

Parts Ordering for: HS, NS 5 $\frac{1}{8}$ " Bore, 743 Series

Genuine Cummins Parts and service facilities are world-wide. There are more than 2400 Cummins Sales and Service locations in the principal cities of the United States and Canada, and more than 500 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.

2. 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

CUSTOMER SERVICE INFORMATION

This Parts Catalog contains standard parts information for the HS, NS 5 1/8" bore, 743 cubic inch series supercharged engines. On the engine name plate the engine is identified by Engine Model and R.P.M. In this Parts Catalog the engines are identified by aspiration, number of valves per cylinder, and in some instances, engine R.P.M. The following chart provides a cross reference to the various engine models contained in this catalog.

Engine Model	Horse Power	RPM	Head	Engine Model	Horse Power	RPM	Head
HRS	240	1800	2 Valve	NS-743C290	290	2100	4 Valve
HS-743B240	240	1800	2 Valve	NS-743P290	290	2100	4 Valve
HS-743C240	240	1800	2 Valve	NHRS	320	2100	4 Valve
HS-743P240	240	1800	2 Valve	NS-743B320	320	2100	4 Valve
NHS	290	2100	4 Valve	NS-743C320	320	2100	4 Valve
NS-743B290	290	2100	4 Valve	NS-743P320	320	2100	4 Valve

Engine application information is provided on each parts listing page. An "X" appearing in an application box indicates the parts information appearing on the page applicable.

Part numbers appearing in () are for identification purposes only and should not be used when ordering service replacement parts.

The form below is provided for your convenience and when properly filled out, will allow proper identification of your unit and the normal maintenance items. Parts information errors that could cause extended down time could be avoided if the information on this form is referred to when ordering parts from your Cummins Distributor or Dealer.

ALWAYS SPECIFY ENGINE MODEL AND SERIAL NUMBER WHEN ORDERING PARTS FROM THIS CATALOG

Engine Model _____ Engine Serial No. _____

MFG Make _____ Model _____ Chassis No. _____

Fuel Pump Assembly No. _____ Injector No. _____

Belt, Fan _____ Belt, Water Pump _____ Belt, Gen. _____

Element, Fuel Filter _____ Full Flow Lub. Filter _____

Air Cleaner _____ By-Pass Lub. Filter _____

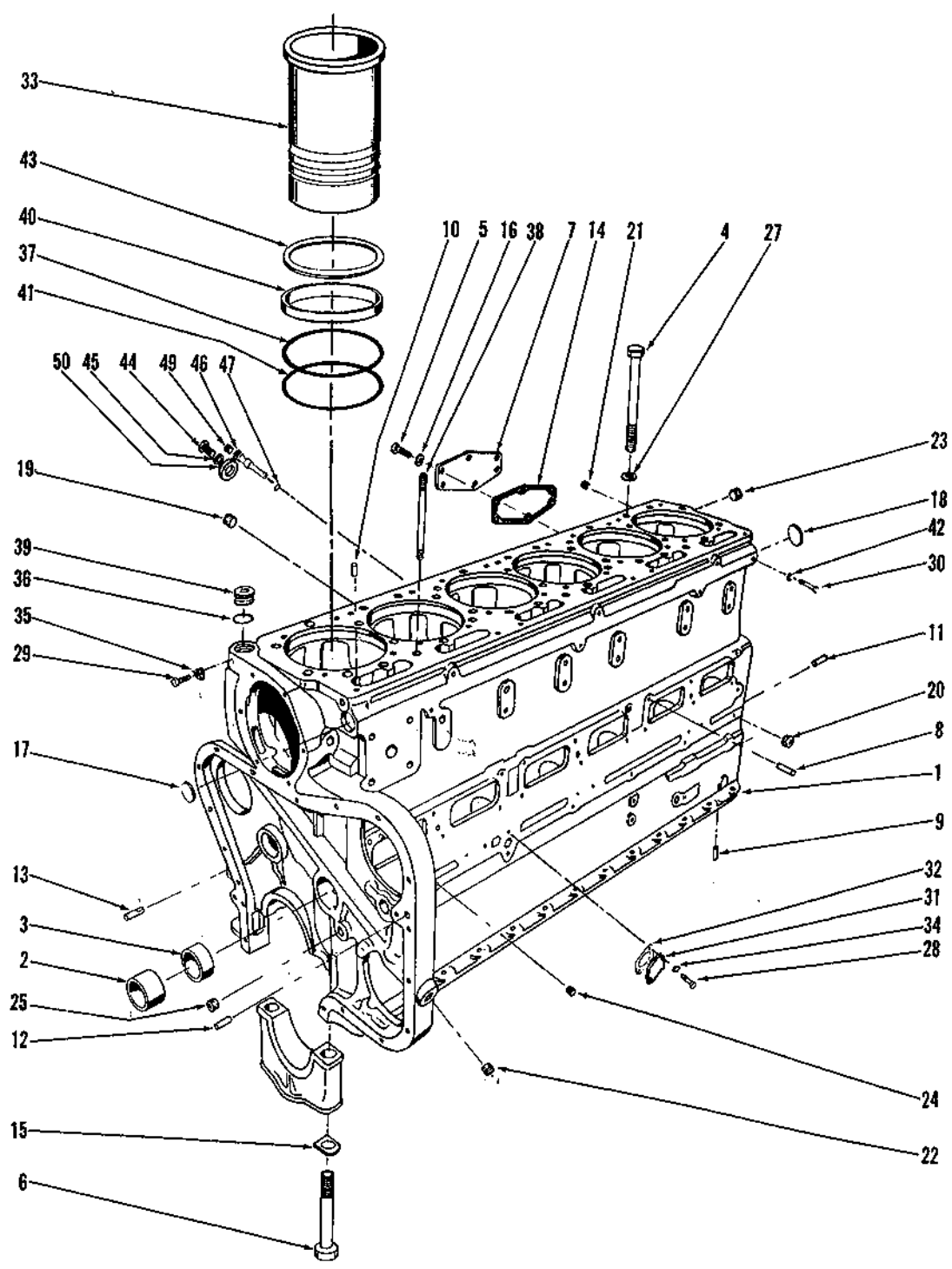
Special Equipment _____

Cummins Distributor _____



Table of Contents

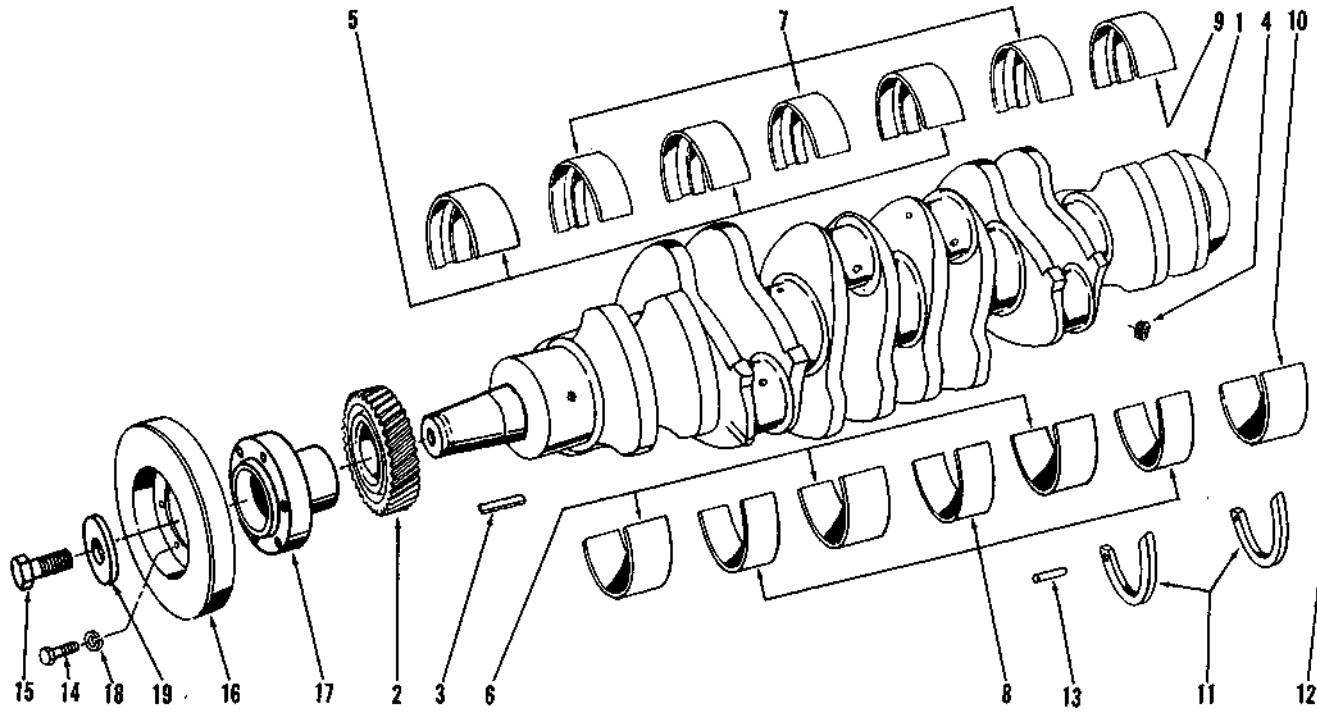
Air Compressor—Cummins Compact	38-39	Gasket Sets	51
Air Compressor — Bendix-Westinghouse	52	Gear Cover	6-7-8
Air Intake Manifold	30-31	Generator	50
Air Cleaner	32-33	Glow Plug	30-31
Breather	11	Injector	46-47
Camshaft	3	Instrument Panel	48-49
Camshaft Bushings	1	Lubricating Oil Filter	16
Cam Followers, Cam Follower Housings	12	Lubricating Oil Cooler	18-19
Compression Release	12	Lubricating Oil By-Pass Filter	17
Connecting Rod	4-5	Lubricating Oil Pump	20-21
Corrosion Resistor	37	Main Bearing Shells	2
Crankshaft	2	Oil Pan	13-14-15
Cylinder Block	1	Pistons	4-5
Cylinder Head	9	Piston Rings	4-5
Cylinder Liner	1	Push Tubes	12
Dipstick	13-14-15	Radiator	28-29
Exhaust Manifold	40-41	Radiator Support	28-29
Fan Bracket	26-27	Rear Cover	3
Fan Guard	28-29	Rocker Lever Covers	11
Fan Hub	26-27	Rocker Levers and Housings	10
Flywheel Housing	51	Scavenger Pump	22
Flywheel Housing Support	42	Shutdown Valve	46-47
Flywheel and Ring Gear	51	Starting Motor	58
Front Engine Support	42	Supercharger	34-35
Fuel Filter	44-45	Supercharger Drive	36
Fuel Gear Pump	44-45	Thermostat and Housing	23
Fuel Pump Drive	43	Vibration Damper	2
Fuel Pump Damper	44-45	Voltage Regulator	50
Fuel Pump	44-45	Water Manifold	23
Fuel Tubing	46-47	Water Pump and Pulley	24-25



CYLINDER BLOCK

ENGINE APPLICATION		AUTOMOTIVE	X	B - OFF-HIGHWAY	X	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.		
CYLINDER BLOCK									
Engines With 4 Valve Cylinder Head									
Auto, B, C, P Applications									
290 HP, 2100 RPM Engines									
AR-01635	Block assembly (189050)	1	1	124320	Shim, liner (.020")	A/R	43		
BM-27253	Bushing assembly, camshaft	1		124331	Shim, liner (.031")	A/R	43		
300670	Bushing	1	2	124454	Shim, liner (.062")	A/R	43		
157870	Bushing	6	3						
38329	Capscrew, cylinder head	18	4						
S-114	Capscrew, water header cover	12	5						
103953	Capscrew, main bearing	14	6						
132019	Cover, water header	2	7						
68585	Dowel, cam follower housing to block	6	8						
67211	Dowel, rear main bearing cap	2	9						
68445	Dowel, cylinder head	6	10						
9226	Dowel, flywheel housing	2	11	OMIT:					
30653	Dowel, gear cover to block	1	12	AR-01635	Block assembly (189050)	1	1		
68408	Dowel, gear cover	1	13						
78089-1	Gasket, water header cover	2	14	ADD:					
9427	Lockplate, main bearing cap	14	15	AR-01624	Block assembly (189052)	1	1		
S-600	Lockwasher (1/4") cover	12	16	BM-57272	Nozzle, piston cooling	6			
66971	Pin, idler gear	1		S-102-A	Capscrew (5/16"-24 x 3/4")	6	44		
S-719	Plug, expansion	1	17	S-605	Lockwasher (5/16")	6	45		
S-716	Plug, expansion	1	18	153999	Nozzle	6	46		
S-962	Plug, pipe (1")	2	19	148296	"O" ring	6	47		
68901	Plug, pipe (1/8")	6	20	S-911-B	Plug, pipe (1/8")	6	49		
S-910-B	Plug, pipe (1/4")	2	21	146161	Washer	6	50		
S-915-A	Plug, pipe (1/2")	5	22						
S-966-E	Plug, pipe (1")	1	23						
S-911-B	Plug, pipe (1/8")	1	24						
S-901	Plug, pipe (1/4")	1							
S-908	Plug, pipe (3/8")	4	25						
123107	Washer, cylinder head	18	27						
MOUNTING PARTS									
S-129	Capscrew (3/8"-24 x 1")	2	28	OMIT:					
S-118-A	Capscrew (1/4"-20 x 5/8")	1	29	AR-01635	Block assembly (189050)	1	1		
S-190-C	Capscrew (3/8"-24 x 5/8")	1	30	66971	Pin, idler gear	1			
132648	Flange, oil drain	1	31	184400	Liner, cylinder	6	33		
68963	Gasket, oil drain flange	1	32						
184400	Liner, cylinder	6	33	ADD:					
S-600	Lockwasher (1/4")	12		AR-01636	Block assembly (189050)	1	1		
S-604	Lockwasher (3/8")	2	34	65264	Pin, idler gear	1			
158379	Nameplate, engine	1		184420	Liner, cylinder	6			
S-258	Nut	1	35						
68910	"O" ring	1	36						
184448	Packing, ring (Buna)	6	37						
181449	Packing, ring (Silicone)	6	41						
43168-E	Pin, groove	1							
9213	Pipe, lubricating	3	38						
18304	Plug, water by-pass	1	39						
S-905	Plug, pipe	1							
199067	Plug, pipe	2							
S-2286	Screw, nameplate	4							
183807	Seal, crevice	6	40						
S-679	Washer, copper (25/64")	1	42						
CYLINDER LINER SHIMS									
4246-A	Shim, liner (.007")	A/R	43						
4246-B	Shim, liner (.008")	A/R	43						
4246-C	Shim, liner (.009")	A/R	43						

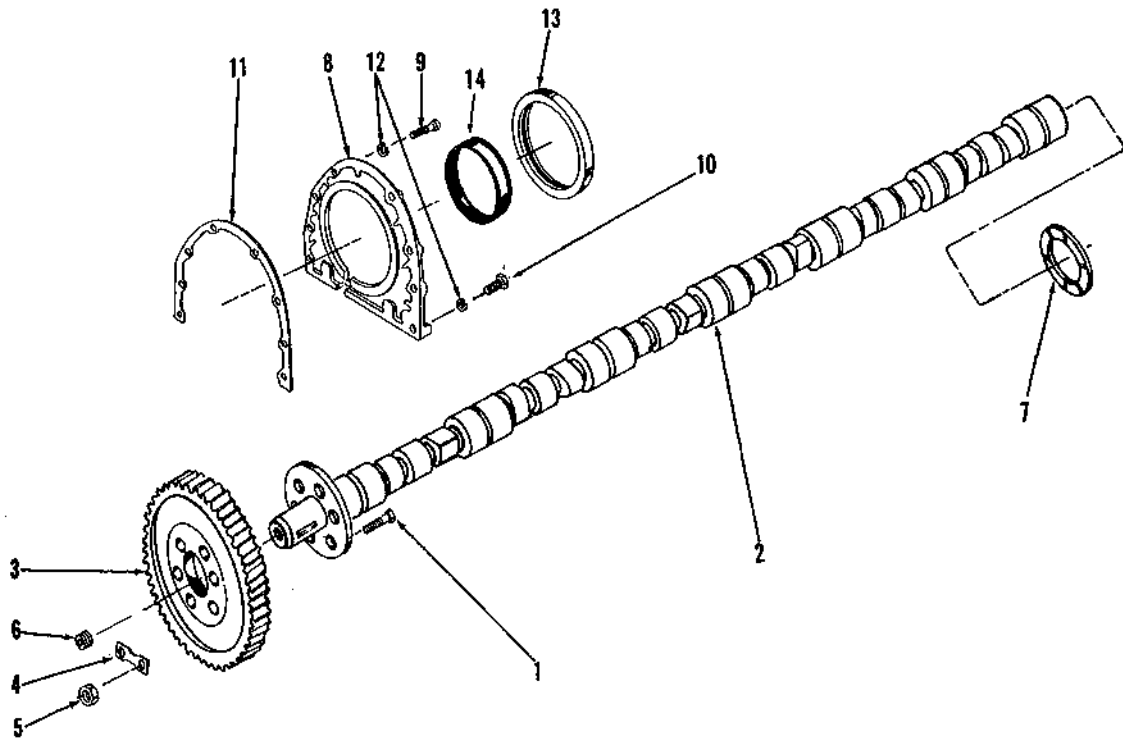
PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



ENGINE APPLICATION	AUTOMOTIVE	X	B - OFF-HIGHWAY	X	C - CONSTRUCTION & INDUSTRIAL	X	P - INDUSTRIAL POWER	X
--------------------	------------	---	-----------------	---	-------------------------------	---	----------------------	---

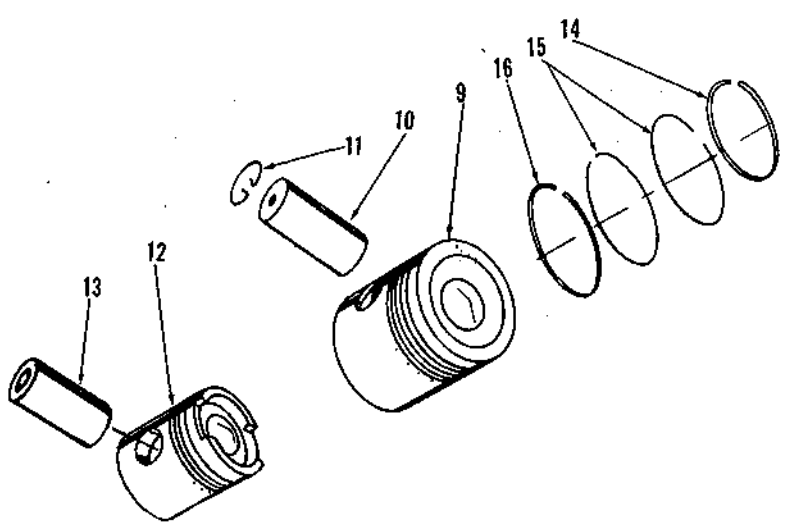
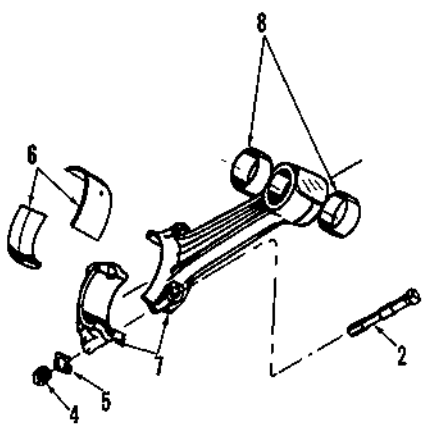
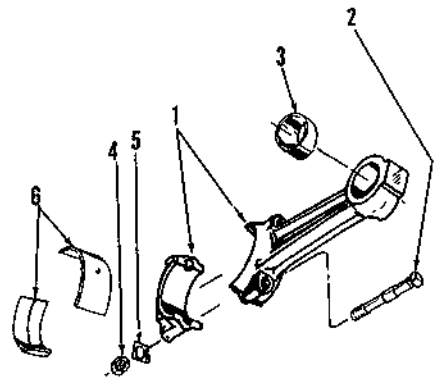
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.
	CRANKSHAFT				VIBRATION DAMPER		
	All Applications Except 1800 RPM Engines				Engines With 4 Valve Cylinder Head		
* BM-68743	Crankshaft assembly	1			All Applications		
130186	Crankshaft	1	1		290 HP, 320 HP, 2100 RPM Engines		
65261	Gear, crankshaft	1	2	S-112-A	Capscrew, damper to flange	6	14
9300-1	Key, gear	1	3	140410	Capscrew, flange retainer	1	15
S-911-B	Plug, pipe (1/8")	6	4	20633-1	Damper vibration	1	16
	1800 RPM Engines			115562	Flange, crankshaft	1	17
	Same as above applications except:			S-608	Lockwasher (1/2")	6	18
				140411	Retainer, crankshaft flange	1	19
OMIT:					Note: Vibration dampers are not required on 1800 RPM Engines.		
BM-68743	Crankshaft assembly	1					
130186	Crankshaft	1	1				
ADD:							
BM-54521	Crankshaft assembly	1					
142960	Crankshaft	1					
	MAIN BEARINGS						
	All Applications						
* AR-07110	Set, main bearing	1					
44383	Bearing, main (No. 1, 3, 5 upper)	3	5				
44384	Bearing, main (No. 1, 3, 5 lower)	3	6				
44385	Bearing, main (No. 2, 4, 6 upper)	3	7				
44386	Bearing, main (No. 2, 4, 6 lower)	3	8				
44387	Bearing, main (No. 7 upper)	1	9				
44388	Bearing, main (No. 7 lower)	1	10				
157280	Half-ring, thrust	4	11				
60575	Dowel, ring	7	12				
202903	Pin, roll	2	13				
	* Main bearings may be purchased in .010", .020", .030" and .040" undersize.						

PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



ENGINE APPLICATION		AUTOMOTIVE	X	B - OFF-HIGHWAY	X	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.		
	CAMSHAFT				REAR COVER				
	Engines With 4 Valve Cylinder Head				All Applications				
	Auto, B, C, P Applications			123982	Cover, rear	1	8		
	290 HP, 320 HP, 2100 RPM Engines			S-120-A	Capscrew (3/8"-24 x 7/8")	6	9		
				S-165	Capscrew (3/8"-24 x 1-1/2")	2	10		
9280	Bolt, camshaft gear	6	1	40662-A	Gasket	1	11		
139420	Camshaft (R.H.)	1	2	S-604	Lockwasher (3/8")	8	12		
40716-1	Gear, camshaft	1	3	AR-07708	Seal, crankshaft oil	1			
66212	Lockplate, camshaft bolt	3	4	189652	Seal	1	13		
S-205	Nut (3/8"-24)	6	5	202974	Sleeve	1	14		
S-911-B	Plug, pipe (1/8")	1	6						
9235-1	Washer, camshaft thrust	1	7						
	Engines With 2 Valve Cylinder Head								
	B, C, P Applications								
	240 HP, 1800 RPM Engines								
	Same as 290 HP, 320 HP except:								
OMIT:									
139420	Camshaft (R.H.)	1	2						
ADD:									
129780	Camshaft (R.H.)	1	2						
S-1546	Screw, set (1/4"-28)								

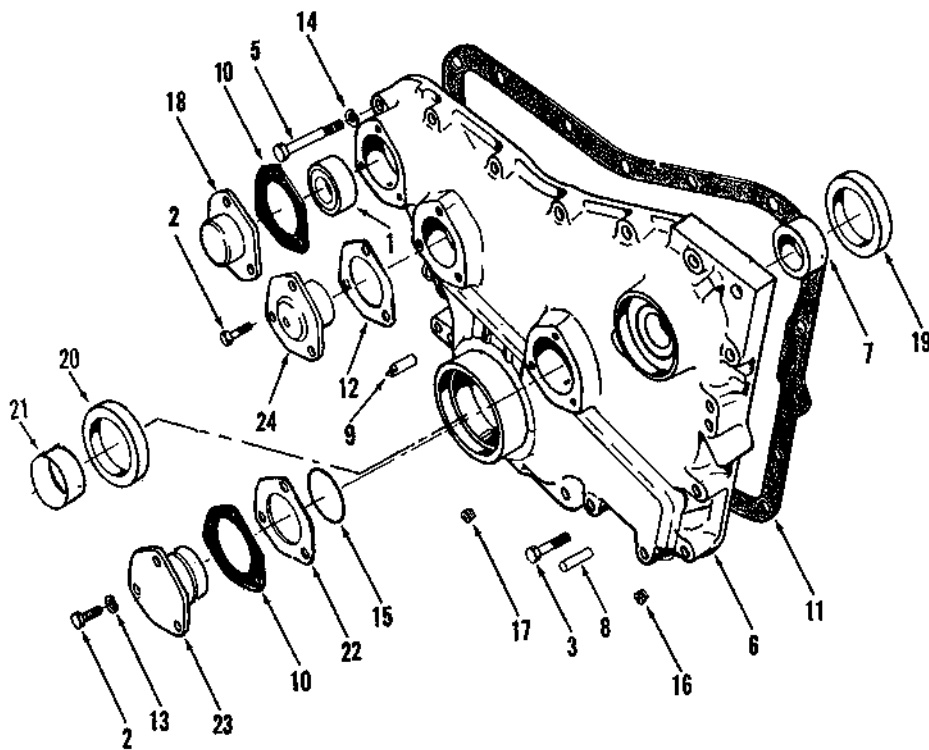
PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



CONNECTING ROD, PISTON AND PISTON RINGS

ENGINE APPLICATION		AUTOMOTIVE	X	B - OFF-HIGHWAY	X	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.		
	CONNECTING ROD				PISTON RINGS				
	Engines With 4 Valve Cylinder Head				All Applications				
	Auto, B, C, P Applications			AR-04970	Ring set, piston (Std.)	6			
	290 HP, 320 HP, 2100 RPM Engines			100233	Ring, compression	6	14		
				41878	Ring, compression	12	15		
BM-51721	Rod assembly (121430)	6	1	126620	Ring, oil	6	16		
9195-3	Bolt, rod	12	2						
187420	Bushing	6	3						
69936	Nut, bolt	12	4						
112611	Lockplate, rod	12	5						
42679-1 *	Shell, connecting rod	12	6						
	Engines With 2 Valve Cylinder Head								
	B, C, P Applications								
	240 HP, 1800 RPM Engines								
	Same as 290 HP and 320 HP except:								
OMIT:									
BM-51721	Rod assembly (121430)	6	1						
187420	Bushing	6	3						
ADD:									
BM-35519	Rod assembly (101158)	6	7						
43067	Bushing	12	8						
	* Connecting rod bearing shells may be purchased in .010", .020", .030", and .040" oversize.								
	PISTONS								
	Engines With 4 Valve Cylinder Head								
	Auto, B, C, P Applications								
	290 HP, 320 HP, 2100 RPM Engines								
AR-07440	Piston assembly	6							
200710	Piston	6	9						
203070	Pin, piston	6	10						
61908	Ring, snap	12	11						
	Engines With 2 Valve Cylinder Head								
	B, C, P Applications								
	240 HP, 1800 RPM Engines								
	Same as above except:								
OMIT:									
AR-07440	Piston assembly	6							
200710	Piston	6	9						
ADD:									
AR-07430	Piston assembly	6							
200690	Piston	6	12						

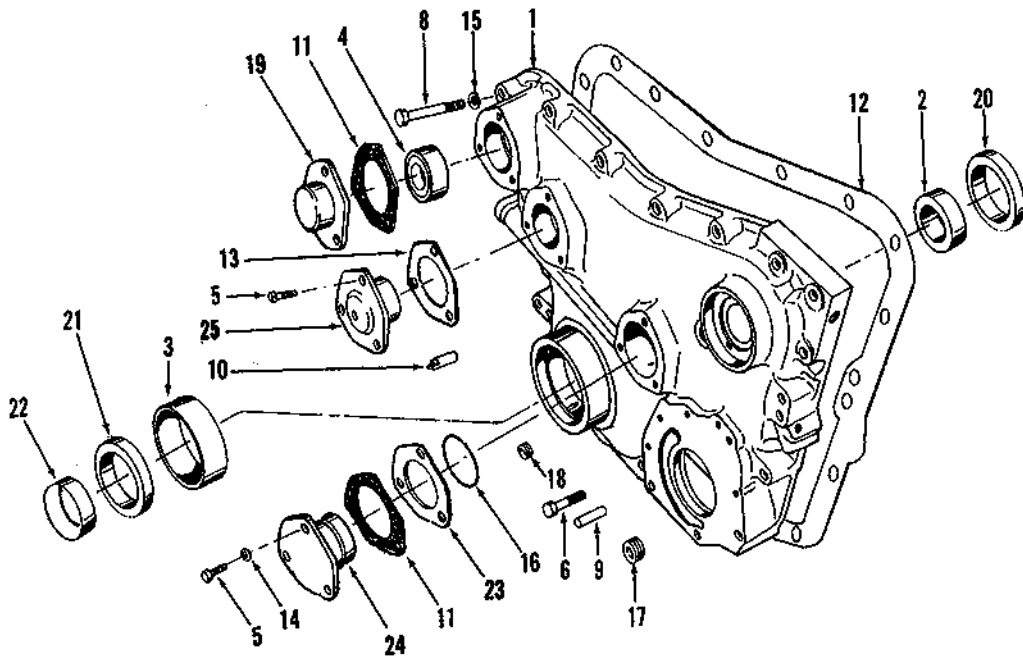
PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



ENGINE APPLICATION	AUTOMOTIVE	X	B - OFF-HIGHWAY	X	C - CONSTRUCTION & INDUSTRIAL	P - INDUSTRIAL POWER	X
--------------------	------------	---	-----------------	---	-------------------------------	----------------------	---

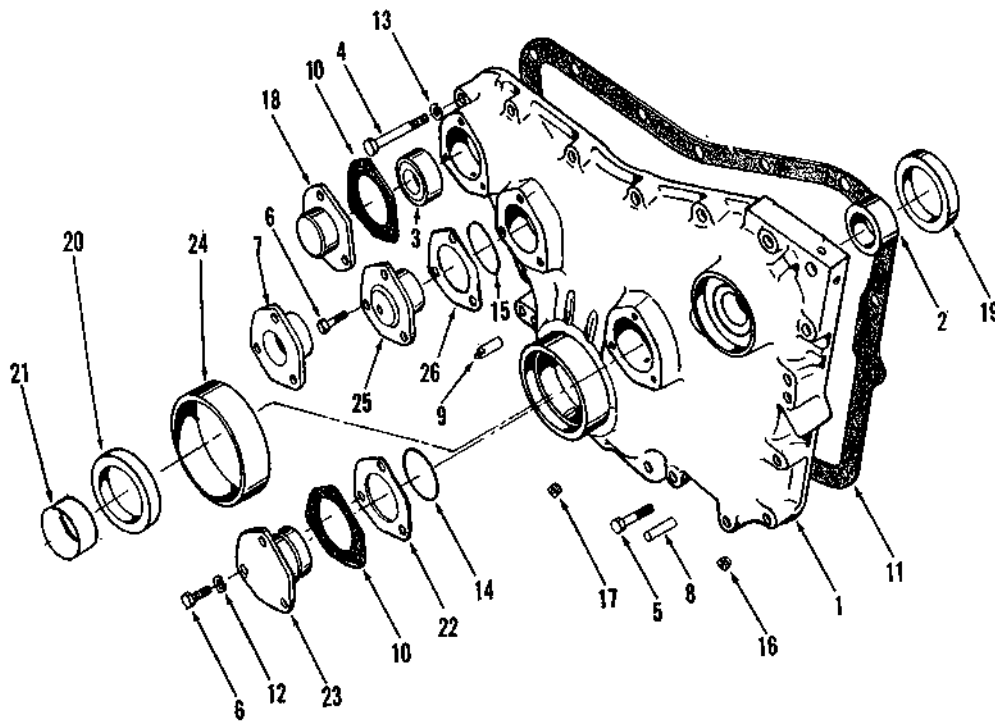
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.
GEAR COVER							
Engines With 4 Valve Cylinder Head							
Auto, B, P Applications							
320 HP, 2100 RPM Engines							
150982	Bearing, ball	1	1				
S-103-D	Capscrew (3/8"-16 x 1-1/4")	6	2				
S-112	Capscrew (3/8"-16 x 1")	3					
S-116-C	Capscrew (7/16"-20 x 3-1/2")	4	5				
69793	Capscrew	1					
100915	Capscrew (7/16"-20 x 2")	13	3				
BM-68947	Cover, gear (139948)	1	6				
132770	Bushing, fuel pump drive	1	7				
66973	Cover, idler gear pin support	1	24				
60408	Dowel (Master)	1	8				
70653	Dowel (Diamond)	1	9				
65250	Gasket, support and retainer	2	10				
199325	Gasket, cover	1	11				
66974	Gasket, idler gear pin retainer	1	12				
S-604	Lockwasher (3/8")	3	13				
S-610	Lockwasher (7/16")	17	14				
65260	Packing, camshaft support	1	15				
S-908	Plug, pipe (3/8")	1	16				
S-911-B	Plug, pipe (1/8")	1	17				
65255-3	Retainer, cover	1	18				
149488	Seal, fuel pump	1	19				
AR-07709	Seal, crankshaft oil	1					
187863	Seal	1	20				
202975	Sleeve	1	21				
AR-01176	Shim, assembly	1	22				
65259-A	Shim, thrust plate (.010")	A/R	22				
65259-B	Shim, thrust plate (.005")	A/R	22				
65259-C	Shim, thrust plate (.002")	A/R	22				
185573	Shim, thrust plate (.025")	A/R	22				
159969	Support, camshaft	1	23				
S-679	Washer	3					

PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



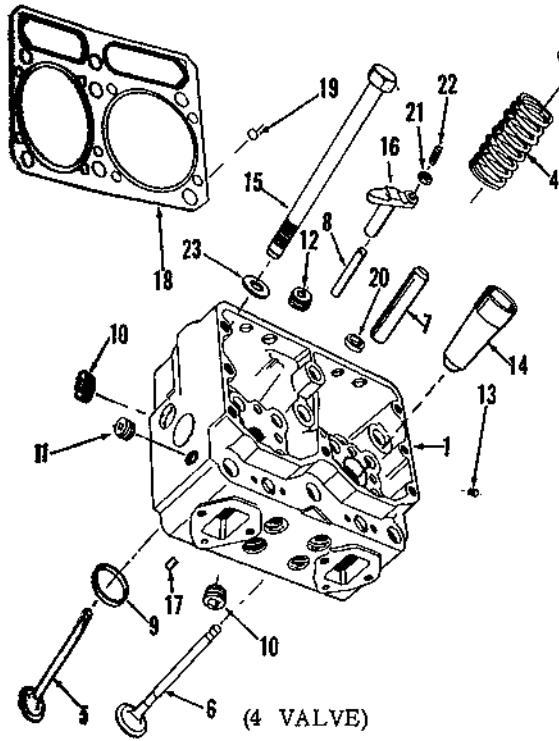
ENGINE APPLICATION		AUTOMOTIVE		B - OFF-HIGHWAY		C - CONSTRUCTION & INDUSTRIAL		P - INDUSTRIAL POWER	
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.		
	GEAR COVER								
	Engines With 4 Valve Cylinder Head								
	C Application								
	320 HP, 2100 RPM Engines								
150982	Bearing, ball	1	4						
S-103-D	Capscrew (3/8"-16 x 1-1/4")	6	5						
S-112	Capscrew (3/8"-16 x 1")	3							
S-116-C	Capscrew (7/16"-20 x 3-1/2")	4	8						
100915	Capscrew (7/16"-20 x 2")	13	6						
69793	Capscrew	1							
BM-79817	Cover, gear (161197)	1	1						
132770	Bushing, fuel pump drive	1	2						
68226-1	Bushing, trunnion	1	3						
66973	Cover, idler gear pin support	1	25						
60408	Dowel (Master)	1	9						
70653	Dowel (Diamond)	1	10						
65250	Gasket, support and retainer	2	11						
199325	Gasket, cover	1	12						
66974	Gasket, idler gear pin retainer	1	13						
S-604	Lockwasher (3/8")	3	14						
S-610	Lockwasher (7/16")	17	15						
65260	Packing, camshaft support	1	16						
S-908	Plug, pipe (3/8")	1	17						
S-911-B	Plug, pipe (1/8")	1	18						
65255-3	Retainer, cover	1	19						
149488	Seal, fuel pump	1	20						
AR-07709	Seal, crankshaft oil	1							
187863	Seal	1	21						
202975	Sleeve	1	22						
AR-01176	Shim, assembly	1	23						
65259-A	Shim, thrust plate (.010")	A/R	23						
65259-B	Shim, thrust plate (.005")	A/R	23						
65259-C	Shim, thrust plate (.002")	A/R	23						
185573	Shim, thrust plate (.025")	A/R	23						
159969	Support, camshaft	1	24						
S-679	Washer	3							

PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED

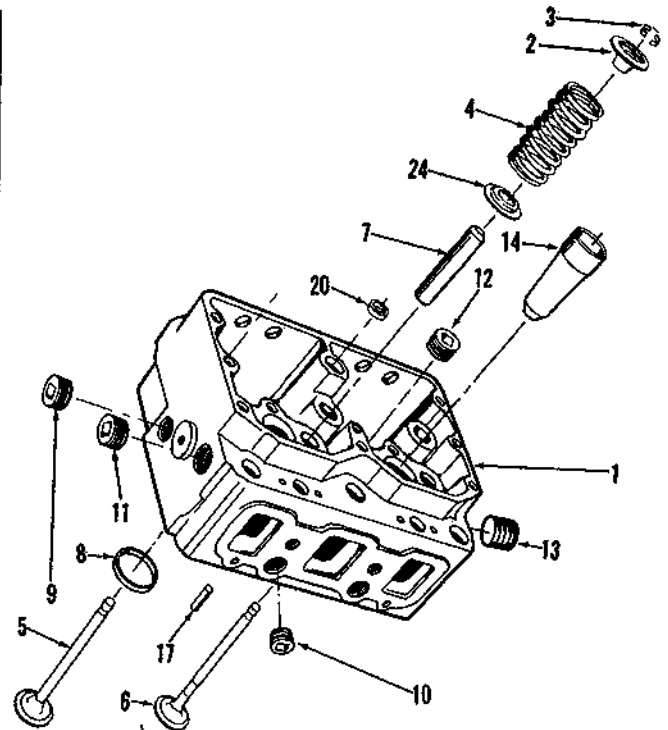


ENGINE APPLICATION		AUTOMOTIVE	X	B - OFF-HIGHWAY	X	C - CONSTRUCTION & INDUSTRIAL	X	P - INDUSTRIAL POWER	X
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.		
	GEAR COVER				Engines With 4 Valve Cylinder Head				
	Engines With 4 Valve Cylinder Head				C Application				
	Auto, B, P Applications				290 HP, 2100 RPM Engines				
	290 HP, 2100 RPM Engines				Same as above except:				
150982	Bearing, ball	1	3	OMIT:					
S-103-D	Capscrew (3/8"-16 x 1-1/4")	6	6	BM-54318	Cover, gear (124537)	1	1		
S-112	Capscrew (3/8"-16 x 1")	3		ADD:					
S-196-A	Capscrew (7/16"-20 x 2-3/4")	4	4	BM-79816	Cover, gear (161196)	1	1		
100915	Capscrew (7/16"-20 x 2")	13	5	68226-1	Bushing, trunnion.	1	24		
BM-54318	Cover, gear (124537)	1	1						
132770	Bushing, fuel pump drive	1	2						
69793	Cover, idler gear pin support	1	7		Engines With 2 Valve Cylinder Head				
60408	Dowel (Master)	1	8		B, P Applications				
70653	Dowel (Diamond)	1	9		240 HP, 1800 RPM Engines				
65250	Gasket, support	2	10		Same as 290 HP, Auto, B, P Applications except:				
124547	Gasket, cover	1	11						
66974	Gasket, idler gear pin retainer	1	26						
S-604	Lockwasher (3/8")	6	12						
S-610	Lockwasher (7/16")	17	13	OMIT:					
65260	Packing, camshaft support	1	14	BM-54318	Cover, gear (124537)	1	1		
65280	Packing, idler gear pin support	1	15	ADD:					
S-908	Plug, pipe (3/8")	1	16	BM-74436	Cover, gear (139102)	1	1		
S-911-B	Plug, pipe (1/8")	1	17	132770	Support, idler gear pin	1	25		
65255-3	Retainer, bearing	1	18						
149488	Seal, fuel pump	1	19		Engines With 2 Valve Cylinder Head				
AR-07709	Seal, crankshaft oil	1			C Application				
187863	Seal	1	20						
202975	Sleeve	1	21		Same as 290 HP, Auto, B, P, Applications except:				
AR-01176	Shim, assembly	1	22						
65259-A	Shim, thrust plate (.010")	A/R	22	OMIT:					
65259-B	Shim, thrust plate (.005")	A/R	22	BM-54318	Cover, gear (124537)	1	1		
65259-C	Shim, thrust plate (.002")	A/R	22	ADD:					
185573	Shim, thrust plate (.025")	A/R	22	BM-92139	Cover, gear (168248)	1	1		
159969	Support, camshaft	1	23	68226-1	Bushing, trunnion	1	24		
S-679	Washer	3		65279	Support, idler gear pin	1	25		

PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



(4 VALVE)



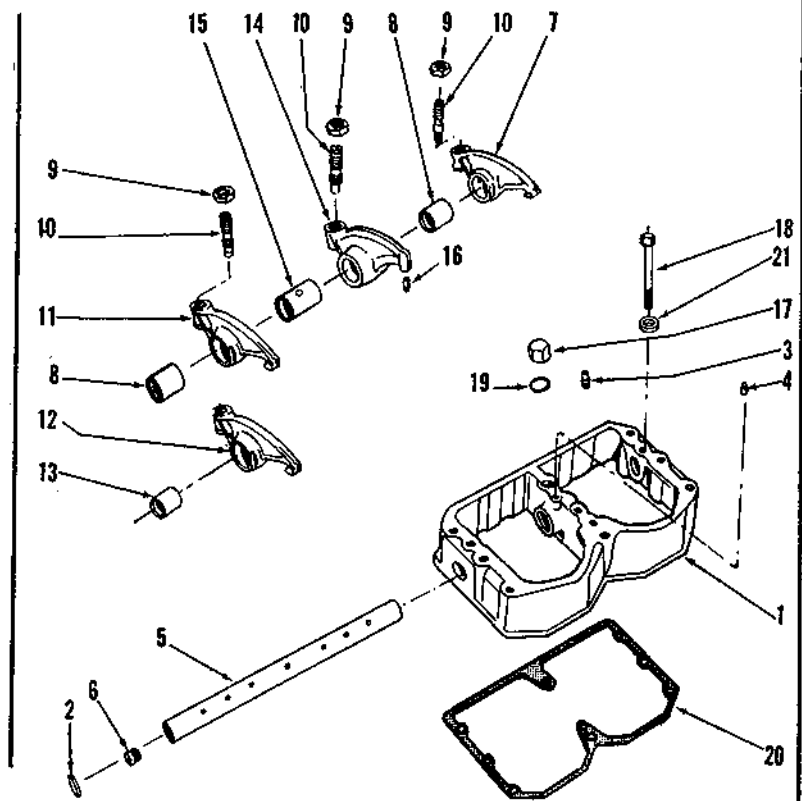
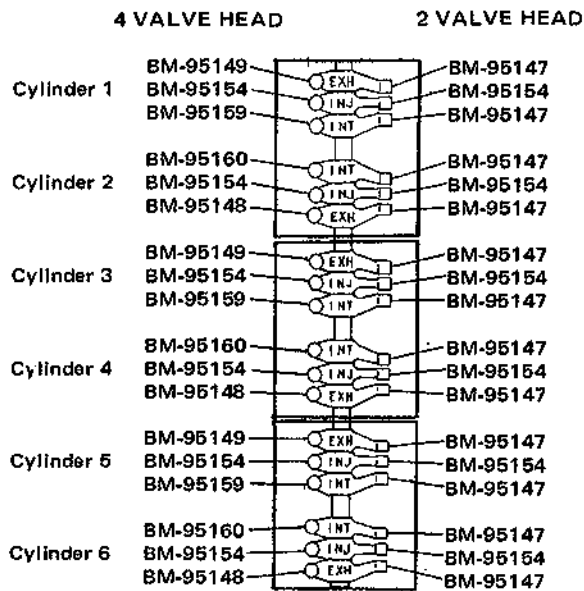
(2 VALVE)

ENGINE APPLICATION	AUTOMOTIVE	X	B - OFF-HIGHWAY	X	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.
CYLINDER HEAD Engines With 4 Valve Cylinder Head Auto, B, C, P Applications 290 HP, 320 HP, 2100 RPM Engines				CYLINDER HEAD Engines With 2 Valve Cylinder Head B, C, P Applications 240 HP, 1800 RPM Engines			
BM-60971	Head, cylinder (142023)	3	1	BM-61413	Head, cylinder (131700)	3	1
66871	Guide, valve spring	24	2	60010	Guide, valve spring	12	2
S-2037	Half-collet, valve	48	3	60011-1	Half-collet, valve	24	3
111446	Spring, valve	24	4	68997	Spring, valve	12	4
144911	Valve, exhaust	12	5	9167-Y	Valve, exhaust	6	5
150288	Valve, intake	12	6	69032	Valve, intake	6	6
BM-60965	Head, cylinder (less valves)	3		BM-61412	Head, cylinder (less valves)	3	
66890	Guide, valve stem	24	7	105984	Guide, valve	12	7
123658	Guide, crosshead	12	8	70650	Insert, exhaust valve seat	6	8
89965	Insert, valve seat	24	9	S-962	Plug, pipe (1")	9	9
S-962	Plug, pipe (1")	18	10	S-995	Plug, pipe (3/4")	6	10
S-911-B	Plug, pipe (1/8")	3	11	S-911-B	Plug, pipe (1/8")	3	11
67622	Plug, pipe (3/8")	6		67861	Plug, pipe (1/2")	6	12
67861	Plug, pipe (1/2")	6	12	125162	Plug, fuse (1")	3	13
70459	Plug, fuse (1/8")	3	13	8901-2	Sleeve, injector	6	14
8901-2	Sleeve, injector	6	14	105986	Retainer, valve guide	12	24
MOUNTING PARTS				MOUNTING PARTS			
188329	Capscrew, head to block	18	15	188329	Capscrew, head to block	18	15
110472	Crosshead, valve	12	16	68445	Dowel, head to block	6	17
68445	Dowel, head to block	9	17	AR-02883	Gasket, head (107371)	3	18
AR-02883	Gasket, head (107371)	3	18	193949	Grommet, water	3	19
193949	Grommet, water	24	19	129373	Gasket, lubricating pipe	3	20
129373	Gasket, lubricating pipe	3	20	123107	Washer, capscrew (7/8")	18	23
S-273	Nut, crosshead adjusting	12	21				
147389	Screw, crosshead adjusting	12	22				
123107	Washer, capscrew (7/8")	18	23				

PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED

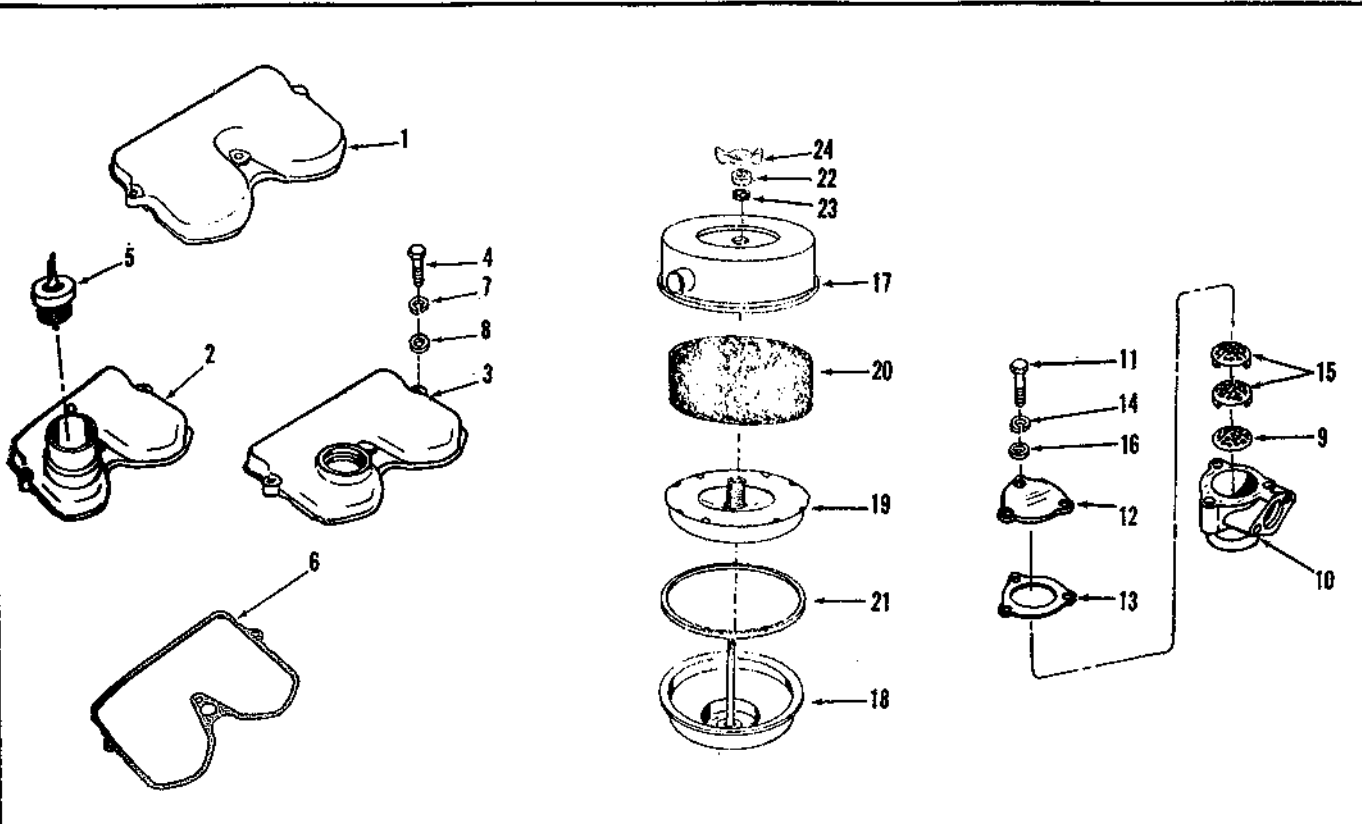
ROCKER LEVER LAYOUT



ENGINE APPLICATION AUTOMOTIVE X B-OFF-HIGHWAY X 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.
ROCKER LEVER HOUSING				S-212	Nut, adjusting screw	6	9
Engines With 4 Valve Cylinder Head				168306	Screw, adjusting	6	10
BM-90513	Housing, rocker lever	3		Engines With 2 Valve Cylinder Head			
BM-73974	Housing and plug	3	1	BM-37715	Housing, rocker lever	3	
146259	Housing	3	2	BM-73974	Housing and plug	3	
175830	Plug, expansion	6	3	146259	Housing	3	1
62229	Plug, ventilator	3	4	175830	Plug, expansion	6	2
168319	Screw, rocker lever shaft	3	5	62229	Plug, ventilator	3	3
BM-68740	Shaft, rocker lever (140297)	3	6	168319	Screw, rocker lever shaft	3	4
161825	Plug, shaft	6		BM-68740	Shaft, rocker lever (140297)	3	5
BM-95148	Lever, exhaust valve	3		161825	Plug, shaft	6	6
BM-95143	Lever and bushing (168804)			BM-95147	Lever, valve	12	
	Cyl. No. 2, 4 & 6	3	7	BM-95146	Lever and bushing (168816)	12	12
140330	Bushing, lever	3	8	143650	Bushing, lever	12	13
S-212	Nut, adjusting screw	3	9	S-212	Nut, adjusting screw	12	9
168306	Screw, adjusting	3	10	168306	Screw, adjusting	12	10
BM-95149	Lever, exhaust valve	3		BM-95154	Lever, injector	6	
BM-95142	Lever and bushing (168802)			BM-95144	Lever, injector (168801)	6	14
	Cyl. No. 1, 3 & 5	3	11	169353	Bushing, lever	6	15
140330	Bushing, lever	3	8	152173	Socket, injector	6	16
S-212	Nut, adjusting screw	3	9	S-212	Nut, adjusting screw	6	9
168306	Screw, adjusting	3	10	168306	Screw, adjusting	6	10
BM-95159	Lever, intake valve	3		MOUNTING PARTS			
BM-95158	Lever and bushing (168805)			All Applications			
	Cyl. No. 1, 3 & 5	3	11	9271	Cap, lubricating pipe	3	17
140330	Bushing, lever	3	8	108601	Capscrew (1/2"-13 x 3-1/2")	21	18
S-212	Nut, adjusting screw	3	9	108602	Capscrew (1/2"-13 x 3-3/4")	A/R	
168306	Screw, adjusting	3	10	108603	Capscrew (1/2"-13 x 4")	A/R	
BM-95160	Lever, intake valve	3	7	108604	Capscrew (1/2"-13 x 4-1/2")	A/R	
BM-95157	Lever and bushing (168803)			9272	Gasket, cap	3	19
	Cyl. No. 2, 4 & 6	3	8	194106	Gasket, housing	3	20
140330	Bushing, lever	3	8	158208	Washer, plain	21	21
S-212	Nut, adjusting screw	3	9				
168306	Screw, adjusting	3	10				
BM-95154	Lever, injector	6					
BM-95144	Lever, injector (168801)	6	14				
169353	Bushing, lever	6	15				
152173	Socket, injector	6	16				

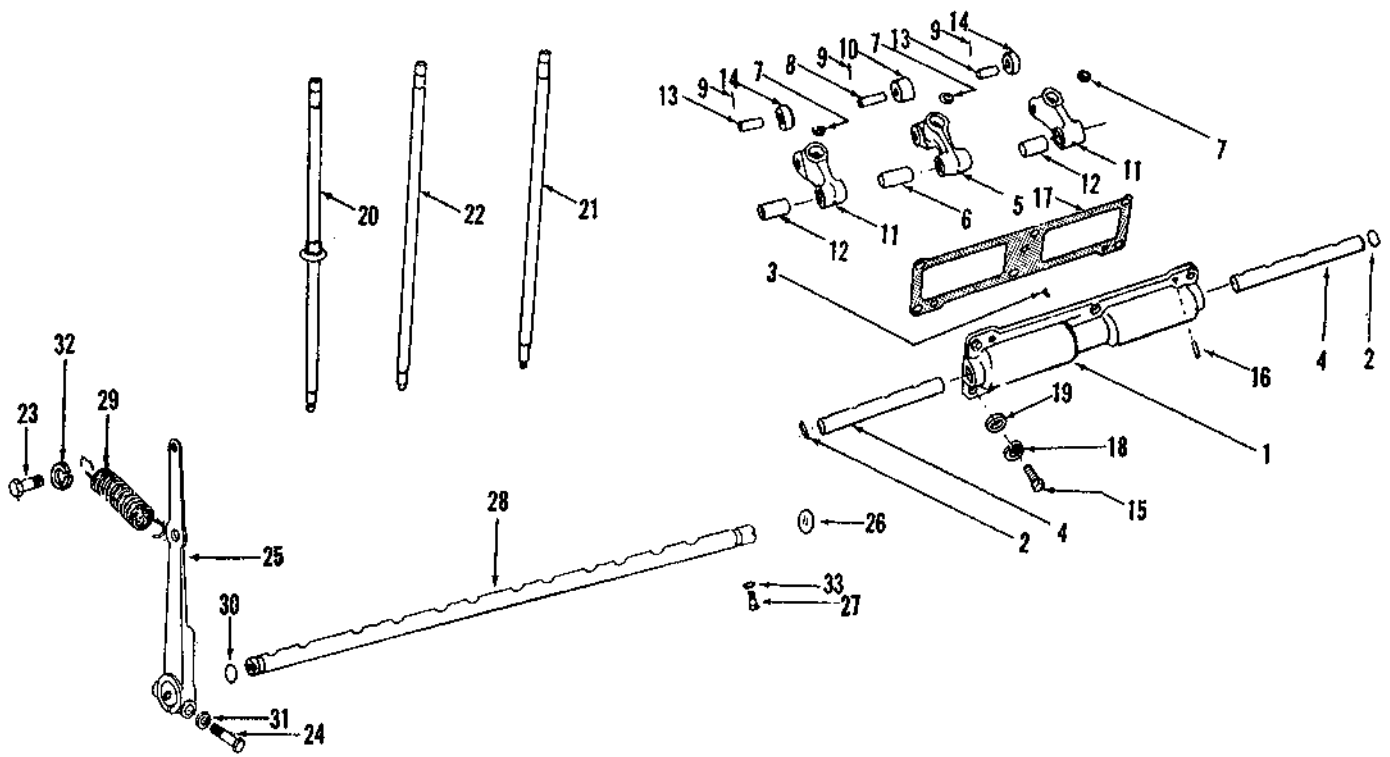
PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



ENGINE APPLICATION	AUTOMOTIVE	X	B - OFF-HIGHWAY	X	C - CONSTRUCTION & INDUSTRIAL	X	P - INDUSTRIAL POWER	X
--------------------	------------	---	-----------------	---	-------------------------------	---	----------------------	---

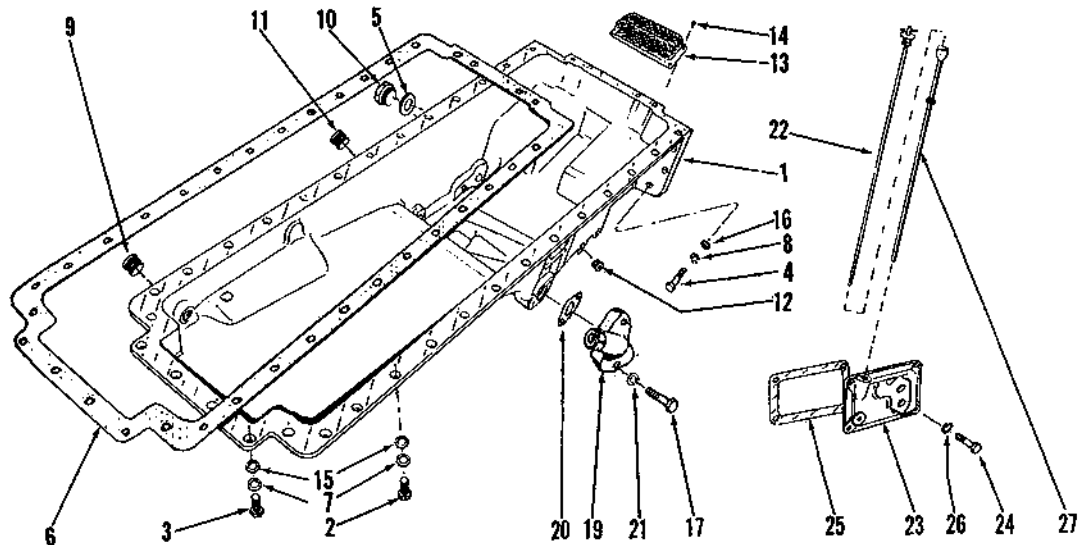
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.
ROCKER HOUSING COVERS				68562	Flange	1	
All Applications				S-604	Lockwasher (3/8")	1	
				S-605	Lockwasher (5/16")	2	
				S-3101	"O" ring	1	
13683	Baffle, breather	1		109489	Support, oil gauge tube	1	
42357	Cover, housing (center)	1	1	127415	Tube, breather	1	
140390	Cover, housing (front)	1	2				
140391	Cover, housing (rear)	1	3				
S-174-B	Capscrew (3/8"-16 x 1-3/8")	9	4		P Application		
101322	Cap, oil filler	1	5	S-114	Capscrew (1/4"-20 x 3/4")	1	
140981	Cap, oil filler (C application)	1		S-115	Capscrew (5/16"-18 x 7/8")	2	
126692	Gasket, cover	3	6	S-129	Capscrew (3/8"-24 x 1")	1	
S-604	Lockwasher (3/8")	9	7	69911-A	Clamp, tube	1	
S-602	Washer, plain (13/32")	9	8	114307	Bracket, tube clip	1	
Note: On P applications use (2) 42357 and (1) 140391 cover, housing only.				68562	Flange	1	
				S-604	Lockwasher (3/8")	1	
				S-605	Lockwasher (5/16")	2	
				S-205	Nut	1	
				S-3101	"O" ring	1	
				120919	Tube, breather vent	1	
				S-602	Washer, plain (13/32")	2	
				70704	Washer	1	
BREATHER							
Auto, B, P Applications					BREATHER		
20079	Breather, crankcase	1			C Application		
116021	Baffle, breather	1	9				
122133	Body, breather	1	10				
S-167-A	Capscrew (1/4"-20 x 7/8")	3	11				
122136	Cover, breather	1	12	255180	Breather, crankcase	1	
122135	Gasket, cover	1	13	255803	Body, upper	1	17
S-600	Lockwasher (1/4")	3	14	255806	Body, lower	1	18
116019	Screen, breather	4	15	255809	Element, vapor	1	19
S-631	Washer, cover to body	3	16	255183	Element, vapor	1	20
				254608	Gasket	1	21
				255815	Gasket	1	22
				255816	Washer	1	23
				250026	Wing nut (1/4"-20)	1	24
MOUNTING PARTS							
Auto, B, A Applications							
S-115	Capscrew (5/16"-18 x 7/8")	2					
S-114	Capscrew (3/8"-24 x 3/4")	1					
S-11-A	Clamp, tube	1					

PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



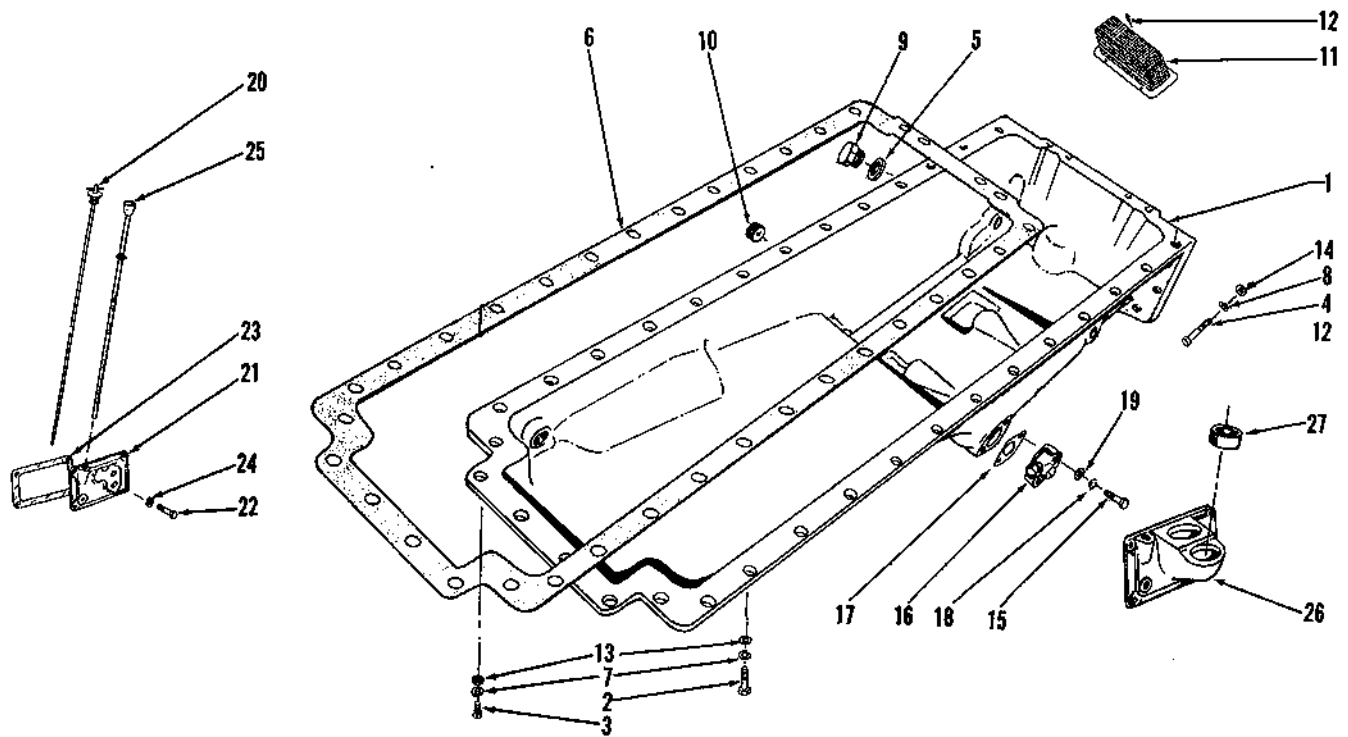
ENGINE APPLICATION		AUTOMOTIVE	X	B - OFF-HIGHWAY	X	C - CONSTRUCTION & INDUSTRIAL	X	P - INDUSTRIAL POWER	X
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.		
CAM FOLLOWER AND HOUSING				PUSH TUBES					
All Applications				All Applications					
BM-37625	Housing, cam follower, assembly	3		BM-47777	Tube assembly, intake	6	20		
BM-73976	Housing, cam follower	3		BM-47778	Tube assembly, exhaust	6	21		
44035	Housing	3	1	BM-47779	Tube assembly, injector	6	22		
175831	Plug, expansion	6	2	COMPRESSION RELEASE					
69736	Screw, shaft	6	3	S-108	Capscrew (5/16"-24 x 5/8")	1	23		
42443	Shaft	6	4	108707	Capscrew (3/8"-16 x 1-1/2")	1	24		
BM-37621	Cam follower assembly, injector	6		43693	Lever	1	25		
BM-37496	Cam follower and bushing (108169)	6	5	S-719	Plug, expansion	1	26		
118377	Bushing	6	6	9237	Screw, shaft lock	1	27		
107738	Insert	6	7	189737	Shaft	1	28		
68512	Pin, roller	6	8	139289	Spring	1	29		
118939	Pin, roll	6	9	43696	"O" ring	1	30		
7348-2	Roller, injector cam	6	10	S-604	Lockwasher (3/8")	1	31		
BM-37634	Cam follower assembly, intake and exhaust	12		S-605	Lockwasher (5/16")	1	32		
BM-37633	Cam follower and bushing (120543)	12	11	S-679	Washer, copper (25/64")	1	33		
118378	Bushing	12	12						
107738	Insert	12	7						
68513	Pin, roller	12	13						
118939	Pin, roll	12	9						
9260-1	Roller, valve cam	12	14						
MOUNTING PARTS									
S-129	Capscrew, housing to block (3/8"-24 x 1")	18	15						
68585	Dowel, housing to block	6	16						
120819	Gasket (.026")	A/R	17						
9266-A	Gasket (.007")	A/R	17						
S-604	Lockwasher (3/8")	18	18						
S-602	Washer, plain (13/32")	18	19						

PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



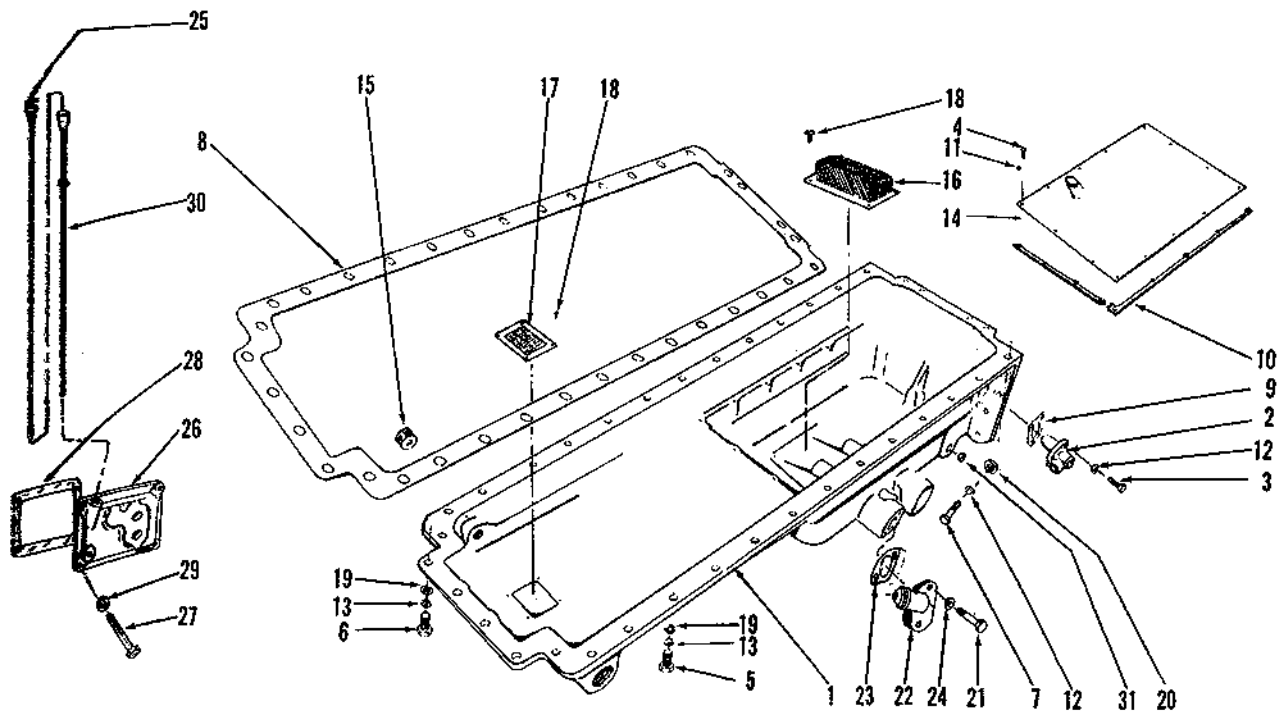
ENGINE APPLICATION		AUTOMOTIVE	X	B - OFF-HIGHWAY	C - CONSTRUCTION & INDUSTRIAL	P - INDUSTRIAL POWER	
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.
152411	OIL PAN Engines With 4 Valve Cylinder Head Auto Application 290 HP, 2100 RPM Engines Pan, oil	1	1	OMIT: S-995 S-908 ADD: 20622 S-1354	Plug, pipe Plug, pipe Screen, suction plate Screw, suction plate screen	1 1 1 4	13 14
S-125	Capscrew (1/2"-13 x 2")	3		S-120	Capscrew (3/8"-16 x 1-3/4")	2	17
70349	Capscrew (7/16"-20 x 1-3/8")	28	2	179688	Flange, suction	1	19
185804	Capscrew (7/16"-14 x 1-1/2")	4	3	157551	Gasket, suction flange	1	20
105574	Capscrew (5/16"-14 x 2-1/4")	4	4	S-604	Lockwasher (3/8")	2	21
67946	Gasket, drain plug	1	5	S-602	Washer	2	
178788	Gasket, oil pan	1	6				
S-608	Lockwasher (1/2")	3			DIPSTICK, OIL GAUGE		
S-610	Lockwasher (7/16")	34	7	158649	Dipstick, oil gauge	1	22
S-605	Lockwasher (5/16")	4	8				
S-208-A	Nut	3			OIL GAUGE BRACKET AND TUBE		
S-995	Plug, pipe (3/4")	1	9		Bracket, oil gauge	1	23
110907	Plug, drain	1	10	131998	Capscrew (3/8"-16 x 1")	4	24
S-915-A	Plug, pipe (1/2")	4	11	S-112	Gasket	1	25
S-908	Plug, pipe (3/8")	1	12	65274	Lockwasher (3/8")	4	26
20622	Screen, suction plate	1	13	S-604	Tube, oil gauge	1	27
S-1354	Screw, suction plate screen	4	14	101814			
S-601	Washer, plain (17/32")	3			LUBRICATING OIL HOSE		
S-622	Washer, plain (15/32")	34	15		Clip, hose	1	
S-626	Washer, plain (11/32")	4	16	67950	Hose, lubricating oil	1	
S-602	Washer, plain (13/32")	2		AS1602766MS			
193635	320 HP, 2100 RPM Engines Same as above except: Pan, oil	1	1				

PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



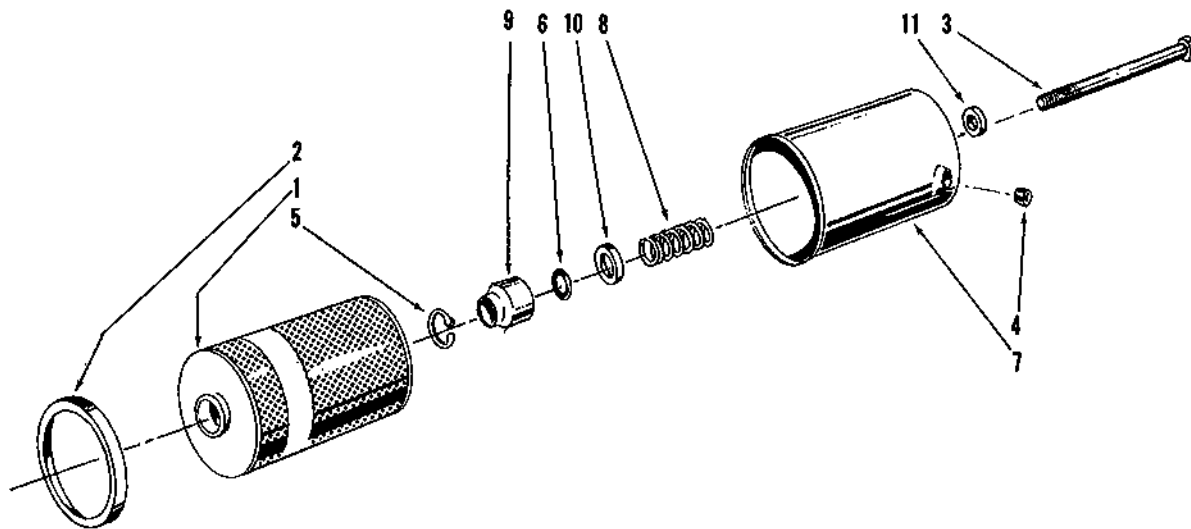
ENGINE APPLICATION		AUTOMOTIVE	B - OFF-HIGHWAY	X	C - CONSTRUCTION & INDUSTRIAL	P - INDUSTRIAL POWER	X
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.
193625	OIL PAN			187059	Flange, suction	1	16
	Engines With 4 Valve and 2 Valve Cylinder Head			67963	Gasket, suction flange	1	17
	B, P Applications			S-604	Lockwasher (3/8")	2	18
	290 HP, 2100 RPM, 240 HP, 1800 RPM Engines			S-602	Washer, plain (13/32")	2	19
	P Application			108707	P Application		
	320 HP, 2100 RPM Engines			187059	320 HP, 2100 RPM Engines		
	Pan, oil	1	1	67963	Capscrew (3/8"-16 x 1-1/2")	4	15
				S-604	Flange, suction	2	16
				S-602	Gasket, suction flange	2	17
					Lockwasher (3/8")	4	18
				Washer, plain (13/32")	4	19	
	MOUNTING PARTS						
S-125	Capscrew (1/2"-13 x 2")	3			P Application		
70349	Capscrew (7/16"-20 x 1-3/8")	28	2		290 HP, 2100 RPM, 240 HP, 1800 RPM Engines		
185804	Capscrew (7/16"-14 x 1-1/2")	4	3		Same as B application except:		
105574	Capscrew (5/16"-14 x 2-1/4")	4	4				
67946	Gasket, drain plug	1	5	ADD:			
178788	Gasket, oil pan	1	6	S-112	Capscrew (3/8"-16 x 1")	2	
S-608	Lockwasher (1/2")	3		132648	Flange, blind	1	
S-610	Lockwasher (7/16")	34	7	67963	Gasket, flange	1	
S-605	Lockwasher (5/16")	4	8	S-604	Lockwasher (3/8")	2	
S-208-A	Nut	3					
110907	Plug, drain	1	9		DIPSTICK OIL GAUGE		
S-915-A	Plug, pipe (1/2")	4	10		All Applications		
20622	Screen, suction plate	2	11	199445	Dipstick, oil gauge	1	20
S-1354	Screw, suction plate screen	8	12				
S-601	Washer, plain (17/32")	3			OIL GAUGE BRACKET AND TUBE		
S-622	Washer, plain (15/32")	34	13		B, P Applications		
S-626	Washer, plain (11/32")	4	14	115325	Bracket, oil gauge (P application)	1	26
S-602	Washer, plain (13/32")	2		131998	Bracket, oil gauge (B application)	1	21
	Engines With 4 Valve Cylinder Head			S-112	Capscrew (3/8"-16 x 1")	4	22
	B Application			65274	Gasket	1	23
	320 HP, 2100 RPM Engines			S-604	Lockwasher (3/8")	4	24
	Same as above except:			101814	Tube, oil gauge	1	25
193635	Pan, oil	1	1	101264	Tube, oil filler (P application)	1	27
	SUCTION FLANGE						
	B Application						
108707	Capscrew (3/8"-16 x 1-1/2")	2	15				

PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



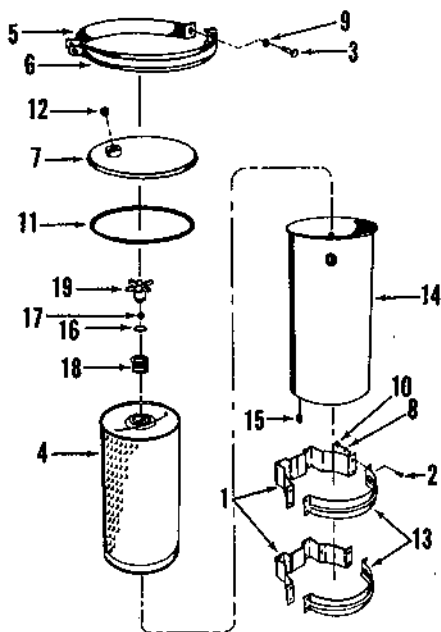
ENGINE APPLICATION		AUTOMOTIVE	B - OFF-HIGHWAY	C - CONSTRUCTION & INDUSTRIAL	X	P - INDUSTRIAL POWER	
OMIT NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.
	OIL PAN				Engines With 4 Valve Cylinder Head		
	Engines With 4 Valve and 2 Valve Cylinder Head				C Application		
	C Application				290 HP, 2100 RPM, 240 HP, 1800 RPM Engines		
12377	Pan, oil	1	1	OMIT: 121377	Pan, oil	1	1
	MOUNTING PARTS			ADD: 139745 68908 20622	Pan, oil Lockplate Screen, oil pan	1 12 1	1 16
12360	Aerator, oil pan	1	2				
S-302	Capscrew (5/16"-18 x 1")	3	3				
S-103-A	Capscrew (1/4"-20 x 5/8")	12	4		SUCTION FLANGE		
S-125	Capscrew (1/2"-13 x 2")	3			Capscrew (3/8"-16 x 2")	2	21
70200	Capscrew (7/16"-20 x 1-3/8")	28	5	108707	Flange, suction	1	22
18304	Capscrew (7/16"-14 x 1-1/2")	4	6	187059	Gasket, suction flange	1	23
10574	Capscrew (5/16"-14 x 2-1/4")	4	7	67963	Lockwasher (3/8")	2	24
170706	Gasket, oil pan	1	8	S-604	Washer, plain	2	
11963	Gasket, aerator	1	9	S-602			
12379	Gasket, baffle plate	1	10		DIPSTICK, OIL GAUGE		
S-200	Lockwasher (1/4")	12	11		Dipstick, oil gauge	1	25
S-605	Lockwasher (5/16")	7	12				
S-606	Lockwasher (1/2")	3		124035			
S-610	Lockwasher (7/16")	34	13		OIL GAUGE BRACKET AND TUBE		
S-200-A	Nut	3			Bracket, oil gauge	1	26
12378	Plate, baffle	1	14		Capscrew (3/8"-16 x 1")	4	27
S-362	Plug, pipe (1")	1		131998	Gasket	1	28
S-905-A	Plug, pipe (1/2")	2	31	S-112	Lockwasher (3/8")	4	29
S-905	Plug, pipe (3/4")	2	15	65274	Tube, oil gauge	1	30
20622	Screen, lubricating oil plate	1	16	S-604			
110154	Screen, oil pan	1	17	101814			
S-134	Screw	12	18				
S-601	Washer, plain	3					
S-622	Washer (15/32")	34	19				
S-625	Washer (11/32")	4	20				

PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



ENGINE APPLICATION		AUTOMOTIVE	X	B - OFF-HIGHWAY	X	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.		
	LUBRICATING OIL FILTER				Engines With 4 Valve Cylinder Head				
	Engines With 4 Valve Cylinder Head				C Application				
	Auto, B, P Applications				290 HP, 2100 RPM Engines				
	Engines With 2 Valve Cylinder Head				Auto, B, C, P Applications				
	B, P Applications				320 HP, 2100 RPM Engines				
	240 HP, 1800 RPM Engines				Engines With 2 Valve Cylinder Head				
	Filter, oil	1			C Application				
AR-01058	Cartridge (paper)	1	1	BM-94090	240 HP, 1800 RPM Engines				
LF-516	Seal, shell to filter head	1	2	LF-516	Filter, oil	1			
173368	Shell and bolt	1		153528	Cartridge (paper)	1	1		
179599	Bolt	1	3	165286	Seal, shell to filter head	1	2		
184265	Plug, drain	1	4	153517	Shell and bolt	1			
69901	Ring, snap	1	5	69901	Bolt	1	3		
S-16245	Seal, bolt	1	6	S-16245	Plug, drain	1	4		
153518	Shell	1	7	153518	Ring, snap	1	5		
184386	Spring, cartridge	1	8	153516	Seal, bolt	1	6		
173176	Support, cartridge	1	9	153519	Shell	1	7		
183342	Washer, bolt seal	1	10	153521	Spring, cartridge	1	8		
153520	Washer, copper	1	11	153520	Support, cartridge	1	9		
8265				8265	Washer, bolt	1	10		
					Washer, copper	1	11		

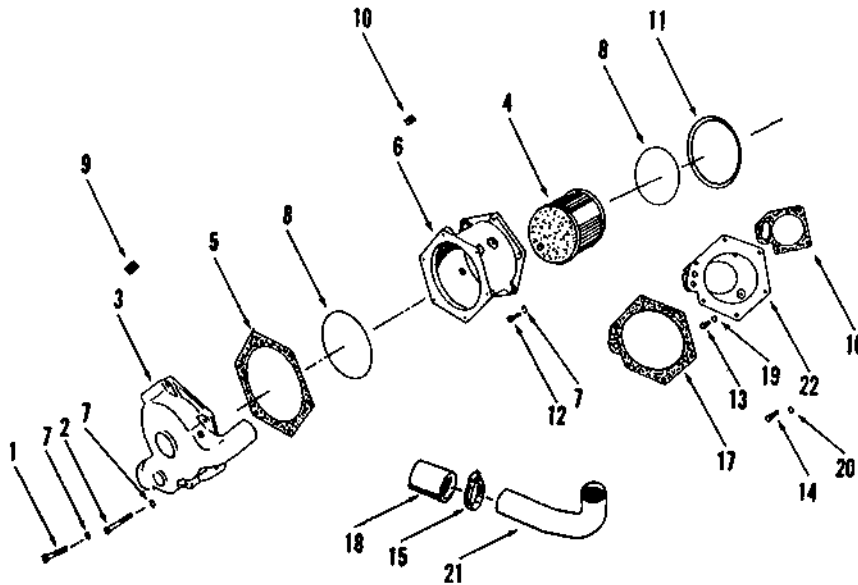
PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



ENGINE APPLICATION	AUTOMOTIVE	B - OFF-HIGHWAY	C - CONSTRUCTION & INDUSTRIAL	X	P - INDUSTRIAL POWER
--------------------	------------	-----------------	-------------------------------	---	----------------------

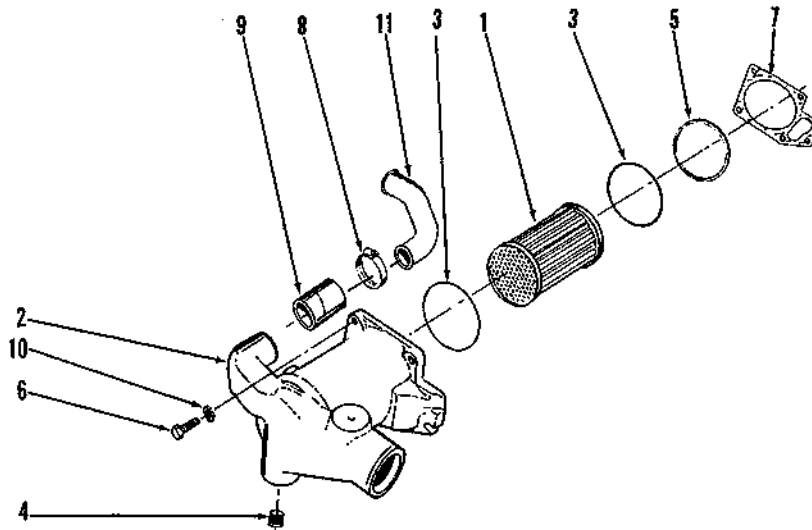
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.
	LUBRICATING OIL BY-PASS FILTER						
	Engines With 2 Valve and 4 Valve Cylinder Head						
	C Application						
	290 HP, 320 HP, 2100 RPM and 240 HP, 1800 RPM Engines						
159706	Filter, lubricating oil	1					
145664	Bracket, mounting	2	1				
70188	Capscrew, bracket	8	2				
70499	Capscrew, coupling half	2	3				
LF-750	Cartridge	1	4				
150038	Coupling half with nuts	1	5				
150039	Coupling half, cover	1	6				
159667	Cover	1	7				
70189	Lockwasher, bracket	8	8				
70194	Lockwasher, coupling half	2	9				
70299	Nut, bracket	8	10				
164159	"O" ring cover	1	11				
S-908	Plug, cover	1	12				
145665	Strap, mounting	2	13				
252057	Shell, filter	1	14				
157152	Decal, filter	1					
S-908	Plug, drain	1	15				
252138	Support, upper	1					
116029	"O" ring, support	1	16				
131911	Orifice, plug	1	17				
150037	Spring, hold down	1	18				
252055	Support, upper	1	19				

PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



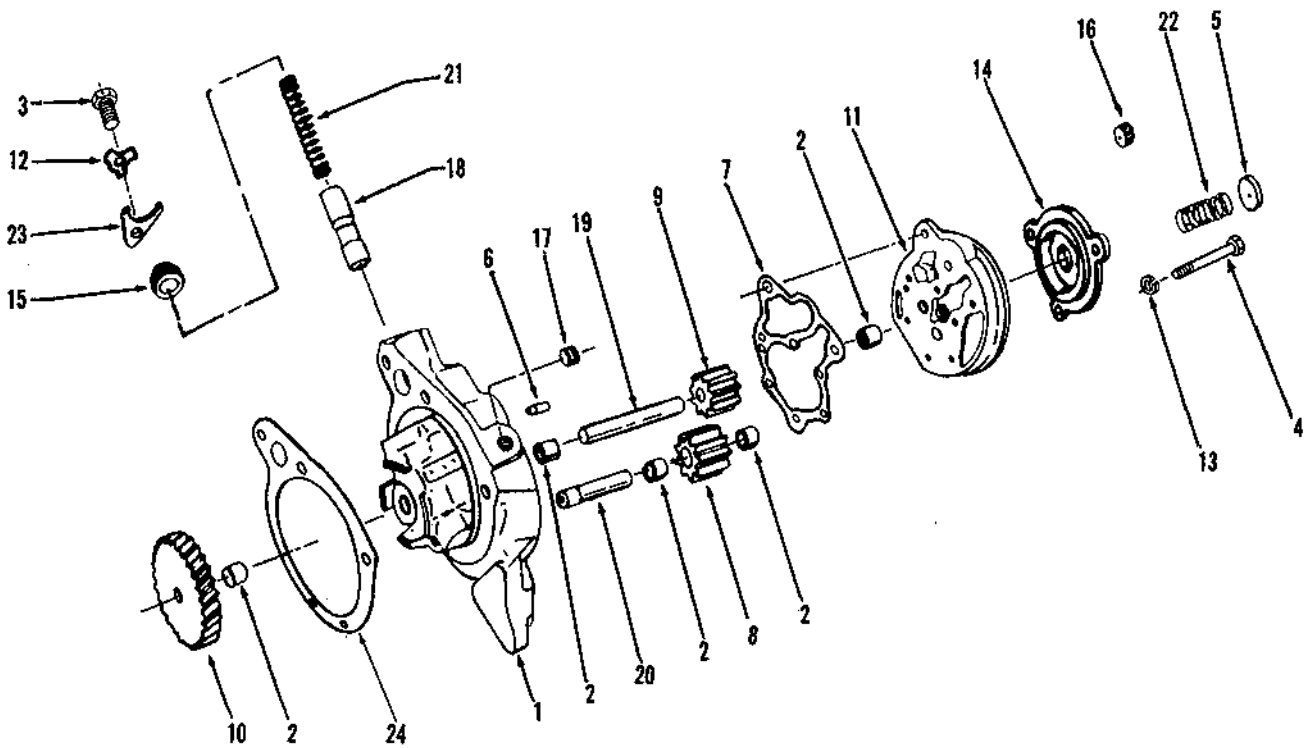
ENGINE APPLICATION		AUTOMOTIVE	X	B - OFF-HIGHWAY	X	C - CONSTRUCTION & INDUSTRIAL	X	P - INDUSTRIAL POWER	X
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.		
	LUBRICATING OIL COOLER				MOUNTING PARTS				
	Engines With 4 Valve Cylinder Head			S-103-D	Capscrew (3/8"-16 x 1-1/4")	5	12		
	Auto, B, C, P Applications			S-126	Capscrew (3/8"-16 x 2-1/2")	2	13		
	320 HP, 2100 RPM Engines			70213	Capscrew (3/8"-16 x 1-1/4")	2	14		
BM-65816	Cooler, lubricating oil	1		43828-B	Clamp, hose	4	15		
S-137	Capscrew (3/8"-16 x 2")	1	1	121779	Gasket	1	16		
S-103-D	Capscrew (3/8"-16 x 1-1/4")	5	2	133179	Gasket	1	17		
183345	Cover, housing	1	3	63495	Hose	2	18		
125659	Element, cooler	1	4	S-604	Lockwasher (3/8")	7	19		
133190	Gasket, cover to housing	1	5	70206	Lockwasher (3/8")	2	20		
133102	Housing, cooler	1	6	134288	Pipe, by-pass	1	21		
S-604	Lockwasher (3/8")	6	7	133225	Support	1	22		
148294	"O" ring	2	8						
S-995	Plug, pipe (3/4")	2	9						
S-910-B	Plug, pipe (1/4")	6	10						
125658	Retainer, "O" ring	1	11						

PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



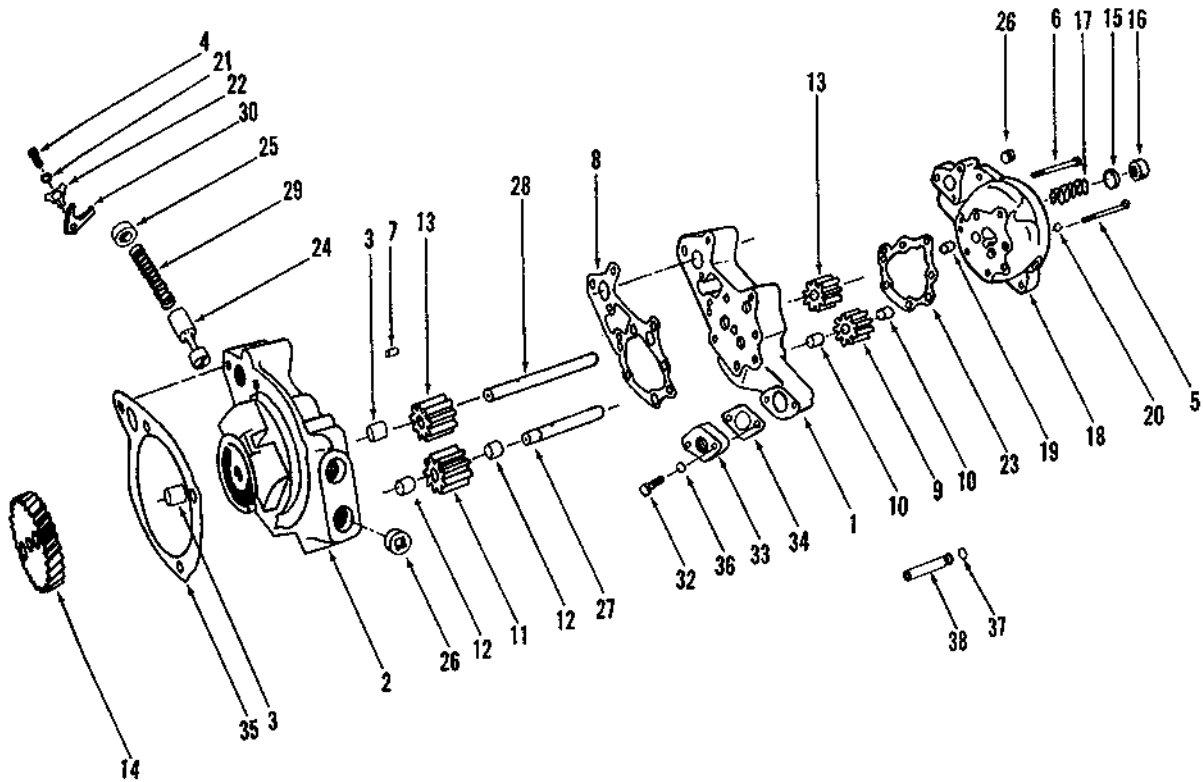
ENGINE APPLICATION		AUTOMOTIVE	X	B - OFF-HIGHWAY	X	C - CONSTRUCTION & INDUSTRIAL	X	P - INDUSTRIAL POWER	X
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.		
	LUBRICATING OIL COOLER				MOUNTING PARTS				
	Engines With 4 Valve and 2 Valve Cylinder Head			S-103-D	Capscrew (3/8"-16 x 1-1/4")	5	6		
				121779	Gasket	1	7		
	Auto, B, C, P Applications			43828-B	Clamp, hose	4	8		
	290 HP, 2100 RPM, 240 HP, 1800 RPM Engines			63495	Hose	2	9		
				S-604	Lockwasher (3/8")	5	10		
				21133	Pipe, by-pass	1	11		
BM-67673	Cooler, lubricating oil	1							
110848	Element	1	1						
181518	Housing	1	2						
148293	"O" ring	2	3						
S-995	Plug, pipe (3/4")	1	4						
110827	Retainer, "O" ring	1	5						

PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



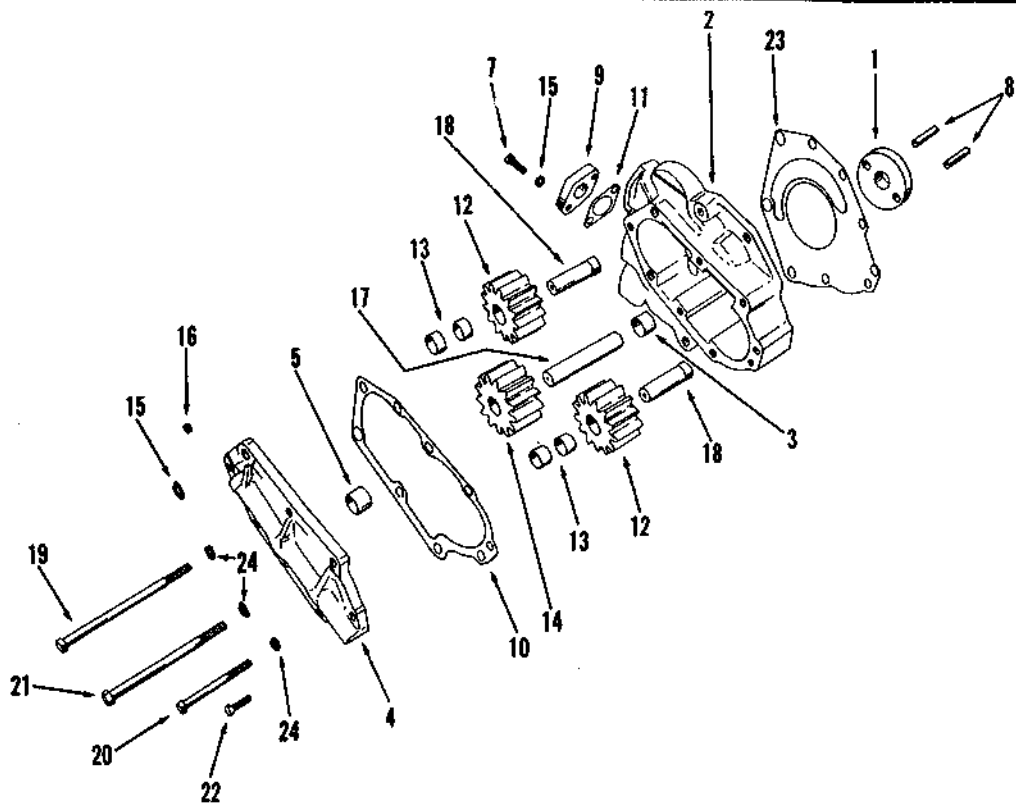
ENGINE APPLICATION		AUTOMOTIVE	B - OFF-HIGHWAY	C - CONSTRUCTION & INDUSTRIAL	P - INDUSTRIAL POWER		
		X	X		X		
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.
	LUBRICATING OIL PUMP (SINGLE)				MOUNTING PARTS		
	Engines With 4 Valve Cylinder Head			S-101-A	Capscrew (7/16"-20 x 1")	1	
	Auto, B, P Applications			S-183-A	Capscrew (7/16"-20 x 2-1/2")	3	
	290 HP, 2100 RPM Engines			S-127-A	Capscrew (7/16"-20 x 3")	1	
	Engines With 2 Valve Cylinder Head			121907	Gasket, pump to block	1	24
	B, P Applications			S-610	Lockwasher (7/16")	5	
240 HP, 1800 RPM Engines							
AR-01961	Pump, lubricating oil	1					
AR-01017	Body and bushing (173160)	1	1				
68586	Bushing	2	2				
S-109	Capscrew (3/8"-16 x 7/8")	1	3				
191772	Capscrew	5	4				
BM-20443	Gear, idler (68589)	1	8				
68586	Bushing	2	2				
69519	Dowel	1	6				
173161	Gasket	1	7				
68588	Gear, drive	1	9				
135037	Gear, main drive	1	10				
AR-01018	Head, filter (173162)	1	11				
68586	Bushing	1	2				
153525	Disc, by-pass	1	5				
251152	Spring, by-pass	1	22				
109319	Lockplate	1	12				
S-604	Lockwasher (3/8")	5	13				
173163	Plate, filter head	1	14				
S-908	Plug, pipe (3/8")	1	16				
S-915-A	Plug, pipe (1/2")	1	17				
134596	Plug, by-pass valve	1	15				
127558	Plunger	1	18				
126284	Shaft, drive	1	19				
126289	Shaft, idler	1	20				
68274	Spring, by-pass valve	1	21				
126304	Yoke	1	23				

PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



ENGINE APPLICATION		AUTOMOTIVE	X	B - OFF-HIGHWAY	X	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.		
	LUBRICATING OIL PUMP (DOUBLE)			134596	Plug, by-pass valve	1	25		
				S-995	Plug, pipe (3/4")	2	26		
				S-908	Plug, pipe (3/8")	1			
				133848	Shaft, idler	1	27		
				164164	Shaft, drive	1	28		
				68274	Spring, by-pass valve	1	29		
				126304	Yoke, retaining	1	30		
	Engines With 2 Valve and 4 Valve Cylinder Head								
	C Application								
	240 HP, 1800 RPM, 290 HP, 2100 RPM Engines								
					Engines With 4 Valve Cylinder Head				
					Auto, B, C, P Applications				
					320 HP, 2100 RPM Engines				
					Same as above except:				
BM-94084	Pump, lubricating oil	1							
151917	Body, inner	2	1						
BM-66076	Body and bushing (164162)	1	2						
68586	Bushing	2	3						
S-109	Capscrew (3/8"-16 x 7/8")	1	4						
S-130-A	Capscrew (3/8"-16 x 5-1/4")	3	5	OMIT:					
S-169-A	Capscrew (3/8"-16 x 4-1/2")	2	6	BM-94084	Pump, lubricating oil	1			
S-199-A	Capscrew (3/8"-16 x 4")	1		BM-66076	Body and bushing (164162)	1	2		
S-196-A	Capscrew (7/16"-20 x 2-3/4")	1							
101662	Capscrew (5/16"-18 x 4-1/2")	2		ADD:					
69519	Dowel	2	7	BM-94086	Pump, lubricating oil	1			
133851	Gasket, housing to cover	1	23	BM-63816	Body and bushing (164163)	1	2		
151911	Gasket, housing	2	8	134736	"O" ring	1	37		
BM-20443	Gear and bushing (68589)	1	9	185696	Tube, piston-cooling oil	1	38		
68586	Bushing	2	10						
BM-63818	Gear and bushing (133827)	1	11		MOUNTING PARTS				
68586	Bushing	2	12		All Applications				
68588	Gear, impeller drive	2	13						
136314	Gear, main drive	1	14						
BM-94081	Head, filter	1		S-101-A	Capscrew (7/16"-20 x 1")	2			
153525	Disc, by-pass	1	15	69960	Capscrew, hex head	1			
153526	Seat, by-pass	1	16	169657	Capscrew, hex head	1			
251152	Spring	1	17	S-103-D	Capscrew (3/8"-16 x 1-1/4")	2	32		
BM-94080	Head, filter (197093)	1	18	134284	Flange, scavenger pump	1	33		
68586	Bushing	1	19	134285	Gasket, flange to body	1	34		
S-604	Lockwasher (3/8")	6	20	121907	Gasket, pump to block	1	35		
S-605	Lockwasher (5/16")	2	21	S-604	Lockwasher (3/8")	2	36		
S-616	Lockwasher (7/16")	1		S-610	Lockwasher (7/16")	4			
109319	Lockplate	1	22						
127558	Plunger, regulator	1	24						

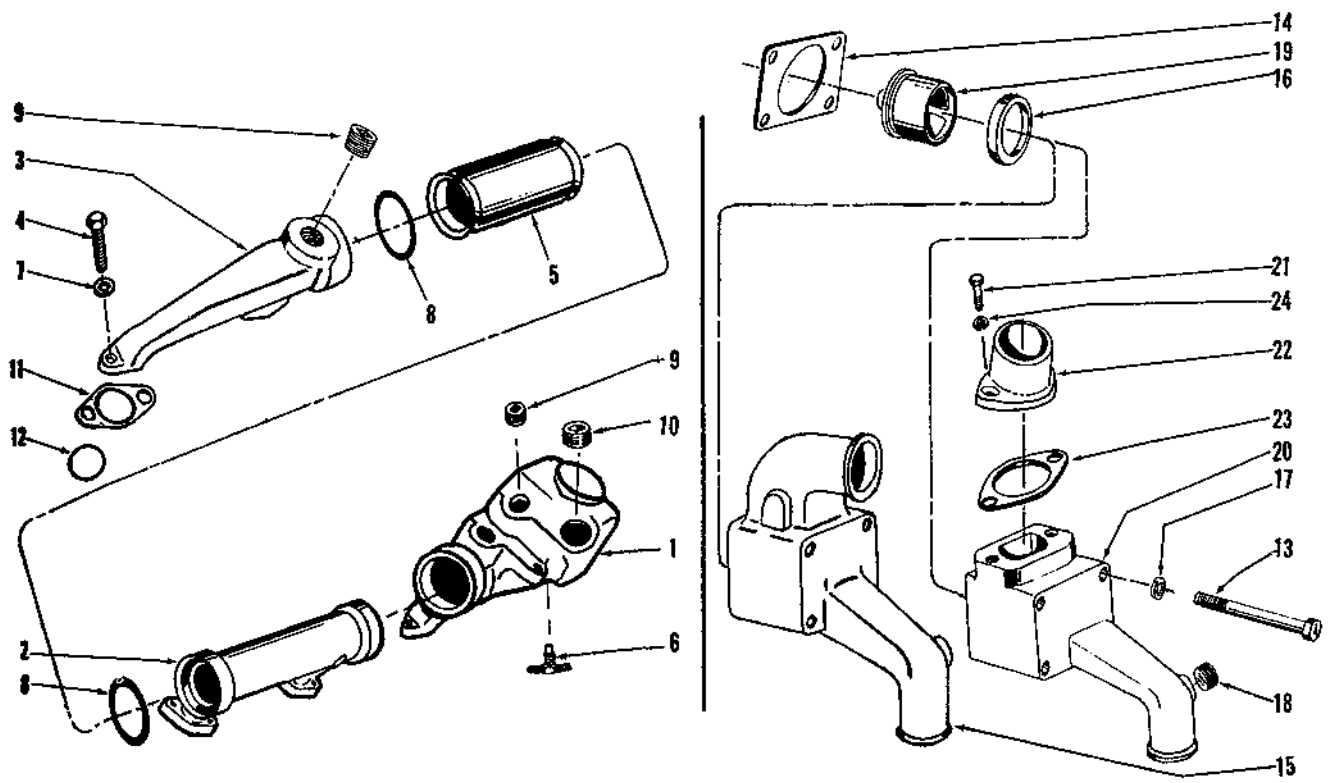
PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



ENGINE APPLICATION	AUTOMOTIVE	B - OFF-HIGHWAY	C - CONSTRUCTION & INDUSTRIAL	X	P - INDUSTRIAL POWER
--------------------	------------	-----------------	-------------------------------	---	----------------------

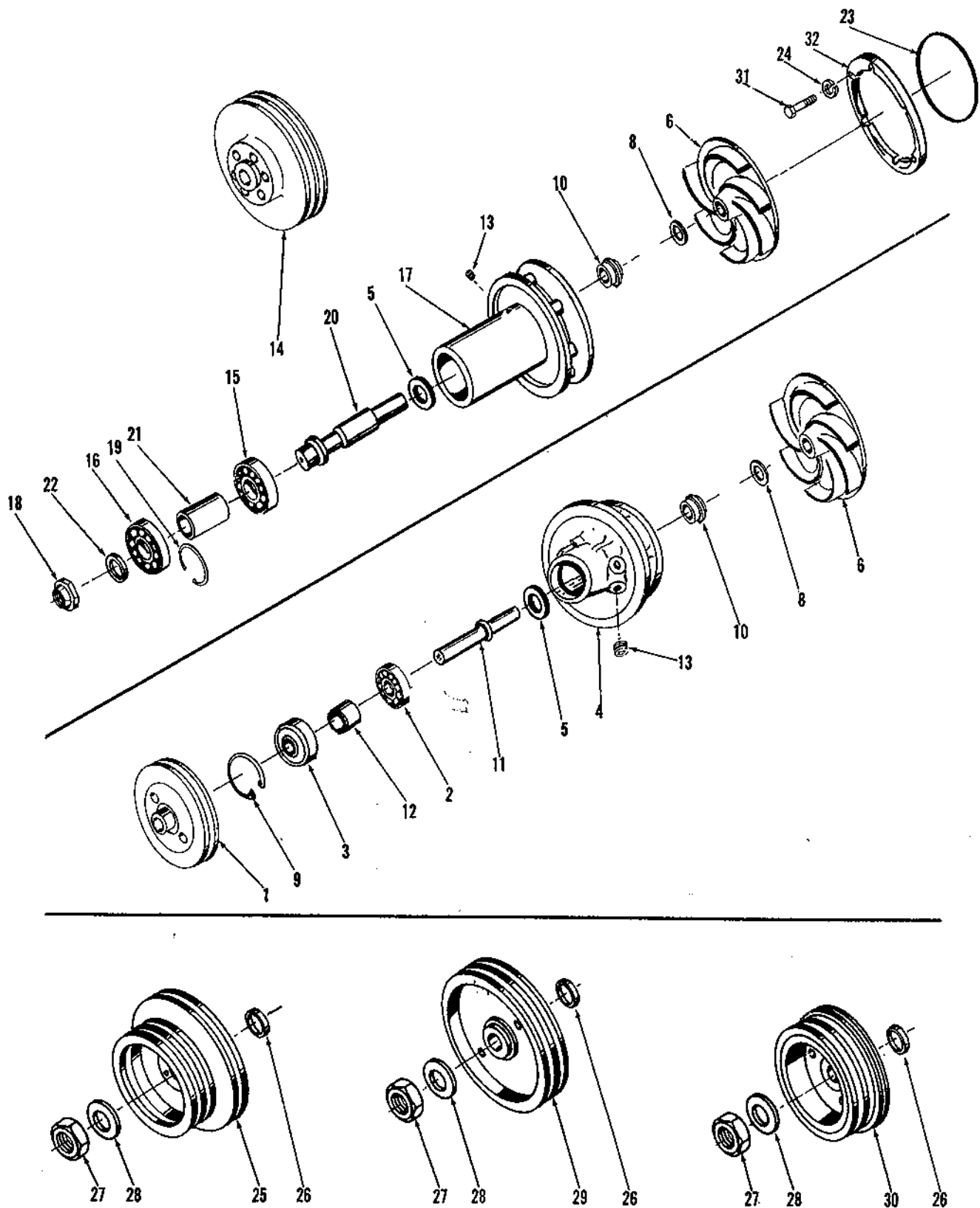
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.
	SCAVENGER PUMP				MOUNTING PARTS		
	Engines With 4 Valve Cylinder Head			134963	Capscrew, pump to gear cover	1	
	C Application			120688	Capscrew, pump to gear cover	2	19
	320 HP, 2100 RPM Engines			S-163	Capscrew, pump to gear cover	3	20
				S-120	Capscrew, pump to gear cover	1	21
				S-172-B	Capscrew, pump to gear cover	1	22
BM-66130	Pump, double scavenger	1		133831	Gasket, pump to gear cover	1	23
139267	Adapter	1	1	S-604	Lockwasher (3/8"), pump to gear cover	5	24
BM-64811	Body and bushing (133834)	1	2	S-610	Lockwasher (7/16")	3	
133835	Bushing, shaft	1	3				
BM-66128	Cover and bushing (133843)	1	4				
113126	Bushing, shaft	1	5				
S-103-D	Capscrew, flange	7	7				
7613	Dowel, drive adapter	2	8				
144706	Flange, scavenger pump drive	1					
134284	Flange, suction	2	9				
133844	Gasket, cover to body	1	10				
134285	Gasket, flange	2	11				
BM-64809	Gear and bushing, idler (133841)	2	12				
113126	Bushing, shaft	4	13				
133837	Gear, impeller drive	1	14				
S-604	Lockwasher (3/8") cover to body	7	15				
S-911-B	Plug, pipe (1/8")	1	16				
133836	Shaft, drive	1	17				
133839	Shaft, idler	2	18				

PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



ENGINE APPLICATION		AUTOMOTIVE	X	B - OFF-HIGHWAY	X	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.		
WATER MANIFOLD				THERMOSTAT HOUSING					
All Applications				Engines With 2 Valve and 4 Valve Cylinder Head					
21749	Manifold, water (front)	1	1	Auto, B, C Applications					
44733	Manifold, water (center)	1	2	290 HP, 320 HP, 2100 RPM and					
44730	Manifold, water (rear)	1	3	240 HP, 1800 RPM Engines					
S-138-A	Capscrew (5/16"-24 x 7/8")	12	4	S-199-B	Capscrew (3/8"-16 x 3-3/4")	4	13		
70627	Coupling, manifold	2	5	70441	Gasket, housing	1	14		
S-962-E	Draincock	1	6	BM-90637	Housing, thermostat (161380)	1	15		
S-605	Lockwasher (5/16")	12	7	186780	Seal, housing	1	16		
70624	"O" ring	4	8	S-604	Lockwasher (3/8")	4	17		
S-915-A	Plug, pipe (1/2")	2	9	S-908	Plug, pipe (3/8")	1	18		
S-995	Plug, pipe (3/4")	1	10	135675	Thermostat (170° to 185°)	1	19		
BM-90021	Plate and ring assembly	6	6	Engines With 2 Valve and 4 Valve Cylinder Head					
156334	Plate, retaining	6	11	P Application					
160196	Ring, sealing	6	12	290 HP, 320 HP, 2100 RPM and					
				240 HP, 1800 RPM Engines					
				Same as above except:					
				OMIT:					
				BM-90637	Housing, thermostat (161380)	1	15		
				ADD:					
				BM-73207	Housing, thermostat (146106)	1	20		
				S-112	Capscrew (3/8"-16 x 1")	2	21		
				68270	Connection, outlet	1	22		
				9221	Gasket, connection	1	23		
				S-604	Lockwasher (3/8")	2	24		

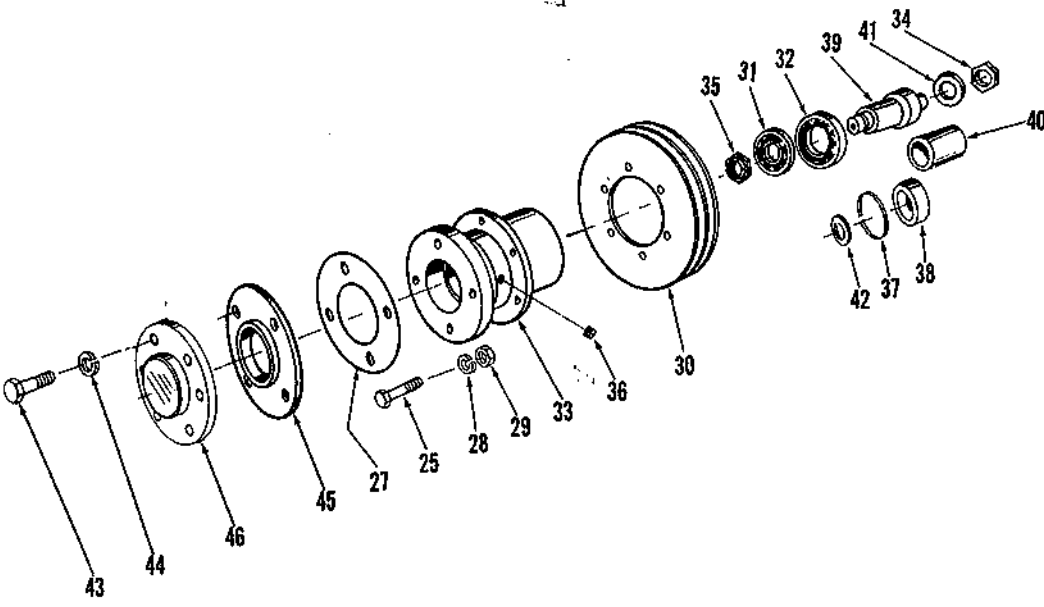
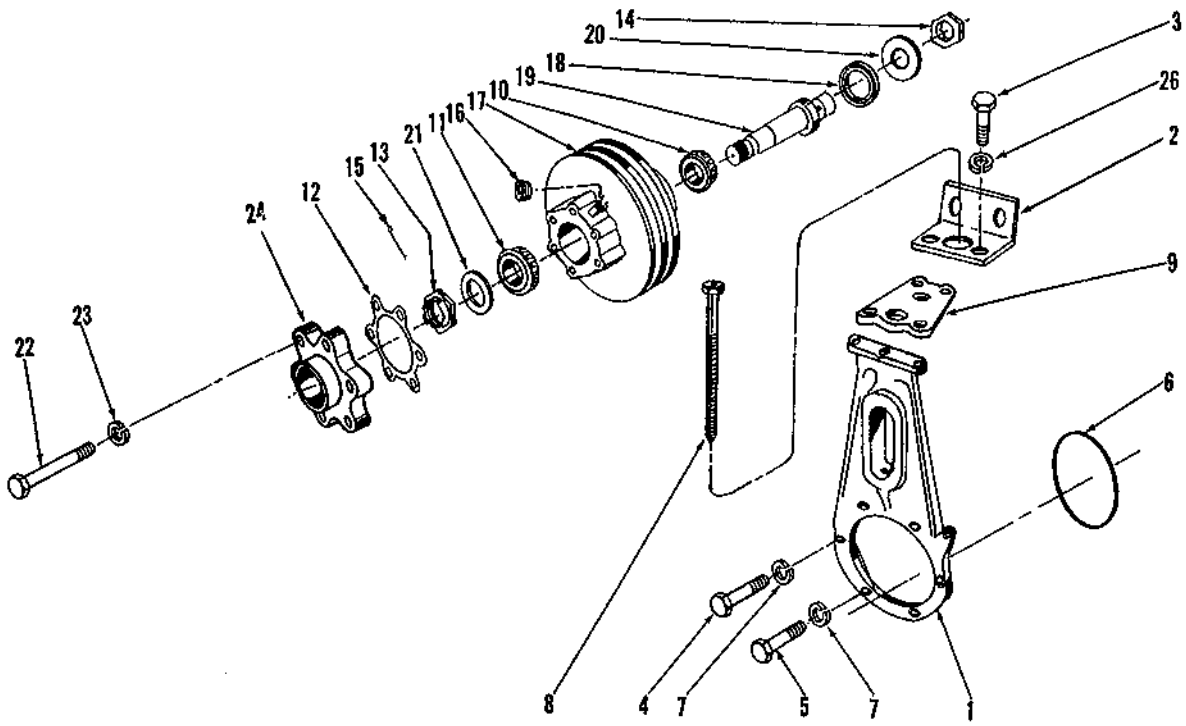
PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



WATER PUMP AND PULLEY

ENGINE APPLICATION		AUTOMOTIVE	X	B - OFF-HIGHWAY	X	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.		
	WATER PUMP			AR-06589	Impeller (201766)	1	6		
	Engines With 4 Valve Cylinder Head			200509	Seal, seat	1	8		
	Auto, B, C, P Applications			115508	Nut, huglock	1	18		
	290 HP, 320 HP, 2100 RPM Engines			S-16255	Ring, retaining	1	19		
	Engines With 2 Valve Cylinder Head			170895	Seal, water pump	1	10		
	P Application			115502	Shaft, water pump	1	20		
	240 HP, 1800 RPM Engines			67509	Spacer, bearing	1	21		
				115550	Washer, plain	1	22		
				S-911-B	Plug, pipe (1/8")	1	13		
				172856	Belt, fan and water pump drive	2			
				S-194	Capscrew (3/8"-24 x 1-1/4")	6	31		
				9097	Gasket, pump	1	23		
BM-50446	Pump, water (with pulley)	1		S-604	Lockwasher (3/8")	6	24		
112718	Pulley, water pump	1	1	193432	Ring, water pump	1	32		
BM-76506	Pump, water (less pulley)	1		197277	Spacer, water pump ring	1			
69289	Bearing, ball	1	2	108330	Washer	5			
177596	Bearing, ball	1	3						
132423	Body, water pump	1	4						
185616	Filter, dust	1	5						
AR-06589	Impeller (201766) (R.H.)	1	6						
200509	Seal, seat	1	8						
132427	Ring, retaining	1	9						
170895	Seal, water pump	1	10						
112719	Shaft, water pump	1	11						
67520-1	Spacer, bearing	1	12	AR-05065	Pulley, fan and water pump drive (190399)	1	25		
S911-B	Plug, pipe (1/8")	1	13	190397	Sleeve, pulley	1	26		
	Engines With 4 Valve Cylinder Head			191517	Locknut	1	27		
	Auto, B, C Applications			194380	Washer, plain	1	28		
	Engines With 2 Valve Cylinder Head								
	B, C Applications								
134809	Belt, fan drive	2							
200328	Belt, water pump	1							
	Engines With 4 Valve Cylinder Head			AR-05820	Pulley, fan and water pump drive (190522)	1	29		
	P Applications			190397	Sleeve, pulley	1	26		
				191517	Locknut	1	27		
178611	Belt, fan drive	2		194380	Washer, plain	1	28		
200328	Belt, water pump	1							
	Engines With 2 Valve Cylinder Head								
	P Applications			AR-05021	Pulley, fan and water pump drive (190406)	1	30		
				190397	Sleeve, pulley	1	26		
178617	Belt, fan drive	2		191517	Locknut	1	27		
178570	Belt, water pump	1		194380	Washer, plain	1	28		
	Engines With 2 Valve Cylinder Head								
	B, C Applications								
	240 HP, 1800 RPM Engines								
BM-78347	Pump, water (with pulley)	1							
150948	Pulley, water pump	1	14						
BM-50345	Pump, water (less pulley)	1							
115512	Bearing, ball	1	15						
115519	Bearing, ball	1	16						
165135	Body, water pump	1	17						
185616	Filter, dust	1	5						

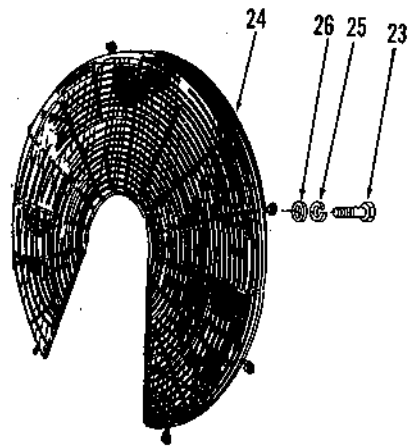
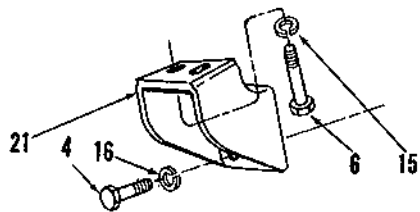
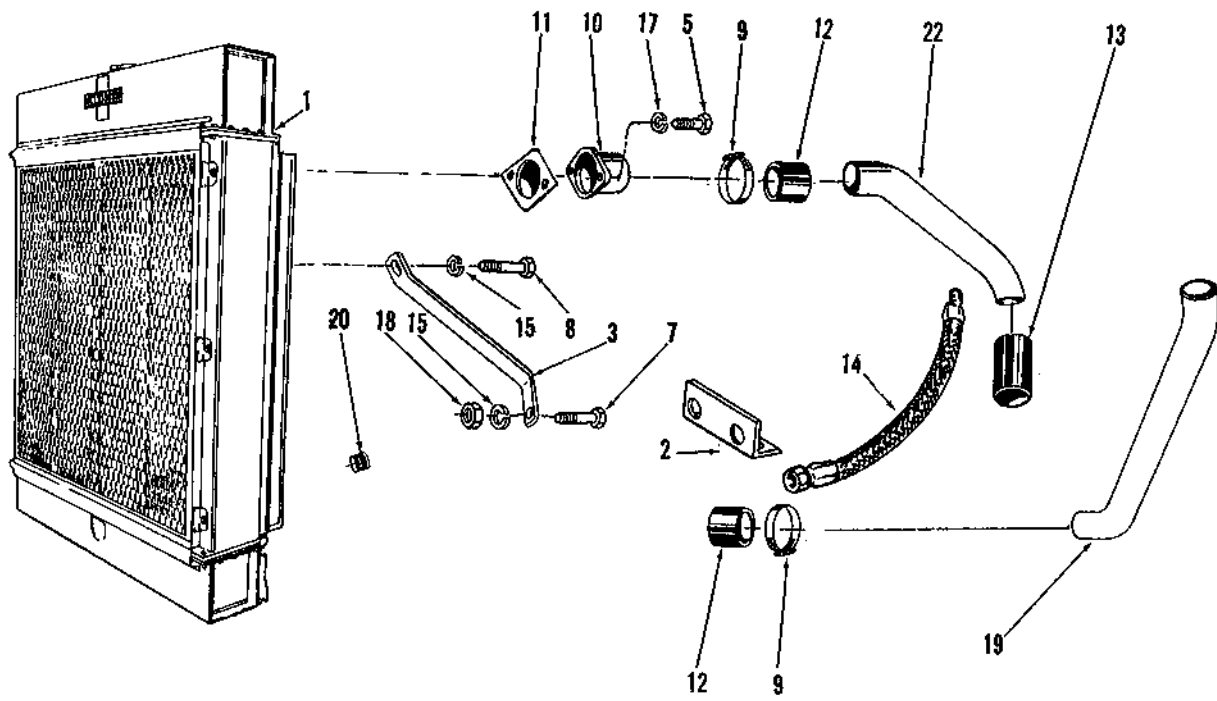
PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



FAN BRACKET, FAN HUB, AND MOUNTING PARTS

ENGINE APPLICATION		AUTOMOTIVE	X	B - OFF-HIGHWAY	X	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.		
	FAN BRACKET				MOUNTING PARTS				
	Engines With 4 Valve Cylinder Head			108707	Capscrew (3/8"-16 x 1-1/2")	6	22		
	Auto, B, C, P Applications			S-604	Lockwasher (3/8")	6	23		
	290 HP, 320 HP, 2100 RPM Engines			147209	Spacer, fan pilot	1	24		
	Engines With 2 Valve Cylinder Head				Engines With 4 Valve Cylinder Head				
	P Application				P Application				
					290 HP, 320 HP, 2100 RPM Engines				
41717-2	Bracket, fan	1	1	BM-72981	Fan pulley	1			
70173	Bracket, radiator support	1	2	108707	Capscrew (3/8"-16 x 1-1/2")	6	25		
S-113	Capscrew, bracket support	2	3	67547	Gasket	1	27		
S-194	Capscrew, fan bracket	4	4	S-604	Lockwasher (3/8")	6	28		
105831	Capscrew, fan bracket	2	5	S-223	Nut	6	29		
9097	Gasket	1	6	20536	Pulley, fan	1	30		
S-604	Lockwasher (3/8")	6	7	BM-72969	Assembly, fan hub (less pulley)	1			
S-608	Lockwasher (1/2")	2	26	S-16004-A	Bearing, ball	1	31		
66912-1A	Screw, adjusting	1	8	S-16093	Bearing, ball	1	32		
70172	Support, fan bracket	1	9	162123	Hub, fan	1	33		
				67532	Nut, Marsden	1	34		
	FAN HUB			142176	Nut, huglock	1	35		
	Engines With 4 Valve Cylinder Head			S-911-B	Plug, pipe (1/8")	2	36		
	Auto, B, C Applications			162127	Ring, retaining	1	37		
	290 HP, 320 HP, 2100 RPM Engines			162128	Seal, oil	1	38		
	Engines With 2 Valve Cylinder Head			42377	Shaft, fan hub	1	39		
	P Application			67550	Spacer, bearing	1	40		
				67546	Washer, clamp	1	41		
				67551	Washer, clamp	1	42		
					MOUNTING PARTS				
BM-72337	Hub, fan	1		108707	Capscrew (3/8"-16 x 1-1/2")	6	43		
143116	Bearing, roller	1	10	S-608	Lockwasher (1/2")	6	44		
116759	Bearing, roller	1	11	42378	Pilot, fan	1	45		
143108	Gasket	1	12	43583	Spacer	1	46		
146650	Nut	1	13		FAN				
67532	Nut, Marsden	1	14		Engines With 4 Valve Cylinder Head				
S-510	Pin	1	15		P Application				
S-911-B	Plug, pipe (1/8")	2	16		290 HP, 320 HP, 2100 RPM Engines				
146656	Pulley, fan hub	1	17		Fan (320 HP)	1			
106276	Seal, oil	1	18		Fan (290 HP)	1			
146649	Shaft	1	19		Engines With 2 Valve Cylinder Head				
67526	Washer, clamp	2	20		P Application				
146651	Washer, cone clamping	1	21	160559	Fan (320 HP)	1			
				43381-1	Fan (290 HP)	1			
					Engines With 2 Valve Cylinder Head				
					P Application				
					240 HP, 1800 RPM Engines				
				20217-1	Fan	1			
				66440-1	Spacer	1			

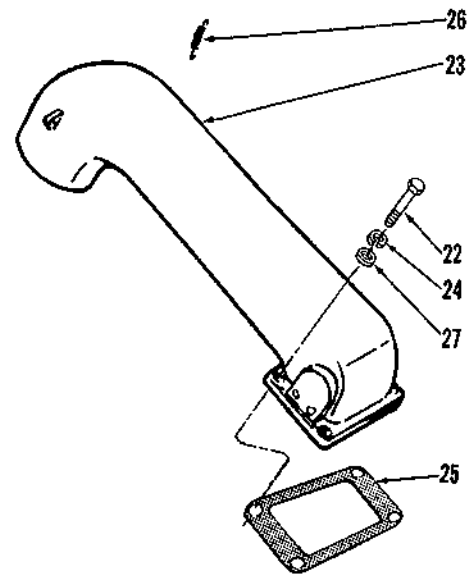
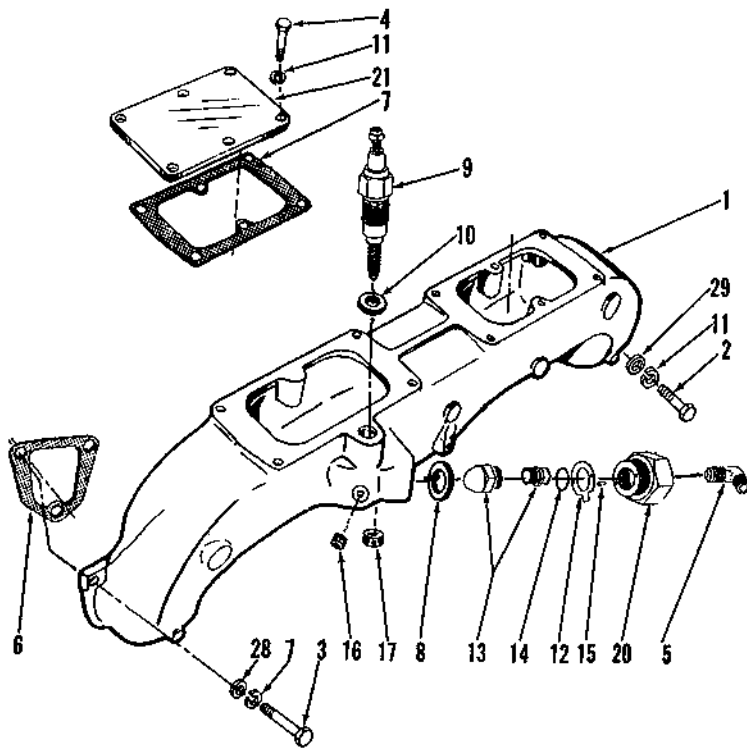
PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



RADIATOR

ENGINE APPLICATION		AUTOMOTIVE		B - OFF-HIGHWAY		C - CONSTRUCTION & INDUSTRIAL		P - INDUSTRIAL POWER		X	
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.				
	RADIATOR				Engines With 2 Valve Cylinder Head						
	Engines With 4 Valve Cylinder Head				Same as 290 HP except:						
	290 HP, 2100 RPM Engines				OMIT:						
184369	Radiator	1	1	43584-A	Brace, radiator	1				3	
				184369	Radiator	1				1	
				AS053360SS	Hose	1				14	
				196921	Tube	1					
				102234	Hose	1				13	
186935	Adapter, hose	2									
18173	Bracket, radiator brace	1	2	ADD:							
18384-A	Brace, radiator	2	3	43584	Brace, radiator	1				3	
5125	Capscrew, support (1/2"-13 x 2")	8	4	183665	Radiator	1				1	
5172-B	Capscrew, connection (3/8"-16 x 1-1/8")	4	5	AS0502760SS	Hose	1				14	
5327-C	Capscrew, support (5/8"-11 x 1-3/4")	4	6	197717	Tube	1					
5145	Capscrew, brace (1/2"-13 x 1-1/4")	2	7	67185	Hose	1				12	
5169	Capscrew (1/2"-13 x 1")	2	8								
18793	Capscrew (3/8"-24 x 3/4")	1			FAN GUARD						
1828-A	Clamp, hose	4		S-114	Engines With 4 Valve Cylinder Head						
1828-D	Clamp, hose	8	9	43728	Capscrew (1/4"-20 x 3/4")	8				23	
187460	Clamp, hose	1		S-600	Guard, fan	1				24	
18270	Connection, outlet	2	10	S-631	Lockwasher (1/4")	8				25	
5988	Elbow, pipe	1			Washer, plain (9/32")	8				26	
1821	Gasket, connection	2	11		Engines With 2 Valve Cylinder Head						
18554	Hose, water	2			Same as above except:						
18185	Hose, water	3	12								
182234	Hose, water	1	13								
AS0503360SS	Hose	1	14	OMIT:							
5603	Lockwasher, support (5/8")	4	15	43728	Guard, fan	1				24	
5608	Lockwasher (1/2")	12	16								
5604	Lockwasher (3/8")	5	17	ADD:							
186598	Nameplate, Cummins	1		43727	Guard, fan	1				24	
5932-B	Nipple, pipe	1									
5205	Nut	1									
5200	Nut, brace (1/2")	2	18								
182228	Pipe, water outlet	1	19								
5995	Plug	1	20								
53097	Screw, nameplate	2									
281351	Strap, binding	2									
18585	Support, radiator	2	21								
186845	Support	1									
AR-02634	Tube, water inlet connection	1	22								
124867	Tube	1									
181669	Thredolet	1									
186921	Tube	1									
5602	Washer, plain (13/32")	1									
	320 HP, 2100 RPM Engines										
	Same as 290 HP except:										
OMIT:											
18793	Capscrew (3/8"-24 x 3/4")	1									
182228	Pipe, water outlet	1	19								
182234	Hose	1	13								
186834	Support	1									
186921	Tube	1									
ADD:											
5129	Capscrew (3/8"-24 x 1")	1									
180231	Pipe, water outlet	1	19								
67185	Hose	1	12								
134307	Bracket	1									
188818	Tube	1									

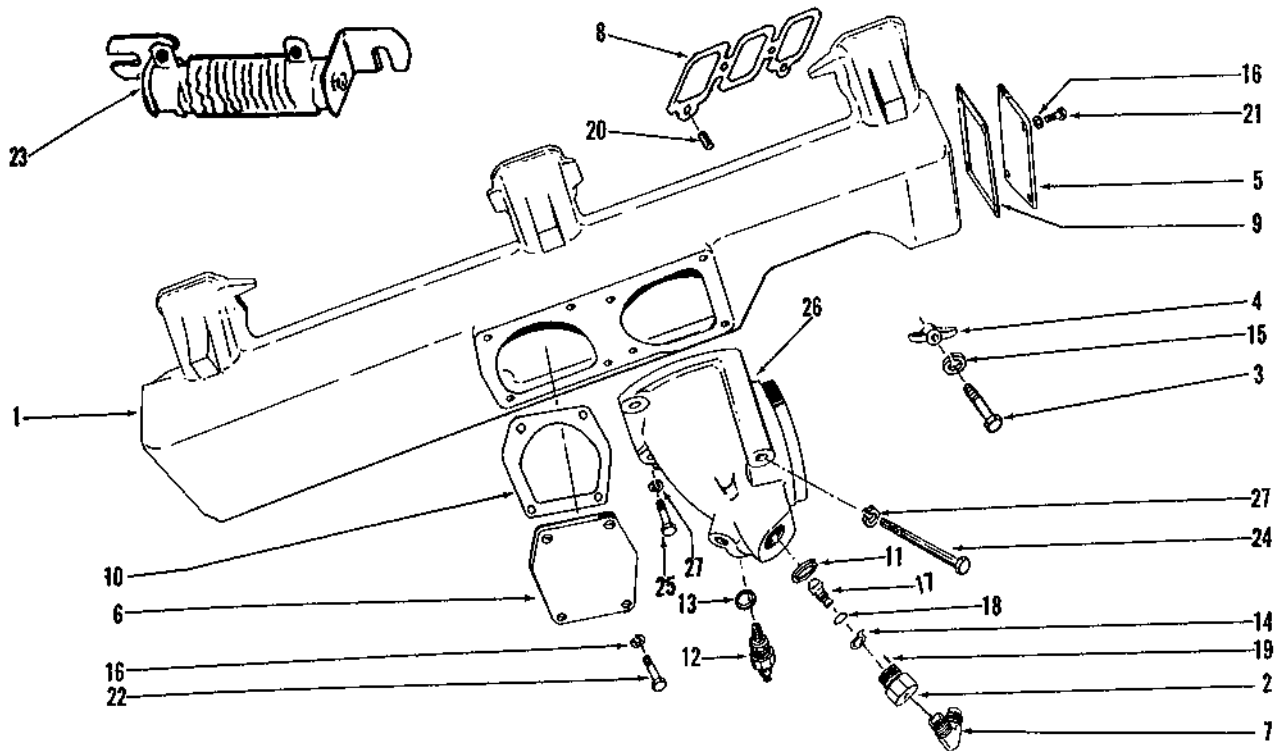
PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



ENGINE APPLICATION	AUTOMOTIVE	X	B - OFF-HIGHWAY	X	C - CONSTRUCTION & INDUSTRIAL	X	P - INDUSTRIAL POWER	X
--------------------	------------	---	-----------------	---	-------------------------------	---	----------------------	---

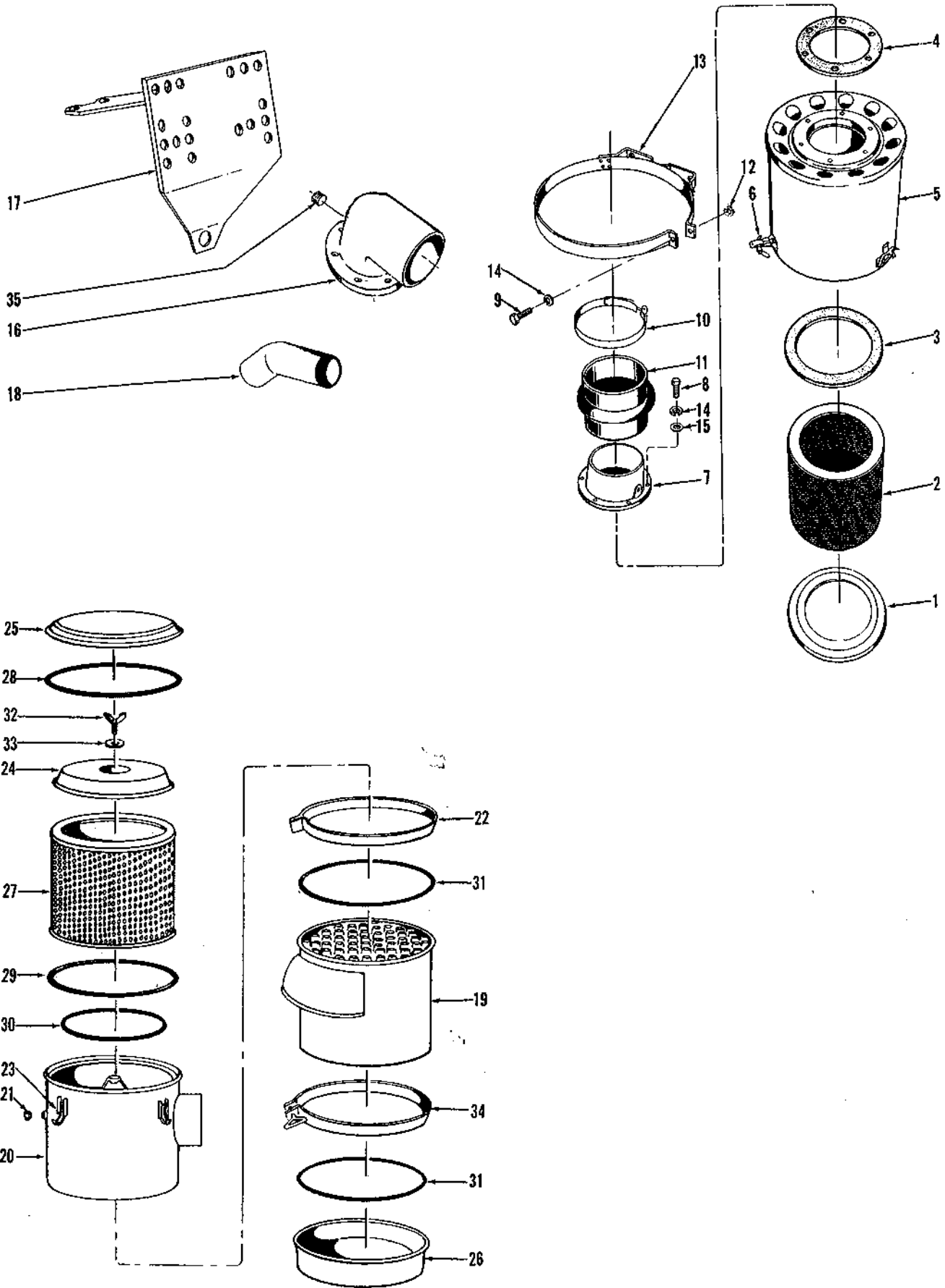
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.
	AIR INTAKE MANIFOLD				P Application		
	Engines With 4 Valve Cylinder Head				Same as above except:		
	Auto, B, C, P Applications				Primer, hand	1	
	290 HP, 320 HP, 2100 RPM Engines			OMIT:	Resistor, preheater (12 volt)	1	
141895	Manifold, air intake	1	1	100046			
	MOUNTING PARTS			68813			
125880	Adapter, glow plug nozzle	1	20		AIR INTAKE CONNECTION		
S-103-D	Capscrew (3/8"-16 x 1-1/4")	6	2	S-103-D	All Applications		
108707	Capscrew (3/8"-16 x 1-1/2")	3	3	11318	Capscrew (3/8"-16 x 1-1/4")	4	22
S-112	Capscrew (3/8"-16 x 1")	6	4	199568	Connection, air crossover	1	23
139474	Decal, cold start	1		S-604	Gasket, connection	1	25
68139	Elbow, hose	2	5	149018	Lockwasher (3/8")	4	24
202961	Gasket	3	6	S-602	Spring, connection	1	26
149819	Gasket	1	7		Washer, plain (13/32")	4	27
67946	Gasket, copper, glow plug	1	8				
68812	Glow plug	1	9				
118273	Gasket, glow plug	1	10				
S-604	Lockwasher (3/8")	15	11				
68178-1	Lockplate, nozzle	1	12				
69215	Nozzle, glow plug	1	13				
68061-A	"O" ring, nozzle	1	14				
43468	Pin, groove, nozzle	1	15				
68606	Plug, pipe	1					
S-911-B	Plug, pipe (1/8")	1	16				
S-962	Plug, pipe (1")	1	17				
S-910-B	Plug, pipe (1/4")	3					
S-915-A	Plug, pipe (1/2")	2					
S-901	Plug, pipe (1/4")	1					
144257	Plate, cover	1	21				
100046	Primer, hand	1					
68813	Resistor, preheater (12 volt)	1					
S-602	Washer, plain (13/32")	6	28				
63842	Washer, plain (13/32")	3	29				

PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



ENGINE APPLICATION		AUTOMOTIVE		B - OFF-HIGHWAY		C - CONSTRUCTION & INDUSTRIAL		P - INDUSTRIAL POWER	
				X		X			X
PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.	PART NUMBER	PART NAME	NO. REQ'D.	REF. NO.		
	AIR INTAKE MANIFOLD				P Application				
	Engines With 2 Valve Cylinder Head				Same as above except:				
	B, C, P Applications				Primer, hand	1			
	240 HP, 1800 RPM Engines				Resistor, preheater (12 volt)	1			
105126	Manifold, air intake	1	1	OMIT: 100046 68813					
	MOUNTING PARTS				AIR INTAKE CONNECTION				
125880	Adapter, glow plug nozzle	1	2	S-149-A	Capscrew (3/8"-16 x 5")	2	24		
S-137-B	Capscrew (5/8"-11 x 4-1/2")	6	3	S-112	Capscrew (3/8"-16 x 1")	4	25		
S-109	Capscrew (3/8"-16 x 7/8")	8	21	106497	Connection	1	26		
S-112	Capscrew (3/8"-16 x 1")	4	22	63622	Gasket, inlet	1	10		
105289	Clamp, manifold	6	4	S-604	Lockwasher (3/8")	4	27		
63677	Cover, end	2	5						
63621	Cover, intake manifold	1	6						
139474	Decal, cold start	1							
68139	Elbow, hose	2	7						
147263	Gasket, manifold	3	8						
63620	Gasket, end cover	2	9						
63622	Gasket, inlet cover	1	10						
67946	Gasket, copper, glow plug	1	11						
68812	Glow plug	1	12						
118273	Gasket, glow plug	1	13						
68178-1	Lockplate, nozzle	1	14						
S-603	Lockwasher (5/8")	6	15						
S-604	Lockwasher (3/8")	12	16						
69215	Nozzle, glow plug	1	17						
68061-A	"O" ring, nozzle	1	18						
43468	Pin, groove, nozzle	1	19						
68445	Pin, groove	6	20						
S-911-B	Plug, pipe (1/8")	2							
S-995	Plug, pipe (3/4")	1							
S-962	Plug, pipe (1")	1							
S-910-B	Plug, pipe (1/4")	1							
68606	Plug, pipe	1							
100046	Primer, hand	1							
68813	Resistor, preheater (12 volt)	1	23						

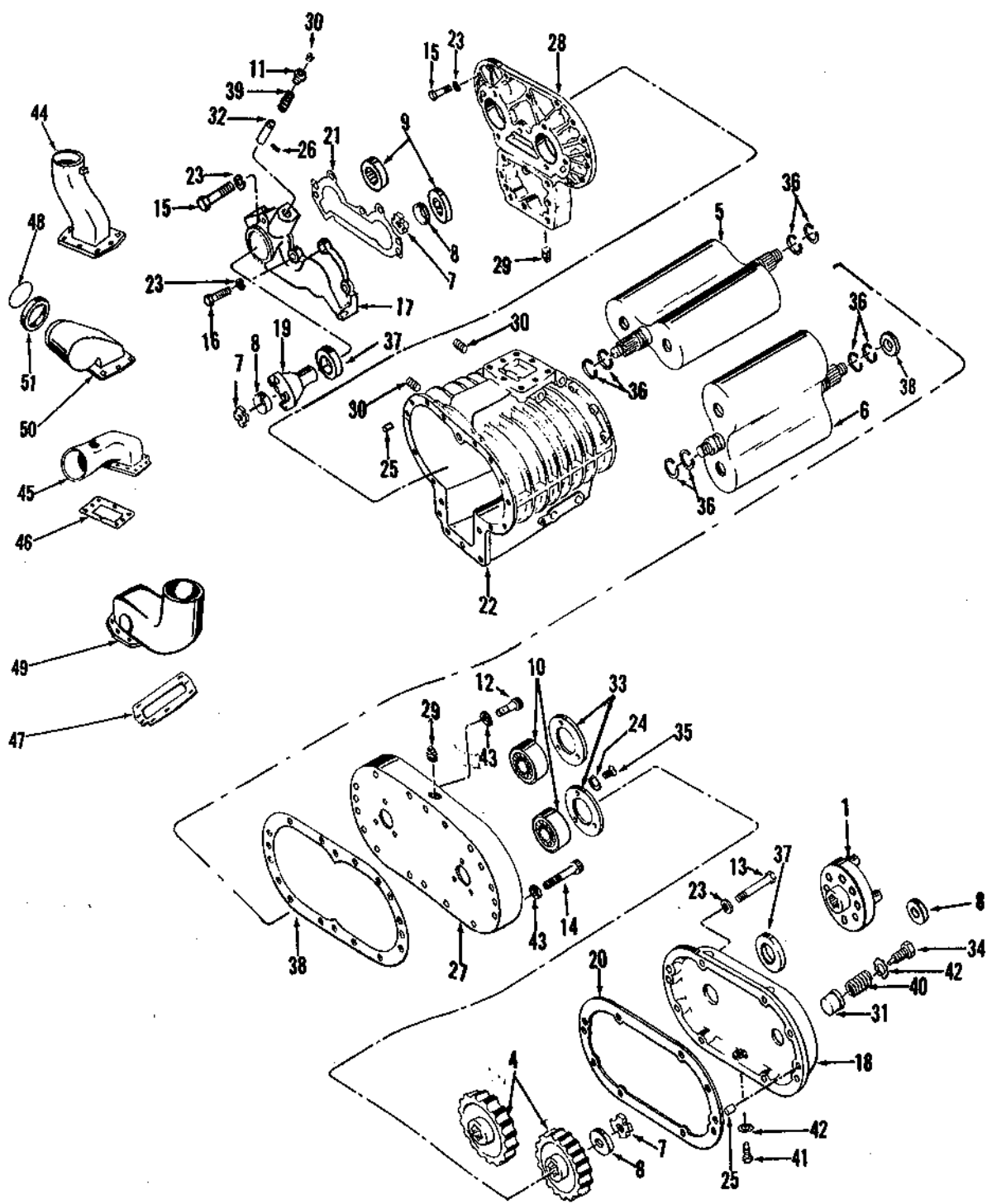
PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



AIR CLEANER

ENGINE APPLICATION		AUTOMOTIVE	X	B - OFF-HIGHWAY	X	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.		
	AIR CLEANER				Engines With 2 and 4 Valve Cylinder Head				
	Engines With 4 Valve Cylinder Head				C Application				
	Auto, B, P Applications				290 HP, 320 HP, 2100 RPM And				
	290 HP, 320 HP, 2100 RPM Engines				240 HP, 1800 RPM Engines				
	Engines With 2 Valve Cylinder Head			151609	Cleaner, air (14" diameter)	1			
106833	Cleaner, air	1		151801	Body, lower	1	19		
107135	Cover, shell	1	1	150759	Body, upper	1	20		
AF-253	Element	1	2	150768	Cap, restriction	1	21		
107136	Gasket, element	1	3	150763	Clamp, body	1	22		
107137	Gasket, flange	1	4	150771	Clamp, cup	1	34		
107134	Shell, cleaner	1	5	150767	Clip, cover	1	23		
122121	Spring	3	6	150757	Cover, inner	1	24		
	B, P Applications			133757	Cover, assembly	1	25		
	240 HP, 1800 RPM Engines			150772	Cup, assembly	1	26		
				150756	Element	1	27		
				150747	Gasket, cover	1	28		
				150758	Gasket, inner cover	1	29		
				150766	Gasket, element	1	30		
				133763	Gasket, body and cup	1	31		
				152792	Screw	1	32		
				152793	Washer	1	33		
	MOUNTING PARTS								
	Engines With 4 Valve Cylinder Head								
	Auto, B, Applications								
	290 HP, 320 HP, 2100 RPM Engines								
	Engines With 2 Valve Cylinder Head			S-111	Capscrew (5/16"-18 x 1-1/2")	2	9		
	B Application			125741	Clamp	4	8		
	240 HP, 1800 RPM Engines			103808	Hose	2	11		
				S-605	Lockwasher (5/16")	2	14		
				S-221	Nut (5/16")	2	12		
106126	Adapter	1	7	S-221	Nut (5/16")	2	12		
S-111	Capscrew (5/16"-18 x 1-1/2")	2	9	66079	Strap	2			
S-115	Capscrew (5/16"-18 x 7/8")	6	8						
125741	Clamp, hose	4	10						
103808	Hose	2	11						
S-605	Lockwasher (5/16")	2	14						
S-221	Nut (5/16")	2	12						
105916	Strap, air cleaner	2	13						
S-626	Washer, plain (11/32")	6	15						
	P Application								
105402	Adapter	1	16						
43580-1	Bracket	1	17						
S-111	Capscrew (5/16"-18 x 1-1/2")	2	9						
S-115	Capscrew (5/16"-18 x 7/8")	6	8						
S-117	Capscrew (3/8"-16 x 3/4")	4							
S-186-A	Capscrew	1							
125741	Clamp, hose	4	10						
103808	Hose	2	11						
S-603	Lockwasher (5/8")	1							
S-604	Lockwasher (3/8")	4							
S-605	Lockwasher (5/16")	8	14						
S-221	Nut (5/16")	2	12						
S-223	Nut (3/8")	4							
S-910-B	Plug, pipe (1/4")	1	35						
105916	Strap, air cleaner	2	13						
105920	Tube, air cleaner	1	18						
S-626	Washer, plain (11/32")	6	15						
S-658	Washer, plain (5/8")	1							

PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED



SUPERCHARGER