



# **JOHN DEERE**

## **Parts Catalog**

### **WA-14 AND WA-17 TRACTORS**

**PC1144**

**SPECIFICATIONS***(Specifications and design subject to change without notice)*

**Performance**... Maximum horsepower at 2,100 engine rpm (factory observed)  
Flywheel—WA-14: 225; WA-17: 280

**Engine**... Cummins 6-cylinder, variable-speed, valve-in-head, 4-cycle Diesel  
Model—WA-14: N855C; WA-17: NT855C  
Bore and stroke—5-1/2 x 6 inches  
Compression ratio—14.9 to 1  
Governed speed, loaded—2,100 rpm  
Operating speed range—1,500 to 2,100 rpm  
Displacement—855 cu. in.  
Lubrication system—Full-flow, full-pressure system, micron paper element  
Cooling system—100-gpm pressure system with thermostatic heat control  
Air cleaner—Dry type with restriction indicator

**Capacities (U.S. Measures):**

Fuel tank—120 gallons  
Cooling system without heater—12-1/2 gallons  
Hydraulic system—52 gallons  
Steering reservoir—40 gallons

**Transmission**... Sliding-gear type with twin countershafts.  
10 speeds forward, 2 reverse, air-assist range selector.

**Clutch**... Foot-operated, spring-loaded, two 14-inch dry disks.

**Hydraulics**... Open-center system. Choice of 15-gpm engine-driven pump and dual remote control or 35-gpm power take-off-driven pump with either dual or triple remote control. Couplers, cylinders and hoses are not included.

**Steering**... Full power with two double-acting hydraulic cylinders and 30-gpm hydraulic pump.

**Brakes**... 4-wheel air brakes and parking brakes.

**Electric system**... 24-volt starting, 12-volt lights and accessories, two 12-volt batteries in series, charged by alternator.

**Drawbar**... Swinging type with clevis.

**Axles**... 4-wheel planetary reductions in wheel hubs. Extra-heavy-duty axle is available for WA-17.

**Tires**... WA-14: 18.4 x 34, 8-ply, R-1 duals  
18.4 x 34, 8-ply, R-3 duals  
23.1 x 30, 10-ply, R-1 singles  
23.1 x 30, 10-ply, R-3 singles  
23.1 x 30, 8-ply, R-1 duals  
23.1 x 30, 8-ply, R-3 or R-2-O duals  
WA-17: 28.5 x 26, 10-ply, R-1 singles  
28.5 x 26, 10-ply, R-3 singles  
23.1 x 30, 8-ply, R-1 duals  
23.1 x 30, 8-ply, R-3 or R-2-O duals

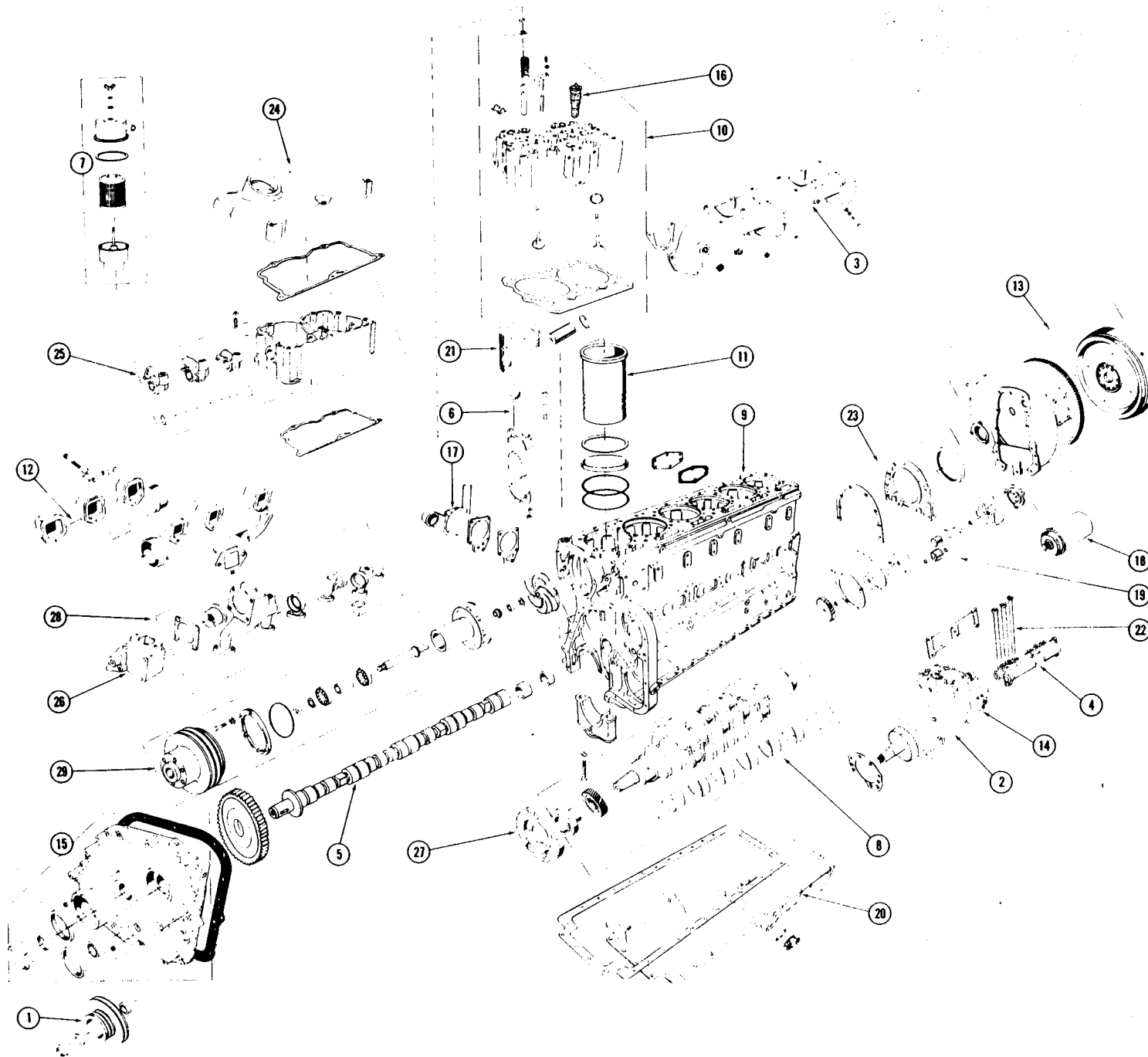
**Ground speeds, mph (1,500 to 2,100 engine rpm):**

1st	1.37 - 1.92
2nd	1.75 - 2.45
3rd	2.71 - 3.10
4th	2.80 - 3.92
5th	3.42 - 4.84
6th	4.43 - 6.22
7th	5.61 - 7.88
8th	7.13 - 10.00
9th	8.90 - 12.50
10th	11.00 - 15.50
Rev. 1	1.78
Rev. 2	5.68

Dimensions	WA-14	WA-17
Height without cab	8 ft. 3 in.	8 ft. 2 in.
Height with cab	10 ft. 10 in.	10 ft. 9 in.
Width, over-all	8 ft. 8 in.	9 ft. 3 in.
Length, over-all	21 ft. 5 in.	21 ft. 5 in.
Wheelbase	11 ft. 4 in.	11 ft. 8 in.
Clearance	1 ft. 7 in.	1 ft. 6 in.

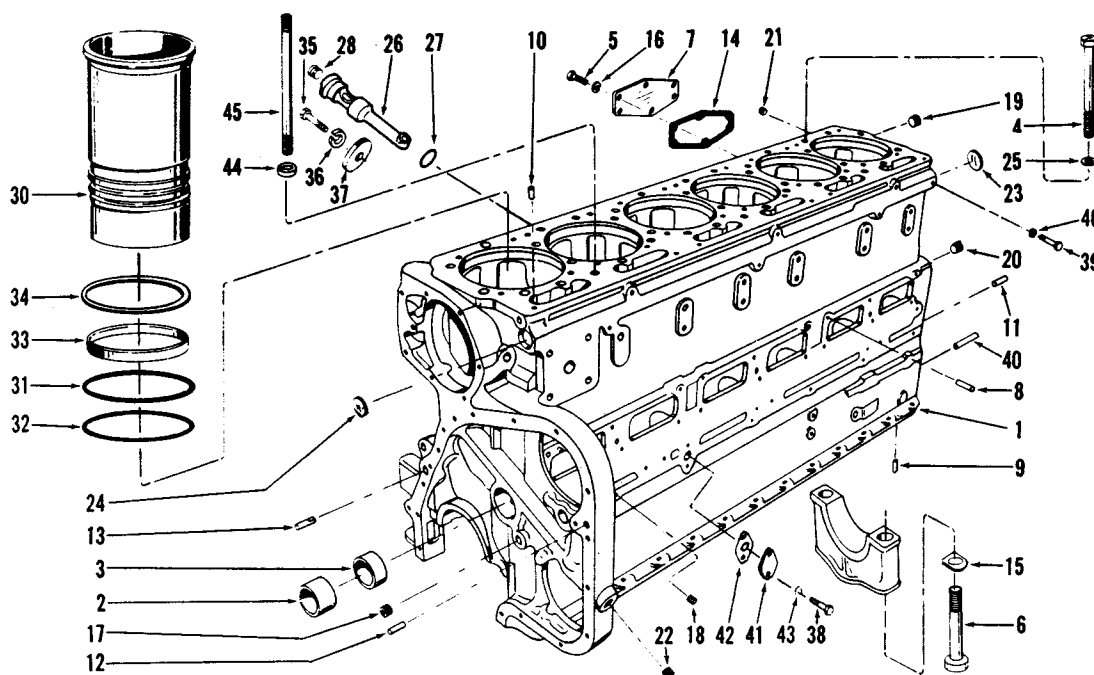
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- 1 ACCESSORY DRIVE PULLEY
- 2 AIR COMPRESSOR
- 3 AIR INTAKE MANIFOLD
- 4 CAM FOLLOWER and HOUSING
- 5 CAMSHAFT
- 6 CONNECTING ROD
- 7 CRANKCASE BREATHER
- 8 CRANKSHAFT and BEARINGS
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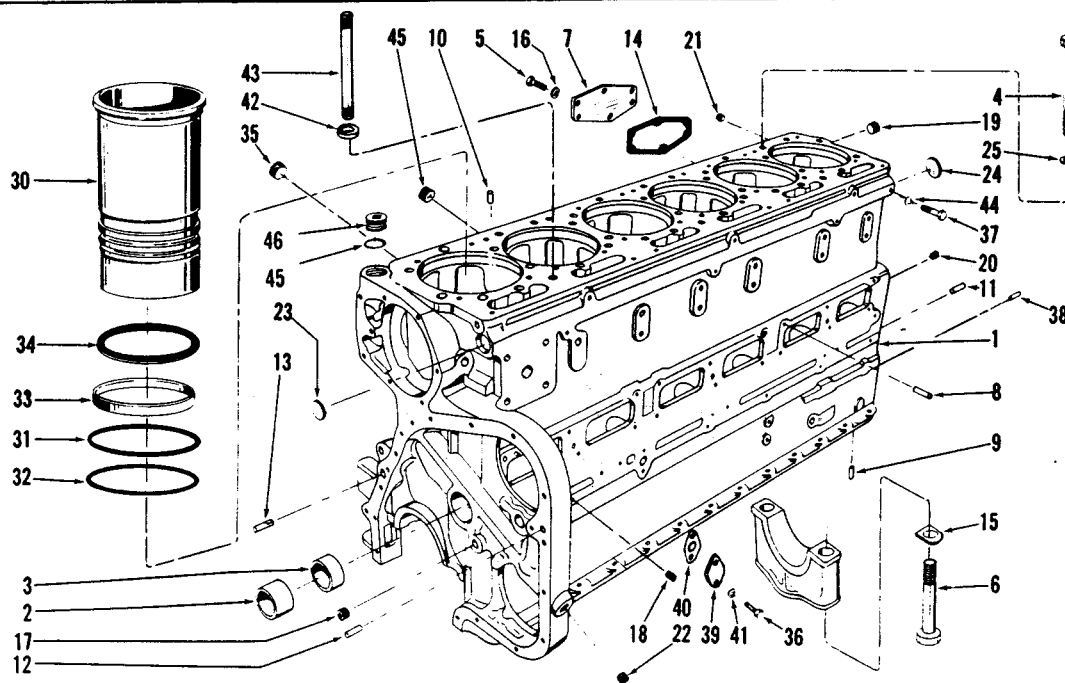
Engine Application					
B	BI	CI	I	IP	P
X	X	X	X	X	
Remarks    Piston Cooled					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>CYLINDER BLOCK</b>							
AR-02162	Block, cylinder (180905)	1	1	BM-57272	Nozzle, piston cooling assembly	6	
BM-17153	Bushing, assembly, camshaft	1		S-102-A	Capscrew (5/16-24 x 3/4")	6	35
100670	Bushing	1	2	153999	Nozzle	6	26
157870	Bushing	6	3	148296	"O" ring	6	27
177734	Capscrew, cylinder head	36	4	S-911-B	Plug, pipe (1/8")	6	28
S-114	Capscrew, water header cover	12	5	S-605	Lockwasher (5/16")	6	36
105953	Capscrew, main bearing cap	14	6	146161	Washer	6	37
132019	Cover, water header	2	7	<b>MOUNTING PARTS</b>			
68585	Dowel, cam follower housing to block	6	8				
67294	Dowel, main bearing	2		S-129	Capscrew (3/8-24 x 1")	2	38
67211	Dowel, main bearing cap to block	2	9	S-190-C	Capscrew (3/8-24 x 5/8")	1	39
68445	Dowel, head to block	6	10	64790	Dowel, rear cover plate	2	40
9226	Dowel, fan wheel housing	1	11	132648	Flange, oil pan	1	41
60408	Dowel, gear cover	1	12	67963	Gasket, suction flange	1	42
70653	Dowel, gear cover (Diamond)	1	13	S-604	Lockwasher (3/8")	2	43
70089-1	Gasket, water header cover	2	14	183050	Liner, cylinder	6	30
9427	Lockplate	14	15	159380	Nameplate	1	
S-600	Lockwasher, water header cover	12	16	156545	"O" ring	3	44
S-908	Plug, pipe (3/8")	6	17	133029	Pipe, lubricating oil	3	45
S-911-B	Plug, pipe (1/8")	4	18	183048	Ring, packing	6	31
S-966-E	Plug, pipe (1")	8	19	183049	Ring, packing	6	32
69901	Plug, pipe (1/8")	5	20	183056	Seal, crevice	6	33
S-910-B	Plug, pipe (1/4")	3	21	S-2286	Screw, nameplate	6	
S-915-A	Plug, pipe (1/2")	5	22	S-679	Washer (25/64")	1	46
S-719	Plug, expansion	1	23	143938	Shim, liner (.007")	A/R	34
S-716	Plug, expansion	1	24	143939	Shim, liner (.008")	A/R	34
69699	Washer, cylinder head	36	25	143946	Shim, liner (.009")	A/R	34
				143947	Shim, liner (.020")	A/R	34
				143948	Shim, liner (.031")	A/R	34
				143949	Shim, liner (.062")	A/R	34

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

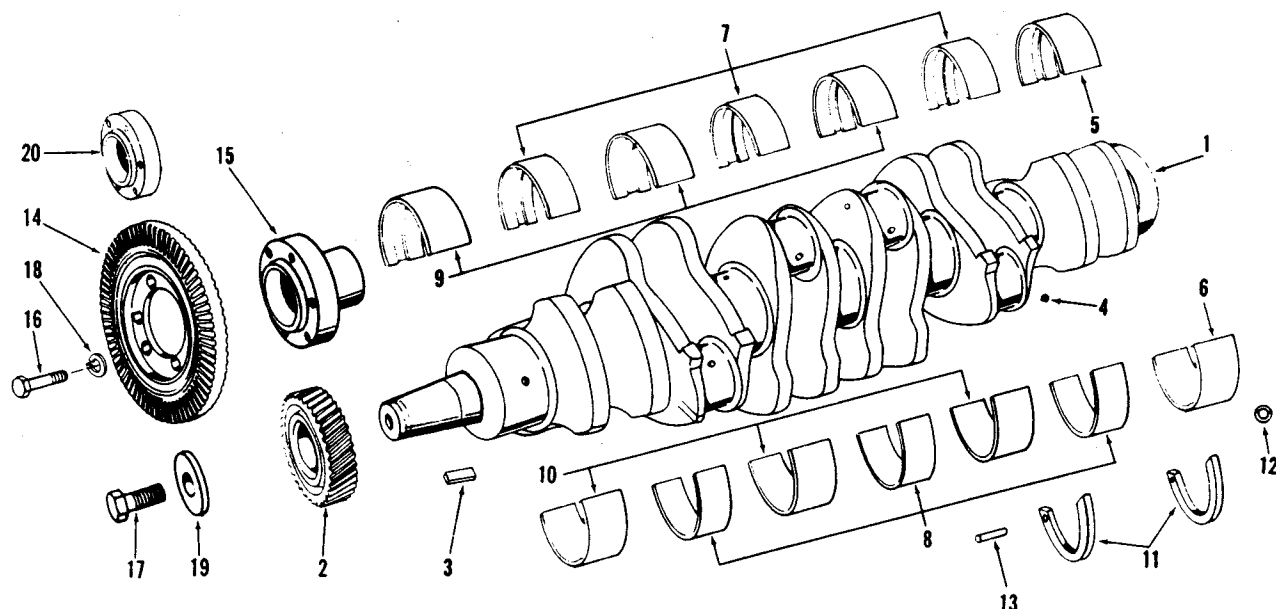
Engine Application					
B	B	C	I	I	P
X	X	X	X	X	
Remarks Non Piston Cooled					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>CYLINDER BLOCK</b>				<b>MOUNTING PARTS</b>			
AR-02160	Block, cylinder (180904)	1	1	S-129	Capscrew (3/8-24 x 1")	2	36
BM-27253	Bushing assembly, camshaft	1		S-190-C	Capscrew (3/8-24 x 5/8")	1	37
100670	Bushing	1	2	67294	Dowel, thrust ring	2	38
157870	Bushing	6	3	132648	Flange, oil pan	1	39
177734	Capscrew, cylinder head	36	4	67963	Gasket, suction flange	1	40
S-118-A	Capscrew (1/4-20 x 5/8")	12		S-604	Lockwasher (3/8")	2	41
S-114	Capscrew, water header cover	12	5	183050	Liner, cylinder	6	30
105953	Capscrew, main bearing cap	14	6	159380	Nameplate	1	
132019	Cover, water header	2	7	156545	"O" ring	3	42
68585	Dowel, cam follower housing to block	6	8	68910	"O" ring	1	45
67211	Dowel, main bearing cap to block	2	9	69304	Plug, water by-pass	1	46
68445	Dowel, head to block	6	10	133029	Pipe, lubricating oil	3	43
9226	Dowel, flywheel housing	2	11	183048	Ring, packing	6	31
60408	Dowel, gear cover	1	12	183049	Ring, packing	6	32
70653	Dowel, gear cover (Diamond)	1	13	183056	Seal, crevice	6	33
70089-1	Gasket, water header cover	2	14	S-2286	Screw, nameplate	6	
9427	Lockplate	14	15	S-679	Washer (25/64")	1	44
S-600	Lockwasher, water header cover	12	16				
199067	Plug, pipe	1		143938	Shim, liner (.007")	A/R	34
S-908	Plug, pipe (3/8")	6	17	143939	Shim, liner (.008")	A/R	34
S-995	Plug, pipe (3/4")	1	45	143946	Shim, liner (.009")	A/R	34
S-911-B	Plug, pipe (1/8")	1	18	143947	Shim, liner (.020")	A/R	34
S-966-E	Plug, pipe (1")	1	19	143948	Shim, liner (.031")	A/R	34
S-901	Plug, pipe (1/4")	1		143949	Shim, liner (.062")	A/R	34
S-962	Plug, pipe (1")	2	35				
69901	Plug, pipe (1/8")	6	20				
S-910-B	Plug, pipe (1/4")	2	21				
S-915-A	Plug, pipe (1/2")	5	22				
S-719	Plug, expansion	1	23				
S-716	Plug, expansion	1	24				
69699	Washer, cylinder	36	25				

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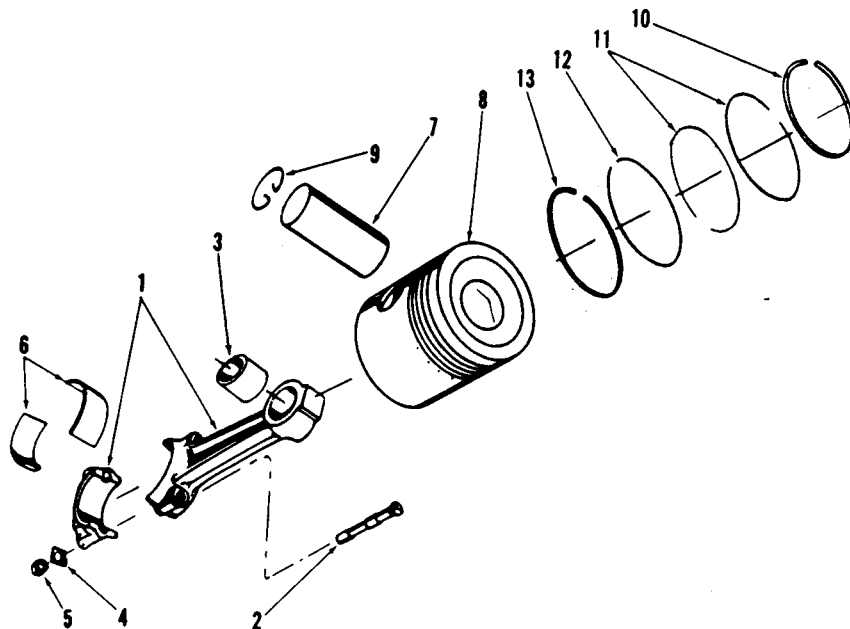
Engine Application					
B	BI	CI	I	IP	P
X	X	X	X		
Remarks      Variable Applications					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>CRANKSHAFT</b>				<b>VIBRATION DAMPER</b>			
<b>All Applications</b>				<b>Piston Cooled—B, BI, IP Applications</b>			
AR-06062	Crankshaft assembly	1		<b>Non Piston Cooled—B, BI, CI Applications</b>			
196410	Crankshaft	1	1				
142804	Gear, crankshaft	1	2	145789	Damper, vibration	1	14
9300-1	Key, gear	1	3	175183	Flange, crankshaft	1	15
S-911-B	Plug, pipe (1/8")	6	4	S-163-B	Capscrew (1/2-20 x 1-1/8")	6	16
BM-28978 *	Set, main bearing	1		S-608	Lockwasher (1/2")	6	18
44387	Shell, main bearing (No. 7, upper)	1	5	<b>Piston Cooled—CI Applications</b>			
44388	Shell, main bearing (No. 7, lower)	1	6	Same as above except:			
44385	Shell, main bearing (No. 2, 4 and 6, upper)	3	7	69952	Capscrew (1/2-20 x 2")	6	16
44386	Shell, main bearing (No. 2, 4 and 6, lower)	3	8	154918	Spacer, vibration damper	1	20
44383	Shell, main bearing (No. 1, 3 and 5, upper)	3	9				
44384	Shell, main bearing (No. 1, 3 and 5, lower)	3	10				
157280	Ring, thrust	4	11				
60575	Dowel, ring	7	12				
67294	Dowel, thrust ring	2	13				
* Main bearings may be purchased in .010", .020", and .040" undersize.							
<b>MOUNTING PARTS</b>							
140410	Capscrew (3/4-16 x 1-3/4")	1	17				
140411	Retainer	1	19				

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

Engine Application					
B	BI	CI	I	IP	P
X	X	X		X	
Remarks All Applications					

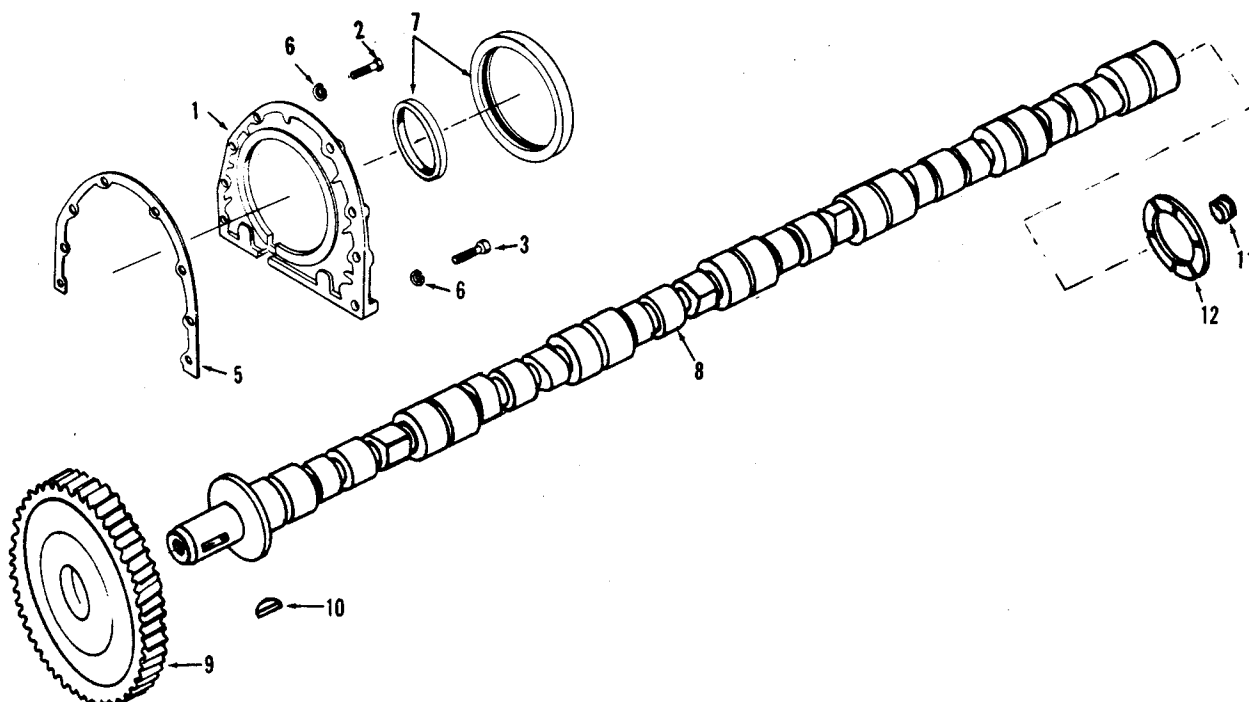


Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>CONNECTING ROD</b>				<b>RINGS</b>			
BM-52474	Connecting rod assembly (121579)	6	1	AR-05040	Ring set, piston (standard)	6	
9195-3	Bolt, connecting rod	12	2	147670	Ring, compression	6	10
187420	Bushing, piston pin	6	3	132880	Ring, compression	12	11
112611	Lockplate	12	4	168680	Ring, compression	6	12
69936	Nut	12	5	122560	Ring, compression	6	13
139620	* Shell, connecting rod bearing	12	6				
<b>PISTON</b>							
AR-03530	Piston assembly	6					
191970	Pin, piston	6	7				
147540	Piston	6	8				
61908	Ring, snap	6	9				
	* Connecting rod bearing shells may be purchased in .010", .020", .030" and .040" oversize.						
Note:	Piston and Piston Rings in .020", .030" and .040" oversize are available by special order only.						

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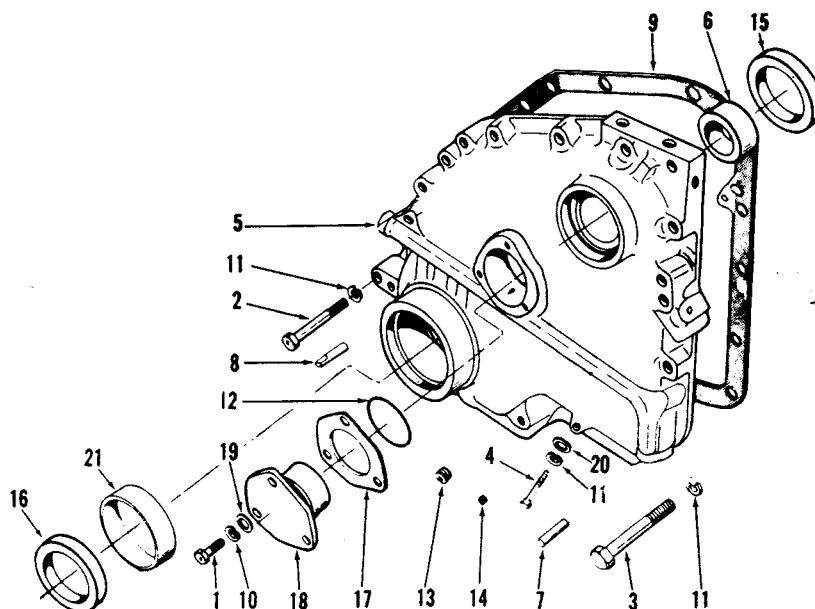
Engine Application				
B	BI	CI	I	IP
X	X	X	X	
Remarks				
Variable Applications				



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>REAR COVER</b>				<b>CAMSHAFT</b>			
<b>All Applications</b>				<b>Piston Cooled B, BI, CI, IP Applications</b>			
123982	Cover, rear	1	1		Camshaft	1	8
S-120-A	Capscrew (3/8-24 x 7/8")	6	2	143450	Gear, camshaft	1	9
S-165	Capscrew (3/8-24 x 1-1/2")	2	3	156226	Key, gear	1	10
40662-A	Gasket (.005")	A/R	5	69550	Plug, pipe (1/8")	2	11
S-604	Lockwasher (3/8")	8	6	S-911-B	Washer, thrust	1	12
189652	Seal, rear oil	1	7	9235-1			
				<b>Non Piston Cooled B, BI, CI Applications</b>			
				Same as above except:			
				129860	Camshaft	1	8
				109072	Gear, camshaft	1	9
				68193	Plug, pipe (1/8")	1	11

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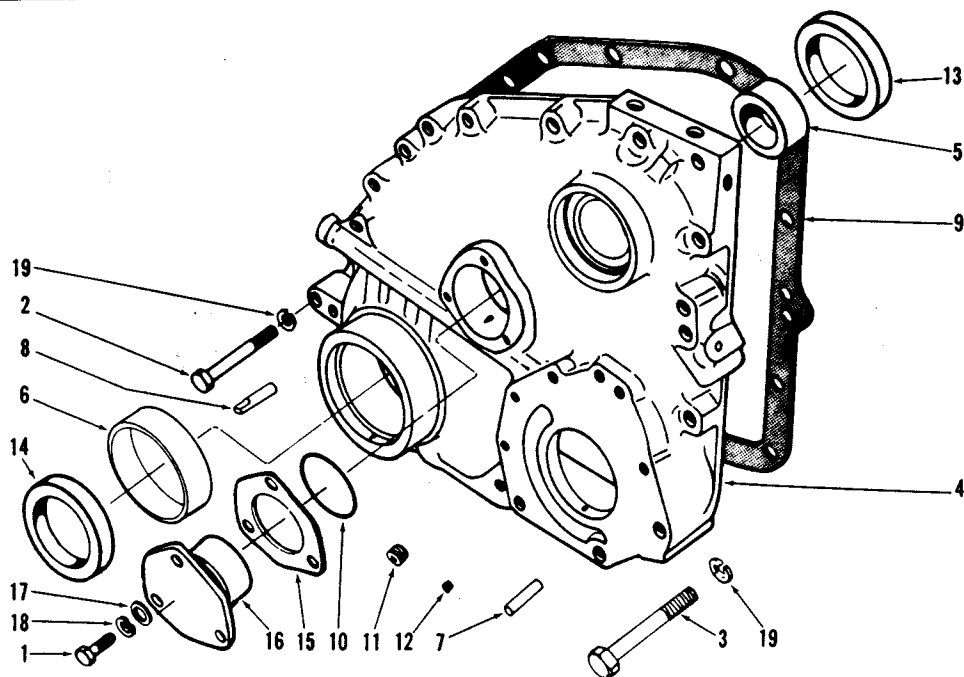
Engine Application					
B	BI	CI	I	IP	P
X	X			X	
Remarks      Piston Cooled					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>GEAR CASE COVER</b>							
S-112	Capscrew (3/8-16 x 1")	3	1				
S-119-C	Capscrew (7/16-20 x 3-1/4")	1	2				
S-196-A	Capscrew (7/16-20 x 2-3/4")	3	3				
100915	Capscrew (7/16-20 x 2")	13	4				
AR-00393	Cover, gear case (174320)	1	5				
68226-1	Bushing, trunnion	1	21				
132770	Bushing	1	6				
60408	Dowel	1	7				
70653	Dowel	1	8				
134276	Gasket, gear cover	1	9				
S-604	Lockwasher (3/8")	3	10				
S-610	Lockwasher (7/16")	17	11				
65260	Packing	1	12				
S-908	Plug, pipe (3/8")	3	13				
69901	Plug, pipe (1/8")	1	14				
149488	Seal, oil	1	15				
176927	Seal, crankshaft oil	1	16				
185573	Shim, insert	1	17				
65259-A	Shim	A/R	17				
65259-B	Shim	A/R	17				
65259-C	Shim	A/R	17				
150002	Support	1	18				
S-602	Washer, plain (13/32")	3	19				
S-622	Washer, plain (15/32")	17	20				

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

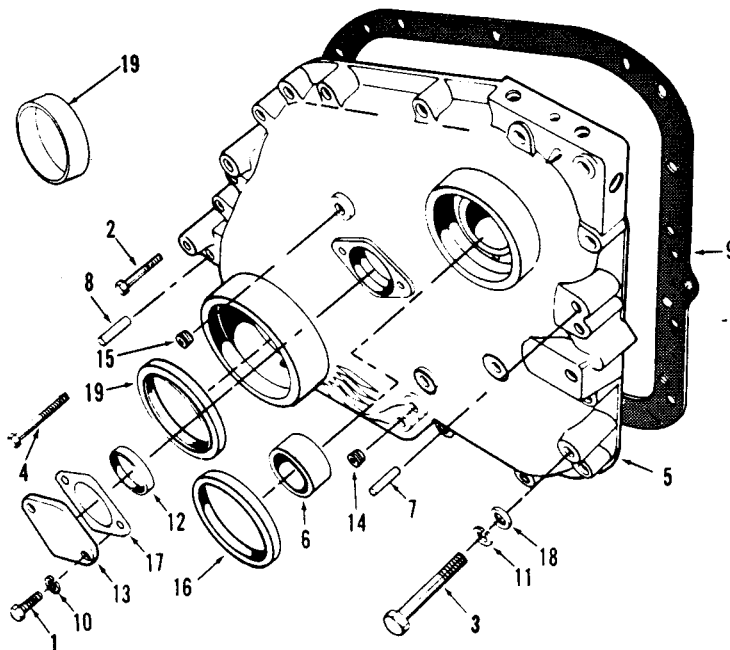
Engine Application					
B	BI	CI	I	IP	P
		X			
Remarks     Piston Cooled					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>GEAR CASE COVER</b>							
S-112	Capscrew (3/8-16 x 1")	3	1				
S-131-C	Capscrew (7/16-20 x 2-1/2")	5	2				
100915	Capscrew (7/16-20 x 2")	12	3				
BM-79818	Cover, gear case (161199)	1	4				
68226-1	Bushing, trunnion	1	6				
132770	Bushing	1	5				
60408	Dowel	1	7				
70653	Dowel	1	8				
134276	Gasket, gear cover	1	9				
S-604	Lockwasher (3/8")	3	18				
S-610	Lockwasher (7/16")	17	19				
65260	Packing	1	10				
S-908	Plug, pipe (3/8")	3	11				
69901	Plug, pipe (1/8")	2	12				
149488	Seal, oil	1	13				
176927	Seal, crankshaft oil	1	14				
185573	Shim, insert (.025")	1	15				
68259-A	Shim (.010")	A/R	15				
65259-B	Shim (.005")	A/R	15				
65259-C	Shim (.002")	A/R	15				
150002	Support, crankshaft	1	16				
S-602	Washer, plain (13/32")	3	17				

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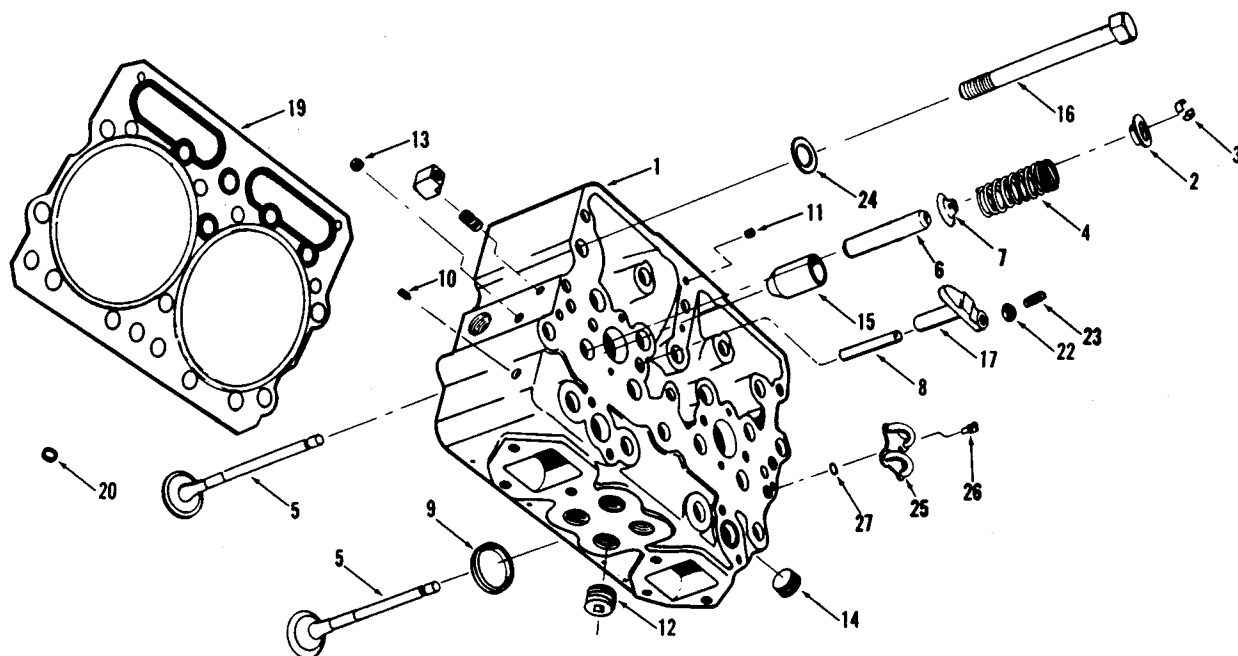
Engine Application							
B	B	C	I	I	P	P	
X	X	X					
Remarks Non Piston Cooled							



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>GEAR CASE COVER</b>							
S-112	Capscrew (3/8-16 x 1")	2	1				
100915	Capscrew (7/16-20 x 2")	15	2				
S-196-A	Capscrew (7/16-20 x 2-3/4")	1	3				
S-127-A	Capscrew (7/16-20 x 3")	1	4				
BM-70398	Cover, gear case (137164)	1	5				
68226-1	Bushing, trunnion	1					
132770	Bushing	1	6				
60408	Dowel	1	7				
70653	Dowel	1	8				
121934	Gasket, gear cover	1	9				
S-604	Lockwasher (3/8")	2	10				
S-610	Lockwasher (7/16")	17	11				
67270	Packing	1	12				
138988	Plate, camshaft thrust	1	13				
S-908	Plug, pipe (3/8")	1	14				
69901	Plug, pipe (1/8")	1	15				
149488	Seal, oil	1	16				
176927	Seal, crankshaft oil	1	19				
185574	Shim, insert (.025")	1	17				
68192-A	Shim (.010")	A/R	17				
68192-B	Shim (.005")	A/R	17				
68192-C	Shim (.002")	A/R	17				
S-602	Washer, plain (13/32")	2					
S-622	Washer, plain (15/32")	17	18				

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

Engine Application					
B	BI	CI	I	IP	P
X	X	X	X		
Remarks      Variable Applications					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
	<b>CYLINDER HEAD</b>				<b>MOUNTING PARTS</b>		
	<b>Piston Cooled</b>				<b>All Applications</b>		
	<b>B, BI, CI, IP Applications</b>						
BM-65359	Head, cylinder (135541)	3	1	177734	Capscrew, head to block (11/16-16 x 6-3/8")	36	16
128879	Guide, valve spring	24	2	123416	Crosshead, valve	12	17
127554	Half-collet, valve	48	3	AR-02885	Gasket, cylinder head (129978)	3	19
143907	Spring, valve	24	4	193949	Grommet, water	24	20
145701	Valve, intake and exhaust	24	5	S-273	Nut (3/8")	12	22
BM-65994	Head, cylinder, assembly (135541) (less valves)	3		147389	Screw, crosshead adjusting	12	23
174213	Guide, valve stem	24	6	69699	Washer, cylinder head	36	24
172034	Guide, valve spring	24	7				
123558	Guide, crosshead valve	12	8	147100	Crossover, fuel assembly	2	25
127930	Insert, valve seat	24	9	70772	Capscrew, springtite	4	26
70459	Plug, fuse	3	10	131026	"O" ring	8	27
S-965-E	Plug, pipe (1/16")	3	11				
S-962	Plug, pipe (1")	6	12				
S-911-B	Plug, pipe (1/8")	12	13				
S-995	Plug, pipe (3/4")	18	14				
147056	Sleeve, injector	6	15				
	<b>Piston Cooled—B Applications</b>						
	<b>(2100 R.P.M.)</b>						
	<b>Non Piston Cooled—</b>						
	<b>B, BI, CI Applications</b>						
	Same as above except:						
BM-65356	Head, cylinder (135541)	3	1				
135957	Valve, intake	12	5				

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

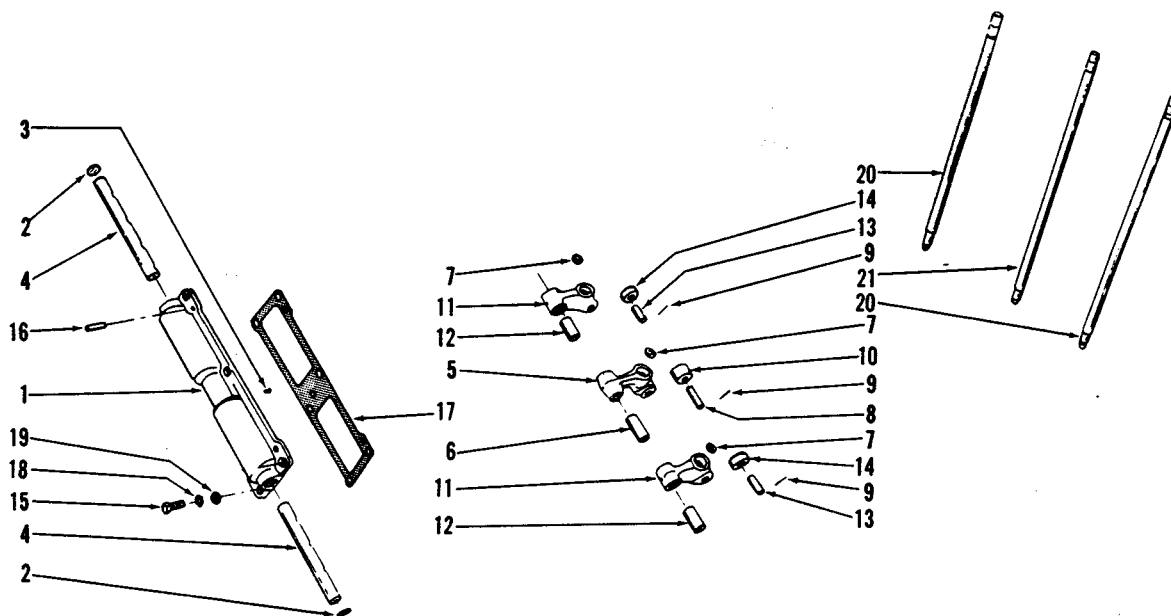


Engine Application					
B	BI	CI	I	IP	P
X	X	X	X	X	
Remarks      Variable Applications					

Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
	<b>ROCKER LEVERS</b>				<b>BREATHER</b>		
	<b>All Applications</b>			250729	Breather, crankcase, assembly	1	
				105021	Baffle	1	27
AR-03315	Housing rocker lever assembly	3		122133	Body	1	28
AR-03312	Housing, rocker lever	3		S-167-A	Capscrew, cover to body	3	29
194525	Housing	3	1	122136	Cover	1	30
175830	Plug, expansion	6	2	122135	Gasket	1	31
62229	Plug vent	3	3	S-600	Lockwasher (1/4")	3	32
168319	Screw, rocker lever shaft	3	4	105019	Screen	4	33
BM-68740	Shaft, rocker lever (140297)	3	5	S-115	Capscrew (5/16"-18 x 7/8")	2	34
161825	Plug, shaft	6	6	S-181-B	Capscrew (3/8"-16 x 1/2")	1	
BM-95148	Lever, valve	3		69911-A	Clamp, tube	1	
BM-95143	Lever and bushing (168804)	3	12	S-604	Lockwasher (3/8")	1	35
140330	Bushing	3	8	S-605	Lockwasher (5/16")	2	
S-212	Nut, adjusting	3	9	109489	Support, tube	1	
168306	Screw, adjusting	3	10	127415	Tube, breather vent	1	36
AR-02308	Lever, injector	3					
AR-02307	Lever and bushing (190253)	6	14		<b>IP Application</b>		
169353	Bushing	6	15		Same as piston cooled B application except:		
186956	Socket, injector	6	16				
S-212	Nut	6	9				
168306	Screw, adjusting	6	10				
BM-95149	Lever, valve	3		114307	Bracket, tube clip	1	
BM-95142	Lever and bushing (168802)	3	11	S-114	Capscrew (1/4"-20 x 3/4")	1	
140330	Bushing	3	5	S-129	Capscrew (3/8"-24 x 1")	1	
S-212	Nut	3	9	S-205	Nut (3/8"-24)	1	
168306	Screw, adjusting	3	10	120919	Tube, breather vent	1	
BM-95159	Lever, valve	3		70704	Washer, plain (1/4")	1	37
BM-95158	Lever and bushing (168805)	3	7				
140330	Bushing	3	8				
S-212	Nut	3	9				
168306	Screw, adjusting	3	10				
BM-95160	Lever, valve	3					
BM-95157	Lever and bushing (168803)	3	13				
140330	Bushing	3	8				
S-212	Nut	3	9				
168306	Screw, adjusting	3	10				
	<b>B, BI, CI Applications</b>						
	<b>Piston Cooled</b>						
	<b>B, BI, CI Applications</b>						
	<b>Non Piston Cooled</b>						
176914	Bracket, lifting	1					
170226	Bracket, lifting	1					
	Cap. oil filler (less chain)	1	25				
107981	Cap. oil filler (with chain)	1					
120516	Capscrew, bracket	8					
150858	Capscrew, housing	12					
S-137	Capscrew, cover (3/8"-16 x 2")	9	21				
S-112	Capscrew, cover (3/8"-16 x 1")	6	22				
S-118-A	Capscrew, heat shield (1/4"-20 x 5/8")	4					
149628	Cover (center) (less heat shield)	1	18				
149768	Cover (center) (with heat shield)	1	19				
150326	Cover (front)	1					
150327	Cover (rear)	1	20				
149651	Gasket, cover	3	23				
187589	Gasket, housing to head	3	26				
S-600	Lockwasher, heat shield (1/4")	4					
S-604	Lockwasher (3/8")	15	24				
S-608	Lockwasher (1/2")	8					
151127	Shield, heat	1					
S-602	Washer, plain (13/32")	15	25				
158208	Washer, housing to head	12					
193213	Gasket	1					

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

Engine Application					
B	BI	CI	I	IP	P
X	X	X	X	X	
Remarks      Variable Applications					

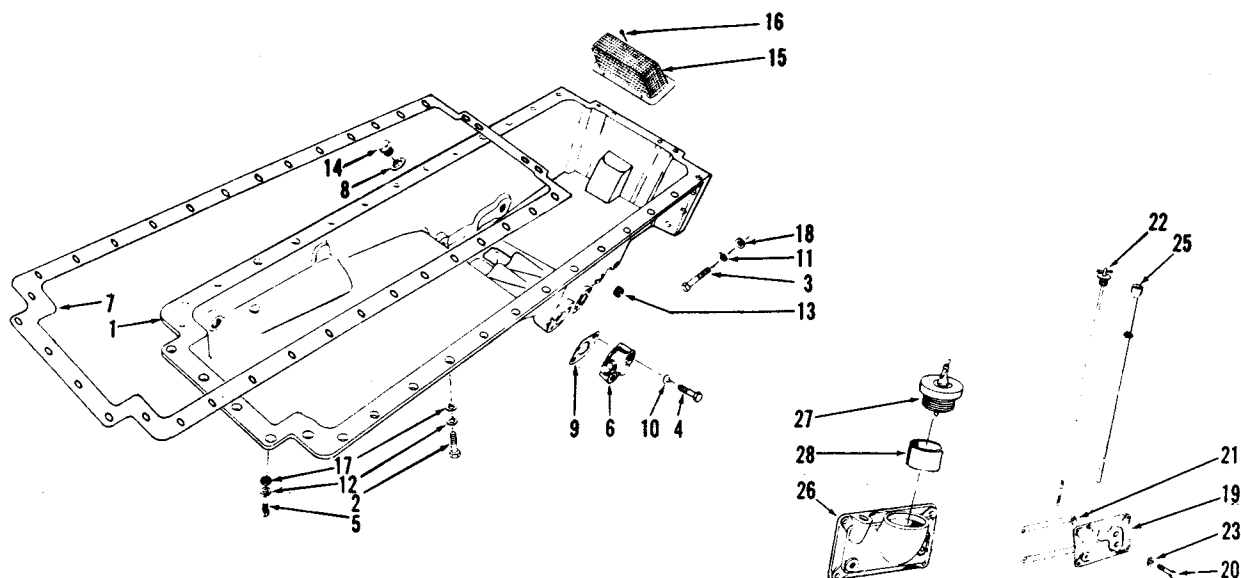


Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>CAM FOLLOWERS</b>				<b>All Applications</b>			
<b>Piston Cooled</b>				<b>MOUNTING PARTS</b>			
<b>B, BI, CI, IP Applications</b>							
BM-67009	Housing, cam follower, assembly	3		S-129	Capscrew (3/8-24 x 1")	18	15
138808	Housing, cam follower	3	1	9228	Dowel	2	
175831	Plug, expansion	6	2	68585	Dowel, housing to block	6	16
69736	Screw, shaft	6	3	120819	Gasket (.026")	A/R	17
42443	Shaft, cam follower	6	4	9266-A	Gasket	A/R	17
BM-37621	Cam follower, injector	6		S-604	Lockwasher (3/8")	18	18
BM-37496	Cam follower and bushing (108169)	6	5	S-602	Washer, plain (13/32")	18	19
118377	Bushing	6	6				
107738	Insert, cam follower	6	7	BM-47778	Tube assembly, intake and exhaust	12	20
68512	Pin, roller	6	8		Tube assembly, injector	6	21
118939	Pin, roll	6	9	BM-47779			
7348-2	Roller	6	10				
BM-37634	Cam follower, intake and exhaust	12					
BM-37633	Cam follower and bushing (120543)	12	11				
118378	Bushing	12	12				
107738	Insert, cam follower	12	7				
68513	Pin, roller	12	13	ADD:			
118939	Pin, roll	12	9	BM-47777	Tube, push	6	
9260-1	Roller	12	14	OMIT:			
<b>Non Piston Cooled</b>				BM-47778	Tube, push	6	
<b>B, BI, CI Applications</b>							
Same as Piston Cooled application except:							
BM-37625	Housing, cam follower, assembly	3					
44035	Housing, cam follower	3	1				

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



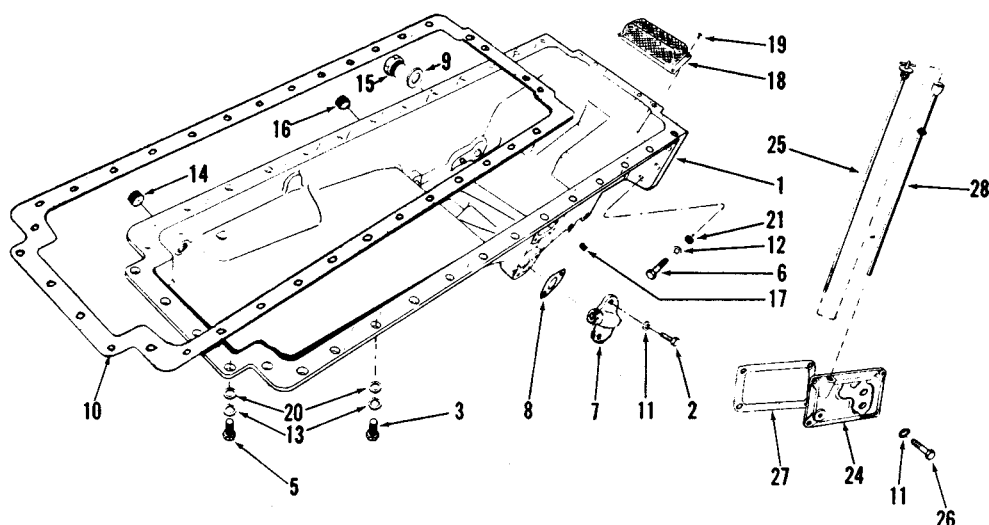
Engine Application					
B	BI	CI	I	IP	P
X	X			X	
Remarks    Piston Cooled					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>OIL PAN</b>				<b>DIPSTICK BRACKET</b>			
<b>B Application</b>				<b>B, BI Applications</b>			
132514	Pan, oil	1	1	131998	Bracket, dipstick	1	19
70349	Capscrew, pan to clock (7/16-20 x 1-3/8")	28	2	S-112	Capscrew (3/8-16 x 1")	4	20
105574	Capscrew, pan to rear cover (5/16-24 x 2-1/4")	4	3	65274	Gasket	1	21
108707	Capscrew (3/8-16 x 1-1/2")	4	4	101368	Gauge, dipstick	1	22
185804	Capscrew, pan to gear cover	4	5	S-604	Lockwasher (3/8")	4	23
187059	Flange, oil suction	2	6	S-915-A	Plug, pipe (1/2")	A/R	
5083	Gasket, oil pan	1	7	101814	Tube, dipstick	1	25
67946	Gasket, drain plug	1	3				
67963	Gasket	2	9				
HS1602206MS	Hose, lubricating oil	1					
HS1602946MS	Hose, lubricating oil	1					
S-604	Lockwasher (3/8")	4	10	115590	Bracket, oil filler	1	26
S-605	Lockwasher (5/16")	5	11	101322	Cap, oil filler	1	27
S-610	Lockwasher (7/16")	34	12	101264	Tube, oil filler	1	28
S-915-A	Plug, pipe (1/2")	2	13				
110907	Plug, drain	1	14				
20622	Screen, lubricating oil plate	2	15				
S-1354	Screw, plate to screen	8	16				
S-602	Washer, plain (13/32")	4					
S-622	Washer, plain (15/32")	34	17				
S-626	Washer, plain (11/32")	4	18				
<b>BI, IP Applications</b>				<b>IP Application</b>			
Same as above except:				Same as above except:			
132515	Pan, oil	1					

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

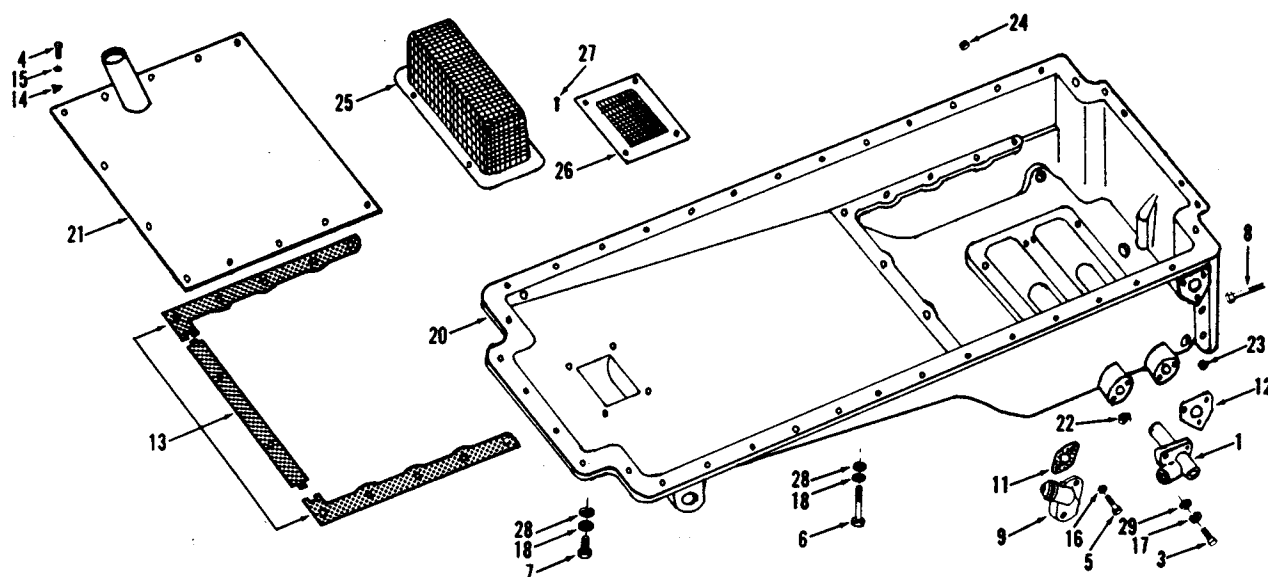
Engine Application					
B	BI	CI	I	IP	P
X	X				
Remarks    Non Piston Cooled					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
	<b>OIL PAN</b>				<b>DIPSTICK BRACKET</b>		
	<b>B Applications</b>				<b>B Application</b>		
152411	Pan, oil	1	1	131998	Bracket, dipstick	1	24
S-120	Capscrew (3/8-16 x 1-3/4")	2	2	158649	Dipstick	1	25
70349	Capscrew (7/16-10 x 1-3/8"), pan to blkok	28	3	S-112	Capscrew (3/8-16 x 1")	4	26
185804	Capscrew (7/16-14 x 1-3/8")	4	5	65274	Gasket	1	27
105574	Capscrew (5/16-24 x 2-1/4"), pan to rear cover	4	6	S-604	Lockwasher (3/8")	4	11
179688	Flange, oil suction	1	7	S-915-A	Plug, pipe (1/2")	A/R	
5083	Gasket, oil pan	1	10	101814	Tube, dipstick	1	28
157551	Gasket, suction flange	1	8				
67946	Gasket, drain plug	1	9		<b>BI Application</b>		
HS1602506MS	Hose, lubricating oil	1			Same as above except:		
S-604	Lockwasher (3/8")	2	11				
S-610	Lockwasher (7/16")	34	13	101368	Dipstick	1	25
S-605	Lockwasher (5/16")	1	12				
S-995	Plug, pipe (3/4")	1	14				
110907	Plug, drain	1	15				
S-915-A	Plug, pipe (1/2")	4	16				
S-908	Plug, pipe (3/8")	1	17				
20622	Screen, suction plate	1	18				
S-1354	Screw	4	19				
S-602	Washer, plain (13/32")	2					
S-622	Washer, plain (15/32")	34	20				
S-626	Washer, plain (11/32")	4	21				
	<b>BI Application</b>						
	Same as above except:						
116895	Pan, oil	1	1				

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

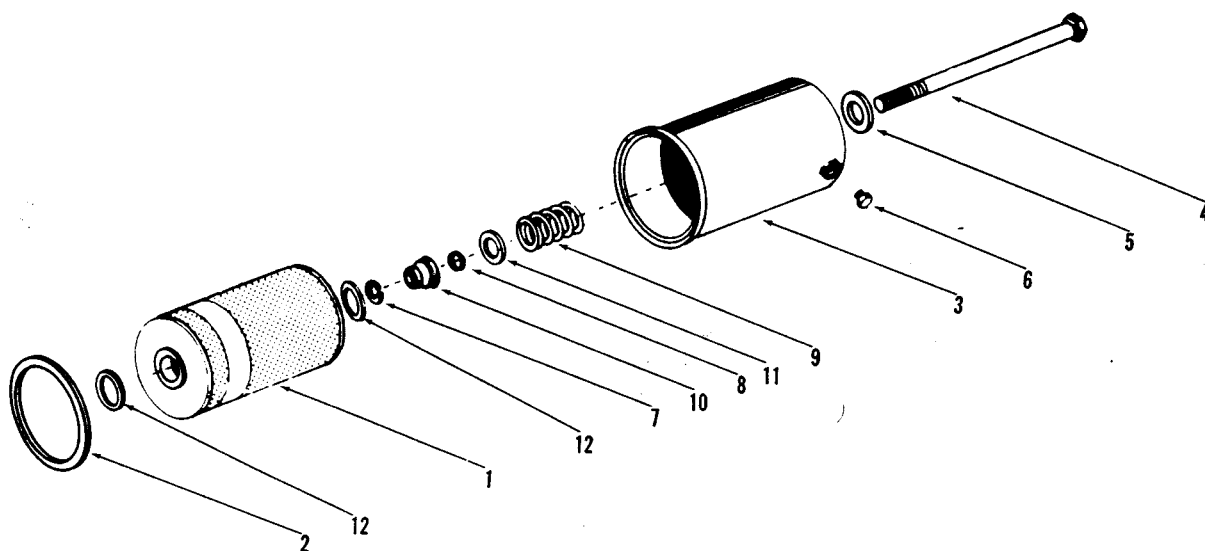
Engine Application					
B	B	C	I	P	P
		X			
Remarks      Variable Applications					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>OIL PAN</b>				<b>DIPSTICK</b>			
<b>Piston Cooled</b>				<b>Piston Cooled, Non Piston Cooled</b>			
139745	Pan, oil	1	20	131998	Bracket, dipstick	1	
129569	Aerator, oil pan	1	1	S-112	Capscrew (3/8-16 x 1")	4	
S-102	Capscrew (5-1/16"-18 x 1")	3	3	65274	Gasket	1	
S-118-A	Capscrew (1/4-20 x 5/8")	12	4	124035	Gauge, dipstick	1	
S-137	Capscrew, flange	4	5	S-604	Lockwasher (3/8")	4	
70349	Capscrew (7/16-20 x 1-3/8"), pan to block	28	6	S-915-A	Plug, pipe (1/2")	A/R	
185804	Capscrew (7/16-14 x 1-3/8"), pan to gear cover	4	7	101814	Tube, dipstick	1	
105574	Capscrew (5/16-24 x 2-1/4"), pan to rear cover	4	8	<b>LUBRICATING OIL HOSE</b>			
108707	Capscrew (3/8-16 x 1-1/2")	2		<b>Piston Cooled</b>			
187059	Flange, lubricating oil	2	9	67944	Adapter, hose	3	
5083	Gasket, oil pan	1		S-915-B	Bushing	1	
67963	Gasket, lubricating oil flange	2	11	68121	Clamp, hose	4	
110453	Gasket, aerator	1	12	67950	Clip, hose	2	
121379	Gasket, baffle plate	1	13	S-987	Elbow	4	
68908-A	Lockplate, capscrew	12	14	HS1603146MS	Hose	1	
S-600	Lockwasher (1/4")	12	15	HS1602406MS	Hose	2	
S-604	Lockwasher (3/8")	4	16	HS1603906MS	Hose	1	
S-605	Lockwasher (5/16")	7	17	S-600	Lockwasher (1/4")	2	
S-610	Lockwasher (7/16")	34	18	S-939-B	Nipple	4	
121378	Plate, baffle	1	21	S-251	Nut	2	
S-962	Plug, pipe (1")	1	22	S-1315	Screw	2	
S-924	Plug, pipe (1/2")	2	23	<b>Non Piston Cooled</b>			
S-995	Plug, pipe (3/4")	1	24	Same as above except:			
20622	Screen, lubricating oil plate	2	25	S-181-B	Capscrew (3/8-16 x 1/2")	1	
110454	Screen, oil pan	1	26	108709	Capscrew (7/16-20 x 1-1/2")	1	
S-1354	Screw	12	27	113151	Clamp, hose	1	
S-602	Washer, plain (13/32")	4		HS1602506MS	Hose	1	
S-622	Washer, plain (15/32")	34	28	HS1603406MS	Hose	1	
S-626	Washer, plain (11/32")	4	29	S-604	Lockwasher (3/8")	1	
<b>Non Piston Cooled</b>				68038	Support, hose	1	
121377	Same as above except: Pan, oil	1					

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

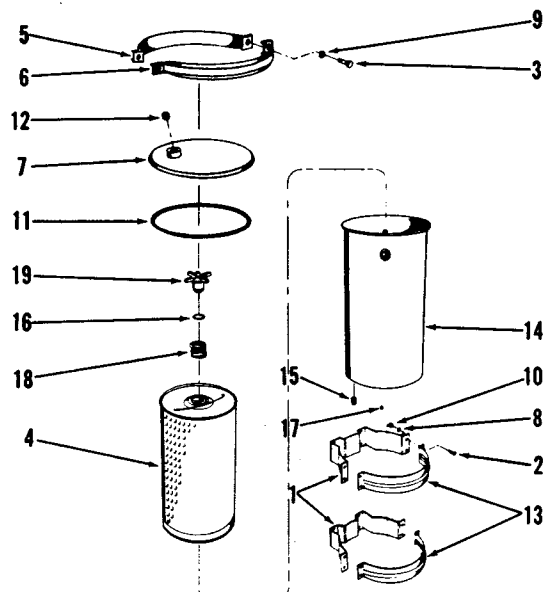
Engine Application					
B	BI	CI	I	IP	P
X	X	X	X	X	
Remarks      Variable Applications					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>LUBRICATING OIL FILTER</b>				<b>B, BI Applications Non Piston Cooled</b>			
<b>Piston Cooled B, BI, CI, IP Applications</b>							
<b>Non-Piston Cooled CI Applications</b>							
BM-94090	Filter, lubricating oil, assembly	1		AR-01058	Filter, lubricating oil, assembly	1	
LF-516	Cartridge (paper)	1	1	LF-516	Cartridge (paper)	1	1
153514	Seal, cartridge	1	12	153514	Seal, cartridge	2	12
153528	Seal, shell to filter head	1	2	173368	Seal, shell to filter head	1	2
165286	Shell and bolt	1		179599	Shell and bolt	1	
153516	Shell (153513)	1	3	179600	Bolt	1	4
153517	Bolt	1	4	8265	Gasket, copper	1	5
8265	Gasket, copper	1	5	S-901	Plug, drain	1	6
69901	Plug, pipe (1/8")	1	6	S-16245	Ring, snap	1	7
S-16245	Ring, snap	1	7	153518	Seal, bolt	1	8
153518	Seal, bolt	1	8	173313	Shell	1	3
153519	Spring, cartridge	1	9	173176	Spring, cartridge	1	9
153521	Support, cartridge	1	10	153521	Support, cartridge	1	10
153520	Washer, bolt	1	11	153520	Washer, bolt	1	11
				NOTE: For remote mounted lubricating oil filter see page 51.			

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

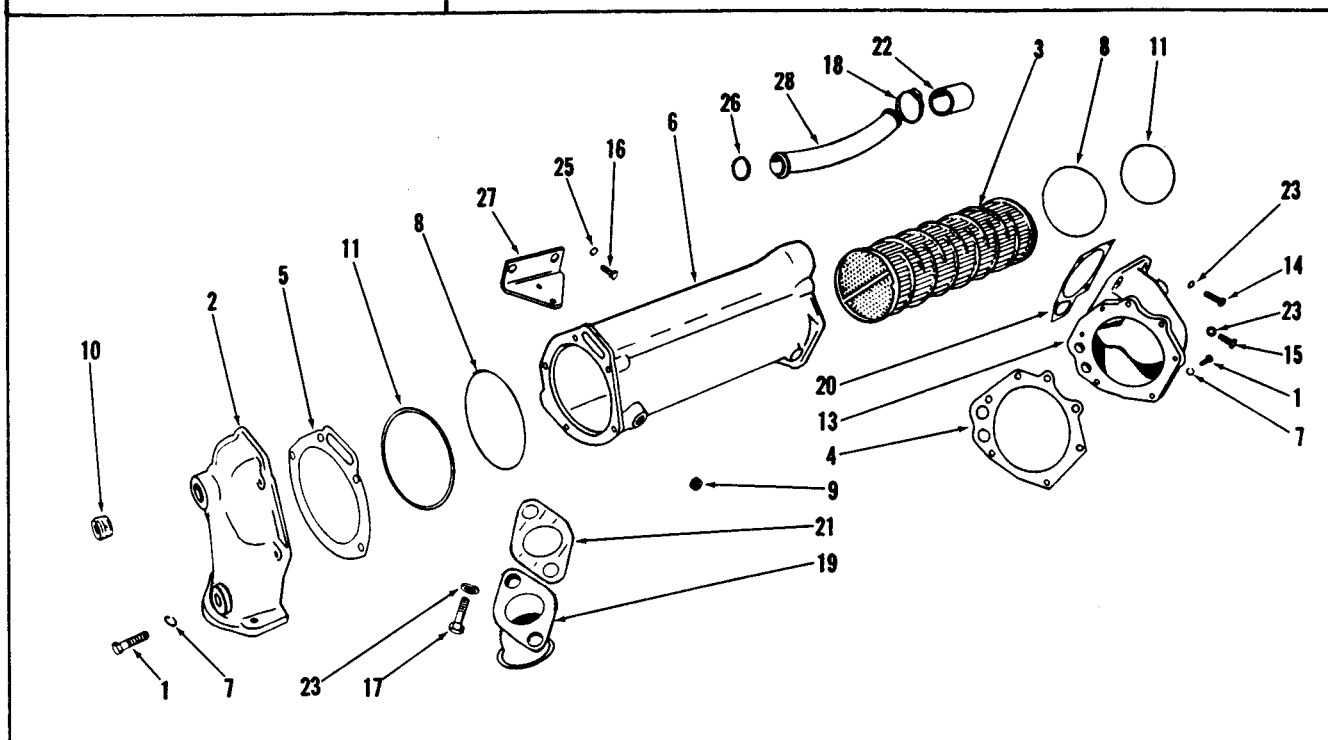
Engine Application					
B	BI	CI	I	IP	P
X	X	X	X	X	
Remarks      Variable Applications					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>BY-PASS FILTER</b>							
<b>Piston Cooled - Non Piston Cooled</b>							
159706	Filter, lubricating oil	1					
145664	Bracket, mounting	2	1				
70188	Capscrew, bracket	8	2				
70223	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

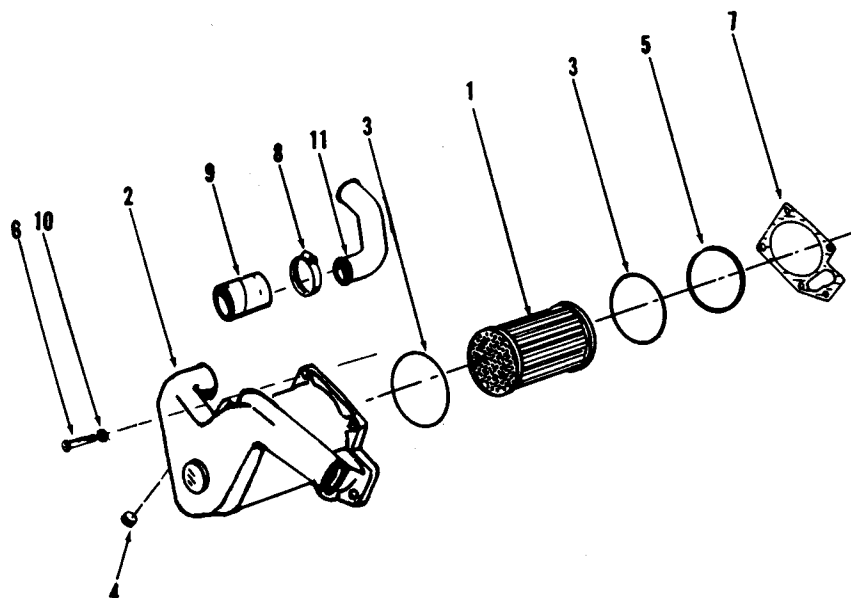
Engine Application					
B	BI	CI	I	IP	P
X	X	X	X		
Remarks     Piston Cooled					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
	<b>LUBRICATING OIL COOLER</b>				<b>MOUNTING PARTS</b>		
	<b>B, BI, CI, IP Applications</b>			S-103-D	Capscrew, support to block (3/8"-16 x 1 1/4")	3	14
BM-69628	Cooler assembly, lubricating oil	1		S-163	Capscrew (3/8"-16 x 3 1/4")	2	15
S-103-D	Capscrew, cover and support to housing (3/8"-16 x 1 1/4")	12	1	S-115	Capscrew (5/16"-18 x 7/8")	2	
170596	Cover, oil cooler	1	2	S-145	Capscrew (1/2"-13 x 1 1/4")	2	16
142608	Element, cooler	1	3	S-112	Capscrew, connection to cover (3/8"-16 x 1")	2	17
146310	Gasket, support to housing	1	4	43828-B	Clamp, hose	2	18
146309	Gasket, cover to housing	1	5	44028	Connection, water inlet	1	19
146306	Housing, cooler	1	6	68645	Elbow	1	
S-604	Lockwasher (3/8")	12	7	121779	Gasket, cooler support to block	1	20
S-908	Plug, pipe (3/8")	2	9	9221	Gasket, water connection	1	21
S-995	Plug, pipe (3/4")	3	10	63495	Hose, water by-pass	1	22
187777	Ring, sealing	2		S-604	Lockwasher (3/8")	7	23
63322	Spacer	1		S-605	Lockwasher (5/16")	2	
180565	Support, lubricating oil cooler	1	13	S-608	Lockwasher (1/2")	2	25
				43463-A	"O" ring, water by-pass tube	1	26
				142631	Support	1	27
				146311	Tube, water by-pass	1	28

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

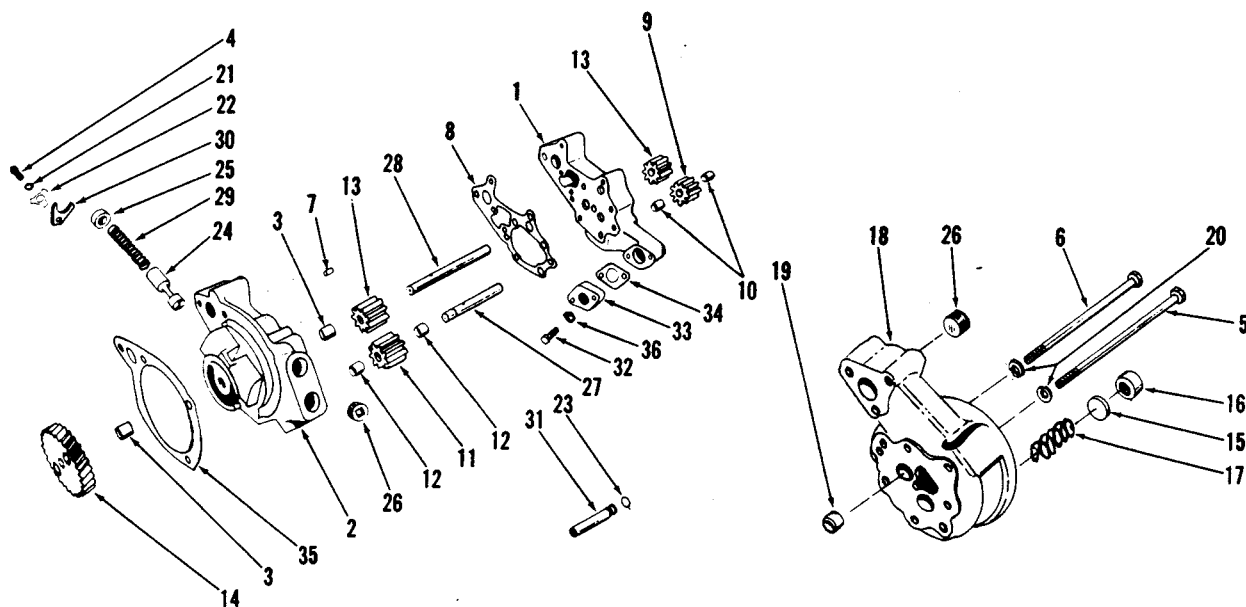
Engine Application					
B	B	C	I	P	P
X	X	X			
Remarks    Non Piston Cooled					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>LUBRICATING OIL COOLER</b>							
AR-00875	Cooler assembly, lubricating oil	1					
110848	Element, cooler	1	1				
183753	Housing	1	2				
148293	"O" ring	2	3				
S-910-B	Plug, pipe (1/4")	1	4				
110827	Retainer, "O" ring	1	5				
<b>MOUNTING PARTS</b>							
S-103-D	Capscrew (3/8"-16 x 1 1/4")	5	6				
43828-B	Clamp, hose	4	8				
121779	Gasket	1	7				
63495	Hose	2	9				
S-604	Lockwasher (3/8")	5	10				
21133	Pipe, water by-pass	1	11				

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

Engine Application					
B	BI	CI	I	IP	P
X	X	X	X		
Remarks      Variable Applications					

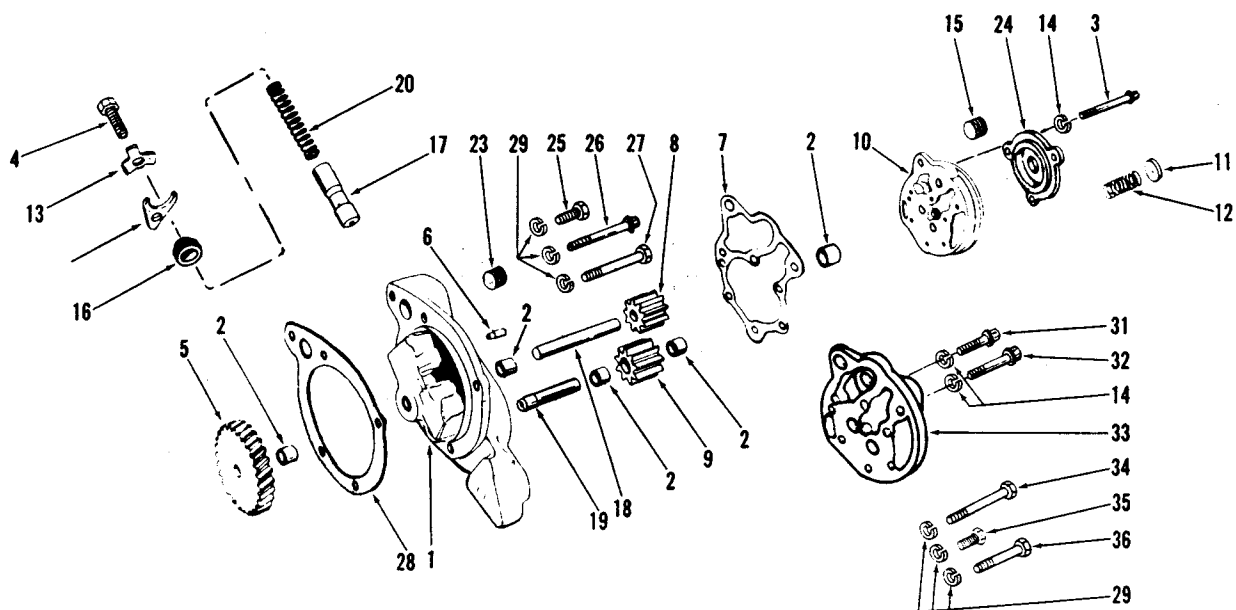


Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>LUBRICATING OIL PUMP</b>							
<b>Piston Cooled B, BI, CI, IP Applications</b>							
BM-94088	Pump, oil, assembly	1		164164	Shaft, drive	1	28
151917	Body, inner	1	1	68274	spring, by-pass valve	1	29
BM-66816	Body and bushing (164163)	1	2	126304	Yoke, retaining	1	30
68586	Bushing	2	3	134736	"O" ring	1	23
S-109	Capscrew (3/8"-16 x 7/8")	1	4	185696	Tube, piston-cooling oil	1	31
S-130-A	Capscrew (3/8"-16 x 5 1/4")	3	5				
S-169-A	Capscrew (3/8"-16 x 4 1/2")	2	6				
S-199-A	Capscrew (3/8"-16 x 4")	1					
S-196-A	Capscrew (7/16"-20 x 2 3/4")	1					
101662	Capscrew (5/16"-18 x 4 1/2")	2					
69519	Dowel	2	7				
151911	Gasket, housing	2	8				
BM-20443	Gear and bushing (68589)	1	9	BM-94082	Pump, oil assembly	1	
68586	Bushing	2	10	BM-66076	Body and bushing (164162)	1	2
BM-63818	Gear and bushing (133827)	1	11				
68586	Bushing	2	12				
68588	Gear, impeller drive	2	13				
133855	Gear, main drive	1	14				
BM-94081	Head, filter	1					
153525	Disc, by-pass	1	15	S-101-A	Capscrew (7/16"-20 x 1")	2	
153526	Seat, by-pass	1	16	69960	Capscrew, hex head	1	
251152	Spring	1	17	169657	Capscrew, hex head	1	
BM-94080	Head, filter (169651)	1	18	S-103-D	Capscrew (3/8"-16 x 1 1/4")	2	32
68586	Bushing	1	19	134284	Flange, scavenger pump	1	33
S-604	Lockwasher (3/8")	6	20	134285	Gasket, flange to body	1	34
S-605	Lockwasher (5/16")	2	21	121907	Gasket, pump to block	1	35
109319	Lockplate	1	22	S-604	Lockwasher (3/8")	2	36
127558	Plunger, regulator	1	24	S-610	Lockwasher (7/16")	5	
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				
<b>Non Piston Cooled CI Applications</b>							
Same as above except:							
<b>All Applications</b>							
<b>MOUNTING PARTS</b>							

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



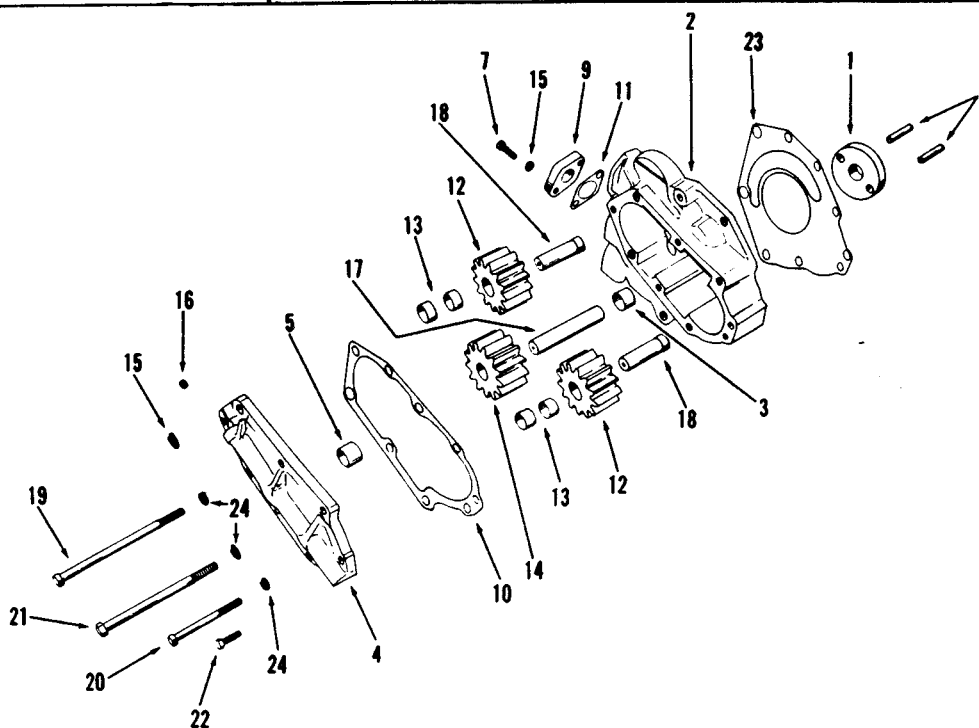
Engine Application					
B	B	C	I	P	P
X	X				
Remarks Non Piston Cooled					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>LUBRICATING OIL PUMP</b> [Standard Horizontal]				<b>LUBRICATING OIL PUMP</b> Same as Standard Horizontal Model except:			
AR-01059	Pump, lubricating oil	1		OMIT:			
AR-01017	Body and bushing (173160)	1	1				
68586	Bushing	2	2				
191772	Capscrew	5	3				
S-109	Capscrew (3/8-16 x 5/8")	1	4				
BM-20443	Gear, idler (68589)	1	5	AR-01059	Pump, lubricating oil		
68586	Bushing	2	2	182609	Capscrew		3
69519	Dowel	1	6	AR-01018	Head, filter (173162)		10
173161	Gasket	1	7	153525	Disc, by-pass		11
68588	Gear, drive	1	8	251152	Spring, by-pass		12
125988	Gear, main drive	1	9	173163	Plate		24
AR-01018	Head, filter (173162)	1	10	<b>MOUNTING PARTS</b>			
68586	Bushing	1	2	182616	Capscrew	3	25
153525	Disc, by-pass	1	11				
251152	Spring, by-pass	1	12				
109319	Lockplate	1	13				
S-604	Lockwasher (3/8")	5	14				
173163	Plate	1	24	AR-02457	Pump, lubricating oil		
S-908	Plug, pipe (3/8")	1	15	S-172-B	Capscrew (3/8-16 x 1-1/8")		31
S-915	Plug, pipe (3/8")	1	23	189699	Capscrew (3/8-16 x 2")		32
134596	Plug, by-pass valve	1	16	AR-01556	Cover and bushing (188860)		33
127558	Plunger	1	17	<b>MOUNTING PARTS</b>			
126284	Shaft, drive	1	18	69406	Capscrew (7/16-20 x 4")	2	34
126289	Shaft, idler	1	19		Capscrew (7/16-20 x 1")		35
68274	Spring, by-pass valve	1	20		Capscrew (7/16-20 x 3")	1	36
126304	Yoke	1	21	S-101-A			
<b>MOUNTING PARTS</b>				S-127			
S-101-A	Capscrew (7/16-20 x 1")	1	25	Note: For remote-mounted filter arrangement, see page 51.			
S-127-A	Capscrew (7/16-20 x 3")	3	26				
S-183-A	Capscrew (7/16-20 x 2-1/2")	1	27				
121907	Gasket, pump to block	1	28				
S-610	Lockwasher (7/16")	5	29				

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

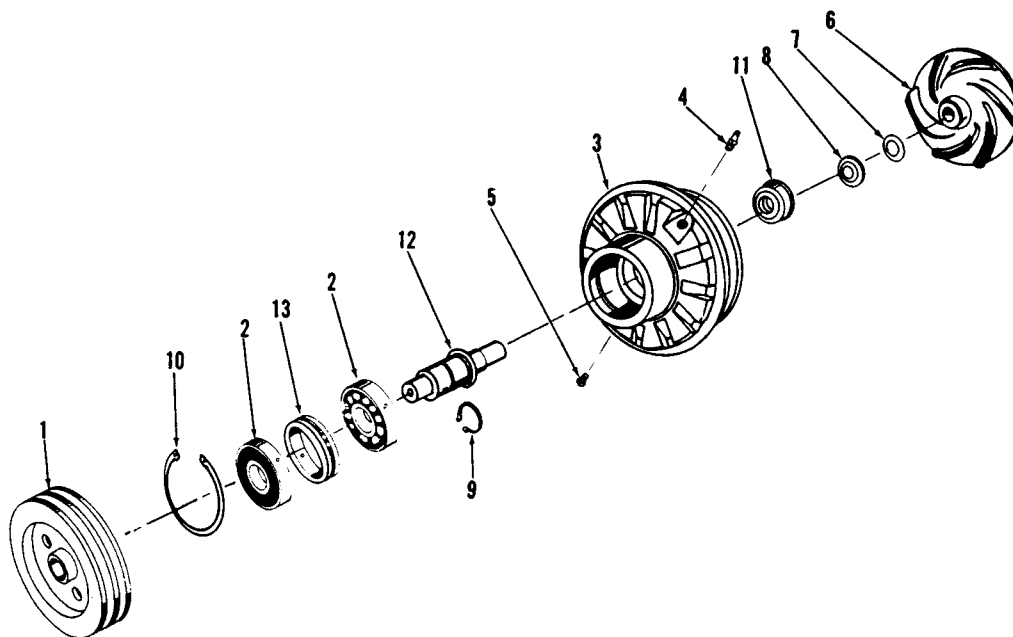
Engine Application					
B	BI	CI	I	IP	P
		X			
Remarks      Piston Cooled					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>SCAVENGER PUMP</b>				<b>MOUNTING PARTS</b>			
BM-66130	Pump, double scavenger	1		134963	Capscrew, pump to gear cover	1	
139267	Adapter	1	1	120688	Capscrew, pump to gear cover	2	19
BM-64811	Body and bushing (133834)	1	2	S-163	Capscrew, pump to gear cover	3	20
133835	Bushing, shaft	1	3	S-120	Capscrew, pump to gear cover	1	21
BM-66128	Cover and bushing (133843)	1	4	S-172-B	Capscrew, pump to gear cover	1	22
113126	Bushing, shaft	1	5	133831	Gasket, pump to gear cover	1	23
S-103-D	Capscrew, flange	7	7	S-604	Lockwasher (3/8"), pump to gear cover	5	24
7613	Dowel, drive adapter	2	8		Lockwasher (7/16")	3	
144706	Flange, scavenger pump drive	1		S-610			
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" O, 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

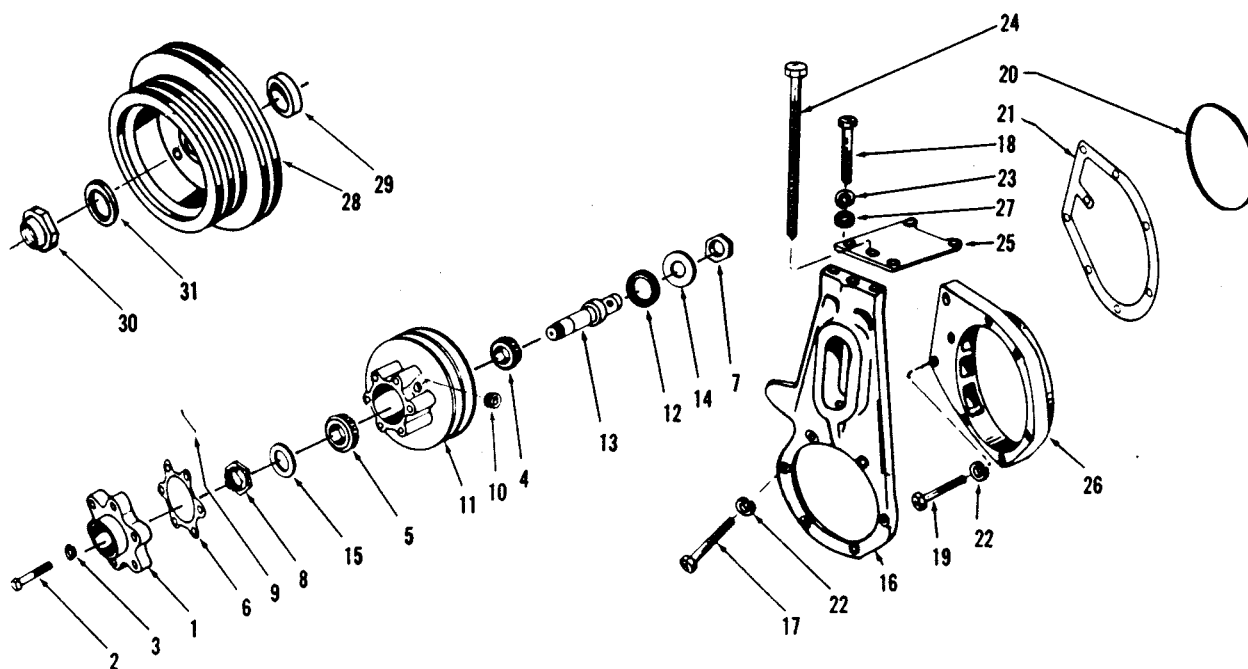
Engine Application	
B	B
C	C
I	I
P	P
X	X
X	X
X	X
Remarks All Applications	



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>WATER PUMP and PULLEY</b>							
AR-04284	Pump, water	1					
154966	Pulley	1	1				
AR-04283	Pump, water (less pulley)	1					
115519	Bearing, ball	2	2				
196845	Body, water pump	1	3				
BM-71656	Impeller (122295)	1	6				
143913	Film, bonding	1	7				
185616	Filter, dust	1					
135079	Seat, ceramic	1	8				
191175	Fitting, relief	1	5				
S-2268	Fitting, grease	1	4				
112302	Ring, snap	1	9				
S-16255	Ring, snap	1	10				
170895	Seal, water pump	1	11				
199410	Shaft, water pump	1	12				
196844	Spacer	1	13				

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

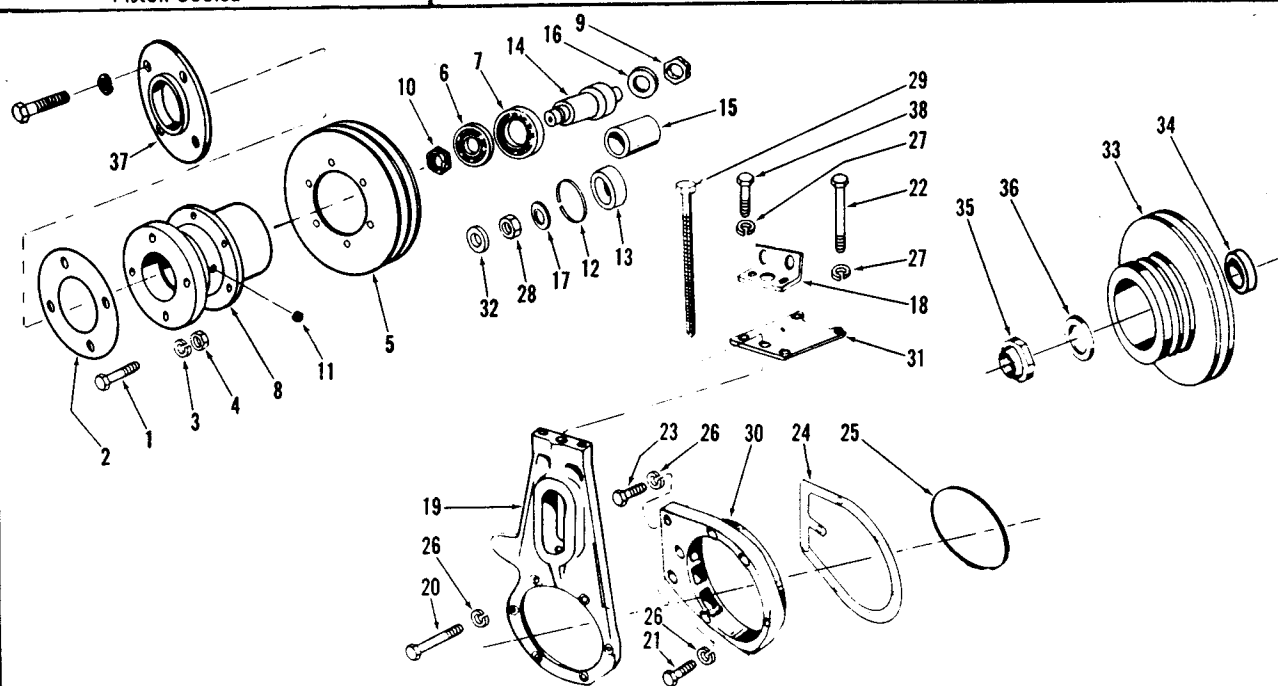
Engine Application					
B	B	C	I	I	P
X	X	X			
Remarks Non Piston Cooled Piston Cooled					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>FAN HUB</b>				<b>FAN BRACKET</b>			
BM-72946	Fan hub, assembly	1		132150	Bracket, fan	1	16
147209	Spacer, fan pilot	1	1	105831	Capscrew, bracket to support	6	17
S-137	Capscrew (3/8"-16 x 2")	6	2	S-145	Capscrew, bracket support		
S-604	Lockwasher (3/8")	6	3		(1/2"-13 x 1 1/4")	2	18
BM-72337	Fan hub, assembly (less spacer)	1		S-165	Capscrew, water pump support		
143116	Bearing, ball	1	4		(3/8"-24 x 1 1/2")	2	19
116759	Bearing, ball	1	5	130240	Gasket, pump to support	1	20
143108	Gasket, spacer to hub	1	6	130226	Gasket, support to block	1	21
67532	Nut, Marsden	1	7	S-604	Lockwasher (3/8")	8	22
146650	Nut, huglock	1	8	S-608	Lockwasher (1/2")	2	23
S-510	Pin, cotter	1	9	66912-1A	Screw, adjusting	1	24
S-911-B	Plug, pipe (1/8")	2	10	131622	Support, fan bracket	1	25
146656	Pulley	1	11	130227	Support, water pump	1	26
106276	Seal, oil	1	12	S-670	Washer, plain (17/32")	3	27
146649	Shaft	1	13				
67526	Washer, clamping	2	14				
146651	Washer, cone-clamping	1	15				
<b>BELTS</b>				<b>ACCESSORY DRIVE PULLEY</b>			
134809	Belt, "V" fan drive	2		AR-5065	Pulley, drive (190399)	1	28
200328	Belt, "V"	1		190397	Sleeve, pulley	1	29
				191517	Nut, pulley	1	30
				194380	Washer, plain	1	31

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

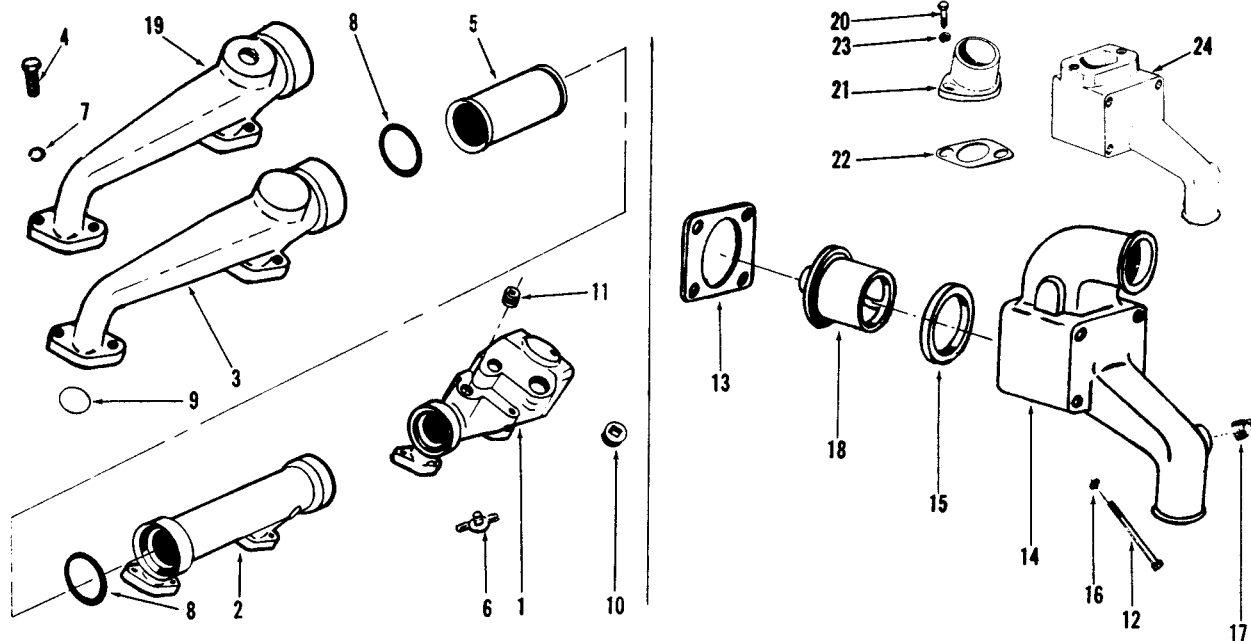
Engine Application					
B	B	C	I	P	P
					X
Remarks Non Piston Cooled Piston Cooled					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>FAN HUB</b>				<b>FAN BRACKET</b>			
BM-72981	Hub, fan	1		70173	Bracket, radiator support	1	18
108707	Capscrew (3/8"-16 x 1-1/2")	6	1	132150	Bracket, fan	1	19
67547	Gasket	1	2	105831	Capscrew, bracket to support	6	20
S-604	Lockwasher (3/8")	6	3	S-165	Capscrew (3/8"-24 x 1-1/2")	1	21
S-223	Nut	6	4	S-176	Capscrew (1/2"-13 x 5")	2	22
20536	Pulley, fan	1	5	106549	Capscrew (3/8"-24 x 1-3/4")	1	23
BM-72969	Hub, fan (less pulley)	1		S-145	Capscrew (1/2"-13 x 1-1/4")	2	38
S-16004-A	Bearing, ball	1	6	130226	Gasket	1	24
S-16093	Bearing, ball	1	7	130240	Gasket	1	25
162163	Hub, fan	1	8	S-604	Lockwasher (3/8")	8	26
67532	Nut, Marsden	1	9	S-608	Lockwasher (1/2")	2	27
142176	Nut, huglock	1	10	S-206	Nut (5/8")	2	28
S-911-B	Plug, pipe (1/8")	2	11	66912-1A	Screw, adjusting	1	29
162127	Ring, retaining	1	12	130227	Support, water pump	1	30
162128	Seal, oil	1	13	131622	Support, fan bracket	1	31
42377	Shaft, fan hub	1	14	S-670	Washer, plain (17/32")	3	32
67550	Spacer, bearing	1	15				
67546	Washer, clamp	1	16				
67551	Washer, clamp	1	17				
<b>MOUNTING PARTS</b>				<b>ACCESSORY DRIVE PULLEY</b>			
178611	Belt, "V"	2		AR-05065	Pulley, drive (190399)	1	33
200328	Belt, "V"	1		190397	Sleeve, wear	1	34
42378	Pilot, fan	1	37	191517	Nut, pulley	1	35
S-125	Capscrew (1/2"-13 x 2")	4	38	194380	Washer, plain	1	36
S-608	Lockwasher (1/2")	4	39				

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

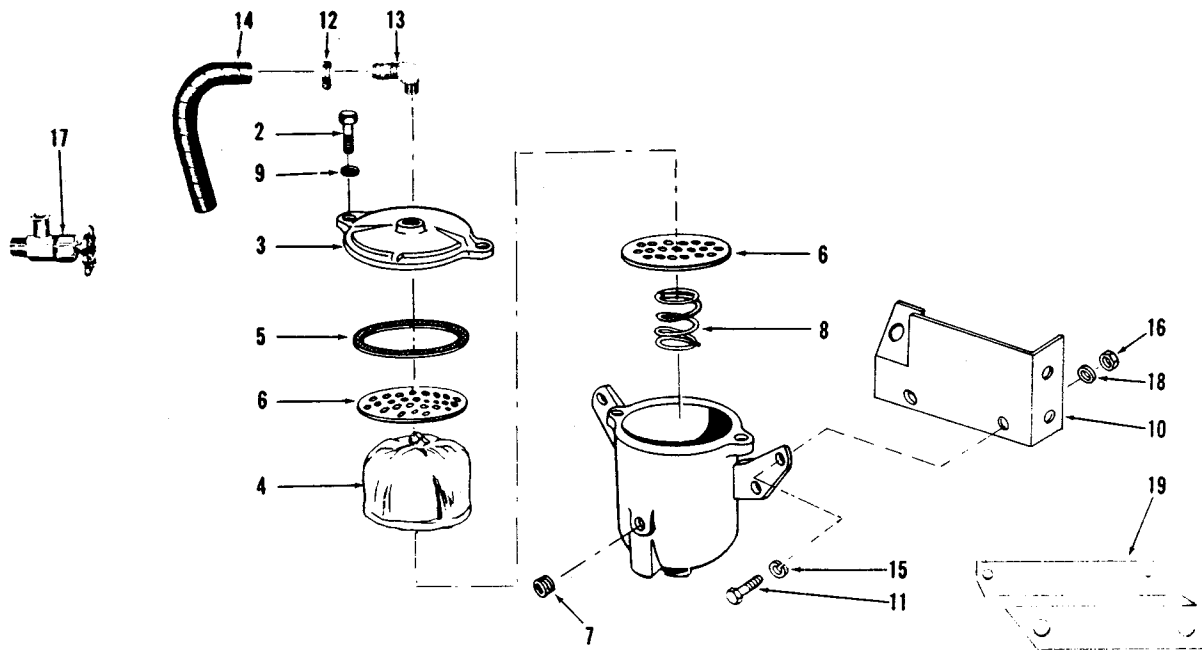
Engine Application				
B	BI	CI	I	IP
X	X	X	X	X
Remarks      Variable Applications				



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
	<b>WATER MANIFOLD</b>				<b>IP Applications</b>		
	<b>All Applications Less Inter-Cooler</b>				Same as all other applications except:		
130117	Manifold, water (front)	1	1	OMIT:			
130118	Manifold, water (center)	1	2	BM-90637	Housing, thermostat (161380)	1	14
130119	Manifold, water (rear)	1	3				
S-103-D	Capscrew (3/8"-16 x 1 1/4")	12	4	ADD:			
S-962-E	Cock, drain	1	6	BM-73207	Housing, thermostat (146106)	1	24
130394	Coupling, manifold	2	5				
S-604	Lockwasher (3/8")	12	7				
70624	"O" ring, coupling	4	8		<b>CONNECTION</b>		
S-915-A	Plug, pipe (1/2")	1	11		<b>IP Applications</b>		
S-995	Plug, pipe (3/4")	1	10		Capscrew (3/8"-16 x 1")	2	20
148203	Ring, sealing	6	9	S-112	Connection, water	1	21
				68270	Gasket, connection	1	22
				9221	Lockwasher (3/8")	2	23
				S-604			
	<b>BI, CI With Inter-Cooler</b>						
	Same as above except:						
133342	Manifold (rear)	1	19				
	<b>THERMOSTAT HOUSING</b>						
	<b>All Applications except IP</b>						
S-199-B	Capscrew (3/8"-16 x 3 3/4")	4	12				
70441	Gasket, housing	1	13				
BM-90637	Housing, thermostat (161380)	1	14				
186780	Seal, housing	1	15				
S-604	Lockwasher (3/8")	4	16				
S-908	Plug, pipe (3/8")	1	17				
135675	Thermostat (170 deg. to 185 deg. )	1	18				

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

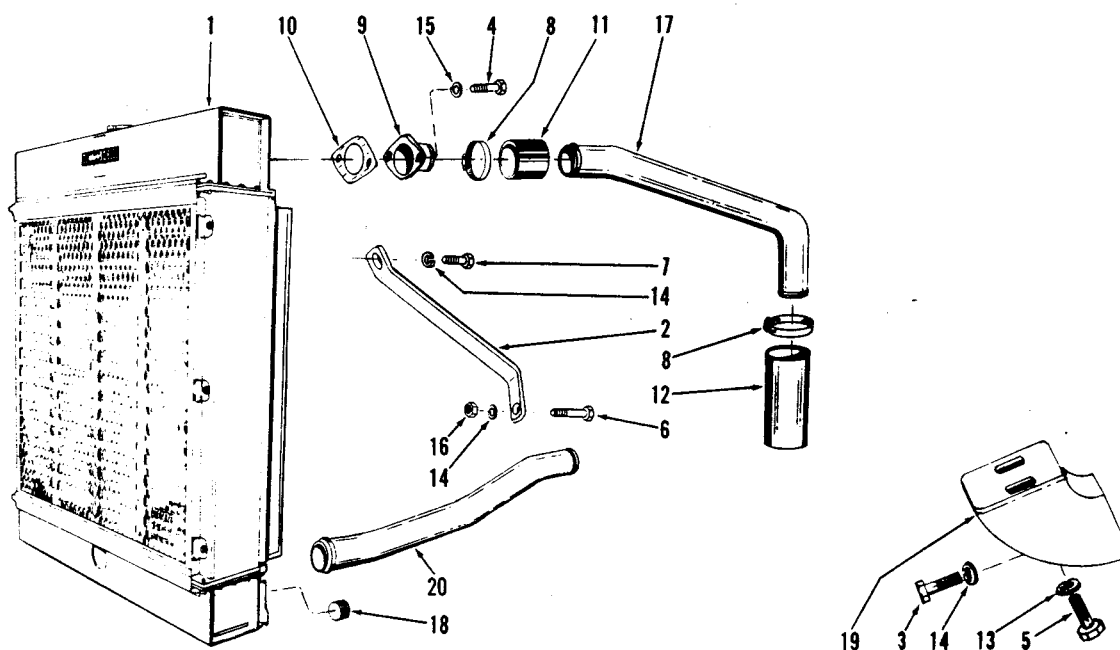
Engine Application					
B	BI	CI	I	IP	P
X	X	X	X		
Remarks      Variable Applications					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>CORROSION RESISTOR</b>				<b>MOUNTING PARTS</b>			
<b>All Applications</b>				<b>IP Application Piston Cooled</b>			
132716	Resistor, corrosion	1		143831	Bracket, corrosion resistor	1	19
132717	Body	1	1	S-102	Capscrew (5/16-18 x 1")	2	
70223	Capscrew, cover to body	2	2	S-145	Capscrew (1/2-13 x 1-1/4")	2	
132718	Cover	1	3	179904	Clamp, hose	4	12
132732	Element WF 1001	1	4	179903	Connector	2	13
132730	Gasket, cover to body	1	5	135970	Decal	1	
132719	Plate	2	6	70470	Elbow	1	
139090	Plug, pipe	2	7	179907	Hose	1	
132731	Spring	1	8	179911	Hose	1	
70233	Washer	2	9	S-605	Lockwasher (5/16")	1	
<b>MOUNTING PARTS</b>				S-608	Lockwasher (1/2")	1	
<b>B, BI, CI Applications Piston Cooled</b>				S-983	Bushing	1	
				S-221	Nut (5/16")	1	
				179901	Valve, shut-off	1	17
<b>MOUNTING PARTS</b>				<b>MOUNTING PARTS</b>			
<b>B, BI Applications Non Piston Cooled</b>				<b>B, BI Applications Non Piston Cooled</b>			
162971	Bracket, corrosion resistor mounting	1	10	S-983	Bushing, pipe	1	
S-112	Capscrew (3/8-16 x 1")	2	11	S-145	Capscrew (1/2-13 x 1-1/4")	2	
S-119	Capscrew (5/16-18 x 1-1/4")	2		179904	Clamp, hose	4	12
S-199-A	Capscrew (3/8-16 x 4")	2		179902	Connector	1	13
69911-A	Clamp, hose	2		179903	Connector	1	
179904	Clamp, hose	4	12	135970	Decal	1	
179903	Connector	2	13	179910	Hose	1	
135970	Decal	1		179914	Hose	1	
179921	Hose	1	14	S-608	Lockwasher (1/2")	1	
179924	Hose	1		179901	Valve, shut-off	2	17
S-604	Lockwasher (3/8")	2	15	S-670	Washer, plain (11/32")	2	
S-605	Lockwasher (5/16")	2					
S-223	Nut (3/8")	2	16				
S-234	Nut (5/16")	2					
60724	Spacer	2					
179901	Valve, shut-off	2	17				
S-626	Washer, plain (11/32")	2	18				

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

Engine Application	
B	B I C I P P
	X
Remarks    Piston Cooled	

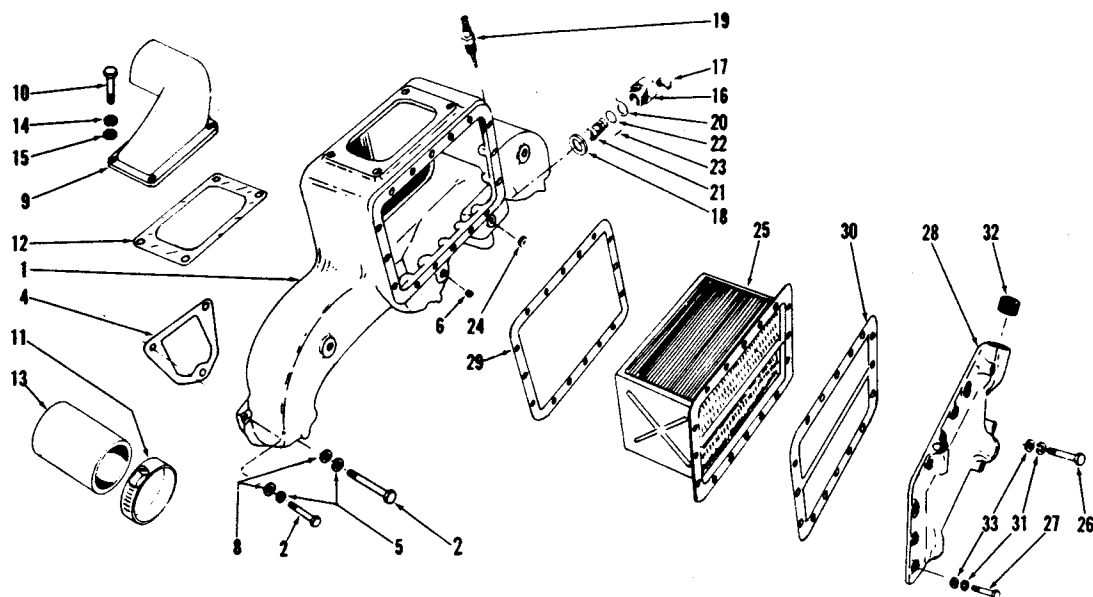


Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
	<b>RADIATOR</b>				<b>2100 RPM IP Applications</b>		
	<b>2300 RPM IP Applications</b>				Same as 2300 RPM except:		
164369	Radiator	1	1	21084	Radiator	1	
	<b>MOUNTING PARTS</b>				<b>FAN GUARD</b>		
					<b>All Applications</b>		
116935	Adapter, hose	1					
43584-A	Brace, radiator	2	2				
S-125	Capscrew (1/2"-13 x 2")	8	3	S-114	Capscrew (1/4"-20 x 3/4")	8	
S-172-B	Capscrew (3/8"-16 x 1 1/8")	4	4	13729	Guard, fan	1	
S-127-C	Capscrew (5/8"-11 x 1 3/4")	4	5	S-600	Lockwasher (1/4")	8	
S-145	Capscrew (1/2"-13 x 1 1/4")	2	6	S-631	Washer, plain (9/32")	8	
S-189	Capscrew (1/2"-13 x 1")	2	7				
43628-A	Clamp	4					
43628-B	Clamp	8	8				
68270	Connection, radiator outlet	2	9				
S-938	Elbow, pipe	1					
120437	Elbow, pipe	1					
9221	Gasket, connection	2	10				
67185	Hose, water	4	11				
HS050200SS	Hose	1					
61554	Hose	2	12				
S-602	Lockwasher (5/8")	4	13				
S-608	Lockwasher (1/2")	12	14				
S-604	Lockwasher (3/8")	4	15				
186958	Nameplate Cummins emblem	1					
S-932-B	Nipple, pipe	1					
S-208-A	Nut, brace (1/2")	2	16				
102228	Pipe, water outlet	1	17				
S-995	Plug, pipe (3/4")	1	18				
S-3097	Screw, Nameplate	2					
43585	Support, radiator	2	19				
153940	Tube, water inlet connection	1	20				
160231	Tube	1					
198777	Tube, fill	1					

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



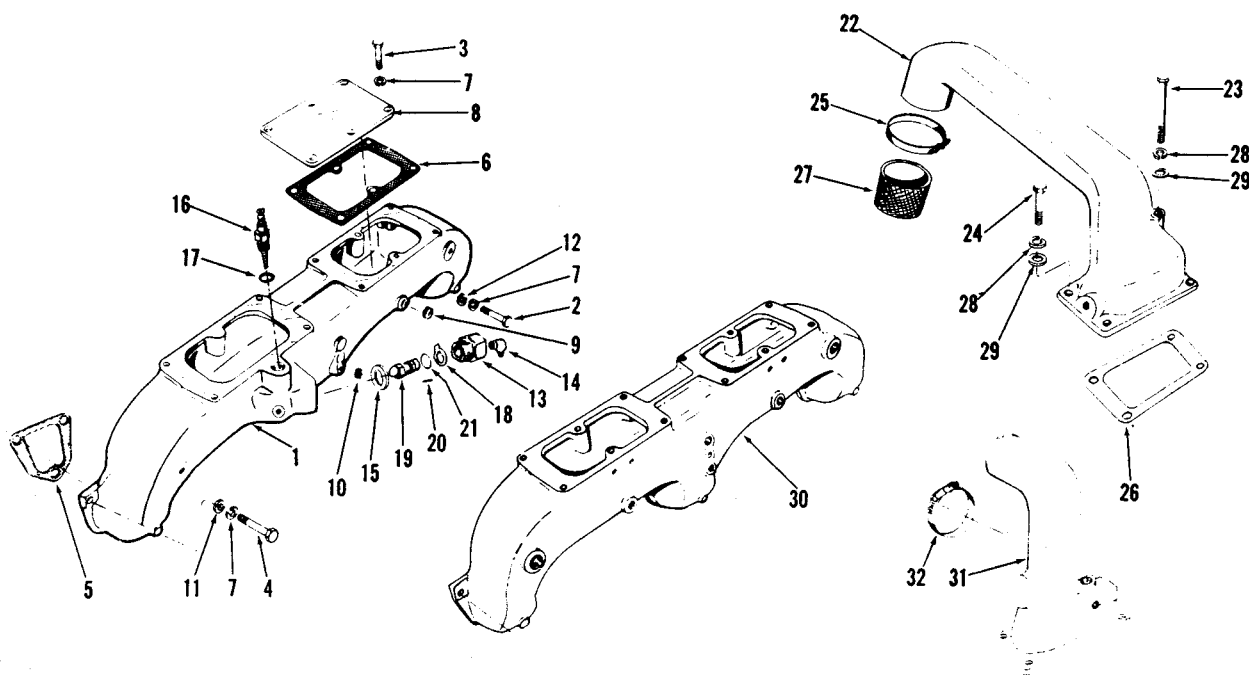
Engine Application					
B	B	C	I	P	P
X	X				
Remarks     Piston Cooled					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
	<b>AIR INTAKE MANIFOLD</b>						
167195	Manifold, air intake	1	1	43468	Pin, groove	1	23
				68606	Plug, pipe (1/8")	1	24
	<b>MOUNTING PARTS</b>				<b>AIR INTER-COOLER</b>		
S-103-D	Capscrew (3/8"-16 x 1 1/4")	9	2		Assembly, core and header	1	25
130653	Gasket, manifold to block	3	4	184145	Capscrew (3/8"-16 x 2 1/4")	6	26
S-604	Lockwasher (3/8")	9	5	S-104	Capscrew (3/8"-16 x 1 1/2")	10	27
S-911-B	Plug, pipe (1/8")	1	6	108707	Cover	1	28
S-962	Plug, pipe (1")	1		171673	Gasket, intercooler to manifold	1	29
S-602	Washer, plain (13/32")	9	8	125547	Gasket, cover to intercooler	1	30
	<b>CONNECTION</b>			125548	Lockwasher (3/8")	16	32
167196	Connection	1		S-604	Plug, pipe (3/4")	2	32
				S-995	Washer, plain (13/32")	16	33
				S-602			
	<b>MOUNTING PARTS</b>				<b>MOUNTING PARTS</b>		
S-174-B	Capscrew (3/8"-16 x 1 3/8")	4	10	68041	Adapter, hose	2	
199058	Clamp, "T" bolt	2	11	107460	Clamp, hose	1	
199568	Gasket	1	12	S-923-E	Cock, drain	2	
116224	Hose	1	13	68111	Elbow	1	
S-602	Lockwasher (3/8")	4	14	110048	Elbow	1	
S-602	Washer, plain (13/32")	4	15	S-987	Elbow	1	
	<b>GLOW PLUG</b>			HS1202200SS	Hose	1	
125880	Adapter, nozzle	1	16	HS1201400SS	Hose	1	
68139	Elbow	1	17	S-939-B	Nipple, close	1	
67946	Gasket	1	18	62279	Spacer	1	
68812	Glow plug	1	19				
118273	Gasket, glow plug	1					
68178-1	Lockplate	1	20				
69215	Nozzle	1	21				
68061-A	"O" ring	1	22				

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

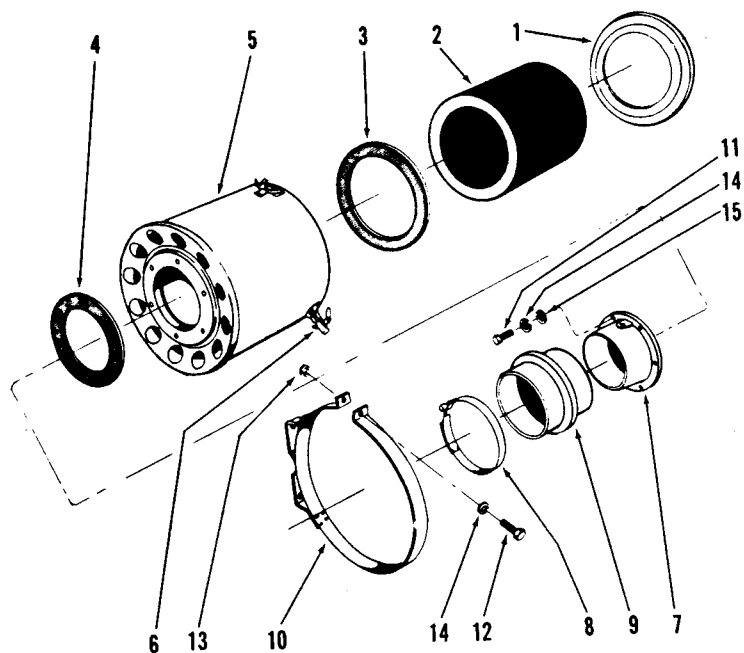
Engine Application					
B	BI	CI	I	IP	P
X	X	X	X	X	X
Remarks    Variable Applications					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
	<b>AIR INTAKE MANIFOLD</b>						
	<b>B, BI, CI Applications</b>						
	<b>Piston Cooled and Non Piston Cooled</b>						
141895	Manifold, air intake	1	1	68812	Glow plug	1	16
				118273	Gasket, glow plug	1	17
				68178-1	Lockplate, nozzle	1	18
				69215	Nozzle	1	19
				68061-A	"O" ring	1	20
				43468	Pin, groove	1	21
				68606	Plug, pipe (1/8")	1	
	<b>MOUNTING PARTS</b>				<b>CONNECTION</b>		
S-103-D	Capscrew (3/8-16 x 1-1/4")	6	2				
S-112	Capscrew (3/8-16 x 1")	6	3				
108707	Capscrew (3/8-16 x 1-1/2")	3	4				
130653	Gasket, manifold to block	3	5				
149819	Gasket, plate	1	6				
S-604	Lockwasher (3/8")	15	7	142248	Connection, manifold to turbocharger	1	22
144257	Plate, manifold cover	1	8				
S-962	Plug, pipe (1")	1			<b>MOUNTING PARTS</b>		
S-910-B	Plug, pipe (1/4")	3	9				
S-915-A	Plug, pipe (1/2")	2	10	S-102-1	Capscrew (3/8-16 x 3")	1	
S-602	Washer, plain (13/32")	6	11	S-126	Capscrew (3/8-16 x 2-1/2")	1	23
63842	Washer, plain (13/32")	3	12	108707	Capscrew (3/8-16 x 1-1/2")	3	24
	<b>IP Application - Piston Cooled</b>			199058	Clamp, hose	2	25
	Same above except:			199568	Gasket, connection to manifold	1	26
141761	Manifold, air intake	1	30	116224	Hose, connection to turbocharger	1	27
	<b>GLOW PLUG</b>			S-604	Lockwasher (3/8")	4	28
	<b>All Applications</b>			S-602	Washer, plain (13/32")	4	29
					<b>IP Application - Piston Cooled</b>		
					Same as above except:		
125880	Adapter, nozzle	1	13				
68139	Elbow, hose	1	14	133266	Crossover	1	31
67946	Gasket, copper	1	15	140331	Clamp, hose	2	32
				S-911-B	Plug, pipe (1/8")	2	

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

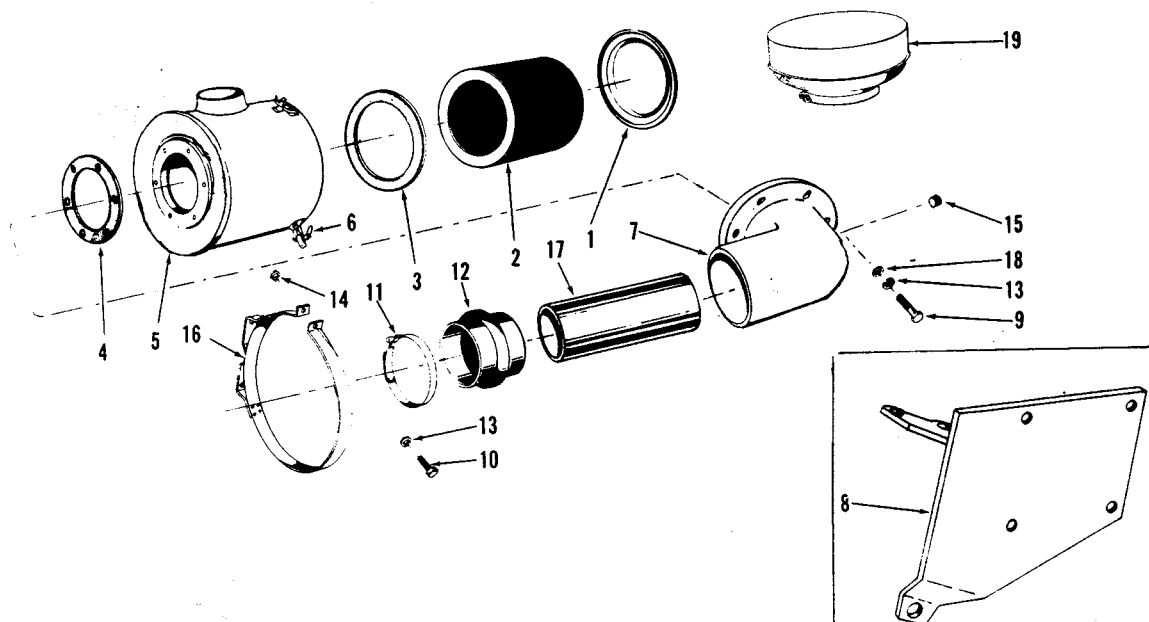
Engine Application					
B	BI	CI	I	IP	P
X	X				
Remarks Non Piston Cooled Piston Cooled					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>AIR CLEANER</b>							
106833	Assembly, air cleaner (12" diameter)	1					
107135	Cover, shell	1	1				
AF-253	Element	1	2				
107136	Gasket, element	1	3				
107137	Gasket, flange	1	4				
107134	Shell, air cleaner	1	5				
122121	Spring, clip	3	6				
<b>MOUNTING PARTS</b>							
106126	Adapter	1	7				
125741	Clamp, hose	4	8				
103808	Hose, flexible	2	9				
105916	Strap	2	10				
S-115	Capscrew (5/16"-18 x 7/8")	6	11				
S-111	Capscrew (5/16"-18 x 1 1/2")	2	12				
S-221	Nut (5/16")	2	13				
S-602	Lockwasher (5/16")	8	14				
S-626	Washer, plain (11/32")	6	15				

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

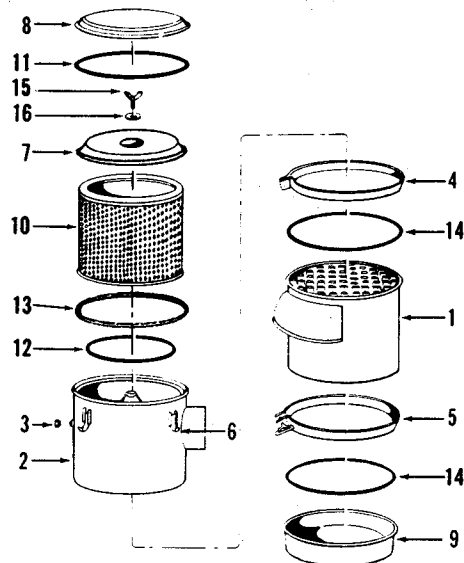
Engine Application					
B	BI	CI	I	IP	P
			X		
Remarks    Piston Cooled					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>AIR CLEANER</b>							
106832	Assembly, air cleaner	1					
107135	Cover	1	1				
AF-253	Element	1	2				
107163	Gasket, element	1	3				
107137	Gasket, flange	1	4				
107139	Shell	1	5				
122121	Spring	3	6				
<b>MOUNTING PARTS</b>							
105402	Adapter	1	7				
146816	Bracket	1	8				
S-117	Capscrew (3/8"-16 x 3/4")	4					
S-136-A	Capscrew (5/8"-18 x 1 1/4")	1					
S-115	Capscrew (5/16"-18 x 7/8")	6	9				
S-111	Capscrew (5/16"-18 x 1 1/2")	2	10				
125741	Clamp, hose	4	11				
106386	Hood	1	19				
103808	Hose	2	12				
S-604	Lock washer (3/8")	4					
S-603	Lock washer (5/8")	1					
S-605	Lock washer (5/16")	8	13				
S-223	Nut (3/8")	4					
S-221	Nut (5/16")	2	14				
S-910-B	Plug, pipe (1/4")	1	15				
105916	Strap	2	16				
113978	Tube, air cleaner to turbocharger	1	17				
S-626	Washer, plain (11/32")	6	18				
S-658	Washer (5/8")	1					

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

Engine Application					
B	BI	CI	I	IP	P
		X			
Remarks      Variable Applications					



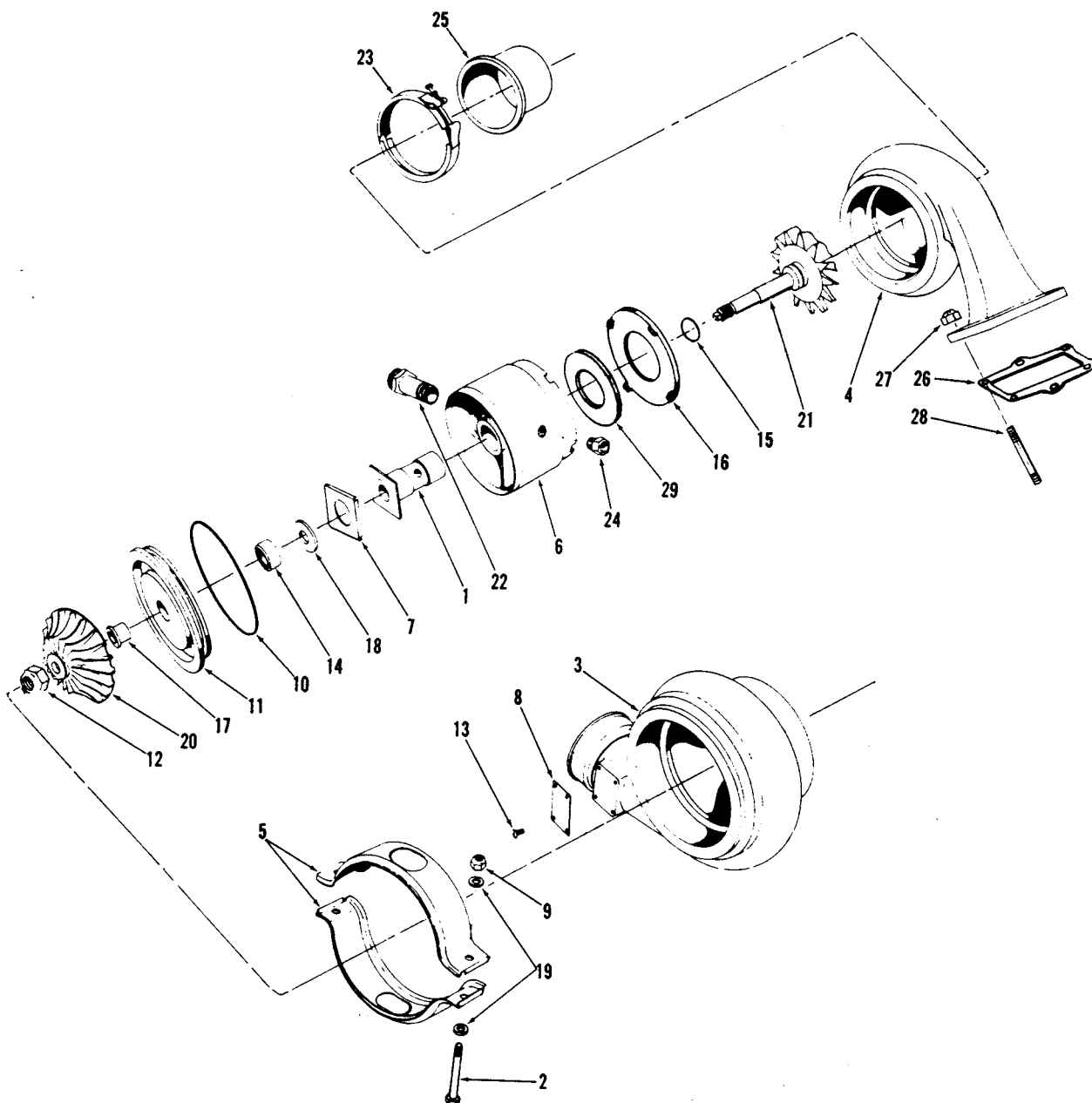
Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>AIR CLEANER</b>							
<b>Non Piston Cooled</b>							
151608	Assembly, air cleaner (14" diameter)	1		151691	Gasket, element	1	13
151800	Body, lower	1	1	133774	Gasket, body and cup	2	14
151788	Body, upper	1	2		Same as above except:		
150768	Cap, restriction	1	3				
150769	Clamp, body	1	4	151611	Assembly, air cleaner (16" diameter)	1	
150771	Clamp, cup	1	5				
150767	Clip, cover	1	6	151803	Body, lower	1	1
150757	Cover, inner	1	7	151790	Body, upper	1	2
133757	Cover, assembly	1	8				
150772	Cup, assembly	1	9				
150785	Element	1	10	<b>MOUNTING PARTS</b>			
150747	Gasket, cover	1	11	<b>Non Piston Cooled</b>			
150758	Gasket, inner cover	1	12				
150766	Gasket, element	1	13	125741	Clamp, "T" bolt	1	
133763	Gasket, body and cup	2	14	152026	Clamp, "T" bolt	1	
152792	Screw	1	15	103808	Hose	1	
152793	Washer	1	16	151614	Reducer, rubber	1	
				197220	Strap	1	
<b>Piston Cooled</b>							
151610	Assembly, air cleaner (16" diameter)	1			<b>Piston Cooled</b>		
151789	Body, upper	1	2		Same as above except:		
151692	Clamp, body	1	4	197221	Strap	1	
151695	Clamp, cup	1	5				
150788	Cover, inner	1	7				
133767	Cover, assembly	1	8				
151696	Cup, assembly	1	9				
151688	Element	1	10				
151687	Gasket, cover	1	11				
151697	Gasket, inner cover	1	12				

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

Engine Application					
B	BI	CI	I	IP	P
X	X	X	X	X	

Remarks	Variable Application
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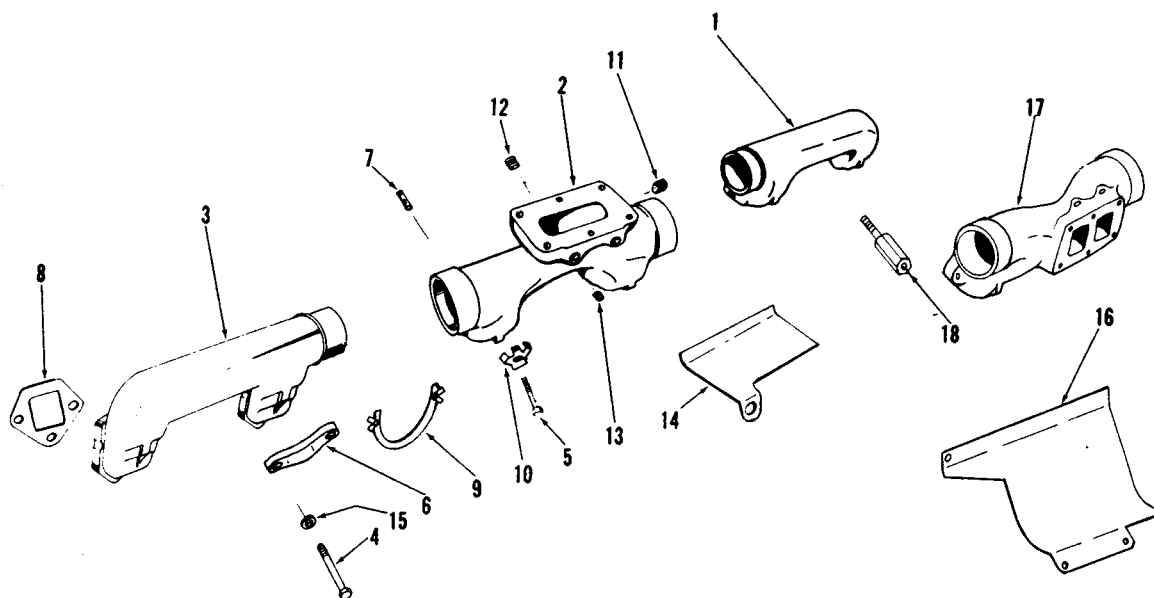
T-50 TURBOCHARGER

Engine Application					
B	BI	CI	I	IP	P
X	X	X	X	X	
Remarks Variable Applications					

Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>T-50 TURBOCHARGER</b>							
2100 RPM engine							
AR-01182	Turbocharger assembly (186911)	1		111670	Support	1	
156420	Bearing	1	1	185667	Tube	1	
194010	Capscrew	2	2	196346	Tube	1	
183543	Casing, compressor	1	3	S-602	Washer (13/32")	2	
183636	Casing, turbine	1	4	S-604	Washer (3/8")	2	
156416	Clamp, V band	2	5	S-626	Washer (11/32")	1	
170981	Housing, bearing	1	6	HS1600706MC	Hose	1	
170510	Insert, bearing	1	7	HS0604600ST	Hose	1	
128936	Nameplate	1	8				
167299	Nut, V band clamp	2	9				
151856	"O" ring	1	10		Top mount turbocharger -		
199415	"O" ring	1			with inter-cooler		
194459	Packing, felted fiber	1	29				
169495	Plate, oil seal	1	11		Same as turbocharger - less		
S-222-A	Nut	1	12		inter-cooler except:		
S-2267	Screw, nameplate	4	13	121349	Support	1	
198816	Seal	1	14	HS1600706VS	Hose	1	
195840	Seal, ring	1	15	HS060430CST	Hose	1	
171570	Shield, heat	1	16				
169491	Sleeve	1	17		Side mount turbocharger		
169493	Washer, thrust	1	18				
S-631	Washer, V band clamp	4	19	196932	Adapter, hose		
185764	Wheel, impeller	1	20	S-1039	Adapter, flexible hose	1	
BM-92123	Wheel and shaft	1	21	181987	Adapter, hose	1	22
				114307	Bracket, tube clip	1	
	Same as 2100 RPM engine except:			S-107	Capscrew (5/16"-18 x 3/4")	1	
	2300 RPM engine			69793	Capscrew	1	
				68425	Clip, hose	1	
				196206	Clip, tube	1	
AR-01183	Turbocharger	1		S-1008-A	Connector, tubing	1	24
183637	Casing, turbine	1	4	69319	Elbow	1	
185811	Casing, compressor	1	3	68645	Elbow	1	
163335	Wheel, impeller	1	20	196207	Fitting, union bolt	1	
				114753	Gasket, turbocharger to		
	<b>MOUNTING PARTS</b>				exhaust manifold	1	26
	Top mount turbocharger - less inter-cooler			S-602	Lockwasher	1	
				107440	Nut, lock	6	27
				S-205	Nut	1	
197733	Adapter, nipple	1		107709	Stud	6	28
142429	Adapter, elbow	1		196348	Tube	1	
181986	Adapter, nipple	1	22	S-626	Washer (11/32")	6	
S-107	Capscrew (5/16"-18 x 3/4")	1		S-602	Washer (13/32")	1	
S-181-B	Capscrew	1		S-604	Washer (3/8")	1	
69793	Capscrew	2		HS0602200ST	Hose	1	
186917	Clamp, V band	1	23	HS1601306MS	Hose	1	
69375	Clip, hose	1					
68425	Clip, hose	2			Side mount turbocharger		
196206	Clip, tube	1					
S-1008-A	Connector, tubing	1	24				
190351	Connection	1	25		NOTE: When engine is equipped with		
S-935	Coupling, pipe	1			large oil cooler (IP applications),		
S-987	Elbow	1			same as above except:		
S-1064	Elbow	1		S-969	Nipple	1	
196207	Fitting, union bolt	1			(Omit S-1039-A Adapter)		
114753	Gasket, turbocharger to			HS1600946MS	Hose	1	
	exhaust manifold	1	26	HS0602200ST	Hose	1	
107440	Nut, lock	6	27				
S-205	Nut	2					
S-946	Nipple	1					
S-939	Nipple	1					
107709	Stud, exhaust manifold	6	28				
113961	Support, oil gauge tube	1					

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

Engine Application					
B	BI	CI	I	IP	P
X	X	X	X	X	X
Remarks      Variable Applications					

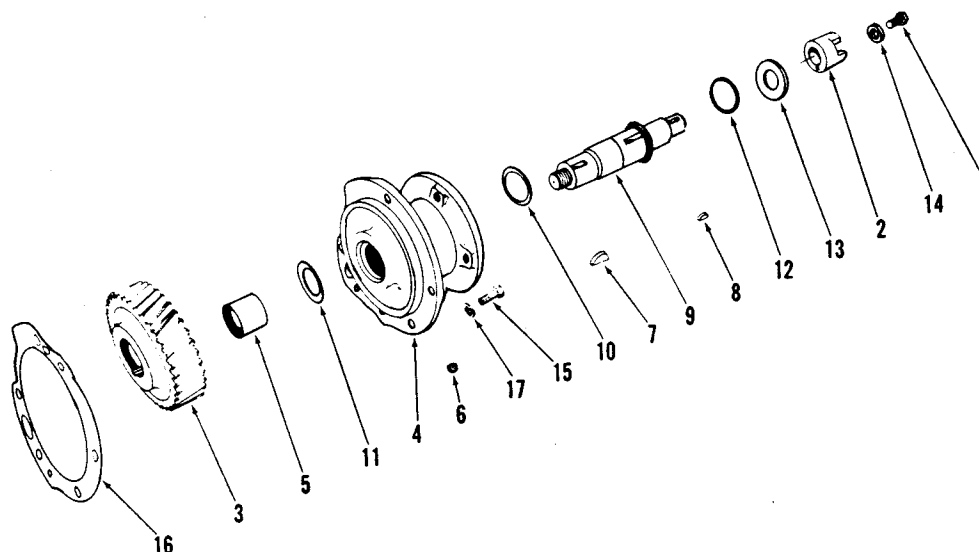


Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>EXHAUST MANIFOLD</b>				<b>EXHAUST MANIFOLD</b>			
<b>BI, IP Applications-Top Mounted Turbocharger - Piston Cooled</b>				<b>B, BI Applications - Piston Cooled B, BI, CI Applications - Non Piston Cooled Side Mounted Turbocharger</b>			
151478	Manifold, exhaust (front)	1	1	151478	Manifold, front	1	1
150990	Manifold, exhaust (center)	1	2	122111	Manifold, center	1	17
151489	Manifold, exhaust (rear)	1	3	151439	Manifold, rear	1	3
<b>CI Applications - Top Mounted Turbocharger With Air Inter-Cooler</b>				<b>CI Applications - Side Mounted Turbocharger - Piston Cooled Less Air Inter-Cooler</b>			
129118	Manifold, exhaust (front)	1	1	139118	Manifold, front	1	1
141853	Manifold, exhaust (center)	1	2	139117	Manifold, center	1	17
139119	Manifold, exhaust (rear)	1	3	139119	Manifold, rear	1	3
<b>MOUNTING PARTS</b>				<b>MOUNTING PARTS</b>			
S-155	Capscrew	12	4	S-117	Capscrew (3/8-16 x 3/4")	3	
200919	Clamp	2	6	200908	Capscrew	4	
105199	Dowel	6	7	110266	Capscrew	4	
142234	Gasket, manifold	6	8	S-155	Capscrew	6	4
116982	Lockplate	4	9	200919	Clamp	2	6
114638	Lockplate	1	10	105199	Dowel	6	7
S-908	Plug, pipe (3/8")	2	11	142234	Gasket	6	8
S-910-B	Plug, pipe (1/4")	2	12	S-604	Lockwasher	4	
S-911-B	Plug, pipe (1/8")	2	13	116932	Lockplate	4	9
163022	Shield, hose	1	14	114638	Lockplate	3	11
109594	Washer	8	15	S-908	Plug, pipe (3/8")	2	13
114200	Washer			S-910-B	Plug, pipe (1/4")	2	14
				S-911-B	Plug, pipe (1/8")	2	15
				142249	Shield, heat	1	16
				163022	Shield, hose	1	14
				113233	Spacer, capscrew	1	18
				109594	Washer	2	15

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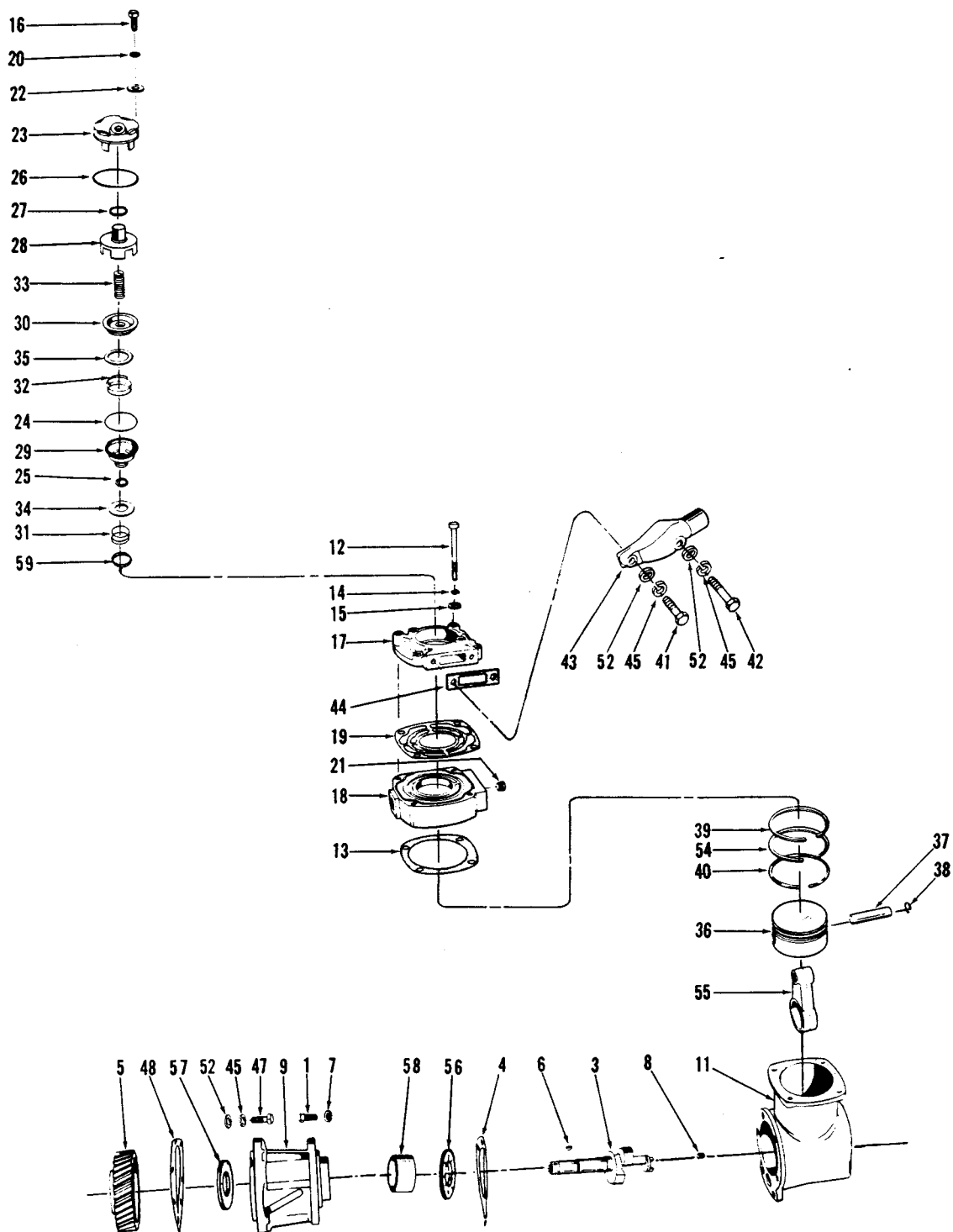


Engine Application				
B	BI	CI	I	IP
X	X			X
Remarks Variable Applications				



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>FUEL PUMP DRIVE</b>				<b>BI, CI Applications</b>			
<b>BI, CI and IP Applications</b>				Less Piston Cooling			
With Piston Cooling				Same as piston cooled except:			
BM-94785	Drive, fuel pump, assembly	1		BM-94785	Drive, fuel pump, assembly	1	
129510	Capscrew (3/8"-16 x 1")	1	1	121933	Gear, accessory drive	1	3
158826	Coupling	1	2	142689	Gear, accessory drive (omit)		
142689	Gear, accessory drive	1	3				
BM-53987	Housing (121936)	1	4				
116391	Bushing	1	5				
S-911-B	Plug, pipe (1/8")	1	6				
69550	Key, Woodruff	2	7				
S-316	Key	1	8				
170658	Shaft, accessory drive	1	9				
181236	Seal, drive pulley	1	10				
116388	Washer, thrust	1	11				
116389	Washer, thrust	1	12				
116390	Washer, clamping	1	13				
170664	Washer, plain	1	14				
<b>MOUNTING PARTS</b>							
S-101-A	Capscrew (7/16"-20 x 1")	5	15				
121937	Gasket, housing to block	1	16				
S-610	Lockwasher (7/16")	5	17				
Used when Engine not equipped with a Cummins Air Compressor							

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



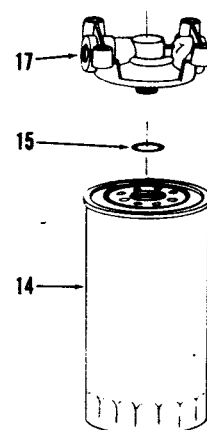
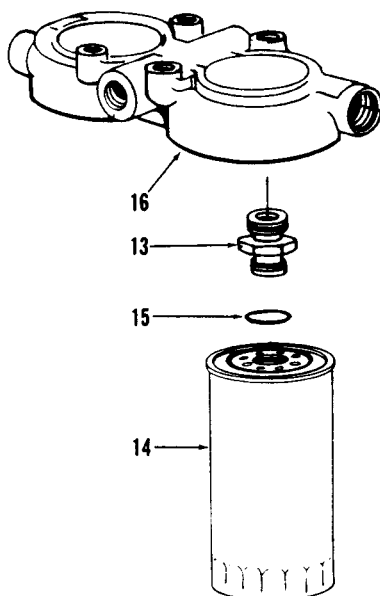
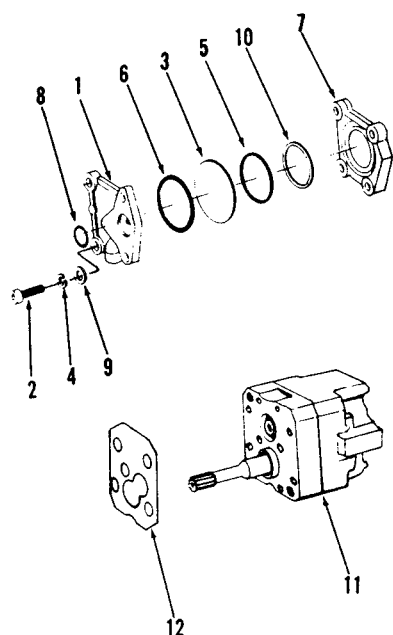
CUMMINS COMPACT AIR COMPRESSOR

Engine Application					
B	I	C	I	P	P
X					
Remarks					
Piston Cooled					

Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
	<b>CUMMINS COMPACT AIR COMPRESSOR</b>				<b>MOUNTING PARTS</b>		
AR-03982	Compressor, air	1		S-105-A	Capscrew	5	
188040	Bearing, thrust	1	56	103009	Capscrew	4	
188042	Bearing, thrust (.002 oversize)	A/R		156089	Gasket, support to block	1	
188044	Bearing, thrust (.004 oversize)	A/R		103005	Gasket, governor	1	
130080	Bearing, thrust	1	57	S-610	Lockwasher (7/16")	9	
130081	Bearing, thrust (.001 oversize)	A/R		181236	Seal, accessory drive pulley keyway	1	
130082	Bearing, thrust (.002 oversize)	A/R			Washer, plain (15/32")	4	52
130083	Bearing, thrust (.003 oversize)	A/R		S-622	Bushing, and tube	1	
108707	Capscrew (3/8"-16 x 1-1/2")	2	47	BM-75526	Capscrew (5/16"-18 x 1-1/2")	1	41
S-103-D	Capscrew (3/8"-16 x 1-1/4")	4	1	S-111	Capscrew (5/16"-18 x 2-1/2")	1	42
176060	Crankshaft, compressor	1	3	S-147-B	Clamp, hose	4	
176027	Gasket, support	1	4	43828-A	Connection, air inlet	1	43
121933	Gear, accessory drive	1	5	183169	Connector, flexible tube	2	
69550	Key, crankshaft	1	6	S-1002-A	Elbow, flexible fitting	2	
S-604	Lockwasher (3/8")	6	7	S-1005-A	Hose	2	
S-965-E	Plug, pipe (1/16")	1	8	61554	Lockwasher (5/16")	2	45
AR-01569	Support, compressor (188039)	1	9	S-605	Tube, compressor inlet	1	
188050	Bushing	2	58	178272	Tube, straight	1	
S-602	Washer, plain (13/32")	4		152539	Tube, compressor	1	
AR-03977	Crankcase and head	1		182589	Tube, compressor	1	
176028	Crankcase	1	11	182586	Washer (11/32")	2	62
S-155-A	Capscrew (5/16"-18 x 2-3/4")	4	12	S-626	Coupling, scider	1	
154018	Gasket, head	1	13	162426			
S-605	Lockwasher (5/16")	4	14				
S-626	Washer, plain (11/32")	4	15				
160047	Nameplate, compressor	1					
136403	Nameplate, serial number	1					
S-2267	Screw, nameplate	6					
AR-03926	Head assembly	1					
S-115	Capscrew (5/16"-18 x 7/8")	2	16				
153964	Cover	1	17				
179122	Head	1	18				
154966	Gasket, cover to head	1	19				
S-605	Lockwasher (5/16")	2	20				
S-915-A	Plug, pipe (1/2")	1	21				
109557	Washer, plain (11/32)	2	22				
183429	Plate, wear	1	59				
AR-04154	Valve assembly	1					
153966	Body, unloader valve	1	23				
191037	Cap, unloader	1	28				
128086	"O" ring, exhaust valve	1	24				
128085	"O" ring, intake valve	1	25				
128087	"O" ring, unloader valve	1	26				
127936	Seal	1	27				
144714	Seat, exhaust valve	1	29				
145028	Seat, intake valve	1	30				
128080	Spring, exhaust valve	1	31				
190334	Spring, intake valve	1	32				
150631	Spring, unloader valve	1	33				
127940	Valve, exhaust	1	34				
144948	Valve, intake	1	35				
BM-77410	Piston assembly	1					
165430	Piston	1	36				
119810	Pin, piston	1	37				
119859	Ring, snap	2	38				
AR-04130	Ring set, piston	1					
194810	Ring, compression (top)	1	39				
187350	Ring, compression	1	54				
180810	Ring, oil control	1	40				
176023	Rod, connecting	1	55				

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

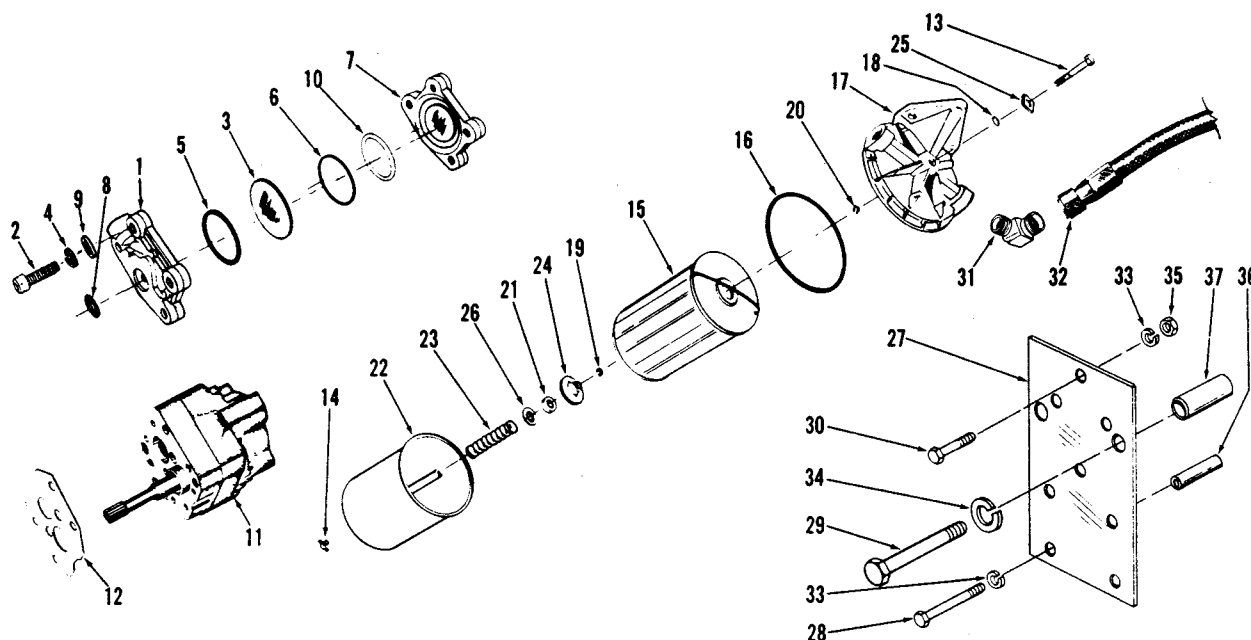
Engine Application					
B	BI	CI	I	IP	P
X					
Remarks B Applications					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>PT FUEL SYSTEM</b>				<b>GEAR PUMP</b>			
<p>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.</p> <p>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 the front of this catalog.</p>				BM-97502 177764	Gear pump 3/4" (R.H.) Gasket	1 1	11 12
				<b>FUEL FILTER</b>			
				Dual Element			
				BM-76976	Assembly, fuel filter	1	
				126516	Bolt, center	2	13
				FF-105	Cartridge	2	14
				251406	Seal, cartridge	2	15
				135601	Head, filter	1	16
				Single Element			
				154711	Assembly, fuel filter	1	
				FF-105	Cartridge	1	14
				251406	Gasket, cover	1	15
				142784	Head, filter	1	17
<b>FUEL PUMP DAMPER</b>							
BM-76340	Damper, fuel pump	1					
153336	Body, damper	1	1				
171545	Capscrew	2	2				
139834	Diaphragm	1	3				
181466	Lockwasher	2	4				
139988	"O" ring	1	5				
100099	"O" ring	1	6				
153338	Plate	1	7				
151900	Seal, damper to gear pump	1	8				
70704	Washer, plain (1/4")	2	9				
160514	Washer, nylon	1	10				

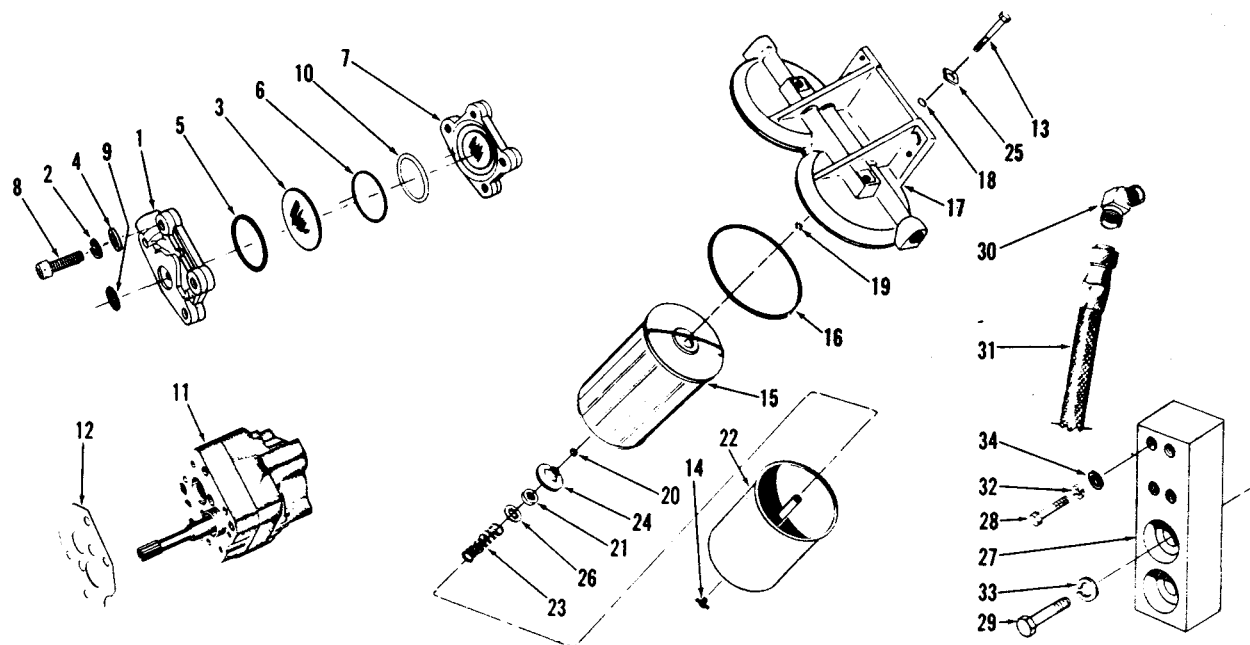
PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED

Engine Application					
B	BI	CI	I	IP	P
X	X	X	X		
Remarks 2100 RPM Engine					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>PT FUEL SYSTEM</b>				<b>FUEL FILTER</b>			
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.				<b>BI, CI, IP Applications</b>			
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 the front of this catalog.				151940	Filter, fuel, assembly	1	
				121960	Capscrew, head to shell	1	13
				S-962-E	Cock, drain	1	14
				190707	Decal, fuel filter	1	
				FF-108	Element	1	15
				151881	Gasket, head to shell	1	16
				251126	Head, filter	1	17
				134736	"O" ring, capscrew	1	18
				135169	Ring, grip, capscrew	1	19
				251131	Ring, grip, post	1	20
				151884	Seal, pilot	1	21
				251091	Shell and post	1	22
				151885	Spring, filter	1	23
				151920	Support, filter element	1	24
				251081	Washer, capscrew	1	25
				S-658	Washer (5/8")	1	26
				<b>MOUNTING PARTS</b>			
				<b>IP Application</b>			
				159749	Bracket, filter mounting	1	27
				S-116-A	Capscrew (3/8-24 x 3-1/2")	2	28
				S-197-B	Capscrew (9/16-18 x 3-1/2")	2	29
				S-103-D	Capscrew (3/8-16 x 1-1/4")	3	30
				129859	Connector, elbow	2	31
				HS1002100SS	Hose	1	32
				S-604	Lockwasher (3/8")	5	33
				S-609	Lockwasher (9/16")	2	34
				70168	Nut, huglock	2	35
				9674-J	Spacer	1	36
				68252-C	Spacer	1	37

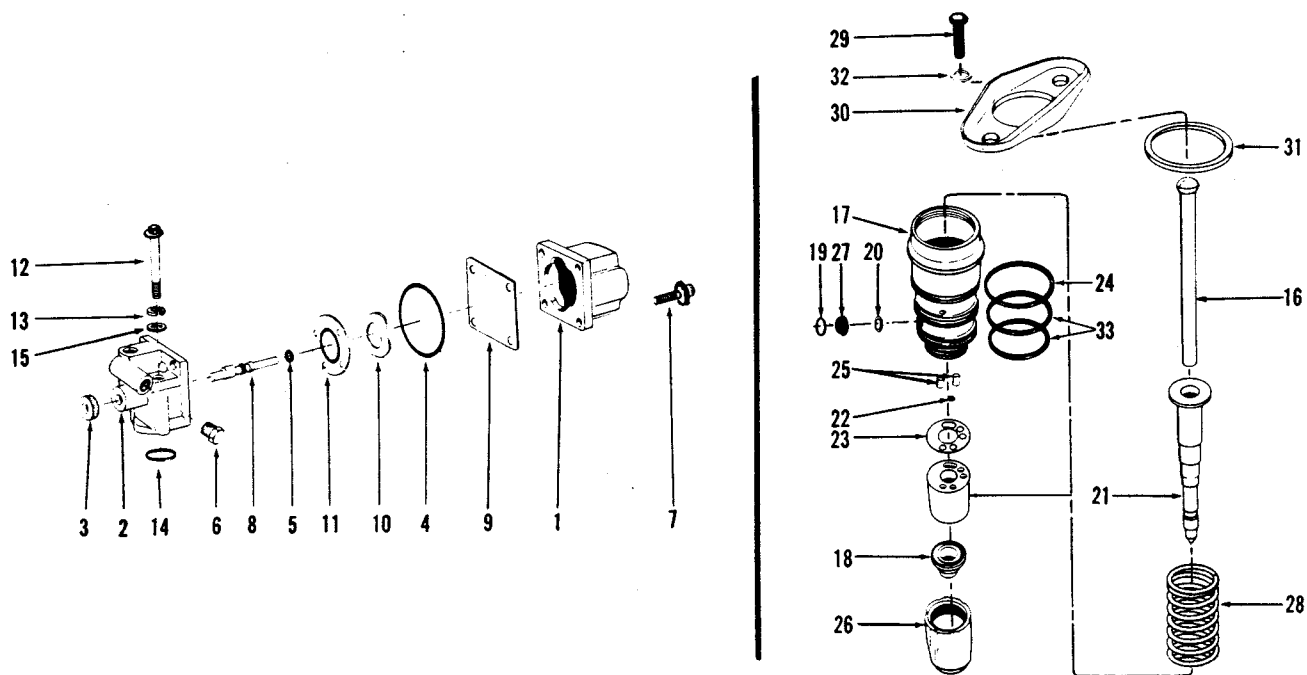
Engine Application				
B	BI	CI	I	IP
X	X		X	
Remarks 2300 RPM Engine				



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>PT FUEL SYSTEM</b>				<b>IP Application</b>			
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.				BM-97504	Gear Pump (1" R.H.)	1	11
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 the front of this catalog.				177764	Gasket	1	12
<b>FUEL PUMP DAMPER</b>				<b>FUEL FILTER</b>			
<b>BI, CI, IP Applications</b>				BM-91119	Assembly, fuel filter	1	
BM-76340	Damper, fuel pump	1		121960	Capscrew, head to shell	2	13
153336	Body, damper	1	1	S-962-E	Cock, drain	2	14
171545	Capscrew	4	2	190707	Decal, filter	2	
139834	Diaphragm	1	3	FF-108	Element	2	15
181466	Lockwasher	4	4	151881	Gasket, head to shell	2	16
139988	"O" ring	1	5	167821	Head, filter	1	17
100099	"O" ring	1	6	134736	"O" ring, capscrew	2	18
153338	Plate	1	7	135169	Ring, grip, capscrew	2	19
151900	Seal, damper to gear pump	1	8	251131	Ring, grip, post	2	20
70704	Washer	4	9	151884	Seal, pilot	2	21
160514	Washer, nylon	1	10	251091	Shell and post	2	22
<b>GEAR PUMP</b>				151885	Spring, filter	2	23
<b>BI, CI Applications</b>				151920	Support, filter element	2	24
BM-93590	Gear Pump, 1" (R.H.)	1	11	251081	Washer, capscrew	2	25
177764	Gasket	1	12	S-658	Washer, plain (5/8")	2	26
				<b>Filter Mounting</b>			
				<b>CI Application</b>			
				164197	Bracket	2	27
				S-103-D	Capscrew (3/8-16 x 1-1/4")	4	28
				S-109-A	Capscrew (9/16-18 x 1-1/2")	4	29
				129859	Connector, elbow	2	30
				HS1002240SS	Hose	1	31
				S-604	Lockwasher (3/8")	4	32
				S-609	Lockwasher (9/16")	4	33
				S-602	Washer, plain (13/32")	4	34

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

Engine Application					
B	BI	CI	I	IP	P
X	X	X	X	X	
Remarks All Models and Applications					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>SHUTDOWN VALVE</b>				<b>INJECTOR PT (TYPE D)</b>			
BM-65725	Shutdown valve assembly	1		AR-40039	Injector assembly	6	
134074	Coil assembly	1	1	191916	Link, injector	6	16
129826	Housing, valve	1	2	AR-40051	Injector (less link)	6	
129838	Knob, override	1	3	185139	Adapter, injector	6	17
190876	"O" ring	1	5	191741	Cup, injector	6	18
129888	"O" ring	1	4	174299	Clip, filter screen	6	19
70295	Plug, pipe	1	6	173086	Gasket, orifice	6	20
187556	Sem, fillister head	4	7	BM-40061	Barrel and plunger	6	21
196037	Shaft, override	1	8	167157	Ball check	6	22
129839	Shield, fuel	1	9	185146	Gasket, injector	6	23
129768	Spring	1	10	101754	"O" ring, adapter	6	24
129827	Valve	1	11	193736	"O" ring, adapter	12	33
171546	Capscrew	2	12	165296	Pin, roll	12	25
181466	Lockwasher	2	13	185138	Retainer, cup	6	26
154087	Ring, sealing	1	14	174298	Screen, filter	6	27
67684	Washer, plain	2	15	166009	Spring, injector	6	28
				131430	Capscrew, clamp	6	29
				191218	Clamp, injector	6	30
				67251	Spacer	6	31
				180626	Washer, injector clamp	6	32
				Note	You can use (3) 193726 "O" rings on a PT (Type D) injector.		

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

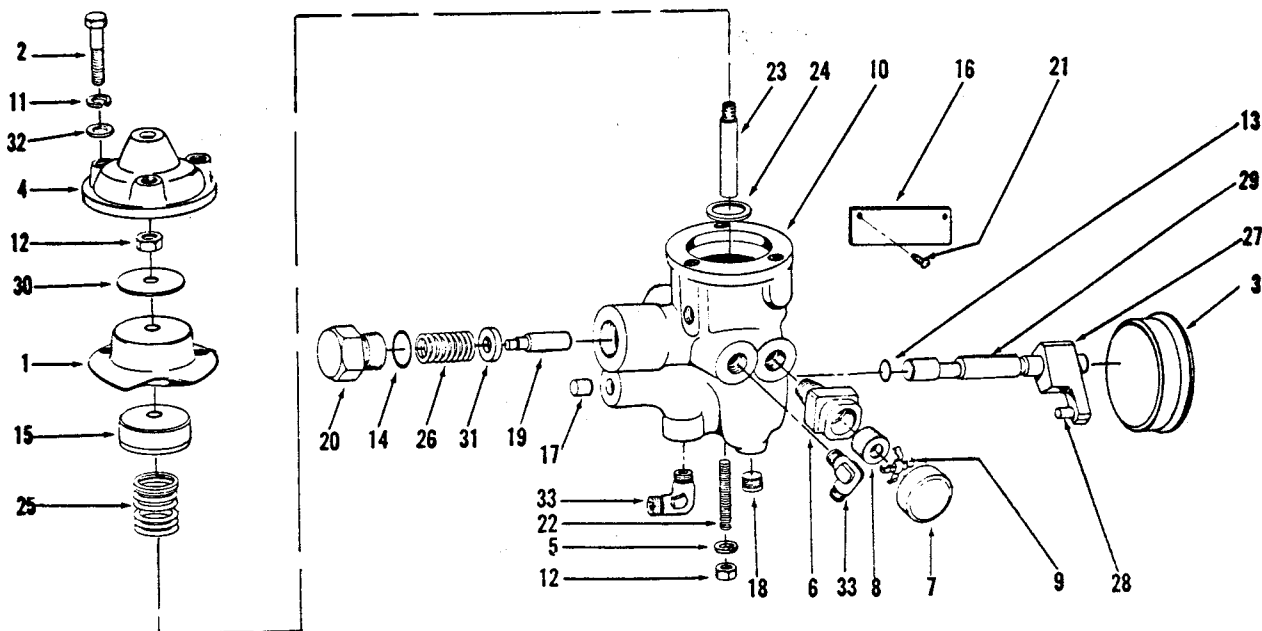
Engine Application					
B	CI	I	IP	P	
X	X	X	X	X	
Remarks					

Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>FUEL TUBING</b>							
<b>2300 RPM Engines</b>							
<b>B Application</b>							
187317	Adapter	1		144733	Tube, fuel supply	1	
147100	Assembly, fuel crossover	2		183381	Tube, fuel by-pass	1	
S-118-A	Capscrew (1/4-20 x 5/8")	1		S-631	Washer, plain	1	
180371	Clip, tube	2					
180372	Clip, tube	1		<b>B Applications</b>			
S-1048-A	Connector, tube	1		Same as BI and CI applications except:			
S-1027	Coupling	1					
S-1047-A	Elbow	1					
116473	Elbow	1					
116936	Elbow	1		144735	Tube, fuel supply	1	
183913	Elbow	1		183382	Tube, fuel by-pass	1	
193762	Elbow	2		144733	Tube, fuel supply (omit)		
181213	Elbow	1		183381	Tube, fuel by-pass (omit)		
HS0400860MS	Hose	1		<b>2100 RPM Engines</b>			
S-600	Lockwasher	1		<b>(Non-Piston Cooled)</b>			
195613	Nipple, pipe	1					
131026	"O" ring	8					
S-911-B	Plug, pipe	11					
S-965-E	Plug, pipe	4		70777	Adapter	1	
70772	Springtite, fillister head	2		147100	Assembly, fuel crossover	2	
144735	Tube, fuel supply	1		S-1048-A	Connector, tube	1	
183382	Tube, fuel by-pass	1		180371	Clip, tube	2	
<b>BI, CI Applications</b>				180372	Clip, tube	1	
Same as B application except:				S-1027	Coupling	1	
144733	Tube, fuel supply	1		181213	Elbow	1	
182331	Tube, fuel by-pass	1		193762	Elbow	2	
144735	Tube, fuel supply (omit)			S-1047-A	Elbow	1	
183382	Tube, fuel by-pass (omit)			HS0400860MS	Hose	1	
<b>IP Application</b>				195613	Nipple, pipe	1	
Same as B application except:				131026	"O" ring	1	
163170	Tube, fuel supply	1		S-965-E	Plug, pipe	4	
144733	Tube, fuel supply (omit)			S-911-B	Plug, pipe	11	
<b>2100 RPM Engines (Piston Cooling)</b>				70772	Springtite, fillister head	2	
<b>BI, CI Applications</b>				144735	Tube, fuel supply	1	
				183282	Tube, fuel by-pass	1	
				<b>BI, CI Applications</b>			
				Same as B application except			
				183381	Tube, fuel by-pass	1	
				183382	Tube, fuel by-pass (omit)	1	
187317	Adapter	1					
147100	Assembly, fuel crossover	2					
S-118-A	Capscrew (1/4-20 x 5/8")	1					
S-1048-A	Connector, tube	1					
S-1047	Coupling	1					
180372	Clip, tube	1					
180271	Clip, tube	1					
193762	Elbow	2					
181213	Elbow	1					
S-1047	Elbow	1					
100502	Elbow	1					
131026	"O" ring	8					
HS0400860MS	Hose	1					
S-600	Lockwasher (1/4")	1					
S-965-E	Plug, pipe	4					
S-911-B	Plug, pipe	11					
70772	Springtite, fillister head	2					

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

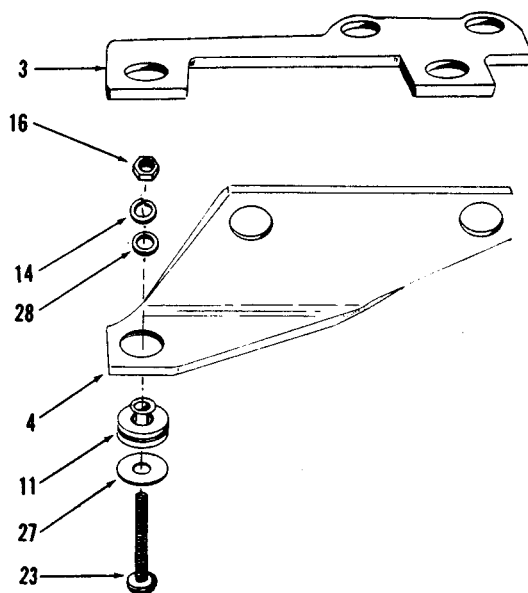
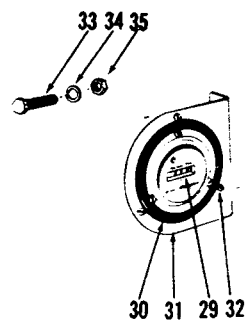
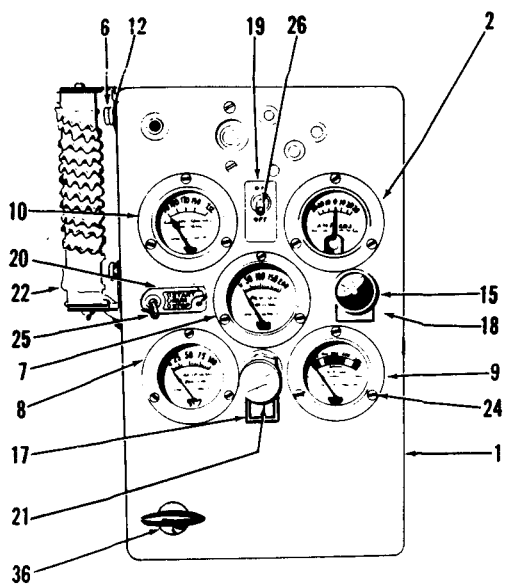


Engine Application					
B	BI	CI	I	IP	P
X	X	X	X	X	X
Remarks 2300 RPM Engine					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>ANEROID CONTROL</b>				<b>MOUNTING PARTS</b>			
<b>B, BI, CI, IP Applications</b>				<b>B Application</b>			
BM-73161-AL	Control, aneroid	1		143950	Adapter	1	
114739	Bellows	1	1	S-109-A	Capscrew (9/16-18 x 1-1/2")	1	
S-1218	Capscrew, cover to housing	3	12	S-122-C	Capscrew (9/16-18 x 7/8")	1	
114773	Cover, control	1	3	108707	Capscrew (3/8-16 x 1-1/2")	2	
114947	Cover, bellows	1	4	68139	Elbow, hose	1	
70815	Dyna-seal, adjusting screw	1	5	116936	Elbow	1	
BM-55534	Filter, air	1	6	144372	Elbow, hose	1	33
125026	Body, filter	1	6	142429	Elbow, 90 degree	1	
125027	Cap, filter	1	7	HS0501200SS	Hose, control	1	
118020	Element	1	8	HS0501600SS	Hose, control	1	
124996	Spring, filter	1	9	HS0400940MS	Hose, control	1	
140357	Housing, control	1	10	S-604	Lockwasher (3/8")	2	
S-600	Lockwasher, cover to housing	3	11	S-609	Lockwasher (9/16")	1	
108074	Nut, bellows actuating shaft	2	12	118304	Plate, control mounting	1	
114791	"O" ring, plunger	1	13	63385	Spacer, water connection	1	
154087	"O" ring, spring retainer	1	14	68252	Spacer, exhaust manifold shield	1	
114755	Piston, bellows	1	15				
105375	Plate, name	1	16	<b>BI, CI, IP Applications</b>			
114765	Plug, plunger	1	17	143950	Adapter, hose	1	
S-911-B	Plug, pipe	2	18	S-109-A	Capscrew (9/16-18 x 1-1/2")	1	
140414	Plunger, pressure	1	19	S-112	Capscrew (3/8-16 x 1")	2	
114764	Retainer, spring	1	20	S-198-A	Capscrew	1	
125111	Rivet	1	21	68139	Elbow, hose	1	
S-2267	Screw, nameplate	2	22	116936	Elbow	2	
109919	Screw, adjusting	1	23	144372	Elbow, hose	1	33
115033	Shaft, bellows actuating	1	24	HS0501200SS	Hose	1	
114921	Shim, spring	1	25	HS0501600SS	Hose	1	
115085	Spring, bellows	1	26	HS040100MS	Hose	1	
120073	Spring, pressure valve	1	27	S-604	Lockwasher (3/8")	2	
BM-69381	Valve, lever and pin	1	28	S-609	Lockwasher (9/16")	1	
115034	Lever	1	29	118304	Plate, control mounting	1	
114940	Pin	1	30	64370	Spacer, oil filter bracket	1	
140358	Valve	1	31				
114754	Washer, bellows retainer	1	32				
114795	Washer, pressurizing valve	1					
70704	Washer, cover to housing	3					

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



INSTRUMENT PANEL

Engine Application					
B	B	C	I	I	P
				X	
Remarks      Piston Cooled					

Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>INSTRUMENT PANEL</b>							
179057	Panel, instrument	1	1	103240	Screw, vibration isolator	3	23
66741	Ammeter	1	2	S-1167	Screw, plate	1	
111881	Block, terminal	1		127814	Screw, flat-head	15	24
153928	Bracket, mounting	1	3	65434-B	Spacer	2	
175617	Bracket	1		118403	Spacer	1	
157349	Bracket, mounting	1	4	111670	Support	1	
103237	Bracket, resistor mounting	1		102057	Switch, starting	1	25
S-112-A	Capscrew, bracket 1/2-20 x 1"	1		66501	Switch	1	
S-116-A	Capscrew (3/8-24 x 3-1/2")	2		104215	Switch, toggle	1	
S-188-C	Capscrew, resistor 1/4-20 x 1/2"	2	6	S-930-E	Tee, pipe	1	
S-186-A	Capscrew (5/8-18 x 1-1/4")	2		66654	Tube, primer	1	
180372	Clip	1		103089	Washer, terminal block	2	
S-1003-1	Connector, tubing	2		102484	Washer, safety, isolator	3	27
S-1059	Coupling, tubing	1		S-603-A	Washer, vibration isolator	3	23
68139	Elbow, hose	1		S-631	Washer, plain	2	
S-1047-A	Elbow, tube	3		<b>HOURLMETER</b>			
S-1004-1	Elbow, tubing	2		113310	Hourmeter	1	23
66735	Gauge, fuel pressure	1	7	68880	Adapter, hourmeter drive	1	31
66733	Gauge, lubricating oil pressure	1	8	44153	Bracket, mounting	1	31
44118	Gauge, oil temperature	1	9	S-159-A	Capscrew (1/4-128 x 3/4")	2	33
41627-R	Gauge, water temperature	1	10	S-600	Lockwasher (1/4")	2	34
HS0404800M'S	Hose	2		S-636	Lockwasher (5/32")	6	
HS0401600M'S	Hose	1		S-270	Nut (1/4-28")	2	35
102486	Isolator, vibration	3	11	70310	Screw	6	32
103088	Lockwasher, terminal block	2		<b>THROTTLE CONTROL</b>			
S-603	Lockwasher	2					
S-600	Lockwasher (1/4")	2	12				
S-604	Lockwasher bracket	2		43588-D	Control assembly, throttle	1	36
S-607	Lockwasher, vibration isolator	3	14	70619	Block, wire clamp	2	
115007	Light, indicator	1	15	S-190-C	Capscrew (3/8-24 x 5/8")	1	
S-205	Nut	2		S-188-C	Capscrew (1/4-20 x 1/2")	1	
S-224	Nut	2		70467	Clip	1	
S-259	Nut, isolator	3	16	S-600	Lockwasher (1/4")	1	
103241	Nut	4		S-604	Lockwasher (3/8")	1	
157159	Nameplate, hand primer	1	17	S-224	Nut (1/4")	1	
157160	Nameplate, indicator light	1	18	70208	Screw	2	
157158	Nameplate, toggle switch	1	19	69276	Spring	1	
174450	Plate, off-on switch	1		111670	Support	1	
118367	Plate, starting switch indicator	1	20	S-631	Washer (9/32")	1	
100046	Primer, hand	1	21				
68813	Resistor, preheater	1	22				
S-1319	Screw, terminal block	2					
103087	Screw, terminal block	2					

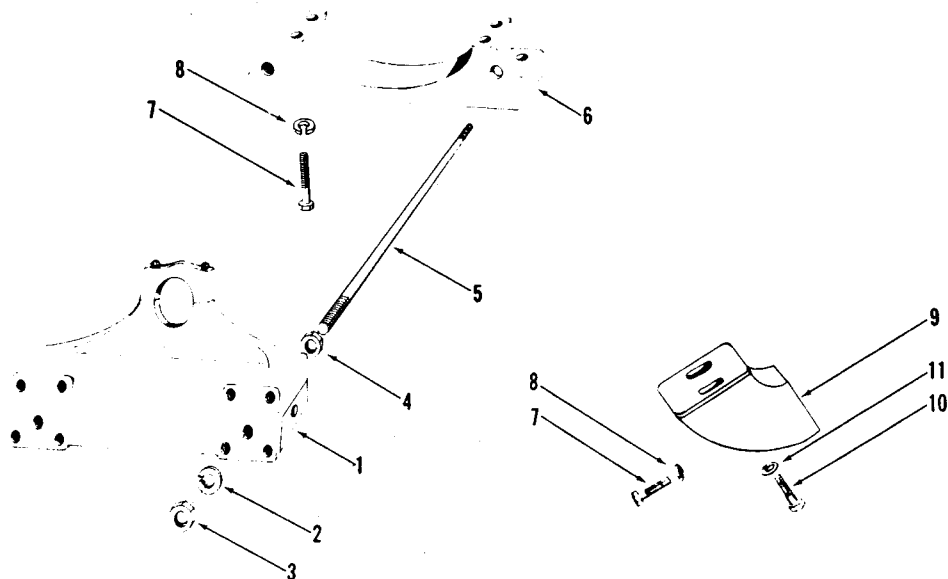
PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED

Engine Application					
B	BI	CI	I	IP	P
X	X	X	X	X	
Remarks      Variable Applications					

Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>ELECTRICAL EQUIPMENT</b>				<b>STARTER</b>			
Electrical equipment is not manufactured by the Cummins Engine Company, Inc. Complete service for electrical equipment may be obtained from the manufacturers: the Delco-Remy Company, at Anderson, Indiana; the Leece-Neville Company, at Cleveland, Ohio; or from their service stations. Address of nearest service station may be obtained from the manufacturer.				<b>B, BI, CI Applications</b>			
				185820	Motor, starting (12 volt)	1	
				S-103-A	Capscrew (5/8-11 x 2")	2	
				153581	Capscrew (5/8-11 x 2")	1	
				S-603	Lockwasher (5/8")	3	
Flywheels, ring gears and flywheel housings have been designed to adapt the Cummins Diesel to hundreds of different installations. For this reason, these assemblies are not listed.				<b>MISCELLANEOUS</b>			
Your Cummins Distributor will record flywheel, flywheel housing and ring gear part numbers in the front of this catalog.				<b>B, BI, CI Applications</b>			
				102846	Switch, ignition	1	
				146458	Switch, magneto	1	
				184666	Regulator, voltage (14 volt)	1	
				173241	Sticker, engine identification		
<b>GASKET SETS</b>				<b>GENERATOR</b>			
				<b>IP Application</b>			
BM-68570	Engine gasket set (piston cooled)	1		124465	Generator (24 volt)	1	
BM-68569	Engine gasket set (non-piston cooled)	1		42568	Baffle fan	1	
BM-77915	Cylinder head gasket set	1		121924	Bracket, front	1	
BM-68356	Fuel pump gasket set	1		121925	Bracket, rear	1	
				178567	Belt, generator	1	
				108707	Capscrew (3/8-16 x 1-1/2")	4	
				S-155	Capscrew (7/16-14 x 1-1/2")	2	
				S-112	Capscrew (3/8-16 x 1")	1	
				106549	Capscrew (3/8-24 x 1-3/4")	1	
				140193	Link, adjusting	1	
				S-604	Lockwasher (3/8")	6	
				S-610	Lockwasher (7/16")	2	
				S-606	Lockwasher (7/32")	4	
				139497	Pulley, generator	1	
				S-1319	Screw, fillister head	4	
				S-602	Washer, plain (13/32")	3	
<b>ALTERNATOR</b>				<b>STARTER</b>			
<b>B, BI, CI Applications</b>							
183751	Alternator (14 volt)	1		185822	Motor, starting (24 volt)	1	
183752	Bracket, alternator	1		S-103-A	Capscrew (5/8-11 x 2")	2	
178626	Belt, "V"	2		153581	Capscrew (5/8-11 x 2")	1	
134809	Belt, "V"	1		S-604	Lockwasher (5/8")	3	
178436	Belt	1					
S-112	Capscrew (3/8-16 x 1")	3		110713	Regulator, voltage (24 volt)	1	
S-153	Capscrew (7/16-14 x 5")	1		111436	Bracket	1	
S-103-D	Capscrew (3/8-16 x 1-1/4")	1		S-600	Lockwasher (1/2")	6	
S-119-C	Capscrew (7/16-20 x 3-1/4")	1		111923	Mount, flexible	3	
183754	Link, adjusting	1		S-224	Nut (1/4")	6	
S-604	Lockwasher (3/8")	1					
S-610	Lockwasher (7/16")	2					
S-217	Nut (7/16")	1					
S-223	Nut (3/8")	1					
183755	Pulley, alternator	1					
70057	Shim, adjusting						
70057-A	Shim, adjusting						
S-602	Washer, plain (13/32")	1					

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

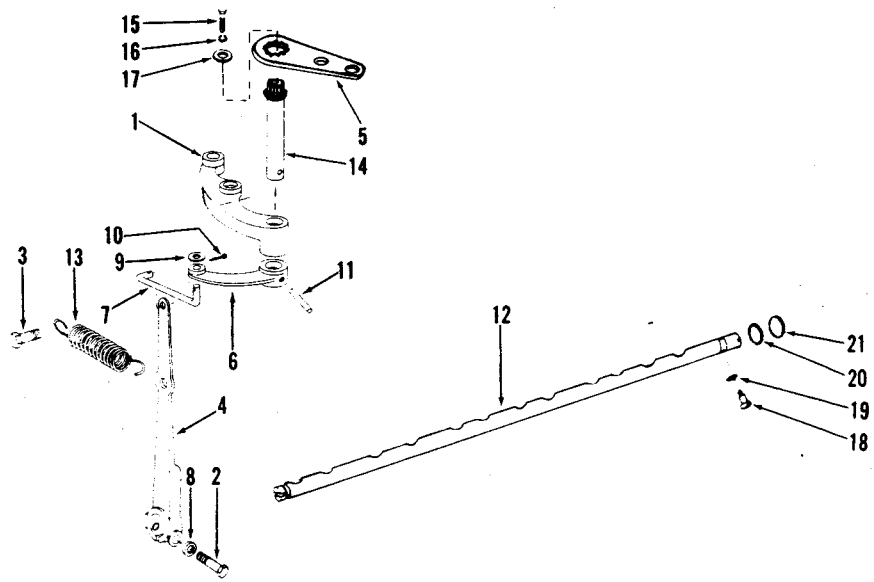
Engine Application	
B	B I C I I P P
	X
Remarks      Piston Cooled	



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>FRONT ENGINE SUPPORT</b>							
BM-25423	Support, front	1	1				
S-612	Lockwasher	4	2				
S-218	Nut, tie rod	8	3				
S-213	Nut, jam	4	4				
43586	Rod, tie	2	5				
<b>FLYWHEEL HOUSING SUPPORT</b>							
21082	Support, flywheel housing	1	6				
S-125	Capscrew (2-13 x 2")	4	7				
S-608	Lockwasher (1/2")	4	8				
<b>RADIATOR SUPPORT</b>							
43584-A	Brace, radiator	1					
70173	Bracket, radiator brace	1					
43585	Support, radiator	2	9				
S-145	Capscrew (2-13 x 1-1/4")	2					
S-125	Capscrew (2-13 x 2")	8	7				
S-169	Capscrew (2-13 x 1")	2					
S-127-C	Capscrew (5-11 x 1-3/4")	4	10				
S-603	Lockwasher (5/8")	4	11				
S-608	Lockwasher (1/2")	12	8				
S-200	Nut	2					

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

Engine Application	
B	B I C I I P P
Remarks - Optional	



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>COMPRESSION RELEASE</b>							
41768	Bracket, compression relief	1	1				
108707	Capscrew (3/8-16 x 1-1/2")	2	2				
S-108	Capscrew (5/16-24 x 5/8")	1	3				
S-118-A	Capscrew (1/4-20 UNC-2B)	1	15				
43693	Lever, compression relief	1	4				
191241	Lever, compression relief	1	5				
66979	Lever	1	6				
66980	Link, compression	1	7				
S-604	Lockwasher (3/8")	2	8				
S-605	Lockwasher (5/16")	1	22				
S-600	Lockwasher (1/4")	1	16				
43696	"O" ring	2	20				
S-719	Plug, expansion	1	21				
S-505	Pin, taper	2	10				
177013	Pin, groove	1	11				
189737	Shaft, compression relief	1	12				
9237	Screw, relief shaft lock	1	18				
139289	Spring, compression relief	1	13				
191229	Shaft, compression	1	14				
S-631	Washer, plain (9/32")	2	9				
S-679	Washer, (25/64")	1	19				
62392	Washer, plain	1	17				
NOTE: Engines using Compression Release							
ADD:							
BM-47777	Tube, push	6					
OMIT							
BM-47778	Tube, push	6					

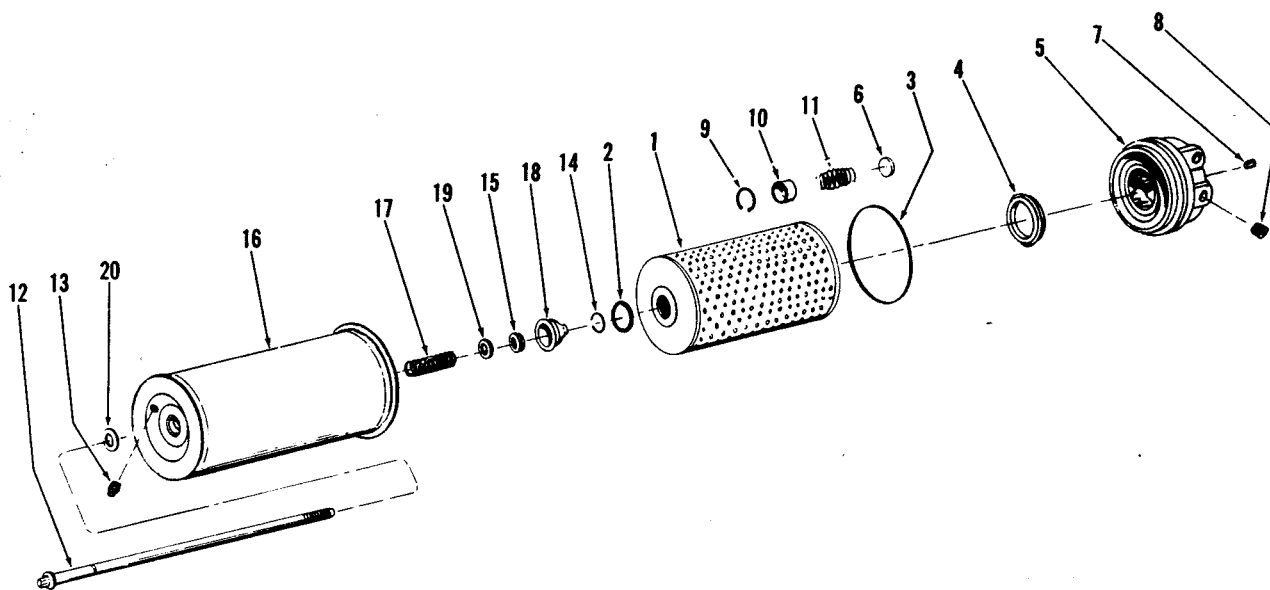
PARTS INDENTED ARE INCLUDED IN THE PART UNDER WHICH THEY ARE INDENTED

Engine Application					
B	B	C	I	P	P
Remarks      Optional					

Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
	<b>BENDIX-WESTINGHOUSE AIR COMPRESSOR</b>						
BM-54501	Assembly, air compressor	1					
103702	Air cleaner, oil bath	1					
121319	Compressor, air	1					
69793	Capscrew	1					
101918	Coupling	1					
68174	Key	1					
S-604	Lockwasher	1					
S-602	Washer, plain	1					
	<b>MOUNTING PARTS</b>						
BM-53986	Drive, fuel pump and compressor	1					
102975	Coupling	1					
121933	Gear	1					
69550	Key	2					
S-316	Key	1					
S-207-A	Locknut	1					
181236	Seal	1					
121940	Shaft	1					
116388	Washer, thrust	A	R				
116389	Washer, thrust	A	R				
116390	Washer, thrust	A	R				
BM-53987	Support (121936)	1					
116391	Bushing	1					
103009	Capscrew (7/16-14 x 1-1/4")	2					
S-100-A	Capscrew (9/16-18 x 1-1/4")	1					
S-155	Capscrew (7/16-14 x 1-1/2")	4					
S-1002-A	Connector, flexible tube	3					
102975	Coupling	1					
103369	Coupling, splined	1					
S-1095	Elbow, flexible fitting	2					
68139	Elbow, hose	1					
S-1005-A	Elbow, flexible fitting	1					
103005	Gasket, compressor to drive	1					
121937	Gasket, drive to block	1					
HS0401000MS	Hose, oil supply	1					
S-608	Lockwasher (1/2")	4					
S-609	Lockwasher (9/16")	1					
S-610	Lockwasher (7/16")	10					
S-274	Nut (7/16 x 14")	4					
S-911-B	Plug, pipe	1					
101941	Support	1					
132529	Tube, water supply	1					
109329	Tube, water drain	1					
128965	Tube, oil drain	1					
S-969	Washer (1 2") (special)	1					
S-624	Washer (1 2")	1					
63322	Washer	2					
108739	Wire, snap	2					

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

Engine Application					
B	BI	CI	I	IP	P
Remarks      Optional					



Part Number	Part Name	No. Req.	Ref. No.	Part Number	Part Name	No. Req.	Ref. No.
<b>LUBRICATING OIL FILTER (Remote Mounted)</b>							
252916	Filter, lubricating oil	1					
LF-516	Element (paper)	1	1				
153514	Seal, element	1	2				
173368	Gasket, shell to head	1	3				
252917	Head, filter	1					
252990	Head and adapter	1					
177066	Adapter	1	4				
177058	Head	1	5				
153525	Disc, by-pass	1	6				
S-911-B	Plug, pipe	1	7				
S-908	Plug, pipe	2	8				
254028	Ring, snap	1	9				
179063	Seat, by-pass	1	10				
167165	Spring, by-pass	1	11				
181592	Shell and bolt	1					
173177	Bolt	1	12				
S-901	Plug, pipe	1	13				
S-16245	Ring, snap	1	14				
153518	Seal, bolt	1	15				
173313	Shell	1	16				
173176	Spring	1	17				
153521	Support	1	18				
153520	Washer, bolt seal	1	19				
8265	Washer, copper	1	20				

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





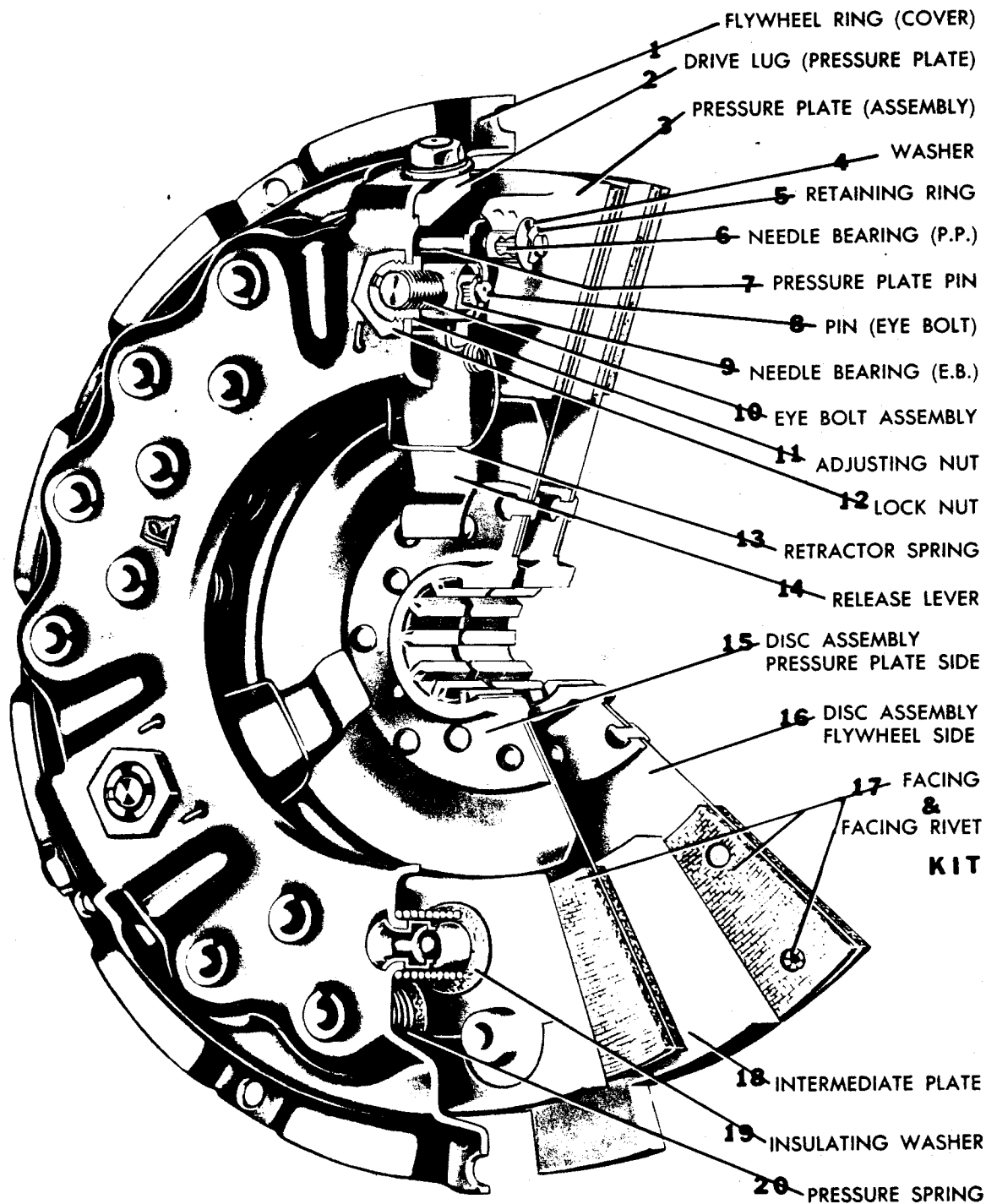
PORTLAND, OREGON

1 of 2

2 1 4 2 8 3

Rel: 12-20-68

**CLUTCH PRESSURE PLATE ASSY.**  
(Less discs Items 15 & 16)





PORTLAND, OREGON

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2 1 4 2 8 3

Rel: 12-20-68

CLUTCH PRESSURE PLATE ASSY.  
(Does Not Incl. Items 15, 16, 17)

ITEM	FWD NO.	DESCRIPTION	QTY.
1	214445	Flywheel Ring (Cover)	1
2	214446	Drive Lug (Press. plate)	3
3	201556	Pressure Plate (Assembly)	1
4	202223	Washer	9
5	202224	Retaining Ring	3
6	214447	Needle Bearing	6
7	201641	Pressure Plate Pin	3
8	214448	Pin (Eye Bolt)	3
9	214449	Needle Bearing	3
10	214450	Eye Bolt Assembly	3
11	214451	Adjusting Nut	3
12	202207	Lock Nut	3
13	201560	Retractor Spring	3
14	214452	Release Lever	3
15	214285	Disc Assembly (Press. Plate side)	1
16	214284	Disc Assembly (Flywheel Side)	1
17	202225	Facing & Rivet Kit	-per disc 1
18	201561	Intermediate Plate	1
19	202222	Insulating Washer	18
20	201559	Pressure Spring	18

TRANSMISSION  
FULLER RTOF-910

NOTE: SERVICE PARTS ON TRANSMISSION #212885 ARE SAME

AS #517247-213134

ALL "O" RINGS AND THE SURFACES THAT OPERATE  
AGAINST THEM ARE TO BE LUBRICATED WITH DOW-  
CORNING 200, 50,000 CENTISTOKES LUBE

END PLAY TOLERANCE

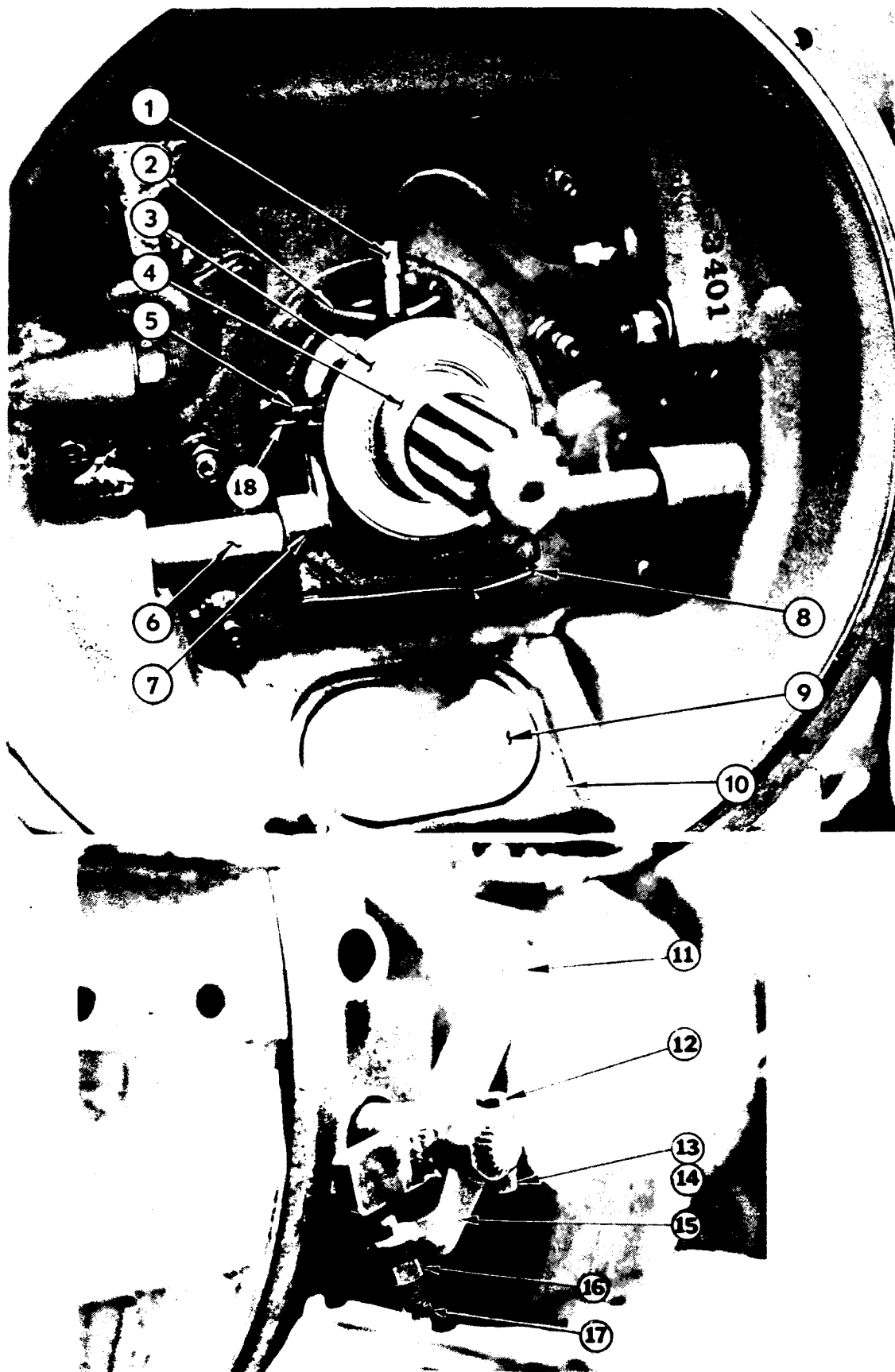
REVERSE GEAR - ITEM 39, Page 14; .005-.038

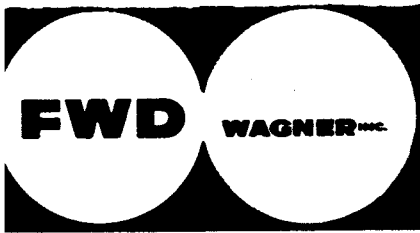
1st, 2nd, 3rd & 4th .006-.012

SELECT CORRECT THICKNESS OF WASHER, (ITEM 22, PAGE 13 &

14), TO OBTAIN THE ABOVE TOLERANCE

**RTOF-910 TRANSMISSION  
CLUTCH RELEASE**





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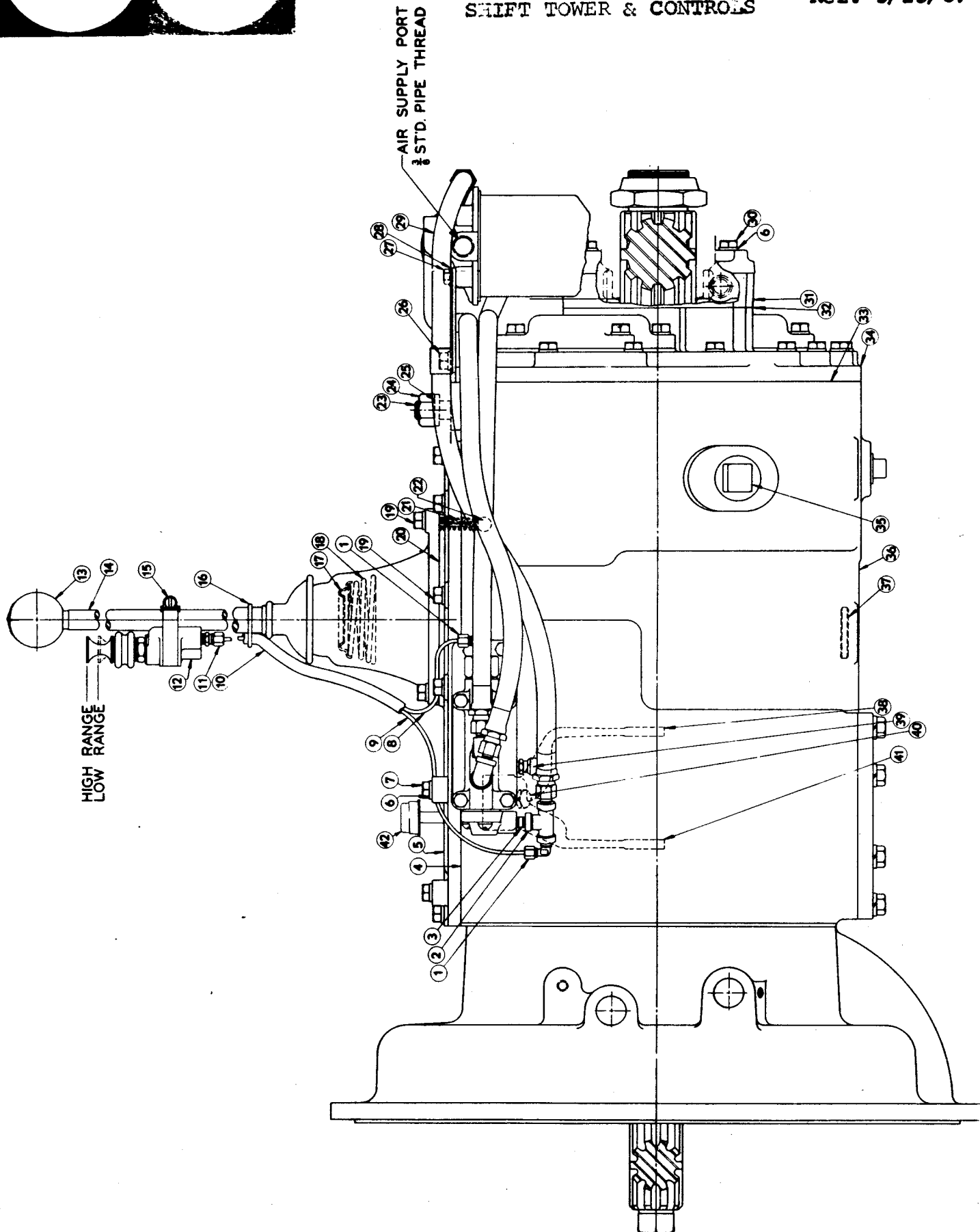
WD-204

Rel: 5/23/67

RTOF-910 TRANSMISSION  
CLUTCH RELEASE

ITEM	FWD NO.	DESCRIPTION	QTY.
1	202772	Hose Assembly	1
2	202420	Spring	2
3	200444	Throw-Out Bearing	1
4	213537	Front Bearing Cover	1
5	213583	Throw-out Bearing Carrier	1
6	213584	Shaft-Pedal	1
7	213585	Throw-out Yoke	1
8	207187	Throw-out Yoke Capscrew	2
9	202388	Cover Plate	1
10	Purch Local	Capscrew	
11	516863	Arm	1
12	207178	Capscrew	1
13	202309	Nut 3/8" NF	1
14	202320	Lockwasher 3/8"	1
15	202400	Adjusting Lever	1
16	202359	Nut 1/2" NC	1
17	202351	Adjusting Screw	1
18	208988	Spring	2

**RTOF 1910 TRANSMISSION  
SHIFT TOWER & CONTROLS**





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WD-204

Rel: 5/23/67

RTOF-910 TRANSMISSION  
SHIFT TOWER & CONTROLS

ITEM	FWD NO.	DESCRIPTION	QTY.
1	213447	Connector	2
2	213448	Tee - Bottom Front Pipe	1
3	213449	Nipple - Bottom Front	1
4	213450	Gasket - Shift Bar Housing	1
5	213451	Housing & Plug - Shifting Bar	1
6	202320	Lockwasher - 3/8; Plain	6
7	202345	Capscrew 3/8-16 x 1-3/4 Hx-Hd.	2
8	213452	Tubing-1/8" I.D. Nylaflo; Black	1
9	213453	Tubing-1/8" I.D. Nylaflo; White	1
10	213454	Sheathing (For Tubing)	1
11	213455	Connector	2
12	213456	Master Valve Assembly	1
13	202385	Ball - Gear Shift Lever	1
14	517725	Lever - Gear Shift	1
15	213457	Clamp - Master Valve Mtg.	1
16	213458	Clamp "O" Ring, Tubing	2
17	202407	Washer - Gear Shift Lever	1
18	202406	Spring - Gear Shift Lever	1
19	202356	Capscrew 3/8-16 x 1-1/4 Hx. Hd.	12
20	202392	Gasket - Gear Shift Lever Hsg.	1
21	202409	Spring - Pos Finder, 4th & Dir	1
22	202368	Ball - 1/2 Steel	1
23	213459	Stud - Top Rear Sun	2



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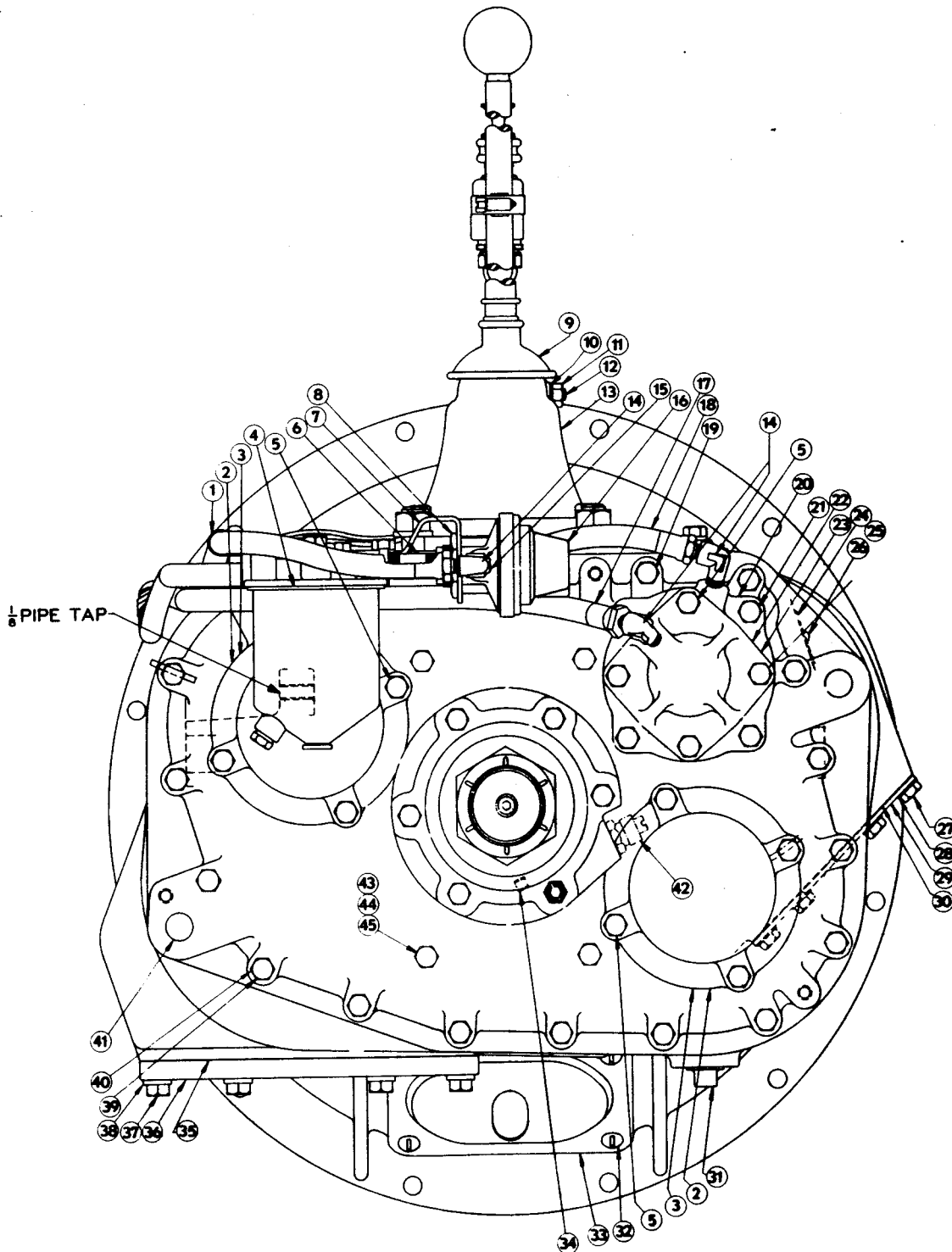
Rel: 5/23/67

RTOF-910 TRANSMISSION  
SHIFT TOWER & CONTROLS

ITEM	FWD NO.	DESCRIPTION	QTY.
24	202312	Nut 5/8-18 N.F.-Plain	1
25	202324	Lockwasher 5/8-Plain	1
26	210049	Capscrew 3/8-16 x 3/4 Hx.Hd.	1
27	207172	Capscrew 1/4-20x1/2 Hx. Hd.	2
28		Washer 1/4 Plain	2
29	213460	Assembly; Flex Hose-27"	1
30		Capscrew 3/8-16 x 2-3/4 Hx.Hd.	1
31	213461	Cover-Aux. Rear Brg.& Spd.Mtr.Hsg.	1
32	213462	Gasket; Housing Rear Brg.& Spd Mtr.Hsg.	1
33	213463	Gasket-Rear Plate & Trans.Case	1
34	213464	Rear Plate & Cover-Trans. Case	1
35	202365	Plug - Pipe; 1/4 Sq.	1
36	213465	Case - Transmission	1
37	213466	Disc - Magnetic	3
38	213467	Shift Yoke - 2nd & 3rd	1
39	210182	Valve - Bottom	1
40	202411	Lock Screw - Shift Yoke	5
41	213468	Shift Yoke - 4th & 5th	1
42	213469	Breather	1
		NOT ILLUSTRATED	
43	202672	Stud	4
44	202324	Washer 5/8"	4
45	202312	Nut 5/8"-18 N.F.	4



**RTOF-910 TRANSMISSION  
REAR VIEW**





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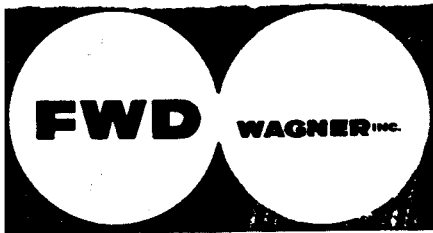
WD-204

Rel: 5/23/67

\* Rev: 5/31/68

RTOF- 910 TRANSMISSION  
REAR VIEW

ITEM	FWD NO.	DESCRIPTION	QTY.
1	200162	Clamp-Hose	1
2	213541	Cover-Aux.Ctrshaft-Rear Brg.	2
3	213542	Gasket-Aux.Ctrshaft Rear Brg. Cover	2
*4	205525	Oil Filter	1
5	202356	Capscrew 3/8"-16 x 1- $\frac{1}{4}$ Hx.Hd.	8
*6	213544	Nipple - Oil Flt.	1
*7	213545	Bracket - Oil Flt.	1
8	213546	Nut - Reg. Valve	1
9	210821	Boot-Gear Shift Lever	1
10		Lockwasher 5/16" Plain	1
11		Nut 5/16"-24 Elastic Stop	1
12	213547	Pin-Pivot; Ctr. Control	1
13	213548	Housing - Gear Shift Lever	1
14	200160	Elbow - Street	1
15	202566	Bushing - Reducing	1
16	213549	Valve - Reg.	1
17	213460	Assembly - Flexhose 27"	1
18	213550	Assembly - Flexhose 29"	1
19		Capscrew $\frac{1}{2}$ -13 x 1- $\frac{1}{2}$ Hx. H.	4
20	213551	Gasket-Aux. Shift Cyl.	1
21	207183	Capscrew 3/8-16 x 1- $\frac{1}{4}$ Hx.Hd.	2
22	213552	Gasket - Aux. Shift Cyl. Cover	1
23	213553	Cover - Aux. Shift Cyl.	1



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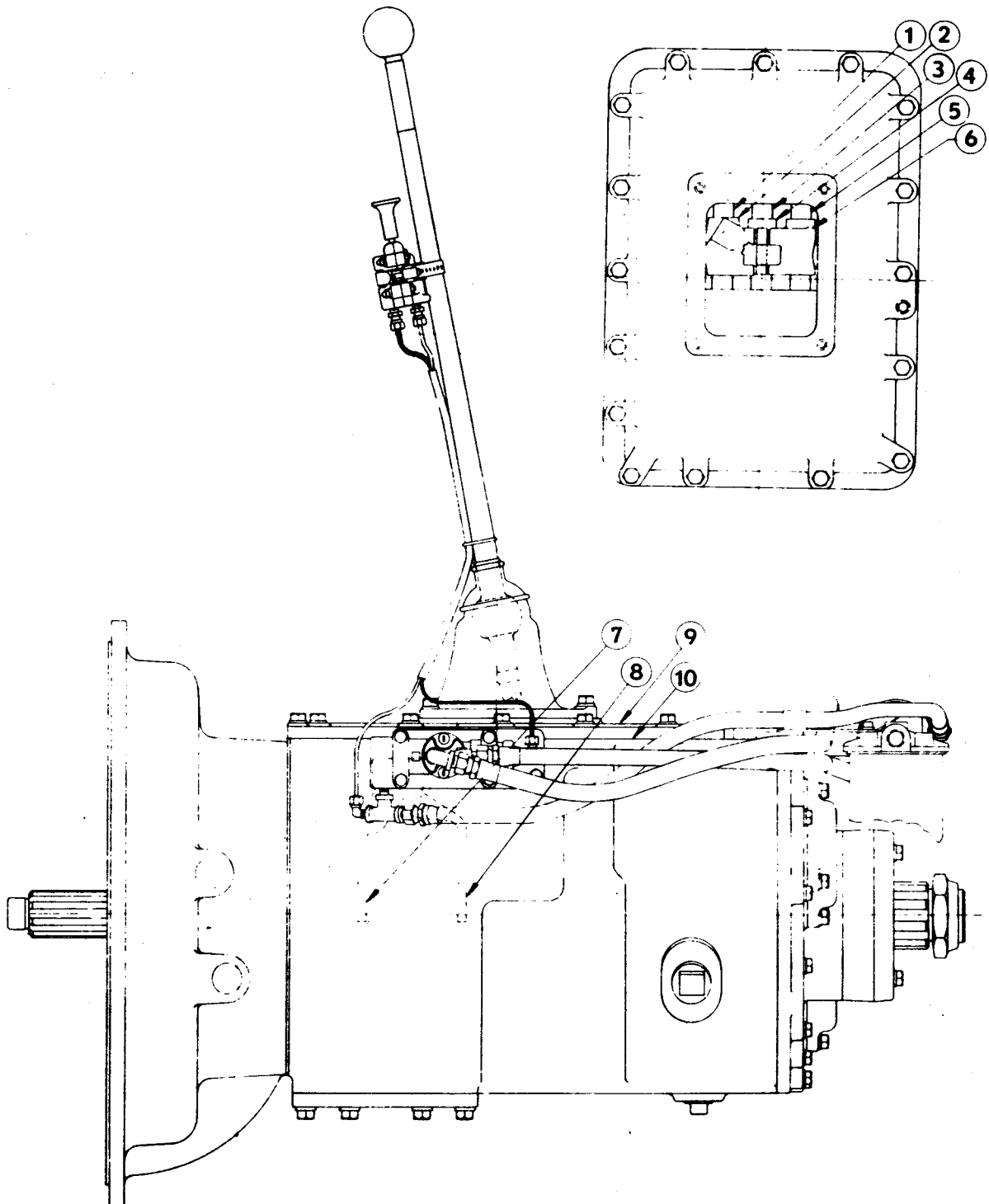
RTOF-910 TRANSMISSION  
REAR VIEW

WD-204

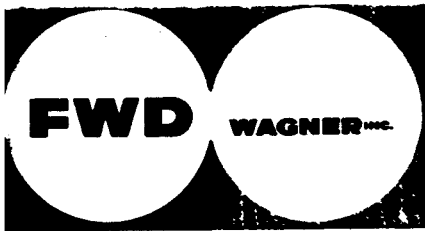
Rel: 5/23/67

ITEM	FWD NO.	DESCRIPTION	QTY.
24	213554	Name Plate	1
25	213555	Name Plate Screw	2
26	202367	Screw No. 7 x 5/16-Z-Type S Tap	2
27	210049	Capscrew 3/8-16 x 3/4 Hx.Hd.	2
28	202321	Lockwasher - 3/8"	1
29	210048	Cover - PTO opening	1
30	202393	Gasket - PTO cover-small	1
31		Plug - Pipe; 3/4 Sq.	1
32	202340	Capscrew 5/16-18 x 1/2 Rd. Hd.	4
33	213556	Cover - Clutch Housing	1
34	213557	Bushing	1
35	213558	Gasket - PTO; Large Cover	1
36	213559	Cover - PTO; Large	1
37		Capscrew 7/16-14 x 1-1/4 Hx. H.D.	8
38		Lockwasher-7/16; Plain	8
39	202320	Lockwasher 3/8; Plain	6
40	202345	Capscrew 3/8-16 x 1-3/4 Hx.H d.	15
41	213560	Pin - Rear Plate Dowel	2
42	202403	Plug	1
43	202312	Nut 5/8"-18 N.F. Plain	4
44	202672	Stud	4
45	202324	Washer 5/8"	4

**RTOF-910 TRANSMISSION  
FILTER, PUMPING & SHIFT  
FORKS**



**MODEL RTF-910 & RTOF-910**



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Rel: 5/23/67

RTOF-910 TRANSMISSION  
FILTER, PLUMBING & SHIFT  
FORKS

ITEM	FWD NO.	DESCRIPTION	QTY.
1	213571	Yoke Bar - 1st & Rev.	1
2	213572	Yoke - 1st & Rev.	1
3	213573	Yoke Bar 2nd & 3rd	1
4	213574	Shift Block 2nd & 3rd	1
5	213575	Yoke Bar 4th & 5th	1
6	213576	Shift Block - 4th & 5th	1
7	213468	Shift Yoke 4th & 5th	1
8	213467	Shift Yoke 2nd & 3rd	1
9	213451	Housing - Shift Bar	1
10	213450	Gasket - Shift Bar Housing	1



FWD WAGNER INC.

PORTLAND, OREGON

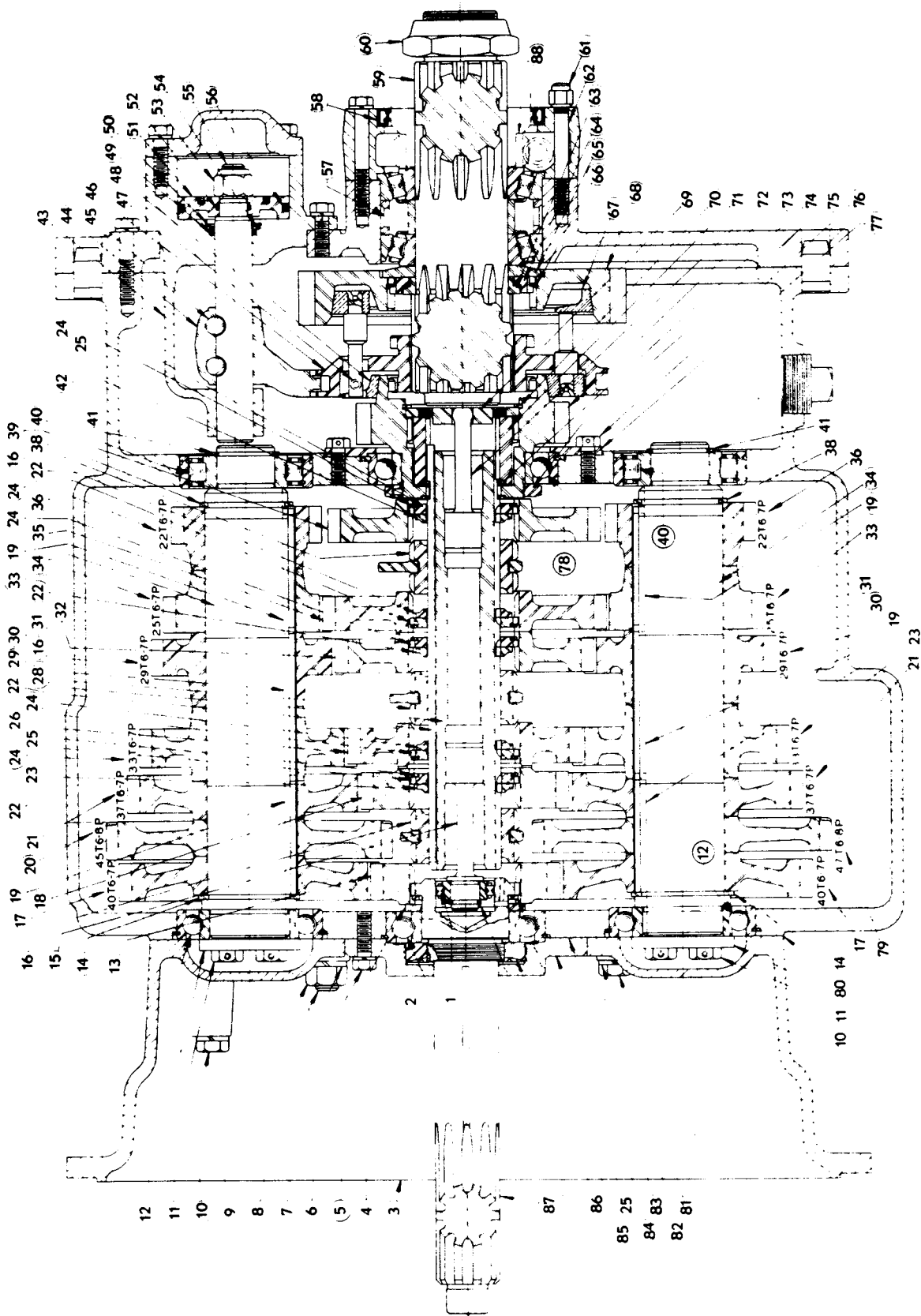
RTOT-910 TRANSMISSION  
SECTION VIEW

12 OCT 23

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ND-204

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SECTIONAL VIEW  
TYPICAL THRU MAIN COUNTERSHAFTS  
AND AUXILIARY SHIFTING CYLINDER

PTO OPENING



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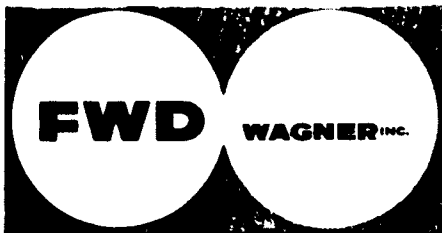
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RTOF-910 TRANSMISSION  
SECTION VIEW

ITEM	FWD NO.	DESCRIPTION	QTY.
1	213470	Roller Bearing	1
2	213471	Ball Bearing	1
3	213472	Clutch Housing & Bushing	1
4	213473	Spacer	1
5	202356	Capscrew 3/8-16 x 1-1/4 Hex HD.	2
6	202324	Lockwasher 5/8" Plain	8
7	213474	Stud	6
8	202312	Nut 5/8-18 NF Plain	8
9		Capscrew 1/2-13 x 3-1/2 Hex Hd.	2
10	200057	Capscrew 1/2-20x1 Hex. Hd.	4
11	202475	Retainer	2
12	213475	Ball Bearing	2
13	213476	Gear (Drive)	1
14	213477	Washer	1
15	N S.S.	Quill See Item 29	
16	213478	Clutch	3
17	213479	Gear	2
18	213480	Gear (M-Shaft-O.D.)	1
19	213481	Key	4
20	213482	Gear (Center Shaft PTO)	1
21	213483	Gear	2
SELECT FROM FOLLOWING TO OBTAIN CORRECT CLEARANCE			
22(a)	213484	Washer - .248-.250 Thick	1



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Rel: 5/23/67

RTOF-910 TRANSMISSION  
SECTION VIEW

ITEM	FWD NO.	DESCRIPTION	QTY.
22(b)	213485	Washer - .253-.255 Thick	1
(c)	213486	Washer - .268-.270 Thick	1
(e)	213698	Washer - .258-.260 Thick	1
(d)	213487	Washer - .273-.275 Thick	1
(f)	213699	Washer - .263-.265 Thick	1
23	213488	Gear	2
24	213489	Spacer (M-Shaft	5
25	213490	Snap Ring	6
26	213491	Gear (M-Shaft 3rd)	1
22	213484	Washer	1
28	213492	Key	1
29	213493	Mainshaft Assembly	1
30	213494	Key	2
31	213495	Gear	2
32	213496	Gear (M.Shaft 2nd)	1
33	213497	Countershaft	2
34	213498	Countershaft	2
35	213499	Gear (M-Shaft 1st)	1
36	213500	Gear	2
38	202423	Snap Ring	2
39	213501	Gear (M-Shaft-Reverse)	1
40	213502	Roller Bearing	2
41	213503	Snap Ring	2
42	213484	Washer	





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RTOF-910 TRANSMISSION  
SECTION VIEW

ITEM	FWD NO.	DESCRIPTION	QTY.
43	213504	Cylinder	1
44	213505	Yoke	1
45		Capscrew 1/2-20x2 Hx.Hd.	2
46	213506	Clutch	1
47	213507	Spring	3
48	213508	Assembly	1
49	213509	"O" Ring	1
50	213510	Snap Ring	1
51	213511	Piston	1
52	213512	"O" Ring	1
53		Nut 5/8-18	1
54	213513	Ring	1
55	213514	Yoke Bar	1
56	213515	"O" Ring	1
57	213517	Roller Bearing	1
58	213124	Oil Seal	1
59	213516	Mainshaft - Aux.	1
60	213522	Nut	1
61		Nut 3/4-24 NF	1
62	213518	Stud	
63	213519	Washer	
64	213520	Washer	
65	213521	Washer	



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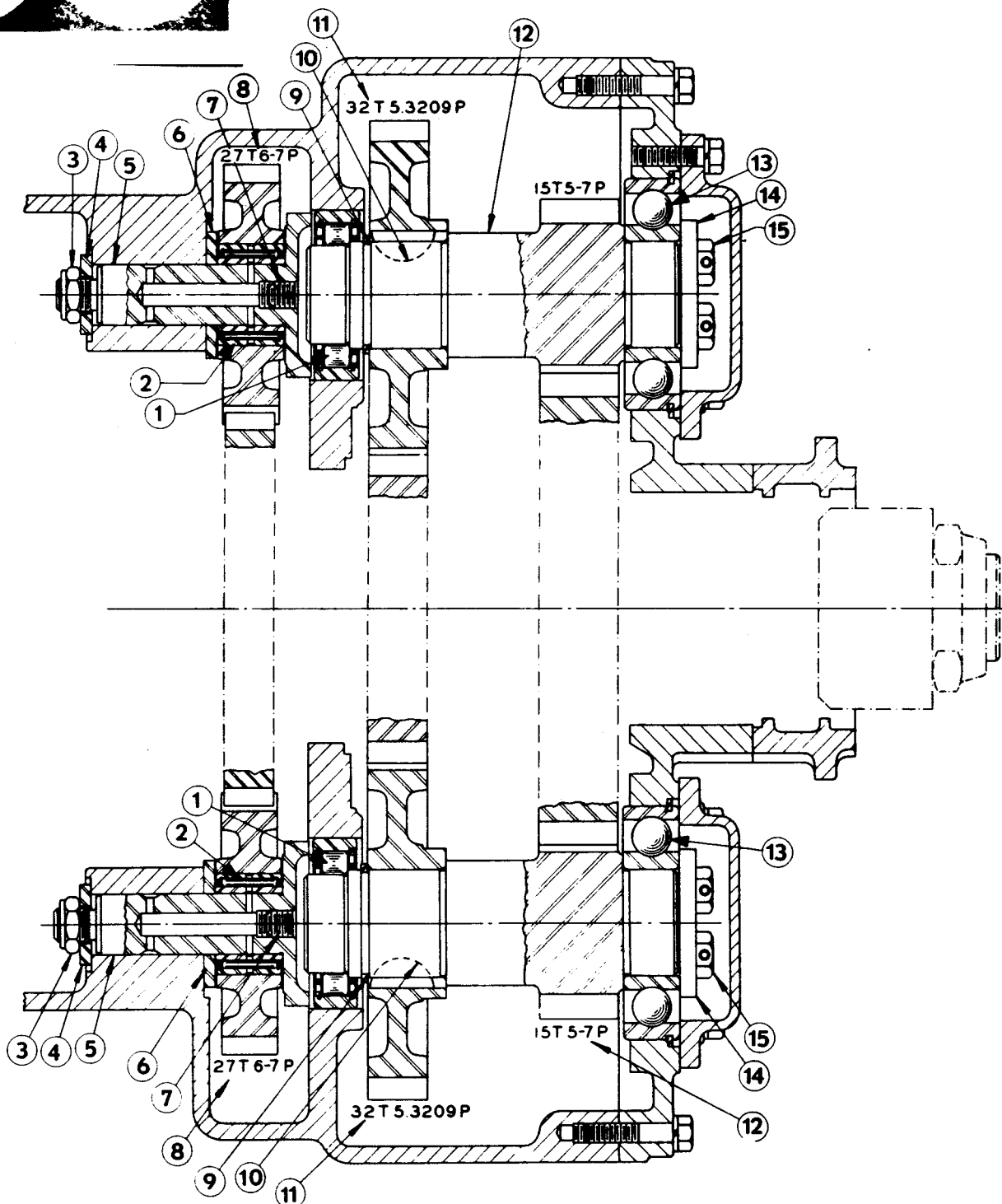
WD-204

Rel: 5/23/67

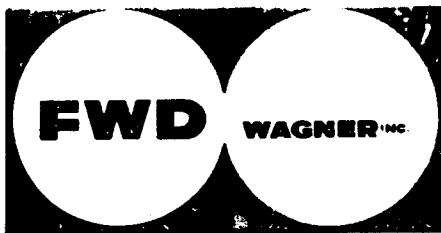
RTOF-910 TRANSMISSION  
SECTION VIEW

ITEM	FWD NO.	DESCRIPTION	QTY.
66	213523	Snap Ring	1
67	213524	Assembly	1
68	213525	Gear	1
69	213526	Support	1
70	213527	Snap Ring	1
71	213528	Coupling	1
72	N.S.S.	Quill See Item 29	
73	213529	Gear - Aux. Drive	1
74	213530	Snap Ring	2
75	213531	Nut	1
76		Capscrew 3/8-16x1 Hex Hd.	6
77	213532	Retainer	1
78	213533	Ball Bearing	1
79	213534	Gear	1
80	213535	Gasket (Hsg)	1
81	202353	Capscrew 1/2-13 x 1-1/2 Hex. Hd.	2
82	202322	Lockwasher - 1/2 Plain	4
83	213536	Gasket	1
84	213537	Cover - Front Bearing	1
85	202539	Nut; Drive Gear Bearing	1
86	213538	Snap Ring - M.Shaft, Front Quill	1
87	213539	Shaft; Drive	1
88	213540	Spacer	1

RTOF-910 TRANSMISSION



SECTIONAL VIEW  
TYPICAL THRU IDLER GEAR SHAFTS  
AND AUXILIARY COUNTERSHAFTS



PORTLAND, OREGON

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517247-213134

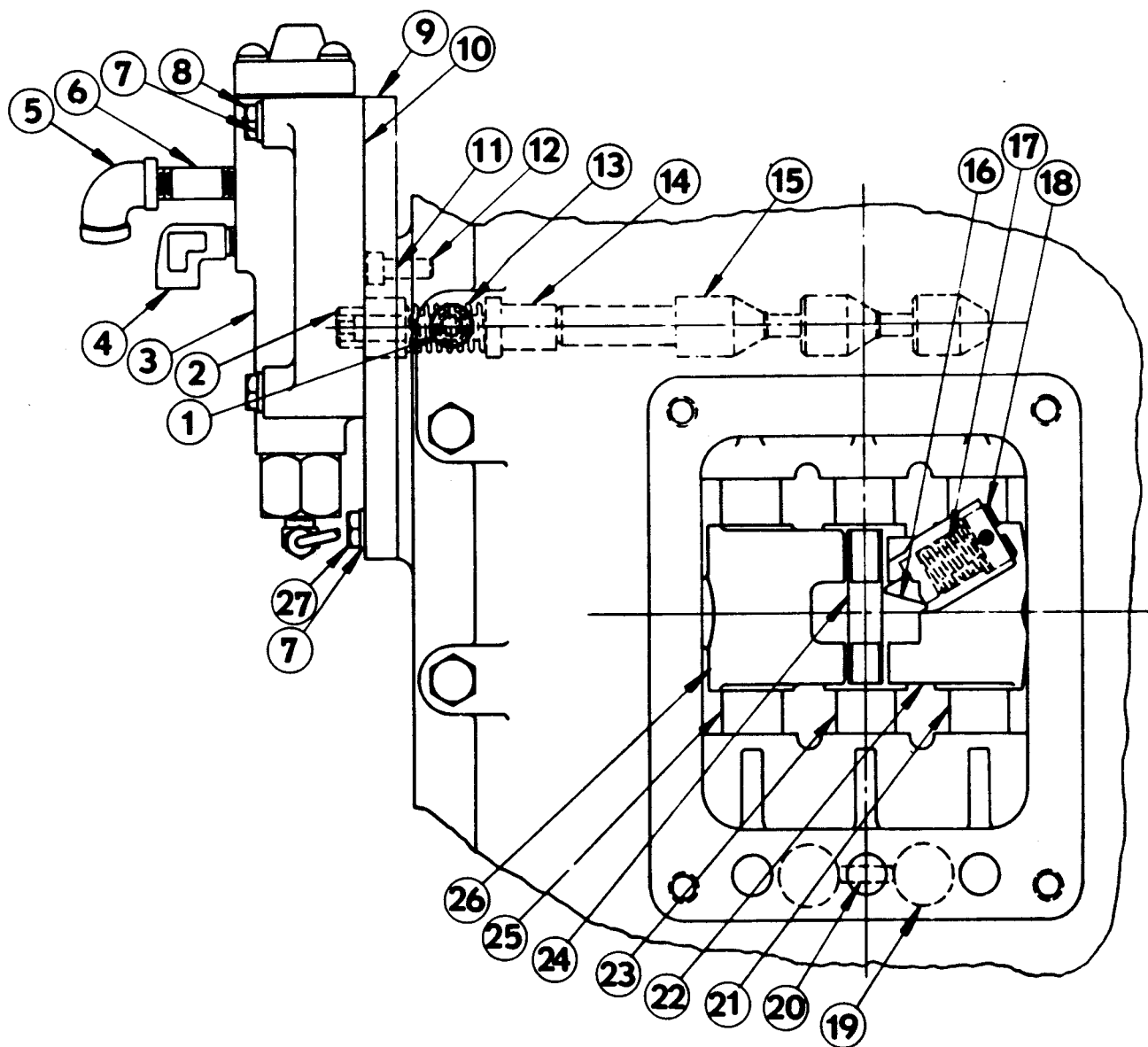
WD-204

Rel: 5/23/67

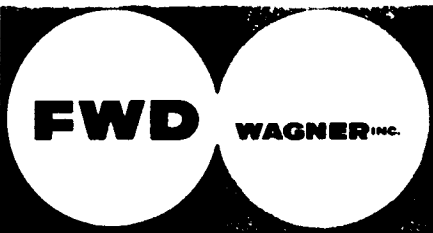
RTOF-910 TRANSMISSION  
SECTION VIEW THRU IDLER GEAR  
& AUXILIARY COUNTERSHAFTS

ITEM	FWD NO.	DESCRIPTION	QTY.
1	202435	Roller Bearing	2
2	213561	Bearing	2
3		Nut 5/8" 18N.F. Els Stop	2
4	213562	Plate	2
5	213563	Shaft	2
6	213564	Washer	2
7	213565	Plug	2
8	213566	Gear	2
9	213567	Snap Ring	2
10	210033	Key No. 1210 3/8 x 1-1/4"	2
11	213568	Gear	2
12	213569	Countershaft	2
13	213570	Ball Bearing	2
14	202475	Retainer	2
15	200057	Capscrew 1/2" 20 x1 Hx. Hd.	4

RTOF-910 TRANSMISSION



PLAN VIEW SHOWING SLAVE VALVE  
AND ACTUATING PARTS



PORTLAND, OREGON

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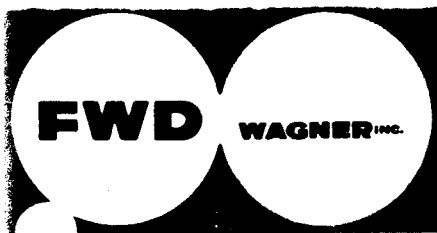
517247-213134

WD-204

Rel: 5/23/67

RTOF-910 TRANSMISSION  
PLAN VIEW - SLAVE VALVE &  
ACTUATING PARTS

ITEM	FWD NO.	DESCRIPTION	QTY.
1	213469	Breather	1
2	213577	Sleeve	1
3	213578	Valve Assembly - Range Shift	1
4	200160	Elbow - Street	2
5	202413	Elbow	1
6	210183	Nipple - Pipe	1
7	202316	Lockwasher 1/4" Plain	6
8	200154	Capscrew 1/4"-20x 1-3/4 Hx Hd.	4
9	213579	Plate	1
10	202728	Gasket	
11	213580	Gasket	1
12		Capscrew 1/4"-20 x 5/8 Soc. Hd.	2
13	202463	Spring	1
14	213581	Pin	1
15	213582	Shaft	1
16	202653	Plunger	1
17	202463	Spring	1
18	202546	Plug	1
19	202369	Ball - 3/4", Steel	2
20	202386	Pin	1
21	213571	Yoke Bar 1st & Rev.	
22	213572	Shift Yoke 1st & Rev.	1
23	213573	Yoke Bar 2nd & 3rd	1



PORTLAND, OREGON

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517247-213134

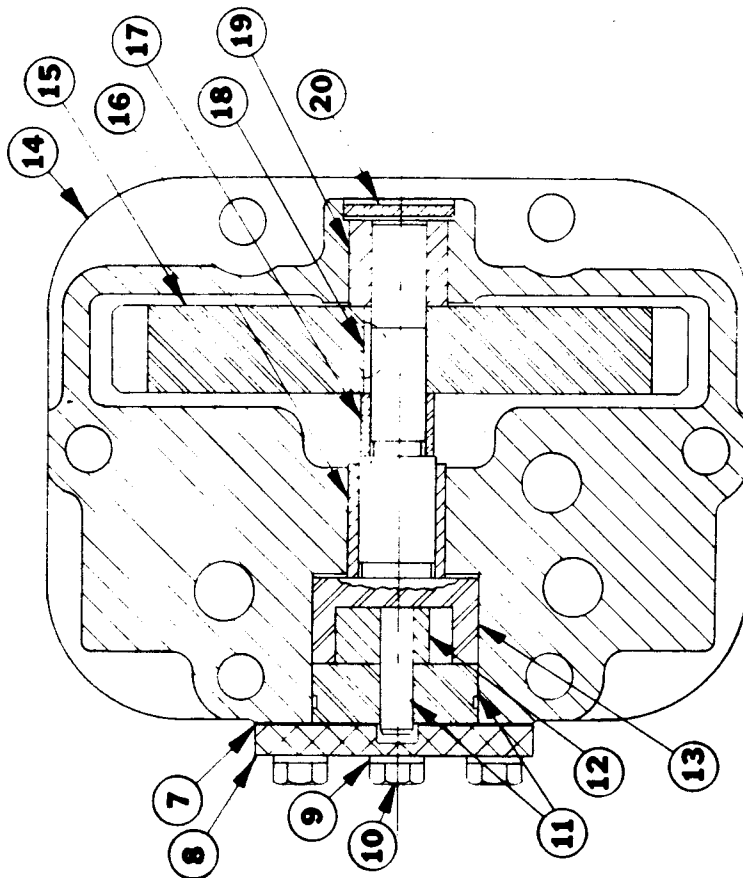
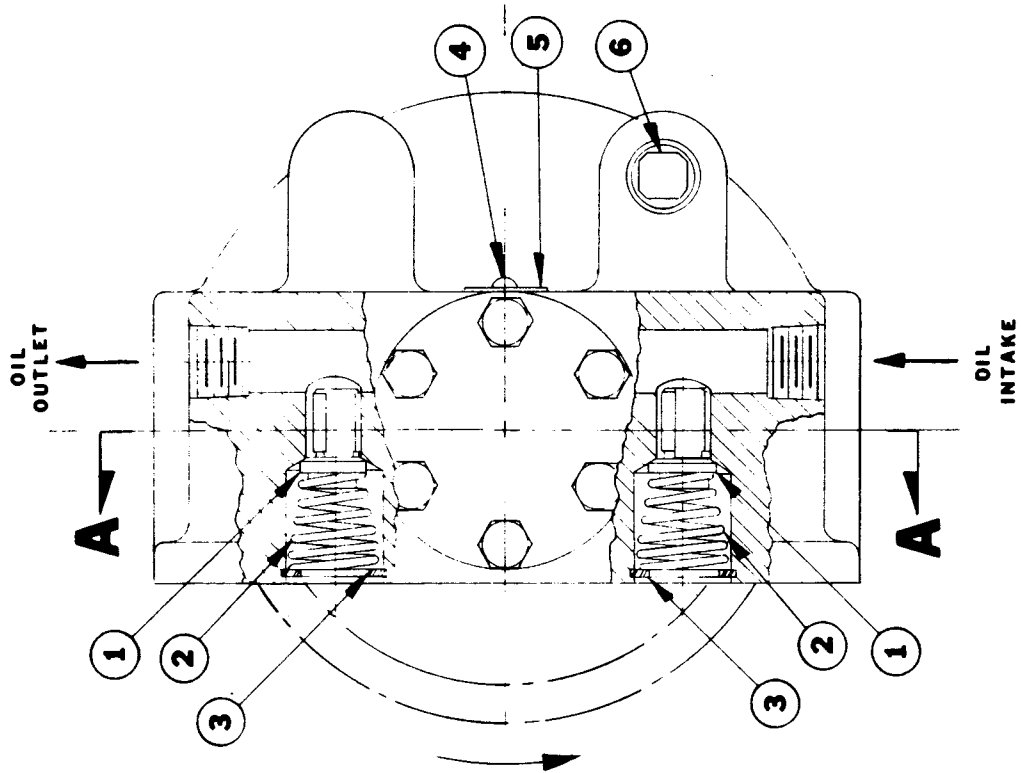
RTOF-910 TRANSMISSION  
PLAN VIEW - SLAVE VALVE &  
ACTUATING PARTS

WD-204

Rel: 5/23/67

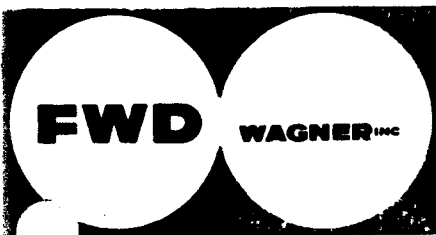
ITEM	FWD NO.	DESCRIPTION	QTY.
24	213574	Shift Block 2nd & 3rd	1
25	213575	Yoke Bar 4th & 5th	1
26	213576	Shift Block 4th & 5th	1
27		Capscrew 1/4" -20 x 7/8 Hx. Hd.	2

**RTOF-918 TRANSMISSION  
OIL PUMP ASSEMBLY**



**SECTION AA**





PORTLAND, OREGON

23 of 23

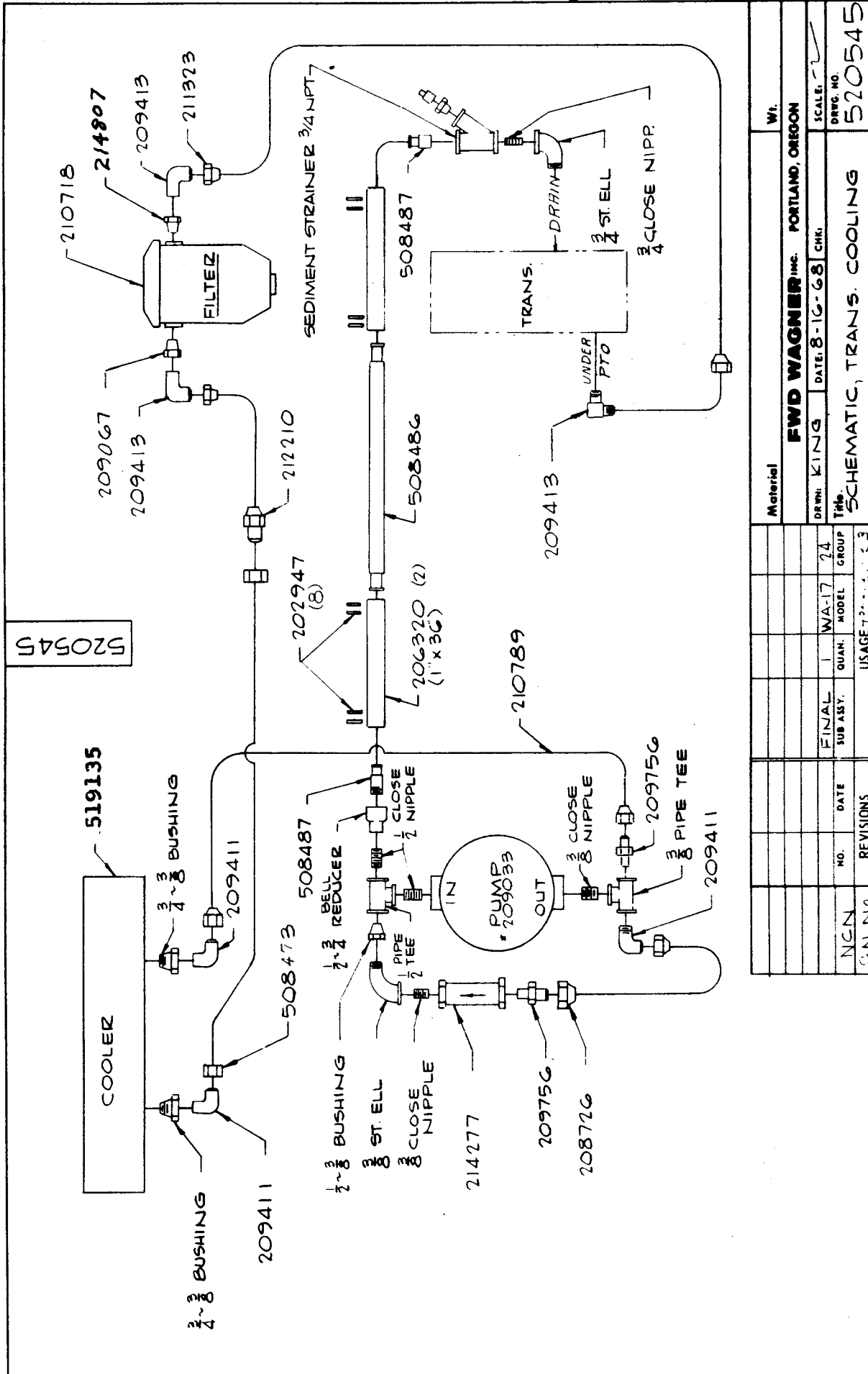
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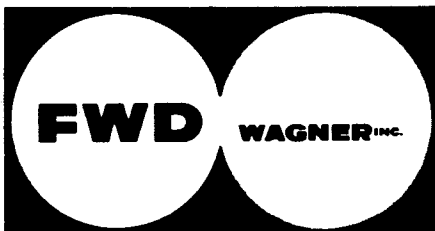
WD-204

Rel: 5/23/67

RTOF-910 TRANSMISSION  
OIL PUMP ASSEMBLY

ITEM	FWD NO.	DESCRIPTION	QTY.
	213613	Pump Assembly	1
1	209027	Valve	2
2	209025	Spring	2
3	209026	Ring	2
4		Screw	2
5		Name Plate	1
6	202363	Pipe Plug 7/8"	1
7	209021	Gasket	1
8	213614	Head	1
9	202316	Lockwasher 1/4"	6
10	202336	Capscrew 1/4-20 x 3/4" Hex	6
11	209022	Pivot Pin Assembly	
12	209020	Gear	1
13	209019	Rotor	1
14	209028	Housing	1
15	213615	Gear	1
16	209017	Bushing	1
17	209016	Spacer	1
18	209015	Woodruff Key	1
19	209014	Bushing	1
	202468	Plug - Expansion	1





PORTLAND, OREGON

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5 2 0 5 4 5

B/M 4377

Rel: 2-18-69

ENGINE AND TRANSMISSION  
(NH-220 RTOF-910 TRANS. COOLER)

ITEM	FWD NO.	DESCRIPTION	QTY.
	519135	Cooler Assembly - Trans.	1
	519145	Cover - Trans. Cooler	1
	519146	Gasket - Cover	1
	214018	Core - Cooler	1
	214019	Gasket - Core	2
	214020	Nut - Core	2
	204389	Seal Washer	11
	207563	Seal Washer	2
		Capscrew 3/8-16 NC x 3/4" Lg.-Stainless Steel	11
		Capscrew 1/2-20 NC x 5-3/4" Lg. Gr. 5	2
	210718	Filter	1
		Sediment Strainer	1
	508486	Pipe - Suction	1
	508487	Adapter	2
	209033	Pump	1
	214277	Check Valve	1
	202947	Hose Clamp	8
	206320	Hose 1" I.D. x 1-1/2" O.D.	2
	209756	Adapter	2
	209413	Adapter	3
	209411	Adapter	3
	214807	Adapter	2



PORTLAND, OREGON

3 of 3

5 2 0 5 4 5

B/M 4377

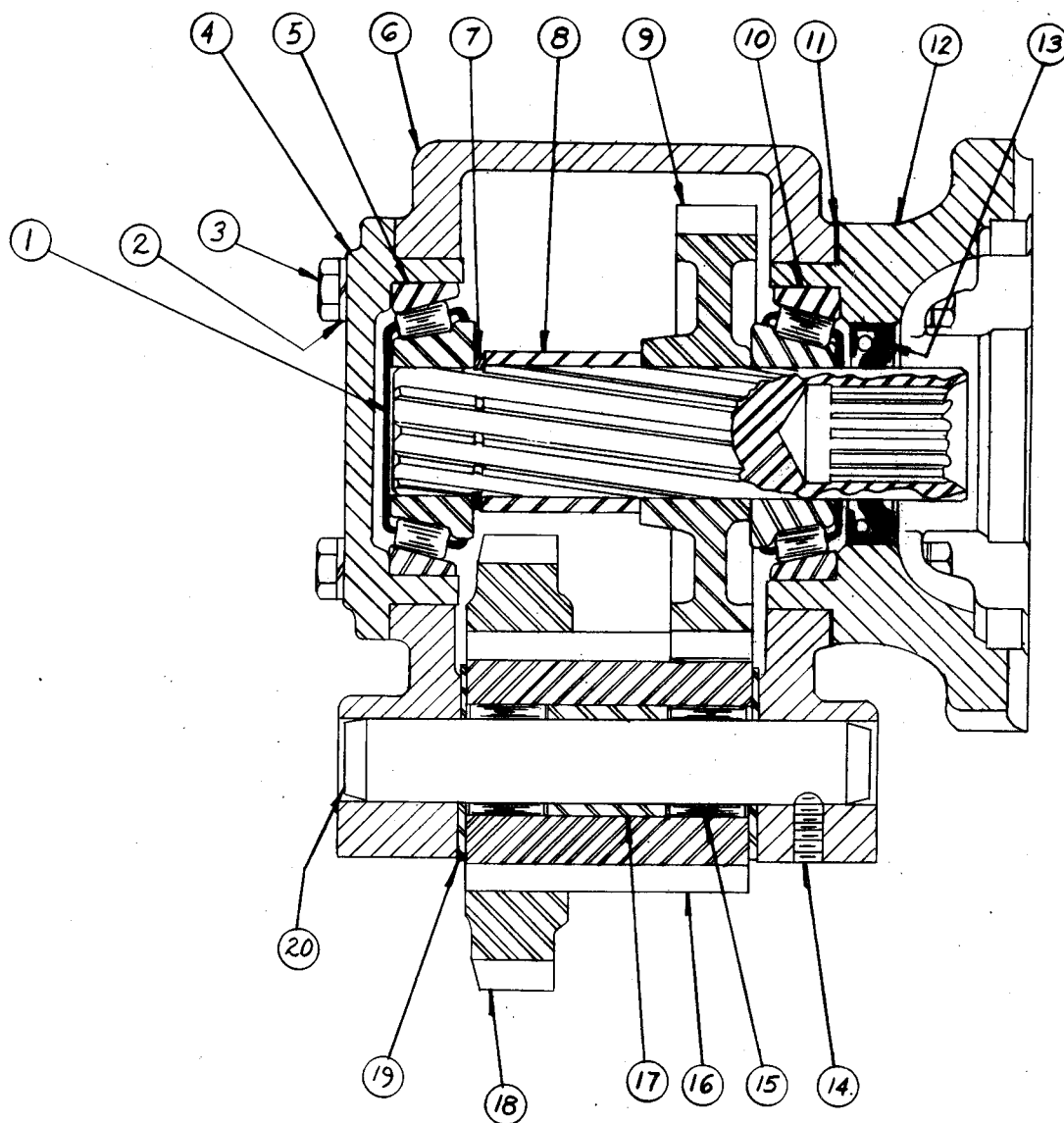
Rel: 2-18-69

ENGINE AND TRANSMISSION  
(NH-220 RTOF-910 TRANS. COOLER)

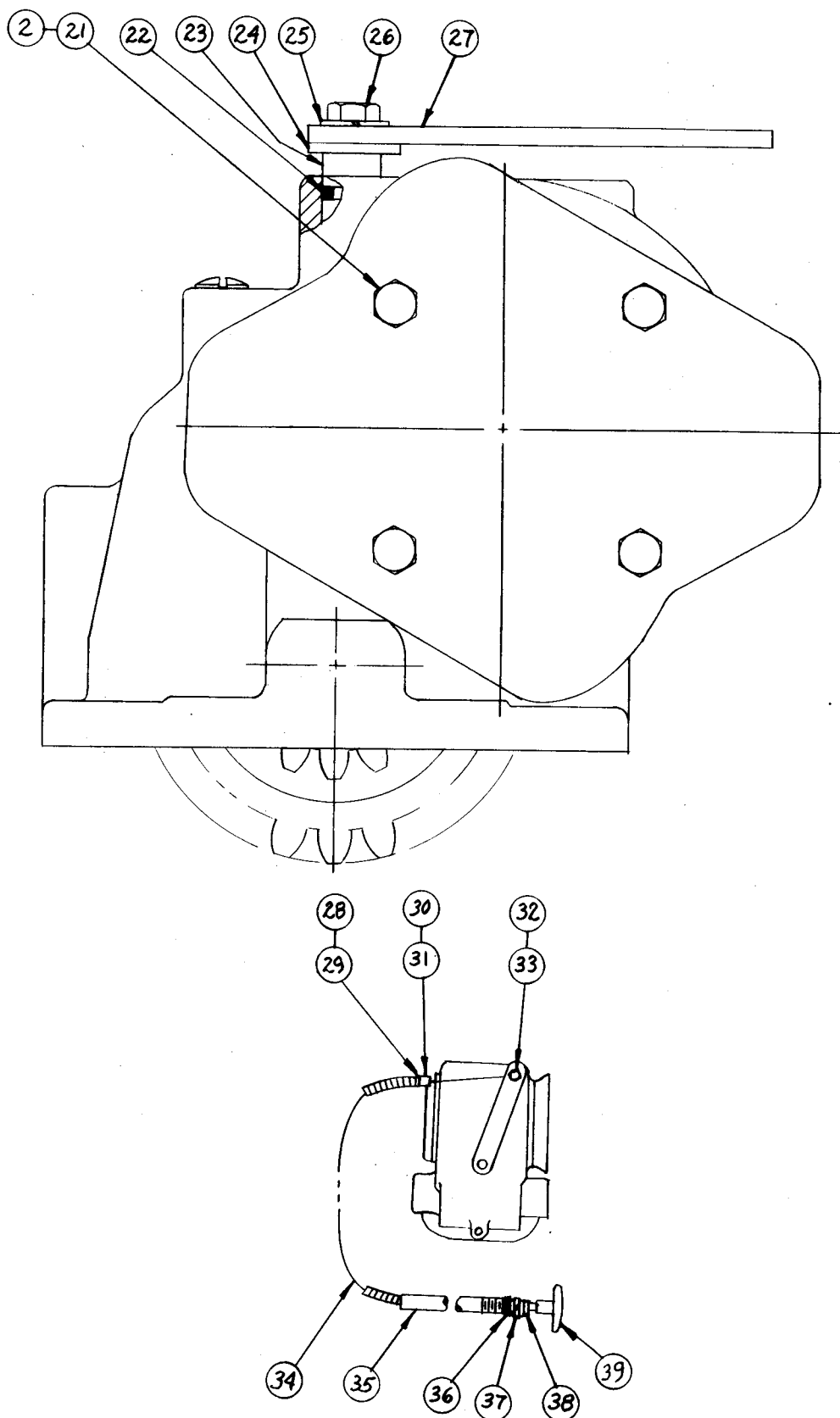
ITEM	FWD NO.	DESCRIPTION	QTY.
	211323	Hose Assembly	1
	212210	Hose Assembly	1
	210789	Hose Assembly	1
	208726	Hose Assembly	1
	508473	Tube Assembly	1
		Bushing 3/4-3/8 NPT	2
		Bushing 1/2-3/8 NPT	1
		Close Nipple 1/2 NPT	2
		Close Nipple 3/8 NPT	2
		Close Nipple 3/4 NPT	1
		Bell Reducer 1/2-3/4 NPT	1
		Pipe Tee 1/2 NPT	1
		Pipe Tee 3/8 NPT	1
		Street Ell 3/4 NPT	1
		Street Ell 3/8 NPT	1
	510406	Mtg. Plate	1
	509145	Gusset	2

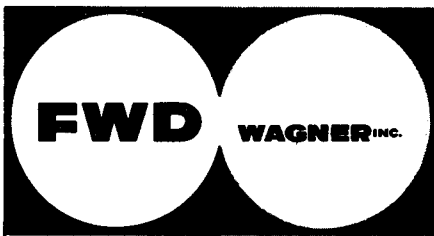
PORTLAND, OREGON

POWER TAKE-OFF  
CHELSEA



POWER TAKE-OFF  
CHELSEA





PORTLAND, OREGON

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2 1 4 5 0 9

HYA-22L-C3-113

Rel: 2-10-69

POWER TAKE-OFF  
CHELSEA

ITEM	FWD NO.	DESCRIPTION	QTY.
1	208626	Drive Shaft	1
2	5/16"	Lockwasher	3
3	5/16-18x1"	Capscrew	3
4	208627	End Cap	1
5	208628	Bearing Assy.	1
6	208629	Housing	1
7	208630	Lock Ring	1
8	208631	Spacer	1
9	208632	Driven Gear	1
10	208633	Bearing Assembly	1
11	208634	Gasket (.010" Thick)	A.R.
	208635	Gasket (.020" Thick)	
12	214745	Pump Adapter Flange	1
13	208637	Seal	1
14		¼ x 20 x ½" Set Screw Socket Head	1
15	208638	Needle Brg. Roller (23 per set)	2
16	208639	Driving Gear	1
17	208640	Spacer	1
18	208641	Sliding Gear	1
19	208642	Thrust Washer	1
20	208643	Idler Shaft	1
21		5/16-18 x 1½" Capscrew	4



PORTLAND, OREGON

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2 1 4 5 0 9

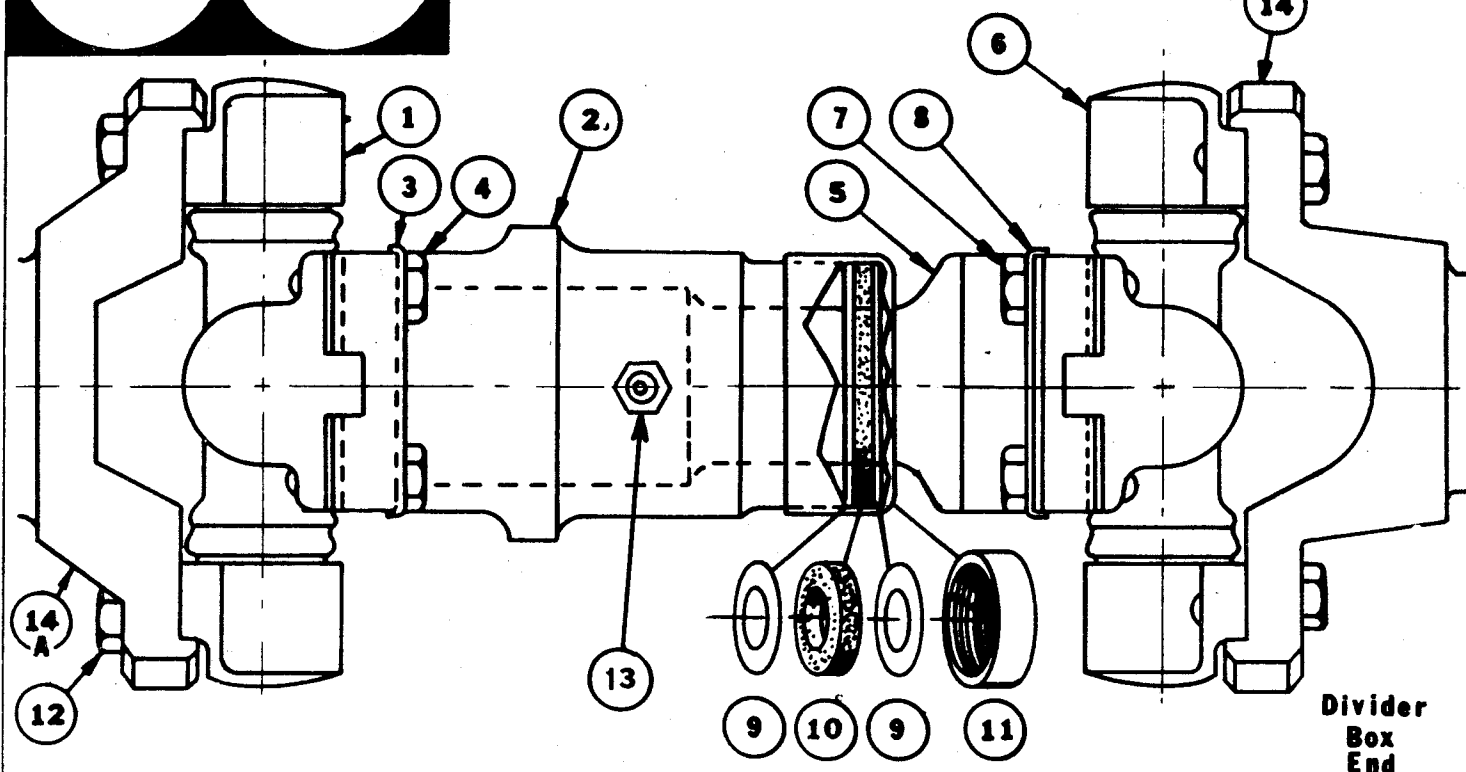
HYA-22L-C3-113

Rel: 2-10-69

POWER TAKE-OFF  
CHELSEA

ITEM	FWD NO.	DESCRIPTION	QTY.
22	208644	"O" Ring	1
23	208645	Post & Arm Assy.	1
24	208646	Washer	1
25	5/16"	Lockwasher	1
26	5/16-24 x	5/8" Capscrew	1
27	208647	Lever	1
28	208648	Cotter Pin	1
29	208649	Eye Bolt	1
30	5/16-18 x	1-1/8" Capscrew	1
31	208650	Wire Control Bracket	1
32	1/4-20 x	1/2 Set Screw	1
33	208651	Swivel Pin	1
34	208652	Control Wire & Rod Assy.	1
35	208653	Control Tube & Casing Assy.	1
36	208654	Jam Nut	1
37	208655	Lockwasher	1
38	208656	Packing Nut	1
39	208657	Knob	1
	214746	Mounting Kit - NOT ILLUSTRATED	1
	214387	Adapter Plate-PTO to Trans. - NOT ILLUSTRATED	1
	522196	Shim - PTO to Pump - NOT ILLUSTRATED	





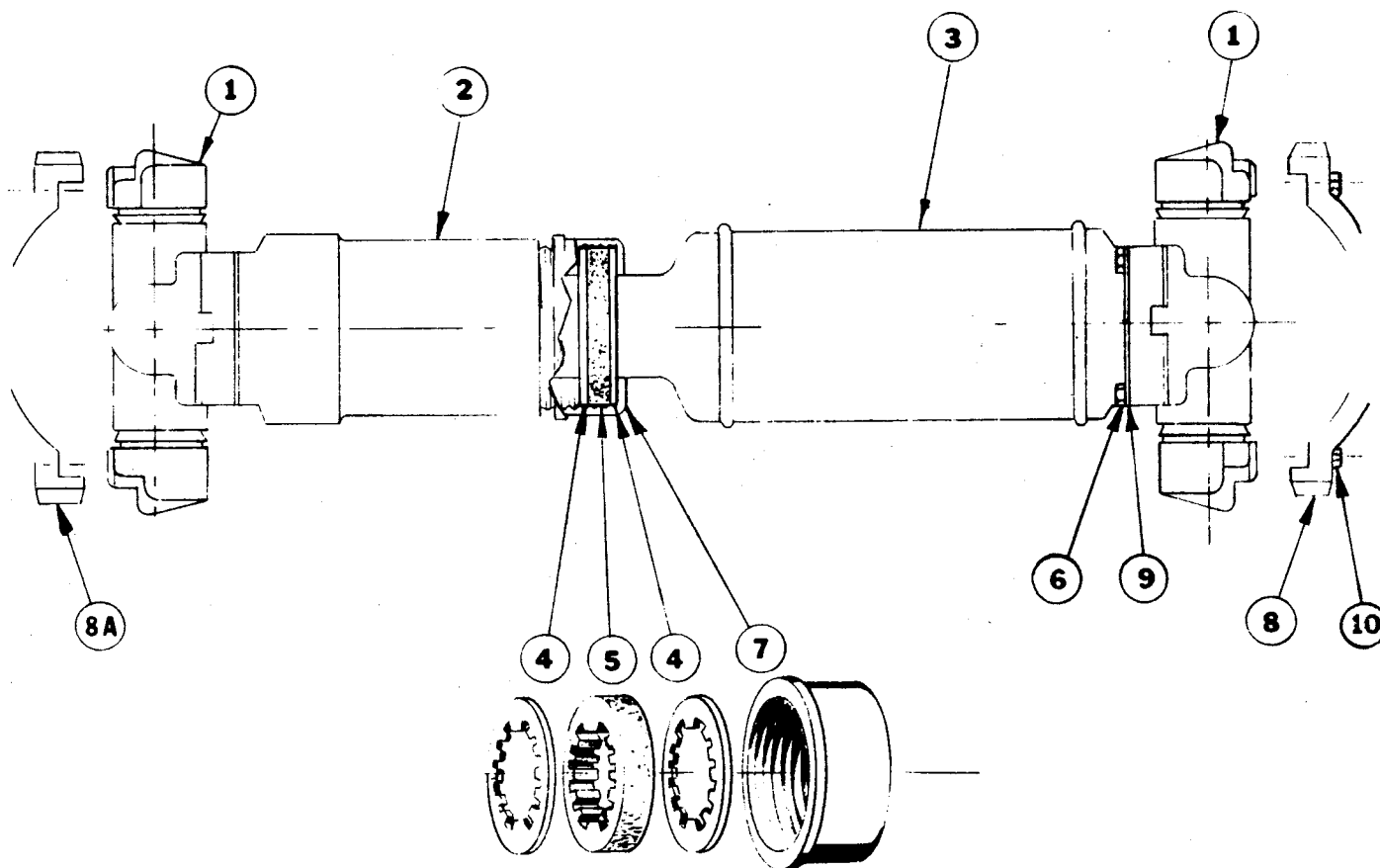
ITEM	FWD NO.	DESCRIPTION	QTY.
1	204301	Cross Ass'y.	1
2	205321	Slip Joint	1
3	207870	Lock Plate	4
4	204319	Capscrew	4
5	204369	Stub Yoke	1
6	204301	Cross Ass'y	1
7	204319	Capscrew	4
8	207870	Lock Plate	2
9	208847	Steel Washer	2
10	208848	Cork Washer	1
11	204316	Retainer	1
12	204319	Capscrew	4
13	G191758	Lube Fitting	1
14	204342	Yoke	1
14A	520620	Yoke	1

## DRIVE LINE ASSEMBLY

WA-14-17

2A-15924-1

Rel: 1/18/67



ITEM	FWD NO.	DESCRIPTION	QTY
1	204311	Cross Assembly	2
2	20412	Slip Yoke	1
3	70-421	Propeller Shaft	1
4	20004	Steel Washer	2
5	208843	Full Washer	1
6	204319	Cap screw	4
7	204313	Retainer Cap	1
8	206711	Slid Yoke - Divider Box	1
8A		See Axle Diff. Group	
9	20 870	Lock Plate	4
10	204319	Cap Screw	4

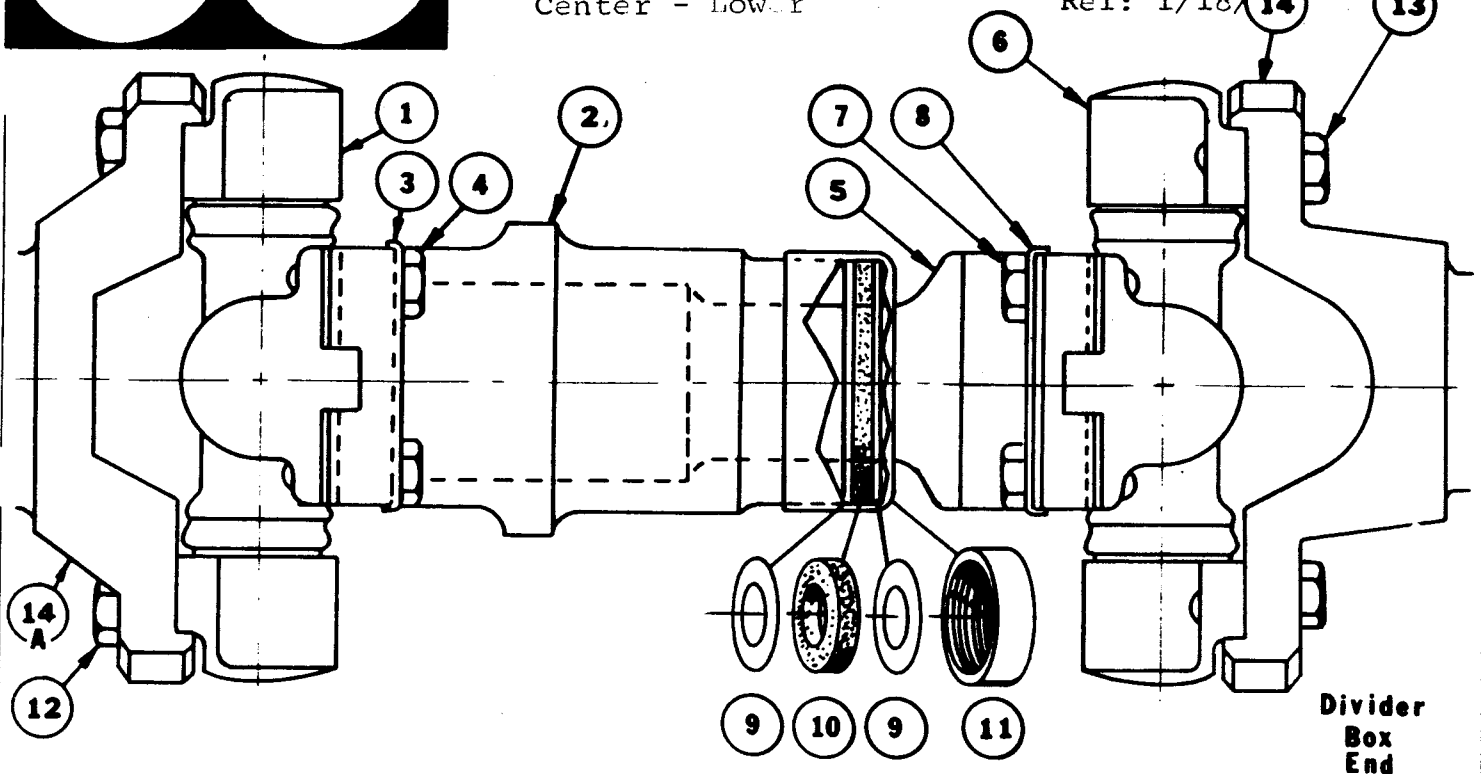
**DRIVE LINE ASSEMBLY WA-14-17**  
 Center - Lower

1 of 1

5 0 8 4 1 0

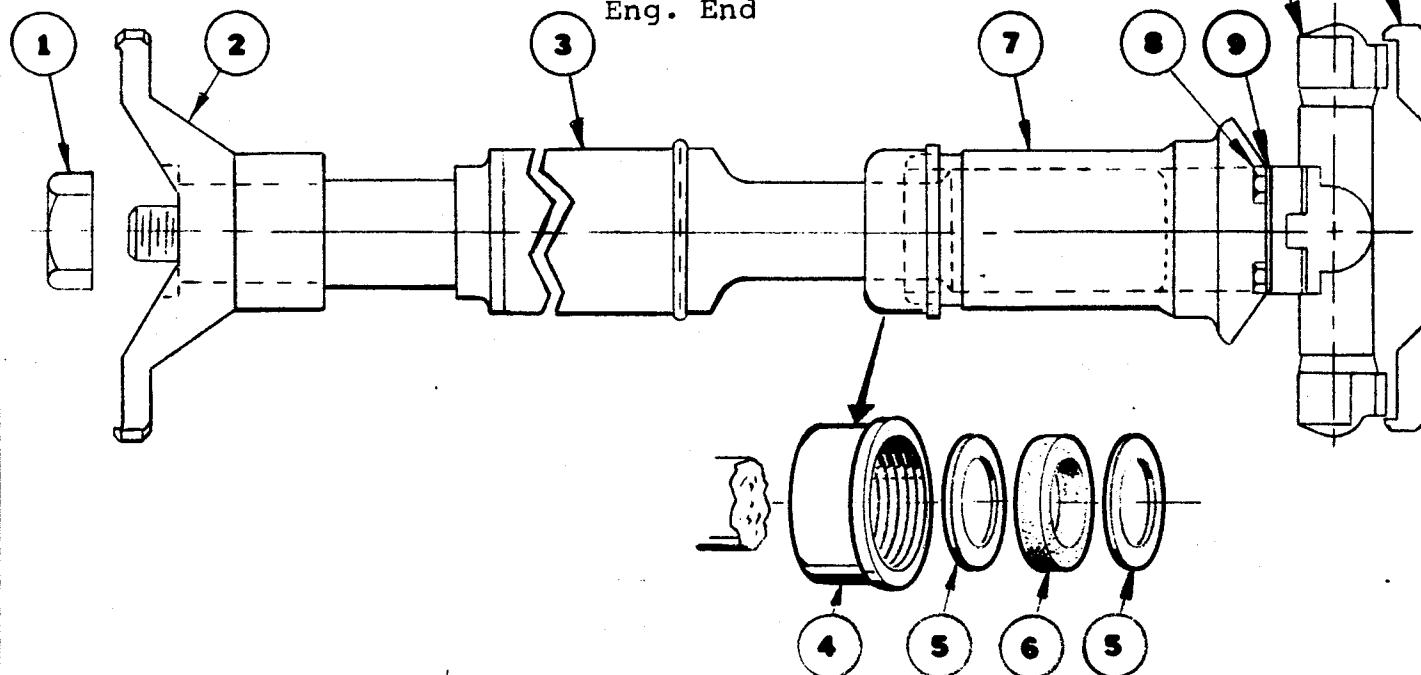
2A-18822-1

Rel: 1/18/67


 Divider  
Box  
End

ITEM	PART NO.	DESCRIPTION	QTY
1	204301	Cross Ass'y	1
2	205321	Slip Joint Ass'y	1
3	207870	Lock Plate	4
4	204319	Cap Screw	8
5	204369	Splined Stub Shaft	1
6	204301	Cross Ass'y	1
7	204319	Cap Screw	8
8	207870	Lock Plate	4
9	208847	Steel Washer	2
10	208848	Felt Washer	1
11	204316	Retainer Cap	1
12	204319	Cap Screw	4
13	204319	Cap Screw	4
14	204342	Splined Yoke	1
14A	204342	Splined Yoke (See Front Driveline-51400)	1

**DRIVELINE ASSEMBLY**

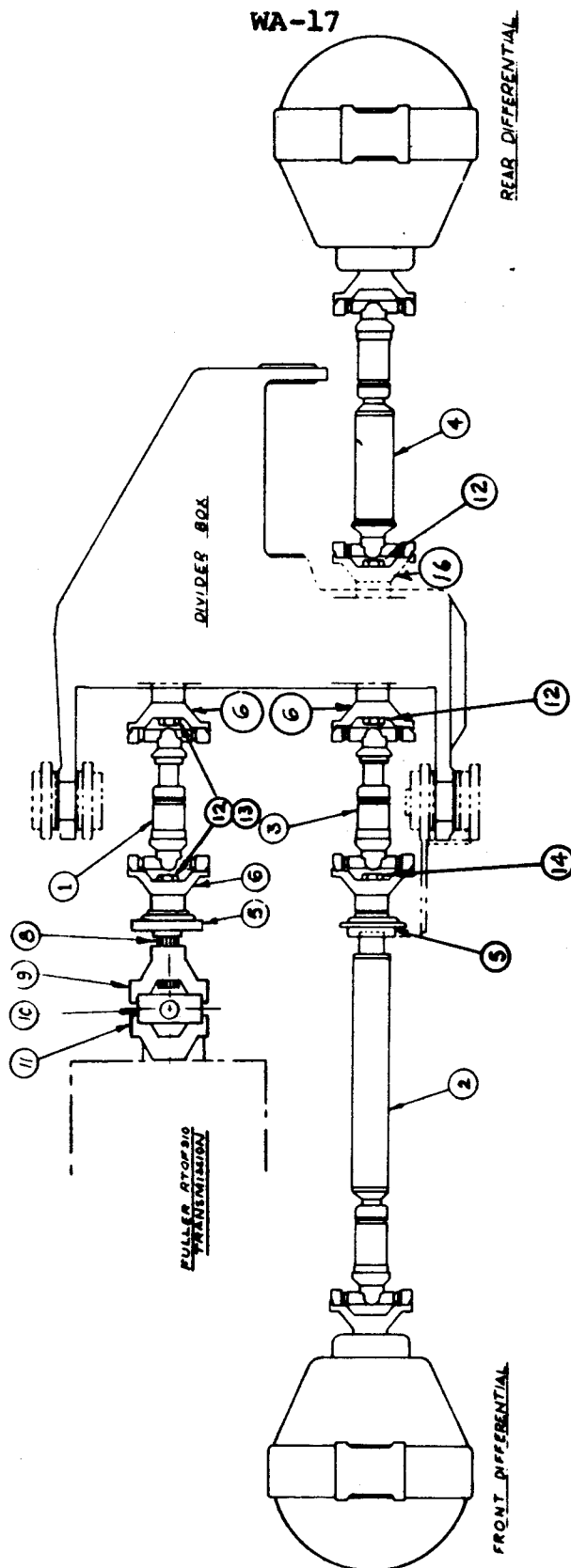
 WA-9  
Eng. End


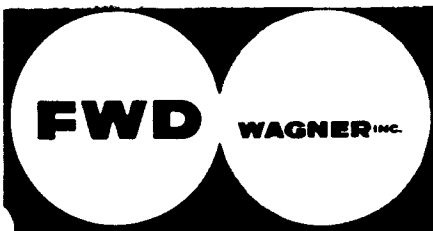
ITEM	FWD NO.	DESCRIPTION	QTY
	204337	Nut	1
	204346	Fitting Yoke	
	205804	Propellor Shaft	1
	204316	Retainer Cap	1
	208847	Steel Washer	2
	208848	Felt Washer	1
	204277	Slip Yoke	1
	204319	Cap Screw	
	207370	Lock Plate	4
10	204301	Cross Assembly	1
11		See Axle Assembly	

**DRIVE LINES**

WA-14

WA-17





PORTLAND, OREGON

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B/M 4366

Rel: 10-1-68

## DRIVELINES

WA-14

WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
1	520621	Driveline Assembly - Center Upper	1
2	505863	Driveline Assembly - Engine End	1
3	508410	Driveline Assembly - Center Lower	1
4	508420	Driveline Assembly - Draw Bar End	1
5	506786	Bearing Assembly - Upper Center	1
5	520928	Bearing Assembly - Lower Center	1
6		Yoke (See Divider Box)	
8	516118	Driveline Shaft	1
9	204346	Yoke	1
10	204302	Journal Bearing Cross	1
11	213117	Yoke	1
12	500598	Washer	4
13	504068	Nut	4
14	204247	Nut	1
16		Yoke (See Divider Box)	
NOTE: SEE ATTACHED SHEETS FOR DETAILS ON ABOVE DRIVELINES			

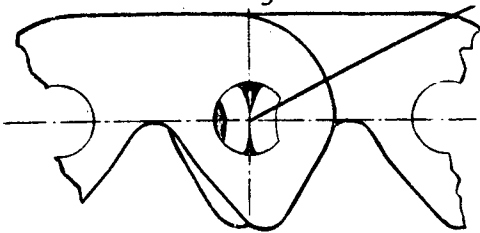
PARTS BULLETIN: 400-69

SUBJECT: DIVIDER BOX CHAIN, (NEW DESIGN).

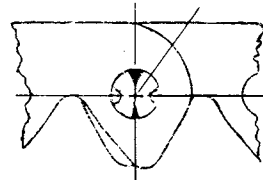
TO: ALL DEALERS.

ATTENTION: PARTS MANAGERS.

The manufacturer of the subject chain, has changed the design of the rocker pins and the opening in the links where the rocker pins are inserted. The following illustrations show the old and new design.



NEW DESIGN

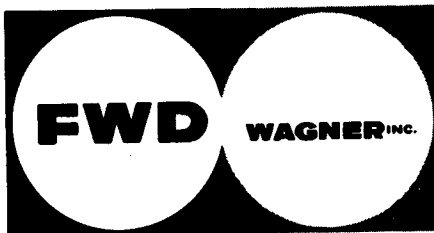


OLD DESIGN

As you can see from the above illustration, the change consists of elimination of the key projection that was used in the old design. The important information to you, is that first, the manufacturer advises that the new design pins and half-links cannot be used to repair the old design chain, and second, the manufacturer also advises that the old design is not available for service parts replacement. This means that when our present inventory of the old design half-link and pins are sold, it will be necessary to buy a complete new chain for service replacement.

The above applies to both the one inch pitch chain that is being used in current production and has been for several years, and the three quarter inch pitch that was used previously in four inch, five inch and six inch width. As the old design and the new design chains are interchangeable as complete chain assemblies, there will be no part number change on the three quarter inch pitch chains. To repeat, we will supply the old design as long as our inventory lasts, and will supply the new design when it becomes necessary. If an order is received for a half-link assembly after our old design stock is sold out, you will be advised that it will be necessary to order a complete chain.

Because the manufacturer advises that the old design and the new design cannot be inter-mixed, we have assigned a new part number to the divider box, and to the new design one inch pitch chain. The new divider box number is, #522516, and the new design chain,



PORTLAND, OREGON

P.B.400-69

Rel: 3/31/69

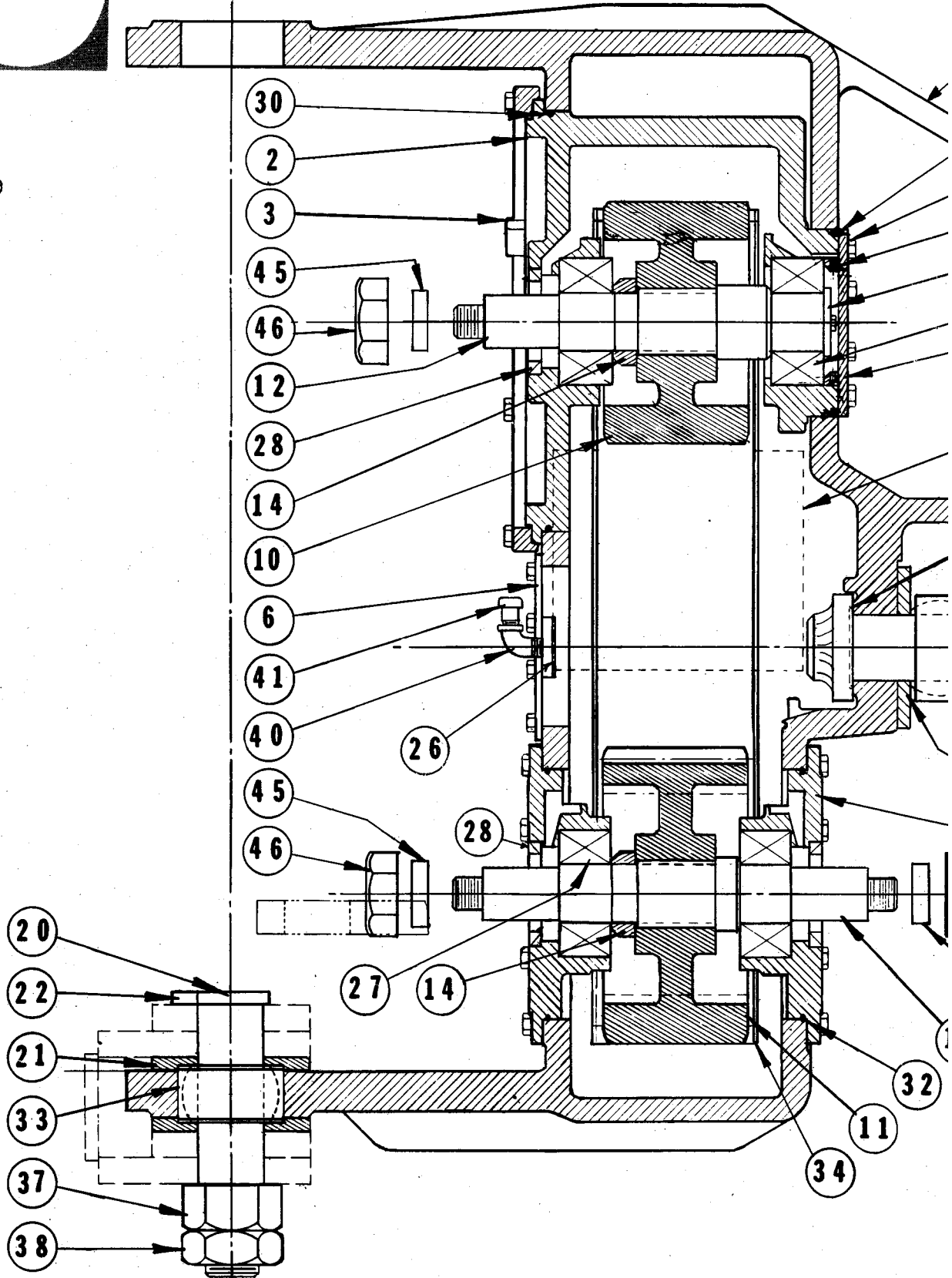
one inch pitch by six inch width, is #214910. The new divider box number will be indicated on the master check sheet for the units that will receive them.

FWD WAGNER



**FWD****WAGNER INC.**

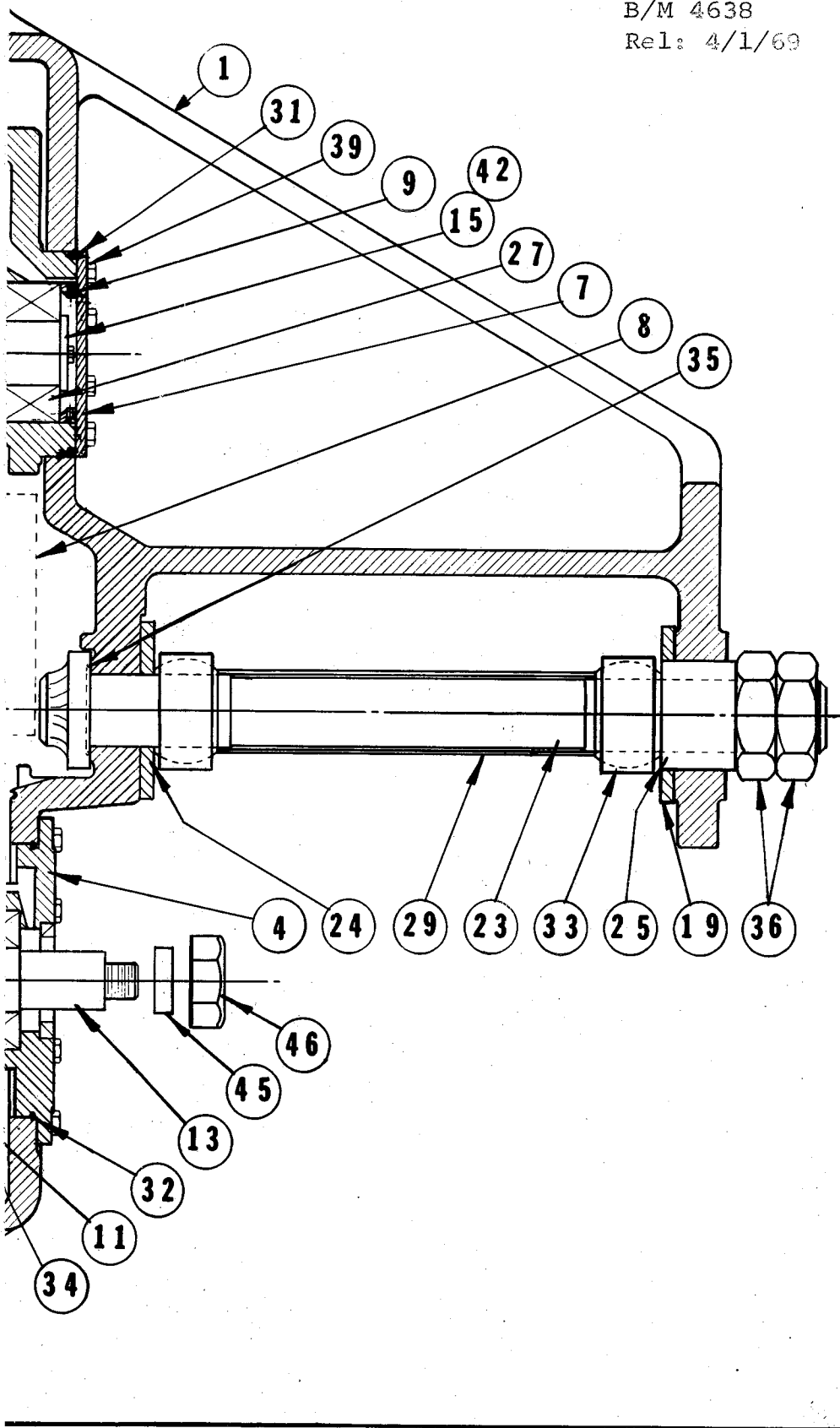
1 of 4  
5 2 2 5 1 6  
B/M 4638  
Rel: 4/1/69

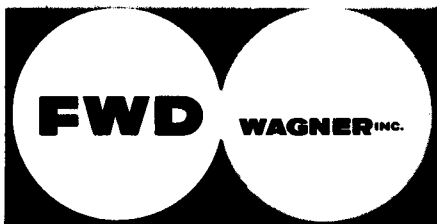


5 2 2 5 1 6

B/M 4638

Rel: 4/1/69





PORTLAND, OREGON

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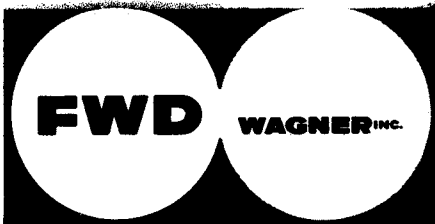
5 2 2 5 1 6

B/M 4638

Rel; 4-1-69

DIVIDER BOX - WA-14-17

ITEM	FWD NO.	DESCRIPTION	QTY.
1	503509	Case	1
2	502337	Cage - Input	1
3	500470	Lock Ring - Chain Adj.	1
4	511029	Cover Plate - Output	2
5	517601	Arm - Steering (Weld On Replacement Not Illust.)	2
6	520288	Inspection Plate - Front	1
7	500468	Inspection Plate - Input	1
8	500469	Inspection Plate - Side	1
9	511026	Spacer - Brg.	1
10	502673	Sprocket - 28 T	1
11	502672	Sprocket - 35 T	1
12	511027	Shaft - Input	1
13	511028	Shaft - Output	1
14	511025	Spacer - Shaft	2
15	502341	Keeper - Brg.	1
19	511092	Thrust Washer (Order to obtain correct clearance) <u>Thickness</u> (See Div. Box Overhaul Instructions)	
19A	511093	Thrust Washer .507 - .503	
19B	511094	Thrust Washer .517 - .513	
19C	511095	Thrust Washer .527 - .523	
19D	511096	Thrust Washer .537 - .533	
19E	511097	Thrust Washer .547 - .543	
19F	511098	Thrust Washer .557 - .553	



PORTLAND, OREGON

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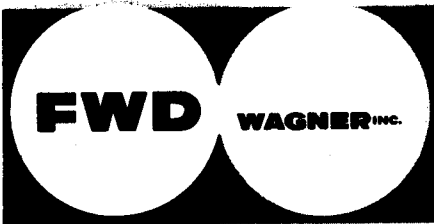
5 2 2 5 1 6

Ref; 4/1/69

B/M 4638

DIVIDER BOX - WA-14-17

ITEM	FWD NO.	DESCRIPTION	QTY.
20	500441	Hinge Pin	2
21	500442	Thrust Washer -Hinge	4
22	500243	Lock - Pin	2
23	501006	Swivel Pin Ass'y.	1
24	511039	Thrust Washer - Swivel (Front)	1
25	500481	Spacer - Swivel	1
26	503502	Baffle-Breather	1
27	211207	Bearing	4
28	204396	Seal - (2 $\frac{15}{16}$ ")	3
29	511041	Spacer - Swivel Bearing	1
30	203505	"O" Ring	1
31	203485	"O" Ring	1
32	203561	"O" Ring	2
33	204503	Bearing	4
34	214910	Chain 1"P, HY-VO, 74 LKS, 6" wide	1
35	203521	"O" Ring	1
36		Nut - HEX JAM 2 1/2 12 THD .	
37		Nut - HEX - 2" - 12 THD	2
38		Nut - HEX JAM - 2" - 12 THD	2
39	204389	Washer	6
40		Street Ell - 3/8"	1
41	200268	Breather Cap S-W 313650 (3/8 NPT)	1



PORTLAND, OREGON

4 of 4

5 2 2 5 1 6

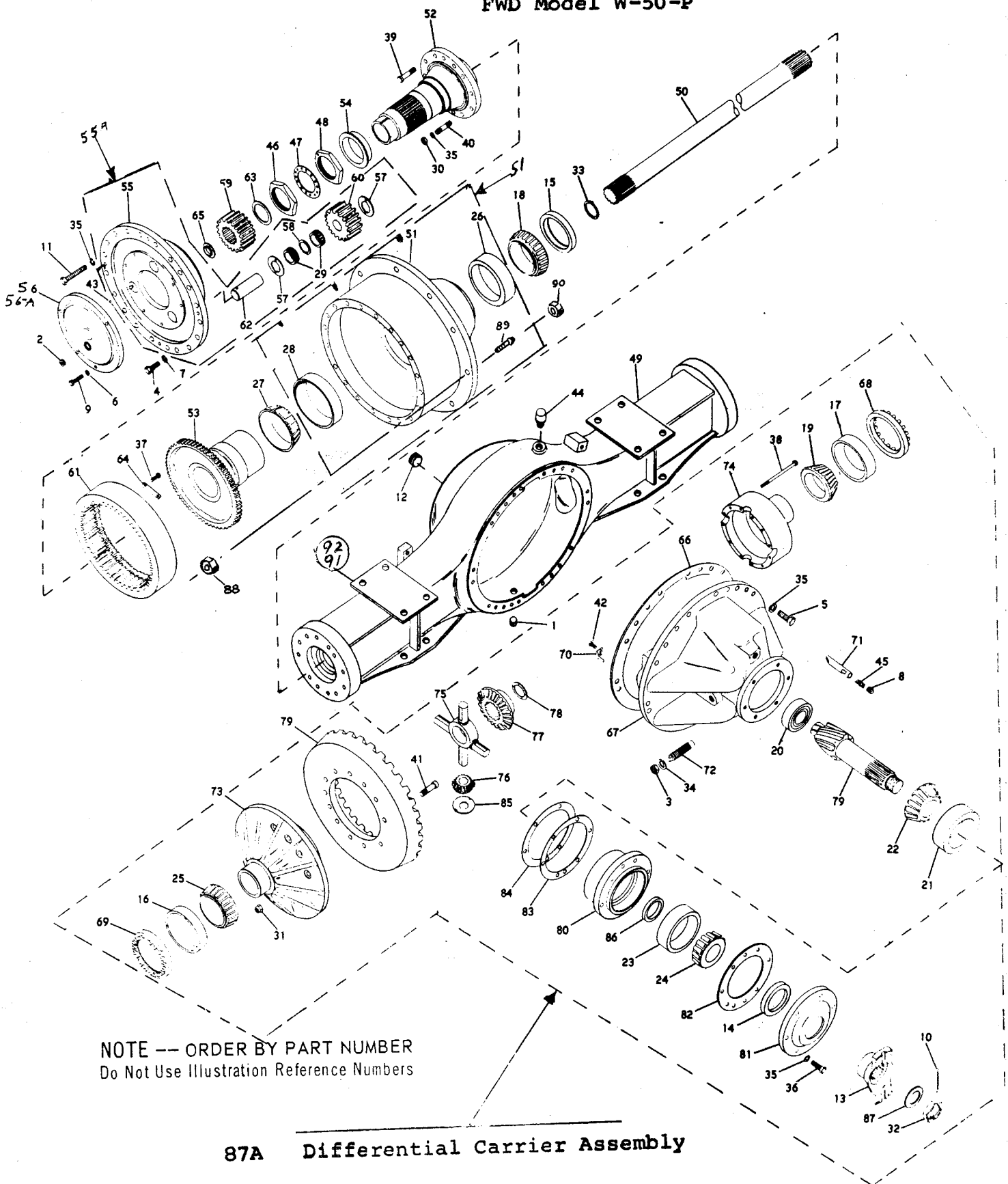
B/M 4638

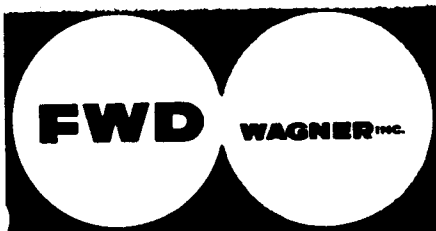
Rel : 4/1/68

DIVIDER BOX - WA-14-17

ITEM	FWD NO.	DESCRIPTION	QTY.
42	504173	Lock Plate	1
43	201319	Plug - Magnetic - (Not Shown)	1
44	214911	Half-Link Ass'y. (For Chain Adj.)	
45	500598	Washer	1
46	504068	Nut	1
	214912	Rocker Pin Set	AR

**AXLE ASSEMBLY (83" Track)**  
**FWD Model W-50-P**





PORTLAND, OREGON

Eng. End

2 of 9

2 1 4 3 6 9

D.B. End

2 1 4 3 7 0

AXLE ASSEMBLY (83" TRACK)

Rel: 2-13-69

Engine End - 108308

Drawbar End- 108307

ITEM	FWD NO.	DESCRIPTION	QTY.
1	201319	Plug, 1 $\frac{1}{4}$ " Pipe	1
2		Plug, 1" Pipe	4
3		Nut, 1-1/8 Jam	1
4		Capscrew, 5/8-18 x 3/4	8
5		Capscrew, 5/8-18 x 1/75	22
6		Lockwasher, 7/16	8
7		Lockwasher, 5/8	14
8		Plug, 3/4" Pipe	1
9		Capscrew, 7/16-20 x 1.25	12
10		Pin, Cotter	1
11		Bolt, 5/8-18 x 250	40
12	213350	Plug 1" Magnetic	1
13	213352	Yoke	1
14	213353	Seal, Oil	1
15	213354	Seal, Oil	2
16	206398	Cup, bearing	1
17	207831	Cup, bearing	1
18	213355	Cone, bearing	2
19	213356	Cone, bearing	1
20	213357	Bearing, pinion	1
21	201130	Cup, bearing	1
22	213375	Cone, bearing	1
23	213376	Cup, bearing	1



PORTLAND, OREGON Eng. End

3 of 9

2 1 4 3 6 9

D.B. End

2 1 4 3 7 0

AXLE ASSEMBLY (83" TRACK)

Rel: 2-13-69

Engine End - 108308

Drawbar End - 108307

ITEM	FWD NO.	DESCRIPTION	QTY.
24	213377	Cone, bearing	1
25	204592	Cone, bearing	1
26	213378	Cup, bearing	2
27	206519	Cone, bearing	2
28	213379	Cup, bearing	2
29	213380	Roller, bearing	12
30	213790	Nut, 5/8-18 NF	24
31		Nut, 5/8-18	12
32		Nut, 1-3/4-12 UN	1
33	213869	Ring, retaining	2
34		Lockwasher	1
35	200762	Lockwasher 5/8	24
36		Capscrew, 5/8-11 x 1.75	6
37		Capscrew 7/16-20 x 1	16
38		Capscrew 5/8-18 x 5	8
39	214169	Capscrew 5/8-18 x 4.50	8
40	213789	Stud, 5/8 NF x 3.50	16
41		Capscrew, 5/8-18 x 1.75	12
42		Capscrew, 3/8-16 NC x .62	2
43	213382	Ball, detent	6
44	213383	Vent, air	1
45	213384	Spring	1
46	213878	Locknut, inner	2





PORTLAND, OREGON

Eng. End

2 1 4 3 6 9

D.B. End

2 1 4 3 7 0

AXLE ASSEMBLY (83" TRACK)

\* Rev: 3/31/69

Engine End - 108308

Drawbar End - 108307

ITEM	FWD NO.	DESCRIPTION	QTY.
47	213385	Spacer, locknut	2
48	213879	Locknut, outer	2
49	213386	Housing	1
50	213870	Shaft, axle	2
	213885	Hub & Cup Ass'y.	
51	213388	Hub, wheel	2
51A	213753	Oil Slinger (dust shield)	
*51B	214917	Hub to Drum Bolts	
51C	213750	Hub to Drum Washers	
52	213389	Skein Axle	2
53	213390	Hub, Ring Gear (3.882:1)	2
54	213391	Bushing	2
55	213392	Spider, planetary	2
55A	213884	Planetary Assembly	2
56	213393	Cover, planetary	2
56A	213794	Gasket	
57	213394	Washer, thrust	12
58	213395	Spacer, bearing	6
59	213398	Gear, Sun (3.882:1)	6
60	213397	Gear, Planet (3.882:1)	2
61	213396	Gear, ring (3.882:1)	2
62	213399	Pin, planet, gear	6
63	213400	Ring, thrust	2



PORTLAND, OREGON

Eng. End

D.B. End

5 of 9

2 1 4 3 6 9

2 1 4 3 7 0

Rel: 2-13-69

AXLE ASSEMBLY (83" TRACK)

Engine End - 108308

Drawbar End - 108307

ITEM	FWD NO.	DESCRIPTION	QTY.
64	213401	Retainer, ring gear	8
65	213402	Button, thrust	2
66	213403	Gasket, carrier	1
67	213404	Carrier and Cap Assy.	1
	214595	Capscrew 7/8 NF x 4.88	4
68	213405	Locknut, R.H.	1
69	213406	Locknut, L.H.	1
70	213407	Lock, bearing adj.	2
71	213408	Scoop, oil	1
72	213409	Plug, back-up	1
73	213410	Case, flanged diff.	1
74	213411	Case, plain diff.	1
74a	213887	Diff. Body Sub Assy.	
74b	213173	No Spin Unit (optional-NOT SHOWN)	
75	213412	Spider, diff.	1
76	213413	Gear, pinion	4
77	213414	Gear, side	2
78	213415	Washer, thrust	2
79	213416**	Ring & Pinion set, rear (Blade or Drawbar End) SEE NOTE ON PAGE 6 BEFORE ORDERING	1
	213417**	Ring & Pinion set, front (Engine End) SEE NOTE ON PAGE 6 BEFORE ORDERING	1
80	213418	Housing, pinion bearing	1
81	213419	Cover, pinion bearing	1



PORTLAND, OREGON

Eng. End

6 of 9

2 1 4 3 6 9

D.B. End

2 1 4 3 7 0

AXLE ASSEMBLY (83" TRACK)

Rel: 2-13-69

Engine End - 108308

Drawbar End - 108307

ITEM	FWD NO.	DESCRIPTION	QTY.
82	213420	Gasket, bearing cover	1
83	213421	Shim, bearing cover	4
84	213422	Shim, bearing cover	4
85	213423	Washer, thrust	4
86	214596	Spacer, pinion bearing	1
	214597	Bushing, Taperlock - NOT ILLUSTRATED	1
87	213425	Washer, flat	1
87a	213426**	Carrier Assembly, rear (Blade or Drawbar End)	1
87a	213427**	Carrier Assembly, front (Engine End)	1
88	207559	Nut	20
89	207558	Stud	20
90	204133	Nut	20
91		Bolt-Axle to Pad-1" NF x 10½" Lg. Gr. 8	24
92		Nut-High - 1" NF Fibrellock	24
<p>**NOTE: BE SURE TO CHECK UNIT MASTER CHECK SHEET, AXLE SECTION, FOR AXLE ASSEMBLY NUMBER LISTED FOR LOCATION (ENGINE END OR DRAWBAR (BLADE END) BEFORE ORDERING THIS ITEM.</p>			



PORTLAND, OREGON

Eng. End

D.B. End

(or Blade)

AXLE ASSEMBLY  
(BRAKE GROUP)

7 of 9

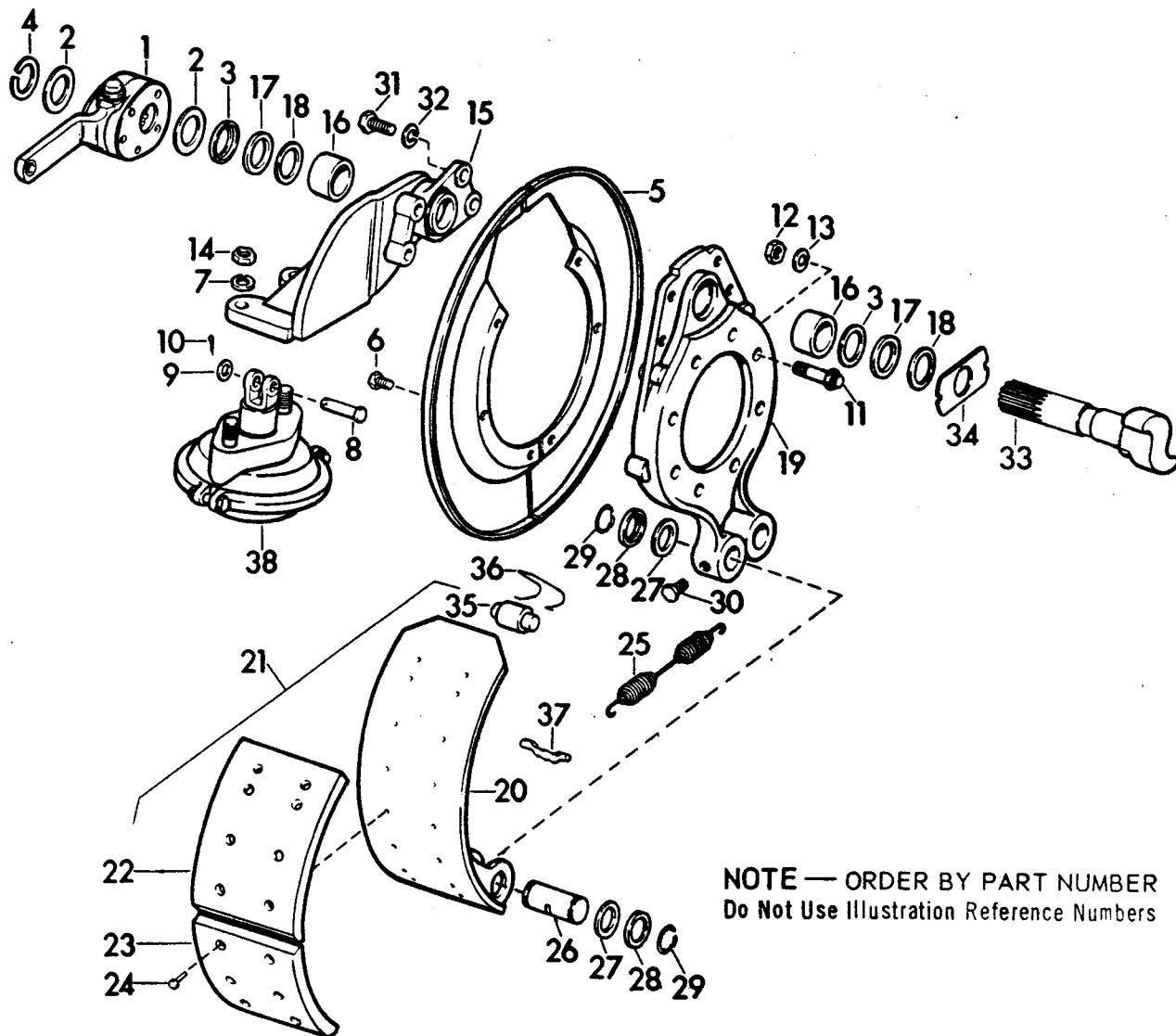
2 1 4 3 6 9

2 1 4 3 7 0

Rel: 2-13-69

8 125

BRAKE ASSEMBLY



NOTE — ORDER BY PART NUMBER  
Do Not Use Illustration Reference Numbers



PORTLAND, OREGON

Eng. End

D.B. End

8 of 9

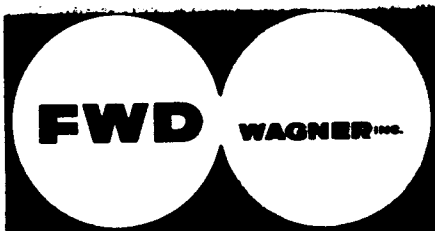
2 1 4 3 6 9

2 1 4 3 7 0

Rel: 2-13-69

AXLE ASSEMBLY  
(BRAKE GROUP)  
(20 X 7)

ITEM	FWD NO.	DESCRIPTION	QTY.
1	214598	Slack Adjuster	2
2	214599	Washer	4
3	214600	Quad Ring	2
4	214601	Snap Ring	2
5	214602	Dust Shield R.H.	2
	214603	Dust Shield L.H.	2
6	214604	Capscrew	8
		Capscrew Lockwasher	8
7		Lockwasher	4
8-13	NOT USED		
14	214605	Capscrew	4
15	214606	Bracket - Camshaft	2
16	214607	Bushing - Camshaft & Spider	4
17	214608	Washer	3
18	214609	Snapring	4
19	518270	Spider	2
20	NOT USED		
21	214610	Shoe Assembly	4
22	214611	Lining	8
23	NOT USED		
24	214612	Capscrew - Flathead	64
	214613	Lockwasher 3/8 AH	64
		Nut 3/8" - 24	64



PORTLAND, OREGON

Eng. End

9 of 9  
2 1 4 3 6 9

D.B. End

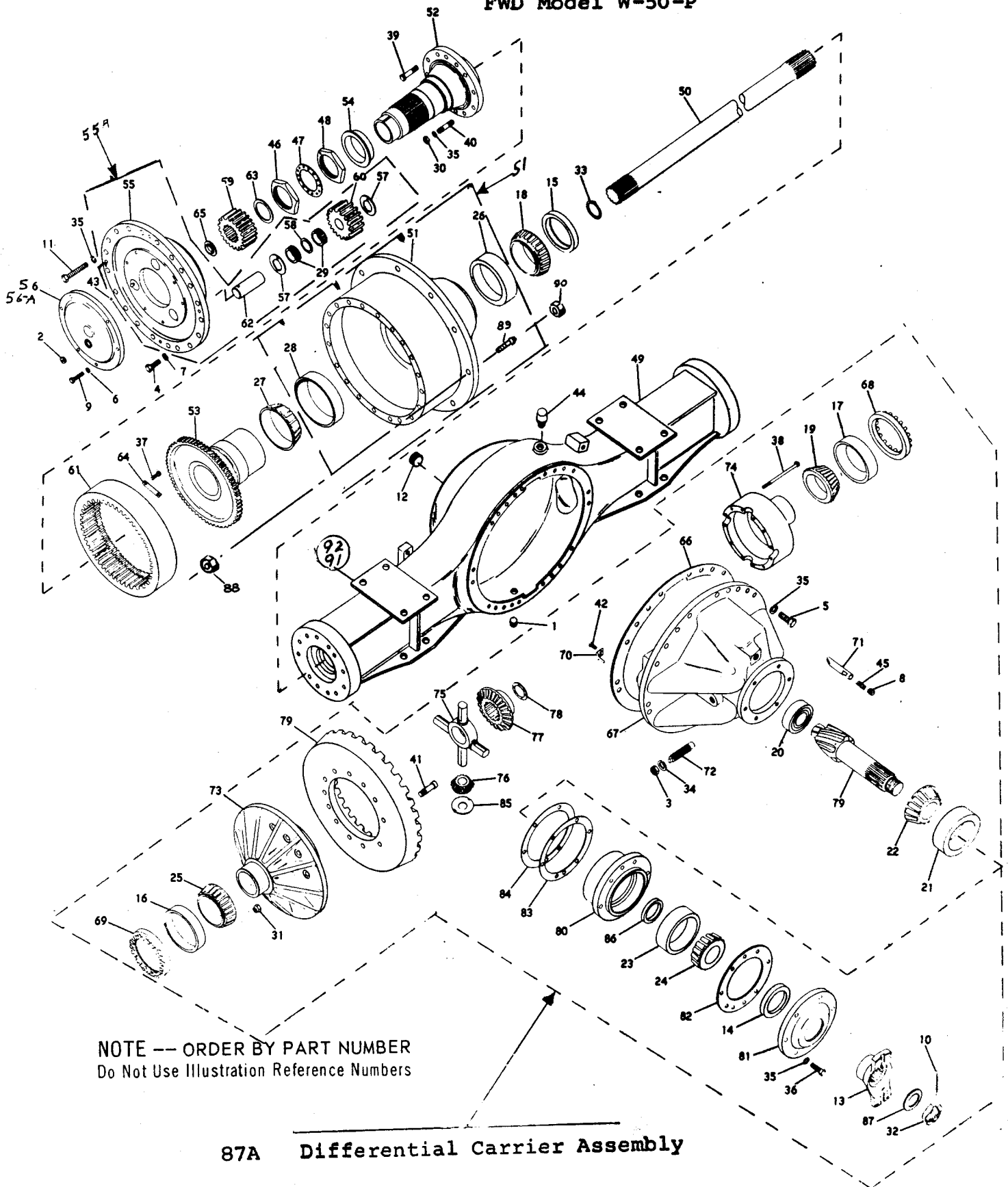
2 1 4 3 7 0

Rel: 2-13-69

AXLE ASSEMBLY  
BRAKE GROUP  
(20 X 7)

ITEM	FWD NO.	DESCRIPTION	QTY.
25	201243	Spring - Return	2
26	207773	Pin - Anchor	4
27-29	NOT USED		
30	201070	Set Screw	4
33	214614	Camshaft R.H.	1
	214615	Camshaft L.H.	1
34	NOT USED		
35	214616	Roller - Cam	4
	214617	Roller - Pin	4
36	214618	Roll Pin	4
37	N.S.S.	Pin - Spring Return	
	214635	Brake Drum - NOT ILLUSTRATED	2
38	201064	Air Chamber - NOT ILLUSTRATED	2

**AXLE ASSEMBLY (98" Track)**  
**FWD Model W-50-P**





PORTLAND, OREGON

Eng. End

2 1 4 4 6 5

D.B. End

2 1 4 4 6 6

AXLE ASSEMBLY (98" TRACK)

Rel: 2-13-69

Engine End - 108326

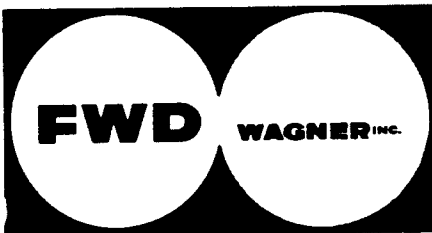
Drawbar End - 108327

W-50-P

2 of 9

ITEM	FWD NO.	DESCRIPTION	QTY.
1		Plug, 1-1/4" Pipe	1
2		Plug, 1" Pipe	4
3		Nut, 1-1/8 Jam	1
4		Capscrew, 5/8-18 x 3/4	8
5		Capscrew, 5/8-18 x 1/75	22
6		Lockwasher, 7/16	12
7		Lockwasher, 5/8	8
8		Plug, 3/4" Pipe	1
9		Capscrew, 7/16 20 x 1.25	12
10		Pin, cotter	1
11		Bolt, 5/8-18 x 250	40
12	213350	Plug, 1" Magnetic	1
13	213352	Yoke	1
14	213353	Seal, Oil	1
15	213354	Seal, Oil	2
16	206398	Cup, bearing	1
17	207831	Cup, bearing	1
18	213355	Cone, bearing	2
19	213356	Cone, bearing	1
20	213357	Bearing, pinion	1
21	201130	Cup, bearing	1
22	213375	Cone, bearing	1





PORTLAND, OREGON

Eng. End

3 of 9

2 1 4 4 6 5

D.B. End

2 1 4 4 6 6

AXLE ASSEMBLY (98" TRACK)

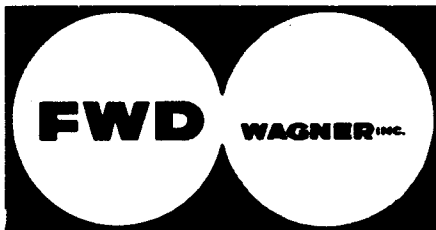
Rel: 2-13-69

Engine End - 108326

Drawbar End - 108327

W-50-P

ITEM	FWD NO.	DESCRIPTION	QTY.
23	213376	Cup, bearing	1
24	213377	Cone, bearing	1
25	204592	Cone, bearing	1
26	213378	Cup, bearing	2
27	206519	Cone, bearing	2
28	213379	Cup, bearing	2
29	213380	Roller, bearing	12
30		Nut, 5/8-18 NF	24
31		Nut, 5/8-18	12
32		Nut, 1-3/4-12 UN	1
33	213869	Ring, retaining	2
34		Lockwasher	1
35	200762	Washer	68
36		Capscrew, 5/8-11 x 1.75	6
37		Capscrew, 7/16-29 x 1	16
38		Capscrew, 5/8-18 x 5	8
39	214619	Capscrew, 5/8-18 x 4.50	8
40		Stud, 5/8 NF x 3.50	16
41		Capscrew, 5/8-18 x 1.75	12
42		Capscrew, 3/8-16 NC x .62	2
43	213382	Ball, detent	6
44	213383	Vent, air	1
45	213384	Spring	1



PORTLAND, OREGON

Eng. End

4 of 9

2 1 4 4 6 5

D.B. End

2 1 4 4 6 6

AXLE ASSEMBLY (98" TRACK)

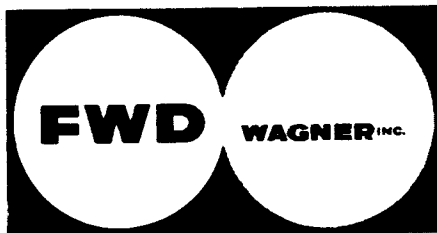
Rel: 2-13-69

Engine End - 108326

Drawbar End - 108327

W-50-P

ITEM	FWD NO.	DESCRIPTION	QTY.
46	213878	Locknut, inner	2
47	213385	Spacer, locknut	2
48	213879	Locknut, outer	2
49	213757	Housing	1
50	213756	Shaft, axle	2
51	213388	Hub, wheel	2
52	213389	Skein, axle	2
53	213390	Hub, ring gear (3.882:1)	2
54	213391	Bushing	2
55	213392	Spider, planetary	2
56	213393	Cover, planetary	2
56a	213794	Cover, gasket	2
57	213394	Washer, thrust	12
58	213395	Spacer, bearing	6
59	213397	Gear, sun	6
60	213398	Gear, planet	2
61	213396	Gear, ring (3.882:1)	2
62	213399	Pin, planet, gear	6
63	213400	Ring, thrust	2
64	213401	Retainer, ring gear	8
65	213402	Button, thrust	2
66	213403	Gasket, carrier	1
67	213404	Carrier and Cap Assy.	1



PORTLAND, OREGON

Eng. End

5 of 9

2 1 4 4 6 5

D.B. End

2 1 4 4 6 6

AXLE ASSEMBLY (98" TRACK)

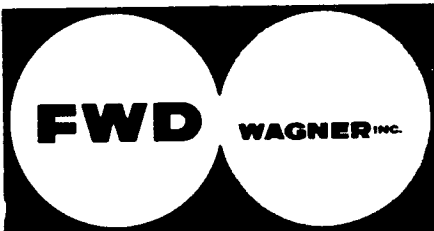
Rel: 2-13-69

Engine End - 108326

Drawbar End - 108327

W-50-P

ITEM	FWD NO.	DESCRIPTION	QTY.
	214595	Capscrew	4
68	213405	Locknut, R.H.	1
69	213406	Locknut, L.H.	1
70	213407	Lock, bearing adj.	2
71	213408	Scoop, oil	1
72	213409	Plug, back-up	1
73	213410	Case, Flanged diff.	1
74	213411	Case, plain Diff.	1
75	213412	Spider, diff.	1
76	213413	Gear, Pinion	4
77	213414	Gear, side	2
78	213415	Washer, thrust	2
79	213416**	Ring & Pinion Set, Rear (Blade or Drawbar End) SEE NOTE ON PAGE 6 BEFORE ORDERING	1
	213417**	Ring & Pinion Set, Front (Engine End) SEE NOTE ON PAGE 6 BEFORE ORDERING	1
80	213418	Housing, pinion bearing	1
81	213419	Cover, pinion bearing	1
82	213420	Gasket, bearing cover	1
83	213421	Shim, bearing cover	4
84	213422	Shim, bearing cover	4
85	213423	Washer, thrust	4
86	214596	Spacer, pinion bearing	1



PORTLAND, OREGON

Eng. End

6 of 9

2 1 4 4 6 5

D.B. End

2 1 4 4 6 6

AXLE ASSEMBLY (98" TRACK)

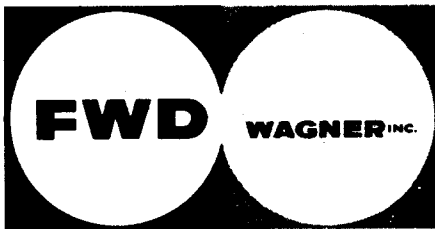
Rel: 2-13-69

Engine End - 108326

Drawbar End - 108327

W-50-P

ITEM	FWD NO.	DESCRIPTION	QTY.
87	213425	Washer, flat	1
	214597	Bushing-Taperlock - NOT ILLUSTRATED	1
87a	213426	Carrier Assembly, Rear (Blade or Drawbar End)	1
87a	213427	Carrier Assembly, Front (Engine End)	1
88	207559	Nut - Wheel	20
89	207558	Stud - Wheel	20
90	204133	Nut - Stud	20
		Bolt - Axle to Pad 1-14 x 10½ Lg. Gr. 8	24
		Nut - High - Fibrelock 1" NF	24
<p><b>** NOTE: BE SURE TO CHECK UNIT MASTER CHECK SHEET, AXLE SECTION, FOR AXLE ASSEMBLY NUMBER LISTED FOR LOCATION (ENGINE END OR DRAWBAR OR BLADE END) BEFORE ORDERING THIS ITEM.</b></p>			



PORTLAND, OREGON

Eng. End

D.B. End

(or Blade)

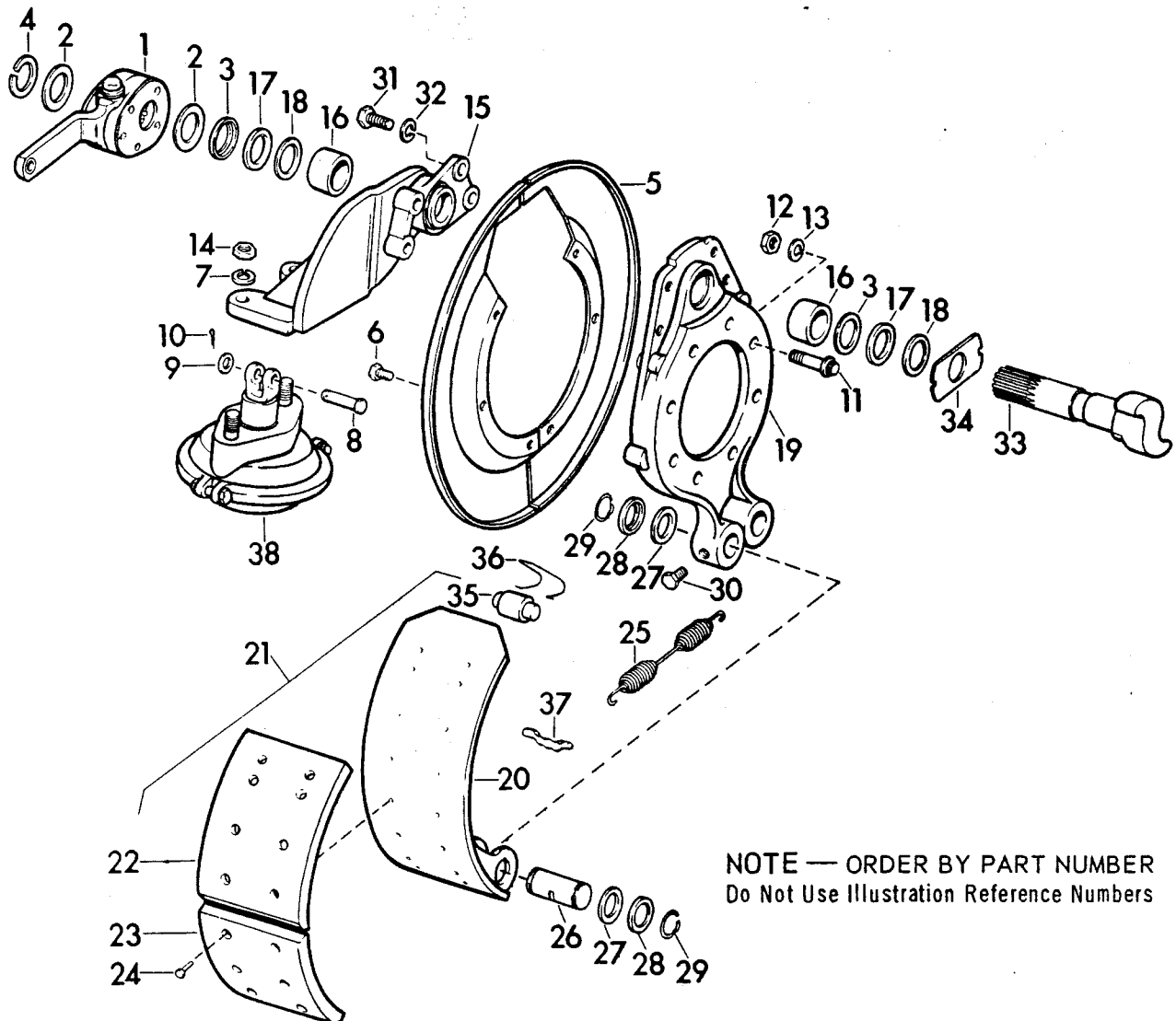
AXLE ASSEMBLY  
(BRAKE GROUP)

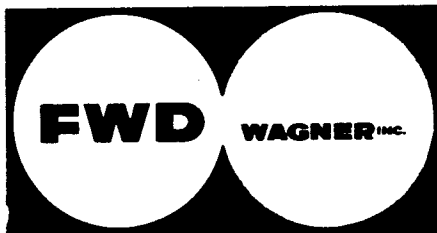
7 of 9

2	1	4	4	6	5
2	1	4	4	6	6
Rel: 2-13-69					

8 125

BRAKE ASSEMBLY





PORTLAND, OREGON

Eng. End 2 1 4 4 6 5  
D.B. End 2 1 4 4 6 6

8 of 9

AXLE ASSEMBLY  
BRAKE GROUP  
(20 X 7)

Rel: 2-13-69

ITEM	FWD NO.	DESCRIPTION	QTY.
1	214598	Slack Adjuster	2
2	214599	Washer	4
3	214600	Quad Ring	2
4	214601	Snap Ring	2
5	214602	Dust Shield, R.H.	2
	214603	Dust Shield, L.H.	2
6	214604	Capscrew	8
		Capscrew Lockwasher	8
7		Lockwasher	4
8-13	NOT USED		
14	214605	Capscrew	4
15	214606	Bracket - Camshaft	2
16	214607	Bushing - Camshaft & Spider	4
17	214608	Washer	3
18	214609	Snapring	4
19	518270	Spider	2
20	NOT USED		
21	214610	Shoe Assembly	4
22	214611	Lining	8
23	NOT USED		
24	214612	Capscrew - Flathead	64
	214613	Lockwasher 3/8 AH	64



PORTLAND, OREGON

Eng. End

D.B. End

9 of 9

2 1 4 4 6 5

2 1 4 4 6 6

Rel: 2-13-69

AXLE ASSEMBLY  
BRAKE GROUP  
(20 X 7)

ITEM	FWD NO.	DESCRIPTION	QTY.
		Nut - 3/8" - 24	64
25	201243	Spring - Return	2
26	207773	Pin - Anchor	4
27-29	NOT USED		
30	201070	Setscrew	4
33	214620	Camshaft - R.H.	1
	214621	Camshaft - L.H.	1
34	NOT USED		
35	214616	Roller - Cam	4
	214617	Roller - Pin	4
36	214618	Roll Pin	4
37	N.S.S.	Pin - Spring Return	
	214635	Brake Drum - NOT ILLUSTRATED	2
38	201064	Air Chamber - NOT ILLUSTRATED	2

**FWD**

**WAGNER INC.**

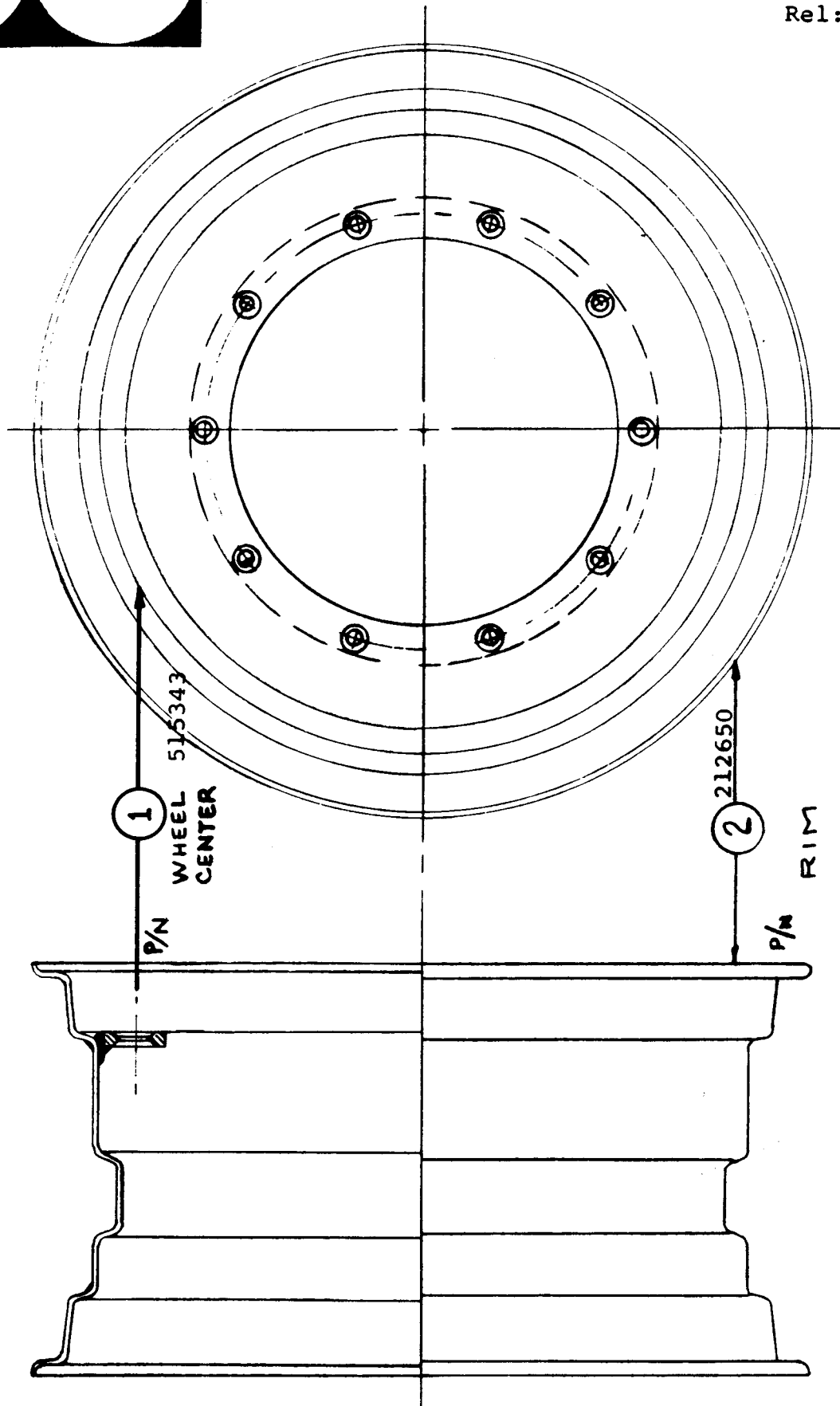
PORTLAND, OREGON

1 of 1

5 1 5 3 4 2

B/M 3340

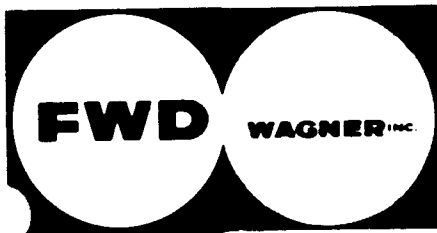
Rel: 8-5-66



**WHEEL ASSEMBLY**

Dual - Outer - WA-17





PORTLAND OREGON

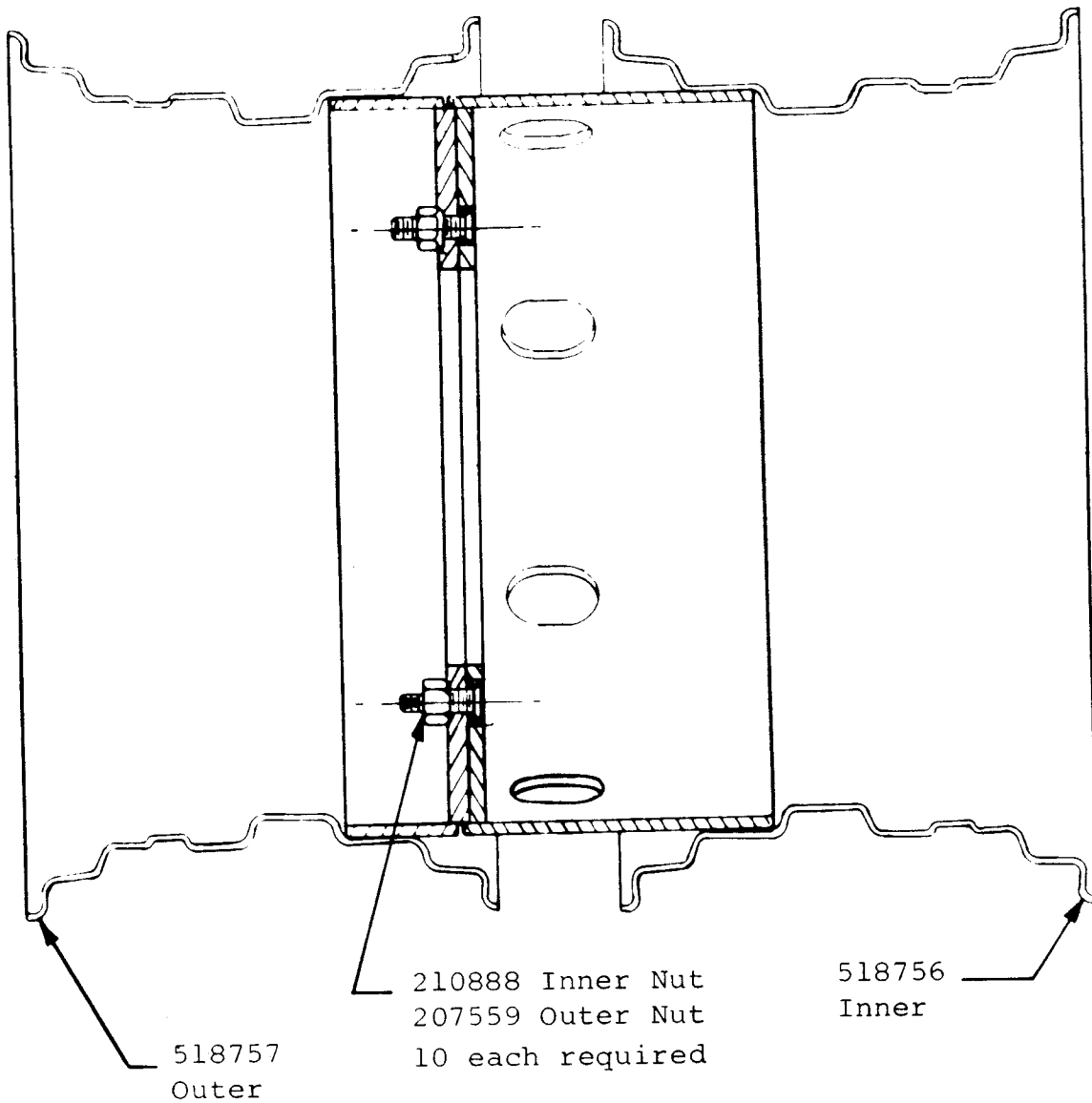
1 of 1

518756-578757

B/M 4172

Rel:2-20-69

DUAL WHEELS  
for 23.1 - 30 Tires  
98" Track Axle





PORTLAND, OREGON

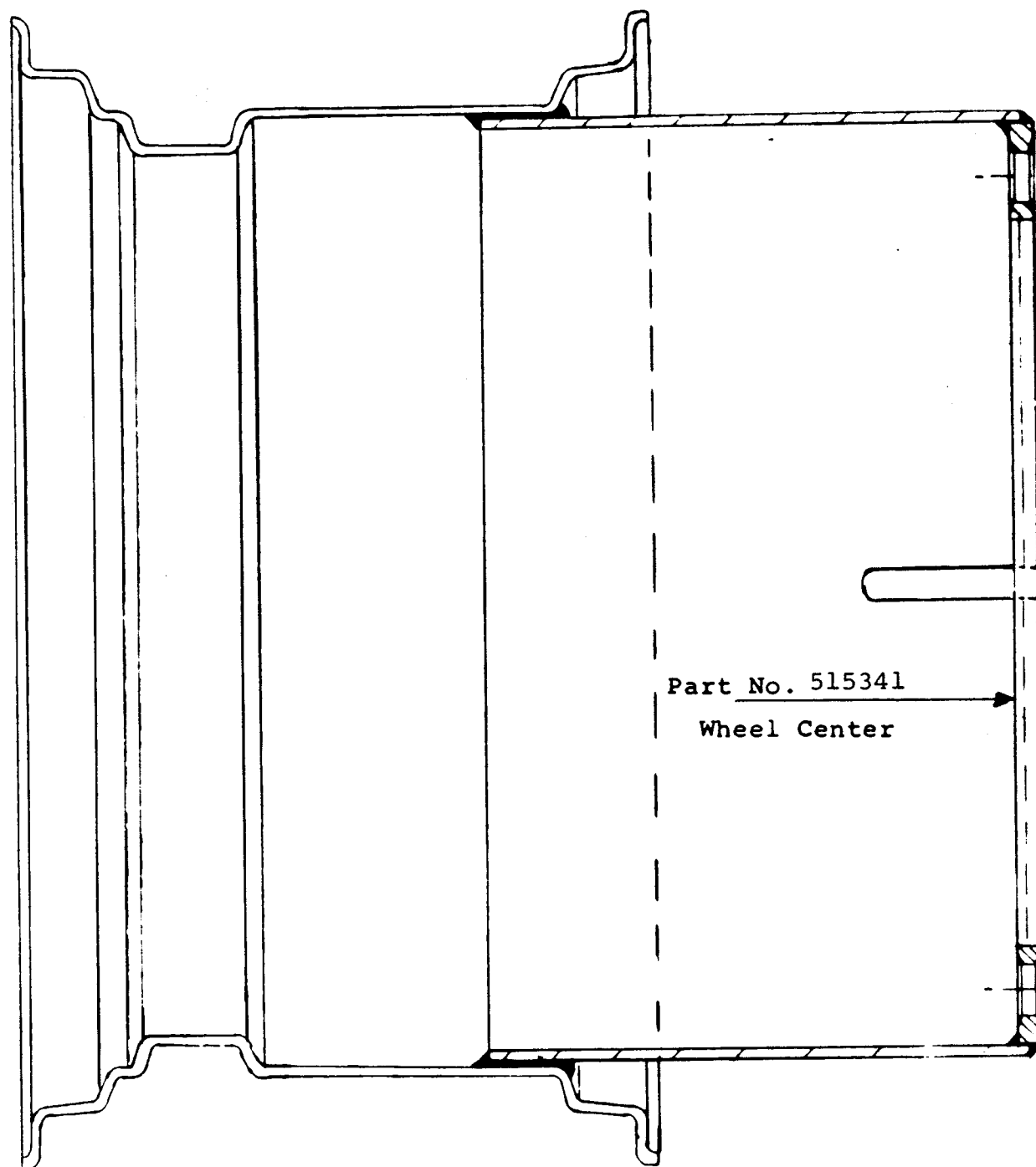
1 of 1

5 1 5 3 0 8

B/M 3340

Rel: 8-5-66

WHEEL ASSEMBLY  
DUAL - INNER

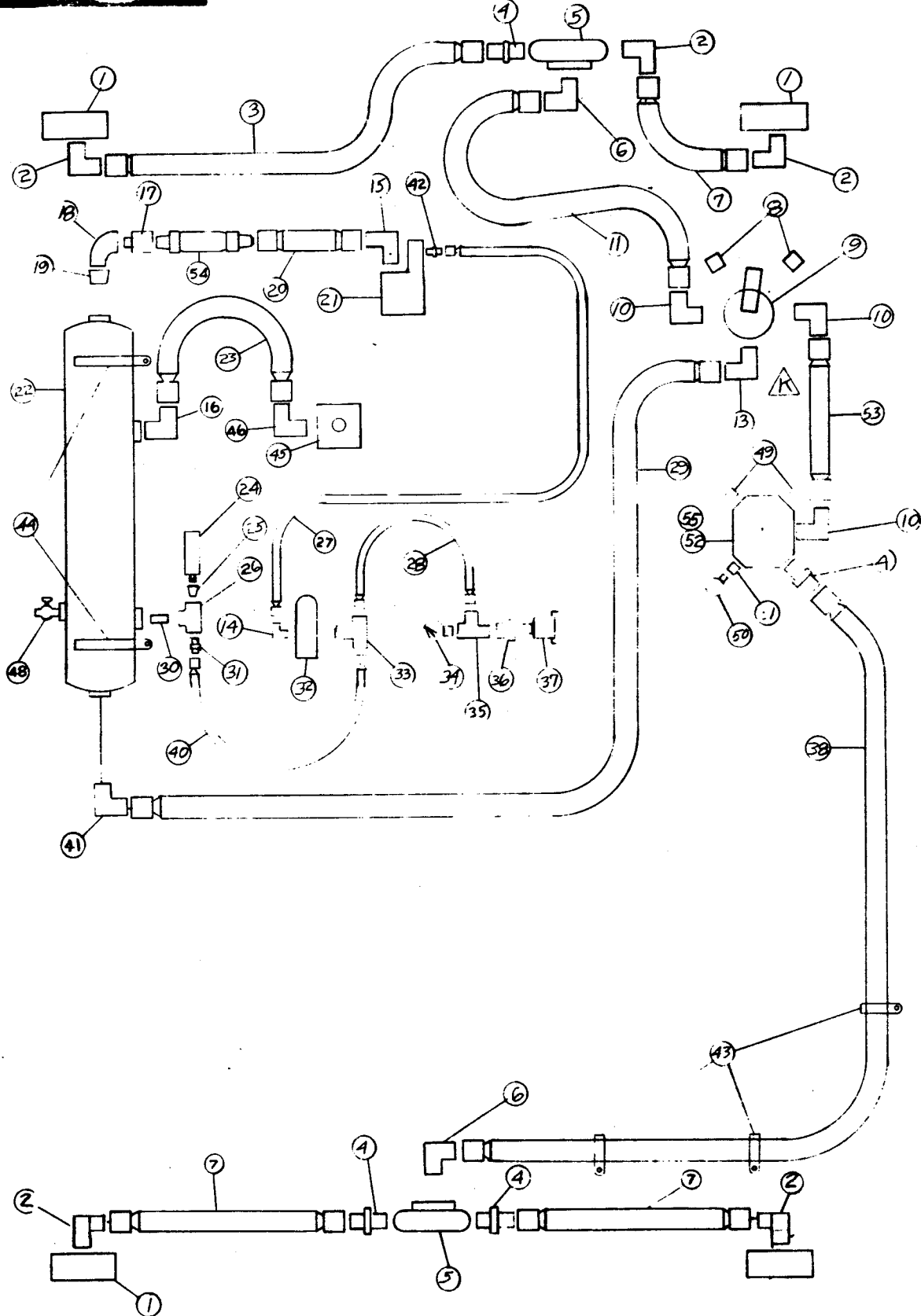


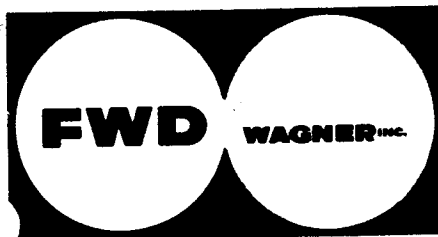
210888 Inner Cap Nut  
207559 Outer Cap Nut

12  
12

NOTE: WHEEL CENTER ONLY SERVICED AS REPLACEMENT  
PART - OTHERWISE ORDER COMPLETE ASSEMBLY.

**SCHEMATIC - AIR**  
**WA-14 WA-17**





PORTLAND, OREGON

2 of 4

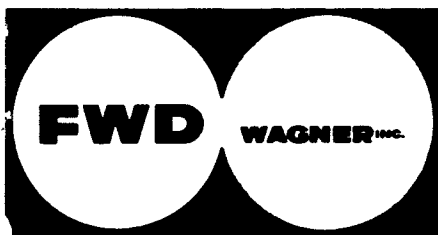
5 1 7 2 2 6

B/M 3657

Rel: 3-22-67

PLUMBING - AIR  
Models WA-14 WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
1	517226	Schematic - Air Plumbing	1
2	209396	Adapter	5
3	209667	Hose Assembly	1
4	209304	Adapter	4
5	207900	Quick Release	2
6	209397	Adapter	2
7	209922	Hose Assembly	3
8	209917	Plug	2
9	212557	Treadle Valve	1
10	209798	Adapter	3
11	209923	Hose Assembly	1
13	209399	Adapter	1
14	209317	Adapter	1
15	209414	Adapter	1
16	209920	Adapter	1
17	207917	Check Valve	1
18		Street Ell 1/2" Pipe	1
19		Bushing 3/4 x 1/2 Pipe	1
20	209711	Hose Assy.	1
22	207904	Tank	1
23	209924	Hose Assy.	1
24	207901	Safety Valve	1
25		Bushing 3/8 x 1/4 Pipe	1



PORTLAND, OREGON

3 of 4

5 1 7 2 2 6

B/M 3657  
Rel: 3-22-67PLUMBING - AIR  
Models WA-14 WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
26		Tee 3/8" Pipe	1
27	209926	Hose Assembly	1
28	209927	Hose Assembly	1
29	209928	Hose Assembly	1
30		Close Nipple 3/8" Pipe	1
31	209391	Adapter	1
32	208930	Governor	1
33	209953	Tee	1
35	209952	Tee	1
36		Bell Reducer	1
38	209929	Hose Assembly	1
40	209930	Hose Assembly	1
41	210738	Elbow	1
42	209390	Adapter	1
43	209579	Clamp	15
44	207905	Tank Strap	2
46	209394	Adapter	1
48	207903	Drain Cock	1
51		Bushing 1/4 x 1/8 Pipe	1
52	211949	Micro Brake Lock	1
53	209932	Hose Assembly	1
54	209931	Hose Assembly	1
55	515002	Bracket - Brake Valve	1



PORTLAND, OREGON

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5 1 7 2 2 6  
B/M 3657  
Rel: 3-22-69PLUMBING - AIR  
Model WA-14 WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
	503252	Mounting Plate- Quick Release Valve Not Shown	1
	504991	Clamp - Hose Not Shown	2
	209698	Hose Clamp	1
	209696	Hose Clamp	2
	209702	Hose Clamp	2
		Weld Stud - $\frac{1}{4}$ - 20 NC x $\frac{3}{4}$ " Lg.	18
		Lockwasher - $\frac{1}{4}$ "	18
		Flatwasher - $\frac{1}{4}$ "	18
		Nut - Hex $\frac{1}{4}$ - 20 NC	18
		Weld Stud - $\frac{3}{8}$ - 16 NC x $\frac{3}{4}$ " Lg.	6
		Lockwasher - $\frac{3}{8}$ "	6
		Flatwasher - $\frac{3}{8}$ "	2
		Flatwasher - $\frac{7}{16}$ "	4

**FWD WAGNER INC.**

PORTLAND, OREGON

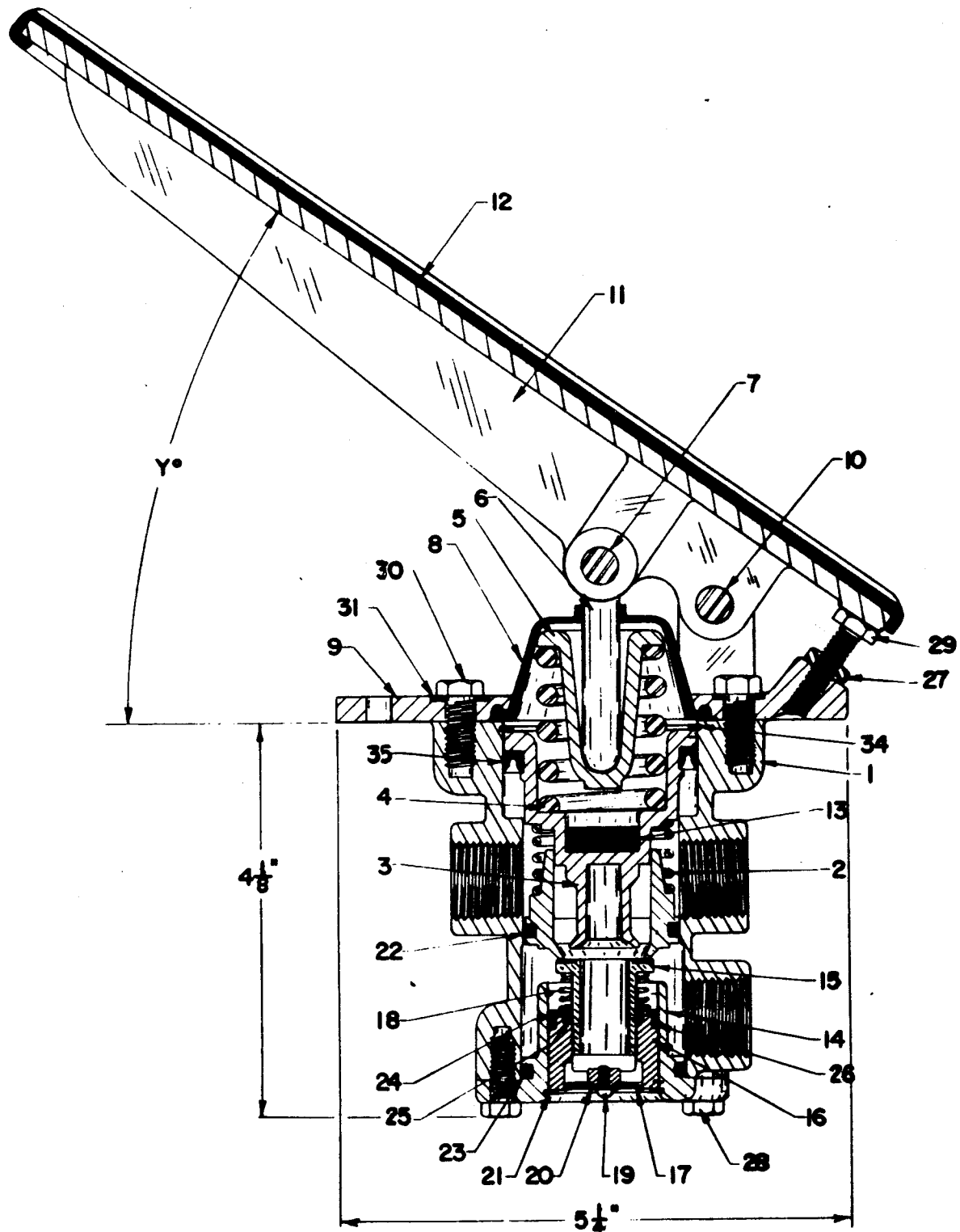
1 of 2

2 1 2 5 5 7

WM-326-A

REL: 6-7-66

**TREADLE APPLICATION VALVE  
AIR BRAKES**



**FWD WAGNER INC.**

PORTLAND, OREGON

2 of 2

2 1 2 5 5 7

WM-326-A

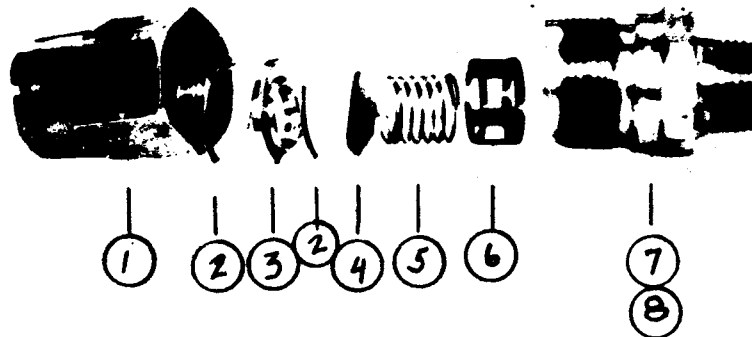
REL: 6-10-66

TREADLE APPLICATION VALVE  
AIR BRAKES

ITEM	FWD NO.	DESCRIPTION	QTY.
	212601	REPAIR KIT (Contains Items Marked*)	
	212602	REPAIR KIT (Contains Items Marked xx)	
*8		DUST BOOT	1
*13		SPRING CUP STOP	1
*15	XX	EXHAUST SEAT TUBE ASSEMBLY	1
*16	XX	EXHAUST SEAT TUBE GUIDE	1
*17	XX	EXHAUST CHECK	1
*18	XX	SPRING	1
*22	XX	"O" RING	1
*23	XX	"O" RING	1
*24	XX	SEAT RETAINER RING	1
*25	XX	"O" RING	1
*26	XX	"O" RING	1
NOTE: For Parts Not Contained In Repair Kits Order By Illust. No.			



## CHECK VALVE - AIR

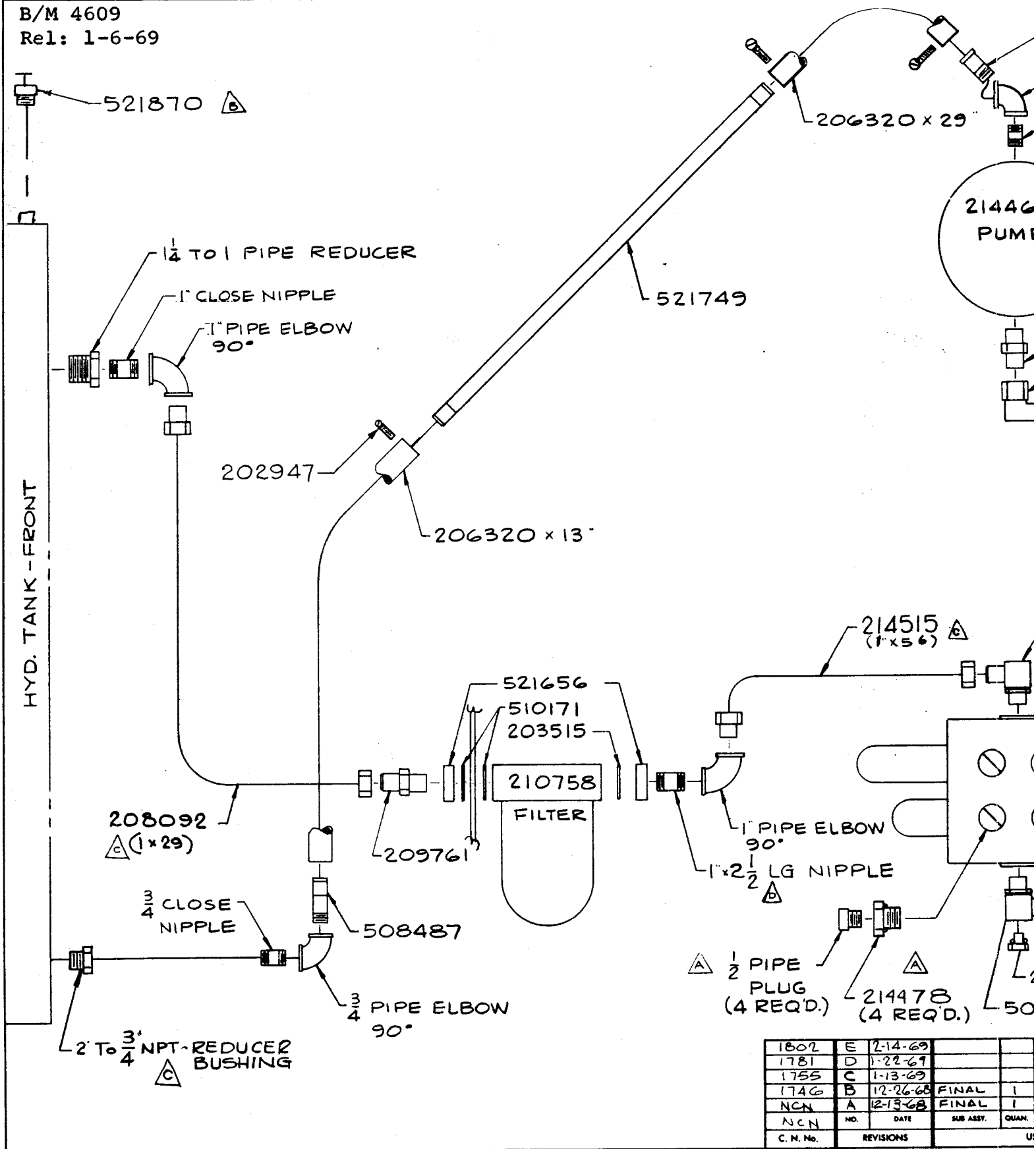


ITEM	PART NO.	DESCRIPTION	* QTY.
1.	206324	BODY	1
2.	206328	WASHER	2
3.	206329	VALVE SEAT	1
4.	206334	DISC-VALVE	1
5.	206333	SPRING	1
6.	206332	VALVE STOP BUSHING	1
7.	206330	SCREW CAP ASS'Y.	1
8.	206331	SCREW CAP	1

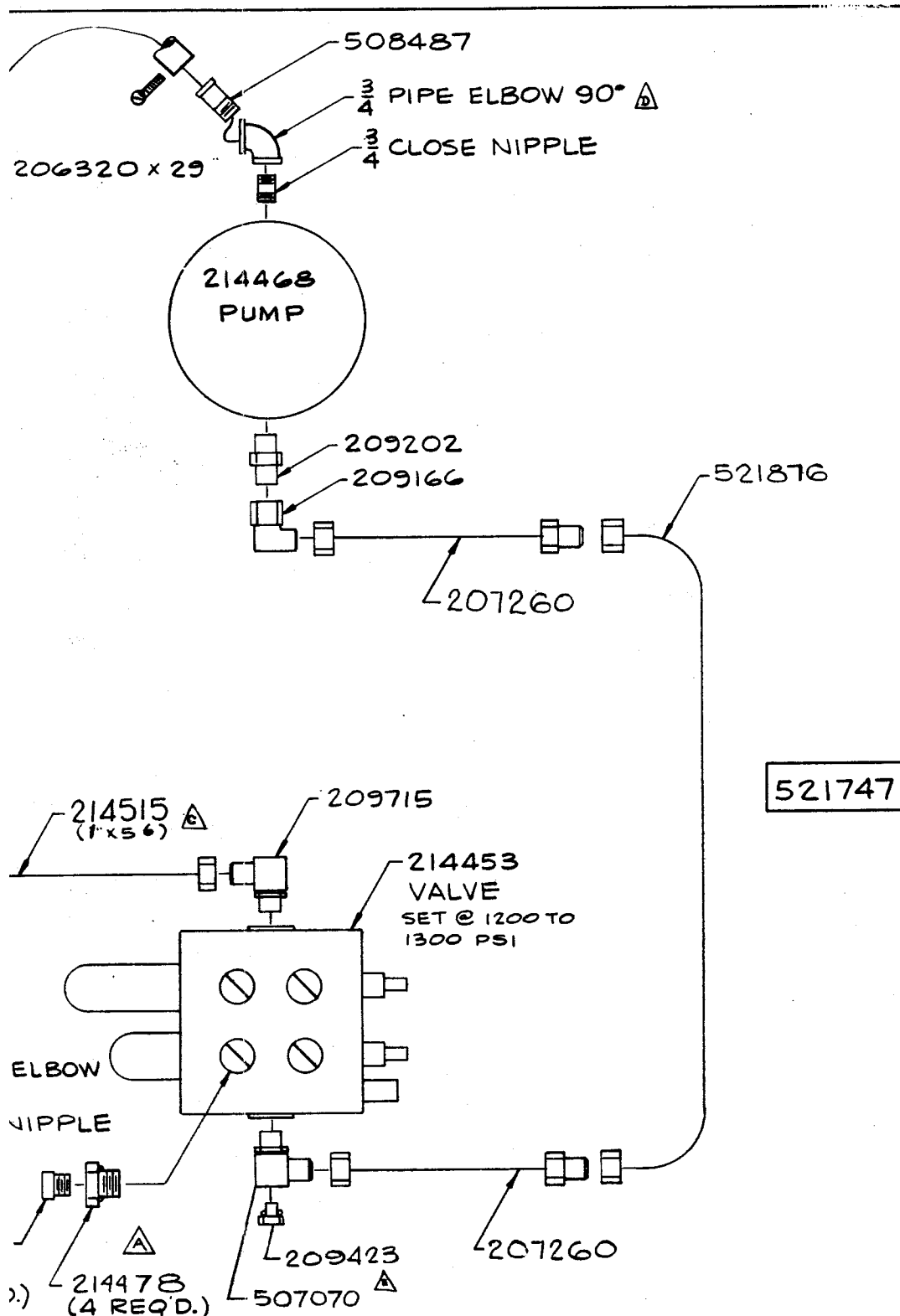
1 of 3

B/M 4609

Rel: 1-6-69



1802	E	2-14-69		
1781	D	1-22-69		
1755	C	1-13-69		
1746	B	12-26-68	FINAL	1
NCN	A	12-13-68	FINAL	1
NCN	NO.	DATE	SUB ASST.	QUAN.
C. N. No.	REVISIONS			U:



2	E	2-14-69							Material	WT.
3	D	1-22-69								
4	C	1-13-69							<b>FWD WAGNER</b> INC.	PORTLAND, OREGON
5	B	12-26-68	FINAL	1	WA	17	4B	DRAWN: PAULL.	DATE: 12-9-68	CHK.
6	A	12-13-68	FINAL	1	WA	14	4B	SCALE: —		
7	NO.	DATE	SUB ASSY.	QUAN.	MODEL	GROUP		TITLE: SCHEMATIC		DEVS. NO. 521747
8	REVISIONS			USAGE P/L 4609			HYD. IMPLEMENT			



PORTLAND, OREGON

2 of 3

5 2 1 7 4 7

B/M 4609

Rel: 1-6-69

HYDRAULIC IMPLEMENTS  
WA-14 WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
	208092	Hose Assembly	1
	214515	Hose Assembly	1
	207260	Hose Assembly	2
	206320	Hose - Suction 13" Lg.	1
	206320	Hose - Suction 29" Lg.	1
	209423	Plug - "O" Ring	1
	209166	Adapter	1
	209202	Adapter	1
	507070	Adapter	1
	209715	Adapter	1
	209761	Adapter	1
	214478	Adapter	4
	203515	"O" Ring	1
	210758	Filter	1
	214453	Valve	1
	214468	Pump	1
	508487	Pipe Fitting	2
	510171	Gasket	2
	521656	Flange Fitting - Rework	2
	521749	Pipe - Pump Section	1
	521876	Tube Assy.	1
		Close Nipple 3/4 NPT	2



PORTLAND, OREGON

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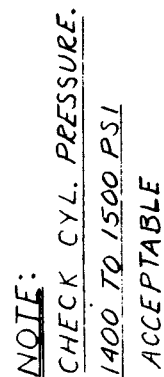
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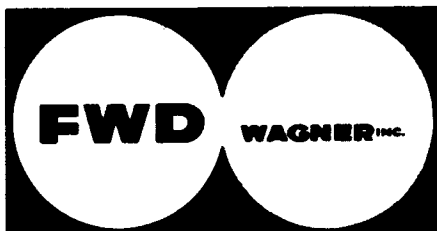
B/M 4609

Rel: 1-6-69

HYDRAULIC IMPLEMENTS  
WA-14 WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
		Pipe Ell 90° - 3/4 NPT	2
		Pipe Ell - 90° 1" NPT	2
		Close Nipple 1" NPT	1
		Reducer 1 - 1/4 to 1" NPT	1
		Plug 1/2 NPT	4
		1" x 2 - 1/2" Lg. Nipple	1
	521870	Dipstick Assembly	1

[illegible]



PORTLAND, OREGON

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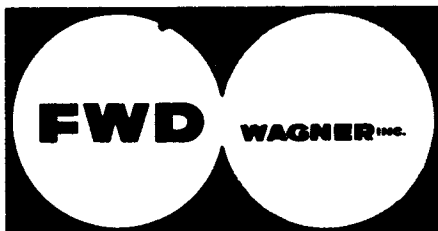
5 2 1 6 5 7

B/M 4397

Rel: 12-12-68

SCHEMATIC  
HYDRAULIC - PLUMBING  
WA-14 WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
1		Nipple - 2" NPT x 6" Lg.	1
2		Elbow - 2" NPT x 90°	1
3	508409	Pipe	1
4	504083	U-Bolt	1
5	510382	Plate	1
6		Coupling - 2" NPT	1
7		Reducer - 2" x 1-1/4" NPT	1
8		King Nipple - 1-1/4" NPT	1
9	202947	Hose Clamp	4
10	202948	Hose - 50" Lg.	1
11	206701	Adapter	1
12	209536	Flange	2
13	203446	"O" Ring	1
14	212344	Pump	1
15	209485	Adapter	1
16	213712	Hose Assembly	1
17	210774	Adapter	1
18	211141	Flow Control Valve	1
19	208713	Adapter	1
20H	211400	Hose Assembly	2
20T	511318	Tube Assembly	1
21	209483	Adapter	4



PORTLAND, OREGON

3 of 4

5 2 1 6 5 7

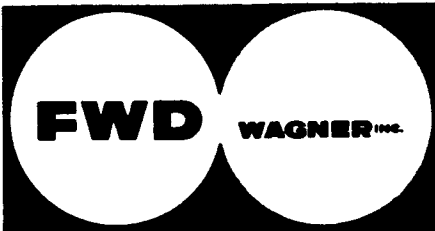
B/M 4397

Rel: 12-12-68

SCHEMATIC  
HYDRAULIC - PLUMBING  
WA-14 WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
22H	211321	Hose Assembly	2
22T	512266	Tube Assembly	1
23H	211481	Hose Assembly	2
23T	512267	Tube Assembly	1
24	510171	Gasket	2
24T	511315	Tube Assembly	1
25	209207	"O" Ring	1
26	209758	Adapter	1
27		Reducer 1" - 1/2" NPT	1
28	510172	Adapter - Oil Filter	1
29	209413	Adapter	1
30	521656	Flg. Plate	1
31		Pipe Plug - 1-1/4" NPT	1
32	203516	"O" Ring	1
33	210758	Filter	1
34		Nipple 1" NPT x 3" Lg.	1
35		Elbow - 90° 1" NPT	1
36	207938	Hose Assembly	1
37	209419	Adapter	1
38		Reducer 1-1/4" NPT - 1" NPT	1
39	213236	Valve	1
40	211397	Tee	2





PORTLAND, OREGON

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5 2 1 6 5 7

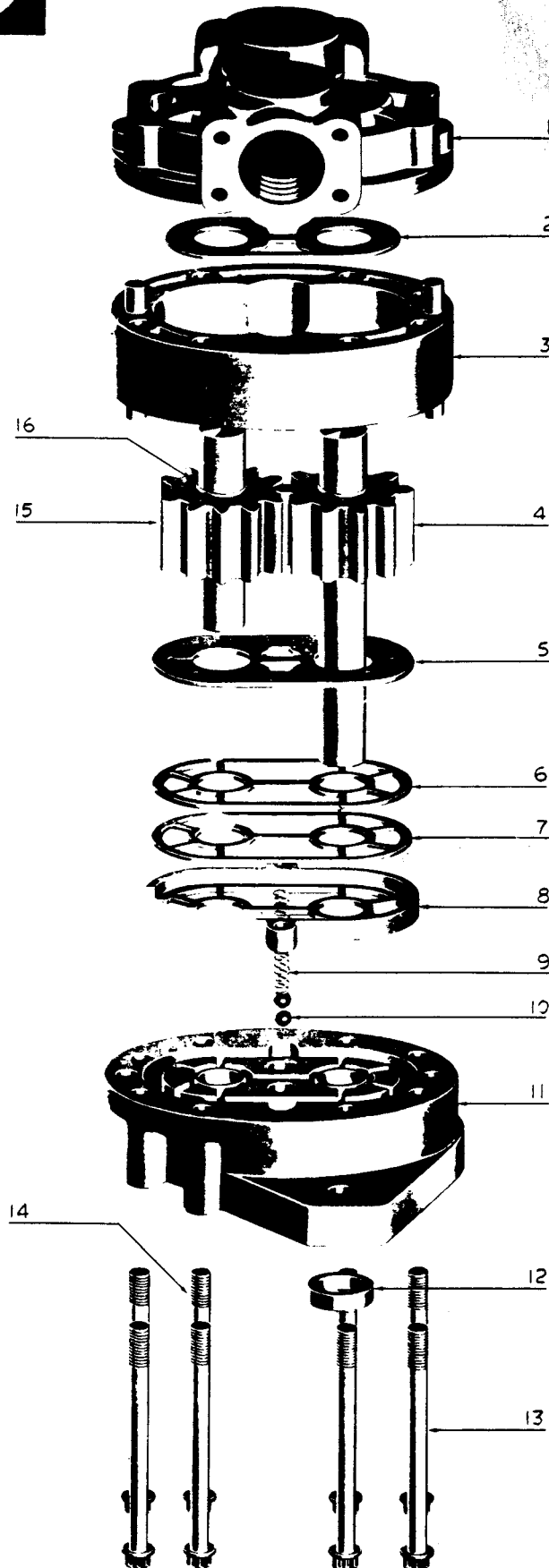
B/M 4397

Rel: 12-12-68

SCHEMATIC  
HYDRAULIC - PLUMBING  
WA-14 WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
41	514024	Bracket	1
42	518693	Tube Assembly	1
43	208373	Hose Assembly	1
44	211688	Grommet	4
45	201456	Clamp	3
46	209166	Adapter	1
47		Reducer - 1-1/4 x 1/2"	1

HYDRAULIC PUMP - CESSNA





PORTLAND, OREGON

2 of 2

2 1 2 3 4 4

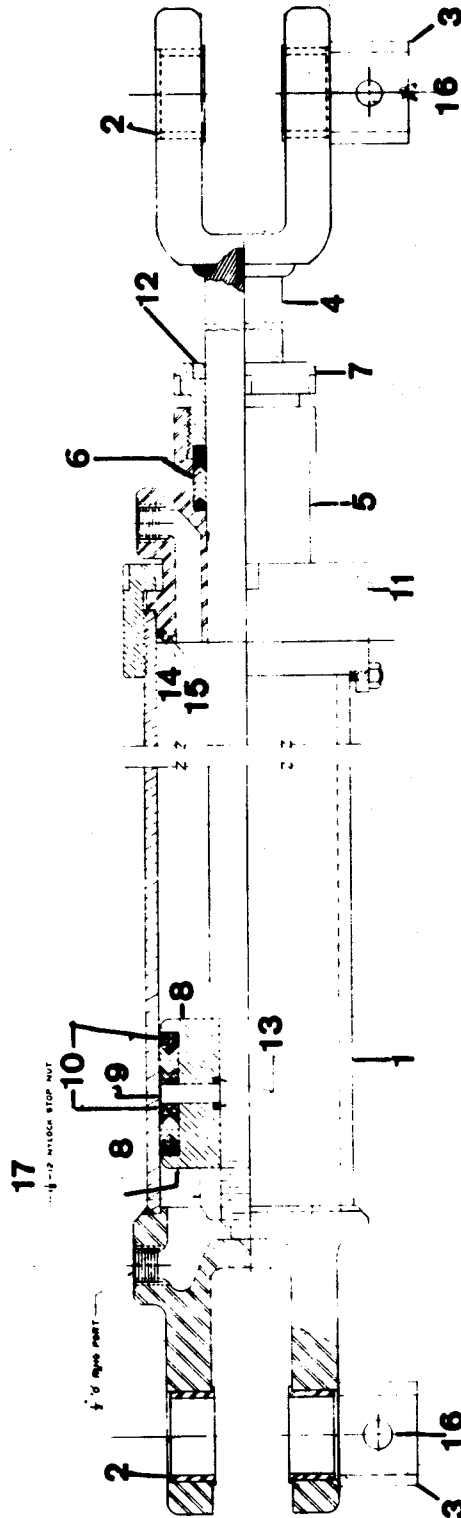
L-20112 IBCC  
(CCW)

Rel: 5-18-66

## HYDRAULIC PUMP - CESSNA

ITEM	FWD NO.	DESCRIPTION	QTY.
1*	206862	Back Plate Ass'y	1
2	206863	Thrust Plate	1
3	206864	Body & Dowel Ass'y	1
4*	212559	Drive Gear & Shaft Ass'y (Keyed)	1
5	206866	Diaphragm	1
6	206867	Nylatron Gasket	1
7	206868	Protector Gasket	1
8	206869	Moulded "V" Seal	1
9	206870	Spring	2
10	206871	Steel Ball	2
11*	206872	Front Plate Ass'y	1
12	206873	Shaft Seal	1
13	206874	Tie Bolt	4
14	206875	Tie Bolt	4
15*	206876	Idler Gear Ass'y	1
16		Snap Ring (Incl. w/ items 4 & 15 - Not Sold Separately)	1
* SOLD AS ASSEMBLY ONLY			

**STEERING CYLINDER  
(3-1/2 x 20")**





PORTLAND, OREGON

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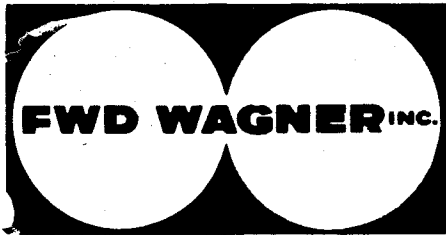
5 1 2 2 3 1

B/M 2898

Rel: 9-30-65

STEERING CYLINDER  
(3-1/2 x 20")

ITEM	FWD NO.	DESCRIPTION	QTY.
1	512230	Barrel & Base Ass'y	1
2	505350	Bushing	4
3	502086	Collar	2
4	512256	Stem & Eye Ass'y	1
5	505518	Packing Gland	1
6	505519	Stem Packing	1
7	505520	Packing - Nut	1
8	505521	Piston	2
9	505522	Piston Spacer	1
10	505523	Piston Packing	2
11	505524	Head - Retainer Ring	1
12	206313	Wiper - Scraper	1
13	203440	"O" Ring	4
14	203527	"O" Ring - Packing Gland	1
5	206308	Back-Up Ring	1
16	508277	Pin-Stem & Anchor Ends	2
17		Nut-Piston-1-1/8-12-Nylock-Stop	1
		Set Screw-1/4" (Not Illustrated)	1
		Bushing-Reg.Mach,-1-1/2 x 10 Gauge (Not illustrated)	4
		Lube Fitting-1/8 PTF x 11/16" Lg. " " " " " "	1
	204501	Bearing (Not Illustrated)	2
	209488	Adapter (Not Illustrated)	2



PORTLAND, OREGON

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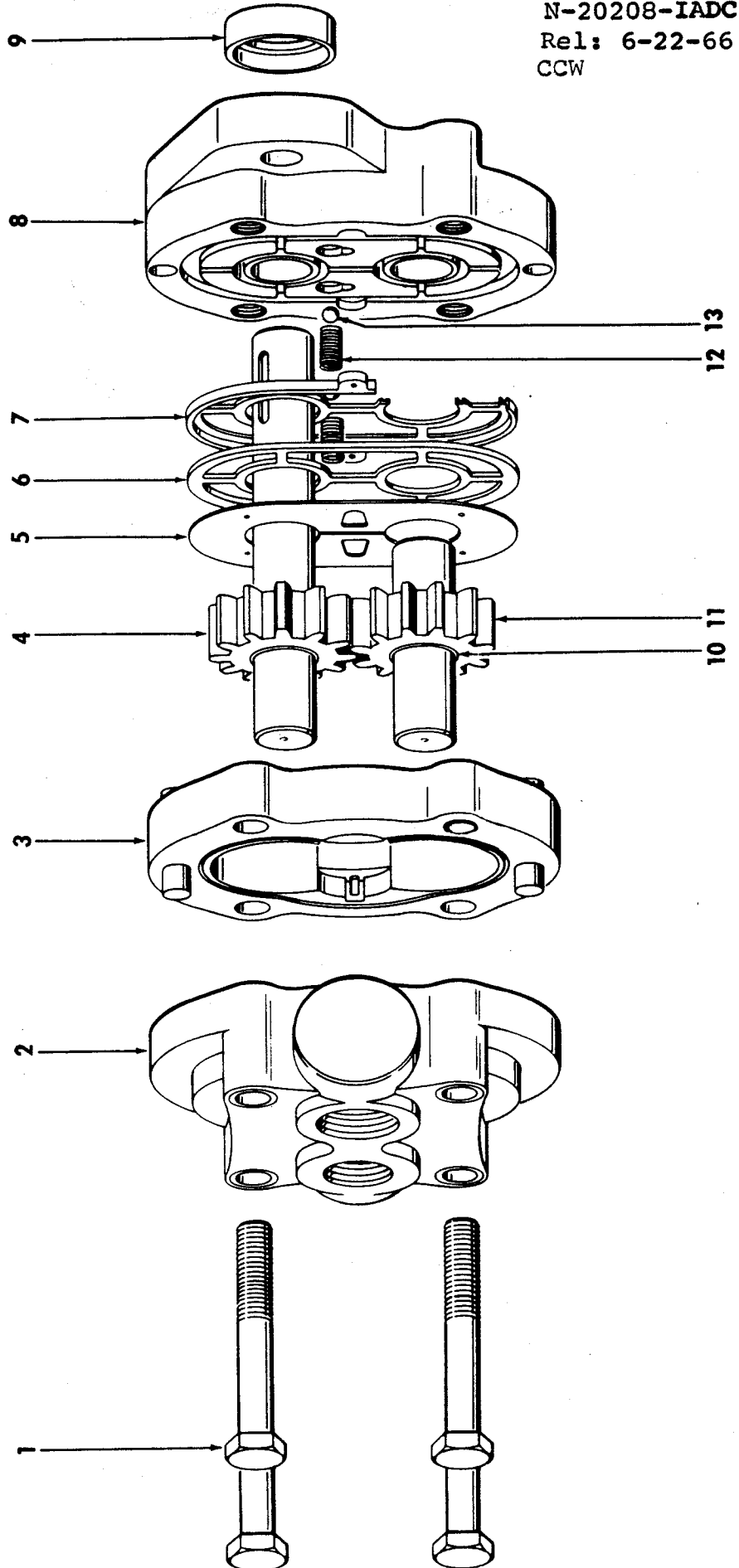
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N-20208-IADC

Rel: 6-22-66

CCW

PUMP - HYDRAULIC  
"H" SERIES



**FWD WAGNER INC.**

PORTLAND, OREGON

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2 0 9 0 3 3

N-20208=IADC

Rel: 6-22-66

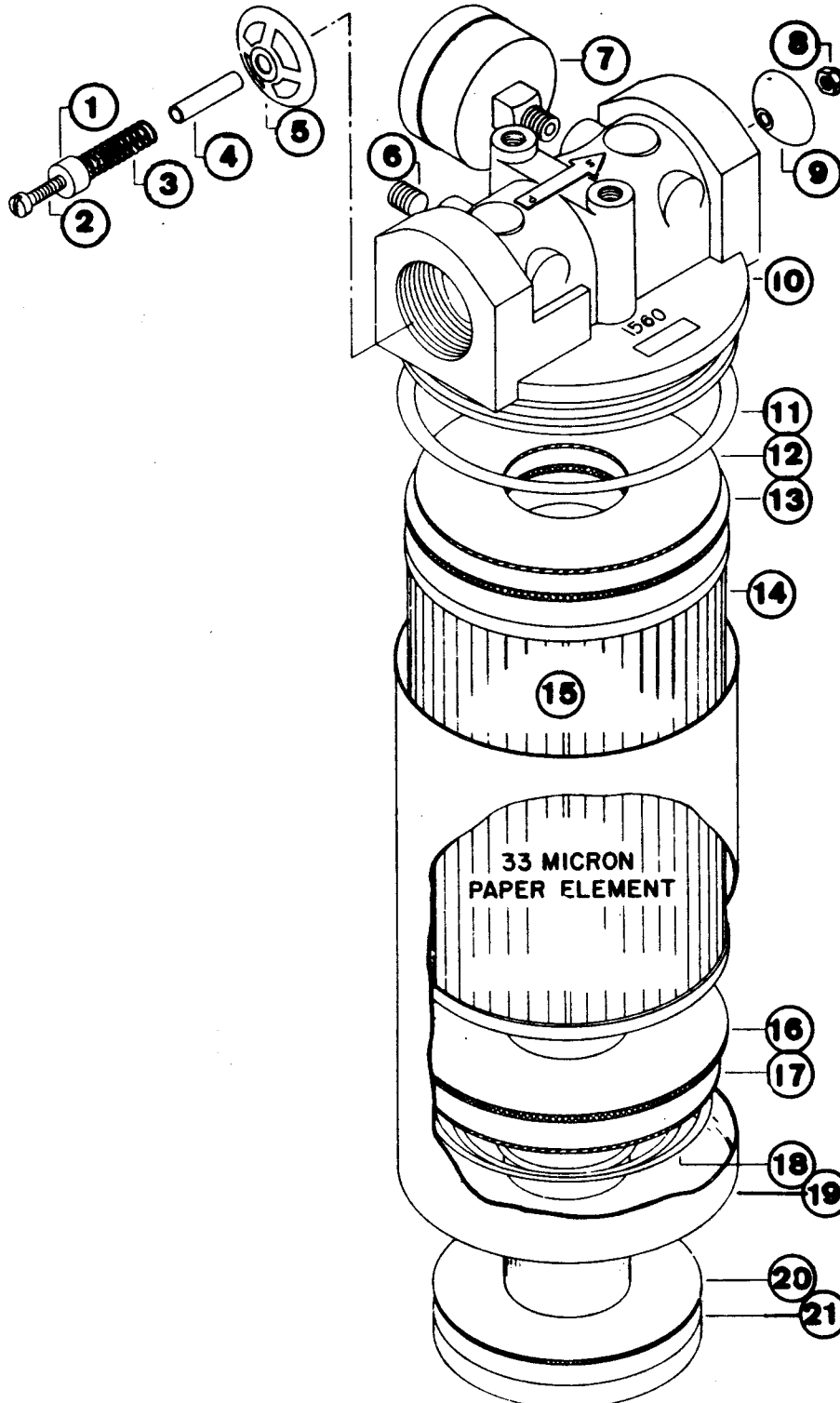
PUMP - HYDRAULIC  
"H" SERIES

ITEM	FWD NO.	DESCRIPTION	QTY.
1	212638	Cap Screw	4
2	212639	Back Plate Ass'y	1
3	212640	Body Ass'y	1
4	212641	Drive Gear Ass'y	1
5	212642	Diaphragm (Wear Plate)	1
6	212643	Backup Gasket	1
7	212644	Diaphragm Seal	1
8	212645	Front Plate Ass'y	1
9	212646	Shaft Seal	1
10		Snap Ring N.S.S. (Include with 4 & 11)	1
11	212647	Idler Gear Ass'y	1
12	208889	Springs	2
13	208912	Steel Balls	2

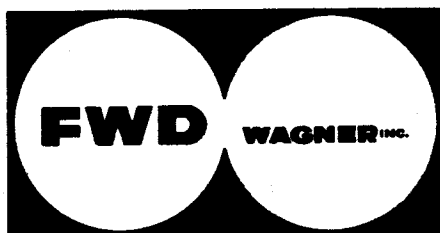
**FILTER - HYDRAULIC OIL**

FA-203

Rel. 2-3-69







PORTLAND, OREGON

2 of 2

210758

R-FA-203

Rel: 11-25-64

FILTER - HYDRAULIC OIL

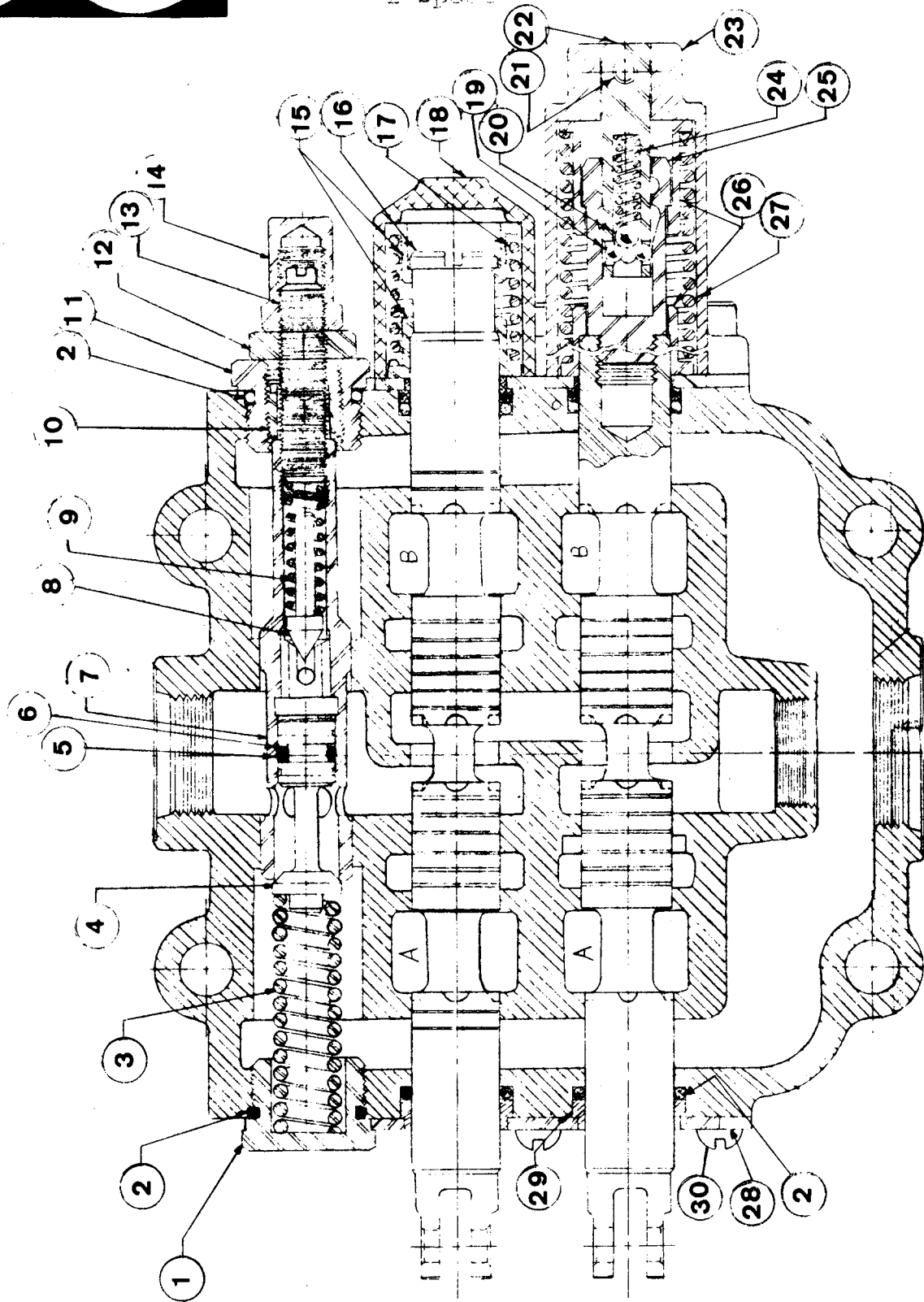
ITEM	FWD NO.	DESCRIPTION	QTY.
1	210154	Cap	1
2	210153	Screw	1
3	210155	Spring	1
4	210156	Spacer	1
5	210157	Guide	1
6	1/8"	Plug	1
7	Not Used	Indicator	1
8	210158	Locknut	1
9	210159	Valve-Bypass	1
10	210765	Head	1
11	210161	Seal	1
12-17	210162	Back-Up Washer	2
13-16	210163	Gasket	2
14-15	210117	Element	1
18	210164	Spring	1
19	210165	Housing	1
20	210166	Gasket	1
21	210167	Center Post	1

HYDRAULIC VALVE  
 2 SPOOL

ITEM	FWD NO.	DESCRIPTION	QTY.
		<p>This illustration and Parts List covers a 2-spool unit with parts quantities for same. Valves with more spools use same parts in corresponding quantity increases.</p> <p>NOTE: Valve body and spool assemblies are not available as service parts.</p> <p>The following are part numbers for valves with additional spools:</p>	
	210948	3 spool valve	
	210949	4 spool valve	
	210950	5 spool valve	
	211003	6 spool valve	

HYDRAULIC VALVE

2 Spool





PORTLAND, OREGON

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2 1 0 9 4 7

Rel: 3-31-65

HYDRAULIC VALVE  
2 Spool

ITEM	FWD NO.	DESCRIPTION	QTY.
1	211107	Plug - Relief Valve	1
2	211108	"O" Ring	6
3	211109	Spring	1
4	211110	Poppet	1
5	211111	"O" Ring	1
6	211112	Back-Up Ring	1
7	211113	Sleeve	1
8	206975	Poppet	1
9	211114	Spring	1
10	211115	Adj. Nut	1
11	211116	plug - R.V. Pilot	1
12	211117	Nut	1
13	211118	Adj. Screw	1
14	206974	Castle Nut	1
15	211119	Spring Guide	2
16	211120	Cap Screw	1
17	211121	Spring	1
18	211122	Cap	1
19	211123	Ball	2
20	211124	Ball	1
	211125	Roll Pin	1

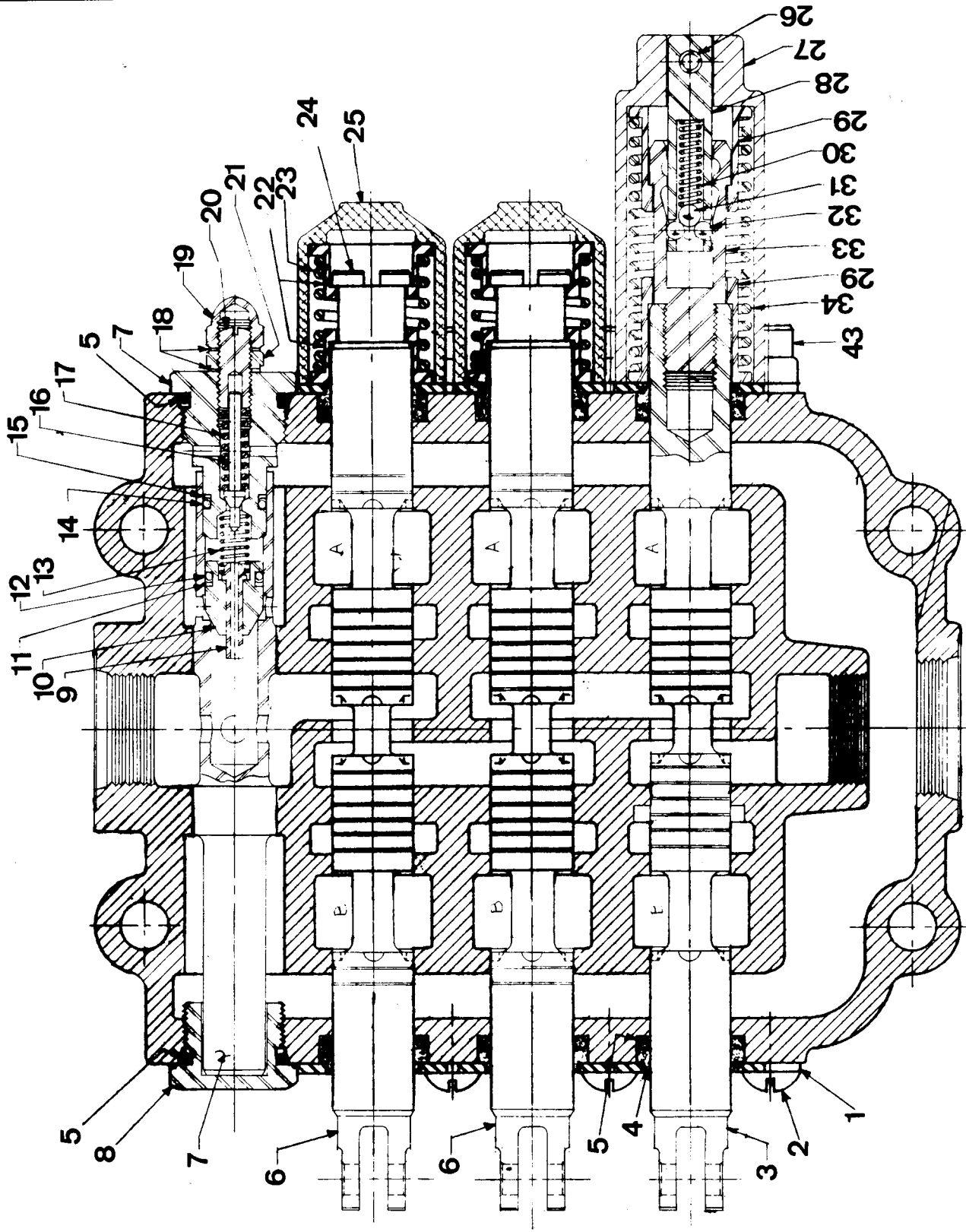
HYDRAULIC VALVE  
2 Spool

ITEM	FWD NO.	DESCRIPTION	QTY.
22	211126	Detent. Pin	1
23	211127	Cap - Plunger	1
24	211128	Spring	1
25	211130	Spring Guide	1
27	211131	Spring	1
28	211132	Seal Plate	4
29	211133	Wiper Ring	2
30		RD. HD. Cap Screw - Use local supply	

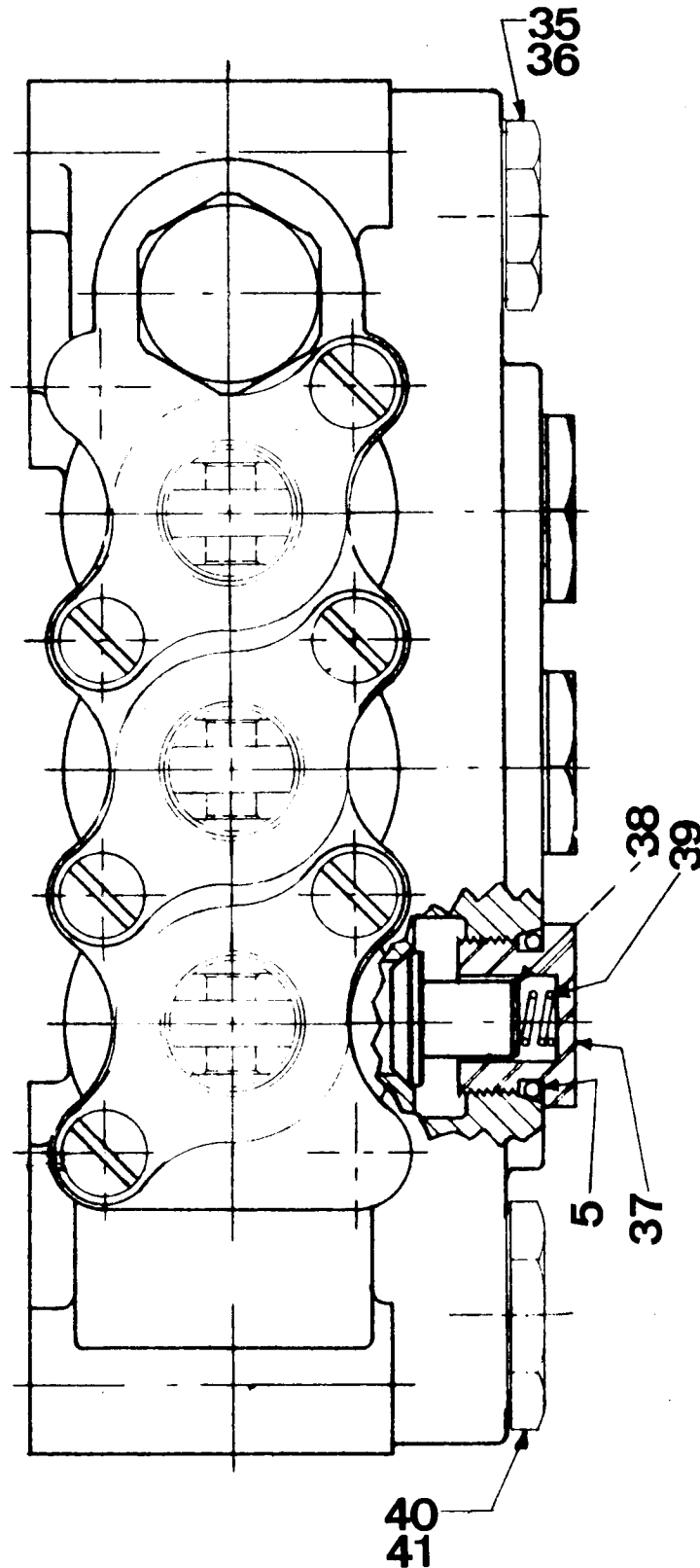
**VALVE - HYDRAULIC**  
(Husco - 2 Spool w/1 Float)

3203-48

Rel. 1-5-66



VALVE - HYDRAULIC  
(Husco - 2 Spool w/1 Float)



**FWD WAGNER INC.**

PORTLAND, OREGON

2 1 0 9 4 8

VALVE - HYDRAULIC

3203-48

(Husco - 2 Spool w/1 Float)

Rel. 1-5-66

ITEM	FWD NO.	DESCRIPTION	QTY.
1	211132	Seal Plate	6
2	211452	Round Head Machine Screw	6
3	N.S.S.	Plunger	1
4	211133	Wiper	6
5	211108	"O" Ring	11
6	N.S.S.	Plunger	2
7	211712	Sleeve	1
8	211107	Plug	1
9	211713	Piston	1
10	211714	Poppet	1
11	211715	Back-up Ring	1
12	211716	"O" Ring	1
13	211717	Spring	1
14	206986	"O" Ring	1
15	211718	Back-up Ring	1
16	211719	Poppet	1
17	211720	Spring	1
18	211723	Washer	2
19	211724	Acorn Nut	1
20	211721	Adjusting Screw	1
21	211725	Nut	1
22	211119	Spring Seat	4



**FWD WAGNER INC.**

PORTLAND, OREGON

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2 1 0 9 4 8

VALVE - HYDRAULIC

3203-48

(Husco - 2 Spool w/1 Float)

Rel. 1-5-66

ITEM	FWD NO.	DESCRIPTION	QTY.
23	211121	Spring	2
24	211120	Capscrew	2
25	211122	Cap - Plunger	2
26	211125	Roll Pin	1
27	211127	Cap - Plunger	1
28	21126	Detent Pin	1
29	211130	Spring Seat	2
30	211128	Spring Detent	1
31	211124	Ball	1
32	211123	Ball	3
33	211129	Plunger End	1
34	211131	Spring Float Plunger	1
35	211726	Plug	1
36	211727	"O" Ring	1
37	211728	Plug	3
38	211729	Poppet	3
39	206979	Spring	3
40	211730	Plug	1
41	211731	"O" Ring	1
42	N.S.S.	Valve Housing	1
43	211451	Capscrew	6
NOTE: Body and Plunger (Spool), items 3, 6 and 42 not sold separate			



PORTLAND, OREGON

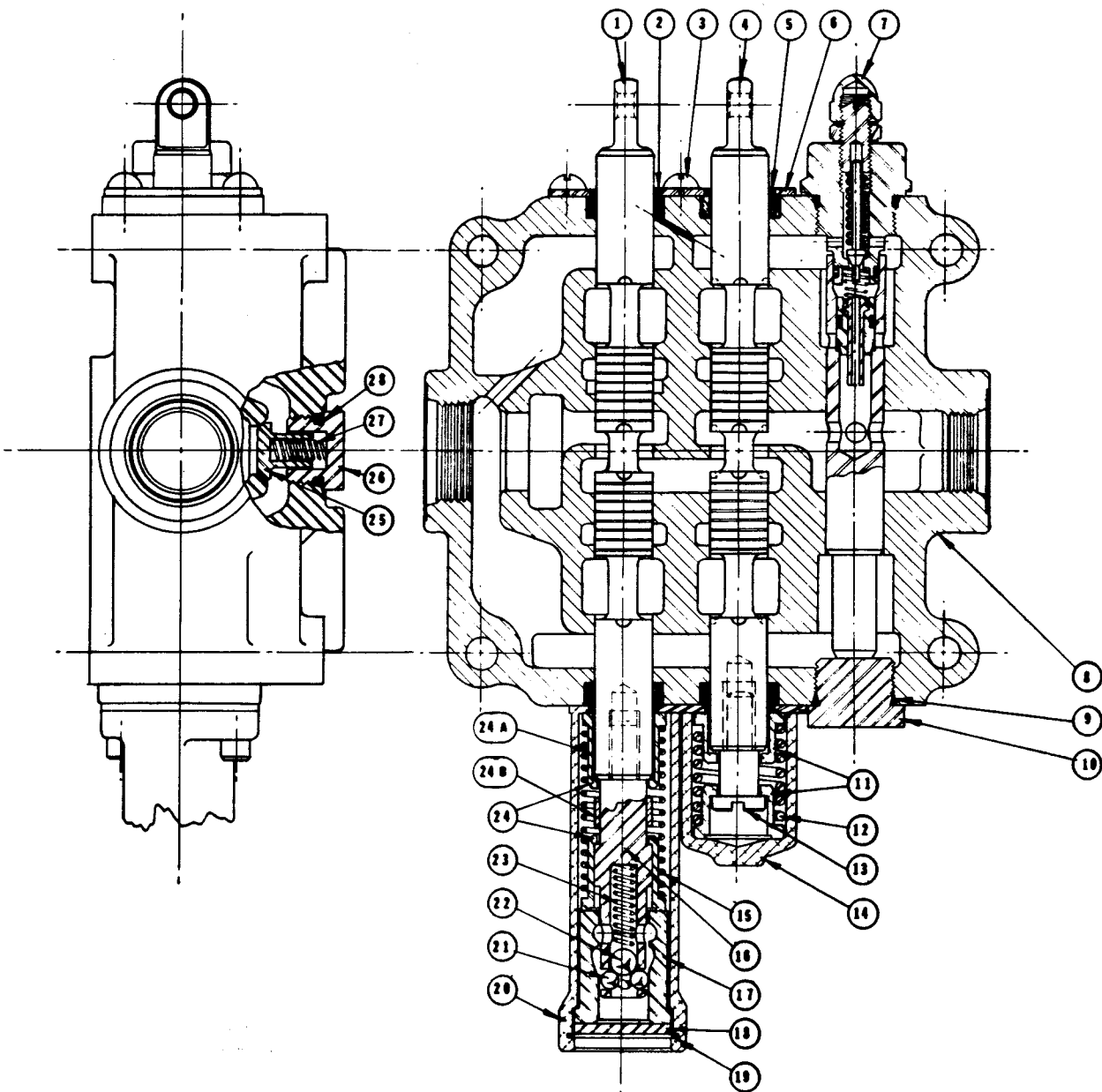
1 of 3

2 1 4 4 5 3

3302-66

Rel: 1-31-69

VALVE - IMPLEMENT  
WA-14-17





PORTLAND, OREGON

2 of 3

2 1 4 4 5 3

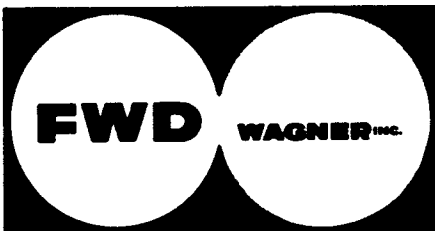
3302-66

Rel: 1-31-69

VALVE-IMPLEMENT  
WA-14-17

N.S.S. NOT SERVICED SEPERATELY

ITEM	FWD NO.	DESCRIPTION	QTY.
1	N.S.S.	Spool - Float	
2	214034	"O" Ring	4
3	214038	Rd. Head Machine Screw	4
4	N.S.S.	Spool - Double Acting	4
5	214033	Seal	4
6	214035	Seal Plate	4
7	214032	Relief Valve Sub-Assy.	1
8	N.S.S.	Body	
9	211727	"O" Ring	1
10	211726	Plug - R.V.	1
11	214031	Spring Seat	2
12	214030	Spring	1
13	214029	Spec. Capscrew	1
14	214028	Cap - Lunger	1
15	214623	Spring - Detent Plunger	1
* 16	214626	Pin - Detent 2-13/16 Long Beyond Spool	1
	214506	Pin - Detent 3-1/4 Long Beyond Spool	1
17	214625	Sleeve - Detent	1
18	214626	Plug - Detent	1
19	214627	Snap Ring - Detent	1
20	214628	Cap - Detent	1
21	214629	Ball - Detent	4
- 22	214630	Ball - Detent	1



PORTLAND, OREGON

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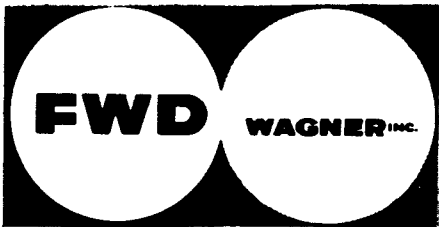
2 1 4 4 5 3

3302-66

Rel: 1-31-69

VALVE-IMPLEMENT  
WA-14-17

ITEM	FWD NO.	DESCRIPTION	QTY.
23	214631	Spring - Detent	1
*24	214632	Spring Seat - Detent 31/32 Long .	2
*24A	214031	Spring Seat - Detent 11/16 Long	1
24B	214505	Spacer Use w/short spring seat on float spool	1
25	214041	Poppet - Check Valve	3
26	214039	Plug - Check Valve	3
27	214040	Spring - Check Valve	3
28	206980	"O" Ring - Check Valve	3
29	214042	Socket Hd. Capscrew (Not Illustrated)	4
* CHECK LENGTH OF PARTS TO BE REPLACED TO IDENTIFY CORRECT PART NUMBER FOR REPLACEMENT			



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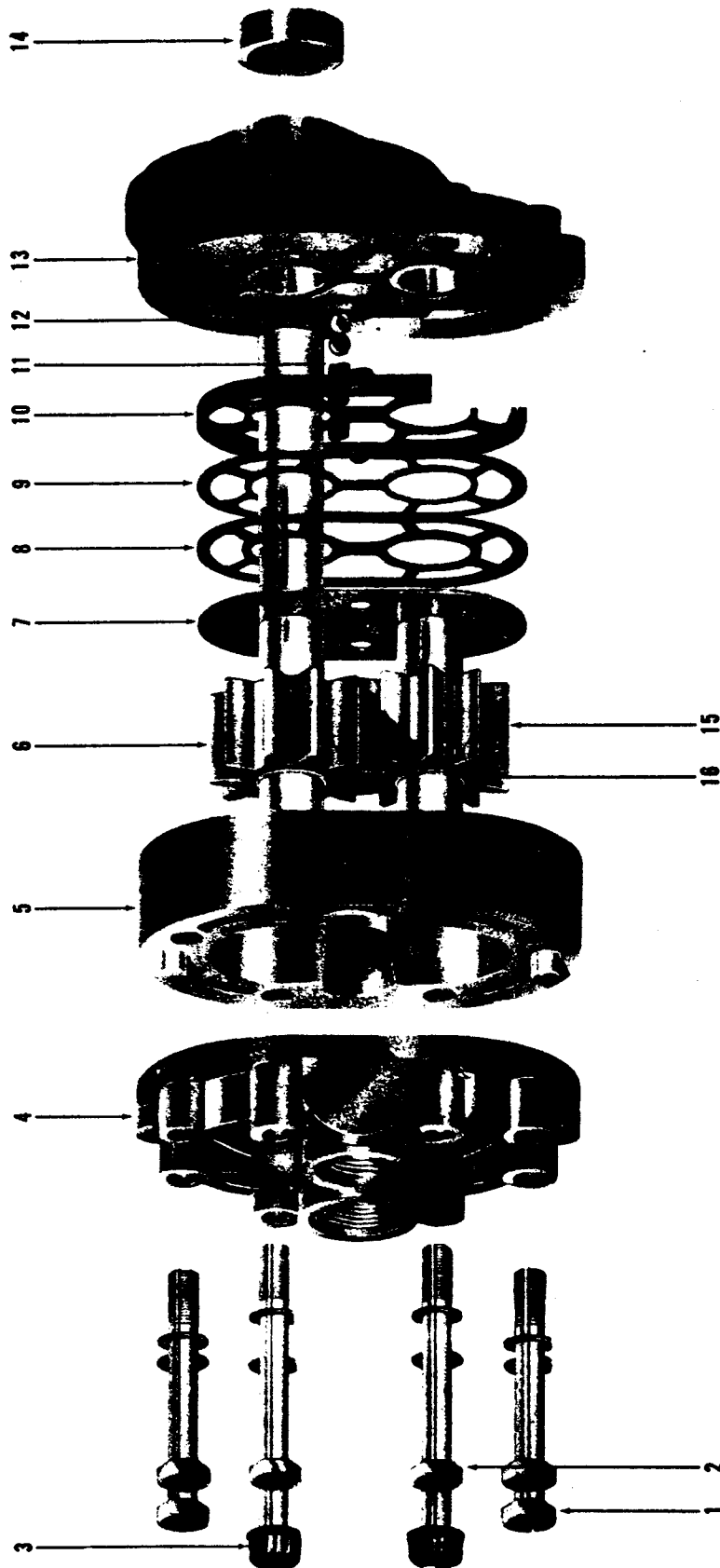
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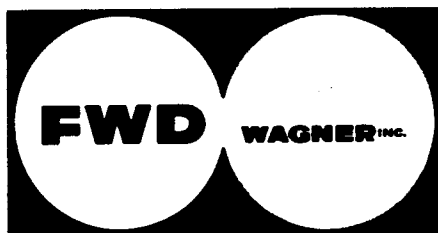
2 1 4 4 6 8

B-15512-1MC

Rel: 1-16-69

PUMP - HYDRAULIC





PORTLAND, OREGON

2 of 2

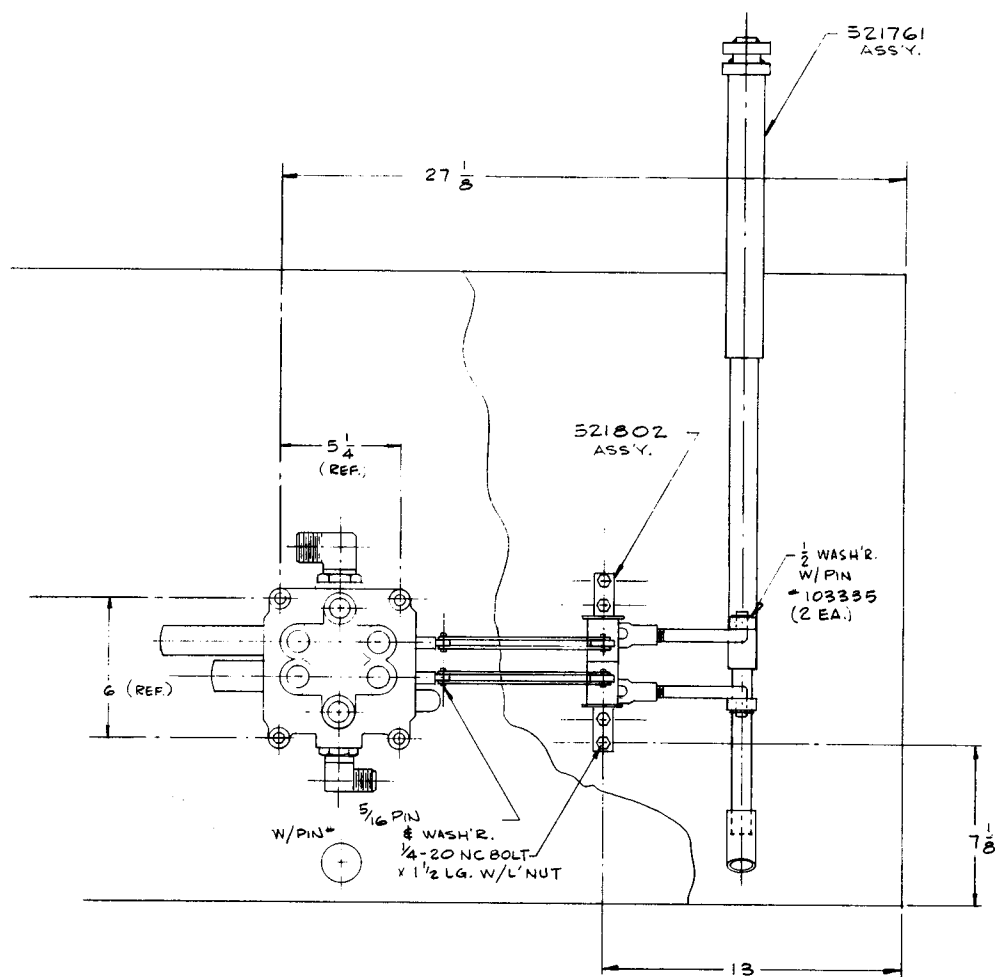
2 1 4 4 6 8

B-15512-1MC

Rel: 1-16-69

PUMP - HYDRAULIC

ITEM	FWD NO.	DESCRIPTION	QTY.
1	214502	Tie Bolt	4
2	210908	Tie Bolt	2
3	214324	Tie Bolt	2
4	214325	Back Plate Assembly	1
5	208890	Body	1
6	208896	Drive Gear Assembly	1
*7	208892	Diaphram	1
*8	208893	Phenolic Gasket	1
*9	208895	Protector Gasket	1
*10	208891	Moulded V Seal	1
*11	208889	Spring	2
*12	208912	Steel Ball	2
13	214327	Front Plate Assy.	1
*14	208897	Shaft Seal	1
15	208894	Idler Gear Assembly	1
	214503	Major Seal Repair Kit (Includes all parts marked *)	1





PORTLAND, OREGON

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5 2 1 8 0 1

B/M 4606

Rel: 12-20-68

CONTROLS - IMPLEMENT  
WA-14 WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
	521801	Control Installation - 2 Spool	1
	521761	Handle Column Assy. - 2 Spool	1
	502408	Shaft Assy. - Column	1
	502409	Shaft - Column	1
	502376	Handle - Shaft	1
	521762	Tube Assy. - Outer	1
	521763	Tube - Outer	1
	503273	Handle - Outer	1
	502680	Bushing - Bronze - 7/8 x 1 x 1	2
	503304	Support Assy. - Column - 2 Spool	1
	503305	Tube - Support - 2 Spool	1
	503284	Bracket - Support	1
	503277	Bushing - Bronze - 1-1/4 x 1-3/8 x 1	2
	502386	Arm - Shaft	1
	503285	Arm - Outer	1
	509198	Pipe - Imp.. Handle	2
	207266	Handle Grip	2
	503287	Tail Bearing Assy. Column	1
	503288	Tube - Tail Bearing	1
	502680	Bushing - Bronze - 7/8 x 1 x 1	1
	521802	Linkage Assembly	1
	510703	Shaft - Linkage	1





PORTLAND, OREGON

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5 2 1 8 0 1

B/M 4606

Rel: 12-20-68

CONTROLS - IMPLEMENT

WA-14 WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
		Bushing - Machine - Reg. 7/8 x 12 Ga.	2
	G104787	Clevis Pin - 1/2 SAE	2
	G104039	Clevis - 1/2 SAE Light	2
		Cotter Pin - 7/64 x 5/8	6
	521495	Link - Valve Control	4
	503205	Rod	1
	G103495	Clevis Pin - 5/16	4
		Washer - Plain - 1/2"	2
	521803	Bell Crank Assy.	2
	521805	Arm - Short	2
	521804	Arm - Long	2
	510673	Pipe - Bell Crank	2
	G271287	Lube Fitting - 1/4-28	2
	504294	Bushing Bronze - 7/8 x 1 x 1/2	4





PORTLAND, OREGON

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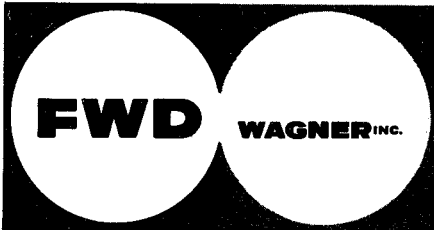
5 2 2 1 9 7

B/M 4624

Rev: 3/27/69

PLUMBING HYDRAULIC IMPLEMENT  
WA-14 WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
	522197	Schematic Hydraulic Implement	1
3	210758	Filter - Hyd.	1
4	520887	Flange	2
5	207981	Hose Ass'y.	1
6	209714	Elbow	1
7	210948	Valve - Implement	1
8	211674	Hose Clamp	2
9		King Nipple - 2" NPT	1
10	207988	Hose Ass'y.	1
12	509315	Elbow	1
13		Close Nipple - 1 1/4 NPT	1
14	208233	Pump - Implement	1
15	203446	"O" Ring	1
16	207239	Flange	1
17	209762	Adapter	1
18	209266	Hose Ass'y.	1
19	201439	Hose Suction - 15" Lg.	1
21	203515	"O" Ring	2
23	510171	Gasket	1
		Elbow - 1 1/4 NPT	2
26	509946	Adapter	1
	509948	Extension	1
27	209715	Elbow	1



PORTLAND, OREGON

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5 2 2 1 9 7

B/M 4624

Rev: 3/27/69

## PLUMBING HYDRAULIC IMPLEMENT

WA-14

WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
28		Elbow - 45° - NPT	1
31		Close Nipple - 2" NPT	1
32	212187	Adapter	2
33		Plug - 3/4 NPT	2
34		Nipple - 1 1/4 NPT x 2 1/2	
35	209423	"O" Ring Plug	1
36	503503	Dip Stick Ass'y.	1
	208202	Filler Cap	1
	503504	Dip Stick	1

**FWD****WAGNER INC.**

PORTLAND, OREGON

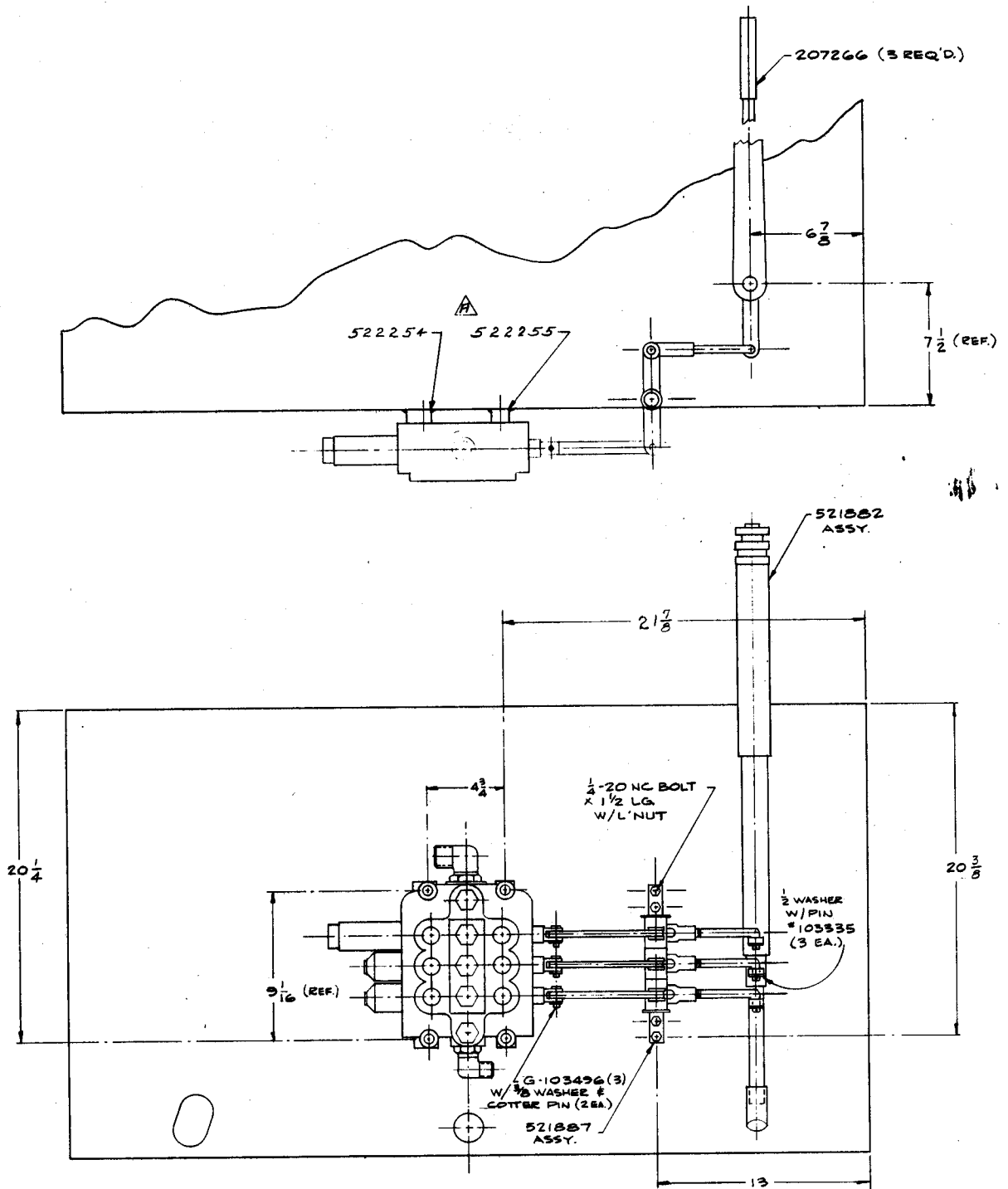
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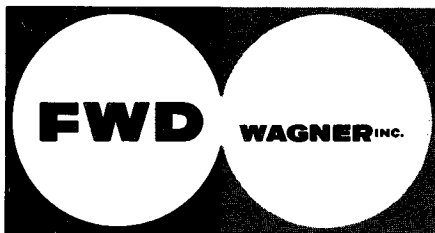
5 2 2 1 9 9

B/M 4622

Rel: 3/27/69

CONTROLS - IMPLEMENT  
(3 Spool - Husco)  
WA-14      WA-17





PORTLAND, OREGON

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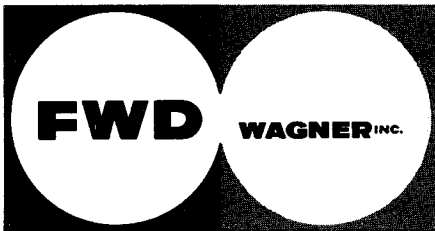
5 2 2 1 9 9

B/M 4622

Rel: 3/27/69

CONTROLS - IMPLEMENT  
(3 Spool - Husco)  
WA-14 WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
	522199	Control Installation - 3 Spool	1
	521822	Handle Column Ass'y. - 3 Spool	1
	502408	Shaft Ass'y. - Column	1
	521883	Tube Ass'y. - Inner	1
	502680	Bushing - Bronze 7/8 x 1 x 1	2
	521885	Tube Ass'y. - Outer	1
	503277	Bushing - Bronze 1-1/4 x 1-3/8 x 1	2
	503297	Support Ass'y. - Column - 3 Spool	1
	503281	Bushing Bronze - 1-5/8 x 1-3/4 x 1	2
	502427	Arm Shaft	1
	503285	Arm - Inner	1
	503286	Arm - Outer	1
	509198	Pipe - Imp. Handle	2
	503287	Tail Bearing Ass'y. - Column	1
	502680	Bushing Bronze 7/8 x 1 x 1	1
	521887	Linkage - Ass'y.	1
		Mach. Bushing - Reg. 7/8" x 12 Ga.	2
	521888	Bell Crank Ass'y.	1
	G271287	Grease Fitting - 1/4-28	1
	504294	Bushing Bronze 7/8 x 1 x 1/2"	2
	522195	Bell Crank Ass'y.	2
	G271287	Lube Fitting - 1/4 - 28	2



PORTLAND, OREGON

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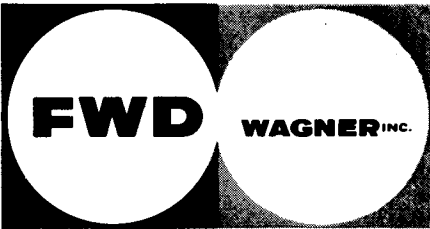
5 2 2 1 9 9

B/M 4622

Rel: 3/27/69

CONTROLS - IMPLEMENT  
(3 Spool Husco)  
WA-14 WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
	504294	Bushing Bronze 7/8 x 1 x 1/2	4
	503205	Rod - Control	3
	G104039	Clevis - 1/2 SAE Light	3
	G103498	Clevis Pin - 1/2 SAE Hard	3
	G9421090	Clevis Pin 3/8 - Hard	3
	521889	Link - Valve Control	3
	207266	Handle Grip	3
	G271291	Lube Fitting - 1/4 28	5



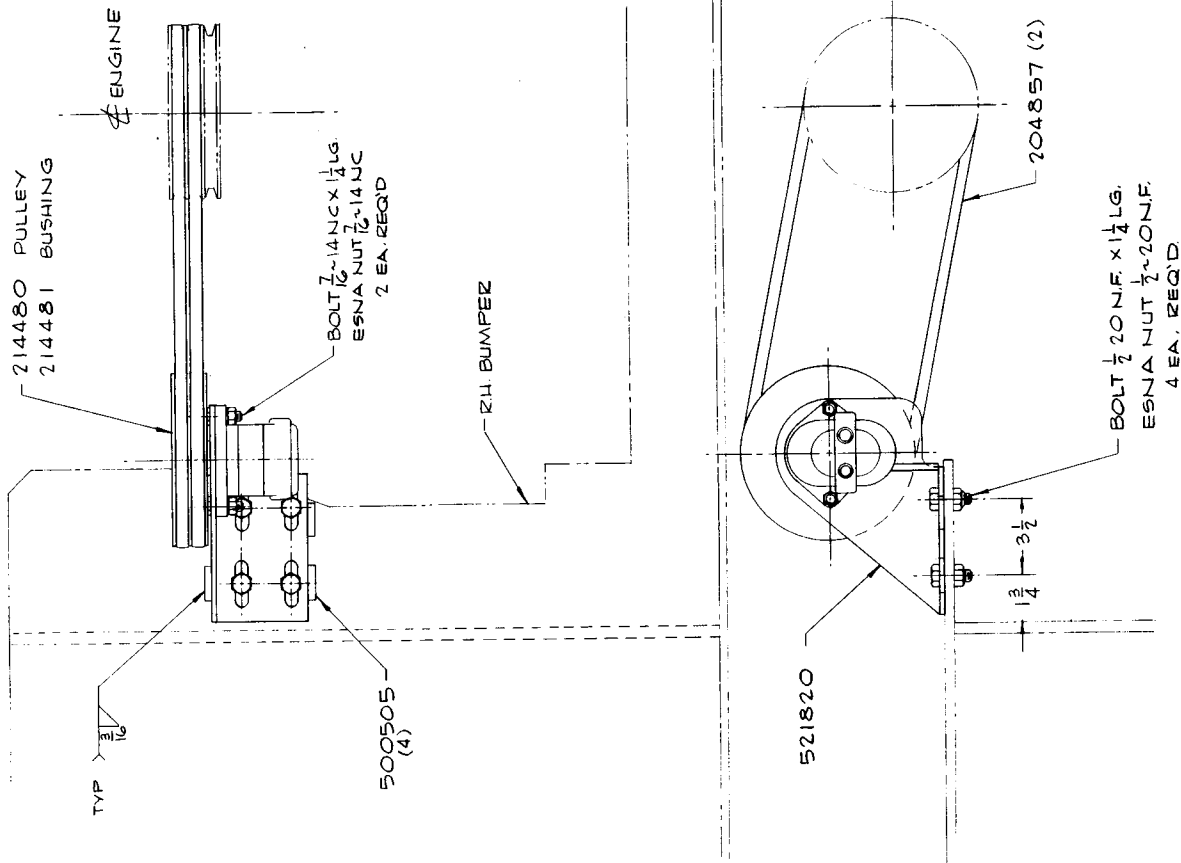
PORTLAND, OREGON

1 of 2

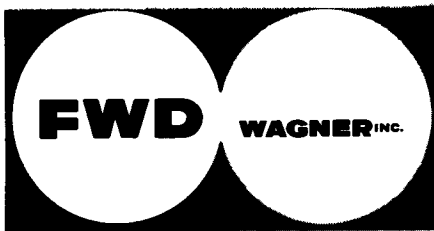
5 2 2 5 1 8

Rel: 4/3/69

# PTO IMPLEMENT (15 Gal Pump)







PORTLAND, OREGON

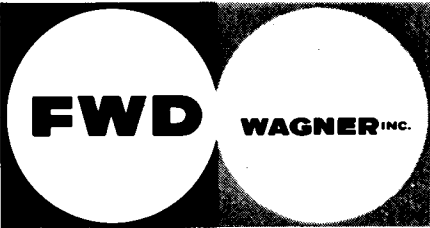
2 of 2

5 2 2 5 1 8

Rel: 4/3/69  
B/M 4608

PTO IMPLEMENT  
(15 Gal. Pump)

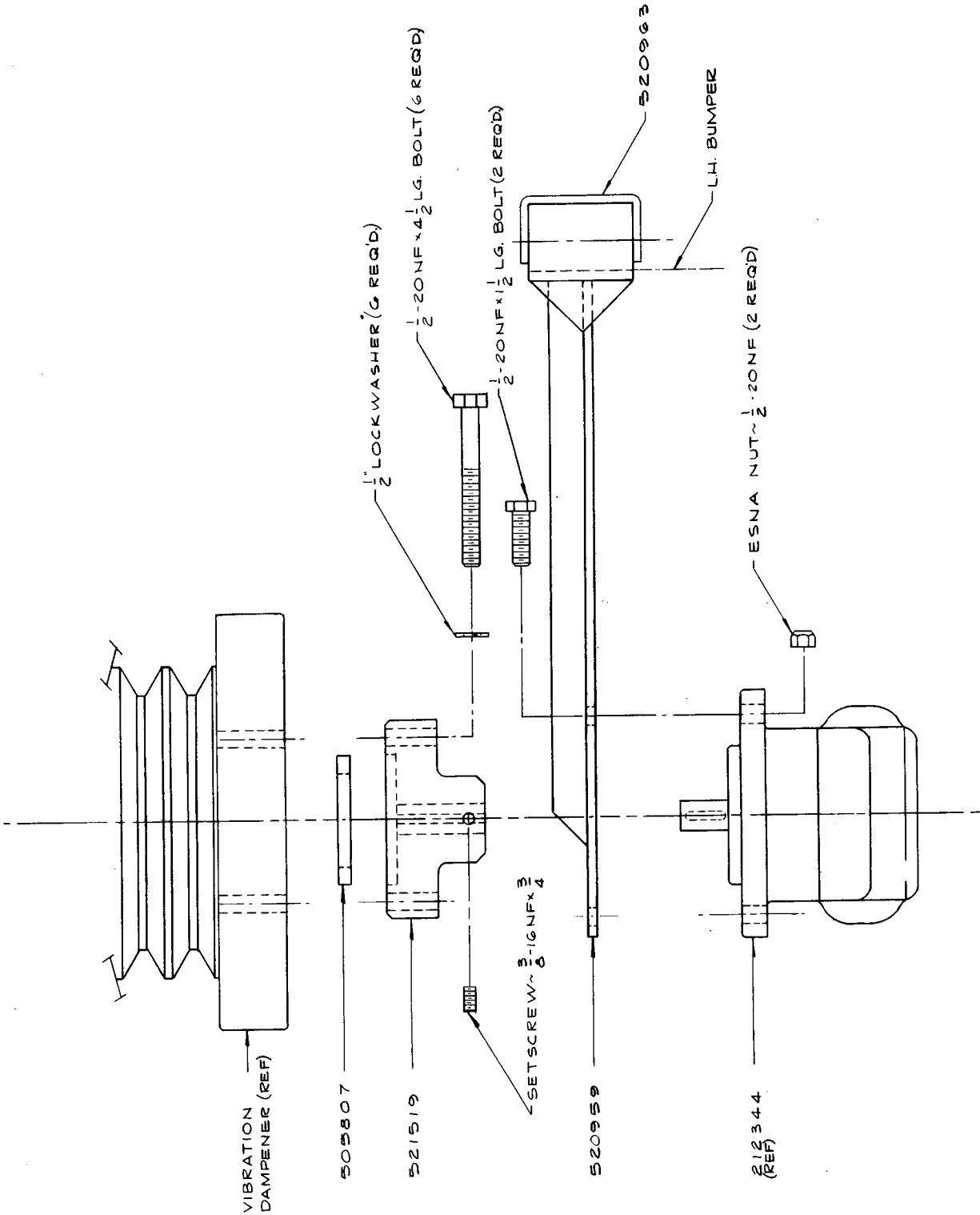
ITEM	FWD NO.	DESCRIPTION	QTY.
	522518	Installation	1
	521820	Bracket	1
	204857	V-Belt	2
	214480	Pulley - 2A6.0-QD	1
	214481	Bushing - Hub - 3/16 Keyway	1
	500505	Key Guide	4
		Bolt 3/8" - 24 x 1 1/4"	4
		Nut 3/8" Fibre Lock	4
		Washer 3/8"	8



PORTLAND, OREGON

1 of 2  
5 2 2 5 1 9  
B/M 4605  
Rel: 4/4/69

PTO STEERING PUMP  
WA-14 WA-17





PORTLAND, OREGON

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5 2 2 5 1 9

B/M 4605

Rel: 4/4/69

PTO STEERING PUMP

WA-14

WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
	522519	P.T.O. Installation	
	520959	Arm Ass'y. - Pump Torque	1
	520963	Pad - Torque Arm	1
	521519	Adapter - Pulley to Pump	1
		Bolt - 1/2-20 x 1-1/2	2
		Bolt - 1/2-20 x 2-3/4	2
		Bolt - 1/2-20 x 7	2
		Nut - 1/2-20 Fiber Lock	6
		Set - Screw 3/8-16 x 3/4	1
	505807	Ring - Pilot	1



PORTLAND, OREGON

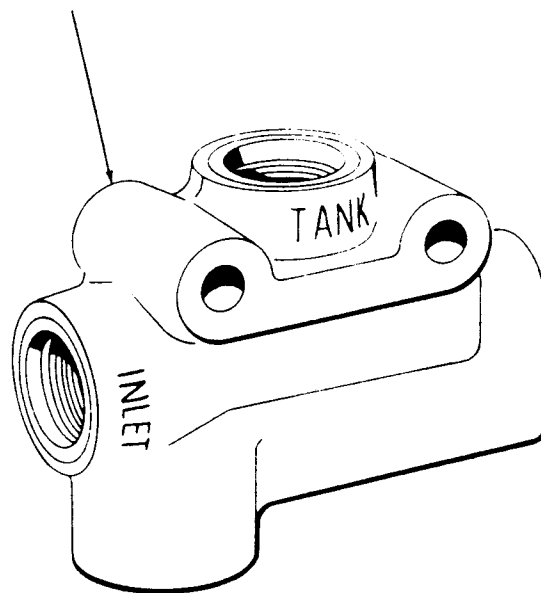
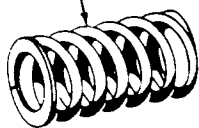
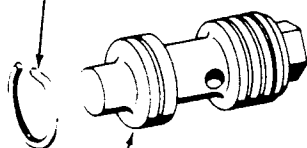
1 of 1

## FLOW CONTROL VALVE

BODY NOT SOLD SEPARATELY.  
ORDER BY COMPLETE ASS'Y. NUMBER 211101

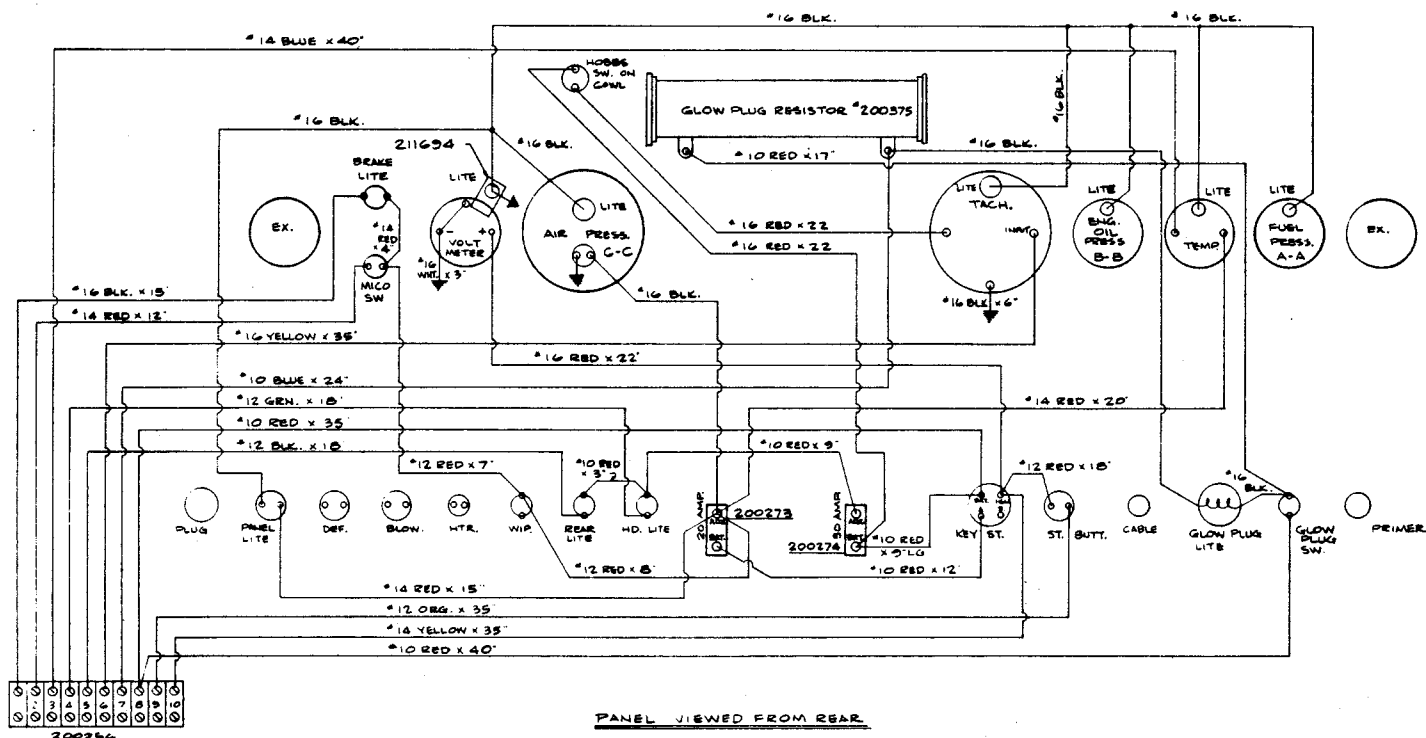
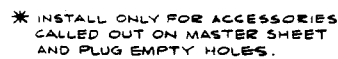
206317 Snap Ring

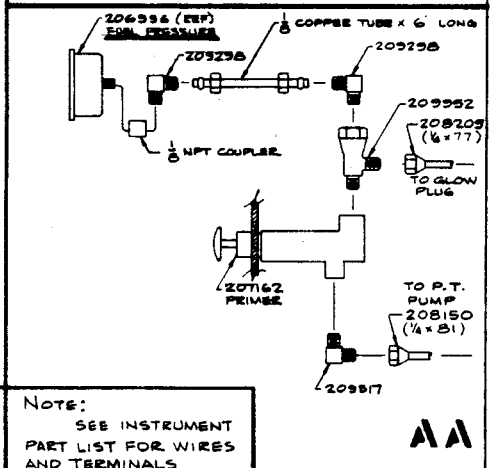
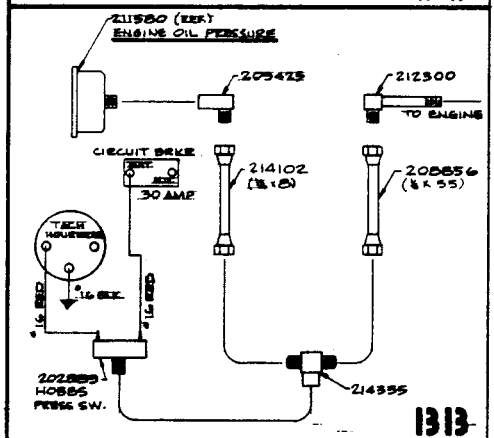
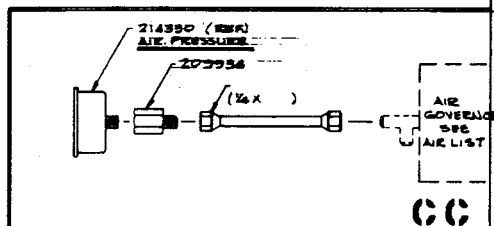
206316 Spring



Control Valve Sub-Ass'y.  
211101

R. 1: 12-20-13



[illegible]

NOTE:  
NEGATIVE  
GROUND FOR  
ALT. SYSTEM

NOTE:  
SEE INSTRUMENT  
PART LIST FOR WIRES  
AND TERMINALS

[illegible]



PORTLAND, OREGON

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5 2 1 5 9 1

B/M 4611

Rel: 12-20-68

INSTRUMENT PANEL ASSEMBLY  
WA-14 WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
	520995	Instrument Panel	1
	517363	Name Plate - Brake Light	1
	206357	Name Plate - Eng. Emergency Pull to Stop	1
	208054	Name Plate - Mico Switch	1
	521592	Name Plate - Start	1
	505028	Name Plate - Head Light	1
	505029	Name Plate - Rear Light	1
	517201	Decal - Voltmeter	1
	517363	Name Plate - Emergency Brake Light	1
	520792	Name Plate - Glow Plug	1
	520791	Name Plate - Panel Light	1
	214368	Tachometer/Hourmeter	1
	204747	Start Switch	1
	207155	Switch - Ignition	1
	214330	Gauge - Air Pressure W/Low Air Light	1
	211745	Gauge - Engine Water Temp.	1
	214336	Sender - Engine Temp.	1
	211580	Gauge - Engine Oil Pressure	1
	206996	Gauge - Fuel Oil Pressure	1
	211338	Voltmeter	1
	207162	Primer - Engine	1
	207166	Light - Glow Plug Indicator	1



PORTLAND, OREGON

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5 2 1 5 9 1

B/M 4611

Rel: 12-20-68

INSTRUMENT PANEL ASSEMBLY  
WA-14 WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
	200278	Light - Red Indicating	1
	207465	Mico Switch	1
	211694	Light - Instrument	1
	207165	Switch - Glow Plug	1
	200272	Switch - Toggle	2
	208810	Switch	1
	200274	Circuit Breaker - 30A	1
	200273	Circuit Breaker - 20A	2
	200375	Resistor - Glow Plug	1
	200256	Junction Block	1
	202889	Switch - Pressure	1
	214335	Adapter - Hobbs Switch	1
	212300	Adapter - Oil in Engine	1
	209425	Adapter - Oil on Gauge - Engine	1
	209934	Adapter - Air on Gauge	1
	209317	Adapter - Fuel Pump	1
	209952	Adapter - Fuel	2
	209298	Adapter - Fuel	2
		Pipe Coupler - 1/8 NPT	1
		Copper Tube - 1/8 x 6 Lg.	1
	214102	Hose Assy. - Eng. Oil	1
	208856	Hose Assy. - Eng. Oil	1





PORTLAND, OREGON

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5 2 1 5 9 1

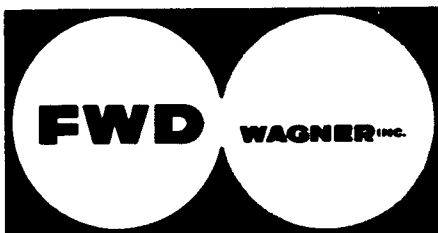
B/M 4611

Rel: 12-20-68

## INSTRUMENT PANEL ASSEMBLY

WA-14 WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
	212192	Pull Control Cable - Eng. Stop	1
		Hose Assembly - Air	1
	208150	Hose Assembly - PT Fuel	1
	208209	Hose Assembly - GP Fuel	1
	205202	Plug - Inst. Panel	1
	210744	Plug - Inst. Panel 2"	2
	511265	Mtg. Plate - J-Block	1
	511112	Mtg. Bracket - J-Block	2
		Wire - Red - #14 x 12" Lg.	1
		Wire - Blue - #14 x 40" Lg.	1
		Wire - Black - #16 x 15" Lg.	1
		Wire - Red - #10 x 35" Lg.	1
		Wire - Red - #12 x 7" Lg.	1
		Wire - Orange - #12 x 35" Lg.	1
		Wire - Red - #10 x 40" Lg.	1
		Wire - Green - #12 x 18" Lg.	1
		Wire - Black - #12 x 18" Lg.	1
		Wire - Yellow - #16 x 35" Lg.	1
		Wire - Red - #14 x 15" Lg.	1
		Wire - White - #16 x 3" Lg.	1
	200248	Terminal	28
	200247	Terminal	12



PORTLAND, OREGON

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5 2 1 5 9 1

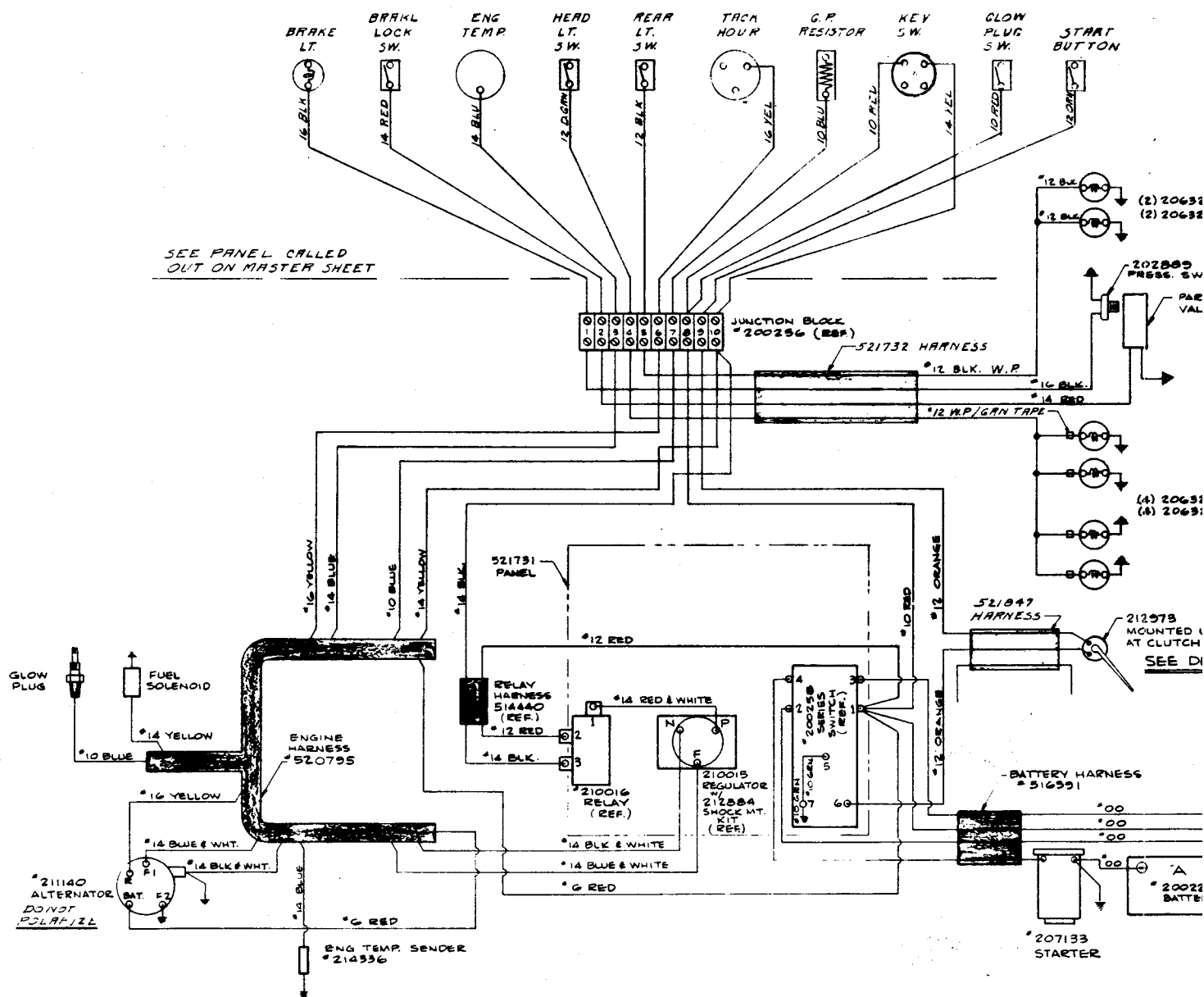
B/M 4611

Rel: 12-20-68

INSTRUMENT PANEL ASSEMBLY  
WA-14 WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
		Wire - Blue - #10 x 24" Lg.	1
		Wire - Yellow - #14 x 35" Lg.	1
		Wire - Red - #14 x 4" Lg.	1
		Wire - Red - #16 x 22" Lg.	3
		Wire - Red - #10 x 9" Lg.	2
		Wire - Red - #10 x 3" Lg.	1
		Wire - Red - #12 x 8" Lg.	1
		Wire - Red - #10 x 12" Lg.	1
		Wire - Red - #12 x 18" Lg.	1
		Wire - Black - #16 x 6" Lg.	2
		Wire - Red - #10 x 17" Lg.	1
		Wire - Red - #14 x 20" Lg.	1
		Wire - Black - #16 x 20" Lg.	1
		Wire - Black - #16 x 30" Lg.	1

Rel: 1-15-69



THIS SYSTEM IS NEGATIVE GROUND  
DEL. PL. FOR 11 PL. 100 TERMINALS





PORTLAND, OREGON

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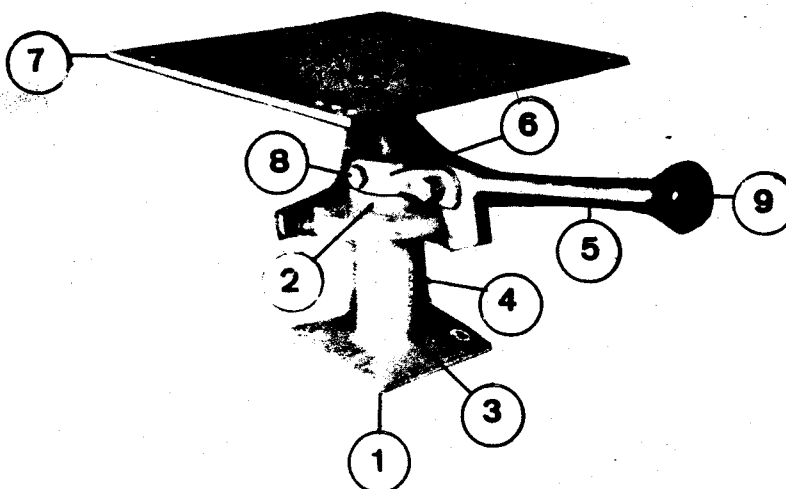
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B/M 4607

Rel: 1-15-69

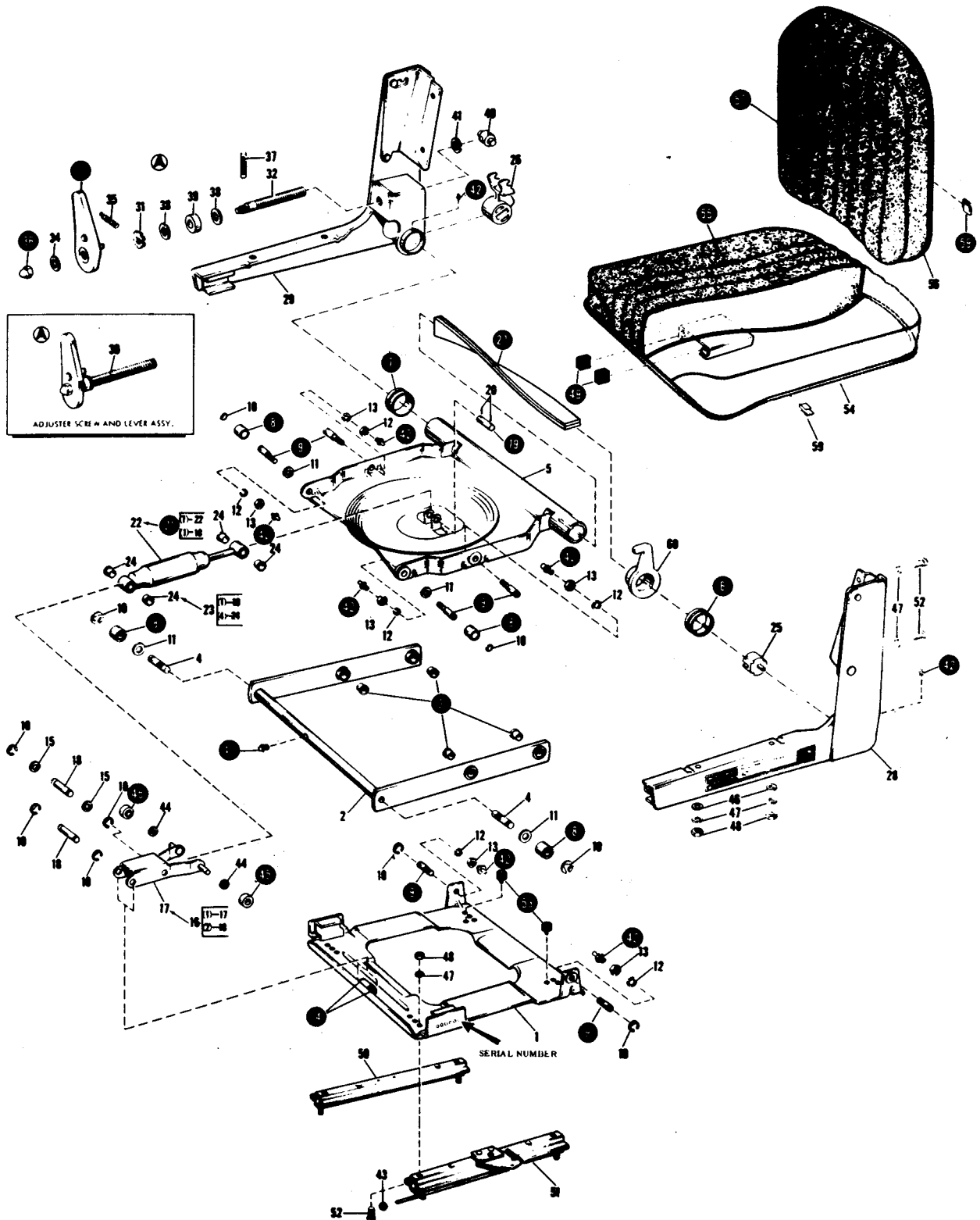
WIRING DIAGRAM  
WA-14 WA-17

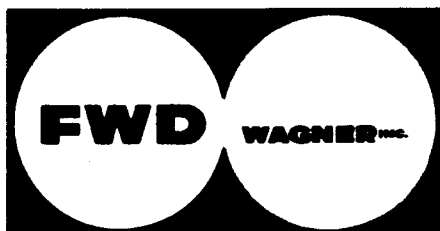
ITEM	FWD NO.	DESCRIPTION	QTY.
	200220	Battery	2
	206325	Light - Sealed Beam	6
	206327	Bracket - Light	6
	207133	Starter D/R 1113771	1
	211140	Alternator D/R 1117756	1
	202889	Switch - Park Light	1
	521731	Mounting Plate Assy.	1
	200258	Series Parallel Switch D/R 1119844	1
	210015	Voltage Regulator D/R 9000590	1
	210016	Relay D/R 1116895	1
	212884	Shock-Mount Kit - Regulator D/R 1919066	1
	514410	Harness Assembly - Relay	1
	520795	Harness Assembly - Engine	1
	521877	Bracket - Fail Safe Start	1
	212973	Switch	1
		Bolt - 1/4 NC x 2" Lg.	1
		Nut - 1/4 NC	3
		Screw 10-32 x 3/4" Lg.	4
	516591	Harness Assembly - Battery	1
	521847	Failsafe Start & Heater Harness	1
	521732	Chassis Harness Assembly	1

**SWIVEL ASS'Y - SEAT**


ITEM NO.	PART NO.	DESCRIPTION	Qty.
1	521532	Base Ass'y (incl. items 2, 3 & 4)	1
2	200238	Bearing (Not illust.)	1
3	503370	Bushing " "	1
4	1/8"	Tube Fitting	1
5	503373	Latch & Handle Ass'y	1
6	503392	Collar Ass'y	1
7	521819	Post & Plate Ass'y	1
8		Bolt, 3/8" - 20 x 3 1/2"	1
9	200246	Knob	1

**SEAT ASSEMBLY BOSTROM**





PORTLAND, OREGON

Page 2 of 2

2 1 4 4 2 8

26657-1

Rel: 12-17-68

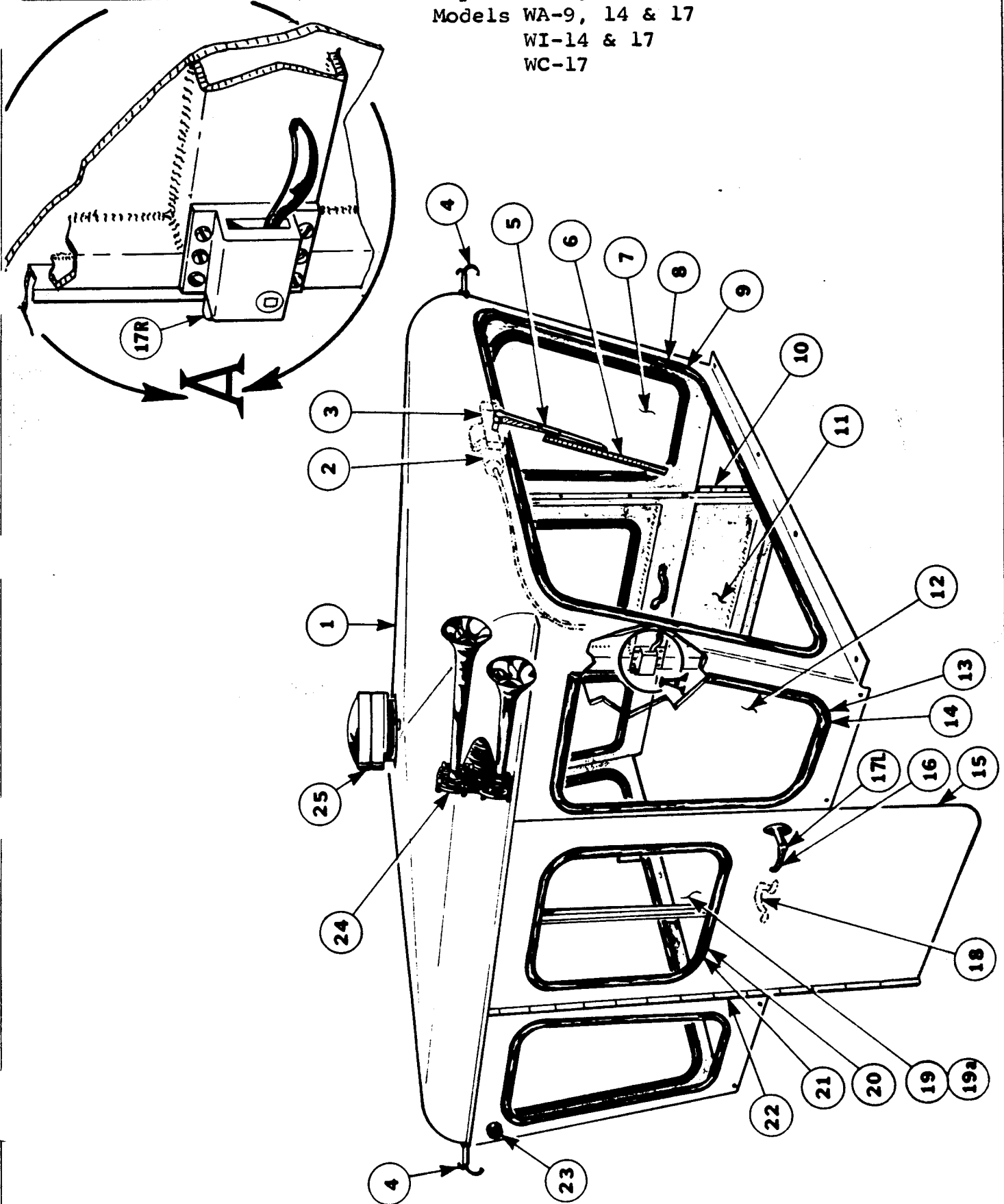
## SEAT ASSEMBLY BOSTROM

ITEM	FWD NO.	DESCRIPTION	QTY.
		FOLLOWING ITEMS ONLY SERVICED FOR REPAIRS	
3	214484	Bearing	4
6	214485	L.H. Housing Bearing	1
7	214486	R.H. Housing Bearing	1
21	214487	Shock Absorber Kit	1
24	214488	Bearing	1
55	214489	Seat Cover Kit	1
57	214490	Back Cover Kit	1
		FOLLOWING NOT ILLUSTRATED	
	509340	Arm Rest - R.H. (Not incl. w/Seat Assembly)	1
	509341	Arm Rest - L.H. (Not incl. w/Seat Assembly)	1
		NOTE: For complete Seat Assembly w/Arm Rests order #521416	



Rel: 7-11-66

Cab Assembly (Solid Glass) FWD #505529 - B/M 1152  
 Cab Assembly (Sliding Glass) FWD #505530-B/M 1172  
 Models WA-9, 14 & 17  
 WI-14 & 17  
 WC-17



**FWD WAGNER INC.**

PORTLAND, OREGON

2 of 3

Rel: 7-11-66

CAB ASSEMBLY (Solid Glass) FWD #505529 - B/M 1152

CAB ASSEMBLY (Sliding Glass) FWD #505530- B/M 1172

Models WA-9, 14 &amp; 17

WI-14 &amp; 17 - WC-17

ITEM	FWD NO.	DESCRIPTION	QTY.
1	502598	Cab Assembly	1
		(Less Doors, Glass and Hardware)	1
2	211155	Motor-Wiper, Electric	1
3	511249	Bracket-Wiper Mounting	1
4	203089	Latch,	2
5	202228	Arm - Wiper	1
6	202229	Blade-Wiper	1
7	502590	Windwhield Glass (Solid)	2
7	503591	Windshield Glass (Sliding)	2
8	200326	Windshield Moulding-Retainer (136" Long)	2
9	203037	Windshield Moulding-Innerlock (136" Long)	2
10	502586	Hinge-Door, Short (R.H.)	1
11	502600	Door Ass'y-(Less glass & Moulding) R.H.	1
12	502588	Glass-Cab Sides	4
13	200326	Moulding-Retainer-Cab Side-67" Long	4
14	203037	Moulding-Innerlock-Cab Side-67" Lg.	4
15	502599	Door Ass'y-L.H. (Less Glass & Moulding)	1
16	203155	Handle- Door	2
17L	203154	Lock-Door - L.H.	1
17R	203052	Lock-Door - R.H.	1
18	203150	Bar-Sash Lift	2
19	502589	Glass-Cab Door (Solid)	2

**FWD WAGNER INC.**

PORTLAND, OREGON

Rel: 7-11-66

CAB ASSEMBLY (Solid Glass) FWD #505529 B/M 1152

CAB ASSEMBLY (Sliding Glass) FWD #505530 B/M 1172

Models WA-9, 14 &amp; 17

WI-14 &amp; 17 - WC-17

ITEM	FWD NO.	DESCRIPTION	QTY.
19A	503590	Glass-Cab Door (L.H.-Sliding)	1
19A	503861	Glass-Cab Door (R.H.-Sliding)	1
20	200326	Moulding-Retainer-Cab Door-74" Lg.	2
21	203037	Moulding-Innerlock-Cab Door-74" Lg.	2
22	502583	Hinge-Door-Long (L.H.)	1
23	200325	Bumper-Rubber (Door)	2
		<u>Optional Equipment</u>	
24	207906	Horn Ass'y	1
25	203236	Blower Fan-Cooler	1
		<u>Not Illustrated</u>	
	511382	Cab Harness	1
	511418	Harness-Panel to Cab	1
		Optional Equipment - Not illustrated	
	203238	Spot Lights	
	204785	Dome Light	1
	204796	Cigar Lighter	1
	203278	Rear View Mirror	
	203234	Defroster Fan	1
	203235	Heater	1



PORTLAND, OREGON

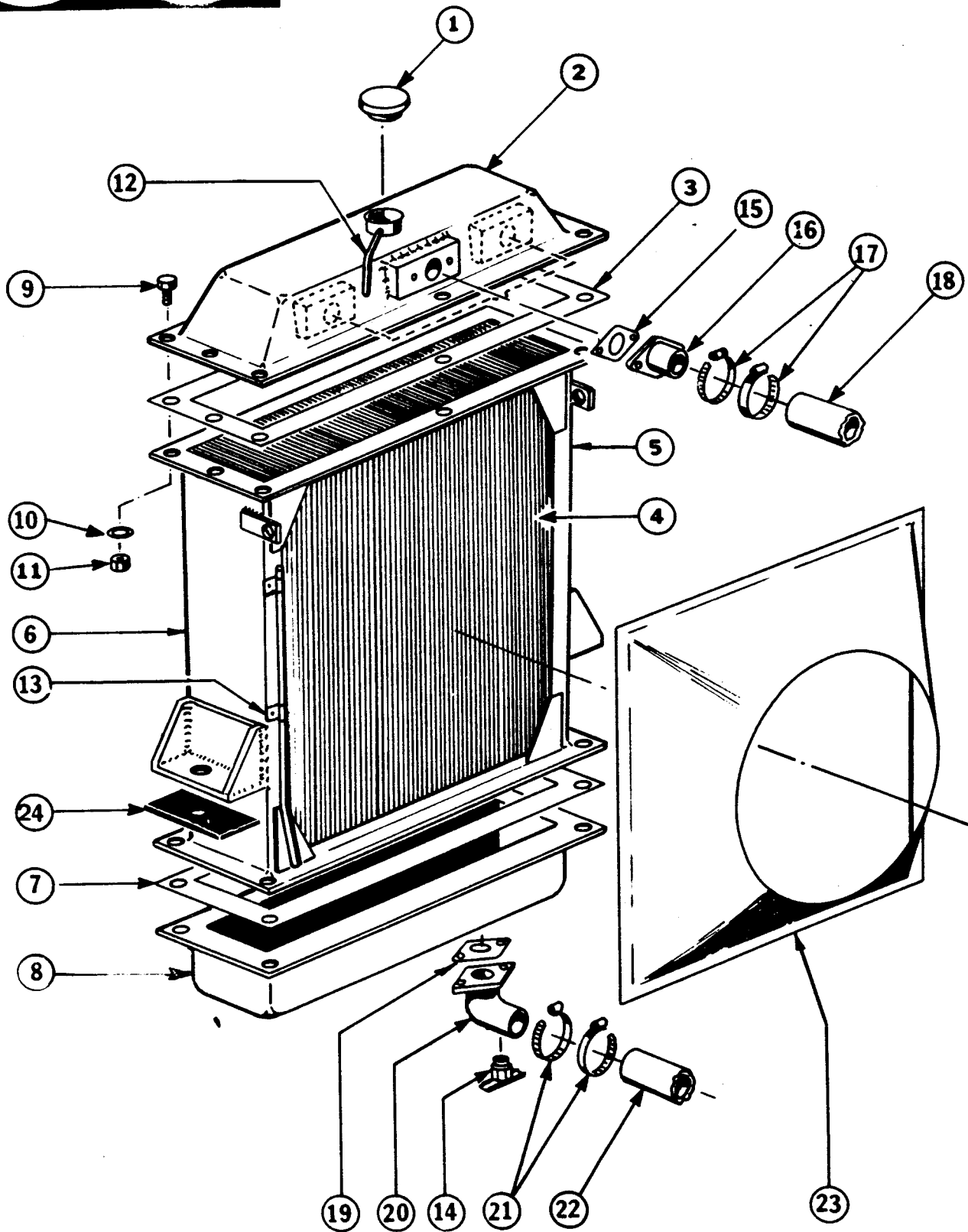
1 of 1

B/M 4625

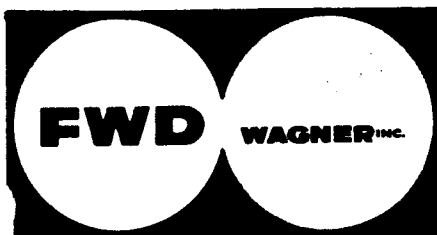
Rel: 4/3/69

AIR CONDITIONER  
WA-14 WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
	214511	Mtg. Kit & Clutch	1
		Frig #91-03909 With 1 75T Belt	
	214641	Cab Unit	1
		Frig #91-11558	
	214642	Hose Kit	1
		Frig #91-06791	
	214643	Compressor	1
		Frig #60-00585	
		NOTE: FOR PARTS & SERVICE ON ABOVE, SEE YOUR NEAREST CUMMINS ENGINE DISTRIBUTOR	



NOTE: FOR ITEMS 15 AND ABOVE, SEE B/M's ATTACHED.



PORTLAND, OREGON

2 of 2

## RADIATOR ASSEMBLY

2 1 1 8 4 4

R-8232

Rel: 12/2/66

ITEM	FWD NO.	DESCRIPTION	QTY.
	211844	Radiator Assembly (Include Items 1 thru 14)	
1	202874	Fill Cap	1
2	213032	Tank-Top	1
3	213034	Gasket	3
4	213031	Core Assembly	1
5	213035	Side Plate - R.H.	1
6	213036	Side Plate - L.H.	1
7	213034	Gasket	3
8	213033	Tank - Bottom	1
9		Bolt - 5/16" N.C. x 1" Hex Hd	AR
10		Lockwasher 5/16"	AR
11		Nut - 5/16" N.C.	AR
12		Overflow Tube	1
13		Overflow Tube Clip (Incl. w/Item 6)	
14	203056	Drain Cock	1
NOTE: SEE ATTACHED B/M's FOR ALL OTHER ITEMS			



PORTLAND, OREGON

1 of 1

B/M 4399

RADIATOR SHROUD

Rel: 1-20-69

&amp;

ATTACHING PARTS

Model WA-17 - for 211844 Radiator

ITEM	FWD NO.	DESCRIPTION	QTY.
15	506669	Gasket - Top Connection	1
16	508069	Connection - Top	2
17	200302	Clamp - Hose	4
18	200298	Hose - Top - 2-3/4 x 32" Long	2
19	506669	Gasket - Bottom Connection	2
20	519134	Cooler - Trans. Oil	1
21	200302	Clamp - Hose	8
22	200299	Hose - Bottom 2 1/4 x 19" Long & 1 Pc. 5" Lg.	2
23	521824	Shroud Assembly	1
24	505697	Radiator Shock Pad	2
		FOLLOWING ITEMS NOT ILLUSTRATED	
		Grill Assembly - NOT USED	
	521821	Screen Assembly	1
	521520	Hood Assembly	1
	209127	Clamp - Hood Hold-down	4
	517041	Brace - Radiator	2
	200301	Hood Cushion Tape - 7/16 x 1 x 36" Long	1
	521583	Hood Support Assembly	2
	517033	Bearing - Hood Shaft	2
	207262	Bushing - Hood Shaft	2

**FWD WAGNER INC.**

PORTLAND, OREGON

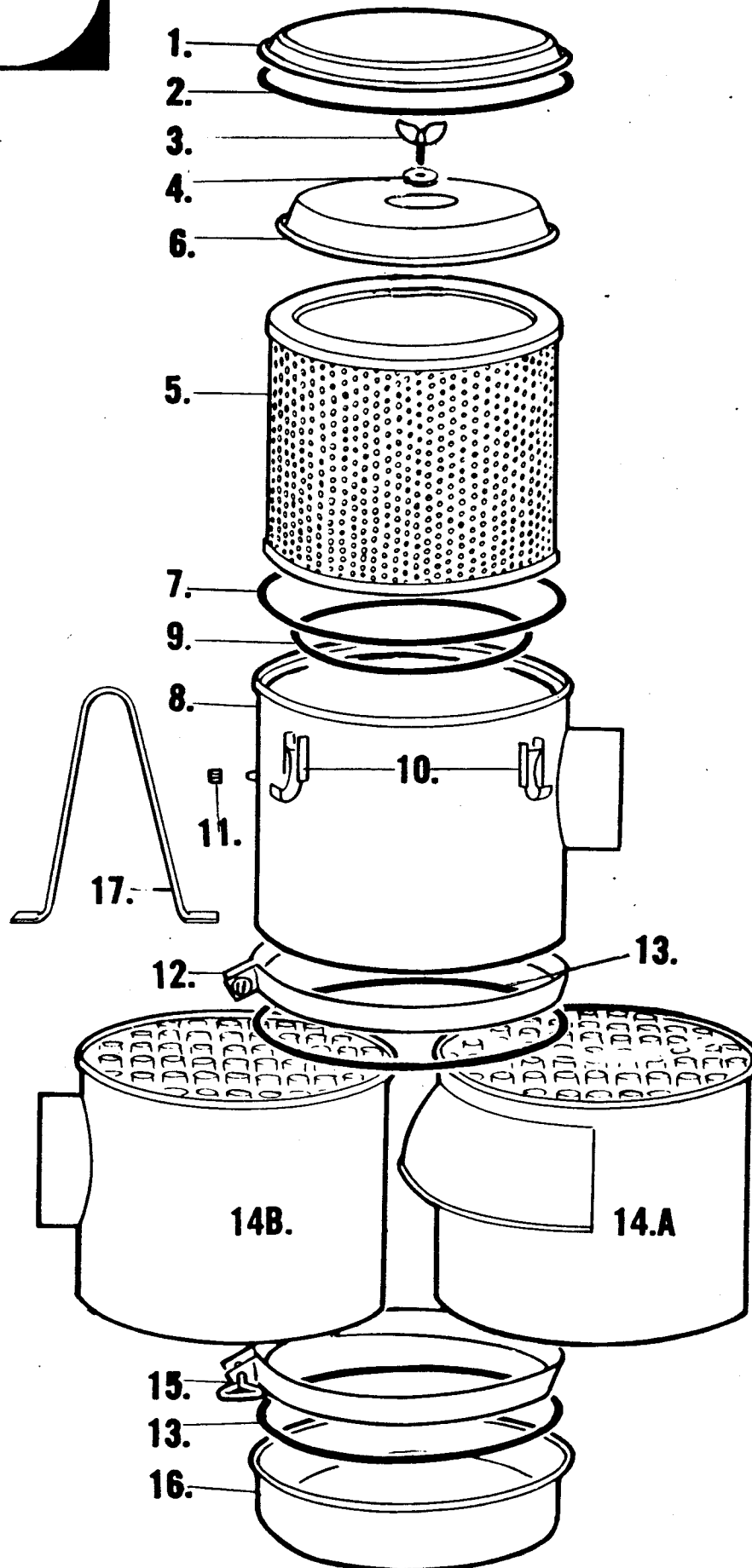
1 of 2

202250

SBC-14-0271

AIR CLEANER

(14A)





**FWD WAGNER INC.**

PORTLAND, OREGON

2 of 2

2 0 2 2 5 8

SBG-14-0271

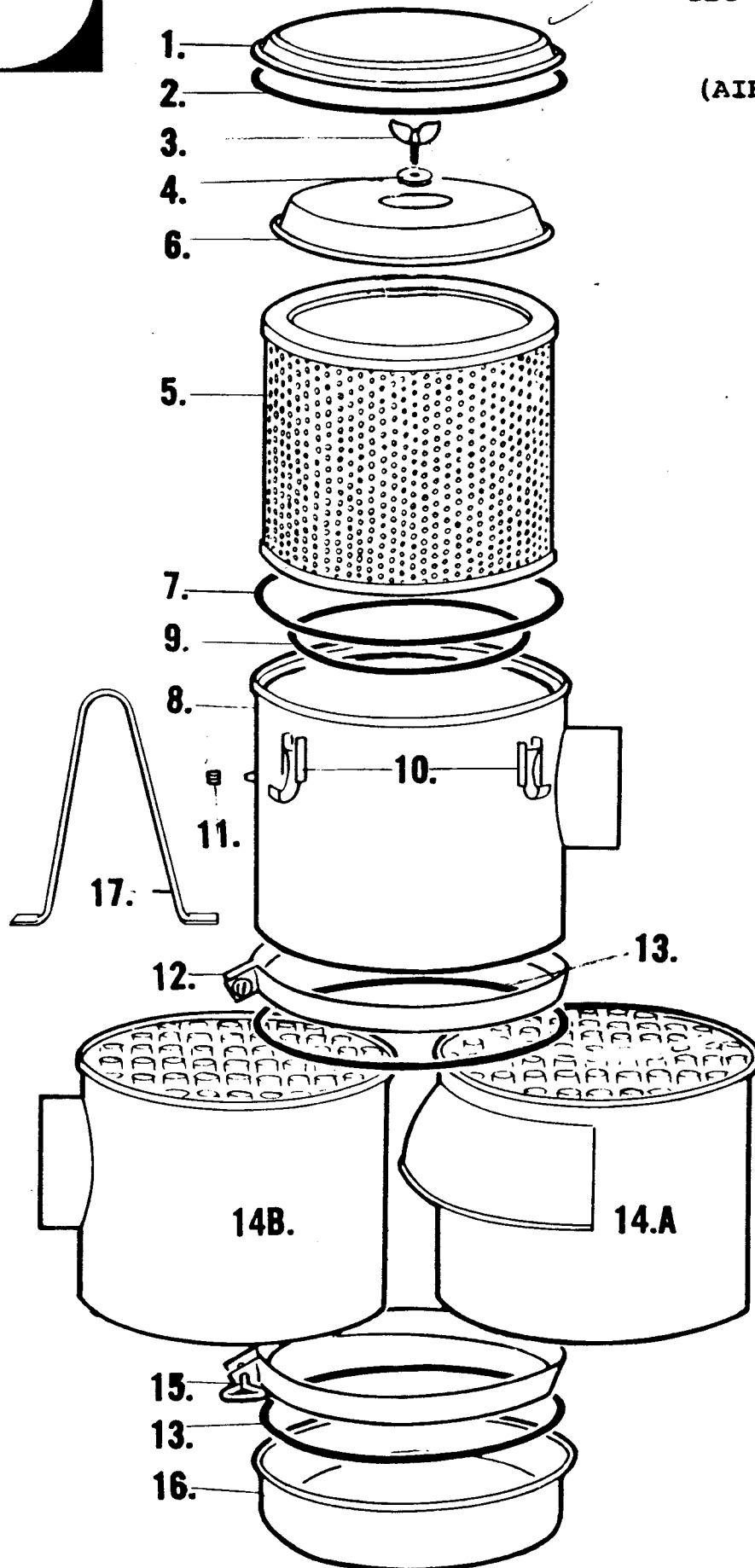
**AIR CLEANER**  
14"

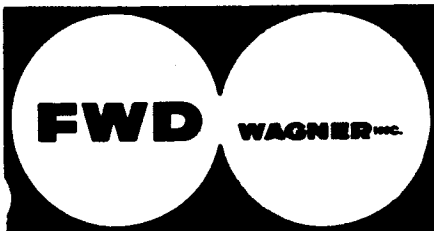
ITEM	FWD NO.	DESCRIPTION	QTY.
1	207889	Cover Ass'y	1
2	205239	Cover Gasket S	1
3	205240	Thumb Screw	L
4	205268	Gasket Washer S	1
5	202942	Element Ass'y S	1
6	205718	Inner Cover	1
7	202943	Inner Cover Gasket S	1
8	207890	Upper Body Ass'y	1
9	202944	Element Gasket S	1
10	205244	Over Center Cover Clips	3
11	202945	Restriction Cap	1
12	207891	Body Clamp Ass'y	1
13	202946	Body & Cup Gasket S	2
14	207892	Lower Body Ass'y	1
15	207893	Cup Clamp Ass'y	1
16	207894	Cup Ass'y	1
17	NOT USED	Element Guide	
18	208136	Service Gauge (Not Illustrated)	1

NOTE: Parts marked with letter "S" are recommended  
Dealer and Fleet Operators stock items.

For other parts order by Item Number

(AIR CLEANER)  
(16")





PORTLAND, OREGON

2 of 2

2 0 4 3 7 5

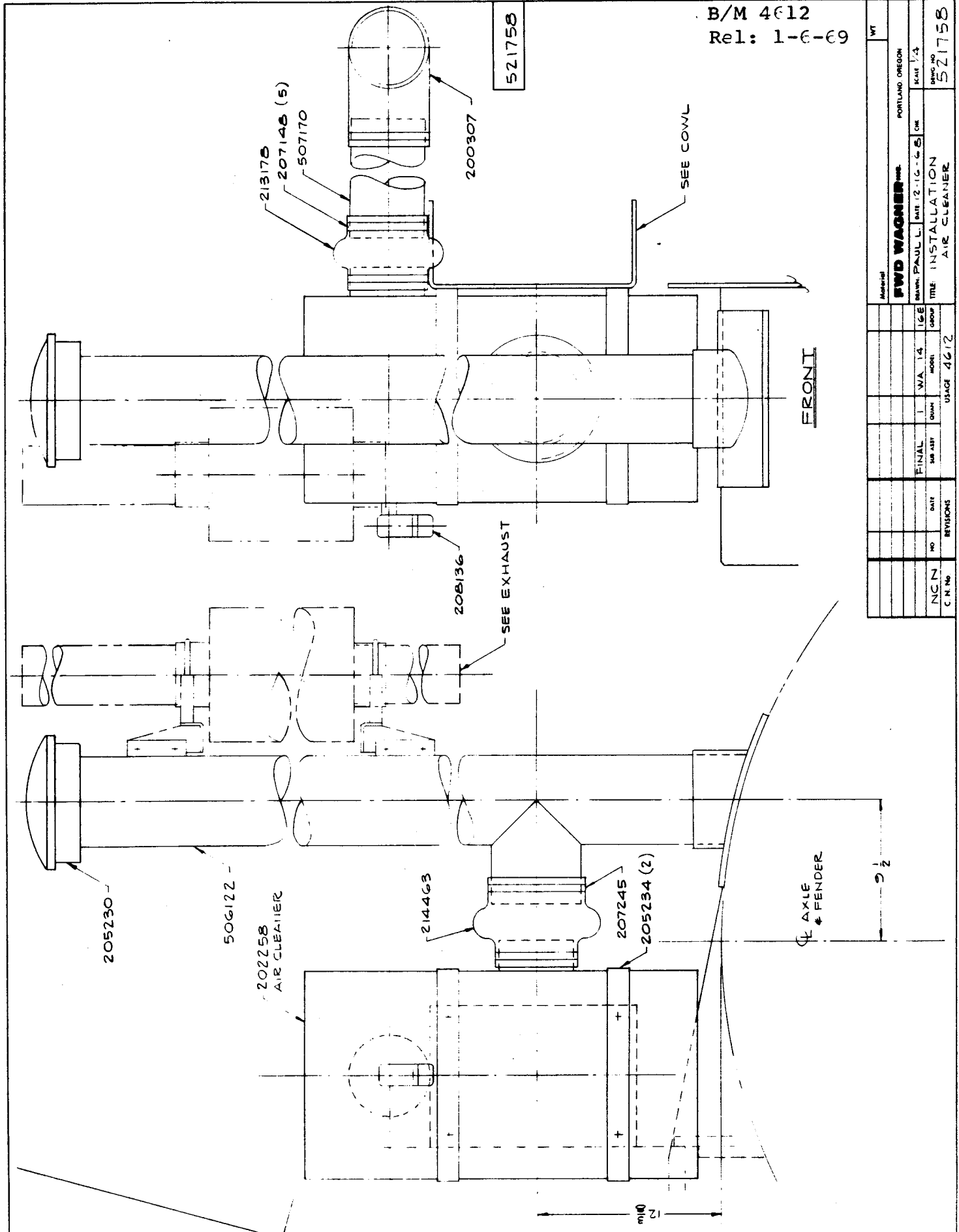
SBG-16-0341

AIR CLEANER - 16"

ITEM	FWD NO.	DESCRIPTION	QTY.
1	207895	Cover Assembly	1
2	205257	Cover Gasket	1
3	205240	Thumb Screw	1
4	205268	Gasket Washer	1
5	205710	Element Assembly	1
6	205711	Inner Cover	1
7	205712	Inner Cover Gasket	1
8	207896	Upper Body Assy.	1
9	205248	Element Gasket	1
10	205244	Over Center Cover Clips	3
11	202945	Restriction Cap	1
12	207897	Body Clamp Assembly	1
13	205245	Body & Cup Gasket	2
14	207898	Lower Body Assembly	1
15	207899	Cup Clamp Assembly	1
16	207926	Cup Assembly	1
17	Not Used	Element Guide	
18	201544	Service Gauge	1

B/M 4612

Rel: 1-6-69



Material		PORTLAND, OREGON		DATE 1-6-69		BY 521758	
FWD WAGNER		PAUL L.		DATE 12-16-68		BY 521758	
TITLE: INSTALLATION		AIR CLEANER		GROUP		DATE 1-6-69	
C.N. No.		NO.		DATE		REVISIONS	
NCN		1		WA 14		USAGE 4612	
FINAL		SUB ASY		QUAN		GROUP	



PORTLAND, OREGON

2 of 2

5 2 1 7 5 8

B/M 4612

Rel: 1-6-69

AIR CLEANER INSTALLATION  
WA-14, WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
	202258	Air Filter - 14"	1
	205234	Filter Mtg. Bands	2
	205230	Air Inlet Hood	1
	208136	Filter Gauge	1
	214463	Reducer 6 x 5	1
	506122	Pipe Assy. - Air Cleaner Inlet	1
	507170	Pipe - Filter to Engine	1
	200307	Elbow - Rubber 90°	1
	207148	Hose Clamp 6"	5
	207245	Hose Clamp 6½"	1
	213178	Connector - Rubber	1
	200286	Filter - Lube Oil	1

D/M 1687  
Rel. 8/14/67

517202

(REF) SEE EXHAUST

502989 (REF)

SEE COWL

511649 - WC-17, SF-17  
WC-317, SF-317

FRONT

WC-317  
202754 WA-17, WC-17  
SF-17, SF-317

213178 WA-14

WC-317  
207245 WA-17, WC-17  
SF-17, SF-317

207143 WA-14

508762 - WC-17, WC-317  
SF-17, SF-317

510266 WA-14  
WA-17

204375 - WA-17, WC-17, WC-317  
SF-17, SF-317

202258 - WA-14

506122 (2) (213178)

206320 x 45  
TO AIR COMP

208136

WC-317  
506122 - WA-17, WC-17  
SF-17, SF-317

510568 - WA-14

504493  
WA-14

505976 - WA-17, SF-17  
WC-17, WC-317  
SF-317

207245 (2) WA-17, WC-17, WC-317  
SF-17, SF-317

205234 (2) - WA-14

212185 (2) - WA-17  
SF-17, WC-317  
WC-17, SF-317

202259 (2) WA-14

Material		Wt.	
EWD WAGNER INC. PORTLAND, OREGON			
QTY	DATE	2-7-67	CHK.
693	NO.	DATE	TIME
CN. NO.	REVISIONS	USAGE	
693	NO.	DATE	TIME
CN. NO.	REVISIONS	USAGE	
AIR FILTER INSTALLATION			
SCALE: 1" = 1'-0"			
Dwg. No. 517202			

**FWD****WAGNER INC.**

PORTLAND, OREGON

5 1 7 2 0 2

B/M 1687

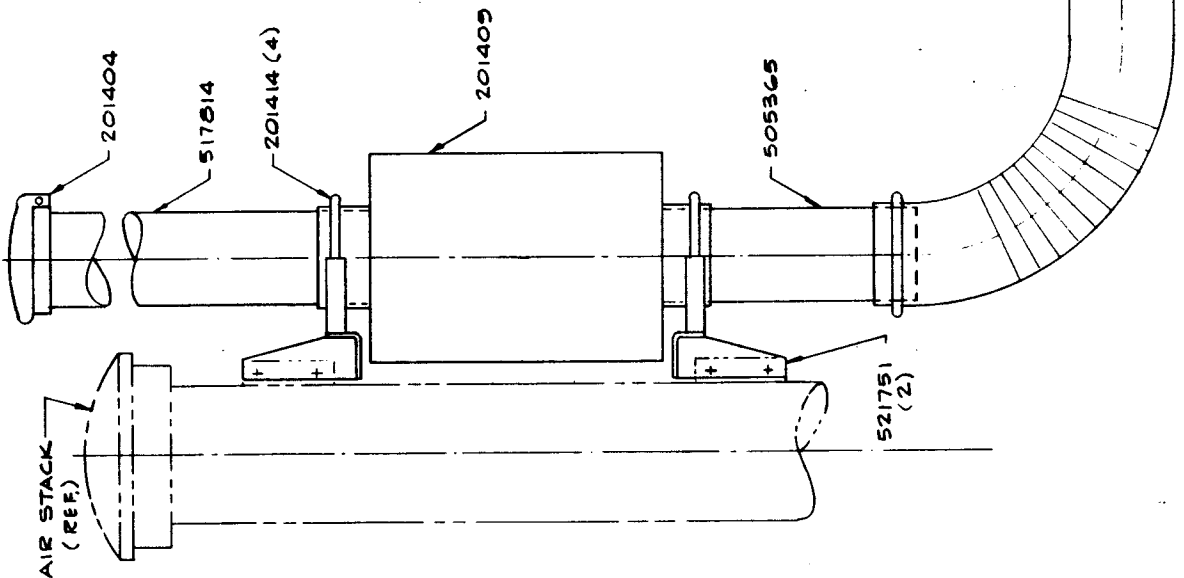
Rel: 8/14/67

## INSTALLATION - AIR CLEANER

Model - WC-17

SF-17

ITEM	FWD NO.	DESCRIPTION	QTY.
	204375	Air Filter	1
	212185	Filter Mtg. Bands	2
	205230	Air Inlet Hood - 6"	1
	208136	Filter Gauge	1
	511649	Spacer - Filter Bracket	2
	506122	Pipe Assy. - Air Cleaner Inlet	1
	508762	Tube Assy. - Air Intake to Comp.	1
	202754	Pipe Reducer - 6 x 5½ Rubber	1
	200307	Elbow - Rubber - 90°	1
	506128	Pipe - Filter to Eng.	1
	207148	Hose Clamp - 6"	5
	207245	Hose Clamp - 6½	3
	206320	Hose - 45" Lg.	1
	505976	Connector - Rubber - 6 I. D. x 4 Lg.	1
	506126	Connector - Rubber - 5½ I.D. x 4 Lg.	1

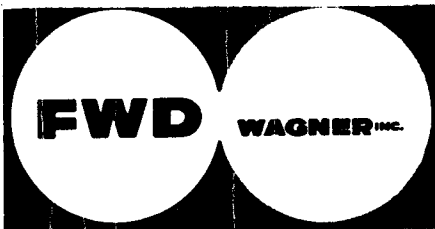


521750

1 of 2  
B/M 4610  
Rel: 1-6-69

Material		PORTLAND OREGON	
FWD WAGNER INC.		SCALE 1/4"	
DATE 12-16-68	CHK.	521750	
PAUL L.	DATE 12-16-68	521750	
TRK EXHAUST	INSTALLATION	521750	
GROUP	GROUP	GROUP	
FINAL	DATE	DATE	
NO	NO	NO	
NCN	REVISIONS	REVISIONS	
C N No	REVISIONS	REVISIONS	





PORTLAND, OREGON

2 of 2

5 2 1 7 5 0

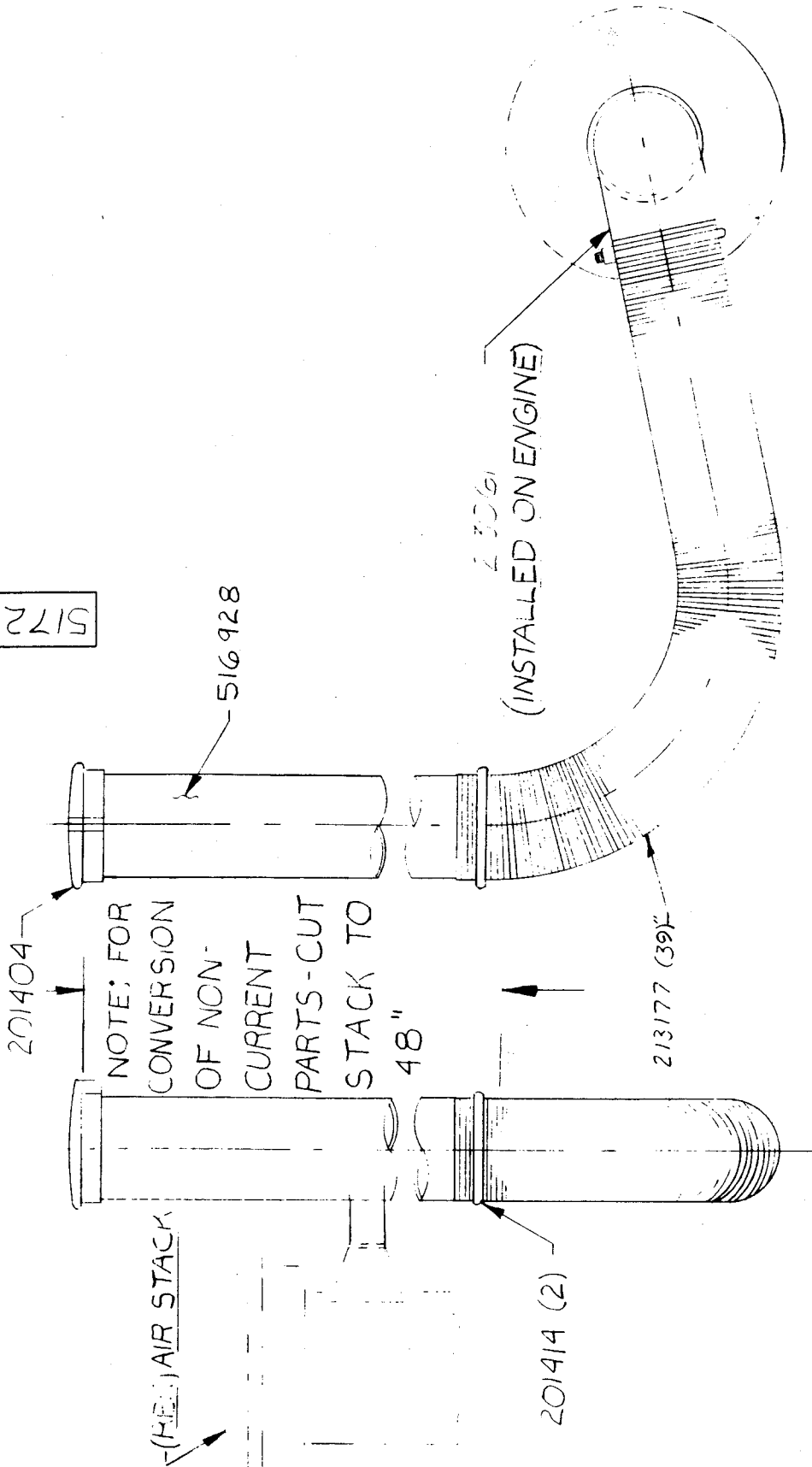
B/M 4610

Rel: 1-6-69

MUFFLER - INSTALLATION  
WA-14

ITEM	FWD NO.	DESCRIPTION	QTY.
	521751	Bracket - Assy. - Muffler	2
	521754	Adapter - Manifold to Pipe	1
	517814	Pipe - Upper	1
	505365	Pipe - Lower	1
	201409	Muffler	1
	201404	Rain Cap	1
	201414	Clamp - 4"	4
	200512	Gasket	1
	521850	Flex Exhaust Tubing 4" ID	1

517204



Material		Wt.	
FWD WAGNER INC. PORTLAND, OREGON			
DRWN: BLUNCK	DATE: 2-8-67	CHK:	SCALE:
Title: EXHAUST INSTALLATION		DRWG. NO. 517204	
REV. NO.		REV. DATE	
692			
CN/NO.		USAGE P/L 2.4	
SUB ASSY.		QUAN.	
FIN/AL		1	
MC-517		TGE	
WA 12.7			

**FWD WAGNER** INC.

PORTLAND, OREGON

Page 2 of 2

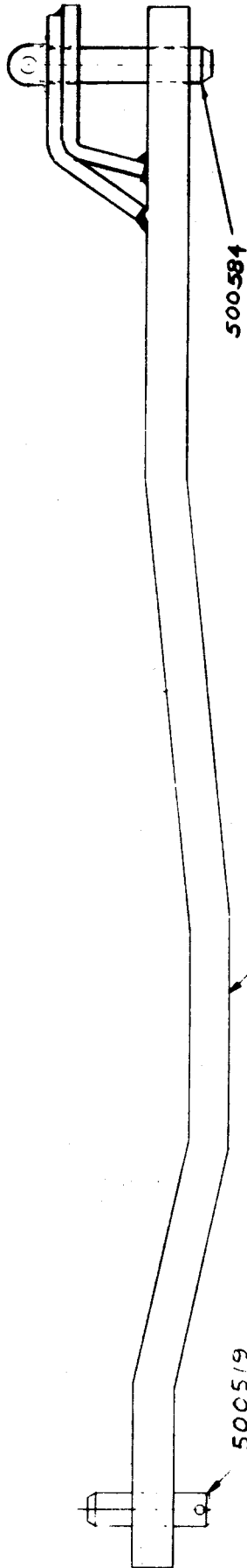
5 1 7 2 0 4

B/M 3643

Rel: 3/21/67

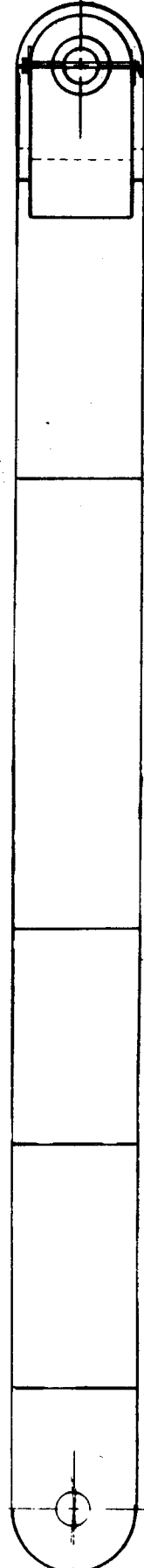
MUFFLER  
(For Flex Pipe)  
Model WC-17, WC-317 WA-14  
SF-17 SF-317 WA-17

ITEM	FWD NO.	DESCRIPTION	QTY.
	517204	Exhaust Installation	
	516928	Exhaust Stack Assembly	1
	213177	Flex Exhaust Tubing - 4" I.D. x 39" Lg.	1
	201404	Rain Cap	1
	201414	Clamp	2
	213061	Elbow	1



508397

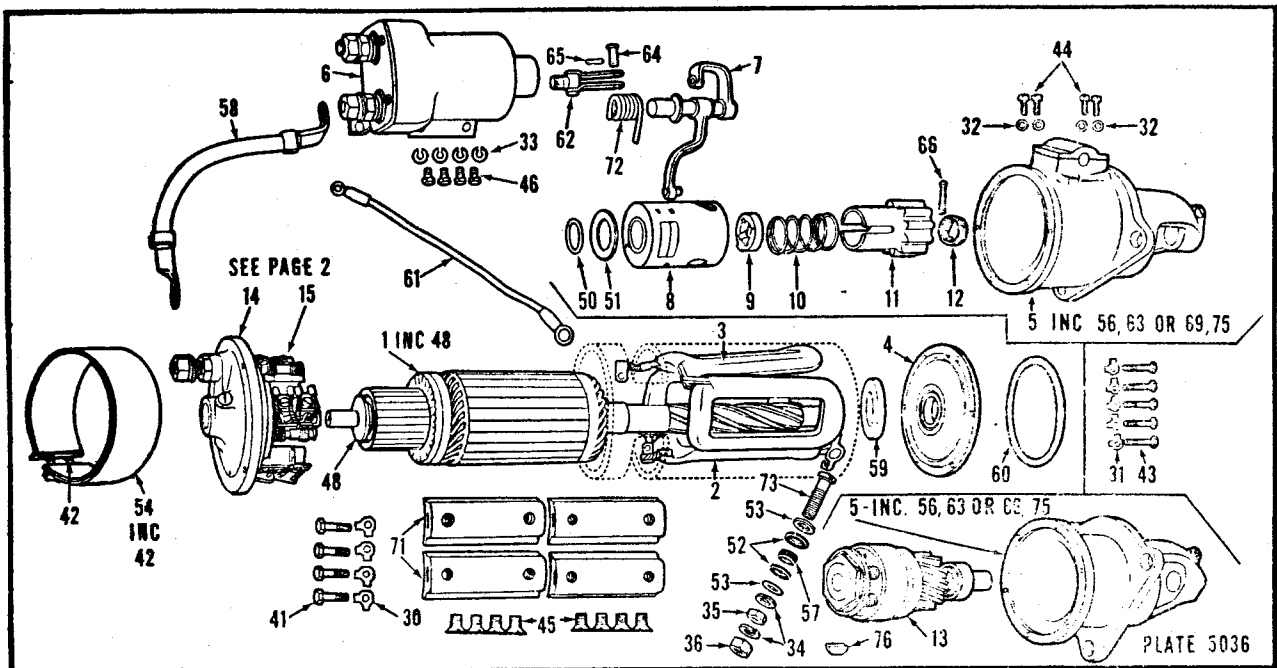
508397



503506

A

Material				Part			
FWD WAGNER				PORTLAND OREGON			
DRM. BUNICA				DATE 10-4-66			
TRA 17				CNC			
QUAN. 1				GROUP 11			
SUB A.S.T.				SCALE			
SIGO 23				508397			
NO. 11-18-66				DRAW BAR ASSEMBLY			
DATE				REVISIONS			
NO. 11-18-66				USAGE			
C/N 10							



Illustrations are of Typical Parts only. For parts not illustrated or in columns see Minor Parts Section.

Model No.	Arma- ture	(a) Field Coil — L.H.	(a) Field Coil — R.H.	†Plate — Center Bearing	Housing — Drive	Switch	Lever — Shift	Sleeve — Shift	Guide — Pinion	Spring — Meshing	Pinion —	Collar — Stop	Drive — Assem
	1	2	3	4	5	6	7	8	9	10	11	12	13
1113761	1937847	1937117	1937121	1941437	1923287								•1937675
1113762	"	1938859	1938860	"	"								•1941433
1113763	"	•	•	1937113	"								•1937089
1113765	"	•	•	1941437	"								•1937675
1113766	"	•	•	"	"								•1941433
1113767	1937071	1937117	1937121	1909603	1909601								•1938010
1113768	"	"	"	1909496	"								•
1113769	"	"	"	1932549	"								•
1113770	1937847	"	"	1937113	1923287								•1937089
1113771	1937071	"	"	1909496	1909601								•1938010
1113772	1918052	•	•	1918048	1918044	1119804	1914253						†1910077
1113773	1936455	1937117	1937121	1936465	1936443	1119803	•						†1932031
1113774	1918052	"	"	1918048	1911612	"	1914253						†1932545
1113775	"	1937612	1937612	1941855	1941855	1119805	"						†1932605
1113776	1937071	1937117	1937121	1919849	1935377								•1938010
1113777	1921117	•	•	1909496	1909579	1119804	1864012	1907636	1906149	1906080	1922761	1910224	
1113778	1911168	1937117	1937121	1937113	1885535	1119803	"	1906082	1906081	"	1928985	1872650	
1113779	1921110	"	"	1909496	1909579	"	"	"	"	"	1928985	1916223	
1113780	"	"	"	1909603	1878404	1119939	"	"	"	"	1941850	"	
1113781	1911168	"	"	1937113	1911166	1119803	"	"	"	"	1928985	1872650	
1113782	"	"	"	"	1885530	"	"	"	"	"	"	"	
1113783	1918052	"	"	1918048	1918044	"	1914253						†1932031
1113784	"	•	•	"	"	1119804	"						†
1113785	"	1937117	1937121	"	1943337	1119803	"						†
1113787	1937847	•	•	1937113	1931819								•1939124
1113788	1937071	1937117	1937121	1909603	1909601								•1938010
1113789	1885624	•	•	"	1910925	1119804	1864012	1906082	1906081	1906080	1928985	1872650	

•For Parts see Switch—Group 101-A.

†Service by complete replacement.

•1937875 is Lower—L.H. 1937876 is Upper—L.H.

1937877 is Lower—R.H. 1937878 is Upper—R.H.

•For parts see Motor Drive—Group 9.

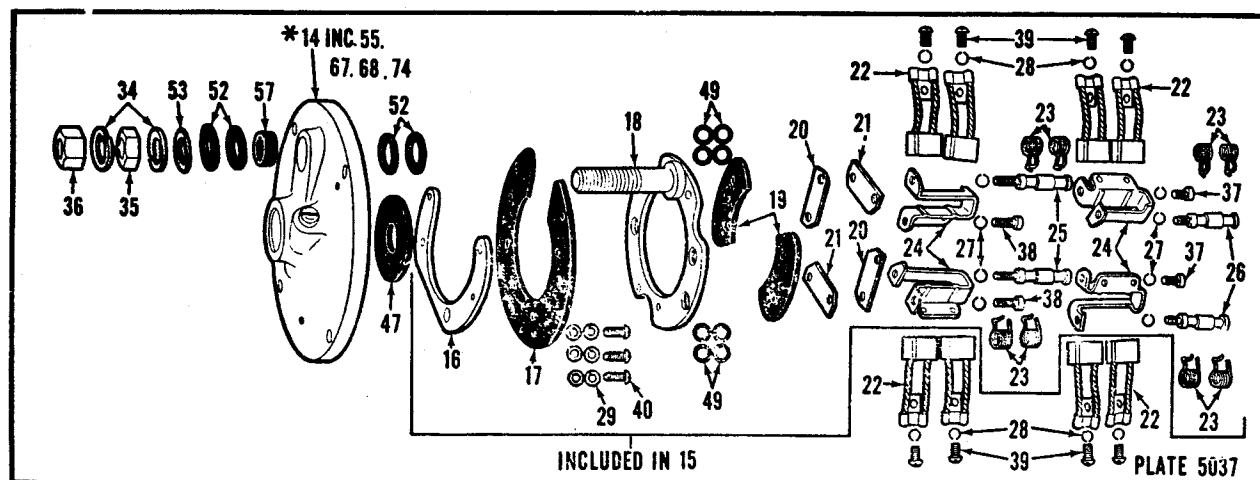
•Lower Lever is 1930652—Upper is 1936458.

†For parts see Motor Drive—Group 7.

•1938948 is lower—L.H. 1938949 is upper—L.H.

•1938950 is lower—R.H. 1938947 is upper—R.H.

**Delco-Remy**  
SERVICE PARTS CATALOG



Illustrations are of Typical Parts only. For parts not illustrated or in columns see Minor Parts Section.

Model No.	*Frame — C.E.	Plate — Assem. Less Brushes	Plate — Support	Insulator — Brush Plate	Plate — & Stud	Insulator — Brush Holder	Plate — Space Ins. Holder	Plate — Space Crd. Holder	Brush (8 Req.)	Spring — Brush	Holder — Brush	Screw — Ins. Holder	Screw — Grd. Holder
	14	15	16	17	18	19	20	21	22	23	24	25	26
→ 1113761	1909514	1909527	1874847	1909523	1907467	1874846	1874848	1874851	1906909	1861785	1909521	1861786	1861787
1113762	"	"	"	"	"	"	"	"	"	"	"	"	"
1113763	"	"	"	"	"	"	"	"	"	"	"	"	"
1113765	"	"	"	"	"	"	"	"	"	"	"	"	"
1113766	"	"	"	"	"	"	"	"	"	"	"	"	"
1113767	"	"	"	"	"	"	"	"	"	"	"	"	"
1113768	"	"	"	"	"	"	"	"	"	"	"	"	"
1113769	"	"	"	"	"	"	"	"	"	"	"	"	"
1113770	"	"	"	"	"	"	"	"	"	"	"	"	"
1113771	"	"	"	"	"	"	"	"	"	"	"	"	"
1113772	"	"	"	"	"	"	"	"	"	"	"	"	"
1113773	1936468	"	"	"	"	"	"	"	"	"	"	"	"
1113774	1909514	"	"	"	"	"	"	"	"	"	"	"	"
1113775	"	"	"	"	"	"	"	"	"	"	"	"	"
1113776	"	"	"	"	"	"	"	"	"	"	"	"	"
1113777	"	"	"	"	"	"	"	"	"	"	"	"	"
1113778	"	"	"	"	"	"	"	"	"	"	"	"	"
1113779	"	"	"	"	"	"	"	"	"	"	"	"	"
1113780	"	"	"	"	"	"	"	"	"	"	"	"	"
1113781	"	"	"	"	"	"	"	"	"	"	"	"	"
1113782	"	"	"	"	"	"	"	"	"	"	"	"	"
1113783	"	"	"	"	"	"	"	"	"	"	"	"	"
1113784	"	"	"	"	"	"	"	"	"	"	"	"	"
1113785	"	"	"	"	"	"	"	"	"	"	"	"	"
1113787	"	"	"	"	"	"	"	"	"	"	"	"	"
1113788	"	"	"	"	"	"	"	"	"	"	"	"	"
1113789	"	"	"	"	"	"	"	"	"	"	"	"	"

\*Includes Brake Washer (47)

# MINOR PARTS SECTION

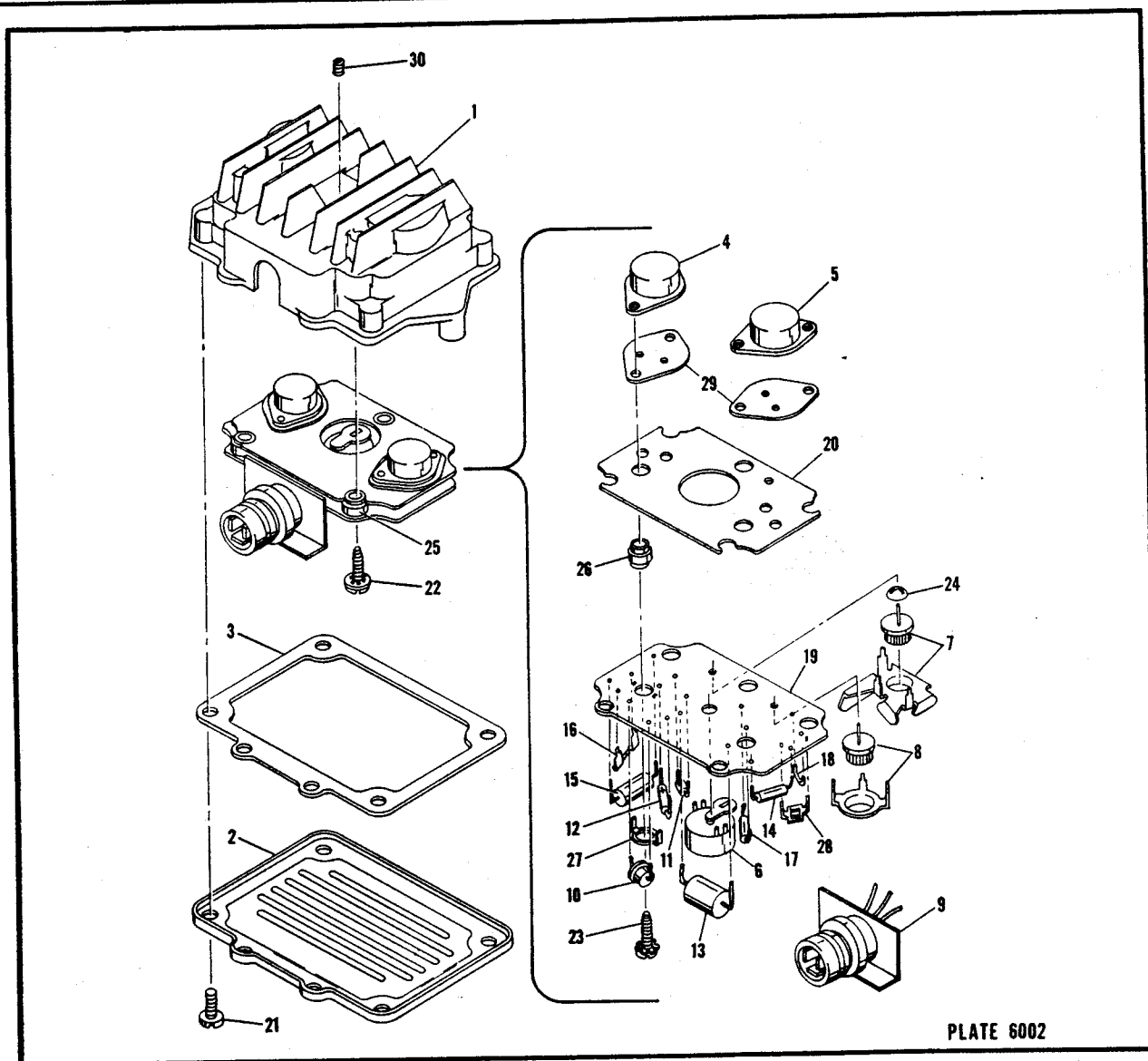
Illus. No.	Name	Part No.	Used on Models
<b>LOCK WASHERS</b>			
27	Lock Washer—Brush Holder Screw -----	120217	All
28	Lock Washer—Brush Lead Screw -----	121841	All
29	Lock Washer—Brush Plate Assem. Attach. Scerw ---	1904376	All
30	Lock Washer—C.E. Frame Screw -----	1873008	All
31	Lock Washer—Drive Housing Screw -----	1873008	1113761-2-6-7-8; 71-3-6-7-8-9; 80-7-8-9
31	Lock Washer—Drive Housing Screw -----	131098	1113763-9; 70
31	Lock Washer—Drive Housing Screw -----	1900310	1113765; 72-4-5; 81-2-3-4-5
32	Lock Washer—Drive Housing Cover Screw -----	121637	1113778; 80-1-2-9
—	Lock Washer—Field Coil Ground Screw -----	131183	1113775
34	Lock Washer—Terminal Stud -----	1902494	All
<b>NUTS</b>			
35	Nut—Terminal Stud ( $\frac{5}{16}$ thk.) -----	120238	All
36	Nut—Terminal Stud ( $\frac{7}{16}$ thk.) -----	120378	All
<b>SCREWS</b>			
37	Screw—Brush Holder—Ground -----	132105	All
38	Screw—Brush Holder—Insulated -----	1912728	All
39	Screw—Brush Lead Attaching -----	121749	All
40	Screw—Brush Plate Assem. Attaching -----	132760	All
41	Screw—C.E. Frame Attaching -----	1867877	All
42	Screw—Cover Band -----	132926	All
43	Screw—Drive Housing Attaching ( $\frac{1}{4}$ -28x1 $\frac{3}{8}$ ) -----	1874496	All except 1113773
43	Screw—Drive Housing Attaching ( $\frac{1}{4}$ -28x1) -----	1867877	1113772-4-5; 83-4-5
43	Screw—Drive Housing Attaching -----	1874857	1113773
44	Screw—Drive Housing Cover Attaching -----	437326	1113778; 80-1-2-9
44	Screw—Drive Housing Cover Attaching -----	132259	1113777-9
—	Screw—Field Coil Ground -----	431942	1113775
45	Screw—Pole Shoe -----	1843646	All
46	Screw—Switch Attaching -----	1930611	1113772-3-4-5-7-8-9; 80-1-2-3-4-5-9
<b>WASHERS</b>			
47	Washer—Brake—C.E. (Fiber) -----	1858490	1113777-8-9; 80-1-2-9
48	Washer—Brake Shoe -----	1856819	1113777-8-9; 80-1-2-9
49	Washer—Ins. (Bushing) Brush Holder Screw -----	1861788	All
—	Washer—Felt—C.E. -----	1935255	1113773
—	Washer—Plain—Brush Plate Assem. Screw -----	810794	All
—	Washer—Space—Between Armature & Center Bearing -----	1911645	1113772-4-5; 83-4-5
50	Washer—Space—Between Center Bearing & Shift Sleeve -----	1906089	1113777-8-9; 80-1-2-9
—	Washer—Space—Between Center Bearing & Shift Sleeve or Drive -----	1911644	1113772-3-4-5; 83-4-5
—	Washer—Space—Between Center Bearing and Drive -----	1907507	1113767-8-9; 71-6; 87
—	Washer—Space—Between Center Bearing and Drive -----	1936638	1113761-2-3-5-6; 70; 87
51	Washer—Space—Cupped—Between Center Bearing and Shift Sleeve -----	1906090	1113777-8-9; 80-1-2-9
—	Washer—Space—D.E. -----	1907495	1113765-7-8-9; 71-6; 87-8
—	Washer—Space—D.E. -----	1881771	1113761-2-3-6; 70
52	Washer—Ins. ( $\frac{7}{8}$ O.D.) Terminal Stud -----	1861791	All
—	Washer—Ins. (1" O.D.) Terminal Stud -----	1922457	All
—	Washer—Insulator ( $\frac{1}{4}$ O.D.) Terminal Stud -----	1903058	1113762-5-6; 72-7; 84-7-9
—	Washer—Plain—Ground Screw -----	32898	1113775
53	Washer—Plain—Terminal Stud -----	811912	All
—	Washer—Thrust—C.E. -----	1905014	1113761-2-3-5-6-7-8-9; 70-1-2-3-4-5-6; 83-4-5-7-8
<b>MISCELLANEOUS</b>			
54	BAND—Cover -----	1909550	All
55	BUSHING—C.E. -----	38273	All
56	BUSHING—D.E. -----	1938754	1113777-8-9; 80-1-2
56	BUSHING—D.E. -----	1856826	1113789
56	BUSHING—D.E. -----	1906382	1113767-8-9; 71
56	BUSHING—D.E. -----	1926140	1113787
56	BUSHING—D.E. -----	1904083	1113772-3; 83
56	BUSHING—D.E. -----	1942995	1113776; 87
56	BUSHING—D.E. -----	1913540	1113761-2-3-5-6; 70-4-5; 85
—	BUSHING—Center Bearing -----	1877962	1113777; 89-8
—	BUSHING—Center Bearing -----	1921660	1113763-7-8-9; 70-1-6-8-9; 81-2-7-9
—	BUSHING—Center Bearing -----	1916389	1113762-4-5; 83-4-5
—	BUSHING—Center Bearing -----	1923481	1113773

## MINOR PARTS SECTION

Illus. No.	Name	Part No.	Used on Models
	MISCELLANEOUS—(Continued)		
—	BUSHING—Center Bearing -----	1916438	1113769
—	BUSHING—Center Bearing -----	1941439	1113761-2-5-6
57	BUSHING—Ins. Terminal Stud -----	1906046	All
—	BUSHING—Ins. Terminal Stud -----	1937116	All except 1113775
58	CABLE -----	1909848	1113772-3-4-5-7-8-9; 80-1-2-3-4-5-9
—	CLIP—Terminal Stud -----	1937665	All except 1113775
—	CLIP—(Retainer Ring)—Lever Shaft -----	9415234	1113773
59	COLLAR—Between Armature & Center Bearing (1 $\frac{1}{2}$ —O.D.) -----	1919853	1113767-8-9; 71-6-7-9; 80-7-9
—	COLLAR—Space—Between Armature & Center Bear. -----	1936466	1113773
—	CUP—Felt Retainer—C.E. -----	1935256	1113773
60	GASKET—Center Bearing -----	1914867	1113761-2-5-6-9; 71-3-7-9
60	GASKET—Center Bearing -----	1910353	1113768
—	GASKET—D.E. Cover Plate Attaching -----	114659	1113777-9
—	GASKET—Shift Lever Spring -----	1909531	1113777-9
—	INSULATOR—Field Coil -----	1868835	1113763-5-6; 72
—	INSULATOR—Field Coil Triangle -----	1913534	All Except 1113733-5-6; 72
61	LEAD—Switch To C.E. Terminal -----	1908675	1113772-3-4-9; 80-2-3-4-5-9
61	LEAD—Switch To C.E. Terminal -----	1910134	1113777-9; 80-9
62	LINK (& Screw)—Assembly -----	1909576	1113777-8; 81
62	LINK (& Screw)—Assembly -----	1917672	1113772-4-5; 83-4-5
62	LINK (& Screw)—Assembly -----	1936461	1113773
62	LINK (& Screw)—Assembly -----	1881381	1113778; 81-2
—	OIL CUP—Center Bearing -----	1919850	1113776
—	OIL CUP—D.E. -----	1935402	1113776
—	PIN—Attach Lever Link and Lever -----	1930648	1113773
—	PIN—Dowel—Shift Lever Shaft -----	455776	1113772-4-5; 83-4-5
64	PIN—Shift Lever -----	1857826	1113777-8-9; 80-1-2-9
64	PIN—Shift Lever -----	1914258	1113772-4-5; 83-4-5
—	PIN—Spring Retainer -----	1917678	1113772-3-4-5; 83-4-5
—	PIN—Cotter—Attach Lever Link and Lever -----	112726	1113773-5
65	PIN—Cotter—Shift Lever -----	112726	1113772-4-7-8-9; 80-1-2-3-4-5-9
66	PIN—Cotter—Pinion Stop -----	454490	1113778; 81-2-9
66	PIN—Cotter -----	137204	1113777-9; 80
—	PLATE—Wick Retainer—In Center Bearing -----	1921662	1113761-2-3-5-6; 78; 81-2
67	PLUG—Expansion—C.E. -----	103893	All except 1113773
68	PLUG—Pipe—C.E. -----	125947	All
—	PLUG—Pipe—In Center Bearing -----	273913	1113773
—	PLUG—Pipe—In Center Bearing ( $\frac{1}{8}$ Pipe Thrd.) -----	125947	1113767-8-9; 71-7-9; 80-7-9
69	PLUG—Pipe—In Drive Housing -----	125947	All except 1113776
—	RETAINER—Felt—In Center Bearing -----	1916386	1113772-4-5; 83-4-5
—	RETAINER—Plunger Spring -----	1917677	1113772-3-4-5; 83-4-5
—	RING—Snap—Wick Retainer -----	1936649	1113761-2-3-5-6; 70-8; 81-2-7
—	SEAL—Lever Shaft ( $\frac{1}{4}$ I.D.) -----	1914373	1113773
—	SEAL—Lever Shaft ( $\frac{1}{4}$ I.D.) -----	1916644	1113773
70	SEAL—Oil—In Center Bearing -----	1909498	1113761-2-5-6; 71-7-9
—	SEAL—Oil—In Center Bearing -----	1918047	1113773
—	SHAFT—Shift Lever -----	1914257	1113772-4-5; 83-4-5
71	SHOE—Pole (View notched end face down—Longer lip on right) -----	1934477	All
—	SHOE—Pole (View notched end face down—Longer lip on left) -----	1934478	All
72	SPRING—Shift Lever -----	1864020	1113777-8-9; 81-2-9
—	SPRING—Plunger Return -----	1917676	1113772-3-4-5; 83-4-5
73	STUD—Field Terminal -----	1937115	All except 1113775
—	STUD—Terminal—C.E. -----	*	
74	WICK—Oil—C.E. -----	1909560	All
75	WICK—Oil—D.E. -----	1909654	All except 1113776; 82
75	WICK—Oil—D.E. -----	1909560	1113782
—	WICK—Oil—D.E. -----	802696	1113776
—	WICK—Oil—In Center Bearing -----	1920400	1113767-8-9; 71-7-9; 80-7-9
—	WICK—Oil—In Center Bearing -----	1921663	1113761-2-3-5-6; 70-8; 81-2-7
—	WICK—Oil—In Center Bearing -----	1916387	1113772-4-5; 83-4-5
—	WICK—Oil—In Center Bearing -----	1936465	1113773
—	WICK—Oil—In Center Bearing -----	1919851	1113776

\*Terminal Stud C. E. not sold separately.

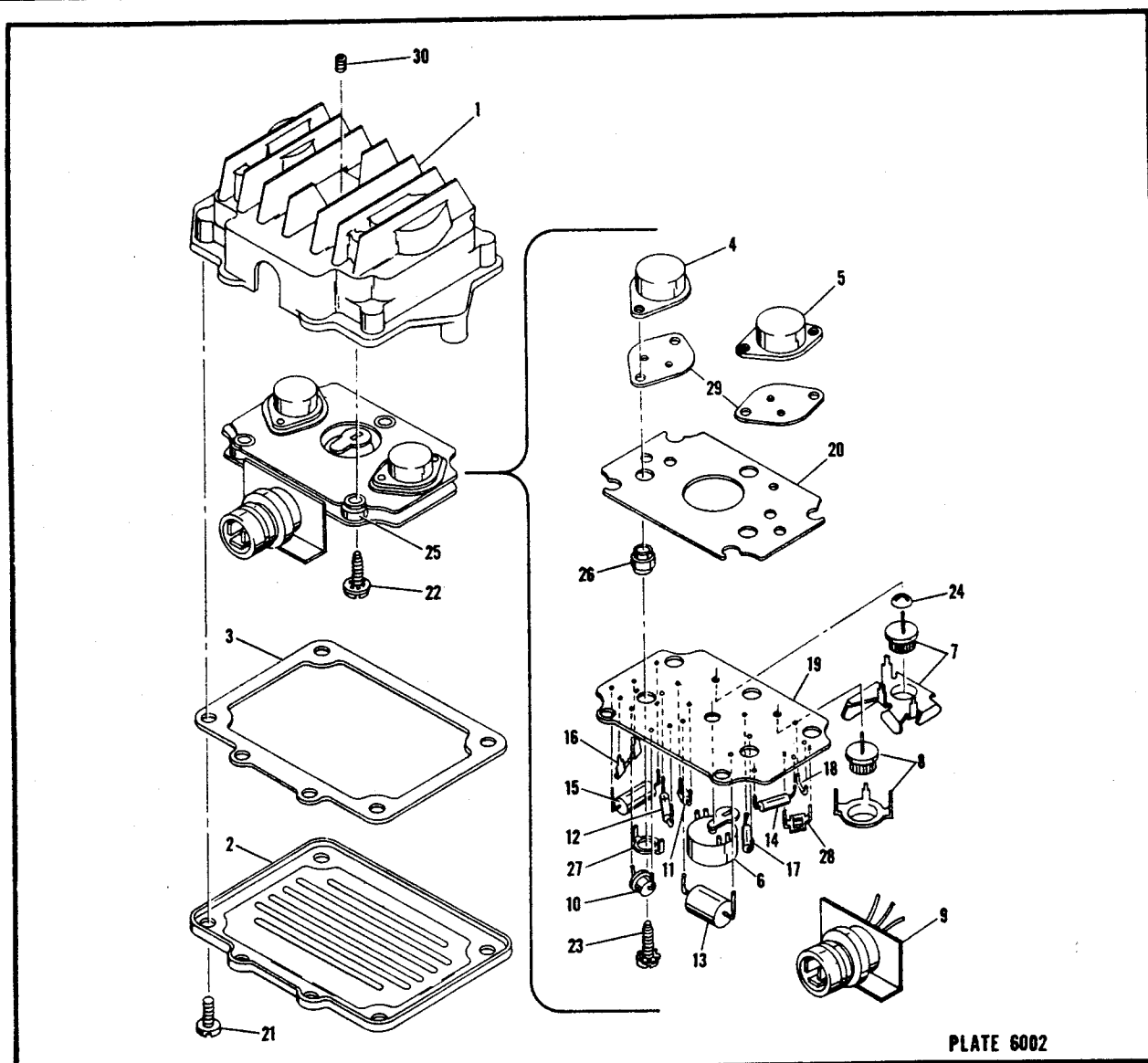




Illustrations are of Typical Parts only. For parts not illustrated or in columns see Minor Parts Section.

Model No.	Housing	Plate — Base Cover	Gasket	Transistor — Driver	Transistor — Power	Potenti- ometer	Diode & Heat Sink — Back Bias	Diode & Heat Sink — Field Discharge	Connector	Diode — Silicon
	1	2	3	4	5	6	7	8	9	10
→ 9000590.....	1961571	1961574	1962035	1961479	1961480	1961562	1962585	1961952	2982445	1956486
9000591.....	"	"	"	"	1962323	1962364	"	"	2983229	"
9000592.....	"	"	"	"	"	"	"	"	2983250	"
9000593.....	"	"	"	"	"	"	"	"	2983249	"

# **Delco-Remy** SERVICE PARTS CATALOG



Illustrations are of Typical Parts only. For parts not illustrated or in columns see Minor Parts Section.

Model No.	Diode — Zener	Capacitor	Capacitor	Resistor	Resistor	Resistor	Resistor	Lead	Circuit — Printed	Plate — Heat Dissipating
	11	12	13	14	15	16	17	18	19	20
9000590.....	1956197	1961559	1961560	1961553	1961554	1961556	1963143	1961561	1961550	1961568
9000591.....	"	1962674	"	1962362	1962363	"	"	"	"	"
9000592.....	"	"	"	1962398	1962399	"	"	"	"	"
9000593.....	"	"	"	1962402	1962403	"	"	"	"	"

## **RESISTOR CHART**

PART No.	VALUE IN OHMS	PART No.	VALUE IN OHMS
1961553 .....	22	1962398 .....	200
1961554 .....	50	1962399 .....	300
1961556 .....	30	1962402 .....	220
1962362 .....	165	1962403 .....	325
1962363 .....	185	1963143 .....	62

Parts not listed in this Catalog will not be sold separately.

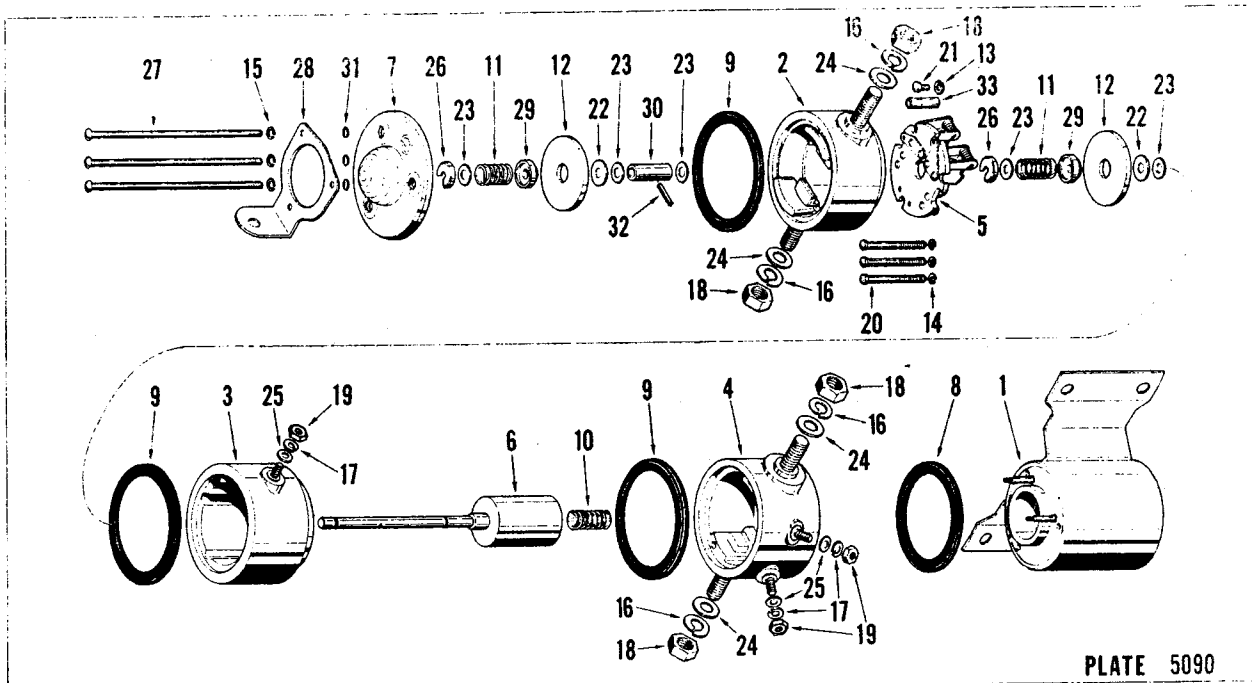


PLATE 5090

Illustrations are of Typical Parts only. For Parts not illustrated or in columns see Minor Parts Section.

Model No.	Case & Coil	Cap Assem. Cover End	Cap Assem. Center	Cap Assem. Coil End	Contact Plate Assem.	Plunger	Cover — End	Gasket Cap & Coil Case	Gasket — Cap	Spring — Plunger	Spring — Contact	Disc — Contact
	1	2	3	4	5	6	7	8	9	10	11	12
1119844.....	1949721	1949730	1949732	1949731	1949673	1949670	1931355	1904966	1904967	1947577	1948867	1907617
1119845.....	"	1949733	"	"	1949715	1949712	"	"	"	"	"	"

### MINOR PARTS SECTION

Illus. No.	Name	Part No.	Used on Models
	<b>LOCK WASHERS</b>		
13	Lock Washer—Contact Terminal Screw .....	131181	1119844-5
14	Lock Washer—Contact Assem. Attaching Screw .....	131181	1119844-5
15	Lock Washer—Thru Bolt .....	131182	1119844
16	Lock Washer— $\frac{3}{8}$ -16 Terminals .....	120381	1119844-5
17	Lock Washer— $\frac{1}{2}$ -10-32 Terminals .....	120217	1119844-5
	<b>NUTS</b>		
18	Nut— $\frac{3}{8}$ -16 Terminals .....	134566	1119844-5
19	Nut— $\frac{1}{2}$ -10-32 Terminals .....	120614	1119844-5
	<b>SCREWS</b>		
20	Screw—Contact Assembly Attaching .....	1949656	1119844-5
21	Screw—Contact Terminal .....	435844	1119844-5
	<b>WASHERS</b>		
22	Washer—Insul.—Contact Disc .....	1917836	1119844-5
23	Washer—Plain—Contact Disc Spring Spacer .....	1849235	1119844-5
24	Washer—Plain— $\frac{3}{8}$ -16 Terminals .....	812622	1119844-5
25	Washer—Plain— $\frac{1}{2}$ -10-32 Terminals .....	813767	1119844-5
26	Washer—Slotted—Contact Disc Spring Retaining .....	1847238	1119844-5
	<b>MISCELLANEOUS</b>		
27	BOLT—Thru .....	1949655	1119844
27	BOLT—Thru .....	1949674	1119845
28	BRACKET—Cover End .....	1949717	1119844
29	BUSHING—Contact Disc Spring Retaining .....	1915669	1119844-5
30	COLLAR—Spacing—Contact Disc .....	1954619	1119844
31	"O" RING—Thru Bolt Seal .....	1918621	1119844-5
32	PIN—Contact Disc Space Collar Attaching .....	455478	1119844
—	RING—Snap—Contact Disc .....	1915411	1119845
33	SPACER—Contact Assembly Attach. Screw .....	1953045	1119844

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 MINOR PARTS SECTION
 

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Illus. No.	Name	Part No.	Used on Models
—	<b>LOCK WASHERS</b>		
—	Lockwasher—Terminal Screw -----	9421423	1119513-16
	<b>SCREWS</b>		
12	Screw—Adjusting -----	1944590	1119500-2-5-8
12	Screw—Adjusting -----	1958148	1119506-7; 11-12-13-14-15-16-18
13	Screw—Contact Support Attaching -----	1943854	1119500-2-5-8
14	Screw—Cover Attaching -----	1943386	All
15	Screw—Terminal -----	454669	1119515-16
15	Screw—Terminal -----	1914800	1119500-2-5-8
	<b>MISCELLANEOUS</b>		
—	Shock Bracket Package -----	1962629	1119513-16-17
—	Rectifier -----	1966808	1119519

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