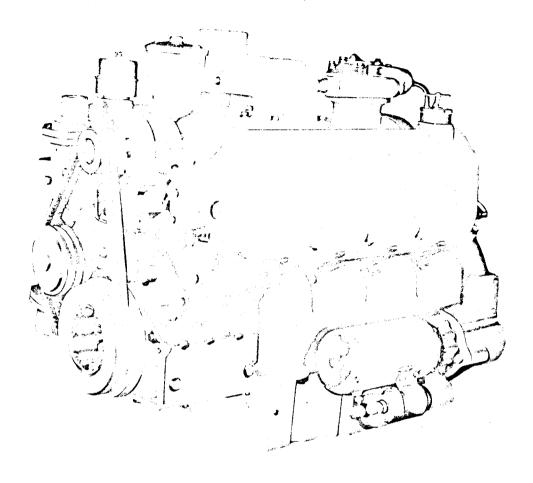
ENGINE SORIAL
F. 441009

# CUMMINS Model: V-470 Series

Bulletin No. 967115-A

Catalog



## Parts Ordering for: V-470 Series

Genuine Cummins Parts and service facilities are worldwide. There are more than 1600 Cummins Sales and Service locations in the principal cities of the United States and Canada, and more than 300 Sales and Service locations situated elsewhere throughout the free world. Each distribution outlet is thoroughly equipped with technical data, factory-trained mechanics, modern equipment and a full, adequate stock of Genuine Cummins Parts.

For quicker and better service, your parts requirements should be ordered from your nearest Cummins Distributor or Dealer. At any of the locations prompt, intelligent, courteous service is a basic trademark. Each is ready and eager to help in every possible way through personal contact or through the mail — at your convenience.

The satisfactory ordering and receiving of parts by the purchaser is greatly dependent upon the proper use of available information. In order that all avoidable errors may be eliminated, the following instructions are offered as the purchaser's guide:

1. Write your order clearly, using a typewriter if possible.

- Be sure to list the correct part number. If in doubt as to the correct part number, state the model and serial number of the engine on which the part is to be used. Part numbers are usually located in various places on the part itself.
- 3. When possible, arrange your purchase order in part number numerical sequence.
- 4. Always specify shipping instructions "Best Way" is satisfactory if you have no preference.
- 5. State your company name and shipping address clearly.

Genuine Cummins Parts mean QUALITY! They're designed and engineered to fit best in your Cummins Diesel. Each part is made of the highest quality material — on the most accurate of machines — by the top craftsmen of the trade.

You can be sure a Genuine Cummins Part will fit better — do the job better — lessen the chances of costly breakdown. When you buy replacement parts, buy quality. Buy Genuine Cummins Parts!

YOU OWN THE BEST . . . REPAIR WITH THE BEST

### **FOREWORD**

This Parts Catalog contains standard parts information for the V-470 Naturally Aspirated engines.

### **IMPORTANT**

Two series of V-470 engines have been manufactured by Cummins Engine Company, Inc. These can be identified by the engine serial number letter prefix. This Parts Catalog pertains only to the engines that have the letter "F" prefix in the engine serial number. For engines having the letter "D" prefix in the engine serial number, please refer to Parts Catalog Bulletin number L-967020-A or Bulletin number 967088.

### **ENGINE APPLICATION INFORMATION**

Explanation of the letter designations for the various engine applications is listed below.

Auto = Automotive Application.

B = Off highway application, less air compressor

C = Construction and mining applications, mobile type of equipment.

P = Industrial application, radiator cooled, stationary unit.

In the engine application box at the top of each page, an "X" will appear only in the application column to which the parts information on the page is applicable.

In those cases, when assemblies and/or parts are variable to applications, direction is provided to identify the assembly or parts pertinent to the Engine Application. Part numbers appearing in () are for identification purposes only and should not be used when ordering service replacement parts.

### SPECIAL PARTS

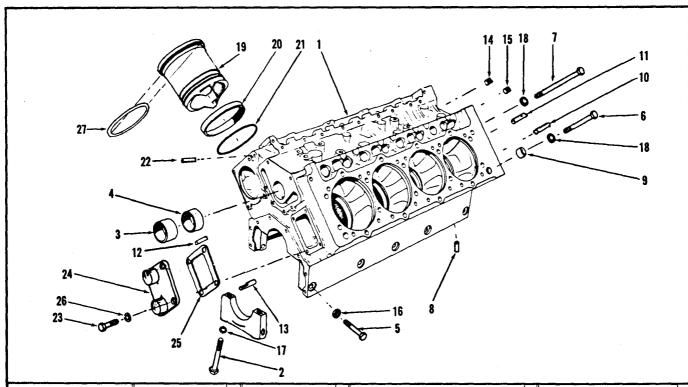
Cummins Distributor\_

Special Parts peculiar to the engine can be listed on the form below. To make certain you have ordered correct parts, refer to this form before submitting Parts Order.

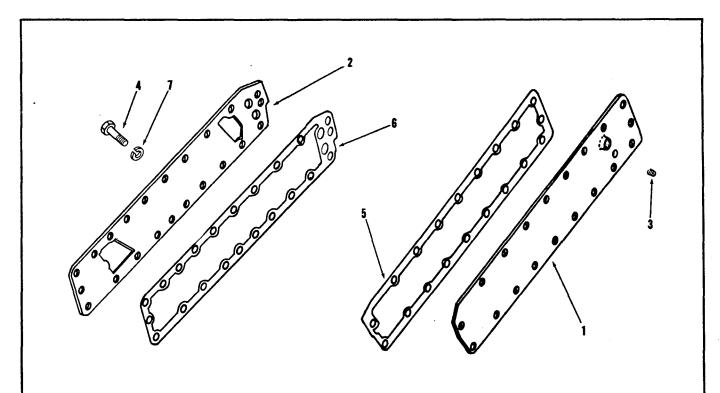
Part Number	Description
185539	Flywheel
154849	KING- GEAR
168643	Flywheel Housing SAF #3
202821	RADIATOR
651014	FAN Blade 24 INCh Blower
178685	FAN BELTS (2) also deires WATER PUMP

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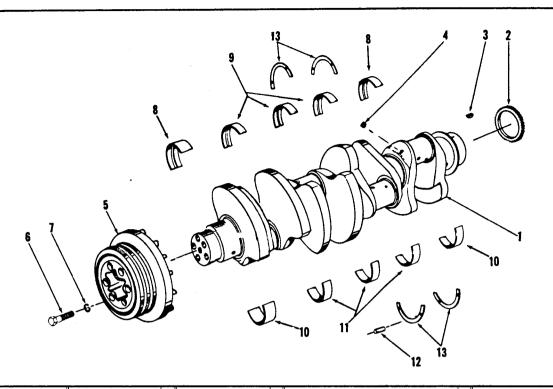
	Page	Grid		Page	G rid
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Air Intake Manifold	27	C6	Fuel Pump	34	D1
Air Cleaner	28-29	C7,8	Fuel Tubing	35	D2
Alternator	37	D4	Gasket Sets	38	D5
Breather	10	B1	Gear Housing And Cover	11	B2
Camshaft And Cover	6	A9	Injector	33	C12
Camshaft Bushings	1	A4	Instrument Panel	36	D3
Connecting Rod	4	A7	Lubricating Oil Cooler	19	B10
Corrosion Resistor	21	B12	Lubricating Oil Filter	17	В8
Crankshaft	3	A6	Lubricating Oil By-Pass Filter	18	В9
Cylinder Block	. 1	A4	Lubricating Oil Pump	12-13	B3,4
Cylinder Head	. 9	A12	Main Bearing Shells	3	A6
Cylinder Head Cover	. 10	<b>B</b> 1	Numerical Index	39-42	D6-9
Cylinder Liner	1	A4	Oil Pan	14,15	B5,6
Dipstick And Tube	14,15 16	B5,6 7	Pistons	16 4	, A7
Electrical Equipment	37	D4	Piston Rings	4	Α7
Exhaust Manifold	26	C5	Push Rods	7	A10
Fan And Guard	24-25	C3,4	Radiator	24-25	C3,4
Fan Hub	23	C2	Rear Engine Support	5	8A
Flywheel Housing	38	D5	Rocker Levers	8	A11
Flywheel and Ring Gear	.38	D5	Shutdown Valve	33	C12
Front Cover	5	A8	Starting Motor	37	D4
Front Engine Support	5	A8	Thermostat And Housing	22	C1
Front Water Header Cover	1	A4	Tappets	7	A10
Fuel Filter	34	D1	Vibration Damper	3	A6
Fuel Gear Pump	34	D1	Water Header Cover	2	A5
Fuel Pump Drive	32	C11	Water Pump And Pulley	20	B11



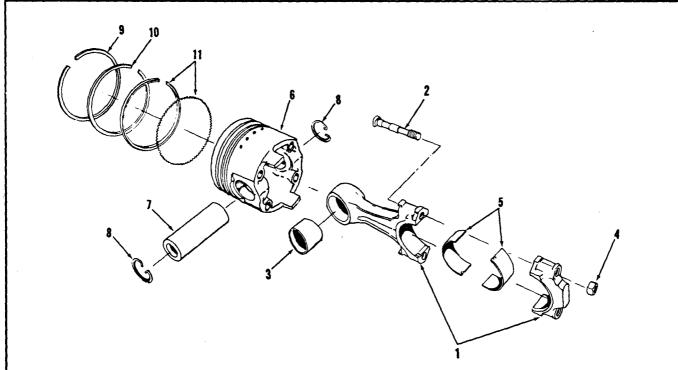
ENGINE APPLIC	ATION AUTOMOTIVE X B-OFF	-HIGHW	AY	C - CONSTRUCTION	ON & INDUSTRIAL X P. INDUSTRIAL	. POWE	R X
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.
	CYLINDER BLOCK			553371	Data plate	1	
BM-99814	Block, cylinder (183070)	1 1	1	S-2286 70760	Screw, data plate  Dowel	4	22
180676	Bolt, main bearing cap			1		1 ' 1	22
	(9/16''-18 x 4-5/8'')	10	2		FRONT WATER HEADER COVER	1	
554003	Bushing, camshaft (No. 1 and 5		ا آ	0.445			
554004	position)  Rushing camebaft (No. 2, 3, and	2	3	S-112	Capscrew, water header cover	4	23
554004	Bushing, camshaft (No. 2, 3, and 4 position)	3	4	167801 167802	Cover, water header Gasket, water header cover		24 25
188395	Capscrew, main bearing side locking		"	S-604	Lockwasher, water header cover	1 4	26
	(9/16"-18 x 2-5/8")	10	5				۔ ا
162182	Capscrew, cylinder head (short)			Į į	OVERSIZE FOR SERVICE	]	•
100100	(1/2"-20 x 4-15/16")	26	6	<b>!</b>			ļ
162183	Capscrew, cylinder head (long)	1	_	171786	Shim liner (.007)	A/R	27
148547	(1/2"-20 x 8-7/8")	10	7	171787	Shim liner (.010)	A/R	27
148547	Dowel, rear main bearing cap  Dowel ring, cylinder head to block	2 4	8 9	171788	Shim liner (.012)	A/R	27
69562	Dowel, gear housing to block	4	9	171789 171790	Shim liner (.014) Shim liner (.021)	A/R	27 27
55552	(Master)	2	10	171790	Smill liner (JUZ1)	A/R	2/
102957	Dowel, gear housing to block	-	'`'	ļ i	SEMI-FINISHED MAIN BEARING		l
	(Diamond)	2	11	Ì	CAPS		
70645	Dowel, front cover to block	j Ì		1		1	
00555	(Master)	1	12	193010	Main bearing cap front	1 1	!
68568	Dowel, front cover to block	1 .	أييا	193013	Main bearing cap intermediate No. 2	1	
67622	(Diamond)	1 1	13	193011	Main bearing cap intermediate No. 4	1 1	
67622 S-911-B	Plug, pipe (3/8")	2	14	193012	Main bearing cap intermediate No. 3	1 1 1	'
188394	Plug, pipe (1/4") Washer, main bearing side locking	4	15	193009	Main bearing cap rear	1 1	
100007	capscrew (5/8")	10	16	<b>1</b>		1 1	1
164601	Washer, main bearing cap (9/16")	10	17	l l			
153411	Washer, cylinder head capscrew	'	''	l		1 1	
	(9/16")	36	18	1		}	
	MOUNTING PARTS				,		
170710	Maria Mad			1		1 1	
179710 171880	Liner, cylinder Seal, crevice	8	19	1		1 1	
171880	Seal, crevice Packing, cylinder liner	8 8	20 21			1 1	
1/12/0	racking, cynnider inier	0	۷۱			Į į	
		1 1	ļ j	l l		1	
		1 1	1	1		1	



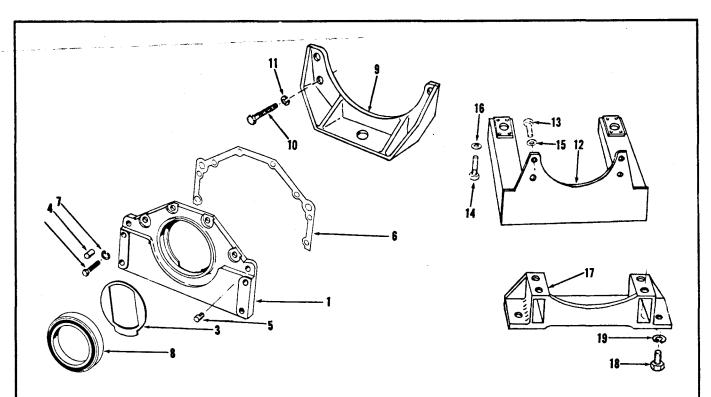
ENGINE APPLICATION AUTOMOTIVE X B-OFF-			AY	C - CONSTRUCTION	ON & INDUSTRIAL X	P - INDUSTRIA	POWE	R X
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART N	AME	NO. REQ'D.	REF NO.
	WATER HEADER COVER							
193557 176596 68606	Cover, water header (L.B.) Cover, water header (R.B.) Plug, pipe (1/8"-27 NPTF) MOUNTING PARTS	1 1 1	1 2 3					
S-109 167800 176598 S-604	Capscrew, cover to block (3/8"-16 x 7/8") Gasket, cover to block (L.B.) Gasket, cover to block (R.B.) Lockwasher (3/8") cover to block	30 1 1 30	4 5 6 7					



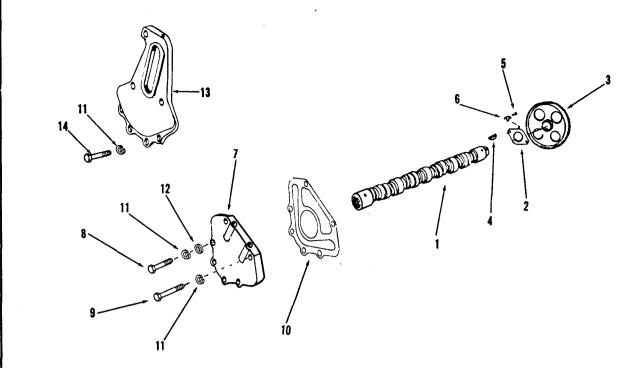
ENGINE APPLIC	ENGINE APPLICATION AUTOMOTIVE X B - OFF-HIGHWAY			/AY	C - CONSTRUCTION	ON & INDUSTRIAL X P - INDUSTRIAL	POWE	R X
PART NUMBER		PART NAME	NO. REQ'D	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.
	Cranks Cranks Gear, o Key, o Plug, p DAMP Dampe Capscr (1/2"-	KSHAFT shaft assembly shaft crankshaft rankshaft gear pipe (1/8"-27 NPTF)				PART NAME  MAIN BEARINGS  Bearing set, main (Std.) Bearing, main (Upper 1 and 5) Bearing, main (Upper 2,3 and 4) Bearing, main (Lower 1 and 5) Bearing, main (Lower 2,3 and 4) Dowel, half ring Half ring, crankshaft thrust (Upper) Half ring, crankshaft thrust (Lower) Half ring, crankshaft thrust (.010") Half ring, crankshaft thrust (.020")  Main bearings may be purchased in .010", .020", .030" or .040" undersize.	NO. REQ'D.  1 2 3 2 2 2 2 2 2 2 2	8 9 10 11 12 13 13 13 13



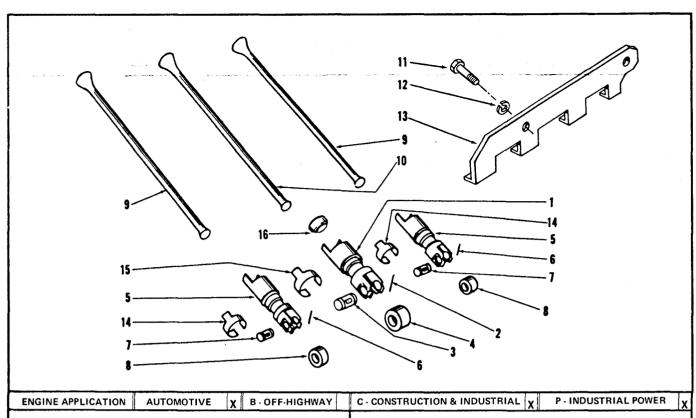
ENGINE APPLIC	ATION AUTOMOTIVE X B-	OFF-HIGHW	AY	C - CONSTRUCTI	ON & INDUSTRIAL X P-INDUS	TRIAL POWER	<u>`                                    </u>
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REI NO
	CONNECTING ROD				PISTON		
BM-78784 157626 195360 152838 157620 *	Rod, connecting (166452) Bolt, connecting rod (7/16"-20 x 3-5/16") Bushing, piston pin Nut, connecting rod bolt (7/16' Bearing, connecting rod (Std.)	16 8 ") 16	1 2 3 4 5	BM-96200 183510 151770 157978	Piston, assembly (Std.) Piston Pin, piston Ring, snap	8 8 8 16	8
*	Connecting rod bearing shells m be purchased in .010", .020", .0 and .040" undersize.	nay 030''		AR-61400 171690 208990 204930	Ring set, piston (Std.) Ring, compression (Top) Ring, compression Ring, oil	8 8 8 8	10
				·			
					·		



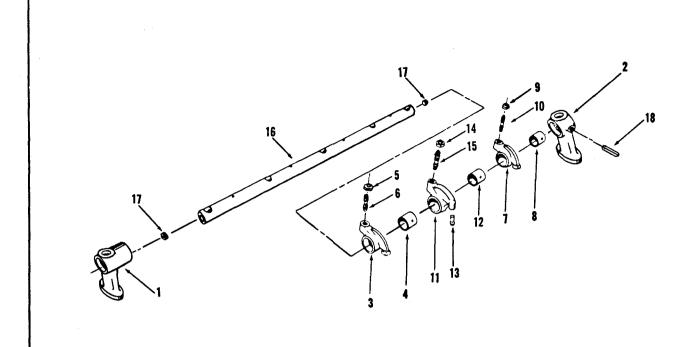
ENGINE APPLICA	ATION AUTOMOTIVE X	B-OFF-	HIGHW	AY	C - CONSTRUCTI	ON & INDUSTRIAL X P. INDUSTRIA	L POWER	Rχ
PART NUMBER	PART NAME		NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.
188393 S-109 173090 70645 68568 188396 S-604 551514	Cover, front Capscrew, front cover (3/8"-16 x 7/8") Deflector, oil Dowel (Master) Dowel (Diamond) Gasket, front cover Lockwasher (3/8") Seal, oil		1 4 1 1 4 1	1 2345678	188397 106289 S-608 650368 106289 S-139 S-608 S-603	FRONT ENGINE SUPPORT  Auto, C Applications  Support, front  MOUNTING PARTS  Capscrew, front support (1/2"-13 x 2-1/4") Lockwasher (1/2")  P Applications  Same as above except:  Support, front Capscrew, support to block Capscrew, radiator base mounting Lockwasher Lockwasher  P Application Only  Support, rear engine Capscrew (1/2"-13 x 1-1/4") Lockwasher (1/2")	1 4 4 4 2 4 2	9 10 11 12 13 14 15 16 17 18 19



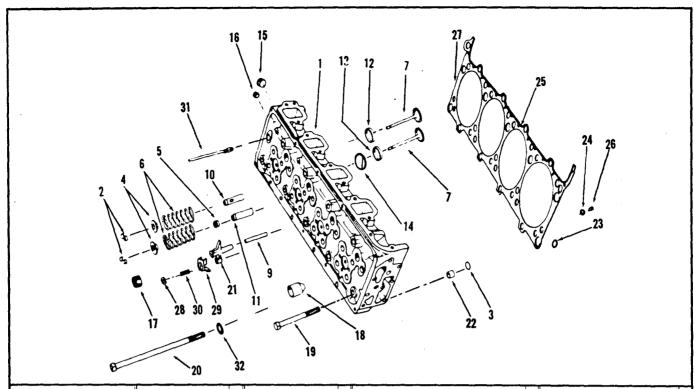
PART NUMBER	PART N	AME	NO. REQ'D.	REF.	PART NUMBER	PART NAME	NO. REQ'D.	REI . NO
	CAMSHAFT					CAMSHAFT COVER		
AR-60615 201050 167305 187649 S-313	All Applications  Camshaft Camshaft Bearing, camshaft tl Gear, camshaft Key, camshaft  MOUNTING PART		1 1 1 1	1 2 3 4	167834 108707 S-137 550164 S-604 S-602	Cover, camshaft Capscrew, camshaft cover (3/8"-16 x 1-1/2") Capscrew, camshaft cover (3/8"-16 x 2") Gasket, camshaft cover Lockwasher, cover (3/8") Washer, plain (13/32")	5 1 1 6 5	9 10 11 12
S-107 68908-A	Capscrew, thrust be (5/16"-18 x 3/4") Lockplate, thrust be	aring	2 2	5 6	ADD: 182697 S-103-D	HIGH MOUNT FAN  Same as above except:  Cover, camshaft Capscrew, camshaft cover (3/8"-16 x 1-1/4")	1 4	13 14
			-		OMIT: S-602 S-137 108707	Washer, plain Capscrew, camshaft cover Capscrew (3/8"-16 x 1-1/2")	5 1 3	1:



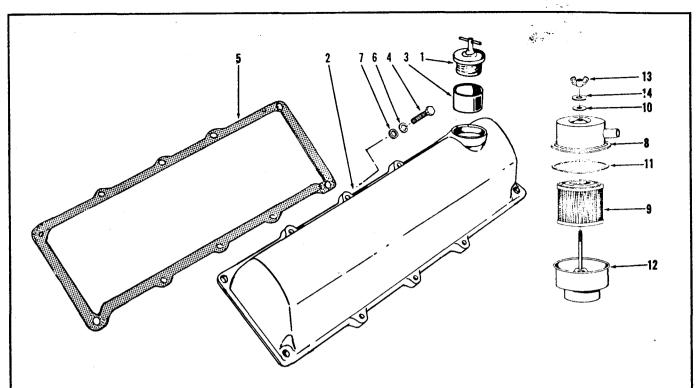
ENGINE APPLIC	ATION AUTOMOTIVE X B-OFF	HIGHWAY	C - CONSTRUCTI	ON & INDUSTRIAL X P - INDUSTR	AL POWER X
PART NUMBER	PART NAME	NO. REF REQ'D. NO.		PART NAME	NO. REF. REQ'D. NO.
BM-94016 107738 108187 114223 154571 BM-94014 108186 169154 153679 168209 170326 S-110 S-605 551084 156438 156439	PUSH RODS AND TAPPETS  Tappet, injector assembly (171936) Socket Lockwire, tappet Pin, injector tappet roller Roller, injector tappet Tappet, valve (171937) Lockwire, tappet Pin, valve tappet Roller, valve tappet Rod, valve push Rod, injector push  MOUNTING PARTS  Capscrew, tappet guide plate (5/16"-18 x 5/8") Lockwasher, tappet guide plate (5/16") Plate, tappet guide Spring, valve tappet Spring, injector tappet	8 4			



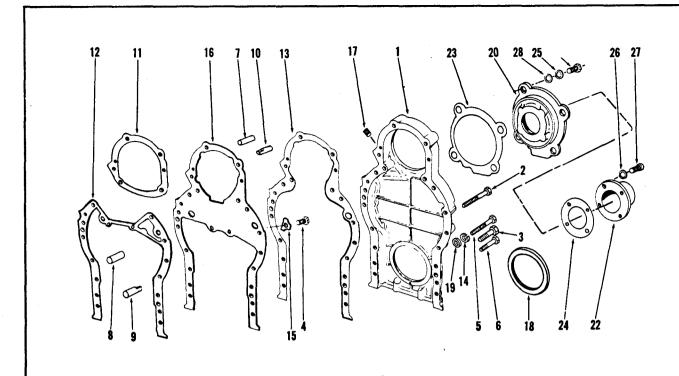
ENGINE APPLICAT	TION AUTOMOTIVE	χ B · O	FF-HIGHW	AY	C - CONSTRUCTI	ON & INDUSTRIAL X	P - INDUSTRIAL	POWE	R X
PART NUMBER	PART NAM	IE	NO. REQ'D.	REF. NO.	PART NUMBER	PART N	AME	NO. REQ'D.	REF. NO.
	Bracket, rocker lever some sever, exhaust valve rocker lever some sever, exhaust valve rocker lever and bushing sushing, valve rocker (Screw, adjusting screw, adjusting lever, injector rocker lever and bushing sushing, injector rocker lever and bushing sushing, injector rock socket, injector link Nut, adjusting screw screw, adjusting screw, adjusting screw, adjusting screw, rocker shaft locat screw, rocker	haft haft bocker  ever 1/2") 168255) lever (194038) er lever				PART N	AME		



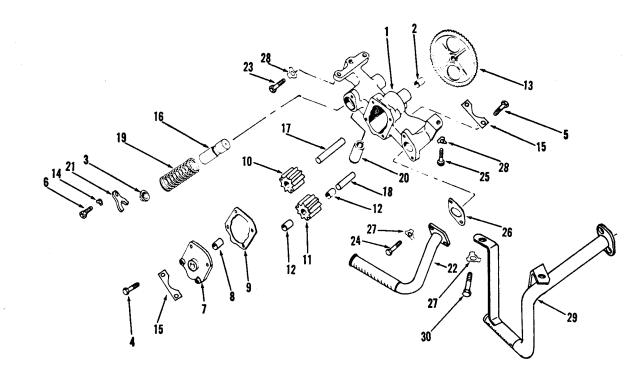
ENGINE APPLICATION AUTOMOTIVE X B.OFF-		HIGHW	AY	C - CONSTRUCTI	ON & INDUSTRIAL X	P · INDUSTRIA	L POWE	R X			
PART NUMBER		PART NAME	: 		NO. REQ'D.	REF. NO.	PART NUMBER	PART	IAME	NO. REQ'D	REF. NO.
	Head a Half or Retain Seal, in Spring Valve, Head a Guide, Guide, Insert, Plate, Plug, c Plug, r Plug, r Plug, r Plug, r	assembly, cylinder ( bollet, valve eer, spring ntake valve , valve exhaust & intake assembly, less valves crosshead exhaust valve intake valve valve seat, intake a	(1 <b>57</b> 7	782)				MOUNTING PAR  Capscrew, cylinder Capscrew, cylinder Crosshead, valve Dowel ring, cylind "O" ring Gasket, cylinder he Grommet Grommet, oil and Grommet, push tu Retainer, grommet Nut, crosshead adj Retainer, crosshead Screw, crosshead a Tube, vent (15388 Connector, tube Nut, tube Washer, cylinder he OPTIONAL  Gasket, cylinder he Gasket, cylinder he Guide, valve crossh	r head (short) r head (long) er head to block ead (190740) water be opening t usting d (exhaust) djusting 2) ead capscrew		



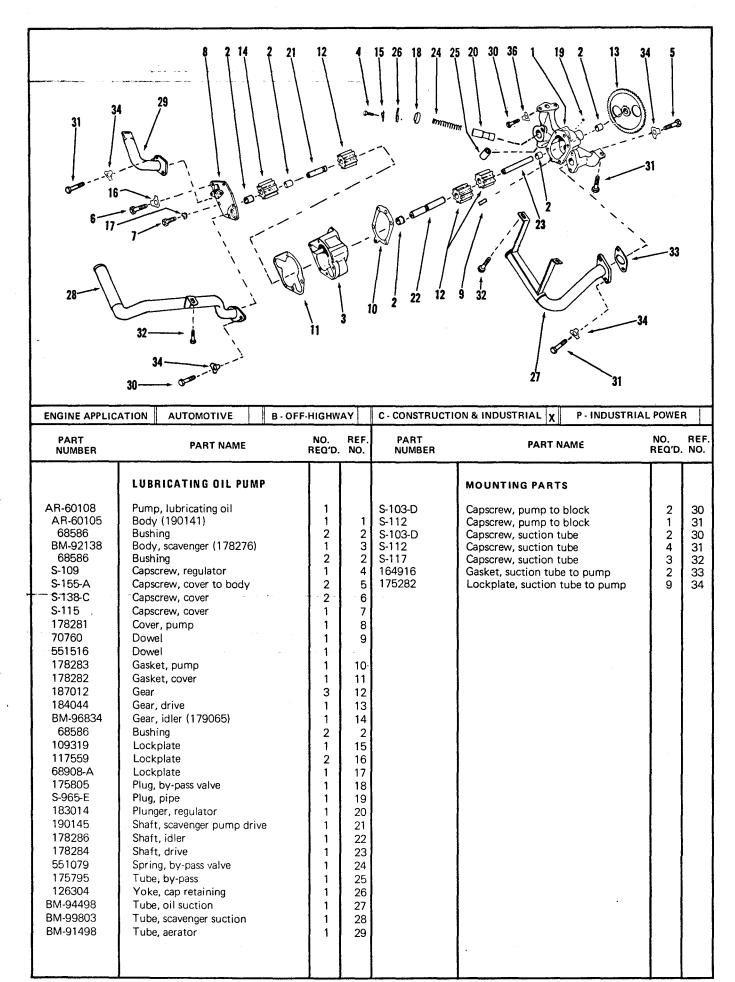
ENGINE APPLI	CATION	AUTOMOTIVE X E	3 - OFF-HIGHW	ΑΥ	C - CONSTRUCTI	ON & INDUSTRIAL X	P · INDUSTRIA	L POWE	R X
PART NUMBER		PART NAME	NO. REQ'D	REF.	PART NUMBER	PART NA	ME	NO. REQ'D.	REF. NO.
101322 AR-60122 551786 550113 551786	Cap, o Cover Cover, Tube, Cover,	Application  iii filler and tube (R.B.) cylinder head (R.B.) filler cylinder head (L.B.)	1 1 1 1 1	1 2 3	155997 AF-250	BREATHER  All Applications  Breather, crankcase Cover, breather Element Gasket, washer Gasket, cover Housing, element Nut, wing, cover Washer, plain cover		1 1 1 1 1 1	8 9 10 11 12 13
107981	Сар, о	as above except: il filler	1	<sub>.</sub> 1					
108707 157018 S-604 S-602	Gasket Lockw	rew, cover (3/8"-16 x 1 1, t, cover vasher (3/8") r, plain (13/32")	/2") 20 2 20 20	4 5 6 7					
					·				

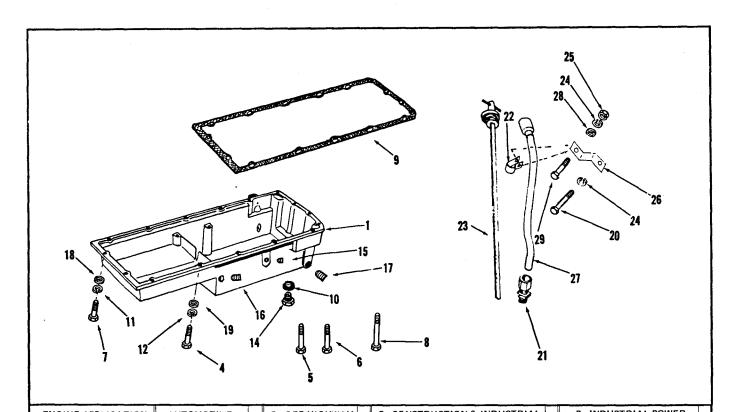


ENGINE APPLI	CATION AUTOMOTIVE X B-OF	F-HIGHW	AY	C-CONSTRUCTI	ION & INDUSTRIAL X P. INDUSTR	TIAL FOWE	
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF NO.
	GEAR HOUSING				C, P Applications		
	Auto Application				Same as Auto except:		t
168644 S-102-D S-104 S-109	Housing, gear Capscrew, housing to block (3/8"-16 x 3") Capscrew, housing to block (3/8"-16 x 2-1/4") Capscrew, plate to block	1 1 6	1 2 3	171627 172645	Housing, gear (P) Housing, gear (C)  GEAR HOUSING COVER	1	1
S-10 <del>9</del>	(3/8"-16 x 7/8") Capscrew, housing to block	2	4		Auto Application Only		
108707 9089 69562 102957 153807 167993 168649 168650 S-604 175282 551467 S-911-B 551515 S-602	(3/8"-16 x 2-1/2") Capscrew, housing to block (3/8"-16 x 1-1/2") Dowel (Master) Dowel (Master) Dowel (Diamond) Dowel (Diamond) Gasket, compressor support Gasket, plate to block Gasket, gear housing to plate Lockwasher, housing to block (3/8") Lockplate, plate to block Plate, gear housing Plug, pipe (1/8") Seal, oil Washer, plain (13/32")	1 6 6 1 1 1 1 1 1 2 1 1 1 1	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	551161 S-163 551160 153433 550123 S-604 S-607 131449 S-602	Cover, gear housing Capscrew (3/8"-16 x 3-1/4") Cover, drive shaft Gasket, support Gasket Lockwasher (3/8") Lockwasher (3/16") Screw Washer, plain (13/32")	1 4 1 1 4 4 4 4	20 21 22 23 24 25 26 27 28

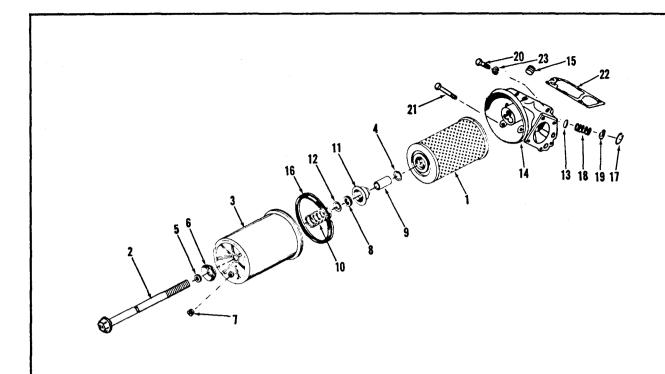


ENGINE APPLICA	ATION	AUTOMOTIVE	ХВ	- OFF-HIGHW	AY	C - CONSTRUCTION & INDUSTRIAL		P - INDUSTRI	AL POWE	R X
PART NUMBER		PART NAME		NO. REQ'D.	REF. NO.	PART NUMBER	PART	NAME	NO. REQ'D.	REF. NO.
	LUBF	RICATING OIL P	UMP				MOUNTING PAR	TS		
AR-60098 AR-60089 68586 175805 S-107 S-155-A S-109 AR-60092 68586 178283 187012	Pump Body Bushi Cap, Capso (5/16 Capso (5/16 Capso (3/8" Cover Bushi Gaske	by-pass spring crew, cover to bod' "-18 x 3/4") crew, cover to bod' "-18 x 2-1/2") crew, regulator '-16 x 7/8") r and bushing (181 ing et, cover	y y	1 1 1 1 2 2 2	1 2 3 3 4 5 6 7 8 9 9	ADD: AR-60086 AR-60486 S-117	Capscrew, pump to Capscrew, tube to Capscrew, pump to Capscrew, pump to Capscrew, pump to Lockplate, tube to Lockplate, pump to LUBRICATING OF Front Sump Pan  Same as rear sump  Pump, lubricating Tube, suction Capscrew	pump o block imp o pump to block IL PUMP except:	2 2 1 1 2 3 3	23 24 25 26 27 28
AR-60090 68586 184044 109319 551117 183014 178284 190138 551079 175795 126304 AR-60495	Gear, Bushi Gear, Lock Lock Plung Shaft Shaft Sprin Tube, Yoke	idler drive idler (187013) ing main drive plate, regulator plate, cover to bod ier, pressure regula , drive , idler g, regulator , by-pass , pressure regulato , suction assembly	tor r	1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10 11 12 13 14 15 16 17 18 19 20 21 22	OMIT: 175795	Lockplate, tube to	o block	1	27

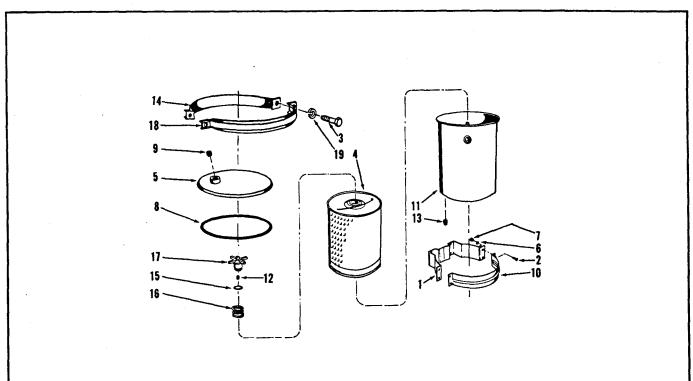




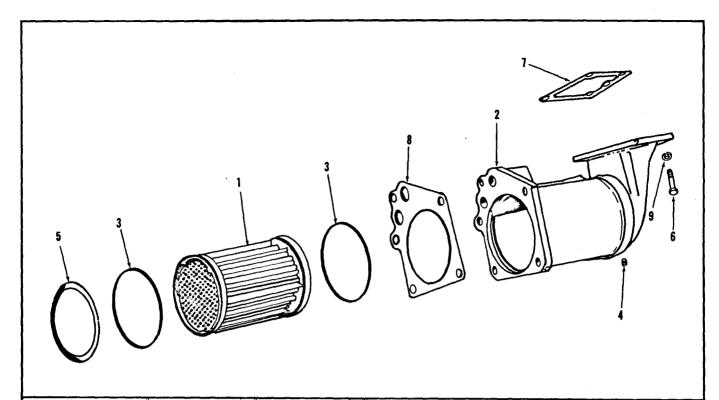
ENGINE APPLIC	APPLICATION AUTOMOTIVE B-OFF-HIGHWA				AY	C - CONSTRUCTION & INDUSTRIAL X P - INDUSTRIAL			L POWE	3
PART NUMBER		PART NAME		NO. REQ'D.	REF.	PART NUMBER	PART N	AME	NO. REQ'D.	REF. NO.
1974 II 185556 185557 S-110 S-103-D S-199-A S-124-C S-119 550389 175727 163087 S-605 S-604 117559 553015 S-911-B S-908 S-915-A S-602 S-626	Pan, c Baffle Capsc Capsc Capsc Capsc Gaske Gaske Lock Lock Lock Plug, Plug, Plug, Plug,	plication  poil e, oil pan crew, baffle crew (3/8"-16 x 1-1, crew (5/16"-18 x 4' crew (5/16"-18 x 1-1, crew (5/16"-18 x 5-1, crew (5/16") et, oil pan et, oil drain washer (5/16") washer (3/8") polate, baffle oil drain pipe pipe	") 1/4")	1 1 4 8 2 2 2 2 1 1 6 0 4 1 1 1 1 0 6	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 6 17 8 19	S-188-C 108707 163759 200064 196900 S-600 S-223 172036 171634 S-602 S-631	Capscrew (1/4"-20 x Capscrew (3/8"-16 x Connector Clamp Dipstick, oil level Lockwasher (1/4") Nut Support, oil gauge to Tube, dipstick Washer, plain Washer, plain (9/32"	1/2") 1 1/2") <b>9023</b> Ø	11111111111	29 20 21 22 23 24 25 26 27 28



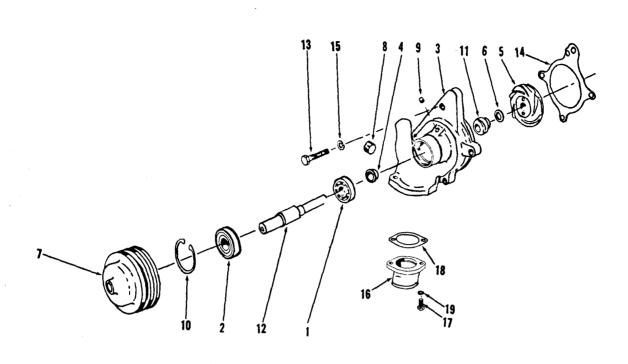
ENGINE APPLIC	CATION	AUTOMOTIVE	ХВ	- OFF-HIGHW	AY	C - CONSTRUCTION	ON & INDUSTRIAL X	P - INDUSTRIA	AL POWE	R X
PART NUMBER		PART NAM	E	NO. REQ'D.	REF. NO.	PART NUMBER	PART N	AME	NO. REQ'D.	REF. NO.
A.D. 00050		ICATING OIL F	ILTER				MOUNTING PAR			
AR-60253 LF-613 551680 551681 551688 551158 551682 553364 551685 551687 551683 551684 200819 175623 S-908 193302 156676 188476 S-689	Cartrio Shell a Bolt, c Can, fi Circlip Gasker Plute Plug, r Seal, b Spacer Spring Suppo Washe Disc, b Head, Plug, r Ring, s Ring, s	issembly, filter center itter t, bolt oipe oolt , cartridge rt, cartridge rt, bolt seal yy-pass filter oipe sealing, head snap disc , by-pass		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 23456789 1011 1231456789 1011 11213 11415 119	108707 S-126 181728 S-604	Capscrew (3/8"-16 Capscrew (3/8"-16 Gasket Lockwasher		5 2 1 7	20 21 22 23



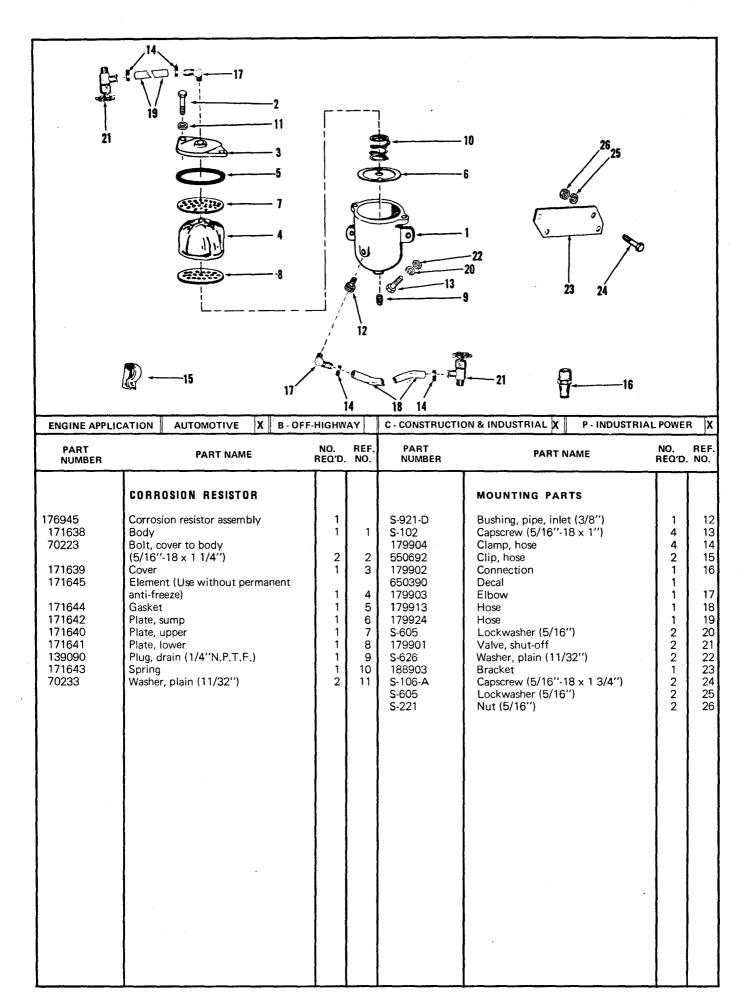
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF NO.
	LUBRICATING OIL BY-PASS FILTER						
159707 145664 70188 70449 LF-500 150038 150039 159667 70189 70194 70299 164159 S-908 145665 252056 157151 131911 S-908 252138 116029 150037 252055	Filter, lubricating oil by-pass Bracket, filter Capscrew, coupling half Capscrew Cartridge Coupling, half with nuts Coupling half, cover Cover Lockwasher, bracket Lockwasher, coupling half Nut, mounting bracket "O" ring, cover Plug, cover Strap, mounting Shell, filter Decal, filter Orifice, plug (no. 6) Plug, drain Support, upper "O" ring, support Spring, hold down Support, upper	1 2 8 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 3 4 14 18 5 6 19 7 8 9 10 11 12 13 15 16 17				

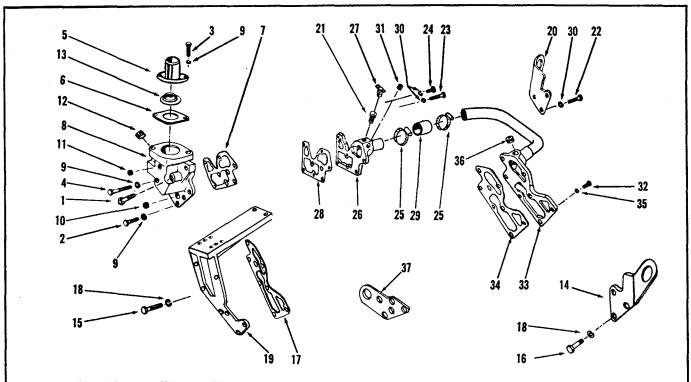


ENGINE APPLIC	ATION	AUT	омот	IVE	х	В-0	OFF-H	IIGHW	AY		C - CONSTRUCTION	ON & INDU	STRIAL X	Р-	INDUSTRIA	L POWE	R X
PART NUMBER			PART	NAME	<b>.</b>		F	NO. REQ'D.	REI NO	F.	PART NUMBER		PART N	AME		NO. REQ'D.	REF. NO.
BM-91604 110848 166401 148293 S-910-B 110827	Cooler Eleme Housir "O" ri Plug, p	ng ing	cating		OOL	ER		1 1 1 2 1		2233							
S-103-D 165153 166407 S-604	Capscr Gasket	rew, mo t, housi t, coole vasher	ounting	g block				9 1 1 9	67	, 1							

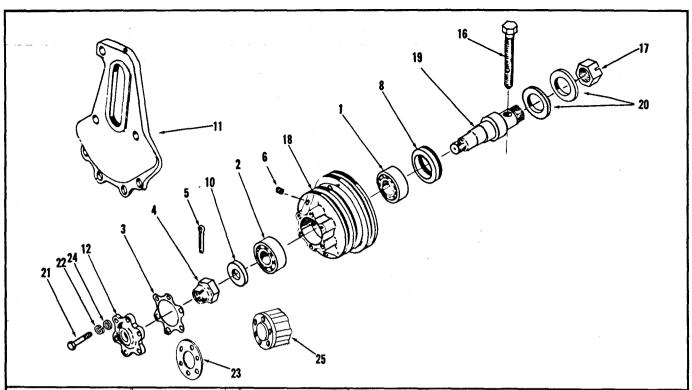


ENGINE APPLIC	ATION AUTOMOTIVE X B-OFF	HIGHW	AY	C - CONSTRUCTI	ON & INDUSTRIAL X P · INDUSTRI	AL POWE	R X
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D	REF. NO.
#K-6/240 AR-60679 552337 552332 107776 BM-96156 200509 170783 S-915-A S-911-B 160586 170895 552334	WATER PUMP  Pump, water Bearing, ball Bearing, ball J 77594 Body, water pump ARLIX 37 Flinger, water pump (553 725 Impeller, water pump (200515) Seal, seat Pulley, water pump 553093 Plug, pipe (3/4") Plug, pipe Plug, pipe (1/8") Ring, retaining Seal, water pump Shaft, water pump 553090  MOUNTING PARTS	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 3 4 5 6 7 8 9 10 11 12	AR-60698 552335 552377 BM-96156 170895 169042 107776 68270 S-112 9221 S-604	WATER PUMP REPAIR KIT  Kit, water pump repair Bearing, ball Bearing, ball Impeller, water pump Seal, water pump Gasket, water pump mounting Flinger, water pump  WATER INLET CONNECTION  Connection, water Capscrew, connection Gasket, connection Lockwasher	1 1 1 1 1 2 1 2	1 2 5 11 14 4 16 17 18 19
108707 169042 S-604	Capscrew, water pump to block Gasket, water pump to block Lockwasher (3/8")	4 1 4	13 14 15				

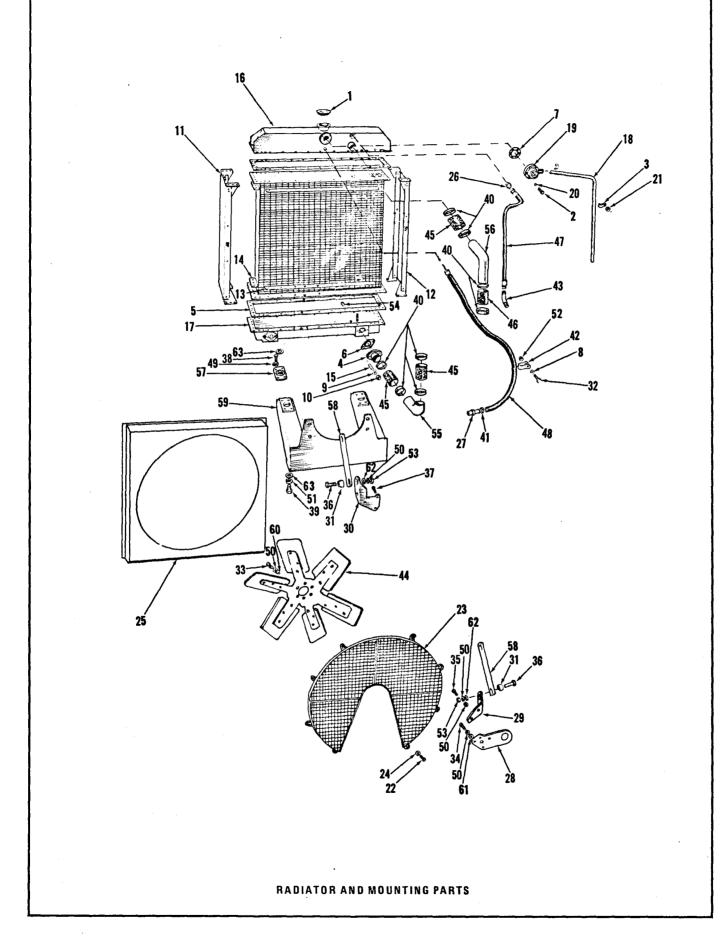




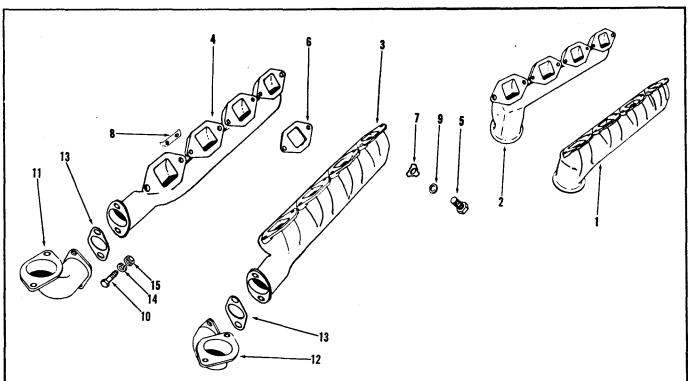
ENGINE APPLI	CATION	AUTOMOTIVE	х	B-OFF-	HIGHW	ΑY	C - CONSTRUCTI	ON & INDUSTRIAL X P - INDU	STRIAL	POWE	R X
PART NUMBER		PART NAME	E		NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME		NO. REQ'D.	REF. NO.
	THER	MOSTAT HOUSI	N G					P Application			
S-102-D S-103-D S-112 S-199-A 172031	Capscr Capscr Capscr Capscr Capscr	T BANK FRONT C Application rew, housing (3/8"- rew, housing rew, connection rew, housing (3/8"- ction, water outlet	-16 x 4	Ť	1 5 2 1	1 2 3 4 5	S-103-D 157290 S-604 172017	Capscrew (3/8"-16 x 1 1/4") Gasket Lockwasher (3/8") Support, alternator bracket  RIGHT BANK REAR All Applications		7 1 7 1	15 7 18 19
140329 157290 172032 S-604 S-908 S-911-B S-915-A	Gasket Gasket Housir Lockw Plug, p Plug, p Plug, p Therm	t, connection t, housing to head ng, thermostat vasher (3/8") pipe (3/8") pipe (1/8") pipe (1/2")			1 1 1 7 1 1 2 1	6 7 8 9 10 11 12 13	168919 S-929-B S-103-D S-104 S-112 550547 BM-96631 S-962-E 157290 178804 S-604 S-908	Bracket, lifting Bushing Capscrew (3/8"-16 x 1 1/4") Capscrew (3/8"-16 x 2 1/4") Capscrew (3/8"-16 x 1") Clamp, hose Crossover, water Drain cock Gasket, crossover Hose Lockwasher (3/8") Plug, pipe (3/8")		1 1 4 1 9 2 1 1 2 1 14 2	20 21 22 23 24 25 26 27 28 29 30 31
ADD: 160216 650864 OMIT:	Bracke	ction, water outlet et, lifting			1	5 37	S-112 BM-96630 157290 S-604 S-908	LEFT BANK REAR Auto, C Applications Capscrew, crossover (3/8"-16 Crossover, water Gasket, crossover Lockwasher (3/8") Plug, pipe (3/8")	5 × 1′′)	7 1 1 7	32 33 34 35 36
172031	LEFT	ction, water outlet  BANK FRONT  C Application	i .		1	5	ADD:	P Applications Same as above except:			
168919 S-103-D 108707 157290	Bracke Capscr Capscr	et, lifting ew, plate to head ew, bracket t, plate to head			1 4 3 1	14 15 16 17	650864 S-103-D	Bracket, lifting (L.B.) Capscrew, lifting bracket		1 4	37 32
S-604 172017	Lockw	rt, plate to flead vasher (3/8'') rt, alternator brack	<et< td=""><td></td><td>4</td><td>18 19</td><td>S-112</td><td>Capscrew (3/8"-16 x 1")</td><td></td><td>4</td><td>32</td></et<>		4	18 19	S-112	Capscrew (3/8"-16 x 1")		4	32



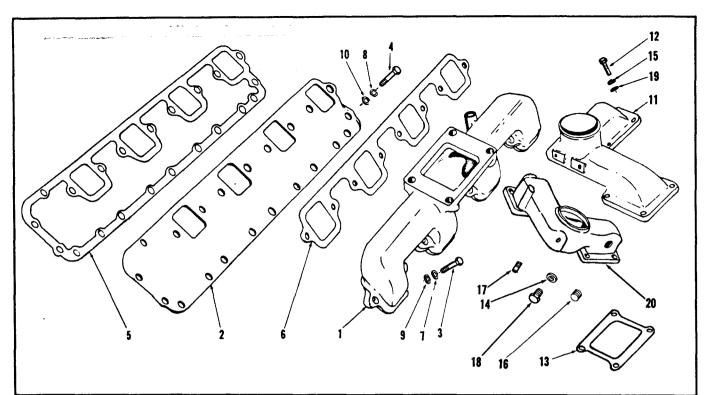
ENGINE APPLI	CATION AUTOMOTIVE X B.OFF	-HIGHW	AY	C - CONSTRUCTION & INDUSTRIAL X P - INDUSTR		TRIAL POWER
PART NUMBER	PART NAME	NO. REQ′D.	REF. NO.	PART NUMBER	PART NAME	NO. RE REQ'D. NO
S-117 S-604	STANDARD FAN MOUNT  Capscrew, fan to crankshaft Lockwasher, fan to crankshaft  HIGH FAN MOUNT	66		178685 108707 S-604 119221 S-602	MOUNTING PARTS  Belt Capscrew, fan mounting Lockwasher Spacer, fan Washer, plain	6 6 6 1 15
BM-94480 143116 116759 143108 146650 67532 S-510 173223 S-911-B 106276 146647 146651 67526 182697 147209 182706	Auto, C Application  Hub, fan Bearing, tapered roller Bearing, tapered roller Gasket Locknut, slotted Locknut, Marsden Pin, cotter Pulley, fan hub Plug, pipe Seal, oil Shaft, fan hub Washer, clamp Washer, clamp Bracket, camshaft cover and fan Pilot, fan Screw, adjusting	1 1 1 1 1 1 2 1 1 2 1 1	1 2 3 4 17 5 18 6 8 19 10 20 11 12 16	ADD: S-141 152237 67012-1 70540  OMIT: 108707 147209	P Application  Same as above except:  Capscrew, fan mounting Pilot, fan Spacer, fan Spacer, fan Capscrew Pilot fan	6 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1



ENGINE APPLIC	ATION AUTOMOTIVE B.OF	F-HIGHW	AY	C - CONSTRUCTIO	DN & INDUSTRIAL P - INDUSTRIA	L POWE	R X
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.
AR-73455 650399 650980 132049 650987 650981 650982 650985 650983 S-205 650991 650992 650994 650995 70768 650989 650984 650993 120684 S-600 S-115-C S-167-A 650406 S-600 650404 S-691	RADIATOR  P Application Only  Radiator and shroud Radiator assembly Cap, radiator filler Capscrew, relief valve Clamp, overflow tube Connection Gasket, core to plate Gasket, cole to plate Gasket, relief valve Lockwasher (1/4" shakeproof) Lockwasher (3/8" shakeproof) Nut, water connection Panel, side (L.H.) Panel, side (R.H.) Plate, stiffening (long) Plate, stiffening (short) Stud, water connection Tank, top subassembly Tank, bottom subassembly Tube, overflow Valve, relief Valve, relief inlet pipe Washer, relief inlet pipe Washer, relief valve Lockwasher (1/4") Capscrew Capscrew, fan guard mounting Guard, fan Lockwasher, fan guard Shroud, fan Washer, toothlock	1 1 1 6 2 1 2 2 2 2 4 4 1 1 1 1 1 6 2 8 8 1 8 1 8	1 2 3 4 5 6 7 8 9 10 11 1 12 13 14 15 16 17 18 19 20 1 22 23 4 25	S-141 S-120 108707 S-165 S-103-D S-115-C S-144 43828-D 43828-A 67949 116936 <del>651069</del> LSICV 4 69972 110980 AS0502660SS 138381 S-600 S-604 S-604 S-603 S-270 S-205 S-908	Adapter, thermostat to radiator Adapter, radiator to water pump Bracket, engine lifting Bracket, engine lift and support Bush, radiator stay Capscrew, clip Capscrew, fan Capscrew, rod support to left bracket Capscrew, lifting bracket Capscrew, radiator stay mounting Capscrew, radiator base mounting Capscrew, radiator base mounting Clamp, hose radiator to pump Clip, hose Elbow, thermostat to radiator Fan Hose, radiator to water pump Hose, water pump Hose, water pump Lockwasher (1/4") Lockwasher (1/4") Lockwasher (5/8") Nut, clip Nut, radiator stay mounting Plug, radiator to water pump Pipe, thermostat housing to head Rubber, radiator Support, front engine Washer, plain, fan Washer, plain, fan Washer, plain, radiator base mounting	11111416 22438282211311194214111221638 4	26 27 28 29 30 31 32 33 34 43 53 53 63 77 88 40 41 42 43 44 45 51 52 53 54 55 56 57 58 59 60 61 62 62 62 63 63 63 63 63 63 63 63 63 63 63 63 63

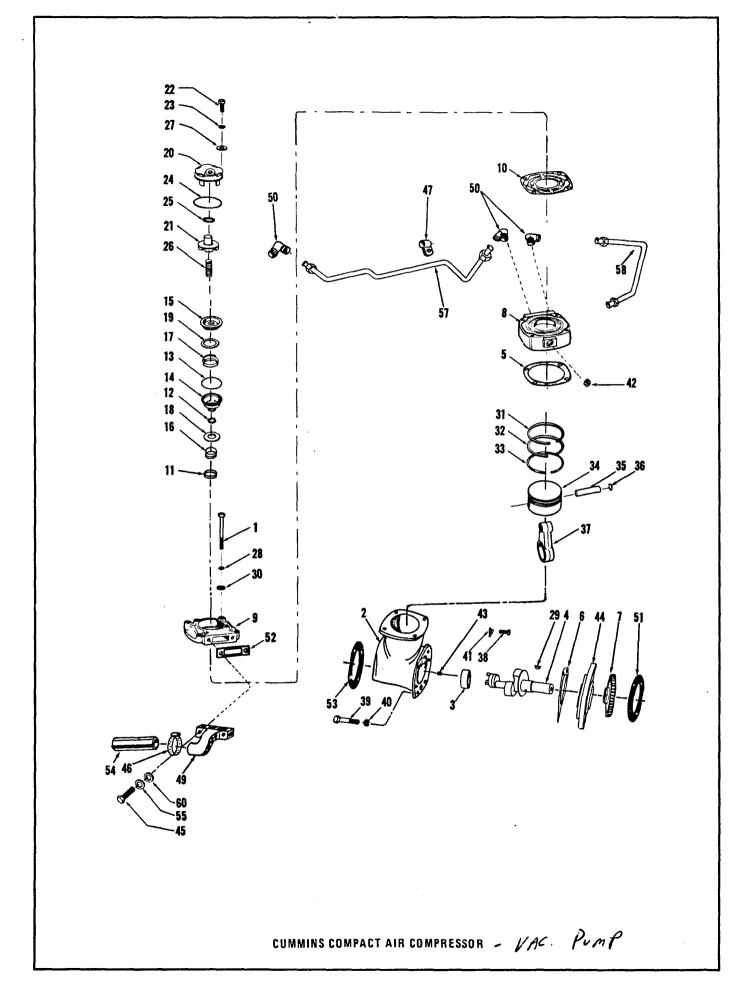


ENGINE APPLI	CATION	AUTOMOTIVE	X B-OFF	-HIGHW	AY	C - CONSTRUCTION	ON & INDUSTRIAL X	P - INDUSTRIA	L POWE	R j
PART NUMBER		PART NAME		NO. REQ'D.	REF. NO.	PART NUMBER	PART	NAME	NO. REQ'D.	REF NO.
	EXHA	UST MANIFOLD								
161488 161489 173139 173140	Manifo Manifo Manifo	old, exhaust L.B. ( bld, exhaust R.B. bld, exhaust R.B. bld, exhaust R.B. bld, exhaust L.B. ( ITING PARTS	(Auto) (C and P)	1 1 1	1 2 3 4					
	Auto,	C Application								
S-172-B 168003 550720 551108 S-602		late		16 8 4 6 4	5 6 7 8 9					
	P Appl	lication								
	Same a	as above except:								
ADD: 108707 650133 650134 168004 S-604 S-254	Elbow, Elbow, Gasket	ew (3/8"-16 x 1-1, , exhaust (L.B.) , exhaust (R.B.) t, elbow to manifo asher (3/8")		4 1 1 2 4 4	10 11 12 13 14 15					
						-				



ENGINE APPLIC	ATION AUTOMOTIVE X B.OFF	HIGHW	AY	C - CONSTRUCTION	ON & INDUSTRIAL X P - INDUSTRIA	L POWE	R X
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D	REF. NO.
168067 159267	AIR INTAKE MANIFOLD  Manifold, air intake Plate, push rod cover  MOUNTING PARTS	2 2	1 2	168076	CONNECTION, AIR CROSSOVER  Connection, air crossover  MOUNTING PARTS	1	11
S-102 S-174-B S-110 157015 156996 S-604 S-605 108976 S-626	Capscrew, plate to block (Auto,C) Capscrew, manifold to plate Capscrew, plate to block Gasket, plate Gasket, intake manifold Lockwasher, manifold Lockwasher, plate Washer, plain, manifold Washer, plain, manifold	2 16 24 2 2 16 26 16 26	3 4 5 6 7 8 9 10	S-103-D 168069 66292 S-604 S-911-B S-932-B 66030 S-602	Auto Application  Capscrew, connection Gasket, connection Gasket, plug Lockwasher Plug, pipe Nipple Plug Washer, plain  C, P Application  Same as above except:	8 2 2 8 1 1 2 8	12 13 14 15 16 17 18 19
				<b>OMIT</b> : S-932-B	Nipple	1	17
					AUTOMOTIVE OPTIONAL		
				176538	Connection, air crossover	1	20

PAGE INTERNAL USE ONLY REVISED ISSUED 5-73 FIG. 2 VARIUM FEETES



GROUP, 12.03

PAGE 5

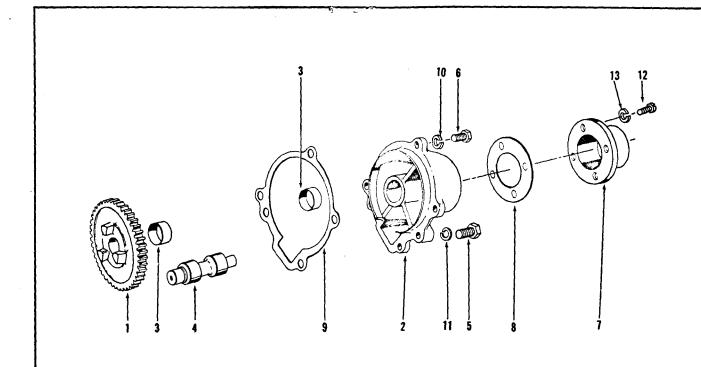
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VACUUM PUMPS

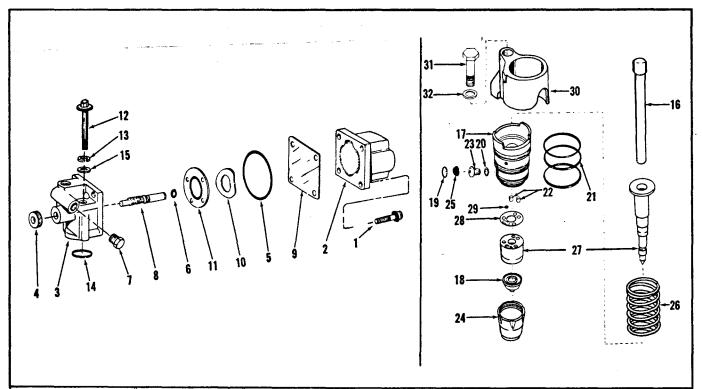
REVISED

PART NUMBER	PART NAME	NO. REQ.	FIG. NO.	REF. NO.	/	PART NUNGER	PART NAME	NO. REQ.	FIG. NO.	REF. NO.
	Group E (Cont'd.)						Group F (Cont'd.)			
AR 03193	Hand,	1 /				110859	Ring, snap	2	2	30
1.00	Cover, head 191846	1/	2	9	-	17002 <b>3</b>	Rod, connecting	1	2	34
154883	Golfet, covar		2	10		S-220 <b>3</b> S-62 <b>8</b>	Screw, nameplate Washer	6		
179122 103012	Head Ind. Isolang	1	2 2	12 11		3-020	Avasilei	7	2	25
121013	"C" ring	1	2	14	l				İ	
120005 120035	"O" ring	1	2	15	J			1		
183429	Plate, wear	1			1					
100010	Screw, socket	1	2	17						
145023	Sout, Injeke velve	1	2	19	- 1					1
144714	Sast Amaust ve ve	1	2	10						İ
12U810 199834	Sylvia Carinj	1	2 2	21	١			1	1	
144943	Valve, intake		12	23					i	ì
127240	Valva, exhaust		2	22	ı					
61623	Washer	1	2 2	24						ļ
/		İ								
AR-7365	Group F				- 1				1	1
1117/2003     <del>417-047</del> 80	Pump, vacuum	1			- 1					
103707	Capterew	4	2	1	- 1					
164331	Capacitaw, nylok	2	1	'						
176050	Crankshaft	1 1	2	4						
173027	Gasket	1	2	6	ĺ			1		-
178034	Gear, drive	1	2	7	١			1		]
103095	Key, crankshaft	1	1		ı			1		İ
170059	Lockplate	2		_	- 1			1	İ	
S-935-E	Plug, pipe	1	2	17	ı					
170029 S-002	Support Washer	1 2	2	25	- 1					
AR-03981	Crankcase, vacuum pump				ļ			1		
S-147-B	Capscrew	4	2	8	l	•	1			
176023	Crankcase	i	2	2	- 1					
154018	Garlant	1	2	5	- 1					
BM-carca		1	1		l		‡			
161843	Cover, head	1	2	9						
154903	Gasket	1	2	10	1				1	
179122	Head	1	2	12	ı					
100012 123035	Mut, lock "O" ring	1	2 2	11 14	- 1		1		1	
120003	"O" ring	1	2	15						
183429	Plate, wear	1	-	'						
100019	Screw, socket	1	2	17	ļ			1	ļ	1
144714	Scat, exhaust valve	1	2	10	- 1					
145023	Suat, intake valve	1	2	13						1
<ul> <li>■ 1288000</li> <li>■ 100004</li> </ul>	Spring, exhaust valve	1	2	23	Ì			1		1
190334	Spring, intake valve	1	2	21	- 1				1	
127940 144043	Valve, exhaust Valve, intake	1	2 .	<b>22</b> 23	-					
01023	Mostal, copper	1	2	23	1			1		
S-605	Lockwasher	4	2	13				1.		
133403	Nameplate	i	-		-			T		
100007	Marria in te	1			- 1					
110310	P.n., piscen	1	2	20	1		1	į		
165450	Piston	1 1	2	28	1		(			[
19 1310	Riog, top	1	2	31	ı					
18750 0 180810	Ring, compression Ring, oil	1 1	2 2	32 33	ı			1		
100010	111.73, 011	'	12	33	ı				l	1 1

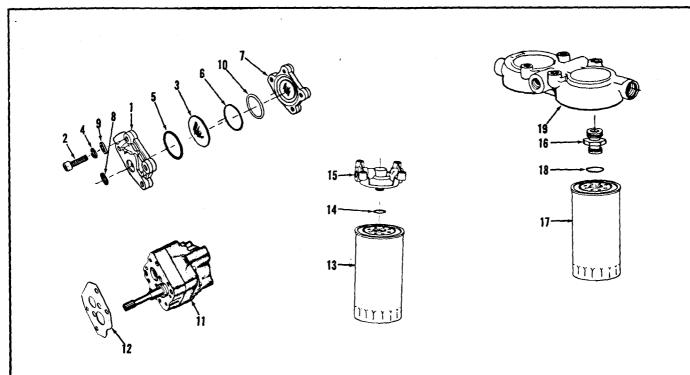
AR-73659 SH-73650 SH-73582 S-155-A BM-98685 147610 176030 154018 176027 187639 AR-03926 179122 153964 154996 183429 AR-73075 128085 128086 144714 145028 128080 190334 127940 144948	Compressor, air Capscrew, head to crankcase Crankcase, compressor (176025) Bushing, crankcase Crankshaft, compressor Gasket, head to crankcase Gasket, support Gear, compressor drive Head assembly Head, air compressor Cover, air compressor head Gasket Wearplate Intake and exhaust valve assembly "O" ring "O" ring Seat, exhaust valve Spring, exhaust valve Spring, exhaust valve	Pin P  1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 3 4 5 6 7 8 9 10 11 12 13	S-111 550788 108722 S-1002-A 194410 (160%) S-1005-A 167993 157911 200817 177217 S-605 S-920 186226 189999	Elbow, flexible hose Gasket, support Gasket, air connection Gasket, fuel pump to compressor Hose Lockwasher Pipe, nipple Tube, water inlet	2 2 1 1 1 3 1 1 1 1 2 1 1 1	45 46 47 48 49 50 51 52 53 54 55
AR-73582 S-155-A BM-98685 147610 176030 154018 176027 187639 AR-03926 179122 153964 154996 183429 AR-73075 128085 128085 144714 145028 128080 190334 127940 144948	Compressor, air Capscrew, head to crankcase Crankcase, compressor (176025) Bushing, crankcase Crankshaft, compressor Gasket, head to crankcase Gasket, support Gear, compressor drive Head assembly Head, air compressor Cover, air compressor head Gasket Wearplate Intake and exhaust valve assembly "O" ring Seat, exhaust valve Seat, intake valve Spring, exhaust valve	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 3 4 5 6 7 8 9 10 11	550788 108722 S-1002-A 194410 (760%) S-1005-A 167993 157911 200817 177217 S-605 S-920 186226 189999	Capscrew, air connection Clamp, hose Clamp, hose Connector, flexible hose Connection, air Elbow, flexible hose Gasket, support Gasket, air connection Gasket, fuel pump to compressor Hose Lockwasher Pipe, nipple Tube, water inlet	2 1 1 1 3 1 1 1 1 2	46 47 48 49 50 51 52 53 54 55
R-73582 S-155-A BM-98685 147610 176030 154018 176027 187639 AR-03926 179122 153964 154996 183429 AR-73075 128085 128085 144714 145028 128080 190334 127940 144948	Capscrew, head to crankcase Crankcase, compressor (176025) Bushing, crankcase Crankshaft, compressor Gasket, head to crankcase Gasket, support Gear, compressor drive Head assembly Head, air compressor Cover, air compressor head Gasket Wearplate Intake and exhaust valve assembly "O" ring "O" ring Seat, exhaust valve Seat, intake valve Spring, exhaust valve	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 3 4 5 6 7 8 9 10 11	550788 108722 S-1002-A 194410 (760%) S-1005-A 167993 157911 200817 177217 S-605 S-920 186226 189999	Clamp, hose Clamp, hose Clamp, hose Connector, flexible hose Connection, air Elbow, flexible hose Gasket, support Gasket, air connection Gasket, fuel pump to compressor Hose Lockwasher Pipe, nipple Tube, water inlet	2 1 1 1 3 1 1 1 1 2	46 47 48 49 50 51 52 53 54
BM-98685 147610 176030 154018 176027 187639 AR-03926 179122 153964 154996 183429 AR-73075 128085 128086 144714 145028 128080 190334 127940 144948	Crankcase, compressor (176025) Bushing, crankcase Crankshaft, compressor Gasket, head to crankcase Gasket, support Gear, compressor drive Head assembly Head, air compressor Cover, air compressor head Gasket Wearplate Intake and exhaust valve assembly "O" ring "O" ring Seat, exhaust valve Seat, intake valve Spring, exhaust valve	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 3 4 5 6 7 8 9 10 11	108722 S-1002-A -194410-1760% S-1005-A 167993 157911 200817 177217 S-605 S-920 186226 189999	Clamp, hose Connector, flexible hose Connection, air Elbow, flexible hose Gasket, support Gasket, air connection Gasket, fuel pump to compressor Hose Lockwasher Pipe, nipple Tube, water inlet	1 1 1 3 1 1 1 1 2	47 48 49 50 51 52 53 54
147610 176030 154018 176027 187639 AR-03926 179122 153964 154996 183429 AR-73075 128085 128086 144714 145028 128080 190334 127940 144948	Bushing, crankcase Crankshaft, compressor Gasket, head to crankcase Gasket, support Gear, compressor drive Head assembly Head, air compressor Cover, air compressor head Gasket Wearplate Intake and exhaust valve assembly "O" ring "O" ring Seat, exhaust valve Seat, intake valve Spring, exhaust valve	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 4 5 6 7 8 9 10 11	S-1002-A 194410-1760% S-1005-A 167993 157911 200817 177217 S-605 S-920 186226 189999	Connector, flexible hose Connection, air Elbow, flexible hose Gasket, support Gasket, air connection Gasket, fuel pump to compressor Hose Lockwasher Pipe, nipple Tube, water inlet	1 1 3 1 1 1 1 1 2	48 49 50 51 52 53 54 55
176030 154018 176027 187639 AR-03926 179122 153964 154996 183429 AR-73075 128085 128085 144714 145028 128080 190334 127940 144948	Crankshaft, compressor Gasket, head to crankcase Gasket, support Gear, compressor drive Head assembly Head, air compressor Cover, air compressor head Gasket Wearplate Intake and exhaust valve assembly "O" ring "O" ring Seat, exhaust valve Seat, intake valve Spring, exhaust valve	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4 5 6 7 8 9 10 11	194410 1760% S-1005-A 167993 157911 200817 177217 S-605 S-920 186226 189999	Connection, air Elbow, flexible hose Gasket, support Gasket, air connection Gasket, fuel pump to compressor Hose Lockwasher Pipe, nipple Tube, water inlet	1 3 1 1 1 1 2	50 51 52 53 54 55
154018 176027 187639 AR-03926 179122 153964 154996 183429 AR-73075 128085 128086 144714 145028 128080 190334 127940 144948	Gasket, head to crankcase Gasket, support Gear, compressor drive Head assembly Head, air compressor Cover, air compressor head Gasket Wearplate Intake and exhaust valve assembly "O" ring "O" ring Seat, exhaust valve Seat, intake valve Spring, exhaust valve	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5 6 7 8 9 10 11	S-1005-A 167993 157911 200817 177217 S-605 S-920 186226 189999	Elbow, flexible hose Gasket, support Gasket, air connection Gasket, fuel pump to compressor Hose Lockwasher Pipe, nipple Tube, water inlet	3 1 1 1 1 2 1	50 52 53 54 54 55
176027 187639 AR-03926 179122 153964 154996 183429 AR-73075 128085 128086 144714 145028 128080 190334 127940 144948	Gasket, support Gear, compressor drive Head assembly Head, air compressor Cover, air compressor head Gasket Wearplate Intake and exhaust valve assembly "O" ring "O" ring Seat, exhaust valve Seat, intake valve Spring, exhaust valve	1 1 1 1 1 1 1 1 1 1 1 1	6 7 8 9 10 11	167993 157911 200817 177217 S-605 S-920 186226 189999	Gasket, support Gasket, air connection Gasket, fuel pump to compressor Hose Lockwasher Pipe, nipple Tube, water inlet	1 1 1 1 2 1	5 5 5 5
187639 AR-03926 179122 153964 154996 183429 AR-73075 128085 128086 144714 145028 128080 190334 127940 144948	Gear, compressor drive Head assembly Head, air compressor Cover, air compressor head Gasket Wearplate Intake and exhaust valve assembly "O" ring "O" ring Seat, exhaust valve Seat, intake valve Spring, exhaust valve	1 1 1 1 1 1 1 1 1 1	7 8 9 10 11	157911 200817 177217 S-605 S-920 186226 189999	Gasket, air connection Gasket, fuel pump to compressor Hose Lockwasher Pipe, nipple Tube, water inlet	1 1 1 2 1	5 5 5 5
AR-03926 179122 153964 154996 183429 AR-73075 128085 128086 144714 145028 128080 190334 127940 144948	Head assembly Head, air compressor Cover, air compressor head Gasket Wearplate Intake and exhaust valve assembly "O" ring "O" ring Seat, exhaust valve Seat, intake valve Spring, exhaust valve	1 1 1 1 1 1 1 1 1 1	8 9 10 11	200817 177217 S-605 S-920 186226 189999	Gasket, fuel pump to compressor Hose Lockwasher Pipe, nipple Tube, water inlet	1 1 2 1	5: 5: 5!
179122 153964 154996 183429 AR-73075 128085 128086 144714 145028 128080 190334 127940 144948	Head, air compressor Cover, air compressor head Gasket Wearplate Intake and exhaust valve assembly "O" ring "O" ring Seat, exhaust valve Seat, intake valve Spring, exhaust valve	1 1 1 1 1 1 1 1 1	9 10 11	177217 S-605 S-920 186226 189999	Hose Lockwasher Pipe, nipple Tube, water inlet	1 2 1	5 <sub>4</sub> 5!
153964 154996 183429 AR-73075 128085 128086 144714 145028 128080 190334 127940 144948	Cover, air compressor head Gasket Wearplate Intake and exhaust valve assembly "O" ring "O" ring Seat, exhaust valve Seat, intake valve Spring, exhaust valve	1 1 1 1 1	9 10 11	S-605 S-920 186226 189999	Lockwasher Pipe, nipple Tube, water inlet	2	5
154996 183429 AR-73075 128085 128086 144714 145028 128080 190334 127940 144948	Gasket Wearplate Intake and exhaust valve assembly "O" ring "O" ring Seat, exhaust valve Seat, intake valve Spring, exhaust valve	1 1 1 1 1 1	10 11 12	S-920 186226 189999	Pipe, nipple Tube, water inlet	1	
183429 AR-73075 128085 128086 144714 145028 128080 190334 127940 144948	Wearplate Intake and exhaust valve assembly "O" ring "O" ring Seat, exhaust valve Seat, intake valve Spring, exhaust valve	1 1 1 1	11 12	186226 189999	Tube, water inlet		
AR-73075 128085 128086 144714 145028 128080 190334 127940 144948	Intake and exhaust valve assembly "O" ring "O" ring Seat, exhaust valve Seat, intake valve Spring, exhaust valve	1 1 1 1 1	12	189999	•		5
128085 128086 144714 145028 128080 190334 127940 144948	"O" ring "O" ring Seat, exhaust valve Seat, intake valve Spring, exhaust valve	1 1 1 1			Tube, water outlet	1 1	5
128086 144714 145028 128080 190334 127940 144948	"O" ring Seat, exhaust valve Seat, intake valve Spring, exhaust valve	1 1			Tee, pipe	l i	59
144714 145028 128080 190334 127940 144948	Seat, exhaust valve Seat, intake valve Spring, exhaust valve	1 1		126876 S-626	Washer, plain	1 2	6
145028 128080 190334 127940 144948	Seat, intake valve Spring, exhaust valve		14	3-020	vvasiter, plain	'	ا ا
128080 190334 127940 144948	Spring, exhaust valve	1 1	15				l
190334 127940 144948		i	16				l
127940 144948	Spring, intake valve	1 1	17			1	1
144948	Valve, exhaust	lil	18				1
	Valve, intake	lil	19				1
AR-73076	Unloading valve assembly	1 1					l
153966	Body, unloader valve /6/846	1 1	20			1	1
191037	Cap, unloader	1 1	21			1	1
S-115	Capscrew	2	22	ĺ			1
S-605	Lockwasher	2	23	j			•
128086	"O" ring	1 1	24				l
127936	Seal, plunger	1 1	25			ı	1
150631	Spring, unloader valve	1	26				1
109557	Washer	2	27			1	1
S-605	Lockwasher, head to crankcase	4	28			- 1	1
S-316	Key	1	29			- 1	1
136403	Nameplate, serial number	1 1				1	l
-2267	Screw, nameplate	2		i			1
5-626	Washer, plain	4	30		:	ı	ı
AR-04130	Ring set, compressor (Std.)	1 1					ŀ
194810	Ring, compression	1 1	31	İ			Ì
187350	Ring, compression	1 1	32				1
180810	Ring, oil	1 !	33				1
3M-77410	Piston assembly (Std.)	1.	04				1
165430	Piston, air compressor		34	<u> </u>		ı	
119810 119859	Pin, piston	1 2	35				1
76023	Ring, snap Rod, connecting	2	36 37				
70023 G-112	Capscrew	1 4	38			-	l
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50720	Lockplate		41				
-915-A	Plug, pipe	1 1	41			l	
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50187	Support		43			1	ĺ
50792	Plug, pipe (Crankshaft)	1 1	77	<b>[</b>		1	
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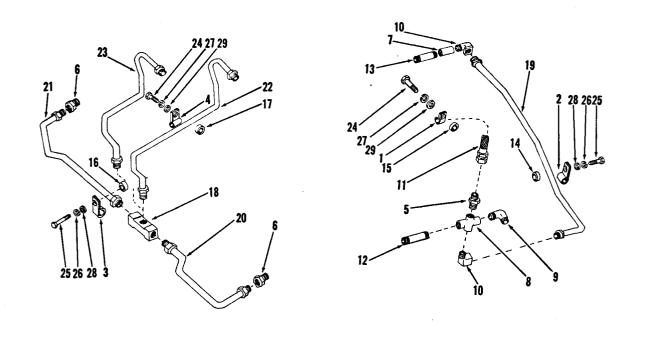
ENGINE APPLIC	CATION	AUTOMOTIVE	B-OFF	-HIGHW	AY	C - CONSTRUCTION & INDUSTRIAL		P - INDUSTRIAI	POWE	R X
PART NUMBER		PART NAME	·	NO. REQ'D.	REF. NO.	PART NUMBER	PART NA	<b>∤</b> ME	NO. REQ'D	REF. NO.
BM-93760 177097 BM-93759 147610 171636	Drive, fue Gear, driv	/e drive (171635) shaft		1 1 2 1	1 2 3 4	S-105-A S-105 551160 550123 153433 S-604 S-610 S-1326 S-607	Capscrew, drive Capscrew, drive Cover, drive shaft Gasket, cover Gasket, support Lockwasher, drive Lockwasher, drive Screw, cover Lockwasher	· S	2 1 1 1 2 2 4 4	5 6 7 8 9 101 112 13



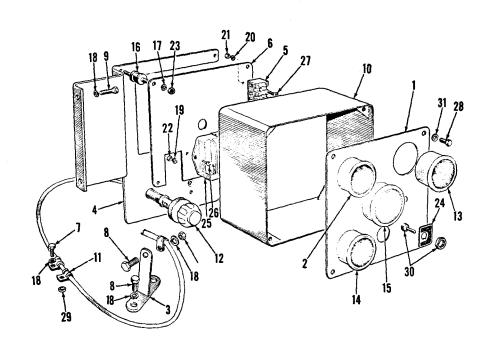
ENGINE APPLIC	ENGINE APPLICATION AUTOMOTIVE X B-OF			C - CONSTRUCTION	ON & INDUSTRIAL X P. INDUSTRIA	P · INDUSTRIAL POWER	
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.
	Valve, shutdown (12V, 1 pole) Capscrew, coil to housing Coil assembly Housing, valve Knob, manual override "O" ring, coil to housing "O" ring, shaft Plug, pipe Shaft, manual override Shield, fuel Spring Valve  MOUNTING PARTS  Capscrew, valve to housing Connection (Auto, C) Lockwasher "O" ring Washer, plain Connection (P)  OPTIONAL  Valve, shutdown (24V, 2 pole) Coil assembly Valve, shutdown (12V, 2 pole) Coil assembly Valve, shutdown (24V, 1 pole) Coil assembly			AR-73326 194041 AR-73359 178088 195321 174299 173086 101754 203426 173085 178009 174298 166009 AR-40063 185782 167157 187326 * 189848 * 187858	INJECTOR  Injector PT (Type D) Link, injector (1/2") Injector, less link Adapter, injector Cup, injector (7 x .0055 x 50) Clip, filter screen Gasket, orifice "O" ring adapter Pin, roll Plug, orifice Retainer, cup Screen, filter Spring, injector Barrel and plunger Gasket Ball, check Barrel, injector Plug, barrel		



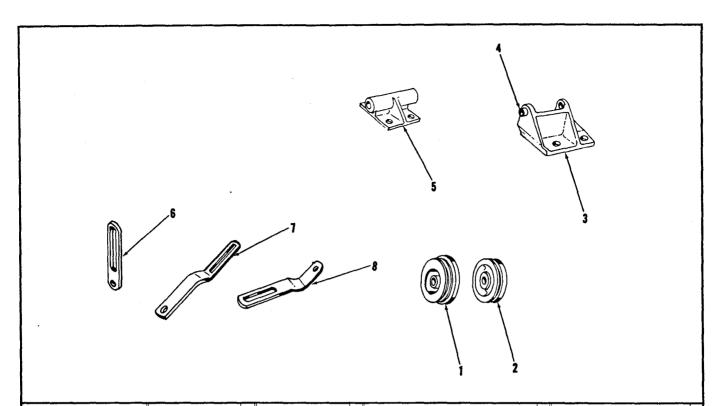
ENGINE APPLICATION AUTOMOTIVE X B-OFF-HIGHW			AY	C - CONSTRUCTION & INDUSTRIAL X P - INDUSTRIAL PC				
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	
PT FUEL SYSTEM  Each Cummins PT Fuel Pump is calibrated to obtain the best performance and fuel economy for your engine. Your Cummins Distributor or Dealer has the special tools required for complete rebuild and calibration. Caution: Do not disturb the fuel pressure settings or the throttle screw settings, as serious damage to your engine may result.  Only PT Fuel System parts which can be replaced without pump calibration are listed here. Your Cummins Distributor will record the specific part number of your complete PT Fuel Pump in				154711 FF-105 255622 142784	FUEL FILTER  Auto Application  Filter, fuel Cartridge Gasket, cover Head  P Application  Filter, fuel	1 1 1	13 14 15	
the fron	t of this catalog.  FUEL PUMP DAMPER			FF-105-D 255622 142784	Cartridge "O" ring, element Head, fuel filter C Application	1 1	13 14 15	
BM-76340 153336 S-170-C 202897 S-600 139988 100099 153338 151900 70704 160514	Damper, fuel pump Body, damper Capscrew Diaphragm Lockwasher "O" ring "O" ring Plate, damper Seal Washer Washer, nylon GEAR PUMP Auto, C Application	1 1 2 1 2 1 1 1 2 1	1 2 3 4 5 6 7 8 9	BM-78793 126516 FF-105-D 255622 135601	Filter, fuel Bolt, center Cartridge "O" ring, element Head, fuel filter	1 2 2 2 1	16 17 18 19	
BM-96327 177764	Pump, gear Gasket  P Application	1 1	11 12					
AR-00936 177764	Pump, gear Gasket	1	11 12					



ENGINE APPLIC	ATION	AUTOMOTIVE	X B-OFF-	HIGHW	AY	C - CONSTRUCT	ION & INDUSTRIAL X P - INDUSTR	IAL POWE	R X
PART NUMBER		PART NAME	· · · · · · · · · · · · · · · · · · ·	NO. REF. REQ'D. NO.		PART NUMBER	PART NAME	NO. REQ'D	REF. NO.
68152 554014 550465 551394 550475 S-1003-1 S-935 175850 43765-A 185347 AS0401860SS AS0402860SS 550291 550610 62087 65297 68368-A 114850 S-1006-1 552184 551212 551213 551217 551215 551797	Clip, Clip, Clip, Clip, Conn Coup Cross Elbov Hose Hose Nippl Space Space Space Space Tube, Tube, Tube,	hose assembly hose ector ector ling -piece v, drain v, crossover (C,P) (Auto) e e er r fuel fuel		1111211111111111111	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 22 22	S-102 S-105 S-604 S-605 S-602 S-626	Capscrew, fuel line clip to push tube cover Capscrew, fuel line clip to camshaft cover Lockwasher Lockwasher Washer, plain Washer, plain	2 22 22 22 2	24 25 26 27 28 29



ENGINE APPLIC	ATION AUTOMOTIVE	B - OFF-HIGHW	AY	C - CONSTRUCT	ION & INDUSTRIAL P - INDUST	P - INDUSTRIAL POWER		
PART NUMBER	PART NAME	NO. REQ'D	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	
650436 68138 701214 109895 650529 650814 650449 650565 S-102 S-102-C S-115 S-117 S-129 650427 550465 108722 187734 162202 S-902 700469 650651 AS0401360SS AS0403760SS 650525 650442 S-600 S-604 S-607 S-636 S-223 S-256 S-259 S-270	Panel, instrument Adapter, hose Ammeter Bracket Bracket, throttle Bracket, instrument case Block, terminal Backplate Capscrew (5/16"-18 x 1") Capscrew (1/4"-28 x 2") Capscrew (3/8"-16 x 3/4") Capscrew (3/8"-16 x 3/4") Capscrew (3/8"-24 x 1") Case, instrument Clip Clamp, hose Control, throttle Connector Coupling, pipe Gauge, water temperature Gauge, oil pressure Hose Hourmeter Isolator, vibration Lockwasher (1/4") Lockwasher (3/8") Lockwasher Lockwasher (5/32") Nut (3/8") Nut Nut Nut (1/4")		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	150348 68368-A 102057 145027 149226 706085 S-930-E 70427 650816 S-168-C 550465 650817 650819 S-600 S-224 650818 650843	Plate, indicator switch Regulator, voltage Screw Screw Screw Shock mounting assembly Spacer Switch, starting Switch, relay Switch, oil pressure Tee, pipe Washer, plain Indicator, restriction assembly Capscrew Clip Flange, adapter Insert Lockwasher Nut Tap, restriction Tubing, nylon Harness, wiring Tube, clip assembly Tube, clip assembly	1 1 2 3 4 1 1 1 1 1 1 4 1 2 2 1 1 2 2 1 A/R 1 8 4	24 25 26 27 28 29 30	



ENGINE APPLIC	CATION AUTOMOTIVE X B-OFF	HIGHW	AY	C - CONSTRUCTION & INDUSTRIAL X P - INDUSTRIAL POWER				
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART N	AME	NO. REQ'D.	REF. NO.
1 <del>50959</del> 157040 AR-02336 AR-02337	Alternator (Auto, P) Alternator (C) Connector, regulator Connector, regulator	1 1		186397 S-106	STARTING MOTO  Auto, P Application  Motor, starting Capscrew, motor		1 3	
156958 164337 176088 191818 145027 102846	Fan and baffle alternator (Auto, P) Pulley alternator (Auto, P) Pulley alternator (C) Regulator Switch, magnetic Switch, ignition	1 1 1 1	1 2	S-608	Lockwasher, motor  C Application  Same as above exce		3	
<del>178473</del> 178471	Belt (Auto, P) Belt (C)	1		114123	Gasket, motor		1	
BM-96737 176365 171299 S-199-B S-103-D S-112 S-112 S-102 S-151 S-604	Bracket and bushing alternator (179078) (Auto, P) Bushing Bracket, alternator (C) Capscrew (Auto, P) Capscrew, alternator bracket Capscrew, alternator bracket (Auto) Capscrew, alternator bracket (C,P) Capscrew, alternator bracket (C,P) Capscrew, adjusting link Capscrew (C) Lockwasher	1 1 1 1 4 5 1 7	3 4 5					
S-610 S-605 163666 182716 182708 S-223 S-217 108515 S-602 146161	Lockwasher (C) Lockwasher Link, adjusting (Auto) Link, adjusting (C) Link, adjusting (P) Nut (Auto, P) Nut (C) Shim, alternator Washer (C,P) Washer (Auto, P)	1 1 1 1 1 1 A/R 1	6 7 8	·				

ENGINE APPLIC	ATION AUTOMOTIVE X B-OF	F-HIGHW	AY	C - CONSTRUCTION & INDUSTRIAL X P - INDUSTRIAL POWER X						
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.			
have be hundred these as wheel, i	FLYWHEELS, RING GEARS and FLYWHEEL HOUSINGS  Flywheels, ring gears and flywheel ho en designed to adapt the Cummins dieds of different installations. For this resemblies are not listed.  Your Cummins Distributor will recording gear and flywheel housing part nursont of this catalog.	esel to reason rd fly-		See from	it cover.					
	GASKET SETS									
AR- <b>601</b> 80 AR- <b>6</b> 0181 BM-68356	Gasket set, cylinder head Gasket set, engine Gasket set, fuel pump	1 1 1								
	·				·					
	·			·						
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BM-91604	Cooler, lub. oil	19	101754	"O" ring	33	143116	Bearing	23
BM-92138	Body, scavenger	13	102057	Switch, starting	36	144714	Seat	31
BM-93759	Housing	32	102846	Switch	37	144948	Valve	31
BM-93760	Drive, fuel pump	32	102957	Dowel	1,11	145027	Switch, magnetic	36,37
BM-94014	Tappet, valve	7	103807	Hose	29	145028	Seat	31
BM-94016	Tappet, injector	7	105312 106276	Elbow	29 23	145664 145665	Bracket, filter	18 18
BM-94480	Hub, fan Tube, oil suction	23 13	106276	Seal, oil Cleaner, air	23 29	146651	Strap, mounting Clamp	23,25
BM-94498 BM-96141	Damper, vibration	3	107091	Strap	29	146647	Shaft, fan hub	23,23
BM-96156	Impeller, water pump	20	107105	Adapter	29	147209	Pilot, fan	23
BM-96200	Piston, assembly	4	107125	Cover	29	147389	Screw, crosshead adj.	9
BM-96327	Pump, gear	34	107126	Gasket	29	147610	Bushing	31,32
BM-96630	Crossover, water	22	107127	Gasket	29	148293	"O" ring	19
BM-96631	Crossover, water	22	107128	Shell	29	148547	Dowel	1
BM-96737	Bracket & bushing	37	107738	Socket	7	149226	Switch, relay	36
BM-96834	Gear and bushing	13	107776	Flinger, water pump	20	150037	Spring Counting half	18 10
BM-98685 BM-99677	Crankcase, compressor		107981 108186	Cap, oil filler Lockwire	10 7	150038 150039	Coupling, half Coupling, half	18 18
BM-99677 BM-99803	Crankshaft Tubo suction	3 13	108187	Lockwire	7	150039	Shock, mounting	36
C0066-IMG	Tube, suction	13	1100107	FOCKANIC	•	1,000-0	Griook, mounting	50