

## DETROIT DIESEL

## 53 MPC ENGINES

## 4.7000A OIL PAN

| PART                                 |                            | TYPES                |             |             |             |             |             |             |             |             |             |             |             |             |
|--------------------------------------|----------------------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG                                  | NUMBER                     | NAME AND DESCRIPTION | 3<br>4<br>4 | 3<br>4<br>5 | 3<br>4<br>8 | 3<br>5<br>0 | 3<br>5<br>1 | 3<br>5<br>3 | 3<br>5<br>4 | 3<br>5<br>7 | 3<br>6<br>0 | 3<br>6<br>1 | 3<br>6<br>7 | 3<br>7<br>6 |
| 4.7101 - CLIP, OIL PAN DRAIN TUBE    |                            |                      |             |             |             |             |             |             |             |             |             |             |             |             |
| 5151189                              | CLIP, 3/4" TUBE (4.8040)   |                      |             |             |             |             |             |             | 1           |             |             |             |             |             |
| 186627                               | BOLT, 3/8"-24X1" (12.9001) |                      |             |             |             |             |             |             | 1           |             |             |             |             |             |
| 103321                               | LOCKWASHER, 3/8" (12.9200) |                      |             |             |             |             |             |             | 1           |             |             |             |             |             |
| 117049                               | NUT, 3/8"-24 (12.9120)     |                      |             |             |             |             |             |             | 1           |             |             |             |             |             |
| 4.7112 - BRACKET, OIL PAN DRAIN TUBE |                            |                      |             |             |             |             |             |             |             |             |             |             |             |             |
| 5173022                              | BRACKET (5.5379)           |                      |             |             |             |             |             |             | 1           |             |             |             |             |             |

## 4.7000A OIL PAN

PART  
IG ... NUMBER ... NAME AND DESCRIPTION

| PART |                                                                                          | TYPES                |             |             |             |             |             |             |             |             |             |             |             |
|------|------------------------------------------------------------------------------------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| IG   | NUMBER                                                                                   | NAME AND DESCRIPTION |             |             |             |             |             |             |             |             |             |             |             |
|      |                                                                                          | 3<br>7<br>7          | 3<br>7<br>9 | 3<br>8<br>1 | 4<br>0<br>4 | 4<br>0<br>5 | 4<br>0<br>6 | 4<br>0<br>7 | 4<br>0<br>8 | 4<br>0<br>9 | 4<br>1<br>0 | 4<br>1<br>3 | 4<br>1<br>7 |
|      | 4.7001 - PAN, OIL                                                                        |                      |             |             |             |             |             |             |             |             |             |             |             |
|      | 5137921 PAN, 8V-53 ALUMINUM                                                              | 1                    |             |             |             |             |             |             |             |             |             |             |             |
|      | * 5139069 PAN, 6V-53 STAMPED                                                             |                      | 1           |             |             |             |             |             |             |             |             |             |             |
|      | 5144109 PAN, 3-53 STAMPED                                                                |                      |             | 1           |             |             |             |             |             |             |             |             |             |
|      | 5139041 PAN, 4-53 CAST                                                                   |                      |             |             | 1           |             |             |             |             |             |             |             |             |
|      | 5138748 PAN, 4-53 CAST                                                                   |                      |             |             |             | 1           |             |             |             |             |             |             |             |
|      | 5138951 PAN, 4-53 CAST                                                                   |                      |             |             |             |             | 1           |             |             |             |             |             |             |
|      | 5138940 # PAN, 8V-53 CAST (USE TYPE 507)                                                 |                      |             |             |             |             |             | 1           |             |             |             |             |             |
|      | 5139388 & PAN, 4-53 CAST                                                                 |                      |             |             |             |             |             |             | 1           |             |             |             |             |
|      | 5135838 = PAN, 6V-53 STAMPED                                                             |                      |             |             |             |             |             |             |             | 1           |             |             |             |
|      | 5139416 PAN, 4-53 CAST                                                                   |                      |             |             |             |             |             |             |             |             | 1           |             |             |
|      | 5140557 & PAN, 4-53 CAST                                                                 |                      |             |             |             |             |             |             |             |             |             | 1           |             |
|      | 5140448 @ PAN, 3-53 CAST                                                                 |                      |             |             |             |             |             |             |             |             |             |             | 1           |
|      | 5144593 PAN, 4-53 STAMPED                                                                |                      |             |             |             |             |             |             | 1           |             |             |             |             |
|      | 5148436 BOLT, 5/16"-18X3/4" (W/LW) (4.7120)                                              |                      | 22          | 20          |             | 24          |             |             | 24          | 22          |             | 24          |             |
|      | 5148437 BOLT, 5/16"-18 X 1" (W/LW) (2.3260)                                              |                      |             |             |             |             |             |             |             |             |             |             |             |
|      | 5148438 BOLT, 5/16"-18 X 1 1/4" (W/LW) (2.3260)                                          |                      |             |             | 24          | 24          | 24          |             | 24          |             | 24          | 24          | 20          |
|      | 5148439 BOLT, 5/16"-18X1 3/8" (W/LW) (12.9001)                                           | 18                   |             |             |             |             |             |             |             |             |             |             |             |
|      | 179823 BOLT, 5/16"-18X1 5/8" (12.9001)                                                   |                      |             |             |             |             |             | 22          |             |             |             |             |             |
|      | 179830 BOLT, 5/16"-18X3" (12.9001)                                                       | 2                    |             |             |             |             |             |             |             |             |             |             |             |
|      | 186270 BOLT, 5/16"-18X3 1/2" (12.9001)                                                   |                      |             |             |             |             |             | 2           |             |             |             |             |             |
|      | 272545 BOLT, 5/16"-18X5 1/4" (12.9001)                                                   | 7                    |             |             |             |             |             | 3           |             |             |             |             |             |
|      | 103320 LOCKWASHER, 5/16" (12.9200)                                                       | AR                   |             |             |             |             |             | AR          |             |             |             |             |             |
|      | * NOT SERVICED; USE 5142310, ALSO INCLUDE (1) 5115214 AND (1) 5142549 PLUGS.             |                      |             |             |             |             |             |             |             |             |             |             |             |
|      | @ OBSOLETE                                                                               |                      |             |             |             |             |             |             |             |             |             |             |             |
|      | # NOT SERVICED; CONVERT TO TYPE SHOWN.                                                   |                      |             |             |             |             |             |             |             |             |             |             |             |
|      | = NOT SERVICED; USE (1) 5145661 PAN AND INCLUDE (2) 5115214 PLUGS AND (1) 5121182 PLUGS. |                      |             |             |             |             |             |             |             |             |             |             |             |
|      | & NOT SERVICED. USE STAMPED OIL PAN AND GASKET SHOWN IN TYPE.                            |                      |             |             |             |             |             |             |             |             |             |             |             |
|      | 4.7030 - GASKET, OIL PAN TO BLOCK                                                        |                      |             |             |             |             |             |             |             |             |             |             |             |
|      | 5198187 GASKET SET, 8V-53                                                                | 1                    |             |             |             |             |             | 1           |             |             |             |             |             |
|      | 5196060 GASKET SET, 4-53                                                                 |                      |             |             | 1           | 1           | 1           |             | 1           |             | 1           | 1           |             |
|      | 5119266 GASKET, 6V-53                                                                    |                      | 1           |             |             |             |             |             |             |             |             |             |             |
|      | 5116256 GASKET, 3-53                                                                     |                      |             | 1           |             |             |             |             |             |             |             |             |             |
|      | 5137847 GASKET, 6V-53                                                                    |                      |             |             |             |             |             |             |             | 1           |             |             |             |
|      | 5196059 GASKET, 3-53                                                                     |                      |             |             |             |             |             |             |             |             |             |             | 1           |
|      | 5116257 GASKET, 4-53 (W/STAMP PAN)                                                       |                      |             |             |             |             |             |             | 1           |             |             | 1           |             |

## 4.7000A OIL PAN

| PART                                                                |         |                                        | TYPES |     |     |     |     |     |     |     |     |     |     |     |
|---------------------------------------------------------------------|---------|----------------------------------------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| ..FIG ..                                                            | NUMBER  | NAME AND DESCRIPTION                   | 377   | 379 | 381 | 404 | 405 | 406 | 407 | 408 | 409 | 410 | 413 | 417 |
| 4.7080 - PLUG, OIL PAN DRAIN                                        |         |                                        |       |     |     |     |     |     |     |     |     |     |     |     |
| PLUGS ARE OPTIONAL WHEN MULTIPLE QUANTITIES ARE SHOWN IN SAME TYPE. |         |                                        |       |     |     |     |     |     |     |     |     |     |     |     |
| 7A                                                                  | 5145014 | PLUG, 3/8" PIPE (12.9550)              |       |     |     | 1   |     | 1   |     |     |     |     |     |     |
| 7A                                                                  | 5115214 | PLUG, 1/2" PIPE SQ. HD. (12.9550)      |       | 1   |     |     |     |     | 1   |     |     | 2   |     | 1   |
| 7A                                                                  | 5138621 | PLUG, 18 MM. X 1.5 MM. (4.7090)        |       | 1   |     |     |     |     |     |     |     |     |     |     |
| 7A                                                                  | 8923313 | PLUG, 3/4" PIPE SQ. SOC. HD. (12.9550) |       |     | 1   | 3   |     |     |     |     |     |     | 2   |     |
| 7A                                                                  | 5103187 | PLUG, 3/4" PIPE HEX. HD. (12.9550)     |       |     |     | 1   |     | 1   | 1   | 1   | 1   |     | 3   | 1   |
| 4.7090 - GASKET, OIL PAN DRAIN PLUG                                 |         |                                        |       |     |     |     |     |     |     |     |     |     |     |     |
| 840277                                                              |         | WASHER (18 MM.)                        |       | 1   |     |     |     |     |     |     |     |     |     |     |
| 4.7120 - COVER, OIL PAN                                             |         |                                        |       |     |     |     |     |     |     |     |     |     |     |     |
| 5139344                                                             |         | COVER                                  |       |     |     | 1   |     | 1   |     |     |     |     |     |     |
| 179816                                                              |         | BOLT, 5/16"-18X3/4" (12.9001)          |       |     |     | 14  |     | 14  |     |     |     |     |     |     |
| 103320                                                              |         | LOCKWASHER, 5/16" (12.9200)            |       |     |     | 14  |     | 14  |     |     |     |     |     |     |
| 4.7130 - GASKET, OIL PAN COVER                                      |         |                                        |       |     |     |     |     |     |     |     |     |     |     |     |
| 5126497                                                             |         | GASKET                                 |       |     |     | 1   |     | 1   |     |     |     |     |     |     |

## DETROIT DIESEL

## 53 MPC ENGINES

## 4.7000A OIL PAN

PART  
FIG . . . NUMBER . . . . . NAME AND DESCRIPTION . . . . .

|                                                                   |         |                                                      | TYPES       |             |             |             |             |             |             |             |             |             |             |
|-------------------------------------------------------------------|---------|------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| PART<br>FIG . . . NUMBER . . . . . NAME AND DESCRIPTION . . . . . |         |                                                      | 4<br>2<br>1 | 4<br>2<br>2 | 4<br>8<br>6 | 4<br>8<br>7 | 4<br>9<br>2 | 5<br>0<br>7 | 5<br>0<br>8 | 5<br>1<br>0 | 5<br>1<br>4 | 5<br>2<br>8 | 5<br>3<br>0 |
| 4.7001 - PAN, OIL                                                 |         |                                                      |             |             |             |             |             |             |             |             |             |             |             |
| A                                                                 | 5137298 | PAN, 6V-53 CAST . . . . .                            | 1           | 1           |             |             |             |             |             |             |             |             |             |
| A                                                                 | 5138951 | PAN, 4-53 CAST . . . . .                             |             |             | 1           |             |             |             |             |             |             |             |             |
| A                                                                 | 5139041 | PAN, 4-53 CAST . . . . .                             |             |             |             | 1           |             |             |             |             |             |             |             |
| A                                                                 | 5132595 | PAN, 4-53 CAST . . . . .                             |             |             |             |             | 1           |             |             |             |             |             |             |
| A                                                                 | 5142663 | PAN, 8V-53 CAST . . . . .                            |             |             |             |             |             | 1           |             |             |             |             |             |
| B                                                                 | 5142768 | PAN, 3-53 STAMPED . . . . .                          |             |             |             |             |             |             | 1           |             |             |             |             |
| B                                                                 | 5142880 | PAN, 3-53 STAMPED . . . . .                          |             |             |             |             |             |             |             |             | 1           |             |             |
| A                                                                 | 5144229 | PAN, 3-53 CAST . . . . .                             |             |             |             |             |             |             |             |             |             | 1           |             |
| B                                                                 | 5144109 | + PAN, 3-53 STAMPED . . . . .                        |             |             |             |             |             |             |             |             |             |             | 1           |
|                                                                   | 5144140 | # PAN ASSY., 4-53 STAMPED . . . . .                  |             |             |             |             |             |             |             | 1           |             |             |             |
|                                                                   | 5133863 | BRACKET (TO INLET ELBOW) . . . . .                   |             |             |             |             |             |             | 1           |             |             |             |             |
|                                                                   | 452720  | INSERT, 7/16"-14X7/8" (12.9118) . . . . .            |             | 4           |             |             |             |             |             |             |             |             |             |
|                                                                   | 186618  | BOLT, 5/16"-18X5/8" (12.9001) . . . . .              |             |             |             |             |             |             | 1           |             |             |             |             |
|                                                                   | 5148438 | BOLT, 5/16"-18X3/4" (W/LW) (4.7120) . . . . .        |             |             |             |             |             |             | 20          |             |             |             | 20          |
|                                                                   | 186625  | BOLT, 5/16"-18X7/8" (12.9001) . . . . .              |             |             |             |             |             |             | 16          |             |             |             |             |
|                                                                   | 5148437 | BOLT, 5/16"-18 X 1" (W/LW) (2.3260) . . . . .        |             |             |             |             |             |             |             | 24          | 20          |             |             |
|                                                                   | 179819  | BOLT, 5/16"-18X1 1/8" (12.9001) . . . . .            |             |             |             |             |             |             | 6           |             |             |             |             |
|                                                                   | 5148438 | BOLT, 5/16"-18 X 1 1/4" (W/LW) (2.3260) . . . . .    |             |             |             | 24          | 24          | 24          |             |             |             | 20          |             |
|                                                                   | 186624  | BOLT, 5/16"-18X1 1/4" (12.9001) . . . . .            |             | 6           |             |             |             |             |             |             |             |             |             |
|                                                                   | 5148439 | BOLT, 5/16"-18X1 3/8" (W/LW) (12.9001) . . . . .     | 22          |             |             |             |             |             |             |             |             |             |             |
|                                                                   | 179823  | BOLT, 5/16"-18X1 5/8" (12.9001) . . . . .            |             |             |             |             |             | 20          |             |             |             |             |             |
|                                                                   | 426444  | BOLT, 5/16"-18X3 1/4" (12.9001) . . . . .            |             | 16          |             |             |             |             |             |             |             |             |             |
|                                                                   | 272545  | BOLT, 5/16"-18X5 1/4" (12.9001) . . . . .            |             |             |             |             |             | 7           |             |             |             |             |             |
|                                                                   | 186725  | BOLT, 1/2"-13X1 1/2" (12.9001) . . . . .             |             |             |             |             |             | 2           |             |             |             |             |             |
|                                                                   | 103320  | LOCKWASHER, 5/16" (12.9200) . . . . .                |             | AR          |             |             |             | AR          |             |             |             |             |             |
|                                                                   | 103329  | LOCKWASHER, 1/2" (12.9200) . . . . .                 |             |             |             |             |             | 2           |             |             |             |             |             |
|                                                                   |         | # INCLUDE ITEMS IN 4.5000A, TYPE 97.                 |             |             |             |             |             |             |             |             |             |             |             |
|                                                                   |         | + OBSOLETE                                           |             |             |             |             |             |             |             |             |             |             |             |
| 4.7030 - GASKET, OIL PAN TO BLOCK                                 |         |                                                      |             |             |             |             |             |             |             |             |             |             |             |
| A                                                                 | 5198187 | GASKET SET, 8V-53 . . . . .                          |             |             |             |             |             | 1           |             |             |             |             |             |
| A                                                                 | 5196060 | GASKET SET, 4-53 . . . . .                           |             |             | 1           | 1           | 1           |             |             |             |             |             |             |
| A                                                                 | 5196061 | GASKET SET, 6V-53 . . . . .                          | 1           |             |             |             |             |             |             |             |             | 1           |             |
| A                                                                 | 5198295 | GASKET SET, 6V-53 . . . . .                          |             | 1           |             |             |             |             |             |             |             |             |             |
| A                                                                 | 5116256 | GASKET, 3-53 . . . . .                               |             |             |             |             |             |             |             |             | 1           |             | 1           |
| A                                                                 | 5143271 | GASKET, 3-53 . . . . .                               |             |             |             |             |             |             | 1           |             |             |             |             |
| A                                                                 | 5116257 | GASKET, 4-53 . . . . .                               |             |             |             |             |             |             |             | 1           |             |             |             |
| 4.7045 - BAFFLE, OIL PAN                                          |         |                                                      |             |             |             |             |             |             |             |             |             |             |             |
|                                                                   | 5142765 | BAFFLE, OIL PAN . . . . .                            |             |             |             |             |             |             | 1           |             |             |             |             |
|                                                                   | 5142764 | SEAL, OIL PAN BAFFLE . . . . .                       |             |             |             |             |             |             | 1           |             |             |             |             |
|                                                                   | 5142766 | SUPPORT, OIL PAN BAFFLE . . . . .                    |             |             |             |             |             |             | 1           |             |             |             |             |
|                                                                   | 186629  | BOLT, 5/16"-18 X 1" (TO SUPPORT) (12.9001) . . . . . |             |             |             |             |             |             | 1           |             |             |             |             |

## DETROIT DIESEL

## 53 MPC ENGINES

## 4.7000A OIL PAN

| PART                                                                   |         | TYPES                                       |             |             |             |             |             |             |             |             |             |             |             |
|------------------------------------------------------------------------|---------|---------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG                                                                    | NUMBER  | NAME AND DESCRIPTION                        | 4<br>2<br>1 | 4<br>2<br>2 | 4<br>8<br>6 | 4<br>8<br>7 | 4<br>9<br>2 | 5<br>0<br>7 | 5<br>0<br>8 | 5<br>1<br>0 | 5<br>1<br>4 | 5<br>2<br>8 | 5<br>3<br>0 |
| 4.7045 - BAFFLE, OIL PAN (CONT'D)                                      |         |                                             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                        | 179816  | BOLT, 5/16"-18X3/4" (12.9001)               |             |             |             |             |             |             | 7           |             |             |             |             |
|                                                                        | 103320  | LOCKWASHER, 5/16" (12.9200)                 |             |             |             |             |             |             | 8           |             |             |             |             |
|                                                                        | 120376  | NUT, 5/16"-18 (TO SUPPORT) (12.9120)        |             |             |             |             |             |             | 6           |             |             |             |             |
| 4.7080 - PLUG, OIL PAN DRAIN                                           |         |                                             |             |             |             |             |             |             |             |             |             |             |             |
| PLUGS ARE OPTIONAL WHEN MULTIPLE<br>QUANTITIES ARE SHOWN IN SAME TYPE. |         |                                             |             |             |             |             |             |             |             |             |             |             |             |
| 7A                                                                     | 5121182 | PLUG, 1/4" PIPE (2.4015)                    | 1           | 1           |             |             |             |             |             |             |             |             |             |
| 7A                                                                     | 5145014 | PLUG, 3/8" PIPE (12.9550)                   |             | 2           | 1           | 1           |             |             |             |             |             |             |             |
| 7A                                                                     | 5115214 | PLUG, 1/2" PIPE SQ. HD. (12.9550)           |             |             |             |             |             | 1           |             | 2           | 1           | 2           |             |
| 7A                                                                     | 8923313 | PLUG, 3/4" PIPE (12.9550)                   |             |             |             |             |             | 2           | 1           |             |             | 3           | 1           |
|                                                                        | 5178994 | PLUG, 3/4" PIPE (MAGNETIC)                  |             |             |             |             | 1           |             |             |             | 1           |             |             |
| 7A                                                                     | 5103187 | PLUG, 3/4" PIPE HEX. HD. (12.9550)          | 1           |             | 1           | 1           |             |             |             |             |             |             |             |
| 4.7100 - TUBE, OIL PAN DRAIN                                           |         |                                             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                        | 5129157 | * HOSE, #8 X 21" L. (8.3830)                |             | 1           | 1           | 1           |             |             |             |             |             |             |             |
|                                                                        | 187396  | COUPLING, 3/8" PIPE (12.9580)               |             | 1           | 1           | 1           |             |             |             |             |             |             |             |
|                                                                        | 142269  | BUSHING, 1/2"X3/8" RED. (12.9570)           |             | 1           | 1           | 1           |             |             |             |             |             |             |             |
|                                                                        | 142767  | BUSHING, 3/4"X3/8" RED. (12.9570)           |             | 1           | 1           | 1           |             |             |             |             |             |             |             |
|                                                                        | 5121825 | FITTING, 1/2" HOSE 3/8" P.T. (12.4090)      |             | 2           | 2           | 2           |             |             |             |             |             |             |             |
|                                                                        | 111316  | ELBOW, 3/8" STREET 90 DEG. (12.9390)        |             | 1           | 1           | 1           |             |             |             |             |             |             |             |
|                                                                        | 112304  | PLUG, 3/8" PIPE SQ. HD. BRASS<br>(12.9550)  |             | 1           | 1           | 1           |             |             |             |             |             |             |             |
|                                                                        |         | * STD. LENGTH HOSE, CUT TO LENGTH<br>SHOWN. |             |             |             |             |             |             |             |             |             |             |             |
| 4.7101 - CLIP, OIL PAN DRAIN TUBE                                      |         |                                             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                        | 5151189 | CLIP, 3/4" TUBE (4.8040)                    |             | 1           | 1           | 1           |             |             |             |             |             |             |             |
|                                                                        | 186627  | BOLT, 3/8"-24X1" (12.9001)                  |             | 1           | 1           | 1           |             |             |             |             |             |             |             |
|                                                                        | 103321  | LOCKWASHER, 3/8" (12.9200)                  |             | 1           | 1           | 1           |             |             |             |             |             |             |             |
|                                                                        | 117049  | NUT, 3/8"-24 (12.9120)                      |             | 1           | 1           | 1           |             |             |             |             |             |             |             |
| 4.7112 - BRACKET, OIL PAN DRAIN TUBE                                   |         |                                             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                        | 5173022 | BRACKET (5.5379)                            |             | 1           | 1           | 1           |             |             |             |             |             |             |             |

## 4.7000A OIL PAN

| PART                                                         |                                | TYPES                |             |             |             |             |             |             |             |             |             |             |             |
|--------------------------------------------------------------|--------------------------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG                                                          | NUMBER                         | NAME AND DESCRIPTION | 4<br>2<br>1 | 4<br>2<br>2 | 4<br>8<br>6 | 4<br>8<br>7 | 4<br>9<br>2 | 5<br>0<br>7 | 5<br>0<br>8 | 5<br>1<br>0 | 5<br>1<br>4 | 5<br>2<br>8 | 5<br>3<br>0 |
| 4.7120 - COVER, OIL PAN                                      |                                |                      |             |             |             |             |             |             |             |             |             |             |             |
| 5139344                                                      | COVER                          |                      |             |             | 1           | 1           |             |             |             |             |             |             |             |
| 5142483                                                      | @ COVER (SIDE)                 |                      |             |             |             |             | 1           |             |             |             |             |             |             |
| 5162680                                                      | COVER                          |                      |             |             |             |             | 1           |             |             |             |             |             |             |
| 8923313                                                      | PLUG, 3/4" PIPE (12.9550)      |                      |             |             |             |             | 1           |             |             |             |             |             |             |
| 179816                                                       | BOLT, 5/16"-18X3/4" (12.9001)  |                      |             | 14          | 14          |             |             |             |             |             |             |             |             |
| 179837                                                       | BOLT, 3/8"-16X3/4" (12.9001)   |                      |             |             |             |             | 12          |             |             |             |             |             |             |
| 186679                                                       | BOLT, 3/8"-16X1 1/4" (12.9001) |                      |             |             |             |             | 2           |             |             |             |             |             |             |
| 103320                                                       | LOCKWASHER, 5/16" (12.9200)    |                      |             | 14          | 14          |             |             |             |             |             |             |             |             |
| 103321                                                       | LOCKWASHER, 3/8" (12.9200)     |                      |             |             |             |             | AR          |             |             |             |             |             |             |
| @ NOT SERVICED, USE 5125256 AND<br>INCLUDE (1) 5142549 PLUG. |                                |                      |             |             |             |             |             |             |             |             |             |             |             |
| 4.7130 - GASKET, OIL PAN COVER                               |                                |                      |             |             |             |             |             |             |             |             |             |             |             |
| 5126497                                                      | GASKET                         |                      |             |             | 1           | 1           |             |             |             |             |             |             |             |
| 5125201                                                      | GASKET                         |                      |             |             |             |             | 1           |             |             |             |             |             |             |

## DETROIT DIESEL

## 53 MPC ENGINES

## 4.7000A OIL PAN

|                                                                       |             |                                                                                 | TYPES       |             |             |             |             |             |             |             |             |             |             |             |
|-----------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG                                                                   | PART NUMBER | NAME AND DESCRIPTION                                                            | 5<br>3<br>4 | 5<br>3<br>5 | 5<br>3<br>7 | 5<br>4<br>2 | 5<br>4<br>3 | 5<br>5<br>3 | 5<br>5<br>8 | 5<br>6<br>0 | 5<br>6<br>8 | 5<br>7<br>3 | 5<br>8<br>4 | 5<br>9<br>0 |
| 4.7001 - PAN, OIL                                                     |             |                                                                                 |             |             |             |             |             |             |             |             |             |             |             |             |
| 7B                                                                    | 5143996     | & PAN, 2-53 STAMPED                                                             | 1           |             |             |             |             |             |             |             |             |             |             |             |
| 7B                                                                    | 5143995     | % PAN, 4-53 STAMPED                                                             |             | 1           |             |             |             |             |             |             |             |             |             |             |
| 7B                                                                    | 5144592     | PAN, 3-53 STAMPED                                                               |             |             | 1           |             |             | 1           | 1           |             |             |             |             |             |
| 7B                                                                    | 5145073     | PAN, 8V-53 STAMPED                                                              |             |             |             | 1           |             |             |             |             |             |             |             |             |
| 7B                                                                    | 5144593     | PAN, 4-53 STAMPED                                                               |             |             |             |             | 1           |             |             |             |             |             |             |             |
| 7A                                                                    | 5145207     | + PAN, 6V-53 CAST                                                               |             |             |             |             |             |             |             | 1           |             |             |             |             |
| 7A                                                                    | 5145661     | PAN, 6V-53 STAMPED                                                              |             |             |             |             |             |             |             |             | 1           |             |             |             |
| 7B                                                                    | 5146367     | PAN, 4-53 STAMPED                                                               |             |             |             |             |             |             |             |             |             | 1           |             |             |
|                                                                       | 5146360     | PAN, 3-53 STAMPED                                                               |             |             |             |             |             |             |             |             |             |             | 1           |             |
| 7B                                                                    | 5134377     | = PAN, 3-53 STAMPED                                                             |             |             |             |             |             |             |             |             |             |             |             | 1           |
|                                                                       | 5166786     | SPACER, 11/32"x3/4"x1/4"                                                        |             |             |             | 1           |             |             |             |             |             |             |             |             |
| 7A                                                                    | 5148437     | BOLT, 5/16"-18 X 1" (W/LW) (2.3260)                                             | 16          | 24          | 20          | 26          | 24          | 20          | 20          |             | 22          | 24          | 20          | 22          |
| 7A                                                                    | 5148439     | BOLT, 5/16"-18X1 3/8" (W/LW)                                                    |             |             |             |             |             |             |             | 22          |             |             |             |             |
|                                                                       | 5146143     | BOLT, 5/16"-18X5.25"                                                            |             |             |             | 1           |             |             |             |             |             |             |             |             |
| 7A                                                                    | 186631      | BOLT, 1/2"-13X2 1/4" (12.9001)                                                  |             |             |             | 2           |             |             |             |             |             |             |             |             |
|                                                                       | 103343      | WASHER, 1/2" (12.9190)                                                          |             |             |             | 2           |             |             |             |             |             |             |             |             |
|                                                                       | 103323      | LOCKWASHER, 1/2" (12.9200)                                                      |             |             |             | 2           |             |             |             |             |             |             |             |             |
|                                                                       |             | & NOT SERVICED; USE 5147383 PLUS<br>1-5142549 PLUG.                             |             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                       |             | % NOT SERVICED; USE 5144593 PLUS (2)<br>5115214 PLUGS AND (2) 5142549<br>PLUGS. |             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                       |             | + OBSOLETE                                                                      |             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                       |             | = NOT SERVICED; USE 5196847 PLUS (1)<br>5142549 PLUG AND (3) 5115214<br>PLUGS.  |             |             |             |             |             |             |             |             |             |             |             |             |
| 4.7030 - GASKET, OIL PAN TO BLOCK                                     |             |                                                                                 |             |             |             |             |             |             |             |             |             |             |             |             |
| 7A                                                                    | 5116255     | GASKET, 2-53                                                                    | 1           |             |             |             |             |             |             |             |             |             |             |             |
| 7A                                                                    | 5116257     | GASKET, 4-53                                                                    |             | 1           |             |             | 1           |             |             |             |             | 1           |             | 1           |
| 7A                                                                    | 5116256     | GASKET, 3-53                                                                    |             |             | 1           |             |             | 1           | 1           |             |             |             | 1           |             |
|                                                                       | 5119266     | GASKET, 6V-53                                                                   |             |             |             |             |             |             |             |             | 1           |             |             |             |
|                                                                       | 5198187     | GASKET SET, 8V-53                                                               |             |             |             | 1           |             |             |             |             |             |             |             |             |
|                                                                       | 5196061     | GASKET SET, 6V-53                                                               |             |             |             |             |             |             |             | 1           |             |             |             |             |
| 4.7045 - BAFFLE, OIL PAN                                              |             |                                                                                 |             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                       | 5141925     | + BAFFLE, OIL PAN (WITH HOLE)                                                   |             |             |             | 1           |             |             |             |             |             |             |             |             |
|                                                                       | 5142841     | SPACER, 13/32"x7/8"x1.18" (7.1598)                                              |             |             |             | 2           |             |             |             |             |             |             |             |             |
|                                                                       | 179847      | BOLT, 3/8"-16X2" (12.9001)                                                      |             |             |             | 2           |             |             |             |             |             |             |             |             |
|                                                                       | 103341      | WASHER, 3/8" (12.9190)                                                          |             |             |             | 2           |             |             |             |             |             |             |             |             |
|                                                                       | 103321      | LOCKWASHER, 3/8" (12.9200)                                                      |             |             |             | 2           |             |             |             |             |             |             |             |             |
|                                                                       |             | + OBSOLETE.                                                                     |             |             |             |             |             |             |             |             |             |             |             |             |
| 4.7080 - PLUG, OIL PAN DRAIN                                          |             |                                                                                 |             |             |             |             |             |             |             |             |             |             |             |             |
| PLUGS ARE OPTIONAL WHEN MULTIPLE<br>QUANITIES ARE SHOWN IN SAME TYPE. |             |                                                                                 |             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                       | 5121182     | PLUG, 1/4" PIPE (2.4015)                                                        |             |             |             |             |             | 2           | 2           |             | 1           |             |             |             |

## 4.7000A OIL PAN

| PART                                  |                                          | TYPES                |             |             |             |             |             |             |             |             |             |             |             |
|---------------------------------------|------------------------------------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG                                   | NUMBER                                   | NAME AND DESCRIPTION |             |             |             |             |             |             |             |             |             |             |             |
|                                       |                                          | 5<br>3<br>4          | 5<br>3<br>5 | 5<br>3<br>7 | 5<br>4<br>2 | 5<br>4<br>3 | 5<br>5<br>3 | 5<br>5<br>8 | 5<br>6<br>0 | 5<br>6<br>8 | 5<br>7<br>3 | 5<br>8<br>4 | 5<br>9<br>0 |
| 4.7080 - PLUG, OIL PAN DRAIN (CONT'D) |                                          |                      |             |             |             |             |             |             |             |             |             |             |             |
| 5115214                               | PLUG, 1/2"-14 HEX. SKT. (12.9550)        |                      | 2           |             | 1           | 2           | 2           | 2           | 2           | 2           | 2           | 3           |             |
| 5178994                               | PLUG, 3/4" PIPE (MAGNETIC)               |                      | 1           |             |             |             |             |             |             |             |             |             |             |
| 8923313                               | PLUG, 3/4" PIPE SQ. SKT. (12.9550)       | 1                    | 1           | 1           | 1           | 3           | 1           | 1           | 1           | 1           | 2           | 1           | 2           |
| 4.7100 - TUBE, OIL PAN DRAIN          |                                          |                      |             |             |             |             |             |             |             |             |             |             |             |
| 5129157                               | * HOSE, #8 X 21" L. (8.3830)             |                      |             |             |             |             |             | 1           |             |             |             |             |             |
| 5121825                               | FITTING, 1/2" HOSE, 3/8" P.T. (12.4090)  |                      |             |             |             |             |             | 2           |             |             |             |             |             |
| 142269                                | BUSHING, 1/2"X3/8" RED. (12.9570)        |                      |             |             |             |             |             | 1           |             |             |             |             |             |
| 142767                                | BUSHING, 3/4"X3/8" RED. (12.9570)        |                      |             |             |             |             |             | 1           |             |             |             |             |             |
| 111316                                | ELBOW, 3/8"-90 DEG. STREET (12.9390)     |                      |             |             |             |             |             | 1           |             |             |             |             |             |
| 187396                                | COUPLING, 3/8" PIPE (12.9580)            |                      |             |             |             |             |             | 1           |             |             |             |             |             |
| 112304                                | PLUG, 3/8" PIPE (12.9550)                |                      |             |             |             |             |             | 1           |             |             |             |             |             |
|                                       | * STD. LENGTH, HOSE CUT TO LENGTH SHOWN. |                      |             |             |             |             |             |             |             |             |             |             |             |
| 4.7101 - CLIP, OIL PAN DRAIN TUBE     |                                          |                      |             |             |             |             |             |             |             |             |             |             |             |
| 5151189                               | CLIP, 3/4" TUBE (4.8040)                 |                      |             |             |             |             |             | 1           |             |             |             |             |             |
| 186627                                | BOLT, 3/8"-24X1" (12.9001)               |                      |             |             |             |             |             | 1           |             |             |             |             |             |
| 103321                                | LOCKWASHER, 3/8" (12.9200)               |                      |             |             |             |             |             | 1           |             |             |             |             |             |
| 117049                                | NUT, 3/8"-24 (12.9120)                   |                      |             |             |             |             |             | 1           |             |             |             |             |             |
| 4.7112 - BRACKET, OIL PAN DRAIN TUBE  |                                          |                      |             |             |             |             |             |             |             |             |             |             |             |
| 5173022                               | BRACKET (5.5379)                         |                      |             |             |             |             |             | 1           |             |             |             |             |             |

## 4.7000A OIL PAN

| PART                                                                |         |                                         | TYPES |     |     |     |     |     |     |     |     |     |     |
|---------------------------------------------------------------------|---------|-----------------------------------------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| FIG                                                                 | NUMBER  | NAME AND DESCRIPTION                    | 591   | 592 | 594 | 604 | 606 | 607 | 608 | 609 | 626 | 627 | 629 |
| 4.7001 - PAN, OIL                                                   |         |                                         |       |     |     |     |     |     |     |     |     |     |     |
| 7B                                                                  | 5144592 | PAN, 3-53 STAMPED                       |       |     |     |     |     |     |     |     |     |     | 1   |
| 7B                                                                  | 5196848 | PAN, 4-53 STAMPED                       | 1     |     |     |     |     |     |     |     |     |     |     |
| 7B                                                                  | 5196847 | PAN, 3-53 STAMPED                       |       | 1   |     |     |     |     |     |     |     |     |     |
| 7B                                                                  | 5146322 | PAN, 3-53 STAMPED                       |       |     | 1   |     |     |     |     |     |     |     |     |
|                                                                     | 5147383 | PAN, 2-53 STAMPED                       |       |     |     | 1   |     |     |     |     |     |     |     |
|                                                                     | 5146850 | PAN, 6V-53 STAMPED                      |       |     |     |     | 1   |     |     |     |     |     |     |
|                                                                     | 5146849 | + PAN, 6V-53 STAMPED                    |       |     |     |     |     | 1   | 1   |     |     |     |     |
| 7B                                                                  | 5147837 | PAN, 6V-53 CAST                         |       |     |     |     |     |     |     | 1   |     |     |     |
| 7A                                                                  | 5143224 | PAN, 4-53 CAST                          |       |     |     |     |     |     |     |     | 1   |     |     |
| 7A                                                                  | 5140019 | PAN, 3-53 CAST                          |       |     |     |     |     |     |     |     |     | 1   |     |
| 7A                                                                  | 5148437 | BOLT, 5/16"-18X1" (W/LW) (12.9001)      | 24    | 20  |     | 16  | 22  | 22  | 22  |     |     |     | 20  |
| 7A                                                                  | 5148439 | BOLT, 5/16"-18X1 3/8" (W/LW)            |       |     |     |     |     |     |     | 22  |     |     |     |
| 7A                                                                  | 189700  | BOLT, 5/16"-18X1 1/4" (W/LW) (12.9001)  |       |     |     |     |     |     |     |     | 24  | 20  |     |
|                                                                     |         | + OBSOLETE                              |       |     |     |     |     |     |     |     |     |     |     |
| 4.7030 - GASKET, OIL PAN TO BLOCK                                   |         |                                         |       |     |     |     |     |     |     |     |     |     |     |
| 7A                                                                  | 5116255 | GASKET, 2-53                            |       |     |     | 1   |     |     |     |     |     |     |     |
| 7A                                                                  | 5116257 | GASKET, 4-53                            | 1     |     |     |     |     |     |     |     |     |     |     |
| 7A                                                                  | 5116256 | GASKET, 4-53                            |       | 1   |     |     |     |     |     |     |     |     | 1   |
|                                                                     | 5119266 | GASKET, 6V-53                           |       |     |     |     | 1   | 1   | 1   |     |     |     |     |
|                                                                     | 5143271 | GASKET, 3-53                            |       |     | 1   |     |     |     |     |     |     |     |     |
|                                                                     | 5196061 | GASKET SET, 6V-53                       |       |     |     |     |     |     |     | 1   |     |     |     |
|                                                                     | 5196060 | GASKET SET, 4-53                        |       |     |     |     |     |     |     |     | 1   |     |     |
|                                                                     | 5196059 | GASKET SET, 3-53                        |       |     |     |     |     |     |     |     |     | 1   |     |
| 4.7080 - PLUG, OIL PAN DRAIN                                        |         |                                         |       |     |     |     |     |     |     |     |     |     |     |
| PLUGS ARE OPTIONAL WHEN MULTIPLE QUANTITIES ARE SHOWN IN SAME TYPE. |         |                                         |       |     |     |     |     |     |     |     |     |     |     |
|                                                                     | 5121182 | PLUG, 1/4" PIPE (2.4015)                |       |     |     |     | 3   | 2   | 1   |     |     |     |     |
|                                                                     | 5146309 | PLUG, 1/2" SQ. RECESSED MAGNETIC        |       |     |     |     | 1   |     |     |     |     |     |     |
|                                                                     | 5115214 | PLUG, 1/2"-14 HEX. SKT. (12.9550)       | 3     | 3   |     |     | 2   | 4   | 4   |     |     |     |     |
|                                                                     | 5178994 | PLUG, 3/4" PIPE (MAGNETIC)              |       |     |     |     |     |     |     |     |     |     | 1   |
|                                                                     | 8923313 | PLUG, 3/4" PIPE SQ. SKT. (12.9550)      | 3     | 2   | 1   | 2   |     |     | 2   |     | 3   |     |     |
|                                                                     | 5103187 | PLUG, 3/4"-14 HEX. SKT. (12.9550)       |       |     |     |     |     | 2   |     |     |     |     |     |
| 4.7100 - TUBE, OIL PAN DRAIN                                        |         |                                         |       |     |     |     |     |     |     |     |     |     |     |
|                                                                     | 5129157 | * HOSE, #8 X 21" L. (8.3830)            |       |     |     |     |     |     | 1   |     |     |     |     |
|                                                                     | 5121825 | FITTING, 1/2" HOSE, 3/8" P.T. (12.4090) |       |     |     |     |     |     | 2   |     |     |     |     |
|                                                                     | 142767  | BUSHING, 3/4"X3/8" RED. (12.9570)       |       |     |     |     |     |     | 1   |     |     |     |     |

## DETROIT DIESEL

## 53 MPC ENGINES

## 4.7000A OIL PAN

| PART |         | TYPES                                       |             |             |             |             |             |             |             |             |             |             |             |
|------|---------|---------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG  | NUMBER  | NAME AND DESCRIPTION                        | 5<br>9<br>1 | 5<br>9<br>2 | 5<br>9<br>4 | 6<br>0<br>4 | 6<br>0<br>6 | 6<br>0<br>7 | 6<br>0<br>8 | 6<br>0<br>9 | 6<br>2<br>6 | 6<br>2<br>7 | 6<br>2<br>9 |
|      |         | 4.7100 - TUBE, OIL PAN DRAIN<br>(CONT'D)    |             |             |             |             |             |             |             |             |             |             |             |
|      | 111316  | ELBOW, 3/8" 90 DEG. STREET (12.9390)        |             |             |             |             |             |             | 1           |             |             |             |             |
|      | 187396  | COUPLING, 3/8" PIPE (12.9580)               |             |             |             |             |             |             | 1           |             |             |             |             |
|      | 112304  | PLUG, 3/8" PIPE (12.9550)                   |             |             |             |             |             |             | 1           |             |             |             |             |
|      |         | * STD. LENGTH HOSE, CUT TO LENGTH<br>SHOWN. |             |             |             |             |             |             |             |             |             |             |             |
|      |         | 4.7101 - CLIP, OIL PAN DRAIN TUBE           |             |             |             |             |             |             |             |             |             |             |             |
|      | 5151189 | CLIP, 3/4" TUBE (4.8040)                    |             |             |             |             |             |             | 1           |             |             |             |             |
|      | 186627  | BOLT, 3/8"-24X1" (12.9001)                  |             |             |             |             |             |             | 1           |             |             |             |             |
|      | 103321  | LOCKWASHER, 3/8" (12.9200)                  |             |             |             |             |             |             | 1           |             |             |             |             |
|      | 117049  | NUT, 3/8"-24 (12.9120)                      |             |             |             |             |             |             | 1           |             |             |             |             |
|      |         | 4.7112 - BRACKET, OIL PAN DRAIN TUBE        |             |             |             |             |             |             |             |             |             |             |             |
|      | 5173022 | BRACKET (5.5379)                            |             |             |             |             |             |             | 1           |             |             |             |             |

## 4.7000A OIL PAN

|                                                                     |             |                                         | TYPES       |             |             |             |             |             |             |             |             |             |             |             |             |             |
|---------------------------------------------------------------------|-------------|-----------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG                                                                 | PART NUMBER | NAME AND DESCRIPTION                    | 6<br>3<br>6 | 6<br>3<br>8 | 6<br>4<br>5 | 6<br>5<br>2 | 6<br>5<br>4 | 6<br>5<br>5 | 6<br>6<br>9 | 6<br>8<br>3 | 6<br>8<br>7 | 6<br>9<br>4 | 6<br>9<br>5 | 6<br>9<br>6 | 7<br>0<br>1 | 7<br>0<br>2 |
| 4.7001 - PAN, OIL                                                   |             |                                         |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
| 7A                                                                  | 5137298     | PAN, 6V-53 CAST                         | 1           |             |             |             |             |             |             |             |             |             |             |             |             |             |
| 7B                                                                  | 5101730     | PAN, 6V-53 STAMPED                      |             | 1           |             |             |             |             |             |             |             |             |             |             |             |             |
| 7B                                                                  | 5103411     | PAN, 4-53 STAMPED                       |             |             | 1           |             |             |             |             |             |             |             |             |             |             |             |
| 7B                                                                  | 5105112     | PAN, 4-53 STAMPED                       |             |             |             | 1           |             |             |             |             |             |             |             |             |             |             |
| 7B                                                                  | 5102567     | PAN, 6V-53 STAMPED                      |             |             |             |             | 1           |             |             |             |             |             |             |             |             |             |
| 7B                                                                  | 5104200     | PAN, 4-53 STAMPED                       |             |             |             |             |             | 1           |             |             |             |             |             |             |             |             |
|                                                                     | 5106631     | PAN, 3-53 STAMPED                       |             |             |             |             |             |             | 1           |             |             |             |             |             |             |             |
| 7B                                                                  | 5107993     | PAN, 6V-53 STAMPED                      |             |             |             |             |             |             |             | 1           |             |             |             |             |             |             |
| 7A                                                                  | 8920639     | PAN, 3-53 CAST                          |             |             |             |             |             |             |             |             | 1           |             |             |             |             |             |
| 7B                                                                  | 8921223     | PAN, 3-53 STAMPED                       |             |             |             |             |             |             |             |             |             | 1           |             |             |             |             |
| 7B                                                                  | 8921222     | PAN, 3-53 STAMPED                       |             |             |             |             |             |             |             |             |             |             | 1           |             |             |             |
|                                                                     | 5107919     | PAN, 3-53                               |             |             |             |             |             |             |             |             |             |             |             |             | 1           |             |
| 7A                                                                  | 8922219     | PAN, 4-53 CAST                          |             |             |             |             |             |             |             |             |             |             |             |             |             | 1           |
| 7A                                                                  | 8921162     | PAN, 3-53 CAST                          |             |             |             |             |             |             |             |             |             |             |             |             |             | 1           |
| 7A                                                                  | 5148439     | BOLT, 5/16"-18X1 3/8" (W/LW)            | 22          |             |             |             |             |             |             |             |             |             |             |             |             |             |
| 7A                                                                  | 5148437     | BOLT, 5/16"-18 X 1" (W/LW) (2.3260)     |             | 22          | 24          | 24          | 22          | 24          | 20          | 22          |             | 24          | 20          | 20          |             |             |
| 7A                                                                  | 5148438     | BOLT, 5/16"-18 X 1 1/4" (W/LW) (2.3260) |             |             |             |             |             |             |             |             |             | 16<br>4     |             |             | 16          | 20          |
|                                                                     | 179829      | BOLT, 5/16"-18 X 2 3/4" (12.9001)       |             |             |             |             |             |             |             |             |             | 4           |             |             | 8           |             |
|                                                                     | 426444      | BOLT, 5/16"-18X3 1/4" (12.9001)         |             |             |             |             |             |             |             |             |             | 4           |             |             | 8           |             |
|                                                                     | 103320      | LOCKWASHER, 5/16" (12.9200)             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
| 4.7030 - GASKET, OIL PAN TO BLOCK                                   |             |                                         |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
| 7A                                                                  | 5196061     | GASKET SET, 6V-53                       | 1           |             |             |             |             |             |             |             |             |             |             |             |             |             |
| 7A                                                                  | 5119266     | GASKET, 6V53                            |             | 1           |             |             | 1           |             |             | 1           |             |             |             |             |             |             |
| 7A                                                                  | 5116257     | GASKET, 4-53                            |             |             | 1           | 1           |             | 1           |             |             |             | 1           |             |             |             |             |
| 7A                                                                  | 5116256     | GASKET, 3-53                            |             |             |             |             |             |             | 1           |             | 1           |             | 1           | 1           |             | 1           |
| 7A                                                                  | 5196060     | GASKET, 4-53                            |             |             |             |             |             |             |             |             |             |             |             |             | 2           |             |
| 4.7080 - PLUG, OIL PAN DRAIN                                        |             |                                         |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
| PLUGS ARE OPTIONAL WHEN MULTIPLE QUANTITIES ARE SHOWN IN SAME TYPE. |             |                                         |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
| 7A                                                                  | 5121182     | PLUG, 1/4" PIPE (2.4015)                | 1           |             |             |             | 1           |             |             | 2           |             |             |             |             |             |             |
| 7A                                                                  | 5145014     | PLUG, 3/8" PIPE (12.9550)               | 2           |             |             |             |             |             |             |             |             |             |             |             |             |             |
| 7B                                                                  | 5115214     | PLUG, 1/2"-14 HEX. SKT. (12.9550)       | 2           | 1           | 3           | 1           |             | 2           |             |             | 2           | 2           | 1           | 1           |             |             |
| 7A                                                                  | 5146309     | PLUG, 1/2" PIPE (MAGNETIC)              |             |             |             | 1           |             |             |             |             |             |             |             |             |             |             |
| 7B                                                                  | 5146648     | PLUG, 1/2"-14 HEX. SKT. (1.3162)        |             | 2           |             |             |             |             |             |             |             |             |             |             |             |             |
| 7A                                                                  | 8923313     | PLUG, 3/8" PIPE HEX. SKT. (12.9550)     |             | 1           | 1           |             |             | 1           | 1           |             |             | 2           | 5           | 2           |             |             |
| 7B                                                                  | 5103187     | PLUG, 3/8"-14 HEX. SKT. (12.9550)       | 2           |             |             |             |             |             |             |             |             |             |             |             |             |             |
| 7A                                                                  | 5102982     | PLUG, 3/4" SQ. HD. PIPE (12.9550)       |             | 1           |             |             | 1           |             |             |             |             |             |             |             |             |             |
| 7A                                                                  | 5111798     | PLUG, 1" PIPE (12.9550)                 |             |             |             |             |             |             |             |             | 1           | 1           |             |             | 3           | 1           |
| 7A                                                                  | 5178994     | PLUG, 3/4" PIPE SQ. HD. (MAGNETIC)      |             |             |             |             |             |             |             |             |             | 1           |             |             |             |             |
| 4.7100 - TUBE, OIL PAN DRAIN                                        |             |                                         |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                     | 5129157     | * HOSE, #8 X 21" L. (8.3830)            | 1           |             |             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                     | 111316      | ELBOW, 3/8"-90 DEG. STREET (12.9590)    |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                     | 5121825     | FITTING, 1/2" HOSE, 3/8" P.T. (12.4090) |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                     | 8924158     | BUSHING, 1/2"X3/8" RED. (12.9570)       | 1           |             |             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                     | 8924159     | BUSHING, 3/4"X3/8" RED. (12.9570)       | 1           |             |             |             |             |             |             |             |             |             |             |             |             |             |

## DETROIT DIESEL

## 53 MPC ENGINES

## 4.7000A OIL PAN

| PART |                                            | TYPES                |             |             |             |             |             |             |             |             |             |             |             |             |             |  |
|------|--------------------------------------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|
| FIG  | NUMBER                                     | NAME AND DESCRIPTION |             |             |             |             |             |             |             |             |             |             |             |             |             |  |
|      |                                            | 6<br>3<br>6          | 6<br>3<br>8 | 6<br>4<br>5 | 6<br>5<br>2 | 6<br>5<br>4 | 6<br>5<br>5 | 6<br>6<br>9 | 6<br>8<br>3 | 6<br>8<br>7 | 6<br>9<br>4 | 6<br>9<br>5 | 6<br>9<br>6 | 7<br>0<br>1 | 7<br>0<br>2 |  |
|      | 4.7100 - TUBE, OIL PAN DRAIN (CONT'D)      |                      |             |             |             |             |             |             |             |             |             |             |             |             |             |  |
|      | 187396 COUPLING, 3/8" PIPE (12.9580)       | 1                    |             |             |             |             |             |             |             |             |             |             |             |             |             |  |
|      | 112304 PLUG, 3/8" PIPE (12.9550) (BRASS)   | 1                    |             |             |             |             |             |             |             |             |             |             |             |             |             |  |
|      | * STD. LENGTH HOSE, CUT TO LENGTH SHOWN.   |                      |             |             |             |             |             |             |             |             |             |             |             |             |             |  |
|      | 4.7101 - CLIP, OIL PAN DRAIN TUBE          |                      |             |             |             |             |             |             |             |             |             |             |             |             |             |  |
|      | 5151189 CLIP, 3/4" TUBE (4.8040)           | 1                    |             |             |             |             |             |             |             |             |             |             |             |             |             |  |
|      | 186627 BOLT, 3/8"-24X1" (12.9001)          | 1                    |             |             |             |             |             |             |             |             |             |             |             |             |             |  |
|      | 103321 LOCKWASHER, 3/8" (12.9200)          | 1                    |             |             |             |             |             |             |             |             |             |             |             |             |             |  |
|      | 117049 NUT, 3/8"-24 (12.9120)              | 1                    |             |             |             |             |             |             |             |             |             |             |             |             |             |  |
|      | 4.7112 - BRACKET, OIL PAN DRAIN TUBE       |                      |             |             |             |             |             |             |             |             |             |             |             |             |             |  |
|      | 5173022 BRACKET (5.5379)                   | 1                    |             |             |             |             |             |             |             |             |             |             |             |             |             |  |
|      | 4.7120 - COVER, OIL PAN                    |                      |             |             |             |             |             |             |             |             |             |             |             |             |             |  |
|      | 5133837 COVER (4.4182)                     |                      |             |             |             |             |             |             |             |             | 1           |             |             |             |             |  |
|      | 5101377 BOLT, 3/8"-16X1" (W/SEAL) (5.2020) |                      |             |             |             |             |             |             |             |             | 2           |             |             |             |             |  |
|      | 103321 LOCKWASHER, 3/8" (12.9200)          |                      |             |             |             |             |             |             |             |             | 2           |             |             |             |             |  |
|      | 4.7130 - GASKET, OIL PAN COVER             |                      |             |             |             |             |             |             |             |             |             |             |             |             |             |  |
|      | 5124798 GASKET (4.4184)                    |                      |             |             |             |             |             |             |             |             | 1           |             |             |             |             |  |

## DETROIT DIESEL

## 53 MPC ENGINE

## 4.7000A OIL PAN

| PART                                     |                |                                    | TYPES       |             |             |             |             |             |
|------------------------------------------|----------------|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG                                      | NUMBER         | NAME AND DESCRIPTION               | 7<br>2<br>0 | 7<br>2<br>2 | 7<br>2<br>7 | 7<br>2<br>8 | 7<br>3<br>9 | 7<br>4<br>4 |
| <b>4.7001 - PAN, OIL</b>                 |                |                                    |             |             |             |             |             |             |
| 7B                                       | <b>8922717</b> | PAN, 6V53 STAMPED                  | 1           |             |             |             |             |             |
|                                          | <b>8924115</b> | PAN, 4-53                          |             | 1           |             |             |             |             |
| 7B                                       | <b>8924883</b> | PAN, 4-53 STAMPED                  |             |             | 1           |             |             |             |
| 7B                                       | <b>8924884</b> | PAN, 4-53 STAMPED                  |             |             |             | 1           |             |             |
|                                          | <b>8924706</b> | PAN, 6V53 STAMPED                  |             |             |             |             | 1           |             |
|                                          | <b>8926385</b> | PAN, 6V53 STAMPED                  |             |             |             |             |             | 1           |
| 7A                                       | <b>5148437</b> | BOLT, 5/16"-18X1" (W/LW) (2.3260)  | 22          | 24          | 24          | 24          | 22          | 22          |
| <b>4.7030 - GASKET, OIL PAN TO BLOCK</b> |                |                                    |             |             |             |             |             |             |
| 7A                                       | <b>5119266</b> | GASKET, 6V53                       | 1           |             |             |             |             | 1           |
| 7A                                       | <b>5116257</b> | GASKET, 4-53                       |             | 1           | 1           | 1           |             |             |
|                                          | <b>8924708</b> | GASKET, 6V53                       |             |             |             |             | 1           |             |
| <b>4.7045 - BAFFLE, OIL PAN</b>          |                |                                    |             |             |             |             |             |             |
|                                          | <b>5103053</b> | BAFFLE                             |             |             |             |             | 1           |             |
|                                          | <b>5110137</b> | SPACER, 13/32"X3/4"X1.46" (2.8907) |             |             |             |             | 2           |             |
|                                          | <b>179847</b>  | BOLT, 3/8"-16X2" (12.9001)         |             |             |             |             | 2           |             |
|                                          | <b>103321</b>  | LOCKWASHER, 3/8" (12.9200)         |             |             |             |             | 2           |             |
| <b>4.7080 - PLUG, OIL PAN DRAIN</b>      |                |                                    |             |             |             |             |             |             |
| 7A,B                                     | <b>5102982</b> | PLUG, 3/4" SQ. HD. PIPE (12.9550)  | 1           |             |             |             | 1           |             |
| 7A,B                                     | <b>5115214</b> | PLUG, 1/2"-14 HEX. SKT. (12.9550)  |             | 2           |             | 3           |             | 2           |
| 7A,B                                     | <b>8923916</b> | PLUG, 1/2"-14 HEX. SKT. (12.9550)  |             |             | 3           |             |             |             |
| 7A,B                                     | <b>8923313</b> | PLUG, 3/4"-14 HEX. SKT. (12.9550)  |             |             | 1           |             |             | 1           |
|                                          | <b>445054</b>  | PLUG, 3/4"-16 DRAIN (9.1007)       |             |             |             |             | 1           |             |

## 4.8000A VENTILATING SYSTEM

PART  
FIG ... NUMBER ... NAME AND DESCRIPTION

| PART                                                                                                                                   |                                                   | TYPES                |             |             |             |             |             |             |             |             |             |             |             |  |
|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|
| FIG                                                                                                                                    | NUMBER                                            | NAME AND DESCRIPTION |             |             |             |             |             |             |             |             |             |             |             |  |
|                                                                                                                                        |                                                   | 1<br>0<br>0          | 1<br>9<br>5 | 1<br>9<br>6 | 1<br>9<br>7 | 2<br>0<br>1 | 2<br>0<br>7 | 2<br>0<br>8 | 2<br>0<br>9 | 2<br>2<br>2 | 2<br>2<br>8 | 2<br>3<br>0 | 2<br>3<br>2 |  |
| 4.8001 - PIPE ASSY., BREATHER                                                                                                          |                                                   |                      |             |             |             |             |             |             |             |             |             |             |             |  |
| A PIPE ASSY. (PLAIN) INCLUDES PLUG IN 4.8001 AND FILTER IN 4.8060. A PIPE ASSY. (WITH OIL FILLER) INCLUDES FILLER CAP CHAIN IN 4.5030. |                                                   |                      |             |             |             |             |             |             |             |             |             |             |             |  |
| A                                                                                                                                      | 5116392                                           |                      |             |             |             |             |             |             |             |             |             |             |             |  |
| A                                                                                                                                      | 5116393                                           |                      | 1           |             |             |             |             |             |             |             |             |             |             |  |
| B                                                                                                                                      | 5121056                                           |                      |             | 1           |             |             |             |             |             |             |             |             |             |  |
| A                                                                                                                                      | 5122558                                           |                      |             |             |             |             | 1           |             |             |             |             |             |             |  |
| A                                                                                                                                      | 5122559                                           |                      |             |             |             |             |             | 1           |             |             |             |             |             |  |
| A                                                                                                                                      | 5122561                                           |                      |             |             |             |             |             |             | 1           |             |             |             |             |  |
| B                                                                                                                                      | 5121057                                           |                      |             |             |             |             |             |             |             | 1           |             |             |             |  |
| A                                                                                                                                      | 5123337                                           |                      |             |             |             |             |             |             |             |             |             | 1           |             |  |
| A                                                                                                                                      | 5123338                                           |                      |             |             |             |             |             |             |             |             |             |             | 1           |  |
| A,B                                                                                                                                    | 5150829                                           |                      | 1           | 1           | 1           |             | 1           | 1           | 1           | 1           |             | 1           | 1           |  |
| A,B                                                                                                                                    | 179828                                            |                      | 2           | 2           | 2           |             | 2           | 2           | 2           | 2           |             | 2           | 2           |  |
| A,B                                                                                                                                    | 103320                                            |                      | 2           | 2           | 2           |             | 2           | 2           | 2           |             |             |             |             |  |
| * NOT SERVICED, USE PART NO. IN PARENTHESES PLUS (1) 5163918 PAD AND (1) 5150829 PLUG.                                                 |                                                   |                      |             |             |             |             |             |             |             |             |             |             |             |  |
| + OBSOLETE.                                                                                                                            |                                                   |                      |             |             |             |             |             |             |             |             |             |             |             |  |
| 4.8005 - TUBE, HEAD TO BLOWER BREATHER                                                                                                 |                                                   |                      |             |             |             |             |             |             |             |             |             |             |             |  |
| #                                                                                                                                      | 5122933                                           |                      |             |             |             | 1           |             |             |             |             |             |             |             |  |
| #                                                                                                                                      | 5123901                                           |                      |             |             |             |             |             |             |             |             |             |             |             |  |
|                                                                                                                                        | 1/2" L)                                           |                      |             |             |             | 2           |             |             |             |             |             |             |             |  |
|                                                                                                                                        | 5122539                                           |                      |             |             |             |             |             |             |             |             |             |             |             |  |
|                                                                                                                                        | = HOSE, 2-53 (FORMED ELBOW) (4 1/2" L, 3/4" I.D.) |                      |             |             |             | 1           |             |             |             |             |             |             |             |  |
| #                                                                                                                                      | 5123540                                           |                      |             |             |             | 1           |             |             |             |             |             |             |             |  |
| #                                                                                                                                      | 5123539                                           |                      |             |             |             | 1           |             |             |             |             |             |             |             |  |
| #                                                                                                                                      | 5186840                                           |                      |             |             |             | 1           |             |             |             |             |             |             |             |  |
| #                                                                                                                                      | 5186840                                           |                      |             |             |             | 4           |             |             |             |             |             |             |             |  |
|                                                                                                                                        | = CLAMP, 1 1/8" HOSE (12.9660)                    |                      |             |             |             | 2           |             |             |             |             |             |             |             |  |
| # FIG. 10C OF 1.0000.                                                                                                                  |                                                   |                      |             |             |             |             |             |             |             |             |             |             |             |  |
| & USED THRU 2D-459 NOT SERVICED; USE ITEMS IDENTIFIED BY =.                                                                            |                                                   |                      |             |             |             |             |             |             |             |             |             |             |             |  |
| = EFFECTIVE WITH 2D-460 THRU 2D-4009, NOT REQUIRED EFFECTIVE WITH 2D-4010.                                                             |                                                   |                      |             |             |             |             |             |             |             |             |             |             |             |  |
| 4.8010 - EXTENSION, BREATHER TUBE                                                                                                      |                                                   |                      |             |             |             |             |             |             |             |             |             |             |             |  |
|                                                                                                                                        | 5110828                                           |                      | 1           |             |             |             |             |             |             |             |             |             |             |  |
| PIPE, 3,4-53 (DEV. L. 25 3/4")                                                                                                         |                                                   |                      |             |             |             |             |             |             |             |             |             |             |             |  |

## DETROIT DIESEL

## 53 MPC ENGINES

## 4.8000A VENTILATING SYSTEM

| PART                                                                 |         |                                                                                 | TYPES |     |     |     |     |     |     |     |     |     |     |     |
|----------------------------------------------------------------------|---------|---------------------------------------------------------------------------------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| FIG                                                                  | NUMBER  | NAME AND DESCRIPTION                                                            | 100   | 195 | 196 | 197 | 201 | 207 | 208 | 209 | 222 | 228 | 230 | 232 |
| 4.8020 - GASKET BREATHER TUBE                                        |         |                                                                                 |       |     |     |     |     |     |     |     |     |     |     |     |
| 8A,B                                                                 | 5116391 | GASKET,2,3,4-53 (1.5060)                                                        |       | 1   | 1   | 1   |     | 1   | 1   | 1   |     |     | 1   | 1   |
| 4.8045 - BREATHER ASSY.                                              |         |                                                                                 |       |     |     |     |     |     |     |     |     |     |     |     |
| FOR COMPONENTS OF BREATHER ASSYS.<br>SEE ASSEMBLY BREAKDOWN PAGE A1. |         |                                                                                 |       |     |     |     |     |     |     |     |     |     |     |     |
|                                                                      | 5110384 | BREATHER ASSY.,3,4-53                                                           | 1     |     |     |     |     |     |     |     |     |     |     |     |
|                                                                      | 1553180 | BREATHER,2,3,4-53 (FILLER CAP)<br>(12.6555)                                     |       |     |     |     | 1   |     |     |     |     | 1   |     |     |
|                                                                      | 5110392 | STUD, WING                                                                      | 1     |     |     |     |     |     |     |     |     |     |     |     |
|                                                                      | 5110393 | GASKET, STUD                                                                    | 1     |     |     |     |     |     |     |     |     |     |     |     |
|                                                                      | 5171344 | WASHER, 5/16" (2.8830)                                                          | 1     |     |     |     |     |     |     |     |     |     |     |     |
| 4.8050 - BODY, BREATHER OR SEPARATOR                                 |         |                                                                                 |       |     |     |     |     |     |     |     |     |     |     |     |
|                                                                      | 5110397 | BODY, 3,4-53                                                                    | 1     |     |     |     |     |     |     |     |     |     |     |     |
|                                                                      | 186612  | BOLT, 3/8"-16X1 3/8" (12.9001)                                                  | 2     |     |     |     |     |     |     |     |     |     |     |     |
|                                                                      | 427588  | BOLT, 3/8"-16X2 1/2" (12.9001)                                                  | 2     |     |     |     |     |     |     |     |     |     |     |     |
|                                                                      | 5152148 | WASHER, 3/8X9/16" SEAL (COPPER)<br>(2.4050)                                     | 4     |     |     |     |     |     |     |     |     |     |     |     |
| 4.8057 - GASKET, BREATHER SHELL COVER                                |         |                                                                                 |       |     |     |     |     |     |     |     |     |     |     |     |
|                                                                      | 5179282 | GASKET,3,4-53 (BETWEEN BREATHER<br>ASSY. AND BODY)                              | 1     |     |     |     |     |     |     |     |     |     |     |     |
| 4.8060 - FILTER UNIT, BREATHER                                       |         |                                                                                 |       |     |     |     |     |     |     |     |     |     |     |     |
| 8A,B                                                                 | 5163918 | ELEMENT 2,3,4-53                                                                |       |     |     |     |     | 1   | 1   | 1   |     |     | 1   | 1   |
|                                                                      | 5104007 | ELEMENT, 3-53                                                                   |       | 1   | 1   | 1   |     |     |     |     | 1   |     |     |     |
| 4.8070 - GASKET, BREATHER BODY OR SEPARATOR                          |         |                                                                                 |       |     |     |     |     |     |     |     |     |     |     |     |
|                                                                      | 5130349 | GASKET,3,4-53 (TO BLOCK) (1.1085)                                               | 1     |     |     |     |     |     |     |     |     |     |     |     |
| 4.8175 - HOSE, BREATHER EXTENSION                                    |         |                                                                                 |       |     |     |     |     |     |     |     |     |     |     |     |
| 8C                                                                   | 5120022 | + HOSE, 1 3/4" L.                                                               | 1     |     |     |     |     |     |     |     |     |     |     |     |
| 8C                                                                   | 2337379 | CLAMP, 1 1/6" HOSE (12.9660)<br>+ STANDARD LENGTH HOSE; CUT TO<br>LENGTH SHOWN. | 2     |     |     |     |     |     |     |     |     |     |     |     |

## 4.8000A VENTILATING SYSTEM

| PART                                      |                                                | TYPES                |             |             |             |             |             |             |             |             |             |             |             |             |
|-------------------------------------------|------------------------------------------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG                                       | NUMBER                                         | NAME AND DESCRIPTION | 1<br>0<br>0 | 1<br>9<br>5 | 1<br>9<br>6 | 1<br>9<br>7 | 2<br>0<br>1 | 2<br>0<br>7 | 2<br>0<br>8 | 2<br>0<br>9 | 2<br>2<br>2 | 2<br>2<br>8 | 2<br>3<br>0 | 2<br>3<br>2 |
| 4.8183 - BRACKET, BREATHER EXTENSION PIPE |                                                |                      |             |             |             |             |             |             |             |             |             |             |             |             |
| 5184291                                   | CLIP (1 1/4" TUBE, 3/8" BOLT HOLE)<br>(8.3820) |                      | 1           |             |             |             |             |             |             |             |             |             |             |             |
| 5176400                                   | BRACKET, TUBE, CLIP (4.8010)                   |                      | 1           |             |             |             |             |             |             |             |             |             |             |             |
| 181360                                    | BOLT, 3/8"-24X3/4" (12.9001)                   |                      | 1           |             |             |             |             |             |             |             |             |             |             |             |
| 103341                                    | WASHER, 3/8" (12.9190)                         |                      | 1           |             |             |             |             |             |             |             |             |             |             |             |
| 103321                                    | LOCKWASHER, 3/8" (12.9200)                     |                      | 1           |             |             |             |             |             |             |             |             |             |             |             |
| 117049                                    | NUT, 3/8"-24 (12.9120)                         |                      | 1           |             |             |             |             |             |             |             |             |             |             |             |
| 4.8185 - PLATE, BREATHER DEFLECTOR        |                                                |                      |             |             |             |             |             |             |             |             |             |             |             |             |
| 5182508                                   | PLATE,3,4-53                                   |                      | 1           |             |             |             |             |             |             |             |             |             |             |             |

## 4.8000A VENTILATING SYSTEM

| PART |         |                                                                                                                                        | TYPES       |             |             |             |             |             |             |             |             |             |             |
|------|---------|----------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG  | NUMBER  | NAME AND DESCRIPTION                                                                                                                   | 2<br>3<br>3 | 2<br>3<br>4 | 2<br>3<br>5 | 2<br>3<br>6 | 2<br>4<br>6 | 2<br>4<br>7 | 2<br>4<br>8 | 2<br>5<br>0 | 2<br>5<br>1 | 2<br>5<br>8 | 2<br>5<br>9 |
|      |         | <b>4.8001 - PIPE, BREATHER</b>                                                                                                         |             |             |             |             |             |             |             |             |             |             |             |
|      |         | A PIPE ASSY. (PLAIN) INCLUDES PLUG IN 4.8001 AND FILTER IN 4.8060. A PIPE ASSY. (WITH OIL FILLER) INCLUDES FILLER CAP CHAIN IN 4.5030. |             |             |             |             |             |             |             |             |             |             |             |
|      | 5125254 | * PIPE ASSY.,2,3,4-53 (A ENGINE) (PLAIN) (5126518)                                                                                     | 1           |             |             |             |             |             |             |             |             |             |             |
|      | 5125255 | * PIPE ASSY.,2,3,4-53 (C ENGINE) (PLAIN) (5126519)                                                                                     |             | 1           |             |             |             |             |             |             |             |             |             |
|      | 5126516 | PIPE ASSY.,2,3,4-53 (WITH OIL FILLER TUBE)                                                                                             |             |             | 1           |             |             |             |             |             |             |             |             |
|      | 5126517 | PIPE ASSY.,2,3,4-53(WITH OIL FILLER TUBE)                                                                                              |             |             |             | 1           |             |             |             |             |             |             |             |
|      | 5128830 | + PIPE, 4-53                                                                                                                           |             |             |             |             |             |             |             | 1           |             |             |             |
|      | 179819  | BOLT, 5/16"-18X1 1/8" (12.9001)                                                                                                        | 2           | 2           | 2           | 2           |             |             |             |             |             |             |             |
|      | 186619  | BOLT, 3/8"-16X1 1/8" (12.9001)                                                                                                         |             |             |             |             |             |             |             | 1           |             |             |             |
|      | 186627  | BOLT, 3/8"-24X1" (12.9001)                                                                                                             |             |             |             |             |             |             |             | 1           |             |             |             |
|      | 5152148 | WASHER, 3/8" COPPER (2.4050)                                                                                                           |             |             |             |             |             |             |             | 2           |             |             |             |
|      | 103321  | LOCKWASHER, 3/8" (12.9200)                                                                                                             |             |             |             |             |             |             |             | 2           |             |             |             |
|      | 102635  | NUT, 3/8"-16 (12.9120)                                                                                                                 |             |             |             |             |             |             |             | 1           |             |             |             |
|      |         | * NOT SERVICED, USE PART NO. IN PARENTHESES PLUS (1) 5163918.                                                                          |             |             |             |             |             |             |             |             |             |             |             |
|      |         | + OBSOLETE.                                                                                                                            |             |             |             |             |             |             |             |             |             |             |             |
|      |         | <b>4.8010 - EXTENSION, BREATHER PIPE</b>                                                                                               |             |             |             |             |             |             |             |             |             |             |             |
|      | 5127858 | PIPE, 3, 4-53 (DEV. L. 31.68") (4.8001)                                                                                                |             |             |             |             | 1           |             |             |             |             |             |             |
|      | 5128015 | + PIPE, 6V53 (DEV. L. 9.24") (4.8001)                                                                                                  |             |             |             |             |             | 1           |             |             |             |             |             |
| 8C   | 5129063 | PIPE, 6V53 (DEV. L. 14.20") (4.8001)                                                                                                   |             |             |             |             |             |             | 1           |             |             |             |             |
|      | 5128822 | + PIPE,4-53(DEV. L. 19")                                                                                                               |             |             |             |             |             |             |             | 1           |             |             |             |
| 8C   | 5129000 | PIPE,6V53 (DEV. L. 20.50")                                                                                                             |             |             |             |             |             |             |             |             | 1           |             |             |
|      | 5129564 | + PIPE, UPPER 4-53 (DEV. L. 27.75")                                                                                                    |             |             |             |             |             |             |             |             |             | 1           | 1           |
|      | 5129563 | + PIPE, LOWER 4-53 (DEV. L. 14.75") (4.8001)                                                                                           |             |             |             |             |             |             |             |             |             | 1           | 1           |
|      |         | + OBSOLETE                                                                                                                             |             |             |             |             |             |             |             |             |             |             |             |
|      |         | <b>4.8020 - GASKET, BREATHER TUBE</b>                                                                                                  |             |             |             |             |             |             |             |             |             |             |             |
| 8A,B | 5116391 | GASKET,2,3,4-53 (1.5060)                                                                                                               | 1           | 1           | 1           | 1           |             |             |             |             |             |             |             |
|      | 5156319 | GASKET,4-53 (5.5610)                                                                                                                   |             |             |             |             |             |             |             | 1           |             |             |             |
|      |         | <b>4.8025 - BAFFLE, BREATHER</b>                                                                                                       |             |             |             |             |             |             |             |             |             |             |             |
|      | 5128809 | * BAFFLE, 4-53                                                                                                                         |             |             |             |             |             |             |             | 1           |             |             |             |
|      | 5128810 | * COVER, 4-53                                                                                                                          |             |             |             |             |             |             |             | 1           |             |             |             |
|      | 5128811 | * SUPPORT, 4-53                                                                                                                        |             |             |             |             |             |             |             | 1           |             |             |             |
|      | 106284  | BOLT, 3/8"-24X5/8" (12.9001)                                                                                                           |             |             |             |             |             |             |             | 1           |             |             |             |

## 4.8000A VENTILATING SYSTEM

| PART |         |                                                      | TYPES       |             |             |             |             |             |             |             |             |             |             |
|------|---------|------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG  | NUMBER  | NAME AND DESCRIPTION                                 | 2<br>3<br>3 | 2<br>3<br>4 | 2<br>3<br>5 | 2<br>3<br>6 | 2<br>4<br>6 | 2<br>4<br>7 | 2<br>4<br>8 | 2<br>5<br>0 | 2<br>5<br>1 | 2<br>5<br>8 | 2<br>5<br>9 |
|      |         | <b>4.8025 - BAFFLE, BREATHER<br/>(CONT'D)</b>        |             |             |             |             |             |             |             |             |             |             |             |
|      | 5152148 | WASHER, 3/8" COPPER (2.4050)                         |             |             |             |             |             |             |             | 1           |             |             |             |
|      | 103321  | LOCKWASHER, 3/8" (12.9200)<br>* OBSOLETE.            |             |             |             |             |             |             |             | 1           |             |             |             |
|      |         | <b>4.8040 - CLIP, BREATHER TUBE</b>                  |             |             |             |             |             |             |             |             |             |             |             |
| 3C   | 5127859 | CLIP, 1" TUBE                                        |             |             |             |             | 1           |             |             |             |             |             |             |
| 3C   | 5157702 | CLIP, 1" TUBE                                        |             |             |             |             | 1           | 1           |             | 1           |             |             |             |
| 3C   | 5177001 | CLIP, 7/8" TUBE (8.3801)                             |             |             |             |             |             |             | 1           |             |             |             |             |
| 3C   | 5174091 | CLIP, 7/8"                                           |             |             |             |             |             |             |             |             | 1           |             |             |
|      | 5155884 | CLIP, 1" SPECIAL (4.1570)                            |             |             |             |             |             |             |             |             |             | 2           | 2           |
|      | 5196119 | SPACER, 13/32" I.D. X 7/8" O.D. X 3/8"<br>L (3.4001) |             |             |             |             | 1           |             |             |             |             |             |             |
|      | 5175705 | SPACER, 13/32" I.D. X 7/8" O.D. X 1" L<br>(8.3826)   |             |             |             |             |             |             |             | 1           |             |             |             |
|      | 179816  | BOLT, 5/16"-18X3/4" (12.9001)                        |             |             |             |             |             |             |             |             |             | 1           | 1           |
|      | 179824  | BOLT, 5/16"-18X1 3/4" (12.9001)                      |             |             |             |             |             |             |             | 1           |             |             |             |
|      | 179837  | BOLT, 3/8"-16X3/4" (12.9001)                         |             |             |             |             | 1           |             |             |             | 1           |             |             |
|      | 181360  | BOLT, 3/8"-24X3/4" (12.9001)                         |             |             |             |             |             |             |             |             |             | 1           | 1           |
|      | 179857  | BOLT, 7/16"-14X1" (12.9001)                          |             |             |             |             |             |             | 1           |             |             |             |             |
|      | 120393  | WASHER, 5/16" (12.9190)                              |             |             |             |             |             |             |             |             |             | 1           | 1           |
|      | 103341  | WASHER, 3/8" (12.9190)                               |             |             |             |             |             |             |             |             | 1           |             |             |
|      | 103320  | LOCKWASHER, 5/16" (12.9200)                          |             |             |             |             |             |             |             |             |             | 1           | 1           |
|      | 103321  | LOCKWASHER, 3/8" (12.9200)                           |             |             |             |             | 1           |             |             |             | 1           | 1           | 1           |
|      | 103322  | LOCKWASHER, 7/16" (12.9200)                          |             |             |             |             |             |             | 1           |             |             |             |             |
|      | 120376  | NUT, 5/16"-18 (12.9120)                              |             |             |             |             |             |             |             |             |             | 1           | 1           |
|      | 117049  | NUT, 3/8"-24 (12.9120)                               |             |             |             |             |             |             |             |             |             | 1           | 1           |
|      |         | <b>4.8042 - SUPPORT, BREATHER TUBE CLIP</b>          |             |             |             |             |             |             |             |             |             |             |             |
|      | 5176846 | BRACKET (7.4013)                                     |             |             |             |             |             | 1           |             |             |             |             |             |
|      | 5129755 | + BRACKET (UPPER TUBE)                               |             |             |             |             |             |             |             |             |             | 1           | 1           |
|      | 5129753 | BRACKET (LOWER TUBE)                                 |             |             |             |             |             |             |             |             |             | 1           |             |
|      | 5129752 | BRACKET (LOWER TUBE)                                 |             |             |             |             |             |             |             |             |             |             | 1           |
|      | 123435  | BOLT, 1/4"-28X5/8" (12.9001)                         |             |             |             |             |             | 1           |             |             |             |             |             |
|      | 120392  | WASHER, 1/4" (12.9190)                               |             |             |             |             |             | 1           |             |             |             |             |             |
|      | 103319  | LOCKWASHER, 1/4" (12.9200)                           |             |             |             |             |             | 1           |             |             |             |             |             |
|      | 121902  | NUT, 1/4"-28 (12.9120)<br>+ OBSOLETE                 |             |             |             |             |             | 1           |             |             |             |             |             |
|      |         | <b>4.8060 - FILTER UNIT, BREATHER OIL SEPARATOR</b>  |             |             |             |             |             |             |             |             |             |             |             |
| 8A,B | 5163918 | ELEMENT, 2,3,4-53                                    | 1           | 1           |             |             |             |             |             |             |             |             |             |
| 8C   | 5119481 | ELEMENT, 6V53                                        |             |             |             |             |             |             |             |             | 1           |             |             |
|      | 5104007 | ELEMENT                                              |             |             |             | 1           | 1           |             |             |             |             |             |             |

5 3 M P C E N G I N E :

[illegible]

## 4.8000A VENTILATING SYSTEM

| PART                                                                                           |         | TYPES                                                                                                    |             |             |             |             |             |             |             |             |             |             |             |             |
|------------------------------------------------------------------------------------------------|---------|----------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG                                                                                            | NUMBER  | NAME AND DESCRIPTION                                                                                     | 2<br>6<br>4 | 2<br>6<br>9 | 2<br>7<br>0 | 2<br>7<br>3 | 2<br>7<br>5 | 2<br>7<br>6 | 2<br>7<br>9 | 2<br>8<br>6 | 2<br>8<br>7 | 2<br>9<br>0 | 2<br>9<br>5 | 2<br>9<br>6 |
| 4.8001 - PIPE, BREATHER                                                                        |         |                                                                                                          |             |             |             |             |             |             |             |             |             |             |             |             |
| A PIPE ASSY. INCLUDES PLUG IN 4.8001<br>AND FILTER IN 4.8060.                                  |         |                                                                                                          |             |             |             |             |             |             |             |             |             |             |             |             |
| 3A                                                                                             | 5129309 | * PIPE ASSY., 2,3-53 (5129518)                                                                           |             | 1           |             |             |             |             |             |             |             |             |             |             |
| 3A                                                                                             | 5129683 | * PIPE ASSY., 2-53 (5129672)                                                                             |             |             | 1           |             |             |             |             |             |             |             |             |             |
| 3A                                                                                             | 5116392 | * PIPE ASSY., 2-53 (5116394)                                                                             |             |             |             | 1           |             |             |             |             |             |             |             |             |
| 3A,B                                                                                           | 5150829 | PLUG (7/8" CUP)                                                                                          |             | 1           | 1           | 1           |             |             |             |             |             |             |             |             |
| 3A,B                                                                                           | 179828  | BOLT, 5/16"-18X2 1/2" (12.9001)                                                                          |             | 2           | 2           | 2           |             |             |             |             |             |             |             |             |
| 3A,B                                                                                           | 103320  | LOCKWASHER, 5/16" (12.9200)                                                                              |             | 2           | 2           | 2           |             |             |             |             |             |             |             |             |
| * NOT SERVICED USE PART NO. IN<br>PARENTHESES PLUS (1) 5150829<br>PLUG AND (1) 5163918 FILTER. |         |                                                                                                          |             |             |             |             |             |             |             |             |             |             |             |             |
| 4.8010 - EXTENSION, BREATHER PIPE                                                              |         |                                                                                                          |             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                                                | 5129236 | PIPE, 6V53 (11.70" DEV. L.)                                                                              | 1           |             |             |             |             |             |             |             |             |             |             |             |
|                                                                                                | 5129564 | + PIPE, UPPER 3-53 (DEV. L. 27.75")                                                                      |             |             |             |             | 1           | 1           |             |             |             |             |             |             |
|                                                                                                | 5129562 | + PIPE, LOWER 3-53 (DEV. L. 17")                                                                         |             |             |             |             | 1           | 1           |             |             |             |             |             |             |
|                                                                                                | 5108409 | PIPE, 4-53 (DEV. L. 41.38") (4.8001)                                                                     |             |             |             |             |             |             | 1           |             |             |             |             |             |
|                                                                                                | 5184798 | PIPE, 4-53 (DEV. L. 19 1/2")                                                                             |             |             |             |             |             |             |             | 1           |             |             |             |             |
|                                                                                                | 5127858 | PIPE, 3,4-53 (DEV. L. 31.68") (4.8001)                                                                   |             |             |             |             |             |             |             |             | 1           |             |             |             |
|                                                                                                | 3816887 | @ PIPE, 6V53                                                                                             |             |             |             |             |             |             |             |             |             | 1           |             |             |
|                                                                                                | 3818954 | @ PIPE, 3,4-53                                                                                           |             |             |             |             |             |             |             |             |             |             | 1           |             |
| #                                                                                              | 5162962 | PIPE, 6V53 (DEV. L. 18.50") (4.8001)<br>@ PROCURE FROM CHEVROLET.<br># FIG. 10G OF 1.0000.<br>+ OBSOLETE |             |             |             |             |             |             |             |             |             |             |             | 1           |
| 4.8020 - GASKET, BREATHER TUBE                                                                 |         |                                                                                                          |             |             |             |             |             |             |             |             |             |             |             |             |
| 8A,B                                                                                           | 5116391 | GASKET, 2,3,4-53 (1.5060)                                                                                |             | 1           | 1           | 1           |             |             |             |             |             |             |             |             |
| 4.8040 - CLIP, BREATHER TUBE                                                                   |         |                                                                                                          |             |             |             |             |             |             |             |             |             |             |             |             |
| 8C                                                                                             | 5155664 | CLIP, 1" TUBE (4.1570)                                                                                   | 1           |             |             |             | 2           | 2           |             | 2           |             |             |             |             |
|                                                                                                | 5174091 | CLIP, 7/8"                                                                                               |             |             | 1           |             |             |             |             |             |             |             |             |             |
| #                                                                                              | 5157702 | CLIP, 1" TUBE                                                                                            |             |             |             |             |             |             | 1           |             | 1           |             | 1           | 1           |
|                                                                                                | 5168435 | SPACER, 1/4" X 7/16" (4.8001)                                                                            |             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                                                | 179816  | BOLT, 5/16"-18X3/4" (12.9001)                                                                            |             |             |             |             | 1           | 1           |             | 2           |             |             |             |             |
|                                                                                                | 180082  | BOLT, 5/16"-18X1 3/4" (12.9001)                                                                          |             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                                                | 179838  | BOLT, 3/8"-16X7/8" (12.9001)                                                                             |             |             |             |             |             |             |             |             | 1           |             |             |             |
|                                                                                                | 179839  | BOLT, 3/8"-16 X 1" (12.9001)                                                                             |             |             | 1           |             |             |             |             |             |             |             |             | 1           |
|                                                                                                | 186612  | BOLT, 3/8"-16X1 3/8" (12.9001)                                                                           |             |             |             |             |             |             | 1           |             |             |             |             |             |
|                                                                                                | 181360  | BOLT, 3/8"-24X3/4" (12.9001)                                                                             |             |             |             |             | 1           | 1           |             |             |             |             |             |             |
|                                                                                                | 120393  | WASHER, 5/16" (12.9190)                                                                                  |             |             |             |             | 1           | 1           |             | 2           |             |             |             |             |
|                                                                                                | 103341  | WASHER, 3/8" (12.9190)                                                                                   |             |             | 1           |             |             |             |             |             | 1           |             |             |             |

## 4.8000A VENTILATING SYSTEM

| PART |         |                                                     | TYPES |     |     |     |     |     |     |     |     |     |     |     |
|------|---------|-----------------------------------------------------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| FIG  | NUMBER  | NAME AND DESCRIPTION                                | 264   | 269 | 270 | 273 | 275 | 276 | 279 | 286 | 287 | 290 | 295 | 296 |
|      |         | <b>4.8040 - CLIP, BREATHER TUBE (CONTD)</b>         |       |     |     |     |     |     |     |     |     |     |     |     |
|      | 120214  | LOCKWASHER, 5/16" (12.9200)                         | 1     |     |     |     | 1   | 1   |     | 2   |     |     |     |     |
|      | 103320  | LOCKWASHER, 5/16" (12.9200)                         |       |     | AR  |     | AR  | AR  |     |     | AR  |     | AR  |     |
|      | 103321  | LOCKWASHER, 3/8" (12.9200)                          |       |     |     |     | 1   | 1   |     | 2   |     |     |     |     |
|      | 120376  | NUT, 5/16"-18 (12.9120)                             |       |     |     |     | 1   | 1   |     | 2   |     |     |     |     |
|      | 102635  | NUT, 3/8"-16 (12.9120)                              |       | 1   |     |     |     |     |     |     | 1   |     |     |     |
|      | 117049  | NUT, 3/8"-24 (12.9120)                              |       |     |     |     | 1   | 1   |     |     |     |     |     |     |
|      | 123221  | NUT, 3/8"-16 (12.9120)                              |       |     |     |     |     |     |     |     |     |     |     | 1   |
|      |         | # FIG. 10G OF 1.0000.                               |       |     |     |     |     |     |     |     |     |     |     |     |
|      |         | <b>4.8042 - SUPPORT, BREATHER TUBE CLIP</b>         |       |     |     |     |     |     |     |     |     |     |     |     |
|      | 5129685 | BRACKET, CLIP (4.8183)                              |       | 1   |     |     |     |     |     |     |     |     |     |     |
|      | 5109270 | + BRACKET                                           |       |     |     |     |     |     |     | 1   |     |     |     |     |
|      | 5175606 | BRACKET (4.1540)                                    |       |     |     |     |     |     |     | 1   |     |     |     |     |
|      | 5179861 | BRACKET, CLIP SUPPORT (7.3245)                      |       |     |     |     |     |     |     |     | 1   |     |     |     |
|      | 5129755 | SUPPORT, CLIP (UPPER)                               |       |     |     |     | 1   | 1   |     |     |     |     |     |     |
|      | 5129756 | SUPPORT, CLIP (LOWER)                               |       |     |     |     | 1   |     |     |     |     |     |     |     |
|      | 5129757 | SUPPORT, CLIP (LOWER)                               |       |     |     |     |     | 1   |     |     |     |     |     |     |
|      | 180120  | BOLT, 3/8"-16X3/4" (12.9001)                        |       |     |     |     |     |     |     | 1   |     |     |     |     |
|      | 103321  | LOCKWASHER, 3/8" (12.9200)                          |       |     |     |     |     |     |     | 1   |     |     |     |     |
|      |         | + OBSOLETE                                          |       |     |     |     |     |     |     |     |     |     |     |     |
|      |         | <b>4.8060 - FILTER UNIT, BREATHER OIL SEPARATOR</b> |       |     |     |     |     |     |     |     |     |     |     |     |
| 1A,B | 5163918 | ELEMENT, 2,3,4-53                                   |       | 1   | 1   | 1   |     |     |     |     |     |     |     |     |
| 3C   | 5119481 | ELEMENT, 6V53                                       |       |     |     |     |     |     |     |     |     | 1   |     |     |
|      |         | <b>4.8175 - HOSE, BREATHER EXTENSION PIPE</b>       |       |     |     |     |     |     |     |     |     |     |     |     |
| 8C   | 5118149 | * HOSE, 1" I.D. X 2" L                              | 1     |     |     |     | 1   | 1   | 1   |     |     |     | 1   |     |
|      | 5169721 | * HOSE, 7/8" I.D. X 24" L (4.8010)                  |       |     |     | 1   |     |     |     |     |     |     |     |     |
|      | 5129751 | HOSE, 1" I.D. (FORMED ELBOW)                        |       |     |     |     | 1   | 1   |     | 1   |     |     |     |     |
|      | 5118149 | * HOSE, 1" I.D. X 7 1/2" L (5.3432)                 |       |     |     |     |     |     |     |     | 1   |     |     |     |
| 8C   | 5169721 | * HOSE, 7/8" I.D. X 2 1/2" L (4.8010)               |       |     |     |     |     |     |     |     |     | 1   |     |     |
| #    | 5118149 | * HOSE, 1" I.D. X 3 1/2" L (5.1270)                 |       |     |     |     |     |     |     |     |     |     |     | 1   |
| 8C   | 272857  | CLAMP, 1" HOSE, SPR. TYPE (12.9660)                 | 2     |     |     |     | 4   | 4   | 2   | 2   | 2   |     |     |     |
|      | 111609  | CLAMP, 1 3/16" HOSE (12.9660)                       |       |     |     | 1   |     |     |     |     |     | 2   |     |     |
|      | 111612  | CLAMP, 1 3/8" HOSE (12.9660)                        |       |     |     |     |     |     |     |     |     |     | 2   | 2   |
|      |         | # FIG. 10G OF 1.0000.                               |       |     |     |     |     |     |     |     |     |     |     |     |
|      |         | * STD. LENGTH HOSE, CUT TO LENGTH SHOWN.            |       |     |     |     |     |     |     |     |     |     |     |     |

## 4.8000A VENTILATING SYSTEM

| PART                                                                                                           |         | TYPES                                           |             |             |             |             |             |             |             |             |             |             |             |             |
|----------------------------------------------------------------------------------------------------------------|---------|-------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG                                                                                                            | NUMBER  | NAME AND DESCRIPTION                            | 3<br>0<br>2 | 3<br>0<br>3 | 3<br>0<br>4 | 3<br>1<br>3 | 3<br>1<br>4 | 3<br>1<br>9 | 3<br>2<br>0 | 3<br>4<br>2 | 3<br>4<br>4 | 3<br>5<br>1 | 3<br>5<br>3 | 3<br>5<br>5 |
| 4.8001 - PIPE, BREATHER                                                                                        |         |                                                 |             |             |             |             |             |             |             |             |             |             |             |             |
| A PIPE ASSY. INCLUDES PLUG IN 4.8001<br>AND FILTER IN 4.8060.                                                  |         |                                                 |             |             |             |             |             |             |             |             |             |             |             |             |
| A                                                                                                              | 5130287 | * PIPE ASSY., 2,3,4-53 (5130289)                |             | 1           |             |             |             |             |             |             |             |             |             |             |
|                                                                                                                | 5128830 | + PIPE, 3-53                                    |             |             |             |             |             |             |             |             |             |             | 1           |             |
|                                                                                                                | 5130289 | PIPE ASSY., 4-53                                |             |             | 1           |             |             |             |             |             |             |             |             |             |
| A,B                                                                                                            | 5150829 | PLUG (7/8" CUP)                                 |             | 1           | 1           |             |             |             |             |             |             |             |             |             |
| A,B                                                                                                            | 179828  | BOLT, 5/16"-18X2 1/2" (12.9001)                 |             | 2           | 2           |             |             |             |             |             |             |             |             |             |
|                                                                                                                | 186619  | BOLT, 3/8"-16X1 1/8" (12.9001)                  |             |             |             |             |             |             |             |             |             |             | 1           |             |
|                                                                                                                | 186627  | BOLT, 3/8"-24X1" (12.9001)                      |             |             |             |             |             |             |             |             |             |             | 1           |             |
|                                                                                                                | 5152148 | WASHER, 3/8" COPPER (2.4050)                    |             |             |             |             |             |             |             |             |             |             | 2           |             |
| A,B                                                                                                            | 103320  | LOCKWASHER, 5/16" (12.9200)                     |             | 2           |             |             |             |             |             |             |             |             |             |             |
|                                                                                                                | 103321  | LOCKWASHER, 3/8" (12.9200)                      |             |             |             |             |             |             |             |             |             |             | 2           |             |
|                                                                                                                | 102635  | NUT, 3/8"-16 (12.9120)                          |             |             |             |             |             |             |             |             |             |             | 1           |             |
| * NOT SERVICED, USE PART NO. IN<br>PARENTHESES PLUS (1) 5150829<br>PLUG AND (1) 5163918 FILTER.<br>+ OBSOLETE. |         |                                                 |             |             |             |             |             |             |             |             |             |             |             |             |
| 4.8010 - EXTENSION, BREATHER PIPE                                                                              |         |                                                 |             |             |             |             |             |             |             |             |             |             |             |             |
| ±                                                                                                              | 5127858 | PIPE, 3,4-53 (1" O.D.X31.68" DEV. L.)           |             |             |             |             |             |             |             |             |             | 1           | 1           |             |
|                                                                                                                | 5130141 | PIPE, 6V53 (1" O.D.X42.10" DEV. L.)<br>(4.8001) | 1           |             |             |             |             |             |             |             |             |             |             |             |
|                                                                                                                | 5172756 | PIPE, 4-53 (1" O.D.X49.76" DEV. L.)<br>(4.8001) |             |             |             | 1           |             |             |             |             |             |             |             |             |
|                                                                                                                | 5162862 | PIPE, 4-53 (1" O.D.X49.76" DEV. L.)<br>(4.8001) |             |             |             |             | 1           |             |             |             |             |             |             |             |
|                                                                                                                | 5130442 | PIPE, 3-53 (1" O.D.X41" DEV. L.) (4.8001)       |             |             |             |             |             | 1           |             |             |             |             |             |             |
|                                                                                                                | 5130443 | PIPE, 3-53 (1" O.D. X 41" DEV. L.)<br>(4.8001)  |             |             |             |             |             |             | 1           |             |             |             |             |             |
| ±                                                                                                              | 5129488 | PIPE, 6V53 (1" O.D.X22.50" DEV. L.)             |             |             |             |             |             |             |             | 1           |             |             |             |             |
| ±                                                                                                              | 5131843 | PIPE, 6V53 (1" O.D.X26.46" DEV. L.)             |             |             |             |             |             |             |             |             | 1           |             |             |             |
|                                                                                                                | 5132581 | % PIPE, 3-53 (1" O.D.X22.38" DEV. L.)           |             |             |             |             |             |             |             |             |             |             | 1           |             |
| # FIG. 10G OF 1.0000.<br>% OBSOLETE.                                                                           |         |                                                 |             |             |             |             |             |             |             |             |             |             |             |             |
| 4.8020 - GASKET, BREATHER TUBE                                                                                 |         |                                                 |             |             |             |             |             |             |             |             |             |             |             |             |
| 1A,B                                                                                                           | 5116391 | GASKET, 2,3,4-53 (1.5060)                       |             | 1           |             |             |             |             |             |             |             |             |             |             |
|                                                                                                                | 5156319 | GASKET, 3-53 (5.5610)                           |             |             |             |             |             |             |             |             |             |             | 1           |             |
| 4.8025 - BAFFLE, BREATHER                                                                                      |         |                                                 |             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                                                                | 5132344 | * BAFFLE, 3-53                                  |             |             |             |             |             |             |             |             |             |             | 1           |             |
|                                                                                                                | 5132345 | * COVER, 3-53                                   |             |             |             |             |             |             |             |             |             |             | 1           |             |
|                                                                                                                | 5132431 | * SUPPORT, 3-53                                 |             |             |             |             |             |             |             |             |             |             | 1           |             |

## 4.8000A VENTILATING SYSTEM

|                                              |                |                                     | TYPES       |             |             |             |             |             |             |             |             |             |             |             |
|----------------------------------------------|----------------|-------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG                                          | PART<br>NUMBER | NAME AND DESCRIPTION                | 3<br>0<br>2 | 3<br>0<br>3 | 3<br>0<br>4 | 3<br>1<br>3 | 3<br>1<br>4 | 3<br>1<br>9 | 3<br>2<br>0 | 3<br>4<br>2 | 3<br>4<br>4 | 3<br>5<br>1 | 3<br>5<br>3 | 3<br>5<br>5 |
| 4.8025 - BAFFLE, BREATHER<br>(CONT'D)        |                |                                     |             |             |             |             |             |             |             |             |             |             |             |             |
|                                              | 106284         | BOLT, 3/8"-24X5/8" (12.9001)        |             |             |             |             |             |             |             |             |             |             |             | 1           |
|                                              | 5152148        | WASHER, 3/8" COPPER (2.4050)        |             |             |             |             |             |             |             |             |             |             |             | 1           |
|                                              | 103321         | LOCKWASHER, 3/8" (12.9200)          |             |             |             |             |             |             |             |             |             |             |             | 1           |
| * OBSOLETE.                                  |                |                                     |             |             |             |             |             |             |             |             |             |             |             |             |
| 4.8040 - CLIP, BREATHER TUBE                 |                |                                     |             |             |             |             |             |             |             |             |             |             |             |             |
| #                                            | 5157702        | CLIP, 1" TUBE                       | 2           |             |             |             |             |             |             | 1           | 1           |             |             | 1           |
|                                              | 5183247        | CLIP, 1" TUBE (8.3801)              |             |             |             | 1           | 1           | 1           | 1           |             |             |             |             |             |
|                                              | 5161874        | CLIP, 1 1/16" TUBE (7.3245)         |             |             |             | 1           | 1           | 1           | 1           |             |             |             |             |             |
|                                              | 5127859        | CLIP, 1" TUBE                       |             |             |             |             |             |             |             |             |             | 1           | 1           |             |
|                                              | 5169476        | CLIP, 1" TUBE                       |             |             |             |             |             |             |             |             |             | 1           |             |             |
|                                              | 5196119        | SPACER, 13/32" I.D. X 7/8" (5.4025) |             |             |             |             |             |             |             |             |             | 1           |             |             |
|                                              | 5159347        | SPACER, 3/4" X 1/2" (7.1581)        |             |             |             |             |             |             |             |             |             | 1           |             |             |
|                                              | 5174085        | SPACER, 15/32" I.D. X 3/8" (2.7960) | 1           |             |             |             |             |             |             |             |             |             |             | 1           |
|                                              | 179816         | BOLT, 5/16"-18X3/4" (12.9001)       | 1           |             |             |             |             |             |             |             |             |             |             |             |
|                                              | 186624         | BOLT, 5/16"-18X1 1/4" (12.9001)     |             |             |             |             |             |             |             |             |             |             |             | 1           |
|                                              | 179835         | BOLT, 3/8"-16X5/8" (12.9001)        |             |             |             |             |             |             |             |             |             | 1           |             |             |
|                                              | 180120         | BOLT, 3/8"-16X3/4" (12.9001)        |             |             |             | 1           | 1           | 1           | 1           |             |             |             | 1           |             |
|                                              | 179838         | BOLT, 3/8"-16X7/8" (12.9001)        |             |             |             |             |             |             |             | 1           |             |             |             |             |
|                                              | 179844         | BOLT, 3/8"-16X1 5/8" (12.9001)      |             |             |             |             |             |             |             |             |             | 1           |             |             |
|                                              | 427564         | BOLT, 7/16"-14X1 3/8" (12.9001)     | 1           |             |             |             |             |             |             |             |             |             |             |             |
|                                              | 103342         | WASHER, 7/16" (12.9190)             | 1           |             |             |             |             |             |             |             |             |             |             |             |
|                                              | 103320         | LOCKWASHER, 5/16" (12.9200)         | 1           |             |             |             |             |             |             |             |             |             |             |             |
|                                              | 103321         | LOCKWASHER, 3/8" (12.9200)          |             |             |             | AR          | AR          | AR          | AR          | AR          |             | AR          | AR          | 1           |
|                                              | 103322         | LOCKWASHER, 7/16" (12.9200)         | 1           |             |             |             |             |             |             |             |             |             |             |             |
|                                              | 120376         | NUT, 5/16"-18 (12.9120)             | 1           |             |             |             |             |             |             |             |             |             |             |             |
|                                              | 102635         | NUT, 3/8"-16 (12.9120)              |             |             |             | 1           | 1           | 1           | 1           | 1           |             |             |             |             |
| # FIG. 10G. OF 1.0000.                       |                |                                     |             |             |             |             |             |             |             |             |             |             |             |             |
| 4.8042 - SUPPORT, BREATHER TUBE CLIP         |                |                                     |             |             |             |             |             |             |             |             |             |             |             |             |
|                                              | 5173189        | BRACKET (9.1591)                    |             |             |             | 1           | 1           | 1           | 1           |             |             |             |             |             |
|                                              | 5173022        | BRACKET (5.5379)                    |             |             |             |             |             |             |             | 1           |             |             |             |             |
|                                              | 5114541        | BRACKET, CLIP (7.1585)              |             |             |             |             |             |             |             | 1           |             |             |             |             |
|                                              | 5184060        | SUPPORT, CLIP (4.6040)              | 1           |             |             |             |             |             |             |             |             |             |             |             |
|                                              | 5196119        | SPACER, 13/32" I.D. X 7/8" (5.4025) |             |             |             | 1           | 1           | 1           | 1           |             |             |             |             |             |
|                                              | 186612         | BOLT, 3/8"-16X1 3/8" (12.9001)      | 1           |             |             |             |             |             |             |             |             |             |             |             |
|                                              | 186285         | BOLT, 3/8"-16X4" (12.9001)          |             |             |             |             |             |             |             | 1           |             |             |             |             |
|                                              | 186314         | BOLT, 3/8"-24X4 1/4" (12.9001)      |             |             |             | 1           | 1           | 1           | 1           |             |             |             |             |             |
|                                              | 103321         | LOCKWASHER, 3/8" (12.9200)          | 1           |             |             |             |             |             |             |             |             |             |             |             |
| 4.8060 - FILTER UNIT, BREATHER OIL SEPARATOR |                |                                     |             |             |             |             |             |             |             |             |             |             |             |             |
| 8A,B                                         | 5163918        | ELEMENT                             | 1           |             |             |             |             |             |             |             |             |             |             |             |
| 8A,B                                         | 5104007        | ELEMENT                             |             | 1           |             |             |             |             |             |             |             |             |             |             |

## 4.8000A VENTILATING SYSTEM

| PART                              |         | TYPES                                       |             |             |             |             |             |             |             |             |             |             |             |             |
|-----------------------------------|---------|---------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG                               | NUMBER  | NAME AND DESCRIPTION                        | 3<br>0<br>2 | 3<br>0<br>3 | 3<br>0<br>4 | 3<br>1<br>3 | 3<br>1<br>4 | 3<br>1<br>9 | 3<br>2<br>0 | 3<br>4<br>2 | 3<br>4<br>4 | 3<br>5<br>1 | 3<br>5<br>3 | 3<br>5<br>5 |
| 4.8175 - HOSE, BREATHER EXTENSION |         |                                             |             |             |             |             |             |             |             |             |             |             |             |             |
|                                   | 5129751 | HOSE, 1" I.D. (FORMED)                      | 1           |             |             |             |             |             |             |             |             |             |             |             |
|                                   | 5130140 | HOSE, 1" I.D. (FORMED ELBOW)                |             |             |             | 1           | 1           | 1           | 1           | 1           | 1           | 1           |             |             |
|                                   | 5118149 | * HOSE, 1" I.D. X 5" L. (4.1642)            |             |             |             |             |             |             |             |             |             |             | 1           |             |
|                                   | 5118149 | * HOSE (1" I.D. X 2 1/2" L. (4.1642)        |             |             |             |             |             |             |             |             |             |             |             | 1           |
| C                                 | 272857  | CLAMP, 1" HOSE, SPRING TYPE<br>(12.9660)    |             |             |             | 2           | 2           | 2           | 2           |             |             | 2           |             | 2           |
|                                   | 111612  | CLAMP, 1 3/8" HOSE (12.9660)                | 2           |             |             |             |             |             |             | 2           | 2           |             |             |             |
|                                   | 5186840 | CLAMP, 1 1/2" HOSE (12.9660)                |             |             |             |             |             |             |             |             |             |             | 2           |             |
|                                   |         | * STD. LENGTH HOSE, CUT TO LENGTH<br>SHOWN. |             |             |             |             |             |             |             |             |             |             |             |             |

## 4.8000A VENTILATING SYSTEM

| PART                              |         |                                                                     | TYPES       |             |             |             |             |             |             |             |             |             |             |             |
|-----------------------------------|---------|---------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG                               | NUMBER  | NAME AND DESCRIPTION                                                | 3<br>5<br>7 | 3<br>7<br>1 | 3<br>7<br>7 | 3<br>7<br>9 | 3<br>8<br>3 | 4<br>0<br>0 | 4<br>0<br>6 | 4<br>1<br>1 | 4<br>2<br>0 | 4<br>3<br>3 | 4<br>3<br>7 | 4<br>4<br>0 |
| 4.8001 - PIPE, BREATHER           |         |                                                                     |             |             |             |             |             |             |             |             |             |             |             |             |
|                                   |         | A PIPE ASSY. (PLAIN) INCLUDES PLUG IN 4.8001 AND FILTER IN 4.8060.  |             |             |             |             |             |             |             |             |             |             |             |             |
|                                   |         | A PIPE ASSY. (WITH OIL FILLER) INCLUDES FILLER CAP CHAIN IN 4.5030. |             |             |             |             |             |             |             |             |             |             |             |             |
|                                   | 5137034 | PIPE, 3-53                                                          |             |             |             |             |             |             |             |             |             |             |             | 1           |
|                                   | 5150829 | PLUG, 7/8" CUP                                                      |             |             |             |             |             |             |             |             |             |             | 1           |             |
|                                   | 179839  | BOLT, 3/8"-16X1" (12.9001)                                          |             |             |             |             |             |             |             |             |             |             |             | 2           |
|                                   | 103321  | LOCKWASHER, 3/8" (12.9200)                                          |             |             |             |             |             |             |             |             |             |             |             | 2           |
| 4.8010 - EXTENSION, BREATHER PIPE |         |                                                                     |             |             |             |             |             |             |             |             |             |             |             |             |
| #                                 | 5131319 | PIPE, 2-53 (1" O.D.X23" DEV. L.)                                    | 1           |             |             |             |             |             |             |             |             |             |             |             |
| #                                 | 5133525 | PIPE, 4-53 (1" O.D.X29.50" DEV. L.)                                 |             | 1           |             |             |             |             |             |             |             |             |             |             |
|                                   | 5133941 | PIPE, 8V53 (1 1/2" O.D.X29.26" DEV. L.)                             |             |             | 1           | 1           |             |             |             |             |             | 1           |             |             |
|                                   | 5134469 | + PIPE, 8V53 (1" O.D.X32.62" DEV. L.)                               |             |             |             | 1           |             |             |             |             |             | 1           |             |             |
|                                   | 5134470 | PIPE, 8V53 (1" O.D.X22.56" DEV. L.)                                 |             |             |             | 1           |             |             |             |             |             | 1           |             |             |
|                                   | 5134627 | PIPE, 8V53                                                          |             |             |             |             | 1           |             |             |             |             |             |             |             |
|                                   | 5136168 | PIPE, 3-53                                                          |             |             |             |             |             | 1           |             |             |             |             |             |             |
|                                   | 5136634 | PIPE, 8V53 (1" O.D.X10" DEV. L.)                                    |             |             |             |             |             |             | 1           | 1           |             |             |             |             |
|                                   | 5136316 | PIPE, 3-53                                                          |             |             |             |             |             |             |             |             | 1           |             |             |             |
|                                   | 5137109 | PIPE, 3-53                                                          |             |             |             |             |             |             |             |             |             |             |             | 1           |
|                                   |         | # FIG. 10G OF 1.0000.                                               |             |             |             |             |             |             |             |             |             |             |             |             |
|                                   |         | + OBSOLETE.                                                         |             |             |             |             |             |             |             |             |             |             |             |             |
| 4.8020 - GASKET, BREATHER TUBE    |         |                                                                     |             |             |             |             |             |             |             |             |             |             |             |             |
|                                   | 5156319 | GASKET, 3-53 (5.5610)                                               |             |             |             |             |             |             |             |             |             |             |             | 1           |
| 4.8040 - CLIP, BREATHER TUBE      |         |                                                                     |             |             |             |             |             |             |             |             |             |             |             |             |
|                                   | 5157702 | CLIP (1" TUBE)                                                      | 1           | 1           |             | 2           |             |             | 1           |             | 1           | 2           |             | 1           |
|                                   | 5158779 | CLIP (1 1/2" TUBE) (5.5376)                                         |             |             | 1           | 1           |             |             |             |             |             | 1           |             |             |
|                                   | 5155664 | CLIP (1" TUBE) (4.1570)                                             |             |             |             |             | 1           |             |             | 1           |             |             |             |             |
|                                   | 120228  | BOLT, 5/16"-18X5/8" (12.9001)                                       |             |             |             |             | 1           |             |             | 1           |             |             |             |             |
|                                   | 186618  | BOLT, 5/16"-18X5/8" (12.9001)                                       |             |             |             |             |             |             |             |             |             |             |             | 2           |
|                                   | 179816  | BOLT, 5/16"-18X3/4" (12.9001)                                       |             |             | 1           | 1           |             |             |             |             |             | 1           |             |             |
|                                   | 180120  | BOLT, 3/8"-16X3/4" (12.9001)                                        | 1           |             |             |             |             |             |             |             |             |             |             |             |
|                                   | 181361  | BOLT, 3/8"-24X7/8" (12.9001)                                        |             |             |             |             |             | 1           |             |             |             |             |             |             |
|                                   | 186310  | BOLT, 3/8"-24X3 1/2" (12.9001)                                      |             |             |             | 1           |             |             |             |             |             | 1           |             |             |
|                                   | 5170489 | BOLT, 3/8"-24X3 9/16" LOCK (12.9001)                                |             |             |             | 1           |             |             |             |             |             | 1           |             |             |
|                                   | 120393  | WASHER, 5/16" (12.9190)                                             |             |             |             | 1           |             |             |             |             |             | 1           |             | 2           |
|                                   | 103341  | WASHER, 3/8" (12.9190)                                              |             |             |             |             |             | 1           |             |             |             |             |             |             |
|                                   | 103320  | LOCKWASHER, 5/16" (12.9200)                                         |             |             | 1           | 1           | 1           |             | 1           | 1           |             | 1           |             | 2           |

## 4.8000A VENTILATING SYSTEM

| PART                                         |         | TYPES                                           |             |             |             |             |             |             |             |             |             |             |             |             |
|----------------------------------------------|---------|-------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG                                          | NUMBER  | NAME AND DESCRIPTION                            | 3<br>5<br>7 | 3<br>7<br>1 | 3<br>7<br>7 | 3<br>7<br>9 | 3<br>8<br>3 | 4<br>0<br>0 | 4<br>0<br>6 | 4<br>1<br>1 | 4<br>2<br>0 | 4<br>3<br>3 | 4<br>3<br>7 | 4<br>4<br>0 |
| 4.8040 - CLIP, BREATHER TUBE<br>(CONT'D)     |         |                                                 |             |             |             |             |             |             |             |             |             |             |             |             |
|                                              | 103321  | LOCKWASHER, 3/8" (12.9200)                      | AR          |             |             |             |             |             | AR          |             |             |             |             |             |
|                                              | 120376  | NUT, 5/16"-18 (12.9120)                         |             |             | 1           | 1           | 1           |             |             | 1           |             | 1           |             | 2           |
|                                              | 102635  | NUT, 3/8"-16 (12.9120)                          | 1           |             |             |             |             |             |             |             |             |             |             |             |
|                                              | 117049  | NUT, 3/8"-24 (12.9120)                          |             |             |             |             |             |             | 1           |             |             |             |             |             |
| 4.8042 - SUPPORT, BREATHER TUBE CLIP         |         |                                                 |             |             |             |             |             |             |             |             |             |             |             |             |
|                                              | 5173022 | BRACKET (5.5379)                                | 1           |             |             |             |             |             | 1           |             |             |             |             | 2           |
|                                              | 5155464 | BRACKET (7.1582)                                |             |             |             | 1           |             |             |             |             |             | 1           |             |             |
|                                              | 5134534 | BRACKET (7.8203)                                |             |             |             |             |             |             |             | 1           |             |             |             |             |
|                                              | 5177331 | SUPPORT (4.8042)                                |             |             | 1           |             |             |             |             |             |             |             |             |             |
|                                              | 106973  | BOLT, 5/16"-18X1/2" (12.9001)                   |             |             |             |             |             |             |             |             |             |             |             | 1           |
|                                              | 120228  | BOLT, 5/16"-18X5/8" (12.9001)                   |             |             |             |             |             |             |             | 1           |             |             |             |             |
|                                              | 179839  | BOLT, 3/8"-16X1" (12.9001)                      |             |             |             |             |             |             |             |             |             |             |             | 1           |
|                                              | 120393  | WASHER, 11/32"X11/16"CAD.<br>(12.9190)          |             |             |             |             |             |             |             |             |             |             |             | 1           |
|                                              | 103341  | WASHER, 3/8" (12.9190)                          |             |             |             |             |             |             |             |             |             |             |             | 1           |
|                                              | 103320  | LOCKWASHER, 5/16" (12.9200)                     |             |             |             |             |             |             |             | 1           |             |             |             | 1           |
|                                              | 120376  | NUT, 5/16"-18 (12.9120)                         |             |             |             |             |             |             |             | 1           |             |             |             |             |
| 4.8050 - BODY, BREATHER                      |         |                                                 |             |             |             |             |             |             |             |             |             |             |             |             |
|                                              | 5134318 | + BODY                                          |             |             | 1           | 1           |             |             |             |             |             | 1           |             |             |
|                                              | 5138044 | BODY                                            |             |             |             |             |             |             |             |             |             |             | 1           |             |
| B                                            | 5121057 | BODY ASSY. (INCLUDES INTEGRAL<br>BREATHER TUBE) |             |             |             |             |             | 1           |             |             |             |             |             |             |
|                                              | 186647  | BOLT, 1/4"-20X1" (12.9001)                      |             |             | 3           | 3           |             |             |             |             |             | 3           |             |             |
|                                              | 179802  | BOLT, 1/4"-20X1 5/8" (12.9001)                  |             |             | 4           | 4           |             |             |             |             |             | 4           |             |             |
|                                              | 179828  | BOLT, 5/16"-18X2 1/2" (12.9001)                 |             |             |             |             |             | 2           |             |             |             |             | 2           |             |
|                                              | 120392  | WASHER, 9/32" (12.9190)                         |             |             |             |             |             |             |             |             |             | 7           |             |             |
|                                              | 120393  | WASHER, 5/16" (12.9190)                         |             |             | 7           | 7           |             |             |             |             |             |             |             |             |
|                                              |         | + OBSOLETE                                      |             |             |             |             |             |             |             |             |             |             |             |             |
| 4.8060 - FILTER UNIT, BREATHER OIL SEPARATOR |         |                                                 |             |             |             |             |             |             |             |             |             |             |             |             |
|                                              | 5132814 | ELEMENT 8V53                                    |             |             | 1           | 1           |             |             |             |             |             |             |             |             |
|                                              | 5137183 | ELEMENT 8V53                                    |             |             |             |             |             |             |             |             |             | 1           |             |             |
|                                              | 5104007 | ELEMENT 3,4-53                                  |             |             |             |             |             |             |             |             |             |             | 1           |             |
| 4.8070 - GASKET, BREATHER BODY               |         |                                                 |             |             |             |             |             |             |             |             |             |             |             |             |
|                                              | 5132774 | GASKET, 8V53                                    |             |             | 1           | 1           |             |             |             |             |             | 1           |             |             |

## DETROIT DIESEL

## 53 MPC ENGINES

## 4.8000A VENTILATING SYSTEM

| PART                                   |        | TYPES                                       |             |             |             |             |             |             |             |             |             |             |             |             |
|----------------------------------------|--------|---------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG                                    | NUMBER | NAME AND DESCRIPTION                        | 3<br>5<br>7 | 3<br>7<br>1 | 3<br>7<br>7 | 3<br>7<br>9 | 3<br>8<br>3 | 4<br>0<br>0 | 4<br>0<br>6 | 4<br>1<br>1 | 4<br>2<br>0 | 4<br>3<br>3 | 4<br>3<br>7 | 4<br>4<br>0 |
| 4.8175 - HOSE, BREATHER EXTENSION PIPE |        |                                             |             |             |             |             |             |             |             |             |             |             |             |             |
| 5118149                                | *      | HOSE, 1" I.D. X 2" L (4.1642)               | 1           |             |             |             |             |             | 1           |             |             |             |             |             |
| 5130140                                |        | HOSE, 1" I.D. (FORMED ELBOW)                |             | 1           |             | 2           |             |             |             | 2           |             | 2           |             | 2           |
| 5163930                                | *      | HOSE, 1 1/2" I.D. X 2 3/4" L (5.3290)       |             |             | 1           | 1           |             |             |             |             |             | 1           |             |             |
| 5130140                                |        | HOSE, 1" I.D. (FORMED ELBOW)                |             |             |             |             |             | 1           |             |             |             |             |             |             |
| 5118149                                | *      | HOSE, 1" I.D. X 5" L (4.1642)               |             |             |             |             |             |             |             |             | 1           |             |             |             |
| 272857                                 |        | CLAMP, 1" HOSE, SPRING TYPE<br>(12.9660)    | 2           | 2           |             | 4           | 2           |             | 2           | 2           | 2           | 4           |             | 6           |
| 5186840                                |        | CLAMP, 1 1/2" HOSE (12.9660)                |             |             |             |             |             |             |             |             |             |             |             |             |
| 2337379                                |        | CLAMP, 1 1/2" HOSE (12.9660)                |             |             | 2           | 2           |             |             |             |             |             | 2           |             |             |
|                                        |        | * STD. LENGTH HOSE, CUT TO LENGTH<br>SHOWN. |             |             |             |             |             |             |             |             |             |             |             |             |

## 4.8000A VENTILATING SYSTEM

| PART                                                                |                                         | TYPES                |             |             |             |             |             |             |             |             |             |             |  |  |  |  |  |  |
|---------------------------------------------------------------------|-----------------------------------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|--|--|--|--|--|
| FIG                                                                 | NUMBER                                  | NAME AND DESCRIPTION |             |             |             |             |             |             |             |             |             |             |  |  |  |  |  |  |
|                                                                     |                                         | 4<br>4<br>1          | 4<br>4<br>6 | 4<br>5<br>6 | 4<br>6<br>2 | 4<br>6<br>3 | 4<br>7<br>3 | 4<br>9<br>1 | 5<br>3<br>3 | 5<br>4<br>1 | 5<br>7<br>7 | 5<br>8<br>5 |  |  |  |  |  |  |
| 4.8001 - PIPE ASSY., BREATHER                                       |                                         |                      |             |             |             |             |             |             |             |             |             |             |  |  |  |  |  |  |
| A PIPE ASSY. (PLAIN) INCLUDES PLUG IN 4.8001 AND FILTER IN 4.8060.  |                                         |                      |             |             |             |             |             |             |             |             |             |             |  |  |  |  |  |  |
| A PIPE ASSY. (WITH OIL FILLER) INCLUDES FILLER CAP CHAIN IN 4.5030. |                                         |                      |             |             |             |             |             |             |             |             |             |             |  |  |  |  |  |  |
| 5138954                                                             | + PIPE, 4-53                            |                      |             |             | 1           |             |             |             |             |             |             |             |  |  |  |  |  |  |
| 5139042                                                             | + PIPE, 4-53                            |                      |             |             |             | 1           |             |             |             |             |             |             |  |  |  |  |  |  |
| 5145442                                                             | + PIPE, 8V53                            |                      |             |             |             |             |             |             |             |             | 1           |             |  |  |  |  |  |  |
| 5145443                                                             | + PIPE, 8V53                            |                      |             |             |             |             |             |             |             |             | 1           |             |  |  |  |  |  |  |
| 5145046                                                             | PIPE, 8V53                              |                      |             |             |             |             |             |             |             |             | 1           |             |  |  |  |  |  |  |
| 5150829                                                             | PLUG, 7/8" CUP                          | 1                    |             |             |             |             |             |             |             |             |             |             |  |  |  |  |  |  |
| 186625                                                              | BOLT, 5/16"-18X7/8" (12.9001)           |                      |             |             |             |             |             |             |             |             |             | 4           |  |  |  |  |  |  |
| 120393                                                              | WASHER, 5/16" (12.9190)                 |                      |             |             |             |             |             |             |             |             |             | 2           |  |  |  |  |  |  |
| 103320                                                              | LOCKWASHER, 5/16" (12.9200)             |                      |             |             |             |             |             |             |             |             |             | 4           |  |  |  |  |  |  |
|                                                                     | + OBSOLETE                              |                      |             |             |             |             |             |             |             |             |             |             |  |  |  |  |  |  |
| 4.8010 - EXTENSION, BREATHER TUBE                                   |                                         |                      |             |             |             |             |             |             |             |             |             |             |  |  |  |  |  |  |
| 5133941                                                             | PIPE, 8V53 (1 1/2" O.D.X29.26" DEV. L.) |                      | 1           |             |             |             |             |             | 1           |             |             |             |  |  |  |  |  |  |
| 5134470                                                             | PIPE, 8V53 (1" O.D.X22.56" DEV. L.)     |                      |             |             |             |             |             |             | 1           |             |             |             |  |  |  |  |  |  |
| 5136634                                                             | PIPE, 8V53 (1" O.D.X10" DEV. L.)        |                      |             |             |             |             |             |             |             | 1           |             |             |  |  |  |  |  |  |
| 5138379                                                             | PIPE, 6V53                              |                      |             | 1           |             |             |             |             |             |             |             |             |  |  |  |  |  |  |
| 5109983                                                             | PIPE, 3-4-53                            |                      |             |             |             |             | 1           |             |             |             |             |             |  |  |  |  |  |  |
| 5144205                                                             | PIPE, 8V53                              |                      |             |             |             |             |             |             |             | 1           |             |             |  |  |  |  |  |  |
| 5145353                                                             | PIPE, 8V53 (1" O.D.X26 11/32" L.)       |                      |             |             |             |             |             |             |             | 1           |             |             |  |  |  |  |  |  |
| 5116262                                                             | PIPE, 8V53 (1.2069)                     |                      |             |             |             |             |             |             |             |             |             | 4           |  |  |  |  |  |  |
| 5144906                                                             | PIPE, 3-53                              |                      |             |             |             |             |             |             |             |             |             | 1           |  |  |  |  |  |  |
| 4.8020 - GASKET BREATHER TUBE                                       |                                         |                      |             |             |             |             |             |             |             |             |             |             |  |  |  |  |  |  |
| 5145447                                                             | SEAL RING (4.8174)                      |                      |             |             |             |             |             |             |             |             |             | 4           |  |  |  |  |  |  |
| 4.8040 - CLIP, BREATHER TUBE                                        |                                         |                      |             |             |             |             |             |             |             |             |             |             |  |  |  |  |  |  |
| 5157702                                                             | CLIP (1" TUBE)                          |                      |             |             |             |             | 1           |             | 1           | 1           |             |             |  |  |  |  |  |  |
| 5144149                                                             | CLIP (1" TUBE)                          |                      |             |             |             |             |             |             |             |             | 2           |             |  |  |  |  |  |  |
| 5158779                                                             | CLIP (1 1/2" TUBE) (5.5376)             |                      | 1           |             |             |             |             |             | 1           |             |             |             |  |  |  |  |  |  |
| 5155664                                                             | CLIP (1" TUBE) (4.1570)                 |                      |             |             |             |             |             |             |             |             | 2           |             |  |  |  |  |  |  |
| 5177001                                                             | CLIP (7/8") (8.3801)                    |                      |             | 1           |             |             |             |             |             |             |             |             |  |  |  |  |  |  |
| 5187661                                                             | CLIP (1 1/4") (4.8183)                  |                      |             |             | 1           | 1           |             |             |             |             |             |             |  |  |  |  |  |  |
| 120228                                                              | BOLT, 5/16"-18X5/8" (12.9001)           |                      |             |             |             |             |             |             |             | 1           |             |             |  |  |  |  |  |  |
| 179816                                                              | BOLT, 5/16"-18X3/4" (12.9001)           | 1                    |             |             |             |             |             |             | 1           |             |             |             |  |  |  |  |  |  |

## 4.8000A VENTILATING SYSTEM

| PART                                                              |                                                       | TYPES                |             |             |             |             |             |             |             |             |             |             |
|-------------------------------------------------------------------|-------------------------------------------------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG                                                               | NUMBER                                                | NAME AND DESCRIPTION |             |             |             |             |             |             |             |             |             |             |
|                                                                   |                                                       | 4<br>4<br>1          | 4<br>4<br>6 | 4<br>5<br>6 | 4<br>6<br>2 | 4<br>6<br>3 | 4<br>7<br>3 | 4<br>9<br>1 | 5<br>3<br>3 | 5<br>4<br>1 | 5<br>7<br>7 | 5<br>8<br>5 |
| 4.8040 - CLIP, BREATHER TUBE (CONT'D)                             |                                                       |                      |             |             |             |             |             |             |             |             |             |             |
| 186625                                                            | BOLT, 5/16"-18X7/8" (12.9001)                         |                      |             |             |             | 1           |             |             |             |             |             |             |
| 181333                                                            | BOLT, 5/16"-24 X 5/8" (12.9001)                       |                      |             |             |             |             | 1           |             |             |             |             |             |
| 179833                                                            | BOLT, 3/8"-16X1/2" (12.9001)                          |                      |             | 1           |             |             |             |             |             |             |             |             |
| 180120                                                            | BOLT, 3/8"-16X3/4" (12.9001)                          |                      |             |             |             |             |             |             |             |             | 1           |             |
| 181360                                                            | BOLT, 3/8"-24X3/4" (12.9001)                          |                      |             |             |             | 1           | 1           |             |             |             |             |             |
| 5170489                                                           | BOLT, 3/8"-24X3 9/16" LOCK (12.9001)                  |                      |             |             |             |             |             |             | 1           |             |             |             |
| 179857                                                            | BOLT, 7/16"-14X7/8" (12.9001)                         |                      |             | 1           |             |             |             |             |             |             |             |             |
| 179858                                                            | BOLT, 7/16"-14X1" (12.9001)                           |                      |             |             |             |             |             |             |             |             | 1           |             |
| 120393                                                            | WASHER, 5/16" (12.9190)                               |                      |             |             |             |             |             |             |             |             | 2           |             |
| 103341                                                            | WASHER, 3/8" (12.9190)                                |                      |             |             |             | 1           | 1           |             |             |             | 1           |             |
| 103342                                                            | WASHER, 7/16" (12.9190)                               |                      |             |             |             |             |             |             |             |             | 1           |             |
| 103320                                                            | LOCKWASHER, 5/16" (12.9200)                           |                      | 1           |             |             | 1           |             |             | 2           |             | 1           |             |
| 103321                                                            | LOCKWASHER, 3/8" (12.9200)                            |                      |             | 1           |             | AR          | AR          | 1           |             |             | 1           |             |
| 103322                                                            | LOCKWASHER, 7/16" (12.9200)                           |                      |             | 1           |             |             |             |             |             |             | 1           |             |
| 120376                                                            | NUT, 5/16"-18 (12.9120)                               |                      | 1           |             |             |             |             |             | 1           |             | 1           |             |
| 114493                                                            | NUT, 5/16"-24 (2.7170)                                |                      |             |             |             |             | 1           |             |             |             |             |             |
| 102635                                                            | NUT, 3/8"-16 (12.9120)                                |                      |             |             |             |             |             |             |             |             | 1           |             |
| 117049                                                            | NUT, 3/8"-24 (12.9120)                                |                      |             |             |             | 1           | 1           |             |             |             |             |             |
| 4.8042 - SUPPORT, BREATHER TUBE CLIP                              |                                                       |                      |             |             |             |             |             |             |             |             |             |             |
| 5155464                                                           | BRACKET (7.1582)                                      |                      |             |             |             |             | 1           |             | 1           |             |             |             |
| 5134534                                                           | BRACKET (7.8203)                                      |                      |             |             |             |             |             |             |             | 1           |             |             |
| 5159398                                                           | BRACKET                                               |                      |             |             |             |             |             |             |             | 1           |             |             |
| 5145437                                                           | BRACKET                                               |                      |             |             |             |             |             |             |             |             | 1           |             |
| 5145508                                                           | BRACKET                                               |                      |             |             |             |             |             |             |             |             | 1           |             |
| 5177331                                                           | SUPPORT (4.8042)                                      |                      | 1           |             |             |             |             |             |             |             |             |             |
| 5179861                                                           | SUPPORT (7.3245)                                      |                      |             |             |             | 1           | 1           |             |             |             |             |             |
| 120228                                                            | BOLT, 5/16"-18X5/8" (12.9001)                         |                      |             |             |             |             |             |             |             |             | 1           |             |
| 186625                                                            | BOLT, 5/16"-18X7/8" (12.9001)                         |                      |             |             |             |             | 1           |             |             |             |             |             |
| 179837                                                            | BOLT, 3/8"-16X3/4" (12.9001)                          |                      |             |             |             |             |             |             |             |             | 1           |             |
| 103320                                                            | LOCKWASHER, 5/16" (12.9200)                           |                      |             |             |             |             | 1           |             |             |             | 1           |             |
| 103321                                                            | LOCKWASHER, 3/8" (12.9200)                            |                      |             |             |             |             |             |             | AR          |             | AR          |             |
| 120376                                                            | NUT, 5/16"-18 (12.9120)                               |                      |             |             |             |             |             |             |             |             | 1           |             |
| 4.8045 - BREATHER ASSY.                                           |                                                       |                      |             |             |             |             |             |             |             |             |             |             |
| FOR COMPONENTS OF BREATHER ASSY.<br>SEE ASSY. BREAKDOWN, PAGE A1. |                                                       |                      |             |             |             |             |             |             |             |             |             |             |
| 5110384                                                           | BREATHER ASSY., 4-53                                  |                      |             |             |             | 1           | 1           |             |             |             |             |             |
| 148148                                                            | SPRING, RETAINER 1/4" (12.9640)                       |                      |             |             |             | 1           | 1           |             |             |             |             |             |
| 186624                                                            | BOLT, 5/16"-18X1 1/4" (12.9001)                       |                      |             |             |             | 1           | 1           |             |             |             |             |             |
| 4.8050 - BODY, BREATHER                                           |                                                       |                      |             |             |             |             |             |             |             |             |             |             |
| 5134318                                                           | + BODY, 8V53                                          |                      | 1           |             |             |             |             |             | 1           |             |             |             |
| 5114263                                                           | BODY, 4-53                                            | 1                    |             |             |             | 1           | 1           |             |             |             |             |             |
| 5121057                                                           | BODY ASSY., 3.53 (INCLUDES INTEGRAL<br>BREATHER TUBE) | 1                    |             |             |             |             |             |             |             |             |             |             |

## 4.8000A VENTILATING SYSTEM

| PART |                | TYPES                                                |   |   |   |   |   |   |   |   |   |
|------|----------------|------------------------------------------------------|---|---|---|---|---|---|---|---|---|
| FIG  | NUMBER         | NAME AND DESCRIPTION                                 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 |
|      |                |                                                      | 4 | 4 | 5 | 6 | 6 | 7 | 9 | 5 | 5 |
|      |                |                                                      | 1 | 6 | 6 | 2 | 3 | 3 | 1 | 3 | 8 |
|      |                |                                                      |   |   |   |   |   |   |   | 7 | 5 |
|      |                | <b>4.8050 - BODY, BREATHER OR SEPARATOR (CONT'D)</b> |   |   |   |   |   |   |   |   |   |
|      | <b>186647</b>  | BOLT, 1/4"-20X1" (12.9001)                           |   |   | 3 |   |   |   |   | 3 |   |
|      | <b>179802</b>  | BOLT, 1/4"-20X1 5/8" (12.9001)                       |   | 4 |   |   |   |   |   | 4 |   |
|      | <b>179828</b>  | BOLT, 5/16"-18X2 1/2" (12.9001)                      | 2 |   |   |   |   |   |   |   |   |
|      | <b>186619</b>  | BOLT, 3/8"-16X1 1/8" (12.9001)                       |   |   |   | 4 | 4 |   |   |   |   |
|      | <b>120392</b>  | WASHER, 1/4" (12.9190)                               |   | 7 |   |   |   |   | 7 |   |   |
|      | <b>103321</b>  | LOCKWASHER, 3/8" (12.9200)                           |   |   |   | 4 | 4 |   |   |   |   |
|      |                | + OBSOLETE                                           |   |   |   |   |   |   |   |   |   |
|      |                | <b>4.8055 - SHELL, BREATHER</b>                      |   |   |   |   |   |   |   |   |   |
| 8D   | <b>2443795</b> | COVER, 8V53                                          |   |   |   |   |   |   |   |   | 1 |
| 8D   | <b>5104265</b> | CLAMP, 8V53                                          |   |   |   |   |   |   |   |   | 1 |
|      |                | <b>4.8057 - GASKET, BREATHER SHELL COVER</b>         |   |   |   |   |   |   |   |   |   |
|      | <b>5179282</b> | GASKET, 8V53 (BETWEEN BREATHER ASSY. AND BODY)       |   |   |   | 1 | 1 |   |   |   |   |
|      |                | <b>4.8060 - FILTER UNIT, BREATHER</b>                |   |   |   |   |   |   |   |   |   |
|      | <b>5137183</b> | FILTER, 8V53                                         |   | 1 |   |   |   |   | 1 |   |   |
|      | <b>5104007</b> | FILTER, 3,4-53                                       | 1 |   |   |   |   |   |   |   |   |
|      | <b>5119481</b> | FILTER, 8V53                                         |   |   |   |   |   |   |   | 1 |   |
| 8D   | <b>5101760</b> | ELEMENT, 8V53                                        |   |   |   |   |   |   |   |   | 1 |
| 8D   | <b>5132042</b> | SCREEN, 8V53                                         |   |   |   |   |   |   |   |   | 2 |
| 8D   | <b>5131951</b> | RETAINER, 8V53                                       |   |   |   |   |   |   |   |   | 2 |
|      |                | <b>4.8070 - GASKET, BREATHER BODY OR SEPARATOR</b>   |   |   |   |   |   |   |   |   |   |
|      | <b>5132774</b> | GASKET, 8V53                                         |   | 1 |   |   |   |   | 1 |   |   |
|      | <b>5183199</b> | GASKET, 4-53                                         |   |   |   | 1 | 1 |   |   | 1 |   |
| 8D   | <b>5144038</b> | GASKET, 8V53                                         |   |   |   |   |   |   |   |   | 1 |
|      |                | <b>4.8175 - HOSE, BREATHER EXTENSION</b>             |   |   |   |   |   |   |   |   |   |
|      | <b>5130140</b> | HOSE (1" I.D.) (FORMED ELBOW)                        |   |   |   |   |   | 1 | 1 | 2 |   |
|      | <b>5163930</b> | * HOSE (1 1/2" I.D. X 2 3/4" L.) (5.3290)            | 1 |   |   |   |   |   | 1 |   |   |
|      | <b>5141191</b> | HOSE (1 I.D.X5 L.) (5.3432)                          |   |   |   |   |   | 1 |   |   |   |

## 4.8000A VENTILATING SYSTEM

| PART                                       |                                             | TYPES                |             |             |             |             |             |             |             |             |             |             |
|--------------------------------------------|---------------------------------------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| ..FIG ..                                   | NUMBER                                      | NAME AND DESCRIPTION |             |             |             |             |             |             |             |             |             |             |
|                                            |                                             | 4<br>4<br>1          | 4<br>4<br>6 | 4<br>5<br>6 | 4<br>6<br>2 | 4<br>6<br>3 | 4<br>7<br>3 | 4<br>9<br>1 | 5<br>3<br>3 | 5<br>4<br>1 | 5<br>7<br>7 | 5<br>8<br>5 |
| 4.8175 - HOSE, BREATHER EXTENSION (CONT'D) |                                             |                      |             |             |             |             |             |             |             |             |             |             |
| 5129064                                    | * HOSE (7/8" I.D.) (4.8001)                 |                      |             | 1           |             |             |             |             |             |             |             |             |
| 5120022                                    | * HOSE (1 1/4" I.D. X 1 3/4" L.) (4.8010)   |                      |             |             | 1           | 1           |             |             |             |             |             |             |
| 5169721                                    | * HOSE (7/8" X 20" L.) (4.8010)             |                      |             |             |             |             |             |             |             |             | 1           |             |
| 5169721                                    | * HOSE (7/8" X 17" L.) (4.8010)             |                      |             |             |             |             |             |             |             |             | 2           |             |
| 5169721                                    | * HOSE (7/8" X 15") (4.8010)                |                      |             |             |             |             |             |             |             |             | 1           |             |
| 5142594                                    | HOSE (16" X 3 1/2")                         |                      |             |             |             |             |             |             |             |             | 2           |             |
| 5130627                                    | HOSE (1 1/8" X 4 5/16") (3.5505)            |                      |             |             |             |             |             |             |             |             | 1           |             |
| 272857                                     | CLAMP, 1" HOSE, SPRING TYPE<br>(12.9660)    |                      |             |             |             |             |             |             | 2           |             |             |             |
| 111609                                     | CLAMP, 1 3/16" HOSE (12.9660)               |                      |             | 2           |             |             |             |             |             |             |             |             |
| 2337379                                    | CLAMP, 1 1/2" HOSE (12.9660)                |                      | 2           |             |             |             |             |             | 2           |             |             |             |
| 5186840                                    | CLAMP, 1 1/2" (12.9660)                     |                      |             |             | 2           | 2           | 2           | 1           |             | 6           | 14          |             |
| 272859                                     | CLAMP, 1 5/8" (12.9600)                     |                      |             |             |             |             |             |             |             |             |             |             |
|                                            | * STD. LENGTH, HOSE CUT TO LENGTH<br>SHOWN. |                      |             |             |             |             |             |             |             |             |             |             |
| 4.8183 - BRACKET, BREATHER EXTENSION PIPE  |                                             |                      |             |             |             |             |             |             |             |             |             |             |
| 5145197                                    | PIPE, 8V53                                  |                      |             |             |             |             |             |             |             |             | 1           |             |
| 5143815                                    | SUPPORT, 8V53                               |                      |             |             |             |             |             |             |             |             | 2           |             |
| 179839                                     | BOLT, 3/8"-16X1" (12.9001)                  |                      |             |             |             |             |             |             |             |             | 2           |             |
| 103321                                     | LOCKWASHER, 3/8" (12.9200)                  |                      |             |             |             |             |             |             |             |             | 2           |             |
| 4.8190 - TUBE, BREATHER TUBE TO DRAIN TANK |                                             |                      |             |             |             |             |             |             |             |             |             |             |
| 5145441                                    | PIPE, OIL DRAIN 8V53                        |                      |             |             |             |             |             |             |             |             | 2           |             |
| 5145440                                    | PIPE, 90 DEG. 8V53                          |                      |             |             |             |             |             |             |             |             | 2           |             |
| 5142549                                    | PLUG, 3/4"-14 NPTF (12.9550)                |                      |             |             |             |             |             |             |             |             | 3           |             |
| 4.8195 - COVER, BREATHER HOLE-IN BLOCK     |                                             |                      |             |             |             |             |             |             |             |             |             |             |
| 5144203                                    | COVER, 8V53 (TO GOVERNOR)                   |                      |             |             |             |             |             |             |             | 1           |             |             |
| 5175683                                    | ELBOW (5.1235)                              |                      |             |             |             |             |             |             |             | 1           |             |             |
| 179796                                     | BOLT, 1/4"-20X7/8" (12.9001)                |                      |             |             |             |             |             |             |             | 7           | 7           |             |
| 120392                                     | WASHER, 1/4" (12.9190)                      |                      |             |             |             |             |             |             |             | 7           | 7           |             |

## 4.8000A VENTILATING SYSTEM

|                                      |                |                                | TYPES       |             |             |             |             |             |             |             |             |             |             |
|--------------------------------------|----------------|--------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG                                  | PART<br>NUMBER | NAME AND DESCRIPTION           | 6<br>7<br>5 | 7<br>1<br>6 | 7<br>2<br>7 | 7<br>5<br>6 | 7<br>7<br>2 | 7<br>9<br>5 | 7<br>9<br>8 | 8<br>0<br>0 | 8<br>1<br>1 | 8<br>3<br>9 | 8<br>4<br>1 |
| 4.8001 - PIPE ASSY., BREATHER        |                |                                |             |             |             |             |             |             |             |             |             |             |             |
| A                                    | 5140282        | PIPE ASSY., 3,4-53             | 1           |             |             |             |             |             |             |             |             |             |             |
| A,B                                  | 180078         | BOLT, 5/16"-18X7/8" (12.9001)  | 2           |             |             |             |             |             |             |             |             |             |             |
| A,B                                  | 103320         | LOCKWASHER, 5/16" (12.9200)    | 2           |             |             |             |             |             |             |             |             |             |             |
| 4.8010 - EXTENSION, BREATHER TUBE    |                |                                |             |             |             |             |             |             |             |             |             |             |             |
| C                                    | 5105041        | TUBE, 1" DIA. X 29.20" L.      |             |             |             | 1           |             |             |             |             |             |             |             |
|                                      | 5129063        | PIPE, DEV. L. 14.20" (4.8001)  |             |             |             |             |             |             |             |             | 1           |             |             |
| 4.8020 - GASKET BREATHER TUBE        |                |                                |             |             |             |             |             |             |             |             |             |             |             |
| A,B                                  | 5163299        | GASKET, 3,4-53                 | 1           |             |             |             |             |             |             |             |             |             |             |
| 4.8040 - CLIP, BREATHER TUBE         |                |                                |             |             |             |             |             |             |             |             |             |             |             |
| IC                                   | 5157702        | CLIP, 1" TUBE                  | 1           |             |             |             |             |             |             |             |             |             |             |
|                                      | 5177001        | CLIP, 7/8" TUBE (8.3801)       |             |             |             |             |             |             |             |             | 1           |             |             |
|                                      | 179837         | BOLT, 3/8"-16X3/4" (12.9001)   | 1           |             |             |             |             |             |             |             |             |             |             |
|                                      | 186288         | BOLT, 3/8"-16X4 1/2" (12.9001) |             |             |             |             |             |             |             |             | 1           |             |             |
|                                      | 5123429        | SPACER (2.3530)                |             |             |             |             |             |             |             |             | 1           |             |             |
|                                      | 103341         | WASHER, 3/8" (12.9190)         | 1           |             |             |             |             |             |             |             |             |             |             |
|                                      | 103321         | LOCKWASHER, 3/8" (12.9200)     | 1           |             |             |             |             |             |             |             |             |             |             |
|                                      | 102635         | NUT, 3/8"-16 (12.9120)         | 1           |             |             |             |             |             |             |             |             |             |             |
| 4.8042 - SUPPORT, BREATHER TUBE CLIP |                |                                |             |             |             |             |             |             |             |             |             |             |             |
|                                      | 5125920        | BRACKET                        | 1           |             |             |             |             |             |             |             |             |             |             |
|                                      | 5105098        | BRACKET                        |             | 1           |             |             |             |             |             |             |             |             |             |
|                                      | 179795         | BOLT, 1/4"-20X3/4" (12.9001)   |             | 1           |             |             |             |             |             |             |             |             |             |
|                                      | 179837         | BOLT, 3/8"-16X3/4" (12.9001)   | 1           |             |             |             |             |             |             |             |             |             |             |
|                                      | 179838         | BOLT, 3/8"-16X7/8" (12.9001)   |             | 1           |             |             |             |             |             |             |             |             |             |
|                                      | 103341         | WASHER, 3/8" (12.9190)         | 1           |             |             |             |             |             |             |             |             |             |             |
|                                      | 103319         | LOCKWASHER, 1/4" (12.9200)     |             | 1           |             |             |             |             |             |             |             |             |             |
|                                      | 103321         | LOCKWASHER, 3/8" (12.9200)     | 1           |             |             |             |             |             |             |             |             |             |             |
|                                      | 120375         | NUT, 1/4"-20 (12.9120)         |             | 1           |             |             |             |             |             |             |             |             |             |
| 4.8050 - BODY, BREATHER OR SEPARATOR |                |                                |             |             |             |             |             |             |             |             |             |             |             |
|                                      | 5163908        | SEPARATOR ASSY., 3,4-53        | 1           |             |             |             |             |             |             |             |             |             |             |
|                                      | 3222765        | BUSHING (2.8925)               | 1           |             |             |             |             |             |             |             |             |             |             |
|                                      | 179858         | BOLT, 7/16"-14X1" (12.9001)    | 1           |             |             |             |             |             |             |             |             |             |             |
|                                      | 179882         | BOLT, 1/2"-13X1 1/8" (12.9001) | 4           |             |             |             |             |             |             |             |             |             |             |
| 4.8055 - SHELL, BREATHER             |                |                                |             |             |             |             |             |             |             |             |             |             |             |
| ID                                   | 5103648        | SHELL ASSY.                    |             | 1           |             | 2           |             | 1           |             |             |             | 2           |             |
| ID                                   | 5103059        | COVER ASSY.                    |             |             |             |             |             |             |             |             |             |             | 2           |
| ID                                   | 2443795        | COVER ASSY., 4" DIA.           |             |             |             |             |             |             | 2           |             |             |             |             |
|                                      | 5104265        | CLAMP ASSY., 4" DIA.           |             |             | 2           |             | 1           |             | 2           |             |             |             | 2           |
|                                      | 5103647        | RETAINER                       |             | 1           |             |             |             |             |             |             | 2           |             |             |

## DETROIT DIESEL

## 53 MPC ENGINES

## 4.8000A VENTILATING SYSTEM

|     |                |                                                                           | TYPES       |             |             |             |             |             |             |             |             |             |             |
|-----|----------------|---------------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG | PART<br>NUMBER | NAME AND DESCRIPTION                                                      | 6<br>7<br>5 | 7<br>1<br>6 | 7<br>2<br>7 | 7<br>5<br>6 | 7<br>7<br>2 | 7<br>9<br>5 | 7<br>9<br>8 | 8<br>0<br>0 | 8<br>1<br>1 | 8<br>3<br>9 | 8<br>4<br>1 |
|     | 4.8055         | SHELL, BREATHER<br>(CONT'D)                                               |             |             |             |             |             |             |             |             |             |             |             |
|     | 5103642        | SCREW, #10-24X.375"                                                       |             |             | 3           |             |             |             |             |             |             | 3           |             |
|     | 4.8057         | GASKET, BREATHER SHELL COVER                                              |             |             |             |             |             |             |             |             |             |             |             |
|     | 5103646        | SEAL                                                                      |             |             | 1           |             |             |             |             |             |             | 2           |             |
|     | 5131952        | SHELL (1.8450)                                                            |             |             |             |             |             |             |             |             |             |             | 1           |
|     | 4.8060         | FILTER UNIT, BREATHER                                                     |             |             |             |             |             |             |             |             |             |             |             |
|     | 5190344        | + FILTER UNIT, 3,4-53                                                     | 1           |             |             |             |             |             |             |             |             |             |             |
| 8D  | 5132042        | SCREEN, 6V-53                                                             |             |             |             | 2           |             | 2           |             | 4           |             |             | 1           |
| 8D  | 5101760        | ELEMENT, 6V-53                                                            |             |             | 1           | 1           |             | 1           |             | 2           |             | 2           |             |
| 8D  | 5131951        | RETAINER, 6V-53                                                           |             |             |             | 2           |             | 2           |             | 4           |             |             |             |
|     | 5103636        | RETAINER, BREATHER ELEMENT<br>+ NOT SERVICED, USE 5163918 AND<br>5163919. |             |             | 1           |             |             |             |             |             |             | 2           |             |
|     | 4.8070         | GASKET, BREATHER BODY OR<br>SEPARATOR                                     |             |             |             |             |             |             |             |             |             |             |             |
| 8D  | 5163910        | GASKET, 3,4-53                                                            | 1           |             |             |             |             |             |             |             |             |             |             |
| 8D  | 5144038        | GASKET, 6V-53                                                             |             |             |             | 2           |             | 1           |             | 2           |             |             | 2           |
|     | 4.8175         | HOSE, BREATHER EXTENSION                                                  |             |             |             |             |             |             |             |             |             |             |             |
| 8C  | 5120022        | * HOSE, 1 1/4" X 3.26" L. (4.8010)                                        |             |             |             |             | 1           |             |             |             |             |             |             |
| 8C  | 5120022        | * HOSE, 1 1/4" X 2.26" L. (4.8010)                                        |             |             |             |             | 1           |             |             |             |             |             |             |
| 8C  | 5134824        | HOSE, 1"X36" L. (1.1155)                                                  |             |             |             |             |             |             | 1           |             |             |             |             |
| 8C  | 5129064        | HOSE, 7/8"X2" L. (4.8001)<br>* STD. LENGTH HOSE, CUT TO LENGTH<br>SHOWN.  |             |             |             |             |             |             |             |             | 1           |             |             |
|     | 4.8180         | CLAMP, BREATHER EXTENSION PIPE<br>HOSE                                    |             |             |             |             |             |             |             |             |             |             |             |
| 8C  | 272859         | CLAMP, 1 1/4" HOSE (12.9660)                                              |             |             |             |             | 2           |             |             |             |             |             |             |
| 8C  | 9139801        | CLAMP, 5/8" HOSE (12.9660)                                                |             |             |             |             |             | 1           |             |             |             |             |             |
|     | 5186840        | CLAMP, 1 1/2" HOSE (12.9660)                                              |             |             |             |             |             |             |             |             | 2           |             |             |
|     | 5181415        | CLIP, 1 1/8" (5.5390)                                                     |             |             |             |             |             |             | 1           |             |             |             |             |
|     | 5101020        | STRAP, NYLON (2.5255)                                                     |             |             |             |             |             |             | 1           |             |             |             |             |
|     | 179837         | BOLT, 3/8"-16X3/4" (12.9001)                                              |             |             |             |             |             |             | 1           |             |             |             |             |
|     | 103341         | WASHER, 3/8" (12.9190)                                                    |             |             |             |             |             |             | 1           |             |             |             |             |
|     | 103321         | LOCKWASHER, 3/8" (12.9200)                                                |             |             |             |             |             |             | 1           |             |             |             |             |

## DETROIT DIESEL

## 53 MPC ENGINES

## 4.8000A VENTILATING SYSTEM

|     |                |                                            | COLUMN |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----|----------------|--------------------------------------------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FIG | PART<br>NUMBER | NAME AND DESCRIPTION                       | A      | B | C | D | E | F | G | H | I | J | K | L | M | N |
|     |                | <b>4.8045 - BREATHER ASSY.</b>             |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
|     | <b>5110384</b> | BREATHER ASSY. ....                        | 1      |   |   |   |   |   |   |   |   |   |   |   |   |   |
|     |                | <b>4.8055 - SHELL, BREATHER</b>            |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 8D  | <b>2443795</b> | COVER ASSY. (4") ....                      | 1      |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 8D  | <b>5104265</b> | CLAMP ASSY. ....                           | 1      |   |   |   |   |   |   |   |   |   |   |   |   |   |
|     |                | <b>4.8060 - FILTER UNIT, BREATHER</b>      |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
|     | <b>5101760</b> | ELEMENT ....                               | 1      |   |   |   |   |   |   |   |   |   |   |   |   |   |
|     |                | <b>4.8070 - GASKET, BREATHER SEPARATOR</b> |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 8D  | <b>5144038</b> | GASKET ....                                | 1      |   |   |   |   |   |   |   |   |   |   |   |   |   |

## GROUP NOMENCLATURE

|                                              |                                            |                                           |                                                  |
|----------------------------------------------|--------------------------------------------|-------------------------------------------|--------------------------------------------------|
| <b>1.0000 ENGINE (less major assemblies)</b> |                                            | <b>5.0000 COOLING SYSTEM (CONT'D)</b>     |                                                  |
| 1.1000                                       | Cylinder Block                             | 5.3000B                                   | Water Connections                                |
| 1.1000A                                      | Air Box Drains                             | 5.4000A                                   | Fan                                              |
| 1.2000                                       | Cylinder Head                              | 5.4000B                                   | Fan Shroud                                       |
| 1.2000A                                      | Engine Lifter Bracket                      | 5.5000A                                   | Heat Exchanger or Keel Cooling                   |
| 1.3000                                       | Crankshaft, Oil Seals and Stabilizers      | 5.6000A                                   | Raw Water Pump                                   |
| 1.3000A                                      | Crankshaft Front Cover                     | 5.7000A                                   | Water Filter                                     |
| 1.3000B                                      | Vibration Damper                           |                                           |                                                  |
| 1.3000C                                      | Crankshaft Pulley                          | <b>6.0000 EXHAUST SYSTEM</b>              |                                                  |
| 1.3000D                                      | Crankshaft Pulley Belt                     | 6.1000A                                   | Exhaust Manifold and/or Connections              |
| 1.4000A                                      | Flywheel                                   | 6.2000A                                   | Exhaust Muffler and/or Connections               |
| 1.5000A                                      | Flywheel Housing                           |                                           |                                                  |
| 1.5000B                                      | Flywheel Housing Adapter                   | <b>7.0000 ELECTRICAL INSTRUMENTS</b>      |                                                  |
| 1.6000                                       | Connecting Rod and Piston                  | 7.1000A                                   | Battery Charging Generator                       |
| 1.7000                                       | Camshaft and Gear Train                    | 7.2000A                                   | Battery Cables                                   |
| 1.7000A                                      | Balance Weight Cover                       | 7.2000B                                   | Automatic Starting                               |
| 1.7000B                                      | Accessory Drive                            | 7.2000B                                   | Automatic Starting (Twin and Quad)               |
| 1.8000                                       | Valve Injector Operating Mechanism         | 7.3000A                                   | Starting Motor                                   |
| 1.8000A                                      | Rocker Cover                               | 7.4000A                                   | Instruments                                      |
|                                              |                                            | 7.4000A                                   | Instruments (Twin and Quad)                      |
| <b>2.0000 FUEL SYSTEM</b>                    |                                            | 7.4000B                                   | Tachometer Drive                                 |
| 2.1000A                                      | Fuel Injector                              | 7.4000B                                   | Tachometer Drive (Twin and Quad)                 |
| 2.1000B                                      | Electronic Injector Controls               | 7.4000C                                   | Shutoff, Alarm and O.S. Governor                 |
| 2.2000                                       | Fuel Pump                                  | 7.4000C                                   | Shutoff, Alarm and O.S. Governor (Twin and Quad) |
| 2.2000A                                      | Fuel Pump Drain                            | 7.5000A                                   | Power Generator                                  |
| 2.3000A                                      | Fuel Filter and Strainer                   | 7.6000A                                   | Control Cabinet                                  |
| 2.3000A                                      | Fuel Filter and Strainer (Twin and Quad)   | 7.6000A                                   | Control Cabinet (Twin and Quad)                  |
| 2.4000                                       | Fuel Manifold and/or Connections           | 7.7000A                                   | Wiring Harness                                   |
| 2.4000A                                      | Dual Fuel System                           | 7.8000A                                   | Air Heater                                       |
| 2.5000A                                      | Fuel Lines and Fuel Cooler                 | 7.8000A                                   | Air Heater (Twin and Quad)                       |
| 2.5000A                                      | Fuel Lines and Fuel Cooler (Twin and Quad) | 7.10000A                                  | Hydraulic Governor Solenoid                      |
| 2.6000A                                      | Fuel Tank                                  |                                           |                                                  |
| 2.6000B                                      | Electric Governor                          | <b>8.0000 POWER TAKE-OFF</b>              |                                                  |
| 2.7000A                                      | Mechanical Governor                        | 8.1000A                                   | Power Take-off and/or Clutch                     |
| 2.8000A                                      | Hydraulic Governor                         | 8.1000A                                   | Power Take-off and/or Clutch (Twin and Quad)     |
| 2.9000                                       | Injector Controls                          | 8.3000A                                   | Torque Converter                                 |
| 2.9000                                       | Injector Controls (Twin and Quad)          | 8.3000A                                   | Torque Converter (Twin and Quad)                 |
| 2.9000A                                      | Throttle Controls                          | 8.3000B                                   | Transmission Lines                               |
| 2.9000A                                      | Throttle Controls (Twin and Quad)          |                                           |                                                  |
| <b>3.0000 AIR SYSTEM</b>                     |                                            | <b>9.0000 TRANSMISSION AND PROPULSION</b> |                                                  |
| 3.1000A                                      | Air Cleaner and/or Adapter                 | 9.1000A                                   | Hydraulic Marine Gear                            |
| 3.2000A                                      | Air Silencer                               | 9.1000A                                   | Hydraulic Marine Gear (Twin and Quad)            |
| 3.3000A                                      | Air Inlet Housing                          | 9.2000A                                   | Reverse and Reduction Gear (mechanical)          |
| 3.3000C                                      | Air Intake Manifold                        | 9.3000A                                   | Power Transfer Gear                              |
| 3.4000                                       | Blower and Drive                           | 9.3000A                                   | Power Transfer Gear (Twin and Quad)              |
| 3.4000A                                      | Blower Drive Shaft                         | 9.4000                                    | Transmission - Highway                           |
| 3.4000B                                      | Blower End Plate Cover                     | 9.7000                                    | Transmission - Off-highway                       |
| 3.5000A                                      | Turbocharger, Intercooler, and Aftercooler | 9.9000                                    | Transmission - Rail Car                          |
|                                              |                                            |                                           |                                                  |
| <b>4.0000 LUBRICATING SYSTEM</b>             |                                            | <b>10.0000 SHEET METAL</b>                |                                                  |
| 4.1000A                                      | Oil Pump                                   | 10.1000A                                  | Engine Hood                                      |
| 4.1000B                                      | Oil Distribution System                    |                                           |                                                  |
| 4.1000C                                      | Oil Pressure Regulator                     | <b>11.0000 ENGINE MOUNTING</b>            |                                                  |
| 4.2000A                                      | Oil Filter                                 | 11.1000A                                  | Engine Mounting and Base                         |
| 4.3000A                                      | Oil Filter Lines                           | 11.1000A                                  | Engine Mounting and Base (Twin and Quad)         |
| 4.4000A                                      | Oil Cooler and Marine Gear Lines           |                                           |                                                  |
| 4.5000A                                      | Oil Filter                                 | <b>12.0000 MISCELLANEOUS</b>              |                                                  |
| 4.6000A                                      | Dipstick                                   | 12.2000A                                  | Bilge Pump                                       |
| 4.7000A                                      | Oil Pan                                    | 12.3000A                                  | Vacuum Pump                                      |
| 4.8000A                                      | Ventilating System                         | 12.4000A                                  | Air Compressor                                   |
|                                              |                                            | 12.5000A                                  | Hydraulic Pump                                   |
| <b>5.0000 COOLING SYSTEM</b>                 |                                            | 12.6000A                                  | Gasoline Starter                                 |
| 5.1000                                       | Fresh Water Pump                           | 12.6000B                                  | Air Starter                                      |
| 5.1000A                                      | Fresh Water Pump Cover                     | 12.6000C                                  | Cold Weather Starting Aid                        |
| 5.2000A                                      | Water Outlet Manifold and/or Elbow         | 12.6000D                                  | Hydraulic Starter                                |
| 5.2000B                                      | Thermostat                                 | 12.6000E                                  | Hydraulic Starter Accessories                    |
| 5.2000C                                      | Water Bypass Tube                          | 12.8000A                                  | Supplies                                         |
| 5.3000A                                      | Radiator                                   | 12.8000B                                  | Fabrication Material                             |
|                                              |                                            | 12.8000C                                  | Miscellaneous Service Kits and Sets              |
|                                              |                                            | 12.8000D                                  | Miscellaneous Service Parts                      |



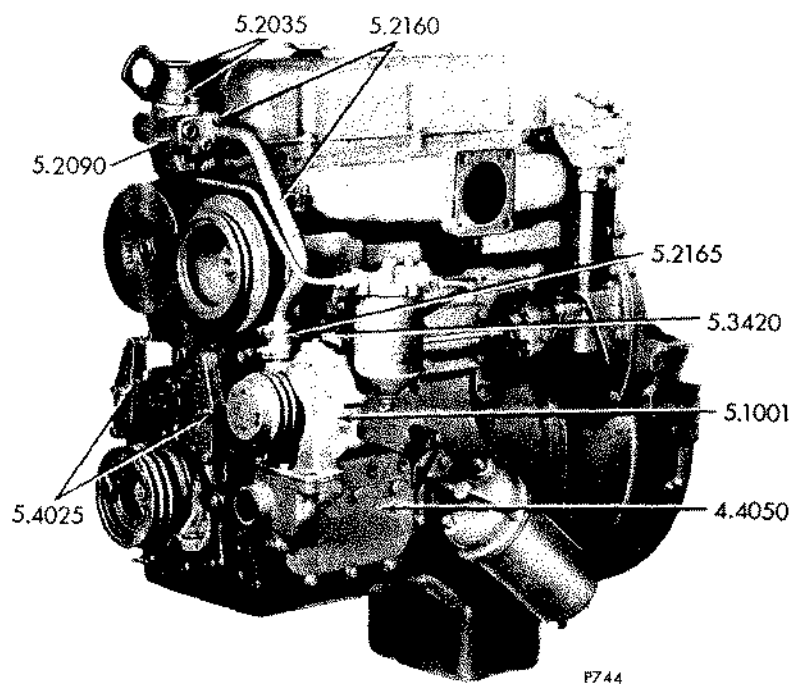


FIG. 1A TYPICAL COOLING SYSTEM (In-Line Engine)

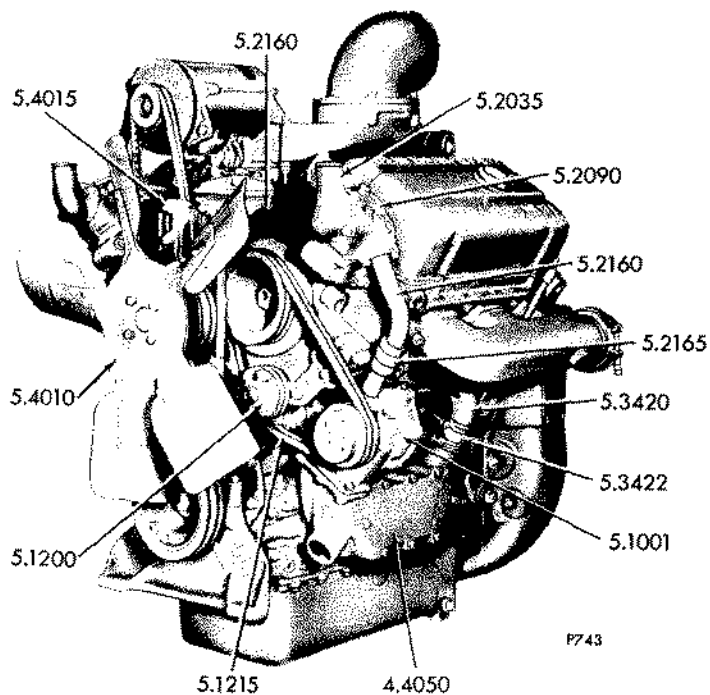


FIG. 1B TYPICAL COOLING SYSTEM (V-Engine)

Figs. 1A & 1B of 5.0000

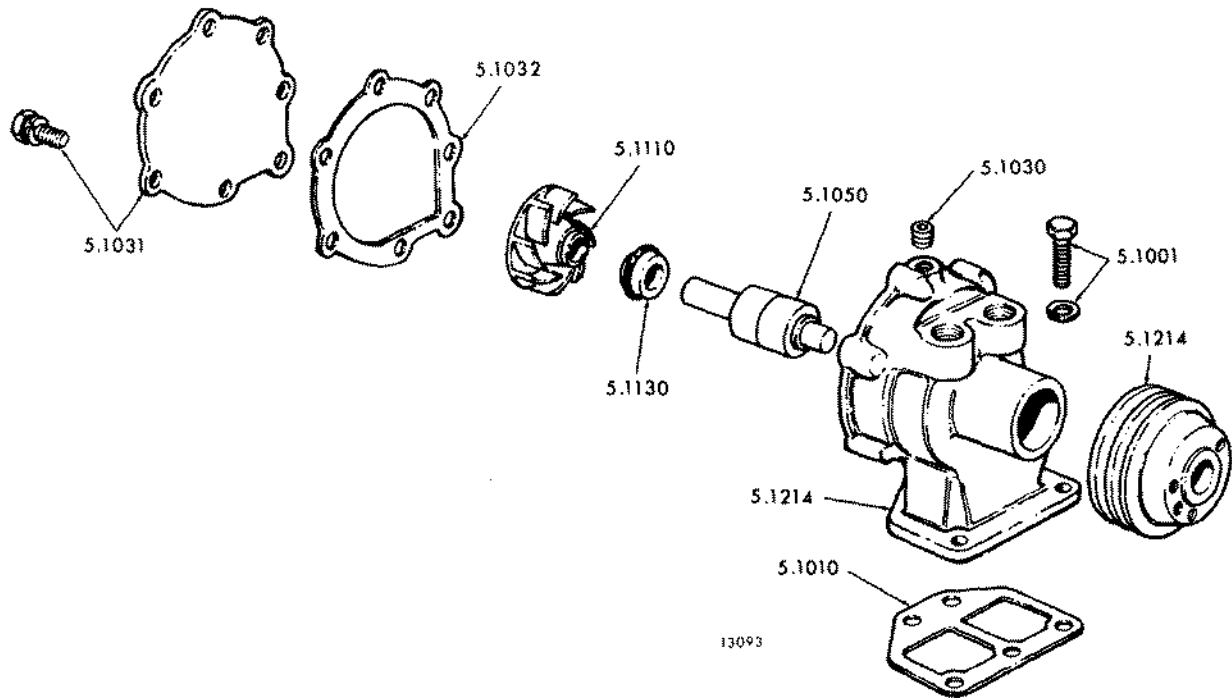


FIG. 2A FRESH WATER PUMP

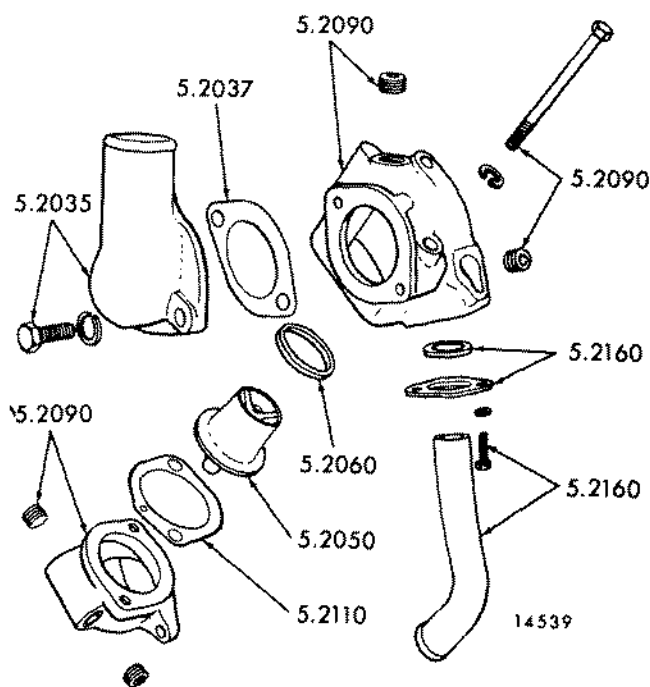


FIG. 3A THERMOSTAT  
(V-Models)

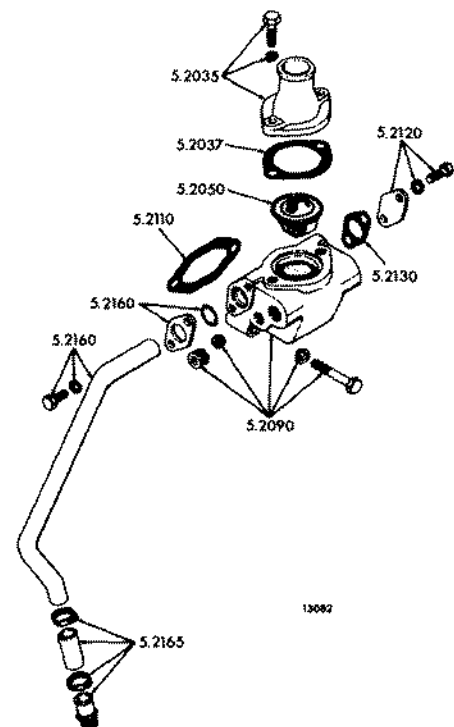


FIG. 3B THERMOSTAT  
(In-Line Models)

Figs. 2A, 3A & 3B of 5.0000

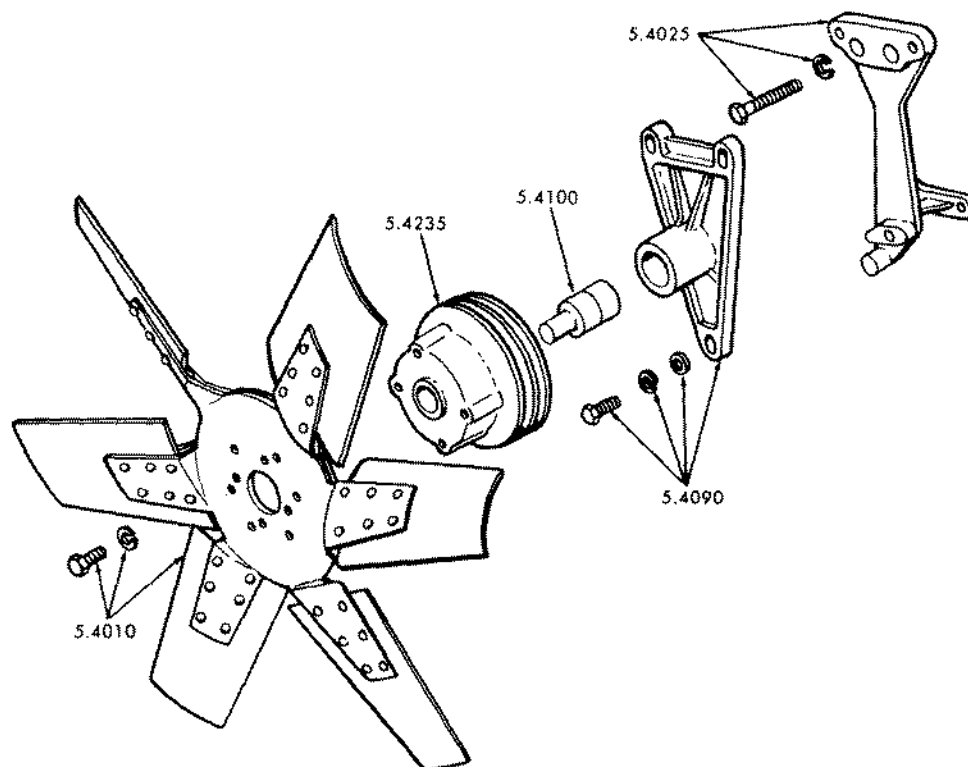


FIG. 4A FAN SHAFT & PULLEY

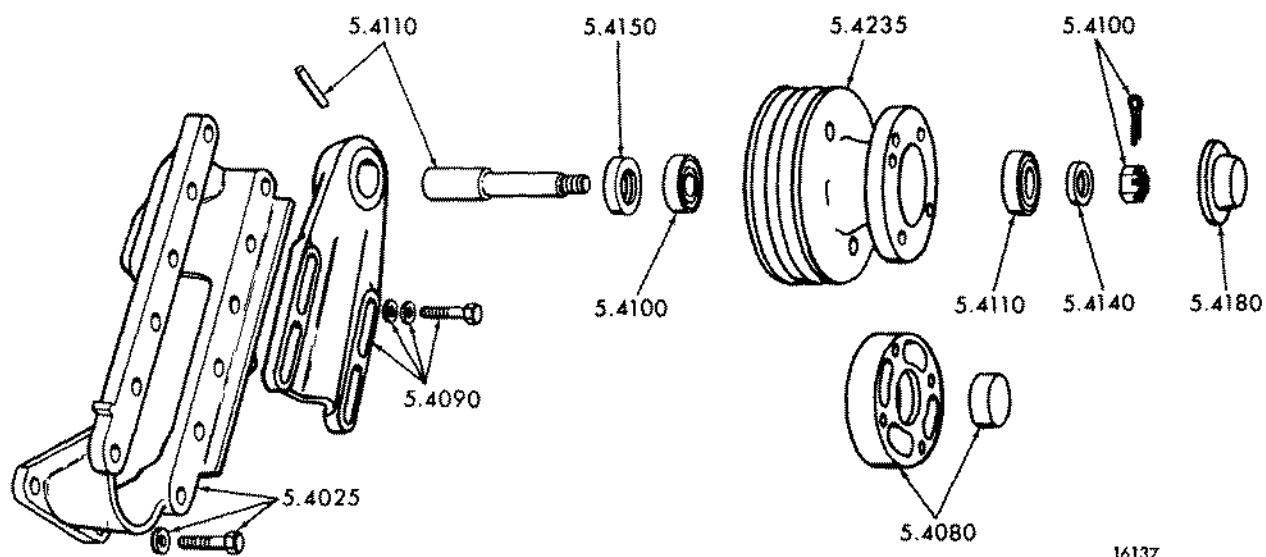


FIG. 4B FAN SHAFT & PULLEY

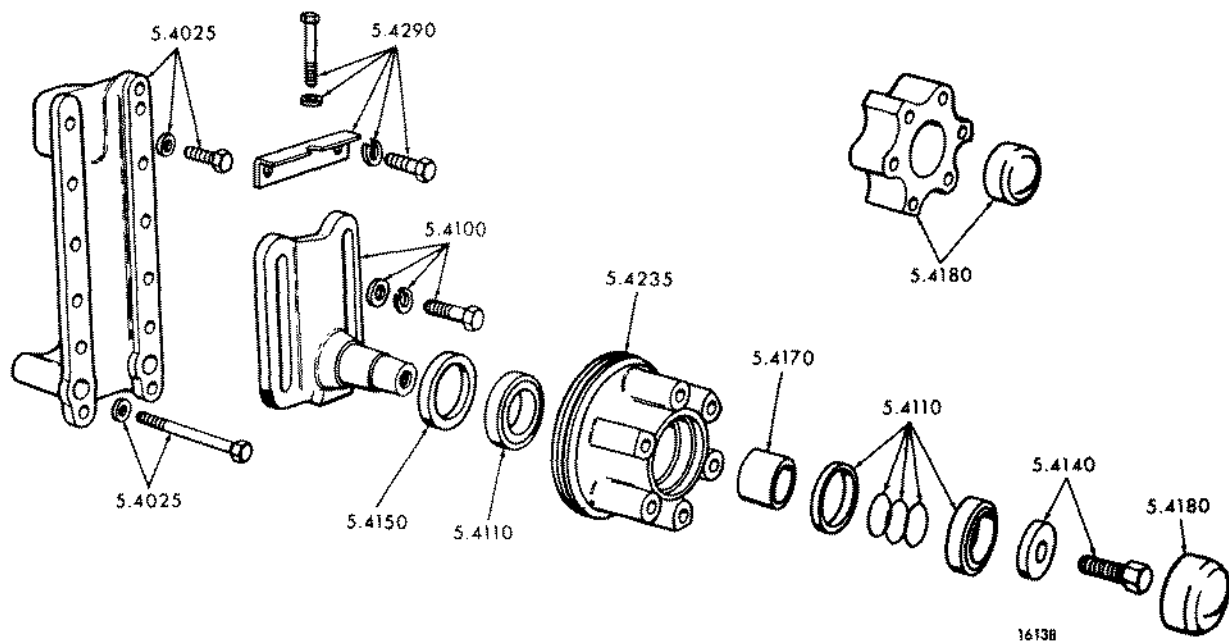


FIG. 4C FAN SHAFT & PULLEY

Fig. 4C of 5.0000

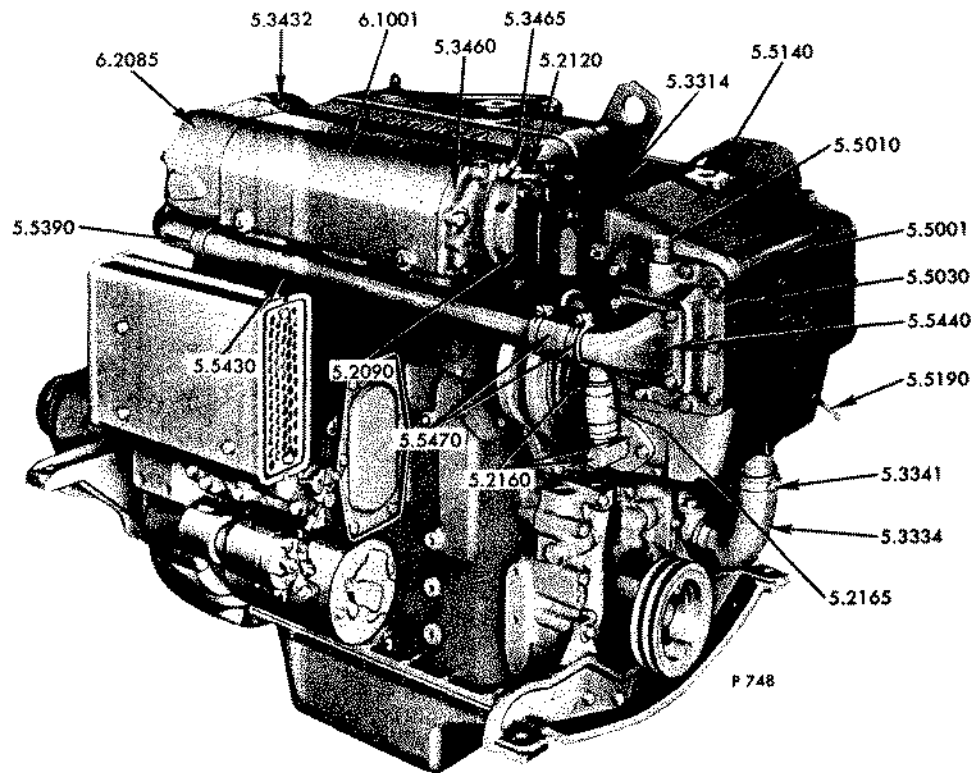


FIG. 5A TYPICAL HEAT EXCHANGER COOLING SYSTEM (In-Line Model)

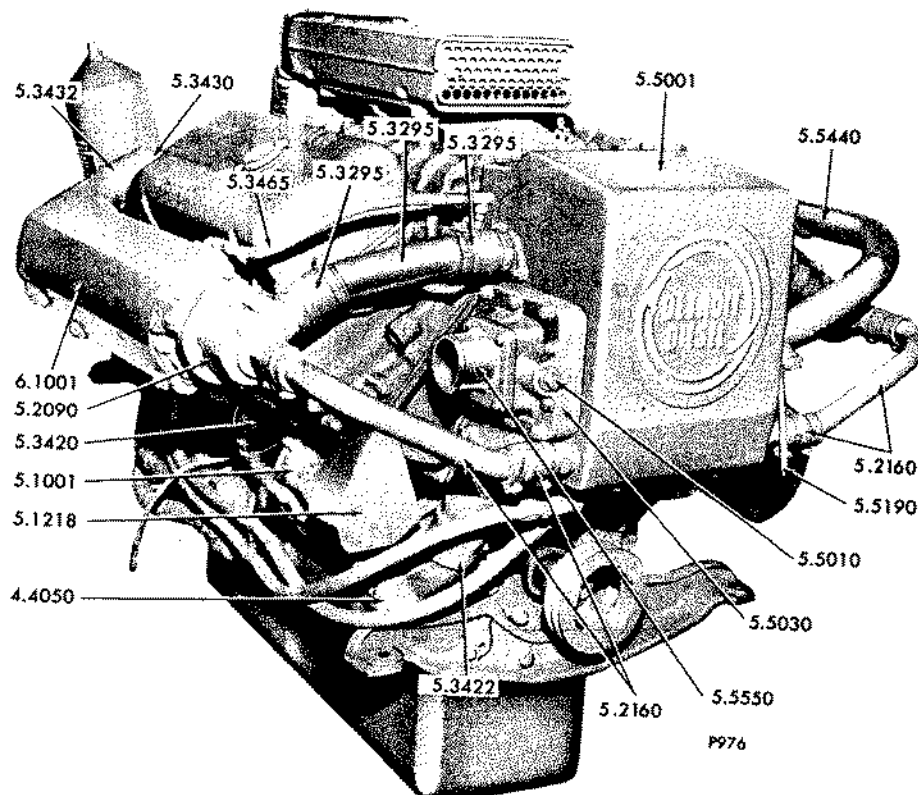


FIG. 5B TYPICAL HEAT EXCHANGER COOLING SYSTEM (V-Model)

Figs. 5A & 5B of 5.0000

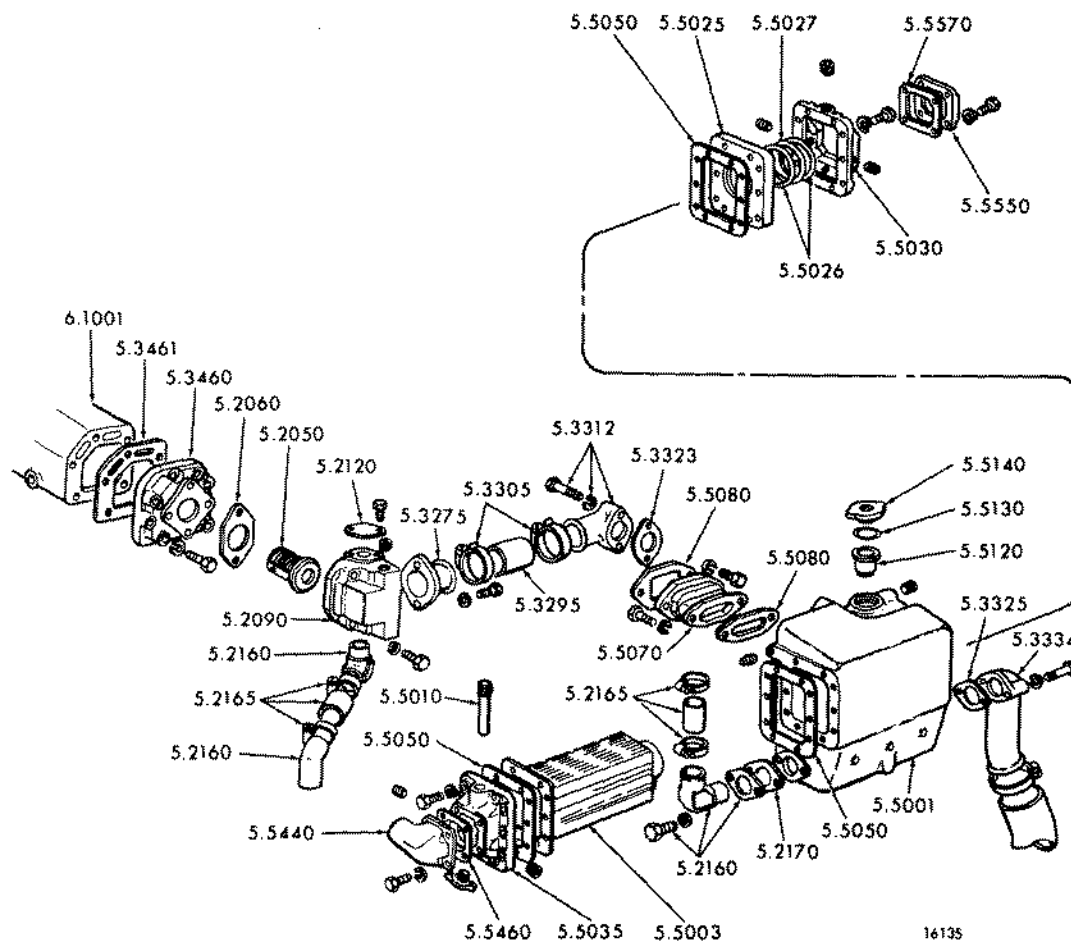


FIG. 6A HEAT EXCHANGER (In-Line Models)

Fig. 6A of 5.0000



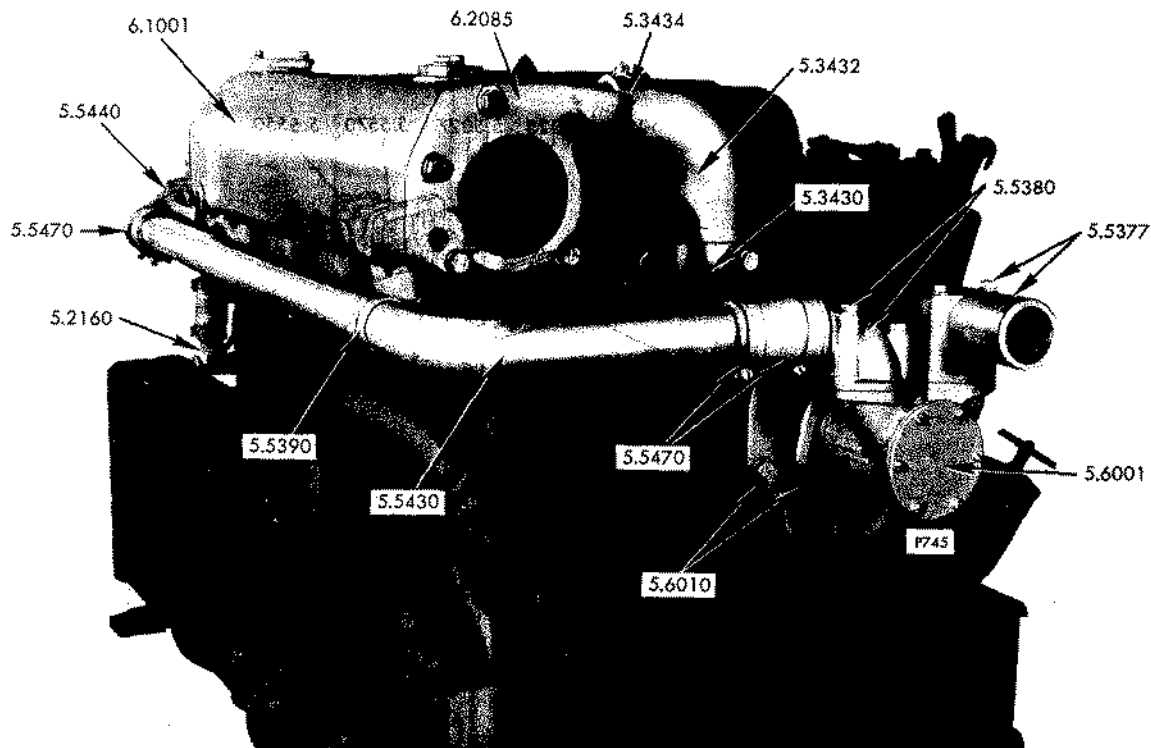


FIG. 7A TYPICAL RAW WATER PUMP INSTALLATION (In-Line Engines)

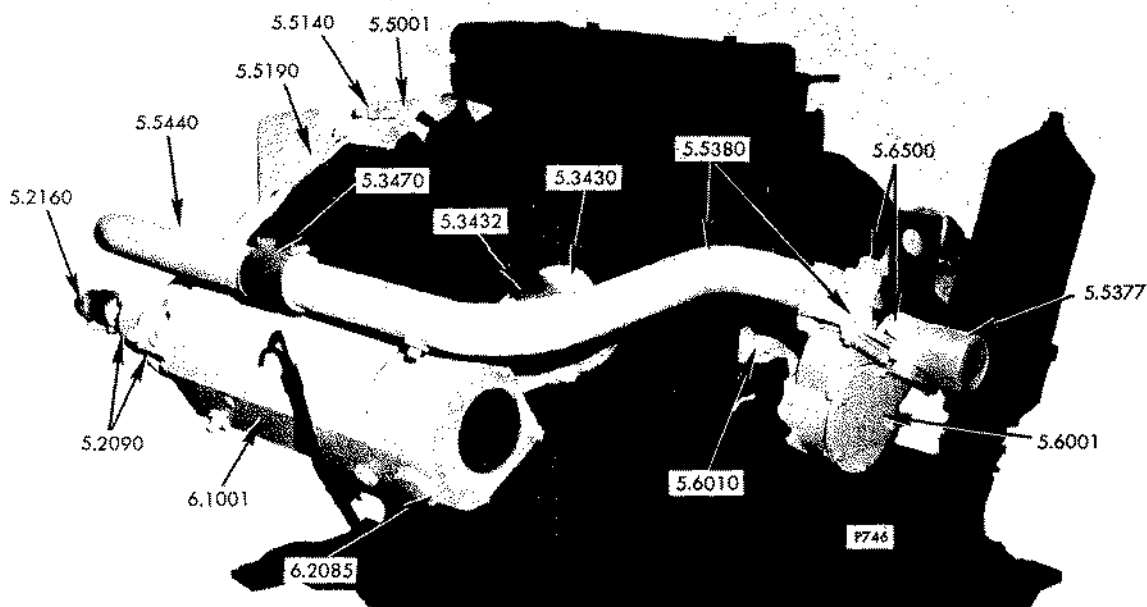


FIG. 7B TYPICAL RAW WATER PUMP INSTALLATION (V-Engines)

Figs. 7A & 7B of 5.0000

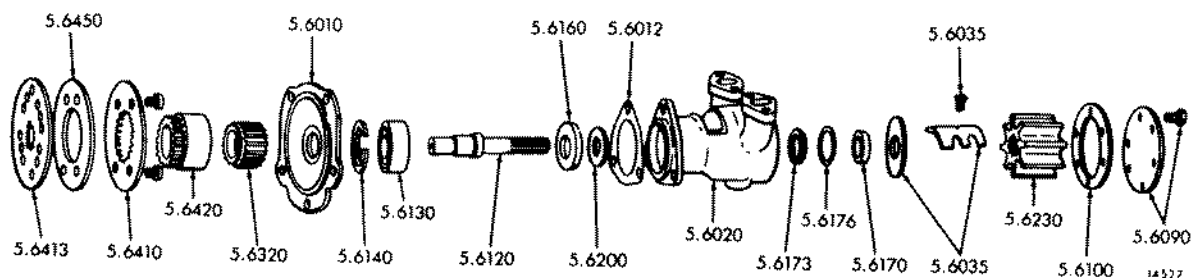


FIG. 8A RAW WATER PUMP (In-Line Models)

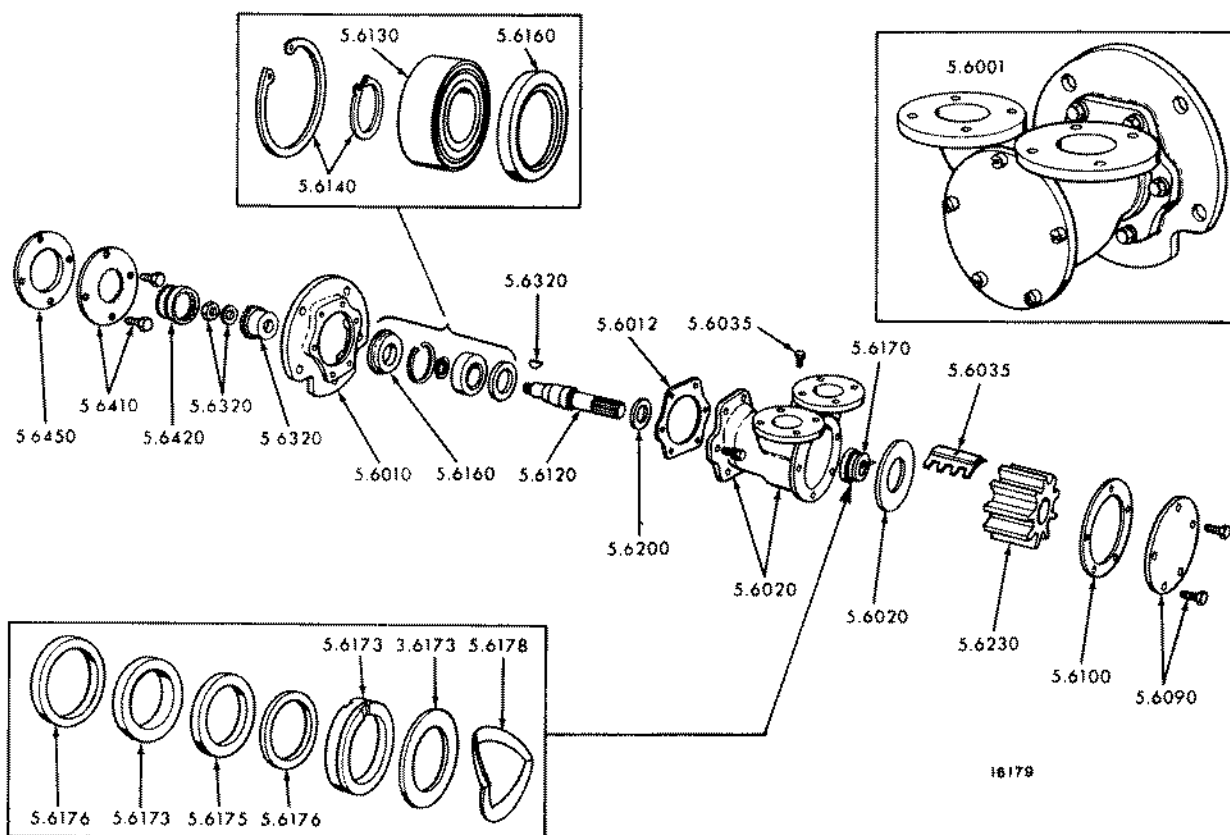


FIG. 8B RAW WATER PUMP (V-Models)

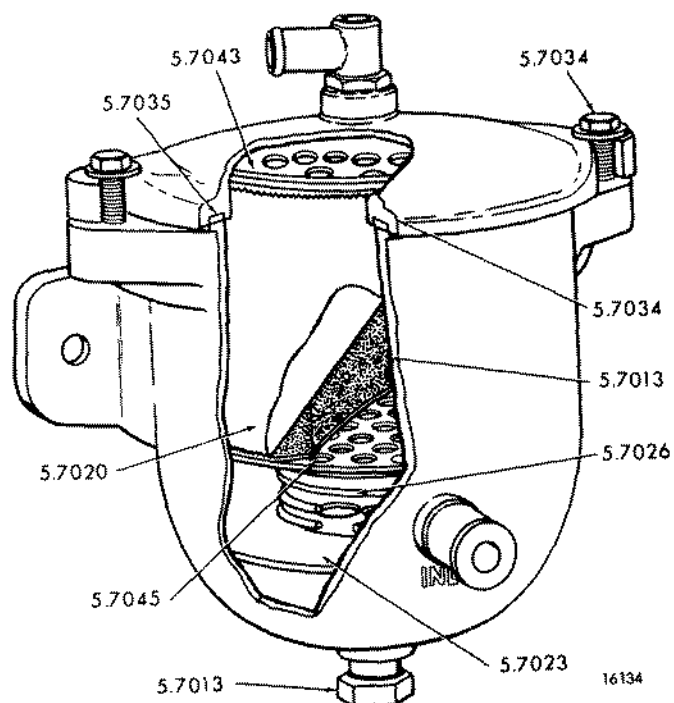


FIG. 9A WATER FILTER (Perry)

FIG. 9B TYPICAL WATER FILTER INSTALLATION

## 5.1000 FRESH WATER PUMP

| PART                                                                                                                                          |         |                                                       | TYPES  |        |        |        |        |        |        |        |        |        |        |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| FIG                                                                                                                                           | NUMBER  | NAME AND DESCRIPTION                                  | 3<br>8 | 3<br>9 | 4<br>0 | 4<br>4 | 4<br>5 | 4<br>6 | 4<br>7 | 5<br>3 | 5<br>4 | 5<br>7 | 5<br>8 | 5<br>9 |
| 5.1001 - PUMP ASSY., FRESH WATER                                                                                                              |         |                                                       |        |        |        |        |        |        |        |        |        |        |        |        |
| SEE ASSEMBLY BREAKDOWN AS INDICATED BELOW.                                                                                                    |         |                                                       |        |        |        |        |        |        |        |        |        |        |        |        |
| 1A                                                                                                                                            | 5195982 | * PUMP ASSY., 2,3,4-53 (L. H. ROTATION) (PAGE A1)     | 1      |        |        |        |        | 1      | 1      |        |        |        |        |        |
| 1A                                                                                                                                            | 5195983 | * PUMP ASSY., 2,3,4,6V53 (R.H. ROTATION) (PAGE A1)    |        | 1      |        | 1      | 1      |        |        |        |        |        |        | 1      |
| 1A                                                                                                                                            | 5121216 | * PUMP ASSY., 2-53 (R.H. ROTATION) (PAGE A1)          |        |        | 1      |        |        |        |        |        |        |        |        |        |
| 1A                                                                                                                                            | 5123801 | * PUMP ASSY., 2-53 (R. H. ROTATION) (PAGE A1)         |        |        |        |        |        |        |        | 1      |        |        |        |        |
| 1A                                                                                                                                            | 5124349 | * PUMP ASSY., 2-53 (R.H. ROTATION) (PAGE A1)          |        |        |        |        |        |        |        |        | 1      |        |        |        |
| 1B                                                                                                                                            | 5121478 | * PUMP ASSY., 6V53 (R.H. ROTATION) (C ENG.) (PAGE A1) |        |        |        |        |        |        |        |        |        | 1      |        |        |
| 1B                                                                                                                                            | 5121477 | * PUMP ASSY., 6V53 (L.H. ROTATION) (A ENG.) (PAGE B1) |        |        |        |        |        |        |        |        |        |        | 1      |        |
|                                                                                                                                               | 186625  | @ BOLT, 5/16"-18X7/8" (12.9001)                       | 5      | 5      | 5      | 5      | 5      | 5      | 5      | 5      | 5      | 4      | 4      | 5      |
|                                                                                                                                               | 9421623 | BOLT, 5/16"-18 X 7/8" (FRONT INSIDE HOLE) (12.9027)   |        |        |        |        |        |        |        |        |        | 1      | 1      |        |
|                                                                                                                                               | 179828  | # BOLT, 5/16"-18X2 1/2" (12.9001)                     |        |        | 2      |        |        |        |        |        |        |        |        |        |
|                                                                                                                                               | 103320  | LOCKWASHER, 5/16" (12.9200)                           | 5      | 5      | 5      | 5      | 5      | 5      | 5      | 5      | 5      | 4      | 4      | 5      |
|                                                                                                                                               | 114493  | # NUT, 5/16"-24 (12.9120)                             |        |        | 3      |        |        |        |        |        |        |        |        |        |
| * NOT SERVICED, REFER TO CONVERSION CHART AT BEGINNING OF SECTION FOR REPLACEMENT PUMP AND ITEMS THAT MAY BE REQUIRED TO CONVERT TO NEW PUMP. |         |                                                       |        |        |        |        |        |        |        |        |        |        |        |        |
| @ EFFECTIVE WITH 2D-761 ON TYPE 40.                                                                                                           |         |                                                       |        |        |        |        |        |        |        |        |        |        |        |        |
| # THRU 2D-760.                                                                                                                                |         |                                                       |        |        |        |        |        |        |        |        |        |        |        |        |
| 5.1002 - RECONDITIONING KIT, FRESH WATER PUMP                                                                                                 |         |                                                       |        |        |        |        |        |        |        |        |        |        |        |        |
| INCLUDES ITEMS IN 5.1010, 5.1032, 5.1050, 5.1110 AND 5.1130.                                                                                  |         |                                                       |        |        |        |        |        |        |        |        |        |        |        |        |
|                                                                                                                                               | 5199535 | RECONDITIONING KIT, 2,3,4,6V53 (L.H. ROTATION PUMP)   | AR     |        |        |        |        | AR     | AR     |        |        |        | AR     |        |
|                                                                                                                                               | 5199536 | RECONDITIONING KIT, 2,3,4,6V53 (R.H. ROTATION PUMP)   |        | AR     | AR     | AR     | AR     |        |        | AR     | AR     | AR     |        | AR     |
| 5.1003 - TUBE, FRESH WATER PUMP VENT                                                                                                          |         |                                                       |        |        |        |        |        |        |        |        |        |        |        |        |
|                                                                                                                                               | 5123166 | TUBE ASSY., 3,4-53                                    |        |        |        | 1      | 1      | 1      | 1      |        |        |        |        |        |
|                                                                                                                                               | 5128855 | TUBE ASSY., 3,4-53                                    |        |        |        |        |        |        |        |        |        |        |        | 1      |
|                                                                                                                                               | 225810  | ELBOW, 1/4" TUBE 90 DEG. (12.9480)                    |        |        |        | 2      | 2      | 2      | 2      |        |        |        |        | 1      |
|                                                                                                                                               | 442321  | CONNECTOR, 1/4" INV. FL. TUBE (12.9460)               |        |        |        | 1      | 1      | 1      | 1      |        |        |        |        |        |

## 5.1000 FRESH WATER PUMP

|            |                                                                                                             | TYPES |    |    |    |    |    |    |    |    |    |
|------------|-------------------------------------------------------------------------------------------------------------|-------|----|----|----|----|----|----|----|----|----|
| PART       | NAME AND DESCRIPTION                                                                                        | 3     | 4  | 4  | 4  | 4  | 5  | 5  | 5  | 5  |    |
| ..FIG ..   | NUMBER                                                                                                      | 8     | 9  | 4  | 6  | 7  | 3  | 4  | 7  | 9  |    |
|            | <b>5.1003 - TUBE, FRESH WATER PUMP VENT (CONT'D)</b>                                                        |       |    |    |    |    |    |    |    |    |    |
| 187321     | CONNECTOR, 1/4" INV. FL. TUBE (12.9460)                                                                     |       |    |    |    |    |    |    |    | 1  |    |
|            | <b>5.1005 - ADAPTOR, FRESH WATER PUMP</b>                                                                   |       |    |    |    |    |    |    |    |    |    |
| 5121390    | * + ADAPTOR, 2-53                                                                                           |       | 1  |    |    |    |    |    |    |    |    |
| 5124265    | # + ADAPTOR, 2-53                                                                                           |       | 1  |    |    |    |    | 1  |    |    |    |
| 5124245    | * + SPACER, 2-53                                                                                            |       | 1  |    |    |    |    |    |    |    |    |
| 5124406    | * STUD, 5/16"-18-24X2.75"                                                                                   |       | 3  |    |    |    |    |    |    |    |    |
| 114981     | DRAINCOCK, 1/8" (12.9510)                                                                                   |       | 1  |    |    |    |    | 1  |    |    |    |
| 186628     | BOLT, 3/8"-16X1 1/2" (12.9001)                                                                              |       | 3  |    |    |    |    | 3  |    |    |    |
| 103321     | LOCKWASHER, 3/8" (12.9200)                                                                                  |       | 3  |    |    |    |    | 3  |    |    |    |
|            | * THRU 2D-760.                                                                                              |       |    |    |    |    |    |    |    |    |    |
|            | # EFFECTIVE WITH 2D-761 ON TYPE 40.                                                                         |       |    |    |    |    |    |    |    |    |    |
|            | + OBSOLETE.                                                                                                 |       |    |    |    |    |    |    |    |    |    |
|            | <b>5.1006 - GASKET, FRESH WATER PUMP ADAPTOR</b>                                                            |       |    |    |    |    |    |    |    |    |    |
| 5175882    | GASKET, 2-53 (ROUND) (4.4115)                                                                               |       | 1  |    |    |    |    | 1  |    |    |    |
| 5119329    | GASKET, 2-53 (LONG)                                                                                         |       | 1  |    |    |    |    | 1  |    |    |    |
|            | <b>5.1010 - GASKET, FRESH WATER PUMP</b>                                                                    |       |    |    |    |    |    |    |    |    |    |
| 2A 5133107 | # GASKET, 2,3,4,6V53                                                                                        | 1     | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  |
| 2A 5133107 | * GASKET, 2-53                                                                                              |       | 2  |    |    |    |    |    |    |    |    |
|            | # EFFECTIVE WITH 2D-761 ON TYPE 40.                                                                         |       |    |    |    |    |    |    |    |    |    |
|            | * THRU 2D-760.                                                                                              |       |    |    |    |    |    |    |    |    |    |
|            | <b>5.1115 - REPLACEMENT KIT, FRESH WATER PUMP SEAL SEAT</b>                                                 |       |    |    |    |    |    |    |    |    |    |
|            | A REPLACEMENT KIT INCLUDES CERAMIC INSERT AND ADHESIVE.                                                     |       |    |    |    |    |    |    |    |    |    |
| 5197279    | REPLACEMENT KIT, IMPELLER INSERT 2,3,4,6V53                                                                 | AR    | AR | AR | AR | AR | AR | AR | AR | AR | AR |
|            | <b>5.1200 - PULLEY, FRESH WATER PUMP IDLER</b>                                                              |       |    |    |    |    |    |    |    |    |    |
|            | A PULLEY ASSY. INCLUDES PULLEY AND ADJUSTING ARM, WHICH ARE NOT SERVICED SEPARATELY, AND BEARING IN 5.1202. |       |    |    |    |    |    |    |    |    |    |

## DETROIT DIESEL

## 53 MPC ENGINES

## 5.1000 FRESH WATER PUMP

| PART |         | TYPES                                                                  |        |        |        |        |        |        |        |        |        |        |        |        |
|------|---------|------------------------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| FIG  | NUMBER  | NAME AND DESCRIPTION                                                   | 3<br>8 | 3<br>9 | 4<br>0 | 4<br>4 | 4<br>5 | 4<br>6 | 4<br>7 | 5<br>3 | 5<br>4 | 5<br>7 | 5<br>8 | 5<br>9 |
|      |         | 5.1200 - PULLEY, FRESH WATER PUMP IDLER (CONT'D)                       |        |        |        |        |        |        |        |        |        |        |        |        |
| 1B   | 5122991 | # PULLEY ASSY., 6V53 (5139405)                                         |        |        |        |        |        |        |        |        |        | 1      |        |        |
|      | 5122992 | # PULLEY ASSY., 2,3,4,6V53 (5139237)                                   |        |        |        |        |        |        |        |        |        | 2      | 1      |        |
|      | 179850  | BOLT, 3/8"-16X2 3/4" (12.9001)                                         |        |        |        |        |        |        |        |        |        | 2      | 2      |        |
|      | 103341  | WASHER, 3/8" (12.9190)                                                 |        |        |        |        |        |        |        |        |        | 2      | 2      |        |
|      |         | # NOT SERVICED; USE PULLEY ASSY. SHOWN IN PARENTHESES.                 |        |        |        |        |        |        |        |        |        |        |        |        |
|      |         | 5.1202 - BEARING, FRESH WATER PUMP IDLER PUMP IDLER PULLEY             |        |        |        |        |        |        |        |        |        |        |        |        |
|      | 907394  | BEARING, 2,3,4,6V53                                                    |        |        |        |        |        |        |        |        |        | 1      | 1      |        |
|      |         | 5.1215 - BELT, FRESH WATER PUMP DRIVE                                  |        |        |        |        |        |        |        |        |        |        |        |        |
|      |         | NOTE: REFER TO 7.1000A OR 12.6000D FOR DRIVE BELT UNLESS LISTED BELOW. |        |        |        |        |        |        |        |        |        |        |        |        |
| 1B   | 5139228 | BELT SET, 2,3,4,6V53 (2 BELTS) (36.76"LX.380" W.)                      |        |        |        |        |        |        |        |        |        | 1      | 1      |        |

## 5.1000 FRESH WATER PUMP

| PART                                                                                                                                                      |                                                        |                                                                 | TYPES  |        |        |        |        |        |        |        |        |        |        |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-----------------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| FIG                                                                                                                                                       | NUMBER                                                 | NAME AND DESCRIPTION                                            | 6<br>0 | 6<br>1 | 6<br>2 | 6<br>7 | 7<br>0 | 7<br>1 | 7<br>2 | 7<br>4 | 7<br>7 | 8<br>3 | 8<br>5 | 9<br>3 |
| 5.1001 - PUMP ASSY., FRESH WATER                                                                                                                          |                                                        |                                                                 |        |        |        |        |        |        |        |        |        |        |        |        |
| SEE ASSEMBLY BREAKDOWN AS INDICATED BELOW.                                                                                                                |                                                        |                                                                 |        |        |        |        |        |        |        |        |        |        |        |        |
| 1A                                                                                                                                                        | 5121216                                                | * PUMP ASSY., 2-53 (R.H. ROTATION)<br>(PAGE A1)                 | 1      |        |        |        |        |        |        |        |        |        |        |        |
| 1A                                                                                                                                                        | 5195982                                                | * PUMP ASSY., 2,3,4-53 (L.H. ROTATION)<br>(PAGE A1)             |        | 1      |        |        |        |        |        |        |        | 1      |        |        |
| 1A                                                                                                                                                        | 5195983                                                | * PUMP ASSY., 2,3,4,6V53 (R.H.<br>ROTATION) (PAGE A1)           |        |        | 1      |        |        | 1      |        |        |        |        |        |        |
| 1B                                                                                                                                                        | 5121478                                                | * PUMP ASSY., 6V53 (R.H. ROTATION) (C<br>ENG.) (PAGE A1)        |        |        |        | 1      |        |        |        |        |        |        |        |        |
| 1A                                                                                                                                                        | 5109046                                                | * PUMP ASSY., 3,4-53 (R.H. ROTATION)<br>(PAGE A1)               |        |        |        |        | 1      |        |        |        |        |        |        |        |
| 1A                                                                                                                                                        | 5109553                                                | * PUMP ASSY., 3,4-53 (L.H. ROTATION)<br>(PAGE A1)               |        |        |        |        |        |        | 1      |        |        |        |        |        |
| 1B                                                                                                                                                        | 5109551                                                | * PUMP ASSY., 6V53 (L.H. ROTATION) (A<br>ENG.) (PAGE B1)        |        |        |        |        |        |        |        | 1      |        |        |        |        |
| 1B                                                                                                                                                        | 5109387                                                | * PUMP ASSY., 6V53 (L.H. ROTATION)<br>(PAGE A1)                 |        |        |        |        |        |        |        |        | 1      |        |        |        |
| 1B                                                                                                                                                        | 5131602                                                | * PUMP ASSY., 6V53 (L.H. ROTATION)<br>(PAGE A1)                 |        |        |        |        |        |        |        |        |        |        | 1      |        |
| 1B                                                                                                                                                        | 5144685                                                | PUMP ASSY., 6V53 (L.H. ROTATION)<br>(PAGE C1)                   |        |        |        |        |        |        |        |        |        |        |        | 1      |
|                                                                                                                                                           | 186625                                                 | BOLT, 5/16"-18X7/8" (12.9001)                                   | 5      | 5      | 5      | 4      | 5      | 4      | 5      | 4      | 4      | 5      | 4      | 4      |
|                                                                                                                                                           | 9421623                                                | BOLT, 5/16"-18 X 7/8" SOC. HD. (FRONT<br>INSIDE HOLE) (12.9027) |        |        |        | 1      |        | 1      |        | 1      | 1      |        | 1      | 1      |
|                                                                                                                                                           | 103320                                                 | LOCKWASHER, 5/16" (12.9200)                                     | 5      | 5      | 5      | 4      | 5      | 4      | 5      | 4      | 4      | 5      | 4      | 4      |
| * NOT SERVICED, REFER TO<br>CONVERSION CHART AT BEGINNING<br>OF SECTION FOR REPLACEMENT PUMP<br>AND ITEMS THAT MAY BE REQUIRED<br>TO CONVERT TO NEW PUMP. |                                                        |                                                                 |        |        |        |        |        |        |        |        |        |        |        |        |
| 5.1002 - RECONDITIONING KIT, FRESH WATER<br>PUMP                                                                                                          |                                                        |                                                                 |        |        |        |        |        |        |        |        |        |        |        |        |
| INCLUDES ITEMS IN 5.1010, 5.1032,<br>5.1050, 5.1110 AND 5.1130.                                                                                           |                                                        |                                                                 |        |        |        |        |        |        |        |        |        |        |        |        |
| 5199535                                                                                                                                                   | RECONDITIONING KIT, 2,3,4,6V53 (L.H.<br>ROTATION PUMP) |                                                                 |        | AR     |        |        |        |        | AR     | AR     | AR     | AR     | AR     |        |
| 5199536                                                                                                                                                   | RECONDITIONING KIT, 2,3,4,6V53 (R.H.<br>ROTATION PUMP) |                                                                 | AR     |        | AR     | AR     | AR     | AR     |        |        |        |        |        |        |
| 5199533                                                                                                                                                   | RECONDITIONING KIT, 6V53 (L.H.<br>ROTATION PUMP)       |                                                                 |        |        |        |        |        |        |        |        |        |        |        | AR     |
| 5.1003 - TUBE, FRESH WATER PUMP VENT                                                                                                                      |                                                        |                                                                 |        |        |        |        |        |        |        |        |        |        |        |        |
| 5129867                                                                                                                                                   | # HOSE, 1/4" I.D. X 26 3/4" L. 4-53<br>(7.4075)        |                                                                 |        | 1      | 1      |        |        |        |        |        |        |        |        |        |
| 5129867                                                                                                                                                   | # HOSE, 1/4" I.D. X 22" L. 3-53 (7.4075)               |                                                                 |        | 1      | 1      |        |        |        |        |        |        |        |        |        |

## 5.1000 FRESH WATER PUMP

| PART  |         | TYPES                                                                                                                |        |        |        |        |        |        |        |        |        |        |        |        |
|-------|---------|----------------------------------------------------------------------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| ..FIG | NUMBER  | NAME AND DESCRIPTION                                                                                                 | 6<br>0 | 6<br>1 | 6<br>2 | 6<br>7 | 7<br>0 | 7<br>1 | 7<br>2 | 7<br>4 | 7<br>7 | 8<br>3 | 8<br>5 | 9<br>3 |
|       |         | 5.1003 - TUBE, FRESH WATER PUMP VENT<br>(CONT'D)                                                                     |        |        |        |        |        |        |        |        |        |        |        |        |
|       | 5137952 | TUBE ASSY., 6V53                                                                                                     |        |        |        |        |        | 1      |        |        |        |        |        |        |
|       | 5168001 | CLIP                                                                                                                 |        | 2      | 2      |        |        |        |        |        |        |        |        |        |
|       | 225810  | ELBOW, 1/4" TUBE 90 DEG. (12.9480)                                                                                   |        | 1      | 1      |        |        | 1      |        |        |        |        |        |        |
|       | 9432337 | ELBOW, 1/4" INV. FL. TUBE 90 DEG.<br>(12.9480)                                                                       |        | 1      | 1      |        |        | 1      |        |        |        |        |        |        |
|       | 5114048 | CONNECTOR, 1/4" HOSE X 1/4" INV. FL.<br>TUBE SWIVEL (2.5217)                                                         |        | 2      | 2      |        |        |        |        |        |        |        |        |        |
|       | 144045  | BUSHING, 1/2"x1/4" RED. (12.9570)<br># STD. LENGTH HOSE, CUT TO LENGTH<br>SHOWN.                                     |        |        |        |        |        | 1      |        |        |        |        |        |        |
|       |         | 5.1005 - ADAPTOR, FRESH WATER PUMP                                                                                   |        |        |        |        |        |        |        |        |        |        |        |        |
|       | 5124265 | + ADAPTOR, 2-53                                                                                                      | 1      |        |        |        |        |        |        |        |        |        |        |        |
|       | 114981  | DRAINCOCK, 1/8" (12.9510)                                                                                            | 1      |        |        |        |        |        |        |        |        |        |        |        |
|       | 186628  | BOLT, 3/8"-16X1 1/2" (12.9001)                                                                                       | 3      |        |        |        |        |        |        |        |        |        |        |        |
|       | 103321  | LOCKWASHER, 3/8" (12.9200)<br>+ OBSOLETE.                                                                            | 3      |        |        |        |        |        |        |        |        |        |        |        |
|       |         | 5.1006 - GASKET, FRESH WATER PUMP ADAPTOR                                                                            |        |        |        |        |        |        |        |        |        |        |        |        |
|       | 5175882 | GASKET, 2-53 (ROUND) (4.4115)                                                                                        | 1      |        |        |        |        |        |        |        |        |        |        |        |
|       | 5119329 | GASKET, 2-53 (LONG)                                                                                                  | 1      |        |        |        |        |        |        |        |        |        |        |        |
|       |         | 5.1010 - GASKET, FRESH WATER PUMP                                                                                    |        |        |        |        |        |        |        |        |        |        |        |        |
| 2A    | 5133107 | GASKET, 2,3,4, 6V53                                                                                                  | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      |
|       |         | 5.1115 - REPLACEMENT KIT, FRESH WATER PUMP<br>SEAL SEAT                                                              |        |        |        |        |        |        |        |        |        |        |        |        |
|       |         | A REPLACEMENT KIT INCLUDES CERAMIC<br>INSERT AND ADHESIVE.                                                           |        |        |        |        |        |        |        |        |        |        |        |        |
|       | 5197279 | REPLACEMENT KIT, IMPELLER INSERT<br>2,3,4,6V53                                                                       | AR     | AR     | AR     | AR     | AR     | AR     | AR     | AR     | AR     | AR     | AR     | AR     |
|       |         | 5.1200 - PULLEY, FRESH WATER PUMP IDLER                                                                              |        |        |        |        |        |        |        |        |        |        |        |        |
|       |         | A PULLEY ASSY. INCLUDES PULLEY AND<br>ADJUSTING ARM, WHICH ARE NOT<br>SERVICED SEPARATELY, AND BEARING IN<br>5.1202. |        |        |        |        |        |        |        |        |        |        |        |        |

## 5.1000 FRESH WATER PUMP

| PART                                                                      |         |                                                           | TYPES  |        |        |        |        |        |        |        |        |        |        |        |
|---------------------------------------------------------------------------|---------|-----------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| ..FIG ..                                                                  | NUMBER  | NAME AND DESCRIPTION                                      | 6<br>0 | 6<br>1 | 6<br>2 | 6<br>7 | 7<br>0 | 7<br>1 | 7<br>2 | 7<br>4 | 7<br>7 | 8<br>3 | 8<br>5 | 9<br>3 |
| 5.1200 - PULLEY, FRESH WATER PUMP IDLER<br>(CONT'D)                       |         |                                                           |        |        |        |        |        |        |        |        |        |        |        |        |
| 1B                                                                        | 5139237 | PULLEY ASSY., 6V53                                        |        |        |        |        |        |        |        |        | 1      |        |        |        |
| 1B                                                                        | 5122991 | # PULLEY ASSY., 6V53 (5139405)                            |        |        |        | 1      |        | 1      |        |        |        |        |        |        |
| 1B                                                                        | 5122992 | # PULLEY ASSY., 2,3,4,6V53 (5139237)                      |        |        |        |        |        |        | 1      |        |        | 1      |        | 1      |
|                                                                           | 5164294 | SPACER, 13/32"7/8"X1/8" 2,3,4-53<br>(7.1581)              |        |        |        |        |        |        |        |        |        | 1      |        |        |
|                                                                           | 179850  | BOLT, 3/8"-16X2 3/4" (12.9001)                            |        |        |        | 2      |        | 2      |        | 2      | 2      |        |        | 2      |
|                                                                           | 181371  | BOLT, 3/8"-24X1 3/8" (12.9001)                            |        |        |        |        |        |        |        |        |        | 1      |        |        |
|                                                                           | 181377  | BOLT, 3/8"-24X1 3/4" (12.9001)                            |        |        |        |        |        |        |        |        |        | 1      |        |        |
|                                                                           | 103341  | WASHER, 3/8" (12.9190)                                    |        |        |        | 1      |        | 1      |        | 1      | 1      | 1      |        | 1      |
|                                                                           | 103321  | LOCKWASHER, 3/8" (12.9200)                                |        |        |        |        |        |        |        |        |        | 2      |        |        |
|                                                                           | 117049  | NUT, 3/8"-24 (12.9120)                                    |        |        |        |        |        |        |        |        |        | 2      |        |        |
|                                                                           |         | # NOT SERVICED; USE PULLEY ASSY.<br>SHOWN IN PARENTHESES. |        |        |        |        |        |        |        |        |        |        |        |        |
| 5.1202 - BEARING, FRESH WATER PUMP IDLER<br>PUMP IDLER PULLEY             |         |                                                           |        |        |        |        |        |        |        |        |        |        |        |        |
|                                                                           | 907394  | BEARING, 2,3,4,6V53                                       |        |        |        | 1      |        | 1      |        | 1      | 1      | 1      |        | 1      |
| 5.1205 - BRACKET, FRESH WATER PUMP IDLER<br>PULLEY                        |         |                                                           |        |        |        |        |        |        |        |        |        |        |        |        |
|                                                                           | 5130918 | BRACKET, 2,3,4-53 (UPPER)                                 |        |        |        |        |        |        |        |        |        | 1      |        |        |
|                                                                           | 5130945 | SUPPORT, 2,3,4-53 (LOWER)                                 |        |        |        |        |        |        |        |        |        | 1      |        |        |
|                                                                           | 179838  | BOLT, 3/8"-16X7/8" (12.9001)                              |        |        |        |        |        |        |        |        |        | 3      |        |        |
|                                                                           | 103321  | LOCKWASHER, 3/8" (12.9200)                                |        |        |        |        |        |        |        |        |        | 3      |        |        |
| 5.1215 - BELT, FRESH WATER PUMP DRIVE                                     |         |                                                           |        |        |        |        |        |        |        |        |        |        |        |        |
| NOTE: REFER TO 7.1000A OR 12.6000D<br>FOR DRIVE BELT UNLESS LISTED BELOW. |         |                                                           |        |        |        |        |        |        |        |        |        |        |        |        |
| 1B                                                                        | 5139228 | BELT SET, 2,3,4,6V53 (2 BELTS)<br>(36.76"L.X.380"W.)      |        |        |        | 1      |        | 1      |        | 1      | 1      | 1      |        |        |
| 1B                                                                        | 5133177 | BELT SET, 6V53 (2 BELTS)<br>(37.50"L.X.380"W.) (7.1575)   |        |        |        |        |        |        |        |        |        |        |        | 1      |
| 5.1218 - GUARD, FRESH WATER PUMP DRIVE<br>BELT                            |         |                                                           |        |        |        |        |        |        |        |        |        |        |        |        |
| 5B                                                                        | 5121437 | GUARD, 6V53                                               |        |        |        | 1      |        | 1      |        |        |        |        |        |        |
|                                                                           | 5129280 | SPACER, 6V53 (2.90"L.)                                    |        |        |        | 1      |        | 1      |        |        |        |        |        |        |
|                                                                           | 192883  | BOLT, 3/8"-16X5 1/4" (12.9001)                            |        |        |        | 1      |        | 1      |        |        |        |        |        |        |
|                                                                           | 120393  | WASHER, 5/16" (12.9190)                                   |        |        |        | 2      |        | 2      |        |        |        |        |        |        |
|                                                                           | 103341  | WASHER, 3/8" (12.9190)                                    |        |        |        | 1      |        | 1      |        |        |        |        |        |        |

## 5.1000 FRESH WATER PUMP

| PART                                                                                                                                          |         |                                                       | TYPES |    |    |    |     |     |     |     |     |     |     |     |
|-----------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------------------------------------------------|-------|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|
| FIG                                                                                                                                           | NUMBER  | NAME AND DESCRIPTION                                  | 94    | 95 | 97 | 98 | 108 | 112 | 113 | 115 | 116 | 119 | 120 | 123 |
| 5.1001 - PUMP ASSY., FRESH WATER                                                                                                              |         |                                                       |       |    |    |    |     |     |     |     |     |     |     |     |
| FOR TYPE 114, USE TYPE 113. SEE ASSEMBLY BREAKDOWN AS INDICATED BELOW.                                                                        |         |                                                       |       |    |    |    |     |     |     |     |     |     |     |     |
| 1B                                                                                                                                            | 5135464 | @ PUMP ASSY., 6V53 (L.H. ROTATION) (PAGE B1)          | 1     |    |    |    | 1   |     |     |     |     |     |     |     |
| 1B                                                                                                                                            | 5133667 | * PUMP ASSY., 8V53 (L.H. ROTATION) (A ENG.) (PAGE B1) |       | 1  |    |    |     |     |     |     |     |     |     |     |
| 1B                                                                                                                                            | 5198194 | * PUMP ASSY., 8V53 (L.H. ROTATION) (A ENG.) (PAGE B1) |       |    | 1  | 1  |     |     |     |     |     |     |     |     |
| 1A                                                                                                                                            | 5142051 | * PUMP ASSY., 2, 3, 4-53 (R.H. ROTATION) (PAGE B1)    |       |    |    |    |     | 1   |     |     |     |     |     |     |
| 1A                                                                                                                                            | 5195983 | * PUMP ASSY., 4-53 (R.H. ROTATION) (PAGE A1)          |       |    |    |    |     |     | 1   |     |     |     |     |     |
| 1B                                                                                                                                            | 5109387 | * PUMP ASSY., 6V53 (L.H. ROTATION) (PAGE A1)          |       |    |    |    |     |     |     | 1   |     |     |     |     |
| 1A                                                                                                                                            | 5195982 | * PUMP ASSY., 2,4-53 (L.H. ROTATION) (PAGE A1)        |       |    |    |    |     |     |     |     | 1   |     |     | 1   |
| 1A                                                                                                                                            | 5136506 | * PUMP ASSY., 3-53 (L.H. ROTATION) (PAGE B1)          |       |    |    |    |     |     |     |     |     | 1   |     |     |
| 1B                                                                                                                                            | 5134191 | * PUMP ASSY., 6V53 (R.H. ROTATION) (PAGE B1)          |       |    |    |    |     |     |     |     |     |     | 1   |     |
|                                                                                                                                               | 5109886 | SPACER, 1/2" I.D. X 1 1/8" O.D. X .16" 3-53           |       |    |    |    |     |     | 2   |     |     |     |     |     |
|                                                                                                                                               | 186625  | BOLT, 5/16"-18 X 7/8" (12.9001)                       | 5     | 4  | 4  | 4  | 4   | 5   | 5   | 4   | 5   | 5   | 4   | 5   |
|                                                                                                                                               | 9421623 | BOLT, 5/16"-18 X 7/8" SOC. HD. (12.9027)              |       | 1  | 1  | 1  | 1   |     |     | 1   |     |     | 1   |     |
|                                                                                                                                               | 186689  | BOLT, 1/2"-13 X 2" (12.9001)                          |       |    |    |    |     |     |     |     |     | 2   |     |     |
|                                                                                                                                               | 120393  | WASHER, 5/16" (12.9190)                               | AR    | AR | AR | AR | AR  | AR  | AR  | AR  | AR  | AR  | AR  | AR  |
|                                                                                                                                               | 103320  | LOCKWASHER, 5/16" (12.9200)                           | AR    | AR | AR | AR | AR  | AR  | AR  | AR  | AR  | AR  | AR  | AR  |
|                                                                                                                                               | 103323  | LOCKWASHER, 1/2" (12.9200)                            |       |    |    |    |     |     |     |     |     | 2   |     |     |
| * NOT SERVICED, REFER TO CONVERSION CHART AT BEGINNING OF SECTION FOR REPLACEMENT PUMP AND ITEMS THAT MAY BE REQUIRED TO CONVERT TO NEW PUMP. |         |                                                       |       |    |    |    |     |     |     |     |     |     |     |     |
| @ NOT SERVICED, USE 5144500 PLUS (1) 5146217, (1) 5133107 AND (1) 5142549.                                                                    |         |                                                       |       |    |    |    |     |     |     |     |     |     |     |     |
| 5.1002 - RECONDITIONING KIT, FRESH WATER PUMP                                                                                                 |         |                                                       |       |    |    |    |     |     |     |     |     |     |     |     |
| INCLUDES ITEMS IN 5.1010, 5.1032, 5.1050, 5.1110 AND 5.1130.                                                                                  |         |                                                       |       |    |    |    |     |     |     |     |     |     |     |     |
| 5199535                                                                                                                                       |         | RECONDITIONING KIT, 6V53 (L.H. ROTATION PUMP)         | 1     | 1  | 1  | 1  |     |     |     | 1   | 1   | 1   |     | 1   |
| 5199536                                                                                                                                       |         | RECONDITIONING KIT, 3,4,6V53 (R.H. ROTATION PUMP)     |       |    |    |    |     | 1   | 1   |     |     |     | 1   |     |

## 5.1000 FRESH WATER PUMP

|     |             |                                                                                                                      | TYPES |    |    |    |     |     |     |     |     |     |     |     |
|-----|-------------|----------------------------------------------------------------------------------------------------------------------|-------|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|
| FIG | PART NUMBER | NAME AND DESCRIPTION                                                                                                 | 94    | 95 | 97 | 98 | 108 | 112 | 113 | 115 | 116 | 119 | 120 | 123 |
|     |             | <b>5.1003 - TUBE, FRESH WATER PUMP VENT</b>                                                                          |       |    |    |    |     |     |     |     |     |     |     |     |
|     | 5137952     | TUBE ASSY., 8V53                                                                                                     |       |    |    | 1  |     |     |     |     |     |     |     |     |
|     | 144045      | BUSHING, 1/2"X1/4" RED. (12.9570)                                                                                    |       |    |    | 1  |     |     |     |     |     |     |     |     |
|     | 9432337     | ELBOW, 1/4" INV. FL. TUBE 90 DEG.,<br>1/4" P.T. (12.9480)                                                            |       |    |    | 1  |     |     |     |     |     |     |     |     |
|     | 225810      | ELBOW, 1/4" INV. FL. TUBE 90 DEG.,<br>1/8" P.T. (12.9480)                                                            |       |    |    | 1  |     |     |     |     |     |     |     |     |
|     |             | <b>5.1010 - GASKET, FRESH WATER PUMP</b>                                                                             |       |    |    |    |     |     |     |     |     |     |     |     |
| 2A  | 5133107     | GASKET, 2,3,4,8V53                                                                                                   | 1     | 1  | 1  | 1  | 1   | 1   | 1   | 1   | 1   | 1   | 1   | 1   |
|     |             | <b>5.1115 - REPLACEMENT KIT, FRESH WATER PUMP SEAL SEAT</b>                                                          |       |    |    |    |     |     |     |     |     |     |     |     |
|     |             | A REPLACEMENT KIT INCLUDES CERAMIC<br>INSERT AND ADHESIVE.                                                           |       |    |    |    |     |     |     |     |     |     |     |     |
|     | 5197279     | REPLACEMENT KIT, IMPELLER INSERT<br>2,3,4,6,8V53                                                                     | AR    | AR | AR | AR | AR  | AR  | AR  | AR  | AR  | AR  | AR  | AR  |
|     |             | <b>5.1200 - PULLEY, FRESH WATER PUMP IDLER</b>                                                                       |       |    |    |    |     |     |     |     |     |     |     |     |
|     |             | A PULLEY ASSY. INCLUDES PULLEY AND<br>ADJUSTING ARM, WHICH ARE NOT<br>SERVICED SEPARATELY, AND BEARING IN<br>5.1202. |       |    |    |    |     |     |     |     |     |     |     |     |
| 1B  | 5122992     | # PULLEY ASSY., 2,6,8V53 (5139237)                                                                                   |       | 1  | 1  | 1  |     |     |     | 1   |     |     | 1   |     |
| 1B  | 5122991     | # PULLEY ASSY., 2,3,4,6V53 (5139405)                                                                                 |       |    |    |    |     |     |     |     | 1   |     |     |     |
|     | 5139405     | PULLEY ASSY., 2,3,4-53                                                                                               |       |    |    | 1  |     | 1   | 1   |     |     |     |     |     |
| 1B  | 5109811     | # PULLEY ASSY., 6V53 (5139237)                                                                                       |       |    |    |    | 1   |     |     |     |     |     |     |     |
|     | 5136874     | & * PULLEY ASSY., 3-53                                                                                               |       |    |    |    |     |     |     |     |     | 1   |     |     |
| 1B  | 5139238     | # PULLEY ASSY., 6, 8V53 (5139237)                                                                                    | 1     |    |    |    |     |     |     |     |     |     |     |     |
|     | 5136811     | * PULLEY, 3-53 (5 3/5" DIA.)                                                                                         |       |    |    |    |     |     |     |     |     | 1   |     |     |
|     | 5164294     | SPACER, 13/32"X7/8"X1/8" 2,3,4-53<br>(7.1581)                                                                        |       |    |    |    |     | 1   | 1   |     | 1   |     |     | 1   |
|     | 179850      | BOLT, 3/8"-16X2 3/4" (12.9001)                                                                                       | 2     | 2  | 2  | 2  | 2   |     | 2   | 2   |     |     | 2   |     |
|     | 181371      | BOLT, 3/8"-24X1 3/8" (12.9001)                                                                                       |       |    |    |    |     | 1   | 1   |     | 1   |     |     | 1   |
|     | 181377      | BOLT, 3/8"-24X1 3/4" (12.9001)                                                                                       |       |    |    |    |     | 1   | 1   |     | 1   |     |     | 1   |
|     | 103341      | WASHER, 3/8" (12.9190)                                                                                               | 2     | 2  | 2  | 2  | 2   | 1   | 1   | 2   | 1   |     | 2   | 1   |

## 5.1000 FRESH WATER PUMP

| PART                                                       |                                                                                                  | TYPES                |        |        |        |             |             |             |             |             |             |             |             |
|------------------------------------------------------------|--------------------------------------------------------------------------------------------------|----------------------|--------|--------|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG                                                        | NUMBER                                                                                           | NAME AND DESCRIPTION |        |        |        |             |             |             |             |             |             |             |             |
|                                                            |                                                                                                  | 9<br>4               | 9<br>5 | 9<br>7 | 9<br>8 | 1<br>0<br>8 | 1<br>1<br>2 | 1<br>1<br>3 | 1<br>1<br>5 | 1<br>1<br>6 | 1<br>1<br>9 | 1<br>2<br>0 | 1<br>2<br>3 |
| 5.1200 - PULLEY, FRESH WATER PUMP IDLER (CONT'D)           |                                                                                                  |                      |        |        |        |             |             |             |             |             |             |             |             |
| 103321                                                     | LOCKWASHER, 3/8" (12.9200)                                                                       |                      | AR     | AR     | AR     | AR          | AR          | AR          |             | AR          |             |             | AR          |
| 117049                                                     | NUT, 3/8"-24 (12.9120)                                                                           |                      |        |        |        |             | 2           | 2           |             | 2           |             |             | 2           |
|                                                            | # NOT SERVICED; USE PULLEY ASSY. SHOWN IN PARENTHESES.                                           |                      |        |        |        |             |             |             |             |             |             |             |             |
|                                                            | & INCLUDES PULLEY IN 5.1200 AND ALSO ITEMS IN 5.1201, 5.1202, 5.1207, 5.1208, 5.1209 AND 5.1216. |                      |        |        |        |             |             |             |             |             |             |             |             |
|                                                            | * OBSOLETE                                                                                       |                      |        |        |        |             |             |             |             |             |             |             |             |
| 5.1201 - ARM, IDLER PULLEY ADJUSTING                       |                                                                                                  |                      |        |        |        |             |             |             |             |             |             |             |             |
| 5136805                                                    | * ARM, 2-53 (5.4343)                                                                             |                      |        |        |        |             |             |             |             |             | 1           |             |             |
|                                                            | * OBSOLETE                                                                                       |                      |        |        |        |             |             |             |             |             |             |             |             |
| 5.1202 - BEARING, FRESH WATER PUMP IDLER PUMP IDLER PULLEY |                                                                                                  |                      |        |        |        |             |             |             |             |             |             |             |             |
| 907394                                                     | BEARING, 3,4,6,8V53                                                                              | 1                    | 1      | 1      | 1      | 1           | 1           | 1           | 1           | 1           | 1           | 1           | 1           |
| 7450630                                                    | BEARING, 3-53 (REAR) (5.4110)                                                                    |                      |        |        |        |             |             |             |             |             | 1           |             |             |
| 9415132                                                    | BEARING, 3-53 (FRONT) (5.4110)                                                                   |                      |        |        |        |             |             |             |             |             | 1           |             |             |
| 5131095                                                    | RETAINER, GREASE 3,4-53 (5.4110)                                                                 |                      |        |        |        |             |             |             |             |             | 1           |             |             |
| 5131124                                                    | SHIM, .015" (5.4110)                                                                             |                      |        |        |        |             |             |             |             |             | 1           |             |             |
| 5131205                                                    | SHIM, .020" (5.4110)                                                                             |                      |        |        |        |             |             |             |             |             | 1           |             |             |
| 5131206                                                    | SHIM, .025" (5.4110)                                                                             |                      |        |        |        |             |             |             |             |             | 1           |             |             |
| 5.1205 - BRACKET, FRESH WATER PUMP IDLER PULLEY            |                                                                                                  |                      |        |        |        |             |             |             |             |             |             |             |             |
| 5136500                                                    | BRACKET, 2,3,4-53                                                                                |                      |        |        |        |             | 1           | 1           |             | 1           |             |             |             |
| 5139060                                                    | BRACKET, 2-53                                                                                    |                      |        |        |        |             |             |             |             |             |             |             | 1           |
| 5136498                                                    | SUPPORT, 2,3,4-53                                                                                |                      |        |        |        |             | 1           | 1           |             | 1           |             |             |             |
| 5136770                                                    | % SUPPORT, 3-53                                                                                  |                      |        |        |        |             |             |             |             |             | 1           |             |             |
| 5130945                                                    | SUPPORT, 2-53                                                                                    |                      |        |        |        |             |             |             |             |             |             |             | 1           |
| 179838                                                     | BOLT, 3/8"-16X7/8" (12.9001)                                                                     |                      |        |        |        |             | 3           | 3           |             | 3           |             |             | AR          |
| 186678                                                     | BOLT, 3/8"-16X1" (12.9001)                                                                       |                      |        |        |        |             |             |             |             |             |             |             | 1           |
| 186612                                                     | BOLT, 3/8"-16X1 3/8" (12.9001)                                                                   |                      |        |        |        |             |             |             |             |             | 3           |             |             |
| 103321                                                     | LOCKWASHER, 3/8" (12.9200)                                                                       |                      |        |        |        |             | AR          | AR          |             | AR          | AR          |             | AR          |
|                                                            | % OBSOLETE                                                                                       |                      |        |        |        |             |             |             |             |             |             |             |             |
| 5.1207 - SEAL, IDLER PULLEY SHAFT                          |                                                                                                  |                      |        |        |        |             |             |             |             |             |             |             |             |
| 5108219                                                    | SEAL, 3-53 (5.4150)                                                                              |                      |        |        |        |             |             |             |             |             | 1           |             |             |
| 5.1208 - RETAINER, IDLER PULLEY SHAFT BEARING              |                                                                                                  |                      |        |        |        |             |             |             |             |             |             |             |             |
| 9409060                                                    | BOLT, 1/2"-20X1 1/2" LOCK (12.9001)                                                              |                      |        |        |        |             |             |             |             |             | 1           |             |             |
| 5131123                                                    | WASHER, 33/64" I.D.X.32" THICK (5.4140)                                                          |                      |        |        |        |             |             |             |             |             | 1           |             |             |

## 5.1000 FRESH WATER PUMP

| PART |         | TYPES                                                                     |        |        |        |        |             |             |             |             |             |             |             |             |
|------|---------|---------------------------------------------------------------------------|--------|--------|--------|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG  | NUMBER  | NAME AND DESCRIPTION                                                      | 9<br>4 | 9<br>5 | 9<br>7 | 9<br>8 | 1<br>0<br>8 | 1<br>1<br>2 | 1<br>1<br>3 | 1<br>1<br>5 | 1<br>1<br>6 | 1<br>1<br>9 | 1<br>2<br>0 | 1<br>2<br>3 |
|      |         | 5.1209 - SPACER, IDLER PULLEY SHAFT BEARING                               |        |        |        |        |             |             |             |             |             |             |             |             |
|      | 5131122 | SPACER, 3-53 (5.4170)                                                     |        |        |        |        |             |             |             |             |             | 1           |             |             |
|      |         | 5.1215 - BELT, FRESH WATER PUMP DRIVE                                     |        |        |        |        |             |             |             |             |             |             |             |             |
|      |         | NOTE: REFER TO 7.1000A OR 12.6000D<br>FOR DRIVE BELT UNLESS LISTED BELOW. |        |        |        |        |             |             |             |             |             |             |             |             |
|      | 5133177 | BELT SET, 6,8V53 (2 BELTS)<br>(37"L.X.380"W.) (7.1575)                    | 1      |        |        |        |             |             |             |             |             |             |             |             |
|      | 5139228 | BELT SET, 6,8V53 (2 BELTS)<br>(36.76"L.X.380"W.)                          |        | 1      | 1      | 1      | 1           |             |             | 1           | 1           |             | 1           |             |
|      | 5135031 | BELT SET, 2, 3, 4-53 (2 BELTS)<br>(36"L.X.380"W.)                         |        |        |        |        |             | 1           |             |             |             |             |             |             |
|      | 5133178 | BELT SET, 2, 3, 4-53 (2 BELTS)<br>(36"L.X.380"W.) (7.1575)                |        |        |        |        |             |             | 1           |             | 1           |             |             | 1           |
|      | 5137110 | BELT SET, 3-53 (2 BELTS)<br>(38"L.X.380"W.)                               |        |        |        |        |             |             |             |             |             | 1           |             |             |
|      |         | 5.1216 - HUB, FRESH WATER PUMP DRIVEN<br>PULLEY                           |        |        |        |        |             |             |             |             |             |             |             |             |
|      | 5144798 | CAP, 3-53 (5.4180)                                                        |        |        |        |        |             |             |             |             |             | 1           |             |             |
|      |         | 5.1218 - GUARD, FRESH WATER PUMP DRIVE<br>BELT                            |        |        |        |        |             |             |             |             |             |             |             |             |
| 3    | 5133607 | GUARD, 8V53                                                               |        |        |        |        | 1           |             |             |             |             |             |             |             |
|      | 5129280 | SPACER, 2.90"L. 8V53                                                      |        |        |        |        | 1           |             |             |             |             |             |             |             |
|      | 192883  | BOLT, 3/8"-16X5 1/4" (12.9001)                                            |        |        |        |        | 1           |             |             |             |             |             |             |             |

## 5.1000 FRESH WATER PUMP

| PART                                                                                                                                                      |                                                        |                                                                | TYPES       |             |             |             |             |             |             |             |             |             |             |             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|----------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG                                                                                                                                                       | NUMBER                                                 | NAME AND DESCRIPTION                                           | 1<br>2<br>4 | 1<br>2<br>7 | 1<br>2<br>8 | 1<br>2<br>9 | 1<br>3<br>3 | 1<br>3<br>4 | 1<br>3<br>8 | 1<br>4<br>2 | 1<br>4<br>5 | 1<br>4<br>6 | 1<br>4<br>8 | 1<br>4<br>9 |
| 5.1001 - PUMP ASSY., FRESH WATER                                                                                                                          |                                                        |                                                                |             |             |             |             |             |             |             |             |             |             |             |             |
| SEE ASSEMBLY BREAKDOWN AS INDICATED BELOW.                                                                                                                |                                                        |                                                                |             |             |             |             |             |             |             |             |             |             |             |             |
| 1A                                                                                                                                                        | 5195982                                                | * PUMP ASSY., 2,4-53 (L.H. ROTATION)<br>(PAGE A1)              | 1           |             |             |             |             |             |             |             |             |             |             |             |
| 1B                                                                                                                                                        | 5121478                                                | * PUMP ASSY., 6V53 (R.H. ROTATION)<br>(PAGE A1)                |             | 1           |             |             |             |             |             |             |             |             |             |             |
| 1A                                                                                                                                                        | 5141747                                                | * PUMP ASSY., 4,6V53 (L.H. ROTATION)<br>(PAGE B1)              |             |             | 1           |             |             |             |             |             |             |             |             |             |
| 1A                                                                                                                                                        | 5142051                                                | * PUMP ASSY., 2,3,4-53 (R.H. ROTATION)<br>(PAGE B1)            |             |             |             | 1           |             |             |             |             |             |             |             |             |
| 1B                                                                                                                                                        | 5109551                                                | * PUMP ASSY., 6V53 (L.H. ROTATION) (A<br>ENG.) (PAGE B1)       |             |             |             |             | 1           |             |             |             |             |             |             |             |
| 1B                                                                                                                                                        | 5141891                                                | PUMP ASSY., 8V53 (L.H. ROTATION)<br>(PAGE C1)                  |             |             |             |             |             | 1           |             |             |             |             |             |             |
| 1A                                                                                                                                                        | 5144717                                                | PUMP ASSY., 3-53 (R.H. ROTATION)<br>(PAGE B1)                  |             |             |             |             |             |             | 1           |             |             |             |             |             |
| 1B                                                                                                                                                        | 5136883                                                | * PUMP ASSY., 6V53 (R.H. ROTATION)<br>(NON-MAGNETIC) (PAGE C1) |             |             |             |             |             |             |             | 1           |             |             |             |             |
| 1A                                                                                                                                                        | 5144685                                                | PUMP ASSY., 3,4-53 (L.H. ROTATION)<br>(PAGE C1)                |             |             |             |             |             |             |             |             | 1           |             |             | 1           |
| 1A                                                                                                                                                        | 5144686                                                | PUMP ASSY., 2,3,4-53 (R.H. ROTATION)<br>(PAGE C1)              |             |             |             |             |             |             |             |             |             | 1           | 1           |             |
|                                                                                                                                                           | 5144920                                                | BALL, 7/16" RUBBER (DRAIN PLUG)<br>(5.1030)                    |             |             |             |             |             |             |             |             |             | 1           |             |             |
|                                                                                                                                                           | 5145014                                                | PLUG, 3/8" PIPE (12.9550)                                      |             |             |             |             |             | 1           |             |             |             | 1           |             |             |
|                                                                                                                                                           | 186625                                                 | BOLT, 5/16"-18X7/8" (12.9001)                                  | 5           | 4           | 4           | 5           | 4           |             | 5           | 4           | 5           | 5           | 5           | 5           |
|                                                                                                                                                           | 9421623                                                | BOLT, 5/16"-18 X 7/8" SOC. HD.<br>(12.9027)                    |             | 1           | 1           |             | 1           |             |             | 1           |             |             |             |             |
|                                                                                                                                                           | 5148291                                                | BOLT, 3/8"-16 X 2 3/4" (12.9027)                               |             |             |             |             |             | 2           |             |             |             |             |             |             |
|                                                                                                                                                           | 120393                                                 | WASHER, 5/16" (12.9190)                                        |             |             |             |             |             |             | 5           |             |             |             |             |             |
|                                                                                                                                                           | 5164292                                                | WASHER, 7/16" (1.7605)                                         |             |             |             |             |             | 2           |             |             |             |             |             |             |
|                                                                                                                                                           | 103320                                                 | LOCKWASHER, 5/16" (12.9200)                                    | AR          | AR          | AR          | AR          | AR          | AR          | AR          | AR          | AR          | AR          | AR          | AR          |
|                                                                                                                                                           | 103321                                                 | LOCKWASHER, 3/8" (12.9200)                                     |             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                                                                                                           | 117049                                                 | NUT, 3/8"-24 (12.9120)                                         |             |             |             |             |             | 4           |             |             |             |             |             |             |
| * NOT SERVICED, REFER TO<br>CONVERSION CHART AT BEGINNING<br>OF SECTION FOR REPLACEMENT PUMP<br>AND ITEMS THAT MAY BE REQUIRED<br>TO CONVERT TO NEW PUMP. |                                                        |                                                                |             |             |             |             |             |             |             |             |             |             |             |             |
| 5.1002 - RECONDITIONING KIT, FRESH WATER<br>PUMP                                                                                                          |                                                        |                                                                |             |             |             |             |             |             |             |             |             |             |             |             |
| INCLUDES ITEMS IN 5.1010, 5.1032,<br>5.1050, 5.1110 AND 5.1130.                                                                                           |                                                        |                                                                |             |             |             |             |             |             |             |             |             |             |             |             |
| 5199533                                                                                                                                                   | RECONDITIONING KIT, 2,3,4,8V53 (L.H.<br>ROTATION PUMP) |                                                                |             |             |             |             |             |             |             |             | 1           |             |             | 1           |

## 5.1000 FRESH WATER PUMP

| PART                                                   |                                                                                                             | TYPES                |             |             |             |             |             |             |             |             |             |             |             |
|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG                                                    | NUMBER                                                                                                      | NAME AND DESCRIPTION |             |             |             |             |             |             |             |             |             |             |             |
|                                                        |                                                                                                             | 1<br>2<br>4          | 1<br>2<br>7 | 1<br>2<br>8 | 1<br>2<br>9 | 1<br>3<br>3 | 1<br>3<br>4 | 1<br>3<br>8 | 1<br>4<br>2 | 1<br>4<br>5 | 1<br>4<br>6 | 1<br>4<br>8 | 1<br>4<br>9 |
| 5.1002 - RECONDITIONING KIT, FRESH WATER PUMP (CONT'D) |                                                                                                             |                      |             |             |             |             |             |             |             |             |             |             |             |
| 5199535                                                | RECONDITIONING KIT, 6V53 (L.H. ROTATION PUMP)                                                               | 1                    |             | 1           |             | 1           |             |             |             |             |             |             |             |
| 5199536                                                | RECONDITIONING KIT, 3,4,6V53 (R.H. ROTATION PUMP)                                                           |                      | 1           |             | 1           |             |             |             | 1           |             |             |             |             |
| 5199534                                                | RECONDITIONING KIT, 3-53 (R.H. ROTATION PUMP)                                                               |                      |             |             |             |             |             | 1           |             |             | 1           | 1           |             |
| 5.1003 - TUBE, FRESH WATER PUMP VENT                   |                                                                                                             |                      |             |             |             |             |             |             |             |             |             |             |             |
| 5109733                                                | TUBE ASSY., 6V53                                                                                            |                      |             |             |             |             |             |             | 1           |             |             |             |             |
| 5123166                                                | TUBE, 3,4-53                                                                                                |                      |             |             |             |             |             |             |             |             |             | 1           | 1           |
| 5132612                                                | HOSE ASSY., 1/2" X 11" L. 8V53 (7.8300)                                                                     |                      |             |             |             |             | 1           |             |             |             |             |             |             |
| 144051                                                 | * BUSHING, 1/2"X1/4" RED. (12.9570)                                                                         |                      |             |             |             |             |             |             | 1           |             |             |             |             |
| 442321                                                 | CONNECTOR, 1/4" INV. FL. TUBE (12.9460)                                                                     |                      |             |             |             |             |             |             |             |             |             | 1           | 1           |
| 9432337                                                | ELBOW, 1/4" INV. FL. TUBE 90 DEG., 1/4" P.T. (12.9480)                                                      |                      |             |             |             |             |             |             | 1           |             |             |             |             |
| 225810                                                 | ELBOW, 1/4" INV. FL. TUBE 90 DEG., 1/8" P.T. (12.9480)                                                      |                      |             |             |             |             |             |             | 1           |             |             | 1           | 1           |
| 9432245                                                | ELBOW, 5/16" INV. FL. TUBE 90 DEG., 1/4" P.T. (12.9480)                                                     |                      |             |             |             |             | 1           |             |             |             |             |             |             |
| 143337                                                 | ELBOW, 5/16" INV. FL. TUBE 45 DEG., 1/4" P.T. (12.9480)                                                     |                      |             |             |             |             | 1           |             |             |             |             |             |             |
|                                                        | * OBSOLETE                                                                                                  |                      |             |             |             |             |             |             |             |             |             |             |             |
| 5.1010 - GASKET, FRESH WATER PUMP                      |                                                                                                             |                      |             |             |             |             |             |             |             |             |             |             |             |
| 2A 5133107                                             | GASKET, 3,4,6V, 8V53                                                                                        | 1                    | 1           | 1           | 1           | 1           | 1           | 1           | 1           | 1           | 1           | 1           | 1           |
| 5141918                                                | GASKET, 8V53                                                                                                |                      |             |             |             |             | 1           |             |             |             |             |             |             |
| 5.1115 - REPLACEMENT KIT, FRESH WATER PUMP SEAL SEAT   |                                                                                                             |                      |             |             |             |             |             |             |             |             |             |             |             |
|                                                        | A REPLACEMENT KIT INCLUDES CERAMIC INSERT AND ADHESIVE.                                                     |                      |             |             |             |             |             |             |             |             |             |             |             |
| 5197279                                                | REPLACEMENT KIT, IMPELLER INSERT 2,3,4,6,8V53                                                               | AR                   | AR          | AR          | AR          | AR          |             | AR          | AR          | AR          | AR          | AR          | AR          |
| 5.1200 - PULLEY, FRESH WATER PUMP IDLER                |                                                                                                             |                      |             |             |             |             |             |             |             |             |             |             |             |
|                                                        | A PULLEY ASSY. INCLUDES PULLEY AND ADJUSTING ARM, WHICH ARE NOT SERVICED SEPARATELY, AND BEARING IN 5.1202. |                      |             |             |             |             |             |             |             |             |             |             |             |

## 5.1000 FRESH WATER PUMP

| PART                                                                   |         |                                                      | TYPES       |             |             |             |             |             |             |             |             |             |             |             |
|------------------------------------------------------------------------|---------|------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| ..FIG                                                                  | NUMBER  | NAME AND DESCRIPTION                                 | 1<br>2<br>4 | 1<br>2<br>7 | 1<br>2<br>8 | 1<br>2<br>9 | 1<br>3<br>3 | 1<br>3<br>4 | 1<br>3<br>8 | 1<br>4<br>2 | 1<br>4<br>5 | 1<br>4<br>6 | 1<br>4<br>8 | 1<br>4<br>9 |
| 5.1200 - PULLEY, FRESH WATER PUMP IDLER (CONT'D)                       |         |                                                      |             |             |             |             |             |             |             |             |             |             |             |             |
| 1B                                                                     | 5122992 | # PULLEY ASSY., 2,6,8V53 (5139237)                   |             |             | 1           |             |             |             |             |             |             |             |             |             |
|                                                                        | 5139405 | PULLEY ASSY., 2,3,4-53                               |             | 1           |             |             |             |             |             |             |             |             |             |             |
| 1B                                                                     | 5139238 | # PULLEY ASSY., 6, 8V53 (5139237)                    |             |             |             |             |             | 1           |             |             |             |             |             |             |
| 1B                                                                     | 5139237 | PULLEY ASSY., 2,6,8V53                               | 1           |             |             |             | 1           |             |             |             |             |             |             |             |
| 1B                                                                     | 5139239 | * PULLEY ASSY., 2,6V53                               |             |             |             |             |             |             |             | 1           |             |             |             |             |
| 1B                                                                     | 5143880 | PULLEY ASSY., 3-53                                   |             |             |             |             |             |             | 1           |             |             |             |             |             |
|                                                                        | 5143806 | SHAFT                                                |             |             |             |             |             |             | 1           |             |             |             |             |             |
|                                                                        | 5164294 | SPACER, 13/32"X7/8"X1/8" 2,3,4-53 (7.1581)           | 1           |             |             |             |             |             |             |             |             |             |             |             |
|                                                                        | 5143879 | BUSHING, IDLER ARM PIVOT 3-53                        |             |             |             |             |             |             | 2           |             |             |             |             |             |
|                                                                        | 5134103 | SPRING                                               |             |             |             |             |             |             | 1           |             |             |             |             |             |
|                                                                        | 179850  | BOLT, 3/8"-16X2 3/4" (12.9001)                       |             | 2           | 2           |             | 2           | 2           |             | 2           |             |             |             |             |
|                                                                        | 186288  | BOLT, 3/8"-16X4 1/2" (12.9001)                       |             |             |             |             |             |             | 1           |             |             |             |             |             |
|                                                                        | 181371  | BOLT, 3/8"-24X1 3/8" (12.9001)                       | 1           |             |             |             |             |             |             |             |             |             |             |             |
|                                                                        | 181377  | BOLT, 3/8"-24X1 3/4" (12.9001)                       | 1           |             |             |             | 1           |             |             |             |             |             |             |             |
|                                                                        | 5187641 | WASHER, 25/64"X1 1/8"X1/16" (1.7605)                 |             |             |             |             |             |             | 1           |             |             |             |             |             |
|                                                                        | 187372  | WASHER, 3/8" (12.9190)                               |             |             |             |             |             |             |             | 2           |             |             |             |             |
|                                                                        | 103341  | WASHER, 3/8" (12.9190)                               | 1           | 2           | 2           |             |             |             |             |             |             |             |             |             |
|                                                                        | 103321  | LOCKWASHER, 3/8" (12.9200)                           | AR          |             |             |             |             |             |             |             |             |             |             |             |
|                                                                        | 117049  | NUT, 3/8"-24 (12.9120)                               | 2           |             |             |             |             |             |             |             |             |             |             |             |
| # NOT SERVICED; USE PULLEY ASSY. SHOWN IN PARENTHESES.                 |         |                                                      |             |             |             |             |             |             |             |             |             |             |             |             |
| * OBSOLETE                                                             |         |                                                      |             |             |             |             |             |             |             |             |             |             |             |             |
| 5.1202 - BEARING, FRESH WATER PUMP IDLER PUMP IDLER PULLEY             |         |                                                      |             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                        | 907394  | BEARING, 3,4,6,8V53                                  | 1           | 1           | 1           |             |             | 1           |             | 1           |             |             |             |             |
| 5.1205 - BRACKET, FRESH WATER PUMP IDLER PULLEY                        |         |                                                      |             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                        | 5130918 | BRACKET, 2-53                                        | 1           |             |             |             |             |             |             |             |             |             |             |             |
|                                                                        | 5130945 | SUPPORT, 2-53                                        | 1           |             |             |             |             |             |             |             |             |             |             |             |
|                                                                        | 179838  | BOLT, 3/8"-16X7/8" (12.9001)                         | AR          |             |             |             |             |             |             |             |             |             |             |             |
|                                                                        | 103321  | LOCKWASHER, 3/8" (12.9200)                           | AR          |             |             |             |             |             |             |             |             |             |             |             |
| 5.1215 - BELT, FRESH WATER PUMP DRIVE                                  |         |                                                      |             |             |             |             |             |             |             |             |             |             |             |             |
| NOTE: REFER TO 7.1000A OR 12.6000D FOR DRIVE BELT UNLESS LISTED BELOW. |         |                                                      |             |             |             |             |             |             |             |             |             |             |             |             |
|                                                                        | 5133178 | BELT SET, 2,3,4-53 (2 BELTS) (36"LX.380"W.) (7.1575) | 1           |             |             |             |             |             |             |             |             |             |             |             |
|                                                                        | 5133177 | BELT SET, 6,8V53 (2 BELTS) (37"LX.380"W.) (7.1575)   |             |             |             |             |             |             |             | 1           |             |             |             |             |
|                                                                        | 5130948 | BELT SET, 6V53 (2 BELTS) (37" L. X 380" W.)          |             |             |             |             | 1           |             |             |             |             |             |             |             |
|                                                                        | 5134089 | BELT SET, 3-53 (2 BELTS) (35" LX380" W) (1.3320)     |             |             |             |             |             |             | 1           |             |             |             |             |             |

## 5.1000 FRESH WATER PUMP

| PART |         |                                                  | TYPES       |             |             |             |             |             |             |             |             |             |             |             |
|------|---------|--------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG  | NUMBER  | NAME AND DESCRIPTION                             | 1<br>2<br>4 | 1<br>2<br>7 | 1<br>2<br>8 | 1<br>2<br>9 | 1<br>3<br>3 | 1<br>3<br>4 | 1<br>3<br>8 | 1<br>4<br>2 | 1<br>4<br>5 | 1<br>4<br>6 | 1<br>4<br>8 | 1<br>4<br>9 |
|      | 5.1215  | BELT, FRESH WATER PUMP DRIVE<br>(CONT'D)         |             |             |             |             |             |             |             |             |             |             |             |             |
|      | 5137861 | BELT SET 8V53 (2 BELTS)<br>(39"L.X.380"W")       |             |             |             |             |             | 1           |             |             |             |             |             |             |
|      | 5139228 | BELT SET, 6,8V53 (2 BELTS)<br>(36.76"L.X.380"W.) |             |             | 1           |             |             |             |             |             |             |             |             |             |
|      | 5.1218  | GUARD, FRESH WATER PUMP DRIVE<br>BELT            |             |             |             |             |             |             |             |             |             |             |             |             |
| 5B   | 5121437 | GUARD, 6V53                                      |             |             |             |             |             |             |             | 1           |             |             |             |             |
|      | 5129280 | SPACER, 3/8" PIPE X2.90"L. 8V53                  |             |             |             |             |             |             |             | 1           |             |             |             |             |
|      | 192883  | BOLT, 3/8"-16X5 1/4" (12.9001)                   |             |             |             |             |             |             |             | 1           |             |             |             |             |
|      | 120393  | WASHER, 5/16" (12.9190)                          |             |             |             |             |             |             |             | 2           |             |             |             |             |
|      | 187372  | WASHER, 3/8" (12.9190)                           |             |             |             |             |             |             |             | 1           |             |             |             |             |

## 5.1000 FRESH WATER PUMP

|          |                |                                                                       | TYPES       |             |             |             |             |             |             |             |             |             |             |             |
|----------|----------------|-----------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| ..FIG .. | PART<br>NUMBER | NAME AND DESCRIPTION                                                  | 1<br>5<br>0 | 1<br>5<br>1 | 1<br>5<br>2 | 1<br>5<br>3 | 1<br>5<br>4 | 1<br>5<br>5 | 1<br>5<br>6 | 1<br>5<br>7 | 1<br>5<br>8 | 1<br>5<br>9 | 1<br>6<br>0 | 1<br>6<br>1 |
|          |                | <b>5.1001 - PUMP ASSY., FRESH WATER</b>                               |             |             |             |             |             |             |             |             |             |             |             |             |
|          |                | SEE ASSEMBLY BREAKDOWN PAGE AS<br>INDICATED BELOW.                    |             |             |             |             |             |             |             |             |             |             |             |             |
| 1A       | 5144685        | PUMP ASSY., 2,3,4,6,8V53 (L.H.<br>ROTATION) (PAGE C1) .....           | 1           | 1           | 1           | 1           | 1           |             |             |             |             |             | 1           |             |
| 1A       | 5144686        | PUMP ASSY., 2,3,4,6V53 (R.H.<br>ROTATION) (PAGE C1) .....             |             |             |             |             |             | 1           | 1           | 1           | 1           | 1           |             | 1           |
|          | 5144920        | BALL, 7/16" RUBBER 3,4,6V53 (DRAIN<br>PLUG) (5.1030) .....            |             |             |             |             |             | 1           |             |             |             |             | 1           |             |
|          | 9421623        | BOLT, 5/16"-18 X 7/8" SOC. HD. (FRONT<br>INSIDE HOLE) (12.9027) ..... |             |             |             | 1           | 1           |             |             |             |             | 1           | 1           | 1           |
|          | 186625         | BOLT, 5/16"-18X7/8" (12.9001) .....                                   | 5           | 5           | 5           | 4           | 4           | 5           | 5           | 5           | 5           | 4           | 4           | 4           |
|          | 103320         | LOCKWASHER, 5/16" (12.9200) .....                                     | AR          | 5           | AR          | AR          | AR          | AR          | AR          | AR          | AR          | AR          | AR          | AR          |
|          |                | <b>5.1002 - RECONDITIONING KIT, FRESH WATER<br/>PUMP</b>              |             |             |             |             |             |             |             |             |             |             |             |             |
|          |                | INCLUDES ITEMS IN 5.1010, 5.1032,<br>5.1050, 5.1110 AND 5.1130.       |             |             |             |             |             |             |             |             |             |             |             |             |
|          | 5199533        | RECONDITIONING KIT, 2,3,4,6,8V53 (L.H.<br>ROTATION) .....             | 1           | 1           | 1           | 1           | 1           |             |             |             |             |             | 1           |             |
|          | 5199534        | RECONDITIONING KIT, 2,3,4,6V53 (R.H.<br>ROTATION) .....               |             |             |             |             |             | 1           | 1           | 1           | 1           | 1           |             | 1           |
|          |                | <b>5.1003 - TUBE, FRESH WATER PUMP VENT</b>                           |             |             |             |             |             |             |             |             |             |             |             |             |
|          | 5137952        | TUBE ASSY., 8V53 .....                                                |             |             |             |             | 1           |             |             |             |             |             |             |             |
|          | 5128855        | TUBE ASSY., 3,4-53 .....                                              |             |             |             |             |             |             |             |             | 1           |             |             |             |
|          | 5109733        | TUBE ASSY., 6V53 .....                                                |             |             |             |             |             |             |             |             |             | 1           |             |             |
|          | 5129867        | # HOSE, 1/4" I.D. X 26 3/4" L. 4-53<br>(7.4075) .....                 | 1           |             |             |             |             |             |             | 1           |             |             |             |             |
|          | 225810         | ELBOW, 1/4" TUBE 90 DEG. (12.9480) .....                              | 1           |             |             |             | 1           |             |             | 1           | 1           | 1           |             |             |
|          | 9432337        | ELBOW, 1/4" INV. FL. TUBE 90 DEG.<br>(12.9480) .....                  | 1           |             |             |             | 1           |             |             | 1           |             | 1           |             |             |
|          | 125859         | ELBOW, 1/4" INV. FL. TUBE 45 DEG.<br>(12.9390) .....                  | 1           |             |             |             |             |             |             | 1           |             |             |             |             |
|          | 5114048        | CONNECTOR, 1/4" HOSE X 1/4" INV. FL.<br>TUBE SWIVEL (2.5217) .....    | 2           |             |             |             |             |             |             | 2           |             |             |             |             |
|          | 187321         | CONNECTOR, 1/4" INV. FL. TUBE<br>(12.9460) .....                      |             |             |             |             |             |             |             |             | 1           |             |             |             |
|          | 144045         | BUSHING, 1/2" X 1/4" RED. (12.9570) .....                             |             |             |             | 1           |             |             |             |             |             | 1           |             |             |
|          | 5168001        | CLIP, 1/2" (12.4095) .....                                            | 2           |             |             |             |             |             |             | 2           |             |             |             |             |
|          |                | # STD. LENGTH HOSE, CUT TO LENGTH<br>SHOWN.                           |             |             |             |             |             |             |             |             |             |             |             |             |
|          |                | <b>5.1010 - GASKET, FRESH WATER PUMP</b>                              |             |             |             |             |             |             |             |             |             |             |             |             |
| 2A       | 5133107        | GASKET, 2,3,4,6,8V53 .....                                            | 1           | 1           | 1           | 1           | 1           | 1           | 1           | 1           | 1           | 1           | 1           | 1           |

## 5.1000 FRESH WATER PUMP

| PART |         |                                                                                                                                                                                                                                                                    | TYPES       |             |             |             |             |             |             |             |             |             |             |             |
|------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG  | NUMBER  | NAME AND DESCRIPTION                                                                                                                                                                                                                                               | 1<br>5<br>0 | 1<br>5<br>1 | 1<br>5<br>2 | 1<br>5<br>3 | 1<br>5<br>4 | 1<br>5<br>5 | 1<br>5<br>6 | 1<br>5<br>7 | 1<br>5<br>8 | 1<br>5<br>9 | 1<br>6<br>0 | 1<br>6<br>1 |
|      | 5.1115  | REPLACEMENT KIT, FRESH WATER PUMP SEAL SEAT                                                                                                                                                                                                                        |             |             |             |             |             |             |             |             |             |             |             |             |
|      |         | A REPLACEMENT KIT INCLUDES CERAMIC INSERT AND ADHESIVE.                                                                                                                                                                                                            |             |             |             |             |             |             |             |             |             |             |             |             |
|      | 5197279 | KIT, IMPELLER                                                                                                                                                                                                                                                      |             |             |             | 1           |             |             |             |             |             |             |             |             |
|      | 5.1200  | PULLEY, FRESH WATER PUMP IDLER                                                                                                                                                                                                                                     |             |             |             |             |             |             |             |             |             |             |             |             |
|      |         | PULLEY ASSYS. 5139237, 5139405 AND 5148444 INCLUDE PULLEY AND ADJUSTING ARM, WHICH ARE NOT SERVICED SEPARATELY, AND BEARING IN 5.1202. PULLEY ASSY. 5136874 INCLUDES PULLEY, 5131123 SPACER, CAP, 9409060 BOLT, IN 5.1200 PLUS ITEMS IN 5.1201, 5.1202 AND 5.1207. |             |             |             |             |             |             |             |             |             |             |             |             |
| 1B   | 5139237 | PULLEY ASSY., 2,3,4,6,8V53                                                                                                                                                                                                                                         |             | 1           | 1           | 1           | 1           |             |             |             |             |             | 1           |             |
| 1B   | 5139405 | PULLEY ASSY., 2,3,6V53                                                                                                                                                                                                                                             |             |             |             |             |             | 1           | 1           |             |             | 1           |             | 1           |
|      | 5164294 | SPACER, 13/32"X7/8"X1/8" 2,3,4-53 (7.1581)                                                                                                                                                                                                                         |             | 1           | 1           |             |             | 1           | 1           |             |             |             |             |             |
|      | 179850  | BOLT, 3/8"-16X2 3/4" (12.9001)                                                                                                                                                                                                                                     |             |             |             | 2           | 2           |             |             |             |             | 2           | 2           | 2           |
|      | 181371  | BOLT, 3/8"-24X1 3/8" (12.9001)                                                                                                                                                                                                                                     |             | 1           | 1           |             |             | 1           | 1           |             |             |             |             |             |
|      | 9414268 | BOLT, 3/8"-24 X 1 1/2" (12 PT) (12.9001)                                                                                                                                                                                                                           |             | 1           |             |             |             |             |             |             |             |             |             |             |
|      | 181377  | BOLT, 3/8"-24X1 3/4" (12.9001)                                                                                                                                                                                                                                     |             |             | 1           |             |             | 1           | 1           |             |             |             |             |             |
|      | 103341  | WASHER, 3/8" (12.9190)                                                                                                                                                                                                                                             |             |             | AR          | AR          | AR          | AR          | AR          |             |             | AR          | AR          | AR          |
|      | 103321  | LOCKWASHER, 3/8" (12.9200)                                                                                                                                                                                                                                         |             | 2           | 2           |             |             | 2           | 2           |             |             |             |             |             |
|      | 102635  | NUT, 3/8"-16 (12.9120)                                                                                                                                                                                                                                             |             |             | 1           |             |             |             |             |             |             |             |             |             |
|      | 117049  | NUT, 3/8"-24 (12.9120)                                                                                                                                                                                                                                             |             | 2           | 1           |             |             | 2           | 2           |             |             |             |             |             |
|      | 5.1202  | BEARING, FRESH WATER PUMP IDLER PUMP IDLER PULLEY                                                                                                                                                                                                                  |             |             |             |             |             |             |             |             |             |             |             |             |
|      | 907394  | BEARING, 2,3,4,6,8V53                                                                                                                                                                                                                                              |             | 1           | 1           | 1           | 1           | 1           | 1           |             |             | 1           | 1           | 1           |
|      | 5.1205  | BRACKET, FRESH WATER PUMP IDLER PULLEY                                                                                                                                                                                                                             |             |             |             |             |             |             |             |             |             |             |             |             |
|      | 5136498 | BRACKET, 2,3,4-53 (UPPER)                                                                                                                                                                                                                                          |             |             |             |             |             | 1           | 1           |             |             |             |             |             |
|      | 5136500 | BRACKET, 2,3,4-53 (LOWER)                                                                                                                                                                                                                                          |             |             |             |             |             | 1           | 1           |             |             |             |             |             |
|      | 5130945 | BRACKET, 2,3,4-53 (LOWER)                                                                                                                                                                                                                                          |             |             |             | 1           |             |             |             |             |             |             |             |             |
|      | 5130918 | BRACKET, 2,3,4-53 (UPPER)                                                                                                                                                                                                                                          |             | 1           | 1           |             |             |             |             |             |             |             |             |             |
|      | 5142214 | BRACKET, 3,4-53 (LOWER)                                                                                                                                                                                                                                            |             | 1           |             |             |             |             |             |             |             |             |             |             |
|      | 179838  | BOLT, 3/8"-16X7/8" (12.9001)                                                                                                                                                                                                                                       |             | 3           | 3           |             |             | 3           | 3           |             |             |             |             |             |
|      | 103321  | LOCKWASHER, 3/8" (12.9200)                                                                                                                                                                                                                                         |             | 3           | 3           |             |             | 3           | 3           |             |             |             |             |             |

## 5.1000 FRESH WATER PUMP

| PART                                                                      |         |                                                               | TYPES       |             |             |             |             |             |             |             |             |             |             |             |
|---------------------------------------------------------------------------|---------|---------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| FIG                                                                       | NUMBER  | NAME AND DESCRIPTION                                          | 1<br>5<br>0 | 1<br>5<br>1 | 1<br>5<br>2 | 1<br>5<br>3 | 1<br>5<br>4 | 1<br>5<br>5 | 1<br>5<br>6 | 1<br>5<br>7 | 1<br>5<br>8 | 1<br>5<br>9 | 1<br>6<br>0 | 1<br>6<br>1 |
| 5.1215 - BELT, FRESH WATER PUMP DRIVE                                     |         |                                                               |             |             |             |             |             |             |             |             |             |             |             |             |
| NOTE: REFER TO 7.1000A OR 12.6000D<br>FOR DRIVE BELT UNLESS LISTED BELOW. |         |                                                               |             |             |             |             |             |             |             |             |             |             |             |             |
| 1B                                                                        | 5133178 | BELT SET, 2,3,4-53 (2 BELTS) (36.00 L. X<br>.380 W.) (COGGED) |             | 1           |             | 1           | 1           |             | 1           |             |             | 1           |             | 1           |
| 1B                                                                        | 5135031 | BELT SET, 3,4-53 (2 BELTS)<br>(36.00"L.X.380"W.)              |             |             | 1           |             |             | 1           |             |             |             |             |             |             |
| 1B                                                                        | 5130948 | BELT SET, 4-53 (2 BELTS)<br>(37"L.X.380"W.)                   |             |             |             |             |             |             |             |             |             |             | 1           |             |
| 5.1218 - GUARD, FRESH WATER PUMP DRIVE<br>BELT                            |         |                                                               |             |             |             |             |             |             |             |             |             |             |             |             |
| 5B                                                                        | 5133607 | GUARD, 8V53                                                   |             |             |             |             | 1           |             |             |             |             |             |             |             |
| 5B                                                                        | 5121437 | GUARD, 6V53                                                   |             |             |             |             |             |             |             |             |             | 1           |             |             |
|                                                                           | 5129280 | SPACER, 6,8V53 (2.90"L.)                                      |             |             |             |             | 1           |             |             |             |             | 1           |             |             |
|                                                                           | 192883  | BOLT, 3/8"-16X5 1/4" (12.9001)                                |             |             |             |             | 1           |             |             |             |             | 1           |             |             |
|                                                                           | 120393  | WASHER, 5/16" (12.9190)                                       |             |             |             |             |             |             |             |             |             | 2           |             |             |
|                                                                           | 103341  | WASHER, 3/8" (12.9190)                                        |             |             |             |             |             |             |             |             |             | 1           |             |             |

## 5.1000 FRESH WATER PUMP

| PART<br>FIG ... NUMBER | NAME AND DESCRIPTION                                                                                                                                                                                                                                                                    | TYPES       |             |             |             |             |             |             |             |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                        |                                                                                                                                                                                                                                                                                         | 1<br>6<br>2 | 1<br>6<br>3 | 1<br>6<br>9 | 1<br>8<br>0 | 1<br>9<br>2 | 1<br>9<br>3 | 2<br>0<br>4 | 2<br>0<br>8 |
|                        | <b>5.1001 - PUMP ASSY., FRESH WATER</b>                                                                                                                                                                                                                                                 |             |             |             |             |             |             |             |             |
|                        | SEE ASSEMBLY BREAKDOWN AS<br>INDICATED BELOW.                                                                                                                                                                                                                                           |             |             |             |             |             |             |             |             |
| 5144685                | PUMP ASSY., 2,3,4,6,8V53 (L.H.<br>ROTATION) (PAGE C1)                                                                                                                                                                                                                                   | 1           | 1           |             |             |             |             |             |             |
| 5144500                | + PUMP ASSY., 3-53, 6V53 (L.H.<br>ROTATION) (PAGE C1) (5104392)                                                                                                                                                                                                                         |             |             | 1           |             | 1           |             |             |             |
| 5148442                | PUMP ASSY., 3,4-53 (R.H. ROTATION)<br>(PAGE C1)                                                                                                                                                                                                                                         |             |             |             | 1           |             | 1           |             |             |
| 5144686                | PUMP ASSY., 3-53 (R.H. ROTATION)<br>(PAGE C1)                                                                                                                                                                                                                                           |             |             |             |             |             |             | 1           | 1           |
| 5144920                | BALL, 7/16" RUBBER 3,4,6V53 (DRAIN<br>PLUG) (5.1030)                                                                                                                                                                                                                                    |             |             |             | 1           |             | 1           | 1           |             |
| 8923313                | PLUG, 3/4" PIPE TEF. (12.9550)                                                                                                                                                                                                                                                          |             |             |             |             | 1           |             |             | 2           |
| 186625                 | BOLT, 5/16"-18X7/8" (12.9001)                                                                                                                                                                                                                                                           | 5           | 5           | 5           | 5           | 4           | 5           | 5           | 4           |
| 9421623                | BOLT, 5/16"-18 X 7/8" SOC. HD. (FRONT<br>INSIDE HOLE) (12.9027)                                                                                                                                                                                                                         |             |             |             |             | 1           |             |             | 1           |
| 103320                 | LOCKWASHER, 5/16" (12.9200)                                                                                                                                                                                                                                                             | AR          | AR          | AR          | AR          | AR          | AR          | AR          | AR          |
| 120393                 | WASHER, 5/16" (12.9190)                                                                                                                                                                                                                                                                 |             |             |             |             | 4           |             |             |             |
|                        | + NOT SERVICED, USE PART NUMBER IN<br>PARENTHESES.                                                                                                                                                                                                                                      |             |             |             |             |             |             |             |             |
|                        | <b>5.1002 - RECONDITIONING KIT, FRESH WATER<br/>PUMP</b>                                                                                                                                                                                                                                |             |             |             |             |             |             |             |             |
|                        | INCLUDES ITEMS IN 5.1010, 5.1032,<br>5.1050, 5.1110 AND 5.1130.                                                                                                                                                                                                                         |             |             |             |             |             |             |             |             |
| 5199533                | RECONDITIONING KIT, 2,3,4,6,8V53 (L.H.<br>ROTATION)                                                                                                                                                                                                                                     | 1           | 1           | 1           |             | 1           |             |             |             |
|                        | <b>5.1010 - GASKET, FRESH WATER PUMP</b>                                                                                                                                                                                                                                                |             |             |             |             |             |             |             |             |
| 5133107                | GASKET, 2,3,4,6,8V53                                                                                                                                                                                                                                                                    | 1           | 1           | 1           | 1           | 1           | 1           | 1           |             |
|                        | <b>5.1200 - PULLEY, FRESH WATER PUMP IDLER</b>                                                                                                                                                                                                                                          |             |             |             |             |             |             |             |             |
|                        | PULLEY ASSYS. 5139237, 5139405 AND<br>5148444 INCLUDE PULLEY AND<br>ADJUSTING ARM, WHICH ARE NOT<br>SERVICED SEPARATELY, AND BEARING IN<br>5.1202. PULLEY ASSY. 5136874<br>INCLUDES PULLEY, 5131123 SPACER,<br>CAP, 9409060 BOLT, IN 5.1200 PLUS<br>ITEMS IN 5.1201, 5.1202 AND 5.1207. |             |             |             |             |             |             |             |             |
| 5139237                | PULLEY ASSY., 2,3,4,6,8V53                                                                                                                                                                                                                                                              | 1           | 1           |             |             |             |             |             |             |
| 5136874                | + PULLEY ASSY., 2-53                                                                                                                                                                                                                                                                    |             |             | 1           |             |             |             |             |             |
| 5148444                | PULLEY ASSY., 3,4-53                                                                                                                                                                                                                                                                    |             |             |             | 1           |             |             |             |             |
| 5136811                | + PULLEY, 2-53 (2 GROOVES, 5.60" DIA.)                                                                                                                                                                                                                                                  |             |             | 1           |             |             |             |             |             |
| 5139238                | # PULLEY ASSY., 6V53 (5139237)                                                                                                                                                                                                                                                          |             |             |             |             | 1           |             |             |             |
| 5139405                | PULLEY ASSY., 3-53                                                                                                                                                                                                                                                                      |             |             |             |             |             |             | 1           | 1           |

## 5.1000 FRESH WATER PUMP

| ..FIG | PART<br>NUMBER | NAME AND DESCRIPTION                                              | TYPES       |             |             |             |             |             |             |             |  |  |
|-------|----------------|-------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|--|
|       |                |                                                                   | 1<br>6<br>2 | 1<br>6<br>3 | 1<br>6<br>9 | 1<br>8<br>0 | 1<br>9<br>2 | 1<br>9<br>3 | 2<br>0<br>4 | 2<br>0<br>8 |  |  |
|       |                | <b>5.1200 - PULLEY, FRESH WATER PUMP IDLER (CONT'D)</b>           |             |             |             |             |             |             |             |             |  |  |
|       | 5144798        | CAP, PULLEY END 2-53                                              |             |             | 1           |             |             |             |             |             |  |  |
|       | 5164294        | SPACER, 13/32"X7/8"X1/8" 2,3,4-53 (7.1581)                        | 2           | 1           |             | 1           |             |             | 1           |             |  |  |
|       | 5109886        | SPACER, 2-53 (ASSY. TO SUPPORT)                                   |             |             | 2           |             |             |             |             |             |  |  |
|       | 5131123        | SPACER, BEARING RETAINING 2-53                                    |             |             | 1           |             |             |             |             |             |  |  |
|       | 9414268        | BOLT, 3/8"-16 X 1 1/2" (12.9005)                                  | 1           |             |             | 1           |             |             |             |             |  |  |
|       | 179850         | BOLT, 3/8"-16X2 3/4" (12.9001)                                    |             |             |             |             | 2           |             |             | 2           |  |  |
|       | 181371         | BOLT, 3/8"-24X1 3/8" (12.9001)                                    |             | 1           |             |             |             |             | 1           |             |  |  |
|       | 181377         | BOLT, 3/8"-24X1 3/4" (12.9001)                                    | 1           | 1           |             | 1           |             |             |             |             |  |  |
|       | 186689         | BOLT, 1/2"-13X2" (12.9001)                                        |             |             | 2           |             |             |             |             |             |  |  |
|       | 9409060        | BOLT, 1/2"-20X1 1/2" (12.9001)                                    |             |             | 1           |             |             |             |             |             |  |  |
|       | 103341         | WASHER, 3/8" (12.9190)                                            |             | AR          |             |             | AR          |             | AR          | AR          |  |  |
|       | 103321         | LOCKWASHER, 3/8" (12.9200)                                        | 2           | 2           |             | 2           |             |             | 2           |             |  |  |
|       | 103323         | LOCKWASHER, 1/2" (12.9200)                                        |             |             | 2           |             |             |             |             |             |  |  |
|       | 102635         | NUT, 3/8"-16 (12.9120)                                            | 2           |             |             | 1           |             |             |             |             |  |  |
|       | 117049         | NUT, 3/8"-24 (12.9120)                                            |             | 2           |             | 1           |             |             | 2           |             |  |  |
|       |                | # NOT SERVICED; USE PULLEY ASSY. SHOWN IN PARENTHESES.            |             |             |             |             |             |             |             |             |  |  |
|       |                | + OBSOLETE.                                                       |             |             |             |             |             |             |             |             |  |  |
|       |                | <b>5.1201 - ARM, IDLER PULLEY ADJUSTING</b>                       |             |             |             |             |             |             |             |             |  |  |
|       | 5136805        | + # ARM, ADJUSTING 2-53                                           |             |             | 1           |             |             |             |             |             |  |  |
|       |                | # INCLUDES INTEGRAL CAST PULLEY SHAFT.                            |             |             |             |             |             |             |             |             |  |  |
|       |                | + OBSOLETE.                                                       |             |             |             |             |             |             |             |             |  |  |
|       |                | <b>5.1202 - BEARING, FRESH WATER PUMP IDLER PUMP IDLER PULLEY</b> |             |             |             |             |             |             |             |             |  |  |
|       | 907394         | BEARING, 2,3,4,6,8V53                                             | 1           | 1           |             |             | 1           |             |             |             |  |  |
|       | 7450630        | BEARING, 2-53 (INNER) (5.4110)                                    |             |             | 1           |             |             |             |             |             |  |  |
|       | 9415132        | BEARING, 2-53 (OUTER) (5.4110)                                    |             |             | 1           |             |             |             |             |             |  |  |
|       | 908140         | BEARING, 3,4-53                                                   |             |             |             | 1           |             |             |             |             |  |  |
|       | 5131122        | SPACER, BEARING 2-53 (5.4170)                                     |             |             | 1           |             |             |             |             |             |  |  |
|       | 5131095        | BAFFLE, GREASE 2-53 (5.4110)                                      |             |             | 1           |             |             |             |             |             |  |  |
|       | 5131124        | SHIM, .015" (5.4110)                                              |             |             | AR          |             |             |             |             |             |  |  |
|       | 5131205        | SHIM, .020" (5.4110)                                              |             |             | AR          |             |             |             |             |             |  |  |
|       | 5131206        | SHIM, .025" (5.4110)                                              |             |             | AR          |             |             |             |             |             |  |  |
|       |                | <b>5.1205 - BRACKET, FRESH WATER PUMP IDLER PULLEY</b>            |             |             |             |             |             |             |             |             |  |  |
|       | 5139060        | BRACKET, 2,3,4-53 (UPPER)                                         |             | 1           |             |             |             |             |             |             |  |  |
|       | 5136498        | BRACKET, 2,3,4-53 (UPPER)                                         |             |             |             | 1           |             |             | 1           |             |  |  |
|       | 5136500        | BRACKET, 2,3,4-53 (LOWER)                                         |             |             |             | 1           |             |             | 1           |             |  |  |
|       | 5130945        | BRACKET, 2,3,4-53 (LOWER)                                         | 1           | 1           |             |             |             |             |             |             |  |  |
|       | 5130918        | BRACKET, 2,3,4-53 (UPPER)                                         | 1           |             |             |             |             |             |             |             |  |  |
|       | 5136770        | * SUPPORT, 3-53                                                   |             |             | 1           |             |             |             |             |             |  |  |
|       | 179838         | BOLT, 3/8"-16X7/8" (12.9001)                                      | 3           | 3           |             | 3           |             |             | 3           |             |  |  |

## 5.1000 FRESH WATER PUMP

| PART |         | TYPES                                                                  |   |   |   |   |   |   |   |   |  |
|------|---------|------------------------------------------------------------------------|---|---|---|---|---|---|---|---|--|
| FIG  | NUMBER  | NAME AND DESCRIPTION                                                   | 1 | 6 | 1 | 1 | 1 | 1 | 2 | 2 |  |
|      |         |                                                                        | 6 | 1 | 6 | 1 | 9 | 1 | 0 | 2 |  |
|      |         |                                                                        | 2 | 3 | 9 | 8 | 2 | 9 | 4 | 0 |  |
|      |         |                                                                        |   |   |   | 0 |   | 3 |   | 8 |  |
|      |         |                                                                        |   |   |   |   |   |   |   |   |  |
|      |         | 5.1205 - BRACKET, FRESH WATER PUMP IDLER PULLEY (CONT'D)               |   |   |   |   |   |   |   |   |  |
|      | 186612  | BOLT, 3/8"-16X1 3/8" (12.9001)                                         |   |   | 3 |   |   |   |   |   |  |
|      | 181377  | BOLT, 3/8"-24 X 1 3/4" (12.9001)                                       |   |   |   |   |   |   | 1 |   |  |
|      | 103321  | LOCKWASHER, 3/8" (12.9200)                                             | 3 | 3 | 3 | 3 |   |   | 3 |   |  |
|      |         | * OBSOLETE.                                                            |   |   |   |   |   |   |   |   |  |
|      |         | 5.1207 - SEAL, IDLER PULLEY SHAFT                                      |   |   |   |   |   |   |   |   |  |
|      | 5108219 | SEAL (5.4150)                                                          |   |   | 1 |   |   |   |   |   |  |
|      |         | 5.1215 - BELT, FRESH WATER PUMP DRIVE                                  |   |   |   |   |   |   |   |   |  |
|      |         | NOTE: REFER TO 7.1000A OR 12.6000D FOR DRIVE BELT UNLESS LISTED BELOW. |   |   |   |   |   |   |   |   |  |
| 1B   | 5133178 | BELT SET, 2,3,4-53 (2 BELTS)<br>(36.00"L.X.380"W.)                     | 1 | 1 |   |   |   |   | 1 |   |  |
| 1B   | 5135031 | BELT SET, 3,4-53 (2 BELTS)<br>(36.00"L.X.380"W.)                       |   |   |   | 1 |   |   |   |   |  |
| 1B   | 5137110 | BELT SET, 3-53 (2 BELTS)<br>(38.00"L.X.380"W.)                         |   |   | 1 |   |   |   |   |   |  |
| 1B   | 5133177 | BELT SET, 6, 6V53 (2 BELTS) (37.00" L.<br>X 380" W.)                   |   |   |   |   | 1 |   |   | 1 |  |
|      |         | 5.1218 - GUARD, FRESH WATER PUMP DRIVE BELT                            |   |   |   |   |   |   |   |   |  |
| 5B   | 5121437 | GUARD, 6V53                                                            |   |   |   |   |   |   |   | 1 |  |
|      | 5129280 | SPACER, 6, 8V53 (2.90" L.)                                             |   |   |   |   |   |   |   | 1 |  |
|      | 192883  | BOLT, 3/8"-16 X 5 1/4" (12.9001)                                       |   |   |   |   |   |   |   | 1 |  |
|      | 103341  | WASHER, 3/8" (12.9190)                                                 |   |   |   |   |   |   |   | 1 |  |
|      | 120393  | WASHER, 5/16" (12.9190)                                                |   |   |   |   |   |   |   | 2 |  |

## 5.1000 FRESH WATER PUMP

|                                                     |             |                                                                                                                                               | COLUMN |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FIG                                                 | PART NUMBER | NAME AND DESCRIPTION                                                                                                                          | A      | B | C | D | E | F | G | H | I | J | K | L | M | N |
| <b>5.1001 - PUMP ASSY., FRESH WATER</b>             |             |                                                                                                                                               |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 1A                                                  | 5195982     | # PUMP ASSY., 2,3,4-53 (L.H. ROTATION)                                                                                                        | 1      |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 1A,B                                                | 5195983     | # PUMP ASSY., 2,3,4,6V53                                                                                                                      |        | 1 |   |   |   |   |   |   |   |   |   |   |   |   |
| 1A                                                  | 5121216     | # PUMP ASSY., 2-53 (R.H. ROTATION)                                                                                                            |        |   | 1 |   |   |   |   |   |   |   |   |   |   |   |
| 1A                                                  | 5123801     | # PUMP ASSY., 2-53 (R.H. ROTATION)                                                                                                            |        |   |   | 1 |   |   |   |   |   |   |   |   |   |   |
| 1A                                                  | 5124349     | # PUMP ASSY., 2-53 (R.H. ROTATION)                                                                                                            |        |   |   |   | 1 |   |   |   |   |   |   |   |   |   |
|                                                     | 5121478     | # PUMP ASSY., 6V53 (R.H. ROTATION) (C ENG.)                                                                                                   |        |   |   |   |   | 1 |   |   |   |   |   |   |   |   |
| 1B                                                  | 5109387     | # PUMP ASSY., 6V53 (L.H. ROTATION)                                                                                                            |        |   |   |   |   |   | 1 |   |   |   |   |   |   |   |
| 1A                                                  | 5109046     | # PUMP ASSY., 3,4-53 (R.H. ROTATION)                                                                                                          |        |   |   |   |   |   |   | 1 |   |   |   |   |   |   |
| 1B                                                  | 5131602     | # PUMP ASSY., 6V53 (L.H. ROTATION)                                                                                                            |        |   |   |   |   |   |   |   | 1 |   |   |   |   |   |
| 1A                                                  | 5109553     | # PUMP ASSY., 3,4-53 (L.H. ROTATION)                                                                                                          |        |   |   |   |   |   |   |   |   | 1 |   |   |   |   |
|                                                     |             | # NOT SERVICED, SHOWN FOR COMPONENT REFERENCE ONLY                                                                                            |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>5.1030 - BODY, FRESH WATER PUMP</b>              |             |                                                                                                                                               |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2A                                                  | 5131547     | # BODY, 3,4-53 (L.H. ROTATION)                                                                                                                | 1      |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2A                                                  | 5119281     | # BODY, 2,3,4,6V53 (R.H. ROTATION)                                                                                                            |        | 1 | 1 | 1 | 1 |   |   |   |   |   |   |   |   |   |
| 2A                                                  | 5121475     | # BODY, 2-53 (R.H. ROTATION) (C ENG.)                                                                                                         |        |   |   |   |   | 1 |   |   |   |   |   |   |   |   |
| 2A                                                  | 5109045     | # BODY, 6V53 (R.H. ROTATION)                                                                                                                  |        |   |   |   |   |   |   | 1 |   |   |   |   |   |   |
| 2A                                                  | 5121474     | # BODY, 2,3,4-53 (L.H. ROTATION) (A ENG.)                                                                                                     |        |   |   |   |   |   |   |   | 1 |   |   |   |   |   |
| 2A                                                  | 5109554     | # BODY, 2,3,4,6V53 (L.H. ROTATION)                                                                                                            |        |   |   |   |   |   |   |   |   | 1 |   |   |   |   |
| 2A                                                  | 5135421     | # BODY ASSY., 2-53 (L.H. ROTATION) (INCLUDES 8" NIPPLE)                                                                                       |        |   |   |   |   |   | 1 |   |   |   |   |   |   |   |
| 2A                                                  | 5119477     | NIPPLE, 7/8" O.D. X 1 5/8" L. (5.2160)                                                                                                        | 1      | 1 | 1 | 1 | 1 |   |   | 1 |   | 1 |   |   |   |   |
| 2A                                                  | 5109219     | + NIPPLE, 1 1/8" O.D. X 2.56" L.                                                                                                              |        |   |   |   |   |   |   |   | 1 |   |   |   |   |   |
| 2A                                                  | 5121479     | NIPPLE, 1 1/8" O.D. X 3 3/16" L.                                                                                                              |        |   |   |   |   | 1 |   |   |   |   |   |   |   |   |
| 2A                                                  | 5145009     | PLUG, 1/8" PIPE (12.9550)                                                                                                                     | 1      | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                                                     | 5115214     | PLUG, 1/2" PIPE (12.9550)                                                                                                                     |        |   |   |   |   |   |   |   | 1 |   |   |   |   |   |
|                                                     | 5119218     | PLUG, 7/8" CUP (5.1030)                                                                                                                       | 2      | 2 |   |   |   | 1 | 1 |   | 1 |   |   |   |   |   |
|                                                     |             | # NOT SERVICED, REFER TO CONVERSION CHART AT BEGINNING OF SECTION FOR REPLACEMENT PUMP AND ITEMS THAT MAY BE REQUIRED TO CONVERT TO NEW PUMP. |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                                                     |             | + OBSOLETE.                                                                                                                                   |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| <b>5.1031 - COVER, FRESH WATER PUMP</b>             |             |                                                                                                                                               |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2A                                                  | 5119283     | COVER, 2,3,4,6V53                                                                                                                             | 1      | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|                                                     | 5148436     | BOLT, 5/16"-18X3/4" (W/LW) (12.9001)                                                                                                          | 7      | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| <b>5.1032 - GASKET, FRESH WATER PUMP BODY COVER</b> |             |                                                                                                                                               |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2A                                                  | 5119282     | GASKET, 2,3,4,6V53                                                                                                                            | 1      | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

## 5.1000 FRESH WATER PUMP

| PART<br>FIG . . . NUMBER . . . . . NAME AND DESCRIPTION . . . . . |                |                                                                      | COLUMN |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-------------------------------------------------------------------|----------------|----------------------------------------------------------------------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                                                   |                |                                                                      | A      | B | C | D | E | F | G | H | I | J | K | L | M | N |
| <b>5.1050 - SHAFT, FRESH WATER PUMP</b>                           |                |                                                                      |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2A                                                                | <b>904827</b>  | SHAFT ASSY., 2,3,4,6V53 (INCLUDES BEARING) . . . . .                 | 1      | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |   |   |   |
| <b>5.1110 - IMPELLER, FRESH WATER PUMP</b>                        |                |                                                                      |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2A                                                                | <b>5146563</b> | IMPELLER, 2,3,4,6V53 (L.H. ROTATION) (WITH CERAMIC INSERT) . . . . . | 1      |   |   |   |   |   | 1 |   | 1 | 1 |   |   |   |   |
| 2A                                                                | <b>5146562</b> | IMPELLER, 2,3,4,6V53 (R.H. ROTATION) (WITH CERAMIC INSERT) . . . . . |        | 1 | 1 | 1 | 1 | 1 |   | 1 |   |   |   |   |   |   |
| <b>5.1130 - SEAL, FRESH WATER PUMP</b>                            |                |                                                                      |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2A                                                                | <b>5130959</b> | SEAL, 2,3,4,6V53 . . . . .                                           | 1      | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |   |   |   |
| <b>5.1214 - PULLEY, FRESH WATER PUMP</b>                          |                |                                                                      |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2A                                                                | <b>5119465</b> | # PULLEY, 2,3,4,6V53 . . . . .                                       | 1      | 1 |   |   |   |   | 1 | 1 | 1 | 1 | 1 |   |   |   |
| 2A                                                                | <b>5121215</b> | + PULLEY, 3,4-53 . . . . .                                           |        |   | 1 |   |   |   |   |   |   |   |   |   |   |   |
| 2A                                                                | <b>5144510</b> | * PULLEY, 2-53 . . . . .                                             |        |   |   | 1 |   |   |   |   |   |   |   |   |   |   |
| 2A                                                                | <b>5125113</b> | % PULLEY, 6V53 . . . . .                                             |        |   |   |   | 1 |   |   |   |   |   |   |   |   |   |
|                                                                   |                | + NOT SERVICED, FOR SERVICE USE 8920869 AND SD-270.                  |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                                                                   |                | % NOT SERVICED, FOR SERVICE USE 8920869 AND SD-273.                  |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                                                                   |                | # NOT SERVICED, FOR SERVICE USE 5144503 AND SD-166.                  |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
|                                                                   |                | * NOT SERVICED, FOR SERVICE USE 8920869 AND SD-268.                  |        |   |   |   |   |   |   |   |   |   |   |   |   |   |

## 5.1000 FRESH WATER PUMP

| PART<br>..FIG .. NUMBER .. NAME AND DESCRIPTION .. |         |                                                                                                                                                                               | COLUMN |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------------------------------------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|
|                                                    |         |                                                                                                                                                                               | A      | B | C | D | E | F | G | H | I | J | K | L | M | N |
| <b>5.1001 - PUMP ASSY., FRESH WATER</b>            |         |                                                                                                                                                                               |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 1B                                                 | 5109551 | # PUMP ASSY., 6V53 (L.H. ROTATION) (A ENG.)                                                                                                                                   | 1      |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 1B                                                 | 5133667 | # PUMP ASSY., 6V53 (L.H. ROTATION) (A ENG.)                                                                                                                                   |        | 1 |   |   |   |   |   |   |   |   |   |   |   |   |
| 1B                                                 | 5198194 | # PUMP ASSY., 8V53 (L.H. ROTATION)                                                                                                                                            |        |   | 1 |   |   |   |   |   |   |   |   |   |   |   |
| 1B                                                 | 5134191 | # PUMP ASSY., 8V53 (R.H. ROTATION)                                                                                                                                            |        |   |   | 1 |   |   |   |   |   |   |   |   |   |   |
| 1B                                                 | 5135464 | # PUMP ASSY., 6V53 (L.H. ROTATION)                                                                                                                                            |        |   |   |   | 1 |   |   |   |   |   |   |   |   |   |
| 1A                                                 | 5136506 | # PUMP ASSY., 6V53 (L.H. ROTATION) (ALUM.)                                                                                                                                    |        |   |   |   |   | 1 |   |   |   |   |   |   |   |   |
| 1A,B                                               | 5141747 | # PUMP ASSY., 3-53 (L.H. ROTATION)                                                                                                                                            |        |   |   |   |   |   | 1 |   |   |   |   |   |   |   |
| 1A                                                 | 5142051 | # PUMP ASSY., 4,6V53 (R.H. ROTATION)                                                                                                                                          |        |   |   |   |   |   |   | 1 |   |   |   |   |   |   |
| 1B                                                 | 5121477 | # PUMP ASSY., 2,3,4-53 (L.H. ROTATION)                                                                                                                                        |        |   |   |   |   |   |   |   | 1 |   |   |   |   |   |
|                                                    | 5144717 | PUMP ASSY., 3-53 (R.H. ROTATION)<br># NOT SERVICED, SHOWN FOR<br>COMPONENT REFERENCE ONLY.                                                                                    |        |   |   |   |   |   |   |   |   | 1 |   |   |   |   |
| <b>5.1030 - BODY, FRESH WATER PUMP</b>             |         |                                                                                                                                                                               |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2A                                                 | 5109552 | # BODY, 6V53 (L.H. ROTATION) (A ENG.)                                                                                                                                         | 1      |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2A                                                 | 5133668 | # BODY, 6V53 (L.H. ROTATION)                                                                                                                                                  |        | 1 |   |   |   |   |   |   |   |   |   |   |   |   |
| 2A                                                 | 5132498 | # BODY, 8V53 (L.H. ROTATION)                                                                                                                                                  |        |   | 1 |   |   |   |   |   |   |   |   |   |   |   |
| 2A                                                 | 5134190 | # BODY, 8V53 (R.H. ROTATION)                                                                                                                                                  |        |   |   | 1 |   |   |   |   |   |   |   |   |   |   |
| 2A                                                 | 5135465 | # BODY, 6V53 (L.H. ROTATION)                                                                                                                                                  |        |   |   |   | 1 |   |   |   |   |   |   |   |   |   |
| 2A                                                 | 5136826 | # BODY, 6V53 (L.H. ROTATION) (ALUM.)<br>(INCLUDES 5136783 TUBE)                                                                                                               |        |   |   |   |   | 1 |   |   |   |   |   |   |   |   |
| 2A                                                 | 5142048 | # BODY, 3-53 (L.H. ROTATION)                                                                                                                                                  |        |   |   |   |   |   | 1 |   |   |   |   |   |   |   |
| 2A                                                 | 5142050 | # BODY, 4,6V53 (R.H. ROTATION)                                                                                                                                                |        |   |   |   |   |   |   | 1 |   |   |   |   |   |   |
| 2A                                                 | 5121474 | # BODY, 2,3,4-53 (L.H. ROTATION) (A ENG.)                                                                                                                                     |        |   |   |   |   |   |   |   | 1 |   |   |   |   |   |
| 2A                                                 | 5144687 | BODY, 3-53 (R.H. ROTATION)                                                                                                                                                    |        |   |   |   |   |   |   |   |   | 1 |   |   |   |   |
| 2A                                                 | 5119477 | NIPPLE, 7/8" O.D. X 5/8" L.                                                                                                                                                   |        |   |   |   |   | 1 |   | 1 |   |   |   |   |   |   |
| 2A                                                 | 5121479 | NIPPLE, 1 1/8" O.D. X 3 3/16" L.                                                                                                                                              | 1      | 1 | 1 | 1 |   |   | 1 |   | 1 | 1 |   |   |   |   |
|                                                    | 5145009 | PLUG, 1/8" PIPE (12.9550)                                                                                                                                                     | 1      | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |   |   |
|                                                    | 5115214 | PLUG, 1/2" PIPE (12.9550)                                                                                                                                                     | 1      | 1 |   | 1 |   |   |   |   |   |   |   |   |   |   |
|                                                    | 5119218 | PLUG, 7/8" CUP (5.1030)                                                                                                                                                       |        |   |   |   | 1 |   | 1 |   | 1 |   |   |   |   |   |
|                                                    | 5197146 | PLUG, 1 1/8" CUP<br># NOT SERVICED, REFER TO<br>CONVERSION CHART AT BEGINNING<br>OF SECTION FOR REPLACEMENT PUMP<br>AND ITEMS THAT MAY BE REQUIRED<br>TO CONVERT TO NEW PUMP. |        |   | 1 |   |   |   |   |   |   |   |   |   |   |   |
| <b>5.1031 - COVER, FRESH WATER PUMP</b>            |         |                                                                                                                                                                               |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2A                                                 | 5119283 | COVER, 2,3,4,6,8V53                                                                                                                                                           | 1      | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |   |   |   |
|                                                    | 5148436 | BOLT, 5/16"-18 X 3/4" (W/LW)<br>(12.9001)                                                                                                                                     | 7      | 7 | 7 | 7 |   | 7 | 7 | 7 | 7 |   |   |   |   |   |
|                                                    | 5104293 | BOLT, 5/16"-18X3/4" (W/LW)<br>(UNCOATED THD.) (12.9001)                                                                                                                       |        |   |   |   | 7 |   |   |   |   | 7 |   |   |   |   |

## 5.1000 FRESH WATER PUMP

| PART |         |                                                            | COLUMN |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------|---------|------------------------------------------------------------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FIG  | NUMBER  | NAME AND DESCRIPTION                                       | A      | B | C | D | E | F | G | H | I | J | K | L | M | N |
|      |         | 5.1032 - GASKET, FRESH WATER PUMP BODY COVER               |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2A   | 5119282 | GASKET, 2,3,4,6,8V53                                       | 1      | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |   |   |   |
|      |         | 5.1050 - SHAFT, FRESH WATER PUMP                           |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2A   | 904827  | SHAFT ASSY., 2,3,4,6,8V53 (INCLUDES BEARING)               | 1      | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |   |   |   |
|      |         | 5.1110 - IMPELLER, FRESH WATER PUMP                        |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2A   | 5146563 | IMPELLER, 2,3,4,6V53 (L.H. ROTATION) (WITH CERAMIC INSERT) | 1      |   |   |   | 1 | 1 | 1 |   | 1 |   |   |   |   |   |
|      | 5113800 | IMPELLER, 6,8V53 (L.H. ROTATION) (WITH CERAMIC INSERT)     |        | 1 | 1 |   |   |   |   |   |   |   |   |   |   |   |
| 2A   | 5146562 | IMPELLER, 4,6,8V53 (R.H. ROTATION) (WITH CERAMIC INSERT)   |        |   |   | 1 |   |   |   | 1 |   |   |   |   |   |   |
| 2A   | 5146354 | IMPELLER, 3-53 (R.H. ROTATION) (WITH CERAMIC INSERT)       |        |   |   |   |   |   |   |   |   |   | 1 |   |   |   |
|      |         | 5.1130 - SEAL, FRESH WATER PUMP                            |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2A   | 5130959 | SEAL, 2,3,4,6,8V53                                         | 1      | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |   |   |   |   |
|      |         | 5.1214 - PULLEY, FRESH WATER PUMP                          |        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2A   | 5119465 | * PULLEY, 2,3,4,6,8V53 (SD-166)                            | 1      | 1 | 1 | 1 |   |   | 1 | 1 | 1 |   |   |   |   |   |
| 2A   | 5109687 | PULLEY, 6V53                                               |        |   |   |   | 1 | 1 |   |   |   |   |   |   |   |   |
| 2A   | 5144503 | PULLEY, 3-53                                               |        |   |   |   |   |   |   |   |   |   | 1 |   |   |   |
|      |         | * NOT SERVICED, FOR SERVICE USE 5144503 AND SD-166.        |        |   |   |   |   |   |   |   |   |   |   |   |   |   |