

# **MICHIGAN**

## **PARTS MANUAL**

### **No. 2462-R1 Model 125 III A Articulated Tractor Shovel**

Information contained herein pertains to Machine Serial

Numbers Listed below:

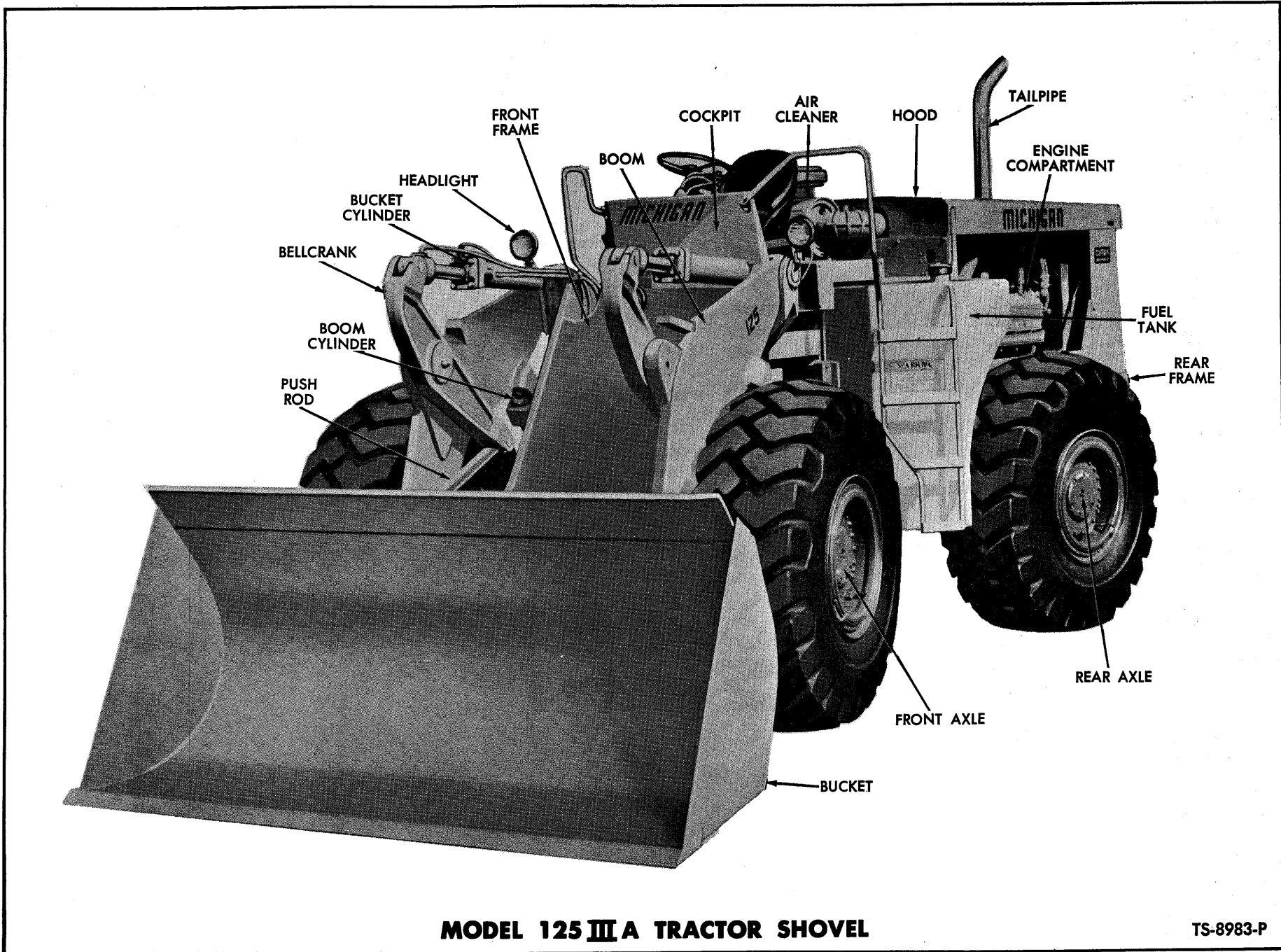
125 III A CUMMINS – 404A101 and after

125 III A G.M. – 403A101 and after

**Record Your Machine  
Serial Number Here**

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**CLARK EQUIPMENT COMPANY**



**WHEN ORDERING REPAIR PARTS**

To assure the best results and to maintain the original quality built into the machine it is important that only Clark-Approved Parts be used when new parts are required.

**IMPORTANT: Always furnish the distributor with the machine serial number when ordering parts.**

Order through your nearest Clark Distributor, for THE MICHIGAN LINE.

Always give serial number of machine.

Furnish: Quantity, Part Number and Description.

**WHEN PARTS ARE RECEIVED**

Check immediately for quantity, correctness and condition.

Advise your Michigan Distributor of any error.

Claims for damages, during shipment, should be made to the carrier immediately.

**MODEL 125III ARTICULATED TRACTOR SHOVEL**

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ENGINE AND ACCESSORIES - CUMMINS

All orders for engine assembly or components thereof should be placed with the nearest Cummins Engine Distributor. Always give model, specifications and serial number of the engine when ordering parts. This data will be found on nameplate attached to the side of the engine.

ENGINE ACCESSORIES - CUMMINS

Table with 4 columns: Item No., Part No., Description, No. Req'd. Rows include: 1 \*ALTERNATOR - 24 V. (DR-1117774, Cummins-181564), 2 \*STARTER - 24 V. (DR-1118872, Cummins-135161), 3 \*AIR COMPRESSOR - (BW-153964, Cummins-163374), 4 \*VOLTAGE REGULATOR - (See Page 5), 5 \*FAN - (Cummins-587399)

\*The above listed accessory items are serviced by the engine manufacturer. Specifications on these items are subject to change without notice. It is, therefore, recommended that complete model, specifications and serial number of the engine be provided to your Cummins Engine Distributor when ordering these parts.

ALTERNATOR, FAN AND WATER PUMP DRIVE BELTS

Table with 4 columns: Item No., Part No., Description, No. Req'd. Rows include: 6 948005 BELT SET, Fan (3 Belt Set), 7 948004 BELT, Alternator, 8 948003 BELT, Water Pump

REPLACEMENT FILTER ELEMENTS

Table with 4 columns: Item No., Part No., Description, No. Req'd. Rows include: 9 946011 ELEMENT, Engine Full Flow Lube Filter, 10 947293 ELEMENT, Engine By-Pass Filter, 11 946010 ELEMENT, Engine Fuel Filter, 12 215502 ELEMENT, Trans. & Conv. Hyd. System, 13 1530600 ELEMENT, Hydraulic Reservoir Return Filter, 14 1532445 FILTER, Hydraulic Reservoir Suction

WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE

**ENGINE AND ACCESSORIES — G.M.**

All orders for engine assembly or components thereof should be placed with the nearest G.M. Diesel Distributor. To obtain proper items, it is necessary to provide your engine model, serial number and necessary group type number for the equipment required. This data is stamped on the options and accessories plate on the rocker cover of engine.

**ENGINE ACCESSORIES — G.M.**

Item No.	Part No.	Description	No. Req'd.
1	-----	*ALTERNATOR — 24 V. (G.M.- 1117774).....	1
1A	-----	*ALTERNATOR — 24 V. (G.M.- 1117786).....	1
2	-----	*STARTER — 24 V. (G.M.- 1113879).....	1
3	-----	*AIR COMPRESSOR (G.M.- 5131513).....	1
4	-----	*VOLTAGE REGULATOR (See Page 7).....	1
5	-----	*FAN (G.M.- 5171229).....	1

\*NOTE: The above listed accessory items are serviced by the engine manufacturer. Specifications on these items are subject to change without notice. It is, therefore, recommended that complete model, specifications and serial number of the engine be provided to your G.M. Engine Distributor when ordering these parts.

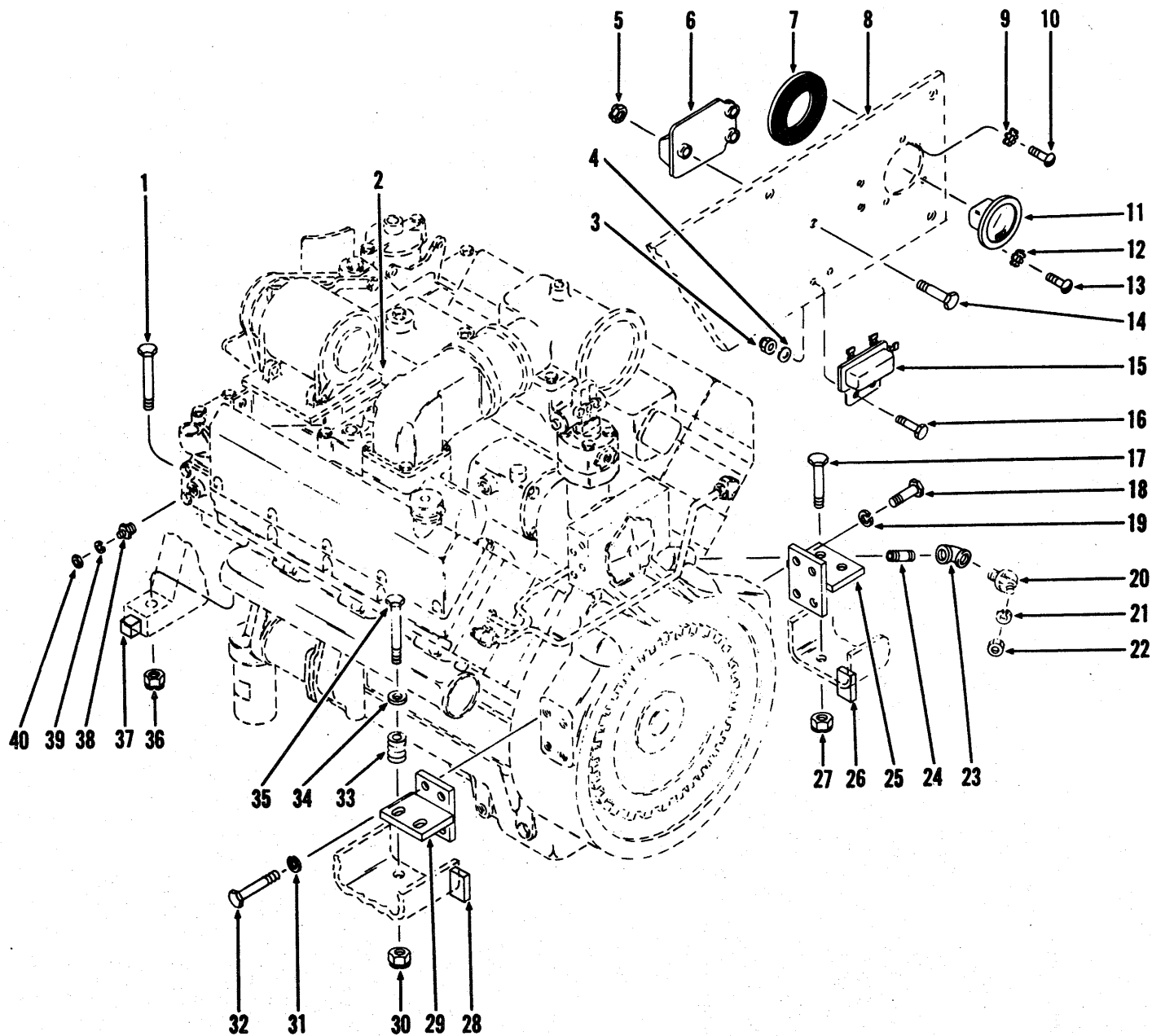
**ALTERNATOR, COMPRESSOR AND FAN BELTS**

Item No.	Part No.	Description	No. Req'd.
6	557527	BELT, Alternator Drive (2 Belt Set)(For use with 1117774 Alternator).....	1
6A	948768	BELT, Alternator Drive (Single Belt)(For use with 1117786 Alternator).....	1
7	3678239	BELT, Compressor.....	1
8	948304	BELT SET, Fan (3 Belt Set).....	1

**REPLACEMENT FILTER ELEMENTS**

Item No.	Part No.	Description	No. Req'd.
9	215502	ELEMENT, Engine Oil Filter .....	1
10	945446	ELEMENT, Fuel Filter — Primary (Can Type) .....	1
10A	949838	ELEMENT, Fuel Filter — Primary (Spin-on Type) .....	1
11	945445	ELEMENT, Fuel Filter — Secondary (Can Type) .....	1
11A	949839	ELEMENT, Fuel Filter — Secondary (Spin-on Type) .....	1
12	215502	ELEMENT, Trans. & Conv. Hyd. System .....	1
13	1530600	ELEMENT, Hydraulic Reservoir Return Filter .....	2
14	1532445	FILTER, Hydraulic Reservoir Suction .....	1

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



ENGINE AUXILIARY AND SUPPORT PARTS — CUMMINS

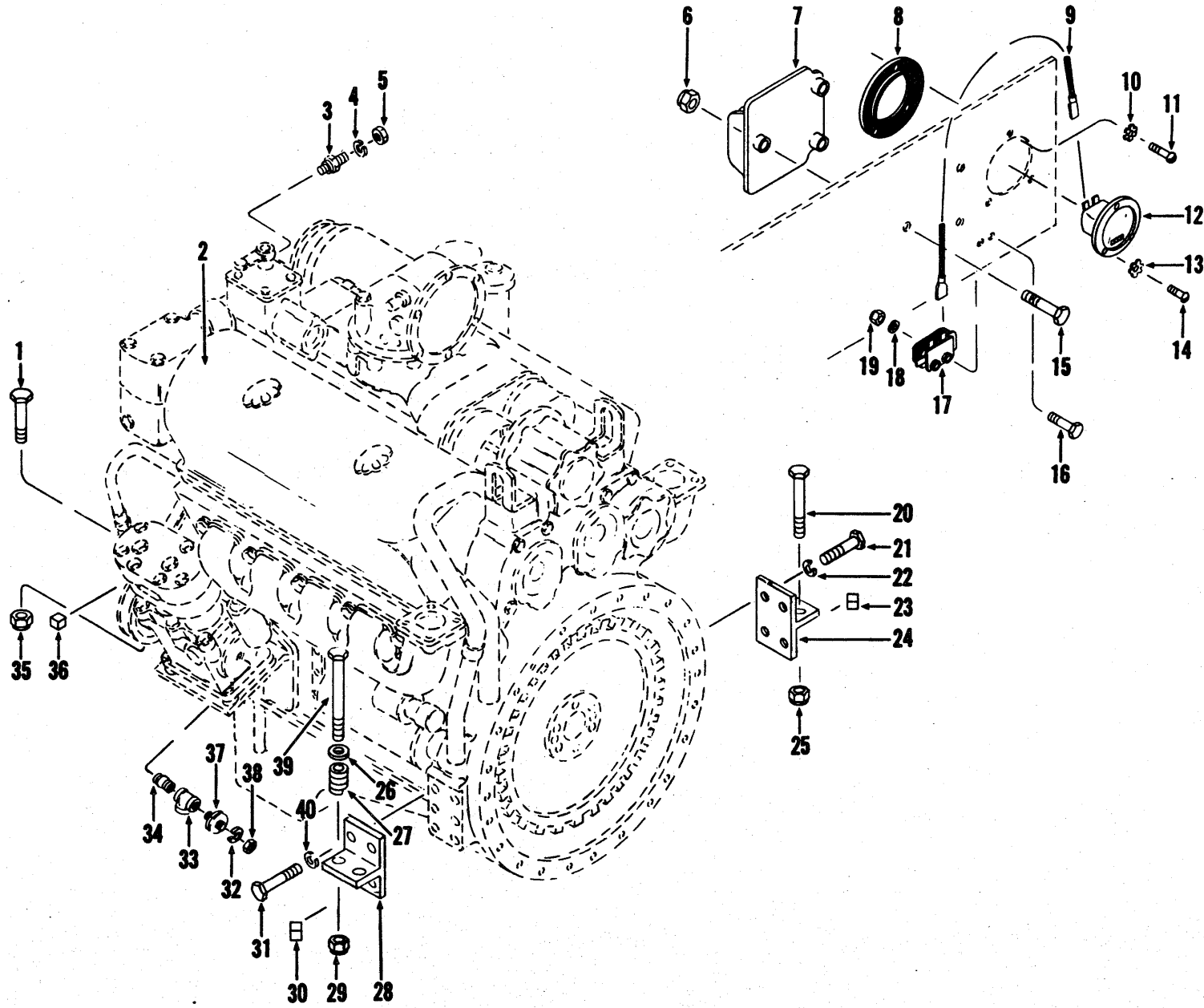
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**ENGINE AUXILIARY AND SUPPORT PARTS — CUMMINS**

Item No.	Part No.	Description	No. Req'd.
1	24C-1048	BOLT, Engine Mount .....	2
2	-----	ENGINE — See Cummins Engine Parts Manual .....	—
3	18D-04	NUT, Relay to Plate .....	2
4	25E-13	WASHER, Relay to Plate .....	2
5	18D-04	NUT, Regulator to Plate .....	3
6	556703	*REGULATOR, Voltage — D.R. #9000591 (See Note A) .....	1
7	551251	DAMPENER, Hourmeter Vibration .....	1
8	-----	PLATE, Air Cleaner Mtg. — See Index .....	—
9	12E-6	LKWSHR, Dampener to Plate .....	3
10	85G-608	SCREW, Dampener to Plate .....	3
11	1743825	KIT, Hourmeter (Inc. 12, 13) .....	1
12	12E-6	LKWSHR, Hourmeter to Dampener .....	3
13	85G-608	SCREW, Hourmeter to Dampener .....	3
14	24C-420	BOLT, Regulator to Plate .....	3
15	1526006	RELAY, Hourmeter (See Note A) .....	1
16	24C-416	BOLT, Relay to Plate .....	2
17	24C-1240	BOLT, Support to Frame .....	2
18	23C-1024	BOLT, Support to Engine .....	4
19	4E-10	LKWSHR, Support to Engine .....	4
20	1618574	SENDER UNIT, Engine Oil Pressure .....	1
21	12E-10	LKWSHR, Sender Unit .....	1
22	14D-10	NUT, Sender Unit .....	1
23	23F-1	ELBOW, Sender Unit .....	1
24	542646	NIPPLE, Elbow to Engine .....	1
25	572356	SUPPORT, Engine — L.H. ....	1
26	608241	BLOCK, Engine Stop .....	1
27	18D-12	NUT, Support to Frame .....	2
28	608241	BLOCK, Engine Stop .....	1
29	572357	SUPPORT, Engine — R.H. ....	1
30	18D-12	NUT, Support to Frame .....	2
31	4E-10	LKWSHR, Support to Engine .....	4
32	23C-1024	BOLT, Support to Engine .....	4
33	570419	SPRING, Support to Frame — R.H. ....	2
34	616809	WASHER, Support to Frame — R.H. ....	2
35	24C-1272	BOLT, Support to Frame — R.H. ....	2
36	18D-10	NUT, Engine Mount .....	2
37	608241	BLOCK, Engine Stop .....	2
38	551323	SENDER UNIT, Engine Temperature .....	1
39	12E-10	LKWSHR, Sender Unit .....	1
40	14D-10	NUT, Sender Unit .....	1

\*NOTE: Your local United Motor Service or Delco-Remy Distributor is equipped to service components of these parts.  
NOTE "A": For serial Cummins 40A101 thru 649.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



ENGINE AUXILIARY AND SUPPORT PARTS - G.M.

TS-8810-P

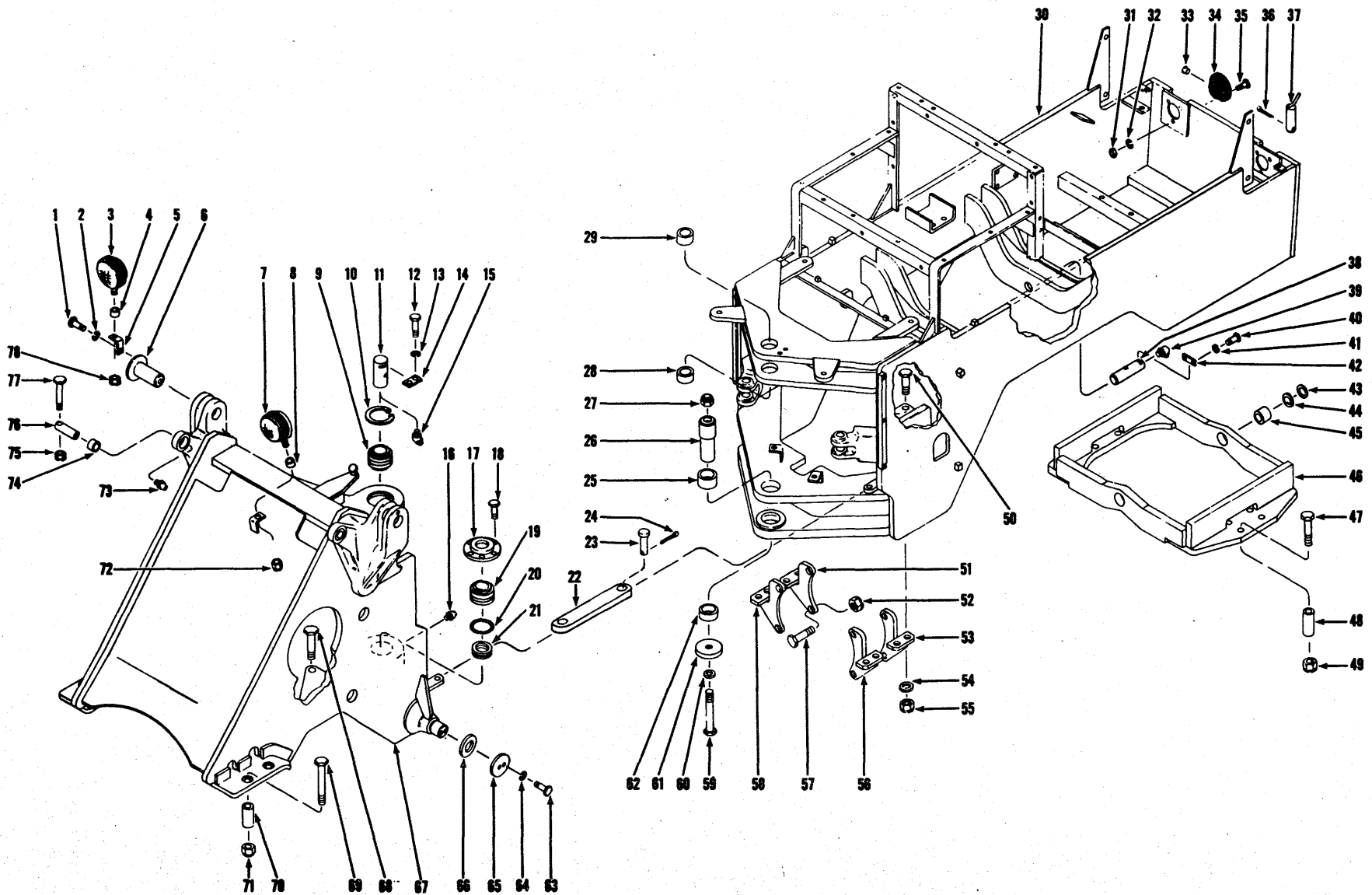


**ENGINE AUXILIARY AND SUPPORT PARTS — G.M.**

Item No.	Part No.	Description	No. Req'd.
1	24C-1036	BOLT, Engine Mount .....	2
2	-----	ENGINE, See G.M. Engine Parts Manual .....	—
3	551323	SENDER UNIT, Engine Temperature .....	1
4	12E-10	LKWSHR, Sender Unit .....	1
5	14D-10	NUT, Sender Unit .....	1
6	18D-04	NUT, Regulator to Plate .....	3
7	556703	*REGULATOR, Voltage D.R. #9000591 .....	1
8	551251	DAMPENER, Hourmeter Vibration .....	1
9	558960	WIRE, Relay to Hourmeter .....	1
10	12E-6	LKWSHR, Dampener to Plate .....	3
11	85G-608	SCREW, Dampener to Plate .....	3
12	1743825	KIT, Hourmeter (Inc. 13, 14) .....	1
13	12E-6	LKWSHR, Hourmeter to Dampener .....	3
14	85G-608	SCREW, Hourmeter to Dampener .....	3
15	24C-420	BOLT, Regulator to Plate .....	3
16	24C-416	BOLT, Relay to Plate .....	2
17	1526006	RELAY, Hourmeter .....	1
18	25E-13	WASHER, Relay to Plate .....	2
19	18D-04	NUT, Relay to Plate .....	2
20	24C-1240	BOLT, Support to Frame .....	2
21	23C-1024	BOLT, Support to Engine .....	4
22	4E-10	LKWSHR, Support to Engine .....	4
23	608241	BLOCK, Engine Stop .....	1
24	1530330	SUPPORT, Engine — L.H. ....	1
25	18D-12	NUT, Support to Frame .....	2
26	616809	WASHER, Support to Frame — R.H. ....	2
27	570419	SPRING, Support to Frame — R.H. ....	2
28	1530329	SUPPORT, Engine — R.H. ....	1
29	18D-12	NUT, Support to Frame .....	2
30	608241	BLOCK, Engine Stop .....	1
31	23C-1024	BOLT, Support to Engine .....	4
32	12E-10	LKWSHR, Sender Unit .....	1
33	18F-1	TEE, Sender Unit .....	1
34	542646	NIPPLE, Tee Mounting .....	1
35	18D-10	NUT, Engine Mount .....	2
36	608241	BLOCK, Engine Stop .....	2
37	1618574	SENDER UNIT, Engine Oil Pressure .....	1
38	14D-10	NUT, Sender Unit .....	1
39	24C-1272	BOLT, Support to Frame — R.H. ....	2
40	4E-10	LKWSHR, Support to Engine .....	4

\*NOTE: Your local United Motor Service or Delco-Remy Distributor is equipped to service components of these parts.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



**FRONT AND REAR FRAME AND CRADLE**  
For Serial: Cummins - 404A101 - 404A299  
G.M. - 403A101 - 403A999

TS-8832-P

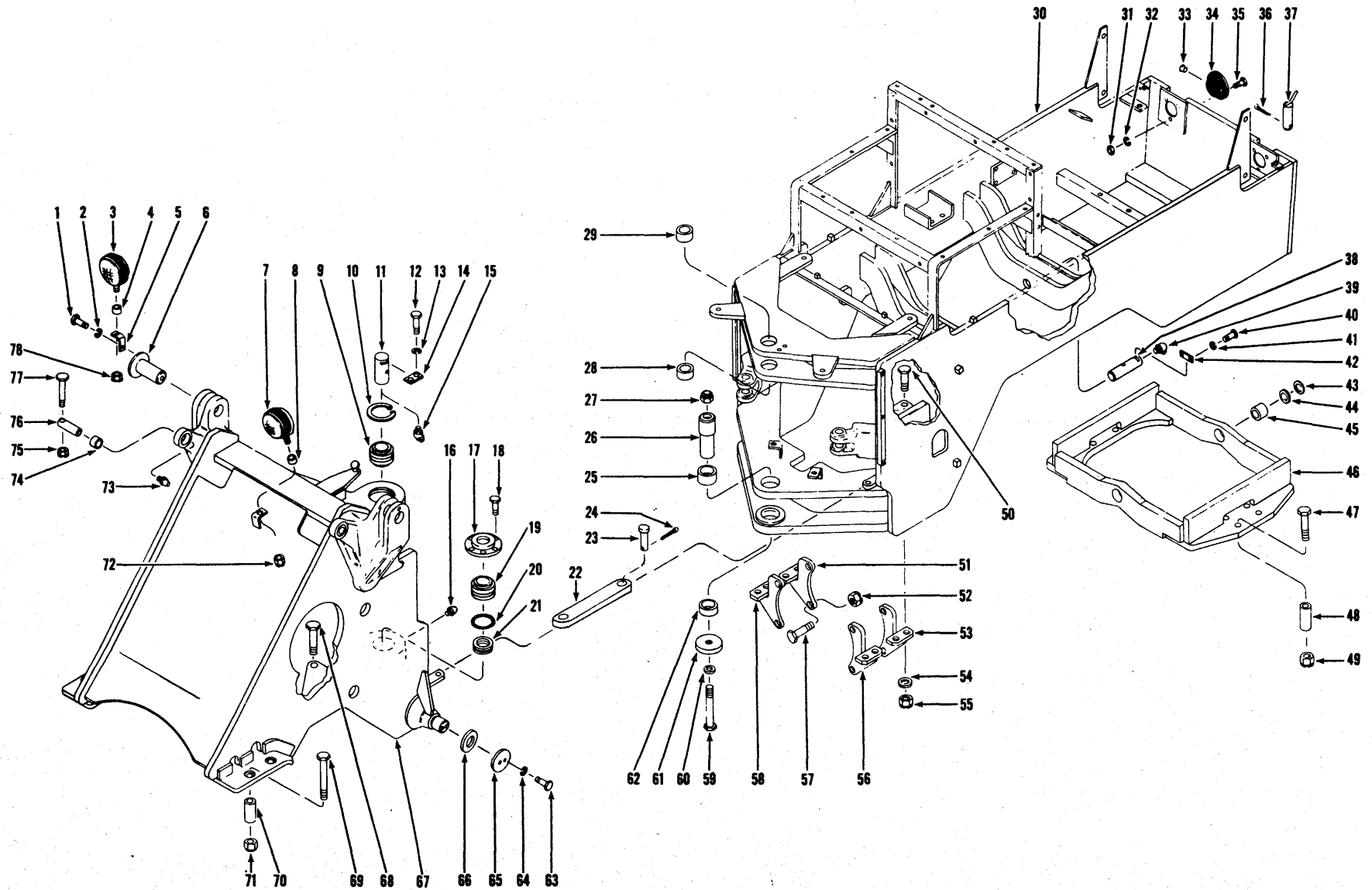
**CONSTRUCTION MACHINERY DIVISION  
FRONT AND REAR FRAME AND CRADLE  
For Serial: Cummins — 404A101 thru 404A299  
G.M. — 403A101 thru 403A299**

Item No.	Part No.	Description	No. Req'd.
1	23C-1232	BOLT, Pin to Frame .....	2
2	4E-12	LKWSHR, Pin to Frame .....	2
3	548088	LAMP ASSY, Head (Inc. 3A, 3B).....	2
3A	944872	†RETAINER, Sealed Unit .....	2
3B	551244	†SEALED UNIT, Head Lamp .....	2
3C	15E-10	†LKWSHR, Wire to Head Lamp .....	2
4	652448	SPACER, Head Lamp to Bracket .....	2
5	569233	BRACKET, Head Lamp Mounting .....	2
6	568002	PIN, Boom to Frame .....	2
7	548088	LAMP ASSY, Head (Inc. 7A, 7B) .....	1
7A	944872	†RETAINER, Sealed Unit .....	1
7B	551244	†SEALED UNIT, Head Lamp .....	1
7C	15E-10	†LKWSHR, Wire to Head Lamp .....	1
8	652448	SPACER, Head Lamp Mounting .....	1
9	1526213	BUSHING, Upper Hinge Pin .....	1
10	660517	RING, Upper Hinge Pin Bushing Retainer .....	1
11	1526211	PIN, Upper Hinge .....	1
11A	26F-1	†ELBOW, Grease Fitting to Hinge Pin .....	1
12	24C-820	BOLT, Lock Plate to Frame .....	2
13	4E-08	LKWSHR, Lock Plate to Frame .....	2
14	1532917	PLATE, Pin Retaining Lock .....	1
15	11H-15	FITTING, Upper Hinge Pin Grease .....	1
16	10H-25	FITTING, Lower Hinge Pin Grease .....	1
17	568952	CAP, Lower Hinge Pin .....	1
18	23C-1236	BOLT, Cap to Frame .....	6
19	568953	BUSHING, Lower Hinge Pin .....	1
20	25K-40416	O-RING, Spacer .....	1
21	568954	*SPACER, Lower Hinge Pin .....	1
22	1533280	SAFETY LINK .....	1
23	1533279	PIN, Clevis .....	2
24	1F-532	COTTER, Clevis Pin .....	2
25	1544289	BUSHING, Lower Pivot .....	1
26	1522427	PIN, Lower Hinge .....	1
27	60D20	NUT, Lower Hinge Pin .....	1
28	572818	BUSHING, Upper Pivot .....	1
29	572818	BUSHING, Upper Pivot .....	1
30		FRAME ASSY (Inc. 25, 28, 29, 62) .....	
30A	1504299	For Serial: 404A101 & after .....	1
30B	1505626	For Serial: 403A101 & after .....	1
31	14D-10	NUT, Lamp to Frame .....	6
32	17E-10	LKWSHR, Lamp to Frame .....	6
33	1010736	PLUG, Lamp .....	1
34	560967	LAMP, Stop & Tail (Inc. 34A, 34B).....	2
34A	1010449	†LENS, Lamp .....	2
34B	946064	†BULB, Lamp .....	2
35	86G-1012	SCREW, Lamp to Frame .....	6
36	1F-1252	COTTER, Drawbar Pin .....	1
37	1506818	PIN, Drawbar .....	1

\*NOTE: For replacement use 1-1510348 Spacer plus 1-1657105 Wiper

†Not Illustrated

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



**FRONT AND REAR FRAME AND CRADLE**  
For Serial: Cummins - 404A101 - 404A299  
G.M. - 403A101 - 403A299

TS-8832-P

10-1

(1F11)

PM 2462



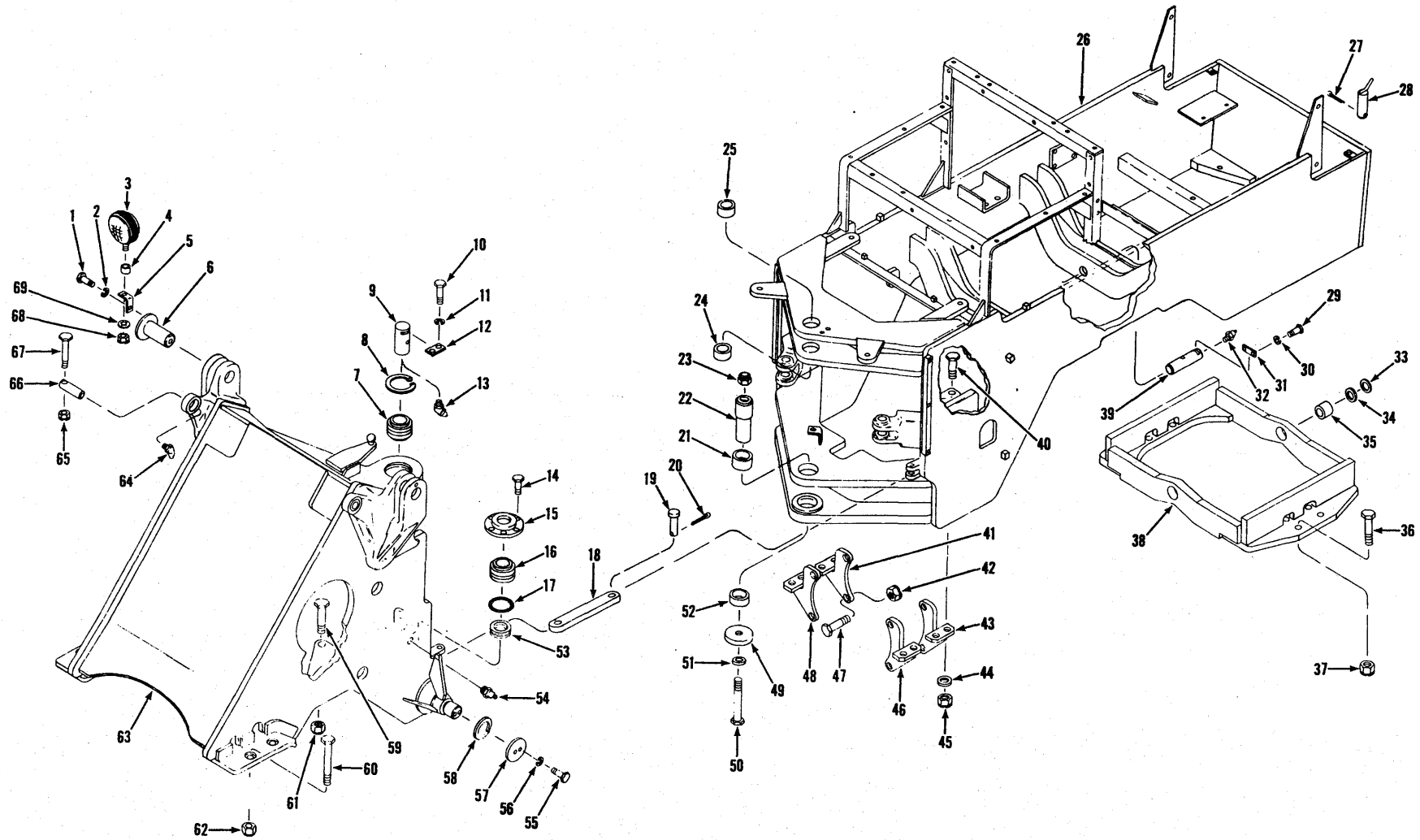
**CONSTRUCTION MACHINERY DIVISION**  
**FRONT AND REAR FRAME AND CRADLE (Continued)**  
 For Serial: Cummins — 404A101 thru 404A299  
 G.M. — 403A101 thru 403A299



Item No.	Part No.	Description	No. Req'd.
38	568258	PIN, Cradle Pivot .....	2
39	12H-15	FITTING, Cradle Pin Grease .....	2
40	24C-820	BOLT, Lock Plate to Cradle .....	4
41	4E-08	LKWSHR, Lock Plate to Cradle .....	4
42	1506190	LOCKPLATE, Pin Retaining .....	2
43	552146	‡SHIM, Cradle — 1/16" .....	—
44	552147	‡SHIM, Cradle — 1/8" .....	—
45	538605	BUSHING, Cradle .....	2
46	573883	CRADLE ASSY (Inc. 45) .....	1
47	24C-16160	BOLT, Axle to Cradle .....	8
48	574031	SPACER, Axle Bolt .....	8
49	68D-16	NUT, Axle to Cradle .....	8
50	24C-1264	BOLT, Transmission Bracket to Frame .....	8
51	572995	BRACKET, Transmission to Frame — R.H. ....	1
52	18D-14	NUT, Transmission to Bracket .....	8
53	572996	BRACKET, Transmission to Frame — L.H. ....	1
54	712285	WASHER, Transmission Bracket to Frame .....	8
55	68D-12	NUT, Transmission Bracket to Frame .....	8
56	572996	BRACKET, Transmission to Frame — L.H. ....	1
57	24C-1452	BOLT, Transmission to Bracket .....	8
58	572995	BRACKET, Transmission to Frame — R.H. ....	1
59	24C-20160	BOLT, Lower Hinge Pin .....	1
60	1522428	WASHER, Lower Hinge Pin Bolt .....	1
61	1522429	PLATE, Bushing Retainer .....	1
62	572817	BUSHING, Lower Pivot .....	1
63	23C-820	BOLT, Boom Cylinder Retaining Plate .....	4
64	4E-08	LKWSHR, Boom Cylinder Retaining Plate .....	4
65	566710	PLATE, Boom Cylinder Retaining .....	2
66	1522911	SPACER, Boom Cylinder Pivot .....	2
67	1533333	FRAME ASSY, Front (Inc. 66, 74) .....	1
68	1511649	BOLT, Steering Cylinder to Frame .....	4
68A	66D-22	†NUT, Steering Cylinder to Frame .....	4
69	24C-16152	BOLT, Axle to Frame .....	8
70	574031	SPACER, Axle Bolt .....	8
71	68D-16	NUT, Front Axle to Frame .....	8
72	18D-08	NUT, Head Lamp to Bracket .....	1
73	10H-25	FITTING, Upper Pivot Pin Grease .....	2
74	556597	BUSHING, Bucket Cylinder Anchor Pin .....	2
75	18D-08	NUT, Pin Retaining .....	2
76	556147	PIN, Bucket Cylinder Anchor .....	2
77	24C-896	BOLT, Pin Retaining .....	2
78	18D-08	NUT, Head Lamp to Bracket .....	2

†Not Illustrated  
 ‡As Required

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



10A.2

(1F13)

PM 2462

FRONT AND REAR FRAME AND CRADLE  
For Serial: Cummins - 404A300 thru 404A499  
G.M. - 403A300 thru 403A499

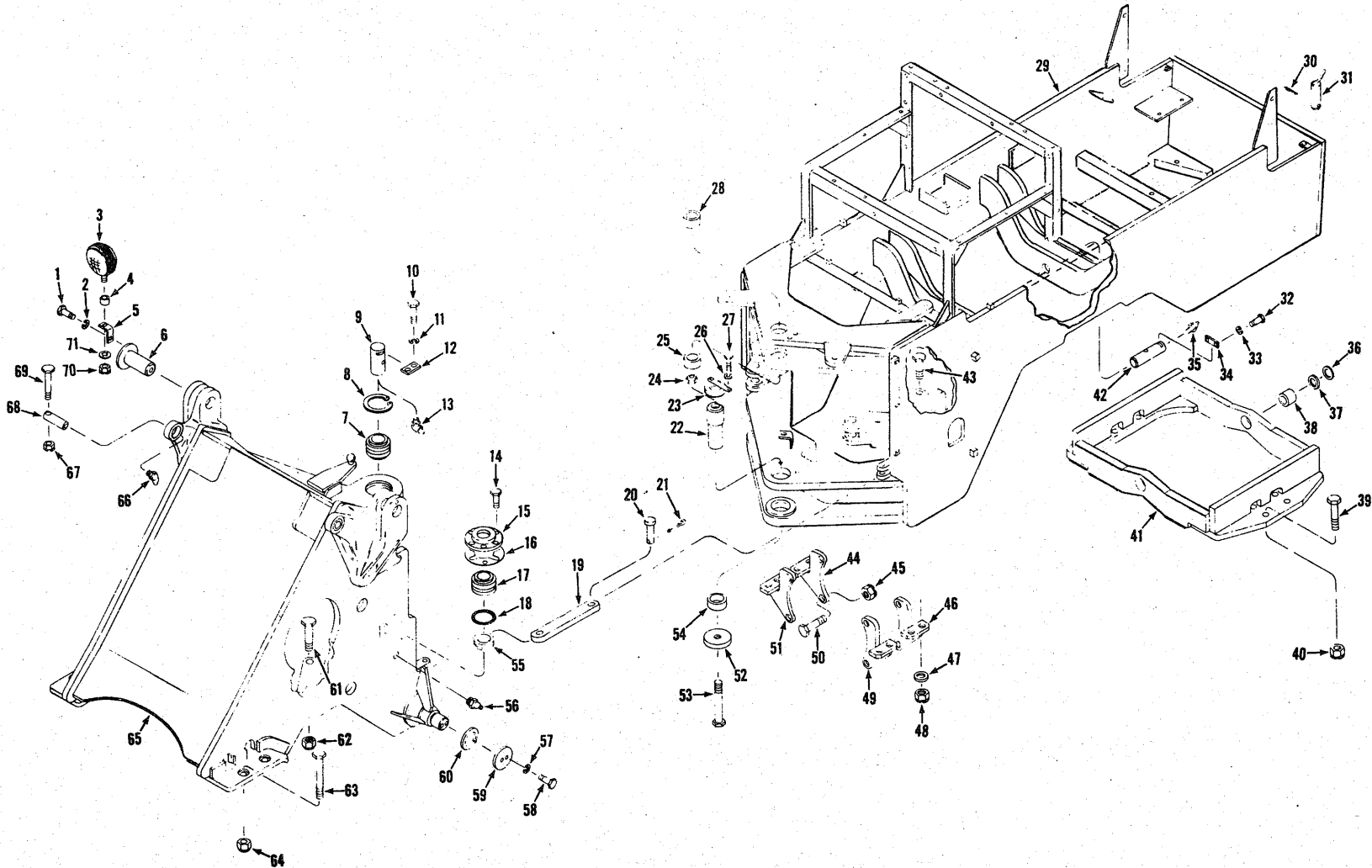
TS-10575

**FRONT AND REAR FRAME AND CRADLE**  
For Serial: Cummins — 404A300 thru 404A499  
G. M. — 403A300 thru 403A499

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	24C-1232	BOLT, Pin to Frame .....	2	37	18D-20	NUT, Axle to Cradle .....	8
2	4E-12	LKWSHR, Pin to Frame .....	2	38	1507454	CRADLE ASSY (Inc. 35) .....	1
3	548088	LAMP ASSY, Head (Inc. 3A, 3B) .....	2	39	568258	PIN, Cradle Pivot .....	2
3A	944872	†RETAINER, Sealed Unit .....	2	40	24C-1264	BOLT, Transmission Bracket to Frame .....	8
3B	551244	†SEALED UNIT, Head Lamp .....	2	41	572995	BRACKET, Transmission to Frame — R.H. ....	1
3C	15E-10	†LKWSHR, Wire to Head Lamp .....	2	42	18D-14	NUT, Transmission to Bracket .....	8
4	652448	SPACER, Head Lamp Mtg. ....	2	43	572996	BRACKET, Transmission to Frame — L.H. ....	1
5	569233	BRACKET, Head Lamp Mtg. ....	2	44	712285	WASHER, Transmission Bracket to Frame .....	8
6	568002	PIN, Boom to Frame .....	2	45	68D-12	NUT, Transmission Bracket to Frame .....	8
6A	1540168	†‡SPACER, Boom to Frame .....	—	46	572996	BRACKET, Transmission to Frame — L.H. ....	1
6B	1540169	†‡SPACER, Boom to Frame .....	—	47	24C-1452	BOLT, Transmission to Bracket .....	8
7	1526213	BUSHING, Upper Hinge Pin ..	1	48	572995	BRACKET, Transmission to Frame — R.H. ....	1
8	660517	RING, Upper Hinge Pin Bushing Retainer .....	1	49	1522429	PLATE, Bushing Retainer .....	1
9	1526211	PIN, Upper Hinge .....	1	50	24C-20160	BOLT, Lower Hinge Pin .....	1
10	24C-820	BOLT, Lockplate to Frame ....	2	51	1522428	WASHER, Lower Hinge Pin ..	1
11	4E-08	LKWSHR, Lockplate to Frame ..	2	52	572817	BUSHING, Lower Pivot .....	1
12	1532917	RETAINER, Pin .....	1	53	568954	*SPACER, Lower Hinge Pin ...	1
13	11H-15	FITTING, Upper Hinge Pin Grease .....	1	54	10H-25	FITTING, Lower Hinge Pin Grease .....	1
14	23C-1236	BOLT, Cap to Frame .....	6	55	23C-820	BOLT, Boom Cylinder Retaining Plate .....	4
15	568952	CAP, Lower Hinge Pin .....	1	56	4E-08	LKWSHR, Boom Cylinder Retaining Plate .....	4
16	568953	BUSHING, Lower Hinge Pin ..	1	57	566710	PLATE, Boom Cylinder Retaining .....	2
17	25K-40416	O-RING, Spacer .....	1	58	1522911	SPACER, Boom Cylinder Pivot ..	2
18	1533280	SAFETY LINK .....	1	59	1511649	BOLT, Steering Cylinder to Frame .....	4
19	1533279	PIN, Clevis .....	2	60	24C-20120	BOLT, Axle to Frame .....	8
20	1F-532	COTTER, Clevis Pin .....	2	61	66D-22	NUT, Steering Cylinder to Frame .....	4
21	1544289	BUSHING, Lower Pivot .....	1	62	18D-20	NUT, Axle to Frame .....	8
22	1522427	PIN, Lower Hinge .....	1	63	1507457	FRAME ASSY, Front (Inc. 58, 66A) .....	1
23	18D-20	NUT, Lower Hinge Pin .....	1	64	10H-25	FITTING, Upper Pivot Pin Grease .....	2
24	572818	BUSHING, Upper Pivot .....	1	65	18D-08	NUT, Pin Retaining .....	2
25	572818	BUSHING, Upper Pivot .....	1	66	556147	PIN, Bucket Cylinder Anchor ..	2
26		REAR FRAME ASSY (Inc. 21, 24, 25, 52)		66A	556597	†BUSHING, Bucket Cylinder Anchor Pin .....	2
26A	1507725	For Cummins Powered Machines .....	1	67	24C-896	BOLT, Pin Retaining .....	2
26B	1507724	For G.M. Powered Machines ..	1	68	18D-08	NUT, Head Lamp to Bracket ..	2
27	1F-1252	COTTER, Drawbar Pin .....	1	69	4E-08	LKWSHR, Head Lamp to Bracket .....	2
28	1506818	PIN, Drawbar .....	1				
29	1506188	BOLT, Lock Plate to Cradle ..	4				
30	4E-08	LKWSHR, Lock Plate to Cradle .....	4				
31	1506190	LOCK PLATE, Pin Retaining ..	2				
32	12H-15	FITTING, Cradle Pin Grease ..	2				
33	552146	‡SHIM, Cradle — 1/8" .....	—				
34	552147	‡SHIM, Cradle — 1/8" .....	—				
35	538605	BUSHING, Cradle .....	2				
36	24C-20120	BOLT, Axle to Cradle .....	8				

\*NOTE: For replacement use 1-1510348 Spacer plus 1-1657105 Wiper  
 †As Required  
 ‡Not Illustrated

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



**FRONT AND REAR FRAME AND CRADLE**  
For Serial: Cummins - 404A500 & After  
G. M. - 403A500 & After

TS-11169



**FRONT AND REAR FRAME AND CRADLE**  
For Serial: Cummins — 404A500 & After  
G. M. — 403A500 & After

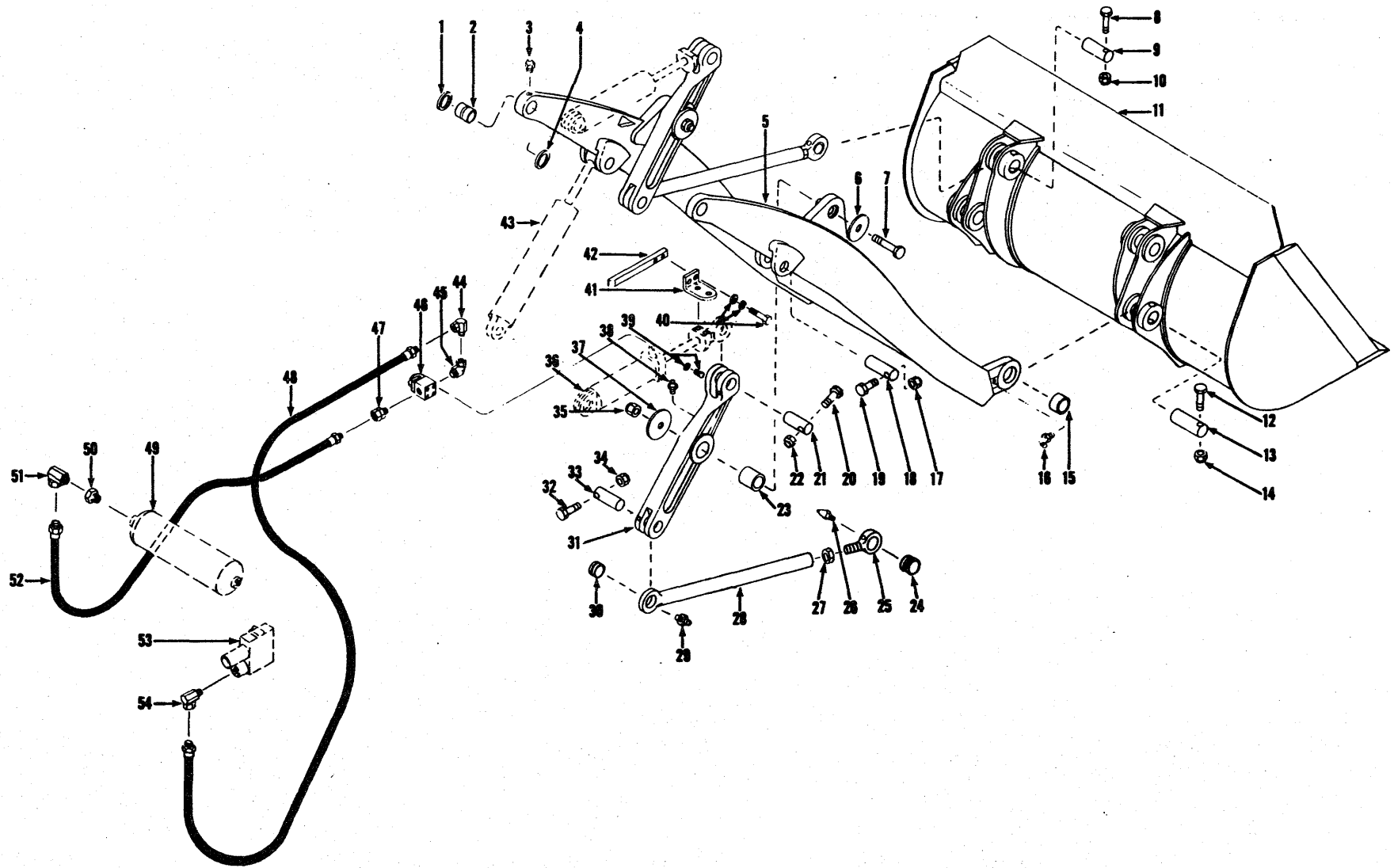
Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	23C-1232	Bolt, pin to frame.....	2	34	1506190	Lockplate, pin retaining.....	2
2	4E-12	Lkwsh, pin to frame.....	2	35	12H-15	Fitting, cradle pin grease.....	2
3	548088	Lamp assy, head (Incl 3A, 3B).....	2	36	552146	‡Shim, cradle — 1/16".....	—
3A	944872	†Retainer, sealed unit.....	2	37	552147	‡Shim, cradle — 1/8".....	—
3B	551244	†Sealed unit, head lamp.....	2	38	562414	Bushing, cradle.....	2
3C	15E-10	†Lkwsh, wire to head lamp.....	2	39	24C-20120	Bolt, axle to cradle.....	8
4	652448	Spacer, head lamp mtg.....	2	40	18D-20	Nut, axle to cradle.....	8
5	569233	Bracket, head lamp mtg.....	2	41	1507454	Cradle assy (Incl 38).....	1
6	568002	Pin, boom to frame.....	2	42	568258	Pin, cradle pivot.....	2
6A	1540168	†‡Spacer, boom to frame.....	—	43	24C-1264	Bolt, bracket to frame.....	4
6B	1540169	†‡Spacer, boom to frame.....	—	44	572995	Bracket, trans. to frame — R.H.....	1
7	1526213	Bushing, upper hinge pin.....	1	45	18D-14	Nut, trans. to bracket.....	8
8	660517	Ring, upper hinge pin bushing retainer.....	1	46	572996	Bracket, trans. to frame — L.H.....	1
9	1538228	Pin, upper hinge.....	1	47	712285	Washer, Bracket to frame.....	2
10	24C-122	Bolt, retainer to frame.....	2	48	68D-12	Nut, bracket to frame.....	4
11	4E-12	Lkwsh, retainer to frame.....	2	49	572996	Bracket, trans. to frame — L.H.....	1
12	1548429	Retainer, pin.....	1	50	24C-1452	Bolt, trans. to bracket.....	8
13	11H-15	Fitting, hinge pin grease.....	1	51	572995	Bracket, trans. to frame — R.H.....	1
14	24C-1236	Bolt, cap to frame.....	6	52	1544068	Washer, lower hinge pin.....	1
15	1538190	Cap, lower hinge pin.....	1	53	24C-20160	Bolt, lower hinge pin.....	1
15A	1657104	†Wiper, hinge pin cap.....	1	54	1544289	Bushing, lower hinge pin.....	1
16	1545064	‡Shim, lower hinge pin.....	—	55	568954	Spacer, lower hinge pin.....	1
17	1540038	Bushing, lower hinge pin.....	1	56	10H-25	Fitting, lower hinge pin, grease.....	1
18	25K-40416	O-Ring, spacer.....	1	57	4E-08	Lkwsh, plate to frame.....	4
19	1533280	Safety link.....	1	58	23C-820	Bolt, plate to frame.....	4
20	1533279	Pin, clevis.....	2	59	566710	Plate, boom cylinder retaining.....	2
21	1F-532	Cotter, clevis pin.....	2	60	1522911	Spacer, boom cylinder pivot.....	2
22	1538088	Pin, lower hinge.....	1	61	1511649	Bolt, steering cylinder to frame.....	4
23	1547432	Lockplate, lower hinge pin.....	1	62	66D-22	Nut, steering cylinder to frame.....	4
24	18D-20	Nut, lower hinge pin.....	1	63	24C-20120	Bolt, axle to frame.....	8
25	572818	Bushing, upper pivot.....	1	64	18D-20	Nut, axle to frame.....	8
26	4E-12	Lkwsh, lockplate to frame.....	2	65	1507457	Frame Assy, front (Incl 60, 68A).....	1
27	24C-1228	Bolt, lockplate to frame.....	2	66	10H-25	Fitting, pin grease.....	2
28	572818	Bushing, upper pivot.....	1	67	18D-08	Nut, pin retaining.....	2
29	-----	Rear frame assy (Incl 25, 28, 54).....	—	68	556147	Pin, bucket cylinder anchor.....	2
29A	1544380	For cummins powered machines.....	1	68A	556597	†Bushing, bucket cylinder anchor pin.....	2
29B	1544379	For G.M. powered machines.....	1	69	24C-896	Bolt, pin retaining.....	2
30	1F-1252	Cotter, drawbar pin.....	1	70	18D-08	Nut, head lamp to bracket.....	2
31	1506818	Pin, drawbar.....	1	71	4E-08	Lkwsh, head lamp to bracket.....	2
32	1506188	Bolt, lockplate to frame.....	4				
33	4E-08	Lkwsh, lockplate to frame.....	4				

\*NOTE: For replacement use 1-1510348 Spacer plus 1-1657105 Wiper

†Not Illustrated

‡As Required

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



BOOM, BELLCRANKS, PUSHRODS, BUCKET LEVELER AND PIPING

TS-8831-P

**BOOM, BELLCRANKS, PUSHRODS, BUCKET LEVELER AND PIPING**

For Serial: Cummins - 404A101 thru 499

G. M. - 403A101 thru 499

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	574311	*SPACER, Boom .....	2	32	24C-888	BOLT, Pin Retaining .....	2
1A	1540168	**‡SPACER, Boom-10 ga. ....	-	33	557946	PIN, Bellcrank to Pushrod ....	2
2	669896	BUSHING, Boom Arm .....	2	34	18D-08	NUT, Pin Retaining .....	2
3	12H-15	FITTING, Boom Grease .....	2	35	18D-16	NUT, Bellcrank to Boom .....	2
4	574311	*SPACER, Boom .....	2	36	-----	BUCKET CYLINDER - See Index .....	-
4A	1540169	**‡SPACER, Boom-12 ga. ....	-	37	588917	WASHER, Bellcrank .....	2
5	1506972	BOOM (Inc. 2, 15) .....	1	38	10H-25	FITTING, Bellcrank Grease....	2
5A	710943	†RING, Retaining .....	2	39	86G-1010	SCREW, Air Valve Mounting..	4
6	25E-31	WASHER, Bellcrank Bolt ....	2	39A	12E-10	LKWSHR, Air Valve Mounting	4
7	24C-16168	BOLT, Bellcrank to Boom ..	2	40	24C-620	BOLT, Cam to Bracket & Bracket to Cylinder .....	4
8	24C-896	BOLT, Pin Retaining .....	2	40A	4E-06	LKWSHR, Cam to Bracket & Bracket to Cylinder .....	4
9	549907	PIN, Pushrod to Bucket .....	2	40B	619021	WASHER, Cam to Bracket & Bracket to Cylinder .....	4
10	18D-08	NUT, Pin Retaining .....	2	41	1528638	BRACKET, Leveler Cam .....	1
11	-----	BUCKET - See Index .....	-	42	1528637	CAM, Bucket Leveler .....	1
12	24C-896	BOLT, Pin Retaining .....	2	43	-----	BOOM CYLINDER - See Index .....	-
13	549907	PIN, Boom to Bucket .....	2	44	31F-2	ADAPTER UNION, Hose to Elbow .....	1
14	18D-08	NUT, Pin Retaining .....	2	45	29F-1	ELBOW, Adapter to Air Valve	1
15	1520690	BUSHING, Boom to Bucket	4	46	-----	AIR VALVE ASSY - See Index	-
16	10H-35	FITTING, Boom Grease .....	2	47	36F-2	ADAPTER UNION, Hose to Valve .....	1
17	18D-08	NUT, Pin Retaining .....	2	48	1534462	HOSE, Air Valve to Control Valve .....	1
18	556205	PIN, Boom Cylinder .....	2	49	-----	AIR RESERVOIR - See Index..	-
19	24C-872	BOLT, Pin Retaining .....	2	50	19F-3	BUSHING, Reducing .....	1
20	24C-12112	BOLT, Pin Retaining .....	2	51	31F-2	ADAPTER UNION, Hose to Reservoir .....	1
21	549659	PIN, Bucket Cylinder .....	2	52	1534462	HOSE, Air Valve to Reservoir	1
22	18D-12	NUT, Pin Retaining .....	2	53	-----	CONTROL VALVE ASSY - See Index .....	-
23	1524037	BUSHING, Bellcrank .....	2	54	31F-2	ADAPTER UNION, Hose to Valve .....	1
24	549669	BUSHING, Pushrod Eye ....	2				
25	569708	EYE, Pushrod Adjusting (Inc. 24) .....	2				
26	10H-25	FITTING, Grease .....	2				
27	1520686	NUT, Pushrod Eye Jam .....	2				
28	1504451	***PUSHROD (Inc. 30) .....	2				
29	10H-25	FITTING, Pushrod Grease ..	2				
30	549669	BUSHING, Pushrod .....	2				
31	1526300	BELLCRANK - R.H. (Inc. 23) 1					
31A	1526299	†BELLCRANK-L.H. (Inc. 23) 1					

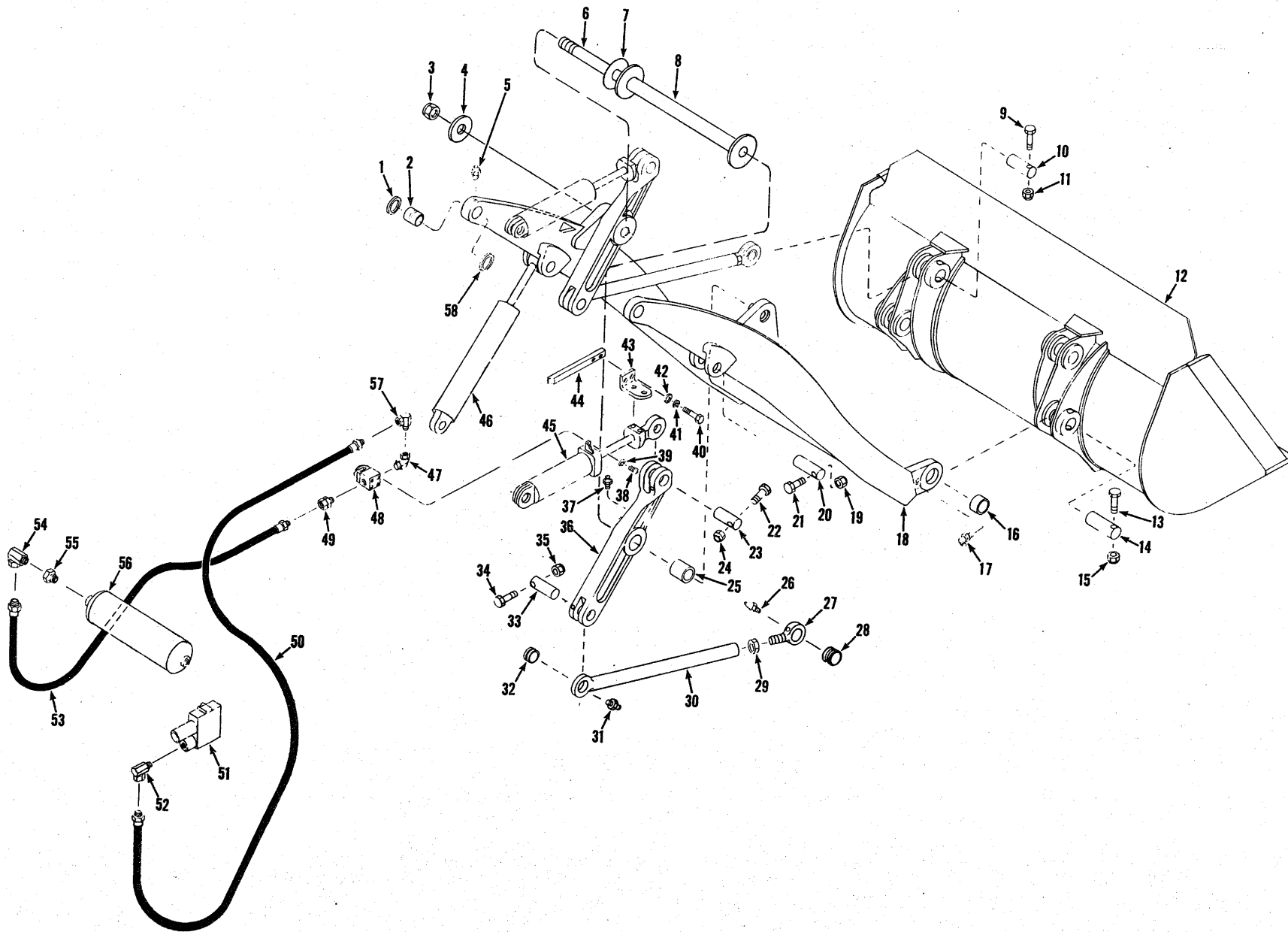
\*NOTE: For Serial: Cummins - 404A101 thru 404A190, G.M. - 403A101 thru 403A200

\*\*NOTE: For Serial: Cummins - 404A191 thru 404A499, G.M. - 403A201 thru 403A499

‡As Required

†Not Illustrated \*\*\*NOTE: For complete replacement use 1514709 Pushrod (one-piece)

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



BOOM, BELLCRANKS, PUSHRODS, BUCKET LEVELER & PIPING

TS-11216

12A.1

(1D15)

PM 2462

**BOOM, BELLCRANK, PUSHRODS, BUCKET LEVELER AND PIPING**  
**For Serial: Cummins - 404A500 & After**  
**G.M. - 403A500 & After**

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	1540168	‡Spacer, boom to frame - 1/8" .....	-	26	10H-25	Fitting, grease .....	2
2	669896	Bushing, boom to frame .....	2	27	569708	Eye, pushrod adjusting (Incl 28) .....	2
3	-----	Nut, bellcrank to boom .....	-	28	549669	Bushing, pushrod eye .....	2
3A	18D-16	For Serial Group "A" .....	2	29	1520686	Nut, pushrod jam .....	2
3B	68D-16	For Serial Group "B" .....	2	30	1504451	*Pushrod (Incl 32) .....	2
4	-----	Washer, bellcrank to boom .....	-	31	10H-25	Fitting, pushrod grease .....	2
4A	25E-31	For Serial Group "A" .....	2	32	549669	Bushing, pushrod .....	2
4B	573845	For Serial Group "B" .....	2	33	557946	Pin, bellcrank to pushrod .....	2
5	10H-35	Fitting, boom grease .....	2	34	24C-888	Bolt, pin retaining .....	2
6	1510944	Rod, Bellcrank attaching (For Serial Group "B") .....	1	35	18D-08	Nut, pin retaining .....	2
6A	24C-16168	Bolt, bellcrank attaching (For Serial Group "A") .....	2	36	1526300	Bellcrank - R.H. (Incl 25) .....	1
7	588917	Washer, bellcrank to boom (For Serial Group "A") .....	2	36A	1526299	†Bellcrank - L.H. (Incl 25) .....	1
7A	1547517	‡Shim, bellcrank to boom (For Serial Group "B") .....	-	37	10H-25	Fitting, bellcrank grease .....	2
8	1510940	Crosstube (For Serial Group "B" Only) .....	1	38	86G-1010	Screw, air valve mtg .....	4
9	24C-896	Bolt, pin retaining .....	2	39	12E-10	Lkwshr, air valve mtg .....	4
10	549907	Pin, pushrod to bucket .....	2	40	24C-620	Bolt, cam to bracket & bracket to cylinder .....	4
11	18D-08	Nut, pin retaining .....	2	41	4E-06	Lkwshr, cam to bracket & bracket to cylinder .....	4
12	-----	Bucket - See Index .....	-	42	619021	Washer, cam to bracket & bracket to cylinder .....	4
13	24C-896	Bolt, pin retaining .....	2	43	1528638	Bracket, leveler cam .....	1
14	1545648	Pin, boom to bucket .....	4	44	1528637	Cam, bucket leveler .....	1
15	18D-08	Nut, pin retaining .....	2	45	-----	Bucket cylinder - See Index .....	-
16	1545647	Bushing, boom to bucket .....	2	46	-----	Boom cylinder - See Index .....	-
17	12H-15	Fitting, boom grease .....	2	47	29F-1	Elbow, adapter to air valve .....	1
18	1545784	Boom (Incl. 2, 16 & 18C) .....	1	48	-----	Air Valve - See Index .....	-
18A	1540168	‡Spacer, bucket to boom - 1/8" .....	-	49	36F-2	Adapter union, hose to valve .....	1
18B	1540169	‡Spacer, bucket to boom - 7/64" .....	-	50	1534462	Hose, air valve to control valve .....	1
18C	710943	†Ring, Retaining .....	2	51	-----	Control valve - See Index .....	-
19	18D-08	Nut, pin retaining .....	2	52	31F-2	Adapter union, hose to valve .....	1
20	556205	Pin, boom cylinder .....	2	53	1534462	Hose, air valve to reservoir .....	1
21	24C-872	Bolt, pin retaining .....	2	54	31F-2	Adapter union, hose to reservoir .....	1
22	24C-12112	Bolt, pin retaining .....	2	55	19F-3	Bushing, reducing .....	1
23	549659	Pin, cylinder to bellcrank .....	2	56	-----	Air reservoir - See Index .....	-
24	18D-12	Nut, pin retaining .....	2	57	31F-2	Adapter union, hose to elbow .....	1
25	1524037	Bushing, bellcrank .....	2	58	1540169	‡Spacer, boom to frame - 7/64" .....	1

†Not Illustrated

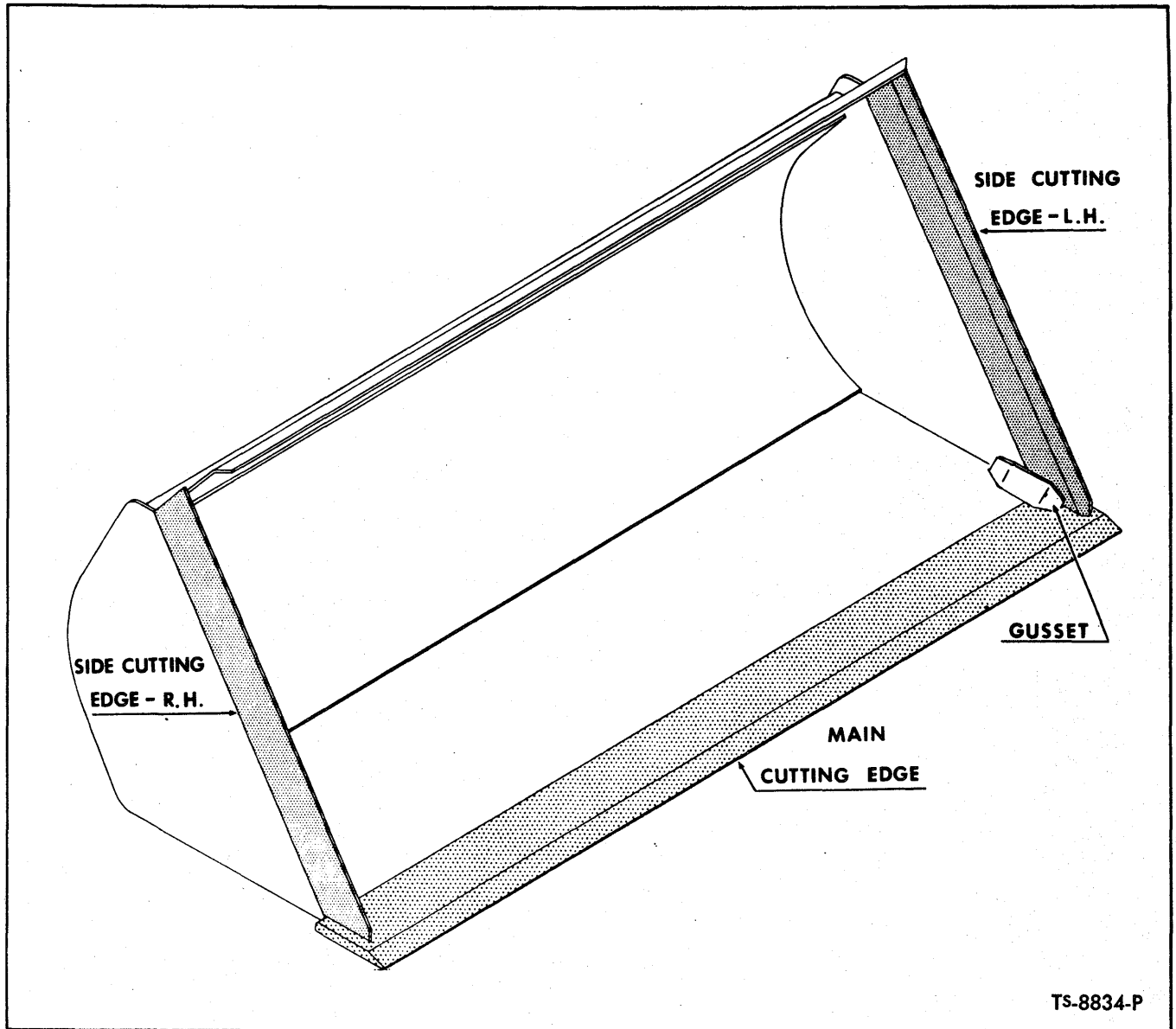
‡As Required

Serial Group "A" - Cummins-404A500 thru 404A519, G.M.-403A500 thru 403A509

Serial Group "B" - Cummins-404A520 & After, G.M.-403A510 & After

\*NOTE: For complete replacement use 1514709 Pushrod (one-piece)

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



TS-8834-P

**BUCKET ASSEMBLY DATA**

BUCKET				MAIN CUTTING EDGE			SIDE CUTTING EDGES			CORNER GUSSET 2 Req'd. PART NO.
ITEM #	S.A.E. HEAPED CAPACITY CU. YD.	WIDTH	PART NO.	PART NO.	SIZE	L.H. PART NO.	R.H. PART NO.	SIZE		
1	4	114 <sup>3</sup> / <sub>4</sub> "	1504937	1506346	1 <sup>3</sup> / <sub>4</sub> "x10 <sup>1</sup> / <sub>2</sub> "x114 <sup>3</sup> / <sub>4</sub> "	1507351	1507350	1 <sup>1</sup> / <sub>4</sub> "x9"x55 <sup>7</sup> / <sub>8</sub> "	1536086	
2	3 <sup>1</sup> / <sub>2</sub>	114 <sup>3</sup> / <sub>4</sub> "	1505881	1517764	1 <sup>3</sup> / <sub>4</sub> "x10 <sup>1</sup> / <sub>2</sub> "x60 <sup>3</sup> / <sub>4</sub> "	-----	-----	-----	1536086	
3	4	114 <sup>3</sup> / <sub>4</sub> "	1507770	1517764	1 <sup>3</sup> / <sub>4</sub> "x10 <sup>1</sup> / <sub>2</sub> "x60 <sup>3</sup> / <sub>4</sub> "	1507370	1507773	1 <sup>1</sup> / <sub>4</sub> "x9"x53 <sup>1</sup> / <sub>16</sub> "	1536086	
4	4 <sup>1</sup> / <sub>2</sub>	114 <sup>3</sup> / <sub>4</sub> "	1505820	1516436	1 <sup>3</sup> / <sub>4</sub> "x10 <sup>1</sup> / <sub>2</sub> "x114 <sup>3</sup> / <sub>4</sub> "	1507478	1507477	1 <sup>1</sup> / <sub>4</sub> "x9"x58 <sup>3</sup> / <sub>8</sub> "	1536086	

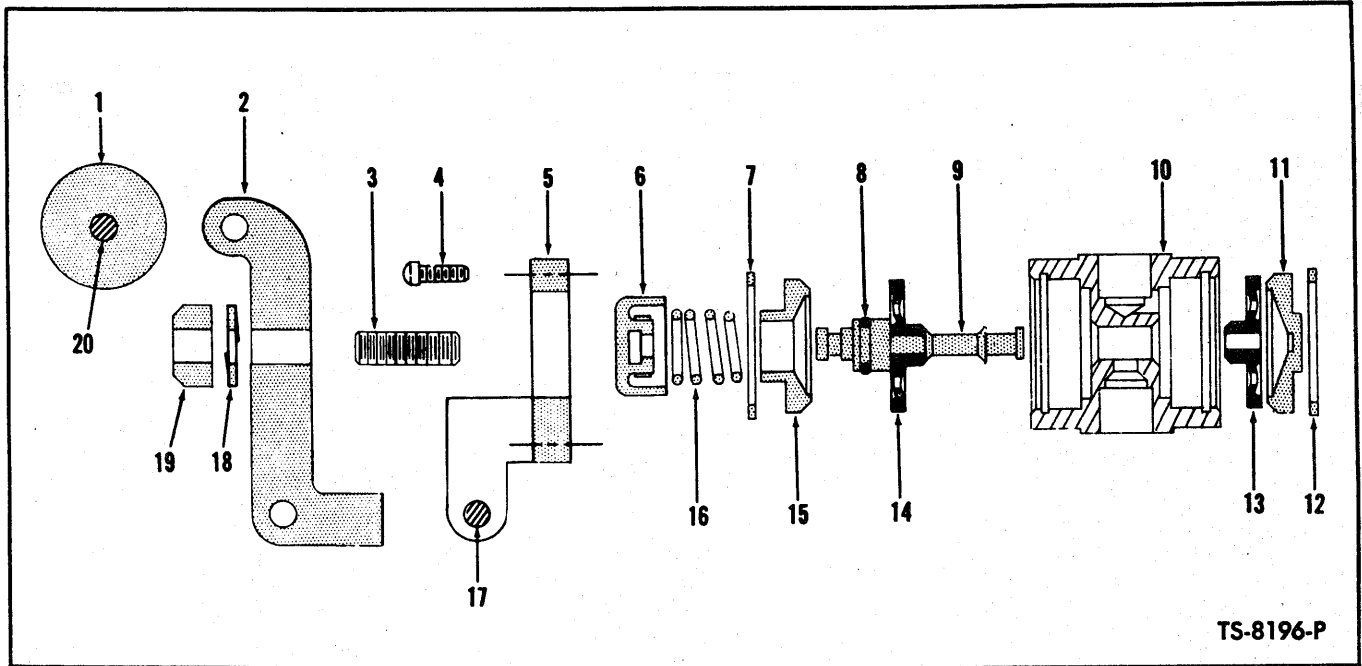
**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**

**BUCKET ASSEMBLY DATA (Continued)**

BUCKET				MAIN CUTTING EDGE		SIDE CUTTING EDGES			CORNER GUSSET 2 Req'd.
ITEM #	S.A.E. HEAPED CAPACITY CU. YD.	WIDTH	PART NO.	PART NO.	SIZE	L.H. PART NO.	R.H. PART NO.	SIZE	PART NO.
5	6½	114¾"	1507629	1516436	1¾"x10½"x114¾"	1507376	1507375	1¼"x9"x64⅞"	1536086
6	3½	117"	1523622	1521432-L.H. 1521433-R.H.	1¾"x10"x61⅞"	-----	-----	-----	*1536086
7	3¾	117"	1524088	565426	1¾"x10"x117"	1524089	1524090	¾"x6"x56"	*1536086
8	4½	117"	1525797	570495	1¾"x10"x117"	1525790	1525789	1"x6"x57¾"	*1536086
9	4¼	117"	1527183	565426	1¾"x10"x117"	1524089	1524090	¾"x6"x56"	*1536086
10	4½	109¾"	1527971	574071	1¾"x10"x109¾"	1527973	1527972	¾"x6"x57⅝"	*1536086
11	5	109¾"	1527994	574071	1¾"x10"x109¾"	1527995	1527996	¾"x6"x59⅞"	*1536086
12	4½	122"	1534651	1534647-L.H. 1534646-R.H.	1¾"x10½"x64¼"	-----	-----	-----	1536086
13	5	122"	1534663	1534657	1¾"x10½"x122"	1534653	1534652	¾"x6"x58¼"	1536086
14	4¼	122"	1534674	1534743	1¾"x10½"x122"	1534666	1534665	¾"x6"x55⅞"	1536086
15	7	122"	1535109	1534657	1¾"x10½"x122"	1535111	1535110	¾"x6"x65⅞"	1536086
16	4½	122"	1535168	1534647-L.H. 1534646-R.H.	1¾"x10½"x64¼"	-----	-----	-----	1536086
17	4	114-3/4"	1545875	1506346	1-3/4"x10-1/2"x114-3/4"	1507351	1507350	1-1/4"x9"x55-7/8"	1536086
18	4	114-3/4"	1545894	1517764	1-3/4"x10-1/2"x60-5/8"	1507774	1507773	1-1/4"x9"x53-9/16"	1536086
19	3-1/2"	114-3/4"	1545876	1517764	1-3/4"x10-1/2"x60-5/8"	-----	-----	-----	1536086
20	4-1/2"	114-3/4"	1545898	1516436	1-3/4"x10-1/2"x114-3/4"	1507478	1507477	1-1/4"x9"x58-7/8"	1536086
21	6-1/2"	114-3/4"	1545899	1516436	1-3/4"x10-1/2"x114-3/4"	1507376	1507375	1-1/4"x9"x64-7/8"	1536086

\*NOTE: These buckets did not originally receive corner gussets. These gussets may be added, if desired, by ordering gussets as listed above, and requesting installation instructions from your local MICHIGAN distributor.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



TS-8196-P

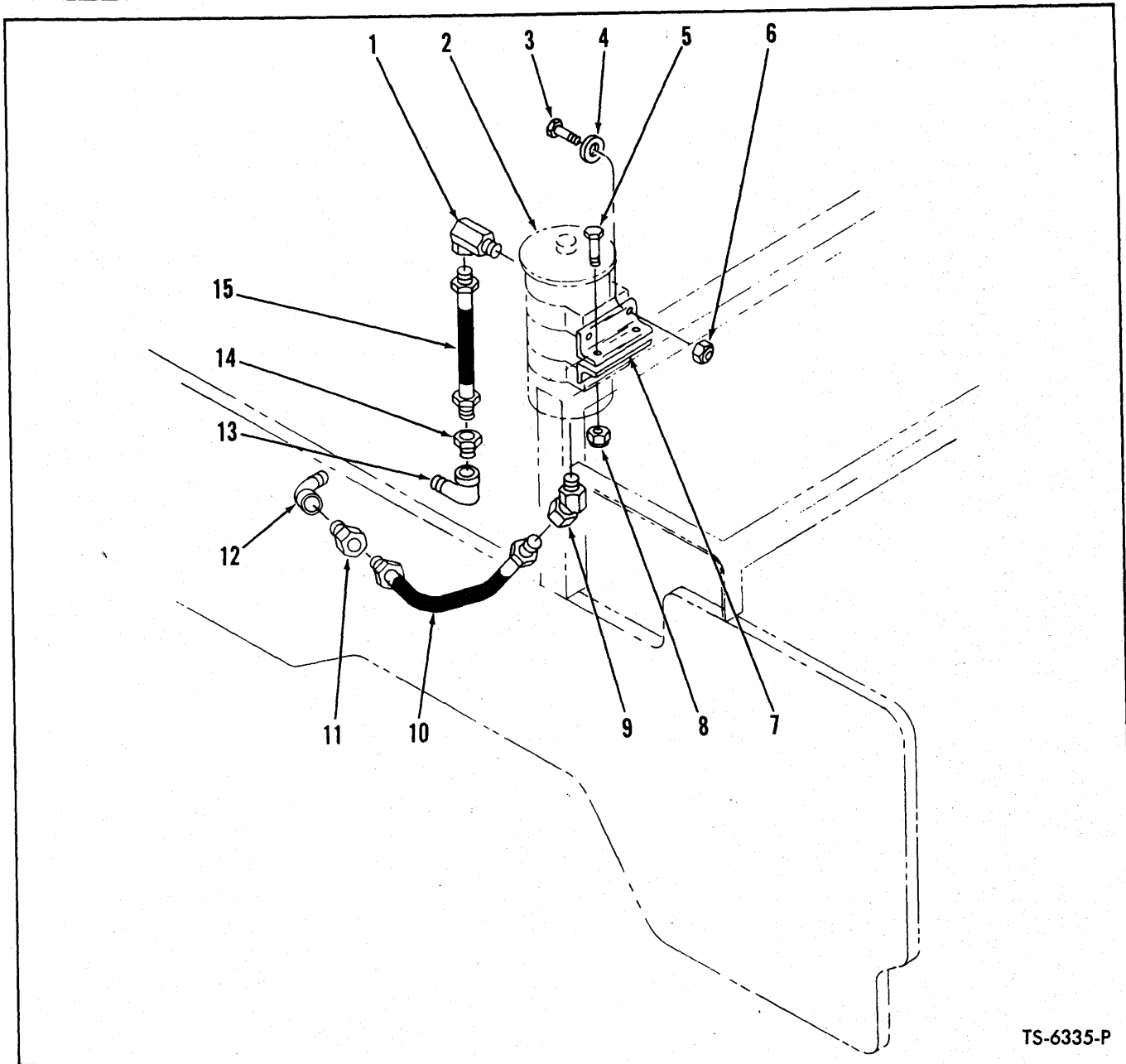
**AIR VALVE ASSEMBLY – BUCKET LEVELER**

Item No.	Part No.	Description	No. Req'd.
A	559784	AIR VALVE ASSY (Inc. 1 thru 20)	1
B	895683	SEAL REPAIR KIT (Inc. 6, 8, 9, 13, 14, 16)	1
1	947178	ROLLER, Air Valve Lever	1
2	947175	LEVER, Air Valve	1
3	15G-416	SCREW, Adjusting	1
4	42G-1008	SCREW, Cover Bracket Attaching	4
5	947176	BRACKET, Top Cover	1
6	947177	BUTTON ASSY (Inc. 16)	1
7	1303319	RING, Retaining	1
8	25K-20012	O-RING, Stem	1
9	947165	BUTTON & STEM ASSY (Inc. 6 & 16)	1
10	----	§BODY – See "A"	—
11	947226	CLOSED END CAP	1
12	1303319	RING, Retaining	1
13	889239	DIAPHRAGM	1
14	889239	DIAPHRAGM	1
15	947225	OPEN END CAP	1
16	889242	SPRING	1
17	947179	PIVOT PIN	1
18	4E-04	LKWSHR, Adjusting Screw	1
19	1D-04	NUT, Adjusting Screw Lock	1
20	947179	PIVOT PIN	1

§Not Sold Separately

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



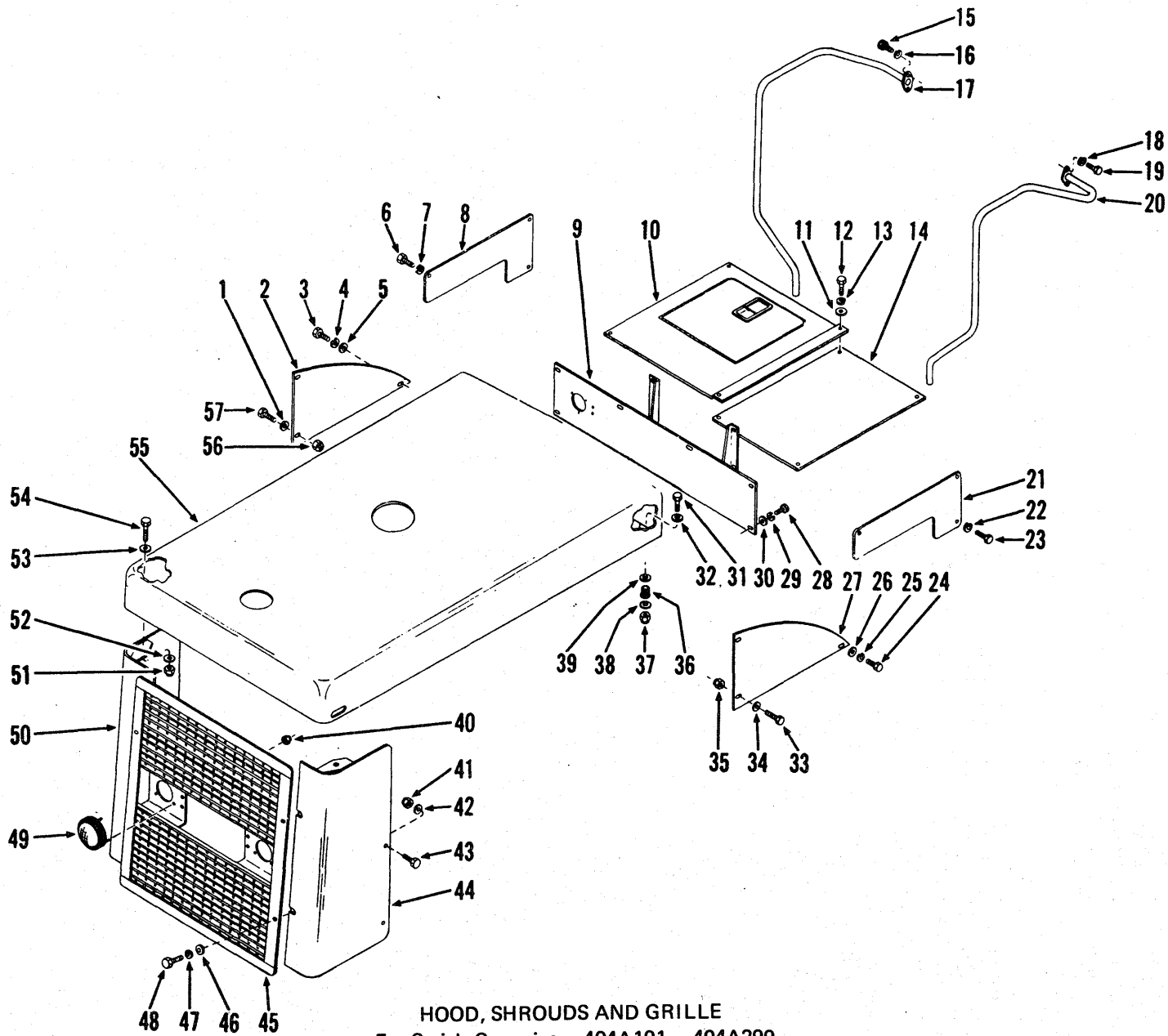


TS-6335-P

**ENGINE OIL BY-PASS FILTER — CUMMINS**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	31F-3	ELBOW, Hose to By-Pass Filter	1	8	18D-06	NUT, Mounting Bracket to Frame	2
2	-----	FILTER, Oil By-Pass (See Engine Parts Manual)	—	9	33F-3	ELBOW, Hose to By-Pass Filter	1
3	24C-516	BOLT, By-Pass Filter to Mounting Bracket	4	10	645493	HOSE, By-Pass Filter to Oil Pan	1
4	25E-15	WASHER, By-Pass Filter to Mounting Bracket	4	11	19F-6	BUSHING, Reducing — Hose to Elbow	1
5	24C-628	BOLT, Mounting Bracket to Frame	2	12	25F-4	ELBOW, Hose to Oil Pan	1
6	18D-05	NUT, By-Pass Filter to Mounting Bracket	4	13	26F-4	ELBOW, Hose to Engine	1
7	568465	BRACKET, By-Pass Filter Mounting	2	14	19F-6	BUSHING, Reducing — Hose to Elbow	1
				15	712699	HOSE, By-Pass Filter to Engine	1

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



**HOOD, SHROUDS AND GRILLE**  
For Serial: Cummins - 404A101 - 404A299  
G.M. - 403A101 - 403A299

TS-8002-P

18:1

(1G1)

PM 2462

**HOOD, SHROUDS AND GRILLE**

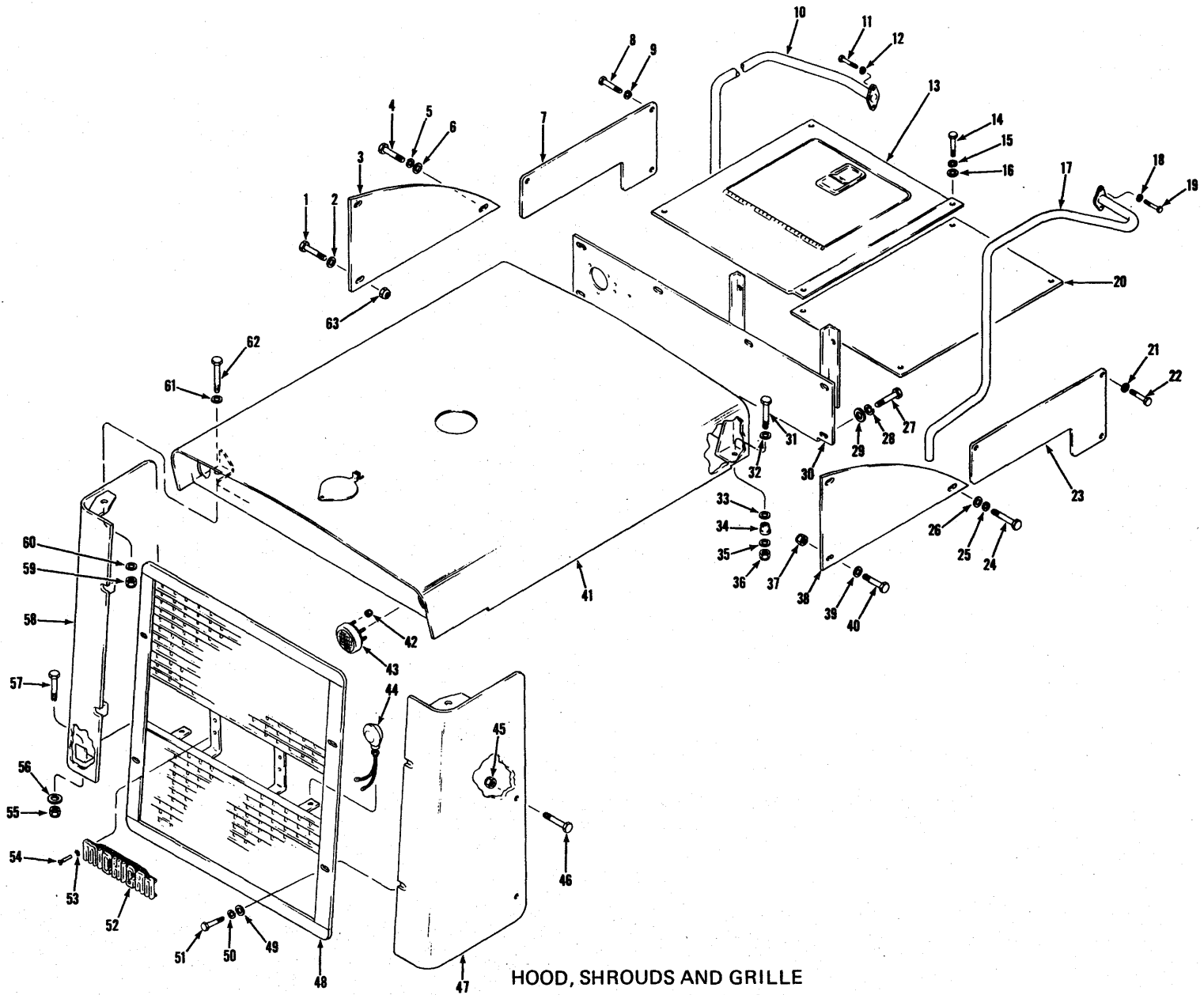
**For Serial: Cummins — 404A101 thru 404A299**

**G.M. — 403A101 thru 403A299**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	656672	WASHER, Side Plate to Frame	2	36	568276	DAMPENER, Vibration	2
2	568748	PLATE, Side	1	37	18D-06	NUT, Hood to Frame	2
3	24C-616	BOLT, Side Plate to Tapped Block	1	38	619021	WASHER, Hood to Frame	2
4	4E-06	LKWSHR, Side Plate to Tapped Block	1	39	619021	WASHER, Hood to Frame	2
5	656672	WASHER, Side Plate to Tapped Block	1	40	50D-10	NUT, Back-Up Light to Grille	6
6	24C-616	BOLT, Panel to Cockpit	3	41	18D-12	NUT, Grille Side Plate to Frame	4
7	4E-06	LKWSHR, Panel to Cockpit	3	42	-----	OMIT, Not Used	—
8	568975	PANEL, Cockpit	1	43	24C-1232	BOLT, Grille Side Plate to Frame	4
9	1530006	PLATE, Air Cleaner Mounting	1	44	568359	PLATE, Grille Side — R.H.	1
10	568076	COVER ASSY — L.H.	1	44A	24C-832	†BOLT, Grille Side Plate to Frame	1
11	656672	WASHER, Cover Plates to Frame	6	44B	619029	†WASHER, Grille Side Plate to Frame	1
12	23C-620	BOLT, Cover Plates to Frame	6	44C	18D-08	†NUT, Grille Side Plate to Frame	1
13	4E-06	LKWSHR, Cover Plates to Frame	6	45	567976	GRILLE	1
14	568075	COVER — R.H.	1	46	635682	WASHER, Grille to Side Plate	4
15	23C-616	BOLT, Hand Rail to Cockpit	2	47	4E-08	LKWSHR, Grille to Side Plate	4
16	4E-06	LKWSHR, Hand Rail to Cockpit	2	48	24C-824	BOLT, Grille to Side Plate	4
17	569394	RAIL, Hand — L.H.	1	49	547416	LAMP ASSY, Back-Up (Inc. 49A, 49B)	2
18	4E-06	LKWSHR, Hand Rail to Cockpit	2	49A	946389	†RETAINER & FRAME ASSY	2
19	23C-616	BOLT, Hand Rail to Cockpit	2	49B	551245	†SEALED UNIT, Back-Up Lamp	2
20	569392	RAIL, Hand — R.H.	1	50	568358	PLATE, Grille Side — L.H.	1
21	568975	PANEL, Cockpit	1	50A	24C-832	†BOLT, Grille Side Plate to Frame	1
22	4E-06	LKWSHR, Panel to Cockpit	3	50B	619029	†WASHER, Grille Side Plate to Frame	1
23	24C-616	BOLT, Panel to Cockpit	3	50C	18D-08	†NUT, Grille Side Plate to Frame	1
24	24C-616	BOLT, Side Plate to Tapped Block	1	51	18D-06	NUT, Hood to Grille Side Plate	2
25	4E-06	LKWSHR, Side Plate to Tapped Block	1	52	619021	WASHER, Hood to Grille Side Plate	2
26	656672	WASHER, Side Plate to Tapped Block	1	53	619021	WASHER, Hood to Grille Side Plate	2
27	568748	PLATE, Side	1	54	24C-632	BOLT, Hood to Grille Side Plate	2
28	23C-620	BOLT, Mounting Plate to Frame	6	55		HOOD	
29	4E-06	LKWSHR, Mounting Plate to Frame	6	55A	1536644	For Cummins Powered Machines	1
30	656672	WASHER, Mounting Plate to Frame	6	55B	1530824	For G.M. Powered Machines	1
31	24C-624	BOLT, Hood to Frame	2	56	18D-06	NUT, Side Plate to Frame	2
32	619021	WASHER, Hood to Frame	2	57	24C-624	BOLT, Side Plate to Frame	2
33	24C-624	BOLT, Side Plate to Frame	2				
34	656672	WASHER, Side Plate to Frame	2				
35	18D-06	NUT, Side Plate to Frame	2				

†Not Illustrated

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



**HOOD, SHROUDS AND GRILLE**  
For Serial: Cummins - 404A300 & After  
G.M. - 403A300 & After

TS-10560

18A.1

(1G3)

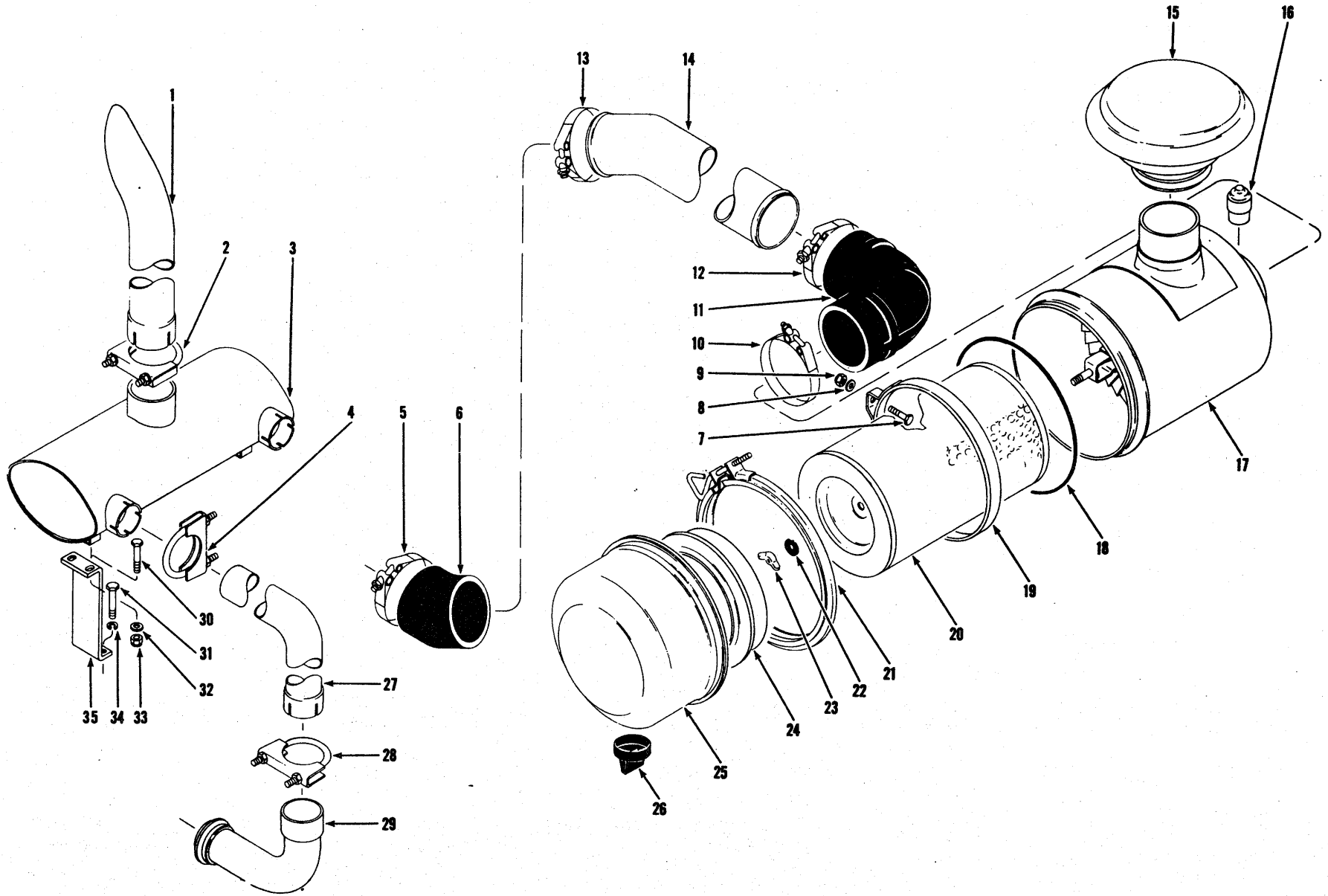
PM 2462

**HOOD, SHROUDS AND GRILLE**  
**For Serial: Cummins — 404A300 and after**  
**G.M. — 403A300 and after**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	24C-624	BOLT, Side Plate to Frame	2	36	18D-06	NUT, Hood to Frame	2
2	656672	WASHER, Side Plate to Frame	2	37	18D-06	NUT, Side Plate to Frame	2
3	568748	PLATE, Side	1	38	568748	PLATE, Side	1
4	24C-616	BOLT, Side Plate to Tapped Block	1	39	656672	WASHER, Side Plate to Frame	2
5	4E-06	LKWSHR, Side Plate to Tapped Block	1	40	18D-06	BOLT, Side Plate to Frame	2
6	656672	WASHER, Side Plate to Tapped Block	1	41		<b>HOOD</b>	
7	568975	PANEL, Cockpit	1	41A	1507890	For Cummins Powered Machines	1
8	24C-616	BOLT, Panel to Cockpit	3	41B	1507889	For G.M. Powered Machines	1
9	4E-06	LKWSHR, Panel to Cockpit	3				
10	569394	RAIL, Hand — L.H.	1	42	50D-10	NUT, Back-Up Light to Hood	6
11	23C-616	BOLT, Hand Rail to Cockpit	2	43	547416	LAMP ASSY, Back-Up (Inc. 43A, 43B)	2
12	4E-06	LKWSHR, Hand Rail to Cockpit	2	43A	946389	†RETAINER & FRAME ASSY	2
13	568076	COVER, R.H.	1	43B	551245	†SEALED UNIT, Back-Up Lamp	2
14	23C-620	BOLT, Cover Plates to Frame	6	44	1540002	LAMP, Stop & Tail (Inc. 44A)	2
15	4E-06	LKWSHR, Cover Plates to Frame	6	44A	942746	†BULB, Stop & Tail Light	2
16	656672	WASHER, Cover Plates to Frame	6	45	18D-12	NUT, Grille Side Plate to Frame	4
17	569392	RAIL, Hand — R.H.	1	46	24C-1232	BOLT, Grille Side Plate Frame	4
18	4E-06	LKWSHR, Hand Rail to Cockpit	2	47	1508050	PLATE, Grille Side — R.H.	1
19	23C-616	BOLT, Hand Rail to Cockpit	2	48	1507701	GRILLE	1
20	568075	COVER, R.H.	1	49	635682	WASHER, Grille to Side Plate	4
21	4E-06	LKWSHR, Panel to Cockpit	3	50	4E-08	LKWSHR, Grille to Side Plate	4
22	24C-616	BOLT, Panel to Cockpit	3	51	24C-824	BOLT, Grille to Side Plate	4
23	568975	PANEL, Cockpit	1	52	535649	NAMEPLATE, Grille	1
24	24C-616	BOLT, Side Plate to Tapped Block	1	53	20E-04	LKWSHR, Nameplate to Grille	4
25	4E-06	LKWSHR, Side Plate to Tapped Block	1	54	7G-418	SCREW, Nameplate to Grille	4
26	656672	WASHER, Side Plate to Tapped Block	1	55	18D-08	NUT, Grille Side Plate to Frame	2
27	23C-620	BOLT, Mounting Plate to Frame	6	56	619029	WASHER, Grille Side Plate to Frame	2
28	4E-06	LKWSHR, Mounting Plate to Frame	6	57	24C-832	BOLT, Grille Side Plate to Frame	2
29	656672	WASHER, Mounting Plate to Frame	6	58	1508051	PLATE, Grille Side — L.H.	1
30	1530006	PLATE, Air Cleaner Mounting	1	59	18D-06	NUT, Hood to Grille Side Plate	2
31	24C-624	BOLT, Hood to Frame	2	60	619021	WASHER, Hood to Grille Side Plate	2
32	619021	WASHER, Hood to Frame	2	61	619021	WASHER, Hood to Grille Side Plate	2
33	619021	WASHER, Hood to Frame	2	62	24C-632	BOLT, Hood to Grille Side Plate	2
34	568276	DAMPENER, Vibration	2	63	18D-06	NUT, Side Plate to Frame	2
35	619021	WASHER, Hood to Frame	2				

†Not Illustrated

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



MUFFLER, TAILPIPE, AIR CLEANER AND CONNECTIONS — CUMMINS

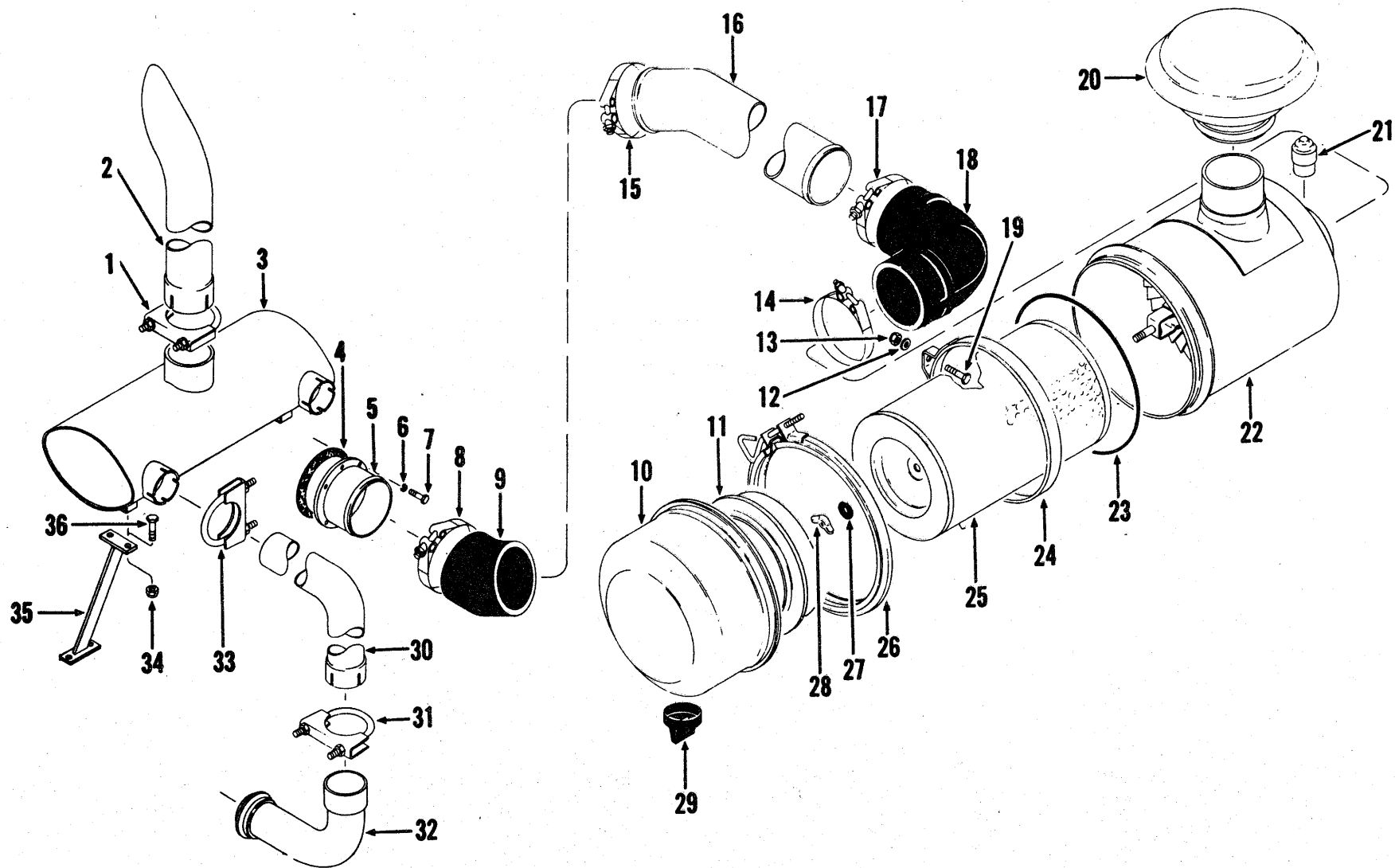
TS-8108-P

**MUFFLER, TAILPIPE, AIR CLEANER AND CONNECTIONS—CUMMINS**

Item No.	Part No.	Description	No. Req'd.
1	542907	PIPE, Tail .....	1
2	542908	CLAMP, Tail Pipe to Muffler .....	1
3	542836	MUFFLER .....	1
4	580282	CLAMP, Pipe to Muffler .....	2
5	540797	CLAMP, Hose to Air Intake .....	1
6	513865	HOSE, Air Intake — 45° .....	1
7	24C-620	BOLT, Air Cleaner to Bracket .....	4
8	656672	WASHER, Air Cleaner to Bracket .....	4
9	18D-06	NUT, Air Cleaner to Bracket .....	4
10	1500793	CLAMP, Hose to Air Cleaner .....	1
11	1529315	HOSE, Air Intake — 90° .....	1
12	1500793	CLAMP, Hose to Tube .....	1
13	540797	CLAMP, Hose to Tube .....	1
14	1530008	TUBE, Air Intake .....	1
15	1530002	CAP, Air Cleaner .....	1
16	1529625	INDICATOR, Air Cleaner Service .....	1
17	1530009	AIR CLEANER ASSY (Inc. 18, 20 thru 26) .....	1
18	944404	O-RING, Cup to Body .....	1
19	1530004	BAND, Air Cleaner Mounting .....	2
20	946897	ELEMENT, Air Cleaner .....	1
21	944810	CLAMP, Air Cleaner Cup Mounting .....	1
22	886527	GASKET, Wing Nut .....	1
23	886526	WING NUT, Element Retaining .....	1
24	946898	BAFFLE, Cup .....	1
25	946899	CUP, Air Cleaner .....	1
26	946860	VACULATOR, Valve .....	1
27	573009	PIPE, Exhaust Manifold .....	2
28	580282	CLAMP, Pipe to Stem .....	2
29		STEM, Exhaust .....	
29A	568931	RIGHT HAND .....	1
29B	556464	†LEFT HAND .....	1
30	24C-620	BOLT, Muffler to Bracket .....	4
31	23C-616	BOLT, Bracket Mounting .....	4
32	656672	WASHER, Muffler to Bracket .....	4
33	18D-06	NUT, Muffler to Bracket .....	4
34	4E-06	LKWSHR, Bracket Mounting .....	4
35	556934	BRACKET, Muffler Mounting .....	2

†Not Illustrated

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



MUFFLER, TAILPIPE, AIR CLEANER AND CONNECTIONS — G.M.

TS-8808-P

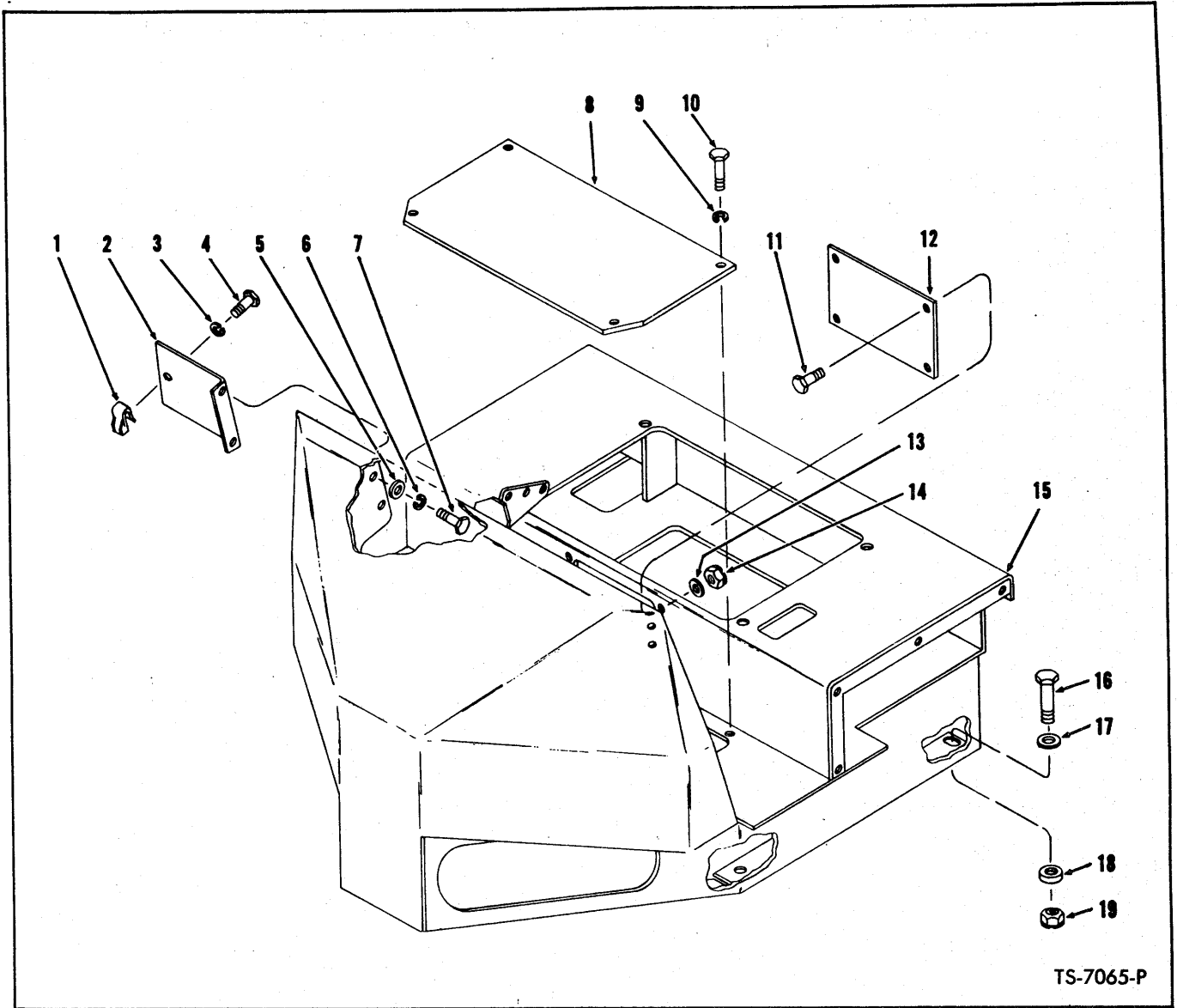


**MUFFLER, TAILPIPE, AIR CLEANER AND CONNECTIONS — G.M.**

Item No.	Part No.	Description	No. Req'd.
1	542908	CLAMP, Tail Pipe to Muffler	1
2	542907	PIPE, Tail	1
3	542836	MUFFLER	1
4	533286	GASKET, Adapter to Engine	1
5	1529298	ADAPTER, Air Intake to Engine	1
6	4E-06	LKWSHR, Adapter to Engine	6
7	23C-616	BOLT, Adapter to Engine	6
8	1500793	CLAMP, Hose to Adapter	1
9	1529295	HOSE, Air Cleaner — 45°	1
10	946899	CUP, Air Cleaner	1
11	946898	BAFFLE, Cup	1
12	656672	WASHER, Air Cleaner to Bracket	4
13	18D-06	NUT, Air Cleaner to Bracket	4
14	1500793	CLAMP, Hose to Air Cleaner	1
15	1500793	CLAMP, Hose to Tube	1
16	1530822	TUBE, Air Intake	1
17	1500793	CLAMP, Hose to Tube	1
18	1529315	HOSE, Air Intake — 90°	1
19	24C-620	BOLT, Air Cleaner to Bracket	4
20	1530002	CAP, Air Cleaner	1
21	1529625	INDICATOR, Air Cleaner Service	1
22	1530009	AIR CLEANER ASSY (Inc. 10, 11, 23, 25 thru 29)	1
23	944404	O-RING, Cup to Body	1
24	1530004	BAND, Air Cleaner Mounting	2
25	946897	ELEMENT, Air Cleaner	1
26	944810	CLAMP, Cup Mounting	1
27	886527	GASKET, Wing Nut	1
28	886526	WING NUT, Element Retaining	1
29	946860	VACULATOR, Valve	1
30	566449	PIPE, Exhaust Manifold	2
31	580282	CLAMP, Pipe to Stem	2
32		STEM, Exhaust	
32A	542998	RIGHT HAND	1
32B	542999	†LEFT HAND	1
33	580282	CLAMP, Pipe to Muffler	2
34	18D-06	NUT, Muffler to Support	4
35		SUPPORT, Muffler Mounting	
35A	543002	RIGHT HAND	1
35B	543003	†LEFT HAND	1
36	24C-616	BOLT, Muffler to Support	4
37	23C-656	BOLT, Muffler Support to Engine	4

†Not Illustrated

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**

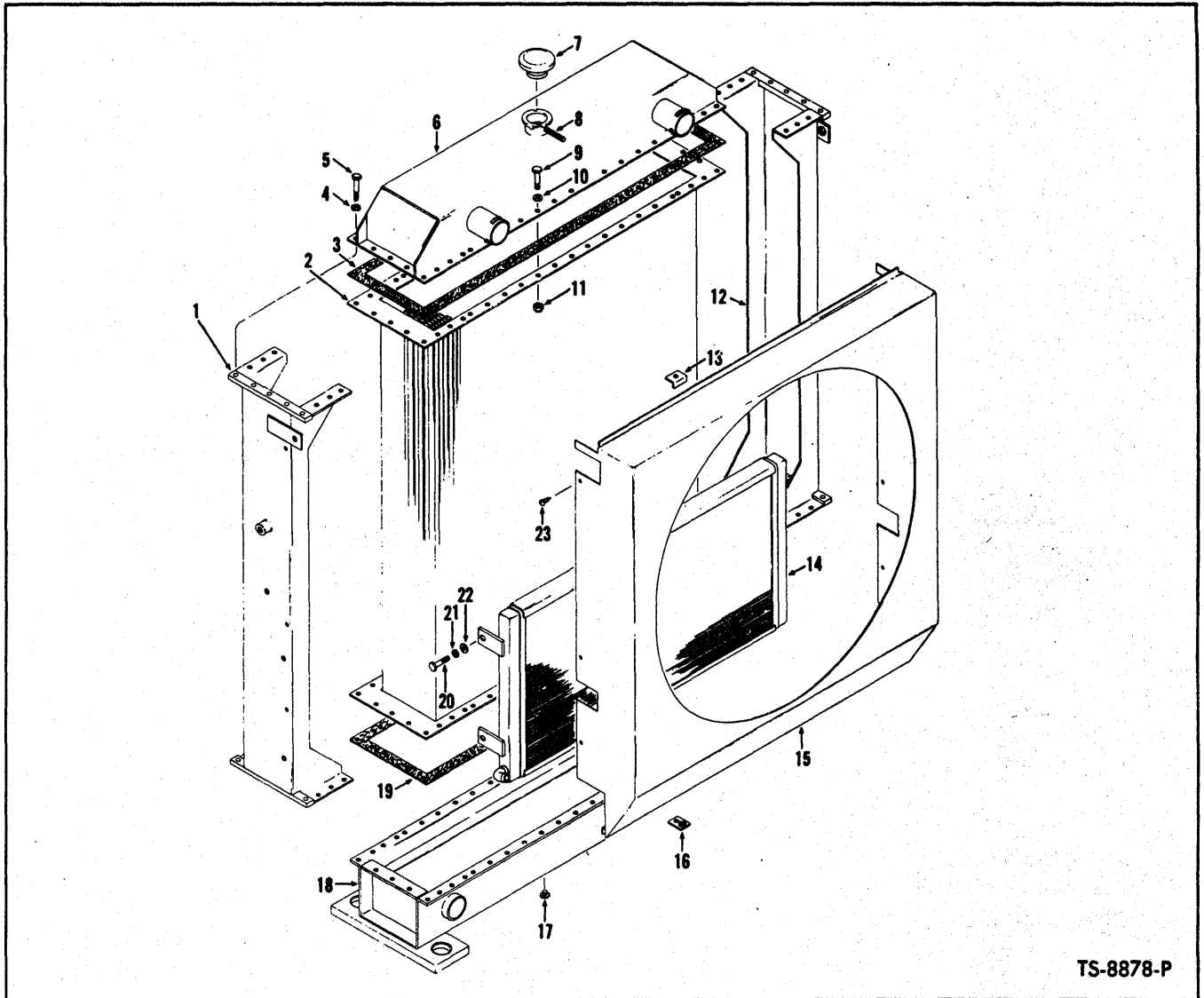


TS-7065-P

**COCKPIT**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	572729	CAGED NUT, Instrument Panel Retaining .....	1	10	23C-816	BOLT, Floorboard to Cockpit	4
2	574026	PLATE, Panel — R.H. ....	1	11	23C-612	BOLT, Cover Plate to Cockpit	4
3	4E-06	LKWSHR, Panel to Cockpit ..	1	12	1508950	PLATE, Heater Cover .....	1
4	23C-616	BOLT, Panel to Cockpit	1	13	-----	OMIT, Not Used .....	—
5	565280	WASHER, Panel to Cockpit ...	2	14	17D-3	NUT, Cover Plate to Cockpit	4
6	4E-06	LKWSHR, Panel to Cockpit ..	2	15	1509035	COCKPIT ASSY .....	1
7	23C-616	BOLT, Panel to Cockpit .....	2	16	23C-840	BOLT, Cockpit to Frame.....	4
8	568946	PLATE, Floorboard .....	1	17	619029	WASHER, Cockpit to Frame..	4
9	4E-08	LKWSHR, Floorboard to Cockpit .....	4	18	-----	OMIT, Not used on this Application .....	—
				19	18D-08	NUT, Cockpit to Frame .....	4

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



TS-8878-P

**RADIATOR ASSEMBLY**

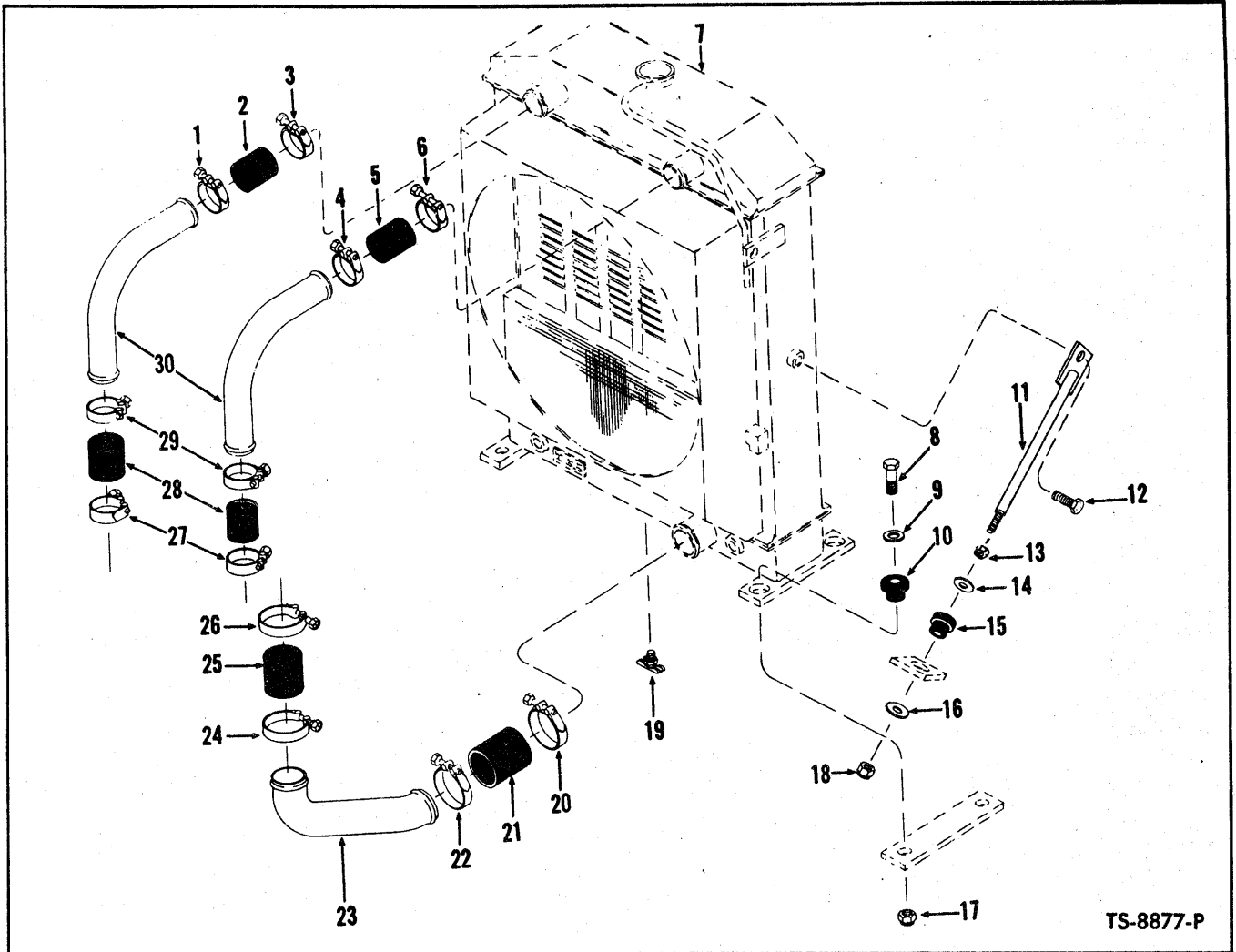
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1504076	*RADIATOR ASSY (Inc. 1 thru 23)	1	13	947812	CLIP, Shroud	2
B	1504077	**RADIATOR ASSY (Inc. 1 thru 23)	1	14	947878	COOLER, Oil	1
1	947876	SIDE MEMBER — R.H.	1	15		FAN SHROUD	
2	947877	CORE, Radiator	1	15A	947882	*For Cummins Powered	1
3	944632	GASKET, Top Tank	3	15B	947960	**For G.M. Powered	1
4	4E-05	LKWSHR, Tanks to Core	20	16	947813	CLIP, Shroud	2
5	1C-512	BOLT, Tanks to Core	20	17	34F-04	PLUG	1
6	947874	TOP TANK	1	18	1507696	BOTTOM TANK	1
7	863364	CAP, Radiator	1	19	944632	GASKET, Bottom Tank	3
8	947881	HOSE, Overflow	1	20	1C-612	BOLT, Cooler Mtg.	4
9	1C-514	BOLT, Tanks to Core	72	20A	1D-06	†NUT, Cooler Mtg.	4
10	4E-05	LKWSHR, Tanks to Core	72	21		OMIT, Not Used	—
11	1D-05	NUT, Tanks to Core	72	22	947879	WASHER, Cooler Mtg.	4
12	947875	SIDE MEMBER — L.H.	1	23	89G-408	SCREW, Fan Shroud	8

†Not Illustrated

\*NOTE: For Cummins Powered Machines.

\*\*NOTE: For G.M. Powered Machines.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**

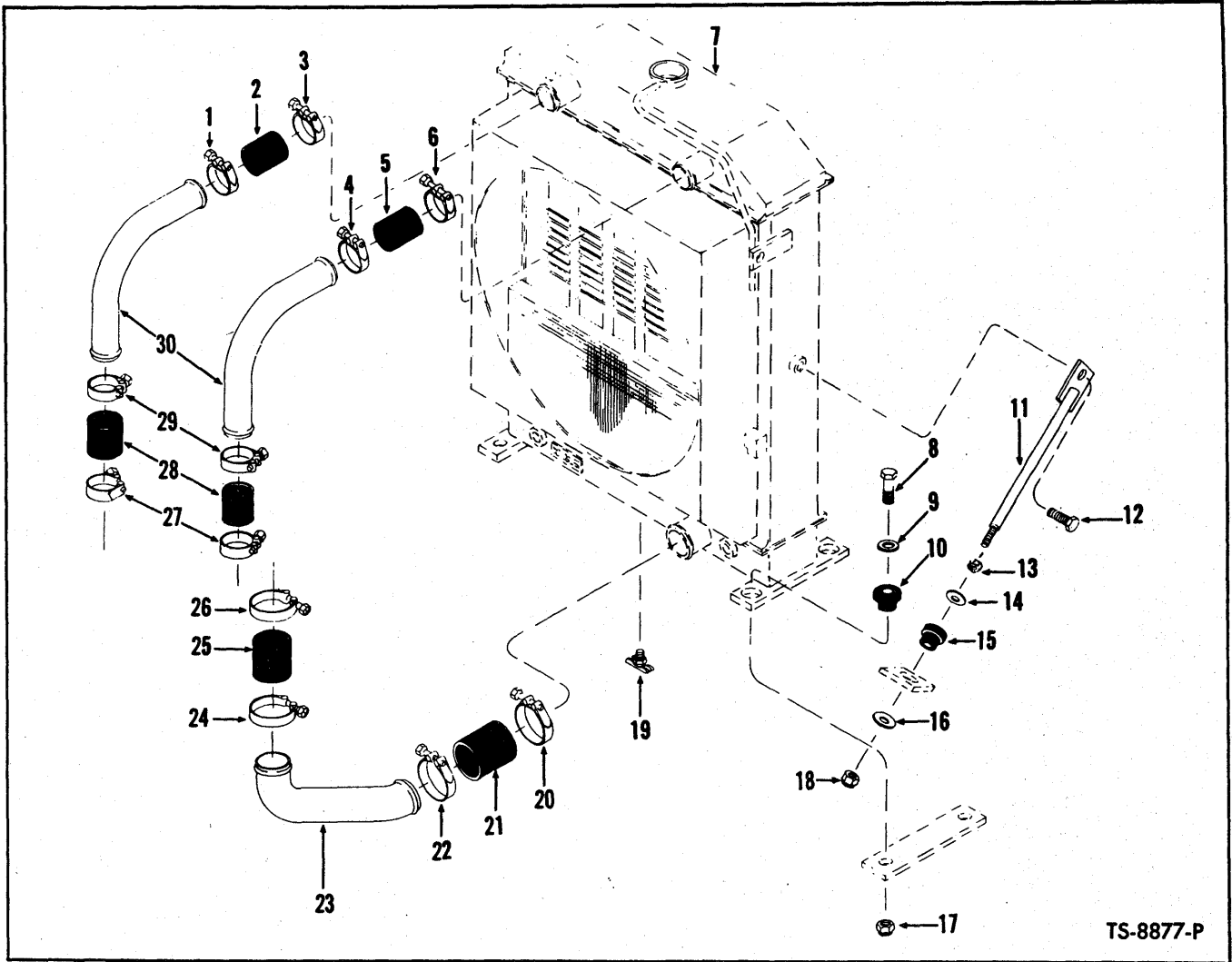


TS-8877-P

**RADIATOR CONNECTIONS – CUMMINS**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	540104	CLAMP, Hose to Tube .....	1	17	18D-10	NUT, Rad. Mtg. ....	4
2	1M-18032	HOSE, Tube to Rad. ....	1	18	18D-08	NUT, Support Rod .....	2
3	540104	CLAMP, Hose to Rad. ....	1	19	72F-2	DRAIN COCK .....	1
4	540104	CLAMP, Hose to Tube .....	1	20	540105	CLAMP, Hose to Rad. ....	1
5	1M-18032	HOSE, Tube to Rad. ....	1	21	1M-22044	HOSE, Tube to Rad. ....	1
6	540104	CLAMP, Hose to Rad. ....	1	22	540105	CLAMP, Hose to Tube .....	1
7	—	RADIATOR ASSY — See Index	—	23	573006	TUBE, Rad. to Engine .....	1
8	24C-1060	BOLT, Rad. Mtg. ....	4	24	540104	CLAMP, Hose to Tube .....	1
9	569070	WASHER, Rad. Mtg. ....	4	25	1M-18032	HOSE, Tube to Engine .....	1
10	1527276	DAMPENER, Vibration .....	4	26	540104	CLAMP, Hose to Engine .....	1
11	1504085	ROD, Support .....	2	27	540104	CLAMP, Hose to Engine .....	2
12	24C-812	BOLT, Support Rod .....	2	28	1M-18040	HOSE, Tube to Engine .....	2
13	8D-08	NUT, Support Rod .....	2	29	540104	CLAMP, Hose to Tube .....	2
14	616796	WASHER, Support Rod .....	2	30	1504086	TUBE, Rad. to Engine — R.H. ...	1
15	569739	DAMPENER, Vibration .....	2	30A	1504087	TUBE, Rad. to Engine — L.H. ...	1
16	616796	WASHER, Support Rod .....	2				

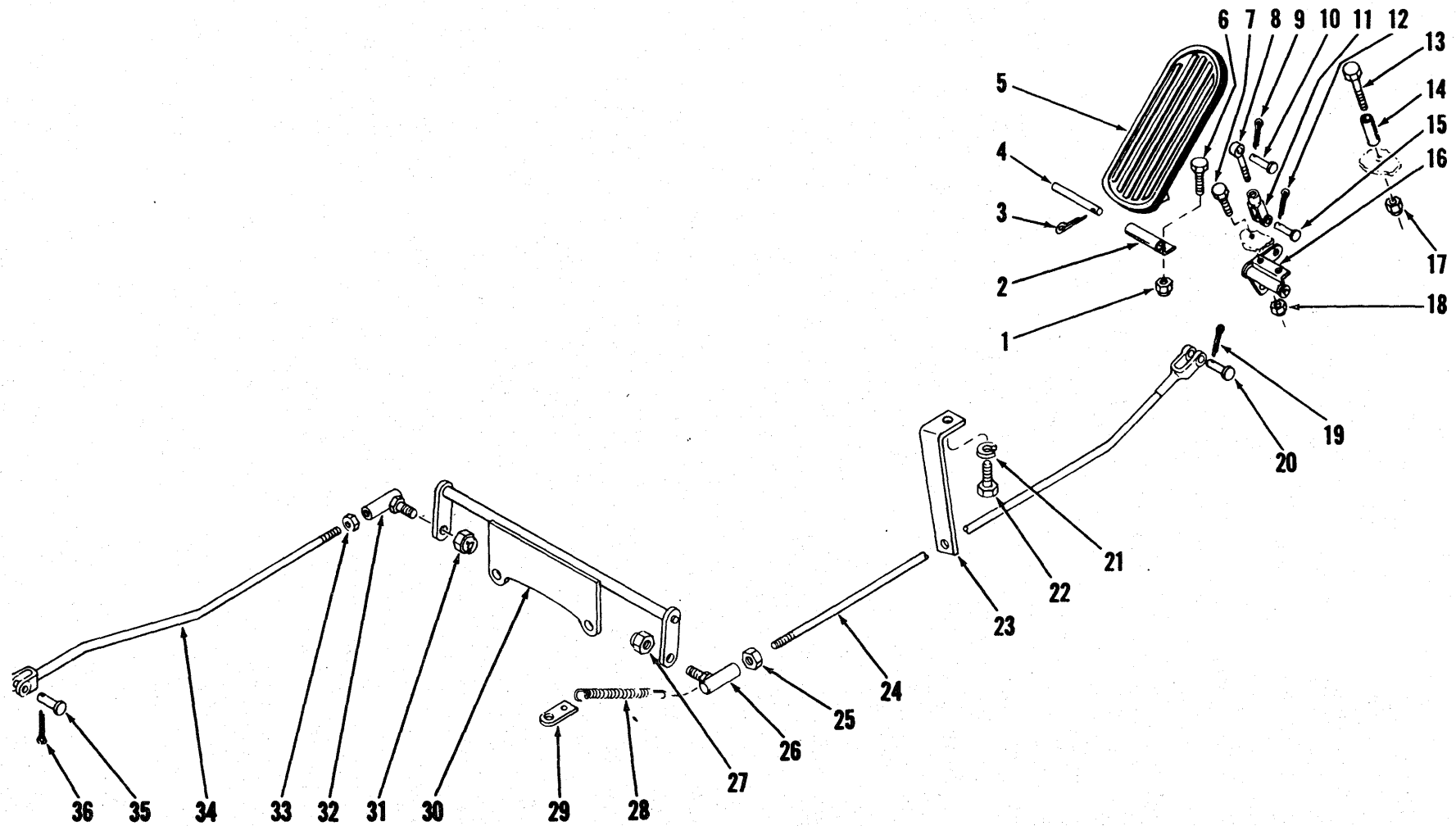
**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



**RADIATOR CONNECTIONS – G.M.**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	540104	CLAMP, Hose to Tube .....	1	16	616796	WASHER, Support Rod .....	2
2	1M-18032	HOSE, Tube to Rad. ....	1	17	18D-10	NUT, Rad. Mtg. ....	4
3	540104	CLAMP, Hose to Rad. ....	1	18	18D-08	NUT, Support Rod .....	2
4	540104	CLAMP, Hose to Tube .....	1	19	72F-2	DRAIN COCK .....	1
5	1M-18032	HOSE, Tube to Rad. ....	1	20	540105	CLAMP, Hose to Rad. ....	1
6	540104	CLAMP, Hose to Rad. ....	1	21	1M-22044	HOSE, Tube to Rad. ....	1
7	-----	RADIATOR ASSY – See Index	—	22	540105	CLAMP, Hose to Tube .....	1
8	24C-1060	BOLT, Rad. Mtg. ....	4	23	566463	TUBE, Rad. to Engine .....	1
9	569070	WASHER, Rad. Mtg. ....	4	24	540105	CLAMP, Hose to Tube .....	1
10	1527276	DAMPENER, Vibration .....	4	25	1M-22044	HOSE, Tube to Engine .....	1
11	1504085	ROD, Support .....	2	26	540105	CLAMP, Hose to Engine .....	1
12	24C-812	BOLT, Support Rod .....	2	27	540104	CLAMP, Hose to Engine .....	2
13	8D-08	NUT, Support Rod .....	2	28	1M-18032	HOSE, Tube to Engine .....	2
14	616796	WASHER, Support Rod .....	2	29	540104	CLAMP, Hose to Tube .....	2
15	569739	DAMPENER, Vibration .....	2	30	1504030	TUBE, Rad. to Engine .....	2

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



ACCELERATOR PEDAL AND LINKAGE — CUMMINS

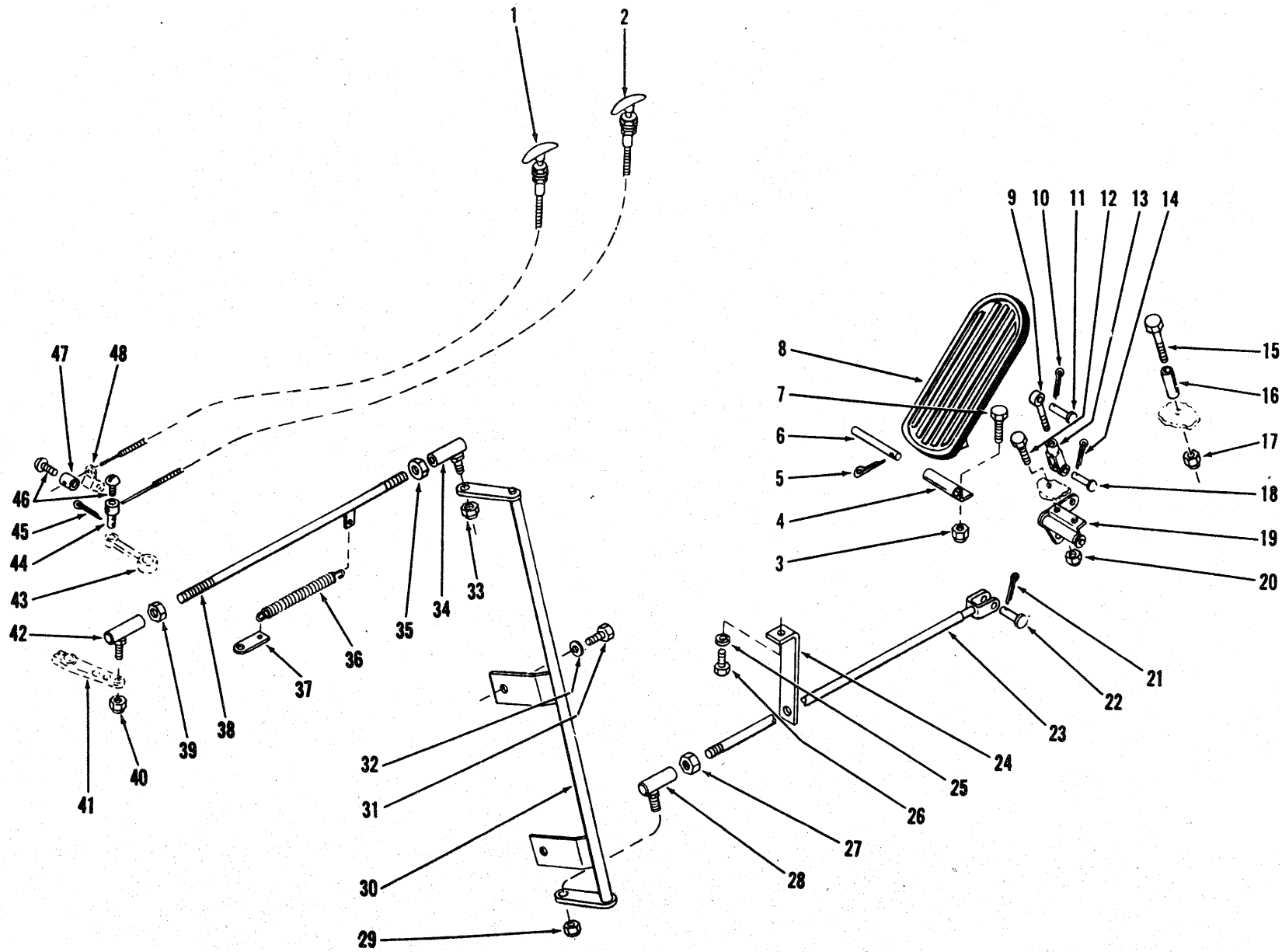
TS-5316-P

**ACCELERATOR PEDAL AND LINKAGE – CUMMINS**

Item No.	Part No.	Description	No. Req'd.
1	18D-04	NUT, Bracket to Cockpit .....	2
2	623760	BRACKET, Accelerator Pedal .....	1
3	1F-316	COTTER, Pedal Pin .....	1
4	623762	PIN, Pedal to Bracket .....	1
5	623829	PEDAL, Accelerator .....	1
6	24C-416	BOLT, Bracket to Cockpit .....	2
7	24C-416	BOLT, Bellcrank to Floorboard .....	2
8	550619	ROD, Pedal to Bellcrank .....	1
8A	8D-04	†NUT, Clevis Jam .....	1
9	1F-208	COTTER, Clevis Pin .....	1
10	4F-04051	PIN, Clevis .....	1
11	2J-4200	CLEVIS, Rod to Bellcrank .....	1
12	1F-208	COTTER, Clevis Pin .....	1
13	24C-448	BOLT, Stop to Floorboard .....	1
14	551016	STOP, Pedal .....	1
15	4F-04051	PIN, Clevis .....	1
16	568941	BELLCRANK .....	1
17	18D-04	NUT, Bellcrank to Floorboard .....	1
18	18D-04	NUT, Bellcrank to Floorboard .....	2
19	1F-208	COTTER, Clevis Pin .....	1
20	4F-04051	PIN, Clevis .....	1
21	4E-06	LKWSHR, Support Angle Mtg. ....	1
22	24C-616	BOLT, Support Angle Mtg. ....	1
23	569151	ANGLE, Support .....	1
24	569148	ROD, Accelerator (Inc. 23, 25, 26) .....	1
25	8D-05	NUT, Ball Joint Jam .....	1
26	1301361	BALL JOINT, Rod to Bellcrank .....	1
27	66D-05	NUT, Ball Joint to Bellcrank .....	1
28	551090	SPRING, Throttle Return .....	1
29	2509392	LUG, Throttle Return Spring .....	1
30	569144	BELLCRANK .....	1
31	66D-05	NUT, Ball Joint to Bellcrank .....	1
32	1301361	BALL JOINT, Rod to Bellcrank .....	1
33	8D-05	NUT, Ball Joint Jam .....	1
34	1522084	ROD, Engine to Bellcrank (Inc. 32, 33) .....	1
35	4F-05062	PIN, Clevis .....	1
36	1F-312	COTTER, Clevis Pin .....	1

†Not Illustrated

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



ACCELERATOR PEDAL AND LINKAGE - G.M.

TS-5317-P

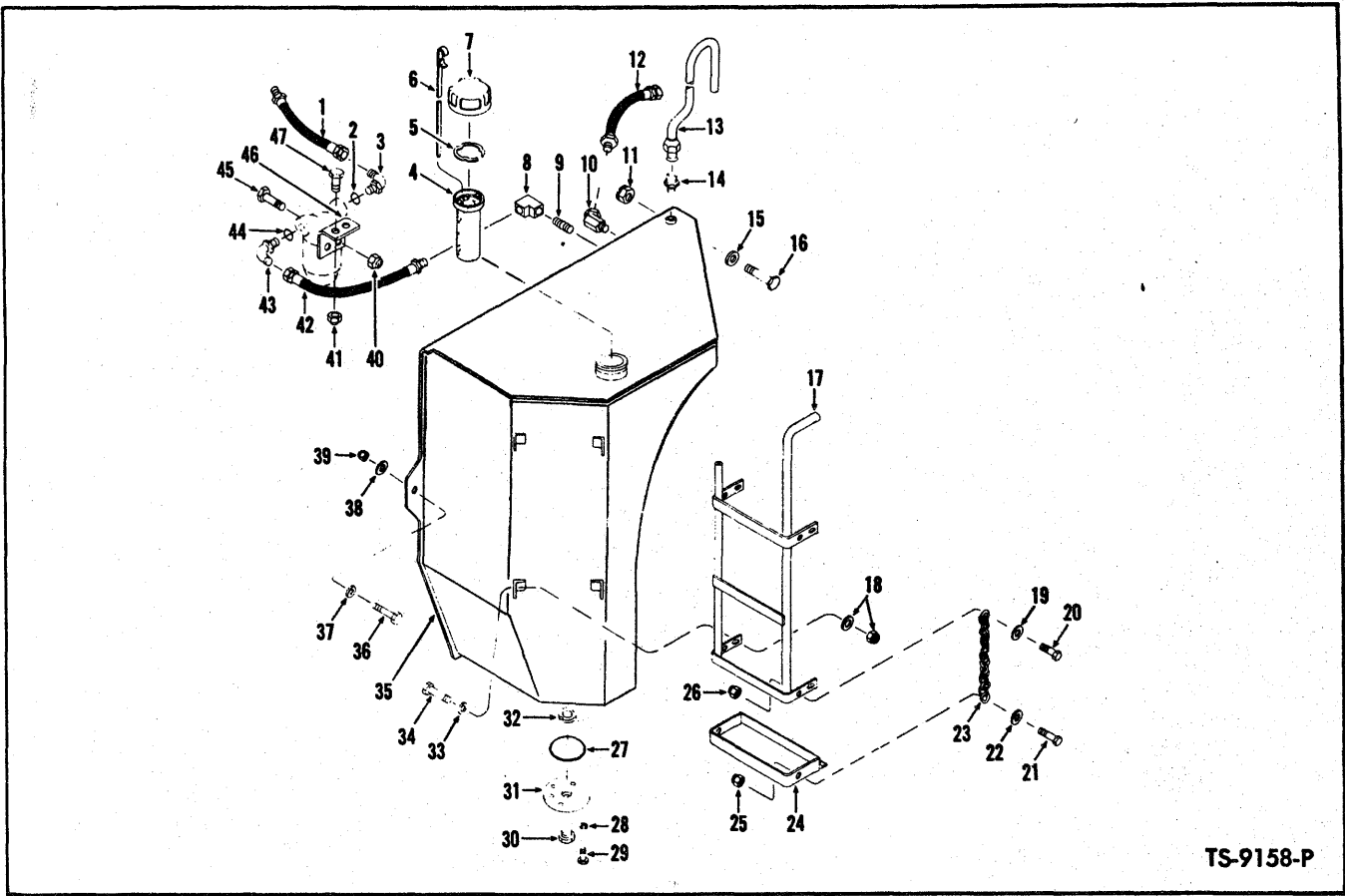


**ACCELERATOR PEDAL AND LINKAGE – G.M.**

Item No.	Part No.	Description	No. Req'd.
1	1520193	CABLE, Engine Stop	1
2	1520190	CABLE, Emergency Stop	1
2A	569389	†PLATE, Emergency Stop	1
2B	6C-605	†SCREW, Plate Mtg.	2
3	18D-04	NUT, Brk. to Floorboard	2
4	623760	BRACKET, Pedal Pivot	1
5	1F-316	COTTER, Pedal Pin	1
6	623762	PIN, Pedal to Bracket	1
7	24C-416	BOLT, Brk. to Floorboard	2
8	623829	PEDAL, Accelerator	1
9	550619	ROD, Pedal to Bellcrank	1
10	1F-208	COTTER, Clevis Pin	1
11	4F-04051	PIN, Pedal to Rod	1
12	24C-416	BOLT, Bellcrank Mtg.	2
13	2J-4200	CLEVIS, Rod to Bellcrank	1
14	1F-208	COTTER, Clevis Pin	1
15	24C-448	BOLT, Stop Mtg.	1
16	551016	STOP, Pedal	1
17	18D-04	NUT, Floorboard Stop	1
18	4F-04051	PIN, Clevis to Bellcrank	1
19	568941	BELLCRANK	1
20	18D-04	NUT, Bellcrank Mtg.	2
21	1F-208	COTTER, Clevis Pin	1
22	4F-04051	PIN, Rod to Bellcrank	1
23	568858	ROD, Accelerator – Front (Inc. 24, 27, 28)	1
24	568859	BRACKET, Rod	1
25	4E-06	LKWSHR, Bracket Mtg.	1
26	24C-616	BOLT, Bracket Mtg.	1
27	8D-05	NUT, Ball Joint Jam	1
28	1301361	BALL JOINT	1
29	66D-05	NUT, Ball Joint Mtg.	1
30	540204	BELLCRANK	1
31		BOLT, Bellcrank Mtg.	
31A	24C-668	Lower	1
31B	24C-680	Upper	1
32	864106	WASHER, Bellcrank Mtg.	2
33	66D-05	NUT, Ball Joint Mtg.	1
34	1301361	BALL JOINT	1
35	8D-05	NUT, Ball Joint Jam	1
36	551014	SPRING, Return	1
37	530509	CLIP, Spring Return	1
38	540274	ROD, Accelerator – Rear (Inc. 34, 35, 39, 42)	1
39	8D-05	NUT, Ball Joint Jam	1
40	66D-05	NUT, Ball Joint Mtg.	1
41	-----	LEVER, Governor – See Engine Manual	—
42	1301361	BALL JOINT	1
43	-----	SHUT-OFF, Fuel – See Engine Manual	—
44	1523209	CONNECTOR, Cable	1
45	1F-208	COTTER, Connector	1
46		SCREW, Connector	
46A	86G-1008	For Item 44	1
46B	85G-806	For Item 47	1
47	1523210	CONNECTOR, Cable	1
48	-----	SHUT-OFF, Emergency – See Engine Manual	—

†Not Illustrated

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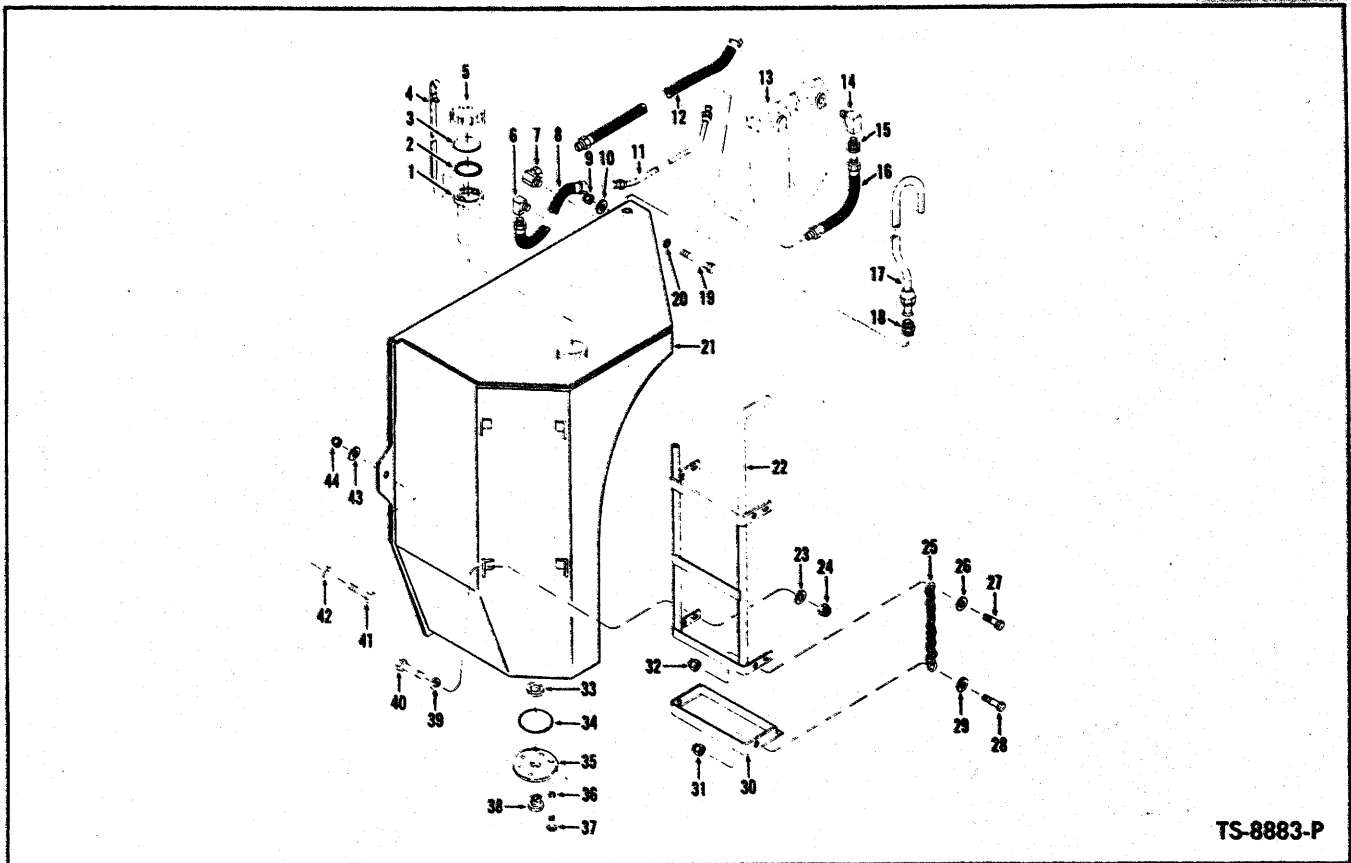


**FUEL TANK AND LINES – CUMMINS**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1522069	HOSE, Filter to Engine .....	1	24	1505606	STEP, Lower Swinging .....	1
2	91F-7	O-RING, Elbow .....	1	25	18D-06	NUT, Chain to Step .....	2
3	17K-7	ELBOW, Hose to Filter (Inc. 2) .....	1	26	18D-06	NUT, Chain to Step .....	2
4	943957	SCREEN, Fuel Tank .....	1	27	25K-40428	O-RING, Inspection Cover .....	1
5	-----	OMIT .....	-----	28	4E-06	LKWSHR, Cover .....	6
6	573434	DIPSTICK, Fuel Tank .....	1	29	24C-612	BOLT, Cover .....	6
7	1558644	CAP, Filler (Inc. 7A, 7B) .....	1	30	40K-16	PLUG, Inspection Cover .....	1
7A	946954	†PLATE, Gasket Back-Up .....	1	31	587613	COVER, Inspection .....	1
7B	946953	†GASKET, Filler Cap .....	1	32	525293	MAGNET .....	1
8	27F-3	ELBOW, Hose to Tank .....	1	33	619029	WASHER, Step to Tank .....	4
9	5K-424	NIPPLE, Tank to Elbow .....	1	34	24C-828	BOLT, Step to Tank .....	4
10	81F-2	ELBOW, Hose to Tank .....	1	35	1505171	TANK, Fuel .....	1
11	18D-12	NUT, Frame to Tank .....	1	36	24C-1246	BOLT, Tank to Frame .....	2
12	1522228	HOSE, Fuel Return .....	1	37	616809	WASHER, Tank to Frame .....	2
13	572079	TUBE, Breather .....	1	38	616809	WASHER, Tank to Frame .....	2
14	38F-4	CONNECTOR, Tube to Tank .....	1	39	18D-12	NUT, Tank to Frame .....	2
15	616809	WASHER, Frame to Tank .....	2	40	18D-06	NUT, Filter to Bracket .....	3
16	24C-1244	BOLT, Frame to Tank .....	1	41	18D-06	NUT, Bracket Mounting .....	2
17	1505607	STEP – L.H. .....	1	42	569228	HOSE, Filter to Tank .....	1
18	18D-08	NUT, Step to Tank .....	4	43	17K-7	ELBOW, Hose to Filter (Inc. 44) .....	1
18A	619029	WASHER, Step to Tank .....	4	44	91F-7	O-RING, Elbow .....	1
19	656672	WASHER, Chain to Step .....	2	45	24C-624	BOLT, Filter to Bracket .....	3
20	24C-624	BOLT, Chain to Step .....	2	46	568466	BRACKET, Filter Mounting .....	1
21	24C-624	BOLT, Chain to Step .....	2	47	24C-624	BOLT, Bracket Mounting .....	2
22	656672	WASHER, Chain to Step .....	2				
23	1505620	CHAIN, Step to Step .....	2				

†Not Illustrated

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TS-8883-P

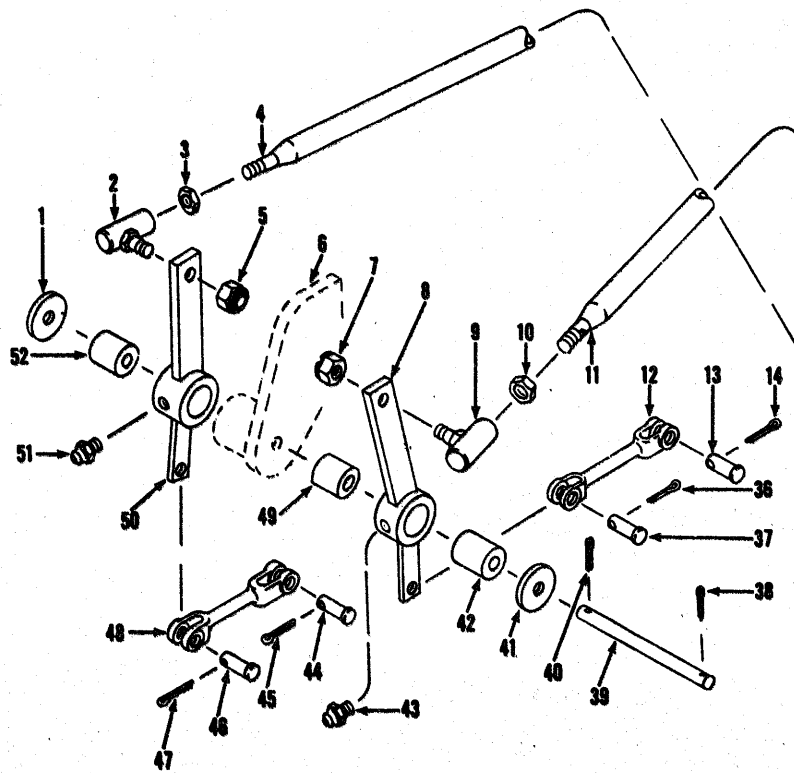
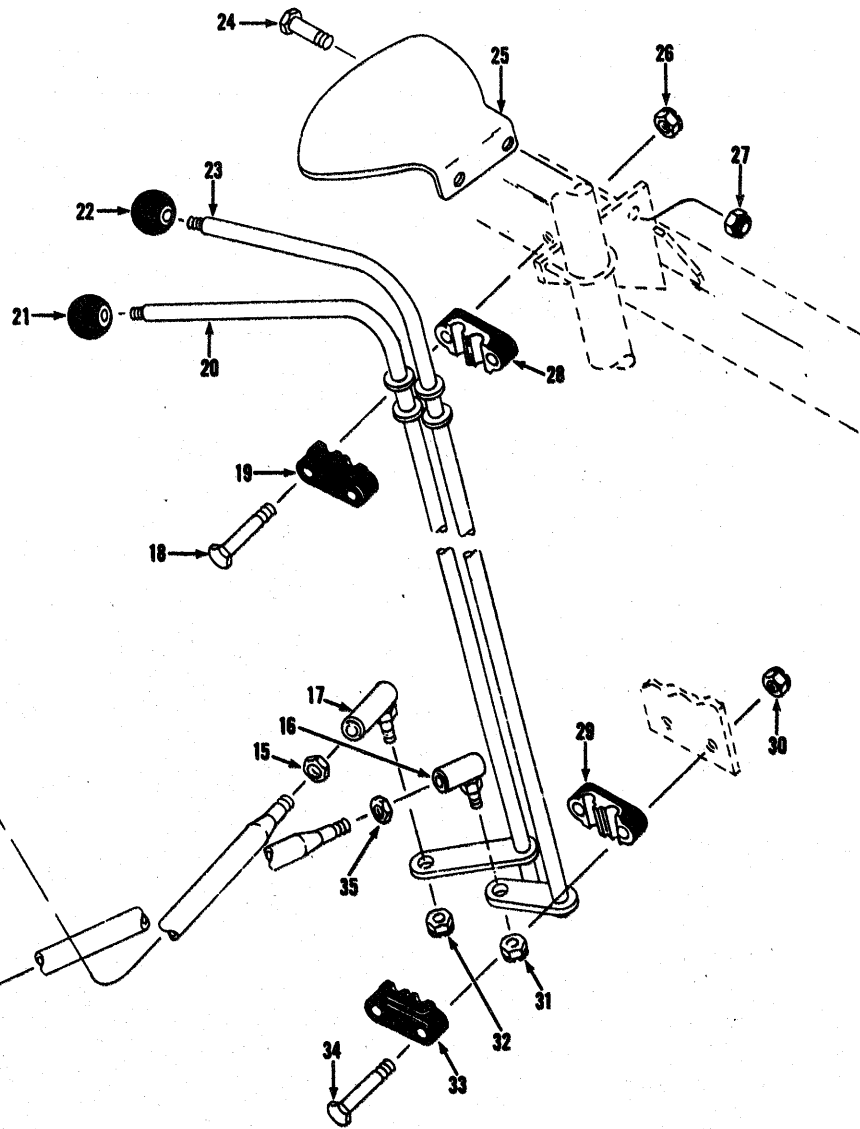
**FUEL TANK AND LINES – G.M.**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	943957	SCREEN, Fuel Tank .....	1	23	619029	WASHER, Step to Tank .....	4
2	946953	GASKET, Filler Cap .....	1	24	18D-08	NUT, Step to Tank .....	4
3	946954	PLATE, Gasket Back-up .....	1	25	1505620	CHAIN, Step to Step .....	2
4	573434	DIPSTICK, Fuel Tank .....	1	26	656672	WASHER, Chain to Step .....	2
5	1558644	CAP, Filler (Inc. 2, 3) .....	1	27	24C-624	BOLT, Chain to Step .....	2
6	29F-3	ELBOW, Hose to Tank .....	1	28	24C-624	BOLT, Chain to Step .....	2
7	33F-3	ADAPTER, Hose to Tank .....	1	29	656672	WASHER, Chain to Step .....	2
8	540568	HOSE, Tube to Tank .....	1	30	1505606	STEP, Lower Swinging .....	1
9	18D-12	NUT, Tank to Frame .....	1	31	18D-06	NUT, Chain to Step .....	2
10	616809	WASHER, Tank to Frame .....	1	32	18D-06	NUT, Chain to Step .....	2
11	1530821	TUBE, Suction .....	1	33	525293	MAGNET .....	1
12	1531988	*HOSE, Fuel Return .....	1	34	25K-40428	O-RING, Inspection Cover .....	1
12A	1513351	**HOSE, Fuel Return .....	1	35	587613	COVER, Inspection .....	1
13	-----	FUEL FILTERS – See G.M. Engine Parts Manual .....	—	36	4E-06	LKWSHR, Cover .....	6
14	29F-2	ELBOW, Hose to Filter .....	1	37	24C-612	BOLT, Cover .....	6
15	425413	CHECK, Valve .....	1	38	40K-16	PLUG, Inspection Cover .....	1
16	1529677	HOSE, Tube to Filter .....	1	39	619029	WASHER, Step to Tank .....	4
17	572079	TUBE, Breather .....	1	40	24C-828	BOLT, Step to Tank .....	4
18	38F-4	CONNECTOR, Tube to Tank .....	1	41	24C-1256	BOLT, Tank to Frame .....	2
19	24C-1244	BOLT, Tank to Frame .....	1	42	616809	WASHER, Tank to Frame .....	2
20	616809	WASHER, Tank to Frame .....	1	43	616809	WASHER, Tank to Frame .....	2
21	1505171	TANK, Fuel .....	1	44	18D-12	NUT, Tank to Frame .....	2
22	1505607	STEP – L.H. .....	1				

\*NOTE: For serial 403A101 → 534

\*\*NOTE: For serial 403A535 & →

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



TRANSMISSION CONTROL LEVERS AND LINKAGE

TS-8806-P

34

(1/77)

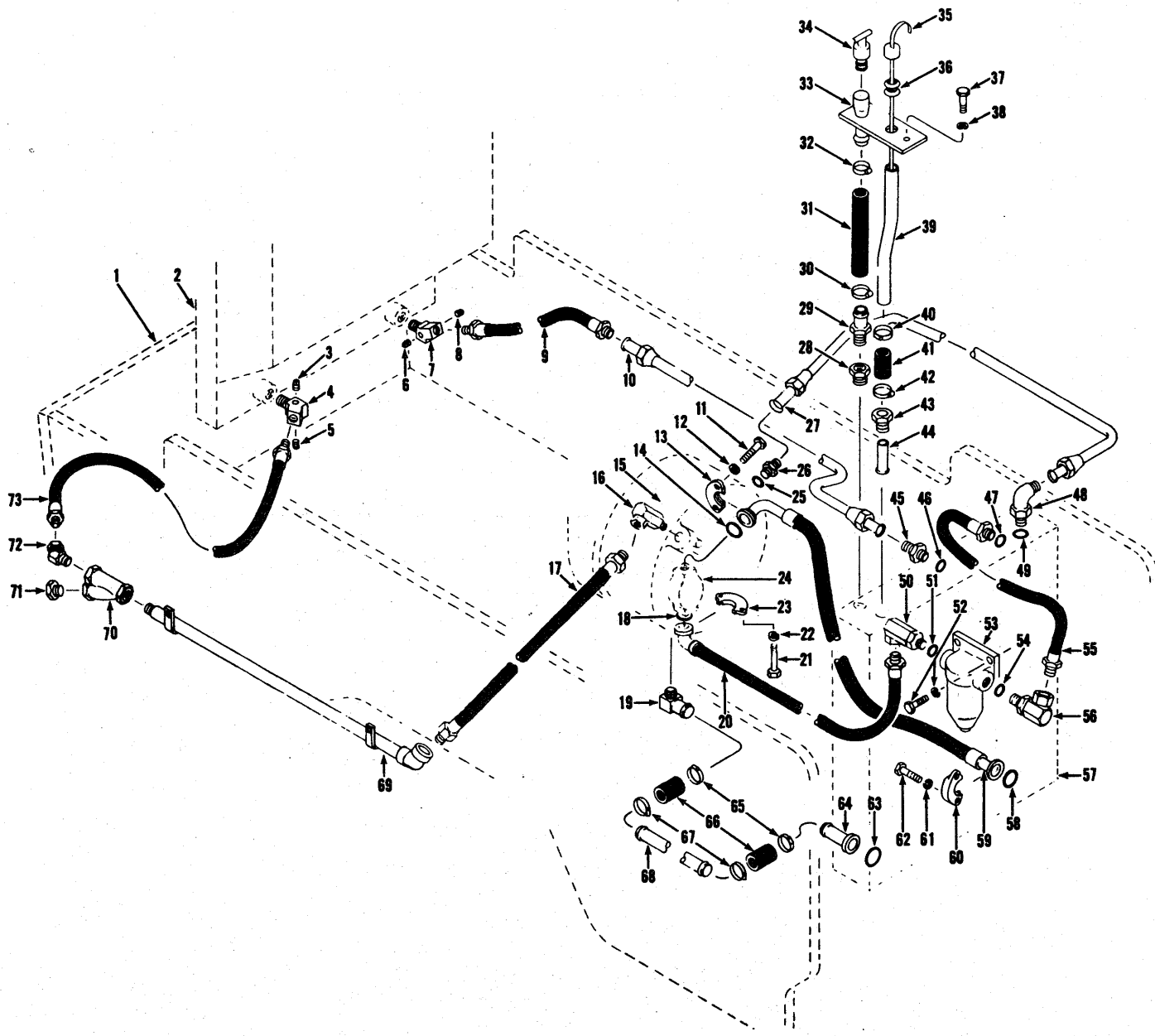
PM 2462

**TRANSMISSION CONTROL LEVERS AND LINKAGE**

Item No.	Part No.	Description	No. Req'd.
1	25E-28	WASHER, Bellcrank to Frame Brk. ....	1
2	1305485	BALL JOINT, Rod to Bellcrank ....	1
3	8D-08	NUT, Ball Joint Jam ....	1
4	568348	ROD, Trans. Control (Inc. 2, 3, 16, 35) ....	1
5	18D-08	NUT, Ball Joint to Bellcrank ....	1
6	-----	§BELLCRANK - Welded to Frame ....	1
7	18D-08	NUT, Ball Joint to Bellcrank ....	1
8	572914	BELLCRANK, Four Speed ....	1
9	1305485	BALL JOINT, Rod to Bellcrank ....	1
10	8D-08	NUT, Ball Joint Jam ....	1
11	568348	ROD, Trans. Control (Inc. 9, 10, 15, 17) ....	1
12	569764	ROD, Bellcrank to Transmission ....	1
13	4F-05062	PIN, Rod Clevis ....	1
14	1F-312	COTTER, Clevis Pin ....	1
15	8D-08	NUT, Ball Joint Jam ....	1
16	1305485	BALL JOINT, Rod to Lever ....	1
17	1305485	BALL JOINT, Rod to Lever ....	1
18	24C-536	BOLT, Lever Mounting Support ....	2
19	1508846	SUPPORT, Lever Mounting (Inc. 28) ....	1
20	568366	LEVER, Trans. Four Speed Shift ....	1
21	509772	KNOB, Shift Lever ....	1
22	509772	KNOB, Shift Lever ....	1
23	568363	LEVER, Trans. Fwd. & Reverse Shift ....	1
24	24C-620	BOLT, Shift Quadrant Mtg. ....	1
25	568477	QUADRANT, Shift ....	1
26	18D-05	NUT, Lever Mounting Support ....	2
27	18D-06	NUT, Shift Quadrant Mtg. ....	1
28	-----	§SUPPORT, Lever Mounting (See 19) ....	1
29	1508846	SUPPORT, Lever Mounting (Inc. 33) ....	1
30	18D-05	NUT, Lever Mounting Support ....	2
31	18D-08	NUT, Ball Joint to Lever ....	1
32	18D-08	NUT, Ball Joint to Lever ....	1
33	-----	§SUPPORT, Lever Mounting (See 29) ....	1
34	24C-536	BOLT, Lever Mounting Support ....	2
35	8D-08	NUT, Ball Joint Jam ....	1
36	1F-312	COTTER, Clevis Pin ....	1
37	4F-05062	PIN, Rod Clevis ....	1
38	1F-420	COTTER, Pin ....	1
39	1535583	PIN, Bellcrank to Frame Bellcrank ....	1
40	1F-420	COTTER, Pin ....	1
41	25E-28	WASHER, Bellcrank to Frame Brk. ....	1
42	570676	SLEEVE, Bellcrank ....	1
43	10H-25	FITTING, Bellcrank Grease ....	1
44	4F-05062	PIN, Rod Clevis ....	1
45	1F-312	COTTER, Clevis Pin ....	1
46	4F-05062	PIN, Rod Clevis ....	1
47	1F-312	COTTER, Clevis Pin ....	1
48	569764	ROD, Bellcrank to Transmission ....	1
49	1503998	SPACER, Bellcrank ....	1
50	573462	BELLCRANK, Fwd. & Reverse ....	1
51	10H-25	FITTING, Bellcrank Grease ....	1
52	570676	SLEEVE, Bellcrank ....	1

§Not Sold Separately

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



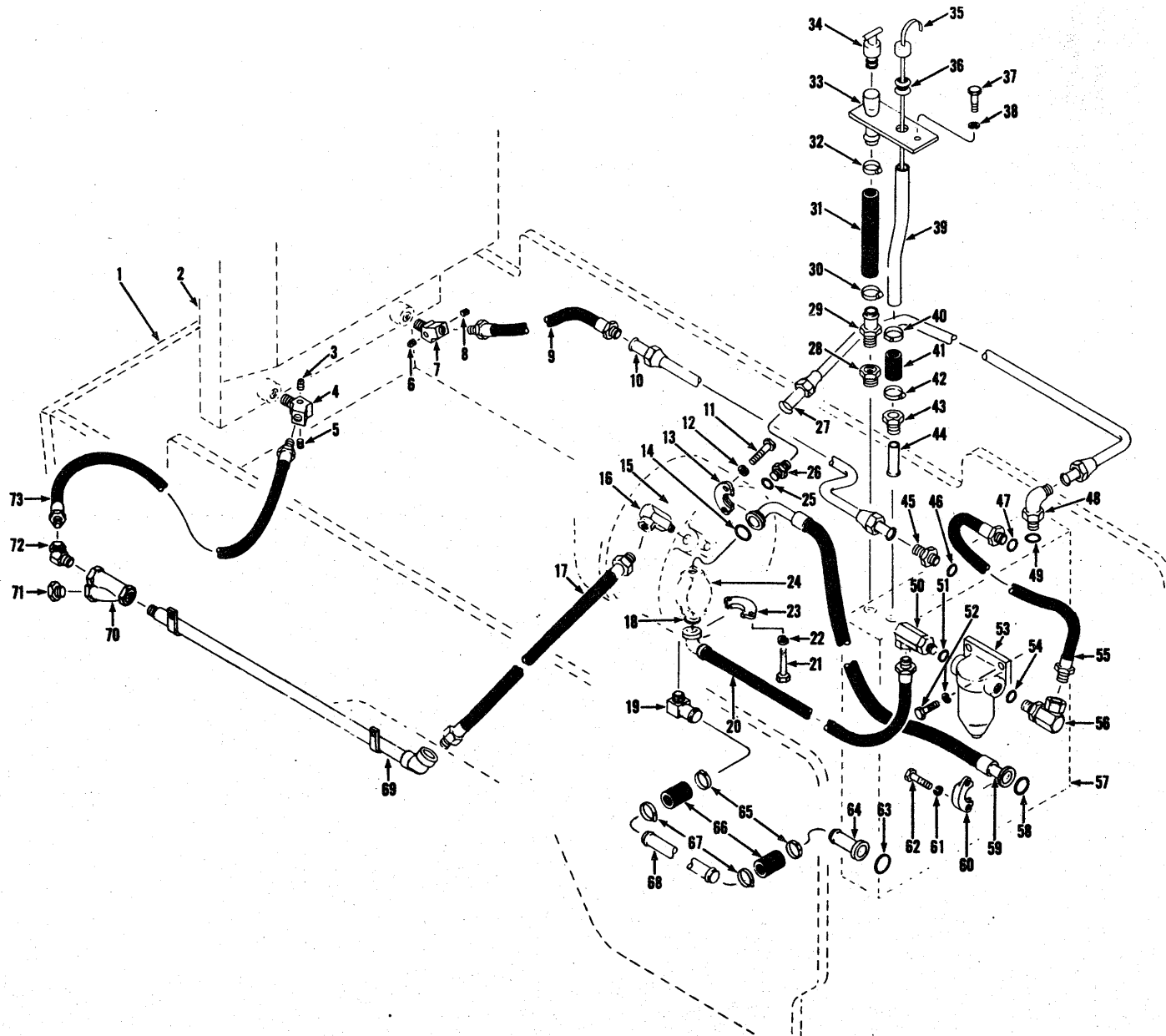
HYDRAULIC SYSTEM — TRANSMISSION AND TORQUE CONVERTER

TS-8880-P

**HYDRAULIC SYSTEM — TRANSMISSION AND TORQUE CONVERTER**

Item No.	Part No.	Description	No. Req'd.
1	-----	REAR FRAME — See Index	—
2	-----	RADIATOR ASSEMBLY — See Index	—
3	-----	OMIT, Not Used	—
4	1529948	ELBOW, Hose to Radiator	1
5	10F-02	PLUG, Elbow	1
6	10F-02	PLUG, Elbow	1
7	1529949	ELBOW, Hose to Radiator	1
7A	5K-611	†NIPPLE, Elbow to Radiator	1
7B	75F-5	†CONNECTOR, Nipple to Elbow	1
8	10F-02	PLUG, Elbow	1
9	570960	HOSE, Radiator to Cooler Tube	1
10	568344	TUBE, Radiator to Transmission	1
11	23C-724	BOLT, Flange Half	4
12	4E-07	LKWSHR, Flange Half	4
13	19J-20	FLANGE HALF, Hose to Pump	2
14	58K-222	O-RING, Flange Half	1
15	-----	TORQUE CONVERTER ASSEMBLY — See Index	—
16	1520566	ADAPTER UNION, Hose to Converter	1
17	546803	HOSE, Tube to Converter	1
18	58K-219	O-RING, Flange Half	1
19	1311282	ELBOW, Hose to Converter	1
20	1533253	HOSE, Pump to Filter	1
21	23C-620	BOLT, Flange Half	4
22	4E-06	LKWSHR, Flange Half	4
23	19J-16	FLANGE HALF, Hose to Pump	2
24	-----	PUMP, Converter Charging — See Index	—
25	91F-10	O-RING	1
26	15K-10	CONNECTOR, Tube (Inc. 25)	1
27	1533268	*TUBE, Transmission to Converter	1
27A	2501353	**TUBE, Transmission to Converter	1
28	356621	BUSHING, Reducing	1
29	667288	STEM, Filler Hose	1
30	1545186	CLAMP, Hose to Stem	1
31	568810	HOSE, Filler	1
32	1545186	CLAMP, Hose to Filler Plate	1
33	568807	FILLER PLATE ASSEMBLY	1
34	568824	PLUG, Filler	1
35	568823	DIPSTICK	1
36	560640	GROMMET, Dipstick	1
37	23C-616	BOLT, Filler Plate Mounting	2
38	4E-06	LKWSHR, Filler Plate Mounting	2
39	1502877	TUBE, Dipstick	1
40	521874	CLAMP, Hose to Tube	1
41	743563	HOSE, Tube to Tube (3½" lg.)	1

†Not Illustrated  
 \*Cummins 404A101 → 649, G.M. 403A101 → 649  
 \*\*Cummins 404A650 & →, G.M. 403A650 & →



HYDRAULIC SYSTEM — TRANSMISSION AND TORQUE CONVERTER

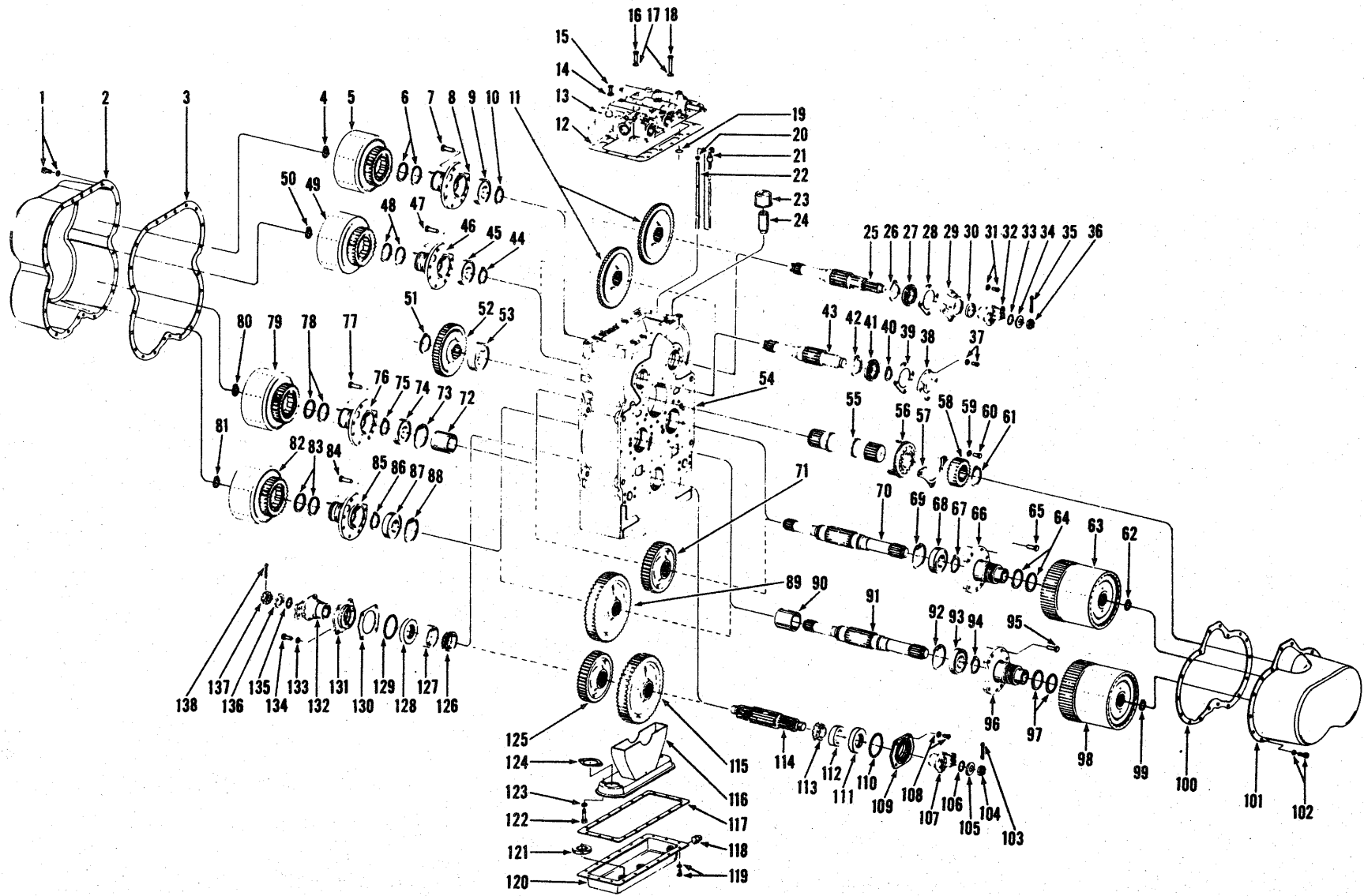
TS-8880-P



**HYDRAULIC SYSTEM—TRANSMISSION AND TORQUE CONVERTER (Continued)**

Item No.	Part No.	Description	No. Req'd.
42	521874	CLAMP, Hose to Tube .....	1
43	92F-7	NUT, Tube .....	1
44	1502876	TUBE, Dipstick .....	1
45	15K-10	CONNECTOR, Tube (Inc. 46) .....	1
46	91F-10	O-RING, Connector .....	1
47	91F-10	O-RING, Hose .....	1
48	17K-10	*ELBOW, Tube to Transmission (Inc. 49) .....	1
48A	15K-10	**ELBOW, Tube to Transmission (Inc. 49) .....	1
49	91F-10	O-RING, Elbow .....	1
50	526676	ADAPTER UNION, Hose to Filter (Inc. 51) .....	1
51	91F-8	O-RING, Adapter Union .....	1
52	24C-620	BOLT, Filter Mounting .....	4
52A	4E-06	LKWSHR, Filter Mounting .....	4
53	1533614	FILTER ASSY, Transmission & Torque Converter (Inc. 53A) .....	1
53A	215502	CARTRIDGE KIT, Filter .....	1
54	91F-8	O-RING, Adapter Union .....	1
55	568340	HOSE, Transmission to Filter (Inc. 47) .....	1
56	526676	ADAPTER UNION, Hose to Filter (Inc. 54) .....	1
57	—	TRANSMISSION ASSEMBLY — See Index .....	—
58	58K-225	O-RING, Flange Half .....	1
59	558793	HOSE, Pump to Transmission .....	1
60	19J-24	FLANGE HALF, Hose to Transmission .....	2
61	4E-08	LKWSHR, Flange Half .....	4
62	23C-824	BOLT, Flange Half .....	4
63	58K-225	O-RING, Stem to Transmission .....	1
64	799020	STEM, Hose to Transmission .....	1
64A	19J-24	†FLANGE HALF, Stem to Transmission .....	2
64B	23C-824	†BOLT, Flange Half .....	4
64C	4E-08	†LKWSHR, Flange Half .....	4
65	540130	CLAMP, Hose .....	2
66	536710	HOSE .....	2
67	540130	CLAMP, Hose .....	2
68	1533267	TUBE, Converter Drain .....	1
69	1533261	TUBE, Hose to Strainer .....	1
70	1532819	STRAINER, Oil (Inc. 70A) .....	1
70A	946943	†SCREEN, Strainer .....	1
71	40K-06	PLUG, Strainer .....	1
72	33F-5	ADAPTER, Hose to Strainer .....	1
73	559453	HOSE, Strainer to Radiator .....	1
74	551323	†SENDER UNIT, Torque Converter Temperature .....	1
75	14E-10	†LKWSHR, Sender Unit .....	1
76	14D-10	†NUT, Sender Unit .....	1

†Not Illustrated  
 \*Cummins 404A101 → 649, G.M. 403A101 → 649  
 \*Cummins 404A650 & →, G.M. 403A650 & →



TRANSMISSION ASSEMBLY

TS-4862-P

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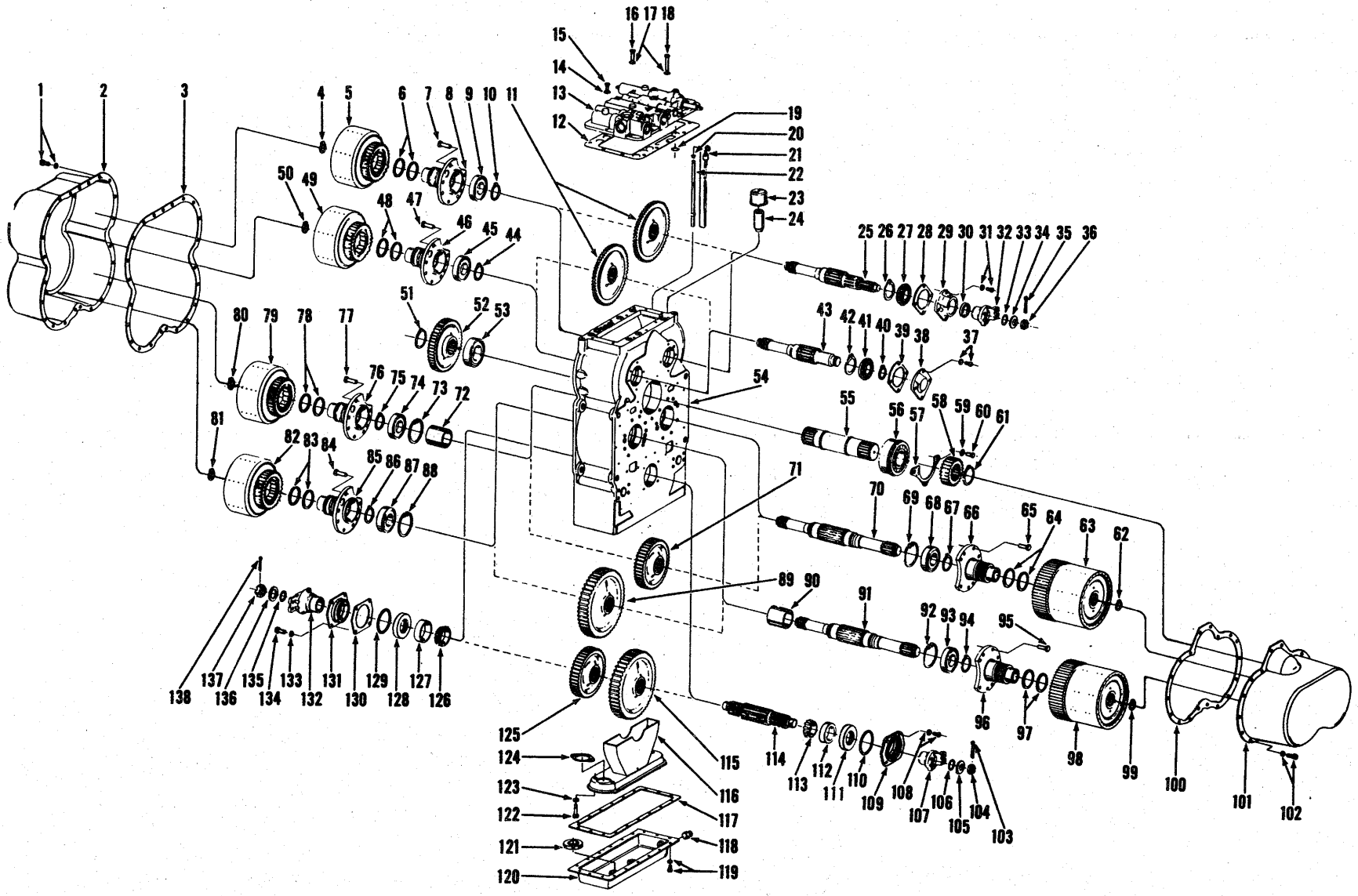
PM 2462

**TRANSMISSION ASSEMBLY**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	282286	TRANSMISSION ASSY (3421-2) (Inc. 1 thru 140)	1	33	25K-40112	O-RING, Flange .....	1
1	5C-612	BOLT & LKWSHR, Clutch Cover .....	23	34	102745	WASHER, Flange .....	1
2	217554	COVER, Fwd. & Rev., 3rd & 4th Clutch .....	1	35	1F-432	COTTER, Flange .....	1
3	237156	GASKET, Clutch Cover .....	1	36	201951	NUT, Flange to Shaft .....	1
4	711418	RING, Disc Hub Snap .....	1	37	5C-616	BOLT & LKWSHR, Bearing Cap	4
5	-----	CLUTCH ASSY, Input — See Index .....	—	38	217557	CAP, Bearing .....	1
6	217600	RING, Clutch Support Piston	2	39	217558	GASKET, Bearing Cap .....	1
7	8C-820	BOLT, Clutch Support to Case	8	40	224083	RING, Bearing Retaining .....	1
8	217146	SUPPORT, Input Clutch .....	1	41	225824	BEARING, Front .....	1
9	225792	BEARING, Rear .....	1	42	711161	RING, Gear Retaining .....	1
10	711161	RING, Gear Retaining .....	1	43	237009	SHAFT, Reverse .....	1
11	217458	GEAR, Input & Reverse Shafts (57T) .....	2	44	711161	RING, Gear Retaining .....	1
12	217653	GASKET, Valve to Case .....	1	45	225792	BEARING, Rear .....	1
13	-----	CONTROL COVER ASSY — See Index .....	—	46	217146	SUPPORT, Reverse .....	1
14	4E-06	LKWSHR, Valve to Case .....	6	47	8C-820	BOLT, Clutch Support to Case	8
15	1C-616	BOLT, Valve to Case .....	4	48	217600	RING, Clutch Support Piston	2
16	1C-624	BOLT, Valve to Case .....	2	49	-----	CLUTCH ASSY, Reverse — See Index .....	—
17	4E-06	LKWSHR, Valve to Case .....	6	50	711418	RING, Disc Hub Snap .....	1
18	1C-640	BOLT, Valve to Case .....	6	51	711161	RING, Gear Retaining .....	1
19	25K-40026	O-RING, Valve to Case .....	6	52	236406	GEAR, Idler (50T) .....	1
20	92F-7	FITTING, Dipstick Tube .....	1	53	225835	BEARING, Idler Shaft .....	1
21	-----	DIPSTICK — See Trans. & T. Converter Hyd. System .....	—	54	-----	TRANSMISSION CASE ASSY — See Index .....	—
22	230605	TUBE, Dipstick — Inner .....	1	55	217548	SHAFT, Idler .....	1
22A	1502876	†TUBE, Dipstick — Outer .....	1	56	801807	BEARING, Idler Shaft .....	1
23	-----	Not used this Application .....	—	57	217560	RETAINER, Bearing .....	1
24	-----	Not used this Application .....	—	58	217763	GEAR, Idler to 1st (28T) .....	1
25	237010	SHAFT, Input .....	1	59	4E-07	LKWSHR, Bearing Retainer....	3
26	711161	RING, Gear Retaining .....	1	60	1C-716	BOLT, Bearing Retainer .....	3
27	225824	BEARING, Front .....	1	61	711161	RING, Gear Retaining .....	1
28	217558	GASKET, Bearing Cap .....	1	62	659764	RING, Disc Hub Snap .....	1
29	217556	CAP, Bearing .....	1	63	-----	CLUTCH ASSY, 1st Clutch — See Index .....	—
30	206864	SEAL, Oil .....	1	64	223740	RING, Clutch Support Piston..	2
31	5C-616	BOLT & LKWSHR, Bearing Cap	4	65	8C-820	BOLT, Clutch Support to Case	8
32	214985	FLANGE, Input (6-C) .....	1	66	217156	SUPPORT, Clutch .....	1
				67	743669	RING, Bearing Retaining .....	1
				68	225794	BEARING, 1st & 3rd Shaft....	1

†Not Illustrated

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TRANSMISSION ASSEMBLY

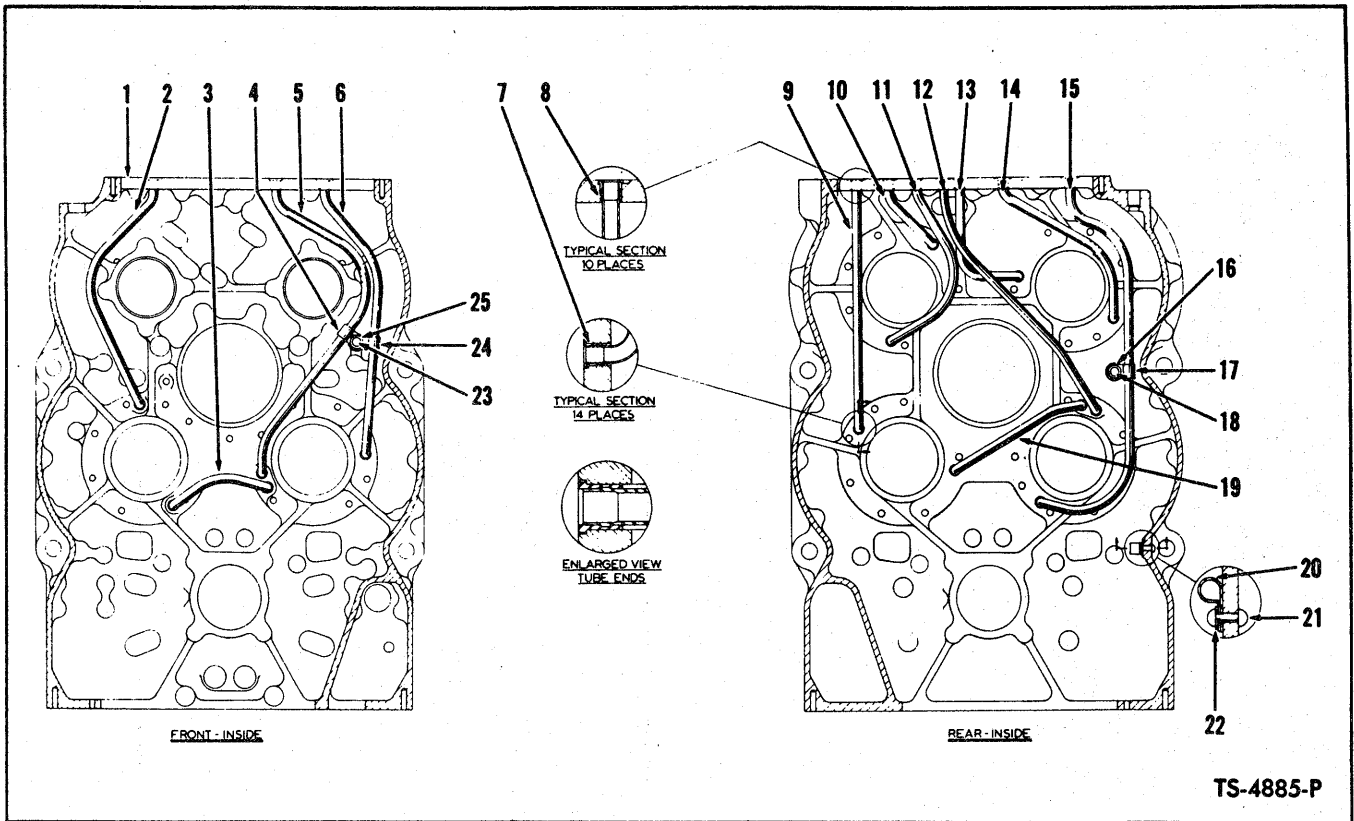
TS-4862-P

**TRANSMISSION ASSEMBLY (Continued)**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
69	223882	RING, Gear Retaining .....	1	107	222233	FLANGE, Output (7-C) .....	1
70	217553	SHAFT, 1st & 3rd .....	1	108	1C-720	BOLT, Output Shaft Cap .....	4
71	217765	GEAR, 1st & 3rd Shaft (47T) ..	1	108A	4E-07	LKWSHR, Output Shaft Cap ..	4
72	217559	SPACER, 1st & 3rd Shaft Gear	1	109	230690	CAP, Output Shaft Bearing ..	1
73	223882	RING, Gear Retaining .....	1	110	25K-40308	O-RING, Bearing Cap .....	1
74	225792	BEARING, 1st & 3rd Shaft ....	1	111	225823	SEAL, Output Shaft Oil .....	1
75	743669	RING, Bearing Retaining .....	1	112	856250	CUP, Output Shaft Tapered Bearing .....	1
76	217146	SUPPORT, Clutch .....	1	113	654141	CONE, Output Shaft Tapered Bearing .....	1
77	8C-820	BOLT, Clutch Support to Case	8	114	218504	SHAFT, Output .....	1
78	217600	RING, Clutch Support Piston ..	2	115	217767	GEAR, Output Shaft to 1st & 3rd (61T) .....	1
79	-----	CLUTCH ASSY, 3rd Clutch — See Index .....	—	116	218357	FRAME & SCREEN ASSY, Oil Sump .....	1
80	711418	RING, Disc Hub Snap .....	1	117	237154	GASKET, Oil Sump .....	1
81	711418	RING, Disc Hub Snap .....	1	118	13F-12	PLUG, Oil Sump Drain .....	1
82	-----	CLUTCH ASSY, 4th Clutch — See Index .....	—	119	5C-612	BOLT & LKWSHR, Oil Sump ..	18
83	217600	RING, Clutch Support Piston ..	2	120	217562	SUMP ASSY, Oil .....	1
84	8C-820	BOLT, Clutch Support to Case	8	121	525293	MAGNET, Sump .....	2
85	217146	SUPPORT, Clutch .....	1	122	1C-636	BOLT, Screen to Case .....	3
86	743669	RING, Bearing Retaining .....	1	123	4E-06	LKWSHR, Screen to Case .....	3
87	225794	BEARING, 2nd & 4th Shafts ..	1	124	218376	GASKET, Oil Sump Frame ....	1
88	223882	RING, Gear Retaining .....	1	125	217464	GEAR, Output Shaft to 2nd & 4th (45T) .....	1
89	217465	GEAR, 2nd & 4th Shaft (63T)	1	126	654141	CONE, Output Shaft Tapered Bearing .....	1
90	217559	SPACER, 2nd & 4th Shaft Gear .....	1	127	856250	CUP, Output Shaft Tapered Bearing .....	1
91	217553	SHAFT, 2nd & 4th .....	1	128	225823	SEAL, Output Shaft Oil .....	1
92	223882	RING, Gear Retaining .....	1	129	25K-40308	O-RING, Bearing Cap .....	1
93	225792	BEARING, 2nd & 4th Shaft ..	1	130	217566	‡SHIM, Bearing Cap — .004" ..	—
94	743669	RING, Bearing Retaining .....	1	130A	217567	‡‡SHIM, Bearing Cap — .007" ..	—
95	8C-820	BOLT, Clutch Support to Case	8	130B	217568	‡‡SHIM, Bearing Cap — .010" ..	—
96	217156	SUPPORT, Clutch .....	1	131	230690	CAP, Bearing .....	1
97	223740	RING, Clutch Support Piston	2	132	222233	FLANGE, Output (7-C) .....	1
98	-----	CLUTCH ASSY, 2nd Clutch — See Index .....	—	133	4E-07	LKWSHR, Output Shaft Cap ..	4
99	659764	RING, Disc Hub Snap .....	1	134	1C-720	BOLT, Output Shaft Cap .....	4
100	237155	GASKET, Clutch Cover .....	1	135	25K-60116	O-RING, Output Shaft Flange	1
101	232872	COVER, 1st & 2nd Clutch ....	1	136	222179	WASHER, Output Shaft Flange .....	1
102	5C-612	BOLT & LKWSHR, Clutch Cover .....	18	137	205928	NUT, Output Shaft Flange ....	1
103	1F-436	COTTER, Output Shaft Flange	1	138	1F-436	COTTER, Output Shaft Flange	1
104	205928	NUT, Output Shaft Flange ....	1	139	211433	†BREATHER, Air .....	1
105	222179	WASHER, Output Shaft Flange .....	1	140	26F-3	†ELBOW, Air Breather .....	1
106	25K-60116	O-RING, Output Shaft Flange	1				

†Not Illustrated  
‡As Required

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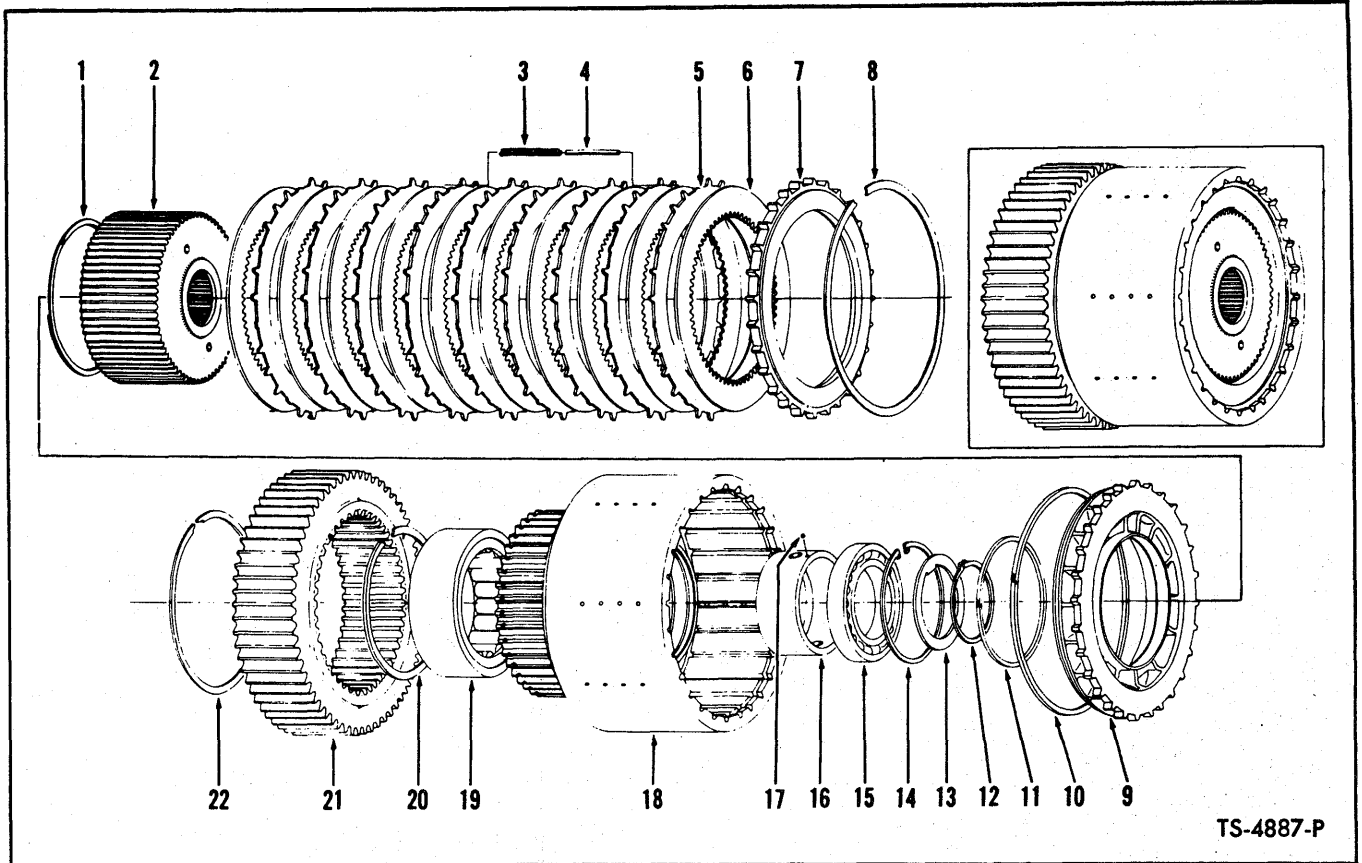


TS-4885-P

**TRANSMISSION CASE AND INTERNAL TUBING**

Item No.	Part No.	Description	No. Req'd.
1	217576	CASE ASSY, Transmission (Inc. 2 thru 25)	1
2	217669	TUBE, 1st Clutch Pressure	1
3	217578	TUBE, 2nd to 1st Crossover Lube	1
4	6H-29	CLIP, Tube	1
5	217577	TUBE, 2nd Clutch Lube	1
6	217674	TUBE, 2nd Clutch Pressure	1
7	222067	SLEEVE, Tube	8
8	222067	SLEEVE, Tube	16
9	217579	TUBE, 4th Clutch Pressure	1
10	217580	TUBE, Reverse Clutch Pressure	1
11	217581	TUBE, Reverse Clutch Lube	1
12	217582	TUBE, 3rd Clutch Lube	1
13	217583	TUBE, Input Lube	1
14	217584	TUBE, Input Clutch Pressure	1
15	217585	TUBE, 3rd Clutch Pressure	1
16	1H-534	RIVET, Clip	1
17	6H-29	CLIP, Tube	1
18	25E-15	WASHER, Clip	1
19	217586	TUBE, 3rd to 4th Crossover Lube	1
20	6H-32	CLIP, Dipstick Tube	1
21	1H-416	RIVET, Dipstick Clip	1
22	25E-13	WASHER, Dipstick Clip	1
23	1H-430	RIVET, Clip	1
24	222167	CLIP, Tube	1
25	25E-13	WASHER, Clip	1

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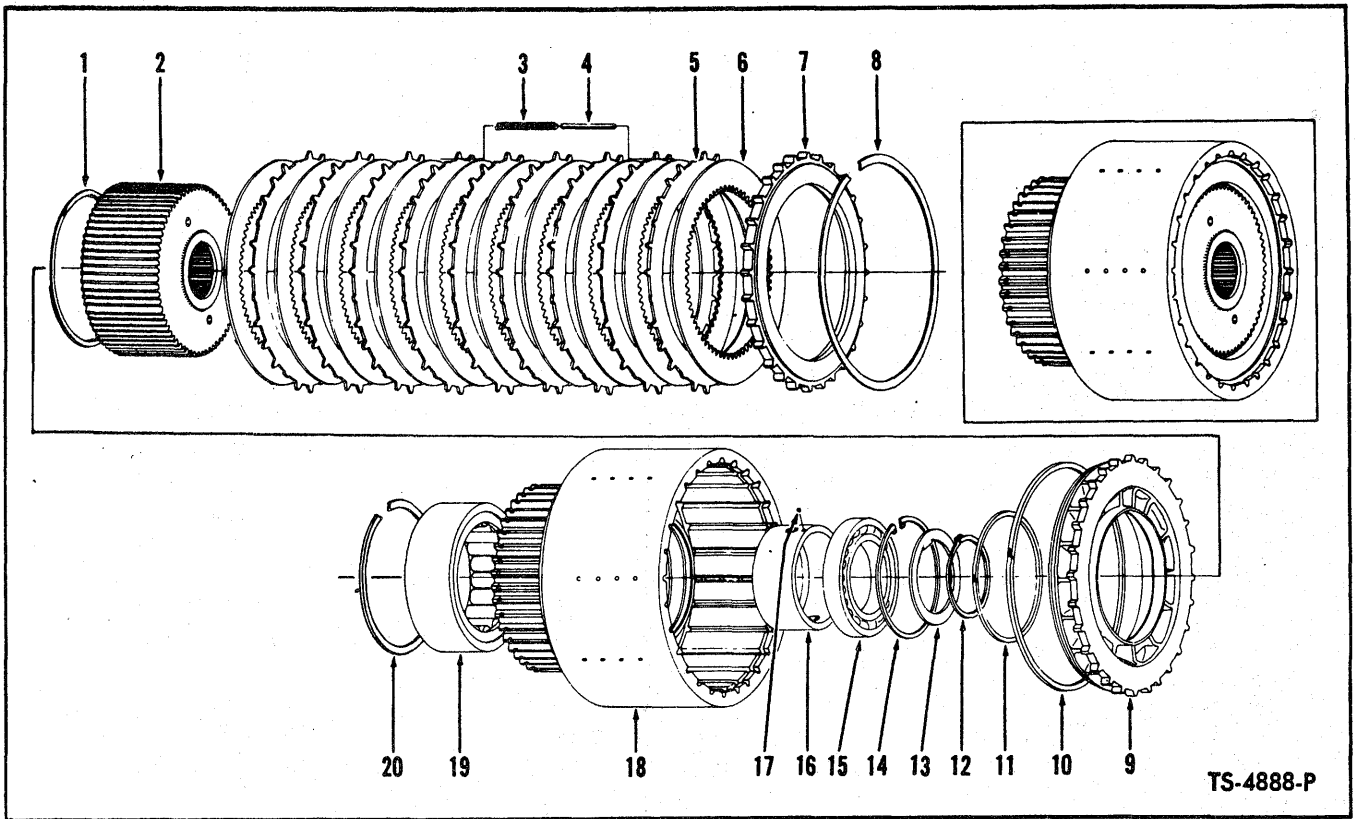
TS-4887-P

**FIRST AND SECOND CLUTCH GROUP**

**2 Clutches used in Transmission — Quantities listed below are for 1 Clutch**

Item No.	Part No.	Description	No. Req'd.
A	218359	CLUTCH ASSY (Inc. 1 thru 22)	1
1	217509	RING, Oil Baffle Retaining	1
2	217158	HUB ASSY, Clutch Disc	1
3	217334	SPRING, Clutch Disc Release	6
4	217599	PIN, Clutch Disc Release Spring	6
5	232394	DISC, Clutch Outer	9
6	232316	DISC, Clutch Inner	10
7	217161	PLATE, Clutch Disc End	1
8	217099	RING, End Plate Retaining	1
9	217164	PISTON, Clutch	1
10	217361	RING, Outer Piston	1
11	217411	RING, Inner Piston	1
12	731627	RING, Washer Retaining	1
13	217165	WASHER, Bearing	1
14	664116	RING, Bearing Retaining	1
15	225813	BEARING, Clutch Support	1
16	217155	RACE, Outer Piston Ring	1
17	10J-08	BALL, Outer Race	1
18	217152	DRUM ASSY, Clutch (Inc. 16, 17)	1
19	225796	BEARING, Clutch Support Roller	1
20	223997	RING, Bearing Retaining	1
21	217768	GEAR, Clutch Drum Hub (53T)	1
22	217605	RING, Gear Retaining	1

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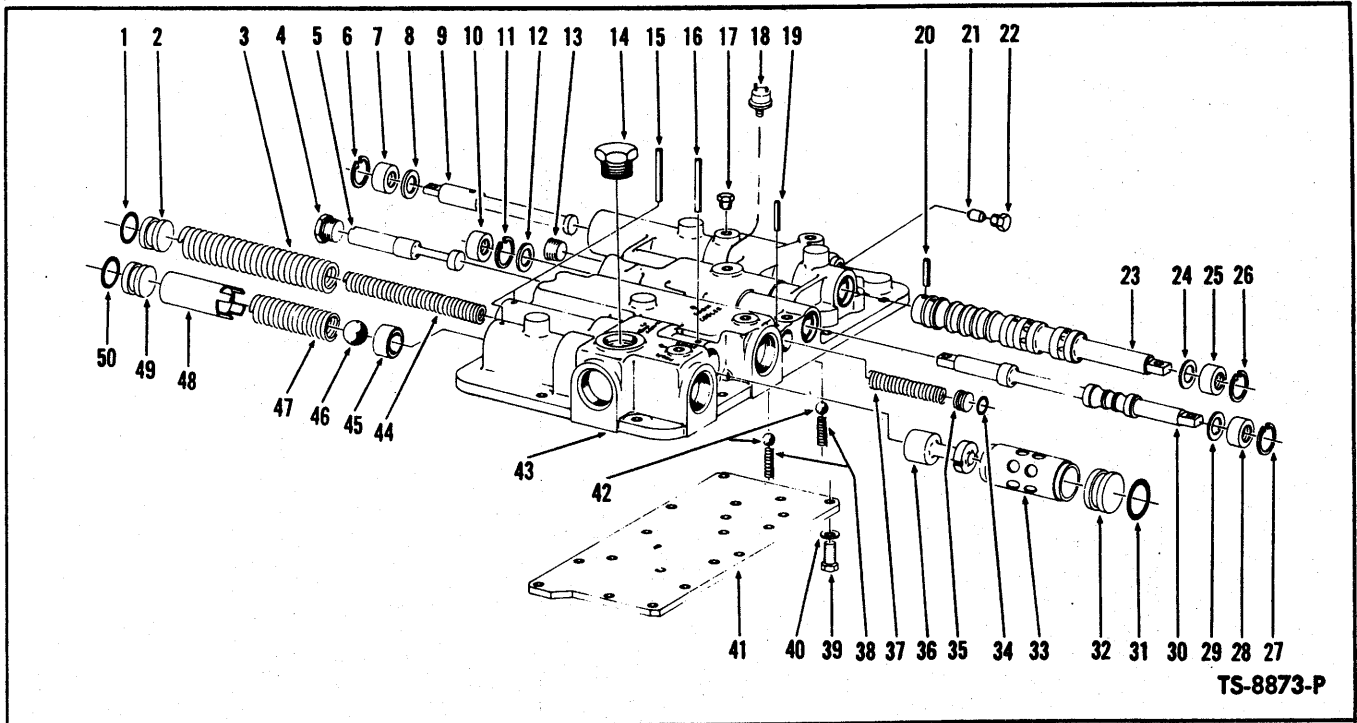
TS-4888-P

**INPUT – REVERSE, THIRD AND FOURTH CLUTCH GROUP**  
**4 Clutches used in Transmission – Quantities listed below are for 1 Clutch**

Item No.	Part No.	Description	No. Req'd.
A	217520	CLUTCH ASSY (Inc. 1 thru 20)	1
1	217509	RING, Oil Baffle Retaining	1
2	217148	HUB ASSY, Clutch Disc	1
3	217347	SPRING, Clutch Disc Release	6
4	217601	PIN, Clutch Disc Release Spring	6
5	232394	DISC, Clutch Outer	5
6	227495	DISC, Clutch Inner	6
7	217161	PLATE, Clutch End	1
8	217099	RING, End Plate Retaining	1
9	217164	PISTON, Clutch	1
10	217361	RING, Outer Piston	1
11	217411	RING, Inner Piston	1
12	743669	RING, Washer Retaining	1
13	217151	WASHER, Bearing	1
14	223901	RING, Bearing Retaining	1
15	225812	BEARING, Clutch Support	1
16	218214	RACE, Outer Piston Ring	1
17	10J-08	BALL, Outer Race	1
18	217142	DRUM ASSY, Clutch (Inc. 16, 17)	1
19	225795	BEARING, Clutch Support Roller	1
20	223855	RING, Bearing Retaining	1

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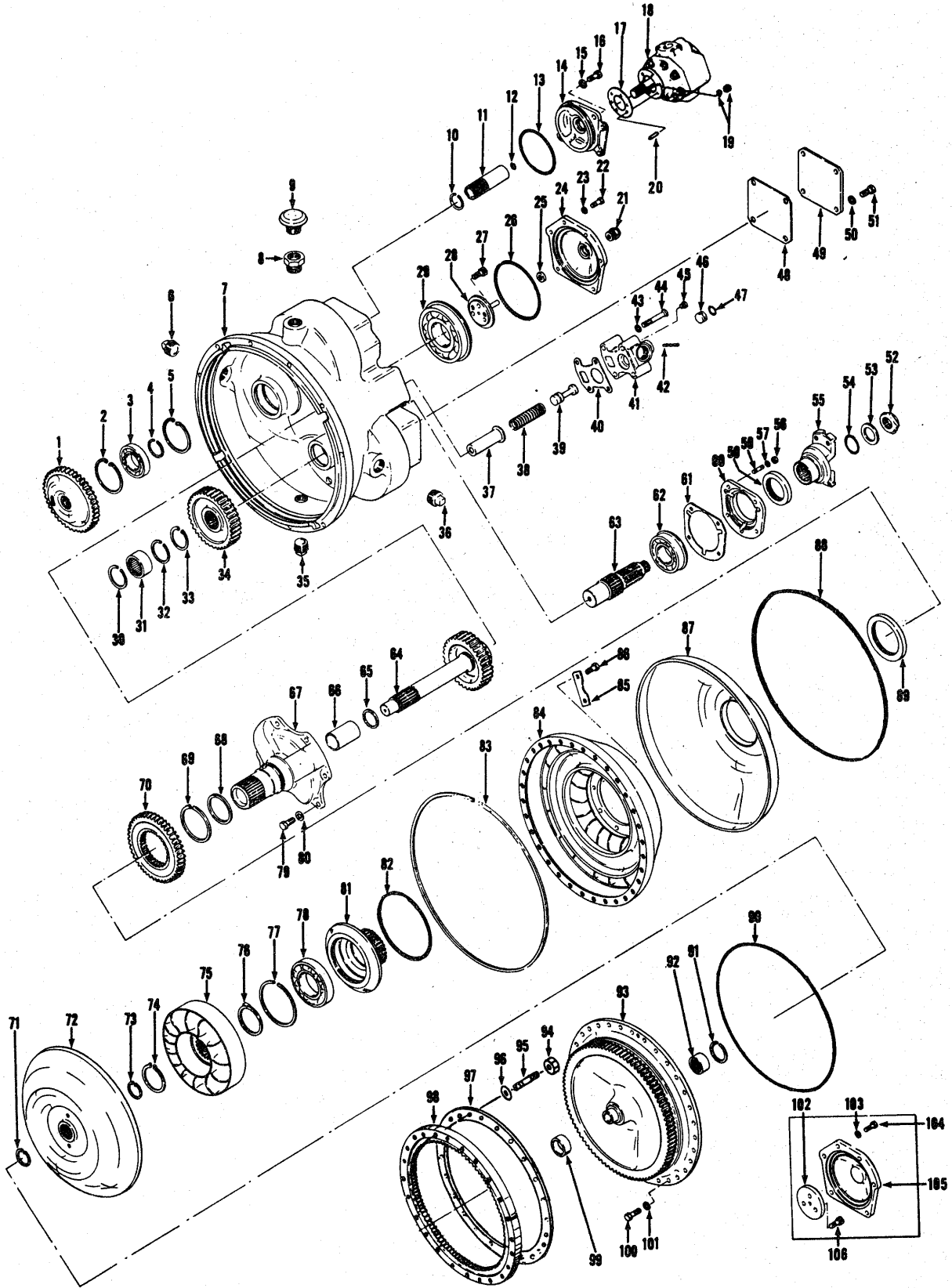
TS-8873-P

**CONTROL COVER ASSEMBLY — TRANSMISSION**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	231110	COVER ASSY, Control (Inc. 1 thru 50)	1	24	217657	WASHER, Selector Valve	1
1	58K-210	O-RING, Reg. Valve Stop	1	25	234651	SEAL, Selector Valve Oil	1
2	222041	STOP, Reg. Valve	1	26	664140	RING, Selector Valve Ret.	1
3	217649	SPRING, Reg. Valve — Outer	1	27	664140	RING, Selector Valve Ret.	1
4	24K-7	PLUG, Shut-Off Valve	1	28	234651	SEAL, Selector Valve Oil	1
5	217644	SPOOL, Shut-Off Valve	1	29	217657	WASHER, Selector Valve	1
6	664140	RING, Selector Valve Ret.	1	30	217637	VALVE, Fwd. & Rev. Selector	1
7	234651	SEAL, Selector Valve Oil	1	31	58K-210	O-RING, Reg. Valve Stop	1
8	217657	WASHER, Selector Valve	1	32	222041	STOP, Reg. Valve	1
9	217635	VALVE, Inner Selector	1	33	-----	OMIT	—
10	234651	SEAL, Selector Valve Oil	1	34	25K-30018	O-RING, Valve Spool	1
11	664140	RING, Selector Valve Ret.	1	35	220983	STOP, Valve Spool	1
12	217657	WASHER, Selector Valve	1	36	232731	REG. VALVE SPOOL	1
13	16F-08	PLUG, Valve Hole	1	37	217645	SPRING, Valve Spool	1
14	24K-10	PLUG, Pipe	1	38	232611	SPRING, Poppet	2
15	300058	PIN, Reg. & Safety Valve Stop Roll	2	39	1C-512	BOLT, Plate to Cover	17
16	300058	PIN, Reg. & Safety Valve Stop Roll	1	40	4E-05	LKWSHR, Plate Mtg.	17
17	40K-02	PLUG, Oil Passage	4	41	217632	PLATE, Control Cover	1
18	236395	SWITCH, Neutral Start	1	42	10J-12	BALL, Poppet	2
18A	10J-12	†BALL, Neutral Start	1	43	229982	COVER, Control	1
19	654724	PIN, Valve Spool Stop Roll	1	44	217648	SPRING, Reg. Valve — Inner	1
20	667209	PIN, Selector Valve Roll	1	45	217650	SEAT, Safety Valve	1
21	-----	OMIT	1	46	10J-24	BALL, Safety Valve	1
22	-----	OMIT	1	47	217651	SPRING, Safety Valve	1
23	217633	VALVE, Selector (Inc. 9,20)	1	48	217652	SPACER, Valve Seat Ret.	1
23A	226869	†SPACER, Selector Valve	1	49	222041	STOP, Safety Valve	1
				50	58K-210	O-RING, Valve Stop	1

†Not Illustrated

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



TORQUE CONVERTER ASSEMBLY

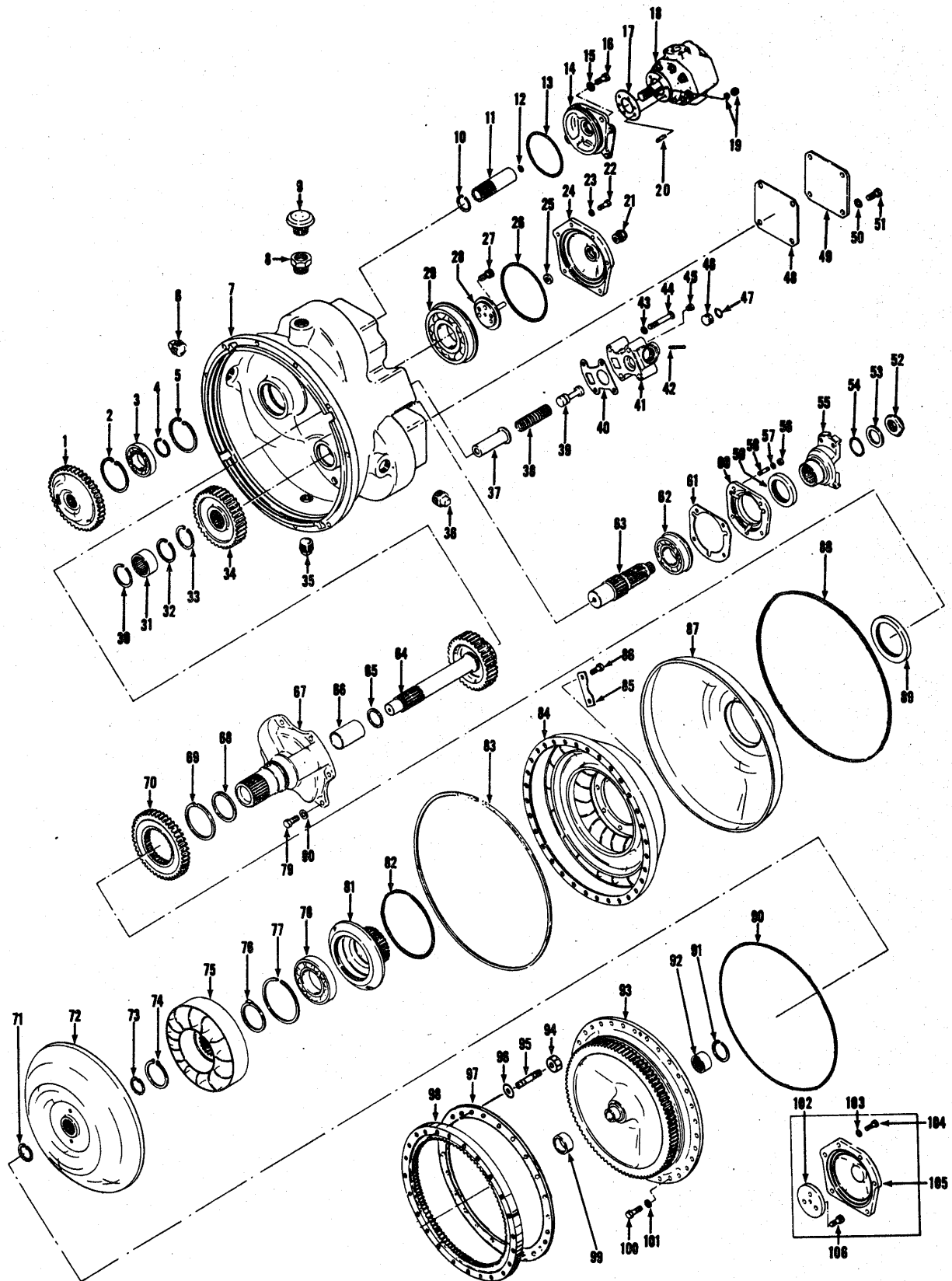
TS-8824-P

**TORQUE CONVERTER ASSEMBLY**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	283176	CONVERTER ASSY (C-5402-4) (Inc. 1 thru 7, 10 thru 93, 97 thru 106A) .....	1	27	-----	OMIT - Use Item 106 .....	-
B	229819	VALVE ASSY, Press. Regulating (Inc. 39, 41, 42, 45, 46, 47) .....	1	28	-----	OMIT - Use Item 102 .....	-
1	229784	GEAR, Pump Drive (41T) .....	3	29	225781	BEARING, Turbine Shaft .....	1
2	711022	RING, Bearing Locating .....	3	30	711406	RING, Bearing Retainer .....	1
3	225825	BEARING, Drive Gear .....	3	31	229815	BEARING, Output Shaft Front .....	1
4	224116	RING, Bearing Retaining .....	3	32	711406	RING, Bearing Retainer .....	1
5	711022	RING, Bearing Locating .....	3	33	660564	RING, Gear Retaining .....	1
6	13F-16	PLUG, Converter Hsg. ....	1	34	229778	GEAR, Output Shaft (36T) .....	1
7	229792	HOUSING, Converter .....	1	35	13F-16	PLUG, Converter Hsg. ....	1
8	227265	VALVE, Check .....	1	36	13F-16	PLUG, Converter Hsg. ....	1
9	211433	BREATHER, Air .....	1	37	229801	RETAINER, Valve Spring .....	1
10	659041	RING, Sleeve Ret. ....	1	38	229820	SPRING, Reg. Valve .....	1
11	230234	SLEEVE, Pump Drive (Inc. 10, 12) .....	1	39	228500	PISTON, Reg. Valve .....	1
12	224104	RING, Sleeve Ret. ....	1	40	229788	GASKET, Valve to Hsg. ....	1
13	25K-40416	O-RING, Adapter Mtg. ....	1	41	229787	BODY, Press. Reg. Valve .....	1
14	227034	ADAPTER, Pump .....	1	42	633157	PIN, Valve Stop Roll .....	1
15	4E-08	LKWSHR, Adapter Mtg. ....	4	43	4E-07	LKWSHR, Valve to Hsg. ....	4
16	1C-820	BOLT, Adapter Mtg. ....	4	44	1C-748	BOLT, Valve to Hsg. ....	4
17	235961	GASKET, Pump Mtg. ....	1	45	40K-04	PLUG, Internal Press. Tap .....	1
18	450245	*PUMP, Conv. Charging .....	1	46	222041	STOP, Reg. Valve .....	1
19	8D-06	NUT, Pump Mtg. ....	3	47	60K4EX 24 58K-204	O-RING, Valve Stop .....	1
19A	4E-06	LKWSHR, Pump Mtg. ....	3	48	552161	GASKET, Cover .....	2
20	203253	STUD, Pump Mtg. ....	3	49	216355	COVER, Oil Pump Hole .....	2
21	-----	OMIT - Not Required .....	-	50	4E-08	LKWSHR, Cover Mtg. ....	8
22	-----	OMIT - Use Item 104 .....	-	51	1C-814	BOLT, Cover Mtg. ....	8
23	-----	OMIT - Use Item 103 .....	-	52	222960	NUT, Output Shaft .....	1
24	-----	OMIT - Use Item 105 .....	-	53	222179	WASHER, Output Shaft .....	1
25	-----	OMIT - Not Required .....	-	54	25K-60116	O-RING, Output Flange .....	1
26	25K-40608	O-RING, Turbine Shaft Brg. Cap .....	1	55	222029	FLANGE, Output Shaft .....	1
				56	8D-06	NUT, Brg. Retainer .....	4
				57	4E-06	LKWSHR, Brg. Retainer .....	4
				58	207647	STUD, Brg. Retainer .....	4

\*NOTE: When Converter Charging Pump replacement is required, only a new factory built and tested pump should be used. Proper operation of converter and transmission is dependent on an efficient charging pump. Damage possible by use of a field rebuilt pump can result in repair cost exceeding cost of a new pump alone.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



TORQUE CONVERTER ASSEMBLY

TS-8824-P

**TORQUE CONVERTER ASSEMBLY (Continued)**

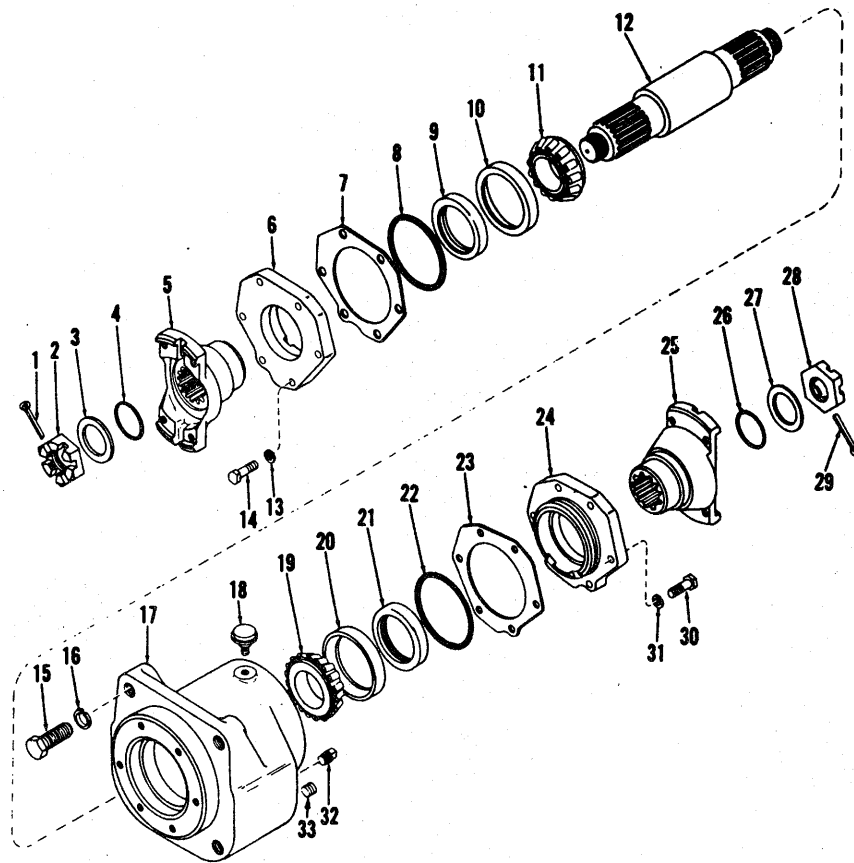
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
59	209587	SEAL, Brg. Retainer Oil .....	1	87	229813	BAFFLE, Oil .....	1
60	229794	RETAINER, Output Brg. (Inc. 59) .....	1	88	229804	RING, Oil Baffle Seal .....	1
61	229793	GASKET, Brg. Retainer .....	1	89	214941	SEAL, Oil Baffle Oil .....	1
62	225842	BEARING, Output Shaft Rear	1	90	218778	O-RING, Impeller to Impeller Cover .....	1
63	229776	SHAFT, Output .....	1	91	223887	RING, Cover Bearing Ret. ....	1
64	229836	SHAFT & GEAR ASSY, Turbine (36T) .....	1	92	229814	BEARING, Impeller Cover ....	1
65	223570	RING, Shaft Piston .....	1	93	232691	COVER, Impeller .....	1
66	229806	SLEEVE, Stator Support .....	1	94	229769	NUT, Ring Gear Mtg. ....	24
67	229810	SUPPORT, Stator (Inc. 66)	1	95	235050	STUD, Ring Gear Mtg. ....	24
68	209673	RING, Support Piston .....	1	96	228987	WASHER, Belleville (Cupped)	72
69	224009	RING, Gear Ret. ....	1	97	230594	RING, Ring Gear Mtg. ....	1
70	229807	GEAR, Impeller Hub (43T)	1	98	226595	GEAR, Flywheel Ring .....	1
71	233307	RING, Turbine Hub Ret. ....	1	99	222006	SLEEVE, Impeller Cover .....	1
72	229516	*TURBINE .....	1	100	1C-720	BOLT, Impeller to Impeller Cover .....	32
73	233307	RING, Turbine Hub Ret. ....	1	101	4E-07	LKWSHR, Impeller to Impeller Cover .....	32
74	507688	RING, Reaction Member Hub Ret. ....	1	102	229803	RETAINER, Turbine Shaft Bearing .....	1
75	229518	REACTION MEMBER .....	1	103	4E-06	LKWSHR, Bearing Cap .....	6
76	229802	SPACER, Reaction Member .....	1	104	1C-618	BOLT, Bearing Cap .....	6
77	223988	RING, Impeller Hub Bearing Ret. ....	1	105	229798	CAP, Turbine Shaft Bearing ..	1
78	230767	BEARING, Impeller Hub .....	1	106	4C-820	BOLT, Bearing Retainer .....	3
79	1C-820	BOLT, Stator Support .....	6	106A	-----	†‡LOCKWIRE (18 ga.) .....	—
80	4E-08	LKWSHR, Stator Support .....	6	107	17C-728	†BOLT, Converter Hsg. to Flywheel Hsg. ....	12
81	222269	HUB, Impeller .....	1	108	4E-07	†LKWSHR, Converter Hsg. to Flywheel Hsg. ....	12
82	60K-40700	O-RING, Impeller Hub .....	1	109	541221	†BUSHING, Flywheel Pilot — G.M. ....	1
83	229805	RING, Oil Baffle Retainer ....	1	110	945815	†BUSHING, Flywheel Pilot — Cummins .....	1
84	229517	IMPELLER .....	1				
85	222019	PLATE, Impeller to Hub Lock	4				
86	222221	BOLT, Impeller to Hub .....	8				

†Not Illustrated

‡As Required

\*NOTE: For replacement use 801933 Kit which consists of 1 — 236547 Washer & 1 — 236551 Turbine.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



TS-7923-P

**MID-MOUNT BEARING ASSEMBLY**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	230553	BEARING ASSY, Mid Mount (Inc. 1 thru 14, 17 thru 33)	1	17	230529	HOUSING, Bearing	1
1	1F-436	COTTER, Flange Nut	1	18	211433	BREATHER, Brg.	1
2	205928	NUT, Flange	1	19	654141	CONE, Brg.	1
3	222179	WASHER, Flange	1	20	856250	CUP, Brg.	1
4	25K-60116	O-RING, Flange	1	21	225823	SEAL, Brg. Cap	1
5	222233	FLANGE	1	22	25K-40308	O-RING, Brg. Cap	1
6	230690	CAP, Bearing	1	23	217566	‡SHIM, Brg. Cap (.004)	—
7	217566	‡SHIM, Brg. Cap (.004)	—	23A	217567	‡SHIM, Brg. Cap (.007)	—
7A	217567	‡SHIM, Brg. Cap (.007)	—	23B	217568	‡SHIM, Brg. Cap (.010)	—
7B	217568	‡SHIM, Brg. Cap (.010)	—	24	230690	CAP, Brg.	1
8	25K-40308	O-RING, Brg. Cap	1	25	222233	FLANGE	1
9	225823	SEAL, Brg. Cap	1	26	25K-60116	O-RING, Flange	1
10	856250	CUP, Brg.	1	27	222179	WASHER, Flange	1
11	654141	CONE, Brg.	1	28	205928	NUT, Flange	1
12	233007	SHAFT, Brg.	1	29	1F-436	COTTER, Flange Nut	1
13	4E-07	LKWSHR, Brg. Cap	4	30	1C-722	BOLT, Brg. Cap	4
14	1C-722	BOLT, Brg. Cap	4	31	4E-07	LKWSHR, Brg. Cap	4
15	17C-1040	BOLT, Brg. to Frame	4	32	13F-12	PLUG	1
16	4E-10	LKWSHR, Brg. to Frame	4	33	215757	PLUG, Drain	1

‡As Required

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**

**TORQUE CONVERTER ASSEMBLY (Continued)**

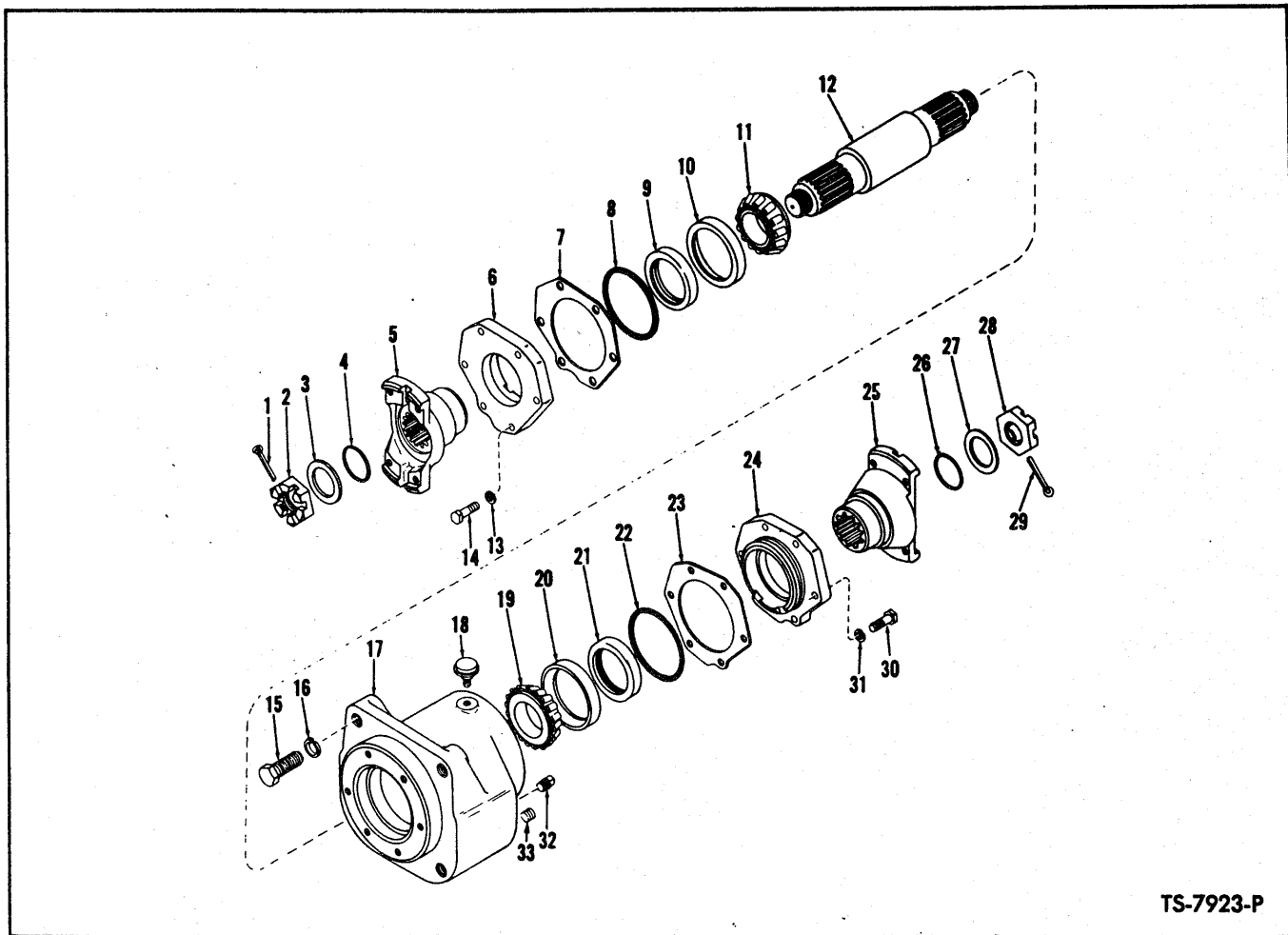
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
59	209587	SEAL, Brg. Retainer Oil .....	1	87	229813	BAFFLE, Oil .....	1
60	229794	RETAINER, Output Brg. (Inc. 59) .....	1	88	229804	RING, Oil Baffle Seal .....	1
61	229793	GASKET, Brg. Retainer .....	1	89	214941	SEAL, Oil Baffle Oil .....	1
62	225842	BEARING, Output Shaft Rear .....	1	90	218778	O-RING, Impeller to Impeller Cover .....	1
63	229776	SHAFT, Output .....	1	91	223887	RING, Cover Bearing Ret. ....	1
64	229836	SHAFT & GEAR ASSY, Turbine (36T) .....	1	92	229814	BEARING, Impeller Cover ....	1
65	223570	RING, Shaft Piston .....	1	93	232691	COVER, Impeller .....	1
66	229806	SLEEVE, Stator Support .....	1	94	229769	NUT, Ring Gear Mtg. ....	24
67	229810	SUPPORT, Stator (Inc. 66) .....	1	95	235050	STUD, Ring Gear Mtg. ....	24
68	209673	RING, Support Piston .....	1	96	228987	WASHER, Belleville (Cupped) ..	72
69	224009	RING, Gear Ret. ....	1	97	230594	RING, Ring Gear Mtg. ....	1
70	229807	GEAR, Impeller Hub (43T) .....	1	98	226595	GEAR, Flywheel Ring .....	1
71	233307	RING, Turbine Hub Ret. ....	1	99	222006	SLEEVE, Impeller Cover .....	1
72	229516	*TURBINE .....	1	100	1C-720	BOLT, Impeller to Impeller Cover .....	32
73	233307	RING, Turbine Hub Ret. ....	1	101	4E-07	LKWSHR, Impeller to Impeller Cover .....	32
74	507688	RING, Reaction Member Hub Ret. ....	1	102	229803	RETAINER, Turbine Shaft Bearing .....	1
75	229518	REACTION MEMBER .....	1	103	4E-06	LKWSHR, Bearing Cap .....	6
76	229802	SPACER, Reaction Member .....	1	104	1C-618	BOLT, Bearing Cap .....	6
77	223988	RING, Impeller Hub Bearing Ret. ....	1	105	229798	CAP, Turbine Shaft Bearing ..	1
78	230767	BEARING, Impeller Hub .....	1	106	4C-820	BOLT, Bearing Retainer .....	3
79	1C-820	BOLT, Stator Support .....	6	106A	-----	††LOCKWIRE (18 ga.) .....	—
80	4E-08	LKWSHR, Stator Support .....	6	107	17C-728	†BOLT, Converter Hsg. to Flywheel Hsg. ....	12
81	222269	HUB, Impeller .....	1	108	4E-07	†LKWSHR, Converter Hsg. to Flywheel Hsg. ....	12
82	60K-40700	O-RING, Impeller Hub .....	1	109	541221	†BUSHING, Flywheel Pilot — G.M. ....	1
83	229805	RING, Oil Baffle Retainer ....	1	110	945815	†BUSHING, Flywheel Pilot — Cummins .....	1
84	229517	IMPELLER .....	1				
85	222019	PLATE, Impeller to Hub Lock ..	4				
86	222221	BOLT, Impeller to Hub .....	8				

†Not Illustrated

‡As Required

\*NOTE: For replacement use 801933 Kit which consists of 1 — 236547 Washer & 1 — 236551 Turbine.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



TS-7923-P

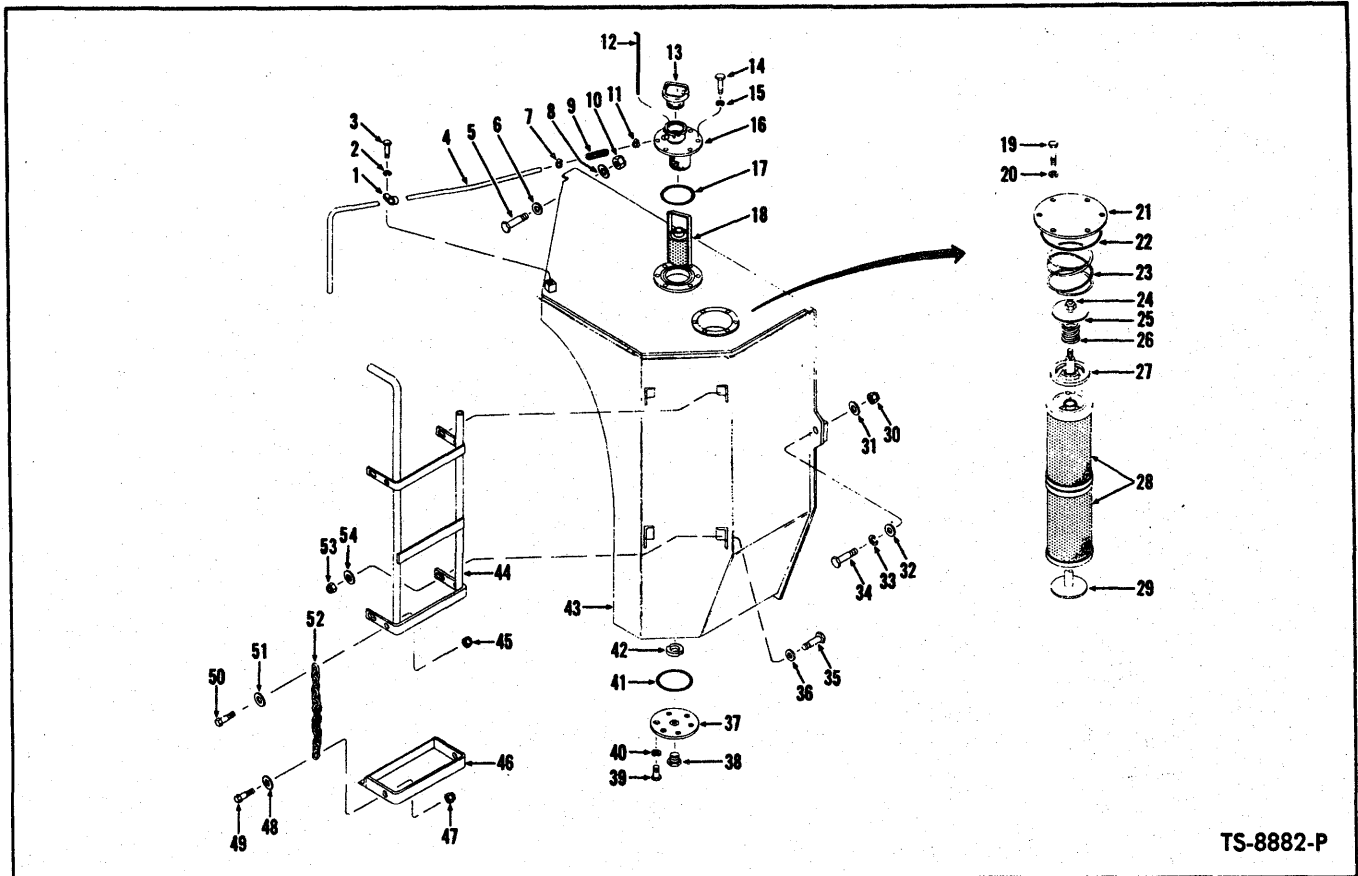
**MID-MOUNT BEARING ASSEMBLY**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	230553	BEARING ASSY, Mid Mount (Inc. 1 thru 14, 17 thru 33)	1	17	230529	HOUSING, Bearing	1
1	1F-436	COTTER, Flange Nut	1	18	211433	BREATHER, Brg.	1
2	205928	NUT, Flange	1	19	654141	CONE, Brg.	1
3	222179	WASHER, Flange	1	20	856250	CUP, Brg.	1
4	25K-60116	O-RING, Flange	1	21	225823	SEAL, Brg. Cap	1
5	222233	FLANGE	1	22	25K-40308	O-RING, Brg. Cap	1
6	230690	CAP, Bearing	1	23	217566	‡SHIM, Brg. Cap (.004)	—
7	217566	‡SHIM, Brg. Cap (.004)	—	23A	217567	‡SHIM, Brg. Cap (.007)	—
7A	217567	‡SHIM, Brg. Cap (.007)	—	23B	217568	‡SHIM, Brg. Cap (.010)	—
7B	217568	‡SHIM, Brg. Cap (.010)	—	24	230690	CAP, Brg.	1
8	25K-40308	O-RING, Brg. Cap	1	25	222233	FLANGE	1
9	225823	SEAL, Brg. Cap	1	26	25K-60116	O-RING, Flange	1
10	856250	CUP, Brg.	1	27	222179	WASHER, Flange	1
11	654141	CONE, Brg.	1	28	205928	NUT, Flange	1
12	233007	SHAFT, Brg.	1	29	1F-436	COTTER, Flange Nut	1
13	4E-07	LKWSHR, Brg. Cap	4	30	1C-722	BOLT, Brg. Cap	4
14	1C-722	BOLT, Brg. Cap	4	31	4E-07	LKWSHR, Brg. Cap	4
15	17C-1040	BOLT, Brg. to Frame	4	32	13F-12	PLUG	1
16	4E-10	LKWSHR, Brg. to Frame	4	33	215757	PLUG, Drain	1

‡As Required

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



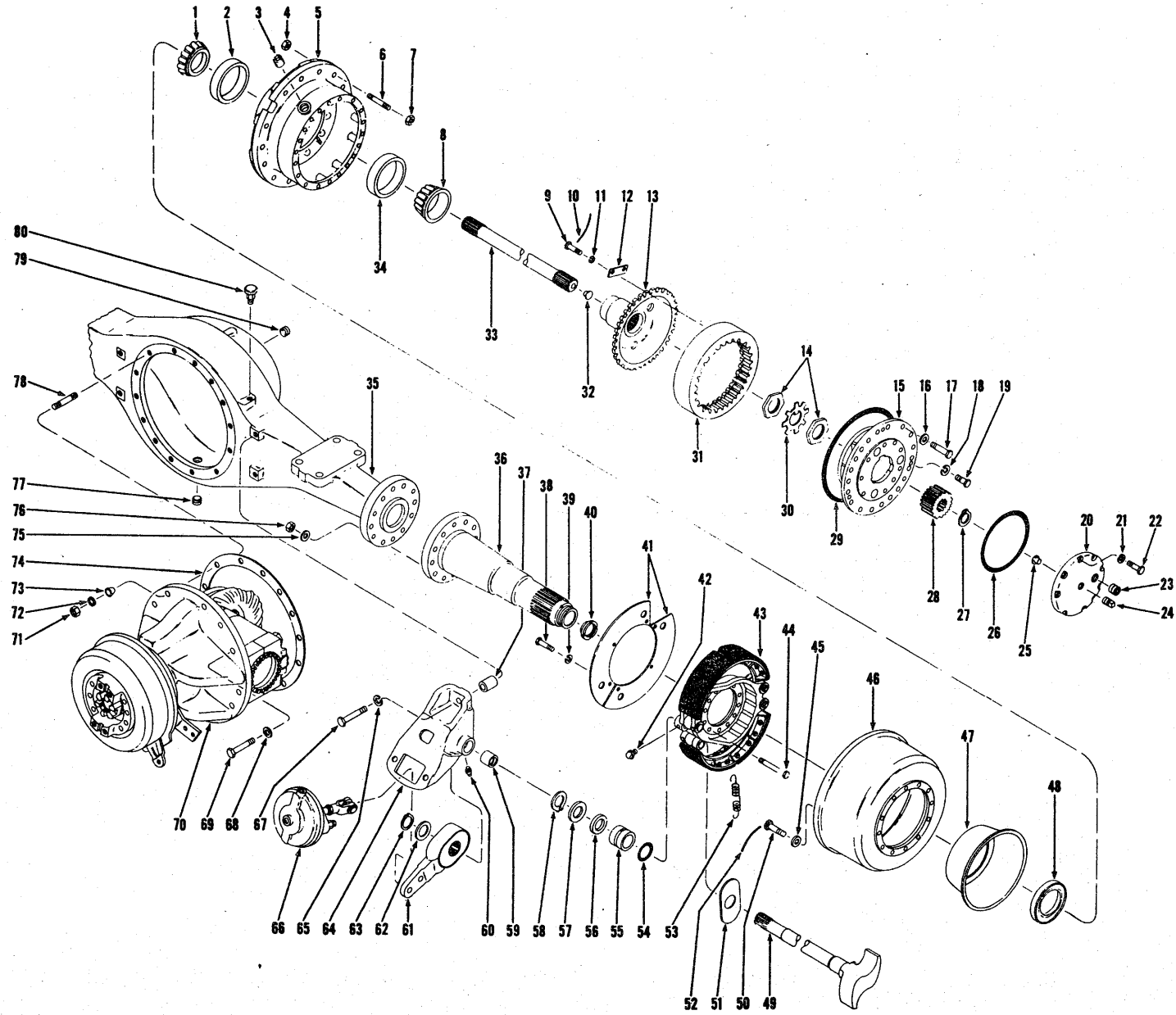


TS-8882-P

**HYDRAULIC OIL RESERVOIR AND STEP**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	30H-31	CLIP, Tube to Reservoir	1	28	1530600	CARTRIDGE, Filter --	
2	4E-06	LKWSHR, Clip to Reservoir	1	29	2517207	Return	2
3	24C-612	BOLT, Clip to Reservoir	1	30	18D-12	ROD, Guide	1
4	567745	TUBE, Reservoir Relief	1	31	616809	NUT, Reservoir to Frame	2
5	24C-1244	BOLT, Reservoir to Frame	1	32	616809	WASHER, Reservoir	2
6	616809	WASHER, Reservoir	1	33		WASHER, Reservoir	2
7	521874	CLAMP, Hose to Tube	1	34	24C-1256	OMIT, Not Used	
8	616809	WASHER, Reservoir	1	35	24C-828	BOLT, Reservoir to Frame	2
9	743563	HOSE, Tube to Filler Neck (3½" lg.)	1	36	619029	BOLT, Step to Reservoir	4
10	18D-12	NUT, Reservoir to Frame	1	37	587613	WASHER, Step to Reservoir	4
11	521874	CLAMP, Hose to Filler Neck	1	38	40K-16	COVER, Inspection	1
12	1510095	DIPSTICK, Oil Reservoir	1	39	24C-612	PLUG, Drain	1
13	554843	CAP, Filler	1	40	4E-06	BOLT, Cover to Reservoir	6
14	24C-612	BOLT, Filler Neck	6	41	25K-40428	LKWSHR, Cover	6
15	4E-06	LKWSHR, Filler Neck	6	42	525293	O-RING, Cover	1
16	567742	FILLER NECK, Reservoir	1	43	1505169	MAGNET	1
17	25K-40624	O-RING, Filler Neck	1	44	1505608	RESERVOIR, Hydraulic Oil	1
18	1532445	FILTER, Suction	1	45	1505608	STEP, Reservoir	1
19	24C-614	BOLT, Cover	6	46	1505606	NUT, Chain to Step	2
20	4E-06	LKWSHR, Cover Plate	6	47	18D-06	STEP, Lower Swinging	1
21	1529896	PLATE, Cover	1	48	656672	NUT, Chain to Step	2
22	25K-40808	O-RING, Cover Plate	1	49	18C-624	WASHER, Chain to Step	2
23	1543238	SPRING, Cover Plate	1	50	24C-624	BOLT, Chain to Step	2
24	66D-06	NUT, Guide Rod	1	51	656672	BOLT, Chain to Step	2
25	1529704	WASHER, Guide Rod	1	52	1505620	WASHER, Chain to Step	2
26	1530598	SPRING, Retainer	1	53	18D-08	CHAIN, Step	2
27	1529679	RETAINER, Filter	1	54	619029	NUT, Step	4
						WASHER, Step	4

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



AXLE ASSEMBLY — FRONT DRIVE

TS-7630-P



**CONSTRUCTION MACHINERY DIVISION**  
**AXLE ASSEMBLY — FRONT DRIVE**  
 For Serial: Cummins — 404A101 thru 404A299  
 G.M. — 403A101 thru 403A299



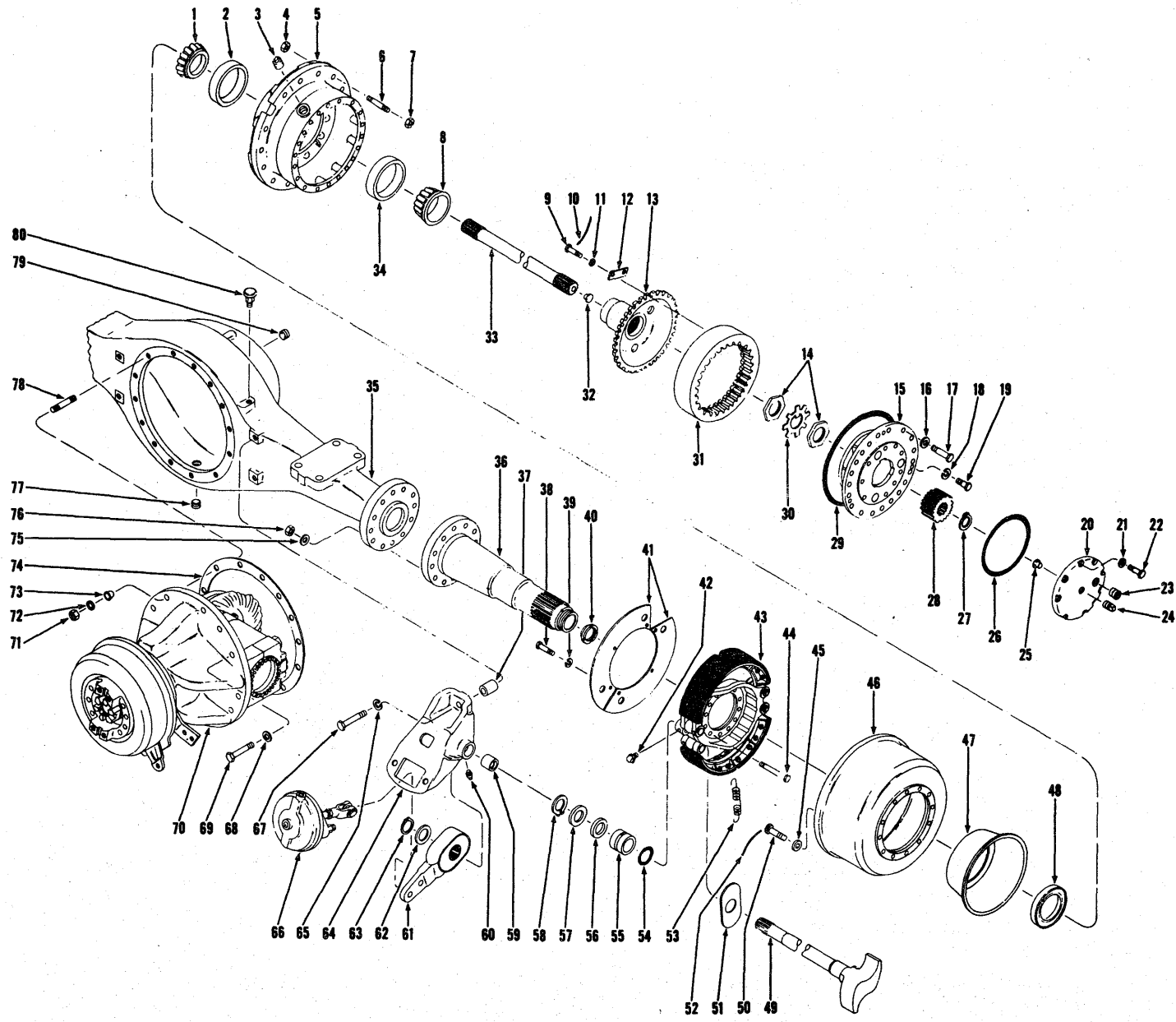
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	190371	*** § AXLE ASSY (Inc. 1 thru 6, 8 thru 37, 40, 42 thru 80) ...	1	22	1C-720	BOLT, Thrust Cap .....	18
1	774025	CONE, Inner Hub Bearing ....	2	23	10F-02	PLUG, Thrust Cap .....	2
2	774024	CUP, Inner Hub Bearing .....	2	24	11F-12	PLUG, Thrust Cap .....	2
3	119469	PLUG, Hub Filler .....	2	25	118785	BUTTON, Thrust .....	2
4	86D12	NUT, Wheel Stud .....	38	26	118790	O-RING, Thrust Cap .....	2
5	118925	HUB ASSY (Inc. 2, 34) .....	2	27	224066	RING, Sun Gear Retaining ..	2
6	120218	STUD, Wheel .....	38	28	118782	GEAR, Sun .....	2
7	64D-12	**NUT, Wheel .....	38	29	118791	O-RING, Planet Carrier .....	2
7A	1520748	†**WASHER, Wheel Nut .....	38	30	118786	LOCK, Spindle Nut .....	2
8	1304048	CONE, Outer Hub Bearing ...	2	31	119217	GEAR, Internal Ring .....	2
9	4C-820	BOLT, Hub to Gear .....	24	32	118785	BUTTON, Thrust .....	2
10	-----	‡LOCKWIRE — 18 Gauge .....	—	33	118937	SHAFT, Axle (Inc. 32) .....	2
11	4E-08	LKWSHR, Hub to Gear .....	24	34	1304047	CUP, Outer Hub Bearing ....	2
12	122701	PLATE, Hub to Gear Retaining	12	35	118935	HOUSING, Axle .....	1
13	119218	HUB, Internal Gear .....	2	36	118781	SPINDLE .....	2
14	110559	NUT, Spindle .....	4	37	110941	SPACER, Air Chamber Bracket to Housing .....	4
15	-----	PLANET CARRIER — See Index .....	—	38	1C-612	*BOLT, Dust Cover .....	4
16	106547	WASHER, Planet Carrier to Hub .....	40	38A	1C-616	*BOLT, Dust Cover .....	4
17	117225	BOLT, Planet Carrier to Hub ..	40	39	4E-06	*LKWSHR, Dust Cover .....	8
18	3E-09	LKWSHR, Planet Puller Hole ..	6	40	118787	RING, Sun Gear Thrust .....	2
19	1C-908	BOLT, Planet Puller Hole .....	6	41	119046	*COVER, Brake Dust .....	4
20	118788	CAP, Sun Gear Thrust (Inc. 25) .....	2	41A	112695	*†PLATE, Dust Cover Reinforcing .....	2
21	112278	WASHER, Thrust Cap .....	18	42	12H-15	FITTING, Brake Spider Grease .....	2

†Not Illustrated  
 ‡As Required

\*NOTE: Optional Equipment — not furnished with machine.

\*\*NOTE: For replacement of either item 7 or 7A use 1515484 Nut. Once Conversion has been made the Washer (7A) is no longer required.

\*\*\*NOTE: See Components.



AXLE ASSEMBLY — FRONT DRIVE

TS-7630-P

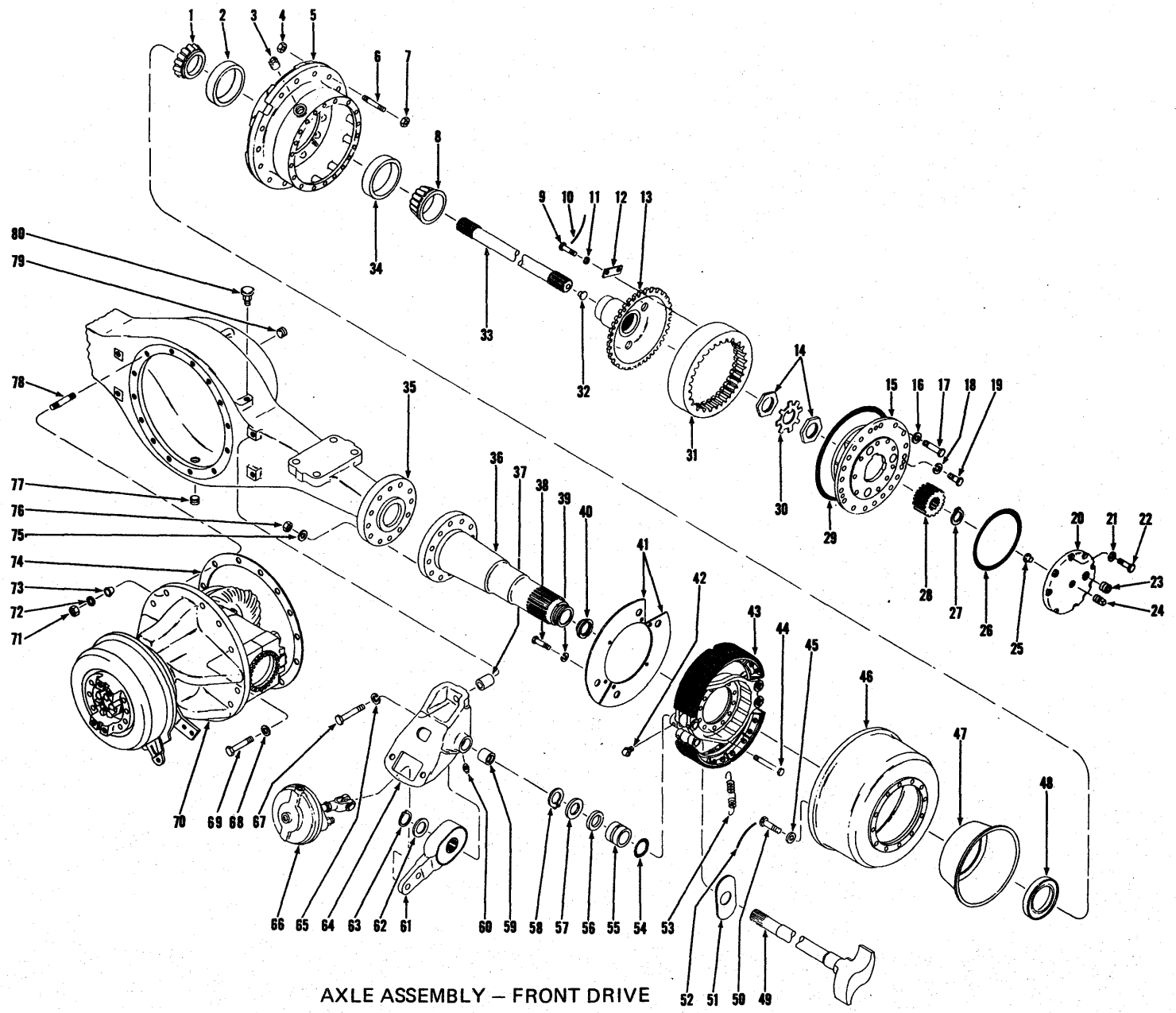
**CONSTRUCTION MACHINERY DIVISION  
AXLE ASSEMBLY — FRONT DRIVE (Continued)  
For Serial: Cummins — 404A101 thru 404A299  
G.M. — 403A101 thru 403A299**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
43	-----	BRAKE ASSY — See Index	—	63	659764	RING, Slack Adjuster Retaining	2
44	18C-1064	BOLT, Brake & Spindle to Housing	20	64	104204	BRACKET ASSY, Air Chamber — R.H. (Inc. 59)	1
45	104412	WASHER, Brake Drum to Hub	24	64A	104203	BRACKET ASSY, Air Chamber — L.H. (Inc. 59)	1
46	121917	DRUM, Brake	2	65	4E-10	LKWSHR, Bracket to Housing	4
47	117445	CATCHER, Oil	2	66	120100	**CHAMBER, Air — B.W. #281353 (Inc. 66A)	2
48	125248	SEAL, Hub Oil	2	66A	882444	**†DIAPHRAGM, Air Chamber	2
49	118940	CAM SHAFT, Brake — R.H.	1	67	1C-1056	BOLT, Bracket to Housing	4
49A	118941	†CAM SHAFT, Brake — L.H.	1	68	-----	OMIT, Not Used	—
50	118381	BOLT, Brake Drum to Hub	24	69	-----	OMIT, Not Used	—
51	107735	WASHER, Cam Shaft Thrust	2	70	-----	DIFF. & CARRIER — See Index	—
52	-----	‡LOCKWIRE — 19 Gauge	—	71	64D-10	NUT, Carrier to Housing	14
53	119650	SPRING, Shoe Return	2	72	104412	WASHER, Carrier to Housing	4
54	25K-60124	O-RING, Cam Shaft	2	73	119141	DOWEL, Carrier to Stud	4
55	107739	BUSHING, Brake Spider	2	74	110607	GASKET, Carrier to Housing	1
56	11E-135	RETAINER, Cam Shaft Grease	2	75	104412	WASHER, Brake & Spindle to Housing	24
57	107736	WASHER, Cam Shaft	2	76	106998	NUT, Brake & Spindle to Housing	24
58	660516	RING, Bushing Retaining	2	77	119469	PLUG, Housing Drain	1
59	102189	BUSHING, Air Chamber Bracket	2	78	117336	STUD, Carrier to Housing	4
60	10H-25	FITTING, Air Chamber Bracket Grease	2	78A	120771	†STUD, Carrier to Housing	10
61	107013	**ADJUSTER, Slack — B.W. #226563	2	79	11F-12	PLUG, Housing Filler	1
62	107010	WASHER, Slack Adjuster	2	80	121214	BREATHER, Housing	1

†Not Illustrated  
‡As Required

\*\*NOTE: Your Bendix-Westinghouse Distributor is equipped to service components of these parts.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



AXLE ASSEMBLY - FRONT DRIVE

56A.2

(1A21)

PM 2462

TS-7630

**AXLE ASSEMBLY — FRONT DRIVE**

Cummins: 404A557 thru 572, 574, 580, 581, 404A300CAC thru 404A594CAC

G.M. 403A300 thru 562, 564, 566, 567

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	190765	AXLE ASSY (Inc. 1 thru 6, 8 thru 37, 40, 42, thru 80) ...	1	43	-----	BRAKE ASSY — See Index ...	—
1	774025	CONE, Inner Hub Bearing ...	2	44	18C-1064	BOLT, Brake & Spindle to Housing ...	24
2	774024	CUP, Inner Hub Bearing ...	2	45	104412	WASHER, Brake Drum to Hub ...	24
3	119469	PLUG, Hub Filler ...	2	46	118805	DRUM, Brake ...	2
4	86D12	NUT, Wheel Stud ...	38	47	117445	CATCHER, Oil ...	2
5	118925	HUB ASSY (Inc. 2, 34) ...	2	48	125248	SEAL, Hub Oil ...	2
6	120218	STUD, Wheel ...	38	49	118940	CAM SHAFT, Brake — R.H. ...	1
7	1515484	NUT, Wheel ...	38	49A	118941	†CAM SHAFT, Brake — L.H. ...	1
8	1304048	CONE, Outer Hub Bearing ...	2	50	118381	BOLT, Brake Drum to Hub ...	24
9	4C-820	BOLT, Hub to Gear ...	24	51	107735	WASHER, Cam Shaft Thrust ...	2
10	-----	‡LOCKWIRE — 18 Gauge ...	—	52	-----	‡LOCKWIRE — 19 Gauge ...	—
11	4E-08	LKWSHR, Hub to Gear ...	24	53	119650	SPRING, Shoe Return ...	2
12	122701	PLATE, Hub to Gear Retaining ...	12	54	25K-60124	O-RING, Cam Shaft ...	2
13	119218	HUB, Internal Gear ...	2	55	107739	BUSHING, Brake Spider ...	2
14	122701	NUT, Spindle ...	4	56	11E-135	RETAINER, Cam Shaft Grease ...	2
15	-----	PLANET CARRIER — See Index ...	—	57	107736	WASHER, Cam Shaft ...	2
16	106547	WASHER, Planet Carrier to Hub ...	40	58	660516	RING, Bushing Retaining ...	2
17	117225	BOLT, Planet Carrier to Hub ...	40	59	102189	BUSHING, Air Chamber Bracket ...	2
18	3E-09	LKWSHR, Planet Puller Hole ...	6	60	10H-25	FITTING, Air Chamber Bracket Grease ...	2
19	1C-908	BOLT, Planet Puller Hole ...	6	61	104214	**ADJUSTER, Slack — B.W. #278312 ...	2
20	118788	CAP, Sun Gear Thrust (Inc. 25) ...	2	62	107010	WASHER, Slack Adjuster ...	2
21	112278	WASHER, Thrust Cap ...	18	63	659764	RING, Slack Adjuster Retaining ...	2
22	1C-720	BOLT, Thrust Cap ...	18	64	104204	BRACKET ASSY, Air Chamber R.H. (Inc. 59) ...	1
23	10F-02	PLUG, Thrust Cap ...	2	64A	104203	†BRACKET ASSY, Air Chamber L.H. (Inc. 59) ...	1
24	11F-12	PLUG, Thrust Cap ...	2	65	4E-10	LKWSHR, Bracket to Housing ...	4
25	118785	BUTTON, Thrust ...	2	66	120100	**CHAMBER, Air — B.W. #281353 (Inc. 66A) ...	2
26	118790	O-RING, Sun Gear Retaining ...	2	66A	882444	**†DIAPHRAGM, Air Chamber ...	2
27	224066	RING, Sun Gear Retaining ...	2	67	1C-1056	BOLT, Bracket to Housing ...	4
28	118782	GEAR, Sun ...	2	68	-----	OMIT, Not Used ...	—
29	118791	O-RING, Planet Carrier ...	2	69	-----	OMIT, Not Used ...	—
30	118786	LOCK, Spindle Nut ...	2	70	-----	DIFF. & CARRIER — See Index ...	—
31	119217	GEAR, Internal Ring ...	2	71	64D-10	NUT, Carrier to Housing ...	14
32	118785	BUTTON, Thrust ...	2	72	104412	WASHER, Carrier to Housing ...	14
33	118937	SHAFT, Axle (Inc. 32) ...	2	73	119141	DOWEL, Carrier to Stud ...	4
34	1304047	CUP, Outer Hub Bearing ...	2	74	110607	GASKET, Carrier to Housing ...	1
35	121590	HOUSING, Axle ...	2	75	104412	WASHER, Brake & Spindle to Housing ...	24
36	118781	SPINDLE ...	2	76	106998	NUT, Brake & Spindle to Housing ...	24
37	110941	SPACER, Air Chamber Bracket to Housing ...	4	77	119469	PLUG, Housing Drain ...	1
38	1C-612	*BOLT, Dust Cover ...	4	78	117336	STUD, Carrier to Housing ...	4
38A	1C-616	†BOLT, Dust Cover ...	4	78A	120771	†STUD, Carrier to Housing ...	10
39	4E-06	*LKWSHR, Dust Cover ...	8	79	11F-12	PLUG, Housing Filler ...	1
40	118787	RING, Sun Gear Thrust ...	2	80	121214	BREATHER, Housing ...	1
41	119046	*COVER, Brake Dust ...	4				
41A	112695	*†PLATE, Dust Cover Reinforcing ...	2				
42	12H-15	FITTING, Brake Spider Grease ...	2				

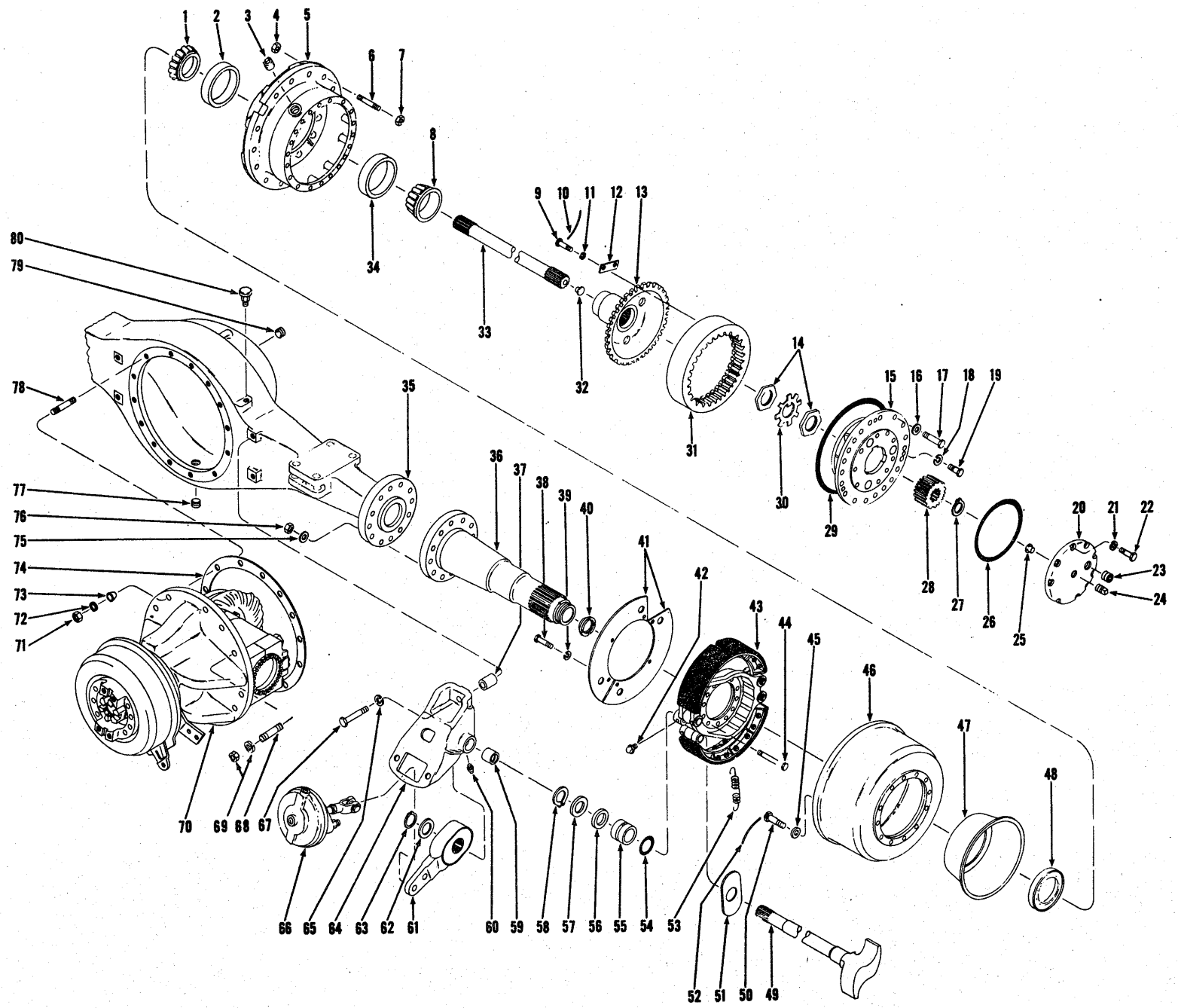
\*NOTE: Optional Equipment — Not furnished with machine.

\*\*NOTE: Your Bendix-Westinghouse Distributor is equipped to service components of these parts.

†As Required

‡Not Illustrated

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



56B.1

(1B1)

PM 2462  
Printed in U.S.A.

TS-9968



\*AXLE ASSEMBLY – FRONT DRIVE

MICHIGAN

No.	Part No.	Qty.	Description
A	<sup>1</sup> 191576	1	Axle assy
1	774025	2	Cone roller brg
2	774024	2	Cup roller brg
3	119469	2	Plug pipe
4	86D12	38	Nut
5	<sup>2</sup> 118925	2	Hub assy
6	120218	38	Stud
7	64D-12	38	Nut
8	1304048	2	Cone roller brg
9	4C-820	24	Bolt
10	<sup>3</sup> -----	—	Lockwire
11	4E-04	24	Lockwasher
12	122701	12	Plate
13	119218	2	Hub
14	110559	4	Nut
15	<sup>4</sup> -----	2	Planet carrier assy
16	106547	40	Washer
17	117225	40	Bolt
18	3E-09	6	Lockwasher
19	1C-908	6	Bolt
20	<sup>5</sup> 118788	2	Cap
21	112278	18	Washer
22	1C-720	18	Bolt
23	10F-02	2	Plug pipe
24	11F-12	2	Plug pipe
25	118785	2	Button
26	118790	2	O-ring
27	224066	2	Ring
28	118782	2	Gear
29	118791	2	O-ring
30	118786	2	Lock
31	119217	2	Gear
32	118785	2	Button
33	<sup>6</sup> 118937	2	Shaft
34	1304047	2	Cup roller brg
35	121590	1	Housing axle
36	118781	2	Spindle
37	110941	4	Spacer
38	1C-612	4	Bolt
39	<sup>7</sup> 1C-612	4	Bolt
39A	<sup>†</sup> 1C-616	4	Bolt
40	118787	2	Washer
41	<sup>7</sup> 119046	4	Shield
41A	<sup>†</sup> 112695	2	Plate

<sup>1</sup>Inc. 1→6, 8→37, 40, 42→80

<sup>2</sup>Inc. 2, 34

<sup>3</sup>18 Gauge

<sup>4</sup>See Index

<sup>5</sup>Inc. 25

<sup>6</sup>Inc. 32

<sup>7</sup>Note: Optional Equipment – Not furnished with machine.

\*S/N Cummins 404A556, 573, 575→579, 582 & →, 404A595CAC & →, 404C101ENC & → G.M. 403A563, 565, 568 & →



\*AXLE ASSEMBLY – FRONT DRIVE (Continued)



No.	Part No.	Qty.	Description
42	12H-15	2	Fitting grease
43	4-----	2	Brake assy
44	18C-1064	24	Bolt
45	104412	24	Washer
46	118805	2	Drum brake
47	117445	2	Catcher oil
48	125248	2	Seal
49	118940	1	Brake camshaft R.H.
49A	118941	1	Brake camshaft L.H.
50	118381	24	Bolt
51	107735	2	Washer
52	‡8-----	—	Lockwire
53	119650	2	Spring
54	25K-60124	2	O-ring
55	107739	2	Bushing
56	11E-135	2	Retainer
57	107736	2	Washer
58	660516	2	Ring
59	102189	2	Bushing
60	10H-25	2	Fitting grease
61	<sup>9,10</sup> 104214	2	Adjuster
62	107010	2	Washer
63	659764	2	Ring
64	<sup>11</sup> 104204	1	Bracket assy R.H.
64A	‡ <sup>11</sup> 104203	1	Bracket assy L.H.
65	4E-10	4	Lockwasher
66	4-----	2	Chamber air
67	1C-1056	4	Bolt
68	120771	10	Stud
69	64D-10	10	Nut
69A	‡104412	10	Washer
70	4-----	1	Diff carrier assy
71	64D-10	4	Nut
72	104412	4	Washer
73	119141	4	Dowel
74	-----	—	Omit
75	104412	24	Washer
76	106998	24	Nut
77	119469	1	Plug pipe
78	117336	4	Stud
79	11F-12	1	Plug
80	121214	1	Breather

<sup>4</sup>See Index

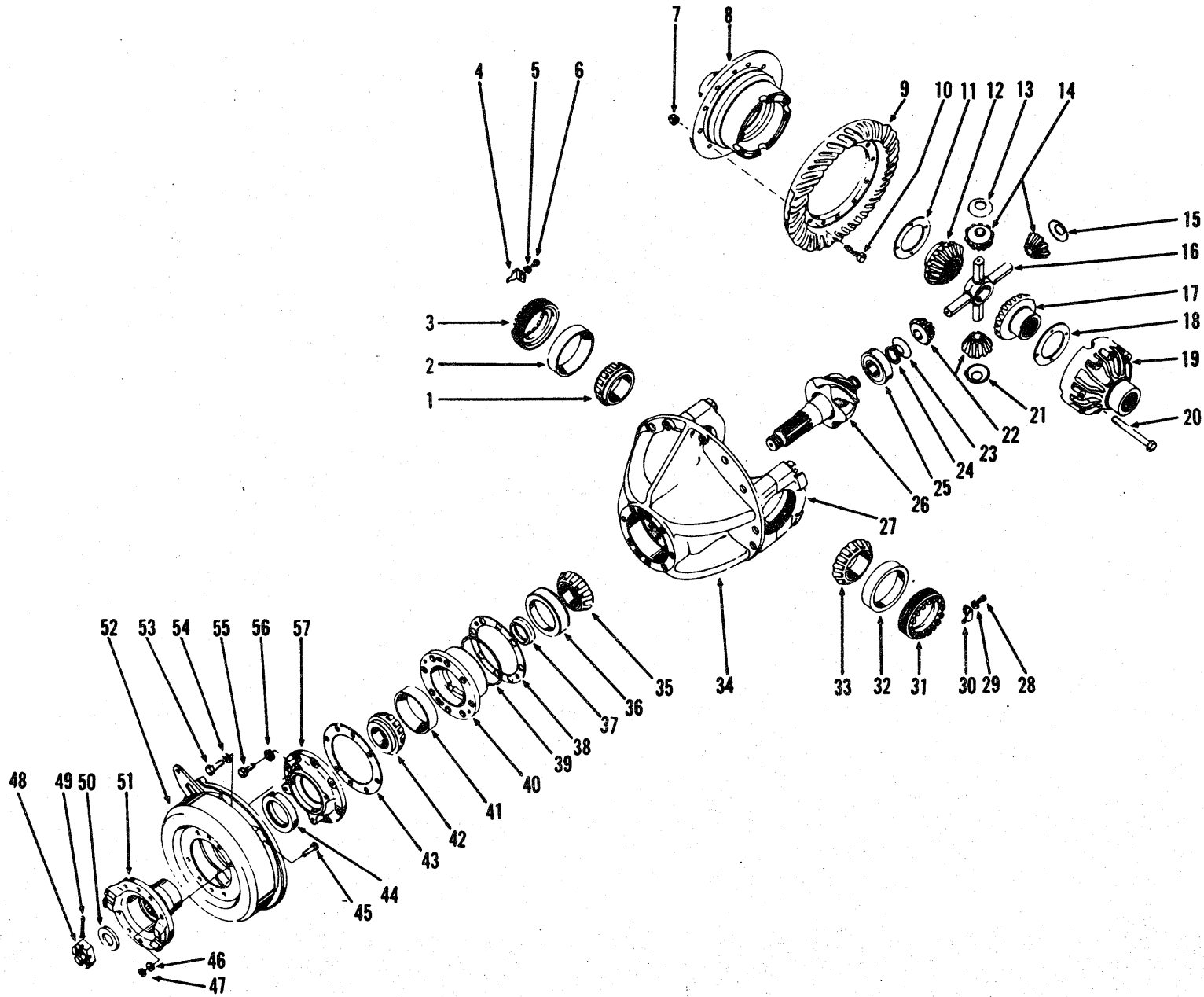
<sup>8</sup>19 Gauge

<sup>9</sup>Note: Your local authorized Bendix-Westinghouse distributor is equipped to furnish components of these parts.

<sup>10</sup>B.W. #278312

<sup>11</sup>Inc. 59

\*S/N Cummins 404A556, 573, 575 → 579, 582 & →, 404A595CAC & →, 404C101ENC & → G.M. 403A563, 565, 568 & →



DIFFERENTIAL AND CARRIER ASSEMBLY — FRONT DRIVE

TS-5235-P



**CONSTRUCTION MACHINERY DIVISION  
DIFFERENTIAL AND CARRIER ASSEMBLY – FRONT DRIVE**



For Serial: Cummins – 404A101 thru 555, 557 thru 572, 574, 580, 581, 404A300CAC thru 404A594CAC  
G.M. – 403A101 thru 562, 564, 566, 567

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	815807	*DIFF. & CARRIER ASSY KIT (Inc. 1 thru 57) .....	1	32	675255	CUP, Differential Bearing .....	1
1	742261	CONE, Differential Bearing ..	1	33	742261	CONE, Differential Bearing ..	1
2	675255	CUP, Differential Bearing ....	1	34	815780	*CARRIER ASSY KIT, Differential (Inc. 27, 27A, 27B) .....	1
3	123749	NUT, Differential Adjusting ..	1	35	710034	CONE, Center Pinion Bearing	1
4	100941	LOCK, Differential Adjusting Nut .....	1	36	710035	CUP, Center Pinion Bearing ..	1
5	4E-06	LKWSHR, Adjusting Nut Lock	1	37	815377	KIT, Pinion Bearing Spacer ....	1
6	3C-614	BOLT, Adjusting Nut Lock ....	1	38	110543	‡SHIM, Pinion Brg. Cage (.004) –	–
7	86D-10	NUT, Ring Gear .....	12	38A	125573	‡SHIM, Pinion Brg. Cage (.007) –	–
8	-----	§DIFF. CASE, Flange Half – See 61 .....	1	38B	125574	‡SHIM, Pinion Brg. Cage (.010) –	–
9	-----	§RING GEAR – See 60 .....	1	39	25K-40616	O-RING, Pinion Brg. Cage ....	1
10	110522	BOLT, Ring Gear .....	12	40	111691	CAGE ASSY, Pinion Bearing (Inc. 36, 41) .....	1
11	119139	WASHER, Side Gear Thrust ..	1	41	774198	CUP, Outer Pinion Bearing ....	1
12	110528	GEAR, Differential Side .....	1	42	774197	CONE, Outer Pinion Bearing	1
13	123382	WASHER, Diff. Pinion Thrust	1	43	110541	GASKET, Oil Seal Retainer ....	1
14	815747	PINION KIT, Diff. (Inc. 22) ....	1	44	111750	SEAL, Pinion Oil .....	1
15	123382	WASHER, Diff. Pinion Thrust	1	45	104471	BOLT, Drum to Flange .....	8
16	110529	SPIDER, Differential .....	1	46	4E-07	LKWSHR, Drum to Flange ....	8
17	110528	GEAR, Differential Side .....	1	47	62D-07	NUT, Drum to Flange .....	8
18	119139	WASHER, Side Gear Thrust	1	48	107977	NUT, Pinion Shaft .....	1
19	-----	§DIFF. CASE, Plain Half – See 61 .....	1	49	1F-748	COTTER, Pinion Shaft Nut ....	1
20	110532	BOLT, Differential Case .....	8	50	107978	WASHER, Pinion Shaft .....	1
21	123382	WASHER, Diff. Pinion Thrust	1	51	116629	FLANGE, Companion .....	1
22	-----	§PINION, Differential – See 14 .....	–	52	-----	PARKING BRAKE – See Index	–
23	123382	WASHER, Diff. Pinion Thrust	1	52A	107481	†DRUM, Brake .....	1
24	224083	RING, Inner Pinion Retaining	1	53	1C-924	BOLT, Brake Attaching .....	4
25	774199	BEARING, Inner Pinion .....	1	54	4E-09	LKWSHR, Brake Attaching ....	4
26	-----	§PINION – See 60 .....	1	55	1C-1036	BOLT, Oil Seal Retainer .....	8
27	-----	§CAP, Differential – See 34 ....	2	56	4E-10	LKWSHR, Oil Seal Retainer ..	8
27A	110536	†BOLT, Carrier Cap .....	4	57	111695	RETAINER, Pinion Oil Seal ....	1
27B	111658	†WASHER, Carrier Cap .....	4	58	119437	DIFF. ASSY (Inc. 7 thru 23, 26)	1
28	3C-614	BOLT, Adjusting Nut Lock ....	1	59	119431	DIFF. BODY SUB-ASSY (Inc. 8, 11 thru 23) .....	1
29	4E-06	LKWSHR, Adjusting Nut Lock	1	60	114201	GEAR & PINION SET (Inc. 9, 26) .....	1
30	100941	LOCK, Diff. Adjusting Nut ....	1	61	815786	DIFF. CASE KIT (Inc. 8, 13, 15, 19 thru 21, 23) .....	1
31	123749	NUT, Differential Adjusting ..	1				

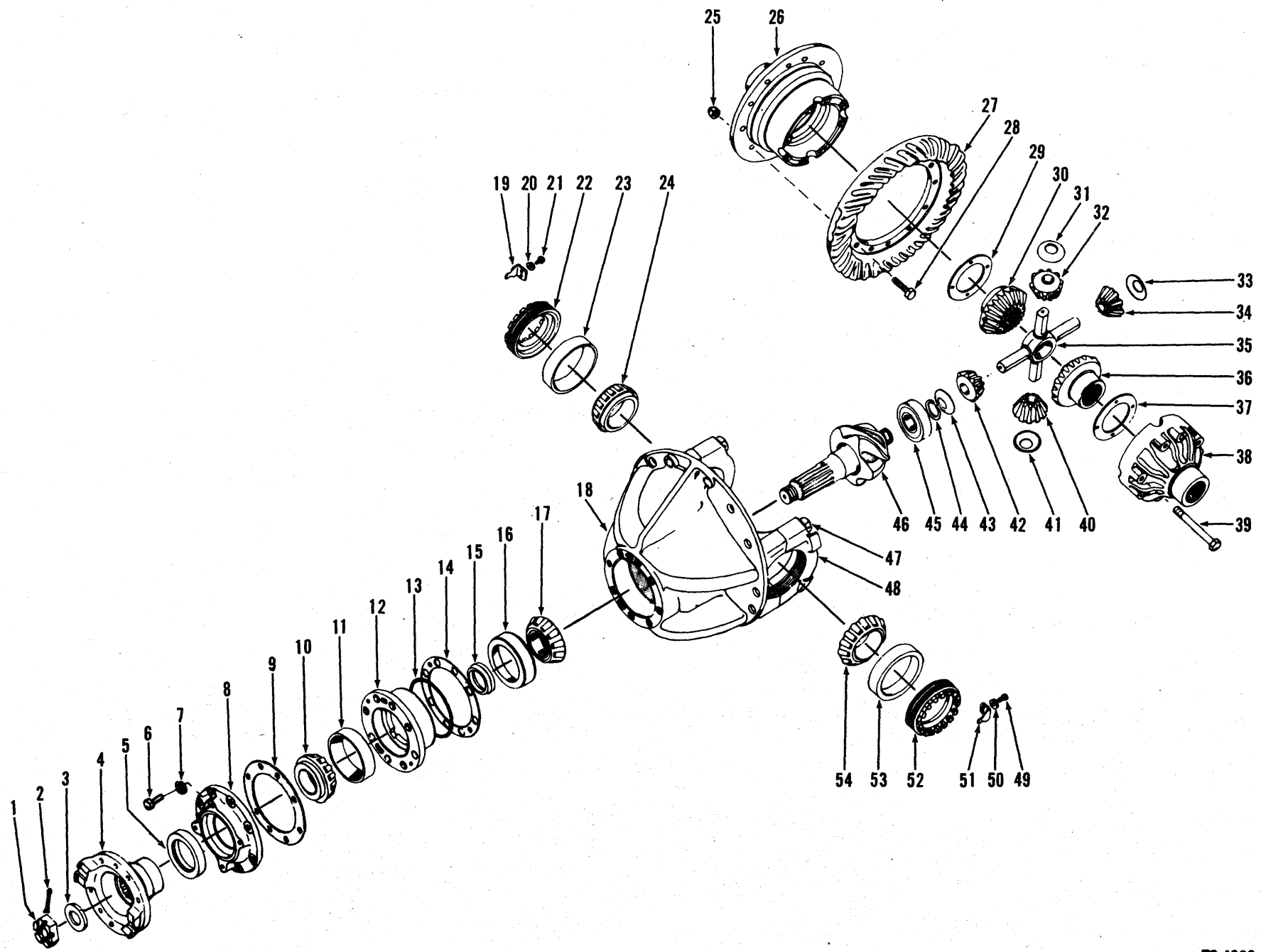
†Not Illustrated

‡As Required

§Not Sold Separately

\*NOTE: 815807 and 815780 Kits also include (4) 117336 Studs, four (4) 119141 Dowels and four (4) 64D-10 Nuts for mounting Differential and Carrier Assembly to Axle Housing.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



58A.1

(1B17)

PM 2462  
Printed in U.S.A.

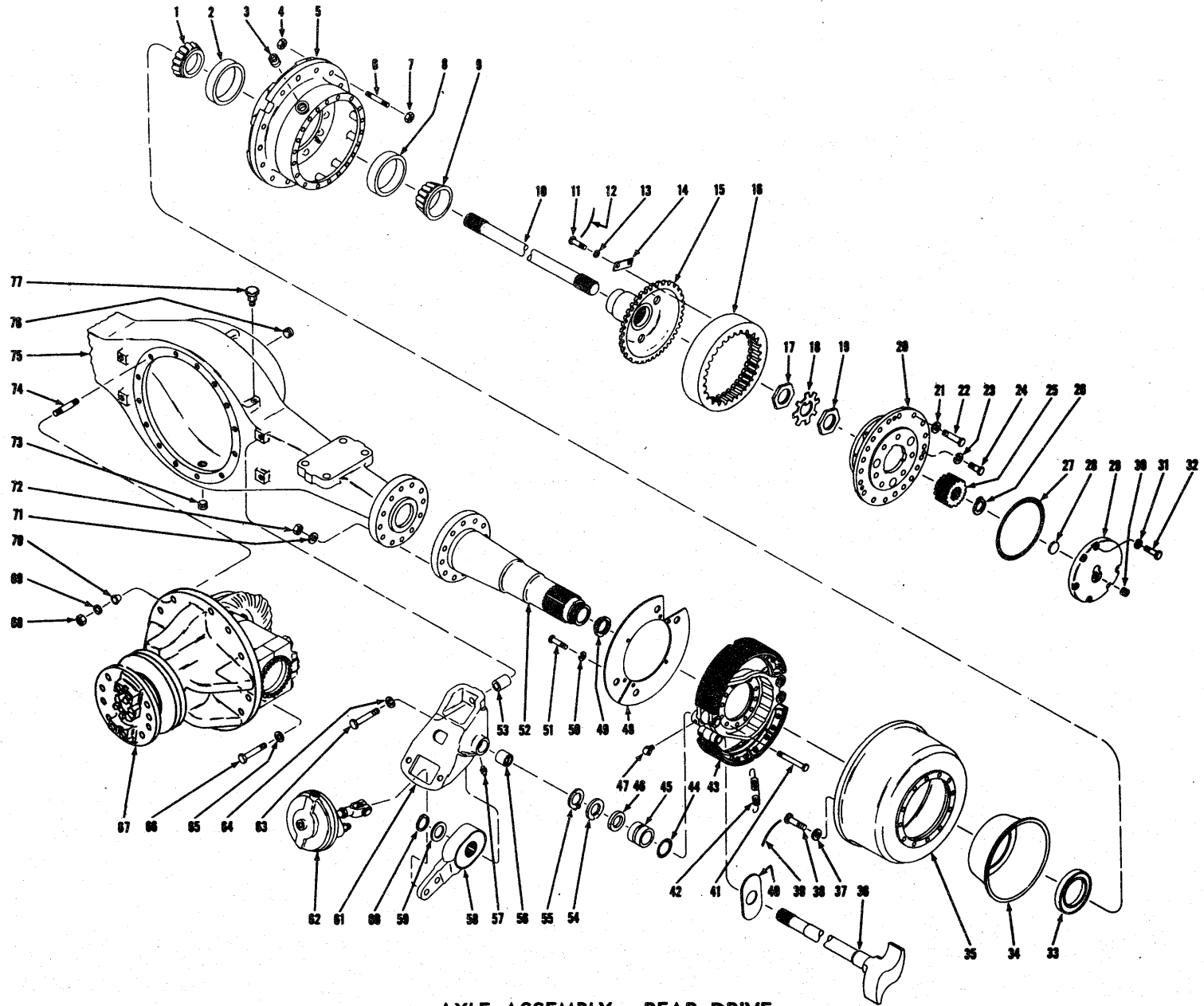
TS-4989

# Differential and Carrier Assembly – Front Drive

S/N Cummins 40A556, 573, 575 → 579, 582 & →, 40A595CAC & →, 404C101ENC & →  
G.M. 403A563, 565, 568 & →

**MICHIGAN**

No.	Part No.	Qty.	Description
A	120352	1	Diff & carrier assy (Inc. 1→57)
1	107977	1	Nut
2	1F-748	1	Pin cotter
3	107978	1	Washer
4	116629	1	Flange
5	111750	1	Seal
6	1C-1036	8	Bolt
7	4E-10	8	Lockwasher
8	119890	1	Retainer
9	110541	1	Gasket
10	774197	1	Cone
11	774198	1	Cup
12	111691	1	Cage (Inc. 11, 16)
13	25K-40616	1	O-ring
14	‡110543	—	Shim (.004)
14A	‡125573	—	Shim (.007)
14B	‡125574	—	Shim (.010)
14C	‡125575	—	Shim (.020)
15	815377	1	Spacer kit
16	710035	1	Cup
17	710034	1	Cone
18	119187	1	Carrier diff (Inc. 47, 47A, 48)
19	100941	1	Lock
20	4E-06	1	Lockwasher
21	1C-614	1	Bolt
22	123749	1	Nut
23	675255	1	Cup
24	742261	1	Cone
25	86D-10	12	Nut
26	§-----	1	Diff case (See 56)
27	§-----	1	Ring gear (See 57)
28	110522	12	Bolt
29	119139	1	Washer
30	110528	1	Gear
31	123382	1	Washer
32	815747	1	Pinion kit (Inc. 34, 40, 42)
33	123382	1	Washer
34	§-----	—	Pinion (See 32)
35	110529	1	Splder
36	110528	1	Gear
37	119139	1	Washer
38	§-----	1	Diff case (See 56)
39	110532	8	Bolt
40	-----	—	Pinion (See 32)
41	123382	1	Washer
42	-----	—	Pinion (See 32)
43	123382	1	Washer
44	224083	1	Ring
45	774199	1	Bearing
46	-----	1	Pinion
47	123832	4	Bolt
47A	26E-14	4	Lockwasher
48	§-----	—	Cap (See 18)
49	1C-614	1	Bolt
50	4E-06	1	Lockwasher
51	100941	1	Lock
52	123749	1	Nut
53	675255	1	Cup
54	742261	1	Cone
55	119437	1	Diff (Inc. 25→43, 46)
56	119431	1	Body sub-assy (Inc. 26, 29→43)
57	114201	1	Gear & pinion set (Inc. 27, 46)



AXLE ASSEMBLY — REAR DRIVE

TS-7726-P





CONSTRUCTION MACHINERY DIVISION

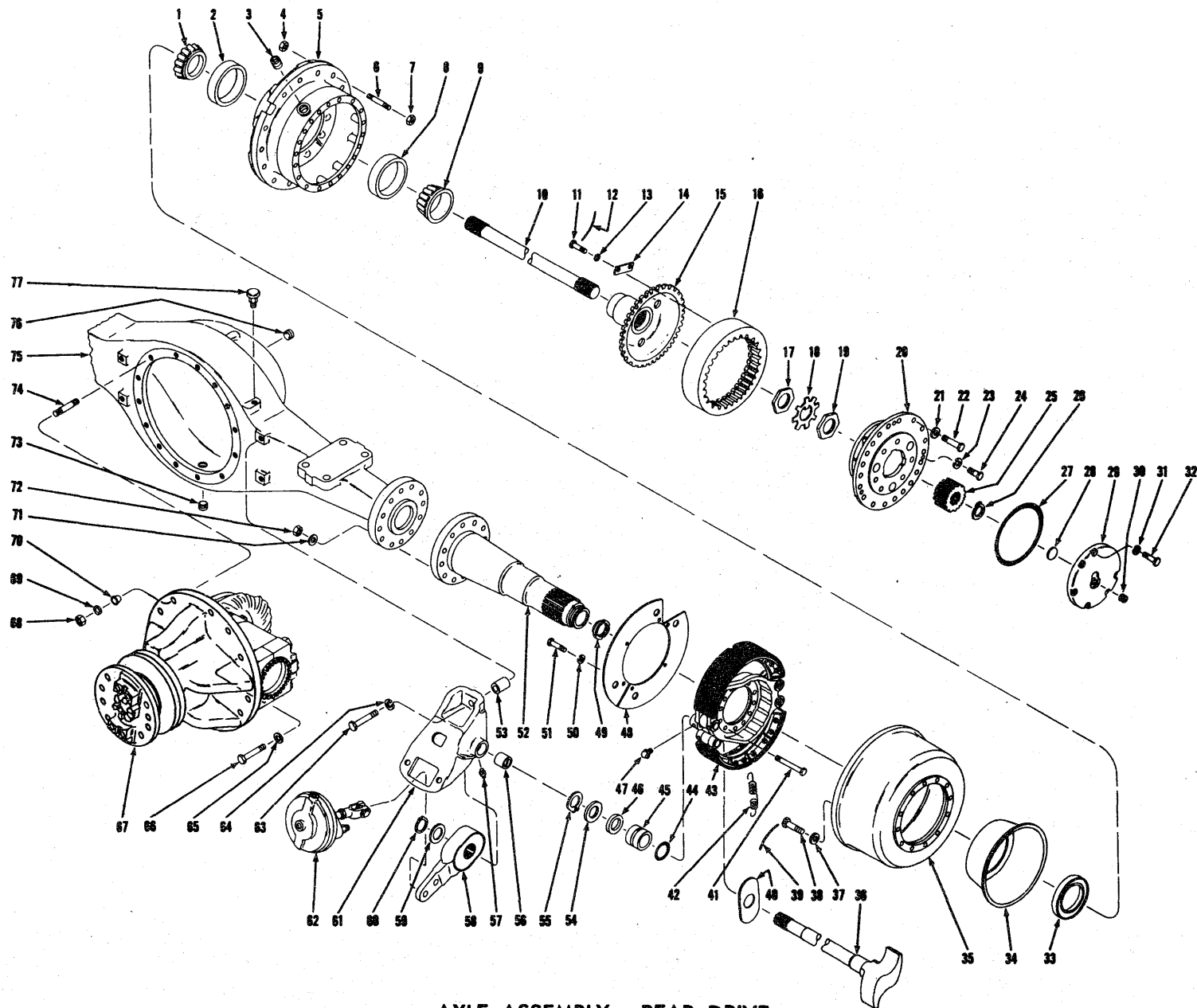


AXLE ASSEMBLY — REAR DRIVE
For Serial: Cummins — 404A101 thru 404A299
G.M. — 403A101 thru 403A299

Table with 4 columns: Item No., Part No., Description, No. Req'd. It lists various mechanical parts such as AXLE ASSY, CONE, CUP, PLUG, NUT, HUB ASSY, STUD, LKWSHR, PLATE, HUB, GEAR, WASHER, BOLT, NUT, PLANET CARRIER, and BRAKE ASSY with their respective quantities.

‡As Required
†Not Illustrated

WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE



AXLE ASSEMBLY — REAR DRIVE

TS-7726-P



CONSTRUCTION MACHINERY DIVISION



AXLE ASSEMBLY — REAR DRIVE (Continued)

For Serial: Cummins — 404A101 thru 299

G.M. — 403A101 thru 299

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
48	118041	*COVER, Brake Dust .....	4	63	1C-1056	BOLT, Bracket to Housing .....	4
48A	112695	†*PLATE, Dust Cover Reinforcing .....	2	64	4E-10	LKWSHR, Bracket to Housing .....	4
49	119853	RING, Sun Gear Thrust .....	2	65	-----	OMIT, Not Used .....	—
50	4E-06	*LKWSHR, Dust Cover .....	8	66	-----	OMIT, Not Used .....	—
51	18C-612	*BOLT, Dust Cover .....	4	66A	-----	OMIT, Not Used .....	—
51A	18C-616	*BOLT, Dust Cover .....	4	66B	-----	OMIT, Not Used .....	—
52	119852	***SPINDLE .....	2	67	-----	DIFF & CARRIER ASSY — See Index .....	—
53	110941	SPACER, Air Chamber Bracket to Housing .....	4	67A	-----	‡‡PERMATEX #2 — Diff. & Carrier to Housing .....	—
54	107736	WASHER, Cam Shaft .....	2	68	64D-09	NUT, Carrier to Housing .....	3
55	660516	RING, Bushing Retaining .....	2	69	106547	WASHER, Carrier to Housing .....	3
56	102189	BUSHING, Air Chamber Bracket .....	2	70	112295	DOWEL, Carrier to Stud .....	3
57	10H-25	FITTING, Air Chamber Bracket Grease .....	2	70A	119889	†STUD, Carrier to Housing .....	2
58	107247	**ADJUSTER, Slack — B.W. #222485 .....	2	70B	119931	†STUD, Carrier to Housing .....	2
59	107010	WASHER, Slack Adjuster .....	2	70C	112294	†STUD, Carrier to Housing .....	10
60	659764	RING, Slack Adjuster Retaining .....	2	71	104412	WASHER, Brake & Spindle to Housing .....	20
61		BRACKET ASSY, Air Chamber (Inc. 56)		72	106998	NUT, Brake & Spindle to Housing .....	20
61A	107632	LEFT HAND .....	1	73	11F-12	PLUG, Housing Drain .....	1
61B	107631	†RIGHT HAND .....	1	74	112294	STUD, Carrier to Housing .....	3
62	117697	**CHAMBER, Air — B.W. #279507 (Inc. 62A) .....	2	75	118912	HOUSING, Axle .....	1
62A	946213	**†DIAPHRAGM, Air Chamber — B.W. #234099 .....	2	75A	12F-204	†PLUG, Housing Expansion .....	1
				76	11F-12	PLUG, Housing Filler .....	1
				77	106656	BREATHER, Housing .....	1

‡As Required

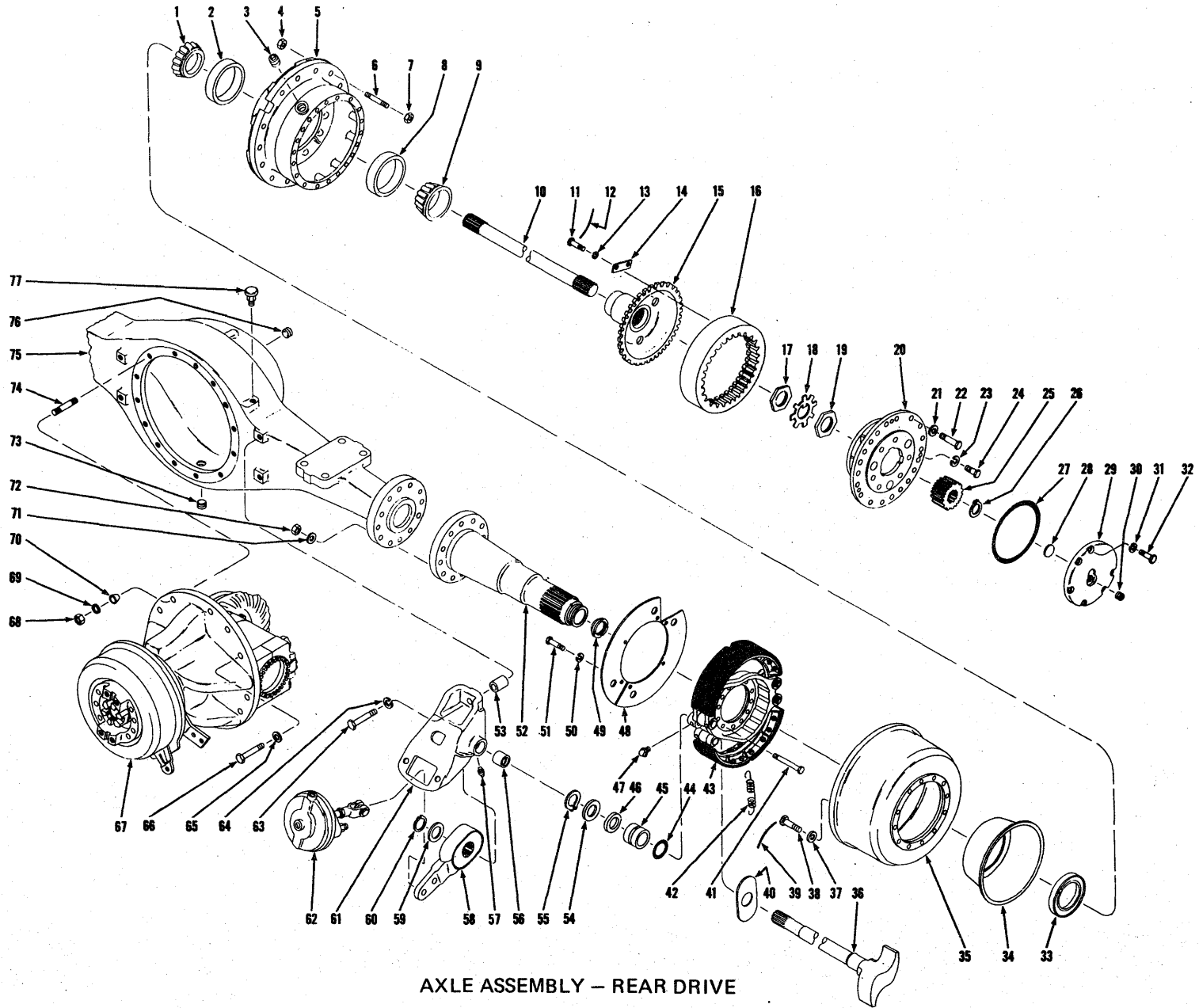
†Not Illustrated

\*NOTE: Optional Equipment — Not furnished with machine.

\*\*NOTE: Your Bendix-Westinghouse Distributor is equipped to service components of these parts.

\*\*\*NOTE: For replacement use 816023 Kit which consists of 1—123945 Spindle & 1—123947 Sleeve.

WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE



AXLE ASSEMBLY - REAR DRIVE

TS-7726

62A.2

(1B11)

PM 2462

**CONSTRUCTION MACHINERY DIVISION  
AXLE ASSEMBLY — REAR DRIVE  
For Serial: Cummins — 404A300 and after  
G.M. — 403A300 and after**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	190762	AXLE ASSY (Inc. 1 thru 47, 52 thru 77) .....	1	47	12H-15	FITTING, Brake Spider Grease .....	2
1	774025	CONE, Inner Hub Bearing .....	2	48	118041	*COVER, Brake Dust .....	4
2	774024	CUP, Inner Hub Bearing .....	2	48A	112695	†*PLATE, Dust Cover Reinforcing .....	2
3	11F-12	PLUG, Hub Filler .....	2	49	119853	RING, Sun Gear Thrust .....	2
4	121062	NUT, Wheel Stud .....	38	50	4E-06	*LKWSHR, Dust Cover .....	8
5	120850	HUB ASSY (Inc. 2, 8) .....	2	51	1C-612	*BOLT, Dust Cover .....	4
6	120218	STUD, Wheel .....	38	51A	1C-616	†*BOLT, Dust Cover .....	4
7	1515484	NUT, Wheel .....	38	52	119852	***SPINDLE .....	2
8	742262	CUP, Outer Hub Bearing .....	2	53	110941	SPACER, Air Chamber Bracket to Housing .....	4
9	742263	CONE, Outer Hub Bearing .....	2	54	107736	WASHER, Cam Shaft .....	2
10	118916	SHAFT, Axle .....	2	55	660516	RING, Bushing Retaining .....	2
11	4C-820	BOLT, Hub to Gear .....	24	56	102189	BUSHING, Air Chamber Bracket .....	2
12	-----	‡LOCKWIRE — 18 Gauge .....	—	57	12H-15	FITTING, Adjuster Slack Grease .....	2
13	4E-08	LKWSHR, Hub to Gear .....	24	58	107247	**ADJUSTER, Slack — B.W. #222485 .....	2
14	119214	PLATE, Hub to Gear Retaining .....	12	59	107010	WASHER, Slack Adjuster .....	2
15	119213	HUB, Internal Gear .....	2	60	659764	RING, Slack Adjuster Retaining .....	2
16	119211	GEAR, Internal Ring .....	2	61	-----	BRACKET ASSY, Air Chamber (Inc. 56) .....	1
17	110559	NUT, Spindle .....	2	61A	107632	LEFT HAND .....	1
18	118786	LOCK, Spindle Nut .....	2	61B	107631	†RIGHT HAND .....	1
19	110559	NUT, Spindle .....	2	62	117697	**CHAMBER, Air — B.W. #279507 (Inc. 62A) .....	2
20	-----	PLANET CARRIER — See Index .....	—	62A	946213	**†DIAPHRAGM, Air Chamber — B.W. #234099 .....	2
21	106547	WASHER, Planet Carrier to Hub .....	40	63	1C-1056	BOLT, Bracket to Housing .....	4
22	117225	BOLT, Planet Carrier to Hub .....	40	64	4E-10	LKWSHR, Bracket to Housing .....	4
23	3E-09	LKWSHR, Planet Puller Hole .....	6	65	-----	OMIT, Not Used This Application .....	—
24	1C-908	BOLT, Planet Puller Hole .....	6	66	-----	OMIT, Not Used This Application .....	—
25	117448	GEAR, Sun .....	2	67	-----	DIFF. & CARRIER ASSY — See Index .....	—
26	224023	RING, Sun Gear Retainer .....	2	67A	-----	††PERMATEX #2 — Diff. & Carrier to Housing .....	—
27	113292	O-RING, Thrust Cap .....	2	68	64D-09	NUT, Carrier to Housing .....	14
28	106457	WASHER, Sun Gear Thrust .....	2	69	106547	WASHER, Carrier to Housing .....	14
29	815565	KIT, Sun Gear Thrust Cap (Inc. 27, 28, 30, 31) .....	2	70	112295	DOWEL, Carrier to Stud .....	3
30	11F-12	PLUG, Thrust Cap .....	2	71	104412	WASHER, Brake & Spindle to Housing .....	20
31	112278	LKWSHR, Thrust Cap .....	12	72	106998	NUT, Brake & Spindle to Housing .....	20
32	1C-720	BOLT, Thrust Cap .....	12	73	11F-12	PLUG, Housing Drain .....	1
33	125248	SEAL, Hub Oil .....	2	74	112294	STUD, Carrier to Housing .....	10
34	117445	CATCHER, Oil .....	2	74A	119889	†STUD, Carrier to Housing .....	2
35	118805	DRUM, Brake .....	2	74B	119931	†STUD, Carrier to Housing .....	2
36	-----	CAM SHAFT, Brake	-----	75	121588	HOUSING, Axle .....	1
36A	111703	LEFT HAND .....	1	76	11F-12	PLUG, Housing Filler .....	1
36B	111702	†RIGHT HAND .....	1	77	121214	BREATHER, Housing .....	1
37	104412	WASHER, Brake Drum to Hub .....	24				
38	118381	BOLT, Brake Drum to Hub .....	24				
39	-----	‡LOCKWIRE, 19 Gauge .....	—				
40	107735	WASHER, Cam Shaft Thrust .....	2				
41	18C-1064	BOLT, Brake & Spindle to Housing .....	20				
42	119650	SPRING, Brake Shoe Return .....	2				
43	-----	BRAKE ASSY, Rear — See Index .....	—				
44	25K-60124	O-RING, Cam Shaft .....	2				
45	107739	BUSHING, Brake Spider .....	2				
46	11E-135	RETAINER, Cam Shaft Grease .....	2				

\*NOTE: Optional Equipment — Not furnished with machine.

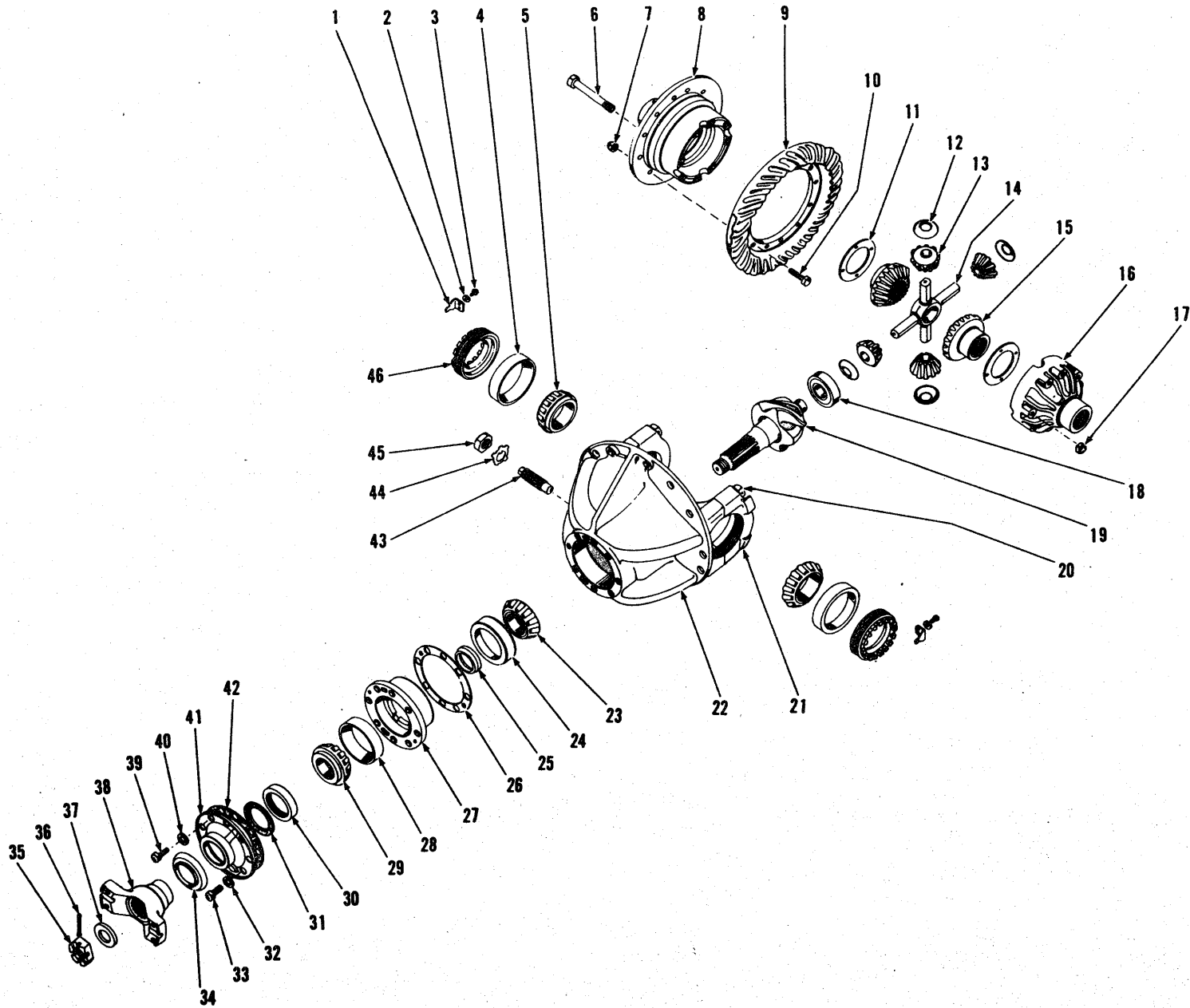
\*\*NOTE: Your Bendix-Westinghouse Distributor is equipped to service components of these parts.

‡As Required

†Not Illustrated

\*\*\*NOTE: For replacement use 816023 Kit which consists of 1—123945 Spindle & 1—123947 Sleeve.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



DIFFERENTIAL AND CARRIER ASSEMBLY — REAR DRIVE

TS-2649-P

**CONSTRUCTION MACHINERY DIVISION  
DIFFERENTIAL AND CARRIER ASSEMBLY — REAR DRIVE  
For Serial: Cummins — 404A101 thru 404A299  
G.M. — 403A101 thru 403A299**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	118511	*** DIFF. & CARRIER ASSY (Inc. 1 thru 46)	1	26B	125579	‡‡SHIM, Bearing Cage—Thick	—
1	100941	LOCK, Adjusting Nut	2	27	815987	CAGE, Outer Pinion Brg. (Inc. 24, 28)	1
2	4E-06	LKWSHR, Adjusting Nut Lock	2	28	675259	CUP, Outer Pinion Bearing	1
3	3C-614	BOLT, Adjusting Nut Lock	2	29	675260	CONE, Outer Pinion Bearing	1
4	675252	CUP, Differential Bearing	2	30	111721	SEAL, Pinion Shaft Oil	1
5	675254	CONE, Differential Bearing	2	31	101217	GASKET, Pinion Shaft Oil Seal	1
6	126625	BOLT, Differential Case	8	32	4E-10	LKWSHR, Oil Seal Retainer	7
7	86D-09	NUT, Ring Gear	12	33	1C-1032	BOLT, Oil Seal Retainer	7
8	-----	§DIFFERENTIAL CASE, Flange Half — See Item 50	1	34	101222	DEFLECTOR, Pinion Dust	1
9	-----	§RING GEAR — See Item 49	1	35	101223	NUT, Pinion Shaft	1
10	101196	BOLT, Ring Gear	12	36	1F-740	COTTER, Pinion Shaft Nut	1
11	118478	WASHER, Side Gear Thrust	2	37	101224	WASHER, Pinion Shaft	1
12	101204	WASHER, Differential Pinion Thrust	4	38	108871	FLANGE, Companion	1
13	815746	PINION KIT, Differential	1	39	1C-828	BOLT, Oil Seal Retainer Locating	1
14	117105	SPIDER, Differential	1	40	4E-08	LKWSHR, Oil Seal Retainer Locating	1
15	106206	GEAR, Differential Side	2	41	101214	RETAINER, Oil Seal	1
16	-----	§DIFFERENTIAL CASE, Plain Half — See Item 50	1	42	107483	§GASKET, Oil Seal Retainer — See Note "A"	1
17	86D-10	NUT, Differential Case	8	43	101226	**SCREW, Differential Thrust	1
18	675265	BEARING, Inner Pinion	1	44	101227	**LOCK, Differential Thrust Screw	1
19	-----	§PINION — See Item 49	—	45	8D-18	**NUT, Differential Thrust Screw	1
20	123831	BOLT, Carrier Cap	4	46	123748	NUT, Differential Adjusting	2
20A	111658	†WASHER, Carrier Cap	4	47	121244	† DIFFERENTIAL ASSY (Inc. 6 thru 17, 19)	1
21	-----	§CAP, Differential Carrier — See Item 22	2	48	121237	† DIFFERENTIAL BODY SUB- ASSY (Inc. 6, 8, 11 thru 17)	1
22	815521	*CARRIER ASSY, Differential (Inc. 20, 20A, 21)	1	49	116632	† GEAR & PINION SET (Inc. 9, 19)	1
23	675263	CONE, Center Pinion Bearing	1	50	815864	† DIFFERENTIAL CASE KIT (Inc. 6, 8, 11, 12, 16, 17)	1
24	675262	CUP, Center Pinion Bearing	1				
25	815200	SPACER KIT, Pinion Bearing	1				
26	114354	‡SHIM, Bearing Cage—Thin	—				
26A	125578	‡‡SHIM, Bearing Cage—Medium	—				

§ Not Sold Separately    † Not Illustrated    ‡ As Required

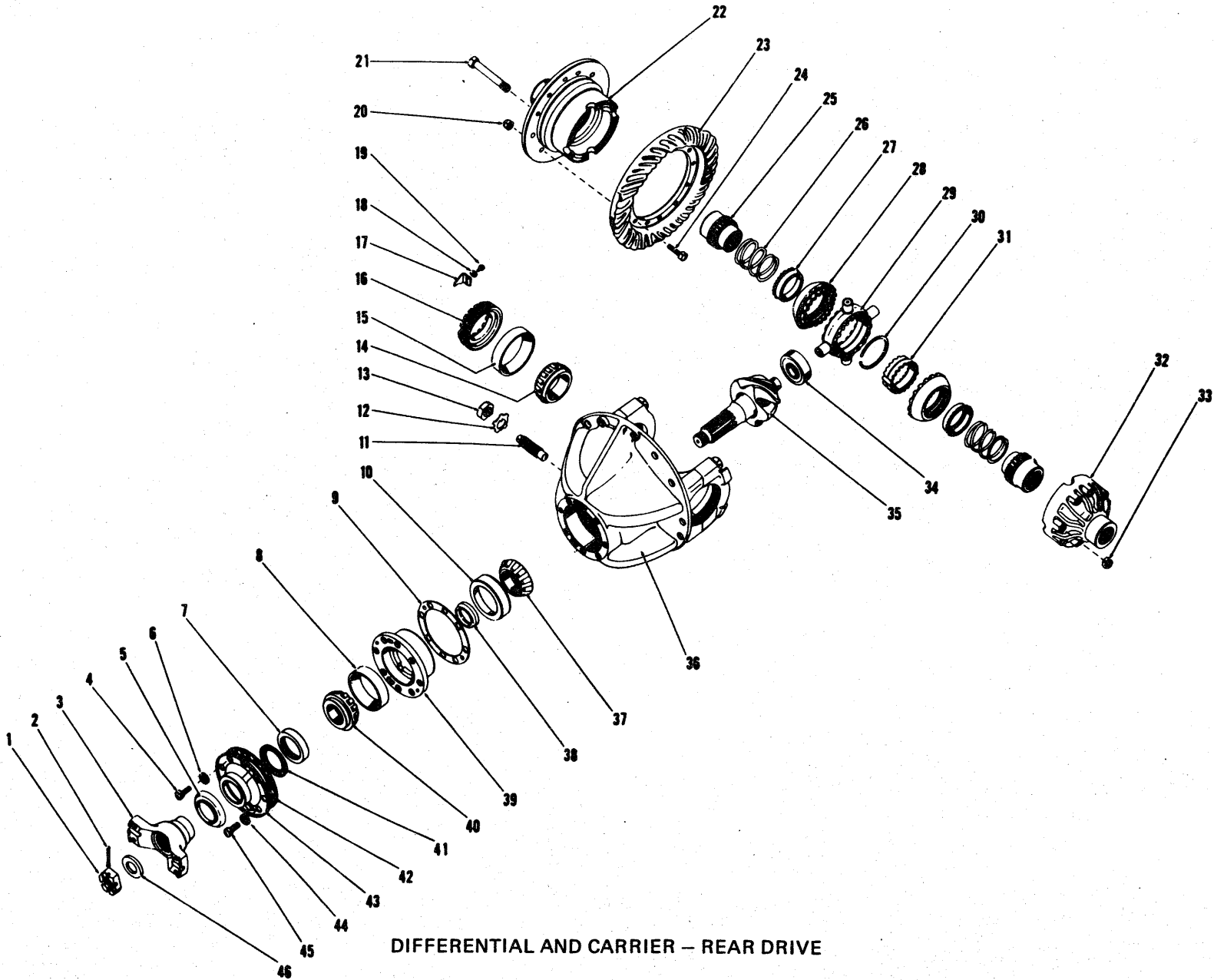
\*NOTE: 815521 Differential and Carrier Assembly also includes 1—101226 Thrust Screw, 1—101227 Thrust Screw Lock, 1—18D-18 Thrust Screw Nut, 3—64D-09 Stud Nut, 7—17C-928 Carrier Bolt, 2—17-932 Carrier Bolt, 2—17C-940 Carrier Bolt, 3—112294 Carrier Stud, 3—112295 Taper Dowel and 14—106547 Carrier Washer.

\*\*NOTE: Some units not equipped with this feature.

\*\*\*NOTE: For replacement use 122840.

NOTE "A": For replacement use Loctite #277.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



DIFFERENTIAL AND CARRIER - REAR DRIVE

TS-9759

64A.2

(1B21)

PM 2462



**CONSTRUCTION MACHINERY DIVISION  
DIFFERENTIAL AND CARRIER ASSEMBLY — REAR DRIVE  
For Serial: Cummins — 404A300 and after  
G.M. — 403A300 and after**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	119152	DIFF. & CARRIER ASSY (Inc. 1 thru 46) .....	1	27	882198	RETAINER, Spring .....	2
B	127566	NO-SPIN UNIT (Inc. 25 thru 31) .....	1	28	960899	CAM & CLUTCH .....	2
1	101223	NUT, Pinion Shaft .....	1	29	875913	SPIDER .....	1
2	1F-740	COTTER, Pinion Shaft Nut ..	1	30	-----	§RING, Snap — See 29 .....	1
3	108871	FLANGE, Companion .....	1	31	-----	§CENTER CAM — See 29 .....	1
4	1C-828	BOLT, Oil Seal Retainer .....	1	32	-----	§DIFFERENTIAL CASE, Plain Half — See 50 .....	—
5	101222	DEFLECTOR, Pinion Dust .....	1	33	126614	NUT, Differential Case .....	8
6	4E-08	LKWSHR, Oil Seal Retainer ..	1	34	675265	BEARING, Inner Pinion .....	1
7	111721	SEAL, Pinion Shaft Oil .....	1	35	-----	§PINION — See 49 .....	—
8	675259	CUP, Outer Pinion Brg. ....	1	36	815521	*CARRIER ASSY, Differential (Inc. 36A, 36B) .....	1
9	114351	‡SHIM, Brg. Cage — Thin .....	—	36A	123831	†BOLT, Carrier Cap .....	4
9A	125578	†‡SHIM, Brg. Cage — Medium ..	—	36B	111658	†WASHER, Carrier Cap .....	4
9B	125579	†‡SHIM, Brg. Cage — Thick .....	—	37	675263	CONE, Center Pinion Brg. ...	1
10	675262	CUP, Center Pinion Brg. ....	1	38	815200	SPACER KIT, Pinion Brg. ...	1
11	121241	SCREW, Differential Thrust ..	1	39	815987	CAGE, Outer Pinion Brg. (Inc. 8, 10) .....	1
12	101227	LOCK, Diff. Thrust Screw .....	1	40	675260	CONE, Outer Pinion Brg. ...	1
13	8D-18	NUT, Diff. Thrust Screw .....	1	41	101217	GASKET, Pinion Oil Seal ...	1
14	675254	CONE, Differential Bearing ..	2	43	101214	RETAINER, Oil Seal .....	1
15	675252	CUP, Differential Bearing ....	2	44	4E-10	LKWSHR, Seal Retainer .....	7
16	123748	NUT, Diff. Adjusting .....	2	45	1C-1032	BOLT, Oil Seal Retainer .....	7
17	100941	LOCK, Adjusting Nut .....	2	46	101224	WASHER, Pinion Shaft .....	1
18	4E-06	LKWSHR, Adjusting Nut .....	2	47	121245	†DIFFERENTIAL ASSY (Inc. 21 thru 33, 35) .....	1
19	3C-614	BOLT, Adjusting Nut Lock ....	2	48	121236	†DIFFERENTIAL BODY SUB. ASSY (Inc. 21, 22, 25 thru 33) .....	1
20	86D-09	NUT, Ring Gear .....	12	49	116632	†GEAR & PINION SET (Inc. 22, 35) .....	1
21	126625	BOLT, Differential Case .....	8	50	126949	†DIFFERENTIAL CASE KIT (Inc. 21, 22, 32, 33) .....	1
22	-----	§DIFFERENTIAL CASE, Flange Half — See 50 .....	—				
23	-----	§RING GEAR — See 49 .....	—				
24	101196	BOLT, Ring Gear .....	12				
25	882199	GEAR, Side .....	2				
26	882197	SPRING .....	2				

§Not Sold Separately

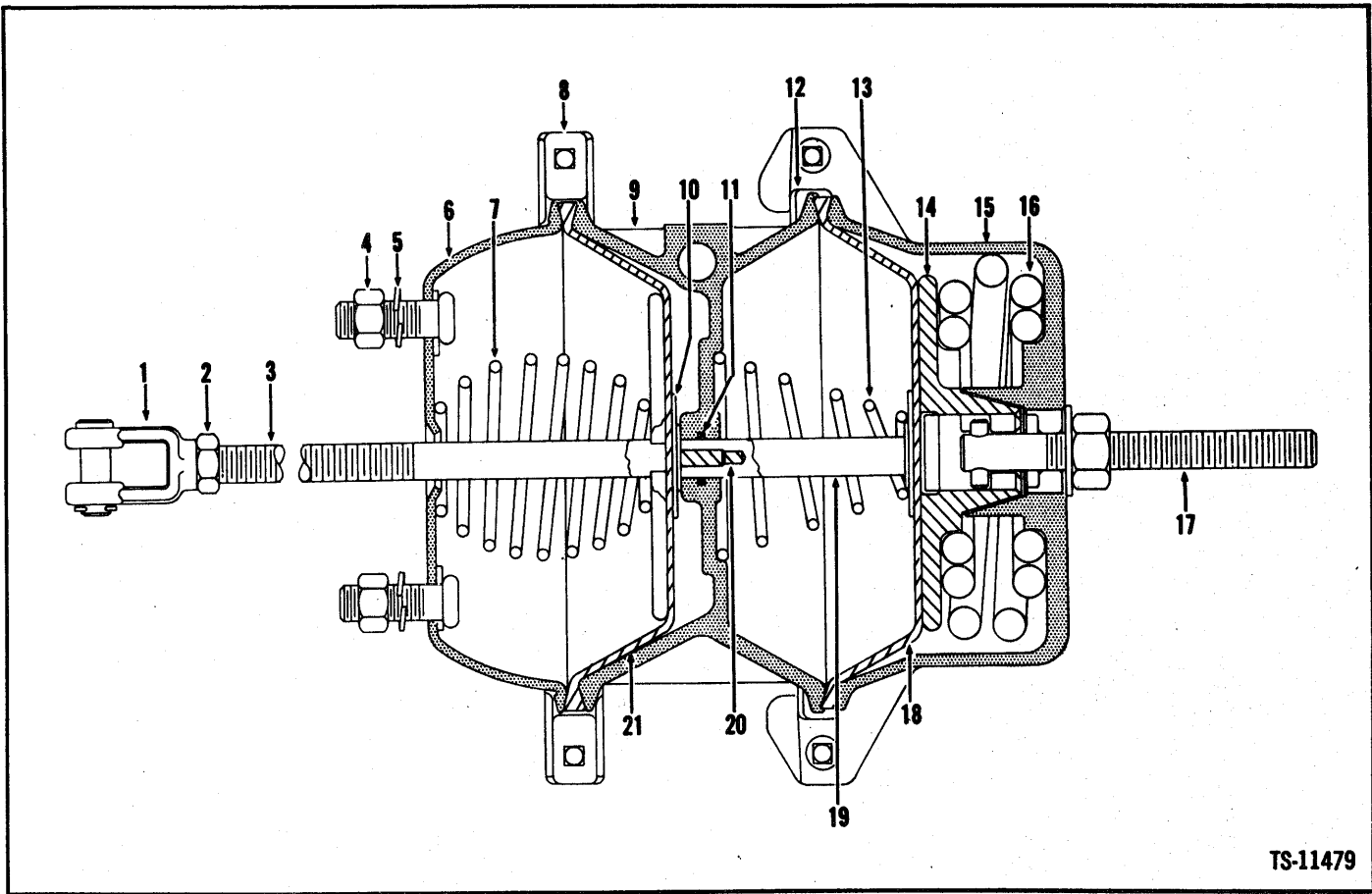
†Not Illustrated

‡As Required

\*NOTE: 815521 Carrier Assembly also includes 1 — 101226 Thrust Screw, 1 — 101227 Thrust Screw Lock, 1 — 8D-18 Thrust Screw Nut, 3 — 64D-09 Stud Nut, 7 — 23C-928 Carrier Bolt, 2 — 23C-932 Carrier Bolt, 2 — 23C-940 Carrier Bolt, 3 — 112294 Carrier Stud, 3 — 112295 Taper Dowel and 14 — 106547 Carrier Washer.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**





No.	Part No.	Qty.	Description
A	<sup>1,2</sup> 123159	2	Air chamber
1	<sup>3</sup> -----	1	Clevis
2	8D-10	1	Nut jam
3	<sup>4</sup> 960234	1	Pushrod assy
4	62D-10	2	Nut
5	23E-10	2	Lockwasher
6	960236	1	Housing assy
7	960235	1	Spring
8	947377	1	Clamp assy
9	947376	1	Adapter
10	947363	1	Plate
11	25K-30020	1	O-ring
12	947377	1	Clamp
13	947368	1	Spring
14	<sup>5</sup> -----	1	Plate
15	<sup>5</sup> -----	1	Chamber air
16	<sup>5</sup> -----	1	Spring
17	947369	1	Release stud assy
18	882444	1	Diaphragm
19	947378	1	Pushrod adapter
20	947370	2	Screw
21	882444	1	Diaphragm

<sup>1</sup>Inc. 1 → 21

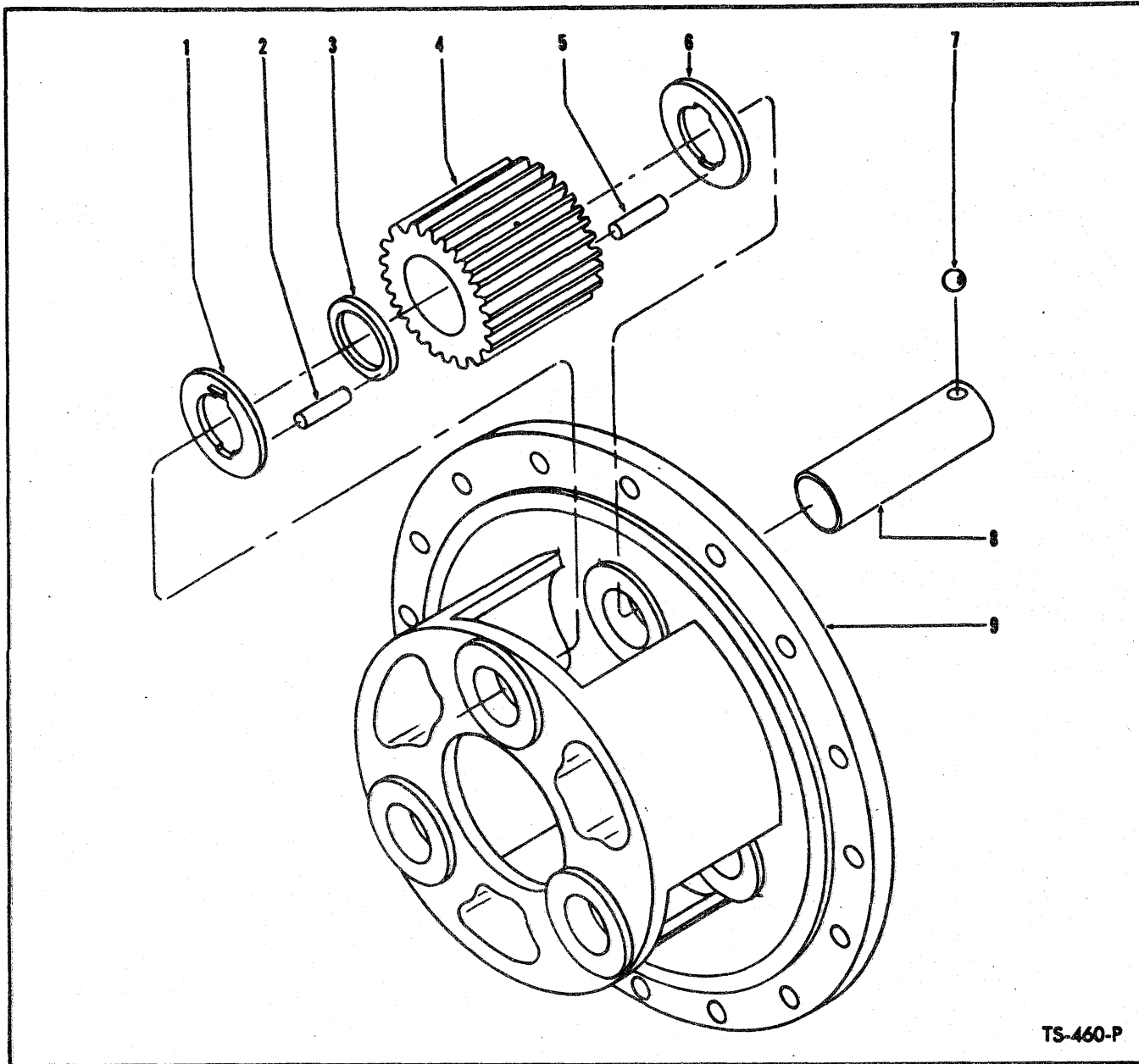
<sup>2</sup>Two (2) Air Chambers used on machine. Quantities are for one (1) Air Chamber.

<sup>3</sup>See 3

<sup>4</sup>Inc. 1, 2

<sup>5</sup>See A

\*S/N Cummins 404A556, 573, 575, → 579, 582 & →  
G.M. 403A563, 565, 568 & →

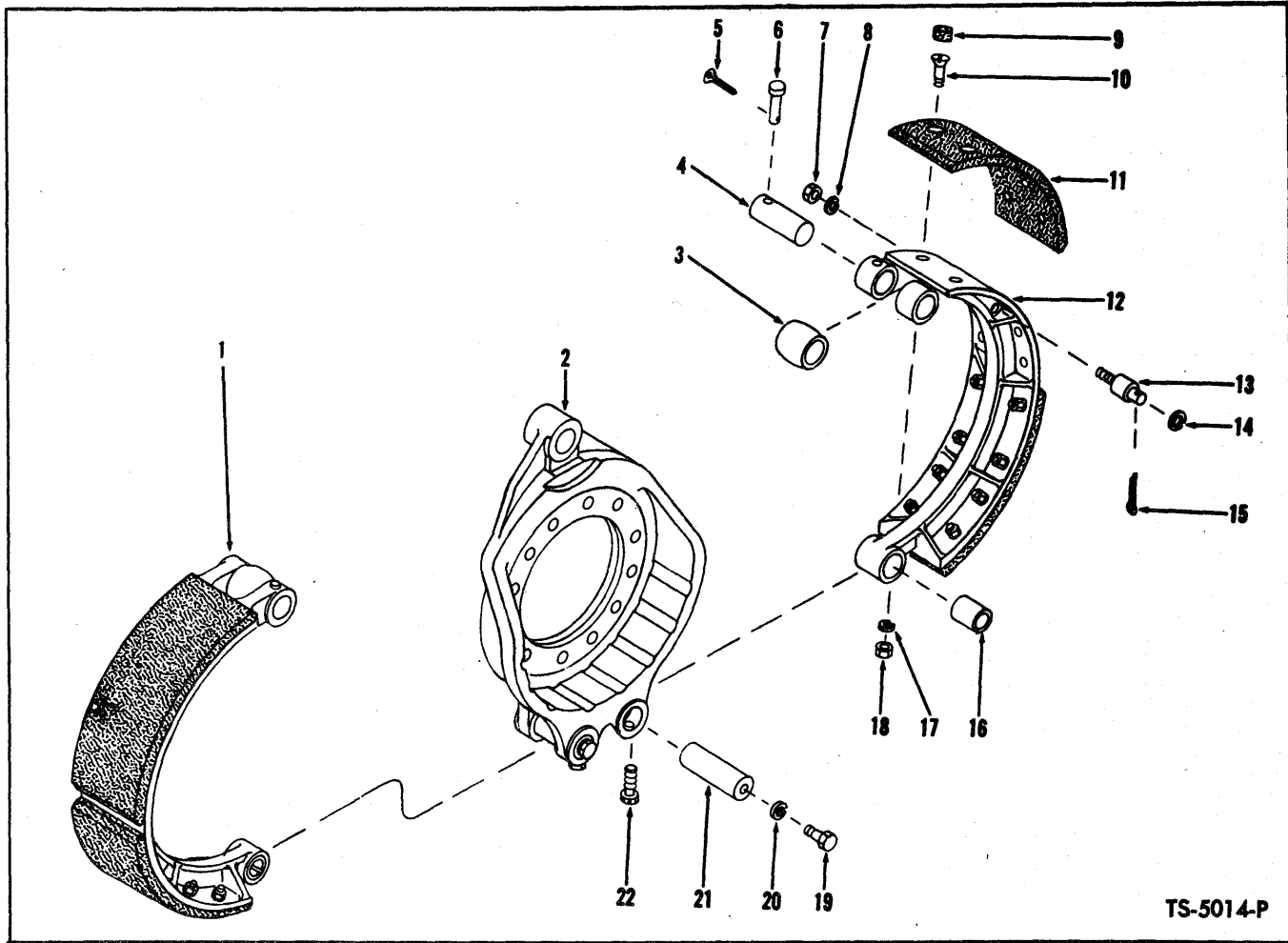


TS-460-P

**PLANET CARRIER ASSEMBLY – FRONT AND REAR**

Item No.	Part No. FRONT	Part No. REAR	Description	No. Req'd. FRONT	No. Req'd. REAR
A	121933	119021	CARRIER ASSY (Inc. 1 thru 9)	2	2
NOTE: Two Carriers are used on axle – Quantities listed below are for (1) Carrier.					
1	118774	106357	WASHER, Pinion Thrust	3	3
2	118803	106358	ROLLER, Pinion	84	75
3	118775	106359	SPACER, Pinion Roller	3	3
4	118776	116584	PINION	3	3
5	118803	106358	ROLLER, Pinion	84	75
6	118774	106357	WASHER, Pinion Thrust	3	3
7	10J-12	10J-12	BALL, Pinion Shaft Lock	3	3
8	118773	106355	SHAFT, Pinion	3	3
9	121934	117505	CARRIER, Planet	1	1

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



TS-5014-P

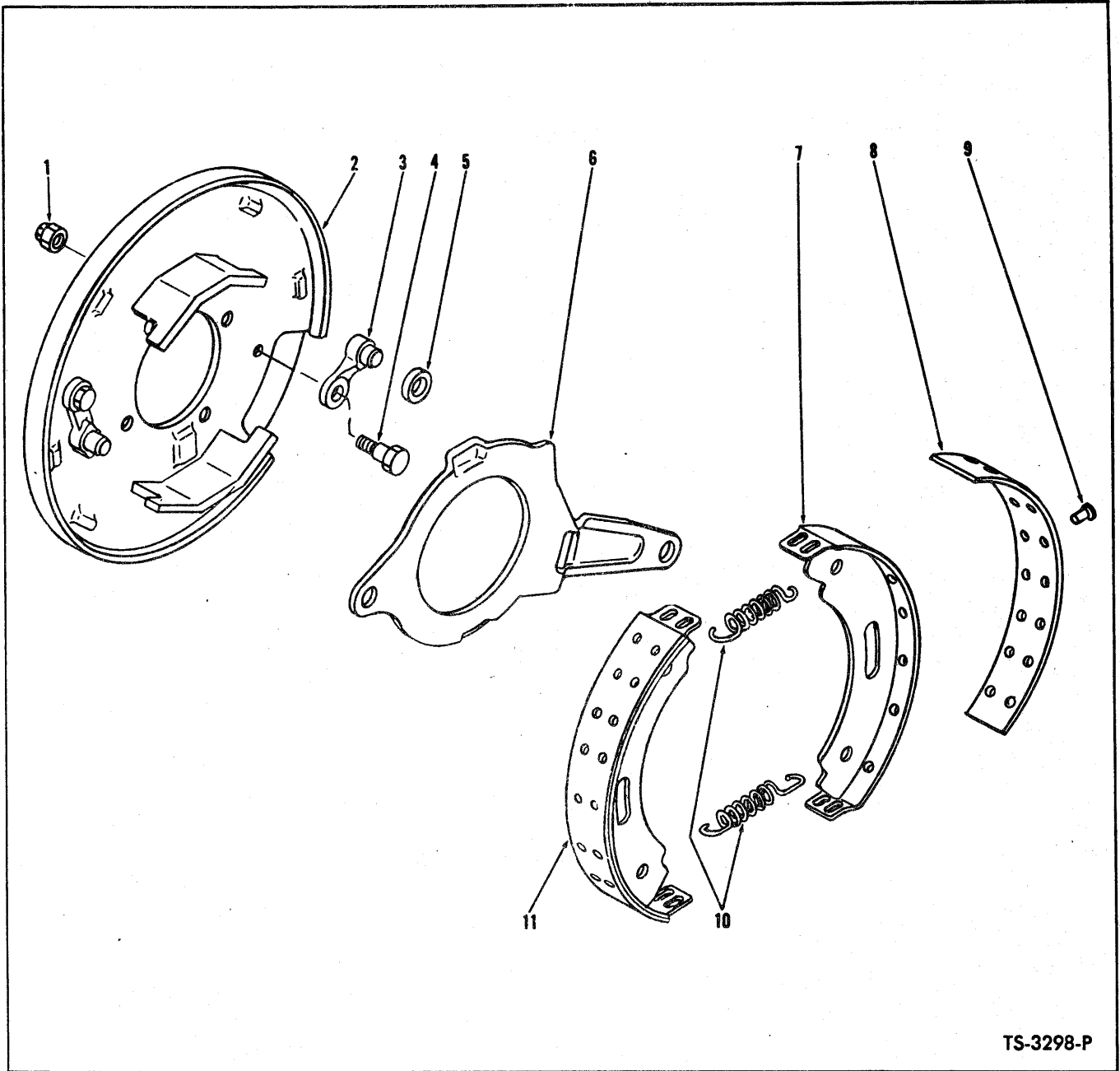
**BRAKE ASSEMBLY — FRONT AND REAR**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	119619	BRAKE ASSY, Rear (Inc. 1, 2A, 3 thru 13, 16 thru 22) ...	2	9	113249	PLUG, Brake Lining .....	32
B	120266	BRAKE ASSY, Front (Inc. 1, 2B, 3 thru 13, 16 thru 22) ...	2	10	107706	SCREW, Lining to Shoe .....	32
<b>NOTE: 2 Brake Assemblies used on each axle — Quantities listed below are for 1 Brake Assembly.</b>							
1	114299	SHOE, Brake (Inc. 3 thru 6, 9 thru 12, 16, 17, 18) .....	2	11		LINING, Brake Shoe	
2		SPIDER, Brake		11A	114301	STANDARD .....	4
2A	112410	Rear Brake .....	1	11B	114302	OVERSIZE (1/8") .....	4
2B	118767	Front Brake .....	1	12		§SHOE, Brake — See 1 .....	—
3	112210	*ROLLER, Brake Cam .....	2	13	112216	PIN, Spring Anchor .....	2
4	112211	*PIN, Brake Cam Roller .....	2	14	25E-21	WASHER, Spring Anchor .....	2
5	1F-308	COTTER, Lock Pin .....	2	15	1F-412	COTTER, Anchor Pin .....	2
6	815971	PIN, Roller Pin Lock .....	2	16	112212	*BUSHING, Brake Shoe .....	2
7	62D-06	NUT, Spring Anchor Pin .....	2	17	24E-06	LKWSHR, Lining to Shoe .....	32
8	4E-06	LKWSHR, Anchor Pin .....	2	18	62D-06	NUT, Lining to Shoe .....	32
				19	1C-812	BOLT, Puller Hole Plug .....	2
				20	4E-08	LKWSHR, Hole Plug .....	2
				21	112213	PIN, Brake Shoe Anchor .....	2
				22	109597	SCREW, Anchor Pin Set .....	2

†Not Illustrated §Not Sold Separately

\*NOTE: For replacement use 840581 Kit, which consists of 2—126246 Roller, 4—25K-40028 "O" Ring, 2—126247 Pin, 4—126248 Bushing, 2—123821 Pin, & 2—123823 Pin.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



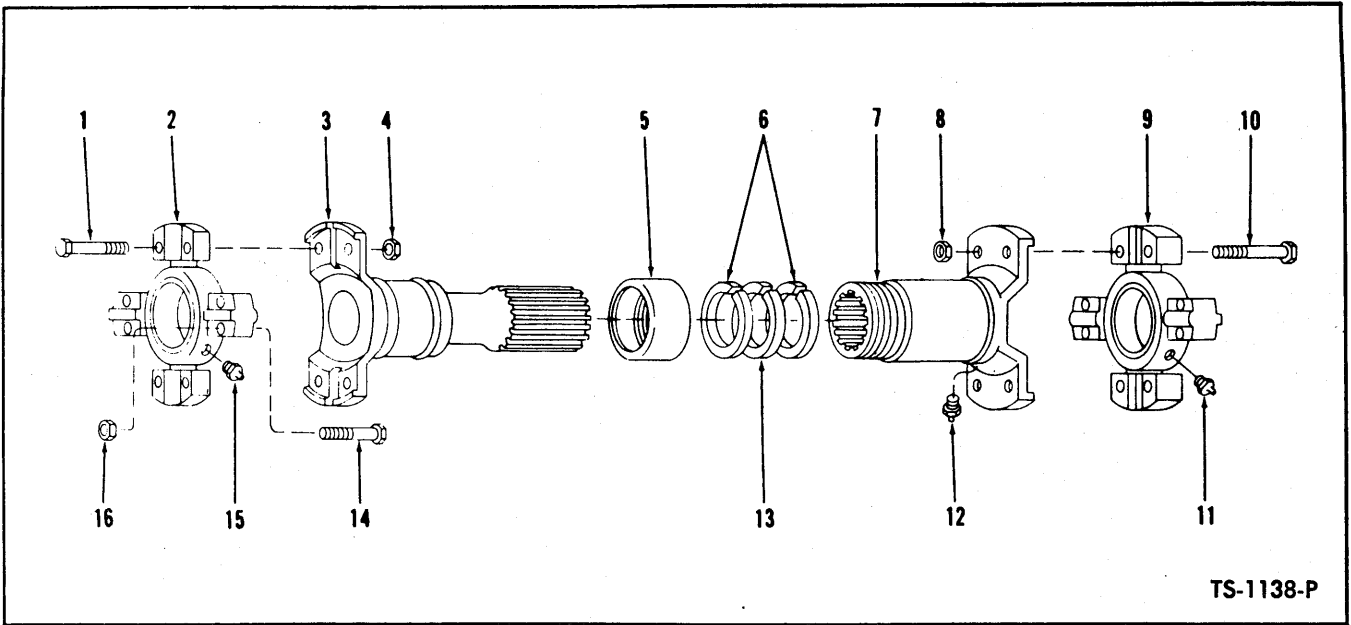
TS-3298-P

**PARKING BRAKE ASSEMBLY**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	111696	BRAKE ASSY (Inc. 1 thru 11)...	1	6	220965	LEVER, Operating Cam.....	1
1	-----	§NUT, Pawl to Plate — See Item 3.....	2	7	-----	§SHOE, Brake — See Item 11...	2
2	945047	PLATE, Brake Backing.....	1	8	942405	LINING KIT, Brake (Inc. 9)....	1
3	886719	PAWL KIT, Brake (Inc. 1, 4, 5)	2	9	945051	RIVET, Lining to Shoe .....	28
4	-----	§BOLT, Pawl to Plate — See Item 3.....	2	10	220969	SPRING, Shoe Return .....	2
5	220968	ROLLER, Brake Actuating .....	1	11	872712	SHOE ASSY, Brake (Inc. 7, 8, 9) .....	2

§Not Sold Separately

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



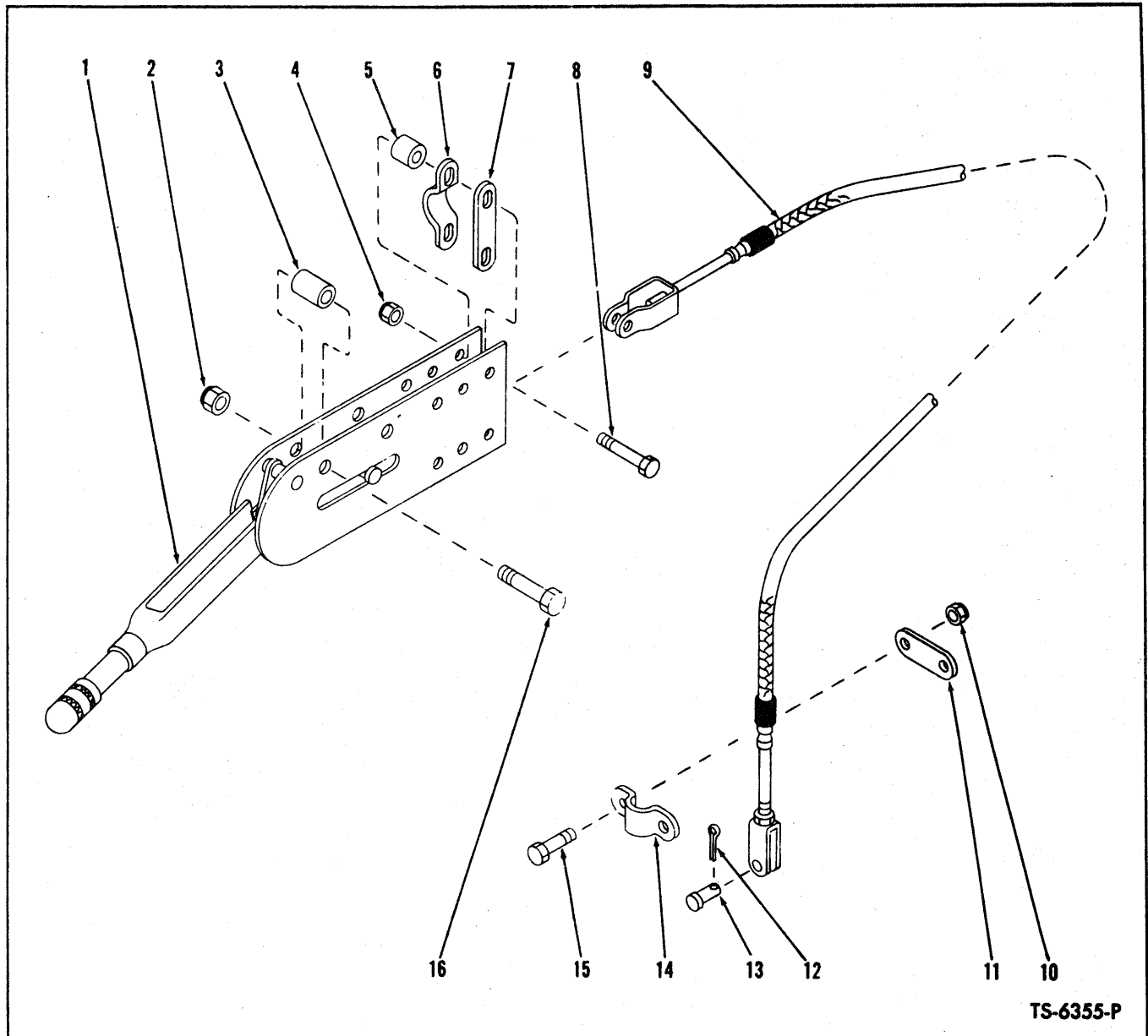
TS-1138-P

**PROPELLER SHAFT ASSEMBLIES**

Item No.	Description	Transmission to Rear Axle	Converter to Transmission	Mid Mount Bearing to Front Axle	Transmission to Mid Mount Bearing (Rear)	No. Req'd.
A	PROPELLER SHAFT ASSY (Inc. 1 thru 16) .....	556432	1526594	1536787	513928	1
B	KIT, Dust Cap (Inc. 5, 6, 13) .....	980615	-----	-----	-----	1
1	BOLT, Spider & Bearing to Tube .....	940229	18C632	940229	940229	4
2	SPIDER & BEARING ASSY .....	946641	944862	942735	942735	1
3	TUBE .....	946642	947245	947821	946101	1
4	NUT, Spider & Bearing to Tube .....	8D-08	8D-06	8D-08	8D-08	4
5	RETAINER, Felt .....	See "B"	940090	940250	940250	1
6	WASHER, Felt Retainer .....	See "B"	940091	940251	940251	2
7	SLIP YOKE .....	946643	940224	942734	942734	1
8	NUT, Spider & Bearing to Slip Yoke .....	8D-08	8D-06	8D-08	8D-08	4
9	SPIDER & BEARING ASSY .....	946641	944862	942735	942735	1
10	BOLT, Spider & Bearing to Slip Yoke .....	940229	18C632	940229	940229	4
11	FITTING, Spider & Bearing Grease .....	10H-35	10H-35	944688	10H-35	1
12	FITTING, Slip Yoke Grease .....	10H-35	10H-25	10H-25	10H-25	1
13	FELT WASHER .....	See "B"	940092	942749	942749	1
14	BOLT, Spider & Bearing Attaching .....	940229	18C632	940229	940229	8
15	FITTING, Spider & Bearing Grease .....	10H-35	10H-35	944688	10H-35	1
16	NUT, Spider & Bearing Attaching .....	8D-08	8D-06	8D-08	8D-08	8

†Not Illustrated

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



TS-6355-P

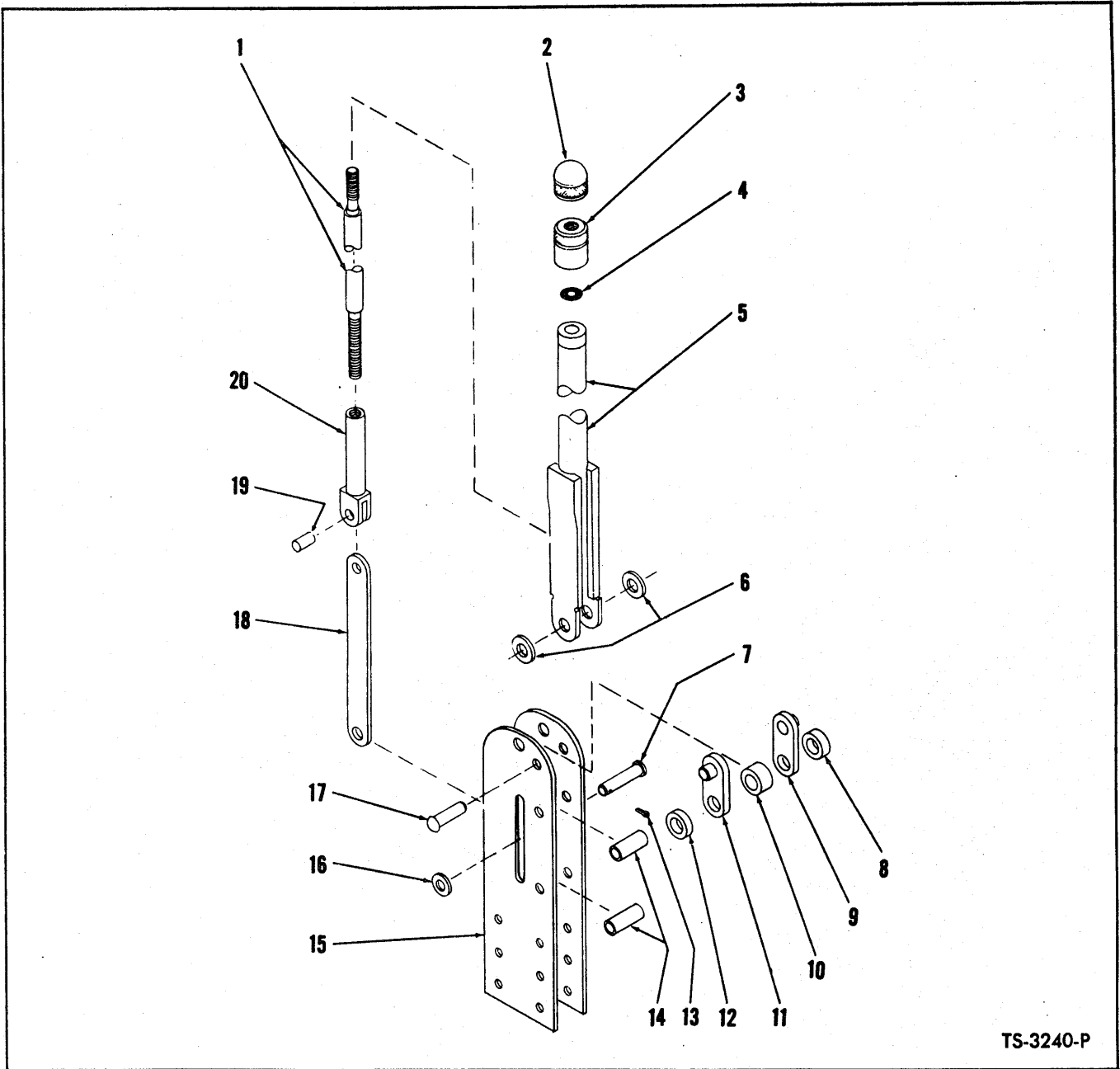
**PARKING BRAKE CONTROLS**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	HAND BRAKE LEVER ASSY — See Index .....	—	8	24C-528	BOLT, Cable Clamp to Lever	2
2	18D-06	NUT, Lever Mounting .....	2	9	1518445	CABLE, Parking Brake .....	1
2A	545006	†SPACER, Lever Mounting .....	1	10	18D-05	NUT, Clamp .....	2
3	545005	SPACER, Lever Mounting .....	2	11	645092	LINK, Cable Clamp .....	1
4	18D-05	NUT, Cable Mounting .....	2	12	1F-312	COTTER, Clevis Pin .....	1
4A	545006	†SPACER, Lever Mounting .....	1	13	4F-06106	PIN, Cable Clevis .....	1
5	545006	SPACER, Cable Mounting .....	2	14	544512	CLAMP, Cable .....	1
6	544512	CLAMP, Cable .....	1	15	24C-516	BOLT, Cable Clamp to Lug .....	2
7	645092	LINK, Cable Clamp .....	1	16	24C-644	BOLT, Lever Mounting .....	2

†Not Illustrated

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**





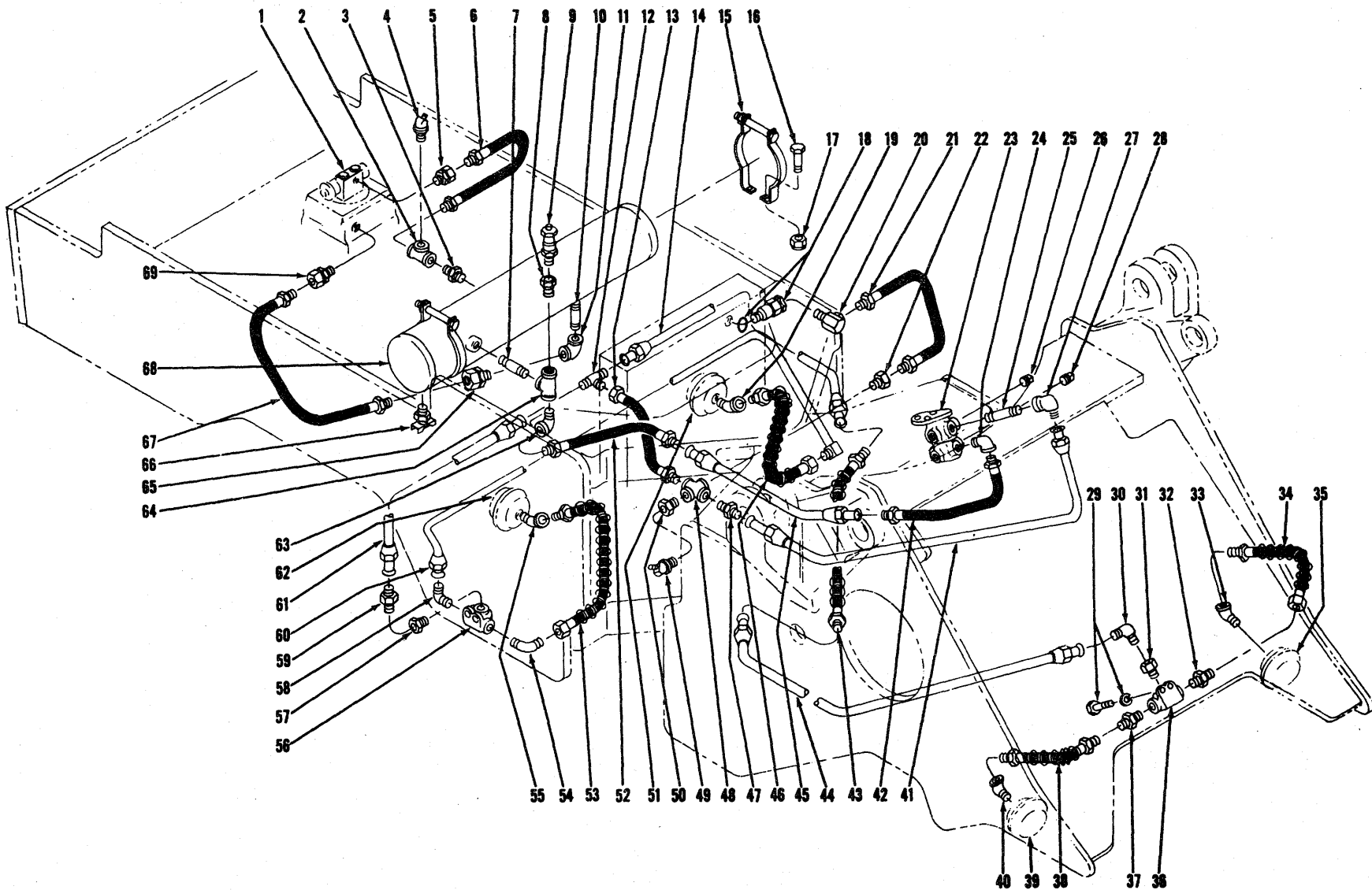
TS-3240-P

**PARKING BRAKE LEVER ASSEMBLY**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	3951954	LEVER ASSY (Inc. 1 thru 20)	1	10	862655	SPACER, Pivot Bracket	1
1	866349	SCREW, Adjusting	1	11	862653	BRACKET, Pivot	1
2	949370	CAP, Adjusting Knob (Inc. 3)	1	12	862656	SPACER, Pivot Bracket	1
3	-----	§BASE, Adjusting Knob (See 2)	1	13	1F-312	COTTER, Link Pivot Pin	1
4	25K-30012	O-RING	1	14	645095	SPACER, Mounting Bracket	2
5	-----	§BODY, Brake Lever - See A	1	15	944969	BRACKET, Lever Mounting	2
6	25E-18	WASHER, Body to Bracket	2	16	25E-15	WASHER, Link Pivot Pin	1
7	862738	PIN, Adjusting Screw Link Pivot	1	17	-----	§RIVET, Pivot - See A	1
8	862656	SPACER, Pivot Bracket	1	18	862652	LINK, Adjusting Screw	1
9	862653	BRACKET, Pivot	1	19	941238	PIN, Link to Tube	1
				20	-----	§TUBE, Adjusting Screw-See A	1

§Not Sold Separately

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



BRAKE AIR LINES — CUMMINS

TS-6340-P

**BRAKE AIR LINES – CUMMINS**

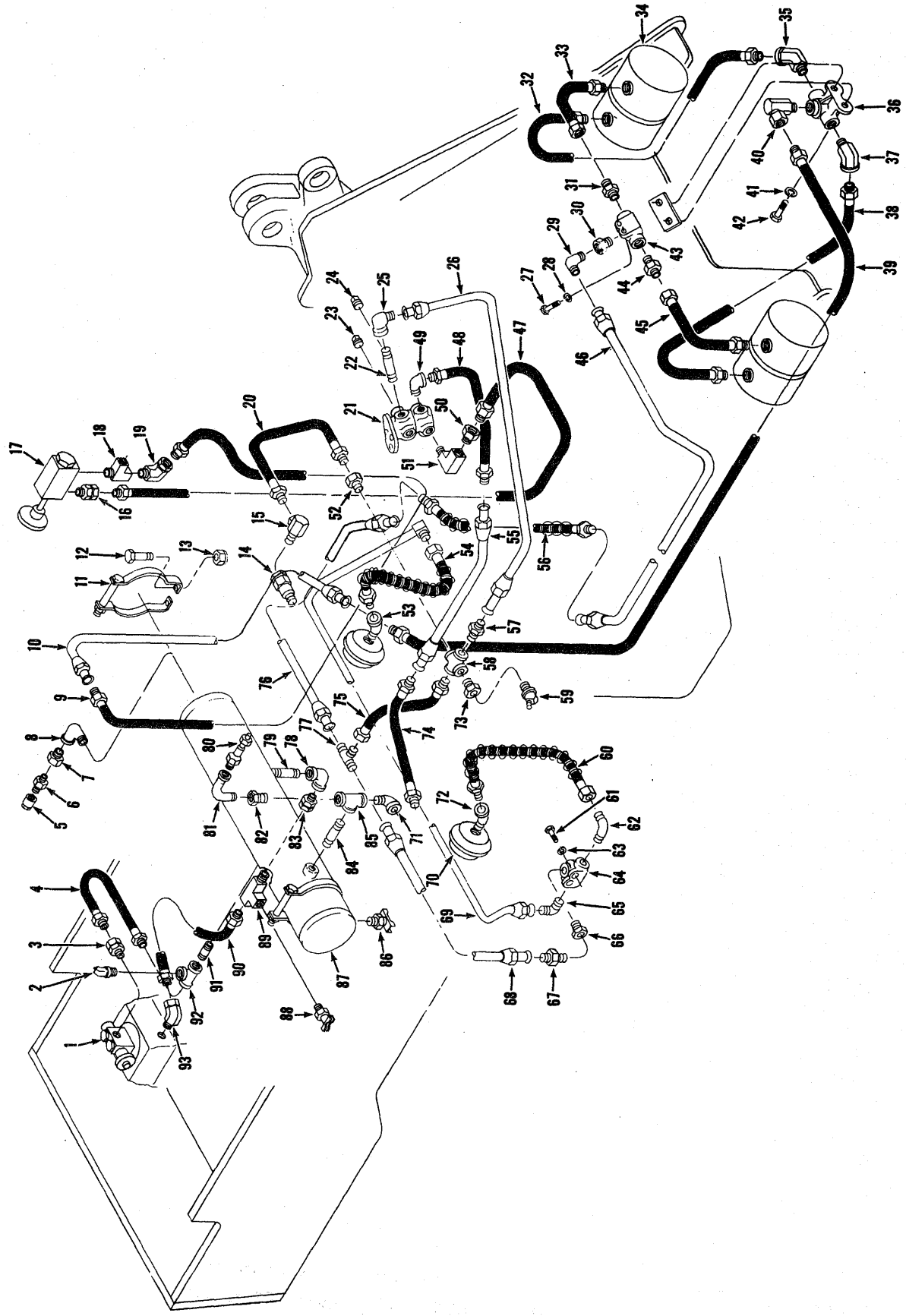
For Serial: 404A101 thru 555, 557 thru 572, 574, 580, 581, 404A101CAC thru 404A594CAC

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	GOVERNOR – See Engine Manual .....	—	34	571697	HOSE, Q.R.V. to Chamber....	1
2	18F-1	TEE, Reservoir .....	1	35	-----	AIR CHAMBER – See Index..	—
3	5K-106	NIPPLE, Res. to Tee .....	1	36	521439	*VALVE, Quick Release (B.W. #228691) .....	1
4	1534135	UNIT, Air Press. Sender .....	1	37	38F-9	CONNECTOR, Q.R.V. ....	1
4A	14D-10	†NUT, Sender Unit .....	1	38	571697	HOSE, Q.R.V. to Chamber ....	1
4B	14E-10	†LKWSHR, Sender Unit .....	1	39	-----	AIR CHAMBER – See Index ..	—
5	36F-1	ADAPTER UNION .....	1	40	26F-2	ELBOW, Air Chamber .....	1
6	539050	HOSE, Gov. to Res. ....	1	41	571693	TUBE, Valve to Tee .....	1
7	5K-410	NIPPLE, Res. to Tee .....	1	42	571695	HOSE, Valve to Res. ....	1
8	19F-5	BUSHING, Tee to Valve .....	1	43	1525177	HOSE, Center Pivot .....	1
9	507815	VALVE, Safety .....	1	44	1525163	TUBE, Hose to Q.R.V. ....	1
10	1530283	STANDPIPE, Air Res. ....	1	45	568581	TUBE, Res. to Valve .....	1
11	24F-4	ELBOW, Valve .....	1	46	568609	HOSE, Air Chamber .....	1
12	44F-7	TEE, Hose to Tubes .....	1	47	38F-10	CONNECTOR, Tube .....	1
13	571694	HOSE, Cross to Tee .....	1	48	21F-4	CROSS, Connecting .....	1
14	568576	TUBE, Tee to Frame .....	1	49	636260	SWITCH, Pressure .....	1
15	527685	*BRACKET, Res. Mtg. (B.W. #205903) .....	2	50	19F-4	BUSHING, Reducing .....	1
16	18C-620	BOLT, Brk. Mtg. ....	4	51	-----	AIR CHAMBER – See Index ..	—
17	18D-06	NUT, Brk. Mtg. ....	4	52	521441	HOSE, Res. to Tube .....	1
18	-----	DE-CLUTCH VALVE – See Index .....	—	53	568609	HOSE, Q.R.V. to Chamber ....	1
19	26F-2	ELBOW, Air Chamber .....	1	54	42F-8	ELBOW, Q.R.V. to Hose .....	1
20	31F-1	ADAPTER, Valve .....	1	55	26F-2	ELBOW, Air Chamber .....	1
21	540915	HOSE, Cross to Trans. ....	1	56	521439	*VALVE, Quick Release (B.W. #228691) .....	1
22	19F-4	BUSHING, Reducing .....	1	56A	18C-510	†BOLT, Q.R.V. Mtg. ....	2
23	-----	BRAKE VALVE – See Index ..	—	56B	4E-05	†LKWSHR, Q.R.V. Mtg. ....	2
24	26F-4	ELBOW, Brake Valve .....	1	57	19F-6	BUSHING, Reducing .....	1
25	36F-4	ADAPTER – Not as shown ..	1	58	42F-8	ELBOW, Q.R.V. ....	1
26	13F-08	PLUG, Brake Valve .....	2	59	38F-9	CONNECTOR, Tube .....	1
27	1535735	ELBOW, Pipe to Valve .....	1	60	568580	TUBE, Rear Cross .....	1
28	13F-04	PLUG, Brake Valve .....	4	61	568740	TUBE, Valve to Tee .....	1
29	18C-510	BOLT, Q.R.V. Mtg. ....	2	62	-----	AIR CHAMBER – See Index ..	—
29A	4E-05	LKWSHR, Q.R.V. Mtg. ....	2	63	26F-4	ELBOW, Hose to Tee .....	1
30	42F-8	ELBOW, Tube to Q.R.V. ....	1	64	18F-4	TEE .....	1
31	19F-6	BUSHING, Q.R.V. ....	1	65	593370	VALVE, Single Check .....	1
32	38F-9	CONNECTOR, Q.R.V. ....	1	66	72F-4	DRAIN COCK .....	1
33	26F-2	ELBOW, Air Chamber .....	1	67	529410	HOSE, Comp. to Res. ....	1
				68	568476	AIR RESERVOIR .....	1
				69	36F-4	ADAPTER, Compressor .....	1

†Not Illustrated

\*NOTE: Your local authorized Bendix-Westinghouse Distributor is equipped to service components of these parts.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



# Brake Air Lines — Cummins \*\*

MICHIGAN

No.	Part No.	Qty.	Description
1	1-----	—	Governor
2	1534135	1	Sender
2A	†14D-10	1	Nut
2B	†14E-10	1	Lockwasher
3	36F-1	1	Adapter union
4	539050	1	Hose
5	573750	1	Cap
6	573618	1	Valve
7	19F-2	1	Bushing
8	26F-3	1	Elbow
9	1511001	1	Hose
10	1511084	1	Tube
11	*527685	2	Bracket
12	24C-620	4	Bolt
13	18D-06	4	Nut
14	<sup>3</sup> -----	1	De-clutch valve
15	31F-1	1	Adapter union
16	36F-1	1	Adapter union
17	1545790	1	Valve
18	1549038	1	Tee
18A	†1537354	1	Switch
19	33F-1	1	Adapter union
20	540915	1	Hose
21	<sup>4</sup> -----	—	Brake valve
22	36F-4	1	Adapter union
23	13F-08	4	Plug
24	13F-04	1	Plug
25	1535735	1	Elbow
26	571693	1	Tube
27	24C-510	2	Bolt
28	4E-05	2	Lockwasher
29	42F-8	1	Elbow
30	19F-6	1	Bushing
31	38F-9	1	Connector
32	593449	1	Hose
33	571697	1	Hose
34	<sup>4</sup> -----	—	Air chamber
35	33F-2	1	Adapter union
36	1504617	1	Valve
37	33F-2	1	Adapter union
38	593449	1	Hose
39	1511002	1	Hose
40	31F-2	1	Adapter union
41	4E-05	2	Lockwasher
42	24C-510	2	Bolt
43	*521439	1	Valve
44	38F-9	1	Connector

\*Note: Your local authorized Bendix-Westinghouse distributor is equipped to furnish components of these parts.

<sup>1</sup>See Engine Parts Manual

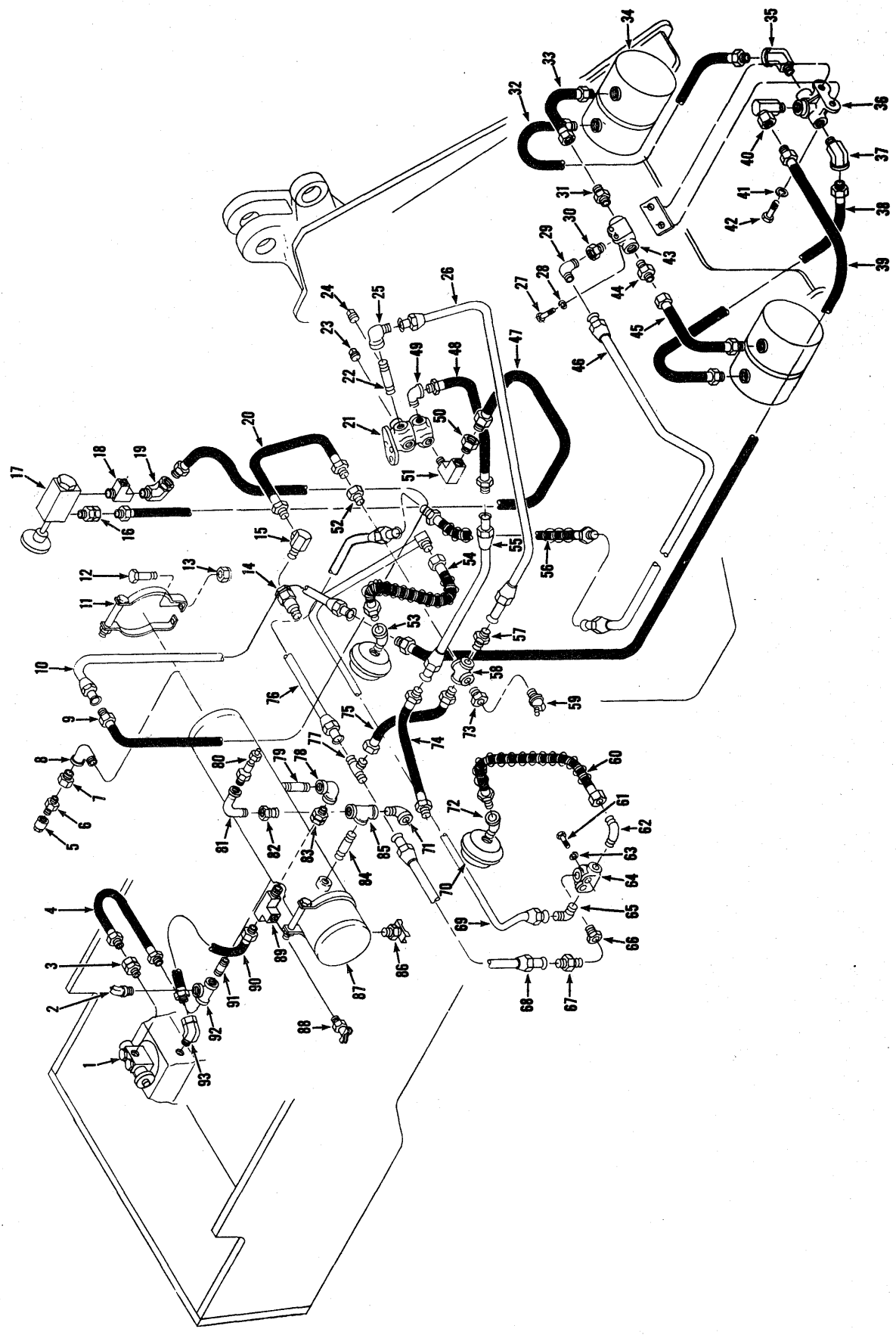
<sup>2</sup>B.W. 205903

<sup>3</sup>See PM 2462

<sup>4</sup>See Index

<sup>5</sup>B.W. 228691

\*\*S/N Cummins 404A556, 573, 575 → 579, 582 & →



## BRAKE AIR LINES – CUMMINS (Continued)\*\*

MICHIGAN

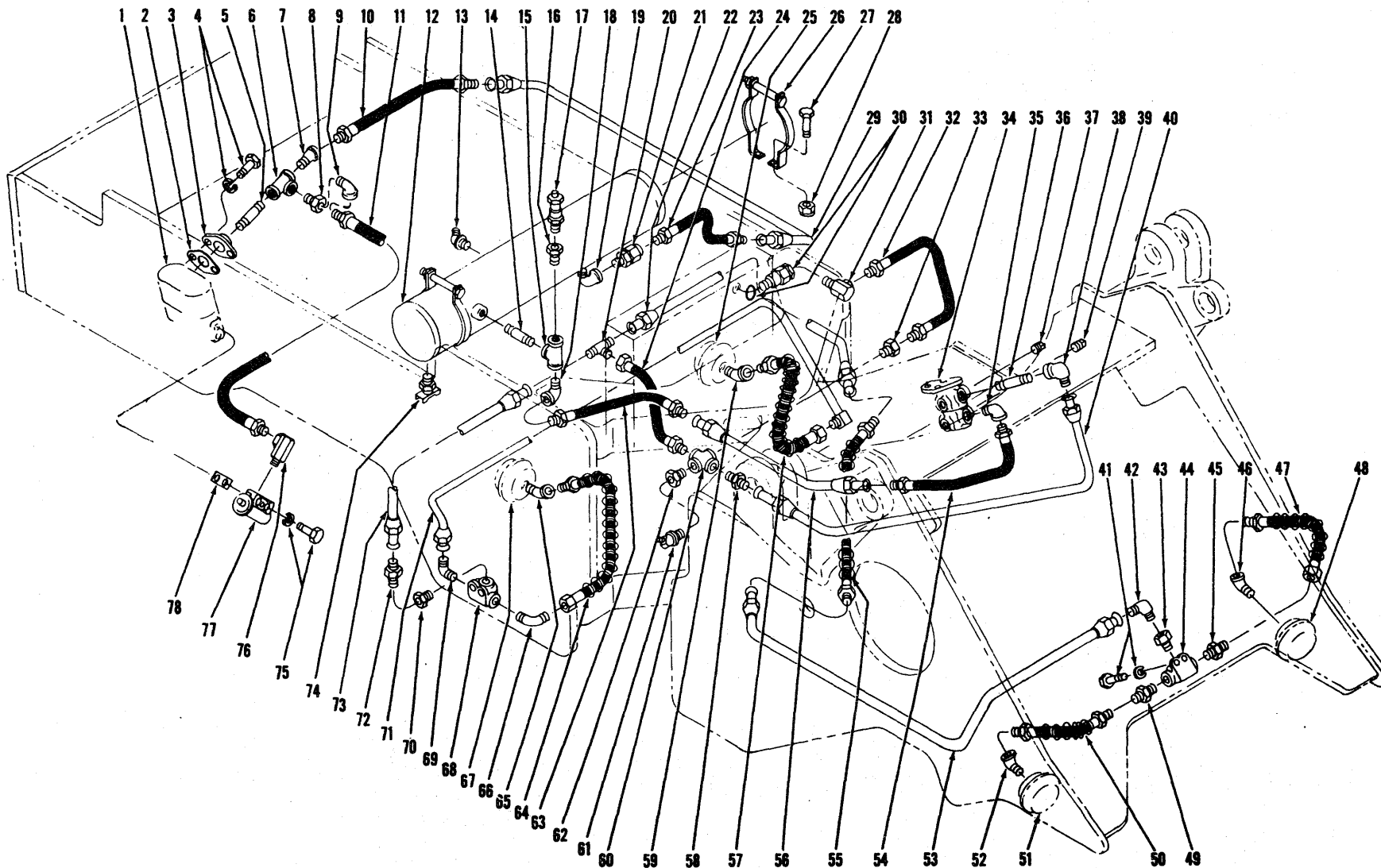
No.	Part No.	Qty.	Description
45	571697	1	Hose
46	1525163	1	Tube
47	1549739	1	Hose
48	571695	1	Hose
49	26F-4	1	Elbow
50	36F-1	1	Adapter union
51	1510853	1	Elbow
52	19F-4	1	Bushing
53	26F-2	1	Elbow
54	568609	1	Hose
55	568581	1	Tube
56	1525177	1	Hose
57	38F-10	1	Connector
58	21F-4	1	Cross
59	636260	1	Switch
60	568609	1	Hose
61	24C-510	2	Bolt
62	42F-8	1	Elbow
63	4E-05	2	Lockwasher
64	*521439	1	Valve
65	42F-8	1	Elbow
66	19F-6	1	Bushing
67	38F-9	1	Connector
68	568740	1	Tube
69	568580	1	Tube
70	4-----	—	Air chamber
71	26F-4	1	Elbow
72	26F-2	1	Elbow
73	19F-4	1	Bushing
74	521441	1	Hose
75	571694	1	Hose
76	568576	1	Tube
77	44F-7	1	Tee
78	24F-4	1	Elbow
79	1530283	1	Standpipe assy
80	507815	1	Valve
81	26F-2	1	Elbow
82	19F-5	1	Bushing
83	593370	1	Valve
84	5K-410	1	Nipple
85	18F-4	1	Tee
86	72F-4	1	Draincock
87	568476	1	Air reservoir
88	72F-4	1	Draincock
89	30F-3	1	Tee
90	1545149	1	Hose
91	5K-106	1	Nipple
92	18F-1	1	Tee
93	33F-4	1	Elbow

\*Note: Your local authorized Bendix-Westinghouse distributor is equipped to furnish components of these parts.

<sup>4</sup>See Index

<sup>5</sup>B.W. 228691

\*\*S/N Cummins 404A556, 573, 575 → 579, 582 & →



BRAKE AIR LINES - G.M.

TS-8063-P



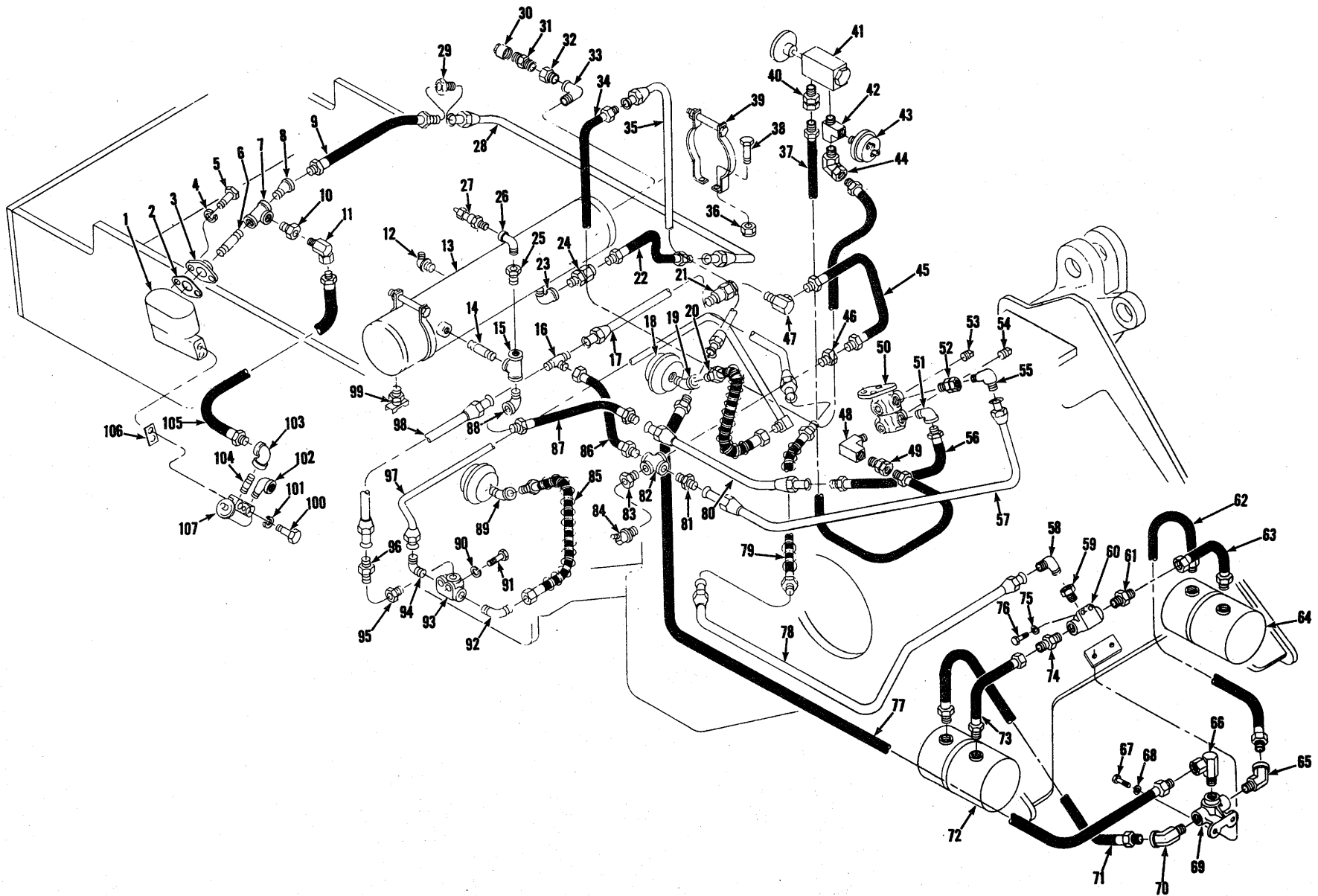
**BRAKE AIR LINES – G.M.**  
For Serial: 403A101 thru 403A562, 564, 567

Item No.	Part No.	Description	No. Req'd.
1	-----	COMPRESSOR – See Engine Parts Manual	—
2	951948	GASKET, Flange to Compressor	1
3	510452	FLANGE, Compressor Discharge	1
4	23C-514	BOLT, Flange to Compressor	2
4A	4E-05	LKWSHR, Flange to Compressor	2
5	5K-409	NIPPLE, Tee to Flange	1
6	18F-4	TEE, Compressor	1
7	25F-4	ELBOW, Hose to Tee	1
8	19F-4	BUSHING, Reducing	1
9	26F-1	ELBOW, Bushing to Hose	1
10	516316	HOSE, Compressor to Tank	1
11	593650	HOSE, Compressor to Governor	1
12	568476	RESERVOIR, Air	1
13	1534135	SENDER UNIT, Air Pressure	1
13A	14D-10	†NUT, Sender Unit	1
13B	12E-10	†LKWSHR, Sender Unit	1
14	5K-410	NIPPLE, Reservoir to Tee	1
15	18F-4	TEE, Reservoir	1
16	19F-5	BUSHING, Reducing – Valve to Tee	1
17	507815	VALVE, Safety	1
18	26F-4	ELBOW, Tee to Hose	1
19	1530284	STAND PIPE ASSY	1
20	44F-7	TEE, Hose to Tubes	1
21	593370	VALVE, Single Check	1
22	568576	TUBE, Tee to Front Frame	1
23	524497	HOSE, Tube to Reservoir	1
24	571694	HOSE, Cross to Tee	1
25	-----	AIR CHAMBER – See Index	—
26	527685	*BRACKET, Reservoir Mounting (B.W. #205093)	2
27	24C-620	BOLT, Mounting Bracket	4
28	18D-06	NUT, Mounting Bracket	4
29	1529302	TUBE, Compressor to Tank	1
30	-----	DECLUTCH VALVE – See Index	—
31	31F-1	ADAPTER, Declutch Valve to Hose	1
32	540915	HOSE, Cross to Transmission	1
33	19F-4	BUSHING, Reducing – Cross to Hose	1
34	-----	BRAKE VALVE – See Index	—
35	26F-4	ELBOW, Brake Valve to Hose	1
36	36F-4	ADAPTER, Brake Valve to Elbow – Not as shown	1
37	13F-08	PLUG, Brake Valve	4
38	1535735	ELBOW, Nipple to Tube	1
39	13F-04	PLUG, Brake Valve	2
40	571693	TUBE, Tee to Brake Valve	1

\*NOTE: Your local authorized Bendix-Westinghouse Distributor is equipped to service components of these parts.

†Not Illustrated

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



74A.1

(1D1)

P.M. 2462  
Printed in U.S.A.

TS-13357

# Brake Air Lines — G.M.\*\*

**MICHIGAN**

No.	Part No.	Qty.	Description
1	1-----	1	Compressor
2	951948	1	Gasket
3	510452	1	Flange
4	4E-05	2	Lockwasher
5	23C-514	2	Bolt
6	5K-409	1	Nipple
7	18F-4	1	Tee
8	25F-4	1	Elbow
9	1545145	1	Hose
10	19F-4	1	Bushing
11	26F-1	1	Elbow
12	1534135	1	Sender unit
12A	†14D-10	1	Nut
12B	†12E-10	1	Lockwasher
13	568476	1	Reservoir
14	5K-410	1	Nipple
15	18F-4	1	Tee
16	44F-7	1	Tee
17	568576	1	Tube
18	2-----	1	Air chamber
19	26F-2	1	Elbow
20	568609	1	Hose
21	2-----	1	De-clutch valve
22	521441	1	Hose
23	1530284	1	Standpipe assy
24	593370	1	Valve
25	19F-5	1	Bushing
26	26F-2	1	Elbow
27	507815	1	Valve
28	568582	1	Tube
29	40F-8	1	Connector
30	573750	1	Cap
31	573618	1	Stem
32	19F-2	1	Bushing
33	26F-3	1	Elbow
34	1511001	1	Hose
35	1511084	1	Tube
36	18D-06	4	Nut
37	1549739	1	Hose
38	24C-620	4	Bolt
39	*527685	2	Bracket
40	36F-1	1	Adapter union
41	1545790	1	Valve
42	1549038	1	Tee
43	1537354	1	Sender unit
44	33F-1	1	Adapter union
45	540915	1	Hose
46	19F-4	1	Bushing
47	31F-1	1	Adapter
48	1510853	1	Elbow
49	36F-1	1	Adapter union
50	2-----	1	Brake valve
51	26F-4	1	Elbow
52	36F-4	1	Adapter union
53	13F-08	4	Plug

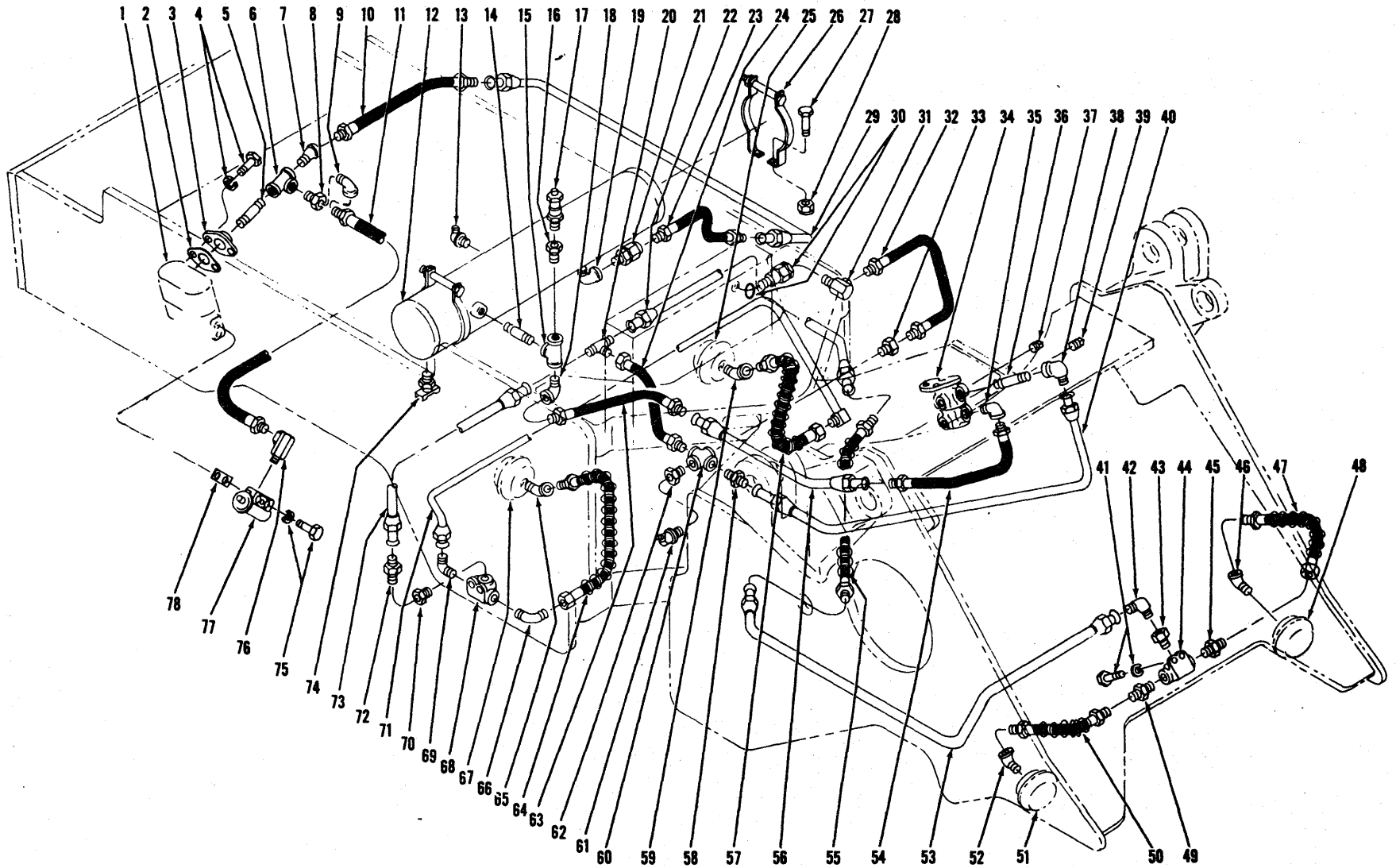
\*Note: Your local authorized Bendix-Westinghouse distributor is equipped to furnish components of these parts.

\*\*G.M. 403A563, 568 & →

1See Engine Parts Manual

2See Index

4B.W. 205093



BRAKE AIR LINES — G.M.

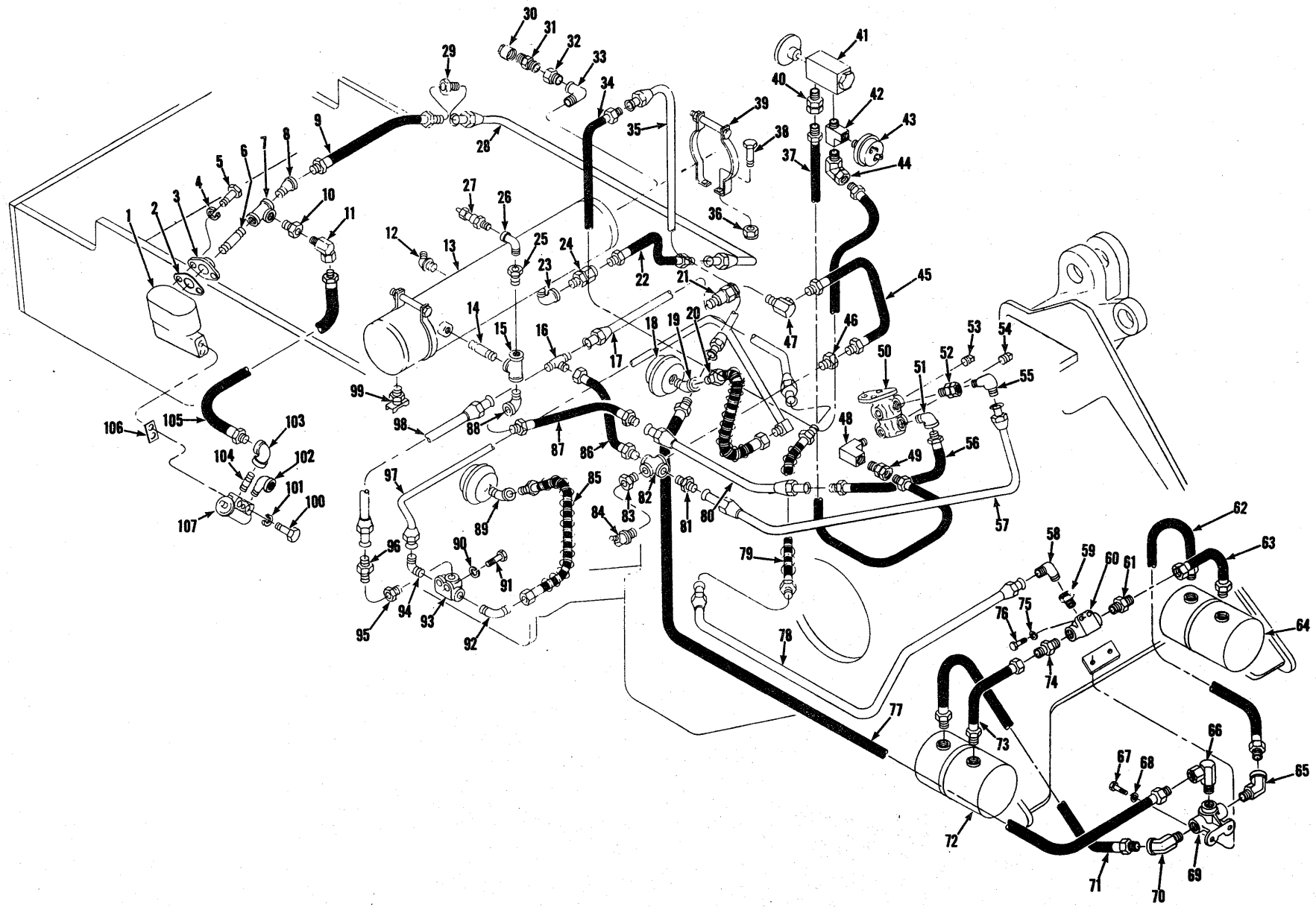
TS-8063-P

**BRAKE AIR LINES – G.M. (Continued)**  
For Serial: 403A101 thru 562, 564, 567

Item No.	Part No.	Description	No. Req'd.
41	24C-510	BOLT, Q.R.V. Mounting .....	2
41A	4E-05	LKWSHR, Q.R.V. Mounting .....	2
42	42F-8	ELBOW, Tube to Bushing .....	1
43	19F-6	BUSHING, Reducing – Elbow to Q.R.V. ....	1
44	521439	*VALVE, Quick Release (B.W. #228691) .....	1
45	38F-9	CONNECTOR, Hose to Q.R.V. ....	1
46	26F-2	ELBOW, Hose to Air Chamber .....	1
47	571697	HOSE, Q.R.V. to Air Chamber .....	1
48	-----	AIR CHAMBER – See Index .....	—
49	38F-9	CONNECTOR, Hose to Q.R.V. ....	1
50	571697	HOSE, Q.R.V. to Air Chamber .....	1
51	-----	AIR CHAMBER – See Index .....	—
52	26F-2	ELBOW, Hose to Air Chamber .....	1
53	1525163	TUBE, Front Frame .....	1
54	571695	HOSE, Brake Valve to Air Reservoir .....	1
55	1525177	HOSE, Center Pivot .....	1
56	568581	TUBE, Air Reservoir to Brake Valve .....	1
57	568609	HOSE, Frame to Air Chamber .....	1
58	38F-10	CONNECTOR, Tube to Cross .....	1
59	26F-2	ELBOW, Hose to Air Chamber .....	1
60	21F-4	CROSS .....	1
61	636260	SWITCH, Pressure .....	1
62	19F-4	BUSHING, Reducing – Pressure Switch to Cross .....	1
63	521441	HOSE, Reservoir to Tube .....	1
64	568609	HOSE, Q.R.V. to Air Chamber .....	1
65	26F-2	ELBOW, Hose to Air Chamber .....	1
66	42F-8	ELBOW, Hose to Q.R.V. ....	1
67	-----	AIR CHAMBER – See Index .....	—
68	521439	*QUICK RELEASE VALVE (B.W. #228691) .....	1
68A	24C-510	†BOLT, Q.R.V. Mounting .....	2
68B	4E-05	†LKWSHR, Q.R.V. Mounting .....	2
69	42F-8	ELBOW, Tube to Q.R.V. ....	1
70	19F-6	BUSHING, Reducing – Connector to Q.R.V. ....	1
71	568580	TUBE, Rear Cross .....	1
72	38F-9	CONNECTOR, Tube to Bushing .....	1
73	568740	TUBE, Tee to Q.R.V. ....	1
74	72F-4	DRAIN COCK .....	1
75	23C-548	BOLT, Governor to Compressor .....	2
75A	4E-05	LKWSHR, Governor to Compressor .....	2
76	31F-1	ADAPTER, Hose to Governor .....	1
77	540306	*GOVERNOR (B.W. #275200) .....	1
78	942646	GASKET, Governor to Compressor .....	1

\*NOTE: Your local authorized Bendix-Westinghouse Distributor is equipped to service components of these parts.  
†Not Illustrated

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



76A.1

(1D3)

P.M. 2462  
Printed in U.S.A.

TS-13357

# Brake Air Lines — G.M. (Continued) \*\*

**MICHIGAN**

No.	Part No.	Qty.	Description
54	13F-04	1	Plug
55	1535735	1	Elbow
56	571695	1	Hose
57	571693	1	Tube
58	42F-8	1	Elbow
59	19F-6	1	Bushing
60	*521439	1	Valve
61	38F-9	1	Connector
62	593449	1	Hose
63	571697	1	Hose
64	<sup>2</sup> -----	—	Air chamber
65	33F-2	1	Union
66	31F-2	1	Union
67	24C-510	2	Bolt
68	4E-05	2	Lockwasher
69	1504617	1	Valve
70	33F-2	1	Union
71	593449	1	Hose
72	<sup>2</sup> -----	—	Air chamber
73	571697	1	Hose
74	38F-9	1	Connector
75	4E-05	2	Lockwasher
76	24C-510	2	Bolt
77	1511002	1	Hose
78	1525163	1	Tube
79	1525177	1	Hose
80	568581	1	Tube
81	38F-10	1	Connector
82	21F-4	1	Cross
83	19F-4	1	Bushing
84	636260	1	Switch
85	568609	1	Hose
86	571694	1	Hose
87	521441	1	Hose
88	26F-4	1	Elbow
89	26F-2	1	Elbow
90	4E-05	2	Lockwasher
91	24C-510	2	Bolt
92	42F-8	1	Elbow
93	*521439	1	Valve
94	42F-8	1	Elbow
95	19F-6	1	Bushing
96	38F-9	1	Connector
97	568580	1	Tube
98	568740	1	Tube
99	72F-4	1	Drain cock
100	23C-548	2	Bolt
101	4E-05	2	Lockwasher
102	26F-1	1	Elbow
103	31F-1	1	Union
104	-----	—	Omit
105	1545222	1	Hose
106	942646	1	Gasket
107	*3540306	1	Governor

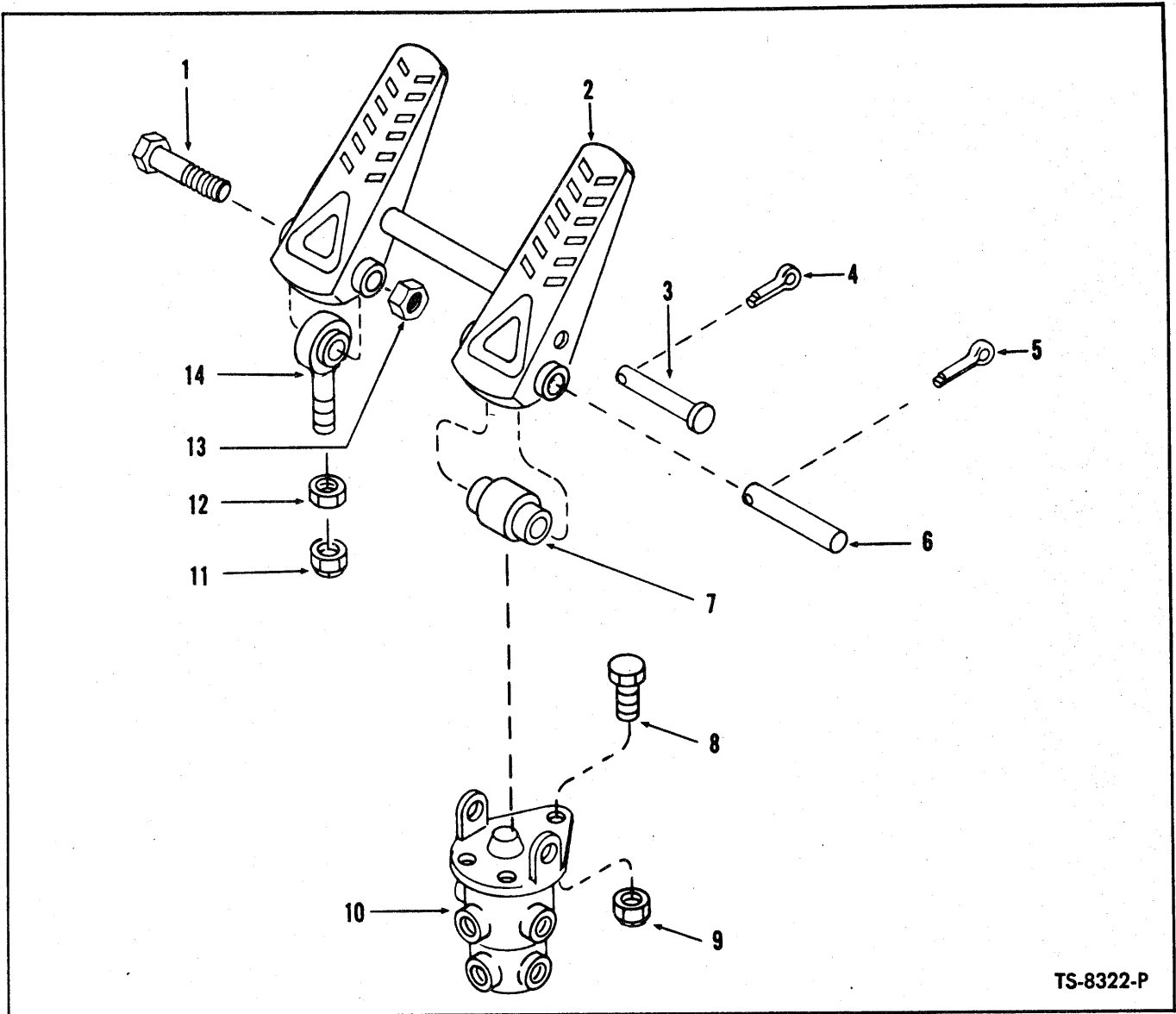
\*NOTE: Your local authorized Bendix-Westinghouse distributor is equipped to furnish components of these parts.

<sup>2</sup>See Index

<sup>3</sup>B.W. 275200

<sup>5</sup>B.W. 228691

\*\*S/N G.M. 403A563, 565, 568



TS-8322-P

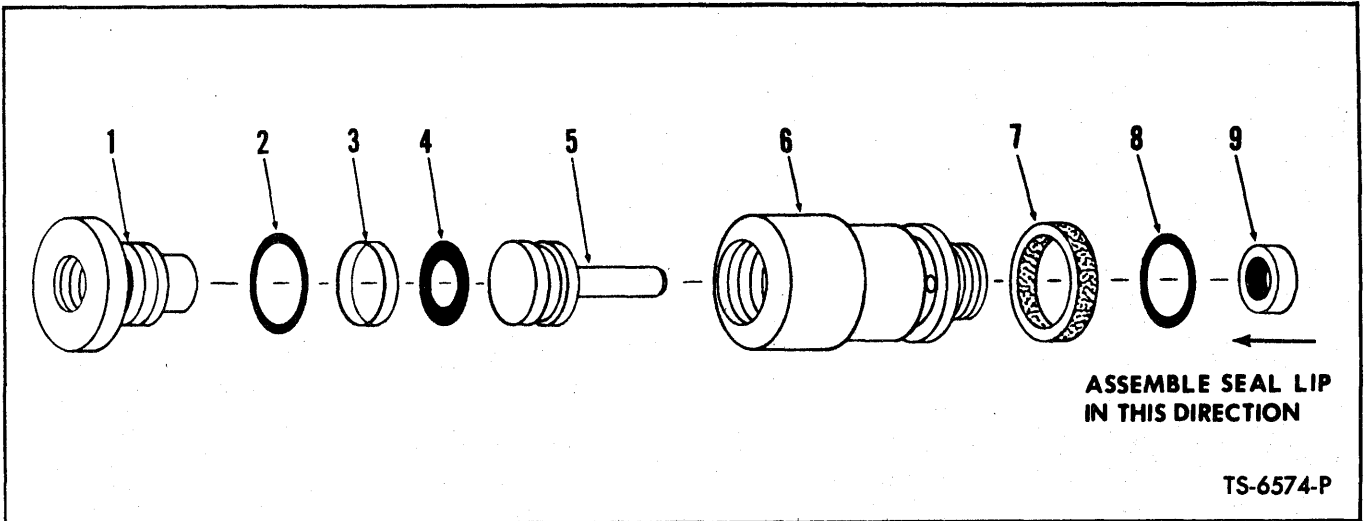
**BRAKE VALVE AND CONTROLS**

Item No.	Part No.	Description	No. Req'd.
1	24C-664	BOLT, Pedal to Bearing .....	1
2	568659	PEDAL ASSY, Air Brake .....	1
3	875766	PIN, Pedal to Roller .....	1
4	1F-312	COTTER, Pedal Pin .....	1
5	1F-320	COTTER, Pedal Pin .....	1
6	875767	PIN, Pedal to Valve .....	1
7	518259	ROLLER, Pedal .....	1
8	24C-520	BOLT, Valve Mounting .....	3
9	18D-05	NUT, Valve Mounting .....	3
10	945996	*VALVE, Air Brake — B.W. #277472 .....	1
11	66D-06	NUT, Bearing Mounting .....	1
12	8D-06	NUT, Bearing Jam .....	1
13	66D-06	NUT, Pedal to Bearing .....	1
14	1525089	BEARING, Spherical .....	1

\*NOTE: Your local authorized Bendix-Westinghouse Distributor is equipped to service components of these parts.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**





**DECLUTCH VALVE – TRANSMISSION**

Item No.	Part No.	Description	No. Req'd.
A	217927	VALVE ASSY (Inc. 1 thru 9)	1
1	217928	PLUG, Piston Stop	1
2	91F-8	O-RING, Plug	1
3	227672	RING, Piston	1
4	25K-30020	O-RING, Piston	1
5	227673	PISTON, Valve	1
6	217929	HOUSING, Valve	1
7	228931	SEAL, Band	1
8	25K-30022	O-RING, Housing	1
9	229131	SEAL, Piston Oil	1

**NOTES**

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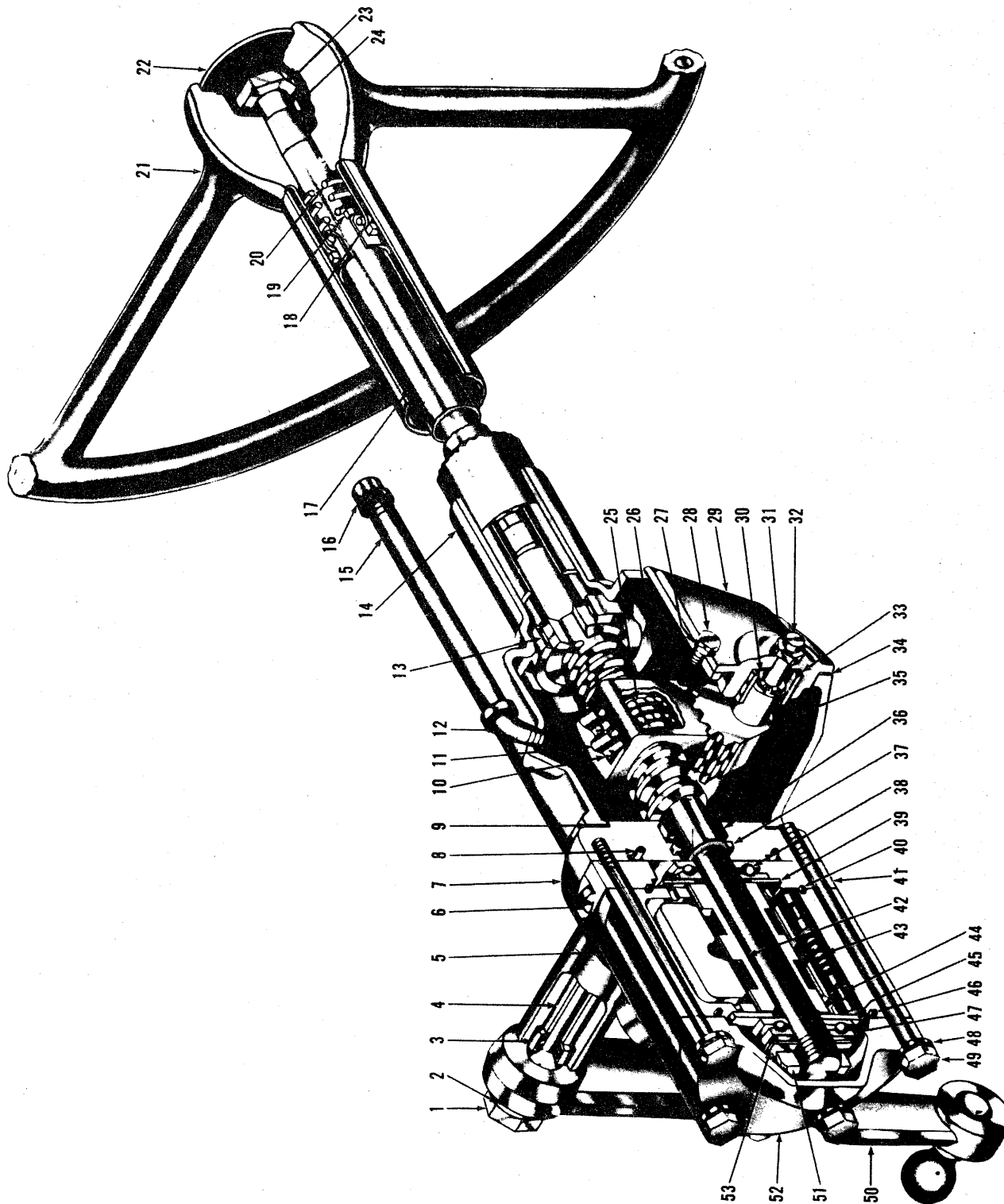
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**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**

TS-4787-P



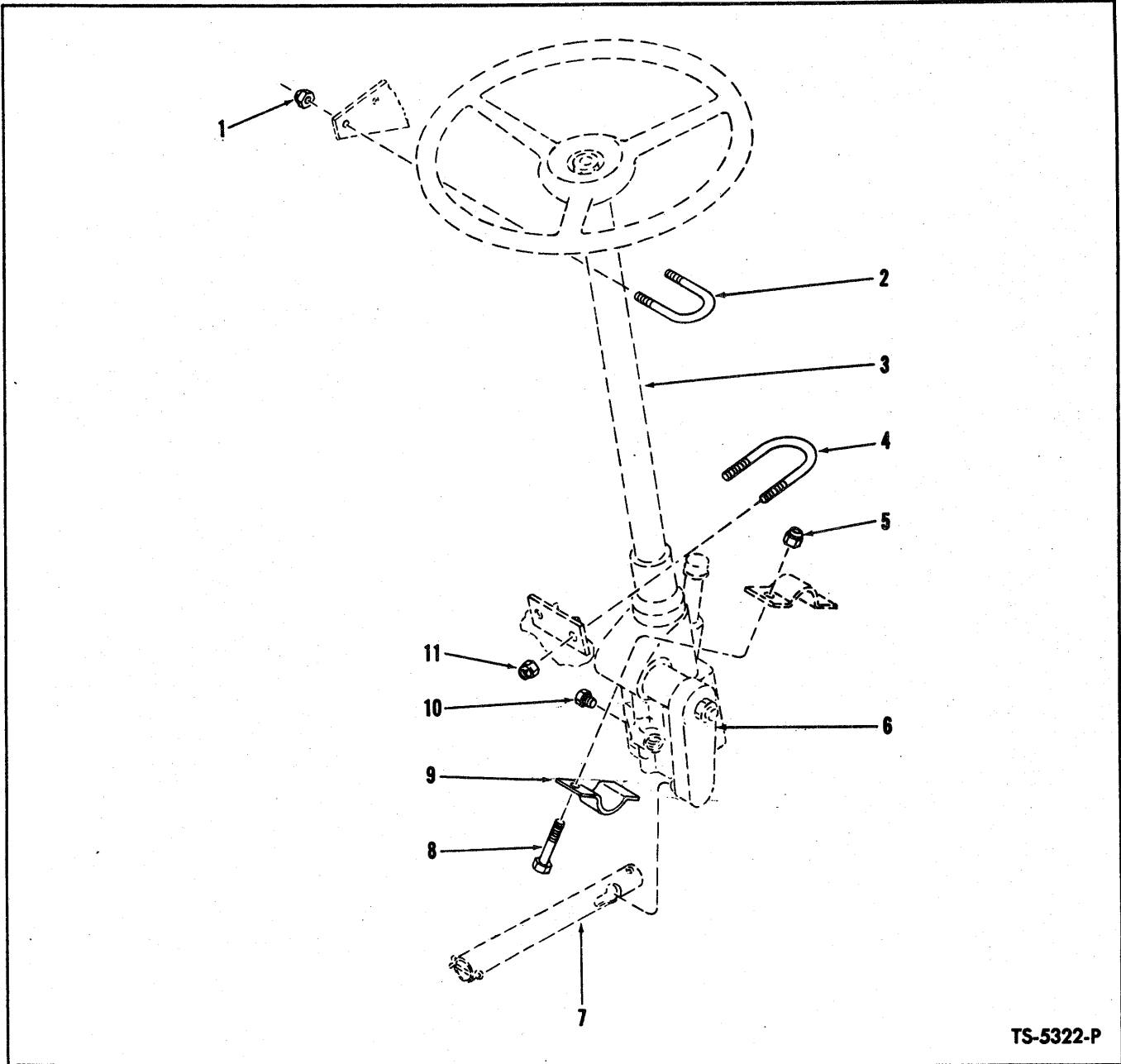
STEERING GEAR ASSEMBLY

**STEERING GEAR ASSEMBLY**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	566434	GEAR ASSY (Inc. 1 thru 11, 13 thru 20, 24 thru 49, 51, 52, 53)	1	25	10J-09	BALL	106
1	850756	NUT, Pitman Arm	1	25A	853526	†GUIDE, Ball Return	4
2	4E-18	LKWSHR, Pitman Arm	1	26	853525	NUT, Ball	1
3	853391	SEAL, Pitman Shaft Grease	1	27	2E-06	LKWSHR, Side Cover	3
4	853357	BUSHING, Pitman Shaft	1	28	1C-612	BOLT, Side Cover	3
5	945334	VALVE ASSY (Inc. 42, 43, 44)	1	29	853182	COVER, Hsg. Side (Inc. 33)	1
6	73G-732	BOLT, Adapter to Housing	4	30	853187	SHIM KIT, Lash Adjuster	1
6A	4E-07	†LKWSHR, Adapter to Hsg.	4	31	8D-07	NUT, Lash Adjuster	1
7	961260	**ADAPTER, Valve to Hsg. (Inc. 36, 37A)	1	32	851770	ADJUSTER, Lash	1
8	58K-232	O-RING, Spacer to Adapter	1	33	-----	§BUSHING, Side Cover	—
9	853380	GASKET, Adapter to Housing	1	34	851756	GASKET, Side Cover	1
10	851762	BOLT & WASHER ASSY, Clamp	3	35	940111	GEAR, Pitman Shaft	1
11	853527	CLAMP, Ball Return Guide	1	36	861741	BEARING, Adapter	1
12	-----	*ELBOW, Filler	1	37	949972	O-RING, Adapter	1
13	730143	BEARING, Needle	1	37A	873293	†SEAL, Adapter	1
14	946138	HOUSING ASSY (Inc. 4, 13)	1	38	860997	BEARING, Worm Thrust	1
15	5K-432	NIPPLE, Filler	1	39	943438	WASHER, Worm Thrust	1
16	22F-4	CAP, Filler	1	40	58K-237	O-RING, Valve to Spacer	1
17	946139	SHAFT ASSY (Inc. 10, 11, 25, 25A, 26)	1	41	943440	SPACER, Valve	1
18	857729	BEARING ASSY, Upper	1	42	-----	§SPOOL, Valve—See Item 5	—
19	861768	WASHER, Upper Bearing	1	43	943437	SPRING, Valve	4
20	853395	SPRING, Upper Bearing	1	44	943436	PLUNGER, Valve	8
21	1508704	WHEEL, Steering	1	45	943438	WASHER, Bearing Thrust	1
22	548074	PLATE, Operating Precaution	1	46	58K-237	O-RING, Valve to Spacer	1
22A	65G-406	†SCREW, Plate Attaching	4	47	860997	BEARING, Worm Thrust	1
23	648304	NUT, Steering Wheel	1	48	3E-08	LKWSHR, End Cover	6
24	853384	KEY, Steering Wheel	1	49	1C-888	BOLT, End Cover	6
				50	566433	ARM, Pitman	1
				51	873250	NUT, Worm Bearing Lock	1
				52	943439	COVER, Valve End	1
				53	943429	SPRING, Valve Spool Preload	1

§ Not Sold Separately                      † Not Illustrated  
 \*NOTE: This item is not used on this machine.  
 \*\*NOTE: For replacement see Service Gram S.G.-551.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**

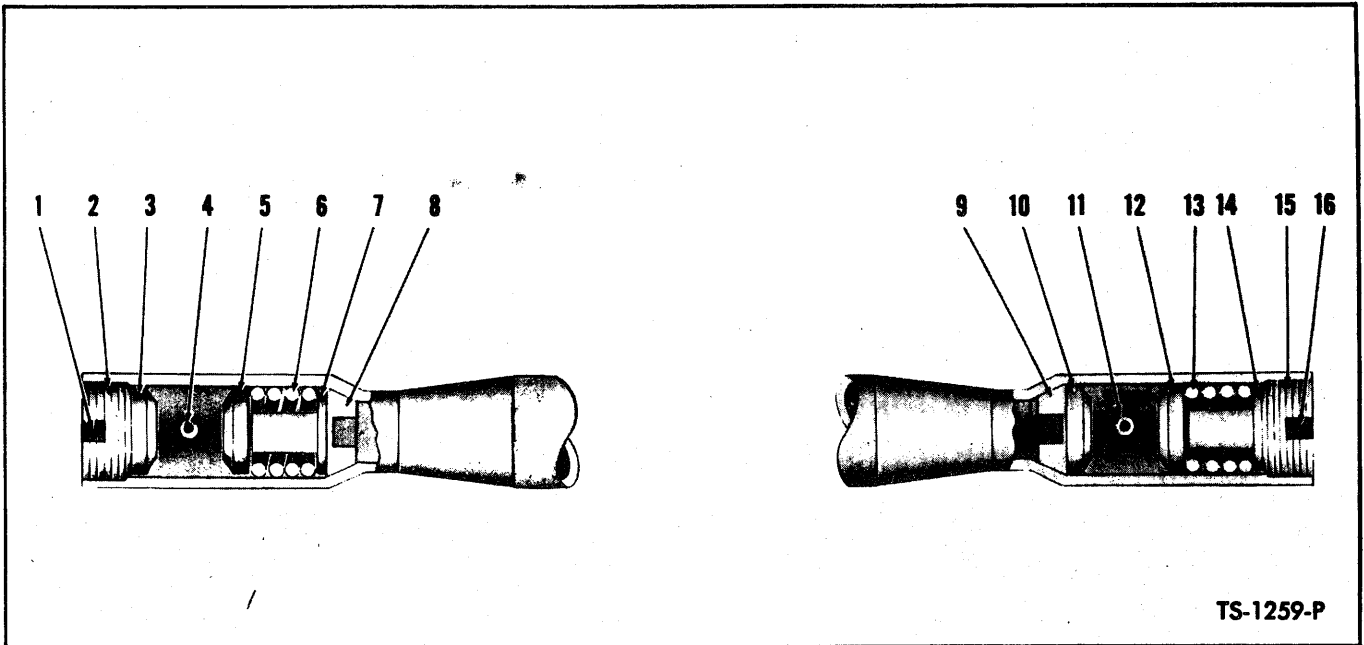


TS-5322-P

**STEERING GEAR MOUNTING GROUP**

Item No.	Part No.	Description	No. Req'd.
1	18D-06	NUT, "U" Bolt .....	2
2	571441	"U" BOLT, Steering Gear to Cockpit .....	1
3	-----	STEERING GEAR ASSY — See Index .....	—
4	545941	"U" BOLT, Steering Gear to Cockpit .....	1
5	18D-08	NUT, Steering Gear Clamp .....	2
6	-----	PITMAN ARM — See Index .....	—
7	-----	DRAG LINK — See Index .....	—
8	24C-836	BOLT, Steering Gear Clamp .....	2
9	550044	CLAMP, Steering Gear .....	1
10	40K-02	PLUG, Steering Valve .....	1
11	18D-08	NUT, "U" Bolt .....	2

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**

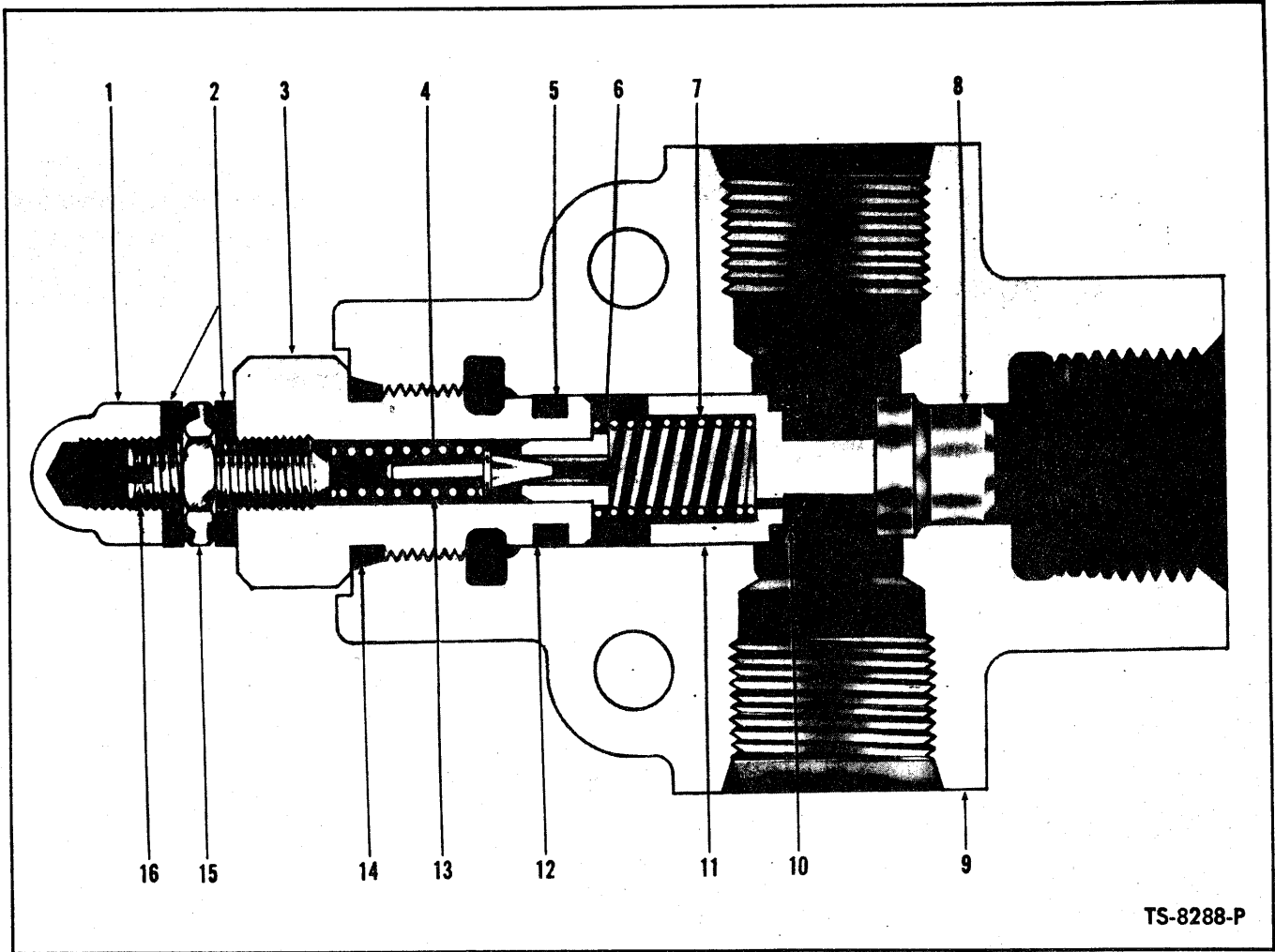


TS-1259-P

**STEERING DRAG LINK**

Item No.	Part No.	Description	No. Req'd.
A	568070	DRAG LINK ASSY (Inc. 2, 3, 5 thru 10, 12 thru 15)	1
1	1F-432	COTTER	1
2	876575	NUT, Adjusting	1
3	865965	SEAT, Ball Stud	1
4	12H-15	FITTING, Grease	1
5	865965	SEAT, Ball Stud	1
6	865961	SPRING	1
7	662691	SEAT, Spring	1
8	865963	SEAT	1
9	865963	SEAT	1
10	865965	SEAT, Ball Stud	1
11	10H-25	FITTING, Grease	1
12	865965	SEAT, Ball Stud	1
13	865961	SPRING	1
14	662691	SEAT, Spring	1
15	876575	NUT, Adjusting	1
16	1F-432	COTTER	1

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**

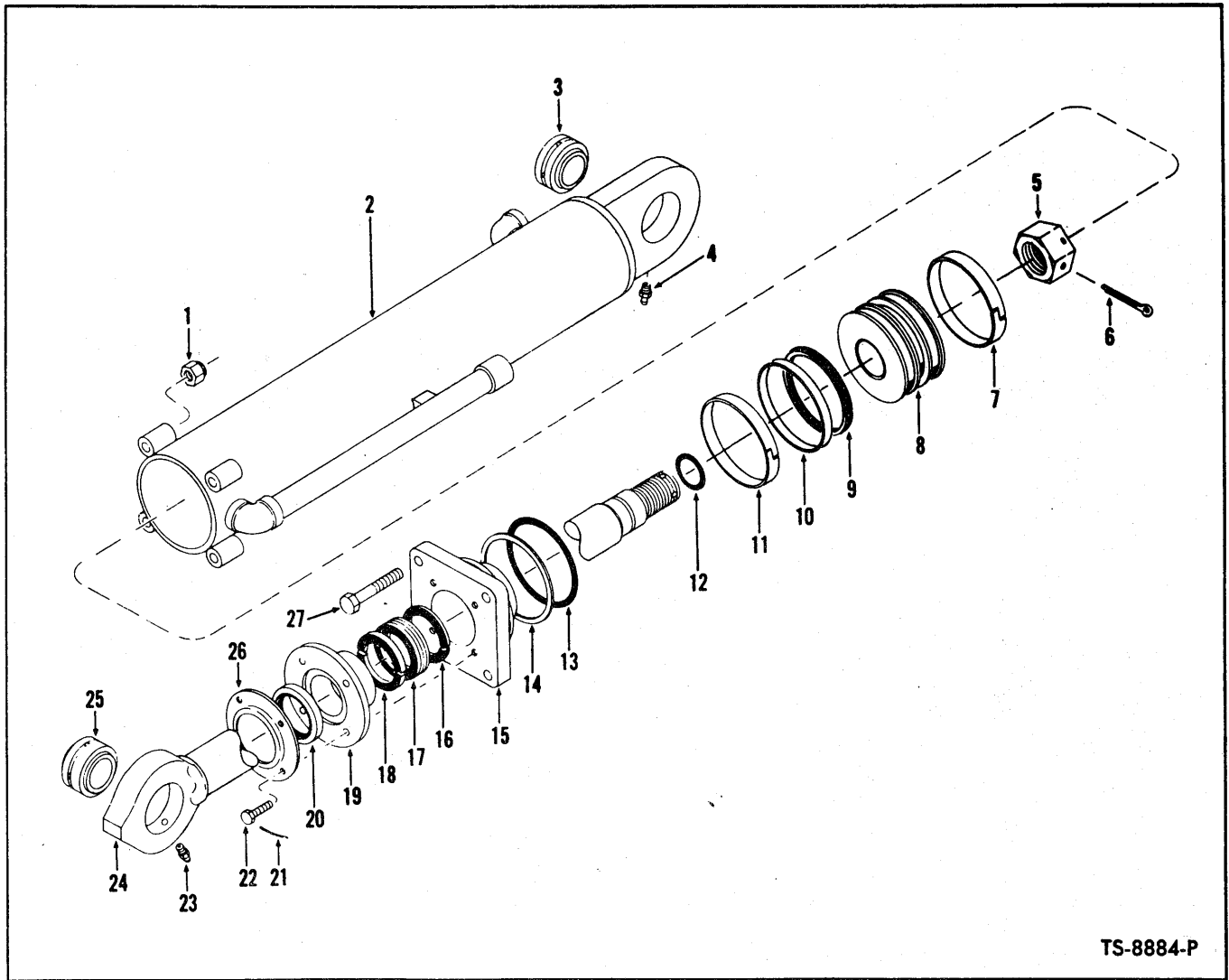


**PRESSURE RELIEF VALVE — STEERING SYSTEM**

Item No.	Part No.	Description	No. Req'd.
A	536539	VALVE ASSY (Inc. 1 thru 17)	1
1	47D-05	NUT, Acorn	1
2	730396	WASHER, Stat-O-Seal	2
3	944467	CAP, Valve	1
4	883734	PLUNGER, Pilot	1
5	899039	O-RING	1
6	944469	SEAT, Pilot	1
7	944646	SPRING	1
8	944645	SEAT, Poppet	1
9	-----	§BODY, Valve — Order Item "A"	—
10	-----	§SCREEN, Poppet — Order Item 11	—
11	944643	POPPET ASSY (Inc. 10)	1
12	899038	RING, Back-Up	1
13	944471	SPRING, Pilot	1
14	91F-6	O-RING, Valve Cap	1
15	8D-05	NUT, Jam	1
16	33G-514	SCREW, Adjusting Set	1
17	40K-02	†PLUG	2

§Not Sold Separately  
†Not Illustrated

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



TS-8884-P

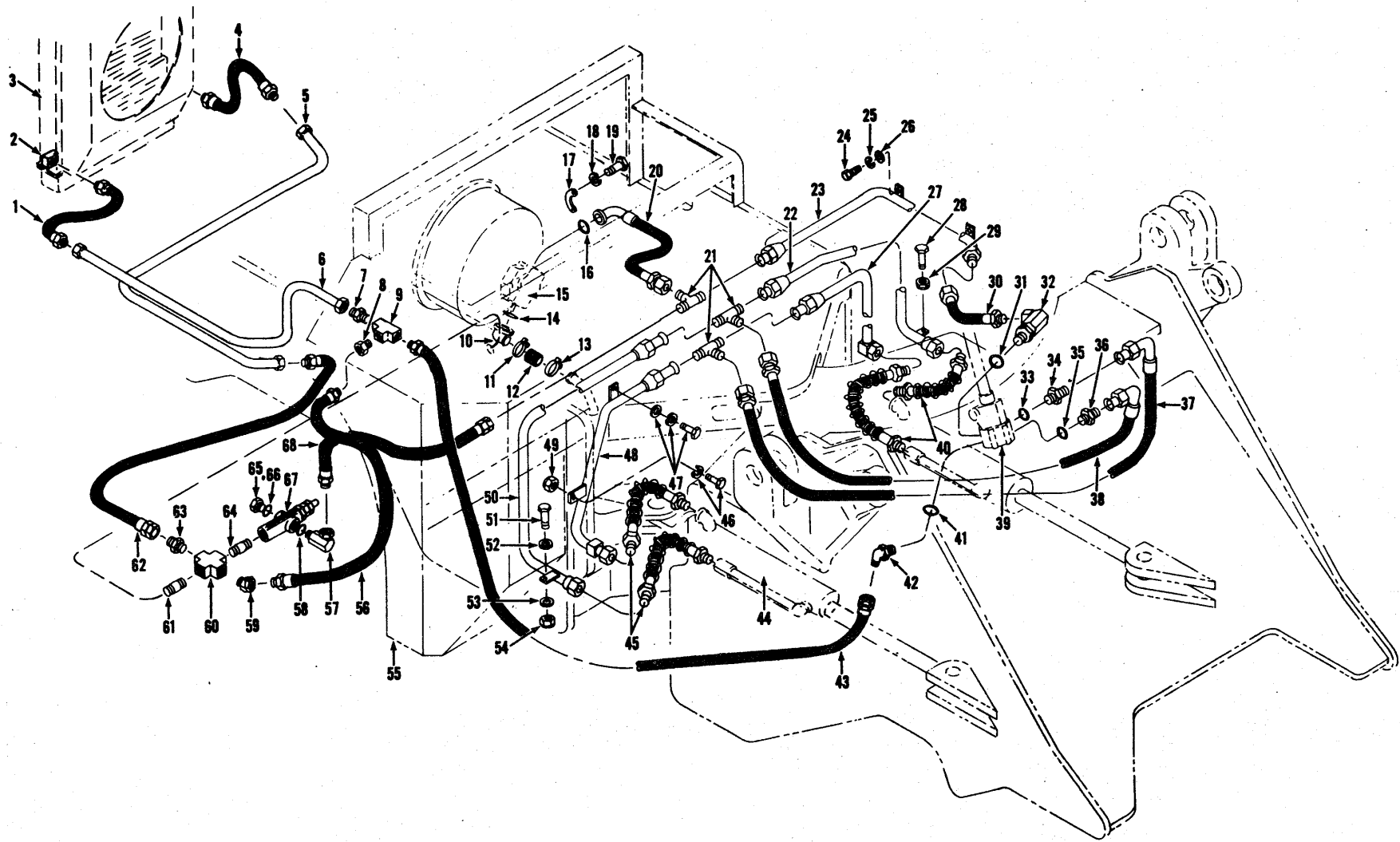
**STEERING CYLINDER ASSEMBLY**

Item No.	Part No.	Description	No. Req'd.
A	1503232	CYLINDER ASSY (Inc. 1, 2, 5 thru 22, 24, 26 & 27)	2
B	2516069	**KIT (Inc. 7, 9 thru 14, 16 thru 18, 20)	2
NOTE: Two (2) Cylinders used on machine — Quantities listed below are for one (1) Cylinder.			
1	18D-08	NUT, Cylinder Cap	4
2	567861	CYLINDER	1
3	713418	BUSHING, Cylinder	1
4	10H-25	FITTING, Cylinder Grease	1
5	1535217	*NUT, Piston Rod	1
6	1F-844	COTTER, Rod Nut	1
7	---	§RING, Piston — See B	1
8	1503026	PISTON	1
9	---	§RING, Inner Seal — See B	1
10	---	§RING, Outer Seal — See B	1
11	---	§ §RING, Piston Wear — See B	1

Item No.	Part No.	Description	No. Req'd.
12	---	§ O-RING, Piston Rod — See B	1
13	---	§ O-RING, Cylinder — See B	1
14	---	§ RING, Back-Up — See B	1
15	945113	CAP, Cylinder (Inc. 13, 14)	1
16	---	§ ADAPTER, Male — See 18	2
17	2501107	PACKING ASSY (Inc. 16, 18)	1
18	---	§ ADAPTER, Female — See 18	2
19	550087	GLAND, Packing	1
20	2516952	SEAL, Piston Rod	1
21	---	LOCKWIRE (16 ga. x 11" lg.)	2
22	4C-616	BOLT, Retainer	4
23	10H-25	FITTING, Rod Grease	1
24	1503226	ROD, Piston	1
25	713418	BUSHING, Piston Rod	1
26	550089	RETAINER, Seal	1
27	24C-860	BOLT, Cylinder Cap	4

\*NOTE: For replacement use 1514622 Nut plus 1—1F-860 Cotter. \*\*NOTE: For reference see Service Gram S.G.-597A.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



HYDRAULIC SYSTEM — STEERING

TS-9157-P

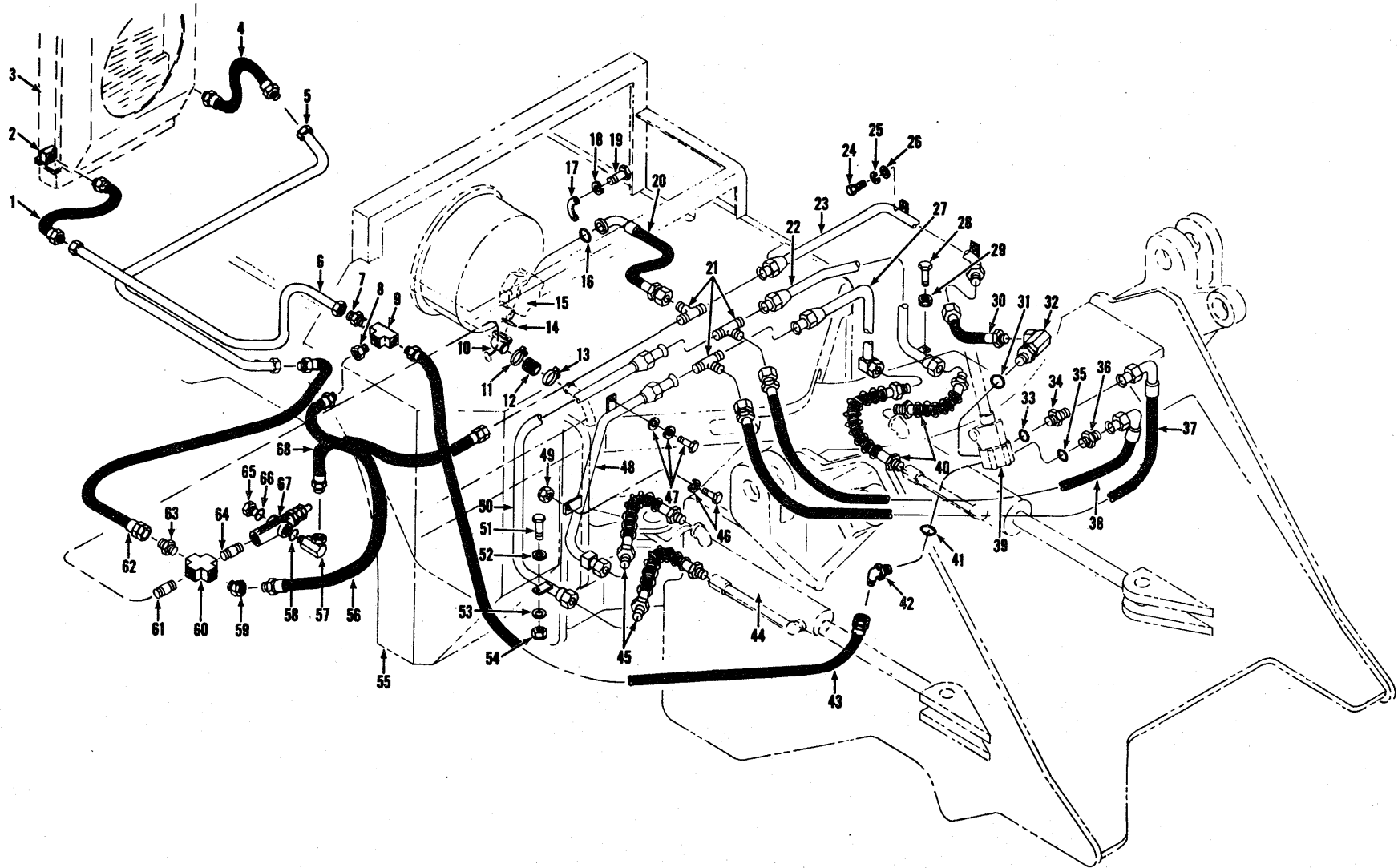


**HYDRAULIC SYSTEM — STEERING**  
**For Serial: Cummins — 404A101 thru 404A299**  
**G.M. — 403A101 thru 403A299**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1504099	HOSE, Tube to Radiator .....	1	35	91F-6	O-RING, Connector .....	1
2	29F-5	ELBOW, Radiator .....	2	36	731793	CONNECTOR, Hose to Gear (Inc. 35) .....	1
3	-----	RADIATOR—See Index .....	—	37	571549	HOSE, Tee to Gear.....	1
4	1504096	HOSE, Tube to Radiator .....	1	38	571549	HOSE, Tee to Gear.....	1
5	1504102	TUBE, Radiator to Reservoir ..	1	39	-----	STEERING GEAR—See Index ..	—
6	1503914	TUBE, Hose to Tee .....	1	40	569086	HOSE, Tube to Cylinder .....	2
7	89F-10	CONNECTOR, Tube to Tee ...	1	41	91F-7	O-RING, Connector .....	1
8	356621	BUSHING, Hose to Tee .....	1	42	573576	CONNECTOR, Hose to Gear (Inc. 41) .....	1
9	28K-216	TEE .....	1	43	1509471	HOSE, Tube to Gear .....	1
10	1533259	STEM, Suction .....	1	44	-----	STEERING CYLINDER — See Index .....	—
10A	23C-822	†BOLT, Stem .....	4	45	569086	HOSE, Tube to Cylinder.....	2
10B	4E-08	†LKWSHR, Stem .....	4	46	24C-620	BOLT, Tube to Frame .....	1
11	540130	CLAMP, Hose .....	1	46A	656672	WASHER, Tube to Frame .....	1
12	569441	HOSE .....	1	47	24C-620	BOLT, Tube to Frame .....	2
13	540130	CLAMP, Hose .....	1	47A	4E-06	LKWSHR, Tube to Frame .....	2
14	58K-225	O-RING, Suction Stem .....	1	47B	656672	WASHER, Tube to Frame .....	2
15	-----	STEERING PUMP—See Index ..	—	48	1523950	TUBE, Steer .....	1
16	58K-222	O-RING, Flange Half .....	1	49	18D-06	NUT, Tube to Frame .....	1
17	19J-20	FLANGE HALF, Hose to Pump .....	2	50	1523955	TUBE, Steer .....	1
18	4E-07	LKWSHR, Flange Half .....	4	51	24C-624	BOLT, Tube to Frame .....	2
19	23C-724	BOLT, Flange Half .....	4	52	656672	WASHER, Tube to Frame .....	2
20	1533256	HOSE, Pump to Tee .....	1	53	656672	WASHER, Tube to Frame .....	2
21	10K-10	TEE, Connector .....	3	54	18D-06	NUT, Tube to Frame .....	2
22	1523951	TUBE, Steer .....	1	55	-----	RESERVOIR — See Index .....	—
23	568339	TUBE, Steer .....	1	56	1509470	HOSE, Cooler Bypass .....	1
24	24C-620	BOLT, Tube to Frame .....	2	57	531684	ADAPTER, Relief Valve (Inc. 58) .....	1
25	4E-06	LKWSHR, Tube to Frame .....	2	58	91F-7	O-RING, Adapter .....	1
26	656672	WASHER, Tube to Frame .....	2	59	33F-5	ADAPTER, Cross to Valve.....	1
27	1523953	TUBE, Steer .....	1	60	29K-212	CROSS .....	1
27A	24C-620	†BOLT, Tube to Frame .....	1	61	5K-624	NIPPLE, Reservoir to Cross ...	1
27B	18D-06	†NUT, Tube to Frame .....	1	62	1504097	HOSE, Tube to Reservoir .....	1
28	24C-620	BOLT, Tube to Frame .....	1	63	89F-8	CONNECTOR, Hose to Cross ..	1
29	18D-06	NUT, Tube to Frame .....	1	64	5K-611	NIPPLE, Cross to Valve .....	1
30	568372	HOSE, Tube to Gear.....	1	65	24K-7	PLUG, Pipe (Inc. 66) .....	1
31	91F-7	O-RING, Adapter .....	1	66	91F-7	O-RING, Plug .....	1
32	531684	ADAPTER, Hose to Valve (Inc. 31) .....	1	67	-----	RELIEF VALVE — See Index....	—
33	91F-6	O-RING, Connector .....	1	68	568372	HOSE, Valve to Tee .....	1
34	731793	CONNECTOR, Hose to Gear (Inc. 33) .....	1				

†Not Illustrated

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



HYDRAULIC SYSTEM - STEERING  
For Serial: Cummins - 404A300 & After  
G.M. - 403A300 & After

TS-9157



CONSTRUCTION MACHINERY DIVISION

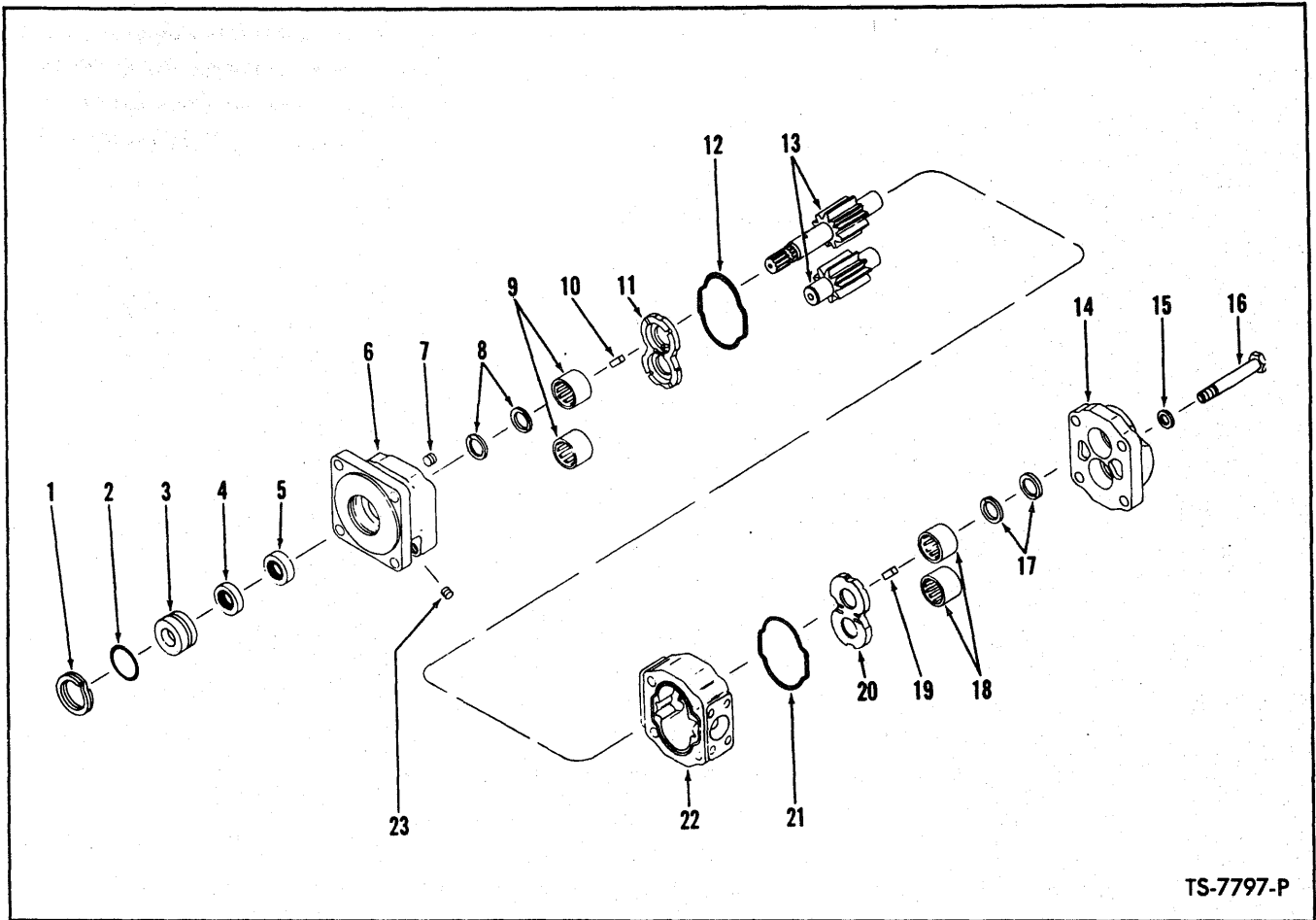


HYDRAULIC SYSTEM - STEERING
For Serial: Cummins - 404A300 and after
G.M. - 403A300 and after

Table with 4 columns: Item No., Part No., Description, No. Req'd. It lists various hydraulic components like hoses, connectors, radiators, and pumps with their respective part numbers and quantities.

†Not Illustrated
\*Cummins 404A300 -> 649, G.M. 403A300 -> 649
\*\*Cummins 404A650 & ->, G.M. 403A650 & ->

WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE

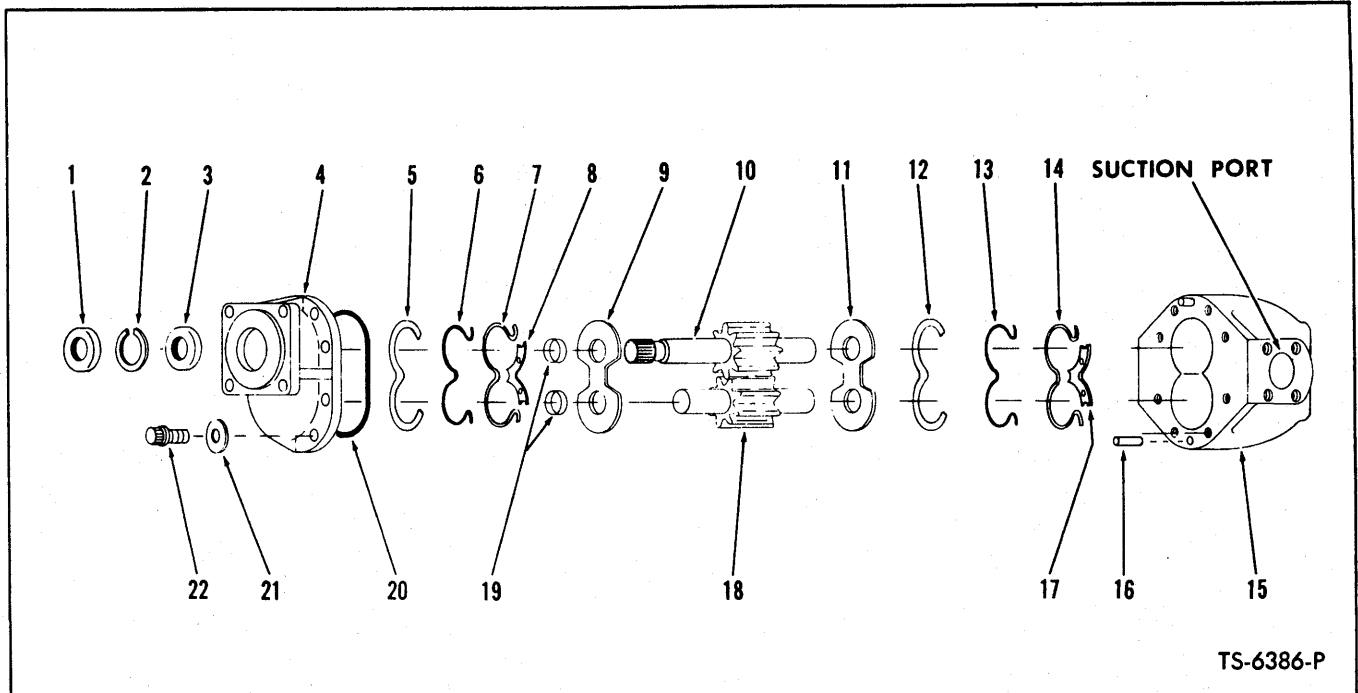


**HYDRAULIC PUMP — STEERING**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1520839	PUMP ASSY (Inc. 1 thru 23) ..	1	11	-----	§PLATE, Thrust — See "D" .....	—
B	946628	SHAFT SEAL KIT (Inc. 1 thru 5) .....	1	12	-----	§SEAL, Housing — See "D" .....	—
C	946629	GEAR KIT (Inc. 13) .....	1	13	-----	§GEARS, Drive & Driven — See "C" .....	—
D	946630	THRUST PLATE KIT (Inc. 1 thru 5, 10, 11, 12, 19, 20, 21) .....	1	14	946635	COVER, Port End .....	1
E	946631	BEARING KIT (Inc. 1 thru 5, 8 thru 12, 17 thru 21) .....	1	15	946401	WASHER, Cover Mounting .....	4
1	858137	RING, Seal Retaining .....	1	16	1C-1084	BOLT, Cover Mounting .....	4
2	25K-40216	O-RING, Seal Retainer .....	1	17	-----	§SEAL RING — See "E" .....	—
3	-----	§RETAINER, Seal — See "B" ..	—	18	-----	§BEARING, Roller — See "E" ..	—
4	946632	SEAL, Outer Shaft .....	1	19	-----	§SEAL, Pocket — See "D" (Cut from Strip in Kit) .....	—
5	946632	SEAL, Inner Shaft .....	1	20	-----	§PLATE, Thrust — See "D" .....	—
6	946633	COVER, Shaft End .....	1	21	-----	§SEAL, Housing — See "D" .....	—
7	33G-706	SCREW, Set .....	1	22	946634	HOUSING, Gear .....	1
8	-----	§SEAL RING — See "E" .....	—	23	-----	§PLUG, Shipping only .....	—
9	-----	§BEARING, Roller — See "E" ..	—	24	552161	†GASKET, Pump Mounting .....	1
10	-----	§SEAL, Pocket — See "D" (Cut from Strip in Kit) .....	—	25	230151	†SLEEVE, Pump Drive .....	1
				26	571511	†STUD, Pump Mounting .....	4
				27	4E-08	†LKWSHR, Pump Mounting .....	4
				28	62D-08	†NUT, Pump Mounting .....	4

†Not Illustrated  
§Not Sold Separately — Order Kits

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



TS-6386-P

**HYDRAULIC PUMP – BUCKET AND BOOM**  
 For Serial: Cummins – 404A101 thru 404A299  
 G.M. – 403A101 thru 403A299, 403A308  
 403A101 CAC thru 403A308 CAC

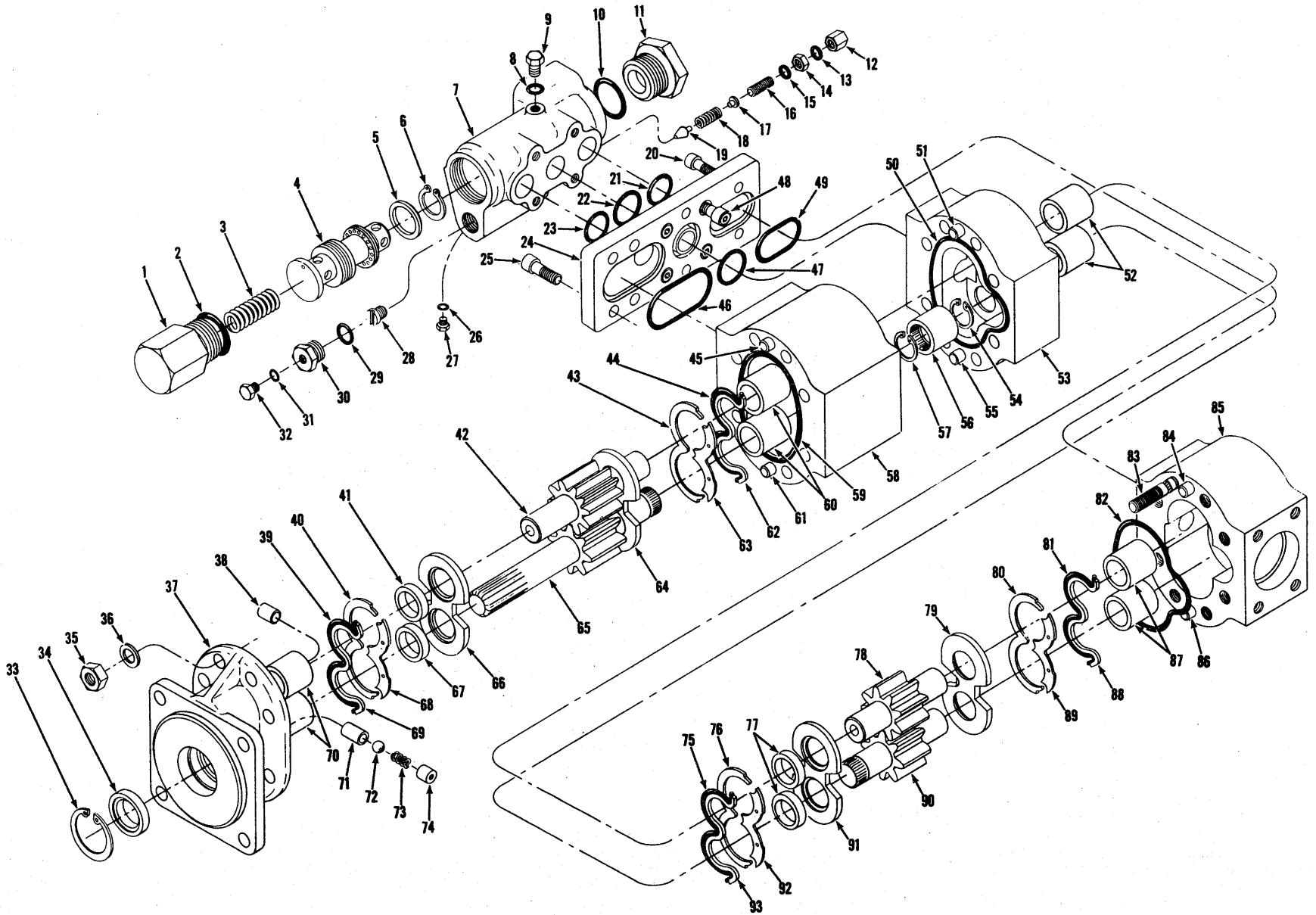
Item No.	Part No.	Description	No. Req'd.
A	564653	PUMP ASSY (Inc. 1 thru 22)	1
B	946257	SEAL KIT (Inc. 1, 2, 3, 5, 6, 7, 12, 13, 14, 20)	1
C	947975	REPAIR KIT, Major (Inc. 1, 2, 3, 5 thru 14, 16 thru 22)	1
1	946099	SEAL, Oil – See "B" or "C"	1
2	946205	SPACER, Oil Seal	1
3	946099	SEAL, Oil – See "B" or "C"	1
4	946260	FLANGE, Cover	1
5	-----	§RETAINER, Ring – See "B" or "C"	1
6	-----	§O-RING – See "B" or "C"	1
7	-----	§RING, Back-Up – See "B" or "C"	1
8	-----	§PLATE, Isolation – See "C"	1
9	-----	§PLATE, Pressure – See "C"	1
10	-----	§GEAR, Drive – See "C"	1
11	-----	§PLATE, Pressure – See "C"	1
12	-----	§RETAINER, Ring – See "B" or "C"	1
13	-----	§O-RING – See "B" or "C"	1
14	-----	§RING, Back-Up – See "B" or "C"	1
15	947974	BODY	1
16	946100	PIN, Body	2
17	-----	§PLATE, Isolation – See "C"	1
18	-----	§GEAR, Driven – See "C"	1
19	-----	§RING, Spacer – See "C"	2
20	-----	§O-RING – See "B" or "C"	1
21	946271	WASHER	8
22	17C-820	BOLT, Flange	8
23	571511	†STUD	4
24	62D-08	†NUT	4
25	552161	†GASKET	1
26	230151	†DRIVE SLEEVE	1
27	4E-08	†LKWSHR	4

§Not Sold Separately

†Not Illustrated

NOTE: Pump is equipped with bushing type bearings. Bearings are machine finished after pressing in place and therefore are not replaceable service items.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



HYDRAULIC PUMP – BUCKET & BOOM

TS-9876

89A.1

(1H7)

PM 2462

**CONSTRUCTION MACHINERY DIVISION**  
**HYDRAULIC PUMP — BUCKET & BOOM**  
 For Serial: Cummins — 404A300 & After  
 G.M. — 403A300 thru 307, 309 thru 534  
 403A309 CAC & After

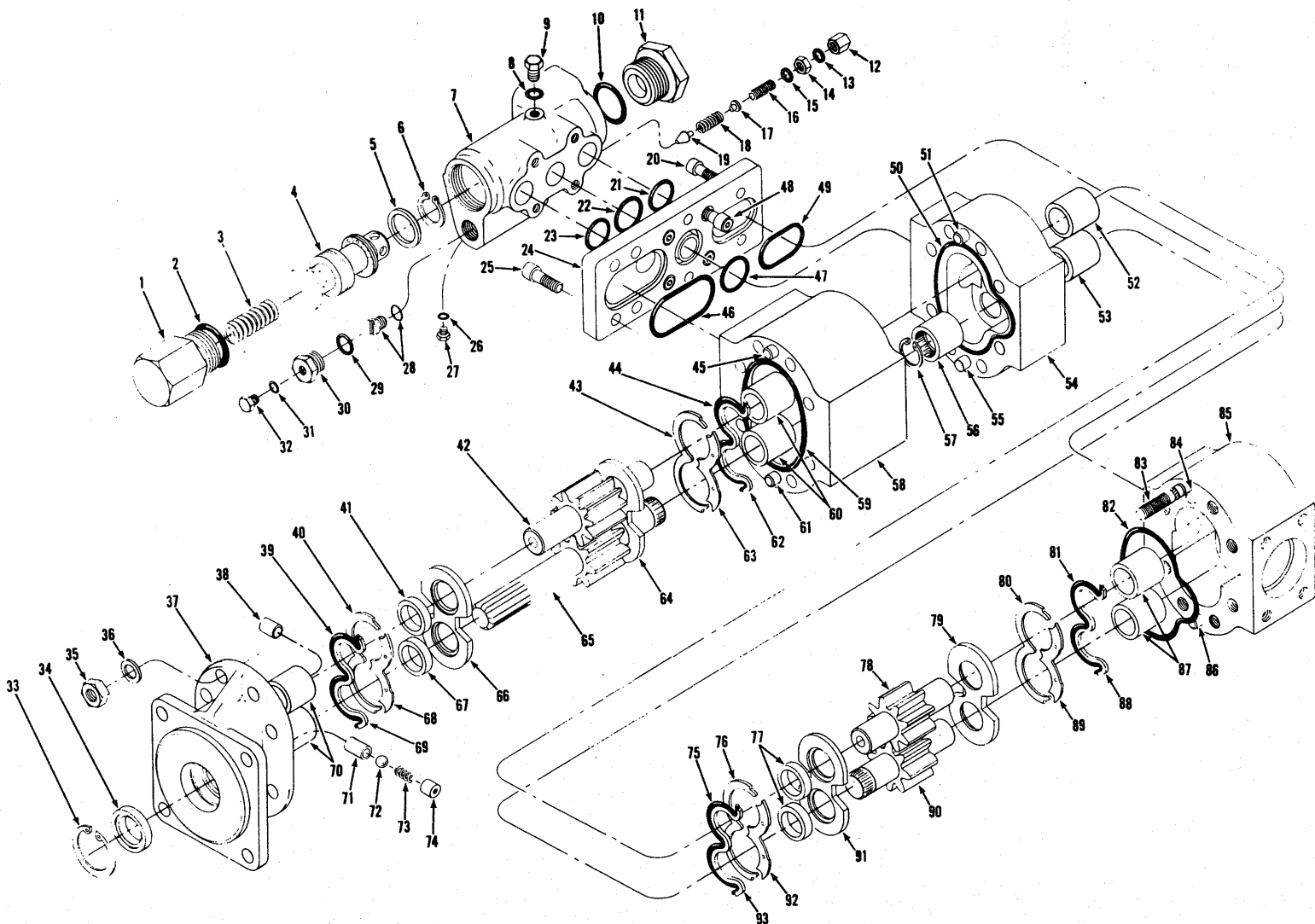
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1508329	PUMP ASSY. (Inc. 1 thru 93)	1	38	-----	§PLUG, Flange — See 37	1
D	948448	REPAIR KIT, Front Gear (Inc. 42 & 65)	1	39	-----	§O-RING, See 1	—
E	948450	REPAIR KIT, Pressure Plate (Inc. 41, 52, 53, 63, 64, 66, 67, 68, 77, 79, 89, & 92)	1	40	947275	RETAINER, O-Ring	1
F	948445	REPAIR KIT, Valve (Inc. 2, 3, 4, 5, 6, 10)	1	41	947209	RING, Spacer	1
G	948444	REPAIR KIT, Service Valve (Inc. 12 thru 19 & 28)	1	42	-----	§GEAR, Front Idler — See D	—
H	948446	SEAL KIT, Valve (Inc. 21, 22, 23, 46, 47, 49)	1	43	947275	RETAINER, O-Ring	1
I	948447	SEAL KIT, Pump (Inc. 34, 39, 40, 43, 44, 50, 59, 62, 69, 75, 76, 80, 82, 86, 88, & 93)	1	44	-----	§O-RING, See 1	—
1	948513	CAP, Valve	1	45	946100	DOWEL	1
2	91F-12	O-RING, Cap	1	46	58K-144	O-RING, Adapter Plate to Pump	1
3	948442	SPRING, Spool	1	47	25K-40114	O-RING, Adapter Plate to Pump	1
4	948433	SPOOL, Valve	1	48	11G-616	BOLT, Valve to Adapter Plate	4
5	948434	VALVE, Check	1	49	58K-135	O-RING, Adapter Plate to Pump	1
6	9J-40	RING, Check Retaining	1	50	-----	§O-RING, Bearing Plate — See 1	—
7	948707	HOUSING, Valve	1	51	946100	DOWEL	1
8	91F-3	O-RING, Plug	1	52	-----	§BEARING, Sleeve — See B	—
9	24K-3	PLUG, Pipe (Inc. 8)	1	53	-----	§PLATE, Bearing — See B	—
10	91F-12	O-RING, Cap	1	54	947965	RING, Snap	1
11	948436	CAP, Valve	1	55	946100	DOWEL	1
12	948441	NUT, Acorn	1	56	948429	COUPLING, Spline	1
13	25K-20014	O-RING, Jam Nut	1	57	947965	RING, Snap	1
14	948440	NUT, Jam	1	58	-----	§BODY, Front — See B	—
15	25K-20014	O-RING, Jam Nut	1	59	58K46	O-RING, Flange	1
16	15G-620	SCREW, Adjusting	1	60	-----	§BEARING, Sleeve — See B	—
17	948437	GUIDE, Spring	1	61	946100	DOWEL	1
18	1550490	SPRING, Poppet	1	62	947277	RING, Back-Up	1
19	948438	POPPET, Relief Valve	1	63	-----	§PLATE, Pressure — See E	—
20	11G-616	BOLT, Adapter Plate to Pump	4	64	-----	§PLATE, Pressure — See E	—
21	58K-123	O-RING, Valve Housing to Adapter Plate	1	65	-----	§GEAR, Front Drive — See D	—
22	58K-128	O-RING, Valve Housing to Adapter Plate	1	66	-----	§PLATE, Pressure — See E	—
23	58K-123	O-RING, Valve Housing to Adapter Plate	1	67	947209	RING, Spacer	1
24	948443	PLATE, Adapter	1	68	-----	§PLATE, Top Isolation — See E	—
25	73G-716	BOLT, Adapter Plate to Pump	4	69	947277	RING, Back-Up	1
26	91F-1	O-RING, Plug	1	70	-----	§BEARING, Sleeve — See 37	—
27	24K-1	PLUG, Pipe (Inc. 26)	1	71	-----	§SEAT, Ball — See 37	—
28	948439	SEAT, Poppet	1	72	-----	§BALL, Check	—
29	91F-7	O-RING, Cap	1	73	-----	§SPRING, Check	—
30	948435	CAP, Relief Valve	1	74	-----	§RETAINER, Spring	—
31	91F-3	O-RING, Plug	1	75	-----	§O-RING — See 1	1
32	24K-3	PLUG, Pipe (Inc. 31)	1	76	947275	RETAINER, O-Ring	1
33	661416	RING, Seal Retaining	1	77	947209	RING, Steel	2
34	946099	SEAL, Shaft Oil	1	78	-----	§GEAR, Rear Idler — See C	—
35	954277	NUT, Flange to Body	8	79	-----	§PLATE, Pressure — See E	—
36	946271	WASHER, Flange to Body	8	80	947275	RETAINER, O-Ring	1
37	948451	FLANGE ASSY (Inc. 38, 70 thru 74)	1	81	-----	§O-RING — See 1	—
				82	-----	§O-RING, Bearing Plate	—
				83	948431	STUD, Pump Connecting	8
				84	946100	DOWEL	1
				85	-----	§BODY, Rear — See B	—
				86	946100	DOWEL	1
				87	-----	§BEARING, Sleeve — See B	—
				88	947277	RING, Back-Up	1
				89	-----	§PLATE, Bottom Isolation — See E	—
				90	-----	§GEAR, Rear Drive — See C	—
				91	-----	§PLATE, Pressure — See E	—
				92	-----	§PLATE, Top Isolation — See E	—
				93	947277	RING, Back-Up	—

NOTE: Pump is equipped with Bushing Type Bearings. Bearings are machine finished after pressing in place and therefore are not replaceable service items.

\*NOTE: For complete replacement use 1513315 Pump Assembly.

§Not Sold Separately

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



HYDRAULIC PUMP – BUCKET & BOOM

TS-11210

89C.1

(1H9)

PM 2462



**HYDRAULIC PUMP – BUCKET & BOOM**  
For Serial: G.M. – 403A535 & After

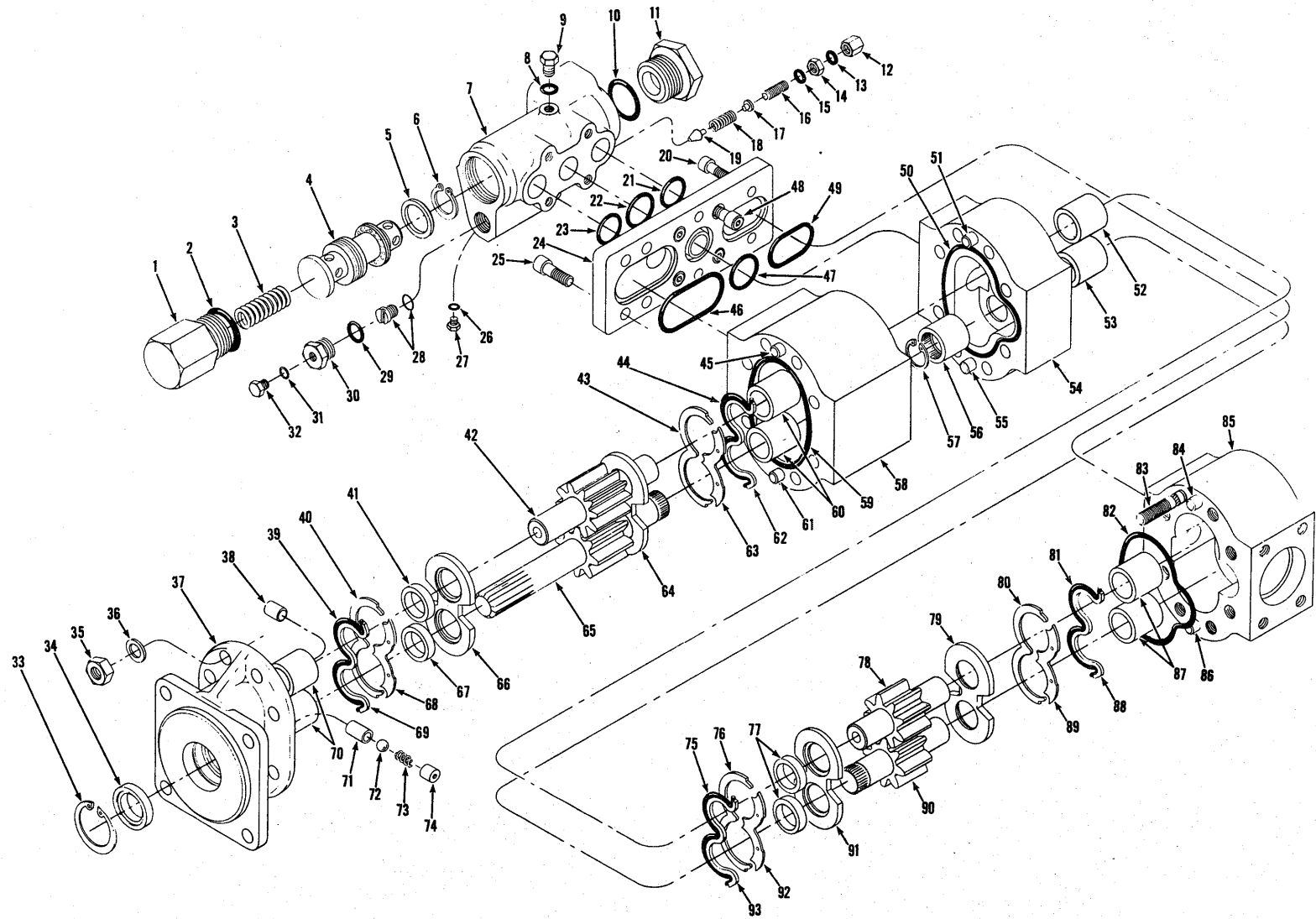
Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
A	1513315	* PUMP ASSY (Incl. 1 thru 93)	1	42	948448	GEAR KIT (Incl. 65)	1
B	949326	BODY KIT – Front (Incl. 41, 42, 45, 51, 55 thru 58, 60, 61, 65, 67)	1	43	-----	§ RETAINER, O-Ring – See "F"	—
C	949330	BODY KIT – Rear (Incl. 52, 53, 54, 56, 57, 77, 78, 84, 85, 86, 87, 90)	1	44	-----	§ O-RING – See "F"	—
D	948568	PLATE KIT (Incl. 39, 40, 43, 44, 50, 59, 62, 63, 64, 66, 68, 69, 75, 76, 79, 80, 81, 82, 88, 89, 91, 92, 93)	1	45	946100	DOWEL	1
E	949328	VALVE ASSY (Incl. 1 thru 19, 26 thru 32)	1	46	58K-144	O-RING, Adapter to Pump	1
F	948569	SEAL KIT (Incl. 34, 39, 40, 43, 44, 50, 59, 62, 69, 75, 76, 80, 81, 82, 88, 93)	1	47	25K-40114	O-RING, Adapter to Pump	1
G	949327	SEAL KIT (Incl. 21, 22, 23, 46, 47, 49)	1	48	73G-614	SCREW, Adapter to Valve	4
1	948513	CAP, Valve	1	49	58K-135	O-RING, Adapter to Pump	1
2	91F-12	O-RING, Cap	1	50	-----	§ O-RING – See "F"	—
3	948442	SPRING, Spool	1	51	946100	DOWEL	1
4	948433	SPOOL, Valve	1	52	-----	§ BEARING, Sleeve – See "54"	—
5	948434	VALVE, Check	1	53	-----	§ BEARING, Sleeve – See "54"	—
6	9J-40	RING, Check Retaining	1	54	949366	PLATE, Bearing (Incl. 52, 53)	1
7	948707	HOUSING, Valve	1	55	946100	DOWEL	1
8	91F-3	O-RING, Plug	1	56	948583	COUPLING, Spline	1
9	24K-3	PLUG (Incl. 8)	1	57	664140	RING, Coupling Retainer	1
10	91F-12	O-RING, Plug	1	58	949331	BODY ASSY – Front (Incl. 60)	1
11	948436	CAP, Valve	1	59	58K46	O-RING, Flange	1
12	948441	NUT, Acorn	1	60	-----	§ BEARING, Sleeve – See "58"	—
13	25K-20014	O-RING, Nut	1	61	946100	DOWEL	1
14	949041	NUT, Jam	1	62	947277	RING, Back-up	1
15	25K-20014	O-RING, Nut	1	63	-----	§ PLATE, Bottom Isolation – See "D"	—
16	15G-624	SCREW, Adjusting	1	64	-----	§ PLATE, Pressure – See "D"	—
17	948437	GUIDE, Spring	1	65	-----	§ GEAR – See "42"	—
18	1550490	SPRING, Poppet	1	66	-----	§ PLATE, Pressure – See "D"	—
19	948438	POPPET	1	67	947209	RING, Spacer	1
20	73G-614	SCREW, Adapter to Housing	4	68	-----	§ PLATE, Top Isolation – See "D"	—
21	58K-123	O-RING, Adapter to Valve	1	69	947277	RING, Back-up	1
22	58K-128	O-RING, Adapter to Valve	1	70	-----	§ BEARING, Sleeve – See "37"	—
23	58K-123	O-RING, Adapter to Valve	1	71	-----	§ SEAT, Ball – See "37"	—
24	948443	ADAPTER, Valve Mounting	1	72	-----	§ BALL, Check – See "37"	—
25	73G-716	SCREW, Adapter to Pump	4	73	-----	§ SPRING, Check – See "37"	—
26	91F-1	O-RING, Plug	1	74	-----	§ RETAINER, Spring – See "37"	—
27	24K-1	PLUG (Incl. 26)	1	75	-----	§ O-RING – See "F"	—
28	948439	SEAT, Poppet	1	76	-----	§ RETAINER, O-Ring – See "F"	—
28A	949040	GASKET, Seat	1	77	947209	RING, Spacer	2
29	91F-7	O-RING, Cap	1	78	949329	GEAR KIT (Incl. 90)	1
30	948439	CAP	1	79	-----	§ PLATE, Pressure – See "D"	—
31	91F-3	O-RING, Plug	1	80	-----	§ RETAINER, O-Ring – See "F"	—
32	24K-3	PLUG, Pipe (Incl. 31)	1	81	-----	§ O-RING – See "F"	—
33	661416	RING, Seal Retaining	1	82	-----	§ O-RING, Bearing Plate – See "F"	—
34	946099	SEAL, Shaft Oil	1	83	948431	STUD, Pump Connecting	8
35	954277	NUT, Flange to Body	8	84	946100	DOWEL	1
36	946271	WASHER, Flange to Body	8	85	949322	BODY ASSY – Rear (Incl. 87)	1
37	949365	FLANGE ASSY (Incl. 38, 70 thru 74)	1	86	946100	DOWEL	1
38	-----	§ PLUG, Flange – See "37"	—	87	-----	§ BEARING, Sleeve – See "C"	—
39	-----	§ O-RING – See "F"	—	88	947277	RING, Back-up	1
40	-----	§ RETAINER, O-Ring – See "F"	—	89	-----	§ PLATE, Bottom Isolation – See "D"	—
41	947209	RING, Spacer	1	90	-----	§ GEAR, Drive – See "78"	—
				91	-----	§ PLATE, Pressure – See "D"	—
				92	-----	§ PLATE, Top Isolation – See "D"	—
				93	947277	RING, Back-up	1
				94	571511	†STUD, Pump Mounting	4
				95	62D-08	†NUT, Pump Mounting	4
				96	4E-08	†LKWSHR, Pump Mounting	4
				97	552161	†GASKET, Pump Mounting	1
				98	230151	†SLEEVE, Drive (Incl. 99)	1
				99	224104	†RING, Drive Sleeve	1

NOTE: Pump is equipped with Bushing Type Bearings. Bearings are machine finished after pressing in place and therefore are not replaceable service items.

\*NOTE: For replacement use 1519954 Pump assy.

†Not Illustrated

§Not Sold Separately



HYDRAULIC PUMP

TS-11210

## HYDRAULIC PUMP - MAIN

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
A	1519954	*PUMP ASSY (Incl. 1 thru 40, 42 thru 66, 68 thru 76, 78 thru 93)	1	42	948448	GEAR KIT (Incl. 65)	1
B	949326	BODY KIT - Front (Incl. 42, 45, 51, 55 thru 58, 60, 61, 65)	1	43	-----	§ RETAINER, O-Ring - See "F"	-
C	949330	BODY KIT - Rear (Incl. 52, 53, 54, 56, 57, 77, 78, 84, 85, 86, 87, 90)	1	44	-----	§ O-RING - See "F"	-
D	948568	PLATE KIT (Incl. 39, 40, 43, 44, 50, 59, 62, 63, 64, 66, 68, 69, 75, 76, 79, 80, 81, 82, 88, 89, 91, 92, 93)	1	45	946100	DOWEL	1
E	960451	*PUMP KIT (Incl. 33 thru 47, 49 thru 93)	1	46	58K-144	O-RING, Adapter to Pump	1
F	948569	SEAL KIT (Incl. 34, 39, 40, 43, 44, 50, 59, 62, 69, 75, 76, 80, 81, 82, 88, 93)	1	47	25K-40114	O-RING, Adapter to Pump	1
G	949327	SEAL KIT (Incl. 21, 22, 23, 46, 47, 49)	1	48	73G-614	SCREW, Adapter to Valve	4
1	948513	CAP, Valve	1	49	58K-135	O-RING, Adapter to Pump	1
2	91F-12	O-RING, Cap	1	50	-----	§ O-RING - See "F"	-
3	948442	SPRING, Spool	1	51	946100	DOWEL	1
4	948433	SPOOL, Valve	1	52	-----	§ BEARING, Sleeve - See "54"	-
5	948434	VALVE, Check	1	53	-----	§ BEARING, Sleeve - See "54"	-
6	9J-40	RING, Check Retaining	1	54	949366	PLATE, Bearing (Incl. 52, 53)	1
7	948707	HOUSING, Valve	1	54A	960872	† STABILIZER, Stud	8
8	91F-3	O-RING, Plug	1	55	946100	DOWEL	1
9	24K-3	PLUG (Incl. 8)	1	56	948583	COUPLING, Spline	1
10	91F-12	O-RING, Plug	1	57	664140	RING, Coupling Retainer	1
11	948436	CAP, Valve	1	58	949331	BODY ASSY - Front (Incl. 60)	1
12	948441	NUT, Acorn	1	59	58K46	O-RING, Flange	1
13	25K-20014	O-RING, Nut	1	60	-----	§ BEARING, Sleeve - See "58"	-
14	949041	NUT, Jam	1	61	946100	DOWEL	1
15	25K-20014	O-RING, Nut	1	62	947277	RING, Back-up	1
16	15G-624	SCREW, Adjusting	1	63	-----	§ PLATE, Bottom Isolation - See "D"	-
17	948437	GUIDE, Spring	1	64	-----	§ PLATE, Pressure - See "D"	-
18	1550490	SPRING, Poppet	1	65	-----	§ GEAR - See "42"	-
19	948438	POPPET	1	66	-----	§ PLATE, Pressure - See "D"	-
20	73G-614	SCREW, Adapter to Housing	4	67	-----	OMIT	-
21	58K-123	O-RING, Adapter to Valve	1	68	-----	§ PLATE, Top Isolation - See "D"	-
22	58K-128	O-RING, Adapter to Valve	1	69	947277	RING, Back-up	1
23	58K-123	O-RING, Adapter to Valve	1	70	-----	§ BEARING, Sleeve - See "37"	-
24	948443	ADAPTER, Valve Mounting	1	71	-----	§ SEAT, Ball - See "37"	-
25	73G-716	SCREW, Adapter to Pump	4	72	-----	§ BALL, Check - See "37"	-
26	91F-1	O-RING, Plug	1	73	-----	§ SPRING, Check - See "37"	-
27	24K-1	PLUG (Incl. 26)	1	74	-----	§ RETAINER, Spring - See "37"	-
28	948439	SEAT, Poppet	1	75	-----	§ O-RING - See "F"	-
28A	949040	GASKET, Seat	1	76	-----	§ RETAINER, O-Ring - See "F"	-
29	91F-7	O-RING, Cap	1	77	-----	OMIT	-
30	948439	CAP	1	78	949329	GEAR KIT (Incl. 90)	1
31	91F-3	O-RING, Plug	1	79	-----	§ PLATE, Pressure - See "D"	-
32	24K-3	PLUG, Pipe (Incl. 31)	1	80	-----	RETAINER, O-Ring - See "F"	-
33	661416	RING, Seal Retaining	1	81	-----	§ O-RING - See "F"	-
34	946099	SEAL, Shaft Oil	1	82	-----	§ O-RING, Bearing Plate - See "F"	-
35	954277	NUT, Flange to Body	8	83	948431	STUD, Pump Connecting	8
36	946271	WASHER, Flange to Body	8	84	946100	DOWEL	1
37	949365	FLANGE ASSY (Incl. 38, 70 thru 74)	1	85	949322	BODY ASSY - Rear (Incl. 87)	1
38	-----	§ PLUG, Flange - See "37"	-	86	946100	DOWEL	1
39	-----	§ O-RING - See "F"	-	87	-----	§ BEARING, Sleeve - See "C"	-
40	-----	§ RETAINER, O-Ring - See "F"	-	88	947277	RING, Back-up	1
41	-----	OMIT	-	89	-----	§ PLATE, Bottom Isolation - See "D"	-
				90	-----	§ GEAR, Drive - See "78"	-
				91	-----	§ PLATE, Pressure - See "D"	-
				92	-----	§ PLATE, Top Isolation - See "D"	-
				93	947277	RING, Back-up	1

NOTE: Pump is equipped with Bushing Type Bearings. Bearings are machine finished after pressing in place and therefore are not replaceable service items.

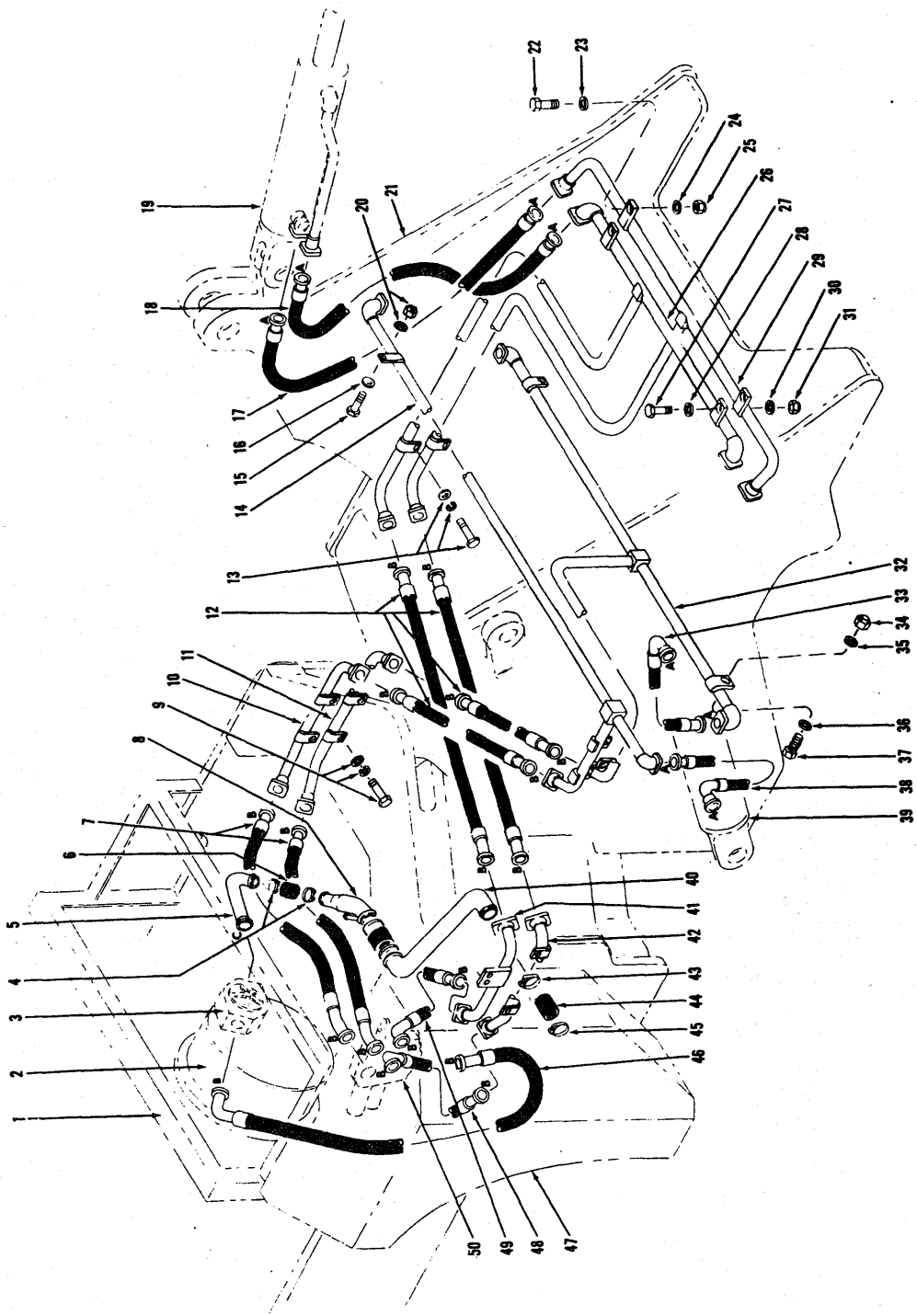
† Not Illustrated

§ Not Sold Separately

\* For replacement of 1519954 Pump Assembly use 960451 Pump Kit (Less Sensor Valve). See Servicegrams SG-508 and SG-521A.

**WHEN ORDERING REPLACEMENT PUMP, ALWAYS REFER TO PUMP REPLACEMENT CHART**

TS-9171-P



HYDRAULIC SYSTEM — BUCKET AND BOOM

NOTE: To determine part number of flange halves refer to letter designation on illustration, and then to Chart below.

GROUP No. Req'd. Per Connection	Flange Half 2	O-Ring 1	Bolt 4	Lkwshr 4	Size
A	19J16	58K-219	23C-620	4E-06	1"
B	19J20	58K-222	23C-724	4E-07	1¼"
C	19J32	58K-228	23C-824	4E-08	2"
D	19J24	58K-225	23C-824	4E-08	1½"



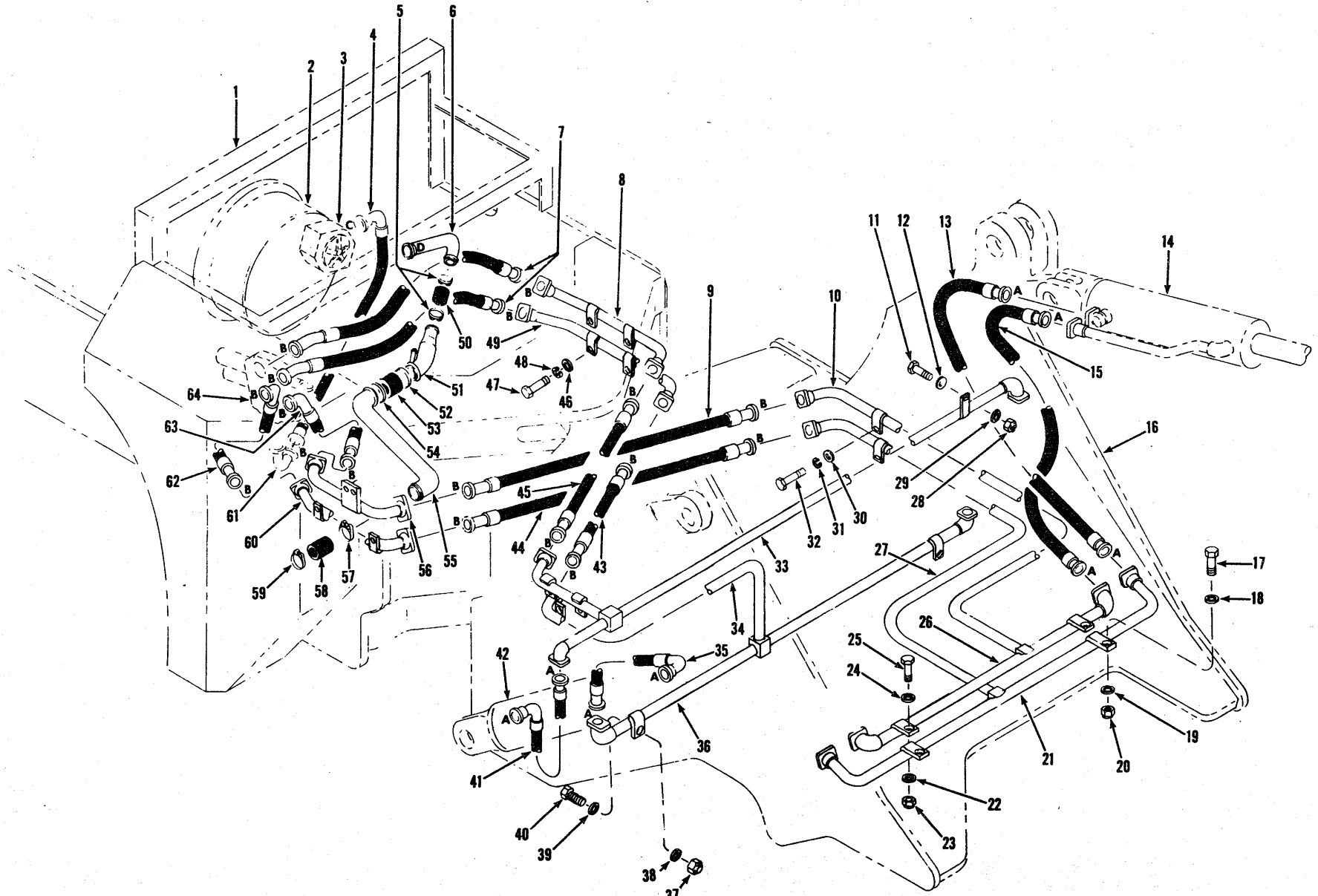
**CONSTRUCTION MACHINERY DIVISION**  
**HYDRAULIC SYSTEM — BUCKET AND BOOM**  
 For Serial: Cummins — 404A101 thru 404A299  
 G.M. — 403A101 thru 403A299



Item No.	Part No.	Description	No. Req'd.
1	----	FRAME, Rear — See Index	—
2	----	TORQUE CONVERTER — See Index	—
3	----	PUMP, Bucket & Boom Hydraulic — See Index	—
4	540106	CLAMP, Hose to Tube & Stem	2
5	1505702	STEM, Suction	1
6	533478	HOSE, Stem to Tube	1
7	1534469	HOSE, Control Valve to Tube	2
8	1533265	TUBE, Suction	1
9	24C-824	BOLT, Tube to Frame	8
9A	4E-08	LKWSHR, Tube to Frame	8
9B	635682	WASHER, Tube to Frame	8
10	1503302	TUBE, L.H. Boom Cylinder — Base End	1
11	1536329	TUBE, L.H. Boom Cylinder — Rod End	1
12	1534465	HOSE, Center Pivot	4
13	24C-820	BOLT, Tube to Frame	5
13A	4E-08	LKWSHR, Tube to Frame	5
13B	635682	WASHER, Tube to Frame	5
14	1536338	TUBE, Upper Boom Cylinder	1
15	24C-828	BOLT, Tube to Frame	1
16	635682	WASHER, Tube to Frame	1
17	1534003	HOSE, Bucket Cylinder — Base End	2
18	1534003	HOSE, Bucket Cylinder Rod End	2
19	----	CYLINDER, Bucket — See Index	—
20	18D-08	NUT, Tube to Frame	1
20A	635682	WASHER, Tube to Frame	1
21	----	FRAME, Front — See Index	—
22	18C-828	BOLT, Tube to Frame	2
23	635682	WASHER, Tube to Frame	2
24	635682	WASHER, Tube to Frame	2
25	18D-08	NUT, Tube to Frame	2
26	1536336	TUBE, Upper Bucket Cylinder	1
27	24C-828	BOLT, Tube to Frame	2
28	635682	WASHER, Tube to Frame	2
29	1536335	TUBE, Lower Bucket Cylinder	1
30	635682	WASHER, Tube to Frame	2
31	18D-08	NUT, Tube to Frame	2
32	1536337	TUBE, Lower Boom Cylinder	1
33	567671	HOSE, Boom Cylinder — Rod End	2
34	18D-08	NUT, Tube to Frame	2
35	635682	WASHER, Tube to Frame	2
36	635682	WASHER, Tube to Frame	2
37	24C-828	BOLT, Tube to Frame	2
38	1534006	HOSE, Boom Cylinder — Base End	2
39	----	CYLINDER, Boom — See Index	—
40	1533262	TUBE, Suction	1
41	1536326	TUBE, R.H. Bucket Cylinder — Rod End	1
42	1536325	TUBE, R.H. Bucket Cylinder — Base End	1
43	540102	CLAMP, Hose	2
44	536942	HOSE, Tube to Reservoir & Suction Tube	2
45	540102	CLAMP, Hose	2
46	1533254	HOSE, Pump to Valve	1
47	----	RESERVOIR, Oil — See Index	—
48	1534468	HOSE, Valve to Tube	1
49	1534466	HOSE, Valve to Tube	1

NOTE: To determine part number of flange halves refer to letter designation on illustration and then to chart.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



HYDRAULIC SYSTEM - BUCKET AND BOOM  
For Serial: Cummins - 404A300 & After  
G.M. - 403A300 & After

TS-9977

90A.1

(1G11)

PM 2462

**HYDRAULIC SYSTEM – BUCKET AND BOOM**

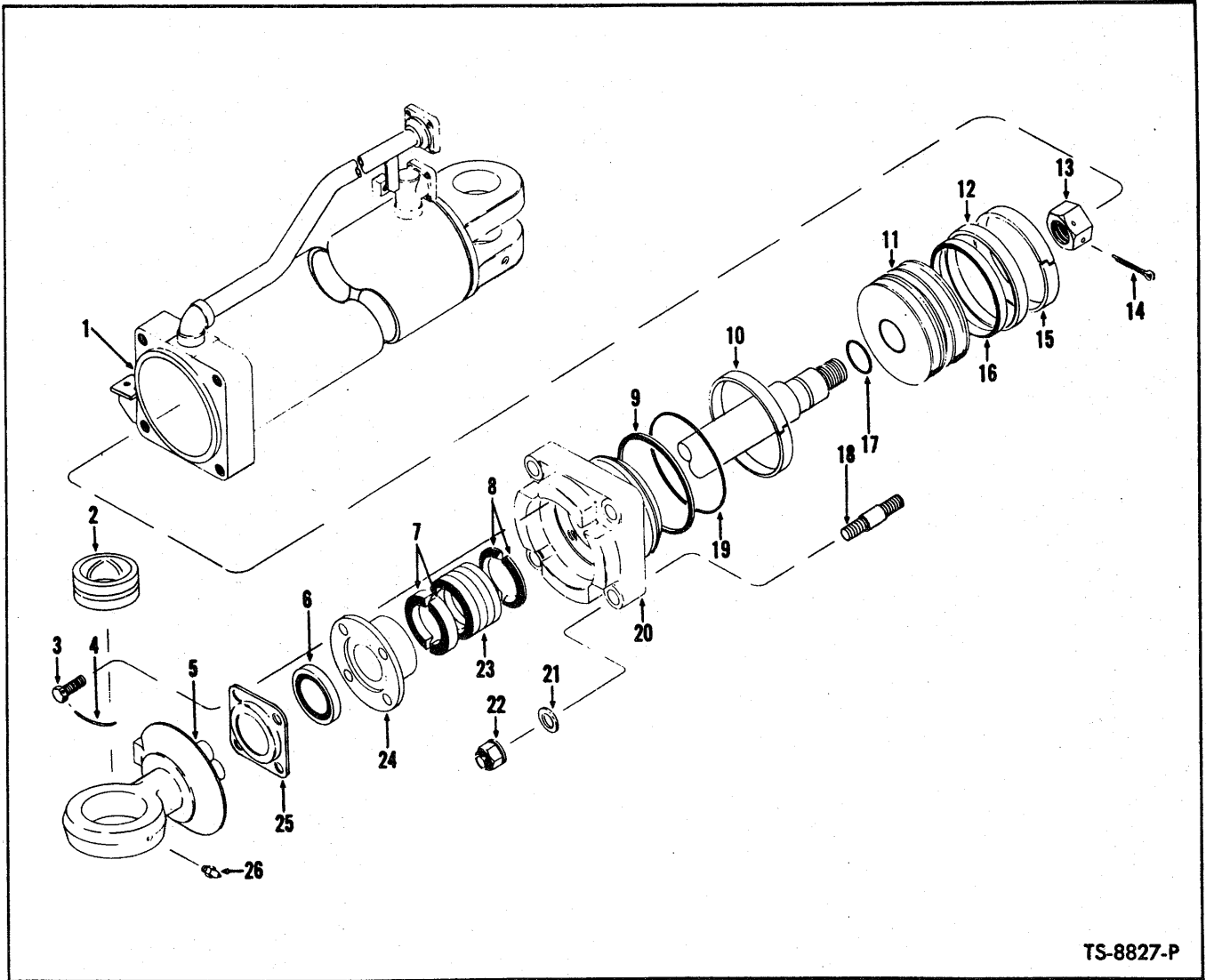
**For Serial: Cummins – 404A300 and after  
G.M. – 403A300 and after**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	FRAME, Rear – See Index .....	—	33	1536338	TUBE, Upper Boom Cylinder ..	1
2	-----	TORQUE CONVERTER – See Index .....	—	34	1536337	TUBE, Lower Boom Cylinder ..	1
3	-----	PUMP, Bucket & Boom Hydraulic – See Index .....	—	35	567671	HOSE, Boom Cylinder – Rod End .....	2
4	1534717	HOSE, Pump to Stem .....	1	36	-----	TUBE, See 34 .....	—
5	540106	CLAMP, Hose to Tube to Stem .....	2	37	18D-08	NUT, Tube to Frame .....	2
6	1541229	TUBE, Suction .....	1	38	635682	WASHER, Tube to Frame .....	2
7	1534469	HOSE, Control Valve to Tube .....	2	39	635682	WASHER, Tube to Frame .....	2
8	1503302	*TUBE, L.H. Boom Cylinder – .....	1	40	24C-828	BOLT, Tube to Frame .....	2
8A	2501352	**TUBE, L.H. Boom Cylinder – .....	1	41	1534006	HOSE, Boom Cylinder – Base End .....	1
9	1534465	HOSE, Center Pivot .....	1	42	-----	CYLINDER, Boom – See Index .....	—
10	1536335	TUBE, Lower Bucket Cylinder .....	1	43	1534465	HOSE, Center Pivot .....	1
11	24C-828	BOLT, Tube to Frame .....	1	44	1534465	HOSE, Center Pivot .....	1
12	635682	WASHER, Tube to Frame .....	1	45	1534465	HOSE, Center Pivot .....	1
13	1534003	HOSE, Bucket Cylinder – Base End .....	1	46	635682	WASHER, Tube to Frame .....	8
14	-----	CYLINDER, Bucket – See Index .....	—	47	24C-820	BOLT, Tube to Frame .....	8
15	1534003	HOSE, Bucket Cylinder – Rod End .....	1	48	4E-08	LKWSHR, Tube to Frame .....	8
16	-----	FRAME, Front – See Index .....	—	49	1536329	TUBE, L.H. Boom Cylinder – Rod End .....	1
17	24C-828	BOLT, Tube to Frame .....	2	50	533478	HOSE, Stem to Tube .....	1
18	635682	WASHER, Tube to Frame .....	2	51	1541231	TUBE, Suction .....	1
19	635682	WASHER, Tube to Frame .....	2	52	540102	CLAMP, Hose .....	1
20	18D-08	NUT, Tube to Frame .....	2	53	1580530	HOSE, Tube to Tube .....	1
21	-----	TUBE – See 10 .....	—	54	540102	CLAMP, Hose .....	1
22	635682	WASHER, Tube to Frame .....	2	55	1533262	TUBE, Suction .....	1
23	18D-08	NUT, Tube to Frame .....	2	56	1536326	TUBE, R.H. Bucket Cylinder – Rod End .....	1
24	635682	WASHER, Tube to Frame .....	2	57	540102	CLAMP, Hose .....	1
25	24C-828	BOLT, Tube to Frame .....	2	58	536942	HOSE, Tube to Reservoir .....	1
26	1536336	TUBE, Upper Bucket Cylinder .....	1	59	540102	CLAMP, Hose .....	1
27	-----	TUBE, See Item 10 .....	—	60	1536325	TUBE, R.H. Bucket Cylinder – Base End .....	1
28	18D-08	NUT, Tube to Frame .....	1	61	-----	OMIT, Not Used This Application .....	—
29	635682	WASHER, Tube to Frame .....	1	62	1534468	HOSE, Valve to Tube .....	1
30	635682	WASHER, Tube to Frame .....	5	63	1534466	HOSE, Valve to Tube .....	1
31	4E-08	LKWSHR, Tube to Frame .....	5	64	-----	CONTROL VALVE – See Index .....	—
32	24C-820	BOLT, Tube to Frame .....	5				

NOTE: To determine part number of Flange Halves refer to Letter Designation on illustration and then to chart.  
\*Cummins 404A300 → 649, G.M. 403A300 → 649      \*\*Cummins 404A650 & →, G.M. 403A650 & →

GROUP	FLANGE HALF	O-RING	BOLT	LKWSHR	SIZE
No. Req'd. Per Connection	2	1	4	4	
A	19J-16	58K-219	23C-620	4E-06	1"
B	19J-20	58K-222	23C-724	4E-07	1¼"
C	19J-24	58K-225	23C-824	4E-08	1½"
D	19J-40	58K-232	17C-828	4E-08	2½"

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



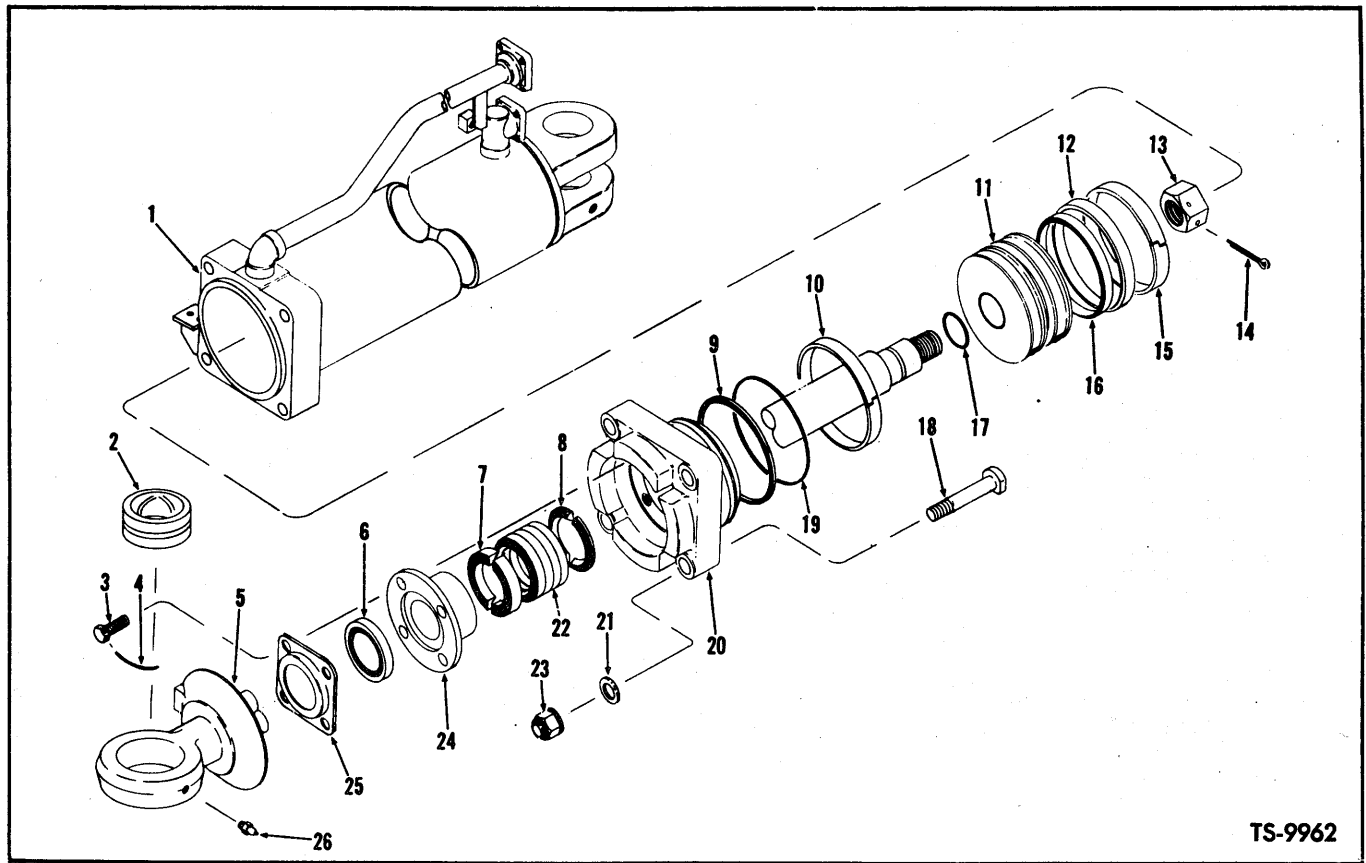
TS-8827-P

**CYLINDER ASSEMBLY – BUCKET**  
**For Serial: Cummins – 404A101 thru 404A299**  
**G.M. – 403A101 thru 403A299**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1503234	*CYLINDER ASSY (Inc. 1 thru 25)	2	11	1502846	PISTON	1
B	2516065	KIT (Inc. 6 → 10, 12, 14 → 17, 19, 23) See Note "A"	1	12	-----	§RING, Piston – See B	1
<b>NOTE: 2 Cylinders used on machine – Quantities listed below are for 1 Cylinder</b>				13	1535218	***NUT, Piston Rod	1
1	1535643	**CYLINDER	1	14	1F-852	COTTER, Piston Rod Nut	1
2	549688	BUSHING, Piston Rod	1	15	-----	§RING, Piston Wear – See B	1
3	3C-820	BOLT, Seal Retainer	4	16	-----	§RING, Piston – See B	1
4	-----	LOCKWIRE (16 ga. x 13" lg.)	2	17	-----	§O-RING, Piston Rod – See B	1
5	1535634	ROD PISTON (Inc. 2)	1	18	1535628	STUD, Cylinder Cap	4
6	2516950	SEAL, Piston Rod	1	19	-----	§O-RING, Cap – See B	1
7	-----	§ADAPTER, Female – See 23	2	20	945909	CAP, Cylinder (Inc. 9, 19)	1
8	-----	§ADAPTER, Male – See 23	2	21	1535626	WASHER, Cylinder Cap	4
9	-----	§RING, Back-Up – See B	1	22	18D-12	NUT, Cylinder Cap	4
10	-----	§RING, Piston Wear – See B	1	23	2501108	PACKING SET (Inc. 7, 8)	1
				24	1520109	**GLAND, Packing	1
				25	522617	RETAINER, Seal	1
				26	10H-25	FITTING, Rod Grease	1

\*NOTE: For complete replacement use 1543216 Cylinder Assembly  
 \*\*NOTE: For replacement use 1543215 Cylinder plus 4–1537343 Bolts.  
 \*\*\*NOTE: For replacement use 1–1520108 Flange plus 1–1520107 Sleeve.  
 NOTE "A": For reference see Service Gram S.G.-597A.  
 \*\*\*NOTE: For replacement use 1514650 Nut plus 1–1F-1068 Cotter Pin.





TS-9962

**CYLINDER ASSEMBLY — BUCKET — 6"**

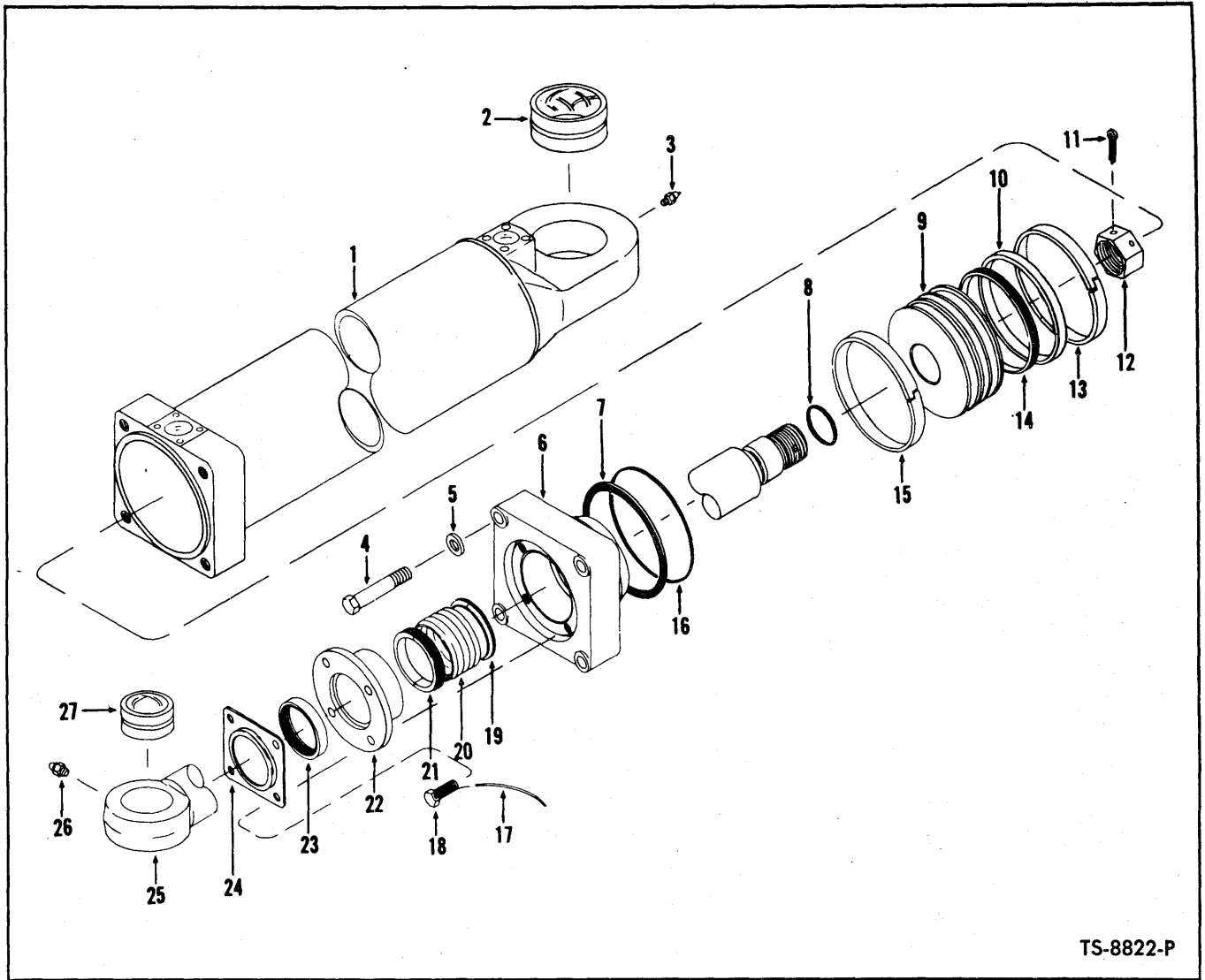
**For Serial: Cummins — 404A300 and after  
G.M. — 403A300 and after**

**NOTE: 2 Cylinders used on machine — Quantities listed below are for 1 Cylinder**

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
A	1543216	CYLINDER ASSY (Inc. 1 thru 25) . . . . .	1	12	-----	§RING, Piston Outer Seal — See B . . . . .	1
B	2516065	KIT (Inc. 6 → 10, 12, 14 → 17, 19, 22) See Note "A" . . . . .	1	13	1535218	**NUT, Piston Rod . . . . .	1
1	1543215	CYLINDER . . . . .	1	14	1F-852	COTTER, Piston Rod Nut . . . . .	1
2	549668	BUSHING, Piston Rod . . . . .	1	15	-----	§RING, Piston Wear — See B . . . . .	1
3	3C-820	BOLT, Seal Retainer . . . . .	4	16	-----	§RING, Piston Inner Seal — See B . . . . .	1
4	-----	LOCKWIRE (16 ga. x 13" lg.) . . . . .	2	17	-----	§O-RING, Piston Rod — See B . . . . .	1
5	1535634	ROD PISTON (Inc. 2) . . . . .	1	18	1537343	BOLT, Cylinder Cap . . . . .	4
6	2516950	SEAL, Piston Rod . . . . .	1	19	-----	§O-RING, Cap — See B . . . . .	1
7	-----	§ADAPTER, Female Packing — See 22 . . . . .	2	20	945909	CAP, Cylinder (Inc. 9, 19) . . . . .	1
8	-----	§ADAPTER, Male Packing — See 22 . . . . .	2	21	1535626	WASHER, Cylinder Cap . . . . .	4
9	-----	§RING, Back-Up — See B . . . . .	1	22	2501108	PACKING SET (Inc. 7, 8) . . . . .	1
10	-----	§RING, Piston Wear — See B . . . . .	1	23	18D-12	NUT, Cylinder Cap . . . . .	4
11	1502846	PISTON . . . . .	1	24	1520109	*GLAND, Packing . . . . .	1
				25	522617	RETAINER, Seal . . . . .	1
				26	10H-25	FITTING, Rod Grease . . . . .	1

\*NOTE: For replacement use 1-1520108 Flange plus 1-1520107 Sleeve. NOTE "A": For reference see Service Gram S.G.-597A.  
\*\*NOTE: For replacement use 1514650 Nut plus 1-1F-1068 Cotter Pin.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



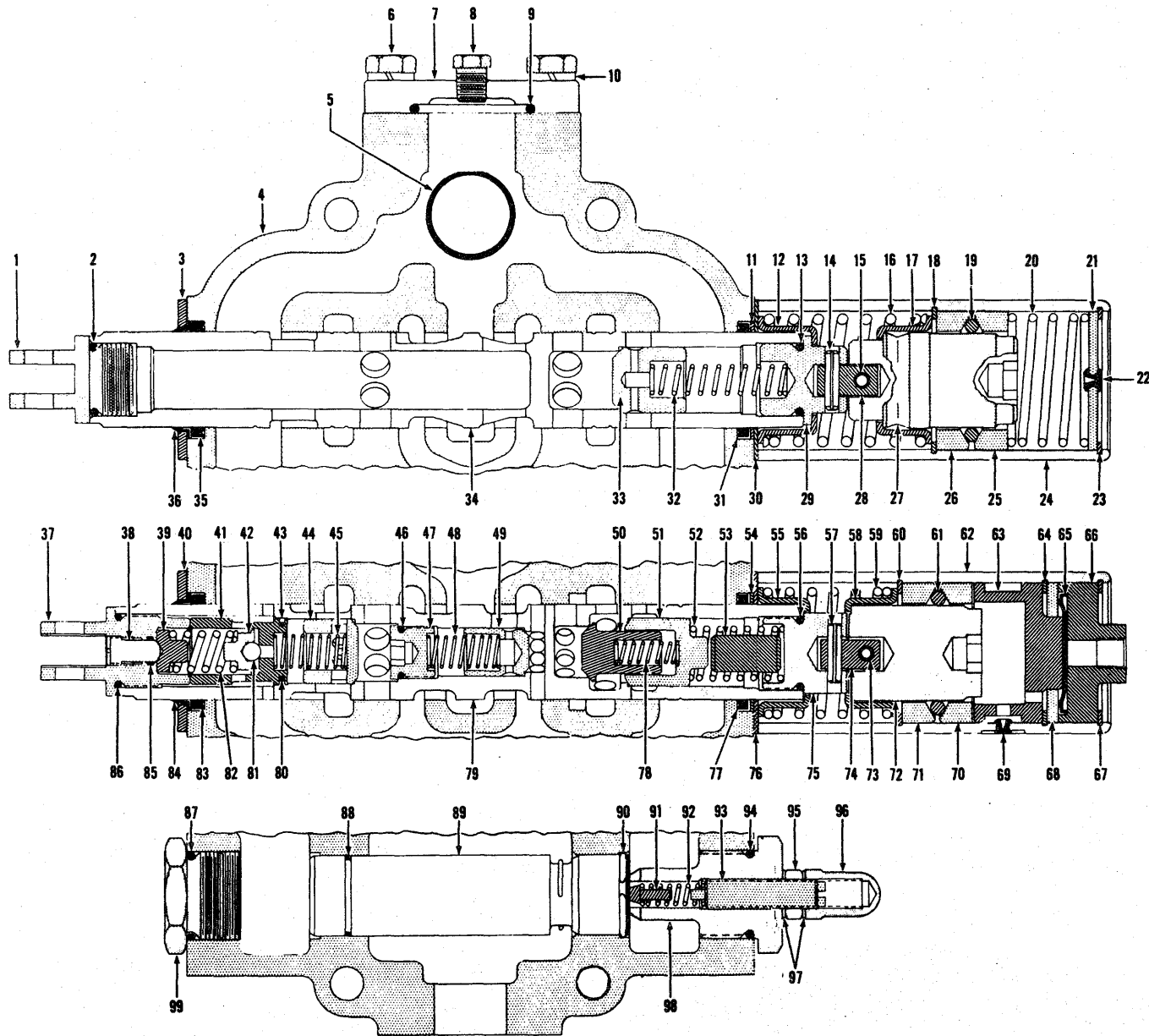
TS-8822-P

**CYLINDER ASSEMBLY – BOOM**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1503236	CYLINDER ASSY (Inc. 1 thru 27) . . . . .	2	12	1502930	**NUT, Piston Rod . . . . .	1
B	2516148	KIT (Incl. 7, 8, 10, 13 → 16, 19 20, 21, 23) See Note "A" . . . . .	2	13	-----	§ RING, Piston Wear – See B . . . . .	1
<b>NOTE: 2 Cylinders used on machine – Quantities listed below are for 1 Cylinder</b>				14	-----	§ RING, Piston Inner – See B . . . . .	1
1	1503769	CYLINDER (Inc. 2) . . . . .	1	15	-----	§ RING, Piston Wear – See B . . . . .	1
2	1522759	BUSHING, Cylinder . . . . .	1	16	-----	O-RING, Cap . . . . .	1
3	10H-25	FITTING, Cylinder Grease . . . . .	1	17	-----	LOCKWIRE (16 ga. x 31" lg.) . . . . .	1
4	24C-1256	BOLT, Cylinder Cap . . . . .	4	18	3C-820	BOLT, Seal Retainer . . . . .	4
5	616809	WASHER, Cylinder Cap . . . . .	4	19	-----	§ ADAPTER, Male Packing – See 20 . . . . .	2
6	945116	CAP, Cylinder (Inc. 7, 16) . . . . .	1	20	2501108	PACKING ASSY (Incl. 19, 21) . . . . .	1
7	-----	§ RING, Back-Up – See B . . . . .	1	21	-----	§ ADAPTER, Female – See 20 . . . . .	—
8	-----	§ O-RING, Piston Rod – See B . . . . .	1	22	1520109	GLAND, Packing . . . . .	1
9	1503028	PISTON . . . . .	1	23	2516950	SEAL, Piston Rod . . . . .	1
10	-----	§ RING, Piston – See B . . . . .	1	24	522617	RETAINER, Seal . . . . .	1
11	1F-852	COTTER, Piston Rod Nut . . . . .	1	25	556203	ROD, Piston (Inc. 27) . . . . .	1
				26	12H-15	FITTING, Rod Grease . . . . .	1
				27	564260	BUSHING, Piston Rod . . . . .	1

\*NOTE: For replacement use 1-1520108 Flange plus 1-1520107 Sleeve.  
 \*\*NOTE: For replacement use 1514650 plus 1-1F-1068 Cotter.  
 NOTE "A": For reference see Service Gram S.G.-597A.





CONTROL VALVE ASSEMBLY

TS-8406-P



**CONSTRUCTION MACHINERY DIVISION**  
**CONTROL VALVE ASSEMBLY**  
 For Serial: Cummins — 404A101 thru 404A145  
 G.M. — 403A101 thru 403A155



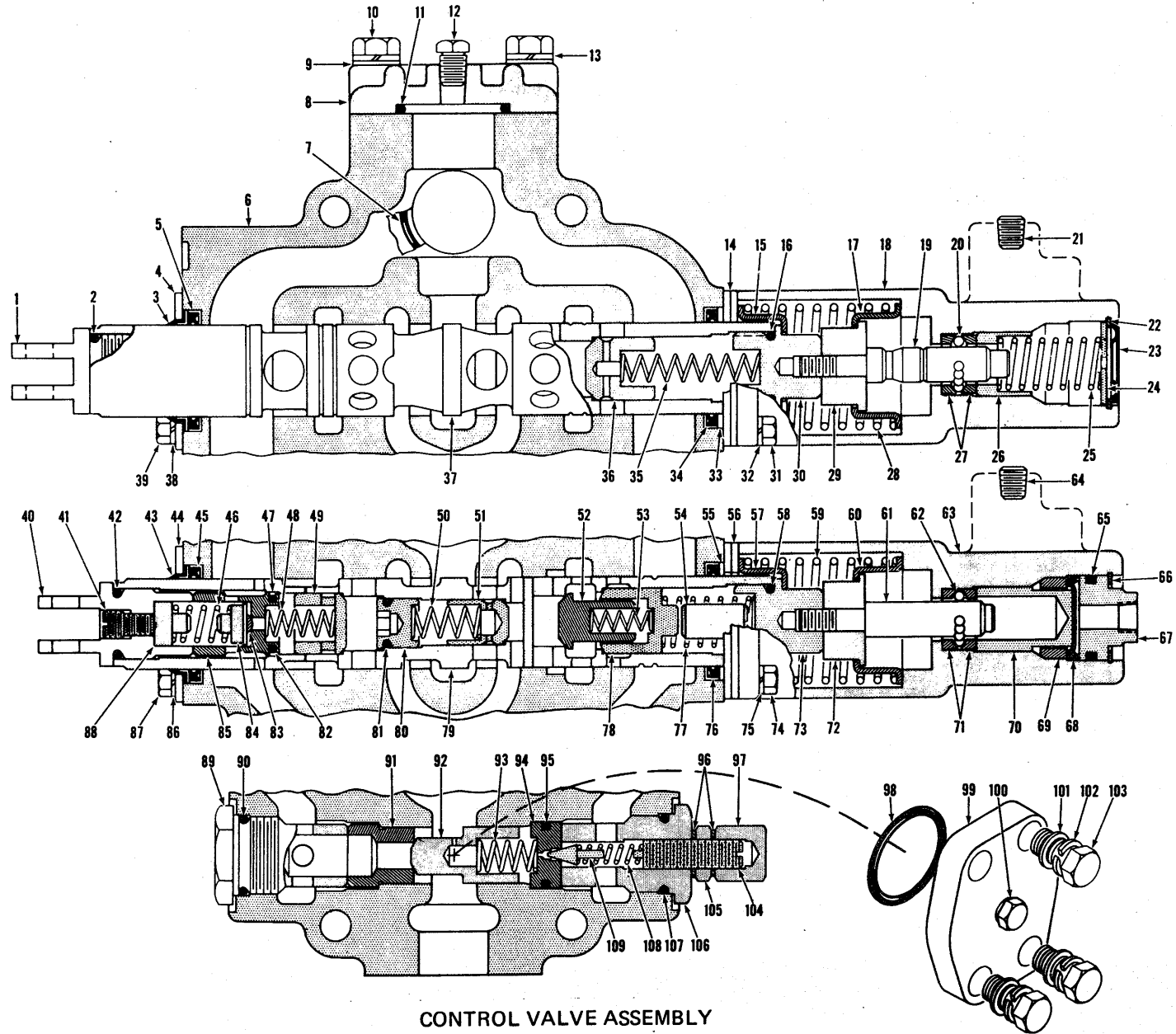
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1536238	*VALVE ASSY (Inc. 1 thru 99)	1	24	945498	COVER, Detent	1
1	946077	EYE, Plunger	1	24A	1C-416	†BOLT, Cover to Housing	4
2	58K-214	O-RING, Plunger Eye	1	24B	4E-04	†LKWSHR, Cover to Housing	4
3	946613	**PLATE, Wiper & Seal Retaining	1	25	945290	RETAINER, Ball	1
3A	1C-412	†BOLT, Plate to Housing	2	26	945290	RETAINER, Ball	1
3B	4E-04	†LKWSHR, Plate to Housing	2	27	944845	CAP, Detent	1
4	-----	§HOUSING, Valve — See "A"	—	28	944148	PIN, Connecting	1
4A	40K-04	†PLUG, Pipe	1	29	944841	CAP, Plunger	1
5	25K-40120	O-RING, Valve Mounting	1	30	946615	PLATE, Seal Retaining	2
6	1C-820	BOLT, Cover to Valve	4	31	949150	SEAL, Plunger Oil	1
7	946381	COVER, Valve	1	32	888304	SPRING, Check	1
8	40K-04	PLUG, Valve Cover Pipe	1	33	943184	CHECK	1
9	58K-225	O-RING, Cover to Housing	1	34	-----	§PLUNGER, Operating — See "A"	—
10	4E-08	LKWSHR, Cover to Housing	4	35	949150	SEAL, Plunger Oil	1
11	944837	RING, Back-up	1	36	946614	**WIPER, Plunger	1
12	944840	GUIDE, Spring	1	37	946616	EYE, Plunger	1
13	58K-214	O-RING, Plunger Cap	1	38	946126	SCREW, Adjusting	1
14	302602	ROLL PIN	1	39	946117	GUIDE, Spring	1
15	660178	ROLL PIN	1	40	946613	**PLATE, Wiper & Seal Retaining	1
16	947287	SPRING	1	40A	1C-412	†BOLT, Plate to Housing	2
17	944851	GUIDE, Spring	1	40B	4E-04	†LKWSHR, Plate to Housing	2
18	1301171	RING, Retaining	1	41	946617	SEAT, Relief Valve	1
19	10J-08	BALL	20	42	946119	POPPET ASSY (Inc. 81)	1
20	945494	SPRING	1	43	946618	RING, Back-up	1
21	944844	PLUG, Detent Cover	1	44	946624	CHECK	1
22	886763	PLUG, Bleeder	1	45	946623	SPRING, Check	1
23	663823	RING, Plug Retaining	1	46	944881	O-RING, Cap	1

\*NOTE: For complete replacement use 1512163 Valve Assembly

§Not Sold Separately

†Not Illustrated

\*\*NOTE: For replacement use 949066 Kit which consists of 1—949150 Seal, 1—949236 Wiper, 1—949237 Plate & 1—949238 Plate.



**CONTROL VALVE ASSEMBLY**  
For Serial: Cummins - 404A146 thru 404A359  
G.M. - 403A156 thru 403A327

TS-9097

94A.2

(2A13)

PM 2462

**CONTROL VALVE ASSEMBLY**  
For Serial: Cummins — 404A146 thru 404A359  
G.M. — 403A156 thru 403A327

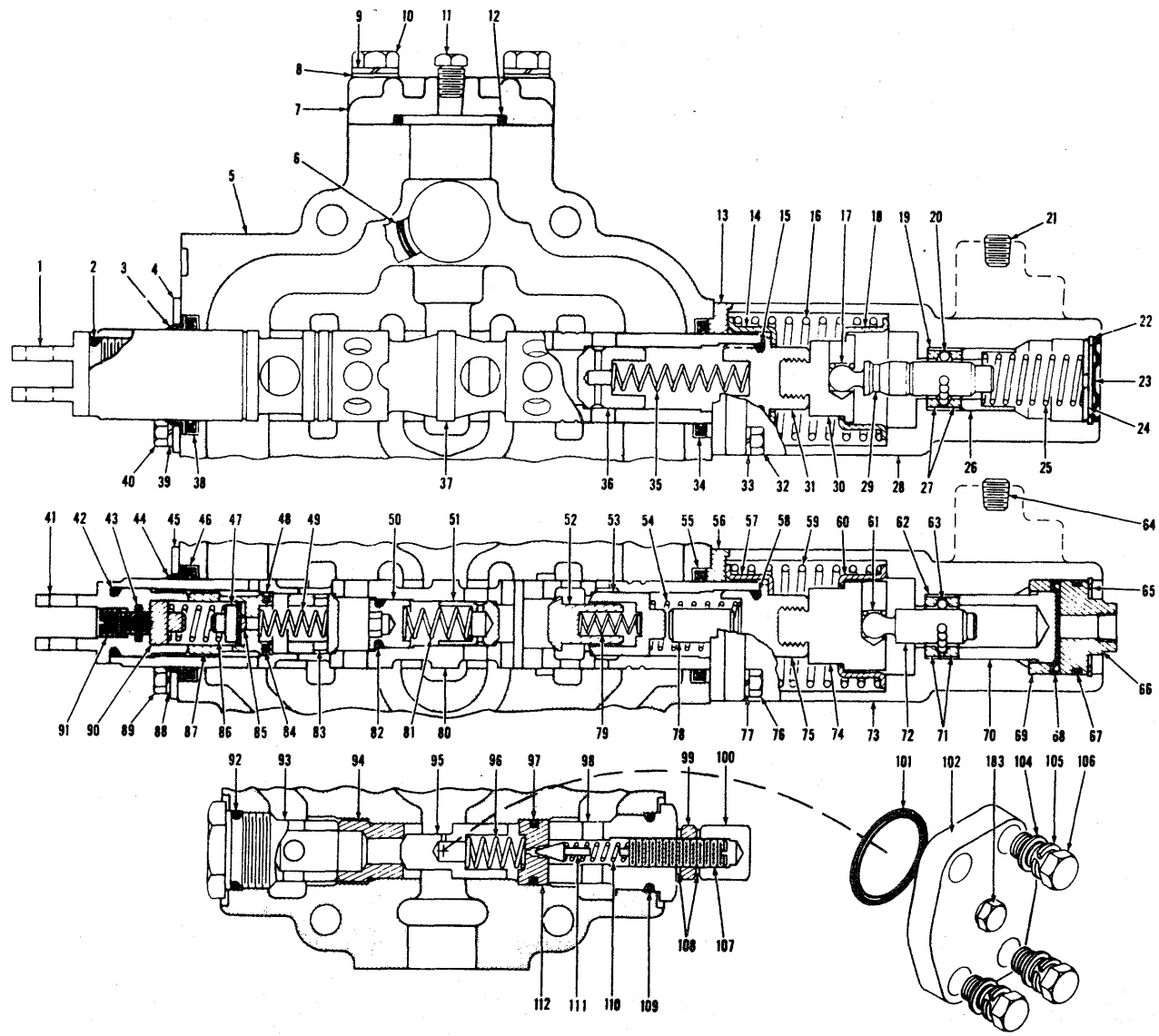
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1508789	*CONTROL VALVE ASSY (Inc. 1 thru 109) .....	1	27A	948388	†SLEEVE, Retainer .....	1
1	946077	EYE, Plunger .....	1	28	947287	SPRING, Plunger Return .....	1
2	58K-214	O-RING, Plunger Eye .....	1	29	947898	SPACER, Return Spring .....	1
3	946614	**WIPER, Plunger .....	1	30	947895	CAP, Plunger .....	1
4	946613	**PLATE, Wiper & Seal Retainer .....	1	31	1C-420	BOLT, Detent to Housing .....	4
5	949150	SEAL, Plunger Oil .....	1	32	4E-04	LKWSHR, Detent to Housing .....	4
6	-----	§HOUSING, Valve (See Item "A") .....	—	33	944837	RING, Back-Up .....	1
7	25K-40120	O-RING, Valve to Plate .....	1	34	949150	SEAL, Plunger Oil .....	1
8	947884	COVER .....	1	35	888304	SPRING, Check .....	1
9	878233	WASHER, Cover to Housing .....	4	36	943184	CHECK .....	1
10	1C-828	BOLT, Cover to Housing .....	4	37	-----	§PLUNGER, Operating (See Item "A") .....	—
11	58K-224	O-RING, Cover to Housing .....	1	38	4E-04	LKWSHR, Plate to Housing .....	2
12	40K-04	PLUG, Cover .....	1	39	1C-412	BOLT, Plate to Housing .....	2
13	4E-08	LKWSHR, Cover to Housing .....	4	40	946616	EYE, Plunger .....	1
14	946615	PLATE, Seal Retainer .....	2	41	946126	SCREW, Adjusting .....	1
15	944840	GUIDE, Spring .....	1	42	58K-214	RING, Back-Up .....	1
16	58K-214	O-RING, Cap .....	1	43	946614	**WIPER, Plunger .....	1
17	944851	GUIDE, Spring .....	1	44	946613	**PLATE, Wiper and Seal Retainer .....	1
18	947883	COVER, Detent .....	1	45	949150	SEAL, Plunger Oil .....	1
19	947901	CAP, Detent .....	1	46	946118	SPRING, Check .....	1
20	10J-06	BALL .....	1	47	946618	RING, Back-Up .....	1
21	16F-04	PLUG, Pipe .....	1	48	946623	SPRING, Check .....	1
22	666542	RING, Plug Retainer .....	1	49	946624	CHECK .....	1
23	948202	DIAPHRAGM, Cover .....	1	50	946623	SPRING, Check .....	1
24	947848	PLUG, Detent Cover .....	1	51	946863	CHECK .....	1
25	947852	SPRING, Detent .....	1	52	946619	CHECK .....	1
26	947842	GUIDE, Detent Spring .....	1	53	946813	SPRING, Check .....	1
27	947843	RETAINER, Ball .....	2	54	947286	SPACER .....	1
				55	944837	RING, Back-Up .....	1

\*NOTE: For replacement use 1512163

†Not Illustrated

§Not Sold Separately

\*\*NOTE: For replacement use 949066 Kit which consists of 1—949150 Seal, 1—949236 Wiper, 1—949237 Plate & 1—949238 Plate.



CONTROL VALVE ASSEMBLY

TS-10672



**CONTROL VALVE ASSEMBLY**  
For Serial: Cummins — 404A360 Thru 544  
G.M. — 403A328 Thru 549

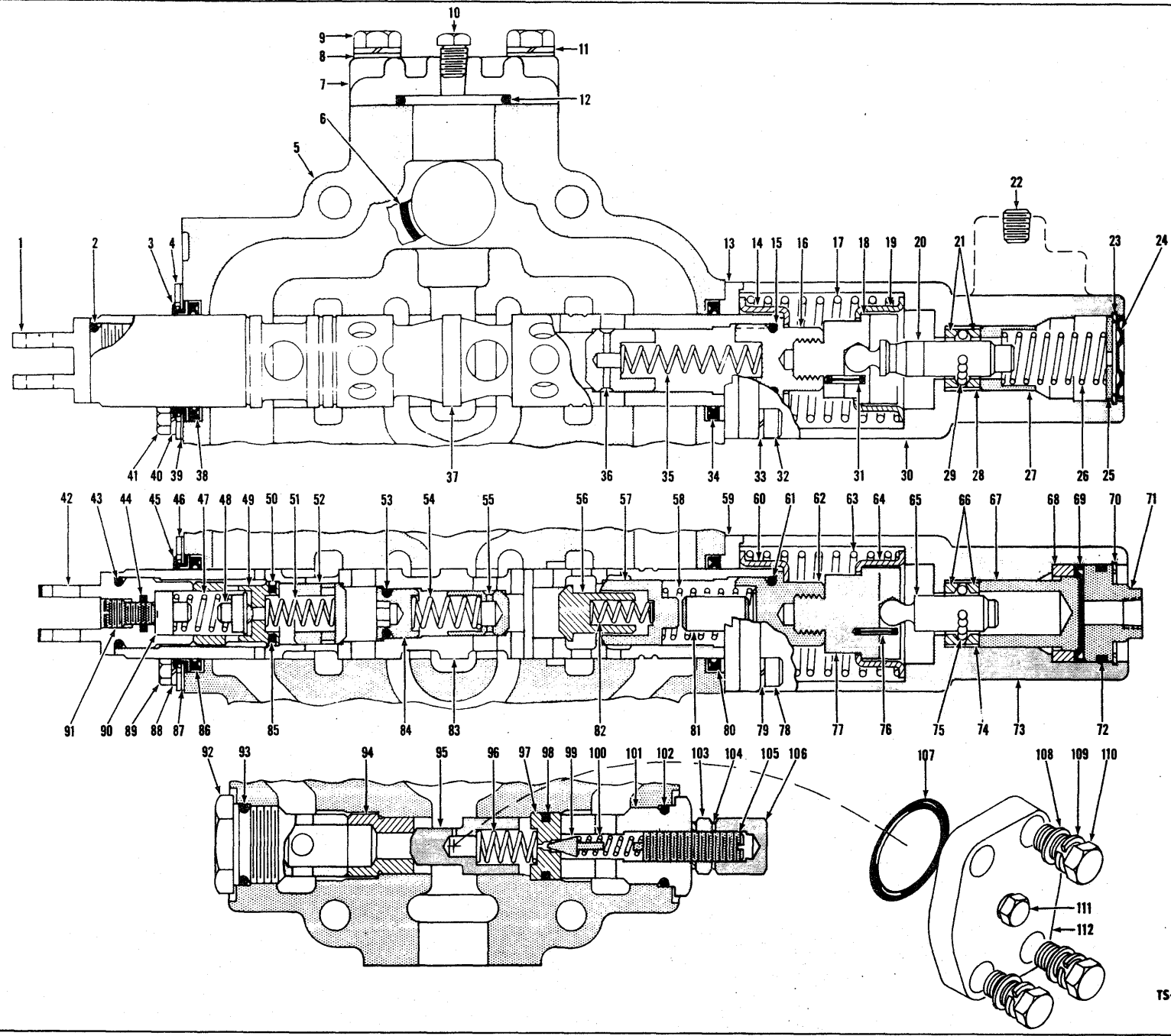
Item No.	Part No.	Description	No. Req'd.
A	1548534	**VALVE ASSY, Control (Incl. 1-112)	1
1	946077	EYE, Plunger	1
2	58K-214	O-RING, Plunger Eye	1
3	946614	WIPER, Plunger — See Note "A"	1
4	946613	PLATE, Wiper Retainer — See Note "A"	1
5	-----	§HOUSING, Valve — See A	—
6	25K-40120	O-RING, Bottom Outlet	1
7	947884	COVER, Housing	1
8	878233	WASHER, Cover to Housing	4
9	4E-08	LKWSHR, Cover to Housing	4
10	1C-828	BOLT, Cover to Housing	4
11	40K-04	PLUG, Cover	1
12	58K-224	O-RING, Cover to Housing	1
13	948837	PLATE, Seal Retainer	1
14	944840	GUIDE, Spring	1
15	58K-214	O-RING, Plunger Cap	1
16	947287	SPRING, Plunger Return	1
17	948726	RING, Retainer	1
18	944851	GUIDE, Spring	1
19	948727	SLEEVE, Ball Retainer	1
20	948730	BALL, Detent	11
21	16F-04	PLUG, Detent Cover	2
22	666542	RING, Plug Retainer	1
23	948202	DIAPHRAGM, Detent	1
24	947848	PLUG, Detent End	1
25	947852	SPRING, Detent	1
26	947842	SEAT, Spring	1
27	947843	RETAINER, Ball	2
28	948744	COVER, Detent	1
29	948747	PLUNGER, Detent	1
30	948743	SOCKET, Detent	1
31	948749	CAP, Plunger	1
32	11G-420	BOLT, Detent Cover to Housing	4
33	4E-04	LKWSHR, Detent Cover to Housing	4
34	949150	SEAL, Plunger Oil	1
35	888304	SPRING, Check	1
36	943184	CHECK	1
37	-----	§PLUNGER, Operating — See A	—
38	949150	SEAL, Plunger Oil	1
39	4E-04	LKWSHR, Retainer Plate to Housing	2
40	1C-412	BOLT, Retainer Plate to Housing	2
41	946616	EYE, Plunger	1
42	58K-214	O-RING, Plunger Eye	1
43	58K-012	O-RING, Adjusting Screw	1
44	946614	WIPER, Plunger — See Note "A"	1
45	946613	PLATE, Wiper Retainer — See Note "A"	1
46	949150	SEAL, Plunger Oil	1
47	946119	POPPET ASSY (Inc. 85)	1
48	946618	RING, Teflon	1
49	946623	SPRING, Check	1
50	946864	*CAP	1
51	946863	CHECK	1
52	946619	CHECK	1
53	946620	CHECK	1
54	946621	SPRING, Check	1
55	949150	SEAL, Plunger Oil	1
56	948837	PLATE, Seal Retainer	1

\*NOTE: Must be torqued to 25 ft. lbs.

\*\*NOTE: For complete replacement use 1512163 Valve Assembly

§Not Sold Separately

NOTE "A": For replacement use 949066 Kit which consists of 1-949150 Seal, 1-949236 Wiper, 1-949237 Plate & 1-949298 Plate.



TS-11521

P.M. 2462

94C.1

(2A21)

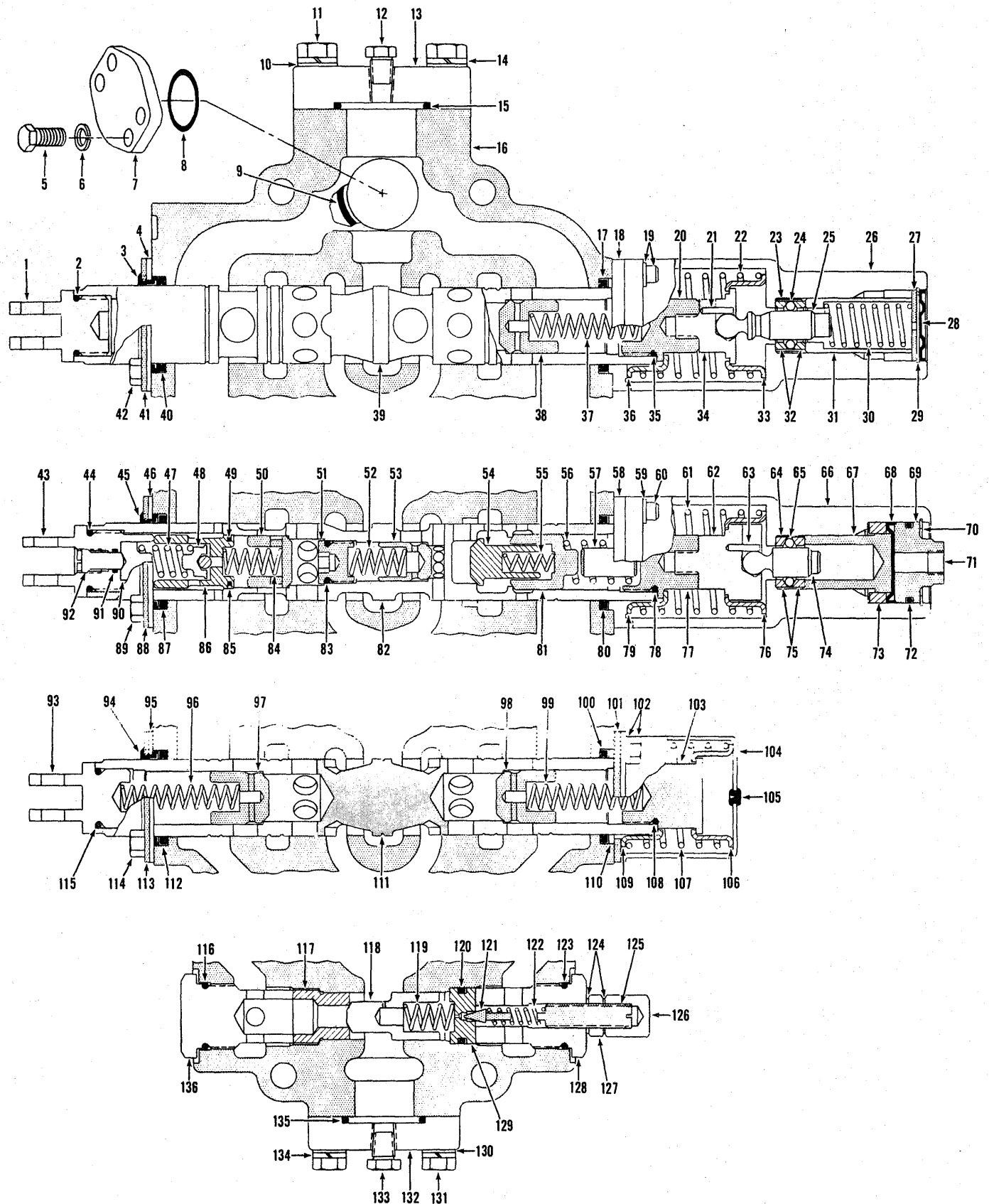
**CONTROL VALVE ASSEMBLY**

For Serial: Cummins - 404A545 & After - G.M. - 403A550 & After

Item	Part No.	Description	Qty.
A	1512163	CONTROL VALVE ASSY (Incl. 1-112)	1
1	946077	EYE, Plunger	1
2	58K-214	O-RING, Plunger Eye	1
3	949236	WIPER, Plunger	1
4	949237	PLATE, Wiper Retaining	1
5	-----	§HOUSING (See "A")	—
6	25K-40120	O-RING, Valve Mounting	1
7	947884	COVER, Housing	1
8	878233	WASHER, Cover to Housing	4
9	1C-828	BOLT, Cover to Housing	4
10	40K-04	PLUG	1
11	4E-08	LKWSHR, Cover to Housing	4
12	58K-224	O-RING, Cover	1
13	948841	‡PLATE, Oil Seal Retaining	1
13A	948837	‡PLATE, Oil Seal Retaining	1
13B	948842	‡PLATE, Oil Seal Retaining	1
14	944840	RETAINER, Spring	1
15	58K-214	O-RING, Cap	1
16	948749	CAP, Plunger	1
17	947287	SPRING, Plunger Return	1
18	949271	SOCKET, Detent	1
19	944851	RETAINER, Spring	1
20	948747	PLUNGER, Detent	1
21	947843	RETAINER, Ball	2
22	16F-04	PLUG, Pipe	1
23	666542	RING, Plug Retaining	1
24	948202	DIAPHRAGM	1
25	947848	PLUG, Detent End	1
26	947852	SPRING, Detent	1
27	948954	RETAINER, Spring	1
28	948727	SLEEVE, Ball Retainer	1
29	948730	BALL, Detent	11
30	948744	COVER, Detent	1
31	300232	PIN, Roll	1
32	11G-420	BOLT, Cover to Housing	4
33	4E-04	LKWSHR, Cover to Housing	4
34	949150	SEAL, Plunger Oil	1
35	888304	SPRING, Check	1
36	943184	CHECK	1
37	-----	§PLUNGER, Operating (See "A")	—
38	949150	SEAL, Plunger Oil	1
39	944838	PLATE, Oil Seal Retaining	1
40	4E-04	LKWSHR, Plate to Housing	4
41	1C-412	BOLT, Plate to Housing	4
42	946616	EYE, Plunger	1
43	58K-214	O-RING, Plunger Eye	1
44	58K-012	O-RING, Adjusting Screw	1
45	949236	WIPER, Plunger	1
46	949237	PLATE, Wiper Retaining	1
47	946118	SPRING, Poppet	1
48	946119	POPPET	1
49	946617	SEAT, Poppet	1
50	946618	RING, Back-up	1
51	946623	SPRING, Check	1
52	946624	CHECK	1
53	25K-30022	O-RING, Cap	1
54	946623	SPRING, Check	1
55	946863	CHECK	1

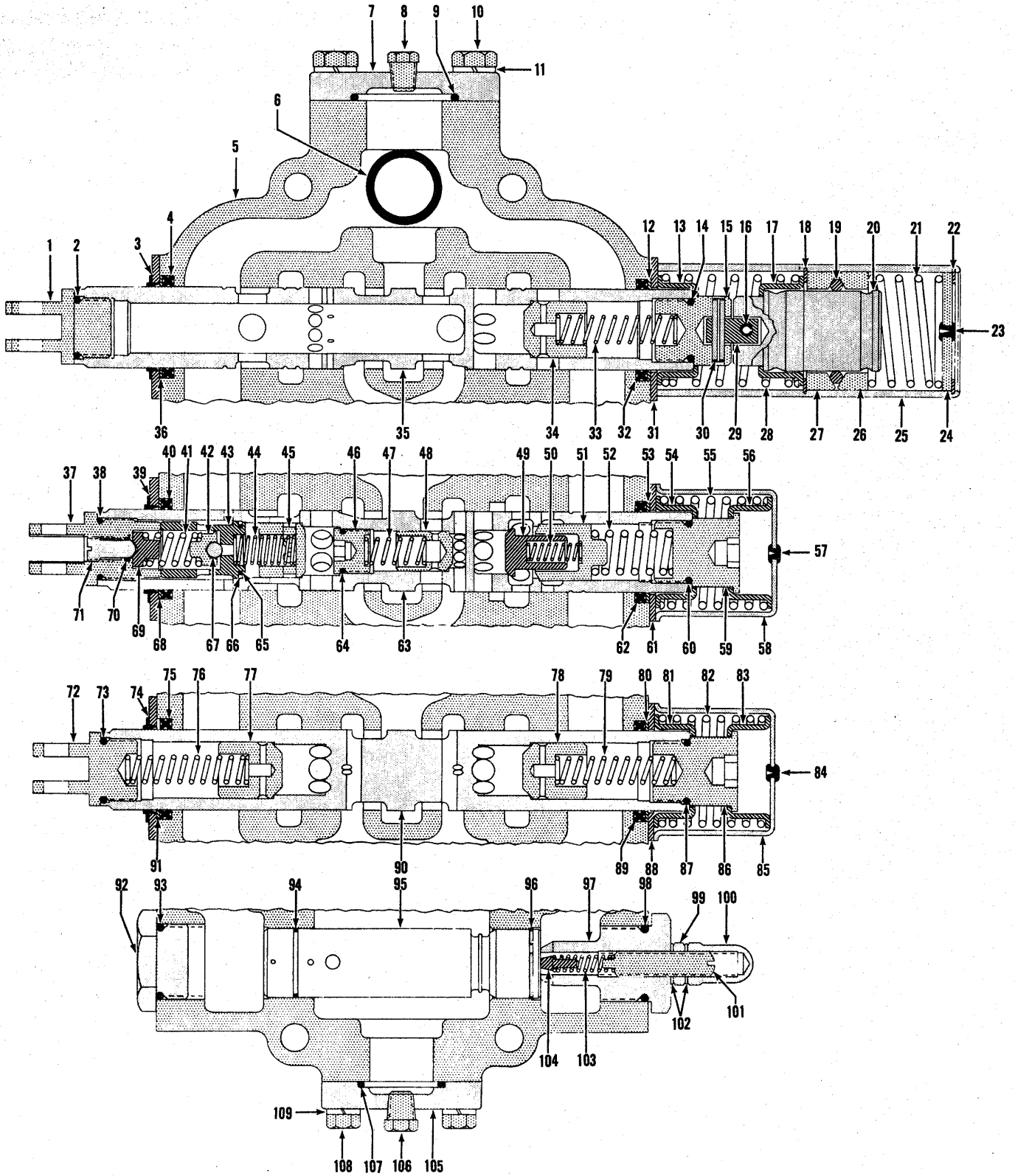
‡As Required  
§Not Sold Separately

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



**CONTROL VALVE ASSEMBLY**

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
A	1512158	CONTROL VALVE ASSY (Inc. 1-136)	1	34	949271	SOCKET, Det	1
1	946077	EYE, Plunger	1	35	58K-214	O-RING, Cap	1
2	58K-214	O-RING, Valve Mtg.	1	36	944840	GUIDE, Spring	1
3	949236	WIPER, Plunger	1	37	888304	SPRING, Check	1
4	944838	PLATE, Retaining	1	38	943184	CHECK, Spring	1
5	1C-828	BOLT, Cover Mtg.	4	39	-----	PLUNGER, See Item A	—
6	4E-08	LKWSHR, Cover Mtg.	4	40	949150	SEAL, Plunger	1
6A	878233	WASHER, Cover Mtg.	4	41	949237	PLATE, Retainer	1
7	947888	COVER	1	42	1C-412	BOLT, Ret. to Hsg.	4
8	58K-224	O-RING, Valve Mtg.	1	42A	4E-04	LKWSHR, Ret to Hsg.	4
9	25K-40120	O-RING, Valve Mtg.	1	43	946616	EYE, Plunger	1
10	878233	WASHER, Cover Mtg.	4	44	58K-214	O-RING, Plunger Eye	1
11	1C-828	BOLT, Cover Mtg.	4	45	949236	WIPER, Plunger	1
12	40K-4	PLUG, Cover	1	46	944838	PLATE, Retainer	1
13	947884	COVER	1	47	946118	SPRING, Guide	1
14	4E-08	LKWSHR, Cover Mtg.	4	48	946119	POPPET	1
15	58K-224	O-RING, Cover Mtg.	1	49	25K-20028	O-RING, Valve Seat	1
16	-----	HOUSING — See Item A	—	50	946624	CHECK, Spring	1
17	949150	SEAL, Plunger	1	51	946864	CAP, Spring	1
18	948837	PLATE, Retaining	1	52	946623	SPRING, Check	1
19	4E-04	LKWSHR, Cover to Hsg.	4	53	946863	CHECK, Spring	1
19A	11G-420	BOLT, Cover to Hsg.	4	54	946619	CHECK, Spring	1
20	948749	CAP, Plunger	1	55	946813	SPRING, Check	1
21	300232	PIN, Roll	1	56	946621	SPRING, Check	1
22	947287	SPRING, Guide	1	57	947286	SPACER, Cap	1
23	948727	SLEEVE	1	58	948837	PLATE, Retainer	1
24	948730	BALL	11	59	4E-04	LKWSHR, Cover to Hsg.	4
25	948747	PLUNGER, Det.	1	60	11G-420	BOLT, Cover to Hsg.	4
26	948744	DETENT, Hsg.	1	61	947902	SPRING, Guide	1
27	947848	PLUG, End	1	62	949270	SOCKET, Det	1
28	948202	DIAPHRAGM	1	63	300232	PIN, Roll	1
29	666542	RING, Retaining	1	64	948727	SLEEVE	1
30	947852	SPRING, Cap	1	65	948730	BALL	11
31	948954	RETAINER, Spring	1	66	948745	DETENT, Hsg.	1
32	947843	RETAINER, Ball	2	67	948725	PISTON	1
33	944851	GUIDE, Spring	1	68	948731	DIAPHRAGM	1



## THREE SPOOL CONTROL VALVE ASSEMBLY

Four Varieties of Control Valves have been used for 125 III-A & 175 III-A MICHIGAN Tractor Shovel Three spool Valve Installations. These are as follows.

Clark Part Number	Hydreco Model Number
1523959	V38DVN31
1536237	V38DVQ42
1508788	V38DRF118
1548535	V38DRF118B

To determine which Control Valve is on a given machine refer to the manufacturers' serial number plate attached to the face of the Valve where the above information is stamped. After determining which Valve is on the machine you may service accordingly from pages 7 thru 21 of this Supplement.

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1523959	*CONTROL VALVE ASSY (Inc. 1 thru 109)	1	25A	1C-416	†BOLT, Cover to Housing	4
1	946077	EYE, Plunger	1	25B	4E-04	†LKWSHR, Cover to Housing	4
2	58K-214	O-RING, Plunger Eye	1	26	945290	RETAINER, Ball	1
3	947521	PLATE, Oil Seal Retaining	1	27	945290	RETAINER, Ball	1
3A	1C-412	†BOLT, Plate to Housing	2	28	944852	SPRING	1
3B	4E-04	†LKWSHR, Plate to Housing	2	29	944148	PIN, Connecting	1
4	949150	SEAL, Plunger Oil	1	30	660178	ROLL PIN	1
5	-----	§HOUSING — See "A"	—	31	946615	PLATE, Seal Retaining	1
6	25K-40120	O-RING, Valve to Reservoir	1	32	946585	SEAL, Plunger Oil	1
7	946381	COVER	1	33	944858	SPRING, Check	1
8	40K-04	PLUG, Cover	1	34	943184	CHECK	1
9	1306624	O-RING, Cover to Housing	1	35	-----	§PLUNGER — See "A"	—
10	1C-820	BOLT, Cover to Housing	4	36	944837	RING, Back-Up	1
11	4E-08	LKWSHR, Cover to Housing	4	37	946616	EYE, Plunger	1
12	944837	RING, Back-Up	1	38	58K-214	O-RING, Plunger Eye	1
13	944851	GUIDE, Spring	1	39	947521	PLATE, Oil Seal Retaining	1
14	58K-225	O-RING, Cap	1	39A	1C-412	†BOLT, Plate to Housing	2
15	944854	CAP, Plunger	1	39B	4E-04	†LKWSHR, Plate to Housing	2
16	660178	ROLL PIN	1	40	949150	SEAL, Plunger Oil	1
17	944851	GUIDE, Spring	1	41	946118	SPRING, Poppet	1
18	1301171	RING, Retaining	1	42	946119	CHECK (Inc. 67)	1
19	10J-08	BALL	20	43	946617	SEAT, Check	1
20	946045	CAP, Detent	1	44	946623	SPRING, Check	1
21	945494	SPRING	1	45	946624	CHECK	1
22	663823	RING, Retaining	1	46	946864	**CAP	1
23	886763	PLUG, Bleeder	1	47	946623	SPRING, Check	1
24	944844	PLUG	1	48	946863	CHECK	1
25	945498	COVER, Detent	1	49	946619	CHECK	1
				50	946813	SPRING, Check	1

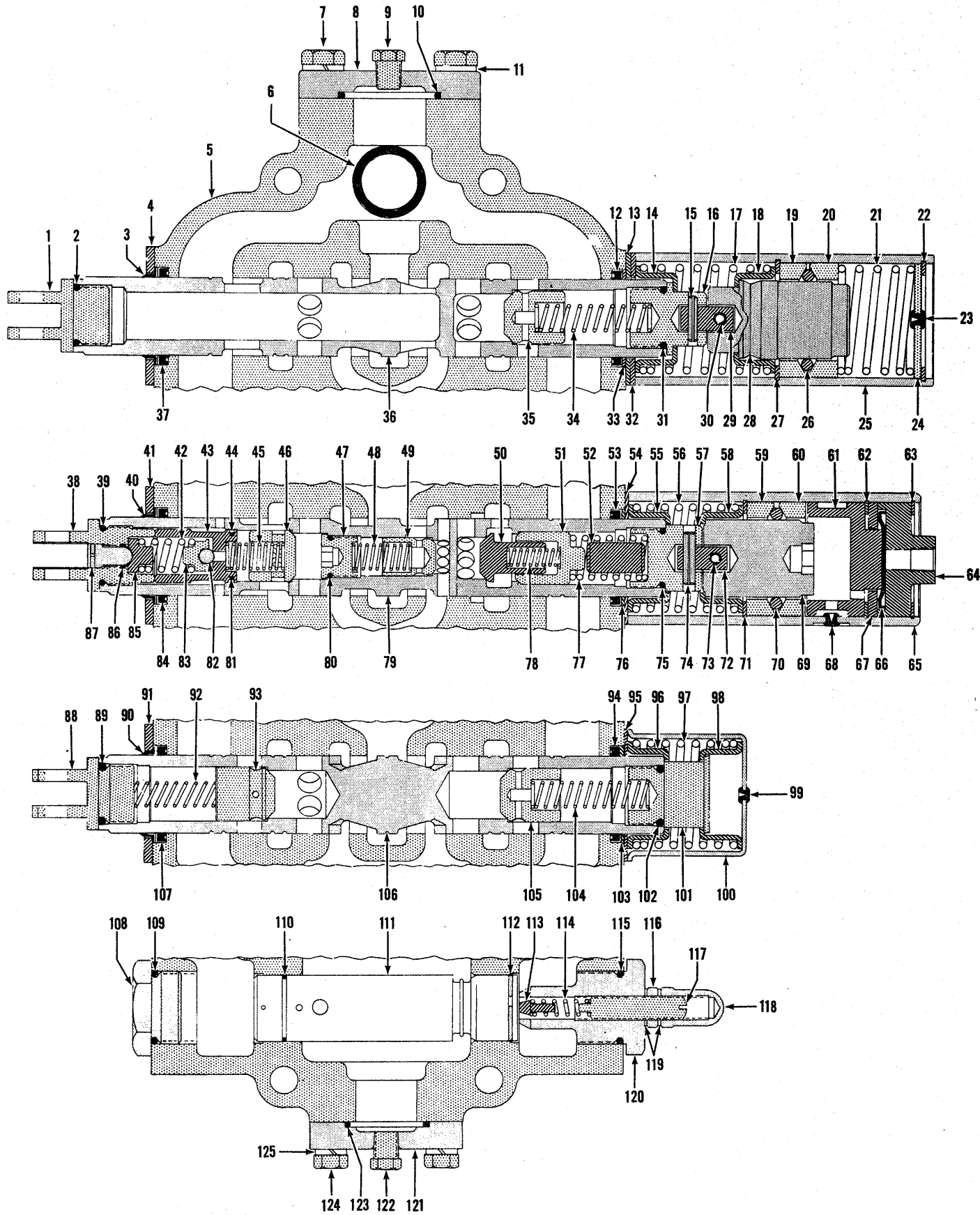
†Not Illustrated

§Not Sold Separately

\*NOTE: For complete Valve replacement use 1512158.

\*\*NOTE: Torque to 25 Ft/Lbs.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**





## THREE SPOOL CONTROL VALVE ASSEMBLY

Four Varieties of Control Valves have been used for 125 III-A & 175 III-A MICHIGAN Tractor Shovel Three spool Valve Installations. These are as follows.

### Clark Part Number

1523959  
1536237  
1508788  
1548535

### Hydrec Model Number

V38DVN31  
V38DVQ42  
V38DRF118  
V38DRF118B

To determine which Control Valve is on a given machine refer to the manufacturers' serial number plate attached to the face of the Valve where the above information is stamped. After determining which Valve is on the machine you may service accordingly from pages 7 thru 21 of this Supplement.

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1536237	**CONTROL VALVE ASSY (Inc. 1 thru 125)	1	29	944148	PIN, Connecting	1
1	946077	EYE, Plunger	1	30	660178	ROLL PIN	1
2	58K-214	O-RING, Plunger Eye	1	31	58K-214	O-RING, Cap	1
3	946614	WIPER, Plunger	1	32	946615	PLATE, Seal Retaining	1
4	946613	PLATE, Wiper & Seal Retaining	1	33	944837	RING, Back-Up	1
4A	1C-412	†BOLT, Plate to Housing	2	34	888304	SPRING	1
4B	4E-04	†LKWSHR, Plate to Housing	2	35	943184	CHECK	1
5	-----	§HOUSING, Valve - See "A"	—	36	-----	§PLUNGER - See "A"	—
6	25K-40120	O-RING, Valve Mounting	1	37	949150	SEAL, Plunger Oil	1
7	1C-820	BOLT, Cover to Housing	4	38	946616	EYE, Plunger	1
8	946381	COVER, Valve	1	39	58K-214	O-RING, Plunger Eye	1
9	40K-04	PLUG	1	40	946614	WIPER, Plunger	1
10	58K-225	O-RING, Cover to Housing	1	41	946613	PLATE, Wiper & Seal Retaining	1
11	4E-08	LKWSHR, Cover to Housing	4	41A	1C-412	†BOLT, Plate to Housing	2
12	949150	SEAL, Plunger Oil	1	41B	4E-04	†LKWSHR, Plate to Housing	2
13	946615	PLATE, Seal Retaining	1	42	946118	SPRING	1
14	944840	GUIDE, Spring	1	43	946617	SEAT, Relief Valve	1
15	302602	ROLL PIN	1	44	946618	RING, Sealing	1
16	944841	CAP, Plunger	1	45	946623	SPRING, Check	1
17	947287	SPRING	1	46	946624	CHECK	1
18	944851	GUIDE, Spring	1	47	946864	*CAP	1
19	945290	RETAINER, Ball	1	48	946623	SPRING, Check	1
20	945290	RETAINER, Ball	1	49	946863	CHECK	1
21	945494	SPRING	1	50	946619	CHECK	1
22	663823	RING, Plug Retaining	1	51	946620	CHECK	1
23	886763	PLUG, Bleeder	1	52	947286	SPACER	1
24	944844	PLUG, Detent Cover	1	53	949150	SEAL, Plunger Oil	1
25	945498	COVER, Detent	1	54	946615	PLATE, Seal Retaining	1
25A	1C-416	†BOLT, Cover to Housing	4	55	944851	GUIDE, Spring	1
25B	4E-04	†LKWSHR, Cover to Housing	4	56	945857	SPRING	1
26	10J-08	BALL	20	57	947285	CAP, Plunger	1
27	1301171	RING, Retaining	1	58	944851	GUIDE, Spring	1
28	944845	CAP, Detent	1	59	945290	RETAINER, Ball	1

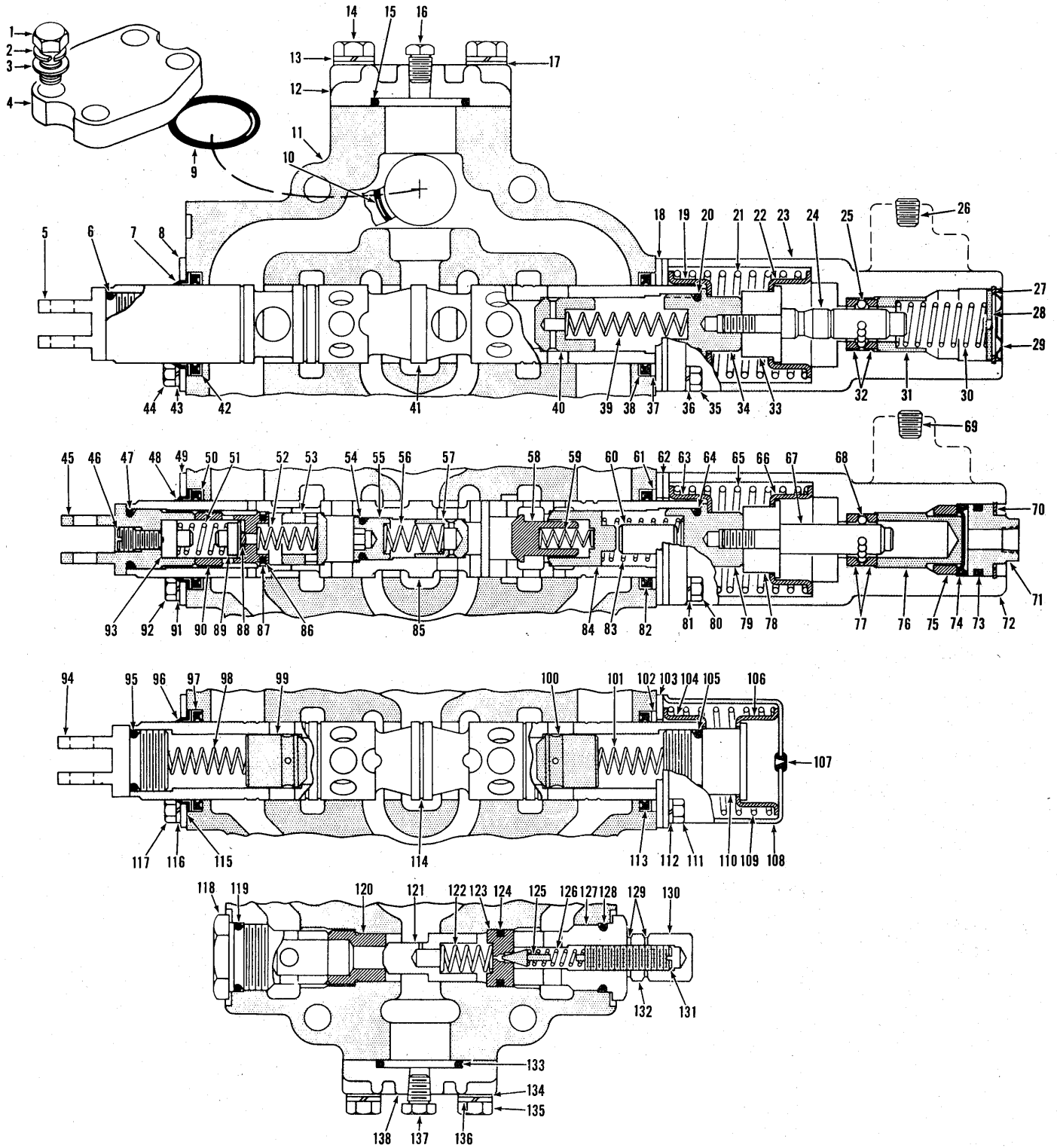
†Not Illustrated

§Not Sold Separately

\*NOTE: Torque to 25 Ft/Lbs.

\*\*NOTE: For complete Valve replacement use 1512158.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



## THREE SPOOL CONTROL VALVE ASSEMBLY

Four Varieties of Control Valves have been used for 125 III-A & 175 III-A MICHIGAN Tractor Shovel Three spool Valve Installations. These are as follows.

### Clark Part Number

1523959

1536237

1508788

1548535

### Hydreco Model Number

V38DVN31

V38DVQ42

V38DRF118

V38DRF118B

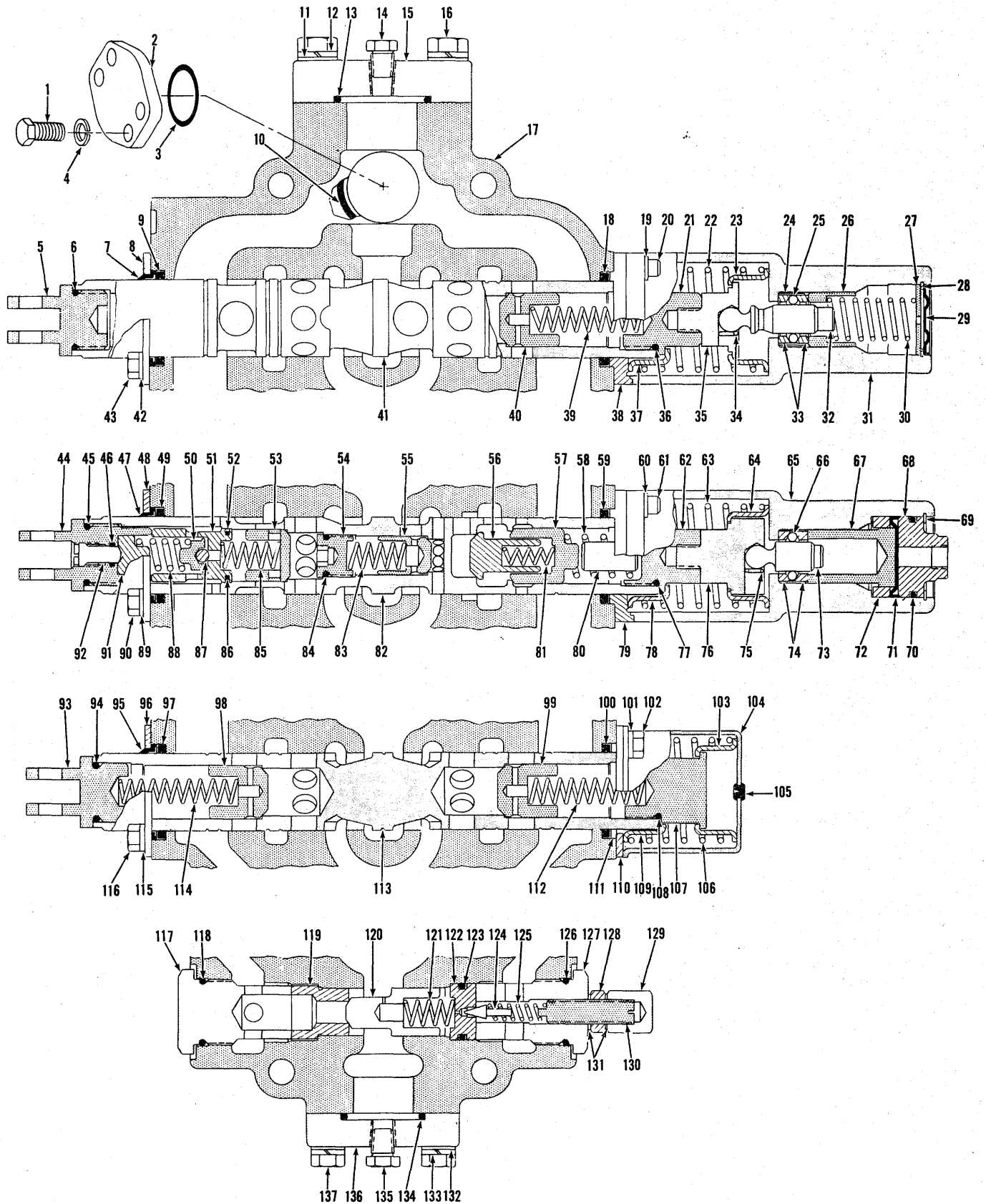
To determine which Control Valve is on a given machine refer to the manufacturers' serial number plate attached to the face of the Valve where the above information is stamped. After determining which Valve is on the machine you may service accordingly from pages 7 thru 21 of this Supplement.

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1508788	*CONTROL VALVE ASSY (Inc. 1 thru 138)	1	30	948515	SPRING, Detent	1
1	1C-828	BOLT, Cover to Housing	4	31	947842	GUIDE, Detent Spring	1
2	4E-08	LKWSHR, Cover to Housing	4	32	947843	RETAINER, Ball	2
3	878233	WASHER, Cover to Housing	4	33	947898	SPACER, Return Spring	1
4	947888	COVER	1	34	947895	CAP, Plunger	1
5	946077	EYE, Plunger	1	35	1C-420	BOLT, Detent to Housing	1
6	58K-214	O-RING, Plunger Eye	1	36	4E-04	LKWSHR, Detent to Housing	4
7	946614	WIPER, Plunger	1	37	944837	RING, Back-up	1
8	946613	PLATE, Wiper & Seal Retainer	1	38	949150	SEAL, Plunger Oil	1
9	58K-224	O-RING, Cover to Housing	1	39	888304	SPRING, Check	1
10	25K-40120	O-RING, Valve to Plate	1	40	943184	CHECK	1
11	-----	§HOUSING, Valve — See Item "A"	—	41	-----	§PLUNGER, Operating — See Item "A"	—
12	947884	COVER	1	42	949150	SEAL, Plunger Oil	1
13	4E-08	LKWSHR, Cover to Housing	4	43	4E-04	LKWSHR, Retainer to Housing	2
14	1C-828	BOLT, Cover to Housing	4	44	1C-412	BOLT, Retainer to Housing	2
15	58K-224	O-RING, Cover to Housing	1	45	946616	EYE, Plunger	1
16	40K-04	PLUG, Pipe	1	46	947219	SCREW, Adjusting	1
17	878233	WASHER, Cover to Housing	4	47	58K-214	O-RING, Plunger Eye	1
18	946615	PLATE, Seal Retaining	2	48	946614	WIPER, Plunger	1
19	944840	GUIDE, Spring	1	49	946613	PLATE, Wiper & Seal Retainer	1
20	58K-214	O-RING, Cap	1	50	949150	SEAL, Plunger Oil	1
21	947287	SPRING, Plunger Return	1	51	946118	SPRING, Check	1
22	944851	GUIDE, Spring	1	52	946623	SPRING, Check	1
23	947883	COVER, Detent	1	53	946624	CHECK	1
24	947901	CAP, Detent	1	54	25K-30022	O-RING, Cap	1
25	10J-06	BALL	10	55	946429	CAP	1
26	16F-04	PLUG, Pipe	1	56	946623	SPRING, Check	1
27	666542	RING, Plug Retaining	1	57	946863	CHECK	1
28	947848	PLUG, Detent Cover	1	58	946619	CHECK	1
29	948202	DIAPHRAGM	1	59	946813	SPRING, Check	1
				60	947286	SPACER	1

§ Not Sold Separately

\*NOTE: For complete replacement use 1512158.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



## CONTROL VALVE ASSEMBLY

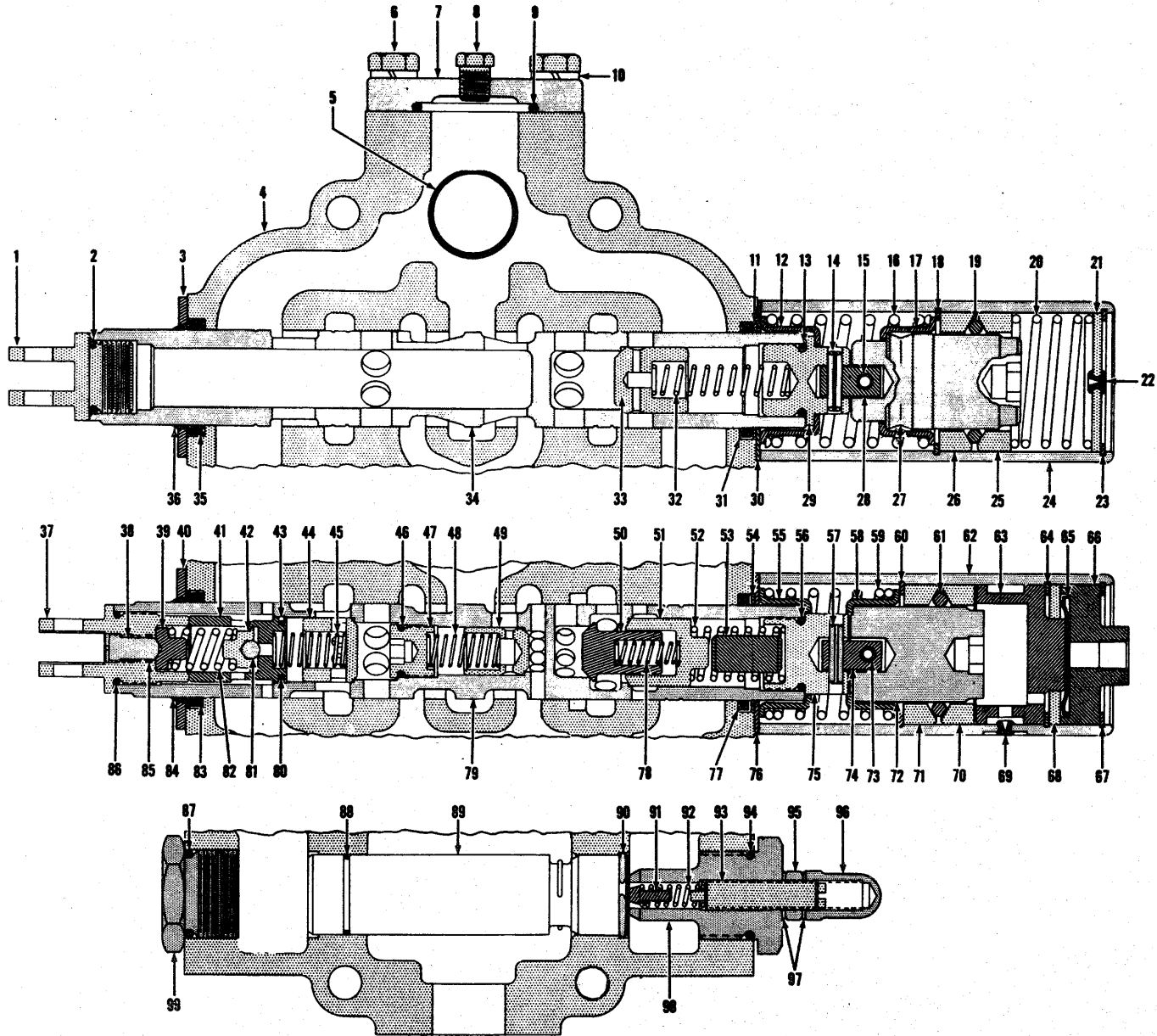
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1548535	*CONTROL VALVE ASSY (Inc. 1 thru 9, 11 thru 137)	1	31	948744	HOUSING, Detent	1
1	1C-828	BOLT, Cover to Housing	4	31A	16F-04	†PLUG, Housing	1
2	947888	COVER, Housing	4	32	948747	PLUNGER, Detent	1
3	58K-224	O-RING, Cover to Housing	1	33	947842	RETAINER, Ball	2
4	4E-08	LKWSHR, Cover to Housing	4	34	948726	RING, Detent Retaining	1
4A	878233	†WASHER, Cover to Housing	4	35	948743	SOCKET, Detent	1
5	946077	EYE, Plunger	1	36	58K-214	O-RING, Cap	1
6	58K-214	O-RING, Plunger Eye	1	37	944851	GUIDE, Spring	1
7	946614	WIPER, Plunger Oil	1	38	948837	PLATE, Seal Retaining	1
8	946613	PLATE, Seal & Wiper Retaining	1	39	888304	SPRING, Check	1
9	949150	SEAL, Plunger Oil	1	40	943184	CHECK	1
10	25K-40120	O-RING, Valve Mtg.	1	41	-----	§PLUNGER, Operating — See Item "A"	—
11	878233	WASHER, Cover to Housing	4	42	4E-04	LKWSHR, Plate to Housing	2
12	4E-08	LKWSHR, Cover to Housing	4	43	1C-412	BOLT, Plate to Housing	2
13	58K-224	O-RING, Cover to Housing	1	44	946616	EYE, Plunger	1
14	40K-04	PLUG, Cover	1	45	58K-214	O-RING, Plunger Eye	1
15	947884	COVER, Housing	1	46	58K-012	O-RING, Adjusting Screw	1
16	1C-828	BOLT, Cover to Housing	4	47	946614	WIPER, Plunger	1
17	-----	§HOUSING, Valve — See "A"	—	48	946613	PLATE, Wiper & Seal Retaining	1
18	949150	SEAL, Plunger Oil	1	49	949150	SEAL, Plunger Oil	1
19	4E-04	LKWSHR, Housing Mtg.	4	50	946119	POPPET ASSY (Inc. 87)	1
20	11G-420	SCREW, Housing Mtg.	4	51	946617	SEAT, Check	1
21	948749	CAP, Plunger	1	52	946618	RING, O-Ring Retainer	1
22	947287	SPRING, Plunger Return	1	53	946624	CHECK	1
23	944840	GUIDE, Spring	1	54	946864	CAP, Plunger	1
24	948727	SLEEVE, Ball Retainer	1	55	946863	CHECK	1
25	948730	BALL	11	56	946619	CHECK	1
26	947842	RETAINER, Spring	1	57	946620	CHECK	1
27	947848	PLUG, Housing	1	58	946621	SPRING, Check	1
28	666542	RING, Plug Retainer	1	59	949150	SEAL, Plunger Oil	1
29	948202	DIAPHRAGM	1	60	4E-04	LKWSHR, Housing to Valve Housing	4
30	948515	SPRING, Detent	1				

†Not Illustrated

§Not Sold Separately

\*NOTE: For complete replacement use 1512158 Control Valve Assy.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



CONTROL VALVE ASSEMBLY

TS-8406-P



**CONSTRUCTION MACHINERY DIVISION**  
**CONTROL VALVE ASSEMBLY (Continued)**  
 For Serial: Cummins — 404A101 thru 404A145  
 G.M. — 403A101 thru 403A155

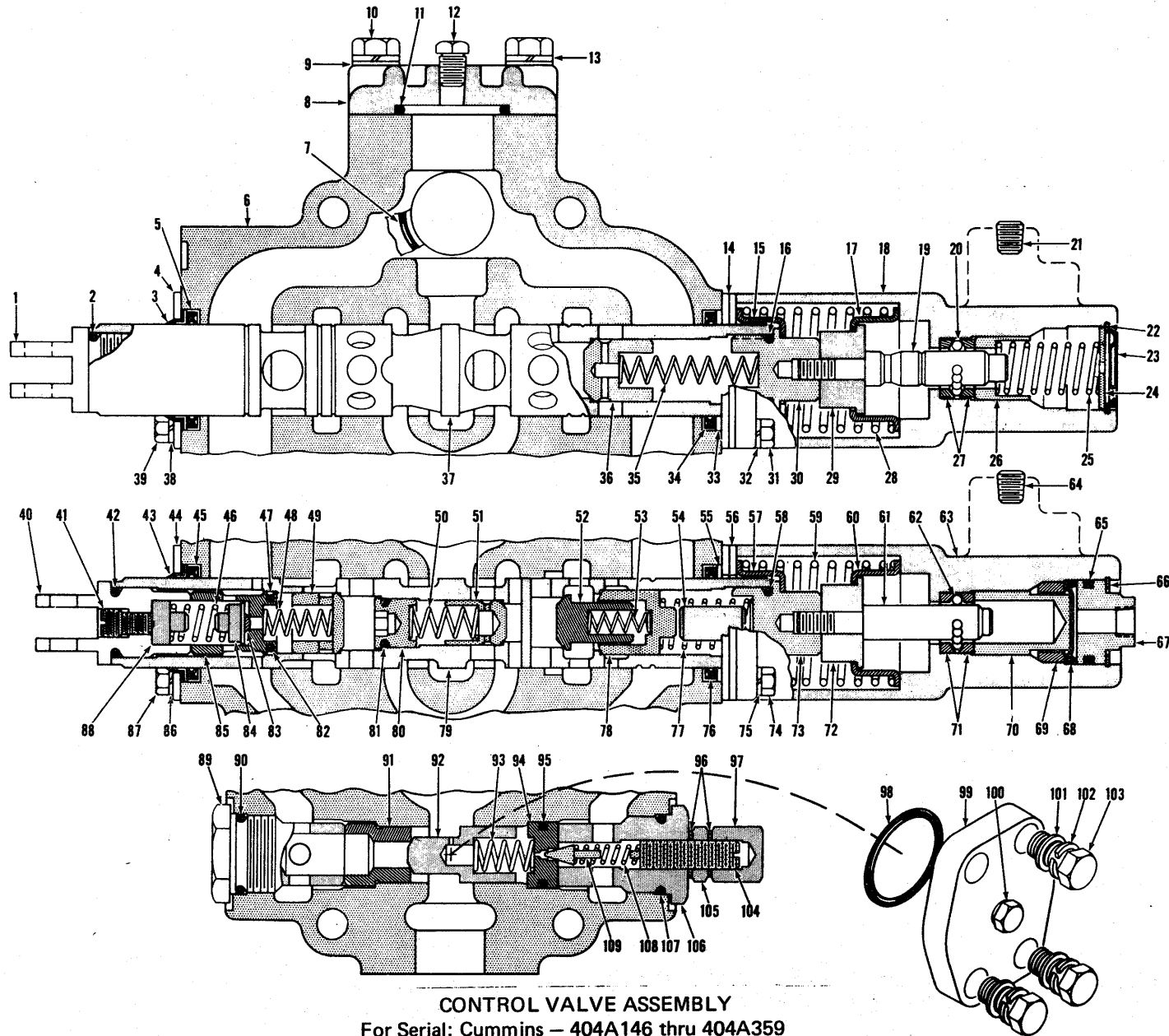


Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
47	946864	CAP .....	1	73	633157	ROLL PIN .....	1
48	946623	SPRING, Check.....	1	74	944148	PIN, Connecting.....	1
49	946863	CHECK .....	1	75	947285	CAP .....	1
50	946619	CHECK .....	1	76	946615	PLATE, Seal Retaining .....	1
51	946620	CHECK .....	1	77	949150	SEAL, Plunger Oil .....	1
52	946621	SPRING .....	1	78	946813	SPRING .....	1
53	947286	SPACER .....	1	79	-----	§ PLUNGER, Operating — See "A" .....	—
54	944837	RING, Back-up .....	1	80	25K-20028	O-RING, Relief Valve Seat....	1
55	944851	GUIDE, Spring .....	1	81	-----	§ BALL, Poppet — See 42 .....	—
56	58K-214	O-RING, Plunger Cap .....	1	82	946118	SPRING .....	1
57	660178	ROLL PIN .....	1	83	949150	SEAL, Plunger Oil.....	1
58	944851	GUIDE, Spring .....	1	84	946614	**WIPER, Plunger.....	1
59	945857	SPRING .....	1	85	25K-20012	O-RING, Adjusting Screw.....	1
60	1301171	RING, Retaining .....	1	86	58K-214	O-RING, Plunger Eye.....	1
61	10J-08	BALL .....	20	87	25K-40108	O-RING, Cap .....	1
62	947281	***COVER, Detent .....	1	88	58K-026	O-RING, Relief Valve.....	1
62A	1C-416	†BOLT, Cover to Housing .....	4	89	945496	RELIEF VALVE ASSY (Inc. 88, 90) .....	1
62B	4E-04	†LKWSHR, Cover to Housing .....	4	90	944802	RING, Relief Valve Retaining .....	1
63	947284	PLUG .....	1	91	886739	POPPET, Relief .....	1
64	663823	RING, Plug Retaining .....	1	92	886753	SPRING, Poppet .....	1
65	947214	DIAPHRAGM .....	1	93	944855	SCREW, Adjusting .....	1
66	947282	PLUG .....	1	94	25K-40108	O-RING, Adjusting Cap.....	1
67	663823	RING, Plug Retaining .....	1	95	8D-08	NUT, Jam .....	1
68	947283	SPACER .....	1	96	944853	NUT, Acorn.....	1
69	886763	PLUG, Bleeder.....	1	97	613750	WASHER, Jam Nut.....	2
70	945290	RETAINER, Ball.....	1	98	945497	CAP, Adjusting .....	1
71	945290	RETAINER, Ball.....	1	99	875279	CAP .....	1
72	947288	CAP .....	1				

§Not Sold Separately  
 †Not Illustrated

\*\*NOTE: For replacement use 949066 Kit which consists of 1—949150 Seal, 1—949236 Wiper, 1—949237 Plate & 1—949238 Plate.

\*\*\*NOTE: For replacement see Service Gram S.G.-338A.



CONTROL VALVE ASSEMBLY  
For Serial: Cummins - 404A146 thru 404A359  
G. M. - 403A156 thru 403A327

TS-9097

96A.2

(2A15)

PM 2462



**CONTROL VALVE ASSEMBLY (Continued)**  
**For Serial: Cummins - 404A146 thru 404A359**  
**G. M. - 403A156 thru 403A327**

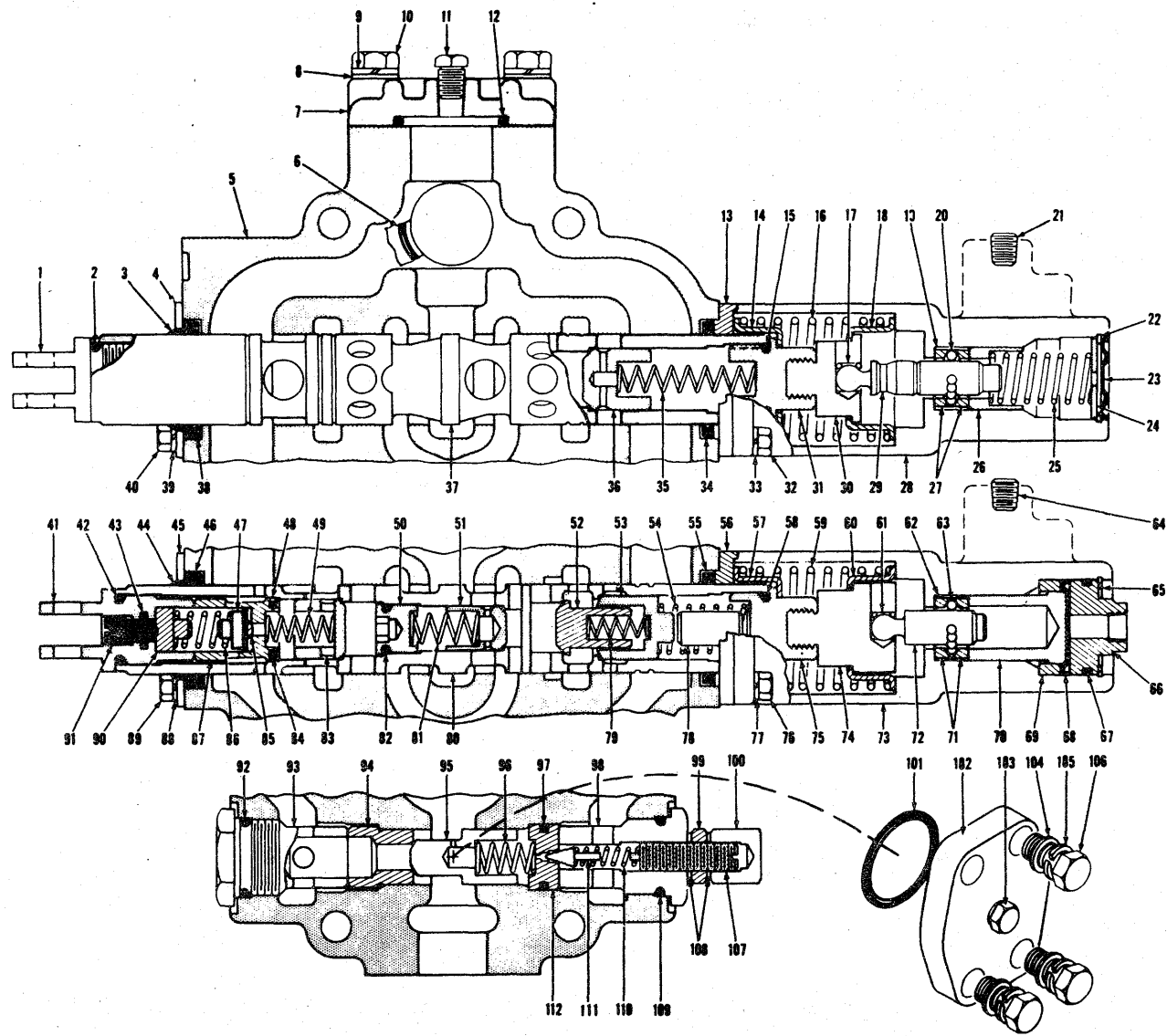
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
56	946615	PLATE, Seal Retaining .....	2	82	25K-20028	O-RING, Poppet Seat .....	1
57	944840	GUIDE, Spring .....	1	83	-----	§BALL (See Item 84) .....	—
58	58K-214	O-RING, Plunger Cap .....	1	84	946119	POPPET (Inc. Item 83) .....	1
59	947287	SPRING, Plunger Return .....	1	85	946617	SEAT, Poppet .....	1
60	944851	GUIDE, Spring .....	1	86	4E-04	LKWSHR, Plate to Housing....	2
61	947892	CAP, Detent, See Note "A" ..	1	87	1C-412	BOLT, Plate to Housing .....	2
62	10J-06	BALL .....	1	88	946117	GUIDE, Spring .....	1
63	947883	COVER, Detent .....	1	89	947845	CAP, Relief Valve Cap .....	1
64	16F-04	PLUG, Pipe .....	1	90	25K-40104	O-RING, Cap .....	1
65	25K-40108	O-RING, Detent Plug .....	1	91	947840	SEAT, Check .....	1
66	666542	RING, Plug Retaining .....	1	92	947844	CHECK, Relief Valve .....	1
67	947340	PLUG, Detent .....	1	93	946805	SPRING, Relief Valve Check..	1
68	946919	DIAPHRAGM .....	1	94	947841	SEAT, Poppet .....	1
69	948459	SPACER, Diaphragm .....	1	95	25K-40030	O-RING, Seat .....	1
70	948460	PISTON, Detent .....	1	96	613750	WASHER, Jam Nut .....	2
71	947843	RETAINER, Ball .....	2	97	49D-08	NUT, Acorn .....	1
71A	948388	†SLEEVE, Retainer .....	1	98	58K-222	O-RING, Cover to Housing....	1
72	947894	SPACER, Return Spring .....	1	99	948276	COVER .....	1
73	947893	CAP, Plunger .....	1	100	40K-04	PLUG, Cover .....	1
74	1C-420	BOLT, Detent to Housing .....	4	101	867747	WASHER, Cover to Housing..	4
75	4E-04	LKWSHR, Detent to Housing ..	4	102	4E-07	LKWSHR, Cover to Housing..	4
76	949150	SEAL, Plunger Oil .....	1	103	1C-724	BOLT, Cover to Housing .....	4
77	946621	SPRING, Check .....	1	104	944890	SCREW, Relief Valve Adj. ....	1
78	946620	CHECK .....	1	105	8D-08	NUT, Jam .....	1
79	-----	§PLUNGER, Operating (See Item "A") .....	—	106	947846	CAP, Relief Valve Cap .....	1
80	946429	CAP .....	1	107	25K-40104	O-RING, Cap .....	1
81	25K-30022	O-RING, Cap .....	1	108	886753	SPRING, Relief Valve .....	1
				109	886739	POPPET .....	1

†Not Illustrated

§Not Sold Separately

NOTE "A": For replacement use 961266 Kit.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



CONTROL VALVE ASSEMBLY

TS-10672

96B.1

(2A19)

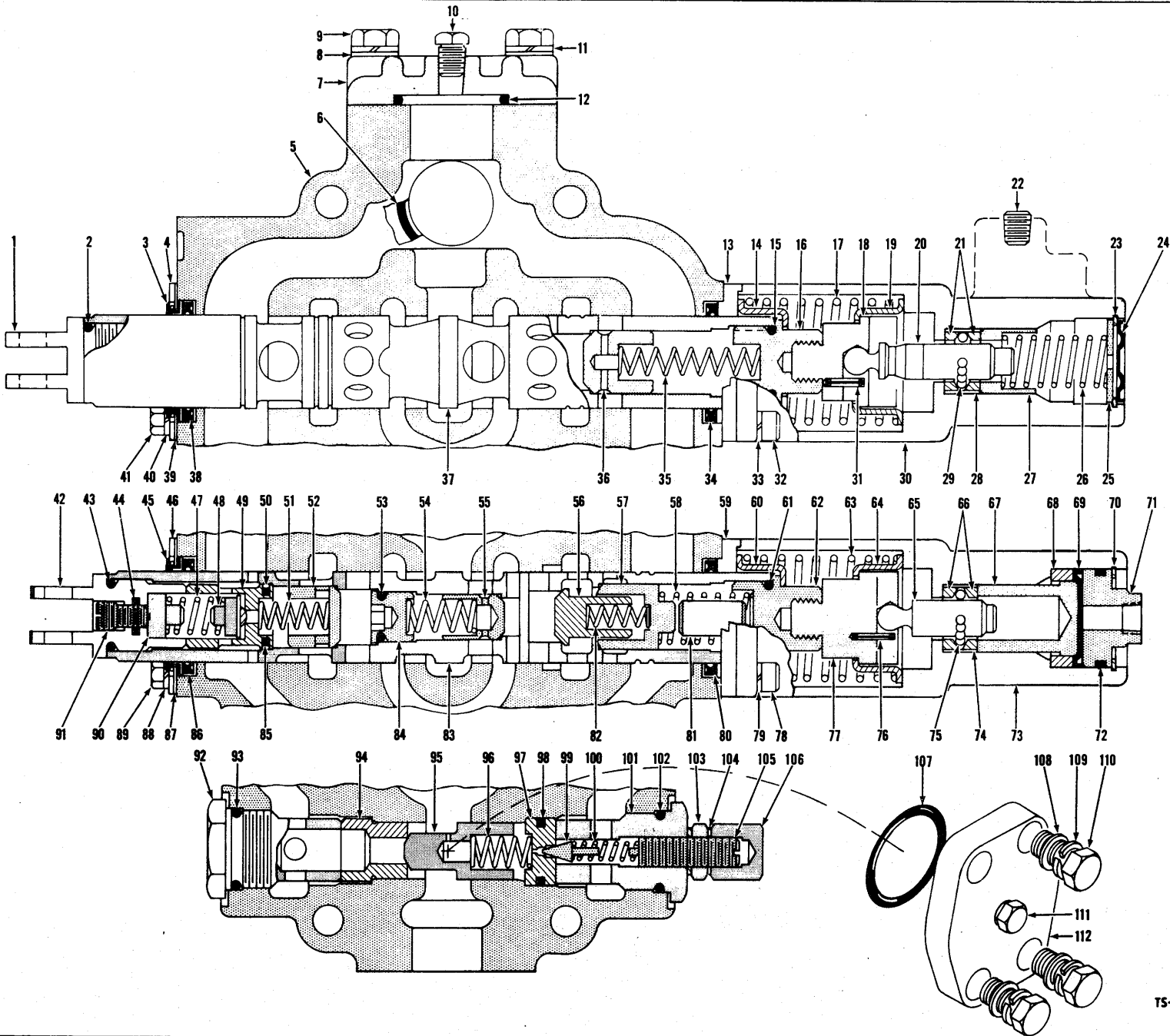
PM 2462

**CONTROL VALVE ASSEMBLY (Continued)**

Item No.	Part No.	Description	No. Req'd.
57	944840	GUIDE, Spring	1
58	58K-214	O-RING, Plunger Cap	1
59	947902	SPRING, Plunger Return	1
60	944851	GUIDE, Spring	1
61	948726	RING, Retainer	1
62	948727	SLEEVE, Ball Retainer	1
63	948730	BALL, Detent	11
64	16F-04	PLUG, Detent Cover	1
65	666542	RING, Plug Retainer	1
66	948724	PLUG, Detent End	1
67	25K-40114	O-RING, Detent Plug	1
68	948731	DIAPHRAGM, Detent	1
69	948728	SPACER	1
70	948725	PISTON, Detent	1
71	947843	RETAINER, Ball	2
72	948746	PLUNGER, Detent	1
73	948745	COVER, Detent	1
74	948742	SOCKET, Detent	1
75	948748	CAP, Plunger	1
76	11G-420	BOLT, Detent Cover to Housing	4
77	4E-04	LKWSHR, Detent Cover to Housing	4
78	947286	SPACER, Check Spring	1
79	946813	SPRING, Check	1
80	----	PLUNGER, Operating — See A	—
81	946623	SPRING, Check	1
82	25K-30022	O-RING, Cap	1
83	946624	CHECK	1
84	25K-20028	O-RING, Check Seat	1
85	----	§BALL, Poppet — See 47	—
86	946118	SPRING, Poppet	1
87	946617	SEAT	1
88	4E-04	LKWSHR, Retainer Plate to Housing	2
89	1C-412	BOLT, Retainer Plate to Housing	2
90	946117	GUIDE, Spring	1
91	946126	SCREW, Adjusting	1
92	25K-40104	O-RING, Cap	1
93	947845	CAP	1
94	947840	SEAT, Check	1
95	947844	CHECK, Relief Valve	1
96	946805	SPRING, Check	1
97	25K-40030	O-RING, Poppet Seat	1
98	947846	CAP, Relief Valve	1
99	8D-08	NUT, Jam	1
100	49D-08	NUT, Acorn	1
101	58K-222	O-RING, Cover to Housing	1
102	947887	COVER, Housing	1
103	40K-04	PLUG, Cover	1
104	867747	WASHER, Cover to Housing	4
105	4E-07	LKWSHR, Cover to Housing	4
106	1C-724	BOLT, Cover to Housing	4
107	944890	SCREW, Relief Adjusting	1
108	613750	WASHER, Jam Nut	2
109	25K-40104	O-RING, Cap	1
110	886753	SPRING, Poppet	1
111	886739	POPPET, Relief Valve	1
112	947841	SEAT, Poppet	1

§ Not Sold Separately

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



TS-11521

P.M. 2462

96C.1

(2A23)



CONSTRUCTION MACHINERY DIVISION



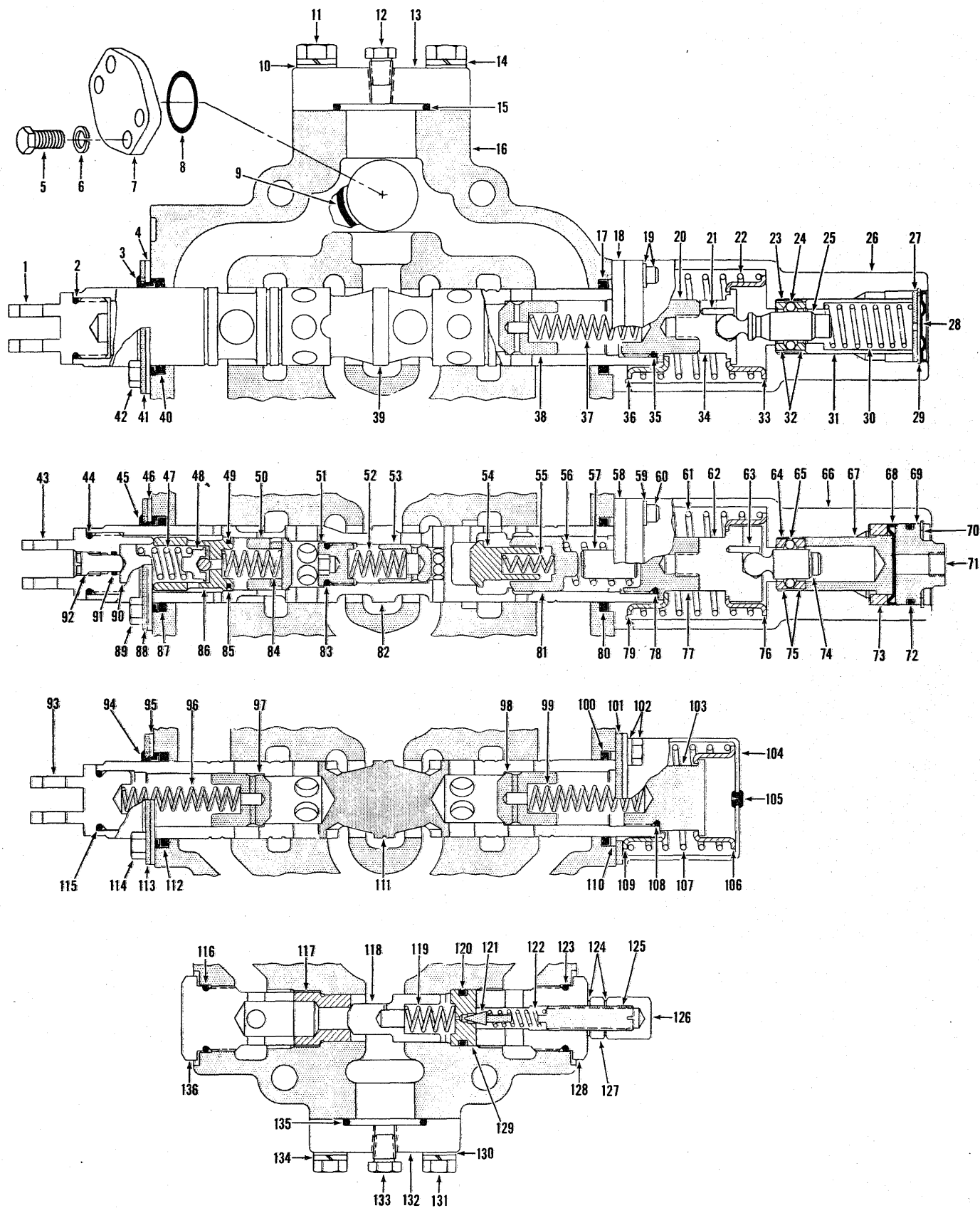
CONTROL VALVE ASSEMBLY, Cont.

For Serial: Cummins - 404A545 & After - G.M. - 403A550 & After

Item	Part No.	Description	Qty.
56	946619	CHECK	1
57	946620	CHECK	1
58	946621	SPRING, Check	1
59	948841	‡PLATE, Oil Seal Retaining	1
59A	948837	‡PLATE, Oil Seal Retaining	1
59B	948842	‡PLATE, Oil Seal Retaining	1
60	944840	RETAINER, Spring	1
61	58K-214	O-RING, Cap	1
62	948748	CAP, Plunger	1
63	947902	SPRING, Plunger Return	1
64	944851	RETAINER, Spring	1
65	948746	PLUNGER, Detent	1
66	947843	RETAINER, Ball	2
67	948725	PISTON	1
68	948728	SPACER	1
69	948731	DIAPHRAGM	1
70	948729	RING, Plug Retainer	1
71	948724	PLUG, Detent Housing	1
72	25K-40114	O-RING, Detent Plug	1
73	948745	COVER, Detent	1
74	948727	SLEEVE, Ball Retainer	1
75	948730	BALL, Detent	11
76	300232	PIN, Roll	1
77	949270	SOCKET, Detent	1
78	11G-420	BOLT, Cover to Housing	4
79	4E-04	LKWSHR, Cover to Housing	4
80	949150	SEAL, Plunger Oil	1
81	947286	SPACER	1
82	946813	SPRING, Check	1
83	-----	§PLUNGER, Operating (See "A")	-
84	946864	CAP, Plunger	1
85	25K-20028	O-RING, Poppet Seat	1
86	949150	SEAL, Plunger Oil	1
87	944838	PLATE, Oil Seal Retaining	1
88	4E-04	LKWSHR, Plate to Housing	4
89	1C-412	BOLT, Plate to Housing	4
90	946117	GUIDE, Spring	1
91	946126	SCREW, Adjusting	1
92	947845	CAP, Relief Valve	1
93	25K-40104	O-RING, Cap	1
94	947840	SEAT, Check	1
95	947844	POPPET	1
96	946805	SPRING, Poppet	1
97	947841	SEAT, Poppet	1
98	25K-40030	O-RING, Seat	1
99	886739	POPPET, Relief	1
100	886753	SPRING, Poppet	1
101	947846	CAP, Adjusting	1
102	25K-40104	O-RING, Cap	1
103	8D-08	NUT, Jam	1
104	613750	WASHER	2
105	944890	SCREW, Adjusting	1
106	49D-08	NUT, Acorn	1
107	58K-222	O-RING, Cover	1
108	867747	WASHER, Cover to Housing	4
109	4E-07	LKWSHR, Cover to Housing	4
110	1C-724	BOLT, Cover to Housing	4
111	40K-04	PLUG, Pipe	1
112	947887	COVER	1

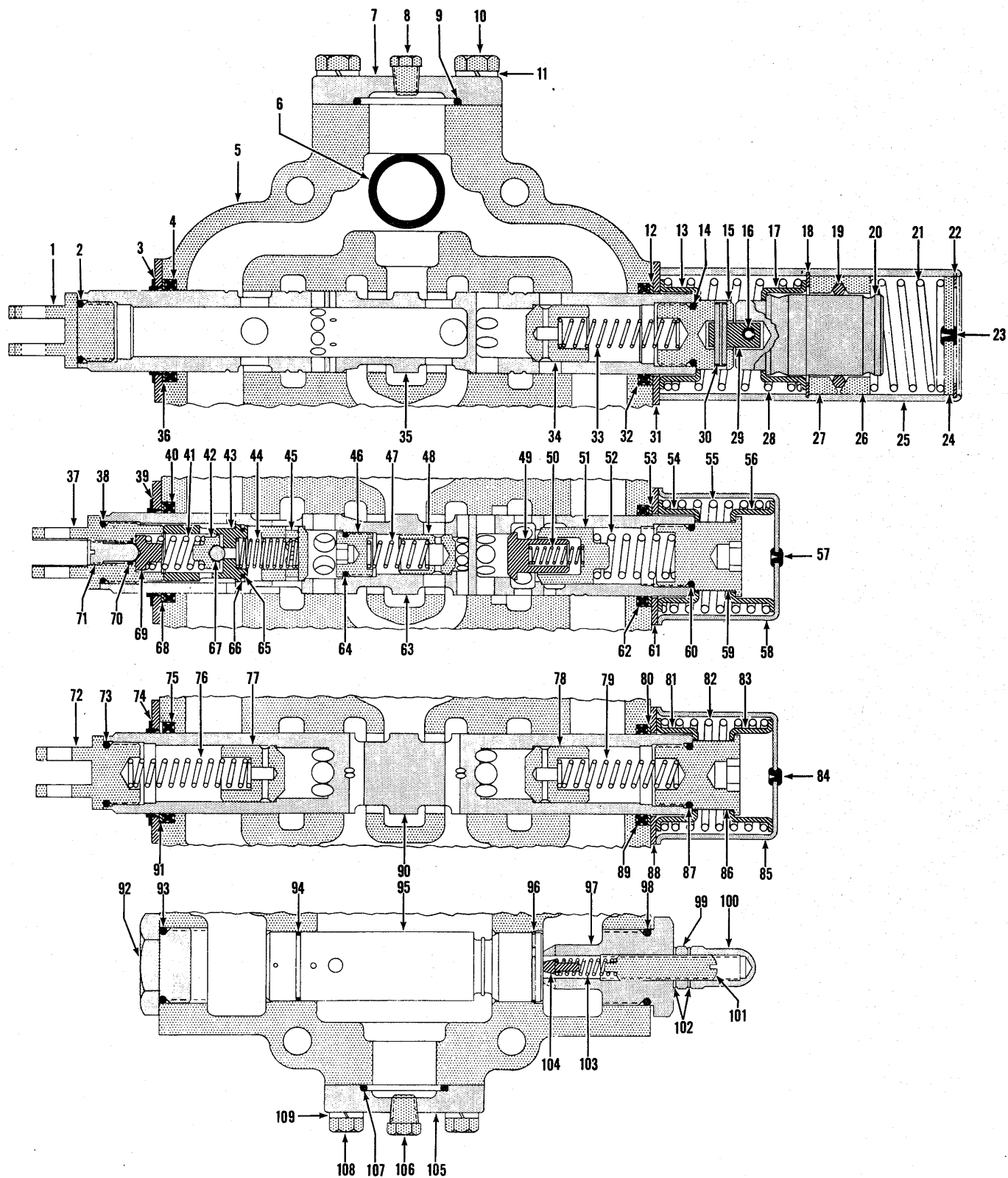
‡As Required  
§Not Sold Separately

WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE



## CONTROL VALVE ASSEMBLY (Continued)

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
69	948724	PLUG, Cover	1	102A	4E-04	LKWSHR, Cover to Hsg.	4
70	948729	RING, Retainer	1	103	945289	CAP	1
71	----	OMIT	—	104	945294	COVER, Cap	1
72	25K-40114	O-RING, Plug	1	105	886745	PLUG, Bleeder	1
73	948728	SPACER, Plug	1	106	944851	GUIDE, Spring	1
74	948746	PLUNGER, Det.	1	107	947326	SPRING, Guide	1
75	947843	RETAINER, Ball	2	108	58K-214	O-RING, Cap	1
76	944851	GUIDE, Spring	1	109	944851	GUIDE, Spring	1
77	948748	CAP	1	110	944837	RING, Back-up	1
78	58K-214	O-RING, Cap	1	111	----	PLUNGER — See item A	—
79	944840	GUIDE, Spring	1	112	949150	SEAL, Plunger	1
80	949150	SEAL, Plunger	1	113	949237	PLATE, Retainer	1
81	946620	CHECK, Spring	1	114	1C-412	BOLT, Ret. to Hsg.	4
82	----	PLUNGER — See Item A	—	114A	4E-04	LKWSHR, Ret. to Hsg.	4
83	25K-30022	O-RING, Cap	1	115	58K-214	O-RING, Plunger Eye	1
84	946623	SPRING, Check	1	116	25K-40104	O-RING, Cap	1
85	946618	RING, TEFLON	1	117	947840	SEAT, Relief	1
86	946617	SEAT, Check	1	118	947844	POPPET, Relief	1
87	949150	SEAL, Plunger	1	119	946805	SPRING, Relief Poppet	1
88	949237	PLATE, Retainer	1	120	25K-40030	O-RING, Pilot Seat	1
89	1C-412	BOLT, Ret. to Hsg.	4	121	886739	POPPET, Relief Valve	1
89A	4E-04	LKWSHR, Ret to Hsg.	4	122	886753	SPRING, Relief Valve	1
90	946117	GUIDE, Spring	1	123	25K-40104	O-RING	1
91	58K-012	O-RING, Adjusting Screw	1	124	613750	WASHER, Jam Nut	2
92	946126	SCREW, Adjusting	1	125	944890	SCREW, Adjusting	1
93	946077	EYE, Plunger	1	126	49D-08	NUT, Acorn	1
94	949236	WIPER, Plunger	1	127	8D-08	NUT, Jam	1
95	944838	PLATE, Retainer	1	128	947846	CAP, Adj.	1
96	888304	SPRING, Check	1	129	947841	SEAT, Pilot	1
97	943184	CHECK, Spring	1	130	867747	WASHER, Cover Mtg.	4
98	943184	CHECK, Spring	1	131	1C-724	BOLT, Cover Mtg.	4
99	888304	SPRING, Check	1	132	947864	COVER	1
100	949150	SEAL, Plunger	1	133	40K-04	PLUG, Cover	1
101	946615	PLATE, Retainer	1	134	4E-07	LKWSHR, Cover Mtg.	4
102	1C-412	BOLT, Cover to Hsg.	4	135	58K-222	O-RING, Cover Mtg.	1
				136	947845	CAP	1



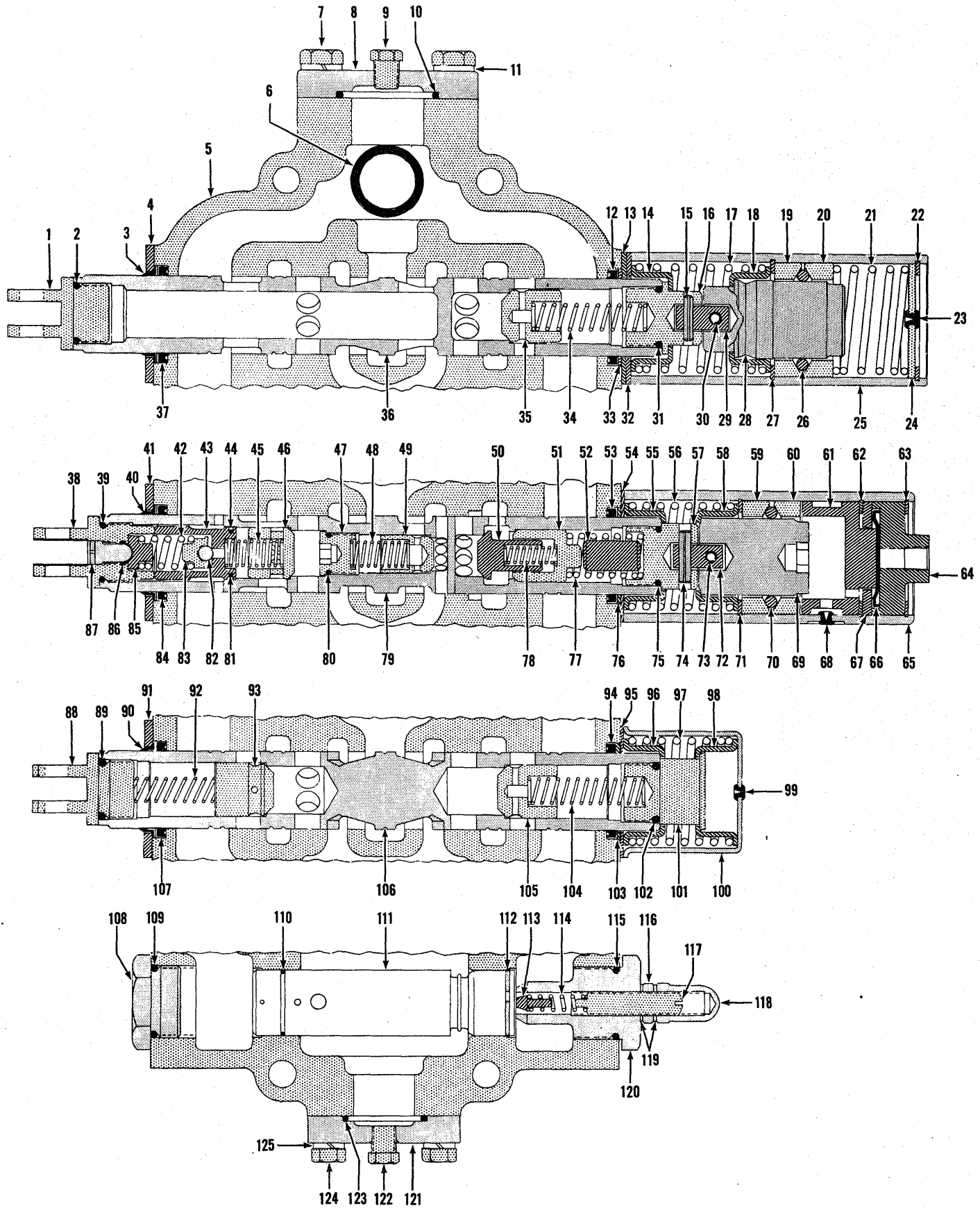


## THREE SPOOL CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
51	946620	CHECK .....	1	80	944837	RING, Back-Up .....	1
52	946621	SPRING, Check .....	1	81	944851	GUIDE, Spring .....	1
53	944837	RING, Back-Up .....	1	82	944852	SPRING .....	1
54	944851	GUIDE, Spring .....	1	83	944851	GUIDE, Spring .....	1
55	944852	SPRING .....	1	84	886745	PLUG, Bleeder .....	1
56	944851	GUIDE, Spring .....	1	85	945294	COVER, Detent .....	1
57	886745	PLUG, Bleeder .....	1	85A	1C-412	†BOLT, Cover to Housing .....	4
58	945294	COVER, Detent .....	1	85B	4E-04	†LKWSHR, Cover to Housing ..	4
58A	1C-412	†BOLT, Cover to Housing .....	4	86	945289	CAP, Detent .....	1
58B	4E-04	†LKWSHR, Cover to Housing ..	4	87	58K-214	O-RING, Cap .....	1
59	946622	CAP, Detent .....	1	88	946615	PLATE, Seal Retaining .....	1
60	58K-214	O-RING, Cap .....	1	89	949150	SEAL, Plunger Oil .....	1
61	946615	PLATE, Seal Retaining .....	1	90	-----	‡PLUNGER — See "A" .....	—
62	949150	SEAL, Plunger Oil .....	1	91	944837	RING, Back-Up .....	1
63	-----	‡PLUNGER — See "A" .....	—	92	875279	CAP .....	1
64	25K-30022	O-RING, Cap .....	1	93	25K-40108	O-RING, Cap .....	1
65	25K-20028	O-RING, Seat .....	1	94	58K-026	O-RING, Relief Valve .....	1
66	946618	RING, Sealing .....	1	95	945496	RELIEF VALVE ASSY (Inc. 94, 96) .....	1
67	-----	‡BALL, Check — See 42 .....	—	96	944802	SNAP RING .....	1
68	944837	RING, Back-Up .....	1	97	945497	CAP, Adjusting .....	1
69	946117	GUIDE, Spring .....	1	98	25K-40108	O-RING, Cap .....	1
70	25K-20012	O-RING, Adjusting Screw .....	1	99	8D-08	NUT, Jam .....	1
71	946126	SCREW, Adjusting .....	1	100	944853	NUT, Acorn .....	1
72	946077	EYE, Plunger .....	1	101	944855	SCREW, Adjusting .....	1
73	58K-214	O-RING, Plunger Eye .....	1	102	613750	WASHER .....	2
74	947521	PLATE, Oil Seal Retaining .....	1	103	886753	SPRING, Relief .....	1
74A	1C-412	†BOLT, Plate to Housing .....	2	104	886739	POPPET, Relief .....	1
74B	4E-04	†LKWSHR, Plate to Housing .....	2	105	946382	COVER .....	1
75	949150	SEAL, Plunger Oil .....	1	106	40K-04	PLUG, Cover .....	1
76	944858	SPRING, Check .....	1	107	58K-222	O-RING, Cover to Housing ..	1
77	943184	CHECK .....	1	108	1C-720	BOLT, Cover to Housing .....	4
78	943184	CHECK .....	1	109	4E-07	LKWSHR, Cover to Housing ..	4
79	944858	SPRING, Check .....	1				

†Not Illustrated  
‡As Required

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



## THREE SPOOL CONTROL VALVE ASSEMBLY (Continued)

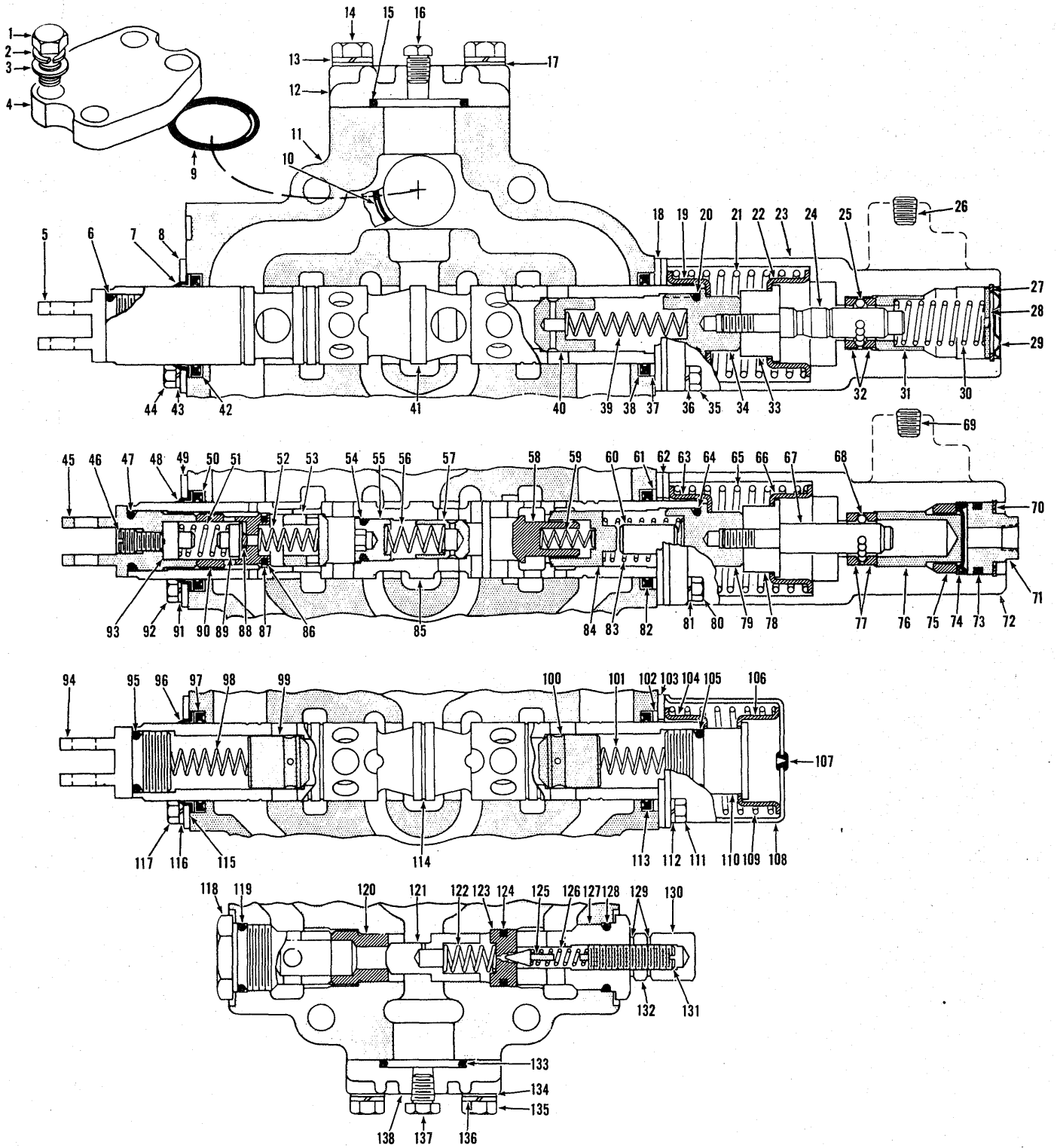
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
60	945290	RETAINER, Ball .....	1	92	888304	SPRING, Check .....	1
61	947284	PLUG .....	1	93	943184	CHECK .....	1
62	663823	RING, Retaining .....	1	94	949150	SEAL, Plunger Oil .....	1
63	663823	RING, Retaining .....	1	95	946615	PLATE, Seal Retaining .....	1
64	947282	PLUG, Detent .....	1	96	944851	GUIDE, Spring .....	1
65	947281	***COVER, Detent .....	1	97	947326	SPRING .....	1
65A	1C-416	†BOLT, Cover to Housing .....	4	98	944851	GUIDE, Spring .....	1
65B	4E-04	†LKWSHR, Cover to Housing ..	4	99	886745	PLUG, Bleeder .....	1
66	947214	DIAPHRAGM .....	1	100	945294	COVER, Detent .....	1
67	947283	SPACER .....	1	100A	1C-412	†BOLT, Cover to Housing .....	4
68	886763	PLUG, Bleeder .....	1	100B	4E-04	†LKWSHR, Cover to Housing ..	4
69	947288	CAP .....	1	101	945289	CAP, Detent .....	1
70	10J-08	BALL .....	20	102	58K-214	O-RING, Cap .....	1
71	1301171	RING, Retaining .....	1	103	944837	RING, Back-Up .....	1
72	944148	PIN, Connecting .....	1	104	888304	SPRING, Check .....	1
73	633157	ROLL PIN .....	1	105	943184	CHECK .....	1
74	660178	ROLL PIN .....	1	106	-----	§PLUNGER — See "A" .....	—
75	58K-214	O-RING, Cap .....	1	107	949150	SEAL, Plunger Oil .....	1
76	944837	RING, Back-Up .....	1	108	875279	CAP .....	1
77	946621	SPRING .....	1	109	25K-40108	O-RING, Cap .....	1
78	946813	SPRING, Check .....	1	110	58K-026	O-RING, Relief Valve .....	1
79	-----	§PLUNGER — See "A" .....	—	111	945496	VALVE ASSY, Relief (Inc. 110, 112) .....	1
80	25K-30022	O-RING, Cap .....	1	112	944802	RING, Relief Valve Retaining	1
81	25K-20028	O-RING, Seat .....	1	113	886739	POPPET, Relief .....	1
82	-----	§BALL, Poppet — See 83 .....	—	114	886753	SPRING, Poppet .....	1
83	946119	POPPET (Inc. 82) .....	1	115	25K-40108	O-RING, Adjusting Cap .....	1
84	949150	SEAL, Plunger Oil .....	1	116	8D-08	NUT, Jam .....	1
85	946117	GUIDE, Spring .....	1	117	944855	SCREW, Adjusting .....	1
86	25K-20012	O-RING, Adjusting Screw .....	1	118	944853	NUT, Acorn .....	1
87	946126	SCREW, Adjusting .....	1	119	613750	WASHER, Jam Nut .....	2
88	947327	EYE, Plunger .....	1	120	945497	CAP, Adjusting .....	1
89	58K-214	O-RING, Plunger Eye .....	1	121	946382	COVER, Housing .....	1
90	946614	WIPER, Plunger .....	1	122	40K-04	PLUG, Cover .....	1
91	946613	PLATE, Wiper & Seal Retaining .....	1	123	58K-222	O-RING, Cover to Housing ..	1
91A	1C-412	†BOLT, Plate to Housing .....	2	124	1C-720	BOLT, Cover to Housing .....	4
91B	4E-04	†LKWSHR, Plate to Housing .....	2	125	4E-07	LKWSHR, Cover to Housing ..	4

†Not Illustrated

§Not Sold Separately

\*\*\*NOTE: For replacement see Service Gram S.G.-338A.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



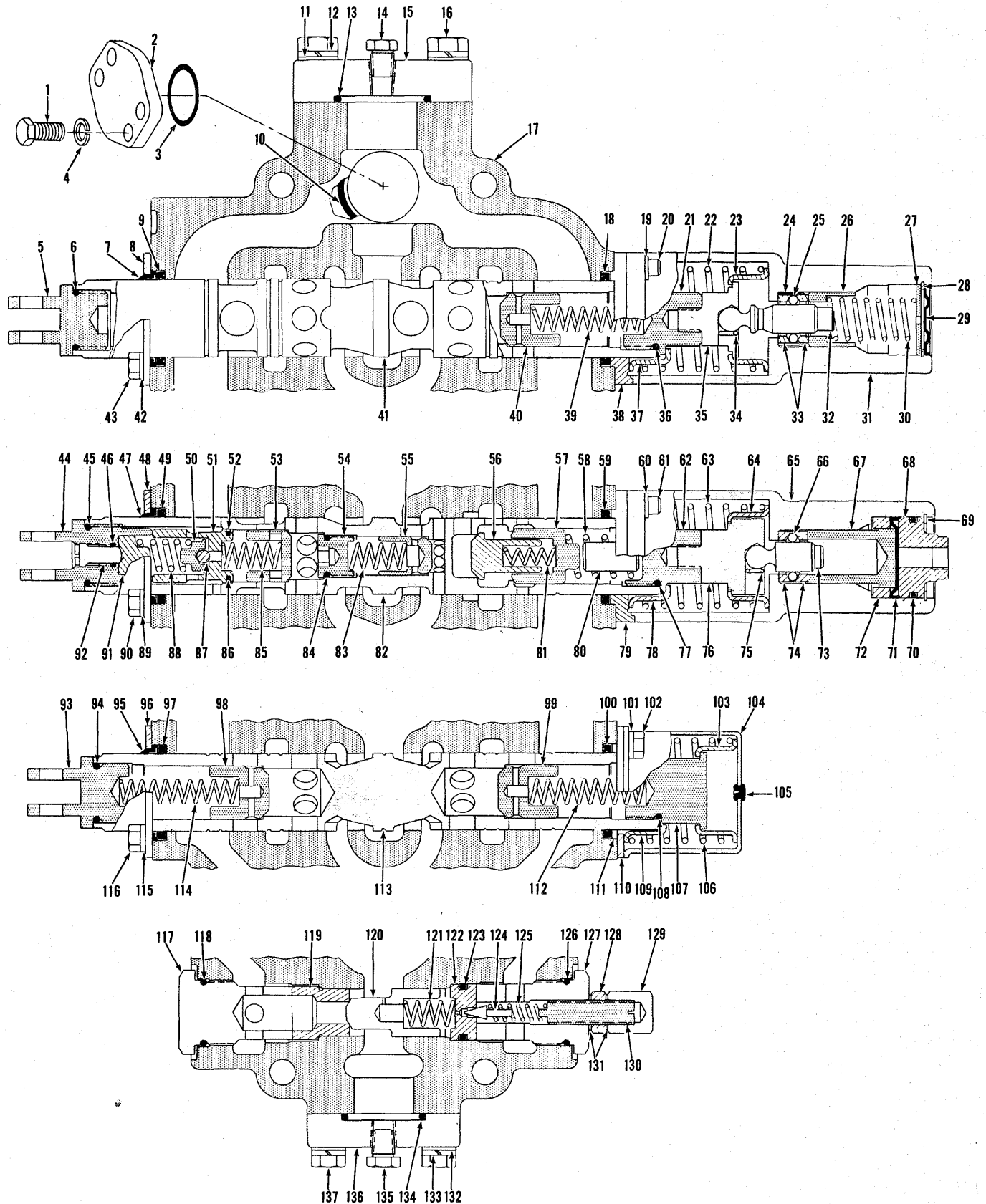
## THREE SPOOL CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
61	944837	RING, Back-up .....	1	101	888304	SPRING, Check .....	1
62	946615	PLATE, Seal Retaining .....	2	102	944837	RING, Back-up .....	1
63	944840	GUIDE, Spring .....	1	103	946615	PLATE, Seal Retainer .....	1
64	58K-214	O-RING, Plunger Cap .....	1	104	944851	GUIDE, Spring .....	1
65	947287	SPRING, Plunger Return .....	1	105	58K-214	O-RING, Plunger Cap .....	1
66	944851	GUIDE, Spring .....	1	106	944851	GUIDE, Spring .....	1
67	947892	**CAP, Detent .....	1	107	886745	PLUG, Bleeder .....	1
68	10J-06	BALL .....	10	108	945294	COVER, Plunger Return Spring .....	1
69	16F-04	PLUG, Pipe .....	1	109	947326	SPRING, Plunger Return .....	1
70	666542	RING, Plug Retaining .....	1	110	945289	CAP, Plunger .....	1
71	947340	PLUG, Detent .....	1	111	1C-420	BOLT, Cover to Housing .....	4
72	947883	COVER, Detent .....	1	112	4E-04	LKWSHR, Cover to Housing ..	4
73	25K-40108	O-RING, Detent Plug .....	1	113	949150	SEAL, Plunger Oil .....	1
74	946919	DIAPHRAGM .....	1	114	-----	§PLUNGER, Operating — See Item "A" .....	—
75	947850	SPACER, Diaphragm .....	1	115	946613	PLATE, Wiper & Seal Retainer .....	1
76	947849	PISTON, Detent .....	1	116	4E-04	LKWSHR, Plate to Housing ..	2
77	947843	RETAINER, Ball .....	2	117	1C-412	BOLT, Plate to Housing .....	2
78	947894	SPACER, Retainer Spring .....	1	118	947845	CAP, Relief Valve .....	1
79	947893	CAP, Plunger .....	1	119	25K-40104	O-RING, Cap .....	1
80	1C-420	BOLT, Detent to Housing .....	4	120	947840	SEAT, Check .....	1
81	4E-04	LKWSHR, Detent to Housing ..	4	121	947844	CHECK, Relief Valve .....	1
82	949150	SEAL, Plunger Oil .....	1	122	946805	SPRING, Relief Valve Check ..	1
83	946621	SPRING, Check .....	1	123	947841	SEAT, Poppet .....	1
84	946620	CHECK .....	1	124	25K-40030	O-RING, Poppet Seat .....	1
85	-----	§PLUNGER, Operating — See Item "A" .....	—	125	886739	POPPET, Relief Valve .....	1
86	25K-20028	O-RING, Poppet Seat .....	1	126	886753	SPRING, Relief Valve .....	1
87	946618	RING, Back-up .....	1	127	947846	CAP, Relief Valve .....	1
88	-----	§BALL — See Item "89" .....	—	128	25K-40104	O-RING, Cap .....	1
89	946119	POPPET — Inc. Item "88" .....	1	129	613750	WASHER, Jam Nut .....	2
90	946617	SEAT, Poppet .....	1	130	49-08	NUT, Acorn .....	1
91	4E-04	LKWSHR, Plate to Housing ..	2	131	944890	SCREW, Relief Valve Adjusting .....	1
92	1C-412	BOLT, Plate to Housing .....	2	132	8D-08	NUT, Jam .....	1
93	946117	GUIDE, Spring .....	1	133	58K-222	O-RING, Cover to Housing ..	1
94	947327	EYE, Plunger .....	1	134	867747	WASHER, Cover to Housing ..	4
95	58K-214	O-RING, Plunger Eye .....	1	135	1C-724	BOLT, Cover to Housing .....	4
96	946614	WASHER, Plunger .....	1	136	4E-07	LKWSHR, Cover to Housing ..	4
97	949150	SEAL, Plunger Oil .....	1	137	40K-04	PLUG, Pipe .....	1
98	888304	SPRING, Check .....	1	138	948276	COVER .....	1
99	943184	CHECK .....	1				
100	943184	CHECK .....	1				

§Not Sold Separately

\*\*NOTE: For replacement use 961266 Kit.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**

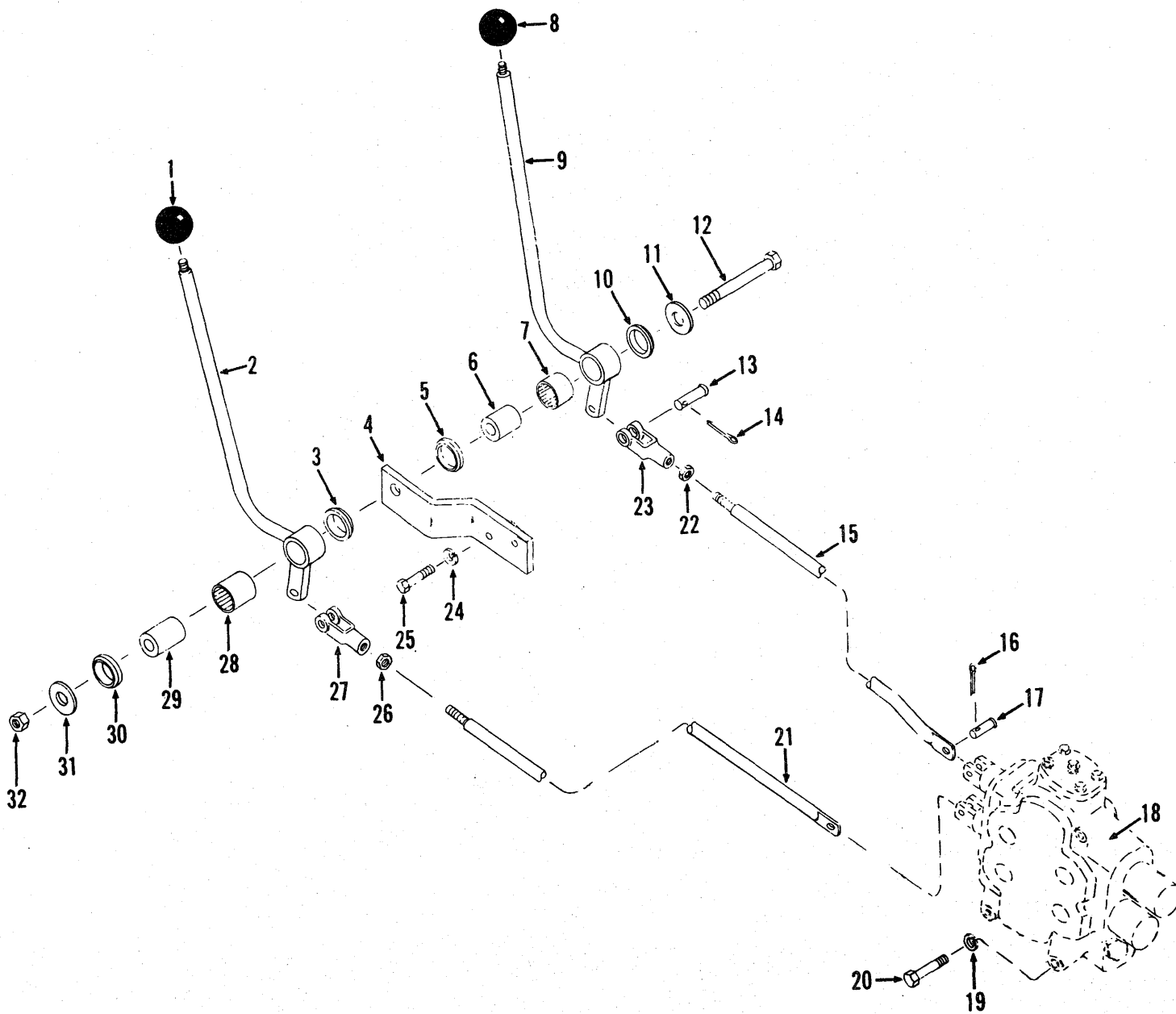


## CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
61	11G-420	SCREW, Housing to Valve Housing .....	4	98	943184	CHECK .....	1
62	948748	CAP, Plunger .....	1	99	943184	CHECK .....	1
63	947902	SPRING, Plunger Return .....	1	100	949150	SEAL, Plunger Oil .....	1
64	944851	GUIDE, Spring .....	1	101	4E-04	LKWSHR, Cover to Housing ..	4
65	948745	HOUSING, Detent .....	1	102	1C-412	BOLT, Cover to Housing .....	4
65A	16F-04	†PLUG, Housing .....	1	103	944851	RETAINER, Spring .....	1
66	948730	BALL .....	11	104	945294	COVER, Plunger .....	1
67	948725	PISTON, Detent .....	1	105	886745	BLEEDER, Plug .....	1
68	948724	PLUG, Detent .....	1	106	947326	SPRING, Plunger Return .....	1
69	948729	RING, Plug Retainer .....	1	107	945289	CAP, Plunger .....	1
70	25K-40114	O-RING, Plug .....	1	108	58K-214	O-RING, Cap .....	1
71	948731	DIAPHRAGM .....	1	109	944851	RETAINER, Spring .....	1
72	948728	SPACER, Piston .....	1	110	946615	PLATE, Seal Retainer .....	1
73	948726	PLUNGER, Detent .....	1	111	944837	RING, Seal Back-up .....	1
74	947843	RETAINER, Ball .....	1	112	888304	SPRING, Check .....	1
74A	948727	†SLEEVE, Ball Retainer .....	1	113	-----	§PLUNGER, Operating — See Item "A" .....	—
75	948726	RING, Plunger Retainer .....	1	114	888304	SPRING, Check .....	1
76	948742	SOCKET, Detent .....	1	115	4E-04	LKWSHR, Plate to Housing ..	2
77	58K-214	O-RING, Cap .....	1	116	1C-412	BOLT, Plate to Housing .....	2
78	944840	GUIDE, Spring .....	1	117	947845	CAP .....	1
79	948837	PLATE, Seal Retainer .....	1	118	25K-40104	O-RING, Cap .....	1
80	947286	SPACER, Plunger .....	1	119	947840	SEAT, Relief .....	1
81	946813	SPRING, Check .....	1	120	947844	POPPET, Relief .....	1
82	-----	§PLUNGER, Operating — See Item "A" .....	—	121	946805	SPRING, Relief .....	1
83	946623	SPRING, Check .....	1	122	947841	SEAT, Pilot .....	1
84	25K-30022	O-RING, Cap .....	1	123	25K-40030	O-RING, Seat .....	1
85	946623	SPRING, Check .....	1	124	886739	POPPET .....	1
86	25K-20028	O-RING, Sleeve .....	1	125	886753	SPRING, Poppet .....	1
87	-----	§BALL, Poppet — See Item 50 ..	—	126	25K-40104	O-RING, Cap .....	1
88	946118	SPRING, Poppet .....	1	127	947846	CAP, Adjusting .....	1
89	4E-04	LKWSHR, Plate to Housing ..	2	128	8D-08	NUT, Jam .....	1
90	1C-412	BOLT, Plate to Housing .....	2	129	49D-08	NUT, Acorn .....	1
91	946117	GUIDE, Spring .....	1	130	944890	SCREW, Adjusting .....	1
92	946126	SCREW, Adjusting .....	1	131	613750	WASHER, Jam .....	2
93	946077	EYE, Plunger .....	1	132	878233	WASHER, Cover to Housing ..	4
94	58K-214	O-RING, Plunger Eye .....	1	133	4E-07	LKWSHR, Cover to Housing ..	4
95	946614	WIPER, Plunger .....	1	134	58K-222	O-RING, Cover .....	1
96	946613	PLATE, Wiper & Seal Retainer ..	1	135	40K-04	PLUG, Cover .....	1
97	949150	SEAL, Plunger Oil .....	1	136	947887	COVER .....	1
				137	1C-724	BOLT, Cover to Housing .....	4

†Not Illustrated  
§Not Sold Separately

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



VALVE CONTROL LEVERS AND LINKAGE

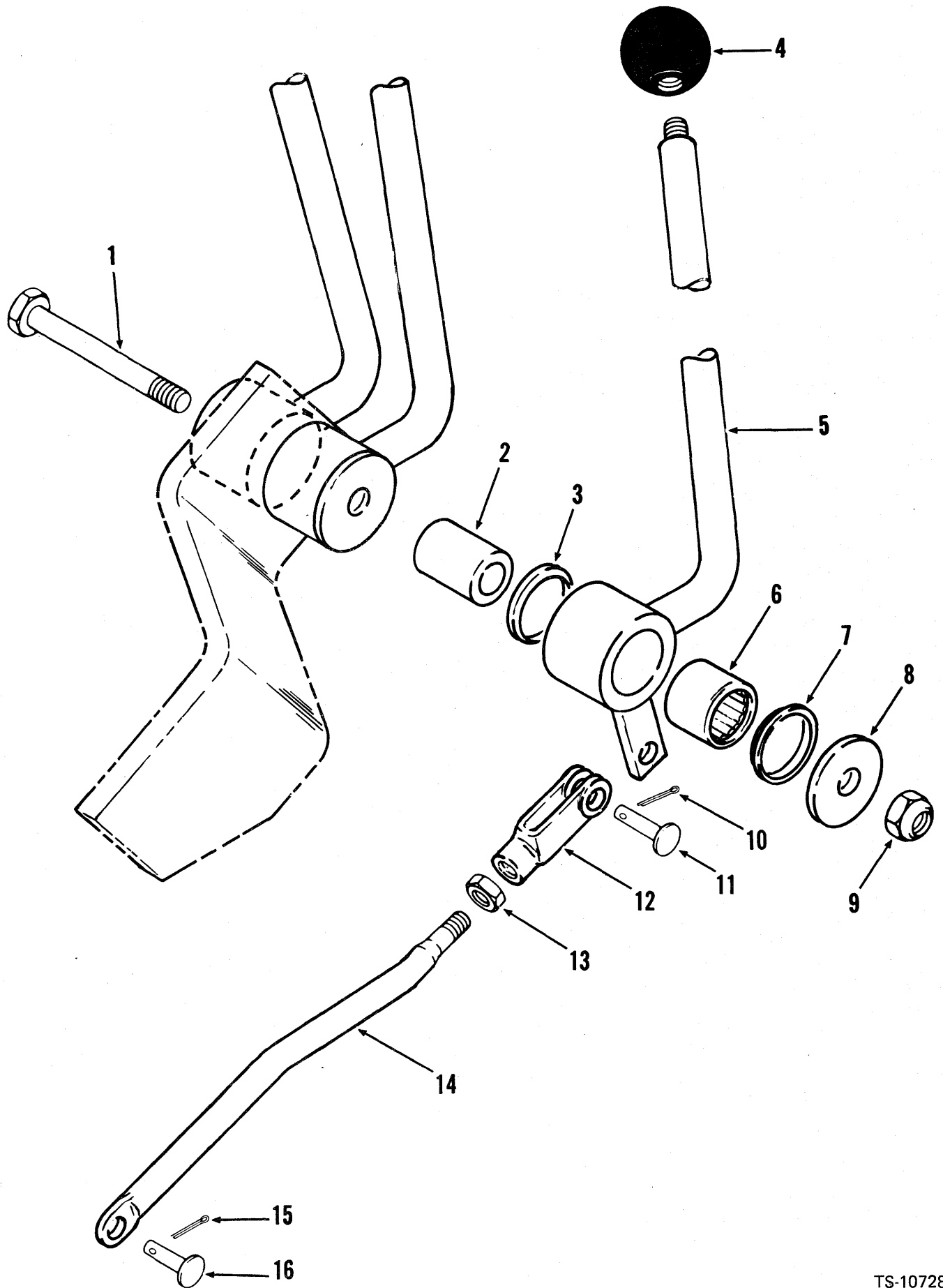
TS-9081-P



**VALVE CONTROL LEVERS AND LINKAGE**

Item No.	Part No.	Description	No. Req'd.
1	565389	KNOB, Bucket Lever .....	1
2	1508479	LEVER, Bucket Control .....	1
3	1522535	SEAL, Grease .....	1
4	1503533	BRACKET, Lever Mounting .....	1
5	1522535	SEAL, Grease .....	1
6	1503251	SLEEVE, Lever .....	1
7	675227	BEARING, Lever .....	1
8	565389	KNOB, Boom Lever .....	1
9	1508478	LEVER, Boom Control .....	1
10	1522535	SEAL, Grease .....	1
11	585972	WASHER, Lever Mounting .....	1
12	24C-872	BOLT, Lever Mounting .....	1
13	4F-08127	PIN, Clevis .....	2
14	1F-414	COTTER, Clevis Pin .....	2
15	1530169	ROD, Boom Control .....	1
16	1F-414	COTTER, Clevis Pin .....	2
17	4F-08127	PIN, Clevis .....	2
18	-----	CONTROL VALVE ASSY — See Index .....	—
19	4E-08	LKWSHR, Valve Mounting .....	3
20	24C-872	BOLT, Valve Mounting .....	3
21	1530167	ROD, Bucket Control .....	1
22	8D-08	NUT, Clevis Jam .....	1
23	2J-8300	CLEVIS, Rod to Lever .....	1
24	4E-08	LKWSHR, Bracket Mounting .....	2
25	24C-824	BOLT, Bracket Mounting .....	2
26	8D-08	NUT, Clevis Jam .....	1
27	2J-8300	CLEVIS, Rod to Lever .....	1
28	675227	BEARING, Lever .....	1
29	1503251	SLEEVE, Lever .....	1
30	1522535	SEAL, Grease .....	1
31	585972	WASHER, Lever Mounting .....	1
32	18D-08	NUT, Lever Mounting .....	1

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



**THREE SPOOL VALVE CONTROLS**

<b>Item No.</b>	<b>Part No.</b>	<b>Description</b>	<b>No. Req'd.</b>
1	24C-8112	BOLT, Valve Lever .....	1
2	1503251	SLEEVE, Valve Lever .....	1
3	1522535	SEAL, Bearing .....	1
4	565389	KNOB .....	1
5	1509029	LEVER, Valve Control .....	1
6	675227	BEARING, Valve Lever .....	1
7	1522535	SEAL, Bearing .....	1
8	569909	WASHER, Valve Lever .....	1
9	18D-08	NUT, Valve Lever .....	1
10	1F-414	COTTER, Clevis Pin .....	1
11	4F-08127	PIN, Clevis .....	1
12	2J-8300	CLEVIS, Valve Rod .....	1
13	8D-08	NUT, Clevis Jam .....	1
14	1503513	ROD ASSY, Valve Lever (Inc. 12, 13) .....	1
15	1F-414	COTTER, Clevis Pin .....	1
16	4F-08127	PIN, Clevis .....	1

**N O T E S**

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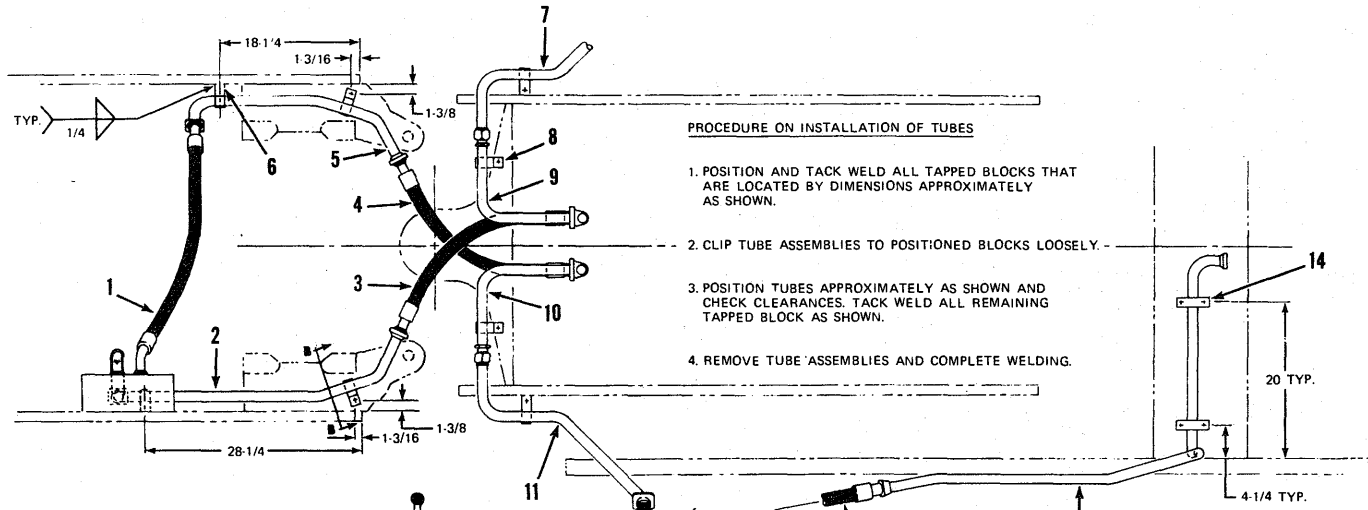
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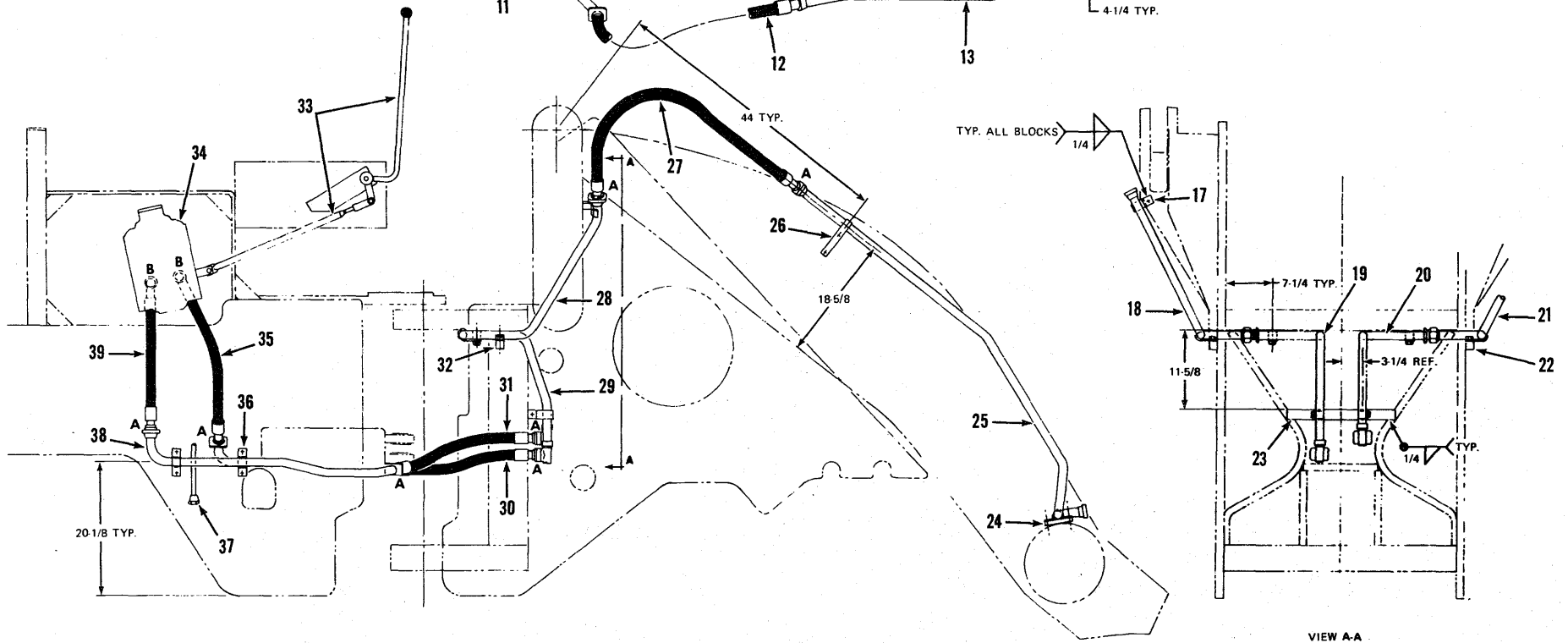
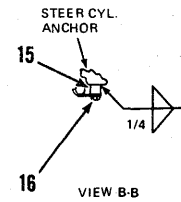
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**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



**PROCEDURE ON INSTALLATION OF TUBES**

1. POSITION AND TACK WELD ALL TAPPED BLOCKS THAT ARE LOCATED BY DIMENSIONS APPROXIMATELY AS SHOWN.
2. CLIP TUBE ASSEMBLIES TO POSITIONED BLOCKS LOOSELY.
3. POSITION TUBES APPROXIMATELY AS SHOWN AND CHECK CLEARANCES. TACK WELD ALL REMAINING TAPPED BLOCK AS SHOWN.
4. REMOVE TUBE ASSEMBLIES AND COMPLETE WELDING.



VIEW A-A

98B.1

(2C15)

PM 2462

## THREE SPOOL VALVE INSTALLATION AND PARTS

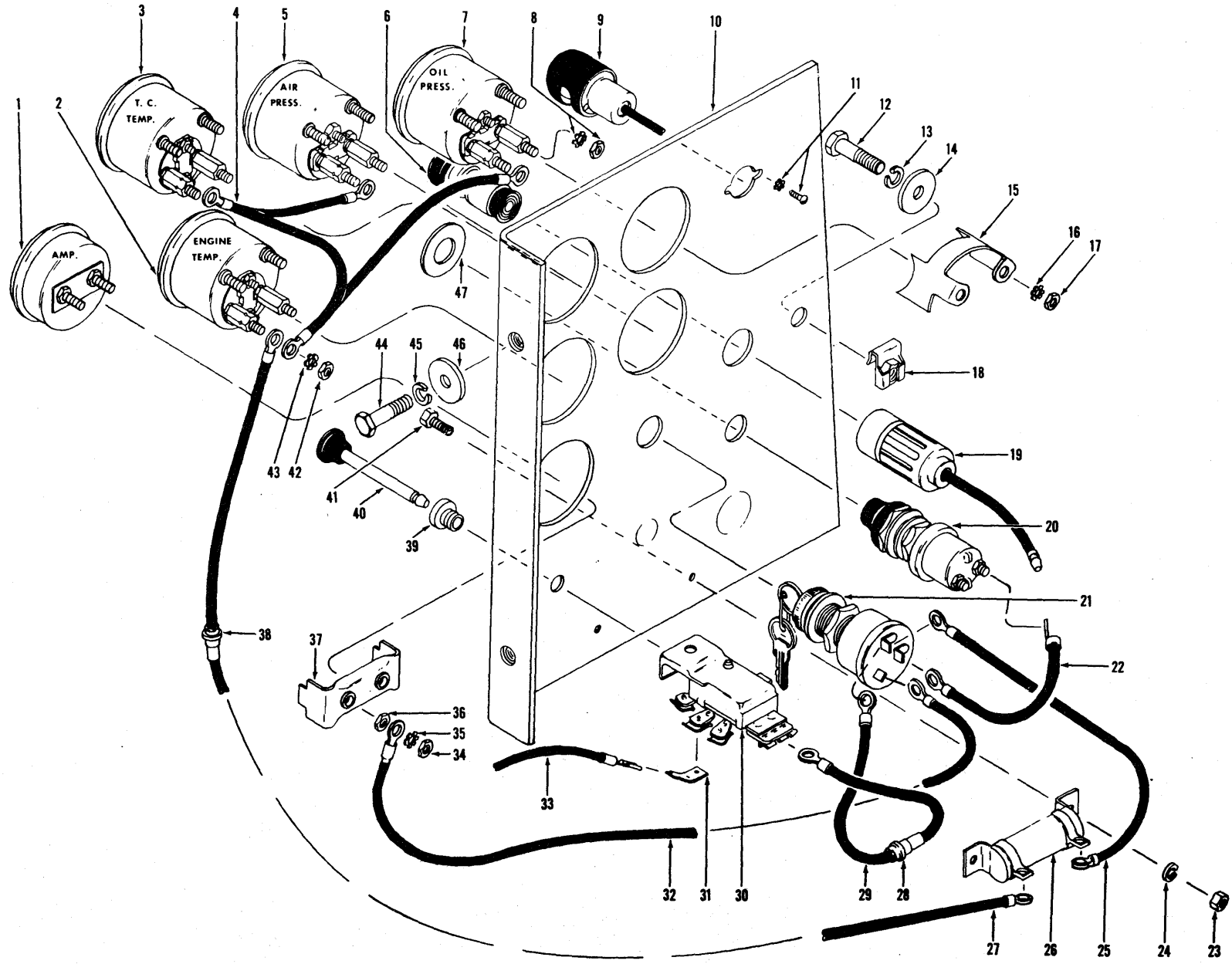
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	HOSE (See Item 35)	—	25A	1523785	†TUBE, Boom — L.H.	1
2	-----	TUBE (See Item 38)	—	26	1525625	TAPPED BLOCK	2
3	-----	HOSE (See Item 31)	—	26A	1520678	†CLIP, Tube Mounting	2
4	-----	HOSE (See Item 30)	—	26B	24C-616	†BOLT, Clip to Block	4
5	1522920	TUBE, Rear Frame — L.H.	1	26C	4E-06	†LKWSHR, Clip to Block	4
6	1520677	TAPPED BLOCK	2	27	1526422	HOSE, Tube to Tube	2
7	1526315	TUBE, Front Frame — Upper — L.H.	1	27A	-----	†FLANGE HALF (See Group "A")	—
8	590424	TAPPED BLOCK	2	28	-----	TUBE (See Item 11)	—
8A	24C-616	†BOLT, Tube Mounting	2	29	-----	TUBE (See Item 10)	—
8B	4E-06	†LKWSHR, Tube Mounting	2	30	1525620	HOSE, Center Pivot	1
9	1526309	TUBE, Front Frame — Lower — L.H.	1	30A	-----	†FLANGE HALF (See Group "A")	—
10	1526311	TUBE, Front Frame — Lower — R.H.	1	31	1525620	HOSE, Center Pivot	1
11	1526313	TUBE, Front Frame — Upper — R.H.	1	31A	-----	†FLANGE HALF (See Group "A")	—
12	-----	HOSE (See Item 27)	—	32	590424	TAPPED BLOCK	2
13	-----	TUBE (See Item 25)	—	32A	24C-616	†BOLT, Tube Mounting	2
14	572665	TAPPED BLOCK	4	32B	4E-06	†LKWSHR, Tube Mounting	2
15	590424	TAPPED BLOCK	2	33	-----	THREE SPOOL VALVE CONTROLS — See Index	—
16	24C-820	BOLT, Block Mounting	2	34	-----	CONTROL VALVE ASSY — See Index	—
16A	4E-08	†LKWSHR, Block Mounting	2	35	1529051	HOSE, Valve to Tube — L.H.	1
17	590424	TAPPED BLOCK	8	35A	-----	†FLANGE HALF, Hose to Tube (See Group "A")	—
17A	24C-820	†BOLT, Block Mounting	8	35B	-----	†FLANGE HALF, Hose to Valve (See Group "B")	—
17B	4E-08	†LKWSHR, Block Mounting	8	36	572557	CLIP, Tube to Block	2
18	-----	TUBE (See Item 11)	—	36A	24C-616	†BOLT, Clip to Block	4
19	-----	TUBE (See Item 10)	—	36B	4E-06	†LKWSHR, Clip to Block	4
20	-----	TUBE (See Item 9)	—	37	1528563	TUBE, Brake	1
21	-----	TUBE (See Item 7)	—	38	1522918	TUBE, Rear Frame — R.H.	1
22	590424	TAPPED BLOCK	2	39	1526424	HOSE, Control Valve to Tube — R.H.	—
22A	24C-820	†BOLT, Block Mounting	2	39A	-----	†FLANGE HALF, Hose to Tube (See Group "A")	—
22B	4E-08	†LKWSHR, Block Mounting	2	39B	-----	†FLANGE HALF, Hose to Valve (See Group "B")	—
23	1525622	RECTANGULAR FLAT	1				
24	572557	CLIP, Tube to Block	4				
24A	24C-616	†BOLT, Clip to Block	8				
24B	4E-06	†LKWSHR, Clip to Block	8				
25	1523787	TUBE, Boom — R.H.	1				

†Not Illustrated

NOTE: To determine part number of flange halves refer to letter designation on illustration, and then to chart.

GROUP	FLANGE HALF	O-RING	BOLT	LKWSHR	SIZE
No. Req'd Per Connection	2	1	4	4	
A	19J16	58K-219	23C-620	4E-06	1"
B	19J20	58K-222	23C-724	4E-07	1¼"

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



INSTRUMENT PANEL ASSEMBLY

TS-8392-P

**INSTRUMENT PANEL ASSEMBLY**

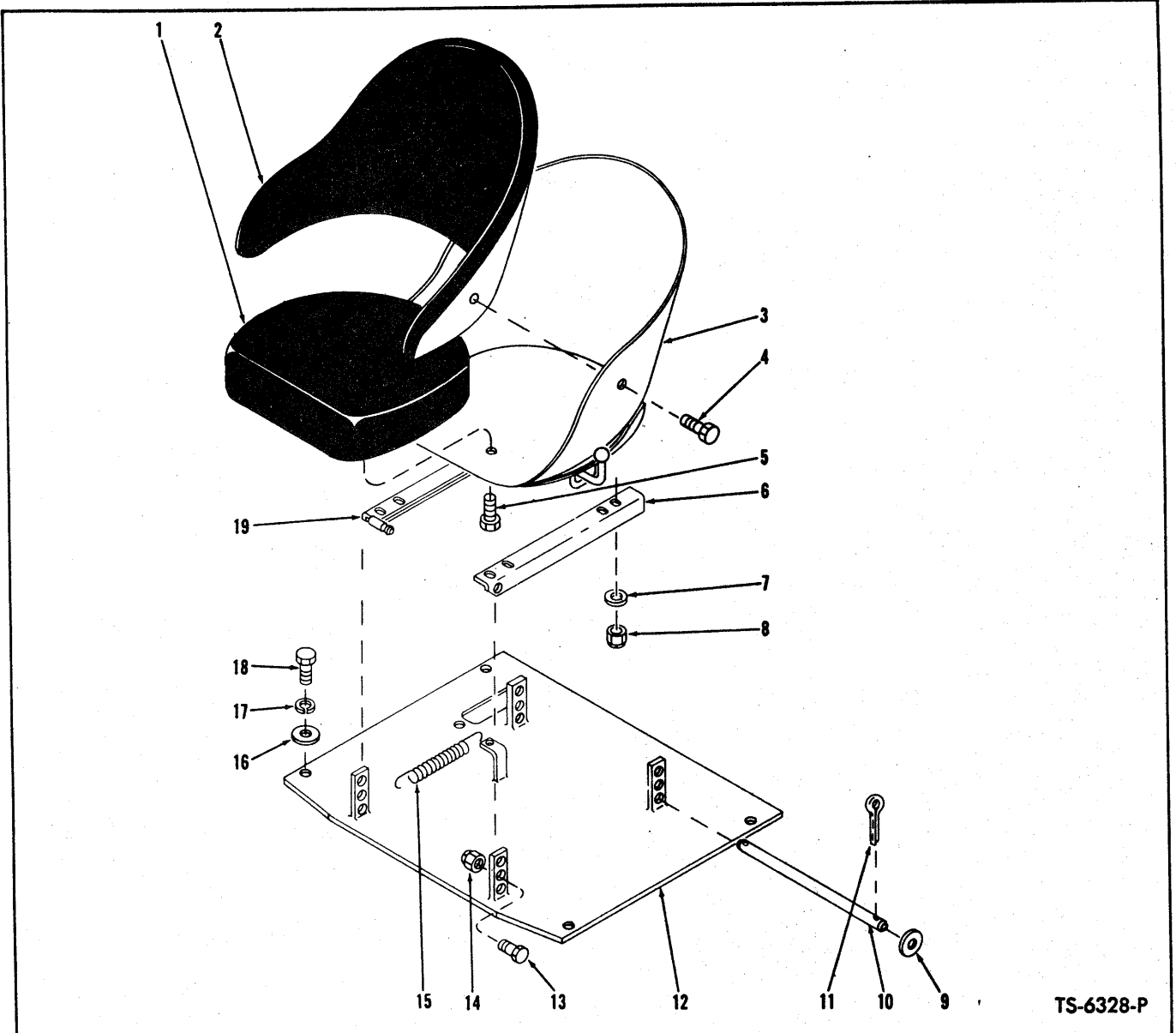
Item No.	Part No.	Description	No. Req'd.
1	949286	AMMETER .....	1
2	947252	GAUGE, Engine Temperature .....	1
3	947254	GAUGE, Torque Converter Temperature .....	1
4	558673	HARNESS, Instrument Wiring .....	1
5	947250	GAUGE, Air Pressure .....	1
6	944803	ELEMENT, Lighter .....	1
7	947248	GAUGE, Engine Oil Pressure .....	1
8	14D-10	NUT, Terminal to Gauge .....	4
8A	12E-10	LKWSHR, Terminal to Gauge .....	4
9	574276	LAMP, Dash (Inc. 33) .....	1
9A	945055	†BULB, Dash Lamp .....	1
10	1526350	PANEL, Instrument .....	1
11	18G-606	SCREW, Dash Lamp Mounting .....	2
11A	12E-6	LKWSHR, Dash Lamp Mounting .....	2
12	23C-616	BOLT, Instrument Panel Mounting .....	1
13	4E-06	LKWSHR, Instrument Panel Mounting .....	1
14	565280	WASHER, Instrument Panel Mounting .....	1
15	1534136	CLAMP, Gauge Mounting .....	4
16	12E-10	LKWSHR, Gauge Mounting .....	8
17	14D-10	NUT, Gauge Mounting .....	8
18	572729	CAGED NUT, Panel Retaining .....	1
19	549024	RECEPTACLE, Lighter (Inc. 19A) .....	1
19A	944804	†FUSE, Lighter .....	1
20	600259	BUTTON, Starter Push (Inc. 20A) .....	1
20A	857420	†BOOT, Starter Button .....	1
21	573548	SWITCH, Ignition .....	1
22	553405	WIRE, Ignition Switch to Starter Button .....	1
23	12D-6	NUT, Resistor to Panel .....	2
24	17E-6	LKWSHR, Resistor to Panel .....	2
25	553405	WIRE, Ignition Switch to Resistor .....	1
26	556489	RESISTOR, Voltage .....	1
27	573587	WIRE, Resistor to Eng. Temp. Gauge (Inc. 38) .....	1
28	611074	FUSE — 20 Amp .....	1
29	552946	WIRE, Ignition Switch to Light Switch (Inc. 28) .....	1
30	2514253	*SWITCH, Light .....	1
31	574275	TAB, Light Switch .....	1
32	553405	WIRE, Ignition Switch to Ammeter .....	1
33	—	§WIRE, Dash Lamp (See Item 9) .....	—
34	14D-10	NUT, Terminal to Ammeter .....	2
35	12E-10	LKWSHR, Terminal to Ammeter .....	2
36	14D-10	NUT, Ammeter Mounting .....	2
37	601212	CLAMP, Ammeter Mounting .....	2
38	571021	FUSE — ¾ Amp .....	1
39	550743	BUSHING, Light Switch .....	1
40	550742	ROD, Light Switch .....	1
41	85G-608	SCREW, Resistor to Panel .....	2
42	12D-8	NUT, Terminal to Gauge .....	4
43	12E-8	LKWSHR, Terminal to Gauge .....	4
44	23C-616	BOLT, Instrument Panel Mounting .....	2
45	4E-06	LKWSHR, Instrument Panel Mounting .....	2
46	565280	WASHER, Instrument Panel Mounting .....	2
47	547237	PLATE, Starter Button .....	1

§ Not Sold Separately

† Not Illustrated

\*NOTE: For replacement with new switch, the mounting hole must be enlarged to .4688.

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**

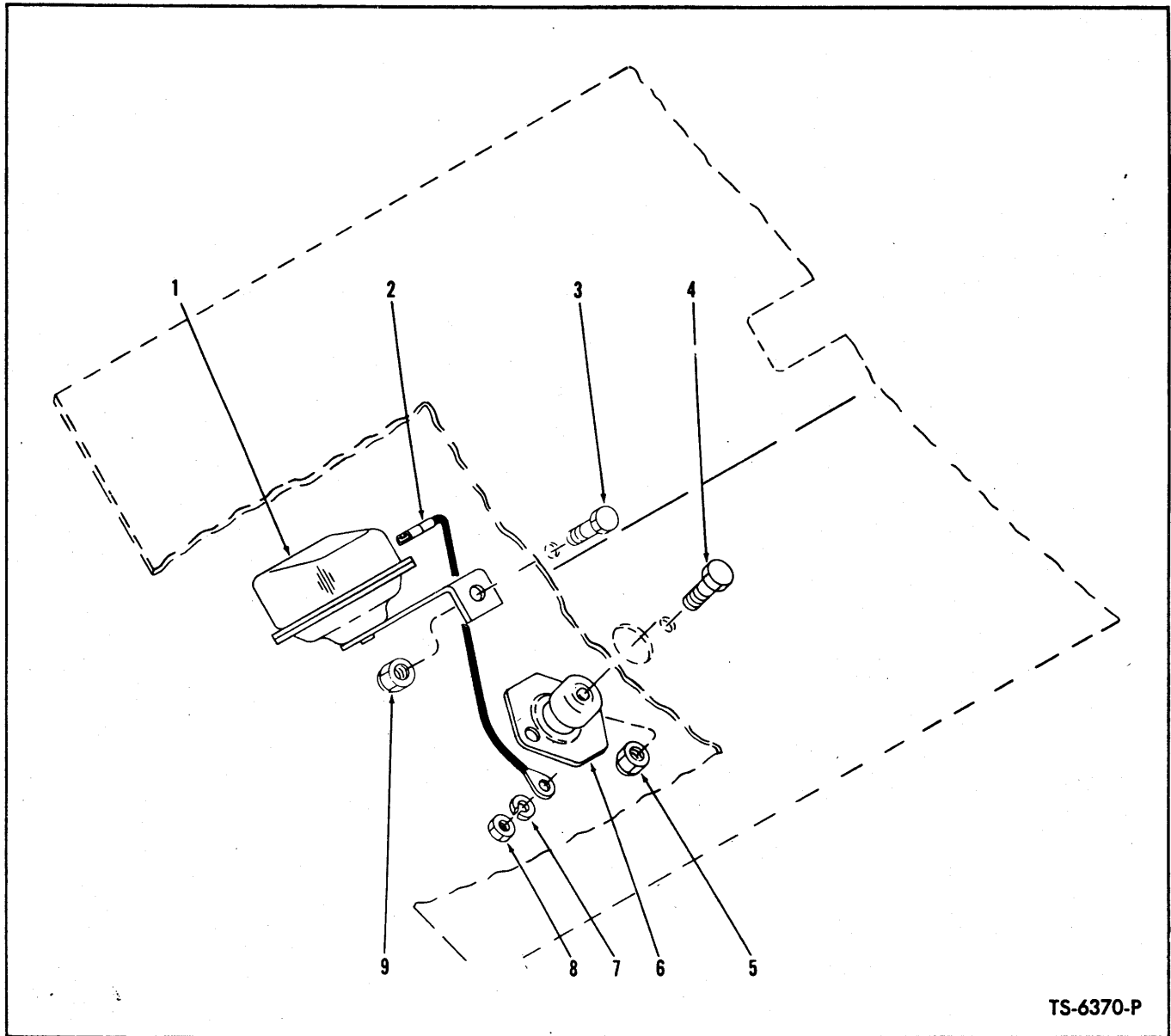


**SEAT AND SUPPORT GROUP**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1507663	SEAT ASSY, Bucket (Inc. 1 thru 5) .....	1	11	1F-420	COTTER, Seat Mounting Bar ...	2
1	948144	CUSHION, Seat .....	1	12	568781	SUPPORT, Seat .....	1
2	948143	CUSHION, Back Rest .....	1	13	24C-824	BOLT, Seat Pivot .....	2
3	944982	BUCKET .....	1	14	18D-08	NUT, Seat Pivot .....	2
4	1C-610	BOLT, Cushion Mounting .....	3	15	550301	SPRING .....	1
5	1C-610	BOLT, Cushion Mounting .....	1	16	619029	WASHER, Seat Support to Frame .....	4
6	558779	ANGLE, Left Hand .....	1	17	4E-08	LKWSHR, Seat Support to Frame .....	4
7	25E-15	WASHER, Seat Mounting ....	4	18	23C-820	BOLT, Seat Support to Frame	4
8	18D-05	NUT, Seat Mounting .....	4	19	558777	ANGLE, Right Hand .....	1
9	25E-22	WASHER, Seat Mounting Bar	2				
10	557458	BAR, Seat Mounting .....	1				

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



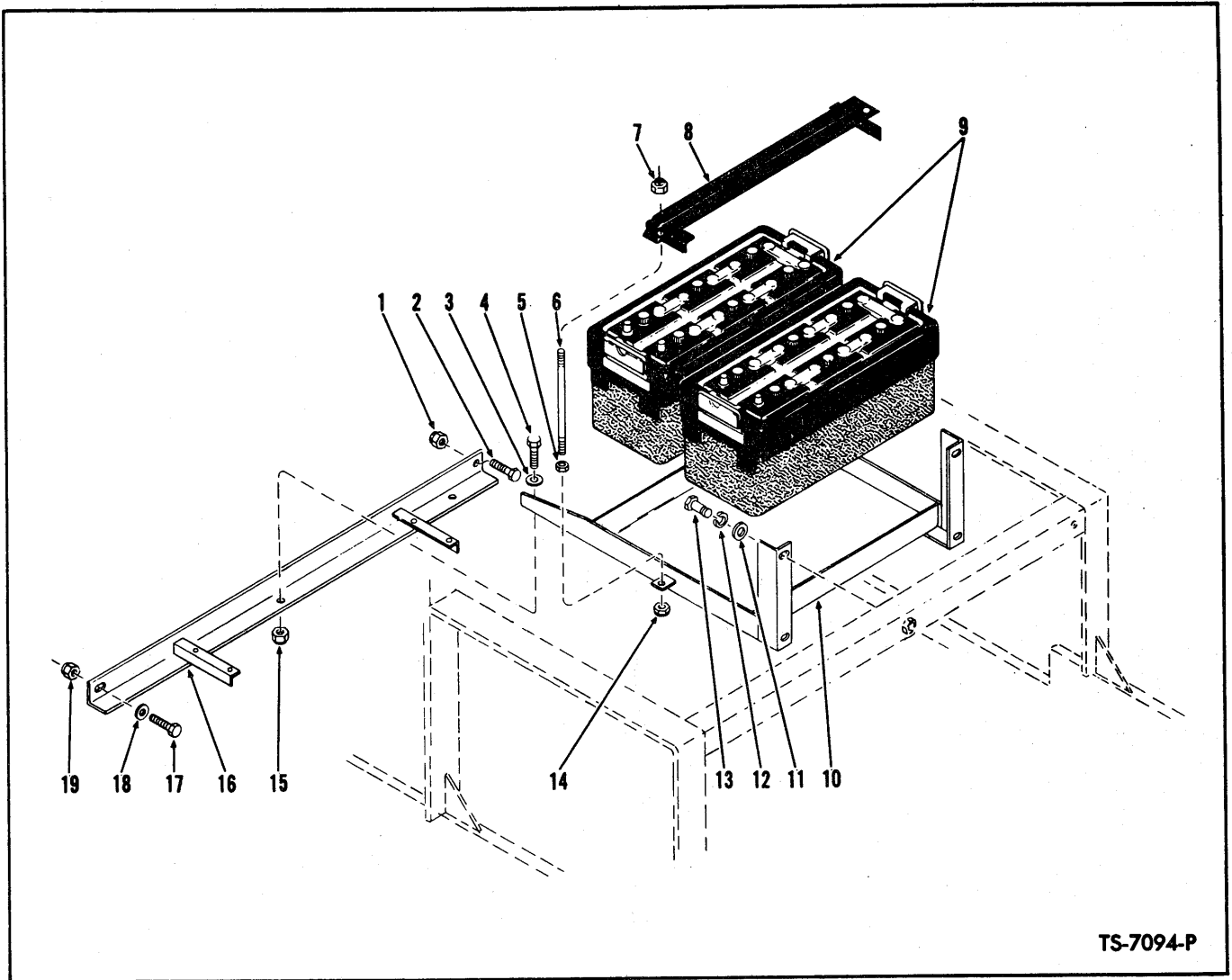


TS-6370-P

**HORN AND FOOT SWITCH**

Item No.	Part No.	Description	No. Req'd.
1	885083	HORN .....	1
2	572373	WIRE, Horn to Foot Switch .....	1
3	24C-416	BOLT, Horn Mounting .....	1
4	24C-416	BOLT, Foot Switch Mounting .....	2
5	18D-04	NUT, Foot Switch Mounting .....	2
6	778570	SWITCH, Foot — Horn (Inc. 7, 8) .....	1
7	4E-06	LKWSHR, Wire to Foot Switch .....	1
8	15D-06	NUT, Wire to Foot Switch .....	1
9	18D-04	NUT, Horn Mounting .....	1

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**

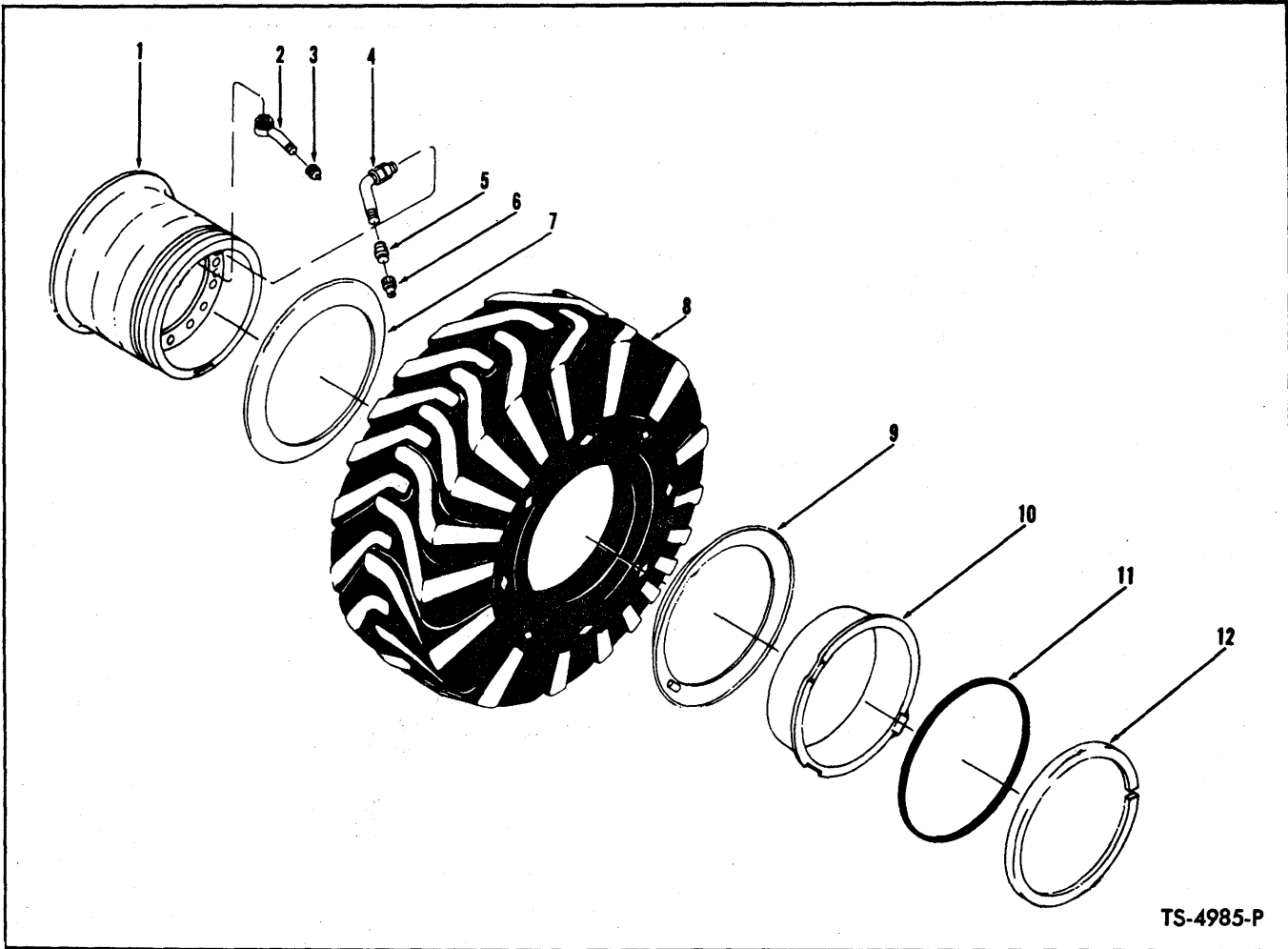


TS-7094-P

**BATTERIES AND BATTERY BOX**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18D-08	NUT, Support Angle to Frame	1	11	635682	WASHER, Battery Box to Frame	2
2	24C-824	BOLT, Support Angle to Frame	1	12	4E-08	LKWSHR, Battery Box to Frame	2
3	635682	WASHER, Battery Box to Support Angle	2	13	23C-820	BOLT, Battery Box to Frame	2
4	24C-820	BOLT, Battery Box to Support Angle	2	14	7D-05	NUT, Hold Down Stud Jam	2
5	7D-05	NUT, Hold Down Stud Jam	2	15	18D-08	NUT, Battery Box to Support Angle	2
6	600183	STUD, Battery Hold Down to Box	2	16	568305	ANGLE, Battery Box Support	1
7	17D-2	NUT, Battery Hold Down to Stud	2	17	24C-824	BOLT, Support Angle to Frame	2
8	566629	HOLD DOWN, Battery	1	18	635682	WASHER, Support Angle to Frame	1
9	1310121	BATTERY	2	19	18D-08	NUT, Support Angle to Frame	1
10	572885	BOX, Battery	1				

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



TS-4985-P

**WHEEL AND TIRE**

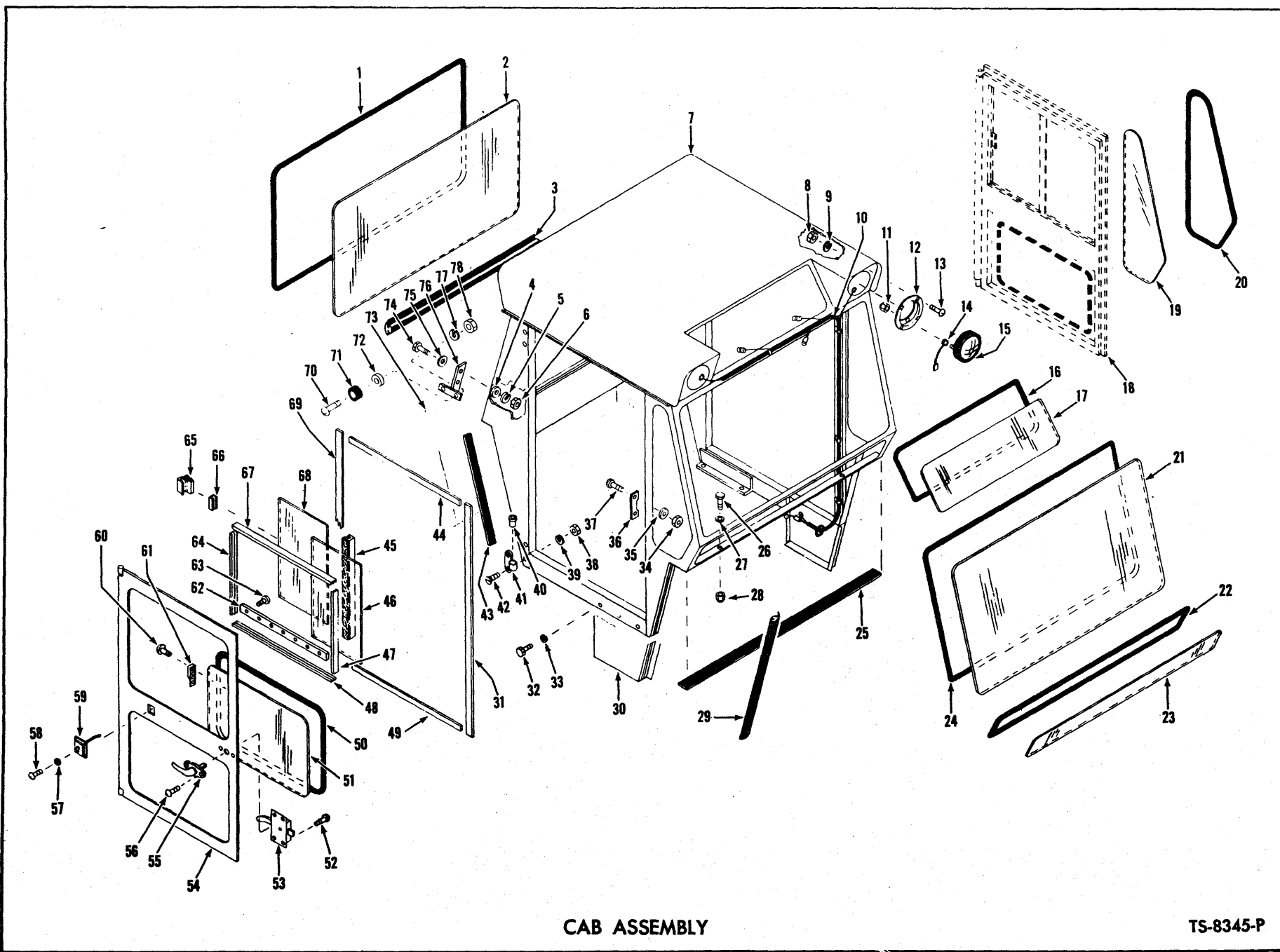
Item No.	Part No.			Description	No. Req'd.
	18.00 x 25	23.5 x 25	23.5 x 25		
1	1536090	1508623	563453	*WHEEL .....	4
2	-----	531112	531112	STEM, Water Filling (Inc. 2A, 2B, 3).....	4
2A	-----	529605	529605	†NUT .....	4
2B	-----	529606	529606	†GROMMET .....	4
3	-----	531111	531111	CAP .....	4
4	509445	509445	509445	STEM, Valve (Inc. 5, 6) .....	4
5	551684	551684	551684	ADAPTER, Valve Stem .....	4
6	551685	551685	551685	CAP, Valve Stem .....	4
7	551341	551341	551341	FLANGE .....	4
8	-----	-----	-----	‡TIRE .....	4
9	551341	551341	551341	FLANGE .....	4
10	553956	553956	553956	BAND, Bead Seat .....	4
11	580278	580278	580278	O-RING .....	4
12	580274	580274	580274	RING, Lock .....	4
13	-----	-----	573366	†SEAL, Bead Seat (See Note "A") .....	8

\*NOTE: Wheel part number 563453, for Michelin tires only.

NOTE "A" - Two (2) 573366 Seals used per wheel with 23.5x25 Michelin tires only.

†Not Illustrated

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



106

(1D21)

PM 2462

CAB ASSEMBLY

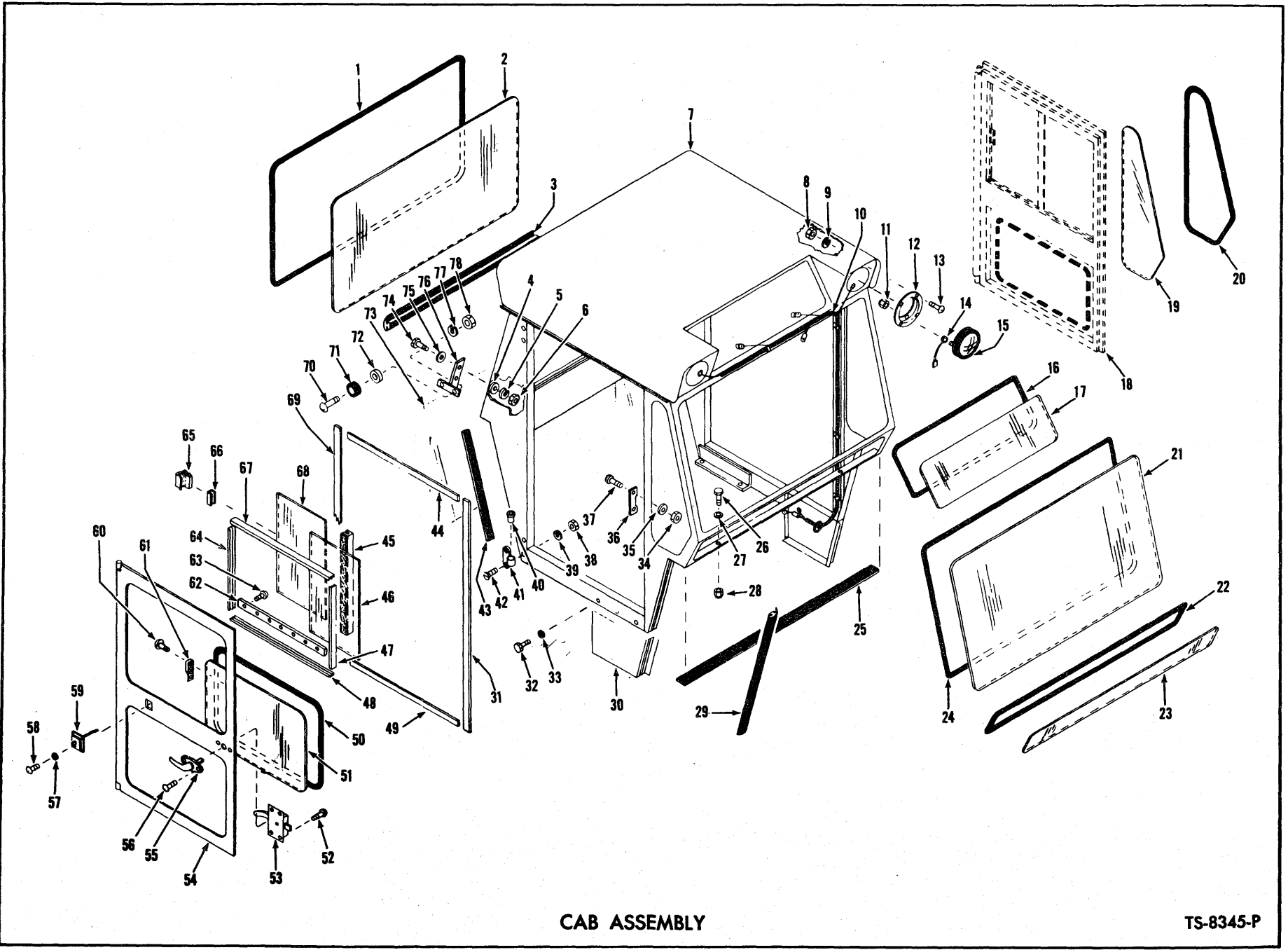
TS-8345-P

**CAB ASSEMBLY**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1536572	CAB ASSY (Inc. 1 thru 9, 12, 13, 16 thru 25, 29 thru 72, 74 thru 78) .....	1	20	569694	MOULDING, Quarter Window	10 ft.
				21	-----	§GLASS PATTERN, Upper Windshield (See 79) .....	—
1	569694	MOULDING, Rear Window ..	11 ft.	22	569694	MOULDING, Lower Windshield .....	10 ft.
2	-----	§GLASS PATTERN, Rear Window (See 79) .....	—	23	-----	§GLASS PATTERN, Lower Windshield (See 79) .....	—
3	1521846	WEATHERSTRIP, Cab — Rear	5 ft.	24	569694	MOULDING, Upper Windshield .....	12 ft.
4	25E-13	WASHER, Door Latch Strike Attaching .....	4	25	1521844	WEATHERSTRIP, Cab Front .....	4 ft.
5	4E-04	LKWSHR, Door Latch Strike Attaching .....	4	26	18C-628	BOLT, Cab Attaching (Front)	2
6	1D-04	NUT, Door Latch Strike Attaching .....	4	26A	18C-624	†BOLT, Cab Attaching (Side) ..	4
7	-----	§CAB (See "A") .....	—	27	616783	WASHER, Cab Attaching .....	6
8	12D-10	NUT, Head Lamp Adapter Attaching .....	8	28	18D-06	NUT, Cab Attaching .....	6
9	17E-10	LKWSHR, Head Lamp Adapter Attaching .....	8	29	569692	WEATHERSTRIP, Cab Front .....	5 ft.
10	1544318	WIRING HARNESS, Cab	1	30	568686	PANEL, Lower Quarter — R.H. ....	1
10A	541988	†CLIP, Wiring Harness	4	30A	568687	†PANEL, Lower Quarter — L.H. ....	1
10B	515069	†GROMMET, Cab Wiring Harness .....	1	31	943623	WEATHERSTRIP, Door — Front	7 ft.
11	50D-10	NUT, Head Lamp Attaching	6	32	17C-410	BOLT, Quarter Panel to Cab ..	6
12	568675	ADAPTER, Head Lamp .....	2	33	4E-04	LKWSHR, Quarter Panel to Cab .....	6
13	85G-1012	SCREW, Head Lamp Adapter	8	34	1D-04	NUT, Door Lock Strike Attaching .....	4
14	540882	WIRE, Head Lamp Ground	2	35	4E-04	LKWSHR, Door Lock Strike Attaching .....	4
15	582057	HEAD LAMP ASSY — 24 VOLT (Inc. 15A & 15B)	2	36	945576	STRIKE, Door Lock .....	2
15A	551244	†SEALED UNIT, Head Lamp	2	37	47G-412	SCREW, Door Lock Strike Attaching .....	4
15B	944977	†RETAINER, Head Lamp .....	2	38	1D-05	NUT, Cab Door Hinge Attaching .....	8
16	569694	MOULDING, Roof Glass .....	6 ft.	39	4E-05	LKWSHR, Cab Door Hinge Attaching .....	8
17	-----	§GLASS PATTERN, Roof (See 79) .....	—	40	568700	BUSHING, Cab Door Hinge ..	4
18	-----	DOOR (See 54) .....	—	41	945555	HINGE, Cab Door — R.H. Upper & L.H. Lower .....	2
19	-----	§GLASS PATTERN, Quarter Window (See 79) .....	—				

§Not Sold Separately  
†Not Illustrated

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



CAB ASSEMBLY

TS-8345-P

**CAB ASSEMBLY (Continued)**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
41A	945554	†HINGE, Cab Door — L.H. Upper & R.H. Lower .....	2	61	557465	STRIKE, Window Lock .....	4
42	76G-512	SCREW, Cab Door Hinge Attaching .....	8	62	945577	RETAINER, Glass Channel ....	2
43	943623	WEATHERSTRIP, Cab Rear ...	3 ft.	63	65G-1008	SCREW, Retainer to Door ....	14
44	943623	WEATHERSTRIP, Door Upper	5 ft.	64	569696	CHANNEL, Side Glass Run (Rear) .....	4 ft.
45	139149	CHANNEL, Glass Divider .....	4 ft.	65	589571	LOCK, Sliding Glass .....	4
46	-----	§GLASS PATTERN, Sliding Door (See 79) .....	—	66	589572	CHANNEL, Side Glass Run (Upper) .....	4 ft.
47	569696	CHANNEL, Side Glass Run — Front .....	4 ft.	67	569696	RUBBER, Lock to Glass Mounting .....	1 ft.
48	569696	CHANNEL, Side Glass Run — Lower .....	4 ft.	68	-----	§GLASS PATTERN, Sliding Door (See 79) .....	—
49	943623	WEATHERSTRIP, Door Lower ..	5 ft.	69	943623	WEATHERSTRIP, Door — Rear	7 ft.
50	569694	MOULDING, Door Glass — Lower .....	10 ft.	70	85G-1016	SCREW, Bumper to Latch Strike .....	2
51	-----	§GLASS PATTERN, Door Glass Lower (See 79) .....	—	71	560651	BUMPER, Latch Strike .....	2
52	66G-1008	SCREW, Door Lock to Door	8	72	874767	SPACER, Bumper Mounting ..	2
53	942874	LOCK, Door — R.H. ....	1	73	571854	PANEL, Cab — Rear .....	1
53A	138249	†LOCK, Door — L.H. ....	1	73A	18C-616	†BOLT, Panel Attaching .....	5
54	1536570	DOOR — L.H. ....	1	73B	25E-17	†WASHER, Panel Attaching ....	5
54A	1536571	†DOOR — R.H. ....	1	73C	18D-06	†NUT, Panel Attaching .....	5
55	1525710	HANDLE, Door .....	2	74	17C-416	BOLT, Latch Strike Attaching	4
56	32G-1008	SCREW, Handle to Door .....	4	75	25E-13	WASHER, Latch Strike Attaching .....	4
57	17E-10	LKWSHR, Door Catch Attaching .....	8	76	574992	STRIKE, Door Latch — L.H. ....	1
58	87G-1010	SCREW, Door Catch Attaching .....	8	76A	1501803	†STRIKE, Door Latch — R.H. ....	1
59	560650	CATCH, Door .....	2	77	17E-10	LKWSHR, Bumper to Strike Attaching .....	2
60	5G-606	SCREW & LKWSHR ASSY, Window Lock Strike Attaching .....	8	78	12D-10	NUT, Bumper to Strike Attaching .....	2
				79	945999	†GLASS PATTERN KIT (Inc. 2, 17, 19, 21, 23, 46, 51 & 68)	1

†Not Illustrated  
§Not Sold Separately

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**

**WIRING**

Item No.	Part No.	Description	No. Req'd.
1	1505025	HARNESS, Engine Wiring — Cummins Serial Group A .....	1
2	1505027	HARNESS, Engine Wiring — G.M. Serial Group B .....	1
3	1505029	HARNESS, Cockpit Wiring Serial Group A & B .....	1
4	572360	HARNESS, Flood Lamp Serial Group A & B .....	1
5	1526349	HARNESS, Tail Light Serial Group A & B .....	1
6	1505023	HARNESS, Flood Lamp — Front Serial Group A & B .....	1
7	1515900	WIRE, Back-Up Light Ground Serial Group A & B .....	2
8	558960	WIRE, Hourmeter Ground Serial Group A & B .....	1
9	558960	WIRE, Hourmeter to Hourmeter Relay Serial Group A & B .....	1
9A	1512688	CIRCUIT BREAKER, Serial Group A & B .....	1

**BATTERY CABLES**

Item No.	Part No.	Description	No. Req'd.
10	557334	CABLE, Battery Group Serial Group A & B .....	1
11	529359	CABLE, Battery to Battery Serial Group A & B .....	1
12	1546669	CABLE, Battery to Starter Serial Group A & B .....	1
13	532549	CABLE, Starter Ground — Cummins Serial Group A .....	1
14	541063	STRAP, Starter Ground — G.M. Serial Group B .....	1
15	24C-612	BOLT, Ground Strap Mtg. Serial Group A & B .....	1
16	4E-06	LKWSHR, Ground Strap Mtg. Serial Group A & B .....	1

**DECALS AND NAMEPLATES**

Item No.	Part No.	Description	No. Req'd.
17	2513351	*DECAL, Clark .....	3
18	----	OMIT .....	—
19	572152	*DECAL, Model .....	2
20	1520495	*DECAL, "Best on Earth" .....	2
21	538256	*DECAL, Drain — Transmission .....	1
22	1505536	*DECAL, Engine Warm-Up Warning .....	1
23	1505581	*DECAL, Safety Wiring .....	1
24	1505537	*DECAL, Safety Warning .....	1
25	572740	*DECAL, Warning .....	2
26	1534502	*DECAL, Transmission Filter — Cummins .....	1
27	1527430	PLATE, Reservoir Service Strainer .....	1
28	542074	PLATE, Patent .....	1
29	6C-605	SCREW, Patent Plate .....	4
30	1510525	*DECAL, Lubrication Instruction .....	1
31	6C-605	SCREW, Lubrication Instruction Plate .....	4
32	567978	PLATE, Shift Quadrant — 4 Speed .....	1
33	567947	PLATE, Shift Quadrant — Fwd. & Reverse .....	1
34	6C-605	SCREW, Shift Quadrant Plates .....	6
35	1511708	DECAL, Emergency Stop — G.M. .....	1
36	6C-605	SCREW, Emergency Stop Plate .....	2
37	535649	NAME PLATE, Grille — Casting .....	1
38	7G-418	SCREW, Name Plate Casting .....	4
39	20E-04	LKWSHR, Name Plate Casting .....	4
40	1511710	PLATE, Operating Precautions .....	1
41	65G-406	SCREW, Operating Precautions Plate .....	4
42	565138	STRIP, Non-Skid Abrasive (6" x 32") .....	1
43	565139	STRIP, Non-Skid Abrasive (6" x 25") .....	1
44	1531606	STRIP, Non-Skid Abrasive (6" x 12½") .....	6

\*NOTE: Contact your local Michigan Distributor for the above listed Decals.  
 Serial Group A 404A101 thru 572, 574, 580, 581  
 Serial Group B 403A101 thru 562, 564, 567

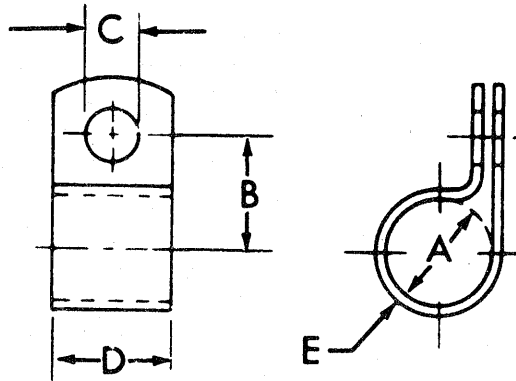
**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



**WIRING, PIPE AND HOSE CLIPS**

The following types of clips are used in connection with the various wiring, fuel, air and hydraulic piping systems employed in this unit. When replacing clips identification can be made by checking type and physical dimensions listed to obtain part number.

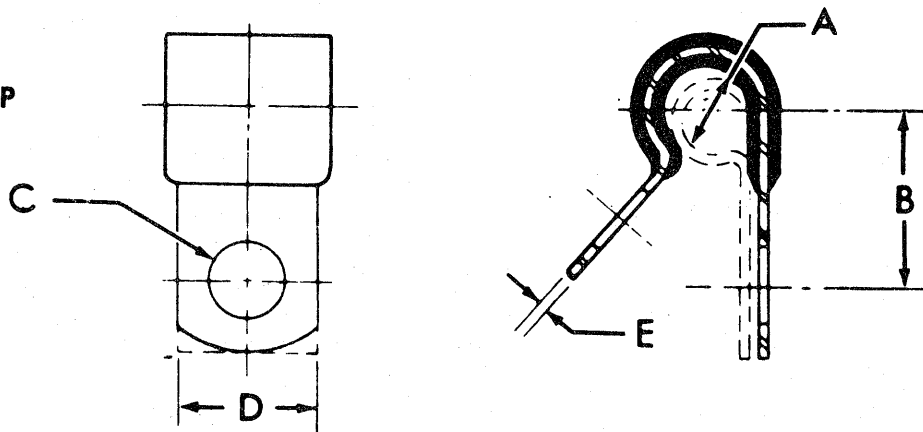
**CLOSED CLIP**



TS-5009-P

ITEM NO.	PART NUMBER	A	B	C	D	E	F
1	6H-20	1	1 3/16	1 3/32	7/8	.060	
2	6H-24	1	1 3/16	1 3/32	7/8	.060	

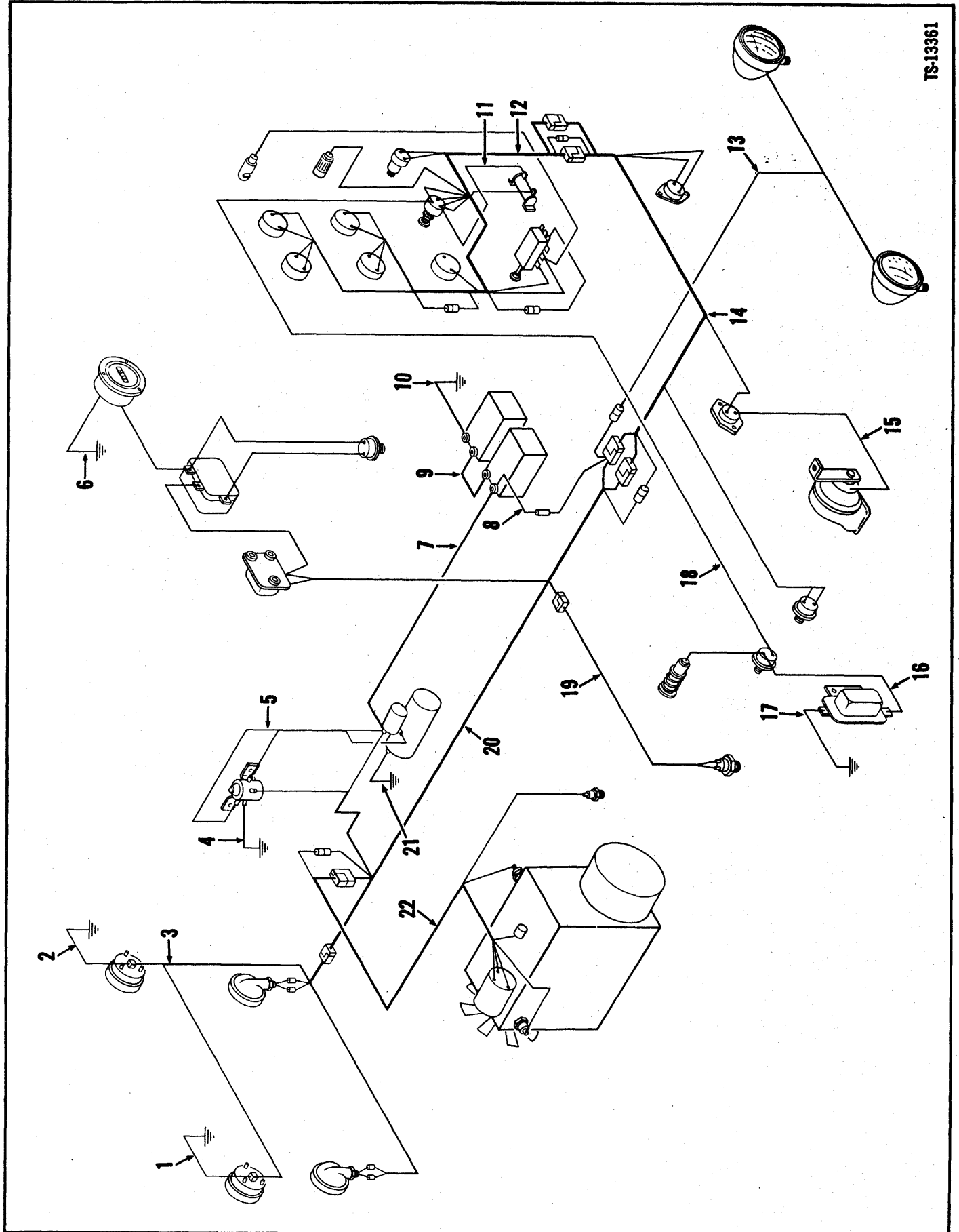
**INSULATED CLIP**



TS-5008-P

ITEM NO.	PART NUMBER	A	B	C	D	E	F
3	30H-14	1/4	1 7/32	9/32	1/2	.032	
4	30H-20	5/16	1 1/16	1 3/32	3/4	.036	
5	30H-23	3/8	2 3/32	1 3/32	3/4	.036	
6	30H-24	3/8	2 5/32	1 5/32	7/8	.036	
7	30H-31	1/2	2 5/32	1 3/32	3/4	.050	
8	30H-32	1/2	2 7/32	1 5/32	7/8	.050	
9	30H-38	5/8	2 7/32	1 3/32	3/4	.050	
10	30H-40	5/8	3 1/32	1 7/32	1	.050	
11	30H-44	1 1/16	1	1 7/32	1	.050	
12	30H-46	1 3/16	1 5/16	1 3/32	3/4	.050	

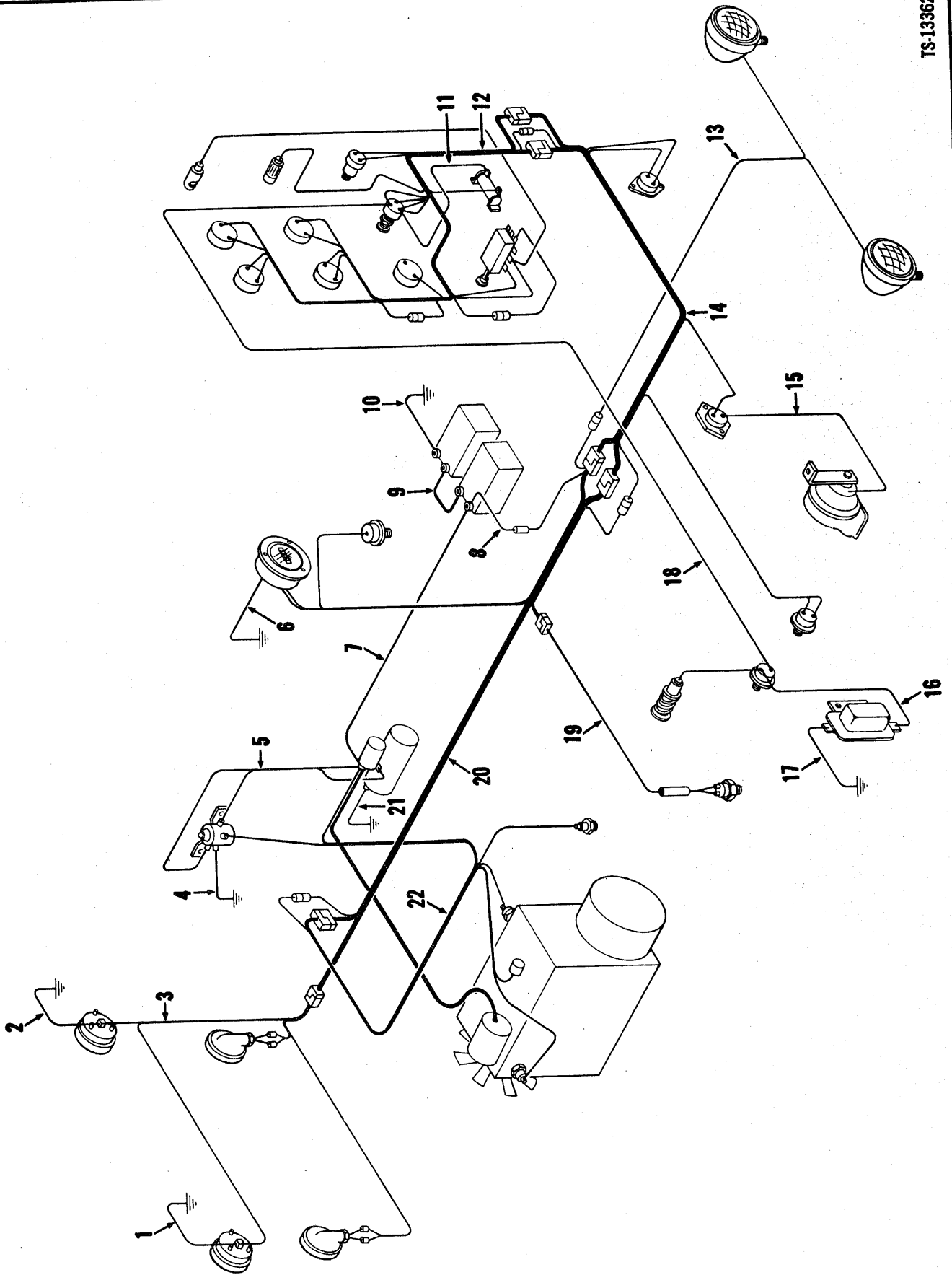
**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



**Electrical Wiring & Battery Cables – Cummins  
For S/N 404A573, 575 thru 579, 582 thru 649 only**

**MICHIGAN**

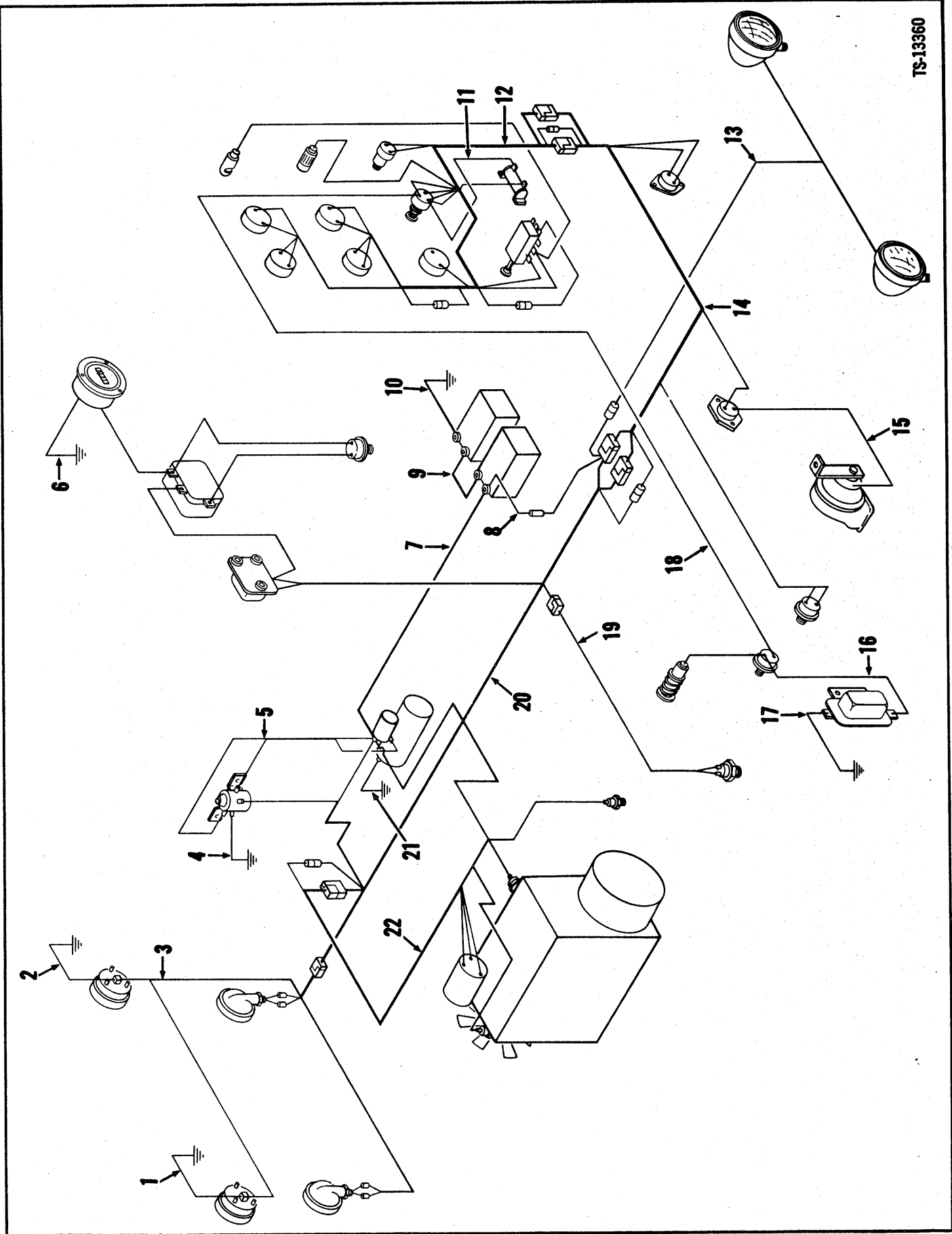
No.	Part No.	Qty.	Description
1	696048	1	Wire
2	696048	1	Wire
3	1515120	1	Harness
4	543483	1	Wire
5	1530361	1	Wire
6	558960	1	Wire
7	1546669	1	Cable
8	1539207	1	Wire
9	529359	1	Cable
10	1549608	1	Cable
11	663579	1	Wire
12	1513293	1	Harness inst panel
13	1515121	1	Harness head light
14	1515124	1	Harness cockpit
15	572373	1	Wire
16	663579	1	Wire
17	543483	1	Wire
18	1548924	1	Wire
19	1544315	1	Wire
20	1515125	1	Harness
21	1525933	1	Cable
22	1515123	1	Harness



# Electrical Wiring & Battery Cables – Cummins For S/N 404A650 and after



No.	Part No.	Qty.	Description
1	696048	1	Wire
2	696048	1	Wire
3	1515120	1	Harness
4	543483	1	Wire
5	1530361	1	Wire
6	558960	1	Wire
7	1546669	1	Cable
8	1539207	1	Wire
9	529359	1	Cable
10	1549608	1	Cable
11	663579	1	Wire
12	1513293	1	Harness inst panel
13	1515121	1	Harness headlight
14	1515124	1	Harness cockpit
15	572373	1	Wire
16	663579	1	Wire
17	543483	1	Wire
18	1548924	1	Wire
19	1544315	1	Wire
20	2503018	1	Harness main
21	1525933	1	Cable
22	2503017	1	Harness engine

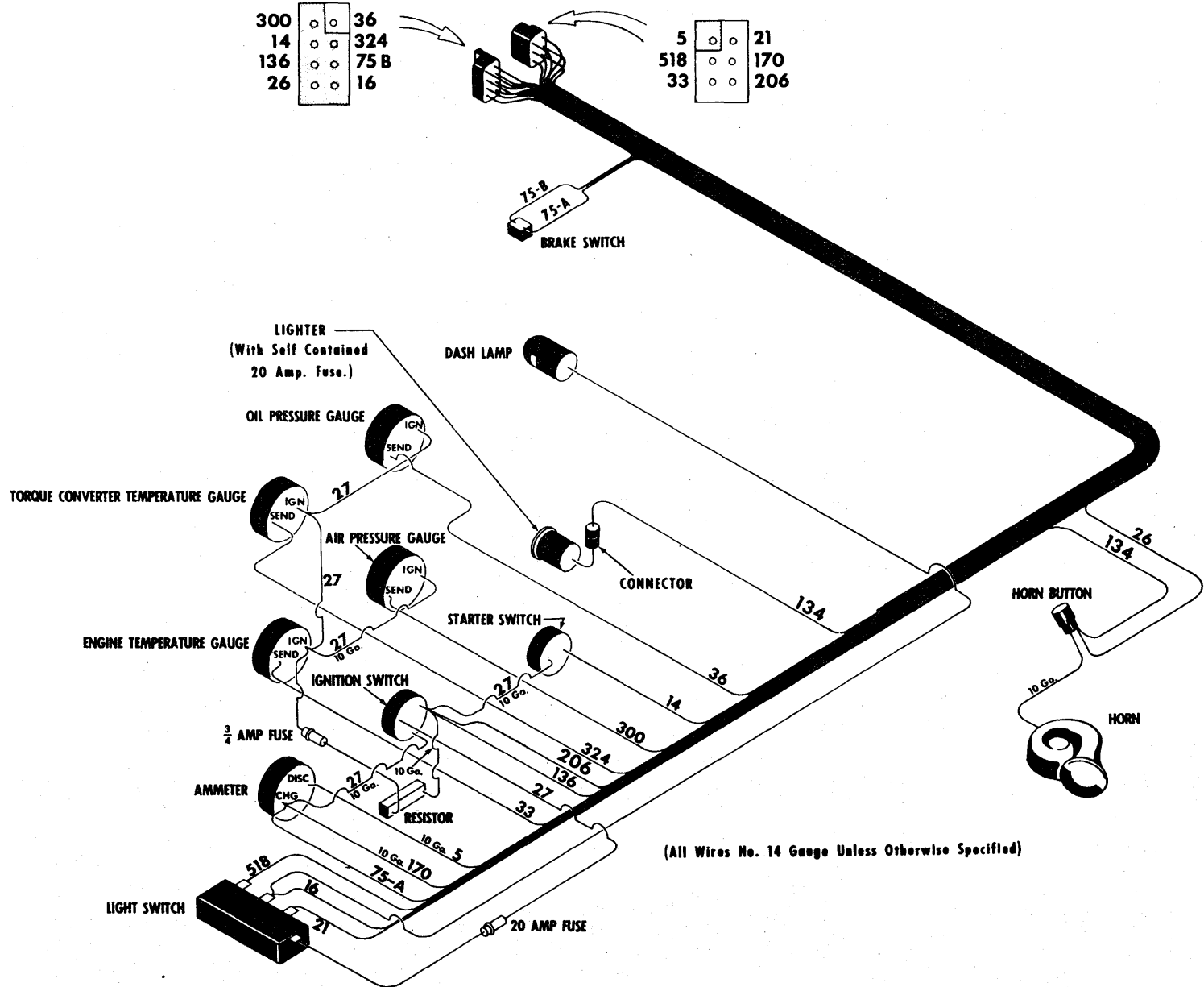
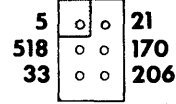
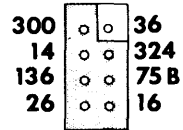


**Electrical Wiring & Battery Cable – G.M.  
For S/N 403A563, 565, 568 and after**



No.	Part No.	Qty.	Description
1	696048	1	Wire
2	696048	1	Wire
3	1515120	1	Harness tail light
4	543483	1	Wire
5	1530361	1	Wire
6	558960	1	Wire
7	1546669	1	Cable
8	1539207	1	Wire
9	529359	1	Cable
10	1549608	1	Cable
11	663579	1	Wire
12	1513293	1	Harness inst panel
13	1515121	1	Harness head light
14	1515124	1	Harness cockpit
15	572373	1	Wire
16	663579	1	Wire
17	543483	1	Wire
18	1548924	1	Wire
19	1544315	1	Wire
20	1515125	1	Harness main
21	1525933	1	Cable
22	1515122	1	Harness engine

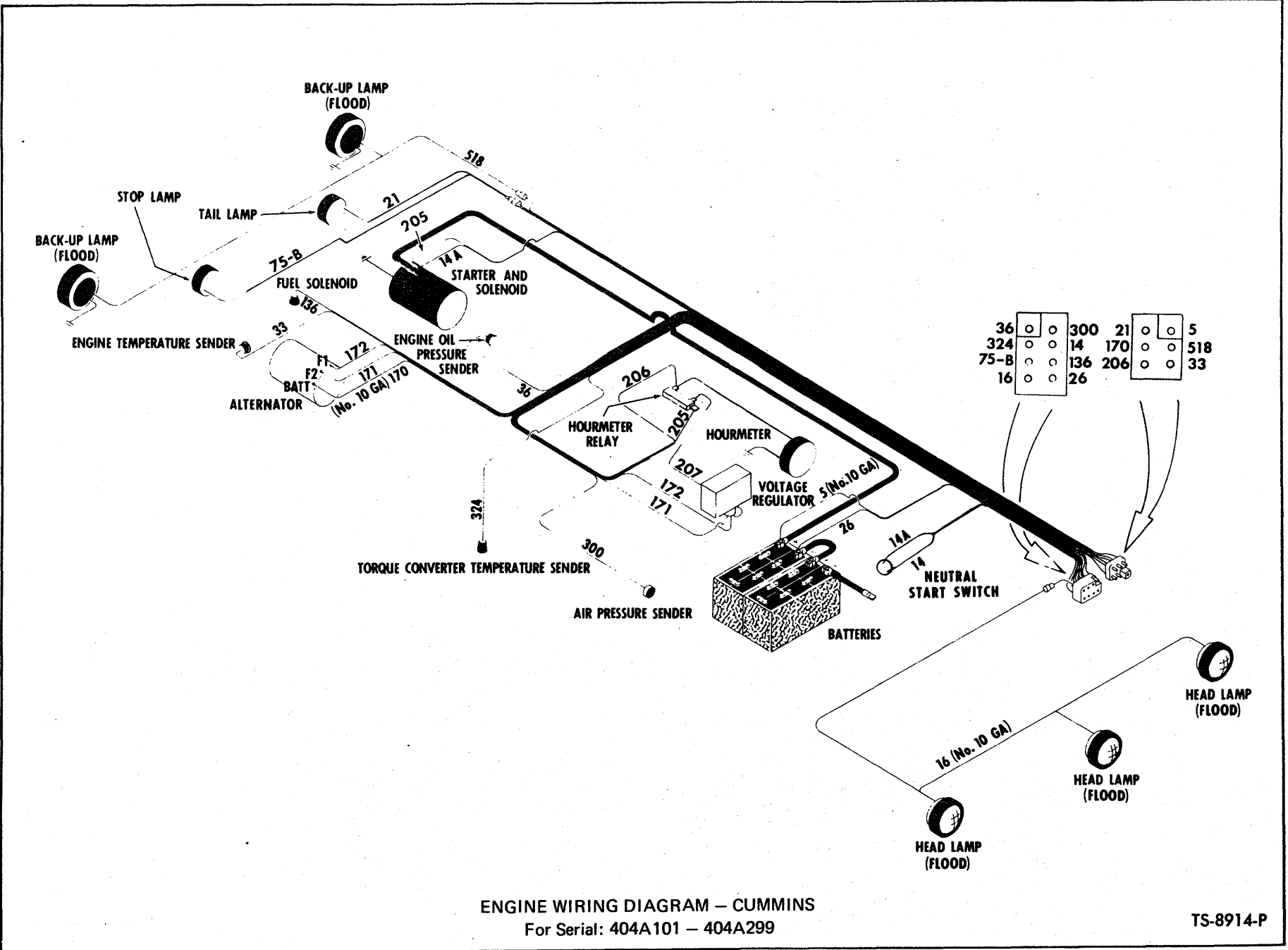
FRONT FACE OF PLUGS



COCKPIT WIRING DIAGRAM

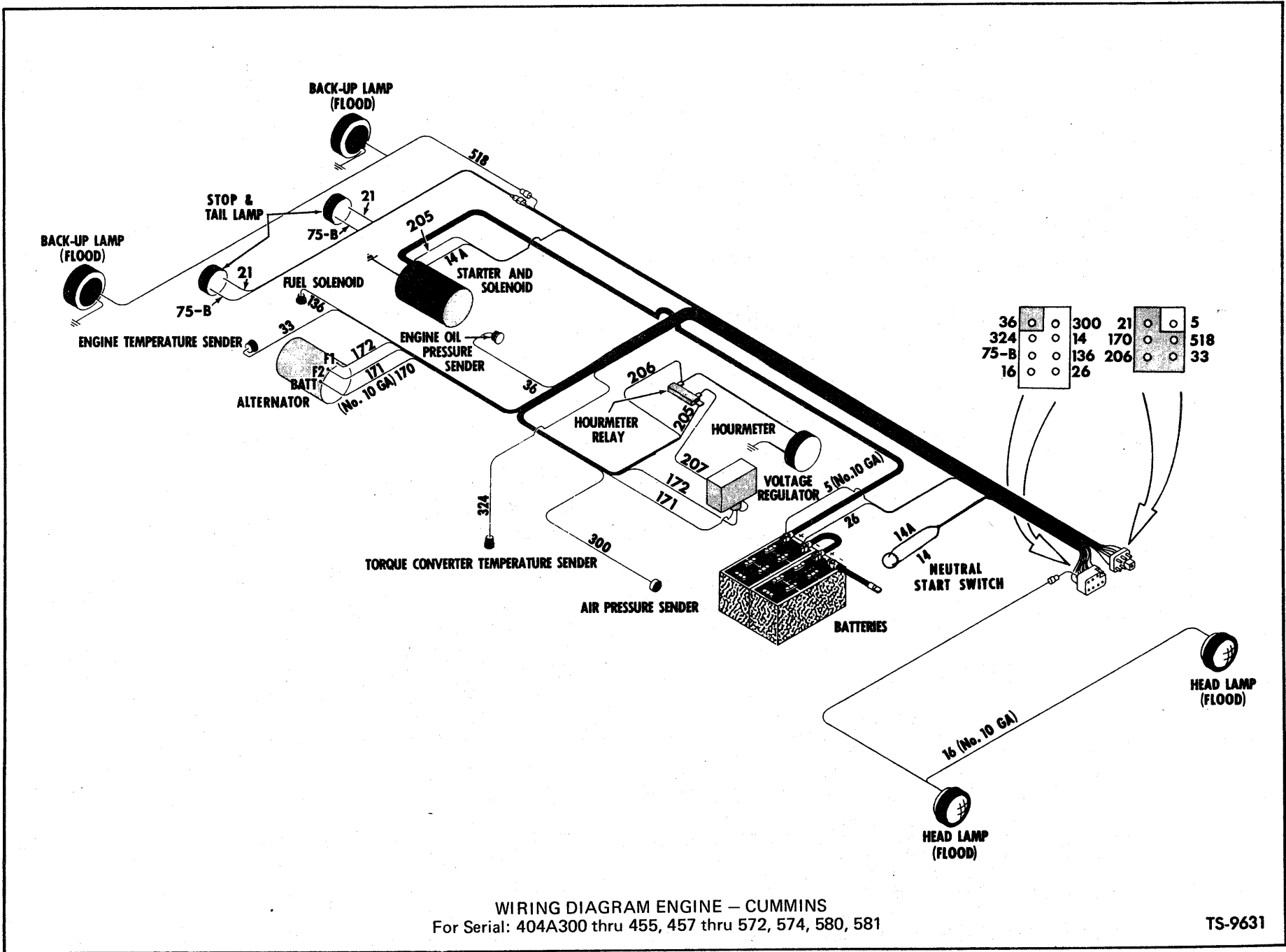
TS-8038-P





ENGINE WIRING DIAGRAM – CUMMINS  
For Serial: 404A101 – 404A299

TS-8914-P

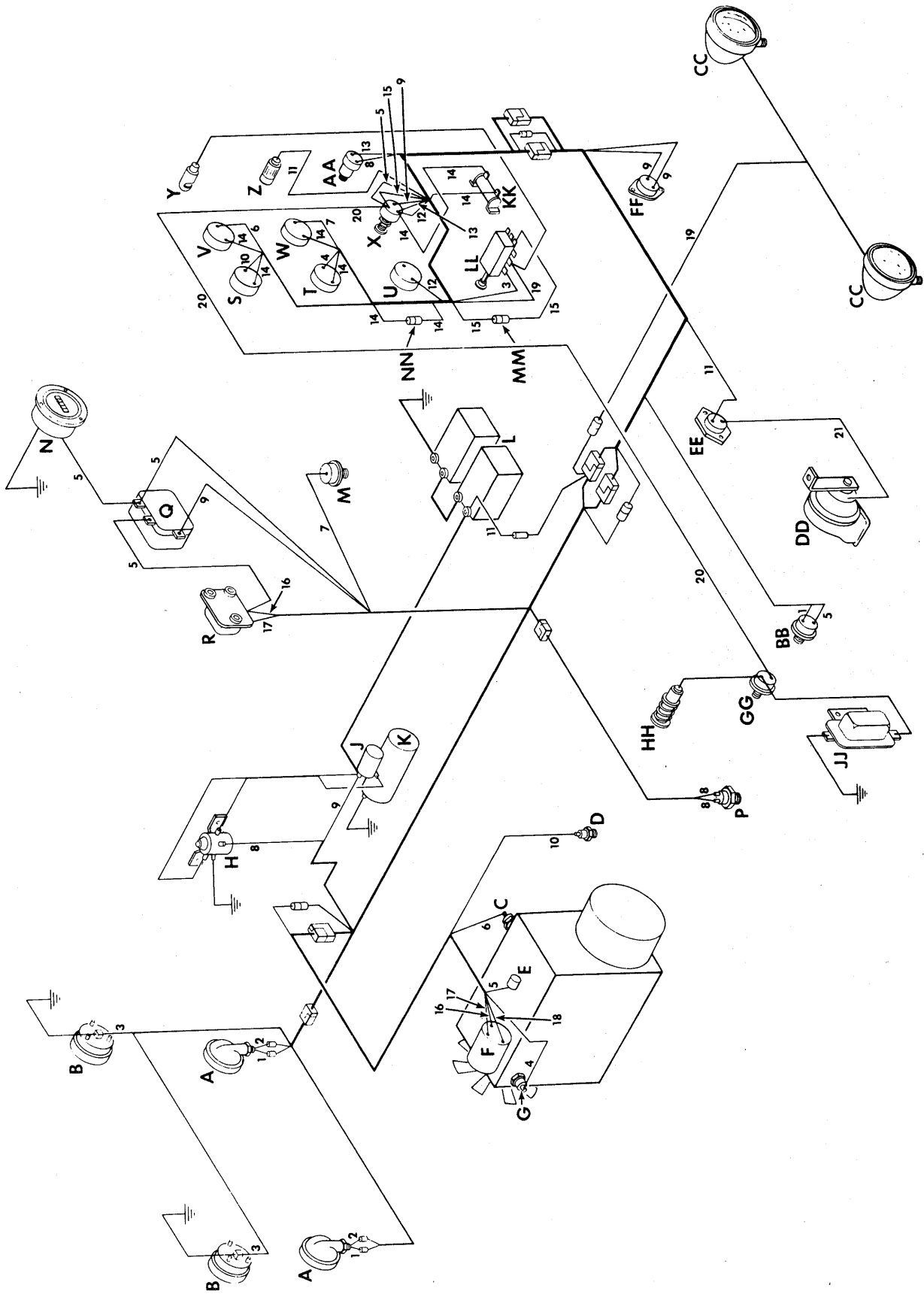


113A.2

(2D13)

PM 2462

TS-9631



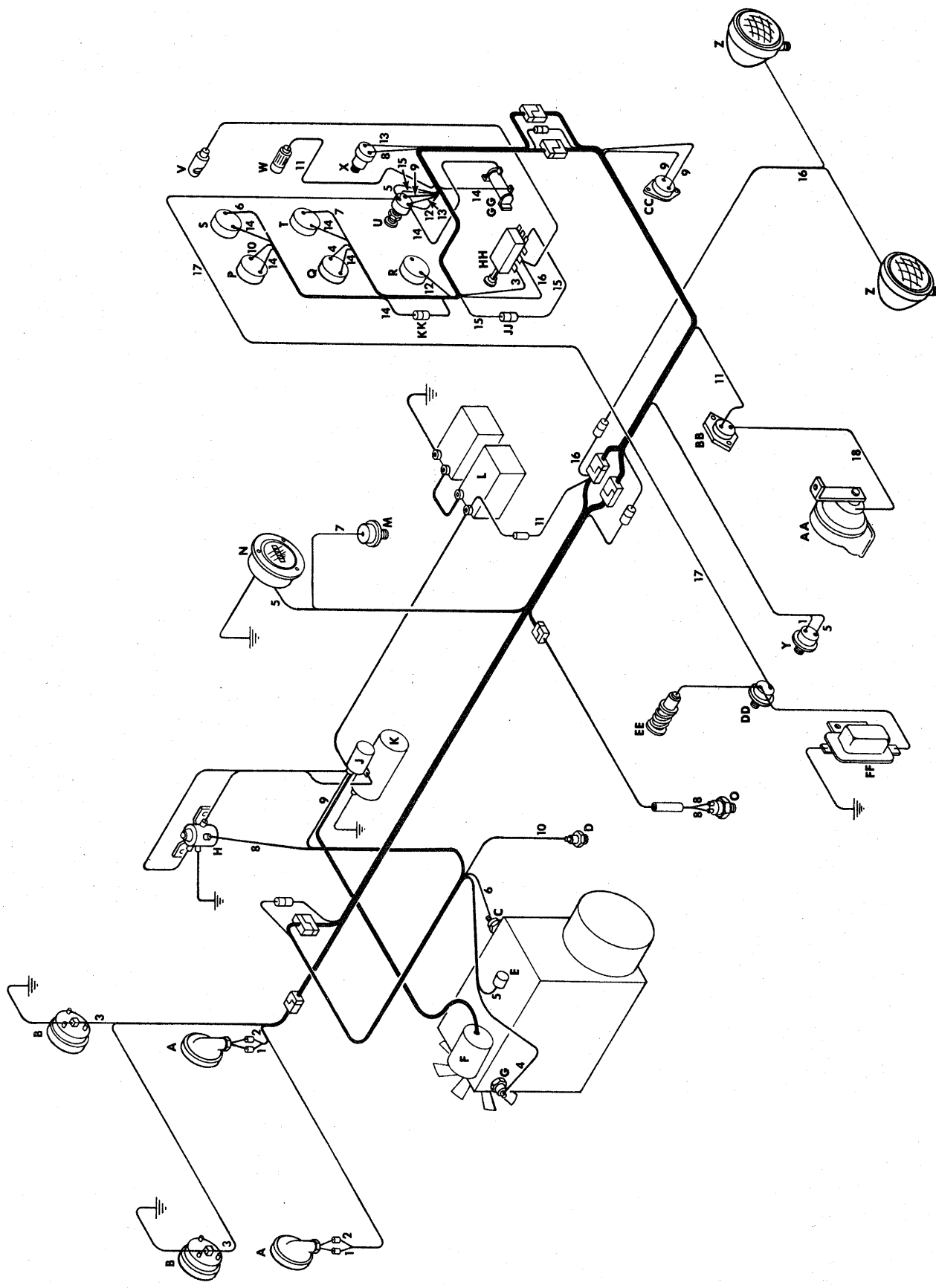


**ELECTRICAL COLOR CODE — CUMMINS**  
**S/N 404A456, 573, 575 → 579, 582 → 649**

<b>Ref. No.</b>	<b>Color</b>	<b>Color Code</b>
1.	Tan	Stoplights to Brake Light Switch
2.	Yellow	Tail Lights to Instrument Panel Plug (Joins Pink)
3.	Dark Blue	Back-Up Lights to Light Switch
4.	Brown	Engine Temp. Sender to Engine Temp. Gauge
5.	Red & White	Ignition Switch to Voltage Reg., Hourmeter Relay, Hourmeter & Switches
6.	Dark Green	Engine Oil Press. Sender to Engine Oil Press. Gauge
7.	Light Green	Air Press. Sender to Air Press. Gauge
8.	White	Starter Button to Neutral Start Switch to Solenoid
9.	Red	Ignition Switch to Circuit Breaker to Starter Solenoid
10.	Grey	Converter Temp. Sender to Converter Temp. Gauge
11.	Orange	Battery to Horn Switch & Lighter
12.	Purple & White	Ignition Switch to Voltmeter
13.	Black	Ignition Switch to Starter Button
14.	Purple	Ignition Switch to Resistor to ¾ Amp. Fuse to Gauges
15.	Violet	Ignition Switch to 20 Amp. Fuse to Light Switch
16.	Lt. Blue & White	F-1 Alternator Terminal to Voltage Regulator
17.	Brown & White	F-2 Alternator Terminal to Voltage Regulator
18.	Red & Black	Battery Alternator Terminal to Splice (Joins Red)
19.	Pink	Light Switch to Head Lamps
20.	Black	Ignition Switch to Low Press. Sender & Warning Devices
21.	Black	Horn Switch to Horn

**125-III A CUMMINS**

- |                                  |                                 |                              |
|----------------------------------|---------------------------------|------------------------------|
| A — Stop & Tail Lamps            | N — Hourmeter.                  | AA — Starter Button          |
| B — Back-up Lamps                | P — Neutral Start Switch        | BB — Brake Light Switch      |
| C — Engine Oil Pressure Sender   | Q — Hourmeter Relay             | CC — Head Lamps              |
| D — Converter Temperature Sender | R — Voltage Regulator           | DD — Horn                    |
| E — Fuel Solenoid                | S — Converter Temperature Gauge | EE — Horn Switch             |
| F — Alternator                   | T — Engine Temperature Gauge    | FF — Circuit Breaker         |
| G — Engine Temperature Sender    | U — Voltmeter                   | GG — Brake Low Press. Sender |
| H — Solenoid                     | V — Engine Oil Pressure Gauge   | HH — Warning Light           |
| J — Starter Solenoid             | W — Air Pressure Gauge          | JJ — Buzzer                  |
| K — Starter                      | X — Ignition Switch             | KK — Resistor                |
| L — Batteries                    | Y — Dash Lamp                   | LL — Light Switch            |
| M — Air Pressure Sender          | Z — Lighter                     | MM — 20 Amp Fuse             |
|                                  |                                 | NN — ¾ Amp Fuse              |



**ELECTRICAL COLOR CODE – CUMMINS  
S/N 404A650 & →**

<b>Ref. No.</b>	<b>Color</b>	<b>Color Code</b>
1.	Tan	Stoptlights to Brake Light Switch
2.	Yellow	Tail Lights to Instrument Panel Plug (Joins Pink)
3.	Dark Blue	Back-Up Lights to Light Switch
4.	Brown	Engine Temp. Sender to Engine Temp. Gauge
5.	Red & White	Ignition Switch to Voltage Reg., Hourmeter, Switches & Fuel Solenoid
6.	Dark Green	Engine Oil Press. Sender to Engine Oil Press. Gauge
7.	Light Green	Air Press. Sender to Air Press. Gauge
8.	White	Starter Button to Neutral Start Switch to Solenoid
9.	Red	Ignition Switch to Circuit Breaker to Starter Solenoid
10.	Grey	Converter Temp. Sender to Converter Temp. Gauge
11.	Orange	Battery to Horn Switch & Lighter
12.	Purple & White	Ignition Switch to Voltmeter
13.	Black	Ignition Switch to Starter Button
14.	Purple	Ignition Switch to Resistor to ¾ Amp. Fuse to Gauges
15.	Violet	Ignition Switch to 20 Amp. Fuse to Light Switch
16.	Pink	Light Switch to Head Lamps
17.	Black	Ignition Switch to Low Press. Sender & Warning Devices
18.	Black	Horn Switch to Horn

**125-III A CUMMINS**

A – Stop & Tail Lights

B – Back-Up Lights

C – Engine Oil Pressure Sender

D – Converter Temperature Sender

E – Fuel Solenoid

F – Alternator

G – Engine Temperature Sender

H – Solenoid

J – Starter Solenoid

K – Starter

L – Batteries

M – Air Pressure Sender

N – Hourmeter

O – Neutral Start Switch

P – Converter Temperature Gauge

Q – Engine Temperature Gauge

R – Voltmeter

S – Engine Oil Pressure Gauge

T – Air Pressure Gauge

U – Ignition Switch

V – Dash Lamp

W – Lighter

X – Starter Button

Y – Brake Light Switch

Z – Head Lamps

AA – Horn

BB – Horn Switch

CC – Circuit Breaker

DD – Low Pressure Sender

EE – Warning Light

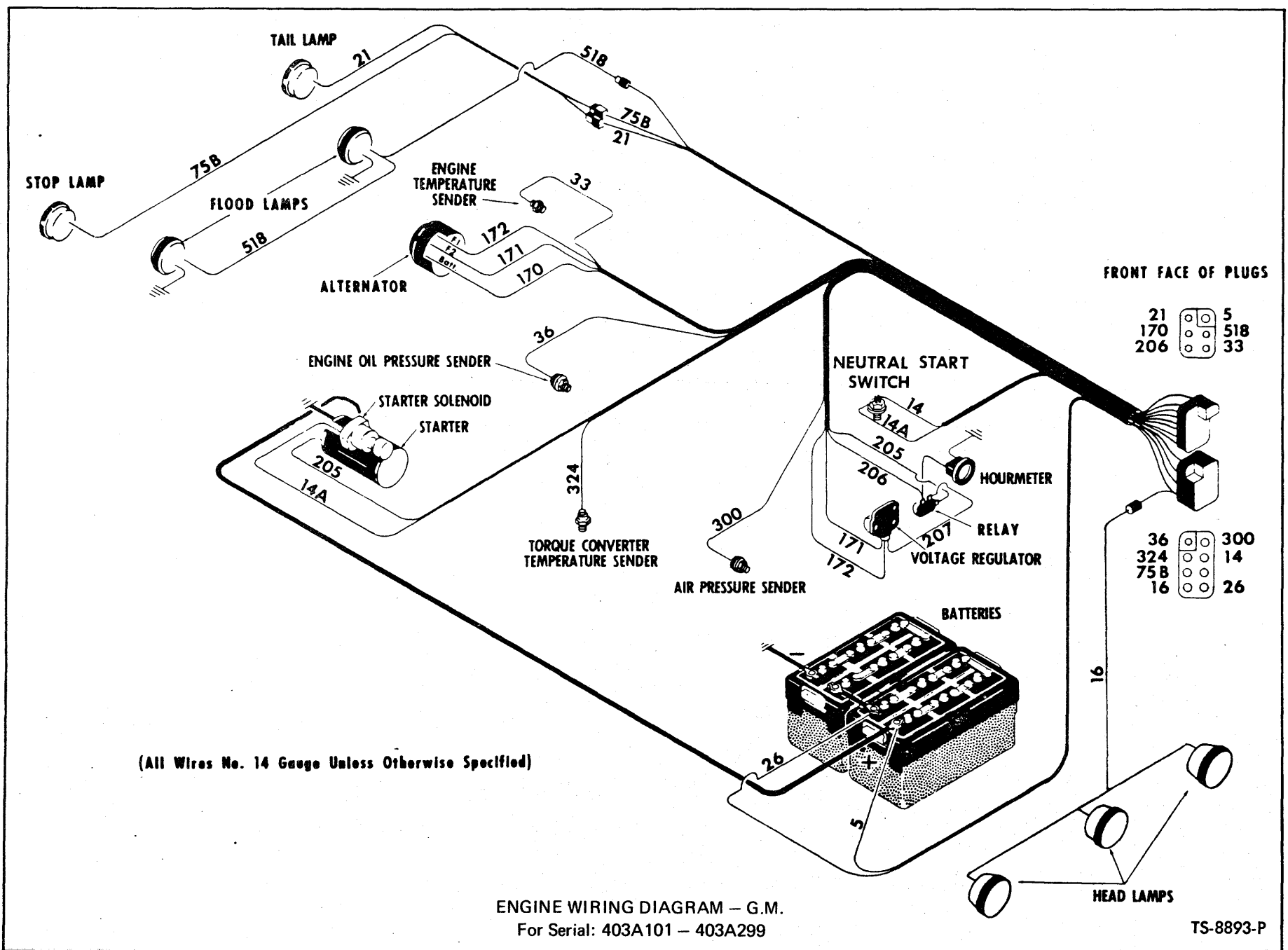
FF – Buzzer

GG – Resistor

HH – Light Switch

JJ – 20 Amp. Fuse

KK – ¾ Amp. Fuse



(All Wires No. 14 Gauge Unless Otherwise Specified)

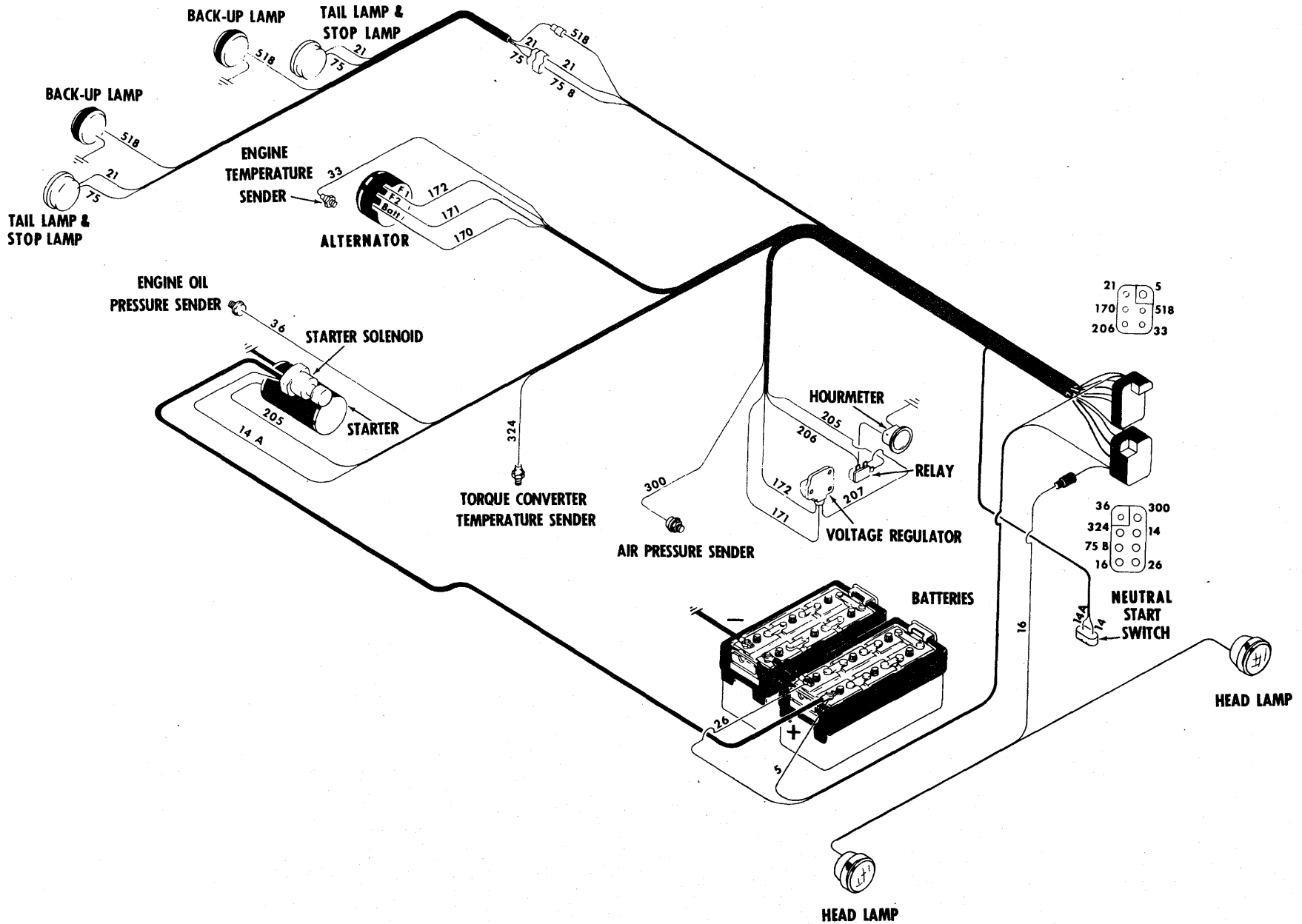
ENGINE WIRING DIAGRAM - G.M.  
For Serial: 403A101 - 403A299

TS-8893-P

114.1

(2D22)

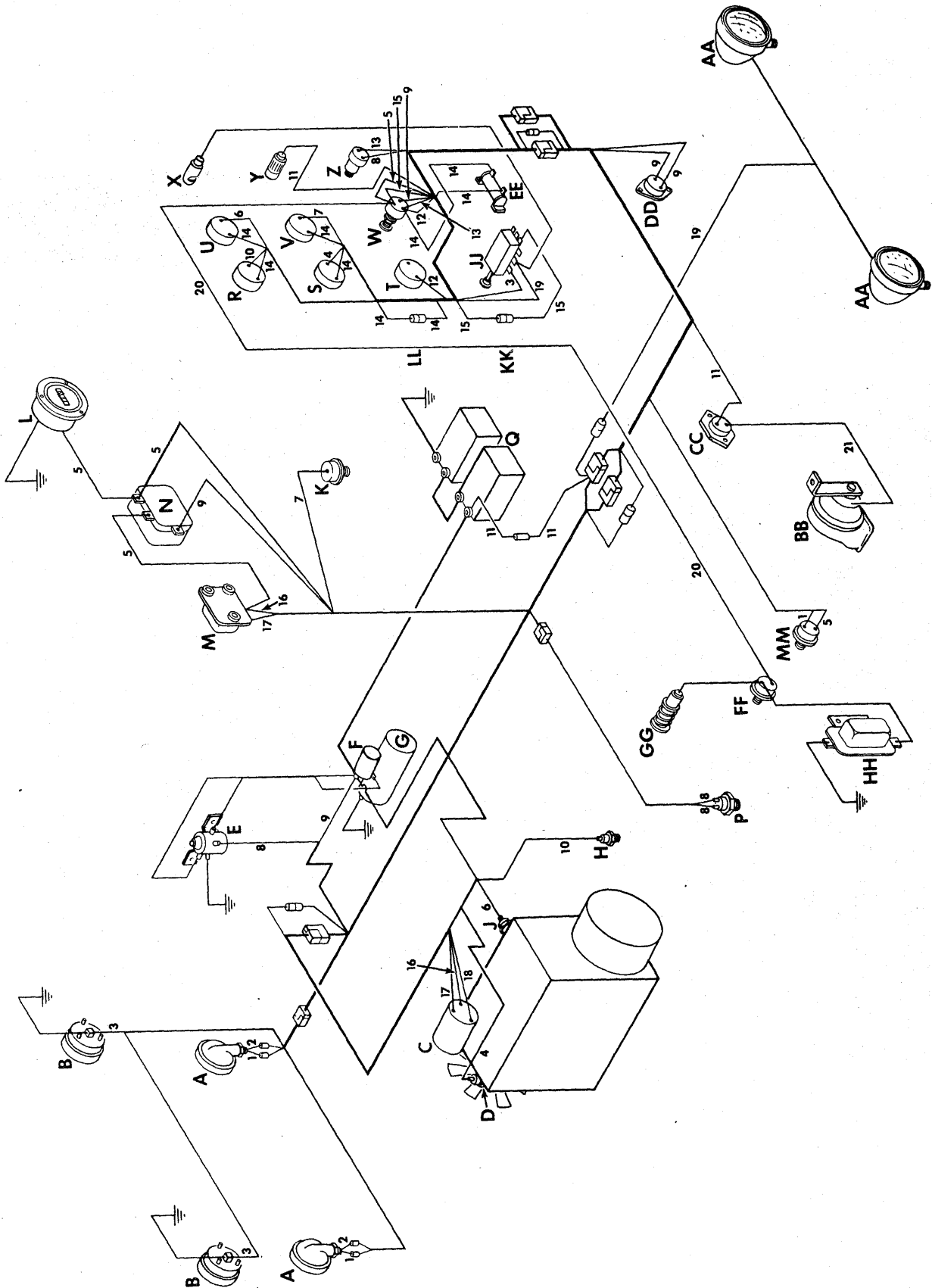
PM 2462



WIRING DIAGRAM ENGINE - G.M.  
 For Serial: 403A300 thru 562, 564, 567

TS-9581





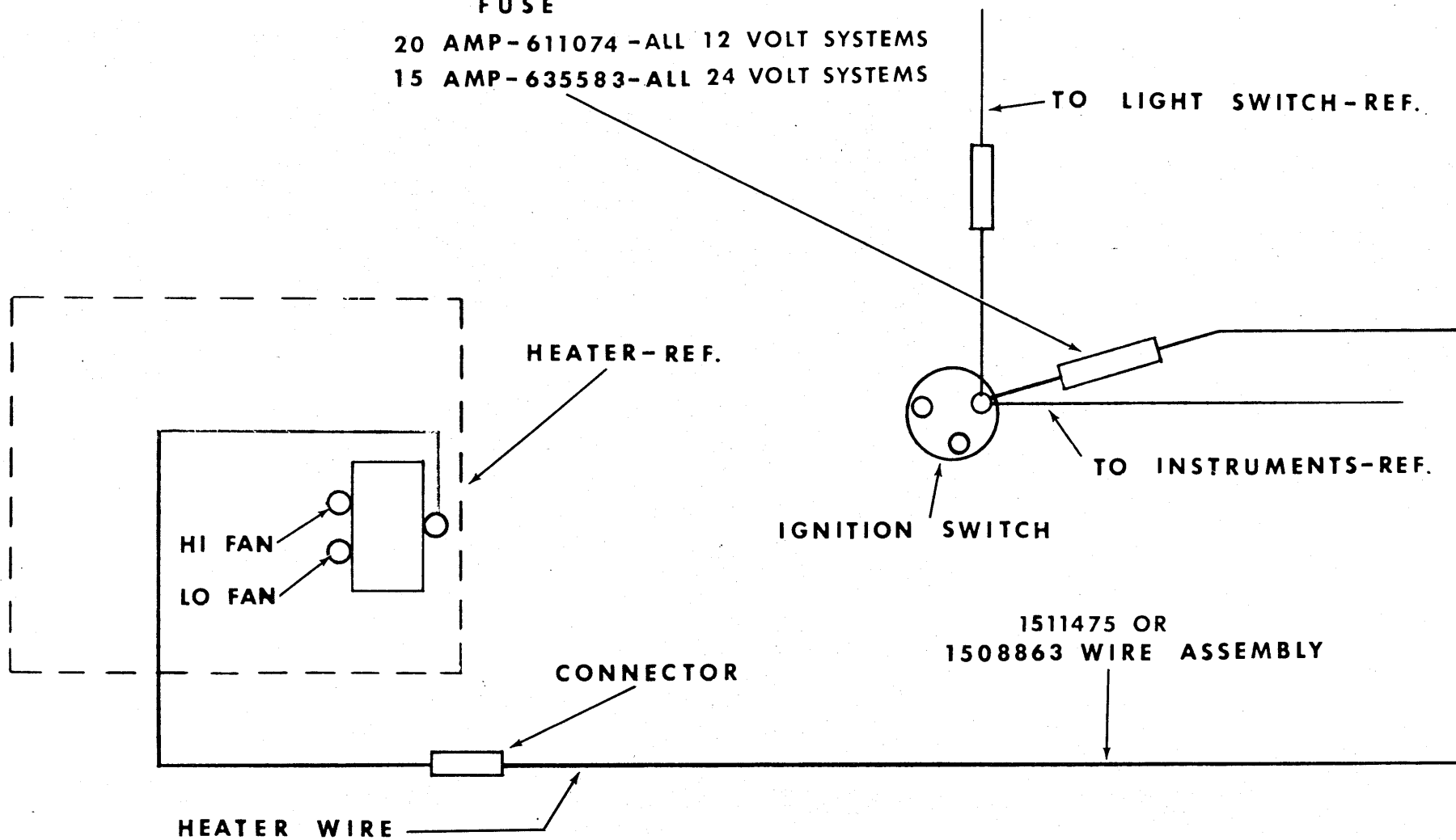
**ELECTRICAL COLOR CODE – G.M.  
S/N 403A563, 565, 568 & →**

<b>Ref. No.</b>	<b>Color</b>	<b>Color Code</b>
1.	Tan	Stoplights to Brake Light Switch
2.	Yellow	Tail Lights to Instrument Panel Plug (Joins Pink)
3.	Dark Blue	Back-Up Lamps to Light Switch
4.	Brown	Engine Temp. Sender to Engine Temp. Gauge
5.	Red & White	Ignition Switch to Voltage Reg., Hourmeter Relay, Hourmeter & Switches
6.	Dark Green	Engine Oil Press. Sender to Engine Oil Press. Gauge
7.	Light Green	Air Press. Sender to Air Press. Gauge
8.	White	Starter Button to Neutral Start Switch to Solenoid
9.	Red	Ignition Switch to Circuit Breaker to Starter Solenoid
10.	Grey	Converter Temp. Sender to Converter Temp. Gauge
11.	Orange	Battery to Horn Switch & Lighter
12.	Purple & White	Ignition Switch to Voltmeter
13.	Black	Ignition Switch to Starter Button
14.	Purple	Ignition Switch to Circuit Breaker to ¾ Amp. Fuse to Gauges
15.	Violet	Ignition Switch to 20 Amp. Fuse to Light Switch
16.	Lt. Blue & White	F-1 Alternator Terminal to Voltage Regulator
17.	Brown & White	F-2 Alternator Terminal to Voltage Regulator
18.	Red & Black	Battery Alternator Terminal to Voltage Regulator
19.	Pink	Light Switch to Head Lamps
20.	Black	Ignition Switch to Brake Low Press. Sender & Warning Devices
21.	Black	Horn Switch to Horn

**125-III A G.M.**

- |                                  |                                 |                              |
|----------------------------------|---------------------------------|------------------------------|
| A – Stop & Tail Lamps            | N – Hourmeter Relay             | AA – Headlamps               |
| B – Back-Up Lights               | P – Neutral Start Switch        | BB – Horn                    |
| C – Alternator                   | Q – Batteries                   | CC – Horn Switch             |
| D – Engine Temperature Sender    | R – Converter Temperature Gauge | DD – Circuit Breaker         |
| E – Solenoid                     | S – Engine Temperature Gauge    | EE – Resistor                |
| F – Starter Solenoid             | T – Voltmeter                   | FF – Brake Low Press. Sender |
| G – Starter                      | U – Engine Oil Pressure Gauge   | GG – Warning Light           |
| H – Converter Temperature Sender | V – Air Pressure Gauge          | HH – Buzzer                  |
| J – Engine Oil Pressure Sender   | W – Ignition Switch             | JJ – Light Switch            |
| K – Air Pressure Sender          | X – Dash Lamp                   | KK – 20 Amp Fuse             |
| L – Hourmeter                    | Y – Lighter                     | LL – ¾ Amp Fuse              |
| M – Voltage Regulator            | Z – Starter Button              | MM – Brake Light Switch      |

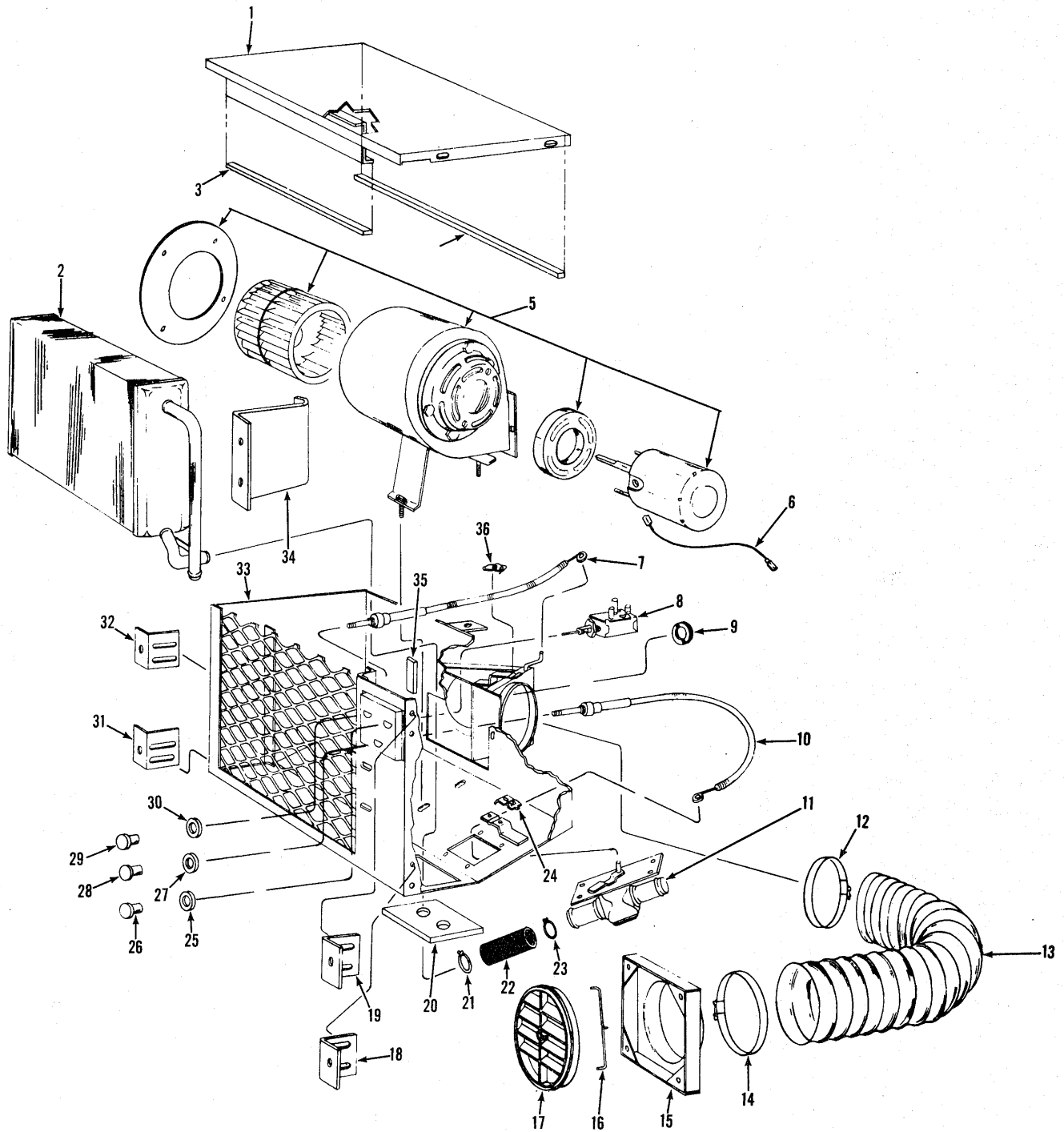
FUSE  
20 AMP-611074 -ALL 12 VOLT SYSTEMS  
15 AMP-635583-ALL 24 VOLT SYSTEMS



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(1F23)

HEATER WIRING DIAGRAM

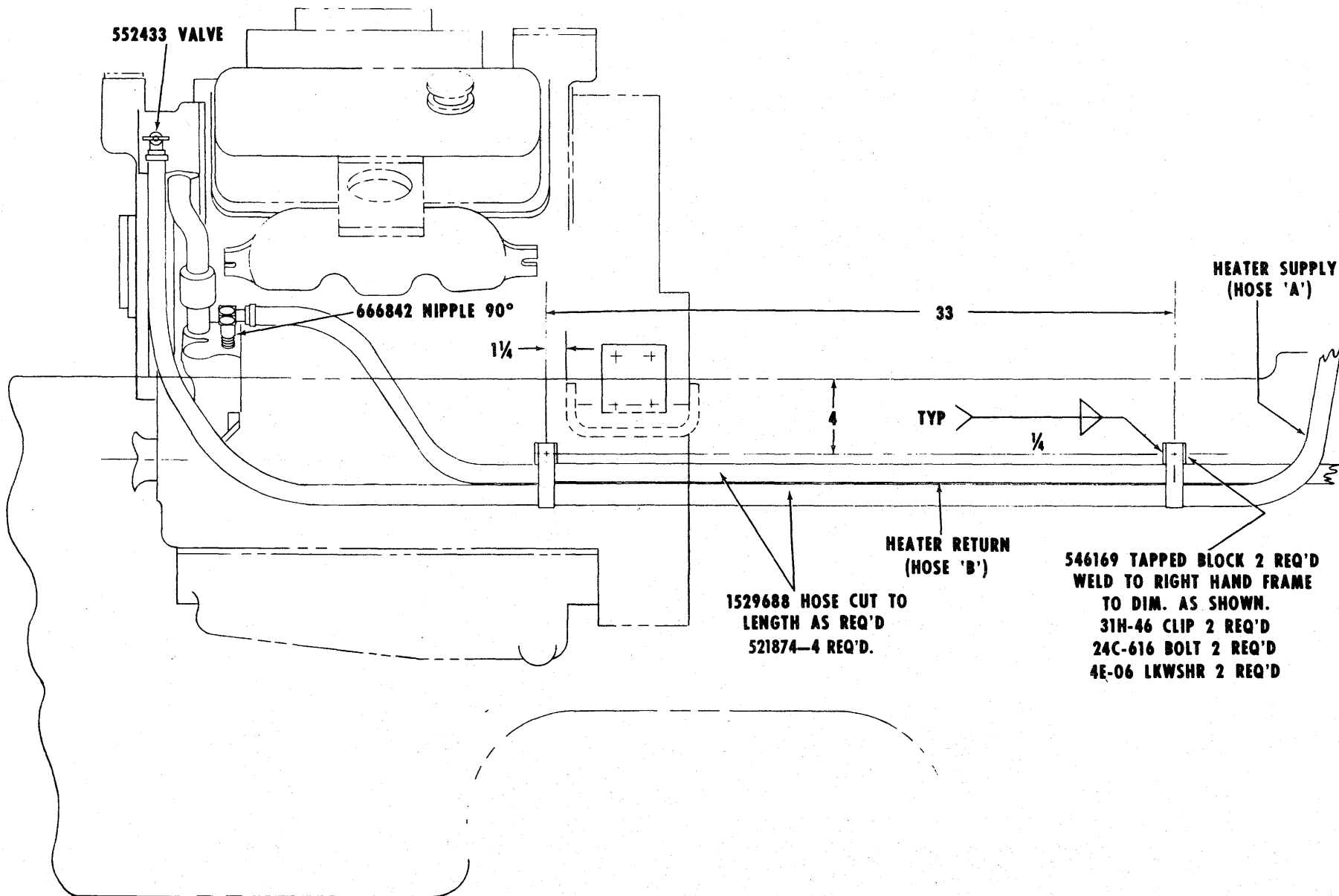


HEATER ASSEMBLY 12V & 24V

**HEATER ASSEMBLY – 12V & 24V**

Item No.	Part No.	Description	No. Req'd.
A	1510660	HEATER ASSY, 12V (Inc. 1 thru 5, 6 thru 36)	1
B	1510661	HEATER ASSY, 24V (Inc. 1 thru 4, 5A thru 36)	1
1	947977	COVER, Core	1
2	947948	CORE, Heater	1
3	949047	SPONGE SEAL, Cover	1
4	947997	SEAL, Cover	1
5	948957	BLOWER ASSY, 12V	1
5A	948958	BLOWER ASSY, 24V	1
6	947999	WIRE	1
7	947981	CABLE, Outlet	1
8	947949	SWITCH, Fan Motor	1
9	947982	GROMMET	1
10	947983	CABLE, Valve	1
11	947950	VALVE, Water	1
12	528651	CLAMP	1
13	947995	HOSE, Flex	1
14	528651	CLAMP	1
15	947994	COLLAR ASSY	1
16	947993	SPRING, Retainer	1
17	947992	LOUVER, Plastic	1
18	947990	BRACKET, Mounting	1
19	947990	BRACKET, Mounting	1
20	947991	GASKET, Core Tube	1
21	949048	CLAMP, Hose	1
22	949049	HOSE	1
23	949048	CLAMP, Hose	1
24	947984	CLIP, Cable	1
25	947989	NUT, Fan	1
26	947988	KNOB, Fan	1
27	947989	NUT, Temperature	1
28	947987	KNOB, Temperature	1
29	947986	KNOB, Heat	1
30	947989	NUT, Heat	1
31	947990	BRACKET, Mounting	1
32	947990	BRACKET, Mounting	1
33	947985	CASE	1
34	947976	RETAINER, Core	1
35	949047	SPONGE, Seal	1
36	947984	CLIP, Cable	1

**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**

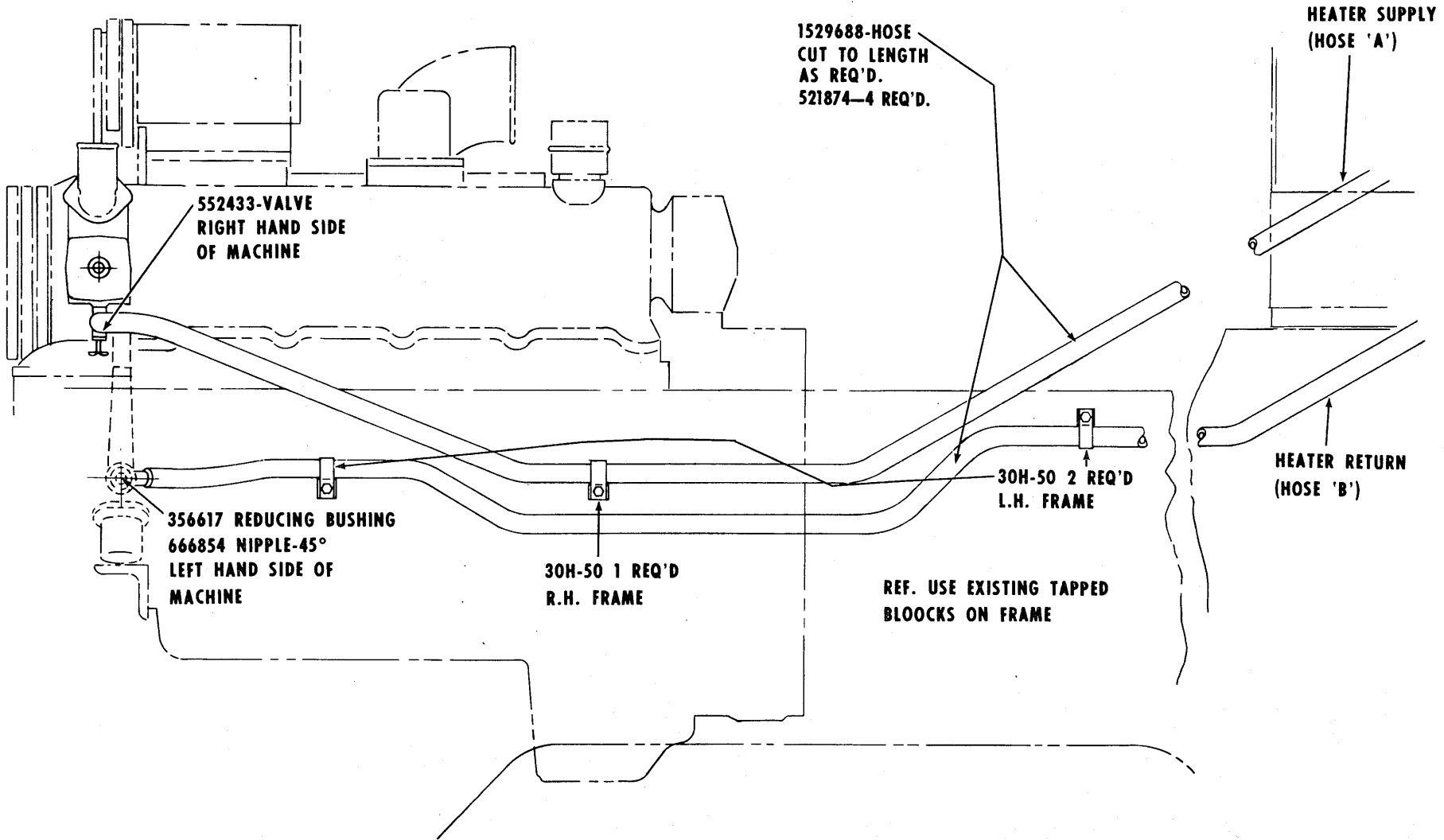


**HEATER PLUMBING DIAGRAM – CUMMINS**

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HEATER PLUMBING DIAGRAM - G.M.





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