

9.1000A HYDRAULIC MARINE GEAR

PART ..FIG .. NUMBER .. NAME AND DESCRIPTION ..			COLUMN												
			A	B	C	D	E	F	G	H	I	J	K	L	N
9.1292 - GEAR ASSY., REDUCTION GEAR PLANETARY															
2B	5196268	GEAR ASSY. (1.5:1 RED.)			1	1									
2C	5196269	GEAR ASSY. (2:1 RED., L.H.) (2 DRILL SPOTS ON REAR FACE)					1								
2C	5196288	GEAR ASSY. (2:1 RED., R.H.)						1							
2D	5196270	* GEAR ASSY. (2.5:1 RED.) (10 SPLINES)							1	1					
2D	5198141	% GEAR ASSY. (2.5:1 RED.) (24 SPLINES)							AR	AR					
2D	5196271	* GEAR ASSY. (3:1 RED.) (10 SPLINES)									1	1			
	5197880	GEAR ASSY. (3:1 RED.) (24 SPLINES)									AR	AR			
2B	3709351	RING, SNAP (1 1/4" I.D.) (9.1027)			1	1									
* NOT SERVICED; FOR REPLACEMENT USE 5198141 (2.5:1) OR 5197880 (3:1) GEAR ASSY. AND INCLUDE 1-9422151 BEARING IN 9.1350, 1-5198125 FLANGE IN 9.1430 AND 1-5198128 NUT IN 9.1435. % NOT SERVICED, FOR SERVICE USE 5196544.															
9.1293 - WASHER, REDUCTION GEAR PLANETARY GEAR THRUST															
2C	5196279	WASHER (2:1 RED.)					2	2							
9.1298 - GEAR, REDUCTION GEAR PLANETARY RING															
2B,C,D	5196252	GEAR (1.5:1, 2:1, 3:1 RED.)			1	1	1	1			1	1			
2D	5196257	GEAR (2.5:1 RED.)							1	1					
2B,C,D	5196253	RING, SNAP (6 1/4" O.D.)			1	1	1	1			1	1			
2D	5196258	RING, SNAP (6 17/32" O.D.)							1	1					
9.1340 - SHAFT, REDUCTION GEAR DRIVE															
2B	5196276	SHAFT (1.5:1 RED.)			1	1									
2C	5196273	SHAFT ASSY. (INCLUDES BUSHING) (2:1 RED.)						1	1						
	5199829	BUSHING (2:1 RED.) (9.1087)						1	1						
9.1350 - BEARING, REDUCTION GEAR OUTPUT SHAFT															
2B,C,D	5199316	BEARING	1	1											
2B,C,D	9413343	# BEARING			1	1	1	1	1	1	1	1			
2D	9422151	* BEARING							AR	AR	AR	AR			
# WITH 10 SPLINE GEAR ASSY. IN 9.1292. * WITH 24 SPLINE GEAR ASSY. IN 9.1292.															

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			COLUMN													
FIG	PART NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M	N
		9.1365 - COVER, REDUCTION GEAR BEARING														
	5196765	COVER	1	1												
2B,C,D	5196286	COVER			1	1	1	1	1	1	1	1				
	454933	BOLT, 7/16"-14X1 1/8" (12.9001)	6	6												
2B,C,D	193221	BOLT, 7/16"-14X1 1/4" (12.9001)			6	6	6	6	6	6	6	6				
2B,C,D	103322	LOCKWASHER, 7/16" (12.9200)	6	6	6	6	6	6	6	6	6	6				
		9.1370 - GASKET, REDUCTION GEAR BEARING COVER														
	5196766	GASKET	1	1												
2B,C,D	5196287	GASKET			1	1	1	1	1	1	1	1				
		9.1375 - SEAL, REDUCTION GEAR BEARING COVER OIL														
2B,C,D	5199391	SEAL, OIL (DOUBLE LIP)	1	1	1	1	1	1	1	1	1	1				
		9.1380 - BAFFLE, MARINE GEAR OIL														
2A	5196175	BAFFLE	1	1	1	1	1	1	1	1	1	1				
		9.1395 - DIPSTICK, REDUCTION GEAR														
2A	5196176	% @ DIPSTDIPSTICK (FILLER CAP)	1	1	1	1	1	1	1	1	1	1				
	5133364	& DIPSTICK (FILLER PLUG)	1	1	1	1	1	1	1	1	1	1				
		@ PRIOR TO GEAR SERIAL NOS. 16338 (D.D.), 883 (1.5:1), 672 (2:1), 1614 (2.5:1) AND 367 (3:1).														
		& EFFECTIVE WITH GEAR SERIAL NOS. 16338 (D.D.), 883 (1.5:1), 672 (2 1), 1614 (2.5 1) AND 367 (3 1), NOT SERVICED, USE 5149100 AND 5149061 ADAPTOR.														
		% OBSOLETE.														
		9.1410 - TUBE, MARINE GEAR OIL FILLER														
	5196174	@ TUBE (WITH FILLER CAP TYPE DIPSTICK)	1	1	1	1	1	1	1	1	1	1				
		@ PRIOR TO GEAR SERIAL NOS. 16338 (D.D.), 883 (1.5:1), 672 (2:1), 1614 (2.5:1) AND 367 (3:1).														
		9.1430 - FLANGE, PROPELLER DRIVE														
2B,C,D	5196745	# FLANGE (4 1/4"B.C.)	1	1	1	1	1	1	1	1	1	1				
2D	5198125	* FLANGE (4 1/4"B.C., 24 SPLINES)							AR	AR	AR	AR				
		# WITH 10 SPLINE GEAR ASSY. IN 9.1292.														

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PART			COLUMN													
FIG	NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1430 - FLANGE, PROPELLER DRIVE (CONT'D)																
* WITH 24 SPLINE GEAR ASSY. IN 9.1292.																
9.1435 - NUT, PROPELLER DRIVE FLANGE																
2B,C,D	5196805	# NUT	1	1	1	1	1	1	1	1	1	1				
2D	5198128	* NUT							AR	AR	AR	AR				
# WITH 10 SPLINE GEAR ASSY. IN 9.1292.																
* WITH 24 SPLINE GEAR ASSY. IN 9.1292.																
9.1475 - PUMP ASSY., HYDRAULIC MARINE GEAR OIL																
2A	5198459	* PUMP ASSY. (INCLUDES SEAL IN 9.1505)	1	1	1	1	1	1	1	1	1	1				
2A	5196889	# PUMP ASSY. (INCLUDES SEAL IN 9.1505)	1	1	1	1	1	1	1	1	1	1				
	5198270	* KEY, 3/16" FLANGE	1	1	1	1	1	1	1	1	1	1				
2A	431787	# KEY, 3/16"X5/8" WOODRUFF (12.9350)	1	1	1	1	1	1	1	1	1	1				
2A	110533	# SCREW, #10-24X3/4" FIL. HD. SL (12.9030)	2	2	2	2	2	2	2	2	2	2				
2A	180083	* BOLT, 5/16"-18X1 1/2" (12.9001)	4	4	4	4	4	4	4	4	4	4				
2A	186643	# BOLT, 5/16"-18X1 7/8" (12.9001)	4	4	4	4	4	4	4	4	4	4				
* EFF. WITH GEAR SERIAL NOS. 4351 (D.D.), 1850 (1.5:1), 2261 (2:1).																
# THRU GEAR SERIAL NOS. 4350 (D.D.), 1849 (1.5:1), 2260 (2:1).																
9.1480 - GASKET, HYDRAULIC MARINE GEAR OIL PUMP																
2A	5196216	GASKET	1	1	1	1	1	1	1	1	1	1				
9.1505 - SEAL, HYDRAULIC MARINE GEAR OIL PUMP																
2A	5199315	SEAL, OIL (DOUBLE LIP)	1	1	1	1	1	1	1	1	1	1				
9.1650 - STRAINER, MARINE GEAR OIL																
	5196883	STRAINER	1	1												
2A	5198456	@ STRAINER	1	1	1	1	1	1	1	1	1	1				
	5196178	STRAINER			1	1	1	1	1	1	1	1				

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PART		COLUMN														
..FIG	NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1650 - STRAINER, MARINE GEAR OIL (CONT'D)																
	5198456	& STRAINER (IN MAIN HOUSING)					1	1								
2A	120428	@ GASKET, 1" ANNULAR (12.9360)	1	1	1	1	1	1	1	1	1	1				
2A	5145014	PLUG, 3/8" PIPE (12.9550)	1	1												
	5142549	% PLUG, 3/4" PIPE (12.9550)					1	1								
2A	453006	@ PLUG, 1" PIPE (12.9550)			1	1	1	1	1	1	1	1				
	5199386	% DEFLECTOR, OIL (IN MAIN HOUSING)					1	1								
	5198458	& PIPE, OIL STRAINER	1	1	1	1	1	1								
	5199388	% SPRING, OIL DEFLECTOR					1	1								
	5199387	% WASHER, DEFLECTOR SPRING					1	1								
	5196890	BUSHING, REDUCING	1	1												
	5198457	& BUSHING, 3/4"X3/8" RED.	1	1	1	1	1	1								
		@ GEAR ASSYS. WITH OIL INLET TO SIDE OF REDUCTION HOUSING.														
		& USE FOR GEAR ASSYS. WITH OIL INLET TO SIDE OF MAIN HOUSING.														
		% USE FOR GEAR ASSYS. WITH OIL INLET TO TOP OF REDUCTION HOUSING.														
9.1840 - BREATHER, MARINE GEAR																
2A	5198454	+ BREATHER (.338" DRIVE TYPE)	1	1	1	1	1	1								
2A	5196177	BREATHER (3/8"-18 THREAD)	1	1	1	1	1	1	1	1	1	1				
2A	5197510	BREATHER (1/2" DRIVE TYPE)	1	1	1	1	1	1	1	1	1	1				
		+ EFF. WITH GEAR SERIAL NOS. 4941 (D.D.), 1854 (1.5:1), 2261 (2:1), 9676 (2.5:1).														

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PART ..FIG ... NUMBER			COLUMN													
NAME AND DESCRIPTION			A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1001 - GEAR ASSY., HYDRAULIC MARINE																
1A,B	5133890	+ GEAR ASSY. (2.5:1 RED., L.H.)	1													
1A,B	5133891	+ GEAR ASSY. (2.5:1 RED., R.H.)		1												
1A,B	5133892	+ GEAR ASSY. (3:1 RED., L.H.)			1											
1A,B	5133893	+ GEAR ASSY. (3:1 RED., R.H.)				1										
1B	5162730	+ GEAR ASSY. (1.9:1 RED., L.H.)					1									
		+ NOT SERVICED, SHOWN FOR REFERENCE ONLY.														
9.1007 - ADAPTOR, MARINE GEAR HOUSING																
2A	5196179	* ADAPTOR ASSY. (INCLUDES BEARING)	1	1	1	1										
2A	5198322	@ ADAPTOR ASSY. (INCLUDES BEARING)	1	1	1	1	1									
2A	455724	BEARING (NEEDLE)	1	1	1	1	1									
2A	5121182	PLUG, 1/4" PIPE (2.4015)	1	1	1	1	1									
2A	5197537	BOLT, 3/8"-16X1 1/4" 12 PT. HD.	4	4	4	4	4									
		* THRU GEAR SERIAL NOS. 2957 (2.5:1), 1135 (3:1).														
		@ EFF. WITH GEAR SERIAL NOS. 2958 (2.5:1) AND 1136 (3:1).														
9.1008 - GASKET, MARINE GEAR HOUSING ADAPTOR																
2A	5196181	GASKET	1	1	1	1	1									
9.1010 - HOUSING, MARINE GEAR																
		A HOUSING ASSEMBLY INCLUDES BUSHING IN 9.1010.														
2A	5198096	HOUSING ASSY. (RED. DRIVE)	1	1	1	1	1									
2A	5196511	BUSHING (OUTPUT SHAFT)	2	2	2	2										
	5198461	PLUG, .338" DIA. CUP	1	1	1	1										
2A	5145009	PLUG, 1/8" PIPE (12.9550)	1	1	1	1	1									
2A	5145014	PLUG, 3/8" PIPE (12.9550)	2	2	2	2	2									
	9421745	PLUG (1/2" CUP)	1	1	1	1										
	5197210	% NAME PLATE													1	
	190073	SCREW, #2X3/16" DRIVE (12.9067)													2	
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1026 - SHAFT, MARINE GEAR INPUT																
2A	5198371	SHAFT (INCLUDES FLANGE KEY IN 9.1475)	1	1	1	1	1									
9.1027 - BEARING, MARINE GEAR INPUT SHAFT																
2A	9416195	BEARING	1	1	1	1	1									
2A	5196543	RING, SNAP (1 29/64" I.D.)	1	1	1	1	1									
2A	5196545	RING, SNAP (2 29/64" I.D.)	1	1	1	1	1									

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PART ..FIG .. NUMBER .. NAME AND DESCRIPTION ..			COLUMN													
			A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1030 - PISTON, REVERSE CLUTCH																
2A	5196183	PISTON	1	1	1	1	1									
9.1035 - SEAL, REVERSE CLUTCH PISTON																
2A	5196188	SEAL RING (3 1/2" DIA.)	1	1	1	1	1									
2A	5196180	SEAL RING (7 1/2" DIA.)	1	1	1	1	1									
9.1045 - PLATE, REVERSE CLUTCH																
2A	5196730	PLATE (SPLINED)	3	3	3	3	3									
2A	5196303	PLATE	2	2	2	2	2									
9.1055 - SPRING, REVERSE CLUTCH RELEASE																
2A	5196186	SPRING	12	12	12	12	12									
9.1060 - PLATE, REVERSE CLUTCH REACTION																
2A	5196184	PLATE	1	1	1	1	1									
2A	5196733	PIN (27/32"L.)	3	3	3	3	3									
9.1080 - GEAR ASSY., MARINE GEAR PLANETARY																
INCLUDES BUSHINGS IN 9.1087.																
2A	5196804	GEAR ASSY. (2.5:1 & 3:1 RED.)	1	1	1	1	1									
2A	5197209	GEAR ASSY. (1.9:1 RED)														
2A	5196272	SCREEN														
2A	5197230	BOLT, 5/16"-18						6								
2A	103320	LOCKWASHER, 5/16" (12.9001)						6								
9.1085 - WASHER, MARINE GEAR PLANETARY GEAR THRUST																
2A	5196211	WASHER (1 3/4" O.D.)	1	1	1	1	1									
9.1087 - BEARING, MARINE GEAR PLANETARY GEAR																
2D	5197342	BEARING (2.5:1 & 3:1 RED.) (9.1350)	1	1	1	1	1									
	5199829	BUSHING	2	2	2	2	2									
2D	5196259	RING, SNAP (1 27/64" DIA.)	1	1	1	1	1									
9.1091 - GEAR, MARINE GEAR PLANETARY RING																
2A	5196549	GEAR	1	1	1	1	1									
2A	5196199	RING, SNAP (5 7/8" O.D.)	1	1	1	1	1									

9.1000A HYDRAULIC MARINE GEAR

PART			COLUMN													
..FIG	NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1135 - VALVE ASSY., SELECTOR																
2A	5196217	VALVE ASSY. (INCLUDES ITEMS IN 9.1137 THRU 9.1160)	1	1	1	1	1									
9.1137 - VALVE, SELECTOR																
2A	5196218	VALVE	1	1	1	1	1									
9.1155 - SPRING, SELECTOR VALVE																
2A	5196219	SPRING	1	1	1	1	1									
2A	5196220	RETAINER, SPRING	1	1	1	1	1									
2A	5196212	RING, SNAP	1	1	1	1	1									
9.1160 - SEAL, SELECTOR VALVE OIL																
2A	5196222	SEAL RING	1	1	1	1	1									
9.1175 - LEVER, SELECTOR VALVE																
2A	5197136	LEVER	1	1	1	1	1									
2A	5196221	SPRING (DETENT)	1	1	1	1	1									
2A	104919	BALL, 5/16" DIA. STEEL (12.9670)	1	1	1	1	1									
2A	103340	WASHER, 5/16" FLAT (12.9190)	1	1	1	1	1									
2A	108579	LOCKWASHER, 5/16" (12.9200)	1	1	1	1	1									
2A	114493	NUT, 5/16"-24 (12.9120)	1	1	1	1	1									
9.1178 - COVER, SELECTOR VALVE																
2A	5196224	COVER	1	1	1	1	1									
2A	186676	BOLT, 1/4"-20X5/8" (12.9001)	3	3	3	3	3									
2A	120380	LOCKWASHER, 1/4" (12.9200)	3	3	3	3	3									
2A	103319	LOCKWASHER, 1/4" (12.9200)					3									
9.1179 - GASKET, SELECTOR VALVE COVER																
2A	5196225	GASKET	1	1	1	1	1									
9.1223 - CYLINDER, FORWARD CLUTCH PISTON																
2A	5196546	CYLINDER	1	1	1	1	1									
2A	5196198	SEAL RING (ON INPUT SHAFT)	2	2	2	2	2									

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			A	B	C	D	E	F	G	H	I	J	K	L	M	N
		9.1224 - WASHER, FORWARD CLUTCH CYLINDER THRUST														
2A	5196881	WASHER, .063" THICK	1	1	1	1	1									
		9.1225 - PISTON, FORWARD CLUTCH														
2A	5196196	PISTON	1	1	1	1	1									
		9.1230 - SEAL, FORWARD CLUTCH PISTON														
2A	5196195	SEAL RING, 2.016" I.D.	1	1	1	1	1									
2A	5196197	SEAL RING, 4.120" I.D.	1	1	1	1	1									
		9.1235 - PLATE, FORWARD CLUTCH														
2A	5196202	PLATE (INNER)	1	1	1	1	1									
2A	5196205	PLATE (OUTER)	1	1	1	1	1									
2A	5197160	PLATE	7	7	7	7	7									
2A	5196203	PLATE (STEEL)	6	6	6	6	6									
	5196770	SHIM (SNAP RING) (.050")	AR	AR	AR	AR	AR	AR								
	5196771	SHIM (SNAP RING) (.075")	AR	AR	AR	AR	AR	AR								
	5196772	SHIM (SNAP RING) (.100")	AR	AR	AR	AR	AR	AR								
		9.1240 - SPRING, FORWARD CLUTCH RELEASE														
2A	5196201	SPRING	1	1	1	1	1									
2A	5196200	RING, SNAP (3" DIA.)	1	1	1	1	1									
2A	5196209	RING, SNAP (5 1/2" DIA.)	1	1	1	1	1									
		9.1242 - HUB, FORWARD CLUTCH														
2A	5196547	HUB	1	1	1	1	1									
2A	5196207	RING, SNAP (1 21/32" DIA.)	1	1	1	1	1									
2A	124553	KEY, 1/4"X1" WOODRUFF (12.9350)	1	1	1	1	1									
		9.1282 - PLATE, REDUCTION GEAR ADAPTOR														
2D	5197338	* PLATE (2.5:1 & 3:1 RED.)	1	1	1	1										
2D	5196248	@ PLATE (2.5:1 & 3:1 RED.)	1	1	1	1										
2B,D	5198554	PLATE (1.9:1 RED.)														
2D	5199061	BOLT, 7/16"-14X1 1/4" (NYLON INSERT)	6	6	6	6										
2B	5199060	BOLT, 7/16"-14X1" (NYLON INSERT)														
2D	114607	LOCKWASHER, 7/16" EXT. TOOTH (12.9210)	6	6	6	6	6									
		* EFF. WITH GEAR SERIAL NOS. 3996 (2.5:1 RED.), 1576 (3:1 RED.).														

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			A	B	C	D	E	F	G	H	I	J	K	L	M	N
		9.1282 - PLATE, REDUCTION GEAR ADAPTOR (CONT'D)														
		@ THRU GEAR SERIAL NOS. 3995 (2.5:1 RED.) AND 1575 FOR 3:1 RATIOS.														
		9.1283 - GASKET, REDUCTION GEAR ADAPTOR PLATE														
2B,C,D	5196260	GASKET	1	1	1	1	1									
		9.1285 - HOUSING, REDUCTION GEAR														
2D	5197337	* HOUSING (2.5:1 & 3:1 RED.)	1	1	1	1										
2D	5196284	@ HOUSING (2.5:1 & 3:1 RED.)	1	1	1	1										
2B	5197334	# HOUSING (1.9:1 RED.)														
2D	186619	BOLT, 3/8"-16X1 1/8" (12.9001)	6	6	6	6	6									
2D	427567	BOLT, 7/16"-14X1 3/4" (12.9001)	2	2	2	2	2									
2D	103321	LOCKWASHER, 3/8" (12.9200)	6	6	6	6	6									
2D	103322	LOCKWASHER, 7/16" (12.9200)	2	2	2	2	2									
		* EFF. WITH GEAR SERIAL NOS. 3996 (2.5:1 RED.), 1576 (3:1 RED.).														
		@ THRU GEAR SERIAL NOS. 3995 (2.5:1 RED.) AND 1575 FOR 3:1 RATIOS.														
		# NOT SERVICED, FOR REPLACEMENT THRU GEAR SERIAL NO. 6443 USE 5199427 HOUSING CONVERSION KIT. USE 5199398 HOUSING FOR REPLACEMENT EFFECTIVE WITH GEAR SERIAL NO. 6444.														
		9.1286 - GASKET, REDUCTION GEAR HOUSING														
2B,C,D	5196285	GASKET	1	1	1	1	1									
		9.1288 - PLATE, REDUCTION GEAR PLANETARY RING GEAR														
2D	5196256	PLATE (2.5:1 RED.)	1	1												
2D	5196255	PLATE (3:1 RED.)			1	1										
		9.1290 - GEAR, REDUCTION GEAR SUN														
2D	5196265	GEAR (2.5:1 RED.)	1	1												
2D	5196266	GEAR (3:1 RED.)			1	1	1									
2D	3709351	RING, SNAP (1 1/4" I.D.) (9.1027)	1	1	1	1	1									
		9.1292 - GEAR ASSY., REDUCTION GEAR PLANETARY														
2D	5198141	+ GEAR ASSY. (2.5:1 RED.)	1	1												
2D	5197880	GEAR ASSY. (3:1 RED.)			1	1										
		+ NOT SERVICED, FOR SERVICE USE 5196544.														

9.1000A HYDRAULIC MARINE GEAR

PART FIG . . . NUMBER NAME AND DESCRIPTION			COLUMN													
			A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1298 - GEAR, REDUCTION GEAR PLANETARY RING																
2B,C,D	5196252	GEAR (1.5:1, 2:1, 3:1 RED.)			1	1	1									
2D	5196257	GEAR (2.5:1 RED.)	1	1												
2B,C,D	5196253	RING, SNAP (6 1/4" O.D.)			1	1	1									
2D	5196258	RING, SNAP (6 17/32" O.D.)	1	1												
9.1340 - SHAFT, REDUCTION GEAR DRIVE																
2B	5197211	SHAFT					1									
9.1350 - BEARING, REDUCTION GEAR OUTPUT SHAFT																
2B,C,D	9422151	BEARING	1	1	1	1										
2B,C,D	9413343	BEARING					1									
9.1365 - COVER, REDUCTION GEAR BEARING																
2B,C,D	5196286	COVER	1	1	1	1	1									
2B,C,D	193221	BOLT, 7/16"-14X1 1/4" (12.9001)	6	6	6	6	6									
2B,C,D	103322	LOCKWASHER, 7/16" (12.9200)	6	6	6	6	6									
9.1370 - GASKET, REDUCTION GEAR BEARING COVER																
2B,C,D	5196287	GASKET	1	1	1	1	1									
9.1375 - SEAL, REDUCTION GEAR BEARING COVER OIL																
2B,C,D	5199391	SEAL, OIL (DOUBLE LIP)	1	1	1	1	1									
9.1380 - BAFFLE, MARINE GEAR OIL																
2D	5196175	BAFFLE	1	1	1	1	1									
9.1395 - DIPSTICK, REDUCTION GEAR																
2A	5133364	* DIPSTICK (FILLER PLUG)	1	1	1	1										
	5149100	DIPSTICK					1									
		* NOT SERVICED, USE 5149100 PLUS 1-5149061 ADAPTOR.														
9.1410 - TUBE, REDUCTION GEAR OIL FILLER																
2E	5149061	ADAPTOR (FOR SQUEEZE TYPE DIPSTICK)	1	1	1	1	1									
9.1430 - FLANGE, PROPELLER DRIVE																
2D	5198125	FLANGE (4 1/4" B.C., 24 SPLINES)	1	1	1	1										
2B	5196745	FLANGE					1									

9.1000A HYDRAULIC MARINE GEAR

PART ..FIG .. NUMBER .. NAME AND DESCRIPTION ..			COLUMN													
			A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1435 - NUT, PROPELLER DRIVE FLANGE																
2D	5198128	NUT	1	1	1	1										
2B	5196805	NUT					1									
9.1475 - PUMP ASSY., HYDRAULIC MARINE GEAR OIL																
2A	5198459	PUMP ASSY. (INCLUDES SEAL IN 9.1505)	1	1	1	1										
2A	5196889	# PUMP ASSY. (INCLUDES SEAL IN 9.1505, GEARS AND PLATE NOT SOLD SEPARATELY)	1	1	1	1										
	5198270	* KEY, 3/16" FLANGED	1	1	1	1	1									
2A	431787	# KEY, 3/16"X5/8" WOODRUFF (12.9350)	1	1	1	1										
2A	110533	# SCREW, #10-24X3/4" FL. HD. SL. (12.9030)	2	2	2	2										
2A	180083	* BOLT, 5/16"-18X1 1/2" (12.9001)	4	4	4	4										
2A	186643	# BOLT, 5/16"-18X1 7/8" (12.9001)	4	4	4	4										
2A	179822	BOLT, 5/16"-18X1 1/2" (12.9001)					4									
		# THRU GEAR SERIAL NOS. 2957 (2.5:1 RED.), 1135 (3:1 RED.).														
		* EFFECTIVE WITH GEAR SERIAL NOS. 2958 (2.5:1 RED.), 1136 (3:1 RED.).														
9.1480 - GASKET, HYDRAULIC MARINE GEAR OIL PUMP																
2A	5196216	GASKET	1	1	1	1	1									
9.1505 - SEAL, HYDRAULIC MARINE GEAR OIL PUMP																
2A	5199315	SEAL, OIL	1	1	1	1	1									
9.1650 - STRAINER, MARINE GEAR OIL																
2A	5196178	STRAINER	1	1	1	1										
2A	5198456	STRAINER	1	1	1	1	1									
2A	120428	GASKET, 1" ANNULAR (12.9360)	1	1	1	1	1									
2A	453006	PLUG, 1" PIPE (12.9550)	1	1	1	1	1									
	5198457	BUSHING, 3/4"X3/8" RED. PIPE	1	1	1	1	1									
	5198458	PIPE, OIL STRAINER	1	1	1	1										
9.1840 - BREATHER, MARINE GEAR																
2A	5196177	BREATHER (3/8"-18 THREAD)	1	1	1	1										
2A	5197510	BREATHER (1/2" DRIVE TYPE)	1	1	1	1										
2A	5198454	BREATHER (VALVE TYPE)					1									

9.1000A HYDRAULIC MARINE GEAR

PART ..FIG .. NUMBER .. NAME AND DESCRIPTION ..			COLUMN													
			A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1001 - GEAR ASSY., HYDRAULIC MARINE																
1B	5148454	GEAR ASSY. (DIRECT DRIVE, L.H.)	1													
1B	5148453	GEAR ASSY. (DIRECT DRIVE, R.H.)		1												
1B	5148428	GEAR ASSY. (1.5:1 RED., L.H.)			1											
1B	5148427	GEAR ASSY. (1.5:1 RED., R.H.)				1										
1B	5141129	GEAR ASSY. (2:1 RED., L.H.)					1									
1B	5141130	GEAR ASSY. (2:1 RED., R.H.)						1								
1B	5144705	GEAR ASSY. (3:1 RED., L.H.)							1							
1B	5144706	GEAR ASSY. (3:1 RED., R.H.)								1						
	5199980	PLATE, NAME	1	1	1	1	1	1	1	1						
	190073	SCREW, DRIVE #2X3/16" (12.9065)	2	2	2	2	2	2	2	2						
9.1007 - ADAPTOR, MARINE GEAR HOUSING																
2E,F	5199973	ADAPTOR ASSY. (INCLUDES BEARING)	1	1	1	1	1	1	1	1						
2E,F	5149001	BEARING (NEEDLE)	1	1	1	1	1	1	1	1						
2E,F	5145009	PLUG, 1/8" PIPE (12.9550)	3	3	3	3	3	3	3	3						
2E,F	5121182	PLUG, 1/4" PIPE (2.4015)	1	1	1	1	1	1	1	1						
2E,F	5197537	BOLT, 3/8"-16X1 1/4" 12 PT. HD.	4	4	4	4	4	4	4	4						
9.1008 - GASKET, MARINE GEAR HOUSING ADAPTOR																
2E,F	5149030	GASKET	1	1	1	1	1	1	1	1						
9.1010 - HOUSING ASSY., REVERSE GEAR																
A DIRECT DRIVE HOUSING ASSEMBLY INCLUDES COVER, BOLTS, LOCKWASHERS AND CUP PLUGS IN 9.1010. A 1.5:1 HOUSING ASSEMBLY INCLUDES 15/64" DIA. CUP PLUG IN 9.1010. A 2:1 AND 3:1 HOUSING ASSEMBLY INCLUDES DOWEL PINS PLUS 15/64" DIA. CUP PLUG IN 9.1010.																
2E	5149070	HOUSING ASSY. (DIRECT DRIVE)	1	1												
2F	5199970	HOUSING ASSY. (1.5:1)			1	1										
2F	5199969	HOUSING ASSY. (2:1 & 3:1)					1	1	1	1						
2E	5149014	COVER, OIL HOLE	1	1												
2F	141283	PIN, DOWEL (1"LX1/2" DIA.)					2	2	2	2						
2E,F	5145009	PLUG, 1/8" PIPE (12.9550)	1	1	1	1	1	1	1	1						
2E,F	5149835	PLUG, ORIFICE	1	1	1	1	1	1	1	1						
2E	5199977	PLUG (17/64" DIA. CUP)	1	1												
2E,F	5145014	PLUG, 3/8" PIPE (12.9550)	2	2	2	2	2	2	2	2						
2E	179857	BOLT, 7/16"-14X7/8" (12.9001)	2	2												
2E	114607	LOCKWASHER, 7/16" (12.9200)	2	2												

9.1000A HYDRAULIC MARINE GEAR

PART ..FIG .. NUMBER .. NAME AND DESCRIPTION ..			COLUMN													
			A	B	C	D	E	F	G	H	I	J	K	L	M	N
		9.1019 - VALVE, OIL COOLER PRESSURE REGULATOR														
2E,F	5149029	SPRING	1	1	1	1	1	1	1	1						
2E,F	5149022	RETAINER	1	1	1	1	1	1	1	1						
2E,F	453595	BALL, 7/16" DIA. STEEL (12.9670)	1	1	1	1	1	1	1	1						
		9.1021 - VALVE, MARINE GEAR PRESSURE REGULATOR														
2E,F	5149023	SPRING	1	1	1	1	1	1	1	1						
2E,F	5149022	RETAINER (9.1019)	1	1	1	1	1	1	1	1						
2E,F	453595	BALL, 7/16" DIA. STEEL (12.9670)	1	1	1	1	1	1	1	1						
		9.1030 - PISTON, REVERSE CLUTCH														
2E,F	5196183	PISTON	1	1	1	1	1	1	1	1						
		9.1035 - SEAL, REVERSE CLUTCH PISTON														
2E,F	5196188	SEAL RING (3 1/2" DIA.)	1	1	1	1	1	1	1	1						
2E,F	5196180	SEAL RING (7 1/2" DIA.)	1	1	1	1	1	1	1	1						
		9.1045 - PLATE, REVERSE CLUTCH DISC														
2E,F	5149757	PLATE (SPLINED)	4	4	4	4	4	4	4	4						
2E,F	5196303	PLATE	3	3	3	3	3	3	3	3						
		9.1055 - SPRING, REVERSE CLUTCH RELEASE														
2E,F	5196186	SPRING	12	12	12	12	12	12	12	12						
		9.1060 - PLATE, REVERSE CLUTCH REACTION														
2E,F	5149016	PLATE	2	2	2	2	2	2	2	2						
2E,F	5199979	PIN, DOWEL (1 1/4" L X 5/16" DIA.)	3	3	3	3	3	3	3	3						
		9.1080 - GEAR ASSY., PLANETARY														
2E,F	5149026	GEAR ASSY. (INCLUDES BEARING IN 9.1085)	1	1	1	1	1	1	1	1						
2E,F	5199990	SEAL RING (1.6255" O.D.)	1	1	1	1	1	1	1	1						
		9.1085 - BEARING, OUTPUT SHAFT														
2E,F	5199994	BEARING (NEEDLE)	1	1	1	1	1	1	1	1						
2E,F	5149000	BEARING (NEEDLE)	1	1	1	1	1	1	1	1						
2E,F	5199997	RACE	1	1	1	1	1	1	1	1						

9.1000A HYDRAULIC MARINE GEAR

PART ..FIG .. NUMBER .. NAME AND DESCRIPTION ..			COLUMN													
			A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1087 - BEARING, PLANETARY GEAR																
2E,F	5199994	BEARING (NEEDLE)	1	1	1	1	1	1	1	1						
2E,F	5199997	RACE	1	1	1	1	1	1	1	1						
2E,F	5199996	RACE	1	1	1	1	1	1	1	1						
2E,F	5149012	WASHER (3 5/8"O.D.X2" I.D.)	1	1	1	1	1	1	1	1						
9.1089 - SHAFT ASSY., PLANETARY OUTPUT																
A SHAFT ASSY. INCLUDES SLEEVE ASSY. IN 9.1092.																
2E	5149011	SHAFT ASSY.	1	1												
2F	5149010	SHAFT ASSY.			1	1	1	1	1	1						
2F	5199989	SEAL RING (1 5/16" I.D.)			1	1	1	1	1	1						
9.1091 - GEAR, MARINE GEAR PLANETARY RING																
2E,F	5199971	GEAR	1	1	1	1	1	1	1	1						
2E,F	5199992	RING, SNAP (7 9/32" O.D.)	1	1	1	1	1	1	1	1						
9.1092 - SLEEVE ASSY., OUTPUT SHAFT																
2E,F	5149025	SLEEVE ASSY.	1	1	1	1	1	1	1	1						
9.1096 - HUB ASSY., REVERSE CLUTCH																
2E,F	5149024	HUB ASSY.	1	1	1	1	1	1	1	1						
9.1097 - BEARING, OUTPUT SHAFT																
2F	5199982	BEARING			1	1	1	1	1	1						
2G	9028332	RING, SNAP (3 13/32" I.D.)			1	1										
2E	5199981	SPACER (1 19/32" I.D.X1 15/16" O.D.X.065" THICK)	1	1												
2E	5149017	SPACER (3.508" O.D.X.635" WIDE)	1	1												
2E	5149006	CONE, BEARING	2	2												
2E	5149007	CLIP, BEARING	2	2												
9.1098 - RETAINER, OUTPUT SHAFT BEARING																
2G	5199898	RETAINER			1	1										
2H,J	5199961	RETAINER					1	1	1	1						
2G,H,J	179857	BOLT, 7/16"-14X7/8" (12.9001)			6	6	6	6	6	6						
2G,H,J	114607	LOCKWASHER, 7/16" (12.9200)			6	6	6	6	6	6						

9.1000A HYDRAULIC MARINE GEAR

PART			COLUMN													
..FIG ..	NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1099 - COVER, OUTPUT SHAFT BEARING																
2E	5199972	COVER	1	1												
2E	193221	BOLT, 7/16"-14X1 1/4" (12.9001)	6	6												
2E	103322	LOCKWASHER, 7/16" (12.9200)	6	6												
9.1102 - GASKET, MARINE GEAR HOUSING REAR																
2E	5149031	GASKET	1	1												
9.1135 - VALVE ASSY., SELECTOR																
2E,F	5149033	VALVE ASSY. (INCLUDES ITEMS IN 9.1137 THRU 9.1160)	1	1	1	1	1	1	1	1	1					
9.1137 - VALVE, SELECTOR																
2E,F	5149032	VALVE	1	1	1	1	1	1	1	1	1					
9.1155 - SPRING, SELECTOR VALVE PRESSURE																
2E,F	5199976	SPRING (2.77" LONG)	1	1	1	1	1	1	1	1	1					
2E,F	5196220	RETAINER, SPRING	1	1	1	1	1	1	1	1	1					
2E,F	5196212	RING, SNAP	1	1	1	1	1	1	1	1	1					
9.1157 - CAM, NEUTRAL																
	5149936	CAM	1	1	1	1	1	1	1	1	1					
	179796	BOLT, 1/4"-20X7/8" (12.9001)	3	3	3	3	3	3	3	3	3					
	103319	LOCKWASHER, 1/4" (12.9200)	3	3	3	3	3	3	3	3	3					
9.1160 - SEAL, SELECTOR VALVE OIL																
2E,F	5196222	SEAL RING	1	1	1	1	1	1	1	1	1					
9.1175 - LEVER, SELECTOR VALVE OPERATING																
2E,F	5149008	LEVER	1	1	1	1	1	1	1	1	1					
2E,F	5196221	SPRING (DETENT)	1	1	1	1	1	1	1	1	1					
2E,F	104919	BALL, 5/16" DIA. STEEL (12.9670)	1	1	1	1	1	1	1	1	1					
2E,F	103340	WASHER, 5/16" (12.9190)	1	1	1	1	1	1	1	1	1					
2E,F	108579	LOCKWASHER, 5/16" (12.9200)	1	1	1	1	1	1	1	1	1					
2E,F	114493	NUT, 5/16"-24 (12.9120)	1	1	1	1	1	1	1	1	1					
9.1178 - COVER, SELECTOR VALVE																
2E,F	5149765	COVER	1	1	1	1	1	1	1	1	1					
2E,F	179793	BOLT, 1/4"-20X7/8" (12.9001)	3	3	3	3	3	3	3	3	3					
2E,F	103319	LOCKWASHER, 1/4" (12.9200)	3	3	3	3	3	3	3	3	3					

9.1000A HYDRAULIC MARINE GEAR

PART FIG . . . NUMBER NAME AND DESCRIPTION			COLUMN													
			A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1179 - GASKET, SELECTOR VALVE COVER																
2E,F	5196225	GASKET	1	1	1	1	1	1	1	1						
9.1223 - CYLINDER, FORWARD CLUTCH PISTON																
2E,F	5149013	CYLINDER	1	1	1	1	1	1	1	1						
2F	5149015	PLATE			2	2	2	2	2	2						
2E,F	5199963	SEAL RING (1.480"O.D.)	1	1	1	1	1	1	1	1						
2E,F	5199991	SEAL RING (2.250"O.D.)	2	2	2	2	2	2	2	2						
2E,F	5196543	RING, SNAP (1 29/64" I.D.)	1	1	1	1	1	1	1	1						
9.1225 - PISTON, FORWARD CLUTCH																
A PISTON ASSY. INCLUDES BALL NOT SERVICED SEPARATELY.																
2E,F	5199968	PISTON ASSY.	1	1	1	1	1	1	1	1						
9.1230 - SEAL, FORWARD CLUTCH PISTON																
2E,F	5199964	SEAL RING (1.579"O.D.)	1	1	1	1	1	1	1	1						
2E,F	5199965	SEAL RING (5.292"O.D.)	1	1	1	1	1	1	1	1						
9.1235 - PLATE, FORWARD CLUTCH																
2E,F	5149809	PLATE (INNER)	6	6	6	6	6	6	6	6						
2E,F	5199967	PLATE (OUTER)	6	6	6	6	6	6	6	6						
2E,F	5196205	PLATE	1	1	1	1	1	1	1	1						
2E,F	5199985	RING, SNAP (5 9/16"O.D.)	1	1	1	1	1	1	1	1						
9.1240 - SPRING, FORWARD CLUTCH RELEASE																
2E,F	5199966	SPRING	1	1	1	1	1	1	1	1						
9.1285 - HOUSING, REDUCTION GEAR																
2G,H,J	5199862	HOUSING			1	1	1	1	1	1						
2G,H,J	179861	BOLT, 7/16"-14X1 3/8" (12.9001)			6	6	6	6	6	6						
2G,H,J	103322	LOCKWASHER, 7/16" (12.9200)			6	6	6	6	6	6						
9.1286 - GASKET, REDUCTION GEAR HOUSING																
2G,H,J	5149031	GASKET			1	1	1	1	1	1						

9.1000A HYDRAULIC MARINE GEAR

PART			COLUMN													
FIG	NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1290 - GEAR, REDUCTION GEAR SUN																
2G	5199870	GEAR (1.5:1 RED.)			1	1										
2H	5199959	GEAR (2:1 RED.)					1	1								
2J	5199960	GEAR (3:1 RED.)							1	1						
2G,H,J	5199984	RING, SNAP (1 13/32" I.D.)			1	1	1	1	1	1						
9.1292 - GEAR ASSY., REDUCTION GEAR PLANETARY																
2G,H,J	5149020	GEAR ASSY.			1	1	1	1	1	1						
9.1298 - GEAR, REDUCTION GEAR PLANETARY RING																
2G,H,J	5199971	GEAR			1	1	1	1	1	1						
2G,H,J	5199992	RING, SNAP (7 9/32" O.D.)			1	1	1	1	1	1						
9.1299 - HUB, REDUCTION RING GEAR																
2G	5199974	HUB (1.5:1 RED.)			1	1										
2H,J	5199975	HUB (2:1, 3:1 RED.)					1	1	1	1						
2G,H,J	5199986	RING, SNAP (2 13/16" I.D.)			2	2	3	3	3	3						
9.1340 - SHAFT, REDUCTION GEAR DRIVE																
2G	5199863	SHAFT (1.5:1 RED.)			1	1										
2H,J	5199922	SHAFT (2:1, 3:1 RED.)					1	1	1	1						
9.1350 - BEARING, REDUCTION GEAR DRIVE SHAFT THRUST																
2G,H,J	5149005	BEARING			1	1	1	1	1	1						
9.1365 - COVER, REDUCTION GEAR BEARING																
2G,H,J	5199873	COVER			1	1	1	1	1	1						
2G,H,J	193221	BOLT, 7/16"-14X1 1/4" (12.9001)			6	6	6	6	6	6						
2G,H,J	103322	LOCKWASHER, 7/16" (12.9200)			6	6	6	6	6	6						
9.1370 - GASKET, REDUCTION GEAR BEARING COVER																
2G,H,J	5149028	GASKET			1	1	1	1	1	1						
9.1375 - SEAL, REDUCTION GEAR BEARING COVER OIL																
2E,G,H	5149676	SEAL, OIL	1	1	1	1	1	1	1	1						

9.1000A HYDRAULIC MARINE GEAR

PART			COLUMN													
FIG	NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1380 - BAFFLE, MARINE GEAR HOUSING OIL																
2E,F	5149027	BAFFLE	1	1	1	1	1	1	1	1						
9.1386 - BAFFLE, REDUCTION HOUSING OIL																
2G,H,J	5149019	BAFFLE			1	1	1			1						
2G,H,J	5149119	BAFFLE						1	1							
2G,H,J	179857	BOLT, 7/16"-14X7/8" (12.9001)			5	5	5	5	5	5						
2G,H,J	103322	LOCKWASHER, 7/16" (12.9200)			5	5	5	5	5	5						
9.1395 - DIPSTICK, REDUCTION GEAR																
2E,F	5149062	DIPSTICK (SQUEEZE TYPE) (5.38" TO FULL, 6.13" TO LOW)	1	1	1	1	1	1	1	1						
9.1410 - TUBE, MARINE GEAR OIL FILLER																
2E,F	5101127	ADAPTOR (3/4"-14X2" O.A.L.)	1	1	1	1	1	1	1	1						
9.1430 - FLANGE, PROPELLER DRIVE																
2E	5149004	FLANGE (18 SPLINES)	1	1												
2G,H,J	5149003	FLANGE (27 SPLINES)			1	1	1	1	1	1						
9.1435 - NUT, PROPELLER DRIVE FLANGE																
2E,G,H	5199987	NUT, 1 1/4"-18	1	1	1	1	1	1	1	1						
9.1475 - PUMP ASSY., HYDRAULIC MARINE GEAR																
2E,F	5198459	PUMP ASSY. (INCLUDES SEAL IN 9.1505)	1	1	1	1	1	1	1	1						
2E,F	5149002	KEY	1	1	1	1	1	1	1	1						
2E,F	179821	BOLT, 5/16"-18X1 3/8" (12.9001)	4	4	4	4	4	4	4	4						
9.1480 - GASKET, HYDRAULIC MARINE GEAR OIL PUMP																
2E,F	5196216	GASKET	1	1	1	1	1	1	1	1						

9.1000A HYDRAULIC MARINE GEAR

PART			COLUMN													
.FIG	NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M	N
		9.1505 - SEAL, HYDRAULIC MARINE GEAR OIL PUMP														
2E,F	5199315	SEAL, OIL (DOUBLE LIP)	1	1	1	1	1	1	1	1						
		9.1650 - STRAINER, MARINE GEAR OIL														
2E,F	5198456	STRAINER	1	1	1	1	1	1	1	1						
2E,F	5142549	PLUG, 3/4" PIPE (12.9550)	1	1	1	1	1	1	1	1						
		9.1840 - BREATHER, MARINE GEAR														
2E,F	5199982	BREATHER (3/8" DRIVE TYPE)	1	1	1	1	1	1	1	1						

9.1000A HYDRAULIC MARINE GEAR

PART
 .FIG . . . NUMBER NAME AND DESCRIPTION

		COLUMN													
		A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1001 - GEAR ASSEMBLY, HYDRAULIC MARINE															
3A	5136432	# GEAR ASSY. (2.42:1)	1												
3A	5136127	# GEAR ASSY. (1.93:1)		1											
3A	5136570	# GEAR ASSY. (2.91:1)			1										
3A	5137157	# GEAR ASSY. (1.93:1)				1									
3A	5136126	# GEAR ASSY. (1.47:1)					1								
3A	5143834	# GEAR ASSY. (2.42:1)						1							
3A	5143835	# GEAR ASSY. (2.90:1)							1						
3A	5144971	# GEAR ASSY. (1.93:1)								1					
3A	5144972	# GEAR ASSY. (2.42:1)									1				
3A	5144973	# GEAR ASSY. (2.90:1)										1			
	179839	BOLT, 3/8"-16X1" (12.9001)	12	12	12	12	12	12	12	12	12	12			
		# NOT SERVICED, SHOWN FOR REFERENCE ONLY.													
9.1006 - COUPLING, MARINE GEAR DRIVE															
4A	5198785	% RING, DRIVE	1					1	1	1	1	1			
4A	5198889	% * RING, DRIVE (FIBER)		1	1	1	1								
	5149086	% WASHER, 3/8" PLAIN		8			8								
		* NOT SERVICED, REPLACE WITH KIT 5198700 IN 9.1016.													
		% NOT SERVICED, PROCURE THRU TWIN DISC INC. 1328 RACINE ST. RACINE, WISC. 53403 OR NEAREST OUTLET.													
9.1008 - GASKET, MARINE GEAR HOUSING															
4A	5198898	% GASKET	1	1	1	1	1	1	1	1	1	1			
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.													
9.1009 - SPIDER, MARINE GEAR DRIVE															
4A	5198786	% SPIDER	1					1	1	1	1	1			
4A	5198891	% SPIDER		1	1	1	1								
4A	5198768	BLOCK (RUBBER)	20					20	20						
		* NOT SERVICED, REPLACE WITH KIT 5198700 IN 9.1016.													
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.													
9.1010 - HOUSING, REVERSE GEAR															
		A HOUSING ASSY. INCLUDES HOUSING & COVER WHICH ARE NOT SERVICED SEPARATELY, GASKET IN 9.1008 AND ITEMS INDICATED (=) IN 9.1010.													
4B	5198778	% HOUSING ASSY. (2.42:1, 2.91:1 RATIO)	1		1						1				
4B	5198807	% HOUSING ASSY. (1.47:1, 1.93:1 RATIO)		1		1	1								
4B	5198659	% HOUSING ASSY. (2.42:1, 2.90:1 RATIO)						1	1			1			
4B	5149072	% HOUSING ASSY. (1.47:1, 1.93:1 RATIO)								1					

9.1000A HYDRAULIC MARINE GEAR

PART ..FIG .. NUMBER .. NAME AND DESCRIPTION ..			COLUMN												
			A	B	C	D	E	F	G	H	I	J	K	L	M
		9.1010 - HOUSING, REVERSE GEAR (CONT'D)													
		5149071 % PLUG (DRAIN)						1	1	1	1	1			
		5198660 % RING, SEAL (DRAIN PLUG)						1	1	1	1	1			
		141264 % PIN, DOWEL (1"X7/16" DIA.)						2	2						
		5198781 PLATE, NAME	1	1	1	1	1	1	1						
		5198894 % PLATE, ROTATION INDICATOR (9.1001)	1	1	1	1	1	1	1						
		5199044 BREATHER (9.1840)						1	1						
		180175 % BOLT, 1/2"-13X1 1/4"						9	9						
		192413 % SCREW, #4X1/4" DRIVE (12.9067)	6	6	6	6	6	6	6	6	6	6			
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST. RACINE, WISC. 53403 OR NEAREST OQUOUTLET.													
		9.1011 - BRACKET, REVERSE GEAR MOUNTING													
3A		5198788 % BRACKET	2	2	2	2	2	2	2						
		180175 BOLT, 1/2"-13X1 1/4" (12.9001)	8	8	8	8	8	8	8						
		120239 LOCKWASHER, 1/2" (12.9200)	8	8	8	8	8	8	8						
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.													
		9.1014 - RETAINER, SPIDER DRIVE													
4A		5149081 % PIN, ROLL	1	1	1	1	1								
4A		5198518 % LOCKPLATE	1	1	1	1	1								
4A		5198519 % WASHER, RETAINING	1	1	1	1	1								
4A		5149082 % WASHER, RETAINING						1	1	1	1	1			
4A		271581 BOLT, 5/8"-18X1 1/4" (12.9001)						1	1	1	1	1			
5A		223809 BOLT, 5/8"-18X1 1/2" (12.9001)	1	1	1	1	1								
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.													
		9.1016 - CONVERSION KIT, MARINE GEAR													
		NOTE: INCLUDES 5198785 DRIVE RING IN 9.1006, 5198786 SPIDER AND 5198768 BLOCKS IN 9.1009, NAME PLATE AND DR IVE SCREWS IN 9.1010 PLUS 5198518 LOCKPLATE IN 9.1014.													
		5198700 % CONVERSION KIT		1	1	1	1								
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.													
		9.1018 - SEAL, MARINE GEAR INPUT SHAFT													
4A		5198749 SEAL	1	1	1	1	1	1	1	1	1	1			
		9.1024 - SUPPORT, INPUT SHAFT BEARING													
4A		5198753 % SUPPORT	1	1	1	1	1	1	1	1	1	1			
4A		5198796 SHIM (.005")	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR			
4A		5198797 % SHIM (.007")	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR			

9.1000A HYDRAULIC MARINE GEAR

PART			COLUMN													
FIG	NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1024 - SUPPORT, INPUT SHAFT BEARING (CONT'D)																
4A	5198798	% SHIM (.020")	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR				
4A	179839	BOLT, 3/8"-16X1" (12.9001)	6	6	6	6	6	6	6	6	6	6				
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1026 - SHAFT, MARINE GEAR INPUT																
4A	5198746	% SHAFT (2.42:1, 2.91:1 RATIO)	1		1											
4A	5198886	# SHAFT (1.47:1, 1.93:1 RATIO)		1		1	1			1						
	5199045	% SHAFT (2.42:1, 2.90:1 RATIO)						1	1		1	1				
4A	5198531	% KEY, WOODRUFF (3/8"X1/4"X1 1/8")	1	1	1	1	1	1	1	1	1	1	1			
4A	5198831	% KEY, WOODRUFF (3/8"X1/4"X1 3/8")	1	1	1	1	1	1	1	1	1	1	1			
		# NOT SERVICED; USE 5198746.														
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1027 - BEARING, MARINE GEAR INPUT SHAFT																
4A	5198545	% BEARING, ROLLER	2	2	2	2	2	2	2	2	2	2	2			
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1028 - GEAR, FORWARD CLUTCH																
4A	5199040	% GEAR & SHAFT ASSY.						1	1	1	1	1				
4A	5199416	GEAR & SHAFT ASSY.	1		1	1										
4A	5199280	% GEAR & SHAFT ASSY.		1			1									
	5198523	% BEARING (CLUTCH GEAR THRUST)	4	4	4	4	4									
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1029 - GEAR, REVERSE CLUTCH																
4A	5199041	% GEAR & SHAFT ASSY.						1	1	1	1	1				
4A	5199417	GEAR & SHAFT ASSY.	1		1	1										
4A	5199281	GEAR & SHAFT ASSY.		1			1									
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1030 - PISTON, REVERSE CLUTCH																
4A	5198743	% PISTON	2	2	2	2	2	2	2	2	2	2	2			
4A	5198780	RING, CLUTCH PISTON	2	2	2	2	2	2	2	2	2	2	2			
4A	5199047	% RING, SNAP		2				2	2	2	2	2	2			
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														

9.1000A HYDRAULIC MARINE GEAR

PART
 ..FIG ... NUMBER NAME AND DESCRIPTION

COLUMN											
A	B	C	D	E	F	G	H	I	J	K	M
											N
9.1032 - SHAFT, CLUTCH FORWARD & REVERSE											
4A	5198776	% RING, PISTON CLUTCH SHAFT (END)	6	6	6	6	6	6	6	6	
4A	5198779	% RING, PISTON CLUTCH SHAFT (CENTER)	2	2	2	2	2	2	2	2	
4A	5198830	% PLUG, 1/16" (SOCKET)	2	2	2	2	2	2	2	2	
4A	5198532	% PLUG, 1/16" (ORIFICE)	2	2	2	2	2	2	2	2	
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.									

9.1000A HYDRAULIC MARINE GEAR

PART			COLUMN													
..FIG ..	NUMBER ..	NAME AND DESCRIPTION ..	A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1033 - BEARING, CLUTCH SHAFT																
4A	5198544	% BEARING, ROLLER TAPER	4	4	4	4	4	4	4	4	4	4				
4A	5198524	WASHER, THRUST	2	2	2	2	2	2	2	2	2	2				
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1036 - GEAR ASSY., CLUTCH HUB																
4A	5198774	% GEAR (2.42:1 RATIO)	2					2			2					
4A	5198810	% GEAR (1.93:1 RATIO)		2		2				2		2				
4A	5198879	% GEAR (2.91:1 RATIO)			2				2							
4A	5198806	GEAR (1.47:1 RATIO)					2									
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1041 - BEARING, THRUST CLUTCH HOUSING GEAR																
4A	5198523	% BEARING, NEEDLE	4	4	4	4	4	4	4	4	4	4				
4A	5198823	% RACE, THRUST	4	4	4	4	4	4	4	4	4	4				
4A	5198522	% RACE (NEEDLE BEARING)	2	2	2	2	2	2	2	2	2	2				
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1055 - SPRING, REVERSE CLUTCH RELEASE																
4A	5197354	SPRING - CLUTCH PISTON	2	2	2	2	2	2	2	2	2	2				
9.1060 - PLATE, REVERSE CLUTCH REACTION																
4A	5198782	% PLATE - BACK CLUTCH	2		2	2		2	2	2	2	2				
4A	5198895	% PLATE - BACK CLUTCH		2			2									
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1062 - PLATE, CLUTCH																
4A	5198896	% PLATE, DRIVING		18			18									
4A	5198783	% PLATE, DRIVING	18		18	18										
4A	5198784	% PLATE, DRIVEN	16	16	16	16	16	16	16	16	18	18	18			
4A	5149089	% PLATE, DRIVING							18	18	18	18	18			
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1065 - RING, CLUTCH REACTION PLATE SNAP																
5199046	% SNAP RING		1	1	1	1	1	1	1	1	1	1				
	% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.															

9.1000A HYDRAULIC MARINE GEAR

.FIG .	PART NUMBER	NAME AND DESCRIPTION	COLUMN													
			A	B	C	D	E	F	G	H	I	J	K	L	M	N
		9.1135 - VALVE ASSY., SELECTOR														
		A VALVE ASSY. INCLUDES ITEMS IN 9.1136 THRU 9.1197.														
4B	5199048	% VALVE ASSY.	1	1	1	1	1	1	1	1	1	1				
4B	179848	BOLT, 3/8"-16X2 1/4" (12.9001)	2	2	2	2	2	2	2							

9.1000A HYDRAULIC MARINE GEAR

			COLUMN												
FIG	PART NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M
9.1135 - VALVE ASSY., SELECTOR (CONT'D)															
4B	179839	BOLT, 3/8"-16X1" (12.9001) % NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.	1	1	1	1	1	1	1						
9.1136 - HOUSING, SELECTOR VALVE															
4B	5199049	% HOUSING						1	1						
4B	5198757	% HOUSING	1	1	1	1	1			1	1	1			
4B	5198533	% PLUG, 1"-12	1	1	1	1	1	1	1	1	1	1			
4B	5198521	% WASHER, SEAL	1	1	1	1	1	1	1	1	1	1			
	5149087	% PLUG, 1 5/16"-12						1	1	2	1	1			
	5198666	% SEAL RING						1	1	1	1	1			
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.															
9.1137 - VALVE, SELECTOR															
4B	5198766	% VALVE	1	1	1	1	1	1	1	1	1	1			
	5198812	% SHIM	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR			
	457008	PIN, SPRING 5/16"X1 1/2"	1	1	1	1	1	1	1	1	1	1			
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.															
9.1138 - STEM, SELECTOR VALVE															
4B	5198767	% STEM (DIRECTION)	1	1	1	1	1	1	1	1	1	1			
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.															
9.1139 - SEAL, SELECTOR VALVE STEM															
4B	5198516	% SEAL RING	1	1	1	1	1	1	1	1	1	1			
4B	5198825	% BEARING, NEEDLE THRUST	1	1	1	1	1	1	1	1	1	1			
4B	5198824	% RACE, THRUST	2	2	2	2	2	1	1	1	1	1			
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.															
9.1147 - SPRING, SELECTOR VALVE REGULATOR															
4B	5198763	% SPRING (INNER)	1	1	1	1	1	1	1	1	1	1			
4B	5198764	% SPRING (OUTER)	1	1	1	1	1	1	1	1	1	1			
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.															
9.1148 - SPACER, SELECTOR VALVE SPRING															
4B	5198762	% SPACER	1	1	1	1	1	1	1	1	1	1			
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.															

9.1000A HYDRAULIC MARINE GEAR

			COLUMN													
..FIG ..	PART NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1175 - LEVER, SELECTOR VALVE OPERATING																
4B	5198759	% LEVER	1	1	1	1	1	1	1	1	1	1				
4B	5198761	% PLATE, DETENT	1	1	1	1	1	1	1	1	1	1				
4B	104920	BALL, 3/8" DETENT (12.9670)	1	1	1	1	1	1	1	1	1	1				

9.1000A HYDRAULIC MARINE GEAR

PART ..FIG ... NUMBER			COLUMN													
NAME AND DESCRIPTION			A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1175 - LEVER, SELECTOR VALVE OPERATING (CONT'D)																
4B	5198765	% SPRING, DETENT	1	1	1	1	1	1	1	1	1	1				
4B	5149083	% SPRING, COMPRESSION		1			1									
4B	5149084	% BOLT, 1/4"-20X.88" HEX. SOC. HD.	1	1	1	1	1	1	1	1	1	1				
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1178 - COVER, HYDRAULIC CONTROL VALVE																
4B	5198760	% COVER	1	1	1	1	1	1	1	1	1	1				
4B	114861	BALL, 9/32" (12.9670)	1	1	1	1	1	1	1	1	1	1				
4B	189132	BOLT, #10-24X5/8" (12.9027)	4		4	4		4	4	4	4	4				
4B	5149085	% BOLT, 3/16"-24X.88" HEX. SOC. HD.		4			4									
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1179 - GASKET, HYDRAULIC CONTROL VALVE COVER																
4B	5198758	% GASKET	1	1	1	1	1	1	1	1	1	1				
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1191 - GASKET, CONTROL VALVE PRESSURE REGULATOR																
4B	5198515	% RING, SEAL	1	1	1	1	1	1	1	1	1	1				
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1194 - VALVE, PRESSURE REGULATOR RELIEF																
4B	5198742	% PISTON (VALVE)	1	1	1	1	1	1	1	1	1	1				
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1195 - SPRING, PRESSURE REGULATOR RELIEF VALVE																
4B	5198751	% SPRING	1	1	1	1	1	1	1	1	1	1				
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1197 - PLUG, CONTROL VALVE PRESSURE REGULATOR																
4B	5198517	% PLUG	1	1	1	1	1	1	1	1	1	1				
4B	455277	PIN, 1/8"X1 1/8" SPRING (12.9275)	1	1	1	1	1	1	1	1	1	1				
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														

9.1000A HYDRAULIC MARINE GEAR

PART			COLUMN													
.FIG . . .	NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1287 - GEAR, REDUCTION GEAR INPUT																
4A	5198770	% GEAR % NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.	1	1	1	1	1	1	1	1	1	1				

9.1000A HYDRAULIC MARINE GEAR

PART			COLUMN													
FIG	NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1310 - GEAR, REDUCTION																
4B	5198773	% GEAR, OUTPUT (2.42:1)	1													
4B	5198809	% GEAR, OUTPUT (1.93:1)		1		1				1						
4B	5198881	GEAR, OUTPUT (2.91:1)			1				1		1	1				
4B	5198805	GEAR, OUTPUT (1.47:1)					1	1								
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1340 - SHAFT, REDUCTION GEAR DRIVE																
4B	5198747	% SHAFT, OUTPUT (2.42:1, 2.91:1)	1		1			1	1		1	1				
4B	5198790	% SHAFT, OUTPUT (1.47:1, 1.93:1)		1		1	1			1						
4B	5198949	% KEY, 1/2"X3/8"X1 1/4"		1		1	1				1					
4B	5198832	KEY, 1/2"X3/8"X2"	1		1		1	1	1			1	1			
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1345 - BEARING, REDUCTION GEAR DRIVE SHAFT PILOT																
4B	5198546	% BEARING, ROLLER TAPER	1		1			1	1	1	1	1				
4B	5199011	% BEARING, ROLLER TAPER		1		1	1									
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1350 - BEARING, REDUCTION GEAR DRIVE SHAFT THRUST																
4B	457441	BEARING, ROLLER TAPER	1		1			1	1	1	1	1				
4B	5199012	% BEARING, ROLLER TAPER		1		1	1									
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1365 - COVER, REDUCTION GEAR BEARING																
4B	5198745	RETAINER	1		1			1	1	1	1	1				
4B	5198897	% RETAINER		1		1	1			1	1	1				
4B	180175	BOLT, 1/2"-13X1 1/4" (12.9001)	3	3	3	3	3	3	3	3	3	3				
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1370 - GASKET, REDUCTION GEAR BEARING COVER																
4B	5198814	SHIM (.005")	AR		AR			AR	AR	AR	AR	AR				
4B	5198815	SHIM (.007")	AR		AR			AR	AR	AR	AR	AR				
4B	5198802	% SHIM (.005")		AR		AR	AR									
4B	5198803	% SHIM (.007")		AR		AR	AR									
4B	5198816	SHIM (.020")	AR		AR			AR	AR	AR	AR	AR				
4B	5198804	% SHIM (.020")		AR		AR	AR									
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														

9.1000A HYDRAULIC MARINE GEAR

		COLUMN													
.FIG	PART NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M
		9.1375 - SEAL, REDUCTION GEAR BEARING COVER OIL													
4B	5198750	% SEAL	1		1			1	1	1	1	1			
4B	5198792	SEAL (9.1018)		1		1	1								
		% NOT SERVICED, PROCURE THRU TWIN DISC INC. 1328 RACINE ST. RACINE, WISC. 53403 OR NEAREST OUTLET.													

9.1000A HYDRAULIC MARINE GEAR

PART FIG . . . NUMBER NAME AND DESCRIPTION			COLUMN													
			A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1395 - DIPSTICK, REDUCTION GEAR																
4B	5198777	% DIPSTICK	1	1	1	1	1									
4B	5199043	% DIPSTICK						1	1	1	1	1				
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1400 - GUIDE, REDUCTION GEAR DIPSTICK																
	5149088	% PLUG, 3/4"-16						1	1	1	1	1				
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1405 - GASKET, REDUCTION GEAR DIPSTICK																
	5198665	% GASKET						2	2	2	2	2				
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1410 - TUBE, REDUCTION GEAR OIL FILLER																
4B	5191238	TUBE ASSY. (INCLUDES BAFFLE, NOT SOLD SEPARATELY)	1	1	1	1	1									
4B	5199051	TUBE ASSY. (INCLUDES BAFFLE, NOT SOLD SEPARATELY)						1	1	1	1	1				
9.1415 - CAP, REDUCTION GEAR OIL FILLER																
4B	1528732	CAP	1	1	1	1	1			1	1	1				
9.1430 - FLANGE, PROPELLER DRIVE																
4B	5198740	% FLANGE, OUTPUT	1		1			1	1		1	1				
4B	5198811	% FLANGE, OUTPUT		1		1	1			1						
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1435 - NUT, PROPELLER DRIVE FLANGE																
4B	5198813	% RING, SEAL	1		1			1	1		1	1				
4B	5198775	% RING, SEAL		1		1	1			1						
4B	5198664	% LOCK PLATE	1		1			1	1		1	1				
4B	181427	BOLT, 1/2"-20X1" (12.9001)	3		3			3	3		3	3				
4B	223809	BOLT, 1/2"-20X1" (12.9001)		1		1	1			1						
4B	5198520	% WASHER, RETAINER	1		1			1	1		1	1				
4B	5199548	+ WASHER, RETAINER		1		1	1			1						
		+ OBSOLETE. % NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														

9.1000A HYDRAULIC MARINE GEAR

[illegible]

9.1440 - COUPLING, PROPELLER DRIVE SHAFT

5198789	% FLANGE ASSY. (1 1/4" BORE)
5198808	FLANGE ASSY. (1 3/8" BORE)
424269	KEY, 1/2"X1/2"X3 3/4"

COLUMN													
A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	1	1	1	1	1	1	1	1	1				
					1	1							

9.1000A HYDRAULIC MARINE GEAR

PART		COLUMN														
FIG	NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1440 - COUPLING, PROPELLER DRIVE SHAFT (CONT'D)																
	271587	BOLT, 5/8"-18X2" (12.9001)						6	6							
	271592	BOLT, 5/8"-18X3 1/4" (12.9001)						2	2							
	NPN	LOCKWASHER, 5/8"						2	2							
	114498	NUT, 5/8"-18 JAM (12.9120)						2	2							
	NPN	NUT, 5/8"						6	6							
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1475 - PUMP ASSY., HYDRAULIC MARINE GEAR OIL																
4B	5198744	% PUMP ASSY.	1	1	1	1	1	1	1	1	1	1				
4B	179816	BOLT, 5/16"-18X3/4" (12.9001)	4	4	4	4	4	4	4	4	4	4				
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1477 - ADAPTOR, MARINE GEAR OIL PUMP																
4B	5198739	% ADAPTOR	1	1	1	1	1	1	1	1	1	1				
4B	179839	BOLT, 3/8"-16X1" (12.9001)	3	3	3	3	3	3	3	3	3	3				
4B	179848	BOLT, 3/8"-16X2 1/4" (12.9001)	1	1	1	1	1	1	1	1	1	1				
	106261	WASHER, 5/16" (12.9190)	4	4	4	4	4									
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1478 - GASKET, MARINE GEAR OIL PUMP ADAPTOR																
4B	5198793	% SHIM (.005")	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR			
4B	5198794	% SHIM (.007")	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR			
4B	5198795	% SHIM (.020")	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR	AR			
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1480 - GASKET, HYDRAULIC MARINE GEAR OIL PUMP																
4B	5198741	% GASKET, PUMP	1	1	1	1	1	1	1	1	1	1				
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1593 - TUBE, HYDRAULIC PUMP TO CONTROL VALVE																
4B	5199556	% TUBE	1	1	1	1	1	1	1	1	1	1				
4B	5199074	% CONNECTOR	2	2	2	2	2	2	2	2	2	2				
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														

9.1000A HYDRAULIC MARINE GEAR

PART
 .FIG . . . NUMBER NAME AND DESCRIPTION

COLUMN

			A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1598 - TUBE, CONTROL VALVE TO HYDRAULIC PUMP HOUSING																
4B	5198754	% TUBE	1	1	1	1	1	1	1	1	1	1				
4B	5199072	% ELBOW, 90 DEG.	1	1	1	1	1	1	1	1	1	1				
4B	5199553	% ELBOW	1	1	1	1	1	1	1	1	1	1				

9.1000A HYDRAULIC MARINE GEAR

PART			COLUMN													
FIG	NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M	N
		9.1598 - TUBE, CONTROL VALVE TO HYDRAULIC PUMP HOUSING (CONT'D)														
4B	5199073	CONNECTOR	1	1	1	1	1	1	1	1	1	1				
4B	5199554	% NIPPLE	1	1	1	1	1	1	1	1	1	1				
		* NOT SERVICED; USE 5199555 TUBE PLUS (1) 5199553 ELBOW AND (1) 5199554 NIPPLE.														
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
		9.1650 - STRAINER, MARINE GEAR OIL														
4B	5198752	% STRAINER	1	1	1	1	1	1	1	1	1	1				
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
		9.1720 - TUBE, MARINE GEAR OIL STRAINER TO PUMP														
3A	5198787	% HOSE	1	1	1	1	1									
	5199042	HOSE						1	1	1	1	1				
3A	119094	ELBOW, 1/2", 45 DEG. PIPE (12.9600)						1	1	1	1	1				
3A	119098	ELBOW, 1/2", 90 DEG. PIPE (12.9600)	2	2	2	2	2									
	5198769	% NIPPLE, 1/2"X1 1/2" PIPE	2	2	2	2	2									
	9409539	UNION, 1/2" PIPE	1	1	1	1	1									
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
		9.1840 - BREATHER, MARINE GEAR														
	5199044	% BREATHER						1	1	1	1	1				
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														

9.1000A HYDRAULIC MARINE GEAR

PART ..FIG .. NUMBER .. NAME AND DESCRIPTION ..			COLUMN													
			A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1001 - GEAR ASSEMBLY, HYDRAULIC MARINE																
3A	5144970	# GEAR ASSY. (1.47:1)	1													
3A	5134384	GEAR ASSY. (1.47:1)		1												
3A	5134385	GEAR ASSY. (1.93:1)			1											
1A	5106313	GEAR ASSY. (2.9:1)				1										
1A	5106312	GEAR ASSY. (2.3:1 RED) (RH)					1									
1A	5106316	GEAR ASSY. (1.5:1 RED) (R.H.)						1								
1A	5106317	GEAR ASSY. (1.5:1 RED) (L.H.)							1							
1A	5106318	GEAR ASSY. (2:1 RED) (R.H.)								1						
1A	5106319	GEAR ASSY. (2:1 RED) (L.H.)									1					
1A	5106320	GEAR ASSY. (2.1:1 RED) (R.H.)										1				
1A	5106321	GEAR ASSY. (2.1:1 RED) (R.H.)											1			
1A	5106322	GEAR ASSY. (2.6:1 RED) (R.H.)												1		
1A	5106323	GEAR ASSY. (2.6:1)													1	
1A	5106324	GEAR ASSY. (2.9:1)														1
	179839	BOLT, 3/8"-16X1" (12.9001)	12	12	12											
		# NOT SERVICED; SHOWN FOR REFERENCE ONLY.														
9.1006 - COUPLING, MARINE GEAR DRIVE																
4A	5198785	% RING, DRIVE	1													
	5198889	* RING, DRIVE (FIBER)		1	1											
	5149086	WASHER, 3/8" PLAIN		8	8											
		* NOT SERVICED; REPLACE WITH KIT 5198700 IN 9.1016.														
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1007 - ADAPTOR, MARINE GEAR HOUSING																
2A	5198322	ADAPTOR ASSY. (INCLUDES BEARING)				1	1	1	1	1	1	1	1	1	1	1
2A	455724	BEARING (NEEDLE)				1	1	1	1	1	1	1	1	1	1	1
2A	5197537	BOLT, 3/8"-16X1 1/4"				4	4	4	4	4	4	4	4	4	4	4
9.1008 - GASKET, MARINE GEAR HOUSING																
4A	5198898	% GASKET	1	1	1											
2A	5196181	GASKET				1	1	1	1	1	1	1	1	1	1	1
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1009 - SPIDER, MARINE GEAR DRIVE																
4A	5198786	% SPIDER	1													
	5198891	* SPIDER		1	1											
4A	5198768	BLOCK (RUBBER)	20													
		* NOT SERVICED; REPLACE WITH KIT 5198700 IN 9.1016.														
9.1010 - HOUSING ASSY., REVERSE GEAR																
		A HOUSING ASSY. INCLUDES A HOUSING AND COVER WHICH ARE NOT SERVICED SEPARATELY, GASKET IN 9.1008 & ITEMS INDICATED (=) IN 9.1010.														
4B	5149072	% HOUSING ASSY. (1.47:1, 1.93:1)	1													

9.1000A HYDRAULIC MARINE GEAR

			COLUMN													
FIG	PART NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1010 - HOUSING ASSY., REVERSE GEAR (CONT'D)																
4B	5149090	HOUSING ASSY. (1.47:1, 1.93:1)		1	1											
2A	5149807	HOUSING ASSY.				1	1									
2A	5149754	HOUSING ASSY.						1	1	1	1	1	1	1	1	1

9.1000A HYDRAULIC MARINE GEAR

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

COLUMN

		A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1010 - HOUSING ASSY., REVERSE GEAR (CONT'D)															
	5198781 = PLATE, NAME	1	1	1											
	5149696 PLATE, NAME				1										
	5149695 PLATE, NAME					1									
	5149756 PLATE, NAME						1								
	5149829 PLATE, NAME							1							
	5149828 PLATE, NAME								1						
	5149837 PLATE, NAME									1					
	5149838 PLATE, NAME										1				
	5149839 PLATE, NAME											1			
	5149840 PLATE, NAME												1		
	5149841 PLATE, NAME													1	
	5149842 PLATE, NAME														1
	5198894 % = PLATE, ROTATION INDICATOR	1	1	1											
	103870 PLUG, 1" PIPE (DRAIN) (12.9550)		1	1											
2A	5149071 % PLUG, DRAIN	1													
	5196511 BUSHING				2										
	141264 = PIN, DOWEL (1"X7/16" DIA.)	2	2	2											
	192413 = SCREW, #4X1/4" DRIVE (12.9067)	6	6	6											
	190073 SCREW, #2X3/16" DRIVE (12.9061)				2	2	2	2	2	2	2	2	2	2	2
	180175 BOLT, 5/8"-18X1 1/4"	9	9	9											
	% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1014 - RETAINER, SPIDER DRIVE															
4A	5149082 % WASHER, RETAINER	1													
4A	5198519 % WASHER, RETAINER		1	1											
4A	5198518 % LOCKPLATE		1	1											
4A	5198831 % PIN	1													
4A	5149081 % PIN		1	1											
4A	271581 BOLT, 5/8"-18X1 1/4" (12.9001)	1													
4A	223809 BOLT, 5/8"-18X1 1/2" (12.9001)		1	1											
	% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1016 - CONVERSION KIT, MARINE GEAR															
NOTE: INCLUDES 5198785 DRIVE RING IN 9.1006, 5198786 SPIDER AND 5198768 BLOCKS IN 9.1009, NAME PLATE AND DRIVE SCREWS IN 9.1010 PLUS 5198518 LOCKPLATE IN 9.1014.															
	5198700 + CONVERSION KIT		1	1											
	+ NOT SERVICED PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1018 - SEAL, MARINE GEAR INPUT SHAFT															
4A	5198749 @ SEAL	1	1	1											
	@ NOT SERVICED PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC 53403 OR NEAREST OUTLET.														

9.1000A HYDRAULIC MARINE GEAR

PART FIG . . . NUMBER NAME AND DESCRIPTION			COLUMN													
			A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1024 - SUPPORT, INPUT SHAFT BEARING																
4A	5198753	% SUPPORT	1	1	1											
4A	5198796	% SHIM (.005" THICK)	AR	AR	AR											
4A	5198797	% SHIM (.007" THICK)	AR	AR	AR											
4A	5198798	% SHIM (.020" THICK)	AR	AR	AR											
4A	179839	BOLT, 3/8"-16X1" (12.9001)	6	6	6											
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1026 - SHAFT, MARINE GEAR INPUT																
4A	5198746	% SHAFT (1.47:1, 1.93:1)	1	1	1											
2A	5198244	SHAFT ASSY. (INCLUDES FLANGED KEY IN 9.1475)				1	1	1	1	1	1	1	1	1	1	1
4A	5198531	% KEY, WOODRUFF (3/8"X1/4"X1 1/8")	1	1	1											
4A	5198831	% KEY, WOODRUFF (3/8"X1/4"X1 3/8")	1	1	1											
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1027 - BEARING, MARINE GEAR INPUT SHAFT																
4A	5198545	+ BEARING, ROLLER	2	2	2											
2A	5149670	BEARING				1	1									
2A	9416195	BEARING						1	1	1	1	1	1	1	1	1
2A	3709351	RING, SNAP (1 1/4" DIA.)				1	1	1	1	1	1			1	1	1
2A	5196193	RING, SNAP (2 1/4" DIA.)				1	1									
2A	5196267	RING, SNAP										1	1			
2A	5196545	RING, SNAP (2 29/64" DIA.)						1	1	1	1	1	1	1	1	1
2A	5196543	RING, SNAP (1 29/64" DIA.)						1	1	1	1	1	1	1	1	1
		+ NOT SERVICED PROCURE THRU TWIN DISC INC., 1328 RACINE ST. RACINE, WISC 53403 OR NEAREST OUTLET.														
9.1028 - GEAR, FORWARD CLUTCH																
4A	5199280	% # GEAR & SHAFT ASSY.	1	1	1											
		# INCLUDES A BUSHING; NOT SERVICED SEPARATELY.														
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1029 - GEAR, REVERSE CLUTCH																
4A	5199281	# GEAR & SHAFT ASSY.	1	1	1											
		# INCLUDES A BUSHING; NOT SERVICED SEPARATELY.														
9.1030 - PISTON, REVERSE CLUTCH																
4A	5198743	% PISTON	2	2	2											
2A	5196183	PISTON				1	1	1	1	1	1	1	1	1	1	1
4A	5198780	RING, CLUTCH PISTON	2	2	2											
4A	5199047	% RING, SNAP	2	2	2											

9.1000A HYDRAULIC MARINE GEAR

PART ..FIG .. NUMBER .. NAME AND DESCRIPTION ..			COLUMN													
			A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1030 - PISTON, REVERSE CLUTCH (CONT'D)																
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1032 - SHAFT, CLUTCH FORWARD AND REVERSE																
4A	5198776	% RING, PISTON CLUTCH SHAFT (END)	6	6	6											
4A	5198779	% RING, PISTON CLUTCH SHAFT (CENTER)	2	2	2											
	5149834	RING, RETAINING								1	1					
4A	5198532	PLUG, 1/16" (ORIFICE)	2	2	2											
4A	5198830	% PLUG, 1/16" (SOCKET)	2	2	2											
	5149835	PLUG, ORIFICE								6	6					
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1033 - BEARING, CLUTCH SHAFT																
4A	5198544	% BEARING, ROLLER TAPER	4	4	4											
4A	5198524	% WASHER, THRUST	2	2	2											
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1035 - SEAL, REVERSE CLUTCH PISTON																
2A	5196180	SEAL, RING (7 1/2" DIA.)				1	1	1	1	1	1	1	1	1	1	1
2A	5196188	SEAL, RING (3 1/2" DIA.)				1	1	1	1	1	1	1	1	1	1	1
9.1036 - GEAR ASSY., CLUTCH HUB																
4A	5198806	# GEAR ASSY. (1.47:1 RATIO)	2	2												
4A	5198810	% GEAR ASSY. (1.93:1 RATIO)			2											
# INCLUDES A BUSHING; NOT SERVICED SEPARATELY.																
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1041 - BEARING, THRUST CLUTCH HOUSING GEAR																
4A	5198523	% BEARING, NEEDLE	4	4	4											
4A	5198823	% RACE, THRUST	4	4	4											
4A	5198522	% RACE (NEEDLE BEARING)	2	2	2											
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1045 - PLATE, REVERSE CLUTCH DISC.																
2A	5149757	PLATE (SPLINED)				2	2	3	3	3	3	3	3	3	3	3
2A	5196303	PLATE				1	1	2	2	2	2	2	2	2	2	2

9.1000A HYDRAULIC MARINE GEAR

PART			COLUMN													
FIG	NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1055 - SPRING, REVERSE CLUTCH RELEASE																
4A	5197354	% SPRING, CLUTCH PISTON	2	2	2											
2A	5196186	SPRING				12	12	12	12	12	12	12	12	12	12	12
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1060 - PLATE, REVERSE CLUTCH																
4A	5198895	% PLATE, BACK	2	2	2											
2A	5196184	PLATE				1	1	1	1	1	1	1	1	1	1	1
2A	3712718	PIN (6.23" L)				3	3									
2A	5196733	PIN, 5/16"X27/32"						3	3	3	3	3	3	3	3	3
2A	5121182	PLUG, 1/4" PIPE (2.4015)				1	1	1	1	1	1	1	1	1	1	1
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														

9.1000A HYDRAULIC MARINE GEAR

PART ..FIG .. NUMBER .. NAME AND DESCRIPTION ..			COLUMN													
			A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1062 - PLATE, CLUTCH																
4A	5149089	PLATE, DRIVING	18													
4A	5198896	% PLATE, DRIVING		18	18											
4A	5198784	% PLATE, DRIVEN	16	16	16											
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1065 - RING, CLUTCH REACTION PLATE SNAP																
	5199046	% SNAP RING	2	2	2											
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1080 - GEAR ASSY., MARINE GEAR PLANETARY																
		INCLUDES BUSHING IN 9.1087.														
2A	5197209	GEAR ASSY.								1	1					
	5196246	GEAR ASSY. (2.5:1 & 3:1 RED)				1										
2A	5196272	SCREEN								1	1					
2A	5197230	BOLT, 5/16"-18								6	6					
2A	103320	LOCKWASHER, 5/16" (12.9200)								6	6					
9.1081 - CAGE, PLANETARY GEAR																
2A	5149702	CAGE PINION & SHAFT DRIVEN ASSY.				1										
2A	5149811	CAGE PINION & SHAFT ASSY.					1	1								
2A	5149760	CAGE PINION & SHAFT ASSY.							1							
2A	5149815	CAGE PINION & SHAFT ASSY.								1	1			1	1	1
2A	5149814	CAGE PINION & SHAFT ASSY.										1	1			
9.1085 - WASHER, MARINE GEAR PLANETARY GEAR THRUST																
2A	5196211	WASHER (1 3/4" O.D.)				1	1	1	1	1	1	1	1	1	1	1
2A	5149762	WASHER						1	1							
9.1087 - BEARING, MARINE GEAR PLANETARY GEAR																
2B,D	5197342	BEARING (2.5:1 & 3:1 RED) (9.1350)				1				1	1			1	1	1
2B,D	5199063	BEARING						1	1							
2B,D	5196259	RING, SNAP (1 27/64" DIA.)				1				1	1			1	1	1
2B,D	5196254	RING, SNAP						1	1							
	5199829	BUSHING				2	2	2	2	2	2	3	3	2	2	2
9.1091 - GEAR, MARINE GEAR PLANETARY RING																
2A	5196208	GEAR				1	1									
2A	5196549	GEAR						1	1	1	1	1	1	1	1	1
2A	5196199	RING, SNAP (5 7/8" O.D.)				1	1	1	1	1	1	1	1	1	1	1

PART	
..FIG ..	NUMBER NAME AND DESCRIPTION

INCLUDES BUSHING IN 9.1087.

9.1097 - BEARING, OUTPUT SHAFT

2B,C,D	5149677	CUP, BEARING
2B,C,D	5149679	CUP, BEARING
2B,C,D	5149680	CONE, BEARING
2B,C,D	5149678	CONE, BEARING

[illegible]

9.1000A HYDRAULIC MARINE GEAR

PART ..FIG .. NUMBER .. NAME AND DESCRIPTION ..			COLUMN													
			A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1135 - VALVE ASSY., SELECTOR																
A VALVE ASSY. INCLUDES ITEMS IN 9.1136 THRU 9.1197.																
4B	5199048	% VALVE ASSY.	1													
4B	5198756	% VALVE ASSY.		1	1											
2A	5149763	VALVE ASSY.				1	1	1	1	1	1	1	1	1	1	1
	5198799	% SHIM (.005")		AR	AR											
	5198800	% SHIM (.007")		AR	AR											
	5198801	% SHIM (.020")		AR	AR											
	179839	BOLT, 3/8"-16X1" (12.9001)		1	1											
	179848	BOLT, 3/8"-16X2 1/4" (12.9001)		2	2											
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1136 - HOUSING, SELECTOR VALVE																
4B	5198757	% HOUSING	1	1	1											
4B	5198533	% PLUG, HOUSING		1	1											
	5149087	% PLUG, 1 5/16"-12	2													
4B	5198521	% WASHER (SEAL)	1	1	1											
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1137 - VALVE, SELECTOR																
4B	5198766	% VALVE	1	1	1											
	5198812	% SHIM	AR	AR	AR											
2A	5196218	VALVE				1	1	1	1	1	1	1	1	1	1	1
2A	5149673	VALVE				1	1	1	1	1	1	1	1	1	1	1
	457008	PIN, 5/16"X1 1/2" SPRING	1	1	1											
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1138 - STEM, SELECTOR VALVE																
4B	5198767	% STEM (DIRECTION)	1	1	1											
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1139 - SEAL, SELECTOR VALVE STEM																
4B	5198516	% SEAL RING	1	1	1											
4B	5198825	% BEARING, NEEDLE (THRUST)	1	1	1											
4B	5198824	% RACE, THRUST BEARING	2	2	2											
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																

9.1000A HYDRAULIC MARINE GEAR

PART FIG . . . NUMBER NAME AND DESCRIPTION			COLUMN													
			A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1147 - SPRING, SELECTOR VALVE REGULATOR																
4B	5198763	% SPRING (INNER)	1	1	1											
4B	5198764	% SPRING (OUTER)	1	1	1											
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1148 - SPACER, SELECTOR VALVE SPRING																
4B	5198762	% SPACER	1	1	1											
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC., 53403 OR NEAREST OUTLET.																
9.1155 - SPRING, SELECTOR VALVE																
2A	5149764	SPRING				1	1	1	1	1	1	1	1	1	1	1
2A	5196220	RETAINER, SPRING				1	1	1	1	1	1	1	1	1	1	1
2A	5196212	RING, SNAP				1	1	1	1	1	1	1	1	1	1	1
9.1160 - SEAL, SELECTOR VALVE OIL																
2A	5196222	SEAL, RING				1	1	1	1	1	1	1	1	1	1	1
9.1157 - CAM, NEUTRAL																
2A	5149936	CAM				1	1	1	1	1	1	1	1	1	1	1
2A	179796	BOLT, 1/4"-20X7/8" (12.9001)				3	3	3	3	3	3	3	3	3	3	3
2A	103319	LOCKWASHER, 1/4" (12.9200)				3	3	3	3	3	3	3	3	3	3	3
9.1175 - LEVER, SELECTOR VALVE OPERATING																
4B	5198759	% LEVER	1	1	1											
2A	5197136	LEVER				1	1	1	1	1	1	1	1	1	1	1
4B	5198761	% PLATE, DETENT	1	1	1											
2A	5149768	SWITCH AND COVER ASSY.							1	1	1	1	1	1	1	1
4B	5198765	% SPRING, DETENT	1													
2A	5196221	SPRING, DETENT				1	1	1	1	1	1	1	1	1	1	1
4B	5149083	% SPRING, COMPRESSION		1	1											
2A	104919	BALL, 5/16" DIA (12.9670)				1	1	1	1	1	1	1	1	1	1	1
2A	103340	WASHER, 5/16" (12.9190)				1	1	1	1	1	1	1	1	1	1	1
4B	104920	BALL, 3/8" DIA. (DETENT) (12.9670)	1	1	1											
4B	5149084	% BOLT, 1/4"-20X.88"	1	1	1											
2A	108579	LOCKWASHER, 5/16" (12.9200)				1	1	1	1	1	1	1	1	1	1	1
2A	114493	NUT, 5/16"-24 (12.9120)				1	1	1	1	1	1	1	1	1	1	1
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1178 - COVER, HYDRAULIC CONTROL VALVE																
4B	5198760	% COVER	1	1	1											
2A	5149765	COVER				1			1	1	1	1	1	1	1	1
4B	114861	BALL, 9/32" DIA. (12.9670)	1	1	1											
4B	189132	BOLT, #10-24X5/8" (12.9027)	4													
4B	5149085	% BOLT, 3/16"-24X.88" SOC. HD.		4	4											
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																

9.1000A HYDRAULIC MARINE GEAR

PART ..FIG .. NUMBER .. NAME AND DESCRIPTION ..			COLUMN													
			A	B	C	D	E	F	G	H	I	J	K	L	M	N
		9.1179 - GASKET, HYDRAULIC CONTROL VALVE COVER														
4B	5198758	% GASKET	1	1	1											
2A	5196225	GASKET				1	1	1	1	1	1	1	1	1	1	1
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
		9.1191 - GASKET, CONTROL VALVE PRESSURE REGULATOR														
4B	5198515	% SEAL RING	1	1	1											
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
		9.1194 - VALVE, PRESSURE REGULATOR RELIEF														
4B	5198742	% PISTON (VALVE)	1	1	1											
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
		9.1195 - SPRING, PRESSURE REGULATOR RELIEF VALVE														
4B	5198751	% SPRING	1	1	1											
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
		9.1197 - PLUG, CONTROL VALVE PRESSURE REGULATOR														
4B	5198517	% PLUG	1	1	1											
	455277	PIN, 1/8"X1 1/8" SPRING (12.9275)		1	1											
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
		9.1223 - CYLINDER, FORWARD CLUTCH PISTON														
2A	5196194	CYLINDER				1	1									
2A	5196546	CYLINDER						1	1	1	1	1	1	1	1	1
2A	5196198	SEAL, RING				2	2	2	2	2	2	2	2	2	2	2
2A	5149755	SEAL, RING					4	4	4	4	4	4	4	4	4	4
		9.1224 - WASHER, FORWARD CLUTCH CYLINDER THRUST														
2A	5196881	WASHER (.063" THICK)				1	1	1	1	1	1	1	1	1	1	1
2A	5196279	WASHER										2	2			
		9.1225 - PISTON FORWARD CLUTCH														
2A	5196196	PISTON				1	1	1	1	1	1	1	1	1	1	1

9.1000A HYDRAULIC MARINE GEAR

PART			COLUMN													
FIG	NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1230 - SEAL, FORWARD CLUTCH PISTON																
2A	5196195	SEAL, RING (2.016" I.D.)				1	1	1	1	1	1	1	1	1	1	1
2A	5196197	SEAL, RING (4.120" I.D.)				1	1	1	1	1	1	1	1	1	1	1
9.1235 - PLATE, FORWARD CLUTCH																
2A	5196202	PLATE (INNER)				1	1	1	1	1	1	1	1	1	1	1
2A	5196205	PLATE (OUTER)				1	1	1	1	1	1	1	1	1	1	1
2A	5196203	PLATE (STEEL)				4	4	6	6	6	6	6	6	6	6	6
2A	5149809	PLATE (INNER)				5	5	7	7	7	7	7	7	7	7	7
2A	5149758	PLATE ASSY.						1	1	1	1	1	1	1	1	1
	5196770	SHIM (SNAP RING) (.050")						1	1	1	1	1	1	1	1	1
	5196771	SHIM (SNAP RING) (.075")						1	1	1	1	1	1	1	1	1
	5196772	SHIM (SNAP RING) (.100")						1	1	1	1	1	1	1	1	1
	5149759	SNAP RING (12.9645)						1	1	1	1	1	1	1	1	1
9.1240 - SPRING, FORWARD CLUTCH RELEASE																
2A	5196201	SPRING				1	1	1	1	1	1	1	1	1	1	1
2A	5196200	RING, SNAP (3/8" DIA.)				1	1	1	1	1	1	1	1	1	1	1
2A	5196209	RING, SNAP (5 1/2" DIA.)				1	1	1	1	1	1	1	1	1	1	1
9.1242 - HUB, FORWARD CLUTCH																
2A	5196206	HUB				1	1									
2A	5196547	HUB						1	1	1	1	1	1	1	1	1
2A	5196207	RING, SNAP (1 21/32" DIA.)				1	1	1	1	1	1	1	1	1	1	1
2A	218211	KEY, 1/4"X3/4" WOODRUFF (12.9350)				1	1									
9.1282 - PLATE, REDUCTION GEAR ADAPTOR																
2B,D	5197338	ADAPTOR				1	1							1	1	1
2B,D	5198554	ADAPTOR								1	1					
2C	5197335	ADAPTOR										1	1			
	5199039	PLATE (1.5:1 RED)						1	1							
2B,C,D	5199061	BOLT, 7/16"-14X1 1/4"				6	6							6	6	6
2B,C,D	5199060	BOLT, 7/16"X14X1"						6	6	6	6	6	6	6	6	6
2B,C,D	114607	LOCKWASHER, 7/16" (12.9200)				6	6	6	6	6	6	6	6	6	6	6
9.1283 - GASKET, REDUCTION GEAR ADAPTOR																
2B,C,D	5196260	GASKET				1		1	1	1	1	1	1	1	1	1
9.1285 - HOUSING, REDUCTION GEAR																
2B,C,D	5149684	HOUSING				1	1	1	1					1	1	1
2B,D	5149836	HOUSING								1	1					
2C	5149685	HOUSING										1	1			
2B,C,D	180123	BOLT, 3/8"-16X1 1/8" (12.9001)				6	6	6	6	6	6	6	6	6	6	6
2B,C,D	427567	BOLT, 7/16"-14X1 3/4" (12.9001)				2	2	2	2	2	2	2	2	2	2	2
2B,C,D	103321	LOCKWASHER, 3/8" (12.9200)				6	6	6	6	6	6	6	6	6	6	6
2B,C,D	103322	LOCKWASHER, 7/16" (12.9200)				2	2	2	2	2	2	2	2	2	2	2
9.1286 - GASKET, REDUCTION GEAR HOUSING																
2B,C,D	5196285	GASKET, RED. U ADAPTOR (REAR)				1	1	1	1	1	1	1	1	1	1	1

9.1000A HYDRAULIC MARINE GEAR

PART			COLUMN													
FIG	NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1287 - GEAR, REDUCTION GEAR INPUT																
4A	5198770	% GEAR	1													
2B	5198883	GEAR		1	1											
2B	5196251	GEAR						1	1							
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1288 - PLATE REDUCTION GEAR PLANETARY RING GEAR																
2D	5196255	PLATE				1	1									
2D	5196256	PLATE												1	1	1
9.1290 - GEAR, REDUCTION GEAR																
2D	5196266	GEAR				1	1			1	1					1
2D	5149686	GEAR						1	1							
2D	5149687	GEAR										1	1			
2D	5196265	GEAR												1	1	
9.1292 - GEAR ASSY. REDUCTION GEAR PLANETARY																
2D	5196290	* GEAR AND PLATE ASSY.				1	1									1
2D	5196268	GEAR ASSY.						1	1							
2D	5149701	GEAR ASSY.										1				
2D	5149703	GEAR ASSY.											1			
2D	5149825	GEAR ASSY.												1	1	
2D	5149702	GEAR ASSY.														1
* NOT SERVICED, FOR SERVICE USE COMPONENTS																
9.1298 - GEAR, REDUCTION GEAR PLANETARY RING																
2B,C,D	5196252	GEAR, RING				1	1	1	1	1	1	1	1			1
2D	5196257	GEAR, RING												1	1	
2B,C,D	5196253	RING, SNAP				1	1	1	1	1	1	1	1			1
2D	5196258	RING, SNAP												1	1	
2B	5149681	RING, SNAP (12.9645)						1	1							
2B	179857	BOLT, 7/16"-14X7/8" (12.9001)						4	4							
2B	114607	LOCKWASHER, 7/16" (12.9210)						4	4							
9.1299 - HUB, REDUCTION GEAR																
2B	5149690	HUB						1	1							
9.1310 - GEAR, REDUCTION																
4B	5198805	GEAR, OUTPUT (1.47:1)	1	1												
4B	5198809	% GEAR, OUTPUT (1.93:1)			1											
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																

9.1000A HYDRAULIC MARINE GEAR

PART			COLUMN													
..FIG	NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1340 - SHAFT, REDUCTION GEAR DRIVE																
4B	5198790	% SHAFT, OUTPUT (1.47:1, 1.93:1)	1	1	1											
2B	5149688	SHAFT						1	1							
2B	5149689	SHAFT								1	1	1	1			
2B	5149704	SHAFT ASSY.										1				
4B	5198949	% KEY, 1/2"X3/8"X1 1/4" WOODRUFF	1	1	1											
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1345 - BEARING, REDUCTION GEAR DRIVE SHAFT PILOT																
4B	5199011	% BEARING, ROLLER TAPER	1	1	1											
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1350 - BEARING, REDUCTION GEAR DRIVE SHAFT THRUST																
4B	5199012	% BEARING, ROLLER TAPER	1	1	1											
2B,C,D	5197342	BEARING				1	1			1	1					
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														
9.1351 - SPACER, REDUCTION GEAR DRIVE SHAFT BEARING																
	5149766	SPACER				1	1	1	1	1	1	1	1	1	1	1
9.1365 - COVER, REDUCTION GEAR BEARING																
4B	5198897	% RETAINER	1	1	1											
4B	180175	BOLT, 1/2"-13X1 1/4" (12.9001)	3	3	3											
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.														

9.1000A HYDRAULIC MARINE GEAR

PART ..FIG .. NUMBER .. NAME AND DESCRIPTION ..			COLUMN													
			A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1370 - GASKET, REDUCTION GEAR BEARING COVER																
4B	5198802	% SHIM (.005")	AR	AR	AR											
4B	5198803	% SHIM (.007")	AR	AR	AR											
4B	5198804	% SHIM (.020")	AR	AR	AR											
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1375 - SEAL, REDUCTION GEAR BEARING COVER OIL																
4B	5198792	SEAL (9.1018)	1	1	1											
2B,C,D	5149678	SEAL				1	1	1	1	1	1	1	1	1	1	1
9.1380 - BAFFLE, MARINE GEAR HOUSING OIL																
2D	5196175	BAFFLE				1	1	1	1	1	1	1	1	1	1	1
9.1386 - BAFFLE, REDUCTION HOUSING OIL																
	5149674	BAFFLE				1	1	1	1	1	1	1	1	1	1	1
	5149682	BAFFLE				1	1							1	1	1
	179857	BOLT, 7/16"-14X7/8" (12.9001)				2	2							2	2	2
9.1395 - DIPSTICK, REDUCTION GEAR																
4B	5198777	% DIPSTICK	1	1	1											
2A	5149100	DIPSTICK				1	1	1	1	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
	5145014	PLUG, 3/8" PIPE (12.9550)				1	1	1	1	1	1	1	1	1	1	1
	5142549	PLUG, 3/4" PIPE (12.9550)										1	1			
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1400 - GUIDE, REDUCTION GEAR DIPSTICK																
4B	5191267	GUIDE		1	1											
	5149088	% PLUG, 3/4"-16		1	1											
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1410 - TUBE, REDUCTION GEAR OIL FILLER																
4B	5191238	TUBE ASSY. (INCLUDES BAFFLE NOT SOLD SEPARATELY)	1	1	1											
	5149061	ADAPTOR (FOR SQUEEZE TYPE DIPSTICK)				1	1	1	1	1	1	1	1	1	1	1
9.1415 - CAP, REDUCTION GEAR OIL FILLER																
4B	1528732	CAP	1	1	1											

9.1000A HYDRAULIC MARINE GEAR

			COLUMN													
FIG	PART NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1430 - FLANGE, PROPELLER DRIVE																
48	5198811	% FLANGE, OUTPUT % NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.	1	1	1											

9.1000A HYDRAULIC MARINE GEAR

PART FIG . . . NUMBER NAME AND DESCRIPTION			COLUMN													
			A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1435 - NUT, PROPELLER DRIVE FLANGE																
4B	5198775	% RING, SEAL	1	1	1											
4B	5199548	WASHER, RETAINER	1													
2B,C,D	5149767	NUT, FLANGED				1	1	1	1	1	1	1	1	1	1	1
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1475 - PUMP ASSY., HYDRAULIC MARINE GEAR OIL																
4B	5198744	% PUMP ASSY.	1	1	1											
2A	5198459	PUMP ASSY.				1										
2A	5196889	PUMP ASSY.				1	1	1	1	1	1	1	1	1	1	1
4B	179818	BOLT, 5/16"-18X3/4"	4	4	4											
2A	5198270	KEY, 3/16" FLANGED				1	1	1	1	1	1	1	1	1	1	1
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1477 - ADAPTOR, MARINE GEAR OIL PUMP																
4B	5198739	% ADAPTOR	1	1	1											
4B	179839	BOLT, 3/8"-16X1"	3	3	3											
4B	179848	BOLT, 3/8"-16X2 1/4"	1	1	1											
	106261	WASHER, 5/16"	4													
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1478 - GASKET, MARINE GEAR PUMP ADAPTOR																
4B	5198793	% SHIM, .005" THK.	AR	AR	AR											
4B	5198794	% SHIM, .007" THK.	AR	AR	AR											
4B	5198795	% SHIM, .020" THK.	AR	AR	AR											
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1480 - GASKET, HYDRAULIC MARINE GEAR OIL PUMP																
2A	5198216	GASKET				1	1	1	1	1	1	1	1	1	1	1
4B	5198741	% GASKET	1	1	1											
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1505 - SEAL, HYDRAULIC MARINE GEAR OIL PUMP																
2A	5199315	SEAL, OIL (DOUBLE LIP)				1	1	1	1	1	1	1	1	1	1	1
2A	5149675	+ SEAL, OIL						1	1	1	1	1	1	1	1	1
+ OPTIONAL																

9.1000A HYDRAULIC MARINE GEAR

		C O L U M N													
FIG	PART NUMBER	NAME AND DESCRIPTION	A	B	C	D	E	F	G	H	I	J	K	L	M
		9.1593 - TUBE, HYDRAULIC PUMP TO CONTROL VALVE													
48	5199556	% TUBE	1	1	1										
48	5199074	% CONNECTOR	2	2	2										
		% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINEST., RACINE, WISC. 53403 OR NEAREST OUTLET.													

9.1000A HYDRAULIC MARINE GEAR

PART ..FIG ... NUMBER NAME AND DESCRIPTION			COLUMN													
			A	B	C	D	E	F	G	H	I	J	K	L	M	N
9.1598 - TUBE, CONTROL VALVE TO HYDRAULIC PUMP HOUSING																
4B	5198754	% * TUBE	1	1	1											
4B	5199072	% ELBOW	1	1	1											
4B	5199553	% ELBOW	1													
4B	5199073	% CONNECTOR	1	1	1											
4E	5199554	% NIPPLE	1													
* NOT SERVICED; USE 5199555 TUBE PLUS (1) 5199553 ELBOW, AND (1) 5199554 NIPPLE.																
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1650 - STRAINER, MARINE GEAR OIL																
4B	5198752	% STRAINER	1	1	1											
2A	5198456	STRAINER				1	1	1	1	1	1			1	1	1
2A	5199386	DEFLECTOR										1	1			
2A	5198457	BUSHING, 3/4"X3/8"				1	1	1	1	1	1			1	1	1
2A	5199388	SPRING										1	1			
2A	5199387	WASHER										1	1			
2A	5198458	TUBE (OIL RETURN)				1	1	1	1	1	1			1	1	1
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1720 - TUBE, MARINE GEAR OIL STRAINER TO PUMP																
3A	5198787	% HOSE	1	1	1											
3A	119098	ELBOW, 1/2"X90 DEG. PIPE	2	2	2											
	5198769	% NIPPLE, 1/2"X1 1/2" PIPE	2	2	2											
	9409539	UNION, 1/2" PIPE	1	1	1											
% NOT SERVICED, PROCURE THRU TWIN DISC INC., 1328 RACINE ST., RACINE, WISC. 53403 OR NEAREST OUTLET.																
9.1840 - BREATHER, MARINE GEAR																
2A	5199044	BREATHER	1													
2A	5198454	BREATHER				1	1	1	1	1	1	1	1	1	1	1
2A	180082	BOLT, 5/16"-18X1 3/8" CAD. (12.9001)				4	4	4	4	4	4	4	4	4	4	4

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

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. TYPES

43

1
12
12
12

GROUP NOMENCLATURE

1.0000	ENGINE (less major assemblies)	5.0000	COOLING SYSTEM (CONT'D)
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	6.0000	EXHAUST SYSTEM
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 Adaptor	7.0000	ELECTRICAL INSTRUMENTS
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)
2.0000	FUEL SYSTEM	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	8.0000	POWER TAKE-OFF
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)		
3.0000	AIR SYSTEM	9.0000	TRANSMISSION AND PROPULSION
3.1000A	Air Cleaner and/or Adaptor	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	Bicer End Plate Cover	9.7000	Transmission—Off-highway
3.5000A	Turbocharger, Intercooler, and Aftercooler	9.9000	Transmission—Rail Car
4.0000	LUBRICATING SYSTEM	10.0000	SHEET METAL
4.1000A	Oil Pump	10.1000A	Engine Hood
4.1000B	Oil Distribution System		
4.1000C	Oil Pressure Regulator	11.0000	ENGINE MOUNTING
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 Filler	12.0000	MISCELLANEOUS
4.6000A	Dipstick	12.2000A	Bilge Pump
4.7000A	Oil Pan	12.3000A	Vacuum Pump
4.8000A	Ventilating System	12.4000A	Air Compressor
5.0000	COOLING SYSTEM	12.5000A	Hydraulic Pump
5.1000	Fresh Water Pump	12.6000A	Gasoline Starter
5.1000A	Fresh Water Pump Cover	12.6000B	Air Starter
5.2000A	Water Outlet Manifold and/or Elbow	12.6000C	Cold Weather Starting Aid
5.2000B	Thermostat	12.6000D	Hydraulic Starter
5.2000C	Water Bypass Tube	12.6000E	Hydraulic Starter Accessories
5.3000A	Radiator	12.8000A	Supplies
		12.8000B	Fabrication Material
		12.8000C	Miscellaneous Service Kits and Sets
		12.8000D	Miscellaneous Service Parts

10.1000A ENGINE HOOD

PART		TYPES												
FIG	NUMBER	NAME AND DESCRIPTION	98	100	101	104	105	108	110	111	115	116	123	124
10.1001 - HOOD ASSY., ENGINE														
FOR ENGINE HOOD TYPES 96, 97, 102, 107, AND 109 NOT SHOWN, REFER TO RADIATOR 5.3000A TYPES AS FOLLOWS FOR RADIATOR SHELL AND SUPPORTS. FOR TYPES 96 AND 107 REFER TO 5.3000A (58). FOR TYPES 97 AND 109 REFER TO 5.3000A (57). FOR TYPE 102 REFER TO 5.3000A TYPE (58) OR (64).														
5123601	HOOD		1											
5123602	+ HOOD			1										
5125340	HOOD				1							1		
5125457	HOOD					1								
5125342	HOOD						1				1			
5125458	HOOD							1						
5125341	HOOD								1					
5125343	HOOD									1				
5135969	HOOD												1	1
181309	BOLT, 1/4"-28X1/2" (12.9001)				14	9	14	9	14	14	14	14	14	14
103319	LOCKWASHER, 1/4" (12.9200)				14	9	14	9	14	14	14	14	14	14
114492	NUT, 1/4"-28 (12.9120)				14	9	14	9	14	14	14	14	14	14
	+ OBSOLETE.													
10.1025 - SUPPORT, ENGINE REAR HOOD														
5123598	SUPPORT		1	1										
5125333	SUPPORT				1		1		1	1	1	1		
5125456	SUPPORT					1		1						
5146353	SUPPORT												1	1
180016	BOLT, 1/4"-20X1/2" (12.9001)		4	4										
5135321	BOLT, 3/8"-24X3 11/16" (12.9001)					2		2						
454990	BOLT, 1/2"-13X1 1/8" (12.9001)						4		4	4	4	4	4	4
103343	WASHER, 1/2" (12.9190)						4				4		4	
103319	LOCKWASHER, 1/4" (12.9200)		4	4										
103323	LOCKWASHER, 1/2" (12.9200)					4		4	4	4	4	4	4	4
123390	NUT, 1/4"-20 (12.9120)		4	4										
10.1057 - CATCH, ENGINE HOOD SIDE PANEL														
5171531	CATCH ASSY., HOOD													4
5135805	BRACKET													4
181309	BOLT, 1/4"-28X1/2" (12.9001)													8
103319	LOCKWASHER, 1/4" (12.9200)													8
114492	NUT, 1/4"-20 (12.9120)													8
10.1100 - PANEL, ENGINE HOOD SIDE														
5123599	PANEL		2											
5123600	PANEL			2										
5125334	PANEL				2				2					

10.1000A ENGINE HOOD

PART		TYPES												
FIG	NUMBER	NAME AND DESCRIPTION	9 8	1 0 0	1 0 1	1 0 4	1 0 5	1 0 8	1 1 0	1 1 1	1 1 5	1 1 6	1 2 3	1 2 4
	10.1100	PANEL ENGINE HOOD SIDE (CONT'D)												
	5125335	PANEL					2			2				
	5135965	PANEL												2

10.1000A ENGINE HOOD

PART		TYPES																	
FIG	NUMBER	NAME AND DESCRIPTION																	
		1 2 5	1 2 6	1 2 7	1 3 2	1 3 4	1 3 5	1 3 8											
10.1001 - HOOD ASSY., ENGINE																			
5135967	HOOD	1	1																
5135968	HOOD			1															
5142791	HOOD				1		1	1											
5140226	HOOD					1													
181309	BOLT, 1/4"-28X1 1/2" (12.9001)	14	14	14	14		14	14											
100015	BOLT, 5/16"-24X1 1/4" (12.9001)					2													
103340	WASHER, 5/16" (12.9190)					2													
103319	LOCKWASHER, 1/4" (12.9200)	14	14	14	14		14	14											
103320	LOCKWASHER, 5/16" (12.9200)					2													
114492	NUT, 1/4"-28 (12.9120)	14	14	14	14		14	14											
114493	NUT, 5/16"-24 (12.9120)					2													
10.1025 - SUPPORT, ENGINE REAR HOOD																			
5146353	SUPPORT	1	1	1	1		1	1											
5140268	SUPPORT					1													
5143368	SHIM, 5" L X 1.12" W. X 1/4"					2													
181377	BOLT, 3/8"-24X1 3/4" (12.9001)					4													
454990	BOLT, 1/2"-13X1 1/8" (12.9001)	4	4	4	2		4	4											
442733	BOLT, 1/2"-13X1 1/4" (12.9001)				2														
5170971	WASHER, 3/8" BEVEL (5.3015)					4													
103341	WASHER, 3/8" (12.9190)					4													
103343	WASHER, 1/2" (12.9190)	4	4	4	6		4	4											
103321	LOCKWASHER, 3/8" (12.9200)					4													
103323	LOCKWASHER, 1/2" (12.9200)	4	4	4	4		4	4											
117049	NUT, 3/8"-24 (12.9120)					4													
10.1035 - PANEL, REAR HOOD SUPPORT																			
5139844	PANEL					1													
106261	WASHER, 1/4" (12.9190)					5													
103319	LOCKWASHER, 1/4" (12.9200)					5													
120375	NUT, 1/4"-20 (12.9120)					5													
10.1050 - CATCH, ENGINE HOOD HOLD-DOWN CLAMP																			
3222748	CATCH (90 DEG.)					4													
120697	SCREW, 1/4"-20X3/4" FL. HD. SL. (12.9030)					8													
103319	LOCKWASHER, 1/4" (12.9200)					8													
120375	NUT, 1/4"-20 (12.9120)					8													
10.1057 - CATCH, ENGINE HOOD SIDE PANEL																			
5171531	CATCH ASSY., HOOD	4		4			4	4											
5135805	BRACKET	4		4			4	4											
181309	BOLT, 1/4"-28X1 1/2" (12.9001)	8		8			8	8											

10.1000A ENGINE HOOD

FIG	PART NUMBER	NAME AND DESCRIPTION	TYPES						
			1 2 5	1 2 6	1 2 7	1 3 2	1 3 4	1 3 5	1 3 8
		10.1057 - CATCH, ENGINE HOOD SIDE PANEL (CONT'D)							
	103319	LOCKWASHER, 1/4" (12.9200)	8		8			8	8
	114492	NUT, 1/4"-20 (12.9120)	8		8			8	8
		10.1070 - ANTI-SQUEAK, ENGINE HOOD							
	5110780	+ ANTI-SQUEAK (1"X41"L) + NOT SERVICED: USE 5167873 AND CUT TO LENGTH SHOWN.					2		
		10.1080 - ROD, ENGINE HOOD TIE							
	3222531	ROD, 33 1/8"L					2		
	5190180	BRACKET (TIE ROD)					2		
	120697	SCREW, 1/4"-20X3/4" (12.9030)					4		
	103319	LOCKWASHER, 1/4" (12.9200)					4		
	103323	LOCKWASHER, 1/2" (12.9200)					4		
	120375	NUT, 1/4"-20 (12.9120)					4		
	102637	NUT, 1/2"-13 (12.9120)					8		
		10.1100 - PANEL, ENGINE HOOD SIDE							
	5135964	PANEL	2		2			2	2
	5139844	PANEL					1		