

MICHIGAN

PARTS MANUAL

No. 2952

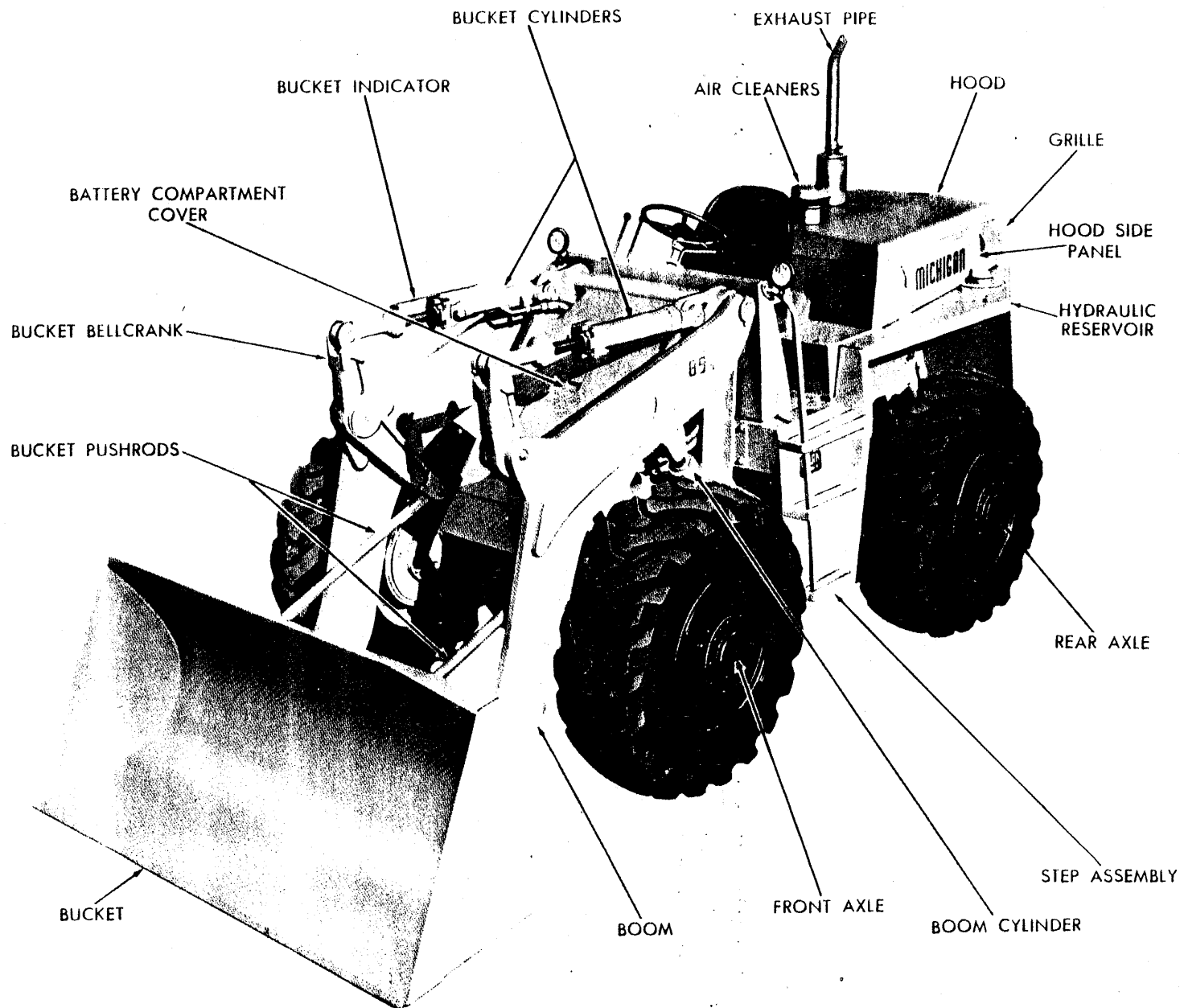
MODEL 85-III TRACTOR SHOVEL

Information contained herein pertains to Machine Serial
Numbers listed below:

85-III CUMMINS — 5DC101 & After
85-III G.M. — 6DG101 & After

Record Your Machine
Serial Number Here

CLARK EQUIPMENT COMPANY



MODEL 85 III TRACTOR SHOVEL

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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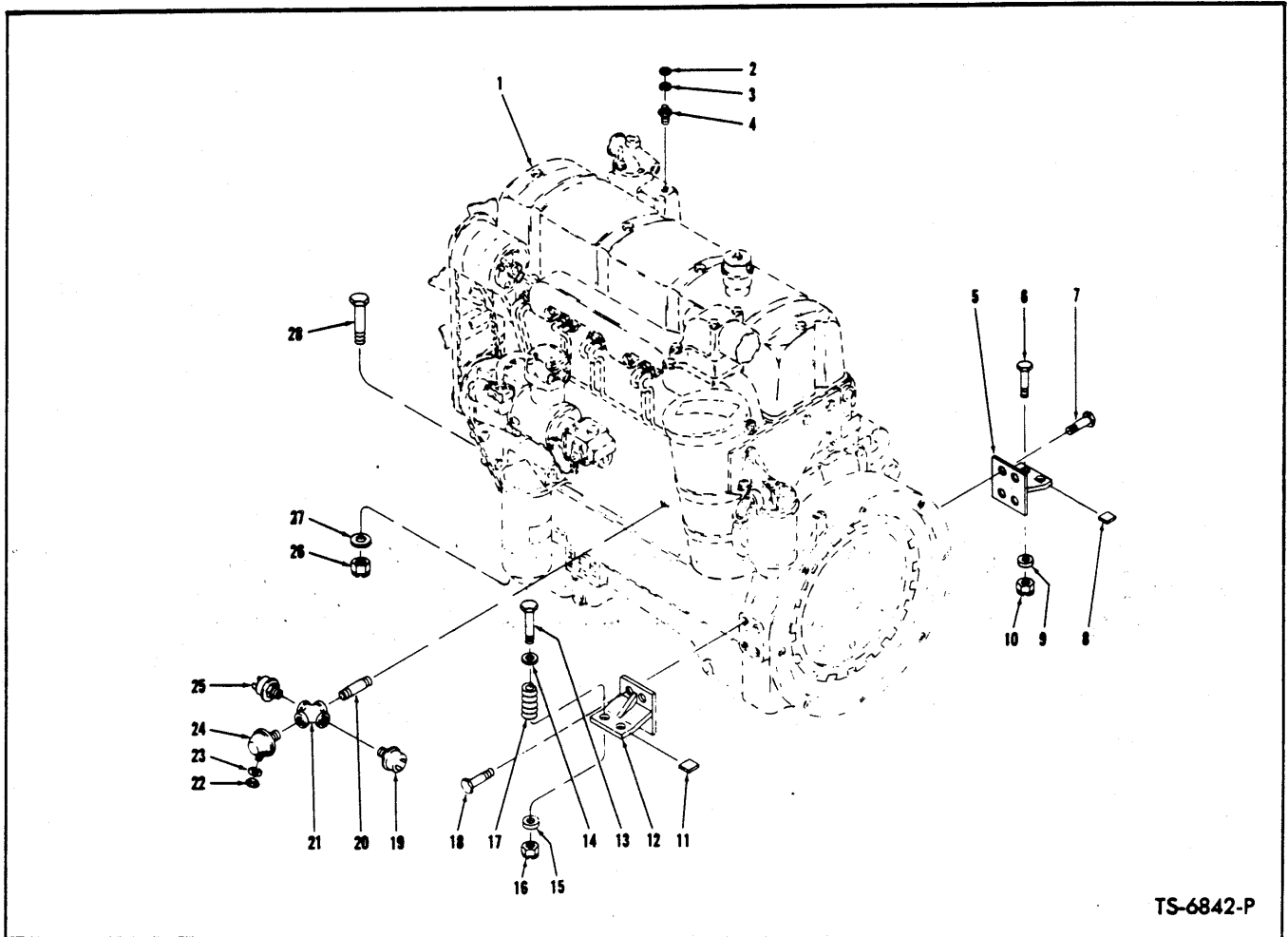
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ENGINE AND ACCESSORIES – CUMMINS

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



TS-6842-P

ENGINE ACCESSORIES AND SUPPORT PARTS – CUMMINS

For Serial: 5DC101 thru 5DC999

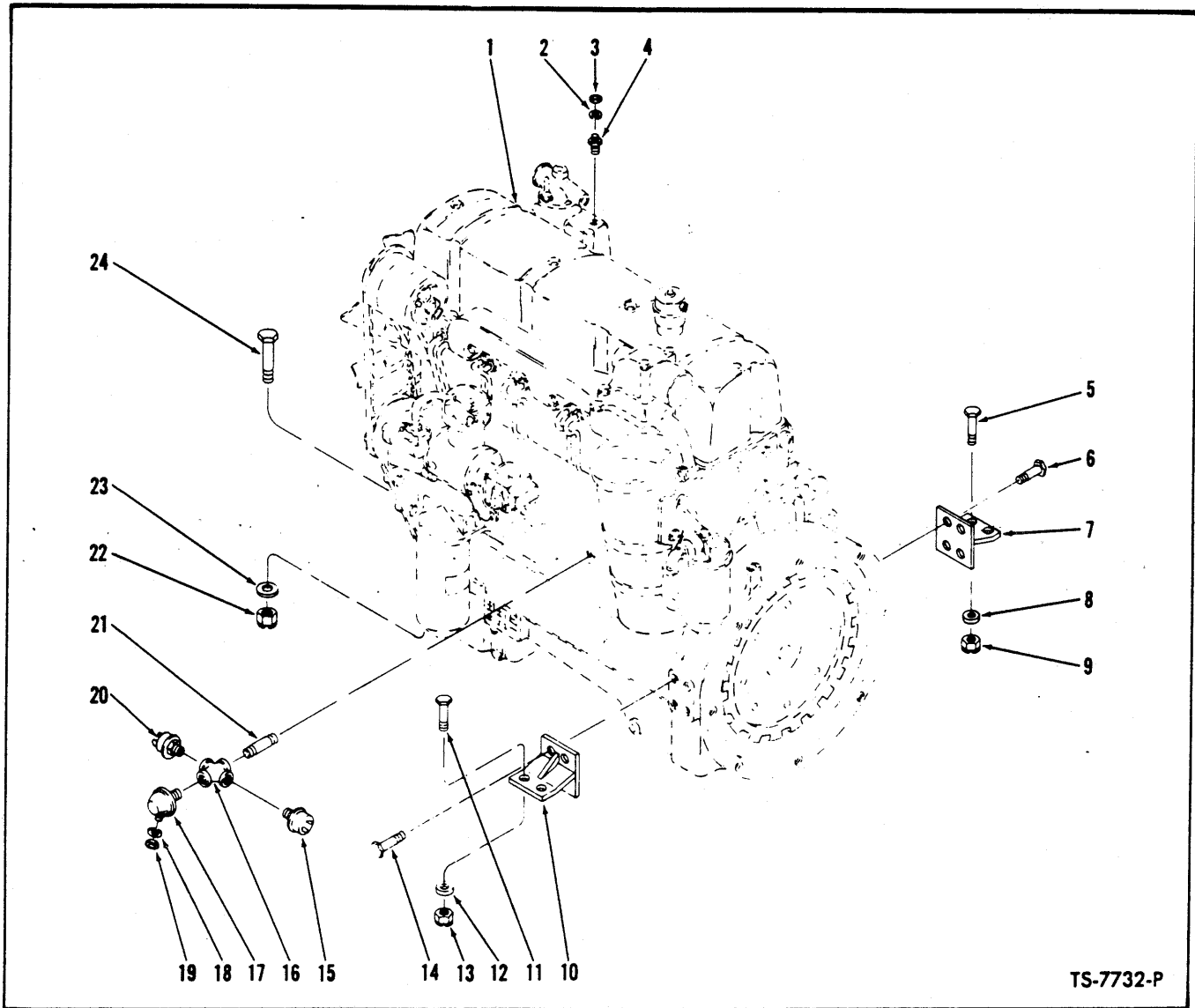
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	ENGINE – See Cummins Engine Parts Manual	—	14	616792	*WASHER, Support to Frame Bolt—R.H.	2
2	14D-10	NUT, Sender Unit	1	15	71D-08	BASE, Support to Frame Bolt	2
3	12E-10	LKWSHR, Sender Unit	1	16	70D-08	NUT, Support to Frame Bolt	2
4	551323	SENDER UNIT, Engine Temperature ..	1	17	570935	*SPRING, Engine Mounting—R.H. Only ..	2
5	571151	SUPPORT, Engine	1	18	8C-824	BOLT, Support to Engine	4
6	18C-836	BOLT, Support to Frame – L.H.	2	19	636260	SWITCH, Hourmeter Pressure	1
7	8C-824	BOLT, Support to Engine	4	20	5K-106	NIPPLE, Cross to Engine	1
8	518624	*BLOCK, Support Mounting – Welded to Frame Only	2	21	21F-1	CROSS, Connecting	1
9	71D-08	BASE, Support to Frame Bolt	2	22	14D-10	NUT, Sender Unit	1
10	70D-08	NUT, Support to Frame Bolt	2	23	12E-10	LKWSHR, Sender Unit	1
11	518624	*BLOCK, Support Mounting – Welded to Frame Only	2	24	940643	*SENDER UNIT, Engine Oil Pressure ..	1
12	571151	SUPPORT, Engine	1	25	636260	SWITCH, Voltage Regulator Pressure ..	1
13	18C-864	*BOLT, Support to Frame – R.H.	2	26	68D-10	NUT, Engine Trunnion to Frame Bolt ..	2
				27	25E-25	WASHER, Engine Trunnion to Frame Bolt	2
				28	18C-1052	BOLT, Engine Trunnion to Frame	2

*NOTE: Items 8, 11, 13, 14 and 17 were installed on Machine Serial 5DC101 thru 5DC114 only. For Machine Serial 5DC115 and thereafter item 13 should be 18C-836 the same as item 6. **NOTE: For replacement refer to Service Gran S.G.-326B.

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

ENGINE AND ACCESSORIES — CUMMINS

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



TS-7732-P

ENGINE ACCESSORIES AND SUPPORT PARTS — CUMMINS
For Serial: 6DC101 and after

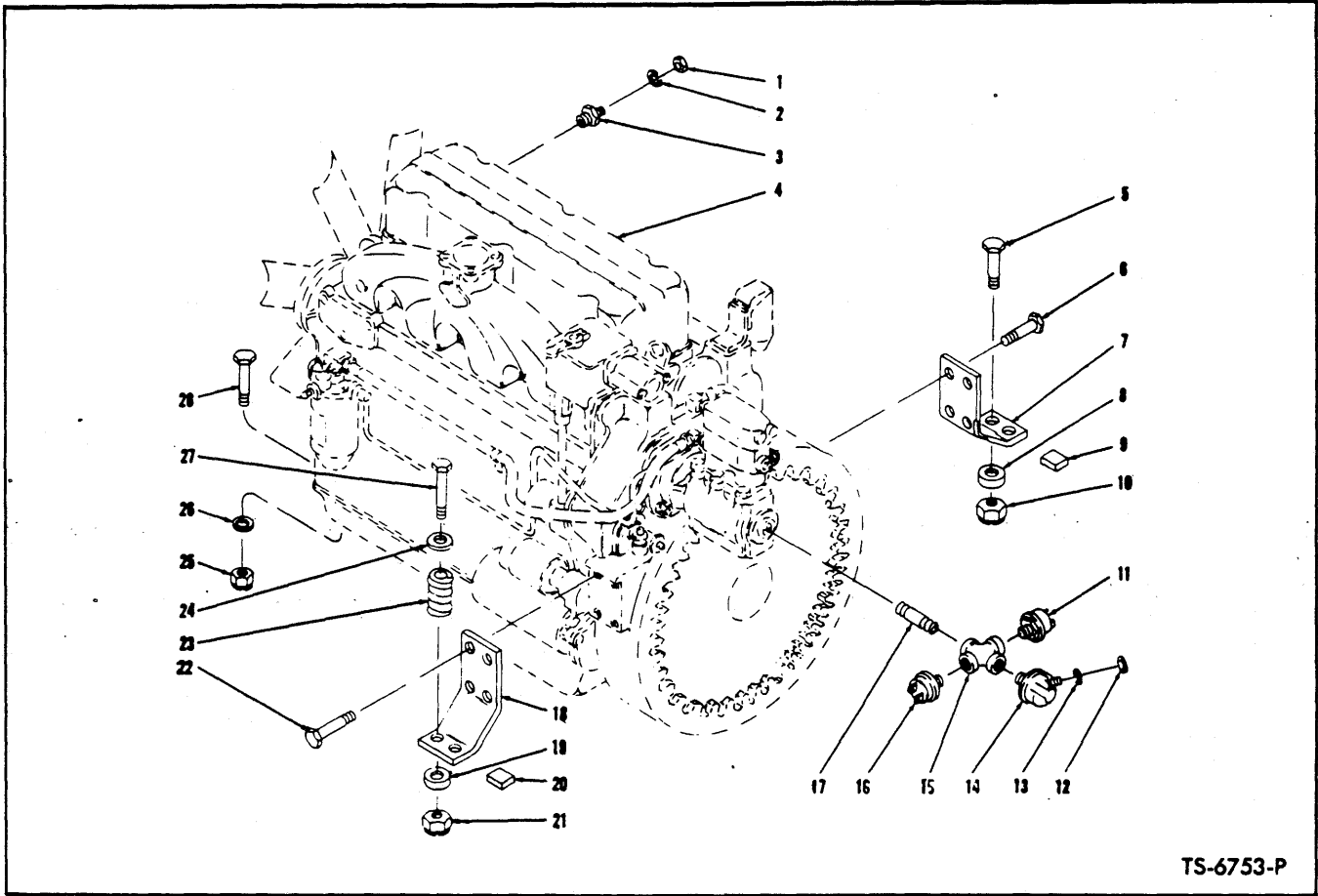
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	ENGINE — See Cummins Engine Parts Manual	—	13	70D-08	NUT, Support to Frame	2
2	12E-10	LKWSHR, Sender Unit	1	14	8C-824	BOLT, Support to Engine	4
3	14D-10	NUT, Sender Unit	1	15	636260	SWITCH, Hourmeter Pressure	1
4	551323	SENDER UNIT, Engine Temperature ..	1	16	21F-1	CROSS, Switch and Sender Unit to Engine	1
5	18C-836	BOLT, Support to Frame	2	17	550832	*SENDER UNIT, Engine Oil Pressure ...	1
6	8C-824	BOLT, Support to Engine	4	18	12E-10	LKWSHR, Sender Unit	1
7	571153	SUPPORT, Engine	1	19	14D-10	NUT, Sender Unit	1
8	71D-08	BASE, Support to Frame	2	20	636260	SWITCH, Voltage Regulator Pressure ..	1
9	70D-08	NUT, Support to Frame	2	21	5K-106	NIPPLE, Cross to Engine	1
10	571153	SUPPORT, Engine	1	22	68D-10	NUT, Engine to Frame	2
11	18C-836	BOLT, Support to Frame	2	23	25E-25	WASHER, Engine to Frame	2
12	71D-08	BASE, Support to Frame	2	24	18C-1052	BOLT, Engine to Frame	2

*NOTE: For replacement refer to Service Gram S.G.-326B.

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.



TS-6753-P

ENGINE ACCESSORIES AND SUPPORT PARTS — G.M.

For Serial: 6DG101 thru 6DG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	14D-10	NUT, Sender Unit	1	17	5K-106	NIPPLE, Cross to Engine	1
2	12E-10	LKWSHR, Sender Unit	1	18	570938	SUPPORT, Engine	1
3	551323	SENDER UNIT, Engine Temperature ..	1	19	71D-08	BASE, Support Mounting	2
4	-----	ENGINE — See G.M. Engine Parts Manual	—	20	518624	*BLOCK, Support Mounting — Welded to Frame Only	2
5	18C-836	BOLT, Support to Frame — L.H.	2	21	70D-08	NUT, Support to Frame	2
6	8C-824	BOLT, Support to Engine	4	22	8C-824	BOLT, Support to Engine	4
7	570938	SUPPORT, Engine	1	23	570935	*SPRING, Engine Mounting—R.H. Only	2
8	71D-08	BASE, Support Mounting	2	24	616792	*WASHER, Engine Mounting — R.H. Only	2
9	518624	*BLOCK, Support Mounting — Welded to Frame Only	2	25	18D-08	NUT, Engine Trunnion to Frame	2
10	70D-08	NUT, Support to Frame	2	26	619029	WASHER, Engine Trunnion to Frame	2
11	636260	SWITCH, Hourmeter Pressure	1	27	18C-864	*BOLT, Support to Frame — R.H.	2
12	14D-10	NUT, Sender Unit	1	27A	18C-836	**BOLT, Support to Frame — R.H.	2
13	12E-10	LKWSHR, Sender Unit	1	28	18C-832	BOLT, Engine Trunnion to Frame	2
14	940643 ***	SENDER UNIT, Engine Oil Pressure	1	29	1621888	†VOLTAGE REGULATOR	1
15	21F-1	CROSS, Connecting	1	30	18C-424	†BOLT, Regulator to Air Cleaner Bracket	3
16	636260	SWITCH, Voltage Regulator Pressure ..	1	31	18D-04	†NUT, Regulator to Air Cleaner Bracket	3

*NOTE: For Serial: 6DG101 thru 6DG166

**NOTE: For Serial: 6DG167 and after

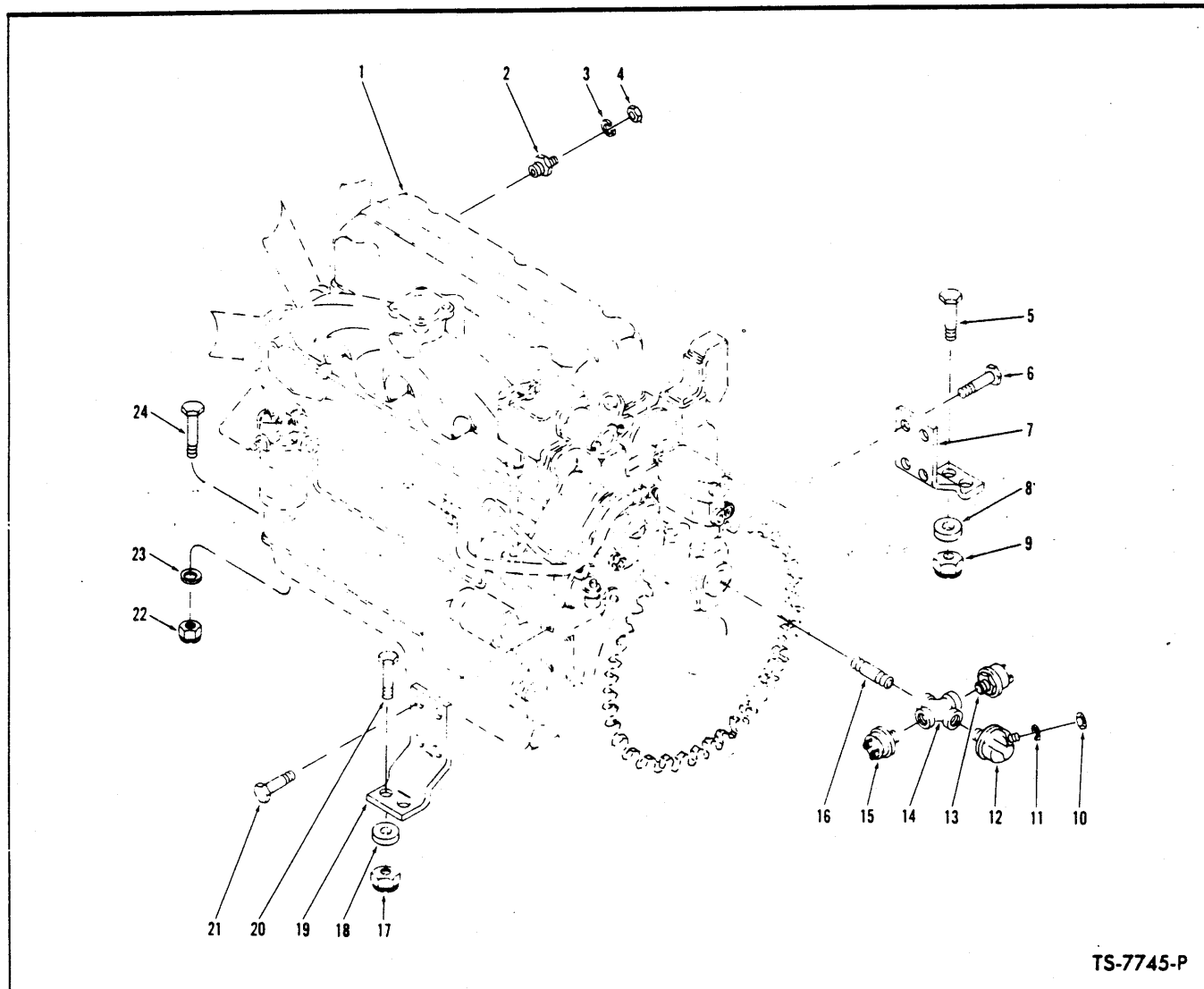
†Not Illustrated

***NOTE: For replacement refer to Service-Gram S.G.-326B.

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.



TS-7745-P

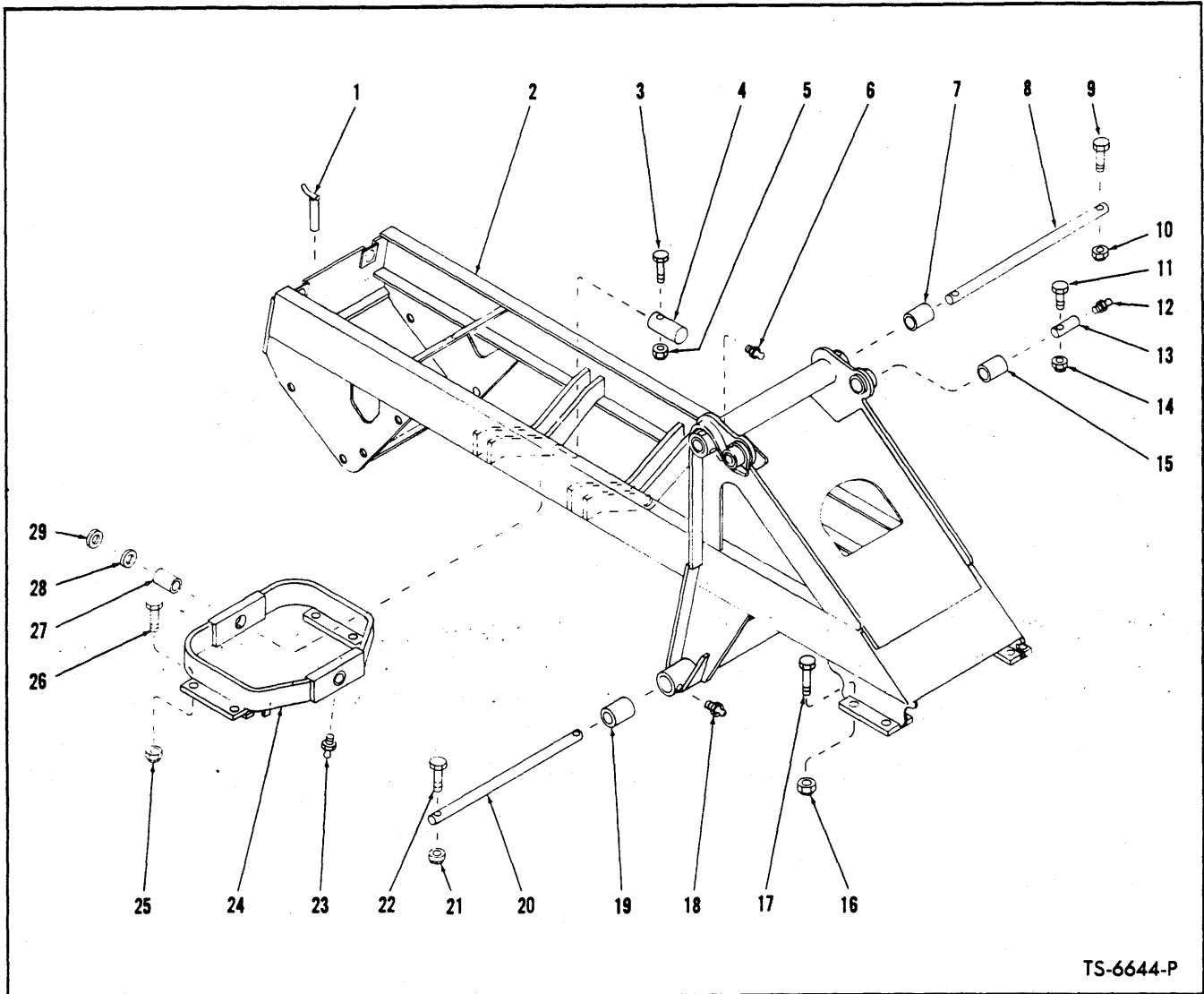
ENGINE ACCESSORIES AND SUPPORT PARTS — G.M.

For Serial: 7DG101 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	----	ENGINE — See G.M. Engine Parts Manual	—	13	636260	SWITCH, Hourmeter Pressure	1
2	551323	SENDER UNIT, Engine Temperature	1	14	21F-1	CROSS, Pressure Switch and Sender Unit Connecting	1
3	12E-10	LKWSHR, Sender Unit	1	15	636260	SWITCH, Voltage Regulator Pressure	1
4	14D-10	NUT, Sender Unit	1	16	5K-106	NIPPLE, Cross to Engine	1
5	18C-836	BOLT, Support to Frame	2	17	70D-08	NUT, Support to Frame	2
6	8C-824	BOLT, Support to Engine	4	18	71D-08	BASE, Support to Frame	2
7	570938	SUPPORT, Engine	1	19	570938	SUPPORT, Engine	1
8	71D-08	BASE, Support to Frame	2	20	18C-836	BOLT, Support to Frame	2
9	70D-08	NUT, Support to Frame	2	21	8C-824	BOLT, Support to Engine	4
10	14D-10	NUT, Sender Unit	1	22	18D-08	NUT, Engine to Frame	2
11	12E-10	LKWSHR, Sender Unit	1	23	619029	WASHER, Engine to Frame	2
12	550832	*SENDER UNIT, Engine Oil Pressure	1	24	18C-832	BOLT, Engine to Frame	2

*NOTE: For replacement refer to Service Gram S.G.-326B.

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



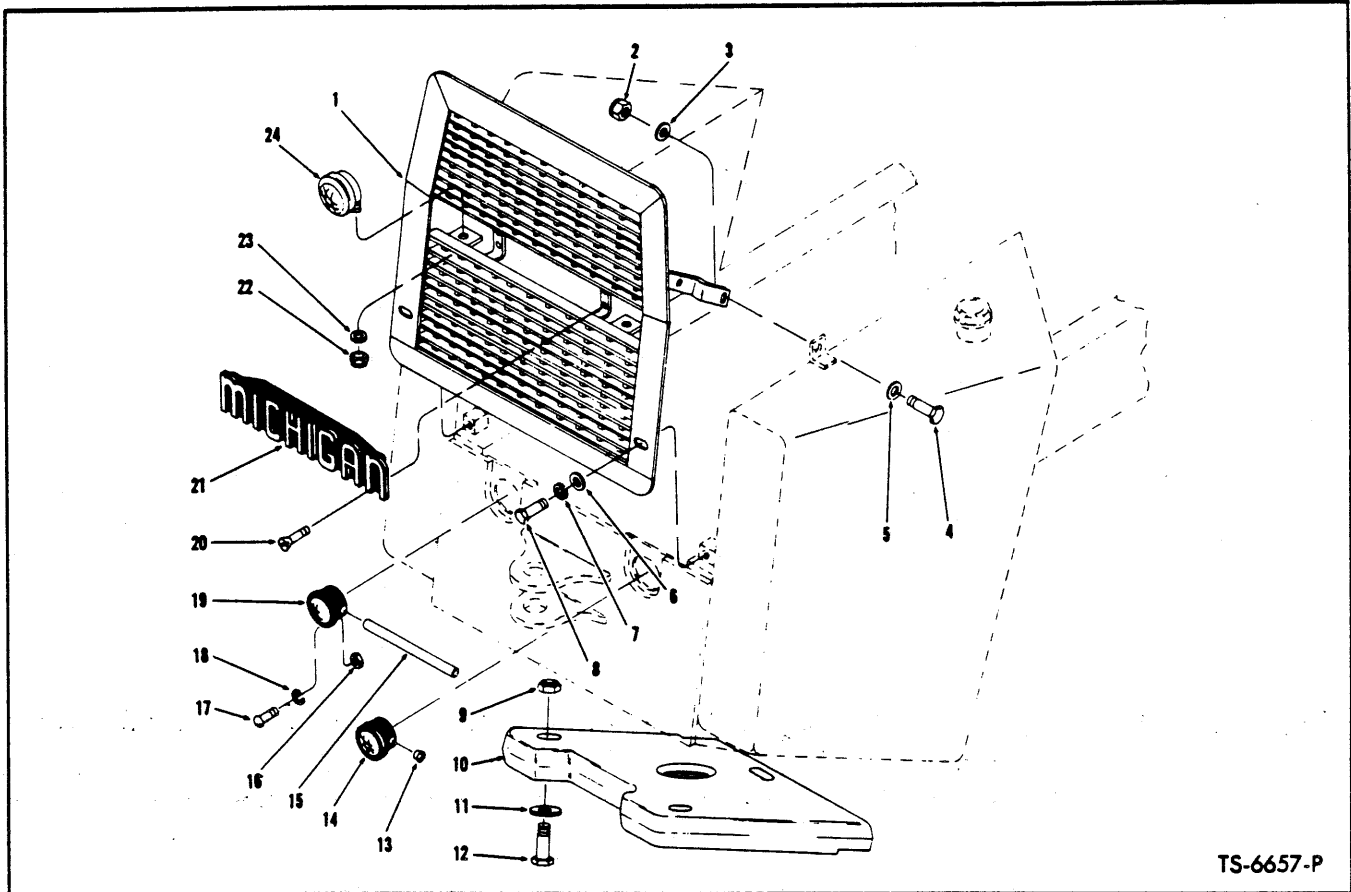
TS-6644-P

FRAME AND CRADLE ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1506818	PIN ASSY, Drawbar	1	16	68D-16	NUT, Front Axle to Frame	8
2	570864	FRAME ASSY (Inc. 7, 15, 19) G.M..	1	17	24C-16160	BOLT, Front Axle to Frame	8
2A	571404	FRAME ASSY (Inc. 7, 15, 19) Cummins	1	18	10H-25	FITTING, Lower Pivot Tube Grease	2
3	18C-856	BOLT, Pin Retaining	2	19	564129	BUSHING, Lower Pivot Tube	2
4	536100	PIN, Cradle Pivot	2	20	1530602	SHAFT, Cylinder Pivot	1
5	18D-08	NUT, Pin Retaining	2	21	18D-08	NUT, Pivot Shaft Retaining	2
6	10H-25	FITTING, Upper Pivot Tube Grease ...	2	22	18C-872	BOLT, Pivot Shaft Retaining	2
7	564126	BUSHING, Upper Pivot Tube	2	23	10H-25	FITTING, Cradle Pin Grease	2
8	571022	SHAFT, Boom Pivot—Upper	1	24	564140	CRADLE ASSY, Rear Axle (Inc. 27)	1
9	18C-880	BOLT, Pivot Shaft Retaining	2	25	68D-16	NUT, Rear Axle to Cradle	8
10	18D-08	NUT, Pivot Shaft Retaining	2	26	24C-16152	BOLT, Rear Axle to Cradle	8
11	18C-880	BOLT, Pivot Pin Retaining	2	27	538585	BUSHING, Cradle Pivot	2
12	10H-25	FITTING, Pivot Pin Grease	2	28	551348	‡SHIM, Cradle to Frame	—
13	556960	PIN, Bucket Cylinder Pivot	2	29	551347	‡SHIM, Cradle to Frame	—
14	18D-08	NUT, Pivot Pin Retaining	2				
15	585007	BUSHING, Upper Pivot	2				

‡As Required

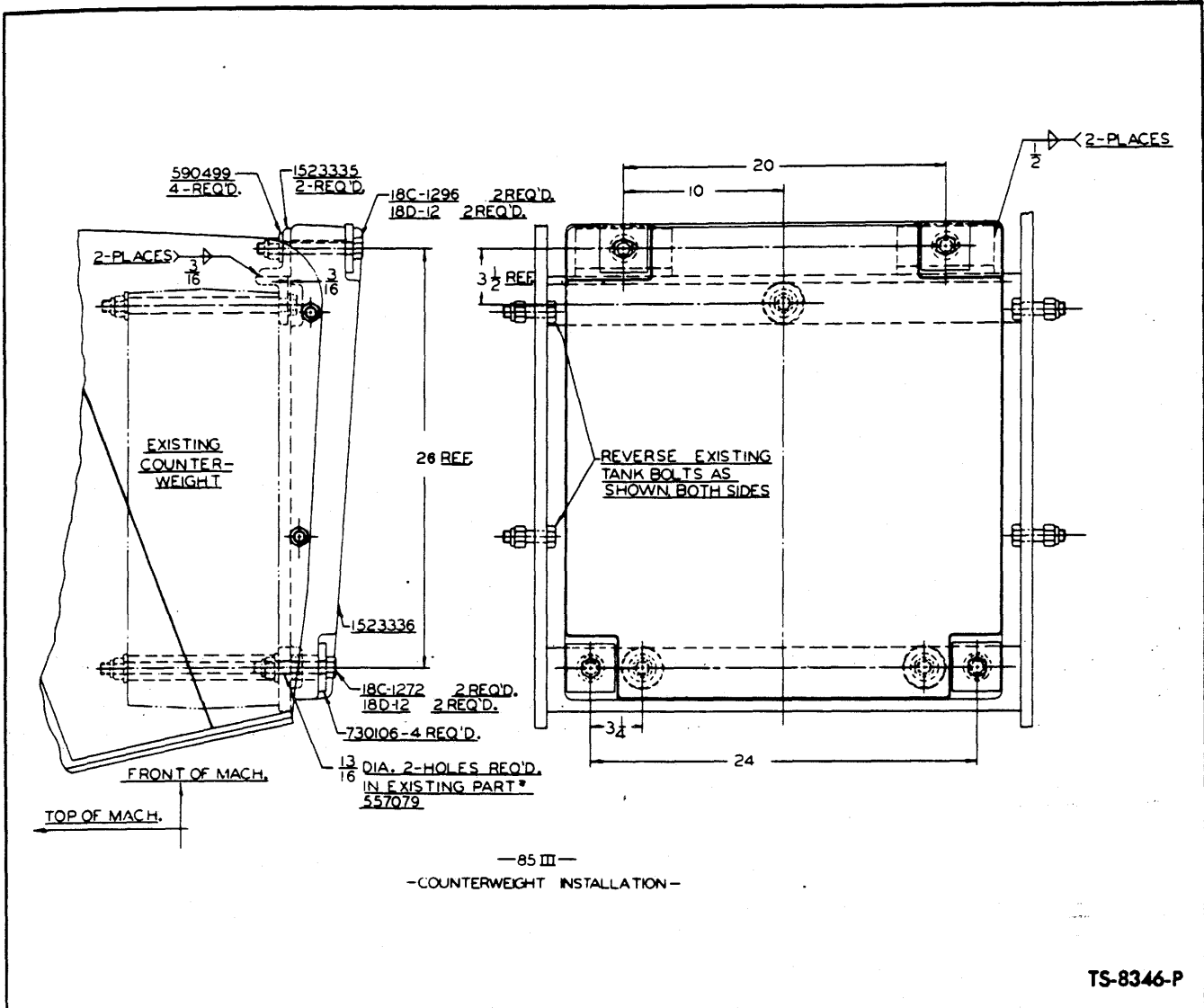
WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE



GRILLE AND COUNTERWEIGHT

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	563881	GRILLE ASSY, Rear	1	15	566849	CONDUIT, Tail & Stop Lamp Wire Protector	1
2	18D-08	NUT, Grille to Tank	2	16	14D-10	NUT, Lamp Mounting	6
3	619029	WASHER, Grille to Tank	2	17	2G-1012	SCREW, Lamp Mounting	6
4	18C-824	BOLT, Grille to Tank	2	18	17E-10	LKWSHR, Lamp Mounting	6
5	619029	WASHER, Grille to Tank	2	19	2520770	LAMP ASSY, Tail & Stop - L.H. (Inc. 19A)	1
6	619029	WASHER, Grille to Frame	2	19A	1010449	†LENS, Tail Lamp	1
7	4E-08	LKWSHR, Grille to Frame	2	19B	942746	†BULB, Tail & Stop Lamp	1
8	18C-816	BOLT, Grille to Frame	2	20	44G-418	SCREW, Name Plate to Grille	4
9	18D-12	NUT, Counterweight to Frame	3	21	564011	NAME PLATE, Michigan	1
10	556574	COUNTERWEIGHT	1	22	17D-6	NUT, Back-Up Lamp Mounting	2
11	590499	WASHER, Counterweight to Frame	3	23	584092	WASHER, Back-Up Lamp Mounting	2
12	24C-12192	BOLT, Counterweight to Frame	3	24	547529	LAMP ASSY, Back-Up (Inc. 25)	2
13	1010736	PLUG, Lamp - R.H. Only	1	25	944907	†SEALED UNIT, Head Lamp	2
14	2520770	LAMP ASSY, Tail & Stop - R.H. (Inc. 14A)	1	26	509320	†SPACER, Back-Up Lamp	2
14A	1010449	†LENS, Tail Lamp	1				
14B	942746	†BULB, Tail & Stop Lamp	1				

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

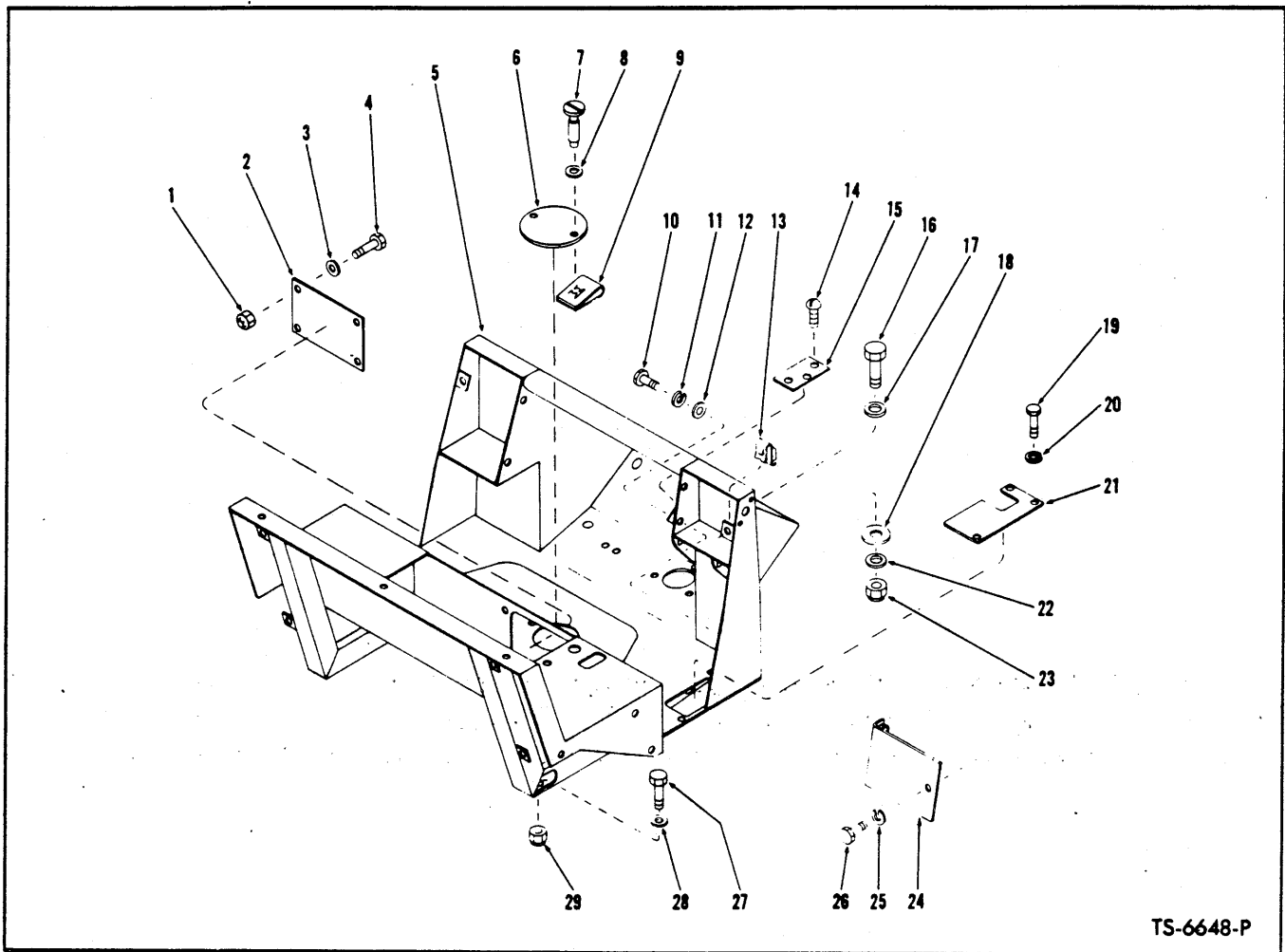


TS-8346-P

**COUNTERWEIGHT INSTALLATION
(OPTIONAL)**

Item No.	Part No.	Description	No. Req'd.
1	1523336	COUNTERWEIGHT	1
2	18C-1296	BOLT, Counterweight Attaching	2
3	18D-12	NUT, Counterweight Attaching	2
4	590499	WASHER, Counterweight Attaching	4
5	1523335	ANGLE, Counterweight Attaching	2
6	18C-1272	BOLT, Counterweight Attaching	2
7	730106	WASHER, Counterweight Attaching	4
8	18D-12	NUT, Counterweight Attaching	2

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



TS-6648-P

COCKPIT AND INSPECTION PLATES

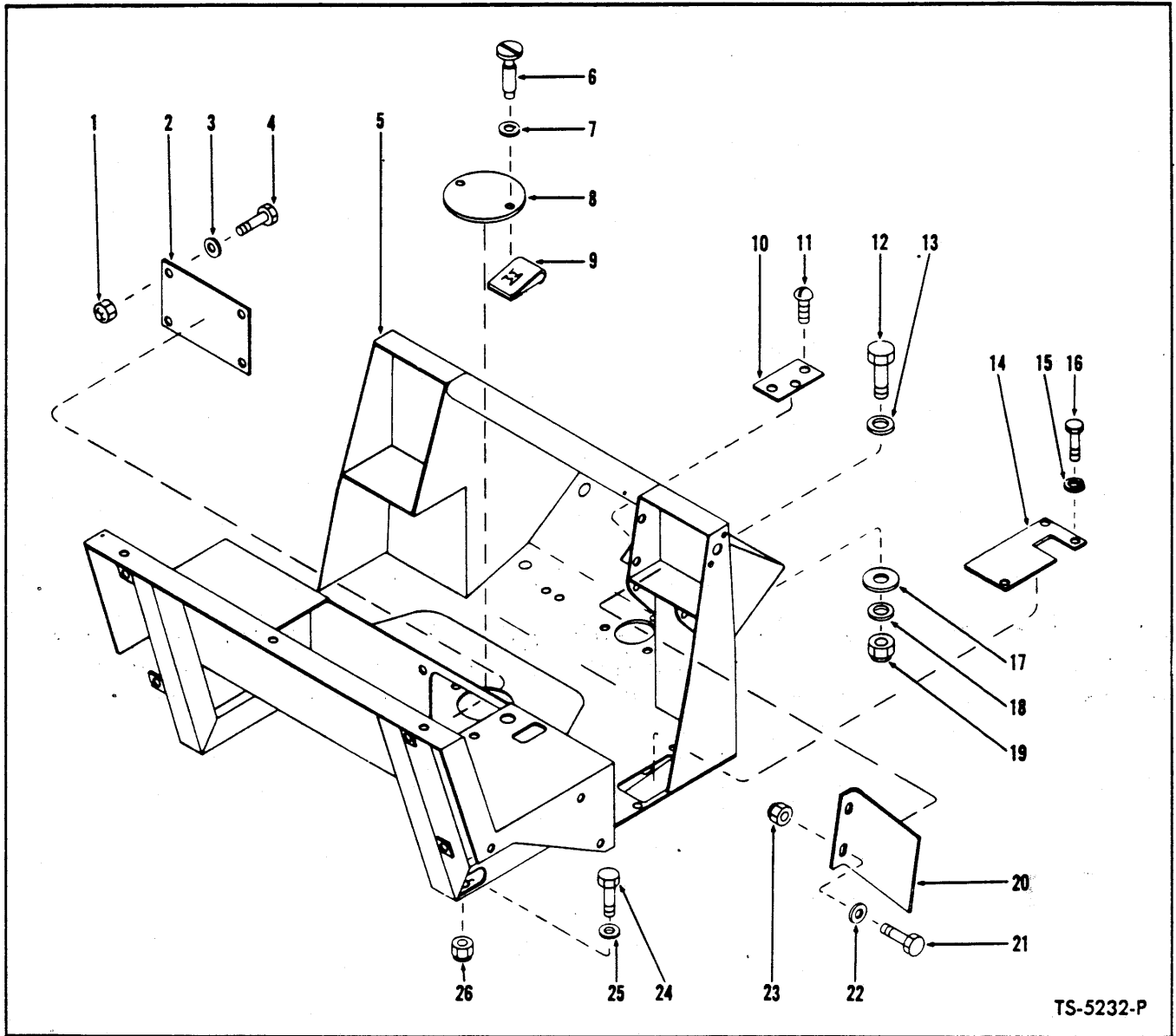
For Serial: Cummins — 5DC101 and after

G.M. — 6DG137 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18D-04	NUT, Cover Plate Mounting	4	16	18C-832	BOLT Cockpit Mounting	1
2	557057	PLATE, Heater Cover	1	17	619029	WASHER, Cockpit Mounting	1
3	25E-13	WASHER, Cover Plate Mounting	4	18	616798	‡SPACER, Cockpit Mounting	—
4	18C-412	BOLT, Cover Plate Mounting	4	19	17C-612	BOLT, Cover Plate Mounting	3
5	588021	COCKPIT	1	20	4E-06	LKWSHR, Cover Plate Mounting	3
6	568828	COVER, Transmission Check (Inc. 7, 8)	1	21	569912	PLATE, Valve Levers Mounting	1
7	568829	SCREW, Cover Mounting	2	22	619029	WASHER, Cockpit Mounting	1
8	1612583	WASHER, Cover Mounting	2	23	18D-08	NUT, Cockpit Mounting	1
9	568830	NUT, Cover Mounting	2	24	574026	PLATE, Panel — R.H.	1
10	17C-616	BOLT, Plate Mounting	2	25	4E-06	LKWSHR, Plate Mounting	1
11	4E-06	LKWSHR, Plate Mounting	2	26	17C-616	BOLT, Plate Mounting	1
12	565280	WASHER, Plate Mounting	2	27	18C-828	BOLT, Cockpit Mounting	4
13	572729	NUT, Plate Mounting	1	28	619029	WASHER, Cockpit Mounting	8
14	18G-806	SCREW, Cover Plate Mounting	3	29	18D-08	NUT, Cockpit Mounting	4
15	566649	PLATE, Steer Cover	1				

‡As Required

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



TS-5232-P

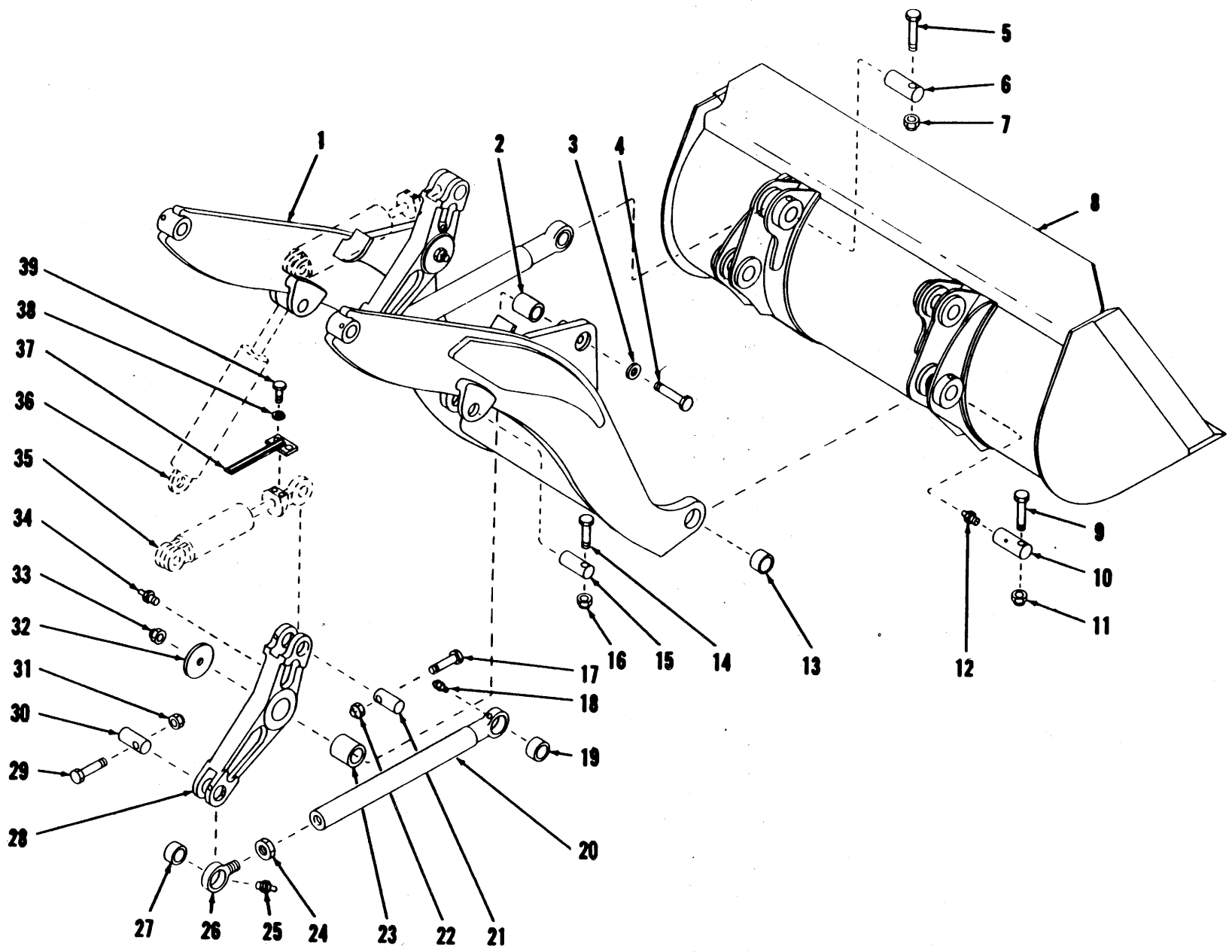
COCKPIT AND INSPECTION PLATES

For Serial - 6DG101 thru 6DG136

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18D-04	NUT, Cover Plate Mounting	4	14	569912	PLATE, Valve Levers Cover	1
2	557057	PLATE, Heater Cover	1	15	4E-06	LKWSHR, Cover Plate Mounting	3
3	25E-13	WASHER, Cover Plate Mounting	4	16	18C-612	BOLT, Cover Plate Mounting	3
4	18C-412	BOLT, Cover Plate Mounting	4	17	616798	‡SPACER, Cockpit Mounting	—
5	588021	COCKPIT	1	18	619029	WASHER, Cockpit Mounting	1
6	568829	SCREW, Cover Mounting	2	19	18D-08	NUT, Cockpit Mounting	1
7	1612583	WASHER, Cover Mounting	2	20	589991	PLATE, Panel - R.H.	1
8	568828	COVER, Transmission Check (Inc. 6, 7)	1	21	18C-616	BOLT, Plate Mounting	2
9	568830	NUT, Cover Mounting	2	22	25E-18	WASHER, Plate Mounting	2
10	566649	PLATE, Steer Cover	1	23	18D-06	NUT, Plate Mounting	2
11	18G-806	SCREW, Cover Plate Mounting	3	24	18C-824	BOLT, Cockpit Mounting	4
12	18C-832	BOLT, Cockpit Mounting	1	25	619029	WASHER, Cockpit Mounting	8
13	619029	WASHER, Cockpit Mounting	1	26	18D-08	NUT, Cockpit Mounting	4

‡As Required

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



BUCKET, INDICATOR, BOOM, BELLCRANKS AND PUSHRODS

TS-6639-P

[10]

(1B23)

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PM 2952

BUCKET, INDICATOR, BOOM, BELLCRANKS AND PUSHRODS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	587832	*BOOM ASSY (Inc. 2, 13)	1	22	18D-08	NUT, Pin Retaining	2
2	589023	BUSHING, Bellcrank Pivot	2	23	542031	BUSHING, Bellcrank	2
3	25E-27	WASHER, Bellcrank Mounting	2	24	8D-24	NUT, Eye Jam	2
4	24C-12152	BOLT, Bellcrank to Boom	2	25	10H-25	FITTING, Eye Grease	2
5	18C-864	BOLT, Pin Retaining	2	26	570850	EYE ASSY — Pushrod (Inc. 27)	2
6	542631	PIN, Pushrod to Bucket	2	27	587908	BUSHING, Pushrod Eye	2
7	18D-08	NUT, Pin Retaining	2	28		BELLCRANK ASSY (Inc. 23)	
8	-----	BUCKET — See Chart Below	—	28A	2516605	RIGHT HAND	1
9	18C-880	BOLT, Pin Retaining	2	28B	2516604	LEFT HAND	1
10	568483	PIN, Boom to Bucket	2	29	18C-672	BOLT, Pin Retaining	2
11	18D-08	NUT, Pin Retaining	2	30	587901	PIN, Bellcrank to Pushrod	2
12	10H-25	FITTING, Pin Grease	2	31	18D-06	NUT, Pin Retaining	2
13	568482	BUSHING, Boom Arm	2	32	557117	WASHER, Bellcrank Mounting	2
14	18C-656	BOLT, Pin Retaining	2	33	18D-12	NUT, Bellcrank to Boom	2
15	514921	PIN, Boom Cylinder to Boom	2	34	12H-25	FITTING, Bellcrank Grease	2
16	18D-06	NUT, Pin Retaining	2	35	-----	BUCKET CYLINDER — See Index	—
17	18C-872	BOLT, Pin Retaining	2	36	-----	BOOM CYLINDER — See Index	—
18	10H-25	FITTING, Pushrod Grease	2	37	573551	INDICATOR, Bucket	1
19	587908	BUSHING, Pushrod	2	38	4E-06	LKWSHR, Indicator to Bucket Cylinder	2
20	1537857	PUSHROD ASSY (Inc. 19)	2	39	18C-620	BOLT, Indicator to Bucket Cylinder	2
21	587900	PIN, Bucket Cylinder to Bellcrank	2				

*NOTE: For replacement use 1-1536857 Boom plus 2-1529902 Pin, 2-1535341 Spacer, 2-573525 Lockplate, 4-24C-1224 Bolts, 4-4E-12 Lockwasher & 2-1509735 Bushings.

BUCKET ASSEMBLY DATA — STANDARD

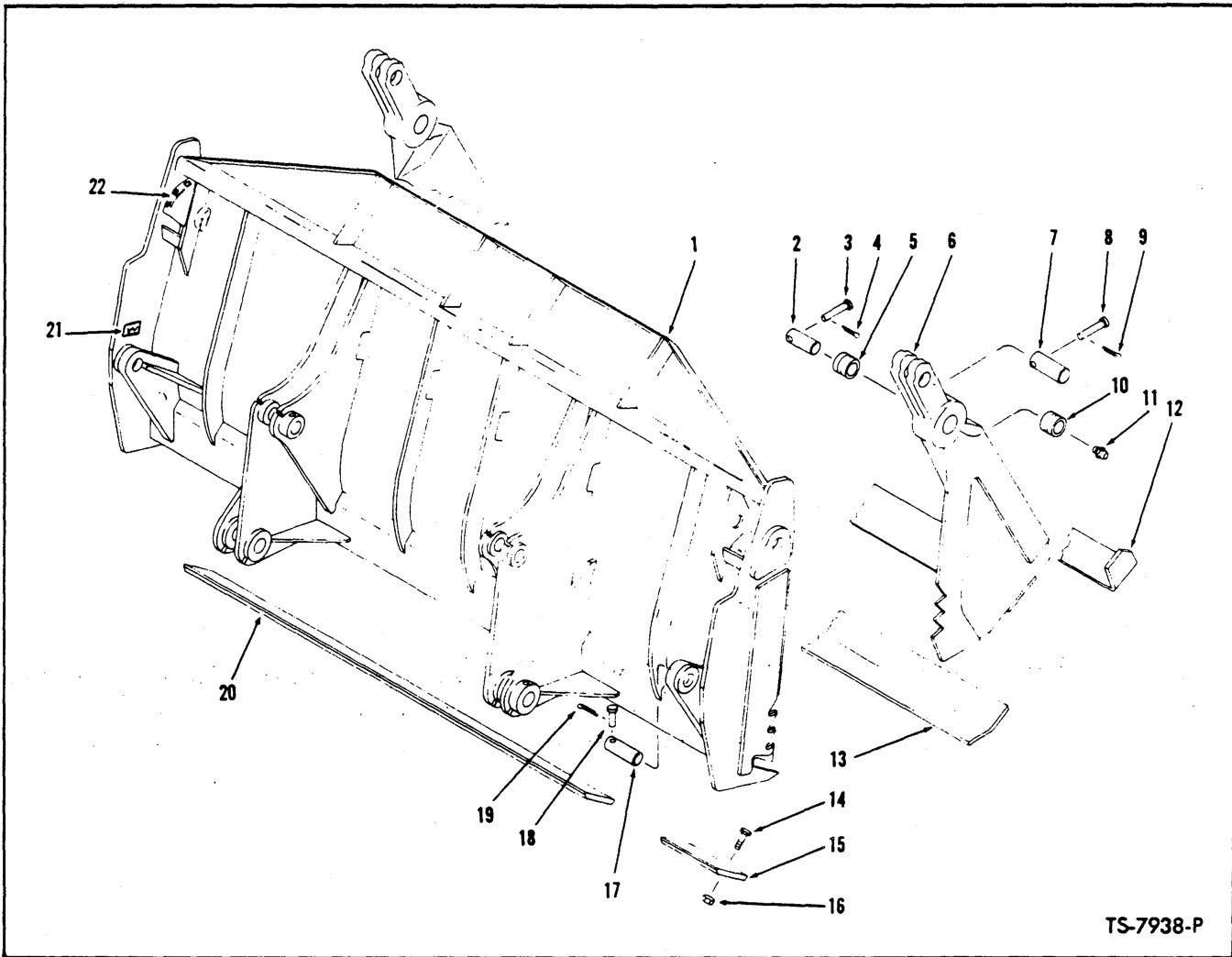
BUCKET			MAIN CUTTING EDGE				SIDE CUTTING EDGE			
Width	Capacity	Part No.	Part No.	Size	Approx. Weight	R.H. Part No.	L.H. Part No.	Size	Approx. Weight	
96"	2½ cu. yd.	1525082	551765	1 x 9 x 97	218	570108	570110	*¾ x 6 x 42%	43	

*NOTE: ¾" x 6" x 10" Segments are available for above side cutting edges 572141 R.H. and 572142 L.H. — Approximate weight 10 lbs.

BUCKET TEETH DATA

REPLACEABLE TOOTH ASSY NO. 1" Thick Cutting Edge	REPLACEABLE TIP NO.	REPLACEABLE TIP PIN NO.
562662	562663	562664

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



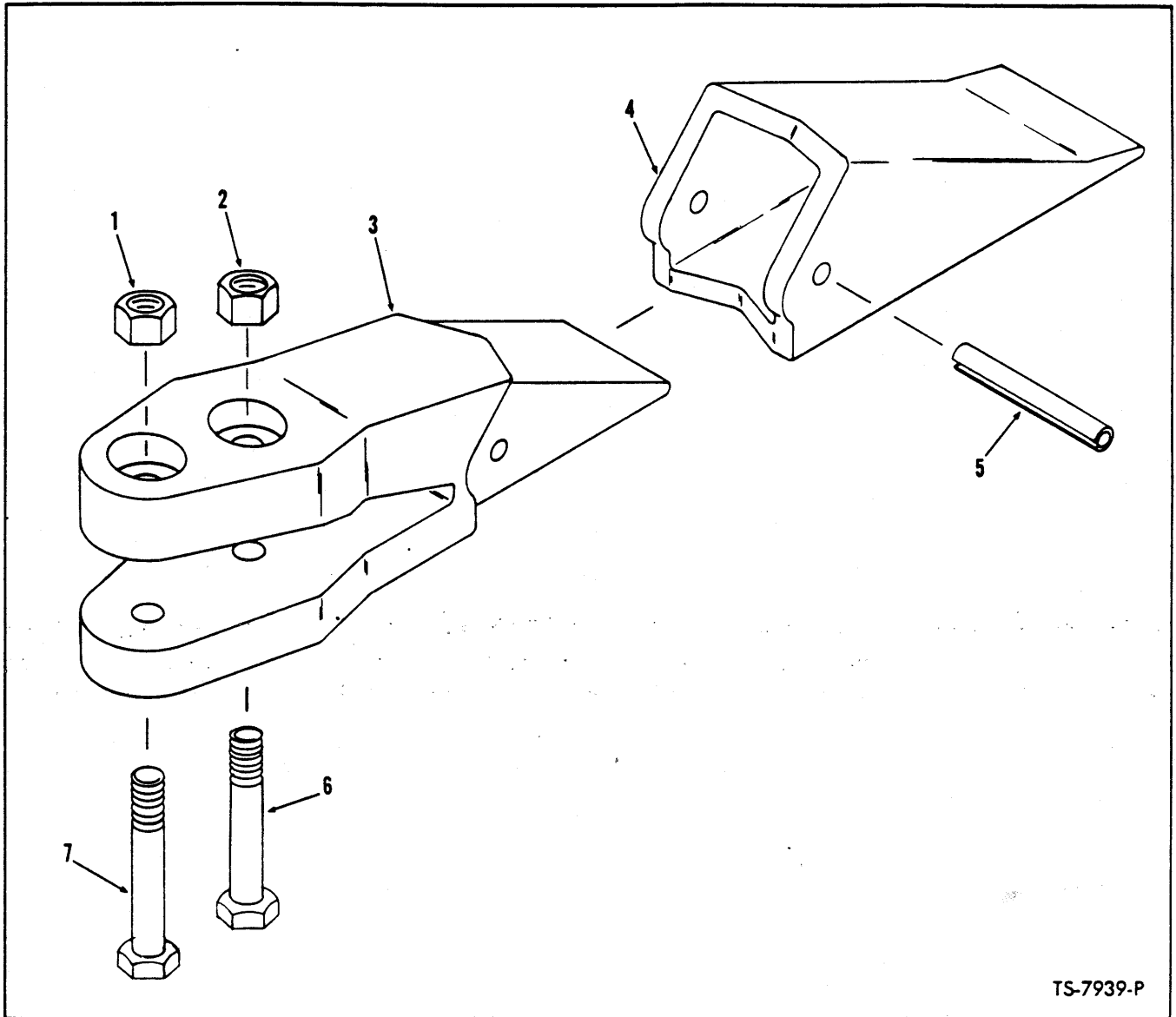
TS-7938-P

DROTT (4 in 1) BUCKET ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1527295	BUCKET ASSY, Less Bucket Teeth ...	1	11	10H-25	FITTING, Grease	2
1	1533396	BUCKET BACK ASSY (Inc. 14 thru 16, 20)	1	12	1533390	CUTTING EDGE — Front, Bucket Front	1
2	3677351	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, Tilt Cylinder	1
				24	1533383	†INDICATOR, Tilt Cylinder	1

†Not Illustrated

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

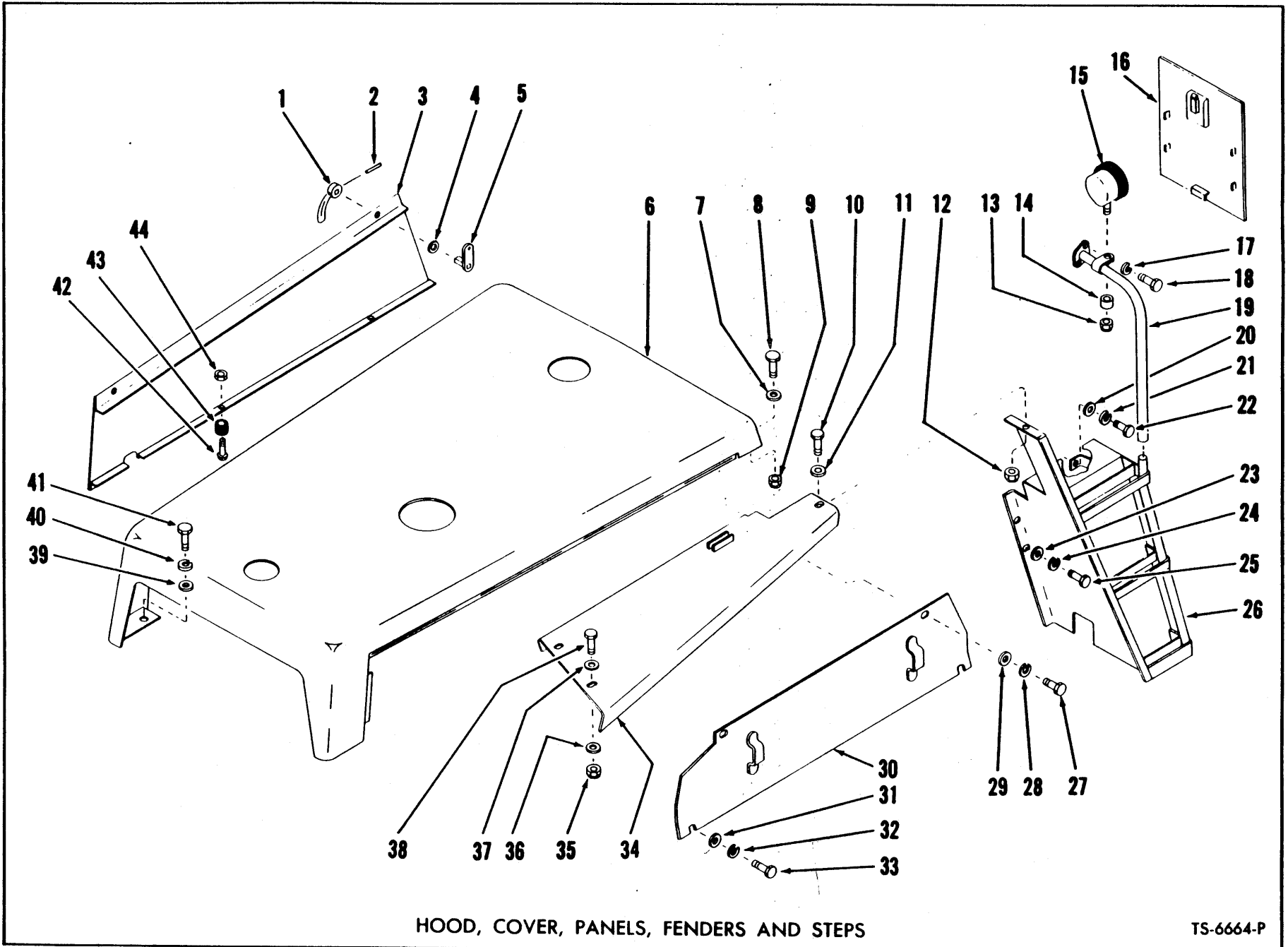


TS-7939-P

BUCKET TOOTH ASSEMBLY — DROTT BUCKET

No. Item	No. Part	Description	No. Req'd.
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

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



HOOD, COVER, PANELS, FENDERS AND STEPS

TS-6664-P

[14]

(1D17)

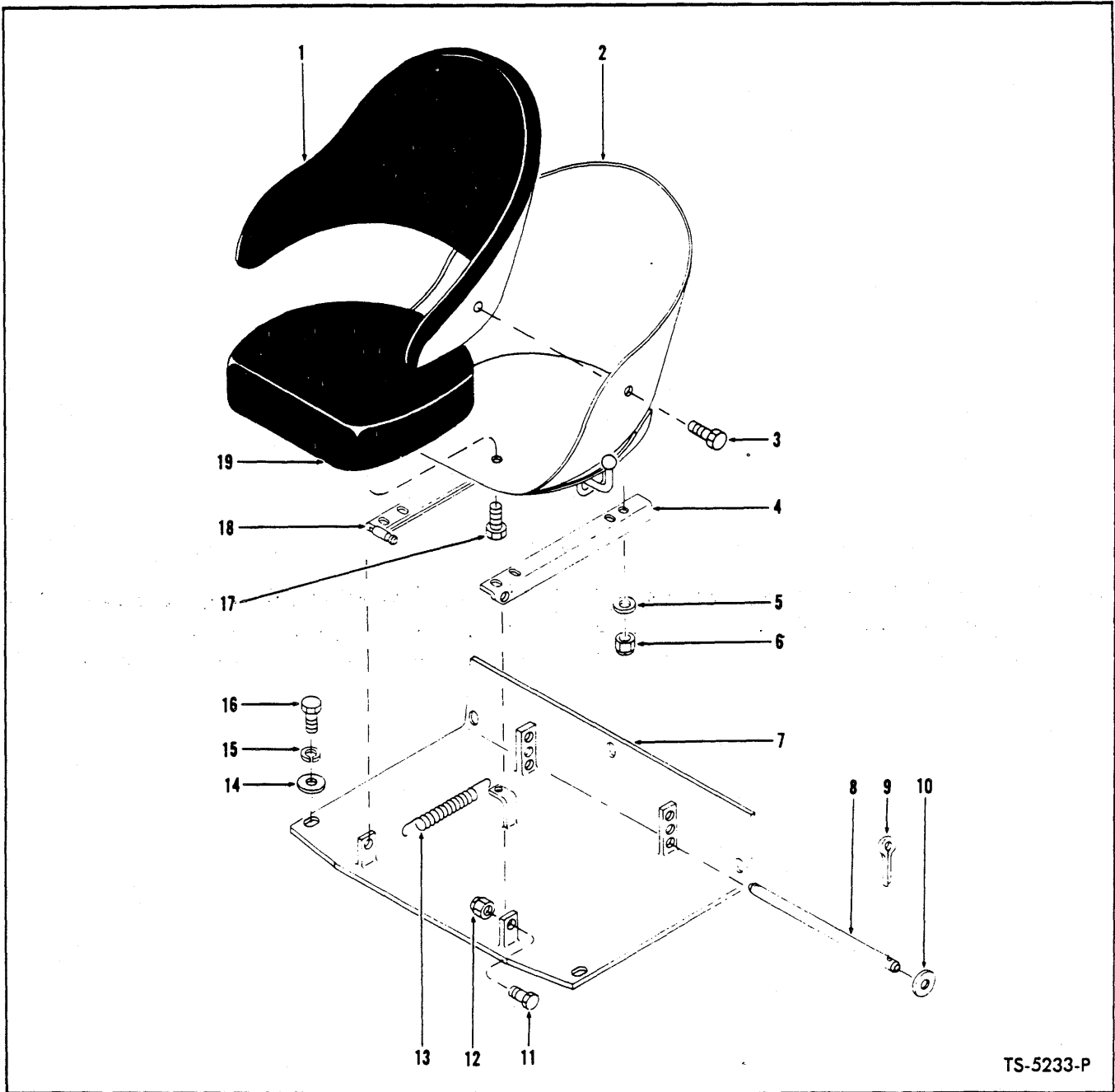
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HOOD, COVER, PANELS, FENDERS AND STEPS

Item No.	Part No.	Description	No. Req'd.
1	142396	KIT, Handle (Inc. 2, 4, 5)	4
2	730432	PIN, Handle Roll	4
3		<i>PANEL, Side (Inc. 1, 2, 4, 5, 42, 43, 44)</i>	
3A	571646	LEFT HAND	1
3B	571645	†RIGHT HAND	1
4	----	§SPACER, Shaft	—
5	----	§SHAFT, Handle	—
6	556323	HOOD — G.M.	1
6A	571405	HOOD — Cummins	1
7	619029	WASHER, Hood to Cockpit	2
8	18C-820	BOLT, Hood to Cockpit	2
9	18D-08	NUT, Hood to Cockpit	2
10	18C-824	BOLT, Fender to Step	2
11	619029	WASHER, Fender to Step	2
12	18D-08	NUT, Fender to Step	2
13	17D-6	NUT, Head Lamp Mounting	2
14	509320	SPACER, Head Lamp Mounting	2
15	547529	LAMP ASSY, Head (Inc. 15A)	2
15A	944907	†SEALED UNIT, Head Lamp	2
16	566764	COVER ASSY, Front	1
17	4E-06	LKWSHR, Hand Rail to Cockpit	4
18	17C-620	BOLT, Hand Rail to Cockpit	4
19		<i>HAND RAIL</i>	
19A	563980	RIGHT HAND	1
19B	563981	†LEFT HAND	1
19C	1522201	CLAMP, Head Lamp to Hand Rail	2
20	619029	WASHER, Step to Frame	2
21	4E-08	LKWSHR, Step to Frame	2
22	18C-816	BOLT, Step to Frame	2
23	619029	WASHER, Step to Frame	4
24	4E-08	LKWSHR, Step to Frame	4
25	18C-816	BOLT, Step to Frame	4
26		<i>STEP ASSEMBLY</i>	
26A	556691	RIGHT HAND	1
26B	556692	†LEFT HAND	1
27	18C-812	BOLT, Panel to Fender	4
28	4E-08	LKWSHR, Panel to Fender	4
29	619029	WASHER, Panel to Fender	4
30		<i>SIDE PANEL</i>	
30A	563928	RIGHT HAND	1
30B	563929	†LEFT HAND	1
31	619029	WASHER, Panel to Frame	4
32	4E-08	LKWSHR, Panel to Frame	4
33	18C-812	BOLT, Panel to Frame	4
34		<i>FENDER</i>	
34A	1504794	RIGHT HAND	1
34B	1504795	†LEFT HAND	1
35	18D-08	NUT, Fender to Tank	4
36	619029	WASHER, Fender to Tank	4
37	619029	WASHER, Fender to Tank	4
38	18C-824	BOLT, Fender to Tank	4
39	571049	WASHER, Hood to Tank	2
40	4E-08	LKWSHR, Hood to Tank	2
41	18C-820	BOLT, Hood to Tank	2
42	3G-1008	SCREW, Side Panel Mounting	4
43	551433	BUMPER, Side Panel Mounting	4
44	12D-10	NUT, Side Panel Mounting	4

†Not Illustrated
‡As Required

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

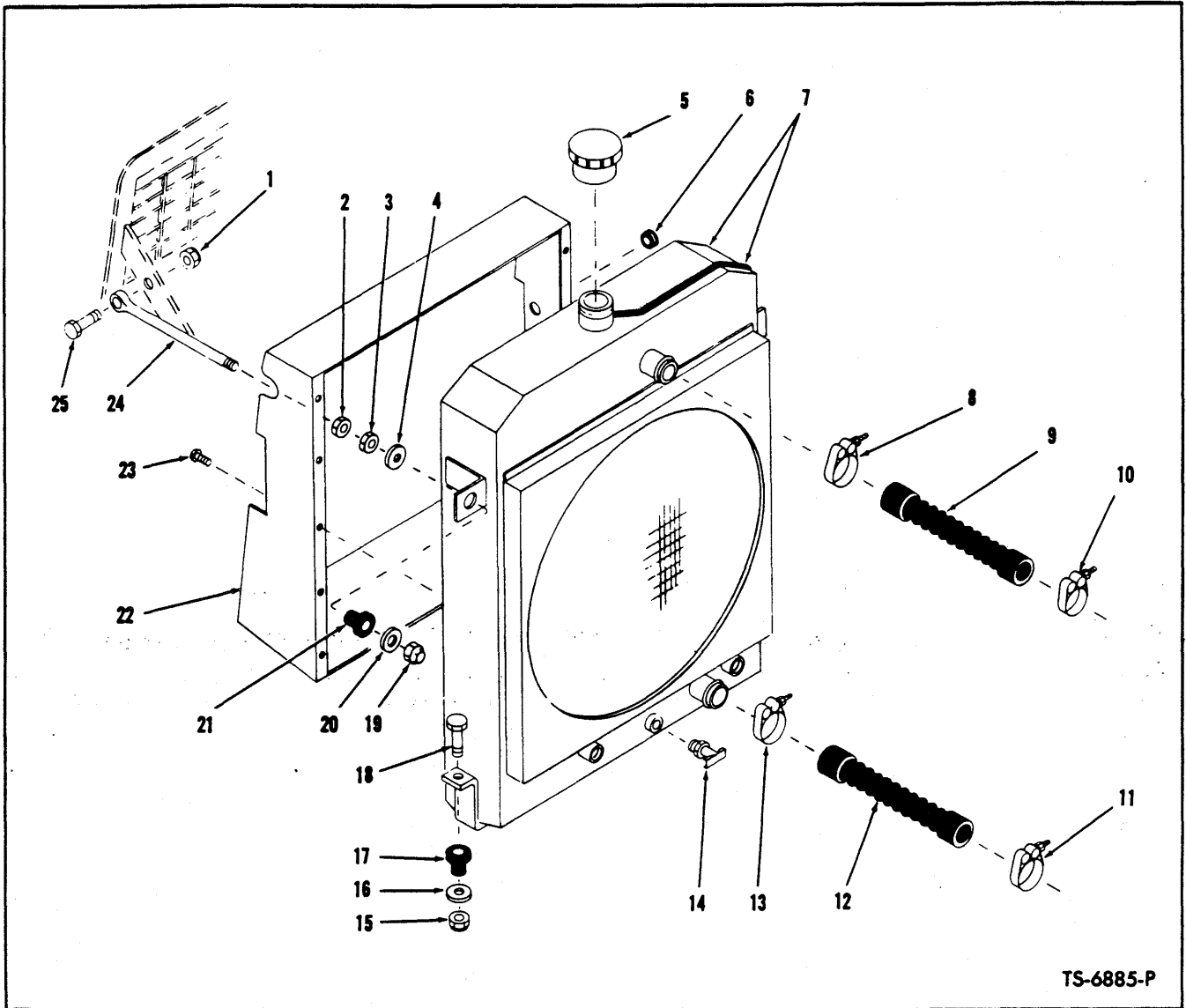


TS-5233-P

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, 2, 3, 17, 19)	1	10	619029	WASHER, Mounting Bar	2
1	948143	CUSHION, Back Rest	1	11	18C-824	BOLT, Angle to Support	2
2	944982	BUCKET, Seat	1	12	18D-08	NUT, Angle to Support	2
3	1C-610	BOLT, Cushion Mounting	3	13	550301	SPRING, Angle	1
4	558779	ANGLE, L.H. Seat Mount	1	14	619029	WASHER, Support to Cockpit	5
5	25E-15	WASHER, Seat Mounting	4	15	4E-08	LKWSHR, Support to Cockpit	5
6	18D-05	NUT, Seat Mounting	4	16	17C-820	BOLT, Support to Cockpit	5
7	557455	SUPPORT, Seat	1	17	1C-610	BOLT, Cushion Mounting	1
8	557458	BAR, Seat Mounting	1	18	558777	ANGLE, R.H. Seat Mount	1
9	1F-420	COTTER, Mounting Bar	2	19	948144	CUSHION, Seat	1

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

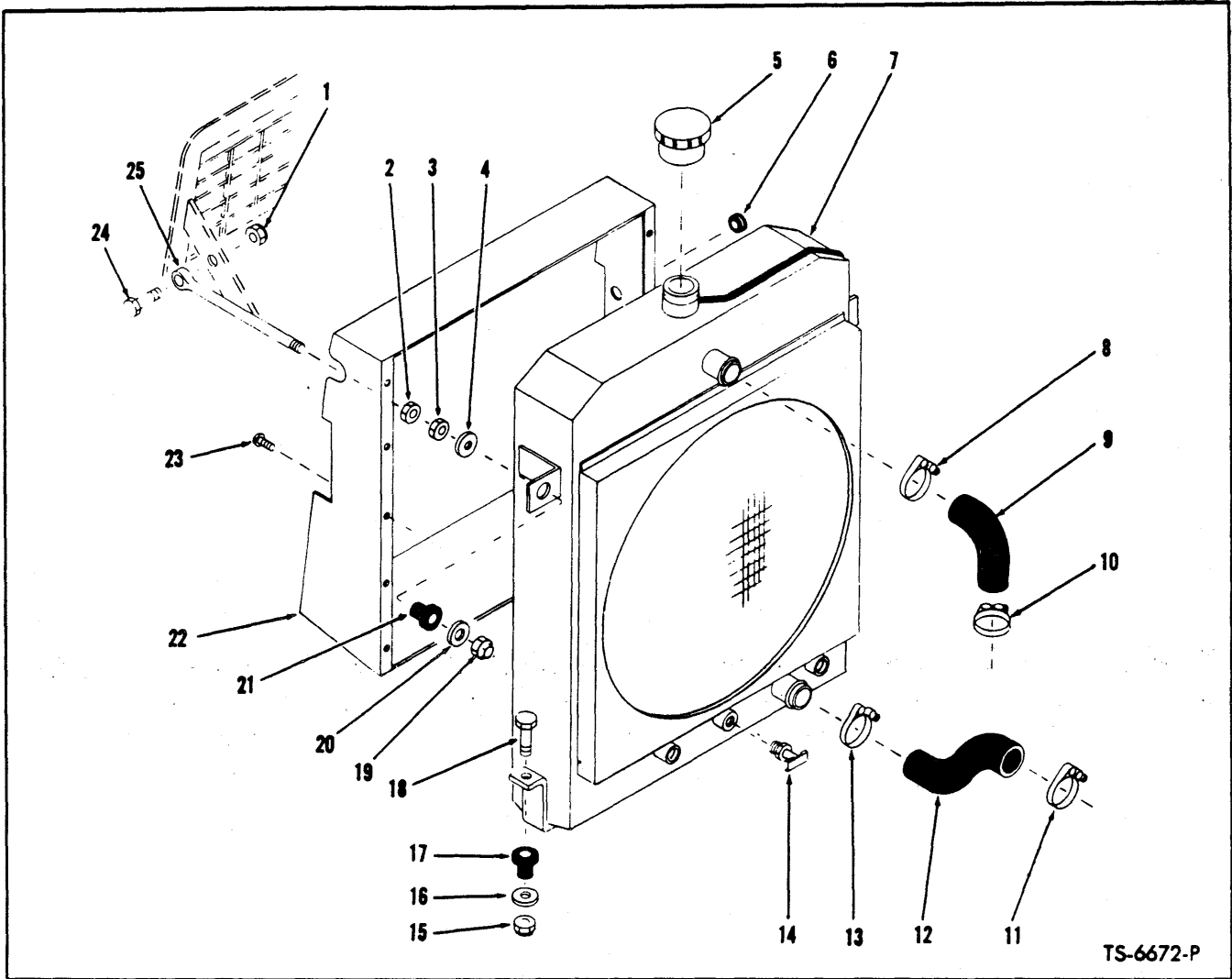


TS-6885-P

RADIATOR AND CONNECTIONS — CUMMINS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18D-08	NUT, Rod to Grille	2	13	540104	CLAMP, Hose	1
2	8D-08	NUT, Rod Jam	2	14	73F-2	DRAIN COCK, Radiator	1
3	8D-08	NUT, Rod Jam	2	15	18D-08	NUT, Radiator to Frame	2
4	584502	WASHER, Rod Mounting	2	16	584502	WASHER, Radiator to Frame	2
5	351495	CAP, Radiator	1	17	584501	MOUNT, Radiator to Frame	2
6	585950	GROMMET, Radiator Shroud	1	18	18C-836	BOLT, Radiator to Frame	2
7	2515245	RADIATOR ASSY (Inc. 5, 7A)	1	19	18D-08	NUT, Rod Mounting	2
7A	945460	HOSE, Overflow	1	20	584502	WASHER, Rod Mounting	2
8	540108	CLAMP, Hose	1	21	584501	MOUNT, Rod to Radiator	2
9	420564	HOSE, Upper Radiator	1	22	563672	SHROUD, Radiator	1
10	540108	CLAMP, Hose	1	23	18G-806	SCREW, Shroud to Radiator	10
11	540104	CLAMP, Hose	1	24	570499	ROD, Radiator to Grille	2
12	571414	HOSE, Lower Radiator	1	25	18C-828	BOLT, Rod to Grille	2

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

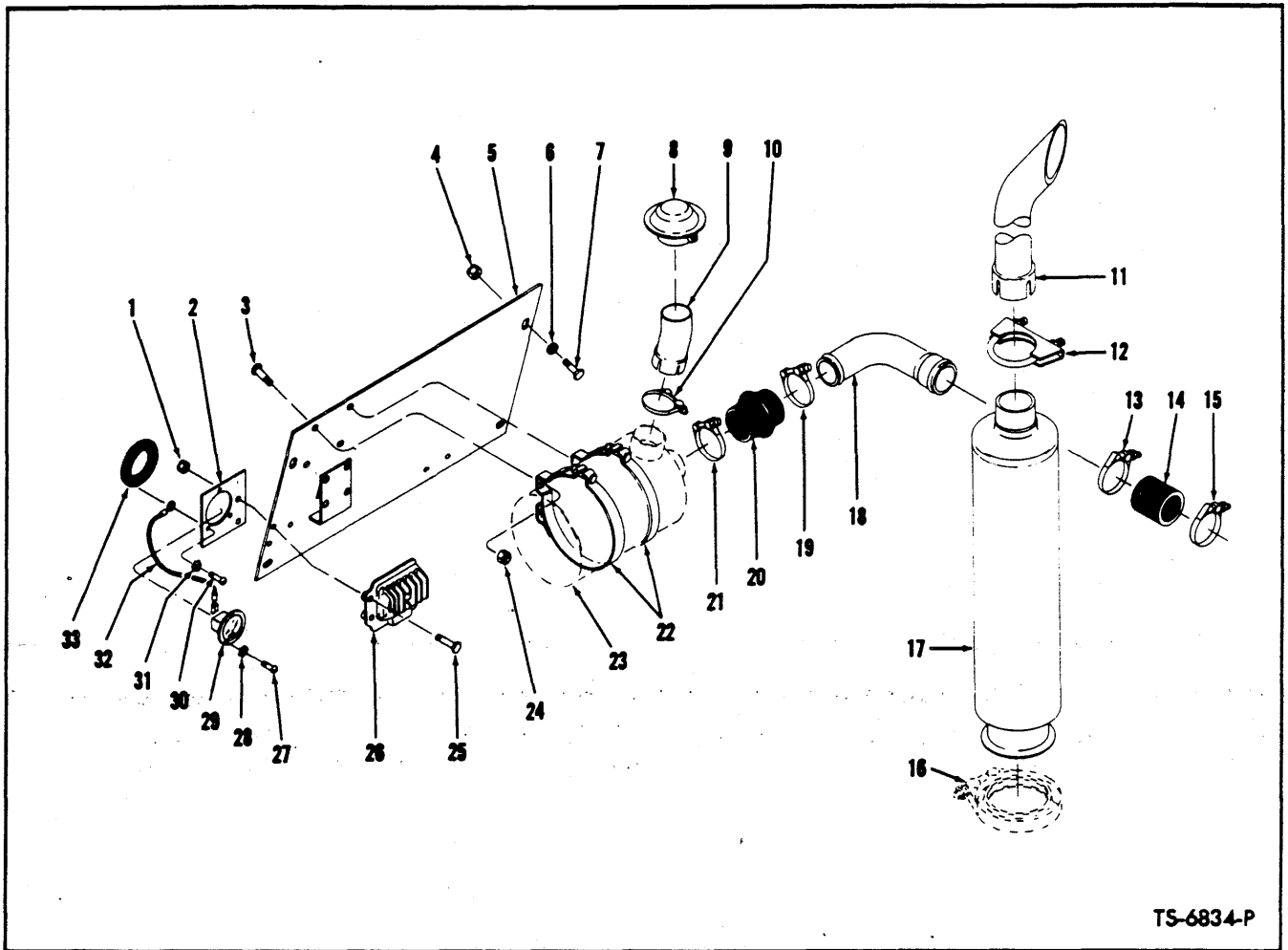


TS-6672-P

RADIATOR AND CONNECTIONS—G.M.

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18D-08	NUT, Rod to Grille	2	13	540108	CLAMP, Hose	1
2	8D-08	NUT, Rod Jam	2	14	73F-2	DRAIN COCK, Radiator	1
3	8D-08	NUT, Rod Jam	2	15	18D-08	NUT, Radiator to Frame	2
4	584502	WASHER, Rod Mounting	2	16	584502	WASHER, Radiator to Frame	2
5	351495	CAP, Radiator	1	17	584501	MOUNT, Radiator to Frame	2
6	585950	GROMMET, Radiator Shroud	1	18	18C-836	BOLT, Radiator to Frame	2
7	564003	RADIATOR ASSY (Inc. 5, 7A)	1	19	18D-08	NUT, Rod Mounting	2
7A	945460	HOSE, Overflow	1	20	584502	WASHER, Rod Mounting	2
8	540266	CLAMP, Hose	1	21	584501	MOUNT, Rod to Radiator	2
9	564005	HOSE, Upper Radiator	1	22	563889	SHROUD, Radiator	1
10	540266	CLAMP, Hose	1	23	18G-806	SCREW, Shroud to Radiator	10
11	540108	CLAMP, Hose	1	24	18C-828	BOLT, Rod to Grille	2
12	564006	HOSE, Lower Radiator	1	25	570499	ROD, Radiator to Grille	2

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

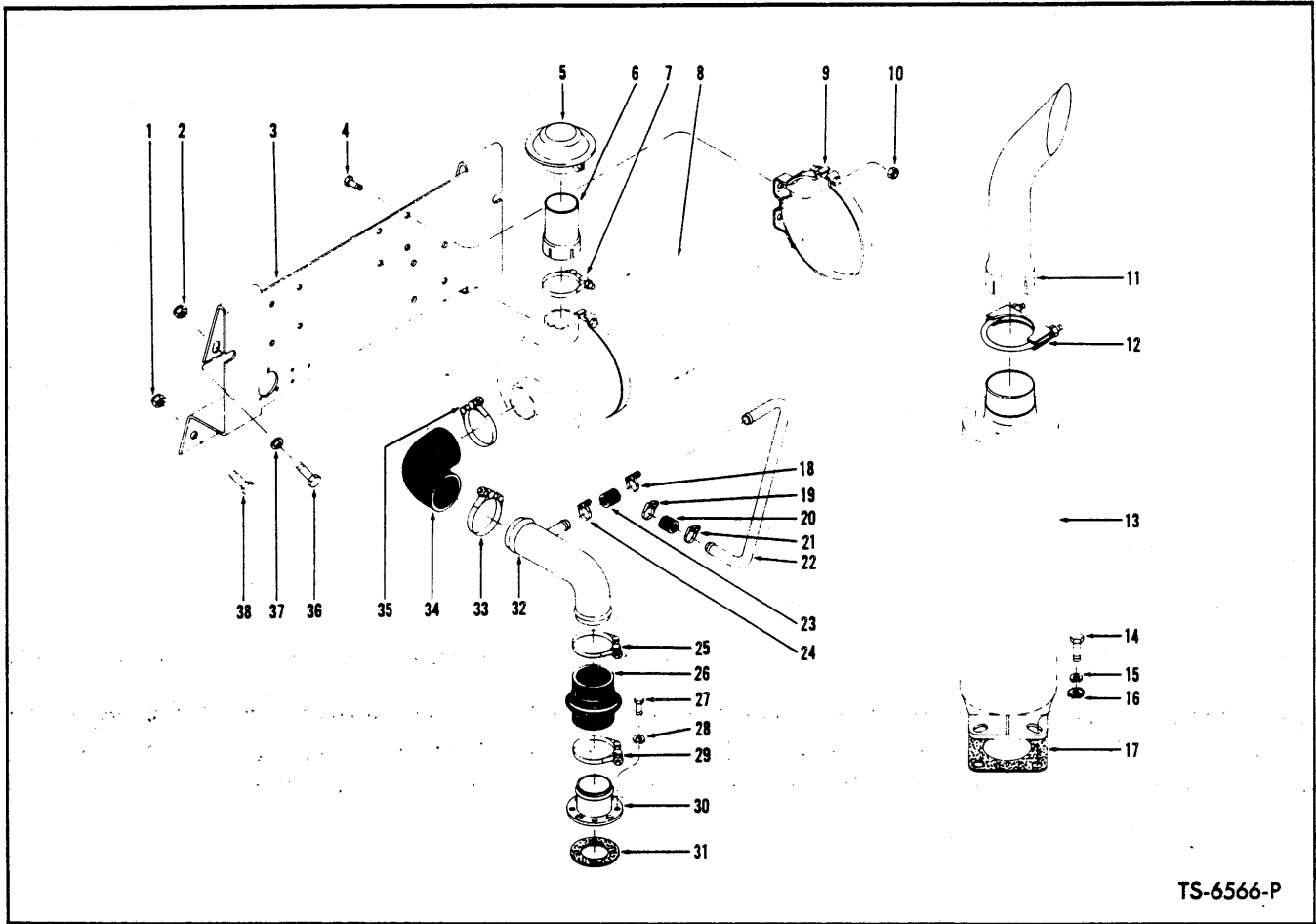


TS-6834-P

MUFFLER, TAIL PIPE AND AIR CLEANER CONNECTIONS — CUMMINS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18D-04	NUT, Regulator Mounting Bolt	3	17	571453	MUFFLER	1
2	569414	BRACKET, Hourmeter Mounting	1	18	571391	TUBE, Air Intake	1
3	18C-616	BOLT, Air Cleaner to Bracket	4	19	539042	CLAMP, Hose	1
4	18D-08	NUT, Bracket to Cockpit Bolt	4	20	515424	HOSE, Intake Tube to Air Cleaner ...	1
5	571389	BRACKET, Air Cleaner Mounting	1	21	539042	CLAMP, Hose	1
6	619029	WASHER, Bracket to Cockpit Bolt	4	22	420945	BAND, Air Cleaner Mounting	2
7	18C-824	BOLT, Bracket to Cockpit	4	23	-----	AIR CLEANER—See Index	—
8	568391	CAP, Air Inlet	1	24	18D-06	NUT, Air Cleaner to Bracket Bolt	4
9	571386	EXTENSION, Air Inlet	1	25	18C-424	BOLT, Regulator Mounting	3
10	543531	CLAMP, Extension to Air Cleaner	1	26	1621888	VOLTAGE REGULATOR	1
11	547585	TAIL PIPE	1	27	3G-608	SCREW, Hourmeter Mounting	3
12	660738	CLAMP, Tail Pipe to Muffler	1	28	12E-8	LKWSHR, Hourmeter Mounting Screw	3
13	540102	CLAMP, Hose	1	29	1743825	HOURMETER KIT (Inc. 27, 28)	1
14	1580530	HOSE, Air Intake Tube to Engine	1	30	3G-608	SCREW, Dampener Mounting	3
15	540102	CLAMP, Hose	1	31	12E-8	LKWSHR, Dampener Mounting Screw	3
16	-----	CLAMP, Muffler to Engine — Furnished with Engine	—	32	558960	WIRE, Hourmeter Ground	1
				33	551251	DAMPENER, Hourmeter Vibration	1

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

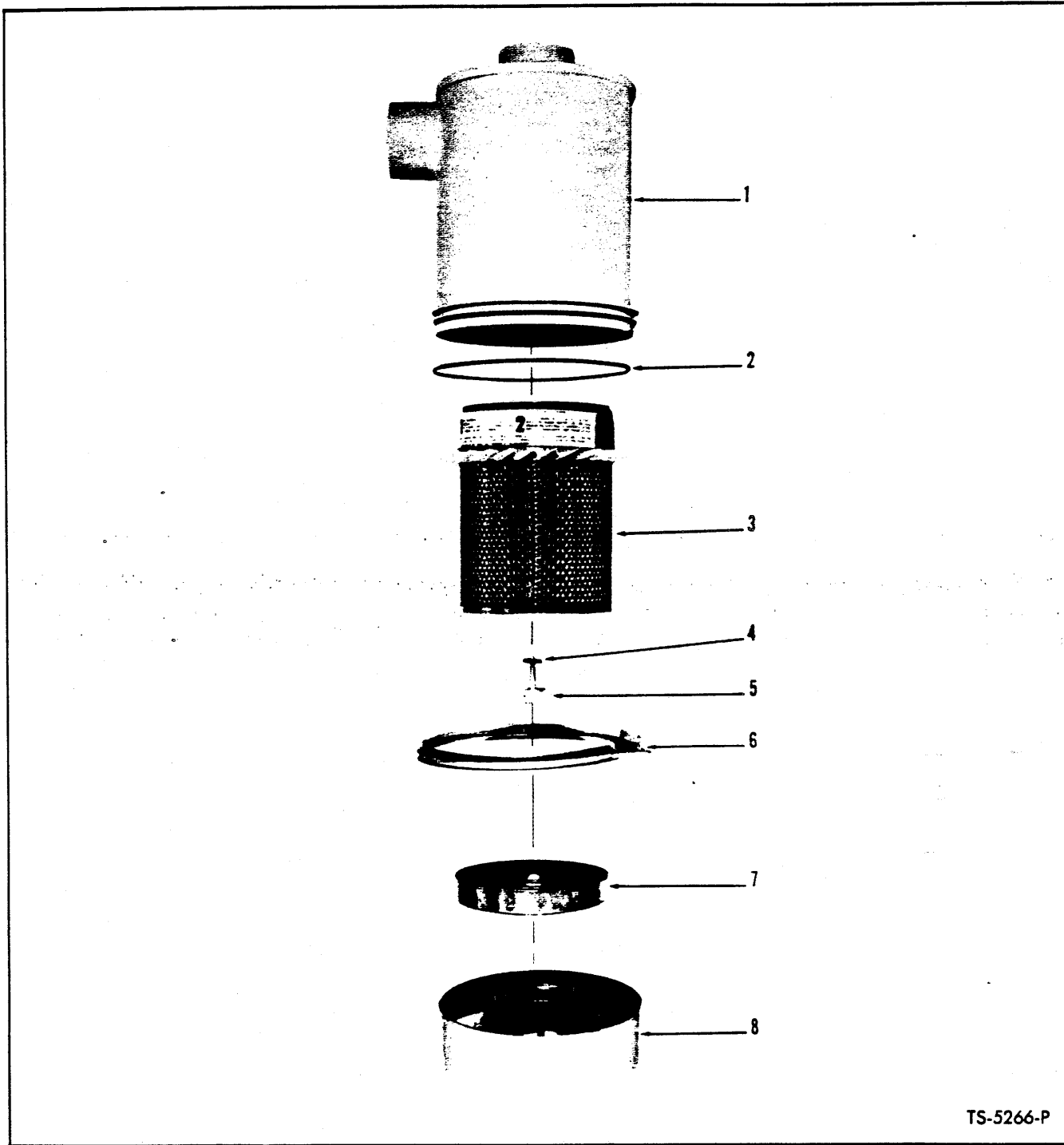


MUFFLER, TAIL PIPE AND AIR CLEANER CONNECTIONS—G.M.

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18D-08	NUT, Bracket to Cockpit	2	20	509711	HOSE, Tube to Air Compressor	1
2	18D-08	NUT, Bracket to Cockpit	2	21	1545186	CLAMP, Hose	1
3	589826	BRACKET, Air Cleaner Mounting	1	22	589852	TUBE, Compressor Intake	1
4	18C-616	BOLT, Air Cleaner to Bracket	4	23	509711	HOSE, Tube to Tube	1
5	568391	CAP, Air Inlet	1	24	1545186	CLAMP, Hose	1
6	543573	EXTENSION, Air Inlet	1	25	539042	CLAMP, Hose	1
7	543531	CLAMP, Extension to Air Cleaner	1	26	515424	HOSE, Tube to Adapter	1
8	-----	AIR CLEANER — See Index	—	27	17C-516	BOLT, Adapter to Engine	4
9	420945	BAND, Air Cleaner Mounting	2	28	4E-05	LKWSHR, Adapter to Engine	4
10	18D-06	NUT, Air Cleaner to Bracket	4	29	539042	CLAMP, Hose	1
10A	619029	†WASHER, Air Cleaner to Bracket	2	30	527095	ADAPTER, Air Intake	1
11	547585	TAIL PIPE	1	31	527096	GASKET, Adapter to Engine	1
12	660738	CLAMP, Tail Pipe to Muffler	1	32	589791	TUBE, Air Intake	1
13	568806	MUFFLER	1	33	539042	CLAMP, Hose	1
14	17C-620	BOLT, Muffler to Engine	4	34	515425	ELBOW, Tube to Air Cleaner	1
15	4E-06	LKWSHR, Muffler to Engine	4	35	539042	CLAMP, Hose	1
16	656672	WASHER, Muffler to Engine	4	36	18C-824	BOLT, Bracket to Cockpit	2
17	509303	GASKET, Muffler to Engine	1	37	619029	WASHER, Bracket to Cockpit	2
18	1545186	CLAMP, Hose	1	38	18C-824	BOLT, Bracket to Cockpit	2
19	1545186	CLAMP, Hose	1				

†Not Illustrated

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



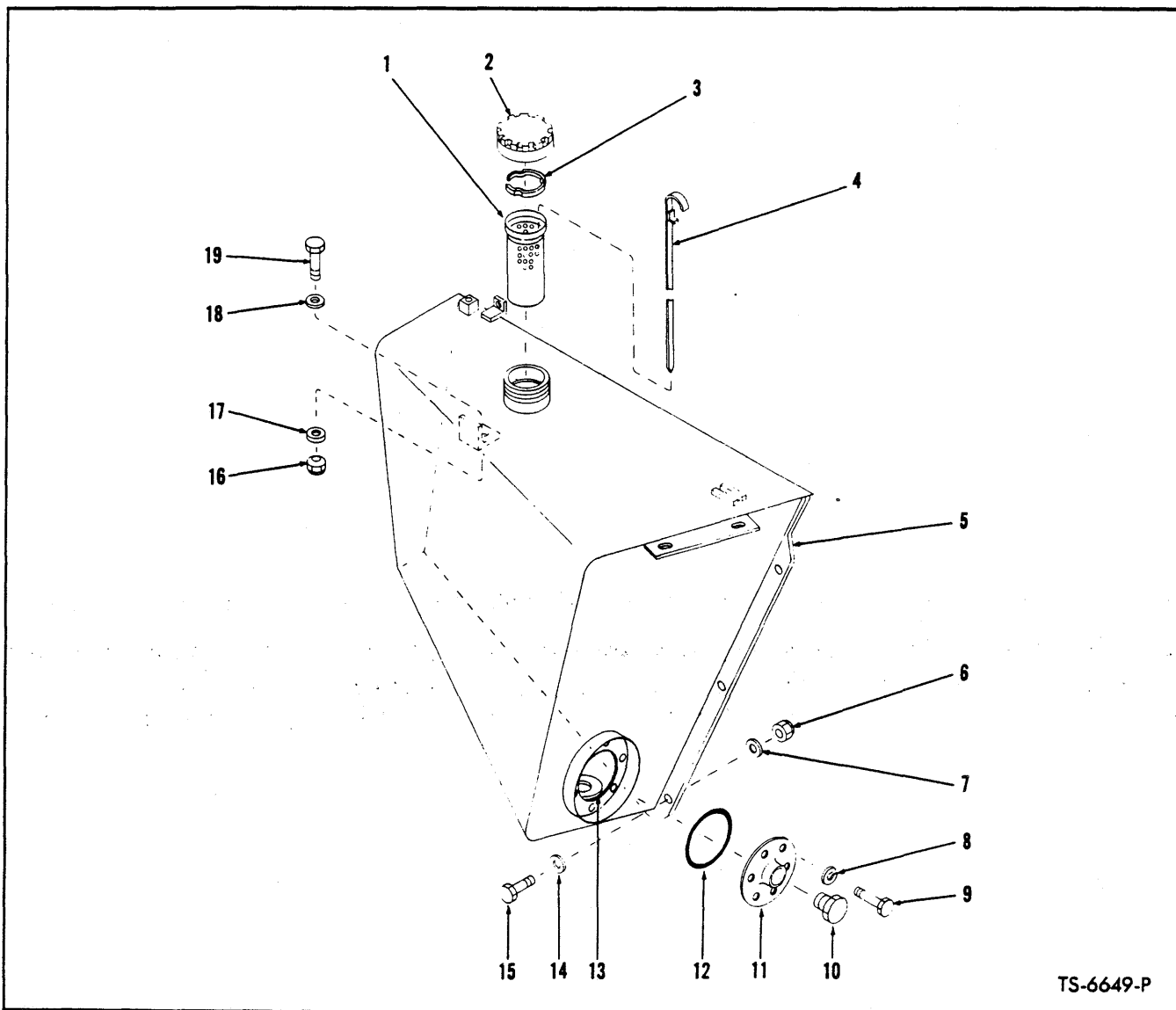
TS-5266-P

AIR CLEANER ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1632441	AIR CLEANER ASSY (Inc. 1 thru 8)	1	5	886285	BOLT, Element Attaching	1
1	-----	§BODY, Air Cleaner — See Item A	—	6	947242	CLAMP, Dust Cover	1
2	886288	GASKET, Air Cleaner	1	7	894653	BAFFLE	1
3	944954	ELEMENT	1	8	894652	CUP, Dust.....	1
4	886287	WASHER, Element Attaching	1				

§Not Sold Separately

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



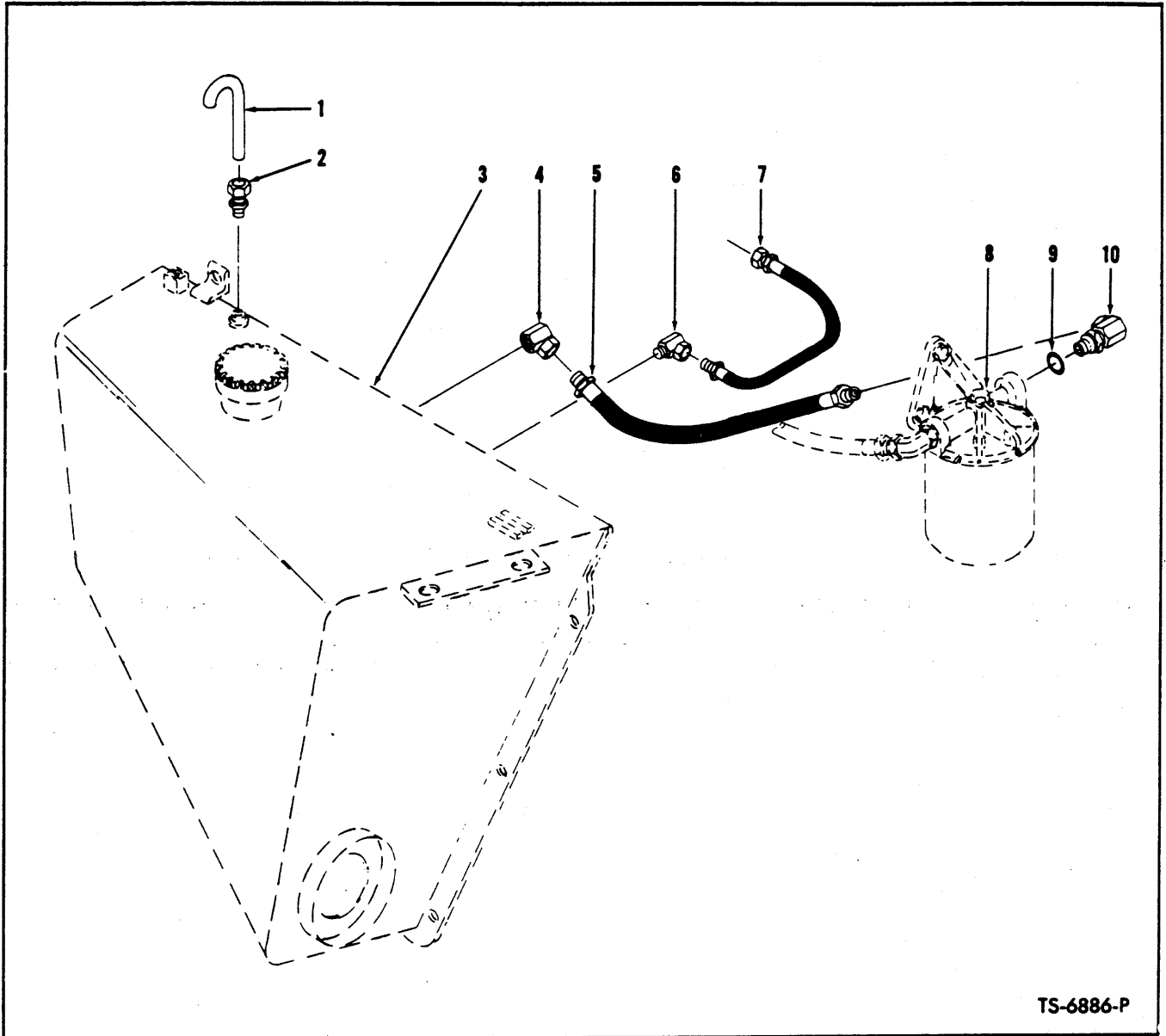
TS-6649-P

FUEL TANK

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	943957	STRAINER, Fuel Tank	1	11	587613	PLATE, Inspection	1
2	1558644	CAP, Fuel Tank	1	12	25K-40428	"O" RING, Inspection Plate	1
2A	946953	†GASKET, Fuel Cap	1	13	525293	MAGNET	1
2B	946954	†PLATE, Gasket Backup	1	14	25E-27	WASHER, Fuel Tank to Side Plate	5
3	569914	RING, Cap Retaining	1	15	18C-1244	BOLT, Fuel Tank to Side Plate	5
4	567864	DIPSTICK	1	16	70D-12	NUT, Tank to Frame	1
5	589200	FUEL TANK	1	17	71D-12	BASE, Tank to Frame	1
6	18D-12	NUT, Fuel Tank to Side Plate	5	18	25E-27	WASHER, Tank to Frame	1
7	25E-27	WASHER, Fuel Tank to Side Plate	5	19	18C-1244	BOLT, Tank to Frame	1
8	4E-06	LKWSHR, Inspection Plate to Tank ..	6				
9	18C-612	BOLT, Inspection Plate to Tank	6				
10	40K-16	PLUG, Drain	1				

†Not Illustrated

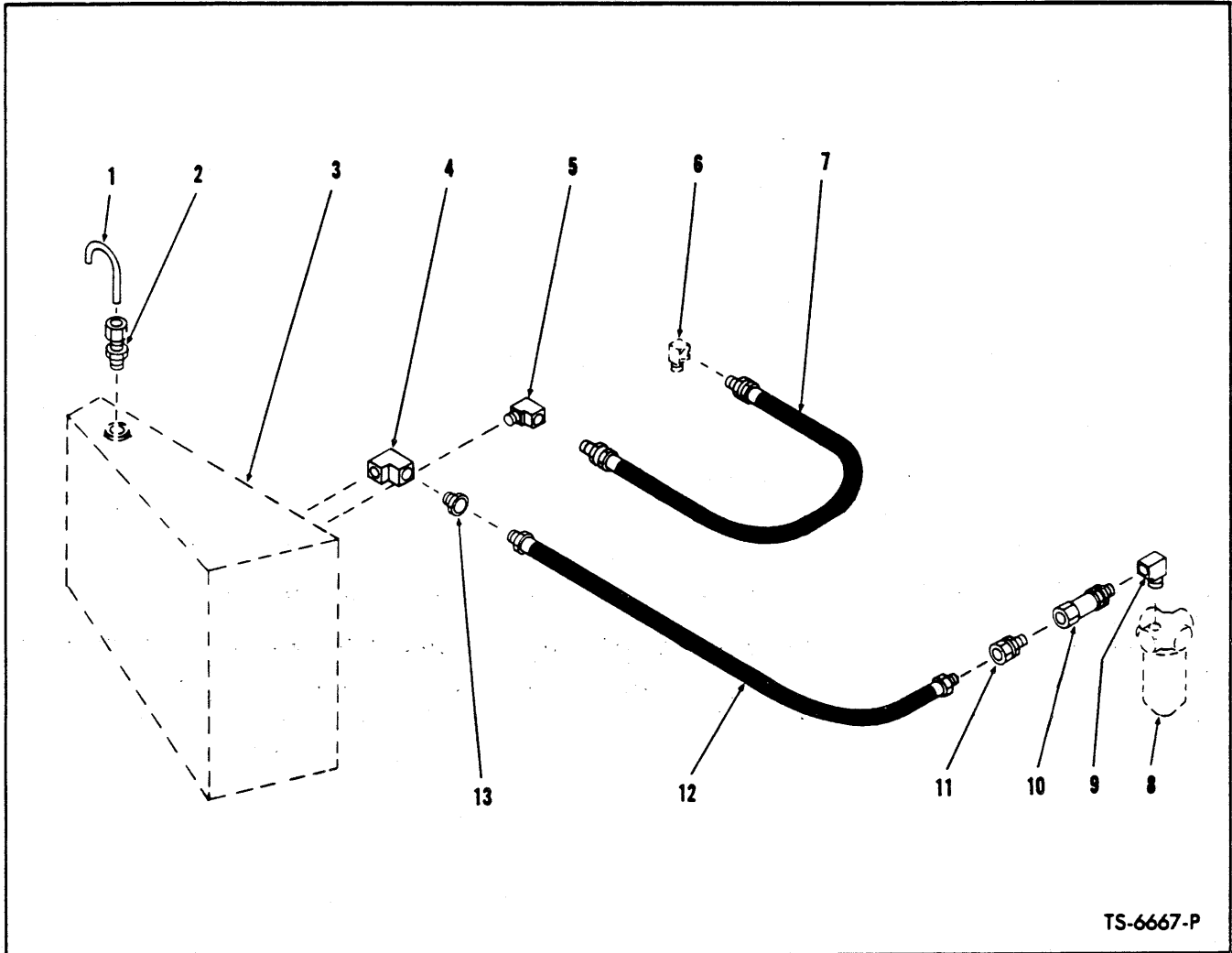
WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE



TS-6886-P

FUEL LINES — CUMMINS

Item No.	Part No.	Description	No. Req'd.
1	567847	TUBE, Breather	1
2	49F-3	CONNECTOR, Tube to Tank	1
3	----	FUEL TANK ASSY — See Index	—
4	32F-4	ADAPTER UNION, Hose to Tank	1
5	661563	HOSE, Tank to Filter	1
6	31F-2	ADAPTER UNION, Hose to Tank	1
7	567889	HOSE, Fuel Return	1
8	----	FILTER ASSY, Fuel (Furnished with Engine) — See Cummins Engine Parts Manual	—
9	91F-7	"O" RING, Adapter Union	1
10	519275	ADAPTER UNION, Hose to Filter (Inc. 9)	1



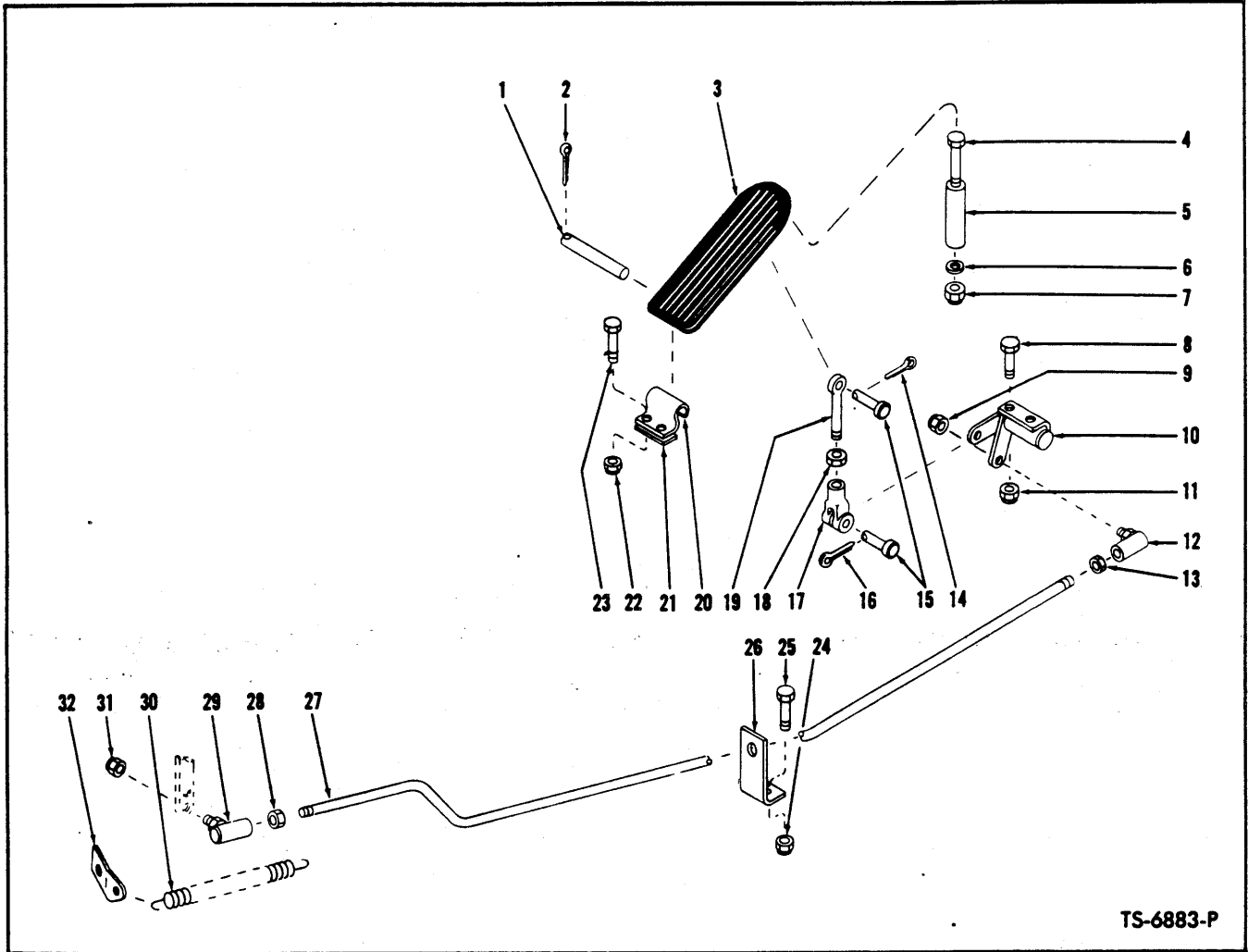
TS-6667-P

FUEL LINES—G.M.

Item No.	Part No.	Description	No. Req'd.
1	567847	TUBE, Breather	1
2	49F-3	CONNECTOR, Tube to Tank	1
3	-----	FUEL TANK-See Index	—
4	27F-3	ELBOW, Hose to Tank	1
5	62F-5	ELBOW, Hose to Tank	1
6	-----	*MANIFOLD, Injector Drain	—
7	563903	HOSE, Fuel Return	1
8	-----	*FILTER, Fuel	—
9	29F-1	ELBOW, Filter	1
10	531792	VALVE, Check	1
11	36F-2	ADAPTER UNION, Valve to Hose	1
12	610236	HOSE, Fuel Suction	1
13	19F-5	BUSHING, Tank Reducing	1

*NOTE: See your local authorized G.M. Distributor for service and replacement of these parts.

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

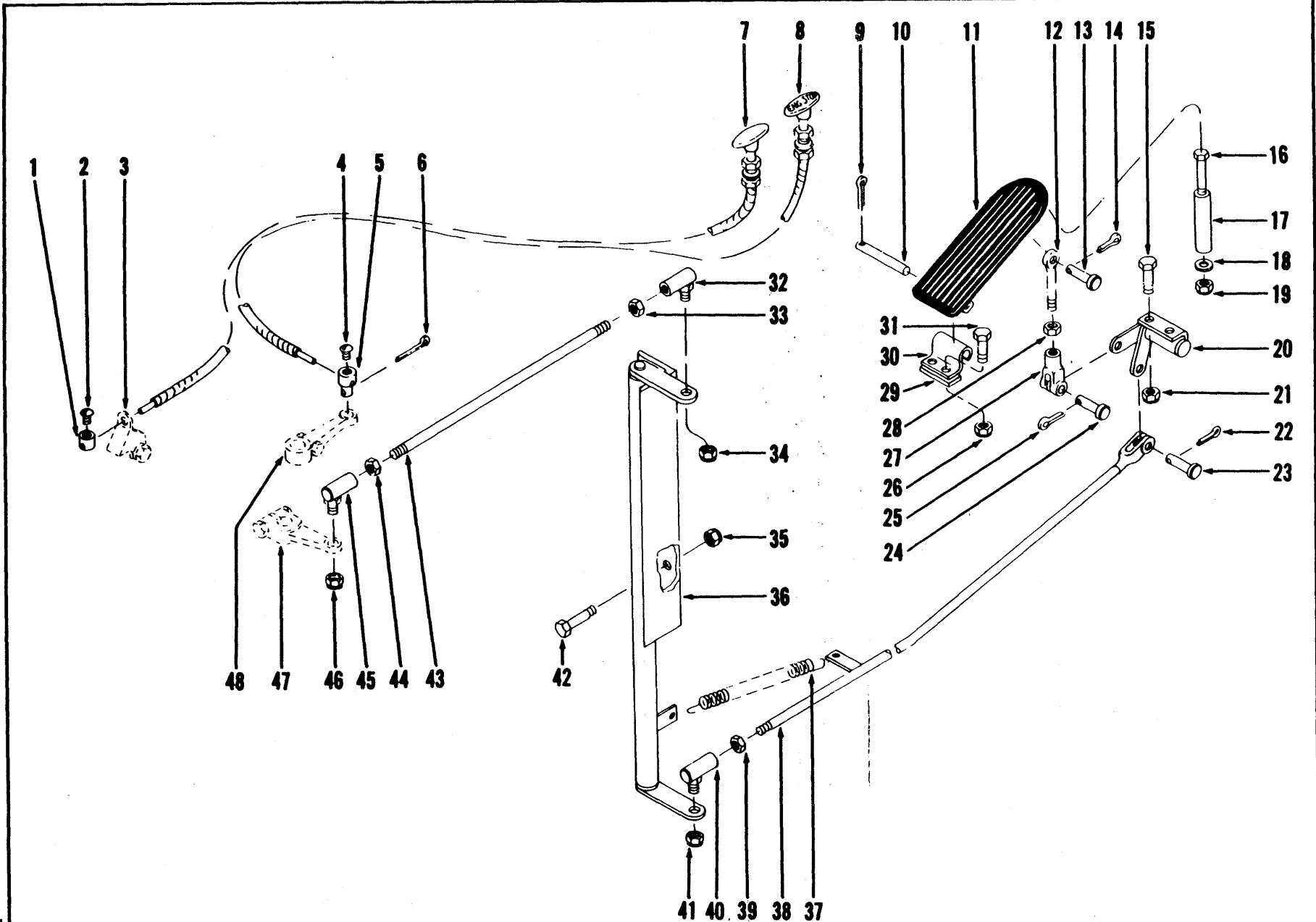


TS-6883-P

ACCELERATOR PEDAL AND LINKAGE — CUMMINS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	623762	PIN, Pedal Pivot	1	17	2J-4200	CLEVIS, Rod to Bellcrank	1
2	1F-316	COTTER, Pivot Pin	1	18	8D-04	NUT, Clevis Jam	1
3	623829	PEDAL, Accelerator	1	19	550619	ROD, Pedal to Clevis	1
4	18C-448	BOLT, Pedal Stop	1	20	623760	BRACKET, Pedal Pivot	1
5	551016	STOP, Pedal	1	21	572556	SPACER, Bracket to Floorboard	1
6	774337	WASHER, Pedal Stop Bolt	1	22	18D-04	NUT, Bracket to Floorboard Bolt	2
7	18D-04	NUT, Pedal Stop Bolt	1	23	18C-416	BOLT, Bracket to Floorboard	2
8	18C-412	BOLT, Bellcrank to Floorboard	2	24	18D-08	NUT, Bracket to Frame Bolt	1
9	18D-05	NUT, Ball Joint to Bellcrank	1	25	18C-832	BOLT, Bracket to Frame	1
10	572174	BELLCRANK	1	26	563656	BRACKET, Accelerator Rod Support ..	1
11	18D-04	NUT, Bellcrank to Floorboard Bolt	2	27	571395	ROD, Accelerator (Inc. 12, 13, 28, 29)	1
12	1301361	BALL JOINT	1	28	8D-05	NUT, Ball Joint Jam	1
13	8D-05	NUT, Ball Joint Jam	1	29	1301361	BALL JOINT	1
14	1F-207	COTTER, Pedal Pin	1	30	551090	SPRING	1
15	4F-04051	PIN, Rod to Pedal & Clevis to Bellcrank	2	31	18D-05	NUT, Ball Joint	1
16	1F-207	COTTER, Clevis Pin	1	32	545568	ANCHOR, Spring	1

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



ACCELERATOR PEDAL AND LINKAGE - G.M.

TS-6565-P



CONSTRUCTION MACHINERY DIVISION

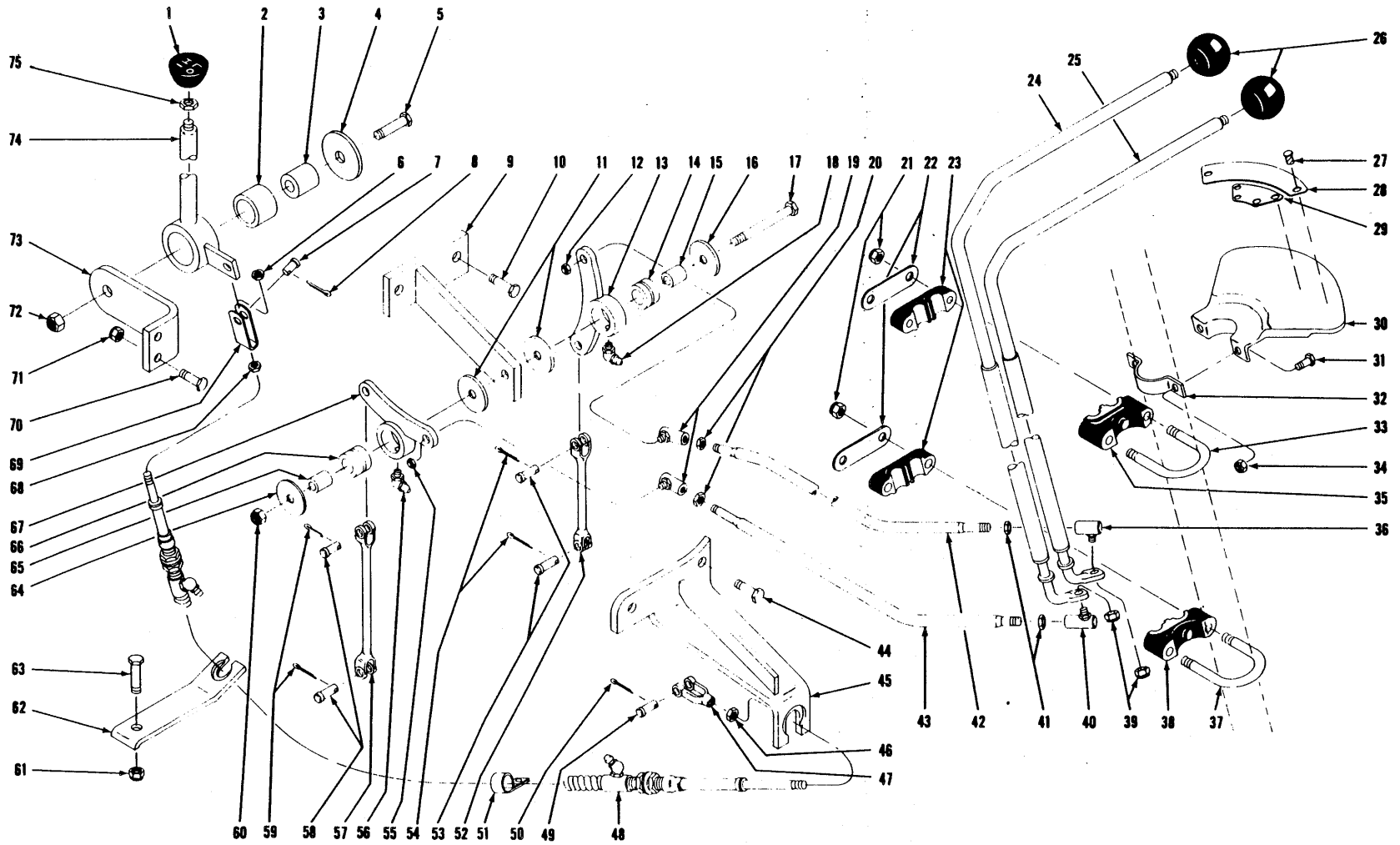


ACCELERATOR PEDAL AND LINKAGE—G.M.

Item No.	Part No.	Description	No. Req'd.
1	535003	*CONNECTOR, Cable	1
2	3G-1008	SCREW, Cable Connector	1
3	-----	SHUT-OFF, Emergency — See Engine Parts Manual	—
4	3G-1008	SCREW, Cable Connector	1
5	351131	**CONNECTOR, Cable	1
6	1F-308	COTTER, Cable Connector	1
7	1520190	CABLE, Emergency Shut-Off	1
8	1520193	CABLE, Engine Shut-Off	1
9	1F-316	COTTER, Pivot Pin	1
10	623762	PIN, Pedal Pivot	1
11	623829	PEDAL, Accelerator	1
12	550619	ROD, Pedal to Clevis	1
13	4F-04051	PIN, Rod to Pedal	1
14	1F-207	COTTER, Pedal Pin	1
15	18C-412	BOLT, Bellcrank to Floorboard	2
16	18C-448	BOLT, Pedal Stop	1
17	551016	STOP, Pedal	1
18	774337	WASHER, Pedal Stop	1
19	18D-04	NUT, Pedal Stop	1
20	572174	BELLCRANK, Front	1
21	18D-04	NUT, Bellcrank to Floorboard	2
22	1F-216	COTTER, Clevis Pin	1
23	4F-04051	PIN, Rod to Bellcrank	1
24	4F-04051	PIN, Clevis to Bellcrank	1
25	1F-207	COTTER, Clevis Pin	1
26	18D-04	NUT, Bracket to Floorboard	2
27	2J-4200	CLEVIS, Rod to Bellcrank	1
28	8D-04	NUT, Clevis Jam	1
29	572556	SPACER, Bracket to Floorboard	1
30	623760	BRACKET, Pedal Pivot	1
31	18C-416	BOLT, Bracket to Floorboard	2
32	1301361	BALL JOINT	1
33	8D-05	NUT, Ball Joint Jam	1
34	18D-05	NUT, Ball Joint to Bellcrank	1
35	18D-06	NUT, Bellcrank to Transmission Filter Bracket	2
36	569352	BELLCRANK, Rear	1
37	551090	SPRING	1
38	571111	ROD, Accelerator (Inc. 39, 40)	1
39	8D-05	NUT, Ball Joint Jam	1
40	1301361	BALL JOINT	1
41	18D-05	NUT, Ball Joint to Bellcrank	1
42	18C-628	BOLT, Bellcrank to Trans. Filter Bracket	2
43	571112	ROD, Governor Control (Inc. 32, 33, 44, 45)	1
44	8D-05	NUT, Ball Joint Jam	1
45	1301361	BALL JOINT	1
46	18D-05	NUT, Ball Joint to Governor Lever	1
47	-----	GOVERNOR, — See Engine Parts Manual	—
48	-----	SHUT-OFF, Fuel — See Engine Parts Manual	—

*NOTE: For replacement use 1523210 plus 1—3G-806 Screw.
 **NOTE: For replacement use 1523209 plus 1—2G-1008 Screw

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



TRANSMISSION CONTROL LEVERS AND LINKAGE

TS-6673-P

[28]

(1G11)

TRANSMISSION CONTROL LEVERS AND LINKAGE

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	563753	KNOB, Shift Lever	1	39	66D-06	NUT, Ball Joint to Shift Lever	2
2	549580	*BUSHING, Shift Lever	1	40	1301362	BALL JOINT	1
2A	569055	**BUSHING, Shift Lever	1	41	8D-06	NUT, Ball Joint Jam	2
3	550646	SLEEVE, Shift Lever	1	42	557030	ROD ASSY, Hi-Lo Control (Inc. 19, 20, 36, 41)	1
4	616796	WASHER, Shift Lever Mounting	1	43	556424	ROD ASSY, Fwd. & Reverse (Inc. 19, 20, 40, 41)	1
5	18C-844	BOLT, Shift Lever Mounting	1	44	17C-724	BOLT, Bracket Mounting	2
6	8D-05	NUT, Control Cable Jam	1	45	568803	BRACKET, Anchor (Hi-Lo Cable)	1
7	4F-05062	PIN, Clevis	1	46	8D-05	NUT, Control Cable Jam	1
8	1F-312	COTTER, Clevis Pin	1	47	556413	CLEVIS, Cable End	1
9	557032	BRACKET, Bellcrank Mounting	1	48	556411	CABLE, Hi-Lo Range Control	1
10	17C-724	BOLT, Bracket Mounting	2	49	4F-06106	PIN, Clevis	1
11	616795	WASHER, Bellcrank Mounting	2	50	1F-312	COTTER, Clevis Pin	1
12	66D-06	NUT, Ball Joint to Bellcrank	1	51	562608	CLIP	1
13	585500	BELLCRANK	1	52	557034	ROD, Hi-Lo	1
14	585597	BUSHING, Bellcrank	1	53	4F-06106	PIN, Clevis	2
15	585596	SLEEVE, Bellcrank	1	54	1F-312	COTTER, Clevis Pin	2
16	616795	WASHER, Bellcrank Mounting	1	55	66D-06	NUT, Ball Joint to Bellcrank	1
17	18C-856	BOLT, Bellcrank Mounting	1	56	12H-15	FITTING, Bellcrank Grease	1
18	12H-15	FITTING, Bellcrank Grease	1	57	556422	ROD, Forward & Reverse	1
19	1301362	BALL JOINT	2	58	4F-06106	PIN, Clevis	2
20	8D-06	NUT, Ball Joint Jam	2	59	1F-312	COTTER, Clevis Pin	2
21	18D-05	NUT, Lever Mounting Support	4	60	18D-08	NUT, Bellcrank Mounting	1
22	589906	PLATE, Support Back-Up	2	61	18D-08	NUT, Bracket Mounting	1
23	1508845	SUPPORT, Lever Mtg., (Inc. 35, 38)	2	62	562607	BRACKET, Hi-Lo Cable Mounting	1
24	562227	LEVER, Shift - Forward & Reverse	1	63	18C-864	BOLT, Bracket Mounting	1
25	562224	LEVER, Shift - Four Speed	1	64	616795	WASHER, Bellcrank Mounting	1
26	509772	KNOB, Shift Lever	2	65	585596	SLEEVE, Bellcrank	1
27	6C-605	SCREW, Plate Mounting Drive	6	66	585597	BUSHING, Bellcrank	1
28	567977	PLATE, Shift Quadrant - Hi-Lo	1	67	585500	BELLCRANK	1
29	567947	PLATE, Shift Quadrant - Forward & Reverse	1	68	8D-05	NUT, Control Cable Jam	1
30	567946	QUADRANT, Shift	1	69	589411	FITTING, Cable End	1
31	18C-412	BOLT, Shift Quadrant Mounting	2	70	18C-620	BOLT, Bracket Mounting	2
32	567945	CLAMP, Shift Quadrant Mounting	1	71	18D-06	NUT, Bracket Mounting	2
33	557246	U-BOLT, Levers to Steering Column	1	72	18D-08	NUT, Lever Mounting	1
34	18D-04	NUT, Shift Quadrant Mounting	2	73	562606	BRACKET, Hi-Lo Range Lever Mounting	1
35	-----	§SUPPORT, Lever Mtg., - See 23	-	74	562605	*LEVER, Hi-Lo Range (Inc. 2) See Note A 1	1
36	1301362	BALL JOINT	1	74A	1520744	**LEVER, Hi-Lo Range	1
37	557246	U-BOLT, Levers to Steering Column	1	74B	11H-15	**FITTING, Lever Grease	1
38	-----	§SUPPORT, Lever Mtg., - See 23	-	75	7D-06	NUT, Hi-Lo Range Lever Jam	1

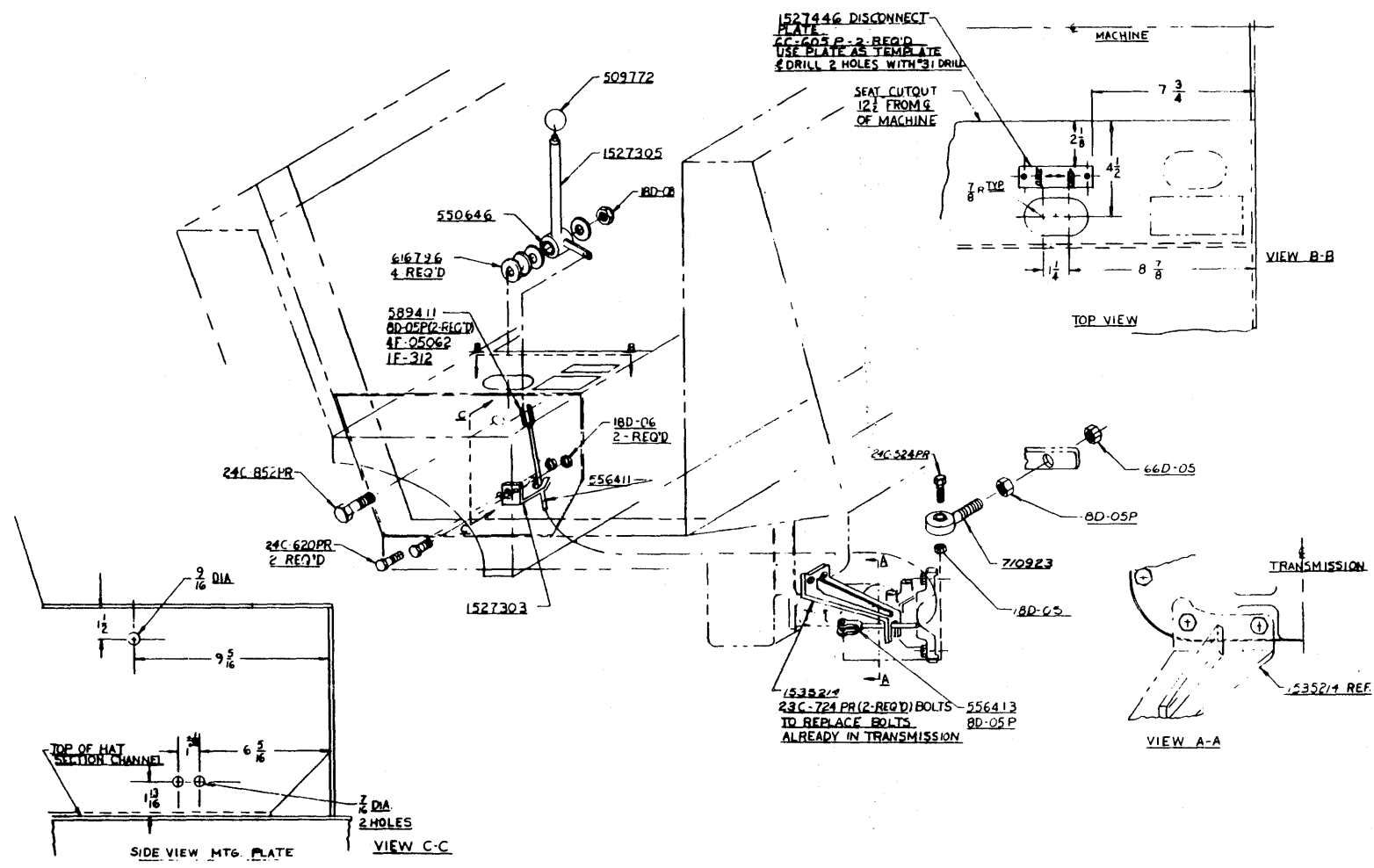
§Not Sold Separately

*NOTE : For Serial: Cummins - 5DC101 thru 5DC166. G.M. - 6DG101 thru 6DG226;

**NOTE: For Serial: Cummins - 5DC167 & after. G.M. - 6DG227 & after.

NOTE "A": For replacement use 1520744 plus 1-569055 Bushing & 1-11H-15 Grease Fitting.

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



DISCONNECT CONTROLS INSTALLATION

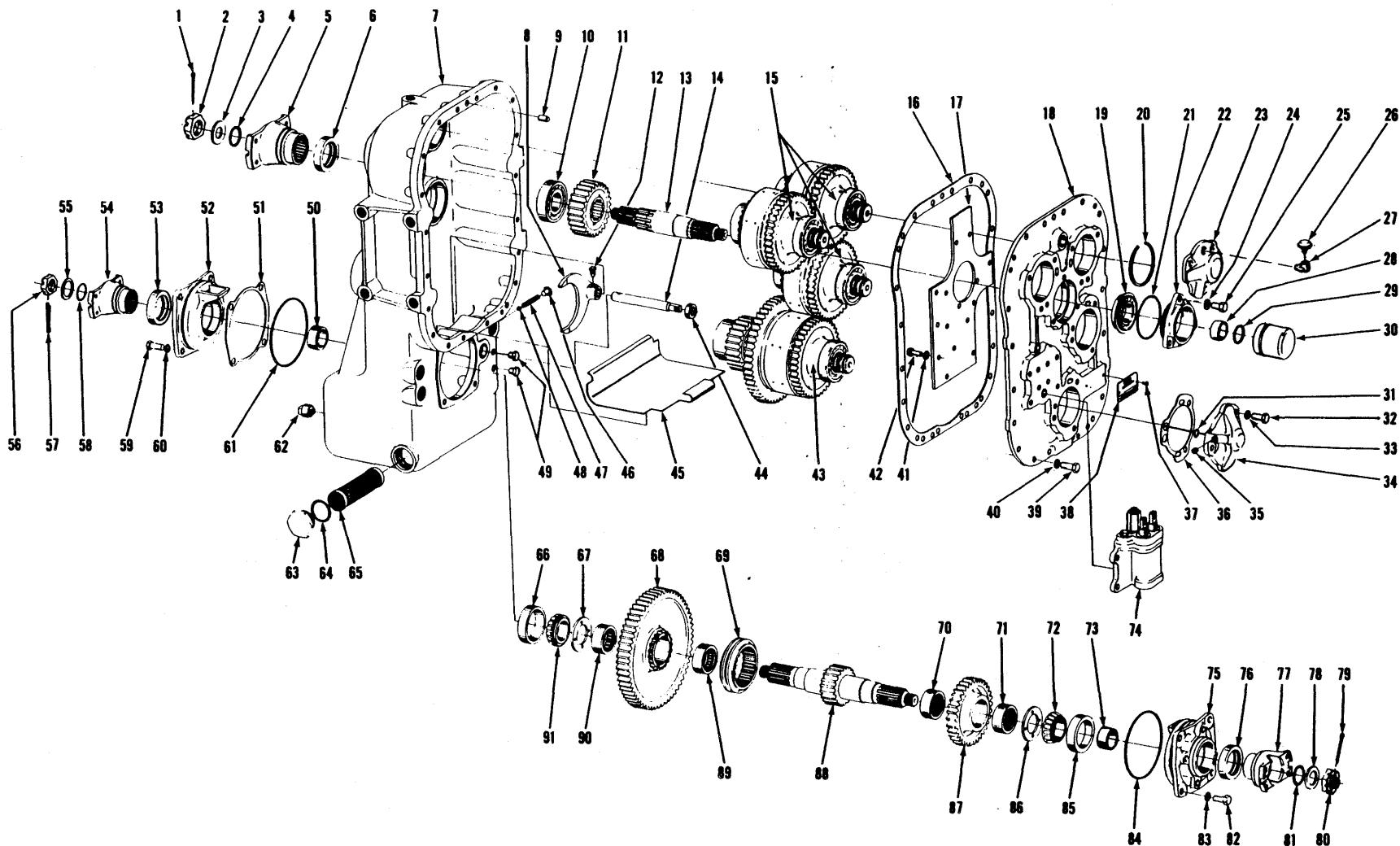
TS-8349-P

DISCONNECT CONTROLS INSTALLATION

Item No.	Part No.	Description	No. Req'd.
1	1527305	LEVER ASSY, Disconnect (Inc. 2)	1
2	569055	BUSHING, Control Lever	1
3	550646	SLEEVE, Control Lever	1
4	616796	WASHER, Control Lever	4
5	18C-852	BOLT, Control Lever	1
6	18D-08	NUT, Control Lever	1
7	509772	KNOB, Control Lever	1
8	11H-15	FITTING, Control Lever Grease	1
9	1527303	BRACKET, Cable Mounting	1
10	18C-620	BOLT, Bracket Attaching	2
11	18D-06	NUT, Bracket Attaching	2
12	1535214	BRACKET, Anchor (Mounted on Transmission)	1
13	17C-724	BOLT, Anchor Bracket Attaching	2
14	556411	CABLE, Disconnect Lever to Transmission	1
15	589411	CLEVIS, Cable to Disconnect Lever	1
16	556413	CLEVIS, Cable to Transmission	1
17	8D-05	NUT, Cable Clevis Jam	3
18	4F-05062	PIN, Clevis	1
19	1F-312	COTTER, Clevis Pin	1
20	18C-524	BOLT, Spherical Bearing Attaching	1
21	18D-05	NUT, Spherical Bearing Attaching	1
22	710923	SPHERICAL BEARING	1
23	8D-05	NUT, Spherical Bearing	1
24	66D-05	NUT, Spherical Bearing	1
25	1527446	PLATE, Disconnect	1
26	6C-605	DRIVE SCREW	2

NOTES

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



TRANSMISSION ASSEMBLY AND MOUNTING BRACKETS

TS-6775-P

[32]

(1G5)

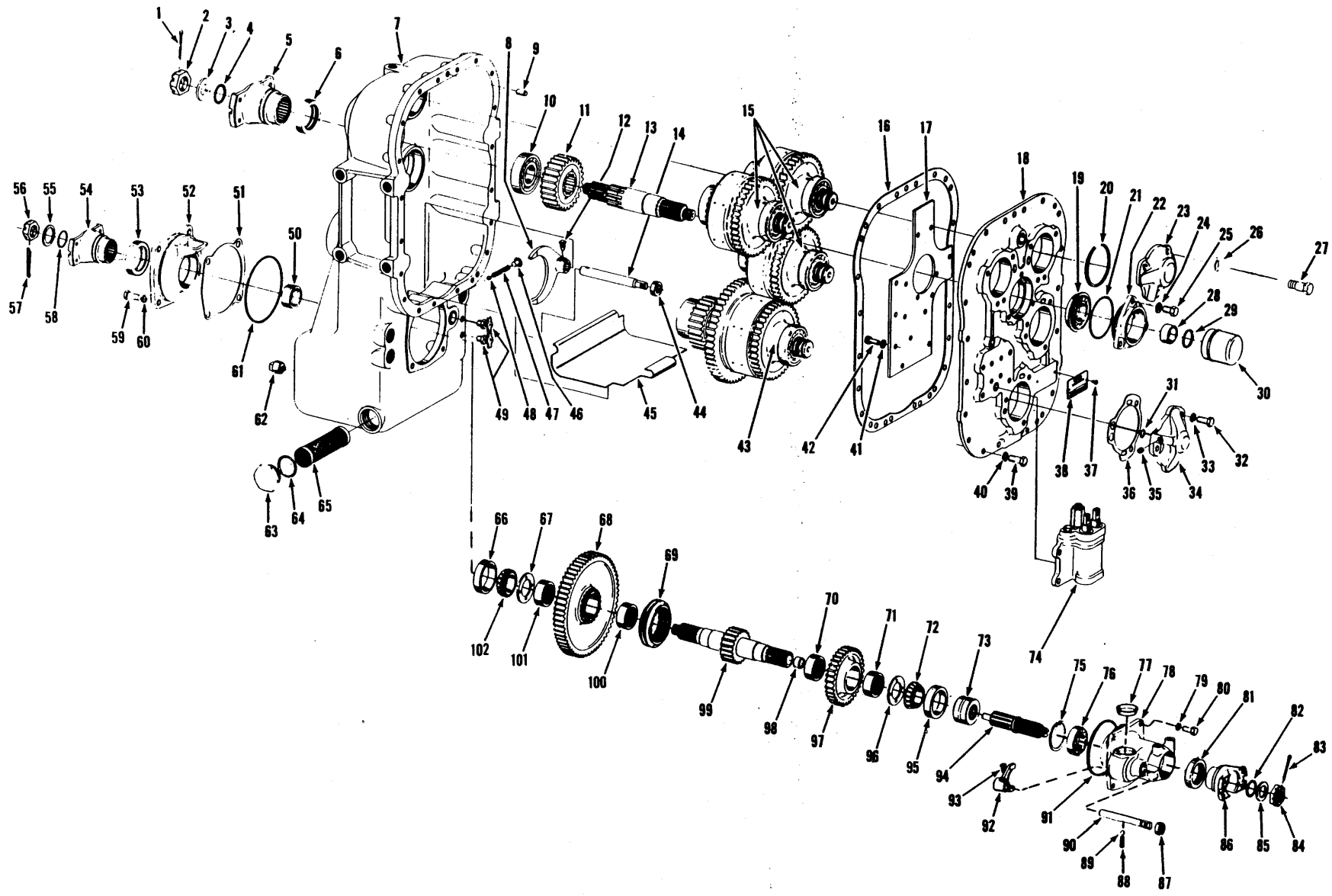
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TRANSMISSION ASSEMBLY AND MOUNTING BRACKETS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	281986	TRANSMISSION ASSY (2420-17) (Inc. 1 thru 91)	1	48	10J-12	BALL, Range Shift Rail Detent	1
1	1F-428	COTTER, Flange Nut	1	49	40K-04	PLUG, Oil Level	2
2	201951	NUT, Input Flange	1	50	215162	SPACER, Brake Flange	1
3	102745	WASHER, Input Flange	1	51	215156	‡SHIM, Bearing Cap — .004"	—
4	25K-40112	"O" RING, Input Flange	1	51A	215157	‡SHIM, Bearing Cap — .007"	—
5	214940	FLANGE, Input Shaft	1	51B	215158	‡SHIM, Bearing Cap — .010"	—
6	206864	SEAL, Input Shaft Oil	1	52	215155	CAP, Output Shaft Bearing	1
7	228494	CASE ASSY, Transmission (Inc. 6)	1	53	206864	SEAL, Bearing Cap Oil	1
8	215146	FORK, Range Shift	1	54	214985	FLANGE, Output	1
9	214295	PIN, Cover to Case Dowel	2	55	102745	WASHER, Flange Nut	1
10	225603	BEARING, Input Shaft	1	56	201951	NUT, Flange	1
11	215166	GEAR, Input Shaft	1	57	1F-428	COTTER, Flange Nut	1
12	201566	SCREW, Shift Fork Lock	1	58	25K-40112	"O" RING, Flange	1
13	217952	SHAFT, Input	1	59	1C-820	BOLT, Bearing Cap	4
14	215145	RAIL, Range Shift	1	60	5E-08	LKWSHR, Bearing Cap	4
15	—	CLUTCH GROUP — Foward, Reverse & Low — See Index (Inc. 20)	—	61	25K-40524	"O" RING, Bearing Cap	1
16	215144	GASKET, Cover to Case	1	62	215757	PLUG, Drain — Magnetic	1
17	215143	PLATE, Oil Circuit	1	63	219370	PLUG, Suction Screen	1
18	215141	COVER ASSY, Trans. (Inc. 17, 41, 42)	1	64	219373	GASKET, Suction Screen Plug	1
19	225824	BEARING, Input Shaft Locating	1	65	215205	SCREEN, Suction	1
20	945374	RING, Bearing Retaining	4	66	675544	CUP, Output Shaft Bearing	1
21	25K-40316	"O" RING, Input Shaft Bearing Cap	1	67	215154	WASHER, Output Shaft Thrust	1
22	215198	CAP ASSY; Input Shaft Bearing (Inc. 22A)	1	68	228068	GEAR ASSY, Low (Inc. 89, 90) (61T)	1
22A	206864	†SEAL, Input Shaft Oil	1	69	215149	HUB, Output Shaft Shift	1
23	228961	CAP, Distributor Bearing	1	70	225079	BEARING, High Gear	1
24	4E-07	LKWSHR, Bearing Cap	3	71	225079	BEARING, High Gear	1
25	1C-718	BOLT, Bearing Cap	3	72	675548	CONE, Output Shaft Bearing	1
26	211433	BREATHER, Air	1	73	215162	SPACER, Brake Flange	1
27	25F-3	ELBOW	1	74	—	CONTROL VALVE — See Index	—
28	215162	SPACER, Input Flange	1	75	215155	CAP, Output Shaft Bearing	1
29	659065	RING, Bearing Retaining	1	76	206864	SEAL, Bearing Cap Oil	1
30	209412	CAP, Input Shaft	1	77	214985	FLANGE, Output	1
31	25K-30016	"O" RING, Bearing Cap	4	78	102745	WASHER, Flange Nut	1
32	1C-718	BOLT, Bearing Cap	12	79	1F-428	COTTER, Flange Nut	1
33	4E-07	LKWSHR, Bearing Cap	12	80	201951	NUT, Flange	1
34	215163	CAP, Distributor Bearing	3	81	25K-40112	"O" RING, Flange	1
35	16F-02	PLUG, Bearing Cap Pipe	4	82	1C-820	BOLT, Bearing Cap	4
36	215164	GASKET, Bearing Cap	4	83	5E-08	LKWSHR, Bearing Cap	4
37	207873	SCREW, Name Plate	2	84	25K-40524	"O" RING, Bearing Cap	1
38	220725	PLATE, Name	1	85	675544	CUP, Output Shaft Bearing	1
39	1C-720	BOLT, Cover to Case	20	86	215154	WASHER, Output Shaft Thrust	1
40	4E-07	LKWSHR, Cover to Case	20	87	228069	GEAR ASSY, High (Inc. 70, 71) (34T)	1
41	5E-06	LKWSHR, Plate to Cover	15	88	215551	SHAFT, Output	1
42	1C-614	BOLT, Plate to Cover	15	89	225079	BEARING, Low Gear	1
43	—	CLUTCH GROUP — High — See Index (Inc. 20)	—	90	225079	BEARING, Low Gear	1
44	234653	SEAL, Range Shift Oil	1	91	675548	CONE, Output Shaft Bearing	1
45	228943	PLATE, Baffle	1	92	589573	†BRACKET, Trans. Mounting	2
46	40K-04	PLUG, Range Shift Rail Detent	1	93	18C-832	†BOLT, Bracket to Frame	4
47	215191	SPRING, Range Shift Rail Detent	1	94	619029	†WASHER, Bracket to Frame — L.H.	2
				95	18D-08	†NUT, Bracket to Frame	4
				96	17C-1228	†BOLT, Bracket to Trans.	8
				97	4E-12	†LKWSHR, Bracket to Trans.	8

†Not Illustrated
‡As Required

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



TRANSMISSION ASSEMBLY (WITH DISCONNECT)

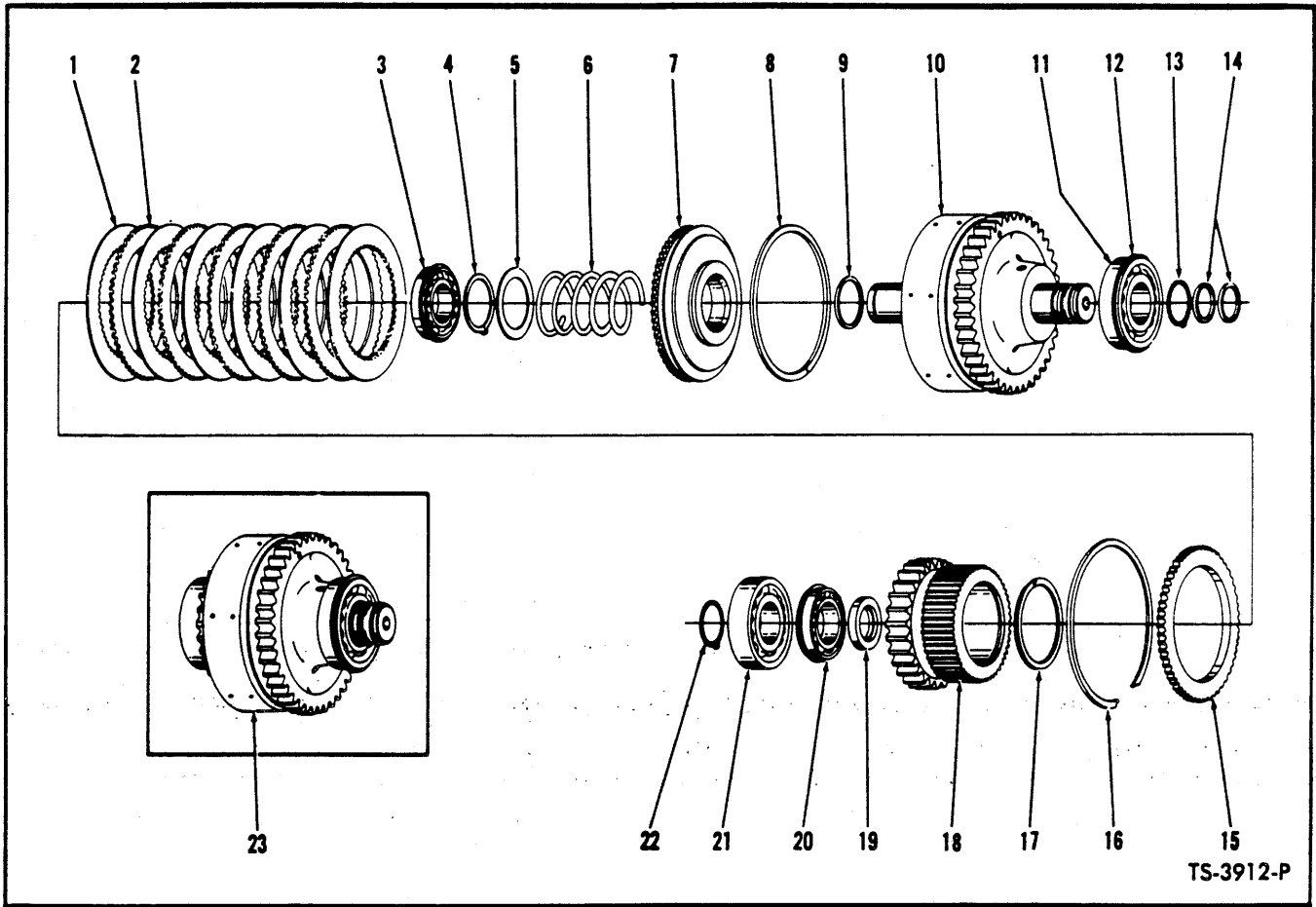
TS-8348-P

TRANSMISSION ASSEMBLY (WITH DISCONNECT)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	282616	TRANSMISSION ASSY (2420-39) (Inc. 1 thru 102 plus pages 4, 5, 6)	1	51	215156	‡ SHIM, Bearing Cap — .004"	—
1	1F-428	COTTER, Flange Nut	1	51A	215157	‡ SHIM, Bearing Cap — .007"	—
2	201951	NUT, Input Flange	1	51B	215158	‡ SHIM, Bearing Cap — .010"	—
3	102745	WASHER, Input Flange	1	52	215155	CAP, Output Shaft Bearing	1
4	25K-40112	"O" RING, Input Flange	1	53	206864	SEAL, Bearing Cap Oil	1
5	214940	FLANGE, Input Shaft	1	54	214985	FLANGE, Output	1
6	206864	SEAL, Input Shaft Oil	1	55	102745	WASHER, Flange Nut	1
7	801363	CASE ASSY, Transmission (Inc. 6)	1	56	201951	NUT, Flange	1
8	215146	FORK, Range Shift	1	57	1F-428	COTTER, Flange Nut	1
9	214295	PIN, Cover to Case Dowel	2	58	25K-40112	"O" RING, Flange	1
10	225603	BEARING, Input Shaft	1	59	1C-820	BOLT, Bearing Cap	4
11	215166	GEAR, Input Shaft (26T)	1	60	5E-08	LKWSHR, Bearing Cap	4
12	201566	SCREW, Shift Fork Lock	1	61	25K-40524	"O" RING, Bearing Cap	1
13	217952	SHAFT, Input	1	62	215757	PLUG, Drain — Magnetic	1
14	215145	RAIL, Range Shift	1	63	219370	PLUG, Suction Screen	1
15	—	CLUTCH GROUP — Forward, Reverse & Low — See Index (Inc. 20)	—	64	219373	GASKET, Suction Screen Plug	1
16	215144	GASKET, Cover to Case	1	65	215205	SCREEN, Suction	1
17	215143	PLATE, Oil Circuit	1	66	675544	CUP, Output Shaft Bearing	1
18	215141	COVER ASSY, Trans. (Inc. 17, 41, 42)	1	67	215154	WASHER, Output Shaft Thrust	1
19	225824	BEARING, Input Shaft Locating	1	68	228068	GEAR ASSY, Low (Inc. 100, 101) (61T)	1
20	945374	RING, Bearing Retaining	4	69	215149	HUB, Output Shaft Shift	1
21	25K-40316	"O" RING, Input Shaft Bearing Cap	1	70	225079	BEARING, High Gear	1
22	215198	CAP ASSY, Input Shaft Bearing (Inc. 22A)	1	71	225079	BEARING, High Gear	1
22A	206864	† SEAL, Input Shaft Oil	1	72	675548	CONE, Output Shaft Bearing	1
23	215163	CAP, Distributor Bearing	1	73	209427	HUB, Disconnect Shaft Shift	1
24	4E-07	LKWSHR, Bearing Cap	3	74	—	CONTROL VALVE — See Index	—
25	1C-718	BOLT, Bearing Cap	3	75	662003	RING, Bearing Retaining	2
26	4E-07	LKWSHR, Bearing Cap	3	76	658019	BEARING, Disconnect Shaft	1
27	1C-718	BOLT, Bearing Cap	3	77	222418	PLUG, Disconnect Housing	1
28	215162	SPACER, Input Flange	1	78	215201	HOUSING, Disconnect	1
29	659065	RING, Bearing Retaining	1	79	5E-08	LKWSHR, Disconnect Housing to Case	4
30	209412	CAP, Input Shaft	1	80	1C-820	BOLT, Disconnect Housing to Case	4
31	25K-30016	"O" RING, Bearing Cap	4	81	206864	SEAL, Flange Oil	1
32	1C-718	BOLT, Bearing Cap	9	82	25K-40112	"O" RING, Flange	1
33	4E-07	LKWSHR, Bearing Cap	9	83	1F-428	COTTER, Flange Nut	1
34	215163	CAP, Distributor Bearing	3	84	201951	NUT, Flange	1
35	16F-02	PLUG, Bearing Cap Pipe	4	85	102745	WASHER, Flange	1
36	215164	GASKET, Bearing Cap	4	86	214987	FLANGE, Output	1
37	207873	SCREW, Name Plate	2	87	234650	SEAL, Shift Rail Oil	1
38	220725	PLATE, Name	1	88	201844	SPRING, Disconnect Shift Rail Detent	1
39	1C-718	BOLT, Cover to Case	20	89	10J-12	BALL, Disconnect Shift Rail Detent	1
40	4E-07	LKWSHR, Cover to Case	20	90	215202	RAIL, Disconnect Shift	1
41	5E-06	LKWSHR, Plate to Cover	15	91	25K-40524	"O" RING, Disconnect Housing	1
42	1C-614	BOLT, Plate to Cover	15	92	215203	FORK, Disconnect Shift	1
43	—	CLUTCH GROUP — High — See Index (Inc. 20)	—	93	201566	SCREW, Shift Fork Lock	1
44	234653	SEAL, Range Shift Oil	1	94	215208	SHAFT, Disconnect	1
45	228943	PLATE, Baffle	1	95	675544	CUP, Output Shaft Bearing	1
46	40K-04	PLUG, Range Shift Rail Detent	1	96	215154	WASHER, Output Shaft Thrust	1
47	215191	SPRING, Range Shift Rail Detent	1	97	228069	GEAR ASSY, High (Inc. 70, 71) 34T	1
48	10J-12	BALL, Range Shift Rail Detent	1	98	225408	BUSHING, Output Shaft	1
49	40K-04	PLUG, Oil Level	2	99	215756	SHAFT & BUSHING ASSY, Output (Inc. 98)	1
50	215162	SPACER, Brake Flange	1	100	225079	BEARING, Low Gear	1
				101	225079	BEARING, Low Gear	1
				102	675548	CONE, Output Shaft Bearing	1

†Not Illustrated
‡As Required

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



TS-3912-P

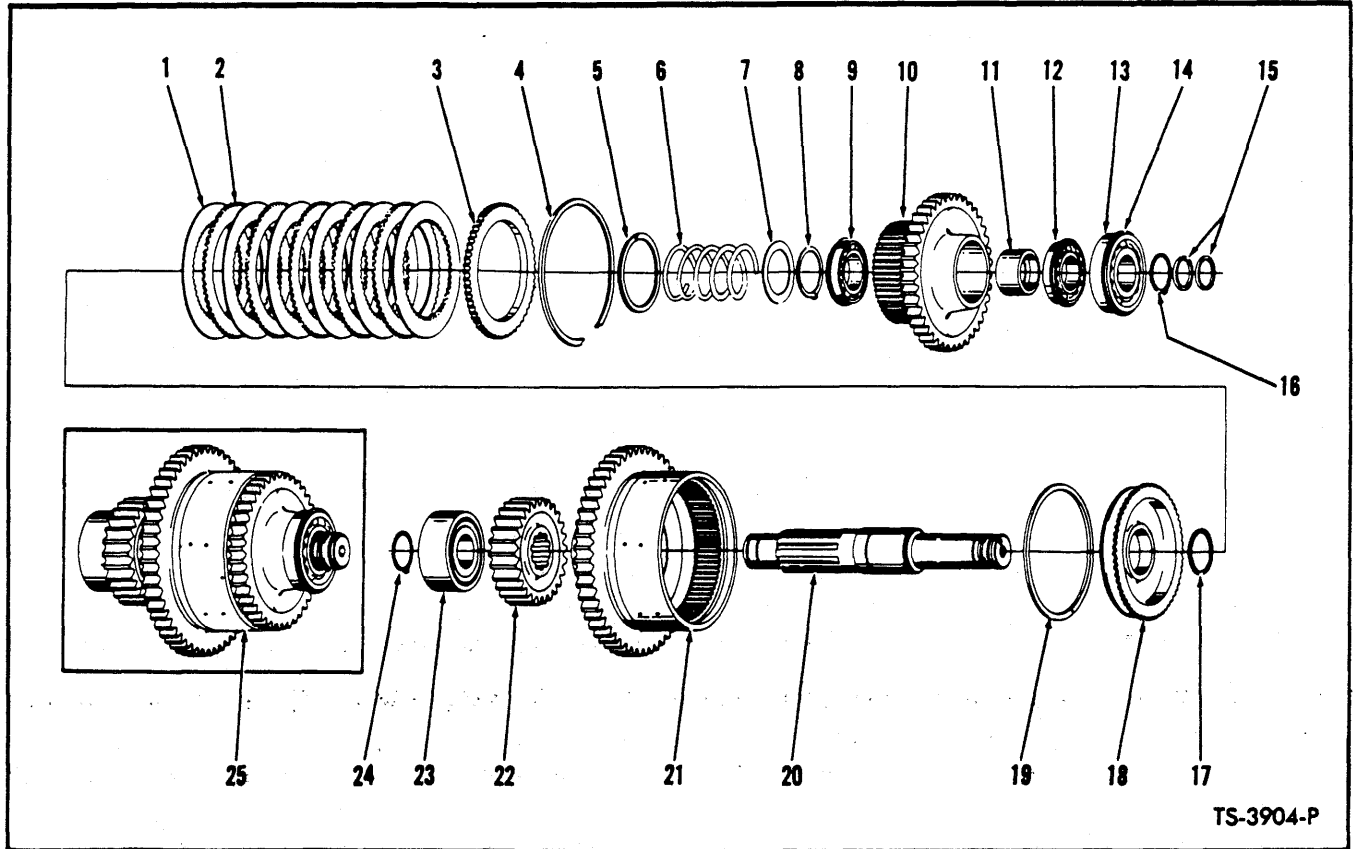
CLUTCH GROUP – FORWARD, REVERSE AND LOW

(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	215178	DISC, Clutch Inner	6	11	225602	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, Clutch Shaft Bearing Retaining	1
4	654613	RING, Return Spring Retaining	1	14	215183	RING, Clutch Shaft Sealing	2
5	616848	WASHER, Return Spring Retaining	1	15	224774	PLATE, Clutch Disc End	1
6	215179	SPRING, Clutch Piston Return	1	16	215190	RING, End Plate Retaining	1
7	215177	PISTON, Clutch	1	17	225077	RING, Clutch Disc Hub Oil Baffle	1
8	224771	RING, Piston Outer Sealing	1	18	215180	GEAR & HUB ASSY (28T)	1
9	223085	RING, Piston Inner Sealing	1	19	215182	SPACER, Clutch Disc Hub Bearing	1
10	215663	DRUM ASSY, Clutch (Inc. 10A, 10B) (40T)	1	20	225076	BEARING, Clutch Disc Hub	1
10A	215176	†SEAT, Bleed Valve Ball	1	21	658016	BEARING, Clutch Shaft	1
10B	10J-06	†BALL, Bleed Valve	1	22	659065	RING, Clutch Shaft Bearing Retaining	1
				23	—	§CLUTCH ASSY	1

†Not Illustrated
§Not sold as an Assembly – Order individual parts.

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



TS-3904-P

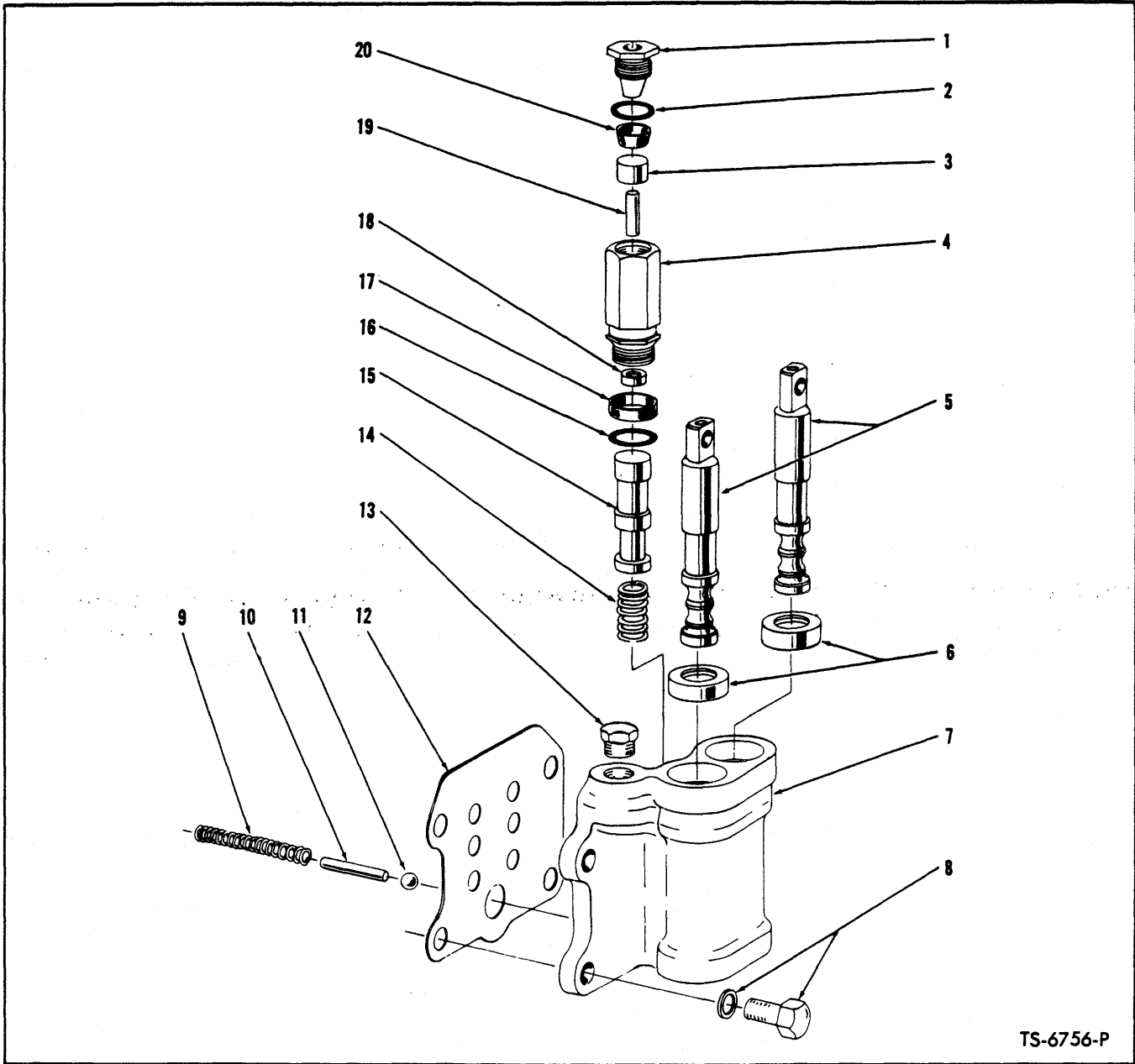
CLUTCH GROUP – HIGH

Item No.	Part No.	Description	No. Req'd.
1	215178	DISC, Clutch Inner	6
2	224772	DISC, Clutch Outer	5
3	224774	PLATE, Clutch Disc End	1
4	215190	RING, End Plate Retaining	1
5	225077	RING, Disc Hub Oil Baffle	1
6	215179	SPRING, Piston Return	1
7	616848	WASHER, Return Spring Retaining	1
8	654613	RING, Return Spring Retaining	1
9	225076	BEARING, Clutch Disc Hub	1
10	215188	HUB & GEAR, Clutch Disc (40T)	1
11	215189	SPACER, Clutch Disc Hub Bearing	1
12	225076	BEARING, Clutch Disc Hub	1
13	225602	BEARING, Clutch Shaft (Inc. 14)	1
14	945374	RING, Bearing Retaining	1
15	215183	RING, Clutch Shaft Sealing	2
16	659065	RING, Bearing Retaining	1
17	223085	RING, Piston Inner Sealing	1
18	215177	PISTON, Clutch	1
19	224771	RING, Piston Outer Sealing	1
20	215184	SHAFT, Clutch	1
21	227952	DRUM & GEAR ASSY, Clutch (Inc. 21A, 21B) (53T)	1
21A	215176	†SEAT, Bleed Valve Ball	1
21B	10J-06	†BALL, Bleed Valve	1
22	215166	GEAR, High Clutch Shaft (26T)	1
23	799595	BEARING, Clutch Shaft High Gear	1
24	659065	RING, Bearing Retaining	1
25		§CLUTCH ASSY	—

†Not Illustrated

§Not Sold as an Assembly – Order individual parts.

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



TS-6756-P

CONTROL VALVE - TRANSMISSION
For Serial: Cummins - 5DC101 thru 6DC115
G.M. - 6DG101 thru 7DG120

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	229047	CONTROL VALVE ASSY (Inc. 1 thru 20)	1	9	215147	SPRING, Detent	2
1	215200	PLUG, Stop	1	10	215194	PIN, Detent Stop	2
2	25K-30020	"O" RING	1	11	10J-12	BALL, Detent	2
3	215199	SPACER, Cup	1	12	215169	GASKET, Housing to Cover	1
4	215196	VALVE, De-Clutch (Inc. 1, 2, 3, 4A, 16 thru 20)	1	13	40K-06	PLUG	1
4A	215197	HOUSING, Valve De-Clutch	1	14	220363	SPRING, Control Valve	1
5	-----	§ VALVE, Manual Control - See A	2	15	-----	§ VALVE, De-Clutch Control - See A	1
6	234653	SEAL, Manual Control Valve Oil	2	16	25K-30022	"O" RING	1
7	-----	§ HOUSING, Control Valve - See A	1	17	228931	SEAL, Band	1
8	5C-718	BOLT & LKWSHR, Housing to Cover ..	4	18	224315	SEAL, Oil	1
				19	106358	PIN, Push	1
				20	227874	CUP, Piston	1

§Not Sold Separately

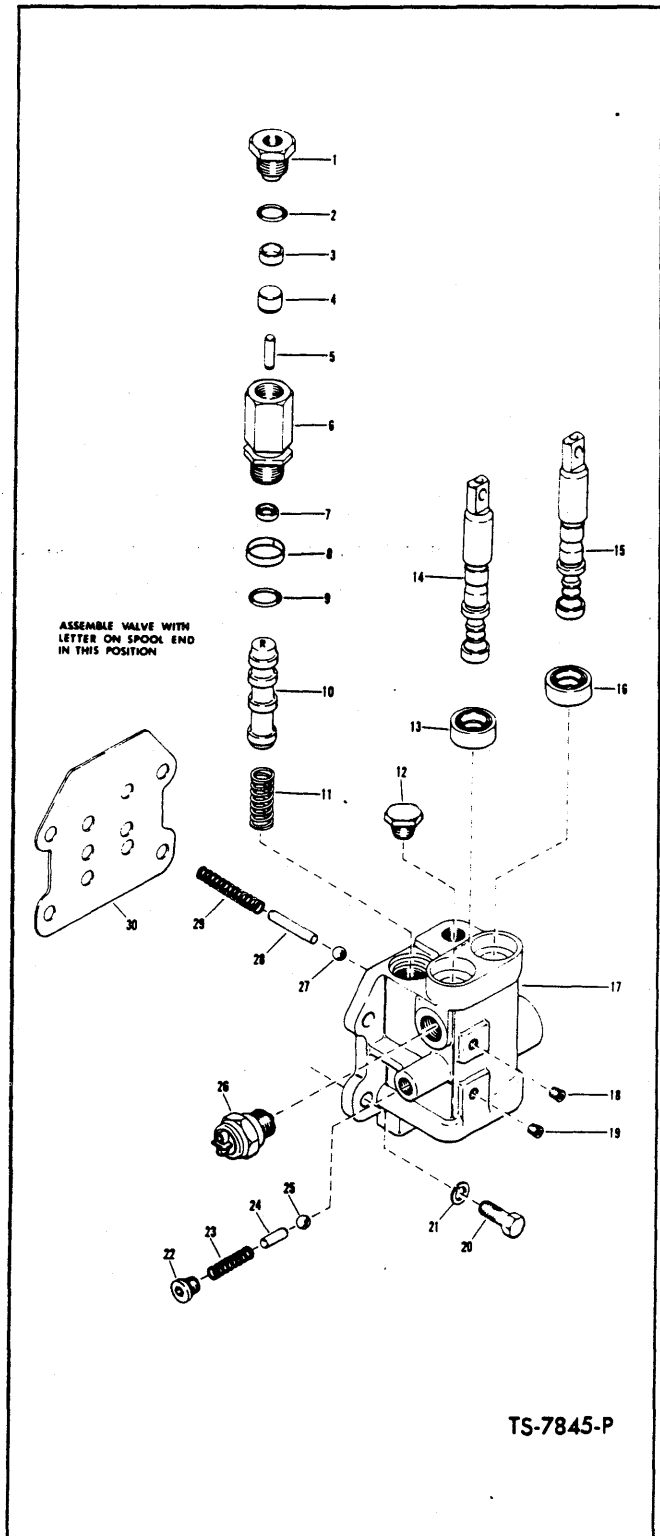
WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE

CONTROL VALVE – TRANSMISSION

For Serial 6DC116 and thereafter, 7DG121 and thereafter

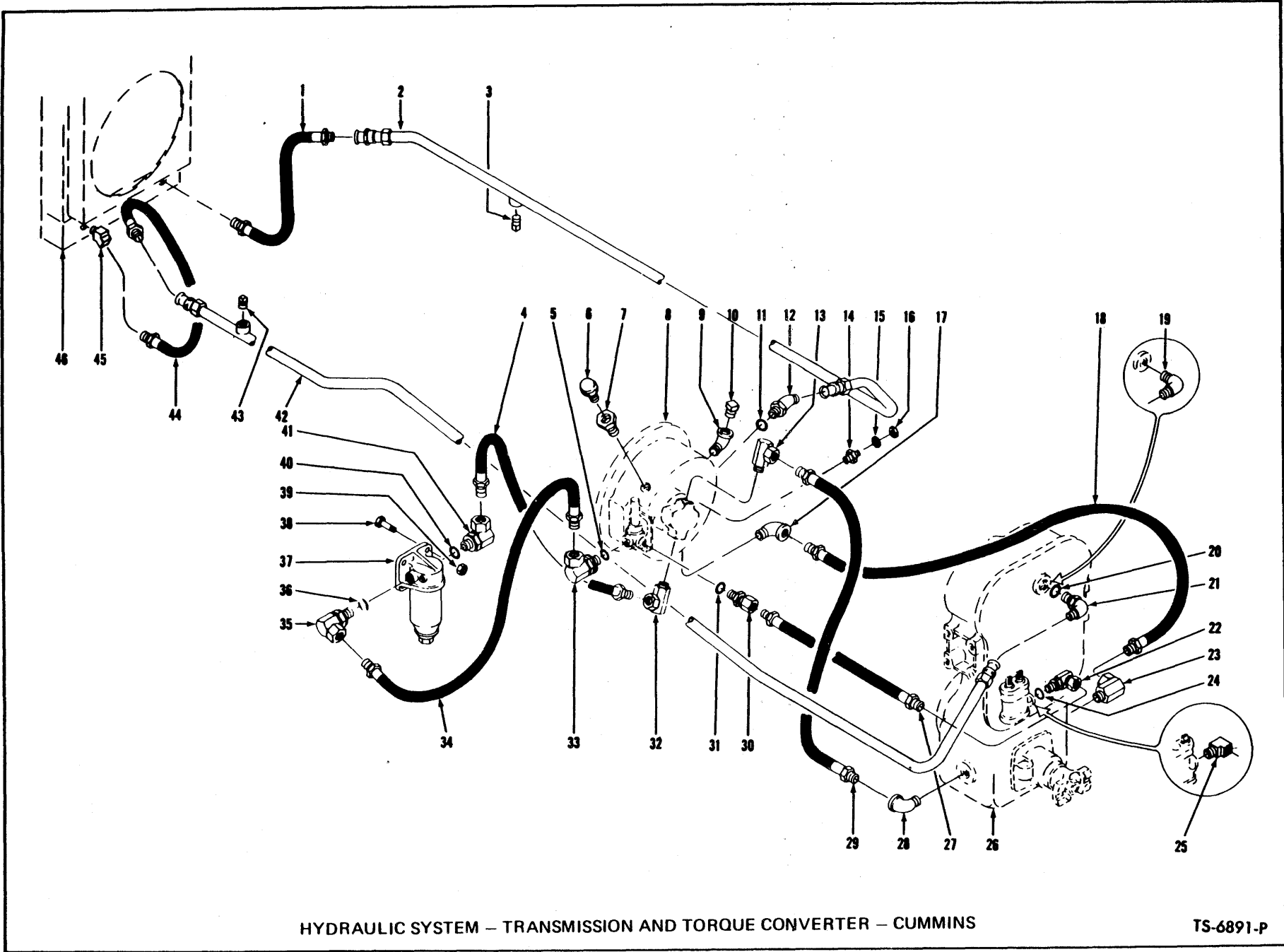
(Also for Disconnect Transmission)

Item No.	Part No.	Description	No. Req'd.
A	229369	CONTROL VALVE ASSY (Inc. 1 thru 30)	1
1	215200	PLUG, Stop	1
2	25K-30020	"O" RING	1
3	227874	CUP, Piston	1
4	215199	SPACER, Cup	1
5	106358	PIN, Push	1
6	215196	VALVE, De-Clutch (Inc. 1 thru 5, 7, 8, 9, 12)	1
7	224315	SEAL, Oil	1
8	228931	SEAL, Band	1
9	25K-30022	"O" RING	1
10	-----	*§VALVE, De-Clutch Control – See Item "A"	—
11	220363	SPRING, Control Valve	1
12	40K-02	PLUG	1
13	234653	SEAL, Manual Control Valve Oil	1
14	-----	§VALVE, Manual Control – See Item "A"	—
15	-----	§VALVE, Manual Control – See Item "A"	—
16	234653	SEAL, Manual Control Valve Oil	1
17	-----	§HOUSING, Control Valve – See Item "A"	—
18	16F-01	PLUG	1
19	16F-01	PLUG	1
20	1C-718	BOLT, Housing to Cover	4
21	4E-07	LKWSHR, Housing to Cover	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 Cover	1



*NOTE: For correct operation of De-Clutch feature in this application, Item 10 must be installed with the letter "R" in the upright position.
§Not Sold Separately

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



HYDRAULIC SYSTEM – TRANSMISSION AND TORQUE CONVERTER – CUMMINS

TS-6891-P

[40]

(1E11)

PM 2952
Printed in U.S.A.

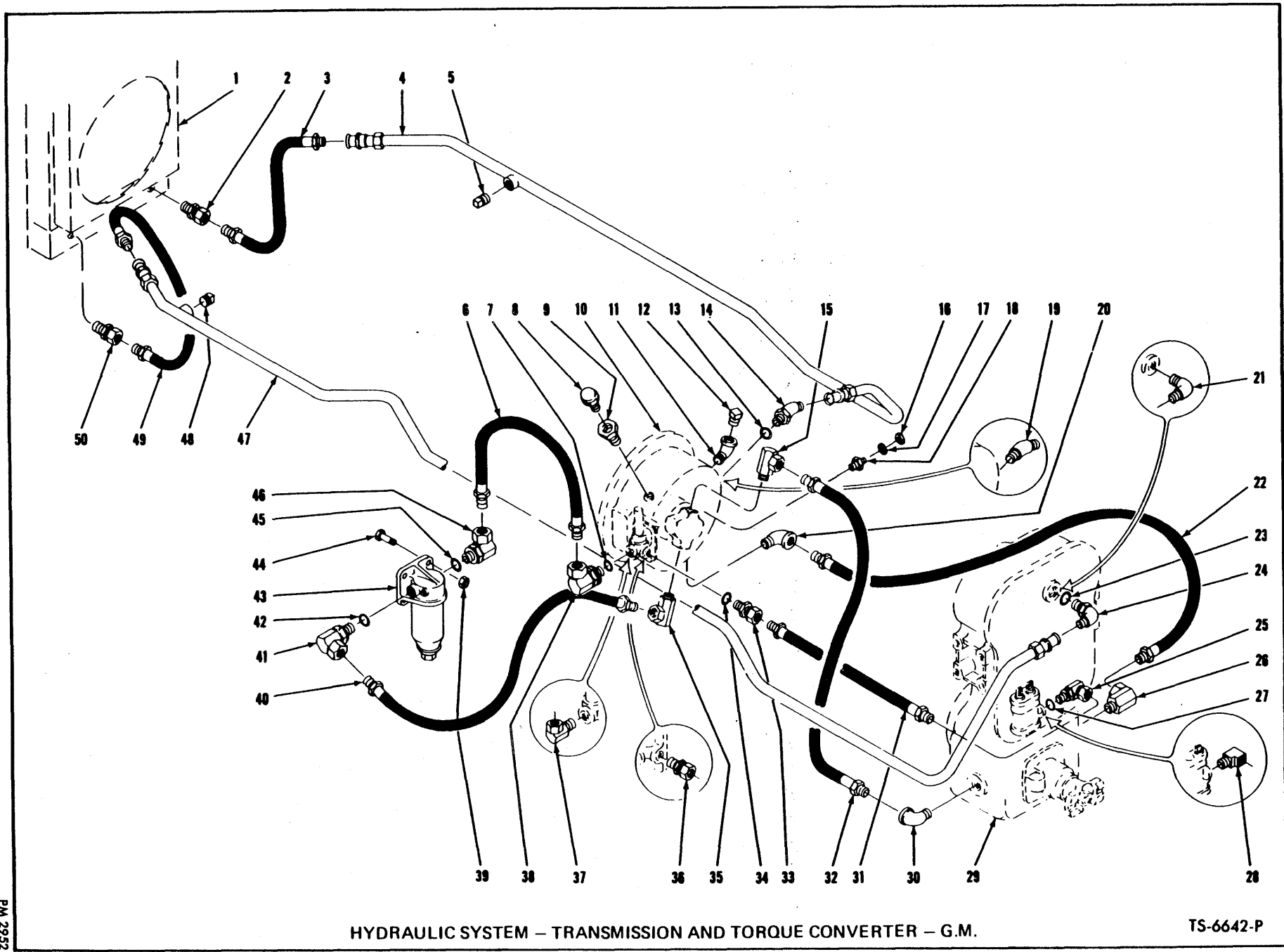
HYDRAULIC SYSTEM — TRANSMISSION AND TORQUE CONVERTER — CUMMINS

Item No.	Part No.	Description	No. Req'd.
1	563465	HOSE, Radiator to Cooler Line	1
1A	36F-5	† ADAPTER UNION, Hose to Radiator	1
2	571412	LINE, Radiator to Converter — Cooler (Inc. 3)	1
3	40K-04	PLUG, Cooler Line	1
4	538090	HOSE, Pump to Filter	1
5	91F-8	"O" RING, Adapter Union	1
6	211433	BREATHER, Converter Air	1
7	227265	VALVE, Air Breather Check	1
8	-----	CONVERTER — See Index	—
9	25F-6	ELBOW, Converter Fill	1
10	13F-16	PLUG, Converter Fill	1
11	91F-8	"O" RING, Elbow	1
12	17K-8	ELBOW, Line to Converter (Inc. 11)	1
13	31F-6	ADAPTER UNION, Hose to Pump	1
14	551323	SENDER UNIT, Converter Temperature	1
15	12E-10	LKWSHR, Sender Unit	1
16	14D-10	NUT, Sender Unit	1
17	26F-6	ELBOW, Hose to Converter	1
18	543280	HOSE, Converter Drain	1
19	83F-8	* ELBOW, Cooler Line to Transmission	1
20	91F-8	"O" RING, Elbow	1
21	17K-8	ELBOW, Cooler Line to Transmission (Inc. 20)	1
22	362653	ADAPTER UNION, Hose to Transmission (Inc. 24)	1
23	31F-6	ADAPTER UNION, Hose to Transmission	1
24	91F-6	"O" RING, Adapter Union	1
25	29F-2	* ELBOW, Hose to Transmission	1
26	-----	TRANSMISSION — See Index	—
27	712699	HOSE, Converter to Transmission	1
28	26F-6	ELBOW, Hose to Transmission	1
29	589367	HOSE, Converter Suction	1
30	690279	CONNECTOR, Hose to Converter (Inc. 31)	1
31	91F-6	"O" RING, Connector	1
32	31F-5	ADAPTER UNION, Hose to Pump	1
33	526676	ADAPTER UNION, Hose to Converter (Inc. 5)	1
34	546810	HOSE, Filter to Converter	1
35	526676	ADAPTER UNION, Hose to Filter (Inc. 36)	1
36	91F-8	"O" RING, Adapter Union	1
37	1533614	FILTER ASSY, Converter & Transmission (Inc. 37A)	1
37A	215502	† CARTRIDGE KIT, Filter	1
38	18C-620	BOLT, Filter Mounting	4
39	66D-06	NUT, Filter Mounting Bolt	4
40	91F-8	"O" RING, Adapter Union	1
41	526676	ADAPTER UNION, Hose to Filter	1
42	571523	LINE, Transmission to Radiator — Cooler (Inc. 43)	1
43	40K-04	PLUG, Cooler Line	1
44	563465	HOSE, Line to Radiator	1
45	81F-4	ELBOW, Hose to Radiator	1
46	-----	RADIATOR — See Index	—

†Not Illustrated

*NOTE: Items 19 and 25 were installed on Machine Serial 5DC103 only in place of items 20, 21, 22 and 24.

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



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

TS-6642-P

[42]

(1E13)

PM 2952
Printed in U.S.A.

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

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	RADIATOR — See Index	—	27	91F-6	"O" RING, Elbow — See Serial Group "D" Below	1
2	36F-5	ADAPTER UNION, Hose to Radiator ..	1	28	29F-2	ELBOW, Hose to Transmission — See Serial Group "C" Below	1
3	526847	HOSE, Radiator to Cooler Line	1	29	-----	TRANSMISSION — See Index	—
4	589477	LINE, Radiator to Converter Cooler (Inc. 5)	1	30	26F-6	ELBOW, Hose to Transmission	1
5	40K-04	PLUG, Cooler Line	1	31	556575	HOSE, Converter to Transmission	1
6	546803	HOSE, Converter to Filter	1	32	589367	HOSE, Converter to Transmission	1
7	91F-8	"O" RING, Elbow — See Serial Group "B" Below	1	33	690279	CONNECTOR, Hose to Converter Valve (Inc. 34) — See Serial Group "B" Below	1
8	211433	BREATHER, Converter Air	1	34	91F-6	"O" RING, Connector — See Serial Group "B" Below	1
9	227265	VALVE, Air Breather Check	1	35	31F-5	ADAPTER UNION, Hose to Converter Pump	1
10	-----	CONVERTER — See Index	—	36	36F-3	CONNECTOR, Hose to Converter Valve — See Serial Group "A" Below	1
11	25F-6	ELBOW, Converter Fill	1	37	553843	ADAPTER UNION, Hose to Converter Valve — See Serial Group "A" Below	1
12	13F-16	PLUG, Converter Fill	1	38	526676	ADAPTER UNION, Hose to Converter Valve — See Serial Group "B" Below	1
13	91F-8	"O" RING, Elbow — See Serial Group "B" Below	1	39	18D-06	NUT, Filter Mounting	4
14	18K-8	ELBOW, Line to Converter (Inc. 13) — See Serial Group "B" Below	1	40	546810	HOSE, Pump to Filter	1
15	31F-6	ADAPTER UNION, Hose to Converter Pump	1	41	526676	ELBOW, Hose to Filter (Inc. 42)	1
16	14D-10	NUT, Sender Unit	1	42	91F-8	"O" RING, Elbow	1
17	12E-10	LKWSHR, Sender Unit	1	43	1533614	FILTER, Converter & Transmission (Inc. 43A)	1
18	551323	SENDER UNIT, Converter Temperature	1	43A	215502	† CARTRIDGE KIT, Filter	1
19	84F-8	ELBOW, Cooler Line to Converter — See Serial Group "A" Below	1	44	18C-628	BOLT, Filter Mounting	4
20	26F-6	ELBOW, Hose to Converter Drain	1	45	91F-8	"O" RING, Elbow	1
21	83F-8	ELBOW, Cooler Line to Transmission — See Serial Group "C" Below	1	46	526676	ELBOW, Hose to Filter (Inc. 45)	1
22	542626	HOSE, Converter Drain	1	47	589476	LINE, Transmission to Radiator Cooler (Incl. 48)	1
23	91F-8	"O" RING, Elbow — See Serial Group "D" Below	1	48	40K-04	PLUG, Cooler Line	1
24	17K-8	ELBOW, Cooler Line to Transmission (Inc. 23) — See Serial Group "D" Below	1	49	526847	HOSE, Cooler Line to Radiator	1
25	362653	ELBOW, Hose to Transmission (Inc. 27) — See Serial Group "D" Below	1	50	36F-5	ADAPTER UNION, Hose to Radiator ..	1
26	31F-6	ELBOW, Drain Hose to Transmission ..	1				

Serial Group "A" — For Converter with pipe fitting — 6DG101 thru 6DG123

Serial Group "B" — For Converter with "O" Ring fitting — 6DG124 and thereafter

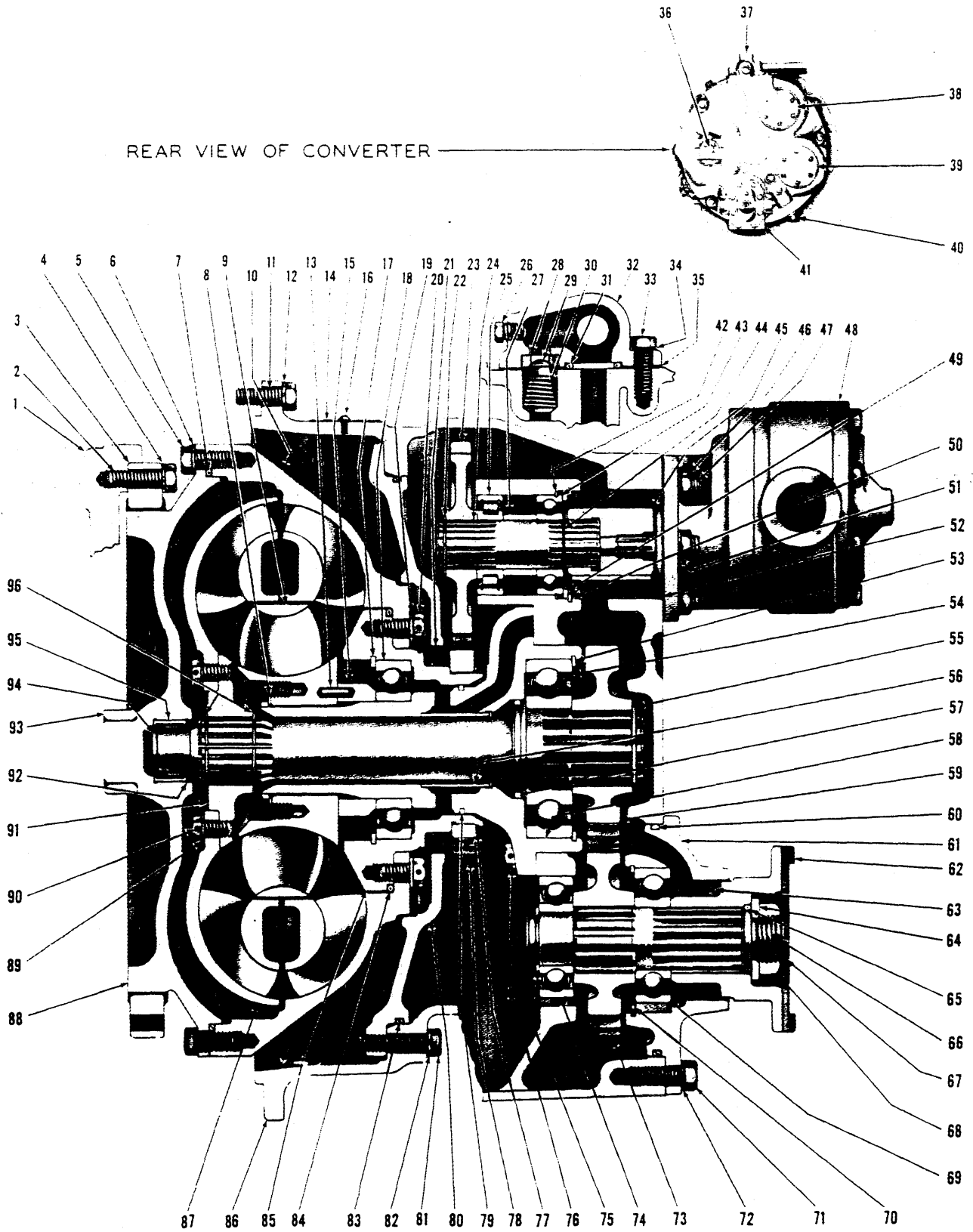
Serial Group "C" — For Transmission with pipe fitting — 6DG101 thru 6DG123, 6DG127

Serial Group "D" — For Transmission with "O" Ring fitting — 6DG124, 6DG125, 6DG126, 6DG128 and thereafter

†Not Illustrated

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

REAR VIEW OF CONVERTER



TORQUE CONVERTER ASSEMBLY

TS-1566-P

TORQUE CONVERTER ASSEMBLY

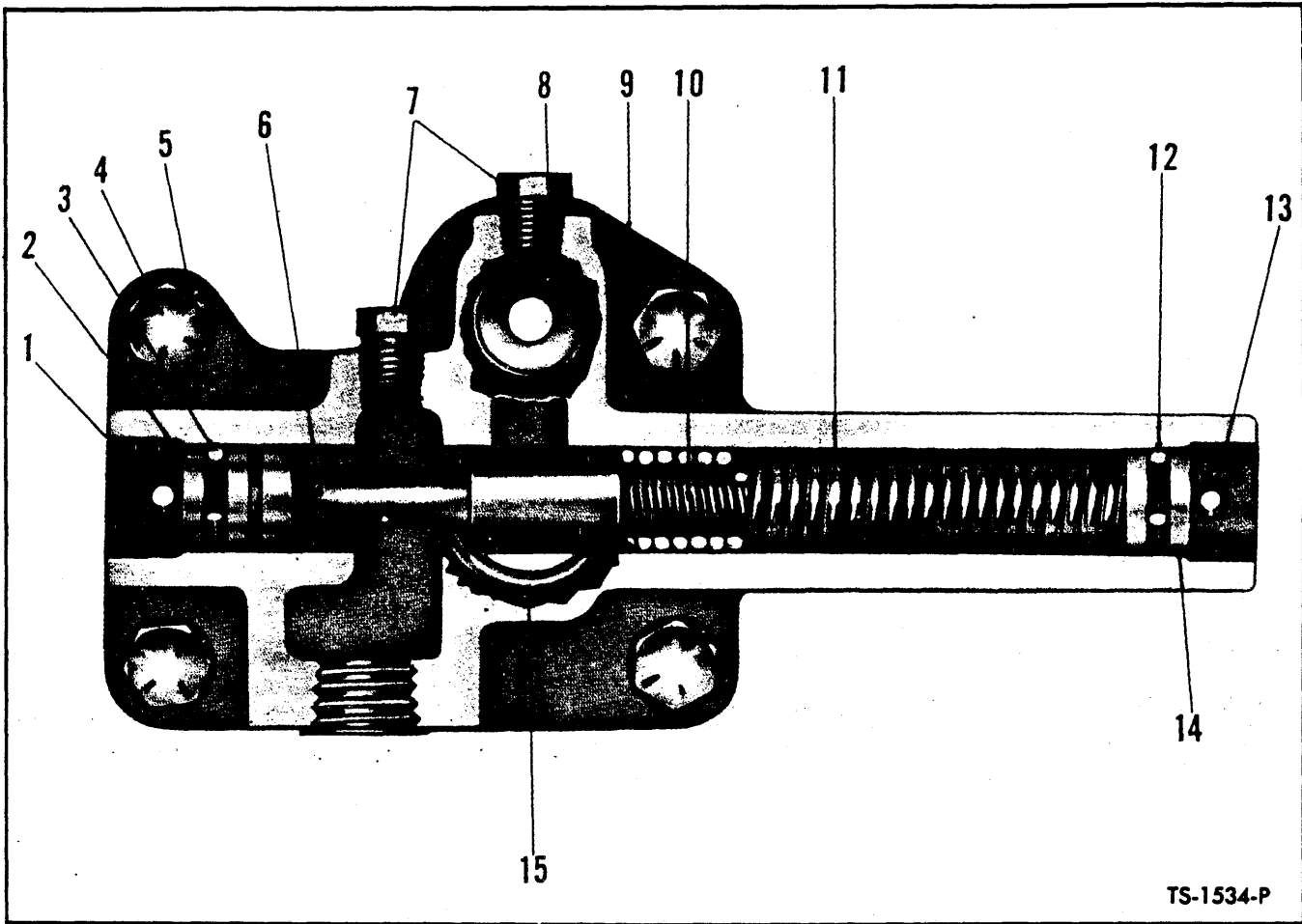
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	281161	CONVERTER ASSY, Torque (C-273T-5) (Inc. 3, 5 thru 10, 13 thru 96)	1	51	4E-06	LKWSHR, Pump Stud	6
1	-----	FLYWHEEL, Engine - See Engine Parts Manual	-----	52	235961	GASKET, Pump Mounting	1
2	233092	BOLT, Drive Gear to Flywheel	8	53	214953	RING, Bearing Retaining	1
3	233089	GEAR, Converter Drive	1	54	231554	BEARING, Turbine Shaft	1
4	215909	WASHER, Drive Gear to Flywheel	8	55	224116	RING, Gear Retaining	1
5	1C-616	BOLT, Impeller to Cover	24	56	-----	§SLEEVE, Stator Support - See Item 58	-----
6	4E-06	LKWSHR, Impeller to Cover	24	57	222079	RING, Turbine Shaft Sealing	1
7	60K41200	"O" RING, Impeller to Cover	1	58	214932	STATOR SUPPORT ASSY (Inc. 56)	1
8	743035	RING, Reaction Member Retaining	1	59	214935	GEAR, Turbine Shaft (28T)	1
9	214957	MEMBER, Reaction	1	60	25K-40512	"O" RING, Bearing Retainer	1
10	214959	IMPELLER	1	61	235091	RETAINER, Bearing	1
11	17C-620	BOLT, Converter to Flywheel Hsg.	12	62	214940	FLANGE, Companion	1
12	4E-06	LKWSHR, Converter to Flywheel Hsg.	12	63	206864	SEAL, Oil	1
13	658244	PIN, Spacer to Reaction Member Lock	1	64	102745	WASHER, Output Shaft	1
14	220725	PLATE, Name	1	65	25K-40112	"O" RING, Companion Flange	1
15	214934	SPACER, Reaction Member	1	66	1F-424	PIN, Cotter	1
16	207873	SCREW, Name Plate Drive	2	67	214937	SHAFT, Output	1
17	214953	RING, Impeller Hub Bearing Retaining	1	68	201951	NUT, Output Shaft	1
18	214596	BEARING, Impeller Hub	1	69	743439	BEARING, Output Shaft-Rear	1
19	25E-19	WASHER, Hub to Impeller	8	70	223901	RING, Bearing Retaining	1
20	4C-714	BOLT, Hub to Impeller	8	71	1C-720	BOLT, Bearing Retainer	3
21	214941	SEAL, Oil Baffle	1	71A	214730	STUD, Bearing Retainer	2
22	711298	RING, Gear Retaining	3	71B	8D-07	NUT, Bearing Retainer	2
23	214931	GEAR, Pump Drive, (39T)	3	72	4E-07	LKWSHR, Bearing Retainer	5
24	214928	SHAFT, Pump Drive	3	73	214938	GEAR, Output Shaft (27T)	1
25	214936	BEARING, Pump Drive Shaft	3	74	235057	BEARING, Output Shaft - Front	1
26	40K-02	PLUG, Valve Housing	2	75	214955	RING, Bearing Retaining	1
27	214930	SPACER, Pump Shaft	3	76	1C-820	BOLT, Stator Support	6
28	214946	SEAT, Safety Valve	1	76A	7E-08	†LKWSHR, Stator Support	6
29	222318	PLUNGER, Safety Valve	1	77	224009	RING, Gear Retaining	1
30	222312	SPRING, Safety Valve	1	78	214951	GEAR, Impeller Hub (41T)	1
31	25K-40104	"O" RING, Valve to Converter	1	79	221653	RING, Sealing	1
32	-----	VALVE, Regulator - See Item 37	-----	80	214925	BAFFLE, Oil	1
33	1C-616	BOLT, Valve Body	4	81	1C-628	BOLT, Oil Baffle	3
34	4E-06	LKWSHR, Valve Body	4	82	4E-06	LKWSHR, Oil Baffle	3
35	214949	GASKET, Valve to Converter	1	83	60K41200	"O" RING, Oil Baffle	1
36	-----	SHAFT, Output - See Item 67	-----	84	25K-40616	"O" RING, Impeller Hub	1
37	-----	VALVE ASSY, Pressure Regulator - See Index	-----	85	214958	HUB, Impeller	1
38	-----	COVER - Shipping	-----	86	801546	HOUSING, Converter	1
39	-----	COVER - Shipping	-----	86A	16F-08	†PLUG, Pipe	1
40	13F-16	PLUG, Converter Housing	4	86B	40K-02	†PLUG, Pipe	1
41	-----	PUMP, Converter Charging - See Item 48	-----	86C	13F-20	†PLUG, Pipe	1
42	214954	RING, Bearing Retaining	3	87	223833	TURBINE	1
43	214956	BEARING, Shaft	3	88	801524	COVER, Impeller	1
44	224039	RING, Bearing Retaining	3	89	619023	WASHER, Turbine Hub	8
45	214961	SLEEVE, Pump Drive Adapter	1	90	209313	BOLT, Turbine to Hub	8
46	8D-06	NUT, Pump Stud	6	91	214924	HUB, Turbine	1
47	207647	STUD, Pump	6	92	666542	RING, Bearing Retaining	1
48	450072	PUMP, Converter Charging - See Note "A"	1	93	222006	SLEEVE, Impeller Cover	1
49	214929	WASHER, Pump Shaft	3	94	214933	SHAFT, Turbine	1
50	713186	RING, Washer Retaining	3	95	214988	BEARING, Impeller Cover	1
				96	659065	RING, Turbine Hub Retaining	2
				97	211433	†AIR BREATHER	1
				98	227265	†CHECK VALVE, Air Breather	1

§Not Sold Separately

†Not Illustrated

NOTE "A": 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 new pump alone.

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

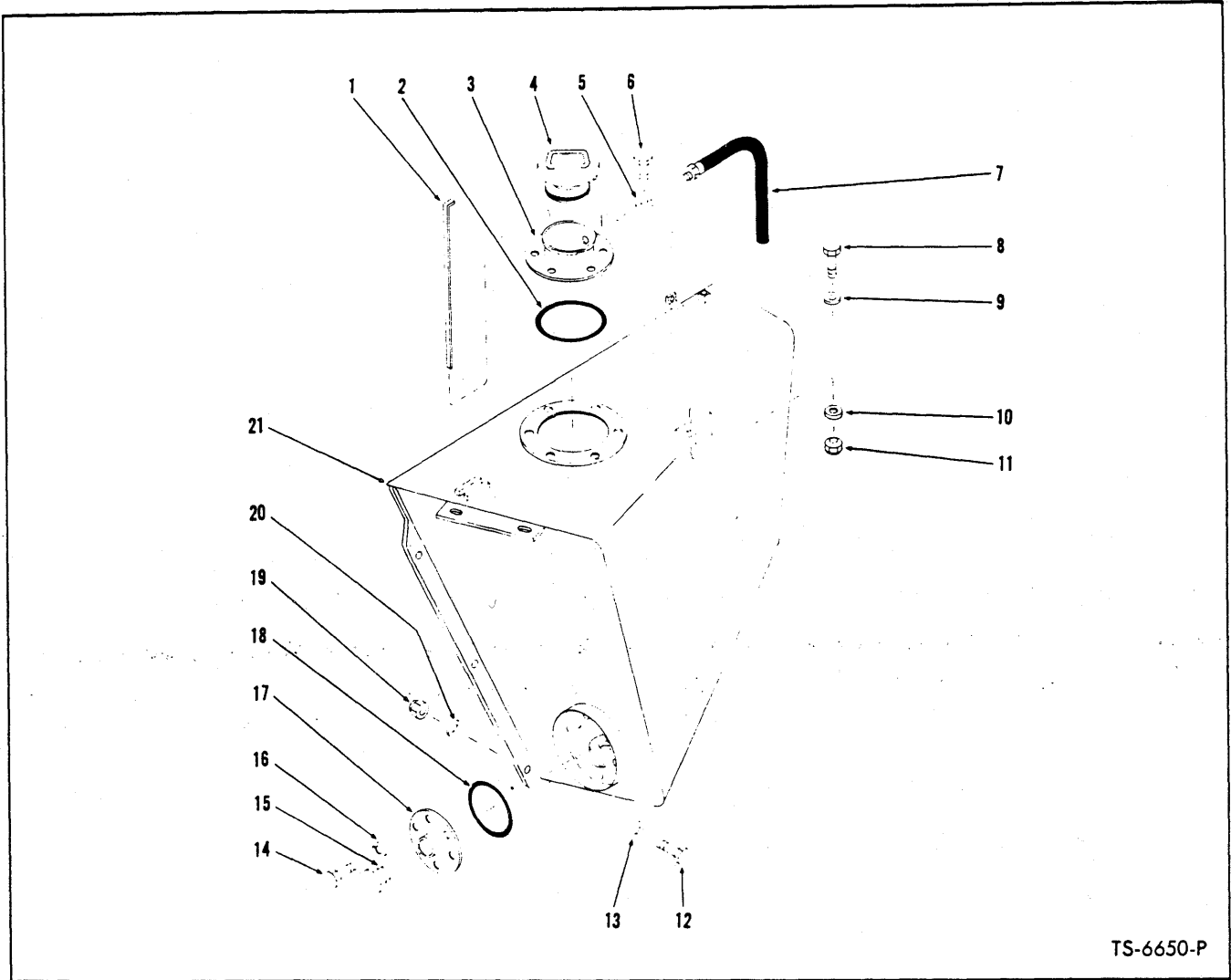


PRESSURE REGULATOR VALVE ASSEMBLY

Item No.	Part No.	Description	No. Req'd.
A	214969	VALVE ASSY, Pressure Regulator (Inc. 1, 2, 3, 6, 8 thru 15)	1
1	660178	PIN, Piston Stop	1
2	220983	STOP, Piston	1
3	25K-30018	"O" RING, Piston Stop	1
4	1C-616	BOLT, Valve to Converter	4
5	4E-06	LKWSHR, Valve to Converter	4
6	---	§PISTON, Valve - See Item "A"	---
7	40K-02	PLUG, Valve Housing	2
8	214946	SEAT, Safety Valve	1
9	---	§BODY, Valve - See Item "A"	---
10	220982	SPRING, Valve - Inner	1
11	220981	SPRING, Valve - Outer	1
12	25K-30018	"O" RING, Piston Stop	1
13	660178	PIN, Piston Stop	1
14	220983	STOP, Piston	1
15	25K-40104	"O" RING, Valve to Converter	1
16	214949	†GASKET, Valve to Housing	1

§Not Sold Separately
†Not Illustrated

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



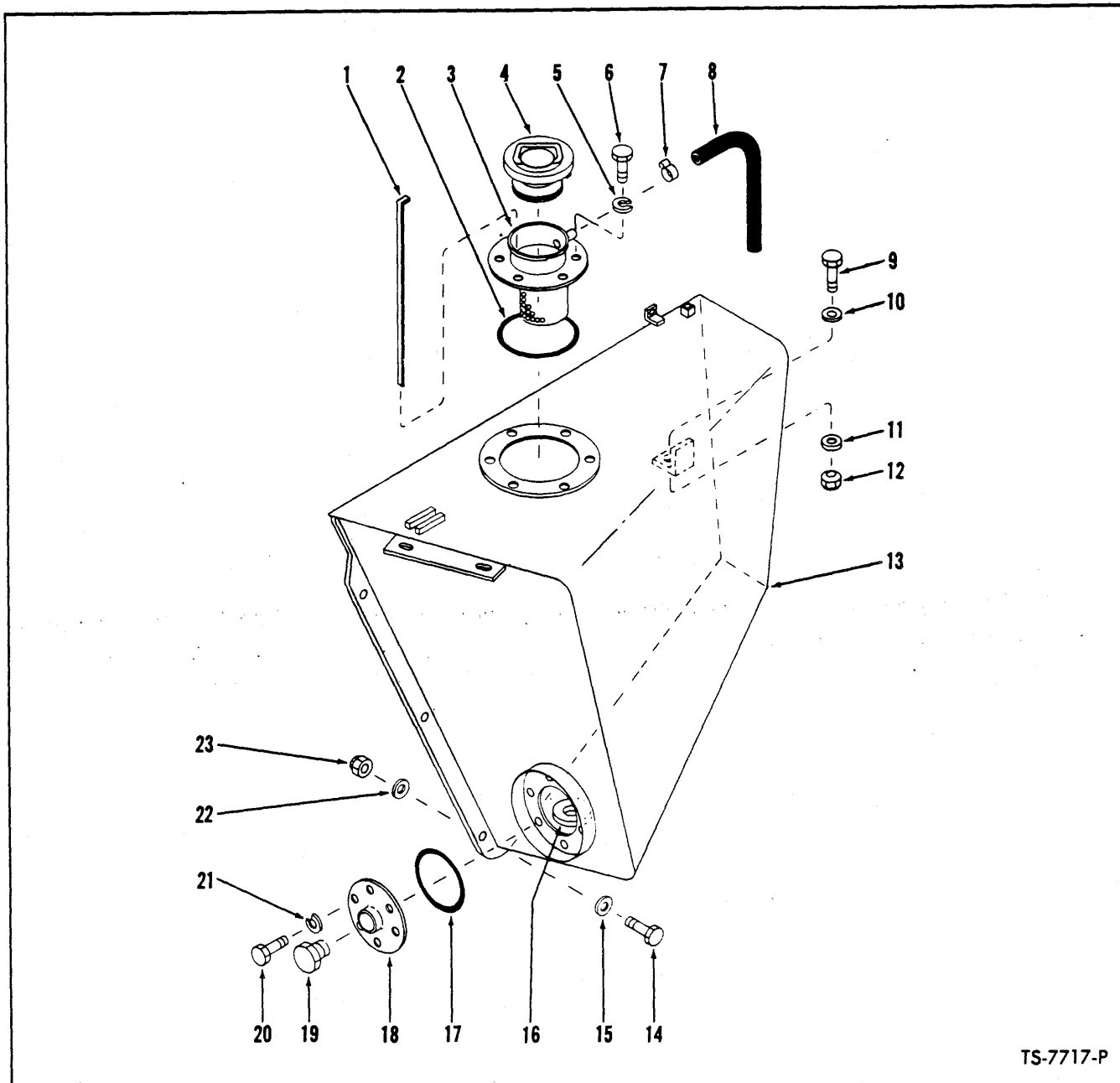
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HYDRAULIC OIL RESERVOIR
For Serial: Cummins — 5DC101 thru 5DC166
G.M. — 6DG101 thru 6DG226

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1510095	DIPSTICK	1	12	18C-1244	BOLT, Tank to Side Plate	5
2	25K-40624	"O" RING, Filler Neck	1	13	25E-27	WASHER, Tank to Side Plate	5
3	564175	NECK, Filler	1	14	18C-612	BOLT, Inspection Plate to Tank	6
4	569759	CAP, Oil Reservoir	1	15	40K-16	PLUG, Drain	1
5	4E-06	LKWSHR, Filler Neck to Tank	6	16	4E-06	LKWSHR, Inspection Plate to Tank	6
6	18C-612	BOLT, Filler Neck to Tank	6	17	587613	PLATE, Inspection	1
7	569927	HOSE, Overflow	1	18	25K-40428	"O" RING, Inspection Plate	1
8	18C-1244	BOLT, Tank to Frame	1	19	18D-12	NUT, Tank to Side Plate	5
9	25E-27	WASHER, Tank to Frame	1	20	25E-27	WASHER, Tank to Side Plate	5
10	71D-12	BASE, Tank to Frame	1	21	589186	OIL RESERVOIR	1
11	70D-12	NUT, Tank to Frame	1	22	525293	†MAGNET	1

†Not Illustrated

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

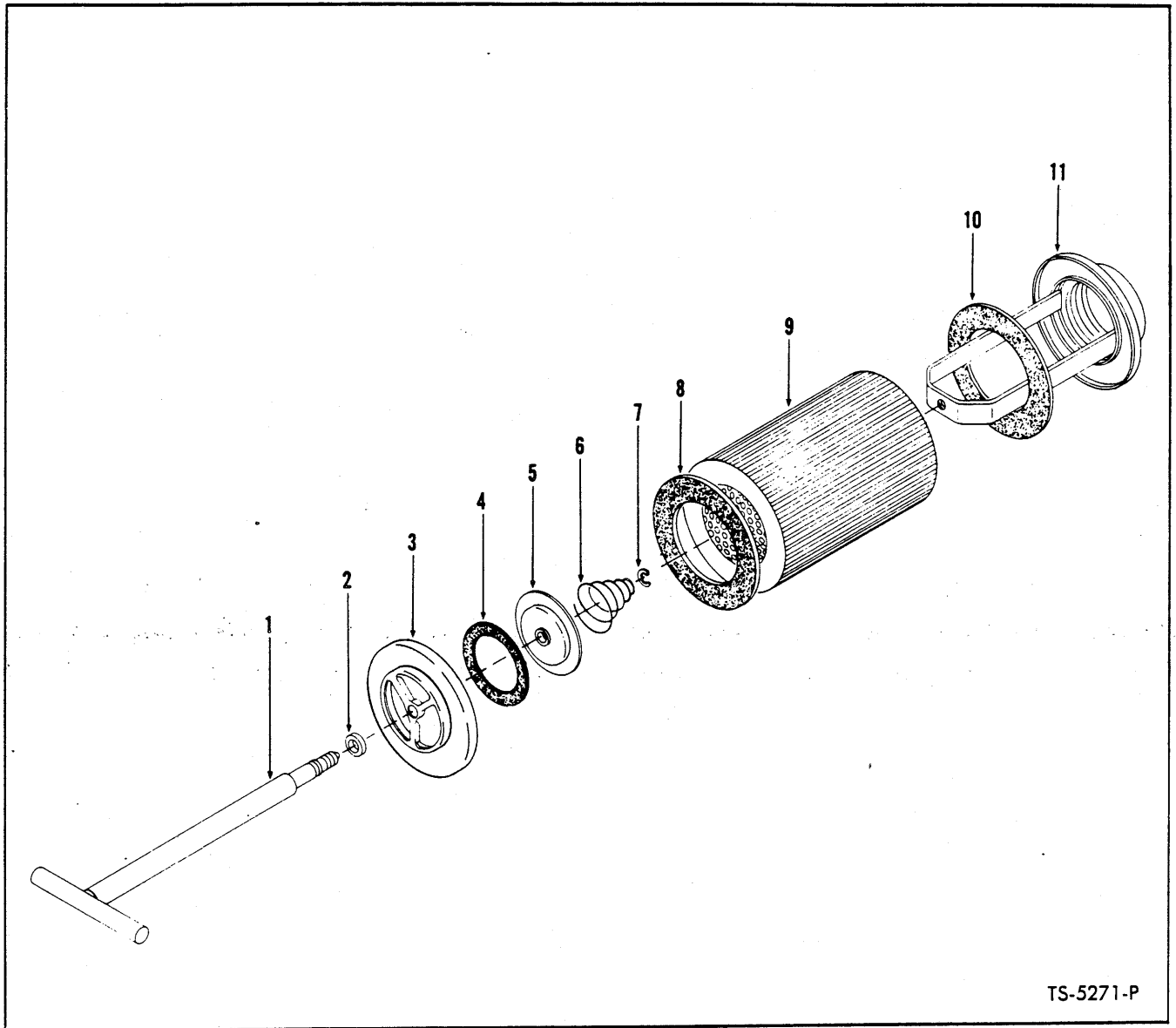


HYDRAULIC OIL RESERVOIR AND ACCESSORIES

For Serial: Cummins — 5DC167 and after
G.M. — 6DG227 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1510095	DIPSTICK	1	13	589186	RESERVOIR, Hydraulic Oil	1
2	25K-40624	"O" RING, Filler Neck	1	14	18C-1244	BOLT, Reservoir to Side Plate	5
3	567742	NECK, Filler	1	15	25E-27	WASHER, Reservoir to Side Plate	5
4	569759	CAP, Filler	1	16	525293	MAGNET	1
5	4E-06	LKWSHR, Filler Neck to Reservoir	6	17	25K-40428	"O" RING, Inspection Plate	1
6	18C-612	BOLT, Filler Neck to Reservoir	6	18	587613	PLATE, Inspection	1
7	521874	CLAMP, Overflow Hose to Filler Neck	1	19	40K-16	PLUG, Inspection Plate	1
8	743563	HOSE, Overflow — 48" Lg.	1	20	18C-612	BOLT, Inspection Plate to Reservoir	6
9	18C-1244	BOLT, Reservoir to Frame	1	21	4E-06	LKWSHR, Inspection Plate to Reservoir	6
10	25E-27	WASHER, Reservoir to Frame	1	22	25E-27	WASHER, Reservoir to Side Plate	5
11	71D-12	BASE, Reservoir to Frame	1	23	18D-12	NUT, Reservoir to Side Plate	5
12	70D-12	NUT, Reservoir to Frame	1				

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



TS-5271-P

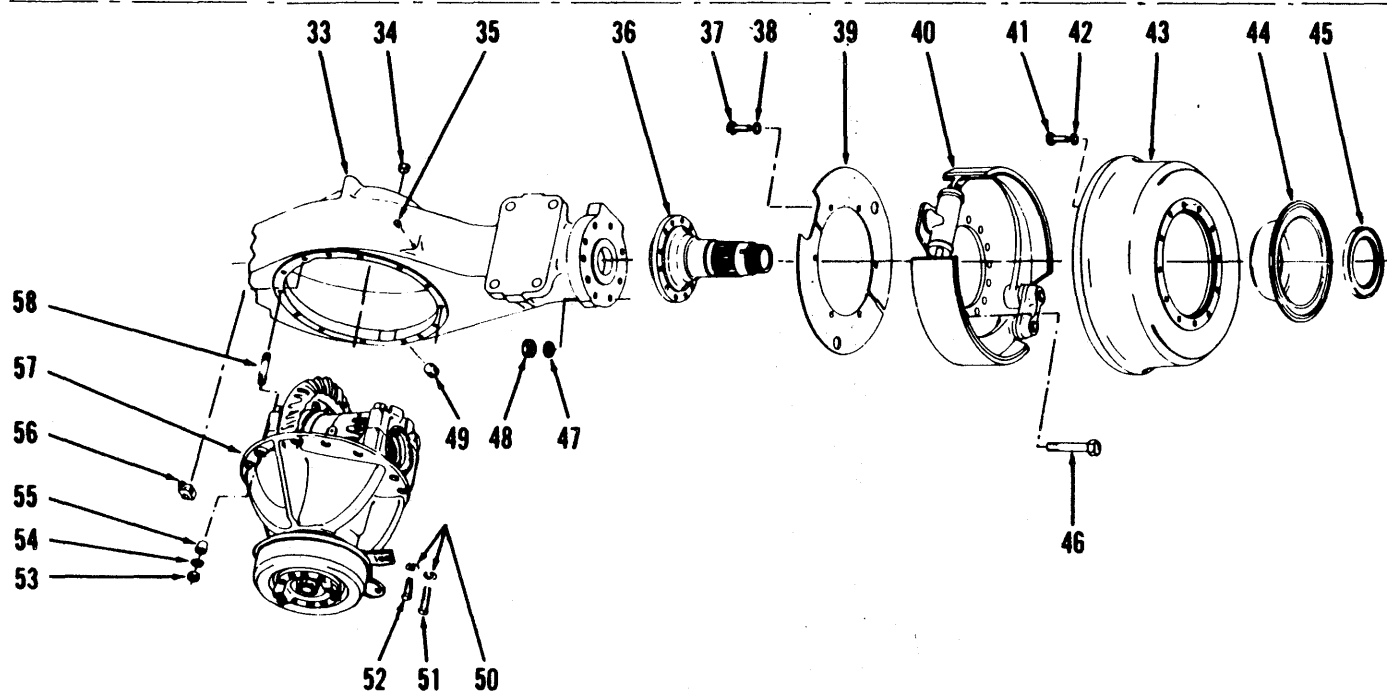
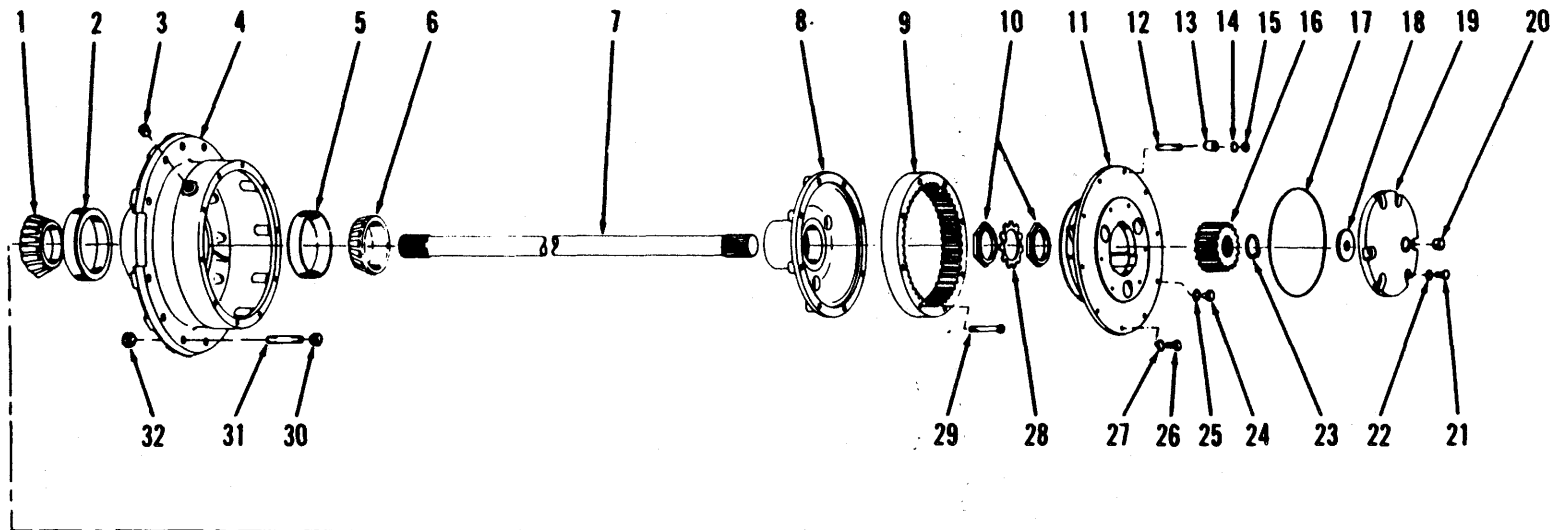
HYDRAULIC RESERVOIR FILTER ASSEMBLY

Item No.	Part No.	Description	No. Req'd.
A	562118	* FILTER ASSY (Inc. 1 thru 11)	1
B	946105	* HANDLE & COVER ASSY (Inc. 1 thru 7)	1
1	-----	§HANDLE, Filter — See Item B	1
2	946060	‡LKWSHR, Handle & Cover	1
3	-----	§COVER, Filter — See Item B	1
4	-----	OMIT, Not Used this Application	—
5	946057	PLATE, Cover Valve	1
6	946056	SPRING, Cover	1
7	1303459	"E" RING, Cover	1
8	946062	GASKET, Element	1
9	946108	ELEMENT, Filter (Inc. 8, 10)	1
10	946062	GASKET, Element	1
11	946106	* BASE, Filter	1

§Not Sold Separately

*NOTE: For replacement use 1532444 Filter Assy. 1532444 is a one-piece Filter containing no serviceable parts.

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



AXLE ASSEMBLY — FRONT DRIVE

TS-6782-P

[50]

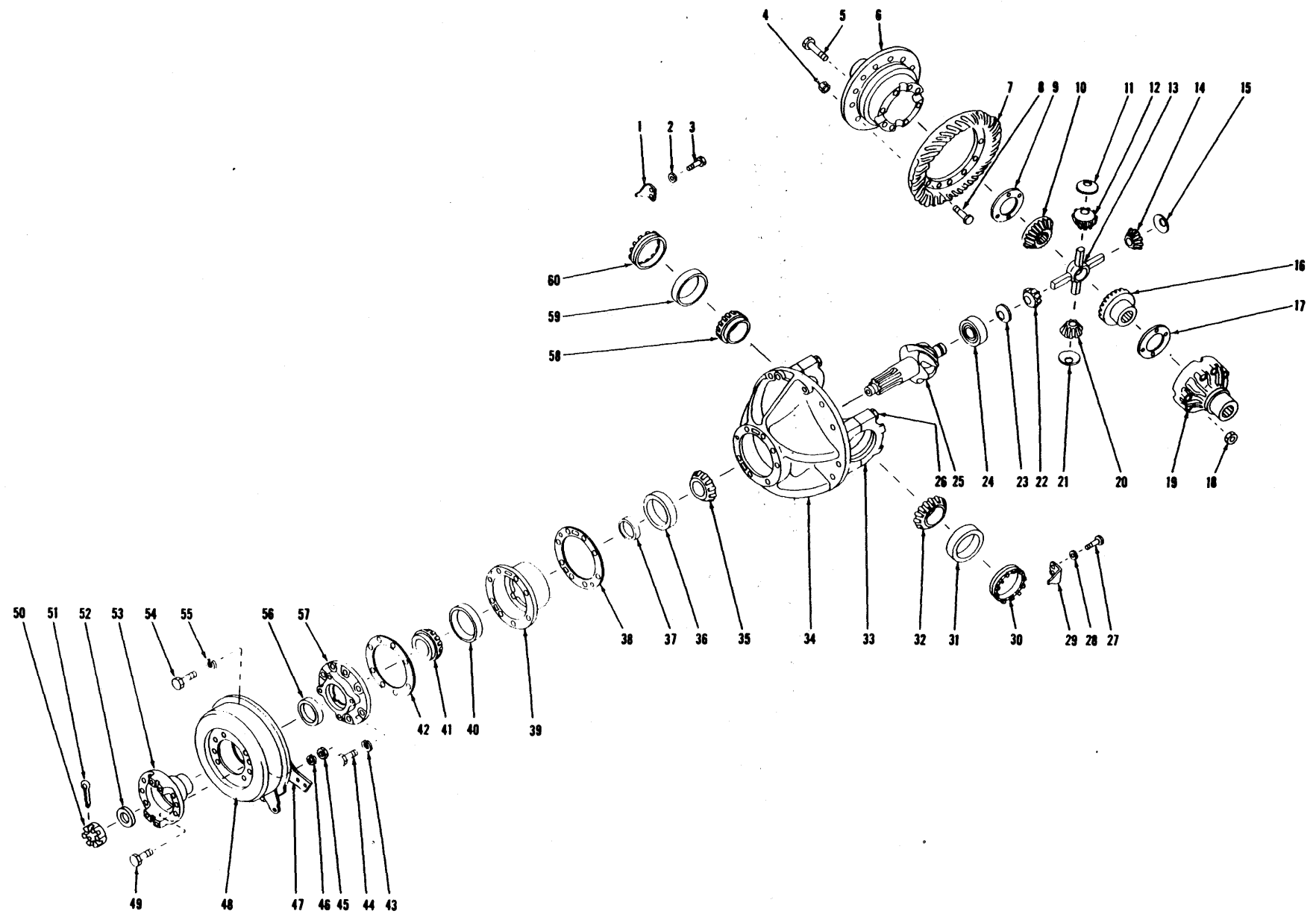
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AXLE ASSEMBLY — FRONT DRIVE

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	29	106880	BOLT, Internal Gear to Hub	16
1	799408	CONE, Inner Hub Bearing	2	30	103522	NUT, Wheel	20
2	658985	CUP, Inner Hub Bearing	2	31	103445	STUD, Wheel	20
3	11F-12	PLUG, Hub Filler	2	32	86D12	NUT, Wheel Stud	20
4	112073	HUB ASSY (Inc. 2, 5)	2	33	112086	HOUSING, Axle	1
5	672181	CUP, Outer Hub Bearing	2	34	11F-12	PLUG, Housing Filler	1
6	672182	CONE, Outer Hub Bearing	2	35	106656	BREATHER, Axle Housing	1
7	112077	AXLE SHAFT	2	36	112078	SPINDLE	2
8	106060	HUB, Internal Gear	2	37	1C-612	BOLT, Dust Shield Mounting	12
9	106059	GEAR, Internal	2	38	4E-06	LKWSHR, Dust Shield Mounting	12
10	114433	NUT, Inner Spindle	4	39	114453	SHIELD, Brake Dust	2
11	-----	PLANET CARRIER — See Index	—	40	-----	FRONT BRAKE ASSY — See Index	—
12	116419	STUD, Planet Carrier Mounting	10	41	17C1024	BOLT, Brake Drum to Hub	24
13	112287	DOWEL, Planet Carrier Mounting	10	42	104412	WASHER, Brake Drum to Hub	24
14	106762	LKWSHR, Planet Carrier Mounting	10	43	112085	DRUM, Brake	2
15	64D-08	NUT, Planet Carrier Stud	10	44	109055	CATCHER, Oil	2
16	109050	GEAR, Sun	2	45	112055	SEAL, Hub Oil	2
17	114089	"O" RING, Cap to Carrier	2	46	118350	BOLT, Spindle & Brake Attaching	16
18	106455	WASHER, Sun Gear Thrust Cap	2	47	104412	LKWSHR, Spindle & Brake Attaching	16
19	945129	KIT, Sun Gear Thrust Cap (Inc. 17, 18, 20)	2	48	106998	NUT, Spindle & Brake Attaching	16
20	11F-04	PLUG, Thrust Cap	2	49	11F-12	PLUG, Housing Drain	1
21	1C-720	BOLT, Thrust Cap	12	50	106762	WASHER, Carrier to Axle Housing	14
22	112278	LKWSHR, Thrust Cap	12	51	17C-828	BOLT, Carrier to Axle Housing	3
23	106247	RING, Sun Gear Snap	2	52	17C-824	BOLT, Carrier to Axle Housing	8
24	1C-808	BOLT, Planet Puller Hole	4	53	64D-08	NUT, Carrier to Axle Housing	3
25	3E-08	LKWSHR, Planet Puller Hole	4	54	106762	WASHER, Carrier to Axle Housing	3
26	100970	BOLT, Planet Carrier to Hub	10	55	112287	DOWEL, Carrier to Axle Housing	3
27	106762	LKWSHR, Planet Carrier to Hub	10	56	550319	TEE, Brake Line	1
28	101274	LOCK, Spindle Nut	2	57	-----	DIFF. & CARRIER ASSY — See Index	—
				58	126416	STUD, Carrier to Axle Housing	3

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



DIFFERENTIAL AND CARRIER ASSEMBLY — FRONT DRIVE

TS-6377-P

[52]

(1A17)

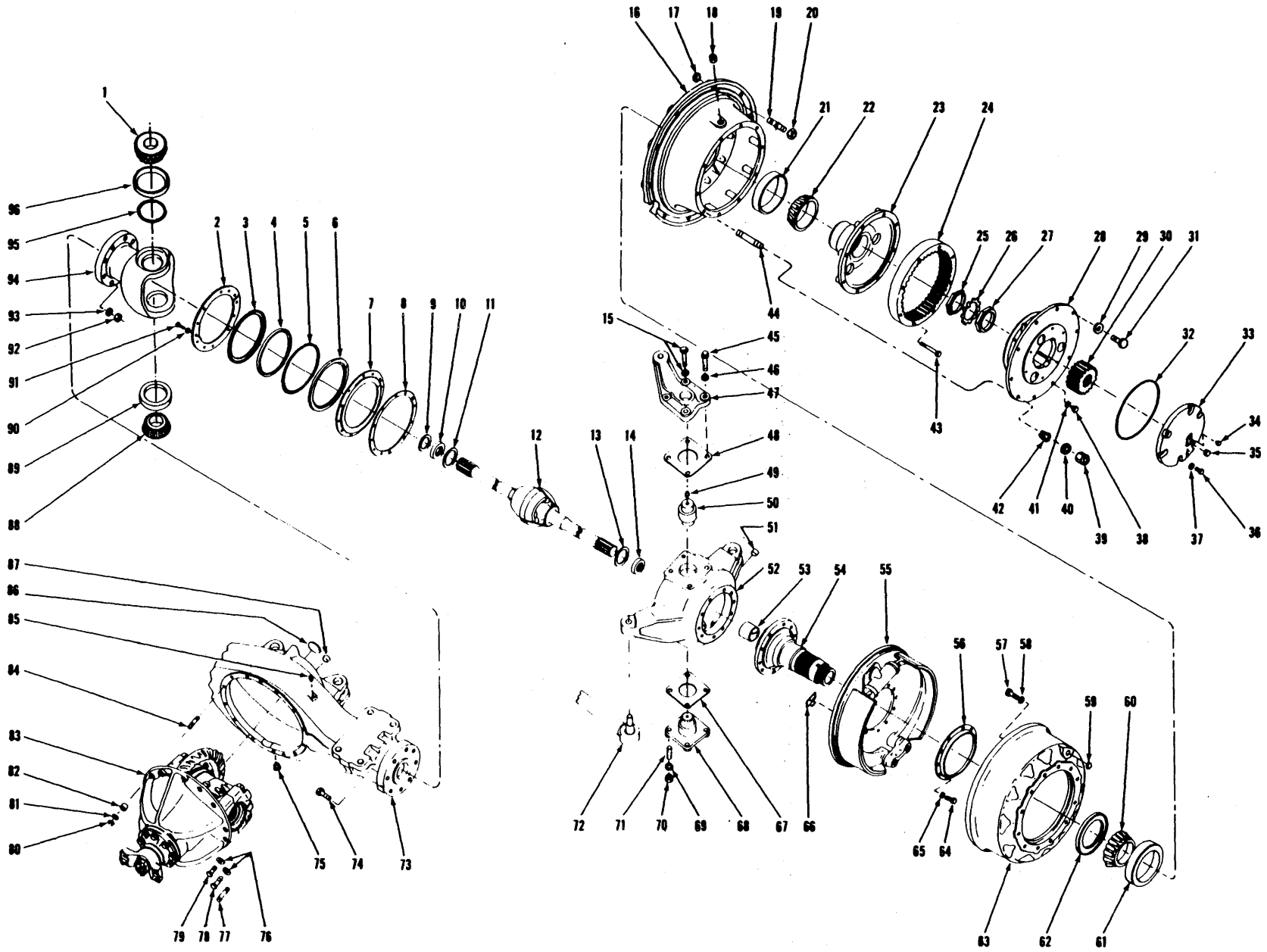
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DIFFERENTIAL AND CARRIER ASSEMBLY — FRONT DRIVE

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	118508	DIFFERENTIAL & CARRIER ASSY (Inc. 1 thru 60)	1	33	-----	§CAP, Differential Carrier — See 34	—
1	100941	LOCK, Adjusting Nut	1	34	116646	CARRIER ASSY, Differential (Inc. 26, 26A, 33)	1
2	4E-06	LKWSHR, Adjusting Nut Lock	1	35	667276	CONE, Center Pinion Bearing	1
3	3C-614	BOLT, Adjusting Nut Lock	1	36	658988	CUP, Center Pinion Bearing	1
4	86D-09	NUT, Ring Gear Bolt	12	37	104226	SPACER, Pinion Bearing	1
5	118475	BOLT, Differential Case	8	38	101257	±SHIM, Bearing Cage — Thin	—
6	-----	§DIFFERENTIAL CASE — Flange Half — See 62	—	38A	125567	‡‡SHIM, Bearing Cage — Medium	—
7	-----	§RING GEAR — See 63	—	38B	125568	‡‡SHIM, Bearing Cage — Thick	—
8	101196	BOLT, Ring Gear	12	39	110843	CAGE ASSY, Pinion Bearing (Inc. 36, 40)	1
9	118474	WASHER, Side Gear Thrust	1	40	667278	CUP, Outer Pinion Bearing	1
10	104167	GEAR, Differential Side Gear	1	41	667277	CONE, Outer Pinion Bearing	1
11	101244	WASHER, Differential Pinion Thrust	1	42	-----	OMIT	—
12	815745	PINION KIT, Differential (Inc. 14, 20, 22)	1	43	4E-09	LKWSHR, Oil Seal Retainer	7
13	117022	SPIDER, Differential	1	43A	4E-08	†LKWSHR, Oil Seal Retainer	1
14	-----	§PINION, Differential — See Item 12	—	44	1C-936	BOLT, Oil Seal Retainer	7
15	101244	WASHER, Differential Pinion Thrust	1	44A	1C-836	†BOLT, Oil Seal Retainer	1
16	104167	GEAR, Differential Side Gear	1	45	2D-06	NUT, Drum to Companion Flange	8
17	118474	WASHER, Side Gear Thrust	1	46	2E-06	LKWSHR, Drum to Companion Flange	8
18	86D-09	NUT, Differential Case	8	47	-----	PARKING BRAKE — See Index	—
19	-----	§DIFFERENTIAL CASE — Plain Half — See 62	—	48	107261	DRUM, Brake	1
20	-----	§PINION, Differential — See Item 12	—	49	101144	BOLT, Drum to Companion Flange	8
21	101244	WASHER, Differential Pinion Thrust	1	50	101262	NUT, Pinion Shaft	1
22	-----	§PINION, Differential — See Item 12	—	51	1F-732	COTTER, Pinion Shaft Nut	1
23	101244	WASHER, Differential Pinion Thrust	1	52	101263	WASHER, Pinion Shaft	1
24	667466	BEARING, Inner Pinion	1	53	112084	FLANGE, Companion	1
25	-----	§PINION — See 63	—	54	1C-920	BOLT, Brake to Oil Seal Retainer	4
26	123831	BOLT, Carrier Cap	4	55	4E-09	LKWSHR, Brake to Oil Seal Retainer	4
26A	111658	†WASHER, Carrier Cap	4	56	110897	SEAL, Pinion Shaft Oil	1
27	3C-614	BOLT, Adjusting Nut Lock	1	57	110847	RETAINER, Oil Seal	1
28	4E-06	LKWSHR, Adjusting Nut Lock	1	58	654144	CONE, Differential Bearing	1
29	100941	LOCK, Adjusting Nut	1	59	667275	CUP, Differential Bearing	1
30	101252	NUT, Differential Adjusting	1	60	101252	NUT, Differential Adjusting	1
31	667275	CUP, Differential Bearing	1	61	126595	†DIFFERENTIAL ASSY (Inc. 4 thru 23, 25)	1
32	654144	CONE, Differential Bearing	1	62	118499	†DIFFERENTIAL BODY SUB — ASSY (Inc. 5, 6, 9 thru 23)	1
				63	815170	†GEAR & PINION SET (Inc. 7, 25)	1
				64	815736	†DIFFERENTIAL CASE KIT (Inc. 5, 6, 9, 11, 15, 17 thru 19, 21, 23)	—

§Not Sold Separately
†Not Illustrated
‡As Required

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



AXLE ASSEMBLY — REAR DRIVE STEER

TS-6767-P

[54]

(1A13)

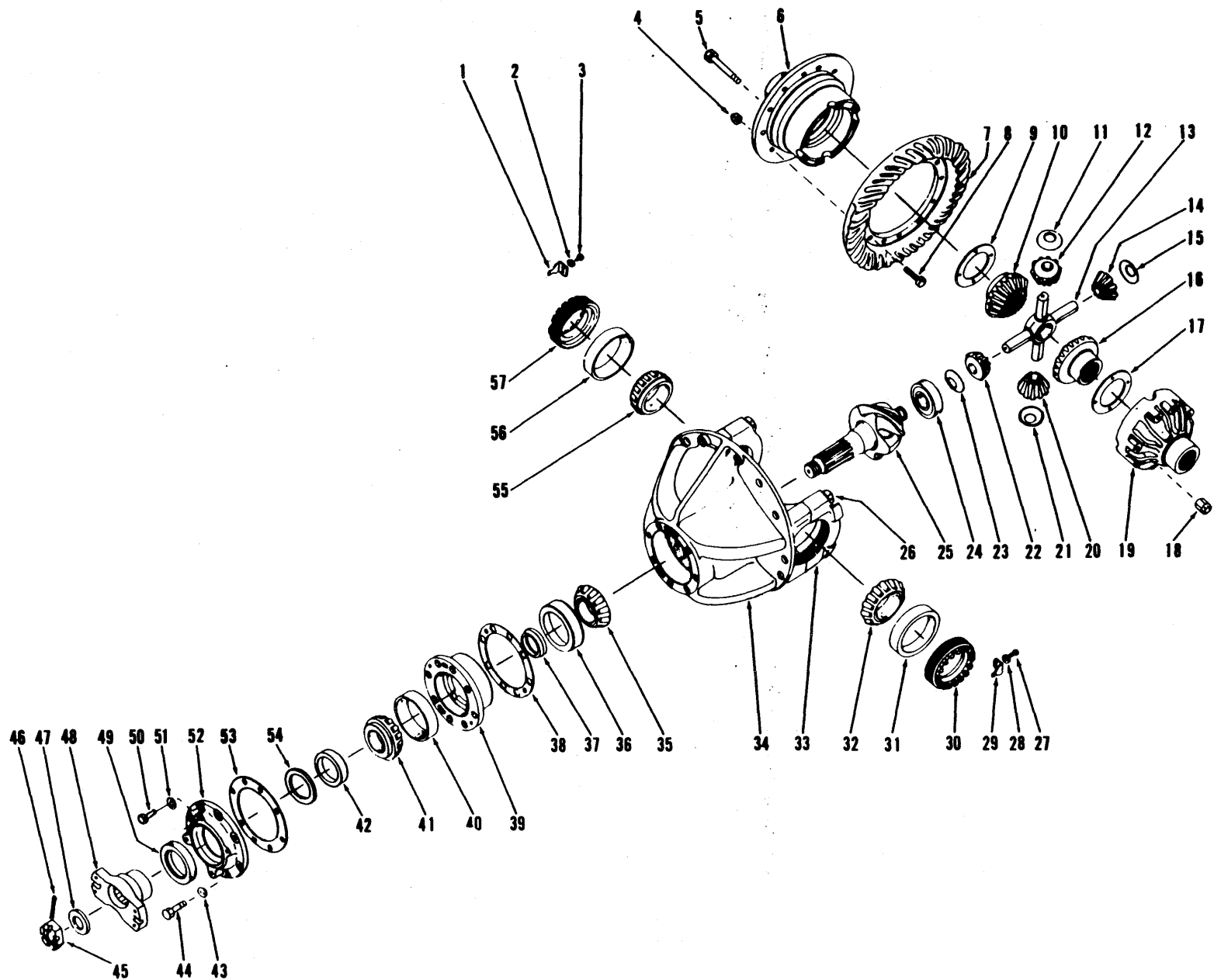
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AXLE ASSEMBLY — REAR DRIVE STEER

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	131600	AXLE ASSY (Inc. 1 thru 97)	1	50	106290	TRUNNION, Upper Steering — L.H.	1
1	667277	CONE, Upper Trunnion Bearing	2	50A	109887	†TRUNNION, Upper Steering Flanged — R. H.	1
2	106287	RING, Outer End Seal Retainer	4	51	11F-12	PLUG, Spindle Support Filler	2
3	106286	RETAINER, Outer Dust Seal	2	52	815956	SUPPORT, Spindle — L.H. (Inc. 71)	1
4	106284	SEAL, Outer End Dust	2	52A	816016	†SUPPORT, Spindle — R.H. (Inc. 71)	1
5	106285	SPRING, Outer End Dust Seal	2	53	106276	BUSHING, Spindle	2
6	106283	SEAL, Outer End Oil	2	54	106744	SPINDLE ASSY (Inc. 53)	—
7	106281	RETAINER, Outer End Oil Seal	2	55	—	BRAKE ASSY — See Index	—
8	106282	GASKET, Outer End Oil Seal Retainer	2	56	106545	CATCHER, Oil	2
9	106297	WASHER, Oil Seal	2	57	17C1024	BOLT, Brake Drum to Hub	12
10	106296	SEAL, Universal Joint Shaft Oil	2	58	104412	WASHER, Brake Drum to Hub	12
11	106298	WASHER, Universal Joint Thrust	2	59	107608	PLUG, Button Inspection Hole	2
12	106306	SHAFT ASSY, Axle & Universal Joint	2	60	672005	CONE, Inner Hub Bearing	2
13	106298	WASHER, Universal Joint Thrust	2	61	672004	CUP, Inner Hub Bearing	2
14	106296	SEAL, Universal Joint Shaft Oil	2	62	128117	SEAL, Hub Oil	2
15	106313	BOLT, Steering, Arm	2	63	107646	DRUM, Brake	2
15A	111656	WASHER, Steering Arm	2	64	106546	BOLT, Spindle & Brake Attaching	16
16	117220	HUB ASSY (Inc. 21, 61)	2	64A	111127	†BOLT, Spindle & Brake Attaching	16
17	86D12	NUT, Wheel Stud	20	65	106547	WASHER, Spindle & Brake Attaching	16
18	11F-12	PLUG, Hub Filler & Drain	2	66	886886	COVER, Brake Adjusting Hole	8
19	103445	STUD, Wheel	20	67	127636	‡SHIM, Steering Arm — Thin	—
20	103522	NUT, Wheel	20	67A	127637	‡SHIM, Steering Arm — Medium	—
21	668553	CUP, Outer Hub Bearing	2	67B	127638	‡SHIM, Steering Arm — Thick	—
22	675261	CONE, Outer Hub Bearing	2	68	109886	TRUNNION, Lower Steering Flanged	2
23	117223	HUB, Internal Gear	2	69	4E-12	LKWSHR, Trunnion Attaching	12
24	106059	GEAR, Internal	2	70	—	OMIT (Use Bolt Item 71)	—
25	114433	NUT, Steering Spindle	2	71	17C-1228	BOLT, Trunnion Attaching	12
26	101274	LOCK, Spindle Nut	2	72	—	TIE ROD ASSY — See Index	—
27	114433	NUT, Steering Spindle	2	73	109624	HOUSING, Axle	1
28	—	PLANET SPIDER — See Index	—	74	112158	STUD, Housing to Outer End	16
29	106762	WASHER, Planet Spider to Hub	10	75	11F-12	PLUG, Housing Drain	1
30	109050	GEAR, Sun	2	76	106762	WASHER, Carrier Attaching	11
31	100970	BOLT, Planet Spider to Hub	10	77	112923	STUD, Brake Line Tee Attaching	1
32	114089	SEAL RING, Cap to Carrier	2	78	17C-828	BOLT, Carrier Attaching	2
33	117242	CAP, Sun Gear Thrust	2	79	17C-824	BOLT, Carrier Attaching	9
34	111805	VALVE, Thrust Cap Relief	2	80	64D-08	NUT, Carrier Stud	3
35	11F-04	PLUG, Thrust Cap	2	81	106762	WASHER, Carrier Stud	3
36	1C-720	BOLT, Thrust Cap	12	82	112287	DOWEL, Carrier Stud	3
37	112278	WASHER, Thrust Cap	12	83	—	DIFF. & CARRIER ASSY — See Index	—
38	1C-808	BOLT, Planet Puller Hole	4	84	112286	STUD, Carrier Attaching	2
39	64D-08	NUT, Planet Carrier Stud	10	85	106656	BREATHER, Axle Housing	1
40	106762	WASHER, Planet Carrier Stud	10	86	12F-204	PLUG, Housing Expansion	1
41	3E-08	LKWSHR, Planet Puller Hole	4	87	11F-12	PLUG, Housing Filler	1
42	112287	DOWEL, Planet Carrier to Hub	10	88	667277	CONE, Lower Trunnion Bearing	2
43	106880	BOLT, Internal Gear to Hub	16	89	675258	CUP, Lower Trunnion Bearing	2
44	116419	STUD, Planet Carrier to Hub	10	90	4E-06	LKWSHR, Outer End Retainer	24
45	106313	BOLT, Steering Arm	2	91	1C-612	BOLT, Outer End Retainer	24
46	111656	WASHER, Steering Arm	2	92	107089	NUT, Outer End to Housing	16
47	815882	ARM, Steering	1	93	111656	WASHER, Outer End to Housing	16
48	127636	‡SHIM, Steering Arm — Thin	—	94	108877	OUTER END, Housing	2
48A	127637	‡SHIM, Steering Arm — Medium	—	95	106291	RETAINER, Upper Trunnion Oil	2
48B	127638	‡SHIM, Steering Arm — Thick	—	96	675258	CUP, Upper Trunnion Bearing	2
49	10H-25	FITTING, Upper Trunnion Grease	2	97	550320	†TEE, Brake Line	1

‡As Required
†Not Illustrated

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



DIFFERENTIAL AND CARRIER ASSEMBLY — REAR DRIVE STEER

TS-5007-P

[56]

(1A19)

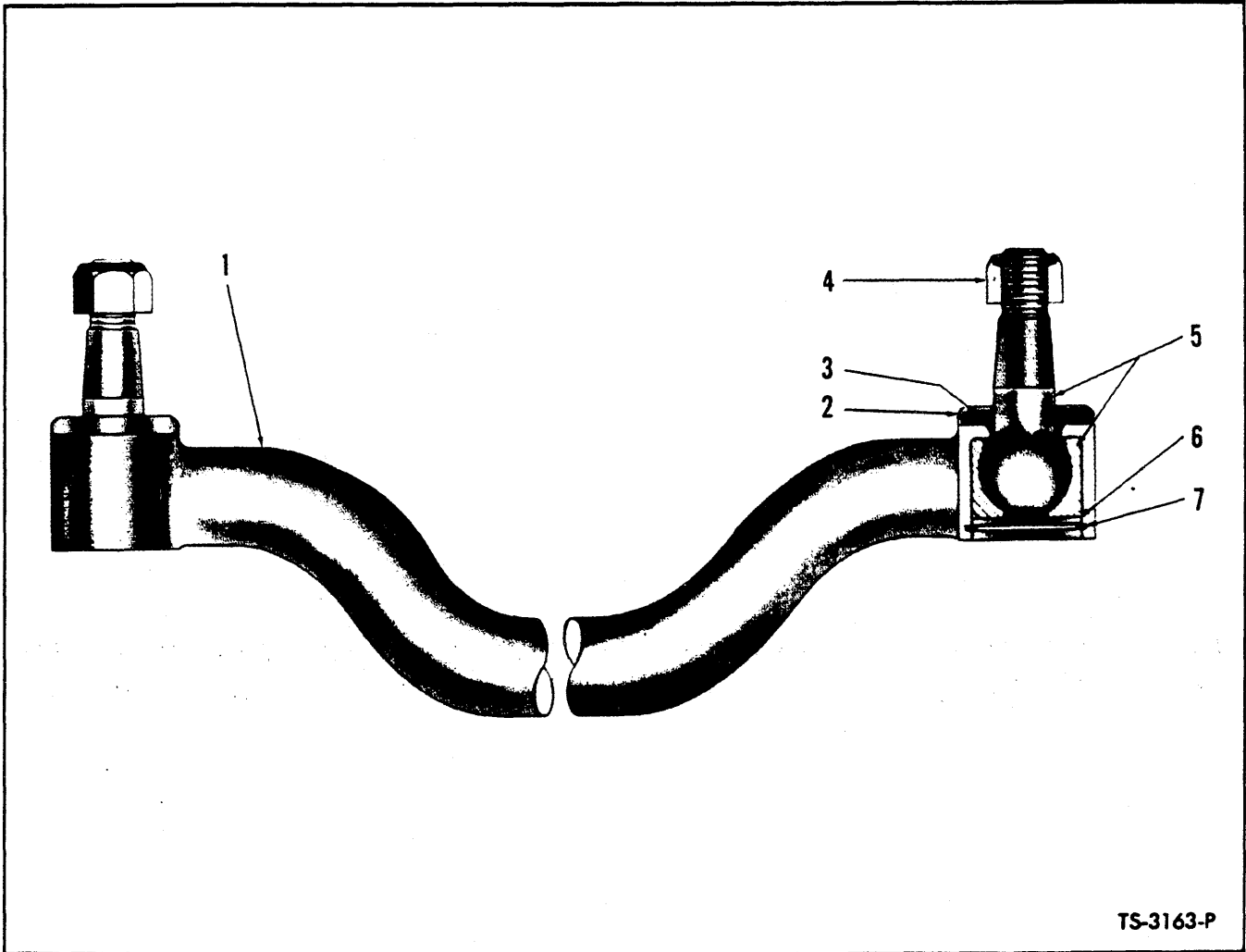
PM 2952
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DIFFERENTIAL AND CARRIER ASSEMBLY — REAR DRIVE STEER

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	118509	DIFF. & CARRIER ASSY (Inc.1 thru 57)	1	33	-----	§CAP, Differential Carrier — See 34	—
1	100941	LOCK, Differential Adjusting Nut	1	34	116646	CARRIER ASSY, Diff. (Inc. 26, 26A, 33)	1
2	4E-06	LKWSHR, Adjusting Nut Lock	1	35	667276	CONE, Center Pinion Bearing	1
3	3C-614	BOLT, Adjusting Nut Lock	1	36	658988	CUP, Center Pinion Bearing	1
4	86D-09	NUT, Ring Gear Bolt	12	37	104226	SPACER, Pinion Bearing	1
5	118475	BOLT, Differential Case	8	38	101257	‡SHIM, Bearing Cage — Thin	—
6	-----	§DIFF. CASE — Flange Half — See 61	—	38A	125567	‡‡SHIM, Bearing Cage — Medium	—
7	-----	§RING GEAR — See 60	—	38B	125568	‡‡SHIM, Bearing Cage — Thick	—
8	101196	BOLT, Ring Gear	12	39	101250	CAGE ASSY, Pinion Bearing (Inc. 36, 40)	1
9	118474	WASHER, Side Gear Thrust	1	40	667278	CUP, Outer Pinion Bearing	1
10	104167	GEAR, Differential Side	1	41	667277	CONE, Outer Pinion Bearing	1
11	101244	WASHER, Differential Pinion Thrust	1	42	110897	SEAL, Pinion Oil	1
12	815745	KIT, Differential Pinion (Inc. 14, 20, 22)	1	43	4E-09	LKWSHR, Oil Seal Retainer	7
13	117022	SPIDER, Differential	1	44	1C-928	BOLT, Oil Seal Retainer	7
14	-----	PINION, Differential — See 12	—	45	101262	NUT, Pinion Shaft	1
15	101244	WASHER, Differential Pinion Thrust	1	46	1F-732	COTTER, Pinion Shaft Nut	1
16	104167	GEAR, Differential Side	1	47	101263	WASHER, Pinion Shaft Nut	1
17	118474	WASHER, Side Gear Thrust	1	48	117218	FLANGE, Companion	1
18	86D-09	NUT, Differential Case Bolt	8	49	101261	SHIELD, Companion Flange Dust	1
19	-----	§DIFF. CASE — Plain Half — See 61	—	50	1C-828	BOLT, Oil Seal Retainer	1
20	-----	Pinion, Differential — See 12	—	51	4E-08	LKWSHR, Oil Seal Retainer	1
21	101244	WASHER, Differential Pinion Thrust	1	52	101253	RETAINER, Pinion Oil Seal	1
22	-----	PINION, Differential — See 12	—	53	-----	OMIT	—
23	101244	WASHER, Differential Pinion Thrust	1	54	101256	GASKET, Pinion Oil Seal	1
24	667466	BEARING, Inner Pinion	1	55	654144	CONE, Differential Bearing	1
25	-----	§PINION, Differential — See 60	—	56	667275	CUP, Differential Bearing	1
26	123831	BOLT, Differential Carrier Cap	4	57	101252	NUT, Differential Adjusting	1
26A	111658	†WASHER, Carrier Cap Bolt	4	58	126585	†DIFF. ASSY (Inc. 4 thru 23, 25)	1
27	3C-614	BOLT, Adjusting Nut Lock	1	59	118499	†DIFF. BODY SUB ASSY (Inc. 5, 6, 9 thru 23)	1
28	4E-06	WASHER, Adjusting Nut Lock	1	60	815369	†GEAR & PINION SET (Inc. 7, 25)	1
29	100941	LOCK, Differential Adjusting Nut	1	61	815736	†DIFF. CASE KIT (Inc. 5, 6, 11, 15, 18, 19, 21, 23)	1
30	123747	NUT, Differential Adjusting	1				
31	667275	CUP, Differential Bearing	1				
32	654144	CONE, Differential Bearing	1				

§Not Sold Separately
 †As Required
 ‡Not Illustrated

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



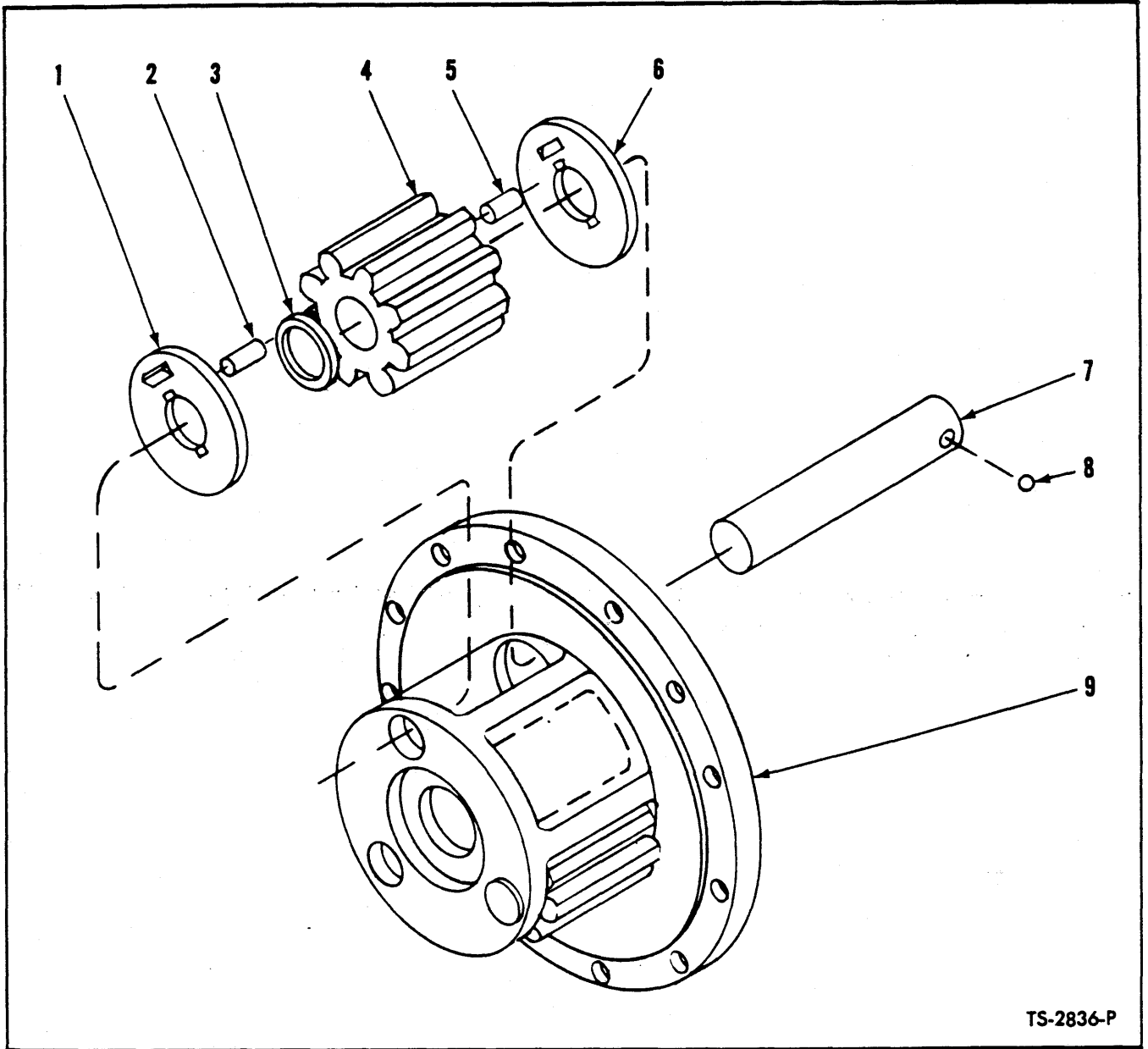
TS-3163-P

TIE ROD ASSEMBLY

Item No.	Part No.	Description	No. Req'd.
A	523467	TIE ROD ASSY (Inc. 1 thru 7)	1
1	-----	§HOUSING, Tie Rod — See A	—
2	106267	RETAINER, Felt	2
3	106266	FELT	2
4	112175	NUT, Ball Stud	2
5	523461	BALL STUD	2
6	541880	PLATE, Ball Stud Retainer	2
7	661416	SNAP RING, Retainer Plate	2

§Not Sold Separately

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

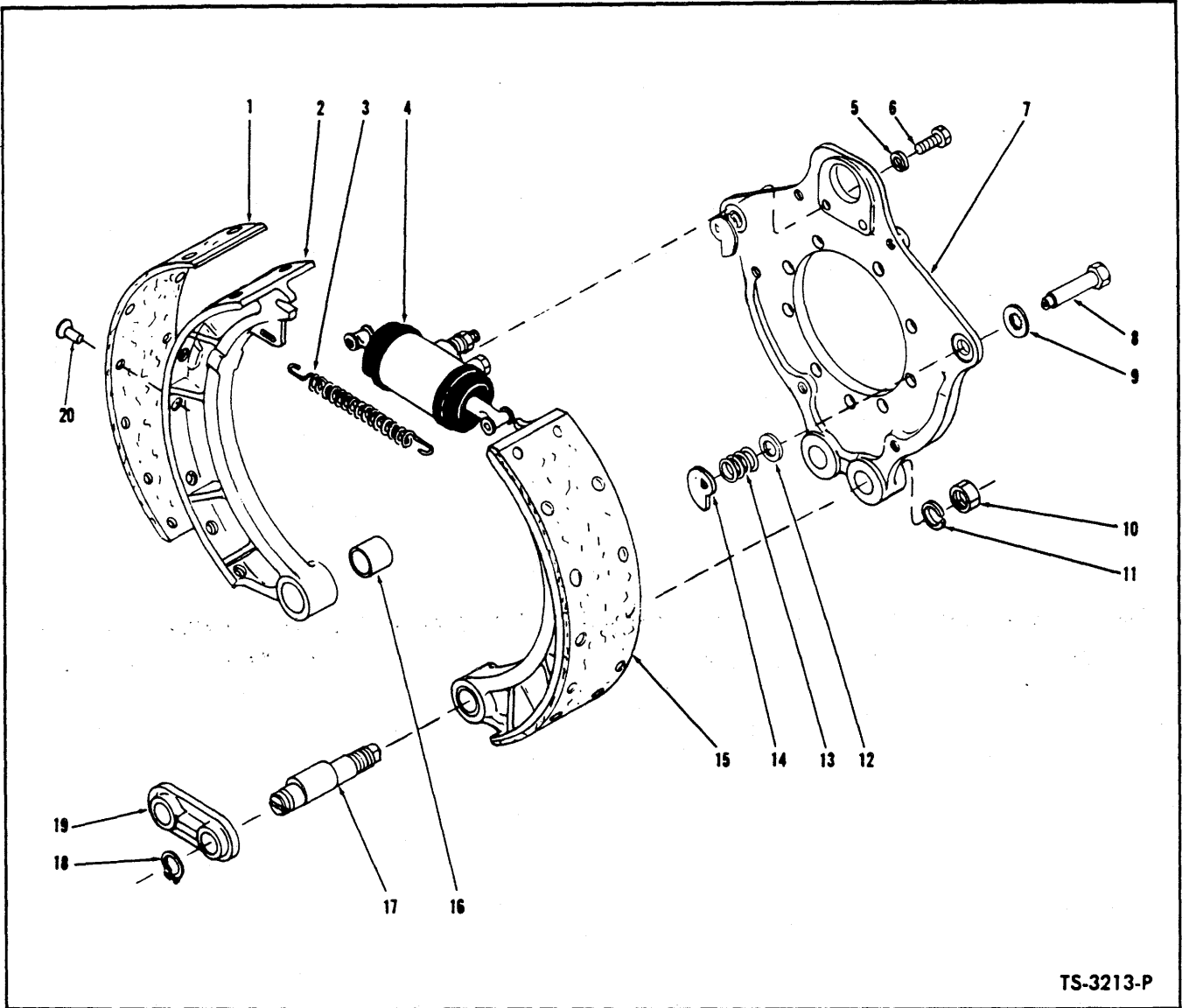


TS-2836-P

PLANET CARRIER ASSEMBLY

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-3213-P

BRAKE ASSEMBLY — FRONT

Item No.	Part No.	Description	No. Req'd.
A	117150	BRAKE ASSY (Inc. 1 thru 20)	2
NOTE: 2 Brake Assemblies used on axle — Quantities listed below are for 1 Brake Assembly			
B		LINING KIT, Brake (Inc. 1, 20)	
C	945614	Standard	1
D	945621	* 1/4" Oversize	1
1	—	§ LINING, Brake Shoe — See C & D	2
2	—	§ SHOE, Brake — See 15	2
3	116949	SPRING, Brake Shoe Return	1
4	—	WHEEL CYLINDER — See Index	1
5	4E-06	LKWSHR, Wheel Cyl. Mounting	2
6	1C-614	BOLT, Wheel Cylinder Mounting	2
7	112060	SPIDER ASSY, Brake (Inc. 8, 9, 12, 13, 14)	1

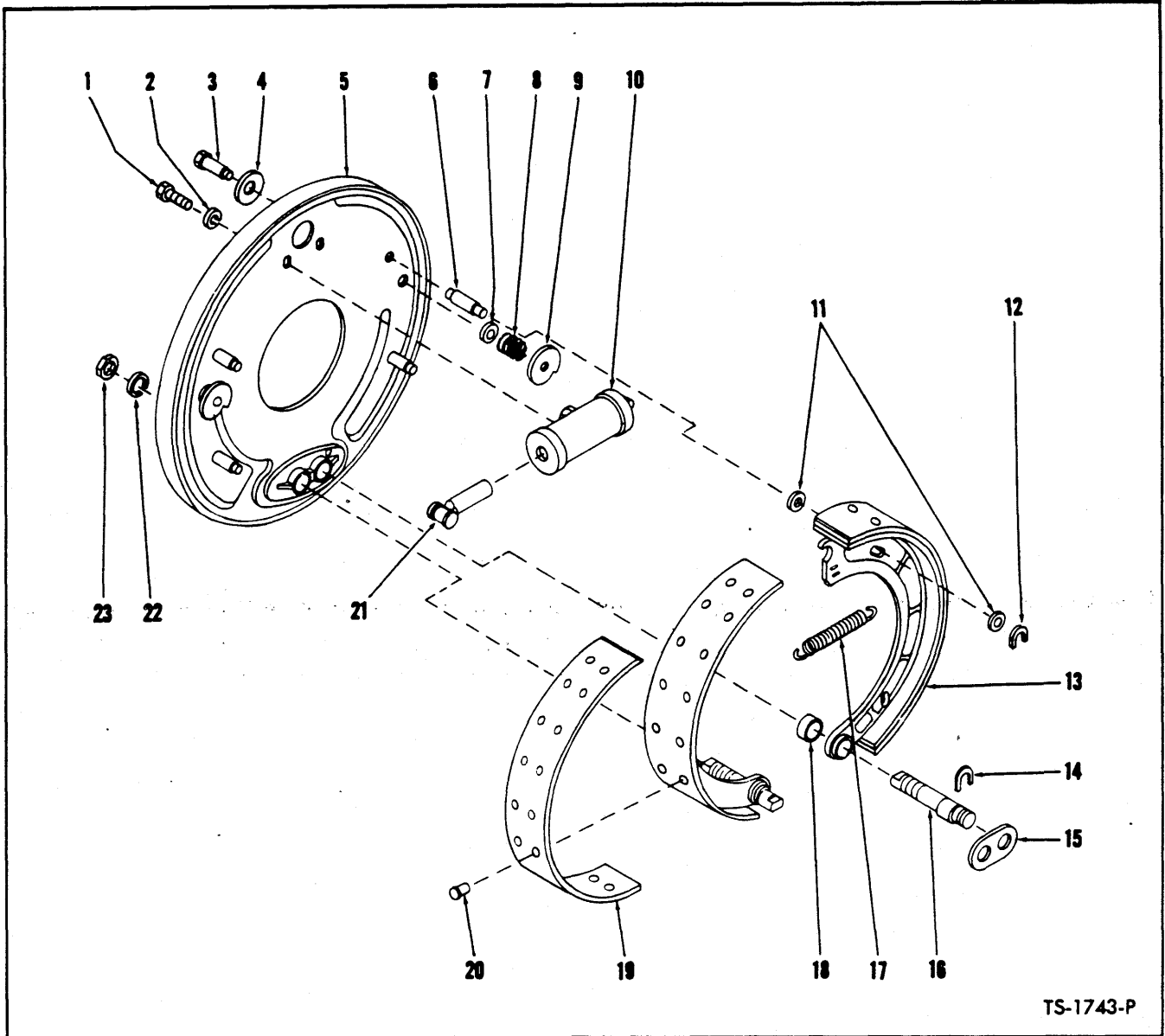
Item No.	Part No.	Description	No. Req'd.
8	114173	PIN ASSY, Brake Shoe Adjusting (Inc. 9)	2
9	100867	WASHER, Brake Shoe Adjusting Pin	2
10	2D-14	NUT, Anchor Pin	2
11	2E-14	LKWSHR, Anchor Pin Nut	2
12	851771	WASHER, Cam Spring	2
13	943859	KIT, Adjusting Cam Spring (Inc. 12)	2
14	112062	CAM, Shoe Adjusting	2
15	118267	SHOE ASSY, Brake (Inc. 1, 2, 16, 20)	2
16	112068	BUSHING, Brake Shoe	2
17	112069	PIN, Brake Shoe Anchor	2
18	710776	RING, Anchor Pin Retaining	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 17.370–17.380". Do Not Exceed this Dimension.

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

PM 2952



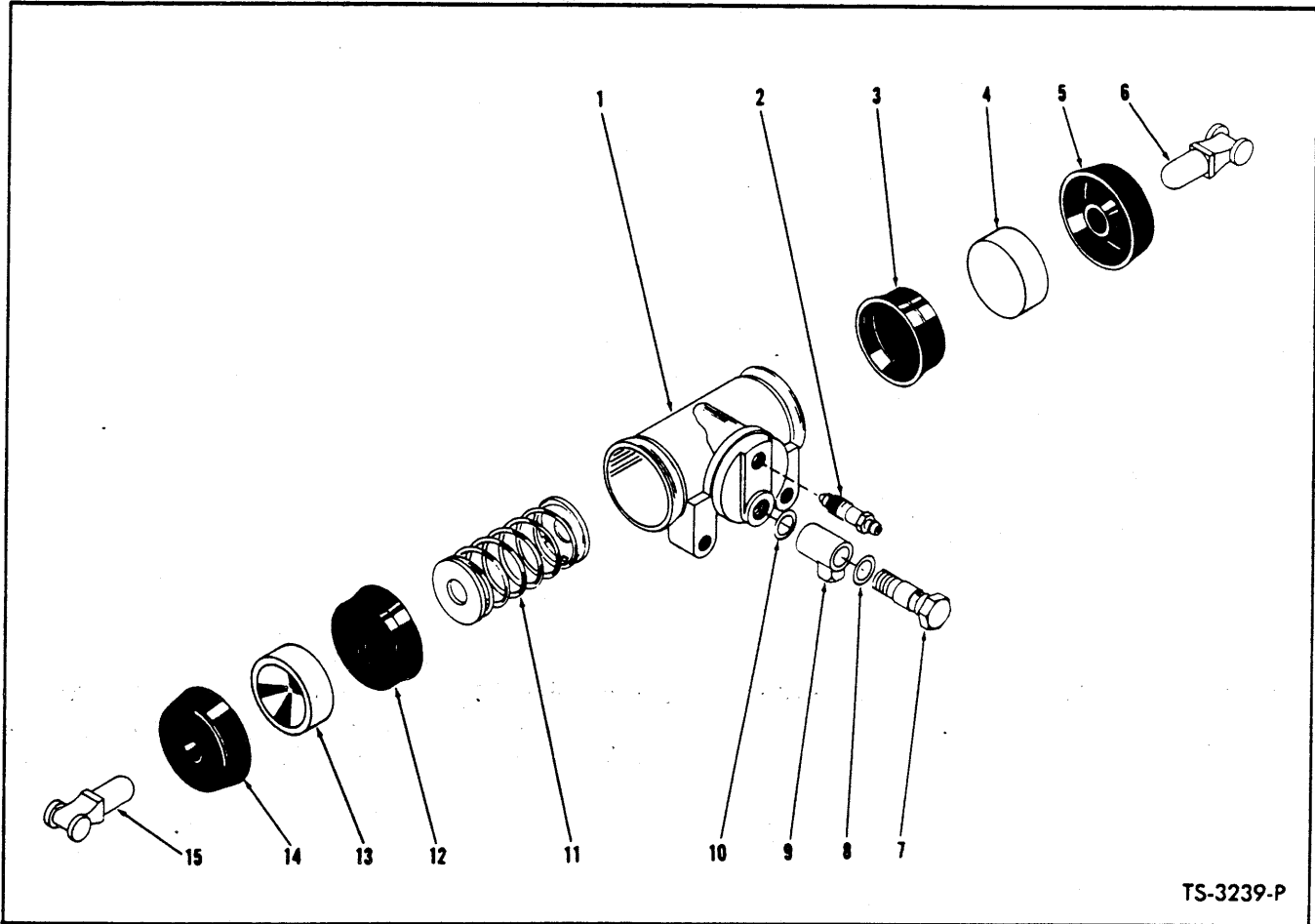
TS-1743-P

BRAKE ASSEMBLY — REAR

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	117558	BRAKE ASSY (Inc. 1 thru 23)	2	12	100878	"C" WASHER, Guide Pin	4
NOTE: 2 Brake Assemblies used on axle — Quantities listed below are for 1 Brake Assembly.				13	118254	SHOE ASSY, Brake (Inc. 18, 19, 20)	2
1	1C-610	BOLT, Cylinder to Brake Disc	2	14	101332	"C" WASHER, Anchor Pin	2
2	4E-06	LKWSHR, Cylinder to Brake Disc	2	15	106970	STRUT, Anchor Pin	1
3	114169	PIN, Cam (Inc. 4)	2	16	106969	PIN, Anchor	2
4	100867	WASHER, Cam Pin	2	17	106216	SPRING, Brake Shoe Return	1
5	106549	DISC ASSY, Brake (Inc. 3, 4, 6 thru 9)	1	18	201966	BUSHING, Brake Shoe	2
6	106373	PIN, Guide	4	19		LINING KIT, Brake (Inc. 20)	
7	851771	WASHER, Cam Spring	2	19A	944217	STANDARD	1
8	943859	KIT, Cam Spring (Inc. 7)	2	19B	945100	*1/8" Oversize	1
9	100864	CAM, Brake Shoe Adjusting	2	20	3H-1216	RIVET, Lining to Shoe	36
10		CYLINDER, Brake Wheel — See Index	—	21	958553	LINK, Wheel Cylinder Connector	2
11	102322	WASHER, Guide Pin	8	22	4E-12	LKWSHR, Anchor Pin	2
				23	2D-12	NUT, Anchor Pin	2

*NOTE: When 945100 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-3239-P

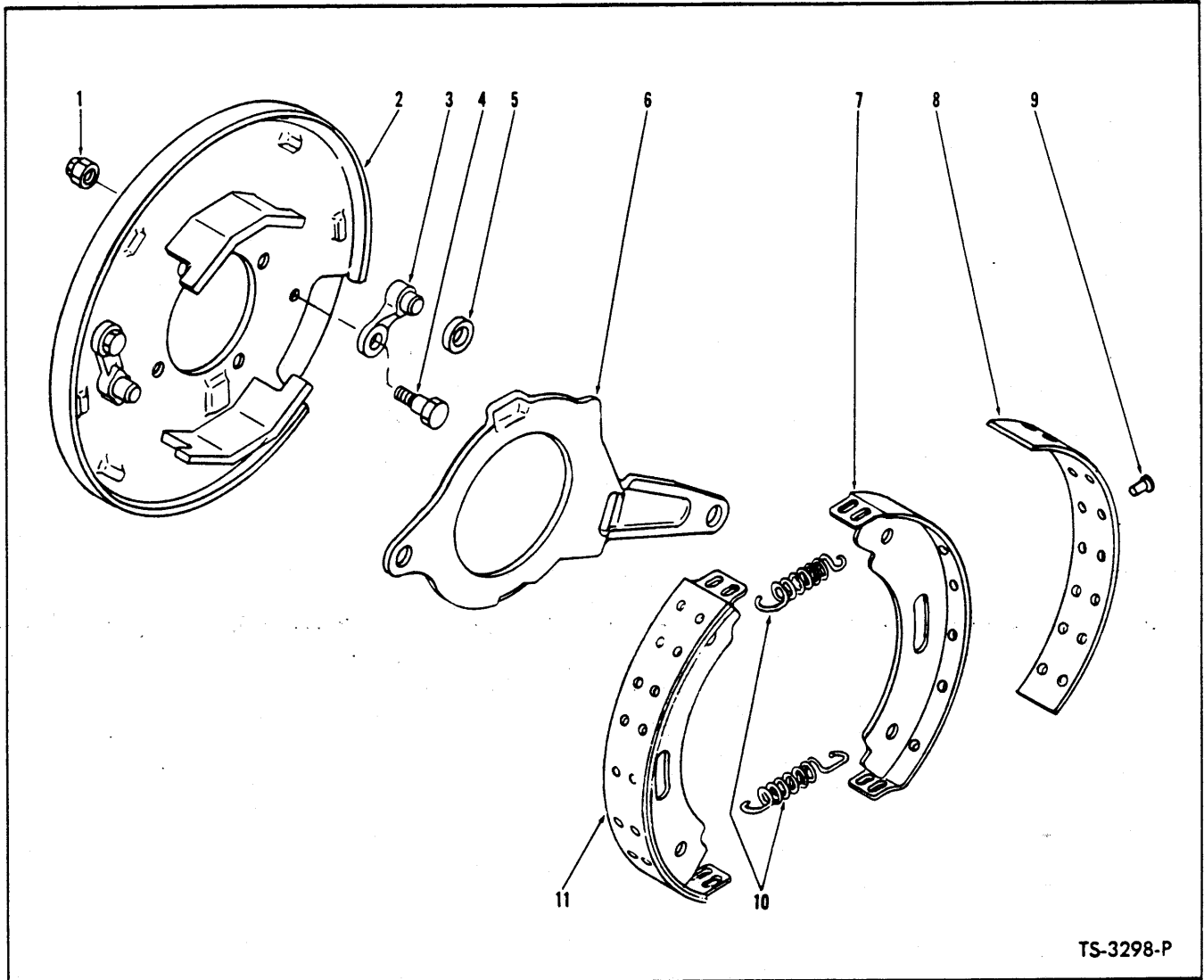
BRAKE WHEEL CYLINDER

Item No.	Part No.	Description	No. Req'd.
A		CYLINDER ASSY (Inc. 1 thru 15)	
B	112072	For Front Brake	2
C	107014	For Rear Brake	2
NOTE: 2 Wheel Cylinders used per axle. Quantities listed below are for 1 Wheel Cylinder			
D		REPAIR KIT, Cylinder (Inc. 3, 5, 12, 14)	
E	957995	For Front Cylinder	1
F	940130	For Rear Cylinder	1
1	----	§CYLINDER, Wheel - See "A"	1
2		SCREW, Bleeder	
2A	861356	For Front Cylinder	1
2B	208805	For Rear Cylinder	1
3	----	§CUP, Piston - See "D"	1
4	----	§PISTON - See "A"	1
5	----	§BOOT - See "D"	1
6	958553	LINK, Wheel Cylinder Connector	1

Item No.	Part No.	Description	No. Req'd.
7		BOLT, Fitting to Cylinder	
7A	944966	For Front Cylinder	1
7B	692722	For Rear Cylinder	1
8	620238	GASKET, Outer Fitting	1
9		FITTING, Cylinder	
9A	944967	For Front Cylinder	1
9B	620235	For Rear Cylinder	1
10	613750	GASKET, Inner Fitting	1
11		SPRING, Cylinder	
11A	956664	For Front Cylinder	1
11B	956622	For Rear Cylinder	1
12	----	§CUP, Piston - See "D"	1
13	----	§PISTON - See "A"	1
14	----	§BOOT - See "D"	1
15	958553	ROD, Push	1

§Not Sold Separately

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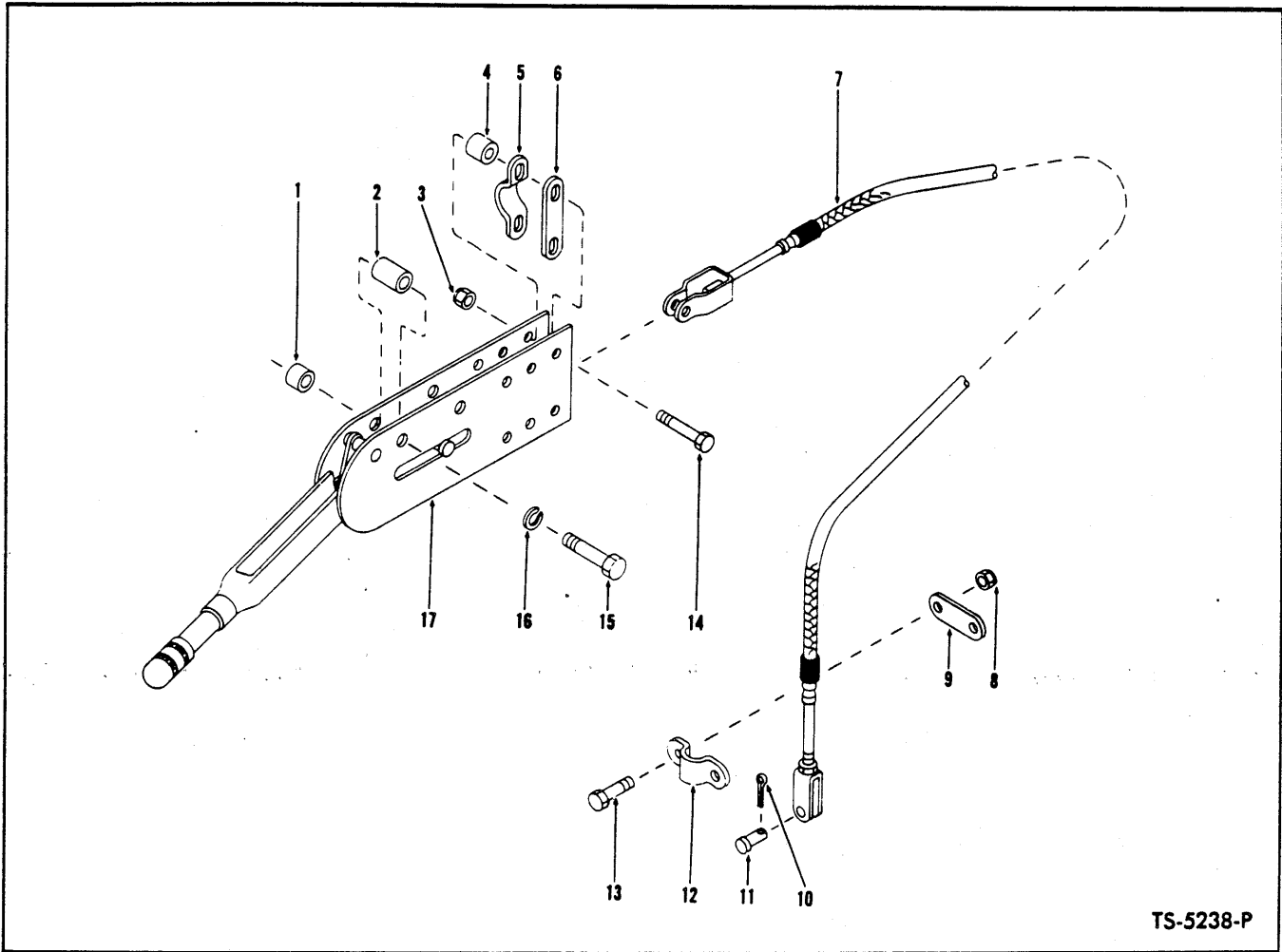
TS-3298-P

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

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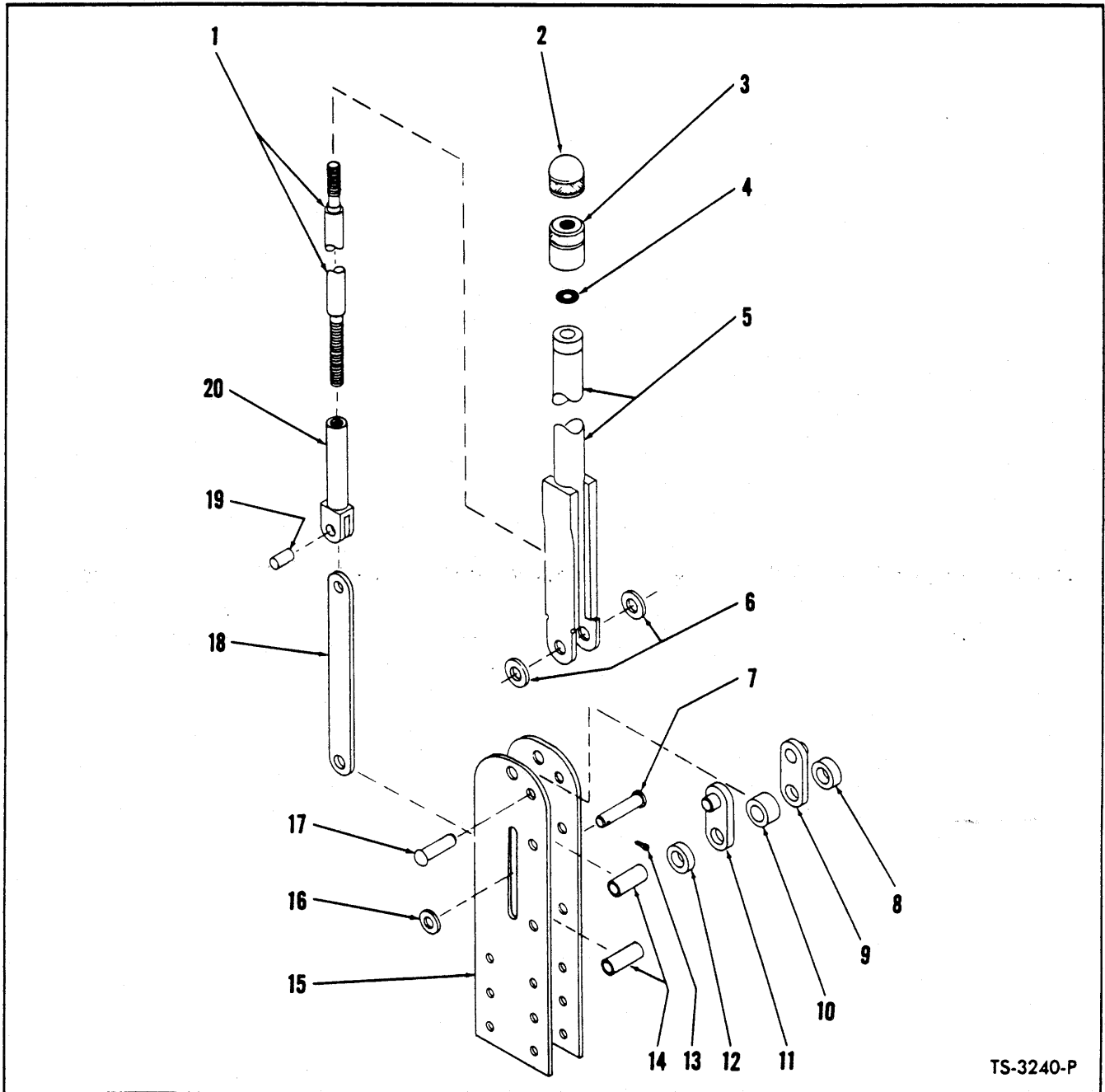


TS-5238-P

PARKING BRAKE CONTROLS

Item No.	Part No.	Description	No. Req'd.
1	545006	SPACER, Lever Mounting	2
2	545005	SPACER, Lever Mounting	2
3	18D-05	NUT, Cable Mounting	2
4	545006	SPACER, Cable Clamp	2
5	544512	CLAMP, Cable Mounting	1
6	645092	LINK, Cable Mounting	1
7	556693	CABLE, Parking Brake	1
8	18D-06	NUT, Clamp Attaching	2
9	645092	LINK, Cable Mounting	1
10	1F-312	COTTER, Clevis Pin	1
11	4F-06106	PIN, Cable Clevis Attaching	1
12	544512	CLAMP, Cable Mounting	1
13	18C-618	BOLT, Clamp Attaching	2
14	18C-528	BOLT, Cable Mounting	2
15	17C-636	BOLT, Lever Mounting	2
16	4E-06	LKWSHR, Lever Mounting	2
17	---	LEVER ASSY, Brake Hand - See Index	-

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



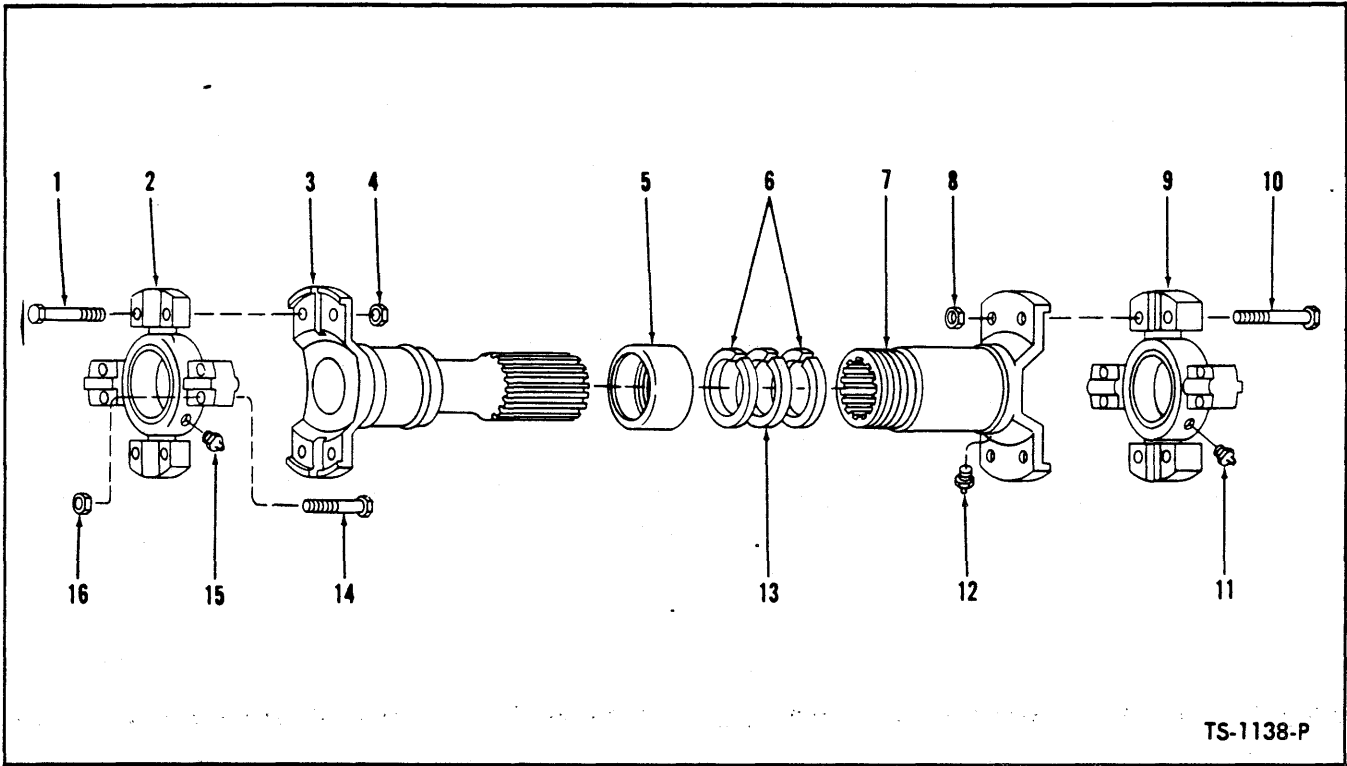
TS-3240-P

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 Bracket	2
4	946163	WASHER, Base to Body	1	15	944969	BRACKET, Lever Mounting	2
5	-----	§BODY, Brake Lever - See A	1	16	25E-15	WASHER, Link Pivot Pin	1
6	25E-18	WASHER, Body to Bracket	2	17	-----	§RIVET, Pivot Bracket - See A	1
7	862738	PIN, Adjusting 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, Adjusting Screw - See A	1
10	862655	SPACER, Pivot Bracket	1				

§ Not Sold Separately

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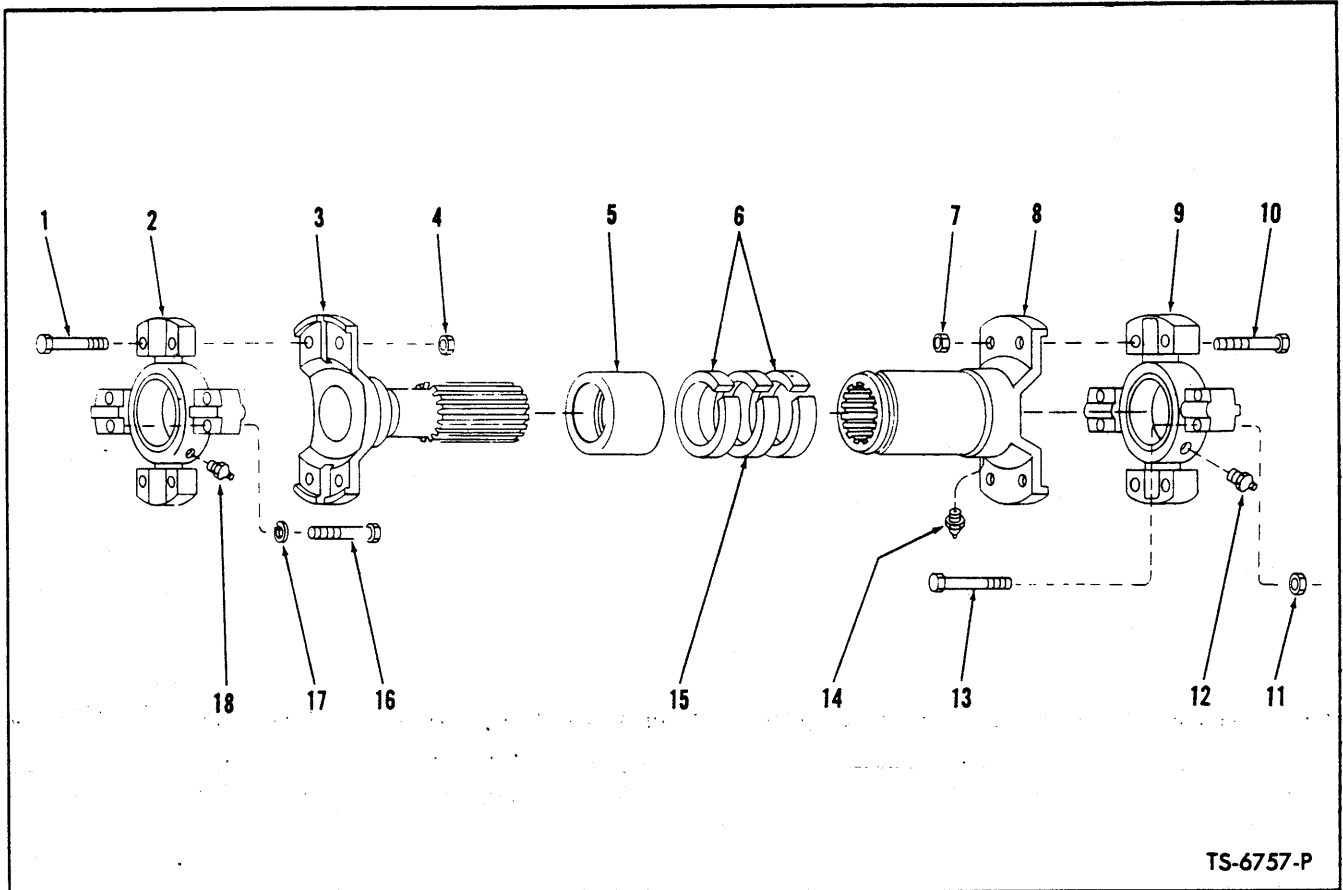
TS-1138-P

PROPELLER SHAFT ASSEMBLIES

Item No.	Description	Cummins	G.M.	Transmission to Rear Axle	No. Req'd
		Converter to Transmission	Converter To Transmission		
A	PROPELLER SHAFT ASSY (Inc. 1 thru 16)	574386	589891	562694	1
1	BOLT, Spider & Bearing to Tube	695808	945256	18C632	4
2	SPIDER & BEARING ASSY (Inc. 15)	887737	887737	944862	1
3	TUBE	946288	948303	946109	1
4	NUT, Spider & Bearing to Tube	8D-05	8D-05	8D-06	4
5	RETAINER, Felt	940654	940654	940090	1
6	WASHER, Felt Retainer	940653	940653	OMIT	2
7	SLIP YOKE (Inc. 12)	942658	942658	946110	1
8	NUT, Spider & Bearing to Slip Yoke	8D-05	8D-05	8D-06	4
9	SPIDER & BEARING ASSY (Inc. 11)	887737	887737	944862	1
10	BOLT, Spider & Bearing to Slip Yoke	695808	945256	18C632	4
11	FITTING, Spider & Bearing Grease	10H-35	10H-35	10H-35	1
12	FITTING, Slip Yoke Grease	10H-25	10H-25	10H-25	1
13	WASHER, Felt	940081	940081	940092	1
14	BOLT, Spider & Bearing Attaching	947391	947391	18C632	8
15	FITTING, Spider & Bearing Grease	10H-35	10H-35	10H-35	1
16	NUT, Spider & Bearing Attaching	18D-05	18D-05	8D-06	8

†Not Illustrated

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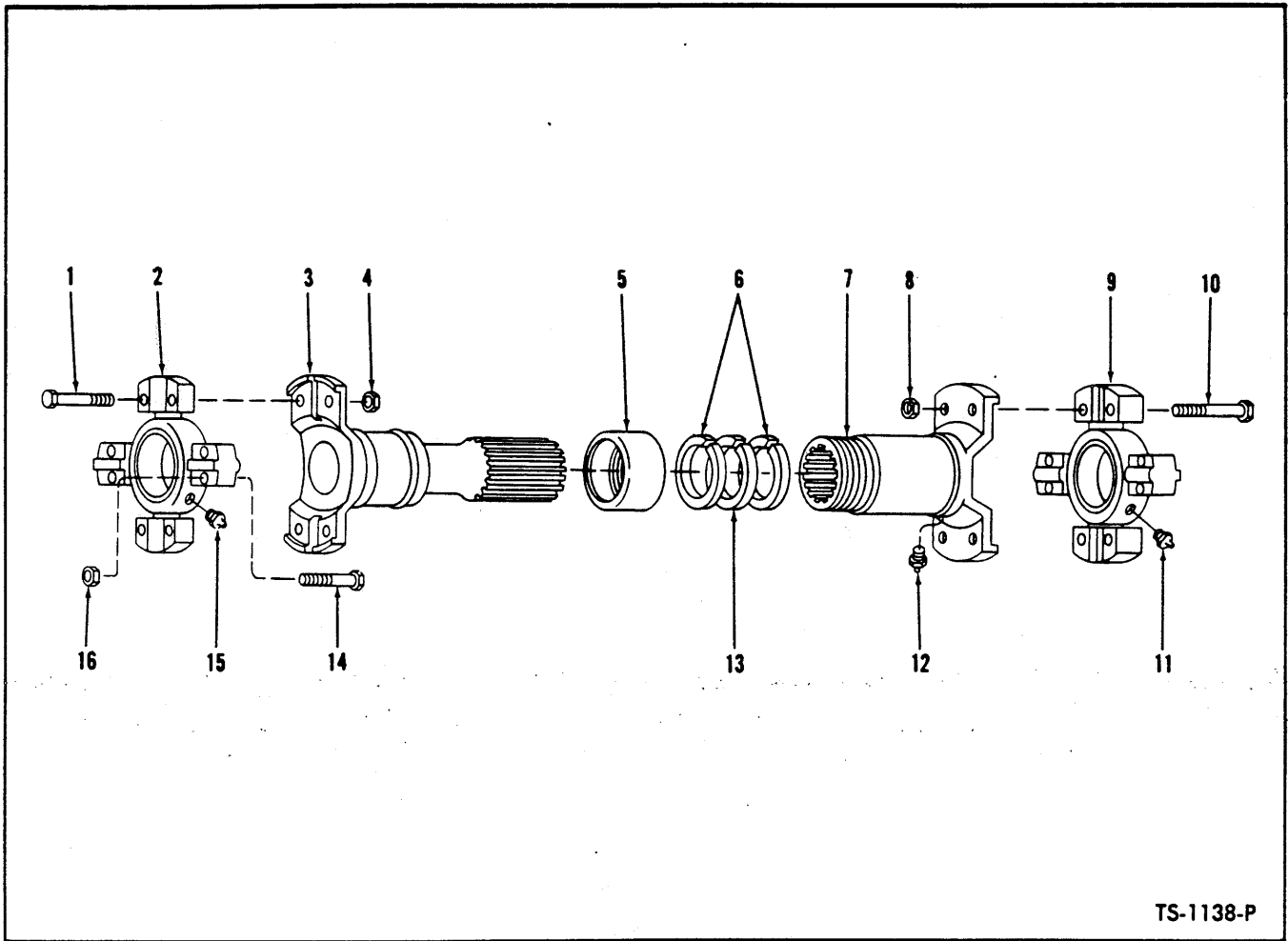
TS-6757-P

PROPELLER SHAFT ASSEMBLY
Transmission to Front Axle

Item No.	Part No.	Description	No. Req'd.
A	525659	PROPELLER SHAFT ASSY (Inc. 1 thru 16, 18)	1
1	18C632	BOLT, Spider & Bearing to Tube	4
2	944862	SPIDER & BEARING ASSY (Inc. 18)	1
3	944111	TUBE ASSY	1
4	8D-06	NUT, Spider & Bearing to Tube	4
5	940090	RETAINER, Felt	1
6	940091	WASHER, Felt Retainer	2
7	8D-06	NUT, Spider & Bearing to Slip Yoke	4
8	940224	SLIP YOKE (Inc. 14)	1
9	944862	SPIDER & BEARING ASSY (Inc. 12)	1
10	18C632	BOLT, Spider & Bearing to Slip Yoke	4
11	8D-06	NUT, Spider & Bearing Attaching	4
12	10H-35	FITTING, Spider & Bearing Grease	1
13	18C632	BOLT, Spider & Bearing Attaching	4
14	10H-25	FITTING, Slip Yoke Grease	1
15	940092	WASHER, Felt	1
16	18C632	BOLT, Spider & Bearing Attaching	4
17	4E-06	LKWSHR, Spider & Bearing Attaching	4
18	10H-35	FITTING, Spider & Bearing Grease	1

†Not Illustrated

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

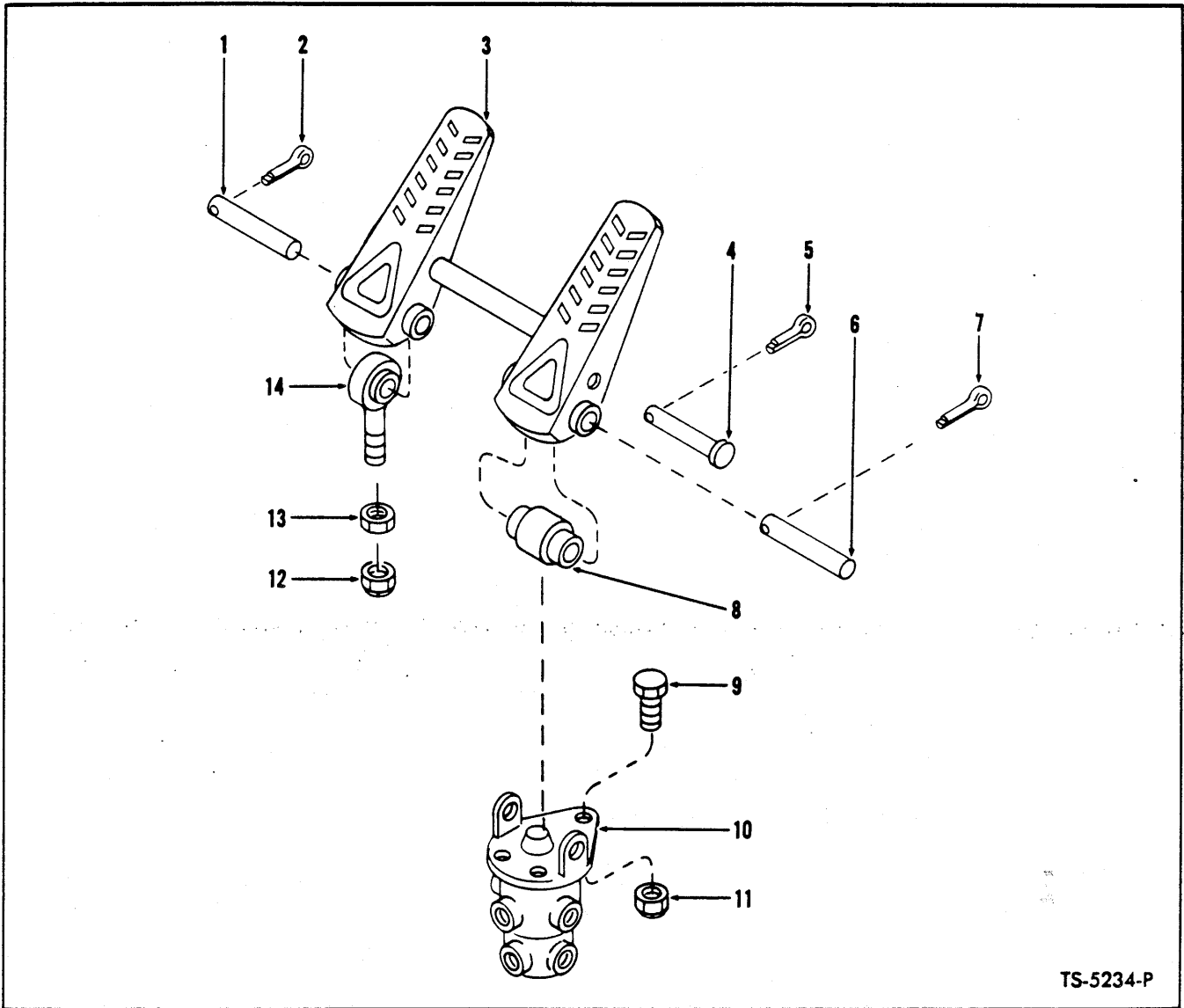


**PROPELLER SHAFT ASSEMBLY – FRONT AXLE TO TRANSMISSION
(With Disconnect Transmission Only)**

Item No.	Part No.	Description	No. Req'd.
A	1526594	PROPELLER SHAFT ASSY (Inc. 1 thru 16)	1
1	18C632	BOLT, Spider & Bearing to Tube	4
2	944862	SPIDER & BEARING ASSY (Inc. 15)	1
3	947245	TUBE	1
4	8D-06	NUT, Spider & Bearing to Tube	4
5	940090	RETAINER, Felt	1
6	940091	WASHER, Felt Retainer	2
7	940224	SLIP YOKE (Inc. 12)	1
8	8D-06	NUT, Spider & Bearing to Slip Yoke	4
9	944862	SPIDER & BEARING ASSY (Inc. 11)	1
10	18C632	BOLT, Spider & Bearing to Slip Yoke	4
11	10H-35	FITTING, Spider & Bearing Grease	1
12	10H-25	FITTING, Slip Yoke Grease	1
13	940092	WASHER, Felt	1
14	18C632	BOLT, Spider & Bearing	8
15	10H-35	FITTING, Spider & Bearing Grease	1
16	8D-06	NUT, Spider & Bearing Attaching	8

†Not Illustrated

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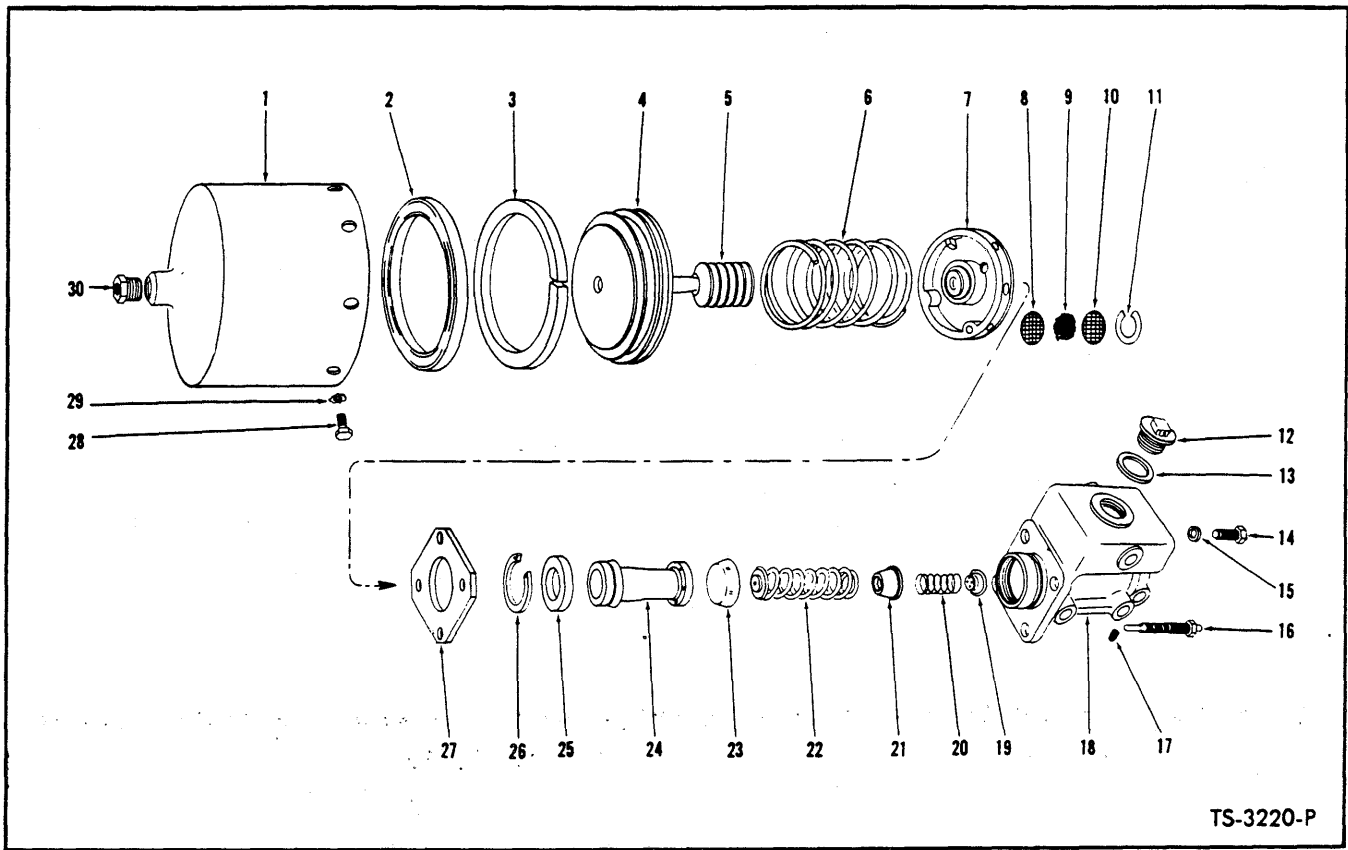
TS-5234-P

BRAKE VALVE AND CONTROLS

Item No.	Part No.	Description	No. Req'd.
1	875767	PIN, Pedal to Eye	1
2	1F-320	COTTER, Pedal Pin	1
3	589912	PEDAL, Air Brake	1
4	875766	PIN, Pedal to Roller	1
5	1F-312	COTTER, Pedal Pin	1
6	875767	PIN, Pedal to Valve	1
7	1F-320	COTTER, Pedal Pin	1
8	518259	ROLLER, Pedal	1
9	18C-516	BOLT, Valve to Cockpit	3
10	945996	*VALVE, Air Brake - B.W. #277472	1
11	18D-05	NUT, Valve to Cockpit	3
12	66D-06	NUT, Eye Mounting	1
13	8D-06	NUT, Eye Jam	1
14	1525089	EYE, Pedal	1

*NOTE: Your local authorized Bendix-Westinghouse Distributor is equipped to service and supply components of this part.

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



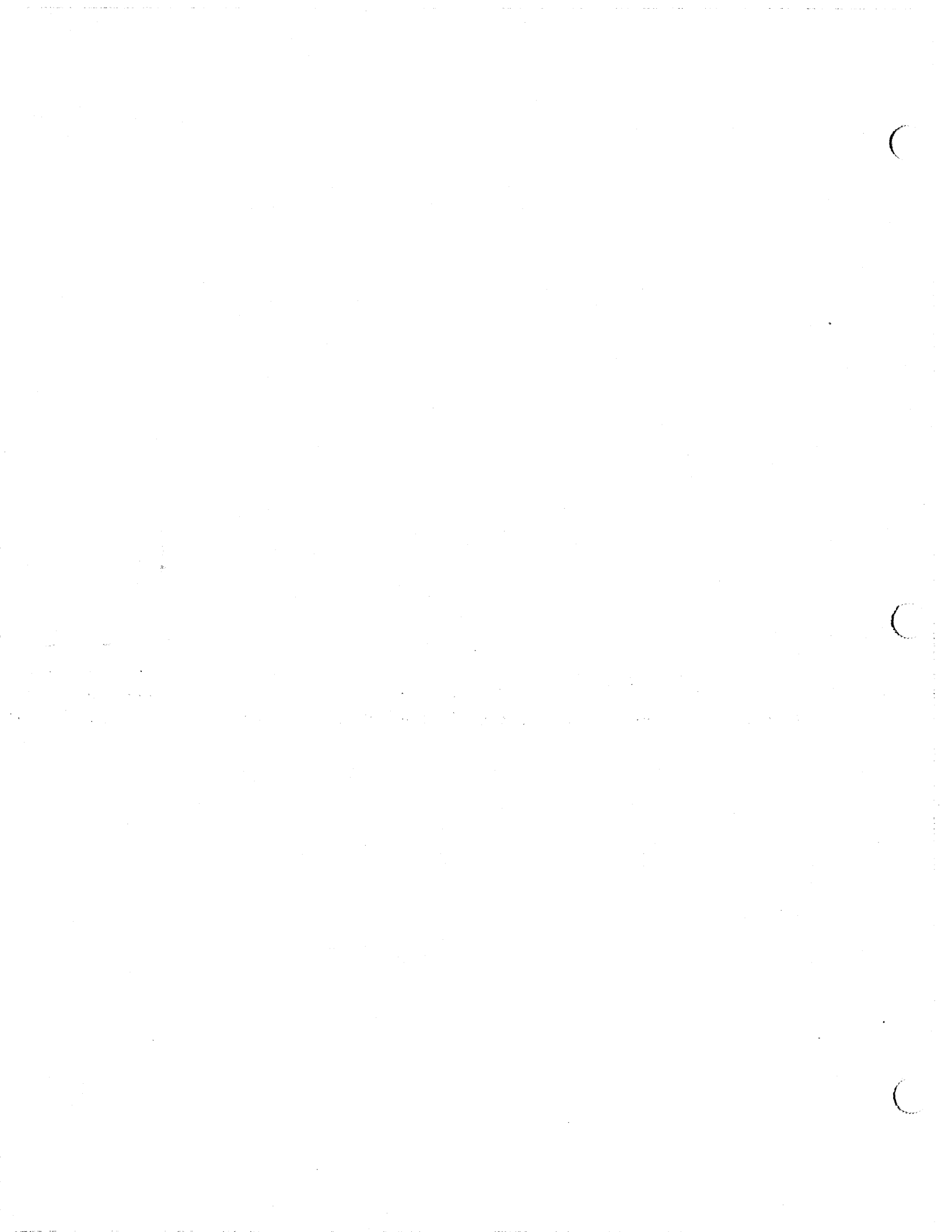
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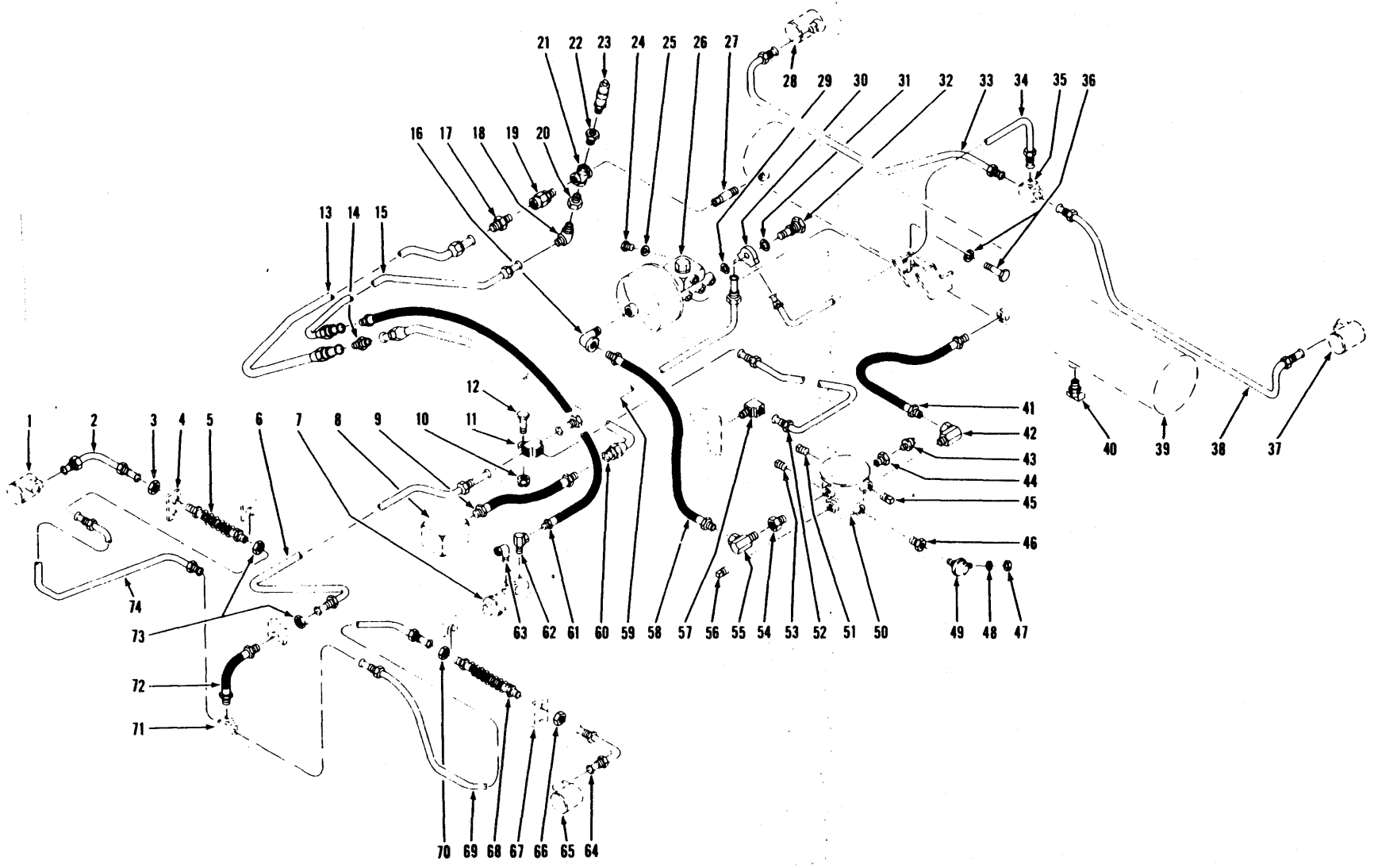
POWER CLUSTER ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	526879	POWER CLUSTER ASSY (Inc. 1 thru 30)	1	17	10F-02	PLUG, Master Cylinder	1
1	945034	SHELL, Air Cylinder	1	18	947740	CASTING, Master Cylinder	1
2	-----	§CUP, Piston—See 31	1	19	-----	§VALVE, Check—See 31	1
3	-----	§WIPER, Piston—See 31	1	20	945026	SPRING, Check Valve	1
4	945035	PISTON, Air Cylinder	1	21	945042	RETAINER, Check Valve Spring	1
5	-----	§BOOT, Piston Rod—See 31	1	22	955321	SPRING, Piston Return	1
6	945036	SPRING, Piston Return	1	23	-----	§CUP, Primary—See 31	1
7	945037	HEAD ASSY, Air Cylinder (Inc. 8 thru 11)	1	24	-----	§PISTON ASSY, Master Cyl.—See 31	—
8	945029	SCREEN, Filtering	1	25	955326	PLATE, Piston Stop	1
9	992163	HAIR, Filtering	1	26	955323	RING, Stop Plate Retaining	1
10	945029	SCREEN, Filtering	1	27	945040	PLATE, Master Cyl. Mounting	1
11	992164	RING, Filter Retaining	1	28	1C-510	BOLT, Shell to Head	8
12	892287	CAP, Master Cylinder Filler	1	29	6E-05	LKWSHR, Shell to Head	8
13	857933	GASKET, Filler Cap	1	30	356612	BUSHING, Shell Reducing	1
14	1C-624	BOLT, Master Cyl. to Air Cylinder	3	31	945041	REPAIR KIT (Inc. 2, 3, 5, 19, 23, 24)	1
15	4E-06	LKWSHR, Master Cyl. to Air Cylinder	4	32	18C-720	†BOLT, Power Cluster Attaching	3
16	945038	INDICATOR, Stroke	1	33	4E-07	†LKWSHR, Power Cluster Attaching	3

§Not Sold Separately
†Not Illustrated

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





BRAKE AIR LINES - CUMMINS

TS-6840-P

[72]

(187)

PM 2952
Printed in U.S.A.

BRAKE AIR LINES — CUMMINS

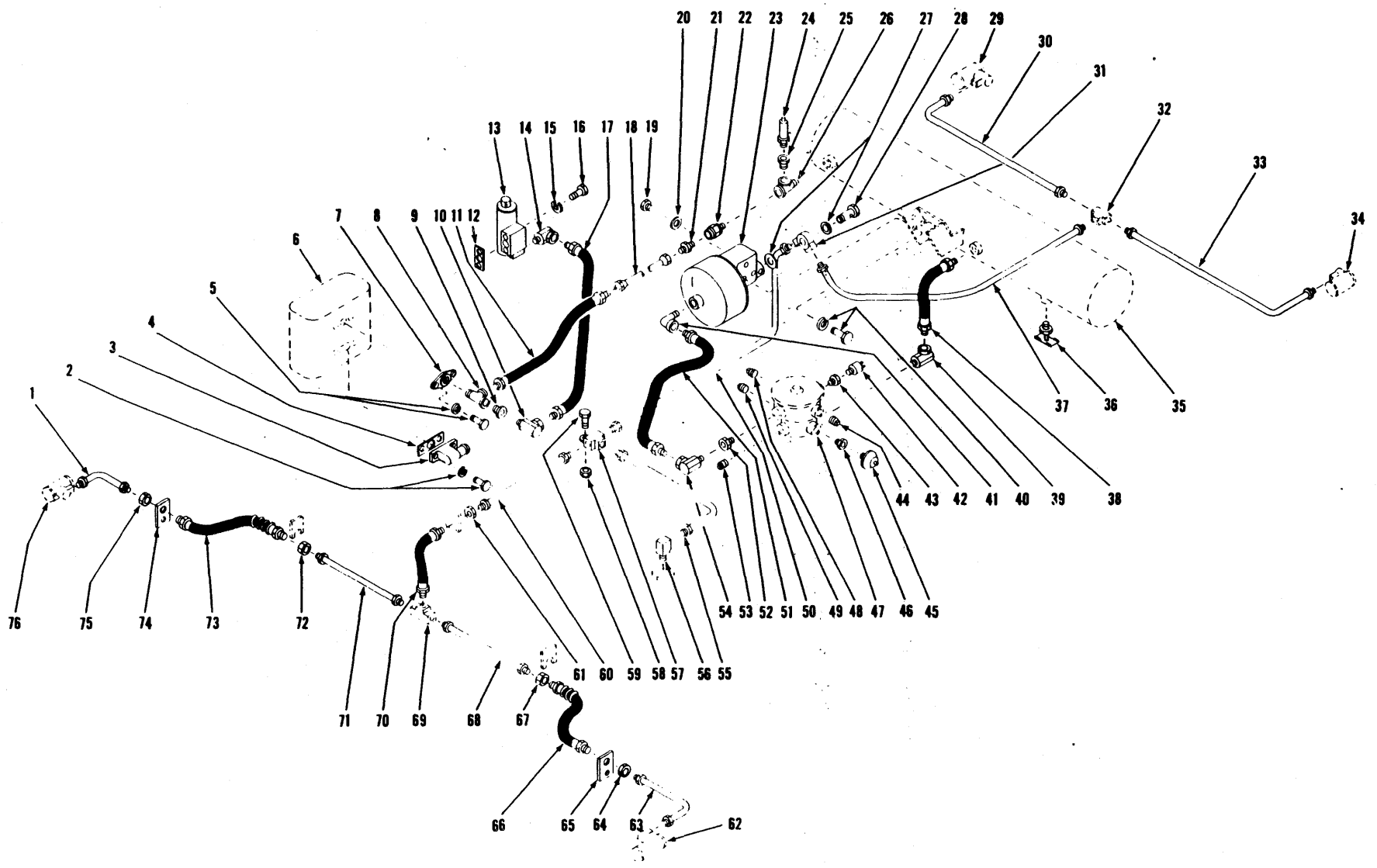
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	----	CYLINDER, Wheel — See Index	—	37	----	CYLINDER, Wheel—See Index	—
2	550334	LINE, Hose to Wheel Cylinder — L.H. Rear Axle	1	38	543740	LINE, Tee to Wheel Cylinder — R.H. Front Axle	1
3	8D-10	NUT, Hose Jam	1	39	----	§AIR RESERVOIR — Welded to Frame	—
4	550325	CLIP, Hose (Furnished with Axle)	1	40	72F-4	DRAIN COCK — Air Reservoir	1
5	552350	HOSE, Line to Line	1	41	574439	HOSE, Air Reservoir to Brake Valve	1
6	589426	TUBE, Tee to Clip	1	42	31F-4	ADAPTER UNION, Hose to Valve	1
7	----	GOVERNOR ASSY (Furnished with Engine) — See Engine Parts Manual	—	43	636260	SWITCH, Stop Light	1
8	----	COMPRESSOR (Furnished with Engine) — See Engine Parts Manual	—	44	19F-4	BUSHING, Switch Reducing	1
9	526090	HOSE, Compressor to Tube	1	45	13F-08	PLUG, Brake Valve	1
10	18D-07	NUT, Tee to Frame Bolt	1	46	19F-1	BUSHING, Sender Unit Reducing	1
11	609733	TEE, Connecting — Frame	1	47	14D-10	NUT, Sender Unit	1
12	18C-724	BOLT, Tee to Frame	1	48	12E-10	LKWSHR, Sender Unit	1
13	571546	TUBE, Tube to Air Reservoir	1	49	940643	**SENDER UNIT, Air Pressure (Inc. 47, 48)	1
14	40K-08	CONNECTOR, Tube	1	50	----	BRAKE VALVE — See Index	—
15	572713	TUBE, Hose to Air Reservoir	1	51	13F-08	PLUG, Brake Valve	1
16	26F-3	ELBOW, Hose to Power Cluster	1	52	589428	TUBE, Frame Tee to Declutch Valve	1
17	38F-10	CONNECTOR, Tube	1	53	13F-04	PLUG, Brake Valve	1
18	42F-3	ELBOW, Tube to Cross	1	54	19F-6	BUSHING, Valve Reducing	1
19	593370	VALVE, Check	1	55	31F-3	ADAPTER UNION, Hose to Valve	1
20	19F-4	BUSHING, Cross Reducing	1	56	13F-08	PLUG, Brake Valve	1
21	21F-4	CROSS, Connecting	1	57	62F-3	ELBOW, Tube to Valve	1
22	19F-5	BUSHING, Cross Reducing	1	58	592784	HOSE, Brake Valve to Power Cluster	1
23	507815	*VALVE, Safety (B.W. #205105)	1	59	589427	TUBE, Power Cluster to Frame Tee	1
24	874007	PLUG, Master Cylinder	2	60	571545	TUBE, Compressor Hose to Tube	1
25	613750	GASKET, Master Cylinder	2	61	557086	HOSE, Governor to Tube	1
26	----	POWER CLUSTER ASSY — See Index	—	62	31F-1	ADAPTER UNION, Hose to Governor	1
27	5K-409	NIPPLE, Cross to Air Reservoir	1	63	26F-1	ELBOW, Governor Exhaust	1
28	----	CYLINDER, Wheel — See Index	—	64	550334	LINE, Hose to Wheel Cylinder — R.H. Rear Axle	1
29	620238	GASKET, Fitting to Master Cylinder	1	65	----	WHEEL CYLINDER — See Index	—
30	633242	FITTING, Connecting	1	66	8D-10	NUT, Hose Jam	1
31	613750	GASKET, Bolt to Fitting	1	67	550325	CLIP, Hose (Furnished with Axle)	1
32	692722	BOLT, Fitting to Master Cylinder	1	68	552350	HOSE, Line to Line	1
33	543741	LINE, Tee to Wheel Cylinder — L.H. Front Axle	1	69	563786	LINE, Axle Tee to Hose	1
34	589429	TUBE, Power Cluster to Front Axle Tee	1	70	8D-10	NUT, Hose Jam	1
35	609733	TEE, Brake Line (Furnished with Axle)	1	71	550320	TEE, Brake Line (Furnished with Axle)	1
36	18C-720	BOLT, Power Cluster Mounting	3	72	533814	HOSE, Clip to Axle Tee	1
36A	4E-07	LKWSHR, Power Cluster Mounting Bolt	3	73	8D-10	NUT, Hose Jam	2
				74	563787	LINE, Axle Tee to Hose	1

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

**NOTE: For replacement refer to Service-Gram S.G.-326B.

§ Not Sold Separately

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



BRAKE AIR LINES - G.M.

TS-6569-P

[74]

(189)

PM 2952
Printed in U.S.A.



BRAKE AIR LINES—G.M.

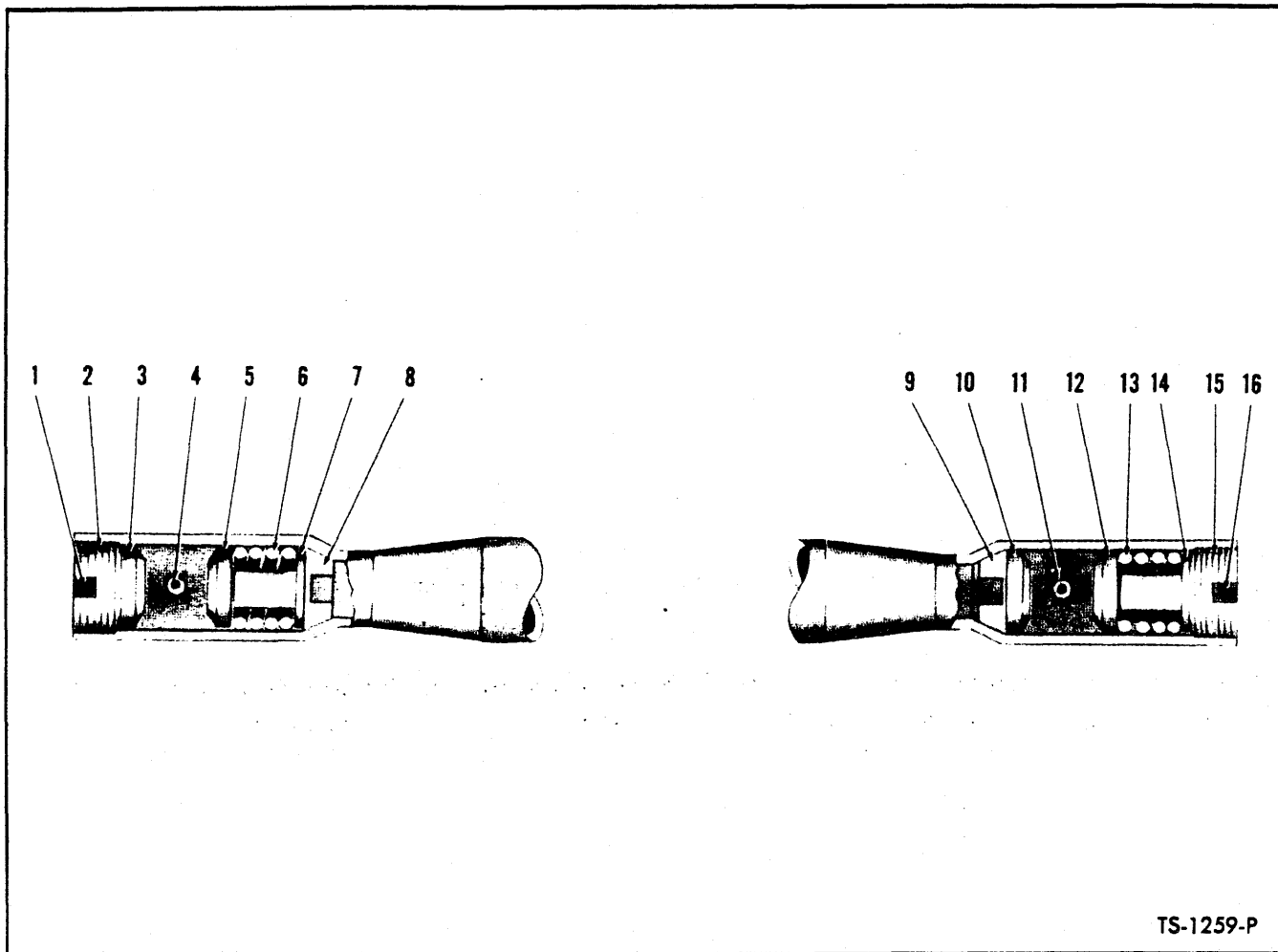
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	550334	LINE, Hose to Wheel Cylinder — L. H. Rear Axle	1	40	18C-720	BOLT, Power Cluster Mounting	3
2	17C-514	BOLT, Elbow to Compressor	2	40A	4E-07	LKWSHR, Power Cluster Mounting	3
2A	4E-05	LKWSHR, Elbow to Compressor	2	41	26F-3	ELBOW, Hose to Power Cluster	1
3	540664	ELBOW, Compressor Air Inlet	1	42	636260	SWITCH, Air Pressure	1
4	875012	GASKET, Elbow to Compressor	1	43	356616	BUSHING, Switch Reducing	1
5	17C-516	BOLT, Flange to Compressor	2	44	13F-08	PLUG, Brake Valve	1
5A	4E-05	LKWSHR, Flange to Compressor	2	45	940643	**SENDER UNIT, Air Pressure (Inc. 45A, 45B)	1
6	-----	AIR COMPRESSOR — See Engine Parts Manual	—	45A	14D-10	NUT, Sender Unit	1
7	510452	FLANGE, Discharge (B.W. #213042)	1	45B	12E-10	LKWSHR, Sender Unit	1
8	17F-4	TEE, Connecting	1	46	19F-1	BUSHING, Sender Unit Reducing	1
9	19F-4	BUSHING, Reducing	1	47	-----	BRAKE VALVE — See Index	—
10	31F-1	ADAPTER UNION, Hose to Tee	1	48	13F-08	PLUG, Brake Valve	1
11	523786	HOSE, Tube to Tee	1	49	13F-04	PLUG, Brake Valve	1
12	942646	*GASKET, Governor (B.W. #236577)	1	50	589427	TUBE, Power Cluster to Connecting Tee	1
13	540306	*GOVERNOR, (B.W. #275200)	1	51	592784	HOSE, Power Cluster to Valve	1
14	31F-1	ADAPTER UNION, Hose to Governor	1	52	19F-6	BUSHING, Valve Reducing	1
15	4E-05	LKWSHR, Governor to Compressor	2	53	13F-08	PLUG, Brake Valve	1
16	17C-548	BOLT, Governor to Compressor	2	54	31F-3	ADAPTER UNION, Hose to Valve	1
17	545528	HOSE, Governor to Connecting Tee	1	55	589428	TUBE, Tee to Declutch Valve	1
18	563978	TUBE, Compressor to Air Reservoir	1	56	62F-3	ELBOW, Tube to Valve	1
19	874007	PLUG, Master Cylinder	2	57	609733	TEE, Connecting	1
20	613750	GASKET, Master Cylinder Plug	2	58	18D-07	NUT, Tee to Frame	1
21	38F-10	CONNECTOR, Tube	1	59	18C-724	BOLT, Tee to Frame	1
22	593370	VALVE, Check	1	60	589426	TUBE, Tee to Frame Clip	1
23	-----	POWER CLUSTER ASSY — See Index	—	61	8D-10	NUT, Hose Jam	1
24	507815	*VALVE, Safety (B.W. #205105)	1	62	-----	CYLINDER, Wheel — See Index	—
25	19F-5	BUSHING, Tee Reducing	1	63	550334	LINE, Hose to Wheel Cylinder — R.H. Rear Axle	1
26	17F-4	TEE, Connecting	1	64	8D-10	NUT, Hose Jam	1
27	620238	GASKET, Fitting to Master Cylinder	1	65	550325	CLIP, Hose — Mounted on Axle Cradle	1
27A	613750	GASKET, Bolt to Fitting	1	66	552350	HOSE, Line to Line	1
28	692722	BOLT, Fitting to Master Cylinder	1	67	8D-10	NUT, Hose Jam	1
29	-----	CYLINDER, Wheel — See Index	—	68	563786	LINE, Tee to Hose	1
30	535049	LINE, Tee to Wheel Cylinder — L. H. Front Axle	1	69	550320	TEE, Brake Line — Furnished with Axle	1
31	633242	FITTING, Connecting	1	70	533814	HOSE, Tube to Tee	1
32	609733	TEE, Brake Line — Furnished with Axle	1	71	563787	LINE, Tee to Hose	1
33	535050	LINE, Tee to Wheel Cylinder — R.H. Front Axle	1	72	8D-10	NUT, Hose Jam	1
34	-----	CYLINDER, Wheel — See Index	—	73	552350	HOSE, Line to Line	1
35	-----	§ AIR RESERVOIR — Welded to Frame	—	74	550325	CLIP, Hose — Mounted on Axle Cradle	1
36	72F-4	DRAINCOCK — Air Reservoir	1	75	8D-10	NUT, Hose Jam	1
37	589429	TUBE, Power Cluster to Front Axle	1	76	-----	CYLINDER, Wheel — See Index	—
38	574439	HOSE, Brake Valve to Air Reservoir	1				
39	31F-4	ADAPTER UNION, Hose to Valve	1				

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

**NOTE: For replacement refer to Service-Gram S.G.-326B.

§ Not Sold Separately

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

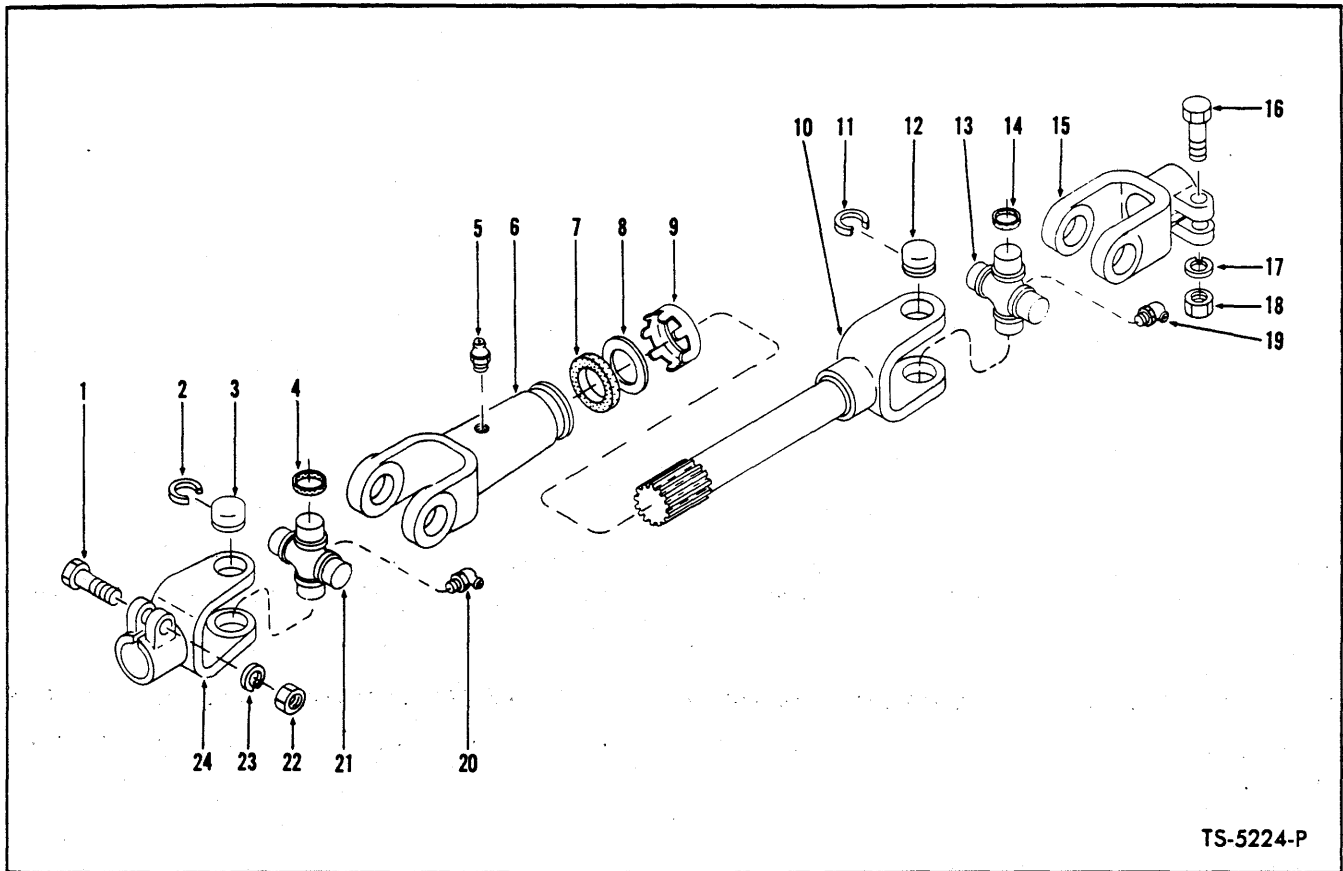


TS-1259-P

DRAG LINK

Item No.	Part No.	Description	No. Req'd.
A	564121	DRAG LINK ASSY (Inc. 2, 3, 5 thru 10, 12 thru 15)	1
1	1F-432	COTTER	1
2	876575	NUT, Adjusting	1
3	865965	SEAT, Ball Stud	1
4	10H-25	FITTING, Grease	1
5	865965	SEAT, Ball Stud	1
6	865961	SPRING	1
7	662691	SEAT, Spring	1
8	865963	SEAT	1
9	865963	SEAT	1
10	865965	SEAT, Ball Stud	1
11	10H-25	FITTING, Grease	1
12	865965	SEAT, Ball Stud	1
13	865961	SPRING	1
14	662691	SEAT, Spring	1
15	876575	NUT, Adjusting	1
16	1F-432	COTTER	1

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



TS-5224-P

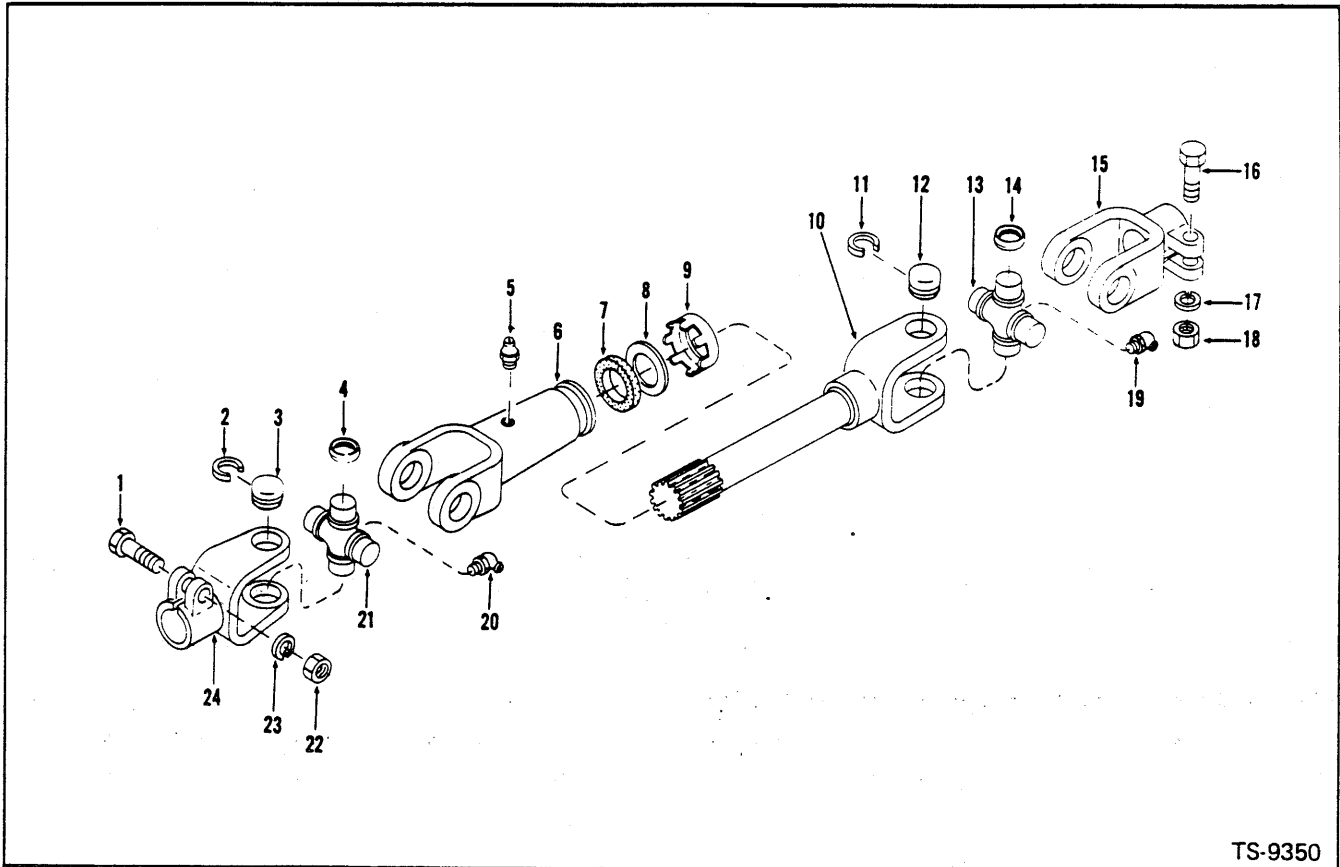
STEERING SLIP SHAFT ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	562144	*SHAFT ASSY, Slip (Inc. 1 thru 24) ...	1	13	946020	SPIDER & BEARING ASSY (Inc. 11, 12, 14, 19)	1
B	946023	KIT, Dust Cap (Inc. 7, 8, 9)	1	14	868215	WASHER, Bearing Assy	4
1	18C-628	BOLT, Clamp Yoke Mounting	1	15	946021	CLAMP YOKE	1
2	868214	RING, Bearing Assy Retaining	4	16	18C-628	BOLT, Clamp Yoke Mounting	1
3	-----	§BUSHING, Bearing Assy Cap — See Item 21	—	17	4E-06	LKWSHR, Clamp Yoke Mounting	1
4	868215	WASHER, Bearing Assy	4	18	8D-06	NUT, Clamp Yoke Mounting	1
5	10H-35	FITTING, Slip Yoke Grease	1	19	15H-15	FITTING, Bearing Assy Grease	1
6	946102	YOKE, Slip (Inc. 5)	1	20	15H-15	FITTING, Bearing Assy Grease	1
7	-----	§WASHER, Dust Cap — See Item "B" ..	—	21	946020	SPIDER & BEARING ASSY (Inc. 2, 3, 4, 20)	1
8	-----	§WASHER, Dust Cap — See Item "B" ..	—	22	8D-06	NUT, Clamp Yoke Mounting	1
9	-----	§CAP, Dust — See Item "B"	—	23	4E-06	LKWSHR, Clamp Yoke Mounting	1
10	946103	YOKE & SHAFT ASSY	1	24	946021	CLAMP YOKE	1
11	868214	RING, Bearing Assy Retaining	4				
12	-----	§BUSHING, Bearing Assy Cap — See Item 13	—				

§Not Sold Separately

*NOTE: For replacement use 1542840 Shaft Assembly

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



TS-9350

STEERING SLIP SHAFT ASSEMBLY

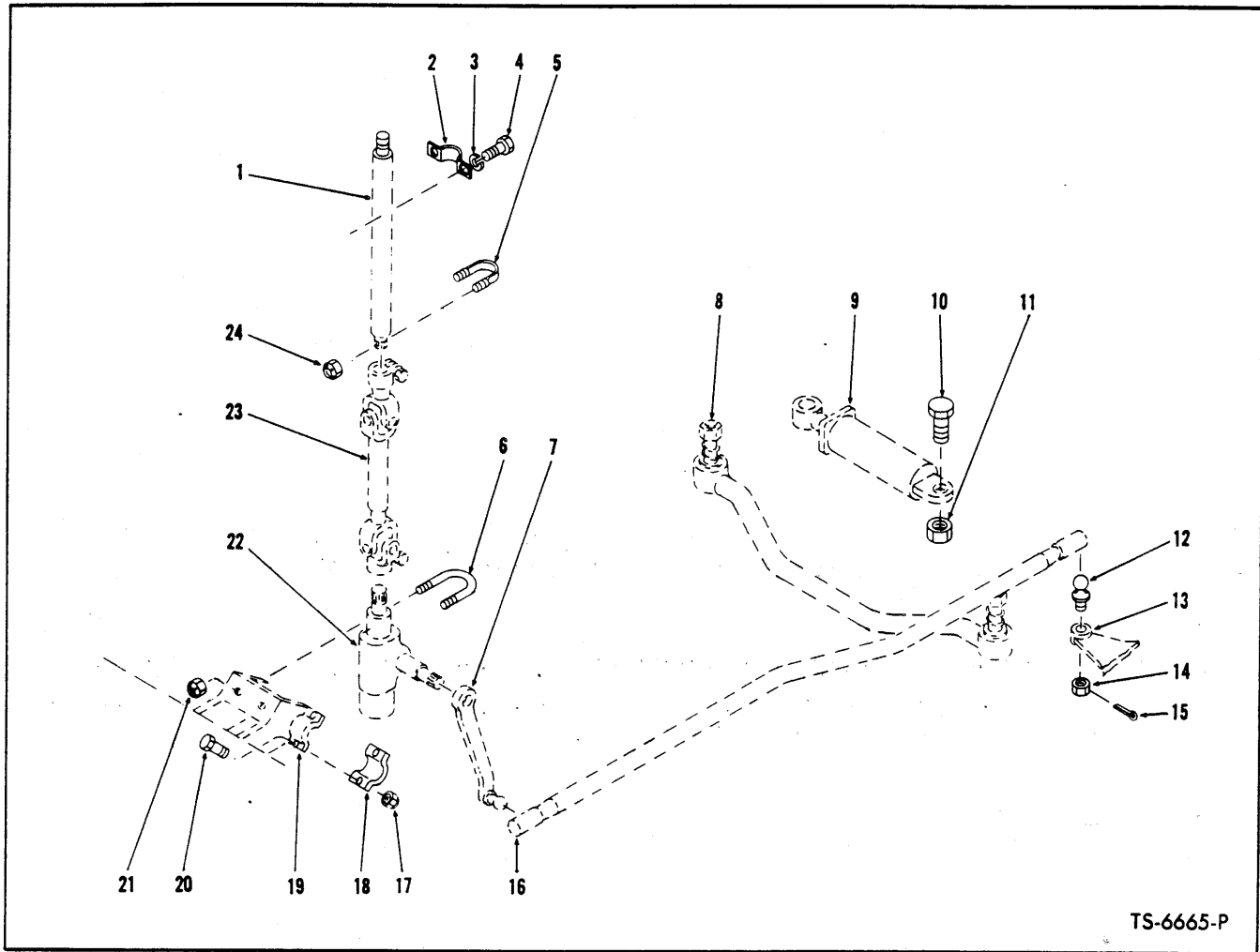
SERVICE

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1542840	SHAFT ASSY, Slip (Inc. 1 thru 24)	1	13	948213	SPIDER & BEARING ASSY (Inc. 11, 12, 14, 19)	1
B	946023	KIT, Dust Cap (Inc. 7, 8, 9)	1	14	948214	SEAL, Bearing Assy	4
1	24C-628	BOLT, Clamp Yoke Mounting	1	15	946021	CLAMP YOKE	1
2	948215	RING, Bearing Assy Retaining	4	16	24C-628	BOLT, Clamp Yoke Mounting	1
3	-----	§BUSHING, Bearing Assy Cap — See Item 21	—	17	4E-06	LKWSHR, Clamp Yoke Mounting	1
4	948214	SEAL, Bearing Assy	4	18	8D-06	NUT, Clamp Yoke Mounting	1
5	10H-35	FITTING, Slip Yoke Grease	1	19	11H-25	FITTING, Bearing Assy Grease	1
6	946102	YOKE, Slip (Inc. 5)	1	20	11H-25	FITTING, Bearing Assy Grease	1
7	-----	§WASHER, Dust Cap — See Item "B"	—	21	948213	SPIDER & BEARING ASSY (Inc. 2, 3, 4, 20)	1
8	-----	§WASHER, Dust Cap — See Item "B"	—	22	8D-06	NUT, Clamp Yoke Mounting	1
9	-----	§CAP, Dust — See Item "B"	—	23	4E-06	LKWSHR, Clamp Yoke Mounting	1
10	946103	YOKE & SHAFT ASSY	1	24	946021	CLAMP YOKE	1
11	948215	RING, Bearing Assy Retaining	4				
12	-----	§BUSHING, Bearing Assy Cap — See Item 13	—				

§Not Sold Separately

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

PM 2952



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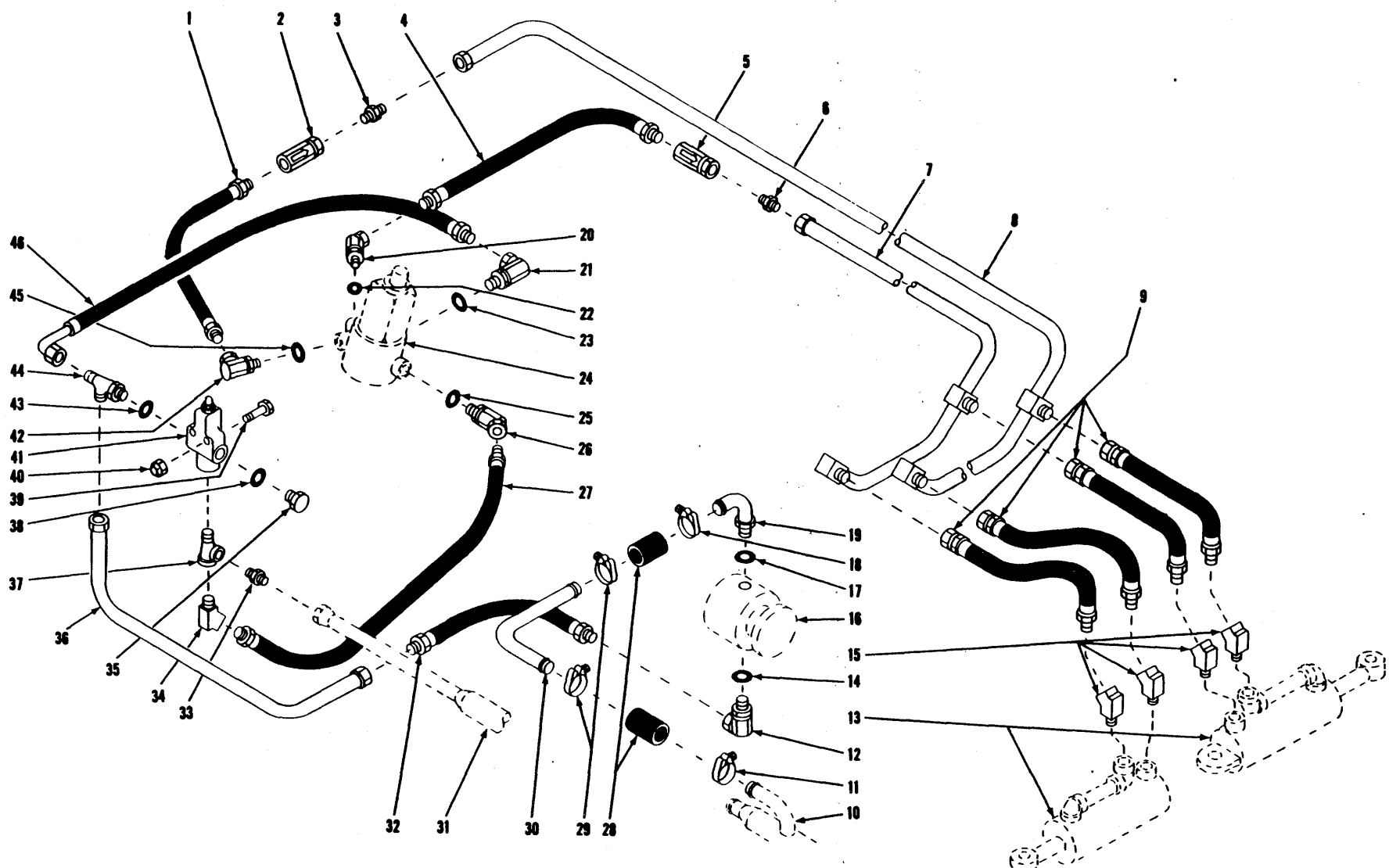
STEERING LINKAGE GROUP

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	STEERING COLUMN — See Index	—	13	§BRACKET, Rear Axle	—	
2	562443	CLAMP, Steering Column Mounting	1	14	4D-10 NUT, Drag Link Mounting	1	
3	4E-06	LKWSHR, Steering Column to Cockpit	2	15	1F-332 COTTER, Ball Stud Nut	1	
4	18C-612	BOLT, Steering Column to Cockpit	2	16	----- DRAG LINK — See Index	—	
5	557997	U-BOLT, Steering Column Mounting	1	17	18D-08 NUT, Gear to Frame Bracket	2	
6	545941	U-BOLT, Steering Gear Mounting	1	18	550044 CLAMP, Steering Gear Mounting	1	
7	-----	PITMAN ARM — See Index	—	19	§BRACKET, Frame Cross Member	—	
8	-----	TIE ROD — See Index	—	20	18C-836 BOLT, Gear to Frame Bracket	2	
9	-----	STEERING CYLINDER — See Index	—	21	18D-08 NUT, Gear to Frame Bracket	2	
10	517355	BOLT, Cylinder Anchor	4	22	----- STEERING GEAR — See Index	—	
11	66D-22	NUT, Cylinder Anchor	4	23	----- SLIP SHAFT, Steering — See Index	—	
12	513122	BALL STUD, Drag Link Mounting	1	24	18D-04 NUT, Steering Column to Cockpit	2	

§Not Sold Separately

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

[80]
(1E7)



HYDRAULIC SYSTEM - STEERING
For Serial: Cummins - 5DC101 thru 5DC999. G.M. - 6DG101 thru 6DG999.

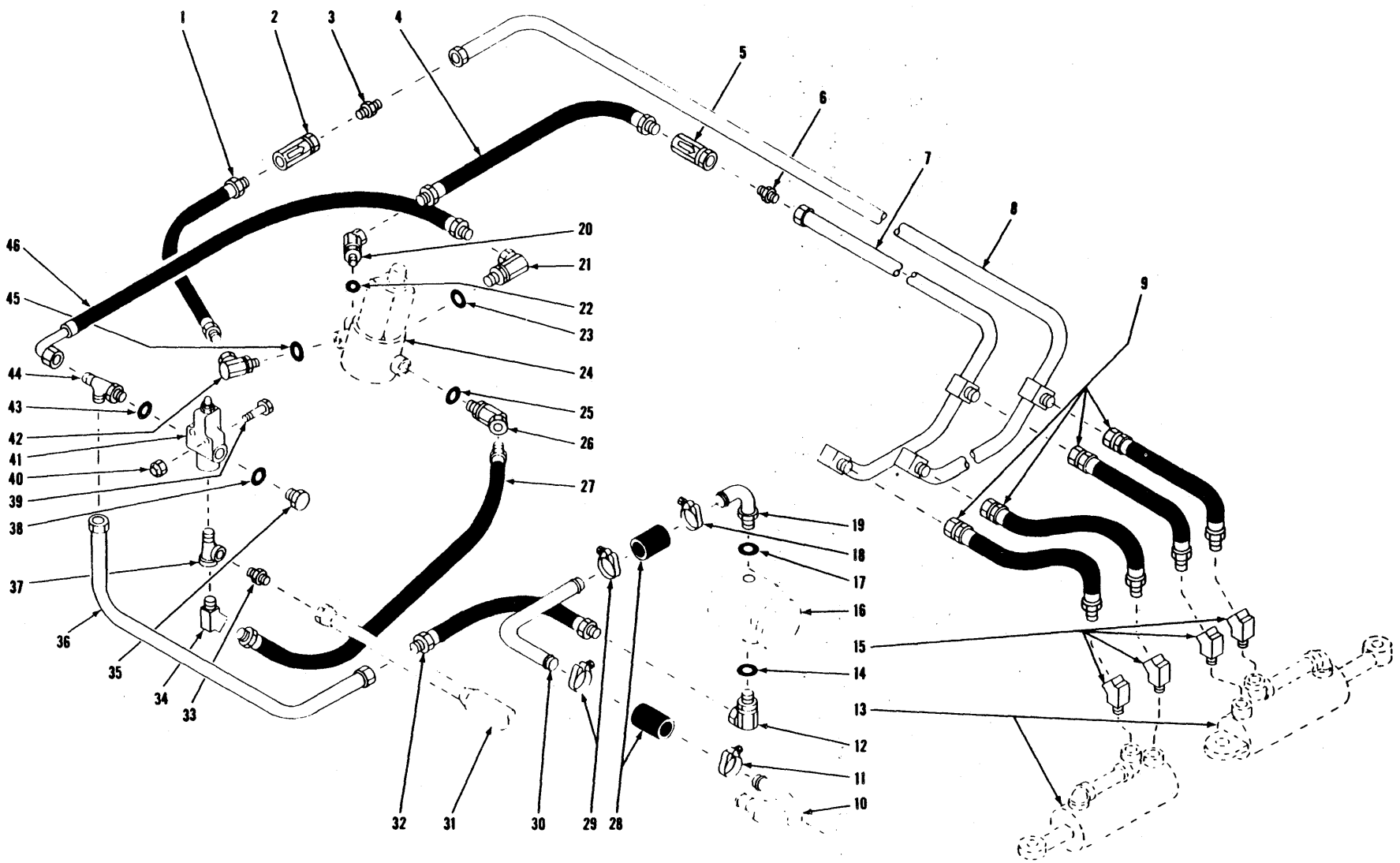
TS-6760-P

HYDRAULIC SYSTEM — STEERING
For Serial: Cummins — 5DC101 thru 5DC999
G.M. — 6DG101 thru 6DG999

Item No.	Part No.	Description	No. Req'd.
1	784398	HOSE, Check Valve to Gear	1
2	572731	VALVE, Check	1
3	89F-7	CONNECTOR, Check Valve to Tube	1
4	784398	HOSE, Check Valve to Tube	1
5	572731	VALVE, Check	1
6	89F-7	CONNECTOR, Check Valve to Tube	1
7	589487	TUBE ASSY, Gear to Cylinder — Right Turn	1
8	589488	TUBE ASSY, Gear to Cylinder — Left Turn	1
9	1520061	HOSE, Tube to Cylinder	4
10	-----	TUBE ASSY, Suction — See Index	—
11	1545004	CLAMP, Hose	1
12	526676	ADAPTER UNION, Hose to Pump (Inc. 14)	1
13	-----	STEERING CYLINDER — See Index	—
14	91F-8	"O" RING, Adapter Union	1
15	81F-3	ELBOW, Hose to Steering Cylinder	4
16	-----	STEERING PUMP — See Index	—
17	91F-11	"O" RING, Elbow	1
18	1545004	CLAMP, Hose	1
19	564087	ELBOW ASSY, Suction — Hose to Pump (Inc. 17)	1
20	535625	ADAPTER UNION, Hose to Gear (Inc. 22)	1
21	519275	ADAPTER UNION, Hose to Gear (Inc. 23)	1
22	91F-6	"O" RING, Adapter Union	1
23	91F-7	"O" RING, Adapter Union	1
24	-----	STEERING GEAR — See Index	1
25	91F-7	"O" RING, Adapter Union	1
26	534894	ADAPTER UNION, Hose to Gear	1
27	542813	HOSE, Relief Valve to Gear	1
28	536749	HOSE, Stem to Tube	2
29	1545004	CLAMP, Hose	2
30	589574	TUBE, Suction	1
31	-----	TUBE ASSY, Return — See Bucket & Boom Hydraulic System	—
32	564107	HOSE, Pump to Tube	1
33	656532	CONNECTOR, Tube	1
34	81F-4	ELBOW, Hose to Tee	1
35	24K-7	PLUG, Relief Valve (Inc. 38)	1
36	558570	TUBE ASSY, Pump to Valve	1
37	17F-5	TEE, Relief Valve	1
38	91F-7	"O" RING, Plug	1
39	18C-540	BOLT, Relief Valve Mounting	2
40	18D-05	NUT, Relief Valve Mounting	2
40A	25E-15	†WASHER, Relief Valve Mounting	2
41	-----	VALVE, Pressure Relief — See Index	—
42	517089	ADAPTER UNION, Hose to Gear (Inc. 45)	1
43	91F-7	"O" RING, Tube Fitting Tee	1
44	21K-7	TEE, Tube Fitting (Inc. 43)	1
45	91F-6	"O" RING, Adapter Union	1
46	568785	HOSE, Gear to Relief Valve	1

†Not Illustrated

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



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(1E9)

PM 2952
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HYDRAULIC SYSTEM – STEERING
For Serial: Cummins – 6DC101 and after. G.M. – 7DG101 and after

TS-6760-P

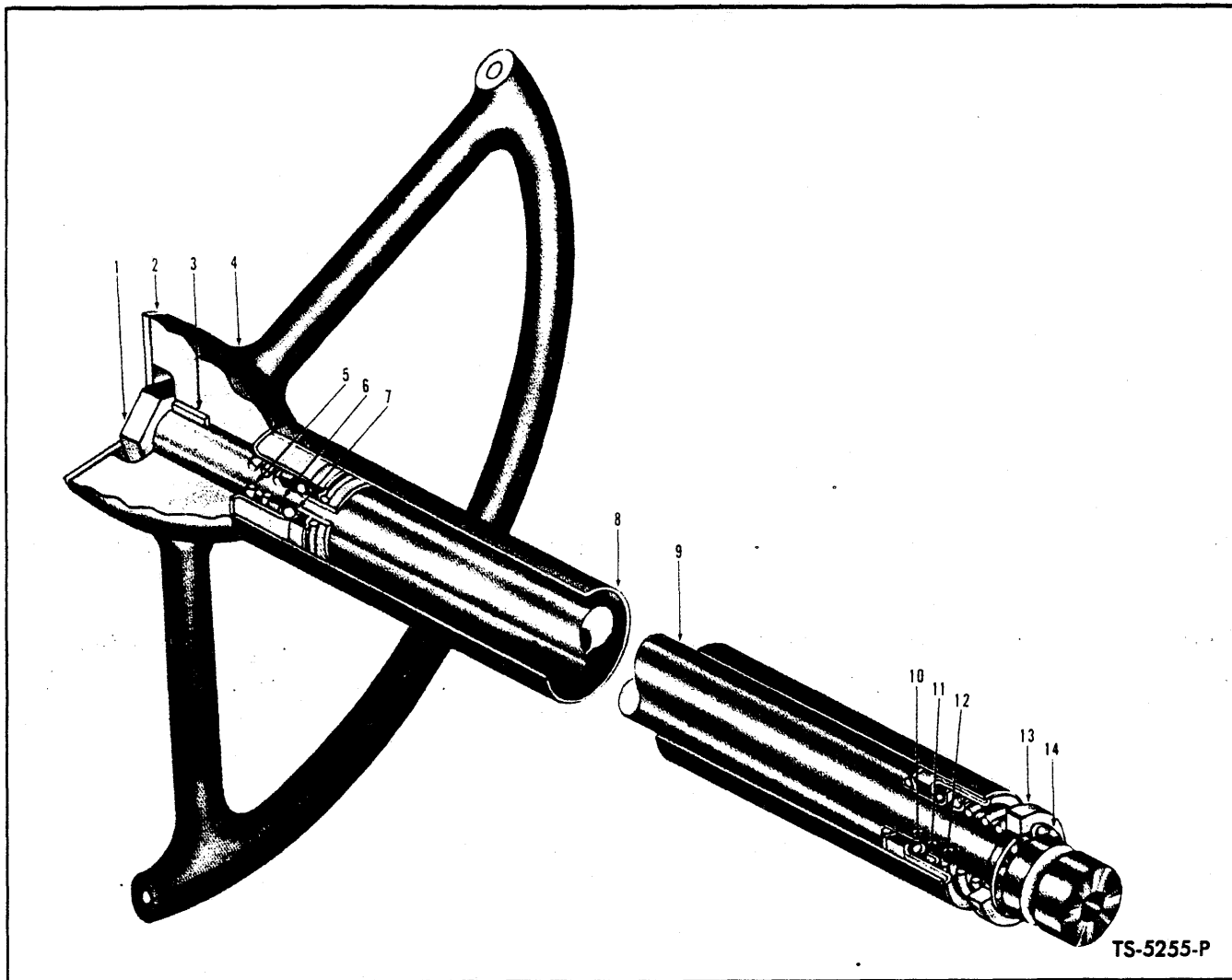
HYDRAULIC SYSTEM — STEERING
For Serial: Cummins — 6DC101 and after
G.M. — 7DG101 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1		HOSE		18	1545004	CLAMP, Hose	2
1A	784398	Valve to Gear — For Serial: Cummins — 6DC101 thru 6DC125, G.M. — 7DG101 only	1	19	1521254	ELBOW ASSY, Suction — Hose to Pump (Inc. 17)	1
1B	540883	†L.T. Tube to Gear — For Serial: Cummins — 6DC126 thru 6DC999, G.M. — 7DG102 thru 7DG999	1	20	535625	ADAPTER UNION, Hose to Gear (Inc. 22)	1
2	572731	VALVE, Check — For Serial: Cummins 6DC101 thru 6DC125 and G.M. — 7BG101 only	1	21	519275	ADAPTER UNION, Hose to Gear (Inc. 23)	1
3	89F-7	CONNECTOR, Check Valve to Tube — For Serial: Cummins — 6DC101 thru 6DC125 and G.M. — 7BG101 only	1	22	91F-6	"O" RING, Adapter Union	1
4		HOSE		23	91F-7	"O" RING, Adapter Union	1
4A	784398	Valve to Gear — For Serial: Cummins — 6DC101 thru 6DC125, G.M. — 7DG101 only	1	24	-----	STEERING GEAR—See Index	—
4B	540883	†L.T. Tube to Gear — For Serial: Cummins — 6DC126 thru 6DC999, G.M. — 7DG102 thru 7DG999	1	25	91F-7	"O" RING, Adapter Union	1
5	572731	VALVE, Check — For Serial: Cummins — 6DC101 thru 6DC125 and G.M. — 7BG101 only	1	26	534894	ADAPTER UNION, Hose to Gear	1
6	89F-7	CONNECTOR, Check Valve to Tube — For Serial: Cummins — 6DC101 thru 6DC125 & 7BG101 only	1	27	542813	HOSE, Relief Valve to Gear	1
7	589487	TUBE ASSY, Gear to Cylinder — Right Turn	1	28	536749	HOSE, Stem to Tube	2
8	589488	TUBE ASSY, Gear to Cylinder — Left Turn	1	29	1545004	CLAMP, Hose	2
9	1520061	HOSE, Tube to Cylinder	4	30		TUBE, Suction	
10	-----	TUBE ASSY, Suction — See Bucket & Boom Hydraulic System	—	30A	1521354	FOR CUMMINS POWERED MACHINES	1
11	540127	CLAMP, Hose	1	30B	1521255	FOR G.M. POWERED MACHINES	1
12	526676	ELBOW, Hose to Pump (Inc. 14)	1	31	-----	TUBE ASSY, Return — See Bucket & Boom Hydraulic System	—
13	-----	STEERING CYLINDER—See Index	—	32		Hose, Pump to Tube	
14	91F-8	"O" RING, Adapter Union	1	32A	563483	FOR CUMMINS POWERED MACHINES	1
15	81F-3	ELBOW, Hose to Steering Cylinder	1	32B	564107	FOR G.M. POWERED MACHINES	1
16	1521257	*PUMP, Steering (Inc. 16A)	1	33	656532	CONNECTOR, Tube	1
16A	946483	†SEAL KIT, Steering Pump	1	34	81F-4	ELBOW, Hose to Tee	1
16B	214961	†SLEEVE, Pump Drive	1	35	24K-7	PLUG, Relief Valve (Inc. 38)	1
16C	235961	†GASKET, Pump to Converter	1	36		TUBE ASSY, Pump to Valve	
16D	9E-06	†LKWSHR, Pump Mounting	3	36A	563466	FOR CUMMINS POWERED MACHINES	1
16E	25E-17	†WASHER, Pump Mounting	3	36B	558570	FOR G.M. POWERED MACHINES	1
16F	8D-06	†NUT, Pump Mounting	3	37	17F-5	TEE, Relief Valve	1
17	91F-11	"O" RING, Elbow	1	38	91F-7	"O" RING, Plug	1
				39	18C-540	BOLT, Relief Valve Mounting	2
				39A	619029	†WASHER, Relief Valve Mounting	2
				40	18D-05	NUT, Relief Valve Mounting	2
				41	-----	VALVE, Pressure Relief — See Index	—
				42	517089	ADAPTER UNION, Hose to Gear (Inc. 45)	1
				43	91F-7	"O" RING, Tube Fitting Tee	1
				44	21K-7	TEE, Tube Fitting (Inc. 43)	1
				45	91F-6	"O" RING, Adapter Union	1
				46	568785	HOSE, Gear to Relief Valve	1

†Not Illustrated

*NOTE: The above listed pump, with the exception of Seal Kit listed, is not considered rebuildable in the field due to extremely close tolerances involved and extensive break-in test required. The cost of equipment needed and parts plus labor would exceed cost of replacement pump. Order replacement pump by part number listed.

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



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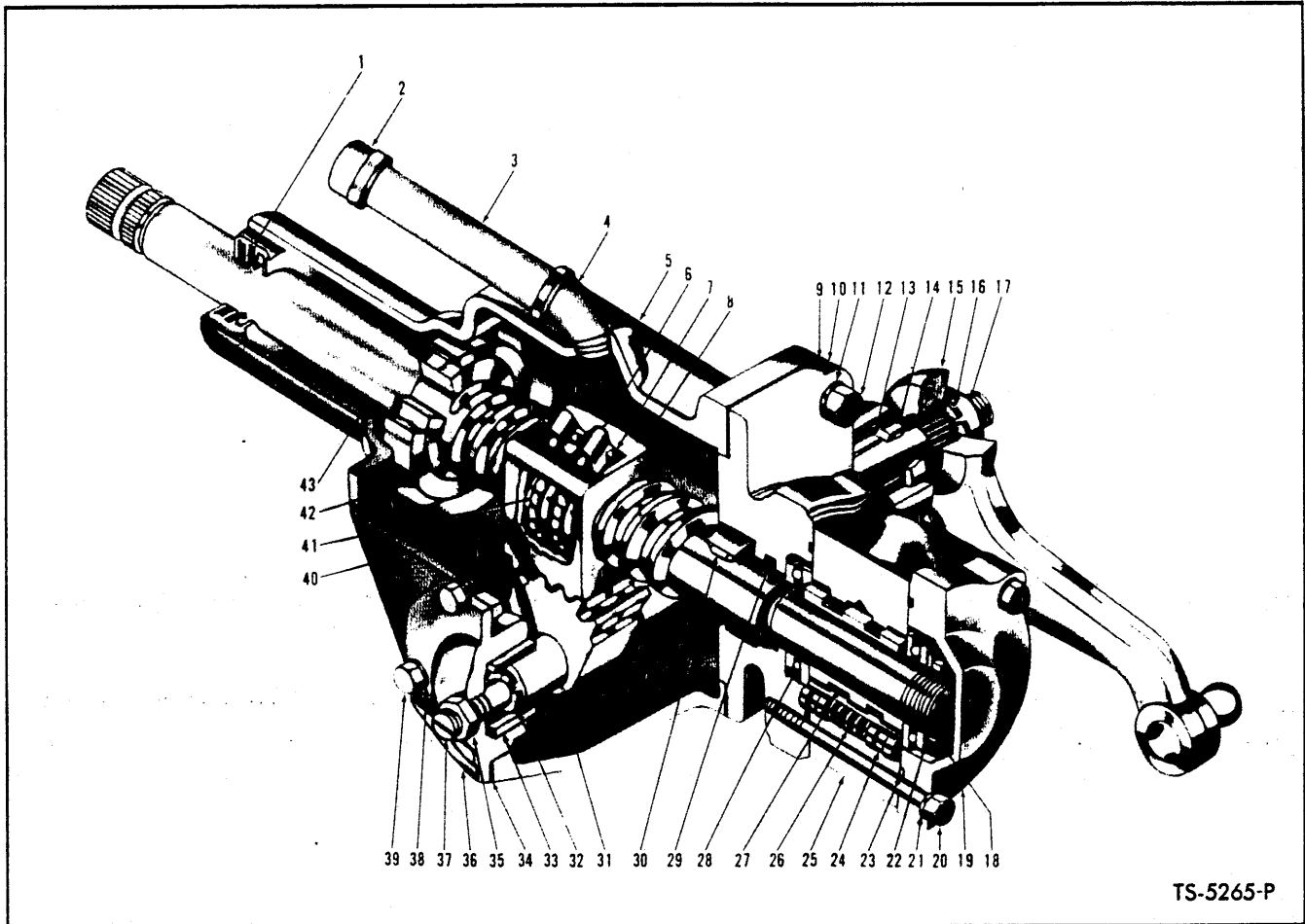
STEERING COLUMN ASSEMBLY

Item No.	Part No.	Description	No. Req'd.
A	589908	COLUMN ASSY, Steering (Inc. 1, 3, 5 thru 14)	1
1	648304	NUT, Steering Wheel	1
2	1517393	PLATE, Operating Precaution	1
2A	65G-406	†SCREW, Plate Attaching	4
3	853384	KEY, Steering Wheel	1
4	1508704	WHEEL, Steering	1
5	853395	SPRING, Upper Bearing	1
6	861768	WASHER, Upper Bearing	1
7	857729	BEARING ASSY, Upper	1
8	589909	JACKET, Steering Column	1
9	—	§SHAFT, Steering — See Item "A"	—
10	857729	BEARING ASSY, Lower	1
11	853394	SEAT, Bearing Spring	1
12	874121	SPRING, Lower Bearing	1
13	566589	SPACER, Steering Shaft	1
14	784075	RING, Steering Shaft Retaining	1

†Not Illustrated

§Not Sold Separately — Order complete assembly

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



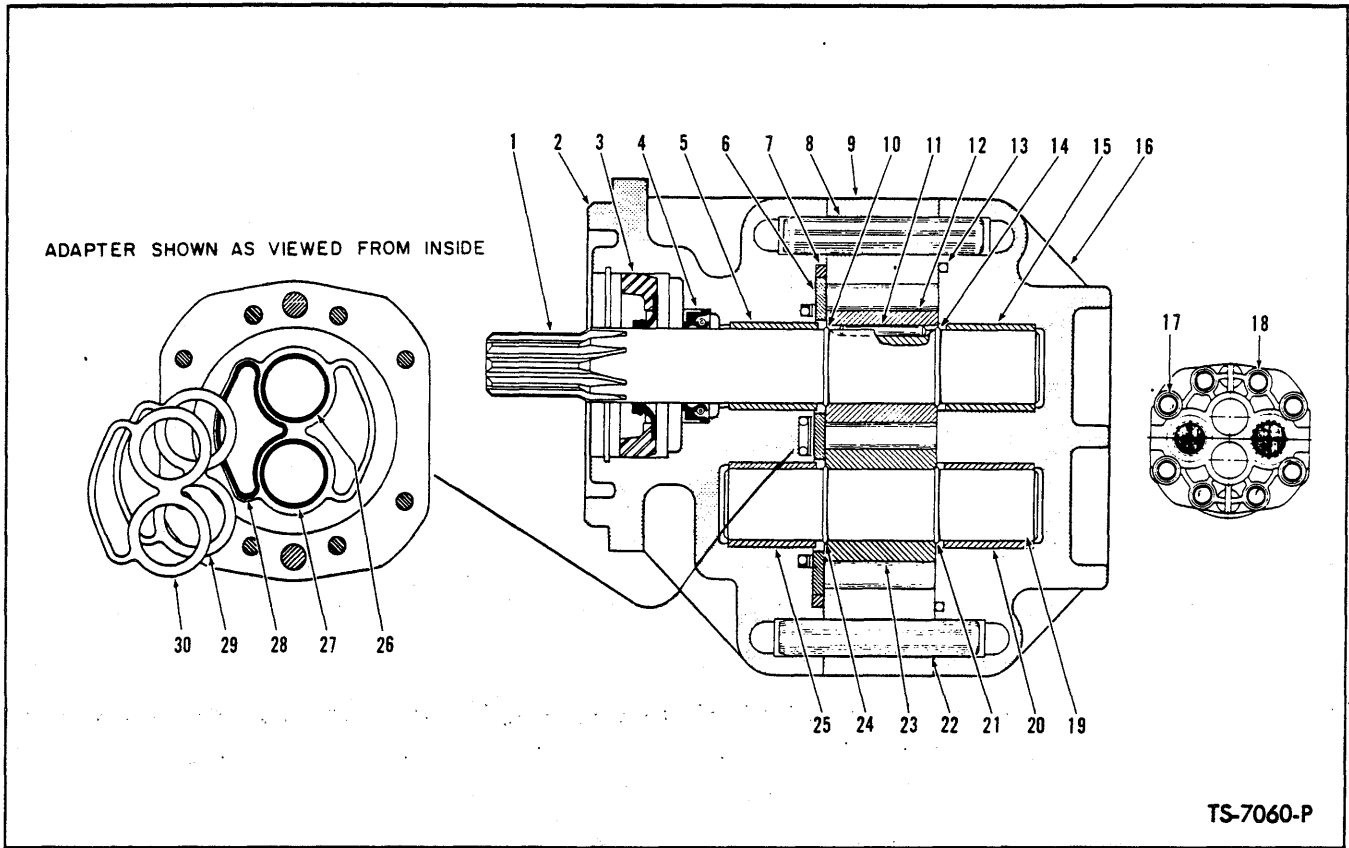
TS-5265-P

STEERING GEAR ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	562075	GEAR ASSY (Inc. 1, 5 thru 14, 16 thru 43)	1	22	943429	SPRING, Valve Spool Preload	1
1	952018	SEAL, Steering Shaft	1	23	58K-232	"O" RING, Valve to End Cover	2
2	22F-4	CAP, Filler	1	24	861755	PLUNGER, Valve Centering	6
3	5K-420	NIPPLE, Filler	1	25	944052	VALVE ASSY (Inc. 24, 26, 27)	1
4	25F-4	ELBOW, Filler	1	26	944053	SPRING, Valve Centering	3
5	946026	HOUSING ASSY (Inc. 13, 42)	1	27	—	§VALVE SPOOL — See Item 25	—
6	853464	CLAMP, Ball Guide Return	1	28	860997	BEARING, Worm Thrust	2
7	851762	BOLT & WASHER ASSY, Clamp	3	29	949972	"O" RING, Adapter	1
8	853408	NUT, Ball	1	30	861741	BEARING, Adapter	1
9	853380	GASKET, Adapter	1	31	940111	GEAR, Pitman Shaft	1
10	861738	ADAPTER, Valve to Housing (Inc. 29, 30)	1	32	853187	SHIM KIT, Lash Adjuster	1
11	4E-07	LKWSHR, Adapter to Housing	4	33	—	§BUSHING, Housing Side Cover — See Item 36	—
12	1C-720	BOLT, Adapter to Housing	4	34	851756	GASKET, Side Cover	1
13	853357	BUSHING, Pitman Shaft	2	35	8D-07	NUT, Lash Adjuster	1
14	853391	SEAL, Pitman Shaft Grease	1	36	853182	COVER ASSY, Housing Side (Inc. 33)	1
15	589811	ARM, Pitman	1	37	851770	ADJUSTER, Lash	1
16	853396	LKWSHR, Pitman Arm	1	38	1C-612	BOLT, Side Cover	3
17	850756	NUT, Pitman Arm	1	39	4E-06	LKWSHR, Side Cover	3
18	873250	NUT, Worm Bearing Lock	1	40	853412	GUIDE, Ball Return	4
19	943667	COVER, Valve End	1	41	10J-09	BALL	106
20	1C-656	BOLT, End Cover	3	42	730143	BEARING, Needle	1
21	4E-06	LKWSHR, End Cover	3	43	946027	SHAFT ASSY (Inc. 6, 7, 8, 40, 41)	1

§Not Sold Separately

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



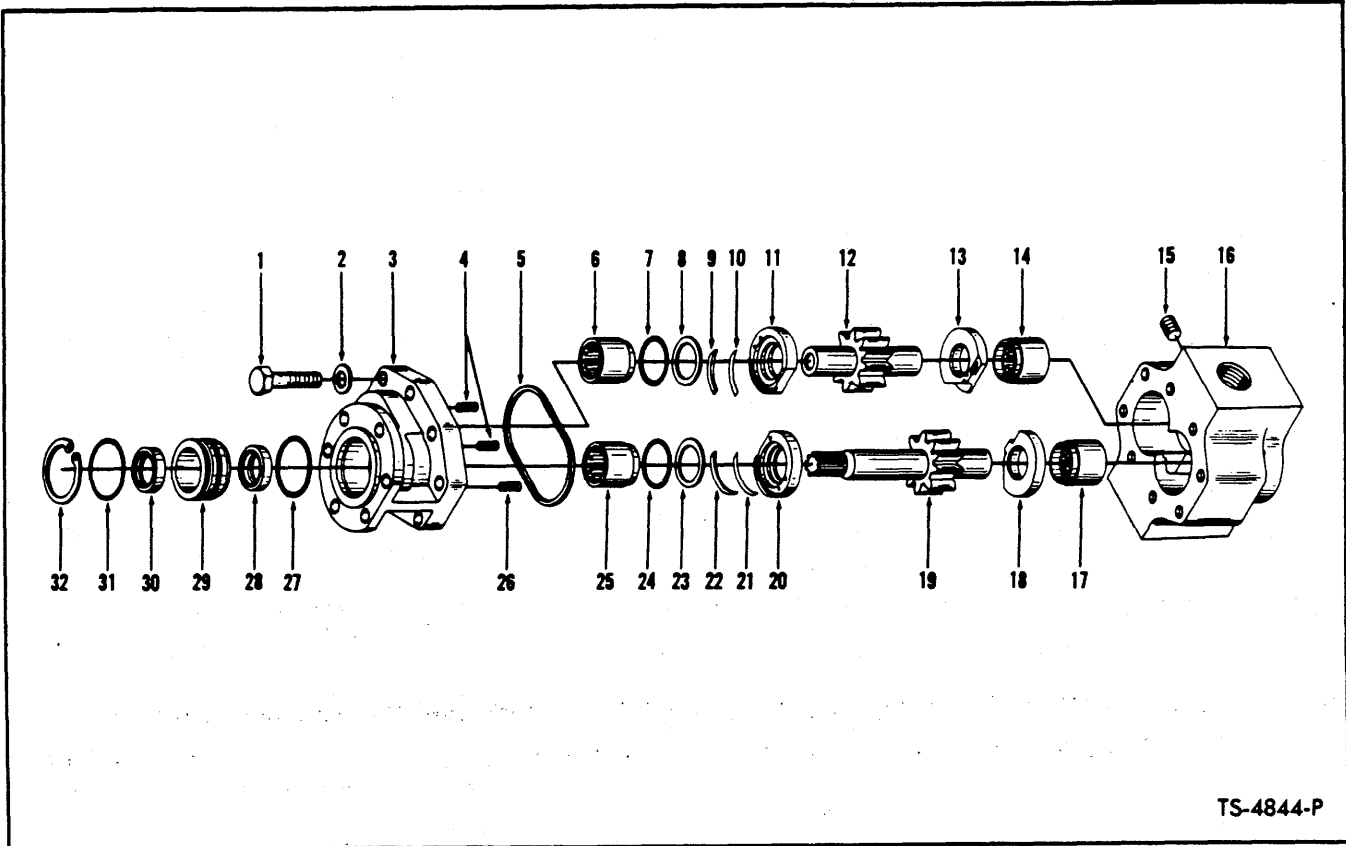
HYDRAULIC PUMP – STEERING

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1521257	*PUMP ASSY (Inc. 1 thru 30)	1	17	---	§BOLT, Cover to Housing	4
B	946483	SEAL KIT (Inc. 3, 4, 7, 13, 26 thru 30)	1	17A	---	§LKWSHR, Cover to Housing	4
1	---	§SHAFT, Drive	1	17B	---	§WASHER, Cover to Housing	4
2	---	§ADAPTER, Pump	1	18	---	§BOLT, Cover to Housing	4
3	---	§SEAL, Shaft	1	18A	---	§LKWSHR, Cover to Housing	4
4	---	§SEAL, Shaft	1	18B	---	§WASHER, Cover to Housing	4
5	---	§BUSHING, Shaft	1	19	---	§SHAFT, Drive	1
6	---	§WEAR PLATE	1	20	---	§BUSHING, Shaft	1
7	---	§"O" RING	1	21	---	§RING, Retaining	1
8	---	§DOWEL PIN	1	22	---	§DOWEL PIN	1
9	---	§HOUSING, Center Section	1	23	---	§GEAR, Driven	1
10	---	§RING, Retaining	1	24	---	§RING, Retaining	1
11	---	§DOWEL PIN	1	25	---	§BUSHING	1
12	---	§GEAR, Drive	1	26	---	§"O" RING	1
13	---	§"O" RING	1	27	---	§"O" RING	1
14	---	§RING, Retaining	1	28	---	§"O" RING	1
15	---	§BUSHING, Shaft	1	29	---	§RING, Back-up	1
16	---	§COVER, Pump	1	30	---	§RING, Back-up	1

§Not Sold Separately

*NOTE: The above listed pump, with the exception of the Seal Kit listed, is not considered rebuildable in the field. Due to extremely close tolerances involved and extensive break-in test required, the cost of equipment needed and parts plus labor would exceed cost of replacement pump. Order replacement Pump by part number listed.

WHEN ORDERING REPLACEMENT PUMP, ALWAYS REFER TO PUMP REPLACEMENT CHART



TS-4844-P

HYDRAULIC PUMP – STEERING
For Serial: Cummins – 5DC101 thru 5DC999
G.M. – 6DG101 thru 6DG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	450185	***PUMP ASSY (Inc. 1 thru 32).....	1	15	47K-3	PLUG, Body	1
B	498203	*REPAIR KIT, Minor (Inc. 1, 2, 4, 5, 7, 8, 23, 24, 26, 27, 32).....	1	16	---	**§BODY, Pump – See Item "A"	1
C	498204	REPAIR KIT, Thrust Plate (Inc. 9, 10, 11, 13, 18, 20, 21, 22).....	1	17	---	§BEARING, Body	1
D	498113	REPAIR KIT, Shaft Seal (Inc. 27 thru 32)	1	18	---	§THRUST PLATE, Body	1
E	498211	GEAR KIT (Inc. 12, 19).....	1	19	---	§GEAR, Driven	1
F	498223	REPAIR KIT, Bearing (Inc. 6, 14, 17, 25)	1	20	---	§THRUST PLATE, Cover	1
1	---	§BOLT, Cover to Body	8	21	---	§SPRING, Wave	1
2	---	§WASHER, Cover to Body	8	22	---	§RING, Mask-Off	1
3	---	**§COVER, Pump See Item "A".....	1	23	---	§RING, "O" Ring Back-Up	1
4	---	§SPRING, Cover Thrust Plate.....	2	24	---	§"O" RING, Cover Thrust Plate	1
5	---	§GASKET, Cover	1	25	---	§BEARING, Cover	1
6	---	§BEARING, Cover	1	26	---	§SPRING, Cover Thrust Plate.....	1
7	---	§"O" RING, Cover Thrust Plate.....	1	27	---	§"O" RING, Oil Seal Retainer.....	1
8	---	§RING, "O" Ring Back-Up	1	28	---	§SEAL, Inner Shaft Oil	1
9	---	§RING, Mask-Off	1	29	---	§RETAINER, Shaft Seal	1
10	---	§SPRING, Wave	1	30	---	§SEAL, Outer Shaft Oil	1
11	---	§THRUST PLATE, Cover	1	31	---	§"O" RING, Oil Seal Retainer.....	1
12	---	§GEAR, Driven	1	32	---	§RING, Seal Retainer Retaining	1
13	---	§THRUST PLATE, Body	1	33	235961	†GASKET, Pump to Converter	1
14	---	§BEARING, Body	1	34	8D-06	†NUT, Pump to Converter	6
				35	9E-06	†LKWSHR, Pump to Converter	6
				36	214961	†SLEEVE, Pump Drive	1

*NOTE: Minor Repair Kit consists of "O" Rings, Back-up Washers, Gaskets and approximately 20% of the hardware items such as bolts, nuts, springs and washers. The latter for the purpose of replacing any of these items lost or damaged in repair operation.

**NOTE: Pump Bodies and Covers will not be made available for field use since when these items are worn beyond limits permitting re-use, the cost of rebuilding the pump exceeds practical limits. In such cases a new pump assembly should be utilized.

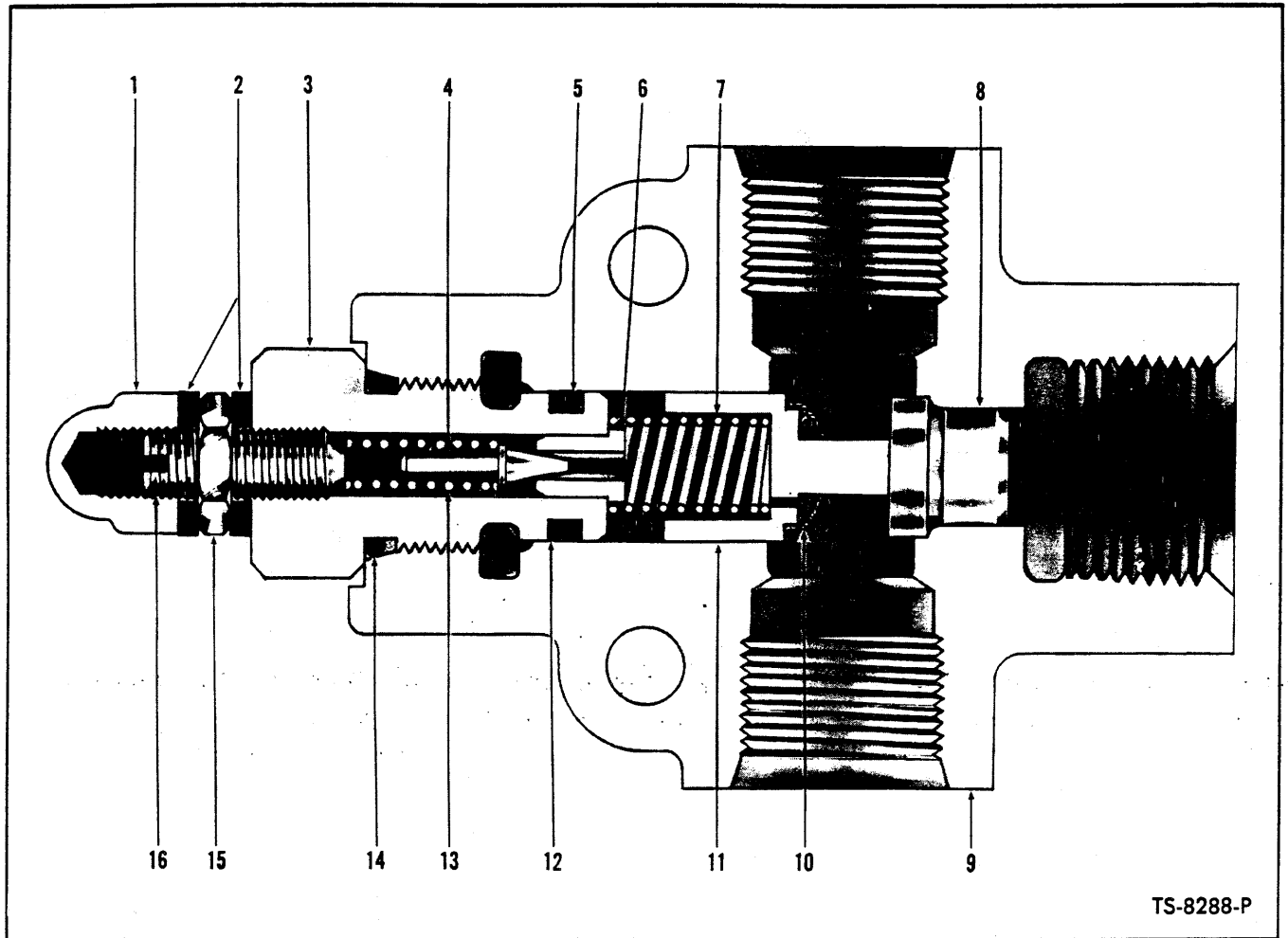
***For replacement use 1521257 plus 1-1521254 Elbow.

§Not Sold Separately – Order Kits.

†Not Illustrated

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

PM 2952

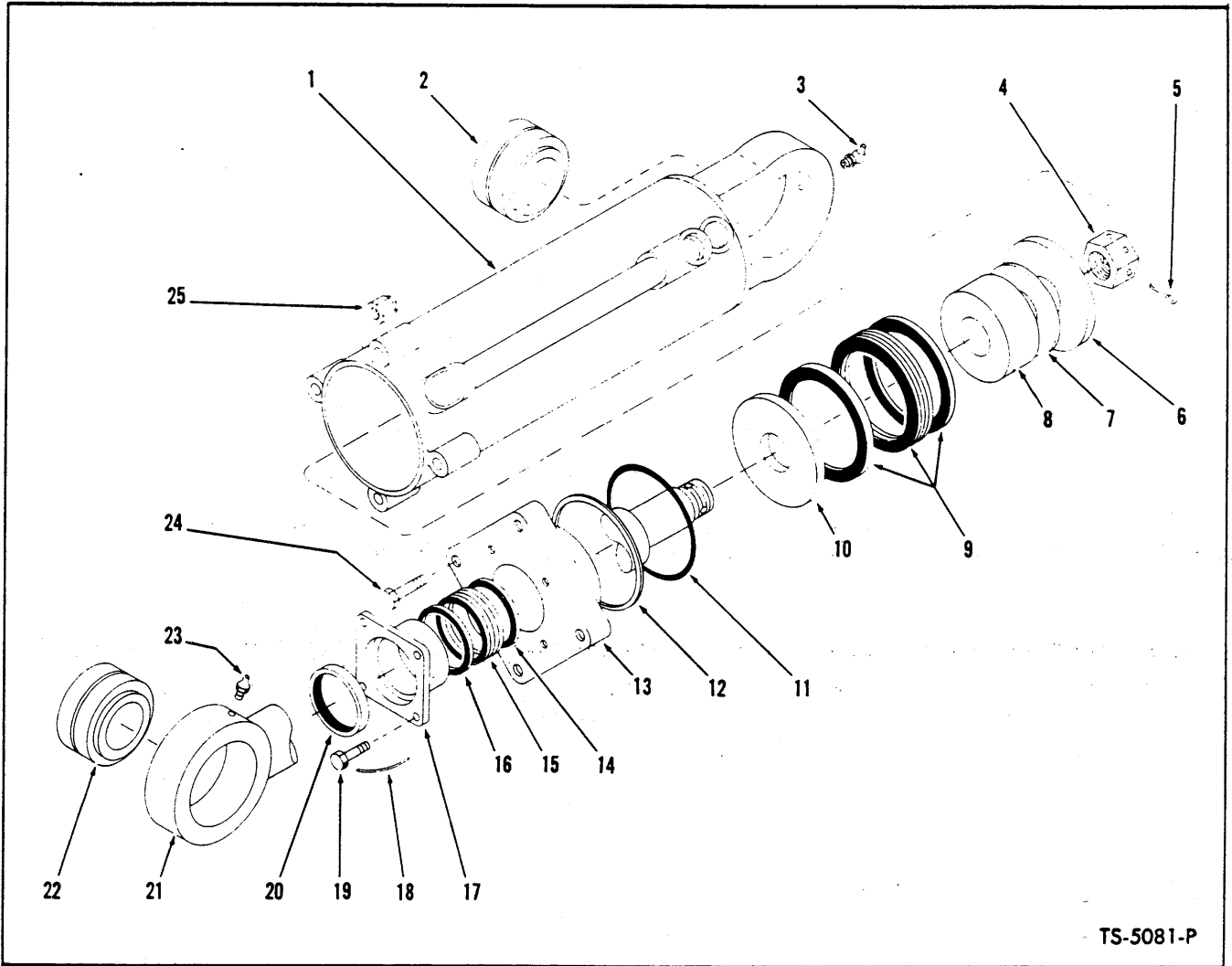


PRESSURE RELIEF VALVE — STEERING SYSTEM

Item No.	Part No.	Description	No. Req'd.
A	536539	VALVE ASSY (Inc. 1 thru 17)	1
1	47D-05	NUT, Acorn	1
2	663792	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-5081-P

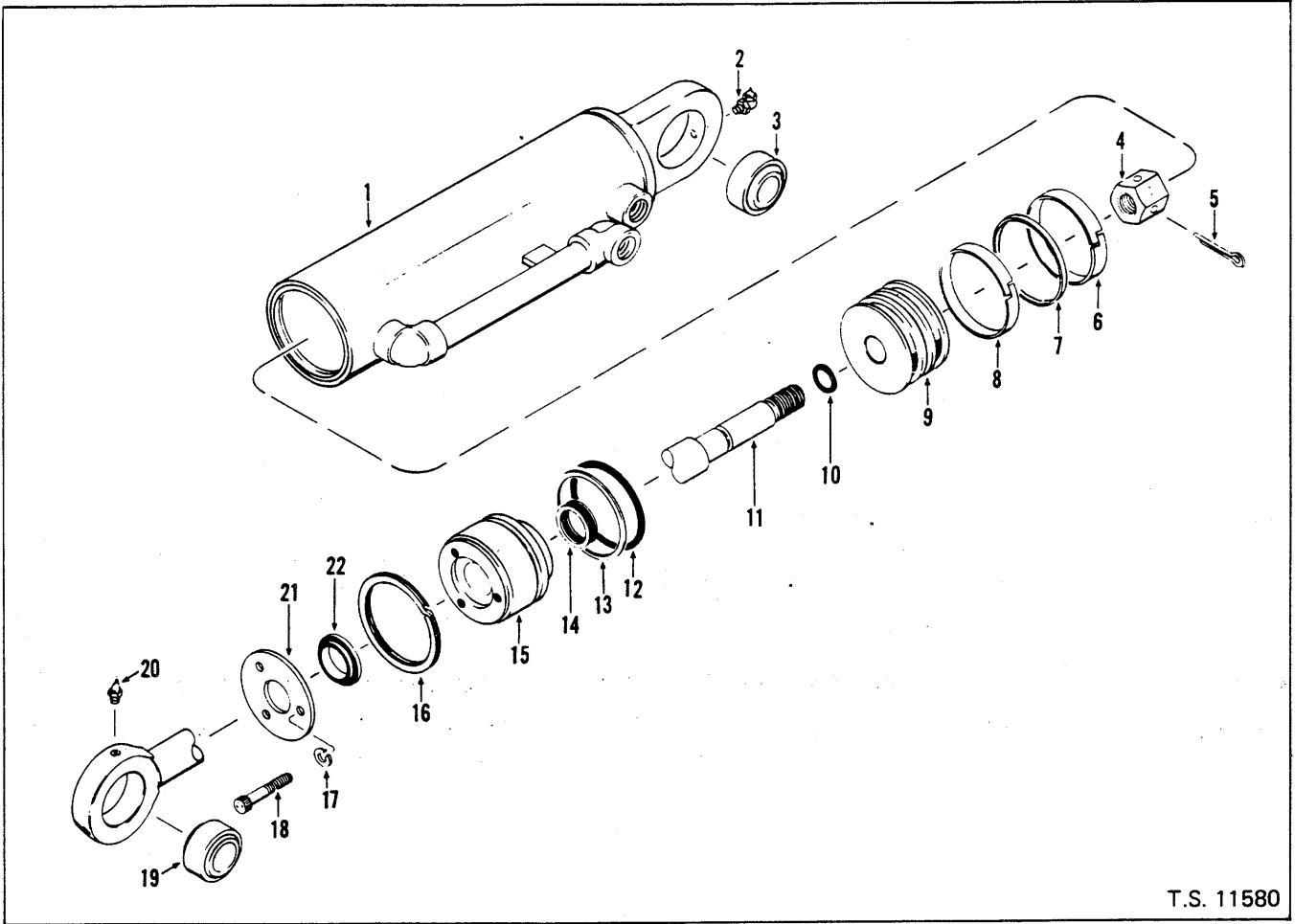
STEERING CYLINDER ASSEMBLY

2 Cylinders used on Machine – Quantity indicated is for 1 Cylinder

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
A	562564	*CYLINDER ASSY (Inc. 1, 3 thru 21, 23, 24, 25)	1	12	-----	§ RING, "O" Ring Back-Up – See B	1
B	2516056	**KIT (Inc. 5, 7, 9, 11, 12, 14 → 16)	1	13	945118	CAP ASSY (Inc. 11, 12)	1
1	562565	CYLINDER	1	14	-----	§ ADAPTER, Male – See 15	2
2	713418	BUSHING, Cylinder	1	15	2501105	PACKING ASSY, (Inc. 14 & 16)	1
3	11H-15	FITTING, Cylinder Grease	1	16	-----	§ ADAPTER, Female – See 15	2
4	523325	NUT, Piston Rod	1	17	526414	GLAND, Packing	1
5	1F-424	COTTER, Piston Rod Nut	1	18	-----	LOCKWIRE (16 ga.—13" long)	2
6	526423	PLATE, Packing Assy Backing	1	19	4C-414	BOLT, Packing Gland to Cylinder Cap	4
7	-----	§ ± SHIM – See B	—	20	526415	SEAL, Piston Rod	1
8	526422	SLEEVE, Piston	1	21	562572	ROD, Piston	1
9	-----	§ PACKING ASSY (Inc. Adapters) – See B	1	22	713418	BUSHING, Piston Rod	1
10	526423	PLATE, Packing Assy Backing	1	23	10H-25	FITTING, Piston Rod Grease	1
11	-----	§ "O" RING, Cylinder Cap – See B	1	24	18C-648	BOLT, Cylinder Cap	4
				25	18D-06	NUT, Cylinder Cap	4

*NOTE: For complete replacement use 1503875 Cylinder Assy.
‡As Required

**NOTE: Ref. SG-597A.



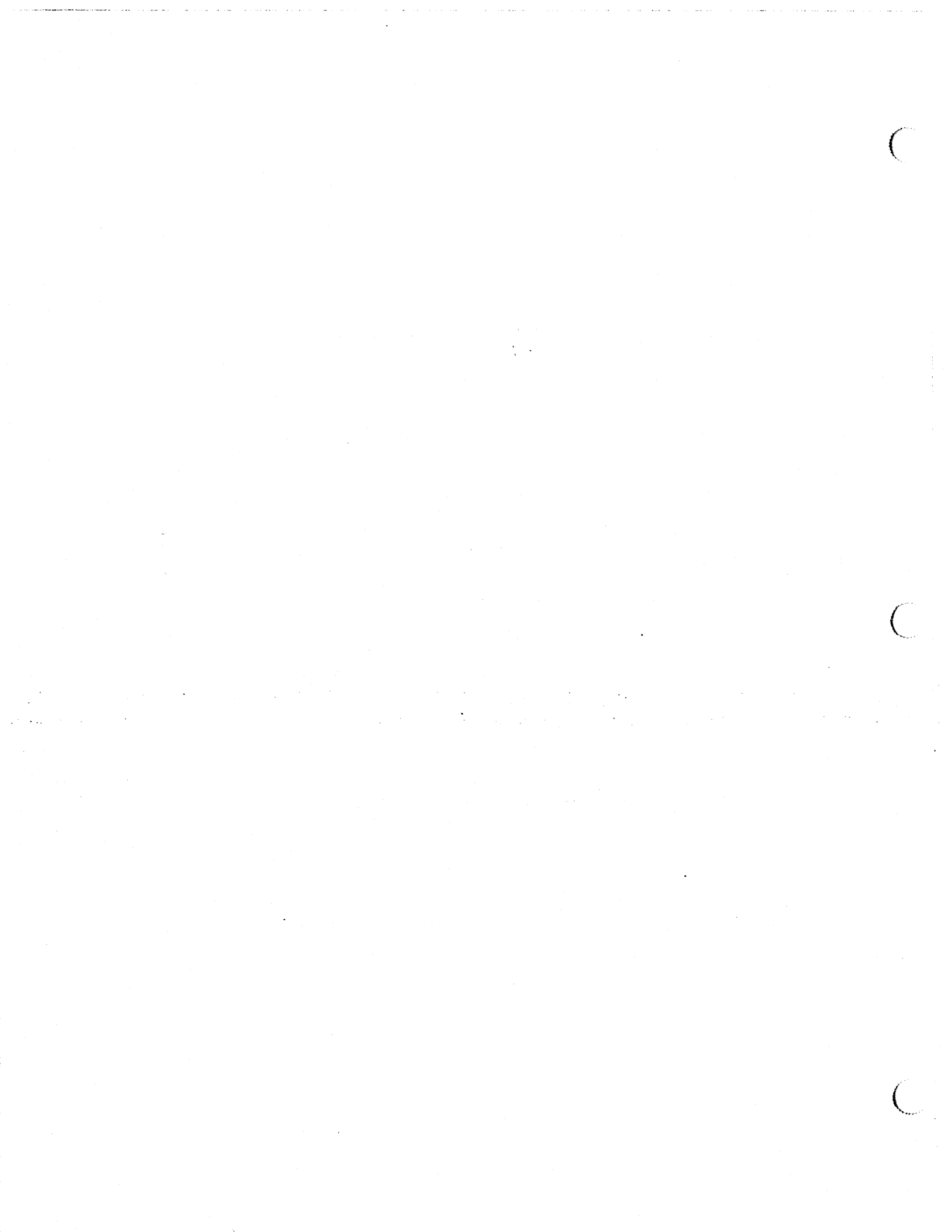
T.S. 11580

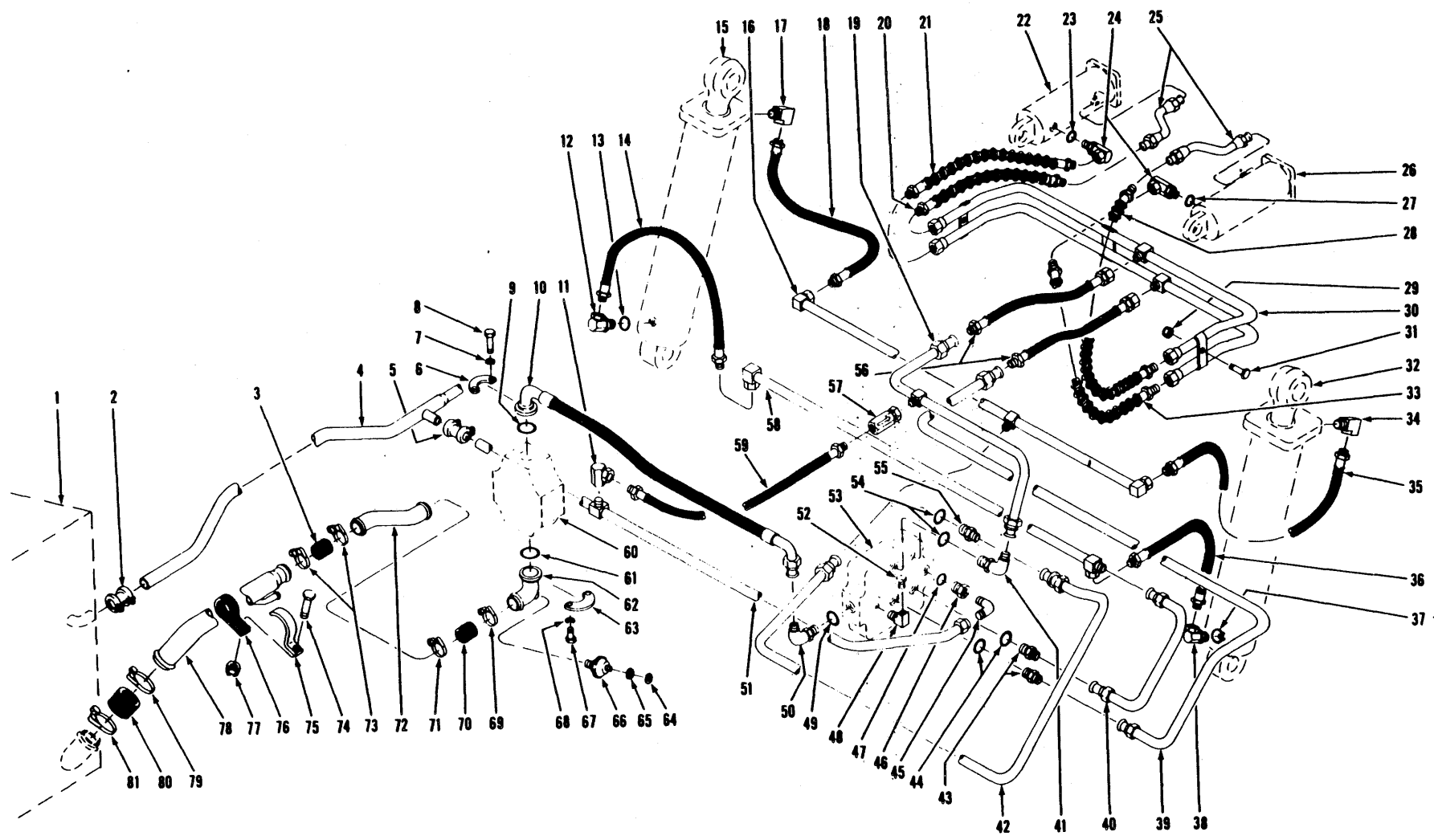
CYLINDER ASSEMBLY – STEERING
2 Cylinders Used on Machine – Quantity Indicated is for 1 Cylinder

Item	Part No.	Description	Qty.
A	1503875	CYLINDER ASSY (Incl. 1, 3 thru 19, 21 & 22)	1
B	2516055	*KIT (Inc. 5 → 8, 10, 12 → 14, 16, 22)	1
1	1503872	CYLINDER (Incl. 3)	1
2	11H-15	FITTING, Pin Grease	1
3	713418	BUSHING, Cylinder	1
4	523325	NUT, Piston Rod	1
5	1F-424	COTTER, Piston Rod Nut	1
6	-----	RING, Wear – See B	1
7	-----	RING ASSY, Seal – See B	1
8	-----	RING, Wear – See B	1
9	1503568	PISTON	1
10	-----	O-RING, Piston Rod – See B	1
11	562572	ROD, Piston (Incl. 19)	1
12	-----	O-RING, Cylinder Cap – See B	1
13	-----	BACK-UP RING, Cylinder Cap – See B	1
14	-----	SEAL, Piston Rod – See B	1
15	1503570	CAP, Cylinder	1
16	2506408	RING, Cap Retaining	1
17	22E-05	LKWSHR, Plate to Cap	3
18	93G-514	BOLT, Plate to Cap	3
19	713418	BUSHING, Piston Rod	1
20	10H-25	FITTING, Pin Grease	1
21	1503567	PLATE, Retaining Ring	1
22	1522535	RING, Wiper	1

§ Not Sold Separately
*NOTE: Ref. SG-597A.

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





[90]

(1D23)

PM 2952
Printed in U.S.A.

HYDRAULIC SYSTEM - BUCKET AND BOOM - CUMMINS
For Serial: 5DC101 thru 5DC999

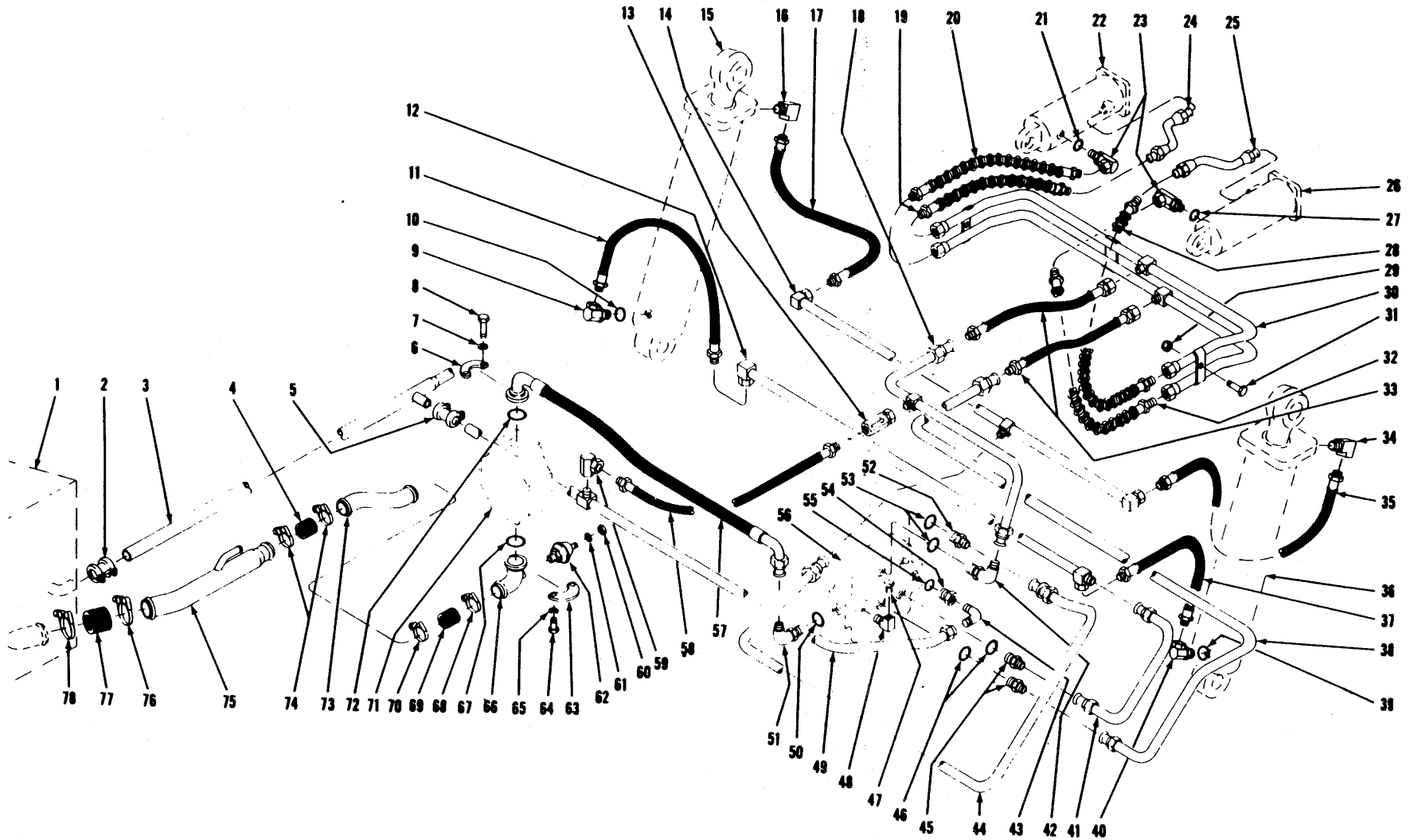
TS-6803-P

HYDRAULIC SYSTEM — BOOM AND BUCKET — CUMMINS

For Serial: 5DC101 thru 5DC999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	RESERVOIR — See Index	—	38	526676	ADAPTER UNION, Hose to Boom Cylinder — Base End (Inc. 37)	1
2	573423	JOINT, Tube to Reservoir—Return ...	1	39	563788	TUBE ASSY, Bucket Cylinder Crosstube to Valve	1
3	536710	HOSE, Tube to Tube — Suction	1	40	563790	TUBE ASSY, Boom Cylinder Base Crosstube to Valve	1
4	574500	TUBE ASSY, Return	1	41	17K-10	ELBOW, Tube to Valve (Inc. 54)	1
5	573422	JOINT, Tube to Tube — Return	1	42	563791	TUBE ASSY, Boom Cylinder Rod End Crosstube to Valve	1
6	19J20	FLANGE HALF, Hose to Pump	2	43	15K-10	CONNECTOR, Tube to Valve (Inc. 44)	2
7	4E-07	LKWSHR, Flange Half Bolt	4	44	91F-10	"O" RING, Connector	2
8	17C-724	BOLT, Flange Half to Pump	4	45	83F-10	ELBOW, Tube to Adapter	1
9	58K-222	"O" RING, Hose	1	46	588399	ADAPTER (Inc. 47)	1
10	571409	HOSE, Pump to Valve	1	47	91F-13	"O" RING, Adapter	1
11	32F-5	ELBOW, Hose to Tube	1	48	29F-1	ELBOW	1
12	526676	ADAPTER UNION, Hose to Boom Cylinder — Base End (Inc. 13)	1	49	91F-10	"O" RING, Elbow	1
13	91F-8	"O" RING, Adapter Union	1	50	17K-10	ELBOW, Tube to Valve (Inc. 49)	1
14	574442	HOSE, Boom Cylinder Base to Crosstube	1	51	563808	TUBE ASSY, Valve to Return Tube	1
15	-----	BOOM CYLINDER — See Index	—	52	40K-04	PLUG	1
16	563801	CROSTUBE ASSY, Boom Cylinder — Rod End	1	53	-----	CONTROL VALVE — See Index	—
17	29F-4	ELBOW, Hose to Boom Cylinder — Rod End	1	54	91F-10	"O" RING, Connector	2
18	574442	HOSE, Boom Cylinder Rod End to Crosstube	1	55	15K-10	CONNECTOR, Tube to Valve (Inc. 54)	1
19	563789	TUBE ASSY, Valve to Crosstube — Bucket Cylinder Rod End	1	56	1308192	HOSE, Bucket Cylinder Crosstube to Tube	2
20	1504454	HOSE, Crosstube to Bucket Cylinder — Rod End	1	57	661707	VALVE, Check	1
21	571176	HOSE, Crosstube to Bucket Cylinder — Base End	1	58	563798	CROSTUBE ASSY, Boom Cylinder — Base End	1
22	-----	BUCKET CYLINDER — See Index	—	59	542813	HOSE, Check Valve to Tube	1
23	91F-8	"O" RING, Adapter Union	1	60	-----	PUMP, Bucket & Boom—See —Index	—
24	526676	ADAPTER UNION, Hose to Bucket Cylinder — Base End (Inc. 23, 27) ..	2	61	58K-225	"O" RING, Stem	1
25	563805	TUBE ASSY, Hose to Bucket Cylinder — Rod End	2	62	571407	STEM, Suction	1
26	-----	BUCKET CYLINDER — See Index	—	63	19J24	FLANGE HALF, Stem to Pump	2
27	91F-8	"O" RING, Adapter Union	1	64	14D-8	NUT, Indicator	1
28	1504454	HOSE, Crosstube to Bucket Cylinder — Rod End	1	65	12E-8	LKWSHR, Indicator	1
29	18D-08	NUT, Bucket Crosstube Assy to Frame Bolt	2	66	562112	INDICATOR, Reservoir Filter — Vacuum	1
30	563792	CROSTUBE ASSY, Bucket Cylinder ..	1	67	17C-824	BOLT, Flange Half to Pump	4
31	18C-820	BOLT, Bucket Crosstube Assy to Frame	2	68	4E-08	LKWSHR, Flange Half to Pump Bolt ..	4
32	-----	BOOM CYLINDER — See Index	—	69	540130	CLAMP, Hose	1
33	571176	HOSE, Crosstube to Bucket Cylinder — Base End	1	70	536710	HOSE, Stem to Tube — Suction	1
34	29F-4	ELBOW, Hose to Boom Cylinder — Rod End	1	71	540130	CLAMP, Hose	1
35	574442	HOSE, Crosstube to Boom Cylinder — Rod End	1	72	572920	TUBE, Suction — Front	1
36	574442	HOSE, Crosstube to Boom Cylinder — Base End	1	73	540130	CLAMP, Hose	2
37	91F-8	"O" RING, Adapter Union	1	74	18C-828	BOLT, Clamp Mounting	1
				75	533482	CLAMP, Suction Tube	1
				76	533483	STRAP, Suction Tube Clamp	1
				77	18D-08	NUT, Clamp Mounting Bolt	1
				78	1520362	TUBE ASSY, Suction — Rear	1
				79	540106	CLAMP, Hose	1
				80	533478	HOSE, Tube to Reservoir — Suction ...	1
				81	540106	CLAMP, Hose	1

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



HYDRAULIC SYSTEM - BUCKET AND BOOM
For Serial: 6DG101 thru 6DG999

TS-6636-P

[92]

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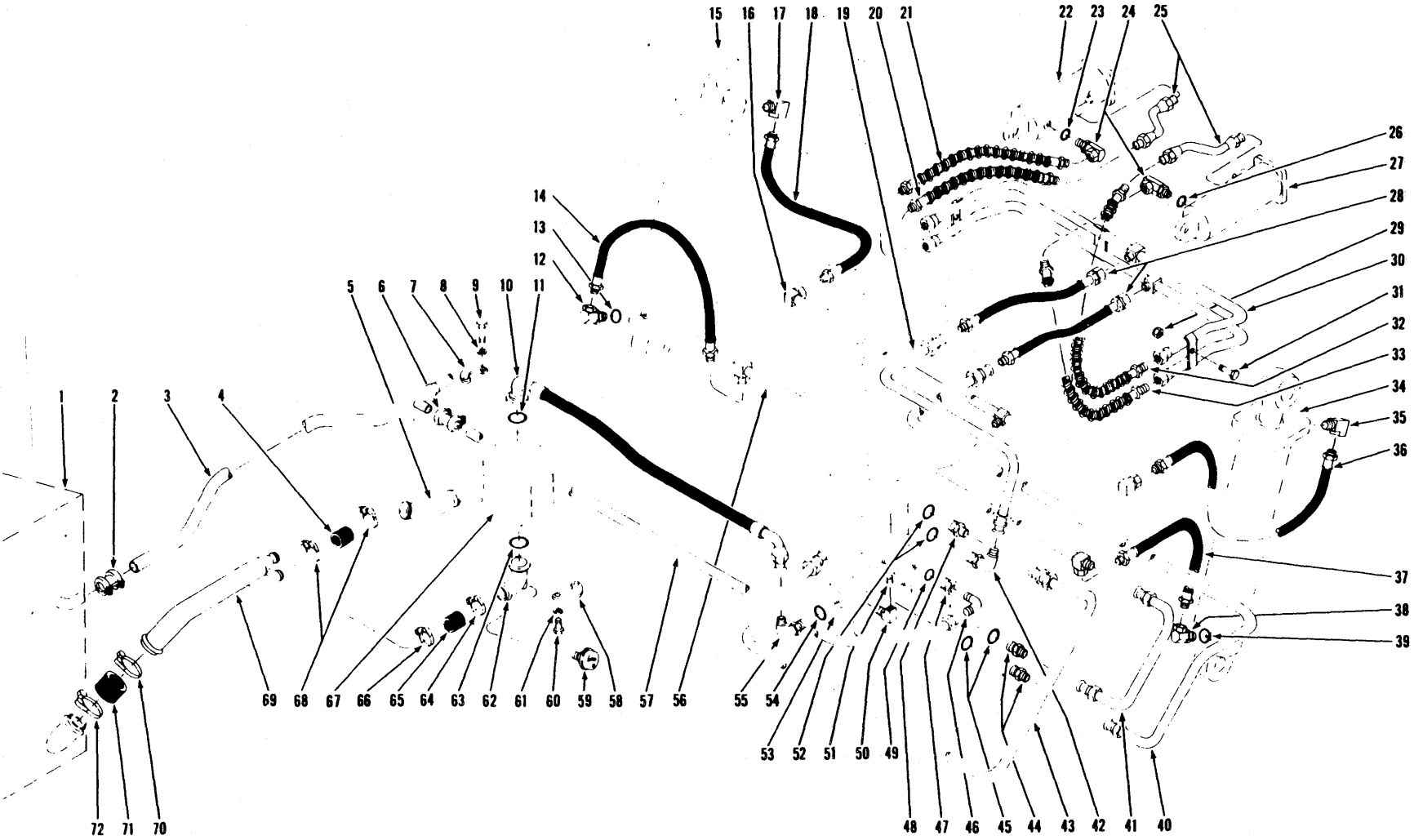
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HYDRAULIC SYSTEM — BUCKET AND BOOM — G.M.

For Serial: 6DG101 thru 6DG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	RESERVOIR — See Index	—	36	-----	BOOM CYLINDER — See Index	—
2	573423	JOINT, Tube to Reservoir	1	37	574442	HOSE, Boom Cylinder Base to Crosstube	1
3	589419	TUBE ASSY, Return	1	38	563788	TUBE ASSY, Bucket Cylinder Crosstube to Valve	1
4	536710	HOSE, Tube to Reservoir	1	39	91F-8	"O" RING, Adapter Union	1
5	573422	JOINT, Tube to Tube	1	40	526676	ADAPTER UNION, Hose to Boom Cylinder Base (Inc. 39)	1
6	19J20 0	FLANGE HALF, Hose to Pump	2	41	563790	TUBE ASSY, Boom Cylinder Base Crosstube to Valve	1
7	4E-07	LKWSHR, Flange Half to Pump	4	42	17K-10	ELBOW, Tube to Valve (Inc. 53)	1
8	17C-724	BOLT, Flange Half to Pump	4	43	83F-10	ELBOW, Tube to Adapter	1
9	526676	ADAPTER UNION, Hose to Boom Cylinder Base (Inc. Item 10)	1	44	563791	TUBE ASSY, Boom Cylinder Rod End Crosstube to Valve	1
10	91F-8	"O" RING, Adapter Union	1	45	15K-10	CONNECTOR, Tube to Valve (Inc. 46)	2
11	574442	HOSE, Boom Cylinder Base to Crosstube	1	46	91F-10	"O" RING, Connector	2
12	563798	CROSSTUBE ASSY, Boom Cylinder Base	1	47	40K-04	PLUG	1
13	661707	VALVE, Check	1	48	29F-1	ELBOW	1
14	563801	CROSSTUBE ASSY, Boom Cylinder Rod End	1	49	563808	TUBE ASSY, Valve to Return Tube	1
15	-----	BOOM CYLINDER — See Index	—	50	91F-10	"O" RING, Elbow	1
16	29F-4	ELBOW, Hose to Boom Cylinder Rod End	1	51	17K-10	ELBOW, Hose to Valve (Inc. 50)	1
17	574442	HOSE, Boom Cylinder Rod End to Crosstube	1	52	15K-10	CONNECTOR, Tube to Valve (Inc. 53)	1
18	563789	TUBE ASSY, Valve to Crosstube — Bucket Rod End	1	53	91F-10	"O" RING, Connector	2
19	1504454	HOSE, Bucket Cylinder Rod End to Crosstube	1	54	588399	ADAPTER (Inc. 55)	1
20	571176	HOSE, Bucket Cylinder Base to Crosstube	1	55	91F-13	"O" RING, Adapter	1
21	91F-8	"O" RING, Adapter Union	1	56	-----	CONTROL VALVE — See Index	—
22	-----	BUCKET CYLINDER — See Index	—	57	563809	HOSE, Valve to Pump	1
23	526676	ADAPTER UNION, Hose to Bucket Cylinder Base (Inc. 21, 27)	2	58	542813	HOSE, Check Valve to Tube	1
24	563805	TUBE ASSY, Hose to Bucket Cylinder Rod End	1	59	32F-5	ELBOW, Hose to Tube	1
25	563805	TUBE ASSY, Hose to Bucket Cylinder Rod End	1	60	14D-08	NUT, Indicator	1
26	-----	BUCKET CYLINDER — See Index	—	61	12E-08	LKWSHR, Indicator	1
27	91F-8	"O" RING, Adapter Union	1	62	562112	INDICATOR, Reservoir Filter — Vacuum	1
28	1504454	HOSE, Bucket Cylinder Rod End to Crosstube	1	63	19J24	FLANGE HALF, Stem to Pump	2
29	18D-08	NUT, Bucket Crosstube Assy to Frame	2	64	17C-824	BOLT, Flange Half to Pump	4
30	563792	CROSSTUBE ASSY, Bucket Cylinder	1	65	4E-08	LKWSHR, Flange Half to Pump	4
31	18C-820	BOLT, Bucket Crosstube Assy to Frame	2	66	569506	STEM, Suction	1
32	571176	HOSE, Bucket Cylinder Base to Crosstube	1	67	25K-225	"O" RING, Stem	1
33	1308192	HOSE, Bucket Cylinder Crosstube to Tube	2	68	540130	CLAMP, Hose	1
34	29F-4	ELBOW, Hose to Boom Cylinder Rod End	1	69	536710	HOSE, Stem to Tube	1
35	574442	HOSE, Boom Cylinder Rod End to Crosstube	1	70	540130	CLAMP, Hose	1
				71	-----	PUMP, Bucket & Boom — See Index	—
				72	58K-222	"O" RING, Hose	1
				73	563785	TUBE, Suction — Front	1
				74	540130	CLAMP, Hose	2
				75	589422	TUBE ASSY, Suction — Rear	1
				76	540106	CLAMP, Hose	1
				77	533478	HOSE, Tube to Reservoir	1
				78	540106	CLAMP, Hose	1

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



HYDRAULIC SYSTEM – BUCKET & BOOM
For Serial: Cummins – 6DC101 and after. G.M. 7DG101 and after.

TS-7743-P

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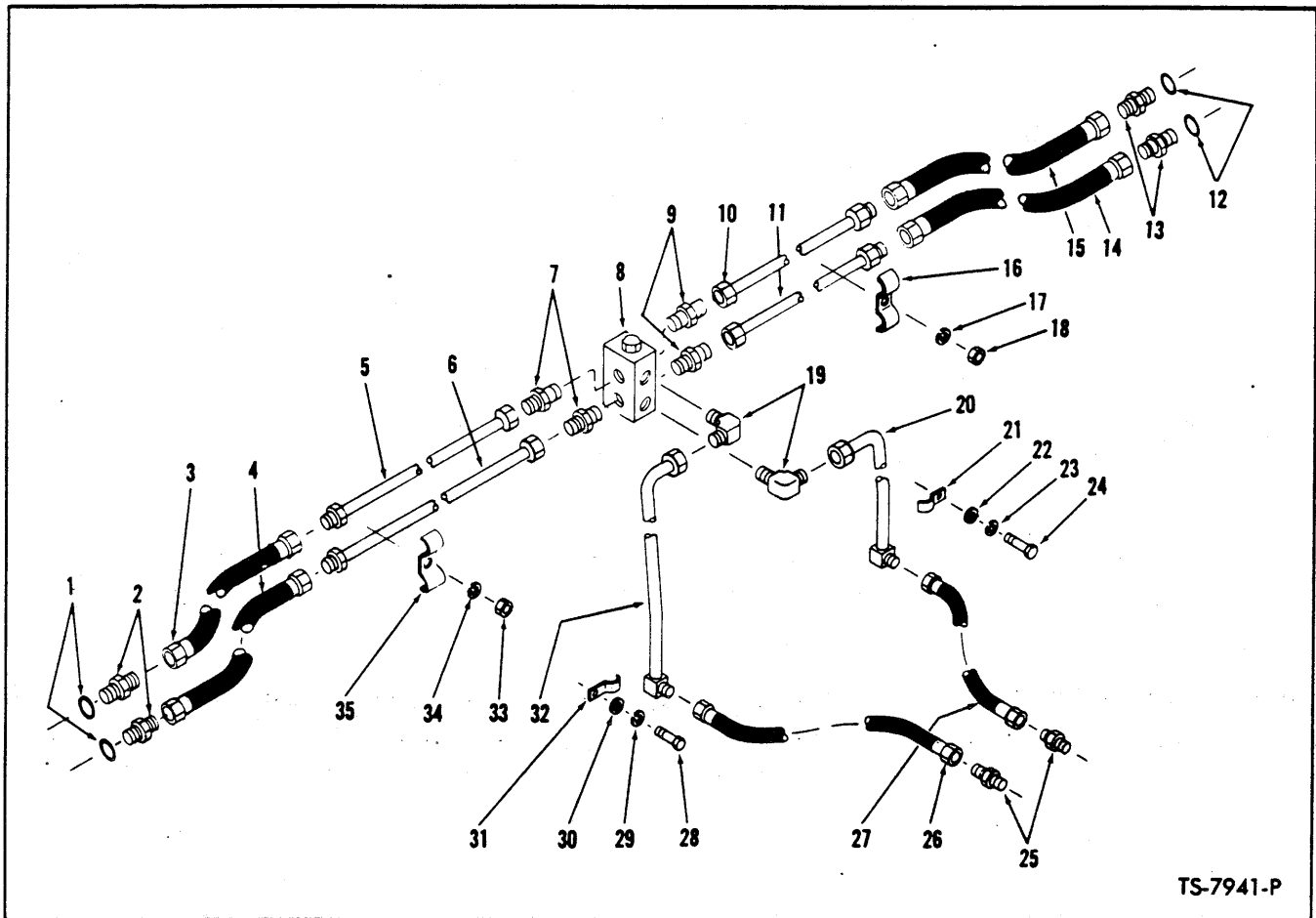
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HYDRAULIC SYSTEM — BUCKET AND BOOM
For Serial: Cummins — 6DC101 and after
G.M. — 7DG101 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	RESERVOIR—See Index	—	35	29F-4	ELBOW, Hose to Boom Cylinder — Rod End	1
2	573423	JOINT, Tube to Reservoir—Return	1	36	574442	HOSE, Boom Cylinder to Crosstube — Rod End	1
3	-----	TUBE ASSY, Return	1	37	574442	HOSE, Boom Cylinder to Crosstube — Base End	1
3A	574500	FOR CUMMINS POWERED MACHINES	1	38	526676	ELBOW, Hose to Boom Cylinder — Base End (Inc. 39)	1
3B	589419	FOR G.M. POWERED MACHINES	1	39	91F-8	"O" RING, Elbow	1
4	536710	HOSE, Tube to Tube — Suction	1	40	563788	TUBE, Valve to Bucket Crosstube	1
5	-----	TUBE, Suction — Front	1	41	563790	TUBE, Valve to Boom Crosstube	1
5A	1521392	FOR CUMMINS POWERED MACHINES	1	42	17K-10	ELBOW, Tube to Valve (Inc. 52)	1
5B	563785	FOR G.M. POWERED MACHINES	1	43	563791	TUBE, Valve to Boom Crosstube	1
6	573422	JOINT, Tube to Tube — Return	1	44	15K-10	CONNECTOR, Tube to Valve (Inc. 45)	2
7	19J20	FLANGE HALF, Hose to Pump	2	45	91F-10	"O" RING, Connector	2
8	4E-07	LKWSHR, Flange Half to Pump	4	46	83F-10	ELBOW, Tube to Adapter	1
9	17C-724	BOLT, Flange Half to Pump	4	47	588399	ADAPTER, (Inc. 49)	1
10	-----	HOSE, Pump to Valve	1	48	15K-10	CONNECTOR, Tube to Valve (Inc. 52)	1
10A	571409	FOR CUMMINS POWERED MACHINES	1	49	91F-13	"O" RING, Adapter	1
10B	563809	FOR G.M. POWERED MACHINES	1	50	29F-1	ELBOW	1
11	58K-222	"O" RING, Hose to Pump	1	51	40K-04	PLUG — Furnished with Valve	1
12	526676	ELBOW, Hose to Boom Cylinder — Base End (Inc. 13)	1	52	91F-10	"O" RING, Elbow and Connector	2
13	91F-8	"O" RING, Elbow	1	53	-----	CONTROL VALVE — See Index	—
14	574442	HOSE, Boom Cylinder to Crosstube	1	54	91F-10	"O" RING, Connector	1
15	-----	BOOM CYLINDER — See Index	—	55	17K-10	ELBOW, Tube to Valve (Inc. 54)	1
16	563801	CROSSTUBE ASSY, Boom Cylinder — Rod End	1	56	563798	CROSSTUBE ASSY, Boom Cylinder — Base End	1
17	29F-4	ELBOW, Hose to Boom Cylinder — Rod End	1	57	1522526	TUBE ASSY, Valve to Return Tube	1
18	574442	HOSE, Boom Cylinder to Crosstube — Rod End	1	58	19J24	FLANGE HALF, Stem to Pump	2
19	1522525	TUBE ASSY, Valve to Bucket Crosstube	1	59	562112	*INDICATOR, Reservoir Filter — Vacuum	1
20	563810	HOSE, Crosstube to Bucket Cylinder — Rod End	1	60	17C-824	BOLT, Flange Half to Pump	4
21	571176	HOSE, Crosstube to Bucket Cylinder — Base End	1	61	4E-08	LKWSHR, Flange Half to Pump	4
22	-----	BUCKET CYLINDER — See Index	1	62	-----	STEM, Suction	1
23	91F-8	"O" RING, Elbow	1	62A	571407	FOR CUMMINS POWERED MACHINES	1
24	526676	ELBOW, Hose to Bucket Cylinder — Base End (Inc. 23, 26)	2	62B	569506	FOR G.M. POWERED MACHINES	1
25	563805	TUBE ASSY, Hose to Bucket Cylinder — Rod End	2	63	58K-225	"O" RING, Stem to Pump	1
26	91F-8	"O" RING, Elbow	—	64	540130	CLAMP, Hose to Stem	1
27	-----	BUCKET CYLINDER — See Index	—	65	536710	HOSE, Stem to Tube	1
28	571207	HOSE, Tube to Crosstube	2	66	540130	CLAMP, Hose to Tube	1
29	18D-08	NUT, Crosstube to Frame	2	67	-----	PUMP, Bucket and Boom—See Index	—
30	563792	CROSSTUBE, Bucket Cylinder	1	68	540130	CLAMP, Tube to Tube	2
31	18C-820	BOLT, Crosstube to Frame	2	69	-----	TUBE ASSY, Suction — Rear	1
32	563810	HOSE, Crosstube to Bucket Cylinder — Rod End	1	69A	1521349	FOR CUMMINS POWERED MACHINES	1
33	571176	HOSE, Crosstube to Bucket Cylinder — Base End	1	69B	589422	FOR G.M. POWERED MACHINES	1
34	-----	BOOM CYLINDER—See Index	—	70	540106	CLAMP, Hose to Tube	1
				71	533478	HOSE, Reservoir to Tube	1
				72	540106	CLAMP, Hose to Reservoir	1

*NOTE: 562112 Indicator is used on machine serial 6DC101 thru 6DC124, 7DG101 thru 7DG120 only. For machine serial 6DC125 and thereafter, 7DG121 and thereafter one (1) 40K-04 Pipe Plug must be used in place of 562112 Indicator.

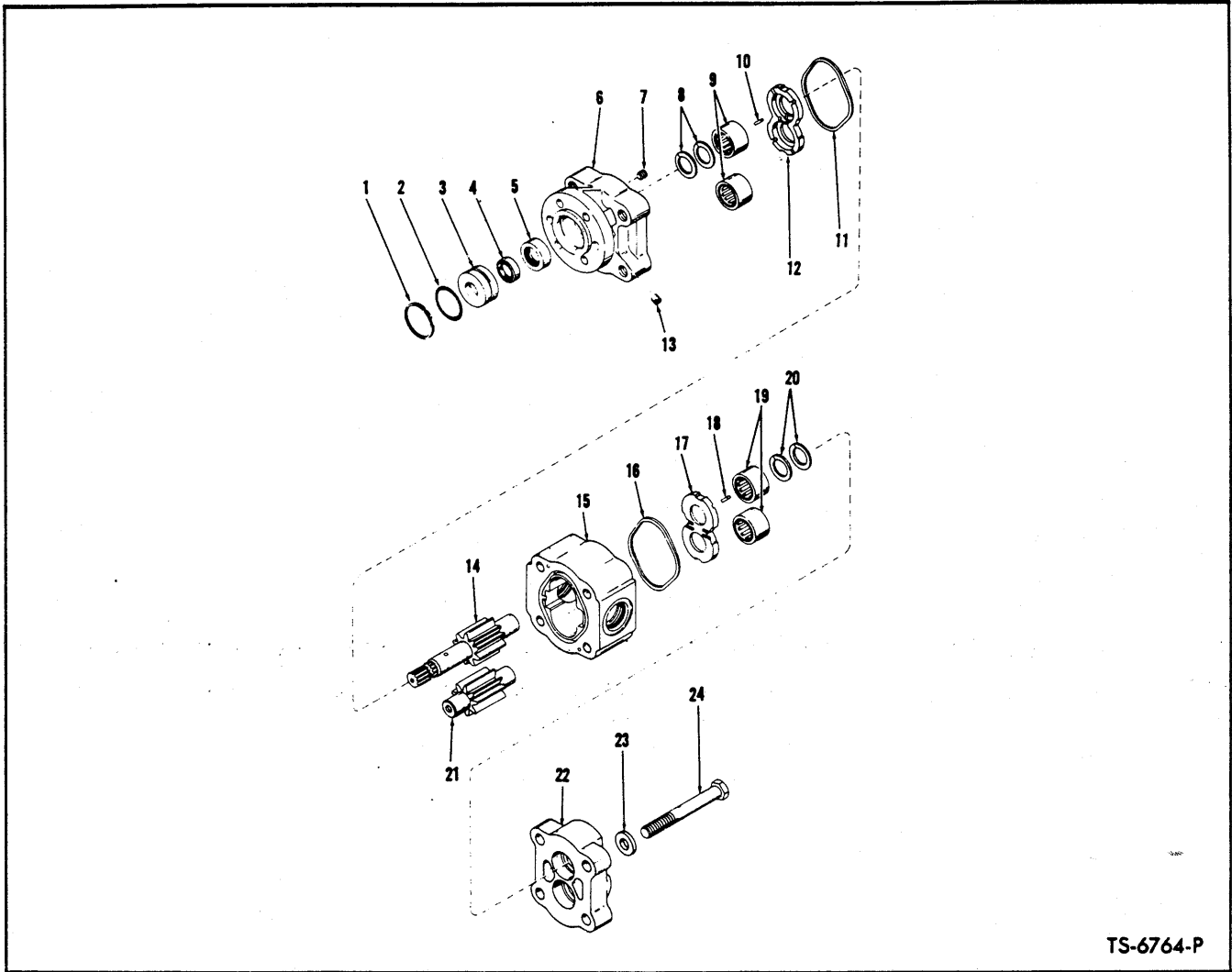


TS-7941-P

HYDRAULIC SYSTEM — DROTT BUCKET

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
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	17C-616	BOLT, Clamp Attaching	1
8	1533373	RELIEF VALVE	1	25	663013	ADAPTER	2
9	89F-7	CONNECTOR — Relief Valve to Tube	2	26	731900	HOSE, Jumper	1
10	1533392	TUBE, Relief Valve to Hose	1	27	731900	HOSE, Jumper	1
11	1533392	TUBE, Relief Valve to Hose	1	28	17C-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

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



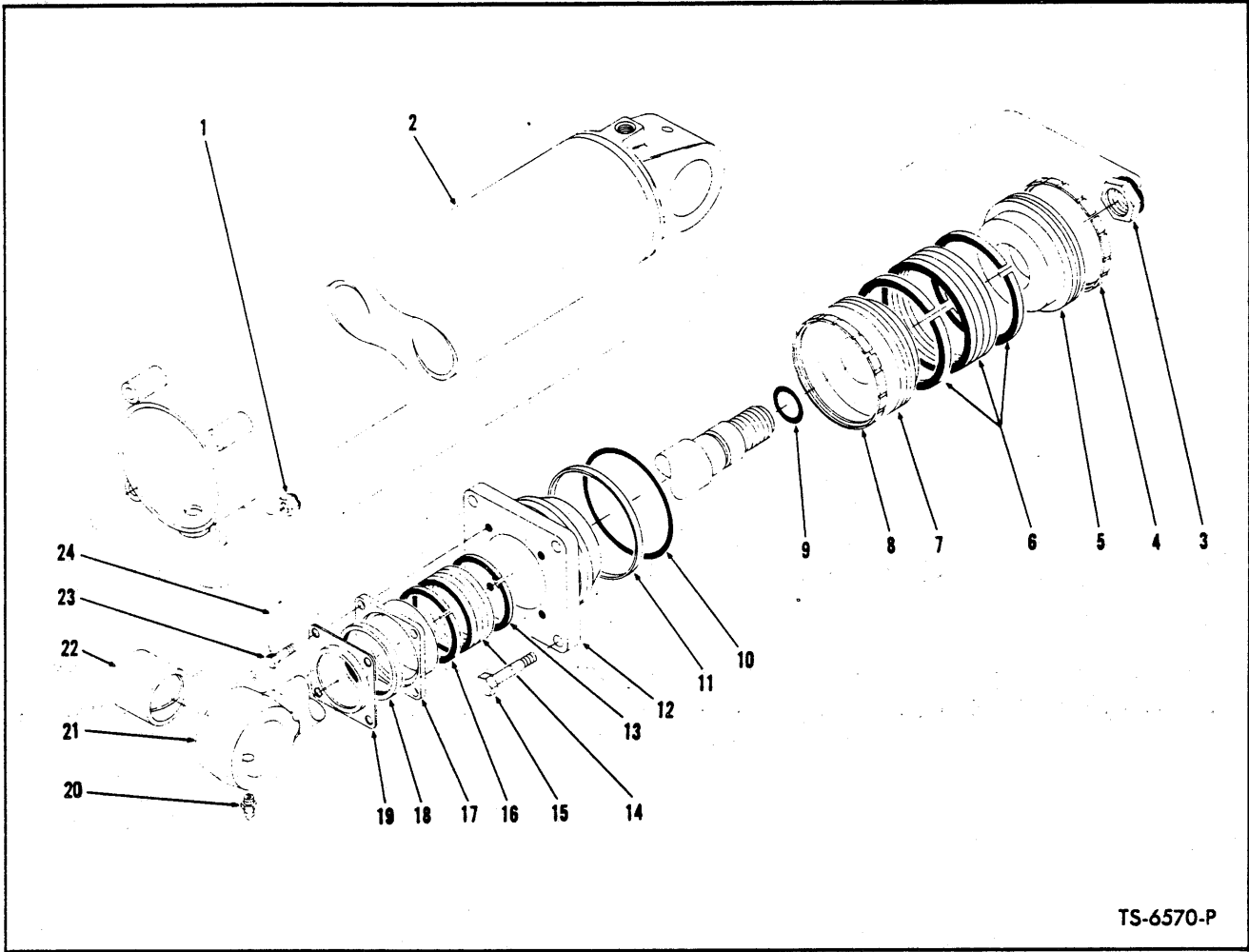
TS-6764-P

HYDRAULIC PUMP – BUCKET AND BOOM

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	569354	PUMP ASSY (Inc. 1 thru 24)	1	12	-----	§PLATE, Thrust – See Item "D"	1
B	946392	SHAFT SEAL KIT (Inc. 1 thru 5)	1	13	-----	PLUG – Shipping only	1
C	948796	GEAR (Inc. 14, 21)	1	14	-----	§GEAR, Drive – See Item "C"	1
D	946394	THRUST PLATE KIT (Inc. 1 thru 5, 10, 11, 12, 16, 17, 18)	1	15	946399	HOUSING, Gear	1
E	946395	BEARING KIT (Inc. 1 thru 5, 8 thru 12, 16 thru 20)	1	16	-----	§SEAL, Housing – See Item "D"	1
1	876354	RING, Seal Retainer	1	17	-----	§PLATE, Thrust – See Item "D"	1
2	25K-30128	"O" RING, Seal Retainer	1	18	-----	§SEAL, Pocket – See Item "D" (Cut from Strip in Kit)	6
3	-----	§RETAINER, Seal – See Item "B"	1	19	-----	§BEARING, Roller – See Item "E"	2
4	946396	SEAL, Outer Drive Shaft	1	20	-----	§SEAL, Ring – See Item "E"	2
5	946397	SEAL, Inner Drive Shaft	1	21	-----	§GEAR, Driven	1
6	946398	COVER, Shaft End	1	22	946400	COVER, Port End	1
7	33G-706	SCREW, Set	1	23	946401	WASHER, Cover Mounting	4
8	-----	§SEAL, Ring – See Item "E"	2	24	1C-1084	BOLT, Cover Mounting	4
9	-----	§BEARING, Roller – See Item "E"	2	25	214962	†SLEEVE, Pump Drive	1
10	-----	§SEAL, Pocket – See Item "D" (Cut from Strip in Kit)	6	26	235961	†GASKET, Pump to Converter	1
11	-----	§SEAL, Housing – See Item "D"	1	27	8D-06	†NUT, Pump Mounting	3
				28	9E-06	†LKWSHR, Pump Mounting	3

§Not Sold Separately
†Not Illustrated

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



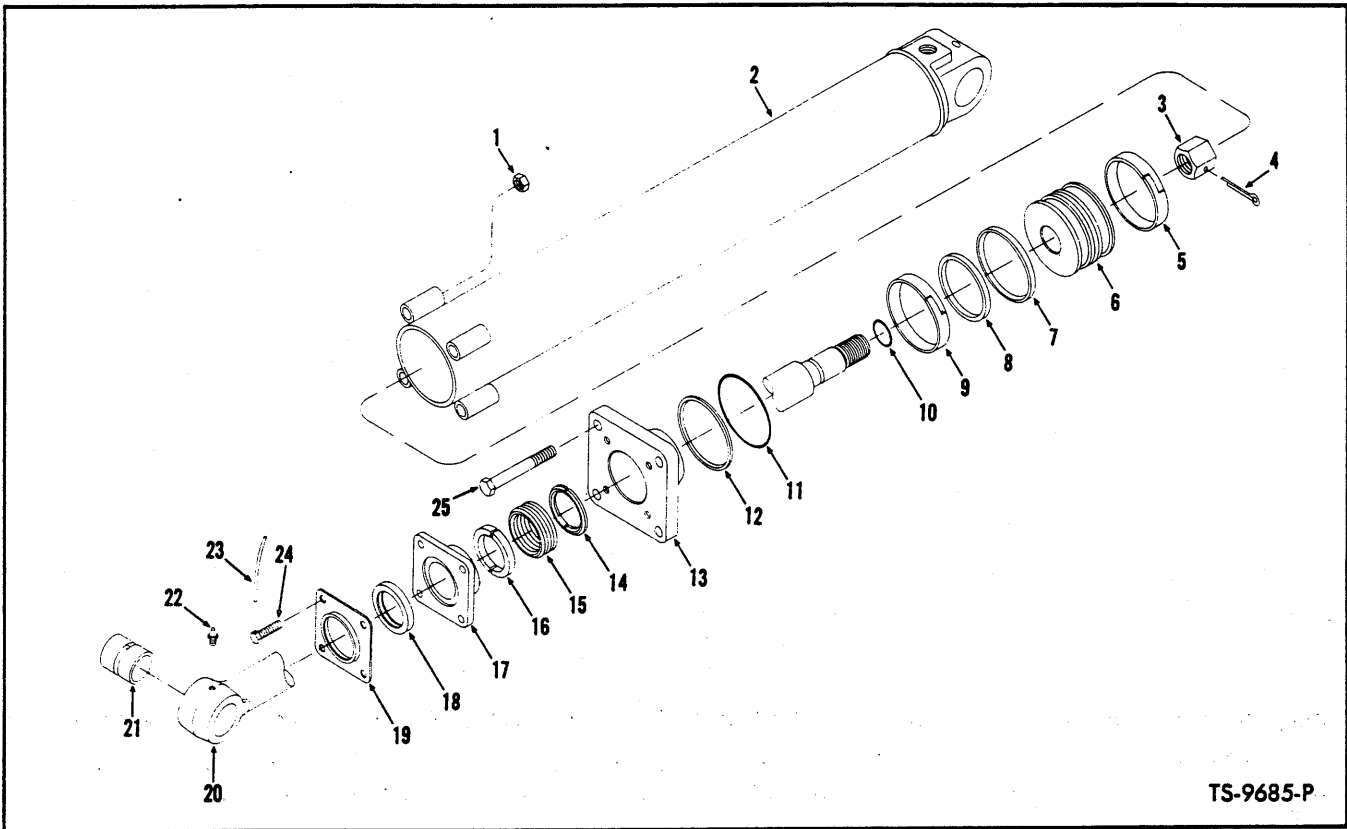
TS-6570-P

BOOM CYLINDER ASSEMBLY

2 Cylinders used on machine – Quantities listed below are for 1 Cylinder

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	587950	*CYLINDER ASSY (Inc. 1 thru 24) . . .	1	12	945950	CAP ASSY, Cylinder (Inc. 10, 11)	1
B	2516067	KIT (Inc. 4, 6, 8 → 11, 13, 14, 16, 18)	1	13	---	§ ADAPTER, Male – See 14	2
1	18D-08	NUT, Cylinder Cap	4	14	2501109	PACKING SET (Inc. 13 & 16)	1
2	587951	CYLINDER	1	15	18C-864	BOLT, Cylinder Cap	4
3	18D-20	NUT, Piston Rod	1	16	---	§ ADAPTER, Female – See 14	2
4	---	§ RING, Wear – See B	1	17	562700	GLAND, Packing	1
5	548575	**PISTON, Bottom Half	1	18	2516953	SEAL, Piston Rod	1
6	---	§ PACKING ASSY – See B	1	19	562701	RETAINER, Seal	1
7	548574	**PISTON, Top Half	1	20	10H-25	FITTING, Piston Rod Grease	1
8	---	§ RING, Wear – See B	1	21	587955	ROD ASSY, Piston (Inc. 22)	1
9	---	§ "O" RING, Piston Rod – See B	1	22	1521218	BUSHING, Piston Rod	1
10	---	§ "O" RING, Cylinder Cap – See B	1	23	4C-616	BOLT, Packing Gland	4
11	---	§ RING, "O" Ring Back-Up – See B	1	24	---	LOCKWIRE, (16 ga. x 15" lg.)	2

*NOTE: For replacement use 1503887 Cylinder Assy.
 **NOTE: For replacement use 1-1503026 Piston plus 1-2516070 Kit.
 § Not Sold Separately
 NOTE "A": Ref. SG-597A.



TS-9685-P

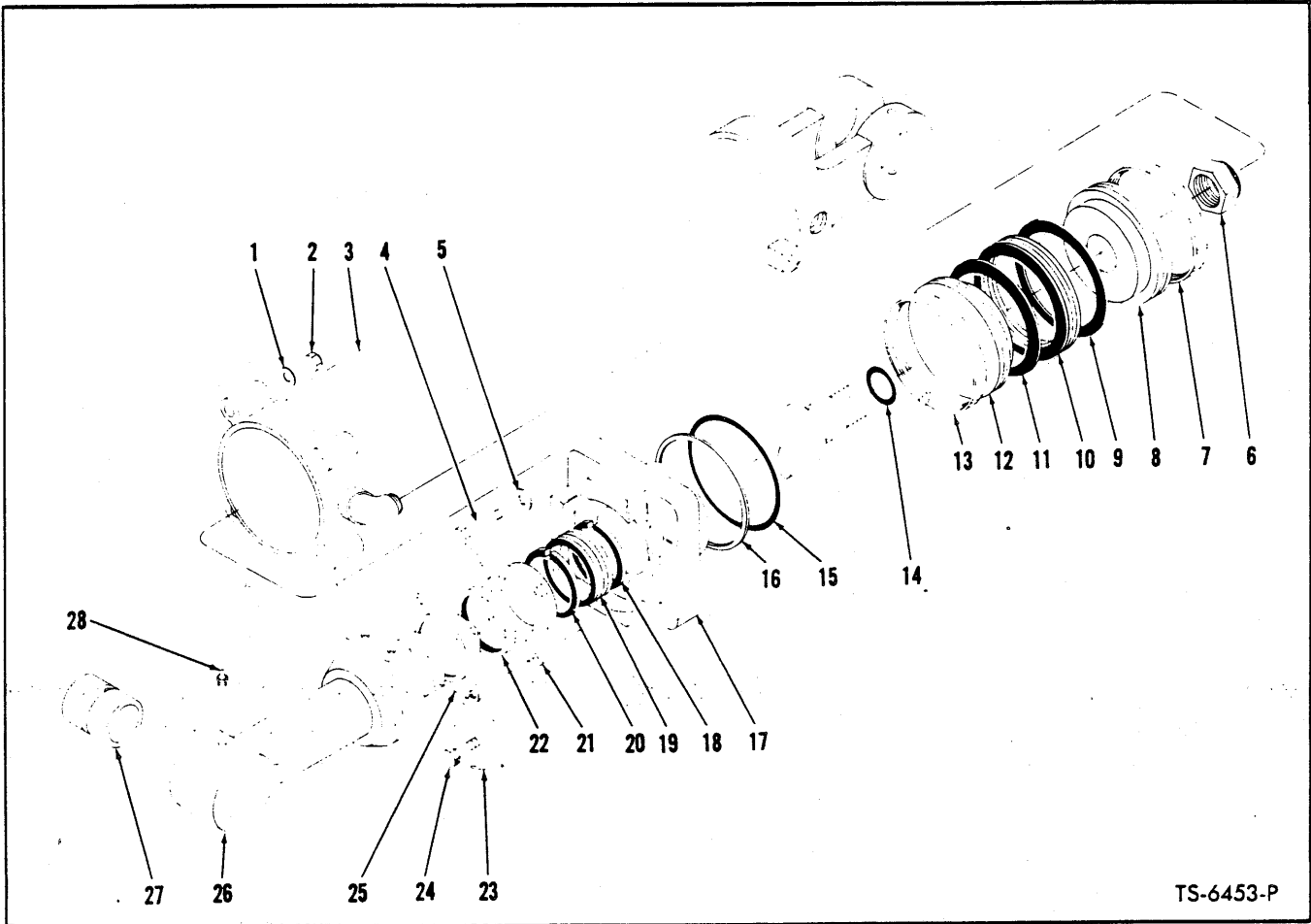
**BOOM CYLINDER ASSEMBLY
(SERVICE)**

Item	Part No.	Description	Qty
A	1503887	CYLINDER ASSY, Boom (Inc. 1 thru 25)	2
B	2516070	*KIT (Inc. 5, 7 → 12, 14 → 16, 18) ..	1
NOTE: Two (2) Cylinders used per machine —			
Quantities listed below are for One (1) Cylinder			
1	18D-08	NUT, Cylinder Cap	4
2	587951	CYLINDER, Boom	1
3	1535960	NUT, Piston Rod	1
4	1F-840	COTTER, Piston Rod Nut	1
5	-----	§ RING, Piston Wear — See B	1
6	1503026	PISTON	1
7	-----	§ SEAL RING, Outer Piston — See B ...	1
8	-----	§ SEAL RING, Inner Piston — See B ...	1
9	-----	§ RING, Piston Wear — See B	1
10	-----	§ "O" RING, Piston Rod — See B	1

Item	Part No.	Description	Qty.
11	-----	§ "O" RING, Cylinder Cap — See B	1
12	-----	§ RING, Back-Up — See B	1
13	945950	CAP, Cylinder	1
14	-----	§ ADAPTER, Male Chevron — See 15 ..	2
15	2501109	PACKING ASSY (Inc. 14 & 16)	1
16	-----	§ ADAPTER, Female Chevron — See 15	2
17	562700	GLAND, Packing	1
18	2516953	SEAL, Piston Rod	1
19	562701	RETAINER, Seal	1
20	587955	PISTON ROD (Inc. 21)	1
21	1521218	BUSHING, Piston Rod	1
22	10H-25	FITTING, Piston Rod Grease	1
23	-----	LOCKWIRE (16 ga. x 15" lg.)	2
24	4C-616	BOLT, Seal Retainer	4
25	24C-864	BOLT, Cylinder Cap	4

*NOTE: Ref. SG-597A.

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



TS-6453-P

BUCKET CYLINDER ASSEMBLY

2 Cylinders used on machine – Quantities listed below are for 1 Cylinder

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	562529	***CYLINDER ASSY (Inc. 1 thru 28)	1	14	----	§ "O" RING, Piston Rod – See B	1
B	2516089	KIT (Inc. 7, 9 → 11, 13 → 16, 18 → 20, 22) See Note "B"	1	15	----	§ "O" RING, Cylinder Cap – See B	1
1	879768	WASHER, Cylinder Cap	4	16	----	§ RING, "O" Ring Back-Up – See B	1
2	68D-08	NUT, Cylinder Cap	4	17	945951	CAP ASSY, Cylinder (Inc. 15, 16)	1
3	562530	*CYLINDER	1	18	----	§ ADAPTER, Male – See 19	2
4	18C-872	BOLT, Cylinder Cap	4	19	2501107	PACKING SET (Inc. 18 & 20)	2
5	879768	WASHER, Cylinder Cap	4	20	----	§ ADAPTER, Female – See 19	2
6	67D-20	**NUT, Piston Rod	1	21	562543	GLAND, Packing	1
7	----	§ RING, Wear – See B	1	22	2516952	SEAL, Piston Rod	1
8	547869	PISTON, Bottom Half—See Note "A"	1	23	----	LOCKWIRE (16 ga. x 13" lg.)	2
9	----	§ ADAPTER – See Item 10	—	24	4C-620	BOLT, Packing Gland	4
10	----	§ PACKING ASSY (Inc. 9, 11) – See B	1	25	562544	RETAINER, Seal	1
11	----	§ ADAPTER – See Item 10	—	26	562536	ROD ASSY, Piston (Inc. 27)	1
12	547868	PISTON, Top Half – See Note "A"	1	27	1521241	BUSHING, Piston Rod	1
13	----	§ RING, Wear – See B	1	28	10H-25	FITTING, Piston Rod Grease	1

§ Not Sold Separately

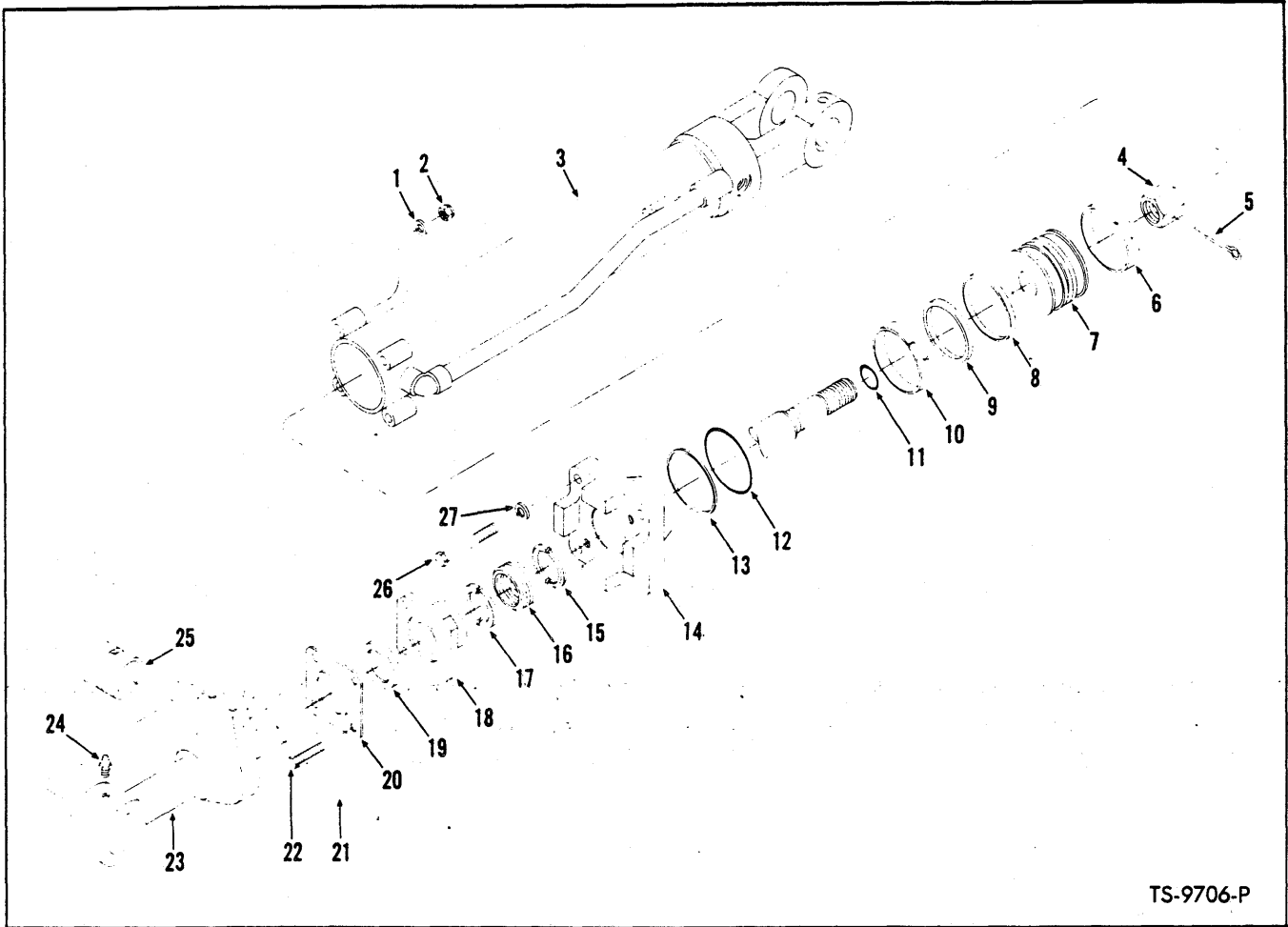
*NOTE: For replacement use 1507805 plus 1-533463 Hose and 1-36F-5 Adapters.

**NOTE: For replacement use 1535960 Nut plus 1-1F-840 Cotter. Refer to SG282 for installation instructions.

***NOTE: For replacement use 1507808 Cylinder Assy, plus 1-533463 Hose & 1-36F-5 Adapter.

NOTE "A": For replacement use 1-1503024 Piston plus 1-2516088 Kit.

NOTE "B": Ref. SG-597A.



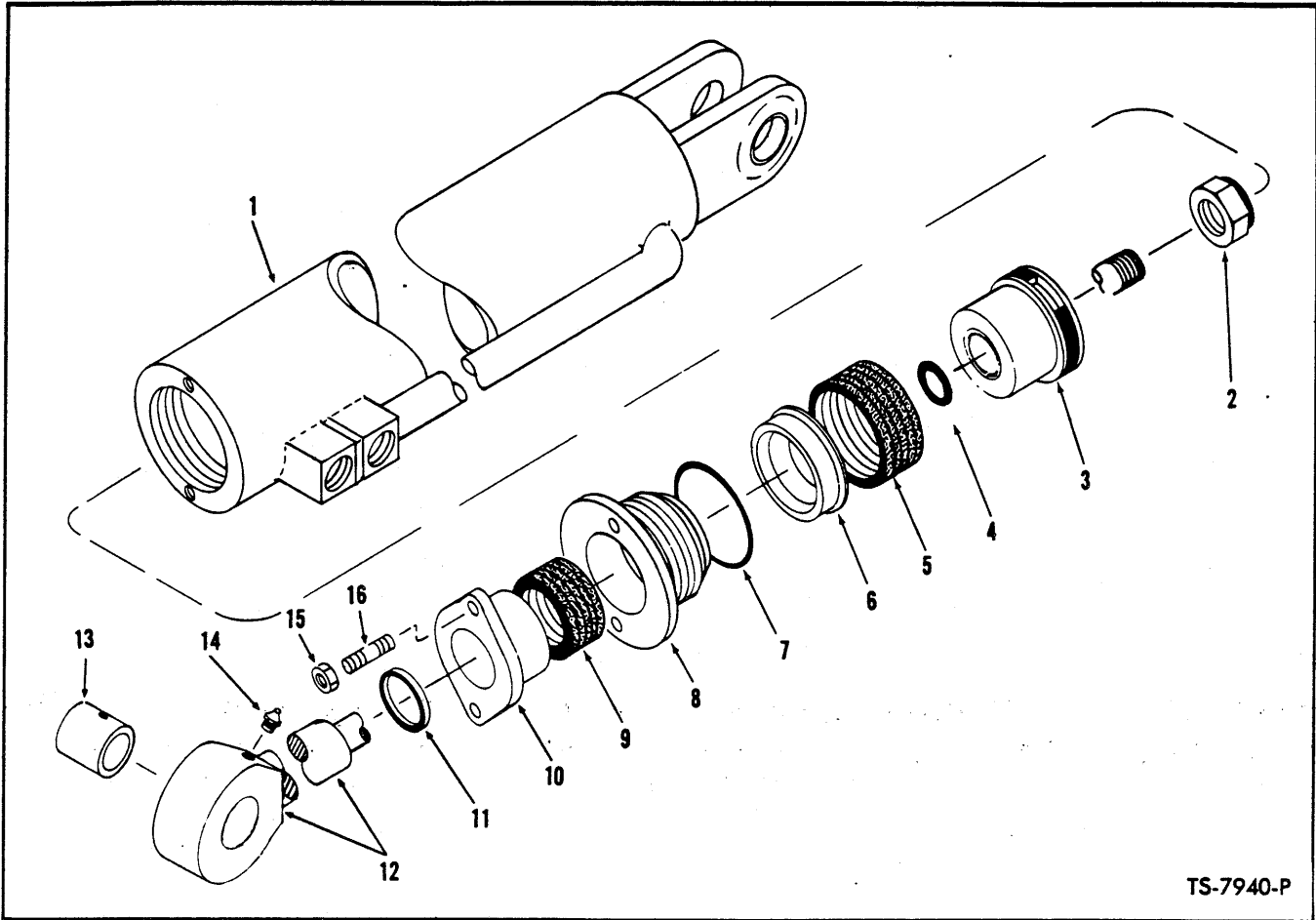
TS-9706-P

**BUCKET CYLINDER ASSEMBLY
(SERVICE)**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1507808	Cylinder Assy, Bucket (Inc. 1 thru 27)	2	12	-----	§"O" RING, Cylinder Cap — See B	1
B	2516088	*KIT (Inc. 5, 6, 8 → 13, 15 → 17, 19)	1	13	-----	§RING, Back-Up — See B	1
NOTE: Two (2) Cylinders used per machine — Quantities listed below are for one (1) Cylinder				14	945951	CAP, Cylinder	1
1	879768	WASHER, Cylinder	4	15	-----	§ADAPTER, Male Chevron — See 16	2
2	68D-08	NUT, Cylinder	4	16	25-1107	PACKING ASSY (Inc. 15 & 17)	1
3	1507805	CYLINDER, Bucket	1	17	-----	§ADAPTER, Female Chevron — See 16	2
4	1535960	NUT, Piston Rod	1	18	562543	GLAND, Packing	1
5	1F-840	COTTER, Piston Rod Nut	1	19	2516952	SEAL, Piston Rod	1
6	-----	§RING, Piston Wear — See B	1	20	562544	RETAINER, Seal	1
7	1503024	PISTON	1	21	-----	LOCKWIRE (16 ga. x 13" lg.)	2
8	-----	§SEAL RING, Outer Piston — See B	1	22	4C-620	BOLT, Seal Retainer	4
9	-----	§SEAL RING, Inner Piston — See B	1	23	562536	ROD, Piston (Inc. 25)	1
10	-----	§RING, Piston Wear — See B	1	24	10H-25	FITTING, Piston Rod Grease	1
11	-----	§"O" RING, Piston Rod — See B	1	25	1521241	BUSHING, Piston Rod	1
				26	24C-872	BOLT, Cylinder Cap	4
				27	879768	WASHER, Cylinder Cap	4

*NOTE: Ref. SG-597A.

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



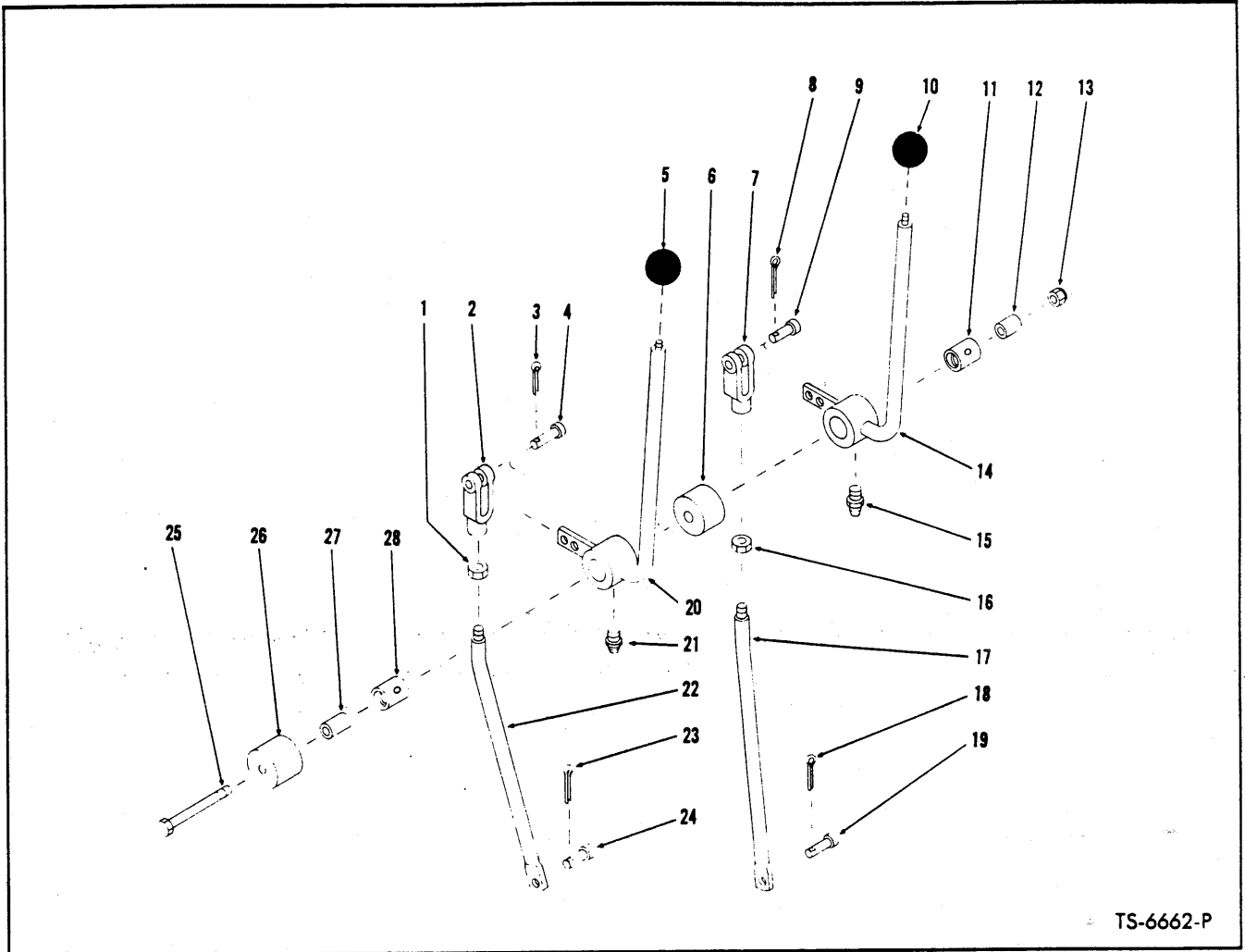
TS-7940-P

CLAMP CYLINDER ASSEMBLY — DROTT BUCKET

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

Item No.	Part No.	Description	No. Req'd.
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

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

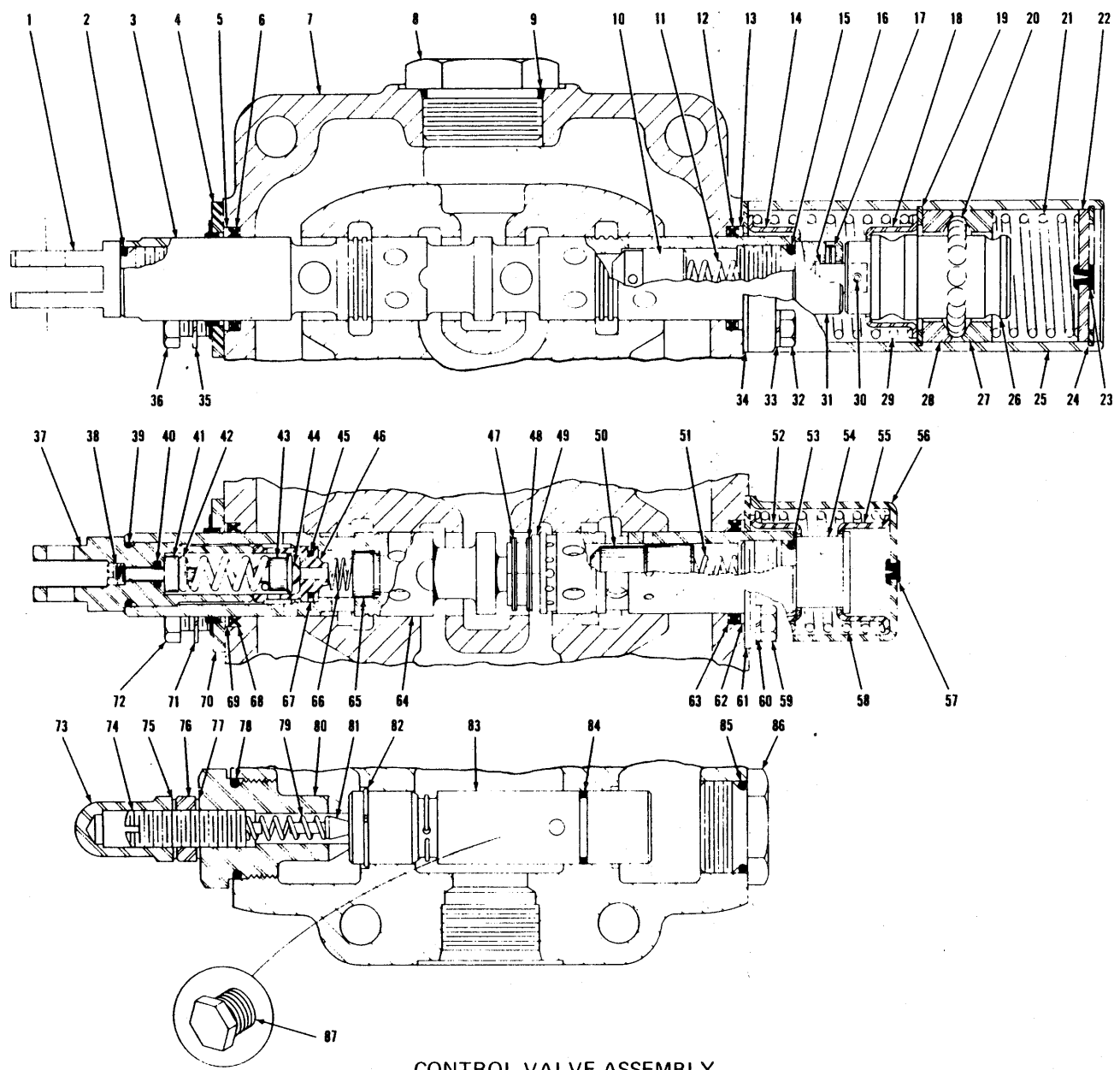


TS-6662-P

VALVE CONTROL LEVERS AND LINKAGE

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	8D-08	NUT, Clevis Jam	1	15	12H-15	FITTING, Lever Grease	1
2	2J-8300	CLEVIS, Rod to Lever	1	16	8D-08	NUT, Clevis Jam	1
3	1F-414	COTTER, Clevis Pin	1	17	564268	ROD ASSY, Valve Control (Inc. 7, 16)	1
4	4F-08127*	PIN, Clevis to Lever	1	18	1F-312	COTTER, Clevis Pin	1
5	509772	KNOB, Bucket Lever	1	19	4F-06106	PIN, Rod to Valve	1
6	558574	SPACER, Valve Lever Mounting	1	20	572708	LEVER, Bucket Control (Inc. 28)	1
7	2J-8300	CLEVIS, Rod to Lever	1	21	12H-15	FITTING, Lever Grease	1
8	1F-414	COTTER, Clevis Pin	1	22	564271	ROD ASSY, Valve Control (Inc. 1, 2)	1
9	4F-08127	PIN, Clevis to Lever	1	23	1F-312	COTTER, Clevis Pin	1
10	509772	KNOB, Boom Lever	1	24	4F-06106	PIN, Rod to Valve	1
11	569055	BUSHING, Valve Lever Mounting	1	25	24C-8136	BOLT, Valve Lever Mounting	1
12	550646	SLEEVE, Valve Lever Mounting	1	26	558574	SPACER, Valve Lever Mounting	1
13	18D-08	NUT, Valve Lever Mounting	1	27	550646	SLEEVE, Valve Lever Mounting	1
14	572708	LEVER, Boom Control (Inc. 11)	1	28	569055	BUSHING, Valve Lever Mounting	1

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



CONTROL VALVE ASSEMBLY

For Serial: Cummins - 5DC101 thru 5DC999. G.M. - 6DG101 thru 6DG999.

TS-6653-P

[104]

(1H1)

PM 2952
Printed in U.S.A.

CONTROL VALVE ASSEMBLY

For Serial: Cummins — 5DC101 thru 5DC999

G.M. — 6DG101 thru 6DG999

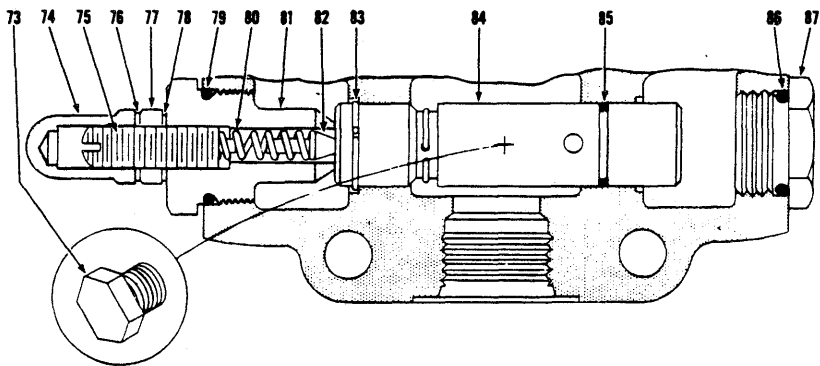
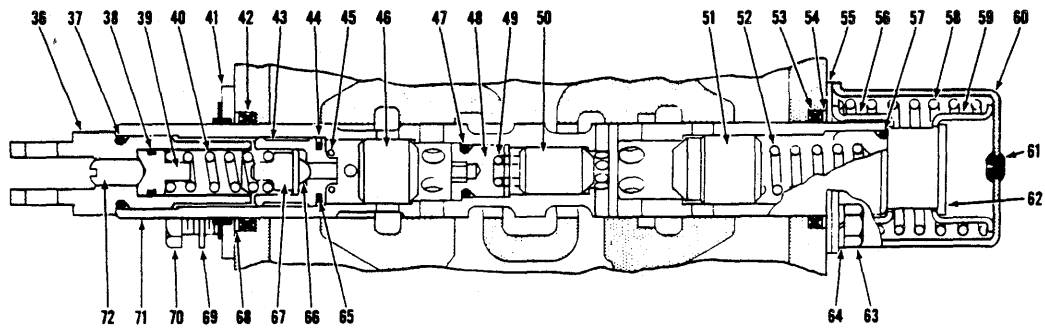
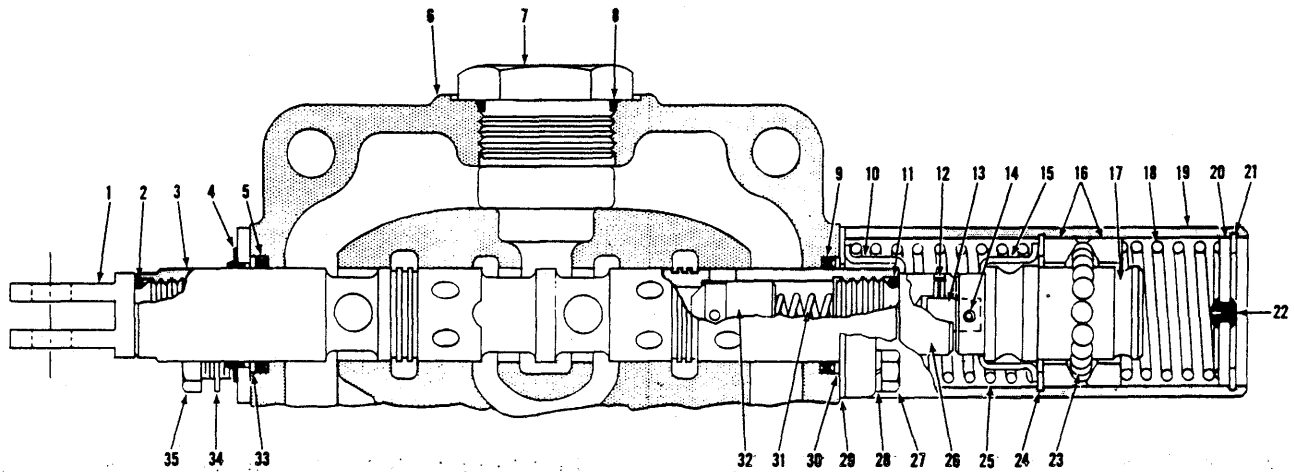
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	558814	*VALVE ASSY (Inc. 1 thru 87)	1	46	946367	SEAT, Check	1
1	946360	EYE, Plunger	1	47	1308105	RING, Check Retaining	2
2	25K-30022	"O" RING, Plunger Eye	1	48	1308105	RING, Check Retaining	2
3	-----	§ OPERATING PLUNGER—See Item "A"	—	49	946032	CHECK, Plunger	2
4	893294	WIPER, Bonded	1	50	946368	CHECK, Plunger	1
5	944883	RING, Back-Up	1	51	893293	SPRING, Plunger Check	1
6	946583	SEAL, Plunger Oil	1	52	945348	GUIDE, Check Spring	1
7	-----	§ HOUSING, Valve—See Item "A"	—	53	25K-30022	"O" RING, Operating Plunger	1
8	24K-11	CAP, Housing	1	54	944895	CAP, Operating Plunger	1
9	91F-11	"O" RING, Cap	1	55	945348	GUIDE, Return Spring	1
10	944885	CHECK, Plunger	1	56	944896	COVER, Detent	1
11	893293	SPRING, Plunger Check	1	57	886745	PLUG, Bleeder	1
12	946583	SEAL, Plunger Oil	1	58	944879	SPRING, Plunger Return	1
13	944883	RING, Back-Up	1	59	1C-410	BOLT, Cover Retaining	4
14	944878	GUIDE, Check Spring	1	60	4E-04	LKWSHR, Cover Retaining	4
15	25K-30022	"O" RING, Operating Plunger	1	61	944882	PLATE, Quad Ring Retaining	1
16	888449	PIN, Detent	1	62	944883	RING, Back-Up	1
17	108301	PIN, Roll	1	63	946583	SEAL, Plunger Oil	1
18	944878	GUIDE, Return Spring	1	64	-----	§ OPERATING PLUNGER—See Item A	—
19	1301194	RING, Retaining	1	65	946370	CHECK, Plunger	1
20	10J-08	BALL, Detent	15	66	946369	SPRING, Plunger	1
21	946029	SPRING, Detent	1	67	946366	RING, Back-Up	1
22	944900	PLUG, Detent	1	68	946583	SEAL, Plunger Oil	1
23	886763	PLUG, Bleeder	1	69	944883	RING, Back-Up	1
24	507695	RING, Plug Retaining	1	70	893294	WIPER, Bonded	1
25	945805	COVER, Detent	1	71	4E-04	LKWSHR, Wiper Retainer	2
26	946030	CAP, Detent	1	72	1C-410	BOLT, Wiper Retainer	2
27	944897	RETAINER, Ball	1	73	944853	ACORN NUT	1
28	944897	RETAINER, Ball	1	74	944890	SCREW, Relief Valve Adjusting	1
29	945090	SPRING, Plunger Return	1	75	613750	WASHER, Jam Nut	1
30	108301	PIN, Roll	1	76	8D-08	NUT, Jam	1
31	945095	CAP, Operating Plunger	1	77	613750	WASHER, Jam Nut	1
32	1C-416	BOLT, Cover Attaching	4	78	58K-214	"O" RING, Adjusting Cap	1
33	4E-04	LKWSHR, Cover Attaching	4	79	886753	SPRING, Relief Valve	1
34	944882	PLATE, Quad Ring Retaining	1	80	893296	CAP, Relief Valve Adjusting	1
35	4E-04	LKWSHR, Wiper Retainer	2	81	886739	POPPET, Relief Valve	1
36	1C-410	BOLT, Wiper Retainer	2	82	946033	RING, Relief Valve Retaining	1
37	946361	EYE, Plunger	1	83	893298	VALVE ASSY, Relief (Inc. 82, 84)	1
38	946362	SCREW, Adjusting	1	84	58K-020	"O" RING, Relief Valve	1
39	25K-30022	"O" RING, Plunger Eye	1	85	58K-214	"O" RING, Cap	1
40	25K-20007	"O" RING, Guide	1	86	944894	CAP, Valve Housing	1
41	946363	GUIDE, Check Spring	1	87	40K-04	PLUG, Housing	1
42	946364	SPRING, Check	1	88	18C-864	† BOLT, Valve Mounting	3
43	946365	CHECK, Plunger (Inc. 44)	1	89	4E-08	† LKWSHR, Valve Mounting	2
44	-----	§ BALL — See Item 43	—	90	66D-08	† NUT, Valve Mounting	1
45	25K-20016	"O" RING, Check Seat	1				

§ Not Sold Separately

† Not Illustrated

*NOTE: For replacement use 2532044 plus 1—15K-10 Connector, 1—11K-10 Elbow, & 3—18C-868 Bolts. Refer to Service Gram SG-268A for installation instructions.

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



CONTROL VALVE ASSEMBLY

For Serial: Cummins - 6DC101 thru 6DC999. G.M. - 7DG101 thru 7DG999.

TS-7721-P

CONTROL VALVE ASSEMBLY

For Serial: Cummins — 6DC101 thru 6DC999
G.M. — 7DG101 thru 7DG999

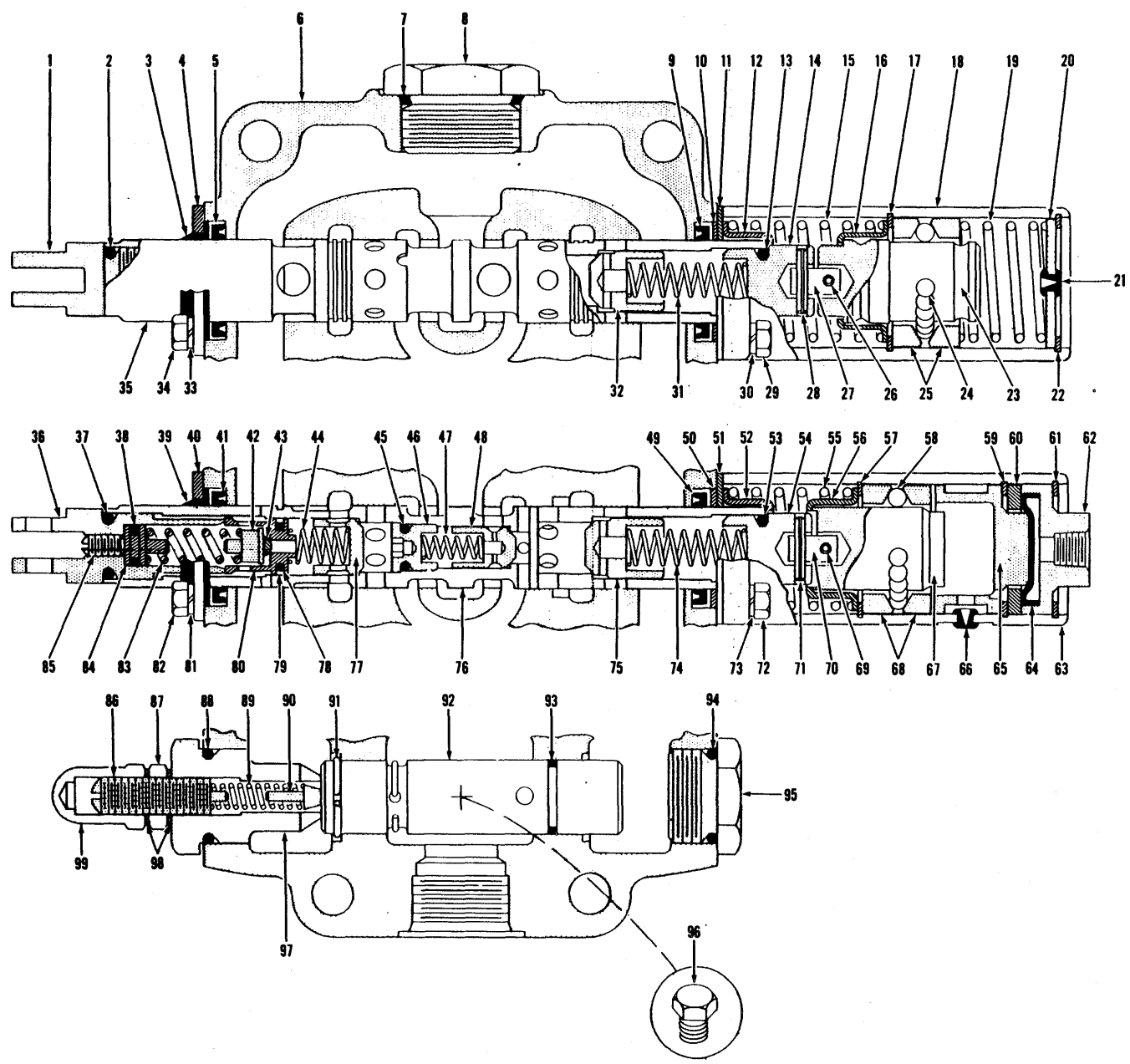
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1520075	*VALVE ASSY (Inc. 1 thru 87)	1	45	946545	SPRING, Check	1
1	946360	EYE, Plunger	1	46	946543	CHECK	1
2	25K-30022	"O" RING, Plunger Eye	1	47	25K-30014	"O" RING	1
3	-----	§PLUNGER, Operating — See Item "A"	—	48	946555	PLUG	1
4	893294	WIPER, Plunger	1	49	946536	SPRING	1
5	946583	SEAL, Plunger Oil	1	50	945590	CHECK	1
6	-----	§HOUSING, Valve — See Item "A"	1	51	944885	CHECK	1
7	24K-11	CAP, Valve Housing	1	52	946544	SPRING, Check	1
8	91F-11	"O" RING, Cap to Housing	1	53	784559	SEAL, Plunger Oil	1
9	946583	SEAL, Plunger Oil	1	54	944883	RING, Back-up	1
10	944878	GUIDE, Spring	1	55	946535	PLATE, Seal Retaining	1
11	25K-30022	"O" RING, Plunger Cap	1	56	945348	GUIDE, Spring	1
12	108301	ROLL PIN	1	57	25K-30022	"O" RING, Plunger Cap	1
13	888449	PIN	1	58	944879	SPRING, Detent	1
14	108301	ROLL PIN	1	59	945348	GUIDE, Spring	1
15	944878	GUIDE, Spring	1	60	944896	COVER, Detent	1
16	944897	RETAINER, Ball	2	61	886745	PLUG, Bleeder	1
17	946030	CAP, Detent	1	62	944895	CAP, Plunger	1
18	946029	SPRING, Return	1	63	1C-410	BOLT, Cover to Housing	4
19	945805	COVER, Detent	1	64	4E-04	LKWSHR, Cover to Housing	4
20	944900	PLUG, Detent Cover	1	65	25K-20018	"O" RING, Check Seat	1
21	507695	RING, Plug Retaining	1	66	-----	§BALL — See Item 67	—
22	886763	PLUG, Bleeder	1	67	946365	CHECK (Inc. 66)	1
23	10J-08	BALL	15	68	944883	RING, Back-up	1
24	1301194	RING, Retaining	1	69	4E-04	LKWSHR, Wiper to Housing	2
25	945090	SPRING, Detent	1	70	1C-410	BOLT, Wiper to Housing	2
26	945095	CAP, Plunger	1	71	-----	§PLUNGER, Operating — See Item "A"	—
27	1C-416	BOLT, Cover to Housing	4	72	946541	SCREW, Adjusting	1
28	4E-04	LKWSHR, Cover to Housing	4	73	40K-04	PLUG, Pipe	1
29	944882	PLATE, Seal Retaining	1	74	944853	NUT, Acorn	1
30	944883	RING, Back-up	1	75	944890	SCREW, Relief Valve Adjusting	1
31	893293	SPRING, Check	1	76	613750	WASHER, Jam Nut	1
32	944885	CHECK	1	77	8D-08	NUT, Jam	1
33	944883	RING, Back-up	1	78	613750	WASHER, Jam Nut	1
34	4E-04	LKWSHR, Wiper to Housing	2	79	58K-214	"O" RING, Adjusting Cap	1
35	1C-410	BOLT, Wiper to Housing	2	80	886753	SPRING, Poppet	1
36	946361	EYE, Plunger	1	81	893296	CAP, Relief Valve Adjusting	1
37	25K-30022	"O" RING, Plunger	1	82	886739	POPPET, Relief Valve	1
38	25K-20014	"O" RING, Spring Guide	1	83	946033	RING, Relief Valve Retaining	1
39	946363	GUIDE, Spring	1	84	893298	VALVE, Relief (Inc. 83, 85)	1
40	946364	SPRING	1	85	58K-020	"O" RING, Relief Valve	1
41	893294	WIPER, Plunger	1	86	58K-214	"O" RING, Cap	1
42	946583	SEAL, Plunger Oil	1	87	944894	CAP, Valve Housing	1
43	946883	SEAT, Check	1	88	18C-864	†BOLT, Valve Mounting	3
44	946556	RING, Back-up	1	89	4E-08	†LKWSHR, Valve Mounting	2
				90	66D-08	†NUT, Valve Mounting	1

§Not Sold Separately

†Not Illustrated

*NOTE: For replacement use 2532044 plus 3-18C-868 Bolts.

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



CONTROL VALVE ASSEMBLY
For Serial: Cummins - 7DC101 and after, G.M. - 8DG101 and after

TS-8494-P

[108]

(1H5)

PM 2952
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CONTROL VALVE ASSEMBLY

**For Serial: Cummins — 7DC101 and after
G.M. — 8DG101 and after**

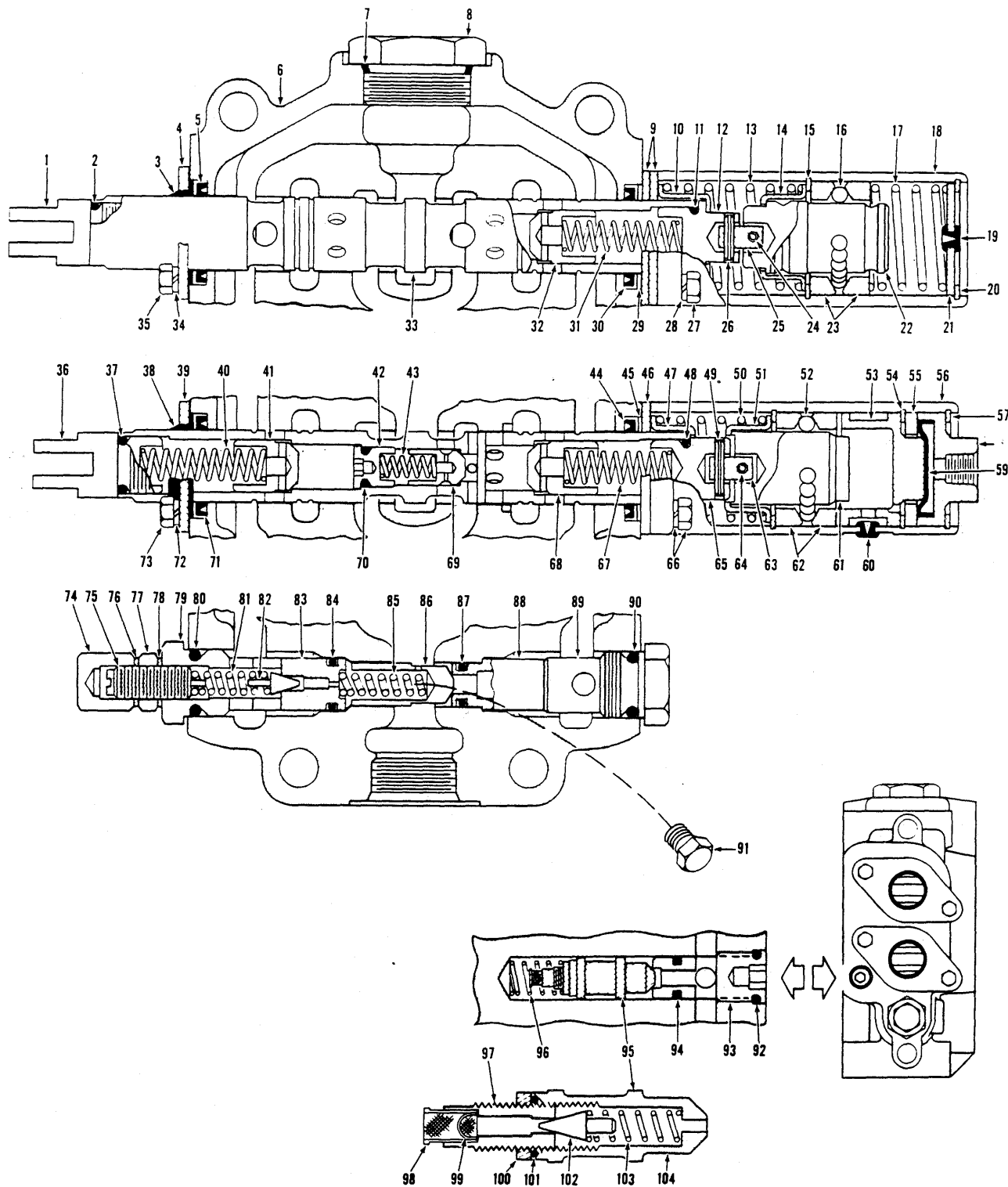
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1501994	**CONTROL VALVE ASSY (Inc. 1 thru 99)	1	50	944883	RING, Back-Up	1
1	946360	EYE, Plunger	1	51	946535	PLATE, Seal Retaining	1
2	25K-30022	"O" RING, Plunger Eye	1	52	944878	GUIDE, Spring	1
3	946918	WIPER, Plunger	1	53	25K-30022	"O" RING, Cap	1
4	946914	PLATE, Wiper & Seal Retaining	1	54	945095	CAP, Plunger	1
5	946583	SEAL, Plunger Oil	1	55	944879	SPRING	1
6	-----	§HOUSING, Valve — See "A"	—	56	944878	GUIDE, Spring	1
7	91F-11	"O" RING, Cap	1	57	1301194	RING, Retaining	1
8	24K-11	CAP, Housing	1	58	10J-08	BALL	15
9	946583	SEAL, Plunger Oil	1	59	507695	RING, Retaining	1
10	944883	RING, Back-Up	1	60	946916	SPACER	1
11	944882	PLATE, Seal Retaining	1	61	507695	RING, Retaining	1
12	944878	GUIDE, Spring	1	62	946915	PLUG	1
13	25K-30022	"O" RING, Cap	1	63	946913	COVER, Detent	1
14	945095	CAP, Plunger	1	64	946919	DIAPHRAGM	1
15	945090	SPRING	1	65	946917	PLUG	1
16	944878	GUIDE, Spring	1	66	886763	PLUG, Bleeder	1
17	1301194	RING, Retaining	1	67	946912	CAP, Detent	1
18	945805	COVER, Detent	1	68	944897	RETAINER, Ball	2
19	946029	SPRING	1	69	305307	ROLL PIN	1
20	944900	PLUG	1	70	888449	PIN, Connecting	1
21	886763	PLUG, Bleeder	1	71	305307	ROLL PIN	1
22	507695	RING, Retaining	1	72	1C-416	BOLT, Cover to Housing	4
23	946030	CAP, Detent	1	73	4E-04	LKWSHR, Cover to Housing	4
24	10J-08	BALL	15	74	946544	SPRING, Check	1
25	944897	RETAINER, Ball	2	75	944885	CHECK	1
26	108301	ROLL PIN	1	76	-----	§PLUNGER — See "A"	—
27	888449	PIN, Connecting	1	77	946543	CHECK	1
28	108301	ROLL PIN	1	78	25K-20018	"O" RING, Seat	1
29	1C-416	BOLT, Cover to Housing	4	79	946556	RING, Sealing	1
30	4E-04	LKWSHR, Cover to Housing	4	80	946883	SEAT, Relief Valve	1
31	893293	SPRING, Check	1	81	4E-04	LKWSHR, Plate to Housing	2
32	944885	CHECK	1	82	1C-410	BOLT, Plate to Housing	2
33	4E-04	LKWSHR, Plate to Housing	2	83	946364	SPRING	1
34	1C-410	BOLT, Plate to Housing	2	84	946363	GUIDE, Spring	1
35	-----	§PLUNGER — See "A"	—	85	946541	SCREW, Adjusting	1
36	946361	EYE, Plunger	1	86	944890	SCREW, Adjusting	1
37	25K-30022	"O" RING, Plunger Eye	1	87	8D-08	NUT, Jam	1
38	25K-20014	"O" RING, Guide	1	88	58K-214	"O" RING, Adjusting Cap	1
39	946918	WIPER, Plunger	1	89	886753	SPRING, Relief	1
40	946914	PLATE, Wiper & Seal Retaining	1	90	886739	POPPET, Relief	1
41	946583	SEAL, Plunger Oil	1	91	947361	SNAP RING	1
42	946884	POPPET ASSY (Inc. 43)	1	92	893298	RELIEF VALVE ASSY (Inc. 91, 93)	1
43	-----	§BALL — See 42	—	93	58K-020	"O" RING, Relief Valve	1
44	946545	SPRING	1	94	58K-214	"O" RING, Cap	1
45	945221	"O" RING, Cap	1	95	944894	CAP	1
46	946555	*CAP	1	96	40K-04	PLUG	1
47	946536	SPRING	1	97	893296	CAP, Adjusting	1
48	945590	CHECK	1	98	613750	WASHER, Jam Nut	2
49	946583	SEAL, Plunger Oil	1	99	944853	NUT, Acorn	1

§ Not Sold Separately

*NOTE: Torque to 25 Ft/Lbs.

**NOTE: For complete replacement use 2532044 Valve plus 3—18C-828 Bolts.

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



**CONTROL VALVE ASSEMBLY
(SERVICE)**

TS-8910-P

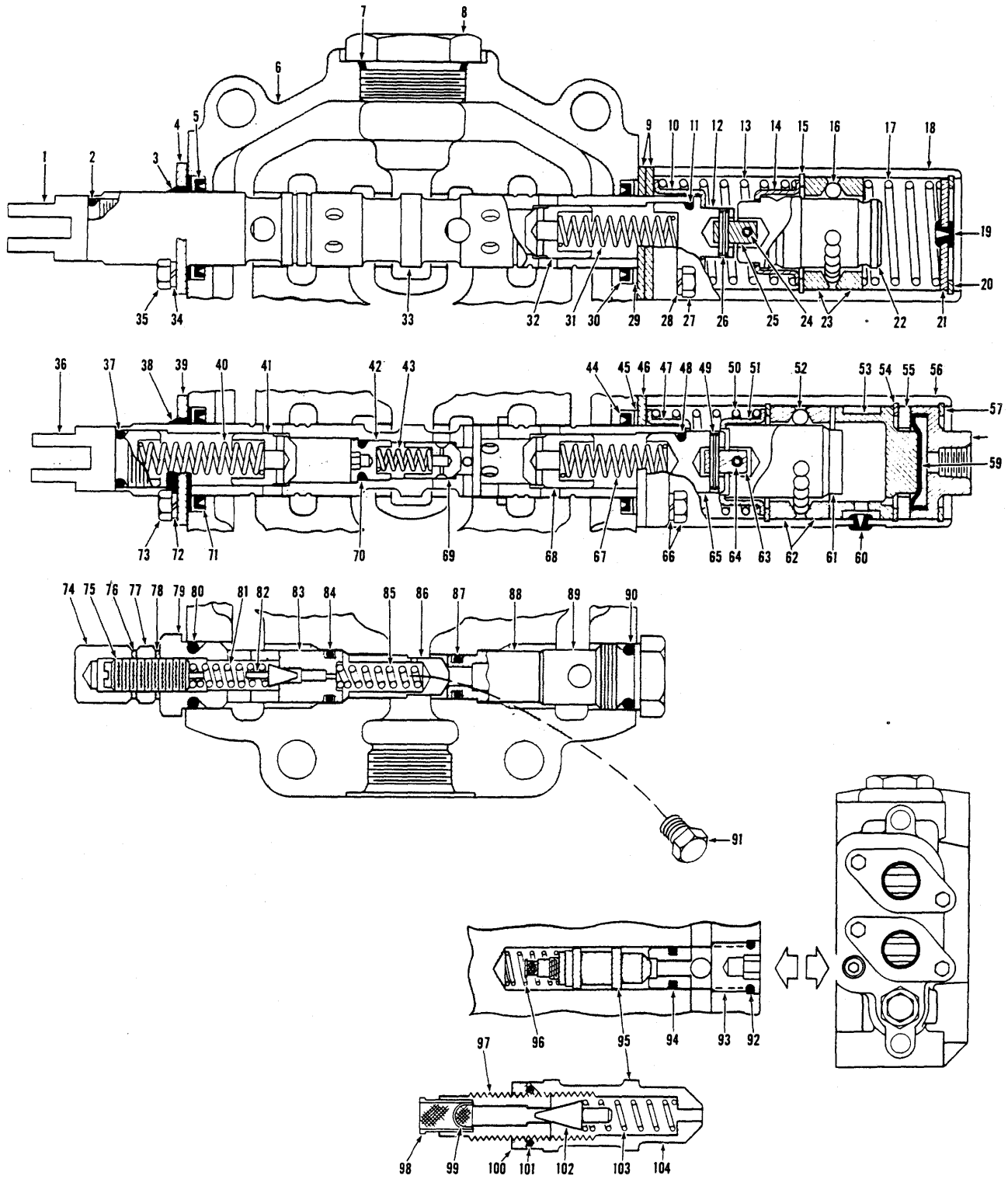
**CONTROL VALVE ASSEMBLY
(SERVICE)**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1536683	*CONTROL VALVE ASSY (Inc. 1 thru 104)	1	36	946360	EYE, Plunger	1
1	946360	EYE, Plunger	1	37	25K-30022	"O" RING, Plunger Eye	1
2	25K-30022	"O" RING, Plunger Eye	1	38	946918	WIPER, Plunger	1
3	946918	WIPER, Plunger	1	39	980830	RETAINER, Wiper	1
4	980831	RETAINER, Wiper	1	40	893293	SPRING, Check	1
5	946583	SEAL, Plunger Oil	1	41	945885	CHECK	1
6	-----	HOUSING, Valve (See "A")	—	42	946555	CAP	1
7	91F-11	"O" RING, Cap	1	43	946536	SPRING, Check	1
8	24K-11	CAP	1	44	946583	SEAL, Plunger	1
9	980832	PLATE, Retainer	2	45	944883	RING, Back-Up	1
10	945092	GUIDE, Spring	1	46	980832	RETAINER, Seal	1
11	25K-30022	"O" RING, Cap	1	47	944878	GUIDE, Spring	1
12	945091	CAP, Plunger	1	48	25K-30022	"O" RING, Cap	1
13	945090	SPRING, Plunger Return	1	49	108301	PIN, Roll	1
14	945092	GUIDE, Spring	1	50	944879	SPRING, Plunger Return	1
15	1301194	RING, Retaining	1	51	944878	GUIDE, Spring	1
16	10J-08	BALL, Detent	15	52	10J-08	BALL, Detent	15
17	946029	SPRING, Detent	1	53	946917	PLUG	1
18	947776	COVER, Detent	1	54	507695	RING, Retainer	1
19	886763	PLUG, Bleeder	1	55	946916	SPACER	1
20	507695	RING, Retainer	1	56	961072	COVER, Detent	1
21	944900	PLUG, Detent	1	57	507695	RING, Retainer	1
22	947786	CAP, Detent	1	58	946915	PLUG	1
23	944897	RETAINER, Ball	2	59	946919	DIAPHRAGM, Cover	1
24	108301	PIN, Roll	1	60	886763	PLUG, Bleeder	1
25	888449	PIN, Connecting	1	61	946912	CAP, Detent	1
26	300232	PIN, Roll	1	62	944897	RETAINER, Ball	2
27	1C-612	BOLT, Cover	2	63	888449	PIN, Connecting	1
28	4E-06	LKWSHR, Cover	2	64	305307	PIN, Roll	1
29	944883	RING, Back-Up	1	65	945095	CAP, Plunger Connecting	1
30	946583	SEAL, Plunger Oil	1	66	1C-612	BOLT, Cover	2
31	893293	SPRING, Check	1	66A	4E-06	LKWSHR, Cover	2
32	944885	CHECK	1	67	946544	SPRING, Check	1
33	-----	§PLUNGER, Operating (See "A")	—	68	944885	CHECK	1
34	4E-06	LKWSHR, Retainer	2	69	945590	CHECK	1
35	1C-618	BOLT, Retainer	2	70	25K-30014	"O" RING, Cap	1
				71	946583	SEAL, Plunger Oil	1

§ Not Sold Separately

*NOTE: For replacement use 2510839.

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



CONTROL VALVE ASSEMBLY
(SERVICE)

TS-8910-P



CONTROL VALVE ASSEMBLY (Continued)
(SERVICE)

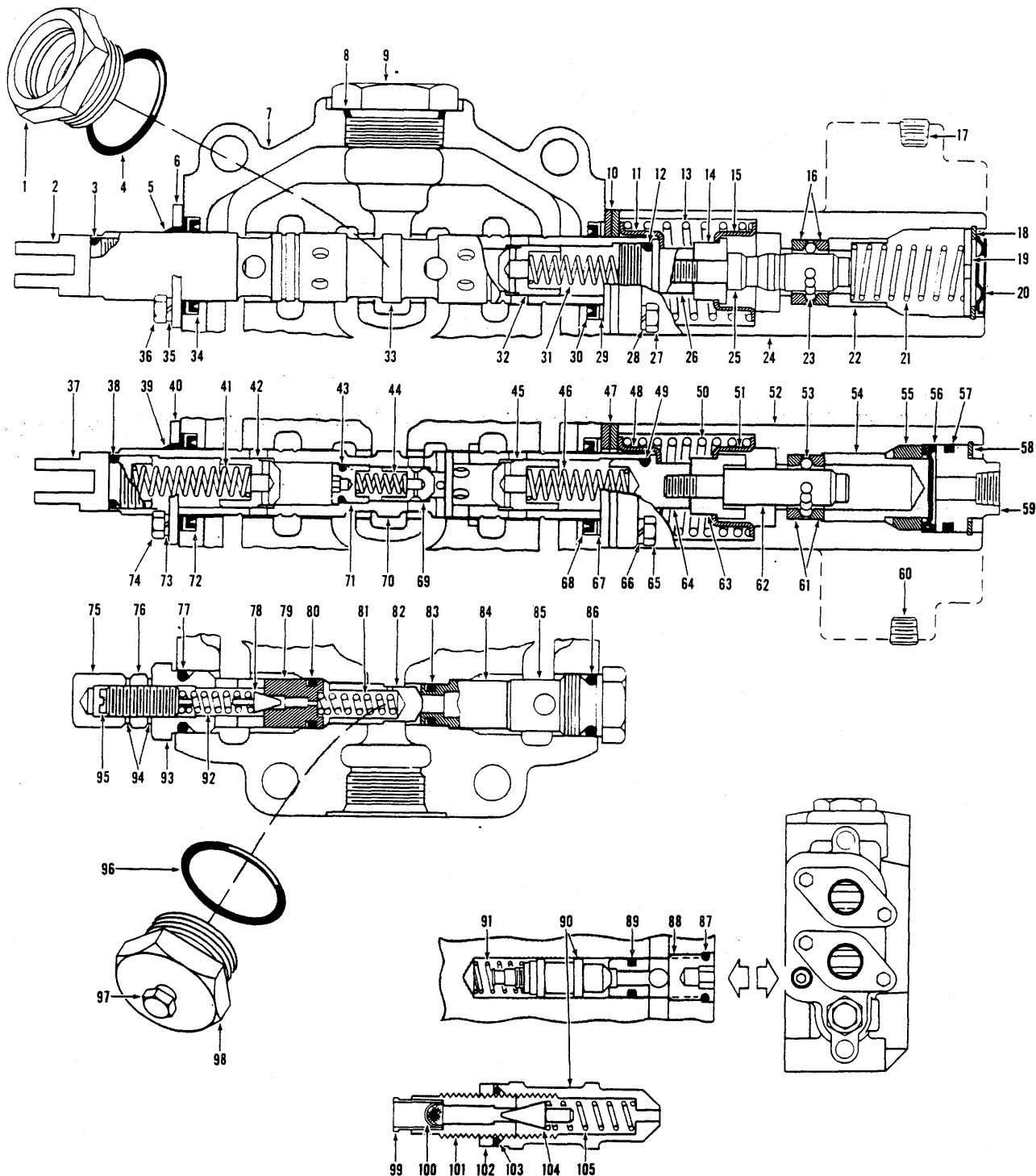
Table with 8 columns: Item No., Part No., Description, No. Req'd., Item No., Part No., Description, No. Req'd. Lists various parts like LKWSHR, BOLT, NUT, SCREW, WASHER, CAP, etc.

§Not Sold Separately

NOTES

Multiple horizontal lines for writing notes.

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



CONTROL VALVE ASSEMBLY

TS-9375

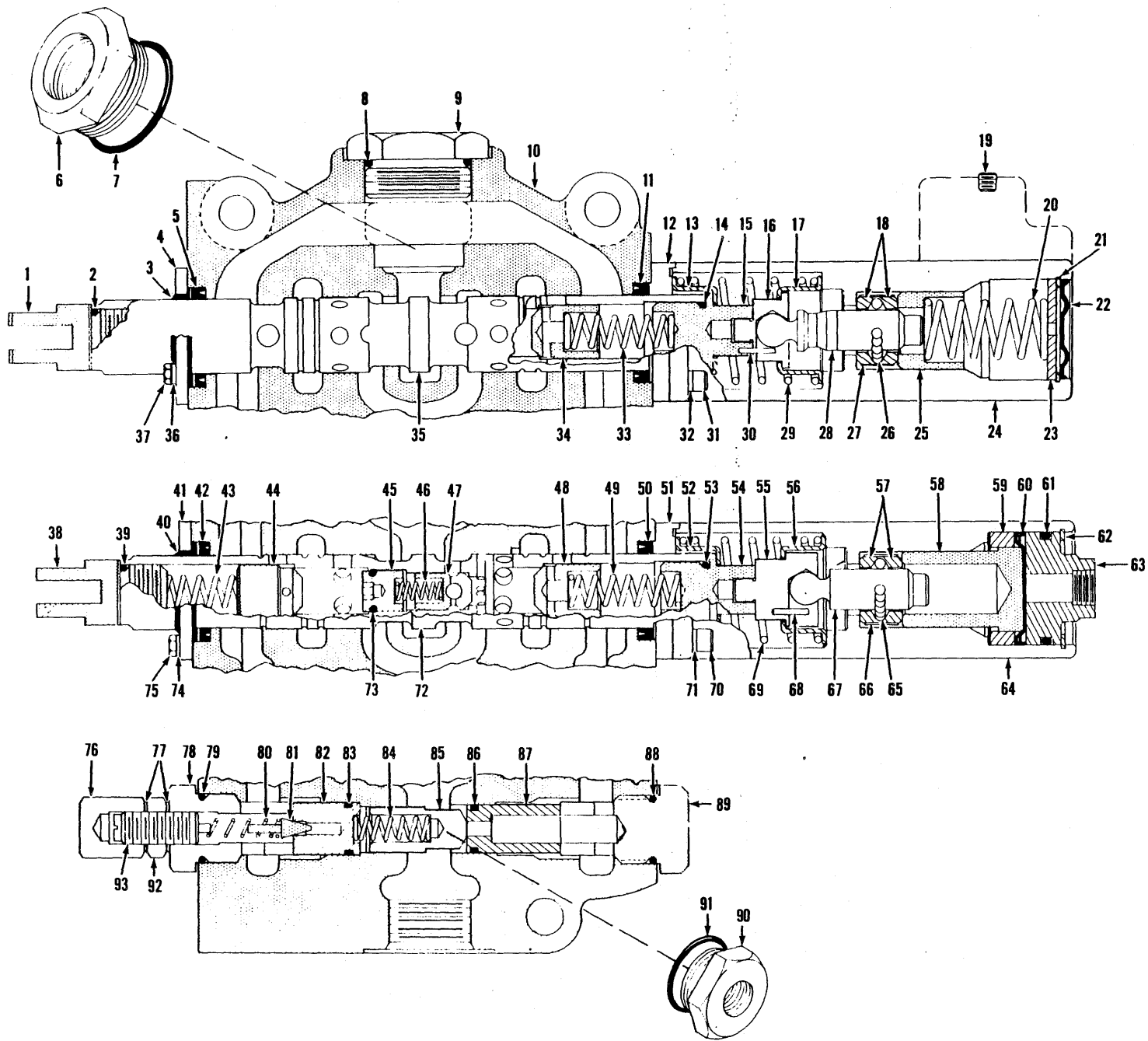


CONTROL VALVE ASSEMBLY (SERVICE)

Table with 4 columns: Item No., Part No., Description, No. Req'd. It lists various components for a control valve assembly, including seals, springs, O-rings, and plungers, with their respective part numbers and quantities.

*For replacement use 2510839 Valve assy.
§Not Sold Separately

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



114A.1

(1H15)

PM 2952
Printed in U.S.A.

TS-13228

Control Valve, Main (2 Spool)

MICHIGAN

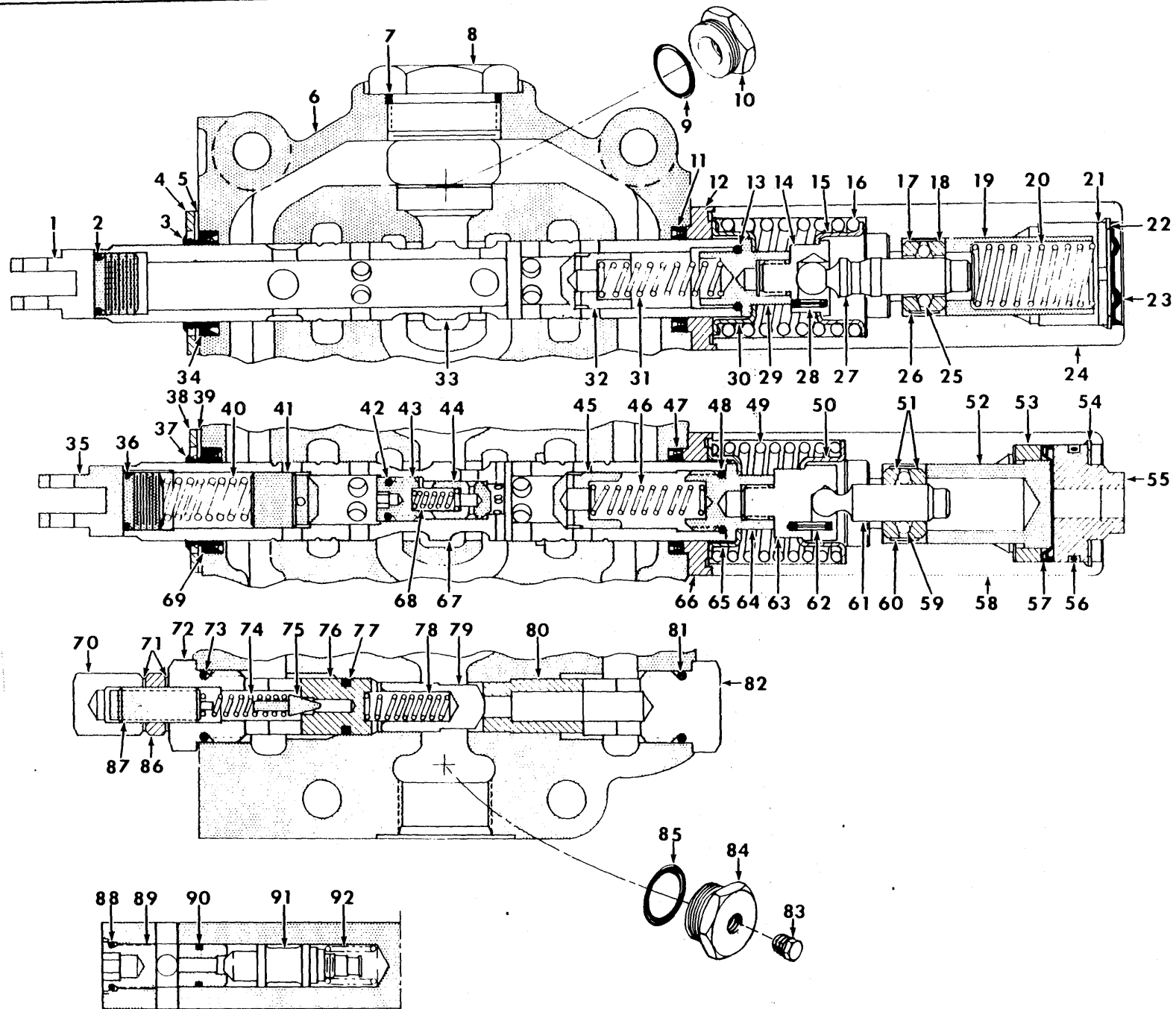
No.	Part No.	Qty.	Description
A	^{3,1} 1549184	1	Control valve assy
1	946360	1	Plunger eye
2	25K-30022	1	O-ring
3	946918	1	Wiper
4	980831	1	Plate
5	946583	1	Seal
6	948243	1	Bushing
7	25K-40112	1	O-ring
8	91F-11	1	O-ring
9	24K-11	1	Cap
10	^{S²} -----	—	Housing
11	946583	1	Seal
12	948717	1	Plate
13	945092	1	Retainer
14	25K-30022	1	O-ring
15	948732	1	Cap
16	949278	1	Detent socket
17	944878	1	Retainer
18	947843	2	Retainer
19	16F-04	1	Plug
20	947852	1	Spring
21	666542	1	Ring
22	948202	1	Diaphragm
23	947848	1	Plug
24	948720	1	Housing
25	947842	1	Retainer
26	948730	11	Ball
27	948727	1	Sleeve
28	948723	1	Plunger
29	945090	1	Spring
30	742306	1	Pin
31	1C-612	2	Bolt
32	4E-06	2	Lockwasher
33	893293	1	Spring
34	944885	1	Check
35	^{S²} -----	—	Plunger assy
36	4E-06	2	Lockwasher
37	1C-612	2	Bolt
38	946360	1	Plunger eye
39	25K-30022	1	O-ring
40	946918	1	Wiper
41	980831	1	Plate
42	946583	1	Seal
43	893293	1	Spring
44	944885	1	Check
45	946555	1	Cap
46	946536	1	Spring

No.	Part No.	Qty.	Description
47	945590	1	Check
48	944885	1	Check
49	946544	1	Spring
50	946583	1	Seal
51	948717	1	Plate
52	945092	1	Retainer
53	25K-30022	1	O-ring
54	948732	1	Cap
55	949279	1	Detent socket
56	944878	1	Retainer
57	947843	2	Retainer
58	948725	1	Piston
59	948728	1	Spacer
60	948731	1	Diaphragm
61	25K-40114	1	O-ring
62	948729	1	Ring
63	948724	1	Plug
64	948721	1	Housing
65	948730	11	Ball
66	948727	1	Sleeve
67	948722	1	Plunger
68	300232	1	Pin
69	945090	1	Spring
70	1C-612	2	Bolt
71	4E-06	2	Lockwasher
72	^{S²} -----	—	Plunger assy
73	25K-30014	1	O-ring
74	4E-06	2	Lockwasher
75	1C-612	2	Bolt
76	49D-08	1	Nut
77	613750	2	Washer
78	980835	1	Cap
79	58K-210	1	O-ring
80	886753	1	Spring
81	886739	1	Poppet
82	980836	1	Seat
83	25K-30020	1	O-ring
84	947791	1	Spring
85	960965	1	Poppet
86	25K-30016	1	O-ring
87	980840	1	Seat
88	58K-210	1	O-ring
89	980838	1	Cap
90	946882	1	Cap
91	91F-10	1	O-ring
92	8D-08	1	Nut
93	980834	1	Screw

¹Inc. 1→93

²See A

³For replacement use 2510839



114B.1

(1H17)

PM 2952
Printed in U.S.A.

TS-13289 D

Control Valve, Main (2 Spool)



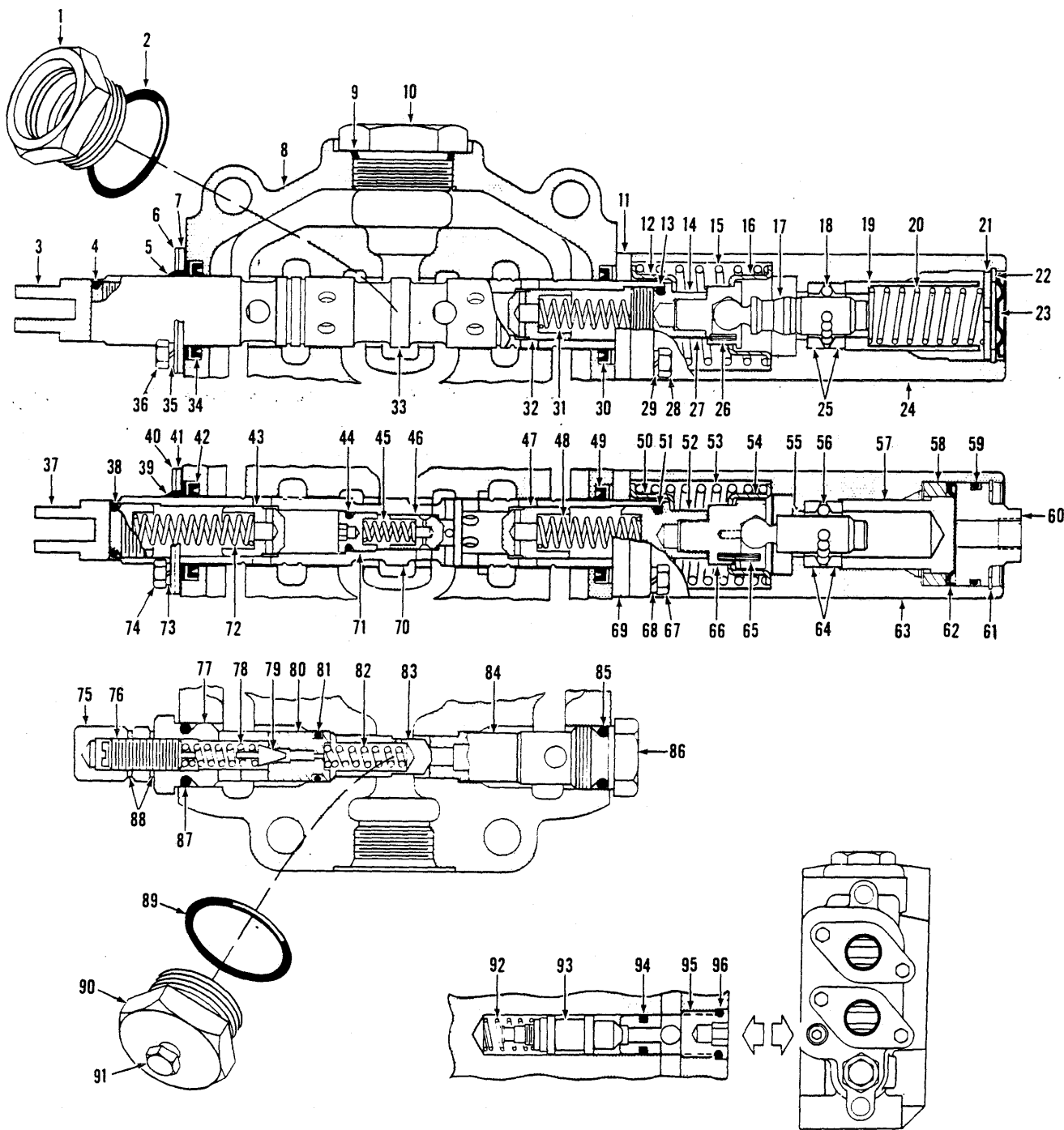
No.	Part No.	Qty.	Description
A	^{1,3} 1512157	1	Valve assy
1	946360	1	Plunger eye
2	25K-30022	1	O-ring
3	949305	1	Wiper
4	949303	1	Plate
5	949302	1	Plate
6	§ ² -----	—	Housing
7	91F-11	1	O-ring
8	24K-11	1	Cap
9	25K-40112	1	O-ring
10	948243	1	Bushing
11	949304	1	Seal
12	949300	1	Plate
13	25K-30022	1	O-ring
14	949278	1	Detent socket
15	944878	1	Retainer
16	945090	1	Spring
17	947843	1	Retainer
18	947843	1	Retainer
19	948954	1	Retainer
20	947852	1	Spring
21	947848	1	Plug
22	666542	1	Ring
23	948202	1	Diaphragm
24	948720	1	Housing
25	948730	11	Ball
26	948727	1	Sleeve
27	948723	1	Plunger
28	742306	1	Pin
29	948732	1	Cap
30	945092	1	Retainer
31	893293	1	Spring
32	944885	1	Check
33	§ ² -----	—	Plunger
34	949304	1	Seal
35	946360	1	Plunger eye
36	25K-30022	1	O-ring
37	949305	1	Wiper
38	949303	1	Plate
39	949302	1	Plate
40	893293	1	Spring
41	944885	1	Check
42	25K-30014	1	O-ring
43	946555	1	Cap
44	945590	1	Check
45	944885	1	Check
46	946544	1	Spring

No.	Part No.	Qty.	Description
47	949304	1	Seal
48	25K-30022	1	O-ring
49	945090	1	Spring
50	944878	1	Retainer
51	947843	2	Retainer
52	948725	1	Piston
53	948728	1	Spacer
54	948729	1	Ring
55	948724	1	Plug
56	25K-40114	1	O-ring
57	948731	1	Diaphragm
58	948721	1	Housing
59	948730	11	Ball
60	948727	1	Sleeve
61	948722	1	Plunger
62	300232	1	Pin
63	949279	1	Detent socket
64	948732	1	Cap
65	945092	1	Retainer
66	949300	1	Plate
67	§ ² -----	—	Plunger
68	946536	1	Spring
69	949304	1	Seal
70	49D-08	1	Nut
71	613750	2	Washer
72	980835	1	Cap
73	58K-210	1	O-ring
74	886753	1	Spring
75	886739	1	Poppet
76	980836	1	Seat
77	25K-30020	1	O-ring
78	947791	1	Spring
79	960965	1	Poppet
80	980840	1	Seat
81	58K-210	1	O-ring
82	980838	1	Cap
83	40K-04	1	Plug
84	946882	1	Cap
85	91F-10	1	O-ring
86	8D-08	1	Nut
87	980834	1	Screw
88	25K-20016	1	O-ring
89	947774	1	Seat
90	25K-20014	1	O-ring
91	948159	1	Poppet assy
92	886764	1	Spring

¹Incl. 1→92

²See A

³For replacement use 2510839



TS-14037

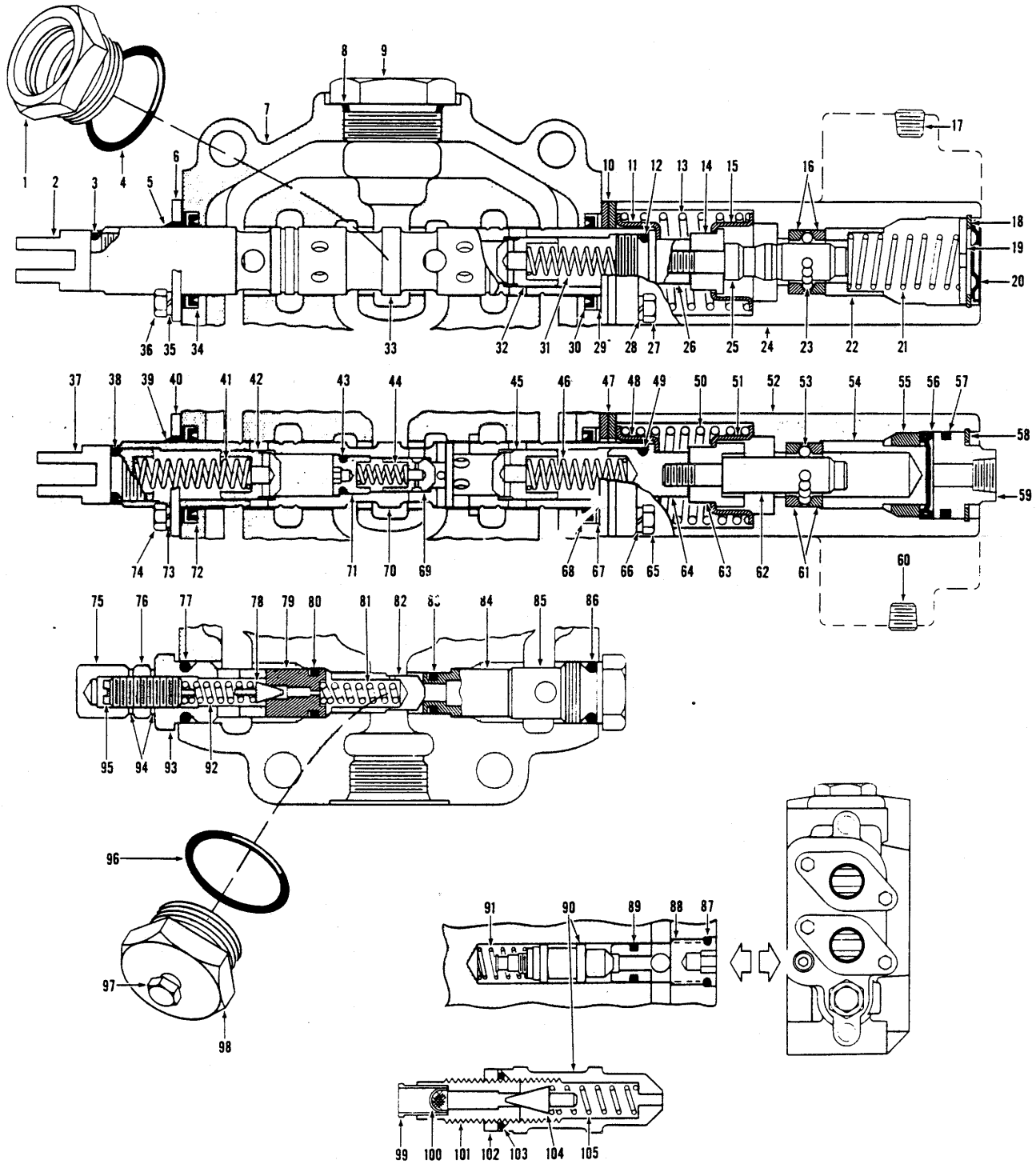
Control Valve, Main (2 Spool)



No.	Part No.	Qty.	Description
A	2510839	1	Valve assy
1	948243	1	Bushing
2	25K-40112	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	§²-----	—	Housing
9	91F-11	1	O-ring
10	24K-11	1	Cap
11	949300	1	Plate
12	945092	1	Retainer
13	25K-30022	1	O-ring
14	948732	1	Cap
15	945090	1	Spring
16	944878	1	Retainer
17	948723	1	Plunger
18	948730	11	Ball
19	948954	1	Retainer
20	947852	1	Spring
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
26A	†949278	1	Socket
27	³-----	—	Cap
28	11G-620	2	Bolt
29	4E-06	2	Lockwasher
30	949304	1	Seal
31	893293	1	Spring
32	944885	1	Check
33	§²-----	—	Plunger
34	949304	1	Seal
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	§²-----	—	O-ring
45	§²-----	—	Spring
46	§²-----	—	Check
47	960901	1	Check

No.	Part No.	Qty.	Description
48	960902	1	Spring
49	949304	1	Seal
50	945092	1	Retainer
51	25K-30022	1	O-ring
52	948732	1	Cap
53	945090	1	Spring
54	944878	1	Retainer
55	948722	1	Plunger
56	948730	11	Ball
57	948725	1	Piston
58	948728	1	Spacer
59	25K-40114	1	O-ring
60	948724	1	Plug
61	948729	1	Ring
62	948731	1	Diaphragm
63	948721	1	Housing
64	947843	2	Retainer
65	300232	1	Pin
66	949279	1	Socket
67	11G-620	2	Bolt
68	4E-06	2	Lockwasher
69	949300	1	Plate
70	§²-----	—	Plunger
71	§²-----	—	Cap
72	893293	1	Spring
73	4E-06	2	Lockwasher
74	1C-612	2	Bolt
75	49D-08	1	Nut
76	980834	1	Screw
77	980835	1	Cap
78	886753	1	Spring
79	886739	1	Poppet
80	980836	1	Seat
81	25K-30020	1	O-ring
82	947791	1	Spring
83	960965	1	Poppet
84	980840	1	Seat
85	58K-210	1	O-ring
86	980838	1	Cap
87	58K-210	1	O-ring
88	613750	2	Washer
89	91F-10	1	O-ring
90	946882	1	Cap
91	40K-04	1	Plug
92	886764	1	Spring
93	948159	1	Poppet assy
94	25K-20014	1	O-ring
95	947774	1	Seat
96	25K-20016	1	O-ring

¹Inc. 1→96
 ²See "A"
 ³See 14



CONTROL VALVE ASSEMBLY

TS-9375



CONSTRUCTION MACHINERY DIVISION



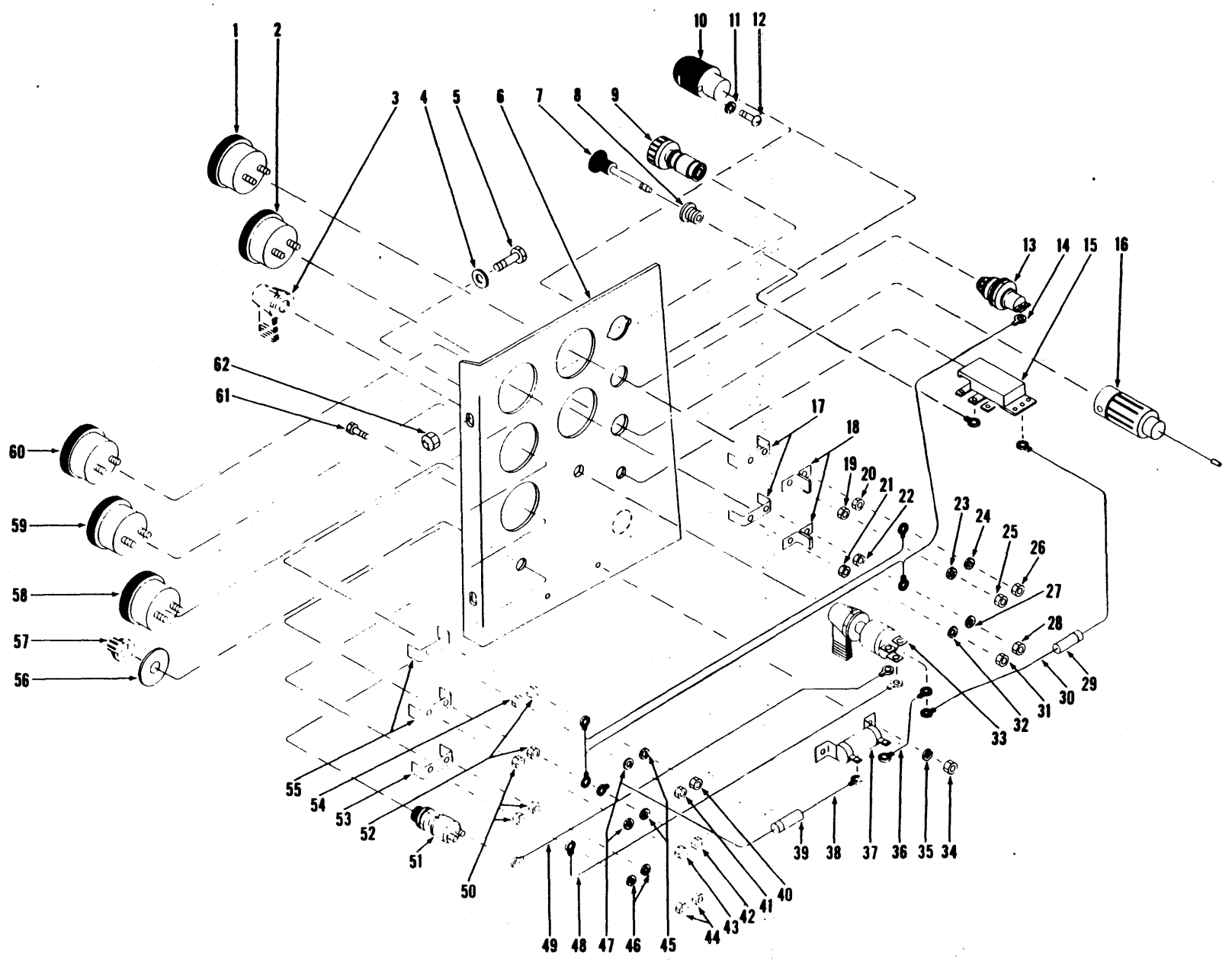
CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
71	946555	CAP	1	89	25K-20014	O-RING, Seat	1
72	946583	SEAL, Plunger Oil	1	90	-----	VALVE, Overload Relief (See Item "B")	—
73	4E-06	LKWSHR, Plate to Housing	2	91	886764	SPRING, Check	1
74	1C-610	BOLT, Plate to Housing	2	92	886753	SPRING, Relief Valve	1
75	49D-8	NUT, Acorn	1	93	980835	CAP, Relief Valve	1
76	8D-08	NUT, Jam	1	94	613750	WASHER, Jam Nut	2
77	58K-210	O-RING, Cap	1	95	980834	SCREW, Adjusting	1
78	886739	POPPET, Relief Valve	1	96	91F-10	O-RING, Cap	1
79	980836	SEAT, Poppet	1	97	40K-04	PLUG, Pipe	1
80	25K-30020	O-RING, Seat	1	98	-----	§CAP, Housing	—
81	947791	SPRING, Check	1	99	-----	§GUIDE, Spring (See Item "B")	—
82	960965	CHECK	1	100	-----	§SCREEN, Filter (See Item "B")	—
83	25K-30016	O-RING, Seat	1	101	-----	§SEAT, Poppet (See Item "B")	—
84	980840	SEAT, Relief Valve Check	1	102	-----	§NUT, Poppet (See Item "B")	—
85	980838	CAP, Housing	1	103	-----	§O-RING, Nut Poppet (See Item "B")	—
86	58K-210	O-RING, Cap	1	104	-----	§POPPET, Overload Relief (See Item "B")	—
87	25K-20016	O-RING, Plug	1	105	-----	§SPRING, Poppet Overload Relief (See Item "B")	—
88	947774	SEAT, Check	1				

§Not Sold Separately

NOTES

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



INSTRUMENT PANEL ASSEMBLY - G.M.
For Serial: 6DG101 thru 6DG136

TS-5236-P

[118]

(1E17)

PM 2952
Printed in U.S.A.

INSTRUMENT PANEL ASSEMBLY—G.M.

For Serial 6DG101 thru 6DG136

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	523372	GAUGE, Engine Oil Pressure	1	31	14D-10	NUT, Terminal to Gauge	1
2	517228	*GAUGE, Air Pressure	1	32	12E-10	LKWSHR, Terminal to Gauge	1
3	-----	OMIT	—	33	573548	SWITCH, Ignition (Key)	1
4	25E-18	WASHER, Instrument Panel Mounting	—	34	-----	OMIT — Not used on 12V System	—
5	18C-616	BOLT, Instrument Panel Mounting	2	35	-----	OMIT — Not used on 12V System	—
6	589992	PANEL, Instrument	1	36	-----	OMIT — Not used on 12V System	—
7	550742	ROD, Light Switch	1	37	-----	OMIT — Not used on 12V System	—
8	550743	BUSHING, Light Switch	1	38	573587	WIRE, Resistor to Temperature Gauge	1
9	944803	ELEMENT, Lighter	1	39	571021	FUSE — .75 Amp	1
10	574276	LAMP, Dash	1	40	12D-8	NUT, Terminal to Gauge	1
10A	427237	†BULB, Dash Lamp (12V)	1	41	14D-10	NUT, Terminal to Gauge	1
11	12E-6	LKWSHR, Dash Lamp Mounting	2	42	12D-8	NUT, Terminal to Gauge	1
12	18G-606	SCREW, Dash Lamp Mounting	2	43	14D-10	NUT, Terminal to Gauge	1
13	562141	LIGHT, Indicator	1	44	14D-10	NUT, Terminal to Gauge	2
13A	876574	†BULB, Indicator Light	1	45	12E-8	LKWSHR, Terminal to Gauge	2
14	558673	HARNESS, Instrument Wiring	1	46	12E-10	LKWSHR, Terminal to Gauge	2
15	2514253	**SWITCH, Light	1	47	12E-10	LKWSHR, Terminal to Gauge	2
16	549024	RECEPTACLE, Lighter (Inc. 16A) ...	1	48	553405	WIRE, Ignition Switch to Ammeter	1
16A	944804	†FUSE, Lighter	1	49	553405	WIRE, Ignition Switch to Starter Button	1
17	626530	CLAMP, Instrument Mounting	2	50	14D-10	NUT, Gauge to Panel Mounting	3
18	602350	SEPARATOR, Oil & Air Gauge	2	51	600259	BUTTON, Starter (Inc. 51A, 57)	1
19	14D-10	NUT, Gauge to Panel Mounting	1	51A	857420	†RUBBER BOOT, Starter Button	1
20	12D-8	NUT, Gauge to Panel Mounting	1	52	12D-8	NUT, Gauge to Panel Mounting	2
21	14D-10	NUT, Gauge to Panel Mounting	1	53	601212	CLAMP, Ammeter Mounting	1
22	12D-8	NUT, Gauge to Panel Mounting	1	54	14D-10	NUT, Gauge to Panel Mounting	1
23	12E-10	LKWSHR, Terminal to Gauge	1	55	626530	CLAMP, Instrument Mounting	2
24	12E-8	LKWSHR, Terminal to Gauge	1	56	547237	PLATE, Starter Button	1
25	14D-10	NUT, Terminal to Gauge	1	57	-----	§BUTTON, Push — See Item 51	—
26	12D-8	NUT, Terminal to Gauge	1	58	949286	AMMETER	1
27	12E-8	LKWSHR, Terminal to Gauge	1	59	551322	*GAUGE, Engine Temperature	1
28	12D-8	NUT, Terminal to Gauge	1	60	551321	GAUGE, Torque Converter Temp.	1
29	611074	FUSE — 20 Amp	1	61	-----	OMIT — Not used on 12V System	—
30	552946	WIRE, Ignition Switch to Light Switch (Inc. 29)	1	62	18D-06	NUT, Instrument Panel Mounting	2
				63	565430	†WIRE, Lighter to Indicator Light	1

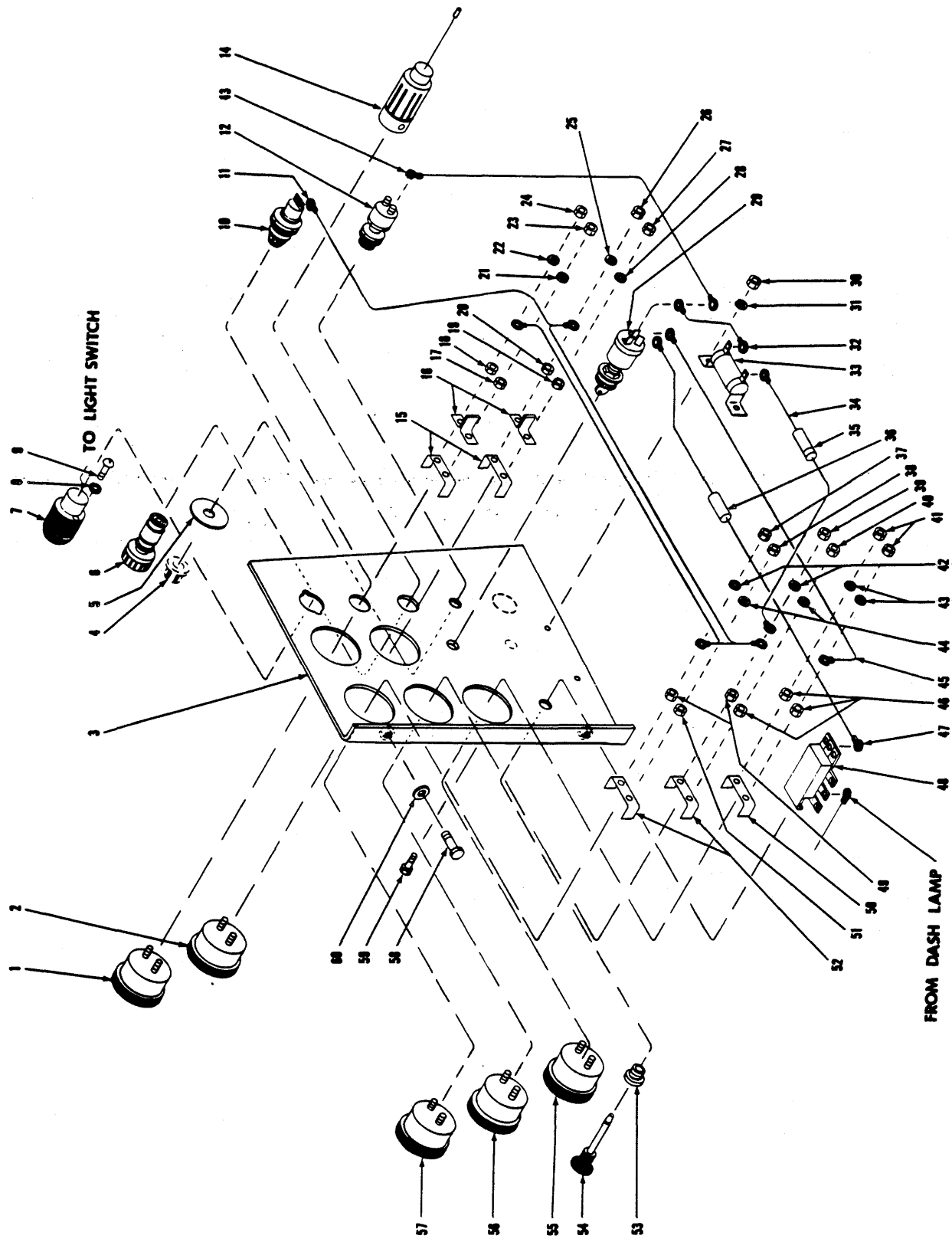
†Not Illustrated

§Not Sold Separately

*NOTE: For replacement refer to Service Gram S.G.-326B.

**NOTE: For replacement the mounting hole must be enlarged to .4688.

TS-6666-P



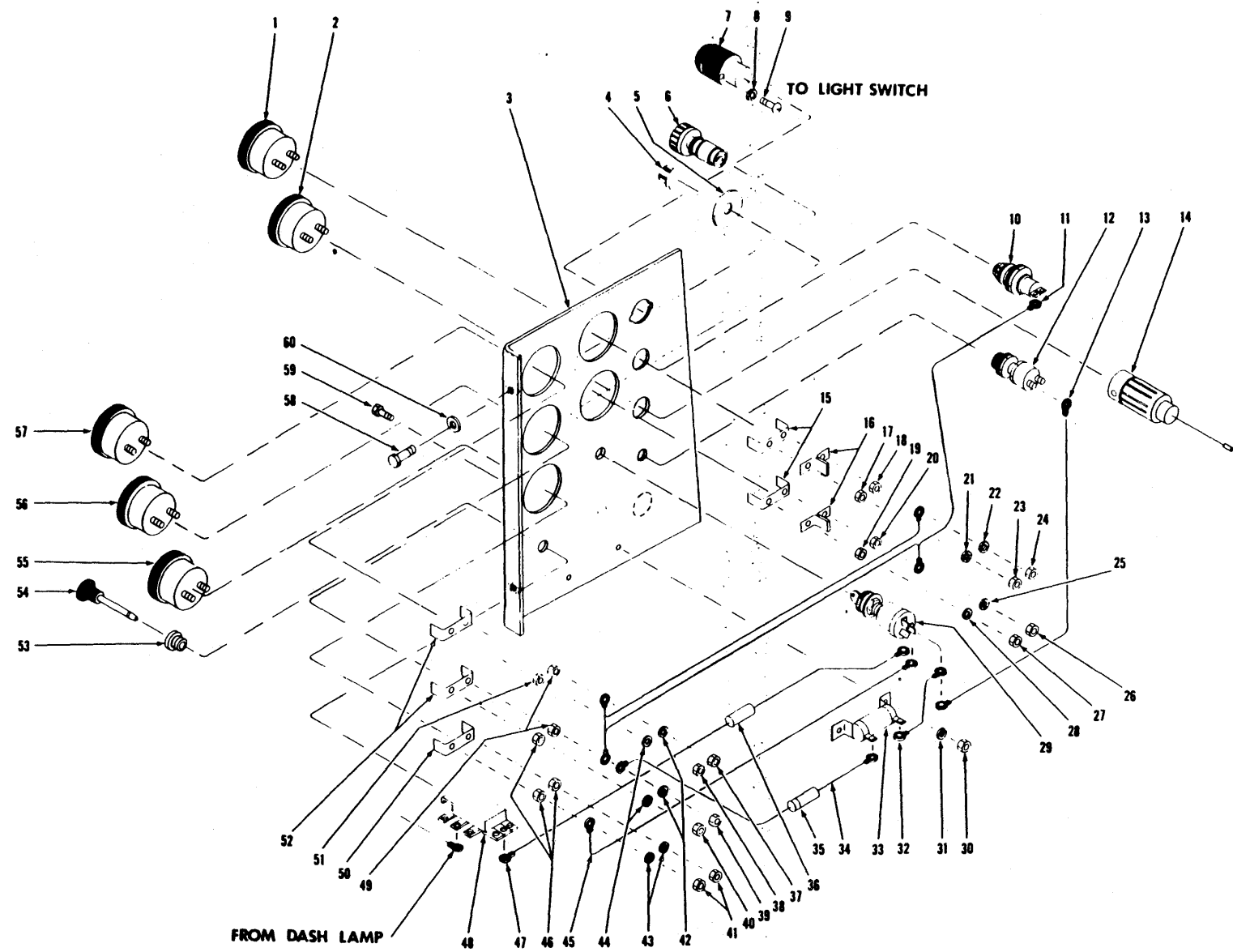
INSTRUMENT PANEL ASSEMBLY
For Serial: G.M. - 6DG137 thru 6DG999, Cummins - 5DC101 thru 5DC999.

INSTRUMENT PANEL ASSEMBLY
For Serial: Cummins — 5DC101 thru 5DC999
G.M. — 6DG137 thru 6DG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	523372	GAUGE, Engine Oil Pressure	1	31	-----	OMIT — Not used on 12V System	—
2	517228	*GAUGE, Air Pressure	1	32	-----	OMIT — Not used on 12V System	—
3	574117	PANEL, Instrument	1	33	-----	OMIT — Not used on 12V System	—
4	-----	§BUTTON, Push — See Item 12	—	34	573587	WIRE, Ignition Switch to Temperature Gauge	1
5	547237	PLATE, Starter Button	1	35	571021	FUSE — .75 Amp	1
6	944803	ELEMENT, Lighter	1	36	611074	FUSE — 20 Amp	1
7	574276	LAMP, Dash	1	37	12D-8	NUT, Terminal to Gauge	1
7A	427237	†BULB, Dash Lamp (12V)	1	38	14D-10	NUT, Terminal to Gauge	1
8	12E-6	LKWSHR, Dash Lamp Mounting	2	39	12D-8	NUT, Terminal to Gauge	1
9	18G-606	SCREW, Dash Lamp Mounting	2	40	14D-10	NUT, Terminal to Gauge	1
10	562141	LIGHT, Indicator	1	41	14D-10	NUT, Terminal to Gauge	2
10A	876574	†BULB, Indicator Light	1	42	12E-8	LKWSHR, Terminal to Gauge	2
11	558673	HARNESS, Instrument Wiring	1	43	12E-10	LKWSHR, Terminal to Gauge	2
12	600259	BUTTON, Starter (Inc. 4, 12A)	1	44	12E-10	LKWSHR, Terminal to Gauge	2
12A	857420	†RUBBER BOOT, Starter Button	1	45	553405	WIRE, Ignition Switch to Ammeter	1
13	553405	WIRE, Ignition Switch to Starter Button	1	46	14D-10	NUT, Gauge to Panel Mounting	3
14	549024	RECEPTACLE, Lighter (Inc. 14A)	1	47	552946	WIRE, Ignition Switch to Light Switch (Inc. 36)	1
14A	944804	+FUSE, Lighter	1	48	2514253 **	SWITCH, Light	1
15	626530	CLAMP, Instrument Mounting	2	49	12D-8	NUT, Gauge to Panel Mounting	2
16	602350	SEPARATOR, Oil & Air Gauges	2	50	601212	CLAMP, Ammeter Mounting	1
17	14D-10	NUT, Gauge to Panel Mounting	1	51	14D-10	NUT, Gauge to Panel Mounting	1
18	12D-8	NUT, Gauge to Panel Mounting	1	52	626530	CLAMP, Instrument Mounting	2
19	14D-10	NUT, Gauge to Panel Mounting	1	53	550743	BUSHING, Light Switch	1
20	12D-8	NUT, Gauge to Panel Mounting	1	54	550742	ROD, Light Switch	1
21	12E-10	LKWSHR, Terminal to Gauge	1	55	947259	AMMETER	1
22	12E-8	LKWSHR, Terminal to Gauge	1	56	551322	*GAUGE, Engine Temperature	1
23	14D-10	NUT, Terminal to Gauge	1	57	551321	GAUGE, Torque Conv. Temperature	1
24	12D-8	NUT, Terminal to Gauge	1	58	17C-616	BOLT, Instrument Panel Mounting	3
25	12E-8	LKWSHR, Terminal to Gauge	1	59	-----	OMIT — Not used on 12V System	—
26	12D-8	NUT, Terminal to Gauge	1	60	565280	WASHER, Instrument Panel Mounting	2
27	14D-10	NUT, Terminal to Gauge	1	60A	4E-06	†LKWSHR, instrument Panel Mounting	3
28	12E-10	LKWSHR, Terminal to Gauge	1	60B	572729	†CAGED NUT, Instrument Panel Mounting	1
29	573548	SWITCH, Ignition	1				
30	-----	OMIT — Not used on 12V System	—				

§Not Sold Separately
†Not Illustrated

*NOTE: For replacement refer to Service Gram S.G.-326B.
**NOTE: For replacement the mounting hole must be enlarged to .4688.



INSTRUMENT PANEL ASSEMBLY

For Serial: 6DC101 thru 6DC124, 7DG101 thru 7DG120

TS-6666-P

[122]

(1E21)

PM 2952
Printed in U.S.A.

INSTRUMENT PANEL ASSEMBLY

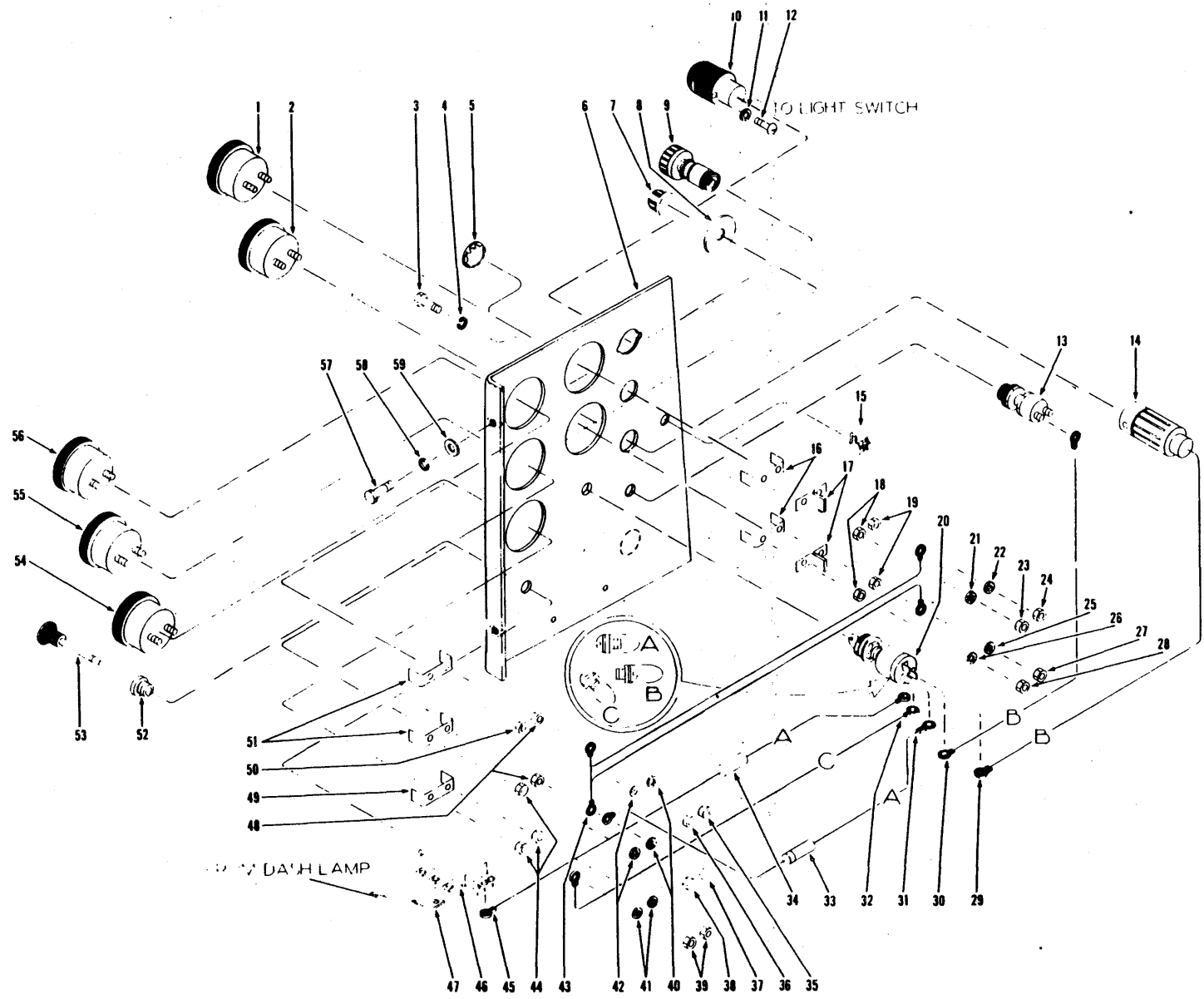
For Serial 6DC101 thru 6DC124, 7DG101 thru 7DG120

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	551319	GAUGE, Engine Oil Pressure	1	31	-----	OMIT - Not used on 12V System	-
2	517228	*GAUGE, Air Pressure	1	32	-----	OMIT - Not used on 12V System	-
3	574117	PANEL, Instrument	1	33	-----	OMIT - Not used on 12V System	-
4	-----	§BUTTON, Push - See Item 12	-	34	573587	WIRE, Ignition Switch to Temperature Gauge	1
5	547237	PLATE, Starter Button	1	35	571021	FUSE - ¼ Amp	1
6	944803	ELEMENT, Lighter	1	36	611074	FUSE - 20 Amp	1
7	574276	LAMP, Dash	1	37	12D-8	NUT, Terminal to Gauge	1
7A	427237	†BULB, Dash Lamp (12V)	1	38	14D-10	NUT, Terminal to Gauge	1
8	12E-6	LKWSHR, Dash Lamp Mounting	2	39	12D-8	NUT, Terminal to Gauge	1
9	18G-606	SCREW, Dash Lamp Mounting	2	40	14D-10	NUT, Terminal to Gauge	1
10	562141	LIGHT, Indicator	1	41	14D-10	NUT, Terminal to Gauge	2
10A	427237	†BULB, Indicator Light	1	42	12E-8	LKWSHR, Terminal to Gauge	2
11	558673	HARNESS, Instrument Wiring	1	43	12E-10	LKWSHR, Terminal to Gauge	2
12	600259	BUTTON, Starter (Inc. 4, 12A)	1	44	12E-10	LKWSHR, Terminal to Gauge	2
12A	857420	†RUBBER BOOT, Starter Button	1	45	553405	WIRE, Ignition Switch to Ammeter	1
13	553405	WIRE, Ignition. Switch to Starter Button	1	46	14D-10	NUT, Gauge to Panel Mounting	3
14	549024	RECEPTACLE, Lighter (Inc. 14A)	1	47	552946	WIRE, Ignition Switch to Light Switch (Inc. 36)	1
14A	944804	†FUSE, Lighter	1	48	2514253	**SWITCH, Light	1
15	601212	CLAMP, Instrument Mounting	2	49	12D-8	NUT, Gauge to Panel Mounting	2
16	602350	SEPARATOR, Oil & Air Gauges	2	50	601212	CLAMP, Ammeter Mounting	1
17	14D-10	NUT, Gauge to Panel Mounting	1	51	14D-10	NUT, Gauge to Panel Mounting	1
18	12D-8	NUT, Gauge to Panel Mounting	1	52	601212	CLAMP, Instrument Mounting	2
19	14D-10	NUT, Gauge to Panel Mounting	1	53	550743	BUSHING, Light Switch	1
20	12D-8	NUT, Gauge to Panel Mounting	1	54	550742	ROD, Light Switch	1
21	12E-10	LKWSHR, Terminal to Gauge	1	55	947259	AMMETER	1
22	12E-8	LKWSHR, Terminal to Gauge	1	56	551322	*GAUGE, Engine Temperature	1
23	14D-10	NUT, Terminal to Gauge	1	57	551321	GAUGE, Torque Conv. Temperature	1
24	12D-8	NUT, Terminal to Gauge	1	58	17C-616	BOLT, Instrument Panel Mounting	3
25	12E-8	LKWSHR, Terminal to Gauge	1	59	-----	OMIT - Not used on 12V System	-
26	12D-8	NUT, Terminal to Gauge	1	60	565280	WASHER, Instrument Panel Mounting	2
27	14D-10	NUT, Terminal to Gauge	1	60A	4E-06	†LKWSHR, Instrument Panel Mounting	3
28	12E-10	LKWSHR, Terminal to Gauge	1	60B	572729	†CAGED NUT, Instrument Panel Mounting	1
29	573548	SWITCH, Ignition	1				
30	-----	OMIT - Not used on 12V System	-				

§Not Sold Separately
†Not Illustrated

*NOTE: For replacement refer to Service Gram S.G.-326B.
**NOTE: For replacement the mounting hole must be enlarged to .4688.

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



INSTRUMENT PANEL ASSEMBLY
For Serial: 6DC125 and thereafter, 7DG121 and thereafter

TS-7829-P

[124]

(1E23)

PM 2952
Printed in U.S.A.



INSTRUMENT PANEL ASSEMBLY

For Serial 6DC125 and thereafter, 7DG121 and thereafter

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	551319	GAUGE, Engine Oil Pressure	1	30	553405	WIRE, Switch to Starter Button	1
2	517228	*GAUGE, Air Pressure	1	31	573587	WIRE, Switch to Harness (Inc. 33)	1
3	17C-616	BOLT, Instrument Panel Mounting	1	32	553405	WIRE, Switch to Ammeter	1
4	4E-06	LKWSHR, Instrument Panel Mounting	1	33	571021	FUSE - 3/4 Amp.	1
5	742710	PLUG, Instrument Panel	1	34	611074	FUSE - 20 Amp.	1
6	574117	PANEL, Instrument	1	35	12D-8	NUT, Terminal to Gauge	1
7	-----	§BUTTON, Starter Push - See 13	-	36	14D-10	NUT, Terminal to Gauge	1
8	547237	PLATE, Starter Button	1	37	12D-8	NUT, Terminal to Gauge	1
9	944803	ELEMENT, Lighter	1	38	14D-10	NUT, Terminal to Gauge	1
10	574276	LAMP, Dash	1	39	14D-10	NUT, Terminal to Gauge	2
10A	427237	†BULB, Dash Lamp (12V)	1	40	12E-8	LKWSHR, Terminal to Gauge	2
11	12E-6	LKWSHR, Dash Lamp Mounting	2	41	12E-10	LKWSHR, Terminal to Gauge	2
12	18G-606	SCREW, Dash Lamp Mounting	2	42	12E-10	LKWSHR, Terminal to Gauge	2
13	600259	BUTTON, Starter (Inc. 7, 13A)	1	43	558673	HARNES, Instrument Wiring	1
13A	857420	†BOOT, Starter Button	1	44	14D-10	NUT, Gauge to Panel Mounting	3
14	549024	RECEPTACLE, Lighter (Inc. 14A)	1	45	552946	WIRE, Switch to Light Switch (Inc. 34)	1
14A	944804	†FUSE, Lighter - 20 Amp	1	46	2514253	**SWITCH, Light	1
15	572729	CAGED NUT, Panel Retaining	1	47	574275	TAB., Dash Lamp Wire to Light Switch	1
16	601212	CLAMP, Instrument Mounting	2	48	12D-8	NUT, Gauge to Panel Mounting	2
17	602350	SEPARATOR, Oil & Air Gauges	2	49	601212	CLAMP, Instrument Mounting	1
18	14D-10	NUT, Gauge to Panel Mounting	2	50	14D-10	NUT, Gauge to Panel Mounting	1
19	12D-8	NUT, Gauge to Panel Mounting	2	51	601212	CLAMP, Instrument Mounting	2
20	573548	SWITCH, Ignition	1	52	550743	BUSHING, Light Switch	1
21	12E-10	LKWSHR, Terminal to Gauge	1	53	550742	ROD, Light Switch	1
22	12E-8	LKWSHR, Terminal to Gauge	1	54	947259	AMMETER	1
23	14D-10	NUT, Terminal to Gauge	1	55	551322	*GAUGE, Engine Temperature	1
24	12D-8	NUT, Terminal to Gauge	1	56	551321	GAUGE, Torque Converter Temperature	1
25	12E-8	LKWSHR, Terminal to Gauge	1	57	17C-616	BOLT, Instrument Panel Mounting	2
26	12E-10	LKWSHR, Terminal to Gauge	1	58	4E-06	LKWSHR, Instrument Panel Mounting	2
27	12D-8	NUT, Terminal to Gauge	1	59	565280	WASHER, Instrument Panel Mounting	2
28	14D-10	NUT, Terminal to Gauge	1				
29	565430	WIRE, Switch to Lighter	1				

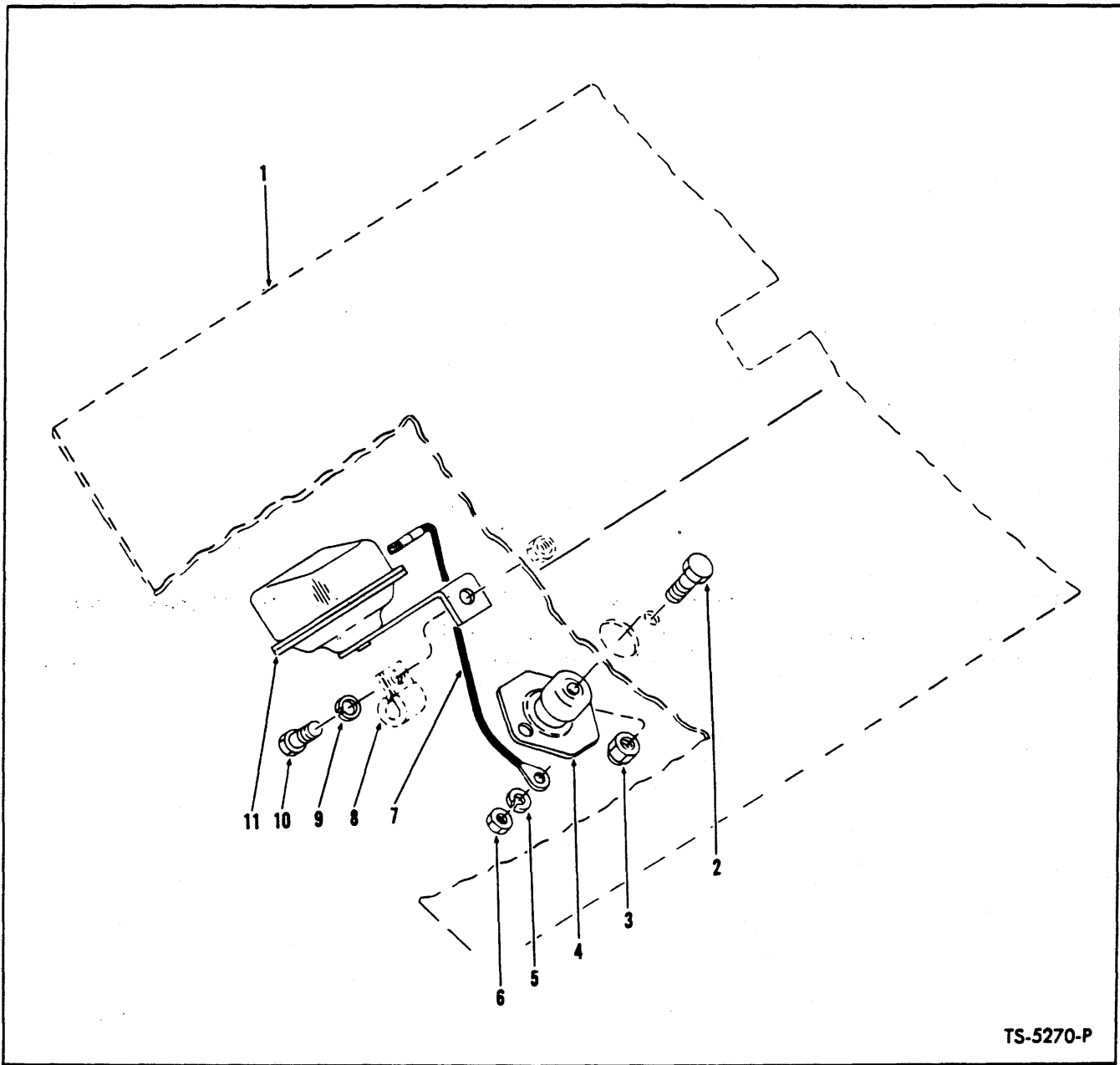
†Not Illustrated

*NOTE: For replacement refer to Service Gram S.G.-326B.

§Not Sold Separately

**NOTE: For replacement the mounting hole must be enlarged to .4688.

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

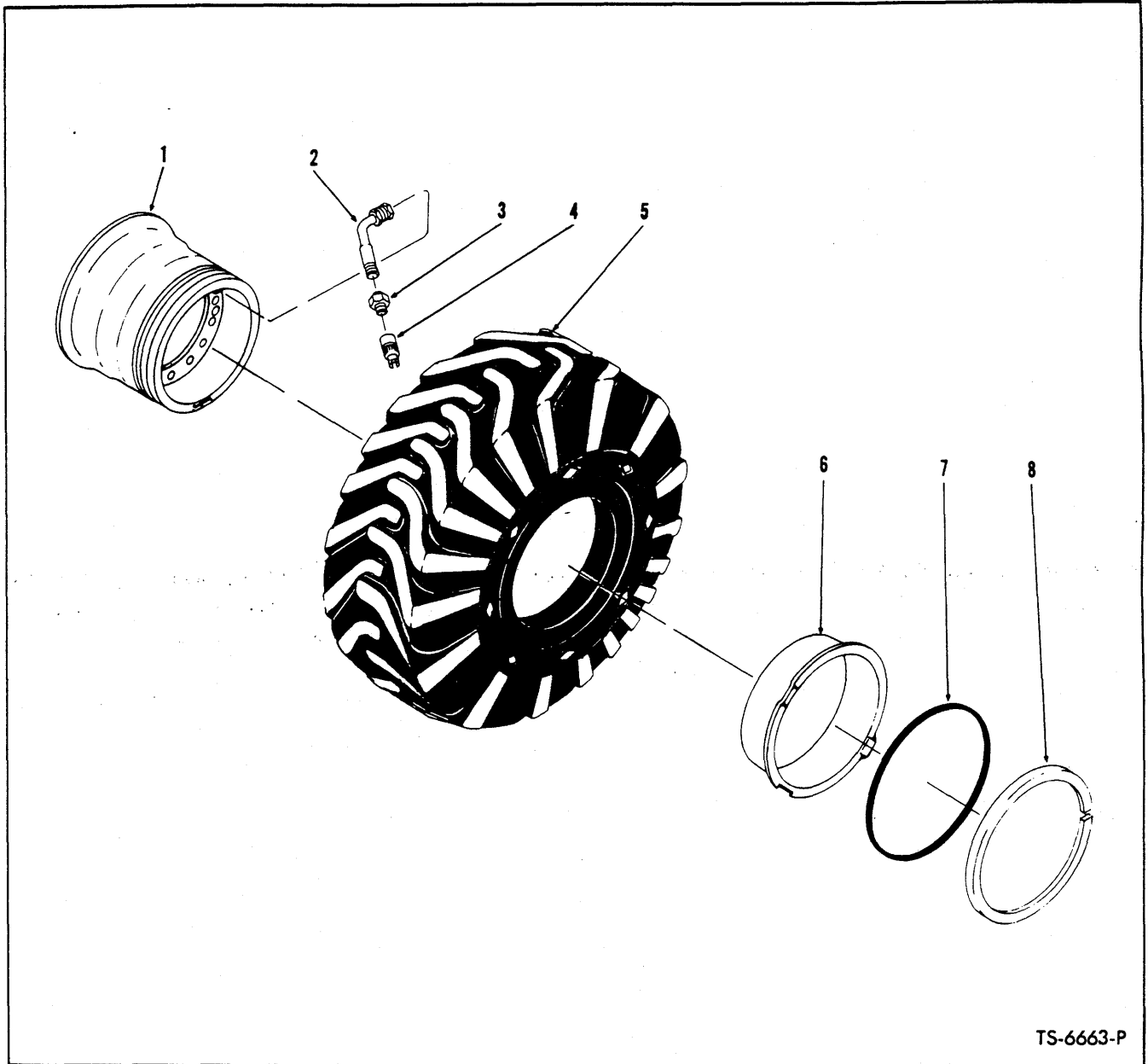


TS-5270-P

HORN AND FOOT SWITCH

Item No.	Part No.	Description	No. Req'd.
1	—	COCKPIT — See Index	—
2	18C-412	BOLT, Foot Switch to Cockpit	2
3	18D-04	NUT, Foot Switch to Cockpit	2
4	778570	SWITCH, Foot	1
5	4E-05	LKWSHR, Terminal Mounting	2
6	8D-05	NUT, Terminal Mounting	2
7	558957	WIRE, Foot Switch to Horn	1
8	—	CLIP — See Clip Chart	—
9	4E-04	LKWSHR, Horn Mounting	1
10	17C-412	BOLT, Horn Mounting	1
11	885083	HORN KIT	1

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



TS-6663-P

WHEEL AND TIRE DATA

Item No.	Sure Grip Grader 14.0 x 24 12 PR	Rock Grader 14.0 x 24 12 PR	Sure Grip Grader 16.0 x 24 12 PR	Loader 17.5 x 25 12 PR	Sure Grip Lug 20.5 x 25 12 PR	Description	No. Req'd.
1	532253	532253	532253	545957	1520271	WHEEL	4
2	517963	517963	517963	509445	509445	STEM, Valve (Inc. 3, 4)	4
3	551684	551684	551684	551684	551684	ADAPTER, Valve Stem	4
4	551685	551685	551685	551685	551685	CAP, Valve	4
5	-----	-----	-----	-----	-----	§TIRE	4
6	941326	941326	941326	112461	424964	FLANGE (See Note "A")	4
7	941329	941329	941329	112462	580278	"O" RING	4
8	941325	941325	941325	112460	580274	LOCK RING	4
9	-----	-----	-----	-----	553956	†BAND, Bead Seat	4

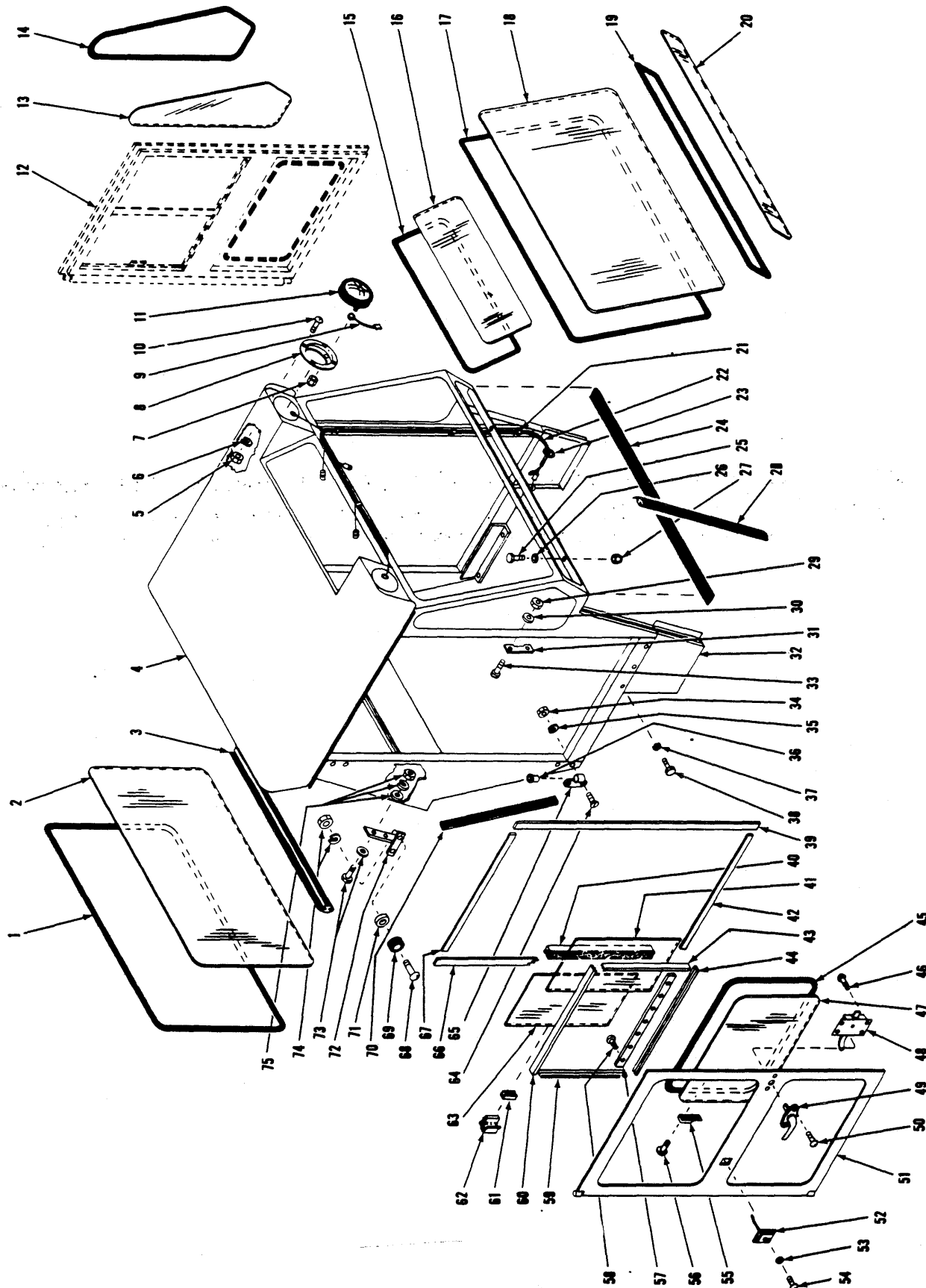
§Not Sold Separately

†Not Illustrated

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

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

TS-6681-P



CAB ASSEMBLY

CAB ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	568652	CAB ASSY (Inc. 1 thru 6, 8, 10, 12 thru 20, 24, 28 thru 75)	1	39	943623	WEATHERSTRIP, Door Front	8 ft.
1	569694	MOULDING, Rear Window	11 ft.	40	139149	CHANNEL, Glass Divider	2 ft.
2	-----	§GLASS PATTERN, Rear Window — See Item 76	—	41	-----	§GLASS PATTERN, Sliding Door — See Item 76	—
3	1521846	WEATHERSTRIP, Cab — Rear	5 ft.	42	943623	WEATHERSTRIP, Door — Bottom	6 ft.
4	-----	§CAB — See Item "A"	—	43	569696	CHANNEL, Side Glass Track	4 ft.
5	12D-10	NUT, Head Lamp Adapter Attaching	8	44	569696	CHANNEL, Bottom Glass Track	4 ft.
6	17E-10	LKWSHR, Head Lamp Adapter Attaching	8	45	569694	MOULDING, Lower Door Glass	12 ft.
7	50D-10	NUT, Head Lamp Attaching	6	46	66G-1008	SCREW, Lock to Door Attaching	8
8	568675	ADAPTER, Head Lamp Panel	2	47	-----	§GLASS PATTERN, Lower Door — See Item 76	—
9	540882	WIRE, Head Lamp Ground	2	48	942874	LOCK, Door — R.H.	1
10	3G-1012	SCREW, Head Lamp Adapter Attaching	8	48A	138249	†LOCK Door — L.H.	1
11	547006	HEAD LAMP ASSY — 12V (Inc. 11A, 11B)	2	49	1525710	HANDLE, Door	2
11A	551242	†SEALED UNIT, Head Lamp — 12V	2	50	32G-1008	SCREW, Handle to Door Attaching	4
11B	944977	†RETAINER, Head Lamp	2	51	568669	DOOR — R.H.	1
12	-----	DOOR — See Item 51A	—	51A	568670	†DOOR — L.H.	1
13	-----	§GLASS PATTERN, Quarter Window — See Item 76	—	52	560650	CATCH, Door	2
14	569694	MOULDING, Quarter Window	5 ft.	53	17E-10	LKWSHR, Door Catch Attaching	8
15	569694	MOULDING, Roof	6 ft.	54	79G-1010	SCREW, Door Catch Attaching	8
16	-----	§GLASS PATTERN, Roof — See Item 76	—	55	557465	STRIKE, Window Lock	4
17	569694	MOULDING, Upper Windshield	12 ft.	56	5G-606	SCREW & LKWSHR ASSY, Window Lock Attaching	8
18	-----	§GLASS PATTERN, Upper Windshield — See Item 76	—	57	945577	RETAINER, Door Channel	2
19	569694	MOULDING, Lower Windshield	10 ft.	58	63G-1008	SCREW, Channel Retainer to Door	14
20	-----	§GLASS PATTERN, Lower Windshield — See Item 76	—	59	569696	CHANNEL, Side Glass Track	4 ft.
21	541988	CLIP, Wiring Harness	4	60	569696	CHANNEL, Top Glass Track	4 ft.
22	1544318	WIRING HARNESS, Cab	1	61	589572	RUBBER, Lock to Glass Mounting	1 ft.
23	515069	GROMMET, Cab Wiring Harness	1	62	589571	LOCK, Sliding Glass	4
24	1521844	WEATHERSTRIP, Cab to Cockpit	4 ft.	63	-----	§GLASS PATTERN, Sliding Door — See Item 76	—
25	18C-628	BOLT, Cab Attaching — Front Mount	2	64	76G-512	SCREW, Hinge Attaching	8
25A	18C-624	†BOLT, Cab Attaching — Side Mount	4	65	945554	HINGE, Door — R.H. Lower & L.H. Upper	2
26	616783	WASHER, Cab Attaching	6	65A	945555	HINGE, Door — R.H. Upper & L.H. Lower	2
27	18D-06	NUT, Cab Attaching	6	66	943623	WEATHERSTRIP, Door — Rear	8 ft.
28	569692	WEATHERSTRIP, Cab — Front	6 ft.	67	943623	WEATHERSTRIP, Door — Top	6 ft.
29	1D-04	NUT, Door Lock Strike Attaching	4	68	3G-1016	SCREW, Bumper to Latch Strike	2
30	4E-04	LKWSHR, Door Lock Strike Attaching	4	69	560651	BUMPER, Rubber	2
31	945576	STRIKE, Door Lock	2	70	943623	WEATHERSTRIP, Cab Seal Rear	2 ft.
32	568686	PANEL, Lower Quarter — R.H.	1	71	874767	SPACER, Bumper to Latch	2
32A	568687	PANEL, Lower Quarter — L.H.	1	72	574992	STRIKE, Door Latch	2
33	47G-412	BOLT, Door Lock Strike Attaching	4	73	17C-416	BOLT, Door Latch Strike Attaching	2
34	1D-05	NUT, Cab Door Hinge Attaching	8	73A	25E-13	WASHER, Door Latch Strike Attaching	2
35	4E-05	LKWSHR, Cab Door Hinge Attaching	8	74	12D-10	NUT, Bumper to Latch Strike	2
36	568700	BUSHING, Cab Door Hinge	4	74A	17E-10	LKWSHR, Bumper to Latch Strike	2
37	4E-04	LKWSHR, Lower Quarter Panel Attaching	6	75	25E-13	WASHER, Door Latch Strike Attaching	2
38	17C-410	BOLT, Lower Quarter Panel Attaching	6	75A	4E-04	LKWSHR, Door Latch Strike Attaching	2
				75B	1D-04	NUT, Door Latch Strike Attaching	2
				76	945903	†GLASS PATTERN KIT (Inc. 2, 13, 16, 18, 20, 41, 47, 63)	1

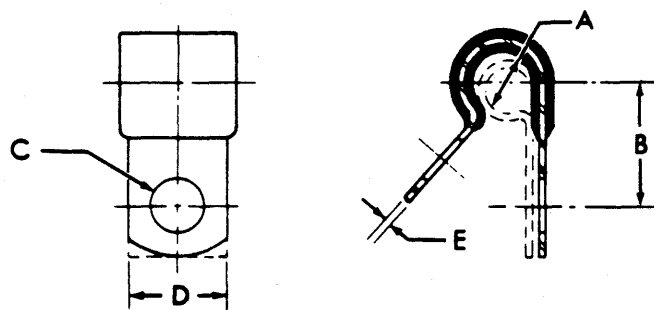
§Not Sold Separately
†Not Illustrated

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.

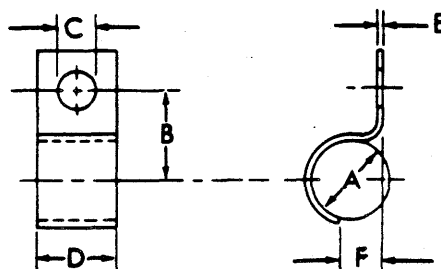
INSULATED CLIP



TS-5008-P

Item No.	PART NUMBER	A	B	C	D	E	F
1	30H-14	1/4	1 1/2	1/2	1/2	.036	
2	30H-16	1/4	2 1/2	1 3/2	3/4	.032	
3	30H-20	5/16	1 1/16	1 3/2	3/4	.036	
4	30H-31	1/2	2 3/2	1 3/2	3/4	.050	
5	30H-36	5/16	7/8	1 3/2	7/8	.048	
6	30H-38	5/8	2 3/2	1 3/2	3/4	.050	
7	30H-40	5/8	3 1/2	1 3/2	1	.050	
8	30H-46	1 3/16	1 5/16	1 3/2	3/4	.050	
9	30H-48	1 3/16	1 1/16	1 3/2	1	.048	
10	30H-50	1 5/16	1	1 3/2	3/4	.050	
11	30H-52	1 5/16	1 1/8	1 3/2	1	.050	
12	538234	7/16	1 5/16	1 3/2	1	.049	
13	574261	1 3/16	2	1 3/2	7/8	.062	

OPEN CLIP



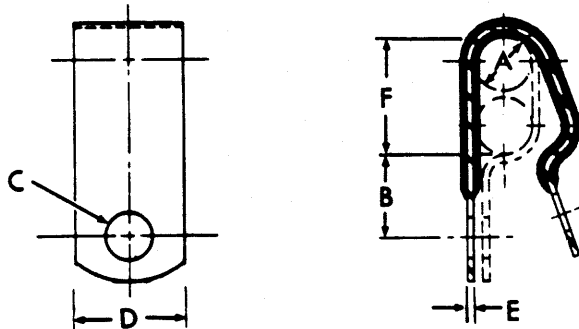
TS-5011-P

Item No.	PART NUMBER	A	B	C	D	E	F
14	533482	2 3/4	2 3/8	5/16	1 1/4	5/16	1 3/4

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.

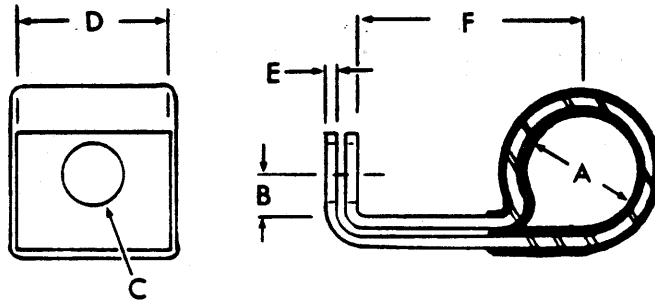
INSULATED DOUBLE CLIP



TS-6372-P

Item No.	PART NUMBER	A	B	C	D	E	F
1	31H-36	$\frac{5}{8}$	$2\frac{1}{2}$	$1\frac{1}{2}$	1	.050	$1\frac{1}{4}$

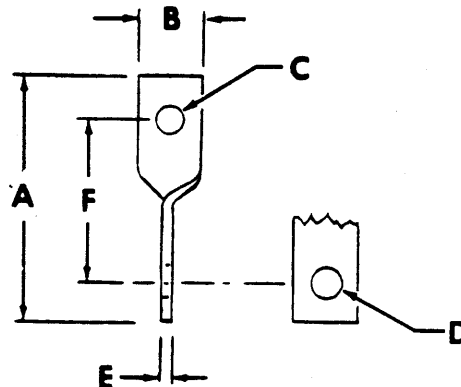
INSULATED CLIP



TS-6373-P

Item No.	PART NUMBER	A	B	C	D	E	F
2	541988	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{7}{16}$	1	.050	$1\frac{1}{8}$

BRACKET CLIP



TS-6758-P

Item No.	PART NUMBER	A	B	C	D	E	F
3	574270	$4\frac{1}{2}$	$\frac{3}{4}$	$\frac{5}{16}$	$\frac{7}{16}$.1046	$3\frac{1}{2}$



WINDSHIELD WIPER - FRONT (OPTIONAL)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
41	568969	*WIPER MOTOR (12V)	1	47	546535	BRACKET, Mounting	1
42	31G-428	SCREW, Mounting	3	48	30H-18	CLIP, Wire Mounting	1
43	8E-04	LKWSHR, Mounting	3	49	784870	WIRE, Harness to Switch	1
44	568967	WIPER ARM (15" long)	1	50	18C-412	BOLT, Mounting	2
45	568968	WIPER BLADE (17" long)	1	51	25E-14	WASHER, Mounting	2
46	891308	SWITCH & KNOB ASSY	1	52	18D-04	NUT, Mounting	2

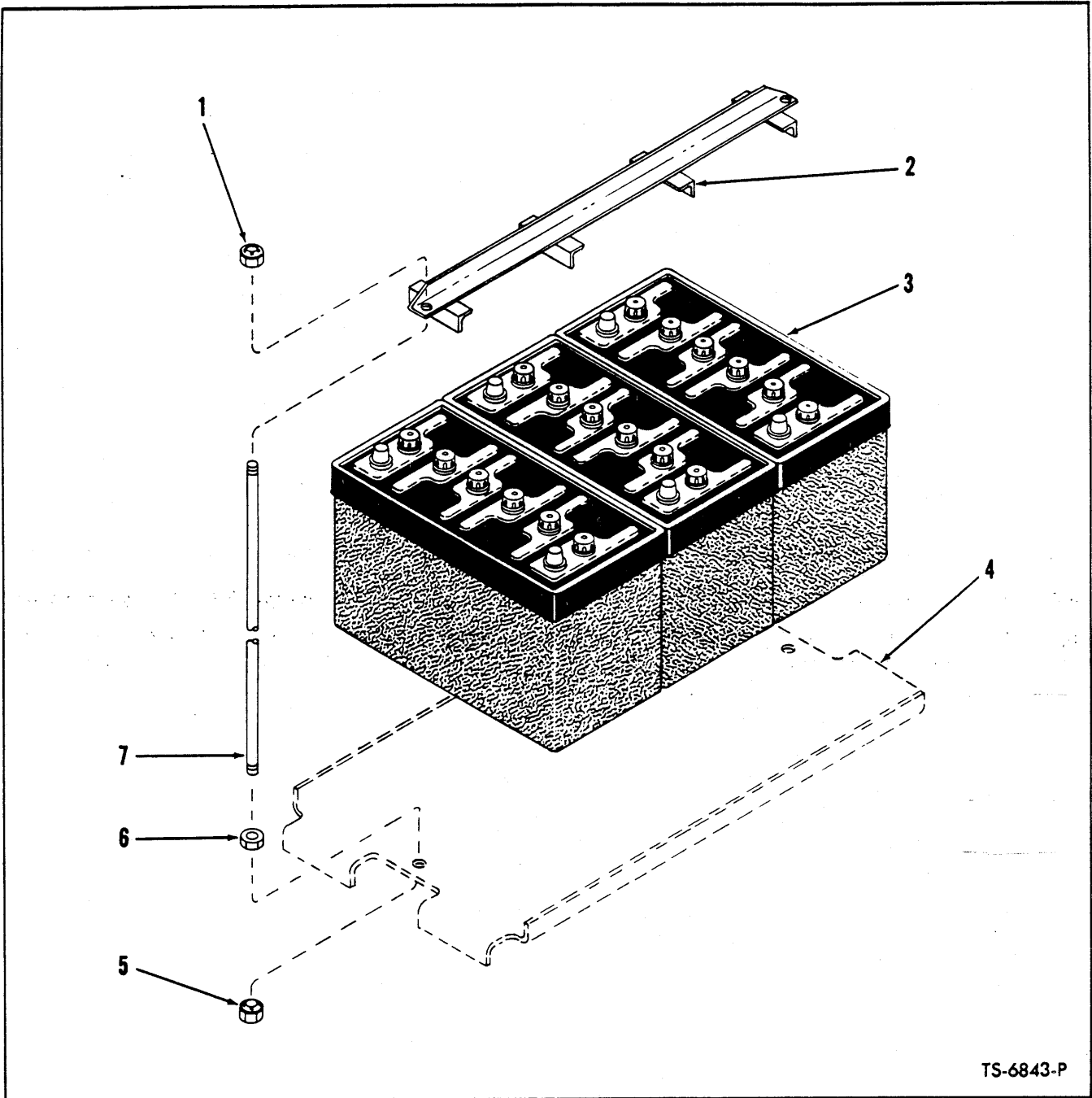
WINDSHIELD WIPER - REAR (OPTIONAL)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
53	568969	*WIPER MOTOR (12V)	1	60	560517	WIPER ARM (14" Long)	1
54	574730	BRACKET, Wiper Motor	1	61	568968	WIPER BLADE (17" Long)	1
55	574729	LINK, Wiper Motor	1	62	891308	SWITCH & KNOB ASSY	1
56	18C-412	BOLT, Mounting	5	63	546535	BRACKET, Switch Mounting	1
57	18D-04	NUT, Mounting	5	64	672313	WIRE, Harness to Switch	1
58	41G-1010	SCREW, Mounting	2	65	30H-14	CLIP, Wire Mounting	2
59	50D-10	NUT, Mounting	2	66	655629	WASHER, Mounting	1

*NOTE: For replacement use 1-960096 Motor plus 1-2501082 Switch & 1-733611 Terminal.

NOTES

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



TS-6843-P

BATTERY AND BATTERY HOLD DOWN

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18D-05	NUT, Hold Down to Stud	2	3B	1671369	For G.M. Powered Machines	1
2		<i>HOLD DOWN, Battery</i>		4	----	BATTERY BOX—(Welded to Frame)	—
2A	563526	For Cummins Powered Machines	1	5	18D-05	NUT, Stud to Battery Box	2
2B	572394	For G.M. Powered Machines	1	6	8D-05	NUT, Stud Jam	2
3		<i>BATTERY</i>		7	536582	STUD, Battery Hold Down	2
3A	1800613	For Cummins Powered Machines	3				

†Not Illustrated

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



WIRING AND CABLES

Item No.	Part No.	Description	No. Req'd.
1	558952	HARNESS, Cockpit	1
2		HARNESS, Engine	
2A	563490	FOR CUMMINS POWERED MACHINES	1
2B	558674	FOR G.M. POWERED MACHINES	1
3	562010	HARNESS, Floodlight	1
4	562008	HARNESS, Tail Light	1
5	1526729	HARNESS, Neutral Start Switch — (For Serial: 6DC116 and thereafter, 7DG121 and thereafter)	1
6	558960	WIRE, Hourmeter Ground	1
7	564384	WIRE, Battery to Horn	
8		CABLE, Battery Ground	
8A	563674	FOR CUMMINS POWERED MACHINES	1
8B	675739	FOR G.M. POWERED MACHINES	1
9		CABLE, Battery to Solenoid	
9A	563673	FOR CUMMINS POWERED MACHINES	1
9B	566502	FOR G.M. POWERED MACHINES	1
10	562015	CABLE, Starter Ground — For Cummins Powered Machines only	1
11	18C-824	BOLT, Ground Cable to Frame — For Cummins Powered Machines only	1
12	18D-08	NUT, Ground Cable to Frame — For Cummins Powered Machines only	1

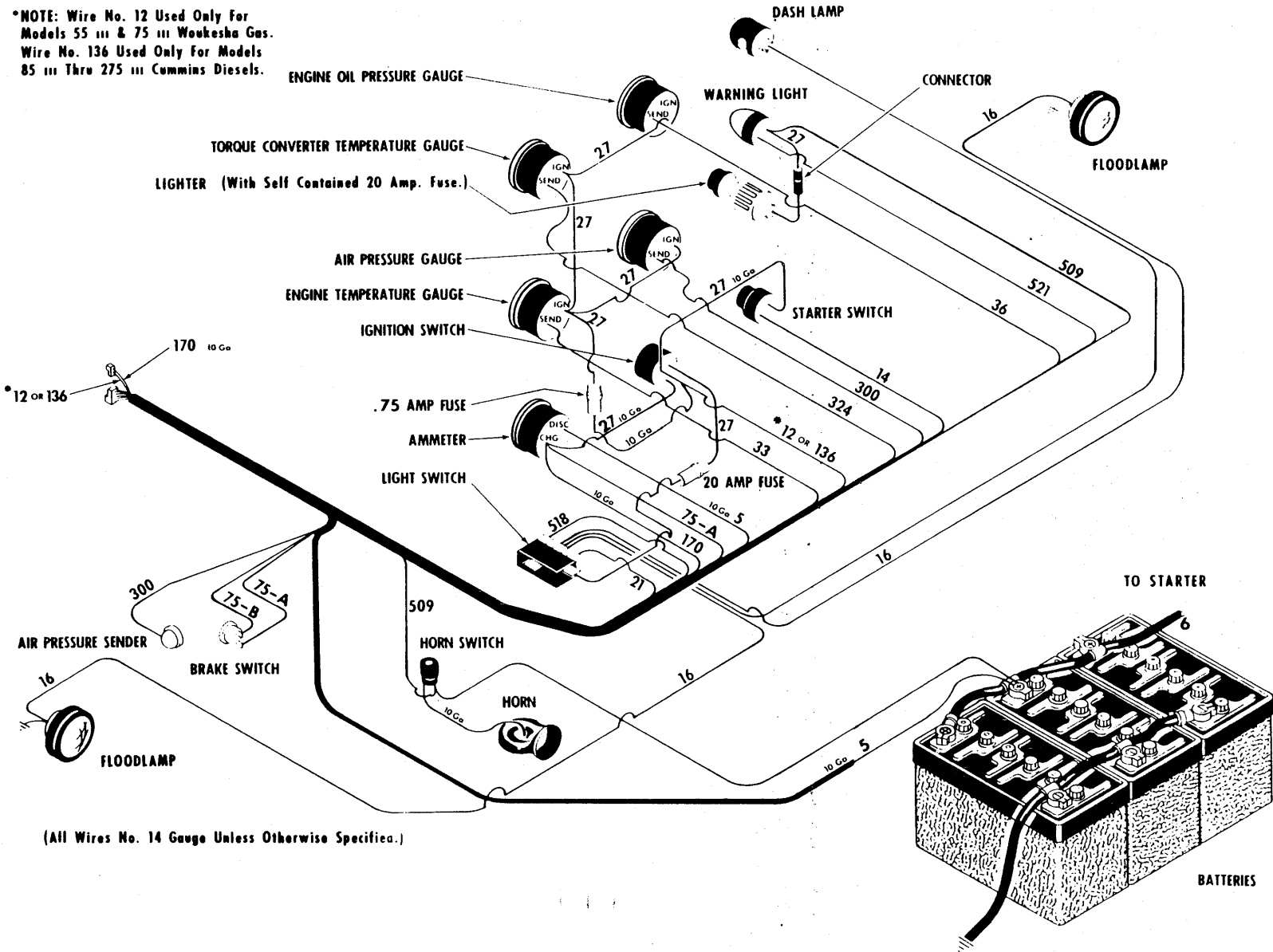
DECALS AND NAMEPLATES

Item No.	Part No.	Description	No. Req'd.
1	547852	*DECAL, Michigan	2
2	547851	*DECAL, Clark Equipment	2
3	571100	*DECAL, Model	2
4	538256	*DECAL, Transmission Drain	1
5	1505537	*DECAL, Safety Warning	1
6	1505581	*DECAL, Safety Wiring	1
7	569451	*DECAL, Warning Light — (For Serial: 5DC101 thru 6DC124, 6DG101 thru 7DG120 only)	1
8	569331	*DECAL, Bucket Indicator	1
9	1520495	*DECAL, "Best on Earth"	2
10	1534502	*DECAL, Trans. Filter	1
11	1511710	PLATE, Operating Precautions	1
12	65G-406	SCREW, Plate Mounting	4
13	542074	PLATE, Patent	1
14	6C-605	SCREW, Plate Mounting	4
15	1510525	DECAL, Lubrication Instruction	1
16	6C-605	SCREW, Plate Mounting	4
17	567977	PLATE, Shift Quadrant — Hi-Lo	1
18	6C-605	SCREW, Plate Mounting	2
19	567947	PLATE, Shift Quadrant — Forward & Reverse	1
20	6C-605	SCREW, Plate Mounting	4
21	1527430	PLATE, Reservoir Strainer Service (For Serial: 6DC125 & thereafter, 7DG202 & thereafter)	1

*NOTE: Contact your local MICHIGAN Distributor for the above listed Decals.

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

*NOTE: Wire No. 12 Used Only For Models 55 III & 75 III Waukesha Gas.
Wire No. 136 Used Only For Models 85 III Thru 275 III Cummins Diesels.



(All Wires No. 14 Gauge Unless Otherwise Specified.)

WIRING DIAGRAM – COCKPIT – CUMMINS
For Serial: 5DC101 thru 6DC115

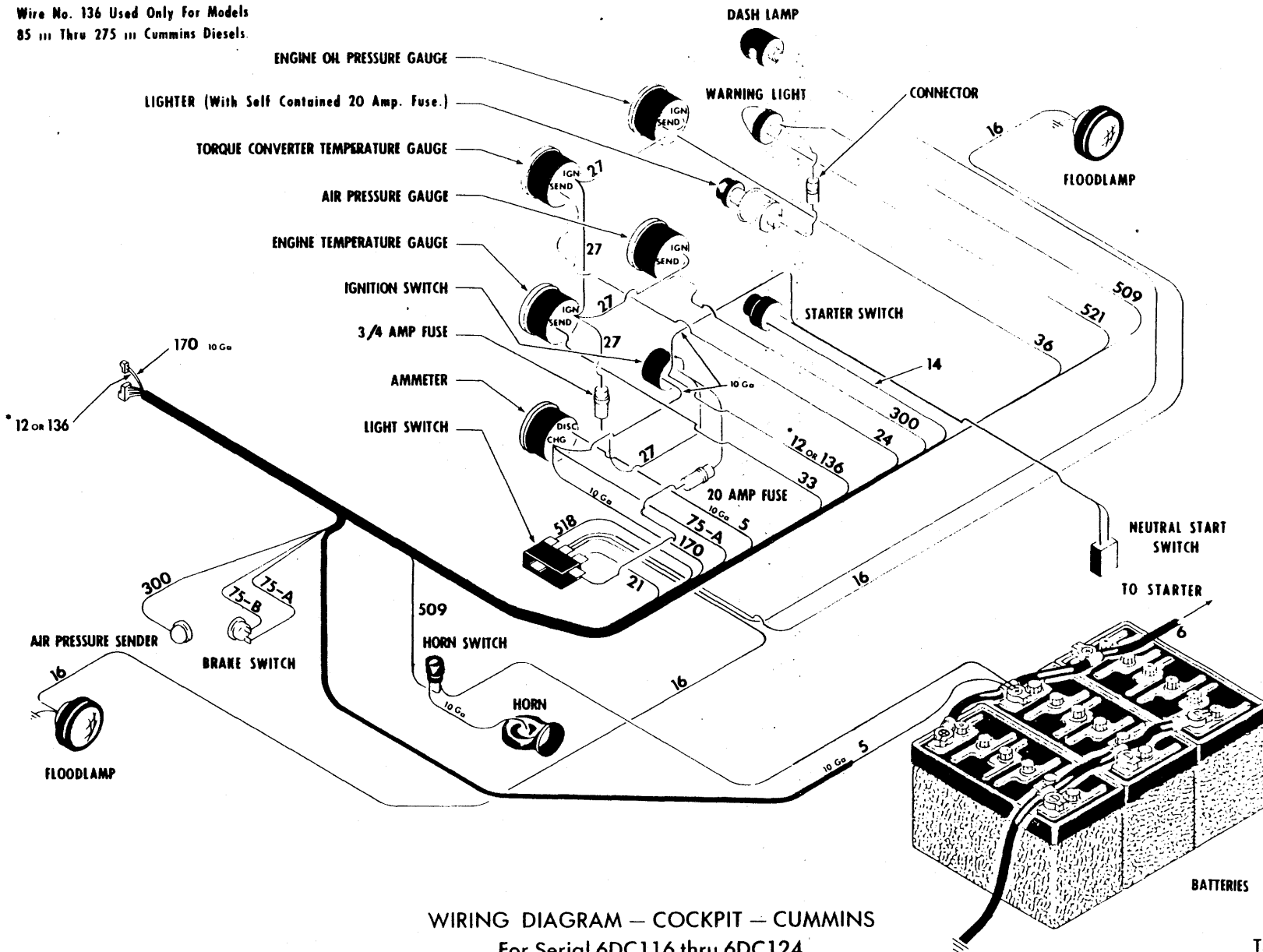
TS-6888-P

PM 2952
Printed in U.S.A.

[135]

(1K13)

*NOTE: Wire No. 12 Used Only For Models 55 III & 75 III Waukesha Gas.
Wire No. 136 Used Only For Models 85 III Thru 275 III Cummins Diesels.



WIRING DIAGRAM — COCKPIT — CUMMINS
For Serial 6DC116 thru 6DC124

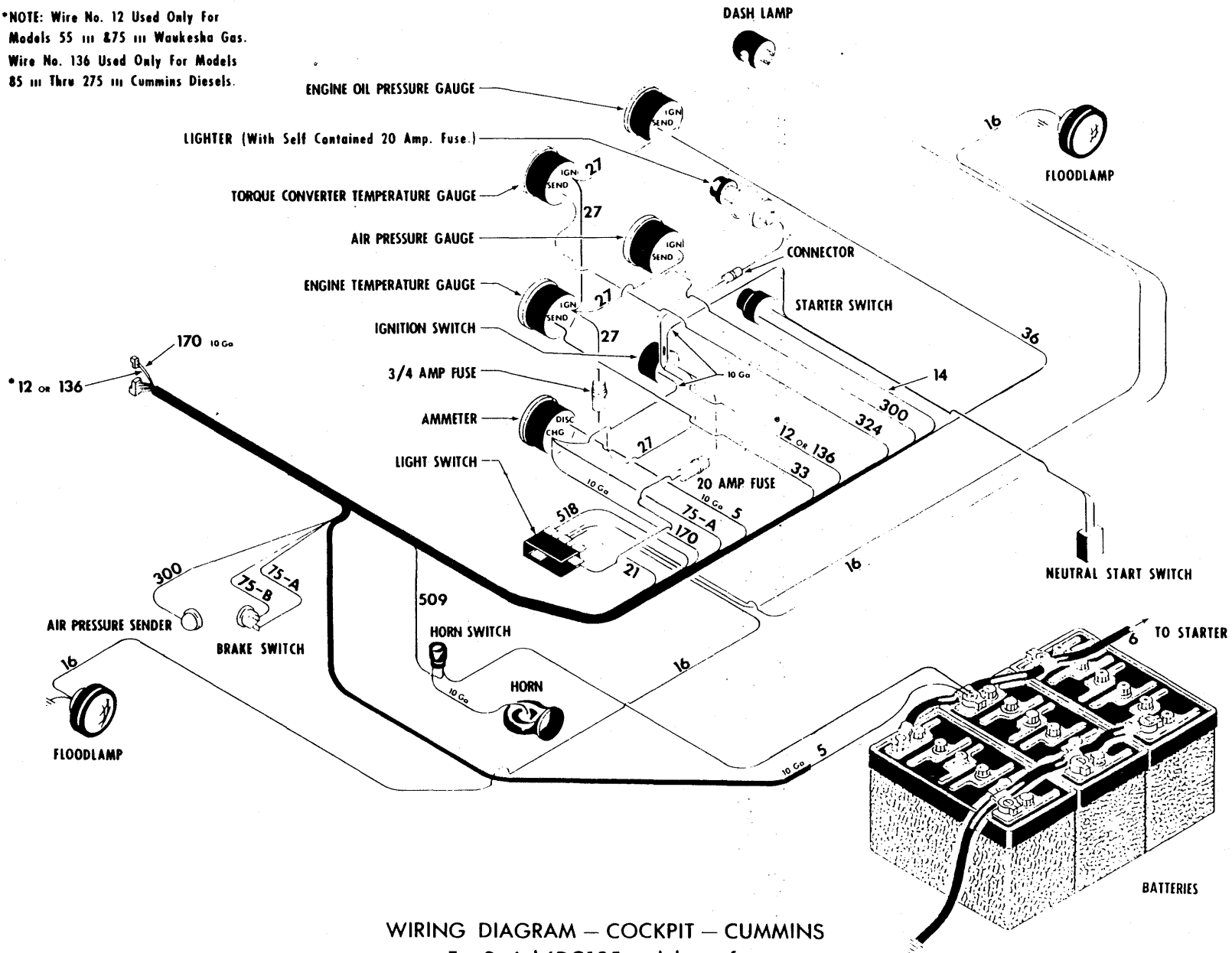
TS-7876-P

[136]

(1K14)

PM 2952
Printed in U.S.A.

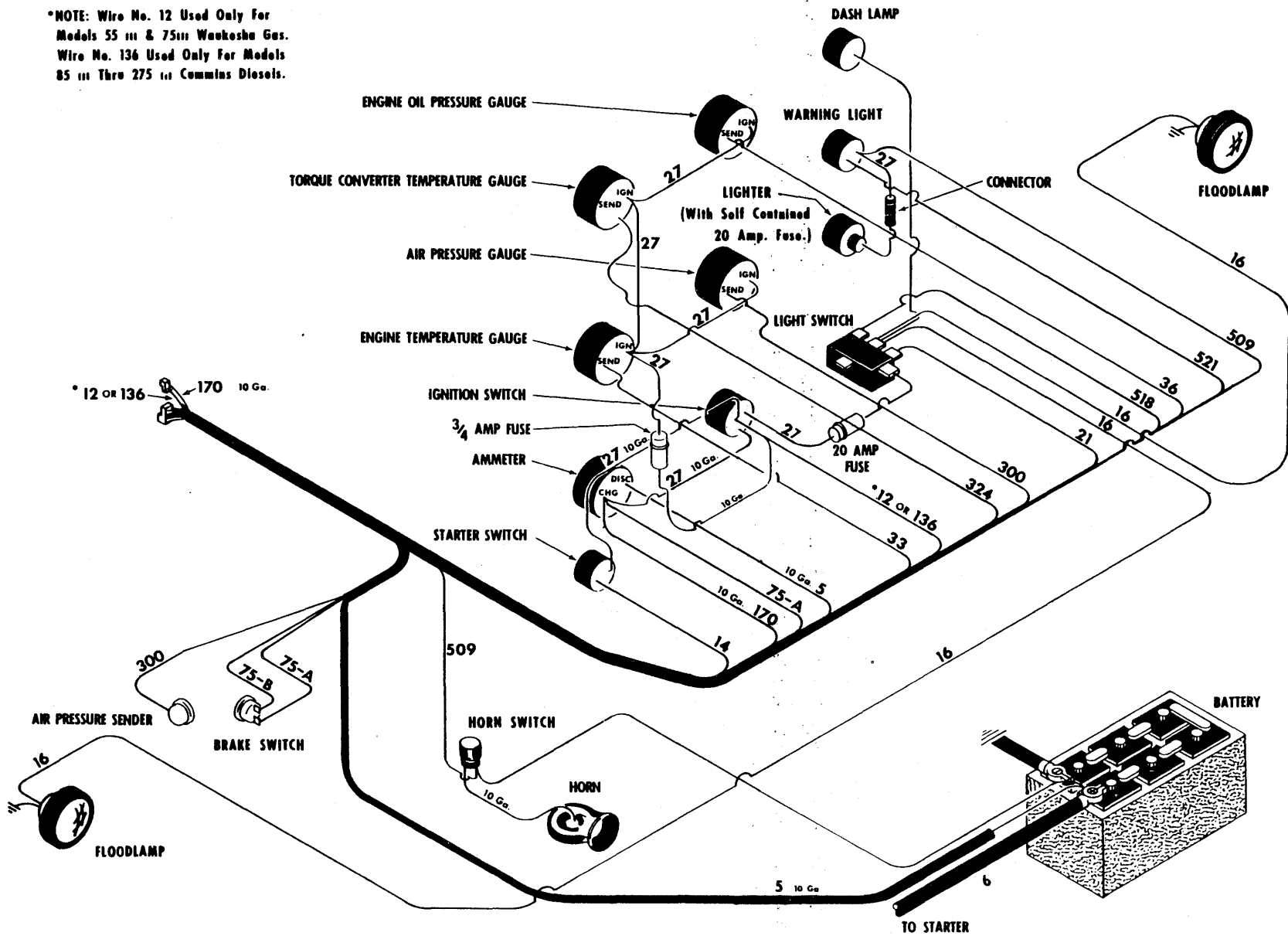
*NOTE: Wire No. 12 Used Only For Models 55 thru 875 thru Waukesha Gas.
Wire No. 136 Used Only For Models 85 thru 275 thru Cummins Diesels.



WIRING DIAGRAM - COCKPIT - CUMMINS
For Serial 6DC125 and thereafter

TS-7874-P

*NOTE: Wire No. 12 Used Only For Models 55 III & 75III Waukesha Gas.
Wire No. 136 Used Only For Models 85 III Thru 275 III Cummins Diesels.



(All Wires No. 14 Gauge Unless Otherwise Specified)
WIRING DIAGRAM - COCKPIT - G.M.
For Serial 6DG101 thru 6DG136

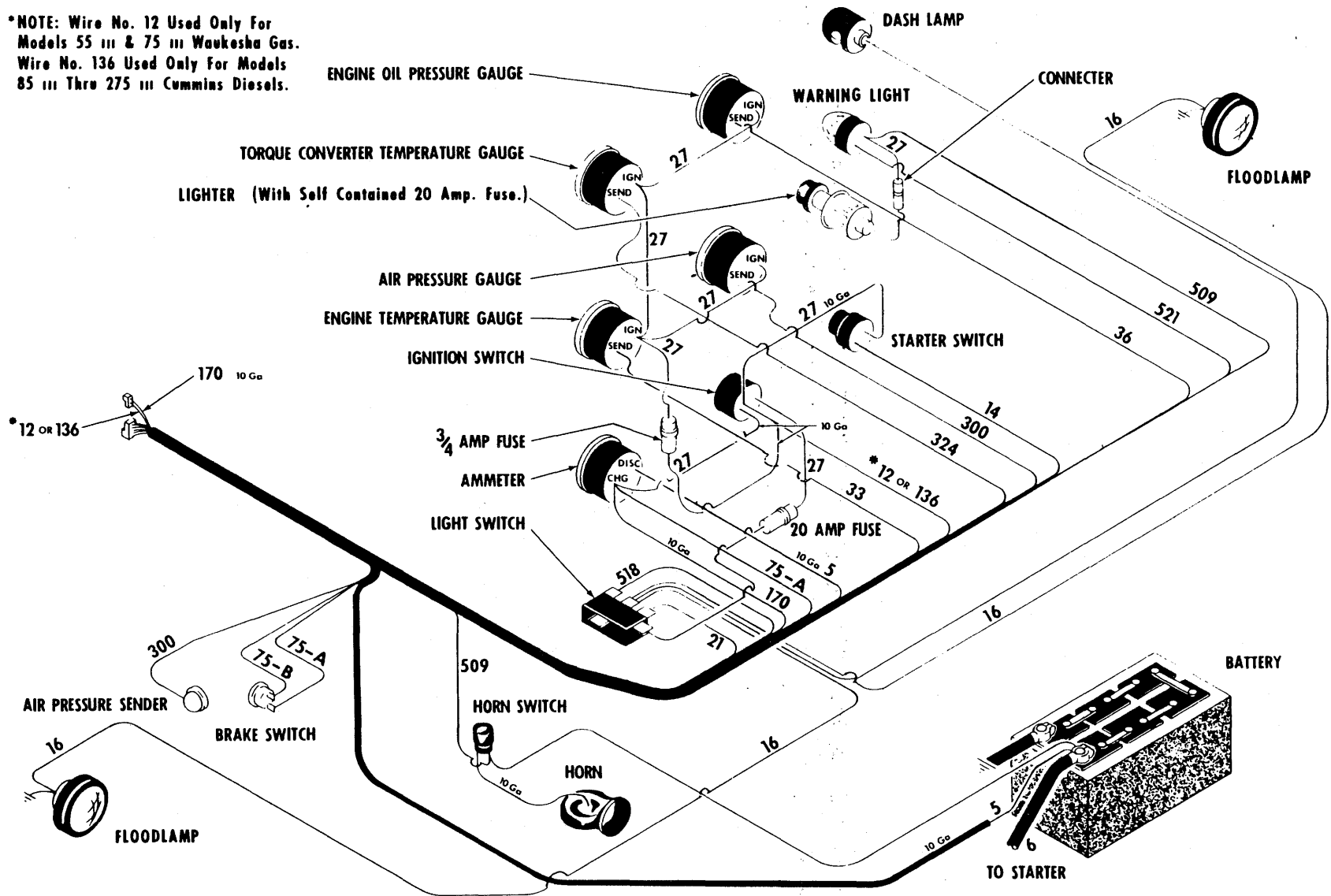
TS-6752-P

[138]

(1K16)

PM 2992
Printed in U.S.A.

*NOTE: Wire No. 12 Used Only For Models 55 III & 75 III Waukesha Gas.
Wire No. 136 Used Only For Models 85 III Thru 275 III Cummins Diesels.

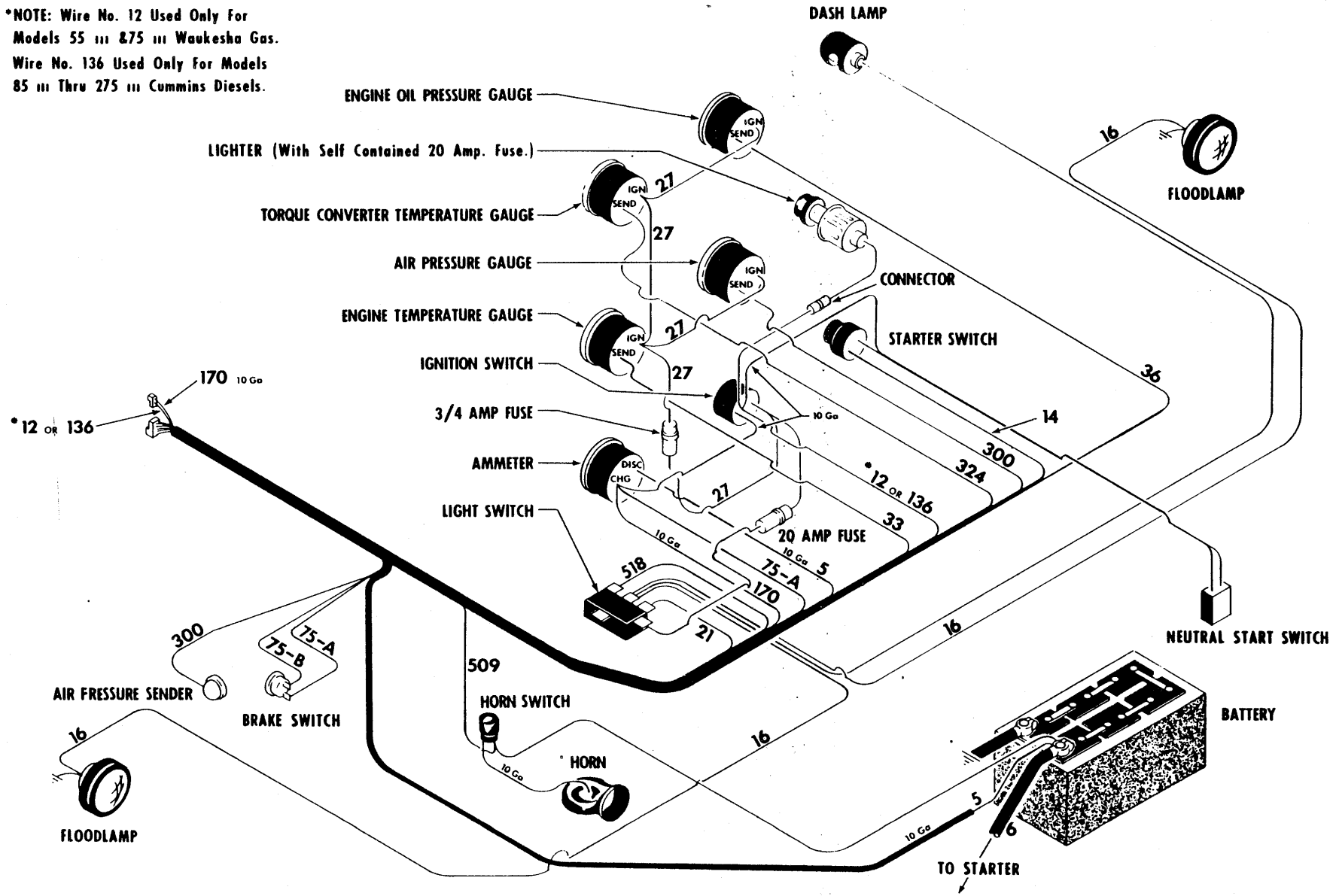


(All Wires No. 14 Gauge Unless Otherwise Specified.)

WIRING DIAGRAM - COCKPIT - G.M.
For Serial: 6DG137 thru 7DG120

TS-6669-P

*NOTE: Wire No. 12 Used Only For Models 55 III 875 III Waukesha Gas.
Wire No. 136 Used Only For Models 85 III Thru 275 III Cummins Diesels.



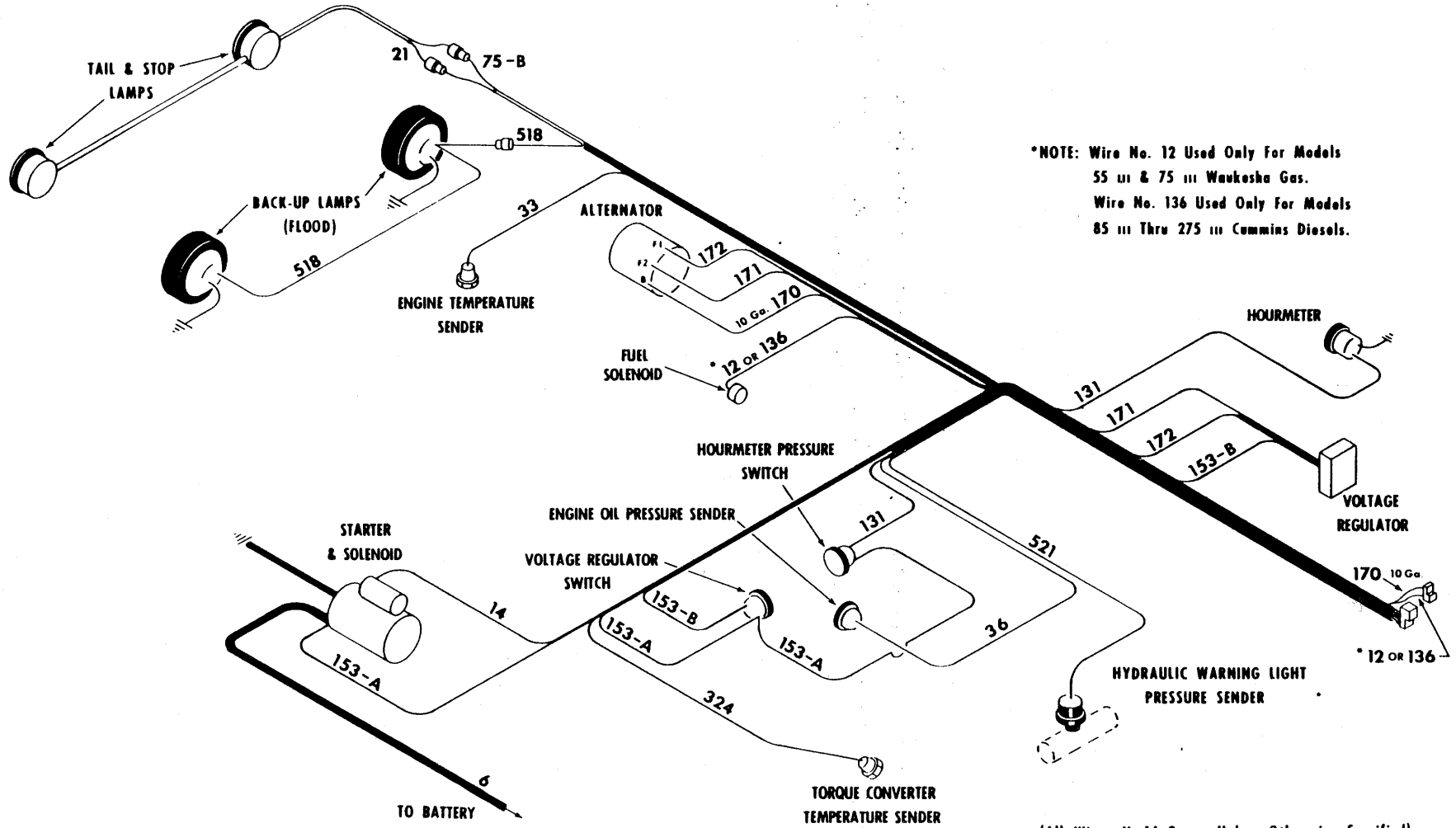
WIRING DIAGRAM — COCKPIT — G.M.
For Serial 7DG121 and thereafter

TS-7868-P

[140]

(1K20)

PM 2952
Printed in U.S.A.

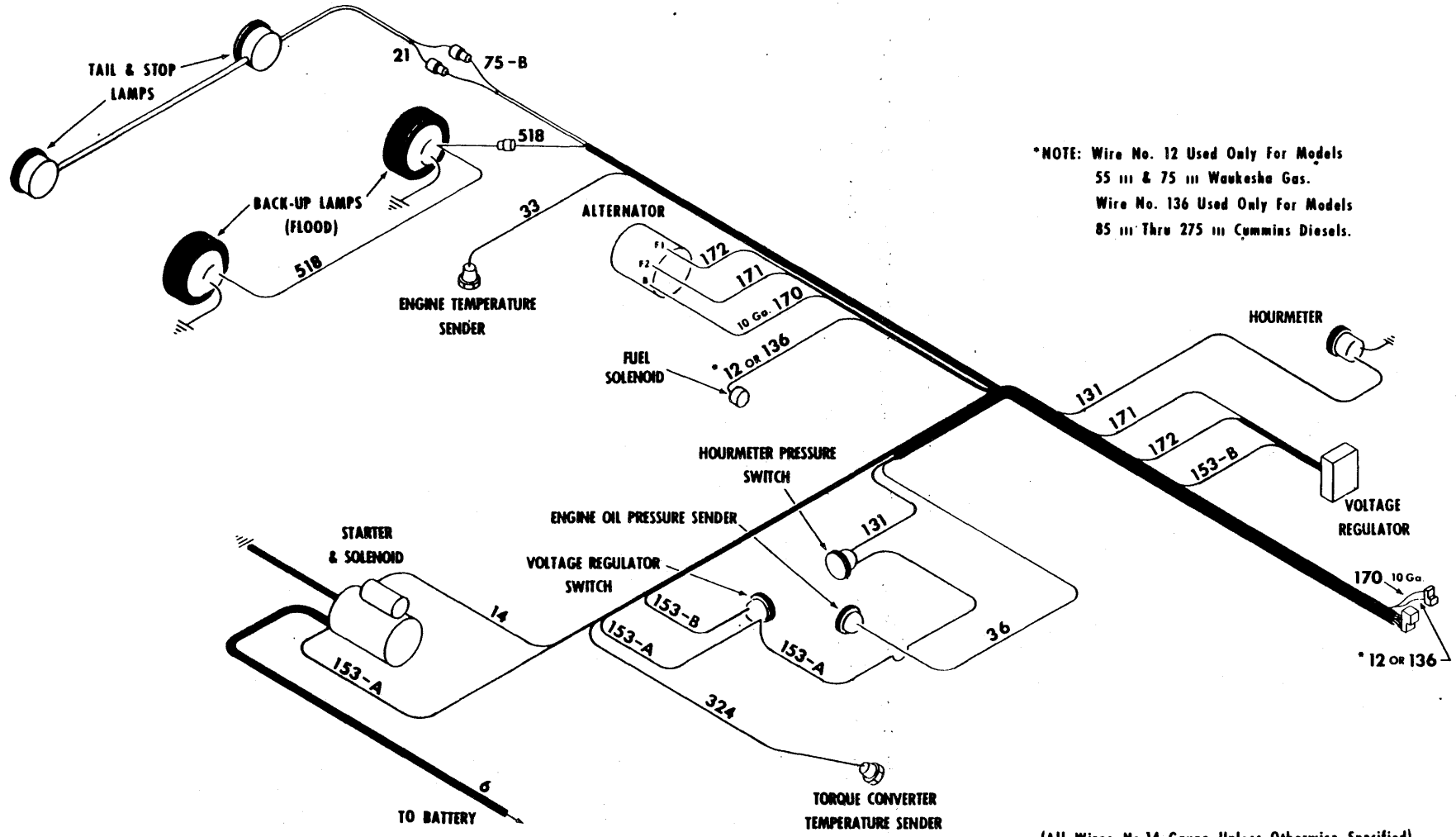


*NOTE: Wire No. 12 Used Only For Models
55 III & 75 III Waukesha Gas.
Wire No. 136 Used Only For Models
85 III Thru 275 III Cummins Diesels.

(All Wires No.14 Gauge Unless Otherwise Specified)

WIRING DIAGRAM - ENGINE - CUMMINS
For Serial 5DC101 thru 6DC124

TS-6844-P



*NOTE: Wire No. 12 Used Only For Models 55 III & 75 III Waukesha Gas.
Wire No. 136 Used Only For Models 85 III Thru 275 III Cummins Diesels.

(All Wires No.14 Gauge Unless Otherwise Specified)

WIRING DIAGRAM — ENGINE — CUMMINS
For Serial 6DC125 and thereafter

TS-7871-P

[142]

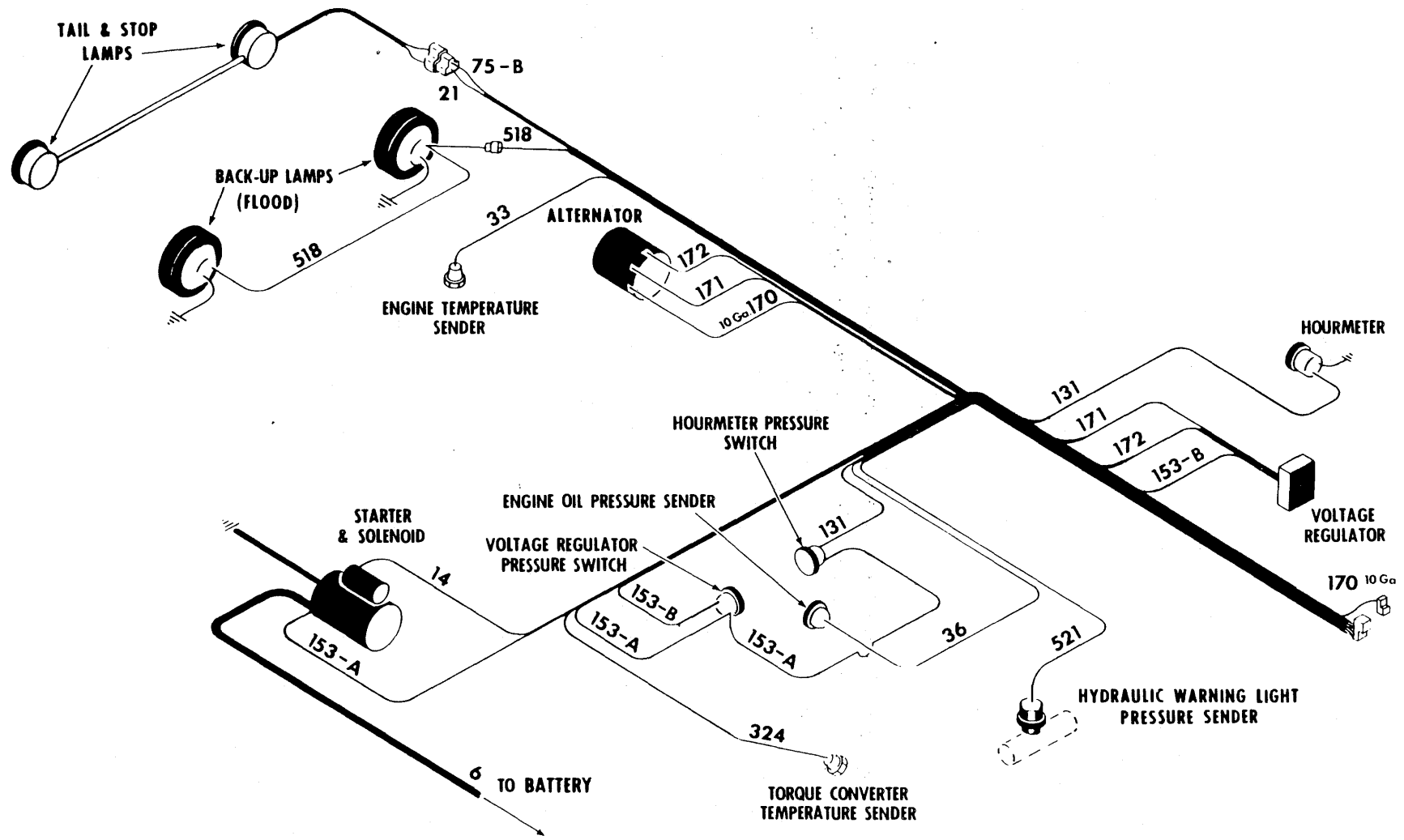
(1K22)

PM 2952
Printed in U.S.A.

PM 2952
Printed in U.S.A.

[143]

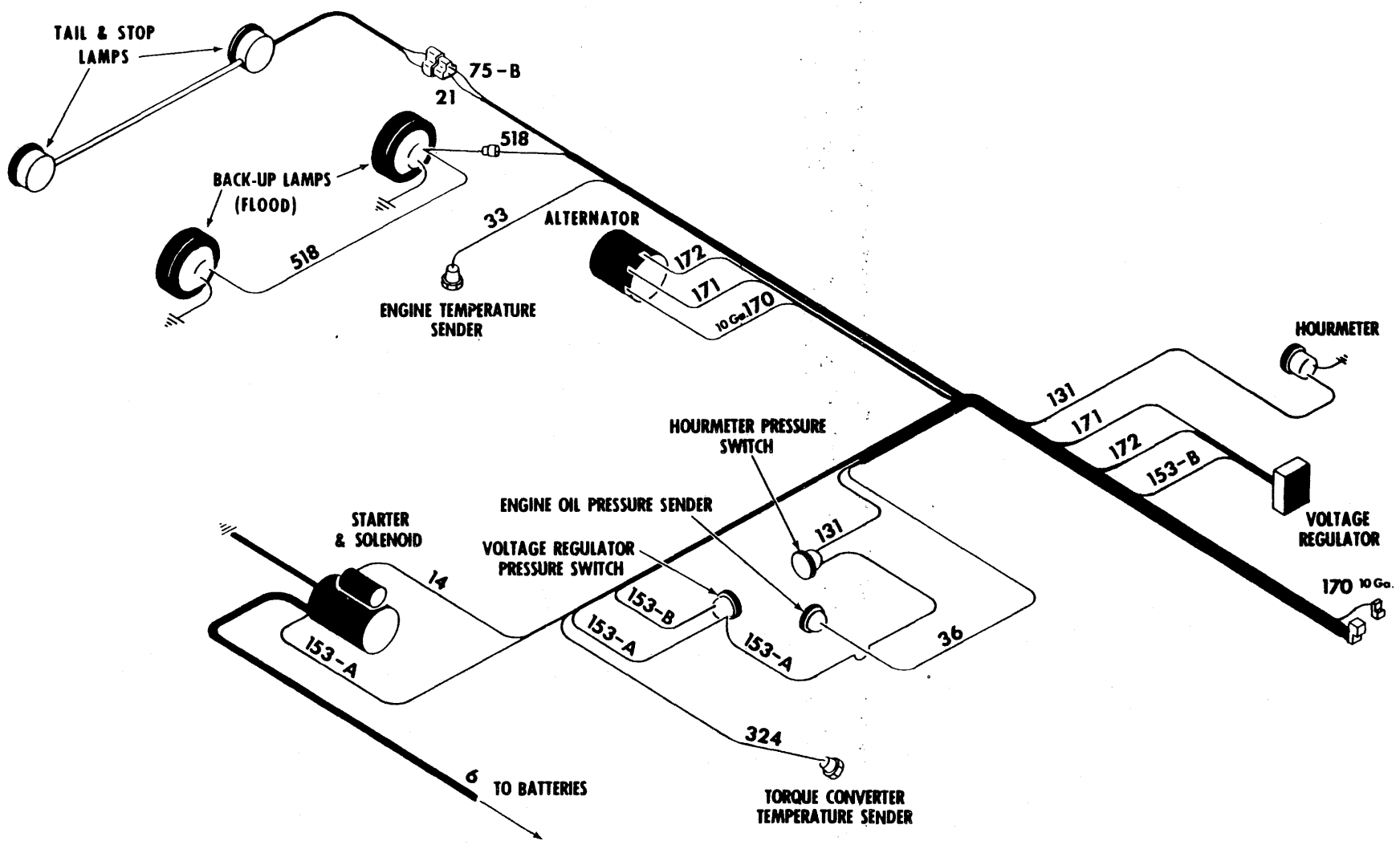
(1K23)



(All Wires No.14 Gauge Unless Otherwise Specified)

WIRING DIAGRAM - ENGINE - G.M.
For Serial: 6DG101 thru 7DG120

TS-6670-P



(All Wires No.14 Gauge Unless Otherwise Specified)

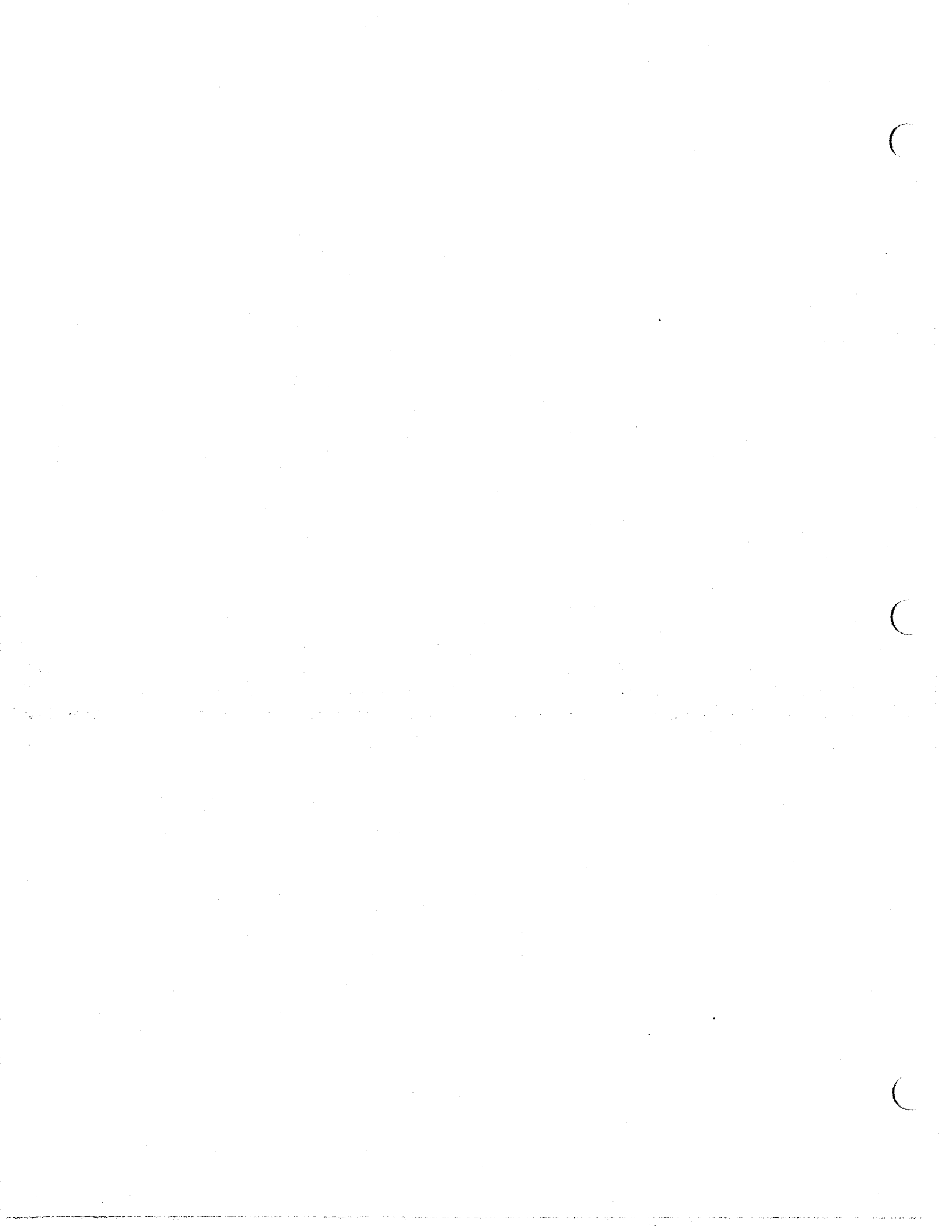
WIRING DIAGRAM — ENGINE — G.M.
For Serial 7DG121 and thereafter

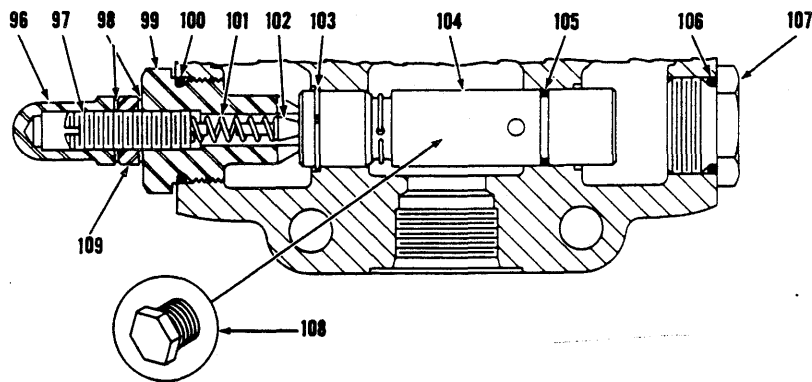
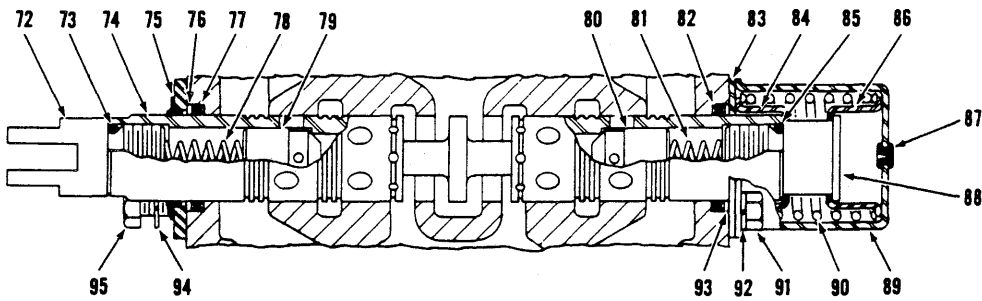
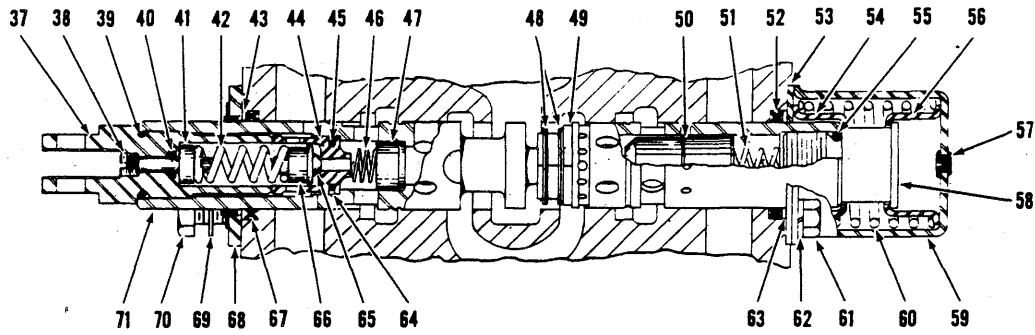
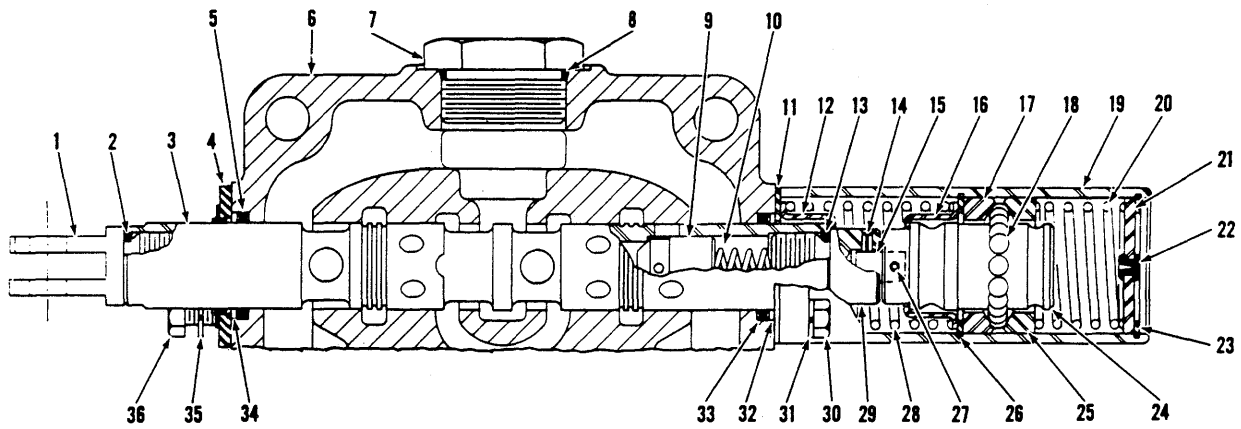
TS-7870-P

[144]

(1K24)

PM 2952
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THREE SPOOL CONTROL VALVE ASSEMBLY

TS-6788-P



THREE SPOOL CONTROL VALVE ASSEMBLY

Three Varieties of Control Valves have been used for 85 III MICHIGAN Tractor Shovel Three spool Valve Installations. These are as follows.

Clark Part Number

572484

1523012

1502537

Hydrec Model Number

V36DWF-20

V36DWF-21

V36DWF-23

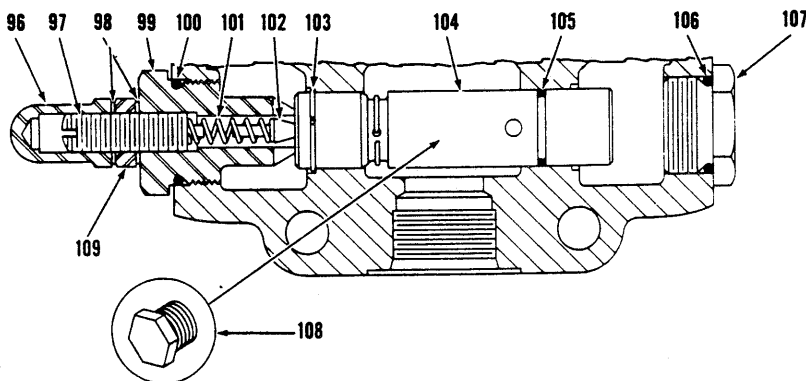
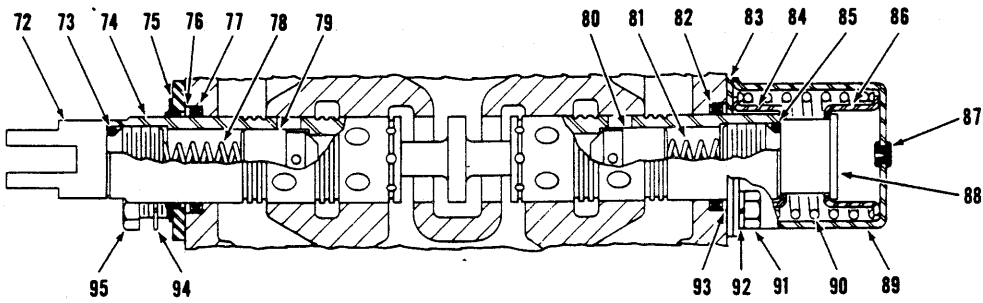
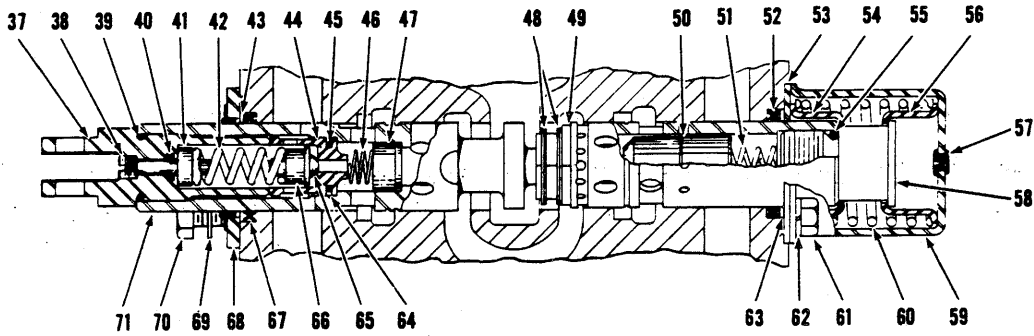
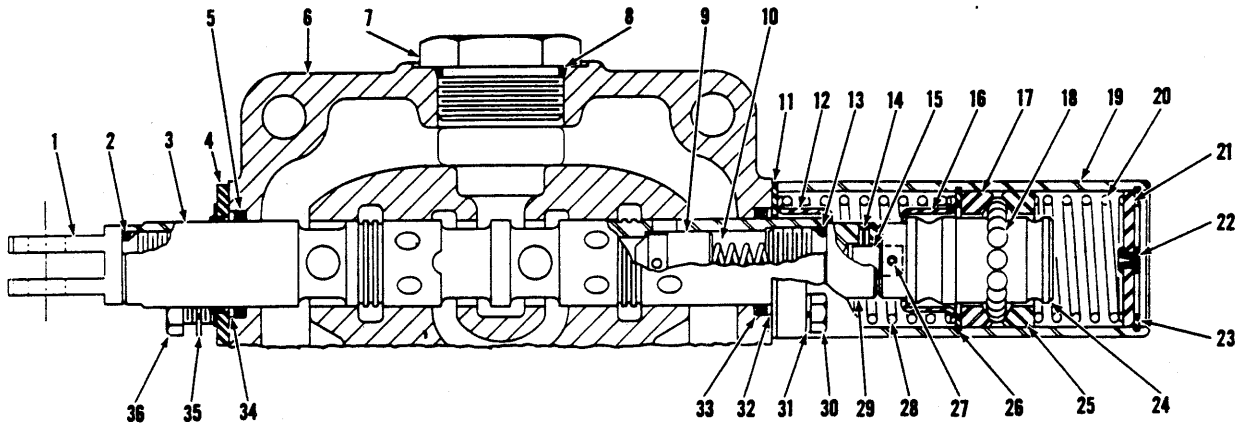
To determine which Control Valve is on a given machine refer to the manufacturers' serial number plate attached to the face of the Valve where the above information is stamped. After determining which Valve is on the machine you may service accordingly.

Item No.	Part No.	Description	No. Req'd.
A	572484	*VALVE ASSY, Control (Inc. 1 thru 109)	1
1	946360	EYE, Plunger	1
2	25K-30022	"O" RING, Eye	1
3	-----	PLUNGER, Operating - See "A"	1
4	947228	WIPER, Plunger	1
5	946583	SEAL, Plunger Oil	1
6	-----	§HOUSING - See "A"	1
7	24K-11	PLUG, Housing	1
8	91F-11	"O" RING, Plug	1
9	944885	CHECK	1
10	893293	SPRING, Check	1
11	944882	PLATE, Retaining	1
12	944878	GUIDE, Spring	1
13	25K-30022	"O" RING, Cap	1
14	108301	ROLL PIN	1
15	888449	PIN	1
16	944878	GUIDE, Spring	1
17	944897	RETAINER, Ball	1
18	10J-08	BALL	15
19	945805	COVER, Detent	1
20	946029	SPRING, Detent	1
21	944900	PLUG	1
22	886763	PLUG, Bleeder	1
23	507695	RING, Retaining	1
24	946030	CAP, Detent	1
25	944897	RETAINER, Ball	1
26	1301194	RING, Retaining	1
27	108301	ROLL PIN	1
28	945090	SPRING	1
29	945095	CAP, Plunger	1
30	1C-416	BOLT, Cover to Housing	4
31	4E-04	LKWSHR, Cover to Housing	4
32	944883	RING, Back-up	1
33	946583	SEAL, Plunger Oil	1
34	944883	RING, Back-up	1
35	4E-04	LKWSHR, Wiper to Housing	2
36	1C-410	BOLT, Wiper to Housing	2
37	946361	EYE, Plunger	1
38	946362	SCREW, Adjusting	1
39	25K-30022	"O" RING, Eye	1
40	25K-20007	"O" RING, Adjusting Screw	1

Item No.	Part No.	Description	No. Req'd.
41	946363	GUIDE, Spring	1
42	946364	SPRING, Check	1
43	944883	RING, Back-up	1
44	946367	SEAT, Check	1
45	25K-20016	"O" RING, Seat	1
46	946369	SPRING, Check	1
47	946370	CHECK	1
48	1308105	RING, Retaining	4
49	946032	CHECK	2
50	946368	CHECK	1
51	893293	SPRING, Check	1
52	946583	SEAL, Plunger Oil	1
53	944882	PLATE, Retaining	1
54	945348	GUIDE, Spring	1
55	25K-30022	"O" RING, Cap	1
56	945348	GUIDE, Spring	1
57	886745	PLUG, Bleeder	1
58	944895	CAP, Plunger	1
59	944896	COVER, Spring Return	1
60	944879	SPRING, Plunger Return	1
61	1C-410	BOLT, Cover Mounting	4
62	4E-04	LKWSHR, Cover Mounting	4
63	944883	RING, Back-up	1
64	946366	RING, Back-up	1
65	-----	BALL (Inc. with Item 66)	1
66	946365	CHECK	1
67	946583	SEAL, Plunger Oil	1
68	947228	WIPER, Plunger	1
69	4E-04	LKWSHR, Cover Mounting	2
70	1C-410	BOLT, Cover Mounting	2
71	-----	§PLUNGER, Operating - See "A"	1
72	946360	EYE, Plunger	1
73	25K-30022	"O" RING, Eye	1
74	-----	§PLUNGER, Operating - See "A"	1
75	947228	WIPER, Plunger	1
76	944883	RING, Back-up	1
77	946583	SEAL, Plunger Oil	1
78	893293	SPRING, Check	1
79	944885	CHECK	1
80	944885	CHECK	1

*NOTE: For complete replacement of 572484 Control Valve Assembly use 2510842 plus 1-15K-10 Connector, 1-11K-10 Elbow, & 3-18C-868 Bolts. Refer to SG-285 for installation.
§Not Sold Separately

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



THREE SPOOL CONTROL VALVE ASSEMBLY

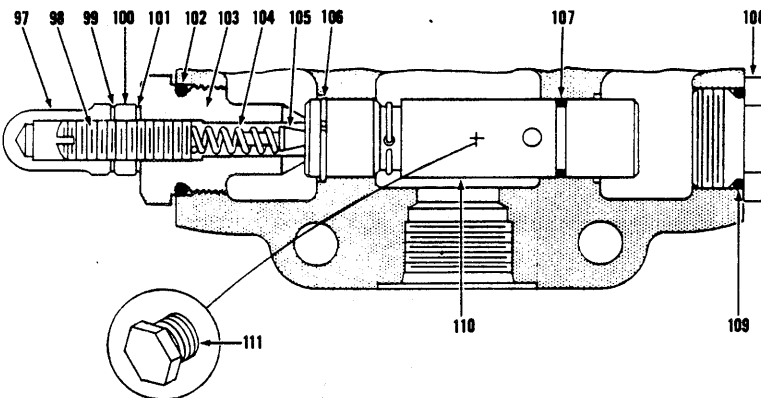
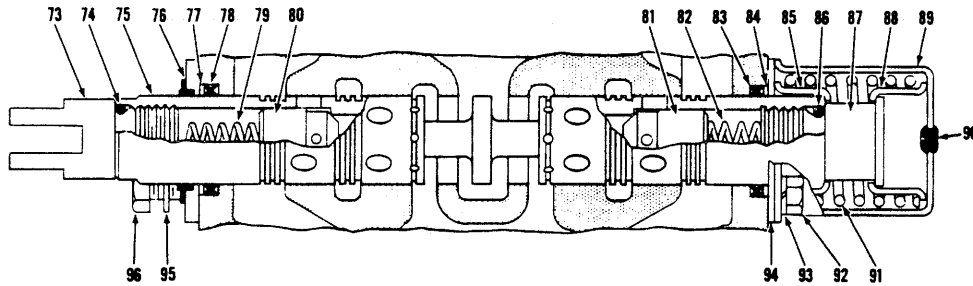
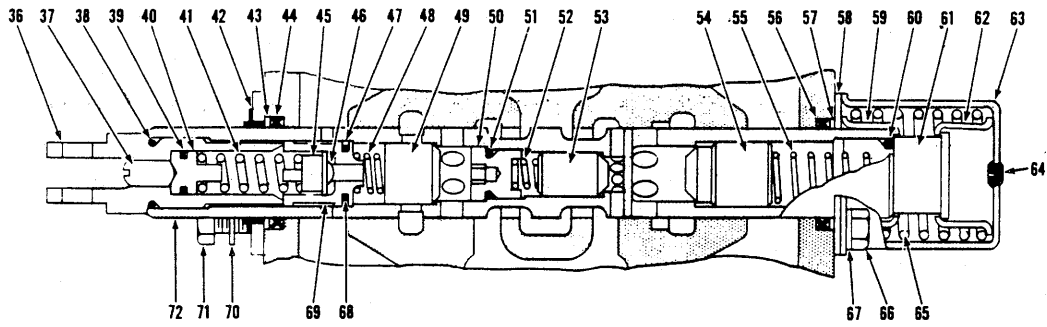
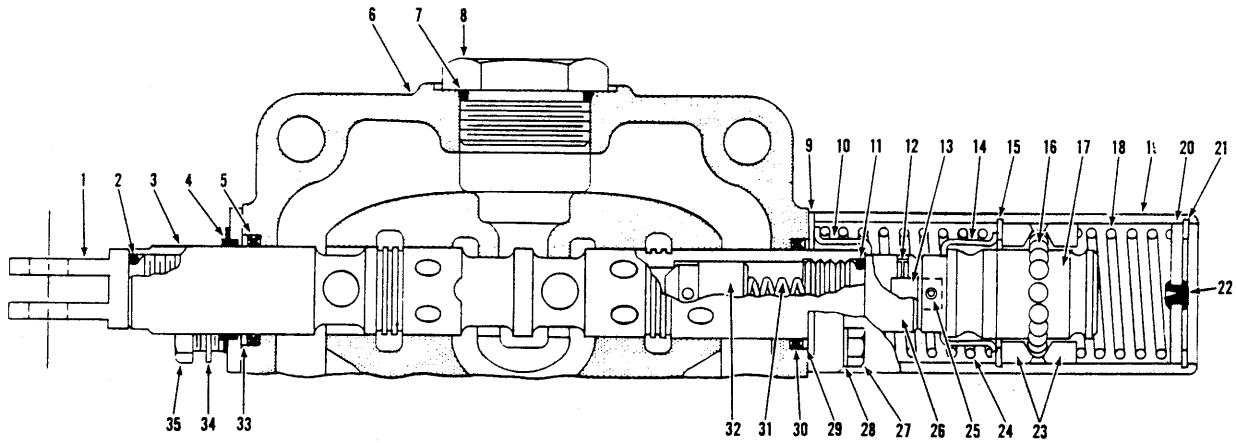
TS-6788-P

THREE SPOOL CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
81	893293	SPRING, Check	1	96	944853	NUT, Acorn	1
82	946583	SEAL, Plunger	1	97	944890	SCREW, Adjusting	1
83	944882	PLATE, Retaining	1	98	613750	WASHER	2
84	945348	GUIDE, Spring	1	99	893296	CAP, Adjusting	1
85	25K-30022	"O" RING, Cap	1	100	58K-214	"O" RING, Adjusting Cap	1
86	945348	GUIDE, Spring	1	101	886753	SPRING, Poppet	1
87	886745	PLUG, Bleeder	1	102	886739	POPPET, Relief	1
88	944895	CAP, Plunger	1	103	946033	RING, Retaining	1
89	944896	COVER, Spring Return	1	104	893298	VALVE ASSY, Relief (Inc. 103, 105)....	1
90	944879	SPRING, Plunger Return	1	105	58K-020	"O" RING, Relief Valve	1
91	1C-410	BOLT, Cover Mounting	2	106	58K-214	"O" RING, Cap	1
92	4E-04	LKWSHR, Cover Mounting	2	107	944894	CAP	1
93	944883	RING, Back-up	1	108	40K-04	PLUG	1
94	4E-04	LKWSHR, Wiper Mounting	2	109	8D-08	NUT, Jam	1
95	1C-410	BOLT, Wiper Mounting	2				

NOTES

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



THREE SPOOL CONTROL VALVE ASSEMBLY

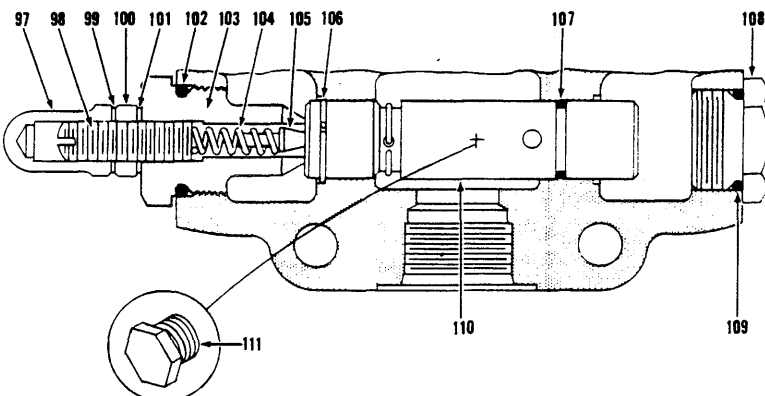
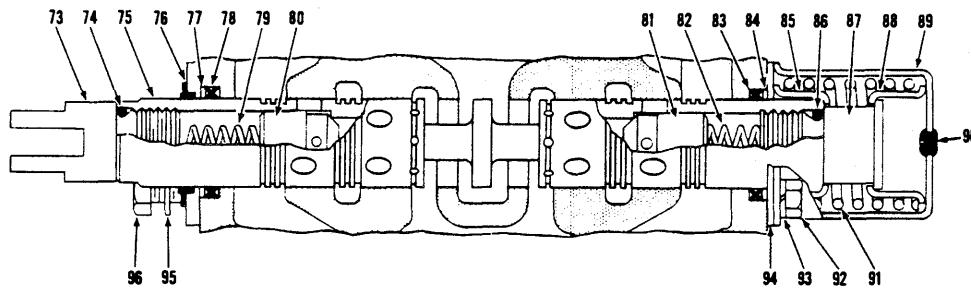
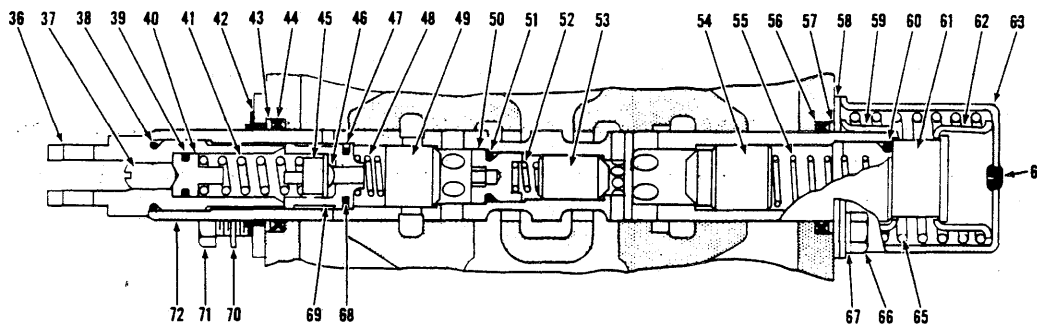
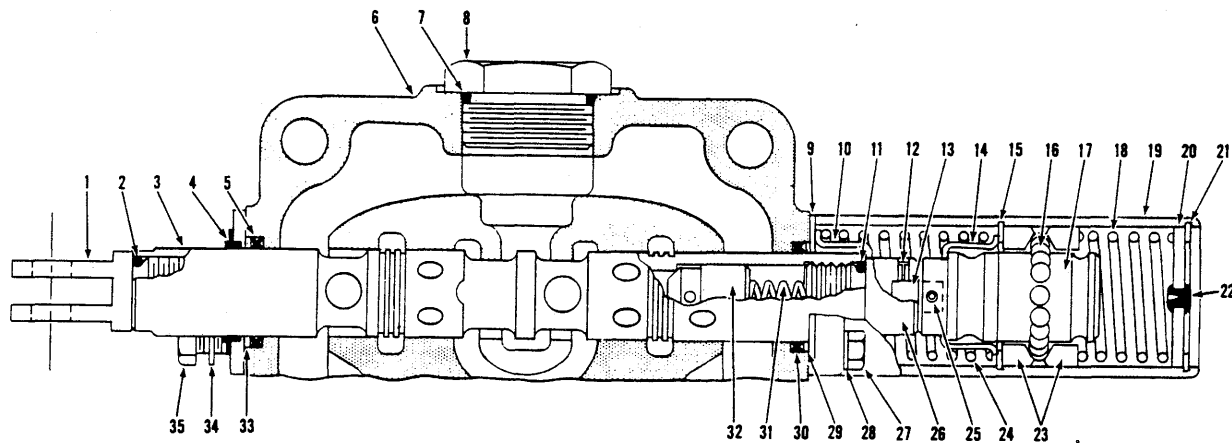
TS-7722-P

CONTROL VALVE ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1523012	*VALVE ASSY (Inc. 1 thru 11)	1	41	946364	SPRING, Check	1
1	946360	EYE, Plunger	1	42	947228	WIPER, Plunger	1
2	25K-30022	"O" RING, Plunger Eye	1	43	944883	RING, Back-up	1
3	-----	§PLUNGER, Operating - See "A"	—	44	946583	SEAL, Plunger Oil	1
4	947228	WIPER, Plunger	1	45	946365	CHECK (Inc. 46)	1
5	946583	SEAL, Plunger Oil	1	46	-----	§BALL - See 45	—
6	-----	§HOUSING, Valve - See "A"	—	47	946556	RING, Back-up	1
7	91F-11	"O" RING, Cap	1	48	946545	SPRING, Check	1
8	24K-11	PLUG, Valve	1	49	946543	CHECK	1
9	944882	RETAINER, Plunger Oil Seal	1	50	946555	PLUG	—
10	944878	GUIDE, Spring	1	51	945221	"O" RING	—
11	25K-30022	"O" RING, Cap	1	52	946536	SPRING	—
12	108301	ROLL PIN	1	53	945590	CHECK	—
13	888449	PIN	1	54	944885	CHECK	—
14	944878	GUIDE, Spring	1	55	946544	SPRING, Check	1
15	1301194	RING, Retaining	1	56	946583	SEAL, Plunger Oil	1
16	10J-08	BALL	15	57	944883	RING, Back-up	1
17	946030	CAP, Detent	1	58	946535	RETAINER, Plunger Oil Seal	1
18	946029	SPRING, Detent	1	59	945348	GUIDE, Spring	1
19	945805	COVER, Detent	1	60	25K-30022	"O" RING, Cap	1
20	944900	PLUG, Detent Cover	1	61	944895	CAP, Plunger	1
21	507695	RING, Plug Retaining	1	62	945348	GUIDE, Spring	1
22	886763	PLUG, Bleeder	1	63	944896	COVER, Detent	1
23	944897	RETAINER, Ball	2	64	886745	PLUG, Bleeder	1
24	945090	SPRING, Return	1	65	944879	SPRING	1
25	108301	ROLL PIN	1	66	1C-410	BOLT, Cover to Housing	4
26	945095	CAP, Plunger	1	67	4E-04	LKWSHR, Cover to Housing	4
27	1C-416	BOLT, Cover to Housing	4	68	25K-20018	"O" RING, Seat	1
28	4E-04	LKWSHR, Cover to Housing	4	69	946883	SEAT, Check	1
29	944883	RING, Back-up	1	70	4E-04	LKWSHR, Wiper to Housing	2
30	946583	SEAL, Plunger Oil	1	71	1C-410	BOLT, Wiper to Housing	2
31	893293	SPRING, Check	1	72	-----	§PLUNGER, Operating - See "A"	—
32	944885	CHECK	1	73	946360	EYE, Plunger	1
33	944883	RING, Back-up	1	74	25K-30022	"O" RING, Plunger Eye	1
34	4E-04	LKWSHR, Wiper to Housing	2	75	-----	§PLUNGER, Operating - See "A"	1
35	1C-410	BOLT, Wiper to Housing	2	76	947228	WIPER, Plunger	1
36	946361	EYE, Plunger	1	77	944883	RING, Back-up	1
37	946541	SCREW, Adjusting	1	78	946583	SEAL, Plunger Oil	1
38	25K-30022	"O" RING, Plunger Eye	1	79	893293	SPRING, Check	1
39	25K-20014	"O" RING, Spring Guide	1	80	944885	CHECK	1
40	946363	GUIDE, Spring	1				

§ Not Sold Separately - Order Kits.
*NOTE: For replacement use 2510842 Valve Assembly.

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



THREE SPOOL CONTROL VALVE ASSEMBLY

TS-7722-P



CONSTRUCTION MACHINERY DIVISION



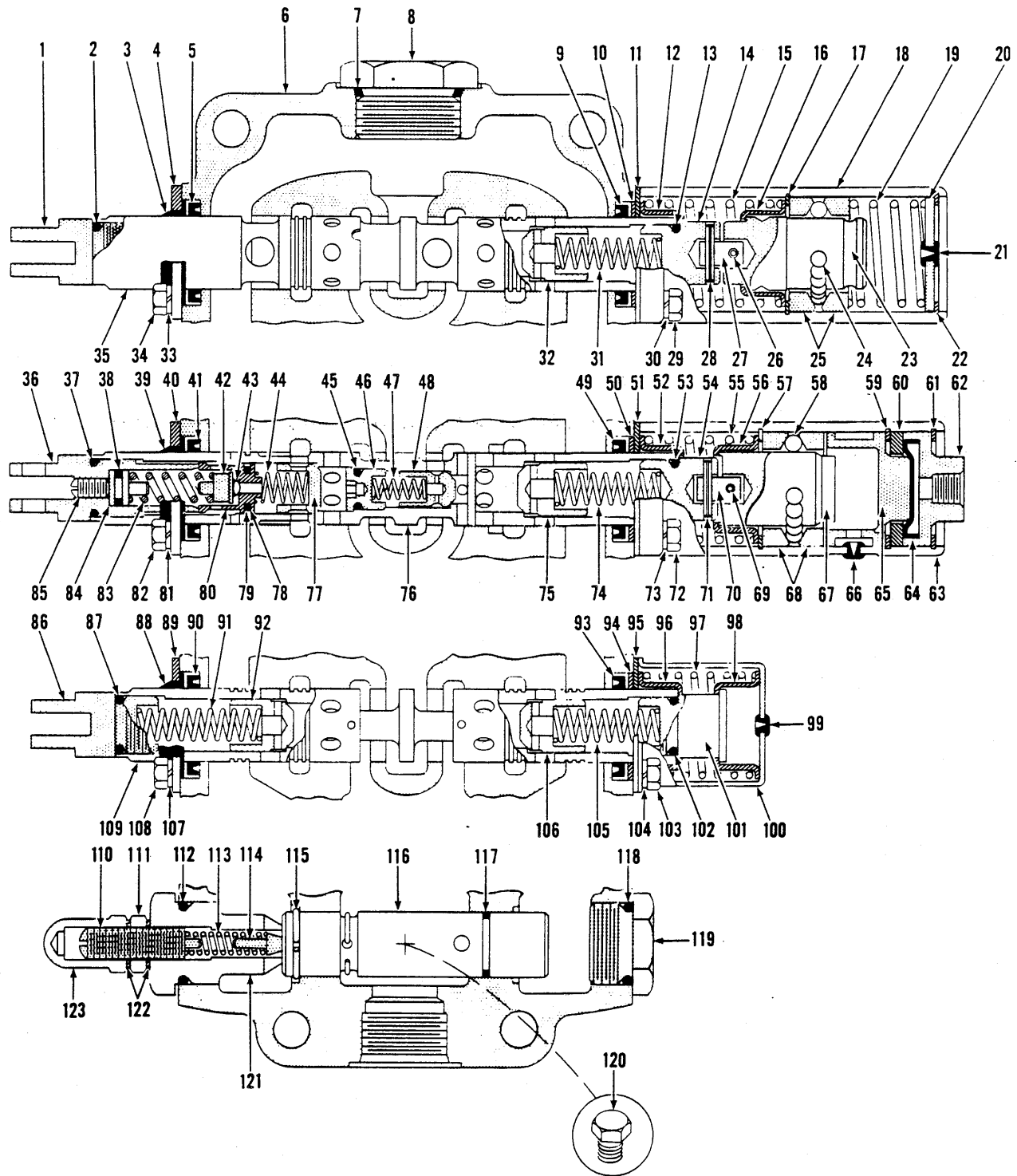
CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
81	944885	CHECK	1	98	944890	SCREW, Relief Valve Adjusting	1
82	893293	SPRING, Check	1	99	613750	WASHER, Jam Nut	1
83	946583	SEAL, Plunger Oil	1	100	8D-08	NUT, Jam	1
84	944883	RING, Back-up	1	101	613750	WASHER, Jam Nut	1
85	945348	GUIDE, Spring	1	102	58K-214	"O" RING, Cap	1
86	25K-30022	"O" RING, Cap	1	103	893296	CAP, Relief Valve Adjusting	1
87	944895	CAP	1	104	886753	SPRING, Poppet	1
88	945348	GUIDE, Spring	1	105	886739	POPPET	1
89	944896	COVER, Detent	1	106	946033	RING, Relief Valve Retaining	1
90	886745	PLUG, Bleeder	1	107	58K-020	"O" RING, Relief Valve	1
91	944879	SPRING	1	108	944894	CAP	1
92	1C-410	BOLT, Cover to Housing	4	109	58K-214	"O" RING, Cap	1
93	4E-04	LKWSHR, Cover to Housing	4	110	893298	RELIEF VALVE (Inc. 106, 107)	1
94	944882	RETAINER, Plunger Oil Seal	1	111	40K-04	PLUG	1
95	4E-04	LKWSHR, Wiper to Housing	2	112	18C-864	†BOLT, Valve Mounting	3
96	1C-410	BOLT, Wiper to Housing	2	113	4E-08	†LKWSHR, Valve Mounting	2
97	944853	NUT, Acorn	1	114	66D-08	†NUT, Valve Mounting	1

†Not Illustrated

NOTES

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



CONTROL VALVE ASSEMBLY

TS-8495-P

THREE SPOOL CONTROL VALVE ASSEMBLY

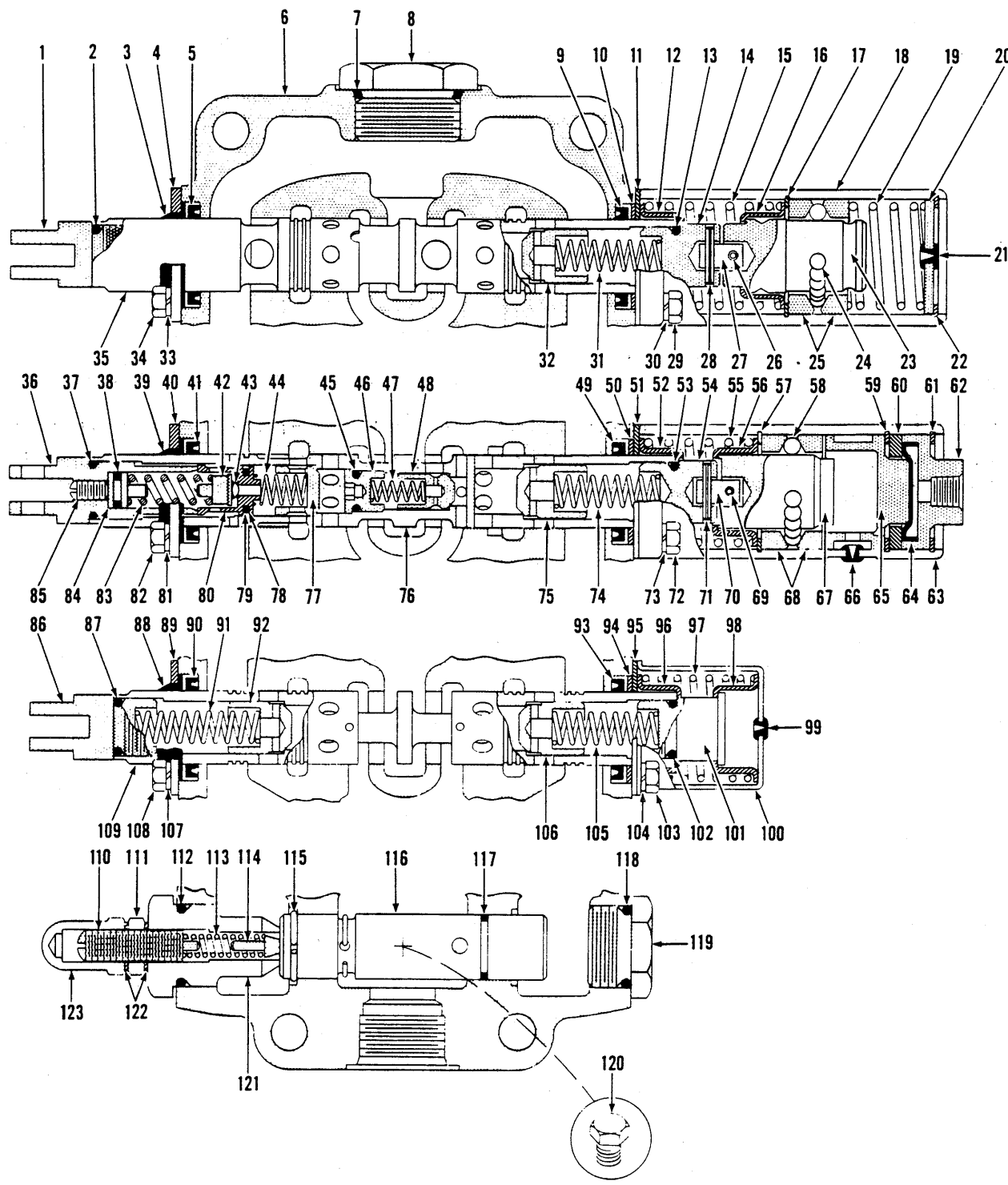
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1502537 **	CONTROL VALVE ASSY (Inc. 1 thru 99)	1	40	946914	PLATE, Wiper & Seal Retaining	1
1	946360	EYE, Plunger	1	41	946583	SEAL, Plunger Oil	1
2	25K-30022	"O" RING, Plunger Eye	1	42	946884	POPPET ASSY (Inc. 43)	1
3	946918	WIPER, Plunger	1	43	—	§BALL — See 42	—
4	946914	PLATE, Wiper & Seal Retaining	1	44	946545	SPRING	1
5	946583	SEAL, Plunger Oil	1	45	945221	"O" RING, Cap	1
6	—	§HOUSING, Valve — See "A"	—	46	946555	*CAP	1
7	91F-11	"O" RING, Cap	1	47	946536	SPRING	1
8	24K-11	CAP, Housing	1	48	945590	CHECK	1
9	946583	SEAL, Plunger Oil	1	49	946583	SEAL, Plunger Oil	1
10	944883	RING, Back-Up	1	50	944883	RING, Back-Up	1
11	944882	PLATE, Seal Retaining	1	51	946535	PLATE, Seal Retaining	1
12	944878	GUIDE, Spring	1	52	944878	GUIDE, Spring	1
13	25K-30022	"O" RING, Cap	1	53	25K-30022	"O" RING, Cap	1
14	945095	CAP, Plunger	1	54	945095	CAP, Plunger	1
15	945090	SPRING	1	55	944879	SPRING	1
16	944878	GUIDE, Spring	1	56	944878	GUIDE, Spring	1
17	1301194	RING, Retaining	1	57	1301194	RING, Retaining	1
18	945805	COVER, Detent	1	58	10J-08	BALL	15
19	946029	SPRING	1	59	507695	RING, Retaining	1
20	944900	PLUG	1	60	946916	SPACER	1
21	886763	PLUG, Bleeder	1	61	507695	RING, Retaining	1
22	507695	RING, Retaining	1	62	946915	PLUG	1
23	946030	CAP, Detent	1	63	946913	COVER, Detent	1
24	10J-08	BALL	15	64	946919	DIAPHRAGM	1
25	944897	RETAINER, Ball	2	65	946917	PLUG	1
26	108301	ROLL PIN	1	66	886763	PLUG, Bleeder	1
27	888449	PIN, Connecting	1	67	946912	CAP, Detent	1
28	108301	ROLL PIN	1	68	944897	RETAINER, Ball	2
29	1C-416	BOLT, Cover to Housing	4	69	305307	ROLL PIN	1
30	4E-04	LKWSHR, Cover to Housing	4	70	888449	PIN, Connecting	1
31	893293	SPRING, Check	1	71	305307	ROLL PIN	1
32	944885	CHECK	1	72	1C-416	BOLT, Cover to Housing	4
33	4E-04	LKWSHR, Plate to Housing	2	73	4E-04	LKWSHR, Cover to Housing	4
34	1C-410	BOLT, Plate to Housing	2	74	946544	SPRING, Check	1
35	—	§PLUNGER — See "A"	—	75	944885	CHECK	1
36	946361	EYE, Plunger	1	76	—	§PLUNGER — See "A"	—
37	25K-30022	"O" RING, Plunger Eye	1	77	946543	CHECK	1
38	25K-20014	"O" RING, Guide	1	78	25K-20018	"O" RING, Seat	1
39	946918	WIPER, Plunger	1	79	946556	RING, Sealing	1
				80	946883	SEAT, Relief Valve	1

§ Not Sold Separately

*NOTE: Torque to 25 Ft./Lbs.

**NOTE: For replacement use 2510842 Valve Assembly.

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



CONTROL VALVE ASSEMBLY

TS-8495-P



CONSTRUCTION MACHINERY DIVISION



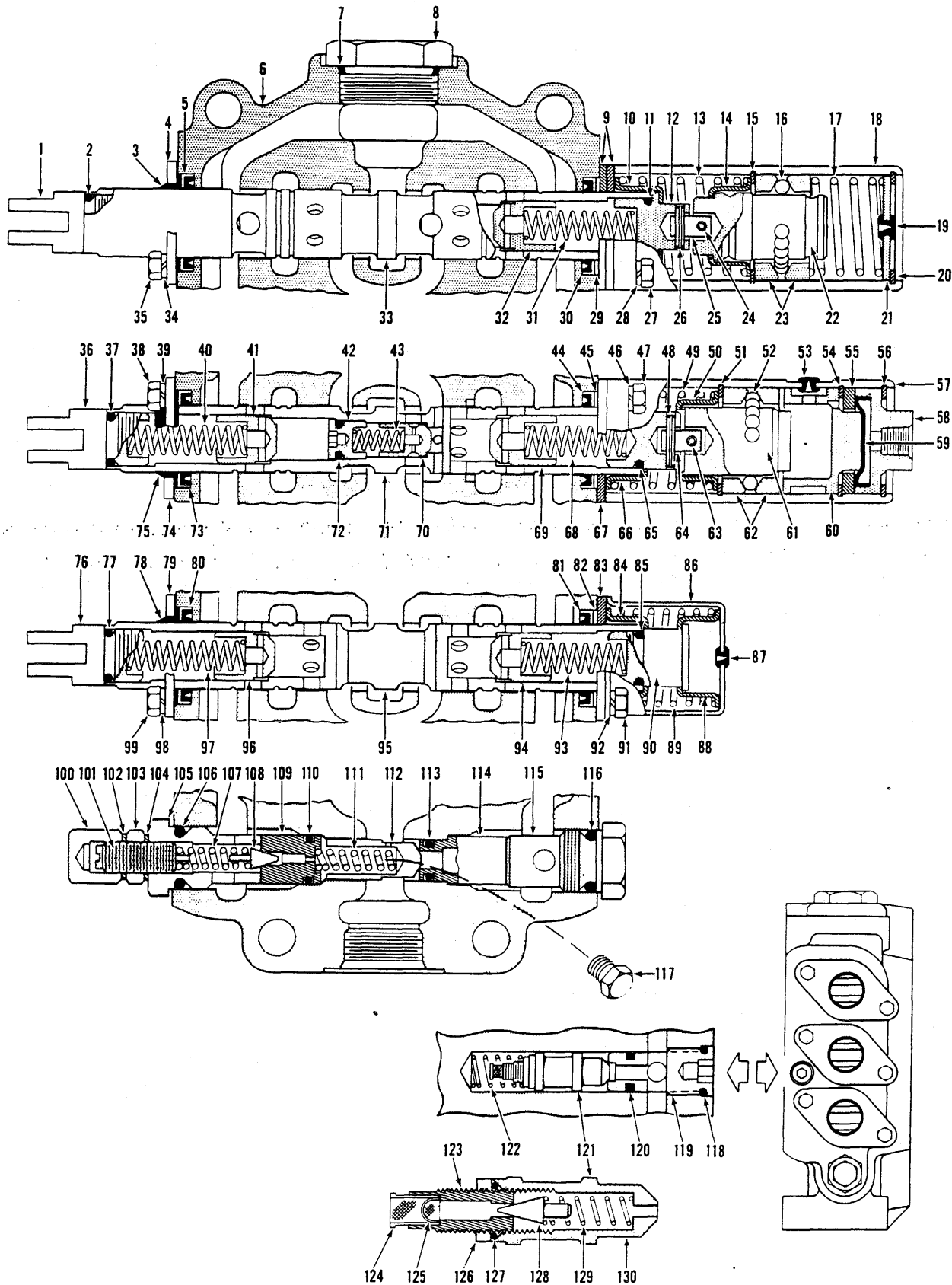
THREE SPOOL CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
81	4E-04	LKWSHR, Plate to Housing	2	103	1C-410	BOLT, Cover to Housing	4
82	1C-410	BOLT, Plate-to Housing	2	104	4E-04	LKWSHR, Cover to Housing	4
83	946364	SPRING	1	105	893293	SPRING, Check	1
84	946363	GUIDE, Spring	1	106	944885	CHECK	1
85	946541	SCREW, Adjusting	1	107	4E-04	LKWSHR, Plate to Housing	2
86	946360	EYE, Plunger	1	108	1C-410	BOLT, Plate to Housing	2
87	25K-30022	"O" RING, Plunger Eye	1	109	-----	§PLUNGER - See "A"	-
88	946918	WIPER, Plunger	1	110	944890	SCREW, Adjusting	1
89	946914	PLATE, Wiper & Seal Retaining	1	111	8D-08	NUT, Jam	1
90	946583	SEAL, Plunger Oil	1	112	58K-214	"O" RING, Adjusting Cap	1
91	893293	SPRING, Check	1	113	886753	SPRING, Relief	1
92	944885	CHECK	1	114	886739	POPPET, Relief	1
93	946583	SEAL, Plunger Oil	1	115	947361	SNAP RING	1
94	944883	RING, Back-Up	1	116	893298	RELIEF VALVE ASSY (Inc. 115, 117)	1
95	944882	PLATE, Seal Retaining	1	117	58K-020	"O" RING, Relief Valve	1
96	945348	GUIDE, Spring	1	118	58K-214	"O" RING, Cap	1
97	944879	SPRING	1	119	944894	CAP	1
98	945348	GUIDE, Spring	1	120	40K-04	PLUG	1
99	886745	PLUG, Bleeder	1	121	893296	CAP, Adjusting	1
100	944896	COVER, Detent	1	122	613750	WASHER	2
101	944895	CAP, Plunger	1	123	944853	NUT, Acorn	1
102	25K-30022	"O" RING, Cap	1				

§Not Sold Separately

NOTES

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



**THREE SPOOL CONTROL VALVE ASSEMBLY
(SERVICE)**

TS-8904-P

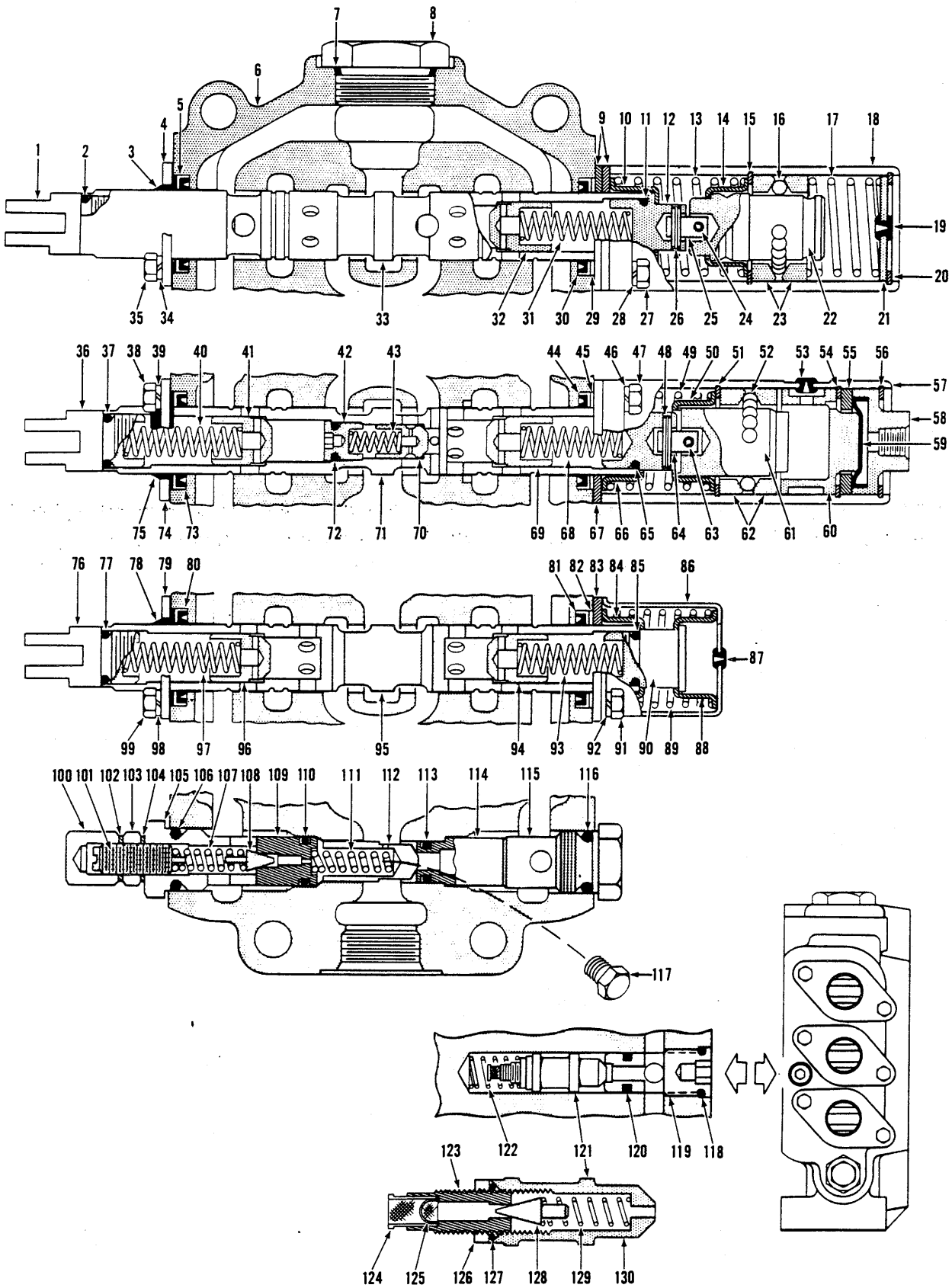
**THREE SPOOL CONTROL VALVE ASSEMBLY
(SERVICE)**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1536690	*CONTROL VALVE (Inc. Items 1 thru 130)	—	36	946360	EYE, Plunger	1
1	946360	EYE, Plunger	1	37	25K-30022	RING, Seal	1
2	25K-30022	O-RING, Plunger Eye	1	38	1C-612	BOLT, Retainer	2
3	946918	WIPER, Plunger	1	39	4E-06	LKWSHR, Retainer	2
4	980831	RETAINER, Wiper	1	40	893293	SPRING, Check	1
5	946583	SEAL, Plunger Oil	1	41	944885	CHECK	1
6	—	§HOUSING, Valve (See "A")	—	42	946555	CAP	1
7	91F-11	O-RING, Cap	1	43	946536	SPRING, Check	1
8	24K-11	CAP	1	44	946583	SEAL, Plunger Oil	1
9	980832	PLATE, Retainer	2	45	944883	RING, Back up	1
10	945092	GUIDE, Spring	1	46	4E-06	LKWSHR, Cover	2
11	25K-30022	RING, Seal	1	47	1C-616	BOLT, Cover	2
12	945091	CAP, Plunger	1	48	108301	PIN, Roll	1
13	945090	SPRING, Return	1	49	980830	SPRING, Return	1
14	944878	GUIDE, Spring	1	50	944878	GUIDE, Spring	1
15	1301194	RING, Retaining	1	51	1301194	RING, Retainer	1
16	10J-08	BALL, Detent	15	52	10J-08	BALL, Detent	15
17	946029	SPRING, Detent	1	53	886763	PLUG, Bleeder	1
18	947776	COVER, Detent	1	54	507695	RING, Retainer	1
19	886763	PLUG, Bleeder	1	55	946916	SPACER	1
20	507695	RING, Retainer	1	56	507695	RING, Retainer	1
21	944900	PLUG	1	57	961072	COVER, Detent	1
22	947786	CAP, Detent	1	58	946915	PLUG	1
23	944897	RETAINER, Ball	2	59	946919	DIAPHRAGM	1
24	108301	PIN, Roll	1	60	946917	PLUG	1
25	888449	PIN	1	61	946912	CAP, Detent	1
26	300232	PIN, Roll	1	62	944897	RETAINER, Roll	2
27	1C-616	BOLT, Cap	2	63	305307	PIN, Roll	1
28	4E-06	LKWSHR, Cap	2	64	888449	PIN	1
29	944883	RING, Back up	1	65	25K-30022	RING, Seal	1
30	946583	SEAL, Plunger Oil	1	66	944878	GUIDE, Spring	1
31	893293	SPRING, Check	1	67	980832	RETAINER, Seal	1
32	944885	CHECK	1	68	946544	SPRING, Check	1
33	—	§PLUNGER, Valve (See "A")	—	69	944885	CHECK	1
34	4E-06	LKWSHR, Retainer	2	70	945590	CHECK	1
35	1C-612	BOLT, Retainer	2	71	—	§PLUNGER, Valve (See "A")	—
				72	945221	RING, Seal	1

§ Not Sold Separately

*NOTE: For replacement use 2510842 Valve Assembly.

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



**THREE SPOOL CONTROL VALVE ASSEMBLY
(SERVICE)**

TS-8904-P

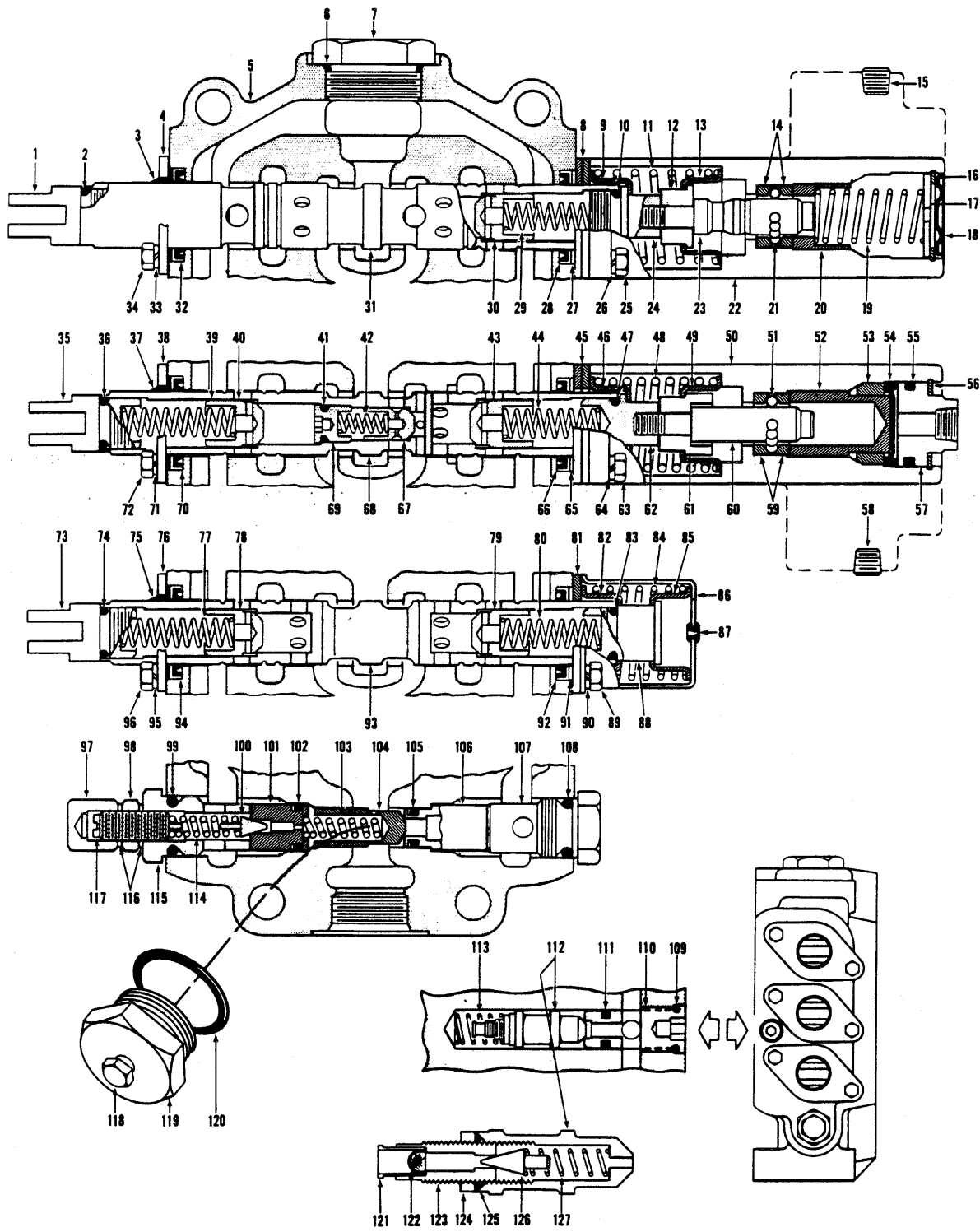
**THREE SPOOL CONTROL VALVE ASSEMBLY
(SERVICE)**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
73	946583	SEAL, Plunger	1	102	613750	WASHER	2
74	980831	RETAINER, Wiper	1	103	8D-08	NUT, Jam	1
75	946918	WIPER, Plunger	1	104	613750	WASHER	2
76	946360	EYE, Plunger	1	105	886753	CAP, Adjusting	1
77	25K-30022	O-RING, Plunger Eye	1	106	893267	RING, Seal	1
78	946918	WIPER, Plunger	1	107	886753	SPRING, Relief	1
79	980831	RETAINER, Wiper	1	108	886739	POPPET, Relief	1
80	946583	SEAL, Plunger	1	109	980836	SEAT, Relief	1
81	946583	SEAL, Plunger	1	110	25K-30020	O-RING, Seat	1
82	944883	RING, Back up	1	111	947791	SPRING, Check	1
83	980832	RETAINER, Seal	1	112	960965	CHECK	1
84	945348	GUIDE, Spring	1	113	25K-30016	O-RING, Seat	1
85	25K-30022	RING, Seal	1	114	980840	SEAT, Check	1
86	980828	COVER, Spring	1	115	980838	CAP	1
87	886745	PLUG, Bleeder	1	116	58K-210	O-RING, Seat	1
88	945348	GUIDE, Spring	1	117	40K-04	PLUG, Pipe	1
89	980830	SPRING, Return	1	118	25K-20016	O-RING, Seat	1
90	944895	CAP, Plunger	1	119	947774	SEAT, Relief	1
91	1C-612	BOLT, Cover	2	120	25K-20014	O-RING, Seat	1
92	4E-06	LKWSHR, Cover	2	121	948159	POPPET ASSY (Inc. 123 thru 130)	1
93	893293	SPRING, Check	1	122	886764	SPRING	1
94	944885	CHECK	1	123	-----	§SEAT, Relief	1
95	-----	§PLUNGER, Valve (See "A")	—	124	-----	§GUIDE, Spring	1
96	944885	CHECK	1	125	-----	§FILTER, Screen	1
97	893293	SPRING, Check	1	126	-----	§NUT	1
98	4E-06	LKWSHR, Retainer	2	127	-----	§RING, Seal	1
99	1C-612	BOLT, Retainer	2	128	-----	§POPPET, Pilot	1
100	49D-08	NUT, Acorn	1	129	-----	§SPRING	1
101	980834	SCREW, Adjusting	1	130	-----	§POPPET, Relief	1

§Not Sold Separately

NOTES

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



THREE SPOOL CONTROL VALVE ASSEMBLY

TS-9376



CONSTRUCTION MACHINERY DIVISION

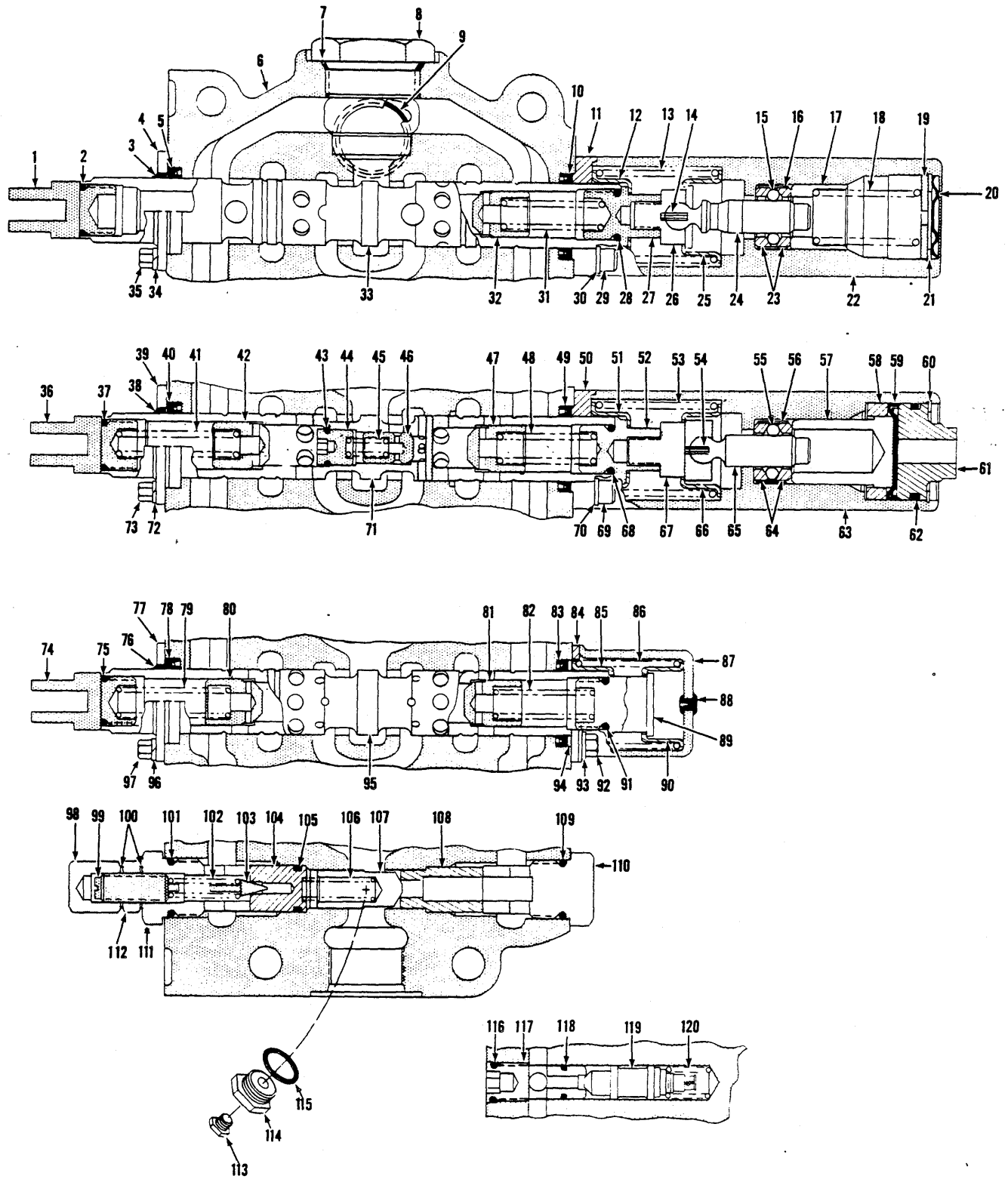


THREE SPOOL CONTROL VALVE ASSEMBLY (Service)

Table with 8 columns: Item, Part No., Description, Qty., Item, Part No., Description, Qty. Lists various components like CONTROL VALVE ASSY, KIT, EYE, Plunger, O-RING, WIPER, PLATE, SPRING, CHECK, etc.

*For replacement use 2510842. §Not Sold Separately

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



TS-13203

Valve Assembly, Main (3 Spool)



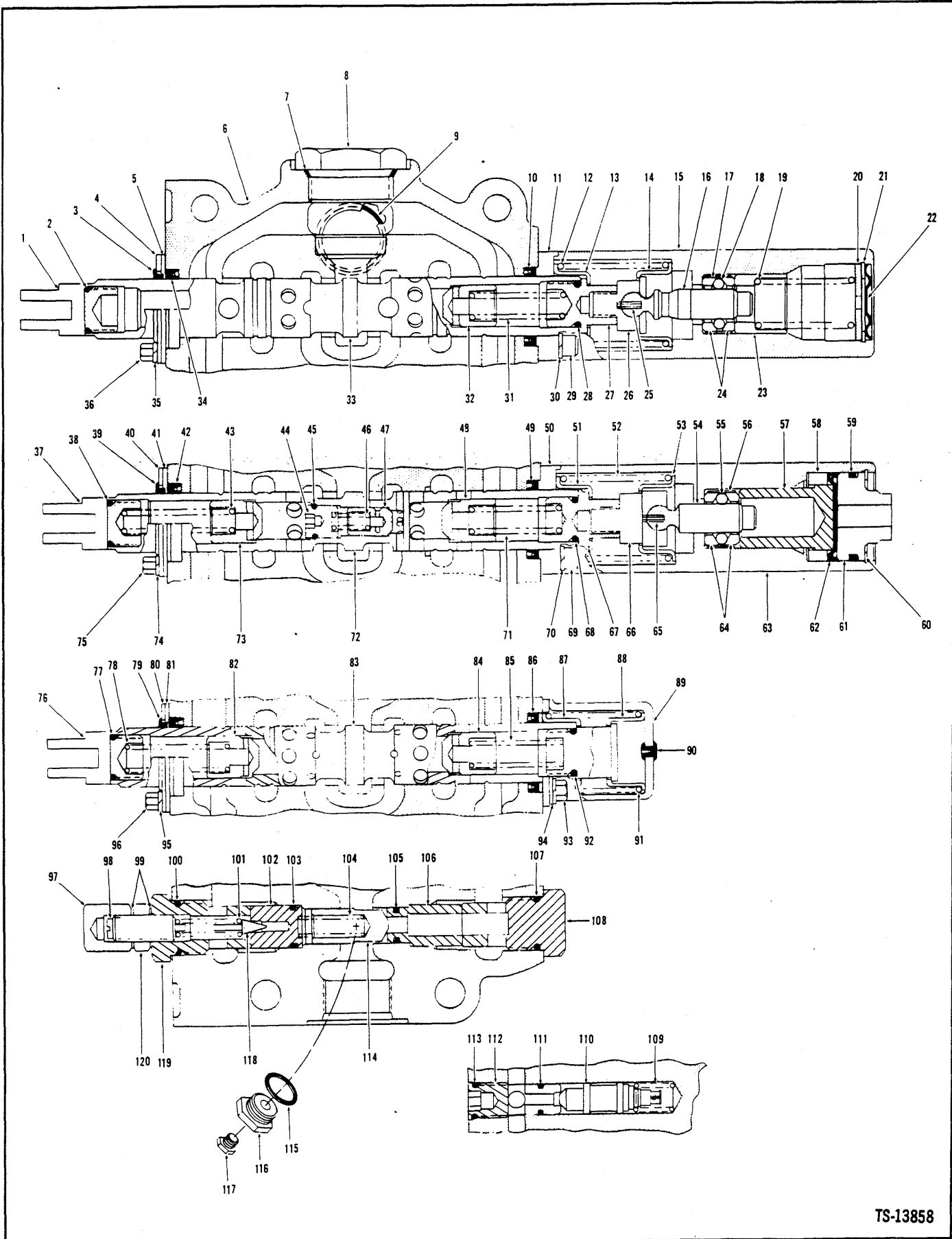
No.	Part No.	Qty.	Description
A	3,1 1549182	1	Valve assy
1	946360	1	Plunger eye
2	25K-30022	1	O-ring
3	946918	1	Wiper
4	980831	1	Plate
5	946583	1	Seal
6	§ ² -----	—	Housing
7	91F-11	1	O-ring
8	24K-11	1	Plug
9	58K-222	1	O-ring
10	946583	1	Seal
11	948717	1	Plate
12	945092	1	Guide
13	945090	1	Spring
14	742306	1	Pin
15	948730	11	Ball
16	948727	1	Sleeve
17	947842	1	Retainer
18	947852	1	Spring
19	947848	1	Plug
20	948202	1	Diaphragm
21	666542	1	Ring
22	948720	1	Housing
23	947843	2	Retainer
24	948723	1	Plunger
25	944878	1	Retainer
26	949278	1	Socket
27	948732	1	Cap
28	25K-30022	1	O-ring
29	1C-612	2	Bolt
30	4E-06	2	Lockwasher
31	893293	1	Spring
32	944885	1	Check
33	§ ² -----	—	Plunger assy
34	4E-06	2	Lockwasher
35	1C-612	2	Bolt
36	946360	1	Plunger eye
37	25K-30022	1	O-ring
38	946918	1	Wiper
39	980831	1	Plate
40	946583	1	Seal
41	893293	1	Spring
42	944885	1	Check
43	25K-30014	1	O-ring
44	946555	1	Cap
45	946536	1	Spring
46	945590	1	Check
47	944885	1	Check
48	946544	1	Spring
49	946583	1	Seal
50	948717	1	Plate
51	945092	1	Guide
52	948732	1	Cap
53	945090	1	Spring
54	300232	1	Pin
55	948730	11	Ball
56	948727	1	Sleeve
57	948725	1	Piston
58	948728	1	Spacer
59	948731	1	Diaphragm
60	948729	1	Ring

No.	Part No.	Qty.	Description
61	948724	1	Plug
62	25K-40114	1	O-ring
63	948721	1	Housing
64	947843	2	Retainer
65	948722	1	Plunger
66	944878	1	Retainer
67	949279	1	Socket
68	25K-30022	1	O-ring
69	1C-612	2	Bolt
70	4E-06	2	Lockwasher
71	§ ² -----	—	Plunger assy
72	4E-06	2	Lockwasher
73	1C-612	2	Bolt
74	946360	1	Plunger eye
75	25K-30022	1	O-ring
76	946918	1	Wiper
77	980831	1	Plate
78	946583	1	Seal
79	893293	1	Spring
80	944885	1	Check
81	944885	1	Check
82	893293	1	Spring
83	946583	1	Seal
84	980832	1	Plate
85	945348	1	Guide
86	980830	1	Spring
87	980828	1	Cover
88	886745	1	Plug
89	944895	1	Cap
90	945348	1	Guide
91	25K-30022	1	O-ring
92	1C-612	2	Bolt
93	4E-06	2	Lockwasher
94	944883	1	Ring
95	§ ² -----	—	Plunger assy
96	4E-06	2	Lockwasher
97	1C-612	2	Bolt
98	49D-08	1	Nut
99	980834	1	Screw
100	613750	2	Washer
101	58K-210	1	O-ring
102	886753	1	Spring
103	886739	1	Poppet
104	980836	1	Seat
105	25K-30020	1	O-ring
106	947791	1	Spring
107	960965	1	Poppet
108	980840	1	Seat
109	58K-210	1	O-ring
110	980838	1	Cap
111	980835	1	Cap
112	8D-08	1	Nut
113	40K-04	1	Plug
114	946882	1	Plug
115	91F-10	1	O-ring
116	25K-20016	1	O-ring
117	947774	1	Seat
118	25K-20014	1	O-ring
119	948159	1	Poppet assy
120	886764	1	Spring

¹Incl. 1→120

²See A

³For replacement use 2510842.



TS-13858

Valve Assembly, Main (3 Spool)



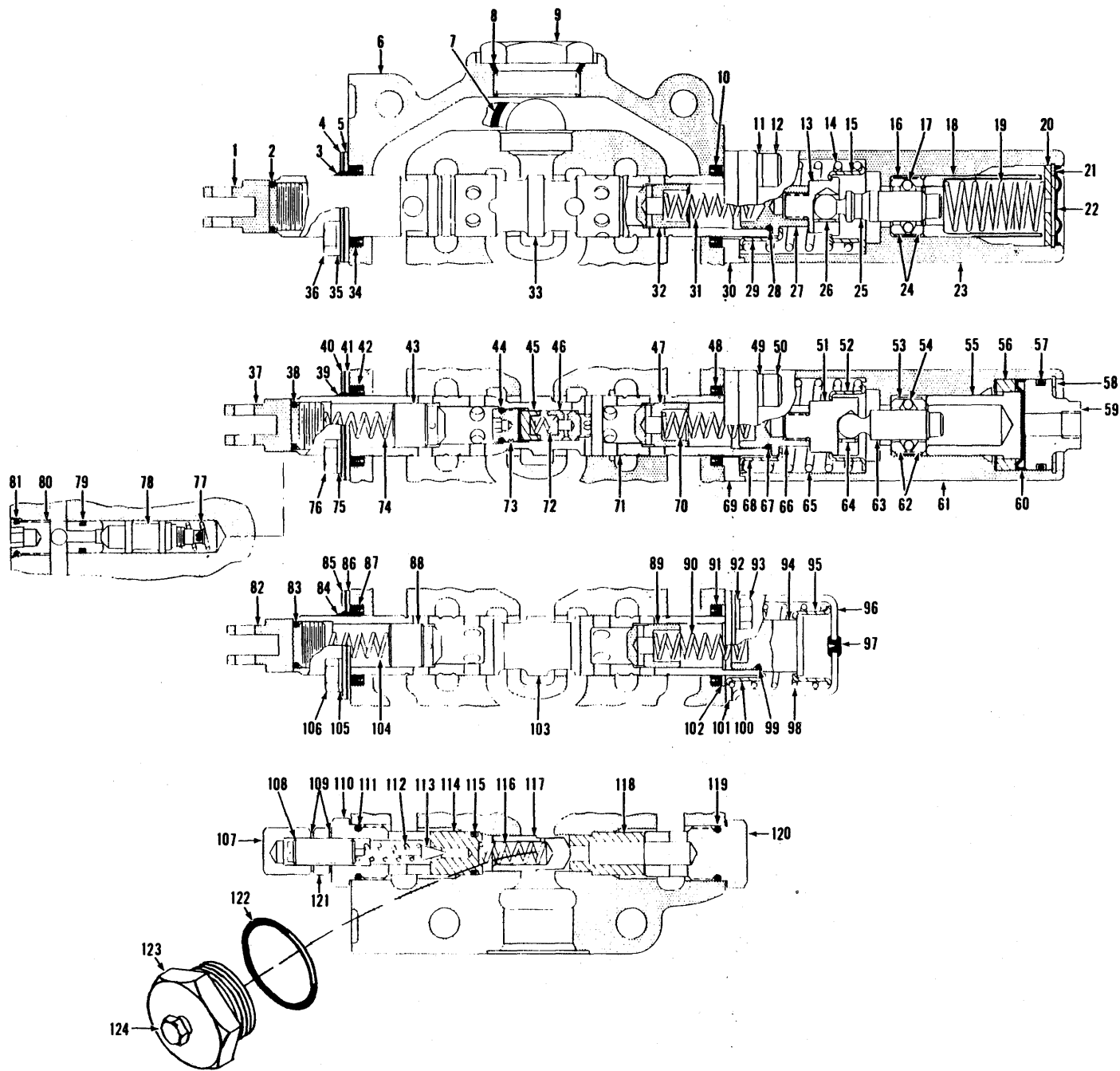
No.	Part No.	Qty.	Description
A	^{3,1} 1513173	1	Valve assy
1	893295	1	Plunger eye
2	25K-30022	1	O-ring
3	949305	1	Wiper
4	949303	1	Plate
5	949302	1	Plate
6	² _____	—	Housing
7	91F-11	1	O-ring
8	24K-11	1	Plug
9	91F-10	1	O-ring
10	949304	1	Seal
11	949299	1	Plate
11A	949300	1	Plate
11B	949301	1	Plate
12	945090	1	Spring
13	945092	1	Guide
14	944878	1	Retainer
15	948720	1	Housing
16	948723	1	Plunger
17	948727	1	Sleeve
18	948730	11	Ball
19	947852	1	Spring
20	947848	1	Plug
21	666542	1	Snap ring
22	948202	1	Diaphragm
23	948954	1	Retainer
24	947843	2	Retainer
25	742306	1	Pin
26	949278	1	Socket
27	948732	1	Cap
28	25K-30022	1	O-ring
29	11G-620	2	Bolt
30	4E-06	2	Lockwasher
31	893293	1	Spring
32	944885	1	Check
33	² _____	—	Plunger assy
34	949304	1	Seal
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	893293	1	Spring
44	946555	1	Cap
45	25K-30014	1	O-ring
46	946536	1	Spring
47	945590	1	Check
48	944885	1	Check
49	949304	1	Seal
50	949299	1	Plate
50A	949300	1	Plate
50B	949301	1	Plate
51	945092	1	Guide
52	946544	1	Spring
53	944878	1	Retainer
54	948722	1	Plunger
55	948730	11	Ball
56	948727	1	Sleeve
57	948725	1	Piston
58	948728	1	Spacer

No.	Part No.	Qty.	Description
59	25K-40114	1	O-ring
60	763840	1	Snap ring
61	948724	1	Plug
62	948731	1	Diaphragm
63	948721	1	Housing
64	947843	2	Retainer
65	300232	1	Pin
66	949279	1	Socket
67	948732	1	Cap
68	25K-30022	1	O-ring
69	11G-620	2	Bolt
70	4E-06	2	Lockwasher
71	946544	1	Spring
72	² _____	—	Plunger
73	944885	1	Check
74	4E-06	2	Lockwasher
75	1C-612	2	Bolt
76	946360	1	Plunger eye
77	25K-30022	1	O-ring
78	893293	1	Spring
79	949305	1	Wiper
80	949303	1	Plate
81	949302	1	Plate
82	944885	1	Check
83	² _____	—	Plunger
84	944885	1	Check
85	893293	1	Spring
86	949304	1	Seal
87	945348	1	Guide
88	945348	1	Guide
89	980828	1	Cover
90	886745	1	Plug
91	980830	1	Spring
92	25K-30022	1	O-ring
93	1C-612	2	Bolt
94	4E-06	2	Lockwasher
95	4E-06	2	Lockwasher
96	1C-612	2	Bolt
97	49D-08	1	Nut
98	980834	1	Screw
99	613750	2	Washer
100	58K-210	1	O-ring
101	886753	1	Spring
102	980836	1	Seat
103	25K-30020	1	O-ring
104	947791	1	Spring
105	25K-30016	1	O-ring
106	980840	1	Seat
107	58K-210	1	O-ring
108	980838	1	Cap
109	886764	1	Spring
110	948159	1	Poppet assy
111	25K-20014	1	O-ring
112	947774	1	Seat
113	25K-20016	1	O-ring
114	960965	1	Poppet
115	91F-10	1	O-ring
116	946882	1	Plug
117	40K-04	1	Plug
118	886739	1	Poppet
119	980835	1	Cap
120	8D-08	1	Nut

¹Inc. 1 → 120

²See A

³For replacement use 2510842.



162C.1

(1J5)

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TS-14059

Valve Assembly, Main (3 Spool)

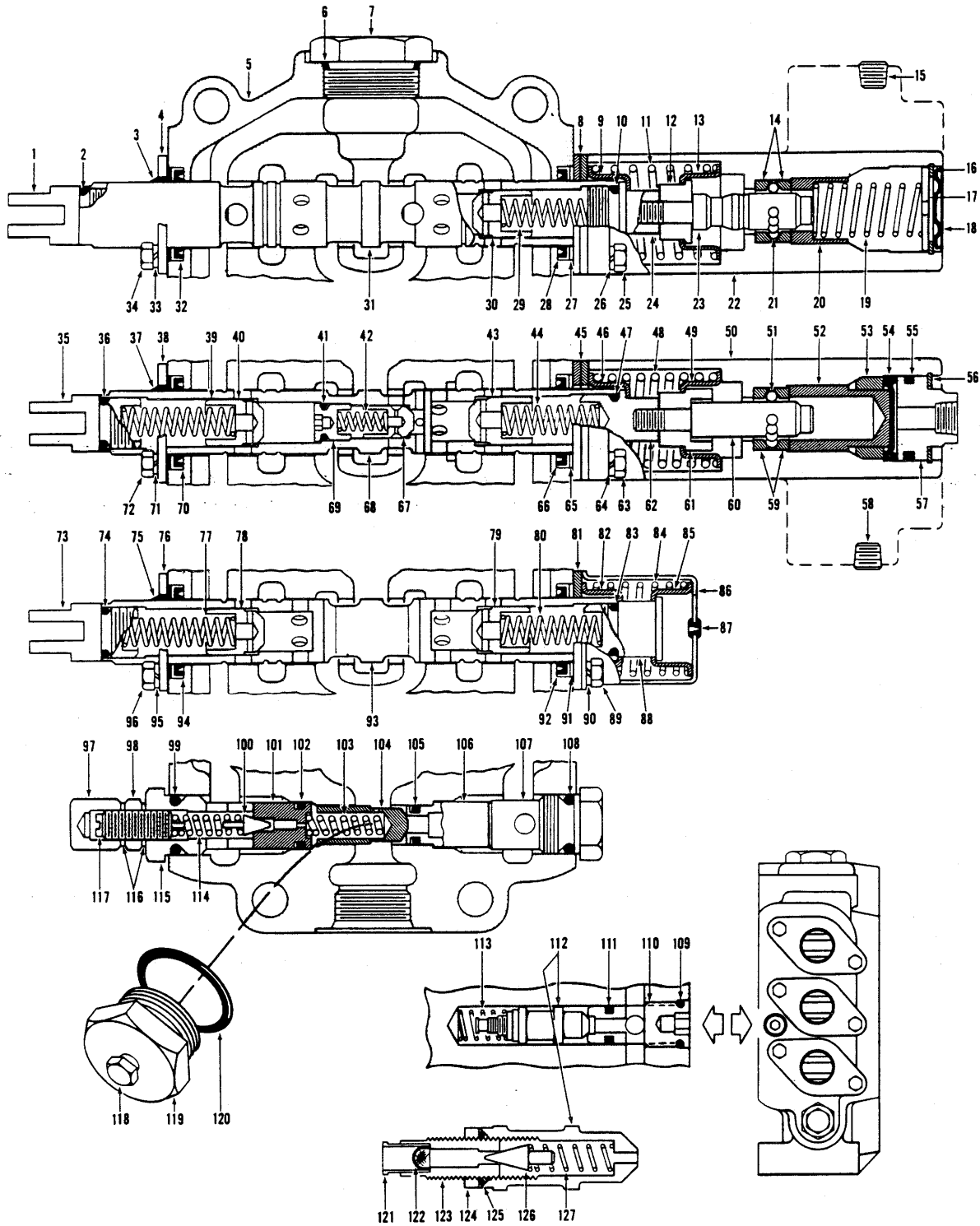


No.	Part No.	Qty.	Description
A	12510842	1	Valve assy
1	946360	1	Plunger eye
2	25K-30022	1	O-ring
3	949305	1	Wiper
4	949303	1	Plate
5	949302	1	Plate
6	§²_____	—	Housing
7	58K-222	1	O-ring
8	91F-11	1	O-ring
9	24K-11	1	Plug
10	949304	1	Seal
11	4E-06	2	Lockwasher
12	11G-620	2	Bolt
13	949278	1	Socket
14	945090	1	Spring
15	944878	1	Guide
16	948727	1	Sleeve
17	948730	11	Ball
18	948954	1	Retainer
19	947852	1	Spring
20	947848	1	Plug
21	666542	1	Ring
22	948202	1	Diaphragm
23	960900	1	Housing
24	947843	1	Retainer
25	948723	1	Plunger
26	742306	1	Pin
27	948732	1	Cap
28	25K-30022	1	O-ring
29	945092	1	Guide
30	949300	1	Plate
31	893293	1	Spring
32	944885	1	Check
33	§²_____	—	Plunger
34	949304	1	Seal
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	§²_____	—	O-ring
45	§²_____	—	Piston
46	§²_____	—	Check
47	960907	1	Check
48	949304	1	Seal
49	4E-06	2	Lockwasher
50	11G-620	2	Bolt
51	949279	1	Socket
52	944878	1	Guide
53	948727	1	Sleeve
54	948730	11	Ball
55	948725	1	Piston
56	948728	1	Spacer
57	25K-40114	1	O-ring
58	948729	1	Ring
59	948724	1	Plug
60	948731	1	Diaphragm
61	948721	1	Housing
62	947843	2	Retainer

No.	Part No.	Qty.	Description
63	948722	1	Plunger
64	300232	1	Pin
65	945090	1	Spring
66	948732	1	Cap
67	25K-30022	1	O-ring
68	945092	1	Guide
69	949300	1	Plate
70	960902	1	Spring
71	§²_____	—	Plunger
72	§²_____	—	Spring
73	§²_____	—	Cap
74	893293	1	Spring
75	4E-06	2	Lockwasher
76	1C-612	2	Bolt
77	886764	1	Spring
78	948159	1	Poppet assy
79	25K-20014	1	O-ring
80	947774	1	Seat
81	25K-20016	1	O-ring
82	946360	1	Plunger eye
83	25K-30022	1	O-ring
84	949305	1	Wiper
85	949303	1	Plate
86	949302	1	Plate
87	949304	1	Seal
88	944885	1	Check
89	944885	1	Check
90	893293	1	Spring
91	949304	1	Seal
92	4E-06	2	Lockwasher
93	1C-612	2	Bolt
94	944895	1	Cap
95	945348	1	Guide
96	980828	1	Cover
97	886745	1	Plug
98	980830	1	Spring
99	25K-30022	1	O-ring
100	945348	1	Guide
101	980832	1	Plate
102	949349	1	Ring
103	§²_____	—	Plunger
104	893293	1	Spring
105	4E-06	2	Lockwasher
106	1C-612	2	Bolt
107	49D-08	1	Nut
108	980834	1	Screw
109	613750	2	Washer
110	980835	1	Cap
111	58K-210	1	O-ring
112	886753	1	Spring
113	886739	1	Poppet
114	980836	1	Seat
115	25K-30020	1	O-ring
116	947791	1	Spring
117	960965	1	Poppet
118	980840	1	Seat
119	58K-210	1	O-ring
120	980838	1	Cap
121	8D-08	1	Nut
122	91F-10	1	O-ring
123	946882	1	Plug
124	40K-04	1	Plug

1 Inc. 1 → 124

2See A



THREE SPOOL CONTROL VALVE ASSEMBLY

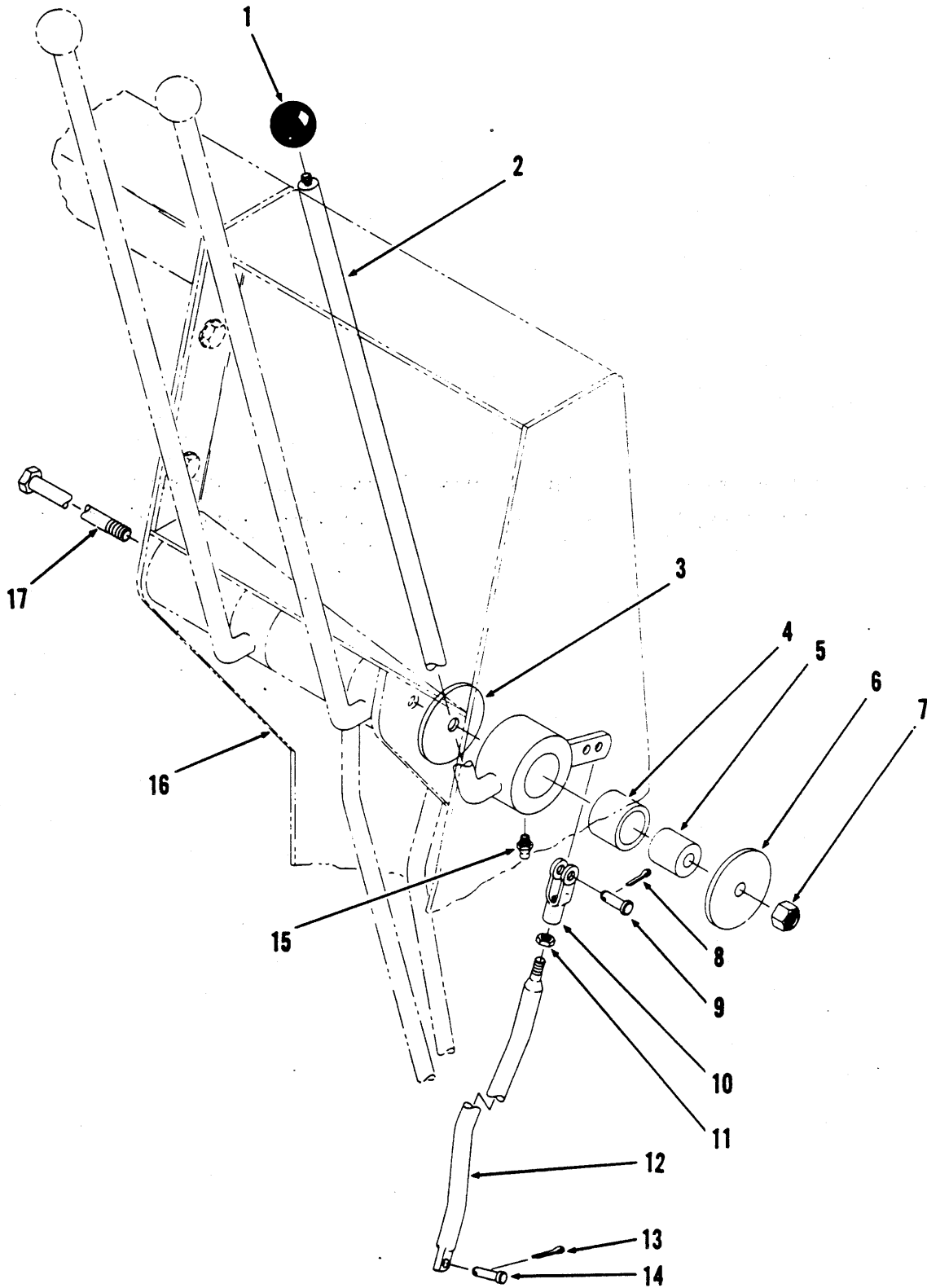
TS-9376

THREE SPOOL CONTROL VALVE ASSEMBLY (Cont'd.)
(Service)

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
71	4E-06	LKWSHR, Plate to Housing	2	100	886739	POPPET, Relief Valve	1
72	1C-610	BOLT, Plate to Housing	2	101	980836	SEAT, Poppet	1
73	946360	EYE, Plunger	1	102	25K-30020	O-RING, Seat	1
74	25K-30022	O-RING, Plunger Eye	1	103	947791	SPRING, Check	1
75	946918	WIPER, Plunger	1	104	960965	CHECK	1
76	980831	PLATE, Wiper & Seal Retainer	1	105	25K-30016	O-RING, Seat	1
77	893293	SPRING, Check	1	106	980840	SEAT, Relief Valve Check	1
78	944885	CHECK	1	107	980838	CAP, Housing	1
79	944885	CHECK	1	108	58K-210	O-RING, Cap	1
80	893293	SPRING, Check	1	109	25K-20016	O-RING, Plug	1
81	980832	PLATE, Seal Retainer	1	110	947774	SEAT, Check	1
82	945348	GUIDE, Spring	1	111	25K-20014	O-RING, Seat	1
83	25K-30022	O-RING, Cap	1	112	-----	VALVE, Overload Relief - See B	1
84	980830	SPRING, Plunger Return.....	1	113	886764	SPRING, Check	1
85	945348	GUIDE, Spring	1	114	886753	SPRING, Relief Valve	1
86	980828	COVER, Spring	1	115	980835	CAP, Relief Valve	1
87	886745	PLUG, Bleeder	1	116	613750	WASHER, Jam Nut	1
88	944895	CAP, Plunger	1	117	980834	SCREW, Adjusting	1
89	1C-618	BOLT, Cover to Housing	4	118	40K-04	PLUG, Pipe	1
90	4E-06	LKWSHR, Cover to Housing	4	119	946882	CAP, Housing	1
91	944883	RING, Back-Up	1	120	91F-10	O-RING, Cap	1
92	946583	SEAL, Plunger Oil	1	121	-----	§GUIDE, Spring - See B	1
93	-----	§PLUNGER, Operating - See A	1	122	-----	§SCREEN, Filter - See B	1
94	946583	SEAL, Plunger Oil	1	123	-----	§SEAT, Poppet - See B	1
95	4E-06	LKWSHR, Plate to Housing	2	124	-----	§NUT, Poppet - See B	1
96	1C-612	BOLT, Plate to Housing	2	125	-----	§O-RING, Nut Poppet - See Item B	1
97	49D-08	NUT, Acorn	1	126	-----	§POPPET, Overload Relief - See B	1
98	8D-08	NUT, Cam	1	127	-----	§SPRING, Poppet Overload Relief - See B	1
99	58K-210	O-RING, Cap	1				

§ Not Sold Separately

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



THREE SPOOL VALVE CONTROLS

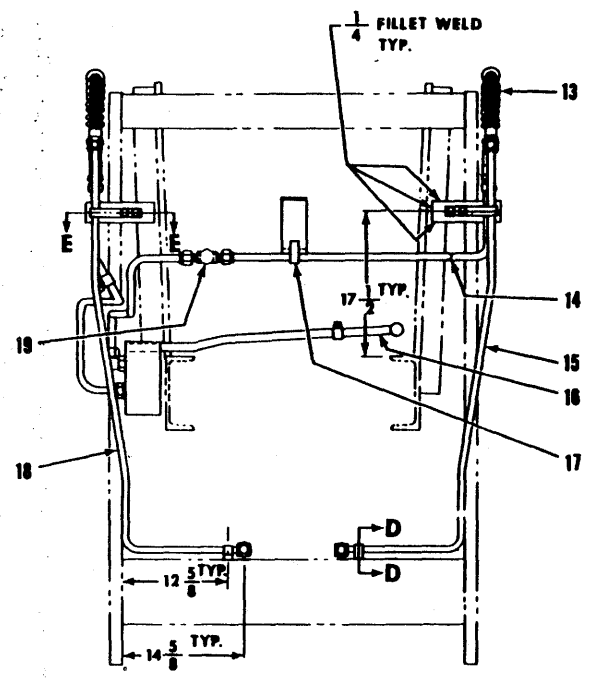
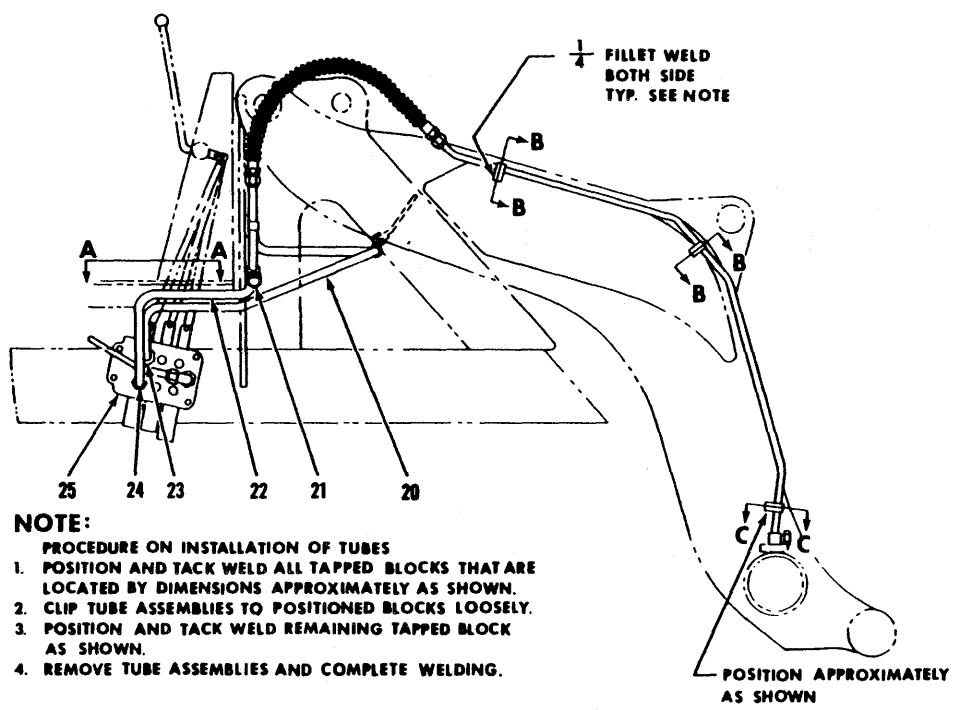
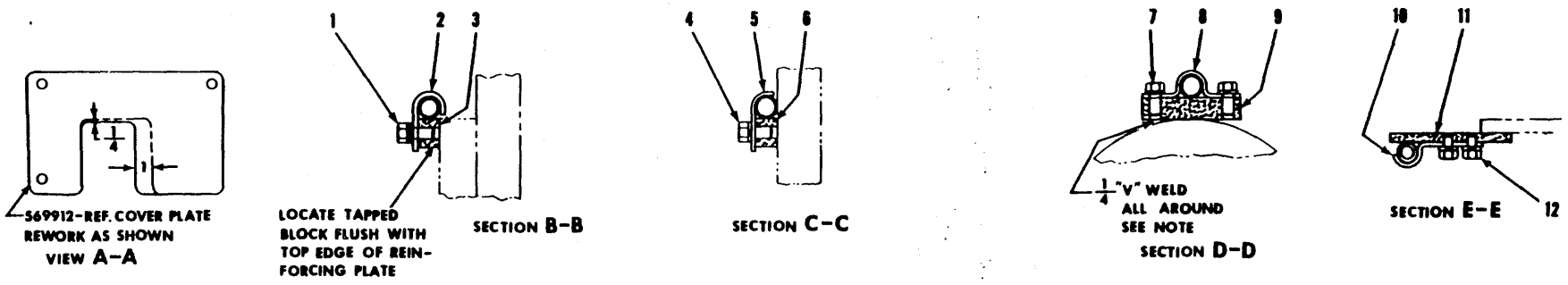
TS-6932-P



THREE SPOOL VALVE CONTROLS

Item No.	Part No.	Description	No. Req'd.
1	509772	KNOB	1
2	567607	LEVER ASSY, Valve (Inc. Item 4)	1
3	616796	WASHER, Valve Lever	1
4	569055	BUSHING, Lever	1
5	550646	SLEEVE, Valve Lever	1
6	616796	WASHER, Valve Lever	1
7	18D-08	NUT	1
8	1F-414	COTTER, Clevis Pin	1
9	4F-08127	PIN, Clevis	1
10	2J-8300	CLEVIS, Valve Rod	1
11	8D-08	NUT, Clevis Jam	1
12	563640	ROD, Valve Assy (Inc. 10, 11)	1
13	1F-312	COTTER, Rod Pin	1
14	4F-06106	PIN, Valve Rod	1
15	10H-25	FITTING, Valve Lever Grease	1
16	----	COCKPIT, See Index	—
17	18C-8160	BOLT, Valve Lever	1

NOTES



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

THREE SPOOL VALVE INSTALLATION AND PARTS

TS-6936-P

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(1J11)

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THREE SPOOL VALVE INSTALLATION AND PARTS

Item No.	Part No.	Description	No. Req'd.
1	18C-612	BOLT, Clamp to Block	4
1A	4E-06	†LKWSHR, Clamp to Block Bolt	4
1B	25E-18	†WASHER, Clamp to Block Bolt	4
2	563638	CLAMP, Tube Mounting	4
3	564771	BLOCK, Tube Mounting	4
4	18C-612	BOLT, Clamp to Block	2
4A	4E-06	†LKWSHR, Clamp to Block Bolt	2
5	563664	CLAMP, Tube Mounting	2
6	564771	BLOCK, Tube Mounting	2
7	18C-612	BOLT, Clamp to Block	4
7A	4E-06	†LKWSHR, Clamp to Block Bolt	4
8	563639	CLAMP, Tube Mounting	2
9	563634	BLOCK, Tube Mounting	2
10	563637	CLAMP, Tube Mounting	2
11	563633	BLOCK, Tube Mounting	2
12	18C-612	BOLT, Clamp to Block	4
12A	4E-06	†LKWSHR, Clamp to Block Bolt	4
13	1521360	HOSE, Tube Connecting	2
14	563647	TUBE, Cross	1
15	1521975	TUBE, L.H.	1
16	563642	TUBE, Rear	1
17	1521359	CLAMP, Tube Mounting	1
17A	————	†BOLT, Use Cockpit Mtg. Bolt	1
18	1521974	TUBE, R.H.	1
19	10K-10	TEE, Union	1
19A	36K-10	†CAP	1
20	563648	TUBE, Valve to Crosstube	1
21	36K-10	CAP	1
22	563646	TUBE, Valve to Hose	1
23	11K-10	ELBOW, 90°	1
23A	15K-10	†CONNECTOR, 37° Flare Fitting (Inc. Item 23B)	1
23B	91F-10	†"O" RING	1
24	15K-10	CONNECTOR, 37° Flare Fitting (Inc. Item 24A)	1
24A	91F-10	†"O" RING	1
25	————	VALVE ASSY, Control — See Index	1

†Not Illustrated

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

C

C

C