



MICHIGAN

PARTS MANUAL

No. 2429-R-1

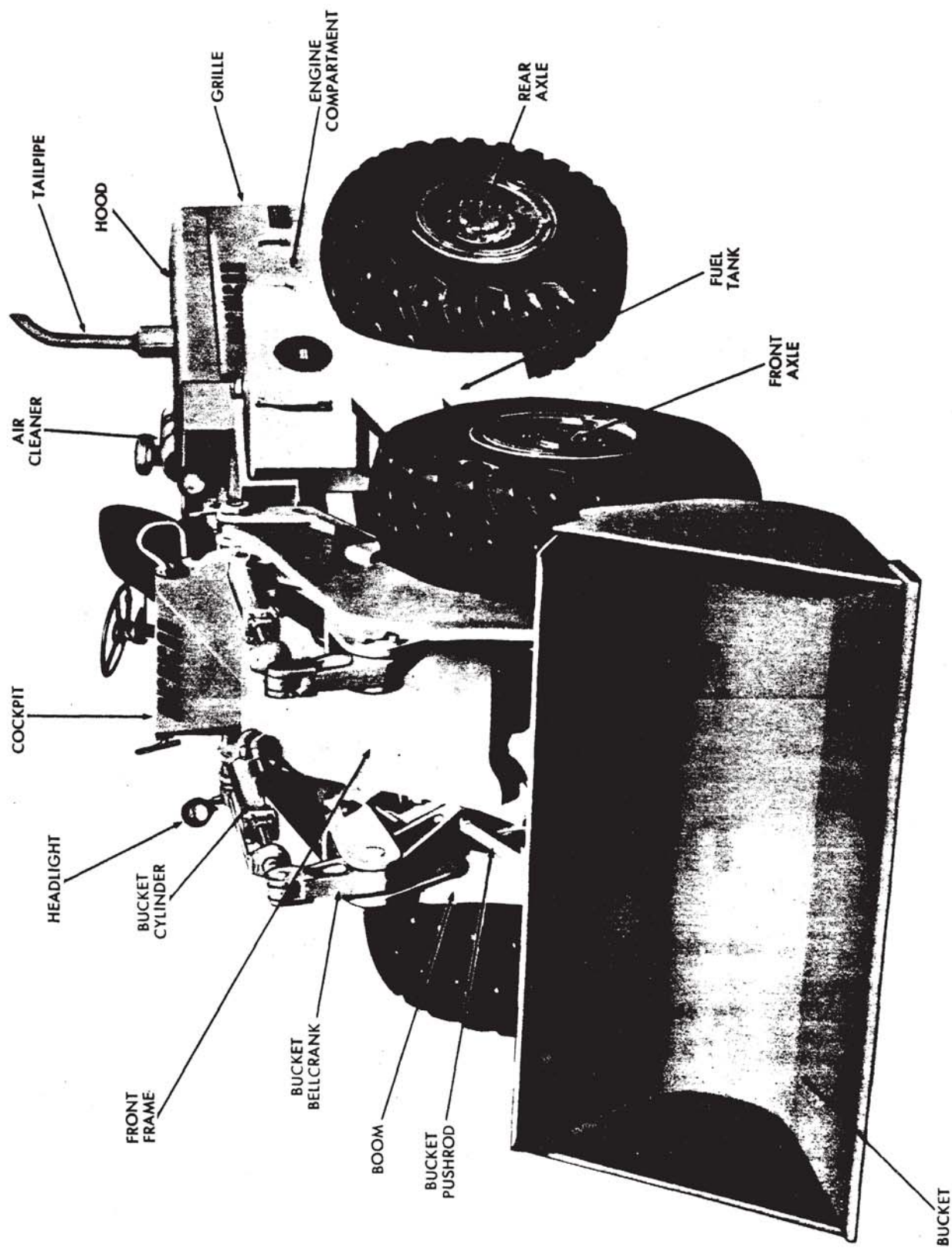
Model 75 IIIA Articulated Tractor Shovel

**Information contained herein pertains to Machine Serial
Numbers listed below:**

**75 IIIA CUMMINS — 408A101 and After
75 IIIA G. M. — 409A101 and After**



CLARK EQUIPMENT COMPANY
Construction Machinery Division



MODEL 75 III A (ARTICULATED) TRACTOR SHOVEL

TS-8427

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.

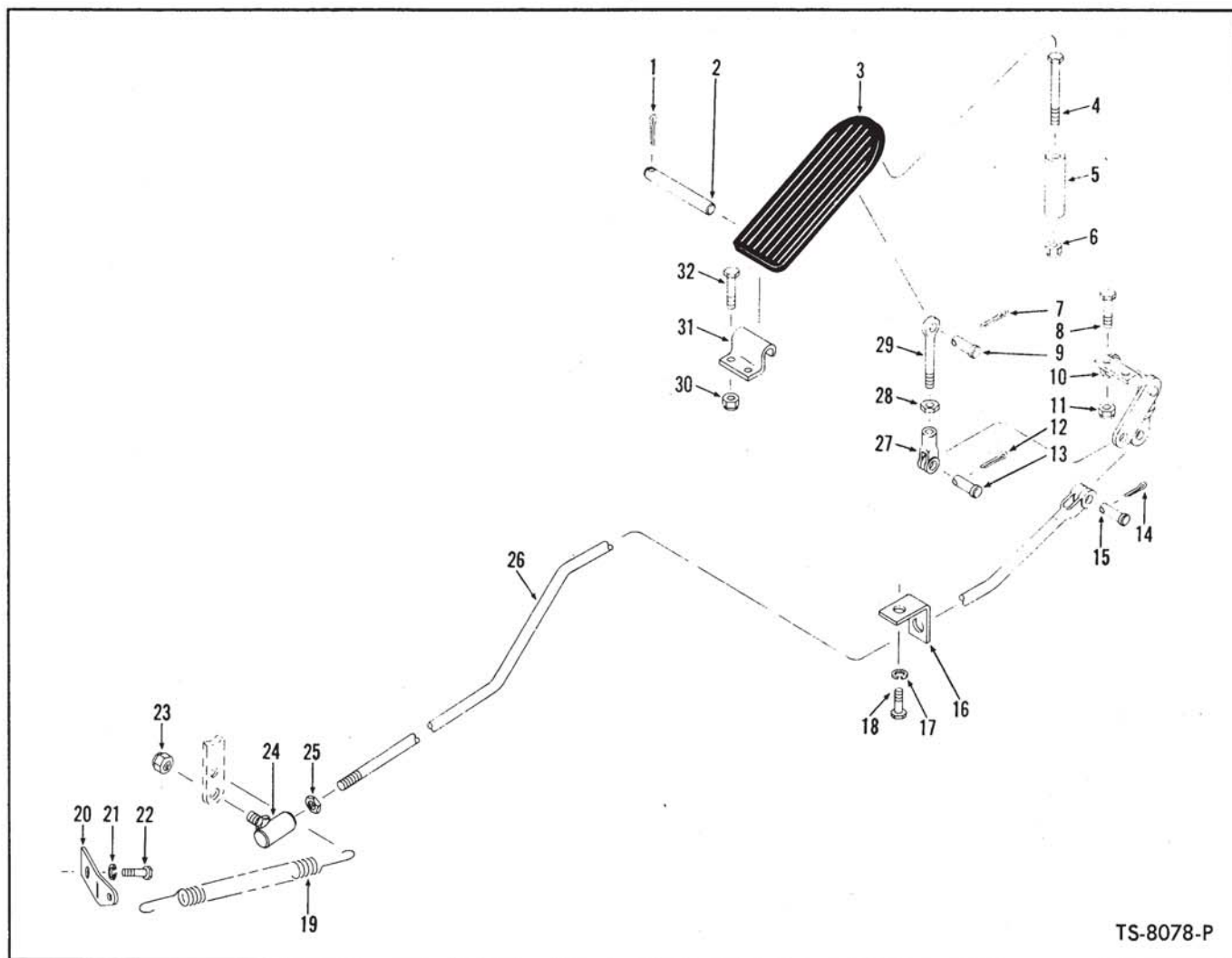
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NOTES


ACCELERATOR PEDAL AND LINKAGE — CUMMINS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1F-316	COTTER, Pedal Pin	1	19	551090	SPRING, Return	1
2	623762	PIN, Accelerator Pedal	1	20	545568	ANCHOR, Return Spring	1
3	623829	PEDAL, Accelerator	1	21	4E-06	LKWSHR, Anchor to Engine ..	1
4	24C-448	BOLT, Stop to Cockpit	1	22	23C-612	BOLT, Anchor to Engine	1
5	551016	STOP, Accelerator Pedal	1	23	66D-05	NUT, Ball Joint to Governor Arm	1
6	18D-04	NUT, Stop to Cockpit	1	24	1301361	BALL JOINT, Rod to Governor Arm	1
7	1F-208	COTTER, Clevis Pin	1	25	8D-05	NUT, Ball Joint Jam	1
8	24C-416	BOLT, Bellcrank to Cockpit ...	2	26	1502606	*ROD, Accelerator (Inc. 16, 24, 25)	1
9	4F-04051	PIN, Rod to Pedal	1	26A	1546382	**ROD, Accelerator (Inc. 16, 24, 25)	1
10	568941	BELLCRANK	1	27	2J-4200	CLEVIS, Rod to Bellcrank ..	1
11	18D-04	NUT, Bellcrank to Cockpit	2	28	8D-04	NUT, Clevis Jam	1
12	1F-208	COTTER, Clevis Pin	1	29	550619	ROD, Pedal to Bellcrank	1
13	4F-04051	PIN, Clevis	1	30	18D-04	NUT, Bracket	2
14	1F-208	COTTER, Clevis Pin	1	31	623760	BRACKET, Pedal	1
15	4F-04051	PIN, Clevis	1	32	24C-416	BOLT, Bracket	2
16	1502603	BRACKET, Rod Support	1				
17	4E-06	LKWSHR, Bracket	1				
18	24C-616	BOLT, Bracket	1				

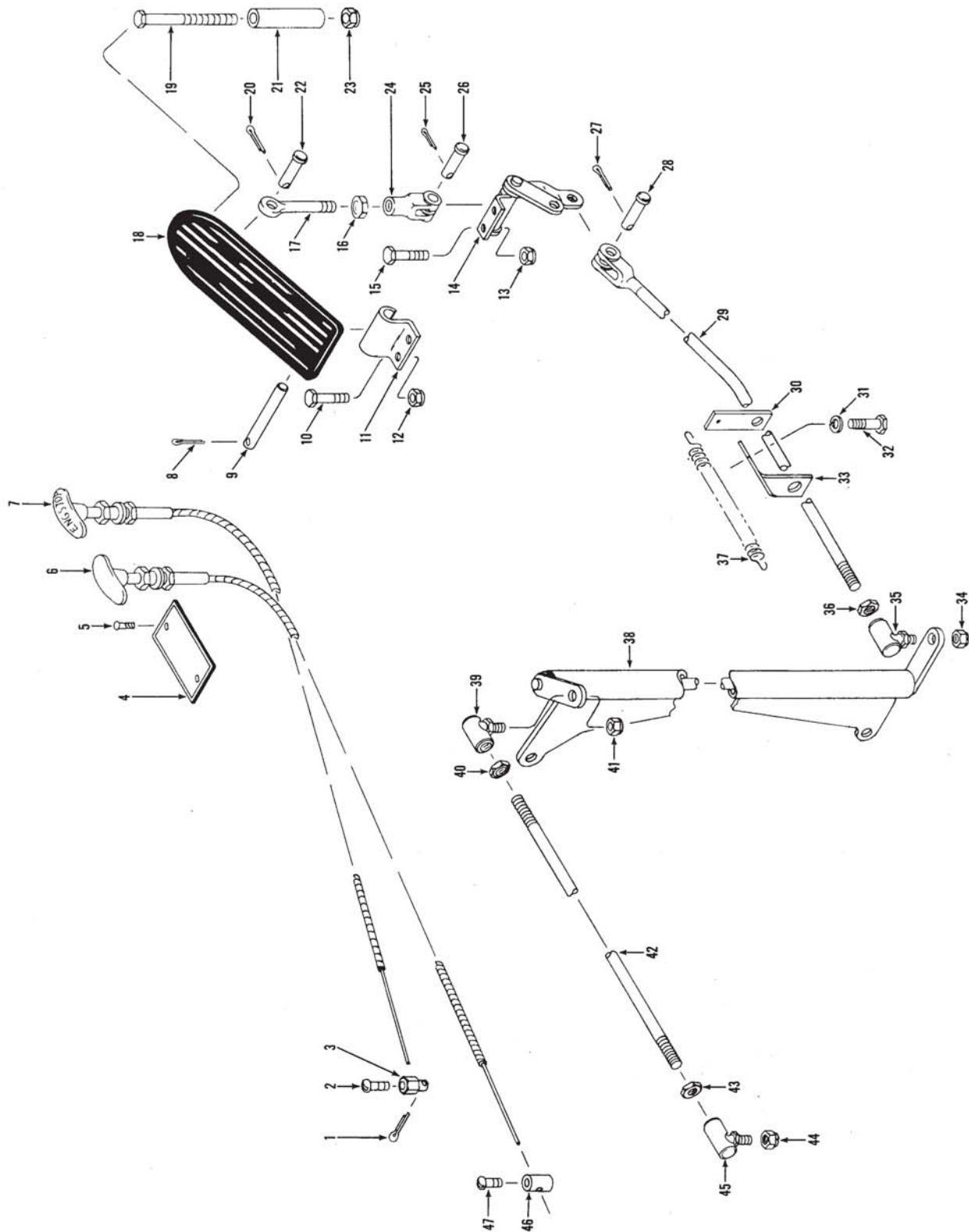
* For Serial 408A101-408B220

** For Serial 408B221 & After

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

TS-9142-P

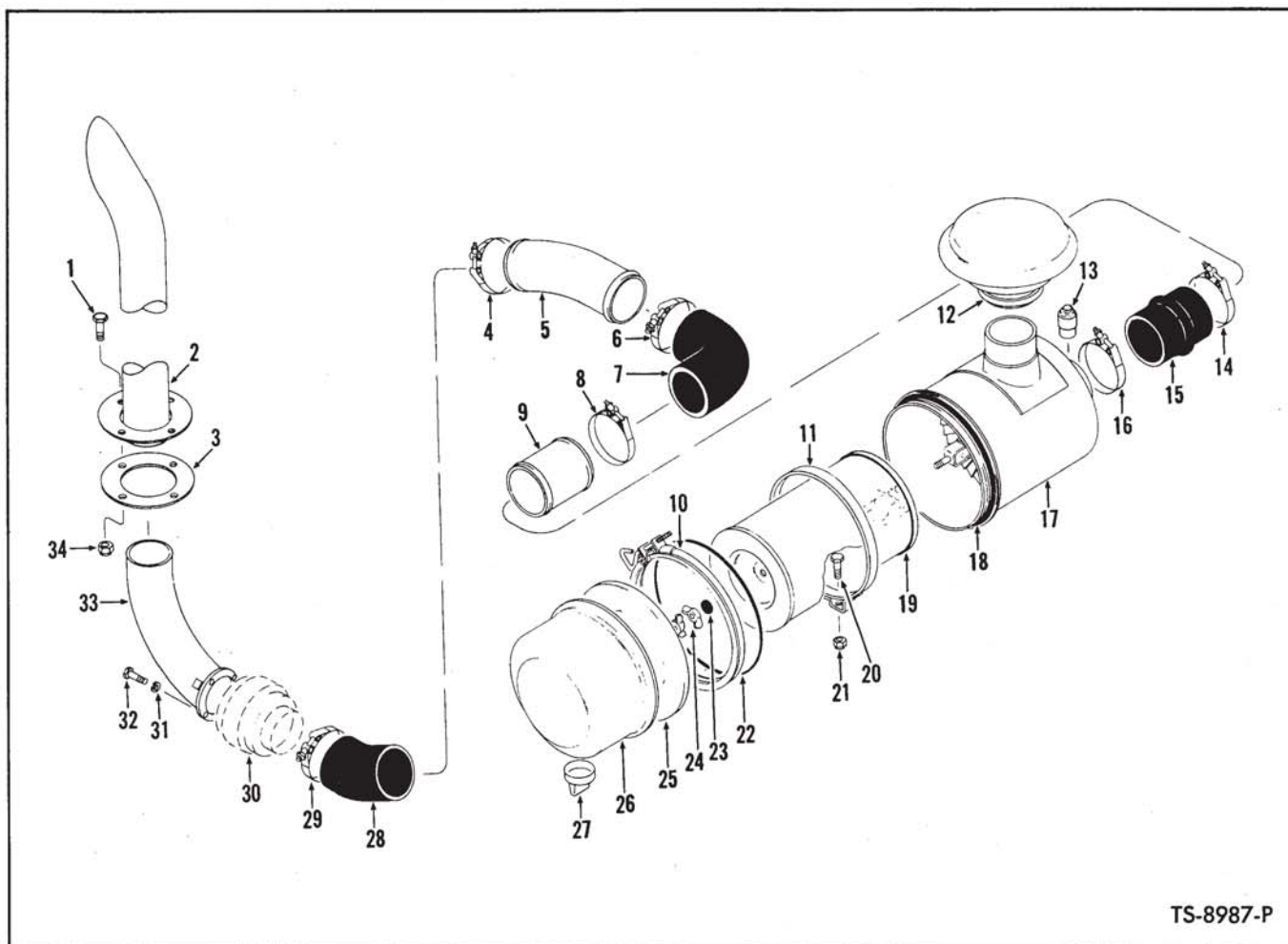
ACCELERATOR PEDAL AND LINKAGE — G.M.



ACCELERATOR PEDAL AND LINKAGE—G.M.

Item No.	Part No.	Description	No. Req'd.
1	1F-208	COTTER, Cable Connector	1
2	86G-1008	SCREW, Cable Connector	1
3	1523209	CONNECTOR, Cable	1
4	1511708	PLATE, Emergency Stop	1
5	6C-605	SCREW, Plate to Cockpit	2
6	1520190	CABLE, Emergency Stop	1
7	1520193	CABLE, Engine Stop	1
8	1F-316	COTTER, Pedal Pin	1
9	623762	PIN, Pedal to Bracket	1
10	24C-416	BOLT, Bracket to Floor	2
11	623762	BRACKET, Acc. Pedal	1
12	18D-04	NUT, Bracket to Floor	2
13	18D-04	NUT, Bellcrank Mtg.	2
14	568941	BELLCRANK	1
15	24C-416	BOLT, Bellcrank Mtg.	2
16	8D-04	NUT, Clevis Jam	1
17	550619	ROD, Pedal to Bellcrank	1
18	623829	PEDAL, Accelerator	1
19	24C-448	BOLT, Pedal Stop	1
20	1F-208	COTTER, Clevis Pin	1
21	551016	STOP, Accelerator Pedal	1
22	4F-04051	PIN, Clevis	1
23	18D-04	NUT, Stop to Floor	1
24	2J-4200	CLEVIS, Rod to Bellcrank	1
25	1F-208	COTTER, Clevis Pin	1
26	4F-208	PIN, Clevis	1
27	1F-208	COTTER, Clevis Pin	1
28	4F-04051	PIN, Clevis	1
29	1507035	ROD, Accelerator (Inc. 30, 33, 35, 36)	1
30	521434	ANCHOR, Spring	1
31	4E-06	LKWSHR, Bracket to Cockpit	1
32	24C-616	BOLT, Bracket to Cockpit	1
33	1502603	BRACKET, Rod Support	1
34	66D-05	NUT, Ball Joint	1
35	1301361	BALL JOINT, Rod to Bellcrank	1
36	8D-05	NUT, Ball Joint Jam	1
37	551090	SPRING, Return	1
38	1507040	BELLCRANK, Engine	1
39	1301361	BALL JOINT, Throttle Rod	1
40	8D-05	NUT, Ball Joint Jam	1
41	66D-05	NUT, Ball Joint	1
42	1507038	ROD, Throttle (Inc. 39, 40, 43, 45)	1
43	8D-05	NUT, Ball Joint Jam	1
44	66D-05	NUT, Ball Joint	1
45	1301361	BALL JOINT, Throttle Rod	1
46	1523209	CONNECTOR, Cable	1
47	86G-1008	SCREW, Cable Connector	1

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

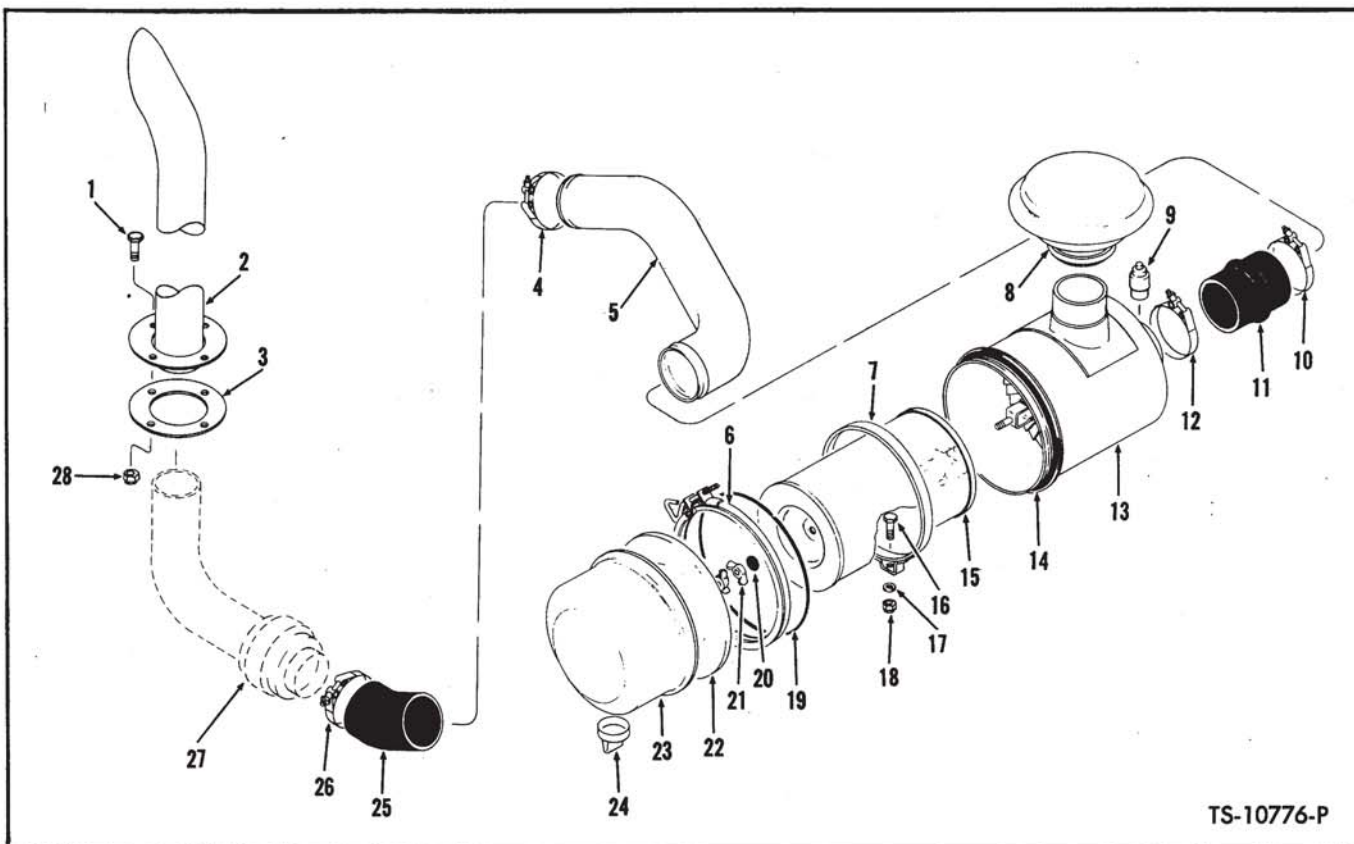


TS-8987-P

TAIL PIPE, AIR CLEANER AND CONNECTIONS—CUMMINS
For Serial: 408A101 thru 408B299

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	24C-620	BOLT, Tail Pipe to Hood	4	19	1990248	ELEMENT	1
2	1506093	TAIL PIPE	1	20	24C-620	BOLT, Mounting	4
3	525535	FLANGE, Tail Pipe to Hood ..	1	20A	656672	WASHER, Mounting	4
4	539042	CLAMP, Hose to Tube	1	21	18D-06	NUT, Mounting	4
5	1506092	TUBE	1	22	886288	O-RING, Dust Cup	1
6	539042	CLAMP, Hose to Tube	1	23	886527	WASHER, Element to Housing	1
7	515425	HOSE, Tube Connecting	1	24	886526	NUT, Element to Housing	1
8	539042	CLAMP, Hose to Tube	1	25	947838	BAFFLE	1
9	1506091	TUBE	1	26	947837	CUP, Dust	1
10	945060	CLAMP, Dust Cover	1	27	946860	VACUATOR	1
11	941474	BAND, Air Cleaner Mounting ..	2	28	515425	HOSE, Tube to Turbo- Charger	1
12	1523149	CAP, Air Cleaner	1	29	539042	CLAMP, Hose to Turbo- Charger	1
13	1721628	INDICATOR, Air Cleaner Service	1	30	-----	TURBO-CHARGER — See Cummins Engine Parts Manual	—
14	539042	CLAMP, Hose to Tube	1	31	4E-05	LKWSHR, Elbow to Engine	5
15	1522451	HOSE, Air Cleaner to Tube ..	1	32	23C-512	BOLT, Elbow to Engine	5
16	1503862	CLAMP, Hose to Air Cleaner ..	1	33	545791	ELBOW, Exhaust	1
17	1506090	AIR CLEANER ASSY (Inc. 10, 18, 19, 22 thru 27	1	34	18D-06	NUT, Tail Pipe to Hood	4
18	-----	OMIT — See Item 22	—				

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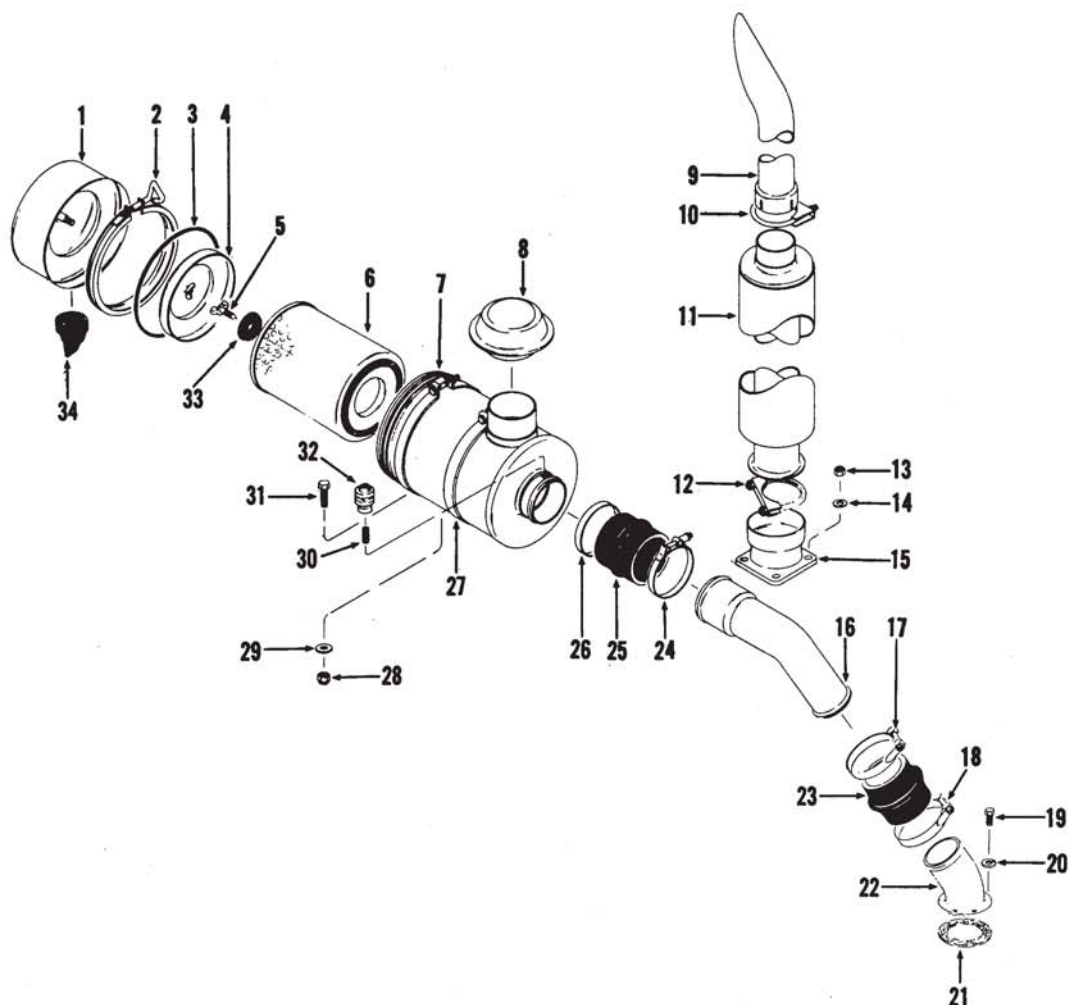


TS-10776-P

TAIL PIPE, AIR CLEANER AND CONNECTIONS — CUMMINS**For Serial: 408B300 and After**

Item No.	Part No.	Description	No. Req'd.
1	24C-620	BOLT, Tail Pipe to Hood	4
2	1506093	TAIL PIPE	1
3	525535	FLANGE, Tail Pipe to Hood	1
4	539042	CLAMP, Hose to Tube	1
5	1546369	TUBE, Hose to Hose	1
6	945060	CLAMP, Dust Cover	1
7	941474	BAND, Air Cleaner Mounting	2
8	1523149	CAP, Air Cleaner	1
9	1529625	INDICATOR, Air Cleaner Service	1
10	539042	CLAMP, Hose to Tube	1
11	1522451	HOSE, Air Cleaner to Tube	1
12	1503862	CLAMP, Hose to Air Cleaner	1
13	1506090	AIR CLEANER ASSY (Inc. 6, 14, 15, 19 thru 24)	1
14	—	OMIT — See Item 19	—
15	1990248	ELEMENT	1
16	24C-620	BOLT, Band to Bracket Mounting	4
17	656672	WASHER, Band to Bracket Mounting	4
18	18D-06	NUT, Band to Bracket Mounting	4
19	886288	O-RING, Dust Cup	1
20	886527	WASHER, Element to Housing	1
21	886526	NUT, Element to Housing	1
22	947838	BAFFLE	1
23	947837	CUP, Dust	1
24	946860	VACUATOR	1
25	515425	HOSE, Tube to Turbo Charger	1
26	539042	CLAMP, Hose to Turbo Charger	1
27	—	TURBO-CHARGER — See Cummins Engine Parts Manual	—
28	18D-06	NUT, Tail Pipe to Hood	4

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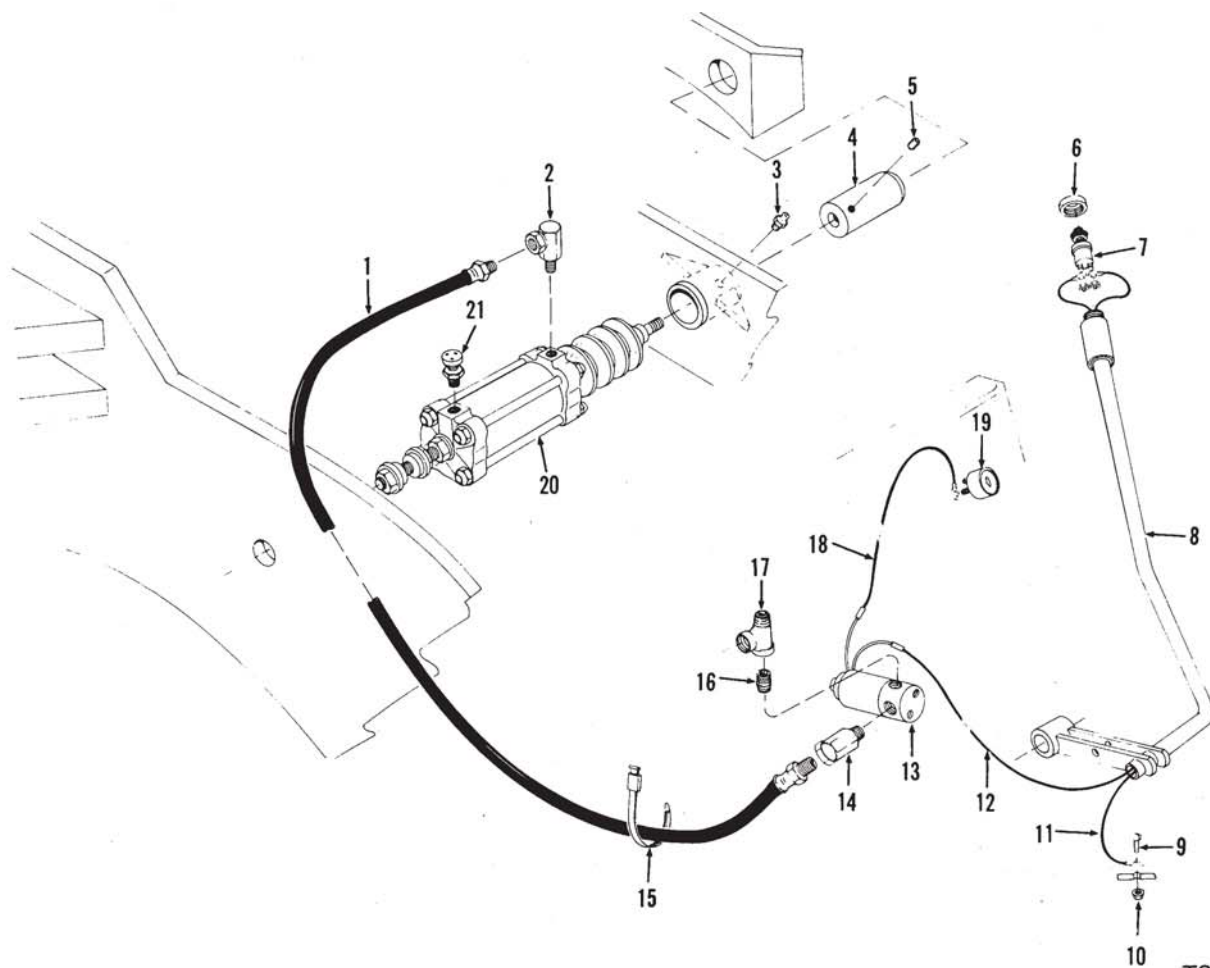


TS-9212-P

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

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	946899	CUP, Air Cleaner	1	17	1503862	CLAMP, Hose to Tube	1
2	944810	CLAMP, Air Cleaner Cup	1	18	539042	CLAMP, Hose to Flange	1
3	944404	O-RING, Cup to Body	1	19	23C-516	BOLT, Flange to Engine	4
4	946898	BAFFLE, Cup	1	20	4E-05	LKWSHR, Flange	4
5	886526	WING NUT, Cartridge		21	527096	GASKET, Flange	1
		Retaining	1	22	1505186	FLANGE ASSY	1
6	946897	CARTRIDGE, Air Cleaner	1	23	1522451	HOSE, Reducer	1
7	1530009	AIR CLEANER ASSY (Inc. 1		24	1503862	CLAMP, Hose to Tube	1
		thru 7, 33, 34)	1	25	1505183	HOSE, Reducer	1
8	1530002	CAP, Air Cleaner	1	26	1500793	CLAMP, Hose to Air Cleaner	1
9	581322	PIPE, Tail	1	27	1530004	BAND, Air Cleaner Mtg.	2
10	509503	CLAMP, Tailpipe	1	28	18D-06	NUT, Air Cleaner Mtg.	4
11	582954	MUFFLER	1	29	656672	WASHER, Air Cleaner Mtg. ..	4
12	509503	CLAMP, Flange to Muffler	1	30	—	OMIT, Not Used	—
13	—	NUT, Furnished with Engine ..	4	31	24C-620	BOLT, Air Cleaner Mtg.	4
14	656672	WASHER	4	32	1529625	INDICATOR, Service	1
15	1540825	FLANGE ASSY	1	33	886527	GASKET, Wing Nut	1
16	1504953	TUBE, Air Intake	1	34	946860	VALVE, Vacuator	1

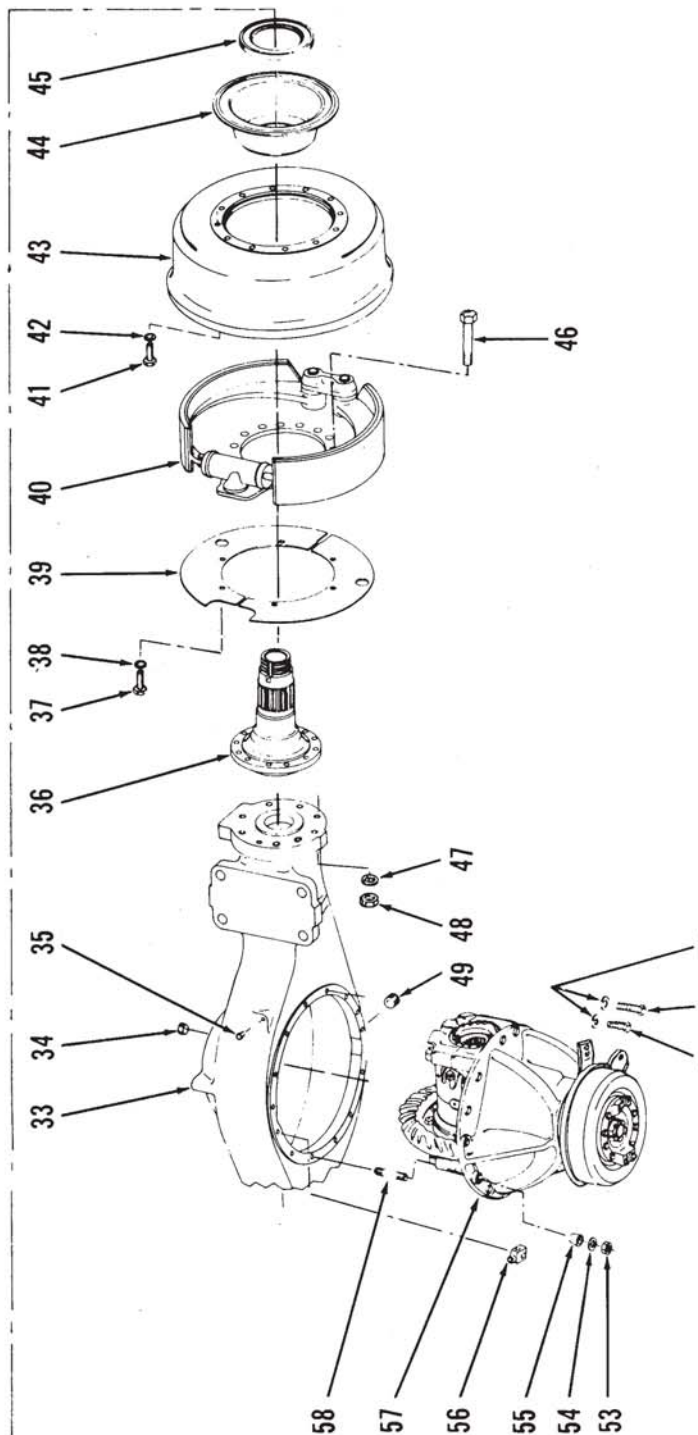
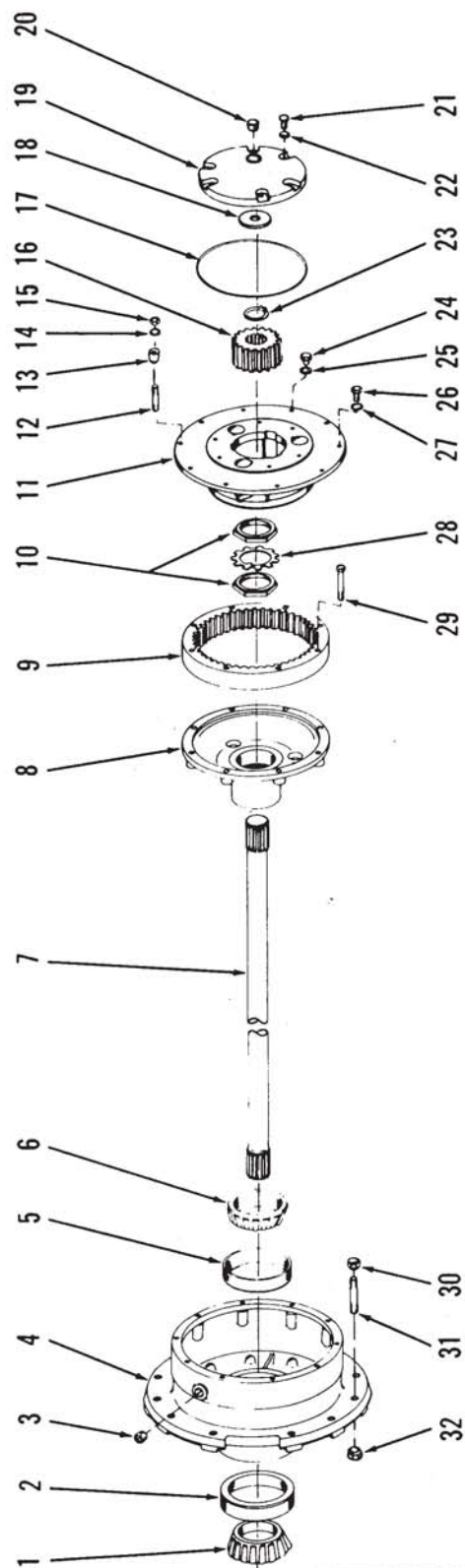
WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE



TS-11286

AIR PIPING SYSTEM (Side Dump Bucket)

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
A	1543612	KIT, Air Piping (Inc. 1 thru 21)	—	11	1543527	WIRE, Starter Button to Ground	1
1	1543485	HOSE, Cylinder to Valve	1	12	1511881	WIRE, Starter Button to Solenoid	1
2	31F-1	ADAPTER UNION, Hose to Cylinder	1	13	1510310	VALVE, Solenoid	1
3	10H-35	FITTING, Grease	1	14	31F-2	ADAPTER UNION, Hose to Valve	1
4	1539366	LATCH	1	15	1736910	TIE STRAP	20
5	35G-606	SCREW, Latch	2	16	5K-207	NIPPLE, Tee to Valve	1
6	1543570	CAP	1	17	17F-2	TEE	1
7	600259	BUTTON, Starter	1	18	1511880	WIRE, Solenoid to Starter Switch	1
8	1543489	LEVER ASSY, Valve	1	19	—	SWITCH, Ignition — Index	—
9	86G-1008	SCREW, Wire to Ground	1	20	—	AIR CYLINDER — See Index	—
10	51D-10	NUT, Wire to Ground	1	21	106656	BREATHER, Cylinder	1



AXLE ASSEMBLY - FRONT DRIVE

For Serial: Cummins 408A101 thru 408A999, G.M. 409A101 thru 409A999

TS-6782-P

AXLE ASSEMBLY — FRONT DRIVE
For Serial: Cummins — 408A101 thru 999
G.M. — 409A101 thru 999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	131599	AXLE ASSY (Inc. 1 thru 58) ..	1	30	103522	NUT, Wheel	20
1	799408	CONE, Inner Hub Brg.	2	31	103445	STUD, Wheel	20
2	658985	CUP, Inner Hub Brg.	2	32	86D12	NUT, Wheel Stud	20
3	119469	PLUG, Hub Filler	2	33	112086	HOUSING, Axle	1
4	112073	HUB ASSY (Inc. 2, 5)	2	34	119469	PLUG, Housing Filler	1
5	672181	CUP, Outer Hub Brg.	2	35	106656	BREATHER, Axle Hsg.	1
6	672182	CONE, Outer Hub Brg.	2	36	112078	SPINDLE	2
7	112077	AXLE SHAFT	2	37	1C-612	BOLT, Dust Shield Mtg.	12
8	106060	HUB, Internal Gear	2	38	4E-06	LKWSHR, Dust Shield Mtg. ..	12
9	106059	GEAR, Internal	2	39	114453	SHIELD, Brake Dust	4
10	114433	NUT, Inner Spindle	4	40	-----	FRONT BRAKE ASSY — See Index	—
11	-----	PLANET CARRIER — See Index	—	41	17C1024	BOLT, Drum to Hub	24
12	116419	STUD, Planet Carrier Mtg.	10	42	104412	WASHER, Drum to Hub	24
13	112287	DOWEL, Planet Carrier Mtg.	10	43	112085	DRUM, Brake	2
14	106762	WASHER, Planet Carrier Mtg.	10	44	109055	CATCHER, Oil	2
15	64D-08	NUT, Planet Carrier Stud	10	45	112055	SEAL, Hub Oil	2
16	109050	GEAR, Sun	2	46	118350	BOLT, Spindle & Brake Attaching	16
17	114089	O-RING, Cap to Carrier	2	47	104412	WASHER, Spindle & Brake Attaching	16
18	106455	WASHER, Thrust Cap	2	48	106998	NUT, Spindle & Brake Attaching	16
19	945129	KIT, Thrust Cap (Inc. 17, 18, 20)	2	49	11F-12	PLUG, Housing Drain	1
20	11F-04	PLUG, Thrust Cap	2	50	106762	WASHER, Carrier to Hsg.	14
21	1C-720	BOLT, Thrust Cap	12	51	17C-828	BOLT, Carrier to Hsg.	3
22	112278	LKWSHR, Thrust Cap	12	52	17C-824	BOLT, Carrier to Hsg.	8
23	106247	RING, Sun Gear Snap	2	53	64D-08	NUT, Carrier to Hsg.	3
24	1C-808	BOLT, Planet Puller Hole	4	54	106762	WASHER, Carrier to Hsg.	3
25	3E-08	LKWSHR, Planet Puller Hole ..	4	55	112287	DOWEL, Carrier to Hsg.	3
26	100970	BOLT, Planet Carrier to Hub ..	10	56	550318	TEE, Brake Line	1
27	106762	WASHER, Planet Carrier to Hub	10	57	-----	DIFF. & CARRIER ASSY — See Index	—
28	101274	LOCK, Spindle Nut	2	58	126416	STUD, Carrier to Hsg.	3
29	106880	BOLT, Internal Gear to Hub ..	16				

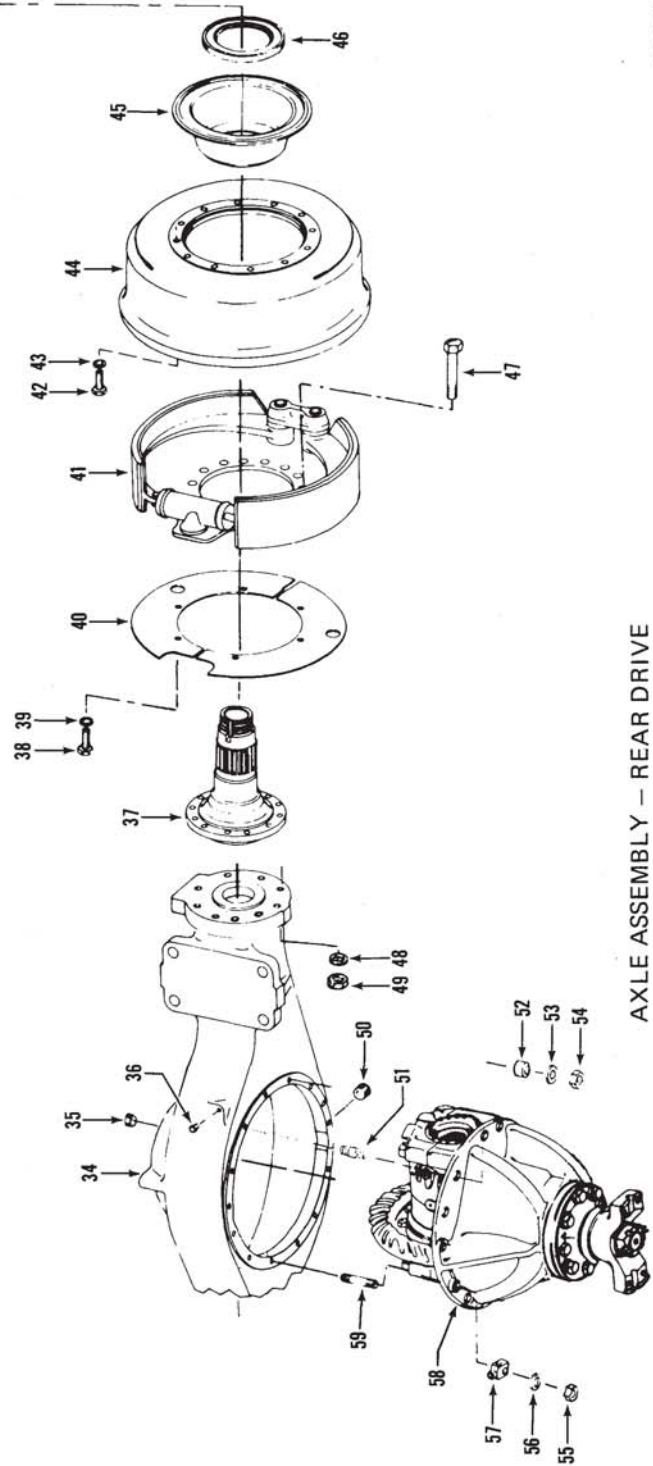
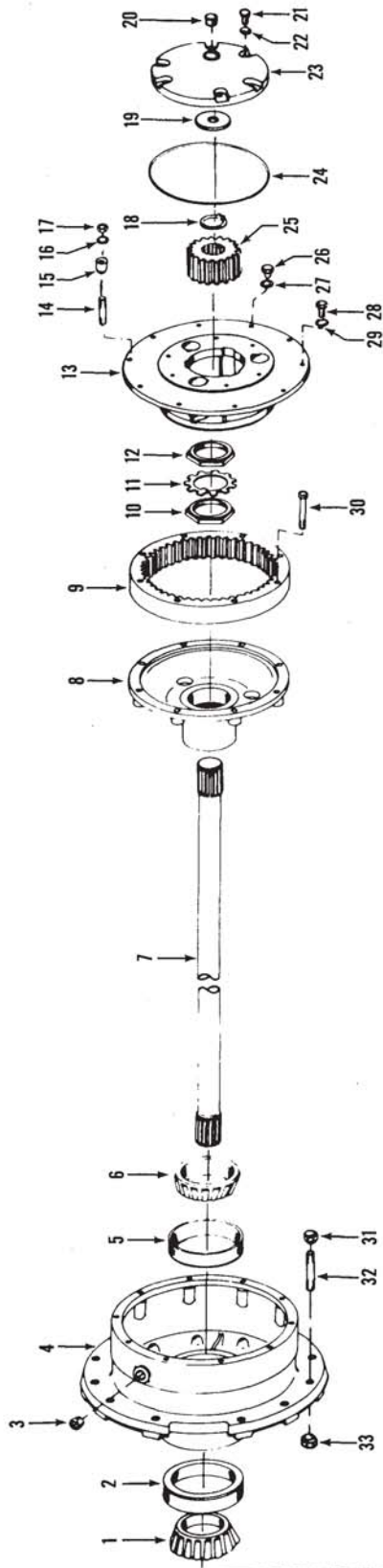
WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE

AXLE ASSEMBLY — FRONT DRIVE
For Serial: G.M. — 409B101 and after
Cummins — 408B101 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	190843	* AXLE ASSY (Inc. 1 thru 51).....	1	27	121785	HUB ASSY (Inc. 21, 23)	2
1	124158	BOLT, Disc to Hub	32	28	121797	HOUSING, Axle	1
2	104412	WASHER, Disc to Hub	32	29	106656	BREATHER, Axle Hsg.	1
3	125435	DISC, Brake	2	30	11F-12	PLUG, Housing Filler	1
4	123904	GEAR & HUB, Internal	2	31	106998	NUT, Spindle Attaching	16
5	121013	NUT, Spindle	2	32	104412	WASHER, Spindle Attaching..	16
6	121014	LOCK, Spindle Nut	2	33	106832	BOLT, Spindle Attaching	16
7	121013	NUT, Spindle	2	34	110305	BOLT, Brake Head Attaching	12
8	121015	SLEEVE, Sun Gear Thrust	2	35	111656	WASHER, Brake Head Attaching	12
9	121798	GEAR, Sun	2	36	121793	PLATE, Brake Adapter	2
10	224116	RING, Sun Gear Snap	2	37	121781	BOLT, Adapter Plate & Spindle Attaching	16
11	107348	O-RING, Planet Carrier	2	38	-----	BRAKE HEAD — See Index	—
12	-----	PLANET CARRIER — See Index	—	39	121802	SPINDLE	2
13	106762	WASHER, Planet Carrier to Hub	24	40	104412	WASHER, Adapter Plate & Spindle Attaching	16
14	100970	BOLT, Planet Carrier to Hub..	24	41	106998	NUT, Adapter Plate & Spindle Attaching	16
15	11F-04	PLUG, Oil Level	2	42	119469	PLUG, Housing Drain	1
16	10F-02	PLUG, Planet Carrier	2	43	126416	STUD, Carrier to Hsg.	3
17	1C-808	BOLT, Puller Hole	4	44	-----	DIFF. & CARRIER ASSY — See Index	—
18	3E-08	LKWSHR, Puller Hole	4	45	112287	DOWEL, Carrier to Hsg.	3
19	121800	AXLE SHAFT	2	46	106762	WASHER, Carrier to Hsg.	3
20	675261	CONE, Outer Hub Brg.	2	47	64D-08	NUT, Carrier to Hsg.	3
21	668553	CUP, Outer Hub Brg.	2	48	64D-08	NUT, Carrier to Hsg.	11
22	119469	PLUG, Hub Filler	2	49	106762	WASHER, Carrier to Hsg.	11
23	672004	CUP, Inner Hub Brg.	2	50	550319	TEE, Brake Line	1
24	128117	SEAL, Hub Oil	2	51	112286	STUD, Carrier to Hsg.	11
25	672005	CONE, Inner Hub Brg.	2				
26	121808	STUD, Wheel	24				
26A	103522	†NUT, Wheel	24				

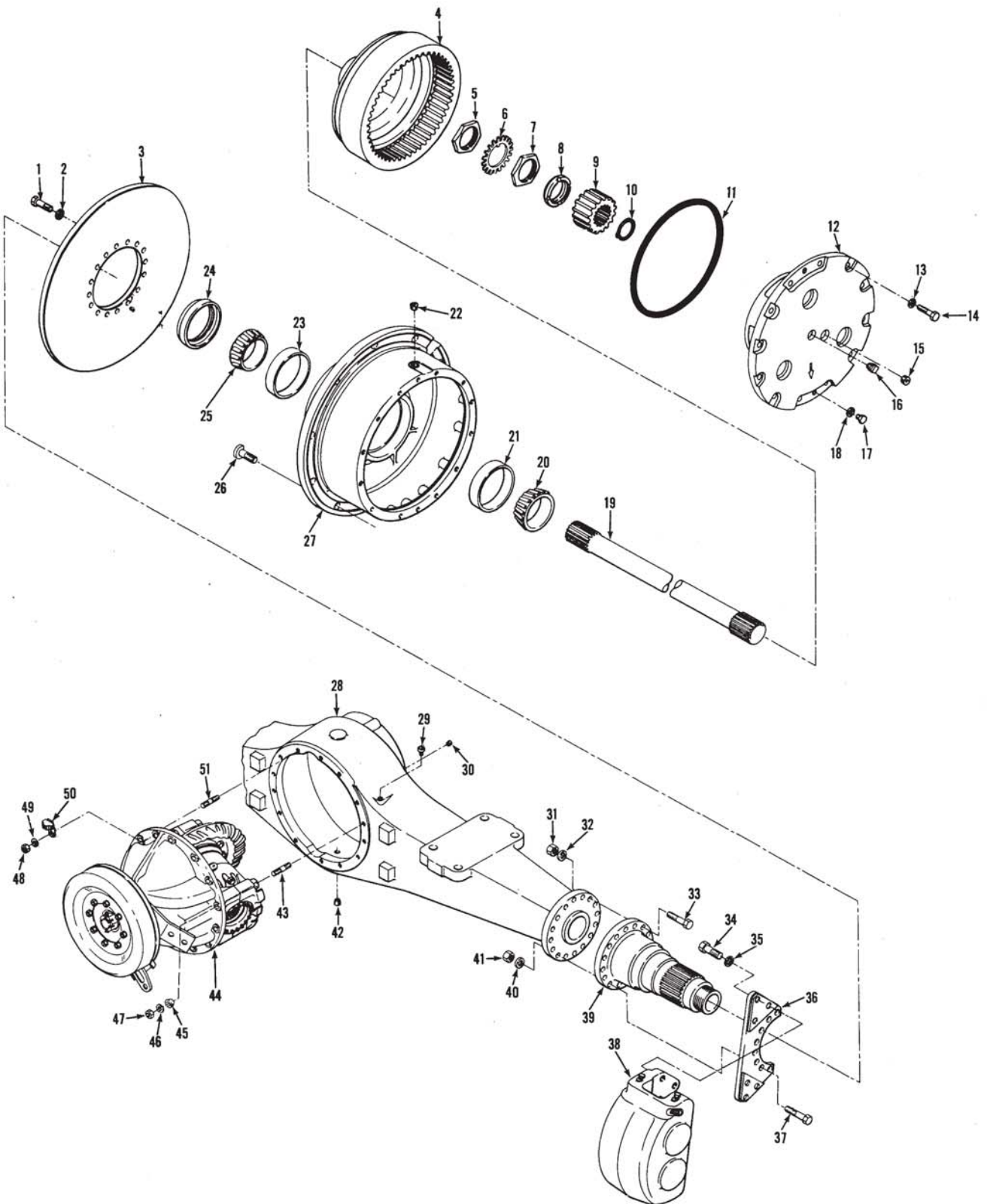
†Not Illustrated. *For replacement use 191835

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



AXLE ASSEMBLY - REAR DRIVE
For Serial: Cummins 408A101 thru 408A999, G.M. 409A101 thru 409A999

TS-8375-P



AXLE ASSEMBLY — FRONT DRIVE

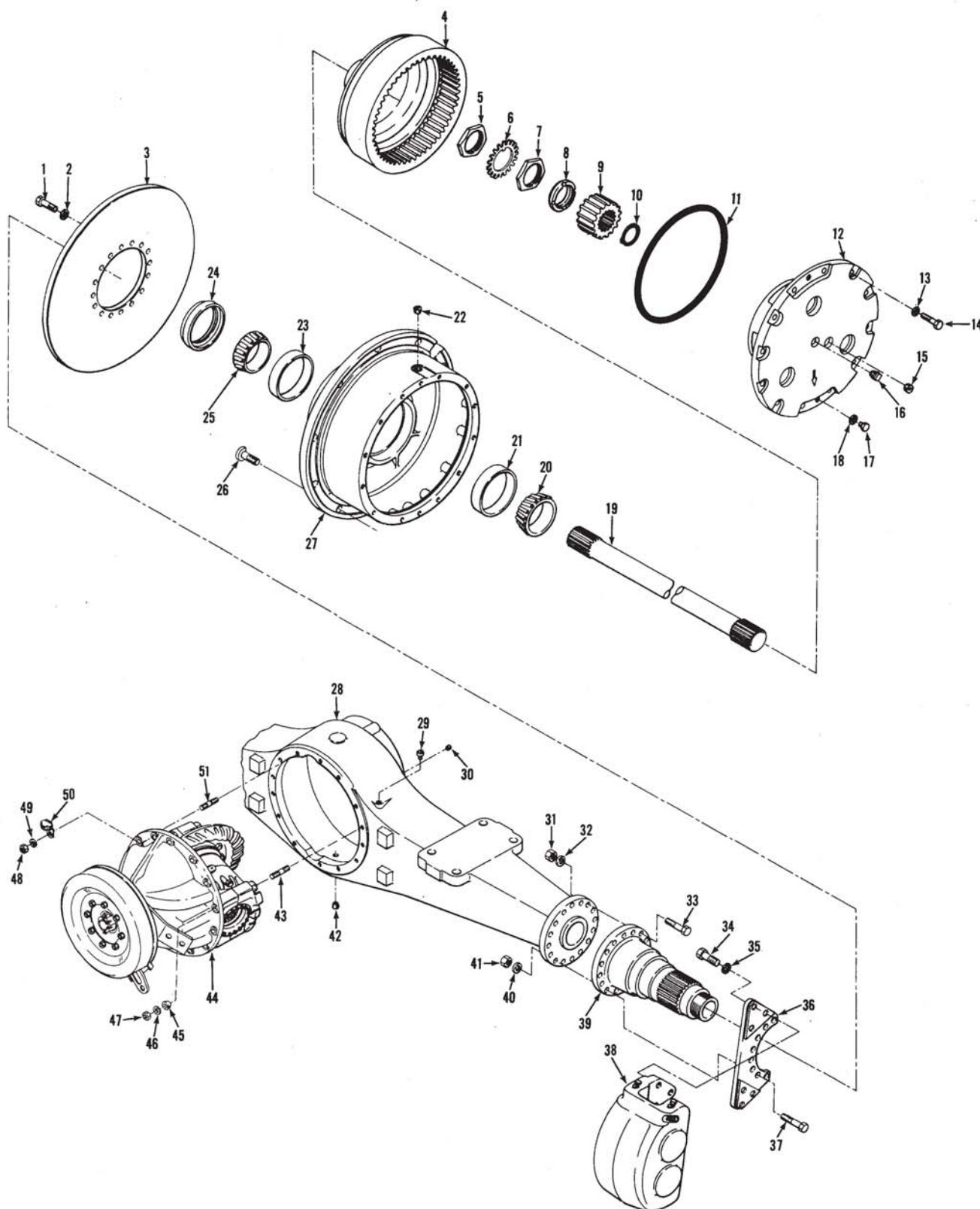
For Serial: G.M. — 409B101 and after; Cummins — 408B101 and after

TS-9634

AXLE ASSEMBLY — REAR DRIVE
For Serial: Cummins — 408A101 thru 999
G.M. — 409A101 thru 999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	190534	AXLE ASSY (Inc. 1 thru 59)	1	31	103522	NUT, Wheel	20
1	799408	CONE, Inner Hub Brg.	2	32	103445	STUD, Wheel	20
2	658985	CUP, Inner Hub Brg.	2	33	86D12	NUT, Wheel Stud	20
3	119469	PLUG, Hub Filler	2	34	112086	HOUSING, Axle	1
4	112073	HUB ASSY (Inc. 2 & 5)	2	35	119469	PLUG, Housing Filler	1
5	672181	CUP, Outer Hub Brg.	2	36	106656	BREATHER, Housing	1
6	672182	CONE, Outer Hub Brg.	2	37	112078	SPINDLE	2
7	112077	SHAFT, Axle	2	38	1C-612	BOLT, Dust Cover	12
8	106060	HUB, Internal Gear	2	39	4E-06	LKWSHR, Dust Cover	12
9	106059	GEAR, Internal Ring	2	40	114453	SHIELD, Brake Dust	4
10	114433	NUT, Spindle Inner	2	41	117150	BRAKE ASSY	2
11	101274	LOCK, Spindle Nut	2	42	17C1024	BOLT, Drum to Hub	24
12	114433	NUT, Spindle Outer	2	43	104412	WASHER, Drum to Hub	24
13	—	PLANET CARRIER (See Index)	—	44	112085	DRUM, Brake	2
14	116419	STUD, Planet Carrier Mtg.	10	45	109055	CATCHER, Oil	2
15	112287	DOWEL, Planet Carrier Mtg.	10	46	112055	SEAL, Hub Oil	2
16	106762	WASHER, Planet Carrier Mtg.	10	47	118350	BOLT, Brake & Spindle Attaching	18
17	64D-08	NUT, Planet Carrier to Hub	10	48	104412	WASHER, Brake & Spindle Attaching	18
18	106247	RING, Sun Gear Ret.	2	49	106998	NUT, Brake & Spindle Attaching	18
19	106455	WASHER, Thrust Cap	2	50	11F-12	PLUG, Housing Drain	1
20	11F-04	PLUG, Planet Filler	2	51	126416	STUD, Carrier to Hsg.	13
21	1C-720	SCREW, Thrust Cap	12	52	112287	DOWEL, Stud	3
22	112278	WASHER, Thrust Cap	12	53	106762	WASHER, Carrier to Hsg.	14
23	114119	CAP ASSY, Sun Gear Thrust (Inc. 19)	2	54	64D-08	NUT, Carrier to Hsg.	14
24	114089	O-RING, Cap to Carrier	2	55	—	NUT, Carrier to Hsg. (See 54)	—
25	109050	GEAR, Sun	2	56	—	WASHER (See 53)	—
26	1C-808	SCREW, Puller Hole	4	57	550320	TEE, Brake Line	1
27	3E-08	LKWSHR, Puller Hole	4	58	—	DIFF. & CARRIER ASSY (See Index)	—
28	100970	BOLT, Planet Carrier to Hub	10	59	112923	STUD, Carrier to Hsg.	1
29	106762	WASHER, Planet Carrier to Hub	10				
30	106880	SCREW, Gear to Gear Hub	16				

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


AXLE ASSEMBLY — REAR DRIVE

For Serial: Cummins — 408B101 and after; G.M. — 409B101 and after

TS-9634

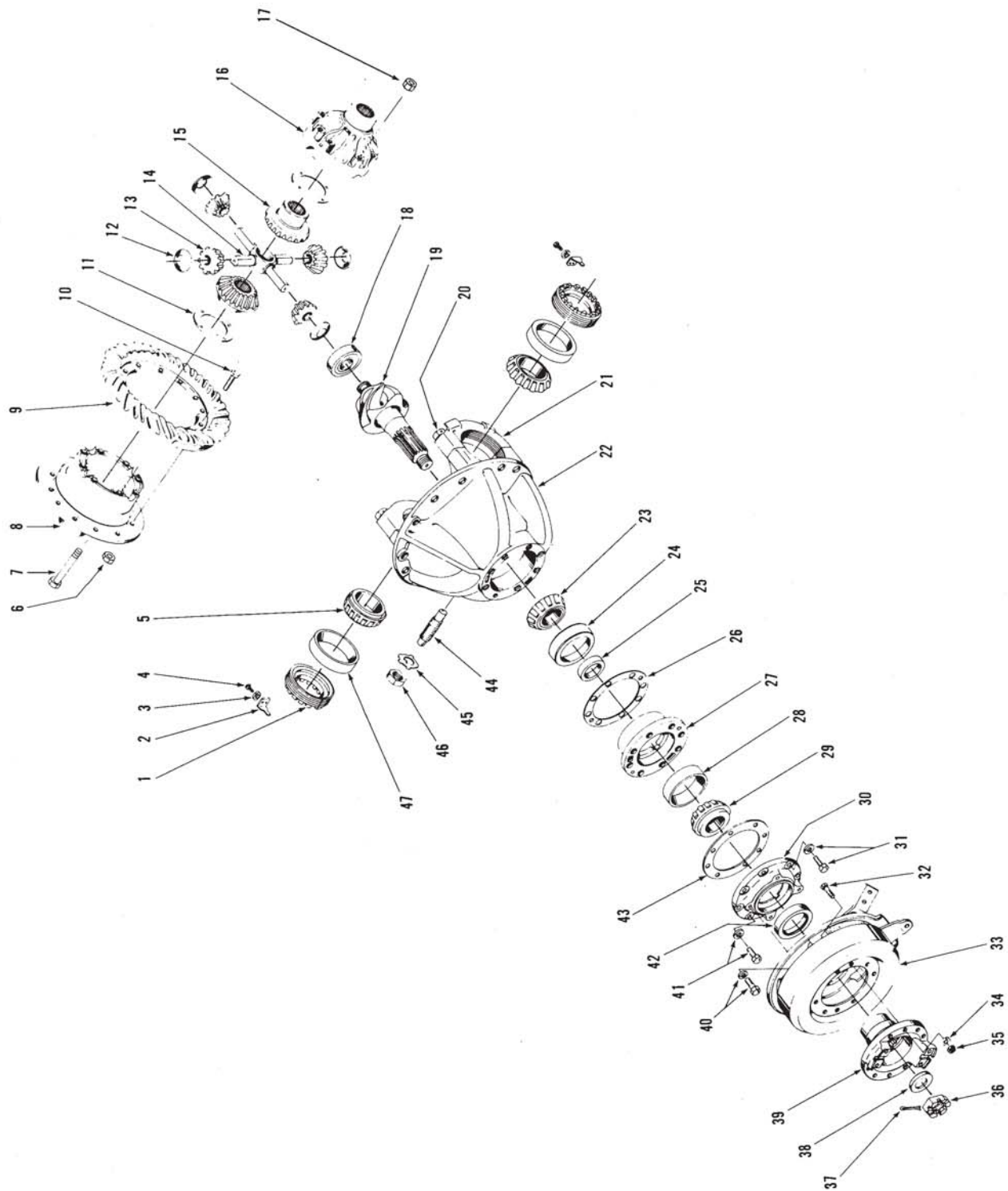
AXLE ASSEMBLY — REAR DRIVE
For Serial: Cummins — 408B101 and after
G.M. — 409B101 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	190844	AXLE ASSY (Inc. 1 thru 50)	1	27	121785	HUB ASSY (Inc. 21, 23)	2
1	124158	BOLT, Disc to Hub	16	28	121797	HOUSING, Axle	1
2	104412	WASHER, Disc to Hub	16	29	106656	BREATHER, Axle Housing	1
3	125435	DISC, Brake	2	30	11F-12	PLUG, Housing Filler	1
4	123904	GEAR, Internal	2	31	106998	NUT, Spindle Attaching	16
5	121013	NUT, Spindle	2	32	104412	WASHER, Spindle Attaching	16
6	121014	LOCK, Spindle Nut	2	33	106832	BOLT, Spindle Attaching	16
7	121013	NUT, Spindle	2	34	110305	BOLT, Brake Head Attaching	12
8	121015	SLEEVE, Sun Gear Thrust	2	35	111656	WASHER, Brake Head Attaching	12
9	121798	GEAR, Sun	2	36	121793	PLATE, Disc Brake Adapter	2
10	224116	RING, Sun Gear Snap	2	37	121781	BOLT, Brake Adapter Attaching	16
11	107348	O-RING, Planet Carrier	2	38	———	BRAKE HEAD (See Index)	—
12	121788	PLANET CARRIER (See Index)	2	39	121802	SPINDLE	2
13	106762	WASHER, Planet Carrier	24	40	104412	WASHER, Brake Adapter Plate	16
14	100970	BOLT, Planet Carrier	24	41	106998	NUT, Brake Adapter Plate	16
15	11F-04	PLUG, Planet Oil Level	2	42	119469	PLUG, Housing Drain	1
16	10F-02	PLUG, Planet Carrier	2	43	126416	STUD, Carrier to Housing	3
17	1C-808	BOLT, Puller Hole	4	44	———	DIFF. & CARRIER ASSY (See Index)	—
18	3E-08	LKWSHR, Puller Hole	4	45	112287	DOWEL, Carrier to Housing	3
19	121800	SHAFT, Axle	2	46	106762	WASHER, Carrier to Housing	3
20	675261	CONE, Outer Brg.	2	47	64D-08	NUT, Carrier to Housing	3
21	668553	CUP, Outer Brg.	2	48	64D-08	NUT, Brake Line Tee	11
22	119469	PLUG, Hub Filler	2	49	106762	WASHER, Brake Line Tee	11
23	672004	CUP, Inner Hub Brg.	2	50	114427	TEE, Brake Line	1
24	128117	SEAL, Hub Oil	2	51	126416	STUD, Carrier to Housing	11
25	672005	CONE, Inner Hub Brg.	2				
26	121808	STUD, Wheel	24				
26A	103522	†NUT, Wheel	24				

†Not Illustrated.

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

TS-8113-P



DIFFERENTIAL AND CARRIER ASSEMBLY — FRONT DRIVE

DIFFERENTIAL AND CARRIER ASSEMBLY — FRONT DRIVE

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	118508	DIFFERENTIAL & CARRIER ASSY (Inc. 1 thru 47)	1	26B	125568	‡SPACER, Bearing Cage — Thick	—
1	123747	NUT, Diff. Adjusting	2	27	110843	CAGE ASSY, Pinion Bearing (Inc. 24, 28)	1
2	100941	LOCK, Diff. Adjusting Nut	2	28	667278	CUP, Pinion Bearing — Outer	1
3	4E-06	LKWSHR, Adj. Nut Lock	2	29	667277	CONE, Pinion Bearing — Outer	1
4	3C-614	BOLT, Adj. Nut Lock	2	30	110847	RETAINER, Oil Seal	1
4A	-----	†‡LOCKWIRE — 18 ga.	—	31	1C-936	BOLT, Seal Retainer	7
5	654144	CONE, Differential Brg.	2	31A	4E-09	LKWSHR, Seal Retainer	7
6	86D-09	NUT, Ring Gear	12	32	101144	BOLT, Drum to Flange	8
7	118475	BOLT, Differential Case	8	33	-----	PARKING BRAKE — See Index	—
8	-----	§DIFFERENTIAL CASE — Flange Half — See 51	—	33A	107261	†DRUM, Parking Brake	1
9	-----	§RING GEAR — See 50	—	34	2E-06	LKWSHR, Drum to Flange	8
10	101196	BOLT, Ring Gear	12	35	62D-06	NUT, Drum to Flange	8
11	118474	WASHER, Side Gear Thrust ..	2	36	101262	NUT, Pinion Shaft	1
12	101244	WASHER, Diff. Pinion Thrust	4	37	1F-732	COTTER, Pinion Shaft Nut	1
13	815745	PINION KIT, Differential	1	38	101263	WASHER, Pinion Shaft	1
14	117022	SPIDER, Differential	1	39	112084	FLANGE, Companion	1
15	104167	GEAR, Differential Side	2	40	1C-920	BOLT, Brake Mtg.	4
16	-----	§DIFFERENTIAL CASE — Plain Half — See 51	—	40A	4E-09	LKWSHR, Brake Mtg.	4
17	86D-09	NUT, Differential Case	8	41	1C-836	BOLT, Seal Retainer	1
18	667466	BEARING, Inner Pinion	1	41A	4E-08	LKWSHR, Seal Retainer	1
19	-----	§PINION — See 50	—	42	110897	SEAL, Oil	1
20	101210	BOLT, Carrier Cap	4	43	101254	*GASKET, Seal Retainer	1
20A	111658	†WASHER, Carrier Cap	4	44	121241	SCREW, Thrust	1
21	-----	§CAP, Differential Carrier — See 22	—	45	-----	OMIT, Not Used	—
22	112289	CARRIER ASSY, Differential (Inc. 20, 20A, 21)	1	46	8D-18	NUT, Thrust Screw	1
23	667276	CONE, Pinion Bearing — Center	1	47	667275	CUP, Differential Brg.	2
24	658988	CUP, Pinion Bearing — Center	1	48	126595	†DIFFERENTIAL ASSY (Inc. 6 thru 17, 19)	1
25	104226	SPACER, Pinion Bearing	1	49	118499	†DIFFERENTIAL BODY SUB-ASSY (Inc. 7, 8, 11 thru 17)	1
26	101257	‡SPACER, Bearing Cage — Thin	—	50	815170	†GEAR & PINION SET (Inc. 9, 19)	1
26A	125567	‡SPACER, Bearing Cage — Medium	—	51	815736	†DIFFERENTIAL CASE KIT (Inc. 7, 8, 11, 12, 16, 17)	1

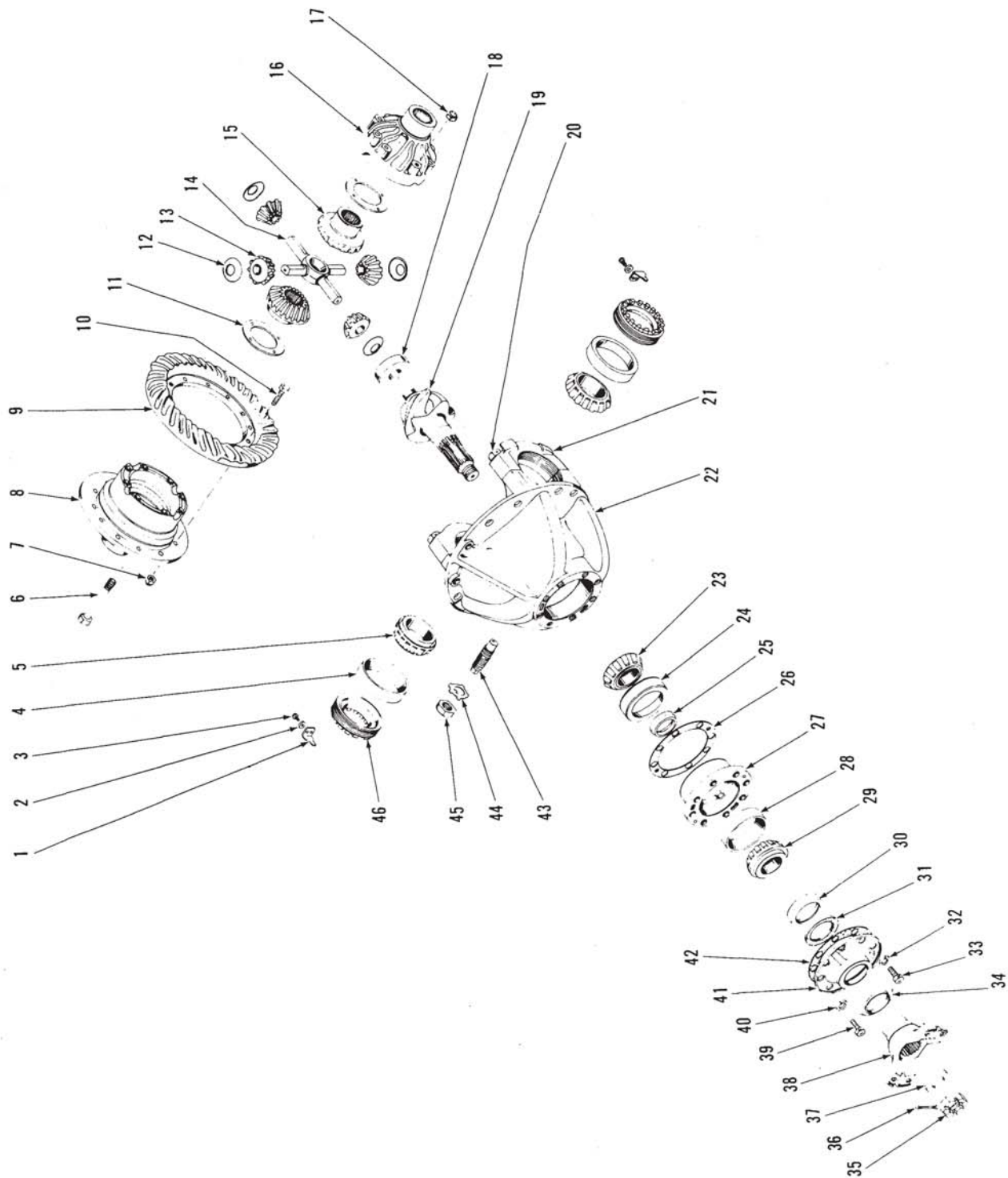
*NOTE: For replacement use Loctite # 277.

§Not Sold Separately

†Not Illustrated

‡As Required

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



DIFFERENTIAL AND CARRIER ASSEMBLY — REAR DRIVE

DIFFERENTIAL AND CARRIER ASSEMBLY — REAR DRIVE

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	118509	DIFF. & CARRIER ASSY (Inc. 1 thru 46)	1	25	104226	SPACER, Pinion Brg.	1
1	100941	LOCK, Diff. Adj.	2	26	125568	SHIM, Bearing Cage — Thick —	—
2	4E-06	LKWSHR, Adj. Nut Lock	2	26A	125567	†‡ SHIM, Bearing Cage — Medium	—
3	3C-614	BOLT, Nut Lock	2	26B	101257	†‡ SHIM, Bearing Cage — Thin —	—
4	667275	CUP, Differential Brg.	2	27	101250	CAGE ASSY, Pinion Bearing (Inc. 24, 28)	1
5	654144	CONE, Differential Brg.	2	28	667278	CUP, Pinion Brg.	1
6	118475	BOLT, Differential Case	8	29	667277	CONE, Outer Pinion Brg.	1
7	86D-09	NUT, Ring Gear Bolt	12	30	110897	SEAL, Pinion Oil	1
8	-----	§ DIFF. CASE — Flange Half — See Item 50	—	31	101256	GASKET, Pinion Oil Seal	1
9	-----	§ RING GEAR — See Item 49 ..	—	32	4E-09	LKWSHR, Seal Retainer	7
10	101196	BOLT, Ring Gear	12	33	1C-928	BOLT, Seal Retainer	7
11	118474	WASHER, Side Gear Thrust ..	2	34	101261	SHIELD, Flange Dust	1
12	101244	WASHER, Differential Pinion Thrust	4	35	101262	NUT, Pinion Shaft	1
13	815745	KIT, Differential Pinion	1	36	1F-732	COTTER, Pinion Shaft Nut	1
14	117022	SPIDER, Differential	1	37	101263	WASHER, Pinion Shaft Nut	1
15	104167	GEAR, Differential Side	2	38	117218	FLANGE, Companion	1
16	-----	§ DIFF. CASE — Plain Half — See Item 50	—	39	1C-828	BOLT, Seal Retainer	1
17	86D-09	NUT, Differential Case	8	40	4E-08	LKWSHR, Seal Retainer	1
18	667466	BEARING, Inner Pinion	1	41	101253	RETAINER, Seal	1
19	-----	§ PINION, Differential — See Item 49	—	42	101254	*GASKET, Seal Retainer	1
20	101210	BOLT, Diff. Carrier Cap	4	43	121241	SCREW, Thrust	1
20A	111658	† WASHER, Carrier Cap Bolt ..	4	44	-----	OMIT, Not Used	—
21	-----	§ CAP, Differential Carrier — See Item 22	—	45	8D-18	NUT, Thrust Screw	1
22	112289	CARRIER ASSY (Inc. 20, 20A, 21)	1	46	123747	NUT, Differential Adj.	2
23	667276	CONE, Center Pinion Brg.	1	47	126585	† DIFF. ASSY (Inc. 6 thru 17)	1
24	658988	CUP, Center Pinion Brg.	1	48	118499	† DIFF. BODY SUB ASSY (Inc. 6, 8, 11 thru 17)	1
				49	815369	† GEAR & PINION SET (Inc. 9, 19)	1
				50	815736	† DIFF. CASE KIT (Inc. 6, 8, 12, 16, 17)	1

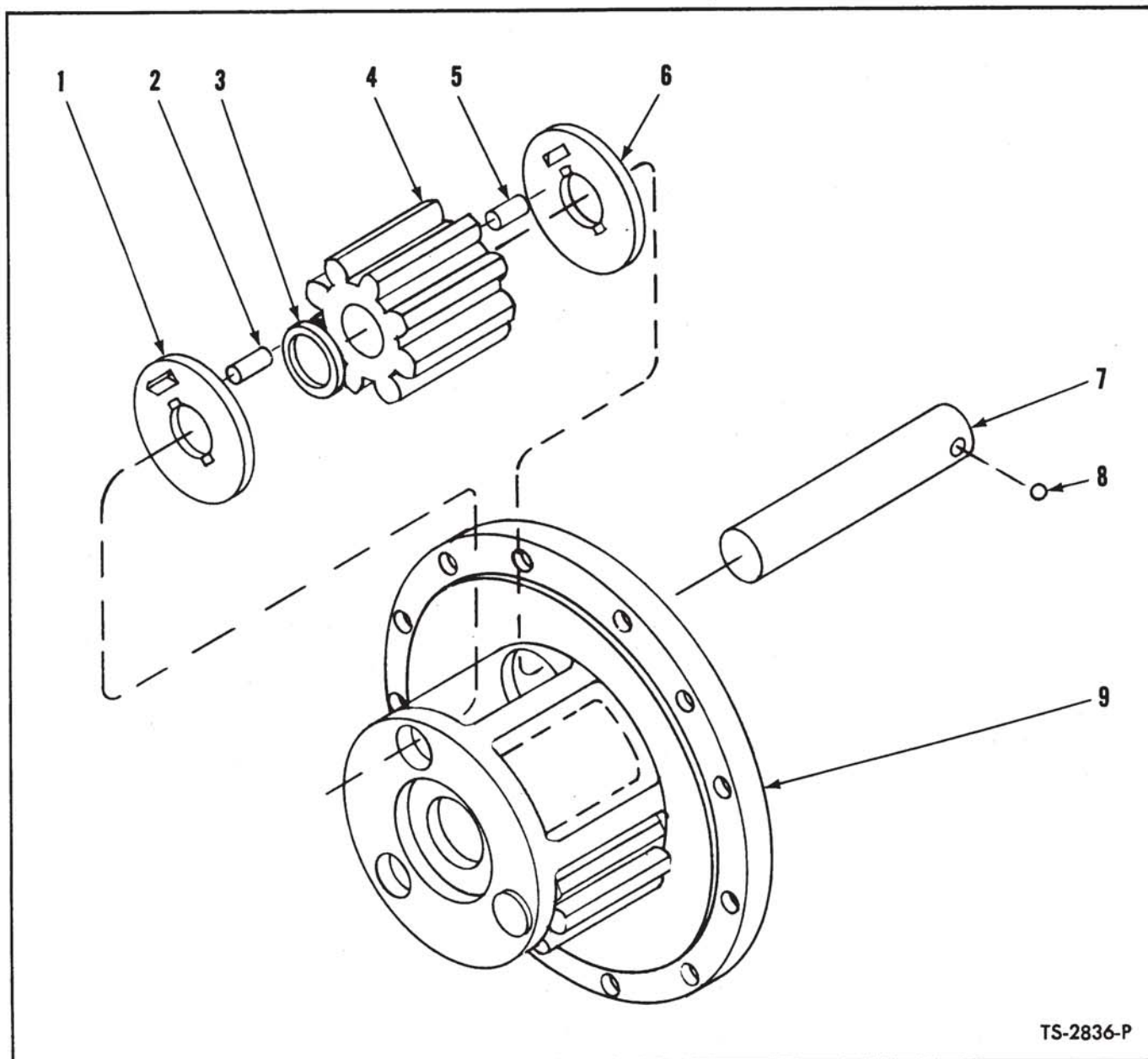
*NOTE: For replacement use Loctite #277.

§ Not Sold Separately

† Not Illustrated

‡ As Required

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



TS-2836-P

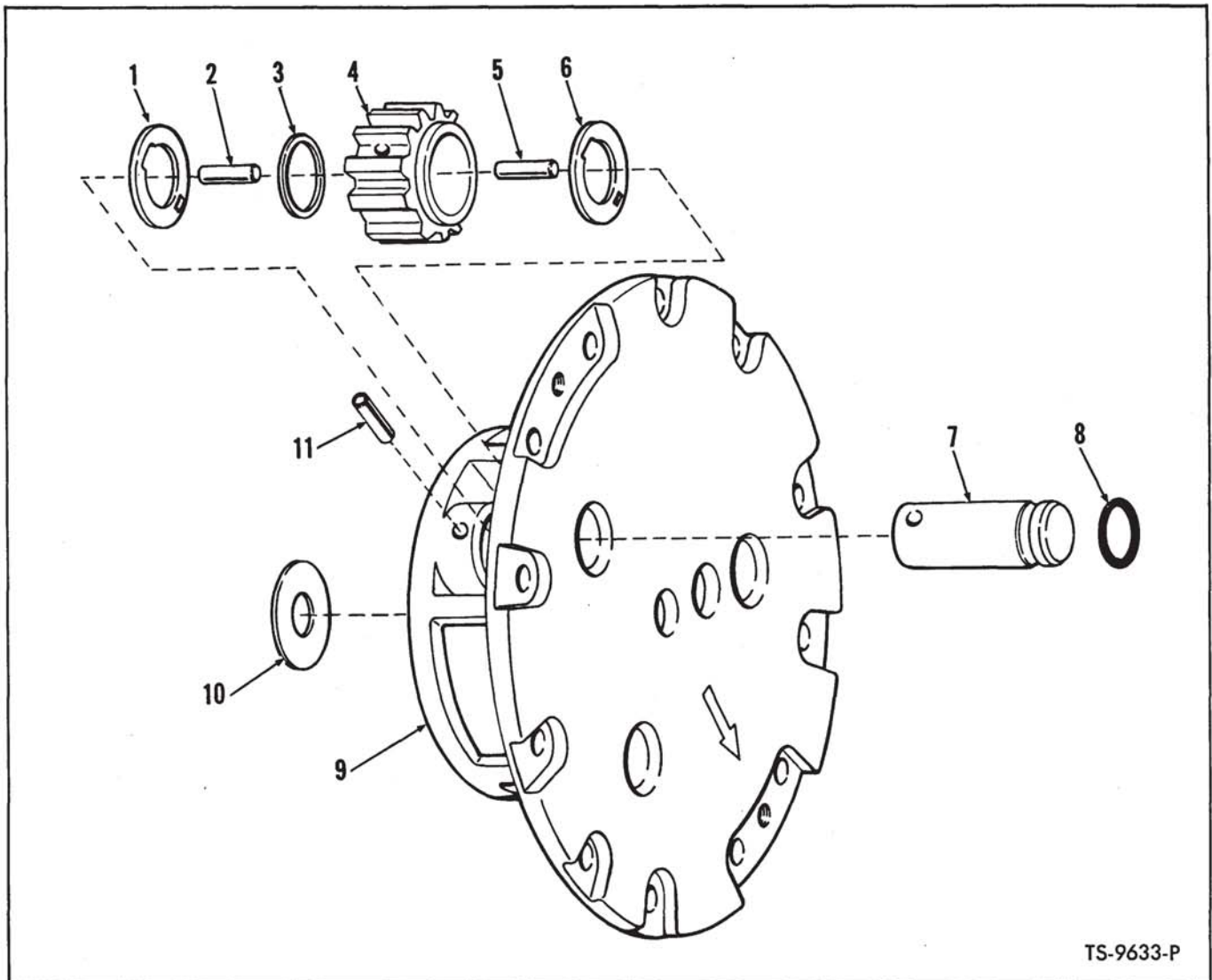
PLANET CARRIER ASSEMBLY — FRONT AND REAR

For Serial: Cummins — 408A101 thru 999

G.M. — 409A101 thru 999

Item No.	Part No.	Description	No. Req'd.
A	114449	CARRIER ASSY, Planet (Inc. 1 thru 9)	4
NOTE: Four (4) Planet Carrier Assemblies used per machine. Quantities listed below are for 1 Planet Carrier.			
1	106350	WASHER, Pinion Thrust	3
2	106351	ROLLER, Pinion	87
3	106352	SPACER, Pinion Roller	3
4	109088	PINION, Planet	3
5	106351	ROLLER, Pinion	87
6	106350	WASHER, Pinion Thrust	3
7	106349	SHAFT, Pinion	3
8	10J-12	BALL, Pinion Shaft	3
9	114450	SPIDER, Planet	1

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



TS-9633-P

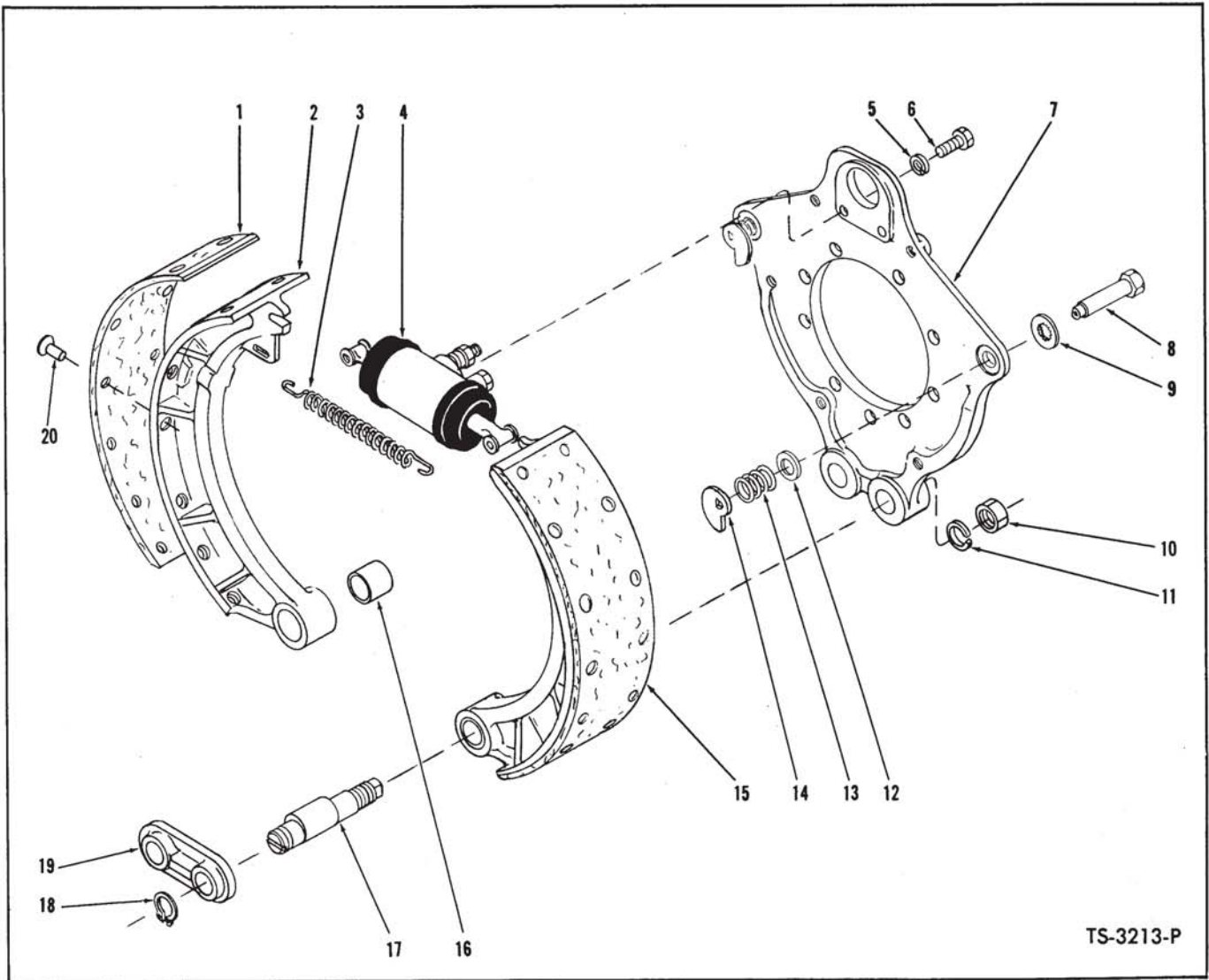
PLANET CARRIER ASSEMBLY – FRONT AND REAR

 For Serial: Cummins – 408B101 and after
 G.M. – 409B101 and after

Item No.	Part No.	Description	No. Req'd.
A	121788	*CARRIER ASSY, Planet (Inc. 1 thru 11)	4
NOTE: Four (4) Planet Carrier Assemblies used per machine. Quantities listed below are for 1 Planet Carrier.			
1	106350	WASHER, Pinion Thrust	3
2	121792	ROLLER, Pinion	87
3	106352	SPACER, Roller	3
4	121790	PINION, Planet	3
5	121792	ROLLER, Pinion	87
6	106350	WASHER, Pinion Thrust	3
7	121791	SHAFT, Pinion	3
8	58K-214	O-RING, Pinion Shaft	3
9	121789	SPIDER, Planet	1
10	121166	WASHER, Thrust	1
11	654841	PIN, Roll	3

*For replacement use 124571

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



TS-3213-P

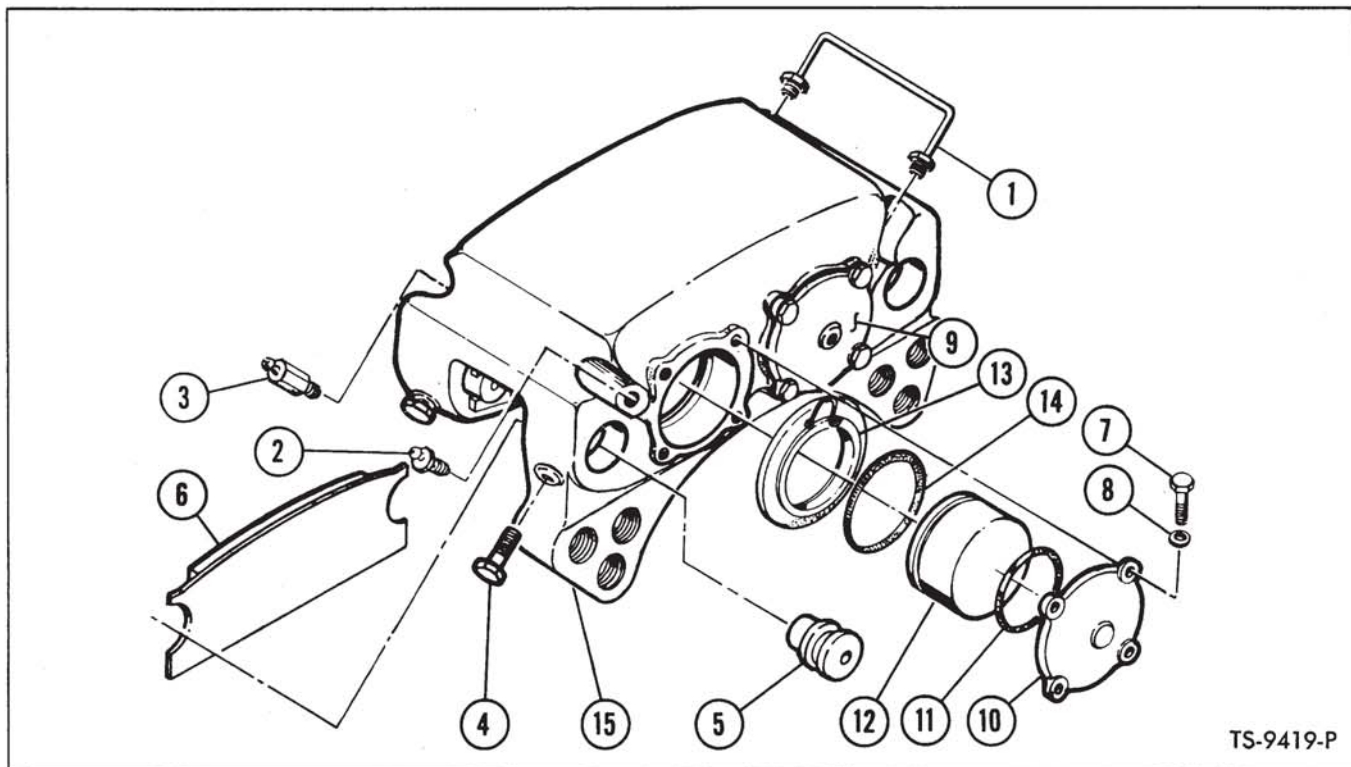
BRAKE ASSEMBLY — FRONT AND REAR
For Serial: Cummins — 408A101 thru 408A999
G.M. — 409A101 thru 409A999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	117150	BRAKE ASSY (Inc. 1 thru 20)	4	7	112060	SPIDER ASSY, Brake (Inc. 8, 9, 12, 13, 14)	1
NOTE: 2 Brake Assemblies used on axle — Quantities listed below are for 1 Brake Assembly				8	114173	PIN ASSY, Shoe Adj. (Inc. 9)	2
B		LINING KIT, Brake (Inc. 1, 20)		9	100867	WASHER, Adjusting Pin	2
C	945614	Standard	1	10	62D-14	NUT, Anchor Pin	2
D	945621	* 1/16" Oversize	1	11	2E-14	LKWSHR, Anchor Pin Nut	2
1	-----	§ LINING, Brake Shoe — See C & D	2	12	851771	WASHER, Cam Spring	2
2	-----	§ SHOE, Brake — See 15	2	13	943859	KIT, Adj. Cam Spring (Inc. 12)	2
3	119670	SPRING, Shoe Return	1	14	112062	CAM, Shoe Adjusting	2
4	-----	WHEEL CYLINDER — See Index	1	15	118267	SHOE ASSY, Brake (Inc. 1, 2, 16, 20)	2
5	4E-06	LKWSHR, Wheel Cyl. Mtg.	2	16	112068	BUSHING, Brake Shoe	2
6	1C-614	BOLT, Wheel Cyl. Mtg.	2	17	112069	PIN, Brake Shoe Anchor	2
				18	710776	RING, Anchor Pin Ret.	2
				19	112070	STRUT, Anchor Pin	1
				20	23H-1008	RIVET, Lining to Shoe	40

§Not Sold Separately

*NOTE: When 945621 Lining Kit is utilized Drums must be turned down to 16.370"—16.380". Do Not Exceed this Dimension.

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



TS-9419-P

BRAKE HEAD ASSEMBLY L.H. REAR, R.H. FRONT
**For Serial: Cummins — 408B101 and after,
G.M. — 409B101 and after**

Item No.	Part No.	Description	No. Req'd.
A	121777	*BRAKE HEAD ASSY, L.H. (Inc. 1 thru 15) See Note "A"	—
1	947926	TUBE & NUT ASSY	1
2	947927	VALVE, Hydraulic Bleeder	1
3	947928	VALVE, Hydraulic Bleeder	1
4	961901	BOLT, Self Locking	4
5	947931	PIN, Carrier & Lining Retaining	4
6	947932	CARRIER & LINING ASSY	2
7	1C-620	BOLT, Cap Mounting	8
8	25E-17	WASHER, Flat	8
9	947933	CAP, Inlet	1
10	947934	CAP	1
11	—	§PACKING, See Item 16	2
12	947935	PISTON	4
13	—	§BOOT, See Item 16	4
14	—	§PACKING, See Item 16	4
15	—	§TORQUE PLATE ASSY — See A	1
16	840535	†REPAIR KIT (Inc. 11, 13, 14)	1
17	121776	†BRAKE DISC	1

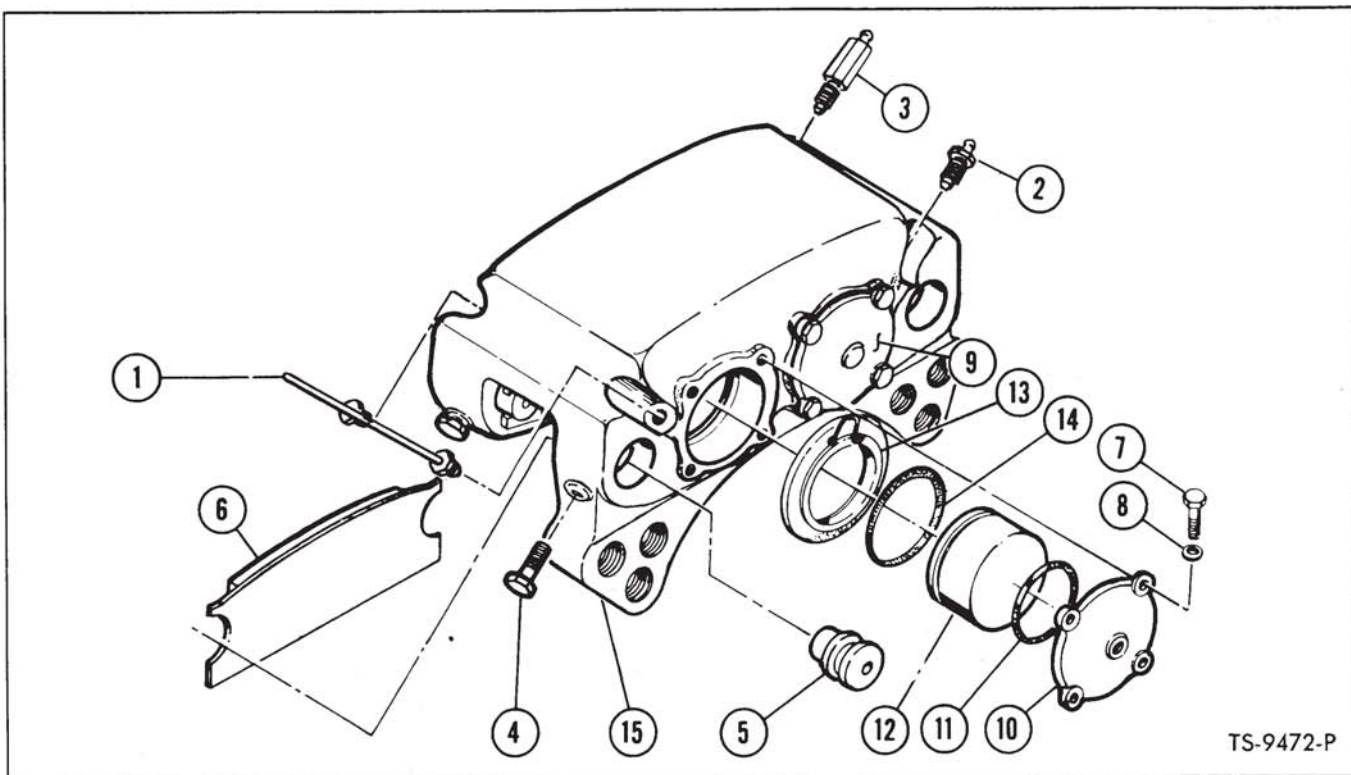
†Not Illustrated

§Not Sold Separately

*75 III A uses two 121777 Brake Head Assemblies; 85 III A uses three 121777 Brake Head Assemblies: Quantities listed for Items 1 thru 15 are per assembly.

NOTE A: For replacement use 128852 plus 1—122630 Adapter Plate.

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

**BRAKE HEAD ASSEMBLY R.H. REAR, L.H. FRONT****For Serial: Cummins — 408B101 and after****G.M. — 409B101 and after**

Item No.	Part No.	Description	No. Req'd.
A	121778	*BRAKE HEAD ASSY, R.H. (Inc. 1 thru 15) Note A	—
1	947926	TUBE & NUT ASSY	1
2	947927	VALVE, Hydraulic Bleeder	1
3	947928	VALVE, Hydraulic Bleeder	1
4	961901	BOLT, Self Locking	4
5	947931	PIN, Carrier & Lining Retaining	4
6	947932	CARRIER & LINING ASSY	2
7	1C-620	BOLT, Cap Mounting	8
8	25E-17	WASHER, Flat	8
9	947934	CAP	1
10	947933	CAP, Inlet	1
11	—	§PACKING, See Item 16	2
12	947935	PISTON	4
13	—	§BOOT, See Item 16	4
14	—	§PACKING, See Item 16	4
15	—	§TORQUE PLATE ASSY — See A	1
16	840535	†REPAIR KIT (Inc. 11, 13, 14)	1
17	121776	†BRAKE DISC	1

†Not Illustrated

§Not Sold Separately

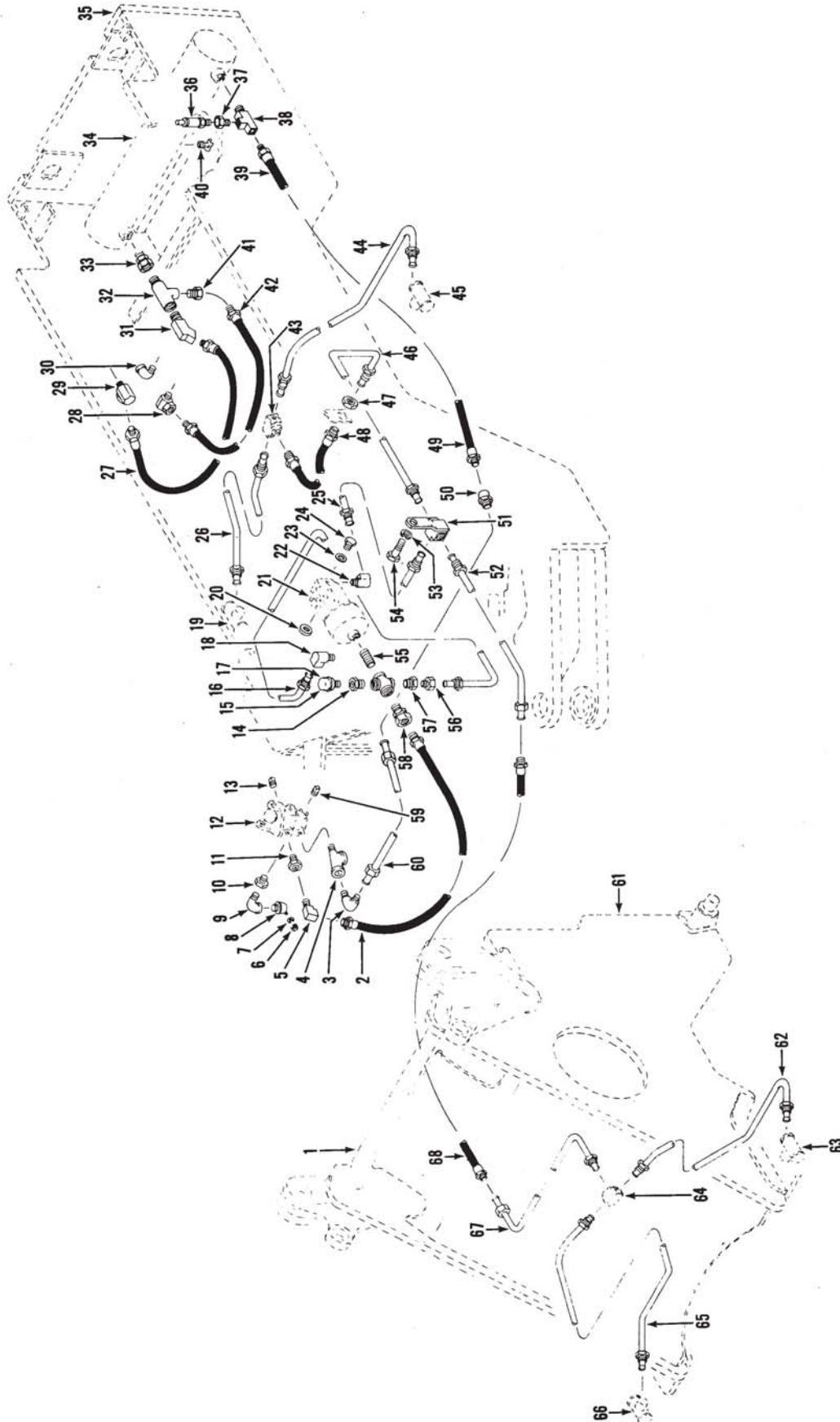
*75 III A uses two 121778 Brake Head Assemblies; 85 III A uses three 121778 Brake Head Assemblies. Quantities listed for Items 1 thru 15 are per assembly.

NOTE A: For replacement use 122561 (Plus 1—122630 Adapter Plate)

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

TS-8964-P

BRAKE LINES — CUMMINS
For Serial: 408A101 thru 408A999



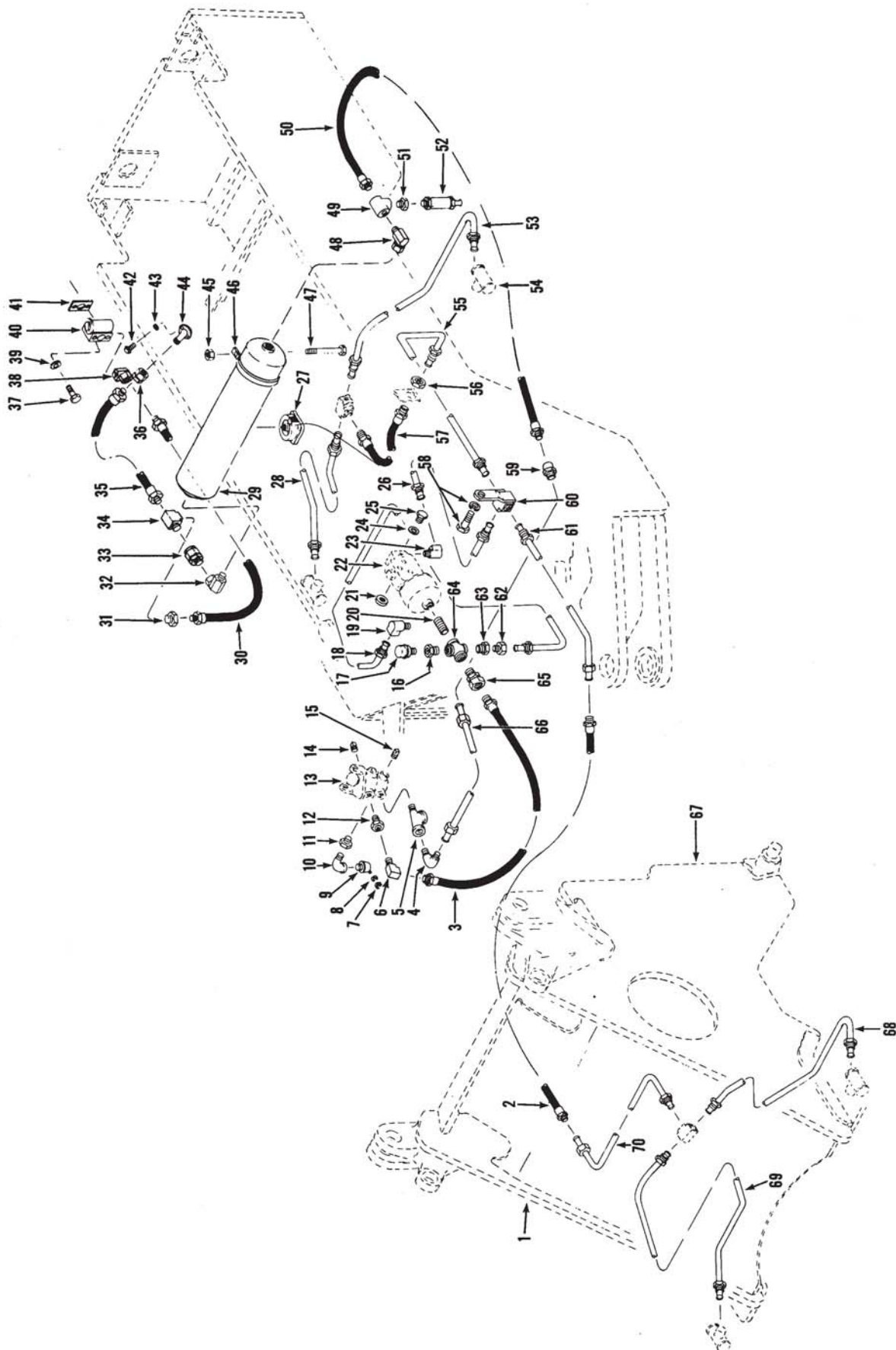
BRAKE LINES — CUMMINS
For Serial: 408A101 thru 999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	FRONT FRAME — See Index ..	1	35	-----	REAR FRAME — See Index ..	1
2	564670	HOSE, Valve to Cluster	1	36	507815	*VALVE, Safety (B.W. #205105)	1
3	42F-9	ELBOW, Tube to Valve	1	37	19F-5	BUSHING, Reducing	1
4	17F-4	TEE, Connecting	1	38	30F-3	TEE, Valve & Hose to Res.	1
5	27F-2	ADAPTER, Hose to Valve	1	39	1508550	HOSE, Foot Valve to Res.	1
6	14D-10	NUT, Sender Unit	1	40	72F-4	DRAIN COCK	1
7	12E-10	LKWSHR, Sender Unit	1	41	19F-4	BUSHING, Reducing	1
8	1534135	SENDER, Air Pressure (Inc. 6, 7)	1	42	536936	HOSE, Gov. to Reservoir	1
9	26F-2	ELBOW, Sender to Valve	1	43	-----	TEE (Furnished with Axle)	1
10	19F-1	BUSHING, Reducing	1	44	543740	TUBE, Tee to Brake — L.H.	1
11	19F-6	BUSHING, Reducing	1	45	-----	WHEEL CYLINDER — See Index	1
12	-----	BRAKE FOOT VALVE — See Index	1	46	1526341	TUBE, Tee to Rear Axle	1
13	13F-08	PLUG, Pipe	4	47	8D-10	NUT, Hose to Clip	1
14	29K-206	CROSS, Connecting	1	48	1526426	HOSE, Tube to Axle Tee	1
15	19F-2	BUSHING, Reducing	1	49	-----	HOSE — See 39	1
16	1526342	TUBE, Power Cluster to Transmission De-Clutch ..	1	50	39F-9	CONNECTOR, Tube to Hose ..	1
17	636260	SWITCH, Stop Light	1	51	552897	TEE, Tube Connecting	1
18	62F-3	ELBOW, Tube to Trans.	1	52	1502638	TUBE, Tee to Pivot Hose	1
19	-----	WHEEL CYLINDER — See Index	1	53	4E-06	LKWSHR, Tee to Frame	1
20	669829	SPACER, Power Cluster Mtg. ..	1	54	24C-612	BOLT, Tee to Frame	1
21	-----	POWER CLUSTER—See Index ..	1	55	5K-308	NIPPLE, Cross to Cluster	1
22	62F-3	ELBOW, Tube to Cluster	1	56	59F-3	CONNECTOR, Tube to Cross ..	1
23	613750	GASKET, Plug	3	57	19F-2	BUSHING, Reducing	1
24	874007	PLUG, Master Cylinder	3	58	36F-3	ADAPTER, Hose to Cross	1
25	1526343	TUBE, Power Cluster to Tee ..	1	59	13F-04	PLUG, Pipe	1
26	543741	TUBE, Tee to Brake — R.H.	1	60	1526344	TUBE, Valve to Reservoir	1
27	1534079	HOSE, Comp. to Reservoir ..	1	61	-----	FRONT FRAME — See Index ..	1
28	31F-1	ADAPTER, Hose to Gov.	1	62	543741	TUBE, Tee to Brake — L.H.	1
29	31F-4	ADAPTER, Hose to Comp.	1	63	-----	WHEEL CYLINDER — See Index	1
30	26F-1	ELBOW	1	64	-----	TEE (Furnished with Axle)	1
31	81F-3	ELBOW, Hose to Tee	1	65	543740	TUBE, Tee to Brake — R.H. Front	1
32	30F-3	TEE, Hoses to Reservoir	1	66	-----	WHEEL CYLINDER — See Index	1
33	593370	*VALVE, Check (B.W. #228194)	1	67	1502637	TUBE, Hose to Axle Tee	1
34	-----	§RESERVOIR (Welded Part of Frame)	1	68	1502643	HOSE, Connecting Pivot	1

§Not Sold Separately

*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



TS-9173-P

BRAKE LINES — G.M.
For Serial: 409A 101 thru 409A999

**BRAKE LINES —G.M.
For Serial: 409A101 thru 999**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	FRONT FRAME — See Index	—	36	37F-4	ADAPTER, Compressor to Hose	1
2	1502643	HOSE, Connecting Pivot	1	37	23C-544	BOLT, Governor to Compressor	2
3	564670	HOSE, Valve to Cluster	1	38	31F-1	ADAPTER, Governor	1
4	42F-9	ELBOW, Tube to Elbow	1	39	4E-05	LKWSHR, Governor to Compressor	2
5	30F-3	TEE, Connecting	1	40	540306	*GOVERNOR — Compressor (B.W. #275200)	1
6	27F-2	ADAPTER, Hose to Valve	1	41	942646	GASKET, Governor	1
7	14D-10	NUT, Sender Unit	1	42	23C-532	BOLT, Flange to Compressor	2
8	12E-10	LKWSHR, Sender Unit	1	43	4E-05	LKWSHR, Flange to Compressor	2
9	1534135	SENDER, Air Pressure (Inc. 7, 8)	1	44	522846	FLANGE, Compressor	1
10	26F-2	ELBOW, Sender to Valve	1	45	18D-06	NUT, Bracket to Frame	4
11	19F-1	BUSHING, Reducing	1	46	527685	*BRACKET (B.W. #205093)	2
12	19F-6	BUSHING, Reducing	1	47	24C-616	BOLT, Bracket to Frame	4
13	-----	BRAKE FOOT VALVE — See Index	1	48	29F-2	ELBOW, Tank to Tee	1
14	13F-08	PIPE, Plug	4	49	30F-2	TEE, Hose to Elbow	1
15	13F-04	PIPE, Plug	1	50	1509583	HOSE, Foot Valve to Reservoir	1
16	19F-2	BUSHING, Reducing	1	51	19F-3	BUSHING, Reducing	1
17	636260	SWITCH, Stop Light	1	52	507815	*VALVE, Safety (B.W. #205105)	1
18	1526342	TUBE, Power Cluster to Transmission De-Clutch	1	53	543740	TUBE, Tee to Brake — L.H.	1
19	62F-3	ELBOW, Tube to Trans.	1	54	-----	WHEEL CYLINDER — See Index	1
20	5K-308	NIPPLE, Cross to Cluster	1	55	1506264	TUBE, Tee to Rear Axle	1
21	669829	SPACER, Power Cluster Mtg.	1	56	8D-10	NUT, Hose to Clip	1
22	-----	POWER CLUSTER — See Index	—	57	1526426	HOSE, Tube to Axle Tee	1
23	62F-3	ELBOW, Tube to Cluster	1	58	24C-612	BOLT, Tee to Frame	1
24	613750	GASKET, Plug	3	58A	4E-06	LKWSHR, Tee to Frame	1
25	874007	PLUG, Master Cylinder	3	59	-----	OMIT, Not Used	—
26	1526343	TUBE, Power Cluster to Tee	1	60	552897	TEE, Tube to Tube	1
27	1505580	*DRAIN VALVE (B.W. #281923)	1	61	1502638	TUBE, Tee to Pivot Hose	1
28	543741	TUBE, Tee to Brake — R.H.	1	62	59F-3	CONNECTOR, Tube to Cross	1
29	527684	*RESERVOIR, Air (B.W. #215730)	1	63	19F-2	ADAPTER, Tee	1
30	544273	HOSE, Gov. to Reservoir	1	64	29K-206	CROSS, Connecting	1
31	19F-4	BUSHING, Reducing	1	65	36F-3	ADAPTER, Cross to Hose	1
31A	31F-1	†ELBOW, Hose to Reservoir	1	66	1526344	TUBE, Hose to Valve	1
32	661417	ELBOW, Valve to Reservoir	1	67	-----	FRONT FRAME — See Index	1
33	593370	*VALVE, Check (B.W. #228194)	1	68	543740	TUBE, Cyl. to Tee — L.H.	1
34	30F-3	TEE, Hoses to Reservoir	1	69	543741	TUBE, Cyl. to Tee — R.H.	1
35	564674	HOSE, Compressor to Reservoir	1	70	1502637	TUBE, Hose to Tee	1

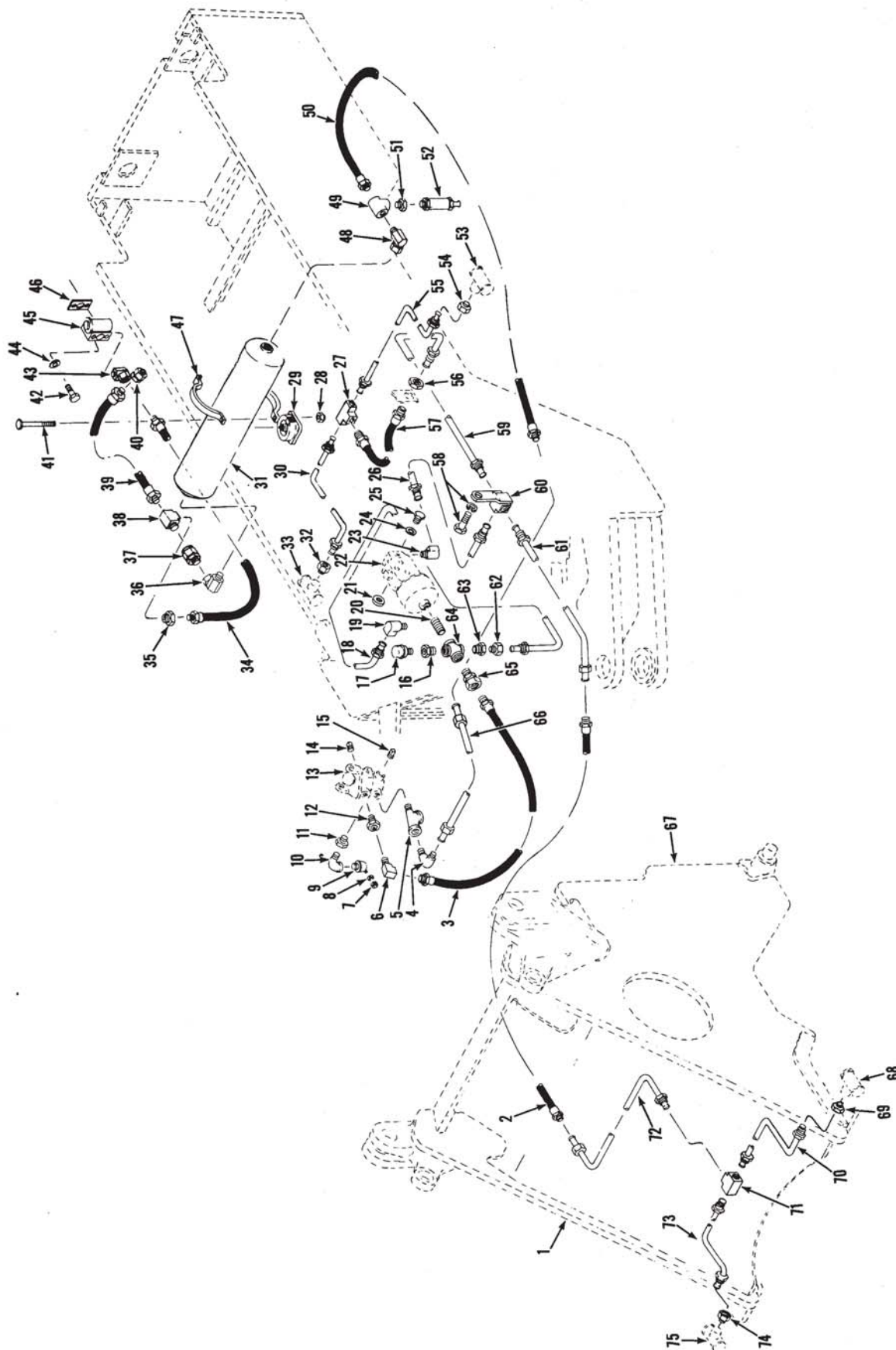
†Not Illustrated

*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

TS-9688

BRAKE AIR LINES
For Serial: Cummins 408B101 thru 408B170; G.M. 409B101 thru 409B180



BRAKE AIR LINES
For Serial: Cummins 408B101 thru 408B170; G.M. 409B101 thru 409B180

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	FRONT FRAME — See Index	—	40A 37F-4	-----	†ADAPTER, Comp. to Hose (See Note "B")	1
2	1502643	HOSE, Connecting Pivot	1	41 24C-616	-----	BOLT, Bracket to Frame	4
3	564670	HOSE, Valve to Cluster	1	42 23C-544	-----	BOLT, Gov. to Comp. (See Note "B")	2
4	42F-9	ELBOW, Tube to Tee	1	43 31F-1	-----	ELBOW, Gov. to Comp. (See Note "A")	1
5	30F-3	TEE, Connecting	1	43A 26F-1	-----	†ELBOW, Gov. to Comp. (See Note "B")	1
6	27F-2	ADAPTER, Hose to Valve	1	44 4E-05	-----	LKWSHR, Gov. to Comp. (See Note "B")	2
7	14D-10	NUT, Sender Unit	1	45 540306	-----	*GOVERNOR — Compressor (See Note "B") (B.W. #275200)	1
8	12E-10	LKWSHR, Sender Unit	1	46 942646	-----	GASKET, Gov. to Comp. (See Note "B")	1
9	1534135	SENDER, Air Pressure (Inc. 7, 8)	1	47 527685	-----	*BRACKET (B.W. #205093)	2
10	26F-2	ELBOW, Sender to Valve	1	48 29F-1	-----	ELBOW, Tank to Tee	1
11	19F-1	BUSHING, Reducing	1	49 30F-2	-----	TEE, Hose to Elbow	1
12	19F-6	BUSHING, Reducing	1	50 1509583	-----	HOSE, Reservoir to Tube	1
13	-----	BRAKE FOOT VALVE — (See Index)	—	51 19F-3	-----	BUSHING, Reducing	1
14	13F-08	PLUG, Pipe	4	52 507815	-----	*VALVE, Safety (B.W. #205105)	1
15	13F-04	PLUG, Pipe	1	53	-----	BRAKE HEAD — (See Index)	—
16	19F-2	BUSHING, Reducing	1	54 699005	-----	CONNECTOR, Tube to Brake Head	1
17	636260	SWITCH, Stop Light	1	55 1509605	-----	TUBE, Tee to Brake — L.H.	1
18	1526342	TUBE, Power Cluster to Transmission De-Clutch	1	56 8D-10	-----	NUT, Hose to Clip	1
19	62F-3	ELBOW, Tube to Trans.	1	57 1526426	-----	HOSE, Tee to Tube	1
20	5K-308	NIPPLE, Cross to Cluster	1	58 24C-616	-----	BOLT, Tee to Frame	1
21	669829	SPACER, Power Cluster Mtg.	1	58A 4E-06	-----	LKWSHR, Tee to Frame	1
22	-----	POWER CLUSTER — (See Index)	—	59 1506264	-----	TUBE, Tee to Rear Axle	1
23	62F-3	ELBOW, Tube to Cluster	1	60 552897	-----	TEE, Tube to Tube	1
24	613750	GASKET, Plug	3	61 1502638	-----	TUBE, Tee to Pivot Hose	1
25	874007	PLUG, Master Cylinder	3	62 59F-3	-----	CONNECTOR, Tube to Cross	1
26	1526343	TUBE, Power Cluster to Tee	1	63 19F-2	-----	BUSHING, Reducing	1
27	-----	TEE (Furnished with Axle)	—	64 29K-206	-----	CROSS, Connecting	1
28	18D-06	NUT, Bracket to Frame	4	65 36F-3	-----	ADAPTER, Hose to Cross	1
29	1505580	*DRAIN VALVE (B.W. #281923)	1	66 1526344	-----	TUBE, Hose to Valve	1
30	1509580	TUBE, Tee to Brake — R.H.	1	67	-----	FRONT FRAME — See Index	—
31	527684	*RESERVOIR, Air (B.W. #215730)	1	68	-----	BRAKE HEAD — (See Index)	—
32	699005	CONNECTOR, Tube to Brake	1	69 699005	-----	CONNECTOR, Tube to Brake	1
33	-----	BRAKE HEAD — (See Index)	—	70 1509580	-----	TUBE, Brake to Tee — L.H.	1
34	1507052	HOSE, Gov. to Reservoir (See Note "A")	1	71	-----	TEE (Furnished with Axle)	—
34A 544273	-----	†HOSE, Gov. to Reservoir (See Note "B")	1	72 1502637	-----	TUBE, Hose to Tee	1
35 19F-4	-----	BUSHING, Reducing	1	73 1509605	-----	TUBE, Brake to Tee — R.H.	1
35A 31F-1	-----	†ELBOW, Hose to Reservoir	1	74 699005	-----	CONNECTOR, Tube to Brake	1
36 661417	-----	ELBOW, Valve to Reservoir	1	75	-----	BRAKE HEAD — (See Index)	—
37 593370	-----	*VALVE, Check (B.W. #228194)	1	76 522846	-----	†FLANGE, Compressor (See Note "B")	1
38 30F-3	-----	TEE, Valve to Hoses	1	77 23C-532	-----	†BOLT, Flange to Compressor (See Note "B")	2
39 593268	-----	HOSE, Reservoir to Comp. (See Note "A")	1	78 4E-05	-----	†LKWSHR, Flange to Compressor (See Note "B")	2
39A 564674	-----	HOSE, Reservoir to Comp. (See Note "B")	1				
40 33F-4	-----	ADAPTER, Comp. to Hose (See Note "A")	1				

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

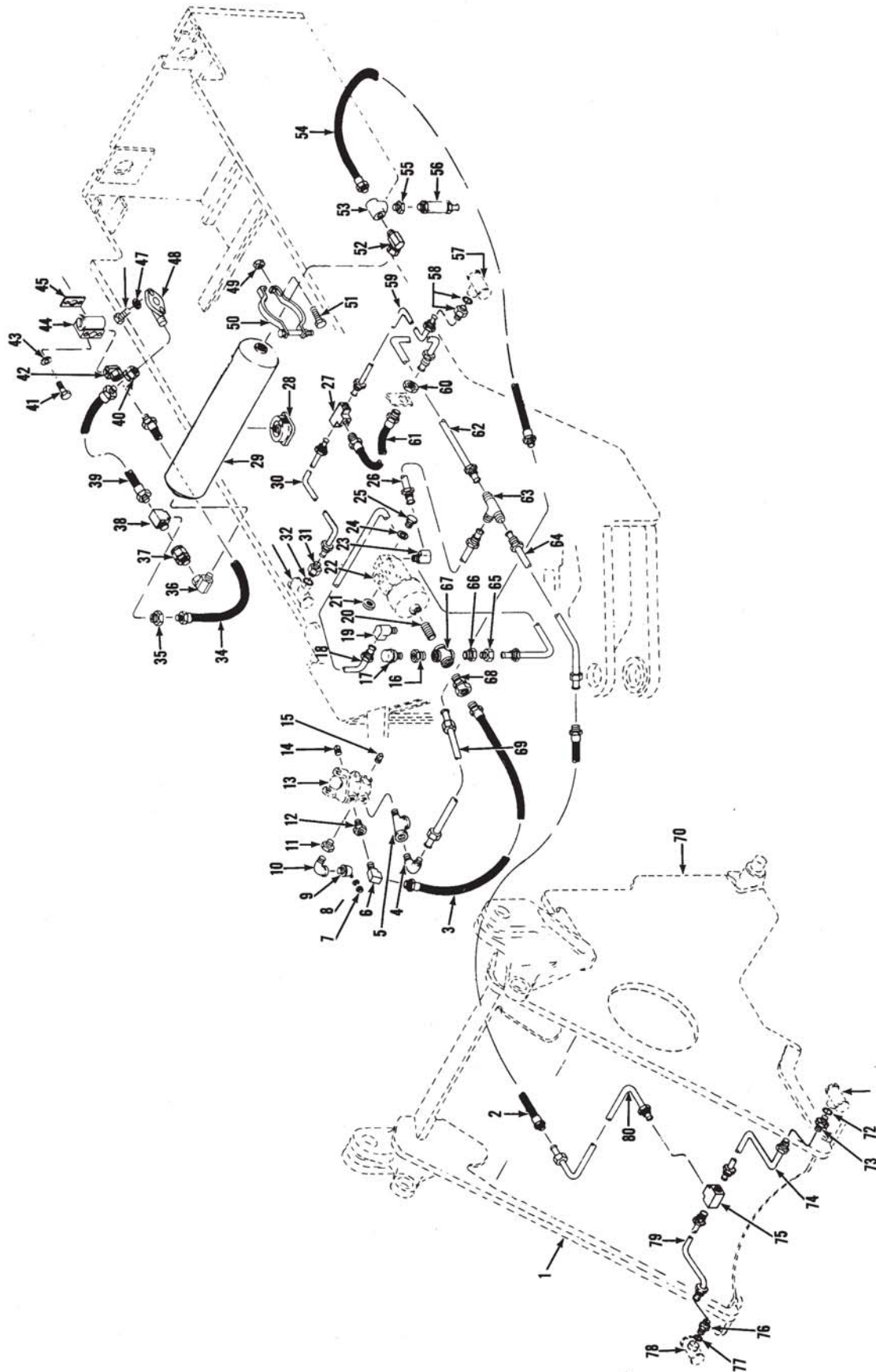
NOTE "A": For Cummins Powered Machines only.

NOTE "B": For G.M. Powered Machines only.

†Not Illustrated

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

TS-9713



BRAKE AIR LINES
For Serial: Cummins 408B171 and After; G.M. 409B181 and After

BRAKE AIR LINES
For Serial: Cummins 408B171 and After; G.M. 409B181 and After

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	FRONT FRAME — See Index	—	41	23C-544	BOLT, Gov. to Comp. (See Note "B")	2
2	1502643	HOSE, Connecting Pivot	1	42	31F-1	ELBOW, Gov. to Comp. (See Note "A")	1
3	564670	HOSE, Valve to Cluster	1	42A	26F-1	ELBOW, Gov. to Comp. (See Note "B")	1
4	42F-9	ELBOW, Tube to Tee	1	43	4E-05	LKWSHR, Gov. to Comp. (See Note "B")	2
5	30F-3	TEE, Connecting	1	44	540306	*GOVERNOR — Compressor (See Note "B") (B.W. #275200)	1
5A	5K-308	†NIPPLIE, Bushing to Adapter	1	45	942646	GASKET, Gov. to Comp. (See Note "B")	1
6	27F-2	ADAPTER, Hose to Valve	1	46	23C-532	BOLT, Flange to Comp. (See Note "B")	2
7	14D-10	NUT, Sender Unit	1	47	4E-05	LKWSHR, Flange to Comp. (See Note "B")	2
8	12E-10	LKWSHR, Sender Unit	1	48	522846	FLANGE, Comp. (See Note "B")	1
9	1534135	SENDER, Air Pressure (Inc. 7, 8)	1	49	18D-06	NUT, Bracket to Frame	4
10	26F-2	ELBOW, Sender to Valve	1	50	527685	*BRACKET (B.W. #205093)	2
11	19F-1	BUSHING, Reducing	1	51	24C-616	BOLT, Bracket to Frame	4
12	19F-6	BUSHING, Reducing	1	52	29F-2	ELBOW, Tank to Tee	1
13	-----	BRAKE FOOT VALVE — (See Index)	—	53	30F-2	TEE, Hose to Elbow	1
14	13F-08	PLUG, Pipe	4	54	1509583	HOSE, Reservoir to Tube	1
15	13F-04	PLUG, Pipe	1	55	19F-3	BUSHING, Reducing	1
16	19F-2	BUSHING, Reducing	1	56	507815	*VALVE, Safety (B.W. #205105)	1
17	636260	SWITCH, Stop Light	1	57	-----	BRAKE HEAD — (See Index)	—
18	1526342	TUBE, Power Cluster to Trans. De-Clutch	1	58	15K-4	CONNECTOR, Tube to Brake Head	1
19	62F-3	ELBOW, Tube to Trans.	1	58A	91F-4	O-RING, Connector	1
20	5K-308	NIPPLE, Cross to Cluster	1	59	1544054	TUBE, Tee to Brake — L.H.	1
21	669829	SPACER, Power Cluster Mtg.	1	60	-----	OMIT, Not Used This Application	—
22	-----	POWER CLUSTER — (See Index)	—	61	1544062	HOSE, Tube to Rear Axle	1
23	83F-3	ELBOW, Tube to Cluster	1	62	1544057	TUBE, Tee to Rear Axle	1
24	613750	GASKET, Plug	3	63	10K-4	TEE, Connecting	1
25	874007	PLUG, Master Cylinder	3	64	1544056	TUBE, Tee to Pivot	1
26	1544058	TUBE, Power Cluster to Tee	1	65	59F-3	CONNECTOR, Tube to Cross	1
27	10K-4	TEE, Hose to Tube	1	66	19F-2	BUSHING, Reducing	1
28	1505580	*DRAIN VALVE (B.W. #281923)	1	67	29K-206	CROSS, Connecting	1
29	527684	*RESERVOIR, Air (B.W. #215730)	1	68	36F-3	ADAPTER, Hose to Cross	1
30	1544053	TUBE, Tee to Brake — R.H.	1	69	1526344	TUBE, Hose to Valve	1
31	15K-4	CONNECTOR, Tube to Brake Head (Inc. 32)	1	70	-----	FRONT FRAME — See Index	—
32	91F-4	O-RING, Connector	1	71	-----	BRAKE HEAD — (See Index)	—
33	-----	BRAKE HEAD — (See Index)	—	72	91F-4	O-RING, Connecting	1
34	1507052	HOSE, Gov. to Reservoir (See Note "A")	1	73	15K-4	CONNECTOR, Tube to Brake	1
34A	544273	†HOSE, Gov. to Reservoir (See Note "B")	1	74	1544053	TUBE, Brake to Tee — L.H.	1
35	19F-4	BUSHING, Reducing	1	75	10K-4	TEE, Front Axle	1
35A	31F-1	†ELBOW, Hose to Reservoir	1	76	15K-4	CONNECTOR, Brake to Tube	1
36	731333	ELBOW, Valve to Reservoir	1	77	91F-4	O-RING, Connector	1
37	593370	*VALVE, Check (B.W. #228194)	1	78	-----	BRAKE HEAD — See P.M.S. 2522	—
38	30F-2	TEE, Valve to Hose	1	79	1544054	TUBE, Hose to Tee — R.H.	1
39	1545148	HOSE, Reservoir to Comp. (See Note "A")	1	80	1544055	TUBE, Hose to Tee	1
39A	564674	HOSE, Reservoir to Comp. (See Note "B")	1	81	26F-1	ELBOW, Breather Governor (See Note "A")	1
40	33F-4	ADAPTER, Comp. to Hose (See Note "A")	1				
40A	37F-4	†ADAPTER, Flange to Hose (See Note "B")	1				

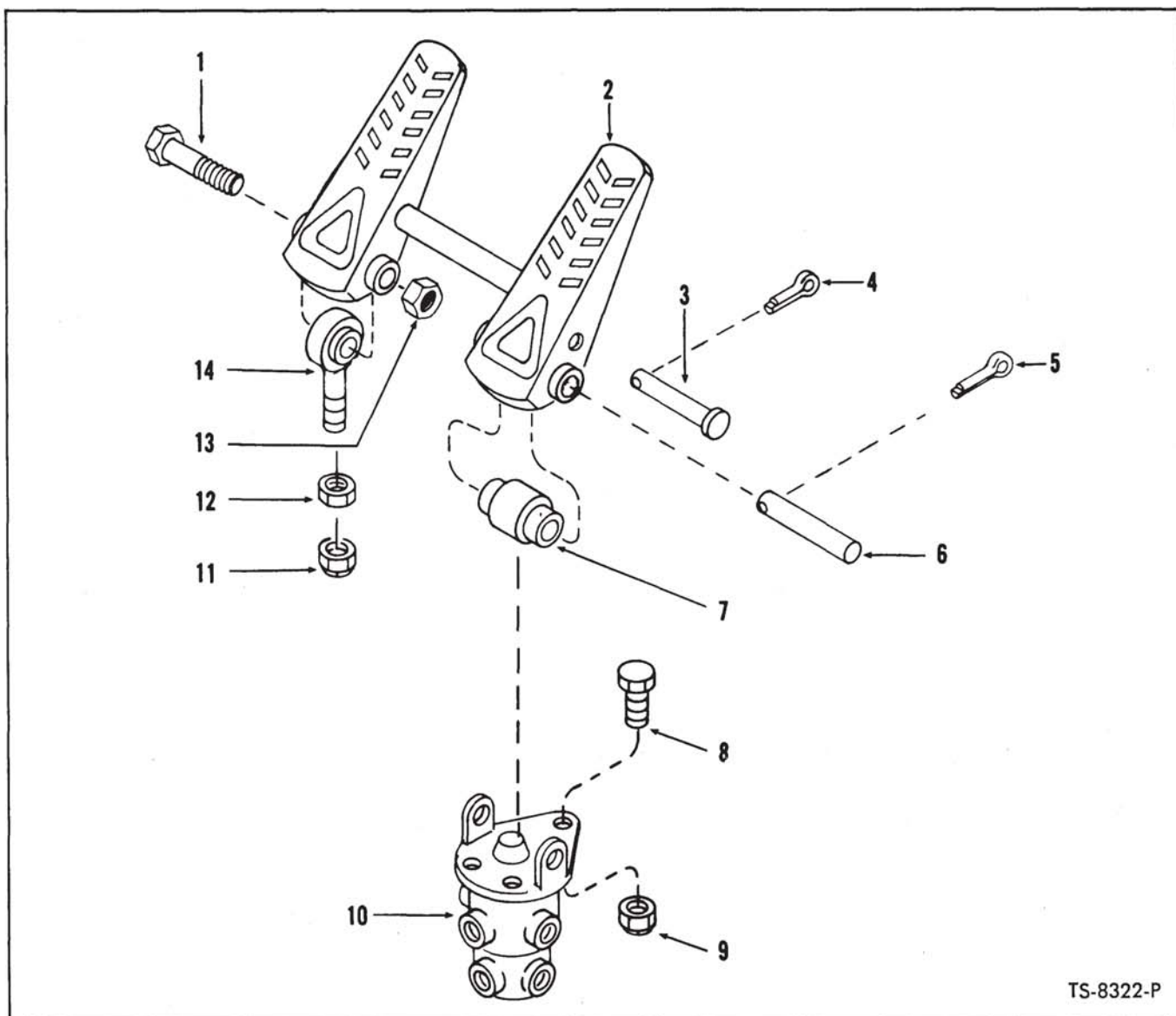
*NOTE: Your Local Authorized Bendix-Westinghouse Distributor is equipped to service components of these parts.

NOTE "A": For Cummins Powered Machines only.

NOTE "B": For G.M. Powered Machines only.

†Not Illustrated

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



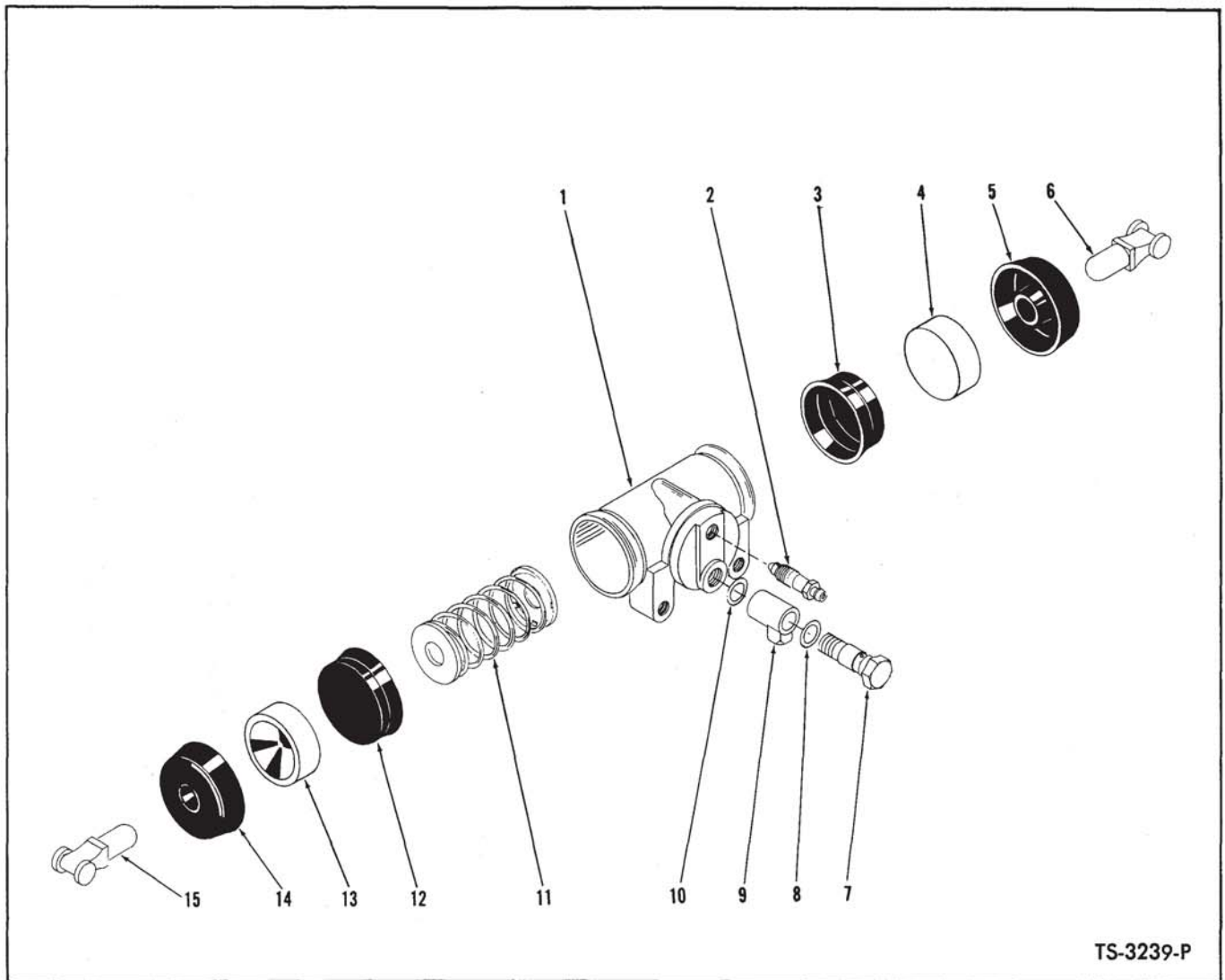
TS-8322-P

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



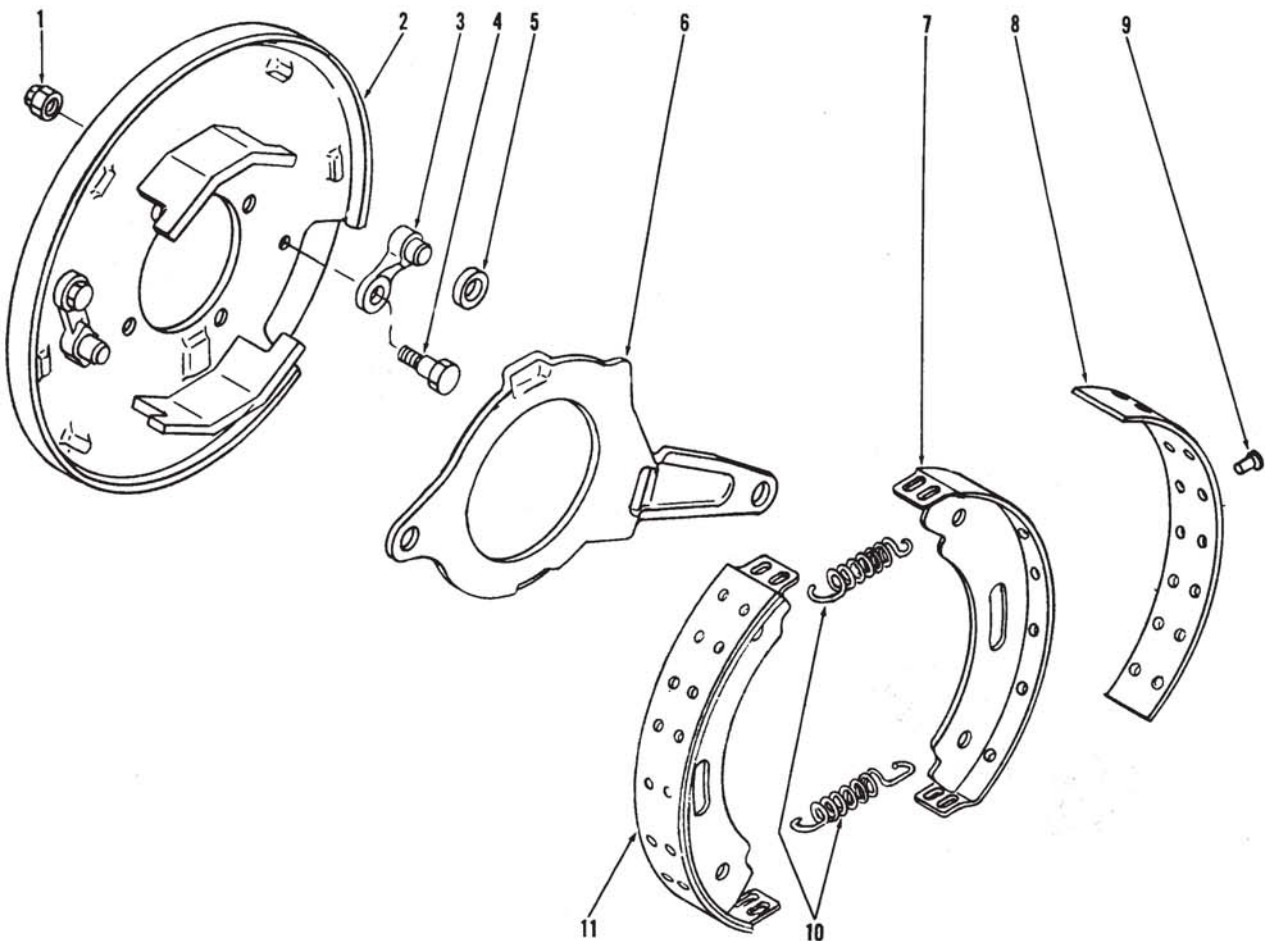
TS-3239-P

BRAKE WHEEL CYLINDER — FRONT AND REAR
For Serial: Cummins — 408A101 thru 408A999
G.M. — 409A101 thru 409A999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	112072	CYLINDER ASSY (Inc. 1 thru 15)	4	6	958553	LINK, Wheel Cyl. Connector	1
NOTE: 2 Wheel Cylinders used per axle — Quantities listed below are for 1 Wheel Cylinder				7	944966	BOLT, Fitting to Cylinder	1
B	957995	REPAIR KIT, Cylinder (Inc. 3, 5, 12, 14)	1	8	620238	GASKET, Outer Fitting	1
1	—	§ CYLINDER, Wheel — See Item "A"	—	9	944967	FITTING, Cylinder	1
2	861356	SCREW, Bleeder	1	10	613750	GASKET, Inner Fitting	1
3	—	§ CUP, Piston — See Item "B" ..	—	11	956664	SPRING, Cylinder	1
4	—	§ PISTON — See Item "A"	—	12	—	§ CUP, Piston — See Item "B" ..	—
5	—	§ BOOT — See Item "B"	—	13	—	§ PISTON — See Item "A"	—
				14	—	§ BOOT — See Item "B"	—
				15	958553	LINK, Wheel Cyl. Connector	1

§Not Sold Separately

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



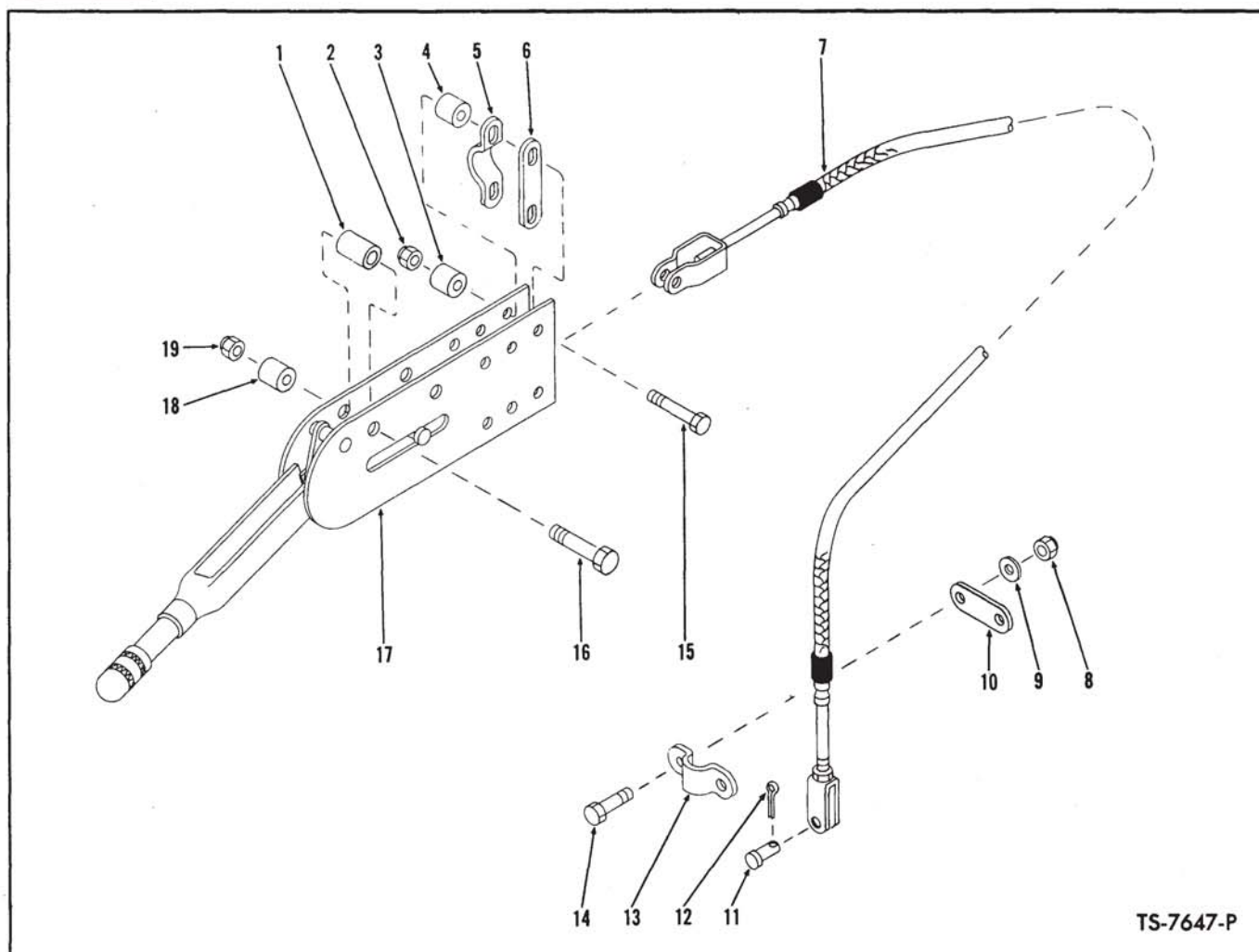
TS-3298-P

PARKING BRAKE ASSEMBLY

Item No.	Part No.	Description	No. Req'd.
A	112439	BRAKE ASSY (Inc. 1 thru 11)	1
1	-----	§NUT, Pawl to Plate — See 3	2
2	945084	PLATE, Backing	1
3	886719	BRAKE PAWL KIT (Inc. 1, 4, 5)	2
4	-----	§BOLT, Pawl to Plate — See 3	2
5	220968	ROLLER, Brake Actuating	1
6	220965	LEVER, Cam Operating	1
7	-----	§SHOE, Brake — See 11	2
8	942405	LINING KIT, Brake Shoe (Inc. 9)	2
9	945051	RIVET, Lining to Shoe	28
10	220969	SPRING, Shoe Return	2
11	872712	SHOE ASSY, Brake (Inc. 7, 8, 9)	2

§Not Sold Separately

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

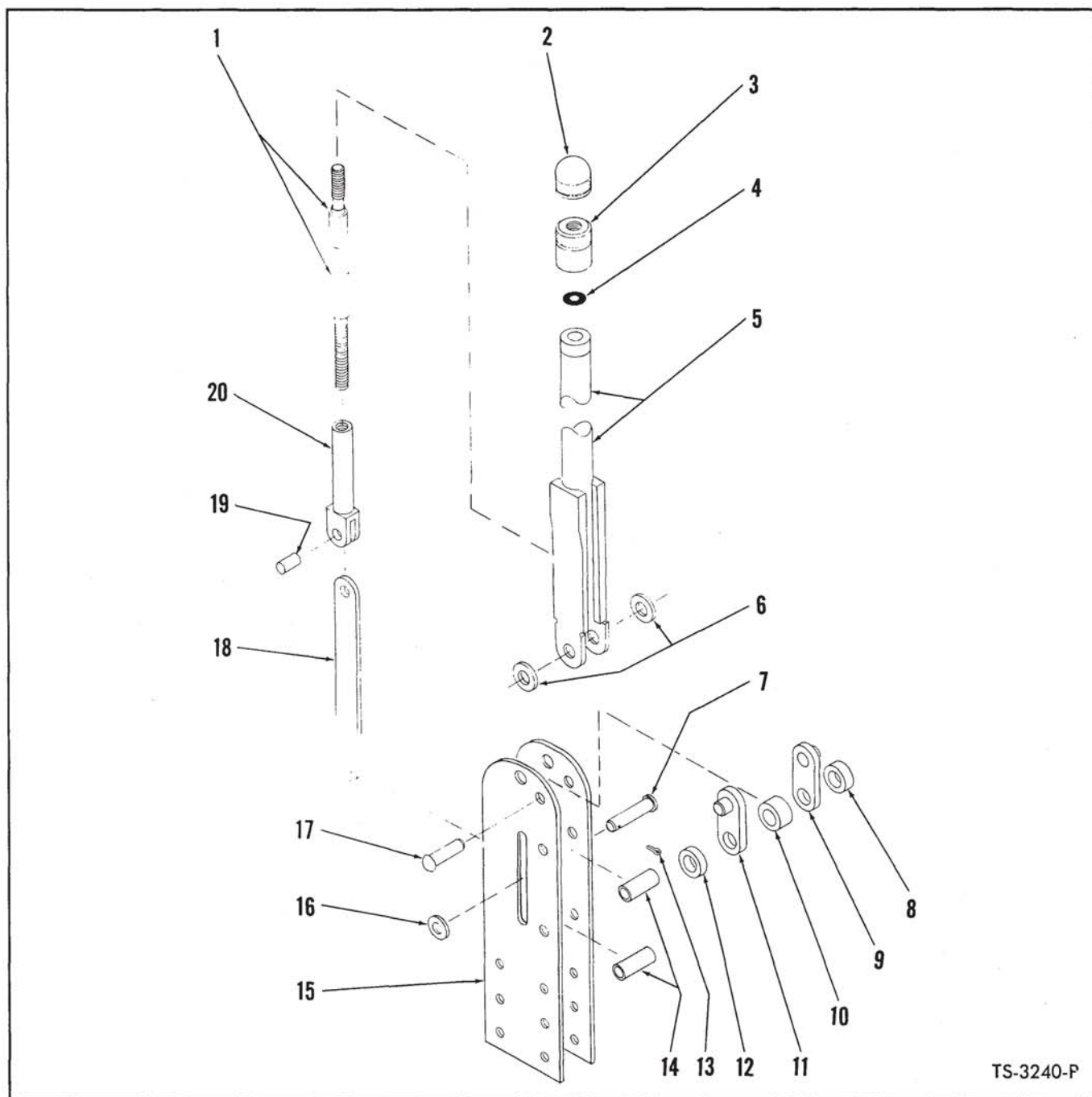


TS-7647-P

PARKING BRAKE CONTROLS

Item No.	Part No.	Description	No. Req'd.
1	545005	SPACER, Lever Mounting	2
2	18D-05	NUT, Cable Mounting	2
3	-----	OMIT, Not Used on This Application	—
4	545006	SPACER, Cable Mounting	2
5	544512	CLAMP, Cable	1
6	645092	LINK, Cable Clamp	1
7	1533794	CABLE, Parking Brake	1
8	18D-06	NUT, Clamp	2
9	-----	OMIT, Not Used on This Application	—
10	645092	LINK, Cable Clamp	1
11	4F-06106	PIN, Cable Clevis	1
12	1F-312	COTTER, Clevis Pin	1
13	544512	CLAMP, Cable	1
14	24C-620	BOLT, Cable Clamp	2
15	24C-528	BOLT, Cable Clamp	2
16	24C-644	BOLT, Lever Mounting	2
17	-----	PARKING BRAKE LEVER ASSY — See Index	—
18	545006	SPACER, Lever Mounting	2
19	18D-06	NUT, Lever Mounting	2

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



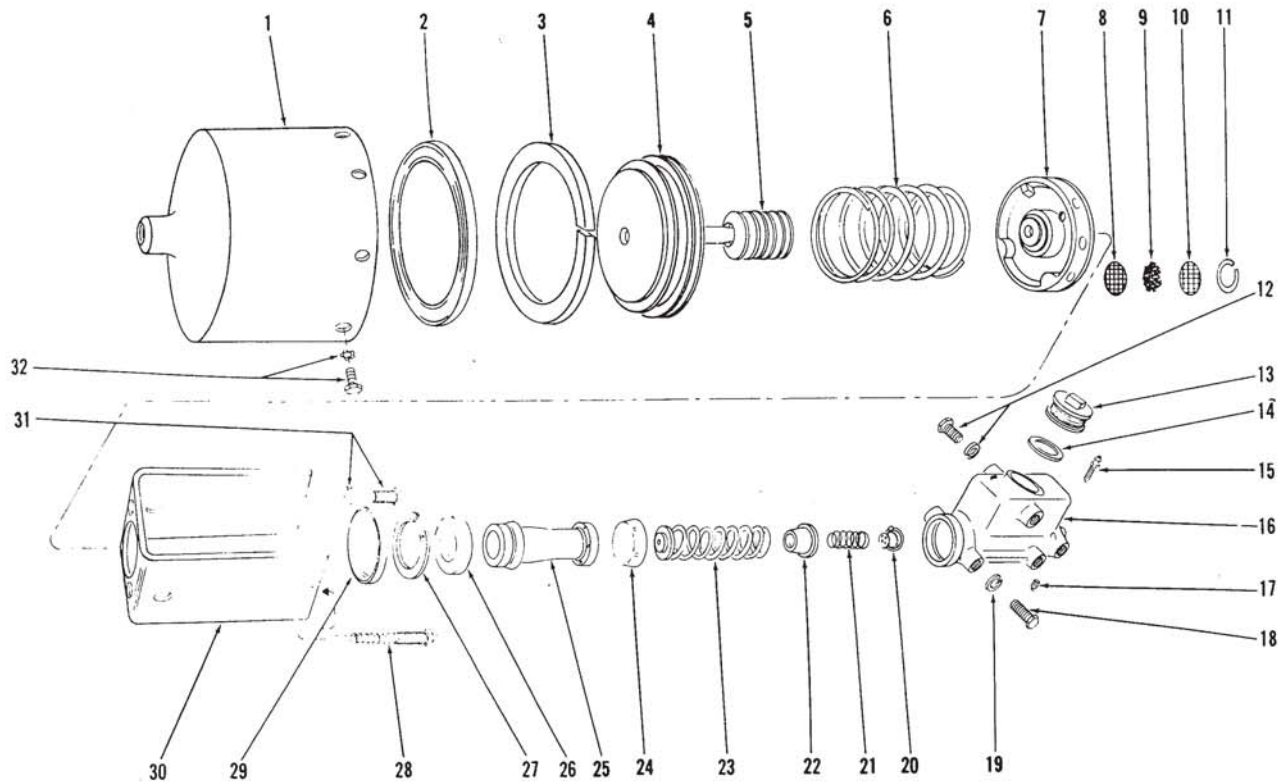
TS-3240-P

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	11	862653	BRACKET, Pivot	1
1	866349	SCREW, Adjusting	1	12	862656	SPACER, Pivot Bracket	1
2	949370	CAP, Adjusting Knob (Inc. 3)	1	13	1F-312	COTTER, Link Pivot Pin	1
3	-----	§ BASE, Adjusting Knob- See 2	1	14	645095	SPACER, Mounting Brk.	2
4	946163	WASHER, Base to Body	1	15	944969	BRACKET, Lever Mtg.	2
5	-----	§ BODY, Brake Lever- See B	1	16	25E-15	WASHER, Link Pivot Pin	1
6	25E-18	WASHER, Body to Brk.	2	17	-----	§ RIVET, Pivot - See A	1
7	862738	PIN, Adj. Screw Link Pivot	1	18	862652	LINK, Adjusting Screw	1
8	862656	SPACER, Pivot Bracket	1	19	941238	PIN, Link to Tube	1
9	862653	BRACKET, Pivot	1	20	-----	§ TUBE, Adj. Screw - See A	1
10	862655	SPACER, Pivot Bracket	1				

§ Not Sold Separately

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



TS-3227-P

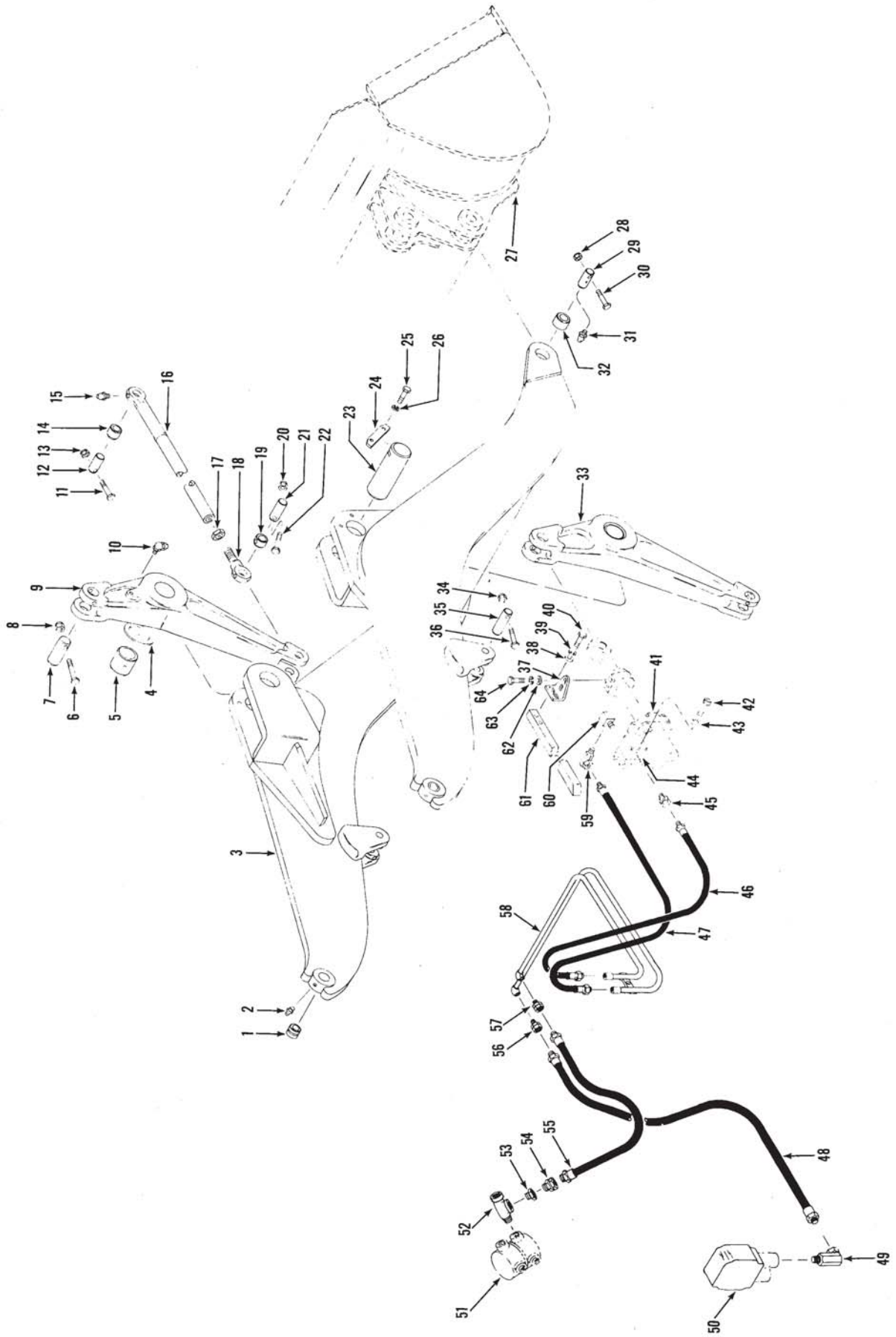
POWER CLUSTER ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	540555	POWER CLUSTER ASSY (Inc. 1 thru 32A)	1	18	2C-714	BOLT, Cylinder to Brk.	2
1	945033	SHELL, Air Cylinder	1	19	4E-07	LKWSHR, Cylinder to Brk.	2
2	-----	§ CUP, Piston — See 33	1	20	-----	§ VALVE, Check — See 33	1
3	-----	§ WIPER, Piston — See 33	1	21	945026	SPRING, Check Valve	1
4	945032	PISTON, Air Cylinder	1	22	945042	RETAINER, Spring	1
5	-----	§ BOOT, Piston — See 33	1	23	874001	SPRING, Piston Return	1
6	945031	SPRING, Piston Return	1	24	-----	§ CUP, Piston — See 33	1
7	945037	HEAD ASSY, Air Cylinder (Inc. 8 thru 11)	1	25	-----	§ PISTON, Master Cylinder — See 33	1
8	945029	SCREEN, Filtering	1	26	874003	PLATE, Piston Stop	1
9	992163	HAIR, Filtering	1	27	874028	RING, Stop Plate Lock	1
10	945029	SCREEN, Filtering	1	28	945030	INDICATOR, Stroke	1
11	992164	RING, Filter Retaining	1	29	945023	BAND, Sealing	1
12	2C-714	BOLT, Cylinder to Brk.	2	30	945024	BRACKET, Cyl. Support	1
12A	4E-07	LKWSHR, Cylinder to Brk.	2	31	1C-616	BOLT, Brk. to Head	3
13	860205	CAP, Filler	1	31A	4E-06	LKWSHR, Brk. to Head	4
14	850287	GASKET, Filler Cap	1	32	1C-510	BOLT, Head to Cyl.	8
15	851806	SCREW, Cylinder Bleeder	1	32A	6E-05	LKWSHR, Head to Cyl.	8
16	945800	CASTING, Master Cylinder ..	1	33	945025	REPAIR KIT (Inc. 2, 3, 5, 20, 24, 25)	1
17	10F-02	PLUG, Master Cylinder	1				

§Not Sold Separately

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

TS-8080-P



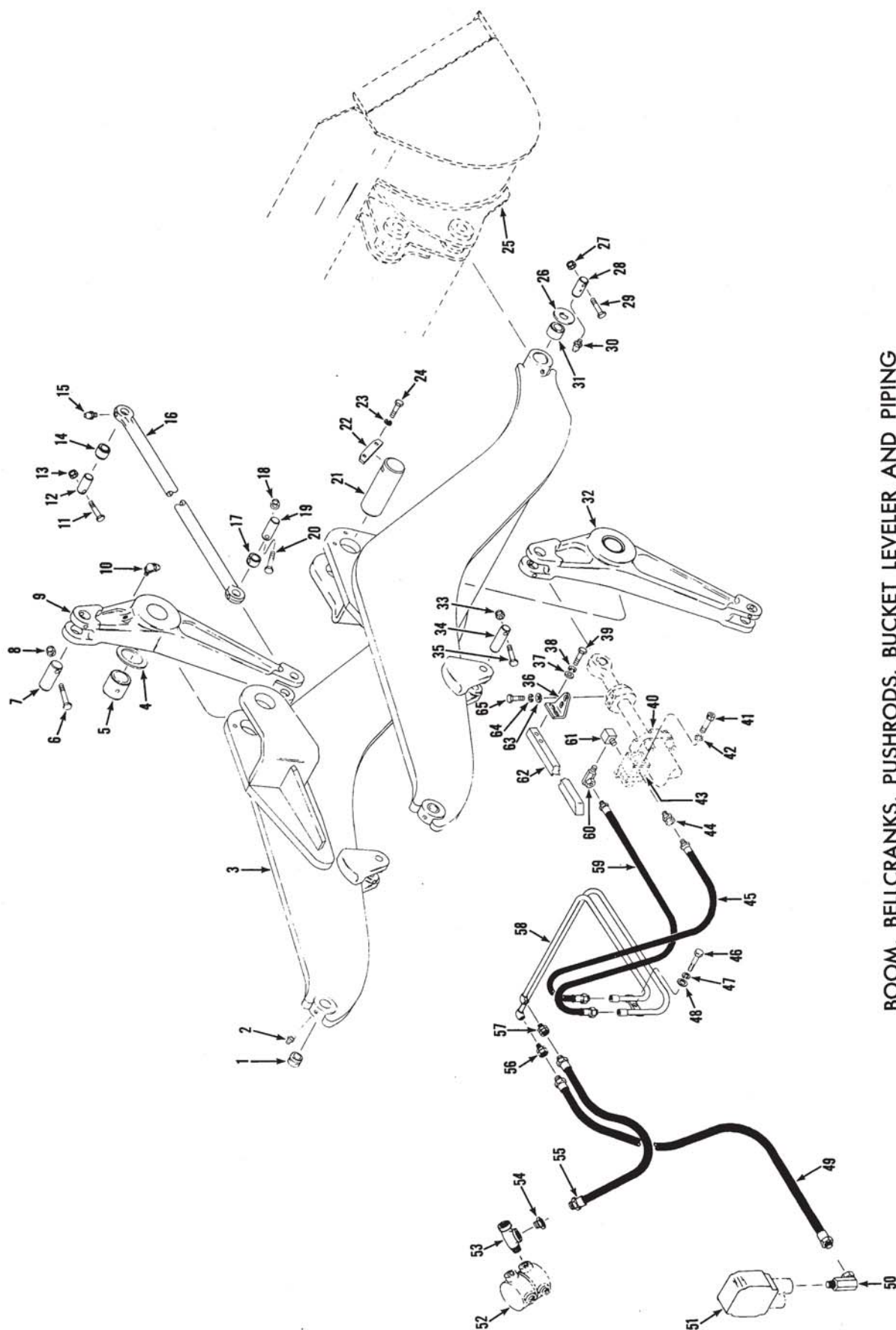
BOOM, BELLCRANKS, PUSHRODS, BUCKET LEVELER AND PIPING
For Serial: Cummins 408A101 thru 408B299 — G.M. 409A101 thru 409B299

**BOOM, BELLCRANKS, PUSHRODS, BUCKET LEVELER AND PIPING
FOR SERIAL: CUMMINS — 408A101 thru 408B299
G. M. — 409A101 thru 409B299**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1521559	BUSHING, Boom Arm	2	35	514921	PIN, Boom Cyl. to Boom	2
2	10H-25	FITTING, Boom Arm Grease..	2	36	24C-656	BOLT, Pin Retaining	2
3	1537931	BOOM ASSY (Inc. 1 & 32)	1	37	1528870	BRACKET, Leveler Cam	1
3A	1547964	†‡SPACER, Boom to Bucket	—	38	656672	WASHER, Cam to Bracket	2
3B	1547891	†‡SPACER, Boom to Frame	—	39	4E-06	LKWSHR, Cam to Bracket	2
4	1535341	SPACER, Bellcrank to Boom..	2	40	24C-616	BOLT, Cam to Bracket	2
5	1502644	BUSHING, Bellcrank Pivot	2	41	-----	BUCKET CYLINDER (See Index)	—
6	24C-876	BOLT, Pin Retaining	2	42	86G-1010	SCREW, Air Valve Mtg.	4
7	587900	PIN, Cylinder to Bellcrank	2	43	12E-10	LKWSHR, Air Valve Mtg.	4
8	18D-08	NUT, Pin Retaining	2	44	-----	AIR VALVE ASSY, Bucket Leveler — See Index	1
9	1502909	BELLCRANK ASSY — L.H. (Inc. 5)	1	45	36F-2	ADAPTER, Hose to Valve	1
10	10H-25	FITTING, Bellcrank Grease....	2	46	559820	HOSE, Tube to Air Valve	1
11	24C-864	BOLT, Pin Retaining	2	47	1502687	HOSE, Tube to Air Valve	1
12	542631	PIN, Pushrod to Bucket	2	48	1502686	HOSE, Control Valve to Tube	1
13	18D-08	NUT, Pin Retaining	2	49	31F-2	ADAPTER, Hose to Control Valve	1
14	587908	BUSHING, Pushrod Eye	2	50	-----	CONTROL VALVE (See Index)	—
15	10H-25	FITTING, Pushrod Grease....	4	51	-----	BRAKE FOOT VALVE (See Index)	—
16	1504434	PUSHROD ASSY (Inc. 14)	2	52	17F-4	TEE, Brake Valve	1
17	8D-24	NUT, Eye Jam	2	53	19F-5	BUSHING, Reducing	1
18	570850	EYE ASSY, Pushrod Adjusting (Inc. 19)	2	54	36F-2	ADAPTER, Hose to Bushing	1
19	587908	BUSHING, Pushrod Eye	2	55	1502687	HOSE, Brake Valve to Tube ..	1
20	18D-06	NUT, Pin Retaining	2	56	36F-2	ADAPTER, Hose to Tube	1
21	587901	PIN, Pushrod to Bellcrank	2	57	36F-2	ADAPTER, Hose to Tube	1
22	24C-668	BOLT, Pin Retaining	2	58	1502690	TUBE ASSY, Bucket Leveler ..	1
23	1529902	PIN, Bellcrank to Boom	2	58A	24C-616	†BOLT, Tube Mounting	2
24	573525	LOCK PLATE, Pin Retaining ..	2	58B	656672	†WASHER, Tube Mounting	2
25	24C-1224	BOLT, Lock Plate Retaining..	4	58C	4E-06	†LKWSHR, Tube Mounting	2
26	4E-12	LKWSHR, Lock Plate	4	59	31F-2	ADAPTER, Hose to Elbow	1
27	-----	BUCKET ASSY (See Index) ..	—	60	29F-1	ELBOW, Adapter to Valve	1
28	18D-08	NUT, Pin Retaining	2	61	1528869	CAM, Bucket Leveler	1
29	568483	PIN, Boom to Bucket	2	62	656672	WASHER, Bracket Mtg.	2
30	24C-880	BOLT, Pin Retaining	2	63	4E-06	LKWSHR, Bracket Mtg.	2
31	10H-25	FITTING, Bucket Pivot Grease	2	64	24C-616	BOLT, Bracket Mtg.	2
32	568482	BUSHING, Bucket Pivot	2				
33	1502908	BELLCRANK ASSY — R.H. (Inc. 5)	1				
34	18D-06	NUT, Pin Retaining	2				

†Not Illustrated
‡As Required

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



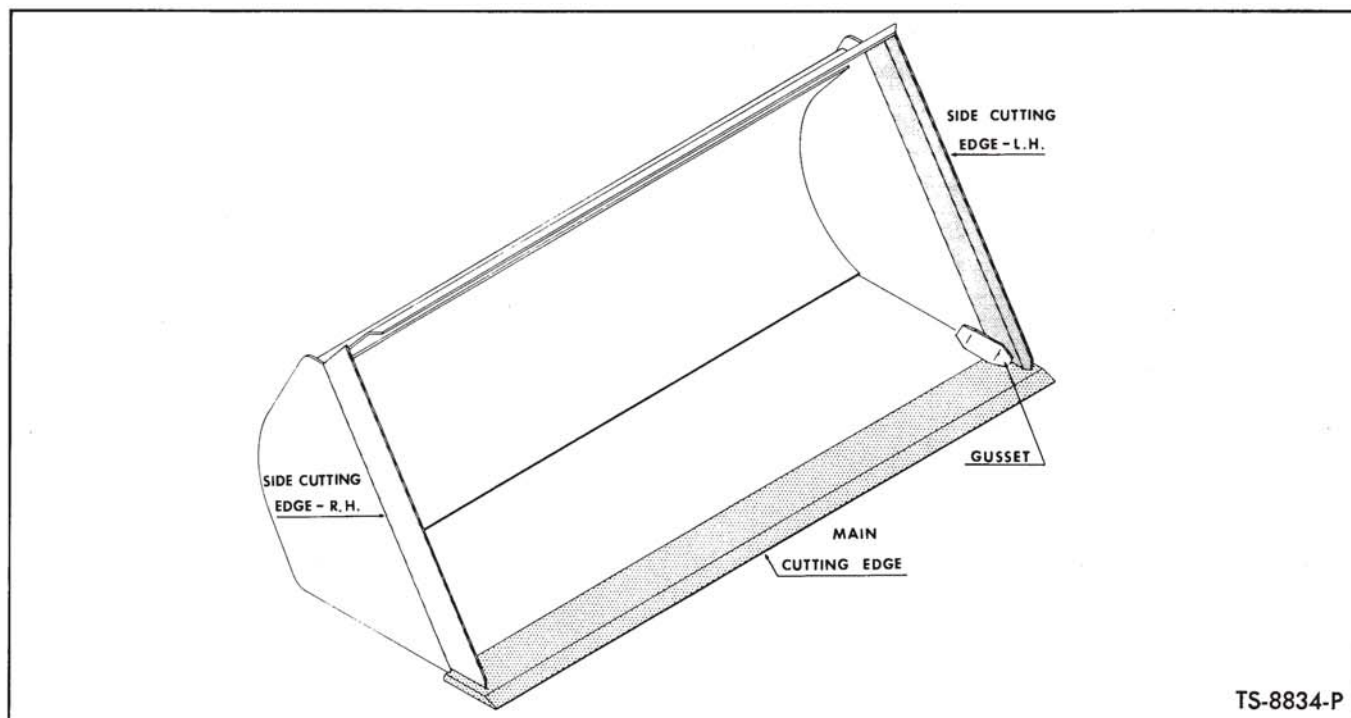
BOOM, BELLCRANKS, PUSHRODS, BUCKET LEVELER AND PIPING
For Serial No. Cummins 408B300 and After
For Serial No. G.M. 409B300 and After

BOOM, BELLCRANKS, PUSHRODS, BUCKET LEVELER AND PIPING
For Serial No. — Cummins 408B300 and After
For Serial No. — G.M. 409B300 and After

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1521559	BUSHING, Boom Arm	2	34	514921	PIN, Boom Cylinder to Boom	2
2	10H-25	FITTING, Boom Arm Grease	2	35	24C-656	BOLT, Pin Retaining	2
3	1545740	BOOM ASSY (Inc. 1 & 31)	1	36	1528870	BRACKET, Leveler Cam	1
4	1535341	SPACER, Bellcrank to Boom	2	37	656672	WASHER, Cam to Bracket	2
5	1509735	BUSHING, Bellcrank Pivot	2	38	4E-06	LKWSHR, Cam to Bracket	2
6	24C-876	BOLT, Pin Retaining	2	39	24C-616	BOLT, Cam to Bracket	2
7	587900	PIN, Cylinder to Bellcrank	2	40	———	BUCKET CYLINDER — See Index	—
8	18D-08	NUT, Pin Retaining	2	41	86G-1010	SCREW, Air Valve Mounting	4
9	1537855	BELLCRANK ASSY — L.H. (Inc. 5)	1	42	12E-10	LKWSHR, Air Valve Mounting	4
10	10H-25	FITTING, Bellcrank Grease	2	43	———	AIR VALVE ASSY, Bucket Leveler — See Index	—
11	24C-864	BOLT, Pin Retaining	2	44	36F-2	ADAPTER, Hose to Valve	1
12	542631	PIN, Pushrod to Bucket	2	45	559820	HOSE, Tube to Air Valve	1
13	18D-08	NUT, Pin Retaining	2	46	24C-616	BOLT, Tube Mounting	2
14	587908	BUSHING, Pushrod	2	47	4E-06	LKWSHR, Tube Mounting	2
15	10H-25	FITTING, Pushrod Grease	4	48	656672	WASHER, Tube Mounting	2
16	1537857	PUSHROD ASSY (Inc. 14)	2	49	1502686	HOSE, Control Valve to Tube	1
17	587908	BUSHING, Pushrod	2	50	31F-2	ADAPTER, Hose to Control Valve	1
18	18D-06	NUT, Pin Retaining	2	51	———	CONTROL VALVE — See Index	—
19	587901	PIN, Pushrod to Bellcrank	2	52	———	BRAKE FOOT VALVE — See Index	—
20	24C-668	BOLT, Pin Retaining	2	53	17F-4	TEE, Brake Valve	1
21	1529902	PIN, Bellcrank to Boom	2	54	19F-5	BUSHING, Reducing	1
22	573525	LOCK PLATE, Pin Retaining	2	55	1502687	HOSE, Brake Valve to Tube	1
23	4E-12	LKWSHR, Lock Plate	4	56	36F-2	ADAPTER, Hose to Tube	1
24	24C-1224	BOLT, Lock Plate	4	57	36F-2	ADAPTER, Hose to Tube	1
25	———	BUCKET ASSY — See Index	—	58	1502690	TUBE ASSY, Bucket Leveler	1
26	1547964	‡SPACER, Boom to Bucket	—	59	1502687	HOSE, Tube to Air Valve	1
27	18D-08	NUT, Pin Retaining	2	60	31F-2	ADAPTER, Hose to Elbow	1
28	1545620	PIN, Boom to Bucket	2	61	29F-1	ELBOW, Adapter to Valve	1
29	24C-880	BOLT, Pin Retaining	2	62	1528869	CAM, Bucket Leveler	1
30	10H-25	FITTING, Bucket Pivot Grease	2	63	656672	WASHER, Bracket Mounting	2
31	1522734	BUSHING, Bucket Pivot	2	64	4E-06	LKWSHR, Bracket Mounting	2
32	1537856	BELLCRANK ASSY R.H. (Inc. 5)	1	65	24C-616	BOLT, Bracket Mounting	2
33	18D-06	NUT, Pin Retaining	2				

‡As Required

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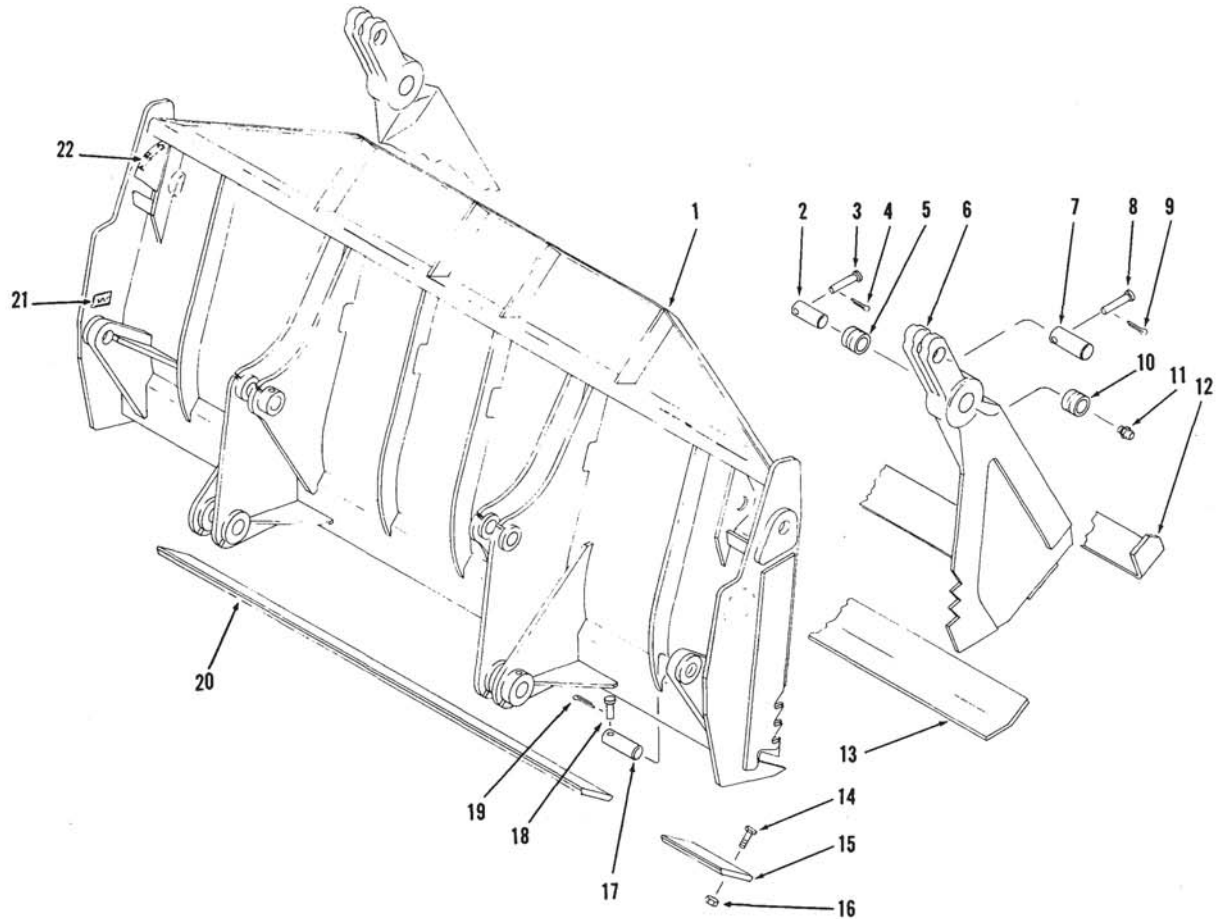
TS-8834-P

BUCKET ASSEMBLY DATA

BUCKET				MAIN CUTTING EDGE		SIDE CUTTING EDGES			GUSSET
Item No.	S.A.E. Heaped Capacity Cu. Yd.	Width	Part No.	Part No.	Size	L.H. Part No.	R.H. Part No.	Size	2 Req'd. Part No.
1	1¾	90"	1525024	544657	1" x 9" x 91"	570110	570108	¾" x 6" x 42¾"	*1536140
2	2	95¼"	1525082	551765	1" x 9" x 97"	570110	570108	¾" x 6" x 42¾"	1536140
3	2¼	95¼"	1527394	551765	1" x 9" x 97"	1527388	1527389	¾" x 6" x 43¾"	1536140
4	2½	95¼"	1525955	551765	1" x 9" x 97"	570242	570240	¾" x 6" x 46¼"	1536140
5	3½	111½"	1520032	545222	1" x 9" x 112¼"	1520012	1520011	¾" x 6" x 48¾"	*1536140
6	3½	111½"	1535665	545222	1" x 9" x 112¼"	1535599	1535657	¾" x 6" x 47½"	1536140
7	2¾	95¼"	1535609	551765	1" x 9" x 97"	1535601	1535600	¾" x 6" x 47"	1536140
8	4	111½"	1535838	545222	1" x 9" x 112¼"	1535714	1535715	¾" x 6" x 49½"	1536140
9	3	103¼"	1503531	1544189	1" x 9" x 104"	1535601	1535600	¾" x 6" x 47"	1536140
10	2	96"	1546085	1544138	1¾" x 10" x 96"	570110	570108	¾" x 6" x 42¾"	1536140
11	2¼	96"	1545912	1544138	1¾" x 10" x 96"	1527388	1527389	¾" x 6" x 43¾"	1536140
12	2½	96"	1545660	1544138	1¾" x 10" x 96"	570242	570240	¾" x 6" x 46¼"	1536140
13	3½	112¾"	1545914	545222	1¾" x 10" x 112¾"	1535599	1535657	¾" x 6" x 47½"	1536140
14	2¾	96"	1545911	1544138	1¾" x 10" x 96"	1535601	1535600	¾" x 6" x 47"	1536140
15	4	112¾"	1545910	545222	1¾" x 10" x 112¾"	1535714	1535715	¾" x 6" x 49½"	1536140
16	3	104"	1545913	1544189	1¾" x 10" x 104"	1535601	1535600	¾" x 6" x 47"	1536140

*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

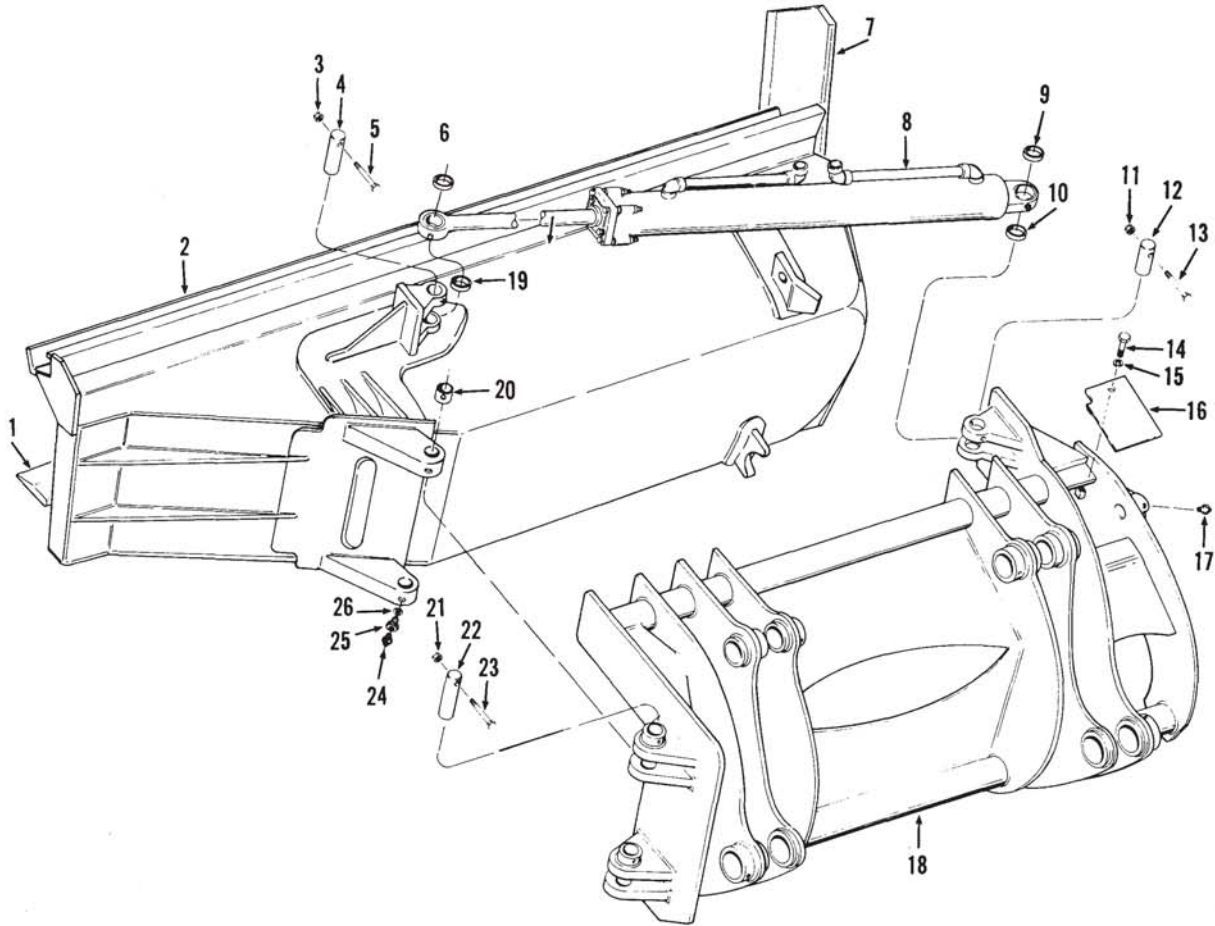


TS-7938

BUCKET ASSEMBLY – DROTT (4 in 1)

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
A	1510936	BUCKET ASSY (Inc. 1 thru 24 & all items listed on pages 3, 4, 5)	1	11	10H-25	FITTING, Grease	2
1	1512023	BUCKET BACK ASSY (Inc. 14 thru 16, 20)	1	12	1533390	CUTTING EDGE – Front, Bucket Front	1
2	1533353	PIN, Bucket Front to Bucket Back	2	13	1533386	CUTTING EDGE – Rear, Bucket Front	1
3	1534323	PIN, Clevis	2	14	513603	BOLT, Plow (Inc. 16)	19
4	1F-416	COTTER	2	15	1533344	CORNER BIT, Bucket Back	2
5	1533356	BUSHING, Bucket Front	2	16	1D-12	NUT, Plow Bolt	19
6	1533397	BUCKET FRONT ASSY (Inc. 5, 6A, 10, 12, 13)	1	17	1533343	PIN, Cylinder to Bucket Back	2
6A	1533378	HINGE EAR	2	18	1534322	PIN, Clevis	2
7	1533352	PIN, Cylinder to Bucket Front	2	19	1F-416	COTTER	2
8	1534323	PIN, Clevis	2	20	1533391	CUTTING EDGE, Bucket Back	1
9	1F-416	COTTER	2	21	1533342	DECAL, Clean	2
10	1533356	BUSHING, Bucket Front	2	22	1533388	DECAL, Clam Opening	1
				23	1533395	†DECAL, Bucket Cylinder	1
				24	1506559	†INDICATOR, Bucket Cylinder	1

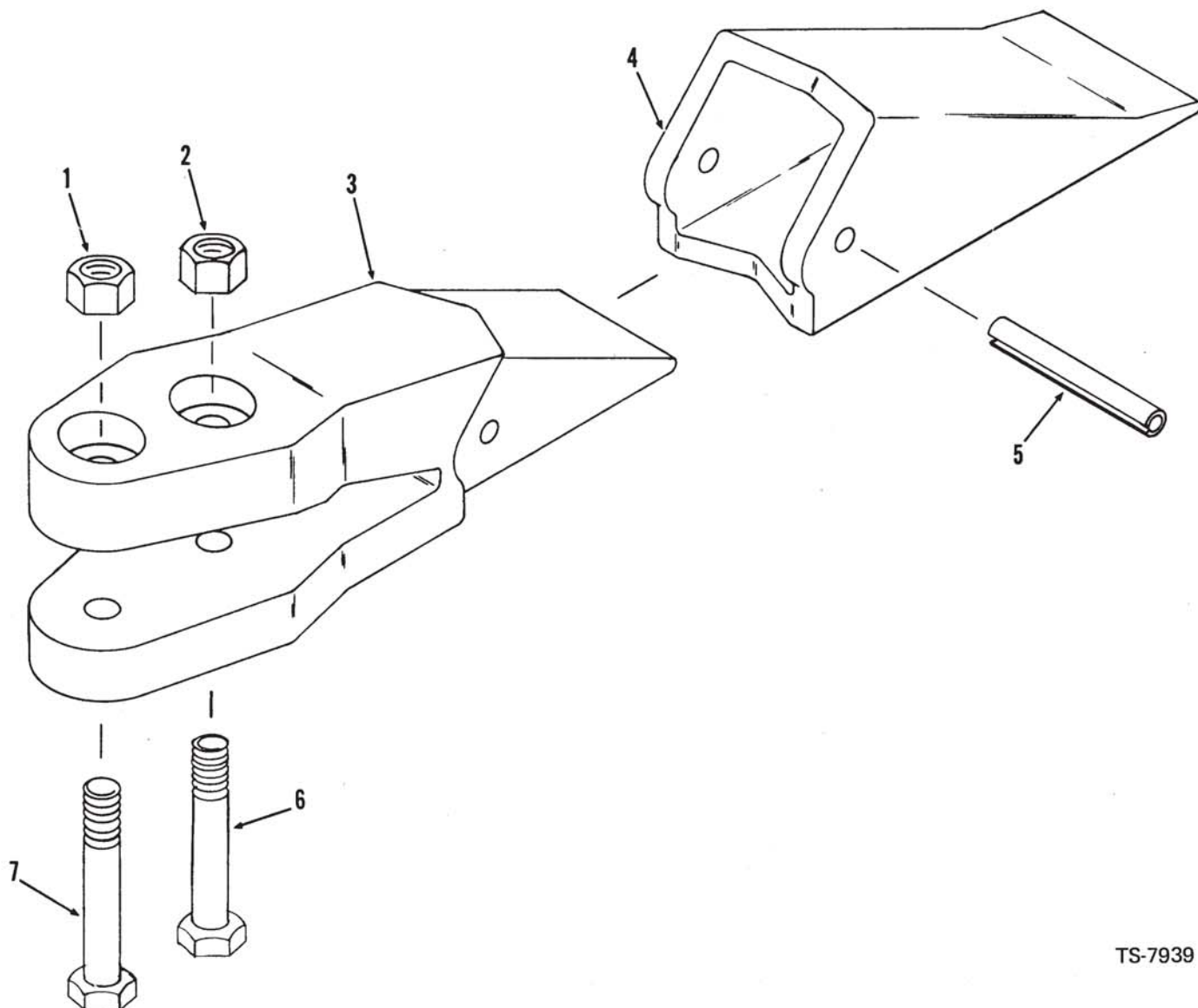
†Not Illustrated



TS-11334

BUCKET, CARRIER & CYLINDER ASSEMBLY (Side Dump)

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
A	1539354	BUCKET, CARRIER & CYLINDER ASSY (Inc. 1 thru 26)	1	13	24C-660	BOLT, Pin	1
1	555001	CUTTING EDGE, Main	1	14	24C-616	BOLT, Plate to Carrier	1
2	1539381	BUCKET ASSY (Inc. 1, 7, 20, 25, 26)	1	15	4E-06	LKWSHR, Plate to Carrier	1
3	18D-06	NUT, Pin	1	16	1539368	PLATE, Cover	1
4	588823	PIN, Side Dump Cylinder	1	17	10H-35	FITTING, Grease	1
5	24C-660	BOLT, Pin	1	18	1539376	CARRIER ASSY	1
6	568303	SLEEVE, Cylinder Pin	1	19	568303	SLEEVE, Cylinder Pin	1
7	555134	CUTTING EDGE, Side	1	20	532369	BUSHING, Pivot Bracket	2
8	----	CYLINDER, Side Dump — See Index —	—	21	18D-06	NUT, Pin	2
9	568303	SLEEVE, Cylinder Pin	1	22	519268	PIN, Carrier to Bucket	2
10	568303	SLEEVE, Cylinder Pin	1	23	24C-660	BOLT, Pin	2
11	18D-06	NUT, Pin	1	24	10H-35	FITTING, Grease	2
12	588823	PIN, Side Dump Cylinder	1	25	532118	BOLT, Pivot Bracket	2
				26	7E-08	LKWSHR, Pivot Bracket	2



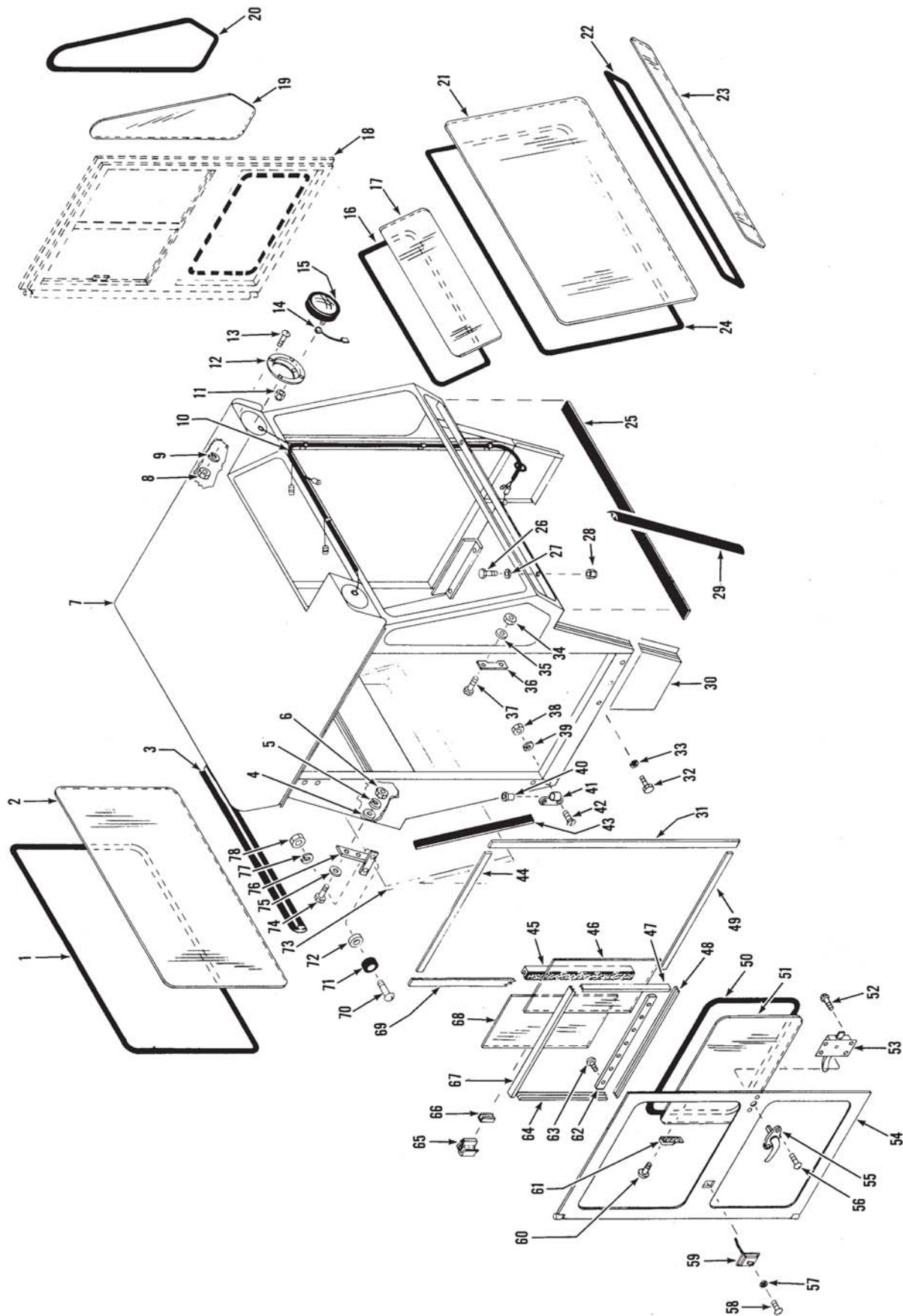
TS-7939

BUCKET TOOTH ASSEMBLY

Item	Part No.	Description	Qty.
A	1533335	BUCKET TOOTH ASSY (Inc. 1 thru 7)	9
1	1D-10	NUT, Bolt Attaching	9
2	1D-10	NUT, Bolt Attaching	9
3	----	ADAPTER, Tooth — See "A"	—
4	1533336	TIP (Tooth Point)	9
5	730131	PIN, Flex	9
6	1C-1048	BOLT, Tooth Attaching	9
7	1C-1052	BOLT, Tooth Attaching	9

TS-8345-P

CAB ASSEMBLY



CAB ASSEMBLY

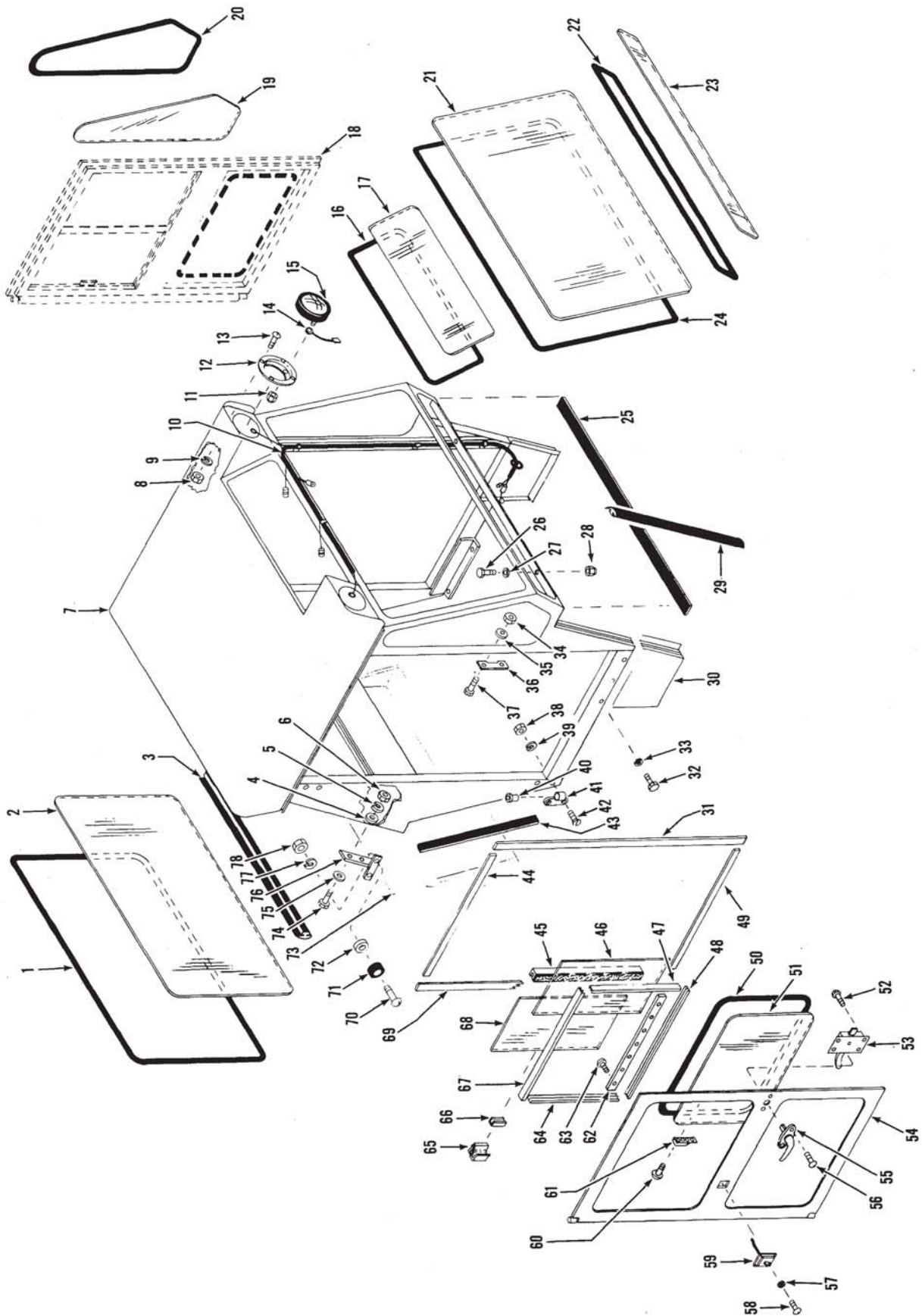
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1536572	CAB ASSY (Inc. 1 thru 9, 12, 13, 16 thru 25, 29 thru 72, 74 thru 78)	1	20	569694	MOULDING, Quarter Window	10 ft.
1	569694	MOULDING, Rear Window	11 ft.	21	-----	§GLASS PATTERN, Upper Windshield (See 79)	—
2	-----	§GLASS PATTERN, Rear Window (See 79)	—	22	569694	MOULDING, Lower Windshield	10 ft.
3	1521846	WEATHERSTRIP, Cab — Rear	5 ft.	23	-----	§GLASS PATTERN, Lower Windshield (See 79)	—
4	25E-13	WASHER, Door Latch Strike Attaching	4	24	569694	MOULDING, Upper Windshield	12 ft.
5	4E-04	LKWSHR, Door Latch Strike Attaching	4	25	1521844	WEATHERSTRIP, Cab Front	4 ft.
6	1D-04	NUT, Door Latch Strike Attaching	4	26	24C-628	BOLT, Cab Attaching (Front)	2
7	-----	§CAB (See "A")	—	26A	24C-624	†BOLT, Cab Attaching (Side)	4
8	12D-10	NUT, Head Lamp Adapter Attaching	8	27	616783	WASHER, Cab Attaching	6
9	17E-10	LKWSHR, Head Lamp Adapter Attaching	8	28	18D-06	NUT, Cab Attaching	6
10	1544318	WIRING HARNESS, Cab	1	29	569692	WEATHERSTRIP, Cab Front	5 ft.
10A	541988	†CLIP, Wiring Harness	4	30	568686	PANEL, Lower Quarter — R.H.	1
10B	515069	†GROMMET, Cab Wiring Harness	1	30A	568687	†PANEL, Lower Quarter — L.H.	1
11	50D-10	NUT, Head Lamp Attaching	6	31	943623	WEATHERSTRIP, Door — Front	7 ft.
12	568675	ADAPTER, Head Lamp	2	32	23C-410	BOLT, Quarter Panel to Cab	6
13	85G-1012	SCREW, Head Lamp Adapter	8	33	4E-04	LKWSHR, Quarter Panel to Cab	6
14	540882	WIRE, Head Lamp Ground	2	34	1D-04	NUT, Door Lock Strike Attaching	4
15	547006	HEAD LAMP ASSY — 12 VOLT (Inc. 15A & 15B)	2	35	4E-04	LKWSHR, Door Lock Strike Attaching	4
15A	551242	†SEALED UNIT, Head Lamp	2	36	945576	STRIKE, Door Lock	2
15B	944977	†RETAINER, Head Lamp	2	37	47G-412	SCREW, Door Lock Strike Attaching	4
16	569694	MOULDING, Roof Glass	6 ft.	38	1D-05	NUT, Cab Door Hinge Attaching	8
17	-----	§GLASS PATTERN, Roof (See 79)	—	39	4E-05	LKWSHR, Cab Door Hinge Attaching	8
18	-----	DOOR (See 54)	—	40	568700	BUSHING, Cab Door Hinge	4
19	-----	§GLASS PATTERN, Quarter Window (See 79)	—	41	945555	HINGE, Cab Door — R.H. Upper & L.H. Lower	2

§Not Sold Separately
†Not Illustrated

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

TS-8345-P

CAB ASSEMBLY



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.		61	557465	STRIKE, Window Lock	4
		Upper & R.H. Lower.....	2	62	945577	RETAINER, Glass Channel	2
42	76G-512	SCREW, Cab Door Hinge		63	65G-1008	SCREW, Retainer to Door	14
		Attaching.....	8	64	569696	CHANNEL, Side Glass Run (Rear)	4 ft.
43	943623	WEATHERSTRIP, Cab Rear	3 ft.	65	589571	LOCK, Sliding Glass	4
44	943623	WEATHERSTRIP, Door		66	589572	CHANNEL, Side Glass Run (Upper)	4 ft.
		Upper.....	5 ft.	67	569696	RUBBER, Lock to Glass Mounting	1 ft.
45	139149	CHANNEL, Glass Divider.....	4 ft.	68	-----	§GLASS PATTERN, Sliding Door (See 79)	—
46	-----	§GLASS PATTERN, Sliding Door (See 79).....	—	69	943623	WEATHERSTRIP, Door — Rear	7 ft.
47	569696	CHANNEL, Side Glass Run — Front.....	4 ft.	70	85G-1016	SCREW, Bumper to Latch Strike	2
48	569696	CHANNEL, Side Glass Run — Lower.....	4 ft.	71	560651	BUMPER, Latch Strike	2
49	943623	WEATHERSTRIP, Door		72	874767	SPACER, Bumper Mounting ..	2
		Lower.....	5 ft.	73	571854	PANEL, Cab — Rear	1
50	569694	MOULDING, Door Glass — Lower.....	10 ft.	73A	24C-616	†BOLT, Panel Attaching	5
51	-----	§GLASS PATTERN, Door Glass Lower (See 79).....	—	73B	25E-17	†WASHER, Panel Attaching	5
52	66G-1008	SCREW, Door Lock to Door	8	73C	18D-06	†NUT, Panel Attaching	5
53	942874	LOCK, Door — R.H.....	1	74	23C-416	BOLT, Latch Strike Attaching	4
53A	138249	†LOCK, Door — L.H.....	1	75	25E-13	WASHER, Latch Strike Attaching	4
54	1536570	DOOR — R.H.....	1	76	574992	STRIKE, Door Latch — L.H.	1
54A	1536571	†DOOR — L.H.....	1	76A	1501803	†STRIKE, Door Latch — R.H.	1
55	1525710	HANDLE, Door.....	2	77	17E-10	LKWSHR, Bumper to Strike Attaching	2
56	32G-1008	SCREW, Handle to Door.....	4	78	12D-10	NUT, Bumper to Strike Attaching	2
57	17E-10	LKWSHR, Door Catch		79	945999	†GLASS PATTERN KIT (Inc. 2, 17, 19, 21, 23, 46, 51 & 68)	1
		Attaching.....	8				
58	87G-1010	SCREW, Door Catch					
		Attaching.....	8				
59	560650	CATCH, Door.....	2				
60	5G-606	SCREW & LKWSHR ASSY, Window Lock Strike					
		Attaching.....	8				

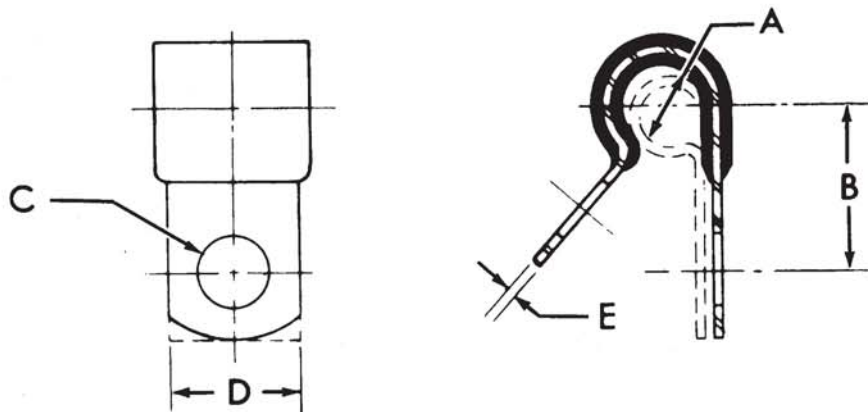
†Not Illustrated
§Not Sold Separately

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.

INSULATED CLIP



TS-5008-P

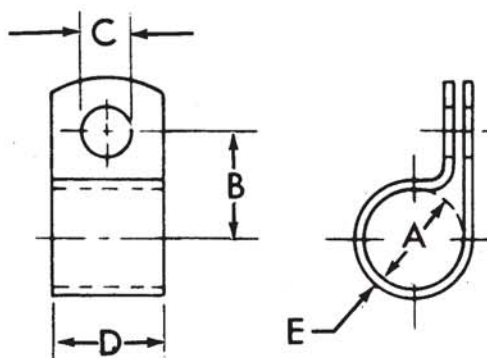
Item No.	PART NUMBER	A	B	C	D	E	F
1	30H-14	$\frac{1}{4}$	$1\frac{7}{32}$	$\frac{9}{32}$	$\frac{1}{2}$	.032	-----
2	30H-16	$\frac{1}{4}$	$2\frac{1}{32}$	$1\frac{3}{32}$	$\frac{3}{4}$	.032	-----
3	30H-18	$\frac{5}{16}$	$\frac{9}{16}$	$\frac{9}{32}$	$\frac{1}{2}$	.032	-----
4	30H-20	$\frac{5}{16}$	$1\frac{1}{16}$	$1\frac{3}{32}$	$\frac{3}{4}$	.032	-----
5	30H-23	$\frac{3}{8}$	$2\frac{3}{32}$	$1\frac{3}{32}$	$\frac{3}{4}$	.032	-----
6	30H-31	$\frac{1}{2}$	$2\frac{5}{32}$	$1\frac{3}{32}$	$\frac{3}{4}$	.048	-----
7	30H-38	$\frac{5}{8}$	$2\frac{7}{32}$	$1\frac{3}{32}$	$\frac{3}{4}$	.048	-----
8	30H-46	$1\frac{3}{16}$	$1\frac{5}{16}$	$1\frac{3}{32}$	$\frac{3}{4}$	.048	-----
9	30H-50	$1\frac{5}{16}$	1	$1\frac{3}{32}$	$\frac{3}{4}$	.048	-----
10	30H-60	$1\frac{7}{16}$	$1\frac{1}{4}$	$1\frac{3}{32}$	$\frac{3}{4}$	.048	-----

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.

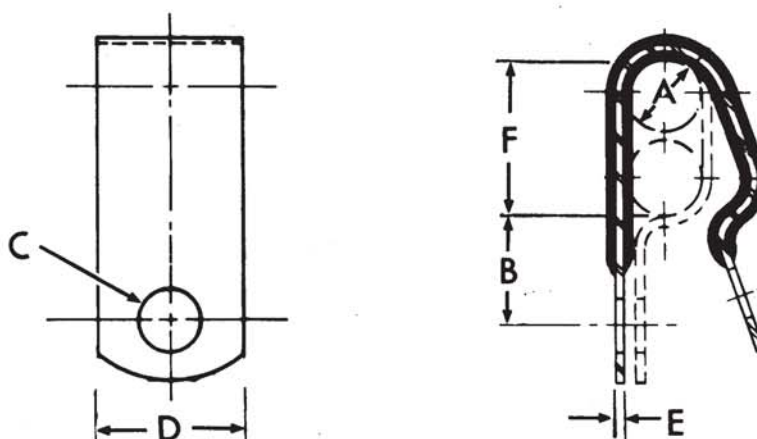
CLOSED CLIP



TS-5009-P

Item No.	PART NUMBER	A	B	C	D	E	F
1	6H-18	$\frac{3}{4}$	$3\frac{1}{32}$	$1\frac{3}{32}$	$\frac{3}{4}$	.060	----

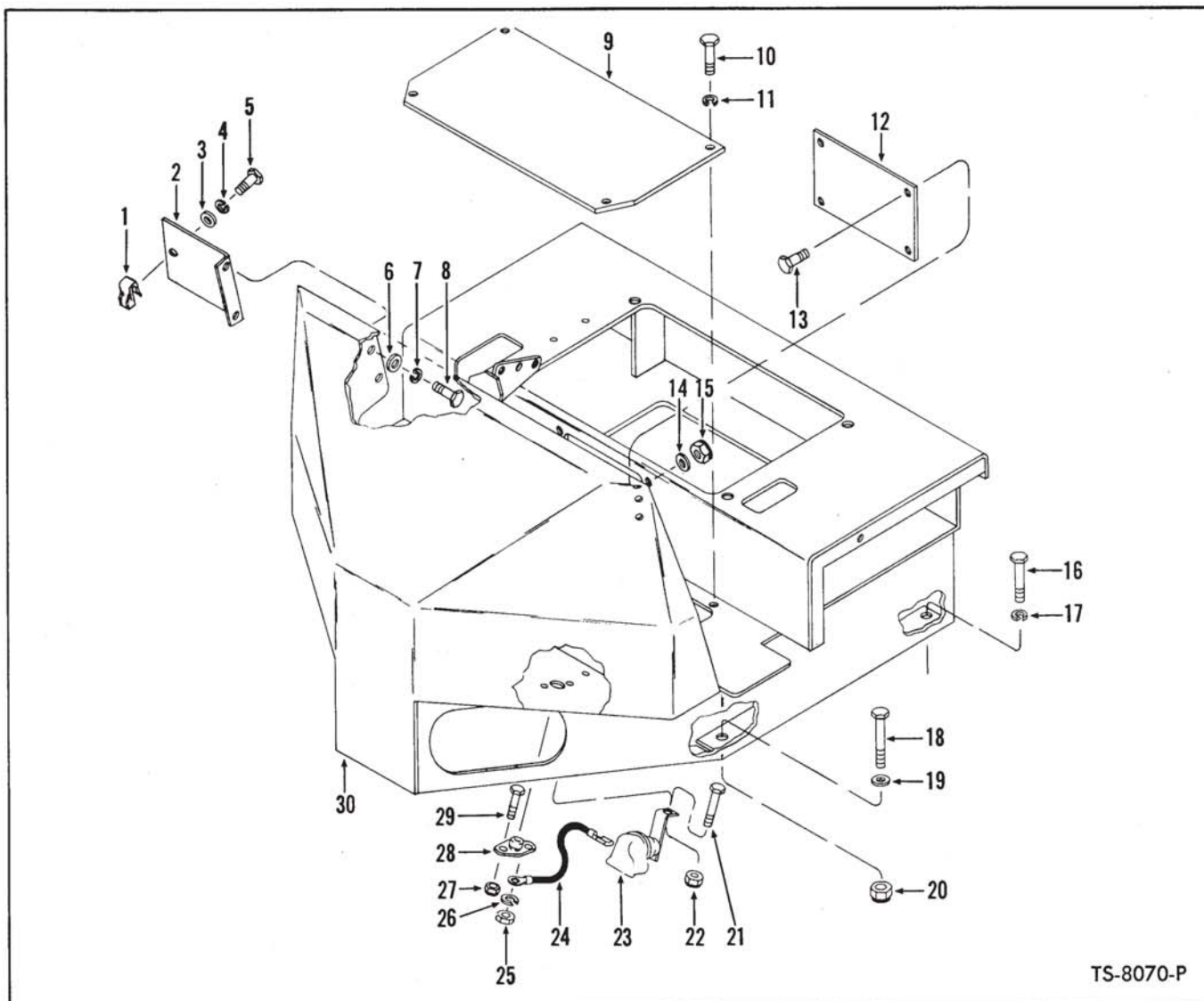
INSULATED CLIP



TS-6372-P

Item No.	PART NUMBER	A	B	C	D	E	F
1	31H-34	$\frac{5}{8}$	$2\frac{7}{32}$	$1\frac{3}{32}$	$\frac{3}{4}$	.050	$1\frac{1}{4}$
2	31H-46	$1\frac{5}{16}$	1	$1\frac{3}{32}$	$\frac{3}{4}$	.062	$1\frac{7}{8}$

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

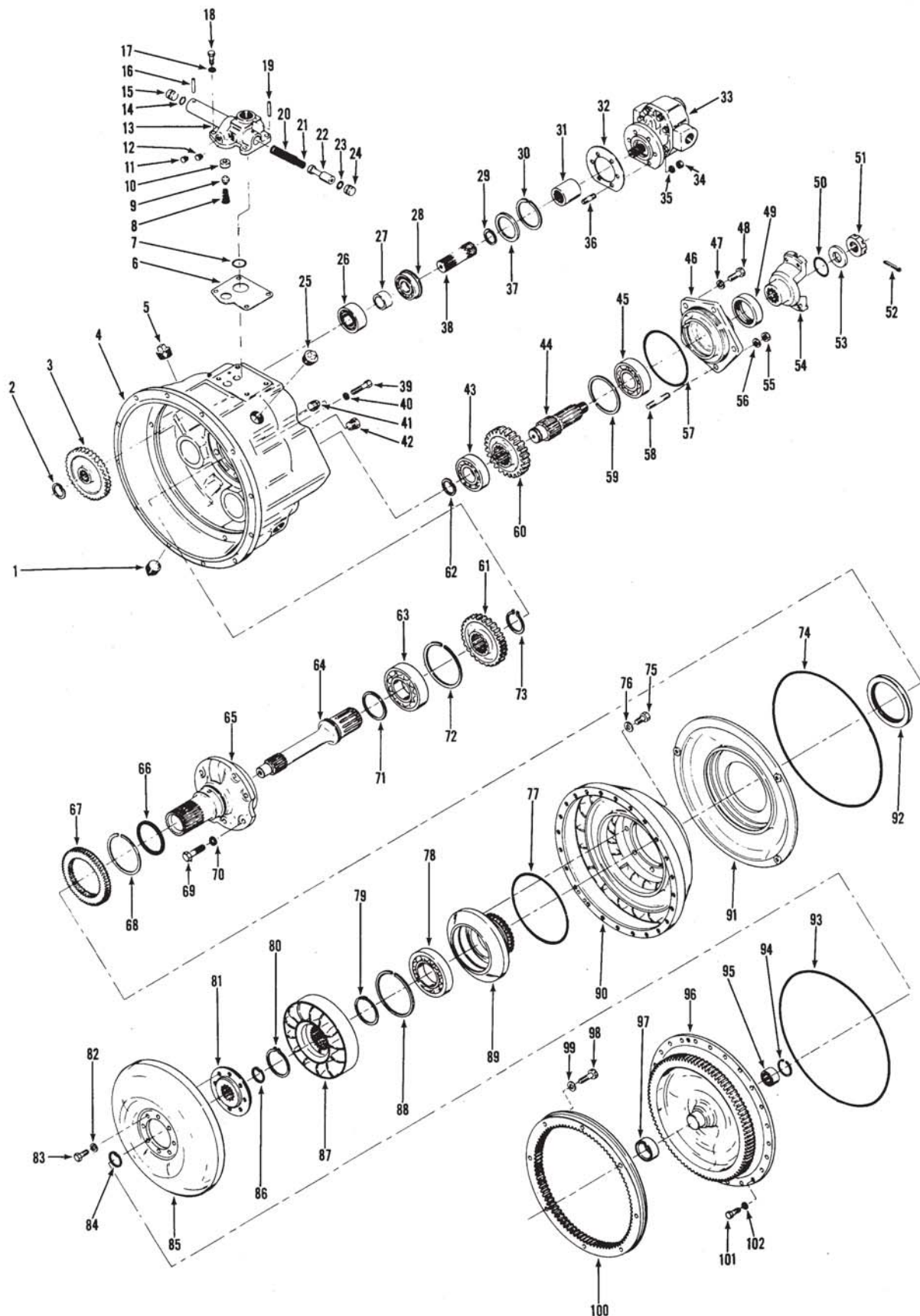


TS-8070-P

COCKPIT, HORN AND HORN SWITCH

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	572729	CAGED NUT, Panel to Cockpit	1	16	24C-824	BOLT, Cockpit Mounting	2
2	574026	PANEL, R.H.	1	17	4E-08	LKWSHR, Cockpit Mtg.	2
3	565280	WASHER, Panel to Cockpit ..	1	18	24C-840	BOLT, Cockpit Mounting	2
4	4E-06	LKWSHR, Panel to Cockpit ..	1	19	619029	WASHER, Cockpit Mtg.	2
5	23C-616	BOLT, Panel to Cockpit	1	20	18D-08	NUT, Cockpit Mounting	2
6	565280	WASHER, Panel to Cockpit ..	2	21	24C-416	BOLT, Horn to Cockpit	1
7	4E-06	LKWSHR, Panel to Cockpit ..	2	22	18D-04	NUT, Horn to Cockpit	1
8	23C-616	BOLT, Panel to Cockpit	2	23	885083	HORN	1
9	1526152	COVER, Floorboard	1	24	572373	WIRE, Horn to Switch	1
10	23C-816	BOLT, Cover to Cockpit	4	25	15D-06	NUT, Wire to Switch	1
11	4E-08	LKWSHR, Cover to Cockpit ..	4	26	4E-06	LKWSHR, Wire to Switch	1
12	557057	COVER, Heater Hole	1	27	18D-04	NUT, Switch to Cockpit	2
13	24C-412	BOLT, Heater Hole Cover ..	4	28	778570	FOOT SWITCH, Horn (Inc. 25, 26)	1
14	25E-13	WASHER, Cover	4	29	24C-416	BOLT, Switch to Cockpit	2
15	18D-04	NUT, Heater Hole Cover	4	30	1522285	COCKPIT	1

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



TORQUE CONVERTER ASSEMBLY

TS-8081-P

TORQUE CONVERTER ASSEMBLY

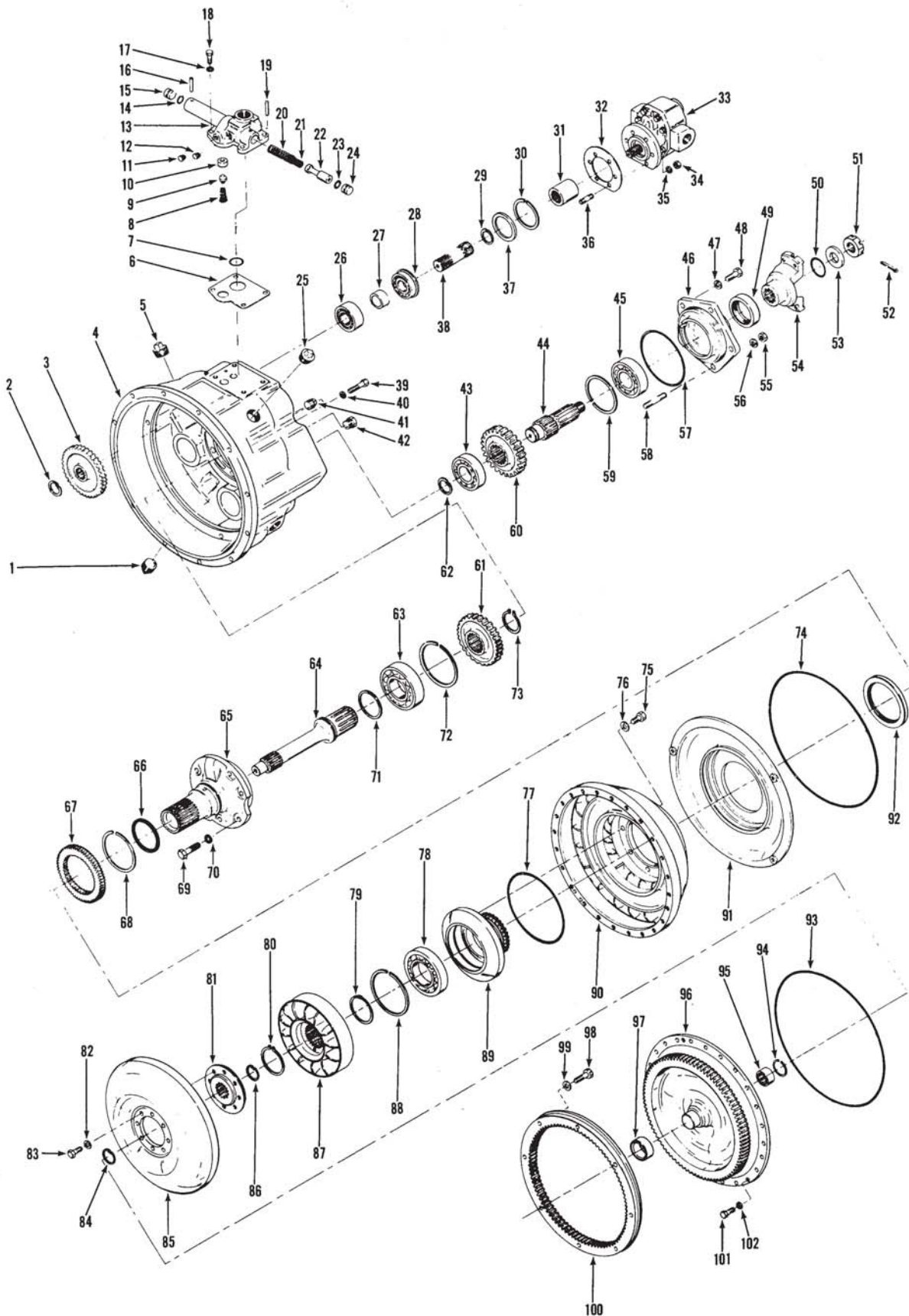
Item No.	Part No.	Description	No. Req'd.
A	283111	CONVERTER ASSY, Torque (C273T-62) (Inc. 1 thru 97, 100, 101, 102)	1
1	13F-16	PLUG, Pipe	1
2	711298	RING, Gear Retaining	3
3	214931	GEAR, Pump Drive (38T)	3
4	801546	HOUSING, Converter	1
5	13F-16	PLUG, Pipe	2
6	214949	GASKET, Regulating Valve to Converter	1
7	25K-40104	O-RING, Regulating Valve to Converter	1
8	222312	SPRING, Safety Valve	1
9	222318	PLUNGER, Safety Valve	1
10	214946	SEAT, Safety Valve	1
11	40K-02	PLUG, Valve Housing	1
12	40K-02	PLUG, Valve Housing	1
13	214943	VALVE ASSY, Pressure Regulating (Inc. 10, 14, 15, 16, 19, 20 thru 24)	1
14	25K-30018	O-RING, Piston Stop	1
15	220983	STOP, Piston	1
16	660178	PIN, Piston Stop	1
17	4E-06	LKWSHR, Valve to Converter	4
18	1C-616	BOLT, Valve to Converter	4
19	660178	PIN, Piston Stop	1
20	224369	SPRING, Valve — Outer	1
21	224368	SPRING, Valve — Inner	1
22	—	§ PISTON, Valve — See 13	—
23	25K-30018	O-RING, Piston Stop	1
24	220983	STOP, Piston	1
25	13F-16	PLUG, Pipe	1
26	214936	BEARING, Pump Drive Shaft	3
27	214930	SPACER, Pump Drive Shaft	3
28	214956	BEARING, Pump Drive Shaft	3
28A	214954	† RING, Bearing Retaining	3
29	224039	RING, Bearing Retaining	3
30	713186	RING, Washer Retaining	3
31	214961	SLEEVE, Pump Drive Adapter	1
32	235961	GASKET, Pump to Converter	1
33	450230	* PUMP, Converter Charging	1
34	8D-06	NUT, Pump Mounting	6
35	4E-06	LKWSHR, Pump Mounting	6
36	207647	STUD, Pump Mounting	6
37	214929	WASHER, Pump Drive Shaft	3
38	214928	SHAFT, Pump Drive	3
39	1C-628	BOLT, Baffle to Housing	3
40	4E-06	LKWSHR, Baffle to Housing	3
41	16F-08	PLUG, Pipe	1
42	40K-02	PLUG, Pipe	2
43	235057	BEARING, Output Shaft — Front	1
44	214937	SHAFT, Output	1
45	743439	BEARING, Output Shaft — Rear	1
46	214942	RETAINER, Bearing	1
47	4E-07	LKWSHR, Bearing Ret.	3
48	1C-720	BOLT, Bearing Retainer	3
49	206864	SEAL, Oil	1
50	25K-40112	O-RING, Flange	1
51	201951	NUT, Output Shaft	1
52	1F-424	PIN, Cotter	1
53	102745	WASHER, Output Shaft	1
54	214987	FLANGE, Companion	1
55	8D-07	NUT, Bearing Retainer	2

§Not Sold Separately

†Not Illustrated

*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-8081-P

TORQUE CONVERTER ASSEMBLY (Continued)

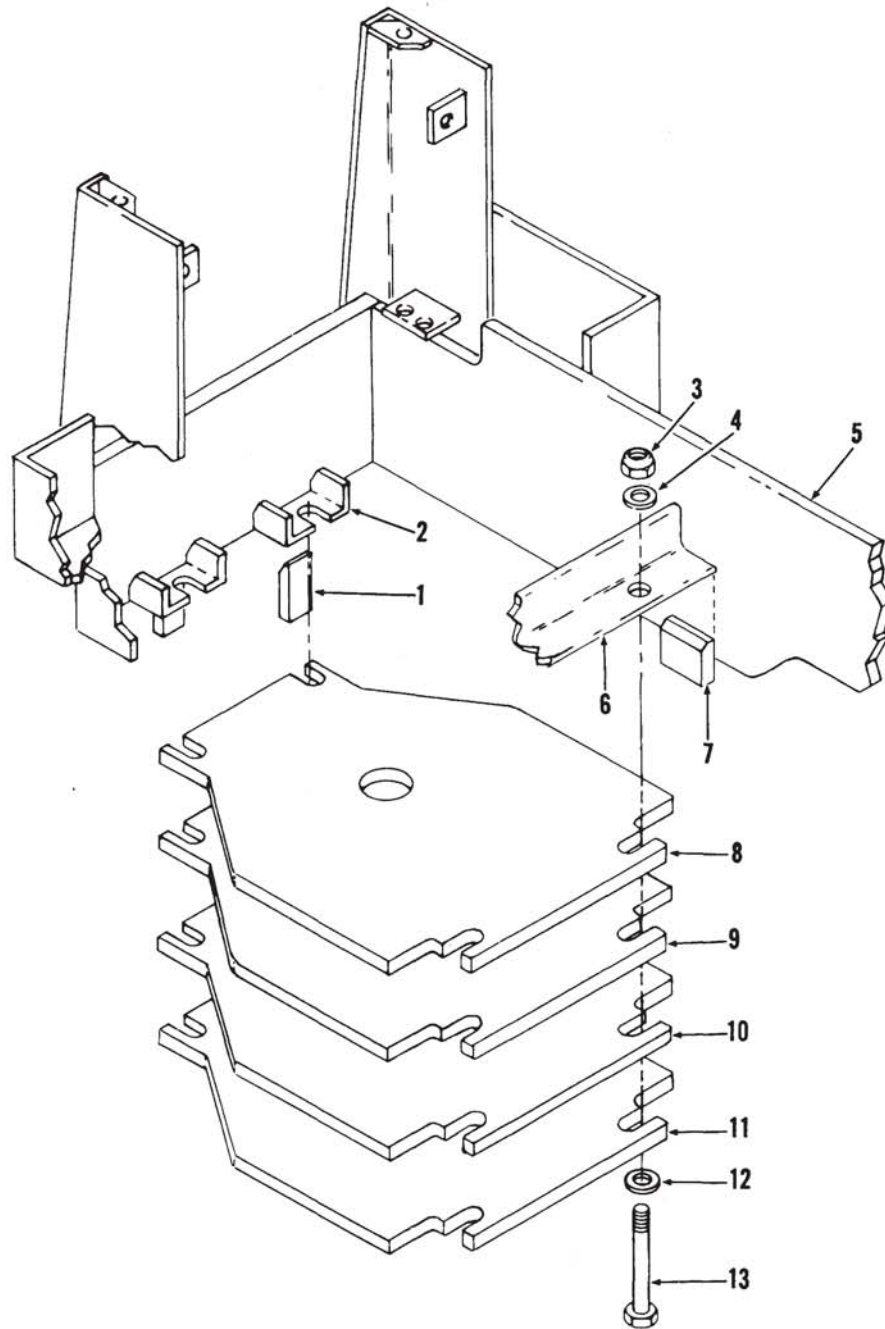
Item No.	Part No.	Description	No. Req'd.
56	4E-07	LKWSHR, Bearing Ret.	2
57	25K-40512	O-RING, Bearing Ret.	1
58	214730	STUD, Bearing Retainer	2
59	223901	RING, Bearing Retaining	1
60	214938	GEAR, Output Shaft (27T)	1
61	214935	GEAR, Turbine Shaft (28T)	1
62	214955	RING, Bearing Retaining	1
63	231554	BEARING, Turbine Shaft	1
64	214933	SHAFT, Turbine	1
65	214932	STATOR SUPPORT ASSY	1
66	221653	RING, Sealing	1
67	214951	GEAR, Impeller Hub	1
68	224009	RING, Gear Retaining	1
69	1C-820	BOLT, Support to Hsg.	6
70	7E-08	LKWSHR, Support to Hsg.	6
71	222079	RING, Turbine Shaft Sealing	1
72	214953	RING, Bearing Retaining	1
73	224116	RING, Gear Retaining	1
74	60K41200	O-RING, Oil Baffle	1
75	4C-714	BOLT, Hub to Impeller	8
75A	-----	†‡ LOCKWIRE, Impeller Hub Bolt (18 ga.)	—
76	25E-19	WASHER, Hub to Impeller	8
77	25K-40616	O-RING, Impeller Hub	1
78	214596	BEARING, Impeller Hub	1
79	214934	SPACER, Reaction Member	1
80	743035	RING, Reaction Member Retaining	1
81	214924	HUB, Turbine	1
82	619023	WASHER, Turbine Hub	8
83	209313	BOLT, Turbine Hub	8
83A	-----	†‡ LOCKWIRE, Turbine Hub Bolt (18 ga.)	—
84	659065	RING, Turbine Hub Ret.	1
85	223833	TURBINE	1
86	659065	RING, Turbine Hub Ret.	1
87	801608	MEMBER, Reaction	1
87A	658244	† PIN, Member to Spacer — Lock	1
88	214953	RING, Bearing Retaining	1
89	214958	HUB, Impeller	1
90	214959	IMPELLER	1
91	214925	BAFFLE, Oil	1
91A	1C-628	† BOLT, Oil Baffle	3
91B	4E-06	† LKWSHR, Oil Baffle	3
92	214941	SEAL, Oil Baffle	1
93	60K41200	O-RING, Impeller to Cover	1
94	666542	RING, Bearing Retaining	1
95	214988	BEARING, Impeller Cover	1
96	214922	* COVER, Impeller	1
97	222006	SLEEVE, Impeller Cover	1
98	233092	BOLT, Gear to Flywheel	8
98A	-----	† LOCKWIRE, Impeller Bolt (18 ga. 20" lg.)	4
99	215909	WASHER, Gear to Flywheel	8
100	233089	GEAR, Converter Drive	1
101	1C-616	BOLT, Impeller to Cover	24
102	4E-06	LKWSHR, Impeller to Cover	24
103	23C-620	† BOLT, Converter to Flywheel Housing	12
104	4E-06	† LKWSHR, Converter to Flywheel Housing	12

†Not Illustrated

‡As Required

*NOTE: For replacement use 801524 Kit, which consists of 1—234503 Impeller Cover & 1—222006 Impeller Cover Sleeve.

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



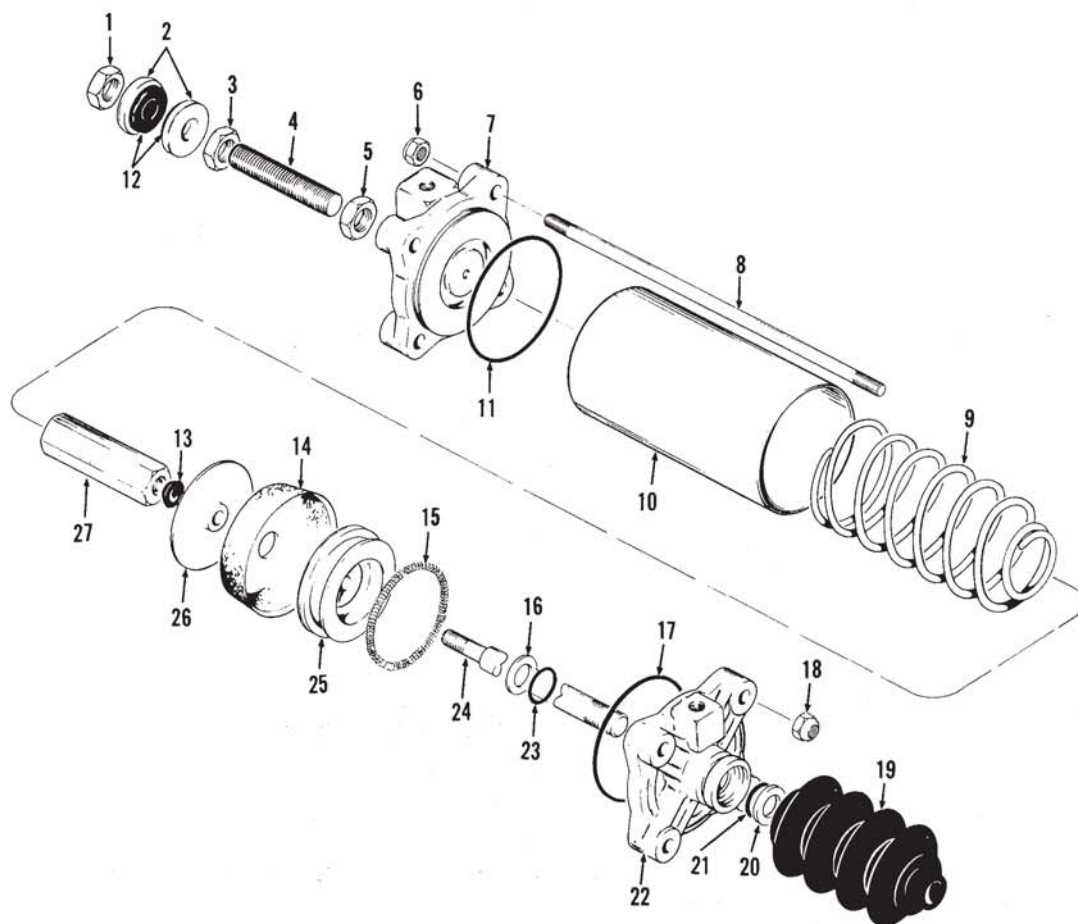
TS-13993

No.	Part No.	Qty.	Description
1	1506606	2	Retainer
2	1506604	2	Channel
3	18D-16	4	Nut
4	102745	4	Washer
5	² ----	—	Frame rear
6	1506605	1	Angle
7	1506607	2	Block

No.	Part No.	Qty.	Description
8	1506608	1	Counterweight
9	1506608	1	Counterweight
10	1506608	1	Counterweight
11	1506608	1	Counterweight
12	102745	4	Washer
13	24C-16168	4	Bolt

*1700 lbs. (773 kg)

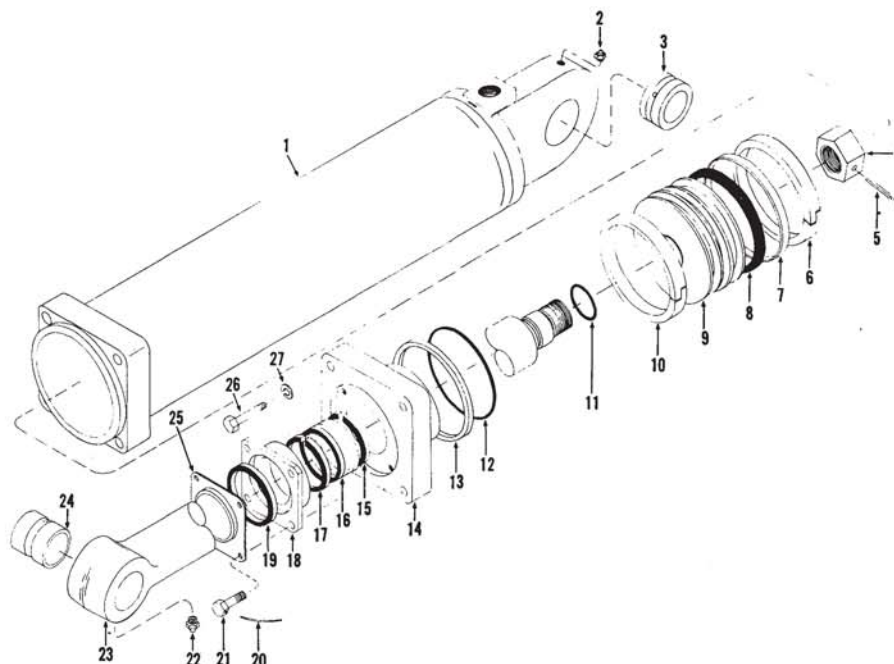
²See Index



TS-11427

AIR CYLINDER ASSEMBLY (Side Dump Bucket)

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
A	1539686	CYLINDER ASSY, Air (Inc. 1 thru 27)	1	13	949454	WASHER	1
B	949442	REPAIR KIT (Inc. 9, 11 thru 14, 16 thru 21, 23)	1	14	949428	PACKING, Piston	1
C	949439	MOUNTING KIT (Inc. 1 thru 5, 12)	1	15	949429	SPRING, Expanding	1
1	8D-06	NUT, Jam	1	16	949432	RETAINER, Seal	1
2	949455	WASHER, Retaining	2	17	25K-30126	O-RING, Cap	1
3	18D-06	NUT, Lock	1	18	51D-10	NUT, Cap	4
4	949440	STUD	1	19	949434	BOOT	1
5	18D-06	NUT, Lock	1	20	949432	RETAINER, Seal	1
6	51D-10	NUT, Cap	4	21	25K-30012	O-RING, Cap	1
7	949433	CAP ASSY, Rear End	1	22	949431	CAP ASSY, Front End	1
8	949459	TIE BOLT	4	23	25K-30012	O-RING	1
9	949437	SPRING	1	24	949436	ROD, Piston	1
10	949435	CYLINDER	1	25	949430	RETAINER ASSY, Packing	1
11	25K-30126	O-RING, Cap	1	26	949427	PLATE, Piston	1
12	949441	WASHER, Rubber	2	27	949438	STOP, Piston	1



TS-8917-P

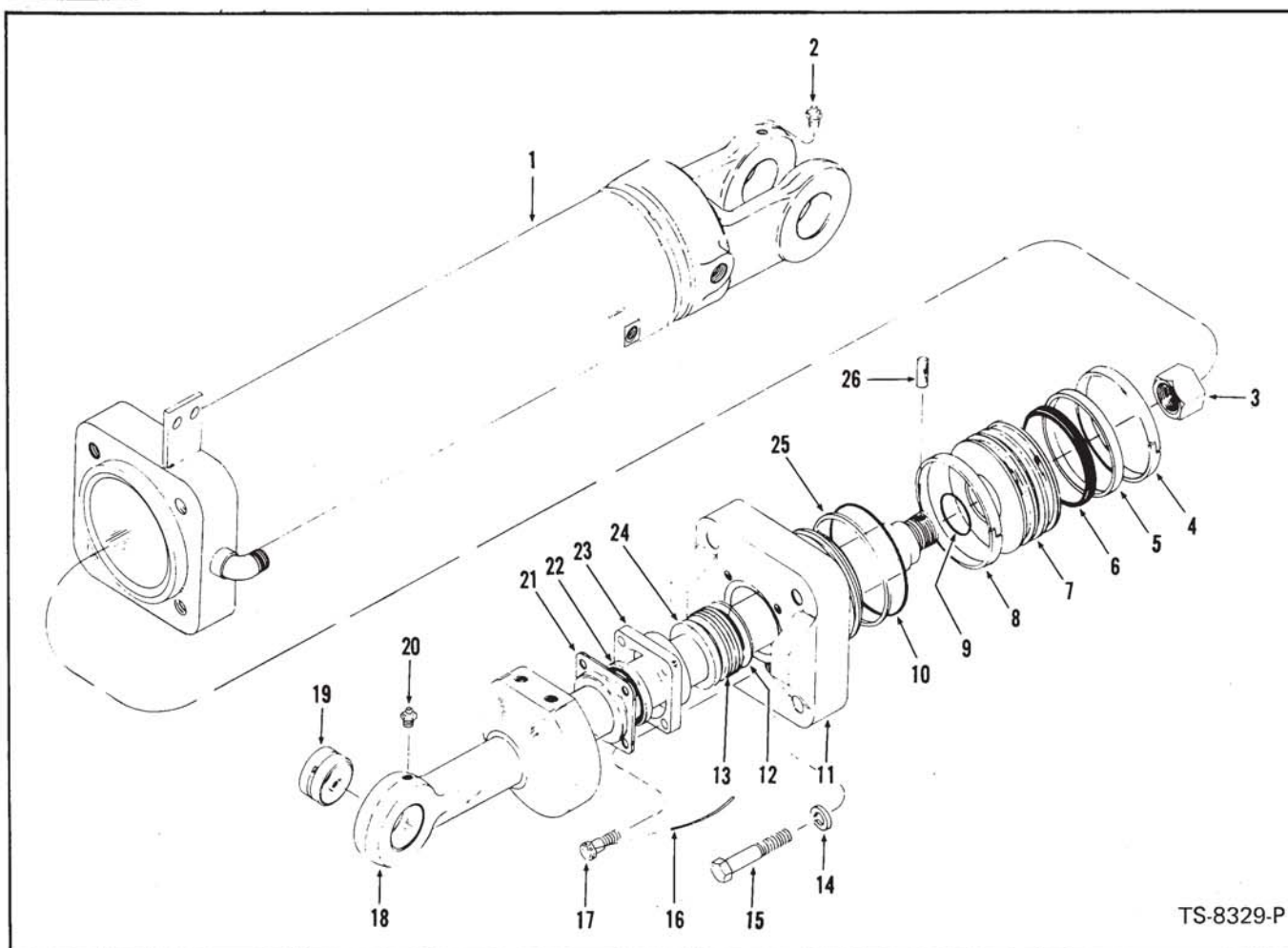
BOOM CYLINDER ASSEMBLY

Item No.	Part No.	Description	No. Req'd.
A	1535946	CYLINDER ASSY (Inc. 1, 3 thru 21, 23 thru 27)	2
B	2516061	*KIT (Inc. 5 thru 8, 10 thru 13, 15 thru 17, 19)	2
NOTE: Two (2) Cylinders used per machine — Quantities listed below are for one (1) Cylinder only.			
1	1535947	CYLINDER (Inc. 3)	1
2	10H-25	FITTING, Cylinder Grease	1
3	1522765	BUSHING, Cylinder	1
4	1535960	NUT, Piston Rod	1
5	1F-844	COTTER, Piston Rod Nut	1
6	-----	§RING, Piston Wear — See B	1
7	-----	§RING, Outer Seal — See B	1
8	-----	§RING, Inner Seal — See B	1
9	1535957	PISTON	1
10	-----	§RING, Piston Wear — See B	1
11	-----	§O-RING, Piston Rod — See B	1
12	-----	§O-RING, Cylinder Cap — See B	1
13	-----	§RING, Back-Up — See B	1
14	1535961	CAP, Cylinder	1
15	-----	§ADAPTER, Male Chevron — See 16	2
16	2501109	PACKING ASSY (Inc. 15, 17)	1
17	-----	§ADAPTER, Female Chevron — See 16	2
18	562700	GLAND, Packing	1
19	2516953	SEAL, Piston Rod	1
20	-----	LOCKWIRE (16 ga. x 15" lg.)	2
21	4C-620	BOLT, Seal Retainer	4
22	10H-25	FITTING, Piston Rod Grease	1
23	1521231	ROD ASSY, Piston (Inc. 24)	1
24	1521218	BUSHING, Piston Rod	1
25	562701	RETAINER, Seal	1
26	24C-836	BOLT, Cylinder Cap	4
27	4E-08	LKWSHR, Cylinder Cap	4

§Not Sold Separately

*NOTE: For reference see Service Gram S.G.-597A.

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



BUCKET CYLINDER ASSEMBLY
For Serial: Cummins — 408A101, 102 only

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
A	1536064	*CYLINDER ASSY, Bucket (Inc. 1, 3 thru 19, 21 thru 26)	2	11	567996	CAP, Cylinder	1
B	2516070	KIT (Inc. 4 → 6, 8 → 10, 12, 13, 22, 24, 25) See Note "A"	1	12	-----	§ ADAPTER, Male Chevron — See 13	2
NOTE: Two (2) Cylinders used per machine — Quantities Listed below are for one (1) Cylinder				13	2501109	PACKING ASSY (Inc. 12, 24)	1
1	1536065	**CYLINDER	1	14	4E-10	LKWSHR, Cylinder Cap Bolt	4
2	10H-25	FITTING, Cylinder Grease	1	15	24C-1040	BOLT, Cylinder Cap	4
3	1536074	***NUT, Piston Rod	1	16	-----	LOCKWIRE (16 ga. x 15" lg.)	4
4	-----	§ RING, Piston Wear — See B	1	17	4C-616	BOLT, Seal Retainer	4
5	-----	§ RING — Outer — See B	1	18	1536076	ROD ASSY, Piston (Inc. 19)	1
6	-----	§ RING — See B — Inner	1	19	1521241	BUSHING, Piston Rod	1
7	1536071	PISTON	1	20	10H-25	FITTING, Piston Rod Grease	1
8	-----	§ RING, Piston Wear — See B	1	21	562701	RETAINER, Seal	1
9	-----	§ O-RING — See B	1	22	2516953	SEAL, Piston Rod	1
10	-----	§ O-RING — See B	1	23	562700	GLAND, Packing	1
				24	-----	§ ADAPTER, Female Chevron — See 13	2
				25	-----	§ RING, Back-up — See B	1
				26	1536075	INSERT, Piston Rod Nut Locking	1

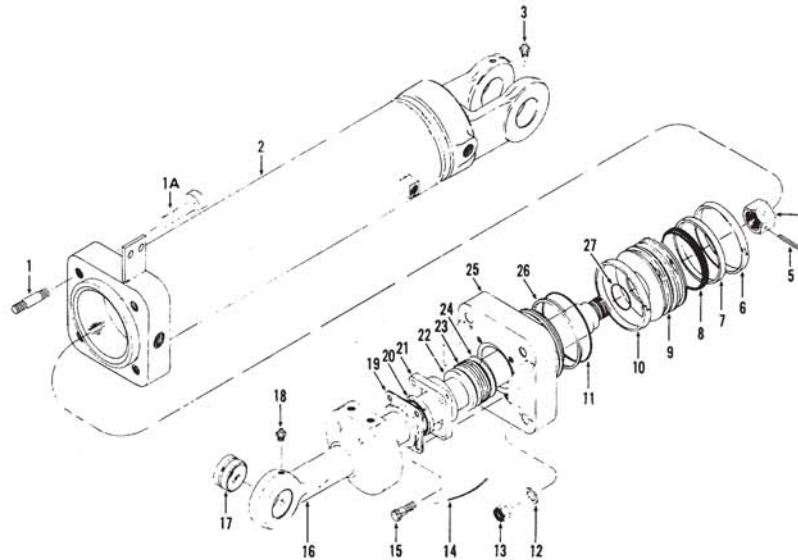
*NOTE: For complete replacement of 1536064 Cylinder Assy use 1509802 Cylinder Assy. Once replacement has been made refer to page 65 for your component part break down.

**NOTE: When replacing 1536065 Cylinder use 1509797 Cylinder plus 1 #17K-8 Fitting, 4 #1509548 Bolts, 4 #573929 Washers and 4 #18D-10 Nuts.

***NOTE: For replacement use 1535960 Nut plus 1—1F-840.

NOTE "A": For reference see Service Gram S.G.-597A.

§ Not Sold Separately



TS-8918-P

BUCKET CYLINDER ASSEMBLY
For Serial: Cummins — 408A103 and after
G.M. — 409A101 and after

Item No.	Part No.	Description	No. Req'd.
A	1509802	CYLINDER ASSY (Inc. 1A, 2, 4 thru 17, 19 thru 27)	2
B	2516070	***KIT (Inc. 6 thru 8, 10, 11, 20, 22 thru 24, 26, 27)	2
NOTE: Two (2) Cylinders used per machine — Quantities listed below are for one (1) Cylinder only.			
1	1533801	*STUD, Cylinder Cap	4
1A	1509548	BOLT, Cylinder Cap	4
2	1509797	**CYLINDER	1
3	10H-25	FITTING, Cylinder Grease	1
4	1535960	NUT, Piston Rod	1
5	1F-840	COTTER, Piston Rod Nut	1
6	----	§ RING, Piston Wear — See B	1
7	----	§ RING, Outer Seal — See B	1
8	----	§ RING, Inner Seal — See B	1
9	1503026	PISTON	1
10	----	§ RING, Piston Wear — See B	1
11	----	§ O-RING, Cap — See B	1
12	573929	WASHER, Cylinder Cap	4
13	18D-10	NUT, Cylinder Cap	4
14	----	LOCKWIRE (16 ga. x 15" lg.)	2
15	4C-616	BOLT, Seal Retainer	4
16	1504080	ROD ASSY, Piston (Inc. 17)	1
17	1521241	BUSHING, Piston Rod	1
18	10H-25	FITTING, Piston Rod Grease	1
19	562701	RETAINER, Seal	1
20	2516953	SEAL, Piston Rod	1
21	562700	GLAND, Packing	1
22	----	§ ADAPTER, Female Chevron — See 23	2
23	2501109	PACKING ASSY — (Inc. 22, 24)	1
24	----	§ ADAPTER, Male Chevron — See 23	2
25	567996	CAP, Cylinder	1
26	----	§ RING, Back-Up — See B	1
27	----	§ O-RING, Piston Rod — See B	1

*NOTE: Stud not used on all cylinders. For replacement of studs use 4 #1509548 Bolts and follow replacement procedure below.

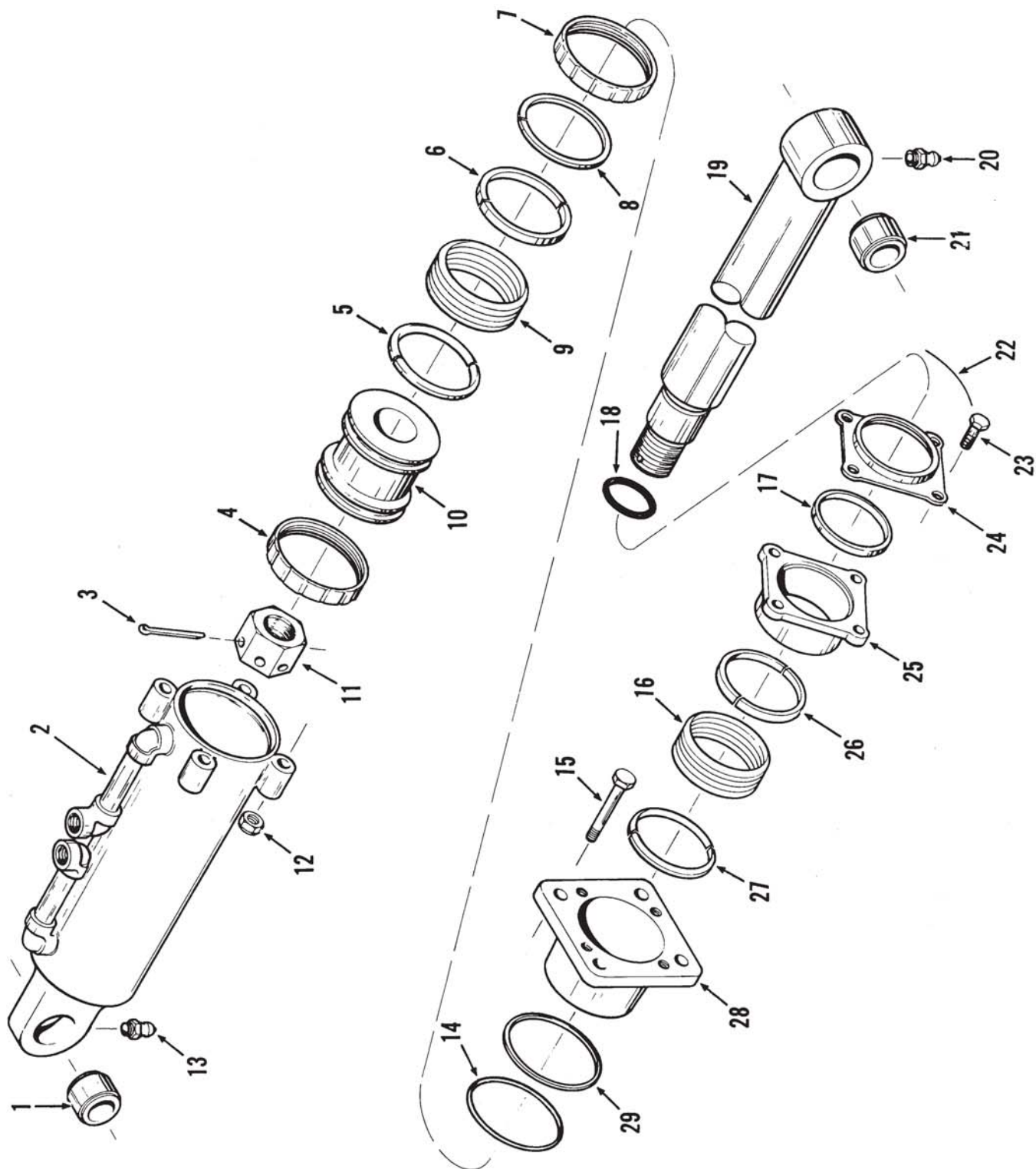
NOTE: When replacing Cylinder on machines equipped with studs, 4 #1509548 Bolts will also be required. Follow steps 4 and 5 of Procedure below. *NOTE: For reference see Service Gram S.G.-597A.

§Not Sold Separately

PROCEDURE

- 1 — Remove Nuts, Washers and Studs.
- 2 — Drill out tapped collar holes to $\frac{1}{16}$ " Dia.
- 3 — Grind Weld (Collar to Tube) away from Collar Holes to allow bolt head to rest flat on collar.
- 4 — Insert Bolts #1509548 through Collar, then Cap.
- 5 — Using same nuts and washers, Torque to 128 ft. lbs.

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



Bucket Cylinder Assembly (Side Dump)

CLARK

No.	Part No.	Qty.	Description
A	² 2514142	1	Cylinder assembly
1	669928	1	Bushing
2	³ 567905	1	Cylinder
3	1F-540	1	Pin cotter
4	552767	1	Ring
5	527496	2	Adapter
6	527497	2	Adapter
7	552767	1	Ring
8	[†] 520405	—	Shim
9	531606	1	Packing
10	⁶ 512789	1	Piston
11	517298	1	Nut
12	68D-07	4	Nut
13	10H-25	1	Fitting grease
14	73K-236	1	Ring
15	24C-752	4	Bolt
16	2501107	1	Packing
17	2516952	1	Seal
18	25K-40104	1	O-ring
19	⁴ 567911	1	Rod assy
20	10H-25	1	Fitting grease
21	669928	1	Bushing
22	⁵ -----	1	Lockwire
23	22C-620	4	Bolt
24	544890	1	Retainer
25	544889	1	Gland
26	544893	2	Adapter
27	544892	2	Adapter
28	945953	1	Cap
29	25K-40308	1	O-ring

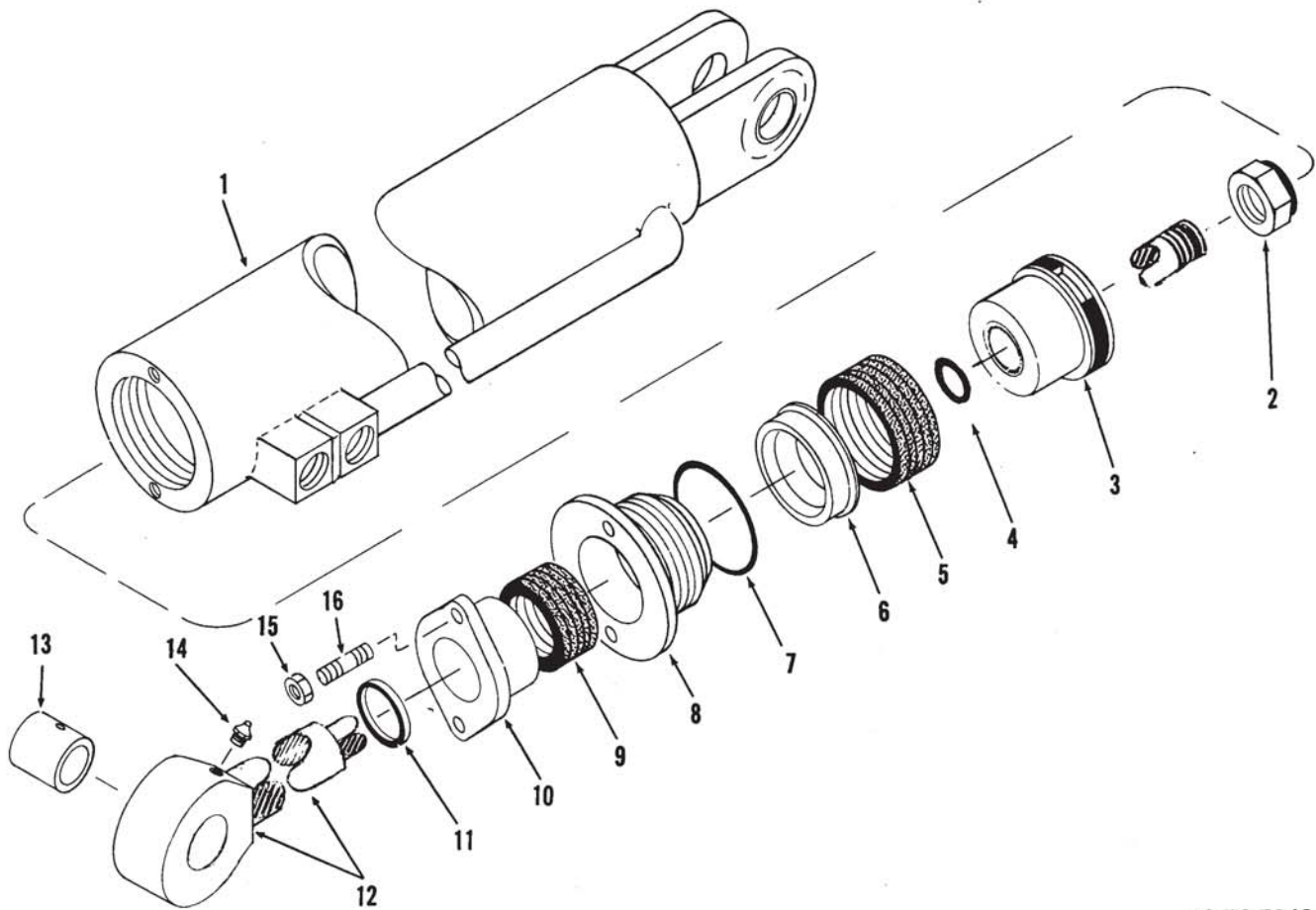
²Inc. 1 → 29

³Inc. 1

⁴Inc. 21

⁵16 gauge X 13 in. (330,2 mm) long

⁶For replacement, use 1—1503639 piston, 2—1530264 wear rings, 1—1503631 outer seal ring & 1—1503629 inner seal ring. Once conversion has been made, individual replacement can be made.

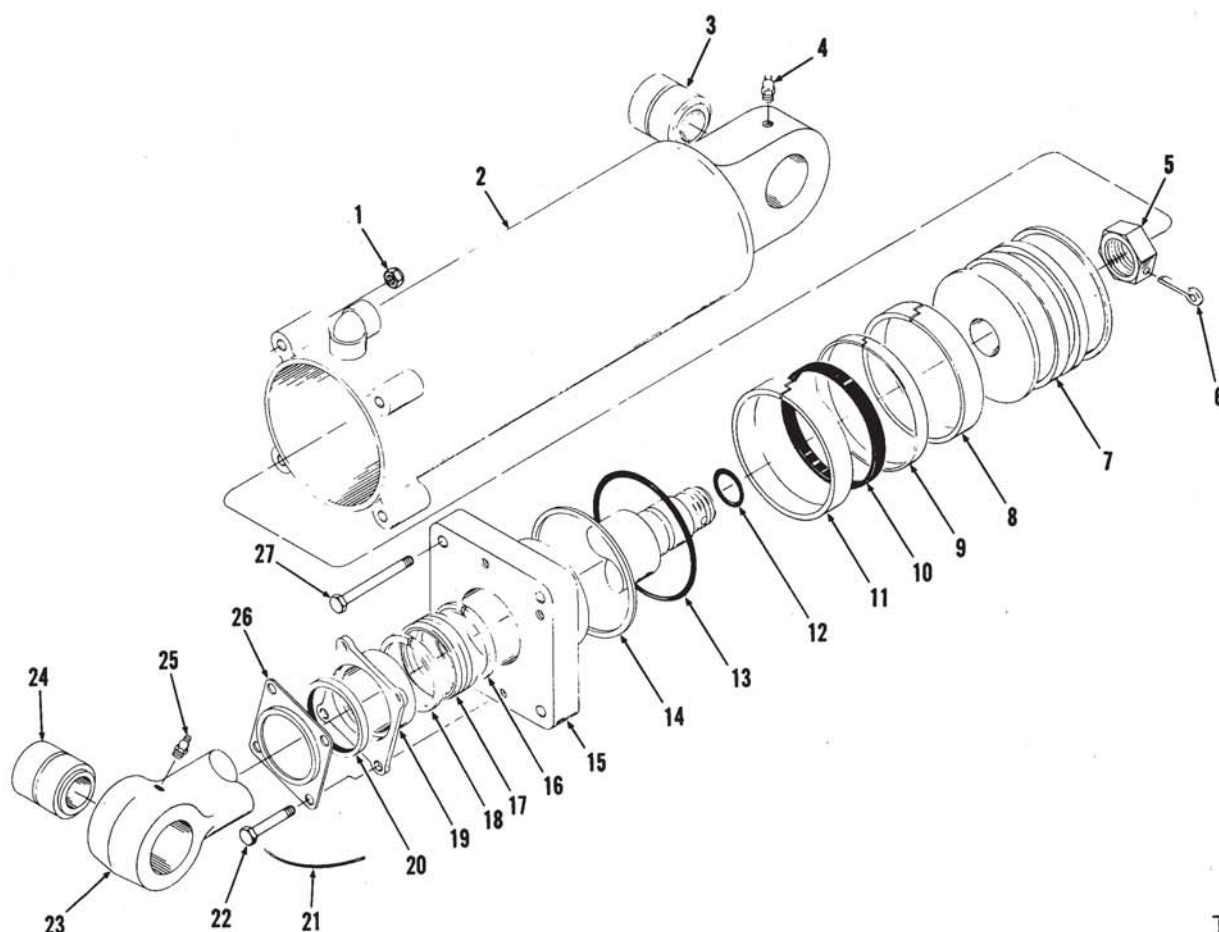


TS-TS-7940

CLAMP CYLINDER ASSEMBLY (Drott Bucket)

(Quantities Shown for Items 1 thru 16 for One Cylinder Only)

Item	Part No.	Description	Qty.
A	1533374	CLAMP CYLINDER ASSY — R.H. (Inc. 1, 2, thru 16)	1
B	1533375	CLAMP CYLINDER ASSY — L.H. (Inc. 1A thru 16)	1
1	1533359	CYLINDER & BASE — R.H.	1
1A	1533360	CYLINDER & BASE — L.H.	1
2	67D-20	NUT, Piston Rod	1
3	1533363	PISTON	1
3A	1533354	WEAR RING	1
4	25K-40108	O-RING	1
5	1533357	V-PACKING SET	1
6	1533364	PISTON	1
7	25K-40400	O-RING	1
8	1533362	CAP, Cylinder	1
9	1533361	V-PACKING SET	1
10	1533365	FLANGE, Packing	1
11	1533340	WIPER RING	1
12	1533358	ROD, Cylinder (Inc. 13)	1
13	1533355	BUSHING, Cylinder Rod	1
14	10H-25	FITTING, Grease	1
15	66D-06	NUT, Cylinder Cap	2
16	1533339	STUD, Cylinder Cap	2



TS-10961

No.	Part No.	Qty.	Description
A	2,3 1539308	2	Cylinder assembly
B	10,11 2516071	1	Kit
1	68D-07	4	Nut
2	4537205	1	Cylinder bucket
3	538604	1	Bushing
4	10H-35	1	Fitting grease
5	1514638	1	Nut
6	1F-640	1	Pin cotter
7	1503639	1	Piston
8	§12 -----	1	Ring
9	§12 -----	1	Ring
10	§12 -----	1	Ring
11	§12 -----	1	Ring
12	§12 -----	1	O-ring
13	§12 -----	1	O-ring

No.	Part No.	Qty.	Description
14	§12 -----	1	Ring back-up
15	5 945112	1	Cap
16	6 -----	2	Adapter
17	7 2501106	1	Packing assy
18	6 -----	2	Adapter
19	526451	1	Gland
20	941568	1	Seal
21	8 -----	2	Lockwire
22	4C-620	4	Bolt
23	9 1539307	1	Rod
24	538604	1	Bushing
25	10H-35	1	Fitting grease
26	512797	1	Retainer
27	24C-752	4	Bolt

2 Inc. 1 → 3, 5 → 24, 26, 27

3 Quantities listed are for one (1). This uses two (2).

4 Inc. 3

5 Inc. 13, 14

6 See 17

7 Inc. 16, 18

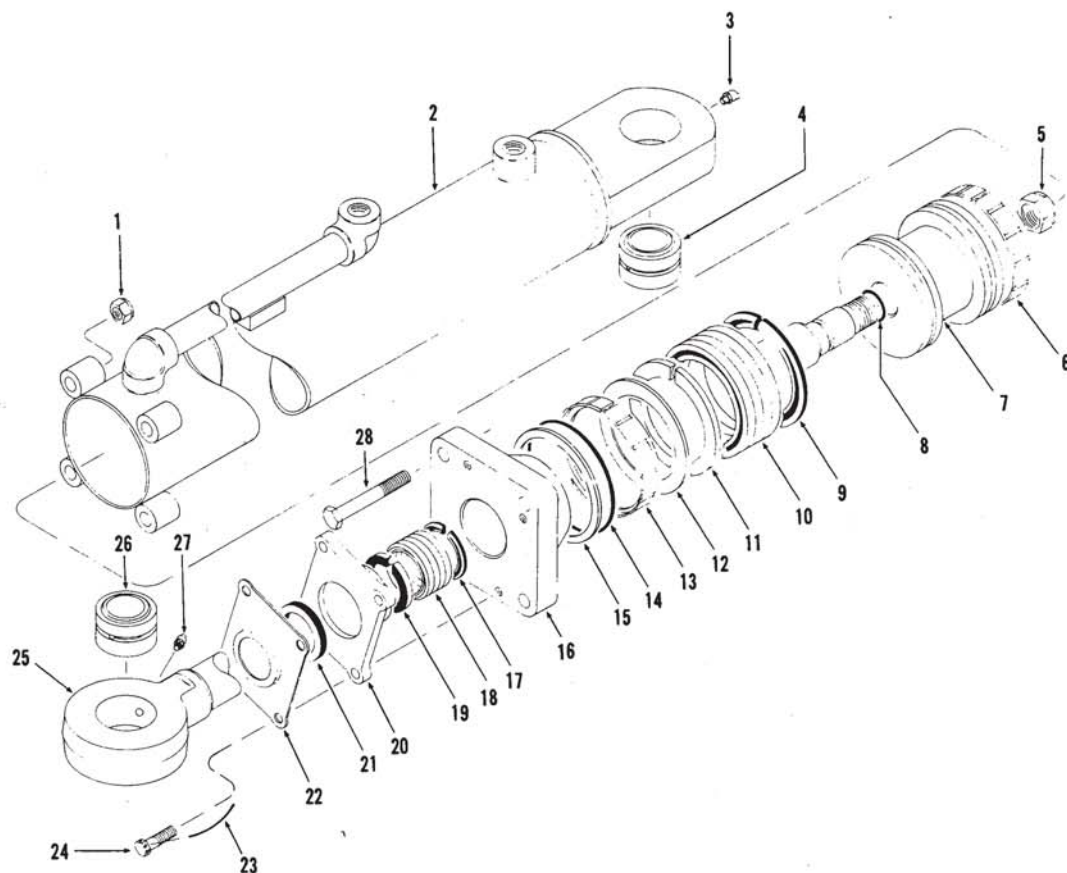
8 16 gauge x 20 in. (508 mm) long

9 Inc. 24

10 Inc. 6, 8 → 14, 16 → 18

11 For reference see Service Gram S.G.-597A

12 See B



TS-8337-P

STEERING CYLINDER ASSEMBLY

For Serial: Cummins — 408A101 thru 108, 113, 115 only

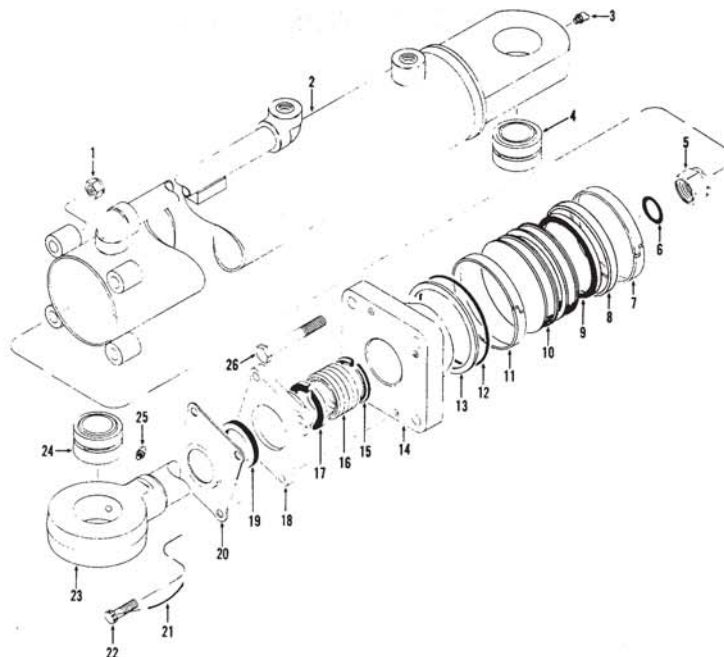
Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
A	1521837	*CYLINDER ASSY (Inc. 1, 2, 4 thru 26, 28)	2	13	-----	§ RING, Piston — See B	1
B	2516074***KIT (Inc. 6, 8 → 15, 17 → 19)	1		14	-----	§ O-RING, Cylinder Cap — See B	1
NOTE: Two (2) Cylinders used per machine — Quantities listed below are for one (1) Cylinder only				15	-----	§ RING, O-Ring Back-Up — See B	1
1	18D-07	NUT, Cylinder Cap	4	16	945112	CAP, Cylinder	1
2	1521836	CYLINDER, Steering	1	17	-----	§ ADAPTER, Male Chevron Packing — See 18	2
3	11H-15	FITTING, Cylinder Grease	1	18	2501106	PACKING ASSY, Chevron (Inc. 17, 19)	1
4	713418	BUSHING, Cylinder	1	19	-----	§ ADAPTER, Female Chevron Packing — See 18	2
5	60D20	NUT, Piston Rod	1	20	526451	GLAND, Packing	1
6	-----	§ RING, Piston — See B	1	21	941568	SEAL, Piston Rod	1
7	512789	**PISTON	1	22	512797	RETAINER, Seal	1
8	-----	§ O-RING — See B	1	23	-----	LOCKWIRE (16 ga. x 20" lg.)	2
9	-----	§ ADAPTER, Male Chevron Packing — See B	2	24	4C-620	BOLT, Packing Gland	4
10	-----	§ PACKING ASSY — See B	1	25	1521832	ROD, Piston	1
11	-----	§ ADAPTER, Female Chevron Packing — See B	2	26	713418	BUSHING, Piston Rod	1
12	-----	§ ‡ SHIM — See B	—	27	10H-25	FITTING, Piston Rod Grease	1
				28	24C-748	BOLT, Cylinder Cap	4

‡ As Required § Not Sold Separately

*NOTE: For complete replacement of 1521837 Cylinder Assy use 1504836 Cylinder Assy. Once replacement has been made refer to page 55 for your component part break down.

**NOTE: When replacing 512789 Piston use 1503639 Piston plus 1—2516071 Kit.

***NOTE: For reference see Service Gram S.G.-597A.



TS-8919-P

STEERING CYLINDER ASSEMBLY**For Serial: Cummins — 408A109 thru 408A112, 408A114, 408116 and after****G.M. — 409A101 and after**

Item No.	Part No.	Description	No. Req'd.
A	1504836	CYLINDER ASSY (Inc. 1, 2, 5 thru 23, 26)	2
B	2516071	*KIT (Inc. 6 thru 9, 11 thru 9, 11 thru 13, 15 thru 17, 19)	—
NOTE: Two (2) Cylinders used per machine — Quantities listed below are for one (1) Cylinder only.			
1	18D-07	NUT, Cylinder Cap	4
2	1521836	CYLINDER, Steering	1
3	11H-15	FITTING, Cylinder Grease	1
4	713418	BUSHING, Cylinder	1
5	60D20	NUT, Piston Rod	1
6	----	§O-RING, Piston Rod — See B	1
7	----	§RING, Piston Wear — See B	1
8	----	§RING, Outer Seal — See B	1
9	----	§RING, Inner Seal — See B	1
10	1503639	PISTON	1
11	----	§RING, Piston Wear — See B	1
12	----	§O-RING, Cap — See B	1
13	----	§RING, Back-Up — See B	1
14	945112	CAP, Cylinder (Inc. 12, 13)	1
15	----	§ADAPTER, Male Chevron — See 16	2
16	2501106	PACKING ASSY (Inc. 15, 17)	1
17	----	§ADAPTER, Female Chevron — See 16	2
18	526451	GLAND, Packing	1
19	941568	SEAL, Piston Rod	1
20	512797	RETAINER, Seal	1
21	----	LOCKWIRE (16 ga. x 20" lg.)	2
22	4C-620	BOLT, Packing Gland	4
23	1521832	ROD, Piston	1
24	713418	BUSHING, Piston Rod	1
25	10H-25	FITTING, Piston Rod Grease	1
26	24C-748	BOLT, Cylinder Cap	4

§Not Sold Separately

*NOTE: For reference see Service Gram S.G.-597A.

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

DECALS AND NAME PLATES

Item No.	Part No.	Description	No. Req'd.
1	2513351	*DECAL, Clark	3
2	-----	OMIT	—
3	1520495	*DECAL, "Best on Earth"	2
4	2513635	*DECAL, Model — See Note "A"	2
5	1503064	*DECAL, Hi-Lo Range	1
6	1505536	*DECAL, Engine Warm-up Warning	1
7	572740	*DECAL, Warning	2
8	1505537	*DECAL, Safety Warning	1
9	1505581	*DECAL, Safety Wiring	1
10	538256	*DECAL, Drain	1
11	1534502	*DECAL, Transmission Filter	1
12	542074	PLATE, Patent	1
13	6C-605	SCREW, Patent Plate	4
14	1510525	DECAL, Lubrication	1
15	6C-605	SCREW, Lubrication Plate	4
16	1503984	STRIP, Non-Skid Abrasive 6" x 16"	4
17	1531606	STRIP, Non-Skid Abrasive 6" x 12½"	3

*NOTE: Contact your local Michigan Distributor for the above listed decals.
NOTE "A": Remove letter "B"

NOTES

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

ENGINE AND ACCESSORIES — CUMMINS**For Serial: 408A101 thru 408B299**

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

Item No.	Part No.	Description	No. Req'd.
1	-----	* ALTERNATOR — 12 V., 42 Amp. (DR #1117753)	1
2	-----	* STARTER ASSY — 12 V. (DR #1114115)	1
3	-----	* AIR COMPRESSOR — 12 CFM (Cummins #176673)	1
4	-----	* CORROSION RESISTOR (Cummins #132716)	1
5	-----	* VOLTAGE REGULATOR (See Page 1, Item 9)	1
6	-----	* FAN — 24" (Cummins #162174)	1
7	-----	* SPACER, Fan (Cummins #119711)	1

*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

Item No.	Part No.	Description	No. Req'd.
8	949649	BELT SET, Fan (3 Belt Set)	1
9	947289	BELT, Alternator Drive	1
10	947291	BELT, Water Pump Drive	1

REPLACEMENT FILTER ELEMENTS

Item No.	Part No.	Description	No. Req'd.
11	946011	ELEMENT, Engine Full Flow Lube Filter	1
12	945350	ELEMENT, Engine By-Pass Filter	1
13	946010	ELEMENT, Engine Fuel Filter	1
14	215502	ELEMENT, Trans. & Converter Hyd. System Filter	1
15	1530600	ELEMENT, Hydraulic Reservoir Return Filter	1

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

ENGINE AND ACCESSORIES — CUMMINS**For Serial: 408B300 and after**

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

Item No.	Part No.	Description	No. Req'd.
1	-----	*ALTERNATOR — 12 V., 55 Amp. (DR #1117780)	1
2	-----	*STARTER — 12 V. (DR #1114145)	1
3	-----	*AIR COMPRESSOR — 12 CFM (Cummins #200812)	1
4	-----	*CORROSION RESISTOR (Cummins #132716)	1
5	-----	*VOLTAGE REGULATOR (See Page 5 Item 20)	1
6	-----	*FAN — 24" (Cummins #162174)	1
7	-----	*SPACER, Fan (Cummins #119711)	1
8	-----	*GOVERNOR (Cummins #163142)	1

*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

Item No.	Part No.	Description	No. Req'd.
9	949649	BELT SET, Fan (3 Belt Set)	1
10	947289	BELT, Alternator Drive	1
11	947291	BELT, Water Pump Drive	1

REPLACEMENT FILTER ELEMENTS

Item No.	Part No.	Description	No. Req'd.
12	946011	ELEMENT, Engine Full Flow Lube Filter	1
13	947293	ELEMENT, Engine By-Pass Filter	1
14	946010	ELEMENT, Engine Fuel Filter	1
15	946657	ELEMENT, Corrosion Resistor	1
16	215502	ELEMENT, Transmission & Converter Hydraulic System Filter	1
17	1530600	ELEMENT, Hydraulic Reservoir Return Filter	1

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

Item No.	Part No.	Description	No. Req'd.
1	-----	*ALTERNATOR (G.M. #1100711)	1
2	-----	*STARTER ASSY (G.M. #1113643)	1
3	-----	*VOLTAGE REGULATOR (D.R. #1119513)	1
4	-----	*AIR COMPRESSOR (B.W. #277057)	1
5	-----	*OIL FILTER ASSY — Full Flow	1
6	-----	*FAN, Radiator (G.M. #5100183)	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

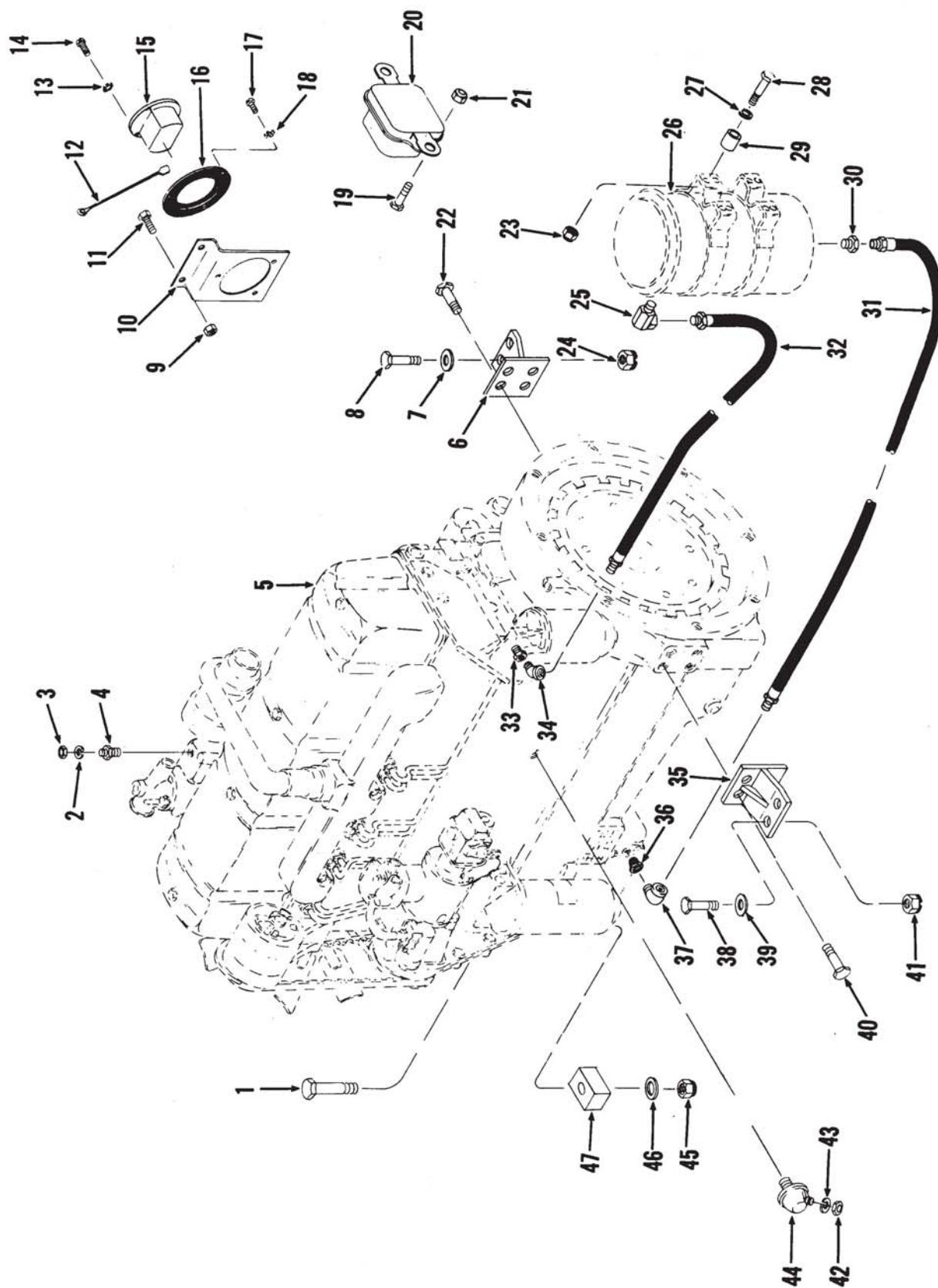
Item No.	Part No.	Description	No. Req'd.
7	948145	BELT, Alternator Drive	1
8	949297	BELT, Fan (2 Belt Set)	1

REPLACEMENT FILTER ELEMENTS

Item No.	Part No.	Description	No. Req'd.
9	946897	ELEMENT, Air Cleaner	1
10	945444	ELEMENT, Fuel Filter Strainer — Primary	1
11	945443	ELEMENT, Fuel Filter Strainer — Secondary	1
12	215502	ELEMENT, Engine Oil Filter	1
13	215502	ELEMENT, Trans. & Converter Hyd. System Filter	1
14	1530600	ELEMENT, Hydraulic Reservoir Return Filter	1

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

TS-10781-P



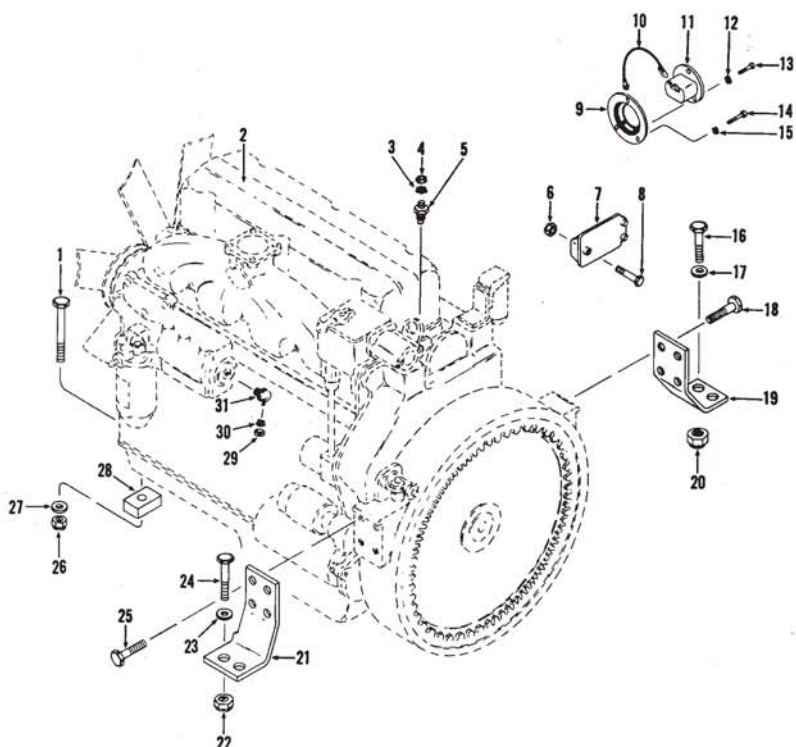
ENGINE SUPPORT AND AUXILIARY PARTS

ENGINE SUPPORT AND AUXILIARY PARTS

Item No.	Part No.	Description	No. Req'd.
1	24C-1072	BOLT, Trunnion to Frame	2
2	12E-10	LKWSHR, Sender Unit	1
3	14D-10	NUT, Sender Unit	1
4	551323	SENDER, Engine Temperature	1
5	-----	ENGINE — See Cummins Engine Parts Manual	—
6	571153	SUPPORT, Engine	1
7	635682	WASHER, Support to Frame	2
8	24C-832	BOLT, Support to Frame	2
9	18D-04	NUT, Bracket to Hood	2
10	1508543	BRACKET, Hourmeter	1
11	24C-412	BOLT, Bracket to Hood	2
12	558960	WIRE, Hourmeter Ground	1
13	12E-6	LKWSHR, Hourmeter to Dampener	3
14	85G-608	SCREW, Hourmeter to Dampener	3
15	1743825	HOURLMETER KIT (Inc. 13, 14)	1
16	551251	DAMPENER, Vibration	1
17	85G-608	SCREW, Dampener to Bracket	3
18	12E-6	LKWSHR, Dampener to Bracket	3
19	24C-412	BOLT, Regulator Mounting	2
20	336290	*REGULATOR, Voltage	1
21	18D-04	NUT, Regulator Mounting	2
22	8C-824	BOLT, Support to Engine	4
23	18D-05	NUT, Filter Mounting	8
24	18D-08	NUT, Support to Frame	2
25	31F-3	ADAPTER, Hose to Filter	1
26	-----	BY PASS FILTER — Furnished With Engine	—
27	25E-15	WASHER, Filter Mounting	8
28	24C-532	BOLT, Filter Mounting	8
29	561430	SPACER, Filter Mounting	8
30	33F-3	ELBOW, Hose to Filter	1
31	663772	HOSE, Filter to Hose Pan	1
32	539762	HOSE, Filter to Engine	1
33	356618	BUSHING, Reducing	1
34	25F-3	ELBOW, Hose to Engine	1
35	571153	SUPPORT, Engine	1
36	19F-6	BUSHING, Reducing	1
37	26F-3	ELBOW, Hose to Engine	1
38	24C-832	BOLT, Support to Frame	2
39	635682	WASHER, Support to Frame	2
40	8C-824	BOLT, Support to Engine	4
41	18D-08	NUT, Support to Frame	2
42	14D-10	NUT, Sender Unit	1
43	12E-10	LKWSHR, Sender Unit	1
44	1618574	SENDER, Engine Oil Pressure	1
45	18D-10	NUT, Trunnion to Frame	2
46	25E-25	WASHER, Trunnion to Frame	2
47	1502738	SPACER, Trunnion to Frame	2

NOTE: When replacement is necessary for Voltage Regulator (Item 20) one (1) 893379 Shock Mount Kit must also be used.

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



TS-9143-P

ENGINE SUPPORT AND AUXILIARY PARTS—G.M.

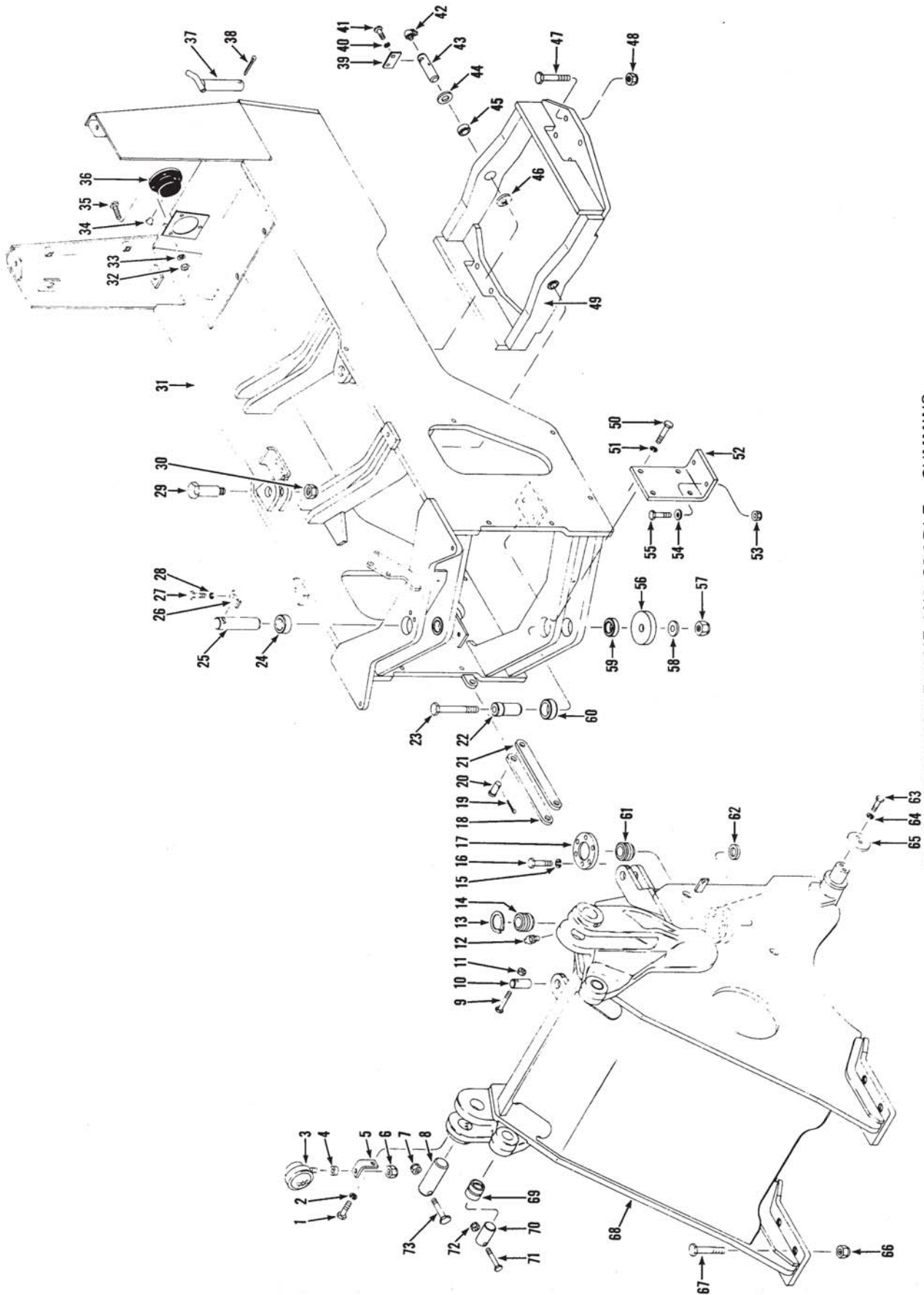
Item No.	Part No.	Description	No. Req'd.
1	24C-832	BOLT, Trunnion to Frame	2
2		ENGINE, See G.M. Engine Parts Manual	—
3	12E-10	LKWSHR, Temperature Sender	1
4	14D-10	NUT, Temperature Sender	1
5	551323	SENDER, Engine Temp.	1
6	18D-04	NUT, Regulator Mounting	2
7	336290	*REGULATOR, Voltage	1
8	24C-412	BOLT, Regulator Mounting	2
9	551251	DAMPENER, Hourmeter Vibration	1
10	558960	WIRE, Hourmeter Ground	1
11	1743825	HOURLMETER (Inc. 12, 13)	1
12	12E-06	LKWSHR, Hourmeter Mtg.	3
13	85G-608	SCREW, Hourmeter Mtg.	3
14	85G-608	SCREW, Dampener Mtg.	3
15	12E-06	LKWSHR, Dampener Mtg.	3
16	24C-832	BOLT, Mount to Frame	2
17	635682	FLAT WASHER, Mount to Frame	2
18	8C-824	BOLT, Mount to Engine	4
19	1523230	MOUNT, Engine to Frame	1
20	18D-08	NUT, Mount to Frame	2
21	1523231	MOUNT, Engine to Frame	1
22	18D-08	NUT, Mount to Frame	2
23	635682	FLAT WASHER, Mount to Frame	2
24	24C-832	BOLT, Mount to Frame	2
25	8C-824	BOLT, Mount to Engine	4
26	68D-10	NUT, Trunnion to Frame	2
27	25E-25	FLAT WASHER, Trunnion to Frame	2
28	1502738	BLOCK, Trunnion Mounting	2
29	14D-10	NUT, Oil Sender	1
30	12E-10	LKWSHR, Oil Sender	1
31	1618574	SENDER, Engine Oil Pressure	1

*NOTE: When replacement is necessary for Voltage Regulator (Item 19) one (1) 893379 Shock Mount Kit must also be used.

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

TS-8077-P

FRONT AND REAR FRAME AND CRADLE — CUMMINS
For Serial: 408A101 thru 408A999



CONSTRUCTION MACHINERY DIVISION **FRONT AND REAR FRAME AND CRADLE — CUMMINS**

For Serial: 408A101 thru 999

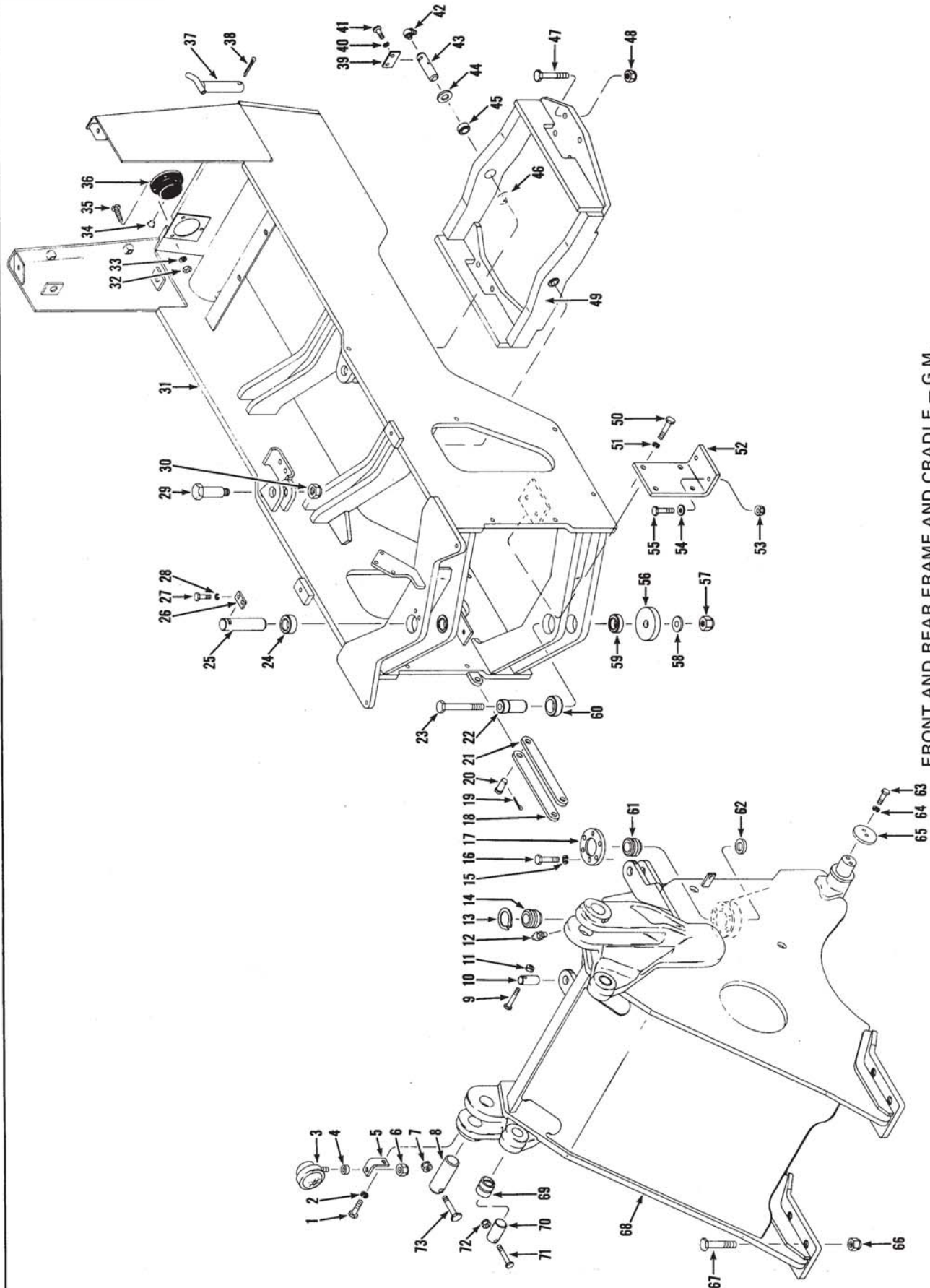
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	24C-616	BOLT, Bracket to Frame	2	37	1506818	PIN, Drawbar	1
2	4E-06	LKWSHR, Brkt. to Frame	2	38	1F-1252	COTTER, Drawbar Pin	1
3	547529	LAMP, Flood (Inc. 3A)	2	39	1506190	LOCK PLATE, Pin Retaining ..	2
3A	944907	†SEALED UNIT	2	40	4E-08	LKWSHR, Plate to Cradle	4
4	675467	SPACER, Lamp to Bracket	2	41	24C-820	BOLT, Plate to Cradle	4
5	556678	BRACKET, Lamp Mtg.	2	42	12H-15	FITTING, Cradle Grease	2
6	17D-6	NUT, Flood Lamp Mtg.	2	43	1521805	PIN, Cradle to Frame	2
7	18D-10	NUT, Pin Retaining	2	44	552146	‡SPACER, Cradle Pin — 1/16" ..	—
8	1522538	PIN, Boom to Frame	2	45	1521804	BUSHING, Cradle	2
9	24C-668	BOLT, Pin Retaining	2	46	552147	‡SPACER, Cradle Pin — 1/8"	—
10	1521896	PIN, Steer Cyl. Anchor	2	47	24C-16160	BOLT, Axle to Cradle	8
11	18D-06	NUT, Pin Retaining	2	48	68D-16	NUT, Axle to Cradle	8
12	12H-15	FITTING, Hinge Grease	2	49	1521810	CRADLE ASSY (Inc. 45)	1
13	710943	RING, Bushing Retaining	1	50	23C-1228	BOLT, Trans. to Bracket	8
14	669896	BUSHING, Upper Hinge	1	51	4E-12	LKWSHR, Trans. to Bracket	8
15	4E-08	LKWSHR, Cap to Frame	6	52	589573	BRACKET, Trans. Mounting	2
16	24C-820	BOLT, Cap to Frame	6	53	18D-08	NUT, Bracket to Frame	4
17	1522024	CAP, Lower Hinge Pin	1	54	619029	WASHER, Bracket to Frame ..	4
18	1533777	BAR, Safety Link	1	55	24C-836	BOLT, Bracket to Frame	4
19	1F-540	COTTER, Clevis Pin	2	56	1506853	PLATE, Bushing Retaining	1
20	358640	PIN, Safety Link Clevis	2	57	68D-16	NUT, Pin Retaining	1
21	1533777	BAR, Safety Link	1	58	589596	WASHER, Pin Retaining	1
22	1522025	PIN, Lower Hinge	1	59	1522029	BUSHING, Lower Pivot — Lower	1
23	24C-16144	BOLT, Pin Retaining	1	60	1522030	BUSHING, Lower Pivot — Upper	1
24	1522035	BUSHING, Upper Pivot	2	61	669896	BUSHING, Lower Hinge Pin ..	1
25	1522023	PIN, Upper Hinge	1	62	1522027	SPACER, Lower Hinge Pin	1
26	1532917	LOCK PLATE, Pin	1	63	23C-620	BOLT, Retainer to Frame	4
27	24C-820	BOLT, Plate to Frame	2	64	4E-06	LKWSHR, Retainer	4
28	4E-08	LKWSHR, Plate to Frame	2	65	1522797	RETAINER, Boom Cyl.	2
29	517355	BOLT, Steering Cyl. Anchor ..	2	66	68D-16	NUT, Axle to Frame	8
30	66D-22	NUT, Steering Cyl. Anchor	2	67	24C-16160	BOLT, Axle to Frame	8
31	1506178	FRAME ASSY, Rear (Inc. 24) ..	1	68	1522568	FRAME ASSY, Front (Inc. 69)	1
32	14D-10	NUT, Tail Lamp Mounting	6	69	585007	BUSHING, Bucket Cylinder ..	2
33	17E-10	LKWSHR, Tail Lamp Mtg.	6	70	556960	PIN, Bucket Cylinder	2
34	1010736	PLUG, Lamp — R.H. Only	1	71	24C-880	BOLT, Pin Retaining	2
35	86G-1012	SCREW, Tail Lamp Mtg.	6	72	18D-08	NUT, Pin Retaining	2
36	2520770	LAMP, Stop & Tail (Inc. 36A)	2	73	24C-1096	BOLT, Pin Retaining	2
36A	1010449	†LENS, Stop & Tail Lamp	2				
36B	942746	†BULB, Stop & Tail Lamp	2				

†Not Illustrated
‡As Required

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

TS-8077-P

FRONT AND REAR FRAME AND CRADLE — G.M.
For Serial: 409A101 thru 409A999



**CONSTRUCTION MACHINERY DIVISION
FRONT AND REAR FRAME AND CRADLE —G.M.**
For Serial: 409A101 thru 999

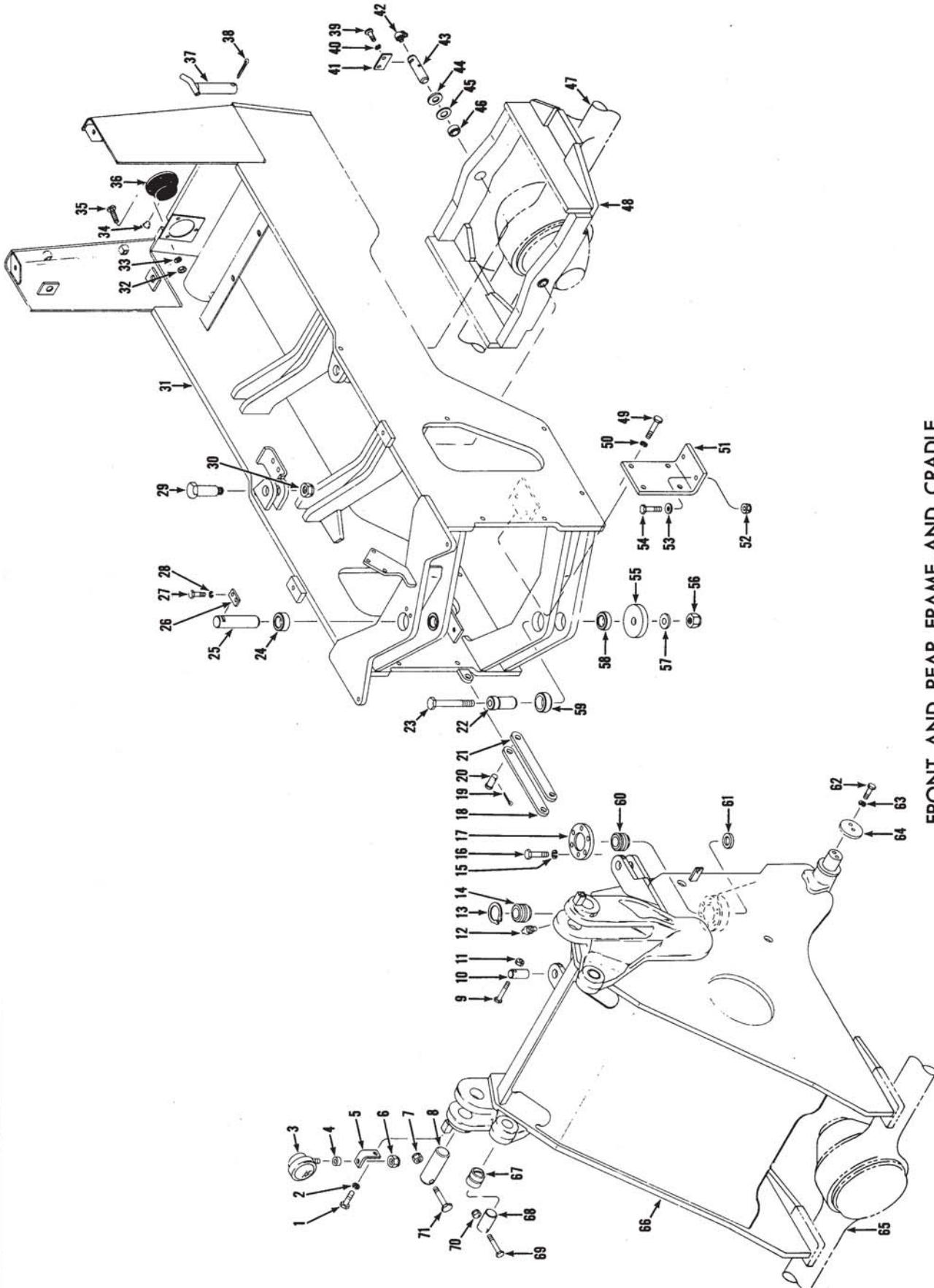
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	24C-616	BOLT, Bracket to Frame	2	37	1506818	PIN, Drawbar	1
2	4E-06	LKWSHR, Brkt. to Frame	2	38	1F-1252	COTTER, Drawbar Pin	1
3	547529	LAMP, Flood (Inc. 3A)	2	39	1506190	LOCK PLATE, Pin Retaining ..	2
3A	944907	†SEALED UNIT	2	40	4E-08	LKWSHR, Plate to Cradle	4
4	675467	SPACER, Lamp to Bracket	2	41	24C-820	BOLT, Plate to Cradle	4
5	556678	BRACKET, Lamp Mtg.	2	42	12H-15	FITTING, Cradle Grease	2
6	17D-6	NUT, Flood Lamp Mtg.	2	43	1521805	PIN, Cradle to Frame	2
7	18D-10	NUT, Pin Retaining	2	44	552146	‡SPACER, Cradle Pin — 1/4" ..	—
8	1522538	PIN, Boom to Frame	2	45	1521804	BUSHING, Cradle	2
9	24C-668	BOLT, Pin Retaining	2	46	552147	‡SPACER, Cradle Pin — 1/8" ..	—
10	1521896	PIN, Steer Cyl. Anchor	2	47	24C-16160	BOLT, Axle to Cradle	8
11	18D-06	NUT, Pin Retaining	2	48	68D-16	NUT, Axle to Cradle	8
12	12H-15	FITTING, Hinge Grease	2	49	1521810	CRADLE ASSY (Inc. 45)	1
13	710943	RING, Bushing Retaining	1	50	23C-1228	BOLT, Trans. to Bracket	8
14	669896	BUSHING, Upper Hinge	1	51	4E-12	LKWSHR, Trans. to Bracket	8
15	4E-08	LKWSHR, Cap to Frame	6	52	589573	BRACKET, Trans. Mounting	2
16	24C-820	BOLT, Cap to Frame	6	53	18D-08	NUT, Bracket to Frame	4
17	1522024	CAP, Lower Hinge Pin	1	54	619029	WASHER, Bracket to Frame ..	4
18	1533777	BAR, Safety Link	1	55	24C-836	BOLT, Bracket to Frame	4
19	1F-540	COTTER, Clevis Pin	2	56	1506853	PLATE, Bushing Retaining	1
20	358640	PIN, Safety Link Clevis	2	57	68D-16	NUT, Pin Retaining	1
21	1533777	BAR, Safety Link	1	58	589596	WASHER, Pin Retaining	1
22	1522025	PIN, Lower Hinge	1	59	1522029	BUSHING, Lower Pivot — Lower	1
23	24C-16144	BOLT, Pin Retaining	1	60	1522030	BUSHING, Lower Pivot — Upper	1
24	1522029	BUSHING, Upper Pivot	2	61	669896	BUSHING, Lower Hinge Pin ..	1
25	1522023	PIN, Upper Hinge	1	62	1522027	SPACER, Lower Hinge Pin	1
26	1532917	LOCK PLATE, Pin	1	63	23C-620	BOLT, Retainer to Frame	4
27	24C-820	BOLT, Plate to Frame	2	64	4E-06	LKWSHR, Retainer	4
28	4E-08	LKWSHR, Plate to Frame	2	65	1522797	RETAINER, Boom Cyl.	2
29	517355	BOLT, Steering Cyl. Anchor ..	2	66	68D-16	NUT, Axle to Frame	8
30	66D-22	NUT, Steering Cyl. Anchor	2	67	24C-16160	BOLT, Axle to Frame	8
31	1502746	FRAME ASSY, Rear (Inc. 24) ..	1	68	1522568	FRAME ASSY, Front (Inc. 69)	1
32	14D-10	NUT, Tail Lamp Mounting	6	69	585007	BUSHING, Bucket Cylinder ..	2
33	17E-10	LKWSHR, Tail Lamp Mtg.	6	70	556960	PIN, Bucket Cylinder	2
34	1010736	PLUG, Lamp — R.H. Only	1	71	24C-880	BOLT, Pin Retaining	2
35	86G-1012	SCREW, Tail Lamp Mtg.	6	72	18D-08	NUT, Pin Retaining	2
36	2520770	LAMP, Stop & Tail (Inc. 36A)	2	73	24C-1096	BOLT, Pin Retaining	2
36A	1010449	†LENS, Stop & Tail Lamp	2				
36B	942746	†BULB, Stop & Tail Lamp	2				

†Not Illustrated
‡As Required

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

TS-9682

FRONT AND REAR FRAME AND CRADLE
For Serial: Cummins, 408B101 and After; G.M., 409B101 and After

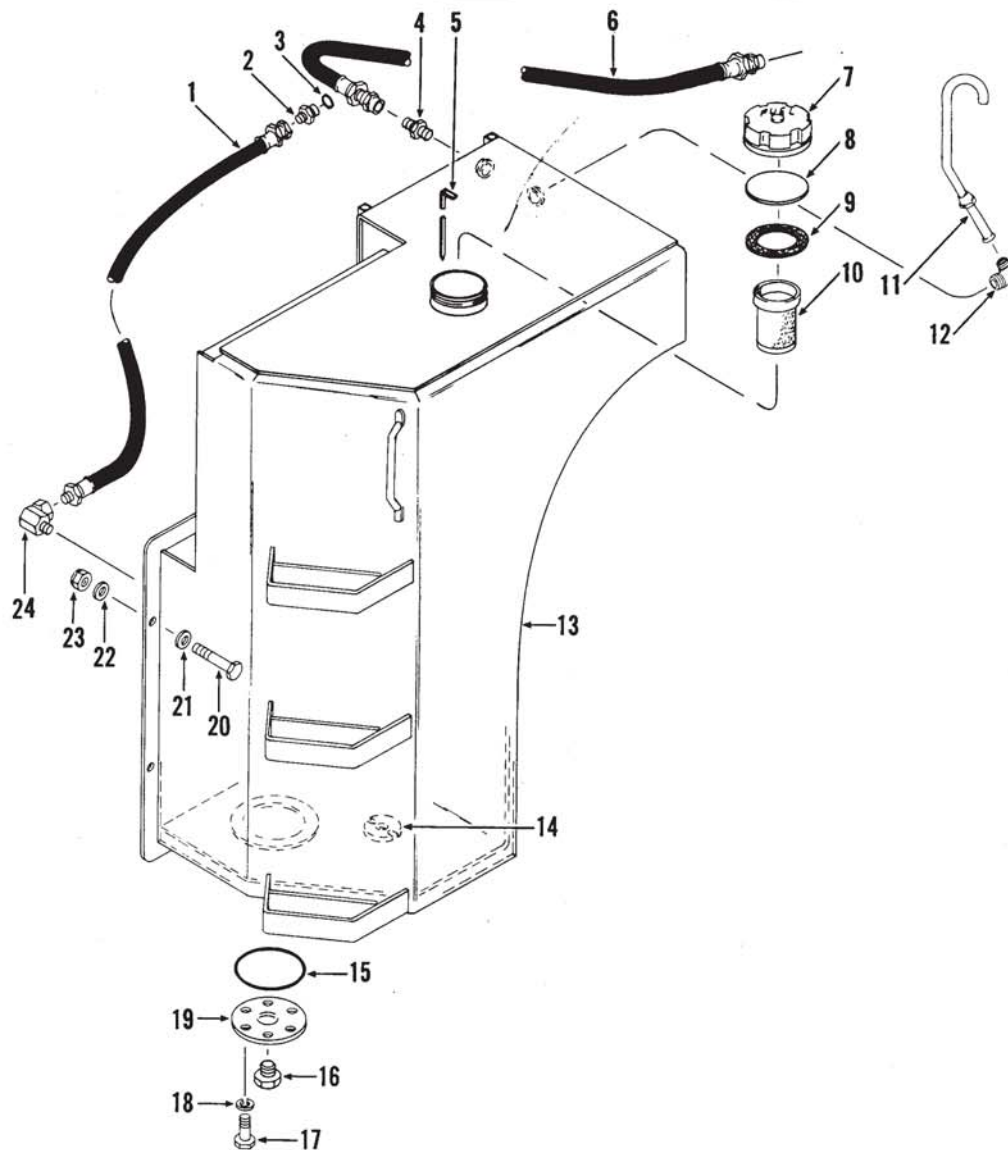


FRONT AND REAR FRAME AND CRADLE
For Serial: Cummins, 408B101 and After; G.M., 409B101 and After

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	24C-616	BOLT, Bracket to Frame	2	36	2520770	LAMP, Stop & Tail (Inc. 36A)	2
2	4E-06	LKWSHR, Bracket to Frame..	2	36A	1010449	†LENS, Stop & Tail Lamp	2
3	547529	LAMP, Flood (Inc. 3A)	2	36B	942746	†BULB, Stop & Tail Lamp	2
3A	944907	†SEALED UNIT	2	37	1506818	PIN, Drawbar	1
4	675467	SPACER, Lamp to Bracket	2	38	1F-1252	COTTER, Drawbar Pin	1
5	556678	BRACKET, Lamp Mtg.	2	39	24C-820	BOLT, Plate to Cradle	4
6	17D-6	NUT, Flood Lamp Mtg.	2	40	4E-08	LKWSHR, Plate to Cradle	4
7	18D-10	NUT, Pin Retaining	2	41	1506190	LOCK PLATE, Pin Retaining ..	2
8	1522538	PIN, Boom to Frame	2	42	12H-15	FITTING, Cradle Grease	2
9	24C-668	BOLT, Pin Retaining	2	43	1521805	PIN, Cradle to Frame	2
10	1521896	PIN, Steer Cyl. Anchor	2	44	552146	‡SPACER, Cradle Pin — 1/16	—
11	18D-06	NUT, Pin Retaining	2	45	552147	‡SPACER, Cradle Pin — 1/8	—
12	11H-25	FITTING, Hinge Grease	2	46	1521804	BUSHING, Cradle	2
13	710943	RING, Bushing Retaining	1	47	—	AXLE ASSY, Rear Drive — See Index	—
14	669896	BUSHING, Upper Hinge	1	48	1537525	CRADLE ASSY (Inc. 46)	1
15	4E-08	LKWSHR, Cap to Frame	6	49	23C-1228	BOLT, Trans. to Bracket	8
16	24C-820	BOLT, Cap to Frame	6	50	4E-12	LKWSHR, Trans. to Bracket....	8
17	1522024	CAP, Lower Hinge Pin	1	51	589573	BRACKET, Trans. Mounting....	2
18	1533777	BAR, Safety Link	1	52	18D-08	NUT, Bracket to Frame	4
19	1F-540	COTTER, Clevis Pin	2	53	619029	WASHER, Bracket to Frame..	4
20	358640	PIN, Safety Link Clevis	2	54	24C-836	BOLT, Bracket to Frame	4
21	1533777	BAR, Safety Link	1	55	1506853	PLATE, Bushing Retaining	1
22	1522025	PIN, Lower Hinge	1	56	68D-16	NUT, Pin Retaining	1
23	24C-16144	BOLT, Pin Retaining	1	57	589596	WASHER, Pin Retaining	1
24	1522029	BUSHING, Upper Pivot	2	58	1522029	BUSHING, Lower Pivot — Lower	1
25	1522023	PIN, Upper Hinge	1	59	1522030	BUSHING, Lower Pivot — Upper	1
26	1532917	LOCK PLATE, Pin	2	60	669896	BUSHING, Lower Hinge Pin ..	1
27	24C-820	BOLT, Plate to Frame	2	61	1522027	SPACER, Lower Hinge Pin	1
28	4E-08	LKWSHR, Plate to Frame	2	62	23C-620	BOLT, Retainer to Frame	4
29	517355	BOLT, Steering Cyl. Anchor..	2	63	4E-06	LKWSHR, Retainer to Frame..	4
30	66D-22	NUT, Steering Cyl. Anchor ..	2	64	1522797	RETAINER, Boom Cyl.	2
31		FRAME ASSY, Rear (Inc. 24, 58, 59)		65	—	AXLE ASSY, Front Drive — See Index	—
31A	1504576	For Cummins Powered	1	66	1545999	FRAME ASSY, Front (Inc. 67)	1
31B	1504577	For G.M. Powered	1	67	585007	BUSHING, Bucket Cylinder....	2
32	14D-10	NUT, Tail Lamp Mounting	6	68	556960	PIN, Bucket Cylinder	2
33	17E-10	LKWSHR, Tail Lamp Mounting	6	69	24C-880	BOLT, Pin Retaining	2
34	1010736	PLUG, Lamp — R.H. Only	1	70	18D-08	NUT, Pin Retaining	2
35	86G-1012	SCREW, Tail Lamp Mtg.	6	71	24C-1096	BOLT, Pin Retaining	2

†Not Illustrated
‡As Required

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



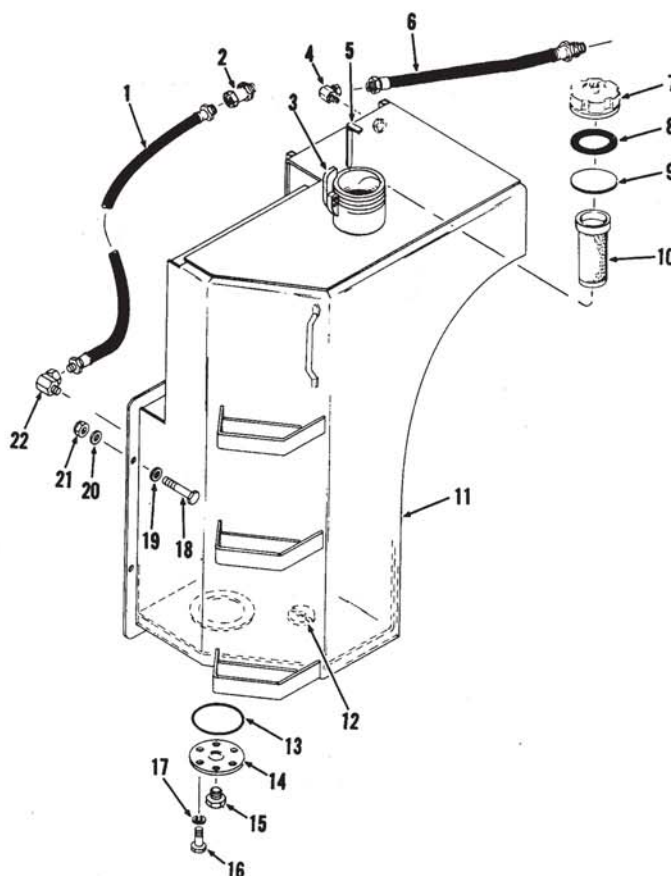
TS-8945-P

FUEL TANK AND LINES — CUMMINS
For Serial: 408A101 thru 999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1502552	HOSE, Fuel Supply	1	12A	19F-1	†BUSHING, Elbow to Tank	1
2	15K-7	ADAPTER, Hose to Filter (Inc. 3)	1	13	1506848	TANK, Fuel	1
3	91F-7	O-RING, Adapter	1	14	525293	MAGNET, Fuel Tank	1
4	38F-7	CONNECTOR, Hose to Tank	1	15	25K-40428	O-RING, Cover	1
5	1522239	DIPSTICK, Fuel Tank	1	16	40K-16	PLUG, Cover	1
6	1528230	HOSE, Fuel Return	1	17	24C-612	BOLT, Cover to Tank	6
7	1558644	CAP, Filler (Inc. 8, 9)	1	18	4E-06	LKWSHR, Cover to Tank	6
8	946954	PLATE, Filler Cap	1	19	587613	COVER, Inspection	1
9	946953	GASKET, Filler Cap	1	20	24C-836	BOLT, Tank Mounting	5
10	943957	SCREEN	1	21	1522284	WASHER, Tank Mounting	5
11	1507501	TUBE, Breather	1	22	1522284	WASHER, Tank Mounting	5
12	42F-3	ELBOW, Tube to Tank	1	23	18D-05	NUT, Tank Mounting	5
				24	31F-4	ADAPTER, Hose to Tank	1

†Not Illustrated

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



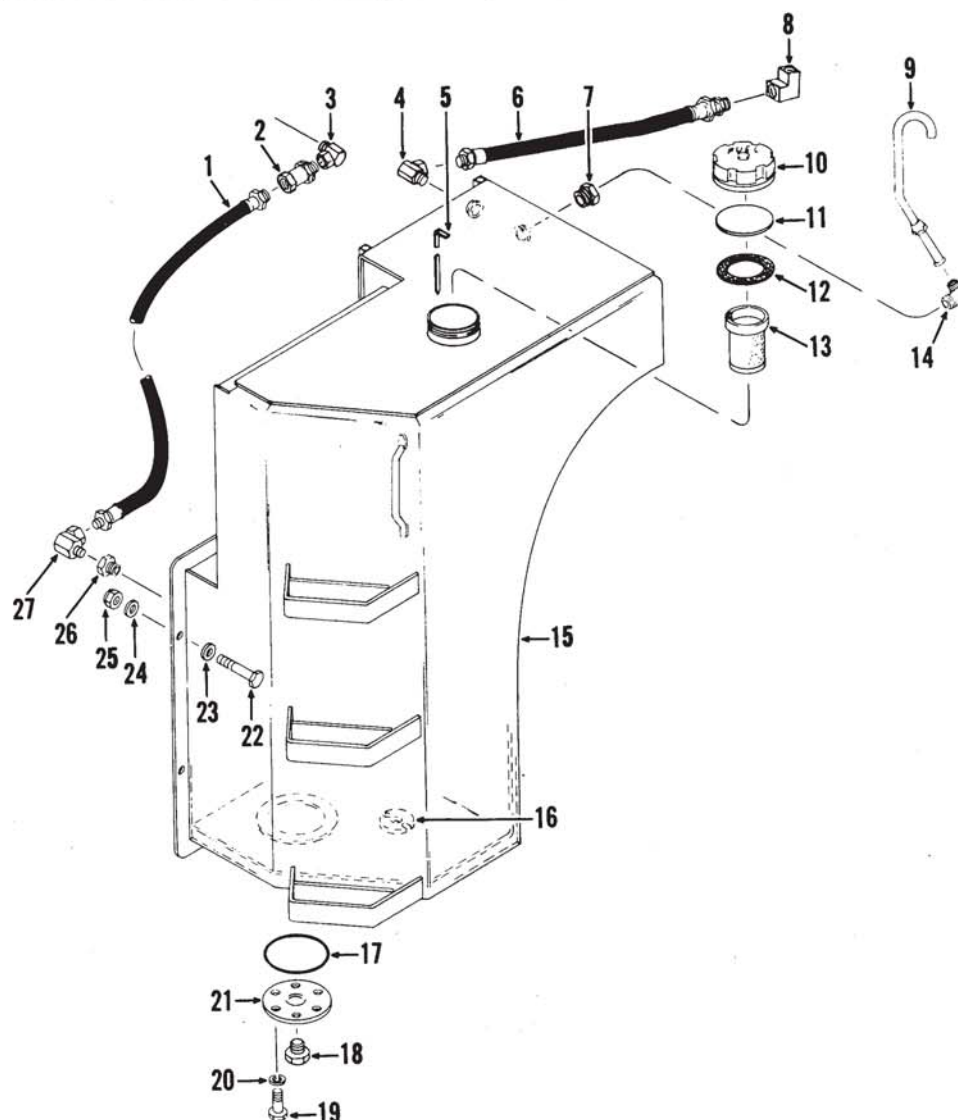
TS-9723

FUEL TANK AND LINES — CUMMINS
For Serial: 408B101 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1502552	HOSE, Fuel Supply	1	11	1506848	TANK, Fuel	1
2	15K-7	ADAPTER, Hose to Fuel Filter (Inc. 2A)	1	12	525293	MAGNET, Fuel Tank	1
2A	91F-7	†O-RING, Adapter	1	13	25K-40428	O-RING, Cover	1
3	1509025	LATCH, Fuel Cap	1	14	587613	COVER, Inspection	1
3A	1H-414	†RIVET, Fuel Cap Latch	1	15	40K-16	PLUG, Cover	1
4	38F-1	FITTING, Hose to Tank	1	16	24C-612	BOLT, Cover to Tank	6
5	1522239	DIPSTICK, Fuel Tank	1	17	4E-06	LKWSHR, Cover to Tank	6
6	1528230	HOSE, Fuel Return	1	18	24C-836	BOLT, Tank Mtg.	5
7	1558644	CAP, Filler (Inc. 8 & 9)	1	19	1522284	WASHER, Tank Mtg.	5
8	946954	PLATE, Gasket Back-Up	1	20	1522284	WASHER, Tank Mtg.	5
9	946953	GASKET, Fuel Cap	1	21	18D-08	NUT, Tank Mtg.	5
10	943957	SCREEN	1	22	31F-4	ADAPTER, Hose to Tank	1

†Not Illustrated

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

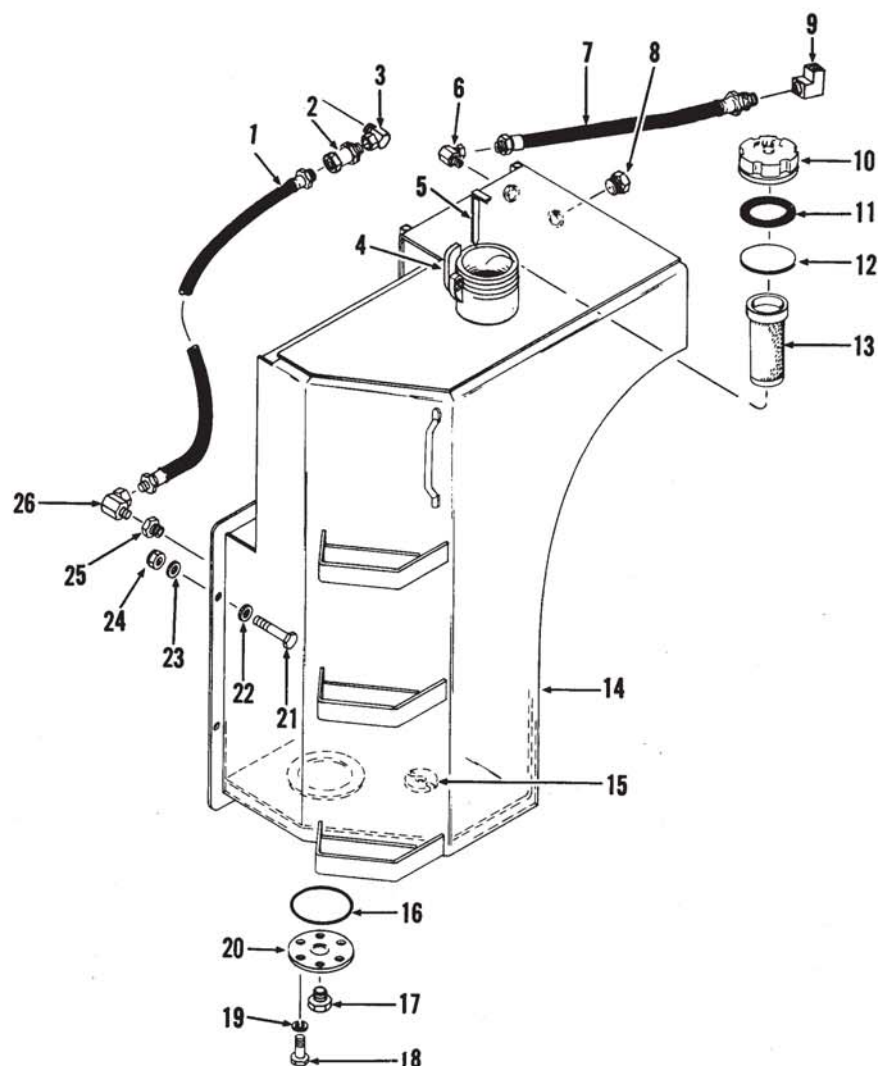


TS-9160-P

FUEL TANK AND LINES —G.M.
For Serial: 409A101 thru 999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1502868	HOSE, Fuel Supply	1	15	1506848	TANK, Fuel	1
2	531792	VALVE, Check	1	16	525293	MAGNET, Fuel Tank	1
3	31F-2	ELBOW, Valve to Filter	1	17	25K-40428	O-RING, Cover	1
4	31F-2	ELBOW, Hose to Tank	1	18	40K-16	PLUG, Cover	1
5	1522239	DIPSTICK, Fuel Tank	1	19	24C-612	BOLT, Cover to Tank	6
6	663771	HOSE, Fuel Return	1	20	4E-06	LKWSHR, Cover to Tank	6
7	19F-1	BUSHING, Elbow to Tank	1	21	587613	COVER, Inspection	1
8	27F-1	ELBOW, Hose to Line	1	22	24C-612	BOLT, Tank Mounting	5
9	1507501	TUBE, Breather	1	23	1522284	WASHER, Tank Mounting	5
10	1558644	CAP, Filler (Inc. 11, 12)	1	24	1522284	WASHER, Tank Mounting	5
11	946954	PLATE, Filler Cap	1	25	18D-08	NUT, Tank Mounting	5
12	946953	GASKET, Filler Cap	1	26	19F-6	BUSHING, Elbow to Tank	1
13	943957	SCREEN	1	27	31F-3	ELBOW, Bushing to Hose	1
14	42F-3	ELBOW, Tube to Tank	1				

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



TS-9712

FUEL TANK AND LINES — G.M.

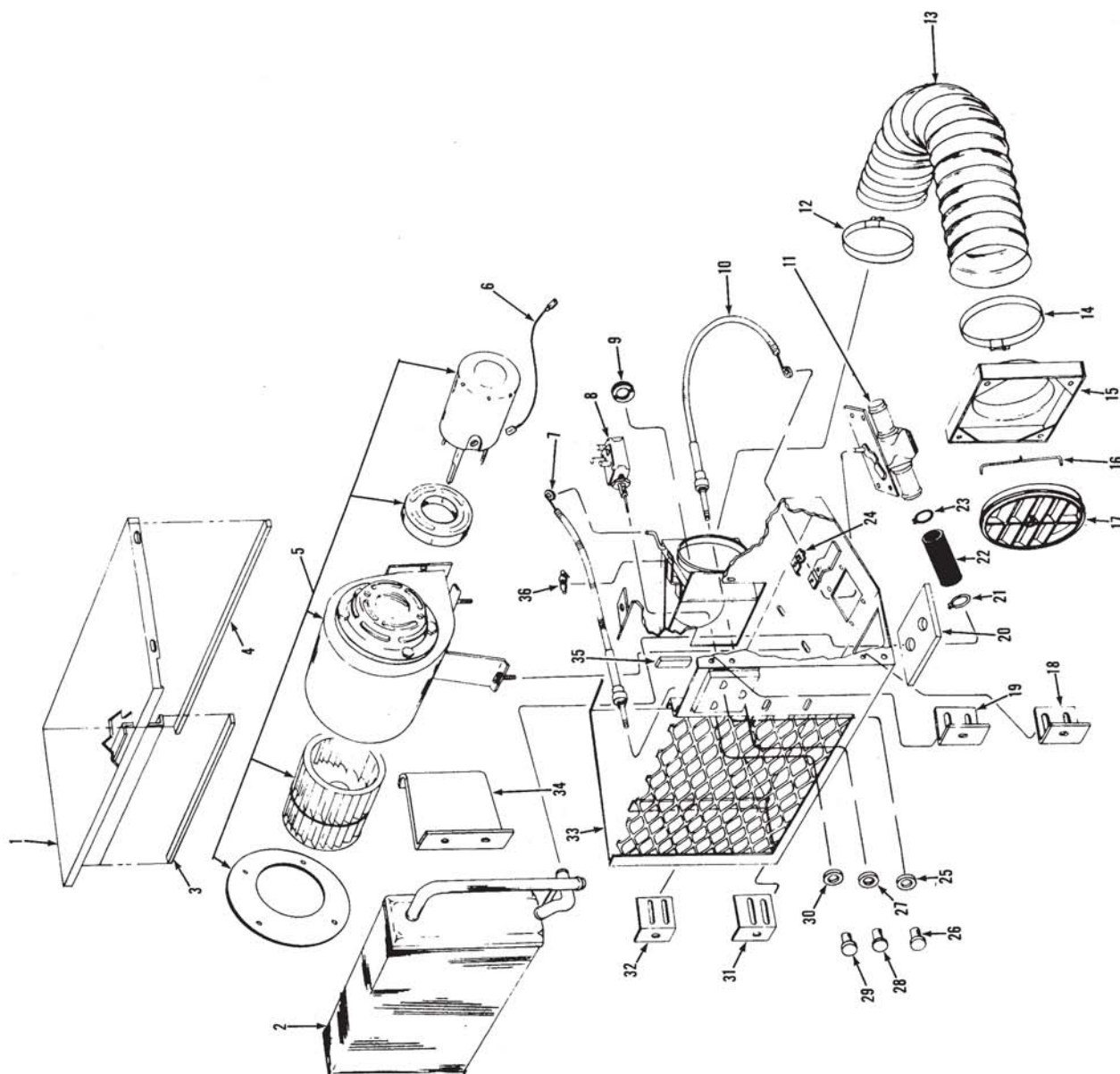
For Serial: 409B101 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1502868	HOSE, Fuel Supply	1	13	943957	SCREEN	1
2	531792	VALVE, Check	1	14	1506848	TANK, Fuel	1
3	29F-1	ELBOW, Valve to Filter	1	15	525293	MAGNET, Fuel Tank	1
4	1509025	LATCH	1	16	25K-40428	O-RING, Cover	1
4A	1H-414	†RIVET, Latch	1	17	40K-16	PLUG, Cover	1
5	1522239	DIPSTICK, Fuel Tank	1	18	24C-612	BOLT, Cover to Tank	6
6	31F-2	ELBOW, Hose to Tank	1	19	4E-06	LKWSHR, Cover to Tank	6
7	663771	HOSE, Fuel Return	1	20	587613	COVER, Inspection	1
8	-----	OMIT, Not Used This Application	—	21	24C-836	BOLT, Tank Mounting	5
9	27F-1	ELBOW, Hose to Line	1	22	1522284	WASHER, Tank Mounting	5
10	1558644	CAP, Filter (Inc. 11, 12)	1	23	1522284	WASHER, Tank Mounting	5
11	946954	PLATE, Gasket Back-Up	1	24	18D-08	NUT, Tank Mounting	5
12	946953	GASKET, Fuel Cap	1	25	19F-6	BUSHING, Elbow to Tank	1
				26	31F-3	ELBOW, Bushing to Hose	1

†Not Illustrated

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

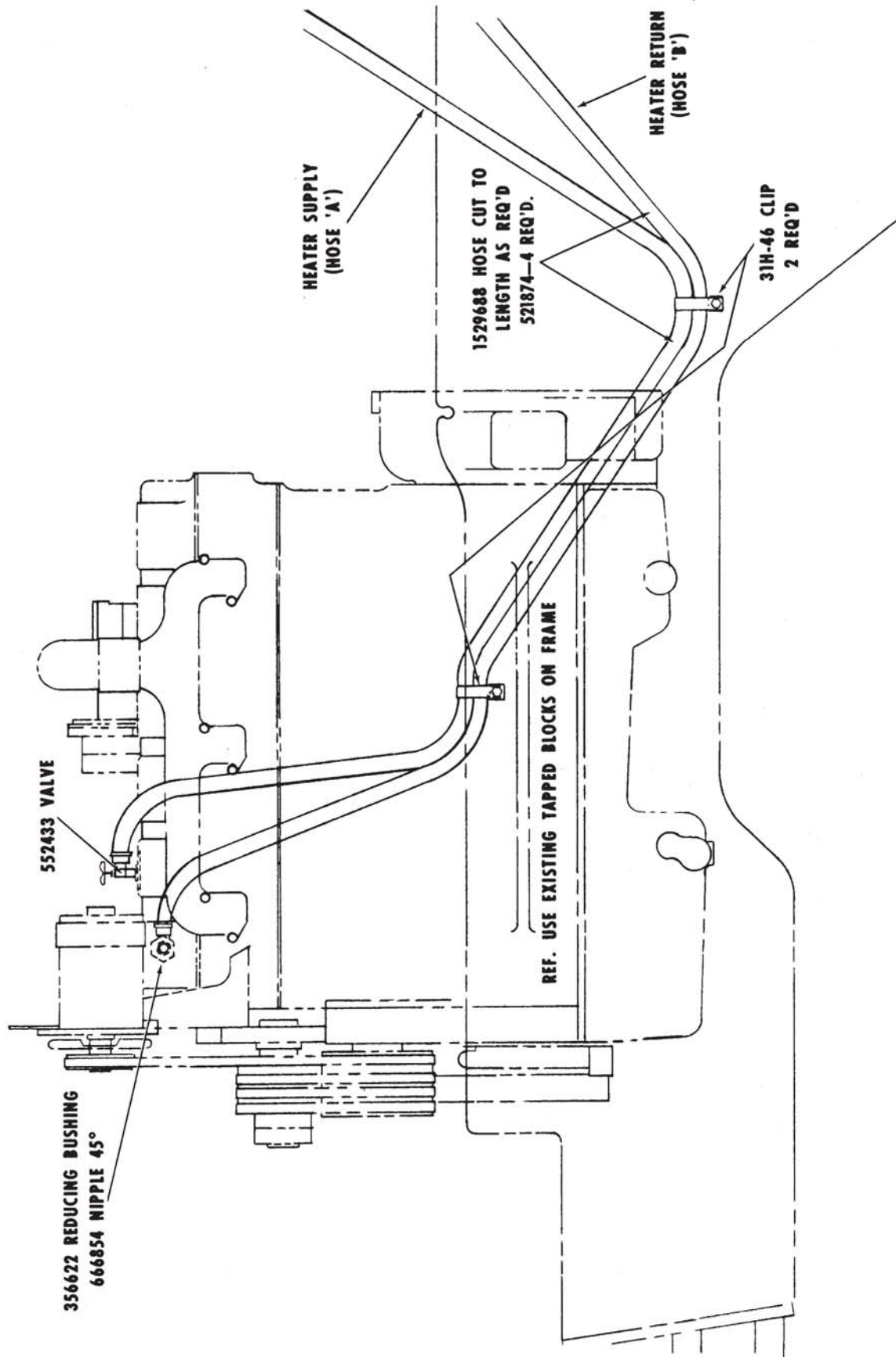
HEATER ASSEMBLY — 12V & 24V



HEATER ASSEMBLY — 12V & 24V

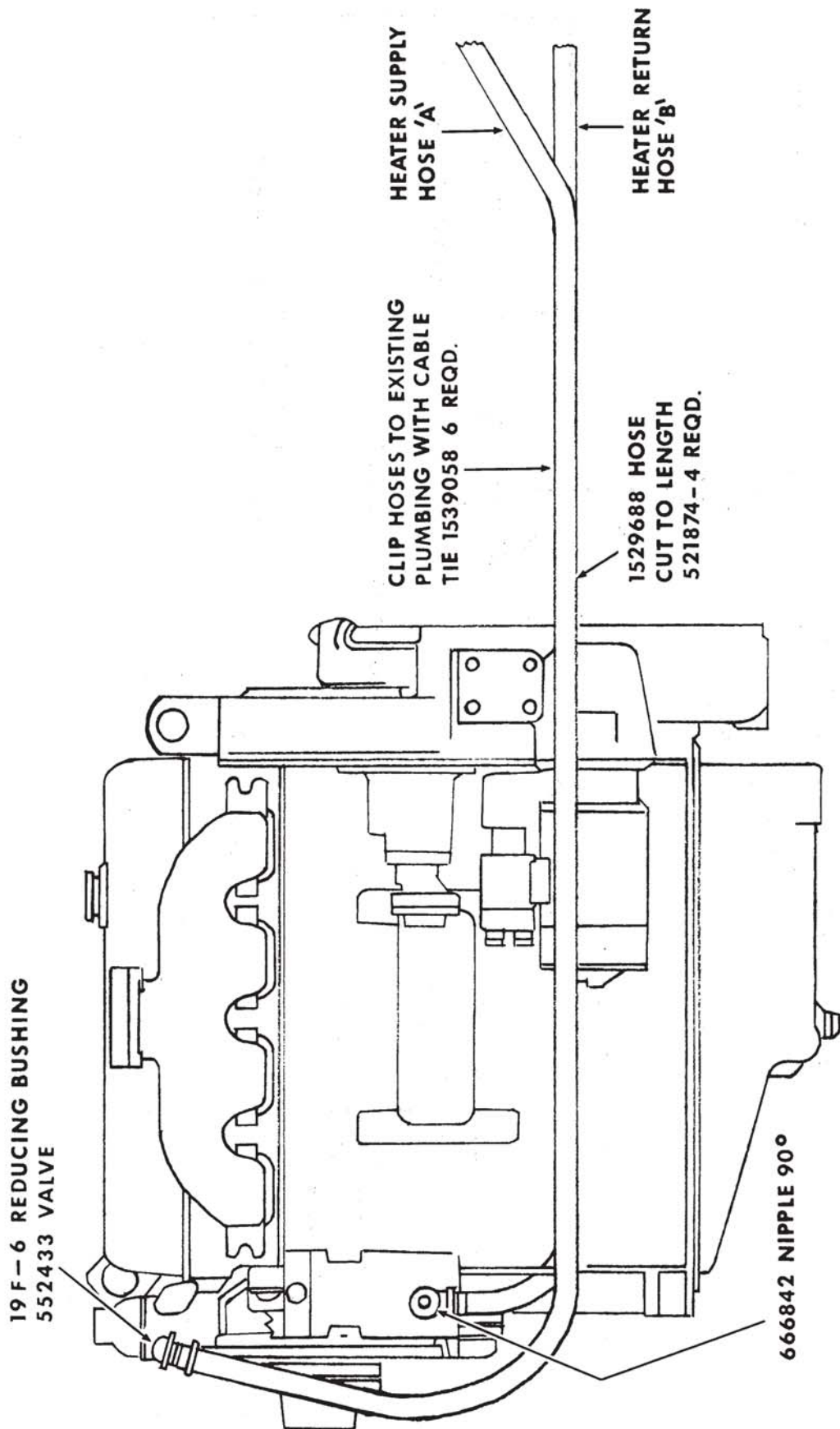
Item No.	Part No.	Description	No. Req'd.
A	1510660	HEATER ASSY, 12V (Inc. 1 thru 5, 6 thru 36)	1
B	1510661	HEATER ASSY, 24V (Inc. 1 thru 4, 5A thru 36)	1
1	947977	COVER, Core	1
2	947948	CORE, Heater	1
3	949047	SPONGE SEAL, Cover	1
4	947997	SEAL, Cover	1
5	948957	BLOWER ASSY, 12V	1
5A	948958	BLOWER ASSY, 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



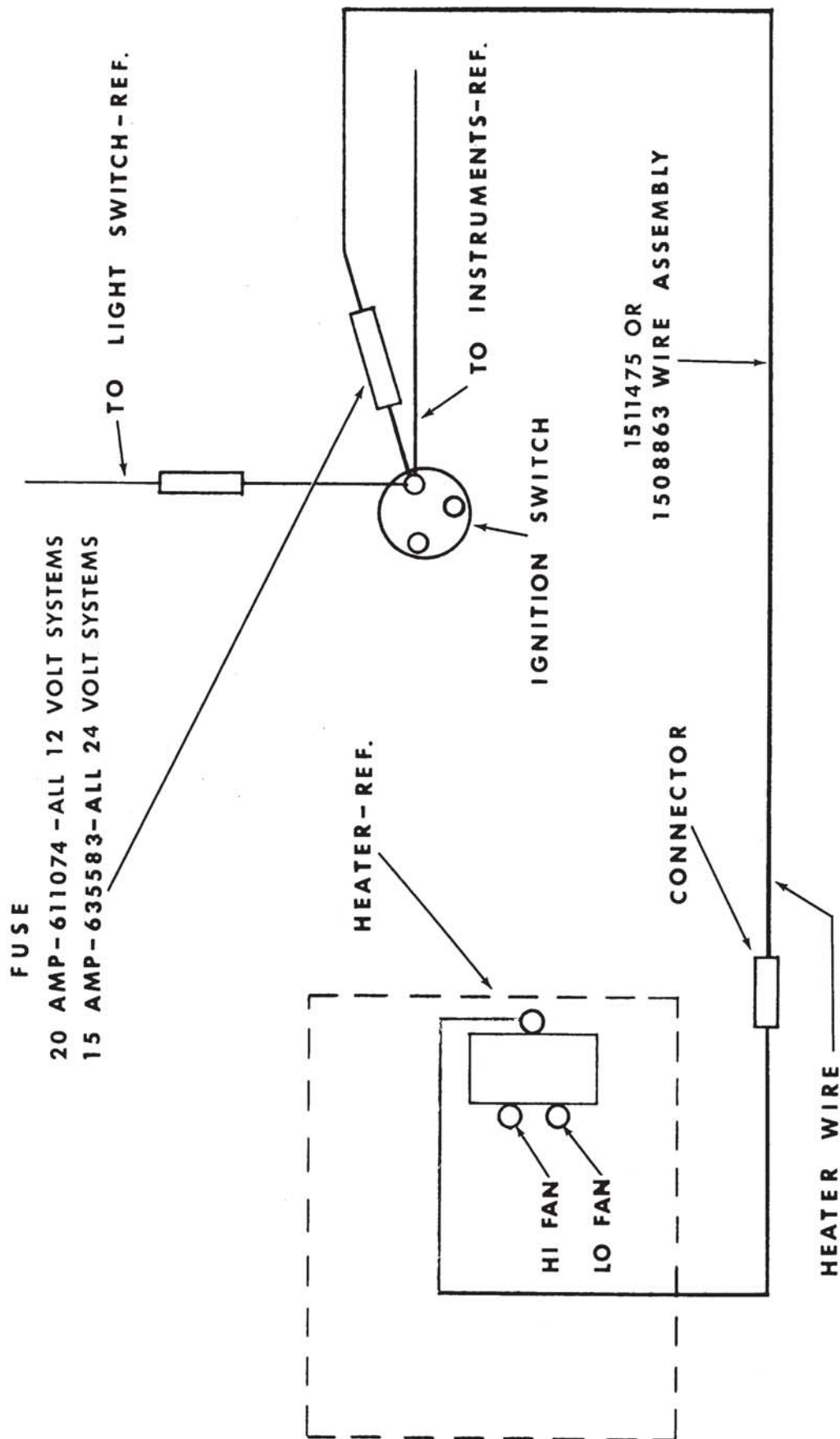
TS-10964

HEATER PLUMBING DIAGRAM — G.M.



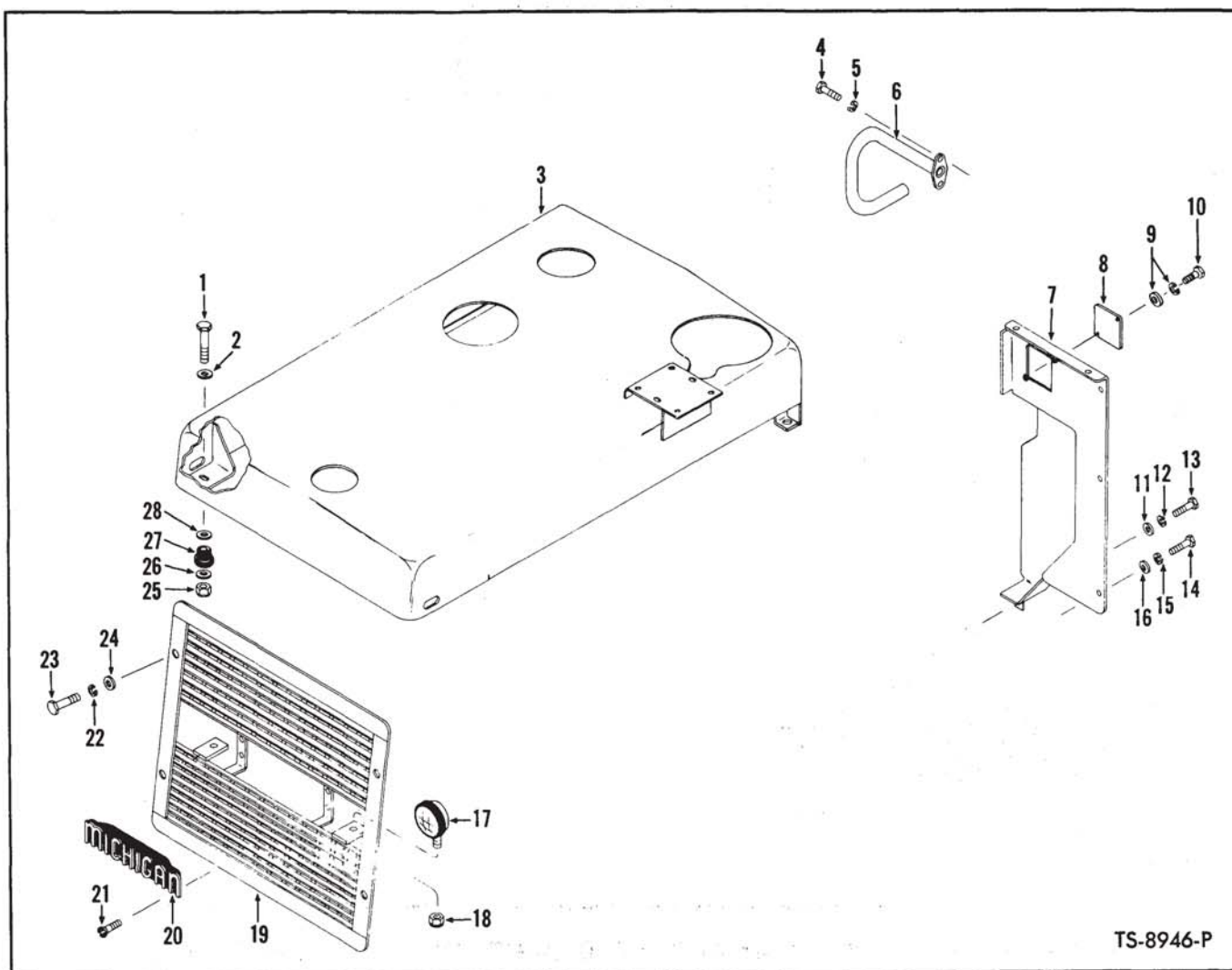
HEATER PUMBLING DIAGRAM - CUMMINS

TS-10963



TS-10972

HEATER WIRING DIAGRAM



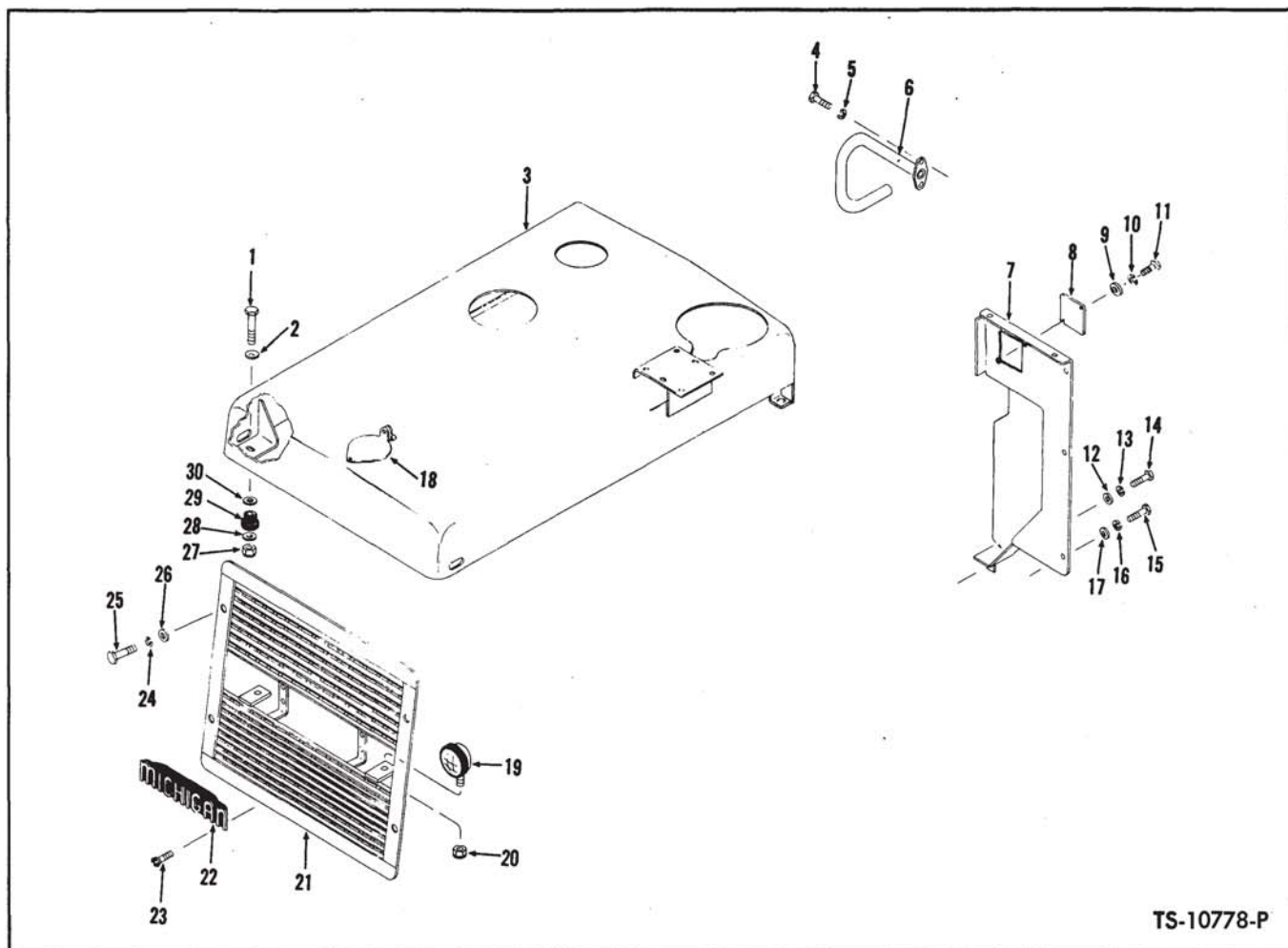
HOOD, HAND RAILS, VALVE COVER AND GRILLE — CUMMINS

For Serial: 408A101 thru 408B299

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	24C-632	BOLT, Hood Mtg.	2	15	4E-06	LKWSHR, Cover Mtg.	1
2	619021	WASHER, Hood Mtg.	2	16	206699	WASHER, Cover Mtg.	1
3	1506095	HOOD	1	17	547529	LAMP, Back-Up (Inc. 17A)	2
4	23C-616	BOLT, Hand Rail to Cockpit ..	4	17A	944907	†SEALED UNIT, Lamp	2
5	4E-06	LKWSHR, Hand Rail to Cockpit ..	4	17B	675467	†SPACER, Lamp Mtg.	2
6	1521678	HAND RAIL — L.H.	1	17C	584092	†WASHER, Lamp Mtg.	2
6A	1521677	†HAND RAIL — R.H.	1	18	17D-06	NUT, Lamp Mtg.	2
7	1536670	COVER, Valve	1	19	1521554	GRILLE	1
8	1503511	PLATE, Valve Cover	1	20	564011	NAMEPLATE, Grille	1
9	206699	WASHER, Plate to Cover	2	21	44G-418	SCREW, Nameplate Mtg.	4
9A	4E-06	LKWSHR, Plate to Cover	2	22	4E-08	LKWSHR, Grille Mtg.	4
10	23C-616	BOLT, Plate to Cover	2	23	24C-824	BOLT, Grille Mtg.	4
11	206699	WASHER, Cover Mtg.	4	24	635682	WASHER, Grille Mtg.	4
12	4E-06	LKWSHR, Cover Mtg.	4	25	18D-06	NUT, Hood Mtg.	2
13	23C-616	BOLT, Cover Mtg.	4	26	619021	WASHER, Hood Mtg.	2
14	24C-616	BOLT, Cover Mtg.	1	27	568276	DAMPENER, Hood Mtg.	2
				28	619021	WASHER, Hood Mtg.	2

†Not Illustrated

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



TS-10778-P

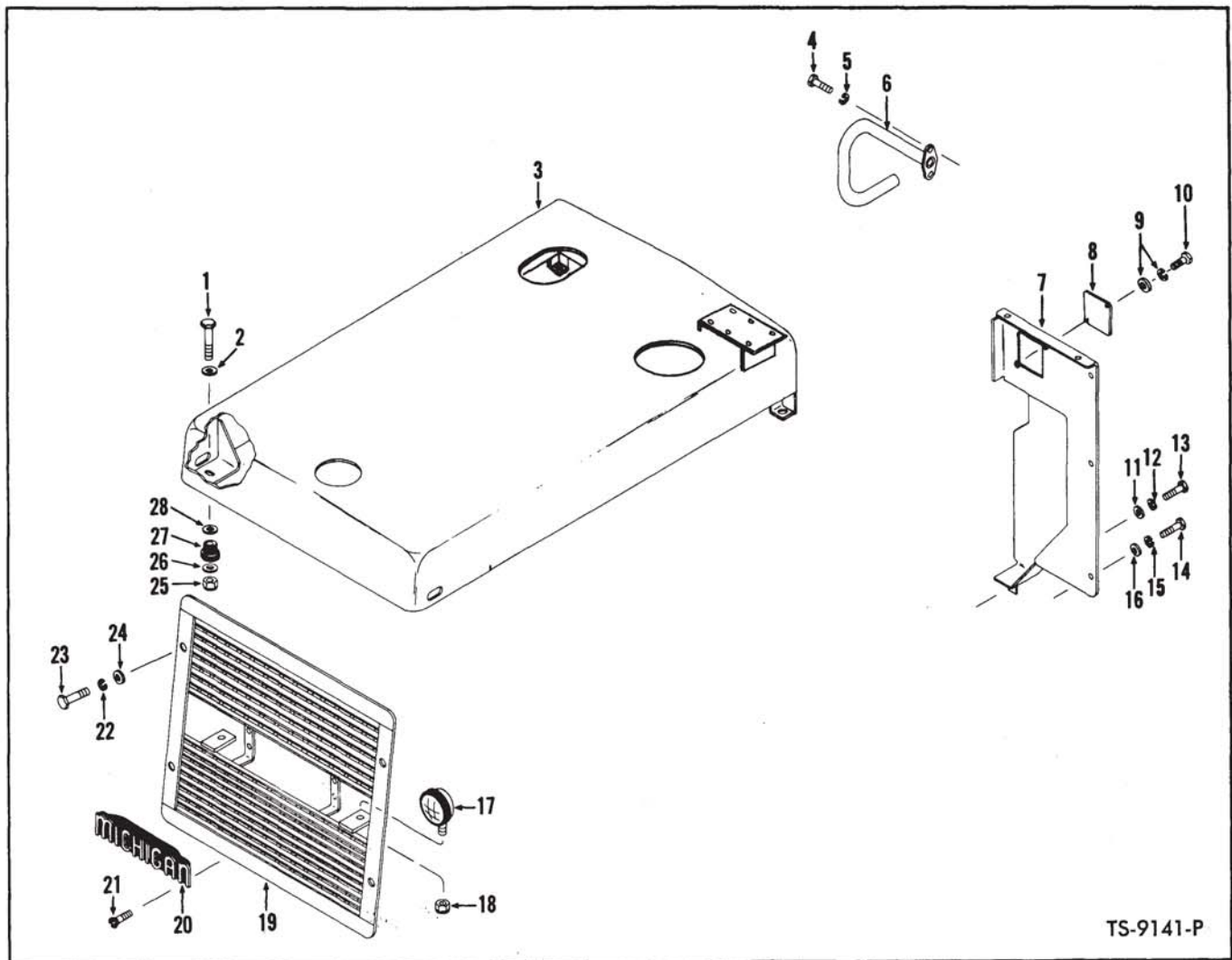
HOOD, HAND RAILS, VALVE COVER AND GRILLE — CUMMINS

For Serial: 408B300 and After

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	24C-632	BOLT, Hood Mounting	2	18	1544448	PLATE, Cover	1
2	619021	WASHER, Hood Mounting	2	18A	1H-508	RIVET	1
3	1509344	HOOD	1	19	547529	LAMP, Back-Up (Inc. 19A)	2
4	23C-616	BOLT, Handrail to Cockpit	4	19A	944907	†SEALED UNIT, Lamp	2
5	4E-06	LKWSHR, Handrail to Cockpit	4	19B	675467	†SPACER, Lamp Mounting	2
6	1521678	HAND RAIL — L.H.	1	19C	584092	†WASHER, Lamp Mounting	2
6A	1521677	†HAND RAIL — R.H.	1	20	17D-06	NUT, Lamp Mounting	2
7	1536670	COVER, Valve	1	21	1521554	GRILLE	1
8	1503511	PLATE, Valve Cover	1	22	564011	NAME PLATE, Grille	1
9	206699	WASHER, Plate to Cover	2	23	44G-418	SCREW, Name Plate Mounting	4
10	4E-06	LKWSHR, Plate to Cover	2	24	4E-08	LKWSHR, Grille Mounting	4
11	23C-616	BOLT, Plate to Cover	2	25	24C-824	BOLT, Grille Mounting	4
12	206699	WASHER, Cover Mounting	4	26	635682	WASHER, Grille Mounting	4
13	4E-06	LKWSHR, Cover Mounting	4	27	18D-06	NUT, Hood Mounting	2
14	23C-616	BOLT, Cover Mounting	4	28	619021	WASHER, Hood Mounting	1
15	24C-616	BOLT, Cover Mounting	1	29	568276	DAMPENER, Hood Mounting	2
16	4E-06	LKWSHR, Cover Mounting	1	30	619021	WASHER, Hood Mounting	1
17	206699	WASHER, Cover Mounting	1				

†Not Illustrated

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



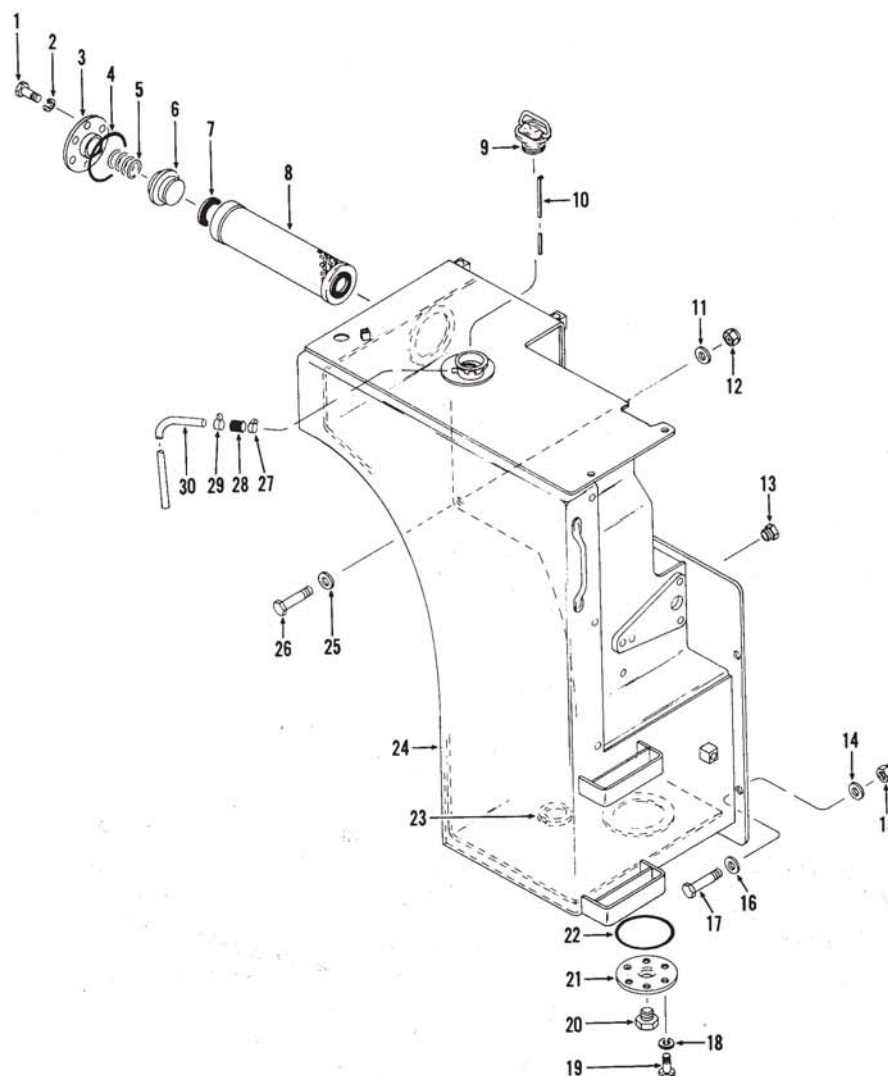
TS-9141-P

HOOD, HAND RAILS, VALVE COVER AND GRILLE—G.M.

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	24C-632	BOLT, Hood Mtg.	2	15	4E-06	LKWSHR, Cover Mtg.	1
2	619021	WASHER, Hood Mtg.	2	16	206699	WASHER, Cover Mtg.	1
3	1523204	HOOD	1	17	547529	LAMP, Back-Up (Inc. 17A)	2
4	23C-616	BOLT, Hand Rail to Cockpit ..	4	17A	944907	† SEALED UNIT, Lamp	2
5	4E-06	LKWSHR, Hand Rail to Cockpit ..	4	17B	675467	† SPACER, Lamp Mtg.	2
6	1521678	HAND RAIL — L.H.	1	17C	584092	† WASHER, Lamp Mtg.	2
6A	1521677	† HAND RAIL — R.H.	1	18	17D-06	NUT, Lamp Mtg.	2
7	1536670	COVER, Valve	1	19	1521554	GRILLE	1
8	1503511	PLATE, Valve Cover	1	20	564011	NAMEPLATE, Grille	1
9	206699	WASHER, Plate to Cover	2	21	44G-418	SCREW, Nameplate Mtg.	4
9A	4E-06	LKWSHR, Plate to Cover	2	22	4E-08	LKWSHR, Grille Mtg.	4
10	23C-616	BOLT, Plate to Cover	2	23	24C-824	BOLT, Grille Mtg.	4
11	206699	WASHER, Cover Mtg.	4	24	635682	WASHER, Grille Mtg.	4
12	4E-06	LKWSHR, Cover Mtg.	4	25	18D-06	NUT, Hood Mtg.	2
13	23C-616	BOLT, Cover Mtg.	4	26	619021	WASHER, Hood Mtg.	2
14	24C-616	BOLT, Cover Mtg.	1	27	568276	DAMPENER, Hood Mtg.	2
				28	619021	WASHER, Hood Mtg.	2

†Not Illustrated

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



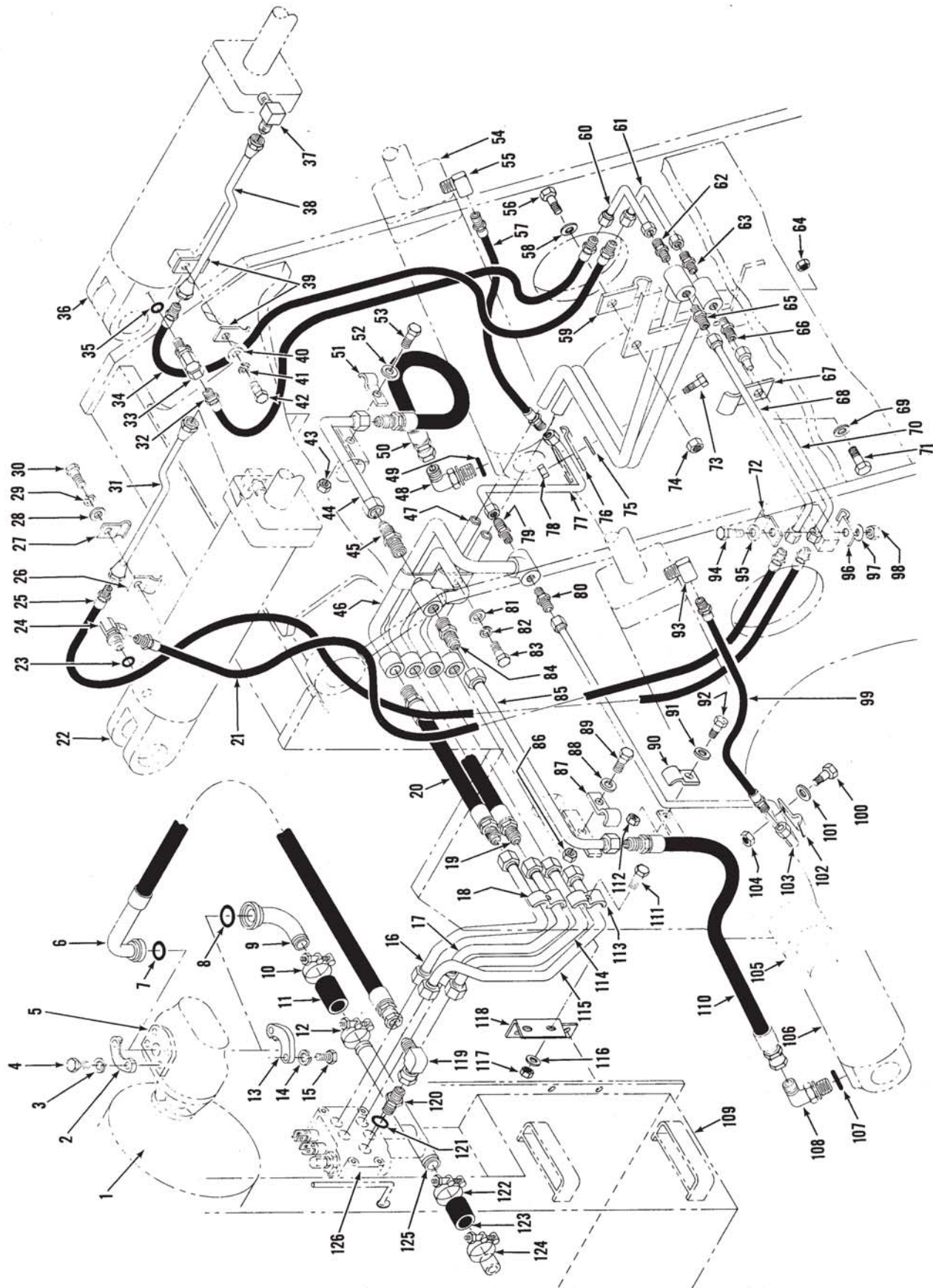
TS-8920-P

HYDRAULIC OIL RESERVOIR AND FILTER

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	24C-612	BOLT, Plate to Reservoir	6	16	1522284	WASHER, Reservoir	3
2	4E-06	LKWSHR, Plate to Reservoir ..	6	17	24C-836	BOLT, Reservoir to Frame	3
3	1535143	PLATE, Cover	1	18	4E-06	LKWSHR, Cover	6
4	25K-40624	O-RING, Cover Plate	1	19	24C-612	BOLT, Cover	6
5	732923	SPRING	1	20	40K-16	PLUG, Cover	1
6	1535139	RETAINER, Spring	1	21	587613	COVER, Inspection	1
7	1535778	GASKET, Filter	1	22	25K-40428	O-RING, Cover	1
8	1530600	FILTER, Return	1	23	525293	MAGNET, Reservoir	1
9	554843	CAP, Filler	1	24	1506566	RESERVOIR, Hydraulic Oil	1
10	1522243	DIPSTICK, Reservoir	1	25	1522284	WASHER, Reservoir	2
11	1522284	WASHER, Reservoir	2	26	24C-840	BOLT, Reservoir to Frame	2
12	18D-08	NUT, Reservoir	2	27	521874	CLAMP, Hose	1
13	40K-12	PLUG, Reservoir	1	28	743563	HOSE, Tube to Reservoir	1
14	1522284	WASHER, Reservoir	3	29	521874	CLAMP, Hose to Tube	1
15	18D-08	NUT, Reservoir	3	30	1534004	TUBE, Relief	1

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

TS-8958-P



HYDRAULIC SYSTEM — BUCKET AND BOOM

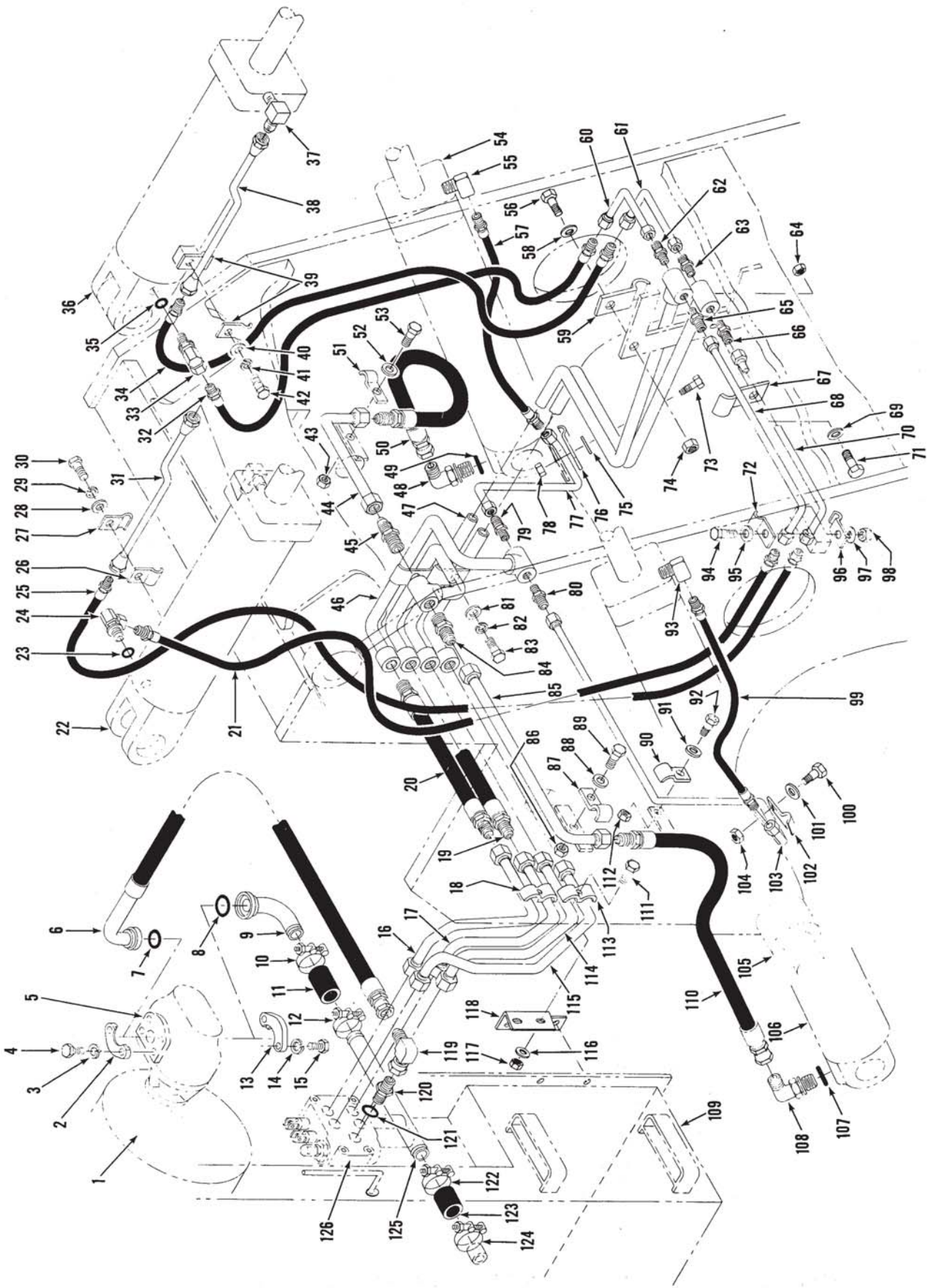
HYDRAULIC SYSTEM — BUCKET AND BOOM

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	TORQUE CONVERTER — See Index	—	33	526676	ADAPTER UNION (Inc. 35) ..	1
2	19J-20	FLANGE HALF, Hose to Pump	2	34	1533766	HOSE, Bucket Cylinder Rod End	1
3	4E-07	LKWSHR, Flange Half	4	35	91F-8	O-RING, Adapter Union	1
4	23C-724	BOLT, Flange Half	4	36	-----	BUCKET CYLINDER — See Index	—
5	-----	PUMP, Main Hydraulic — See Index	—	37	17K-8	FITTING, Tube to Cyl. (Inc. 37A)	2
6	1533907	HOSE, Pump to Valve	1	37A	91F-8	†O-RING, Fitting	2
7	58K-222	O-RING, Hose to Pump	1	38	563805	TUBE, Bucket Cylinder	1
8	58K-225	O-RING, Stem to Pump	1	39	1533865	CLIP, Tube to Cylinder	2
9	1536254	STEM, Suction	1	40	656672	WASHER, Clip Retaining	1
10	540130	CLAMP, Hose to Stem	1	41	4E-06	LKWSHR, Clip Retaining	1
11	536710	HOSE, Stem to Tube	1	42	24C-620	BOLT, Clip Retaining	1
12	540130	CLAMP, Hose to Tube	1	43	18D-06	NUT, Clip Retaining	1
13	19J-24	FLANGE HALF, Stem to Pump	2	44	1536257	TUBE, Boom Cylinder Base End — L.H.	1
14	4E-08	LKWSHR, Flange Half	4	45	89F-10	CONNECTOR, Tube	1
15	23C-824	BOLT, Flange Half	4	46	1536260	TUBE ASSY, Boom	1
16	1526015	TUBE, Valve to Hose — Boom Cylinder Rod End	1	47	1522613	TUBE ASSY, Bucket	1
17	1526012	TUBE, Valve to Hose — Boom Cylinder Base End	1	48	17K-10	ELBOW, Hose to Cylinder (Inc. 49)	1
18	561804	CLIP, Tubes to Bracket	1	49	91F-10	O-RING, Elbow	1
19	-----	HOSE, Center Pivot — See Item 20	—	50	1536263	HOSE, Boom Cylinder Base End	1
20	1536587	HOSE, Center Pivot	4	51	1536262	CLIP, Tube to Frame Bracket ..	1
21	1533765	HOSE, Bucket Cylinder Base End	1	52	656672	WASHER, Clip Retaining	1
22	-----	BUCKET CYLINDER — See Index	—	53	24C-624	BOLT, Clip Retaining	1
23	91F-8	O-RING, Adapter Union	1	54	-----	BOOM CYLINDER — See Index	—
24	526676	ADAPTER UNION (Inc. 23)	1	55	29F-4	ELBOW, Hose to Cylinder	1
25	1533766	HOSE, Bucket Cylinder Rod End	1	56	24C-620	BOLT, Clip Retaining	1
26	1533865	CLIP, Tube to Cylinder	1	57	1536264	HOSE, Boom Cylinder Rod End	1
27	1533865	CLIP, Tube to Cylinder	1	58	656672	WASHER, Clip Retaining	1
28	656672	WASHER, Clip Retaining	1	59	1533672	CLIP, Tubes to Frame Bracket ..	1
29	4E-06	LKWSHR, Clip Retaining	1	60	1522591	TUBE, Bucket Cylinder Base End — L.H.	1
30	24C-620	BOLT, Clip Retaining	1	61	1522597	TUBE, Bucket Cylinder Rod End — L.H.	1
31	563805	TUBE, Bucket Cylinder	1	62	89F-8	CONNECTOR, Tube	1
32	1533765	HOSE, Bucket Cylinder Base End	1	63	89F-8	CONNECTOR, Tube	1

†Not Illustrated

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

TS-8958-P

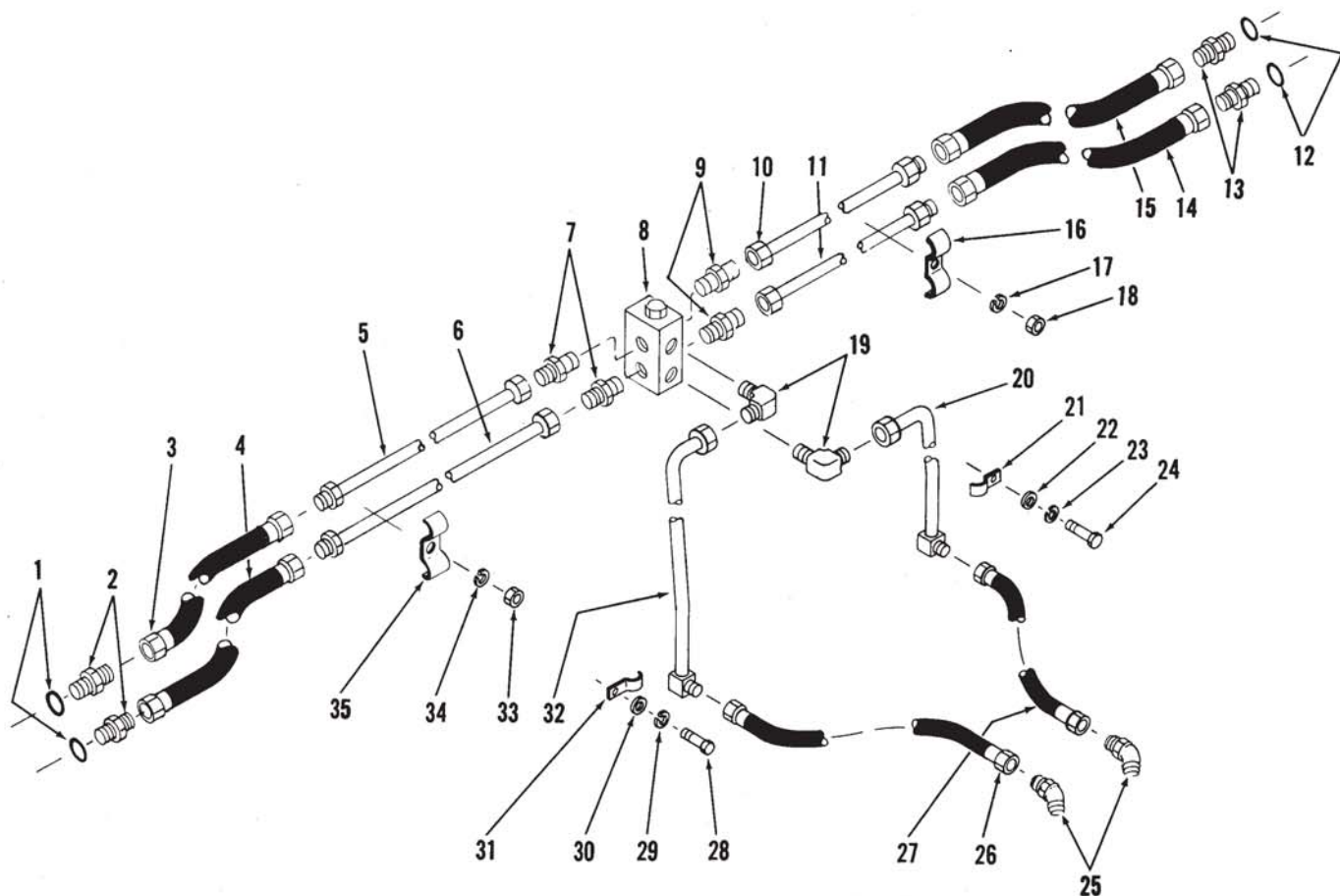


HYDRAULIC SYSTEM — BUCKET AND BOOM

HYDRAULIC SYSTEM — BUCKET AND BOOM (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
64	18D-06	NUT, Clip Retaining	1	98	18D-05	NUT, Clip Retaining	2
65	89F-8	CONNECTOR, Tube	1	99	1536264	HOSE, Boom Cylinder Rod End — R.H.	1
66	89F-8	CONNECTOR, Tube	1	100	24C-624	BOLT, Clip Retaining	1
67	1533672	CLIP, Tubes to Frame Bracket	1	101	656672	WASHER, Clip Retaining	1
68	1522593	TUBE, Bucket Cylinder Base End — R.H.	1	102	1533671	CLIP, Tube to Frame Bracket	1
69	656672	WASHER, Clip Retaining	1	103	1536085	TUBE, Boom Cylinder Rod End — R.H.	1
70	1522595	TUBE, Bucket Cylinder Rod End — R.H.	1	104	18D-06	NUT, Clip Retaining	1
71	24C-620	BOLT, Clip Retaining	1	105	-----	FRAME ASSY — Front — See Index	—
72	1533671	CLIP, Tube to Frame Block	2	106	-----	BOOM CYLINDER — See Index	—
73	24C-624	BOLT, Clip to Frame Bracket	1	107	91F-10	O-RING, Elbow to Cylinder ..	1
74	18D-06	NUT, Clip Retaining	1	108	17K-10	ELBOW, Hose to Cylinder (Inc. 107)	1
75	656672	WASHER, Clip Retaining	1	109	-----	RESERVOIR, Hydraulic Oil — See Index	—
76	1533671	CLIP, Tube to Frame Bracket	1	110	1536263	HOSE, Boom Cylinder Base End — R.H.	1
77	1536084	TUBE, Boom Cylinder Piston End	1	111	24C-620	BOLT, Clip to Bracket	2
78	18D-06	NUT, Clip Retaining	1	112	18D-06	NUT, Clip to Bracket	1
79	89F-8	CONNECTOR, Tube	1	113	561804	CLIP, Tubes to Bracket	1
80	89F-8	CONNECTOR, Tube	1	114	1526013	TUBE, Valve to Hose — Bucket Cylinder Base End	1
81	656672	WASHER, Tube Assy to Frame	2	115	1526014	TUBE, Valve to Hose — Bucket Cylinder Rod End	1
82	4E-06	LKWSHR, Tube Assy to Frame	2	116	656672	WASHER, Clip to Bracket	2
83	24C-616	BOLT, Tube Assy to Frame	2	117	18D-06	NUT, Clip to Bracket	2
84	89F-10	CONNECTOR, Tube	1	118	1526007	BRACKET, Tube Mounting	1
85	1536256	TUBE, Boom Cylinder Base — R.H.	1	119	11K-10	ELBOW, Hose to Valve	1
86	18D-06	NUT, Clip Retaining	1	120	15K-10	ADAPTER, Tubes to Valve (Inc. 121)	5
87	1536262	CLIP, Tube to Frame Bracket ..	1	121	91F-10	O-RING, Adapter to Valve ..	5
88	656672	WASHER, Clip Retaining	1	122	540130	CLAMP, Hose to Tube	1
89	24C-624	BOLT, Clip Retaining	1	123	536710	HOSE, Tube to Reservoir	1
90	1533671	CLIP, Tube to Frame Bracket	1	124	540130	CLAMP, Hose to Reservoir	1
91	656672	WASHER, Clip Retaining	1	125	1536255	TUBE, Suction	1
92	24C-624	BOLT, Clip Retaining	1	126	-----	CONTROL VALVE — See Index	—
93	29F-4	ELBOW, Hose to Cylinder	1				
94	24C-640	BOLT, Clip Retaining	2				
95	656672	WASHER, Clip Retaining	2				
96	1533671	CLIP, Tube to Frame Block	2				
97	656672	WASHER, Clip Retaining	2				

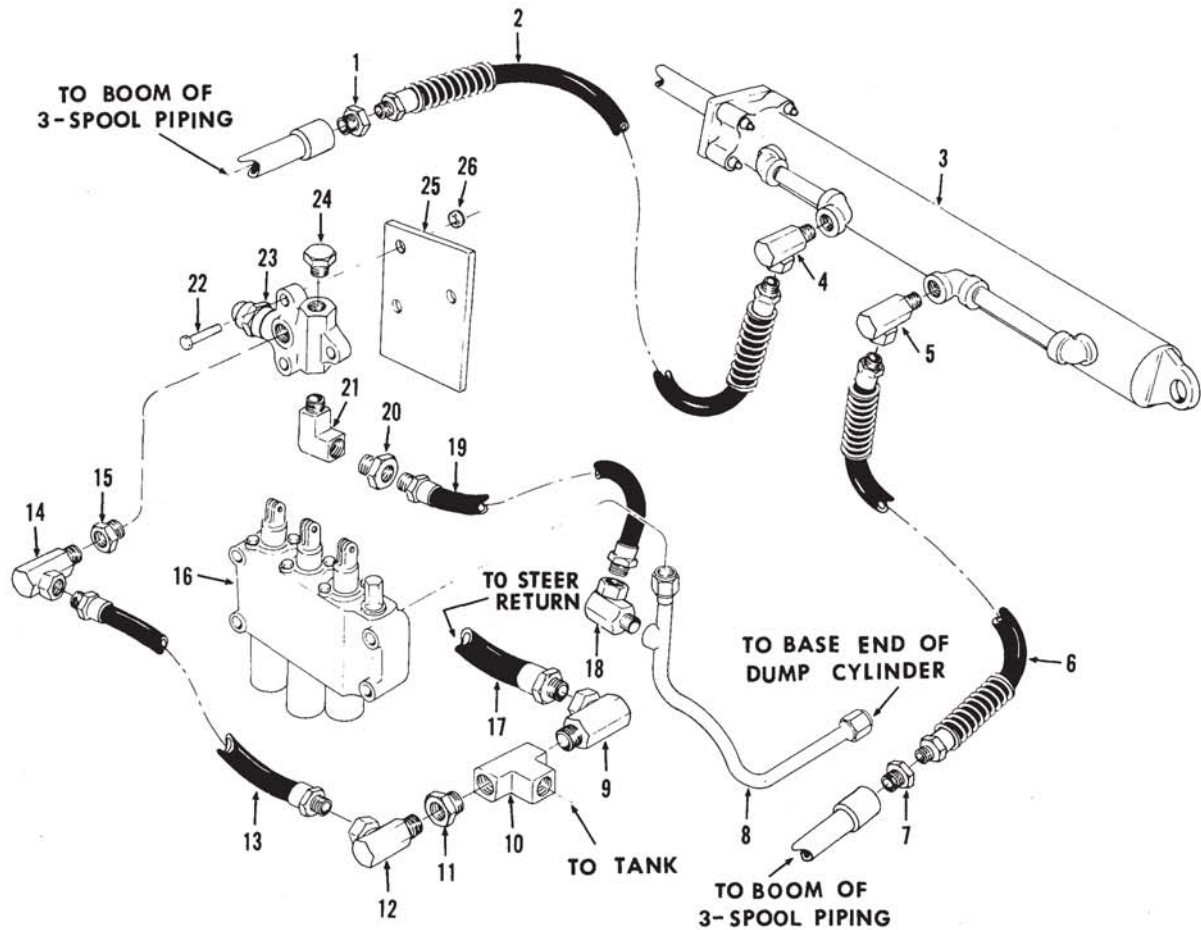
WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE



TS-8542

HYDRAULIC SYSTEM – DROTT BUCKET

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	91F-6	O-RING, Connector	2	18	1D-06	NUT, Clamp Attaching	1
2	15K-6	CONNECTOR, Hose to Cylinder (Inc. 1)	2	19	730149	ELBOW, Tube to Valve	2
3	1533555	HOSE, Cylinder to Tube	1	20	1533393	TUBE, Valve to Hose	1
4	1533555	HOSE, Cylinder to Tube	1	21	1533347	CLAMP, Tube Attaching	1
5	1533392	TUBE, Hose to Relief Valve	1	22	25E-16	WASHER, Clamp Attaching	1
6	1533392	TUBE, Hose to Relief Valve	1	23	4E-06	LKWSHR, Clamp Attaching	1
7	89F-7	CONNECTOR, Tube to Relief Valve	2	24	23C-616	BOLT, Clamp Attaching	1
8	1533373	RELIEF VALVE	1	25	84F-8	ELBOW	2
9	89F-7	CONNECTOR – Relief Valve to Tube	2	26	1306410	HOSE, Jumper	1
10	1533372	TUBE, Relief Valve to Hose	1	27	1306410	HOSE, Jumper	1
11	1533392	TUBE, Relief Valve to Hose	1	28	23C-616	BOLT, Clamp Attaching	1
12	91F-6	O-RING, Connector	1	29	4E-06	LKWSHR, Clamp Attaching	1
13	15K-6	CONNECTOR, Hose to Cylinder (Inc. 12)	2	30	25E-16	WASHER, Clamp Attaching	1
14	1533555	HOSE, Cylinder to Tube	1	31	1533347	CLAMP, Tube Attaching	1
15	1533555	HOSE, Cylinder to Tube	1	32	1533394	TUBE, Valve to Hose	1
16	1533350	CLAMP, Tube Attaching	1	33	1D-06	NUT, Clamp Attaching	1
17	4E-06	LKWSHR, Clamp Attaching	1	34	4E-06	LKWSHR, Clamp Attaching	1
				35	1533350	CLAMP, Tube Attaching	1

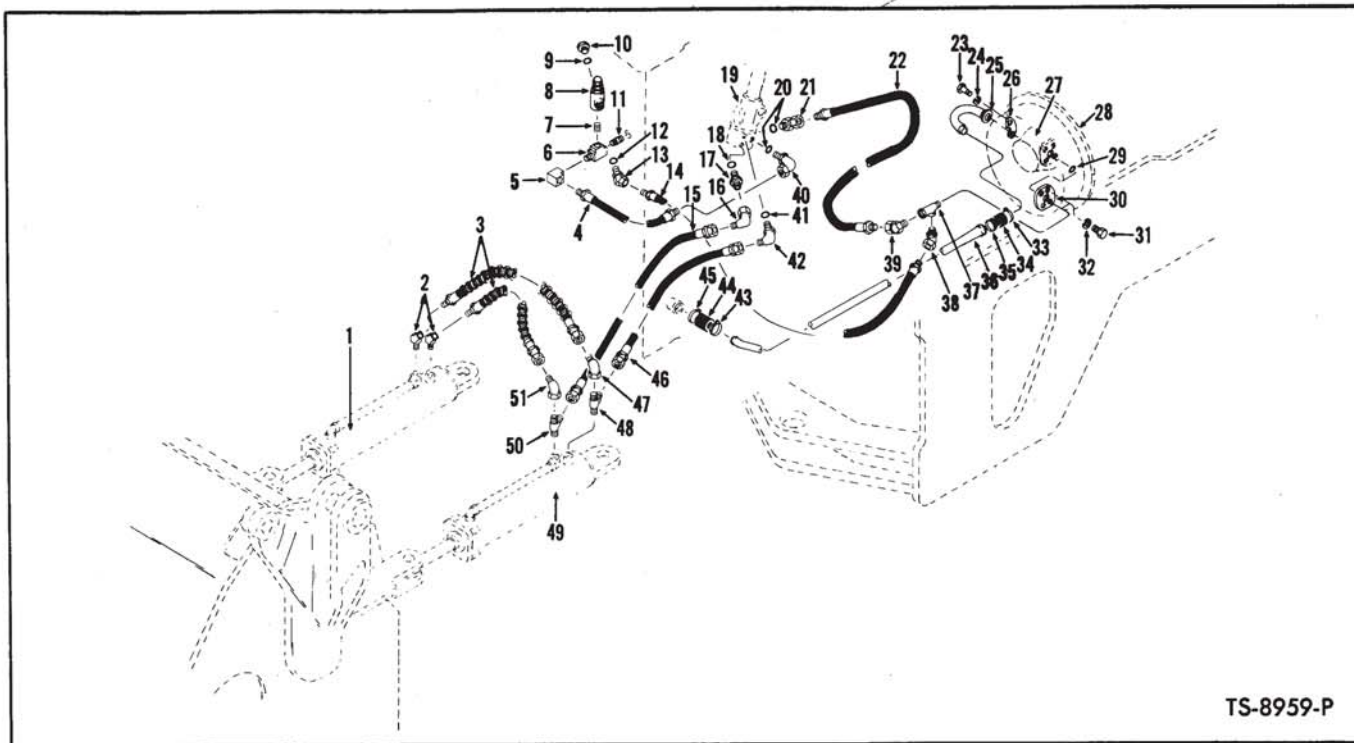


TS-11337

HYDRAULIC SYSTEM (Side Dump Bucket)

Item	Part No.	Description	Qty.
1	356617	BUSHING, Reducing	1
2	1524998	HOSE, Boom Tube to Dump Cylinder .	1
3	-----	CYLINDER, Side Dump — See Index —	—
4	31F-4	ADAPTER UNION, Hose to Cylinder .	1
5	31F-4	ADAPTER UNION, Hose to Cylinder .	1
6	1524998	HOSE, Boom Tube to Cylinder	1
7	356617	BUSHING, Reducing	1
8	1505017	TUBE ASSY, Valve to Base to Cylinder	1
9	31F-5	ADAPTER UNION, Hose to Tee	1
10	28F-4	TEE	1
11	356617	BUSHING, Reducing	1
12	31F-4	ADAPTER UNION, Hose to Tee	1
13	541764	HOSE, Valve to Steer Return Line . . .	1
14	31F-4	ADAPTER UNION, Valve to Hose . . .	1

Item	Part No.	Description	Qty.
15	356617	BUSHING, Reducing	1
16	-----	THREE SPOOL VALVE — See Index	—
17	1503832	HOSE, Steer Return	1
18	31F-4	ADAPTER UNION, Hose to Tube	1
19	352617	HOSE, Tube to Relief Valve	1
20	356617	BUSHING, Reducing	1
21	29F-4	ELBOW, Hose to Relief Valve	1
22	24C-644	BOLT, Relief Valve to Mounting Plate	3
23	-----	RELIEF VALVE — See Index	—
24	40K-12	PLUG, Valve	1
25	1504992	PLATE	1
26	18D-06	NUT, Relief Valve to Mounting Plate .	3



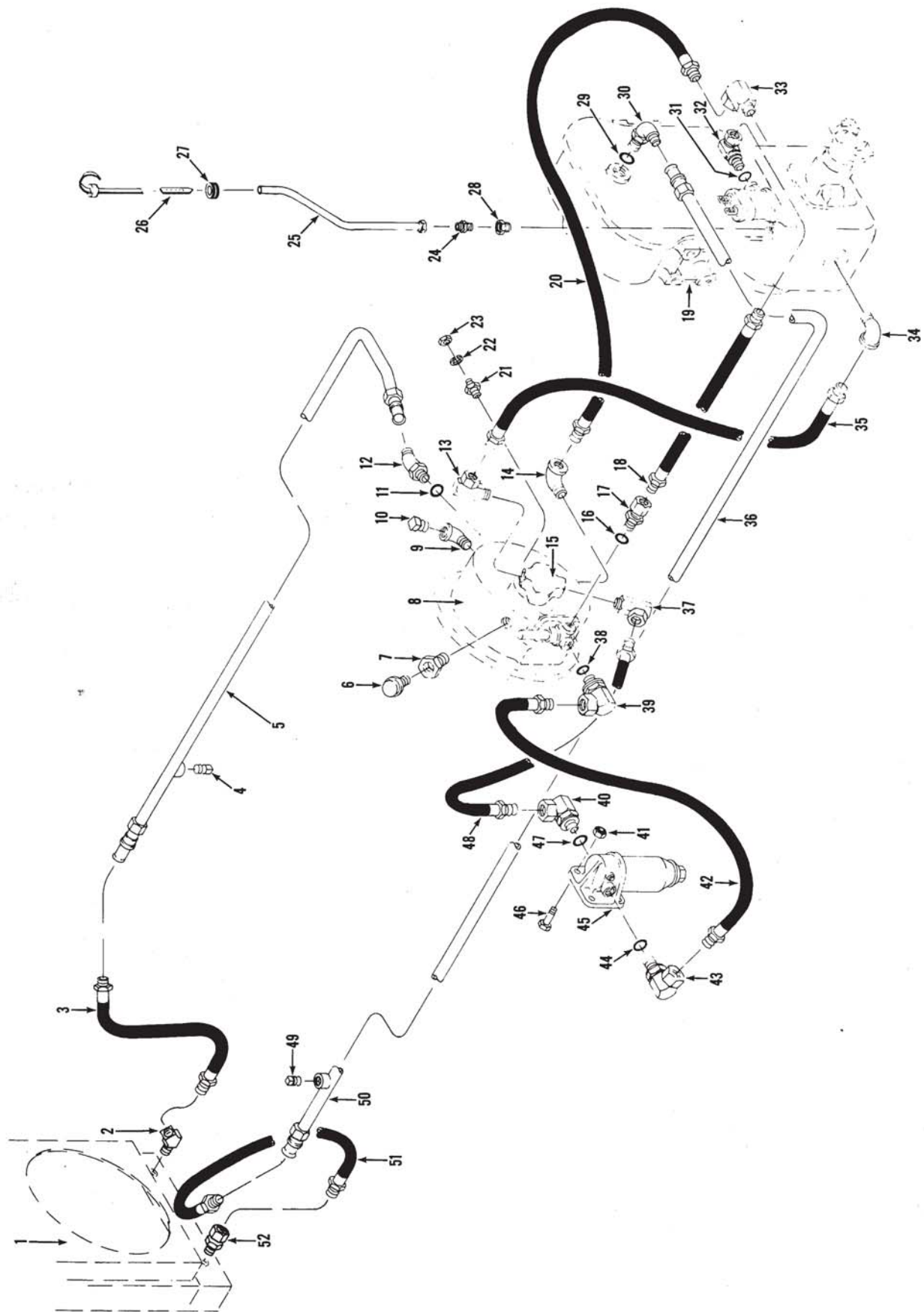
TS-8959-P

HYDRAULIC SYSTEM — STEERING

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	----	STEERING CYLINDER — See Index	—	26A	58K-225	† O-RING, Flange Half	1
2	81F-3	ELBOW, Hose to Cylinder	2	27	----	PUMP, Steering — See Index	—
3	1522361	HOSE, Cylinder Cross-over	2	28	----	TORQUE CONVERTER — See Index	—
4	1503832	HOSE, Valve to Gear	1	29	58K-222	O-RING, Flange Adapter	1
5	32F-5	ADAPTER, Hose to Valve	1	30	544168	ADAPTER, Flange	1
6	30F-4	TEE, Valve to Reservoir	1	31	23C-724	BOLT, Flange Adapter	4
7	5K-611	NIPPLE, Valve to Tee	1	32	4E-07	LKWSHR, Flange Adapter	4
8	----	VALVE, Steering Pressure Relief — See Index	—	33	540130	CLAMP, Hose	1
9	91F-7	O-RING, Plug	1	34	536710	HOSE, Tube Connecting	1
10	24K-7	PLUG, Valve (Inc. 9)	1	35	540130	CLAMP, Hose	1
11	5K-611	NIPPLE, Tee to Reservoir	1	36	1506569	TUBE, Suction	1
12	91F-7	O-RING, Adapter	1	37	30F-4	TEE, Hoses to Pump	1
13	594542	ADAPTER, Hose to Valve (Inc. 12)	1	38	514788	ADAPTER, Hose to Tee	1
14	1520093	HOSE, Valve to Pump	1	39	31F-5	ADAPTER, Hose to Tee	1
15	1533602	HOSE, Gear to Cylinder	1	40	531684	ADAPTER, Hose to Gear (Inc. 20)	1
16	11K-6	ELBOW, Hose to Gear	1	41	91F-6	O-RING, Elbow	1
17	15K-6	CONNECTOR, Elbow to Gear (Inc. 18)	1	42	17K-6	ELBOW, Hose to Gear (Inc. 41)	1
18	91F-6	O-RING, Connector	1	43	540130	CLAMP, Hose to Tube	1
19	----	STEERING GEAR — See Index	—	44	536710	HOSE, Tube to Reservoir	1
20	91F-7	O-RING, Adapter to Gear	2	45	540130	CLAMP, Hose to Reservoir	1
21	534894	ADAPTER, Hose to Gear (Inc. 20)	1	46	1533601	HOSE, Gear to Cylinder	1
22	1504452	HOSE, Pump to Gear	1	47	12K-7	ELBOW, Hose to Tee	1
23	23C-824	BOLT, Flange Half	4	48	42K-7	TEE, Hose to Cylinder	1
24	4E-08	LKWSHR, Flange Half	4	49	----	STEERING CYLINDER — See Index	—
25	1506251	STEM, Suction	1	50	42K-7	TEE, Hoses to Cylinder	1
26	19J-24	FLANGE HALF — Stem to Pump	2	51	12K-7	ELBOW, Hose to Tee	1

†Not Illustrated

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



TS-8952-P

HYDRAULIC SYSTEM - TRANSMISSION AND TORQUE CONVERTER - CUMMINS

HYDRAULIC SYSTEM — TRANSMISSION AND TORQUE CONVERTER — CUMMINS

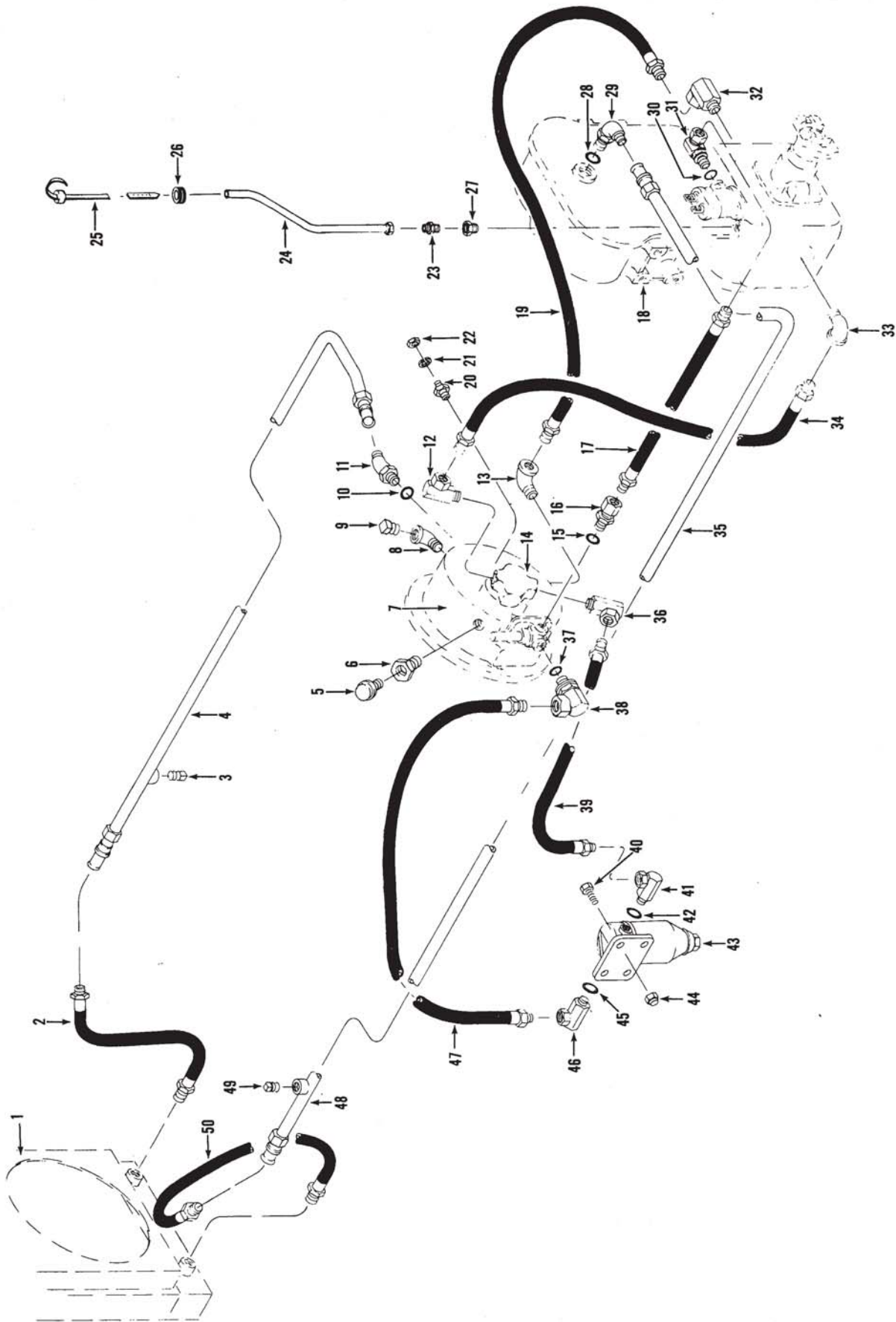
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	RADIATOR — See Index	—	28	356618	BUSHING, Reducing	1
2	81F-4	ELBOW, Hose to Radiator	1	29	91F-8	O-RING, Elbow	1
3	563465	HOSE, Tube to Radiator	1	30	17K-8	ELBOW, Tube to Transmission (Inc. 29)	1
4	40K-04	PLUG, Tube	1	31	91F-6	O-RING, Adapter	1
5	1502742	TUBE, Cooler to Radiator (Inc. 4)	1	32	1301856	ADAPTER, Hose to Transmission (Inc. 31)	1
6	211433	BREATHER, Converter Air	1	33	31F-6	ADAPTER, Hose to Transmission	1
7	227265	VALVE, Air Breather Check	1	34	26F-6	ELBOW, Hose to Transmission	1
8	-----	TORQUE CONVERTER — See Index	—	35	616043	HOSE, Pump Suction	1
9	25F-6	ELBOW, Converter Fill	1	36	1502744	TUBE, Radiator to Transmission (Inc. 49)	1
10	13F-16	PLUG, Filler	1	37	31F-5	ADAPTER, Hose to Pump	1
11	91F-8	O-RING, Elbow	1	38	91F-8	O-RING, Adapter	1
12	17K-8	ELBOW, Tube to Converter (Inc. 11)	1	39	526676	ADAPTER, Hose to Reg. Valve (Inc. 38)	1
13	31F-6	ADAPTER, Hose to Pump	1	40	526676	ADAPTER, Hose to Filter (Inc. 47)	1
14	25F-6	ELBOW, Hose to Converter	1	41	18D-06	NUT, Filter Mounting	4
15	-----	PUMP, Converter Charging — See Index	—	42	546809	HOSE, Filter to Converter	1
16	91F-6	O-RING, Adapter	1	43	526676	ADAPTER, Hose to Filter (Inc. 44)	1
17	362653	ADAPTER, Hose to Regulating Valve (Inc. 16)	1	44	91F-8	O-RING, Adapter	1
18	712699	HOSE, Reg. Valve to Transmission	1	45	1533614	FILTER, Converter & Transmission (Inc. 45A)	1
19	-----	TRANSMISSION — See Index	—	45A	215502	† CARTRIDGE KIT, Filter	1
20	543280	HOSE, Converter Drain	1	46	24C-624	BOLT, Filter Mounting	4
21	551323	SENDER, Converter Temperature	1	47	91F-8	O-RING, Adapter	1
22	12E-10	LKWSHR, Temperature Sender	1	48	583573	HOSE, Pump to Filter	1
23	14D-10	NUT, Temperature Sender	1	49	40K-04	PLUG, Tube	1
24	89F-6	ADAPTER, Tube to Bushing	1	50	-----	TUBE, Radiator to Transmission — See 36	—
25	1505709	TUBE, Dipstick	1	51	563465	HOSE, Tube to Radiator	1
26	1505710	DIPSTICK, Transmission	1	52	-----	OMIT, Not Used	—
27	560640	GROMMET, Dipstick Tube	1				

†Not Illustrated

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

TS-9167-P

HYDRAULIC SYSTEM — TRANSMISSION AND TORQUE CONVERTER — G.M.



HYDRAULIC SYSTEM — TRANSMISSION AND TORQUE CONVERTER — G.M.

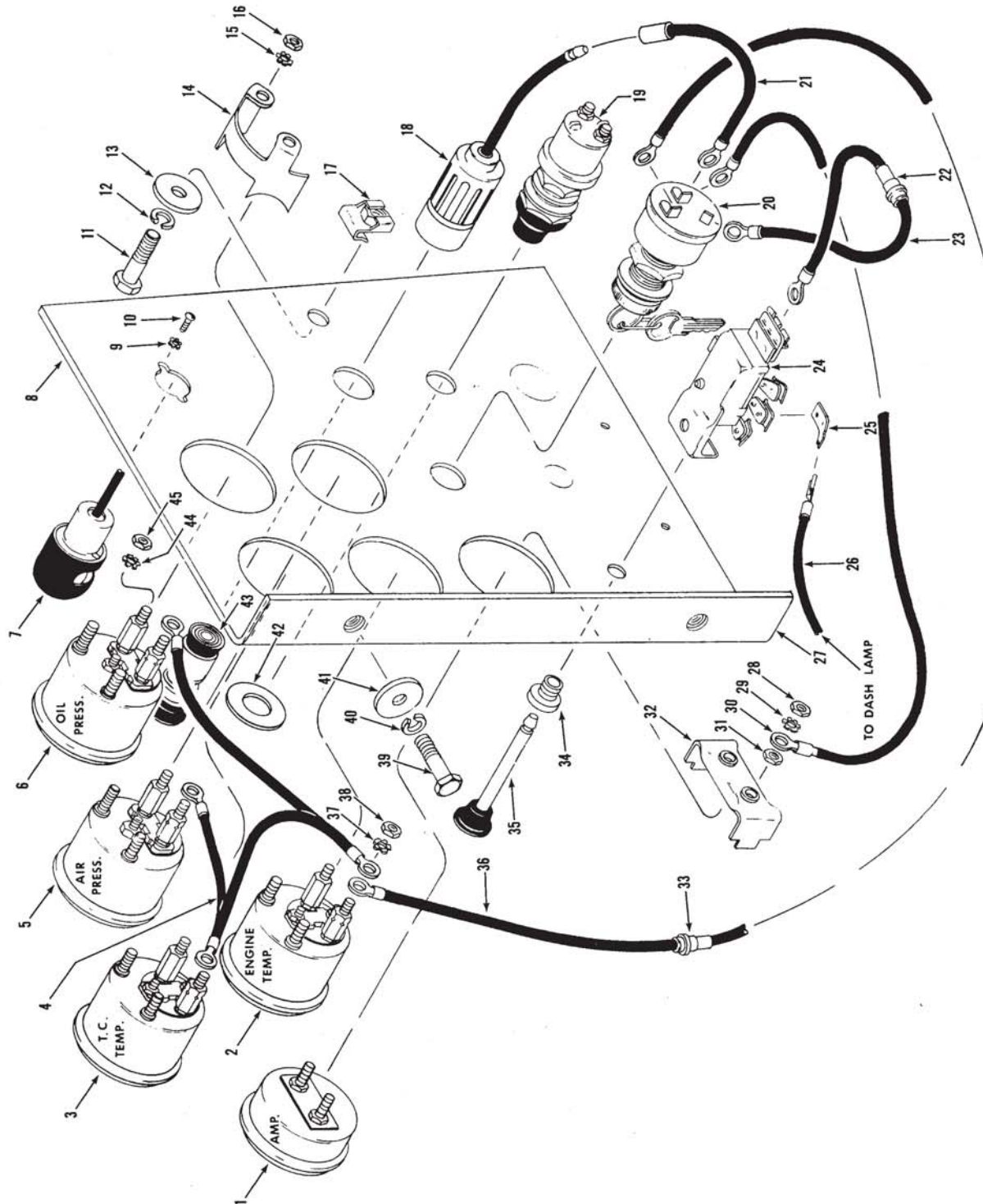
Item No.	Part No.	Description	No. Req'd.
1	—	RADIATOR — See Index	—
2	563465	HOSE, Cooler Line to Radiator	1
3	40K-04	PLUG, Pipe	1
4	1502742	LINE, Cooler to Converter — L.H. (Inc. 3)	1
5	211433	BREATHER, Converter Air	1
6	227265	VALVE, Air Breather Check	1
7	—	CONVERTER — See Index	—
8	25F-6	ELBOW, Converter Fill	1
9	13F-16	PLUG, Filler (Furnished with Converter)	1
10	91F-8	O-RING, Elbow to Converter	1
11	17K-8	ELBOW, Cooler Line to Converter (Inc. 10)	1
12	31F-6	ADAPTER, Suction Hose to Converter	1
13	26F-6	ELBOW, Drain Hose to Converter	1
14	—	PUMP, Converter Charging — See Index	—
15	91F-6	O-RING, Adapter to Valve	1
16	362653	ADAPTER, Hose to Converter (Inc. 15)	1
17	712699	HOSE, Converter to Transmission	1
18	—	TRANSMISSION — See Index	—
19	543280	HOSE, Converter Drain	1
20	551323	SENDER UNIT, Converter Temperature	1
21	12E-10	LKWSHR, Temperature Sender	1
22	14D-10	NUT, Temperature Sender	1
23	89F-6	ADAPTER, Tube to Bushing	1
24	1505709	TUBE, Dipstick	1
25	1505710	DIPSTICK	1
26	560640	GROMMET	1
27	356618	BUSHING, Dipstick to Trans.	1
28	91F-8	O-RING, Elbow	1
29	17K-8	ELBOW, Cooler Line to Transmission (Inc. 28)	1
30	91F-6	O-RING, Adapter to Transmission	1
31	1301856	ADAPTER, Hose to Transmission (Inc. 30)	1
32	31F-6	ADAPTER, Drain Hose to Converter	1
33	26F-6	ELBOW, Suction Hose to Transmission	1
34	616043	HOSE, Pump Suction	1
35	—	LINE — See 48	—
36	33F-5	ADAPTER, Hose to Pump	1
37	91F-8	O-RING, Adapter to Converter Valve	1
38	583210	ADAPTER, Hose to Converter	1
39	546818	HOSE, Pump to Filter	1
40	24C-624	BOLT, Filter Mounting	4
41	526676	ADAPTER, Filter to Hose (Inc. 42)	1
42	91F-8	O-RING, Adapter	1
43	1533614	FILTER ASSY (Inc. 43A)	1
43A	215502	† CARTRIDGE KIT, Filter	1
44	18D-06	NUT, Filter Mounting	4
45	91F-8	O-RING, Adapter	1
46	526676	ADAPTER, Filter to Hose (Inc. 45)	1
47	1540832	HOSE, Filter to Converter	1
48	1502744	LINE, Radiator to Transmission (Inc. 49)	1
49	40K-04	PLUG, Pipe	1
50	563465	HOSE, Cooler Line to Radiator — R.H.	1

† Not Illustrated

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

TS-8366-P

INSTRUMENT PANEL ASSEMBLY



INSTRUMENT PANEL ASSEMBLY

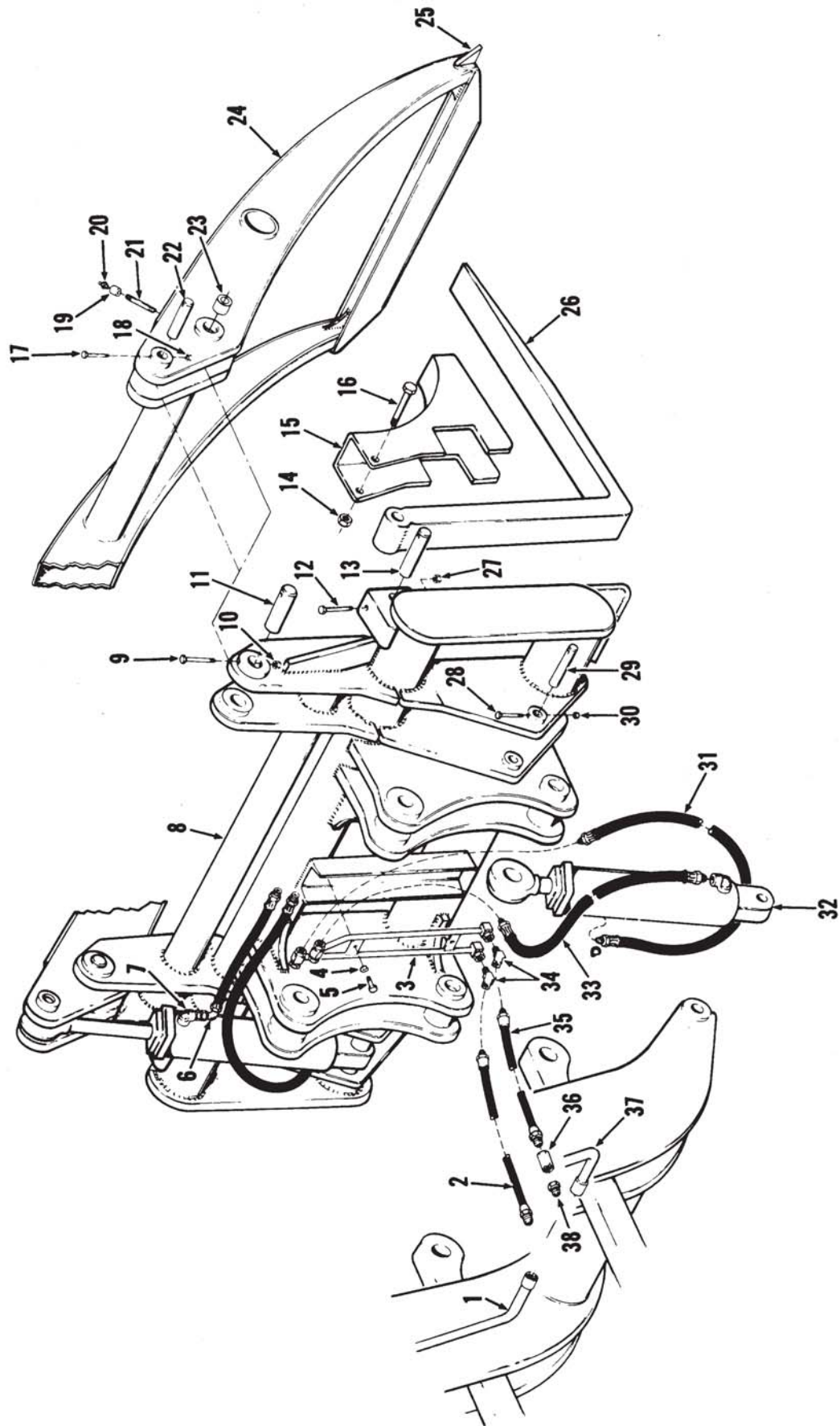
Item No.	Part No.	Description	No. Req'd.
1	949286	AMMETER	1
2	947252	GAUGE, Engine Temperature	1
3	947254	GAUGE, Torque Converter Temperature	1
4	558673	HARNESS, Instrument Wiring	1
5	947250	GAUGE, Air Pressure	1
6	947248	GAUGE, Engine Oil Pressure	1
7	574276	LAMP, Dash	1
7A	427237	†BULB, Dash Lamp — 12 Volt	1
8	1526350	PANEL, Instrument	1
9	12E-6	LKWSHR, Dash Lamp Mounting	2
10	18G-606	SCREW, Dash Lamp Mounting	2
11	23C-616	BOLT, Instrument Panel Mounting	1
12	4E-06	LKWSHR, Instrument Panel Mounting	1
13	565280	WASHER, Instrument Panel Mounting	1
14	1534136	CLAMP, Gauge Mounting	4
15	12E-10	LKWSHR, Gauge Mounting	8
16	14D-10	NUT, Gauge Mounting	8
17	572729	NUT, Instrument Panel Mounting	1
18	549024	RECEPTACLE, Lighter (Inc. 18A)	1
18A	944804	†FUSE, Lighter	1
19	600259	BUTTON, Starter (Inc. 19A)	1
19A	857420	†BOOT, Starter Button	1
20	573548	SWITCH, Ignition	1
21	565430	WIRE ASSY, Lighter to Ignition Switch	1
22	611074	FUSE — 20 Amp	1
23	552946	WIRE ASSY, Light Switch to Ignition Switch (Inc. 22)	1
24	2514253	*SWITCH, Light	1
25	574275	TAB, Light Switch	1
26	-----	§ WIRE, Dash Lamp (See 7)	—
27	-----	PANEL, Instrument (See 8)	—
28	14D-10	NUT, Ammeter Terminal	2
29	12E-10	LKWSHR, Ammeter Terminal	2
30	553405	WIRE ASSY, Ammeter to Ignition Switch	1
31	14D-10	NUT, Ammeter Mounting	2
32	601212	CLAMP, Ammeter Mounting	1
33	571021	FUSE — .75 Amp	1
34	550743	BUSHING, Light Switch	1
35	550742	ROD, Light Switch	1
36	573587	WIRE ASSY, Engine Temperature Gauge to Ignition Switch (Inc. 33)	1
37	12E-8	LKWSHR, Gauge Terminal	4
38	12D-8	NUT, Gauge Terminal	4
39	23C-616	BOLT, Instrument Panel Mounting	2
40	4E-06	LKWSHR, Instrument Panel Mounting	2
41	565280	WASHER, Instrument Panel Mounting	2
42	547237	DISC, Starter Button	1
43	944803	ELEMENT, Lighter	1
44	12E-10	LKWSHR, Gauge Terminal	4
45	14D-10	NUT, Gauge Terminal	4

§Not Sold Separately

†Not Illustrated

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

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



Logger Fork Attachment

MICHIGAN

No.	Part No.	Qty.	Description
A 2,3,4	1505298	—	Logger attachment
B 4,5,6	1510464	—	Logger attachment
C 1	—	—	Counterweights
1	1536677	1	Boom tube LH
2	1505274	1	Hose
3	1523117	1	Tube assy
4	4E-06	2	Lockwasher
5	24C-616	2	Bolt
6	11K-6	2	Elbow
7	656598	2	Connector
8	³ 1505338	1	Carrier assy
8A	⁶ 1511134	1	Carrier assy
9	24C-668	2	Bolt
10	18D-06	2	Locknut
11	1523146	2	Pin
12	24C-696	2	Bolt
13	1512883	2	Pin
14	18D-10	2	Locknut
15	2510387	2	Deflector
16	24C-10128	2	Bolt
17	24C-648	2	Bolt

No.	Part No.	Qty.	Description
18	18D-06	2	Locknut
19	37K-402	2	Coupling
20	10H-25	2	Fitting grease
21	5K-126	2	Nipple
22	588823	2	Pin
23	1521804	4	Bushing
24	⁷ 1523136	1	Clamp assy
25	657871	2	Gusset
26	538401	2	Fork
27	18D-06	2	Locknut
28	24C-648	2	Bolt
29	1512883	2	Pin
30	18D-06	2	Locknut
31	1526135	2	Hose
32	¹ 1539308	2	Cylinder assy
33	591896	2	Hose
34	81F-3	2	Elbow
35	1505274	1	Hose
36	1505347	1	Adapter
37	1536679	1	Boom tube RH
38	356617	1	Bushing

¹See Index

²Inc. C → 8, 9 → 38

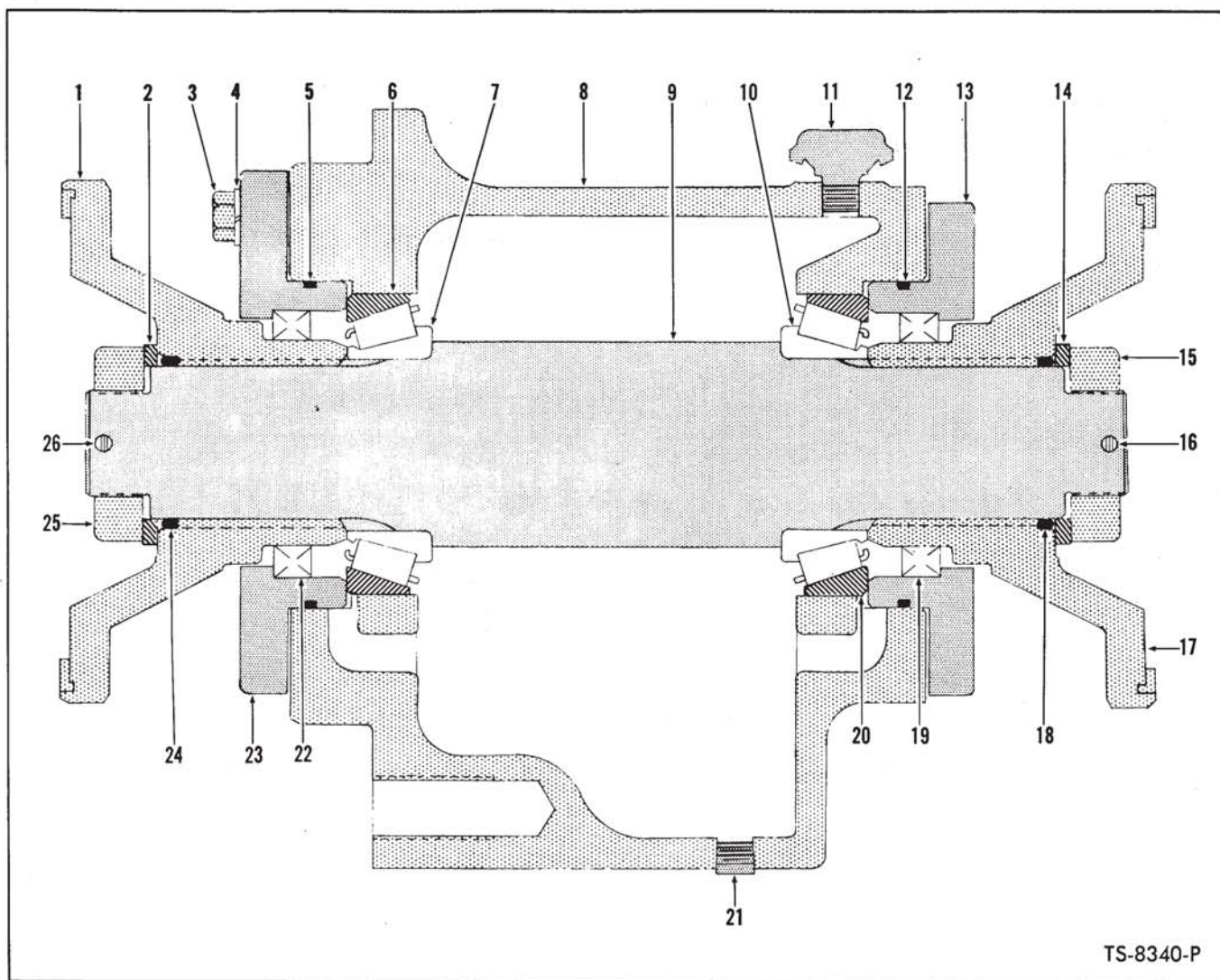
³Cummins 1ACC101 → 408B255, G.M. 409A101 → 409B275

⁴This attachment utilizes the existing mounting pins. See index for Boom & Pushrod Service Parts.

⁵Inc. C → 7, 8A → 38

⁶Cummins 408B256 & →, G.M. 409B276 & →

⁷Inc. 22



TS-8340-P

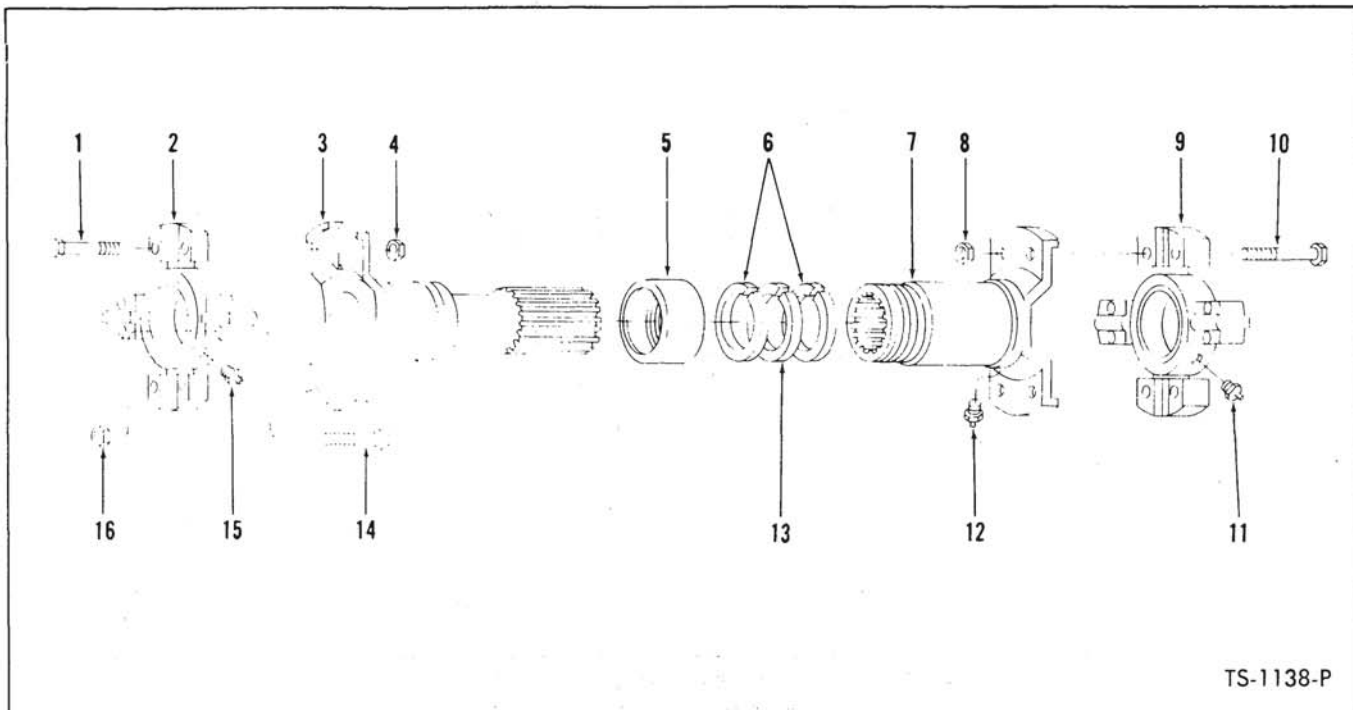
MID-MOUNT BEARING ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	230527	BEARING ASSY, Mid-Mount (Inc. 1 thru 26)	1	14	222179	WASHER, Flange	1
1	222233	FLANGE, Input	1	15	205928	NUT, Flange	1
2	222179	WASHER, Flange	1	16	1F-436	COTTER, Flange Nut	1
3	1C-722	BOLT, Cap to Housing	8	17	222029	FLANGE, Output	1
4	4E-07	LKWSHR, Cap to Housing	8	18	25K-60116	O-RING, Flange	1
5	25K-40308	O-RING, Bearing Cap	1	19	225823	SEAL, Bearing Cap	1
6	856250	CUP, Bearing	1	20	856250	CUP, Bearing	1
7	654141	CONE, Bearing	1	21	215757	PLUG, Drain	1
8	230529	HOUSING, Bearing	1	22	225823	SEAL, Bearing Cap	1
8A	13F-12	† PLUG, Filler	1	23	230690	CAP, Bearing	1
9	233007	SHAFT, Bearing	1	23A	217566	†‡ SHIM, Bearing Cap (.004)	—
10	654141	CONE, Bearing	1	23B	217567	†‡ SHIM, Bearing Cap (.007)	—
11	211433	BREATHER, Housing	1	23C	217568	†‡ SHIM, Bearing Cap (.010)	—
12	25K-40308	O-RING, Bearing Cap	1	24	25K-60116	O-RING, Flange	1
13	230690	CAP, Bearing	1	25	205928	NUT, Flange	1
13A	217566	†‡ SHIM, Bearing Cap (.004)	—	26	1F-436	COTTER, Flange Nut	1
13B	217567	†‡ SHIM, Bearing Cap (.007)	—	27	23C-1028	† BOLT, Bearing Mtg.	4
13C	217568	†‡ SHIM, Bearing Cap (.010)	—	28	4E-10	† LKWSHR, Bearing Mtg.	4

†Not Illustrated

‡As Required

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



TS-1138-P

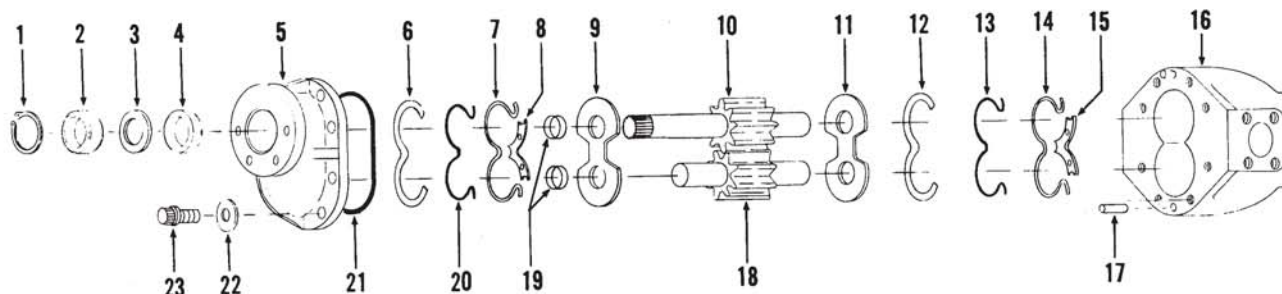
PROPELLER SHAFT ASSEMBLIES

Item No.	Description	Transmission		Converter to Transmission	Mid Mount Bearing to Front Axle	Transmission to Mid Mount Bearing (Rear)	No. Req'd.
		Serial "B"	Serial "A"				
A	PROPELLER SHAFT ASSY (Inc. 1 thru 16)	1504774	550778	1515442	528998	569816	1
1	BOLT, Spider & Bearing to Tube	18C632	18C632	947382	18C632	940229	4
2	SPIDER & BEARING ASSY	944862	944862	945208	944862	942735	1
3	TUBE	948279	940230	947818	944690	946017	1
4	NUT, Spider & Bearing to Tube	8D-06	8D-06	8D-06	8D-08	8D-08	4
5	RETAINER, Felt	940090	940090	942744	940090	940250	1
6	WASHER, Felt Retainer	940091	940091	942750	940091	940251	2
7	SLIP YOKE (Inc. 12)	940224	940224	949457	940224	942734	1
8	NUT, Spider & Bearing to Slip Yoke	8D-06	8D-06	8D-06	8D-08	8D-08	4
9	SPIDER & BEARING ASSY	944862	944862	945208	944862	942735	1
10	BOLT, Spider & Bearing to Slip Yoke	18C632	18C632	947382	18C632	940229	4
11	FITTING, Spider & Bearing Grease	10H-25	10H-35	10H-35	10H-35	944688	1
12	FITTING, Slip Yoke Grease	10H-25	10H-25	10H-25	10H-25	10H-25	1
13	FELT WASHER	940092	940092	942751	940092	942749	1
14	BOLT, Spider & Bearing Attaching	18C632	18C632	947382	18C632	940229	8
15	FITTING, Spider & Bearing Grease	10H-35	10H-35	944688	10H-35	944688	1
16	NUT, Spider & Bearing Attaching	8D-06	8D-06	8D-06	8D-08	8D-08	8

Serial "A" - 408A101 - 408A999, 409A101 - 409A999

Serial "B" - 408B101 & after, 409B101 & after

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



TS-8377-P

HYDRAULIC PUMP — MAIN AND STEER

For Serial: CUMMINS — 408A101 & AFTER

G.M. — 409A101 — 374, 382, 383, 390 & AFTER (MAIN)

G.M. — 409A101 & AFTER (STEER)

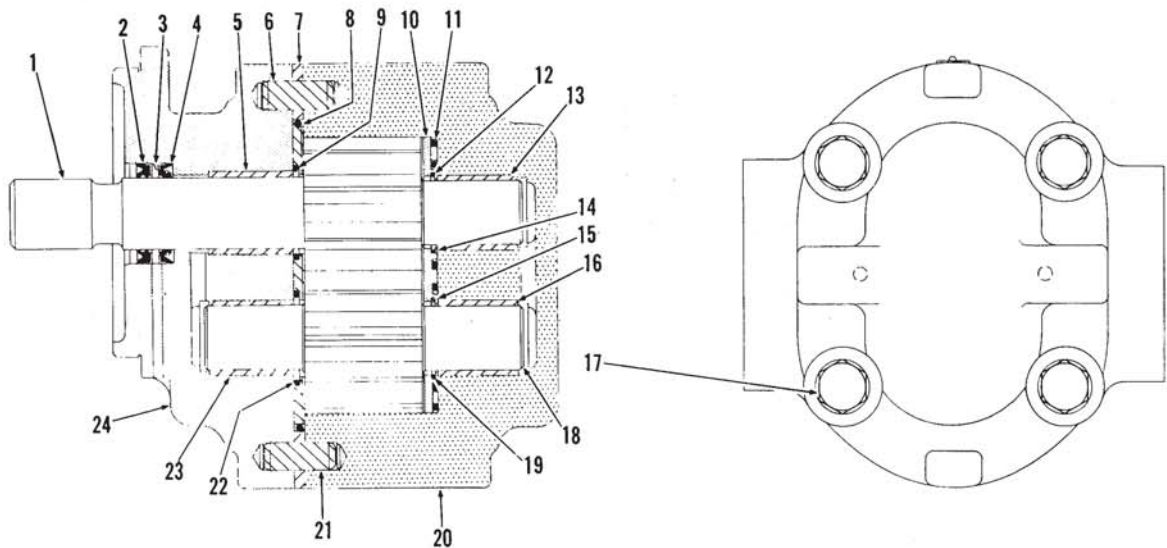
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1535739	PUMP ASSY (Inc. 1 thru 23)	2	11	-----	§ PLATE, Pressure — See "B" & "C"	—
NOTE: Two (2) Pumps used on machine — Quantities listed below are for one (1) Pump only.				12	947275	RETAINER, Ring	1
B	947272	REPAIR KIT, Major (Inc. 1 thru 4, 6 thru 15, 17 thru 21)	1	13	947276	O-RING	1
C	947273	REPAIR KIT, Minor (Inc. 1 thru 4, 6 thru 9, 11 thru 15, 19, 20, 21)	1	14	947277	RING, Back-Up	1
1	661416	SNAP RING	1	15	-----	§ PLATE, Isolation — See "B" & "C"	—
2	947274	SEAL, Oil	1	16	947271	BODY	1
3	946205	SPACER, Oil Seal	1	17	946100	PIN, Body	2
4	947274	SEAL, Oil	1	18	-----	§ GEAR, Driven — See "B"	—
5	947270	FLANGE, Cover	1	19	-----	§ RING, Spacer — See "B" & "C"	—
6	947275	RETAINER, Ring	1	20	947276	O-RING	1
7	947277	RING, Back-Up	1	21	58K46	O-RING, Flange	1
8	-----	§ PLATE, Isolation — See "B" & "C"	—	22	946271	WASHER	8
9	-----	§ PLATE, Pressure — See "B" & "C"	—	23	23C-820	BOLT, Flange	8
10	-----	§ GEAR, Drive — See "B"	—	24	1502715	† STUD, Pump Mtg.	4
				25	8D-06	† NUT, Pump Mtg.	4
				26	4E-06	† LKWSHR, Pump Mtg.	4
				27	235961	† GASKET, Pump Mtg.	1
				28	214962	† SLEEVE, Pump Drive	1

§ 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



TS-11041

HYDRAULIC PUMP – MAIN

For Serial: G.M. 409B375 – 381, 384–389

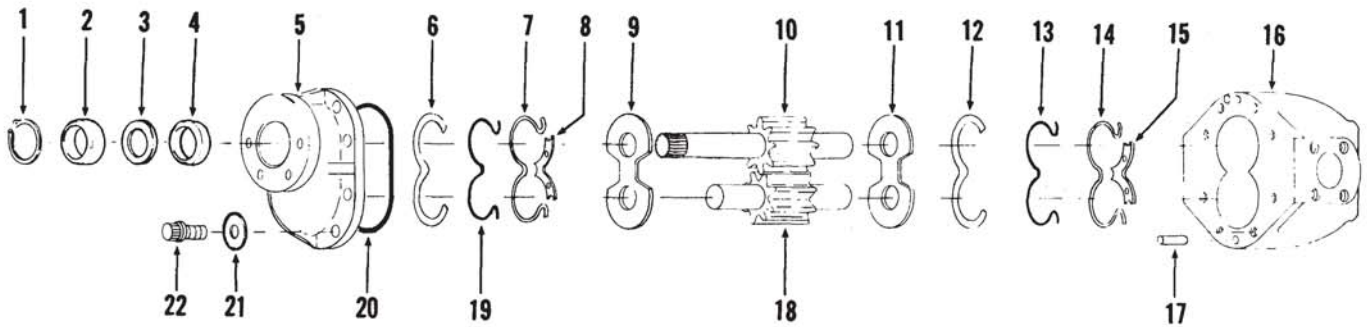
Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
A	1510691	*PUMP ASSY (Inc. 1 thru 24)	1	18	----	§ GEAR, Driven	—
1	----	§ GEAR, Driven	—	19	25K-20108	O-RING	1
2	949315	SEAL, Oil	1	20	----	§ BODY	—
3	949515	SPACER	1	21	----	§ PIN, Dowel	—
4	949316	SEAL, Oil	1	22	25K20116	O-RING	1
5	----	§ BUSHING, Pump Shaft	—	23	----	§ BUSHING, Pump Shaft	—
6	----	§ PIN, Dowel	—	24	----	§ ADAPTER ASSY	—
7	949314	PLATE, Wear	1	25	216388	† ADAPTER, Pump Mounting	1
8	949320	O-RING, Wear Plate	1	26	214963	† SLEEVE, Pump Drive	1
9	25K20116	O-RING, Wear Plate	1	27	664140	† RING, Snap	1
10	----	§ PLATE, Spacer	—	28	235961	† GASKET, Adapter to Converter	1
11	949317	O-RING,	1	29	23C-616	BOLT, Adapter to Converter	—
12	25K-20108	O-RING	1			(Can use 17C-616)	6
13	----	§ BUSHING, Pump Shaft	—	30	561807	† GASKET, Pump to Adapter	1
14	949318	SEAL, O-Ring Back-Up	1	31	23C-1024	† BOLT, Pump to Adapter	—
15	949318	SEAL, O-Ring Back-Up	1			(Can use 23C-1024)	2
16	----	§ BUSHING, Pump Shaft	—	32	4E-10	† LKWSHR, Pump to Adapter	2
17	2C-972	BOLT, Housing to Housing	4				

†Not Illustrated

§ Not Sold Separately

*NOTE: For complete replacement use 1519913 Pump Assembly plus 4–1502715 Stud, 4–8D-06 Nut, 1–214962 Drive Sleeve, 1–235961 Gasket, & 4–4E-06 Lockwasher.

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



TS-13313

No.	Part No.	Qty.	Description
A	¹ 1519913	1	Pump assembly
B	² 947272	1	Repair kit major
C	³ 947273	1	Repair kit minor
1	661416	1	Ring snap
2	947274	1	Seal
3	946205	1	Spacer
4	947274	1	Seal
5	947270	1	Flange
6	947275	1	Retainer
7	947277	1	Ring back-up
8	⁴ -----	—	Isolation plate
9	⁴ -----	—	Pressure plate
10	⁵ -----	—	Drive gear
11	⁴ -----	—	Pressure plate
12	947275	1	Retainer
13	947276	1	O-ring
14	947277	1	Ring back-up
15	⁴ -----	—	Isolation plate
16	947271	1	Body
17	946100	2	Pin
18	⁵ -----	—	Gear
19	947276	1	O-ring
20	58K46	1	O-ring
21	946271	8	Washer
22	17C-820	8	Bolt

¹Inc. 1 → 22

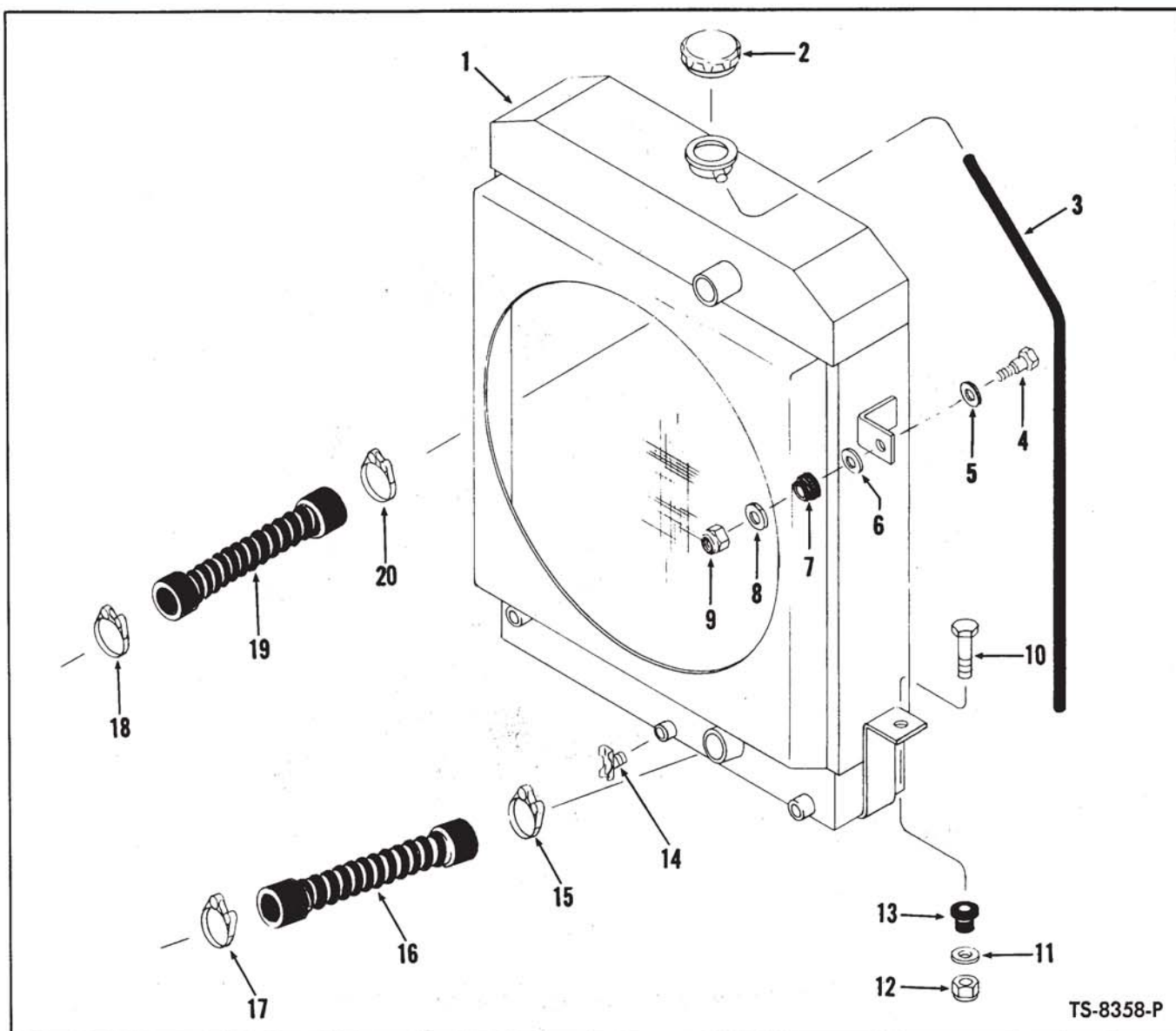
²Inc. 1 → 4, 6 → 15, 17 → 20

³Inc. 1 → 4, 6 → 9, 11 → 15, 19, 20

⁴See B & C

⁵See B

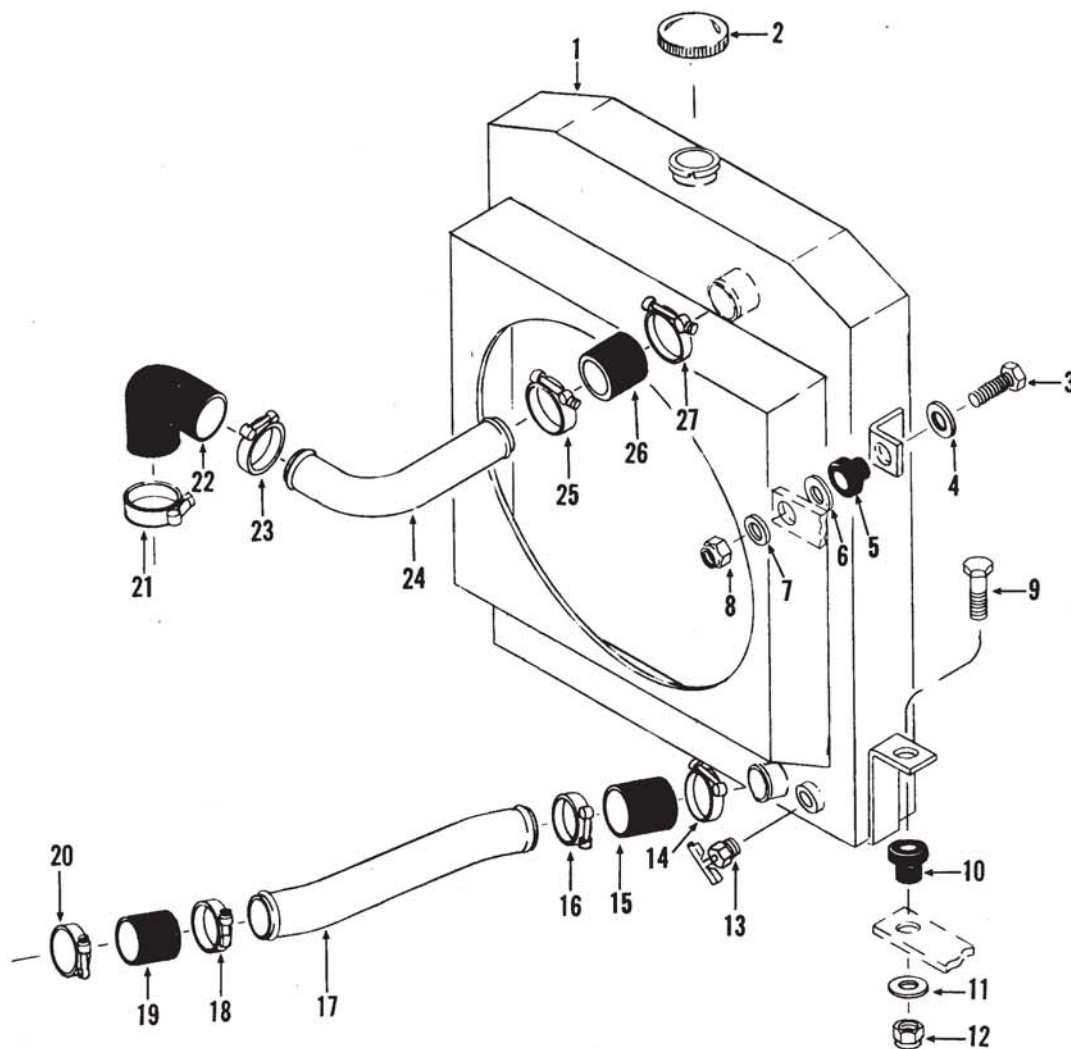
Pump is equipped with bushing type bearings. Bearings are machine finished after pressing in place and therefore are not replaceable service items.



RADIATOR AND CONNECTIONS — CUMMINS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1505587	RADIATOR ASSY (Inc. 2, 3) ..	1	11	584502	WASHER, Radiator Mtg.	2
2	351495	CAP, Radiator	1	12	18D-08	NUT, Radiator Mtg.	2
3	945460	HOSE, Overflow	1	13	584501	DAMPENER, Vibration — Radiator Mtg.	2
4	24C-836	BOLT, Radiator Mtg.	2	14	72F-2	DRAIN COCK	1
5	619029	WASHER, Radiator Mtg.	2	15	540108	CLAMP, Radiator Hose	1
6	584502	WASHER, Radiator Mtg.	2	16	523515	HOSE, Radiator	1
7	584501	DAMPENER, Vibration — Radiator Mtg.	2	17	540108	CLAMP, Radiator Hose	1
8	584502	WASHER, Radiator Mtg.	2	18	540108	CLAMP, Radiator Hose	1
9	18D-08	NUT, Radiator Mtg.	2	19	1533797	HOSE, Radiator	1
10	24C-836	BOLT, Radiator Mtg.	2	20	540108	CLAMP, Radiator Hose	1

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



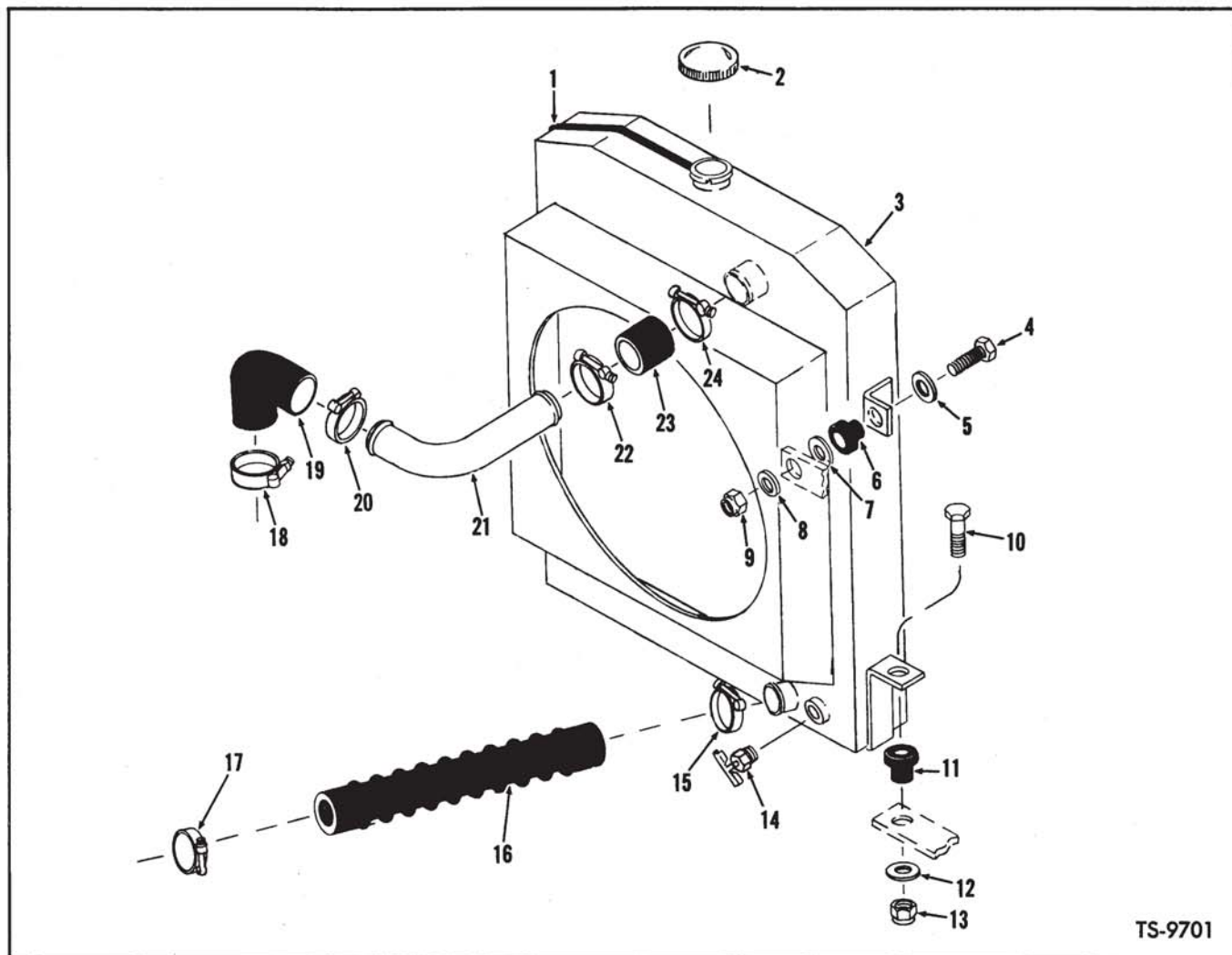
TS-9176-P

RADIATOR AND CONNECTIONS - G.M.
For Serial: 409A101 thru 999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1502735	RADIATOR ASSY (Inc. 1A, 2)	1	13	72F-2	DRAIN COCK	1
1A	945460	†HOSE, Overflow	1	14	540108	CLAMP, Radiator to Hose	1
2	351495	CAP, Radiator	1	15	536711	HOSE, Radiator Lower	1
3	24C-836	BOLT, Radiator to Frame	2	16	540108	CLAMP, Tube to Hose	1
4	619029	WASHER, Radiator to Frame	2	17	1502751	TUBE, Lower	1
5	584501	DAMPENER, Vibration Radiator to Frame	2	18	540108	CLAMP, Tube to Hose	1
6	584502	WASHER, Radiator to Frame	2	19	536711	HOSE, Radiator Lower	1
7	584502	WASHER, Radiator to Frame	2	20	540108	CLAMP, Hose to Engine	1
8	18D-08	NUT, Radiator to Frame	2	21	540108	CLAMP, Hose to Engine	1
9	24C-836	BOLT, Radiator to Frame	2	22	515810	HOSE, Engine to Tube	1
10	584501	DAMPENER, Vibration Radiator to Frame	2	23	540108	CLAMP, Hose to Tube	1
11	584502	WASHER, Radiator to Frame	2	24	1502750	TUBE, Upper	1
12	18D-08	NUT, Radiator to Frame	2	25	540108	CLAMP, Hose to Tube	1
				26	536711	HOSE, Upper	1
				27	540108	CLAMP, Hose to Radiator	1

†Not Illustrated

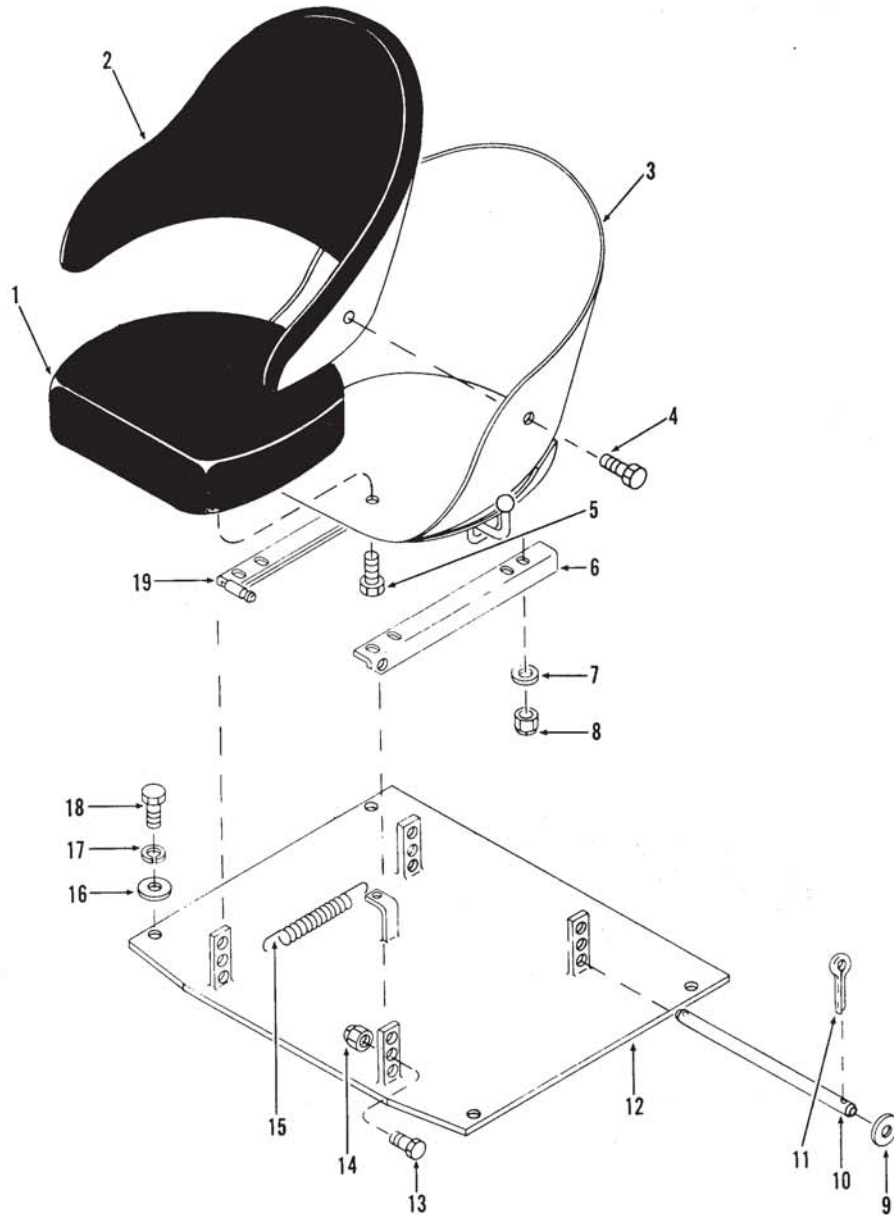
WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE



RADIATOR AND CONNECTIONS — G.M.
For Serial: 409B101 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	945460	HOSE, Overflow	1	12	619029	WASHER, Radiator to Frame	2
2	351495	CAP, Radiator	1	13	18D-08	NUT, Radiator to Frame	2
3	1502735	RADIATOR ASSY (Inc. 1, 2) ..	1	14	72F-2	DRAIN COCK	1
4	24C-836	BOLT, Radiator to Frame	1	15	540108	CLAMP, Radiator to Hose	1
5	619029	WASHER, Radiator to Frame	2	16	543842	HOSE, Radiator to Engine	1
6	584501	DAMPENER, Vibration — Radiator to Frame	2	17	540108	CLAMP, Hose to Engine	1
7	619029	WASHER, Radiator to Frame	2	18	540108	CLAMP, Hose to Engine	1
8	619029	WASHER, Radiator to Frame	2	19	515810	HOSE, Engine to Tube	1
9	18D-08	NUT, Radiator to Frame	2	20	540108	CLAMP, Tube to Hose	1
10	24C-836	BOLT, Radiator to Frame	2	21	1502750	TUBE, Upper	1
11	584501	DAMPENER, Vibration — Radiator to Frame	2	22	540108	CLAMP, Tube to Hose	1
				23	1M-16040	HOSE, Radiator to Tube	1
				24	540108	CLAMP, Hose to Radiator	1

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



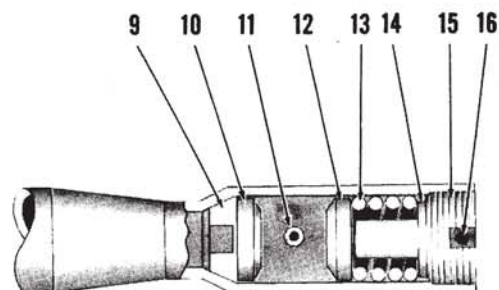
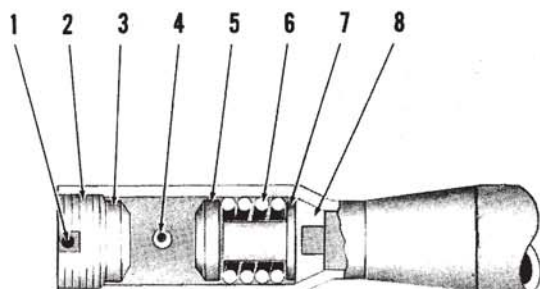
TS-8102-P

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	10	557458	BAR, Seat Mounting	1
1	948144	CUSHION, Seat	1	11	1F-420	COTTER, Mounting Bar	2
2	948143	CUSHION, Back Rest	1	12	1533590	SUPPORT, Seat	1
3	944982	BUCKET	1	13	24C-824	BOLT, Seat Pivot	2
4	1C-610	BOLT, Cushion Mtg.	5	14	18D-08	NUT, Seat Pivot	2
4A	25E-17	†WASHER, Cushion Mtg.	5	15	550301	SPRING	1
5	1C-610	BOLT, Cushion Mtg.	2	16	619029	WASHER, Seat Support to Frame	4
5A	25E-17	†WASHER, Cushion Mtg.	2	17	4E-08	LKWSHR, Seat Support to Frame	4
6	558779	ANGLE, Left Hand	1	18	23C-820	BOLT, Seat Support to Frame	4
7	25E-15	WASHER, Seat Mtg.	4	19	558777	ANGLE, Right Hand	1
8	18D-05	NUT, Seat Mtg.	4				
9	25E-22	WASHER, Mounting Bar	2				

†Not Illustrated

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



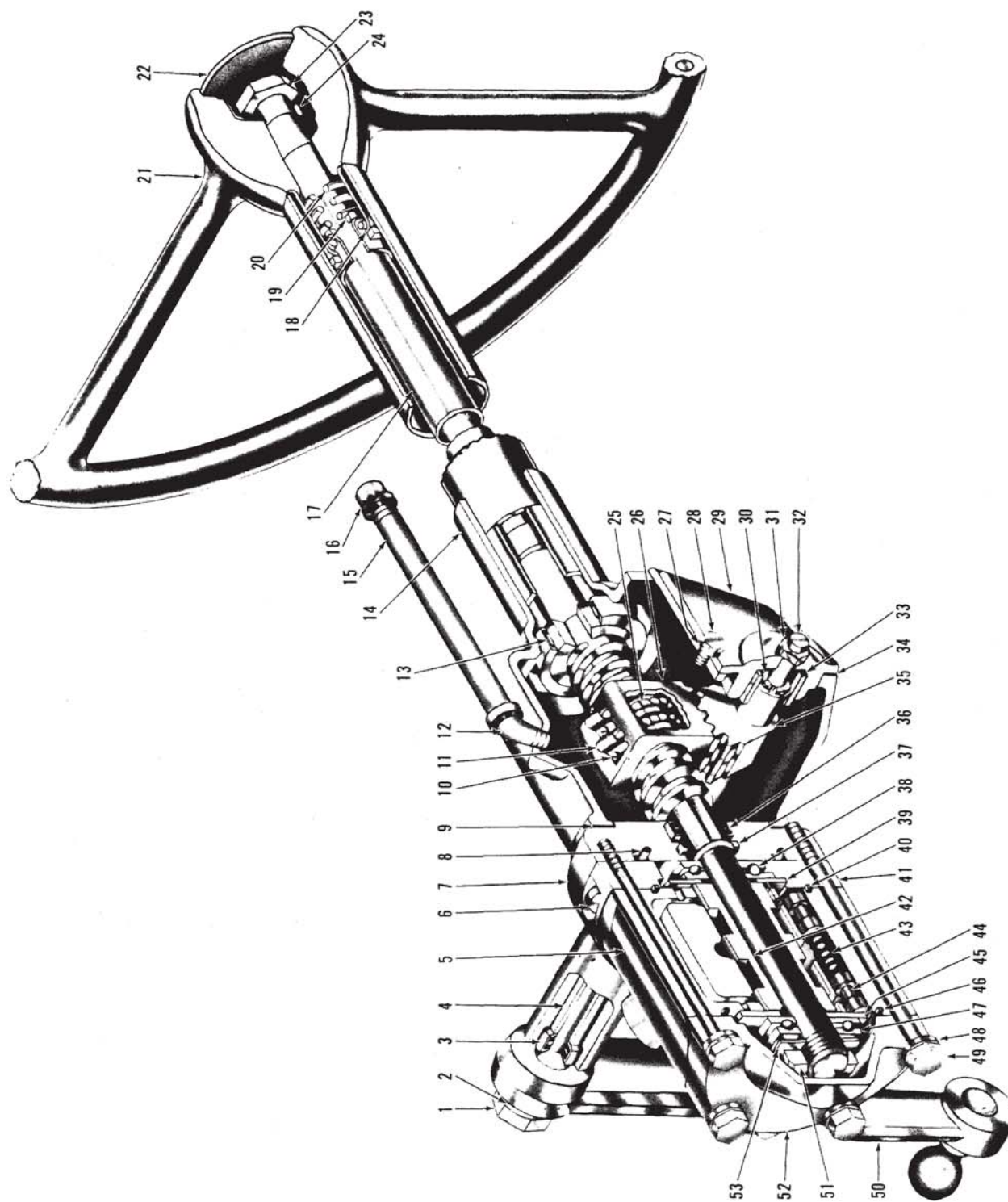
TS-1259-P

STEERING DRAG LINK

Item No.	Part No.	Description	No. Req'd.
A	1533311	DRAG LINK ASSY (Inc. 2, 3, 5 thru 10, 12 thru 15)	1
1	1F-432	COTTER	1
2	876575	PLUG, 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	12H-15	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

TS-4787-P



STEERING GEAR ASSEMBLY

STEERING GEAR ASSEMBLY

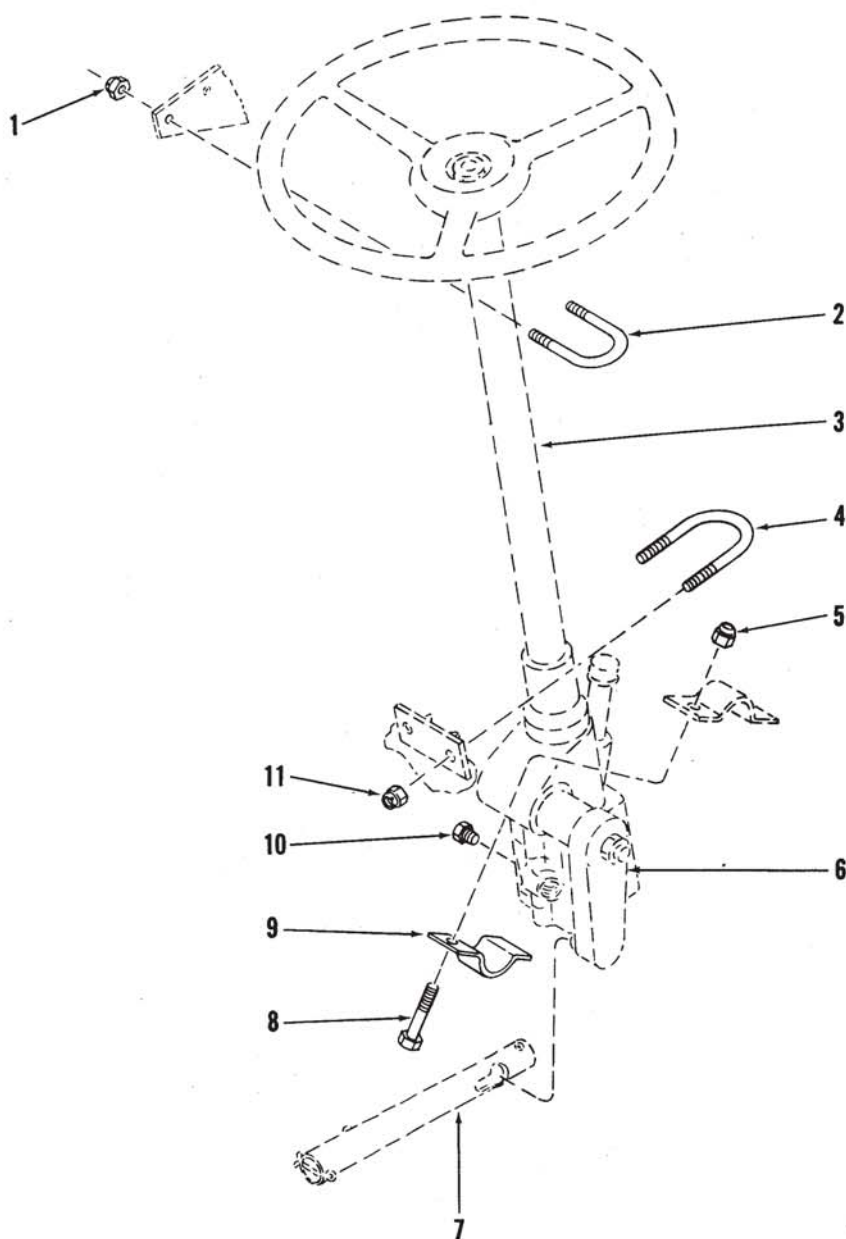
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1502890	GEAR ASSY (Inc. 1 thru 20, 24 thru 49, 51, 52, 53)	1	25A	853526	†GUIDE, Ball Return	4
1	850756	NUT, Pitman Arm	1	26	853525	NUT, Ball	1
2	4E-18	LKWSHR, Pitman Arm	1	27	2E-06	LKWSHR, Side Cover	3
3	853391	SEAL, Pitman Shaft Grease	1	28	1C-612	BOLT, Side Cover	3
4	853357	BUSHING, Pitman Shaft	1	29	853182	COVER, Housing Side (Inc. 33)	1
5	945334	* VALVE ASSY (Inc. 42, 43, 44)	1	30	853187	SHIM KIT, Lash Adjuster	1
6	73G-732	BOLT, Adapter to Hsg.	4	31	8D-07	NUT, Lash Adjuster	1
6A	4E-07	† LKWSHR, Adapter to Hsg.	4	32	851770	ADJUSTER, Lash	1
7	961260	** ADAPTER, Valve to Hsg. (Inc. 36, 37A)	1	33	-----	§ BUSHING, Side Cover — See 29	—
8	58K-232	O-RING, Spacer to Adapter	1	34	851756	GASKET, Side Cover	1
9	853380	GASKET, Adapter to Hsg.	1	35	940111	GEAR, Pitman Shaft	1
10	851762	BOLT & WASHER ASSY, Clamp	3	36	861741	BEARING, Adapter	1
11	853527	CLAMP, Ball Return Guide	1	37	949972	O-RING, Adapter	1
12	25F-4	ELBOW, Filler	1	37A	873293	†SEAL, Adapter	—
13	730143	BEARING, Needle	1	38	860997	BEARING, Worm Thrust	1
14	946138	HOUSING ASSY (Inc. 4, 13)	1	39	943438	WASHER, Worm Thrust	1
15	5K-432	NIPPLE, Filler	1	40	58K-237	O-RING, Valve to Spacer	1
16	22F-4	CAP, Filler	1	41	943440	SPACER, Valve	1
17	946139	SHAFT ASSY (Inc. 10, 11, 25, 25A, 26)	1	42	-----	§SPOOL, Valve — See Item 5	—
18	857729	BEARING ASSY, Upper	1	43	943437	SPRING, Valve	4
19	861768	WASHER, Upper Brg.	1	44	943436	PLUNGER, Valve	8
20	853395	SPRING, Upper Brg.	1	45	943438	WASHER, Brg. Thrust	1
21	1508704	WHEEL, Steering	1	46	58K-237	O-RING, Valve to Spacer	1
22	1511710	PLATE, Precaution	1	47	860997	BEARING, Worm Thrust	1
22A	65G-406	†SCREW, Plate Attaching	4	48	3E-08	LKWSHR, End Cover	6
23	648304	NUT, Steering Wheel	1	49	1C-888	BOLT, End Cover	6
24	853384	KEY, Steering Wheel	1	50	566433	ARM, Pitman	1
25	10J-09	BALL	106	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

*Shown Out of Position **See S.G. 551

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

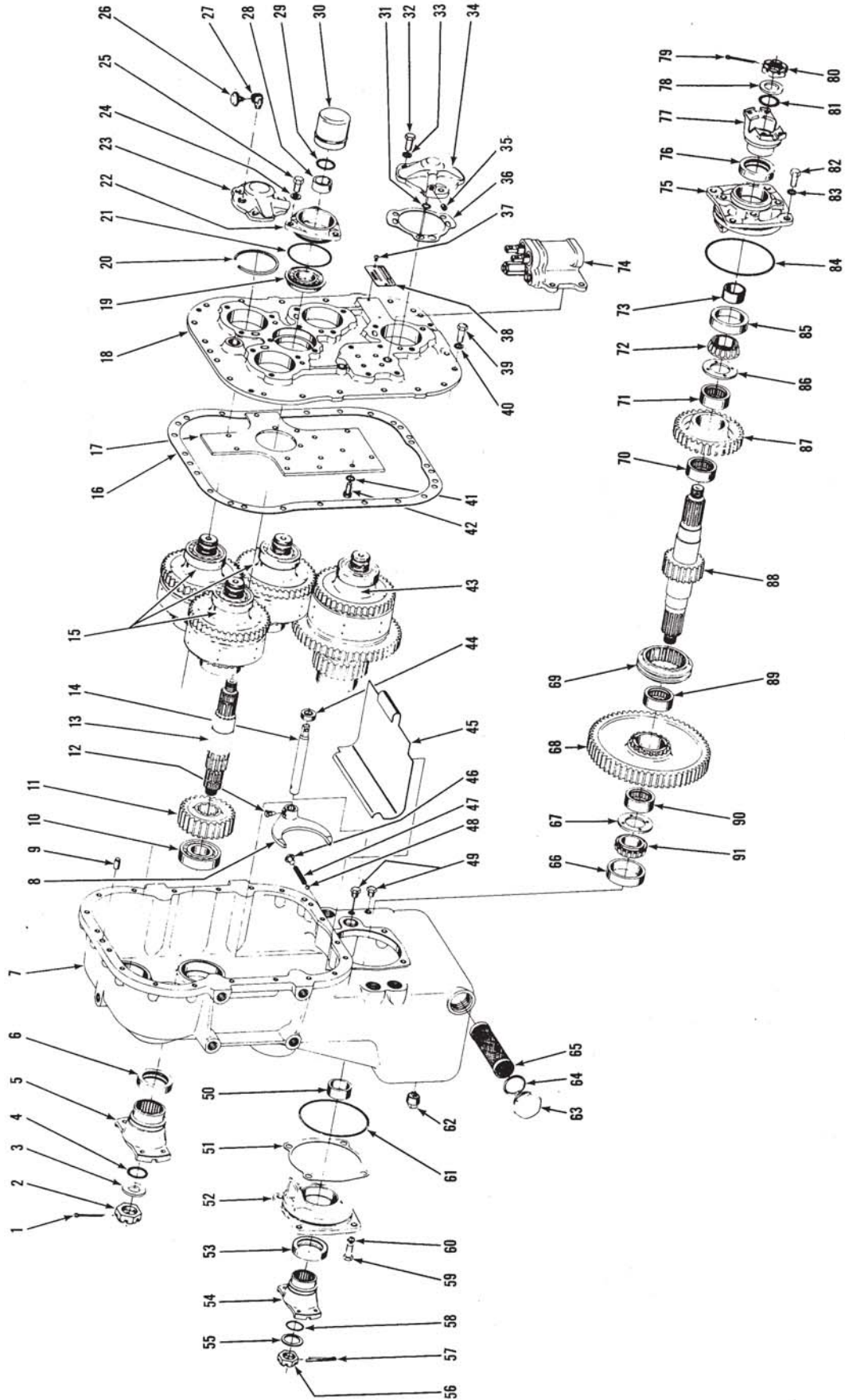


TS-5322-P

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 — Steering Gear	—
7	-----	DRAG LINK — See Index	—
8	18C-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-6775-P

TRANSMISSION ASSEMBLY

TRANSMISSION ASSEMBLY

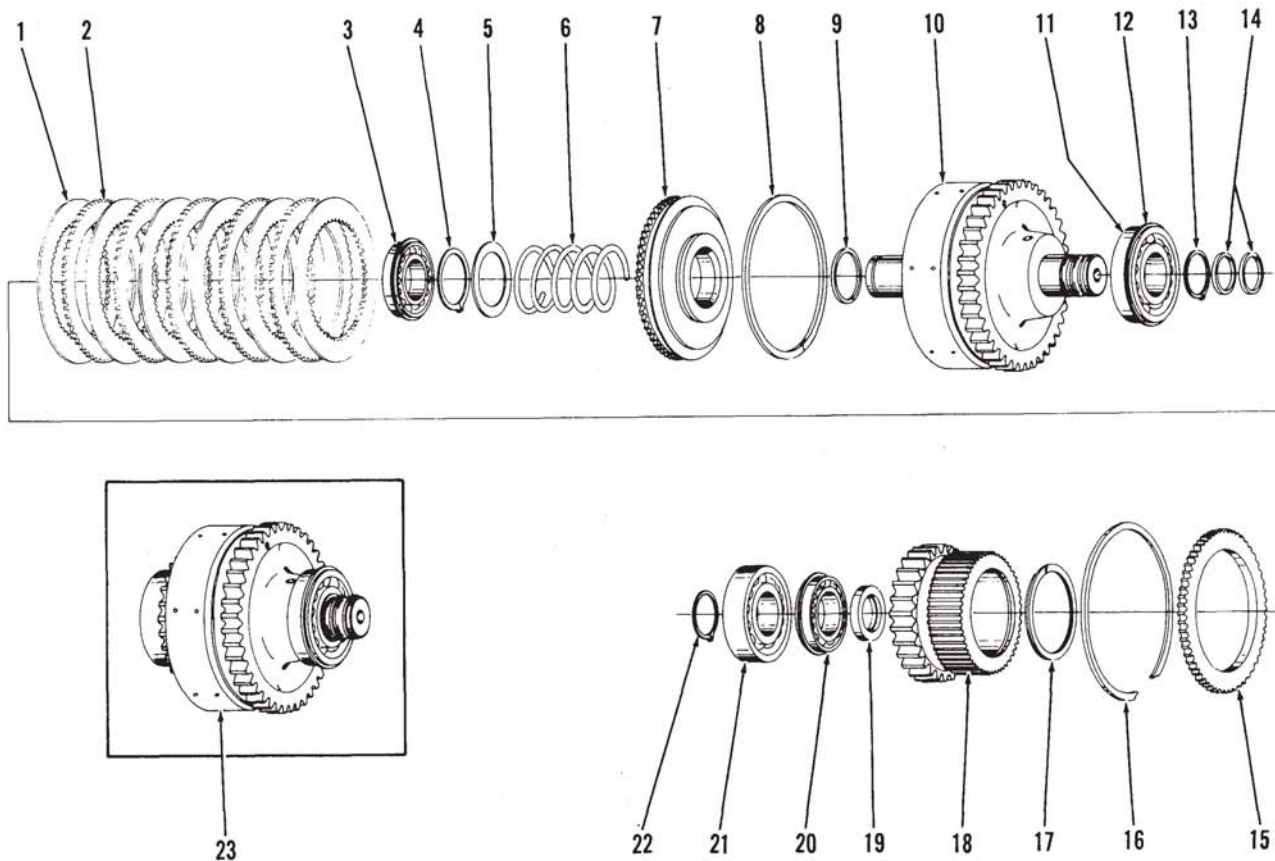
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	283112	TRANSMISSION ASSY (2420H-28) (Inc. 1 thru 91 and all Items listed on pages 20 thru 22)	1	44	234653	SEAL, Range Shift Oil	1
1	1F-428	COTTER, Flange Nut	1	45	228943	PLATE, Baffle	1
2	201951	NUT, Input Flange	1	46	40K-04	PLUG, Shift Rail Detent	1
3	102745	WASHER, Input Flange	1	47	215191	SPRING, Shift Rail Detent	1
4	25K-40112	O-RING, Input Flange	1	48	10J-12	BALL, Shift Rail Detent	1
5	214987	FLANGE, Input Shaft	1	49	40K-04	PLUG, Oil Level	2
6	206864	SEAL, Input Shaft Oil	1	50	227945	SPACER, Brake Flange	1
7	801363	CASE ASSY, Trans. (Inc. 6)	1	51	215156	‡ SHIM, Bearing Cap — .004" ..	—
8	215146	FORK, Range Shift	1	51A	215157	‡ SHIM, Bearing Cap — .007" ..	—
9	214295	PIN, Cover to Case Dowel	2	51B	215158	‡ SHIM, Bearing Cap — .010" ..	—
10	225603	BEARING, Input Shaft	1	52	227960	CAP, Output Shaft Bearing ..	1
11	215166	GEAR, Input Shaft (26T)	1	53	225823	SEAL, Bearing Cap Oil	1
12	201566	SCREW, Shift Fork Lock	1	54	222029	FLANGE, Output	1
13	217952	SHAFT, Input	1	55	222179	WASHER, Flange Nut	1
14	215145	RAIL, Range Shift	1	56	205928	NUT, Flange	1
15	—	CLUTCH GROUP — Fwd., Rev. & Low — See Index (Inc. 20)	—	57	1F-436	COTTER, Flange Nut	1
16	215144	GASKET, Cover to Case	1	58	25K-60116	O-RING, Flange	1
17	215143	PLATE, Oil Circuit	1	59	1C-820	BOLT, Bearing Cap	4
18	215141	COVER ASSY, Trans. (Inc. 17, 41, 42)	1	60	5E-08	LKWSHR, Bearing Cap	4
19	225824	BEARING, Input Shaft	1	61	25K-40524	O-RING, Bearing Cap	1
20	945374	RING, Bearing Retaining	4	62	215757	PLUG, Drain — Magnetic	1
21	25K-40316	O-RING, Bearing Cap	1	63	219370	PLUG, Suction Screen	1
22	215198	CAP, Bearing (Inc. 22A)	1	64	219373	GASKET, Plug	1
22A	206864	† SEAL, Input Shaft Oil	1	65	215205	SCREEN, Suction	1
23	—	CAP, Bearing — See Item 34 ..	—	66	661721	CUP, Output Shaft Bearing ..	1
24	4E-07	LKWSHR, Bearing Cap	3	67	227947	WASHER, Thrust	1
25	1C-718	BOLT, Bearing Cap	3	68	228068	GEAR, Low (61T)	1
26	—	OMIT, Not Used	—	69	215149	HUB, Output Shaft Shift	1
27	—	OMIT, Not Used	—	70	227944	BEARING, High Gear	1
28	215162	SPACER, Input Flange	1	71	227944	BEARING, High Gear	1
29	659065	RING, Bearing Retaining	1	72	227946	CONE, Output Shaft Brg.	1
30	209412	CAP, Input Shaft	1	73	227945	SPACER, Brake Flange	1
31	25K-30016	O-RING, Bearing Cap	4	74	—	VALVE — See Index	—
32	1C-718	BOLT, Bearing Cap	9	75	227960	CAP, Output Shaft Bearing ..	1
33	4E-07	LKWSHR, Bearing Cap	9	76	225823	SEAL, Bearing Cap Oil	1
34	215163	CAP, Distributor Bearing	4	77	222233	FLANGE, Output	1
35	16F-02	PLUG, Bearing Cap Pipe	4	78	222179	WASHER, Flange Nut	1
36	215164	GASKET, Bearing Cap	4	79	1F-436	COTTER, Flange Nut	1
37	207873	SCREW, Name Plate	2	80	205928	NUT, Flange	1
38	—	§ PLATE, Name	1	81	25K-60116	O-RING, Flange	1
39	1C-718	BOLT, Cover to Case	20	82	1C-820	BOLT, Bearing Cap	4
40	4E-07	LKWSHR, Cover to Case	20	83	5E-08	LKWSHR, Bearing Cap	4
41	5E-06	LKWSHR, Plate to Cover	15	84	25K-40524	O-RING, Bearing Cap	1
42	1C-614	BOLT, Plate to Cover	15	85	661721	CUP, Output Shaft Brg.	1
43	—	CLUTCH GROUP — High — See Index (Inc. 20)	—	86	227947	WASHER, Thrust	1
				87	228069	GEAR, High (34T)	1
				88	228887	SHAFT, Output	1
				89	227944	BEARING, Low Gear	1
				90	227944	BEARING, Low Gear	1
				91	227946	CONE, Output Shaft Brg.	1

†Not Illustrated

‡As Required

§Not Sold Separately

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



TS-3912-P

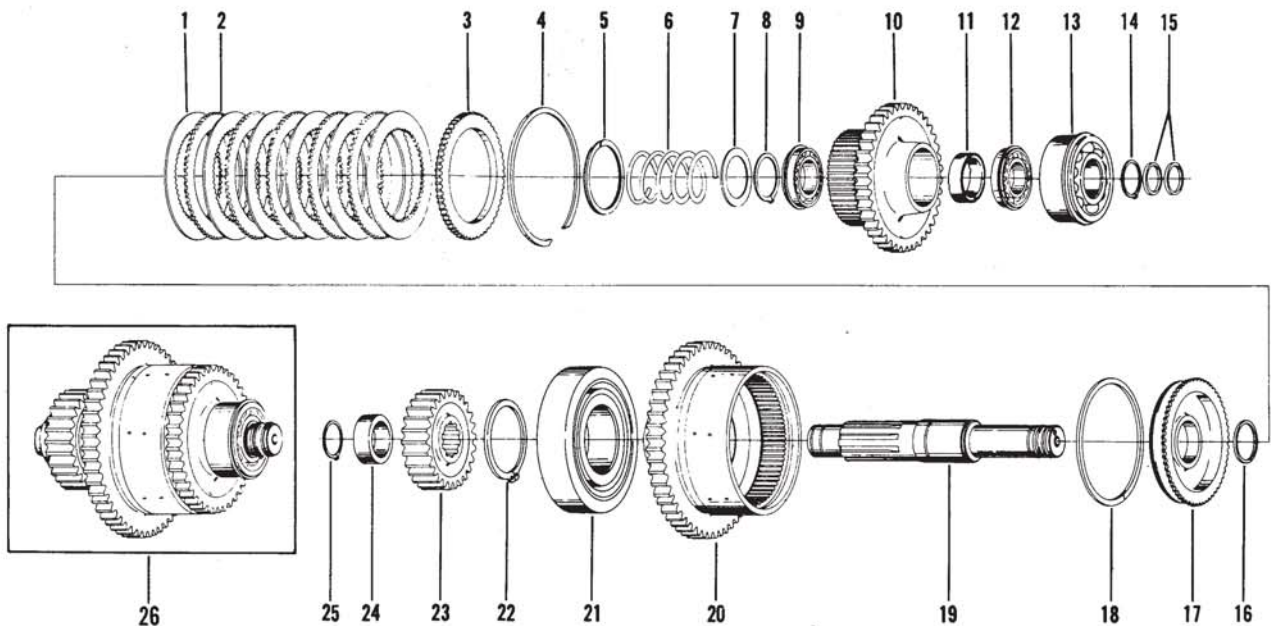
CLUTCH GROUP — FORWARD, REVERSE AND LOW

(This Group used 3 times in Transmission — Quantities listed below are for 1 Clutch Group)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	233166	DISC, Clutch Inner	6	11	228245	BEARING, Clutch Shaft (Inc. 12)	1
2	224772	DISC, Clutch Outer	5	12	945374	RING, Bearing Retaining	1
3	225076	BEARING, Clutch Disc Hub	1	13	659065	RING, Bearing Retaining	1
4	654613	RING, Return Spring Ret.	1	14	215183	RING, Clutch Shaft Seal	2
5	616848	WASHER, Spring Ret.	1	15	224774	PLATE, Clutch Disc End	1
6	215179	SPRING, Piston Return	1	16	215190	RING, End Plate Ret.	1
7	215177	PISTON, Clutch	1	17	225077	RING, Hub Oil Baffle	1
8	224771	RING, Piston Outer Seal	1	18	215180	GEAR & HUB ASSY (28T)	1
9	223085	RING, Piston Inner Seal	1	19	215182	SPACER, Hub Bearing	1
10	227955	DRUM ASSY, Clutch (Inc. 10A, 10B) (40T)	1	20	225076	BEARING, Disc Hub	1
10A	215176	† SEAT, Bleed Valve Ball	1	21	225078	BEARING, Clutch Shaft	1
10B	10J-06	† BALL, Bleed Valve	1	22	659065	RING, Bearing Ret.	1
				23	228223	CLUTCH ASSY (Inc. 1 thru 22)	1

†Not Illustrated

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



TS-8951-P

CLUTCH GROUP — HIGH

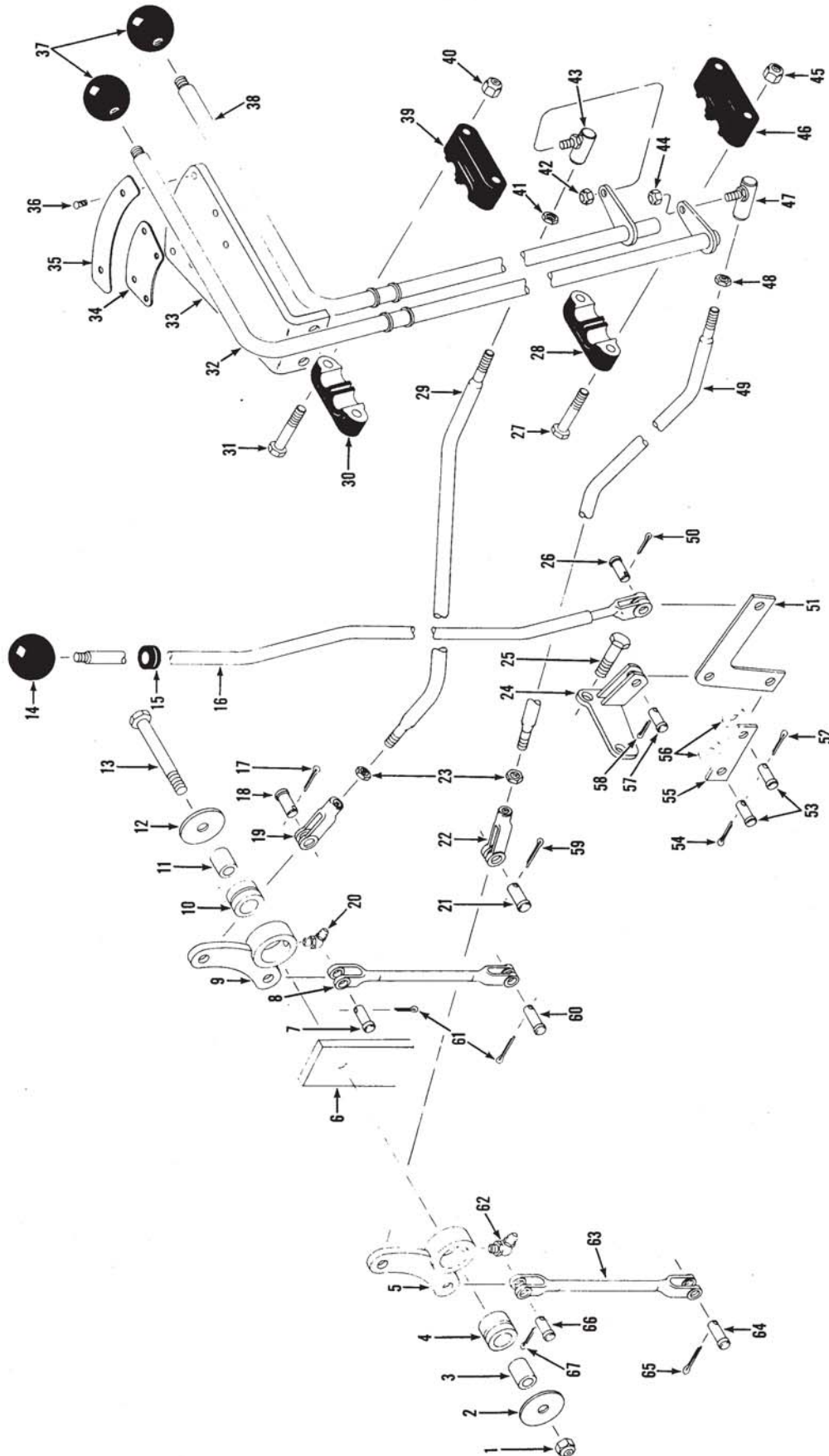
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	233166	DISC, Clutch Inner	6	15	215183	RING, Clutch Shaft Sealing ..	2
2	224772	DISC, Clutch Outer	5	16	223085	RING, Piston Inner Sealing ..	1
3	224774	PLATE, Clutch Disc End	1	17	215177	PISTON, Clutch	1
4	215190	RING, End Plate Ret.	1	18	224771	RING, Piston Outer Sealing ..	1
5	225077	RING, Hub Oil Baffle	1	19	215184	SHAFT, Clutch	1
6	215179	SPRING, Piston Return	1	20	227952	DRUM & GEAR ASSY, Clutch (Inc. 20A, 20B) (53T)	1
7	616848	WASHER, Spring Ret.	1	20A	215176	† SEAT, Bleed Valve Ball	1
8	654613	RING, Return Spring Ret.	1	20B	10J-06	† BALL, Bleed Valve	1
9	225076	BEARING, Disc Hub	1	21	228246	BEARING, High Gear	1
10	227950	HUB & GEAR, Clutch Disc (40T)	1	22	507688	RING, Bearing Retaining	1
11	227959	SPACER, Hub Bearing	1	23	215166	GEAR, High Clutch Shaft (26T)	1
12	225076	BEARING, Disc Hub	1	24	227949	SPACER, Gear	1
13	228245	BEARING, Clutch Shaft	1	25	659065	RING, Retaining	1
14	659065	RING, Bearing Retaining	1	26	228222	CLUTCH ASSY (Inc. 1 thru 25) ..	1

†Not Illustrated

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

TS-8924-P

TRANSMISSION CONTROL LEVERS AND LINKAGE



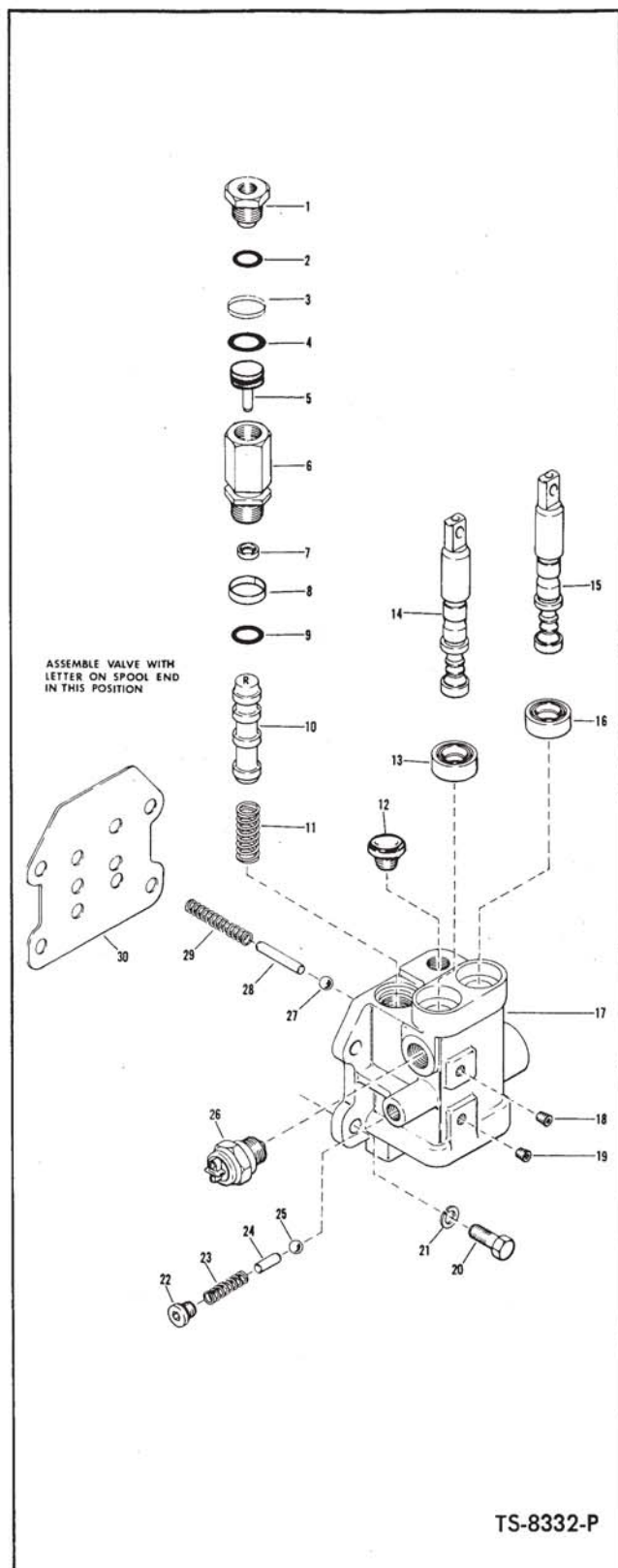
TRANSMISSION CONTROL LEVERS AND LINKAGE

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18D-08	NUT, Bellcrank to Brk.	1	33B	18D-06	†NUT, Quadrant	1
2	616795	WASHER, Bellcrank to Brk.	1	34	567947	PLATE, Hi-Lo	1
3	585596	SLEEVE, Bellcrank	1	35	567977	PLATE, Forward & Reverse	1
4	585597	BUSHING, Bellcrank	1	36	6C-605	SCREW, Plate to Quadrant	6
5	585500	BELLCRANK, Forward & Reverse	1	37	509772	KNOB, Shift Lever	2
6	-----	§BRACKET — Part of Frame	—	38	1522226	LEVER, High & Low	1
7	4F-06106	PIN, Clevis	1	39	-----	§SUPPORT, Shift Lever — See 30	—
8	1505272	ROD, High & Low	1	40	18D-05	NUT, Lever Support	2
9	585500	BELLCRANK, High & Low	1	41	8D-06	NUT, Ball Joint Jam	1
10	585597	BUSHING, Bellcrank	1	42	66D-06	NUT, Ball Joint	1
11	585596	SLEEVE, Bellcrank	1	43	1301362	BALL JOINT, Control Rod	1
12	616795	WASHER, Bellcrank to Brk.	1	44	66D-06	NUT, Ball Joint	1
13	24C-852	BOLT, Bellcrank to Brk.	1	45	18D-05	NUT, Lever Support	2
14	509772	KNOB, Control Rod	1	46	-----	§SUPPORT, Shift Lever — See 28	—
15	565073	GROMMET, Control Rod	1	47	1301362	BALL JOINT, Control Rod	1
16	1522196	ROD, High & Low	1	48	8D-06	NUT, Ball Joint Jam	1
17	1F-310	COTTER, Clevis Pin	1	49	1505229	ROD, Forward & Reverse (Inc. 22, 23, 47, 48)	1
18	4F-06106	PIN, Clevis	1	50	1F-310	COTTER, Clevis Pin	1
19	2J-6208	CLEVIS, Control Rod	1	51	1522219	BELLCRANK, High & Low	1
20	12H-15	FITTING, Bellcrank Grease	1	52	1F-310	COTTER, Clevis Pin	1
21	4F-06106	PIN, Clevis	1	53	4F-06106	PIN, Clevis	2
22	2J-6208	CLEVIS, Control Rod	1	54	1F-310	COTTER, Clevis Pin	1
23	8D-06	NUT, Clevis Jam	2	55	743878	LINK, Connecting	2
24	1522216	BRACKET, Bellcrank	1	56	980055	WASHER, Clevis Pin	2
25	23C-724	BOLT, Bracket to Trans.	2	57	4F-06106	PIN, Clevis	1
26	4F-06106	PIN, Clevis	1	58	1F-310	COTTER, Clevis Pin	1
27	24C-536	BOLT, Lever Support	2	59	1F-310	COTTER, Clevis Pin	1
28	1508846	SUPPORT, Shift Lever (Inc. 46)	1	60	4F-06106	PIN, Clevis	1
29	1505228	ROD, High & Low (Inc. 19, 23, 41, 43)	1	61	1F-310	COTTER, Clevis Pin	2
30	1508846	SUPPORT, Shift Lever (Inc. 39)	1	62	12H-15	FITTING, Bellcrank Grease	1
31	24C-536	BOLT, Lever Support	2	63	1505272	ROD, Forward & Reverse	1
32	1522225	LEVER, Forward & Reverse	1	64	4F-06106	PIN, Clevis	1
33	1536275	QUADRANT, Shift	1	65	1F-310	COTTER, Clevis Pin	1
33A	24C-620	†BOLT, Quadrant	1	66	4F-06106	PIN, Clevis	1
				67	1F-310	COTTER, Clevis Pin	1

§Not Sold Separately

†Not Illustrated

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

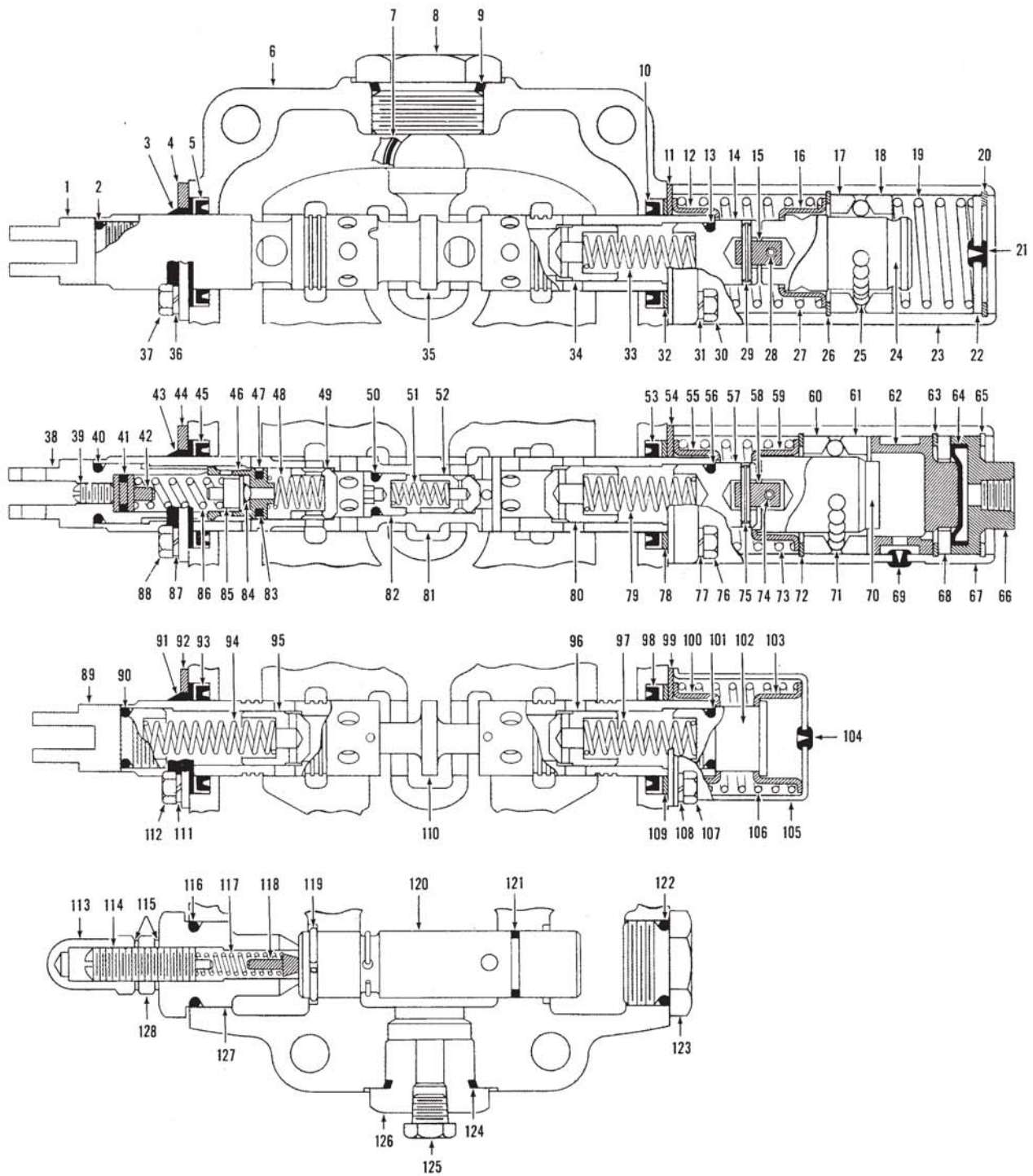
CONTROL VALVE — TRANSMISSION


Item No.	Part No.	Description	No. Req'd.
A	230505	CONTROL VALVE ASSY (Inc. 1 thru 30)	1
1	217928	PLUG, Stop	1
2	91F-8	O-RING, Stop Plug	1
3	227672	SEAL, Piston — Outer	1
4	25K-30020	O-RING, Piston	1
5	227674	PISTON	1
6	219342	VALVE, De-Clutch (Inc. 1 thru 5, 7, 8, 9)	1
7	229131	SEAL, Oil	1
8	228931	SEAL, Band	1
9	25K-30022	O-RING	1
10	—	*§ VALVE, De-Clutch Control — See "A"	—
11	219344	SPRING, Control Valve	1
12	211433	BREATHER	1
13	234653	SEAL, Manual Control Valve Oil	1
14	—	§ VALVE, Manual Control — See "A"	—
15	—	§ VALVE, Manual Control — See "A"	—
16	234653	SEAL, Manual Control Valve Oil	1
17	—	§ HOUSING, Control Valve — See "A"	—
18	16F-01	PLUG	1
19	16F-01	PLUG	1
20	1C-718	BOLT, Housing to Trans.	4
21	4E-07	LKWSHR, Housing to Trans. ..	4
22	47K-3	PLUG, Detent	1
23	202200	SPRING, Detent	1
24	229010	PIN, Detent	1
25	10J-12	BALL, Detent	1
26	224620	SWITCH, Neutral Start	1
27	10J-12	BALL, Detent	1
28	215194	PIN, Detent Stop	1
29	215147	SPRING, Detent	1
30	229009	GASKET, Housing to Trans. ..	1

§ Not Sold Separately

*NOTE: For correct operation of the de-clutch feature for this application Item 10 must be installed with the letter "R" in the upright position.

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



CONTROL VALVE ASSEMBLY

TS-8586-P

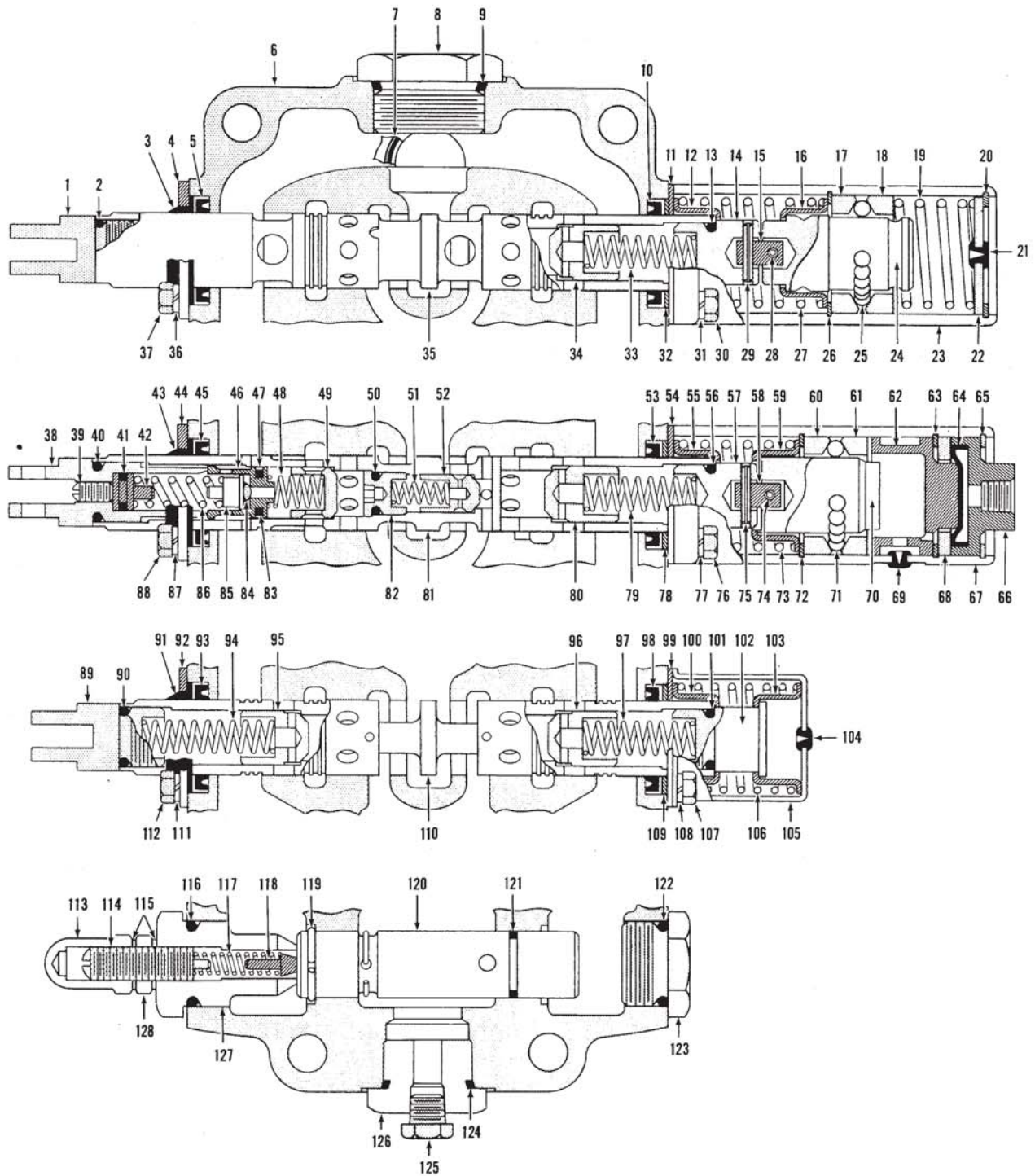
CONTROL VALVE ASSEMBLY
For Serial: Cummins — 408A101 thru 165, 178

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1503807	*VALVE ASSY (Inc. 1 thru 128)	1	37	1C-410	BOLT, Retainer to Hsg.	2
1	946360	EYE, Plunger	1	38	946361	EYE, Plunger	1
2	25K-30022	O-RING, Plunger Eye	1	39	946541	SCREW, Adjusting	1
3	946918	WIPER, Plunger	1	40	25K-30022	O-RING, Plunger Eye	1
4	946914	RETAINER, Wiper	1	41	25K-20014	O-RING, Guide	1
5	946583	SEAL, Plunger Oil	1	42	946363	GUIDE, Spring	1
6	-----	§HOUSING — See "A"	1	43	946918	WIPER, Plunger	1
7	91F-11	O-RING, Valve Mounting	1	44	946914	RETAINER, Wiper	1
8	24K-11	CAP	1	45	946583	SEAL, Plunger Oil	1
9	58K-222	O-RING, Cap	1	46	946883	SEAT, Relief Valve	1
10	946583	SEAL, Plunger Oil	1	47	946556	RING, Teflon Seal	1
11	944882	PLATE, Retaining	1	48	946545	SPRING, Check	1
12	944878	GUIDE, Spring	1	49	946543	CHECK	1
13	25K-30022	O-RING, Cap	1	50	945221	O-RING, Cap	1
14	945095	CAP, Plunger	1	51	946536	SPRING, Check	1
15	888449	PIN, Connecting	1	52	945590	CHECK	1
16	944878	GUIDE, Spring	1	53	946583	SEAL, Plunger Oil	1
17	944897	RETAINER, Ball	1	54	946535	RETAINER, Seal	1
18	944897	RETAINER, Ball	1	55	944878	GUIDE, Spring	1
19	946029	SPRING, Detent	1	56	25K-30022	O-RING, Cap	1
20	507695	RING, Retaining	1	57	945095	CAP, Plunger	1
21	886763	PLUG, Bleeder	1	58	888449	PIN, Connecting	1
22	944900	PLUG, Cover	1	59	944878	GUIDE, Spring	1
23	945805	COVER, Detent	1	60	944897	RETAINER, Ball	1
24	946030	CAP, Detent	1	61	944897	RETAINER, Ball	1
25	10J-08	BALL, Detent	15	62	946917	PLUG, Detent	1
26	1301194	RING, Retaining	1	63	507695	RING, Retaining	1
27	945090	SPRING, Return	1	64	946919	DIAPHRAGM	1
28	108301	ROLL PIN	1	65	507695	RING, Retaining	1
29	108301	ROLL PIN	1	66	946915	PLUG, Detent Cover	1
30	1C-416	BOLT, Cover to Housing	4	67	946913	COVER, Detent	1
31	4E-04	LKWSHR, Cover to Housing	4	68	946916	SPACER	1
32	944883	RING, Back-Up	1	69	886763	PLUG, Bleeder	1
33	893293	SPRING, Check	1	70	946912	CAP, Detent	1
34	944885	CHECK	1	71	10J-08	BALL, Detent	15
35	-----	§PLUNGER — See "A"	1	72	1301194	RING, Retaining	1
36	4E-04	LKWSHR, Retainer to Hsg.	2	73	944879	SPRING, Return	1

§Not Sold Separately

*NOTE: For complete replacement of 1503807 Control Valve use 2510840 Valve plus the following items; 1 #1508082 Bracket, 3 #1509125 Clips, 3 #4E-08 Lockwashers and 3 #24C-864 Bolts. However, if your machine is equipped with optional equipment that requires the use of a 3-spool valve it will be necessary to use 1548531 Valve plus the above listed attaching parts to replace 1503807 Valve.

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



CONTROL VALVE ASSEMBLY

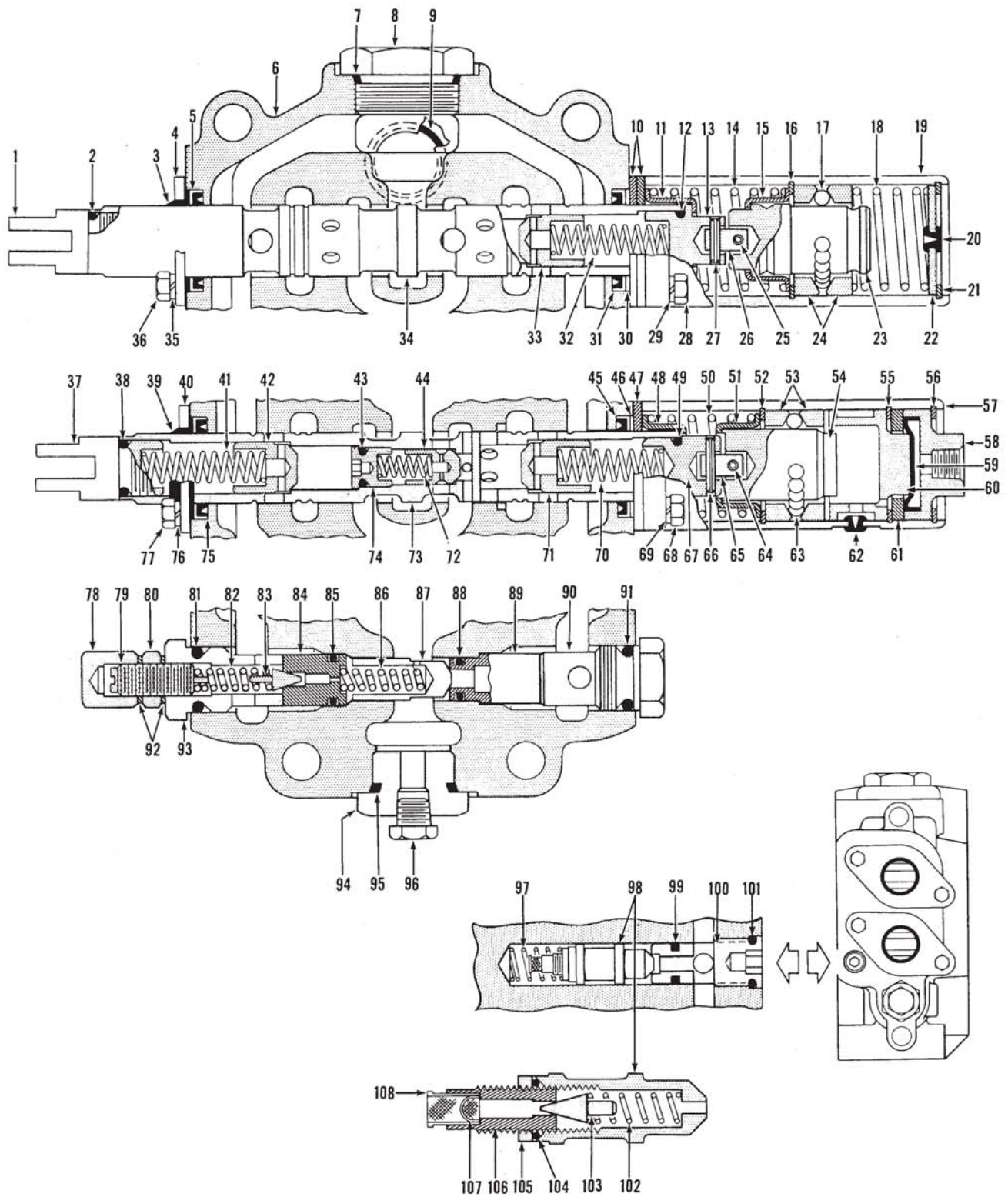
TS-8586-P

CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
74	305307	ROLL PIN	1	102	944895	CAP, Plunger	1
75	108301	ROLL PIN	1	103	945348	GUIDE, Spring	1
76	1C-416	BOLT, Cover to Housing	4	104	886745	PLUG, Bleeder	1
77	4E-04	LKWSHR, Cover to Housing ..	4	105	944896	COVER, Return Spring	1
78	944883	RING, Back-Up	1	106	944879	SPRING, Return	1
79	946544	SPRING, Check	1	107	1C-410	BOLT, Cover to Housing	4
80	944885	CHECK	1	108	4E-04	LKWSHR, Cover to Housing ..	4
81	-----	§PLUNGER — See "A"	1	109	944883	RING, Back-Up	1
82	946555	CAP (Must be Torqued to 25 ft. lbs.)	1	110	-----	§PLUNGER — See "A"	—
83	25K-20018	O-RING, Seat	1	111	4E-04	LKWSHR, Retainer to Housing ..	2
84	-----	§BALL — See 85	1	112	1C-410	BOLT, Retainer to Housing ..	2
85	946884	POPPET (Inc. 84)	1	113	944853	NUT, Acorn	1
86	946364	SPRING	1	114	944890	SCREW, Adjusting	1
87	4E-04	LKWSHR, Retainer to Housing ..	2	115	613750	WASHER, Jam Nut	2
88	1C-410	BOLT, Retainer to Housing ..	2	116	58K-214	O-RING, Cap	1
89	946360	EYE, Plunger	1	117	886753	SPRING, Relief	1
90	25K-30022	O-RING, Plunger Eye	1	118	886739	POPPET, Relief	1
91	946918	WIPER, Plunger	1	119	946033	RING, Retaining	1
92	946914	RETAINER, Seal	1	120	893298	RELIEF VALVE ASSY (Inc. 119, 121)	1
93	946583	SEAL, Plunger Oil	1	121	58K-021	O-RING, Relief Valve	1
94	893293	SPRING, Check	1	122	58K-214	O-RING, Cap	1
95	944885	CHECK	1	123	944894	CAP, Relief Valve	1
96	944885	CHECK	1	124	91F-10	O-RING, Cap	1
97	893293	SPRING, Check	1	125	40K-04	PLUG, Pipe	1
98	946583	SEAL, Plunger Oil	1	126	946882	CAP	1
99	944882	RETAINER, Seal	1	127	893296	CAP, Adjusting	1
100	945348	GUIDE, Spring	1	128	8D-08	NUT, Jam	1
101	25K-30022	O-RING, Cap	1				

§Not Sold Separately

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



CONTROL VALVE ASSEMBLY

TS-8905-F



CONSTRUCTION MACHINERY DIVISION
CONTROL VALVE ASSEMBLY

MICHIGAN

For Serial: Cummins — 408A166 thru 177, 179 thru 188, 190, 194 thru 215, 217 thru 272,
274 thru 999, 408B101 thru 123, 125 thru 207, 209, 211, 220

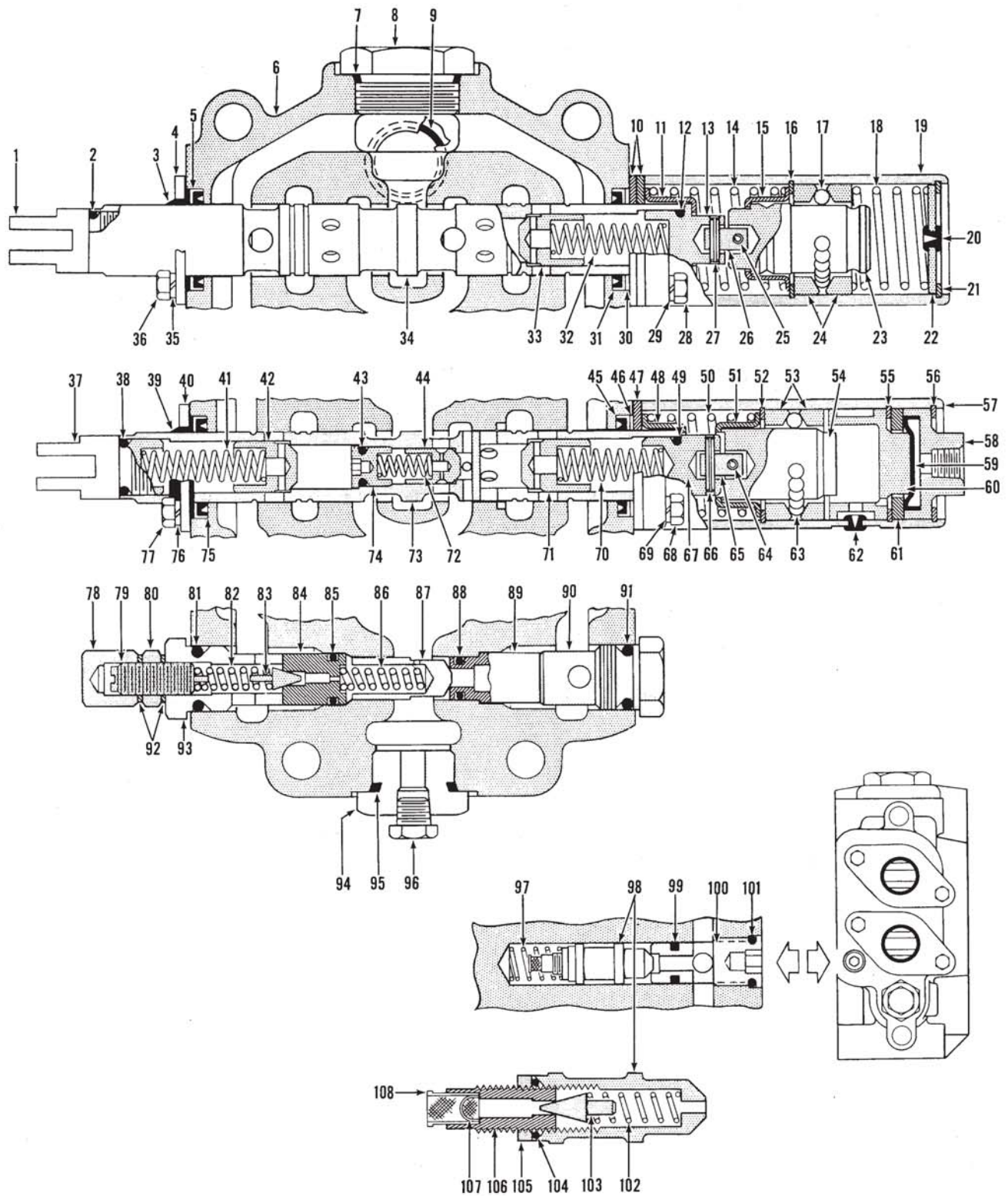
G.M. — 409A101 thru 124, 126 thru 131, 134 thru 145, 147 thru 999.

409B101 thru 103, 105 thru 117, 119 thru 167, 169 thru 190, 192 thru 198, 200 thru 209, 214

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1536682	*VALVE ASSY (Inc. 1 thru 108)	1	29	4E-06	LKWSHR, Cover Mtg.	2
1	946360	EYE, Plunger	1	30	944883	RING, Back-Up	1
2	25K-30022	O-RING, Plunger Eye	1	31	946583	SEAL, Plunger Oil	1
3	946918	WIPER, Plunger	1	32	893293	SPRING, Check	1
4	980831	RETAINER, Wiper	1	33	944885	CHECK	1
5	946583	SEAL, Plunger Oil	1	34	-----	§PLUNGER — See "A"	1
6	-----	§HOUSING, Valve — See "A"	1	35	4E-06	LKWSHR, Wiper Retainer	2
7	91F-11	O-RING, Cap	1	36	1C-612	BOLT, Wiper Retainer	2
8	24K-11	CAP	1	37	946360	EYE, Plunger	1
9	1306623	O-RING, Valve Mtg.	1	38	25K-30022	O-RING, Plunger Eye	1
10	980832	PLATE, Seal Retaining	2	39	946918	WIPER, Plunger	1
11	945092	GUIDE, Spring	1	40	980831	RETAINER, Wiper	1
12	25K-30022	O-RING, Cap	1	41	893293	SPRING, Check	1
13	945091	CAP, Plunger	1	42	944885	CHECK	1
14	945090	SPRING, Return	1	43	945221	O-RING, Cap	1
15	944878	GUIDE, Spring	1	44	945590	CHECK	1
16	1301194	RING, Retaining	1	45	946583	SEAL, Plunger Oil	1
17	10J-08	BALL, Detent	15	46	944883	RING, Back-up	1
18	946029	SPRING, Detent	1	47	980832	PLATE, Retaining	1
19	947776	COVER, Detent	1	48	944878	GUIDE, Spring	1
20	886763	PLUG, Bleeder	1	49	25K-30022	O-RING, Cap	1
21	507695	RING, Retaining	1	50	944879	SPRING, Return	1
22	944900	PLUG, Detent Cover	1	51	944878	GUIDE, Spring	1
23	947786	CAP, Detent	1	52	1301194	RING, Retaining	1
24	944897	RETAINER, Ball	2	53	944897	RETAINER, Ball	2
25	108301	ROLL PIN	1	54	946912	CAP, Detent	1
26	888449	PIN, Connecting	1	55	507695	RING, Retaining	1
27	300232	ROLL PIN	1	56	507695	RING, Retaining	1
28	1C-616	BOLT, Cover Mtg.	2				

*NOTE: For complete replacement of 1536682 Control Valve use 2510840 Valve plus the following items: 1-1508082 Bracket, 3-1509125 Clips, 3-4E-08 Lockwashers and 3-24C-864 Bolts.
§Not Sold Separately

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



CONTROL VALVE ASSEMBLY

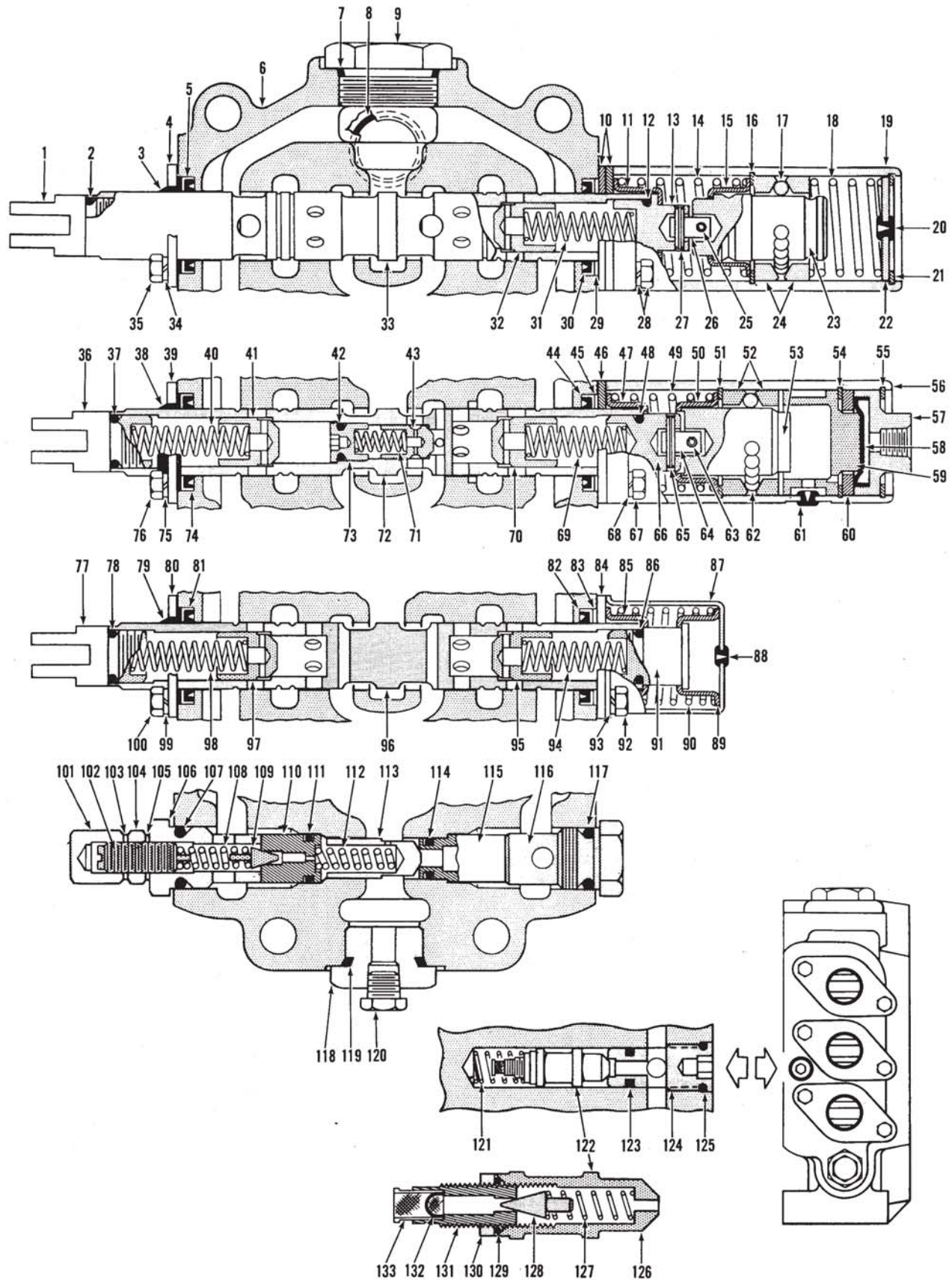
TS-8905-P

CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
57	961072	COVER, Detent	1	84	980836	SEAT, Relief	1
58	946915	PLUG, Cover	1	85	25K-30020	O-RING, Relief Seat	1
59	946919	DIAPHRAGM	1	86	947791	SPRING, Check	1
60	946917	PISTON	1	87	960965	CHECK	1
61	946916	RING, Spacer	1	88	25K-30016	O-RING, Check Seat	1
62	886763	PLUG, Bleeder	1	89	980840	SEAT, Check	1
63	10J-08	BALL, Detent	15	90	980838	CAP	1
64	305307	ROLL PIN	1	91	58K-210	O-RING, Cap	1
65	888449	PIN, Connecting	1	92	613750	WASHER, Jam Nut	2
66	108301	ROLL PIN	1	93	980835	CAP, Adjusting	1
67	945095	CAP, Plunger	1	94	946882	CAP	1
68	1C-416	BOLT, Cover Mtg.	2	95	91F-10	O-RING, Cap	1
69	4E-06	LKWSHR, Cover Mtg.	2	96	40K-04	PIPE PLUG.....	1
70	946544	SPRING, Check	1	97	886764	SPRING.....	1
71	944885	CHECK	1	98	948159	POPPET ASSY (Inc. 102 thru 108).....	1
72	946536	SPRING, Check	1	99	25K-20014	O-RING, Relief Seat.....	1
73	-----	§PLUNGER — See "A"	1	100	947774	SEAT, Relief.....	1
74	946555	CAP	1	101	25K-20016	O-RING, Relief Seat.....	1
75	946583	SEAL, Plunger Oil	1	102	-----	§SPRING—See 98.....	1
76	4E-06	LKWSHR, Wiper Retainer	2	103	-----	§POPPET—See 98.....	1
77	1C-612	BOLT, Wiper Retainer	2	104	-----	§O-RING,Poppet—See 98.....	1
78	49D-08	NUT, Acorn	1	105	-----	§NUT, Jam—See 98.....	1
79	980834	SCREW, Adjusting	1	106	-----	§SEAT, Relief—See 98.....	1
80	8D-08	NUT, Jam	1	107	-----	§SCREEN, Filter—See 98.....	1
81	58K-210	O-RING, Adj. Cap	1	108	-----	§GUIDE, Spring—See 98.....	1
82	886753	SPRING, Relief	1				
83	886739	POPPET, Relief	1				

§Not Sold Separately

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



CONTROL VALVE ASSEMBLY

TS-8911-P

**CONSTRUCTION MACHINERY DIVISION
CONTROL VALVE ASSEMBLY**
For Serial: Cummins — 408A189, 192, 193, 273; 408B124, 208
G.M. — 409A125, 132, 133, 146; 409B104, 118, 168, 191, 199

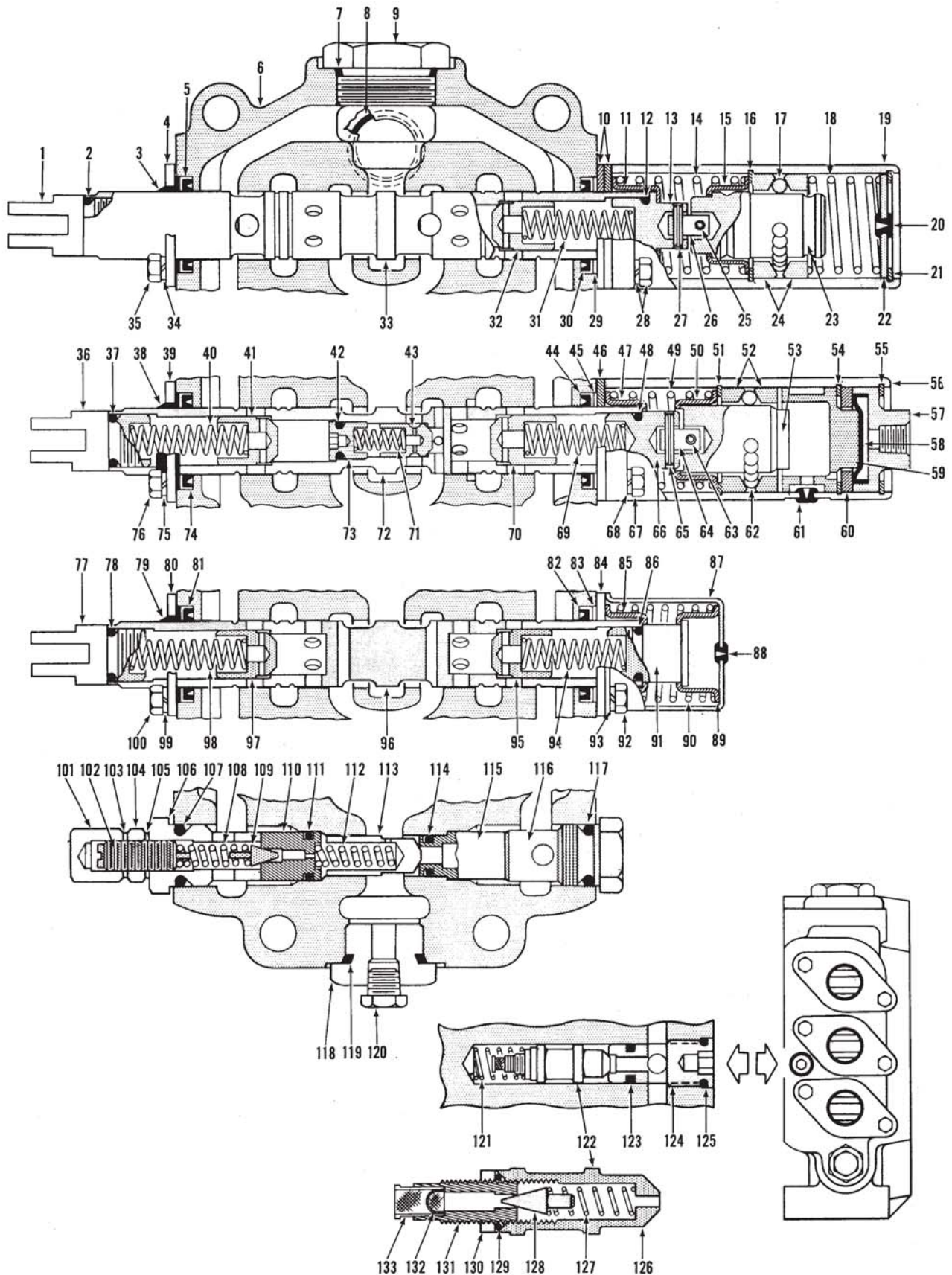
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1536681	*CONTROL VALVE (Inc. 1 thru 133)	1	32	944885	CHECK	1
1	946360	EYE, Plunger	1	33	-----	§PLUNGER — See "A"	—
2	25K-30022	O-RING, Plunger Eye	1	34	4E-06	LKWSHR, Retainer to Housing	2
3	946918	WIPER, Plunger	1	35	1C-612	BOLT, Retainer to Housing	2
4	980831	PLATE, Wiper & Seal Retaining	1	36	946360	EYE, Plunger	1
5	946583	SEAL, Plunger Oil	1	37	25K-30022	O-RING, Plunger Eye	1
6	-----	§HOUSING, Valve — See "A"	—	38	946918	WIPER, Plunger	1
7	91F-11	O-RING, Cap to Housing	1	39	980831	PLATE, Wiper & Seal Retaining	1
8	58K-222	O-RING, Valve to Plate	1	40	893293	SPRING, Check	1
9	24K-11	CAP	1	41	944885	CHECK	1
10	980832	PLATE, Seal Retaining	2	42	945221	O-RING, Cap	1
11	945092	GUIDE, Spring	1	43	945590	CHECK	1
12	25K-30022	O-RING, Cap	1	44	946583	SEAL, Plunger Oil	1
13	945091	CAP, Plunger	1	45	944883	RING, Back-Up	1
14	945090	SPRING, Return	1	46	980832	PLATE, Retainer	1
15	944878	GUIDE, Spring	1	47	944878	GUIDE, Spring	1
16	1301194	RING, Retaining	1	48	25K-30022	O-RING, Cap	1
17	10J-08	BALL, Detent	15	49	944879	SPRING, Return	1
18	946029	SPRING, Detent	1	50	944878	GUIDE, Spring	1
19	947776	COVER, Detent	1	51	1301194	RING, Retaining	1
20	886763	PLUG, Bleeder	1	52	944897	RETAINER, Ball	2
21	507695	RING, Plug Retaining	1	53	946912	CAP, Detent	1
22	944900	PLUG, Cover	1	54	507695	RING, Retaining	1
23	947786	CAP, Detent	1	55	507695	RING, Retaining	1
24	944897	RETAINER, Ball	2	56	961072	COVER, Detent	1
25	108301	ROLL, Pin	1	57	946915	PLUG	1
26	888449	PIN, Connecting	1	58	946919	DIAPHRAGM	1
27	300232	ROLL, Pin	1	59	946917	PISTON	1
28	1C-616	BOLT, Cover to Housing	2	60	946916	SPACER	1
28A	4E-06	†LKWSHR, Cover to Housing	2	61	886763	PLUG, Bleeder	1
29	944883	PLATE, Seal Retaining	1	62	10J-08	BALL, Detent	15
30	946583	SEAL, Plunger Oil	1	63	305307	ROLL PIN	1
31	893293	SPRING, Check	1	64	888449	PIN, Connecting	1
				65	108301	ROLL PIN	1

†Not Illustrated

§Not Sold Separately

*NOTE: For replacement use 2510841 Valve Assembly

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



CONTROL VALVE ASSEMBLY

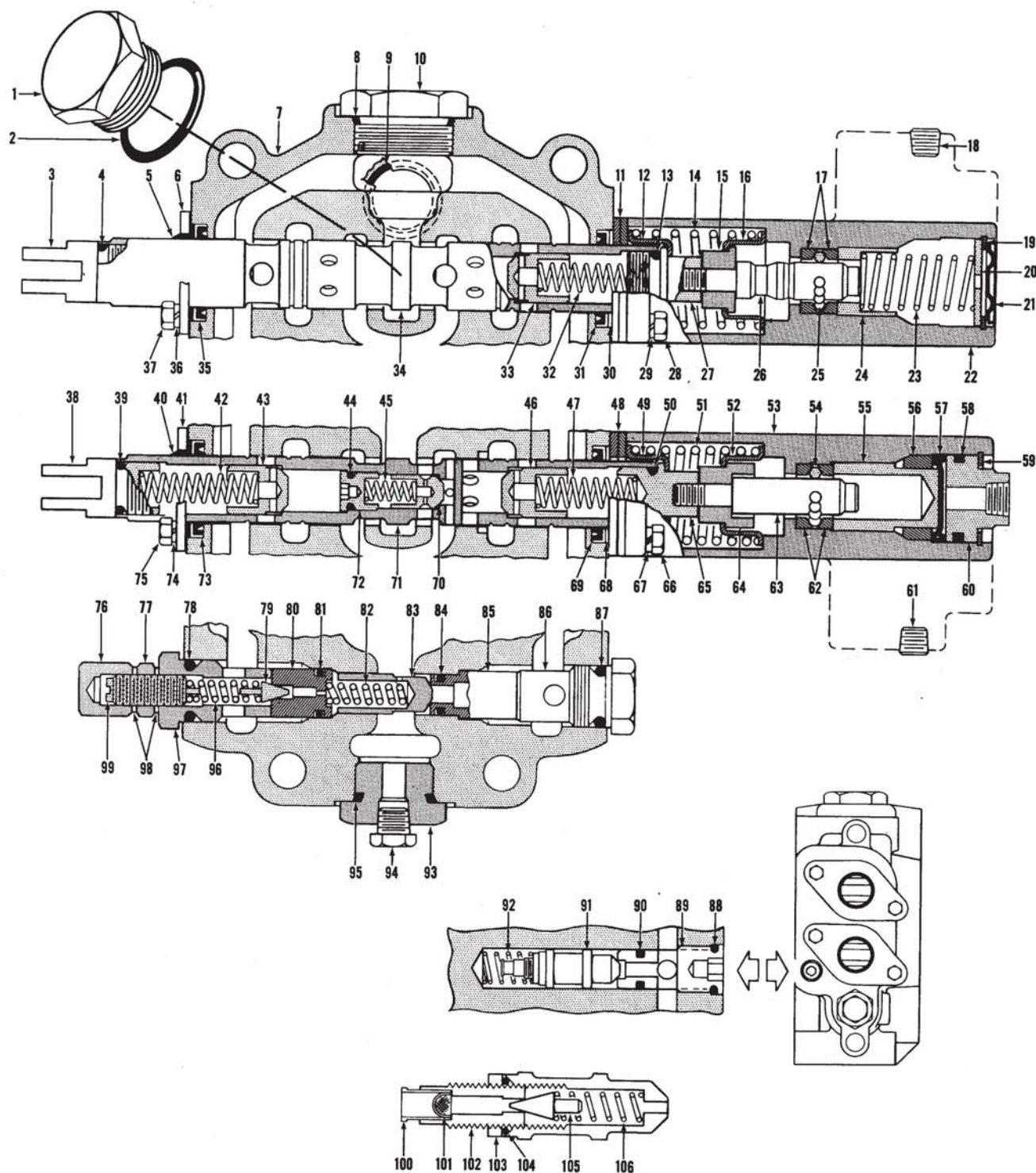
TS-8911-P

CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
66	945095	CAP, Plunger	1	100	1C-612	BOLT, Cover to Housing	2
67	1C-616	BOLT, Cover to Housing	2	101	49D-08	NUT, Acorn	1
68	4E-06	LKWSHR, Cover to Housing ..	2	102	980834	SCREW, Adjusting	1
69	946544	SPRING, Check	1	103	613750	WASHER	1
70	944885	CHECK	1	104	8D-08	NUT, Jam	1
71	946536	SPRING, Check	1	105	613750	WASHER	1
72	-----	§PLUNGER — See "A"	—	106	980835	CAP, Adjusting	1
73	946555	CAP, Check	1	107	58K-210	O-RING, Adjusting Cap	1
74	946583	SEAL, Plunger Oil	1	108	886753	SPRING, Relief	1
75	4E-06	LKWSHR, Retainer to Housing	2	109	886739	POPPET, Relief	1
76	1C-612	BOLT, Retainer to Housing ..	2	110	980836	SEAT, Relief	1
77	946360	EYE, Plunger	1	111	25K-30020	O-RING, Seat	1
78	25K-30022	O-RING, Plunger Eye	1	112	947791	SPRING, Check	1
79	946918	WIPER, Plunger	1	113	960965	CHECK	1
80	980831	PLATE, Wiper & Seal Retaining	1	114	25K-30016	O-RING, Seat	1
81	946583	SEAL, Plunger Oil	1	115	980840	SEAT, Check	1
82	946583	SEAL, Plunger Oil	1	116	980838	CAP	1
83	944883	PLATE, Seal Retaining	1	117	58K-210	O-RING, Cap	1
84	980832	RING, Retaining	1	118	946882	CAP	1
85	945348	GUIDE, Spring	1	119	91F-10	O-RING, Cap	1
86	25K-30022	O-RING, Cap	1	120	40K-04	PLUG, Pipe	1
87	980828	COVER, Detent	1	121	886764	SPRING	1
88	886745	PLUG, Bleeder	1	122	948159	POPPET ASSY (Inc. 126 thru 133)	1
89	945348	GUIDE, Spring	1	123	25K-20014	O-RING	1
90	980830	SPRING, Return	1	124	947774	SEAT, Relief	1
91	944895	CAP, Plunger	1	125	25K-20016	O-RING	1
92	1C-612	BOLT, Cover to Housing	2	126	-----	§POPPET, Relief—See 122 ...	1
93	4E-06	LKWSHR, Cover to Housing ..	2	127	-----	§SPRING—See 122	1
94	893293	SPRING, Check	1	128	-----	§POPPET, Pilot—See 122	1
95	944885	CHECK	1	129	-----	§O-RING—See 122	1
96	-----	§PLUNGER — See "A"	—	130	-----	§NUT, Jam—See 122	1
97	944885	CHECK	1	131	-----	§SEAT, Relief—See 122	1
98	893293	SPRING, Check	1	132	-----	§SCREEN, Filter—See 122 ...	1
99	4E-06	LKWSHR, Cover to Housing ..	2	133	-----	§GUIDE, Spring—See 122	1

§Not Sold Separately

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



CONTROL VALVE ASSEMBLY

For Serial No. Cummins 408B221 and After
For Serial No. GM 409B210, 211, 212, 213, 215 and After

TS-9373

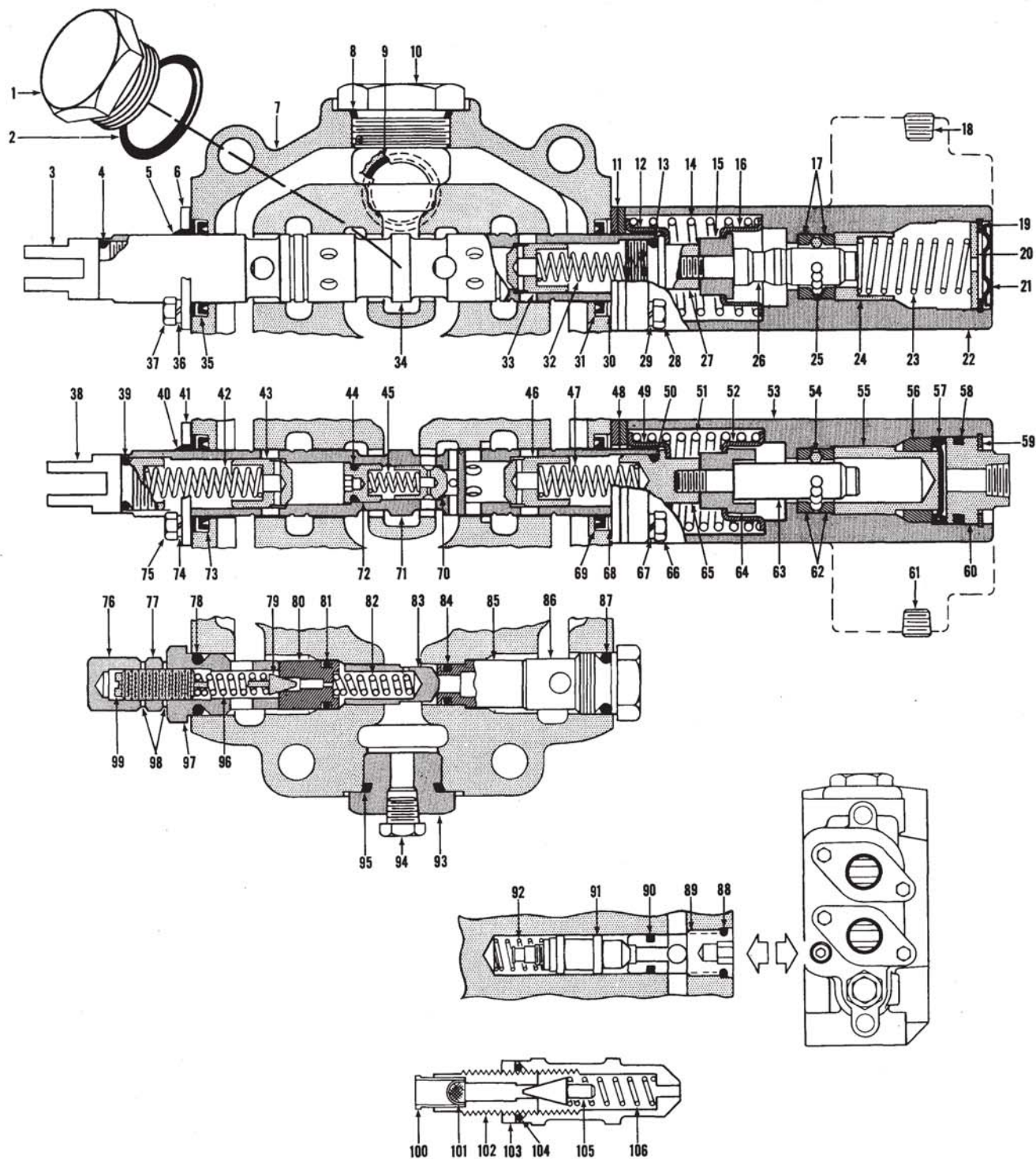
CONTROL VALVE ASSEMBLY
For Serial No. Cummins 408B221 and After
For Serial No. GM 409B210, 211, 212, 213, 215 and After

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1541958	*CONTROL VALVE ASSY (Inc. 1 thru 106)	1	26	948204	CAP, Detent	1
B	948159	KIT, Overload Relief (Inc. 88 thru 92 and 100 thru 106)	1	27	948203	CAP, Plunger	1
1	24K-11	PLUG, Housing	1	28	1C-618	BOLT, Cover to Housing	4
2	91F-11	O-RING, Plug to Housing	1	29	4E-06	LKWSHR, Cover to Housing ..	4
3	946360	EYE, Plunger	1	30	944883	RING, Back-Up	1
4	25K-30022	O-RING, Plunger Eye	1	31	946583	SEAL, Plunger Oil	1
5	946918	WIPER, Plunger	1	32	893293	SPRING, Check	1
6	980831	PLATE, Wiper & Seal Retainer ..	1	33	944885	CHECK	1
7	-----	§HOUSING, Valve — See Item "A"	—	34	-----	§PLUNGER, Operating — See Item "A"	—
8	91F-11	O-RING, Plug	1	35	946583	SEAL, Plunger Oil	1
9	58K-222	O-RING, Valve to Plate	1	36	4E-06	LKWSHR, Plate to Housing	2
10	24K-11	PLUG, Housing	1	37	1C-610	BOLT, Plate to Housing	2
11	980832	PLATE, Seal Retainer	2	38	946360	EYE, Plunger	1
12	945092	GUIDE, Spring	1	39	25K-30022	O-RING, Plunger Eye	1
13	25K-30022	O-RING, Cap	1	40	946918	WIPER, Plunger	1
14	944879	SPRING, Plunger Return	1	41	980831	PLATE, Wiper & Seal Retainer ..	1
15	948205	SPACER	1	42	893293	SPRING, Check	1
16	944878	GUIDE, Spring	1	43	944885	CHECK	1
17	947843	RETAINER, Ball	2	44	25K-30014	O-RING, Cap	1
18	16F-04	PLUG, Pipe	1	45	946536	SPRING, Check	1
19	666542	RING, Plug Retainer	1	46	944885	CHECK	1
20	947848	PLUG, Detent	1	47	946544	SPRING, Check	1
21	948202	DIAPHRAGM	1	48	980832	PLATE, Seal Retainer	2
22	948201	COVER, Detent	1	49	945092	GUIDE, Spring	1
23	947852	SPRING, Detent	1	50	25K-30022	O-RING, Cap	1
24	947842	GUIDE, Spring	1	51	945090	SPRING, Plunger Return	1
25	10J-06	BALL	10	52	944878	GUIDE, Spring	1
				53	948201	COVER, Detent	1

§Not Sold Separately

*NOTE: For complete replacement of 1541958 use 2510840.

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



CONTROL VALVE ASSEMBLY
For Serial No. Cummins 408B221 & After
For Serial No. GM 210, 211, 212, 213, 215 and After

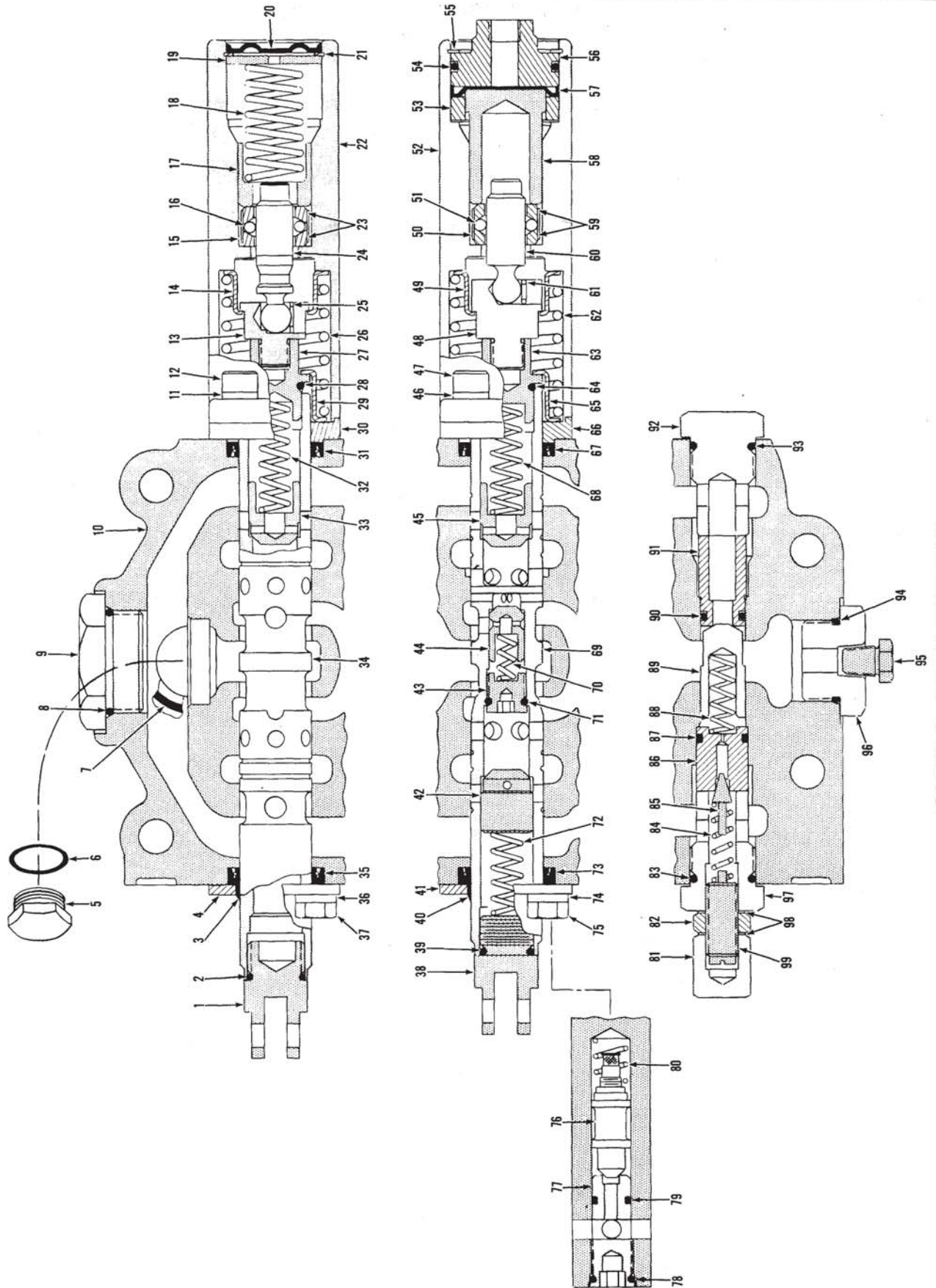
TS-9373

CONTROL VALVE ASSEMBLY (Continued)
For Serial No. Cummins 408B221 & After
For Serial No. GM 210, 211, 212, 213, 215 and After

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
54	10J-06	BALL	10	82	947791	SPRING, Check	1
55	948460	PISTON, Detent	1	83	960965	CHECK	1
56	948459	SPACER	1	84	25K-30016	O-RING, Seat	1
57	946919	DIAPHRAGM	1	85	980840	SEAT, Relief Valve Check	1
58	25K-40108	O-RING, End Plug	1	86	980838	CAP, Housing	1
59	666542	RING, Plug Retainer	1	87	58K-210	O-RING, Cap	1
60	947340	PLUG, Detent End	1	88	25K-20016	O-RING, Plug	1
61	16F-04	PLUG, Pipe	1	89	947774	SEAT, Check	1
62	947843	RETAINER, Ball	2	90	25K-20014	O-RING, Seat	1
63	948206	CAP, Detent	1	91	-----	§OVERLOAD RELIEF VALVE ASSY — See Item "B"	—
64	948207	SPACER	1	92	886764	SPRING, Check	1
65	948203	CAP, Plunger	1	93	946882	CAP, Housing	1
66	1C-618	BOLT, Detent to Housing	4	94	40K-04	PLUG, Pipe	1
67	4E-06	LKWSHR, Detent to Housing ..	4	95	91F-10	O-RING, Cap	1
68	944883	RING, Back-Up	1	96	886753	SPRING, Relief Valve	1
69	946583	SEAL, Plunger Oil	1	97	980835	CAP, Relief Valve	1
70	945590	CHECK	1	98	613750	WASHER, Jam Nut	2
71	-----	§PLUNGER, Operating — See Item "A"	—	99	980834	SCREW, Adjusting	1
72	946555	CAP	1	100	-----	§GUIDE, Spring — See Item "B"	—
73	946583	SEAL, Plunger Oil	1	101	-----	§SCREEN, Filter — See Item "B"	—
74	4E-06	LKWSHR, Plate to Housing ..	2	102	-----	§SEAT, Poppet — See Item "B" ..	—
75	1C-610	BOLT, Plate to Housing	2	103	-----	§NUT, Poppet — See Item "B" ..	—
76	49D-08	NUT, Acorn	1	104	-----	§O-RING, Nut — See Item "B" ..	—
77	8D-08	NUT, Jam	1	105	-----	§POPPET, Overload Relief — See Item "B"	—
78	58K-210	O-RING, Cap	1	106	-----	§SPRING, Poppet — See Item "B"	—
79	886739	POPPET, Relief Valve	1				
80	980836	SEAT, Poppet	1				
81	25K-30020	O-RING, Seat	1				

§Not Sold Separately

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



TS-10696

CONTROL VALVE ASSEMBLY

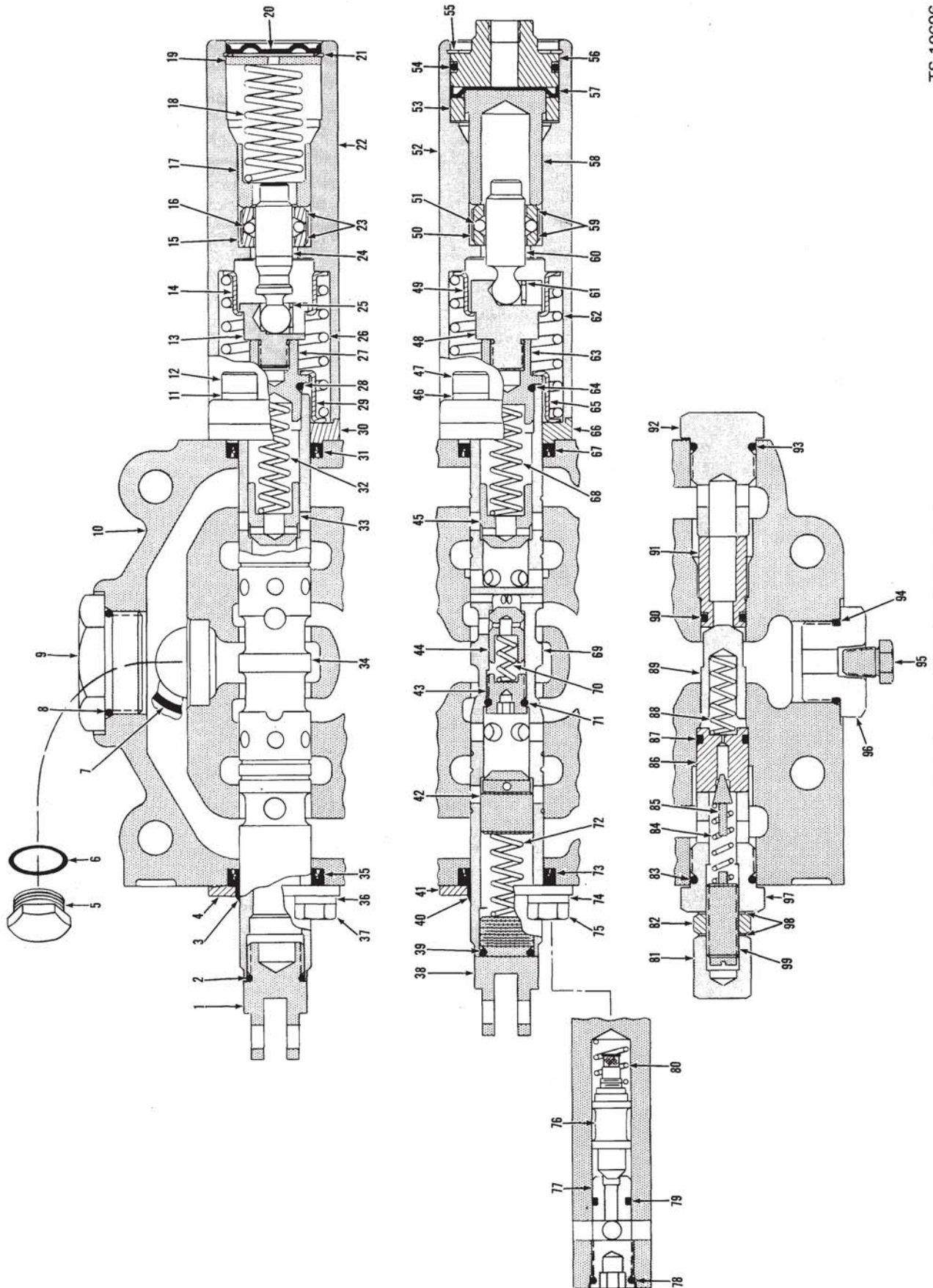
CONTROL VALVE ASSEMBLY

Item	Part No.	Description	Qty.
A	1548530	*CONTROL VALVE ASSY (Incl. 1 thru 99)	1
1	946360	EYE, Plunger	1
2	25K-30022	O-RING, Plunger Eye	1
3	946918	WIPER, Plunger Oil	1
4	980831	PLATE, Wiper & Seal Retainer	1
5	24K-11	PLUG, Pipe	1
6	91F-11	O-RING, Plug	1
7	58K-222	O-RING, Valve Mounting	1
8	91F-11	O-RING, Plug	1
9	24K-11	PLUG, Pipe	1
10	----	§HOUSING, Valve — See A	—
11	4E-06	LKWSHR, Cover to Housing	2
12	11G-610	BOLT, Cover to Housing	2
13	948719	SOCKET, Detent	1
14	944878	RETAINER, Spring	1
15	948727	SLEEVE, Ball Retainer	1
16	948730	BALL	11
17	947842	RETAINER, Spring	1
18	947852	SPRING, Detent	1
19	947848	PLUG, Detent	1
20	948202	DIAPHRAGM	1
21	666542	RING, Plug Retainer	1
22	948720	COVER, Detent	1
22A	16F-04	†PLUG, Cover	1
23	947843	RETAINER, Ball	2
24	948723	PLUNGER, Detent	1
25	948726	RING, Plunger Retainer	1
26	945090	SPRING, Plunger Return	1
27	948732	CAP, Plunger	1
28	25K-30022	O-RING, Cap	1
29	945092	RETAINER, Spring	1
30	948717	PLATE, Seal Retainer	1
31	946583	SEAL, Plunger Oil	1
32	893293	SPRING, Check	1
33	944885	CHECK	1
34	----	§PLUNGER, Operating — See "A"	—
35	946583	SEAL, Plunger Oil	1
36	4E-06	LKWSHR, Plate to Housing	2
37	1C-610	BOLT, Plate to Housing	2
38	946360	EYE, Plunger	1
39	25K-30022	O-RING, Plunger Eye	1
40	946918	WIPER, Plunger Oil	1
41	980831	PLATE, Wiper & Seal Retaining	1
42	944885	CHECK	1
43	946555	CAP, Plunger	1
44	945590	CHECK	1
45	944885	CHECK	1
46	4E-06	LKWSHR, Plate to Housing	2

†Not Illustrated

§Not Sold Separately *NOTE: For replacement use 2510840 Valve Assembly.

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



TS-10696

CONTROL VALVE ASSEMBLY

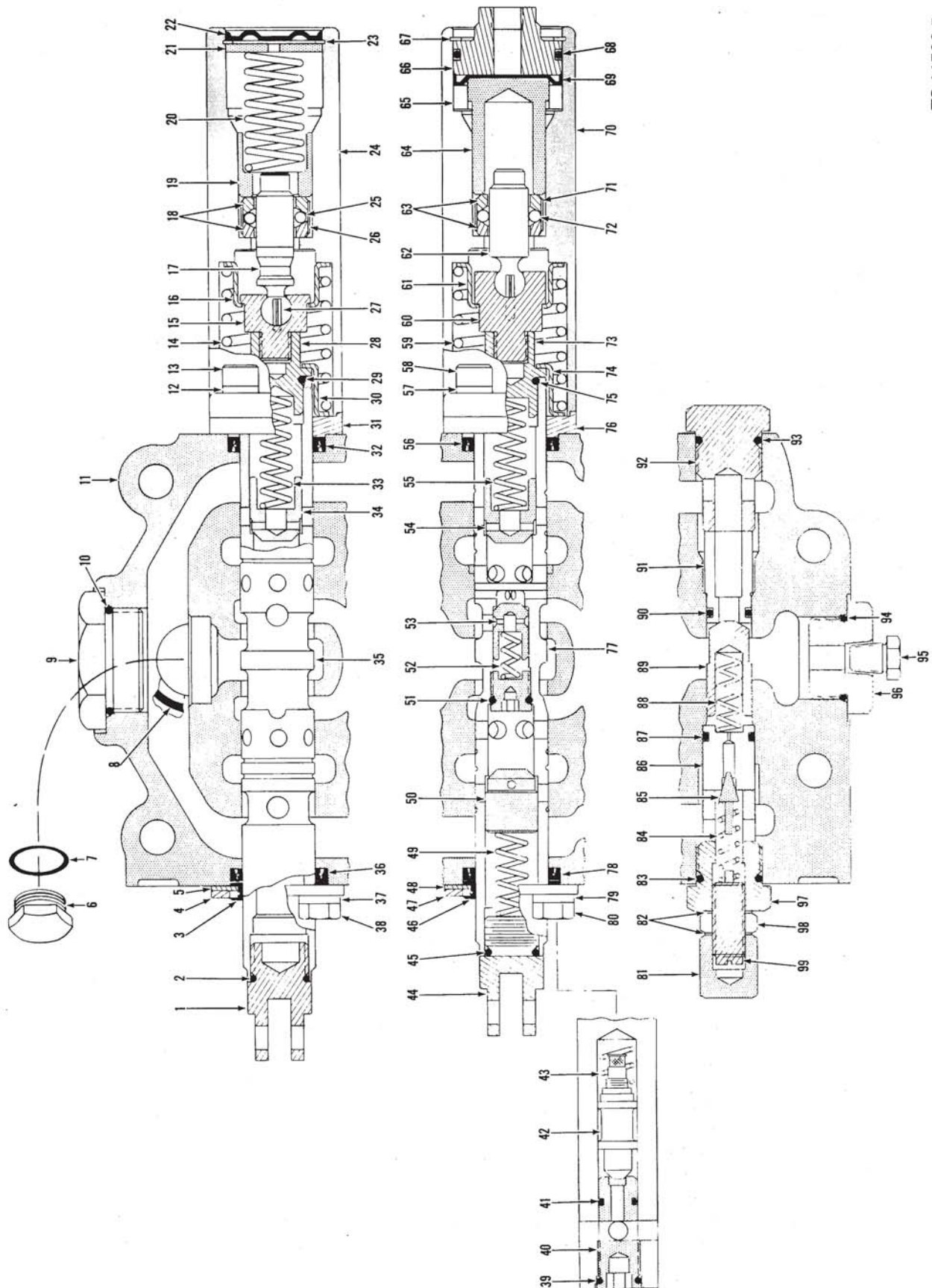
CONTROL VALVE ASSEMBLY (Cont'd.)

Item	Part No.	Description	Qty.
47	11G-620	BOLT, Plate to Housing	2
48	948718	SOCKET, Detent	1
49	944878	RETAINER, Spring	1
50	948727	SLEEVE, Ball Retainer	1
51	948730	BALL	11
52	948721	COVER, Detent	1
52A	16F-04	†PLUG, Cover	1
53	948728	SPACER, Detent	1
54	25K-40114	O-RING, Plug	1
55	948729	RING, Plug Retainer	1
56	948724	PLUG, Detent	1
57	948731	DIAPHRAGM	1
58	948725	PISTON	1
59	947843	RETAINER, Ball	2
60	948722	PLUNGER, Detent	1
61	948726	RING, Plunger Retainer	1
62	945090	SPRING, Plunger Retainer	1
63	948732	CAP, Plunger	1
64	25K-30022	O-RING, Cap	1
65	945092	RETAINER, Spring	1
66	948717	PLATE, Seal Retaining	1
67	946583	SEAL, Plunger Oil	1
68	946544	SPRING, Check	1
69	-----	§PLUNGER, Operating — See "A"	—
70	946536	SPRING, Check	1
71	25K-30014	O-RING, Cap	1
72	893293	SPRING, Check	1
73	946583	SEAL, Plunger Oil	1
74	4E-06	LKWSHR, Plate to Housing	2
75	11G-620	BOLT, Plate to Housing	2
76	947822	POPPET ASSY	1
77	947774	SEAT, Relief	1
78	25K-20016	O-RING, Seat	1
79	25K-20014	O-RING, Seat	1
80	886764	SPRING, Poppet	1
81	49D-08	NUT, Acorn	1
82	8D-08	NUT, Jam	1
83	25K-30016	O-RING, Cap	1
84	886753	SPRING, Poppet	1
85	886739	POPPET	1
86	980836	SEAT, Poppet	1
87	25K-30020	O-RING, Seat	1
88	947791	SPRING, Check	1
89	960965	CHECK	1
90	25K-30016	O-RING, Seat	1
91	980840	SEAT, Poppet	1
92	980838	CAP	1
93	25K-40024	O-RING, Cap	1
94	91F-10	O-RING, Cap	1
95	40K-04	PLUG, Cap	1
96	946882	CAP	1
97	980835	CAP, Adjusting	1
98	613750	WASHER, Jam Nut	1
99	980834	SCREW, Adjusting	1

†Not Illustrated

§Not Sold Separately

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



TS-11566 B

CONTROL VALVE ASSEMBLY

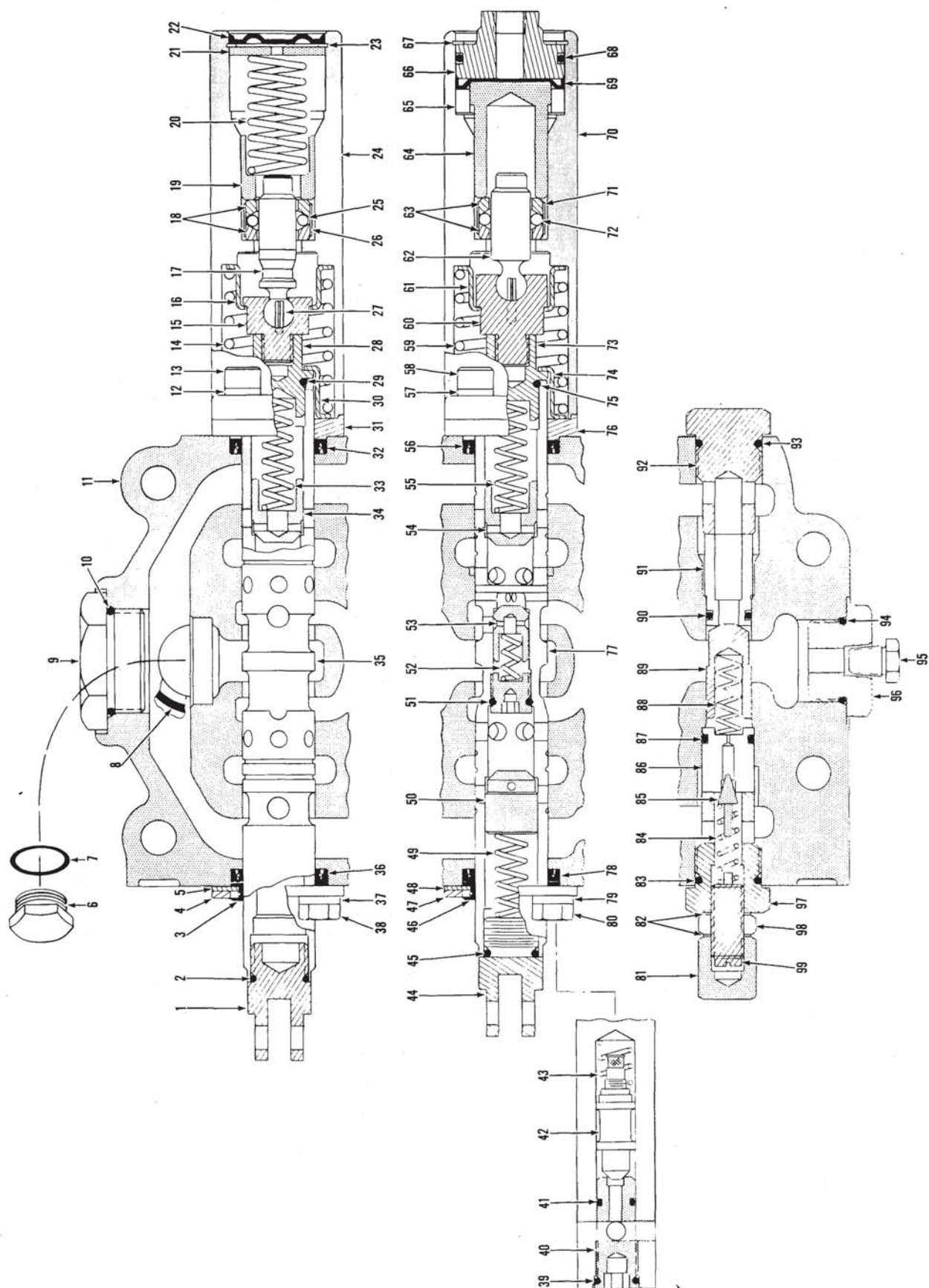
Item	Part No.	Description	Qty.
A	1512156	* CONTROL VALVE ASSY (Incl. 1 thru 99)	1
1	893295	EYE, Plunger	1
2	25K-30022	O-RING, Plunger Eye	1
3	949305	WIPER, Plunger	1
4	949303	PLATE, Wiper Retaining	1
5	949302	PLATE, Oil Seal Retaining	1
6	24K-11	CAP, Housing	1
7	91F-11	O-RING, Cap	1
8	58K-222	O-RING, Valve Mounting	1
9	24K-11	CAP, Housing	1
10	91F-11	O-RING, Cap	1
11	-----	§ HOUSING	—
12	4E-06	LKWSHR, Cover to Housing	2
13	116-620	BOLT, Cover to Housing	2
14	945090	SPRING, Plunger Return	1
15	949278	SOCKET, Detent	1
16	944878	GUIDE, Spring	1
17	948723	PLUNGER, Detent	1
18	947843	RETAINER, Ball	2
19	948954	RETAINER, Spring	1
20	947852	SPRING, Detent	1
21	947848	PLUG, Detent End	1
22	948202	DIAPHRAGM, Detent	1
23	666542	RING, Plug Retaining	1
24	948720	COVER, Detent	1
25	948730	BALL, Detent	11
26	948727	SLEEVE, Ball Retainer	1
27	742306	PIN, Roll	1
28	948732	CAP	1
29	25K-30022	O-RING, Cap	1
30	945092	GUIDE, Spring	1
31	949299	‡ PLATE, Oil Seal Retaining	—
31A	949300	‡ PLATE, Oil Seal Retaining	—
31B	949300	‡ PLATE, Oil Seal Retaining	—
32	949304	SEAL, Plunger Oil	1
33	893293	SPRING, Check	1
34	944885	CHECK	1
35	-----	§ PLUNGER, Operating — See Item A	—
36	949304	SEAL, Plunger Oil	1
37	4E-06	LKWSHR, Plate to Housing	2
38	1C-612	BOLT, Plate to Housing	2
39	25K-20016	O-RING, Seat	1
40	947774	SEAT, Relief	1
41	25K-20014	O-RING, Seat	1
42	947822	POPPET ASSY	1
43	886764	SPRING, Poppet	1
44	946360	EYE, Plunger	1
45	25K-30022	O-RING, Plunger Eye	1
46	949305	WIPER, Plunger	1
47	949303	PLATE, Wiper Retaining	1
48	949302	PLATE, Oil Seal Retaining	1
49	893293	SPRING, Check	1
50	944885	CHECK	1
51	25K-30014	O-RING, Cap	1
52	946536	SPRING, Check	1
53	945590	CHECK	1
54	944885	CHECK	1
55	946544	SPRING, Check	1

*For replacement use 2510840

‡As Required

§Not Sold Separately

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



TS-11566 B

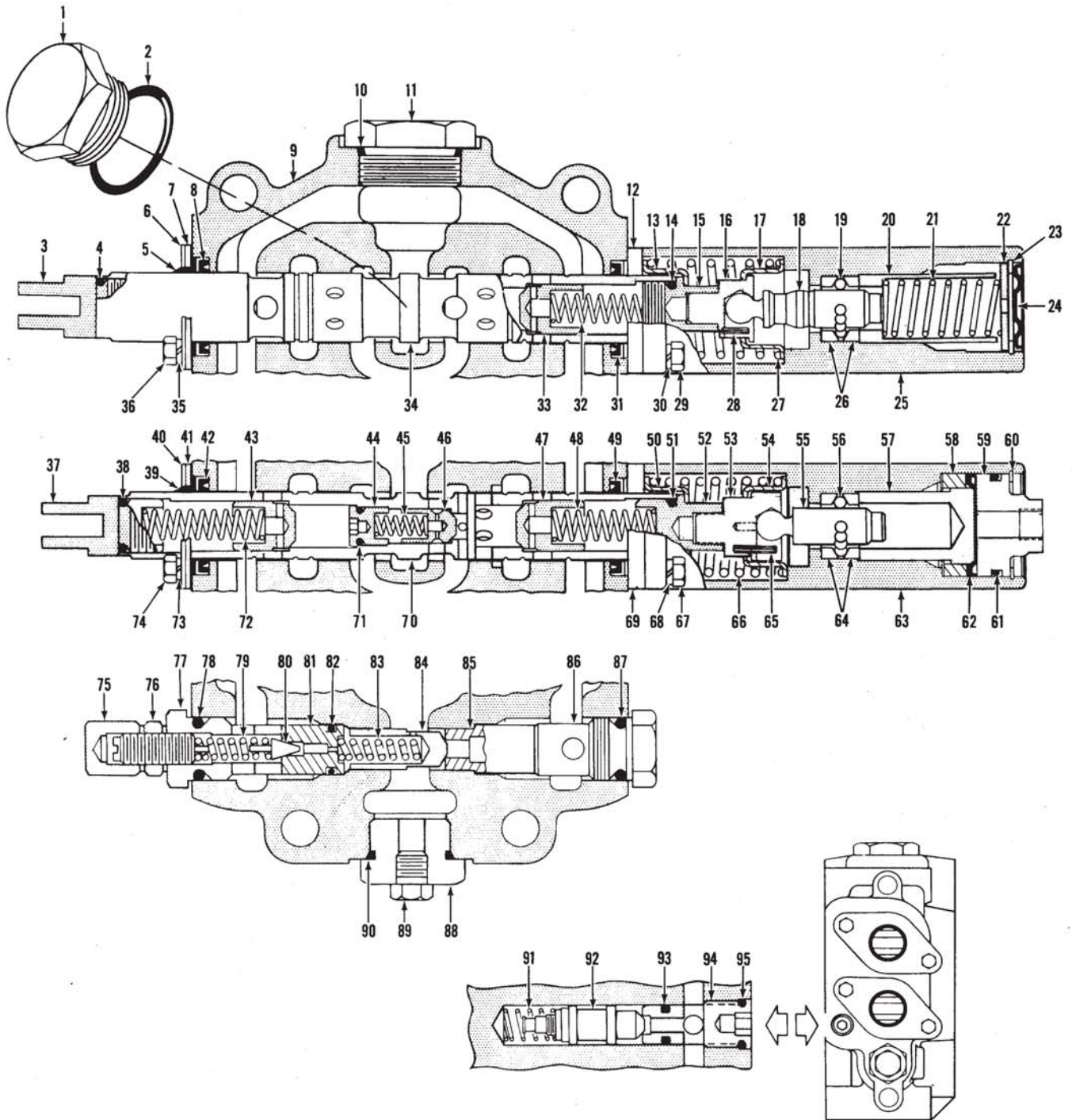
CONTROL VALVE ASSEMBLY, Cont.

Item	Part No.	Description	Qty.
56	949304	SEAL, Plunger Oil	1
57	4E-06	LKWSHR, Cover to Housing	2
58	11G-620	BOLT, Cover to Housing	2
59	945090	SPRING, Plunger Return	1
60	949279	SOCKET, Detent	1
61	944878	GUIDE, Spring	1
62	948722	PLUNGER, Detent	1
63	947843	RETAINER, Ball	2
64	948725	PISTON, Detent	1
65	948728	SPACER, Detent	1
66	948724	PLUG, Detent	1
67	948729	RING, Plug Retaining	1
68	25K-40114	O-RING, Plug	1
69	948731	DIAPHRAGM	1
70	948721	COVER, Detent	1
71	948727	SLEEVE, Ball Retainer	1
72	948730	BALL, Detent	11
73	948732	CAP	1
74	945092	GUIDE, Spring	1
75	25K-30022	O-RING, Cap	1
76	949299	‡PLATE, Oil Seal Retaining	—
76A	949300	‡PLATE, Oil Seal Retaining	—
76B	949300	‡PLATE, Oil Seal Retaining	—
77	—	§PLUNGER, Operating — See Item A	—
78	949304	SEAL, Plunger Oil	1
79	4E-06	LKWSHR, Plate to Housing	2
80	1C-612	BOLT, Plate to Housing	2
81	490-08	ACORN-NUT	1
82	613750	WASHER	2
83	58K-210	O-RING, Cap	1
84	886753	SPRING, Poppet	1
85	886739	POPPET	1
86	980836	SEAT, Relief	1
87	25K-30020	O-RING, Seat	1
88	947791	SPRING, Check	1
89	960965	POPPET	1
90	25K-30016	O-RING, Seat	1
91	980840	SEAT	1
92	980838	CAP, Housing	1
93	58K-210	O-RING, Cap	1
94	91F-10	O-RING, Cap	1
95	40K-04	PLUG, Pipe	1
96	946882	CAP, Housing	1
97	980835	ADJUSTING CAP	1
98	8D-08	JAM NUT	1
99	980834	ADJUSTING SCREW	1

‡As Required

§Not Sold Separately

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



TS-14050

Valve Assembly, Main (2 Spool)

MICHIGAN

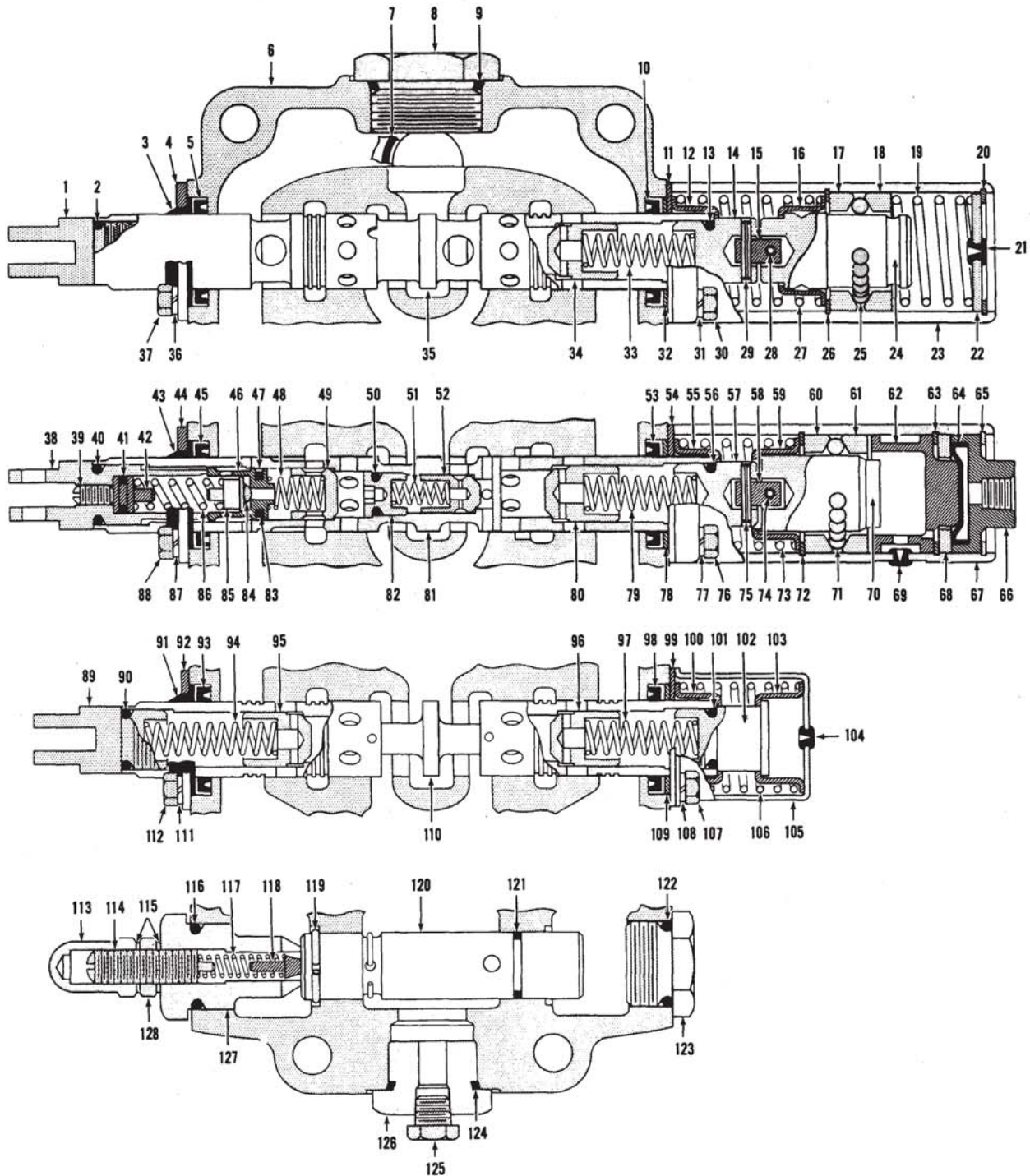
No.	Part No.	Qty.	Description
A	2510840	1	Valve assy
1	24K-11	1	Cap
2	91F-11	1	O-ring
3	946360	1	Plunger eye
4	25K-30022	1	O-ring
5	949305	1	Wiper
6	949303	1	Plate
7	949302	1	Plate
8	949304	1	Seal
9	§ ³ -----	—	Housing
9A	†58K-222	1	O-ring
10	91F-11	1	O-ring
11	24K-11	1	Cap
12	949300	1	Plate
13	945092	1	Retainer
14	25K-30022	1	O-ring
15	948732	1	Cap
16	949278	1	Detent socket
17	944878	1	Retainer
18	948723	1	Plunger
19	948730	11	Ball
20	948954	1	Retainer
21	947852	1	Spring
22	947848	1	Plug
23	666542	1	Ring
24	948202	1	Diaphragm
25	960900	1	Housing
25A	†16F-04	1	Plug
26	947843	2	Retainer
27	945090	1	Spring
28	742306	1	Pin
29	11G-620	2	Bolt
30	4E-06	2	Lockwasher
31	949304	1	Seal
32	893293	1	Spring
33	944885	1	Check
34	§ ³ -----	—	Plunger
35	4E-06	2	Lockwasher
36	1C-612	2	Bolt
37	946360	1	Plunger eye
38	25K-30022	1	O-ring
39	949305	1	Wiper
40	949303	1	Plate
41	949302	1	Plate
42	949304	1	Seal
43	944885	1	Check
44	§ ³ -----	—	Cap
45	§ ³ -----	—	Spring
46	§ ³ -----	—	Check

No.	Part No.	Qty.	Description
47	960901	1	Check
48	960902	1	Spring
49	949304	1	Seal
50	945092	1	Retainer
51	25K-30022	1	O-ring
52	948732	1	Cap
53	949279	1	Socket
54	944878	1	Retainer
55	948722	1	Plunger
56	948730	11	Ball
57	948725	1	Piston
58	948728	1	Spacer
59	948724	1	Plug
60	948729	1	Ring
61	25K-40114	1	O-ring
62	948731	1	Diaphragm
63	948721	1	Housing
64	947843	2	Retainer
65	300232	1	Pin
66	945090	1	Spring
67	11G-620	2	Bolt
68	4E-06	2	Lockwasher
69	949300	1	Plate
70	§ ³ -----	—	Plunger
71	§ ³ -----	—	O-ring
72	893293	1	Spring
73	4E-06	2	Lockwasher
74	1C-612	2	Bolt
75	49D-08	1	Nut
76	8D-08	1	Nut
77	980835	1	Cap
78	58K-210	1	O-ring
79	886753	1	Spring
80	886739	1	Poppet
81	980836	1	Seat
82	25K-30020	1	O-ring
83	947791	1	Spring
84	960965	1	Poppet
85	980840	1	Seat
86	980838	1	Cap
87	58K-210	1	O-ring
88	946882	1	Cap
89	40K-04	1	Plug
90	91F-10	1	O-ring
91	886764	1	Spring
92	948159	1	Poppet assy
93	25K-20014	1	O-ring
94	947774	1	Seat
95	25K-20016	1	O-ring

¹See Index

²Inc. 1→95

³See "A"



THREE SPOOL CONTROL VALVE ASSEMBLY

TS-8586-P

THREE SPOOL CONTROL VALVE ASSEMBLY

Five Varieties of Control Valves have been used for 75III-A MICHIGAN Tractor Shovel Three spool valve Installations. These are as follows.

Clark Part Number

1503807

1536681

1541956

1548531

1513174

Hydrex Model Number

V36DWF24

V46DRF5

V46DRF103

V46DRF103B

V46DRF103A

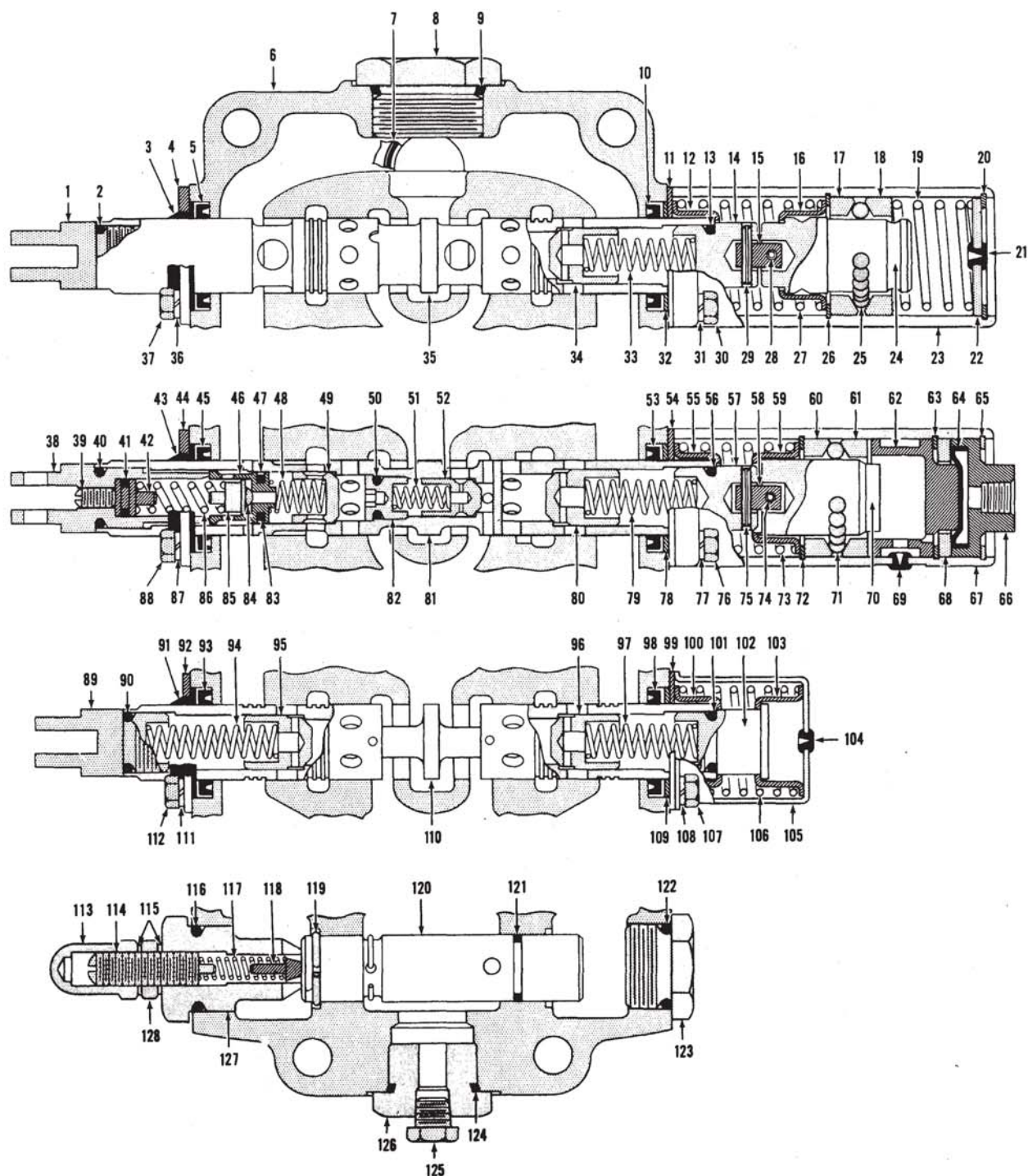
To determine which Control Valve is on a given machine refer to the manufacturers' serial number plate attached to the face of the Valve where the above information is stamped. After determining which Valve is on the machine you may service accordingly.

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1503807	*CONTROL VALVE ASSY (Inc. 1 thru 128)	1	23	945805	COVER, Detent	1
1	946360	EYE, Plunger	1	24	946030	CAP, Detent	1
2	25K-30022	O-RING, Plunger Eye	1	25	10J-08	BALL	15
3	946918	WIPER, Plunger	1	26	1301194	RING, Retaining	1
4	946914	PLATE, Wiper & Seal Retaining	1	27	945090	SPRING	1
5	946583	SEAL, Plunger Oil	1	28	108301	ROLL PIN	1
6	—	§ HOUSING, Valve — See "A"	—	29	108301	ROLL PIN	1
7	58K-222	O-RING, Valve Mounting	1	30	1C-416	BOLT, Cover to Housing	4
8	24K-11	PLUG, Housing (Inc. 9)	1	31	4E-04	LKWSHR, Cover to Housing	4
9	91F-11	O-RING, Plug	1	32	944883	RING, Back-Up	1
10	946583	SEAL, Plunger Oil	1	33	893293	SPRING, Check	1
11	944882	PLATE, Seal Retaining	1	34	944885	CHECK	1
12	944878	GUIDE, Spring	1	35	—	§ PLUNGER, Operating — See "A"	—
13	25K-30022	O-RING, Plunger Cap	1	36	4E-04	LKWSHR, Plate to Housing	2
14	945095	CAP, Plunger	1	37	1C-410	BOLT, Plate to Housing	2
15	888449	PIN, Connecting	1	38	946361	EYE, Plunger	1
16	944878	GUIDE, Spring	1	39	946541	SCREW, Adjusting	1
17	944897	RETAINER, Ball	1	40	25K-30022	O-RING, Plunger Eye	1
18	944897	RETAINER, Ball	1	41	25K-20014	O-RING, Spring Guide	1
19	946029	SPRING	1	42	946363	GUIDE, Spring	1
20	507695	RING, Plug Retaining	1	43	946918	WIPER, Plunger	1
21	886763	PLUG, Bleeder	1	44	946914	PLATE, Wiper & Seal Retaining	1
22	944900	PLUG, Detent Cover	1	45	946583	SEAL, Plunger Oil	1
				46	946883	SEAT, Check	1

*NOTE: For complete replacement of 1503807 Control Valve Assembly use 2510841 plus 1—1508082 Bracket, 3—1509125 Clip, 3—24C-864 Bolt & 3—4E-08 LKWSHR.

§ Not Sold Separately

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



THREE SPOOL CONTROL VALVE ASSEMBLY

TS-8586-P

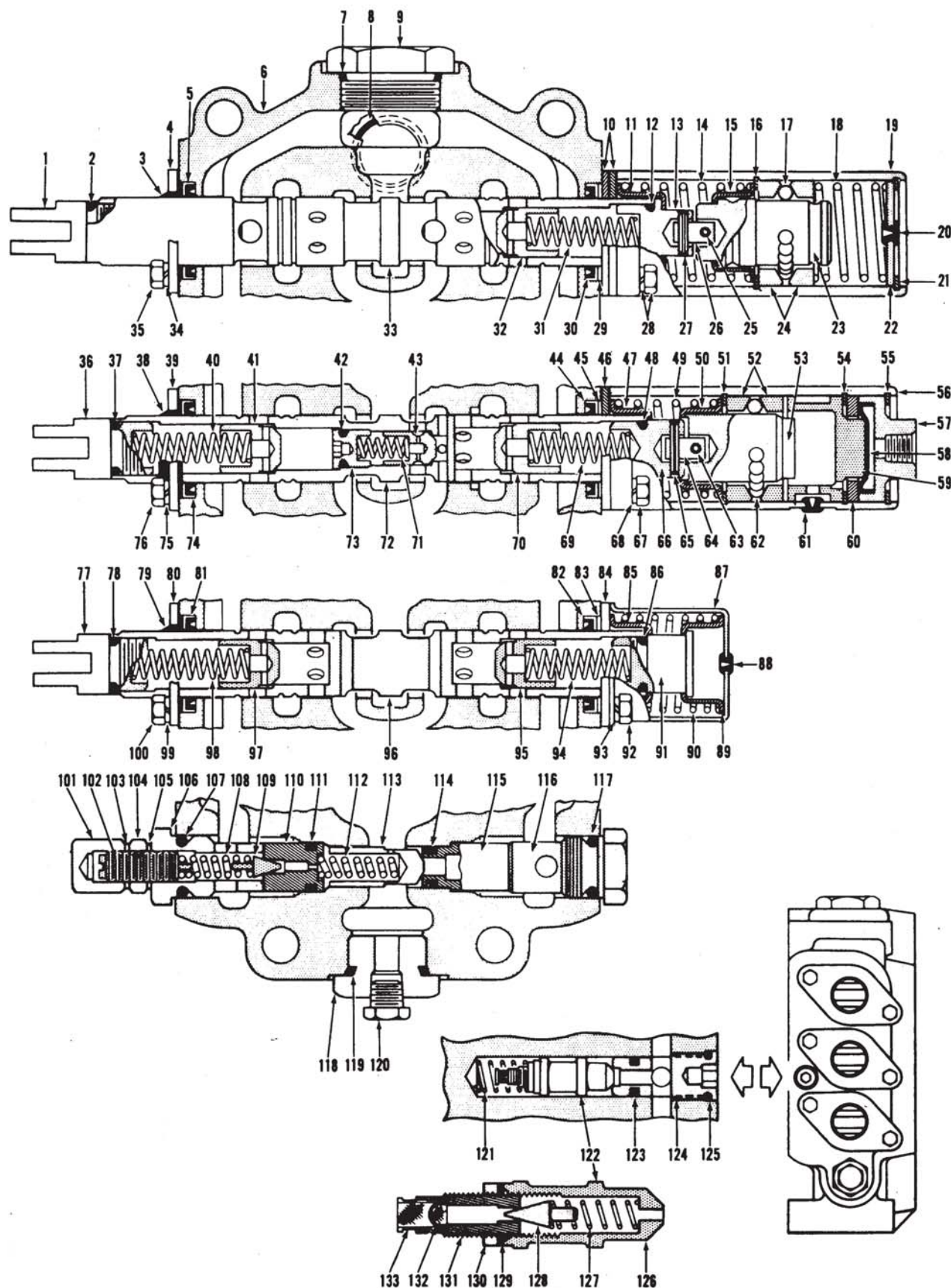
THREE SPOOL CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
47	946556	RING, Back-Up	1	88	1C-410	BOLT, Plate to Housing	2
48	946545	SPRING, Check	1	89	946360	EYE, Plunger	1
49	946543	CHECK	1	90	25K-30022	O-RING, Plunger Eye	1
50	25K-30014	O-RING, Cap	1	91	946918	WIPER, Plunger	1
51	946536	SPRING, Check	1	92	946914	PLATE, Wiper & Seal Retaining	1
52	945590	CHECK	1	93	946583	SEAL, Plunger Oil	1
53	946583	SEAL, Plunger Oil	1	94	893293	SPRING, Check	1
54	946535	PLATE, Seal Retaining	1	95	944885	CHECK	1
55	944878	GUIDE, Spring	1	96	944885	CHECK	1
56	25K-30022	O-RING, Cap	1	97	893293	SPRING, Check	1
57	945095	CAP, Plunger	1	98	946583	SEAL, Plunger Oil	1
58	888449	PIN, Connecting	1	99	944882	PLATE, Seal Retaining	1
59	944878	GUIDE, Spring	1	100	945348	GUIDE, Spring	1
60	944897	RETAINER, Ball	1	101	25K-30022	O-RING, Cap	1
61	944897	RETAINER, Ball	1	102	944895	CAP, Detent	1
62	946917	PLUG	1	103	945348	GUIDE, Spring	1
63	507695	RING, Retaining	1	104	886745	PLUG, Bleeder	1
64	946919	DIAPHRAGM	1	105	944896	COVER, Detent	1
65	507695	RING, Plug Retaining	1	106	944879	SPRING	1
66	946915	PLUG	1	107	1C-410	BOLT, Cover to Housing	4
67	946913	COVER, Detent	1	108	4E-04	LKWSHR, Cover to Housing	4
68	946916	SPACER	1	109	944883	RING, Back-Up	1
69	886763	PLUG, Bleeder	1	110	———	§ PLUNGER, Operating — See "A"	—
70	946912	CAP, Detent	1	111	4E-04	LKWSHR, Plate to Housing	2
71	10J-08	BALL	15	112	1C-410	BOLT, Plate to Housing	2
72	1301194	RING, Retaining	1	113	944853	NUT, Acorn	1
73	944879	SPRING	1	114	944890	SCREW, Adjusting	1
74	305307	ROLL PIN	1	115	613750	WASHER, Jam Nut	2
75	108301	ROLL PIN	1	116	58K-214	O-RING, Cap	1
76	1C-416	BOLT, Cover to Housing	4	117	886753	SPRING, Poppet	1
77	4E-04	LKWSHR, Cover to Housing	4	118	886739	POPPET, Relief	1
78	944883	RING, Back-Up	1	119	946033	RING, Relief Valve Retaining	1
79	946544	SPRING, Check	1	120	893298	RELIEF VALVE ASSY (Inc. 119 & 121)	1
80	944885	CHECK	1	121	58K-021	O-RING, Relief Valve	1
81	———	§ PLUNGER, Operating — See "A"	—	122	58K-214	O-RING, Cap	1
82	946555	**CAP	1	123	944894	CAP	1
83	25K-20018	O-RING, Seat	1	124	91F-10	O-RING, Cap	1
84	———	§ BALL, Poppet — See 85	—	125	40K-04	PLUG, Pipe	1
85	946884	POPPET — Inc. 84	1	126	946882	CAP	1
86	946364	SPRING	1	127	893296	CAP, Adjusting	1
87	4E-04	LKWSHR, Plate to Housing	2	128	8D-08	NUT, Jam	1

§Not Sold Separately

**NOTE: Torque to 25 ft/lbs.

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



THREE SPOOL CONTROL VALVE ASSEMBLY

TS-8911

THREE SPOOL CONTROL VALVE ASSEMBLY

Five Varieties of Control Valves have been used for 75III-A MICHIGAN Tractor Shovel Three spool Valve Installations. These are as follows:

Clark Part Number

1503807

1536681

1541956

1548531

1513174

Hydreco Model Number

V36DWF24

V46DRF5

V46DRF103

V46DRF103B

V46DRF103A

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.

Item No.	Part No.	Description	No. Req'd.
A	1536681	*CONTROL VALVE (Inc. 1 thru 133)	1
1	946360	EYE, Plunger	1
2	25K-30022	O-RING, Plunger Eye	1
3	946918	WIPER, Plunger	1
4	980831	PLATE, Wiper & Seal Retaining	1
5	946583	SEAL, Plunger Oil	1
6	-----	§ HOUSING, Valve — See "A"	—
7	91F-11	O-RING, Cap to Housing	1
8	58K-222	O-RING, Valve to Plate	1
9	24K-11	CAP	1
10	980832	PLATE, Seal Retaining	2
11	945092	GUIDE, Spring	1
12	25K-30022	O-RING, Cap	1
13	945091	CAP, Plunger	1
14	945090	SPRING, Return	1
15	944878	GUIDE, Spring	1
16	1301194	RING, Retaining	1
17	10J-08	BALL, Detent	15
18	946029	SPRING, Detent	1
19	947776	COVER, Detent	1
20	886763	PLUG, Bleeder	1
21	507695	RING, Plug Retaining	1
22	944900	PLUG, Cover	1
23	947786	CAP, Detent	1
24	944897	RETAINER, Ball	2
25	108301	ROLL, Pin	1
26	888449	PIN, Connecting	1
27	300232	ROLL, Pin	1

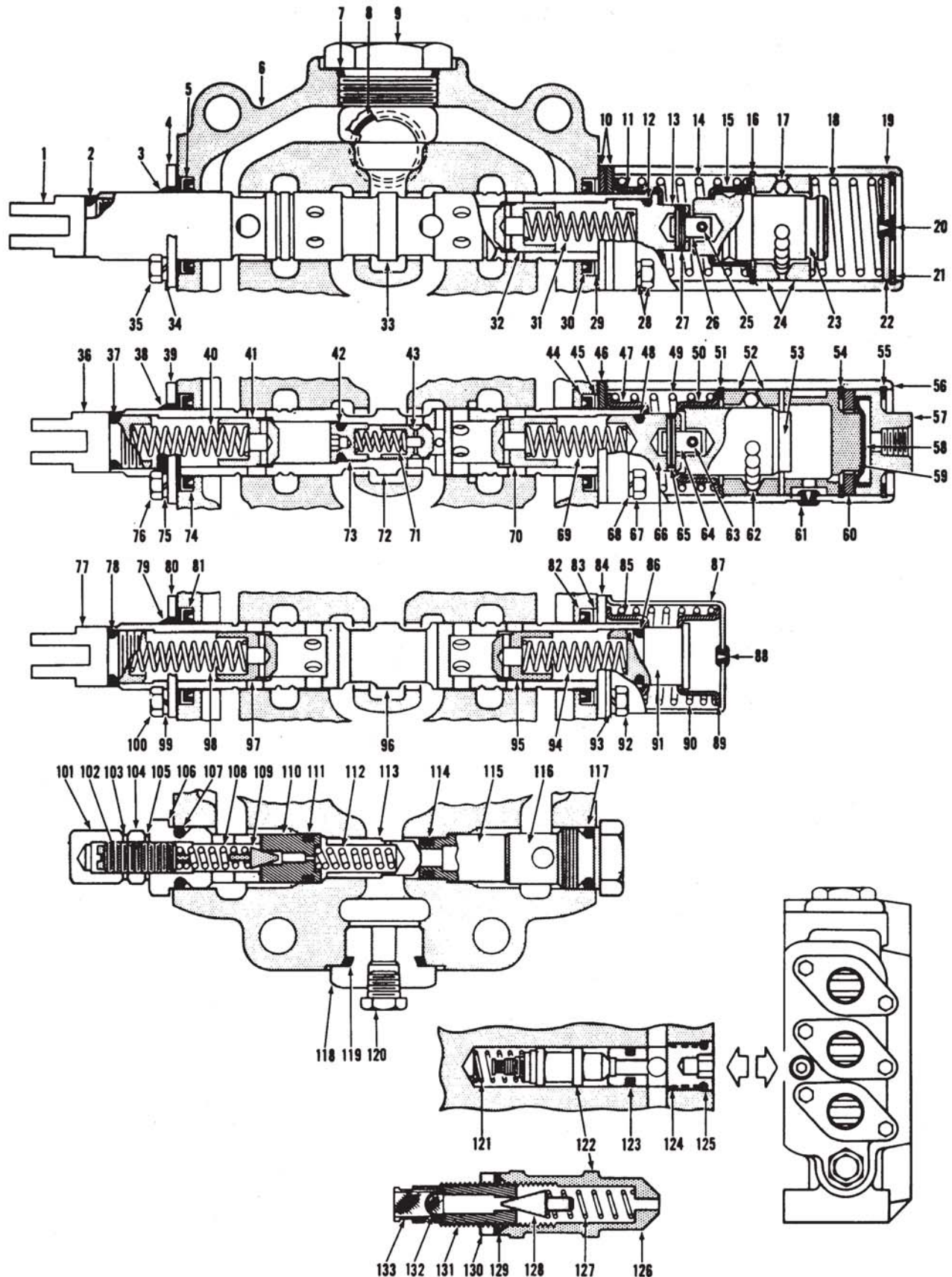
Item No.	Part No.	Description	No. Req'd.
28	1C-616	BOLT, Cover to Housing	2
28A	4E-06	† LKWSHR, Cover to Housing	2
29	944883	PLATE, Seal Retaining	1
30	946583	SEAL, Plunger Oil	1
31	893293	SPRING, Check	1
32	944885	CHECK	1
33	-----	§ PLUNGER — See "A"	—
34	4E-06	LKWSHR, Retainer to Housing	2
35	1C-612	BOLT, Retainer to Housing	2
36	946360	EYE, Plunger	1
37	25K-30022	O-RING, Plunger Eye	1
38	946918	WIPER, Plunger	1
39	980831	PLATE, Wiper & Seal Retaining	1
40	893293	SPRING, Check	1
41	944885	CHECK	1
42	25K-30014	O-RING, Cap	1
43	945590	CHECK	1
44	946583	SEAL, Plunger Oil	1
45	944883	RING, Back-Up	1
46	980832	PLATE, Retainer	1
47	944878	GUIDE, Spring	1
48	25K-30022	O-RING, Cap	1
49	944879	SPRING, Return	1
50	944878	GUIDE, Spring	1
51	1301194	RING, Retaining	1
52	944897	RETAINER, Ball	2
53	946912	CAP, Detent	1
54	507695	RING, Retaining	1

*NOTE: For complete Valve replacement use 2510841

§ Not Sold Separately

† Not Illustrated

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



THREE SPOOL CONTROL VALVE ASSEMBLY

TS-8911

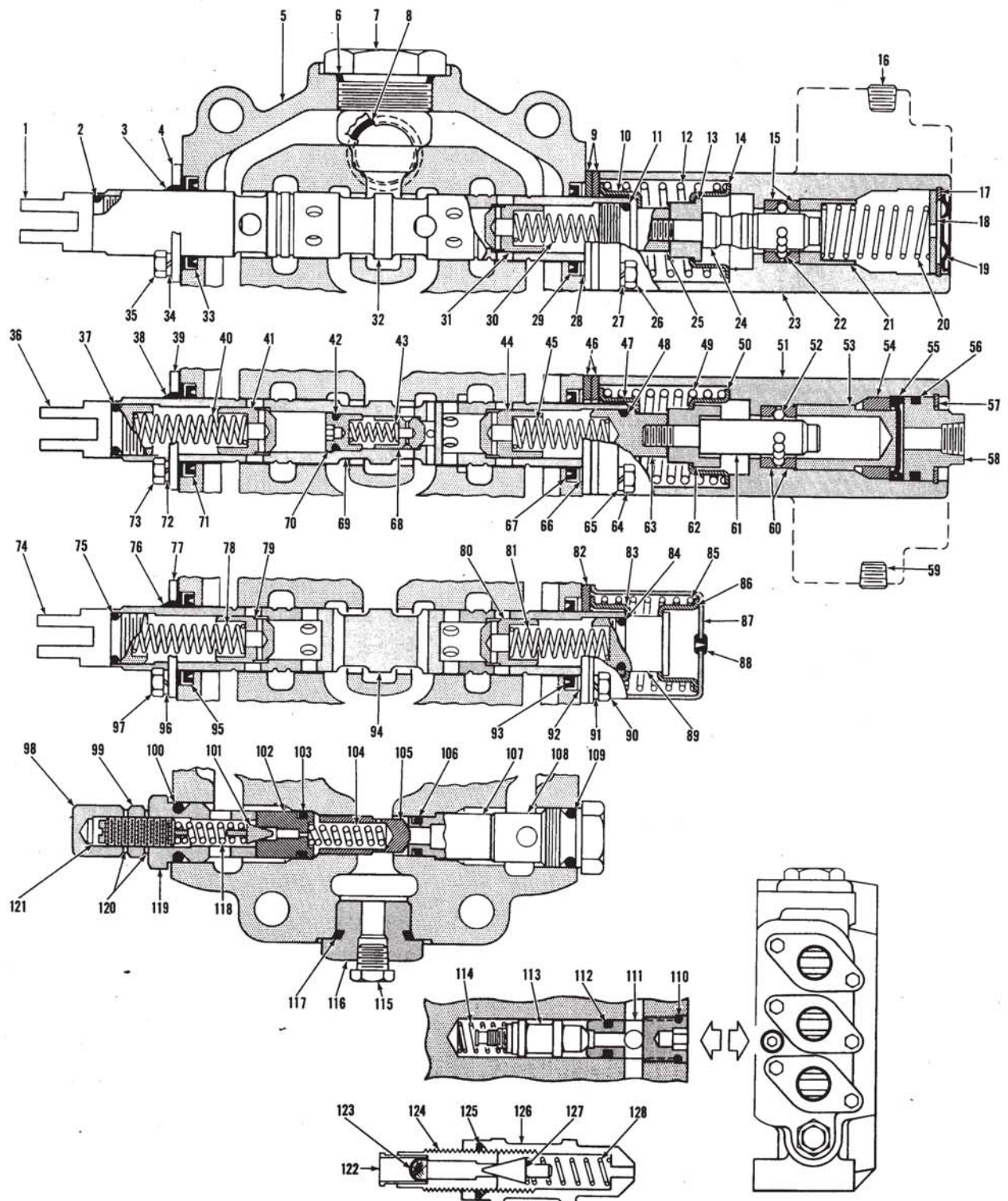
THREE SPOOL CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
55	507695	RING, Retaining	1	95	944885	CHECK	1
56	961072	COVER, Detent	1	96	-----	§ PLUNGER — See "A"	—
57	946915	PLUG	1	97	944885	CHECK	1
58	940919	DIAPHRAGM	1	98	893293	SPRING, Check	1
59	946917	PLUG	1	99	4E-06	LKWSHR, Cover to Housing	2
60	946916	SPACER	1	100	1C-612	BOLT, Cover to Housing	2
61	886763	PLUG, Bleeder	1	101	49D-08	NUT, Acorn	1
62	10J-08	BALL, Detent	15	102	980834	SCREW, Adjusting	1
63	305307	ROLL PIN	1	103	613750	WASHER	1
64	888449	PIN, Connecting	1	104	8D-08	NUT, Jam	1
65	108301	ROLL PIN	1	105	613750	WASHER	1
66	945095	CAP, Plunger	1	106	980835	CAP, Adjusting	1
67	1C-616	BOLT, Cover to Housing	2	107	58K-210	O-RING, Adjusting Cap	1
68	4E-06	LKWSHR, Cover to Housing	2	108	886753	SPRING, Relief	1
69	946544	SPRING, Check	1	109	886739	POPPET, Relief	1
70	944885	CHECK	1	110	980836	SEAT, Relief	1
71	946536	SPRING, Check	1	111	25K-30020	O-RING, Seat	1
72	-----	§ PLUNGER — See "A"	—	112	947791	SPRING, Check	1
73	946555	CAP, Check	1	113	960965	CHECK	1
74	946583	SEAL, Plunger Oil	1	114	25K-30016	O-RING, Seat	1
75	4E-06	LKWSHR, Retainer to Housing	2	115	980840	SEAT, Check	1
76	1C-612	BOLT, Retainer to Housing	2	116	980838	CAP	1
77	946360	EYE, Plunger	1	117	58K-210	O-RING, Cap	1
78	25K-30022	O-RING, Plunger Eye	1	118	946882	CAP	1
79	946918	WIPER, Plunger	1	119	91F-10	O-RING, Cap	1
80	980831	PLATE, Wiper & Seal Retaining	1	120	40K-04	PLUG, Pipe	1
81	946583	SEAL, Plunger Oil	1	121	886764	SPRING	1
82	946583	SEAL, Plunger Oil	1	122	948159	POPPET ASSY (Inc. 126 thru 133)	1
83	944883	RING, Retaining	1	123	25K-20014	O-RING	1
84	980832	PLATE, Seal Retaining	1	124	947774	SEAT, Relief	1
85	945348	GUIDE, Spring	1	125	25K-20016	O-RING	1
86	25K-30022	O-RING, Cap	1	126	-----	§ POPPET, Relief — See 122	1
87	980828	COVER, Detent	1	127	-----	§ SPRING — See 122	1
88	886745	PLUG, Bleeder	1	128	-----	§ POPPET, Pilot — See 122	1
89	945348	GUIDE, Spring	1	129	-----	§ O-RING — See 122	1
90	980830	SPRING, Return	1	130	-----	§ NUT, Jam — See 122	1
91	944895	CAP, Plunger	1	131	-----	§ SEAT, Relief — See 122	1
92	1C-612	BOLT, Cover to Housing	2	132	-----	§ SCREEN, Filter — See 122	1
93	4E-06	LKWSHR, Cover to Housing	2	133	-----	§ GUIDE, Spring — See 122	1
94	893293	SPRING, Check	1				

†Not Illustrated

§Not Sold Separately

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



THREE SPOOL CONTROL VALVE ASSEMBLY

TS-9374

THREE SPOOL CONTROL VALVE ASSEMBLY

Five Varieties of Control Valves have been used for 75III-A MICHIGAN Tractor Shovel Three spool Valve Installations. These are as follows:

Clark Part Number

1503807
1536681
1541956
1548531
1513174

Hydrec Model Number

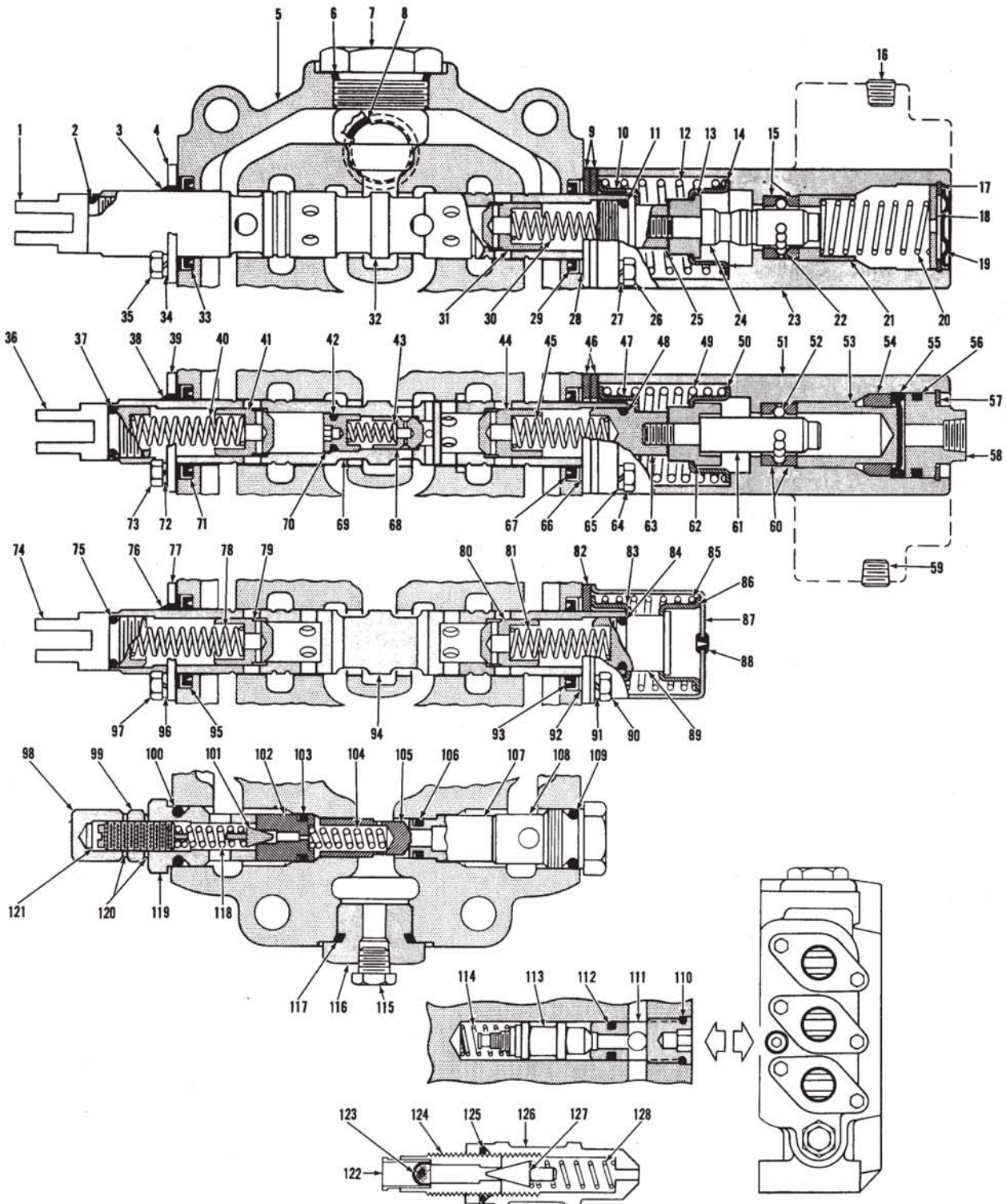
V36DWF24
V46DRF5
V46DRF103
V46DRF103B
V46DRF103A

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.

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1541956	*CONTROL VALVE ASSY (Inc. 1 thru 128)	1	27	4E-06	LKWSHR, Cover to Housing	2
1	946360	EYE, Plunger	1	28	944883	RING, Back-Up	1
2	25K-30022	O-RING, Plunger Eye	1	29	946583	SEAL, Plunger Oil	1
3	946918	WIPER, Plunger Oil	1	30	893293	SPRING, Check	1
4	980831	PLATE, Wiper & Seal Retainer	1	31	944885	CHECK	1
5	-----	§ HOUSING, Valve — See "A"	—	32	-----	§ PLUNGER, Operating — See "A"	—
6	91F-11	O-RING, Plug	1	33	946583	SEAL, Plunger Oil	1
7	24K-11	PLUG, Pipe	1	34	4E-06	LKWSHR, Plate to Housing	2
8	58K-222	O-RING, Valve Mounting	1	35	1C-610	BOLT, Plate to Housing	2
9	980832	PLATE, Seal Retainer	2	36	946360	EYE, Plunger	1
10	945092	RETAINER, Spring	1	37	25K-30022	O-RING, Plunger Eye	1
11	25K-30022	O-RING, Cap	1	38	946918	WIPER, Plunger Oil	1
12	945090	SPRING, Plunger Return	1	39	980831	PLATE, Wiper & Seal Retainer	1
13	948205	SPACER, Detent	1	40	893293	SPRING	1
14	944878	RETAINER, Spring	1	41	944885	CHECK	1
15	947843	RETAINER, Ball	2	42	25K-30014	O-RING, Cap	1
16	16F-04	PLUG, Pipe	1	43	946536	SPRING, Check	1
17	666542	RING, Plug Retainer	1	44	944885	CHECK	1
18	947848	PLUG, Detent	1	45	946544	SPRING, Check	1
19	948202	DIAPHRAGM	1	46	980832	PLATE, Seal Retaining	2
20	947852	SPRING, Detent	1	47	945092	RETAINER, Spring	1
21	947842	RETAINER, Spring	1	48	25K-30022	O-RING, Cap	1
22	10J-06	BALL	10	49	945090	SPRING, Plunger Return	1
23	948201	HOUSING, Detent	1	50	944878	RETAINER, Spring	1
24	948204	CAP, Detent	1	51	948201	HOUSING, Detent	1
25	948203	CAP, Plunger	1	52	10J-06	BALL	10
26	1C-618	BOLT, Cover to Housing	2	53	948460	PISTON, Detent	1
				54	947850	SPACER	1

*NOTE: For complete Valve replacement use 2510841.
§ Not Sold Separately

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



THREE SPOOL CONTROL VALVE ASSEMBLY

TS-9374

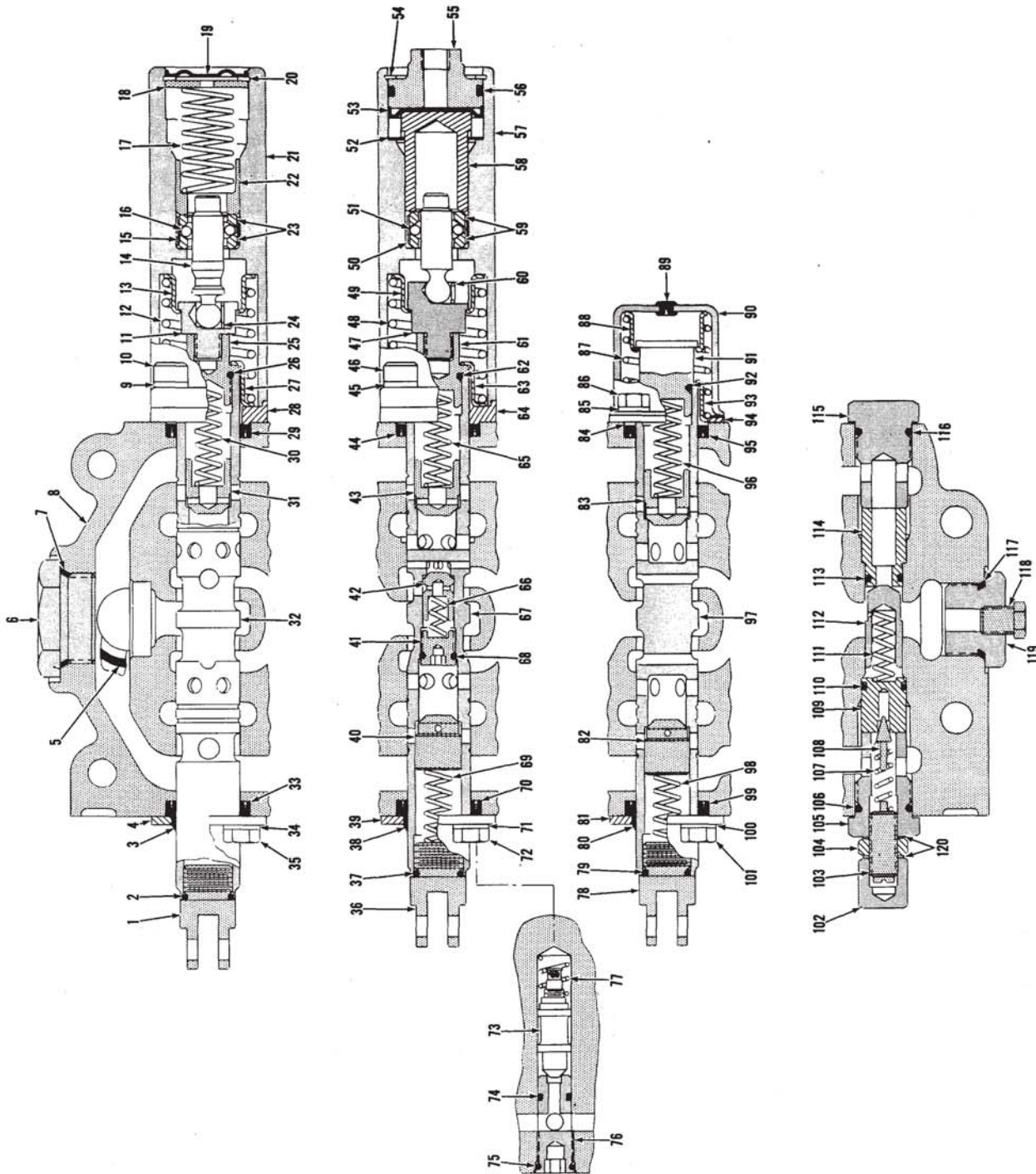
THREE SPOOL CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
55	946919	DIAPHRAGM	1	92	944883	RING, Back-Up	1
56	25K-40108	O-RING, Plug	1	93	946583	SEAL, Plunger Oil	1
57	666542	RING, Plug Retainer	1	94	-----	§ PLUNGER, Operating — See "A"	—
58	947340	PLUG, Detent	1	95	946583	SEAL, Plunger Oil	1
59	16F-04	PLUG, Pipe	1	96	4E-06	LKWSHR, Plate to Housing	2
60	947843	RETAINER, Ball	2	97	1C-610	BOLT, Plate to Housing	2
61	948206	CAP, Plunger	1	98	49D-08	NUT, Acorn	1
62	948207	SPACER, Detent	1	99	8D-08	NUT, Jam	1
63	948203	CAP, Plunger	1	100	58K-210	O-RING, Cap	1
64	1C-618	BOLT, Cover to Housing	2	101	886739	POPPET	1
65	4E-06	LKWSHR, Cover to Housing	2	102	980836	SEAT, Poppet	1
66	944883	RING, Back-Up	1	103	25K-30020	O-RING, Seat	1
67	946583	SEAL, Plunger Oil	1	104	947791	SPRING, Poppet	1
68	945590	CHECK	1	105	960965	POPPET, Relief	1
69	-----	§ PLUNGER, Operating — See "A"	—	106	25K-30016	O-RING, Seat	1
70	948203	CAP, Plunger	1	107	980840	SEAT, Poppet	1
71	946583	SEAL, Plunger Oil	1	108	980838	CAP	1
72	4E-06	LKWSHR, Cover to Housing	2	109	58K-210	O-RING, Cap	1
73	1C-610	BOLT, Cover to Housing	2	110	25K-20016	O-RING, Seat	1
74	946360	EYE, Plunger	1	111	947774	SEAT, Poppet	1
75	25K-30022	O-RING, Plunger Eye	1	112	25K-20014	O-RING, Seat	1
76	946918	WIPER, Plunger Oil	1	113	948159	POPPET ASSY (Inc. 122 thru 128)	1
77	980831	PLATE, Wiper & Seal Retainer	1	114	886764	SPRING, Poppet	1
78	893293	SPRING, Check	1	115	40K-04	PLUG, Pipe	1
79	944885	CHECK	1	116	946882	PLUG, Housing	1
80	944885	CHECK	1	117	91F-10	O-RING, Plug	1
81	893293	SPRING, Check	1	118	886753	SPRING, Poppet	1
82	980832	PLATE, Seal Retainer	1	119	980835	CAP, Adjusting	1
83	945348	RETAINER, Spring	1	120	613750	WASHER, Jam Nut	2
84	25K-30022	O-RING, Cap	1	121	980834	SCREW, Adjusting	1
85	980830	SPRING, Plunger Return	1	122	-----	§ GUIDE, Spring — See Item 113	—
86	945348	RETAINER, Spring	1	123	-----	§ SCREEN, Filter — See Item 113	—
87	980828	COVER, Spring	1	124	-----	§ SEAT, Poppet — See Item 113	—
88	886745	PLUG, Bleeder	1	125	-----	§ O-RING, Seat — See Item 113	—
89	944895	CAP, Plunger	1	126	-----	§ POPPET, Relief — See Item 113	—
90	1C-612	BOLT, Cover to Housing	2	127	-----	§ POPPET — See Item 113	—
91	4E-06	LKWSHR, Cover to Housing	2	128	-----	§ SPRING, Poppet — See Item 113	—

§Not Sold Separately

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

TS-10715



THREE SPOOL CONTROL VALVE ASSEMBLY

THREE SPOOL CONTROL VALVE ASSEMBLY

Five Varieties of Control Valves have been used for 75III-A MICHIGAN Tractor Shovel Three spool Valve Installations. These are as follows.

Clark Part Number

1503807
1536681
1541956
1548531
1513174

Hydrec Model Number

V36DWF24
V46DRF5
V46DRF103
V46DRF103B
V46DRF103A

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.

Item No.	Part No.	Description	No. Req'd.
A	1548531	*CONTROL VALVE ASSY (Inc. 1 thru 120)	1
1	946360	EYE, Plunger	1
2	25K-30022	O-RING, Plunger Eye	1
3	946918	WIPER, Plunger Oil	1
4	980831	PLATE, Seal & Wiper Retainer	1
5	58K-222	O-RING, Valve Mounting	1
6	24K-11	PLUG, Pipe	1
7	91F-11	O-RING, Plug	1
8	-----	§ HOUSING, Valve — See "A"	—
9	4E-06	LKWSHR, Cover to Housing	2
10	11G-620	SCREW, Cover to Housing	2
11	948719	SOCKET, Detent	1
12	945090	SPRING, Plunger Return	1
13	944878	RETAINER, Spring	1
14	948723	PLUNGER, Detent	1
15	948727	SLEEVE, Ball	1
16	948730	BALL	11
17	947852	SPRING, Detent	1
18	947848	PLUG, Detent	1
19	948202	DIAPHRAGM, Detent	1
20	666542	RING, Plug Retainer	1
21	948720	HOUSING, Detent	1
21A	16F-04	† PLUG, Detent	1
22	947842	RETAINER, Spring	1

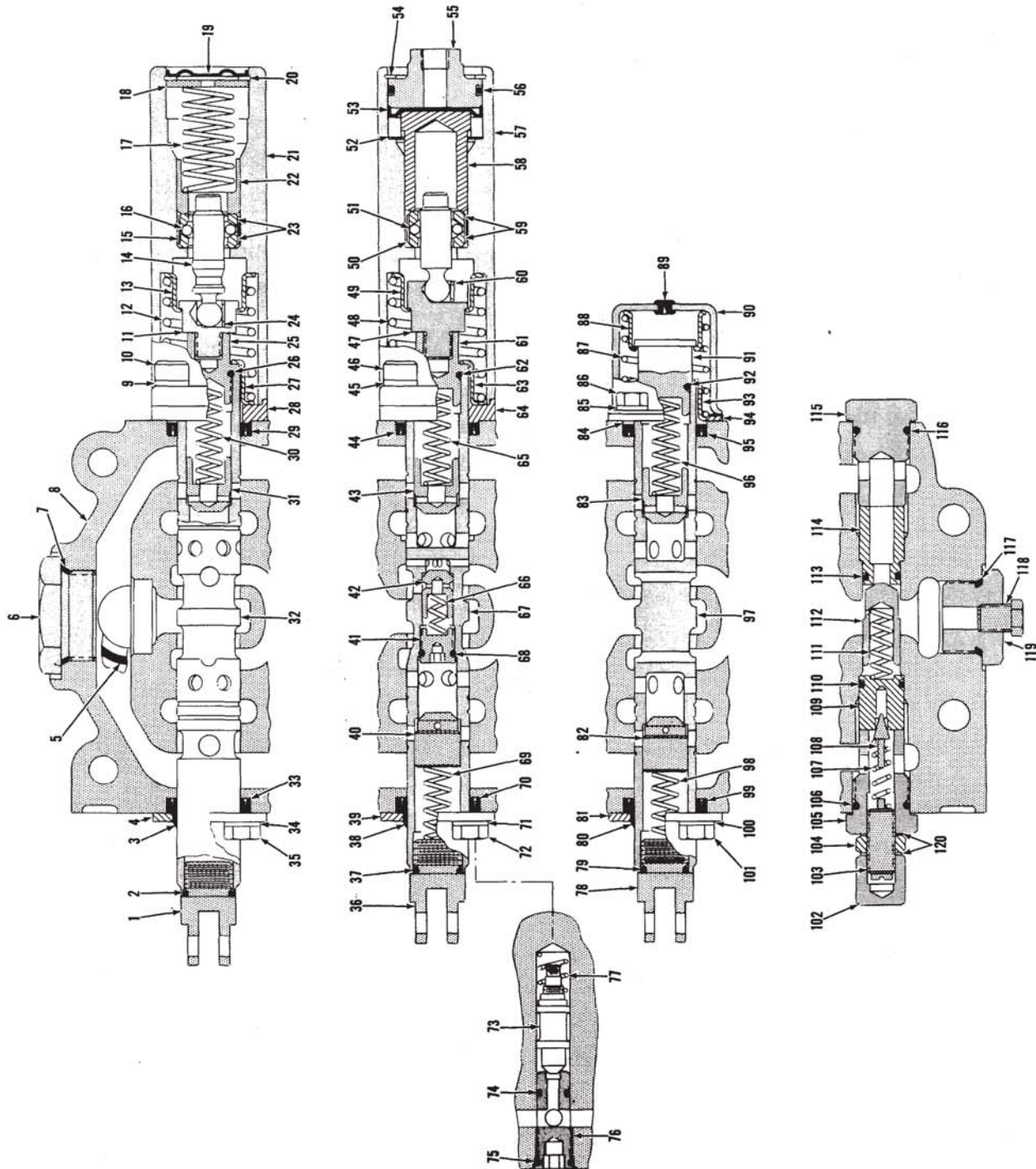
Item No.	Part No.	Description	No. Req'd.
23	947843	RETAINER, Ball	2
24	948726	RING, Plunger Retainer	1
25	948732	CAP, Plunger	1
26	25K-30022	O-RING, Cap	1
27	945092	RETAINER, Spring	1
28	948717	PLATE, Seal Retainer	1
29	946583	SEAL, Plunger Oil	1
30	893293	SPRING, Check	1
31	944885	CHECK	1
32	-----	§ PLUNGER, Operating — See "A"	—
33	946583	SEAL, Plunger Oil	1
34	4E-06	LKWSHR, Plate to Housing	4
35	1C-612	BOLT, Plate to Housing	2
36	946360	EYE, Plunger	1
37	25K-30022	O-RING, Plunger Eye	1
38	946918	WIPER, Plunger Oil	1
39	980831	PLATE, Wiper & Seal Retainer	1
40	944885	CHECK	1
41	946555	CAP, Check	1
42	945590	CHECK	1
43	944885	CHECK	1
44	946583	SEAL, Plunger Oil	1
45	4E-06	LKWSHR, Cover to Housing	2
46	11G-620	SCREW, Cover to Housing	2

§ Not Sold Separately
† Not Illustrated

*NOTE: For replacement use 2510841 Valve Assy.

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

TS-10715



THREE SPOOL CONTROL VALVE ASSEMBLY

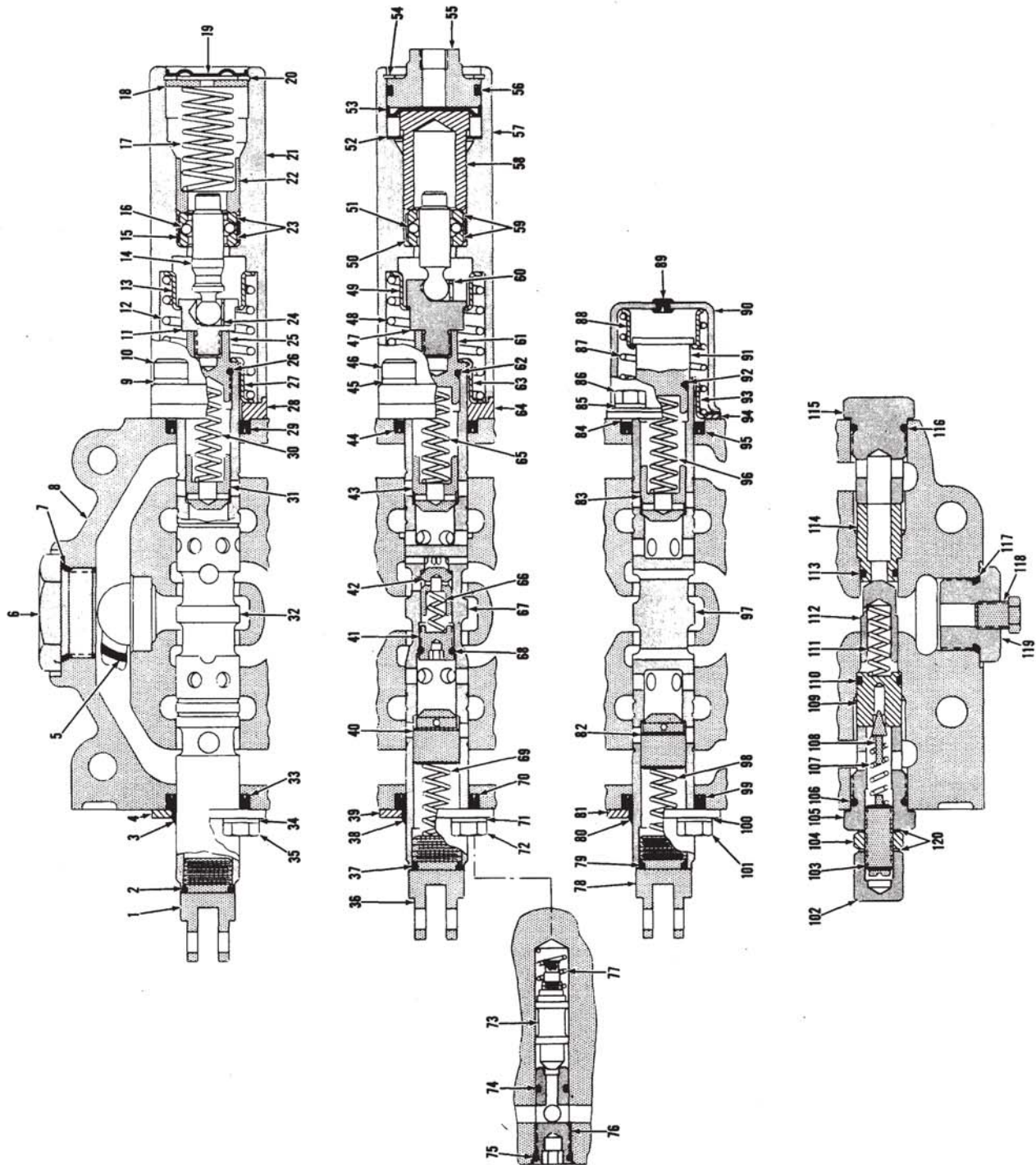
THREE SPOOL CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
47	948718	SOCKET, Detent	1	84	944883	RING, Seal Back-Up	1
48	945090	SPRING, Plunger Return	1	85	4E-06	LKWSHR, Cover to Housing	2
49	944878	RETAINER, Spring	1	86	1C-612	BOLT, Cover to Housing	2
50	948727	SLEEVE, Ball	1	87	980830	SPRING, Plunger Return	1
51	948730	BALL	11	88	945348	GUIDE, Spring	1
52	948728	SPACER, Detent	1	89	886745	PLUG, Bleeder	1
53	948731	DIAPHRAGM	1	90	980828	COVER, Spring	1
54	948729	RING, Plug Retainer	1	91	944895	CAP, Plunger	1
55	948724	PLUG, Detent	1	92	25K-30022	O-RING, Cap	1
56	25K-40114	O-RING, Plug	1	93	945348	GUIDE, Spring	1
57	948721	HOUSING, Detent	1	94	980832	PLATE, Seal Retainer	1
58	948725	PISTON, Detent	1	95	946583	SEAL, Plunger Oil	1
59	947843	RETAINER, Ball	2	96	893293	SPRING, Check	1
60	948726	RING, Plunger Retainer	1	97	-----	§PLUNGER, Operating — See "A"	—
61	948732	CAP, Plunger	1	98	893293	SPRING, Check	1
62	25K-30022	O-RING, Cap	1	99	946583	SEAL, Plunger Oil	1
63	945092	RETAINER, Spring	1	100	4E-06	LKWSHR, Plate to Housing	2
64	948717	PLATE, Seal Retainer	1	101	1C-612	BOLT, Plate to Housing	2
65	946544	SPRING, Check	1	102	49D-08	NUT, Acorn	1
66	946536	SPRING, Check	1	103	980834	SCREW, Adjusting	1
67	-----	§PLUNGER, Operating — See "A"	—	104	8D-08	NUT, Jam	1
68	25K-30014	O-RING, Cap	1	105	980835	CAP, Adjusting	1
69	893293	SPRING, Check	1	106	58K-210	O-RING, Cap	1
70	946583	SEAL, Plunger Oil	1	107	886753	SPRING, Poppet	1
71	4E-06	LKWSHR, Plate to Housing	2	108	886739	POPPET	1
72	1C-612	BOLT, Plate to Housing	2	109	980836	SEAT, Poppet	1
73	948159	POPPET	1	110	25K-30020	O-RING, Seat	1
74	25K-20014	O-RING, Seat	1	111	947791	SPRING, Poppet	1
75	25K-20016	O-RING, Seat	1	112	960965	POPPET, Relief	1
76	947774	SEAT, Poppet	1	113	25K-30016	O-RING, Seat	1
77	886764	SPRING, Poppet	1	114	980840	SEAT, Poppet	1
78	946360	EYE, Plunger	1	115	980838	CAP	1
79	25K-30022	O-RING, Plunger Eye	1	116	58K-210	O-RING, Cap	1
80	946918	WIPER, Plunger Oil	1	117	91F-10	O-RING, Plug	1
81	980831	PLATE, Wiper & Seal Retainer	1	118	40K-04	PLUG, Pipe	1
82	944885	CHECK	1	119	946882	PLUG	1
83	944885	CHECK	1	120	613750	WASHER, Jam Nut	1

§Not Sold Separately

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

TS-10715



THREE SPOOL CONTROL VALVE ASSEMBLY

THREE SPOOL CONTROL VALVE ASSEMBLY

Five Varieties of Control Valves have been used for 75III-A MICHIGAN Tractor Shovel Three spool Valve Installations. These are as follows.

Clark Part Number

1503807
1536681
1541956
1548531
1513174

Hydrec Model Number

V36DWF24
V46DRF5
V46DRF103
V46DRF103B
V46DRF103A

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.

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
A	1513174	*VALVE ASSY, Main (Inc. 1 thru 120)	1	34	4E-06	LOCKWASHER, Plate to Housing	4
1	946360	EYE, Plunger	1	35	1C-612	BOLT, Plate to Housing	4
2	25K-30022	O-RING, Plunger Eye	1	36	946360	EYE, Plunger	1
3	949305	WIPER, Plunger Oil	1	37	25K-30022	O-RING, Plunger Eye	1
4	949303	PLATE, Retainer Wiper	1	38	949305	WIPER, Plunger Oil	1
4A	949302	†PLATE, Retainer Seal	1	39	949303	PLATE, Wiper Retainer	1
5	58K-222	O-RING	1	40	949302	PLATE, Seal Retainer	1
6	24K-11	PLUG	1	41	946555	CAP, Check	1
7	91F-11	O-RING, Plug	1	42	945590	CHECK	1
8	-----	§ HOUSING, Valve - See A	-	43	944885	CHECK	1
9	4E-06	LOCKWASHER, Cover to Housing	2	44	949304	SEAL, Plunger Oil	1
10	11G-620	SCREW, Cover to Housing	2	45	4E-06	LOCKWASHER, Cover to Housing	2
11	949279	SOCKET, Detent	1	46	11G-620	SCREW, Cover to Housing	2
12	945090	SPRING, Plunger Return	1	47	949279	SOCKET, Detent	1
13	944878	RETAINER, Spring	1	48	945090	SPRING, Plunger Return	1
14	948723	PLUNGER, Detent	1	49	944878	RETAINER, Spring	1
15	948727	SLEEVE, Ball	1	50	948727	SLEEVE, Ball	1
16	948730	BALL	11	51	948730	BALL	11
17	947852	SPRING, Detent	1	52	948728	SPACER, Detent	1
18	947848	PLUG, Detent	1	53	948731	DIAPHRAGM	1
19	948202	DIAPHRAGM	1	54	948729	RING, Plug Retainer	1
20	666542	RING, Plug Retainer	1	55	948724	PLUG, Detent	1
21	948720	HOUSING, Detent	1	56	25K-40114	O-RING, Plug	1
21A	16F-04	†PLUG, Detent	1	57	948721	HOUSING, Detent	1
22	947842	RETAINER, Spring	1	58	948725	PISTON, Detent	1
23	947843	RETAINER, Ball	2	59	947843	RETAINER, Ball	2
24	742306	PIN, Roll	1	60	300232	PIN, Roll	1
25	948732	CAP, Plunger	1	61	948732	CAP, Plunger	1
26	25K-30022	O-RING, Cap	1	62	25K-30022	O-RING, Cap	1
27	945092	RETAINER, Spring	1	63	945092	RETAINER, Spring	1
28	949350	PLATE, Seal Retainer	1	64	949350	PLATE, Seal Retainer	1
29	949304	SEAL, Plunger	1	65	946544	SPRING, Check	1
30	893293	SPRING, Check	1	66	946536	SPRING, Check	1
31	944885	CHECK	1	67	-----	§ PLUNGER, Operating - See A	-
32	-----	§ PLUNGER, Operating - See A	-	68	25K-30014	O-RING, Cap	1
33	949304	SEAL, Plunger Oil	1	69	893293	SPRING, Check	1

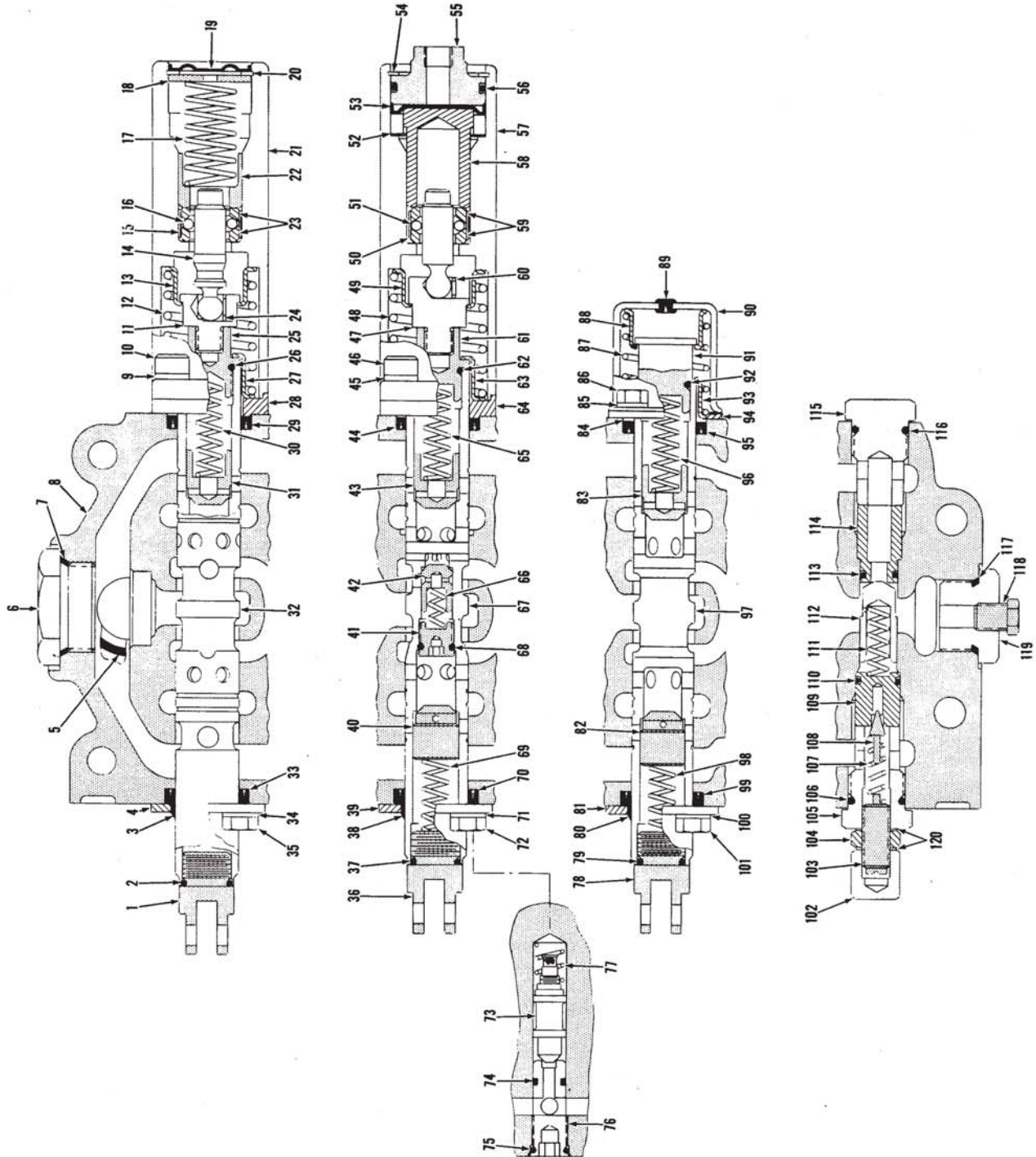
*For replacement use 2510841

†Not Illustrated

§Not Sold Separately

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

TS-10715



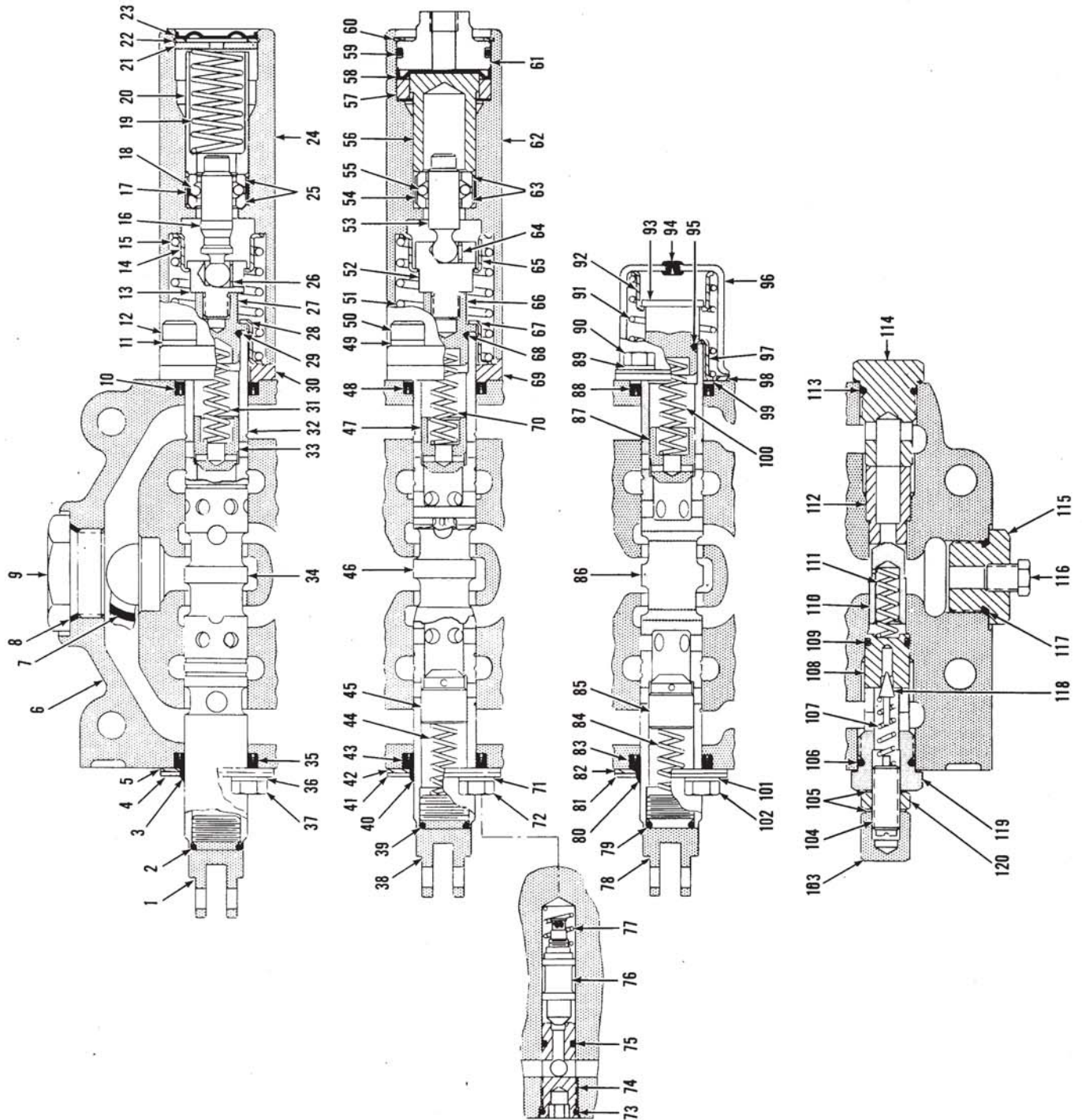
THREE SPOOL CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
70	949304	SEAL, Plunger Oil	1	95	949304	SEAL, Plunger Oil	1
71	4E-06	LOCKWASHER, Plate to Housing	2	96	893293	SPRING, Check	1
72	1C-612	BOLT, Plate to Housing	2	97	-----	§PLUNGER, Operating — See A	—
73	948159	POPPET	1	98	893293	SPRING, Check	1
74	25K-20014	O-RING, Seat	1	99	946583	SEAL, Plunger Oil	1
75	25K-20016	O-RING, Seat	1	100	4E-06	LOCKWASHER, Plate to Housing	2
76	947774	SEAT, Poppet	1	101	1C-612	BOLT, Plate to Housing	2
77	886764	SPRING, Poppet	1	102	49D-08	NUT, Acorn	1
78	946360	EYE, Plunger	1	103	980834	SCREW, Adjusting	1
79	25K-30022	O-RING, Plunger Eye	1	104	8D-08	NUT, Jam	1
80	949305	WIPER, Plunger Oil	1	105	980835	CAP, Adjusting	1
81	949303	PLATE, Wiper Retainer	1	106	58K-210	O-RING	1
81A	949302	†PLATE, Seal Retainer	1	107	886753	SPRING, Poppet	1
82	944885	CHECK	1	108	886739	POPPET	1
83	944885	CHECK	1	109	980836	SEAT, Poppet	1
84	949349	RING, Seal Back-Up	1	110	25K-30020	O-RING, Seat	1
85	4E-06	LOCKWASHER, Cover to Housing	2	111	947791	SPRING, Poppet	1
86	1C-612	BOLT, Cover to Housing	2	112	960965	POPPET, Relief	1
87	980830	SPRING, Plunger Return	1	113	25K-30016	O-RING, Seat	1
88	945348	GUIDE, Spring	1	114	980840	SEAT, Poppet	1
89	886745	PLUG, Bleeder	1	115	980838	CAP	1
90	980828	COVER, Spring	1	116	58K-210	O-RING, Cap	1
91	944895	CAP, Plunger	1	117	91F-10	O-RING, Plug	1
92	25K-30022	O-RING, Cap	1	118	40K-04	PLUG, Pipe	1
93	945348	GUIDE, Spring	1	119	946882	PLUG	1
94	980832	PLATE, Seal Retainer	1	120	613750	WASHER, Jam Nut	2

§Not Sold Separately

†Not Illustrated

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



Valve Assembly, Main (3 Spool)

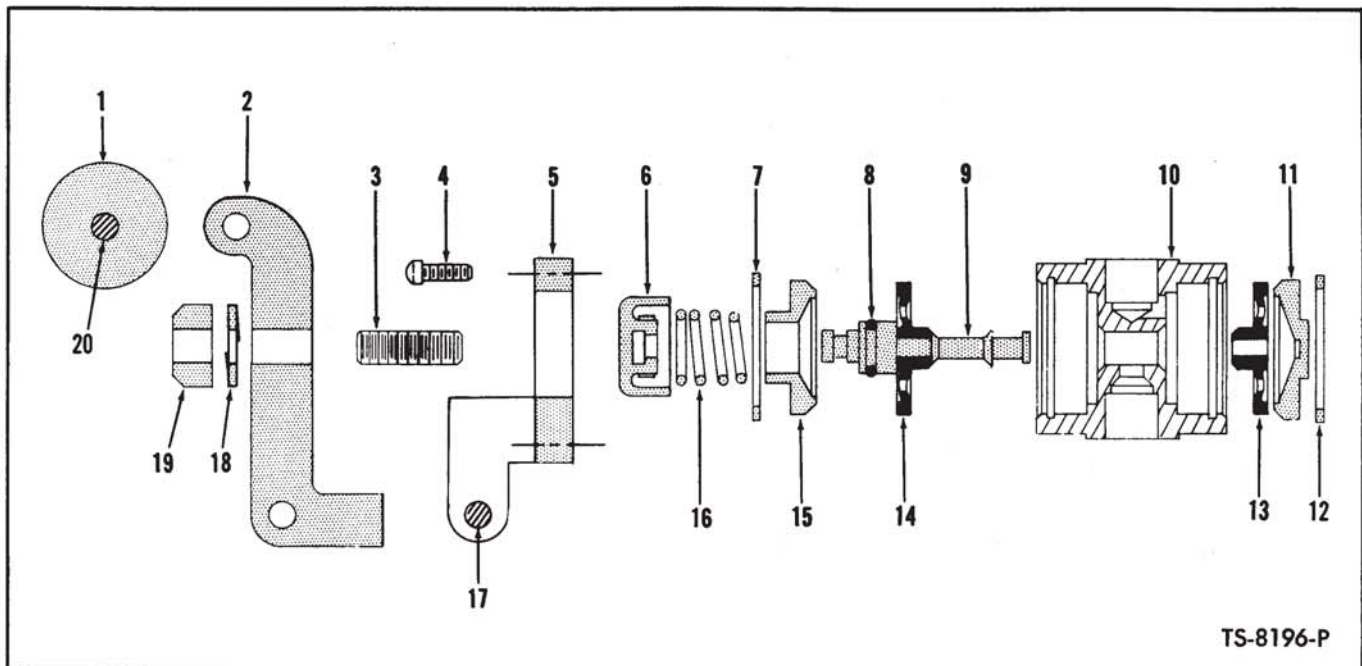
MICHIGAN

No.	Part No.	Qty.	Description
A	2510841	1	Control valve assy
1	946360	1	Plunger eye
2	25K-30022	1	O-ring
3	949305	1	Wiper
4	949303	1	Plate
5	949302	1	Plate
6	§2-----	—	Housing
7	58K-222	1	O-ring
8	91F-11	1	O-ring
9	24K-11	1	Plug
10	949304	1	Seal
11	4E-06	2	Lockwasher
12	11G-620	2	Screw
13	949278	1	Socket
14	944878	1	Retainer
15	945090	1	Spring
16	948723	1	Plunger
17	948727	1	Sleeve
18	948730	11	Ball
19	947852	1	Spring
20	948954	1	Retainer
21	947848	1	Plug
22	666542	1	Ring
23	948202	1	Diaphragm
24	960900	1	Housing
24A	†16F-04	1	Plug
25	947843	2	Retainer
26	742306	1	Pin
27	948732	1	Cap
28	945092	1	Retainer
29	25K-30022	1	O-ring
30	949300	1	Plate
31	893293	1	Spring
32	§2-----	—	Plunger
33	944885	1	Check
34	§2-----	—	Plunger
35	949304	1	Seal
36	4E-06	2	Lockwasher
37	1C-612	2	Screw
38	946360	1	Eye
39	25K-30022	1	O-ring
40	949305	1	Wiper
41	949303	1	Plate
42	949302	1	Plate
43	949304	1	Seal
44	893293	1	Spring
45	944885	1	Check
46	§2-----	—	Plunger
47	960907	1	Check
48	949304	1	Seal
49	4E-06	2	Lockwasher
50	11G-620	2	Screw
51	945090	1	Spring
52	949279	1	Socket
53	948722	1	Plunger
54	948727	1	Sleeve
55	948730	11	Ball
56	948725	1	Piston
57	948728	1	Spacer
58	948731	1	Diaphragm
59	25K-40114	1	O-ring

†Inc. 1→120

§See "A"

No.	Part No.	Qty.	Description
60	948729	1	Ring
61	948724	1	Plug
62	948721	1	Housing
63	947843	2	Retainer
64	300232	1	Pin
65	944878	1	Retainer
66	948732	1	Cap
67	945092	1	Retainer
68	25K-30022	1	O-ring
69	949300	1	Plate
70	960902	1	Spring
71	4E-06	2	Lockwasher
72	1C-612	2	Screw
73	25K-20016	1	O-ring
74	947774	1	Seat
75	25K-20014	1	O-ring
76	948159	1	Poppet assy
77	886764	1	Spring
78	946360	1	Eye
79	25K-30022	1	O-ring
80	949305	1	Wiper
81	949303	1	Plate
82	949302	1	Plate
83	949304	1	Seal
84	893293	1	Spring
85	944885	1	Check
86	§2-----	—	Plunger
87	944885	1	Check
88	949304	1	Seal
89	4E-06	2	Lockwasher
90	1C-612	2	Screw
91	980830	1	Spring
92	945348	1	Retainer
93	944895	1	Cap
94	886745	1	Plug
95	25K-30022	1	O-ring
96	980828	1	Cover
97	945348	1	Retainer
98	980832	1	Plate
99	949349	1	Ring
100	893293	1	Spring
101	4E-06	2	Lockwasher
102	1C-612	2	Screw
103	49D-08	1	Nut
104	980834	1	Screw
105	613750	2	Washer
106	58K-210	1	O-ring
107	886753	1	Spring
108	980836	1	Seat
109	25K-30020	1	O-ring
110	960965	1	Poppet
111	947791	1	Spring
112	980840	1	Seat
113	58K-210	1	O-ring
114	980838	1	Cap
115	946882	1	Plug
116	40K-04	1	Plug
117	91F-10	1	O-ring
118	886739	1	Poppet
119	980835	1	Cap
120	8D-08	1	Nut



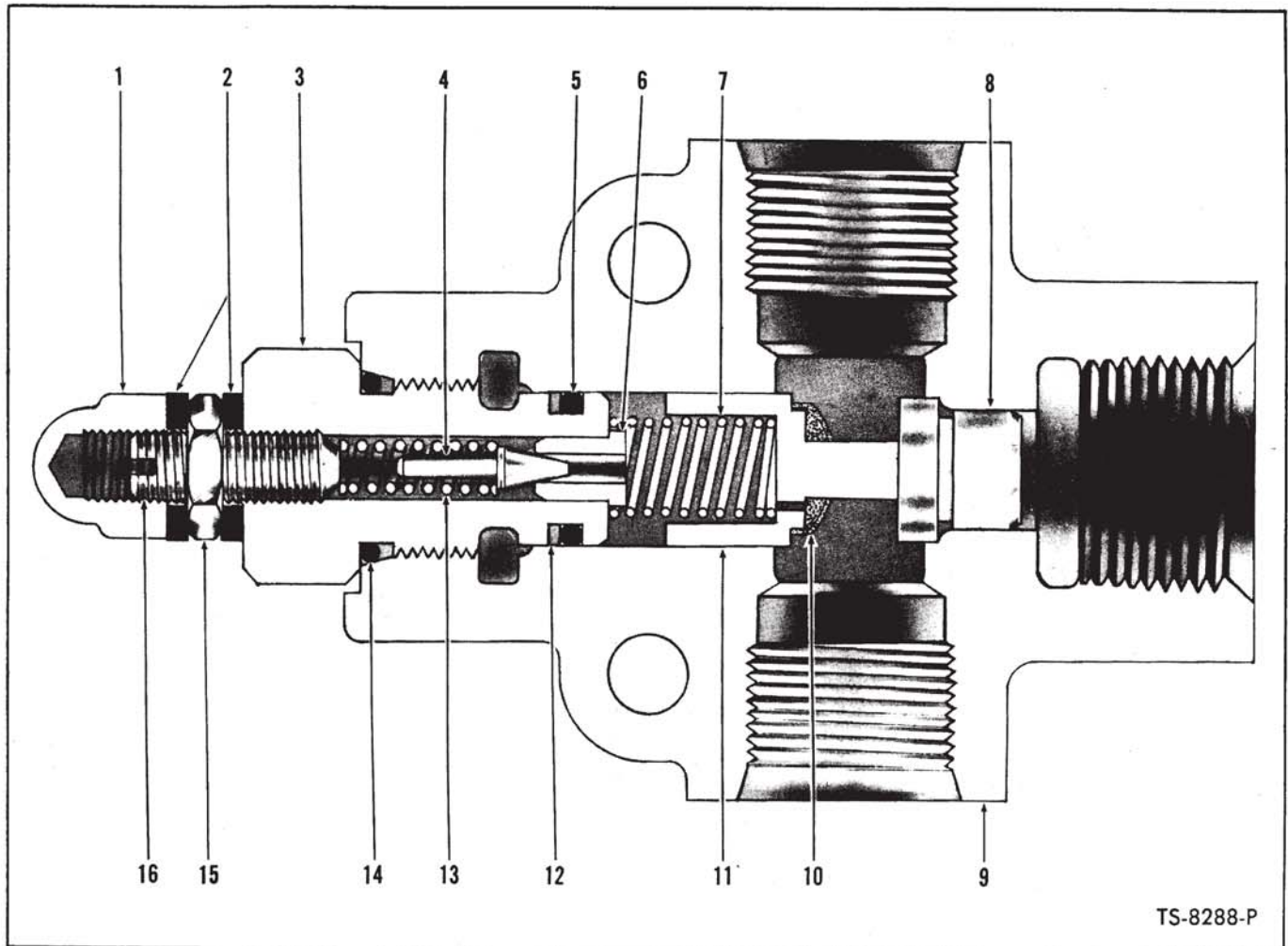
TS-8196-P

AIR VALVE ASSEMBLY

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

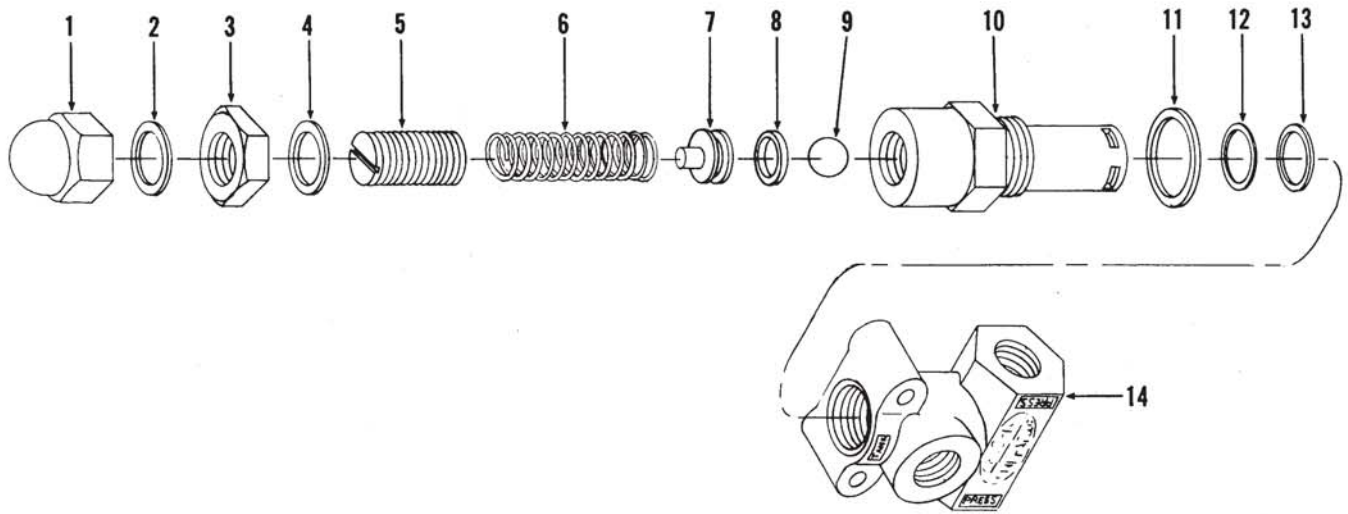

PRESSURE RELIEF VALVE — STEERING SYSTEM

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

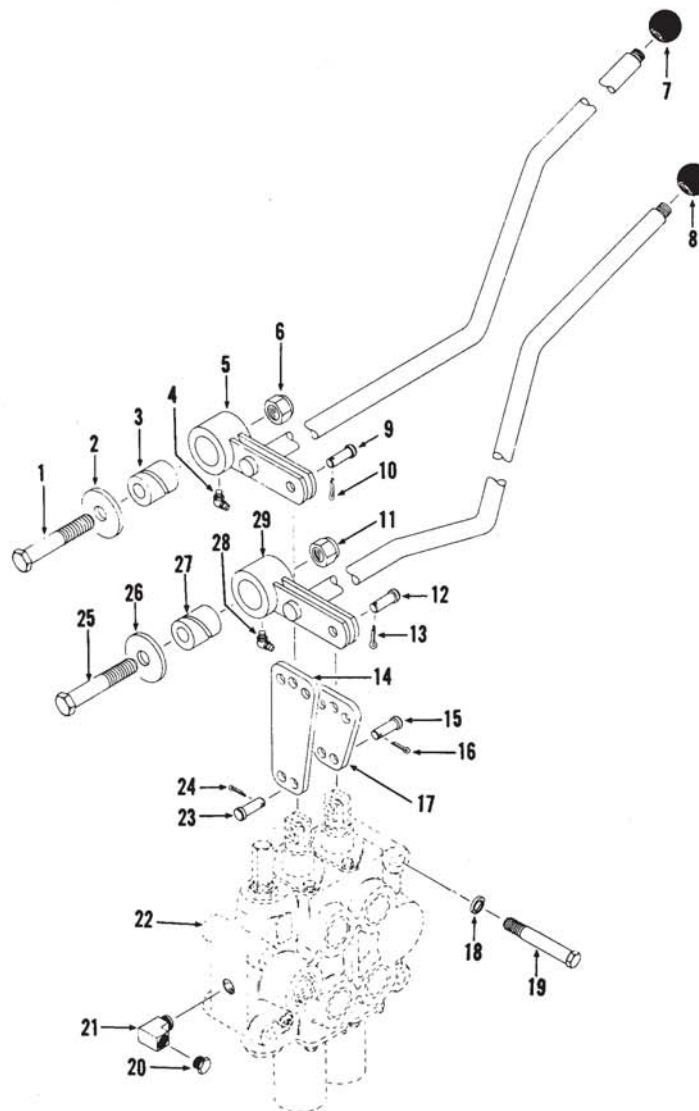
WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE



TS-9980

RELIEF VALVE ASSEMBLY (Side Dump Bucket)

Item	Part No.	Description	Qty.
A	1616512	RELIEF VALVE ASSY (Inc. 1 thru 14)	1
1	47D-14	NUT, Acorn	1
2	947724	WASHER	1
3	947722	NUT, Jam	1
4	947724	WASHER	1
5	947721	SCREW, Adjusting	1
6	947723	SPRING	1
7	947725	GUIDE, Ball	1
8	225104	SEAL, Ball Guide	1
9	947720	BALL	1
10	947726	BODY	1
11	91F-9	O-RING, Body	1
12	947727	WASHER, Back-Up	1
13	58K-021	O-RING	1
14	----	HOUSING (See Item "A")	1



TS-8362-P

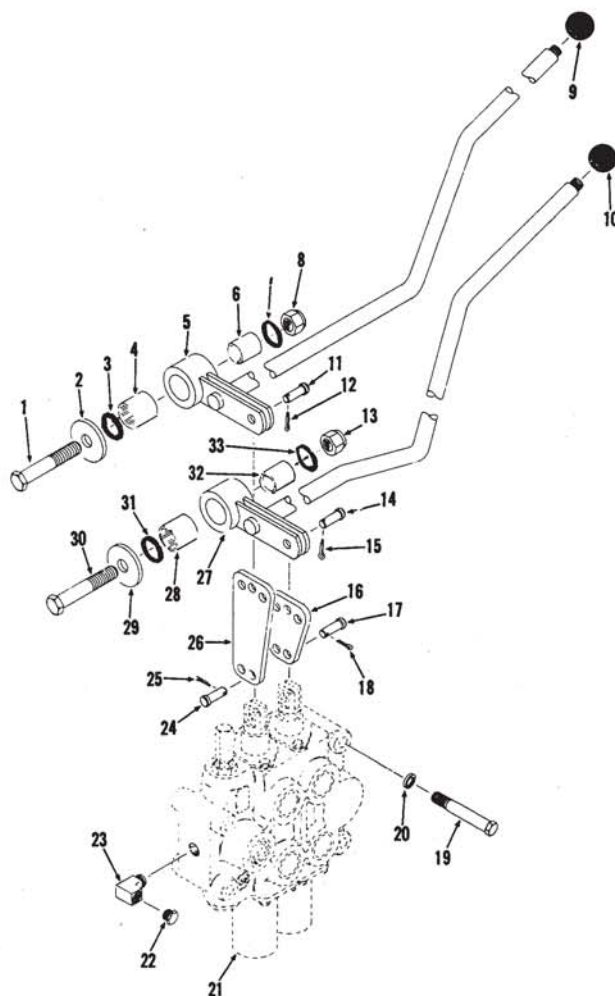
VALVE CONTROL LEVERS AND LINKAGE

For Serial: Cummins — 408A101 thru 999

G.M. — 409A101 thru 999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	24C-1252	BOLT, Lever Mtg.	1	16	1F-414	COTTER, Pin Retaining	1
2	585972	WASHER, Lever Mtg.	1	17	1526016	LINK, Valve Control — Boom	1
3	570676	SLEEVE, Lever Mtg.	1	18	4E-08	LKWSHR, Valve Mtg.	3
4	12H-15	FITTING, Lever Grease	1	19	24C-864	BOLT, Valve Mtg.	3
5	1526022	LEVER ASSY, Bucket	1	20	40K-04	PLUG, Elbow	1
6	18D-12	NUT, Lever Mtg.	1	21	29F-1	ELBOW, Control Valve	1
7	565389	KNOB, Bucket Lever	1	22	-----	CONTROL VALVE — See	
8	565389	KNOB, Boom Lever	1			Index	—
9	4F-06106	PIN, Lever to Link	1	23	4F-06106	PIN, Link to Valve	1
10	1F-414	COTTER, Pin Retaining	1	24	1F-414	COTTER, Pin Retaining	1
11	18D-12	NUT, Lever Mtg.	1	25	24C-1252	BOLT, Lever Mtg.	1
12	4F-06106	PIN, Lever to Link	1	26	585972	WASHER, Lever Mtg.	1
13	1F-414	COTTER, Pin Retaining	1	27	570676	SLEEVE, Lever Mtg.	1
14	1526016	LINK, Valve Control — Bucket	1	28	12H-15	FITTING, Lever Grease	1
15	4F-06106	PIN, Link to Valve	1	29	1526020	LEVER ASSY, Boom	1

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



TS-9674

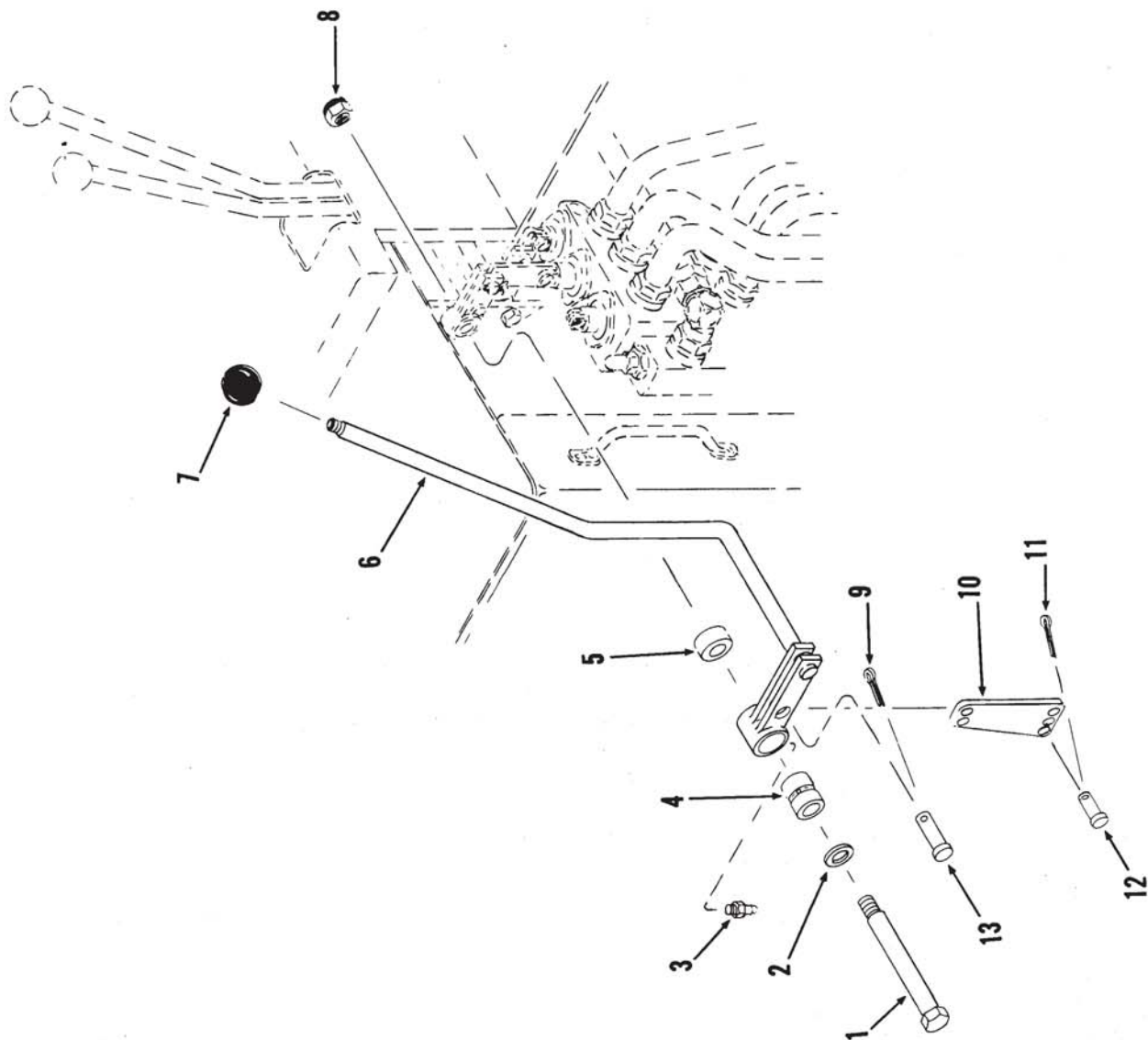
VALVE CONTROL LEVERS AND LINKAGE

 For Serial: Cummins — 408B101 and after
 G.M. — 409B101 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	24C-852	BOLT, Lever Mtg.	1	18	1F-414	COTTER, Pin Retaining	1
2	569909	WASHER, Lever Mtg.	1	19	24C-864	BOLT, Valve Mtg.	3
3	1522535	SEAL, Grease	1	20	4E-08	LKWSHR, Valve Mtg.	3
4	675227	BEARING, Lever	1	21	—	CONTROL VALVE —	—
5	1509019	LEVER ASSY, Bucket	1			See Index	—
6	1503251	SLEEVE, Lever	1	22	40K-04	PLUG, Elbow	1
7	1522535	SEAL, Grease	1	23	29F-1	ELBOW, Control Valve	1
8	18D-08	NUT, Lever Mtg.	1	24	4F-06106	PIN, Link to Valve	1
9	565389	KNOB, Bucket Lever	1	25	1F-414	COTTER, Pin Retaining	1
10	565389	KNOB, Boom Lever	1	26	1526016	LINK, Valve Control — Bucket	1
11	4F-06106	PIN, Lever to Link	1	27	1509020	LEVER ASSY, Boom	1
12	1F-414	COTTER, Pin Retaining	1	28	675227	BEARING, Lever	1
13	18D-08	NUT, Lever Mtg.	1	29	569909	WASHER, Lever Mtg.	1
14	4F-06106	PIN, Lever to Link	1	30	24C-852	BOLT, Lever Mtg.	1
15	1F-414	COTTER, Pin Retaining	1	31	1522535	SEAL, Grease	1
16	1526017	LINK, Valve Control — Boom..	1	32	1503251	SLEEVE, Lever	1
17	4F-06106	PIN, Link to Valve	1	33	1522535	SEAL, Grease	1

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

TS-8595-P



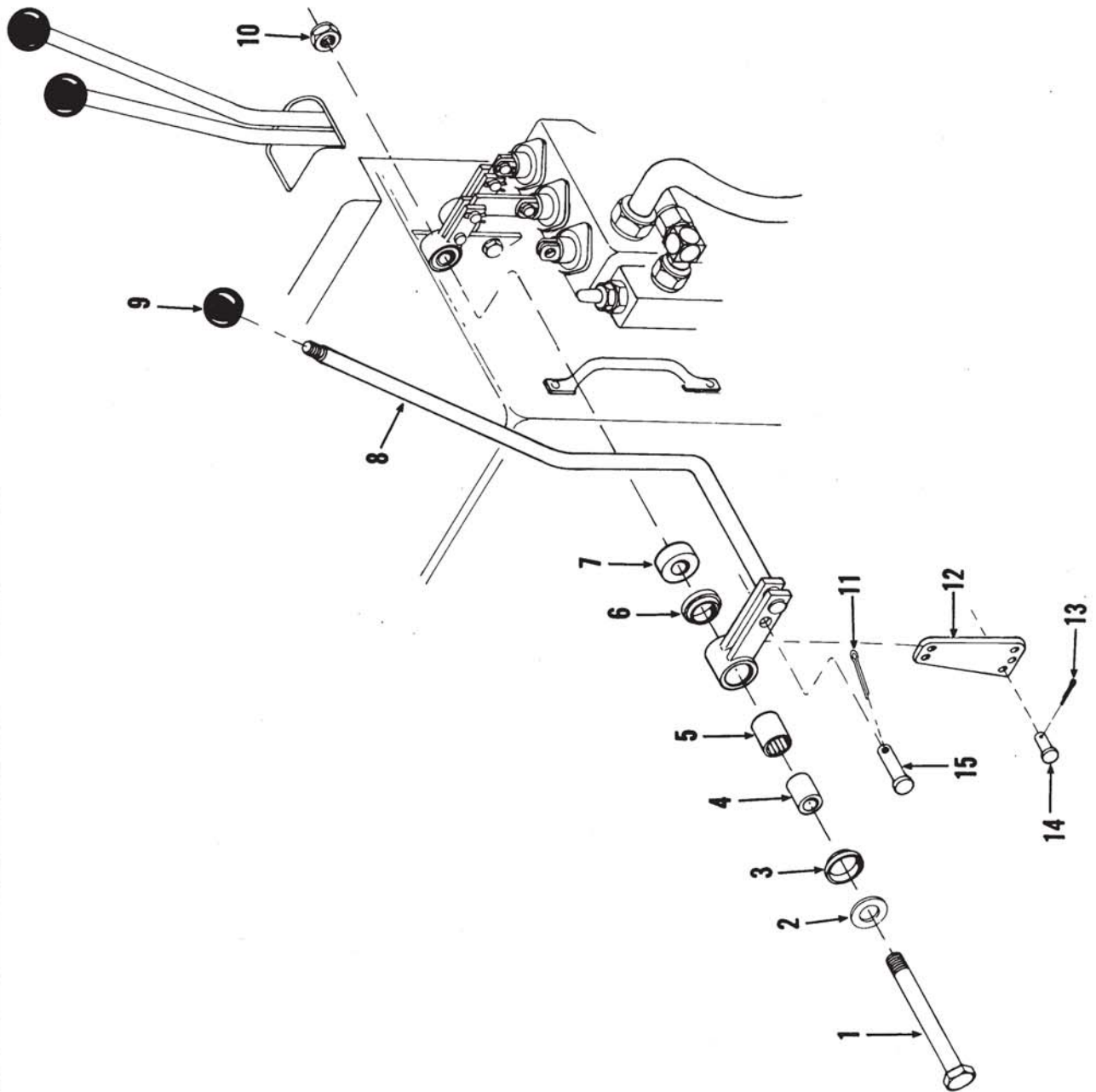
THREE SPOOL VALVE CONTROLS

THREE SPOOL VALVE CONTROLS
For Serial: Cummins - 408A101 thru 999
G.M. - 409A101 thru 999

Item No.	Part No.	Description	No. Req'd.
1	24C-1288	BOLT, Valve Lever	1
2	585972	WASHER, Valve Lever	1
3	12H-15	FITTING, Valve Lever Grease	1
4	570676	SLEEVE, Valve Lever (Bushing)	1
5	730483	SPACER, Valve Lever	1
6	1536669	LEVER, Valve Control	1
7	565389	KNOB, Valve Lever	1
8	18D-12	NUT, Valve Lever Bolt	1
9	1F-414	COTTER, Clevis Pin	1
10	1526016	LINK, Lever to Valve	1
11	1F-414	COTTER, Clevis Pin	1
12	4F-06106	PIN, Clevis	1
13	4F-06106	PIN, Clevis	1

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

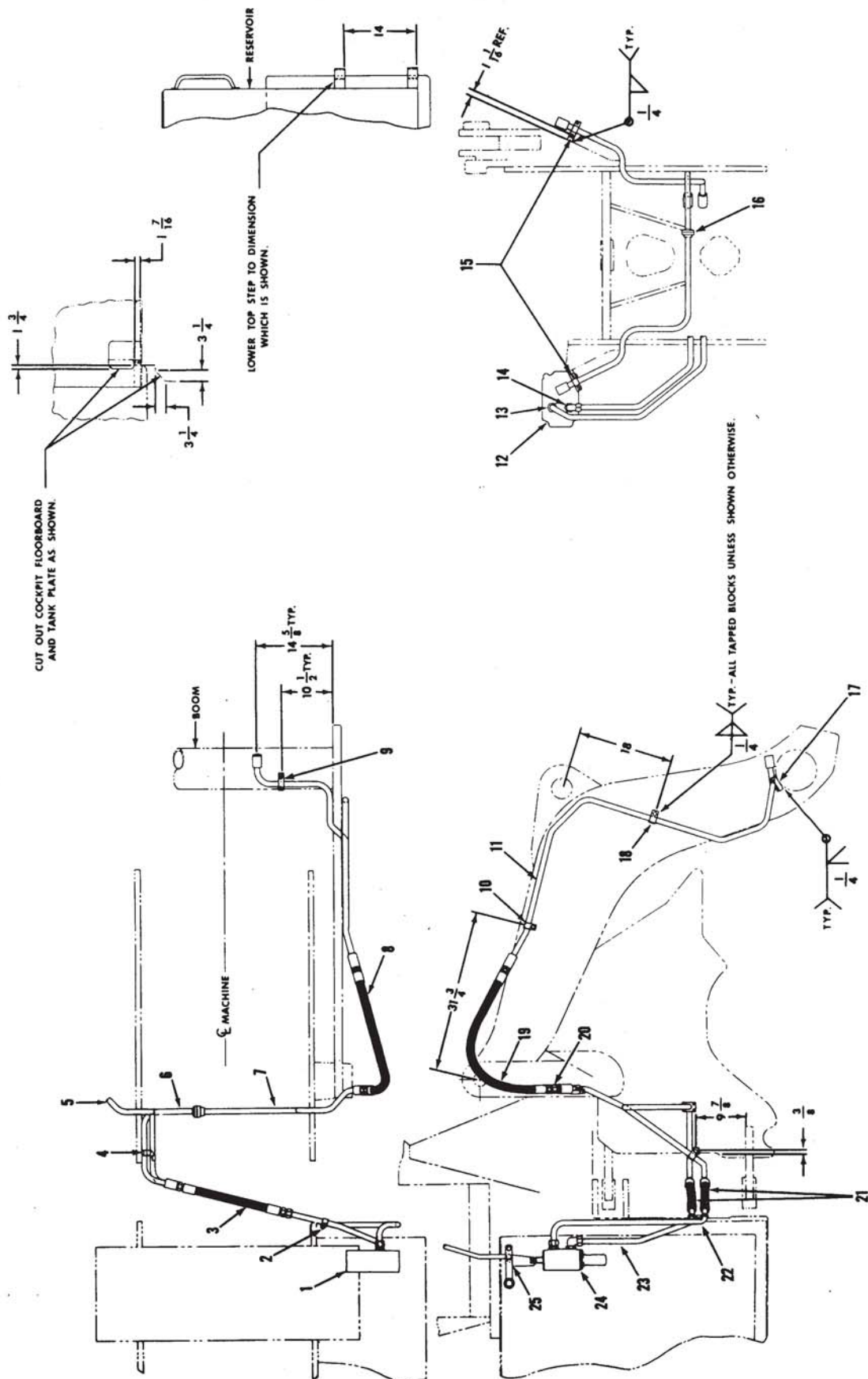
TS-11578 D



THREE SPOOL VALVE CONTROLS
For Serial: Cummins - 408B101 & AFTER
G.M. - 409B101 & AFTER

Item No.	Part No.	Description	No. Req'd.
1	24C-888	BOLT, Valve Lever	1
2	569909	WASHER, Valve Lever	1
3	1522535	SEAL, Bearing	1
4	1503251	SLEEVE, Valve Lever	1
5	675227	BEARING, Valve Lever	1
6	1522535	SEAL, Bearing	1
7	669750	SPACER, Valve Lever	1
8	1509047	LEVER, Valve Control	1
9	565389	KNOB, Valve Lever	1
10	18D-08	NUT, Valve Lever	1
11	1F-414	COTTER, Clevis Pin	1
12	1526016	LINK, Lever to Valve	1
13	1F-414	COTTER, Clevis Pin	1
14	4F-06106	PIN, Clevis	1
15	4F-06106	PIN, Clevis	1

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

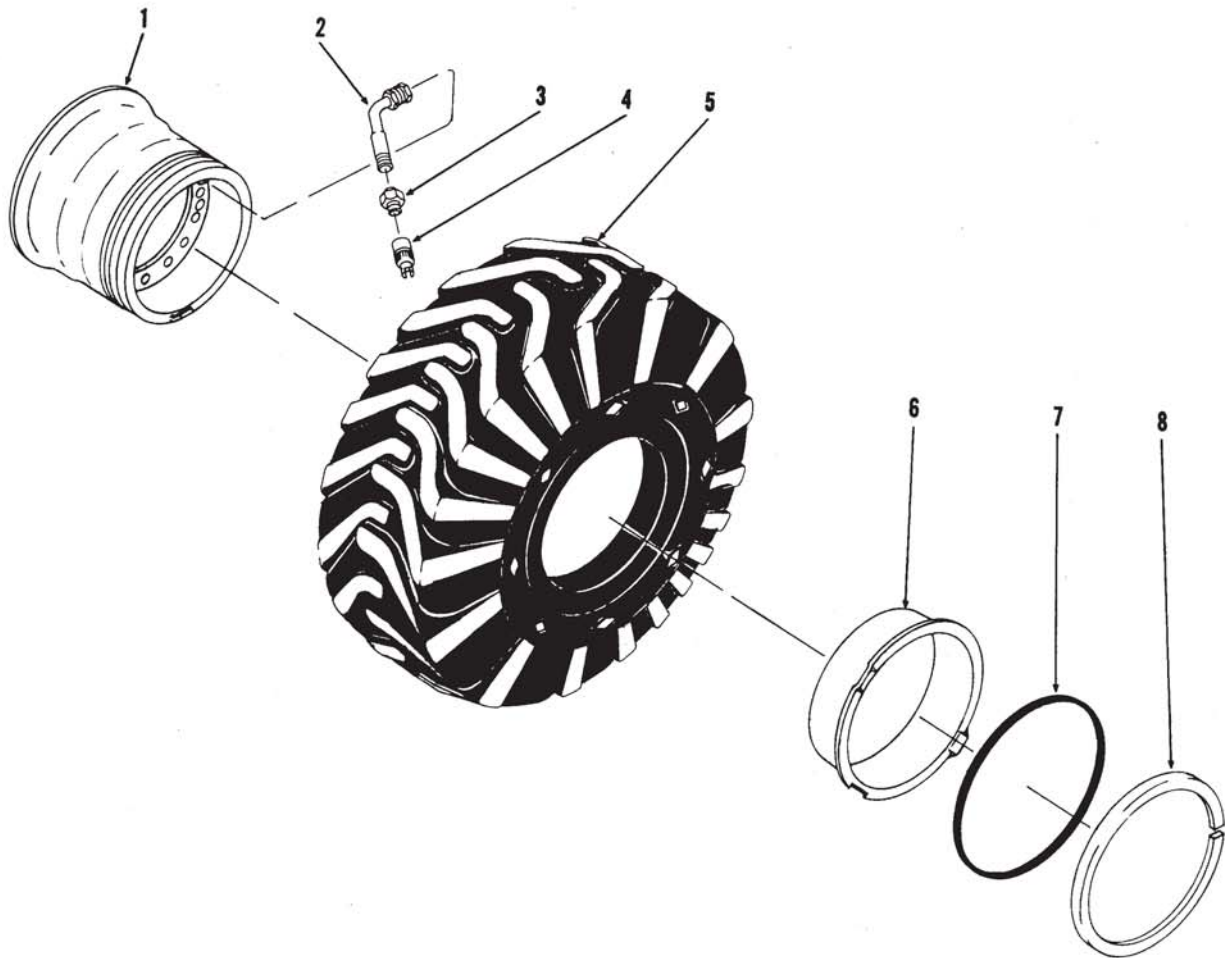


THREE SPOOL VALVE INSTALLATION & PARTS

Item No.	Part No.	Description	Req'd.
1	-----	VALVE ASSY, Control — See Index	—
2	1509125	CLIP, Valve Tube	1
2A	24C-620	BOLT, Valve Tube Attaching	1
2B	656672	WASHER, Valve Tube Attaching	1
2C	4E-06	LKWSHR, Valve Tube Attaching	1
3	1536587	HOSE, Pivot	2
4	590384	BLOCK, Cross Tube to Frame	1
4A	1536656	CLIP — L.H. Cross Tube to Frame	1
4B	1536657	CLIP — R.H. Cross Tube to Frame	1
4C	1504641	SPACER, Cross Tube to Frame	1
4D	24C-824	BOLT, Cross Tube to Frame	1
4E	4E-08	LKWSHR, Cross Tube to Frame	1
5	1536675	TUBE — L.H. Pivot Hose to Boom Hose	1
6	1504642	TUBE — L.H. Tube to Cross	1
7	1536673	TUBE — R.H. Tube to Boom Hose	1
8	533463	HOSE, Boom	2
9	1536658	BRACKET, Boom Tube to Cross Tube on Boom Assy	2
9A	24C-616	BOLT, Bracket Attaching	4
9B	656672	WASHER, Bracket Attaching	4
9C	4E-06	LKWSHR, Bracket Attaching	4
10	590384	BLOCK, Boom Tube	2
10A	1536657	CLIP, Boom Tube	2
10B	24C-816	BOLT, Boom Tube Attaching	2
10C	4E-08	LKWSHR, Boom Tube Attaching	2
11	1536679	TUBE — R.H. Boom	1
11A	1536677	TUBE — L.H. Boom	1
12	-----	VALVE ASSY — See Item 1	—
13	15K-10	CONNECTOR (Inc. 13A)	1
13A	91F-10	†O-RING	1
14	17K-10	ELBOW (Inc. 14A)	1
14A	91F-10	†O-RING	1
15	1536790	BLOCK, Cross Tube to Upper Pivot	2
15A	1536658	BRACKET, Cross Tube to Upper Pivot	2
15B	24C-616	BOLT, Cross Tube Attaching	4
15C	4E-06	LKWSHR, Cross Tube Attaching	4
15D	656672	WASHER, Cross Tube Attaching	4
16	19J-12	FLANGE HALF	2
16A	58K-214	O-RING, Flange Half	1
16B	23C-620	BOLT, Flange Half Attaching	4
16C	4E-06	LKWSHR, Flange Half Attaching	4
17	1504639	BLOCK, Boom Tube to Cross Tube on Boom	2
18	590384	BLOCK, Boom Tube	2
18A	1536657	CLIP, Boom Tube	2
18B	24C-816	BOLT, Boom Tube Attaching	2
18C	4E-08	LKWSHR, Boom Tube Attaching	2
19	-----	HOSE — See Item 8	—
20	36F-5	ADAPTER UNION	2
21	-----	HOSE — See Item 3	—
22	1536598	TUBE — Valve to Pivot Hose	1
23	1536660	TUBE — Valve to Pivot Hose	1
24	-----	VALVE ASSY — See Item 1	—
25	-----	VALVE CONTROLS — See Index	—

†Not Illustrated

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



TS-6663-P

WHEEL AND TIRE DATA
For Serial: Cummins — 408A101 thru 999
G.M. — 409A101 thru 999

Item No.	14.0 x 24	16.0 x 24	17.5 x 25	20.5 x 25	Description	No. Req'd.
1	532253	532253	545957	1520271	WHEEL	4
2	517963	517963	509445	509445	STEM, Valve (Inc. 3, 4)	4
3	551684	551684	551684	551684	ADAPTER, Valve Stem	4
4	551685	551685	551685	551685	CAP, Valve	4
5	-----	-----	-----	-----	TIRE	4
6	941326	941326	112461	424964	FLANGE (See Note "A")	4
7	941329	941329	112462	580278	"O" RING	4
8	941325	941325	112460	580274	LOCK RING	4
9	-----	-----	573366	553956	†BAND, Bead Seat (See Note "B") ..	4

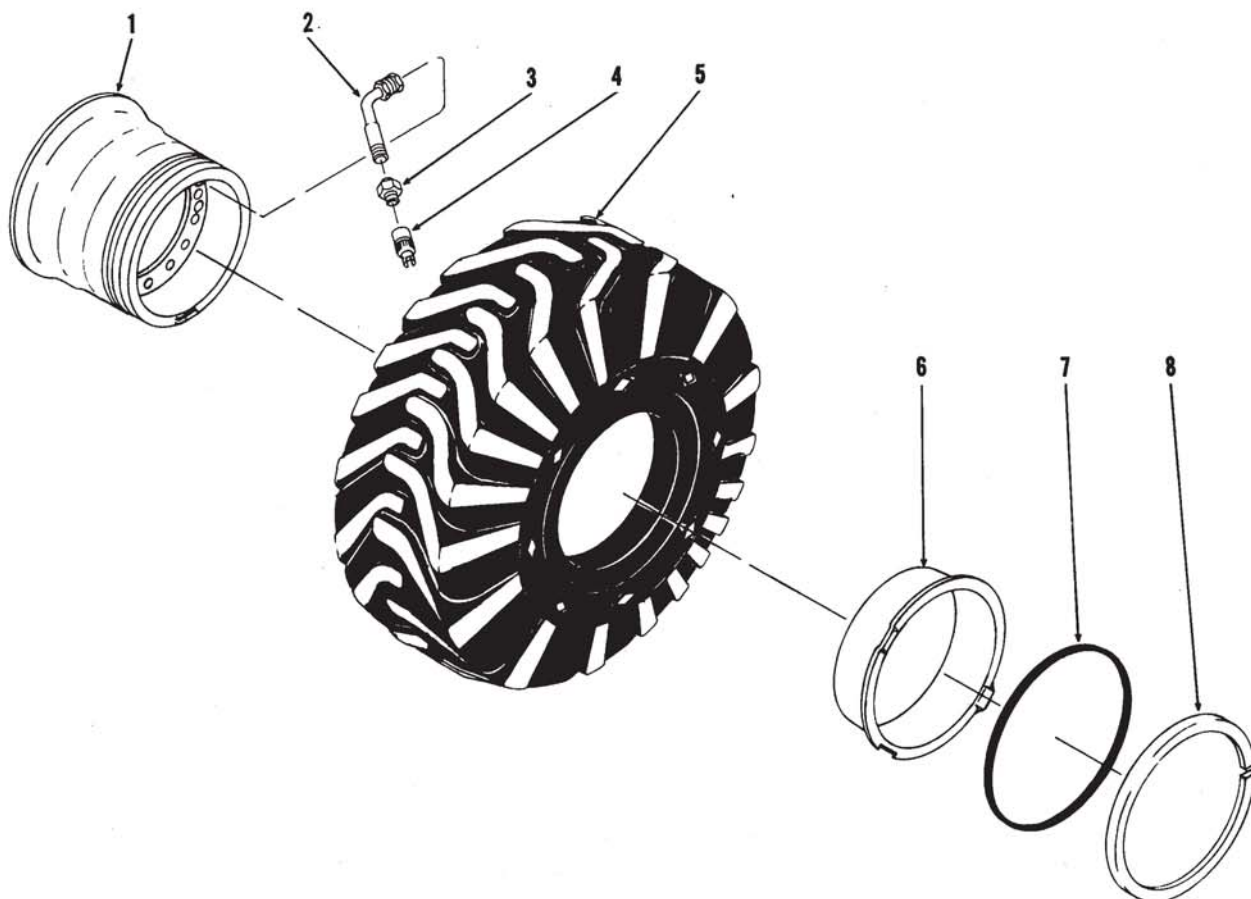
§Not Sold Separately

†Not Illustrated

NOTE "A": Two (2) 424964 Flanges used per wheel on 20.5 x 25 Tire

NOTE "B": Two (2) 573366 Bead Seat Bands used per wheel with 17.5 x 25 Michelin tire only.

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



TS-6663

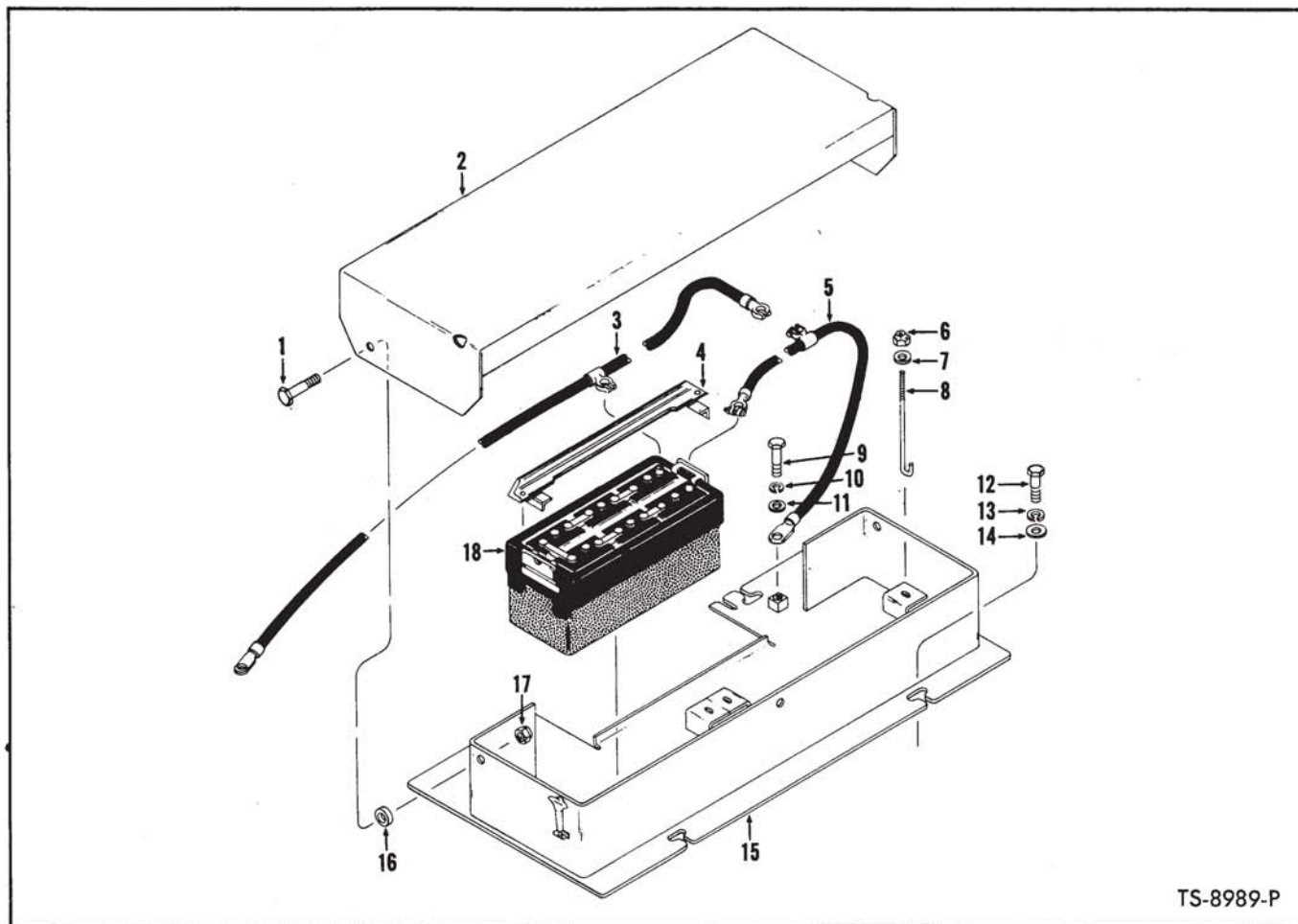
WHEEL AND TIRE DATA
 For Serial: Cummins — 408B101 and after
 G.M. — 409B101 and after

Item No.	14.0 x 24	16.0 x 24	17.5 x 25	20.5 x 25	Description	No. Req'd.
1	*1540622	*1540622	1508626	1509337	WHEEL	4
2	517963	517963	509445	509445	STEM, Valve (Inc. 3, 4)	4
3	551684	551684	551684	551684	ADAPTER, Valve Stem	4
4	551685	551685	551685	551685	CAP, Valve	4
5	—	—	—	—	TIRE	4
6	941326	941326	112461	424964	FLANGE (See Note "A")	4
7	941329	941329	112462	580278	O-RING	4
8	941325	941325	112460	580274	LOCK RING	4
9	—	—	573366	553956	BAND, Bead Seat (See Note "B")	4

NOTE "A": Two (2) 424964 Flanges used per wheel on 20.5 x 25 Tire.

 NOTE "B": Two (2) 573366 Bead Seat Bands used per wheel with 17.5 x 25 Michelin tire only.
 ‡Not Sold Separately *For replacement use 1540366 Wheel.

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

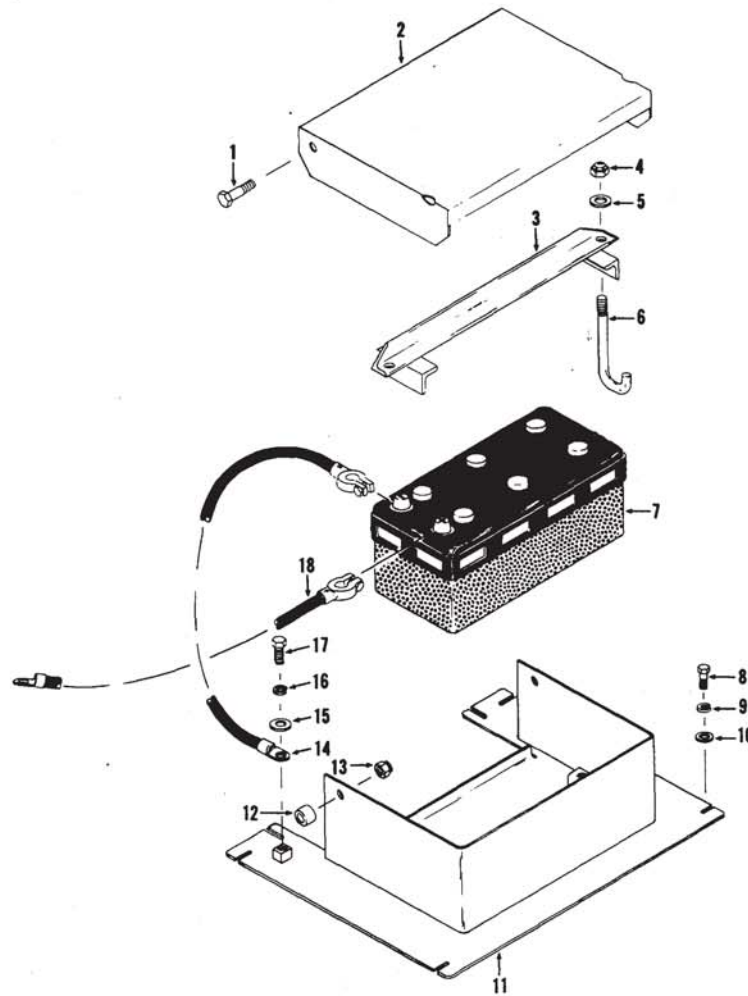


TS-8989-P

BATTERIES, BATTERY BOX AND HOLDDOWN — CUMMINS

Item No.	Part No.	Description	No. Req'd.
1	24C-620	BOLT, Cover Mounting	2
2	1506131	COVER, Battery Box	1
3	1506285	CABLE, Battery to Starter	1
4	566629	HOLD DOWN, Battery	2
5	1506284	CABLE, Battery to Ground	1
6	17D-2	NUT, Hold Down Bolt	4
7	25E-15	WASHER, Hold Down Bolt	4
8	585592	BOLT, Battery Hold Down	4
9	24C-616	BOLT, Ground Cable	1
10	4E-06	LKWSHR, Ground Cable	1
11	619021	WASHER, Ground Cable	1
12	24C-620	BOLT, Battery Box Mounting	4
13	4E-06	LKWSHR, Battery Box Mounting	4
14	619021	WASHER, Battery Box Mounting	4
15	1506134	BATTERY BOX	1
16	552914	SPACER, Cover	2
17	18D-06	NUT, Cover	2
18	1310121	BATTERY	2

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



TS-9163-P

BATTERY, BATTERY BOX AND HOLD DOWN —G.M.

Item No.	Part No.	Description	No. Req'd.
1	24C-616	BOLT, Cover Mounting	2
2	1505855	COVER, Battery Box	1
3	566629	HOLD DOWN, Battery	1
4	17D-2	NUT, Hold Down Bolt	2
5	25E-15	WASHER, Hold Down Bolt	2
6	585592	BOLT, Battery Hold Down	2
7	1671369	BATTERY	1
8	24C-620	BOLT, Battery Box Mounting	4
9	4E-06	LKWSHR, Battery Box Mounting	4
10	619021	WASHER, Battery Box Mounting	4
11	1505857	BATTERY BOX	1
12	552914	SPACER, Cover	2
13	18D-06	NUT, Cover	2
14	1506852	CABLE, Battery to Ground	1
15	25E-17	WASHER, Ground Cable	1
16	4E-06	LKWSHR, Ground Cable	1
17	24C-616	BOLT, Ground Cable	1
18	1506852	CABLE, Battery to Starter	1

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

WIRING

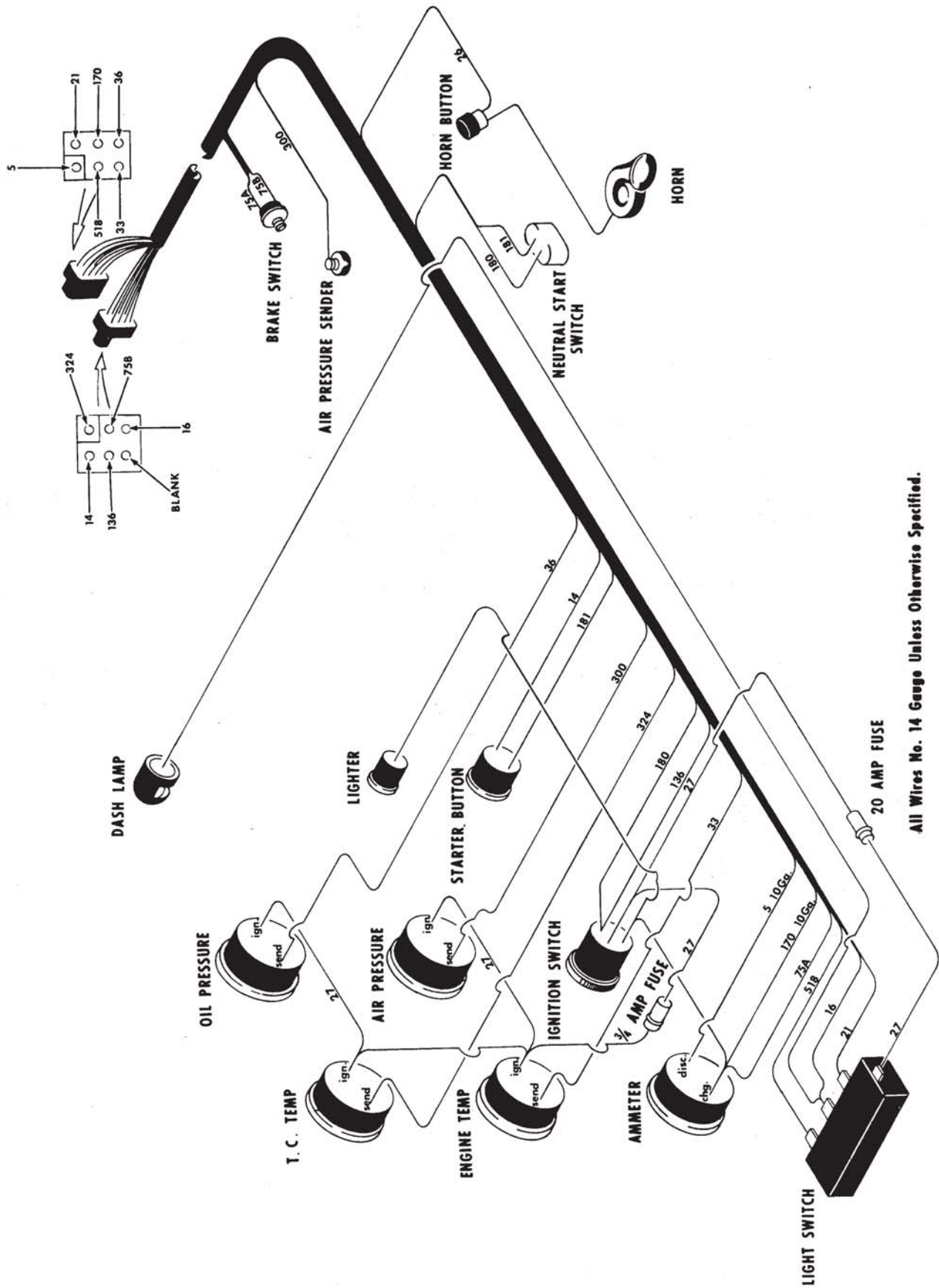
Item No.	Part No.	Description	No. Req'd.
1	1522394	HARNESS, Engine Wiring — Cummins	1
1A	1502934	HARNESS, Engine Wiring — G.M.	1
2	1522307	HARNESS, Cockpit	1
3	1535404	HARNESS, Flood Lights — Front	1
4	562010	HARNESS, Flood Lights — Rear	1
5	562008	HARNESS, Tail Light	1
6	558960	WIRE, Hourmeter Ground	1

BATTERY CABLES

Item No.	Part No.	Description	No. Req'd.
1	1506284	CABLE, Battery to Ground — Cummins	1
1A	1506857	CABLE, Battery to Ground — G.M.	1
2	532549	CABLE, Starter to Ground	1
3	1506285	CABLE, Battery to Starter — Cummins	1
4	1506852	CABLE, Battery to Starter — G.M.	1

NOTES

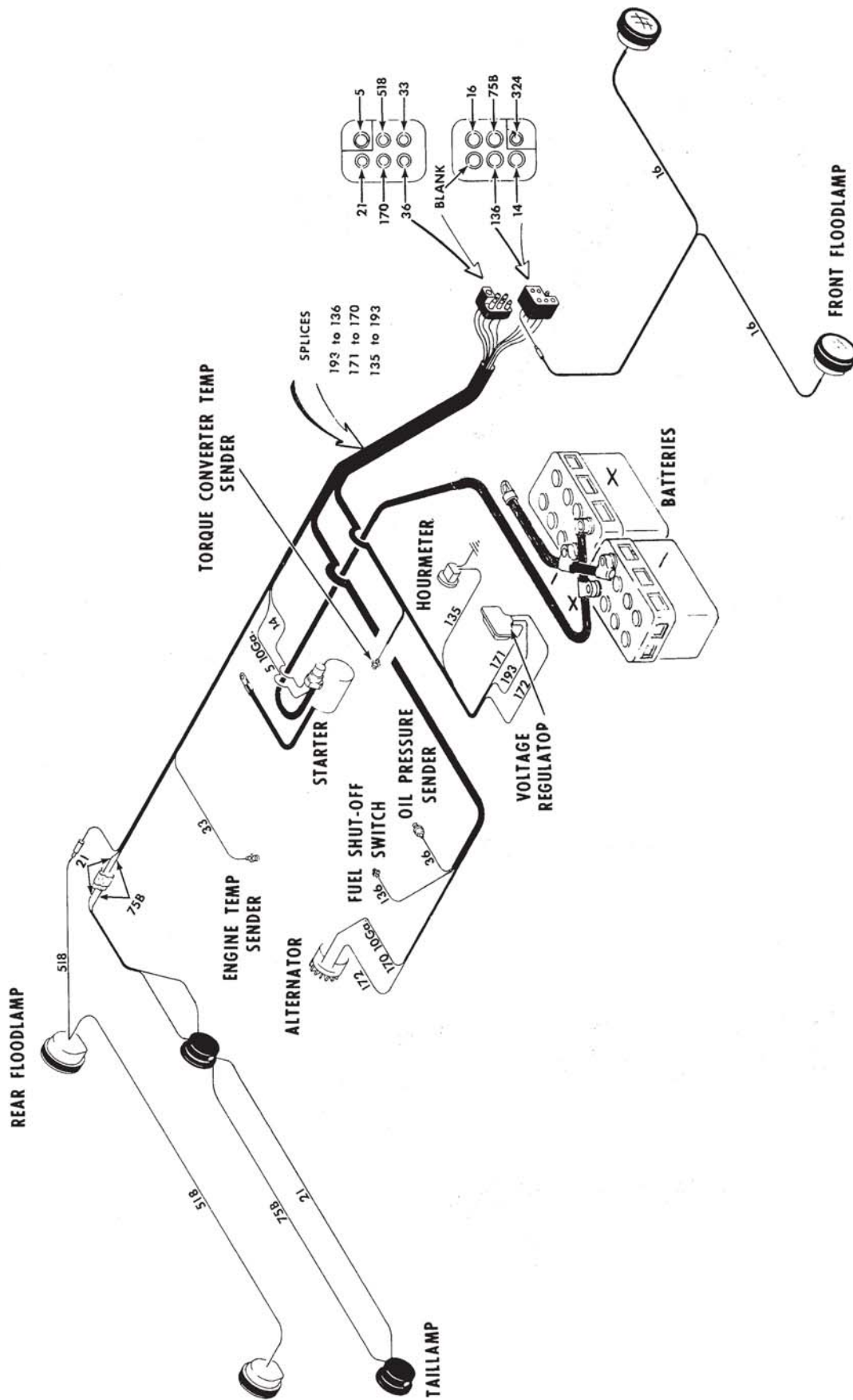
WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE



All Wires No. 14 Gauge Unless Otherwise Specified.

WIRING DIAGRAM — COCKPIT

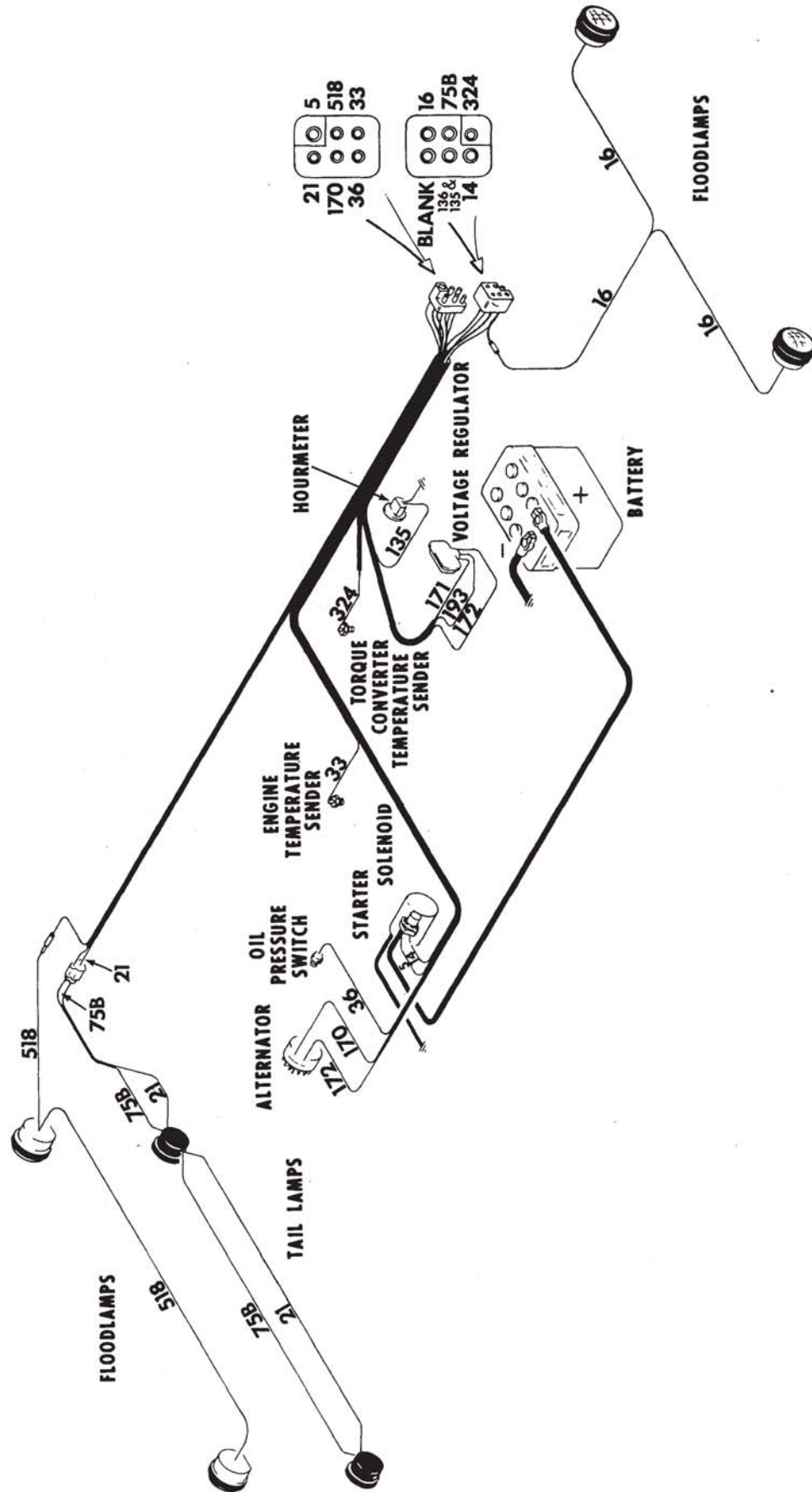
TS-8981-P



All Wires No. 14 Gauge Unless Otherwise Specified.

WIRING DIAGRAM — ENGINE — CUMMINS

TS-8799-P



WIRING DIAGRAM — ENGINE — G.M.

TS-9118-P

