

# CLARK

## PARTS MANUAL

**No. 2419**

### **Model 175 III Tractor Shovel**

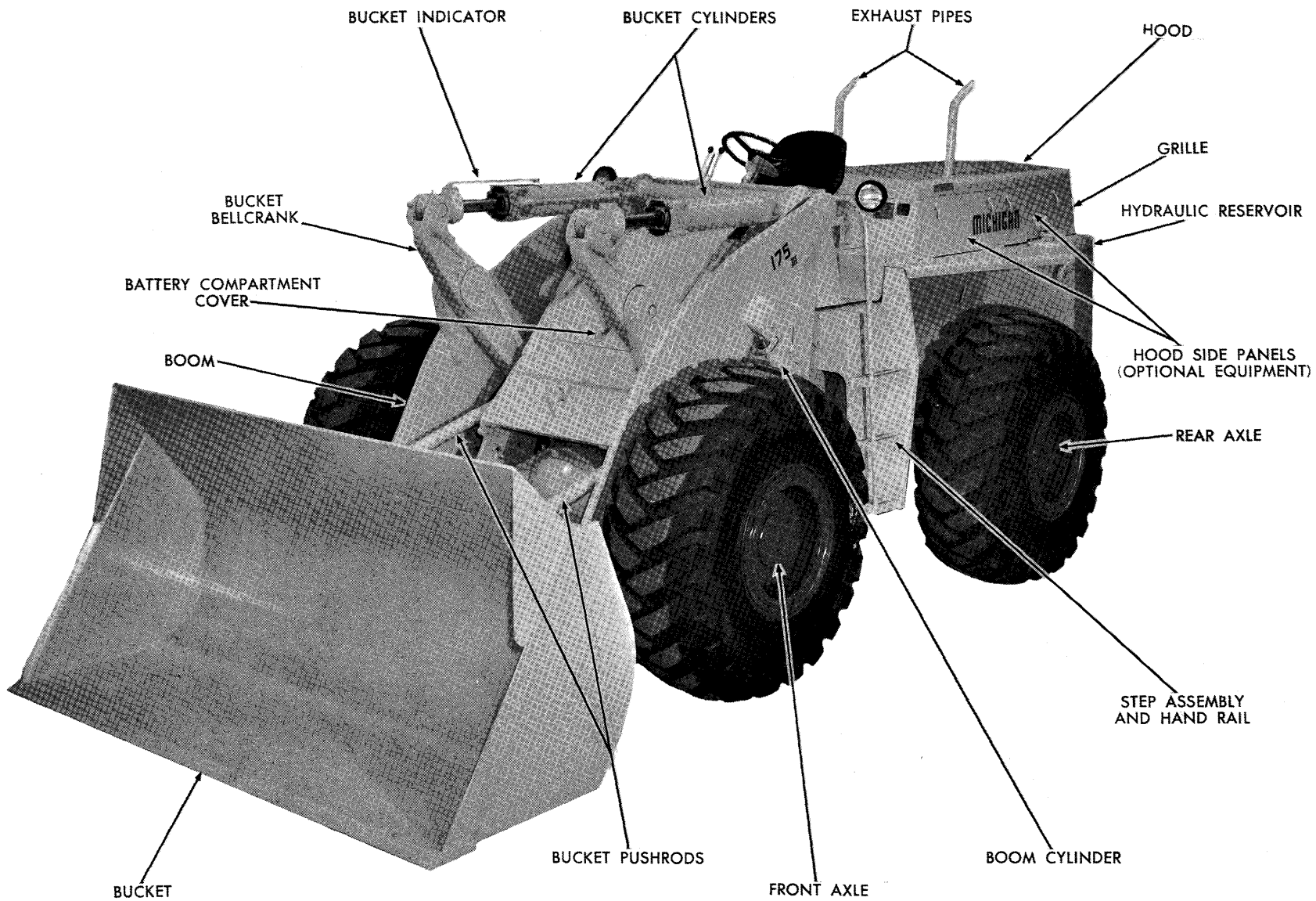
**Information Contained Herein Pertains to Machine Serial  
Numbers Listed Below:**

**175 III CUMMINS – 5HC101 thru 5HC999  
6HC101 thru 6HC999**

**175 III G.M. – 5HG101 thru 5HG999  
6HG101 thru 6HG999  
7HG101 thru 7HG999**

**Record Your Machine  
Serial Number Here**

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**MODEL 175 III TRACTOR SHOVEL**

TS-6397-P

## 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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## ENGINE AND ACCESSORIES — CUMMINS

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

### ENGINE ACCESSORIES — CUMMINS

Item No.	Part No.	Description	No. Req'd.
1	946132	*ALTERNATOR — 24V. (D.R. #1117774) .....	1
2	946164	*STARTER — 24V. (D.R. #1113872) — See Note "A" .....	1
3	556703	VOLTAGE REGULATOR (D.R. #9000591) .....	1
4	-----	*AIR COMPRESSOR (Cummins #161446) .....	1
5	-----	*GOVERNOR (Cummins #160245) .....	1
6	-----	*FUEL FILTER (Cummins #151940) .....	1
7	-----	*BY-PASS FILTER (Cummins #159706) .....	1
8	-----	*FAN (Cummins #587399) .....	1

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

NOTE "A": For complete replacement of 946164 (DR #1113872) Starter use 946052 (DR #1113905).

## ENGINE AND ACCESSORIES — G.M.

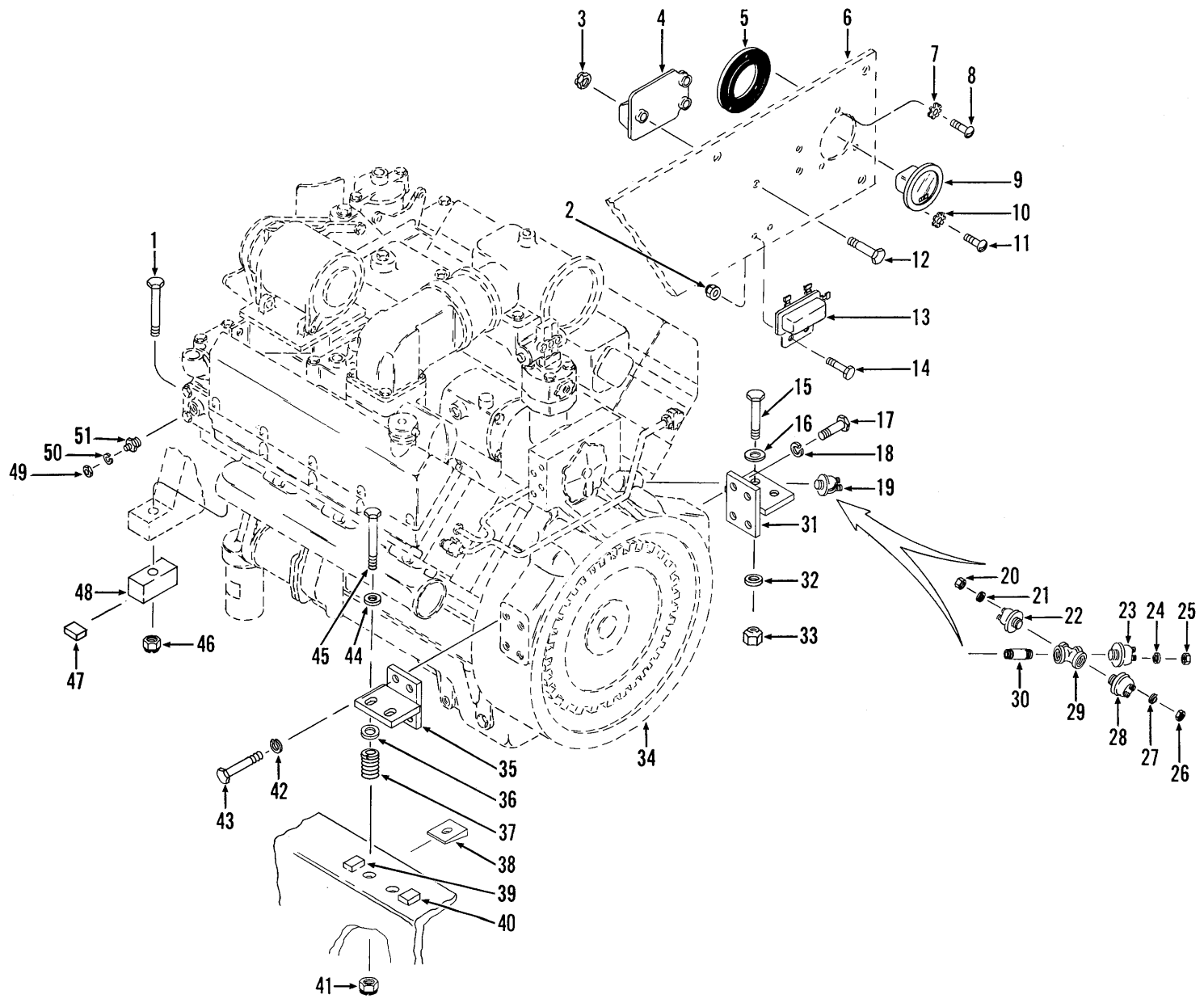
All orders for engine assembly or components thereof should be placed with the nearest G.M. Diesel Distributor. To obtain proper items, it is necessary to provide your engine model, serial number and necessary group type number for the equipment required. This data is stamped on the options and accessories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

### ENGINE ACCESSORIES — G.M.

Item No.	Part No.	Description	No. Req'd.
9	946132	*ALTERNATOR — 24V. (D.R. #1117774) .....	1
10	946253	*STARTER — 24V. (G.M. #1113879) .....	1
11	556703	VOLTAGE REGULATOR (D.R. #9000591) .....	1
12	-----	*AIR COMPRESSOR (G.M. #5131515) .....	1
13	-----	*GOVERNOR (G.M. #5133790) .....	1
14	557527	BELT, Alternator Drive (2 Belt Set) .....	1
15	947903	BELT, Fan Drive (3 Belt Set) .....	1
16	-----	*FILTER, Lube Oil (G.M. #5134553) .....	1
17	-----	*FUEL FILTER, Primary (G.M. #6435875) .....	1
18	-----	*FUEL FILTER, Secondary (G.M. #5574506) .....	1
19	215502	ELEMENT, Lube Oil .....	1
20	945446	ELEMENT, Fuel Filter — Primary .....	1
21	945445	ELEMENT, Fuel Filter — Secondary .....	1

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

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



[ 2 ]

ENGINE AUXILIARY AND SUPPORT PARTS — CUMMINS

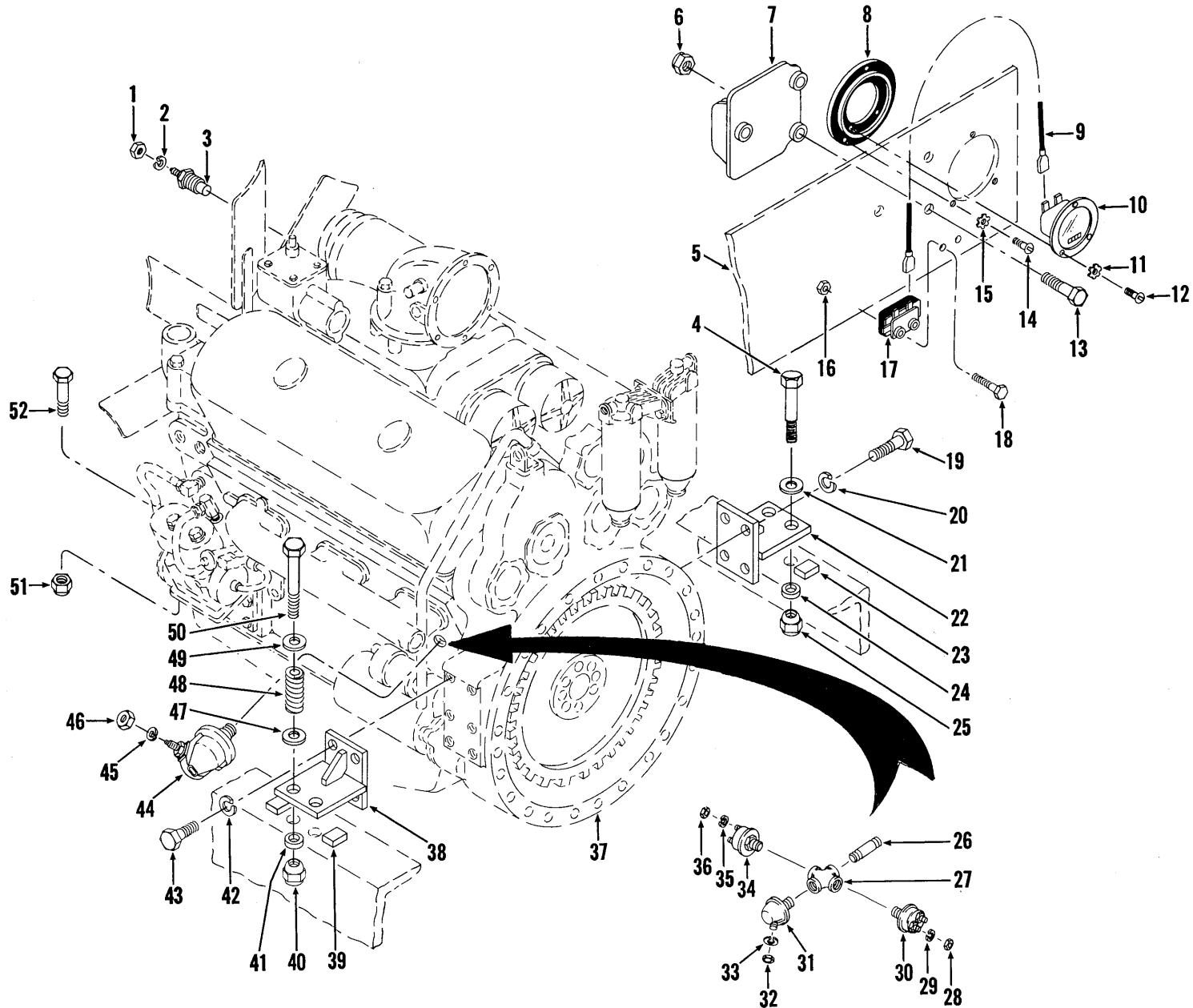
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## ENGINE AUXILIARY AND SUPPORT PARTS — CUMMINS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	24C-1036	BOLT, Front Eng. Mount.....	2	24	12E-10	LKWSHR — Serial Group "A"	1
2	18D-04	NUT, Relay Mtg. — Serial Group "B" .....	2	25	14D-10	NUT, Sender — Serial Group "A" .....	1
3	18D-04	NUT, Regulator Mtg. ....	3	26	14D-10	NUT, Press. Switch — Serial Group "A" .....	1
4	556703	REGULATOR, Voltage .....	1	27	12E-10	LKWSHR — Serial Group "A"	1
5	551251	DAMPENER, Hourmeter Vibrating .....	1	28	636260	SWITCH, Voltage Reg. Press. — Serial Group "A"	1
6	-----	PLATE, Air Cleaner Mtg. — See Index .....	—	29	21F-1	CROSS — Serial Group "A"	1
7	12E-6	LKWSHR, Vibration Dampener Mtg. ....	3	30	542646	NIPPLE, Cross to Eng. — Serial Group "A" .....	1
8	85G-608	SCREW, Vibration Dampener Mtg. ....	3	31	571152	SUPPORT, Engine — L.H. ....	1
9	1743825	KIT, Hourmeter (Inc. 10, 11) ..	1	32	71D-12	BASE, Support to Frame — L.H. ....	2
9A	569414	†BRACKET, Hourmeter Mtg. — Serial Group "A" .....	1	33	70D-12	NUT, Support to Frame — L.H. ....	2
9B	24C-424	†BOLT, Hourmeter Brk. Mtg. — Serial Group "A" .....	2	34	-----	ENGINE — See Engine Parts Manual .....	—
9C	18D-04	†NUT, Hourmeter Brk. Mtg. — Serial Group "A" .....	2	35	571152	SUPPORT, Engine — R.H. ....	1
10	12E-6	LKWSHR, Hourmeter Mtg. ....	3	36	616809	WASHER, Support to Frame — R.H. ....	2
11	85G-608	SCREW, Hourmeter Mtg. ....	3	37	570419	SPRING, Eng. Support — R.H. ....	2
12	24C-420	BOLT, Regulator Mtg. ....	3	38	553898	WASHER, Support-Wedge — R.H. ....	2
13	1526006	RELAY, Hourmeter — Serial Group "B" .....	1	39	552248	WELD BLOCK — Welded to Frame .....	2
14	24C-420	BOLT, Relay Mtg. ....	2	40	552248	WELD BLOCK — Welded to Frame .....	2
15	24C-1240	BOLT, Support to Frame — L.H. ....	2	41	68D-12	NUT, Support to Frame — R.H. ....	2
16	616809	WASHER, Support to Frame — L.H. ....	2	42	4E-10	LKWSHR, Support to Engine — R.H. ....	4
17	23C-1028	BOLT, Support to Engine — L.H. ....	4	43	23C-1028	BOLT, Support to Engine — R.H. ....	4
18	4E-10	LKWSHR, Support to Engine — L.H. ....	4	44	616809	WASHER, Support to Frame — R.H. ....	2
19	550832	SENDER, Eng. Oil Press. — Serial Group "B" .....	1	45	24C-1288	BOLT, Support to Frame — R.H. ....	2
19A	14D-10	†NUT, Sender Press. — Serial Group "B" .....	1	46	18D-10	NUT, Front Eng. Mount.....	2
19B	12E-10	†LKWSHR — Serial Group "B"	1	47	552248	WELD BLOCK — Welded.....	2
20	14D-10	NUT, Press. Switch — Serial Group "A" .....	1	48	774224	SPACER, Front Eng. Mount....	2
21	12E-10	LKWSHR — Serial Group "A"	1	49	14D-10	NUT, Eng. Temp. Sender .....	1
22	636260	SWITCH, Hourmeter Press. — Serial Group "A" .....	1	50	12E-10	LKWSHR, Eng. Temp. Sender	1
23	940643	SENDER, Engine Oil Press. — Serial Group "A" .....	1	51	551323	SENDER, Eng. Temp. ....	1

†Not Illustrated  
 Serial Group "A": 5HC101 thru 5HC999  
 Serial Group "B": 6HC101 thru 6HC999

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



ENGINE AUXILIARY AND SUPPORT PARTS — G.M.

TS-8984-P

[ 4 ]

PM 2419

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

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	14D-10	NUT, Eng. Temp. Sender	1	26	542646	NIPPLE, Cross to Eng. — Serial Group "C"	1
2	12E-10	LKWSHR, Eng. Temp. Sender	1	27	21F-1	CROSS — Serial Group "C"	1
3	551323	SENDER, Eng. Temp.	1	28	14D-10	NUT, Press. Switch — Serial Group "C"	1
4		BOLT, Support to Frame — L.H.		29	12E-10	LKWSHR — Serial Group "C"	1
4A	24C-1040	Serial Group "A"	2	30	636260	SWITCH, Hourmeter Press. — Serial Group "C"	1
4B	24C-1240	Serial Group "B"	2	31	940643	SENDER, Eng. Oil Press. — Serial Group "C"	1
5		PLATE, Air Cleaner Mtg. — See Index	—	32	14D-10	NUT, Sender — Serial Group "C"	1
6	18D-04	NUT, Voltage Reg. Mtg.	3	33	12E-10	LKWSHR — Serial Group "C"	1
7	556703	REGULATOR, Voltage	1	34	636260	SWITCH, Voltage Reg. Press. — Serial Group "C"	1
8	551251	DAMPENER, Hourmeter Vibration	1	35	12E-10	LKWSHR — Serial Group "C"	1
9	558960	WIRE, Relay to Hourmeter — Serial Group "D"	1	36	14D-10	NUT, Press. Switch — Serial Group "C"	1
10	1743825	KIT, Hourmeter (Inc. 11, 12)	1	37		ENGINE — See Engine Parts Manual	—
10A	569414	†BRACKET, Hourmeter Mtg. — Serial Group "C"	1	38		SUPPORT, Engine — R.H.	
10B	24C-424	†BOLT, Hourmeter Brk. Mtg. — Serial Group "C"	2	38A	539780	Serial 5HG101 thru 5HG999	1
10C	18D-04	†NUT, Hourmeter Brk. Mtg. — Serial Group "C"	2	38B	571154	Serial 6HG101 thru 6HG999	1
12	85G-608	SCREW, Hourmeter Mtg.	3	38C	1530332	Serial 7HG101 thru 7HG999	1
11	12E-6	LKWSHR, Hourmeter Mtg.	3	38D	568599	†SPACER, Support Mtg. — Serial Group "A" only	1
13	24C-420	BOLT, Regulator Mtg.	3	39	552248	WELD BLOCK — R.H. — Welded to Frame	1
14	85G-608	SCREW, Vibration Dampener Mtg.	3	40		NUT, Support to Frame	
15	12E-6	LKWSHR, Vibration Dampener Mtg.	3	40A	70D-10	Serial Group "A"	2
16	18D-04	NUT, Relay Mtg. — Serial Group "D"	2	40B	70D-12	Serial Group "B"	2
17	1526006	RELAY, Hourmeter — Serial Group "D"	1	41		BASE, Support to Frame	
18	24C-420	BOLT, Relay Mtg. — Serial Group "D"	2	41A	71D-10	Serial Group "A"	2
19		BOLT, Support to Engine — L.H.		41B	71D-12	Serial Group "B"	2
19A	23C-824	Serial Group "C"	4	42		LKWSHR, Support to Engine	
19B	23C-1024	Serial Group "D"	4	42A	4E-08	Serial Group "C"	4
20		LKWSHR, Support to Engine		42B	4E-10	Serial Group "D"	4
20A	4E-08	Serial Group "C"	4	43		BOLT, Support to Engine	
20B	4E-10	Serial Group "D"	4	43A	23C-824	Serial Group "C"	4
21	616809	WASHER, Support to Frame — L.H. — Serial Group "B"	2	43B	23C-1024	Serial Group "D"	4
22		SUPPORT, Engine — L.H.		44	550832	SENDER, Eng. Oil Press. — Serial Group "D"	1
22A	539782	Serial 5HG101 thru 5HG999	1	45	12E-10	LKWSHR — Serial Group "D"	1
22B	571154	Serial 6HG101 thru 6HG999	1	46	14D-10	NUT, Sender Press. — Serial Group "D"	1
22C	1530332	Serial 7HG101 thru 7HG999	1	47	616809	WASHER, Support to Frame — R.H. — Serial Group "B"	2
22D	568599	†SPACER, Support Mtg. — Serial Group "A" only	1	48	570419	SPRING, Eng. Support — R.H. — Serial Group "B"	2
23	552248	WELD BLOCK — L.H. — Welded to Frame	1	49	616809	WASHER, Support to Frame — R.H. — Serial Group "B"	2
24		BASE, Support to Frame		50		BOLT, Support to Frame	
24A	71D-10	Serial Group "A"	2	50A	24C-1040	Serial Group "A"	2
24B	71D-12	Serial Group "B"	2	50B	24C-1280	Serial Group "B"	2
25		NUT, Support to Frame		51	18D-10	NUT, Front Eng. Mount	2
25A	70D-10	Serial Group "A"	2	52	24C-1036	BOLT, Front Eng. Mount	2
25B	70D-12	Serial Group "B"	2				

†Not Illustrated

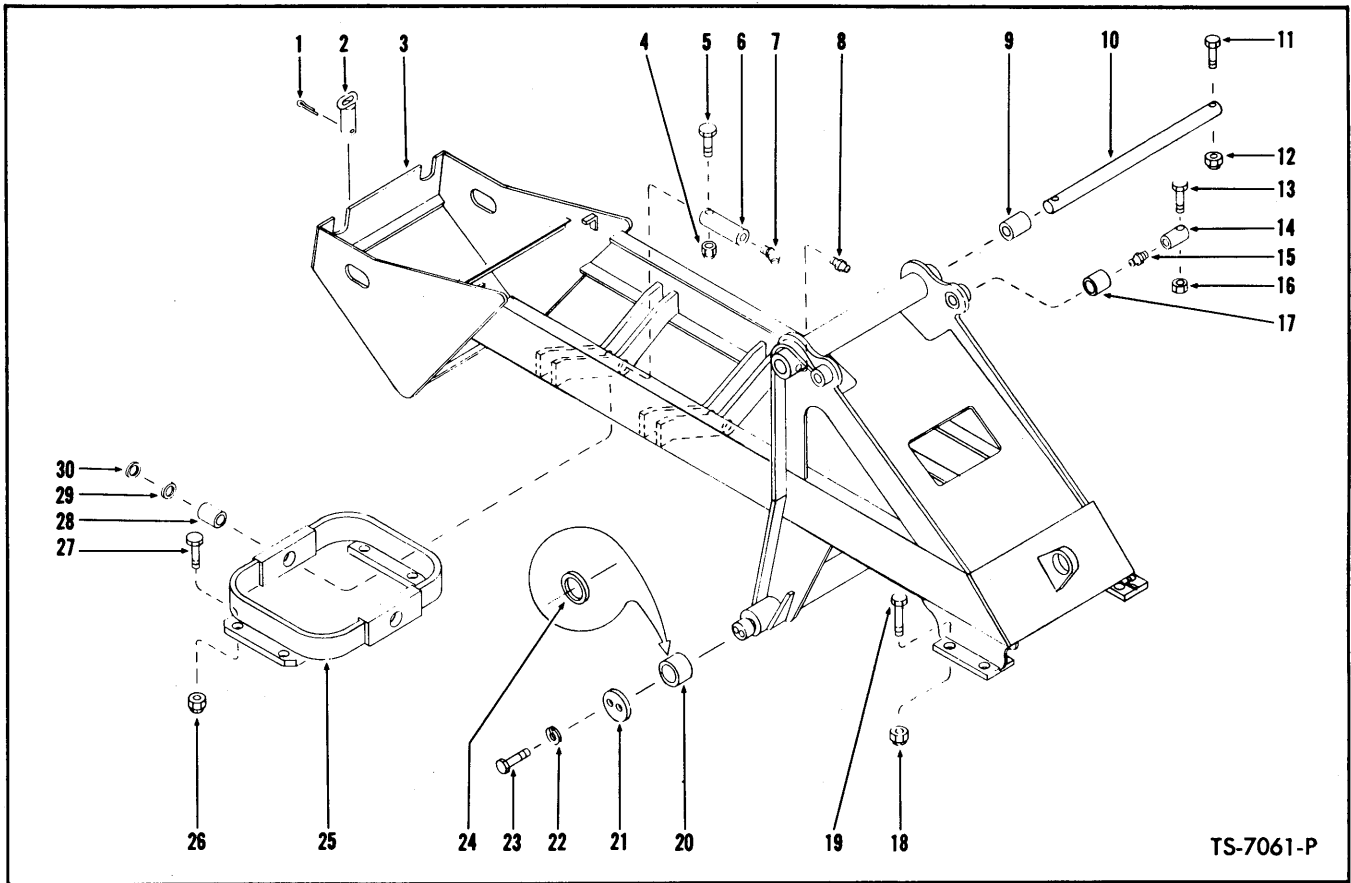
Serial Group "A": 5HG101 thru 5HG999

Serial Group "B": 6HG101 thru 6HG999, 7HG101 thru 7HG999

Serial Group "C": 5HG101 thru 5HG999, 6HG101 thru 6HG999

Serial Group "D": 7HG101 thru 7HG999

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



**FRAME AND CRADLE ASSEMBLY**  
**For Serial: Cummins – 5HC101 thru 5HC999;**  
**G.M. – 5HG101 thru 5HG999, 6HG101 thru 6HG999**

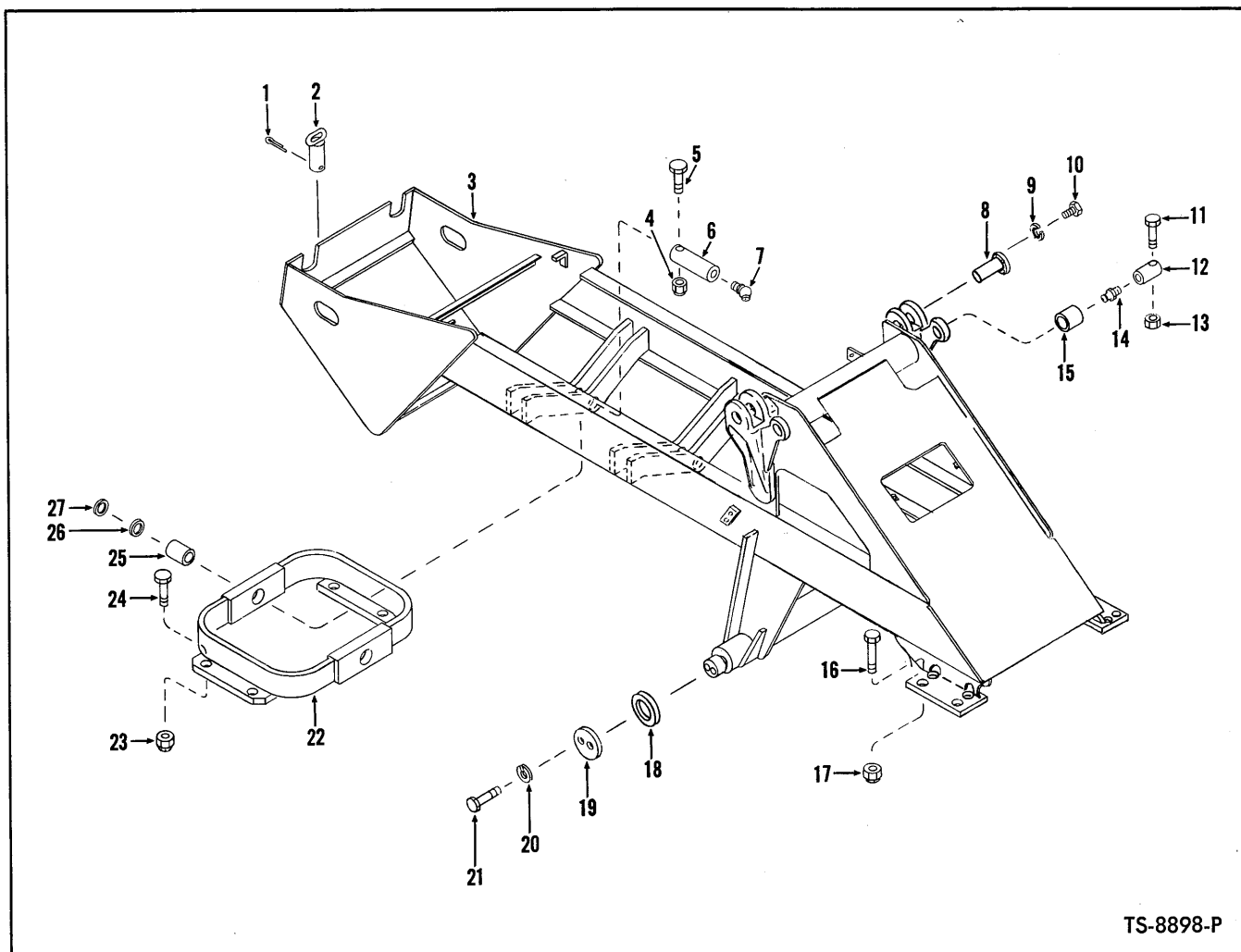
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1F-1252	COTTER, Drawbar Pin . . . . .	1	13	24C-896	BOLT, Pivot Pin Ret. . . . .	2
2	1506818	PIN, Drawbar . . . . .	1	14	556147	PIN, Bucket Cyl. Pivot . . . . .	2
3				15	12H-1	FITTING, Pin Grease . . . . .	2
3		<i>FRAME (Inc. 9, 17 &amp; 20 or 24)</i>		16	18D-08	NUT, Pivot Pin Ret. . . . .	2
3A	571193	Cummins – 5HC101		17	556597	BUSHING, Upper Pivot . . . . .	2
		thru 5HC999 . . . . .	1	18	68D-16	NUT, Axle to Frame . . . . .	8
3B	556586	G.M.—5HG101 thru 5HG999	1	19	24C-16168	BOLT, Axle to Frame . . . . .	8
3C	571194	G.M.—6HG101 thru 6HG999	1	20	566876	BUSHING, Lower Pivot	
4	18D-08	NUT, Pin Retaining . . . . .	2			Shaft – Serial Group "B" . . . . .	2
5	24C-660	BOLT, Pin Retaining . . . . .	2	21	566710	PLATE, Boom Cyl. Ret. . . . .	2
6	562412	PIN, Cradle Pivot . . . . .	2	22	4E-08	LKWSHR, Ret. Plate Mtg. . . . .	4
7	12H-25	FITTING, Pin Grease . . . . .	2	23	24C-820	BOLT, Ret. Plate Mtg. . . . .	4
8	10H-25	FITTING, Pivot Grease . . . . .	2	24	1522766	SPACER, Lower Pivot	
9	569168	BUSHING, Pivot Tube . . . . .	2			Shaft – Serial Group "C" . . . . .	2
10	587132	SHAFT, Boom Pivot . . . . .	1	25	534173	CRADLE, Axle (Inc. 28) . . . . .	1
11	24C-12144	BOLT, Pivot Shaft Ret. . . . .	2	26	68D-16	NUT, Rear Axle to Cradle . . . . .	8
12	18D-12	NUT, Pivot Shaft Ret. . . . .	2	27	24C-1680	BOLT, Axle to Cradle . . . . .	8
				28	538605	BUSHING, Pivot Pin . . . . .	2
				29	552146	‡SHIM, Cradle Mtg. – 1/16" . . . . .	—
				30	552147	‡SHIM, Cradle Mtg. – 1/8" . . . . .	—

‡As Required

**Serial Group "B":** Cummins – 5HC101 thru 5HC105, 5HC107, 5HC109, 5HC110, 5HC113 and 5HC117; G.M. – 5HG101 thru 5HG999, 6HG101 thru 6HG190, 6HG192, 6HG193, 6HG195 thru 6HG198 and 6HG210.

**Serial Group "C":** Cummins – 5HC106, 5HC108, 5HC111, 5HC112, 5HC114 thru 5HC116, 5HC118 thru 5HC999; G.M. – 6HG191, 6HG194, 6HG199 thru 6HG209, 6HG211 thru 6HG999.

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



TS-8898-P

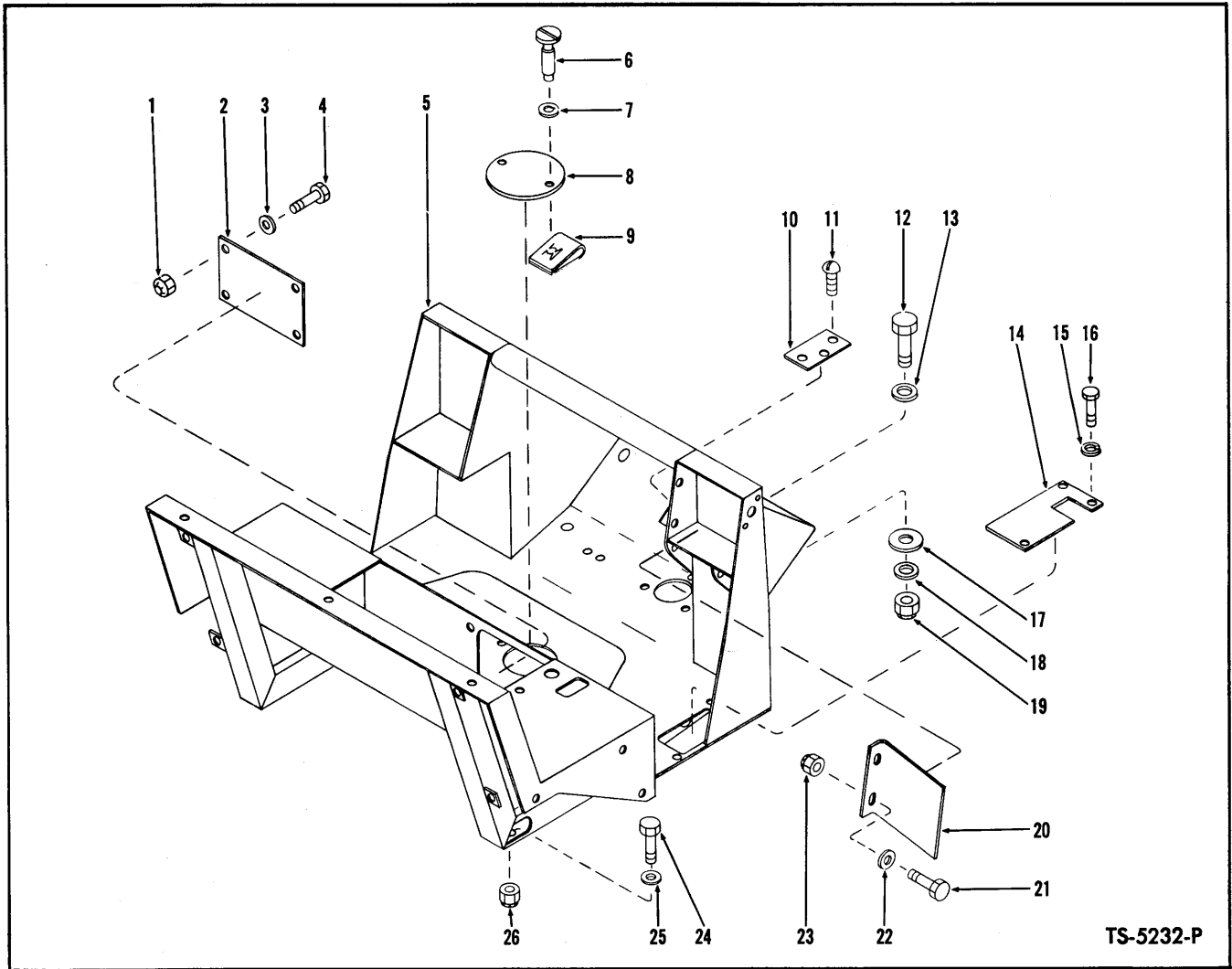
## FRAME AND CRADLE ASSEMBLY

For Serial: Cummins — 6HC101 thru 6HC999;  
G.M. — 7HG101 thru 7HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1F-1252	COTTER, Drawbar Pin .....	1	13	18D-08	NUT, Pivot Pin Ret.....	2
2	1506818	PIN, Drawbar.....	1	14	12H-1	FITTING, Pin Grease.....	2
3		FRAME (Inc. 15, 18)		15	556597	BUSHING, Upper Pivot.....	2
3A	1523271	Cummins .....	1	16	24C-1676	BOLT, Axle to Frame .....	8
3B	1523270	G.M. ....	1	17	68D-16	NUT, Axle to Frame .....	8
4	18D-08	NUT, Pin Retaining.....	2	18	1522766	SPACER, Lower Pivot Shaft...	2
5	24C-660	BOLT, Pin Retaining .....	2	19	566710	PLATE, Boom Cyl. Ret. ....	2
6	562412	PIN, Cradle Pivot .....	2	20	4E-08	LKWSHR, Ret. Plate Mtg. ....	4
7	12H-25	FITTING, Pin Grease .....	2	21	24C-820	BOLT, Ret. Plate Mtg.....	4
8	568002	PIN, Boom to Pivot .....	2	22	534173	CRADLE, Axle (Inc. 25).....	1
9	4E-12	LKWSHR, Pin Ret.....	4	23	68D-16	NUT, Rear Axle to Cradle.....	8
10	23C-1232	BOLT, Pin Retaining .....	4	24	24C-1676	BOLT, Axle to Cradle.....	8
11	24C-896	BOLT, Pivot Pin Ret. ....	2	25	538605	BUSHING, Pivot Pin .....	2
12	556147	PIN, Bucket Cyl. Pivot.....	2	26	552146	‡SHIM, Cradle Mtg. — 1/8".....	—
				27	552147	‡SHIM, Cradle Mtg. — 1/8".....	—

‡As Required

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



TS-5232-P

## COCKPIT AND INSPECTION PLATES

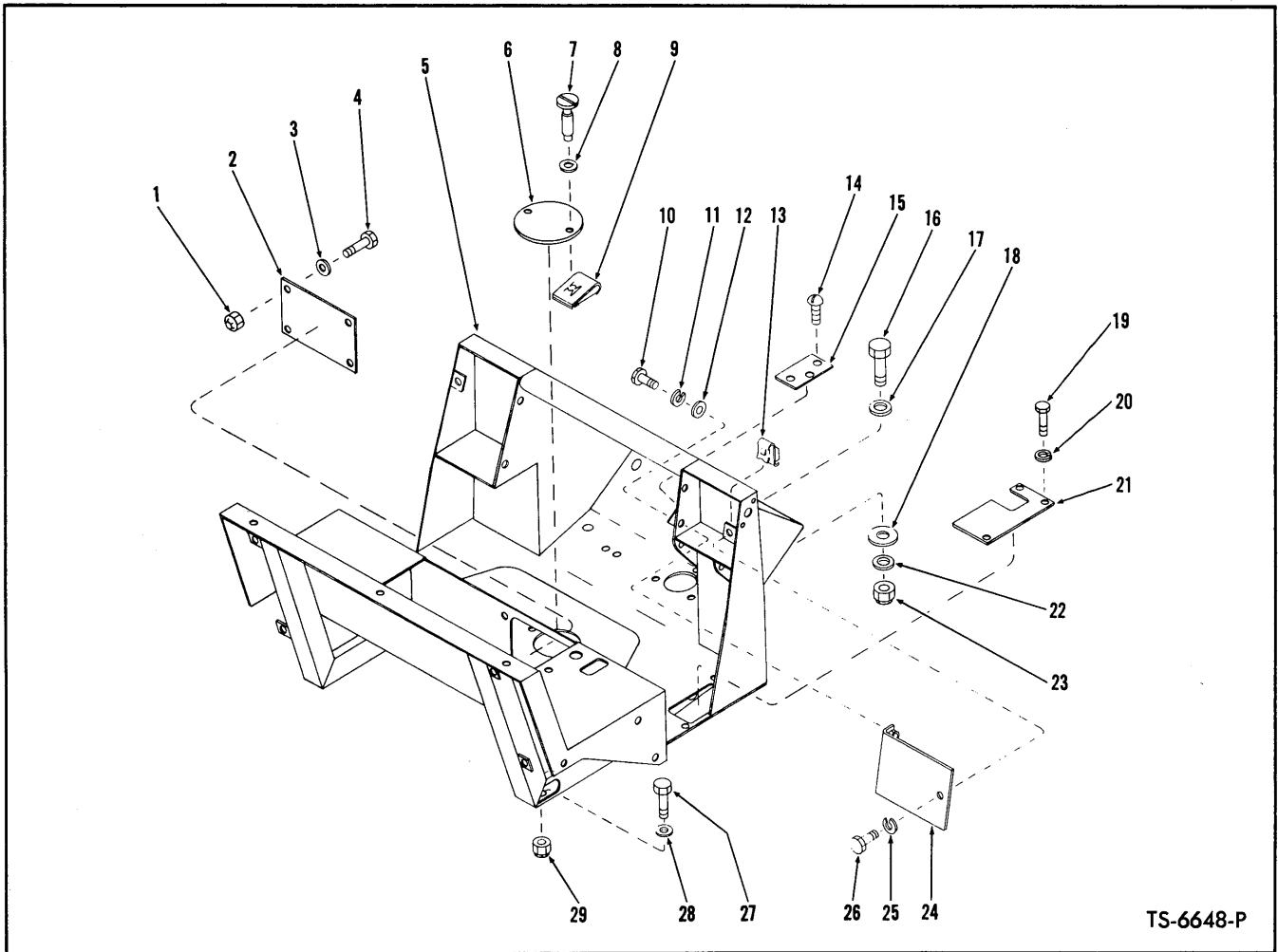
For Serial: Cummins — 5HC101 thru 5HC105;  
G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG170

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18D-04	NUT, Cover Plate Mounting	4	13	619029	WASHER, Cockpit Mounting	1
2	557057	PLATE, Heater Cover	1	14	566458	PLATE, Valve Levers Cover	1
3	25E-13	WASHER, Cover Plate Mounting	4	15	4E-06	LKWSHR, Cover Plate Mounting	3
4	24C-412	BOLT, Cover Plate Mounting	4	16	24C-612	BOLT, Cover Plate Mounting	3
5	588021	COCKPIT	1	17	616798	‡SPACER, Cockpit Mounting	—
6	568829	SCREW, Cover Mounting	2	18	619029	WASHER, Cockpit Mounting	1
7	1612583	WASHER, Cover Mounting	2	19	18D-08	NUT, Cockpit Mounting	1
8	568828	COVER, Transmission Check (Inc. 6, 7)	1	20	589991	PLATE, Panel — R.H.	1
9	568830	NUT, Cover Mounting	2	21	24C-616	BOLT, Plate Mounting	2
10	566649	PLATE, Steer Cover	1	22	25E-18	WASHER, Plate Mounting	2
11	18G-806	SCREW, Cover Plate Mounting	3	23	18D-06	NUT, Plate Mounting	2
12	24C-832	BOLT, Cockpit Mounting	1	24	24C-824	BOLT, Cockpit Mounting	4
				25	619029	WASHER, Cockpit Mounting	8
				26	18D-08	NUT, Cockpit Mounting	4

‡As Required

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





TS-6648-P

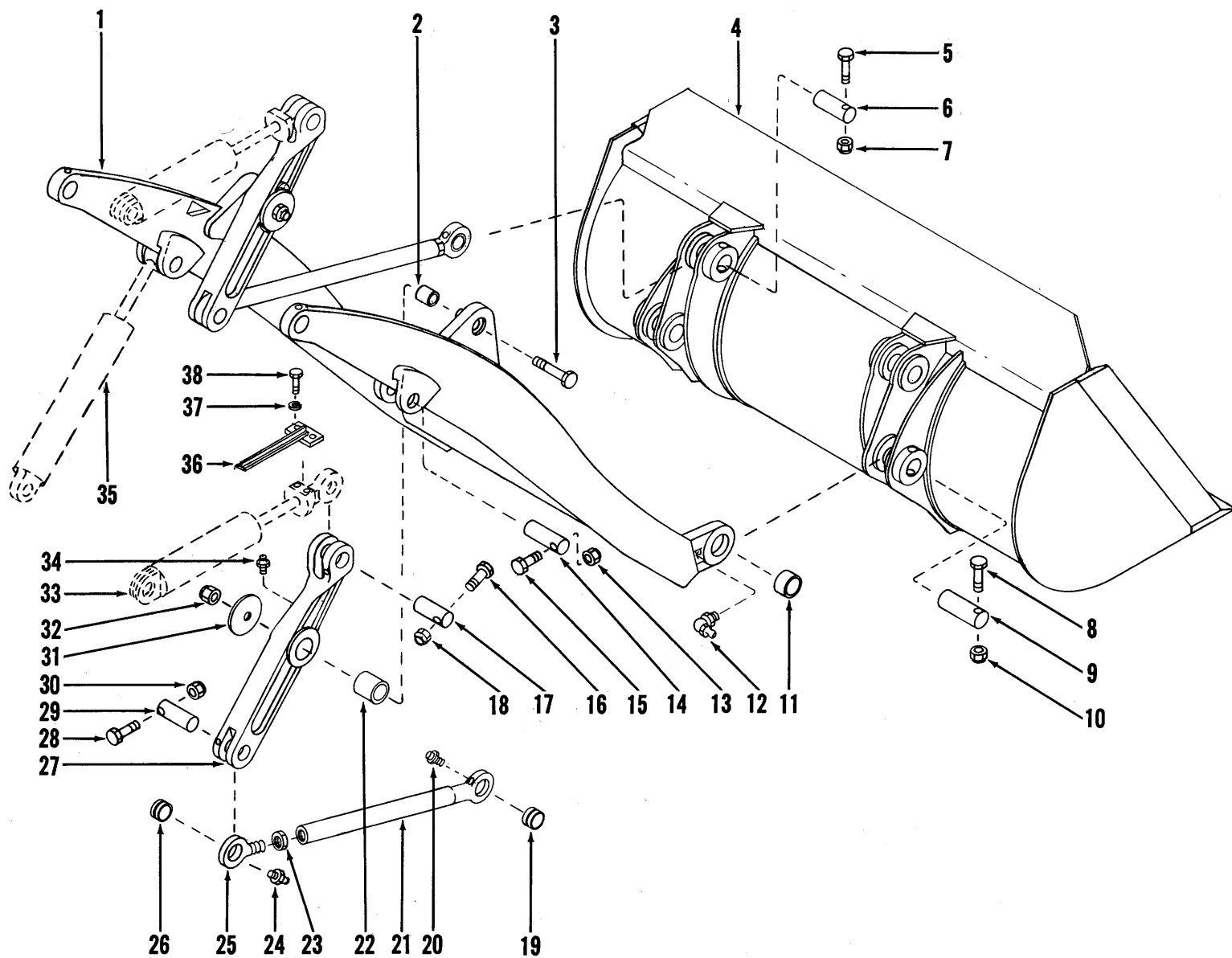
## COCKPIT AND INSPECTION PLATES

For Serial: Cummins — 5HC106 thru 5HC999, 6HC101 thru 6HC999;  
G.M. — 6HG171 thru 6HG999, 7HG101 thru 7HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18D-04	NUT, Cover Plate Mounting	4	15	566649	PLATE, Steer Cover	1
2	557057	PLATE, Heater Cover	1	16	24C-832	BOLT, Cockpit Mounting	1
3	25E-13	WASHER, Cover Plate Mounting	4	17	619029	WASHER, Cockpit Mounting	1
4	24C-412	BOLT, Cover Plate Mounting	4	18	616798	‡SPACER, Cockpit Mounting	—
5	588021	COCKPIT	1	19	24C-612	BOLT, Cover Plate Mounting	3
6	568828	COVER, Transmission Check (Inc. 7, 8)	1	20	4E-06	LKWSHR, Cover Plate Mounting	3
7	568829	SCREW, Cover Mounting	2	21	566458	PLATE, Valve Levers Mounting	1
8	1612583	WASHER, Cover Mounting	2	22	619029	WASHER, Cockpit Mounting	1
9	568830	NUT, Cover Mounting	2	23	18D-08	NUT, Cockpit Mounting	1
10	23C-616	BOLT, Plate Mounting	2	24	574026	PLATE, Panel — R.H.	1
11	4E-06	LKWSHR, Plate Mounting	2	25	4E-06	LKWSHR, Plate Mounting	1
12	565280	WASHER, Plate Mounting	2	26	23C-616	BOLT, Plate Mounting	1
13	572729	NUT, Plate Mounting	1	27	24C-828	BOLT, Cockpit Mounting	4
14	18G-806	SCREW, Cover Plate Mounting	3	28	619029	WASHER, Cockpit Mounting	8
				29	18D-08	NUT, Cockpit Mounting	4

‡As Required

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



**BOOM, BELLCRANKS, PUSHRODS AND BUCKET INDICATOR**

For Serial: Cummins — 5HC101 thru 5HC999;  
G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999

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PM 2419

TS-6789-P

## BOOM, BELLCRANKS, PUSHRODS AND BUCKET INDICATOR

For Serial: Cummins — 5HC101 thru 5HC999;  
G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	589867	*BOOM (Inc. 2, 11)	1	22	588915	BUSHING, Bellcrank	2
2	588916	BUSHING, Bellcrank Pivot	2	23	1520686	NUT, Eye Jam	2
3		BOLT, Bellcrank to Boom		24	10H-25	FITTING, Eye Grease	2
3A	24C-16168	G.M.—5HG101 thru 5HG125	2	25	569708	**EYE, Pushrod (Inc. 26)	2
3B	24C-16152	G.M.—5HG126 thru 5HG999, 6HG101 thru 6HG999; Cummins—5HC101 thru 5HC999	2	26	549669	BUSHING, Pushrod Eye	2
4	-----	BUCKET — See Index	—	27		***BELLCRANK (Inc. 22)	
5	24C-896	BOLT, Pin Retaining	2	27A	1526300	Right Hand — See Note "A"	1
6	549907	PIN, Pushrod to Bucket	2	27B	1526299	Left Hand — See Note "A"	1
7	18D-08	NUT, Pin Retaining	2	28	24C-888	BOLT, Pin Retaining	2
8	24C-896	BOLT, Pin Retaining	2	29		PIN, Bellcrank to Pushrod	
9	549907	PIN, Boom to Bucket	2	29A	549658	G.M.—5HG101 thru 5HG999; 6HG101 thru 6HG137	2
10	18D-08	NUT, Pin Retaining	2	29B	557946	G.M.—6HG138 thru 6HG999; Cummins—5HC101 thru 5HC999	2
11	1520690	BUSHING, Boom Arm	2	30	18D-08	NUT, Pin Retaining	2
12	12H-15	FITTING, Boom Arm Grease	2	31	588917	WASHER, Bellcrank	2
13	18D-08	NUT, Pin Retaining	2	31A	571469	†WASHER, Bellcrank Spacer (3/8" Thick) G.M. — 5HG101 thru 5HG125	2
14	556205	PIN, Boom to Boom Cyl.	2	32	18D-16	NUT, Bellcrank to Boom	2
15	24C-872	BOLT, Pin Retaining	2	33	-----	CYLINDER, Bucket — See Index	—
16	24C-12112	BOLT, Pin Retaining	2	34	10H-25	FITTING, Bellcrank Grease	2
17	549659	PIN, Bucket Cyl. to Bellcrank	2	35	-----	CYLINDER, Boom — See Index	—
18	18D-12	NUT, Pin Retaining	2	36	573551	INDICATOR, Bucket	1
19	549669	BUSHING, Pushrod	2	37	4E-06	LKWSHR, Indicator Mtg.	2
20	10H-25	FITTING, Pushrod Grease	2	38	24C-620	BOLT, Indicator to Bucket Cyl.	2
21	1504451	**PUSHROD (Inc. 19)	2				

†Not Illustrated

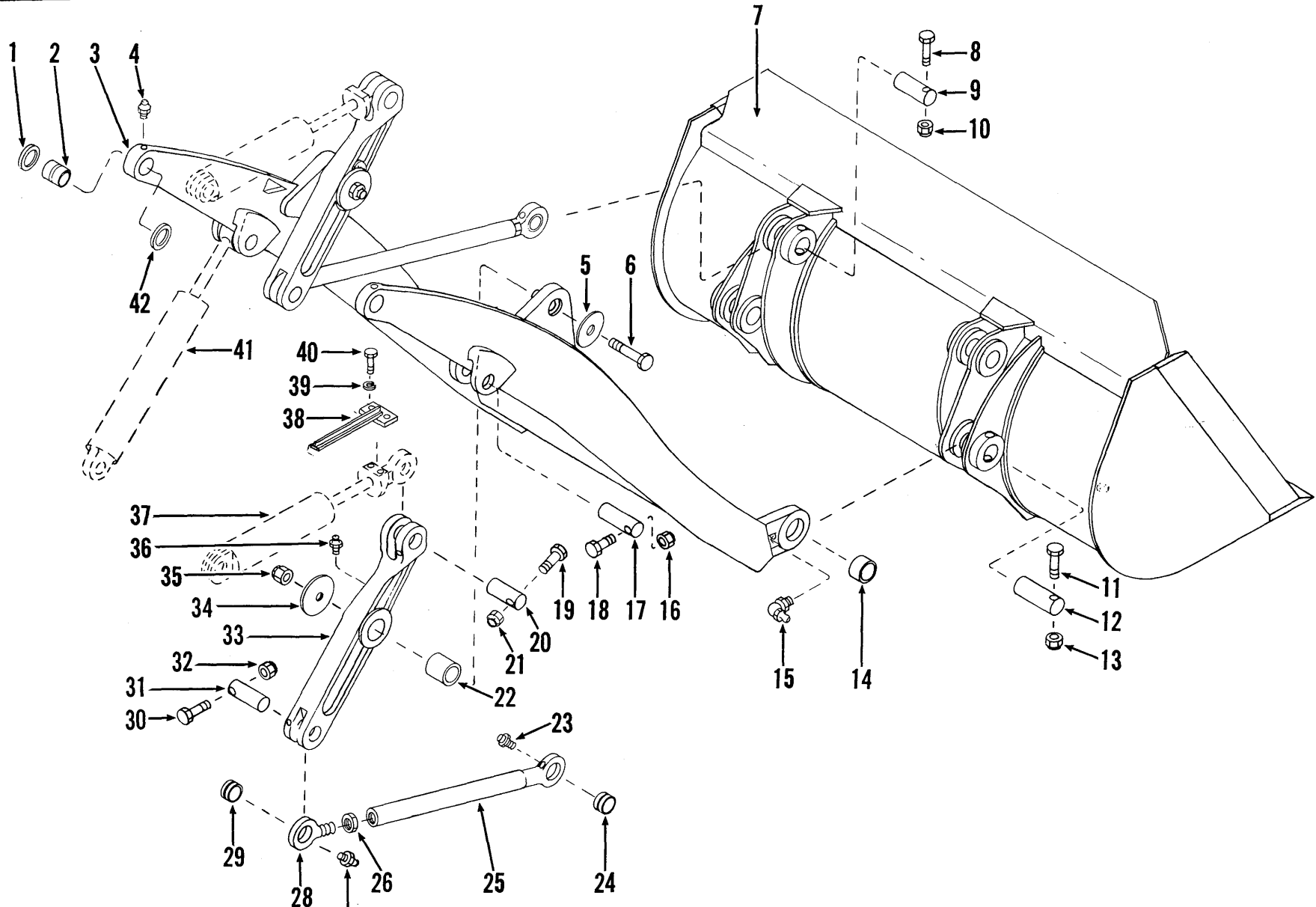
\*NOTE: For complete replacement of 589867 Boom use 1522204 plus 1 #1526300 R.H. Bellcrank, 1 #1526299 L.H. Bellcrank, 2 #24C-16168 Bellcrank to Boom Bolt and 2 #619028 Bellcrank to Boom Washer must also be used. Once conversion has been made individual replacements can be made.

\*\*NOTE: When replacement is necessary for 1504451 Pushrod or 569708 Pushrod Eye on machine serial: G.M. — 5HG101 thru 5HG999 both items must be replaced at the same time plus 1 #1520686 Jam Nut (Item 23) and 2 #10H-25 Grease Fitting (Item 20, 24) must also be used. Once conversion has been made individual replacements can be made.

\*\*\*NOTE: When replacing 1526300 or 1526299 Bellcrank on machine serial: G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG137 one 557946 Bellcrank to Pushrod Pin (Item 29B) must also be used.

NOTE "A": When replacing 1526300 or 1526299 Bellcrank, 1 #24C-16168 Bellcrank to Boom Bolt and 1 #619028 Bellcrank to Boom Washer must also be used. 1526300 and 1526299 Bellcrank includes 1 #1524037 Bellcrank Bushing whereas the previous Bellcranks used a 588915 Bushing.

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



**BOOM, BELLCRANKS, PUSHRODS AND BUCKET INDICATOR**

For Serial: Cummins — 6HC101 thru 6HC999;  
G.M. — 7HG101 thru 7HG999

TS-8072-P

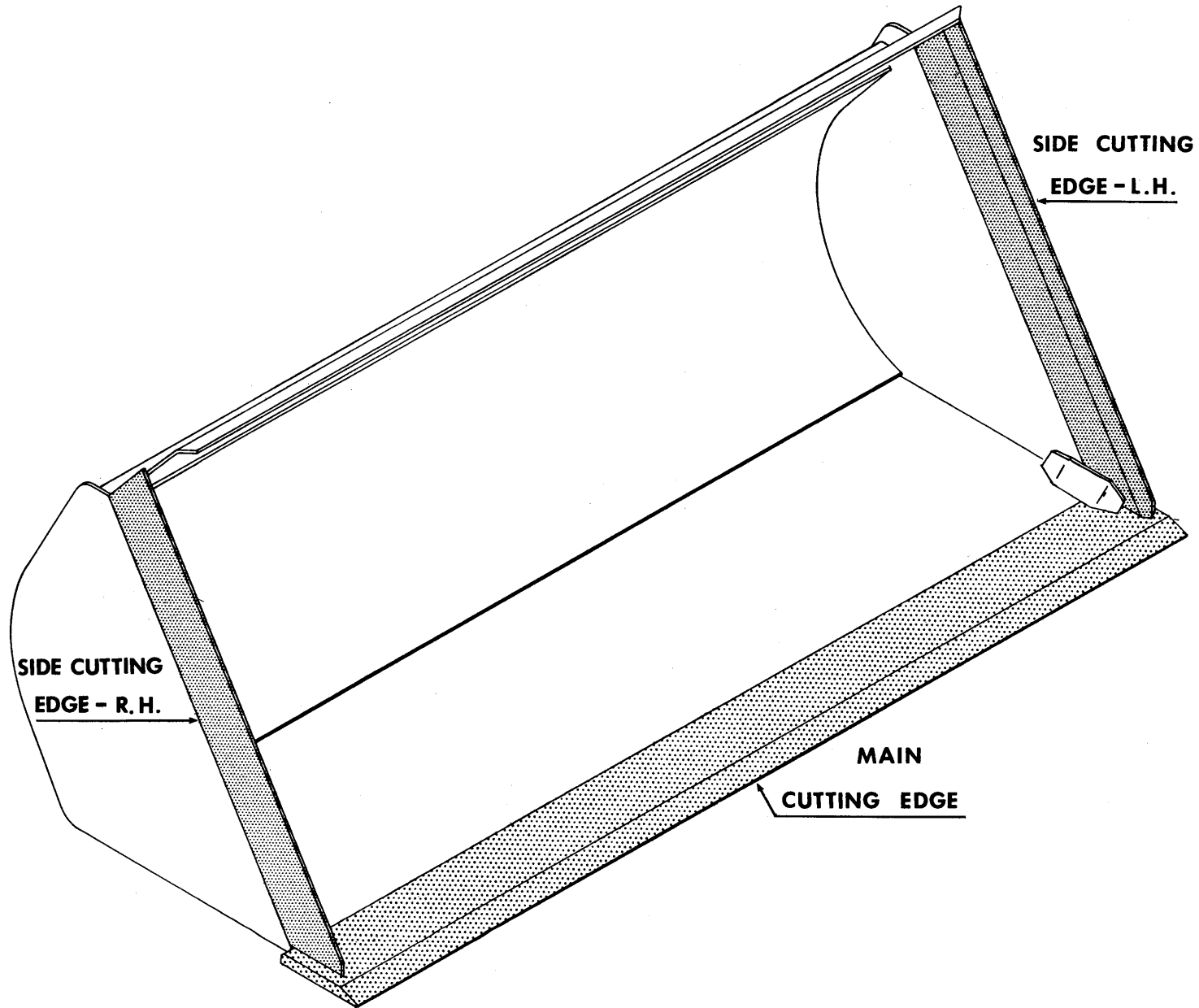
## BOOM, BELLCRANKS, PUSHRODS AND BUCKET INDICATOR

For Serial: Cummins — 6HC101 thru 6HC999;  
G.M. — 7HG101 thru 7HG999

Item No.	Part No.	Description	No. Req'd.
1	574311	SPACER, Boom .....	2
2	669896	BUSHING, Boom to Frame .....	2
3	1522205	*BOOM (Inc. 2, 14) .....	1
4	10H-25	FITTING, Boom Grease .....	2
5	25E-31	WASHER, Bellcrank Bolt .....	2
6	24C-16168	BOLT, Bellcrank to Boom .....	2
7	-----	BUCKET — See Index .....	—
8	24C-896	BOLT, Pin Retaining .....	2
9	549907	PIN, Pushrod to Bucket .....	2
10	18D-08	NUT, Pin Retaining .....	2
11	24C-896	BOLT, Pin Retaining .....	2
12	549907	PIN, Boom to Bucket .....	2
13	18D-08	NUT, Pin Retaining .....	2
14	1520690	BUSHING, Boom to Bucket .....	2
15	12H-15	FITTING, Boom Grease .....	2
16	18D-08	NUT, Pin Retaining .....	2
17	556205	PIN, Boom to Boom Cyl. ....	2
18	24C-872	BOLT, Pin Retaining .....	2
19	24C-12112	BOLT, Pin Retaining .....	2
20	549659	PIN, Bucket Cyl. to Bellcrank .....	2
21	18D-12	NUT, Pin Retaining .....	2
22	1524037	BUSHING, Bellcrank .....	2
23	10H-25	FITTING, Pushrod Grease .....	2
24	549669	BUSHING, Pushrod .....	2
25	1504451	PUSHROD (Inc. 24) .....	2
26	1520686	NUT, Pushrod Eye Jam .....	2
27	10H-25	FITTING, Pushrod Grease .....	2
28	569708	EYE, Pushrod Adj. (Inc. 29) .....	2
29	549669	BUSHING, Pushrod Eye .....	2
30	24C-888	BOLT, Pin Retaining .....	2
31	557946	PIN, Bellcrank to Pushrod .....	2
32	18D-08	NUT, Pin Retaining .....	2
33		<i>BELLCRANK (Inc. 22)</i>	
33A	1526300	Right Hand .....	1
33B	1526299	Left Hand .....	1
34	588917	WASHER, Bellcrank .....	2
35	18D-16	NUT, Bellcrank to Boom .....	2
36	10H-25	FITTING, Bellcrank Grease .....	2
37	-----	CYLINDER, Bucket — See Index .....	—
38	573551	INDICATOR, Bucket .....	1
39	4E-06	LKWSHR, Indicator Mtg. ....	2
40	24C-620	BOLT, Indicator to Bucket Cyl. ....	2
41	-----	CYLINDER, Boom — See Index .....	—
42	574311	SPACER, Boom .....	2

\*NOTE: For complete Boom replacement use 1506972.

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



[ 14 ]

PM 2419

TS-7382-P

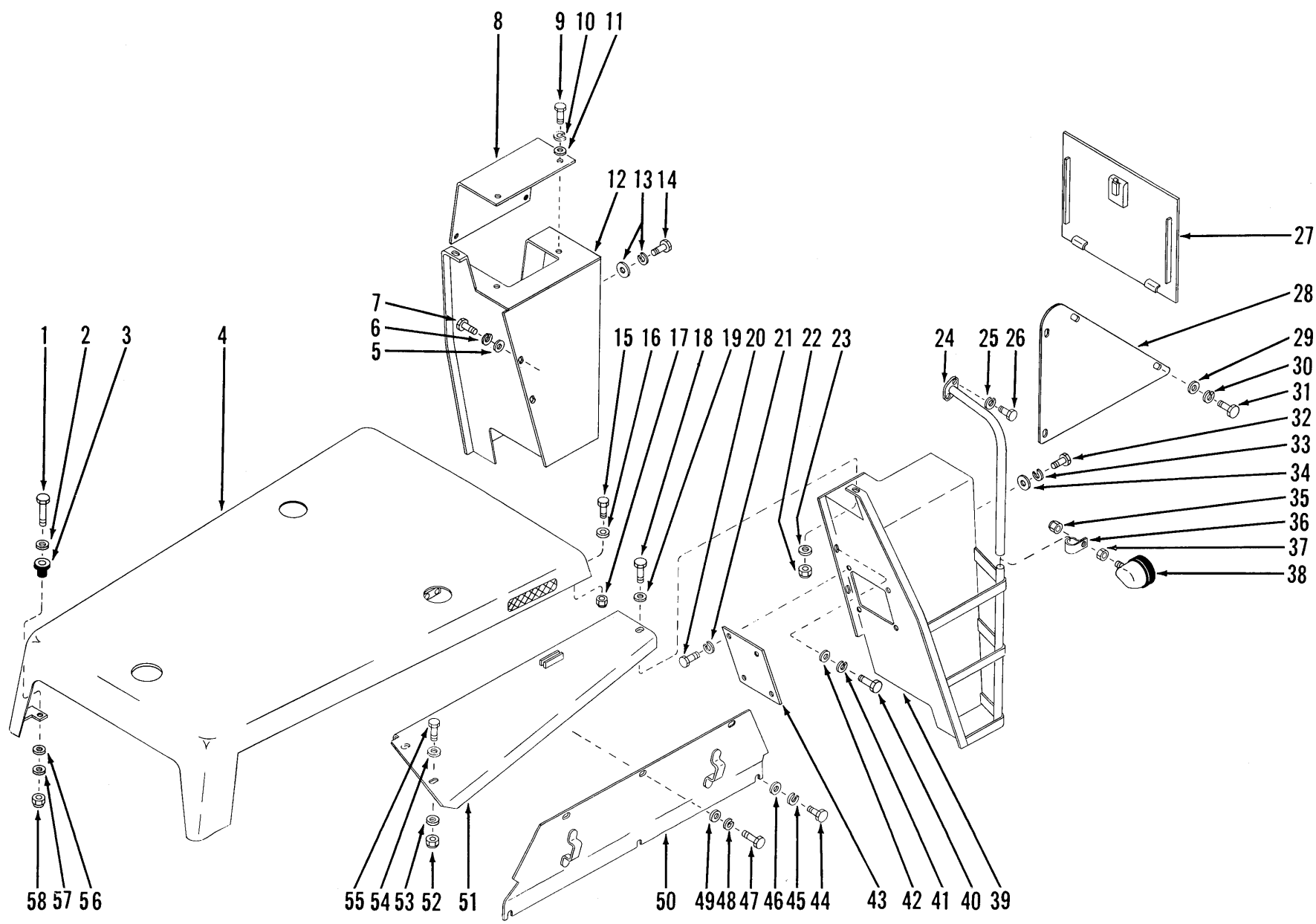
## BUCKET ASSEMBLY DATA

BUCKET			MAIN CUTTING EDGE			SIDE CUTTING EDGES			
Width	S.A.E. Heaped Capacity Cu. Yd.	Part No.	Part No.	Size	Approx. Weight	L.H. Part No.	R.H. Part No.	Size	Approx. Weight
117"	4½	562512	570495	1⅜" x 10" x 117"	450	562518	562517	1" x 6" x 57⅞"	96
117"	3½	564146	565426	1⅜" x 10" x 117"	450	-----	-----	-----	-----
131½"	7	572084	545576	1⅜" x 10" x 132½"	512	572091	572089	¾" x 6" x 64¼"	80
106½"	4½	572461	572456	1⅜" x 10" x 108"	420	562518	562517	1" x 6" x 57⅞"	96
117"	3¾	587342	565426	1⅜" x 10" x 117"	452	587349	587348	¾" x 6" x 50¾"	64
117"	3½	1523622	1521432 — L.H. 1521433 — R.H.	1⅜" x 10" x 61⅞" 1⅜" x 10" x 61⅞"	250 250	-----	-----	-----	-----
117"	3¾	1524088	565426	1⅜" x 10" x 117"	450	1524089	1524090	¾" x 6" x 56"	70
117"	4½	1525797	570495	1⅜" x 10" x 117"	450	1527835	1527836	1" x 6" x 57¾"	96
117"	4¼	1527183	565426	1⅜" x 10" x 117"	450	1524089	1524090	¾" x 6" x 56"	70
109¾"	4½	1527971	574071	1⅜" x 10" x 109¾"	425	1527973	1527972	¾" x 6" x 57⅞"	73
109¾"	5	1527994	574071	1⅜" x 10" x 109¾"	425	1527995	1527996	¾" x 6" x 59⅞"	75
122"	4¼	1534651	1514059	1¾" x 10½" x 64¼" 1¾" x 10½" x 64¼"	315 315	-----	-----	-----	-----
122"	5	1534663	1534657	1¾" x 10½" x 122"	600	1534653	1534652	¾" x 6" x 58¼"	75
122"	4½	1534674	1506344	1¾" x 10½" x 122"	600	1534666	1534665	¾" x 6" x 55⅞"	70
122"	7	1535109	1534657	1¾" x 10½" x 122"	600	1535111	1535110	¾" x 6" x 65¼"	82
122"	4½	1535168	1534647 — L.H. 1534646 — R.H.	1¾" x 10½" x 64¼" 1¾" x 10½" x 64¼"	315 315	-----	-----	-----	-----

## BUCKET TEETH DATA

For Buckets with 1⅜" Cutting Edge Only

One-piece Tooth No.	Replaceable Tooth Assy.	No. Req'd.	Replaceable Tip No.	Replaceable Tip Pin No.
522503	529969	AS REQ'D.	529970	529971



HOOD, COVER, PANELS, FENDERS AND STEPS — CUMMINS

TS-6671-P



## HOOD, COVER, PANELS, FENDERS AND STEPS — CUMMINS

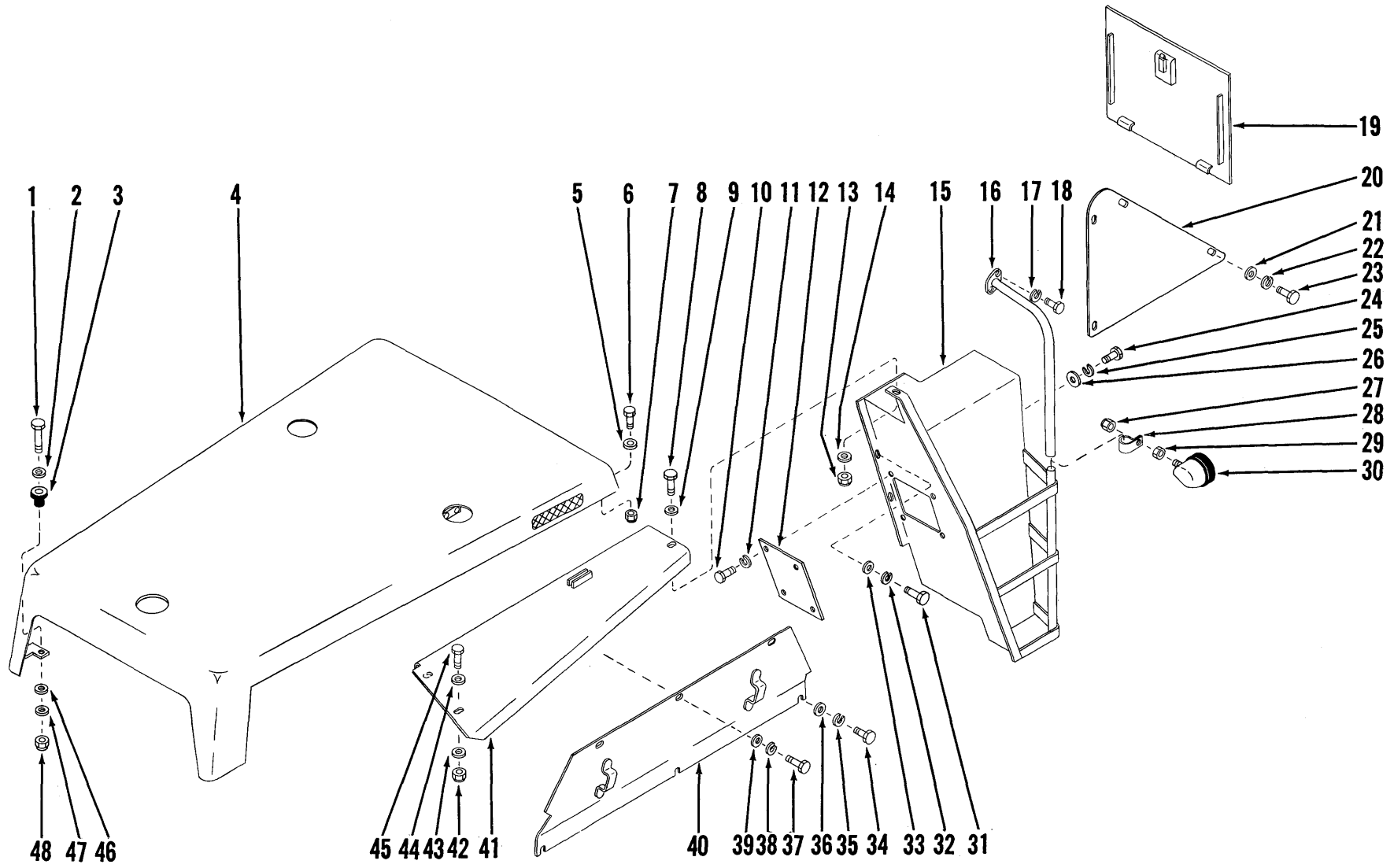
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	24C-848	BOLT, Hood to Tank .....	2	33	4E-08	LKWSHR, Step Mtg. ....	2
2	569909	WASHER, Hood to Tank .....	2	34	619029	WASHER, Mtg. ....	2
3	569739	MOUNT, Hood Shock .....	2	35	18D-08	NUT, Head Lamp Mtg. ....	2
4	562023	HOOD .....	1	36	1522201	CLAMP, Lamp Rail .....	2
5	619029	WASHER, Step to Frame .....	2	37	8D-08	NUT, Head Lamp Jam .....	2
6	4E-08	LKWSHR, Step to Frame .....	2	38	548088	LAMP, Head (Inc. 38A, 38B) ..	2
7	24C-816	BOLT, Step to Frame .....	2	38A	551244	† SEALED UNIT, Lamp .....	2
8	571572	PLATE, L.H. Step Cover .....	1	38B	944872	† RETAINER, Head Lamp .....	2
9	24C-816	BOLT, Plate to Step .....	4	39	562024	STEP ASSY — R.H. (Inc. 20, 21, 43) .....	1
10	4E-08	LKWSHR, Plate to Step .....	4	40	24C-816	BOLT, Step to Frame .....	2
11	619029	WASHER, Plate to Step .....	4	41	4E-08	LKWSHR, Step to Frame .....	2
12	571611	STEP ASSY — L.H. ....	1	42	619029	WASHER, Step to Frame .....	2
13	619029	WASHER, Step to Brk. ....	2	43	571743	PLATE, R.H. Step Cover .....	1
13A	4E-08	LKWSHR, Step to Brk. ....	2	44	24C-816	BOLT, Panel to Frame .....	6
14	24C-824	BOLT, Step to Frame Brk. ....	2	45	4E-08	LKWSHR, Panel Mtg. ....	6
15	24C-820	BOLT, Hood to Cockpit .....	3	46	619029	WASHER, Panel Mtg. ....	6
16	619029	WASHER, Hood Mtg. ....	3	47	23C-812	BOLT, Panel to Fender .....	6
17	18D-08	NUT, Hood to Cockpit .....	3	48	4E-08	LKWSHR, Panel Mtg. ....	6
18	24C-820	BOLT, Fender to Step .....	2	49	619029	WASHER, Panel Mtg. ....	6
19	619029	WASHER, Fender Mtg. ....	2				
20	24C-816	BOLT, Plate to Step .....	4	50		PANEL, Side	
21	4E-08	LKWSHR, Plate to Step .....	4	50A	1522087	RIGHT HAND .....	1
22	18D-08	NUT, Fender to Step .....	2	50B	1522088	† LEFT HAND .....	1
23	619029	WASHER, Fender Mtg. ....	2				
24		HAND RAIL		51		FENDER	
24A	562108	RIGHT HAND .....	1	51A	558984	RIGHT HAND .....	1
24B	562109	† LEFT HAND .....	1	51B	558985	† LEFT HAND .....	1
25	4E-06	LKWSHR, Rail Mtg. ....	4				
26	24C-616	BOLT, Rail to Cockpit .....	4	52	18D-08	NUT, Fender to Tank .....	4
27	588903	COVER ASSY, Front .....	1	53	619029	WASHER, Fender Mtg. ....	4
28	564317	* PANEL, Upper Pivot Side .....	2	54	619029	WASHER, Fender Mtg. ....	4
29	619029	* WASHER, Panel Mtg. ....	8	55	24C-824	BOLT, Fender to Tank .....	4
30	4E-08	* LKWSHR, Panel Mtg. ....	8	56	569909	WASHER, Hood to Tank .....	2
31	24C-816	* BOLT, Panel to Frame .....	8	57	569909	WASHER, Hood to Tank .....	2
32	24C-824	BOLT, Step to Frame Brk. ....	2	58	18D-08	NUT, Hood to Tank .....	2

† Not Illustrated

\* NOTE: For Serial — Cummins 5HC101 thru 5HC999 only.

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

[ 18 ]



HOOD, COVER, PANELS, FENDERS AND STEPS — G.M.

TS-6799-P

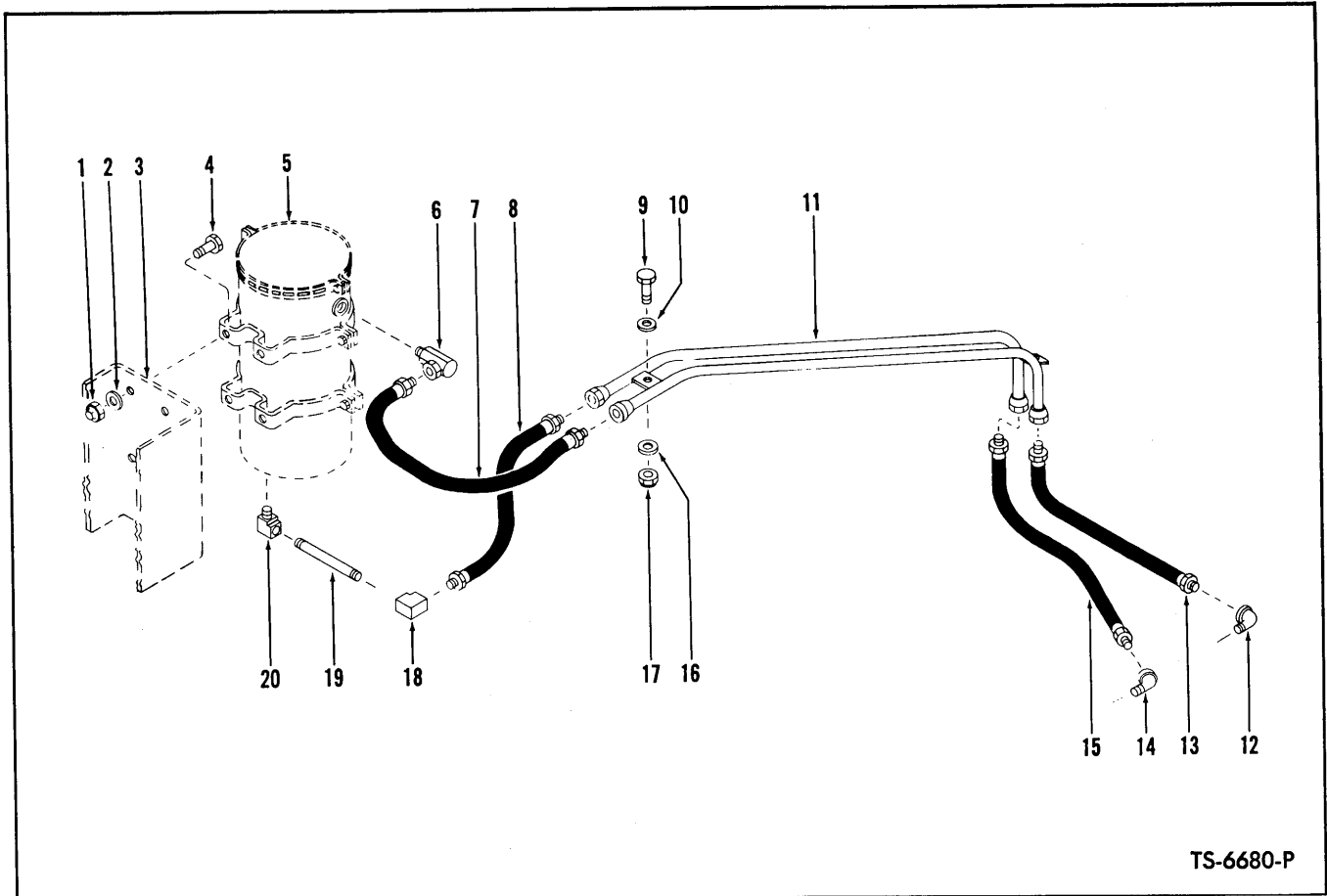
## HOOD, COVER, PANELS, FENDERS AND STEPS — G.M.

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	24C-848	BOLT, Hood to Tank .....	2	25	4E-08	LKWSHR, Step Mtg. ....	4
2	569909	WASHER, Hood to Tank .....	2	26	619029	WASHER, Step Mtg. ....	4
3	569739	MOUNT, Hood Shock .....	2	27	18D-08	NUT, Head Lamp Mtg. ....	2
4	562023	HOOD .....	1	28	1522201	CLAMP, Lamp to Rail .....	2
5	619029	WASHER, Hood Mtg. ....	3	29	8D-08	NUT, Head Lamp Jam .....	2
6	24C-820	BOLT, Hood to Cockpit .....	3	30	548088	LAMP, Head (Inc. 30A, 30B) ..	2
7	18D-08	NUT, Hood to Cockpit .....	3	30A	551244	†SEALED UNIT, Lamp .....	2
8	24C-820	BOLT, Fender to Step .....	2	30B	944872	†RETAINER, Head Lamp .....	2
9	619029	WASHER, Fender Mtg. ....	2	31	24C-816	BOLT, Step to Frame .....	4
10	24C-816	BOLT, Plate to Step — R.H. only .....	4	32	4E-08	LKWSHR, Step to Frame .....	4
11	4E-08	LKWSHR, Plate to Step — R.H. only .....	4	33	619029	WASHER, Step to Frame .....	4
12	571743	PLATE, Control Valve Cover — R.H. only .....	1	34	24C-816	BOLT, Panel to Frame .....	6
13	18D-08	NUT, Fender to Step .....	2	35	4E-08	LKWSHR, Panel to Frame .....	6
14	619029	WASHER, Fender to Step .....	2	36	619029	WASHER, Panel Mtg. ....	6
15		STEP ASSY		37	23C-812	BOLT, Panel to Fender .....	6
15A	562024	RIGHT HAND (Inc. 10, 11, 12)	1	38	4E-08	LKWSHR, Panel Mtg. ....	6
15B	562025	†LEFT HAND .....	1	39	619029	WASHER, Panel Mtg. ....	6
16		HAND RAIL		40		PANEL, Side	
16A	562108	RIGHT HAND .....	1	40A	1522087	RIGHT HAND .....	1
16B	562109	†LEFT HAND .....	1	40B	1522088	†LEFT HAND .....	1
17	4E-06	LKWSHR, Rail Mtg. ....	4	41		FENDER	
18	24C-616	BOLT, Rail to Cockpit .....	4	41A	558984	RIGHT HAND .....	1
19	588903	COVER ASSY, Front .....	1	41B	558985	†LEFT HAND .....	1
20	564317	*PANEL, Upper Pivot Side .....	2	42	18D-08	NUT, Fender to Tank .....	4
21	25E-21	*WASHER, Panel Mtg. ....	8	43	619029	WASHER, Fender Mtg. ....	4
22	4E-08	*LKWSHR, Panel Mtg. ....	8	44	619029	WASHER, Fender Mtg. ....	4
23	24C-816	*BOLT, Panel to Frame .....	8	45	24C-824	BOLT, Fender to Tank .....	4
24	24C-824	BOLT, Step to Frame Brk. ....	4	46	569909	WASHER, Hood to Tank .....	2
				47	569909	WASHER, Hood to Tank .....	2
				48	18D-08	NUT, Hood to Tank .....	2

†Not Illustrated

\*NOTE: For Serial — G.M. 5HG101 thru 5HG999; 6HG101 thru 6HG999 only.

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



TS-6680-P

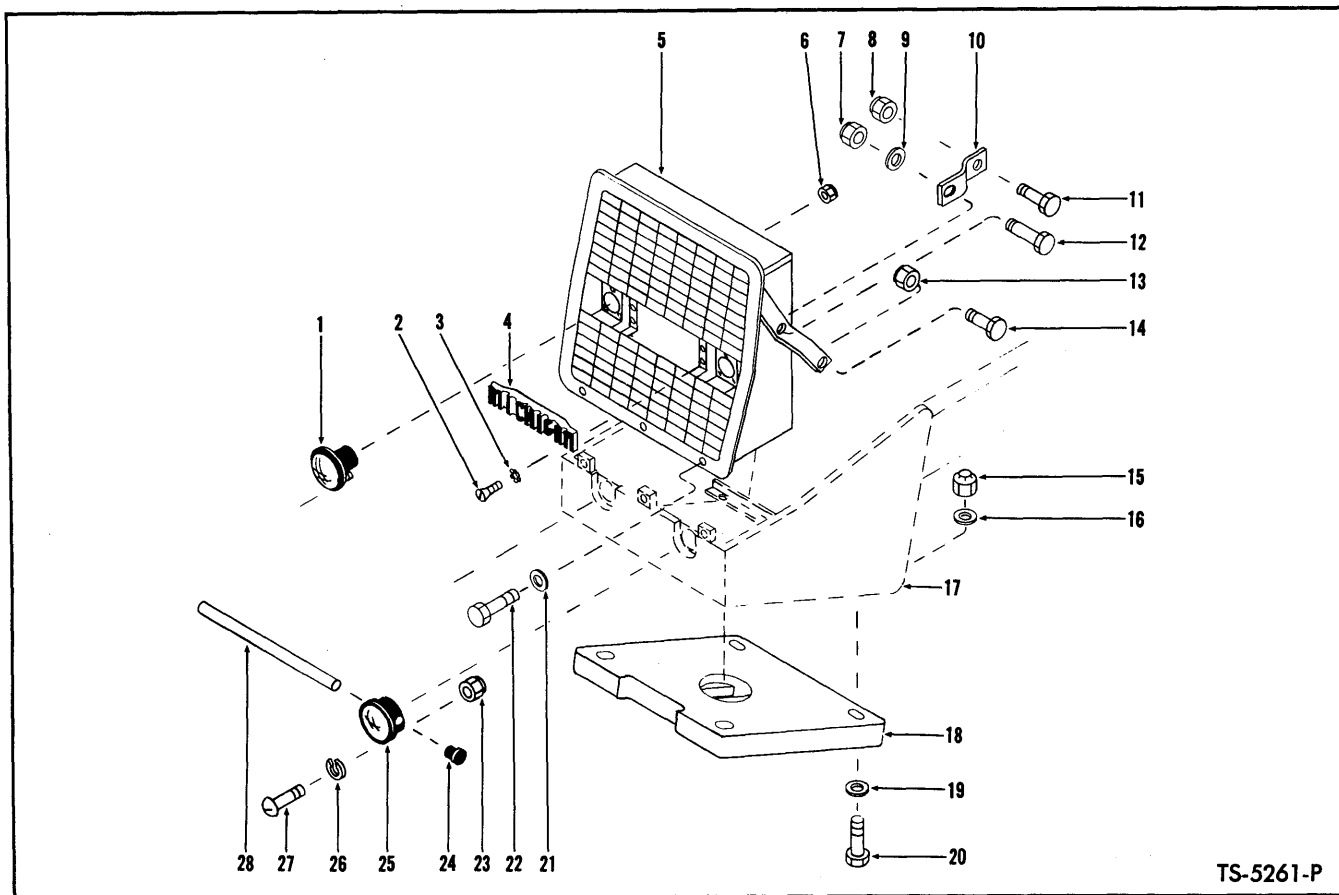
## ENGINE BY-PASS OIL FILTER – CUMMINS

Item No.	Part No.	Description	No. Req'd.
1	18D-05	NUT, Filter to Mounting Bracket .....	4
2	25E-15	WASHER, Filter to Mounting Bracket .....	4
3	-----	§ BRACKET – Welded to L.H. Step Assy .....	—
4	24C-516	BOLT, Filter to Mounting Bracket .....	4
5	-----	* FILTER, By-Pass Oil .....	—
6	31F-3	ADAPTER UNION, Hose to Filter .....	1
7	572237	HOSE, Filter to Crosstube – Suction .....	1
8	572238	HOSE, Filter to Crosstube – Return .....	1
9	24C-624	BOLT, Crosstube Mounting .....	2
10	656672	WASHER, Crosstube Mounting .....	2
11	572241	CROSSTUBE, Engine Oil .....	1
12	26F-4	ELBOW, Hose to Engine .....	1
13	572239	HOSE, Crosstube to Engine – Suction .....	1
14	25F-4	ELBOW, Hose to Engine Oil Pan .....	1
15	572240	HOSE, Crosstube to Engine Oil Pan – Return .....	1
16	656672	WASHER, Crosstube Mounting .....	2
17	18D-06	NUT, Crosstube Mounting .....	2
18	27F-2	ELBOW, Hose to Nipple .....	1
19	5K-356	NIPPLE, Elbow to Elbow .....	1
20	29F-2	ELBOW, Nipple to Filter .....	1

§Not Sold Separately

\*NOTE: These parts furnished with engine. See your local authorized Cummins Engine Distributor for service and replacement of these parts.

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



TS-5261-P

## GRILLE AND COUNTERWEIGHT

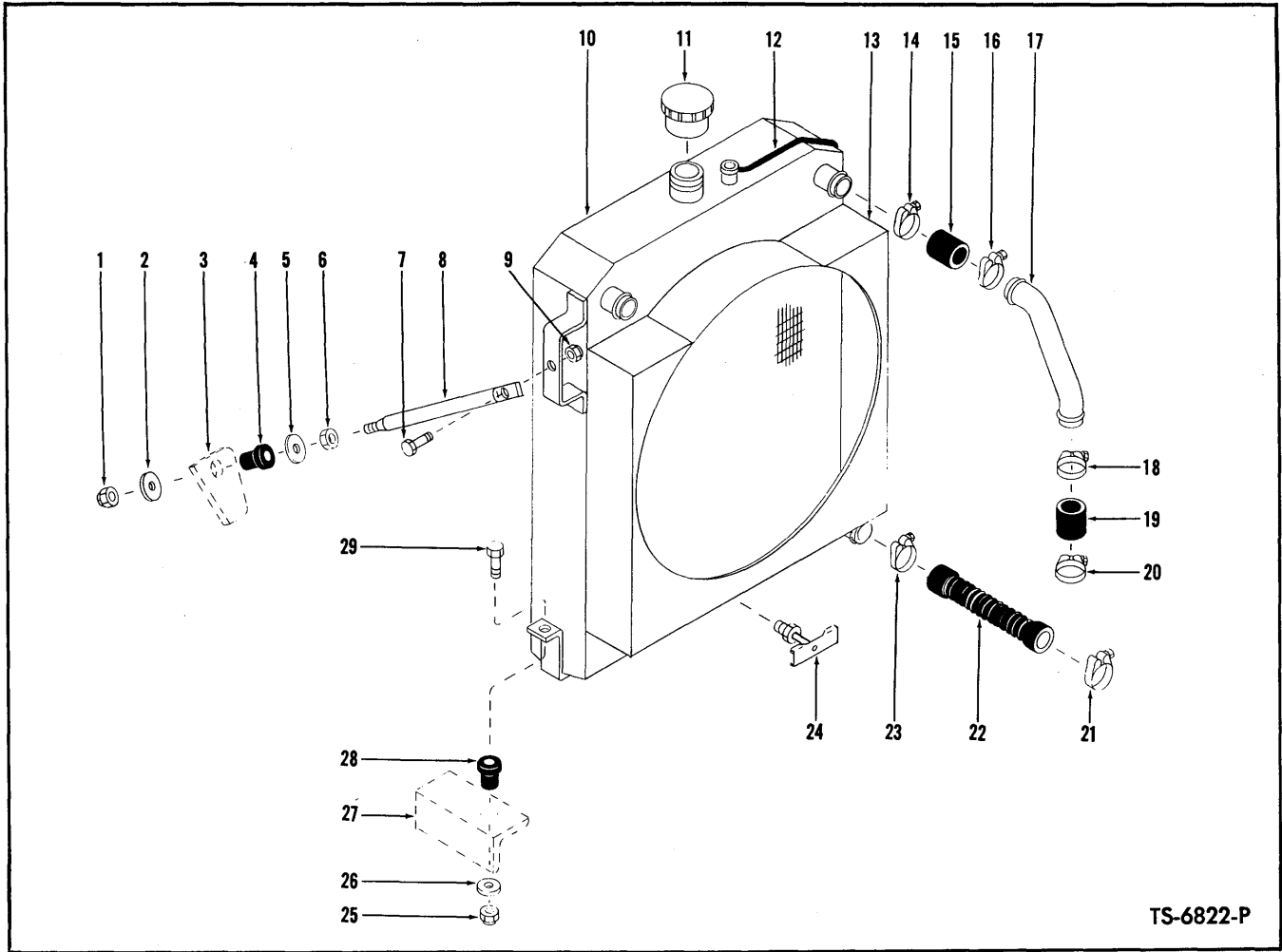
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	582057	LAMP, Back-Up (Inc. 1A, 1B)	2	19	590499	WASHER, Counterweight	4
1A	944977	†RETAINER & FRAME	2	20	24C-12120	BOLT, Counterweight Mtg.	4
1B	551244	†SEALED UNIT	2	21	619029	WASHER, Grille Mtg.	4
2	7G-418	SCREW, Plate to Grille	4	22	24C-816	BOLT, Grille Mtg.	2
3	20E-04	LKWSHR, Plate Mtg.	4	22A	4E-08	†LKWSHR, Grille Mtg.	2
4	535649	NAME PLATE, Michigan	1	23	14D-10	NUT, Lamp Mtg.	6
5	562017	GRILLE & SHROUD	1	24	1010736	PLUG, Lamp — R.H. only	1
6	50D-10	NUT, Lamp Mtg.	6	25		LAMP, Stop & Tail	
7	18D-06	NUT, Plate to Grille Brk.	2	25A	562641	Serial Group "A" (Inc. 25C, 25D)	2
8	18D-06	NUT, Plate to Rad. Brk.	2	25B	560967	Serial Group "B" (Inc. 25C, 25E)	2
9	25E-18	WASHER, Plate to Grille	2	25C	1010449	†LENS, Stop & Tail Lamp	2
10	563943	PLATE, Rad. to Grille	2	25D	1620699	†BULB — Serial Group "A"	2
11	24C-616	BOLT, Plate to Rad. Brk.	2	25E	946064	†BULB — Serial Group "B"	2
12	24C-620	BOLT, Plate to Grille Brk.	2	26	17E-10	LKWSHR, Lamp Mtg.	6
13	18D-08	NUT, Grille to Tank	2	27	86G-1012	SCREW, Lamp Mtg.	6
14	24C-824	BOLT, Grille to Tank	2	28	1520148	CONDUIT, Tail & Stop Lamp Wire Protector	1
15	18D-12	NUT, Counterweight Mtg.	4				
16	590499	WASHER, Counterweight	4				
17	—	FRAME — See Index	—				
18	569998	COUNTERWEIGHT	1				

†Not Illustrated

Serial Group "A": Cummins — 5HC101 thru 5HC999; G.M. — 5HG101 thru 5HG999 and 6HG101 thru 6HG999.

Serial Group "B": Cummins — 6HC101 thru 6HC999; G.M. — 7HG101 thru 7HG999.

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



TS-6822-P

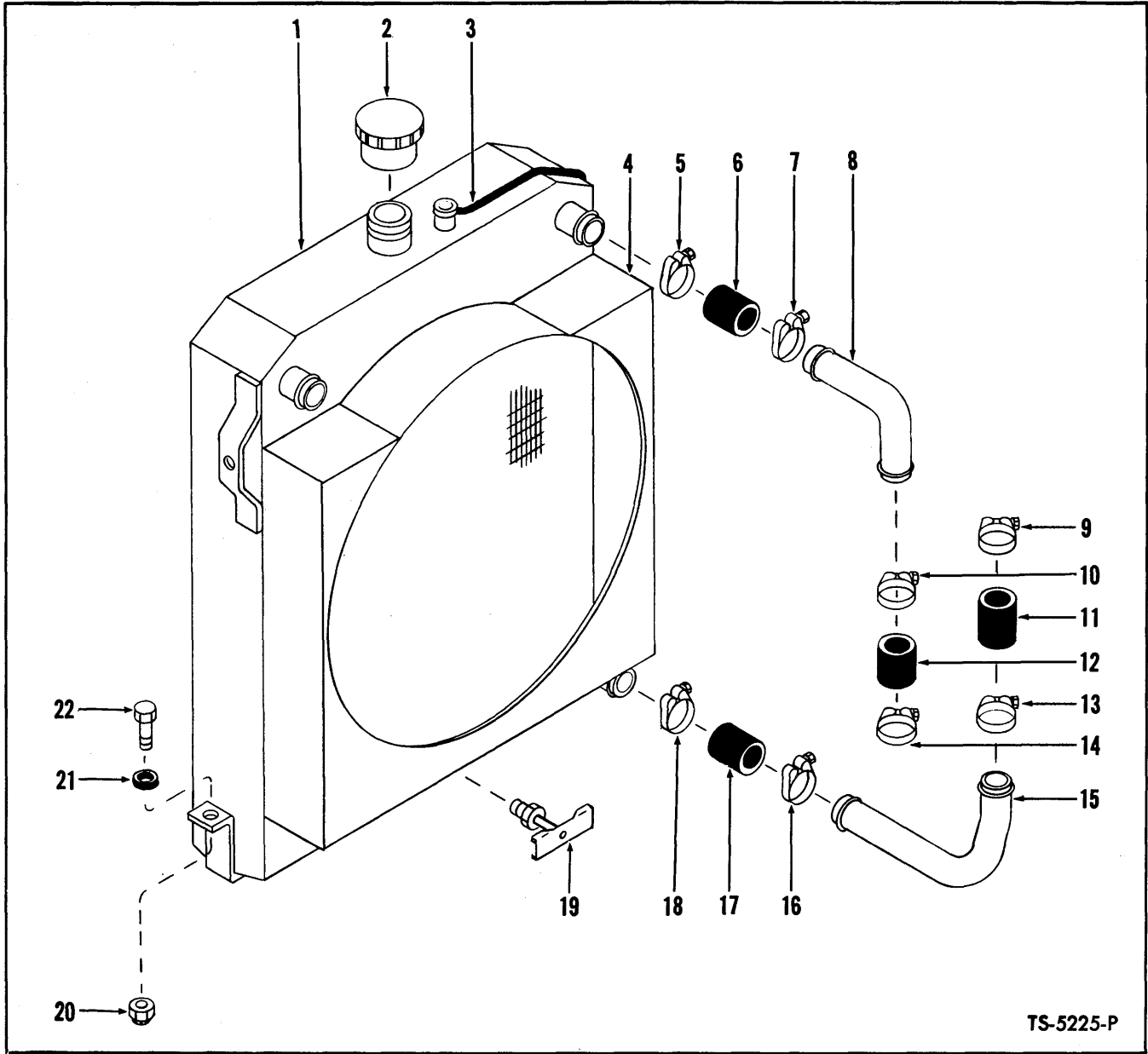
## RADIATOR AND CONNECTIONS — CUMMINS

For Serial: 5HC101 thru 5HC999, 6HC101 thru 6HC999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18D-08	NUT, Rod to Bracket .....	2	17		TUBE, Upper Radiator	
2	569909	WASHER, Rod to Bracket .....	2	17A	571562	LEFT HAND .....	1
3	-----	§BRACKET, Fuel Tank or Oil Reservoir — Welded .....	—	17B	571561	†RIGHT HAND .....	1
4	569739	MOUNT, Rod to Bracket .....	2	18	540104	CLAMP, Hose .....	1
5	569909	WASHER, Rod to Bracket .....	2	19	1M-18032	HOSE, Tube to Engine .....	1
6	8D-08	NUT, Stabilizer Rod Jam .....	2	20	540104	CLAMP, Hose .....	1
7	24C-824	BOLT, Rod to Rad. Brk. ....	2	21	540104	CLAMP, Hose .....	1
8	570991	ROD, Radiator Stabilizer .....	2	22	552481	HOSE, Rad. Outlet — Lower ..	1
9	18D-08	NUT, Rod to Rad. Brk. ....	2	23	540104	CLAMP, Hose .....	1
10	2503605	RADIATOR (Inc. 11, 12, 13) ..	1	24	72F-2	DRAIN COCK .....	1
11	863364	CAP, Radiator .....	1	25	18D-08	NUT, Rad. to Frame Brk. ....	2
12	945460	HOSE, Overflow .....	1	26	569909	WASHER, Rad. to Brk. ....	2
13	946391	SHROUD, Radiator Fan .....	1	27	-----	§BRACKET, Frame — Welded ..	—
14	540104	CLAMP, Hose .....	2	28	569739	MOUNT, Rad. to Brk. ....	2
15	1M-18032	HOSE, Tube to Radiator .....	2	29	24C-848	BOLT, Rad. to Frame Brk. ....	2
16	540104	CLAMP, Hose .....	2				

§Not Sold Separately  
†Not Illustrated

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

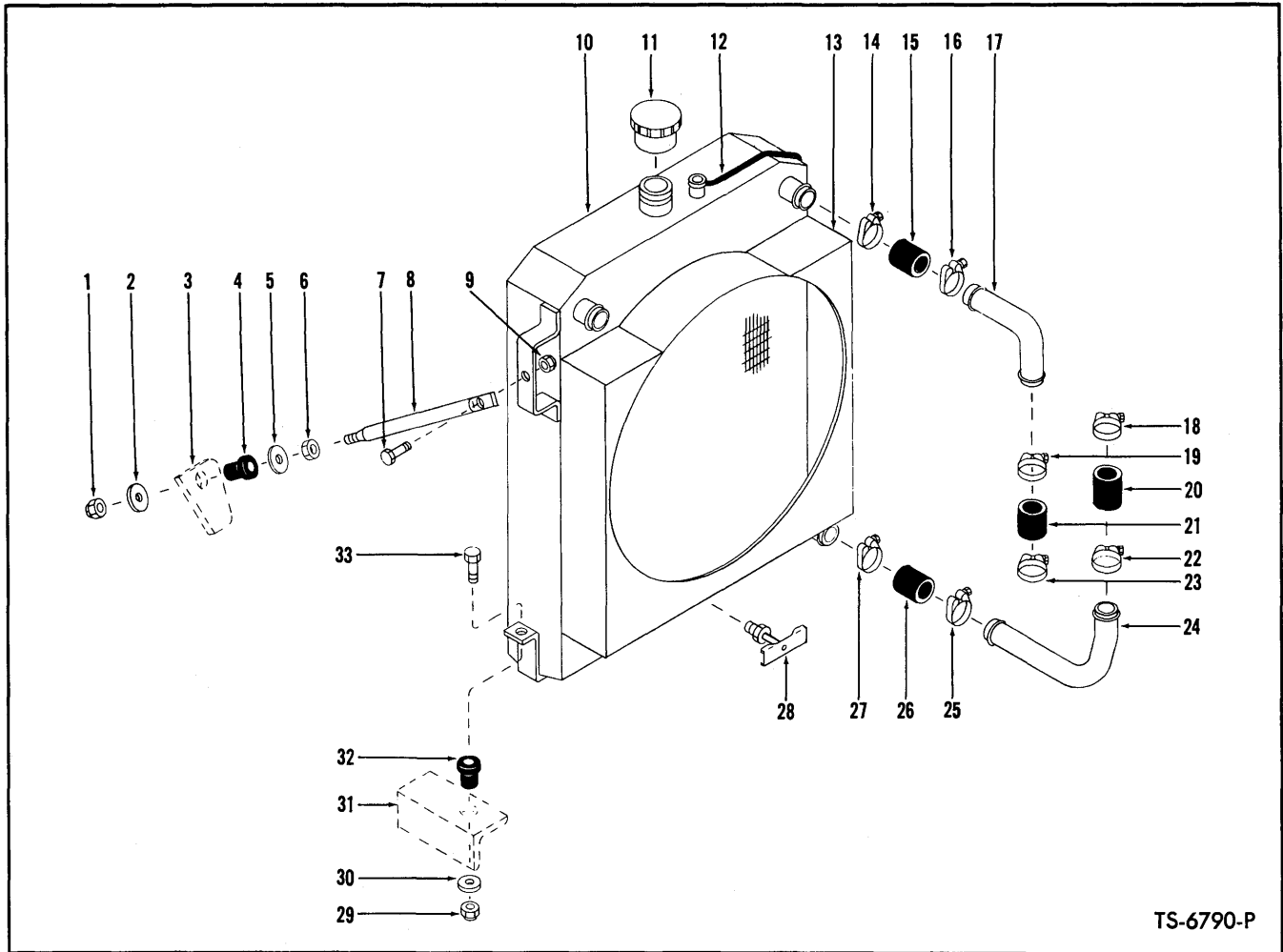


TS-5225-P

**RADIATOR AND CONNECTIONS – G.M.**  
**For Serial: 5HG101 thru 5HG999**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	2503606	RADIATOR (Inc. 2, 3, 4)	1	12	1M-18032	HOSE, Tube to Engine	2
2	863364	CAP, Radiator	1	13	540105	CLAMP, Hose	1
3	945460	HOSE, Overflow	1	14	540104	CLAMP, Hose	2
4	946044	SHROUD, Radiator Fan	1	15	557971	TUBE, Rad. Outlet – Lower	1
5	540104	CLAMP, Hose	2	16	540105	CLAMP, Hose	1
6	1M-18032	HOSE, Upper Tube to Rad.	2	17	1M-22044	HOSE, Tube to Rad.	1
7	540104	CLAMP, Hose	2	18	540105	CLAMP, Hose	1
8	557970	TUBE, Upper Radiator	2	19	72F-2	DRAIN COCK	1
9	540105	CLAMP, Hose	1	20	18D-08	NUT, Radiator to Frame	2
10	540104	CLAMP, Hose	2	21	518233	PAD, Radiator to Frame	2
11	1M-22044	HOSE, Tube to Engine	1	22	24C-832	BOLT, Radiator to Frame	2

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



## RADIATOR AND CONNECTIONS — G.M.

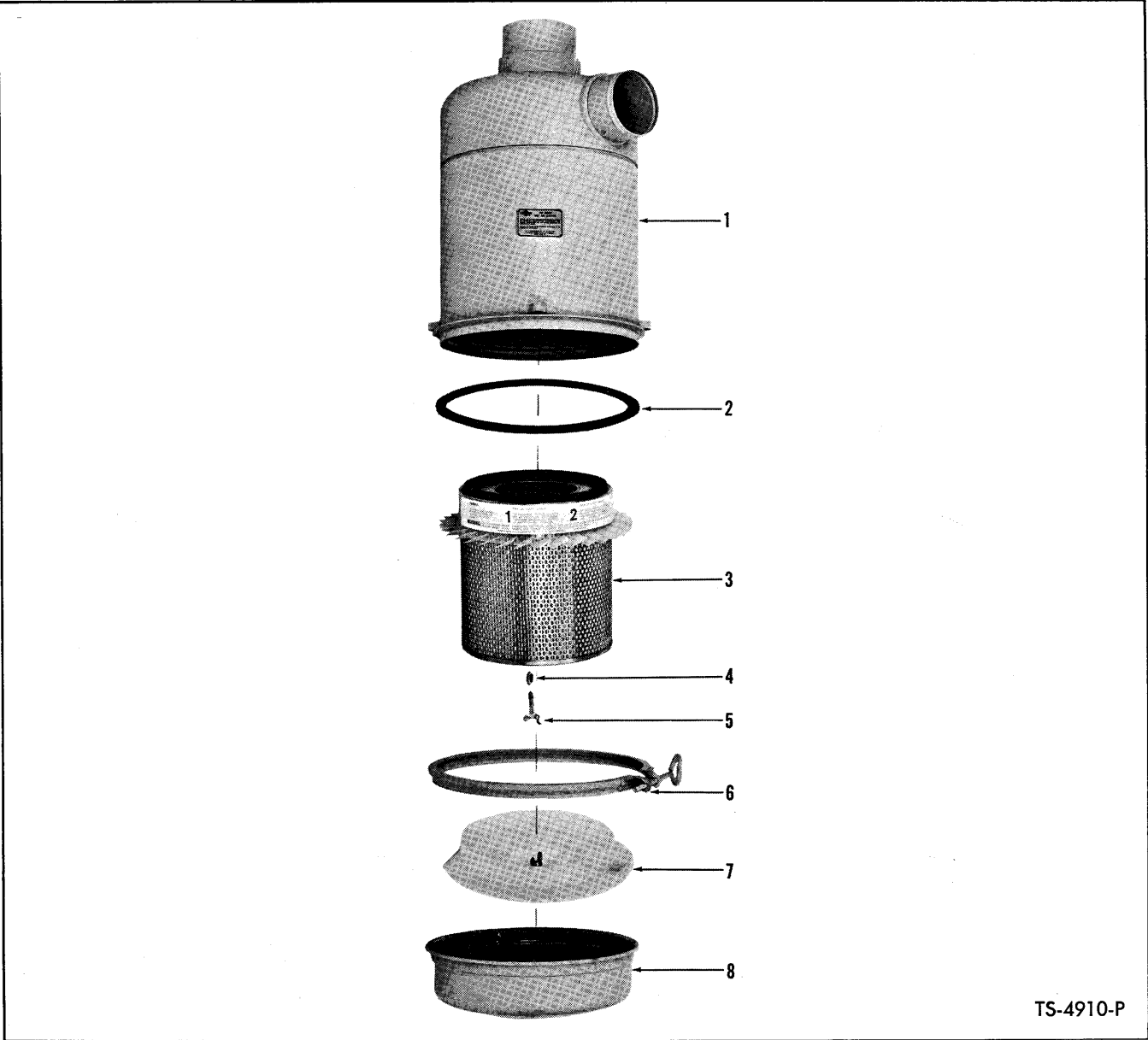
For Serial: 6HG101 thru 6HG999, 7HG101 thru 7HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18D-08	NUT, Rod to Bracket .....	2	17	557970	TUBE, Upper Radiator .....	2
2	569909	WASHER, Rod to Bracket ....	2	18	540105	CLAMP, Hose .....	1
3	-----	§BRACKET, Fuel Tank or Oil Reservoir — Welded .....	—	19	540104	CLAMP, Hose .....	2
4	569739	MOUNT, Rod to Bracket .....	2	20	1M-22044	HOSE, Tube to Engine .....	1
5	569909	WASHER, Rod to Bracket ....	2	21	1M-18032	HOSE, Tube to Engine .....	2
6	8D-08	NUT, Stabilizer Rod Jam .....	2	22	540105	CLAMP, Hose .....	1
7	24C-824	BOLT, Rod to Rad. Brk. ....	2	23	540104	CLAMP, Hose .....	2
8	570991	ROD, Radiator Stabilizer .....	2	24	557971	TUBE, Rad. Outlet — Lower ..	1
9	18D-08	NUT, Rod to Rad. Brk. ....	2	25	540105	CLAMP, Hose .....	1
10	2503610	RADIATOR (Inc. 11, 12, 13) ..	1	26	1M-22044	HOSE, Radiator to Tube .....	1
11	863364	CAP, Radiator .....	1	27	540105	CLAMP, Hose .....	1
12	945460	HOSE, Overflow .....	1	28	72F-2	DRAIN COCK .....	1
13	946044	SHROUD, Radiator Fan .....	1	29	18D-08	NUT, Rad. to Frame Brk. ....	2
14	540104	CLAMP, Hose .....	2	30	569909	WASHER, Rad. to Brk. ....	2
15	1M-18032	HOSE, Tube to Radiator .....	2	31	-----	§BRACKET, Frame — Welded ..	—
16	540104	CLAMP, Hose .....	2	32	569739	MOUNT, Rad. to Brk. ....	2
				33	24C-848	BOLT, Rad. to Frame Brk. ....	2

§Not Sold Separately

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





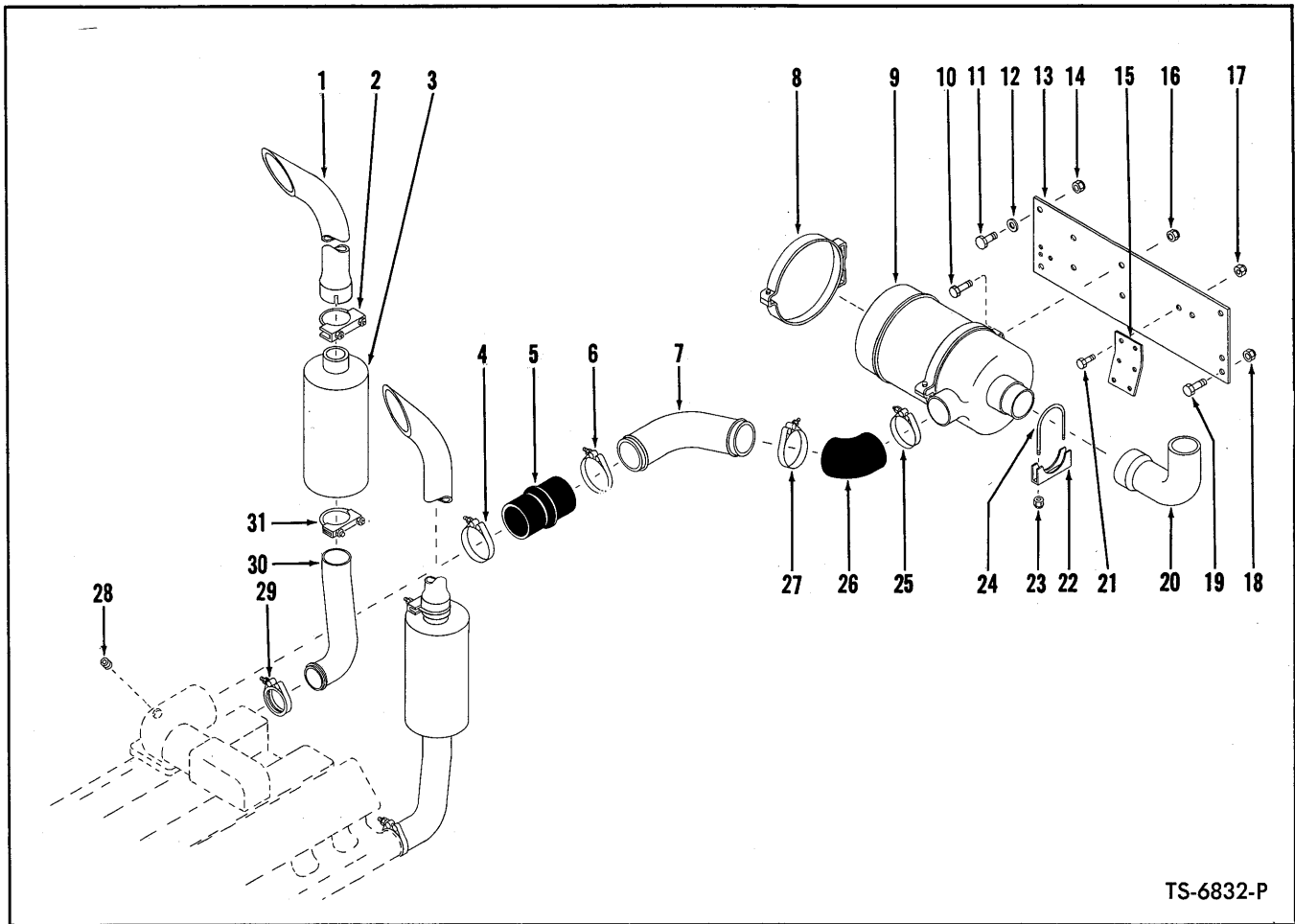
TS-4910-P

**AIR CLEANER ASSEMBLY**

Item No.	Part No.	Description	No. Req'd.
A	540699	AIR CLEANER ASSY (Inc. 1 thru 8) .....	1
1	-----	§BODY, Air Cleaner — See Item "A" .....	1
2	944404	GASKET, Air Cleaner .....	1
3	944809	ELEMENT .....	1
4	886287	WASHER, Element Attaching .....	1
5	886285	THUMB SCREW, Element Attaching .....	1
6	944810	CLAMP, Dust Cup .....	1
7	944784	BAFFLE .....	1
8	944785	CUP, Dust .....	1

§Not Sold Separately

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



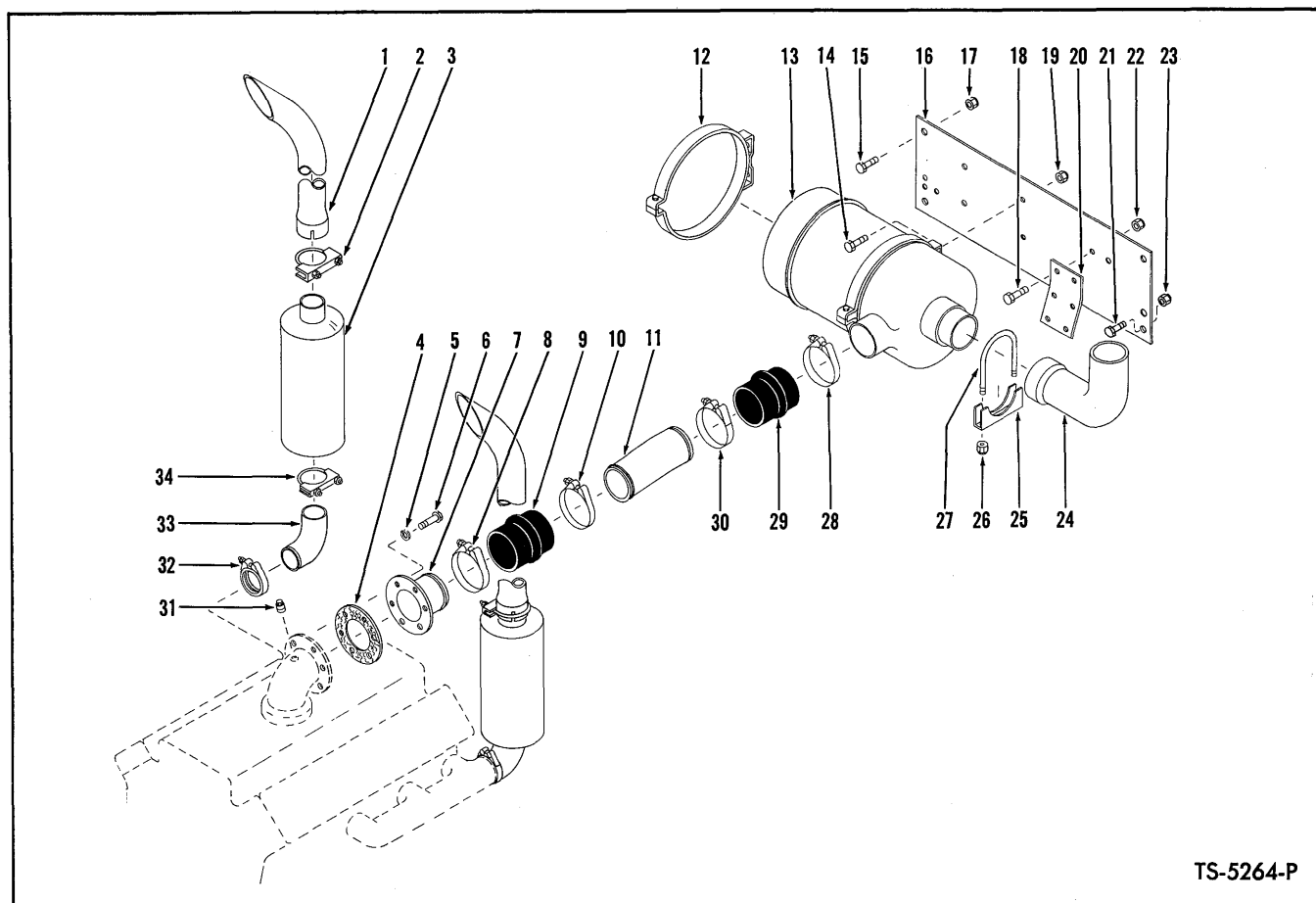
TS-6832-P

## MUFFLER, TAILPIPE AND AIR CLEANER CONNECTIONS — CUMMINS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1524081	TAILPIPE .....	2	19	24C-832	BOLT, Bellcrank & Plate to Cockpit .....	1
2	580282	CLAMP, Pipe to Muffler .....	2	20	557980	ELBOW, Air Inlet .....	1
3	532603	MUFFLER .....	2	21	24C-620	BOLT, Bracket to Plate .....	2
4	540797	CLAMP, Hose .....	1	22	563860	BASE, Clamp .....	1
5	513864	HOSE, Tube to Air Comp. ....	1	23	17D-3	NUT, U-Bolt & Base Mtg. ....	2
6	540797	CLAMP, Hose .....	1	24	563813	U-BOLT, Tube to Air Cleaner	1
7	571556	TUBE, Air Intake .....	1	25	540797	CLAMP, Hose .....	1
8	509763	STRAP, Air Cleaner Mtg. ....	2	26	513865	HOSE, Tube to Air Cleaner ...	1
9	-----	AIR CLEANER — See Index ...	—	27	540797	CLAMP, Hose .....	1
10	24C-620	BOLT, Air Cleaner to Plate ...	4	28	16F-06	PLUG, Air Comp. Inlet .....	1
11	24C-824	BOLT, Plate to Cockpit .....	3	29	539906	CLAMP, Stem to Manifold — Furnished with Engine .....	2
12	703891	WASHER, Plate to Cockpit ....	3	30	-----	STEM, Exhaust	—
13	557982	PLATE, Air Cleaner Mtg. ....	1	30A	1524084	RIGHT HAND .....	1
14	18D-08	NUT, Plate to Cockpit .....	3	30B	1524085	†LEFT HAND .....	1
15	562105	BRACKET, Converter Filter Mounting .....	1	31	580282	CLAMP, Stem to Muffler .....	2
16	18D-06	NUT, Air Cleaner to Plate ....	4				
17	18D-06	NUT, Bracket to Plate .....	2				
18	18D-08	NUT, Bellcrank & Plate to Cockpit .....	1				

†Not Illustrated

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



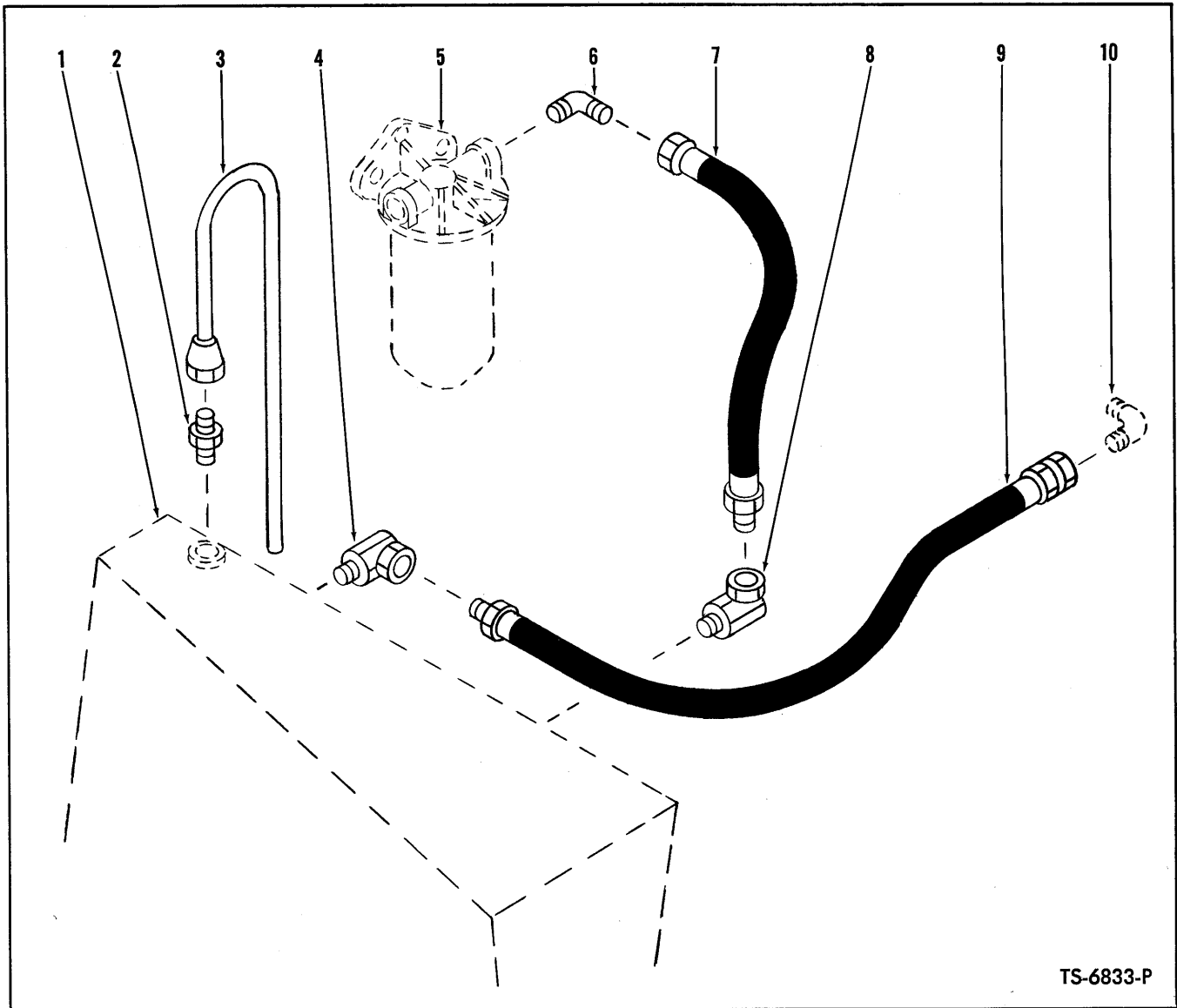
TS-5264-P

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

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	543576	TAILPIPE .....	2	21	24C-832	BOLT, Bellcrank & Plate to Cockpit .....	1
2	1524082	CLAMP, Pipe to Muffler .....	2	22	18D-06	NUT, Bracket to Plate .....	2
2A	1524167	† SPACER, Pipe to Muffler .....	2	23	18D-08	NUT, Bellcrank & Plate to Cockpit .....	1
3	557985	MUFFLER .....	2	24	557980	ELBOW, Air Inlet .....	1
4	533286	GASKET, Adapter .....	1	25	563860	BASE, Clamp .....	1
5	4E-06	LKWSHR, Adapter Mtg. ....	6	26	17D-3	NUT, U-Bolt & Base Mtg. ....	2
6	23C-616	BOLT, Adapter Mounting ....	6	27	563813	U-BOLT, Tube to Air Cleaner	1
7	557978	ADAPTER, Air Intake .....	1	28	540797	CLAMP, Hose .....	1
8	540797	CLAMP, Hose .....	1	29	513864	HOSE, Tube to Air Cleaner ..	1
9	513864	HOSE, Tube to Adapter .....	1	30	540797	CLAMP, Hose .....	1
10	540797	CLAMP, Hose .....	1	31	16F-06	PLUG, Air Compressor Inlet ..	1
11	558169	TUBE, Air Suction .....	1	32	539906	CLAMP, Stem to Manifold — Furnished with Engine .....	2
12	509763	STRAP, Air Cleaner Mtg. ....	2	33		STEM, Exhaust	
13		AIR CLEANER — See Index ..	—	33A	557984	LEFT HAND .....	1
14	24C-620	BOLT, Air Cleaner to Plate ..	4	33B	557983	RIGHT HAND .....	1
15	24C-824	BOLT, Plate to Cockpit .....	3	34	507069	CLAMP, Stem to Muffler .....	2
16	557982	PLATE, Air Cleaner Mtg. ....	1				
17	18D-08	NUT, Plate to Cockpit .....	3				
18	24C-620	BOLT, Bracket to Plate .....	2				
19	18D-06	NUT, Air Cleaner to Plate ....	4				
20	562105	BRACKET, Conv. Filter Mtg. ...	1				

†Not Illustrated

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



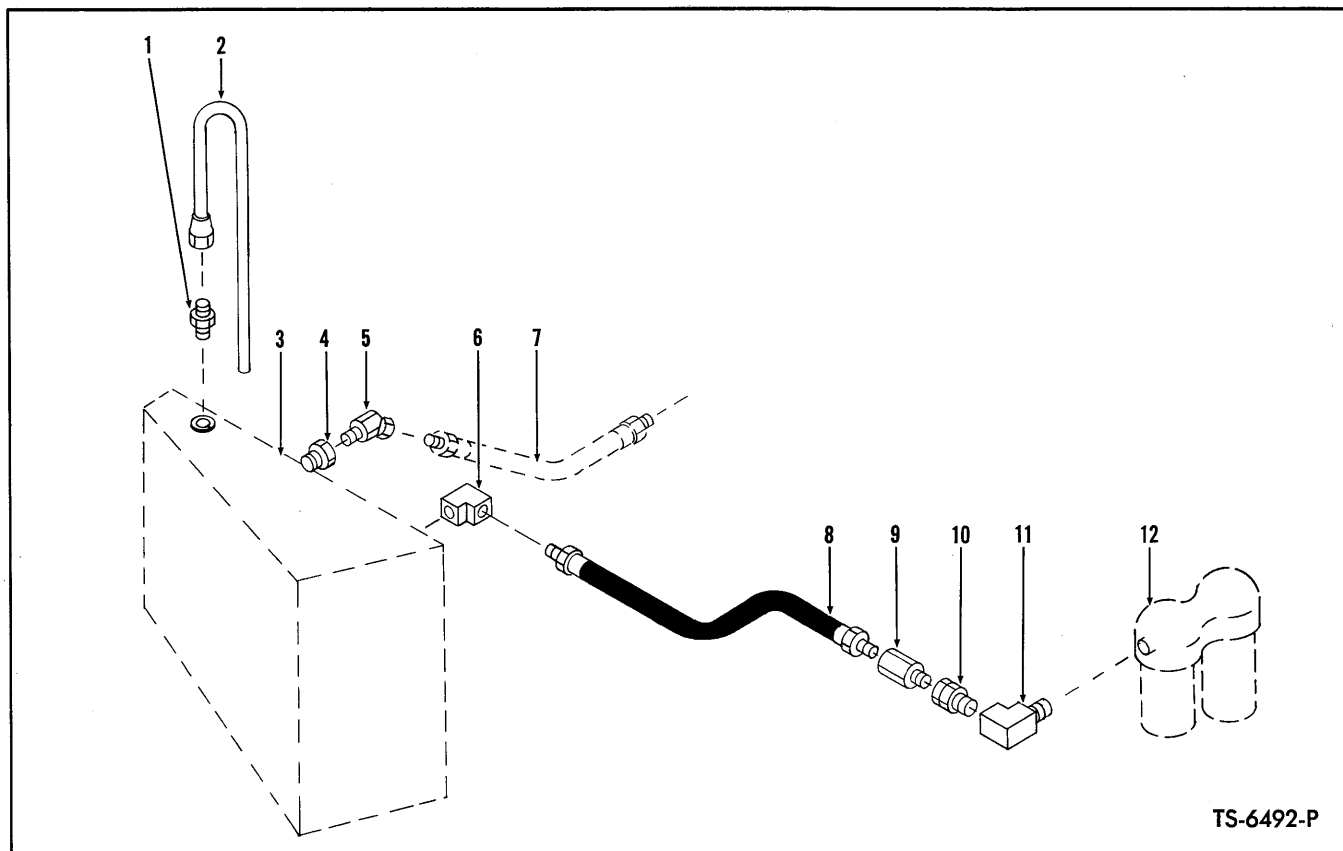
TS-6833-P

## FUEL LINES — CUMMINS

Item No.	Part No.	Description	No. Req'd.
1	-----	FUEL TANK — See Index .....	—
2	38F-3	CONNECTOR, Tube to Tank .....	1
3	557669	TUBE, Breather .....	1
4	31F-3	ADAPTER UNION, Hose to Tank .....	1
5	-----	*FILTER, Fuel .....	—
6	77F-7	ELBOW, Hose to Filter .....	1
7	572149	HOSE, Fuel Suction .....	1
8	32F-4	ADAPTER UNION, Hose to Tank .....	1
9	545117	HOSE, Fuel Return .....	1
10	-----	*ELBOW, Hose to Engine Cross .....	—

\*NOTE: These parts furnished with Engine. See your local authorized Cummins Engine Distributor for service and replacement of these parts.

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



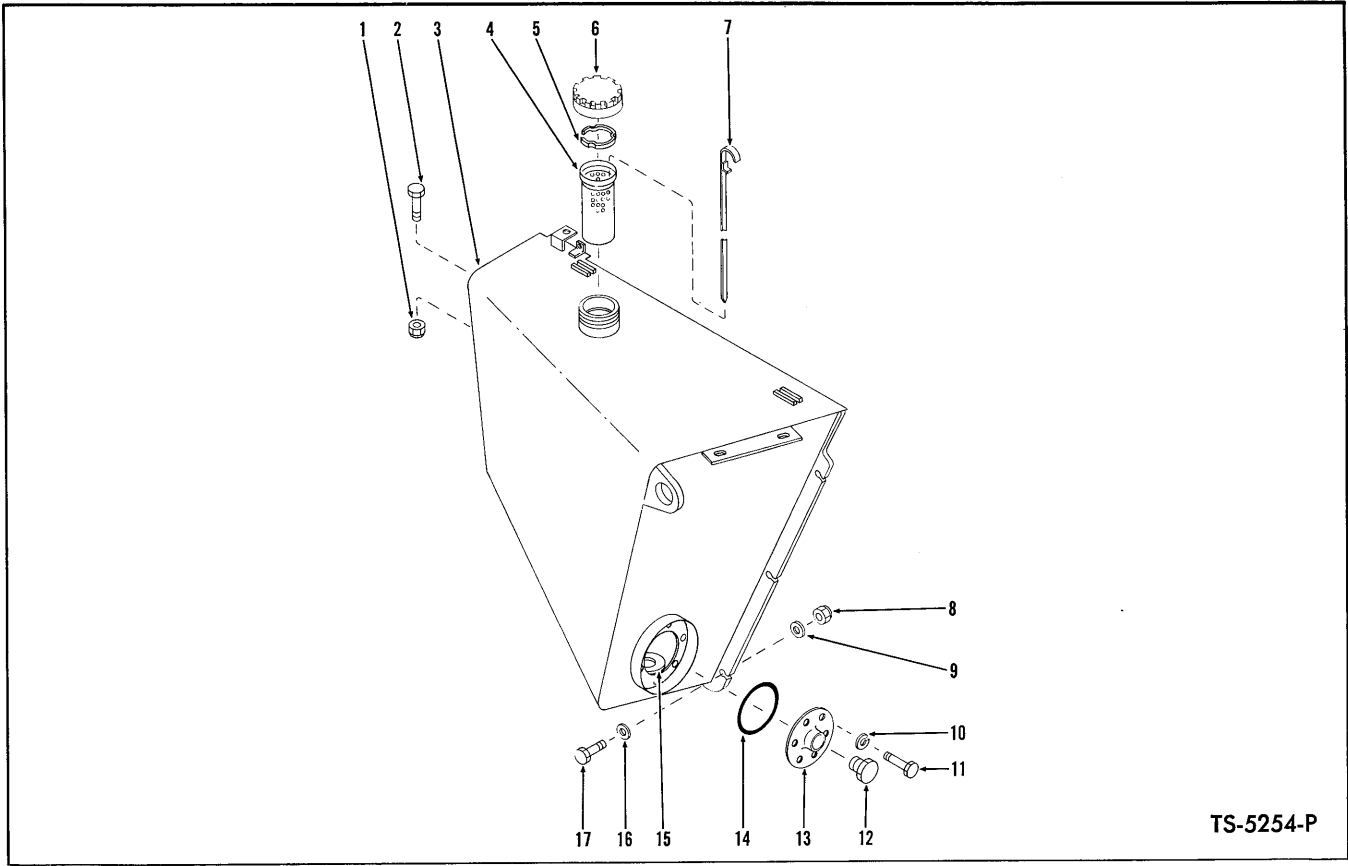
## FUEL LINES — G.M.

Item No.	Part No.	Description	No. Req'd.
1	38F-3	CONNECTOR, Tube to Tank .....	1
2	557669	TUBE, Breather .....	1
3	---	FUEL TANK — See Index .....	—
4	19F-3	BUSHING, Tank Reducing .....	1
5	33F-2	ADAPTER UNION, Hose to Tank .....	1
6	27F-3	ELBOW, Hose to Tank .....	1
7	---	* HOSE, Fuel Return .....	—
8	544419	HOSE, Fuel Suction .....	1
9	425413	VALVE, Check — B.W. #227856 (See Note "A") .....	1
10	36F-3	ADAPTER UNION, Valve to Elbow .....	1
11	29F-2	ELBOW, Filter (See Note "A") .....	1
12	---	* FILTER, Fuel .....	—

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

NOTE "A": When replacement is necessary for Items 8, 9, or 11 on Machine Serial 5HG101 thru 5HG146 one 36F-3 Item 10 should be installed for easier assembly.

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



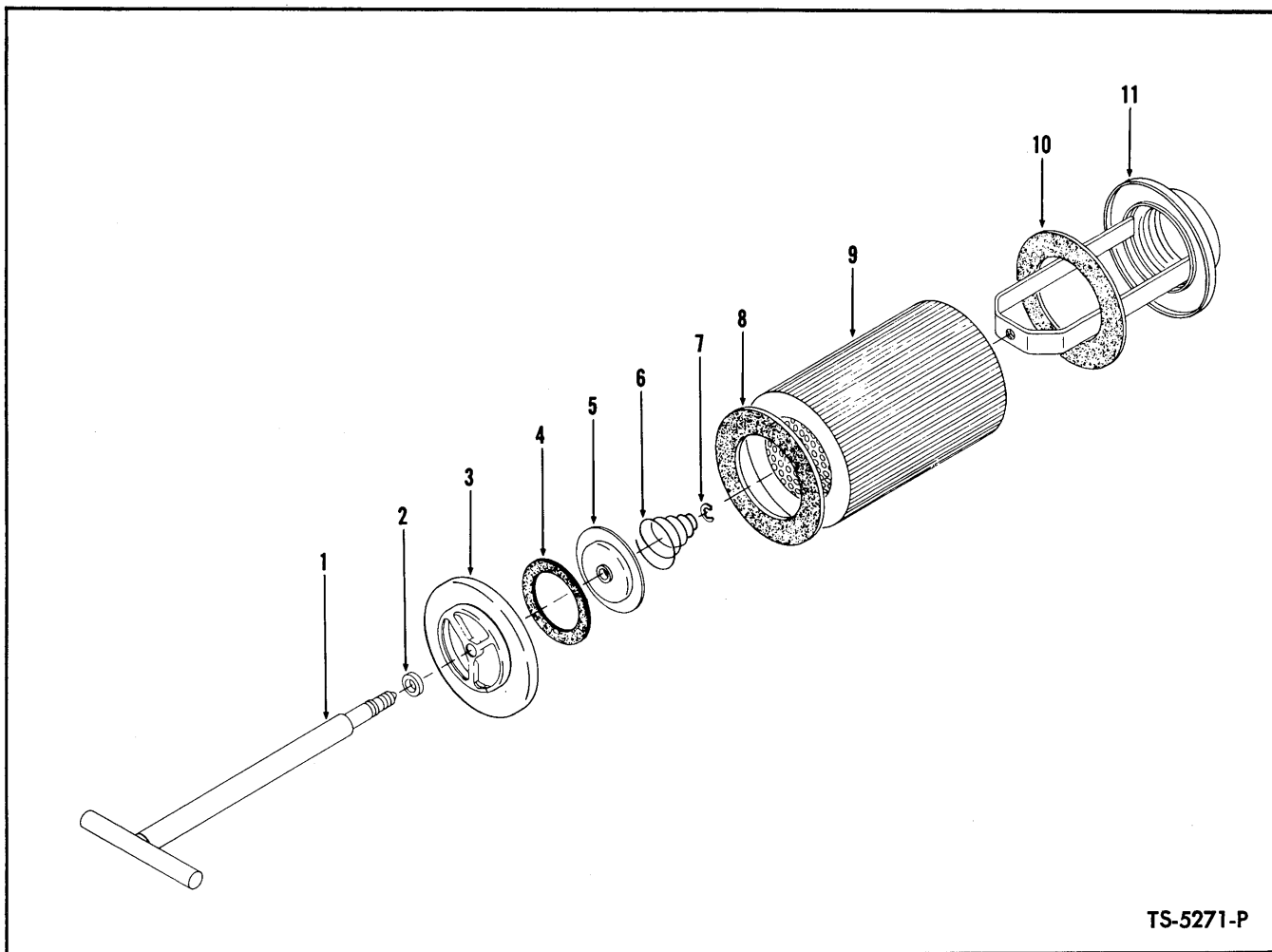
TS-5254-P

## FUEL TANK

Item No.	Part No.	Description	No. Req'd.
1	18D-12	NUT, Fuel Tank Mtg. ....	1
2	24C-1244	BOLT, Fuel Tank Mtg. ....	1
3		<b>FUEL TANK</b>	
3A	558820	For Serial: G.M. — 5HG101 thru 5HG999 .....	1
3B	571326	For Serial: G.M. — 6HG101 thru 6HG999; 7HG101 thru 7HG999; Cummins — 5HC101 thru 5HC999; 6HC101 thru 6HC999 .....	1
4	943957	STRAINER, Fuel Tank .....	1
5	569914	RING, Cap Retaining .....	1
6	1558644	CAP, Fuel Tank .....	1
6A	946953	†GASKET, Fuel Cap .....	1
6B	946954	†PLATE, Gasket Back-Up .....	1
7	569933	DIPSTICK .....	1
8	18D-12	NUT, Fuel Tank Mtg. ....	5
9	942138	WASHER, Fuel Tank Mtg. ....	5
10	4E-06	LKWSHR, Inspection Plate to Tank .....	6
11	24C-612	BOLT, Inspection Plate to Tank .....	6
12	40K-16	PLUG, Drain .....	1
13	587613	PLATE, Inspection .....	1
14	25K-40428	O-RING, Inspection Plate .....	1
15	525293	MAGNET .....	1
16	942138	WASHER, Fuel Tank Mtg. ....	5
17	24C-1244	BOLT, Fuel Tank Mtg. ....	5

†Not Illustrated

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



TS-5271-P

## FILTER ASSEMBLY — HYDRAULIC RESERVOIR (Suction)

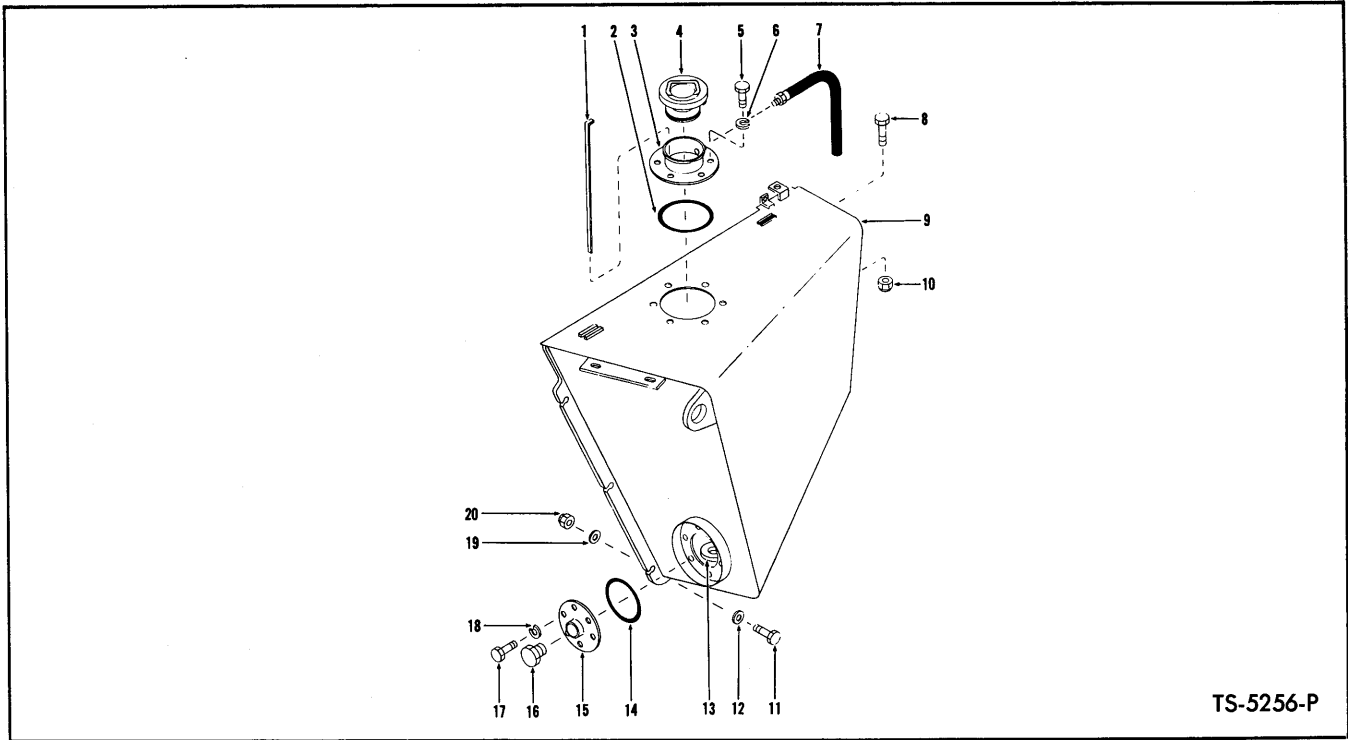
Item No.	Part No.	Description	No. Req'd.
A	562119	*HYDRAULIC OIL FILTER (Inc. 1 thru 11)	1
B	946053	**HANDLE & COVER ASSY (Inc. 1 thru 7)	1
1	-----	§HANDLE — See Item B	1
2	946060	WASHER, Handle	1
3	-----	§COVER, Filter — See Item B	1
4	-----	OMIT, Not used this application	—
5	946057	PLATE, Valve	1
6	946056	SPRING, Valve	1
7	1303459	E-RING, Spring Retaining	1
8	946062	GASKET, Element	1
9	946055	*ELEMENT (Inc. 8, 10)	1
10	946062	GASKET, Element	1
11	946054	BASE ASSY	1

§Not Sold Separately

\*NOTE: For complete Filter Assembly replacement or Element replacement use 1 — 1532445 one piece Filter Assembly. When replacing 562119 or 946055 with 1532445 all items (1 thru 11) must be removed before installation can be made.

\*\*NOTE: For replacement use 1532445 Filter Assy.

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



TS-5256-P

## HYDRAULIC OIL RESERVOIR

For Serial: Cummins — 5HC101 thru 5HC999;  
G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999

Item No.	Part No.	Description	No. Req'd.
1	1510095	DIPSTICK .....	1
2	25K-40624	O-RING, Neck to Tank .....	1
3	564175	NECK, Filler .....	1
4	569759	CAP, Filler Neck .....	1
5	24C-612	BOLT, Neck to Tank .....	6
6	4E-06	LKWSHR, Neck to Tank .....	6
7	569927	HOSE, Overflow .....	1
8	24C-1244	BOLT, Reservoir Mtg. ....	1
9		<i>RESERVOIR, Oil</i>	
9A	558830	* G.M. — 5HG101 thru 5HG999 .....	1
9B	571324	** G.M. — 6HG101 thru 6HG120 .....	1
9C	574062	** G.M. — 6HG121 thru 6HG999 .....	1
9D	574062	*** Cummins — 5HC101 thru 5HC999 .....	1
10	18D-12	NUT, Reservoir Mtg. ....	1
11	24C-1244	BOLT, Reservoir Mtg. ....	5
12	942138	WASHER, Reservoir Mtg. ....	5
13	525293	MAGNET, Oil Res. ....	1
14	25K-40428	O-RING, Plate to Tank .....	1
15	587613	PLATE, Inspection .....	1
16	40K-16	PLUG, Drain .....	1
17	24C-612	BOLT, Plate Mtg. ....	6
18	4E-06	LKWSHR, Plate Mtg. ....	6
19	942138	WASHER, Reservoir Mtg. ....	5
20	18D-12	NUT, Reservoir Mtg. ....	5

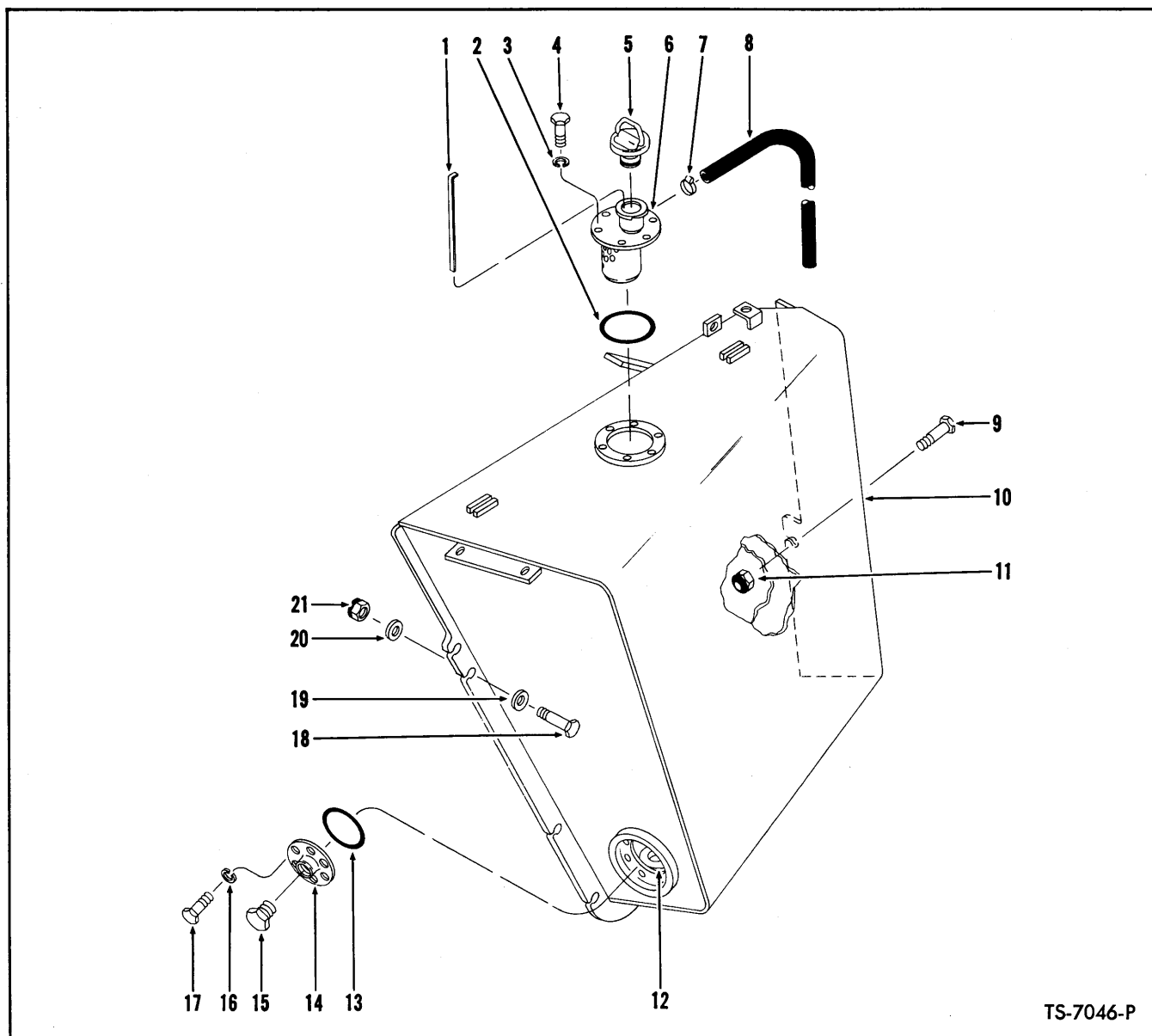
\*NOTE: For complete replacement of 558830 Reservoir use 574062 plus 1 #1522642 Return Tube Crossover and 1 #1529758 Front Return Tube must also be used.

\*\*NOTE: For complete replacement of 571324 Reservoir use 574062 or when replacing 574062 Reservoir as shipped from factory, 1 #1522642 Return Tube Crossover and 1 #1529755 Front Return Tube must also be used.

\*\*\*NOTE: When replacing 574062 Reservoir as shipped from factory, 1 #1522645 Return Tube Crossover and 1 #1529759 Front Return Tube must also be used.

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





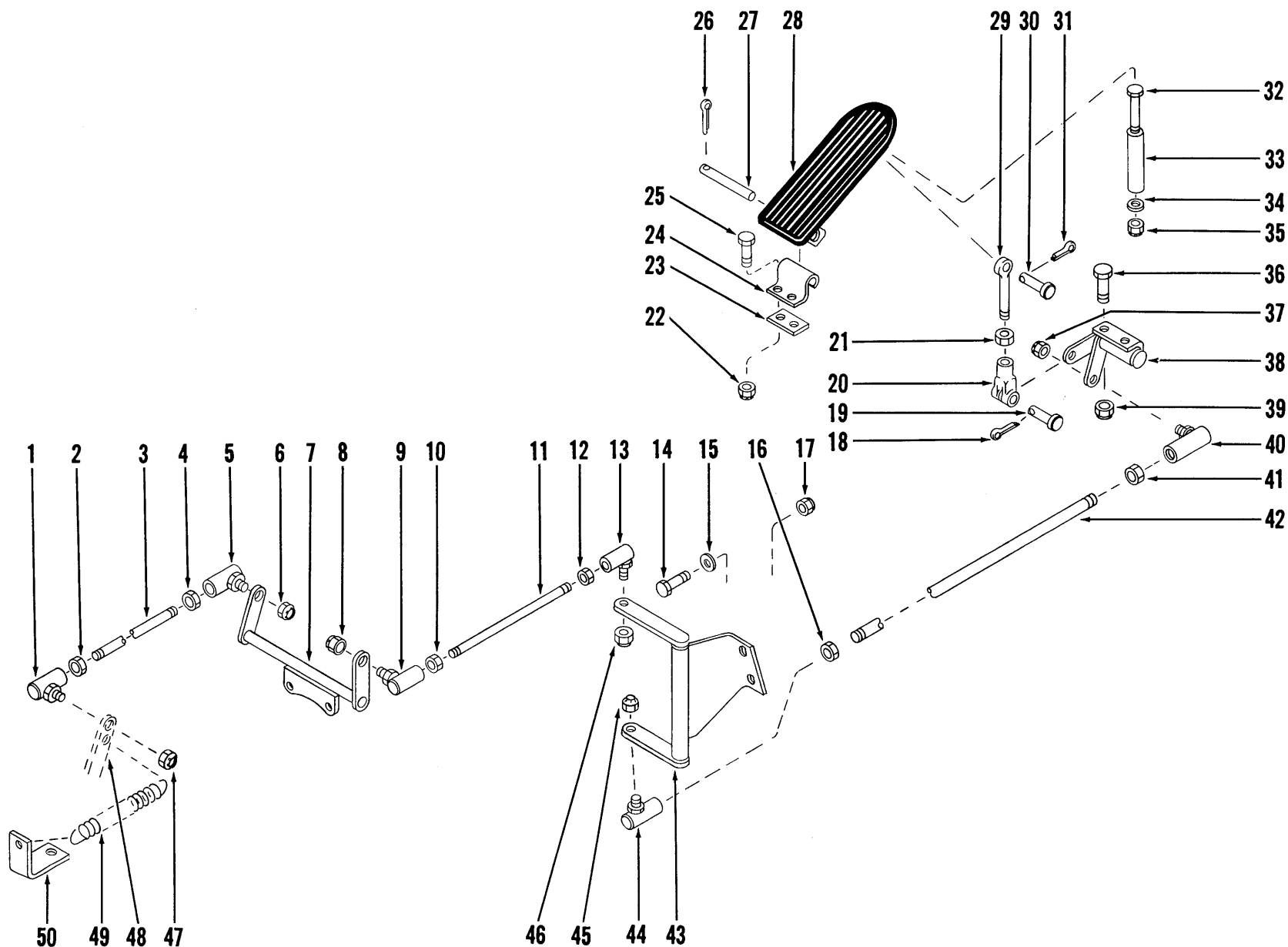
TS-7046-P

## HYDRAULIC OIL RESERVOIR

For Serial: Cummins — 6HC101 thru 6HC999;  
G.M. — 7HG101 thru 7HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1510095	DIPSTICK, Oil Level .....	1	12	525293	MAGNET, Oil Res. ....	1
2	25K-40624	O-RING, Neck to Tank .....	1	13	25K-40428	O-RING, Plate to Tank .....	1
3	4E-06	LKWSHR, Neck to Tank .....	6	14	587613	PLATE, Inspection .....	1
4	24C-612	BOLT, Neck to Tank .....	6	15	40K-16	PLUG, Drain .....	1
5	569759	CAP, Filler Neck .....	1	16	4E-06	LKWSHR, Plate Mtg. ....	6
6	567742	FILLER NECK & SCREEN .....	1	17	24C-612	BOLT, Plate Mtg. ....	6
7	521874	CLAMP, Hose .....	1	18	24C-1244	BOLT, Reservoir Mtg. ....	5
8	743563	HOSE, Overflow .....	1	19	942138	WASHER, Reservoir Mtg. ....	5
9	24C-1244	BOLT, Reservoir Mtg. ....	1	20	942138	WASHER, Reservoir Mtg. ....	5
10	574062	RESERVOIR, Oil .....	1	21	18D-12	NUT, Reservoir Mtg. ....	5
11	18D-12	NUT, Reservoir Mtg. ....	1				

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



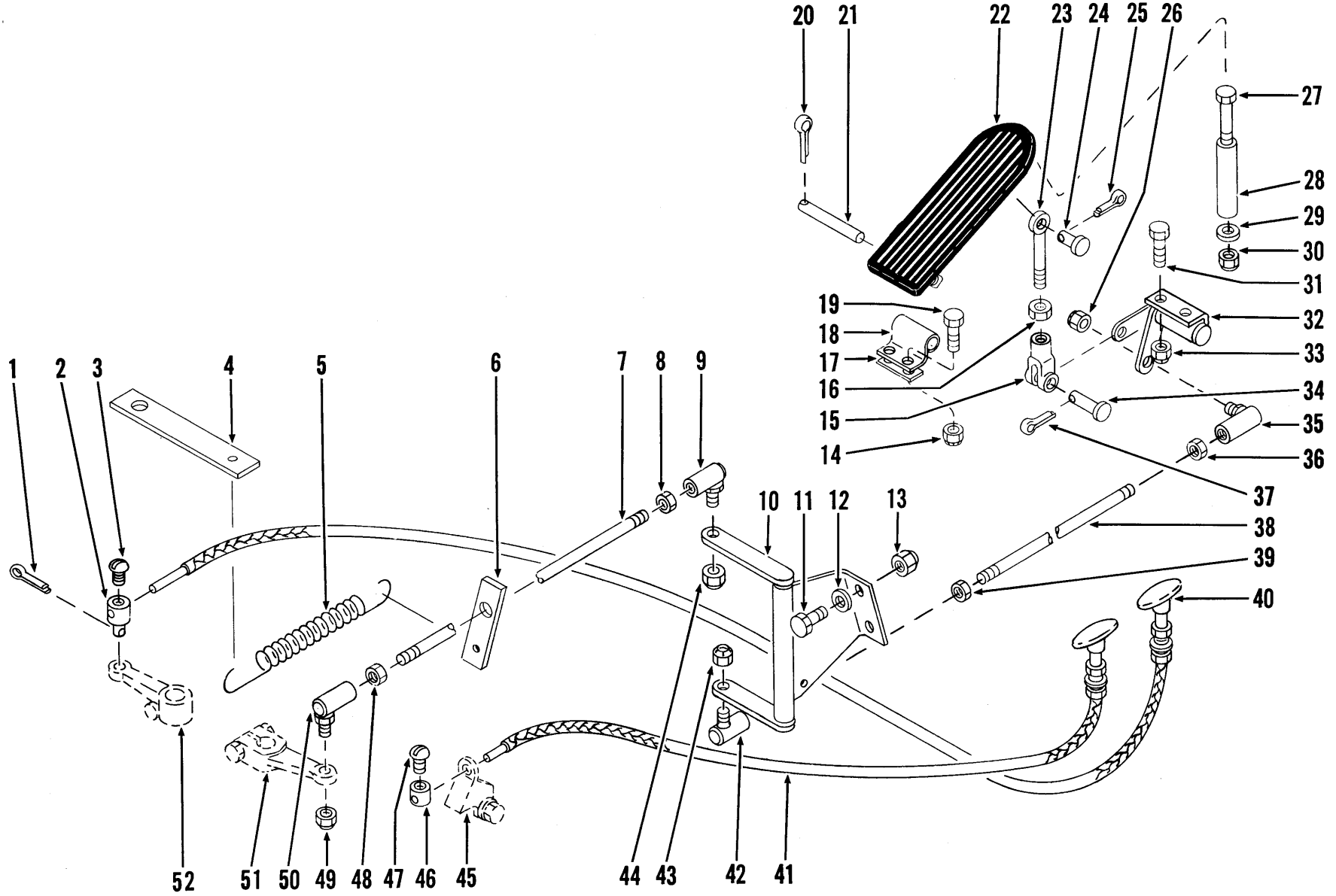
ACCELERATOR PEDAL AND LINKAGE — CUMMINS

TS-6838-P

## ACCELERATOR PEDAL AND LINKAGE — CUMMINS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1301361	BALL JOINT .....	1	27	623762	PIN, Pedal Pivot .....	1
2	8D-05	NUT, Ball Joint Jam .....	1	28	623829	PEDAL, Accelerator .....	1
3	569146	ROD, Control — Rear (Inc. 1, 2, 4, 5) .....	1	29	550619	ROD, Pedal to Clevis .....	1
4	8D-05	NUT, Ball Joint Jam .....	1	30	4F-04051	PIN, Rod to Pedal .....	1
5	1301361	BALL JOINT .....	1	31	1F-207	COTTER, Pedal Pin .....	1
6	18D-05	NUT, Ball Joint Jam .....	1	32	24C-448	BOLT, Pedal Stop .....	1
7	571618	BELLCRANK, Rear .....	1	33	551016	STOP, Pedal .....	1
8	18D-05	NUT, Ball Joint Mtg. ....	1	34	774337	WASHER, Pedal Stop .....	1
9	1301361	BALL JOINT .....	1	35	18D-04	NUT, Pedal Stop .....	1
10	8D-05	NUT, Ball Joint Jam .....	1	36	24C-412	BOLT, Bellcrank Mtg. ....	2
11	571625	ROD, Control — Center (Inc. 9, 10, 12, 13) .....	1	37	18D-05	NUT, Ball Joint Mtg. ....	1
12	8D-05	NUT, Ball Joint Jam .....	1	38	572174	BELLCRANK, Front .....	1
13	1301361	BALL JOINT .....	1	39	18D-04	NUT, Bellcrank Mtg. ....	2
14	24C-824	BOLT, Bellcrank to Mtg. Plate	1	40	1301361	BALL JOINT .....	1
15	619029	WASHER, Bellcrank Mtg. ....	1	41	8D-05	NUT, Ball Joint Jam .....	1
16	8D-05	NUT, Ball Joint Jam .....	1	42	568852	ROD, Control — Front (Inc. 16, 40, 41, 44) .....	1
17	18D-08	NUT, Bellcrank Mtg. ....	1	43	568831	BELLCRANK, Center .....	1
18	1F-207	COTTER, Clevis Pin .....	1	44	1301361	BALL JOINT .....	1
19	4F-04051	PIN, Clevis to Bellcrank .....	1	45	18D-05	NUT, Ball Joint Mtg. ....	1
20	2J-4200	CLEVIS, Rod to Bellcrank .....	1	46	18D-05	NUT, Ball Joint Mtg. ....	1
21	8D-04	NUT, Clevis Jam .....	1	47	18D-05	NUT, Ball Joint to Governor Lever .....	1
22	18D-04	NUT, Bracket Mtg. ....	2	48	-----	GOVERNOR — See Engine Manual .....	—
23	572556	SPACER, Bracket Mtg. ....	1	49	551090	SPRING .....	1
24	623760	BRACKET, Pedal Pivot .....	1	50	557935	CLIP, Spring — Mtg. on Filter Bracket .....	1
25	24C-416	BOLT, Brk. to Floorboard .....	2				
26	1F-316	COTTER, Pivot Pin .....	1				

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



ACCELERATOR PEDAL AND LINKAGE — G.M.

TS-6493-P

## ACCELERATOR PEDAL AND LINKAGE — G.M.

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1		COTTER, Connector		27	24C-448	BOLT, Pedal Stop .....	1
1A	1F-308	For Serial Group "A" .....	1	28	551016	STOP, Pedal .....	1
1B	1F-208	For Serial Group "B" .....	1	29	774337	WASHER, Pedal Stop .....	1
2	1523209	*CONNECTOR, Cable .....	1	30	18D-04	NUT, Pedal Stop .....	1
3		SCREW, Connector		31	24C-412	BOLT, Bellcrank to Floorboard .....	2
3A	85G-1008	For Serial Group "A" .....	1	32	572174	BELLCRANK, Front .....	1
3B	86G-1008	For Serial Group "B" .....	1	33	18D-04	NUT, Bellcrank Mtg. ....	2
4	521434	ANCHOR, Spring-Mtg. on Governor .....	1	34	4F-04051	PIN, Clevis to Bellcrank .....	1
5	551090	SPRING .....	1	35	1301361	BALL JOINT .....	1
6	521434	ANCHOR, Spring .....	1	36	8D-05	NUT, Ball Joint Jam .....	1
7	568854	ROD, Gov. Control (Inc. 6, 8, 9, 48, 50) .....	1	37	1F-207	COTTER, Clevis Pin .....	1
8	8D-05	NUT, Ball Joint Jam .....	1	38	568852	ROD, Accelerator (Inc. 35, 36, 39, 42) .....	1
9	1301361	BALL JOINT .....	1	39	8D-05	NUT, Ball Joint Jam .....	1
10	568831	BELLCRANK, Rear .....	1	40	1520193	CABLE, Engine Shut-Off .....	1
11	24C-824	BOLT, Bellcrank to Mtg. Plate .....	1	41	1520190	CABLE, Emergency Shut-Off .....	1
12	619029	WASHER, Bellcrank Mtg. ....	1	42	1301361	BALL JOINT .....	1
13	18D-08	NUT, Bellcrank Mtg. ....	1	43	18D-05	NUT, Ball Joint Mtg. ....	1
14	18D-04	NUT, Brk. to Floorboard .....	2	44	18D-05	NUT, Ball Joint Mtg. ....	1
15	2J-4200	CLEVIS, Bellcrank Mtg. ....	1	45	-----	SHUT-OFF, Emergency — See Engine Manual .....	—
16	8D-04	NUT, Clevis Jam .....	1	46	1523210	**CONNECTOR, Cable .....	1
17	572556	SPACER, Brk. Mtg. ....	1	47		SCREW, Connector	
18	623760	BRACKET, Pedal Pivot .....	1	47A	85G-1008	For Serial Group "A" .....	1
19	24C-416	BOLT, Brk. Mtg. ....	2	47B	85G-806	For Serial Group "B" .....	1
20	1F-316	COTTER, Pivot Pin .....	1	48	8D-05	NUT, Ball Joint Jam .....	1
21	623762	PIN, Pedal Pivot .....	1	49	18D-05	NUT, Ball Joint Mtg. ....	1
22	623829	PEDAL, Accelerator .....	1	50	1301361	BALL JOINT .....	1
23	550619	ROD, Pedal to Clevis .....	1	51	-----	GOVERNOR — See Engine Manual .....	—
24	4F-04051	PIN, Rod to Pedal .....	1	52	-----	SHUT-OFF, Fuel — See Engine Manual .....	—
25	1F-207	COTTER, Pedal Pin .....	1				
26	18D-05	NUT, Ball Joint Mtg. ....	1				

\*NOTE: When replacing 1523209 Connector on machine serial 5HG101 thru 5HG999, 6HG101 thru 6HG999 one 1F-208 Cotter and one 86G-1008 Screw must also be used.

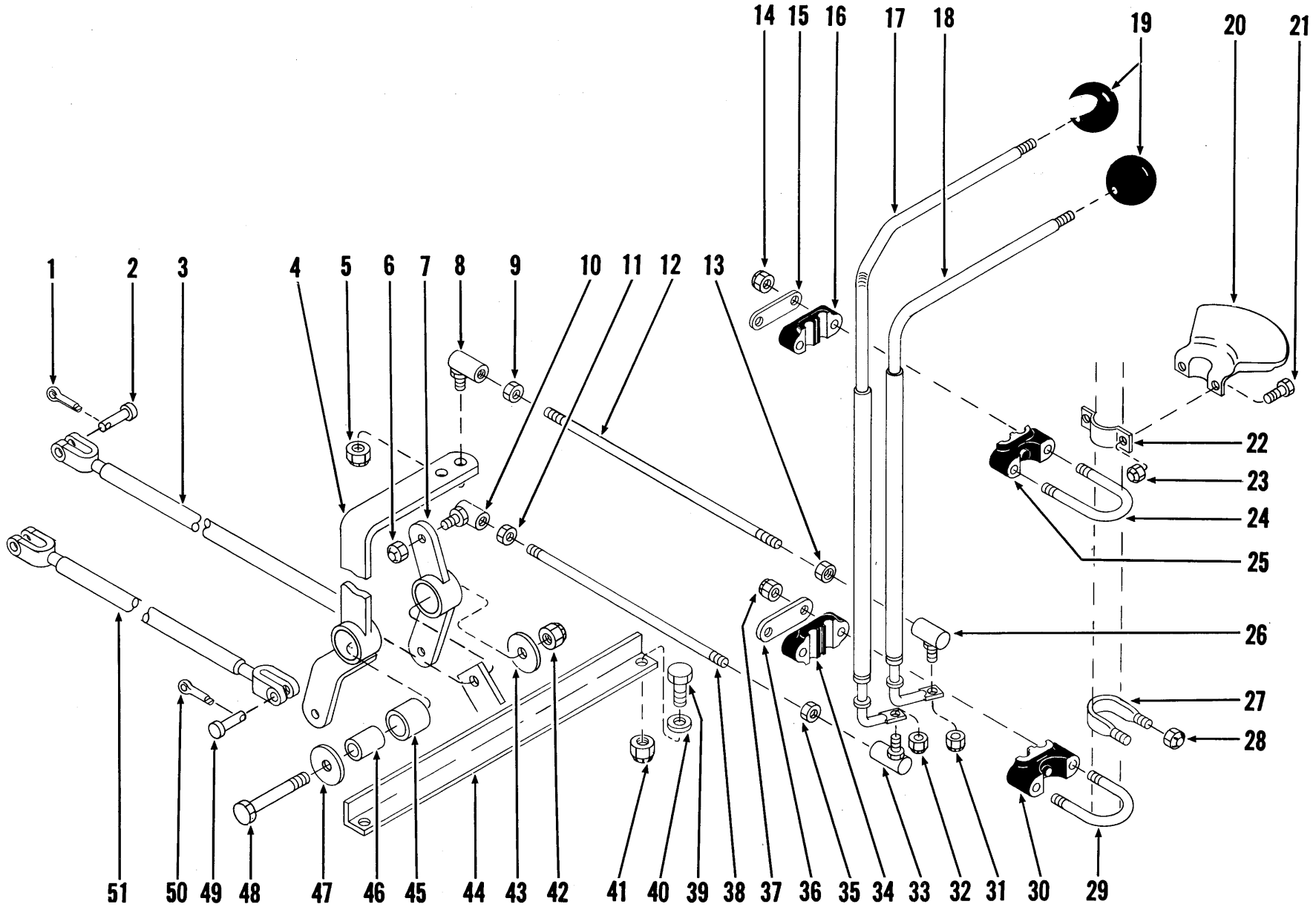
\*\*NOTE: When replacing 1523210 Connector on machine serial 5HG101 thru 5HG999, 6HG101 thru 6HG999 one 85G-806 Screw must also be used.

Serial Group "A": 5HG101 thru 5HG999; 6HG101 thru 6HG999.

Serial Group "B": 7HG101 thru 7HG999.

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

[ 38 ]



TRANSMISSION CONTROL LEVERS AND LINKAGE

TS-5260-P

## TRANSMISSION CONTROL LEVERS AND LINKAGE

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1F-312	COTTER, Clevis Pin .....	2	23	18D-04	NUT, Quadrant Mtg. ....	2
2	4F-05062	PIN, Clevis .....	2	24	557246	U-BOLT, Lever Mtg. ....	1
3		ROD, Shift — Fwd. & Rev.		25	1508845	SUPPORT, Lever Mtg. (Inc. 16)	1
3A	562250	Serial Group "A" .....	1	26	1301362	BALL SOCKET .....	1
3B	1523405	Serial Group "B" .....	1	27	557997	U-BOLT, Strg. Column to Cockpit .....	1
4	567645	*BELLCRANK — Four Epeed (Inc. 4A) .....	1	28	18D-04	NUT, Strg. Column Mtg. ....	2
4A	569055	†BUSHING, Bellcrank — Serial Group "C" .....	1	29	557246	U-BOLT, Lever Mtg. ....	1
4B	10H-25	†FITTING, Bellcrank Grease — Serial Group "C" .....	1	30	1508845	SUPPORT, Lever Mtg. (Inc. 34)	1
5	18D-06	NUT, Socket to Bellcrank .....	1	31	18D-06	NUT, Socket to Lever .....	1
6	18D-06	NUT, Socket to Bellcrank .....	1	32	18D-06	NUT, Socket to Lever .....	1
7	567666	*BELLCRANK — Fwd. & Rev. (Inc. 7A) .....	1	33	1301362	BALL SOCKET .....	1
7A	569055	†BUSHING, Bellcrank — Serial Group "C" .....	1	34	1508845	SUPPORT, Lever Mtg. (Inc. 30)	1
7B	10H-25	†FITTING, Bellcrank Grease — Serial Group "C" .....	1	35	8D-06	NUT, Ball Socket Jam .....	1
8	1301362	BALL SOCKET .....	1	36	589906	PLATE, Support Back-Up .....	1
9	8D-06	NUT, Ball Socket Jam .....	1	37	18D-05	NUT, Lever Mtg. Support .....	2
10	1301362	BALL SOCKET .....	1	38		ROD, Shift — Fwd. & Rev. (Inc. 10, 11, 33, 35)	
11	8D-06	NUT, Ball Socket Jam .....	1	38A	562244	Serial Group "A" .....	1
12		ROD, Shift — 4 Speed (Inc. 8, 9, 13, 26)		38B	1523404	Serial Group "B" .....	1
12A	562244	Serial Group "A" .....	1	39	24C-832	BOLT, Support to Frame .....	2
12B	1523404	Serial Group "B" .....	1	40	619029	WASHER, Support Mtg. ....	2
13	8D-06	NUT, Ball Socket Jam .....	1	41	18D-08	NUT, Support to Frame .....	2
14	18D-05	NUT, Lever Mtg. Support .....	2	42	18D-08	NUT, Bellcrank Mtg. ....	1
15	589906	PLATE, Support Back-Up .....	1	43	616796	WASHER, Bellcrank Mtg. ....	1
16	1508845	SUPPORT, Lever Mtg. (Inc. 25)	1	44	562241	SUPPORT, Bellcrank Mtg. — Serial Group "A" .....	1
17	562227	LEVER, Shift — Fwd. & Rev. ...	1	45	549580	BUSHING, Bellcrank — Serial Group "D" .....	2
18	562224	LEVER, Shift — 4 Speed .....	1	46	550646	SLEEVE, Bellcrank .....	2
19	509772	KNOB, Shift Lever .....	2	47	616796	WASHER, Bellcrank Mtg. ....	1
20	567946	QUADRANT, Shift .....	1	48	24C-872	BOLT, Bellcrank Mtg. ....	1
21	24C-412	BOLT, Quadrant Mtg. ....	2	49	4F-05062	PIN, Clevis .....	2
22	567945	CLAMP, Quadrant Mtg. ....	1	50	1F-312	COTTER, Clevis Pin .....	2
				51		ROD, Shift — 4 Speed	
				51A	562248	Serial Group "A" .....	1
				51B	1523406	Serial Group "B" .....	1

†Not Illustrated

**Serial Group "A":** Cummins — 5HC101 thru 5HC999; G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999.

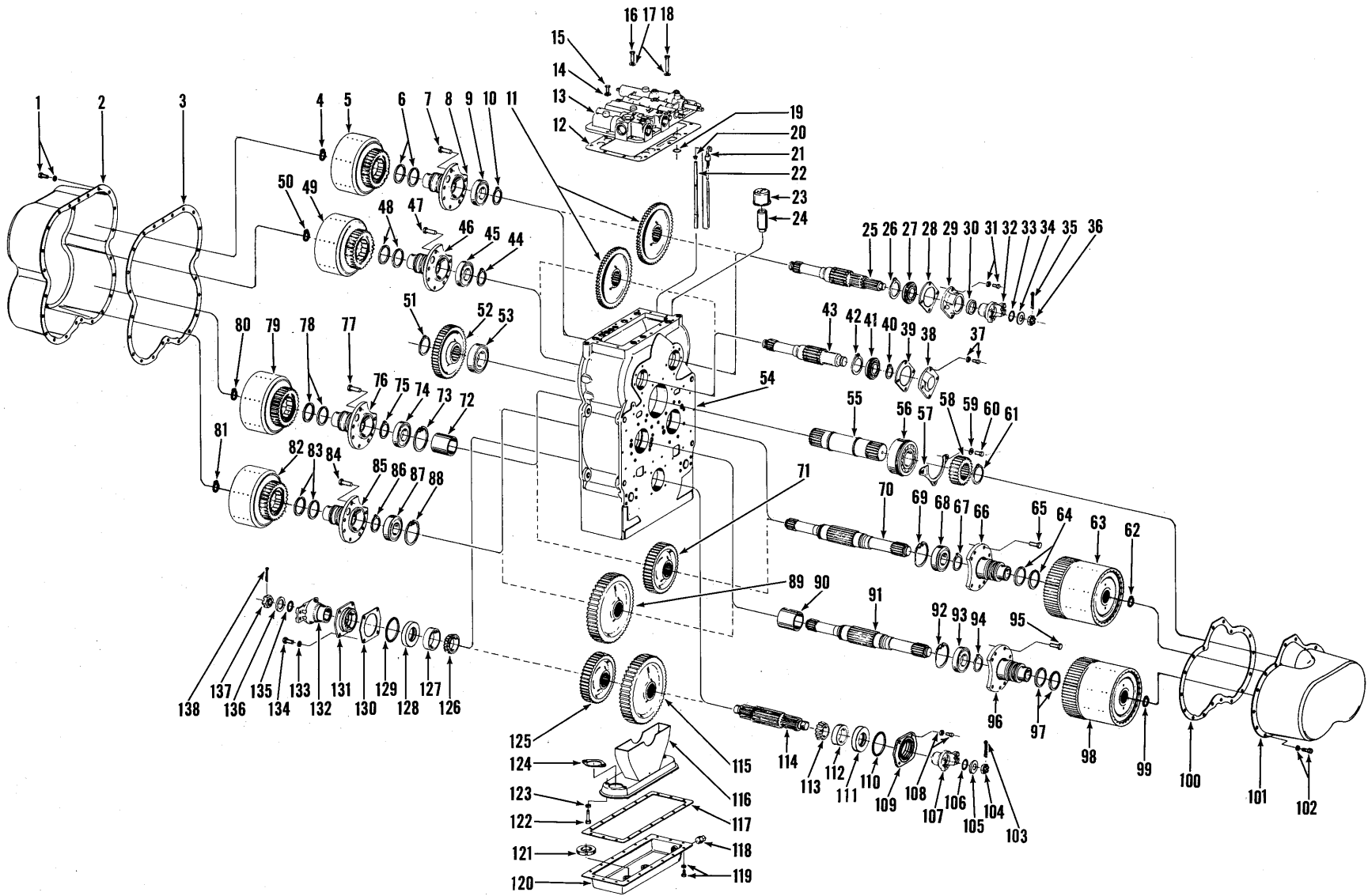
**Serial Group "B":** Cummins — 6HC101 thru 6HC999; G.M. — 7HG101 thru 7HG999.

**Serial Group "C":** Cummins — 5HC121 thru 5HC999, 6HC101 thru 6HC999; G.M. — 6HG201 thru 6HG999, 7HG101 thru 7HG999.

**Serial Group "D":** Cummins — 5HC101 thru 5HC120; G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG200.

\*NOTE: When replacing 567645 or 567666 Bellcrank on machine serial: Cummins — 5HC101 thru 5HC120; G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG200, one 10H-25 Bellcrank Grease Fitting must also be used.

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



TRANSMISSION ASSEMBLY

TS-4862-P

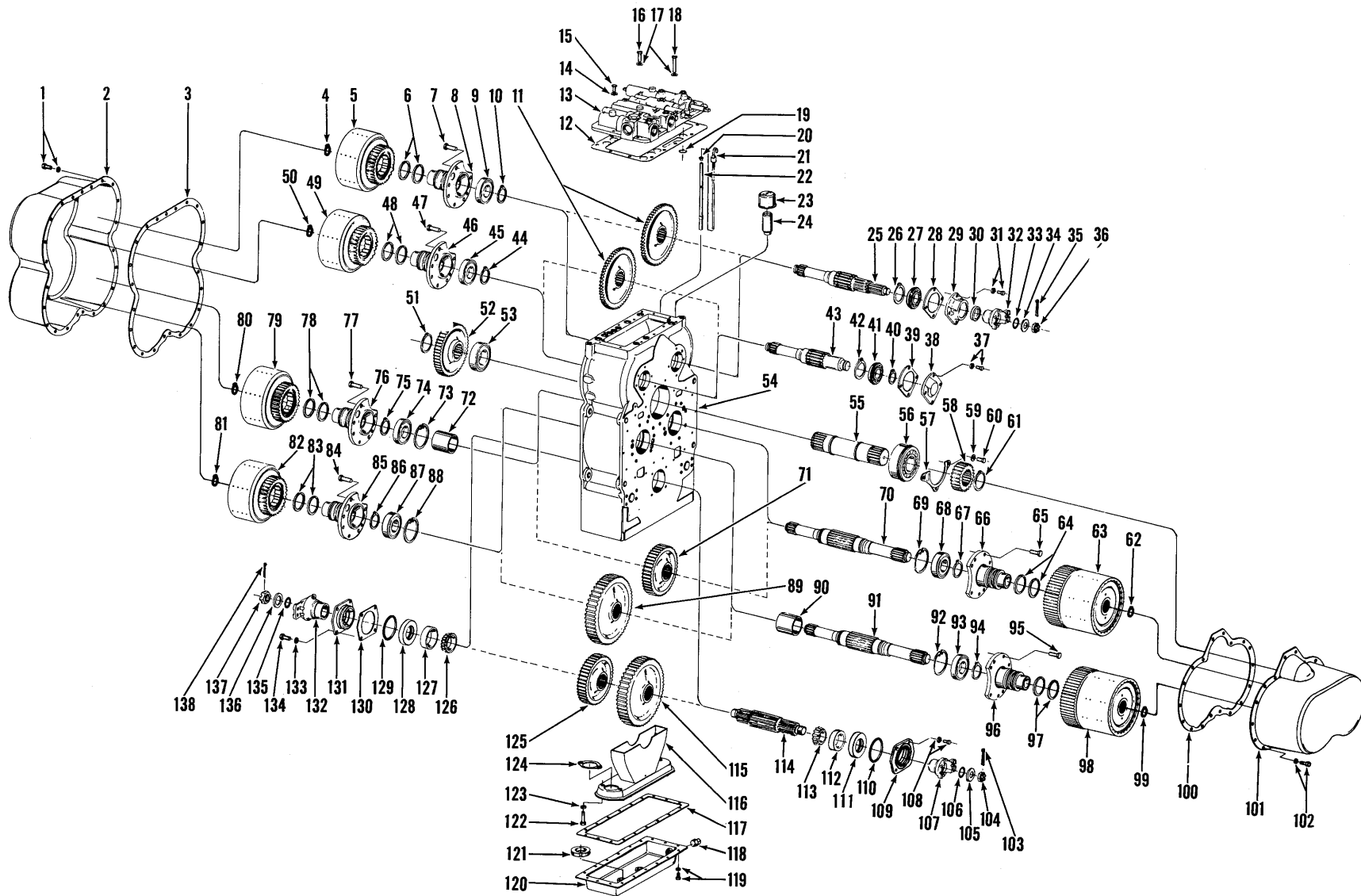


## TRANSMISSION ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	282286	TRANSMISSION ASSY (3421-2) (Inc. 1 thru 142)	1	33	25K-40112	O-RING, Flange	1
1	5C-612	BOLT & LKWSHR, Clutch Cover	23	34	102745	WASHER, Flange	1
2	217554	COVER, Fwd. & Rev., 3rd & 4th Clutch	1	35	1F-432	COTTER, Flange	1
3	217555	GASKET, Clutch Cover	1	36	201951	NUT, Flange to Shaft	1
4	711418	RING, Disc Hub Snap	1	37	5C-616	BOLT & LKWSHR, Bearing Cap	4
5	-----	CLUTCH ASSY, Input — See Index	—	38	217557	CAP, Bearing	1
6	217600	RING, Clutch Support Piston	2	39	217558	GASKET, Bearing Cap	1
7	8C-820	BOLT, Clutch Support to Case	8	40	224083	RING, Bearing Retaining	1
8	217146	SUPPORT, Input Clutch	1	41	225824	BEARING, Front	1
9	225792	BEARING, Rear	1	42	711161	RING, Gear Retaining	1
10	711161	RING, Gear Retaining	1	43	217547	SHAFT, Reverse	1
11	217458	GEAR, Input & Reverse Shafts (57T)	2	44	711161	RING, Gear Retaining	1
12	217653	GASKET, Valve to Case	1	45	225792	BEARING, Rear	1
13	-----	CONTROL COVER ASSY — See Index	—	46	217146	SUPPORT, Reverse	1
14	4E-06	LKWSHR, Valve to Case	6	47	8C-820	BOLT, Clutch Support to Case	8
15	1C-616	BOLT, Valve to Case	4	48	217600	RING, Clutch Support Piston	2
16	1C-624	BOLT, Valve to Case	2	49	-----	CLUTCH ASSY, Reverse — See Index	—
17	4E-06	LKWSHR, Valve to Case	6	50	711418	RING, Disc Hub Snap	1
18	1C-640	BOLT, Valve to Case	6	51	711161	RING, Gear Retaining	1
19	25K-40026	O-RING, Valve to Case	6	52	236406	GEAR, Idler (50T)	1
20	92F-7	FITTING, Dipstick Tube	1	53	225835	BEARING, Idler Shaft	1
21	566401	DIPSTICK	1	54	-----	TRANSMISSION CASE ASSY — See Index	—
22	230605	TUBE, Dipstick — Inner	1	55	217548	SHAFT, Idler	1
22A	1502876	†TUBE, Dipstick — Outer	1	56	801807	BEARING, Idler Shaft	1
23	22F-6	CAP, Oil Filler	1	57	217560	RETAINER, Bearing	1
24	5K-824	NIPPLE, Oil Filler Cap	1	58	217763	GEAR, Idler to 1st (28T)	1
25	217552	SHAFT, Input	1	59	4E-07	LKWSHR, Bearing Retainer	3
26	711161	RING, Gear Retaining	1	60	1C-716	BOLT, Bearing Retainer	3
27	225824	BEARING, Front	1	61	711161	RING, Gear Retaining	1
28	217558	GASKET, Bearing Cap	1	62	659764	RING, Disc Hub Snap	1
29	217556	CAP, Bearing	1	63	-----	CLUTCH ASSY, 1st Clutch — See Index	—
30	206864	SEAL, Oil	1	64	223740	RING, Clutch Support Piston	2
31	5C-616	BOLT & LKWSHR, Bearing Cap	4	65	8C-820	BOLT, Clutch Support to Case	8
32	214985	FLANGE, Input (6-C)	1	66	217156	SUPPORT, Clutch	1
				67	743669	RING, Bearing Retaining	1
				68	225794	BEARING, 1st & 3rd Shaft	1

†Not Illustrated

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



[ 42 ]

TRANSMISSION ASSEMBLY

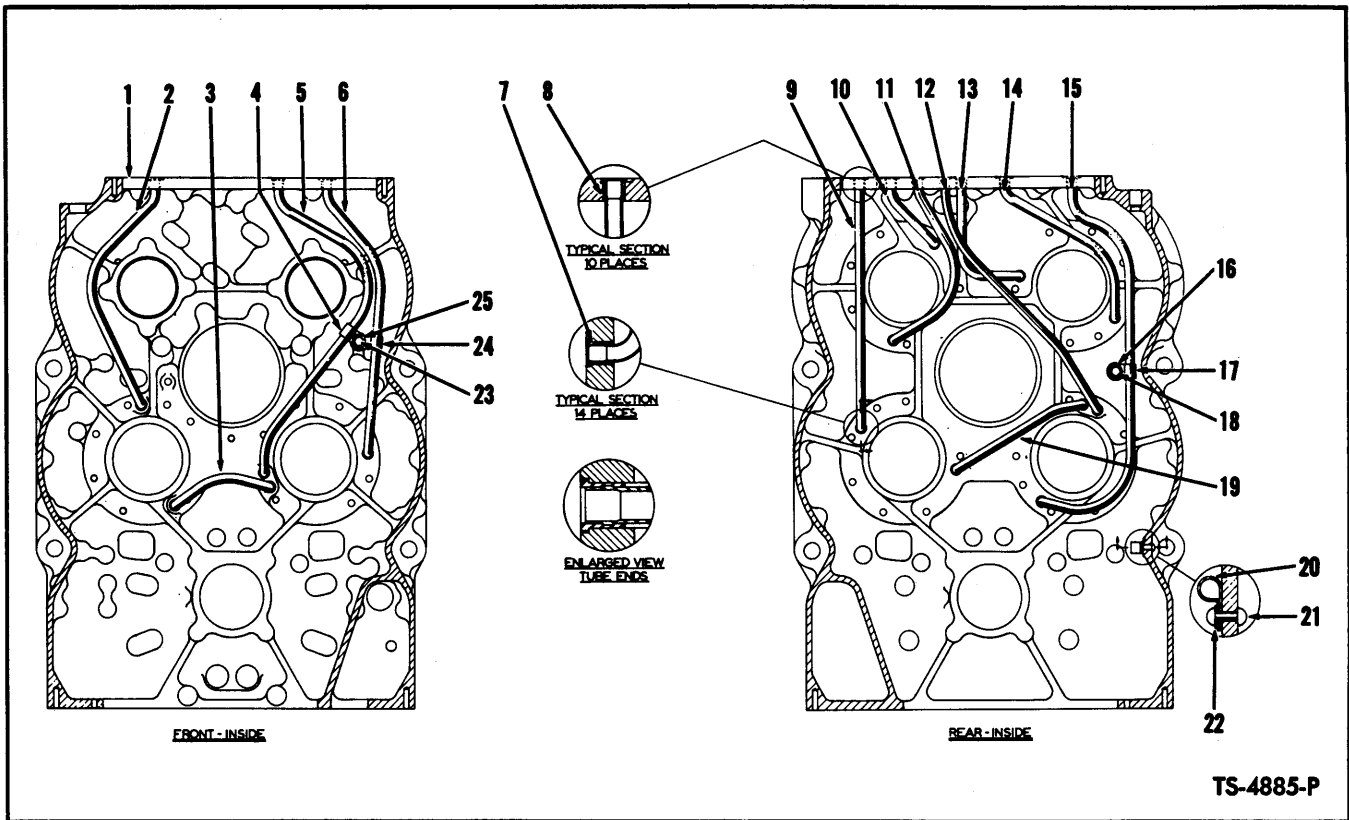
TS-4862-P

## TRANSMISSION ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
69	223882	RING, Gear Retaining .....	1	112	856250	CUP, Output Shaft Tapered Bearing .....	1
70	217553	SHAFT, 1st & 3rd .....	1	113	654141	CONE, Output Shaft Tapered Bearing .....	1
71	217765	GEAR, 1st & 3rd Shaft (47T) .....	1	114	218504	SHAFT, Output .....	1
72	217559	SPACER, 1st & 3rd Shaft Gear .....	1	115	217767	GEAR, Output Shaft to 1st & 3rd (61T) .....	1
73	223882	RING, Gear Retaining .....	1	116	218357	FRAME & SCREEN ASSY, Oil Sump .....	1
74	225792	BEARING, 1st & 3rd Shaft .....	1	117	217563	GASKET, Oil Sump .....	1
75	743669	RING, Bearing Retaining .....	1	118	13F-12	PLUG, Oil Sump Drain .....	1
76	217146	SUPPORT, Clutch .....	1	119	5C-612	BOLT & LKWSHR, Oil Sump .....	18
77	8C-820	BOLT, Clutch Support to Case .....	8	120	217562	SUMP ASSY, Oil .....	1
78	217600	RING, Clutch Support Piston .....	2	121	525293	MAGNET, Sump .....	2
79	-----	CLUTCH ASSY, 3rd Clutch — See Index .....	—	122	1C-636	BOLT, Screen to Case .....	3
80	711418	RING, Disc Hub Snap .....	1	123	4E-06	LKWSHR, Screen to Case .....	3
81	711418	RING, Disc Hub Snap .....	1	124	218376	GASKET, Oil Sump Frame .....	1
82	-----	CLUTCH ASSY, 4th Clutch — See Index .....	—	125	217464	GEAR, Output Shaft to 2nd & 4th (45T) .....	1
83	217600	RING, Clutch Support Piston .....	2	126	654141	CONE, Output Shaft Tapered Bearing .....	1
84	8C-820	BOLT, Clutch Support to Case .....	8	127	856250	CUP, Output Shaft Tapered Bearing .....	1
85	217146	SUPPORT, Clutch .....	1	128	225823	SEAL, Output Shaft Oil .....	1
86	743669	RING, Bearing Retaining .....	1	129	25K-40308	O-RING, Bearing Cap .....	1
87	225794	BEARING, 2nd & 4th Shafts .....	1	130	217566	‡SHIM, Bearing Cap — .004" .....	—
88	223882	RING, Gear Retaining .....	1	130A	217567	‡‡SHIM, Bearing Cap — .007" .....	—
89	217465	GEAR, 2nd & 4th Shaft (63T) .....	1	130B	217568	‡‡SHIM, Bearing Cap — .010" .....	—
90	217559	SPACER, 2nd & 4th Shaft Gear .....	1	131	217565	CAP, Bearing .....	1
91	217553	SHAFT, 2nd & 4th .....	1	132	222233	FLANGE, Output (7-C) .....	1
92	223882	RING, Gear Retaining .....	1	133	4E-07	LKWSHR, Output Shaft Cap .....	4
93	225792	BEARING, 2nd & 4th Shaft .....	1	134	1C-720	BOLT, Output Shaft Cap .....	4
94	743669	RING, Bearing Retaining .....	1	135	25K-60116	O-RING, Output Shaft Flange .....	1
95	8C-820	BOLT, Clutch Support to Case .....	8	136	222179	WASHER, Output Shaft Flange .....	1
96	217156	SUPPORT, Clutch .....	1	137	205928	NUT, Output Shaft Flange .....	1
97	223740	RING, Clutch Support Piston .....	2	138	1F-436	COTTER, Output Shaft Flange .....	1
98	-----	CLUTCH ASSY, 2nd Clutch — See Index .....	—	139	220725	†NAME PLATE .....	1
99	659764	RING, Disc Hub Snap .....	1	140	207873	†SCREW, Name Plate Attaching .....	2
100	217618	GASKET, Clutch Cover .....	1	141	211433	†BREATHER, Air .....	1
101	232872	COVER, 1st & 2nd Clutch .....	1	142	26F-3	†ELBOW, Air Breather .....	1
102	5C-612	BOLT & LKWSHR, Clutch Cover .....	18	143	556208	†MOUNT, Trans. — R.H. .....	1
103	1F-436	COTTER, Output Shaft Flange .....	1	144	556209	†MOUNT, Trans. — L.H. .....	1
104	205928	NUT, Output Shaft Flange .....	1	145	24C-1452	†BOLT, Trans. to Mount .....	8
105	222179	WASHER, Output Shaft Flange .....	1	146	18D-14	†NUT, Trans. to Mount .....	8
106	25K-60116	O-RING, Output Shaft Flange .....	1	147	24C-1240	†BOLT, Mount to Frame .....	4
107	222233	FLANGE, Output (7-C) .....	1	148	70D-12	†NUT, Mount to Frame .....	4
108	1C-720	BOLT, Output Shaft Cap .....	4	149	71D-12	†BASE, Mount to Frame .....	4
108A	4E-07	LKWSHR, Output Shaft Cap .....	4				
109	230690	CAP, Output Shaft Bearing .....	1				
110	25K-40308	O-RING, Bearing Cap .....	1				
111	225823	SEAL, Output Shaft Oil .....	1				

†Not Illustrated  
‡As Required

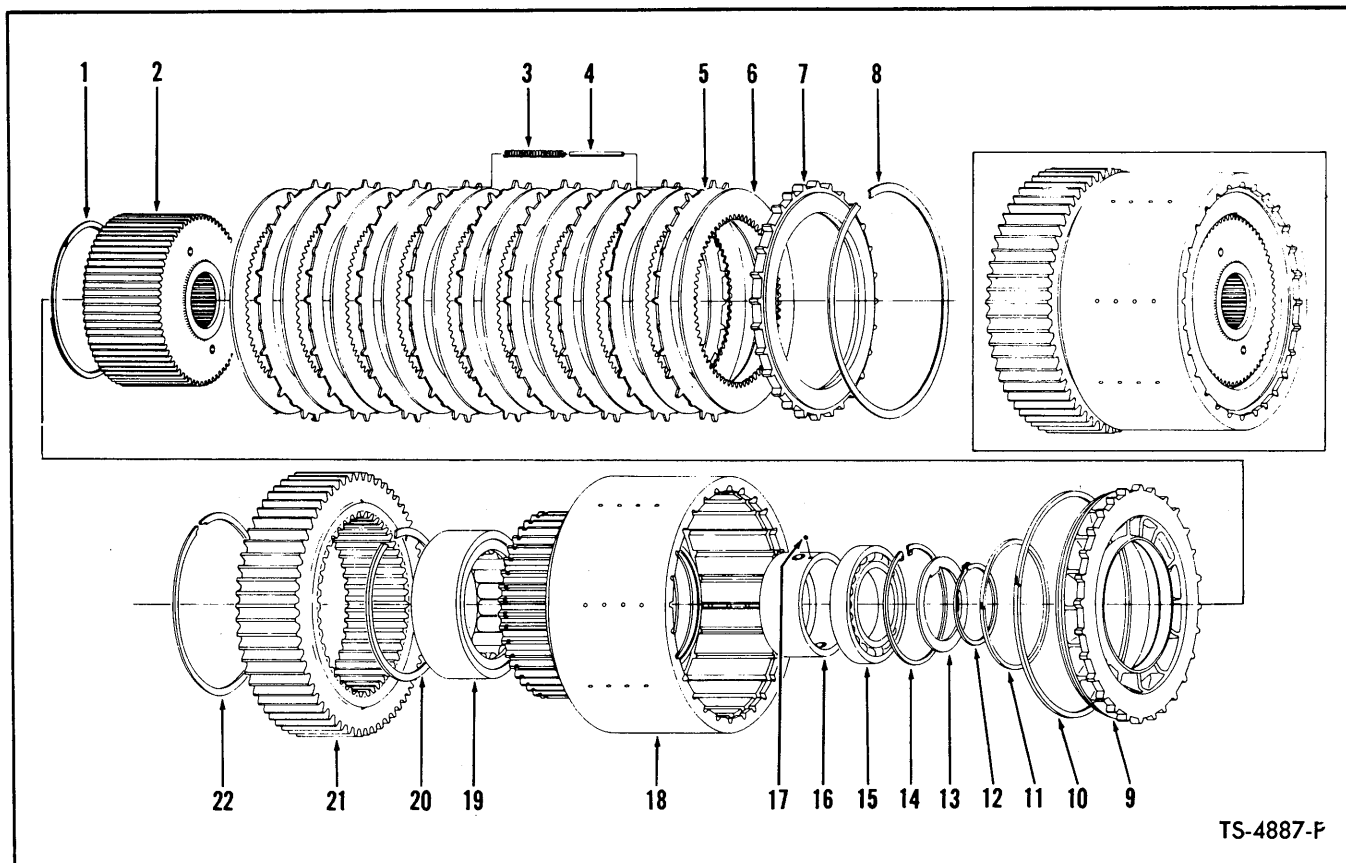
**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



## TRANSMISSION CASE AND INTERNAL TUBING

Item No.	Part No.	Description	No. Req'd.
1	217576	CASE ASSY, Transmission (Inc. 2 thru 25)	1
2	217669	TUBE, 1st Clutch Pressure	1
3	217578	TUBE, 2nd to 1st Crossover Lube	1
4	6H-29	CLIP, Tube	1
5	217577	TUBE, 2nd Clutch Lube	1
6	217674	TUBE, 2nd Clutch Pressure	1
7	222067	SLEEVE, Tube	8
8	222067	SLEEVE, Tube	16
9	217579	TUBE, 4th Clutch Pressure	1
10	217580	TUBE, Reverse Clutch Pressure	1
11	217581	TUBE, Reverse Clutch Lube	1
12	217582	TUBE, 3rd Clutch Lube	1
13	217583	TUBE, Input Lube	1
14	217584	TUBE, Input Clutch Pressure	1
15	217585	TUBE, 3rd Clutch Pressure	1
16	1H-534	RIVET, Clip	1
17	6H-29	CLIP, Tube	1
18	619019	WASHER, Clip	1
19	217586	TUBE, 3rd to 4th Crossover Lube	1
20	6H-32	CLIP, Dipstick Tube	1
21	1H-416	RIVET, Dipstick Clip	1
22	619018	WASHER, Dipstick Clip	1
23	1H-430	RIVET, Clip	1
24	222167	CLIP, Tube	1
25	25E-13	WASHER, Clip	1

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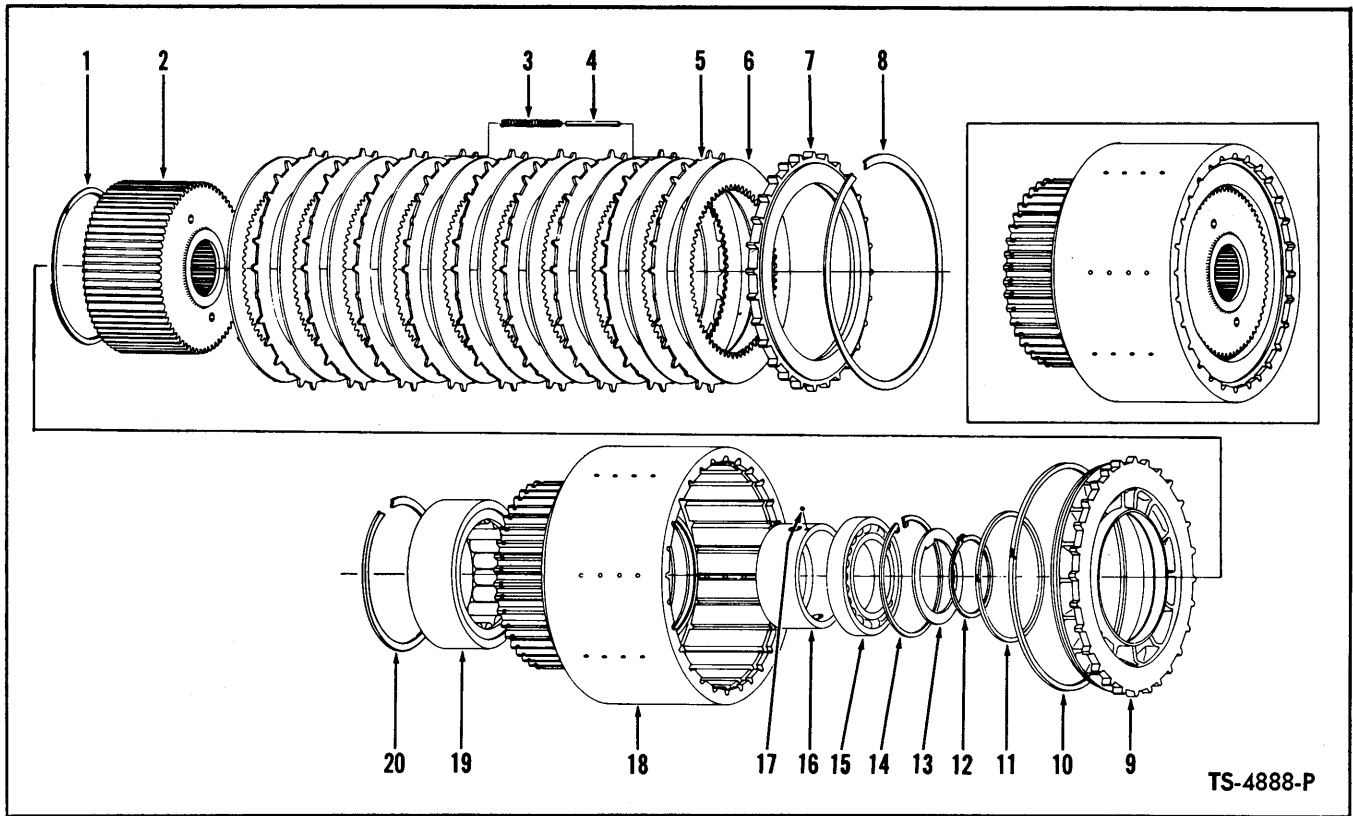
TS-4887-F

## FIRST AND SECOND CLUTCH GROUP

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

Item No.	Part No.	Description	No. Req'd.
A	218359	CLUTCH ASSY (Inc. 1 thru 22)	1
1	217509	RING, Oil Baffle Retaining	1
2	217158	HUB ASSY, Clutch Disc	1
3	217334	SPRING, Clutch Disc Release	6
4	217599	PIN, Clutch Disc Release Spring	6
5	232394	DISC, Clutch Outer	9
6	232778	DISC, Clutch Inner	10
7	217161	PLATE, Clutch Disc End	1
8	217099	RING, End Plate Retaining	1
9	217164	PISTON, Clutch	1
10	217361	RING, Outer Piston	1
11	217411	RING, Inner Piston	1
12	731627	RING, Washer Retaining	1
13	217165	WASHER, Bearing	1
14	664116	RING, Bearing Retaining	1
15	225813	BEARING, Clutch Support	1
16	217155	RACE, Outer Piston Ring	1
17	10J-08	BALL, Outer Race	1
18	217152	DRUM ASSY, Clutch (Inc. 16, 17)	1
19	225796	BEARING, Clutch Support Roller	1
20	223997	RING, Bearing Retaining	1
21	217768	GEAR, Clutch Drum Hub (53T)	1
22	217605	RING, Gear Retaining	1

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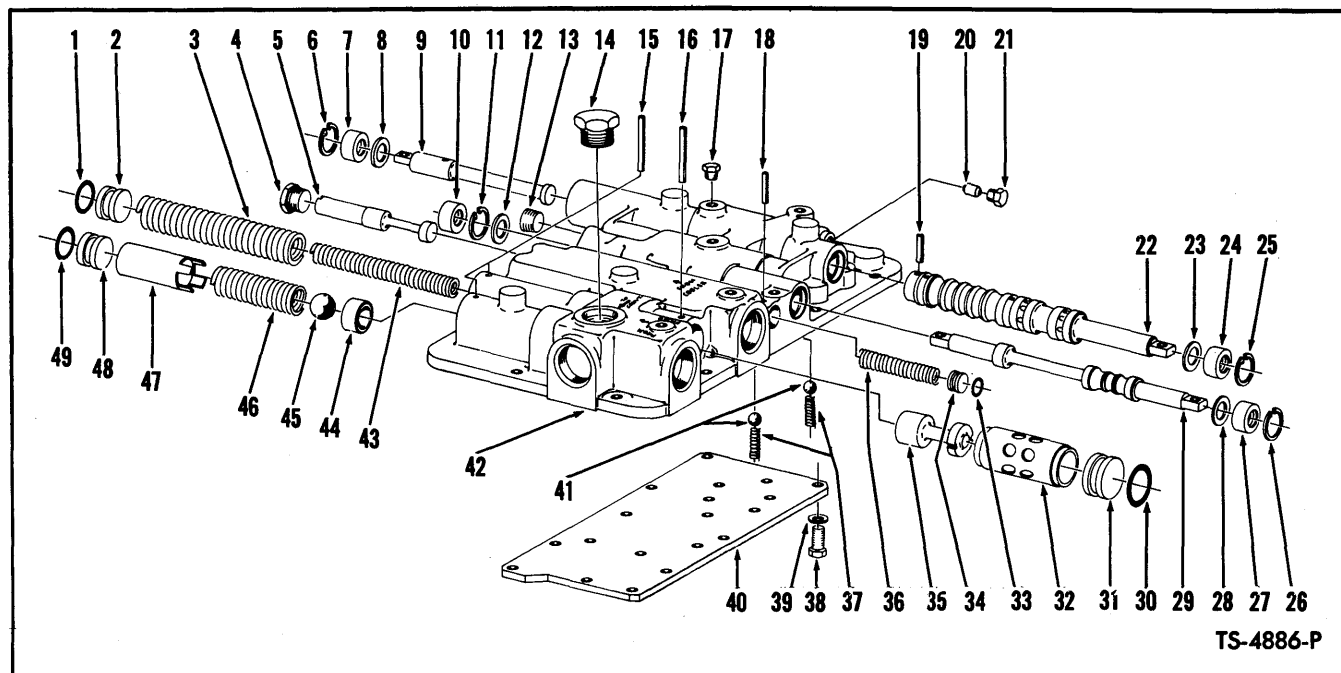
TS-4888-P

## INPUT — REVERSE, THIRD AND FOURTH CLUTCH GROUP

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

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

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



## CONTROL COVER ASSEMBLY — TRANSMISSION

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	217746	* COVER ASSY, Control (Inc. 1 thru 49)	1	23	217657	WASHER, Selector Valve	1
1	58K-210	O-RING, Safety Valve	1	24	233222	SEAL, Selector Valve Oil	1
2	222041	STOP, Reg. Valve	1	25	664140	RING, Selector Valve Ret.	1
3	217649	SPRING, Outer Reg. Valve	1	26	664140	RING, Selector Valve Ret.	1
4	24K-7	PLUG, Shut-Off Valve	1	27	233222	SEAL, Selector Valve Oil	1
5	217644	SPOOL, Shut-Off Valve	1	28	217657	WASHER, Selector Valve	1
6	664140	RING, Selector Valve Ret.	1	29	217637	VALVE, Fwd. & Rev. Selector	1
7	233222	SEAL, Selector Valve Oil	1	30	58K-210	O-RING, Reg. Valve Stop	1
8	217657	WASHER, Selector Valve	1	31	801754	KIT, Reg. Valve Stop	1
9	217635	VALVE, Inner Selector	1	32	—	§ SLEEVE, Reg. Valve Spool	1
10	233222	SEAL, Selector Valve Oil	1	33	25K-30018	O-RING, Valve Spool	1
11	664140	RING, Selector Valve Ret.	1	34	220983	STOP, Valve Spool	1
12	217657	WASHER, Selector Valve	1	35	801437	SPOOL, Reg. Valve (Inc. 32)	1
13	16F-08	PLUG, Oil Passage	1	36	217645	SPRING, Valve Spool	1
14	24K-10	PLUG	1	37	232611	SPRING, Poppet	2
15	300058	PIN, Reg. Valve & Safety Valve Stop Roll	2	38	1C-512	BOLT, Plate to Cover	17
16	300058	PIN, Reg. Valve & Safety Valve Stop Roll	1	39	5E-05	LKWSHR, Plate Mtg.	17
17	40K-02	PLUG, Oil Passage	5	40	217632	PLATE, Control Cover	1
18	654724	PIN, Valve Spool Stop Roll	1	41	10J-12	BALL, Poppet	2
19	667209	PIN, Roll	1	42	217745	** COVER, Control	1
20	217654	VALVE, Shuttle	1	43	217648	SPRING, Inner Reg. Valve	1
21	47K-3	PLUG, Shuttle Valve	1	44	217650	SEAT, Safety Valve	1
22	217633	VALVE, Selector (Inc. 9, 19)	1	45	10J-24	BALL, Safety Valve	1
22A	226869	† SPACER, Selector Valve	1	46	217651	SPRING, Safety Valve	1
				47	217652	SPACER, Safety Valve Ret.	1
				48	222041	STOP, Regulator Valve	1
				49	893267	O-RING, Safety Valve	1

\*NOTE: For replacement use 231110 Cover Assy.

\*\*NOTE: For replacement use 229982 Cover plus 1—229729 Switch.

†Not Illustrated

§Not Sold Separately

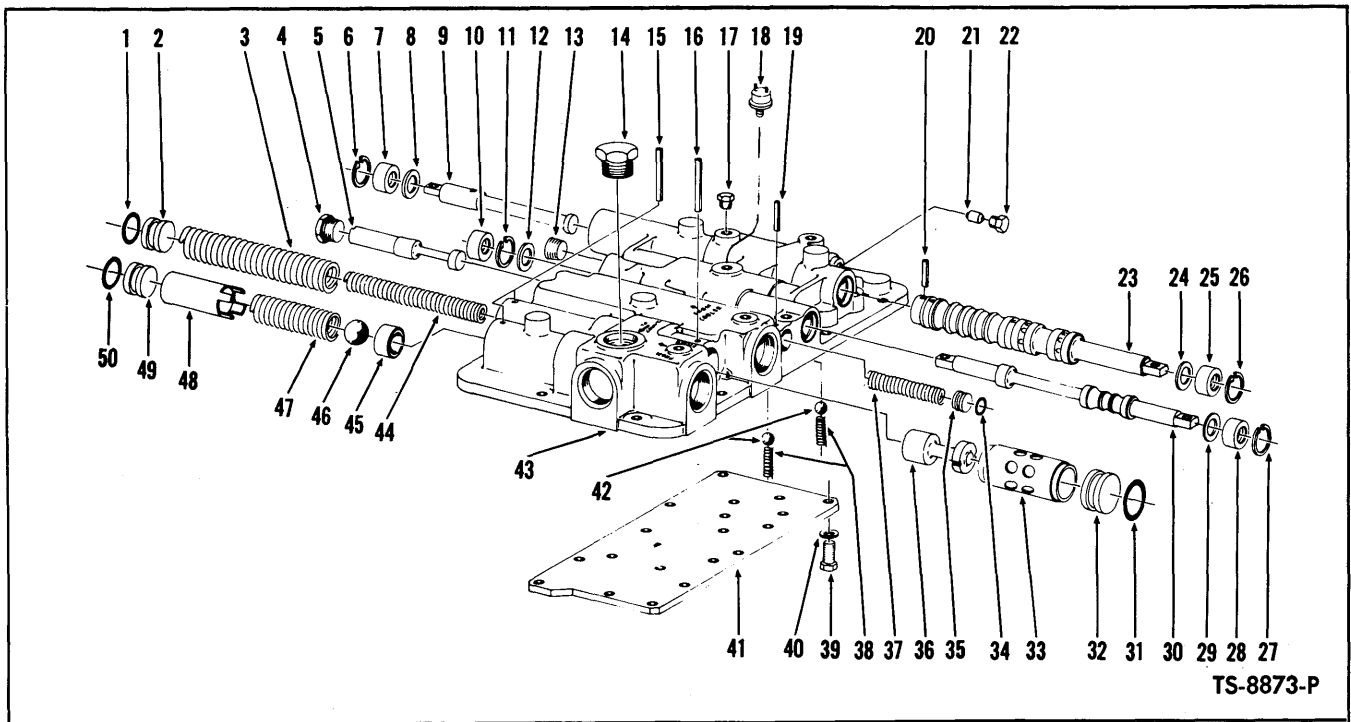
**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**

C

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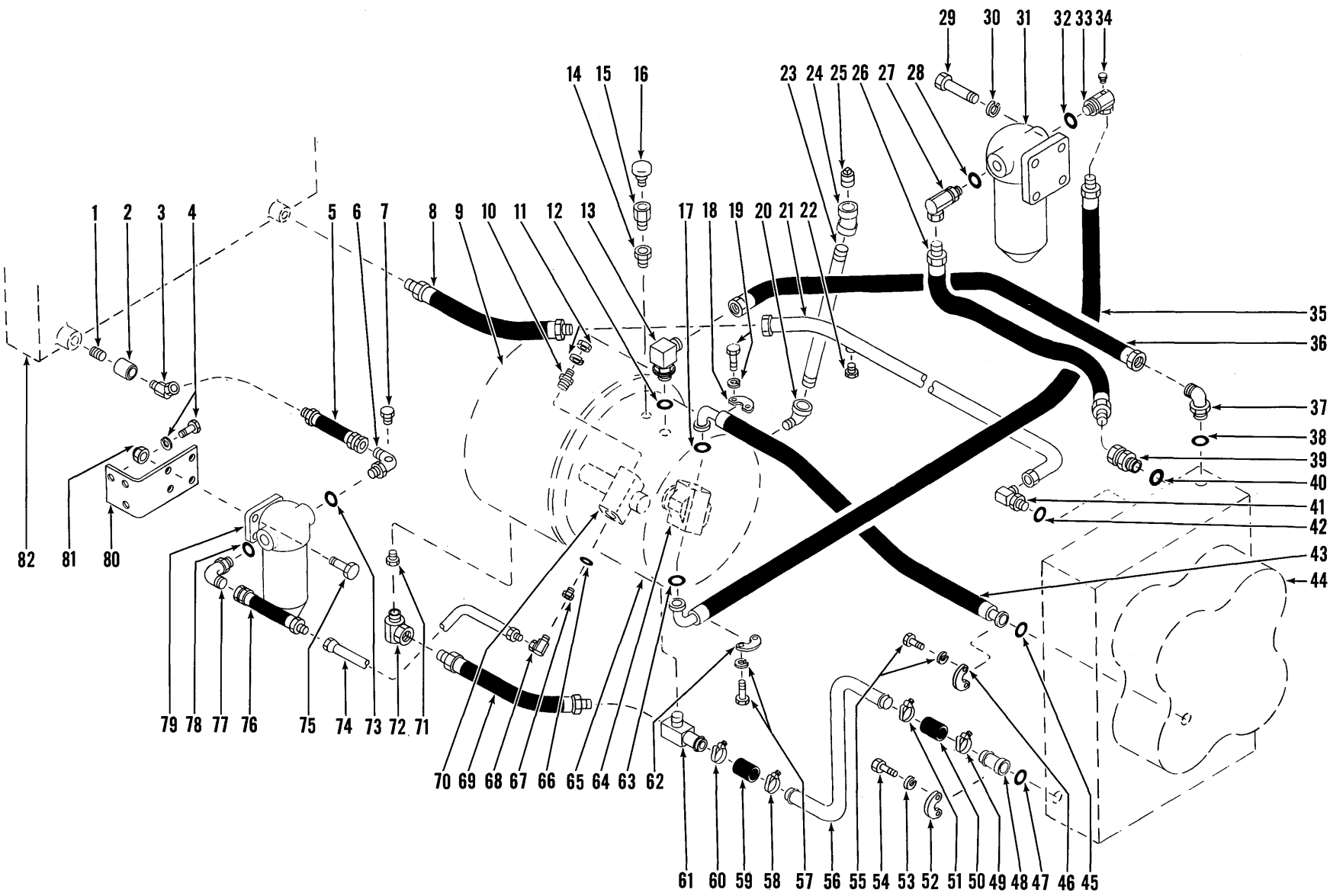


## CONTROL COVER ASSEMBLY – TRANSMISSION

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	231110	COVER ASSY, Control (Inc. 1 thru 50)	1	24	217657	WASHER, Selector Valve	1
1	58K-210	O-RING, Reg. Valve Stop	1	25	233222	SEAL, Selector Valve Oil	1
2	222041	STOP, Reg. Valve	1	26	664140	RING, Selector Valve Ret.	1
3	217649	SPRING, Reg. Valve – Outer	1	27	664140	RING, Selector Valve Ret.	1
4	24K-7	PLUG, Shut-Off Valve	1	28	233222	SEAL, Selector Valve Oil	1
5	217644	SPOOL, Shut-Off Valve	1	29	217657	WASHER, Selector Valve	1
6	664140	RING, Selector Valve Ret.	1	30	217637	VALVE, Fwd. & Rev. Selector	1
7	233222	SEAL, Selector Valve Oil	1	31	58K-210	O-RING, Reg. Valve Stop	1
8	217657	WASHER, Selector Valve	1	32	222041	STOP, Reg. Valve	1
9	217635	VALVE, Inner Selector	1	33	-----	OMIT	1
10	233222	SEAL, Selector Valve Oil	1	34	25K-30018	O-RING, Valve Spool	1
11	664140	RING, Selector Valve Ret.	1	35	220983	STOP, Valve Spool	1
12	217657	WASHER, Selector Valve	1	36	232731	Reg. Valve Spool	1
13	16F-08	PLUG, Valve Hole	1	37	217645	SPRING, Valve Spool	1
14	24K-10	PLUG, Pipe	1	38	232611	SPRING, Poppet	2
15	300058	PIN, Reg. & Safety Valve Stop Roll	2	39	1C-512	BOLT, Plate to Cover	17
16	300058	PIN, Reg. & Safety Valve Stop Roll	1	40	5E-05	LKWSHR, Plate Mtg.	17
17	40K-02	PLUG, Oil Passage	4	41	217632	PLATE, Control Cover	1
18	229729	SWITCH, Neutral Start	1	42	10J-12	BALL, Poppet	2
18A	10J-12	†BALL, Neutral Start	1	43	229982	COVER, Control	1
19	654724	PIN, Valve Spool Stop Roll	1	44	217648	SPRING, Reg. Valve – Inner	1
20	667209	PIN, Selector Valve Roll	1	45	217650	SEAT, Safety Valve	1
21	-----	OMIT	---	46	10J-24	BALL, Safety Valve	1
22	-----	OMIT	---	47	217651	SPRING, Safety Valve	1
23	217633	VALVE, Selector (Inc. 9, 20)	1	48	217652	SPACER, Valve Seat Ret.	1
23A	226869	†SPACER, Selector Valve	1	49	222041	STOP, Safety Valve	1
				50	58K-210	O-RING, Valve Stop	1

†Not Illustrated

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



HYDRAULIC SYSTEM — TRANSMISSION AND TORQUE  
CONVERTER — CUMMINS

TS-6820-P

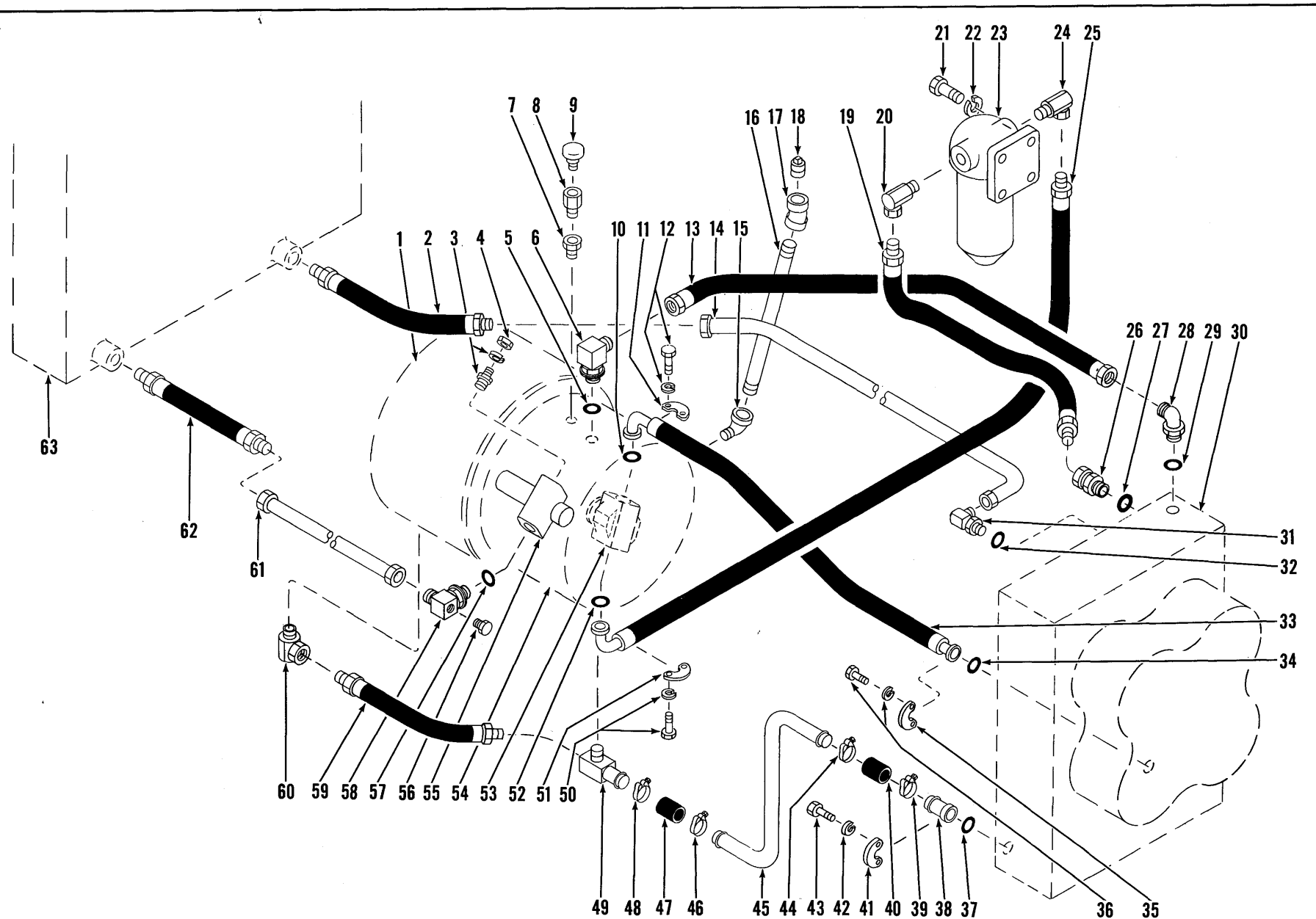
## HYDRAULIC SYSTEM — TRANSMISSION AND TORQUE CONVERTER — CUMMINS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	5K-620	NIPPLE, Rad. to Coupling	1	42	91F-10	O-RING, Elbow	1
2	37K-312	COUPLING, Connecting	1	43	558793	HOSE, Pump to Trans.	1
3	33F-5	ADAPTER UNION	1	44	-----	TRANSMISSION — See Index	—
4	24C-616	BOLT, Brk. to Fuel Tank	3	45	58K-225	O-RING, Flange Half	1
4A	4E-06	LKWSHR, Brk. Mtg.	3	46	1511521	FLANGE HALF, Hose Mtg.	2
4B	25E-18	WASHER, Brk. Mtg.	3	47	58K-225	O-RING, Flange Half	1
5	571605	HOSE, Rad. to Filter	1	48	799020	STEM, Hose to Trans.	1
6	531798	ELBOW, Filter (Inc. 73)	1	49	1545004	CLAMP, Hose	1
7	40K-02	PLUG, Elbow	1	50	536710	HOSE, Tube to Stem	1
8	541363	HOSE, Line to Rad.	1	51	1545004	CLAMP, Hose	1
9	-----	HOUSING, Flywheel — See Engine Parts Manual	—	52	1511521	FLANGE HALF, Stem Mtg.	2
10	551323	SENDER, Conv. Temp.	1	53	4E-08	LKWSHR, Flange Mtg.	4
11	14D-10	NUT, Sender	1	54	23C-824	BOLT, Flange to Trans.	4
11A	12E-10	LKWSHR, Sender	1	55	23C-824	BOLT, Flange to Trans.	4
12	91F-11	O-RING, Elbow	1	55A	4E-08	LKWSHR, Flange Mtg.	4
13	588820	ELBOW, Conv. (Inc. 12)	1	56	558789	TUBE, Conv. Drain	1
14	356626	BUSHING, Reducing	1	57	23C-620	BOLT, Flange to Pump	4
15	227265	VALVE, Check	1	57A	4E-06	LKWSHR, Flange Mtg.	4
16	211433	BREATHER, Conv. Air	1	58	1545004	CLAMP, Hose	1
17	1306623	O-RING, Flange Half	1	59	536710	HOSE, Tube to Fitting	1
18	1511520	FLANGE HALF, Hose Mtg.	2	60	1545004	CLAMP, Hose	1
19	23C-724	BOLT, Flange to Pump	4	61	562352	FITTING, Conv. — Special	1
19A	4E-07	LKWSHR, Flange Mtg.	4	62	663093	FLANGE HALF, Hose Mtg.	2
20	25F-7	ELBOW, Nipple to Conv.	1	63	58K-219	O-RING, Flange Half	1
21	558791	LINE, Rad. to Trans. Cooler (Inc. 22)	1	64	-----	PUMP, Conv. Charging — See Index	—
22	13F-04	PLUG, Cooler Line	1	65	-----	CONVERTER — See Index	—
23	5K-1096	*NIPPLE, Conv. Fill	1	66	91F-11	O-RING, Adapter	1
24	23F-7	*ELBOW, Conv. Fill	1	67	588399	ADAPTER (Inc. 66)	1
25	13F-20	PLUG, Conv. Fill	1	68	728212	ADAPTER UNION	1
26	538210	HOSE, Filter to Trans.	1	69	587036	HOSE, Conv. to Flywheel Hsg.	1
27	571239	ADAPTER UNION (Inc. 28)	1	70	-----	VALVE, Press. Reg. — See Index	—
28	91F-10	O-RING, Adapter	1	71	356633	BUSHING, Reducing	1
29	24C-620	BOLT, Filter Mtg.	4	72	550700	UNION, Flywheel Hsg.	1
30	4E-06	LKWSHR, Filter	4	73	91F-8	O-RING, Elbow	1
31	1533614	FILTER, Trans. & Conv. Oil (Inc. 31A)	1	74	571607	TUBE, Hose to Valve	1
31A	215502	†CARTRIDGE KIT, Filter	1	75	24C-628	BOLT, Filter to Brk.	4
32	91F-10	O-RING, Adapter	1	75A	619024	†WASHER, Filter Mtg.	4
33	571238	ADAPTER UNION (Inc. 32)	1	76	571604	HOSE, Filter to Tube	1
34	40K-04	PLUG, Adapter Union	1	77	17K-8	ELBOW (Inc. 78)	1
35	545070	HOSE, Pump to Filter	1	78	91F-8	O-RING, Elbow	1
36	569899	HOSE, Conv. to Trans.	1	79	1533614	FILTER, Trans. & Conv. Oil (Inc. 79A)	1
37	17K-10	ELBOW (Inc. 38)	1	79A	215502	†CARTRIDGE KIT, Filter	1
38	91F-10	O-RING, Elbow	1	80	571603	BRACKET, Filter Mtg.	1
39	533481	ADAPTER UNION (Inc. 40)	1	81	18D-06	NUT, Filter to Brk.	4
40	91F-10	O-RING, Adapter	1	82	-----	RADIATOR — See Index	—
41	17K-10	ELBOW (Inc. 42)	1				

†Not Illustrated

\*NOTE: For Serial — 5HC101 thru 5HC999 only.

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



HYDRAULIC SYSTEM — TRANSMISSION AND TORQUE CONVERTER — G.M.  
For Serial: 5HG101 thru 5HG999

TS-5219-P

[ 50 ]

PM 2419

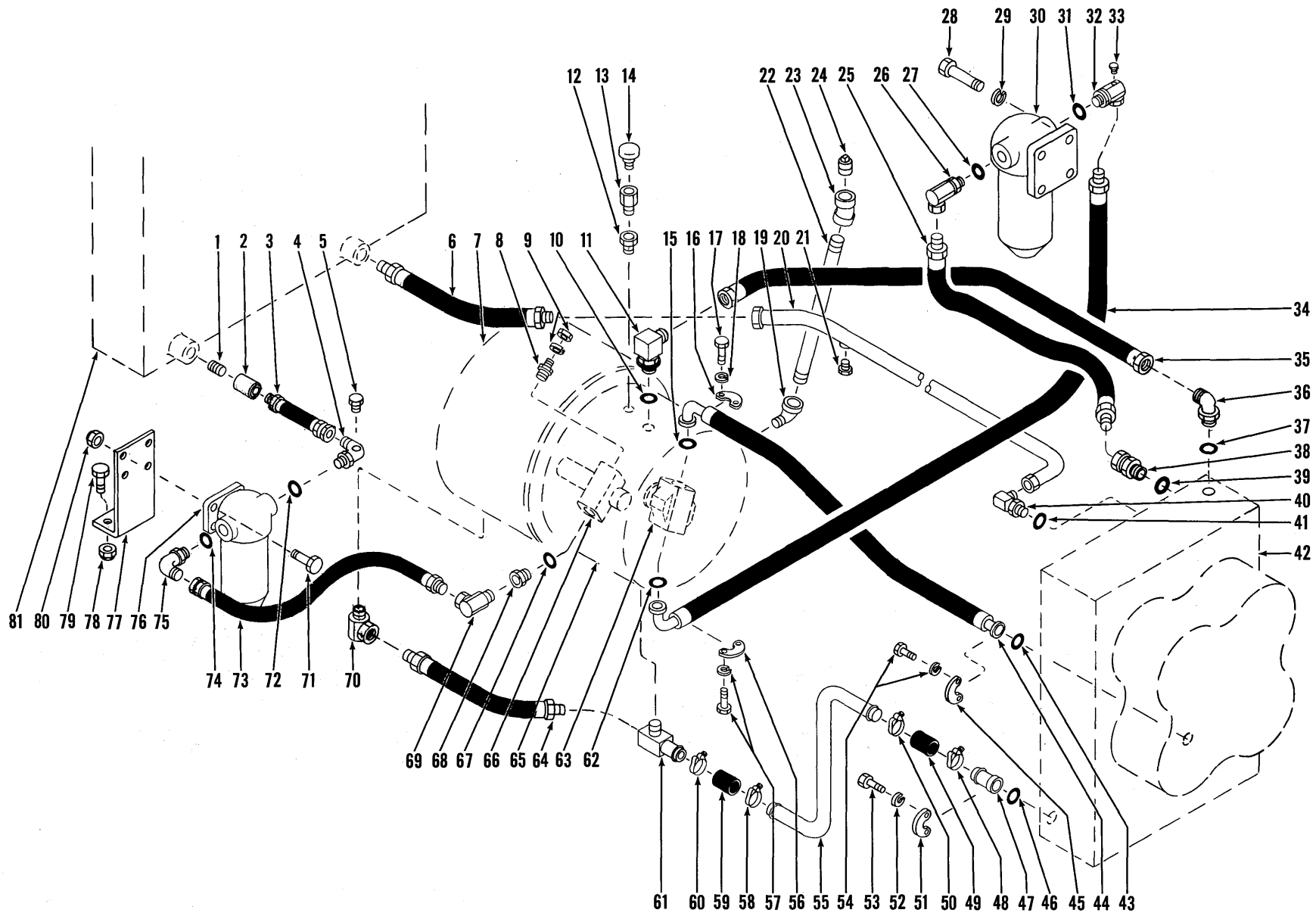
## HYDRAULIC SYSTEM — TRANSMISSION AND TORQUE CONVERTER — G.M. For Serial: 5HG101 thru 5HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	FLYWHEEL HOUSING — See Engine Parts Manual.	—	32	91F-10	O-RING, Elbow.....	1
2	541363	HOSE, Line to Rad. ....	1	33	558793	HOSE, Pump to Trans. ....	1
3	551323	SENDER, Conv. Temp. ....	1	34	58K-225	O-RING, Flange Half .....	1
3A	12E-10	LKWSHR, Sender Unit .....	1	35	1511521	FLANGE HALF, Hose Mtg. ....	2
4	14D-10	NUT, Sender Unit .....	1	36	23C-824	BOLT, Flange to Trans. ....	4
5	91F-11	O-RING, Elbow.....	1	36A	4E-08	LKWSHR, Flange Mtg. ....	4
6	588820	ELBOW (Inc. 5) .....	1	37	58K-225	O-RING, Flange Half .....	1
7	356626	BUSHING, Reducing.....	1	38	799020	STEM, Hose to Trans. ....	1
8	227265	VALVE, Air Breather Check ..	1	39	1545004	CLAMP, Hose .....	1
9	211433	BREATHER, Conv. Air .....	1	40	536710	HOSE, Tube to Stem.....	1
10	1306623	O-RING, Flange Half .....	1	41	1511521	FLANGE HALF, Stem Mtg. ....	2
11	1511520	FLANGE HALF, Hose Mtg. ....	2	42	4E-08	LKWSHR, Flange Mtg. ....	4
12	23C-724	BOLT, Flange to Pump .....	4	43	23C-824	BOLT, Flange to Trans. ....	4
12A	4E-07	LKWSHR, Flange Mtg. ....	4	44	1545004	CLAMP, Hose .....	1
13	569899	HOSE, Conv. to Trans. ....	1	45	558789	TUBE, Converter Drain.....	1
14	558791	LINE, Rad. to Trans. Cooler (Inc. 14A) .....	1	46	1545004	CLAMP, Hose .....	1
14A	13F-04	† PLUG, Cooler Line (For Serial: 5HG121 thru 5HG999) .....	1	47	536710	HOSE, Tube to Fitting.....	1
15	25F-7	ELBOW, Converter .....	1	48	540130	CLAMP, Hose .....	1
16	5K-1096	NIPPLE, Converter Fill .....	1	49	562352	FITTING, Special — Conv. ....	1
17	23F-7	ELBOW, Converter Fill .....	1	50	23C-620	BOLT, Flange Pump .....	4
18	13F-20	PLUG, Converter Fill .....	1	50A	4E-06	LKWSHR, Flange Mtg. ....	4
19	538210	HOSE, Filter to Transmission ..	1	51	663093	FLANGE HALF, Hose Mtg. ....	2
20	711046	ADAPTER UNION.....	1	52	58K-219	O-RING, Flange Half .....	1
21	24C-620	BOLT, Filter Mounting.....	4	53	-----	PUMP, Conv. Charging — See Index .....	—
22	4E-06	LKWSHR, Filter Mtg. ....	4	54	-----	TORQUE CONVERTER — See Index .....	—
23	1533615	FILTER, Trans. & Conv. (Inc. 23A) .....	1	55	-----	VALVE, Press. Reg. — See Index .....	—
23A	215502	† CARTRIDGE KIT, Filter .....	1	56	40K-04	PLUG, Elbow.....	1
24	711046	ADAPTER UNION.....	1	57	91F-11	O-RING, Elbow.....	1
25	545070	HOSE, Pump to Filter .....	1	58	571304	ELBOW (Inc. 57) .....	1
26	533481	ADAPTER UNION (Inc. 27) ....	1	59	587036	HOSE, Conv. to Flywheel Hsg. ....	1
27	91F-10	O-RING, Adapter.....	1	60	550700	ADAPTER UNION.....	1
28	17K-10	ELBOW (Inc. 29).....	1	61	558790	LINE, Rad. to Conv. ....	1
29	91F-10	O-RING, Elbow.....	1	62	541363	HOSE, Rad. to Line.....	1
30	-----	TRANSMISSION — See Index ..	—	63	-----	RADIATOR — See Index.....	—
31	17K-10	ELBOW (Inc. 32).....	1				

†Not Illustrated

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

[ 52 ]



HYDRAULIC SYSTEM — TRANSMISSION AND TORQUE CONVERTER — G.M.  
For Serial: 6HG101 thru 6HG999, 7HG101 thru 7HG999

TS-6651-P

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

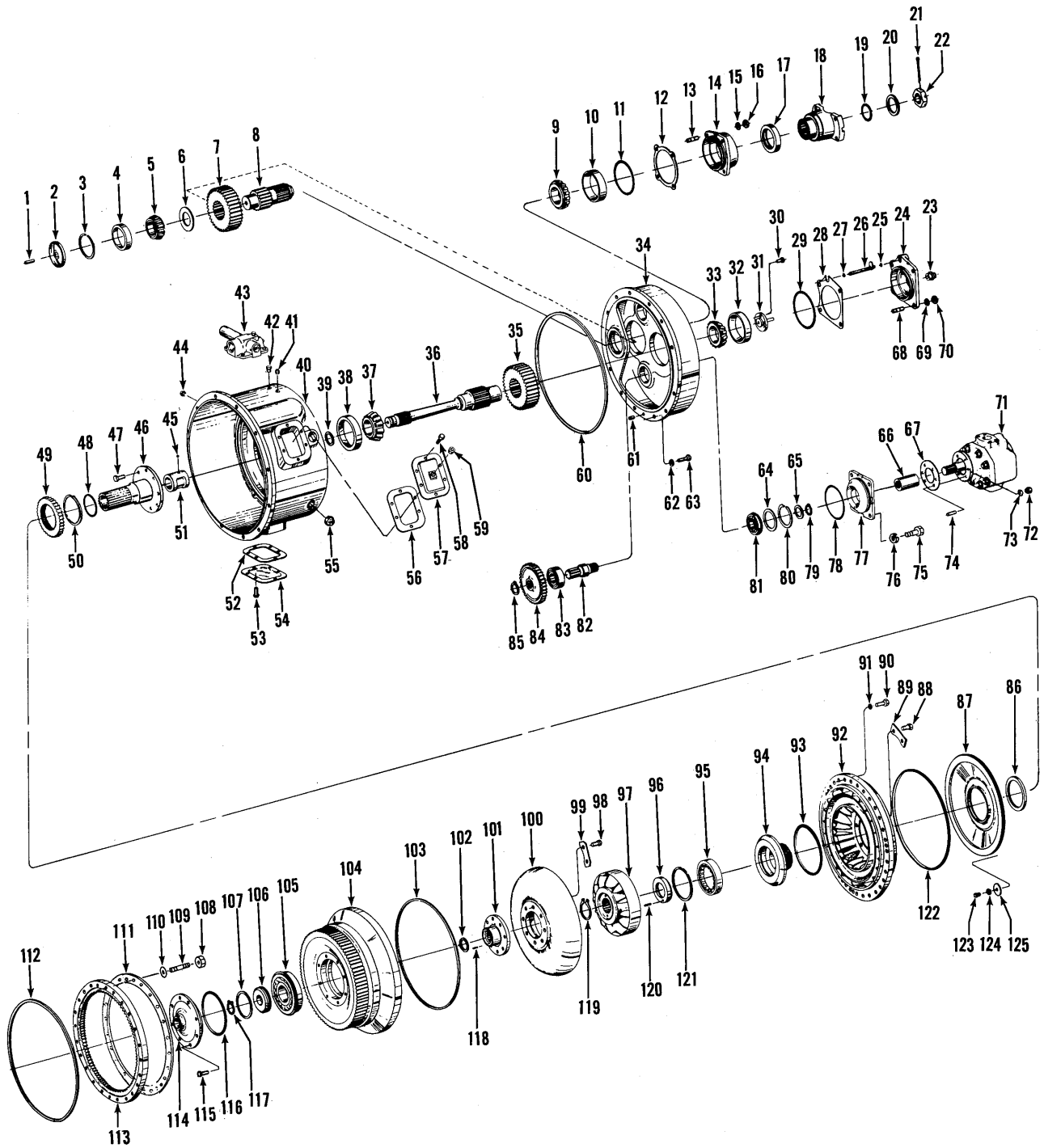
For Serial: 6HG101 thru 6HG999, 7HG101 thru 7HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	5K-611	NIPPLE, Rad. to Coupling.....	1	43	58K-225	O-RING, Flange Half.....	1
2	37K-312	COUPLING, Connecting.....	1	44	558793	HOSE, Pump to Trans. ....	1
3	571218	HOSE, Radiator to Filter.....	1	45	1511521	FLANGE HALF, Hose Mtg. ....	2
4	531798	ELBOW, Filter (Inc. 72).....	1	46	58K-225	O-RING, Flange Half.....	1
5	40K-02	PLUG, Elbow.....	1	47	799020	STEM, Hose to Trans. ....	1
6	541363	HOSE, Cooler Line to Rad.....	1	48	1545004	CLAMP, Hose.....	1
7	-----	FLYWHEEL HOUSING — See Engine Parts Manual ..	—	49	536710	HOSE, Tube to Stem.....	1
8	551323	SENDER, Conv. Temp.....	1	50	1545004	CLAMP, Hose.....	1
9	14D-10	NUT, Sender Unit.....	1	51	1511521	FLANGE HALF, Stem Mtg. ....	2
9A	12E-10	LKWSHR, Sender Unit.....	1	52	4E-08	LKWSHR, Flange Mtg. ....	4
10	91F-11	O-RING, Elbow.....	1	53	27C-824	BOLT, Flange to Trans. Mtg...	4
11	588820	ELBOW (Inc. 10).....	1	54	27C-824	BOLT, Flange to Trans. ....	4
12	356626	BUSHING, Reducing.....	1	54A	4E-08	LKWSHR, Flange Mtg. ....	4
13	227265	VALVE, Breather Check.....	1	55	558789	TUBE, Converter Drain.....	1
14	211433	BREATHER, Converter Air.....	1	56	663093	FLANGE HALF, Hose Mtg. ....	2
15	1306623	O-RING, Flange Half.....	1	57	23C-620	BOLT, Flange to Pump.....	4
16	1511520	FLANGE HALF, Hose Mtg. ....	2	57A	4E-06	LKWSHR, Flange Mtg. ....	4
17	23C-724	BOLT, Flange to Pump.....	4	58	540130	CLAMP, Hose.....	1
18	4E-07	LKWSHR, Flange Mtg. ....	4	59	536710	HOSE, Tube to Fitting.....	1
19	25F-7	ELBOW, Nipple.....	1	60	540130	CLAMP, Hose.....	1
20	558791	LINE, Rad. to Trans. Cooler (Inc. 21).....	1	61	562352	FITTING, Special — Conv. ....	1
21	13F-04	PLUG, Cooler Line.....	1	62	1306622	O-RING, Flange Half.....	1
22	5K-1096	*NIPPLE, Converter Fill.....	1	63	-----	PUMP, Conv. Charging — See Index.....	—
23	23F-7	*ELBOW, Converter Fill.....	1	64	587036	HOSE, Conv. to Flywheel Hsg.....	1
24	13F-20	PLUG, Converter Fill.....	1	65	-----	TORQUE CONVERTER — See Index.....	—
25	538210	HOSE, Filter to Trans.....	1	66	-----	VALVE, Press. Reg. — See Index.....	—
26	571239	ADAPTER UNION (Inc. 27)....	1	67	91F-11	O-RING, Adapter.....	1
27	91F-10	O-RING, Adapter.....	1	68	588399	ADAPTER (Inc. 67).....	1
28	24C-620	BOLT, Filter Mtg. ....	4	69	728212	ADAPTER UNION.....	1
29	4E-06	LKWSHR, Filter Mtg.....	4	70	550700	UNION, Flywheel Hsg.....	1
30	1533614	FILTER, Trans. & Conv. Oil (Inc. 30A).....	1	71	24C-624	BOLT, Filter to Bracket.....	4
30A	215502	† CARTRIDGE KIT, Filter.....	1	72	91F-8	O-RING, Elbow.....	1
31	91F-10	O-RING, Adapter.....	1	73	571219	HOSE, Filter to Valve.....	1
32	571238	ADAPTER UNION (Inc. 31)....	1	74	91F-8	O-RING, Elbow.....	1
33	40K-04	PLUG, Adapter Union.....	1	75	17K-8	ELBOW, Filter (Inc. 74).....	1
34	545070	HOSE, Pump to Filter.....	1	76	1533614	FILTER, Trans. & Conv. Oil (Inc. 76A).....	1
35	569899	HOSE, Converter to Trans.....	1	76A	215502	† CARTRIDGE KIT, Filter.....	1
36	17K-10	ELBOW (Inc. 37).....	1	77	571217	BRACKET, Filter Mtg. ....	1
37	91F-10	O-RING, Elbow.....	1	78	18D-06	NUT, Bracket Mounting.....	2
38	533481	ADAPTER UNION (Inc. 39)....	1	79	24C-624	BOLT, Bracket Mounting.....	2
39	91F-10	O-RING, Adapter.....	1	80	18D-06	NUT, Filter to Bracket.....	4
40	17K-10	ELBOW (Inc. 41).....	1	81	-----	RADIATOR — See Index.....	—
41	91F-10	O-RING, Elbow.....	1				
42	-----	TRANSMISSION — See Index ..	—				

†Not Illustrated

\*NOTE: For Serial — 6HG101 thru 6HG999 only.

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



**TORQUE CONVERTER ASSEMBLY**  
 For Serial: Cummins — 5HC101 thru 5HC999;  
 G.M. — 5HG101 thru 5HG999; 6HG101 thru 6HG999

TS-8405-P



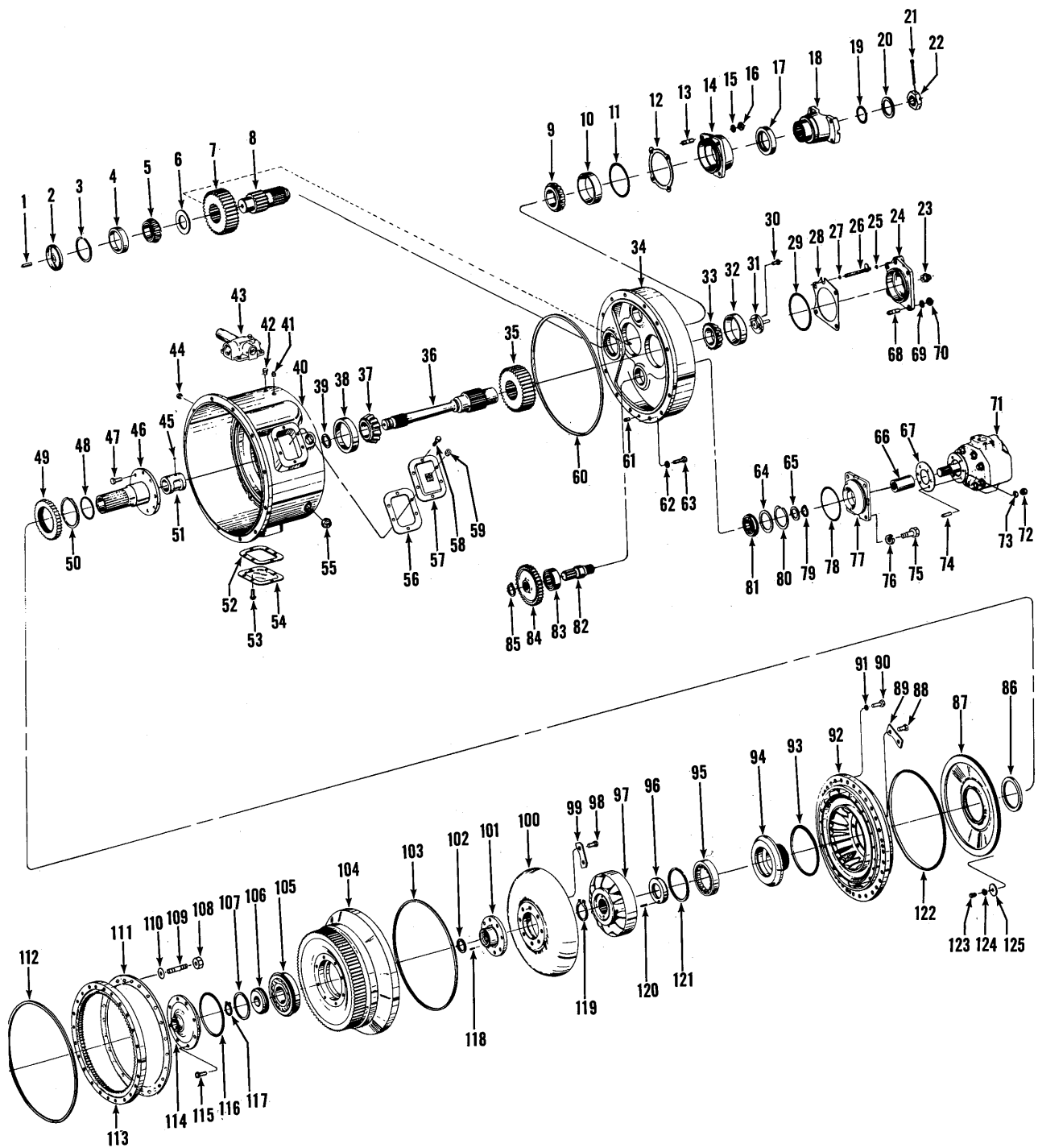
## TORQUE CONVERTER ASSEMBLY

For Serial: Cummins — 5HC101 thru 5HC999;  
G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	282206	CONVERTER ASSY (C-8502-3) (Inc. 1 thru 107, 111, 113 thru 125) .....	1	32	710790	CUP, Bearing .....	1
1	222031	TUBE, Oil .....	1	33	710791	CONE, Bearing .....	1
2	222027	BAFFLE, Oil .....	1	34	227064	COVER, Rear Hsg. ....	1
3	223900	RING, Front Brg. Ret. ....	1	35	218728	GEAR, Turbine Shaft (38T) ..	1
4	675543	CUP, Front Brg. ....	1	36	218731	SHAFT, Turbine .....	1
5	731283	CONE, Front Brg. ....	1	37	226027	CONE, Bearing .....	1
6	218738	SPACER, Front Brg. ....	1	38	226026	CUP, Bearing .....	1
7	218729	GEAR, Output Shaft (34T) ..	1	39	223570	RING, Piston .....	1
8	218733	SHAFT, Output .....	1	40	227065	HOUSING, Converter .....	1
9	710791	CONE, Rear Brg. ....	1	41	40K-02	PLUG, Pipe .....	1
10	710790	CUP, Rear Brg. ....	1	42	40K-04	PLUG, Pipe .....	1
11	25K-40420	O-RING, Brg. Cap .....	1	43	-----	VALVE, Pressure Regulating — See Index .....	—
12	218742	‡SHIM, Brg. Cap (.004) .....	—	44	40K-04	PLUG, Pipe .....	1
12A	218743	‡SHIM, Brg. Cap (.007) .....	—	45	10J-08	BALL, Oil Distributor Sleeve Lock .....	1
12B	218744	‡SHIM, Brg. Cap (.010) .....	—	46	218723	SUPPORT, Conv. (Inc. 45, 51) ..	1
13	204347	STUD, Brg. Cap .....	4	47	8C-820	BOLT, Support to Hsg. ....	8
14	218791	CAP, Bearing (Inc. 17) .....	1	48	209673	RING, Piston .....	1
15	4E-08	LKWSHR, Brg. Cap Stud .....	4	49	222035	GEAR, Oil Pump Drive (37T) ..	1
16	8D-08	NUT, Brg. Cap Stud .....	4	50	224009	RING, Gear Ret. ....	1
17	225763	SEAL, Brg. Cap Oil .....	1	51	218725	SLEEVE, Oil Distributor .....	1
18	218748	FLANGE, Output (Inc. 18A) ..	1	52	201400	GASKET, Inspection Cover ....	2
18A	218747	†RING, Output Flange .....	1	53	208261	BOLT & LKWSHR, Cover to Hsg. ....	12
19	25K-60204	O-RING, Output Flange .....	1	54	201398	COVER, Hsg. Inspection .....	2
20	222181	WASHER, Output Flange .....	1	55	13F-20	PLUG, Pipe .....	4
21	1F-632	COTTER, Flange Nut .....	1	56	201400	GASKET, Inspection Cover ....	1
22	201262	NUT, Output Flange .....	1	57	226856	COVER, Hsg. Inspection .....	1
23	202459	NUT, Gov. Drive Adapter .....	1	58	208261	BOLT & LKWSHR, Cover to Hsg. ....	6
24	218752	CAP, Bearing .....	1	59	16F-06	PLUG, Pipe .....	1
24A	226056	†SEAL, Brg. Cap Oil .....	1	60	218779	O-RING, Cover to Hsg. ....	1
25	25K-30012	O-RING, Lube Tube .....	1	61	214295	PIN, Cover to Hsg. Locating Dowel .....	1
26	218737	TUBE, Lube .....	1	62	4E-07	LKWSHR, Cover to Hsg. ....	12
27	25K-30012	O-RING, Lube Tube .....	1	63	1C-722	BOLT, Cover to Hsg. ....	12
28	218739	‡SHIM, Brg. Cap (.004) .....	—	64	222038	WASHER, Rear Brg. — Outer ..	3
28A	218740	‡SHIM, Brg. Cap (.007) .....	—	65	100838	WASHER, Rear Brg. — Inner ..	3
28B	218741	‡SHIM, Brg. Cap (.010) .....	—	66	221992	SLEEVE, Charging Pump .....	1
29	25K-40424	O-RING, Brg. Cap .....	1	67	551906	GASKET, Charging Pump .....	1
30	4C-612	BOLT, Adapter to Shaft .....	3				
31	218862	ADAPTER, Gov. Drive .....	1				

†Not Illustrated  
‡As Required

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



**TORQUE CONVERTER ASSEMBLY**  
 For Serial: Cummins — 5HC101 thru 5HC999;  
 G.M. — 5HG101 thru 5HG999; 6HG101 thru 6HG999

TS-8405-P

## TORQUE CONVERTER ASSEMBLY (Continued)

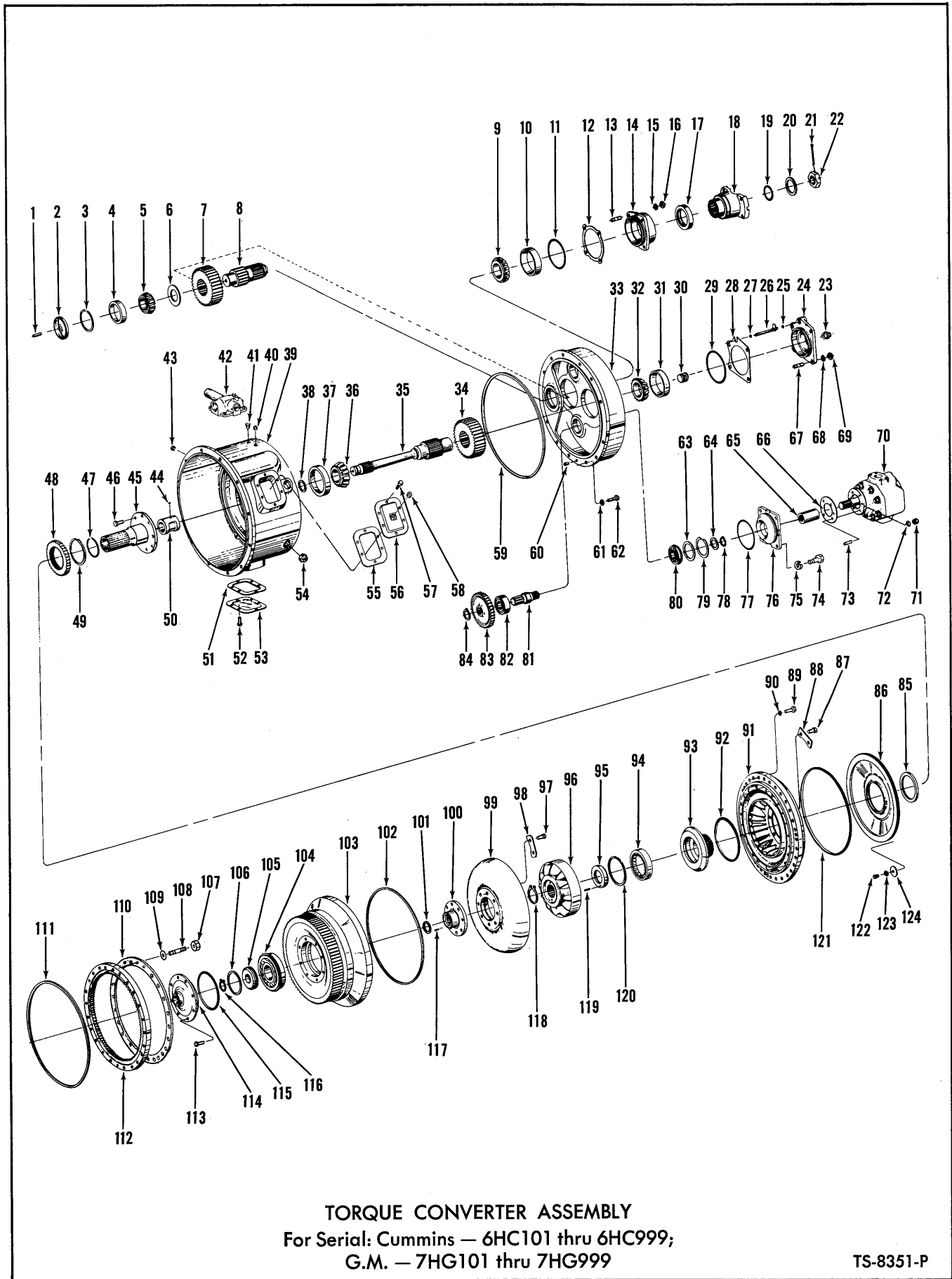
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
68	204347	STUD, Bearing Cap .....	4	100	222263	TURBINE .....	1
69	4E-08	LKWSHR, Bearing Cap .....	4	101	218753	HUB, Turbine .....	1
70	8D-08	NUT, Bearing Cap .....	4	102	223866	RING, Hub Ret. ....	1
71	450245	*PUMP, Conv. Charging .....	1	103	218778	O-RING, Impeller .....	1
72	8D-06	NUT, Pump Mtg. ....	3	104	218870	COVER, Impeller .....	1
73	4E-06	LKWSHR, Pump Mtg. ....	3	105	225781	BEARING, Front .....	1
74	203253	STUD, Pump Mtg. ....	3	106	218855	RETAINER, Bearing .....	1
75	-----	OMIT, Not used this model ..	—	107	211323	RING, Piston .....	1
76	-----	OMIT, Not used this model ..	—	108	230647	**NUT, Ring Gear Mtg. ....	12
77	-----	OMIT, Not used this model ..	—	109	229768	**STUD, Ring Gear Mtg. ....	12
78	-----	OMIT, Not used this model ..	—	110	228987	**WASHER, Belleville (Cupped)	48
79	224039	RING, Inner Washer Ret. ....	3	111	230594	**RING, Ring Gear Mtg. ....	1
80	223961	RING, Brg. Washer Ret. ....	3	112	219234	O-RING, Conv. to Flywheel Hsg. ....	1
81	226025	BEARING, Pump Shaft Rear ..	3	113	226595	GEAR, Flywheel Ring .....	1
82	216095	SHAFT, Pump Drive .....	3	114	218717	CAP, Impeller Cover .....	1
83	225385	BEARING, Pump Shaft Front ..	3	115	8C-716	BOLT, Impeller Cover Cap ....	8
84	222037	GEAR, Pump Driven (35T) ....	3	116	60K-40608	O-RING, Cover Cap .....	1
85	224036	RING, Driven Gear Ret. ....	3	117	663834	RING, Brg. Retainer Ret. ....	1
86	214941	SEAL, Oil Baffle Oil .....	1	118	221478	DOWEL, Turbine Hub Ret. ....	2
87	218721	BAFFLE, Oil .....	1	119	711161	RING, Reaction Member Ret. ...	1
88	222221	BOLT, Impeller to Hub .....	8	120	302602	PIN, Reaction Member Spacer Roll .....	1
89	222019	LOCKPLATE, Impeller Mtg. ....	4	121	223988	RING, Impeller Hub Brg. Ret. ...	1
90	1C-622	BOLT, Impeller to Cover .....	30	122	218777	O-RING, Oil Baffle .....	1
91	4E-06	LKWSHR, Impeller Mtg. ....	30	123	1C-612	BOLT, Oil Baffle .....	3
92	222265	IMPELLER .....	1	124	5E-06	LKWSHR, Oil Baffle .....	3
93	60K-40700	O-RING, Impeller Hub .....	1	125	616786	WASHER, Oil Baffle .....	3
94	222266	HUB, Impeller .....	1	126	23C-724	†BOLT, Conv. Hsg. to Flywheel	12
95	225778	BEARING, Impeller Hub .....	1	127	4E-07	†LKWSHR, Conv. Hsg. Mtg. ....	12
96	218782	SPACER, Reaction Member ..	1	128	211433	†BREATHER, Conv. Air .....	1
97	801007	MEMBER, Reaction (Inc. 96, 120) .....	1	129	227265	†VALVE, Breather Check .....	1
98	222223	BOLT, Turbine to Hub .....	8	130	356626	†BUSHING, Valve Reducing ..	1
99	222008	LOCKPLATE, Turbine Mtg. ....	4				

†Not Illustrated

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

\*\*NOTE: Two variations of mounting the Flywheel Ring Gear have been used. These are listed as follows: Machine Serial: Cummins — 5HC101 thru 5HC120; G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG200 received 12 #224797 Bolt and 12 #619021 Washer; Cummins — 5HC121 thru 5HC999; G.M. — 6HG201 thru 6HG999 received 12 #228985 Stud, 12 #18D-06 Nut, 12 #228986 Washer and 24 #228987 Washer (Belleville-Cupped). When replacing Flywheel Ring Gear for any reason use 12 #230647 Nut (108), 12 #229768 Stud (109), 48 #228987 Washer-Belleville (110) and 1 #230594 Mtg. Ring (111) as a complete set. Refer to Service Gram SG-257C for installation instructions.

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



**TORQUE CONVERTER ASSEMBLY**  
For Serial: Cummins — 6HC101 thru 6HC999;  
G.M. — 7HG101 thru 7HG999

TS-8351-P

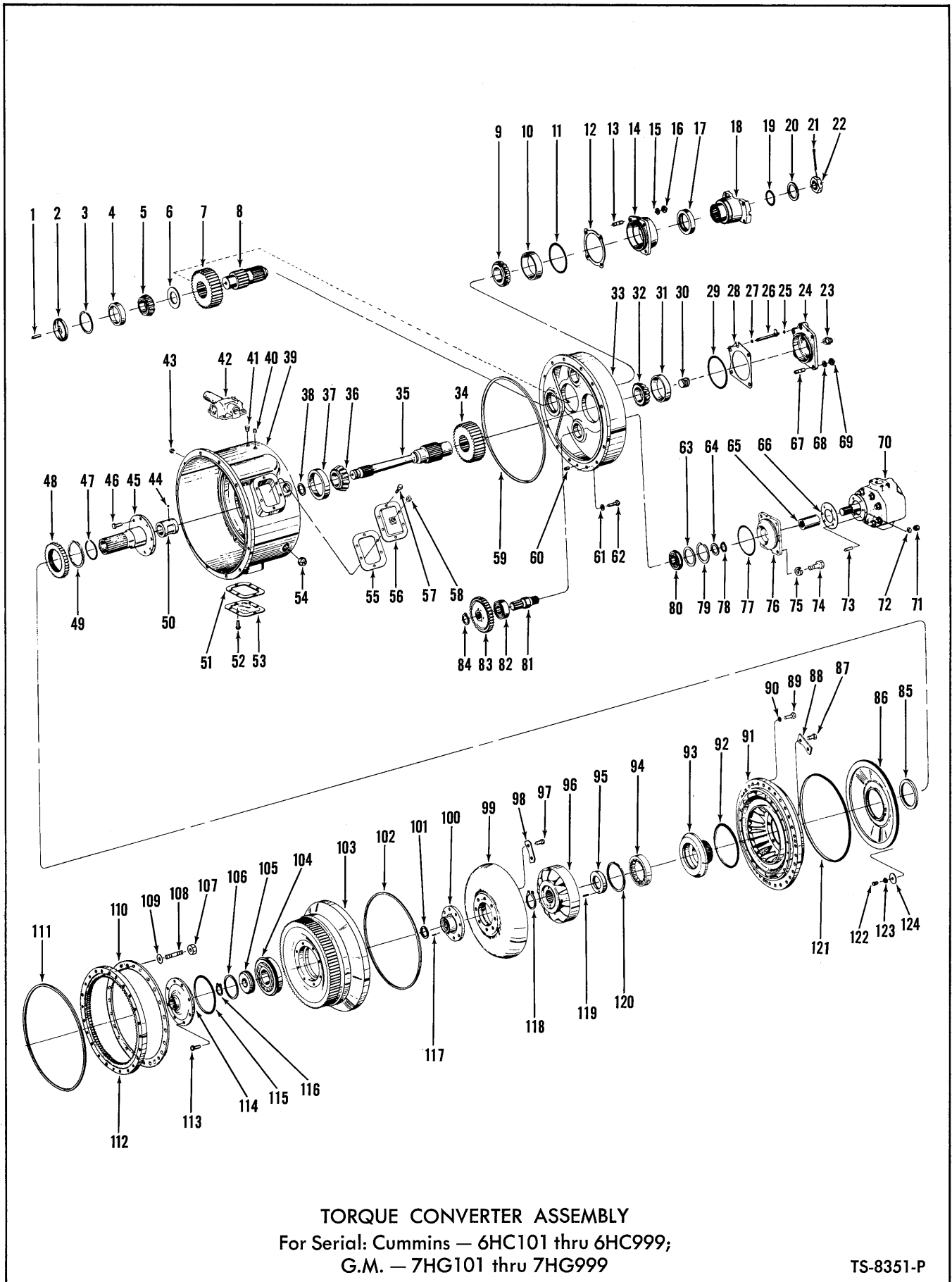
## TORQUE CONVERTER ASSEMBLY

For Serial: Cummins — 6HC101 thru 6HC999;  
G.M. — 7HG101 thru 7HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	282206	CONVERTER ASSY (C-8502-3) (Inc. 1 thru 106, 110, 112 thru 124) .....	1	32	710791	CONE, Bearing .....	1
1	222031	TUBE, Oil .....	1	33	227064	COVER, Rear Hsg. .....	1
2	222027	BAFFLE, Oil .....	1	34	218728	GEAR, Turbine Shaft (38T) ..	1
3	223900	RING, Front Brg. Ret. ....	1	35	218731	SHAFT, Turbine .....	1
4	675543	CUP, Front Brg. ....	1	36	226027	CONE, Bearing .....	1
5	731283	CONE, Front Brg. ....	1	37	226026	CUP, Bearing .....	1
6	218738	SPACER, Front Brg. ....	1	38	223570	RING, Piston .....	1
7	218729	GEAR, Output Shaft (34T) ...	1	39	227065	HOUSING, Converter .....	1
8	218733	SHAFT, Output .....	1	40	40K-02	PLUG, Pipe .....	1
9	710791	CONE, Rear Brg. ....	1	41	40K-04	PLUG, Pipe .....	1
10	710790	CUP, Rear Brg. ....	1	42	-----	VALVE, Pressure Regulating — See Index .....	—
11	25K-40420	O-RING, Brg. Cap .....	1	43	40K-04	PLUG, Pipe .....	1
12	218742	‡SHIM, Brg. Cap (.004) .....	—	44	10J-08	BALL, Oil Distributor Sleeve Lock .....	1
12A	218743	‡SHIM, Brg. Cap (.007) .....	—	45	218723	SUPPORT, Conv. (Inc. 44, 50)	1
12B	218744	‡SHIM, Brg. Cap (.010) .....	—	46	8C-820	BOLT, Support to Hsg. ....	8
13	204347	STUD, Brg. Cap .....	4	47	209673	RING, Piston .....	1
14	218791	CAP, Bearing (Inc. 17) .....	1	48	222035	GEAR, Oil Pump Drive (37T)	1
15	4E-08	LKWSHR, Brg. Cap Stud .....	4	49	224009	RING, Gear Ret. ....	1
16	8D-08	NUT, Brg. Cap Stud .....	4	50	218725	SLEEVE, Oil Distributor .....	1
17	225763	SEAL, Brg. Cap Oil .....	1	51	201400	GASKET, Inspection Cover ...	2
18	218748	FLANGE, Output (Inc. 18A) ..	1	52	208261	BOLT & LKWSHR, Cover to Hsg. ....	12
18A	218747	†RING, Output Flange .....	1	53	201398	COVER, Hsg. Inspection .....	2
19	25K-60204	O-RING, Output Flange .....	1	54	13F-20	PLUG, Pipe .....	4
20	222181	WASHER, Output Flange .....	1	55	201400	GASKET, Inspection Cover ...	1
21	1F-632	COTTER, Flange Nut .....	1	56	226856	COVER, Hsg. Inspection .....	1
22	201262	NUT, Output Flange .....	1	57	208261	BOLT & LKWSHR, Cover to Hsg. ....	6
23	40K-04	PLUG, Brg. Cap .....	1	58	16F-06	PLUG, Pipe .....	1
24	218864	CAP, Bearing .....	1	59	218779	O-RING, Cover to Hsg. ....	1
25	25K-30012	O-RING, Lube Tube .....	1	60	214295	PIN, Cover to Hsg. Locating Dowel .....	1
26	218737	TUBE, Lube .....	1	61	4E-07	LKWSHR, Cover to Hsg. ....	12
27	25K-30012	O-RING, Lube Tube .....	1	62	1C-722	BOLT, Cover to Hsg. ....	12
28	218739	‡SHIM, Brg. Cap (.004) .....	—	63	222038	WASHER, Rear Brg. — Outer	3
28A	218740	‡SHIM, Brg. Cap (.007) .....	—	64	100838	WASHER, Rear Brg. — Inner ..	3
28B	218741	‡SHIM, Brg. Cap (.010) .....	—	65	221992	SLEEVE, Charging Pump .....	1
29	25K-40424	O-RING, Brg. Cap .....	1	66	551906	GASKET, Charging Pump .....	1
30	16F-04	PLUG, Turbine Shaft .....	1				
31	710790	CUP, Bearing .....	1				

†Not Illustrated  
‡As Required

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



**TORQUE CONVERTER ASSEMBLY**  
For Serial: Cummins — 6HC101 thru 6HC999;  
G.M. — 7HG101 thru 7HG999

TS-8351-P

## TORQUE CONVERTER ASSEMBLY (Continued)

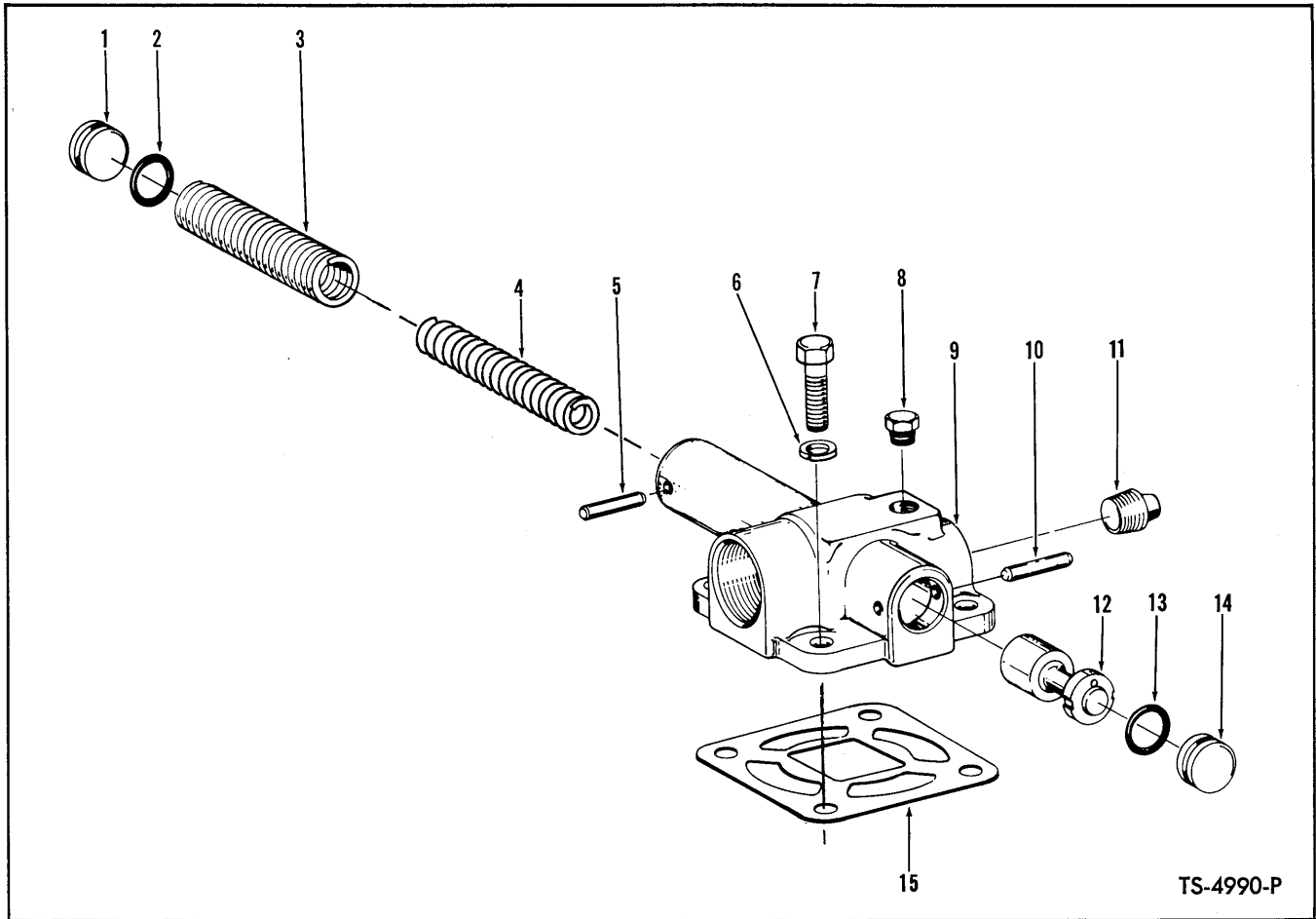
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
67	204347	STUD, Bearing Cap .....	4	99	222263	TURBINE .....	1
68	4E-08	LKWSHR, Bearing Cap .....	4	100	218753	HUB, Turbine .....	1
69	8D-08	NUT, Bearing Cap .....	4	101	223866	RING, Hub Ret. ....	1
70	450245	*PUMP, Conv. Charging .....	1	102	218778	O-RING, Impeller .....	1
71	8D-06	NUT, Pump Mtg. ....	3	103	218870	COVER, Impeller .....	1
72	4E-06	LKWSHR, Pump Mtg. ....	3	104	225781	BEARING, Front .....	1
73	203253	STUD, Pump Mtg. ....	3	105	218855	RETAINER, Bearing .....	1
74	-----	OMIT, Not used this model ...	—	106	211323	RING, Piston .....	1
75	-----	OMIT, Not used this model ...	—	107	230647	**NUT, Ring Gear Mtg. ....	12
76	-----	OMIT, Not used this model ...	—	108	229768	**STUD, Ring Gear Mtg. ....	12
77	-----	OMIT, Not used this model ...	—	109	228987	**WASHER, Belleville (Cupped)	48
78	224039	RING, Inner Washer Ret. ....	3	110	230594	**RING, Ring Gear Mtg. ....	1
79	223961	RING, Brg. Washer Ret. ....	3	111	219234	O-RING, Conv. to Flywheel Hsg. ....	1
80	226025	BEARING, Pump Shaft Rear ..	3	112	226595	GEAR, Flywheel Ring .....	1
81	216095	SHAFT, Pump Drive .....	3	113	8C-716	BOLT, Impeller Cover Cap ...	8
82	225385	BEARING, Pump Shaft Front	3	114	218717	CAP, Impeller Cover .....	1
83	222037	GEAR, Pump Driven (35T) ...	3	115	60K-40608	O-RING, Cover Cap .....	1
84	224036	RING, Driven Gear Ret. ....	3	116	663834	RING, Brg. Retainer Ret. ....	1
85	214941	SEAL, Oil Baffle Oil .....	1	117	221478	DOWEL, Turbine Hub Ret. ....	2
86	218721	BAFFLE, Oil .....	1	118	711161	RING, Reaction Member Ret.	1
87	222221	BOLT, Impeller to Hub .....	8	119	302602	PIN, Reaction Member Spacer Roll .....	1
88	222019	LOCKPLATE, Impeller Mtg. ...	4	120	223988	RING, Impeller Hub Brg. Ret.	1
89	1C-622	BOLT, Impeller to Cover ....	30	121	218777	O-RING, Oil Baffle .....	1
90	4E-06	LKWSHR, Impeller Mtg. ....	30	122	1C-612	BOLT, Oil Baffle .....	3
91	222265	IMPELLER .....	1	123	5E-06	LKWSHR, Oil Baffle .....	3
92	60K-40700	O-RING, Impeller Hub .....	1	124	616786	WASHER, Oil Baffle .....	3
93	222266	HUB, Impeller .....	1	125	23C-724	†BOLT, Conv. Hsg. to Flywheel	12
94	225778	BEARING, Impeller Hub .....	1	126	4E-07	†LKWSHR, Conv. Hsg. Mtg. ...	12
95	218782	SPACER, Reaction Member ...	1	127	211433	†BREATHER, Conv. Air .....	1
96	801007	MEMBER, Reaction (Inc. 96, 120) .....	1	128	227265	†VALVE, Breather Check .....	1
97	222223	BOLT, Turbine to Hub .....	8	129	356626	†BUSHING, Valve Reducing ...	1
98	222008	LOCKPLATE, Turbine Mtg. ....	4				

†Not Illustrated

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

\*\*NOTE: Two variations of mounting the Flywheel Ring Gear have been used. These are listed as follows: Machine Serial; G.M. — 7HG101 thru 7HG105 received 12 #228985 Stud, 12 #18D-06 Nut, 12 #228986 Washer and 24 #228987 Washer (Belleville-Cupped); Cummins — 6HC101 thru 6HC999; G.M. — 7HG106 thru 7HG999 received 12 #229768 Stud, 12 #68D-06 Nut, 12 #228986 Washer and 48 #228987 Washer (Belleville-Cupped). When replacing Flywheel Ring Gear for any reason use 12 #230647 Nut (107), 12 #229768 Stud (108), 48 #228987 Washer-Belleville (109) and 1 #230594 Mtg. Ring (110) as a complete set. Refer to Service Gram SG-257C for installation instructions.

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



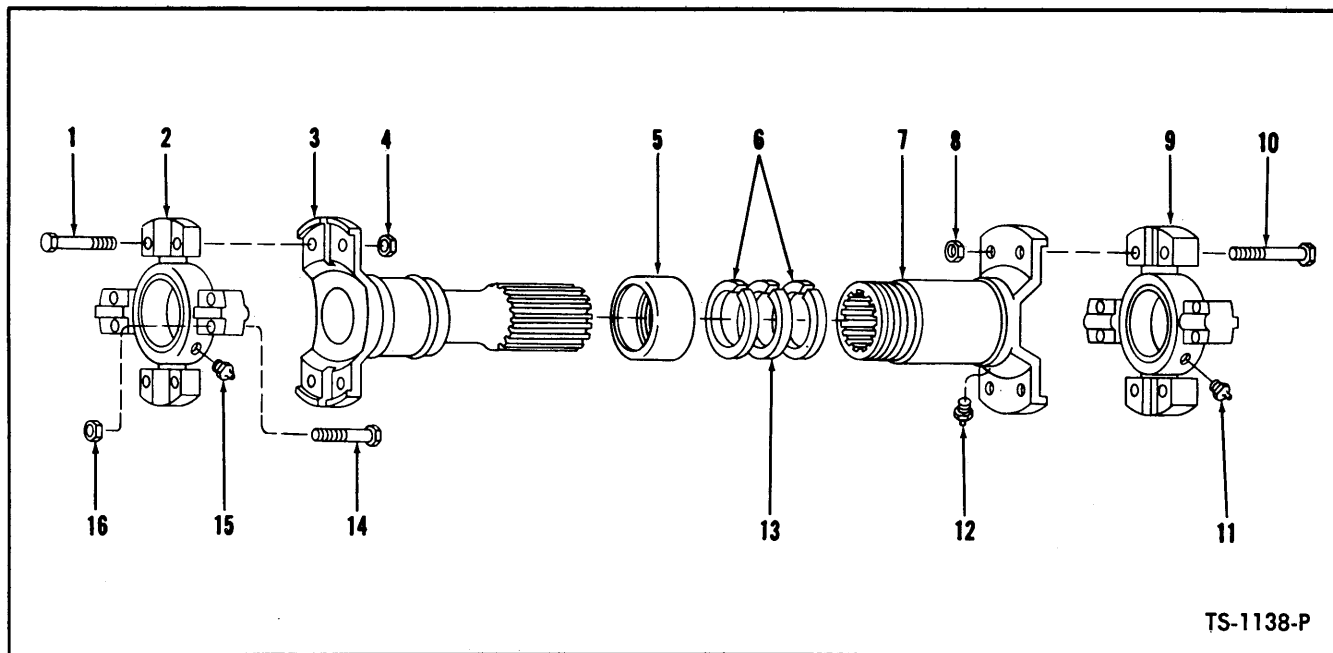
TS-4990-P

## DOWNSTREAM PRESSURE REGULATING VALVE ASSEMBLY

Item No.	Part No.	Description	No. Req'd.
A	228499	VALVE ASSY, Pressure Regulating (Inc. 1 thru 5, 8 thru 14)	1
1	222041	STOP, Piston	1
2	893267	O-RING, Piston Stop	1
3	214668	SPRING, Pressure	1
4	227292	SPRING, Regulator	1
5	633157	PIN, Piston Stop	1
6	4E-07	LKWSHR, Valve to Converter Housing	4
7	iC-722	BOLT, Valve to Converter Housing	4
8	40K-04	PLUG, Pressure Tap	1
9	227076	BODY, Pressure Regulating Valve	1
10	633157	PIN, Piston Stop Roll	1
11	13F-08	PLUG, Pipe	1
12	228500	PISTON, Regulating Valve	1
13	893267	O-RING, Piston Stop	1
14	222041	STOP, Piston	1
15	227087	GASKET, Valve to Converter Housing	1

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





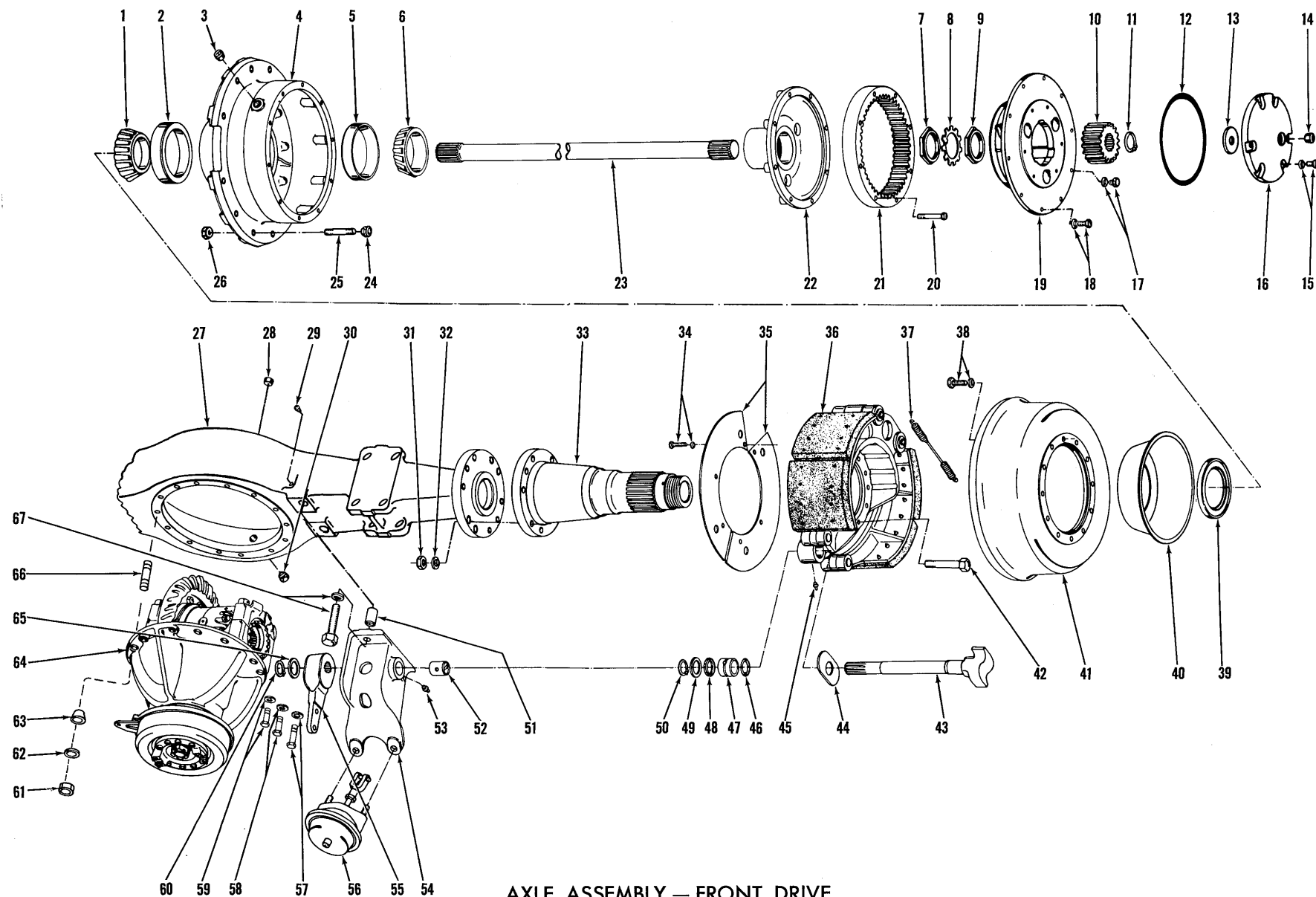
TS-1138-P

## PROPELLER SHAFT ASSEMBLIES

Item No.	Description	Converter to Transmission	Transmission to Front Axle	Transmission to Rear Axle	No. Req'd
A	PROPELLER SHAFT ASSY (Inc. 1 thru 16).....	550778	572612	566045	1
1	BOLT, Spider & Bearing to Tube.....	940089	940229	940229	4
2	SPIDER & BEARING ASSY (Inc. 15) .....	944862	942735	942735	1
3	TUBE .....	940230	946166	946042	1
4	NUT, Spider & Bearing to Tube.....	8D-06	8D-08	8D-08	4
5	RETAINER, Felt .....	940090	940250	940250	1
6	WASHER, Felt Retainer .....	940091	940251	940251	2
7	SLIP YOKE (Inc. 12) .....	940093	942734	946043	1
8	NUT, Spider & Bearing to Slip Yoke.....	8D-06	8D-08	8D-08	4
9	SPIDER & BEARING ASSY (Inc. 11) .....	944862	942735	942735	1
10	BOLT, Spider & Bearing to Slip Yoke.....	940089	940229	940229	4
11	FITTING, Spider & Bearing Grease.....	10H-35	944688	944688	1
12	FITTING, Slip Yoke Grease.....	10H-25	10H-25	10H-25	1
13	WASHER, Felt .....	940092	942749	942749	1
14	BOLT, Spider & Bearing Attaching.....	940089	940229	940229	8
15	FITTING, Spider & Bearing Grease.....	10H-35	944688	944688	1
16	NUT, Spider & Bearing Attaching.....	8D-06	8D-08	8D-08	8

†Not Illustrated

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



**AXLE ASSEMBLY — FRONT DRIVE**  
 For Serial: Cummins — 5HC101 thru 5HC999;  
 G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999

TS-6395-P

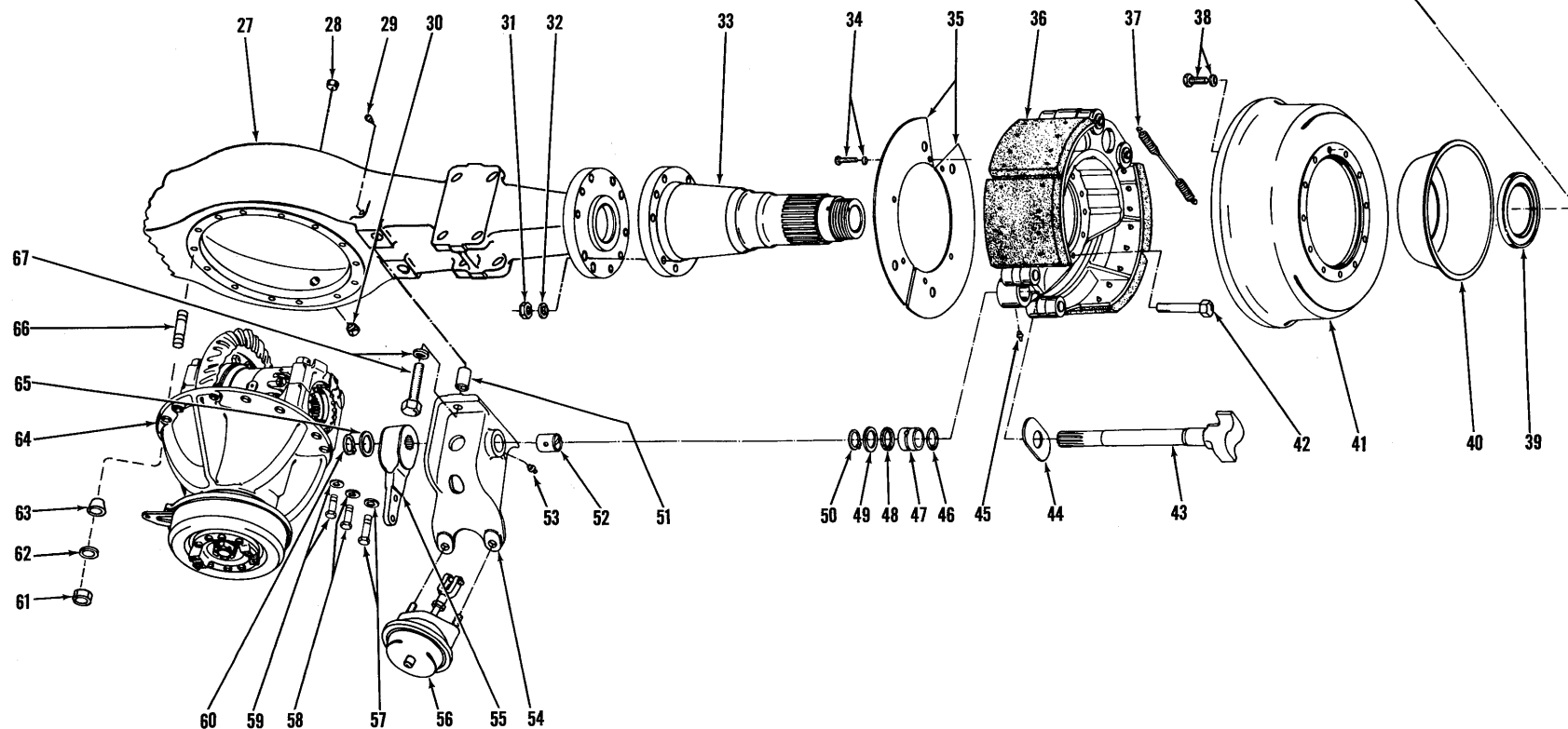
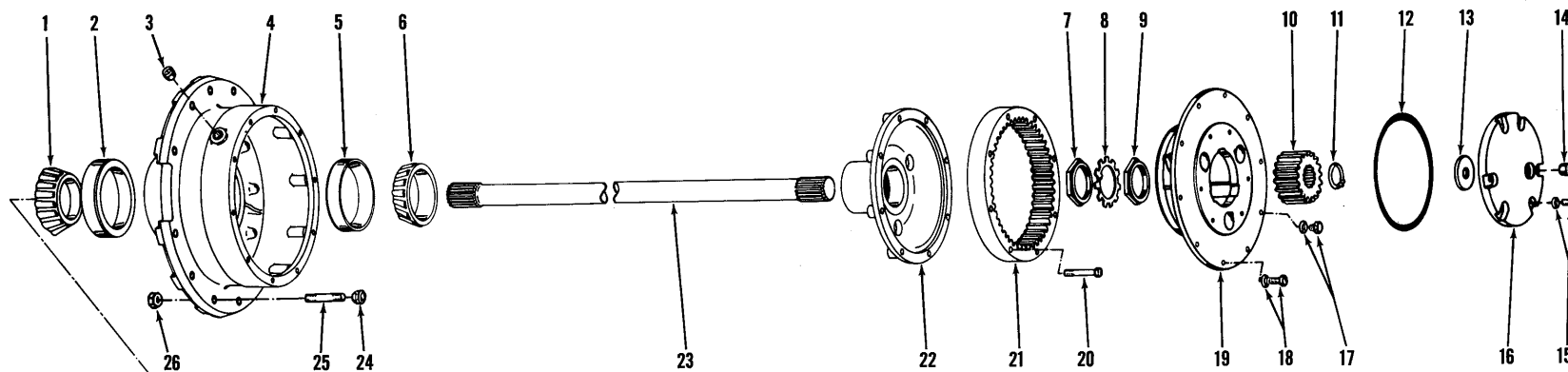
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PM 2419

**AXLE ASSEMBLY – FRONT DRIVE**  
 For SFor Serial: Cummins – 5HC101 thru 5HC999;  
 G.M. – 5HG101 thru 5HG999, 6HG101 thru 6HG999

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
A	131722	AXLE ASSY (Inc. 1 thru 33, 36 thru 67A) . . . . .	1	19	-----	PLANET CARRIER – See Index . . . . .	—
1	774025	CONE, Inner Hub Brg. . . . .	2	20	110624	BOLT, Internal Gear to Hub . . . . .	16
2	774024	CUP, Inner Hub Brg. . . . .	2	21	110622	GEAR, Internal . . . . .	2
3	791034	PLUG, Hub Filler . . . . .	2	22	110553	HUB, Internal Gear . . . . .	2
4	815755	**HUB (Inc. 2, 5, 38A) . . . . .	2	23	111701	SHAFT, Axle . . . . .	2
5	742262	CUP, Outer Hub Brg. . . . .	2	24	103522	NUT, Wheel . . . . .	20
6	742263	CONE, Outer Hub Brg. . . . .	2	25	103445	STUD, Wheel . . . . .	20
7	110559	NUT, Inner Spindle . . . . .	2	26	121062	NUT, Wheel Stud – See Note "B" . . . . .	20
8	110560	LOCK, Spindle Nut . . . . .	2	27	111700	HOUSING, Axle . . . . .	1
9	110559	NUT, Outer Spindle . . . . .	2	28	11F-12	PLUG, Housing Filler . . . . .	1
10	110556	GEAR, Sun . . . . .	2	29	121214	BREATHER, Axle Hsg. . . . .	1
11	224066	RING, Sun Gear Ret. . . . .	2	30	791034	PLUG, Housing Drain . . . . .	1
12	113292	O-RING, Thrust Cap . . . . .	2	31	106998	NUT, Spindle & Brake Attaching . . . . .	20
13	106457	WASHER, Sun Gear Thrust . . . . .	2	32	104412	WASHER, Spindle & Brake Attaching . . . . .	20
14	11F-12	PLUG, Thrust Cap . . . . .	2	33	123945	***SPINDLE ASSY (Inc. 33A) . . . . .	2
15	1C-720	BOLT, Thrust Cap . . . . .	12	33A	123947	†SLEEVE . . . . .	2
15A	112278	LKWSHR, Thrust Cap . . . . .	12	34	1C-612	BOLT, Dust Cover – See Note "A" . . . . .	4
16	815565	KIT, Sun Gear Thrust Cap (Inc. 12, 13, 14, 15A) . . . . .	2	34A	1C-616	BOLT, Dust Cover – See Note "A" . . . . .	4
17	1C-908	BOLT, Planet Puller Hole . . . . .	6	34B	4E-06	LKWSHR, Dust Cover – See Note "A" . . . . .	8
17A	3E-09	LKWSHR, Planet Puller Hole . . . . .	6	35	118041	COVER, Brake Dust – See Note "A" . . . . .	4
18	117225	BOLT, Planet Carrier to Hub . . . . .	40	35A	112695	†PLATE, Dust Cover – See Note "A" . . . . .	2
18A	106547	WASHER, Planet Carrier to Hub . . . . .	40	36	-----	BRAKE ASSY, Front – See Index . . . . .	—
				37	119650	SPRING, Brake Shoe Return . . . . .	2

†Not Illustrated  
 NOTE "A": Optional Equipment – Not furnished with machine.  
 NOTE "B": When replacing 121062 Wheel Stud Nut you must replace as a complete set and torque to 200 to 250 ft. lbs. Once conversion has been made, individual replacements can be made.  
 \*\*NOTE: 815755 Kit also includes 12 #118381 Brake Drum Bolts that must be used to replace existing Brake Drum Bolts.  
 \*\*\*NOTE: When replacing 123945 Spindle Assembly, you must also use 1 #118736 Spindle Nut Lock.



**AXLE ASSEMBLY — FRONT DRIVE**  
For Serial: Cummins — 5HC101 thru 5HC999;  
G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999

TS-6395-P

## AXLE ASSEMBLY — FRONT DRIVE (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
38		BOLT, Drum to Hub		56	112767	*AIR CHAMBER (Inc. 56A) — B.W. #277024	2
38A	107256	Serial Group "C" .....	24	56A	952109	†DIAPHRAGM, Air Chamber ..	2
38B	118381	Serial Group "D" .....	24	57	23C-1028	BOLT, Carrier to Axle Hsg. ..	10
38C	104412	WASHER, Drum to Hub .....	24	57A	104412	WASHER, Carrier to Axle Hsg. ....	10
39	125248	SEAL, Hub Oil .....	2	58	-----	OMIT .....	—
40	117445	CATCHER, Oil .....	2	58A	-----	OMIT .....	—
41	118805	DRUM, Brake .....	2	59	110894	BOLT, Carrier to Axle Hsg. — Serial Group "A" .....	4
42	18C-1064	BOLT, Brake & Spindle Attaching .....	20	59A	104412	WASHER, Carrier to Axle Hsg. — Serial Group "A" ..	4
43	111703	CAM SHAFT — R.H. ....	1	60	659764	RING, Slack Adjuster Ret. ....	2
43A	111702	†CAM SHAFT — L.H. ....	1	61	64D-10	NUT, Carrier to Axle Hsg. — Serial Group "B" .....	4
44	107735	WASHER, Cam Shaft Thrust ..	2	62	104412	WASHER, Carrier to Axle Hsg. — Serial Group "B" ..	4
45	12H-15	FITTING, Spider Grease .....	2	63	119141	DOWEL, Carrier to Axle Hsg. — Serial Group "B" .....	4
46	25K-60124	O-RING, Cam Shaft .....	2	64	-----	DIFF. & CARRIER ASSY — See Index .....	—
47	107739	BUSHING, Brake Spider .....	2	64A	110607	†GASKET, Carrier to Hsg. ....	1
48	11E-135	RETAINER, Brake Spider Grease .....	2	65	107010	WASHER, Slack Adjuster Retaining .....	2
49	107736	WASHER, Cam Shaft .....	2	66	117336	STUD, Carrier to Axle Hsg. — Serial Group "B" .....	4
50	660516	RING, Washer Ret. ....	2	67	1C-1056	BOLT, Air Chamber Bracket Mtg. ....	4
51	110941	SPACER, Air Chamber Bracket .....	4	67A	4E-10	LKWSHR, Air Chamber Bracket Mtg. ....	4
52	102189	BUSHING, Air Chamber Bracket .....	2				
53	10H-25	FITTING, Air Chamber Brk. Grease .....	2				
54	107632	BRACKET, Air Chamber — R.H. (Inc. 52) .....	1				
54A	107631	†BRACKET, Air Chamber — L.H. (Inc. 52) .....	1				
55	107247	*ADJUSTER, Slack — B.W. #222485 .....	2				

†Not Illustrated

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

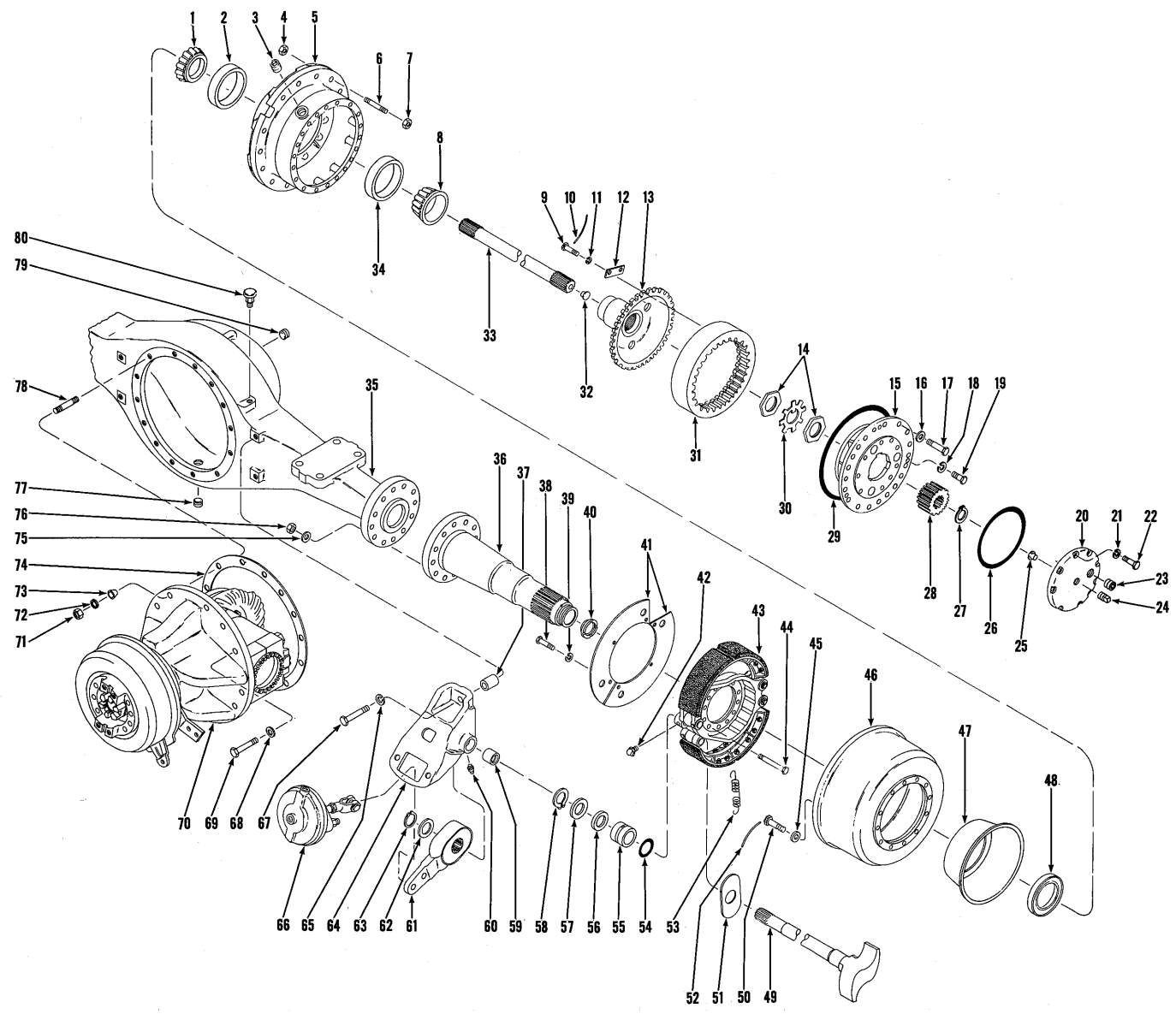
**Serial Group "A":** Cummins — 5HC101 thru 5HC110; G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG170, 6HG174, 6HG176, 6HG180, 6HG182, 6HG184 and 6HG188.

**Serial Group "B":** Cummins — 5HC111 thru 5HC999; G.M. — 6HG171, 6HG172, 6HG173, 6HG175, 6HG177, 6HG178, 6HG179, 6HG181, 6HG183, 6HG185, 6HG186, 6HG187, 6HG189 thru 6HG999.

**Serial Group "C":** G.M. — 5HG101 thru 5HG126, 5HG128, 5HG146, 5HG148 and 5HG162.

**Serial Group "D":** Cummins — 5HC101 thru 5HC999; G.M. — 5HG127, 5HG129 thru 5HG145, 5HG147, 5HG149 thru 5HG161, 5HG163 thru 5HG999, 6HG101 thru 6HG999.

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



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PM 2419

**AXLE ASSEMBLY — FRONT DRIVE**  
For Serial: Cummins — 6HC101 thru 6HC999;  
G.M. — 7HG101 thru 7HG999

TS-7630-P

## AXLE ASSEMBLY — FRONT DRIVE

For Serial: Cummins — 6HC101 thru 6HC999;  
G.M. — 7HG101 thru 7HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	190011	AXLE ASSY (Inc. 1 thru 6, 8 thru 37, 40, 42 thru 80)	1	42	12H-15	FITTING, Spider Grease	2
1	774025	CONE, Inner Hub Brg.	2	43	-----	BRAKE — See Index	—
2	774024	CUP, Inner Hub Brg.	2	44	18C-1064	BOLT, Brake & Spindle to Housing	20
3	119469	PLUG, Hub Filler	2	45	104412	WASHER, Drum to Hub	24
4	121062	NUT, Wheel Stud	38	46	118805	DRUM, Brake	2
5	118925	HUB ASSY (Inc. 2, 34)	2	47	117445	CATCHER, Oil	2
6	120218	STUD, Wheel	38	48	125248	SEAL, Hub Oil	2
7	64D-12	NUT, Wheel	38	49	118940	CAM SHAFT — R.H.	1
7A	1520748	† WASHER, Wheel Nut	38	49A	118941	† CAM SHAFT — L.H.	1
8	1304048	CONE, Outer Hub Brg.	2	50	118381	BOLT, Drum to Hub	24
9	4C-820	BOLT, Hub to Gear	24	51	107735	WASHER, Cam Shaft Thrust	2
10	-----	‡ LOCKWIRE — 18 Gauge	—	52	-----	LOCKWIRE — 19 Ga.	—
11	4E-08	LKWSHR, Hub to Gear	24	53	119650	SPRING, Brake Shoe Return	2
12	122701	PLATE, Hub to Gear Ret.	12	54	25K-60124	O-RING, Cam Shaft	2
13	119218	HUB, Internal Gear	2	55	107739	BUSHING, Brake Spider	2
14	110559	NUT, Spindle	4	56	11E-135	RETAINER, Cam Shaft Grease	2
15	-----	PLANET CARRIER — See Index	—	57	107736	WASHER, Cam Shaft	2
16	106547	WASHER, Carrier to Hub	40	58	660516	RING, Bushing Ret.	2
17	117225	BOLT, Carrier to Hub	40	59	102189	BUSHING, Air Chamber Brk.	2
18	3E-09	LKWSHR, Puller Hole	6	60	10H-25	FITTING, Bracket Grease	2
19	1C-908	BOLT, Puller Hole	6	61	107013	** ADJUSTER, Slack — B.W. 226563	2
20	118788	CAP, Sun Gear Thrust (Inc. 25)	2	62	107010	WASHER, Slack Adj.	2
21	112278	WASHER, Thrust Cap	18	63	659764	RING, Adjuster Ret.	2
22	1C-720	BOLT, Thrust Cap	18	64	104204	BRACKET, Air Chamber — R.H. (Inc. 59)	1
23	10F-02	PLUG, Thrust Cap	2	64A	104203	‡ BRACKET, Air Chamber — L.H. (Inc. 59)	1
24	11F-12	PLUG, Thrust Cap	2	65	4E-10	LKWSHR, Brk. to Housing	4
25	118785	BUTTON, Thrust	2	66	120100	** CHAMBER, Air — B.W. 281353 (Inc. 66A)	2
26	118790	O-RING, Thrust Cap	2	66A	882444	**† DIAPHRAGM, Air Chamber	2
27	224066	RING, Sun Gear Ret.	2	67	1C-1056	BOLT, Bracket to Hsg.	4
28	118782	GEAR, Sun	2	68	104412	WASHER, Carrier to Hsg.	10
29	118791	O-RING, Planet Carrier	2	69	23C-1028	BOLT, Carrier to Hsg.	10
30	118786	LOCK, Spindle Nut	2	70	-----	DIFF. & CARRIER — See Index	—
31	119217	GEAR, Internal Ring	2	71	64D-10	NUT, Carrier to Hsg.	4
32	118785	BUTTON, Thrust	2	72	104412	WASHER, Carrier to Hsg.	4
33	118937	SHAFT, Axle (Inc. 32)	2	73	119141	DOWEL, Carrier to Stud	4
34	1304047	CUP, Outer Hub Brg.	2	74	110607	GASKET, Carrier to Hsg.	1
35	118935	HOUSING, Axle	1	75	104412	WASHER, Brake & Spindle to Housing	20
36	118781	SPINDLE	2	76	106998	NUT, Brake & Spindle to Housing	20
37	110941	SPACER, Air Chamber Bracket to Housing	4	77	119469	PLUG, Housing Drain	1
38	1C-612	* BOLT, Dust Cover	4	78	117336	STUD, Carrier to Hsg.	4
38A	1C-616	* BOLT, Dust Cover	4	79	11F-12	PLUG, Housing Filler	1
39	4E-06	* LKWSHR, Dust Cover	8	80	121214	BREATHER, Housing	1
40	118787	RING, Sun Gear Thrust	2				
41	119046	* COVER, Brake Dust	4				
41A	112695	*† PLATE, Dust Cover	2				

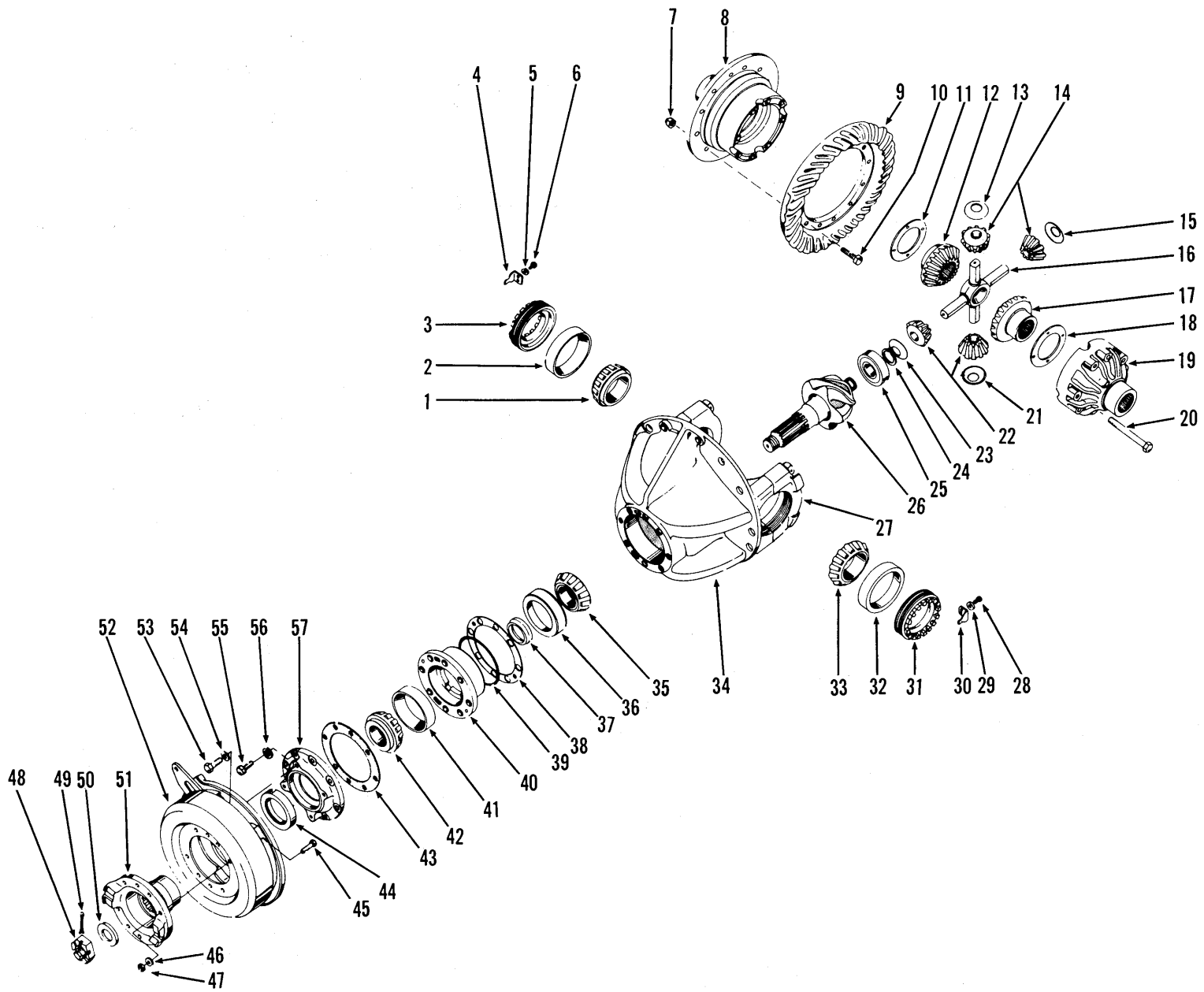
† Not Illustrated

‡ As Required

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

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

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



DIFFERENTIAL AND CARRIER ASSEMBLY — FRONT DRIVE

TS-5235-P



## DIFFERENTIAL AND CARRIER ASSEMBLY — FRONT DRIVE

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	815807	*DIFF. & CARRIER ASSY (Inc. 1 thru 57) — Serial Group "A" .....	1	32	675255	CUP, Diff. Brg. ....	1
B	815806	*DIFF. & CARRIER ASSY (Inc. 1 thru 57) — Serial Group "B" .....	1	33	742261	CONE, Diff. Brg. ....	1
1	742261	CONE, Diff. Brg. ....	1	34	815780	*CARRIER, Diff. (Inc. 27, 27A, 27B) .....	1
2	675255	CUP, Diff. Brg. ....	1	35	710034	CONE, Center Pinion Brg. ....	1
3	110539	NUT, Diff. Adj. ....	1	36	710035	CUP, Center Pinion Brg. ....	1
4	100941	LOCK, Diff. Adj. Nut .....	1	37	815377	KIT, Pinion Brg. Spacer .....	1
5	4E-06	LKWSHR, Nut Lock .....	1	38	110543	‡SHIM, Pinion Brg. Cage (.004) —	
6	3C-614	BOLT, Adj. Nut Lock .....	1	38A	125573	‡SHIM, Pinion Brg. Cage (.007) —	
7	110523	NUT, Ring Gear .....	12	38B	125574	‡SHIM, Pinion Brg. Cage (.010) —	
8	-----	§DIFF. CASE, Flange Half — See 61 .....	—	39	25K-40616	O-RING, Pinion Brg. Cage ....	1
9	-----	§GEAR, Ring — See 60 .....	—	40	111691	CAGE, Pinion Brg. (Inc. 36, 41) .....	1
10	110522	BOLT, Ring Gear .....	12	41	774198	CUP, Outer Pinion Brg. ....	1
11	119139	WASHER, Side Gear Thrust ..	1	42	774197	CONE, Outer Pinion Brg. ....	1
12	110528	GEAR, Diff. Side .....	1	43	110541	GASKET, Oil Seal Ret. ....	1
13	123382	WASHER, Diff. Pinion Thrust	1	44	111750	SEAL, Pinion Oil .....	1
14	815747	KIT, Diff. Pinion (Inc. 22) ....	1	45	104471	BOLT, Drum to Flange .....	8
15	123382	WASHER, Diff. Pinion Thrust	1	46	4E-07	LKWSHR, Drum to Flange ....	8
16	110529	SPIDER, Differential .....	1	47	62D-07	NUT, Drum to Flange .....	8
17	110528	GEAR, Diff. Side .....	1	48	107977	NUT, Pinion Shaft .....	1
18	119139	WASHER, Side Gear Thrust ..	1	49	1F-748	COTTER, Pinion Shaft Nut ....	1
19	-----	§DIFF. CASE, Plain Half — See 61 .....	—	50	107978	WASHER, Pinion Shaft .....	1
20	110532	BOLT, Diff. Case .....	8	51	116629	FLANGE, Companion .....	1
21	123382	WASHER, Diff. Pinion Thrust	1	52	-----	BRAKE, Parking — See Index —	
22	-----	§PINION, Diff. — See 14 .....	—	52A	107481	†DRUM, Brake .....	1
23	123382	WASHER, Diff. Pinion Thrust	1	53	1C-924	BOLT, Brake Mtg. ....	4
24	224083	RING, Inner Pinion Ret. ....	1	54	4E-09	LKWSHR, Brake Mtg. ....	4
25	774199	BEARING, Inner Pinion .....	1	55	1C-1036	BOLT, Oil Seal Ret. ....	8
26	-----	§PINION — See 60 .....	—	56	4E-10	LKWSHR, Oil Seal Ret. ....	8
27	-----	§CAP, Diff. — See 34 .....	—	57	111695	RETAINER, Pinion Oil Seal ....	1
27A	110536	†BOLT, Carrier Cap .....	4	58	-----	†DIFF. ASSY (Inc. 7 thru 23, 26)	
27B	111658	†WASHER, Carrier Cap .....	4	58A	119437	Serial Group "A" .....	1
28	3C-614	BOLT, Adj. Nut Lock .....	1	58B	119446	Serial Group "B" .....	1
29	4E-06	LKWSHR, Adj. Nut Lock .....	1	59	119431	†DIFF. BODY SUB-ASSY (Inc. 8, 11 thru 23) .....	1
30	100941	LOCK, Diff. Adj. Nut .....	1	60	-----	†GEAR & PINION (Inc. 9, 26)	
31	110539	NUT, Diff. Adj. ....	1	60A	114201	Serial Group "A" .....	1
				60B	119000	Serial Group "B" .....	1
				61	815786	†DIFF. CASE KIT (Inc. 8, 13, 15, 19 thru 21, 23) .....	1

†Not Illustrated

‡As Required

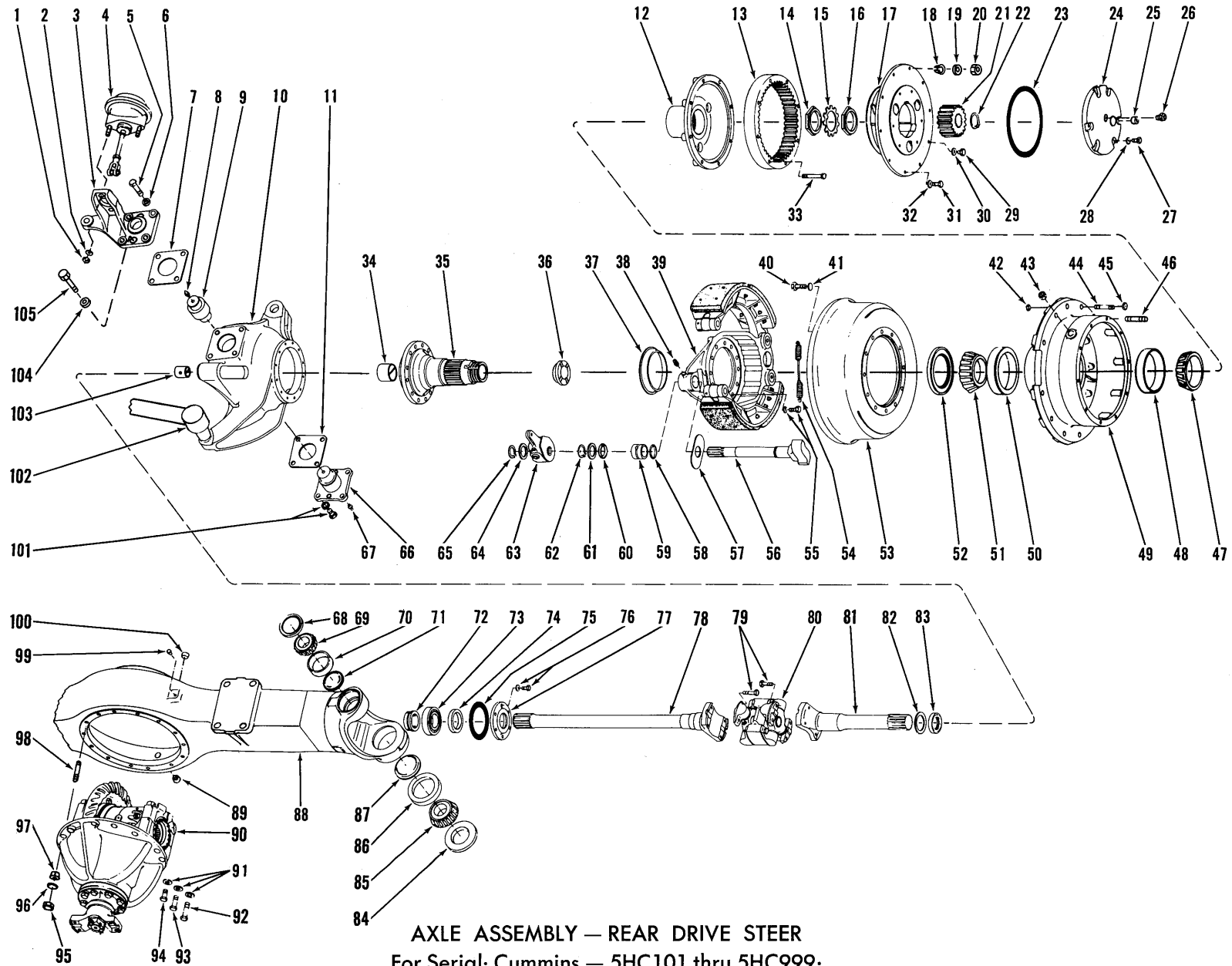
§Not Sold Separately

\*NOTE: 815806, 815807 and 815780 Kits also include 4 #117336 Stud, 4 #119141 Dowel and 4 #64D-10 Nut for mounting Differential and Carrier Assembly to Axle Housing.

Serial Group "A": Cummins — 5HC101 thru 5HC999; G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999.

Serial Group "B": Cummins — 6HC101 thru 6HC999; G.M. — 7HG101 thru 7HG999.

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



**AXLE ASSEMBLY — REAR DRIVE STEER**  
 For Serial: Cummins — 5HC101 thru 5HC999;  
 G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999

**AXLE ASSEMBLY — REAR DRIVE STEER**  
**For Serial: Cummins — 5HC101 thru 5HC999;**  
**G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	131508	AXLE ASSY (Inc. 1 thru 105) ..	1	21	106232	GEAR, Sun .....	2
1	8D-10	NUT, Air Chamber to Brk. ....	4	22	224023	RING, Sun Gear Ret. ....	2
2	4E-10	LKWSHR, Air Chamber Mtg. ...	4	23	113292	O-RING, Thrust Cap .....	2
3		BRACKET, Air Chamber		24	815564	KIT, Thrust Cap (Inc. 23, 25, 28) .....	2
3A	111634	LEFT HAND .....	1	25	11F-12	PLUG, Thrust Cap .....	2
3B	110962	†RIGHT HAND .....	1	26	111805	VALVE, Cap Relief .....	2
4	110203	*CHAMBER, Air (Inc. 4A) B.W. #227548 .....	2	27	1C-720	BOLT, Thrust Cap .....	12
4A	952109	†DIAPHRAGM, Air Chamber ..	2	28	112278	LKWSHR, Thrust Cap .....	12
5	23C-1232	BOLT, Air Chamber Brk. ....	8	29		BOLT, Planet Puller Hole	
6	4E-12	LKWSHR, Chamber Mtg. ....	8	29A	1C-808	See Note "A" .....	4
7		SHIM, Air Chamber Brk.		29B	1C-908	See Note "B" .....	6
7A	106316	‡.010" .....	—	30		LKWSHR, Puller Hole	
7B	106317	‡.007" .....	—	30A	3E-08	See Note "A" .....	4
7C	106318	‡.004" .....	—	30B	3E-09	See Note "B" .....	6
8	10H-25	FITTING, Trunnion Grease ....	2	31		BOLT, Carrier to Hub	
9	110906	TRUNNION, Strg. — Upper ..	2	31A	100970	See Note "A" .....	10
10		SUPPORT, Spindle		31B	117225	See Note "B" .....	40
10A	116913	LEFT HAND (Inc. 103) .....	1	32		WASHER, Carrier to Hub	
10B	116912	†RIGHT HAND (Inc. 103) .....	1	32A	106762	See Note "A" .....	10
11		SHIM, Air Chamber Brk.		32B	106547	See Note "B" .....	40
11A	106316	‡.010" .....	—	33	110624	BOLT, Gear to Hub .....	16
11B	106317	‡.007" .....	—	34	110890	BUSHING, Spindle .....	2
11C	106318	‡.004" .....	—	35	119427	SPINDLE ASSY (Inc. 34) .....	2
12	110553	HUB, Internal Gear .....	2	36	128315	RING, Sun Gear Thrust .....	2
13	110622	GEAR, Internal .....	2	37	110942	CATCHER, Oil .....	2
14	110559	NUT, Inner Spindle .....	2	38	12H-15	FITTING, Spider Grease .....	2
15	110560	LOCK, Spindle Nut .....	2	39	—	BRAKE — See Index .....	—
16	110559	NUT, Outer Spindle .....	2	40		BOLT, Drum to Hub	
17	—	PLANET CARRIER — See Index .....	—	40A	107256	Serial Group "A" .....	24
18	112287	DOWEL, Carrier to Hub — See Note "A" .....	10	40B	118381	Serial Group "B" .....	24
19	106762	WASHER, Carrier to Hub — See Note "A" .....	10	41	104412	WASHER, Drum to Hub .....	24
20	64D-08	NUT, Carrier to Hub — See Note "A" .....	10	42	121062	NUT, Wheel Stud — See Note "C" .....	20
				43	119469	PLUG, Hub Filler .....	2
				44	103445	STUD, Wheel .....	20

†Not Illustrated

‡As Required

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

NOTE "A": For Hub and Planet equipped with Stud and Taper Dowel feature.

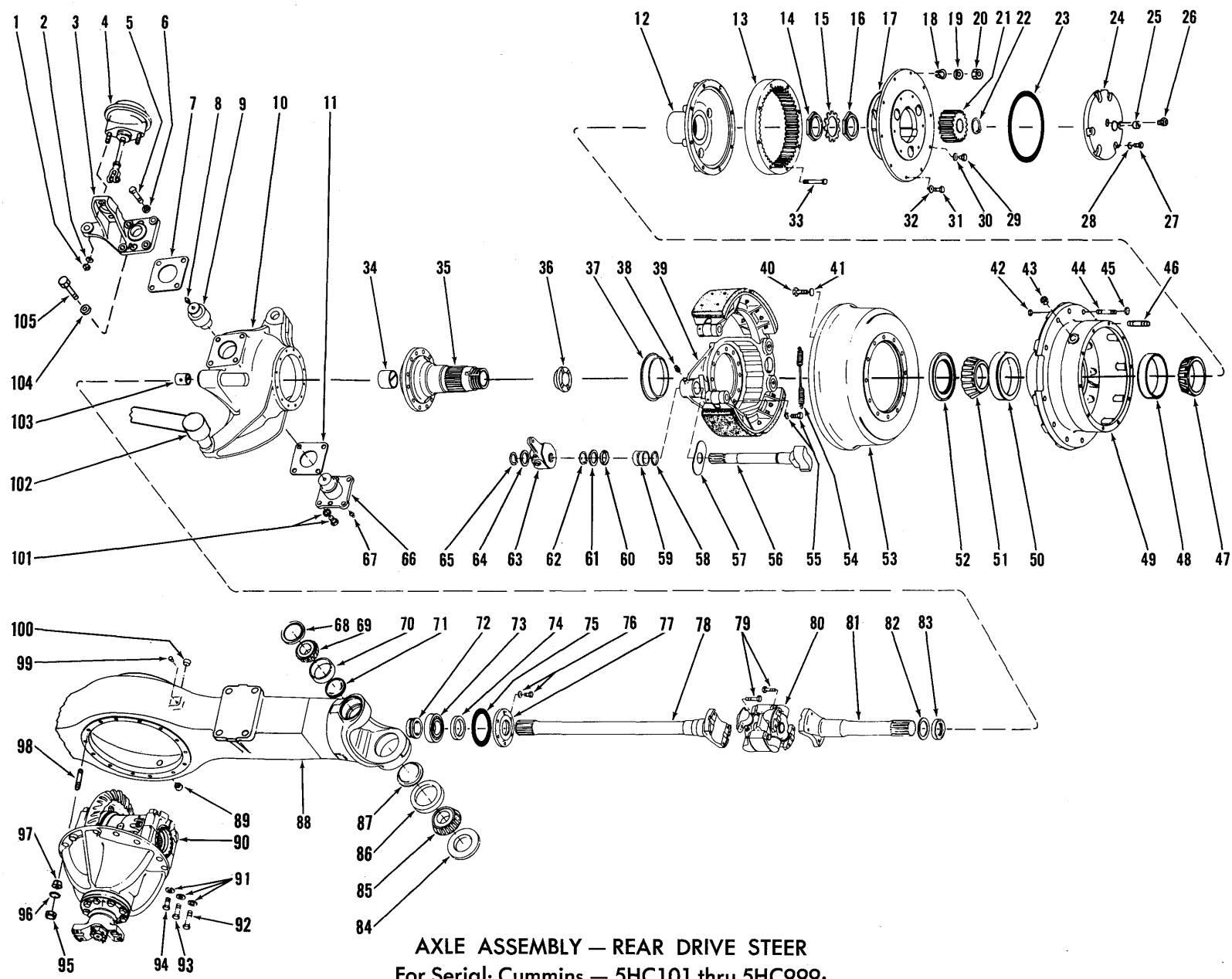
NOTE "B": For Hub and Planet equipped with Bolt and Washer feature only.

NOTE "C": When replacing 121062 Wheel Stud Nut you must replace as a complete set and torque to 200 to 250 ft. lbs. Once conversion has been made, individual replacements can be made.

Serial Group "A": G.M. — 5HG101 thru 5HG130, 5HG137, 5HG139, 5HG140, 5HG141, 5HG143 thru 5HG146 and 5HG160.

Serial Group "B": Cummins — 5HC101 thru 5HC999; G.M. — 5HG131 thru 5HG136, 5HG138, 5HG142, 5HG147 thru 5HG159, 5HG161 thru 5HG999, 6HG101 thru 6HG999.

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



**AXLE ASSEMBLY — REAR DRIVE STEER**  
 For Serial: Cummins — 5HC101 thru 5HC999;  
 G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999

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PM 2419

TS-5041-P

## AXLE ASSEMBLY – REAR DRIVE STEER (Continued)

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
45	103522	NUT, Wheel	20	79	24C-836	BOLT, U-Joint to Shafts	16
46	116419	STUD, Carrier to Hub – See Note "A"	10	80	112176	U-JOINT ASSY (Inc. 80A, 80B, 80C, 80D, 80E)	2
47	742263	CONE, Outer Hub Brg.	2	80A	96011	†SPIDER & BEARING (Inc. 80D, 80E)	4
48	742262	CUP, Outer Hub Brg.	2	80B	944718	†COUPLING PLATE	2
49		**HUB ASSY (Inc. 40, 41, 48, 50)		80C	18C-834	+BOLT, Spider & Bearing to Coupling Plate	16
49A	815754	See Note "A"	2	80D	1300452	†FITTING, Spider Grease	4
49B	815755	See Note "B"	2	81	110960	SHAFT, Wheel	2
50	774024	CUP, Inner Hub Brg.	2	82	110899	WASHER, Shaft Oil Seal	2
51	774025	CONE, Inner Hub Brg.	2	83	110898	SEAL, Wheel Shaft Oil	2
52	125248	SEAL, Hub Oil	2	84	112049	SEAL, Lower Trunnion Brg.	2
53	112662	DRUM, Brake	2	85	784295	CONE, Lower Trunnion Brg.	2
54	119650	SPRING, Brake Shoe Return	2	86	784296	CUP, Lower Trunnion Brg.	2
55	110958	BOLT, Spindle & Brake Mounting	24	87	108665	RETAINER, Trunnion Oil	2
55A	104412	WASHER, Spindle & Brake Mounting	24	88	116918	HOUSING, Axle	1
56		CAM SHAFT		89	119469	PLUG, Housing Drain	1
56A	110965	LEFT HAND	1	90	----	DIFF. & CARRIER ASSY – See Index	–
56B	110964	RIGHT HAND	1	90A	110607	†GASKET, Differential & Carrier to Housing	1
57	107735	WASHER, Shaft Thrust	2	91	104412	WASHER, Carrier to Hsg.	14
58	25K-60124	O-RING, Shaft Thrust	2	92	110894	BOLT, Carrier to Housing – Serial Group "A"	2
59	107739	BUSHING, Brake Spider	2	93	110894	BOLT, Carrier to Housing – Serial Group "A"	2
60	11E-135	RETAINER, Shaft Grease	2	94	23C-1028	BOLT, Carrier to Hsg.	10
61	107736	WASHER, Cam Shaft Ret.	2	95	64D-10	NUT, Carrier to Housing – Serial Group "B"	4
62	660516	RING, Cam Shaft Ret.	2	96	104412	WASHER, Carrier to Housing – Serial Group "B"	4
63	107247	*ADJUSTER, Slack – B.W. #222485	2	97	119141	DOWEL, Carrier to Housing – Serial Group "B"	4
64	107010	WASHER, Slack Adj. Ret.	2	98	117336	STUD, Carrier to Housing – Serial Group "B"	4
65	659764	RING, Slack Adj. Ret.	2	99	121214	BREATHER, Axle Hsg.	1
66	110905	TRUNNION, Steering – Lower	2	99A	12F-204	†PLUG, Axle Hsg. Expansion	1
67	10H-25	FITTING, Trunnion Grease	2	100	11F-12	PLUG, Housing Filler	1
68	112050	SEAL, Upper Trunnion Oil	2	101	23C-1232	BOLT, Lower Trunnion	8
69	856071	CONE, Upper Trunnion Brg.	2	101A	4E-12	LKWSHR, Lower Trunnion	8
70	662738	CUP, Upper Trunnion Brg.	2	102	----	TIE ROD – See Index	–
71	106291	RETAINER, Upper Trunnion Oil	2	103	102189	BUSHING, Spindle Support	2
72	109931	SLEEVE, Axle Shaft	2	104	4E-10	LKWSHR, Upper & Lower Trunnion Puller	8
73	214596	BEARING, Axle Shaft	2	105	1C-1008	BOLT, Upper & Lower Trunnion Puller	8
74	110897	SEAL, Axle Shaft Oil	2				
75	----	‡Use Permatex #2	–				
76	1C-620	BOLT, Bearing Retainer	12				
76A	4E-06	LKWSHR, Bearing Ret.	12				
77	119366	RETAINER, Axle Shaft Brg.	2				
78	110959	SHAFT, Axle	2				

†Not Illustrated

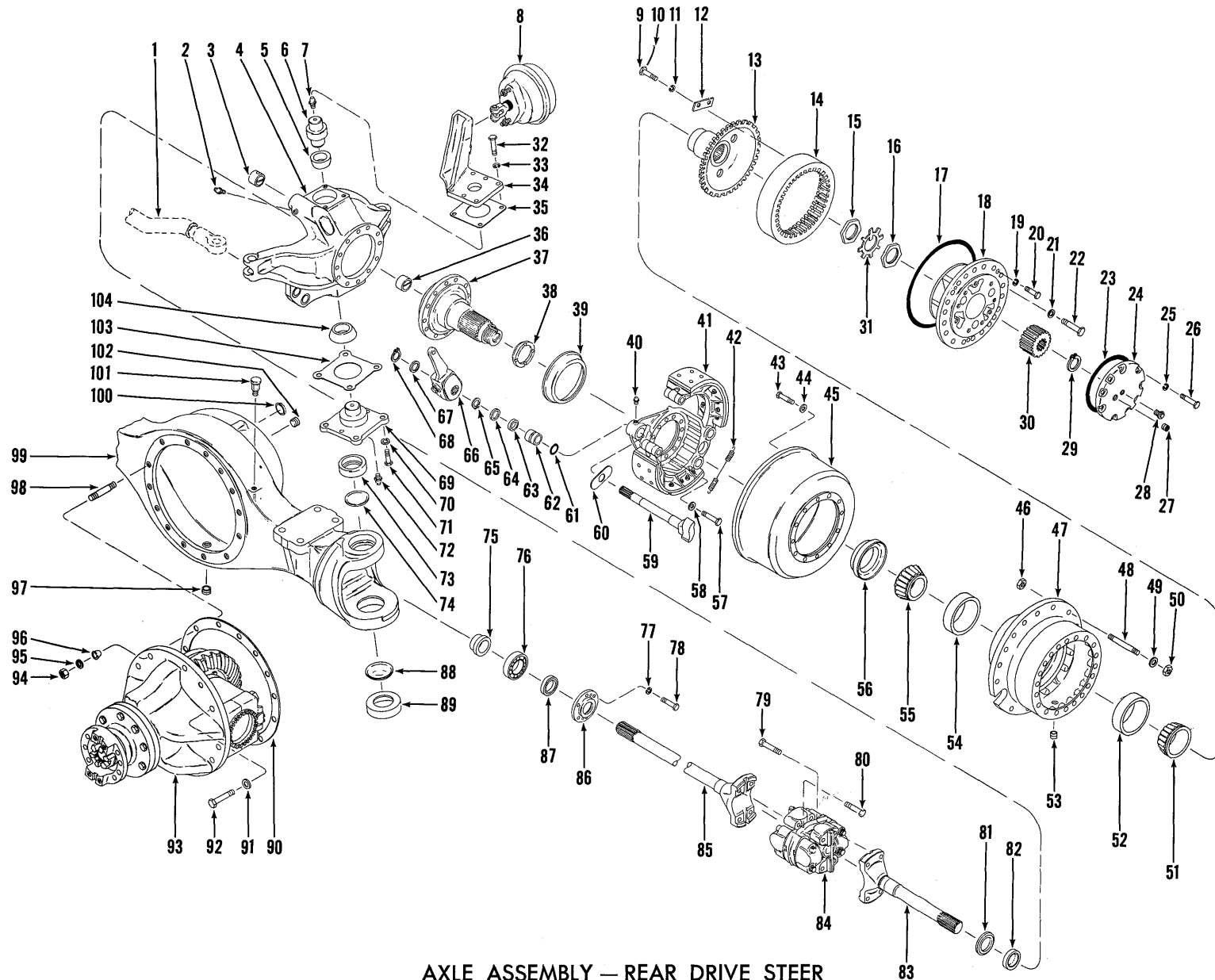
‡As Required

Serial Group "A": Cummins – 5HC101 thru 5HC110; G.M. – 5HG101 thru 5HG999, 6HG101 thru 6HG171, 6HG183, 6HG184, 6HG186.

Serial Group "B": Cummins – 5HC111 thru 5HC999; G.M. – 6HG172 thru 6HG182, 6HG185, 6HG187 thru 6HG999.

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

\*\*NOTE: 815754 and 815755 Kits also include 12 #118381 Brake Drum Bolts that must be used to replace existing Brake Drum Bolts.



AXLE ASSEMBLY — REAR DRIVE STEER  
For Serial: Cummins — 6HC101 thru 6HC999;  
G.M. — 7HG101 thru 7HG999

TS-7843-P

## AXLE ASSEMBLY — REAR DRIVE STEER

For Serial: Cummins — 6HC101 thru 6HC999;  
G.M. — 7HG101 thru 7HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	190009	AXLE ASSY (Inc. 1 thru 48, 51 thru 104) .....	1	26	1C-720	BOLT, Thrust Cap to Planet Carrier .....	18
1	-----	TIE ROD — See Index .....	—	27	11F-12	PLUG, Thrust Cap .....	2
2	10H-25	FITTING, Bushing Grease .....	2	28	111805	VALVE, Thrust Cap Relief .....	2
3	102189	BUSHING, Spindle Support .....	2	29	224023	RING, Sun Gear Ret. ....	2
4	118986	SUPPORT, Spindle — L.H. (Inc. 3) .....	1	30	118947	SUN GEAR .....	2
4A	118985	†SUPPORT, Spindle — R.H. (Inc. 3) .....	1	31	110560	LOCK, Spindle Nut .....	2
5	815837	KIT, Cup & Cone (Inc. 73) .....	2	32	23C-1232	BOLT, Brk. to Support .....	8
6	118995	*TRUNNION, Strg. — Upper .....	2	33	4E-12	LKWSHR, Brk. to Support .....	8
7	10H-25	FITTING, Trunnion Grease .....	2	33A	1C-1008	†BOLT, Brk. Puller Hole .....	4
8	118543	**AIR CHAMBER — B.W. #280261 (Inc. 8A) .....	2	33B	4E-10	†LKWSHR, Brk. Puller Hole .....	4
8A	882444	†**DIAPHRAGM, Air Chamber .....	2	34	118538	BRACKET, Air Chamber — L.H. ....	1
9	4C-820	BOLT, Hub to Gear .....	24	34A	118537	†BRACKET, Air Chamber — R.H. ....	1
10	-----	‡LOCKWIRE — 18 Gauge .....	—	35	106316	‡SHIM, Brk. Mounting (.004) ..	—
11	4E-08	LKWSHR, Hub to Gear .....	24	35A	106317	‡SHIM, Brk. Mounting (.007) ..	—
12	122701	PLATE, Hub to Gear Ret. ....	12	35B	106318	‡SHIM, Brk. Mounting (.010) ..	—
13	119218	HUB, Internal Gear .....	2	36	110890	BUSHING, Spindle .....	2
14	119217	GEAR, Internal Ring .....	2	37	119427	SPINDLE ASSY (Inc. 36) .....	2
15	110559	NUT, Inner Spindle .....	2	38	128315	RING, Sun Gear Thrust .....	2
16	110559	NUT, Outer Spindle .....	2	39	110942	CATCHER, Oil .....	2
17	118791	O-RING, Planet Carrier .....	2	40	12H-15	FITTING, Spider Grease .....	2
18	-----	PLANET CARRIER — See Index .....	—	41	-----	BRAKE, Rear — See Index .....	—
19	3E-09	LKWSHR, Planet Puller .....	6	42	119650	SPRING, Brake Shoe Return ..	2
20	1C-908	BOLT, Planet Puller Hole .....	6	43	118381	BOLT, Brake Drum to Hub .....	24
21	106547	WASHER, Carrier to Hub .....	40	44	104412	WASHER, Drum to Hub .....	24
22	117225	BOLT, Carrier to Hub .....	40	45	112662	DRUM, Brake .....	2
23	118790	O-RING, Thrust Cap .....	2	46	121062	***NUT, Wheel Stud .....	38
24	815836	KIT, Sun Gear Thrust Cap (Inc. 23, 25, 27, 28) .....	2	47	118943	HUB (Inc. 52, 54) .....	2
25	112278	LKWSHR, Thrust Cap to Planet Carrier .....	18	48	120218	STUD, Wheel .....	38
				49	1520748	WASHER, Wheel Nut .....	38
				50	64D-12	NUT, Wheel .....	38
				51	1304048	CONE, Outer Hub Brg. ....	2

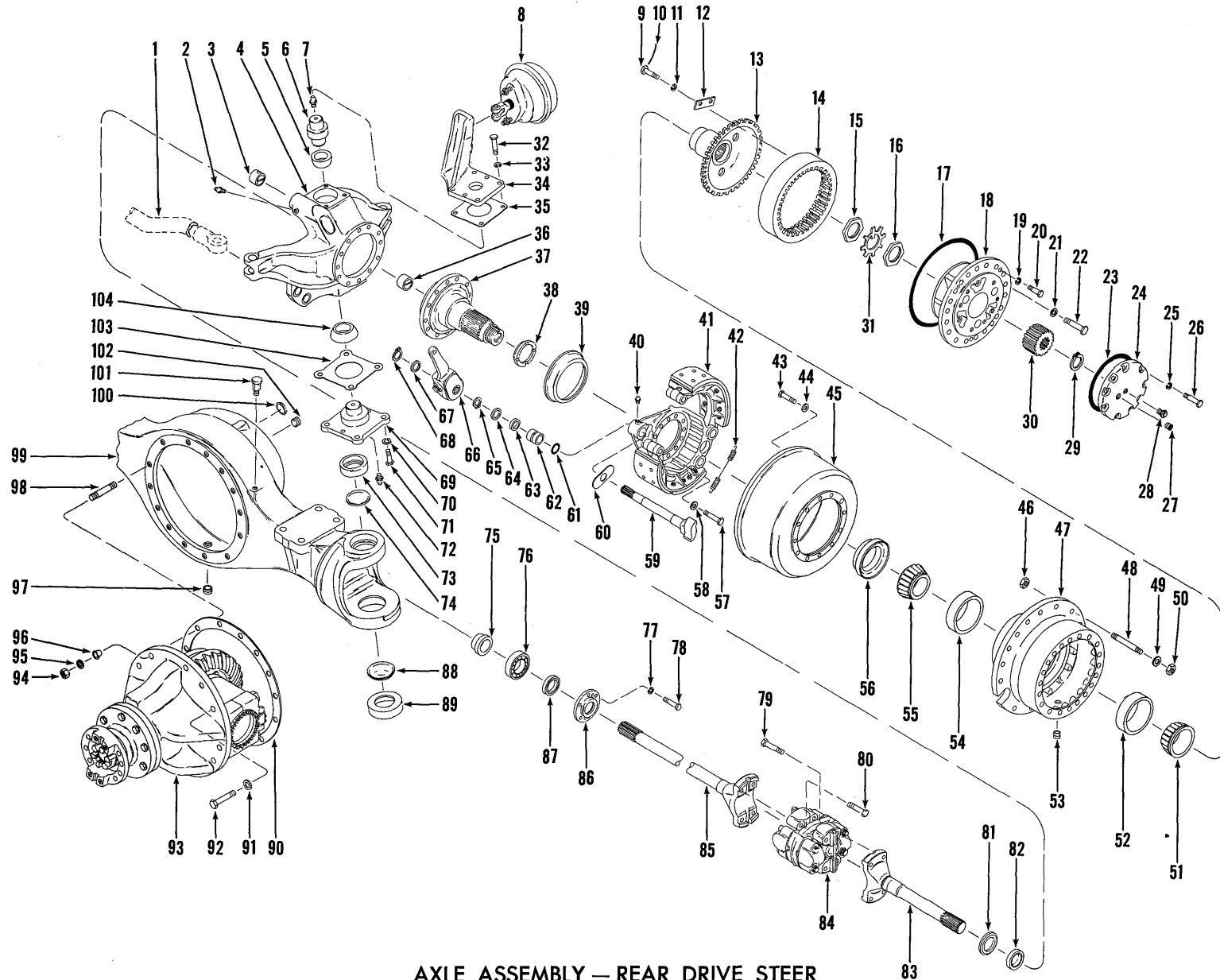
†Not Illustrated  
‡As Required

\*NOTE: When replacement is necessary for the Upper or Lower Steering Trunnion their respective Cone and Cup Kit (Upper 815837, Lower 815838) must also be replaced at the same time. Each Kit 815837 or 815838 consists of one Trunnion Cone and one Housing Cup.

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

\*\*\*NOTE: When replacing 121062 Wheel Stud Nut you must replace as a complete set and torque to 200 to 250 ft. lbs. Once conversion has been made, individual replacements can be made.

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



**AXLE ASSEMBLY — REAR DRIVE STEER**  
 For Serial: Cummins — 6HC101 thru 6HC999;  
 G.M. — 7HG101 thru 7HG999

TS-7843-P



## AXLE ASSEMBLY — REAR DRIVE STEER (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
52	1304047	CUP, Outer Hub Brg. ....	2	78B	4E-06	†LKWSHR, Ret. Puller Hole ...	4
53	119469	PLUG, Hub Drain or Fill .....	2	79	119428	BOLT, U-Joint to Wheel Shaft	8
54	774024	CUP, Inner Hub Brg. ....	2	80	119428	BOLT, U-Joint to Axle Shaft ..	8
55	774025	CONE, Inner Hub Brg. ....	2	81	110899	WASHER, Wheel Shaft Oil Seal .....	2
56	125248	SEAL, Hub Oil .....	2	82	110898	SEAL, Wheel Shaft Oil .....	2
57	110958	BOLT, Brake & Spindle to Support .....	24	83	118945	SHAFT, Wheel .....	2
58	104412	WASHER, Brake & Spindle to Support .....	24	84	119360	U-JOINT ASSY (Inc. 84A, 84B, 84C) .....	2
59	110965	CAM SHAFT, Brake — L.H. ....	1	84A	946640	CROSS & BEARING ASSY ....	2
59A	110964	†CAM SHAFT, Brake — R.H. ....	1	84B	119428	BOLT, Cross & Bearing Mtg. ...	16
60	107735	WASHER, Cam Shaft Thrust ..	2	84C	10H-35	FITTING, Cross & Bearing Grease .....	2
61	25K-60124	O-RING, Cam Shaft .....	2	85	119365	SHAFT, Axle .....	2
62	107739	BUSHING, Brake Spider .....	2	86	119366	RETAINER, Axle Shaft Brg. ...	2
63	11E-135	RETAINER, Cam Shaft Grease	2	87	110897	SEAL, Axle Shaft Oil .....	2
64	107736	WASHER, Cam Shaft Ret. ....	2	88	12F-300	PLUG, Hsg. Expansion — Lower .....	2
65	660516	RING, Cam Shaft Ret. ....	2	89	815838	KIT, Cup & Cone (Inc. 104) ..	2
66	118542	ADJUSTER, Slack — L.H. — B.W. #278201 .....	1	90	110607	GASKET, Diff. & Carrier .....	1
66A	118541	**†ADJUSTER, Slack — R.H. — B.W. #278202 .....	1	91	104412	WASHER, Carrier to Hsg. ....	10
67	107010	WASHER, Slack Adjuster Ret.	2	92	23C-1028	BOLT, Carrier to Hsg. ....	10
68	659764	RING, Slack Adjuster Ret. ....	2	93	-----	DIFF. & CARRIER ASSY — See Index .....	—
69	118997	*TRUNNION, Steering — Lower .....	2	94	64D-10	NUT, Carrier to Hsg. ....	4
70	4E-12	LKWSHR, Trunnion to Support	8	95	104412	WASHER, Carrier to Hsg. ....	4
71	23C-1232	BOLT, Trunnion to Support ..	8	96	119141	DOWEL, Carrier to Stud .....	4
71A	1C-1008	†BOLT, Trunnion Puller Hole ..	4	97	119469	PLUG, Housing Drain .....	1
71B	4E-10	†LKWSHR, Trunnion Puller .....	4	98	117336	STUD, Carrier to Hsg. ....	4
72	10H-25	FITTING, Trunnion Grease ....	2	99	118989	HOUSING, Axle (Inc. 73, 74, 88, 89) .....	1
73	815837	KIT, Cup & Cone (Inc. 5) ....	2	100	12F-204	PLUG, Hsg. Expansion .....	1
74	12F-208	PLUG, Hsg. Expansion — Upper .....	2	101	121214	BREATHER, Axle Hsg. ....	1
75	109931	SLEEVE, Axle Shaft .....	2	102	11F-12	PLUG, Housing Filler .....	1
76	214596	BEARING, Axle Shaft .....	2	103	118991	‡SHIM, Trunnion Mtg. (.004) ..	—
77	4E-06	LKWSHR, Bearing Ret. ....	12	103A	118992	‡SHIM, Trunnion Mtg. (.007) ..	—
78	1C-620	BOLT, Bearing Retainer .....	12	103B	118993	‡SHIM, Trunnion Mtg. (.010) ..	—
78A	1C-608	†BOLT, Ret. Puller Hole .....	4	104	815838	KIT, Cup & Cone (Inc. 89) ....	2

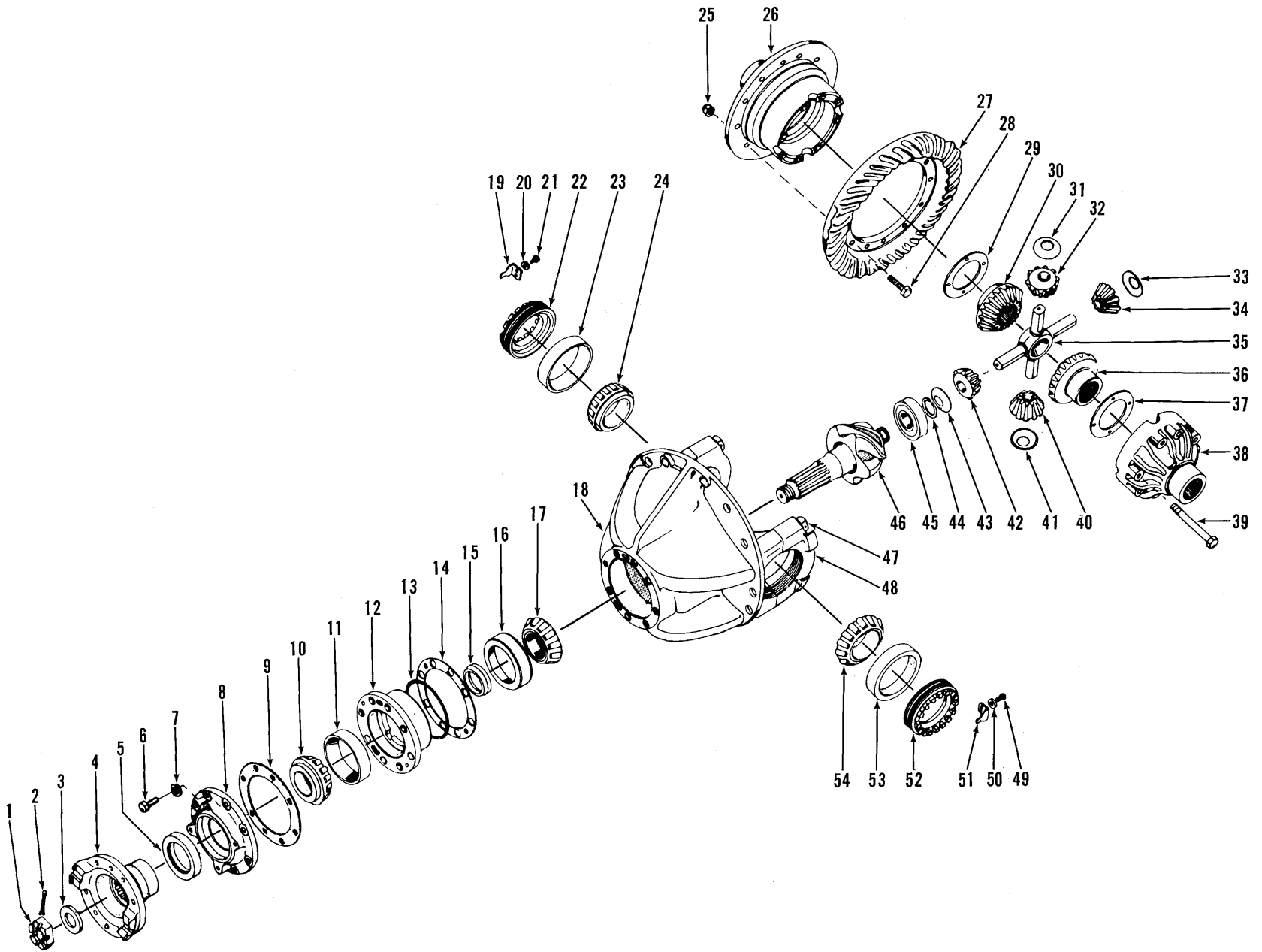
†Not Illustrated

‡As Required

\*NOTE: When replacement is necessary for the Upper or Lower Steering Trunnion their respective Cone and Cup Kit (Upper 815837, Lower 815838) must also be replaced at the same time. Each Kit 815837 or 815838 consists of one Trunnion Cone and one Housing Cup.

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

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



DIFFERENTIAL AND CARRIER ASSEMBLY — REAR DRIVE STEER

TS-4989-P

## DIFFERENTIAL AND CARRIER ASSEMBLY — REAR DRIVE STEER

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	815804	*DIFF. & CARRIER ASSY (Inc. 1 thru 54) — Serial Group "A" .....	1	30	111313	GEAR, Diff. Side .....	1
B	815820	*DIFF. & CARRIER ASSY (Inc. 1 thru 54) — Serial Group "B" .....	1	31	123382	WASHER, Diff. Pinion Thrust..	1
1	107977	NUT, Pinion Shaft .....	1	32	815747	PINION KIT, Diff. (Inc. 34, 40, 42) .....	1
2	1F-748	COTTER, Pinion Shaft Nut .....	1	33	123382	WASHER, Diff. Pinion Thrust..	1
3	107978	WASHER, Pinion Shaft Nut..	1	34	-----	§ PINION, Diff. — See 32 .....	—
4	116629	FLANGE, Companion .....	1	35	110529	SPIDER, Diff. ....	1
5	111750	SEAL, Pinion Oil .....	1	36	111313	GEAR, Diff. Side .....	1
6	1C-1036	BOLT, Oil Seal Ret. ....	8	37	119139	WASHER, Side Gear Thrust..	1
7	4E-10	LKWSHR, Oil Seal Ret. ....	8	38	-----	§ DIFF. CASE — Plain Half — See 58 .....	—
8	119890	**RETAINER, Pinion Oil Seal ...	1	39	110532	BOLT, Diff. Case .....	8
9	110541	GASKET, Oil Seal Ret. ....	1	40	-----	§ PINION, Diff. — See 32 .....	—
10	774197	CONE, Pinion Brg. — Outer ..	1	41	123382	WASHER, Diff. Pinion Thrust ..	1
11	774198	CUP, Pinion Brg. — Outer .....	1	42	-----	§ PINION, Diff. — See 32 .....	—
12	111691	**CAGE, Pinion Brg. (Inc. 11, 16)	1	43	123382	WASHER, Diff. Pinion Thrust..	1
13	25K-40616	O-RING, Pinion Brg. Cage .....	1	44	224083	RING, Pinion Brg. Ret. — Inner .....	1
14	110543	‡SHIM, Pinion Brg. Cage (.004) —	—	45	774199	BEARING, Pinion — Inner .....	1
14A	125573	‡SHIM, Pinion Brg. Cage (.007) —	—	46	-----	PINION — See 57 .....	—
14B	125574	‡SHIM, Pinion Brg. Cage (.010) —	—	47	110536	BOLT, Diff. Carrier Cap .....	4
15	815377	KIT, Pinion Brg. Spacer .....	1	47A	111658	†WASHER, Diff. Carrier Cap ..	4
16	710035	CUP, Pinion Brg. — Center .....	1	48	-----	§ CAP, Carrier — See 18 .....	—
17	710034	CONE, Pinion Brg. — Center..	1	49	3C-614	BOLT, Diff. Adj. Nut Lock .....	1
18	815780	*CARRIER, Diff. (Inc. 47, 47A, 48) .....	1	50	4E-06	LKWSHR, Diff. Adj. Nut Lock	1
19	100941	LOCK, Diff. Adj. Nut .....	1	51	100941	LOCK, Diff. Adj. Nut .....	1
20	4E-06	LKWSHR, Diff. Adj. Nut Lock	1	52	110539	NUT, Diff. Adj. ....	1
21	3C-614	BOLT, Diff. Adj. Nut Lock .....	1	53	675255	CUP, Diff. Brg. ....	1
22	110539	NUT, Diff. Adj. ....	1	54	742261	CONE, Diff. Brg. ....	1
23	675255	CUP, Diff. Brg. ....	1	55	-----	† DIFF. ASSY (Inc. 25 thru 43, 46) Serial Group "A" .....	1
24	742261	CONE, Diff. Brg. ....	1	55A	119443	Serial Group "A" .....	1
25	110523	NUT, Ring Gear .....	12	55B	119447	Serial Group "B" .....	1
26	-----	§ DIFF. CASE — Flange Half — See 58 .....	—	56	119435	† DIFF. BODY SUB-ASSY (Inc. 26, 29 thru 43) .....	1
27	-----	§ RING GEAR — See 57 .....	—	57	-----	† GEAR & PINION (Inc. 27, 46) Serial Group "A" .....	1
28	110522	BOLT, Ring Gear .....	12	57A	116901	Serial Group "A" .....	1
29	119139	WASHER, Side Gear Thrust..	1	57B	118982	Serial Group "B" .....	1
				58	815786	† DIFF. CASE KIT (Inc. 26, 29, 31, 33, 37, 38, 39, 41, 43)	1

‡As Required

§Not Sold Separately

†Not Illustrated

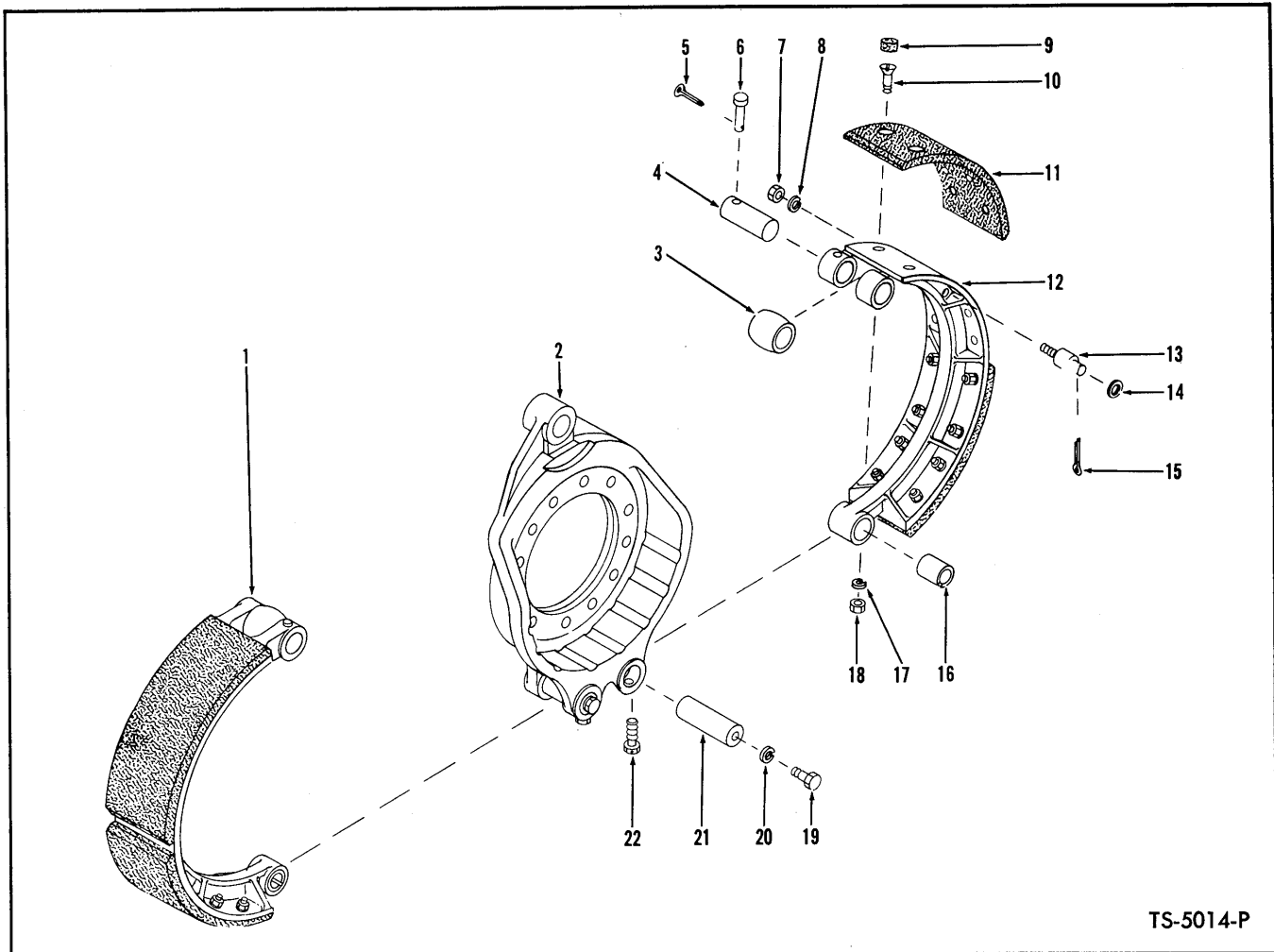
\*NOTE: 815804, 815820 and 815780 Kits also include 4 #117336 Stud, 4 #119141 Dowel and 4 #64D-10 Nut for mounting Diff. & Carrier Assy. to Axle Housing.

\*\*NOTE: When replacing 111691 Cage Assy. one (1) 119890 Pinion Oil Seal Retainer must also be used.

Serial Group "A": Cummins — 5HC101 thru 5HC999; G.M. — 5HG101 thru 5HG999; 6HG101 thru 6HG999.

Serial Group "B": Cummins — 6HC101 thru 6HC999; G.M. — 7HG101 thru 7HG999.

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



## BRAKE ASSEMBLY — FRONT AND REAR

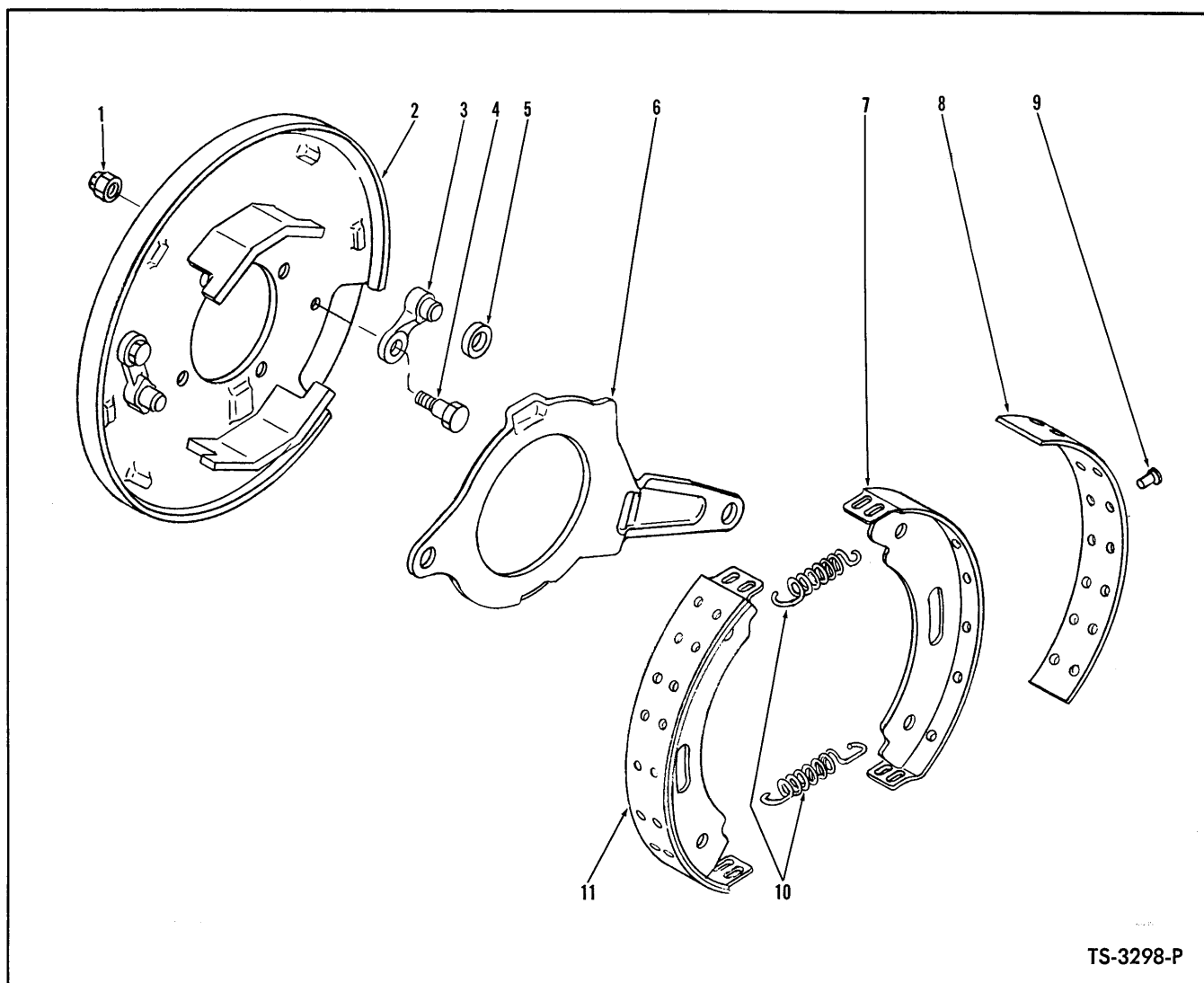
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	119619	*BRAKE ASSY, Front (Inc. 1, 2A, 3 thru 13, 16 thru 22)	2	7	62D-06	NUT, Spring Anchor Pin	2
B	120266	**BRAKE ASSY, Front (Inc. 1, 2B, 3 thru 13, 16 thru 22)	2	8	4E-06	LKWSHR, Anchor Pin	2
C	114298	BRAKE ASSY, Rear (Inc. 1, 2C, 3 thru 13, 16 thru 22)	2	9	113249	PLUG, Brake Lining	32
<b>NOTE: 2 Brake Assemblies used on each axle — Quantities listed below are for 1 Brake Assembly.</b>				10	107706	SCREW, Lining to Shoe	32
1	114299	SHOE, Brake (Inc. 3 thru 6, 9 thru 12, 16, 17, 18)	2	11		LINING, Brake Shoe	
2		SPIDER, Brake		11A	114301	STANDARD	4
2A	112410	*Front Brake	1	11B	114302	OVERSIZE (1/8")	4
2B	118767	**Front Brake	1	12		§SHOE, Brake — See 1	—
2C	112408	Rear Brake	1	13	112216	PIN, Spring Anchor	2
3		ROLLER, Brake Cam—See 4..	2	14	619027	WASHER, Spring Anchor	2
4	840581	PIN, Brake (Inc. 3)	2	15	1F-412	COTTER, Anchor Pin	2
5	1F-308	COTTER, Lock Pin	2	16	112212	BUSHING, Brake Shoe	2
6	110855	PIN, Roller Pin Lock	2	17	24E-06	LKWSHR, Lining to Shoe	32
				18	62D-06	NUT, Lining to Shoe	32
				19	1C-812	BOLT, Puller Hole Plug	2
				20	4E-08	LKWSHR, Hole Plug	2
				21	112213	PIN, Brake Shoe Anchor	2
				22	109597	SCREW, Anchor Pin Set	2

§Not Sold Separately

\*NOTE: For Serial: Cummins — 5HC101 thru 5HG999; G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999.

\*\*NOTE: For Serial: Cummins — 6HC101 thru 6HC999; G.M. — 7HG101 thru 7HG999.

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



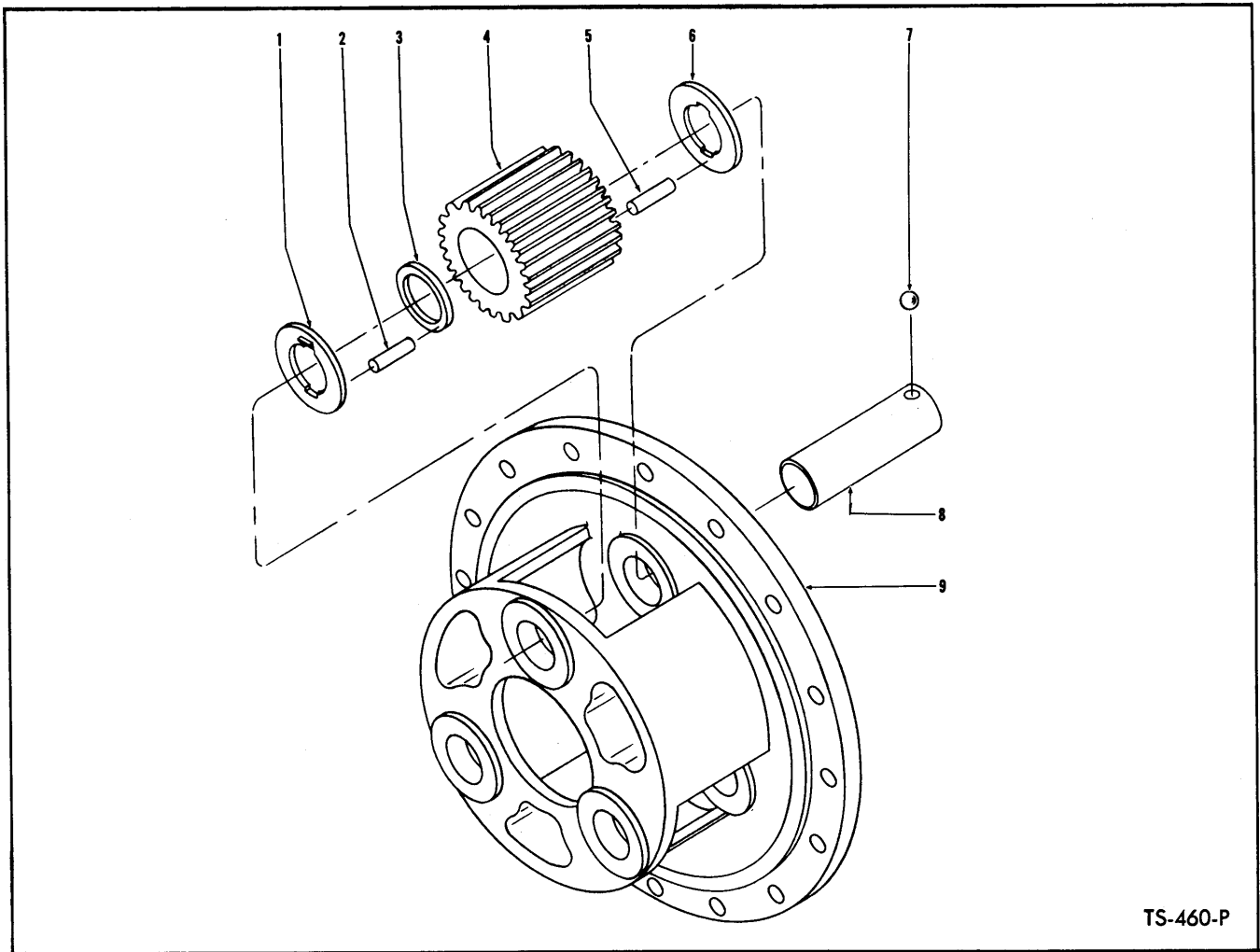
TS-3298-P

## BRAKE ASSEMBLY – PARKING

Item No.	Part No.	Description	No. Req'd.
A	111696	BRAKE ASSY (Inc. 1 thru 11) .....	1
1	-----	§NUT, Pawl to Plate – See 3 .....	2
2	945047	PLATE, Brake 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) .....	1
9	945051	RIVET, Lining to Shoe .....	28
10	220969	SPRING, Shoe Return .....	2
11	872712	SHOE ASSY, Brake (Inc. 7, 8, 9) .....	2

§Not Sold Separately

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



TS-460-P

## PLANET CARRIER ASSEMBLY FRONT DRIVE

For Serial: Cummins — 5HC101 thru 5HC999;  
G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999

Item No.	Part No.	Description	No. Req'd.
A	119207	CARRIER (Inc. 1 thru 9)	2
NOTE: Two Carriers used on Axle — Quantities listed below are for (1) Carrier			
1	106357	WASHER, Pinion Thrust	3
2	106358	ROLLER, Pinion	75
3	106359	SPACER, Pinion Roller	3
4	106356	PINION	3
5	106358	ROLLER, Pinion	75
6	106357	WASHER, Pinion Thrust	3
7	10J-12	BALL, Pinion Shaft Lock	3
8	106355	SHAFT, Pinion	3
9	119208	CARRIER, Planet	1

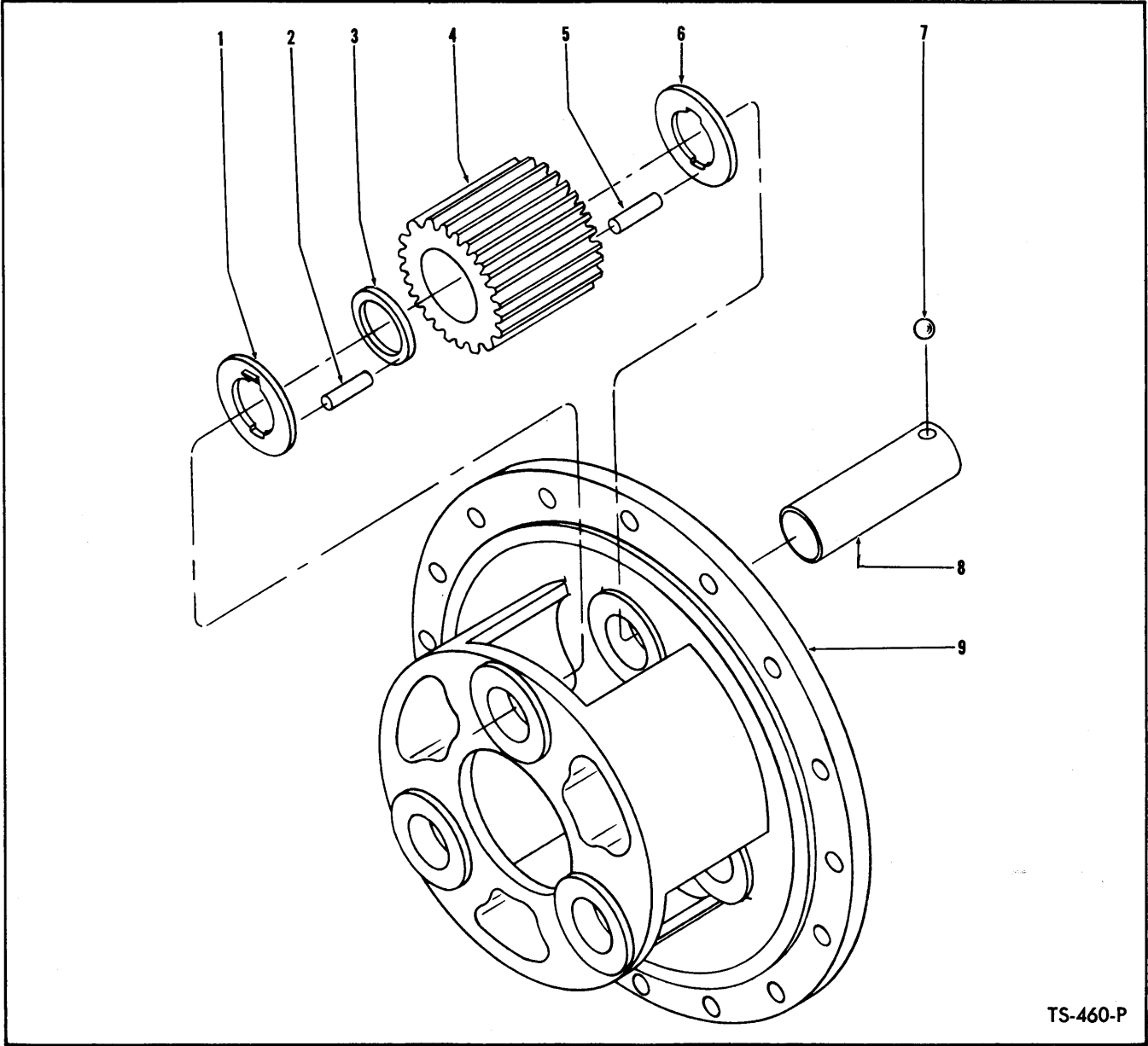
## PLANET CARRIER ASSEMBLY REAR DRIVE STEER

For Serial: Cummins — 5HC101 thru 5HC999;  
G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999

Item No.	Part No.	Description	No. Req'd.
A	119204	CARRIER (Inc. 1 thru 8, 9A)	2
See Note "A"			
B	117504	CARRIER (Inc. 1 thru 8, 9B)	2
See Note "B"			
NOTE: Two Carriers used on axle — Quantities listed below are for (1) Carrier			
1	106357	WASHER, Pinion Thrust	3
2	106358	ROLLER, Pinion	75
3	106359	SPACER, Pinion Roller	3
4	106356	PINION	3
5	106358	ROLLER, Pinion	75
6	106357	WASHER, Pinion Thrust	3
7	10J-12	BALL, Pinion Shaft Lock	3
8	106355	SHAFT, Pinion	3
9		CARRIER, Planet	
9A	119205	See Note "A"	1
9B	117505	See Note "B"	1

NOTE "A": For Hub and Planet equipped with Stud and Taper Dowel feature.  
NOTE "B": For Hub and Planet equipped with Bolt and Washer feature only.

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



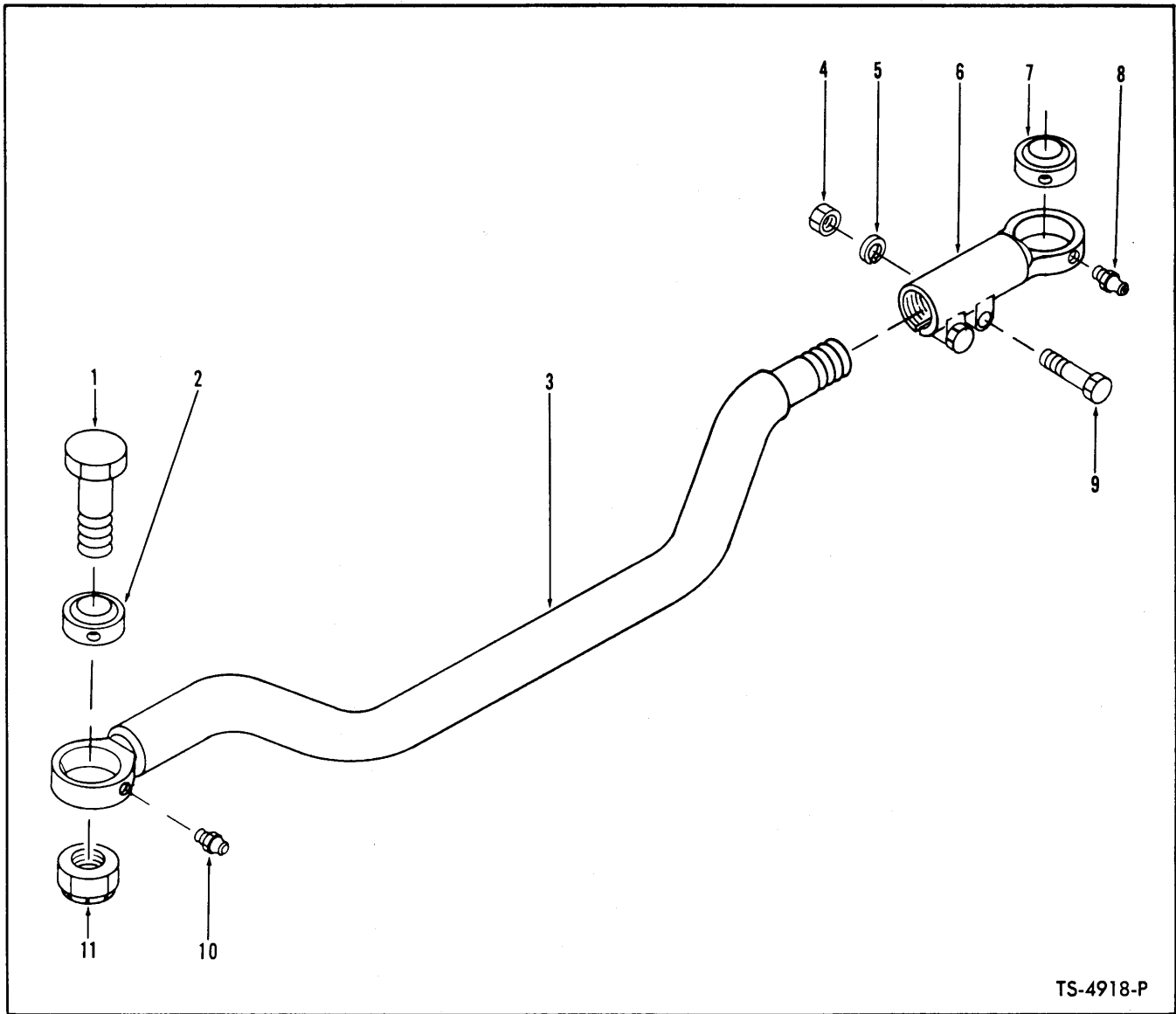
TS-460-P

**PLANET CARRIER ASSEMBLY – FRONT AND REAR**

**For Serial: Cummins – 6HC101 thru 6HC999;  
G.M. – 7HG101 thru 7HG999**

Item No.	Part No.	Description	No. Req'd.
A	118771	CARRIER (Inc. 1 thru 9)	4
<b>NOTE: Two Carriers are used on axle – Quantities listed below are for (1) Carrier.</b>			
1	118774	WASHER, Pinion Thrust	3
2	357049	ROLLER, Pinion	84
3	118775	SPACER, Pinion Roller	3
4	118776	PINION	3
5	357049	ROLLER, Pinion	84
6	118774	WASHER, Pinion Thrust	3
7	10J-12	BALL, Pinion Shaft Lock	3
8	118773	SHAFT, Pinion	3
9	118772	CARRIER, Planet	1

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



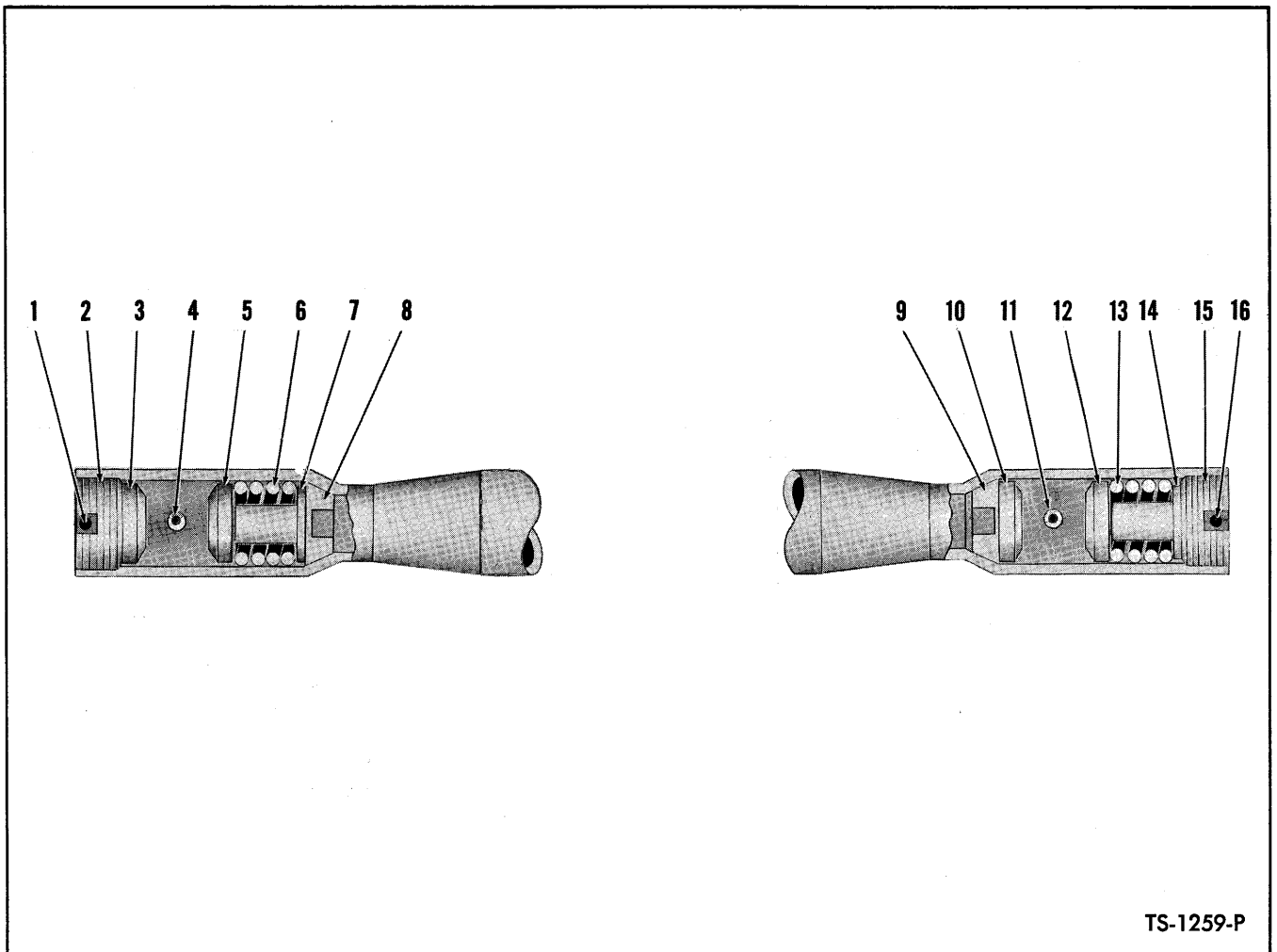
TS-4918-P

## TIE ROD ASSEMBLY

Item No.	Part No.	Description	No. Req'd.
1	517355	BOLT, Tie Rod Attaching .....	2
2	713418	BUSHING, Tie Rod .....	1
3	125554	TIE ROD .....	1
4	62D-10	NUT, End to Tie Rod .....	2
5	4E-10	LKWSHR, End to Tie Rod .....	2
6	116909	END ASSY, Tie Rod (Inc. 4, 5, 7, 9) .....	1
7	713418	BUSHING, End Assy .....	1
8	10H-25	FITTING, End Assy Grease .....	1
9	2C-1048	BOLT, End to Tie Rod .....	2
10	10H-25	FITTING, Tie Rod Grease .....	1
11	66D-22	NUT, Tie Rod Attaching .....	2

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





TS-1259-P

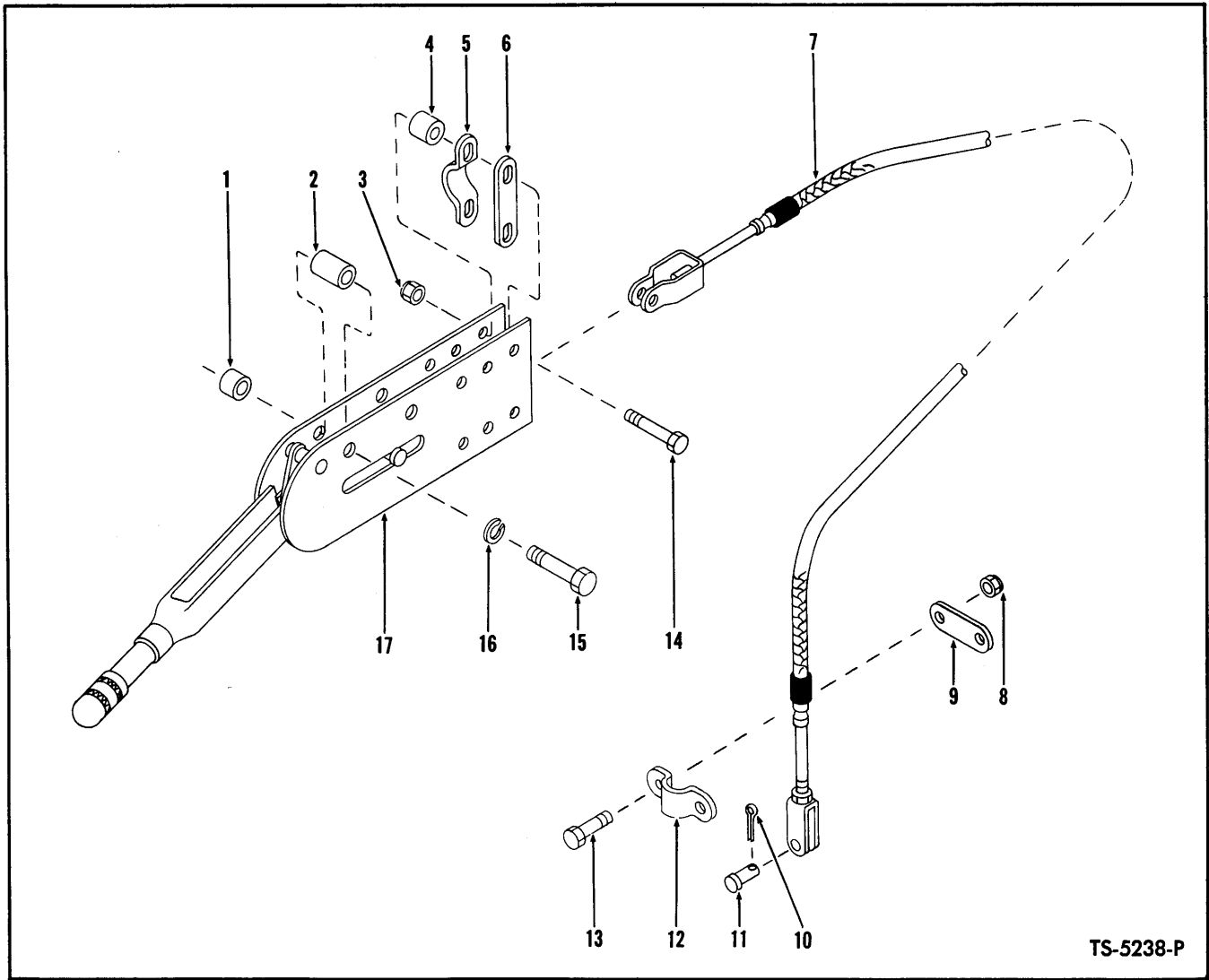
## DRAG LINK

Item No.	Part No.	Description	No. Req'd.
A	556181	*DRAG LINK ASSY (Inc. 2, 3, 5 thru 10, 12 thru 15)	1
B	1522014	**DRAG LINK ASSY (Inc. 2, 3, 5 thru 10, 12 thru 15)	1
1	1F-432	COTTER	1
2	876575	NUT, Adjusting	1
3	865965	SEAT, Ball Stud	1
4	12H-15	FITTING, Grease	1
5	865965	SEAT, Ball Stud	1
6	865961	SPRING	1
7	6622691	SEAT, Spring	1
8	865963	SEAT	1
9	865963	SEAT	1
10	865965	SEAT, Ball Stud	1
11	12H-15	FITTING, Grease	1
12	865965	SEAT, Ball Stud	1
13	865961	SPRING	1
14	662691	SEAT, Spring	1
15	876575	NUT, Adjusting	1
16	1F-432	COTTER	1

\*NOTE: For Serial: Cummins — 5HC101 thru 5HC999; G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999.

\*\*NOTE: For Serial: Cummins — 6HC101 thru 6HC999; G.M. — 7HG101 thru 7HG999.

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



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	556987	CABLE, Parking Brake .....	1
8	18D-05	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	24C-516	BOLT, Clamp Attaching .....	2
14	24C-528	BOLT, Cable Mounting .....	2
15	23C-636	BOLT, Lever Mounting .....	2
16	4E-06	LKWSHR, Lever Mounting .....	2
17	544998	LEVER ASSY, Brake Hand — See Index .....	—

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



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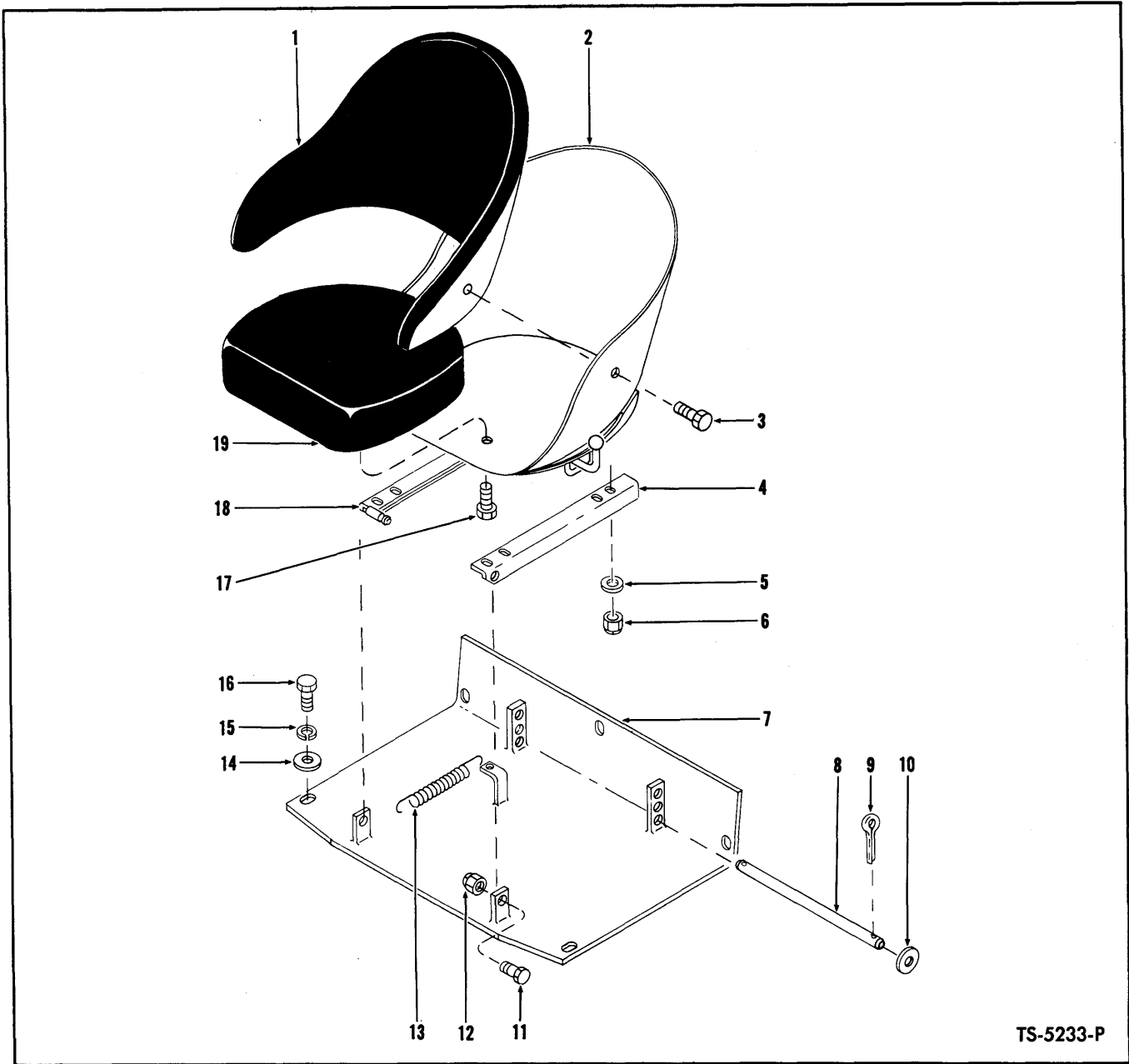
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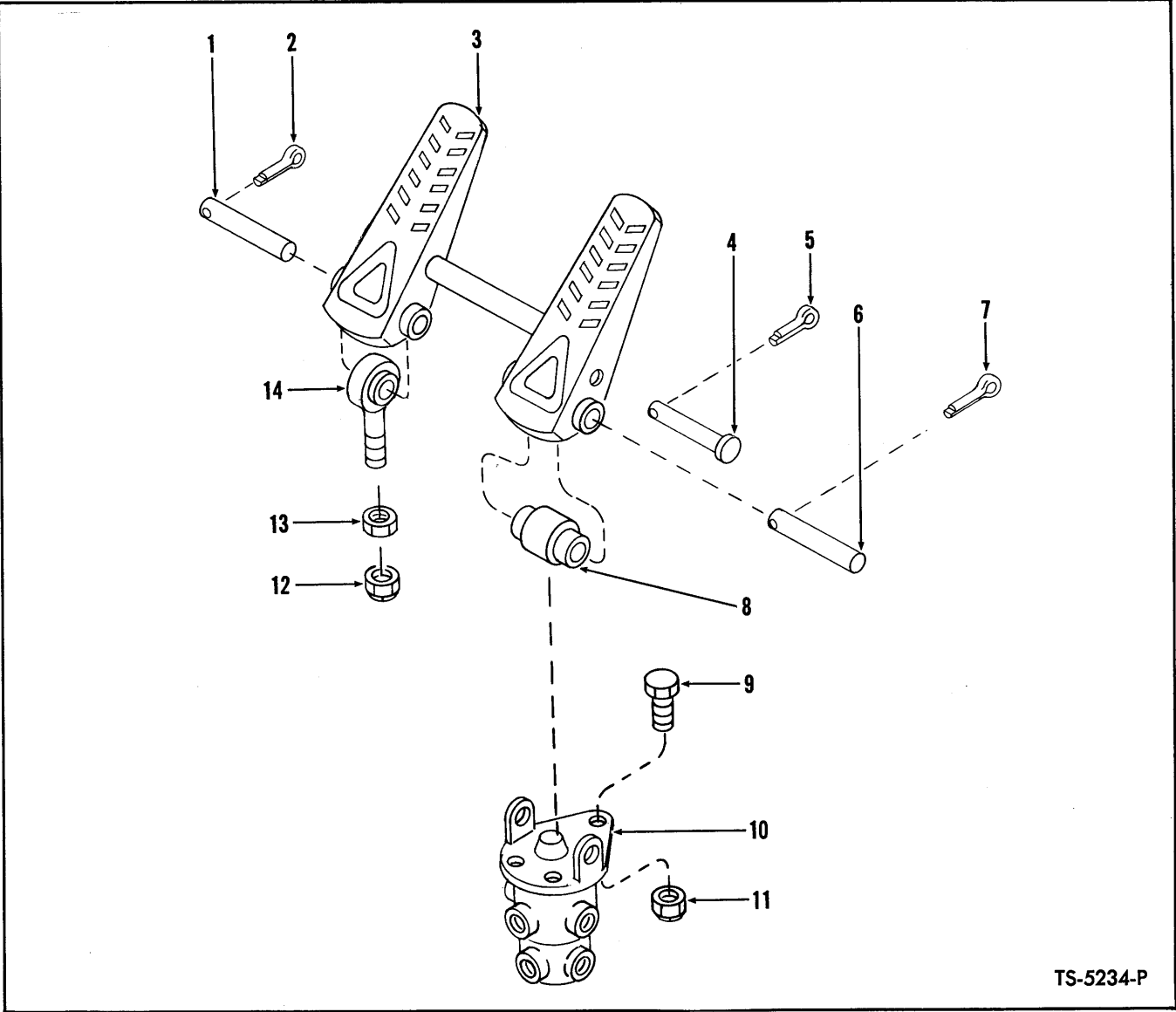


TS-5233-P

## 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	24C-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 Mtg.	5
5	25E-15	WASHER, Seat Mounting	4	15	4E-08	LKWSHR, Support Mtg.	5
6	18D-05	NUT, Seat Mounting	4	16	23C-820	BOLT, Support Mtg.	5
7	557455	SUPPORT, Seat	1	17	1C-610	BOLT, Cushion Mtg.	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



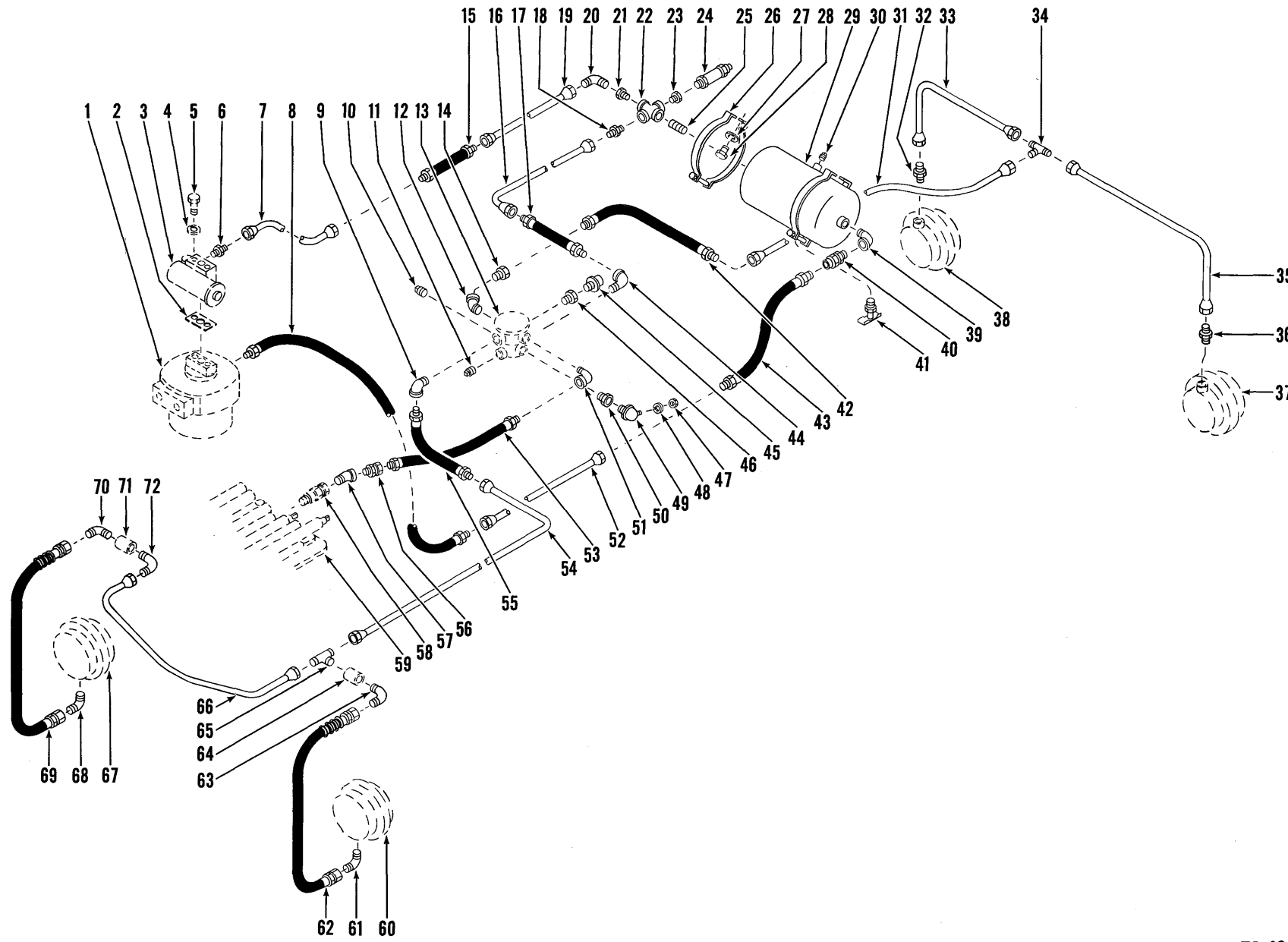
TS-5234-P

**BRAKE VALVE AND CONTROLS**

No. Item	No. Part	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	24C-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 these parts.

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



BRAKE AIR LINES — CUMMINS

TS-6814-P

[ 92 ]

PM 2419

## BRAKE AIR LINES — CUMMINS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	*COMPRESSOR, Air	—	37	-----	CHAMBER, Air — See Index	—
2	-----	*GASKET, Governor	—	38	-----	CHAMBER, Air — See Index	—
3	-----	*GOVERNOR	—	39	26F-4	ELBOW, Air Reservoir	1
4	-----	*LKWSHR, Gov. to Comp.	—	40	593370	VALVE, Reservoir Check	1
5	-----	*BOLT, Gov. to Comp.	—	41	72F-4	DRAIN COCK, Reservoir	1
6	38F-3	CONNECTOR, Gov.	1	42	542357	HOSE, Valve to Line	1
7	572713	LINE, Res. to Gov. — Rear	1	43	524497	HOSE, Reservoir to Line	1
8	571654	HOSE, Comp. to Line	1	44	26F-4	ELBOW, Hose to Valve	1
9	26F-4	ELBOW, Hose to Valve	1	45	636260	SWITCH, Air Pressure	1
10	13F-04	PLUG, Brake Valve	1	46	19F-4	BUSHING, Reducing	1
11	13F-08	PLUG, Brake Valve	1	47	14D-10	NUT, Sender Unit	1
12	25F-4	ELBOW, Hose to Valve	1	48	12E-10	LKWSHR, Sender Unit	1
13	-----	VALVE, Brake — See Index	—	49	940643	SENDER, Air Press.	—
14	19F-5	BUSHING, Reducing	1	50	19F-1	BUSHING, Reducing	1
15	571653	HOSE, Line to Line	1	51	26F-4	ELBOW, Hose to Valve	1
16	571656	LINE, Valve to Res.	1	52	556813	LINE, Compressor to Res.	1
17	521441	HOSE, Line to Valve	1	53	663771	HOSE, Brake Valve to De-Clutch Valve	1
18	38F-10	CONNECTOR, Cross	1	54	556814	LINE, Valve to Rear Axle	1
19	571657	LINE, Gov. to Comp. — Front	1	55	566239	HOSE, Valve to Line	1
20	83F-3	ELBOW, Line to Cross	1	56	593297	ADAPTER UNION	1
21	19F-4	BUSHING, Elbow	1	57	25F-1	ELBOW, Valve	1
22	21F-4	CROSS, Res. Connecting	1	58	-----	VALVE, De-Clutch — See Index	—
23	19F-5	BUSHING, Reducing	1	59	-----	COVER, Trans. Control — See Index	—
24	507815	**VALVE, Safety (B.W. #205105)	1	60	-----	CHAMBER, Air — See Index	—
25	5K-409	NIPPLE, Cross to Res.	1	61	42F-6	ELBOW, Air Chamber	1
26	941813	**BRACKET, Res. Mtg. (B.W. #221399) — For Serial Group "A"	2	62	524561	HOSE, Line to Chamber	1
26A	1521694	†BRACKET, Res. Mtg. — For Serial Group "B"	4	63	42F-6	ELBOW, Hose to Coupling	1
26B	24C-688	†BOLT, Brk. Mtg. — For Serial Group "B"	2	64	75F-2	COUPLING, Frame — Welded to Frame	1
26C	18D-06	†NUT, Brk. Mtg. — For Serial Group "B"	2	65	45F-6	TEE, Connecting	1
27	4E-06	LKWSHR, Res. Mtg.	4	66	-----	LINE, Rear Axle	—
28	24C-616	BOLT, Res. Mtg.	4	66A	535025	For Serial Group "A"	1
29	513842	**RESERVOIR, Air (B.W. #227901)	1	66B	1524746	For Serial Group "B"	1
30	16F-08	PLUG, Air Reservoir	1	67	-----	CHAMBER, Air — See Index	—
31	566952	LINE, Valve to Axle	1	68	42F-6	ELBOW, Air Chamber	1
32	38F-7	CONNECTOR, Chamber	1	69	524561	HOSE, Line to Chamber	1
33	535023	LINE, Front Axle — L.H.	1	70	42F-6	ELBOW, Hose to Coupling	1
34	44F-5	TEE, Line Connecting	1	71	75F-2	COUPLING, Frame — Welded to Frame	1
35	535022	LINE, Front Axle — R.H.	1	72	42F-6	ELBOW, Line to Coupling	1
36	38F-7	CONNECTOR, Chamber	1				

†Not Illustrated

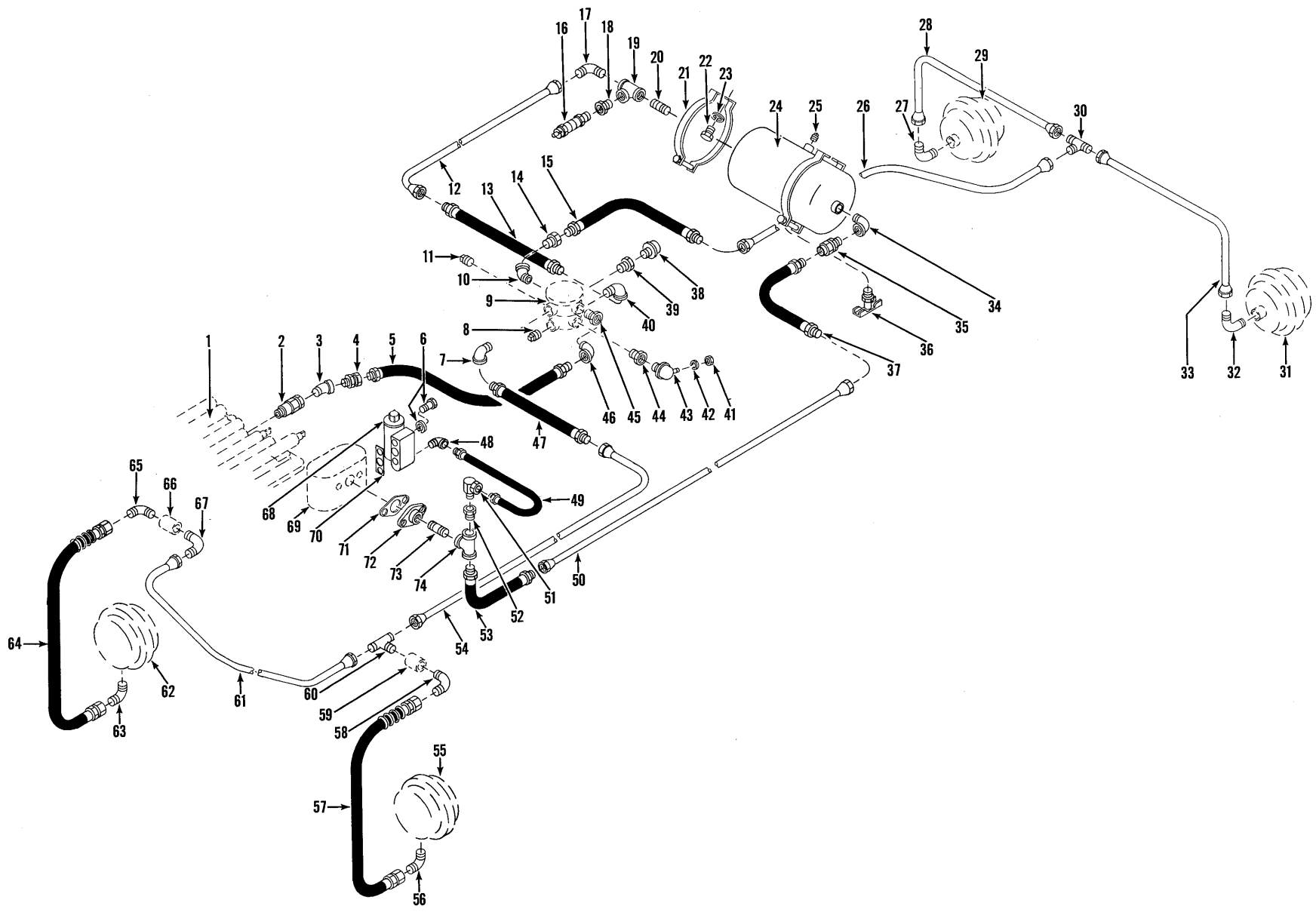
\*NOTE: These parts furnished with engine. See your local authorized Cummins Engine Distributor for service and replacement of these parts.

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

Serial Group "A": 5HC101 thru 5HC999.

Serial Group "B": 6HC101 thru 6HC999.

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



[ 94 ]

PM 2419

BRAKE AIR LINES — G.M.

TS-8894-P



## BRAKE AIR LINES — G.M.

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	COVER, Trans. Control — See Index .....	—	35	593370	VALVE, Res. Check .....	1
2	-----	VALVE, De-Clutch — See Index .....	—	36	72F-4	DRAIN COCK, Reservoir .....	1
3	25F-1	ELBOW, Valve .....	1	37	524497	HOSE, Reservoir to Line .....	1
4	593297	ADAPTER UNION .....	1	38	636260	SWITCH, Air Pressure .....	1
5	663771	HOSE, Brake Valve to De-Clutch Valve .....	1	39	19F-4	BUSHING, Reducing .....	1
6	23C-544	BOLT, Gov. to Comp. ....	2	40	26F-4	ELBOW, Hose to Valve .....	1
6A	4E-05	LKWSHR, Gov. to Comp. ....	2	41	14D-10	NUT, Sender Unit .....	1
7	26F-4	ELBOW, Hose to Valve .....	1	42	12E-10	LKWSHR, Sender Unit .....	1
8	13F-08	PLUG, Brake Valve .....	1	43	940643	SENDER, Air Press. ....	—
9	-----	VALVE, Brake — See Index ..	—	44	19F-1	BUSHING, Reducing .....	1
10	25F-4	ELBOW, Hose to Valve .....	1	45	19F-5	BUSHING, Reducing .....	1
11	13F-04	PLUG, Brake Valve .....	1	46	26F-4	ELBOW, Valve .....	1
12	558697	LINE, Valve to Res. ....	1	47	566239	HOSE, Valve to Line .....	1
13	521441	HOSE, Valve to Line .....	1	48	26F-1	ELBOW, Hose to Gov. ....	1
14	19F-5	BUSHING, Reducing .....	1	49	593650	HOSE, Tee to Gov. ....	1
15	542357	HOSE, Valve to Line .....	1	50	556813	LINE, Comp. to Res. ....	1
16	507815	*VALVE, Safety (B.W. #205105) .....	1	51	31F-1	ADAPTER UNION .....	1
17	42F-9	ELBOW, Line to Tee .....	1	52	19F-4	BUSHING, Reducing .....	1
18	19F-5	BUSHING, Reducing .....	1	53	523786	HOSE, Line to Tee .....	1
19	18F-4	TEE, Connecting .....	1	54	556814	LINE, Valve to Rear Axle .....	1
20	5K-409	NIPPLE, Tee to Res. ....	1	55	-----	CHAMBER, Air — See Index ..	—
21	941813	*BRACKET, Res. Mtg. (B.W. #221399) — For Serial Group "A" .....	2	56	42F-6	ELBOW, Air Chamber .....	1
21A	1521694	†BRACKET, Res. Mtg. — For Serial Group "B" .....	4	57	524561	HOSE, Line to Chamber .....	1
21B	24C-688	†BOLT, Brk. Mtg. — For Serial Group "B" .....	2	58	42F-6	ELBOW, Hose to Coupling .....	1
21C	18D-06	†NUT, Brk. Mtg. — For Serial Group "B" .....	2	59	75F-2	COUPLING, Frame — Welded to Frame .....	1
22	24C-616	BOLT, Res. Mtg. ....	4	60	45F-6	TEE, Connecting .....	1
23	4E-06	LKWSHR, Res. Mtg. ....	4	61	-----	LINE, Rear Axle	
24	513842	*RESERVOIR, Air (B.W. #227901) .....	1	61A	535025	For Serial Group "A" .....	1
25	16F-08	PLUG, Reservoir .....	1	61B	1524746	For Serial Group "B" .....	1
26	566952	LINE, Valve to Axle .....	1	62	-----	CHAMBER, Air — See Index ..	—
27	38F-7	CONNECTOR, Chamber .....	1	63	42F-6	ELBOW, Air Chamber .....	1
28	535023	LINE, Front Axle — L.H. ....	1	64	524561	HOSE, Line to Chamber .....	1
29	-----	CHAMBER, Air — See Index ..	—	65	42F-6	ELBOW, Hose to Coupling .....	1
30	44F-5	TEE, Connecting .....	1	66	75F-2	COUPLING, Frame — Welded to Frame .....	1
31	-----	CHAMBER, Air — See Index ..	—	67	42F-6	ELBOW, Line to Coupling .....	1
32	38F-7	CONNECTOR, Chamber .....	1	68	540306	*GOVERNOR (B.W. #275200)	1
33	535022	LINE, Front Axle — R.H. ....	1	69	-----	COMPRESSOR, Air — See Engine Manual .....	—
34	26F-4	ELBOW, Air Reservoir .....	1	70	942646	GASKET, Governor .....	1
				71	951948	GASKET, Flange .....	1
				72	510452	FLANGE, Discharge .....	1
				73	5K-416	NIPPLE, Tee to Flange .....	1
				74	18F-4	TEE, Connecting .....	1

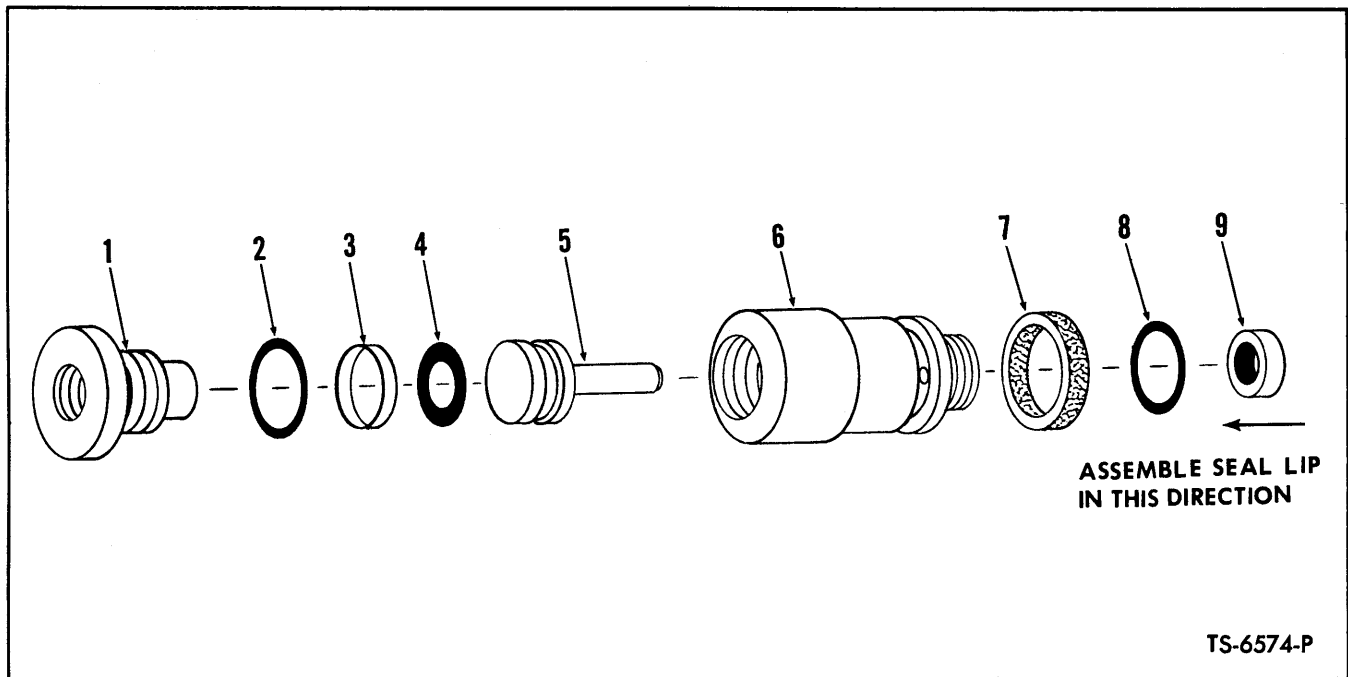
†Not Illustrated

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

Serial Group "A": 5HG101 thru 5HG999, 6HG101 thru 6HG999.

Serial Group "B": 7HG101 thru 7HG999.

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



TS-6574-P

## DE-CLUTCH VALVE – TRANSMISSION

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

### NOTES

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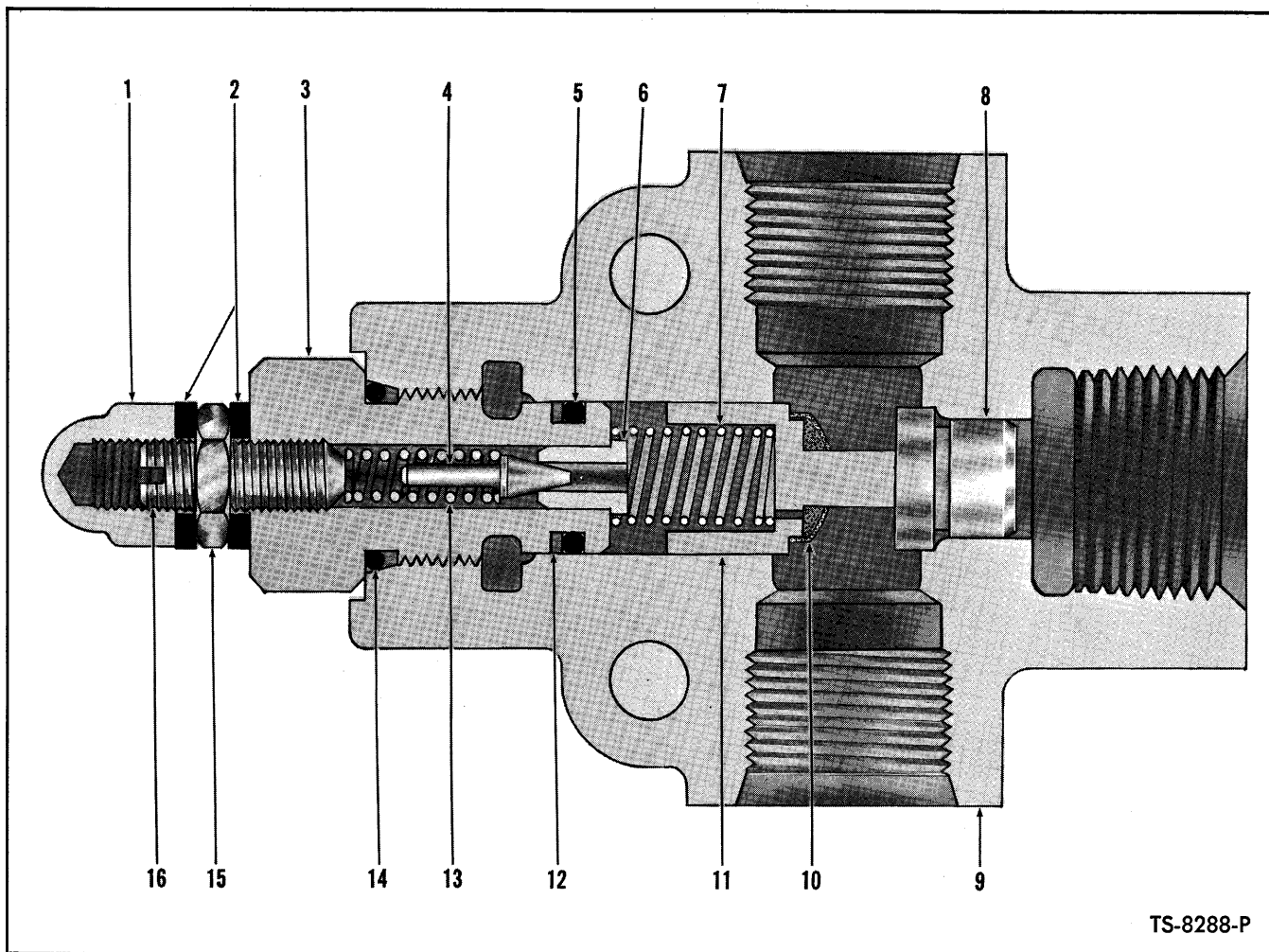
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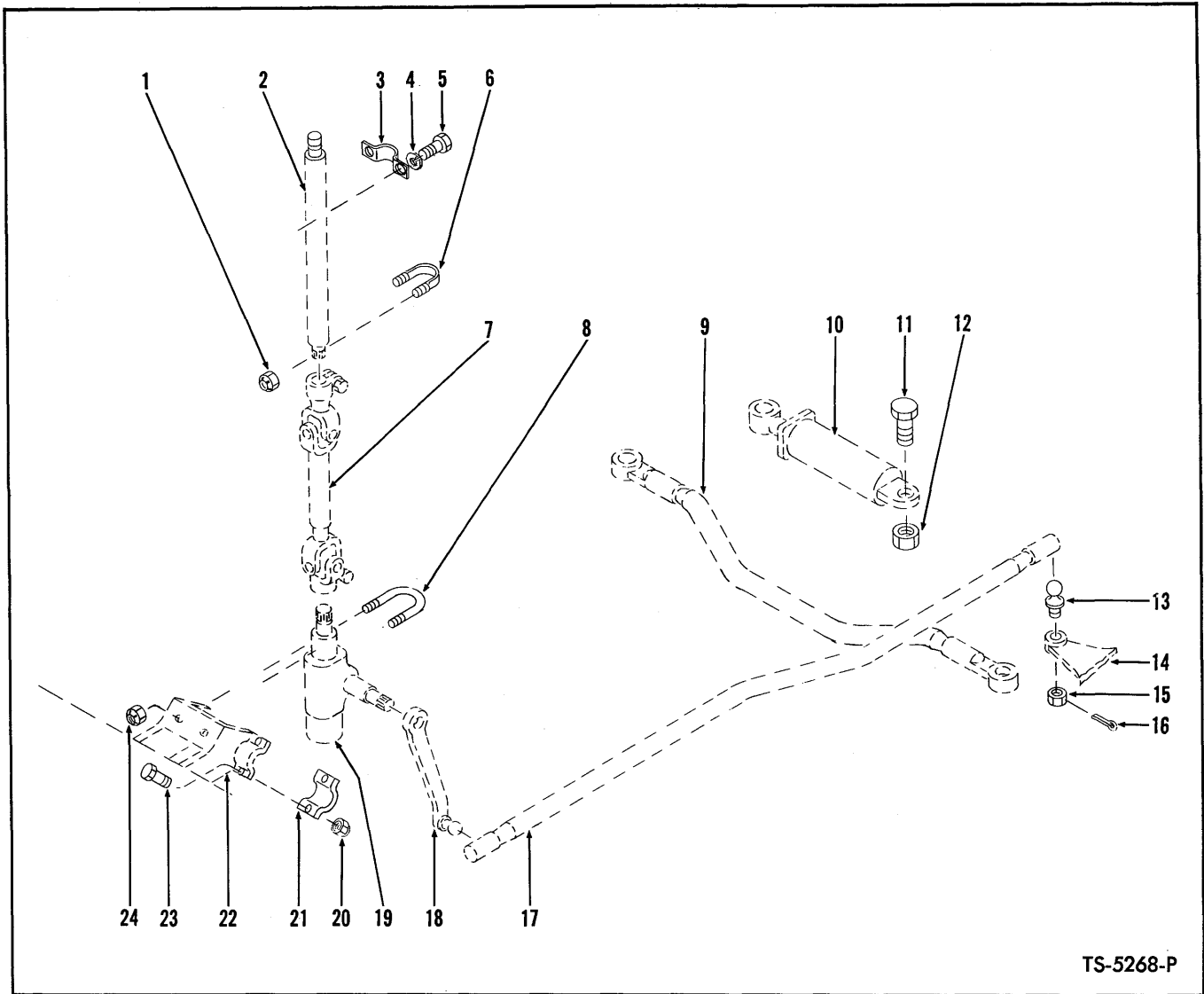


## PRESSURE RELIEF VALVE – STEERING SYSTEM

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

§ Not Sold Separately  
 † Not Illustrated

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

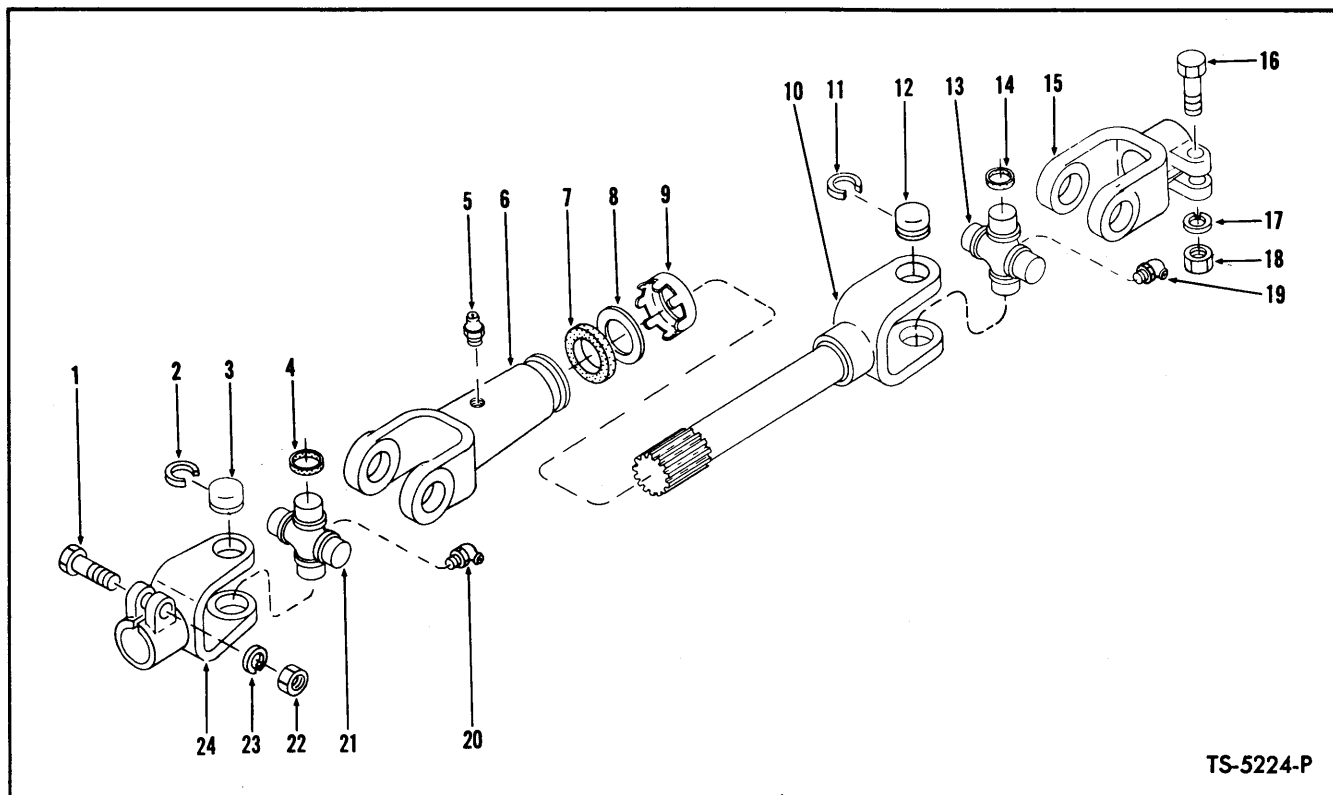


## STEERING LINKAGE GROUP

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18D-04	NUT, Strg. Column to Cockpit	2	11	517355	BOLT, Cylinder Anchor	4
2	-----	STEERING COLUMN — See Index	—	12	66D-22	NUT, Cylinder Anchor	4
3	562443	CLAMP, Strg. Column Mtg.	1	13	513122	BALL STUD, Link Mtg.	1
4	4E-06	LKWSHR, Strg. Column to Cockpit	2	14	-----	§ BRACKET, Rear Axle	—
5	24C-612	BOLT, Strg. Column to Cockpit	2	15	4D-10	NUT, Drag Link Mounting	1
6	557997	U-BOLT, Strg. Column Mtg.	1	16	1F-332	COTTER, Ball Stud Nut	1
7	-----	SLIP SHAFT, Strg. — See Index	—	17	-----	DRAG LINK — See Index	—
8	545941	U-BOLT, Strg. Gear Mtg.	1	18	-----	PITMAN ARM — See Index	—
9	-----	TIE ROD — See Index	—	19	-----	STEERING GEAR — See Index	—
10	-----	STEERING CYLINDER — See Index	—	20	18D-08	NUT, Gear to Frame Brk.	2
				21	550044	CLAMP, Steering Gear Mtg.	1
				22	-----	§ BRACKET, Frame Cross Member	—
				23	24C-832	BOLT, Gear to Frame Brk.	2
				24	18D-08	NUT, Gear to Frame Brk.	2

§Not Sold Separately

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



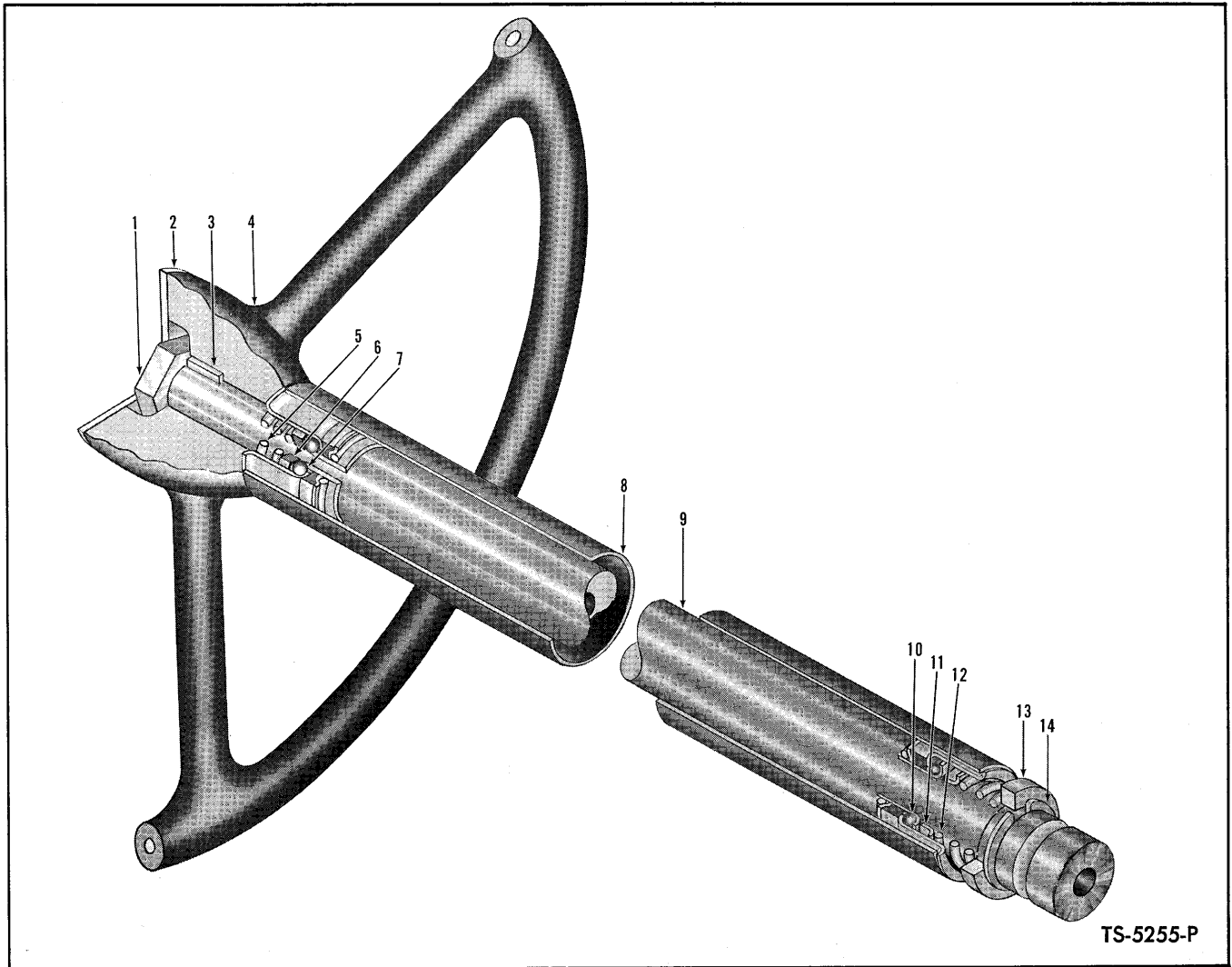
TS-5224-P

## STEERING SLIP SHAFT ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1542841	SHAFT ASSY, Slip (Inc. 1 thru 24)	1	12	-----	§BUSHING, Bearing Cap — See Item 13	—
B	946023	KIT, Dust Cap (Inc. 7, 8, 9)	1	13	948213	SPIDER & BEARING (Inc. 11, 12, 14, 19)	1
1	2C-728	BOLT, Clamp Yoke Mtg.	1	14	948214	WASHER, Bearing	4
2	948215	RING, Bearing Ret.	4	15	946021	CLAMP YOKE	1
3	-----	§BUSHING, Bearing Cap — See Item 21	—	16	2C-728	BOLT, Clamp Yoke Mtg.	1
4	948214	WASHER, Bearing Assy	4	17	4E-07	LKWSHR, Yoke Mtg.	1
5	10H-35	FITTING, Slip Yoke Grease	1	18	8D-07	NUT, Clamp Yoke Mtg.	1
6	948261	YOKE, Slip (Inc. 5)	1	19	15H-15	FITTING, Bearing Grease	1
7	-----	§WASHER, Dust Cap — See Item "B"	—	20	15H-15	FITTING, Bearing Grease	1
8	-----	§WASHER, Dust Cap — See Item "B"	—	21	948213	SPIDER & BEARING (Inc. 2, 3, 4, 20)	1
9	-----	§CAP, Dust — See Item "B"	—	22	8D-07	NUT, Clamp Yoke Mtg.	1
10	946024	YOKE & SHAFT ASSY	1	23	4E-07	LKWSHR, Yoke Mtg.	1
11	948215	RING, Bearing Ret.	4	24	946021	CLAMP YOKE	1

§Not Sold Separately

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



TS-5255-P

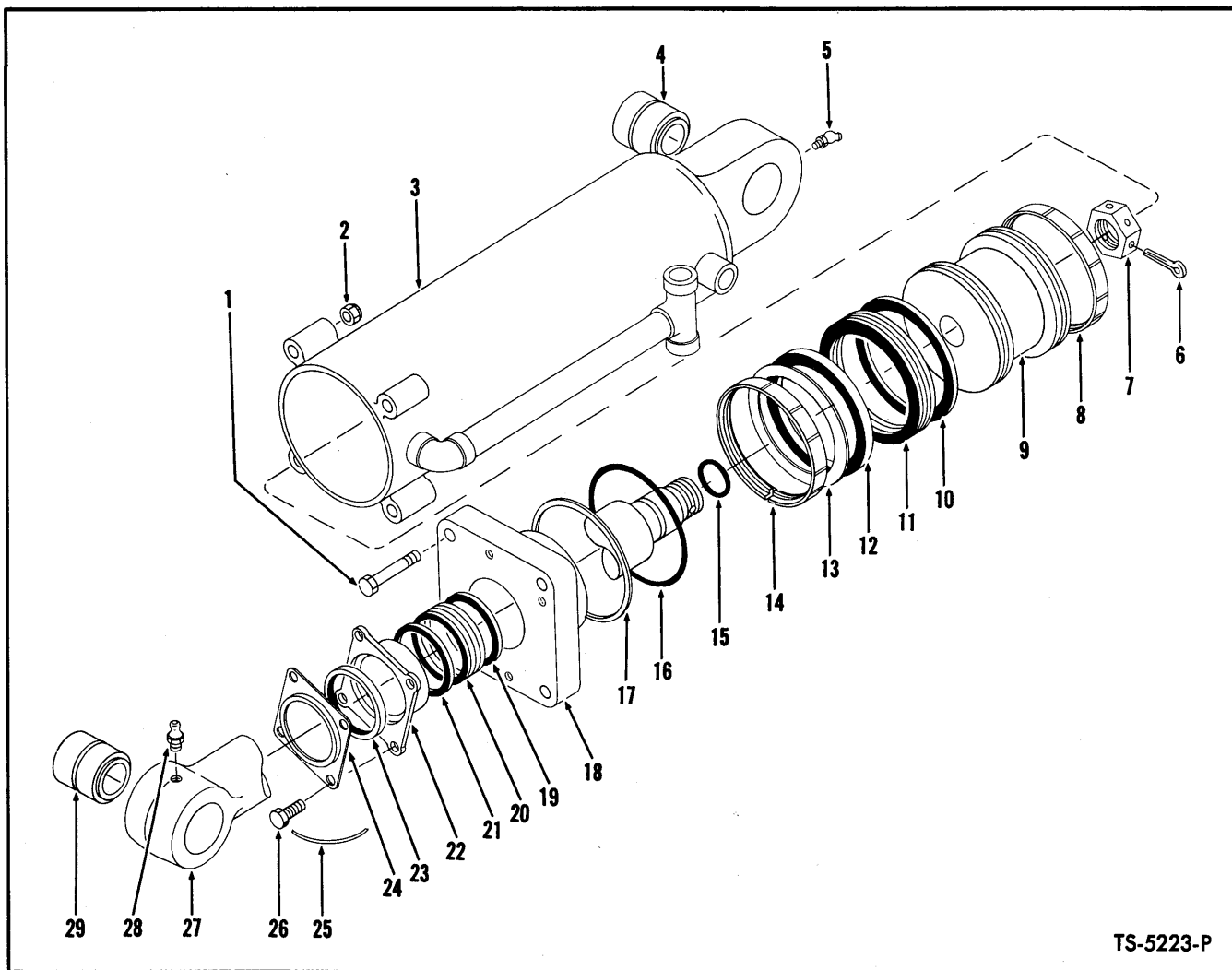
## STEERING COLUMN ASSEMBLY

No. Item	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-5223-P

## STEERING CYLINDER ASSEMBLY

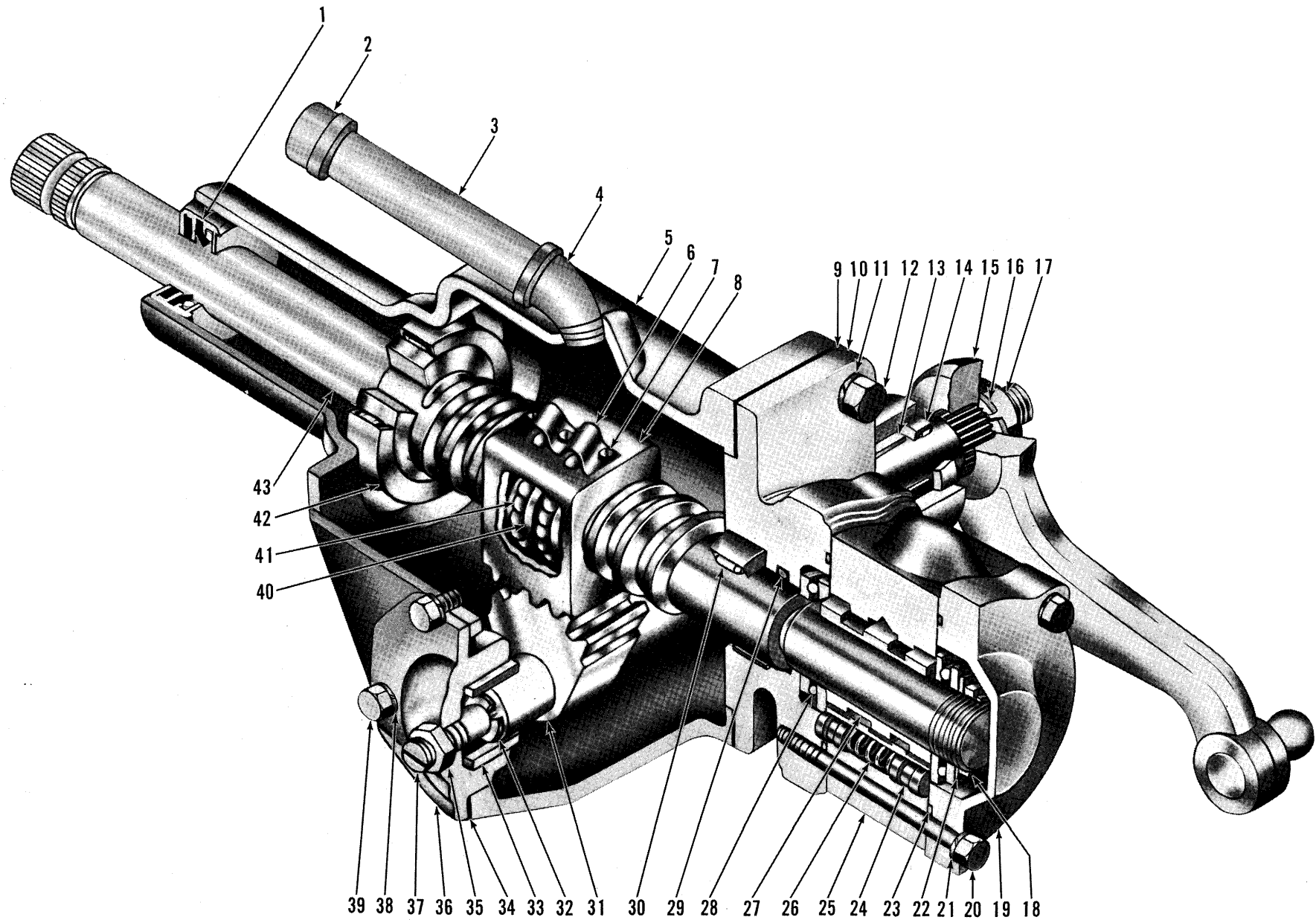
2 Cylinders used on machine — Quantities listed below are for 1 Cylinder

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	570709	CYLINDER ASSY (Inc. 1, 2, 3, 6 thru 27)	1	15	25K-40104	O-RING, Piston Rod	1
1	24C-748	BOLT, Cylinder Cap	4	16	25K-40308	O-RING, Cylinder Cap	1
2	18D-07	NUT, Cylinder Cap	4	17	532917	RING, O-Ring Back-Up	1
3	570710	CYLINDER	1	18	945112	CAP, Cyl. (Inc. 16, 17)	1
4	713418	BUSHING, Cylinder	1	19	-----	§ ADAPTER, Male Chevron Packing (See 20)	2
5	11H-15	FITTING, Cylinder Grease	1	20	2501106	PACKING SET (Inc. 19, 21)	1
6	1F-540	COTTER, Piston Rod Nut	1	21	-----	§ ADAPTER, Female Chevron Packing (See 20)	2
7	517298	NUT, Piston Rod	1	22	526451	GLAND, Packing	1
8	552767	RING, Wear	1	23	941568	WIPER, Piston Rod	1
9	512789	* PISTON	1	24	512797	RETAINER, Piston Rod Wiper	1
10	-----	§ ADAPTER, Male Chevron Packing (See 11)	2	25	-----	LOCKWIRE (16 ga. x 20" lg.)	2
11	2501098	PACKING SET, (Inc. 10, 12)	1	26	4C-620	BOLT, Wiper Retainer	4
12	-----	§ ADAPTER, Female Chevron Packing (See 11)	2	27	544359	ROD, Piston	1
13	520405	‡ SHIM	—	28	10H-25	FITTING, Rod Grease	1
14	552767	RING, Wear	1	29	713418	BUSHING, Piston Rod	1

‡As Required

\*NOTE: For replacement use 1-1503639 Piston plus 2-1503264 Wear Rings, 1-1503631 Seal Ring & 1-1503639 Seal Ring.

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



STEERING GEAR ASSEMBLY

TS-5265-P

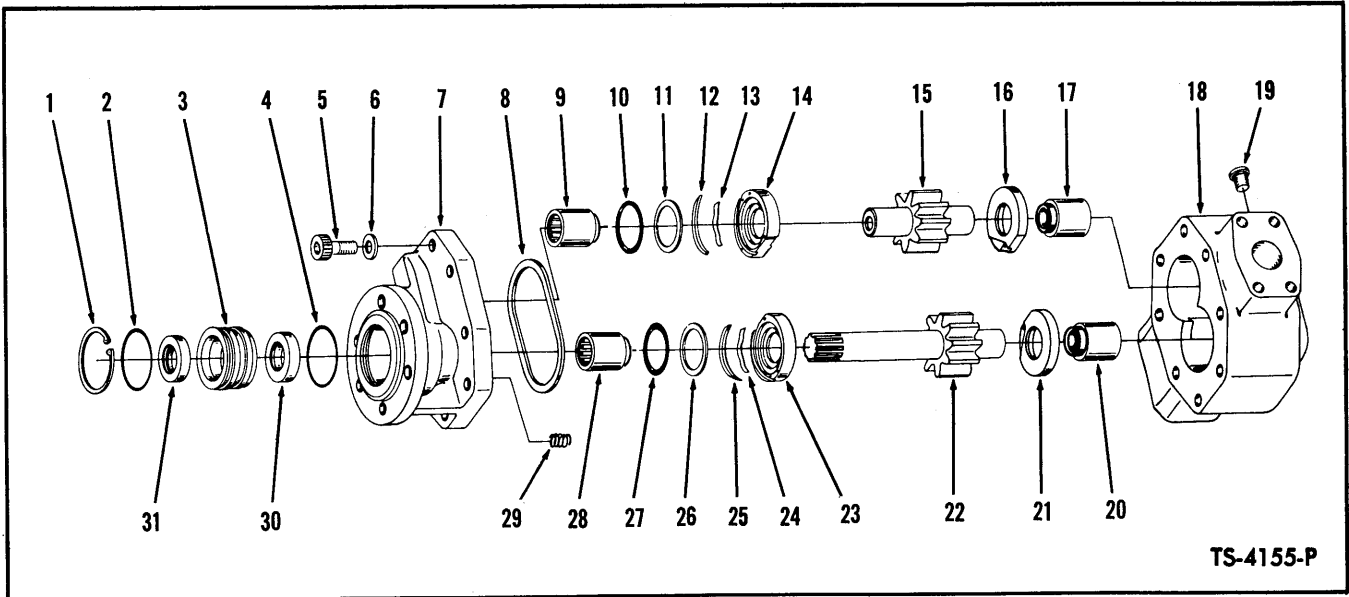


## STEERING GEAR ASSEMBLY

Item No.	Part No.	Description	No. Req'd.
A	562075	GEAR ASSY (Inc. 1, 5 thru 14, 16 thru 43)	1
1	952018	SEAL, Steering Shaft	1
2	22F-4	CAP, Filler	1
3	5K-420	NIPPLE, Filler	1
4	25F-4	ELBOW, Filler	1
5	946026	HOUSING ASSY (Inc. 13, 42)	1
6	853464	CLAMP, Ball Guide Return	1
7	851762	BOLT & WASHER ASSY, Clamp	3
8	853408	NUT, Ball	1
9	853380	GASKET, Adapter	1
10	861738	ADAPTER, Valve to Housing (Inc. 29, 30)	1
11	4E-07	LKWSHR, Adapter to Housing	4
12	1C-720	BOLT, Adapter to Housing	4
13	853357	BUSHING, Pitman Shaft	2
14	853391	SEAL, Pitman Shaft Grease	1
15	569864	ARM, Pitman	1
16	853396	LKWSHR, Pitman Arm	1
17	850756	NUT, Pitman Arm	1
18	873250	NUT, Worm Bearing Lock	1
19	943667	COVER, Valve End	1
20	1C-656	BOLT, End Cover	3
21	4E-06	LKWSHR, End Cover	3
22	943429	SPRING, Valve Spool Preload	1
23	886851	O-RING, Valve to End Cover	2
24	861755	PLUNGER, Valve Centering	6
25	944052	VALVE ASSY (Inc. 24, 26, 27)	1
26	944053	SPRING, Valve Centering	3
27	-----	§ VALVE SPOOL — See Item 25	—
28	860997	BEARING, Worm Thrust	2
29	949972	O-RING, Adapter	1
30	861741	BEARING, Adapter	1
31	940111	GEAR, Pitman Shaft	1
32	853187	SHIM KIT, Lash Adjuster	1
33	-----	§ BUSHING, Housing Side Cover — See Item 36	—
34	851756	GASKET, Side Cover	1
35	8D-07	NUT, Lash Adjuster	1
36	853182	COVER ASSY, Housing Side (Inc. 33)	1
37	851770	ADJUSTER, Lash	1
38	1C-612	BOLT, Side Cover	3
39	4E-06	LKWSHR, Side Cover	3
40	853412	GUIDE, Ball Return	4
41	10J-09	BALL	106
42	730143	BEARING, Needle	1
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**



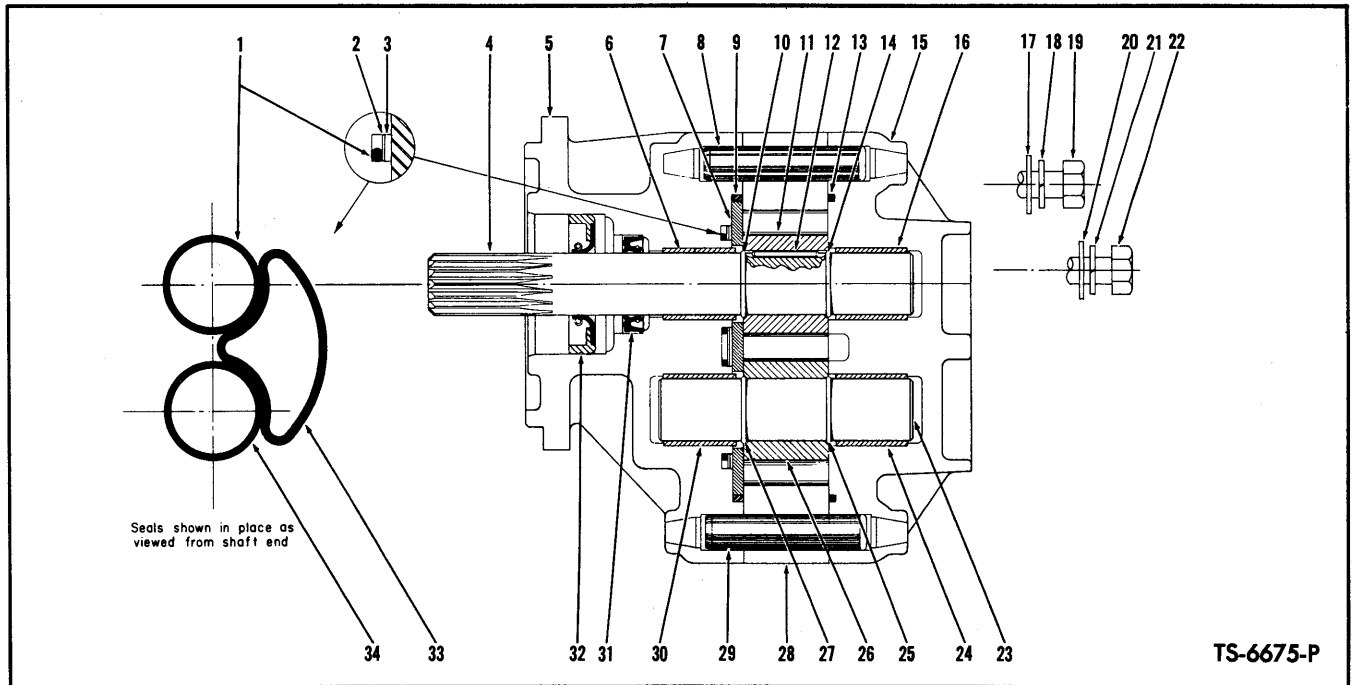
**HYDRAULIC PUMP – STEERING**  
**For Serial: Cummins – 5HC101 thru 5HC999;**  
**G.M. – 5HG101 thru 5HG999, 6HG101 thru 6HG999**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	450161	*PUMP ASSY (Inc. 1 thru 31)	1	16	-----	§ PLATE, Body Thrust	1
B	498197	KIT, Minor Repair (Inc. 2, 4, 5, 6, 8, 10, 11, 26, 27, 29)	1	17	-----	§ BEARING, Body	1
C	498198	KIT, Thrust Plate Repair (Inc. 12, 13, 14, 16, 21, 23, 24, 25)	1	18	-----	§ BODY, Pump – See "A"	1
D	498199	KIT, Gear (Inc. 15, 22)	1	19	-----	§ PLUG, Body	1
E	498201	KIT, Shaft Seal Repair (Inc. 1 thru 4, 30, 31)	1	20	-----	§ BEARING, Body	1
F	498222	KIT, Bearing Repair (Inc. 9, 17, 20, 28)	1	21	-----	§ PLATE, Body Thrust	1
1	-----	§ RING, Shaft Seal Ret.	1	22	-----	§ GEAR, Drive	1
2	-----	§ O-RING, Oil Seal Ret.	1	23	-----	§ PLATE, Cover Thrust	1
3	-----	§ RETAINER, Shaft Seal	1	24	-----	§ SPRING, Wave	1
4	-----	§ O-RING, Oil Seal Ret.	1	25	-----	§ RING, Mask-Off	1
5	-----	§ BOLT, Cover to Body	8	26	-----	§ RING, O-Ring Back-Up	1
6	-----	§ WASHER, Cover to Body	8	27	-----	§ O-RING, Thrust Plate	1
7	-----	**§ COVER, Pump – See "A"	1	28	-----	§ BEARING, Cover	1
8	-----	§ GASKET, Cover to Body	1	29	-----	§ SPRING, Thrust Plate	3
9	-----	§ BEARING, Cover	1	30	-----	§ SEAL, Inner Oil	1
10	-----	§ RING, Cover Thrust Plate	1	31	-----	§ SEAL, Outer Oil	1
11	-----	§ RING, O-Ring Back-Up	1	32	551906	† GASKET, Pump to Conv.	1
12	-----	§ RING, Mask-Off	1	33	221992	† SLEEVE, Pump Drive	1
13	-----	§ SPRING, Wave	1	34	8D-06	† NUT, Pump to Conv.	3
14	-----	§ PLATE, Cover Thrust	1	35	207647	† STUD, Pump Mtg.	3
15	-----	§ GEAR, Driven	1	36	9E-06	† LKWSHR, Pump to Conv.	3
				37	25E-17	† WASHER, Pump to Conv.	3
				38	227034	† ADAPTER, Pump	1
				39	25K-40416	† O-RING, Adapter	1
				40	23C-820	† BOLT, Pump Adapter	4
				41	4E-08	† LKWSHR, Pump Adapter	4

† Not Illustrated  
 § Not Sold Separately

\*NOTE: For replacement use 1-571497 Pump plus 1-1520855 Tube, 1-573585 Stem, 1-1520854 Hose, 1-536710 Hose, & 4-1545004 Clamps.

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



TS-6675-P

## HYDRAULIC PUMP – STEERING

For Serial: Cummins – 6HC101 thru 6HC999;  
G.M. – 7HG101 thru 7HG999

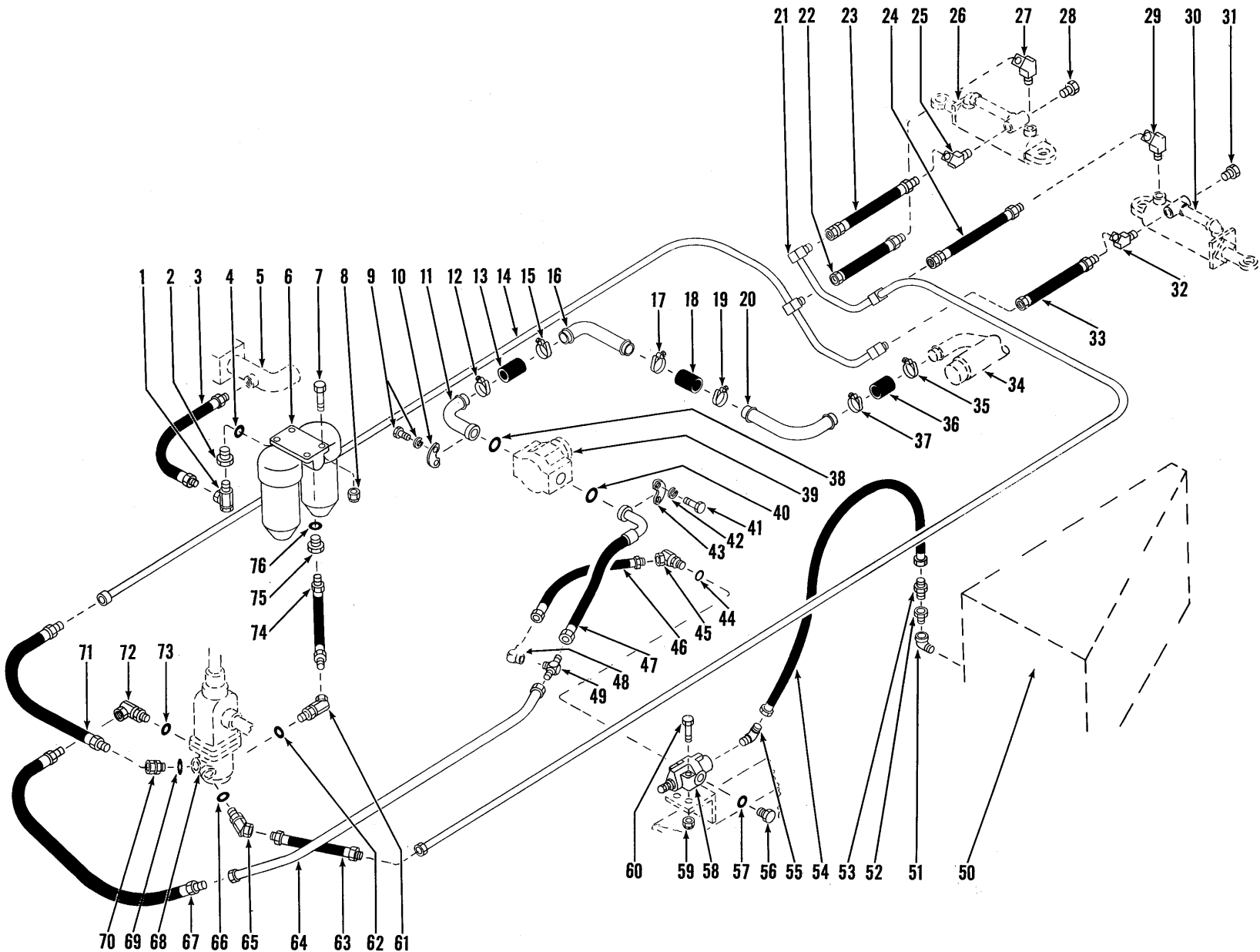
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	571497	*PUMP ASSY (Inc. 1 thru 34) ..	1	22	---	§BOLT, Cover Mounting .....	4
B	946372	SEAL KIT, Minor (Inc. 1, 2, 3, 9, 13, 31 thru 34) .....	1	23	---	§SHAFT, Driven .....	1
1	---	§O-RING .....	1	24	---	§BUSHING, Shaft .....	1
2	---	§RING, Back-Up .....	1	25	---	§RING, Retaining .....	1
3	---	§RING, Back-Up .....	1	26	---	§GEAR, Driven .....	1
4	---	§SHAFT, Drive .....	1	27	---	§RING, Retaining .....	1
5	---	§ADAPTER, Pump .....	1	28	---	§HOUSING, Pump .....	1
6	---	§BUSHING, Shaft .....	1	29	---	§DOWEL, Adapter & Cover ...	1
7	---	§PLATE, Wear .....	1	30	---	§BUSHING, Shaft .....	1
8	---	§DOWEL, Adapter & Cover ..	1	31	---	§SEAL, Shaft .....	1
9	---	§O-RING .....	1	32	---	§SEAL, Shaft .....	1
10	---	§RING, Retaining .....	1	33	---	§SEAL .....	1
11	---	§GEAR, Drive .....	1	34	---	§O-RING .....	1
12	---	§DOWEL .....	1	35	551906	†GASKET, Pump to Conv. ....	1
13	---	§O-RING .....	1	36	221992	†SLEEVE, Pump Drive .....	1
14	---	§RING, Retaining .....	1	37	8D-06	†NUT, Pump to Conv. ....	3
15	---	§COVER, Pump .....	1	38	207647	†STUD, Pump Mtg. ....	3
16	---	§BUSHING, Shaft .....	1	39	9E-06	†LKWSHR, Pump to Conv. ....	3
17	---	§WASHER, Cover Mtg. ....	4	40	25E-17	†WASHER, Pump to Conv. ....	3
18	---	§LKWSHR, Cover Mtg. ....	4	41	227034	†ADAPTER, Pump .....	1
19	---	§BOLT, Cover Mtg. ....	4	42	25K-40416	†O-RING, Adapter .....	1
20	---	§WASHER, Cover Mtg. ....	4	43	23C-820	†BOLT, Pump Adapter .....	4
21	---	§LKWSHR, Cover Mtg. ....	4	44	4E-08	†LKWSHR, Pump Adapter ...	4

§Not Sold Separately

†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**



HYDRAULIC SYSTEM — STEERING — CUMMINS  
For Serial: 5HC101 thru 5HC999

TS-6798-P

[ 106 ]

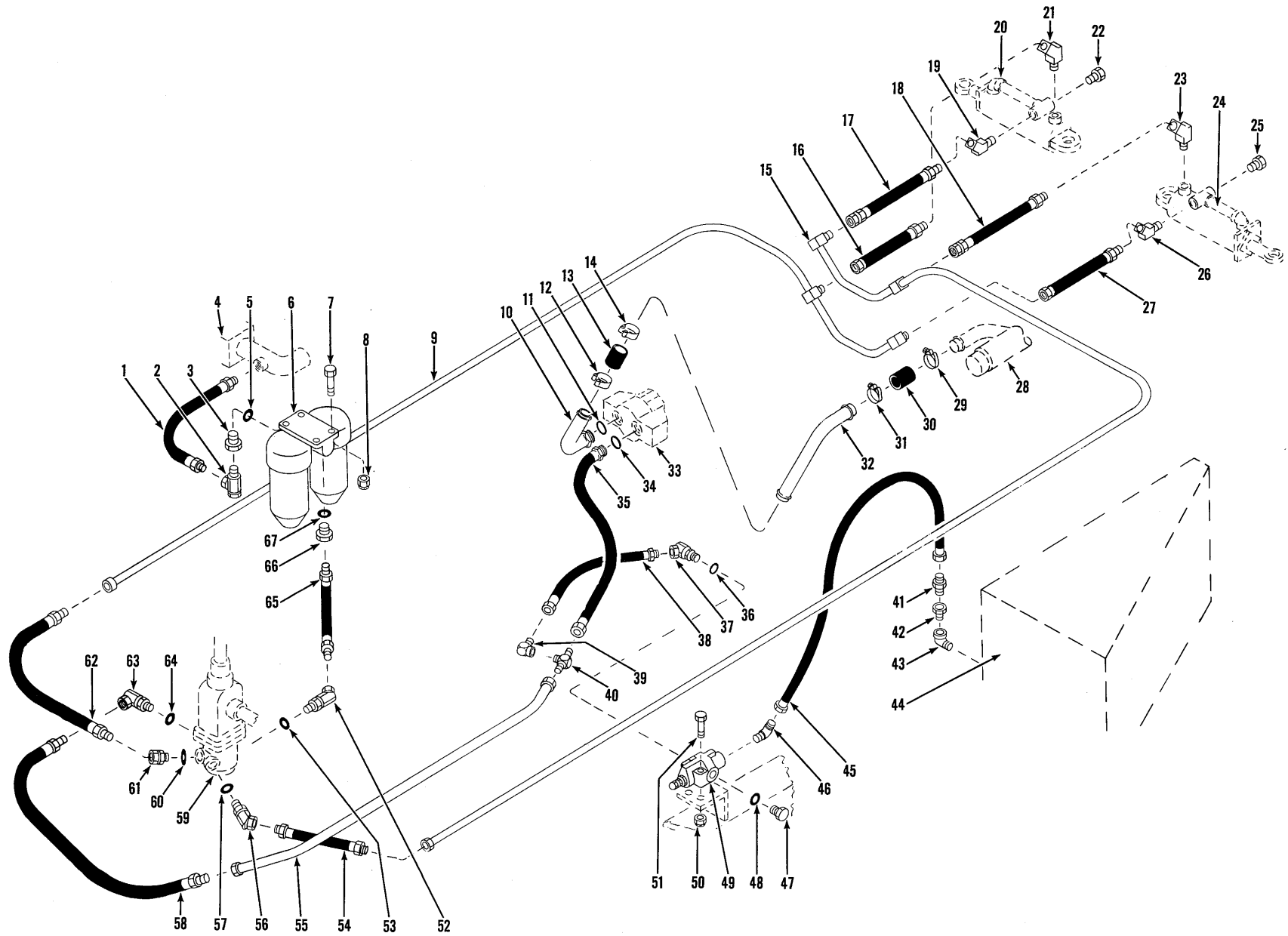
PM 2419

## HYDRAULIC SYSTEM — STEERING — CUMMINS For Serial: 5HC101 thru 5HC999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	6K-12	VALVE, Check .....	1	39	-----	PUMP, Steering — See Index	—
2	522969	BUSHING, Reducing (Inc. 4) )	1	40	58K-219	O-RING, Flange Half .....	1
3	616533	HOSE, Tube to Filter .....	1	41	23C-620	BOLT, Flange to Pump .....	4
4	91F-10	O-RING, Bushing .....	1	42	4E-06	LKWSHR, Flange to Pump ....	4
5	-----	TUBE, Return — See Bucket & Boom Hyd. System .....	—	43	663093	FLANGE, Hose to Pump .....	2
6	234777	FILTER, Strg. Oil (Inc. 6A) ....	1	44	91F-7	O-RING, Elbow .....	1
6A	945580	† CARTRIDGE KIT, Filter .....	2	45	594542	ELBOW, Valve (Inc. 44) .....	1
7	24C-628	BOLT, Filter to Bracket .....	4	46	541066	HOSE, Valve to Tee .....	1
8	18D-06	NUT, Filter to Bracket .....	4	47	570822	HOSE, Pump to Tube .....	1
9	23C-724	BOLT, Flange to Pump .....	4	48	85F-8	ELBOW, Hose to Tee .....	1
9A	4E-07	LKWSHR, Flange Mtg. ....	4	49	98F-8	TEE, Connecting .....	1
10	1511520	FLANGE, Stem to Pump .....	2	50	-----	RESERVOIR, Oil — See Index	—
11	593505	STEM, Suction .....	1	51	26F-5	ELBOW, Reservoir .....	1
12	1545004	CLAMP, Hose .....	1	52	356617	BUSHING, Reducing .....	1
13	536710	HOSE, Stem to Stem .....	1	53	89F-7	CONNECTOR, Hose .....	1
14	558682	TUBE, Gear to Cyl. — R.H. ....	1	54	571237	HOSE, Valve to Res. ....	1
15	1545004	CLAMP, Hose .....	1	55	84F-8	ELBOW, Hose to Valve .....	1
16	566846	STEM, Suction .....	1	56	24K-7	PLUG, Valve (Inc. 57) .....	1
17	1545004	CLAMP, Hose .....	1	57	91F-7	O-RING, Plug .....	1
18	536710	HOSE, Stem to Tube .....	1	58	-----	VALVE, Pressure Relief — See Index .....	—
19	1545004	CLAMP, Hose .....	1	59	18D-05	NUT, Valve to Bracket .....	2
20	556817	TUBE, Suction .....	1	60	24C-536	BOLT, Valve to Bracket .....	2
21	558687	TUBE, Gear to Cyl. — L.H. ....	1	61	534894	ADAPTER UNION, Hose to Gear (Inc. 62) .....	1
22	1536561	HOSE, Tube to Cylinder .....	1	62	91F-7	O-RING, Adapter .....	1
23	1536561	HOSE, Tube to Cylinder .....	1	63	1536560	HOSE, Tube to Gear .....	1
24	1536561	HOSE, Tube to Cylinder .....	1	64	556818	TUBE, Gear to Pump — Pressure .....	1
25	81F-3	ELBOW, Hose to Cyl. ....	1	65	535625	ADAPTER UNION, Hose to Gear (Inc. 66) .....	1
26	-----	STEERING CYLINDER — See Index .....	—	66	91F-6	O-RING, Adapter .....	1
27	81F-3	ELBOW, Hose to Cyl. ....	1	67	558692	HOSE, Tube to Gear .....	1
28	40K-08	PLUG, Cylinder Tube .....	1	68	-----	STRG. GEAR — See Index	—
29	81F-3	ELBOW, Hose to Cyl. ....	1	69	91F-6	O-RING, Adapter Union .....	1
30	-----	STEERING CYLINDER — See Index .....	—	70	661564	ADAPTER, Hose to Gear .....	1
31	40K-08	PLUG, Cylinder Tube .....	1	71	1536560	HOSE, Tube to Gear .....	1
32	81F-3	ELBOW, Hose to Cyl. ....	1	72	531684	ADAPTER UNION, Hose to Gear (Inc. 73) .....	1
33	1536561	HOSE, Tube to Cyl. ....	1	73	91F-7	O-RING, Adapter .....	1
34	-----	TUBE, Suction — See Bucket & Boom Hyd. System .....	—	74	645432	HOSE, Gear to Filter .....	1
35	1545004	CLAMP, Hose .....	1	75	522969	BUSHING, Reducing (Inc. 76)	1
36	536710	HOSE, Tube to Tube .....	1	76	91F-10	O-RING, Bushing .....	1
37	1545004	CLAMP, Hose .....	1				
38	58K-222	O-RING, Flange Half .....	1				

†Not Illustrated

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



HYDRAULIC SYSTEM — STEERING — CUMMINS  
For Serial: 6HC101 thru 6HC999

TS-8995-P

## HYDRAULIC SYSTEM — STEERING — CUMMINS

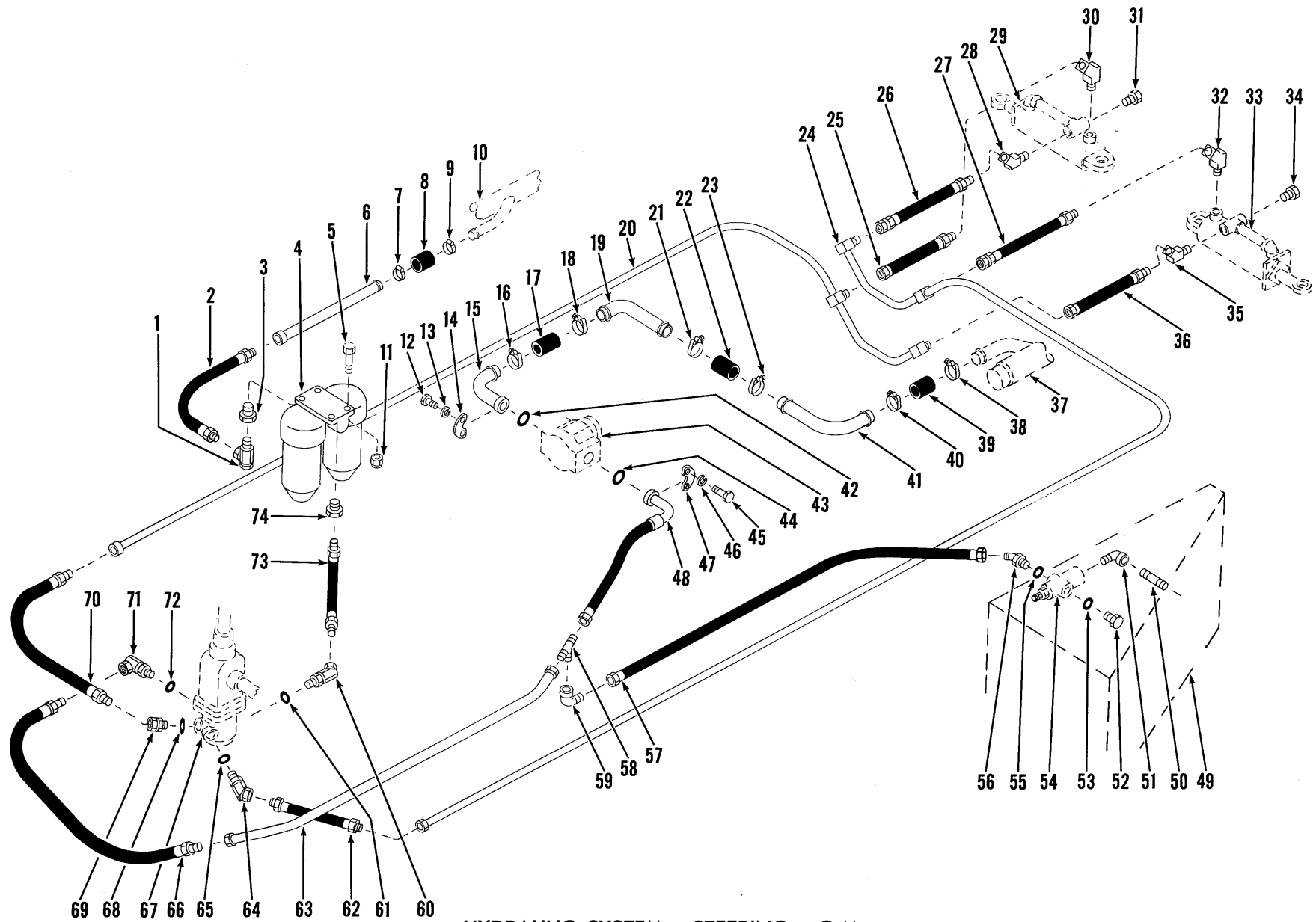
For Serial: 6HC101 thru 6HC999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	616533	HOSE, Tube to Filter .....	1	35	1520854	HOSE, Pump to Tube (Inc. 34) .....	1
2	6K-12	VALVE, Check .....	1	36	91F-7	O-RING, Elbow .....	1
3	522969	BUSHING (Inc. 5) .....	1	37	594542	ELBOW, Valve (Inc. 36) .....	1
4	-----	TUBE, Return — See Bucket & Boom Hyd. System .....	—	38	541066	HOSE, Valve to Tee .....	1
5	91F-10	O-RING, Bushing .....	1	39	85F-8	ELBOW, Hose to Tee .....	1
6	234777	FILTER, Strg. Oil (Inc. 6A) .....	1	40	98F-8	TEE, Connecting .....	1
6A	945580	† CARTRIDGE KIT, Filter .....	2	41	89F-7	CONNECTOR, Hose .....	1
7	24C-628	BOLT, Filter to Bracket .....	4	42	356617	BUSHING, Reducing .....	1
8	18D-06	NUT, Filter to Bracket .....	4	43	26F-5	ELBOW, Reservoir .....	1
9	558682	TUBE, Gear to Cyl. — R.H. ....	1	44	-----	RESERVOIR, Oil — See Index .....	—
10	573585	STEM, Suction (Inc. 11) .....	1	45	571237	HOSE, Valve to Res. ....	1
11	91F-11	O-RING, Stem to Pump .....	1	46	84F-8	ELBOW, Hose to Valve .....	1
12	1545004	CLAMP, Hose .....	1	47	24K-7	PLUG, Valve (Inc. 48) .....	1
13	536710	HOSE, Stem to Tube .....	1	48	91F-7	O-RING, Plug .....	1
14	1545004	CLAMP, Hose .....	1	49	-----	VALVE, Press. Relief — See Index .....	—
15	558687	TUBE, Gear to Cyl. — L.H. ....	1	50	18D-05	NUT, Valve to Brk. ....	2
16	1536561	HOSE, Tube to Cyl. ....	1	51	24C-536	BOLT, Valve to Brk. ....	2
17	1536561	HOSE, Tube to Cyl. ....	1	52	534894	ADAPTER UNION, Hose to Gear (Inc. 53) .....	1
18	1536561	HOSE, Tube to Cyl. ....	1	53	91F-7	O-RING, Adapter .....	1
19	81F-3	ELBOW, Hose to Cyl. ....	1	54	1536560	HOSE, Tube to Gear .....	1
20	-----	STRG. CYLINDER — See Index .....	—	55	556818	TUBE, Gear to Pump — Pressure .....	1
21	81F-3	ELBOW, Hose to Cyl. ....	1	56	535625	ADAPTER UNION, Hose to Gear (Inc. 57) .....	1
22	40K-08	PLUG, Cyl. Tube .....	1	57	91F-6	O-RING, Adapter .....	1
23	81F-3	ELBOW, Hose to Cyl. ....	1	58	558692	HOSE, Tube to Gear .....	1
24	-----	STRG. CYLINDER — See Index .....	—	59	-----	STRG. GEAR — See Index .....	—
25	40K-08	PLUG, Cyl. Tube .....	1	60	91F-6	O-RING, Adapter .....	1
26	81F-3	ELBOW, Hose to Cyl. ....	1	61	661564	ADAPTER UNION, Hose to Gear .....	1
27	1536561	HOSE, Tube to Cyl. ....	1	62	1536560	HOSE, Tube to Gear .....	1
28	-----	TUBE, Suction — See Bucket & Boom Hyd. System .....	—	63	531684	ADAPTER UNION, Hose to Gear (Inc. 64) .....	1
29	1545004	CLAMP, Hose .....	1	64	91F-7	O-RING, Adapter .....	1
30	536710	HOSE, Tube to Tube .....	1	65	645432	HOSE, Gear to Filter .....	1
31	1545004	CLAMP, Hose .....	1	66	522969	BUSHING, (Inc. 67) .....	1
32	1520855	TUBE, Suction .....	1	67	91F-10	O-RING, Bushing .....	1
33	-----	PUMP, Strg. — See Index .....	—				
34	91F-10	O-RING, Hose to Pump .....	1				

†Not Illustrated

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

[ 110 ]



HYDRAULIC SYSTEM — STEERING — G.M.  
For Serial: 5HG101 thru 5HG999

TS-5217-P

PM 2419



## HYDRAULIC SYSTEM — STEERING — G.M.

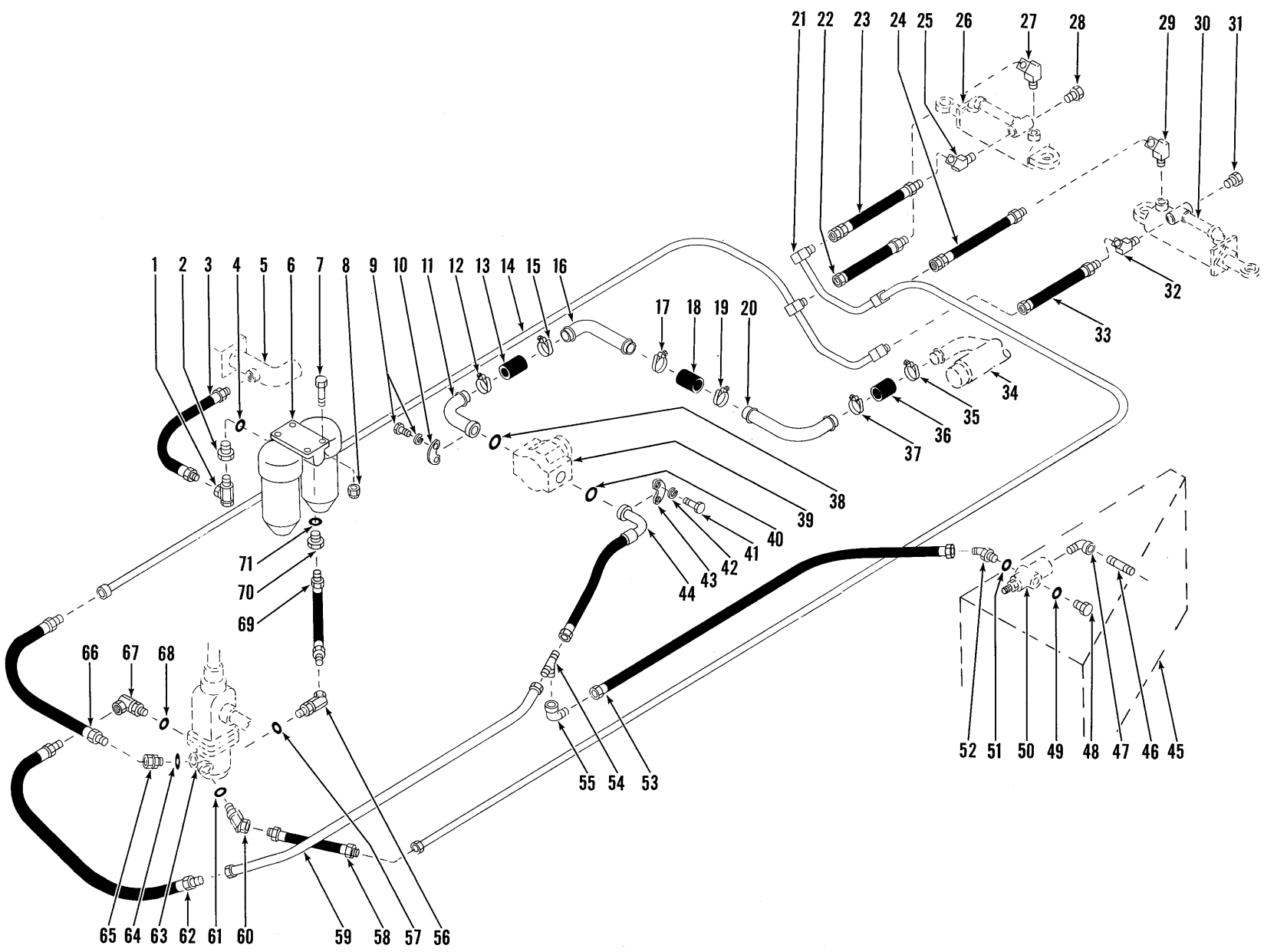
For Serial: 5HG101 thru 5HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	6K-12	VALVE, Check .....	1	38	1545004	CLAMP, Hose .....	1
2	533991	HOSE, Tube to Filter .....	1	39	536710	HOSE, Tube to Tube .....	1
3	356621	BUSHING, Reducing .....	1	40	1545004	CLAMP, Hose .....	1
4	215500	FILTER, Strg. Oil (Inc. 4A) .....	1	41	556817	TUBE, Suction .....	1
4A	945580	† CARTRIDGE KIT, Filter .....	2	42	58K-222	O-RING, Flange Half .....	1
5	24C-628	BOLT, Filting Mounting .....	4	43	-----	PUMP, Strg. — See Index .....	—
6	558690	TUBE, Return .....	1	44	58K-219	O-RING, Flange Half .....	1
7	521874	CLAMP, Hose .....	1	45	23C-620	BOLT, Flange to Pump .....	4
8	1520104	HOSE, Tube to Tube .....	1	46	4E-06	LKWSHR, Flange Mtg. ....	4
9	521874	CLAMP, Hose .....	1	47	663093	FLANGE HALF, Hose Mtg. ....	2
10	-----	TUBE, Return — See Bucket & Boom Hyd. System .....	—	48	570822	HOSE, Pump to Tube .....	1
11	18D-06	NUT, Filter Mounting .....	4	49	-----	RESERVOIR, Oil — See Index .....	—
12	23C-724	BOLT, Flange to Pump .....	4	50	5K-616	NIPPLE, Elbow to Tank .....	1
13	4E-07	LKWSHR, Flange Mtg. ....	4	51	26F-5	ELBOW, Connecting .....	1
14	1511520	FLANGE HALF, Stem Mtg. ....	2	52	24K-7	PLUG, Valve (Inc. 53) .....	1
15	593505	STEM, Suction .....	1	53	91F-7	O-RING, Plug .....	1
16	1545004	CLAMP, Hose .....	1	54	-----	VALVE, Pressure Relief — See Index .....	—
17	536710	HOSE, Stem to Stem .....	1	55	91F-7	O-RING, Elbow .....	1
18	1545004	CLAMP, Hose .....	1	56	18K-7	ELBOW, Valve (Inc. 55) .....	1
19	566846	STEM, Suction .....	1	57	571237	HOSE, Tube to Valve .....	1
20	558682	TUBE, Gear to Cyl. — R.H. ....	1	58	98F-8	TEE, Connecting .....	1
21	1545004	CLAMP, Hose .....	1	59	85F-8	ELBOW, Hose to Tee .....	1
22	536710	HOSE, Stem to Tube .....	1	60	534894	ADAPTER UNION, Hose to Gear (Inc. 61) .....	1
23	1545004	CLAMP, Hose .....	1	61	91F-7	O-RING, Adapter Union .....	1
24	558687	TUBE, Gear to Cyl. — L.H. ....	1	62	1536560	HOSE, Tube to Gear .....	1
25	1536561	HOSE, Tube to Cylinder .....	1	63	556818	TUBE, Gear to Pump — Pressure .....	1
26	1536561	HOSE, Tube to Cylinder .....	1	64	535625	ADAPTER UNION, Hose to Gear (Inc. 65) .....	1
27	1536561	HOSE, Tube to Cylinder .....	1	65	91F-6	O-RING, Adapter .....	1
28	81F-3	ELBOW, Hose to Cylinder .....	1	66	558692	HOSE, Tube to Gear .....	1
29	-----	STEERING CYLINDER — R.H. — See Index .....	—	67	-----	STRG. GEAR — See Index .....	—
30	81F-3	ELBOW, Hose to Cyl. ....	1	68	91F-6	O-RING, Adapter .....	1
31	40K-08	PLUG, Cylinder Tube .....	1	69	661564	ADAPTER, Hose to Gear .....	1
32	81F-3	ELBOW, Hose to Cyl. ....	1	70	1536560	HOSE, Tube to Gear .....	1
33	-----	STEERING CYLINDER — L.H. — See Index .....	—	71	531684	ADAPTER UNION, Hose to Gear (Inc. 72) .....	1
34	40K-08	PLUG, Cylinder Tube .....	1	72	91F-7	O-RING, Adapter Union .....	1
35	81F-3	ELBOW, Hose to Cylinder .....	1	73	645432	HOSE, Gear to Filter .....	1
36	1536561	HOSE, Tube to Cylinder .....	1	74	356621	BUSHING, Filter Reducing .....	1
37	-----	TUBE, Suction — See Bucket & Boom Hyd. System .....	—				

†Not Illustrated

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

[ 112 ]



HYDRAULIC SYSTEM — STEERING — G.M.  
For Serial: 6HG101 thru 6HG999

TS-6655-P

PM 2419

## HYDRAULIC SYSTEM — STEERING — G.M.

For Serial: 6HG101 thru 6HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	6K-12	VALVE, Check .....	1	37	1545004	CLAMP, Hose .....	1
2	522969	BUSHING, Reducing (Inc. 4) ..	1	38	58K-222	O-RING, Flange Half .....	1
3	616533	HOSE, Tube to Filter .....	1	39	-----	PUMP, Steering — See Index	—
4	91F-10	O-RING, Bushing .....	1	40	58K-219	O-RING, Flange Half .....	1
5	-----	TUBE, Return — See Bucket & Boom Hyd. System .....	—	41	23C-620	BOLT, Flange to Pump .....	4
6	234777	FILTER, Strg. Oil (Inc. 6A) ....	1	42	4E-06	LKWSHR, Flange Mtg. ....	4
6A	945580	† CARTRIDGE KIT, Filter .....	2	43	663093	FLANGE, Hose to Pump .....	2
7	24C-628	BOLT, Filter to Bracket .....	4	44	570822	HOSE, Pump to Tube .....	1
8	18D-06	NUT, Filter to Bracket .....	4	45	-----	RESERVOIR, Oil — See Index	—
9	23C-724	BOLT, Flange to Pump .....	4	46	5K-616	NIPPLE, Elbow to Tank .....	1
9A	4E-04	LKWSHR, Flange Mtg. ....	4	47	26F-5	ELBOW, Valve .....	1
10	1511520	FLANGE, Stem to Pump .....	2	48	24K-7	PLUG, Valve (Inc. 49) .....	1
11	593505	STEM, Suction .....	1	49	91F-7	O-RING, Plug .....	1
12	1545004	CLAMP, Hose .....	1	50	-----	VALVE, Pressure Relief — See Index .....	—
13	536710	HOSE, Stem to Stem .....	1	51	91F-7	O-RING, Elbow .....	1
14	558682	TUBE, Gear to Cyl. — R.H. ....	1	52	18K-7	ELBOW, Valve (Inc. 51) .....	1
15	1545004	CLAMP, Hose .....	1	53	571237	HOSE, Tube to Valve .....	1
16	566846	STEM, Suction .....	1	54	98F-8	TEE, Connecting .....	1
17	1545004	CLAMP, Hose .....	1	55	85F-8	ELBOW, Hose to Tee .....	1
18	536710	HOSE, Stem to Tube .....	1	56	534894	ADAPTER UNION, Hose to Gear (Inc. 57) .....	1
19	1545004	CLAMP, Hose .....	1	57	91F-7	O-RING, Adapter .....	1
20	556817	TUBE, Suction .....	1	58	1536560	HOSE, Tube to Gear .....	1
21	558687	TUBE, Gear to Cyl. — L.H. ....	1	59	556818	TUBE, Gear to Pump — Pressure .....	1
22	1536561	HOSE, Tube to Cylinder .....	1	60	535625	ADAPTER UNION, Hose to Gear (Inc. 61) .....	1
23	1536561	HOSE, Tube to Cylinder .....	1	61	91F-6	O-RING, Adapter .....	1
24	1536561	HOSE, Tube to Cylinder .....	1	62	558692	HOSE, Tube to Gear .....	1
25	81F-3	ELBOW, Hose to Cyl. ....	1	63	-----	STRG. GEAR — See Index	—
26	-----	STEERING CYLINDER — See Index .....	—	64	91F-6	O-RING, Adapter .....	1
27	81F-3	ELBOW, Hose to Cyl. ....	1	65	661564	ADAPTER UNION, Hose to Gear .....	1
28	40K-08	PLUG, Cylinder Tube .....	1	66	1536560	HOSE, Tube to Gear .....	1
29	81F-3	ELBOW, Hose to Cyl. ....	1	67	531684	ADAPTER UNION, Hose to Gear (Inc. 68) .....	1
30	-----	STEERING CYLINDER — See Index .....	—	68	91F-7	O-RING, Adapter .....	1
31	40K-08	PLUG, Cylinder Tube .....	1	69	645432	HOSE, Gear to Filter .....	1
32	81F-3	ELBOW, Hose to Cylinder ....	1	70	522969	BUSHING, Reducing (Inc. 71)	1
33	1536561	HOSE, Tube to Cylinder .....	1	71	91F-10	O-RING, Bushing .....	1
34	-----	TUBE, Suction — See Bucket & Boom Hyd. System .....	—				
35	1545004	CLAMP, Hose .....	1				
36	536710	HOSE, Tube to Tube .....	1				

†Not Illustrated

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

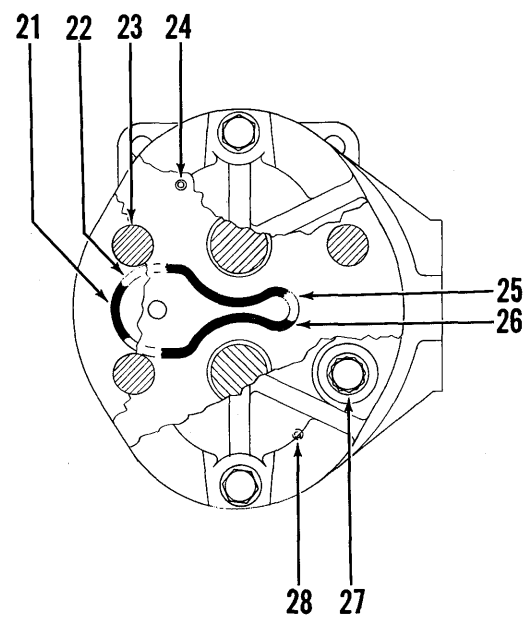
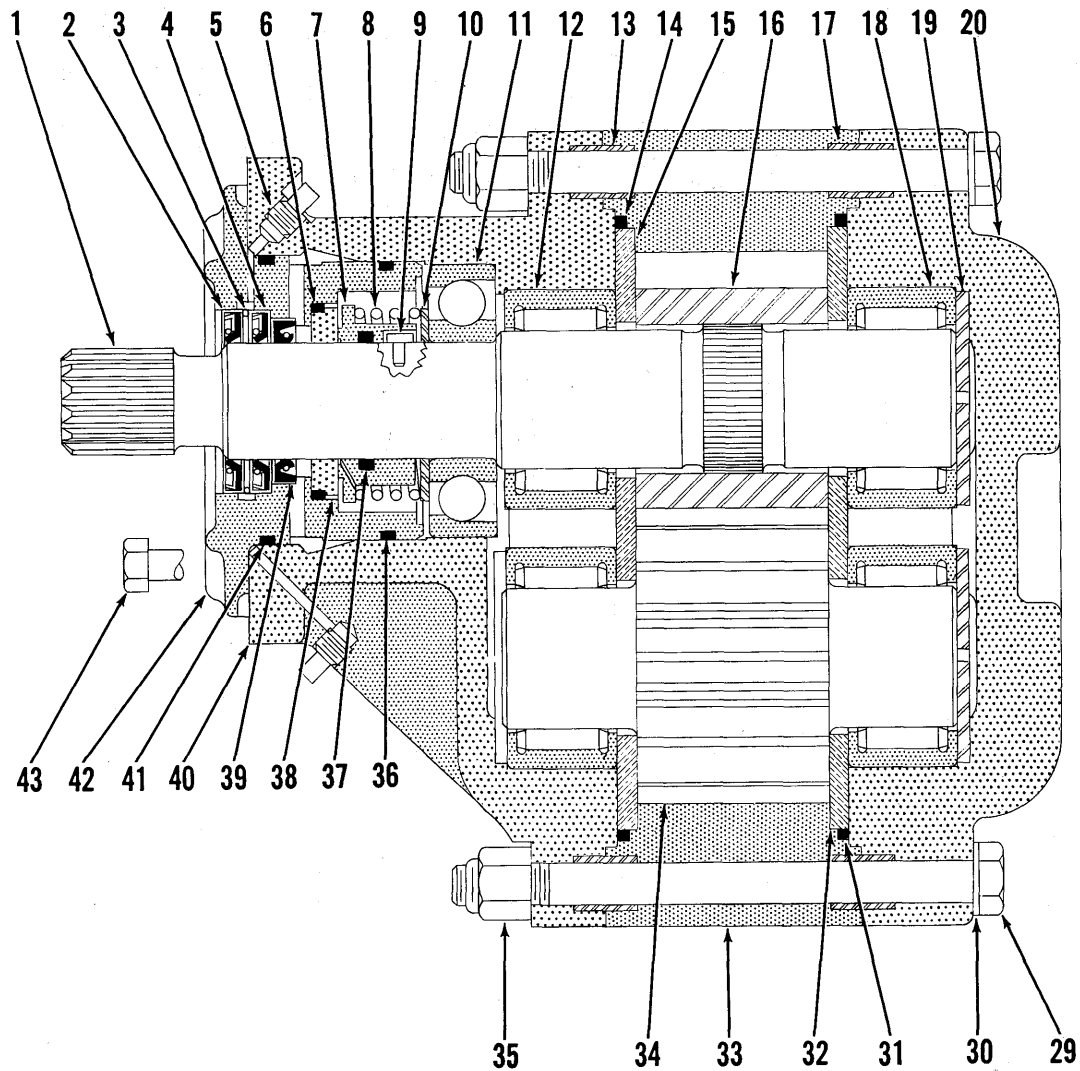


## HYDRAULIC SYSTEM — STEERING — G.M. For Serial: 7HG101 thru 7HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	616533	HOSE, Tube to Filter .....	1	32	1520855	TUBE, Suction .....	1
2	6K-12	VALVE, Check .....	1	33	-----	PUMP, Strg. — See Index .....	—
3	522969	BUSHING (Inc. 5) .....	1	34	91F-10	O-RING, Hose to Pump .....	1
4	-----	TUBE, Return — See Bucket & Boom Hyd. System .....	—	35	1520854	HOSE, Pump to Tube (Inc. 34) .....	1
5	91F-10	O-RING, Bushing .....	1	36	-----	RESERVOIR, Oil — See Index .....	—
6	234777	FILTER, Strg. Oil (Inc. 6A) .....	1	37	5K-616	NIPPLE, Elbow to Tank .....	1
6A	945580	† CARTRIDGE KIT, Filter .....	2	38	26F-5	ELBOW, Valve .....	1
7	24C-628	BOLT, Filter to Bracket .....	4	39	24K-7	PLUG, Valve (Inc. 40) .....	1
8	18D-06	NUT, Filter to Bracket .....	4	40	91F-7	O-RING, Plug .....	1
9	558682	TUBE, Gear to Cyl. — R.H. ....	1	41	-----	VALVE, Pressure Relief .....	—
10	573585	STEM, Suction (Inc. 11) .....	1	42	91F-7	O-RING, Elbow .....	1
11	91F-11	O-RING, Stem to Pump .....	1	43	18K-7	ELBOW, Valve (Inc. 42) .....	1
12	1545004	CLAMP, Hose .....	1	44	571237	HOSE, Tee to Valve .....	1
13	536710	HOSE, Stem to Tube .....	1	45	85F-8	ELBOW, Hose to Tee .....	1
14	1545004	CLAMP, Hose .....	1	46	98F-8	TEE, Connecting .....	1
15	558687	TUBE, Gear to Cyl. — L.H. ....	1	47	534894	ADAPTER UNION, Hose to Gear (Inc. 48) .....	1
16	1536561	HOSE, Tube to Cyl. ....	1	48	91F-7	O-RING, Adapter .....	1
17	1536561	HOSE, Tube to Cyl. ....	1	49	1536560	HOSE, Tube to Gear .....	1
18	1536561	HOSE, Tube to Cyl. ....	1	50	556818	TUBE, Gear to Pump — Pressure .....	1
19	81F-3	ELBOW, Hose to Cyl. ....	1	51	535625	ADAPTER UNION, Hose to Gear (Inc. 52) .....	1
20	-----	STRG. CYLINDER — See Index .....	—	52	91F-6	O-RING, Adapter .....	1
21	81F-3	ELBOW, Hose to Cyl. ....	1	53	558692	HOSE, Tube to Gear .....	1
22	40K-08	PLUG, Cyl. Tube .....	1	54	-----	STRG. GEAR — See Index .....	—
23	81F-3	ELBOW, Hose to Cyl. ....	1	55	91F-6	O-RING, Adapter .....	1
24	-----	STRG. CYLINDER — See Index .....	—	56	661564	ADAPTER UNION, Hose to Gear .....	1
25	40K-08	PLUG, Cyl. Tube .....	1	57	1536560	HOSE, Tube to Gear .....	1
26	81F-3	ELBOW, Hose to Cyl. ....	1	58	531684	ADAPTER UNION, Hose to Gear (Inc. 59) .....	1
27	1536561	HOSE, Tube to Cyl. ....	1	59	91F-7	O-RING, Adapter .....	1
28	-----	TUBE, Suction — See Bucket & Boom Hyd. System .....	—	60	645432	HOSE, Gear to Filter .....	1
29	1545004	CLAMP, Hose .....	1	61	522969	BUSHING, Reducing (Inc. 62) .....	1
30	536710	HOSE, Tube to Tube .....	1	62	91F-10	O-RING, Bushing .....	1
31	1545004	CLAMP, Hose .....	1				

†Not Illustrated

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



[ 116 ]

HYDRAULIC PUMP — BUCKET AND BOOM

TS-7918-P

## HYDRAULIC PUMP — BUCKET AND BOOM

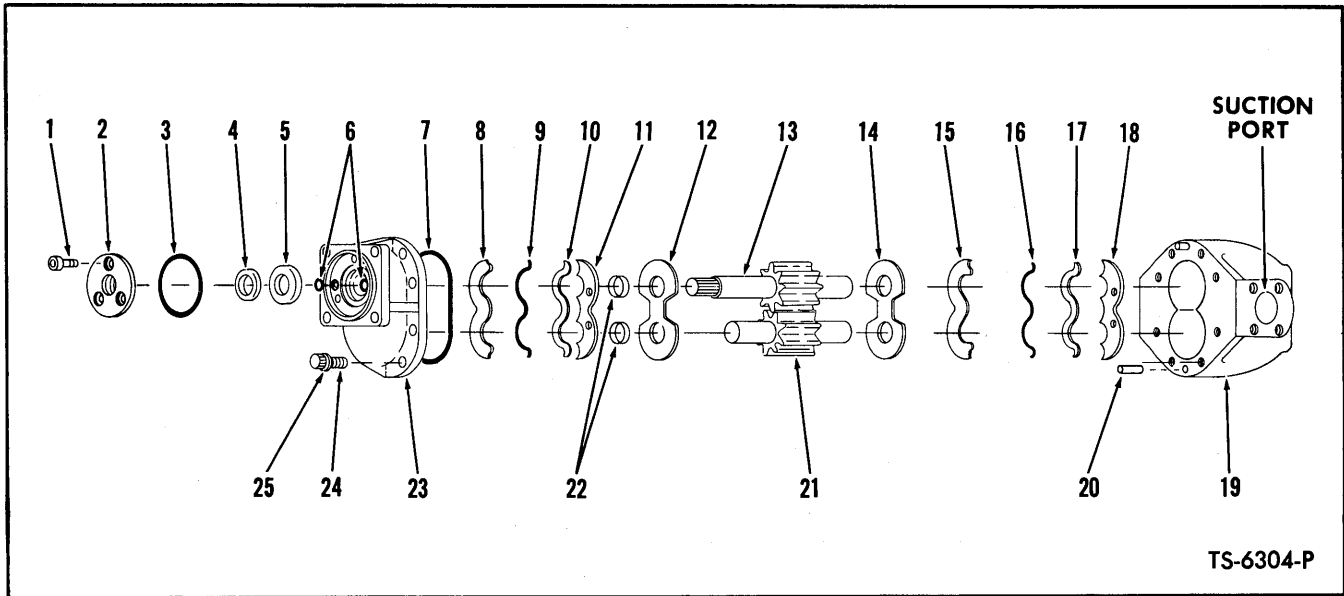
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	564403	*PUMP ASSY (Inc. 1 thru 43)	1	20	946087	COVER, Pump	1
B	946078	KIT, Minor Repair (Inc. 14, 21, 22, 25, 26, 31, 36, 41)	1	21	-----	§O-RING (See B)	1
C	946079	KIT, Shaft Seal (Inc. 2, 3, 4, 39)	1	22	-----	§RING, Back-Up (See B)	1
D	946080	KIT, Bearing (Inc. 11, 12, 18, 19)	1	23	12G-1488	BOLT, Cover & Adapter to Hsg.	2
E	946081	KIT, Wear Plate (Inc. 15, 32)	1	24	209968	PIN, Roll	1
F	946082	KIT, Seal & Seat (Inc. 6 thru 10, 37, 38)	1	25	-----	§RING, Back-Up (See B)	1
G	946083	KIT, Gear (Inc. 16, 34)	1	26	-----	§O-RING (See B)	1
1	946084	SHAFT, Drive	1	27	12G-1488	BOLT, Cover & Adapter to Hsg.	2
2	-----	§SEAL, Shaft — Outer (See C)	1	28	209968	PIN, Roll	1
3	-----	§RING, Retaining (See C)	1	29	14C-8104	BOLT, Cover to Hsg. & Adapter	2
4	-----	§SEAL, Shaft — Outer (See C)	1	30	878233	WASHER, Cover Mtg.	2
5	945441	PLUG, Adapter Port	4	31	-----	§O-RING, Housing (See B)	1
6	-----	§O-RING, Seal Seat (See F)	1	32	-----	§PLATE, Wear (See E)	1
7	-----	§SEAL, High Press. (See F)	1	33	946086	HOUSING, Center	1
8	-----	§SPRING, High Press. Seal (See F)	1	34	-----	§GEAR, Driven (See G)	1
9	946085	KEY, Drive (See F)	1	35	18D-08	NUT, Cover Mtg.	2
10	-----	§WASHER, Thrust (See F)	1	36	-----	§O-RING, Ret. (See B)	1
11	-----	§BEARING, Drive Shaft (See D)	1	37	-----	§O-RING, High Press. (See F)	1
12	-----	§BEARING, Roller (See D)	2	38	-----	§SEAT, Seal (See F)	1
13	944826	DOWEL, Hsg. to Adapter	2	39	-----	§SEAL, Shaft Inner (See C)	1
14	-----	§O-RING, Housing (See B)	1	40	946088	ADAPTER, Pump	1
15	-----	§PLATE, Wear (See E)	1	41	-----	§O-RING, Adapter (See B)	1
16	-----	§GEAR, Drive (See G)	1	42	946089	RETAINER, Seal	1
17	944826	DOWEL, Hsg. to Cover	2	43	944827	BOLT, Retainer	6
18	-----	§BEARING, Roller (See D)	2	44	219413	†SLEEVE, Pump Drive (Inc. 46)	1
19	-----	§WASHER, Thrust (See D)	1	45	552161	†GASKET, Pump to Conv.	1
				46	664140	†RING, Drive Sleeve Ret.	1
				47	216555	†STUD, Pump Mtg.	4
				48	18D-08	†NUT, Pump to Conv.	4

§Not Sold Separately — Order Kits

†Not Illustrated

\*NOTE: For complete Pump replacement use 574294 plus 1 #552161 Pump Mtg. Gasket, 1 #1306625 Suction Tube O-Ring, 1 #533478 Suction Stem to Tube Hose, 2 #540106 Hose Clamp, 1 #573708 Pump to Valve Tube Hose, 1 #1306624 Pump to Hose O-Ring, 2 #663095 Pump to Hose Flange Half, 4 #23C-824 Flange Half Mtg. Bolt, 4 #4E-08 Lockwasher, 1 #1306623 Hose to Valve Tube O-Ring, 4 #571511 Pump Mtg. Stud, 4 #4E-08 Lockwasher and 4 #62D-08 Nut must also be used. After conversion refer to Page 118 for your component part breakdown of 574294 Pump Assembly.

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



## HYDRAULIC PUMP – BUCKET AND BOOM

Item No.	Part No.	Description	No. Req'd.
A	574294	*PUMP ASSY (Inc. 1 thru 25)	1
B	945898	KIT, Seal (Inc. 3 thru 10, 15, 16, 17)	1
C	946752	KIT, Major Repair (Inc. 1 thru 18, 21, 22, 24, 25)	1
D	946753	KIT, Gear (Inc. 13, 21)	1
1	11G-408	BOLT, Seal Retainer	3
2	946756	RETAINER, Seal	1
3	1307761	O-RING, Seal Retainer – See "B" or "C"	1
4	946355	SEAL, Outer Oil – See "B" or "C"	1
5	946099	SEAL, Inner Oil – See "B" or "C"	1
6	91F-1	O-RING, Flange Drain Back – See "B" or "C"	2
7	-----	§O-RING, Body to Flange – See "B" or "C"	1
8	-----	§RETAINER, Ring – See "B" or "C"	1
9	-----	§O-RING – See "B" or "C"	1
10	-----	§RING, Back-up – See "B" or "C"	1
11	-----	§PLATE, Isolation – See "C"	1
12	-----	§PLATE, Pressure – See "C"	1
13	-----	§GEAR, Drive – See "C" or "D"	1
14	-----	§PLATE, Pressure – See "C"	1
15	-----	§RETAINER, Ring – See "B" or "C"	1
16	-----	§O-RING – See "B" or "C"	1
17	-----	§RING, Back-up – See "B" or "C"	1
18	-----	§PLATE, Isolation – See "C"	1
19	946754	BODY	1
20	946100	PIN, Flange to Body	2
21	-----	§GEAR, Driven – See "C" or "D"	1
22	-----	§RING, Spacer – See "C"	2
23	946755	FLANGE, Cover	1
24	946356	WASHER, Flange – See "C"	8
25	23C-1024	BOLT, Flange – See "C"	8
26	571511	†STUD, Pump Mounting	4
27	4E-08	†LKWSHR, Pump Mounting	4
28	62D-08	†NUT, Pump Mounting	4
29	552161	†GASKET, Pump to Converter	1
30	664140	†RING, Drive Sleeve Ret.	1
31	219413	†SLEEVE, Pump Drive (Inc. 30)	1

§Not Sold Separately – Order Kits

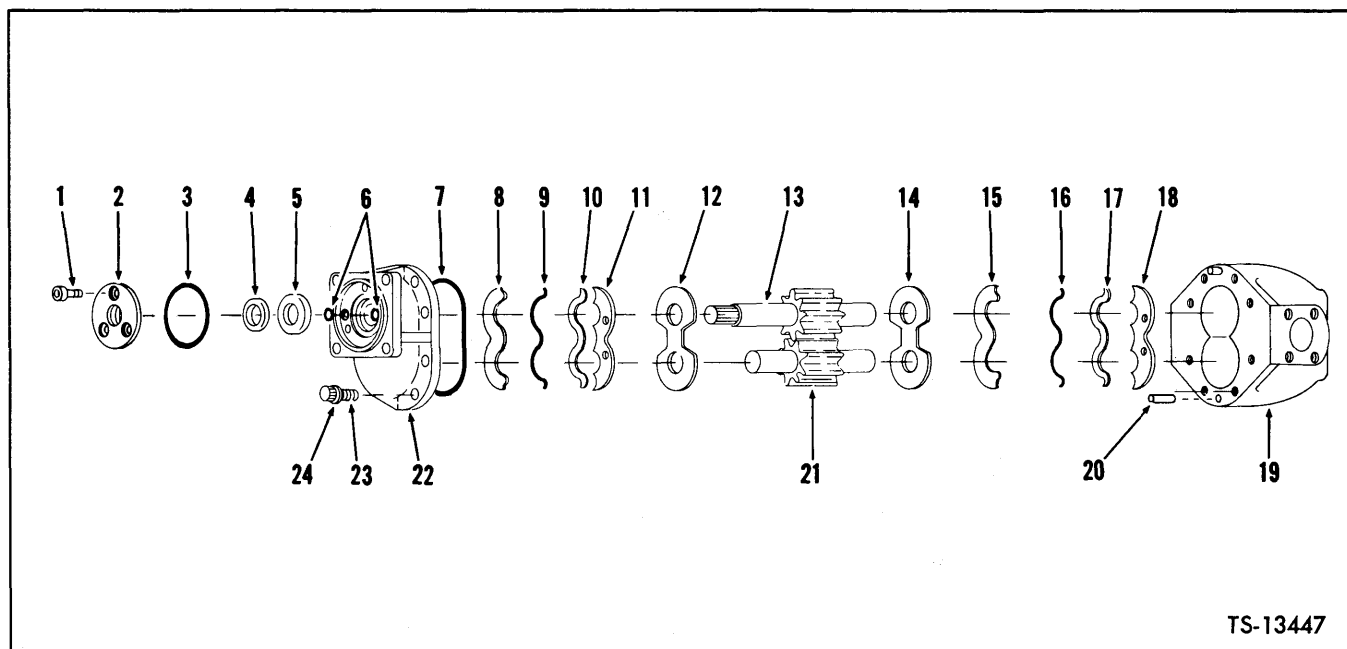
†Not Illustrated

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

\*NOTE: For replacement use 1519915 Pump

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





TS-13447

## HYDRAULIC PUMP

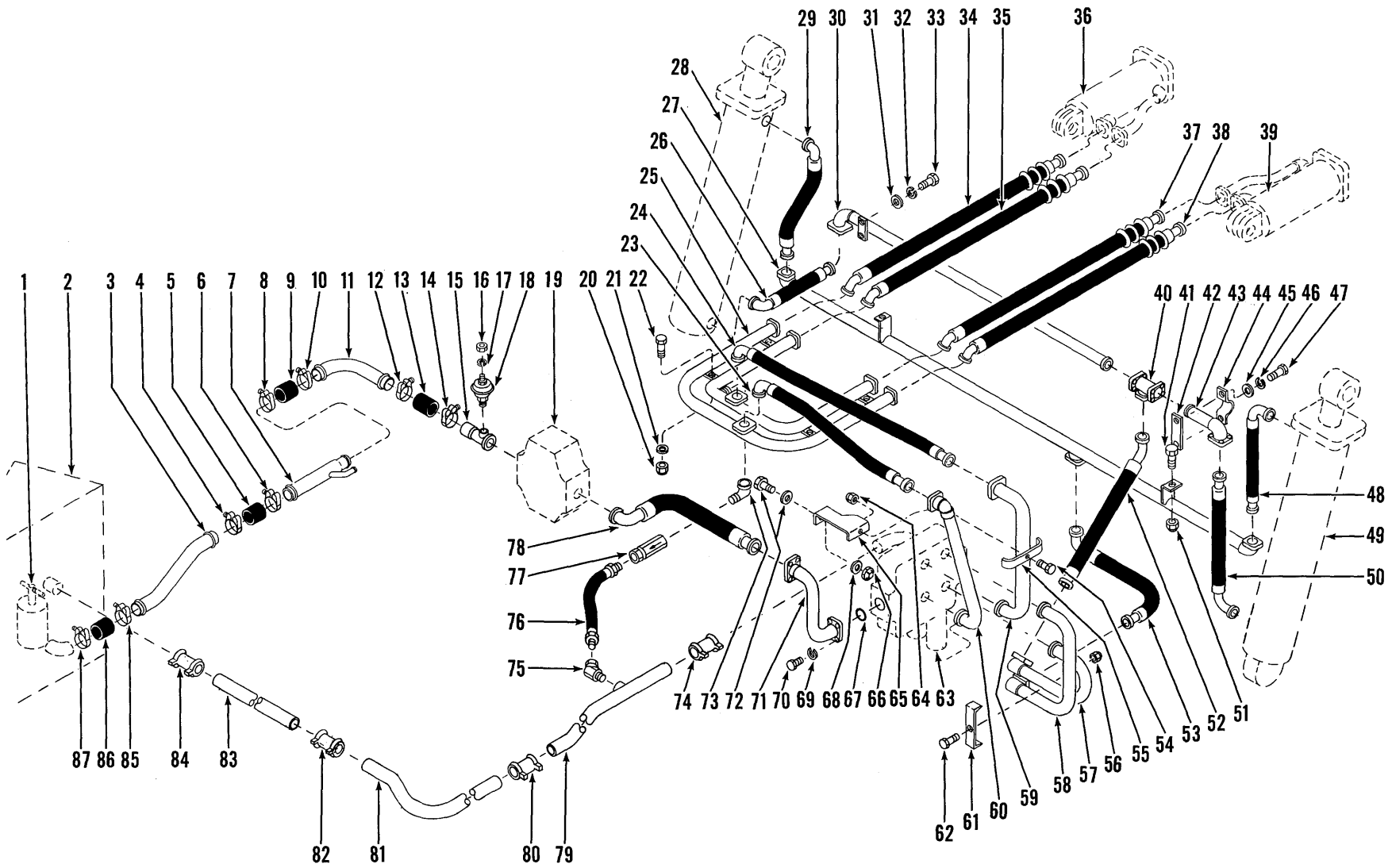
Item No.	Part No.	Description	No. Req'd.
A	1519915	PUMP ASSY (Inc. 1 thru 24)	1
B	945898	KIT, Seal (Inc. 3 thru 10, 15, 16, 17)	1
C	946752	KIT, Major Repair (Inc. 1 thru 18, 21, 23, 24)	1
D	946753	KIT, Gear (Inc. 13, 21)	1
1	11G-408	BOLT, Seal Retainer	3
2	946756	RETAINER, Seal	1
3	1307761	"O" RING, Seal Retainer — See "B" or "C"	1
4	946355	SEAL, Outer Oil — See "B" or "C"	1
5	946099	SEAL, Inner Oil — See "B" or "C"	1
6	91F-1	"O" RING, Flange Drain Back — See "B" or "C"	2
7	-----	§"O" RING, Body to Flange — See "B" or "C"	1
8	-----	§RETAINER, Ring — See "B" or "C"	1
9	-----	§"O" RING — See "B" or "C"	1
10	-----	§RING, Back-up — See "B" or "C"	1
11	-----	§PLATE, Isolation — See "C"	1
12	-----	§PLATE, Pressure — See "C"	1
13	-----	§GEAR, Drive — See "C" or "D"	1
14	-----	§PLATE, Pressure — See "C"	1
15	-----	§RETAINER, Ring — See "B" or "C"	1
16	-----	§"O" RING — See "B" or "C"	1
17	-----	§RING, Back-up — See "B" or "C"	1
18	-----	§PLATE, Isolation — See "C"	1
19	946754	BODY	1
20	946100	DOWEL, Flange to Body	2
21	-----	§GEAR, Driven — See "C" or "D"	1
22	946755	FLANGE, Cover	1
23	17C-1024	BOLT, Flange — See "C"	8
24	946356	WASHER, Flange — See "C"	8

§Not Sold Separately

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

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

[ 120 ]



HYDRAULIC SYSTEM — BUCKET AND BOOM  
For Serial: Cummins — 5HC101 thru 5HC999

TS-6802-P

## HYDRAULIC SYSTEM — BUCKET AND BOOM

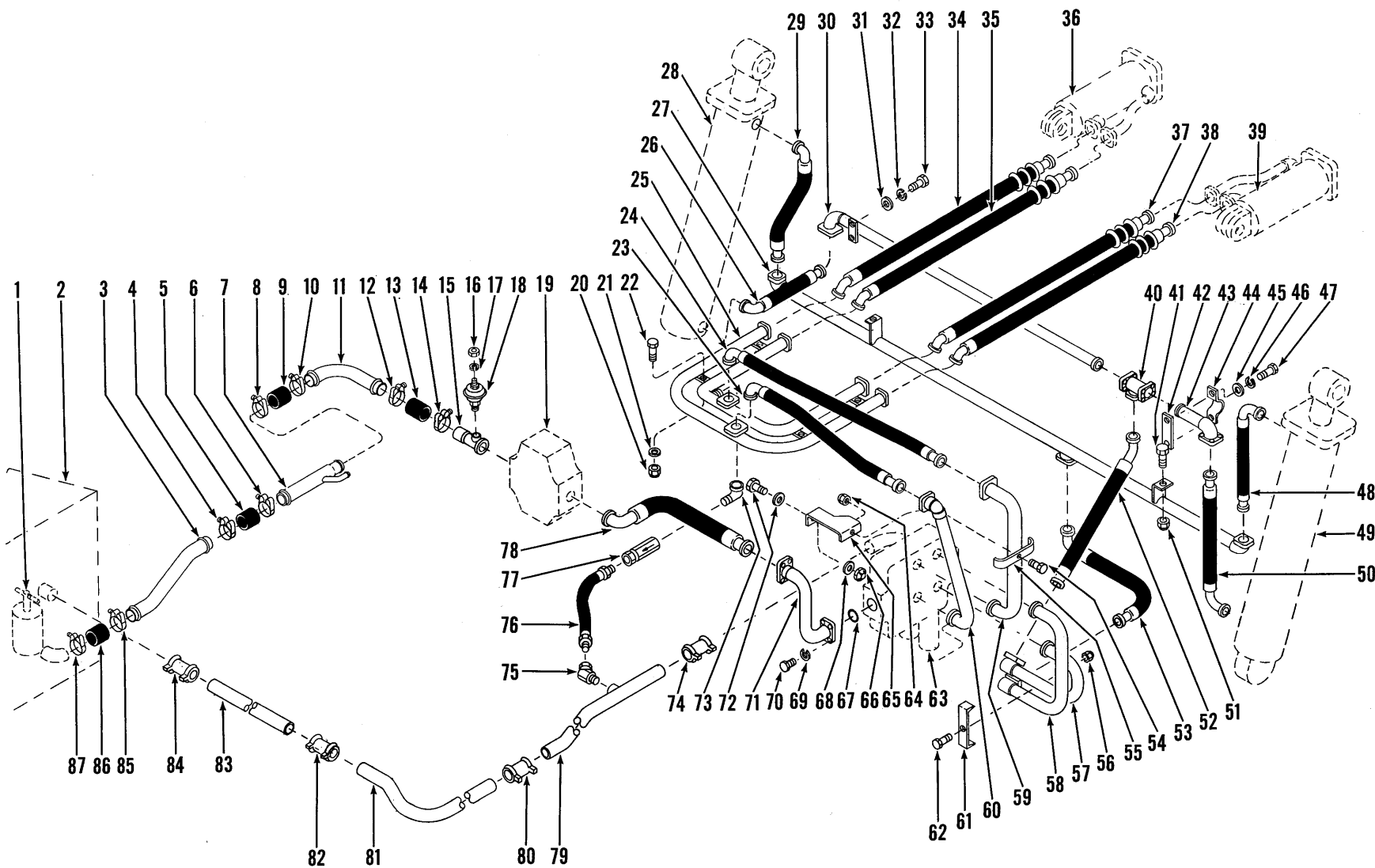
For Serial: Cummins — 5HC101 thru 5HC999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	FILTER, Oil Reservoir — See Index .....	—	28	-----	CYLINDER, Boom—See Index	—
2	-----	RESERVOIR, Oil—See Index..	—	29	567671	HOSE, Cross Tube to Cyl.....	1
3	558706	TUBE, Suction — Rear.....	1	29A	-----	†FLANGE — See Group "C"....	—
4	540107	CLAMP, Hose .....	1	30	566382	TUBE, Boom Cyl. Cross .....	1
5	533139	HOSE, Tube to Tube.....	1	31	619021	WASHER, Tube to Frame .....	2
6	540107	CLAMP, Hose .....	1	32	4E-06	LKWSHR, Tube to Frame .....	2
7	558707	TUBE, Suction — Center .....	1	33	24C-620	BOLT, Tube to Frame .....	2
8	540106	CLAMP, Hose .....	1	34	567670	HOSE, Cross Tube to Cyl.....	1
9	533478	HOSE, Tube to Tube.....	1	34A	-----	†FLANGE — See Group "C"....	—
10	540106	CLAMP, Hose .....	1	35	567670	HOSE, Cross Tube to Cyl.....	1
11	558709	TUBE, Suction — Front .....	1	35A	-----	†FLANGE — See Group "C"....	—
12	540106	CLAMP, Hose .....	1	36	-----	CYLINDER, Bucket — See Index .....	—
13	533478	HOSE, Tube to Stem .....	1	37	567670	HOSE, Cross Tube to Cyl.....	1
14	540106	CLAMP, Hose .....	1	37A	-----	†FLANGE — See Group "C"....	—
15	565996	STEM, Suction .....	1	38	567670	HOSE, Cross Tube to Cyl.....	1
15A	-----	†FLANGE — See Group "A"....	—	38A	-----	†FLANGE — See Group "C"....	—
16	14D-8	NUT, Vacuum Indicator .....	1	39	-----	CYLINDER, Bucket — See Index .....	—
17	12E-8	LKWSHR, Vac. Indicator.....	1	40	566374	TEE, Split Flange.....	1
18	562112	INDICATOR, Reservoir Filter — Vacuum .....	1	40A	-----	†FLANGE — See Group "C"....	—
19	-----	PUMP, Bucket & Boom — See Index .....	—	41	24C-828	BOLT, Tube to Frame .....	2
20	18D-06	NUT, Tube to Frame.....	4	42	566376	BRACKET, Tube Mtg. ....	1
21	619021	WASHER, Tube to Frame .....	4	43	566383	TUBE, Tee to Hose .....	1
22	24C-620	BOLT, Tube to Frame .....	4	44	572557	SUPPORT, Tube Mtg. ....	1
23	567672	HOSE, Tube to Tube.....	1	45	619021	WASHER, Tube Mtg. ....	2
23A	-----	†FLANGE — See Group "B"....	—	46	4E-06	LKWSHR, Tube Mtg.....	2
24	567672	HOSE, Tube to Tube.....	1	47	24C-620	BOLT, Tube to Frame .....	2
24A	-----	†FLANGE — See Group "B"....	—	48	567671	HOSE, Cross Tube to Cyl.....	1
25	571337	TUBE, Bucket Cyl. Cross .....	1	48A	-----	†FLANGE — See Group "C"....	—
26	567671	HOSE, Cross Tube to Cyl.....	1	49	-----	CYLINDER, Boom—See Index	—
26A	-----	†FLANGE — See Group "C"....	—	50	567671	HOSE, Cross Tube to Cyl.....	1
27	566385	TUBE, Boom Cyl. Cross .....	1	50A	-----	†FLANGE — See Group "C"....	—

†Not Illustrated

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

[ 122 ]



HYDRAULIC SYSTEM — BUCKET AND BOOM  
For Serial: Cummins — 5HC101 thru 5HC999

TS-6802-P

## HYDRAULIC SYSTEM — BUCKET AND BOOM (Continued)

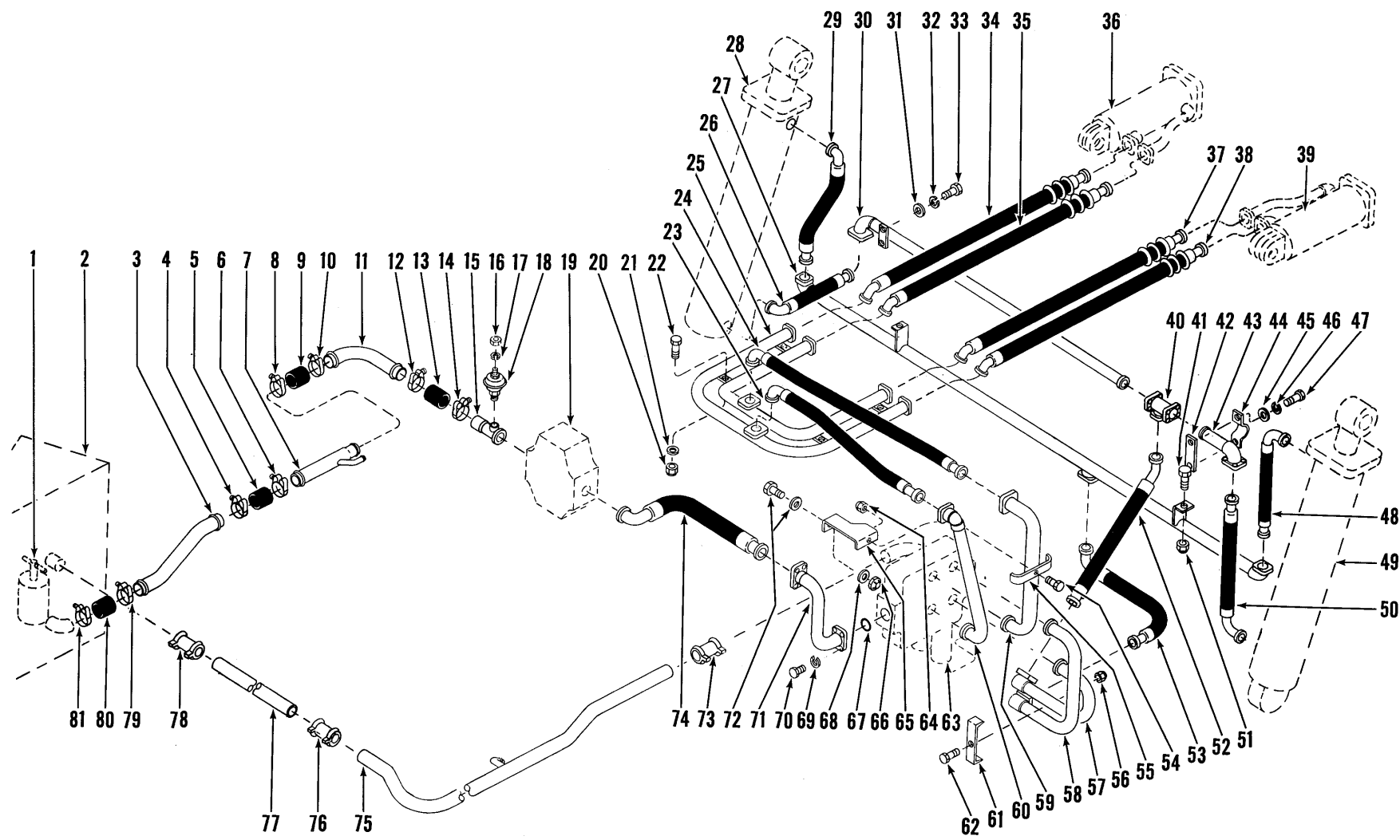
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
51	18D-08	NUT, Tube to Frame.....	2	67	58K-222	O-RING, Tube to Valve.....	1
52	1536496	HOSE, Tube to Tee.....	1	68	619021	WASHER, Brk. to Frame.....	1
52A	-----	†FLANGE — See Group "B"....	—	69	4E-07	LKWSHR, Tube to Valve.....	4
53	1536496	HOSE, Tube to Tube.....	1	70	23C-728	BOLT, Tube to Valve.....	4
53A	-----	†FLANGE — See Group "B"....	—	71	558717	TUBE, Hose to Valve — Pressure.....	1
54	24C-640	BOLT, Bracket to Bracket.....	1	72	24C-624	BOLT, Bracket to Frame.....	1
55	558739	BRACKET, Tube Mtg.....	1	72A	619021	WASHER, Brk. to Frame.....	1
56	18D-08	NUT, Bracket to Frame.....	1	73	30K-320	ELBOW, Valve to Tube.....	1
57	571458	TUBE, Hose to Valve.....	1	74	574303	JOINT, Tube to Stem.....	1
57A	-----	†FLANGE — See Group "B"....	—	75	33F-7	UNION, Hose to Tube.....	1
58	558720	TUBE, Hose to Valve.....	1	76	712524	HOSE, Tube to Valve.....	1
58A	-----	†FLANGE — See Group "B"....	—	77	569105	VALVE, Check.....	1
59	558727	TUBE, Hose to Valve.....	1	78	567672	HOSE, Tube to Pump.....	1
59A	-----	†FLANGE — See Group "B"....	—	78A	-----	†FLANGE — See Group "B"....	—
60	558729	TUBE, Hose to Valve.....	1	79	1520001	TUBE, Return — Front.....	1
60A	-----	†FLANGE — See Group "B"....	—	80	574303	JOINT, Tube Connecting.....	1
61	562188	BRACKET, Tube Mtg.....	1	81	1520000	TUBE, Return — Rear.....	1
62	24C-832	BOLT, Bracket to Frame.....	1	82	574303	JOINT, Tube Connecting.....	1
63	-----	VALVE, Control—See Index.....	—	83	574999	TUBE, Return Crossover.....	1
63A	1528018	†PLATE, Valve Mtg. — Welded to Frame.....	1	84	574303	JOINT, Tube to Res.....	1
64	18D-06	NUT, Bracket to Bracket.....	1	85	540107	CLAMP, Hose.....	1
65	566377	BRACKET, Tube Mtg.....	1	86	533139	HOSE, Tube to Res.....	1
66	18D-06	NUT, Bracket to Frame.....	1	87	540107	CLAMP, Hose.....	1

†Not Illustrated

GROUP Number Required Per Connection	FLANGE HALF	O-RING	BOLT	LKWSHR	SIZE
	2	1	4	4	
A	1511522	58K-228	23C-824	4E-08	2"
B	1511520	58K-222	23C-724	4E-07	1½"
C	663093	58K-219	23C-620	4E-06	1"

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

[ 124 ]



HYDRAULIC SYSTEM — BUCKET AND BOOM  
For Serial: G.M. — 5HG101 thru 5HG999

TS-6818-P

PM 2419

## HYDRAULIC SYSTEM — BUCKET AND BOOM

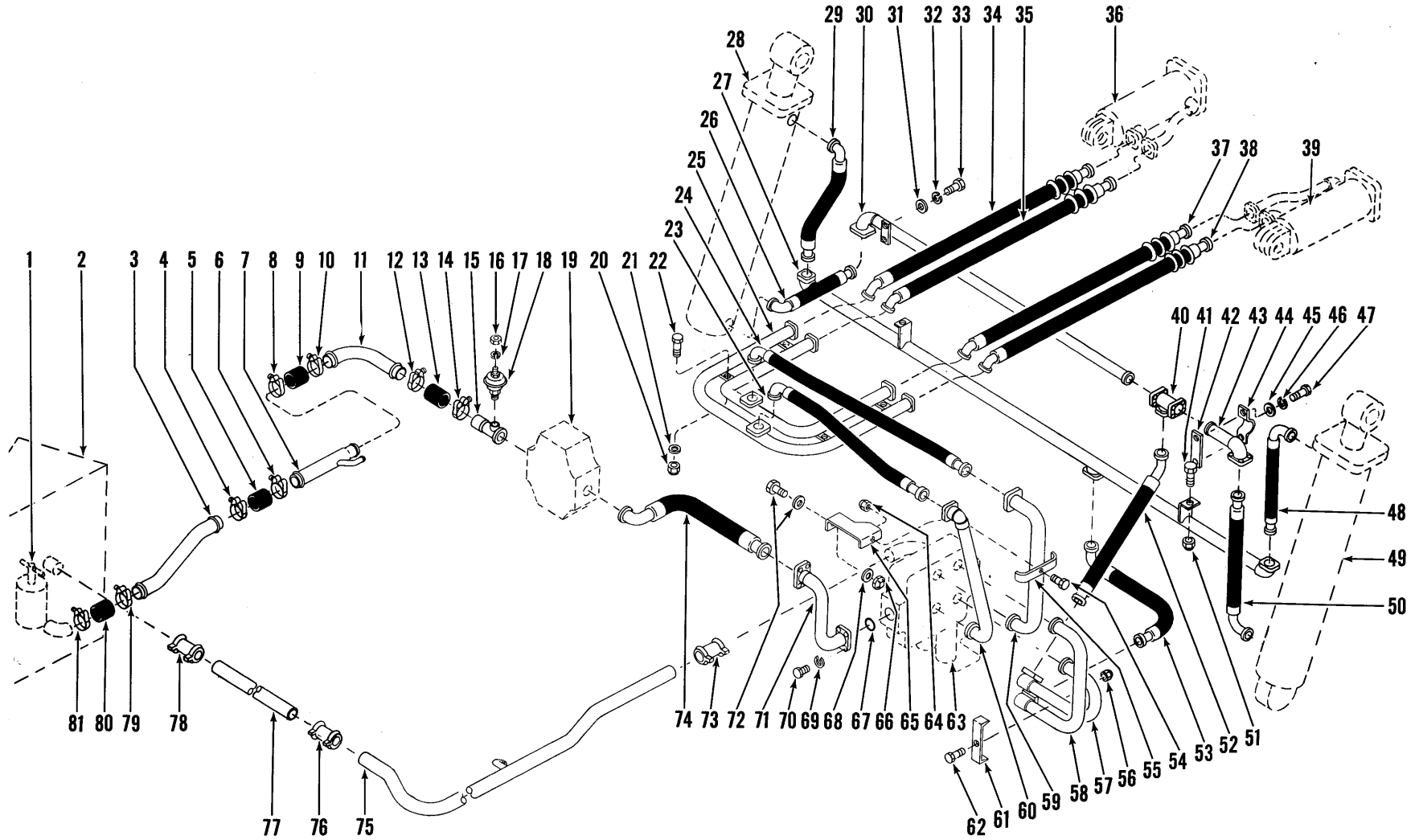
For Serial: G.M. — 5HG101 thru 5HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	FILTER, Oil Reservoir — See Index .....	—	31	619021	WASHER, Tube to Frame .....	2
2	-----	RESERVOIR, Oil — See Index..	—	32	4E-06	LKWSHR, Tube to Frame .....	2
3	558706	TUBE, Suction — Rear .....	1	33	24C-620	BOLT, Tube to Frame .....	2
4	540107	CLAMP, Hose .....	1	34	566180	HOSE, Cross Tube to Cyl.....	1
5	533139	HOSE, Tube to Tube.....	1	34A	-----	† FLANGE — See Group "C" .....	—
6	540107	CLAMP, Hose .....	1	35	566180	HOSE, Cross Tube to Cyl.....	1
7	558707	TUBE, Suction — Center .....	1	35A	-----	† FLANGE — See Group "C" .....	—
8	540106	CLAMP, Hose .....	1	36	-----	CYLINDER, Bucket — See Index .....	—
9	533478	HOSE, Tube to Tube.....	1	37	566180	HOSE, Cross Tube to Cyl.....	1
10	540106	CLAMP, Hose .....	1	37A	-----	† FLANGE — See Group "C" .....	—
11	558709	TUBE, Suction — Front .....	1	38	566180	HOSE, Cross Tube to Cyl.....	1
12	540106	CLAMP, Hose .....	1	38A	-----	† FLANGE — See Group "C" .....	—
13	533478	HOSE, Tube to Stem.....	1	39	-----	CYLINDER, Bucket — See Index .....	—
14	540106	CLAMP, Hose .....	1	40	566374	TEE, Split Flange .....	1
15	565996	STEM, Suction.....	1	40A	-----	† FLANGE — See Group "C" .....	—
15A	-----	† FLANGE — See Group "A".....	—	41	24C-828	BOLT, Tube to Frame .....	2
16	14D-8	NUT, Vacuum Indicator .....	1	42	566376	BRACKET, Tube Mtg. ....	1
17	12E-8	LKWSHR, Vac. Indicator .....	1	43	566383	TUBE, Tee to Hose (See Note "A").....	1
18	562112	INDICATOR, Reservoir Filter — Vacuum .....	1	44	572557	SUPPORT, Tube Mtg. ....	1
19	-----	PUMP, Bucket & Boom — See Index .....	—	45	619021	WASHER, Tube Mtg.....	2
20	18D-06	NUT, Tube to Frame .....	4	46	4E-06	LKWSHR, Tube Mtg. ....	2
21	619021	WASHER, Tube to Frame .....	4	47	24C-620	BOLT, Tube to Frame .....	2
22	24C-620	BOLT, Tube to Frame .....	4	48	567671	HOSE, Cross Tube to Cyl.....	1
23	567672	HOSE, Tube to Tube .....	1	48A	-----	† FLANGE — See Group "C" .....	—
23A	-----	† FLANGE — See Group "B".....	—	49	-----	CYLINDER, Boom—See Index .....	—
24	567672	HOSE, Tube to Tube .....	1	50	567671	HOSE, Cross Tube to Cyl.....	1
24A	-----	† FLANGE — See Group "B".....	—	50A	-----	† FLANGE — See Group "C" .....	—
25	566379	TUBE, Bucket Cyl. Cross .....	1	51	18D-08	NUT, Tube to Frame .....	2
26	567671	HOSE, Cross Tube to Cyl.....	1	52	1536496	HOSE, Tube to Tee .....	1
26A	-----	† FLANGE — See Group "C".....	—	52A	-----	† FLANGE — See Group "B".....	—
27	566385	TUBE, Boom Cyl. Cross .....	1	53	1536496	HOSE, Tube to Tube.....	1
28	-----	CYLINDER, Boom—See Index .....	—	53A	-----	† FLANGE — See Group "B".....	—
29	567671	HOSE, Cross Tube to Cyl.....	1	54	24C-640	BOLT, Bracket to Bracket .....	1
29A	-----	† FLANGE — See Group "C".....	—	55	558739	BRACKET, Tube Mtg. ....	1
30	566382	TUBE, Boom Cyl. Cross.....	1	56	18D-08	NUT, Bracket to Frame .....	1

†Not Illustrated

NOTE "A": When replacing 566383 Cross Tube, one 566376 Mounting Bracket (Item 42) and one 572557 Tube Support (Item 44) must also be used.

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



HYDRAULIC SYSTEM — BUCKET AND BOOM  
For Serial: G.M. — 5HG101 thru 5HG999

TS-6818-P



## HYDRAULIC SYSTEM — BUCKET AND BOOM (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
57	558724	TUBE, Hose to Valve.....	1	68	619021	WASHER, Brk. to Frame.....	1
57A	-----	†FLANGE — See Group "B"....	—	69	4E-07	LKWSHR, Tube to Valve.....	4
58	558720	TUBE, Hose to Valve.....	1	70	23C-728	BOLT, Tube to Valve .....	4
58A	-----	†FLANGE — See Group "B"....	—	71	558717	TUBE, Hose to Valve — Pressure .....	1
59	558727	TUBE, Hose to Valve.....	1	72	24C-624	BOLT, Bracket to Frame .....	1
59A	-----	†FLANGE — See Group "B"....	—	72A	619021	WASHER, Brk. to Frame.....	1
60	558729	TUBE, Hose to Valve.....	1	73	574303	*JOINT, Tube to Stem .....	1
60A	-----	†FLANGE — See Group "B"....	—	74	567672	HOSE, Tube to Pump .....	1
61	562188	BRACKET, Tube Mtg. ....	1	74A	-----	†FLANGE — See Group "B"....	—
62	24C-832	BOLT, Bracket to Frame .....	1	75	567710	**TUBE, Return.....	1
63	-----	VALVE, Control — See Index ..	—	76	574303	*JOINT, Tube Connecting.....	1
63A	1528017	***†PLATE, Valve Mtg. — Welded to Frame .....	1	77	574035	**TUBE, Return Crossover.....	1
64	18D-06	NUT, Bracket to Bracket.....	1	78	574303	*JOINT, Tube to Res. ....	1
65	566377	BRACKET, Tube Mtg. ....	1	79	540107	CLAMP, Hose .....	1
66	18D-06	NUT, Bracket to Frame .....	1	80	533139	HOSE, Tube to Res.....	1
67	58K-222	O-RING, Tube to Valve .....	1	81	540107	CLAMP, Hose .....	1

†Not Illustrated

\*NOTE: On Machine Serial 5HG101 thru 5HG999 a straight tube hose was used in place of the present straight tube joint. When replacement is necessary for any of these three hoses all three must be replaced at the same time with 574303 straight tube joints. When making this conversion it is necessary to cut approximately 1/4" off each end of return tubes, stem on control valve mounting plate welded to frame and tube from oil reservoir (Total 6 Places) to remove the bead that was necessary when using straight tube hoses. Once conversion has been made individual replacements can be made with 574303 straight tube joint and also, the Hydraulic Oil Reservoir used after conversion becomes Part Number 574062.

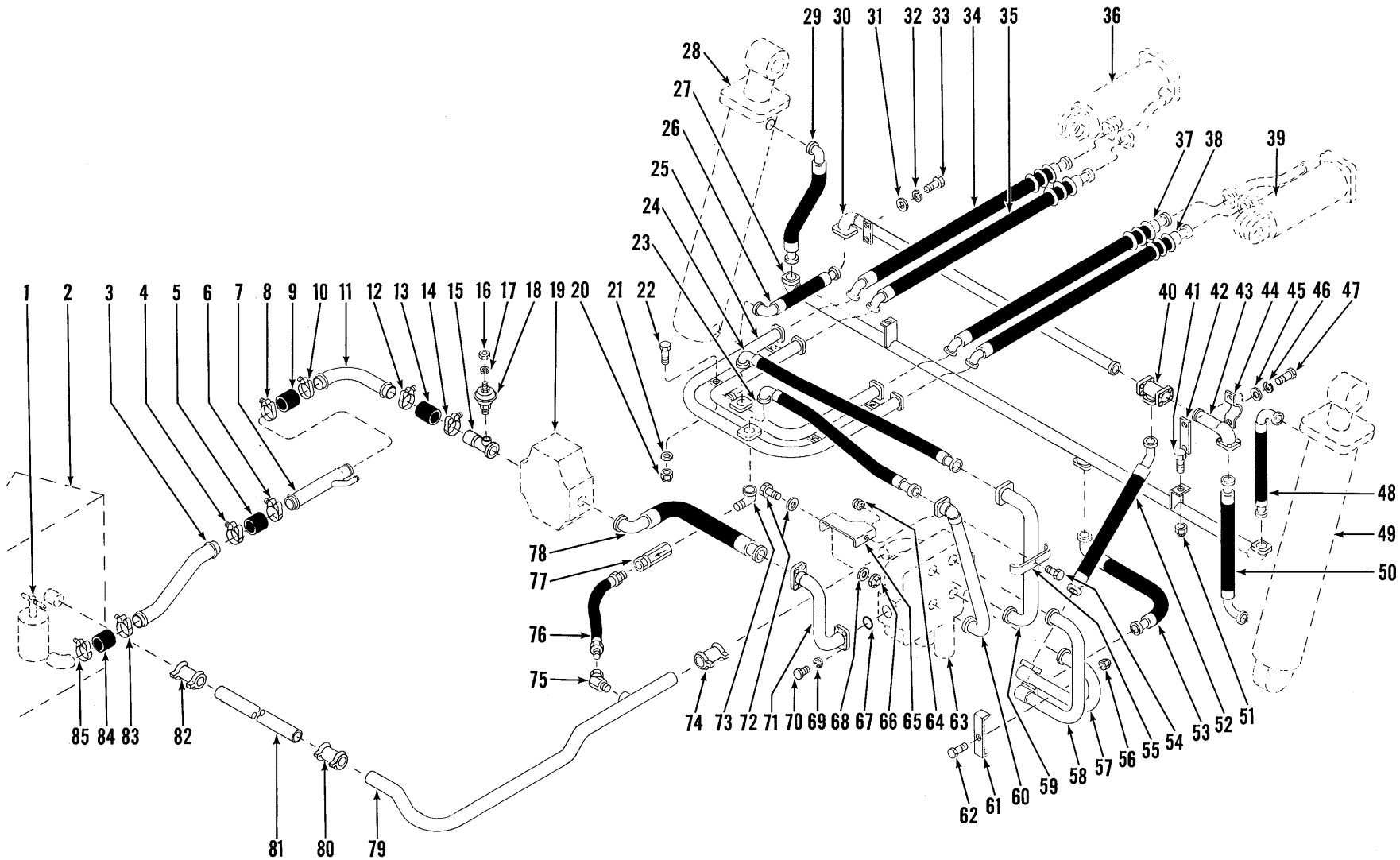
\*\*NOTE: On Machine Serial 5HG101 thru 5HG999 when replacement is necessary for items 75 or 77 both items must be replaced at the same time plus three 574303 straight tube joints items 73, 76 and 78 must also be used. When making this conversion it is necessary to cut approximately 1/4" off stem on control valve mounting plate welded to frame and tube from oil reservoir (Total 2 Places) to remove the bead that was necessary when using straight tube hose connection. Once conversion has been made individual replacements can be made and also, the Hydraulic Oil Reservoir used after conversion becomes Part Number 574062.

\*\*\*NOTE: It may be necessary to cut approximately 1/4" off stem on 1528017 Control Valve Mounting Plate if you have converted to 574303 Straight Tube Joints in place of Hoses as referred to in the single asterisk (\*) Note.

GROUP Number Required Per Connection	FLANGE HALF	O-RING	BOLT	LKWSHR	SIZE
	2	1	4	4	
A	1511522	58K-228	23C-824	4E-08	2"
B	1511520	58K-222	23C-724	4E-07	1 1/4"
C	663093	58K-219	23C-620	4E-06	1"

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

[ 128 ]



HYDRAULIC SYSTEM — BUCKET AND BOOM  
For Serial: G.M. — 6HG101 thru 6HG999

TS-6660-P

## HYDRAULIC SYSTEM — BUCKET AND BOOM

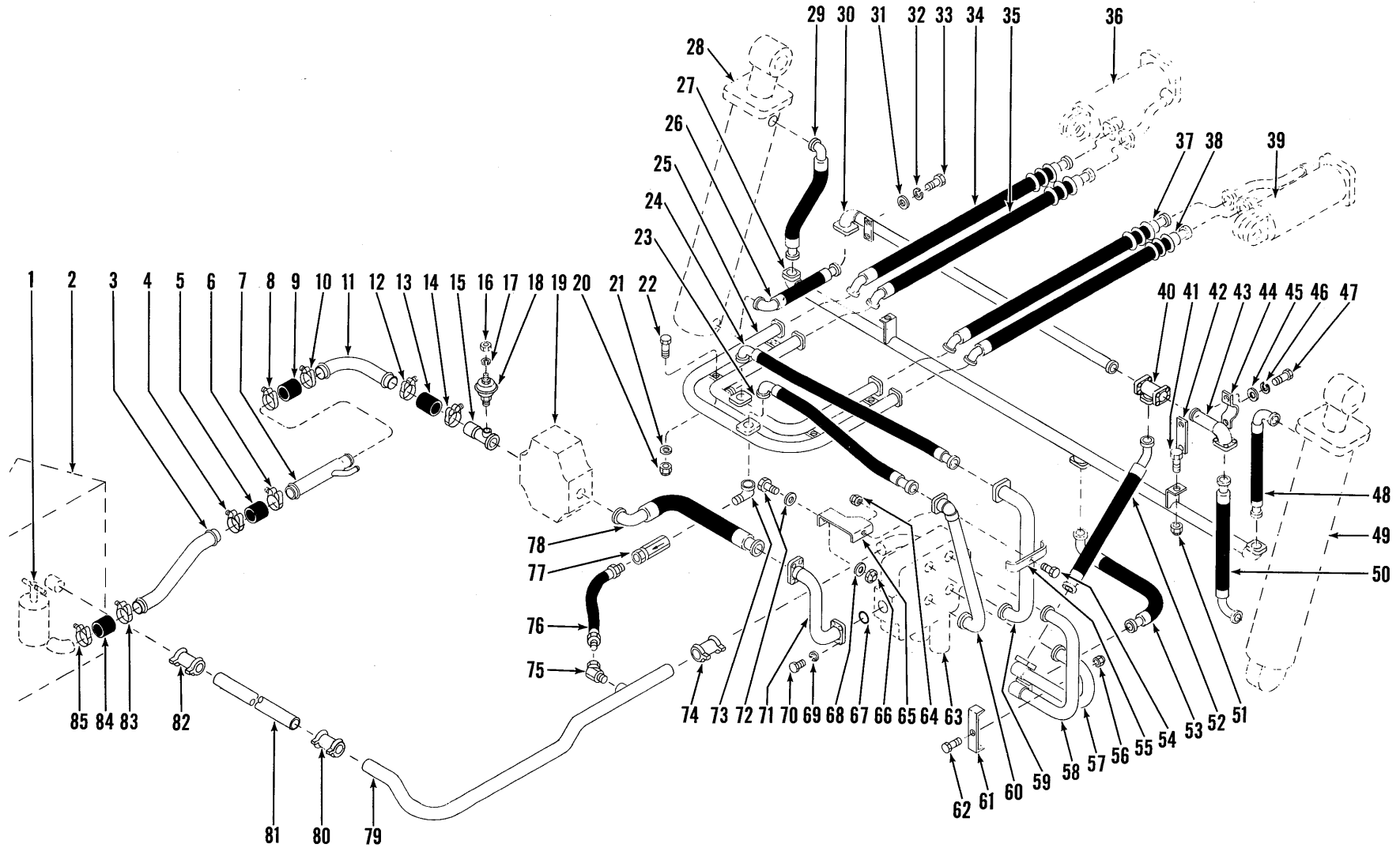
For Serial: G.M. — 6HG101 thru 6HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	FILTER, Oil Reservoir — See Index .....	—	30	566382	TUBE, Boom Cyl. Cross .....	1
2	-----	RESERVOIR, Oil — See Index .....	—	31	619021	WASHER, Tube to Frame .....	2
3	558706	TUBE, Suction — Rear .....	1	32	4E-06	LKWSHR, Tube to Frame .....	2
4	540107	CLAMP, Hose .....	1	33	24C-620	BOLT, Tube to Frame .....	2
5	533139	HOSE, Tube to Tube .....	1	34	567670	HOSE, Cross Tube to Cyl. ....	1
6	540107	CLAMP, Hose .....	1	34A	-----	†FLANGE — See Group "C" ..	—
7	558707	TUBE, Suction — Center .....	1	35	567670	HOSE, Cross Tube to Cyl. ....	1
8	540106	CLAMP, Hose .....	1	35A	-----	†FLANGE — See Group "C" ..	—
9	533478	HOSE, Tube to Tube .....	1	36	-----	CYLINDER, Bucket — See Index .....	—
10	540106	CLAMP, Hose .....	1	37	567670	HOSE, Cross Tube to Cyl. ....	1
11	558709	TUBE, Suction — Front .....	1	37A	-----	†FLANGE — See Group "C" ..	—
12	540106	CLAMP, Hose .....	1	38	567670	HOSE, Cross Tube to Cyl. ....	1
13	533478	HOSE, Tube to Stem .....	1	38A	-----	†FLANGE — See Group "C" ..	—
14	540106	CLAMP, Hose .....	1	39	-----	CYLINDER, Bucket — See Index .....	—
15	565996	STEM, Suction .....	1	40	566374	TEE, Split Flange .....	1
15A	-----	†FLANGE — See Group "A" .....	—	40A	-----	†FLANGE — See Group "C" ..	—
16	14D-8	NUT, Vacuum Indicator .....	1	41	24C-828	BOLT, Tube to Frame .....	2
17	12E-8	LKWSHR, Vac. Indicator .....	1	42	566376	BRACKET, Tube Mtg. ....	1
18	562112	INDICATOR, Reservoir Filter — Vacuum .....	1	43	566383	TUBE, Tee to Hose .....	1
19	-----	PUMP, Bucket & Boom — See Index .....	—	44	572557	SUPPORT, Tube Mtg. ....	1
20	18D-06	NUT, Tube to Frame .....	4	45	619021	WASHER, Tube Mtg. ....	2
21	619021	WASHER, Tube to Frame .....	4	46	4E-06	LKWSHR, Tube Mtg. ....	2
22	24C-620	BOLT, Tube to Frame .....	4	47	24C-620	BOLT, Tube to Frame .....	2
23	567672	HOSE, Tube to Tube .....	1	48	567671	HOSE, Cross Tube to Cyl. ....	1
23A	-----	†FLANGE — See Group "B" .....	—	48A	-----	†FLANGE — See Group "C" ..	—
24	567672	HOSE, Tube to Tube .....	1	49	-----	CYLINDER, Boom — See Index .....	—
24A	-----	†FLANGE — See Group "B" .....	—	50	567671	HOSE, Cross Tube to Cyl. ....	1
25	571337	TUBE, Bucket Cyl. Cross .....	1	50A	-----	†FLANGE — See Group "C" ..	—
26	567671	HOSE, Cross Tube to Cyl. ....	1	51	18D-08	NUT, Tube to Frame .....	2
26A	-----	†FLANGE — See Group "C" .....	—	52	1536496	HOSE, Tube to Tee .....	1
27	566385	TUBE, Boom Cyl. Cross .....	1	52A	-----	†FLANGE — See Group "B" ..	—
28	-----	CYLINDER, Boom — See Index .....	—	53	1536496	HOSE, Tube to Tube .....	1
29	567671	HOSE, Cross Tube to Cyl. ....	1	53A	-----	†FLANGE — See Group "B" ..	—
29A	-----	†FLANGE — See Group "C" .....	—	54	24C-640	BOLT, Bracket to Bracket .....	1
				55	558739	BRACKET, Tube Mtg. ....	1

†Not Illustrated

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

[ 130 ]



HYDRAULIC SYSTEM — BUCKET AND BOOM  
For Serial: G.M. — 6HG101 thru 6HG999

TS-6660-P

## HYDRAULIC SYSTEM — BUCKET AND BOOM (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
56	18D-08	NUT, Bracket to Frame .....	1	68	619021	WASHER, Brk. to Frame .....	1
57	571458	TUBE, Hose to Valve .....	1	69	4E-07	LKWSHR, Tube to Valve .....	4
57A	-----	†FLANGE — See Group "B" .....	—	70	23C-728	BOLT, Tube to Valve .....	4
58	558720	TUBE, Hose to Valve .....	1	71	558717	TUBE, Hose to Valve — Pressure .....	1
58A	-----	†FLANGE — See Group "B" .....	—	72	24C-624	BOLT, Bracket to Frame .....	1
59	558727	TUBE, Hose to Valve .....	1	72A	619021	WASHER, Brk. to Frame .....	1
59A	-----	†FLANGE — See Group "B" .....	—	73	30K-320	ELBOW, Valve to Tube .....	1
60	558729	TUBE, Hose to Valve .....	1	74	574303	*JOINT, Tube to Stem .....	1
60A	-----	†FLANGE — See Group "B" .....	—	75	33F-7	UNION, Hose to Tube .....	1
61	562188	BRACKET, Tube Mtg. ....	1	76	712524	HOSE, Tube to Valve .....	1
62	24C-832	BOLT, Bracket to Frame .....	1	77	569105	VALVE, Check .....	1
63	-----	VALVE, Control — See Index .....	—	78	567672	HOSE, Tube to Pump .....	1
63A	1528017	***†PLATE, Valve Mtg. — Welded to Frame — 6HG101 thru 6HG120 .....	1	78A	-----	†FLANGE — See Group "B" .....	—
63B	1528018	†PLATE, Valve Mtg. — Welded to Frame — 6HG121 thru 6HG999 .....	1	79	1520004	**TUBE, Return .....	1
64	18D-06	NUT, Bracket to Bracket .....	1	80	574303	*JOINT, Tube Connecting .....	1
65	566377	BRACKET, Tube Mtg. ....	1	81	574035	**TUBE, Return Crossover .....	1
66	18D-06	NUT, Bracket to Frame .....	1	82	574303	*JOINT, Tube to Res. ....	1
67	58K-222	O-RING, Tube to Valve .....	1	83	540107	CLAMP, Hose .....	1
				84	533139	HOSE, Tube to Reservoir .....	1
				85	540107	CLAMP, Hose .....	1

†Not Illustrated

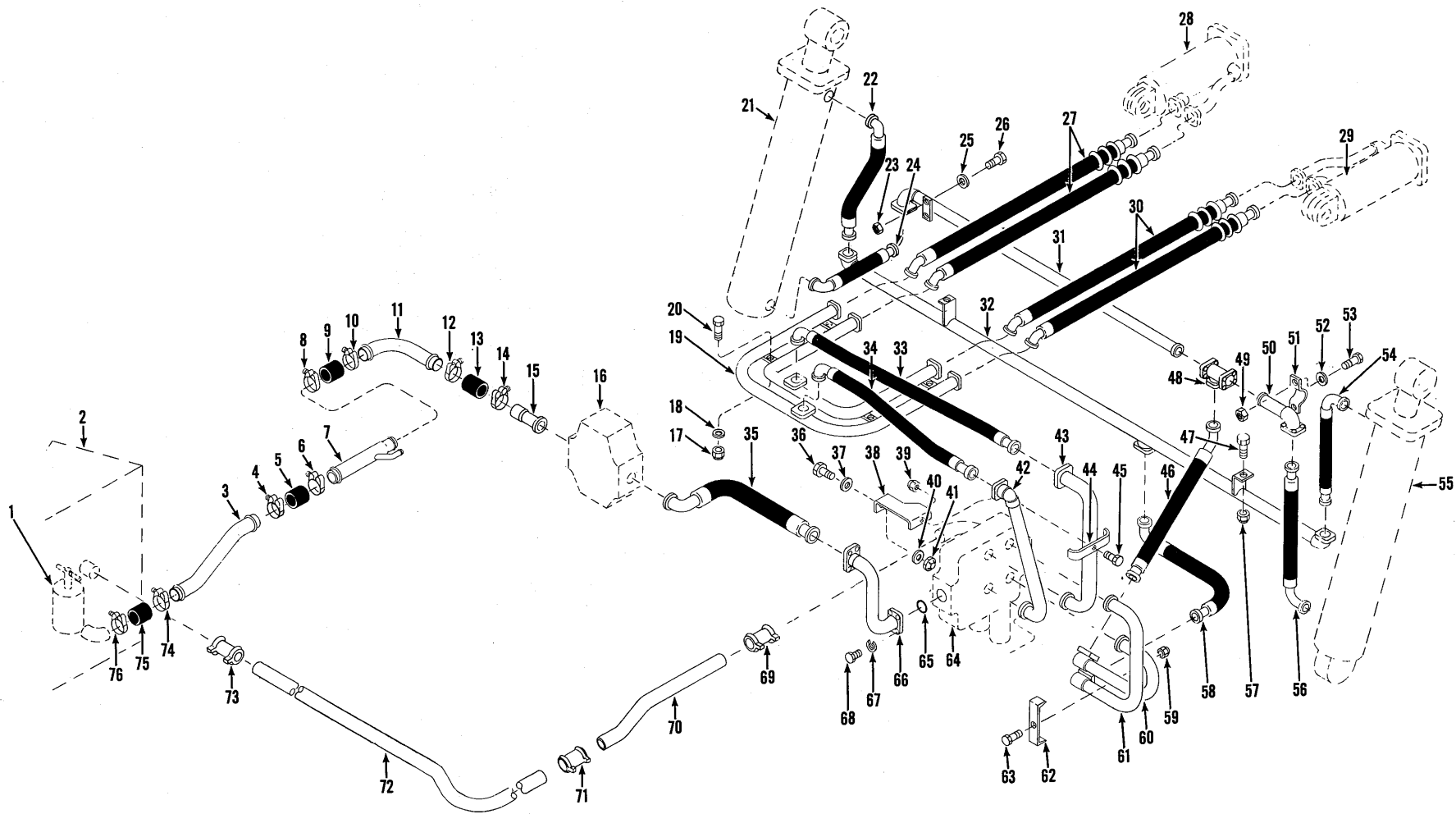
\*NOTE: On Machine Serial 6HG101 thru 6HG120 a straight tube hose was used in place of the present straight tube joint. When replacement is necessary for any of these three hoses all three must be replaced at the same time with 574303 Straight Tube Joints. When making this conversion it is necessary to cut approximately ¼" off each end of return tubes, stem on control valve mounting plate welded to Frame and tube from oil reservoir (Total 6 Places) to remove the bead that was necessary when using straight tube hoses. Once conversion has been made individual replacements can be made with 574303 straight tube joint and also, the Hydraulic Oil Reservoir used after conversion becomes Part Number 574062.

\*\*NOTE: On Machine Serial 6HG101 thru 6HG120 when replacement is necessary for items 79 or 81 both items must be replaced at the same time plus three 574303 straight tube joints items 74, 80 and 82 must also be used. When making this conversion it is necessary to cut approximately ¼" off stem on control valve mounting plate welded to frame and tube from oil reservoir (Total 2 Places) to remove the bead that was necessary when using straight tube hose connection. Once conversion has been made individual replacements can be made and also, the Hydraulic Oil Reservoir used after conversion becomes Part Number 574062.

\*\*\*NOTE: It may be necessary to cut approximately ¼" off stem on 1528017 Control Valve Mounting Plate if you have converted to 574303 Straight Tube Joints in place of Hoses as referred to in the single asterisk (\*) Note.

GROUP	FLANGE HALF	O-RING	BOLT	LKWSHR	SIZE
Number Required Per Connection	2	1	4	4	
A	1511522	58K-228	23C-824	4E-08	2"
B	1511520	58K-222	23C-724	4E-07	1¼"
C	663093	58K-219	23C-620	4E-06	1"

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



HYDRAULIC SYSTEM — BUCKET AND BOOM  
For Serial: Cummins — 6HC101 thru 6HC999;  
G.M. — 7HG101 thru 7HG999

## HYDRAULIC SYSTEM — BUCKET AND BOOM

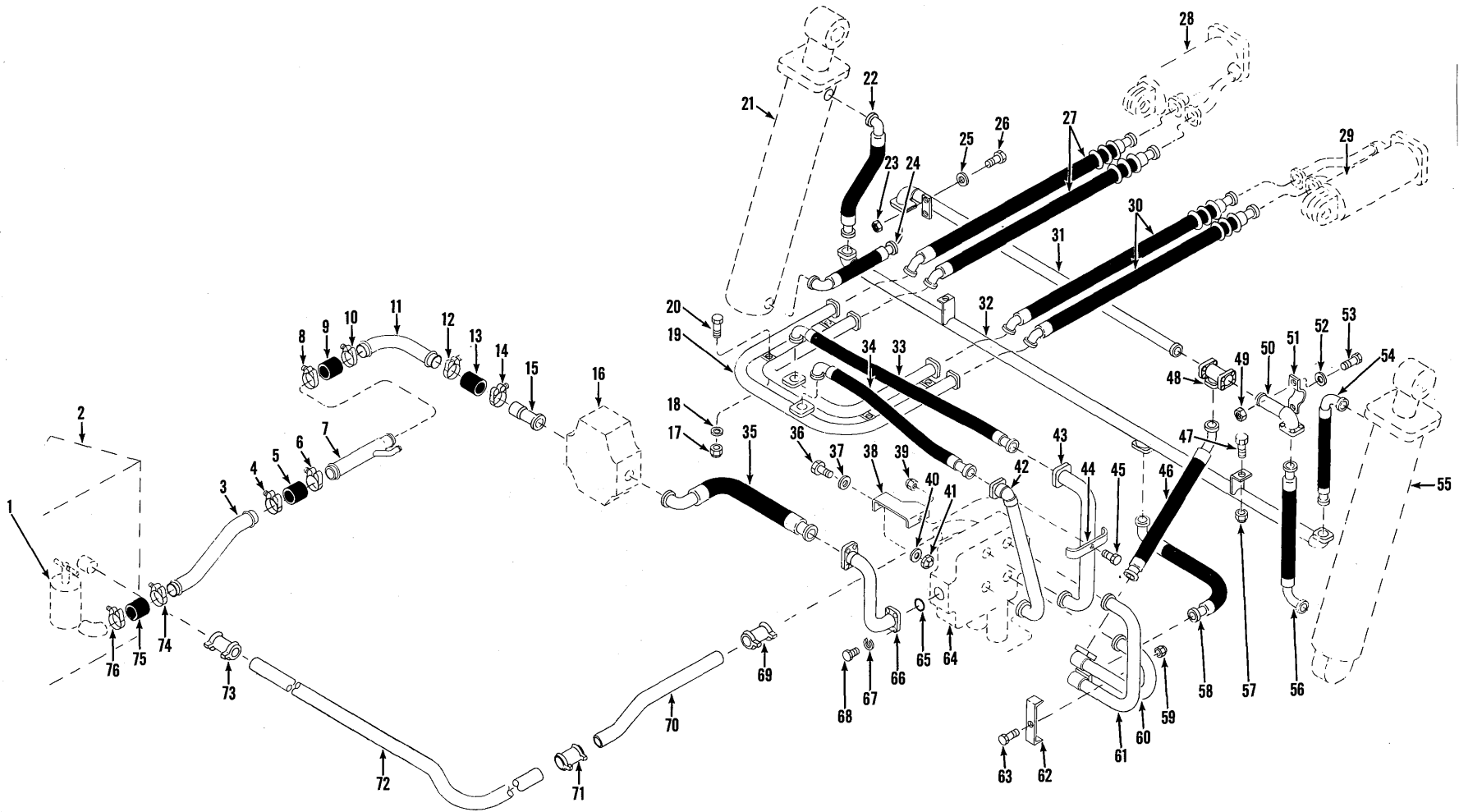
For Serial: Cummins — 6HC101 thru 6HC999;  
G.M. — 7HG101 thru 7HG999

Item No.	No. Part	Description	No. Req'd.
1	-----	FILTER, Oil Reservoir — See Index	—
2	-----	RESERVOIR, Oil — See Index	—
3	558706	TUBE, Suction — Rear	1
4	540107	CLAMP, Hose	1
5	533139	HOSE, Tube to Tube	1
6	540107	CLAMP, Hose	1
7	558707	TUBE, Suction — Center	1
8	540106	CLAMP, Hose	1
9	533478	HOSE, Tube to Tube	1
10	540106	CLAMP, Hose	1
11	558709	TUBE, Suction — Front	1
12	540106	CLAMP, Hose	1
13	533478	HOSE, Tube to Stem	1
14	540106	CLAMP, Hose	1
15	1526972	STEM, Suction	1
15A	-----	†FLANGE — See Group "A"	—
16	-----	PUMP, Bucket & Boom — See Index	—
17	18D-06	NUT, Tube to Frame	4
18	619021	WASHER, Tube to Frame	4
19	566379	TUBE, Bucket Cyl. Cross	1
20	24C-620	BOLT, Tube to Frame	4
21	-----	CYLINDER, Boom — See Index	—
22	567671	HOSE, Cross Tube to Cyl.	1
22A	-----	†FLANGE — See Group "C"	—
23	18D-06	NUT, Tube to Frame	2
24	567671	HOSE, Cross Tube to Cyl.	1
24A	-----	†FLANGE — See Group "C"	—
25	619021	WASHER, Tube to Frame	2
26	24C-624	BOLT, Tube to Frame	2
27	567670	HOSE, Cross Tube to Cyl.	2
27A	-----	†FLANGE — See Group "C"	—
28	-----	CYLINDER, Bucket — See Index	—
29	-----	CYLINDER, Bucket — See Index	—
30	567670	HOSE, Cross Tube to Cyl.	2
30A	-----	†FLANGE — See Group "C"	—
31	566382	TUBE, Boom Cyl. Cross	1
32	566385	TUBE, Boom Cyl. Cross	1
33	567672	HOSE, Tube to Tube	1
33A	-----	†FLANGE — See Group "B"	—
34	567672	HOSE, Tube to Tube	1
34A	-----	†FLANGE — See Group "B"	—
35	567672	HOSE, Tube to Pump	1
35A	-----	†FLANGE — See Group "B"	—
36	24C-624	BOLT, Bracket to Frame	1
37	619021	WASHER, Bracket to Frame	1
38	566377	BRACKET, Tube Mtg.	1
39	18D-06	NUT, Bracket to Bracket	1
40	619021	WASHER, Bracket to Frame	1
41	18D-06	NUT, Bracket to Frame	1
42	558729	TUBE, Hose to Valve	1
42A	-----	†FLANGE — See Group "B"	—
43	558727	TUBE, Hose to Valve	1
43A	-----	†FLANGE — See Group "B"	—
44	558739	BRACKET, Tube Mtg.	1
45	24C-640	BOLT, Bracket to Bracket	1
46	1536496	HOSE, Tube to Tee	1
46A	-----	†FLANGE — See Group "B"	—

†Not Illustrated

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

[ 134 ]



**HYDRAULIC SYSTEM — BUCKET AND BOOM**  
 For Serial: Cummins — 6HC101 thru 6HC999;  
 G.M. — 7HG101 thru 7HG999

TS-8286-P



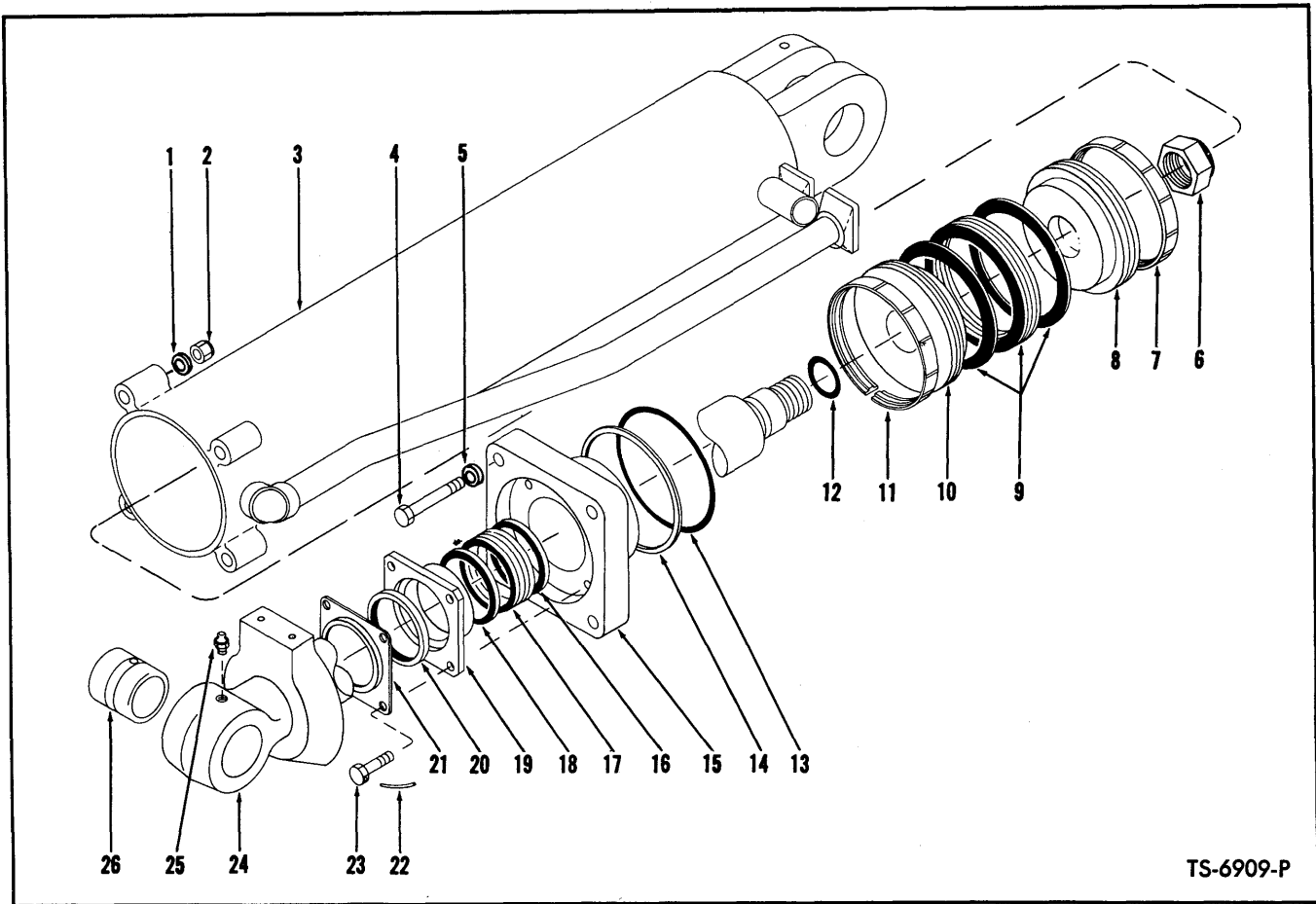
## HYDRAULIC SYSTEM — BUCKET AND BOOM (Continued)

Item No.	Part No.	Description	No. Req'd.
47	24C-828	BOLT, Tube to Frame .....	2
48	566374	TEE, Split Flange .....	1
48A	-----	†FLANGE — See Group "C" .....	—
49	18D-06	NUT, Tube to Frame .....	2
50	566383	TUBE, Tee to Hose .....	1
51	572557	SUPPORT, Tube Mtg. ....	1
52	619021	WASHER, Tube Mtg. ....	2
53	24C-624	BOLT, Tube to Frame .....	2
54	567671	HOSE, Cross Tube to Cyl. ....	1
54A	-----	†FLANGE — See Group "C" .....	—
55	-----	CYLINDER, Boom — See Index .....	—
56	567671	HOSE, Cross Tube to Cyl. ....	1
56A	-----	†FLANGE — See Group "C" .....	—
57	18D-08	NUT, Tube to Frame .....	2
58	1536496	HOSE, Tube to Tube .....	1
58A	-----	†FLANGE — See Group "B" .....	—
59	18D-08	NUT, Bracket to Frame .....	1
60	571458	TUBE, Hose to Valve .....	1
60A	-----	†FLANGE — See Group "B" .....	—
61	558720	TUBE, Hose to Valve .....	1
61A	-----	†FLANGE — See Group "B" .....	—
62	562188	BRACKET, Tube Mtg. ....	1
63	24C-848	BOLT, Bracket to Frame .....	1
64	-----	VALVE, Control — See Index .....	—
64A	1528018	†PLATE, Valve Mtg. — Welded to Frame .....	1
65	58K-222	O-RING, Tube to Valve .....	1
66	558717	TUBE, Hose to Valve — Pressure .....	1
67	4E-07	LKWSHR, Tube to Valve .....	4
68	23C-728	BOLT, Tube to Valve .....	4
69	574303	JOINT, Tube to Stem .....	1
70		<i>TUBE, Return</i>	
70A	1522643	Cummins Powered Machines .....	1
70B	1522644	G.M. Powered Machines .....	1
71	574303	JOINT, Tube Connecting .....	1
72		<i>TUBE, Return Crossover</i>	
72A	1522645	Cummins Powered Machines .....	1
72B	1522642	G.M. Powered Machines .....	1
73	574303	JOINT, Tube to Res. ....	1
74	540107	CLAMP, Hose .....	1
75	533139	HOSE, Tube to Reservoir .....	1
76	540107	CLAMP, Hose .....	1

†Not Illustrated

GROUP	FLANGE HALF	O-RING	BOLT	LKWSHR	SIZE
Number Required Per Connection	2	1	4	4	
A	1511522	58K-228	23C-824	4E-08	2"
B	1511520	58K-222	23C-724	4E-07	1¼"
C	663093	58K-219	23C-620	4E-06	1"

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



TS-6909-P

## BUCKET CYLINDER ASSEMBLY

2 Cylinders used on machine – Quantities listed below are for 1 Cylinder  
 For Serial: Cummins – 5HC101 thru 5HC999, 6HC101 thru 6HC999;  
 G.M. – 5HG101 thru 5HG999, 6HG101 thru 6HG999, 7HG101 thru 7HG999

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
A	556192	*CYLINDER ASSY (Inc. 1 thru 24, 26)	1	13	25K-80516	O-RING, Cyl. Cap	1
1	563570	WASHER, Cylinder Cap	4	14	73K-433	RING, Back-Up	1
2	68D-12	NUT, Cylinder Cap	4	15	945909	CAP, Cyl. (Inc. 13, 14)	1
3	1535643	**CYLINDER	1	16	-----	§ ADAPTER, Male (See 17)	2
4	24C-12104	BOLT, Cylinder Cap	4	17	2501108	PACKING SET (Inc. 16, 18)	1
5	563570	WASHER, Cyl. Cap	4	18	-----	§ ADAPTER, Female (See 17)	2
6	1514650	***NUT, Piston Rod	11	19	1520109	GLAND, Packing—See Note A	1
6A	1F-1068	†COTTER	1	20	550450	SEAL, Piston Rod	1
7	550261	RING, Piston Wear	1	21	522617	RETAINER, Seal	1
8	541749	PISTON, Bottom Half	1	22	-----	LOCKWIRE (16 ga. x 13" lg.)	2
9	541769	PACKING SET	1	23	3C-818	BOLT, Packing Gland	4
10	541748	PISTON, Top Half	1	24	1535634	***ROD, Piston (Inc. 26)	1
11	550261	RING, Piston Wear	1	25	10H-25	FITTING, Grease	1
12	25K-60120	O-RING, Piston Rod	1	26	549668	BUSHING, Piston Rod	1

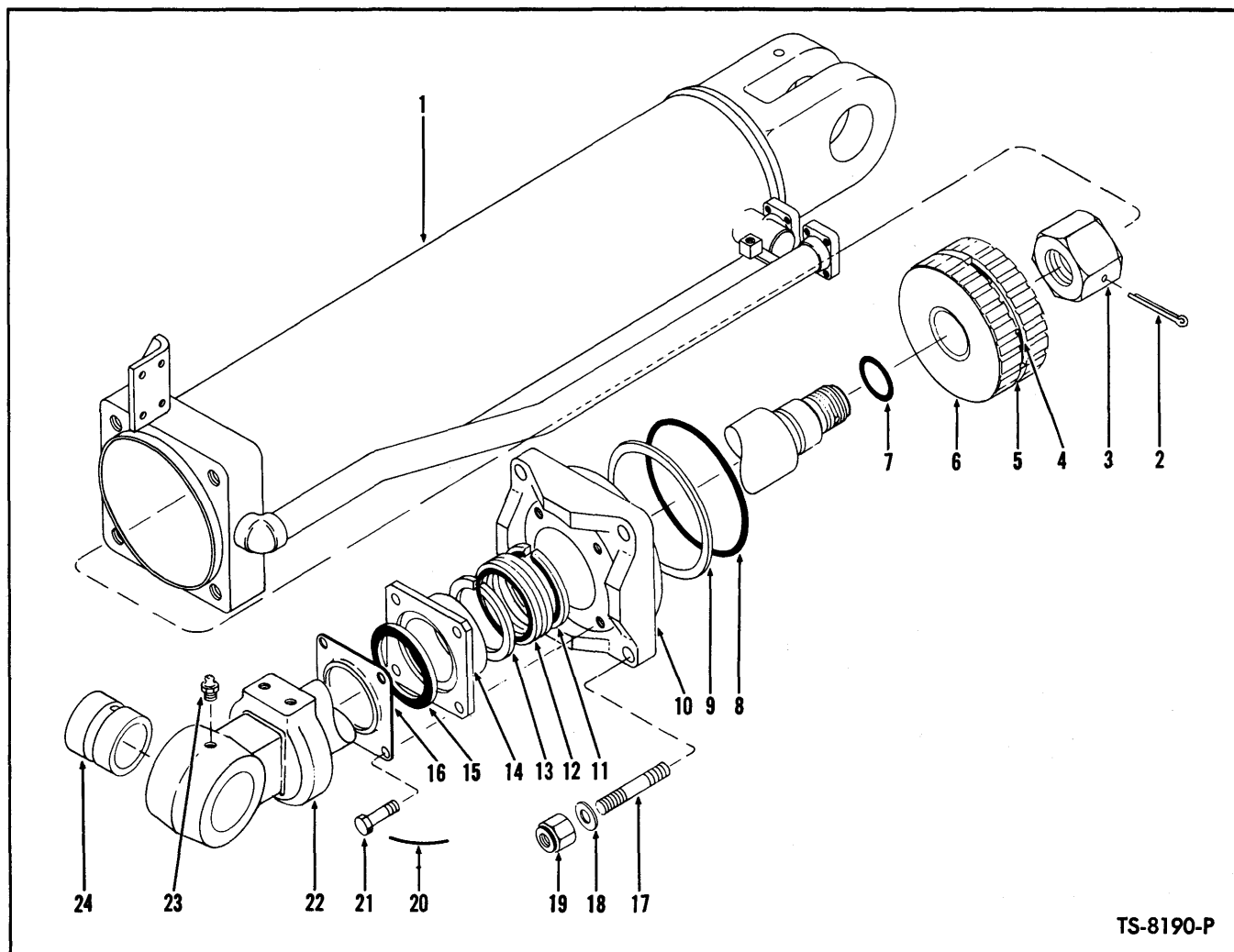
\*NOTE: When complete Cylinder replacement is necessary use 1543216.

\*\*NOTE: When replacing 1535643 Cylinder, 1 # 1535634 Piston Rod, 1 # 1514650 Piston Rod Nut, 1 # 1F-856 Cotter, 4 # 1535628 Cyl. Cap Stud, 4 # 1535626 Washer and 4 # 18D-12 Nut must also be used.

\*\*\*NOTE: When replacing 1514650 Piston Rod Nut, 1 # 1F-856 Cotter must also be used. Refer to Service Gram 276 Rev. for installation instructions, torquing and drilling of nut and piston rod.

\*\*\*\*NOTE: When replacing 1535634 Piston Rod, 1 # 1514650 Piston Rod Nut and 1 # 1F-856 Cotter must also be used.

NOTE "A": For replacement use 1-1520108 Flange plus 1-1520107 Sleeve.



TS-8190-P

## CYLINDER ASSEMBLY — BUCKET

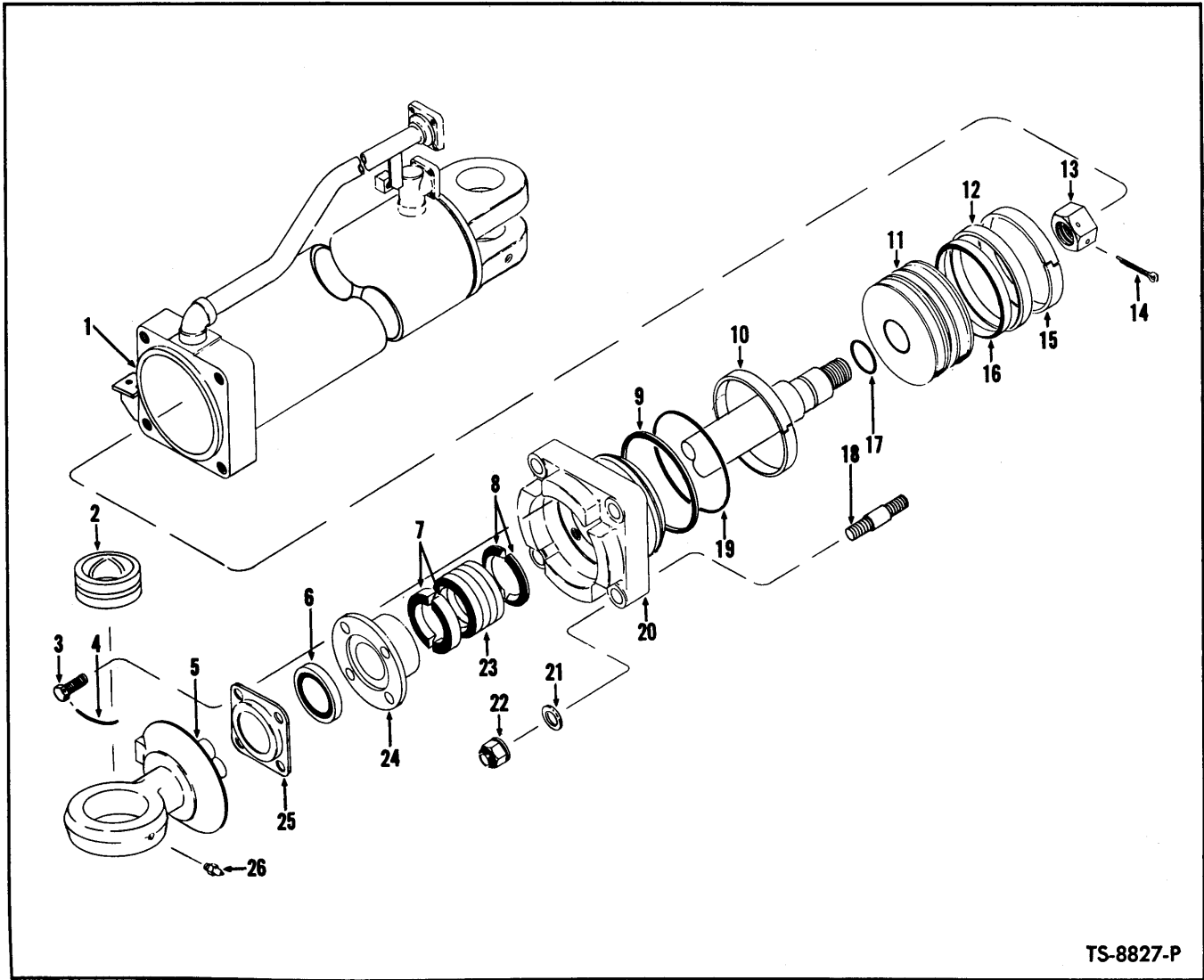
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1535641	*CYLINDER ASSY (Inc. 1 thru 24)	2	12	2501108	PACKING SET (Inc. 11, 12)	1
		<b>NOTE: 2 Cylinders used on machine — Quantities listed below are for 1 Cylinder</b>		13	-----	§ ADAPTER, Female (See 12)	2
1	1535643	CYLINDER	1	14	1520109	*** GLAND, Packing	1
2	1F-856	PIN, Piston Rod Nut Cotter	1	15	550450	SEAL, Piston Rod	1
3	1535218	*** NUT, Piston Rod	1	16	522617	RETAINER, Seal	1
4	25K-40512	O-RING, Piston	1	17	1535628	STUD, Cylinder Cap	4
5	557995	RING, Piston Sealing	1	18	1535626	WASHER, Cylinder Cap	4
6	569993	** PISTON	1	19	18D-12	NUT, Cylinder Cap	4
7	25K-60120	O-RING, Piston Rod	1	20	-----	LOCKWIRE (16 ga. x 13" lg.)	2
8	25K-80516	O-RING, Cylinder Cap	1	21	3C-820	BOLT, Seal Retainer	4
9	73K-433	RING, Back-Up	1	22	1535634	ROD ASSY, Piston (Inc. 24)	1
10	945909	CAP, Cylinder	1	23	10H-25	FITTING, Piston Rod Grease	1
11	-----	§ ADAPTER, Male (See 12)	2	24	549668	BUSHING, Piston Rod	1

\*NOTE: For complete replacement of 1535641 Cylinder Assembly use 1543216.

\*\*NOTE: For replacement of 569993 use 1502846 Piston plus 2 #1503013 Wear Rings, 1 #1502845 Seal Ring and 1 #1503467 Seal Ring.

\*\*\*NOTE: For replacement use 1-1520108 Flange plus 1-1520107 Sleeve.

\*\*\*\*NOTE: For replacement use 1514650 Nut plus 1-15-1068 Cotter Pin.



TS-8827-P

## CYLINDER ASSEMBLY — BUCKET

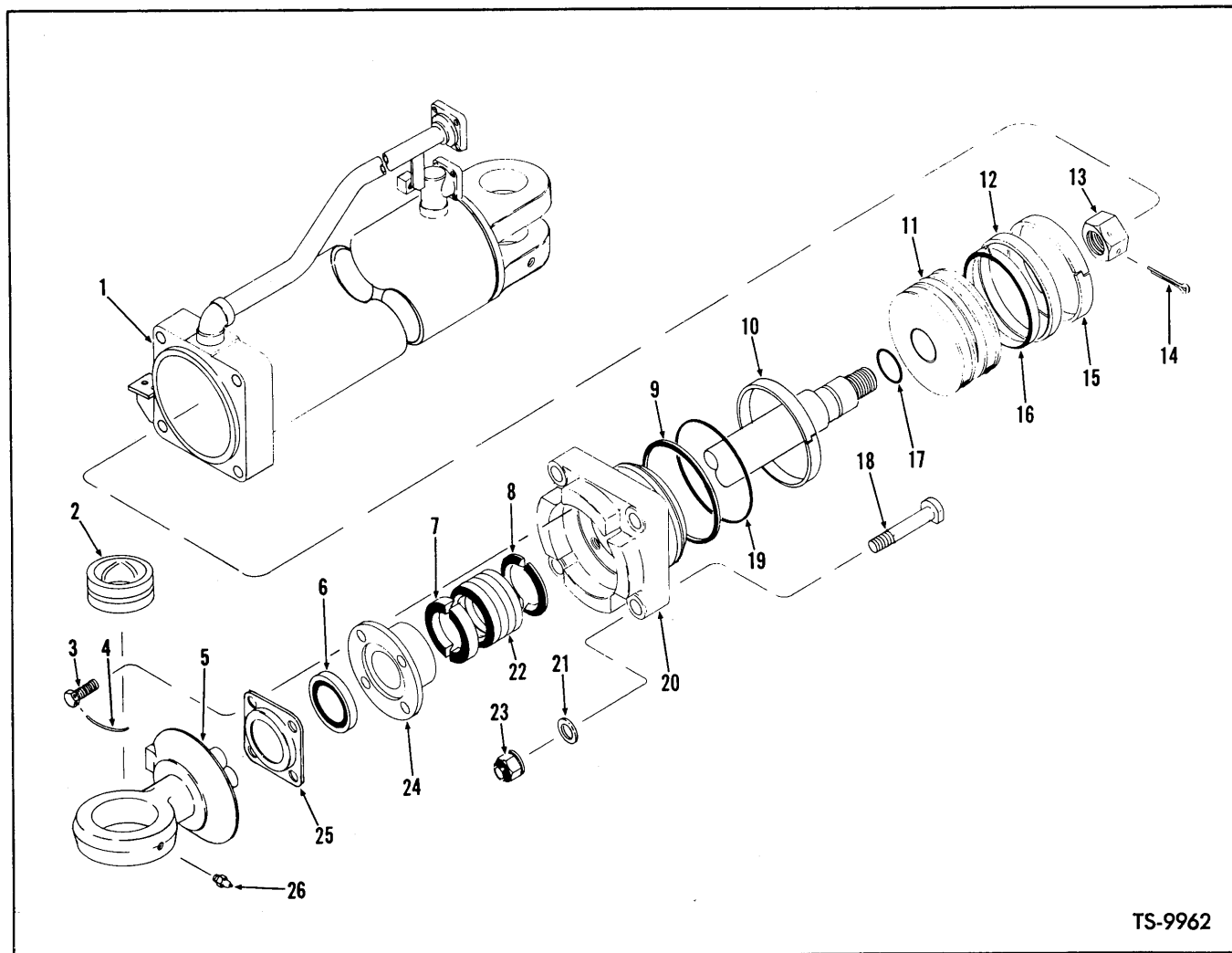
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1503234	*CYLINDER ASSY (Inc. 1 thru 25)	2	12	1502845	RING, Piston Outer Seal	1
<b>NOTE: 2 Cylinders used on machine — Quantities listed below are for 1 Cylinder</b>				13	1535218	*** NUT, Piston Rod	1
1	1535643	**CYLINDER	1	14	1F-852	COTTER, Piston Rod Nut	1
2	549668	BUSHING, Piston Rod	1	15	1503013	RING, Piston Wear	1
3	3C-820	BOLT, Seal Retainer	4	16	1503467	RING, Piston Inner Seal	1
4	-----	LOCKWIRE (16 ga. x 13" lg.)	2	17	25K-60120	O-RING, Piston Rod	1
5	1535634	ROD PISTON (Inc. 2)	1	18	1535628	STUD, Cylinder Cap	4
6	550450	SEAL, Piston Rod	1	19	25K-80516	O-RING, Cap	1
7	-----	§ ADAPTER, Female (See 23)	2	20	945909	CAP, Cylinder (Inc. 9, 19)	1
8	-----	§ ADAPTER, Male (See 23)	2	21	1535626	WASHER, Cylinder Cap	4
9	73K-433	RING, Back-Up	1	22	18D-12	NUT, Cylinder Cap	4
10	1503013	RING, Piston Wear	1	23	2501108	PACKING SET (Inc. 7, 8)	1
11	1502846	PISTON	1	24	1520109	*** GLAND, Packing	1
				25	522617	RETAINER, Seal	1
				26	10H-25	FITTING, Rod Grease	1

\*NOTE: For replacement use 1543216 Cylinder Assembly.

\*\*NOTE: For replacement use 1543215 Cylinder plus 4—1537343 Bolts.

\*\*\*NOTE: For replacement use 1—1520108 Flange plus 1—1520107 Sleeve.

\*\*\*\*NOTE: For replacement use 1514650 Nut plus 1—1F-1068 Cotter Pin.



TS-9962

## CYLINDER ASSEMBLY — BUCKET For Serial: 13AHG300 and After

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1543216	CYLINDER ASSY (Inc. 1 thru 25)	2	12	1502845	RING, Piston Outer Seal	1
<b>NOTE: 2 Cylinders used on machine — Quantities listed below are for 1 Cylinder</b>				13	1512122	**NUT, Piston Rod	1
1	1543215	CYLINDER	1	14	1F-852	COTTER, Piston Rod Nut	1
2	549668	BUSHING, Piston Rod	1	15	1503013	RING, Piston Wear	1
3	3C-820	BOLT, Seal Retainer	4	16	1503467	RING, Piston Inner Seal	1
4	-----	LOCKWIRE (16 ga. x 13" lg.)	2	17	25K-60120	O-RING, Piston Rod	1
5	1535634	ROD PISTON (Inc. 2)	1	18	1537343	BOLT, Cylinder Cap	4
6	550450	SEAL, Piston Rod	1	19	25K-80516	O-RING, Cap	1
7	-----	§ADAPTER, Female (See 22)	2	20	945909	CAP, Cylinder (Inc. 9, 19)	1
8	-----	§ADAPTER, Male (See 22)	2	21	1535626	WASHER, Cylinder Cap	4
9	73K-433	RING, Back-Up	1	22	2501108	PACKING SET (Inc. 7, 8)	1
10	1503013	RING, Piston Wear	1	23	18D-12	NUT, Cylinder Cap	4
11	1502846	PISTON	1	24	1520109	*GLAND, Packing	1
				25	522617	RETAINER, Seal	1
				26	10H-25	FITTING, Rod Grease	1

\*NOTE: For replacement use 1-1520108 Flange plus 1-1520107 Sleeve.

\*\*NOTE: For replacement use 1514650 Nut plus 1-1F-1068 Cotter Pin.

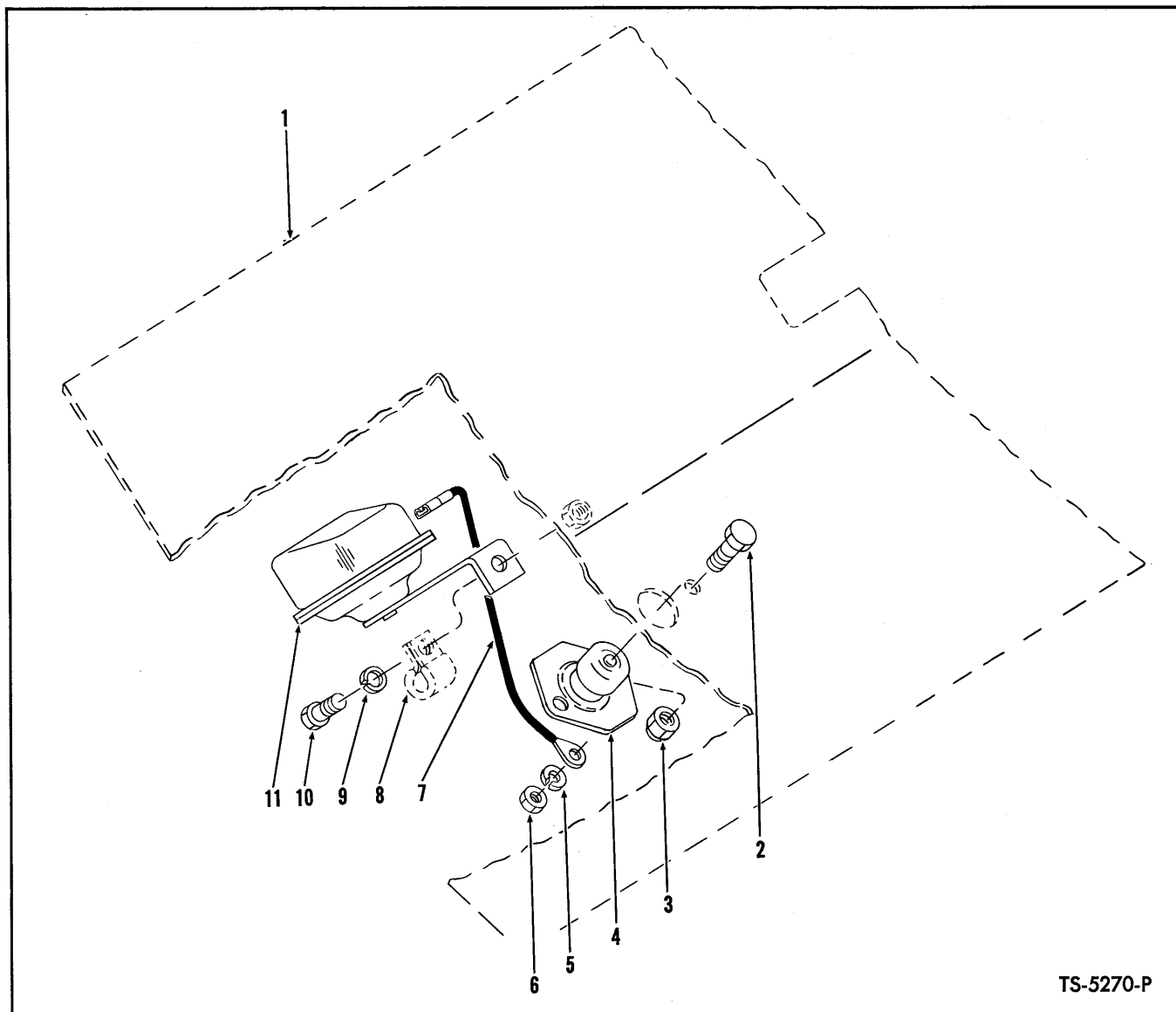
§Not Sold Separately

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

C

C

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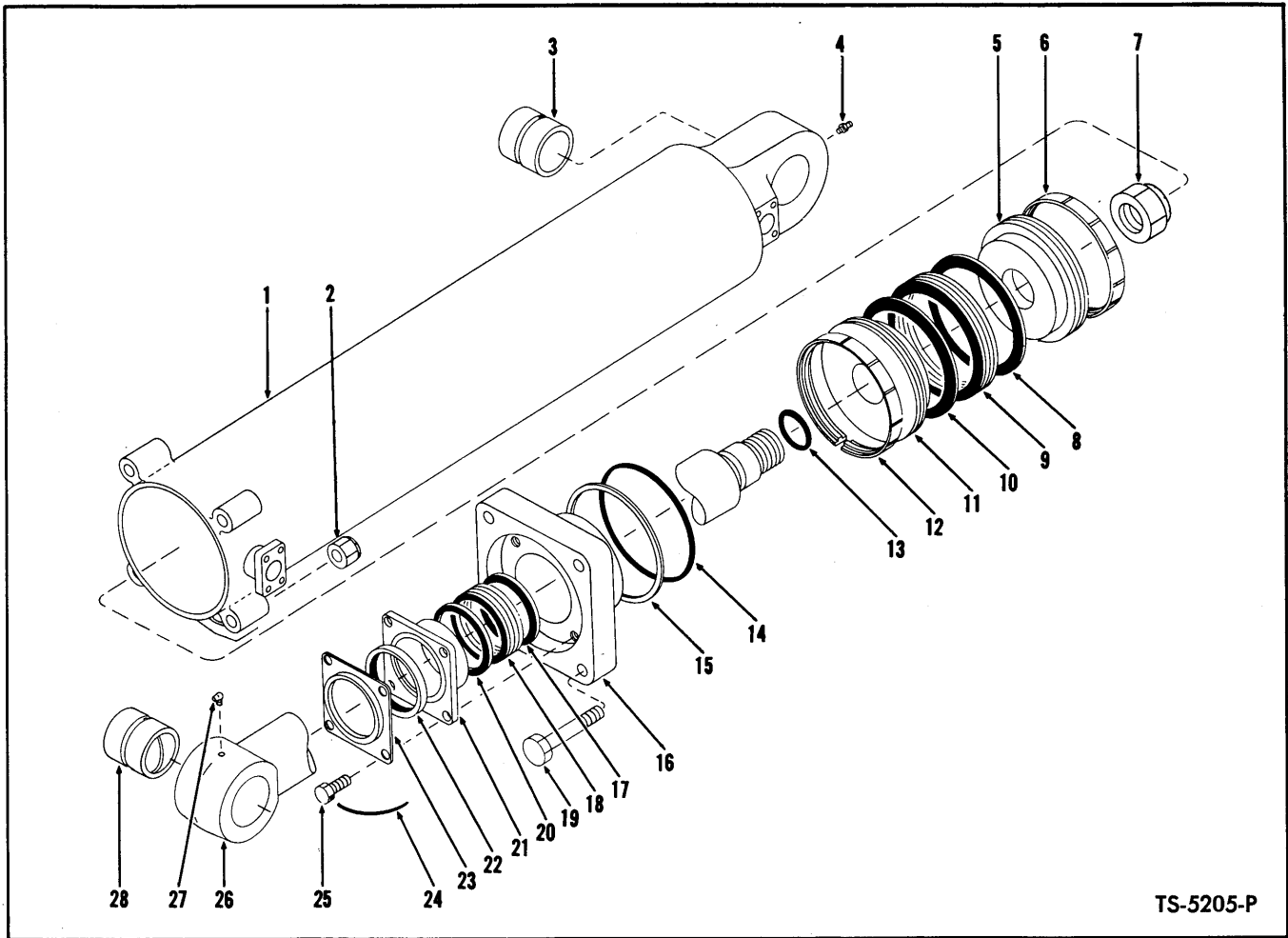


TS-5270-P

## HORN AND FOOT SWITCH

Item No.	Part No.	Description	No. Req'd.
1	----	COCKPIT — See Index	—
2	24C-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	23C-412	BOLT, Horn Mounting	1
11	885083	HORN KIT	1

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



TS-5205-P

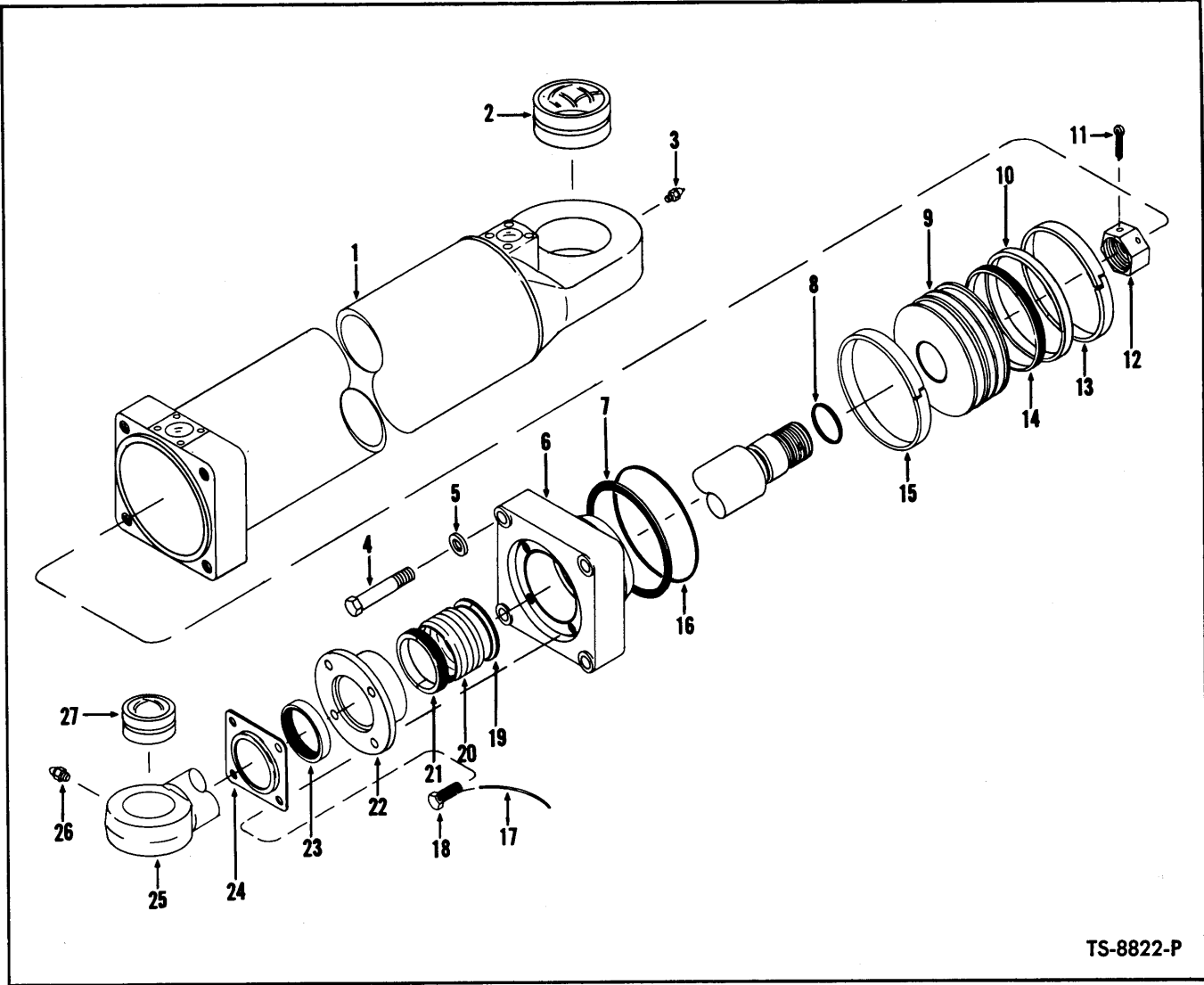
## CYLINDER ASSEMBLY – BOOM

For Serial: Cummins – 5HC101 thru 5HC999, 6HC101 thru 6HC999;  
G.M. – 5HG101 thru 5HG999, 6HG101 thru 6HG999, 7HG101 thru 7HG999

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
A	566885	*CYLINDER ASSY (Inc. 1 thru 28) . . .	2	13	25K-60120	O-RING, Piston Rod . . . . .	1
		<b>Note: 2 Cylinders used on machine – Quantities listed below are for 1 Cylinder</b>		14	25K-80616	O-RING, Cylinder Cap . . . . .	1
1	1503769	CYLINDER (Inc. 3) . . . . .	1	15	73K-439	RING, O-Ring Back-Up . . . . .	1
2	18D-12	NUT, Cylinder Cap . . . . .	4	16	945116	CAP ASSY, Cylinder (Inc. 14, 15) . . . .	1
3	1522759	BUSHING, Cylinder . . . . .	1	17	-----	§ ADAPTER, Male (See 18) . . . . .	2
4	10H-25	FITTING, Cylinder Grease . . . . .	1	18	2501108	PACKING SET (Inc. 17, 19) . . . . .	1
5	549036	PISTON, See Note "A" . . . . .	1	19	24C-1288	BOLT, Cylinder Cap . . . . .	4
6	550262	RING, Piston Wear . . . . .	1	20	-----	§ ADAPTER, Female (See 18) . . . . .	2
7	1502930	NUT, Piston Rod . . . . .	1	21	1520109	**GLAND, Packing . . . . .	1
7A	1F-852	†COTTER, Piston Rod Nut . . . . .	1	22	550450	SEAL, Piston Rod . . . . .	1
8	-----	§ ADAPTER – See Item 9 . . . . .	—	23	522617	RETAINER, Seal . . . . .	1
9	2501094	PACKING ASSY (Inc. 8, 10) . . . . .	1	24	-----	LOCKWIRE (16 ga. x 13" lg.) . . . . .	2
10	-----	§ ADAPTER – See Item 9 . . . . .	—	25	3C-820	BOLT, Packing Gland . . . . .	4
11	541787	PISTON, Top Half (See Note "A") . . . .	1	26	556203	ROD ASSY, Piston (Inc. 28) . . . . .	1
12	550262	RING, Piston Wear . . . . .	1	27	12H-15	FITTING, Piston Rod Grease . . . . .	1
				28	564260	BUSHING, Piston Rod . . . . .	1

\*NOTE: For complete replacement of 566885 Cylinder Assembly, use 1503236.  
 \*\*NOTE: For replacement use 1-1520108 Flange plus 1-1520107 Sleeve.  
 †Not Illustrated  
 §Not Sold Separately  
 NOTE "A": For replacement use 1-1503028 Piston plus 2-1503014 Wear Ring, 1-1503020 Outer Seal & 1-1503468 Inner Seal Ring.





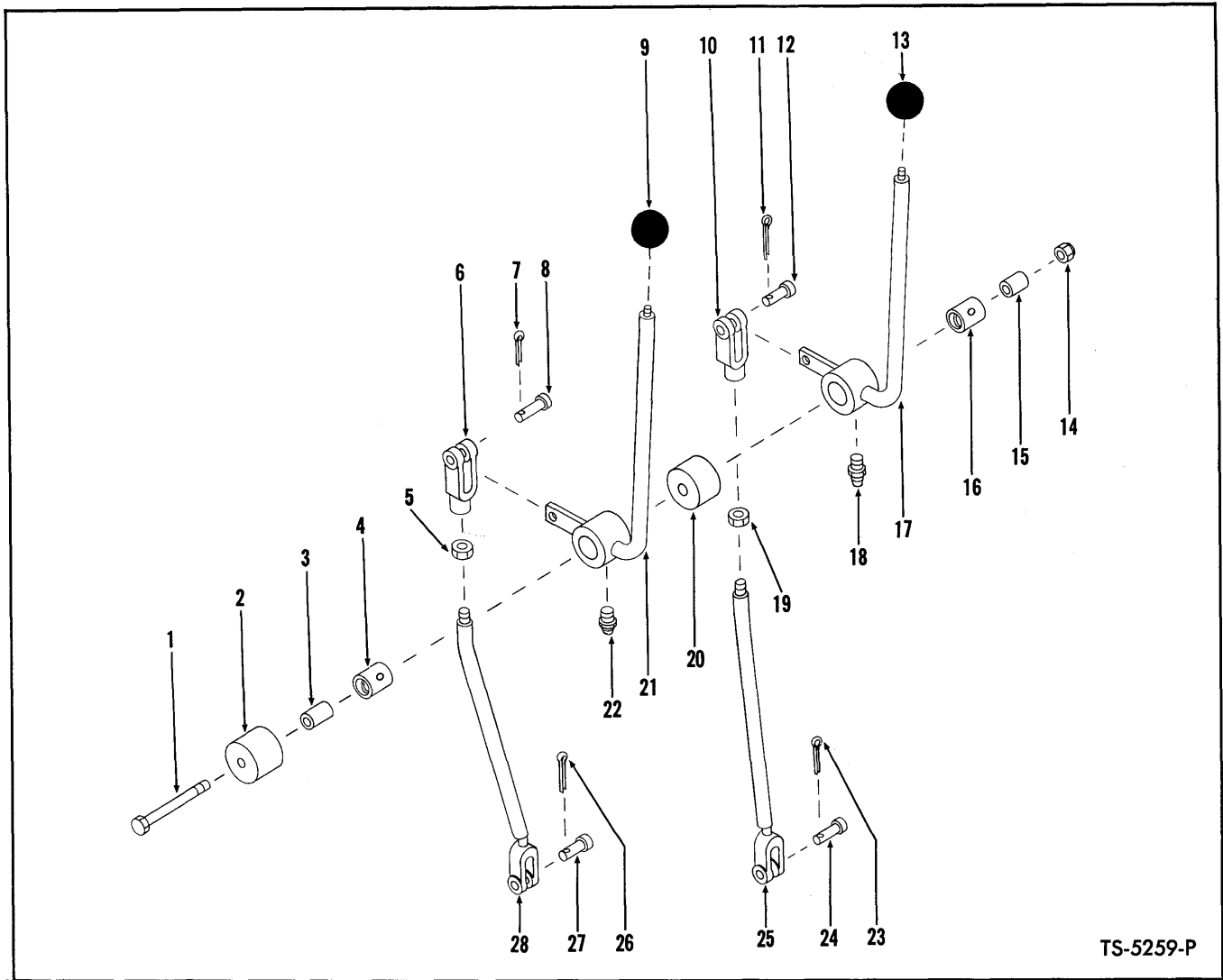
TS-8822-P

**CYLINDER ASSEMBLY – BOOM**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1503236	CYLINDER ASSY (Inc. 1 thru 27) .....	2	13	1503014	RING, Piston Wear .....	1
<p><b>NOTE: 2 Cylinders used on machine – Quantities listed below are for 1 Cylinder</b></p>				14	1503468	RING, Piston Inner Seal .....	1
1	1503769	CYLINDER (Inc. 2) .....	1	15	1503014	RING, Piston Wear .....	1
2	1522759	BUSHING, Cylinder .....	1	16	25K-80616	O-RING, Cap .....	1
3	10H-25	FITTING, Cylinder Grease .....	1	17	-----	LOCKWIRE (16 ga. x 31" lg.)	1
4	24C-1256	BOLT, Cylinder Cap .....	4	18	3C-820	BOLT, Seal Retainer .....	4
5	616809	WASHER, Cylinder Cap .....	4	19	-----	ADAPTER, Male (See 20) .....	2
6	945116	CAP, Cylinder (Inc. 7, 16) .....	1	20	2501108	PACKING ASSY (Inc. 19, 21)	1
7	73K-439	RING, Back-Up .....	1	21	-----	ADAPTER, Female (See 20) .....	2
8	25K-60120	O-RING, Piston Rod .....	1	22	1520109	*GLAND, Packing .....	1
9	1503028	PISTON .....	1	23	550450	SEAL, Piston Rod .....	1
10	1503020	RING, Piston Outer Seal .....	1	24	522617	RETAINER, Seal .....	1
11	1F-852	COTTER, Piston Rod Nut .....	1	25	556203	ROD, Piston (Inc. 27) .....	1
12	1502930	NUT, Piston Rod .....	1	26	12H-15	FITTING, Rod Grease .....	1
				27	564260	BUSHING, Piston Rod .....	1

\*NOTE: For replacement use 1-1520108 Flange plus 1-1520107 Sleeve.

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



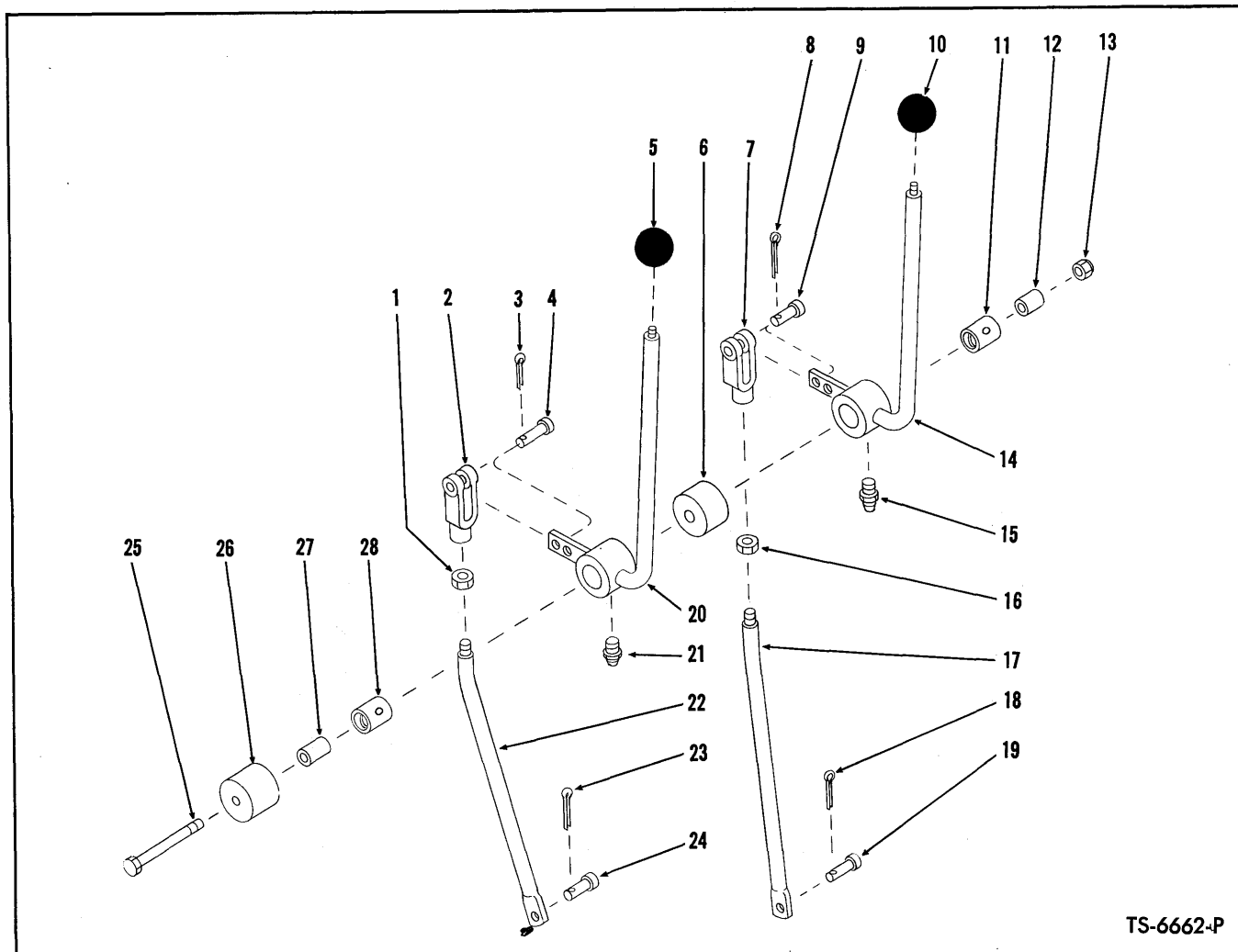
TS-5259-P

## VALVE CONTROL LEVERS AND LINKAGE For Serial: G.M. — 5HG101 thru 5HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	24C-8136	BOLT, Lever Mtg. ....	1	15	550646	SLEEVE, Lever Mtg. ....	1
2	661962	SPACER, Lever Mtg. ....	1	16	569055	BUSHING, Lever Mtg. ....	1
3	550646	SLEEVE, Lever Mtg. ....	1	17	563754	LEVER, Boom Control ....	1
4	569055	BUSHING, Lever Mtg. ....	1	18	10H-25	FITTING, Lever Grease ....	1
5	8D-08	NUT, Clevis Jam ....	1	19	8D-08	NUT, Clevis Jam ....	1
6	2J-8300	CLEVIS, Rod to Lever ....	1	20	661962	SPACER, Lever Mtg. ....	1
7	1F-414	COTTER, Clevis Pin ....	1	21	563754	LEVER, Bucket Control ....	1
8	4F-08127	PIN, Clevis to Lever ....	1	22	10H-25	FITTING, Lever Grease ....	1
9	509772	KNOB, Bucket Lever ....	1	23	1F-414	COTTER, Clevis Pin ....	1
10	2J-8300	CLEVIS, Rod to Lever ....	1	24	4F-08127	PIN, Rod to Valve ....	1
11	1F-414	COTTER, Clevis Pin ....	1	25	566300	ROD, Control (Inc. 10, 19) ...	1
12	4F-08127	PIN, Clevis to Lever ....	1	26	1F-414	COTTER, Clevis Pin ....	1
13	509772	KNOB, Boom Lever ....	1	27	4F-08127	PIN, Rod to Valve ....	1
14	18D-08	NUT, Valve Lever Mtg. ....	1	28	566301	ROD, Control (Inc. 5, 6) ....	1
14A	616796	†WASHER, Lever Mtg. ....	1				

†Not Illustrated

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



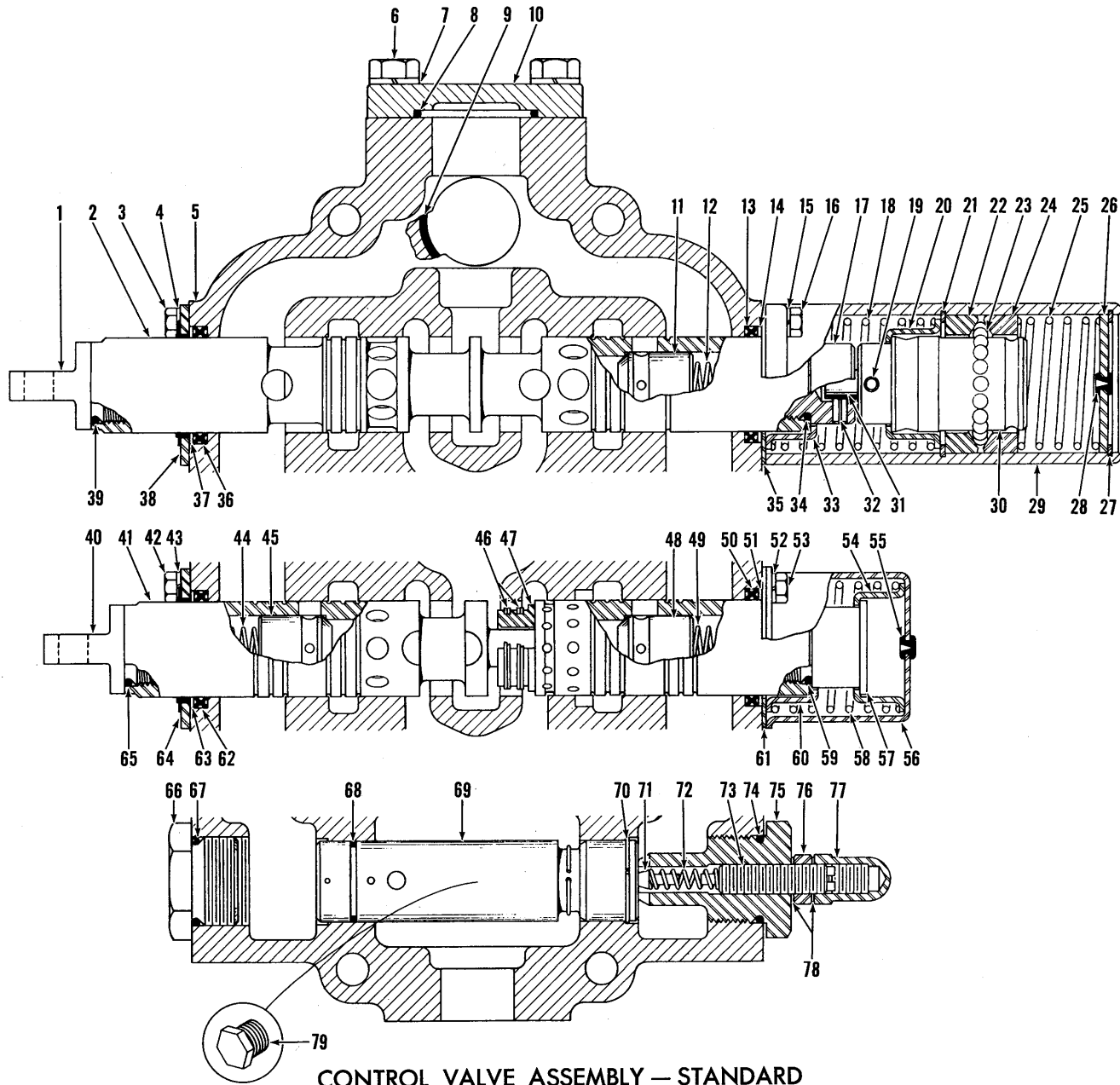
## VALVE CONTROL LEVERS AND LINKAGE

For Serial: Cummins — 5HC101 thru 5HC999, 6HC101 thru 6HC999;  
G.M. — 6HG101 thru 6HG999, 7HG101 thru 7HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	8D-05	NUT, Clevis Jam	1	15	10H-25	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	571577	ROD, Control (Inc. 7, 16)	1
4	4F-08127	PIN, Clevis to Lever	1	18	1F-414	COTTER, Clevis Pin	1
5	509772	KNOB, Bucket Lever	1	19	4F-08127	PIN, Rod to Valve	1
6	558574	SPACER, Lever Mtg.	1	20	563754	LEVER, Bucket Control	1
7	2J-8300	CLEVIS, Rod to Lever	1	21	10H-25	FITTING, Lever Grease	1
8	1F-414	COTTER, Clevis Pin	1	22	571579	ROD, Control (Inc. 1, 2)	1
9	4F-08127	PIN, Clevis to Lever	1	23	1F-414	COTTER, Clevis Pin	1
10	509772	KNOB, Boom Lever	1	24	4F-08127	PIN, Rod to Valve	1
11	569055	BUSHING, Lever Mtg.	1	25	24C-8136	BOLT, Lever Mtg.	1
12	550646	SLEEVE, Lever Mtg.	1	26	558574	SPACER, Lever Mtg.	1
13	18D-08	NUT, Lever Mtg.	1	27	550646	SLEEVE, Lever Mtg.	1
13A	616795	†‡ WASHER, Lever Mtg.	—	28	569055	BUSHING, Lever Mtg.	1
14	563754	LEVER, Boom Control	1				

†Not Illustrated  
‡As Required

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



CONTROL VALVE ASSEMBLY — STANDARD  
For Serial: G.M. — 5HG101 thru 5HG999

TS-5214-P

## CONTROL VALVE ASSEMBLY — STANDARD

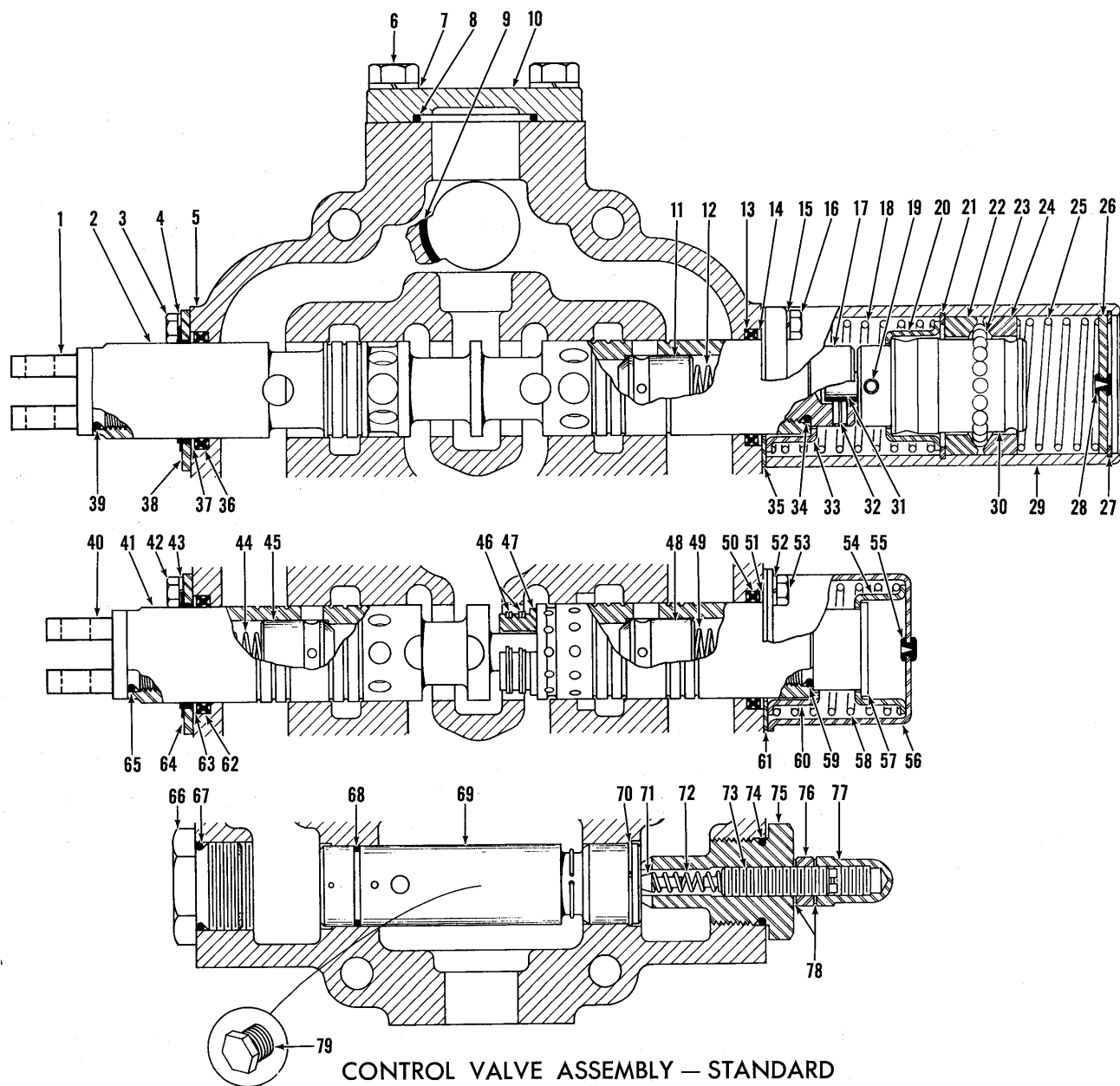
For Serial: G.M. — 5HG101 thru 5HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	568811	*VALVE ASSY (Inc. 1 thru 79)	1	42	1C-412	BOLT, Wiper Ret.	2
1	943180	EYE, Plunger	1	43	4E-04	LKWSHR, Wiper Ret.	2
2	-----	§OPERATING PLUNGER — See Item "A"	—	44	944858	SPRING, Check	1
3	1C-412	BOLT, Wiper Ret.	2	45	943184	CHECK, Plunger	1
4	4E-04	LKWSHR, Wiper Ret.	2	46	1308117	RING, Check Ret.	4
5	-----	§HOUSING, Valve — See Item "A"	—	47	946046	CHECK, Plunger	2
6	1C-820	BOLT, Cover to Hsg.	4	48	943184	CHECK, Plunger	1
7	4E-08	LKWSHR, Cover to Hsg.	4	49	946047	SPRING, Plunger Check	1
8	58K-225	O-RING, Cover to Hsg.	1	50	949150	QUAD RING, Plunger	1
9	25K-40120	O-RING, Valve Mtg.	1	51	944837	RING, Ring Back-Up	1
10	943191	COVER	1	52	4E-04	LKWSHR, Cover Mtg.	4
11	943184	CHECK, Plunger	1	53	1C-412	BOLT, Cover Mtg.	4
12	944858	SPRING, Plunger Check	1	54	944851	GUIDE, Return Spring	1
13	949150	QUAD RING, Plunger	1	55	886745	PLUG, Bleeder	1
14	944837	RING, Ring Back-Up	1	56	945294	COVER, Spring	1
15	4E-04	LKWSHR, Cover Mtg.	4	57	945289	CAP, Operating Plunger	1
16	1C-416	BOLT, Cover Mtg.	4	58	945857	SPRING, Plunger Return	1
17	944854	CAP, Operating Plunger	1	59	58K-214	O-RING, Plunger	1
18	945857	SPRING, Plunger Return	1	60	944851	GUIDE, Return Spring	1
19	660178	ROLL PIN, Detent	1	61	944838	PLATE, Quad Ring Ret.	1
20	944851	GUIDE, Return Spring	1	62	949150	QUAD RING, Plunger	1
21	1301171	RING, Retaining	1	63	944837	RING, Ring Back-Up	1
22	945290	RETAINER, Ball	1	64	947521	WIPER, Plunger	1
23	10J-08	BALL, Detent	20	65	58K-214	O-RING, Plunger Eye	1
24	945290	RETAINER, Ball	1	66	875279	CAP, Housing	1
25	945494	SPRING, Detent	1	67	25K-40108	O-RING, Cap	1
26	944844	PLUG, Detent	1	68	945860	O-RING, Relief Valve	1
27	663823	RING, Plug Retaining	1	69	945496	VALVE, Relief (Inc. 68, 70)	1
28	886763	PLUG, Bleeder	1	70	944802	RING, Valve Ret.	1
29	945498	COVER, Detent	1	71	886739	POPPET, Relief Valve	1
30	946045	CAP, Detent	1	72	886753	SPRING, Relief Valve	1
31	944148	PIN, Detent	1	73	944855	SCREW, Valve Adj.	1
32	660178	ROLL PIN, Detent	1	74	25K-40108	O-RING, Adj. Cap	1
33	944851	GUIDE, Return Spring	1	75	945497	CAP, Relief Valve Adj.	1
34	58K-214	O-RING, Plunger	1	76	8D-08	NUT, Jam	1
35	944838	PLATE, Quad Ring Ret.	1	77	944853	ACORN NUT	1
36	949150	QUAD RING, Plunger	1	78	613750	WASHER, Jam Nut	2
37	944837	RING, Ring Back-Up	1	79	40K-04	PLUG, Housing	1
38	949066	WIPER, Plunger	1	80	24C-872	†BOLT, Valve to Plate	2
39	58K-214	O-RING, Plunger Eye	1	81	4E-08	†LKWSHR, Valve to Plate	2
40	943180	EYE, Plunger	1	82	24C-876	†BOLT, Valve to Bracket	1
41	-----	§OPERATING PLUNGER — See Item "A"	—	83	18D-08	†NUT, Valve to Bracket	1
				84	635682	†SPACER, Valve Mtg.	1
				85	731465	†‡SHIM, Valve Mtg.	—

†Not Illustrated  
 §Not Sold Separately  
 ‡As Required

\*NOTE: For complete Valve replacement use 1508789 plus, 1 #571577 Control Rod and 1 #571579 Control Rod must also be used.

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



**CONTROL VALVE ASSEMBLY — STANDARD**  
For Serial: Cummins — 5HC101 thru 5HC999;  
G.M. — 6HG101 thru 6HG999

## CONTROL VALVE ASSEMBLY — STANDARD

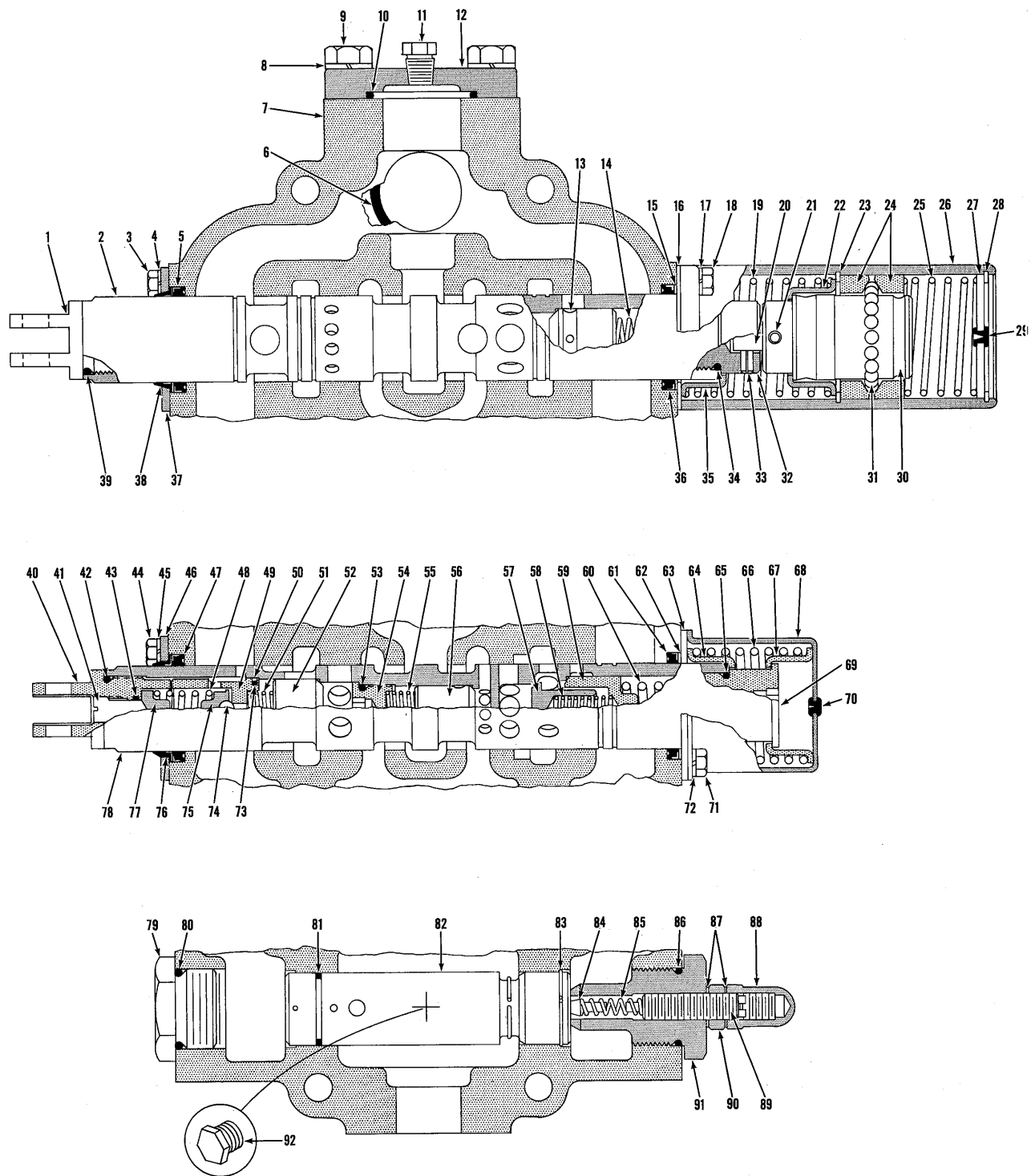
For Serial: Cummins — 5HC101 thru 5HC999;  
G.M. — 6HG101 thru 6HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	570889	*VALVE ASSY (Inc. 1 thru 79)	1	42	1C-412	BOLT, Wiper Retainer	2
1	946077	EYE, Plunger	1	43	4E-04	LKWSHR, Wiper Ret.	2
2	-----	§OPERATING PLUNGER — See Item "A"	—	44	944858	SPRING, Check	1
3	1C-412	BOLT, Wiper Retainer	2	45	943184	CHECK, Plunger	1
4	4E-04	LKWSHR, Wiper Ret.	2	46	1308117	RING, Check Retaining	4
5	-----	§HOUSING, Valve — See Item "A"	—	47	946046	CHECK, Plunger	2
6	1C-820	BOLT, Cover to Housing	4	48	943184	CHECK, Plunger	1
7	4E-08	LKWSHR, Cover to Hsg.	4	49	946047	SPRING, Plunger Check	1
8	58K-225	O-RING, Cover to Hsg.	1	50	949150	QUAD RING, Plunger	1
9	25K-40120	O-RING, Valve Mtg.	1	51	944837	RING, Ring Back-Up	1
10	943191	COVER	1	52	4E-04	LKWSHR, Cover Mtg.	4
11	943184	CHECK, Plunger	1	53	1C-412	BOLT, Cover Mtg.	4
12	944858	SPRING, Plunger Check	1	54	944851	GUIDE, Return Spring	1
13	949150	QUAD RING, Plunger	1	55	886745	PLUG, Bleeder	1
14	944837	RING, Ring Back-Up	1	56	945294	COVER, Spring	1
15	4E-04	LKWSHR, Cover Mtg.	4	57	945289	CAP, Operating Plunger	1
16	1C-416	BOLT, Cover Attaching	4	58	945857	SPRING, Plunger Return	1
17	944854	CAP, Operating Plunger	1	59	791553	O-RING, Plunger	1
18	945857	SPRING, Plunger Return	1	60	944851	GUIDE, Return Spring	1
19	660178	ROLL PIN, Detent	1	61	944838	PLATE, Ring Retaining	1
20	944851	GUIDE, Return Spring	1	62	949150	QUAD RING, Plunger	1
21	1301171	RING, Retaining	1	63	944837	RING, Ring Back-Up	1
22	945290	RETAINER, Ball	1	64	949066	WIPER, Plunger	1
23	10J-08	BALL, Detent	20	65	58K-214	O-RING, Plunger Eye	1
24	945290	RETAINER, Ball	1	66	875279	CAP, Housing	1
25	945494	SPRING, Detent	1	67	25K-40108	O-RING, Cap	1
26	944844	PLUG, Detent	1	68	945860	O-RING, Relief Valve	1
27	663823	RING, Plug Retaining	1	69	945496	VALVE, Relief (Inc. 68, 70)	1
28	886763	PLUG, Bleeder	1	70	944802	RING, Relief Valve Ret.	1
29	945498	COVER, Detent	1	71	886739	POPPET, Relief Valve	1
30	946045	CAP, Detent	1	72	886753	SPRING, Relief Valve	1
31	944148	PIN, Detent	1	73	944855	SCREW, Valve Adj.	1
32	660178	ROLL PIN, Detent	1	74	25K-40108	O-RING, Adj. Cap	1
33	944851	GUIDE, Return Spring	1	75	945497	CAP, Relief Valve Adj.	1
34	58K-214	O-RING, Plunger	1	76	8D-08	NUT, Jam	1
35	944838	PLATE, Ring Retaining	1	77	944853	ACORN NUT	1
36	949150	QUAD RING, Plunger	1	78	613750	WASHER, Jam Nut	2
37	944837	RING, Ring Back-Up	1	79	40K-04	PLUG, Housing	1
38	949066	WIPER, Plunger	1	80	24C-872	†BOLT, Valve to Plate	2
39	58K-214	O-RING, Plunger Eye	1	81	4E-08	†LKWSHR, Valve Mtg.	2
40	946077	EYE, Plunger	1	82	24C-876	†BOLT, Valve to Bracket	1
41	-----	§OPERATING PLUNGER — See Item "A"	—	83	18D-08	†NUT, Valve to Bracket	1
				84	635682	†SPACER, Valve Mtg.	1
				85	731465	††SHIM, Valve Mounting	—

† Not Illustrated  
‡ As Required  
§ Not Sold Separately

\*NOTE: For complete replacement of 570889 Valve Assy use 1548534 Valve Assy.

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



**CONTROL VALVE ASSEMBLY — STANDARD**  
 For Serial: Cummins — 6HC101 thru 6HC999;  
 G.M. — 7HG101 thru 7HG999

TS-7801-P



## CONTROL VALVE ASSEMBLY — STANDARD

For Serial: Cummins — 6HC101 thru 6HC999;  
G.M. — 7HG101 thru 7HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1520077	* VALVE ASSY (Inc. 1 thru 92)	1	48	946118	SPRING, Check	1
1	946077	EYE, Plunger	1	49	946617	SEAT, Relief	1
2	-----	§ PLUNGER, Operating — See Item "A"	—	50	946618	RING, Back-Up	1
3	1C-412	BOLT, Retainer to Hsg.	2	51	946623	SPRING, Check	1
4	4E-04	LKWSHR, Ret. to Hsg.	2	52	946624	CHECK	1
5	949150	SEAL, Plunger Oil	1	53	25K-30022	O-RING, Cap	1
6	25K-40120	O-RING, Valve Mtg.	1	54	946864	CAP	1
7	-----	§ HOUSING, Valve — See Item "A"	—	55	946623	SPRING, Check	1
8	4E-08	LKWSHR, Cover to Hsg.	4	56	946863	CHECK	1
9	1C-820	BOLT, Cover to Hsg.	4	57	946619	CHECK	1
10	58K-225	O-RING, Cover to Hsg.	1	58	871388	SPRING, Check	1
11	40K-04	PLUG, Cover	1	59	946620	CHECK	1
12	946382	COVER	1	60	946621	SPRING	1
13	943184	CHECK	1	61	949150	SEAL, Plunger Oil	1
14	944858	SPRING, Check	1	62	944837	RING, Back-Up	1
15	944837	RING, Back-Up	1	63	946615	PLATE, Seal Retaining	1
16	946615	PLATE, Seal Retaining	1	64	944851	GUIDE, Spring	1
17	4E-04	LKWSHR, Cover to Hsg.	4	65	791553	O-RING, Cap	1
18	1C-416	BOLT, Cover to Housing	4	66	945857	SPRING	1
19	944852	SPRING	1	67	944851	GUIDE, Spring	1
20	944148	PIN, Connecting	1	68	945294	COVER, Detent	1
21	660178	ROLL PIN	1	69	946622	CAP, Plunger	1
22	944851	GUIDE, Spring	1	70	886745	PLUG, Bleeder	1
23	1301171	RING, Retaining	1	71	1C-412	BOLT, Cover to Housing	4
24	945290	RETAINER, Ball	2	72	4E-04	LKWSHR, Cover to Hsg.	4
25	945494	SPRING	1	73	25K-20028	O-RING, Relief Seat	1
26	945498	COVER, Detent	1	74	-----	§ BALL, Check — See Item 75	—
27	944844	PLUG, Detent Cover	1	75	946119	CHECK (Inc. 74)	1
28	663823	RING, Plug Retaining	1	76	946614	** WIPER, Plunger	1
29	886763	PLUG, Bleeder	1	77	946117	GUIDE, Spring	1
30	946045	CAP, Detent	1	78	-----	§ PLUNGER, Operating — See Item "A"	—
31	10J-08	BALL	20	79	875279	CAP	1
32	944854	CAP, Plunger	1	80	25K-40108	O-RING, Cap	1
33	660178	ROLL PIN	1	81	945860	O-RING, Relief Valve	1
34	58K-214	O-RING, Cap	1	82	945496	VALVE, Relief (Inc. 81, 83)	1
35	944851	GUIDE, Spring	1	83	944802	RING, Valve Retaining	1
36	949150	** SEAL, Plunger Oil	1	84	886739	POPPET, Relief	1
37	946613	** PLATE, Wiper & Seal Ret.	1	85	886753	SPRING, Poppet	1
38	946614	WIPER, Plunger	1	86	58K-225	O-RING, Adj. Cap	1
39	58K-214	O-RING, Plunger Eye	1	87	613750	WASHER	2
40	946616	EYE, Plunger	1	88	944853	NUT, Acorn	1
41	946126	SCREW, Adjusting	1	89	944855	SCREW, Adjusting	1
42	58K-214	O-RING, Plunger Eye	1	90	8D-08	NUT, Jam	1
43	25K-20012	O-RING, Adj. Screw	1	91	945497	CAP, Adjusting	1
44	1C-410	BOLT, Retainer to Hsg.	2	92	40K-04	PLUG	1
45	4E-04	LKWSHR, Retainer to Hsg.	2	93	4E-08	† LKWSHR, Valve Mtg.	2
46	946613	** PLATE, Wiper & Seal Ret.	1	94	24C-872	† BOLT, Valve Mounting	2
47	949150	SEAL, Plunger Oil	1	95	18D-08	† NUT, Valve to Bracket	1
				96	635682	† SPACER, Valve	1
				97	731465	†† SHIM, Valve Mounting	—

\*NOTE: For complete replacement use 1548534 Valve Assy.

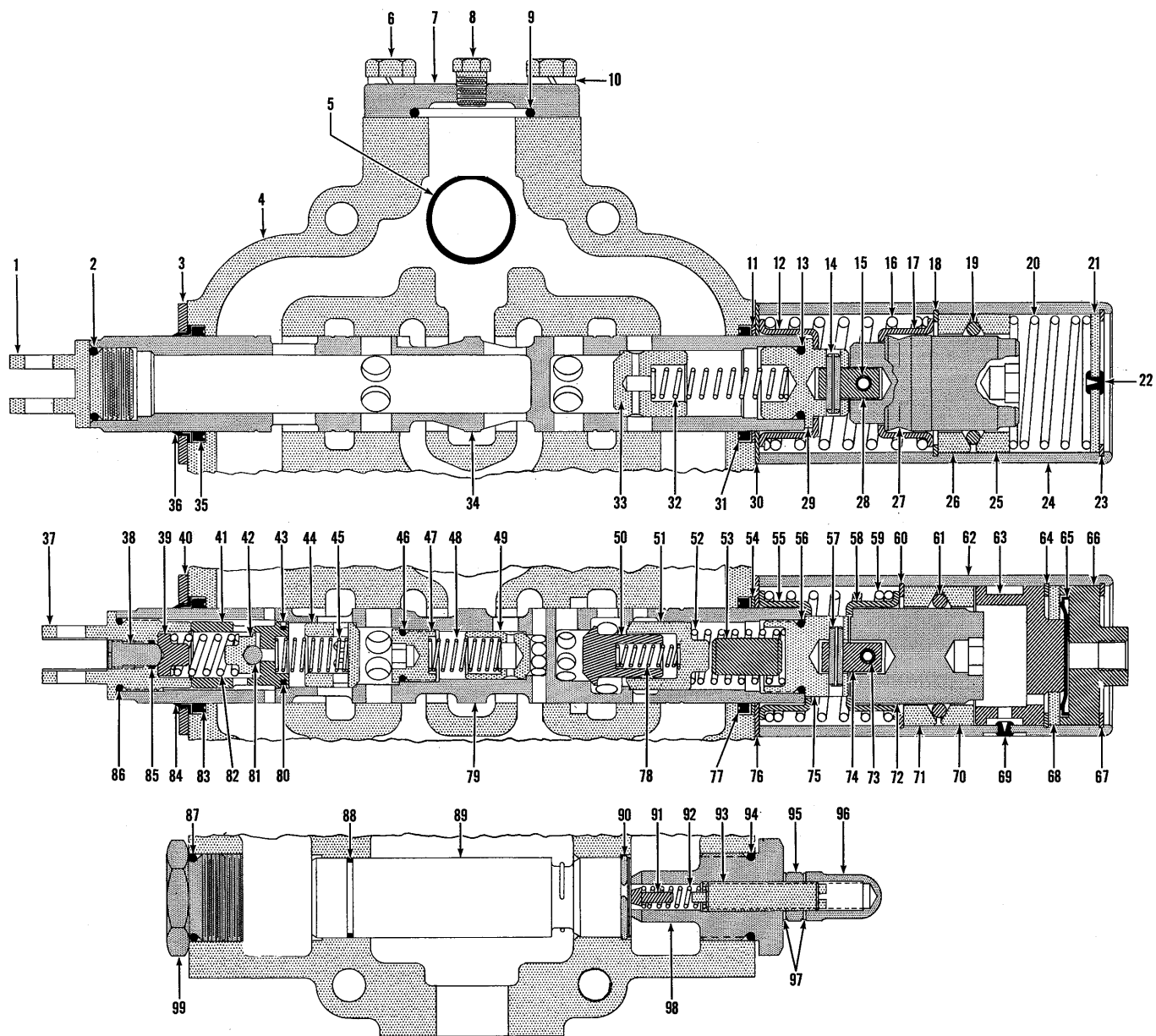
†Not Illustrated

§Not Sold Separately

†As Required

\*\*For replacement use 949066 Seal Kit which consists of 1—949236 Wiper, 1—949237 Plate, 1—949150 Seal & 1—944838 Plate.

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



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PM 2419

CONTROL VALVE ASSEMBLY — STANDARD

TS-8406-P

## CONTROL VALVE ASSEMBLY — STANDARD

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1536238	*VALVE ASSY (Inc. 1 thru 99) .....	1	24	945498	COVER, Detent .....	1
1	946077	EYE, Plunger .....	1	24A	1C-416	†BOLT, Cover to Housing .....	4
2	58K-214	O-RING, Plunger Eye .....	1	24B	4E-04	†LKWSHR, Cover to Housing ..	4
3	946613	**PLATE, Wiper & Seal Retaining .....	1	25	945290	RETAINER, Ball .....	1
3A	1C-412	†BOLT, Plate to Housing .....	2	26	945290	RETAINER, Ball .....	1
3B	4E-04	†LKWSHR, Plate to Housing .....	2	27	944845	CAP, Detent .....	1
4	—	§HOUSING, Valve — See "A" —	—	28	944148	PIN, Connecting .....	1
4A	40K-04	†PLUG, Pipe .....	1	29	944841	CAP, Plunger .....	1
5	25K-40120	O-RING, Valve Mounting .....	1	30	946615	PLATE, Seal Retaining .....	2
6	1C-820	BOLT, Cover to Valve .....	4	31	949150	SEAL, Plunger Oil .....	1
7	946381	COVER, Valve .....	1	32	888304	SPRING, Check .....	1
8	40K-04	PLUG, Valve Cover Pipe .....	1	33	943184	CHECK .....	1
9	58K-225	O-RING, Cover to Housing .....	1	34	—	§PLUNGER, Operating — See "A" .....	—
10	4E-08	LKWSHR, Cover to Housing ..	4	35	949150	SEAL, Plunger Oil .....	1
11	944837	RING, Back-up .....	1	36	946614	** WIPER, Plunger .....	1
12	944840	GUIDE, Spring .....	1	37	946616	EYE, Plunger .....	1
13	58K-214	O-RING, Plunger Cap .....	1	38	946126	SCREW, Adjusting .....	1
14	302602	ROLL PIN .....	1	39	946117	GUIDE, Spring .....	1
15	660178	ROLL PIN .....	1	40	946613	**PLATE, Wiper & Seal Retaining .....	1
16	947287	SPRING .....	1	40A	1C-412	†BOLT, Plate to Housing .....	2
17	944851	GUIDE, Spring .....	1	40B	4E-04	†LKWSHR, Plate to Housing .....	2
18	1301171	RING, Retaining .....	1	41	946617	SEAT, Relief Valve .....	1
19	10J-08	BALL .....	20	42	946119	POPPET ASSY (Inc. 81) .....	1
20	945494	SPRING .....	1	43	946618	RING, Back-up .....	1
21	944844	PLUG, Detent Cover .....	1	44	946624	CHECK .....	1
22	886763	PLUG, Bleeder .....	1	45	946623	SPRING, Check .....	1
23	663823	RING, Plug Retaining .....	1	46	25K-30022	O-RING, Cap .....	1

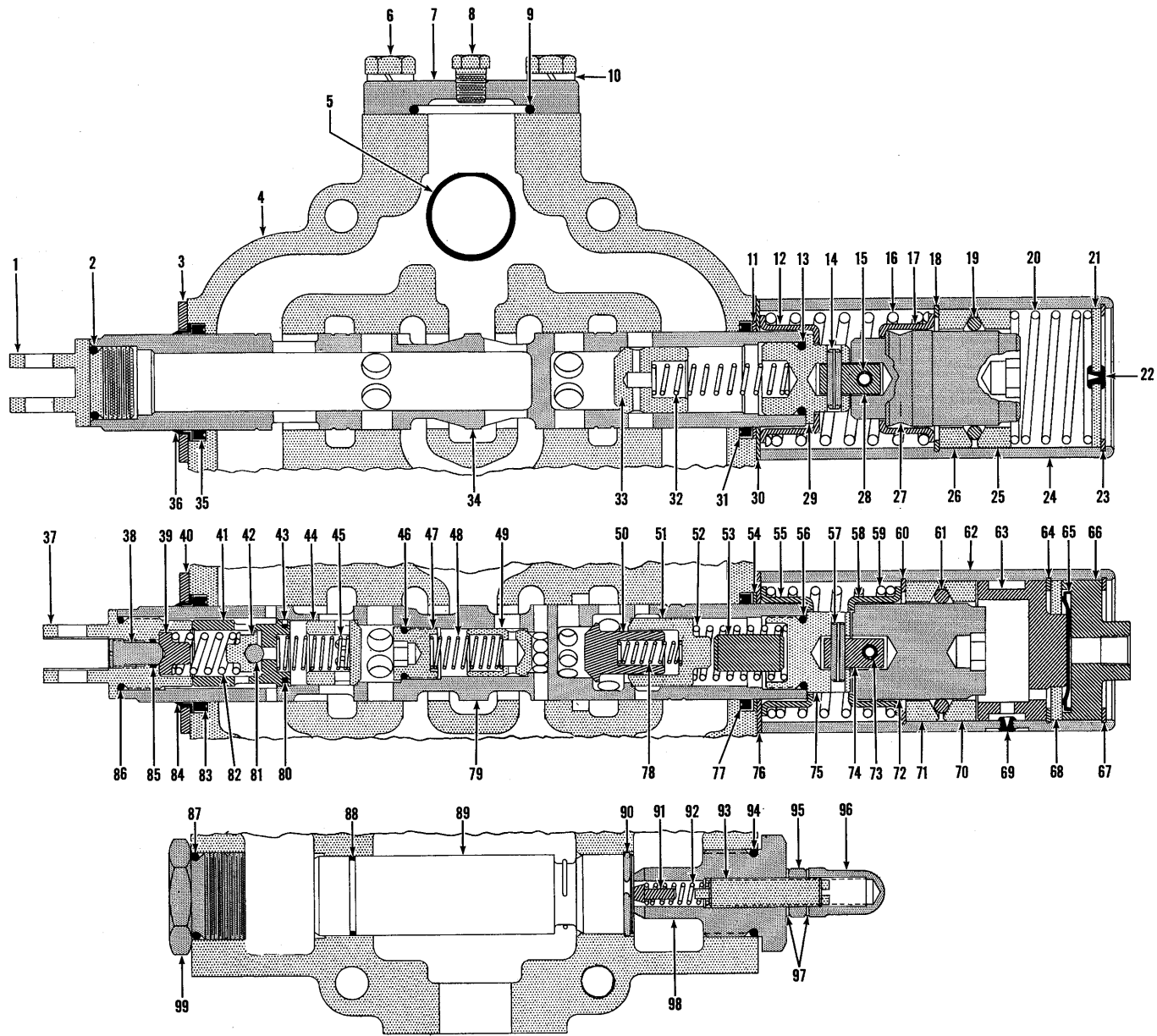
§Not Sold Separately

†Not Illustrated

\*NOTE: For replacement use 1548534 Valve Assembly.

\*\*For replacement use 949066 Seal Kit which consists of 1—949236 Wiper, 1—949237 Plate, 1—949150 Seal, & 1—944838 Plate.

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



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PM 2419

CONTROL VALVE ASSEMBLY - STANDARD

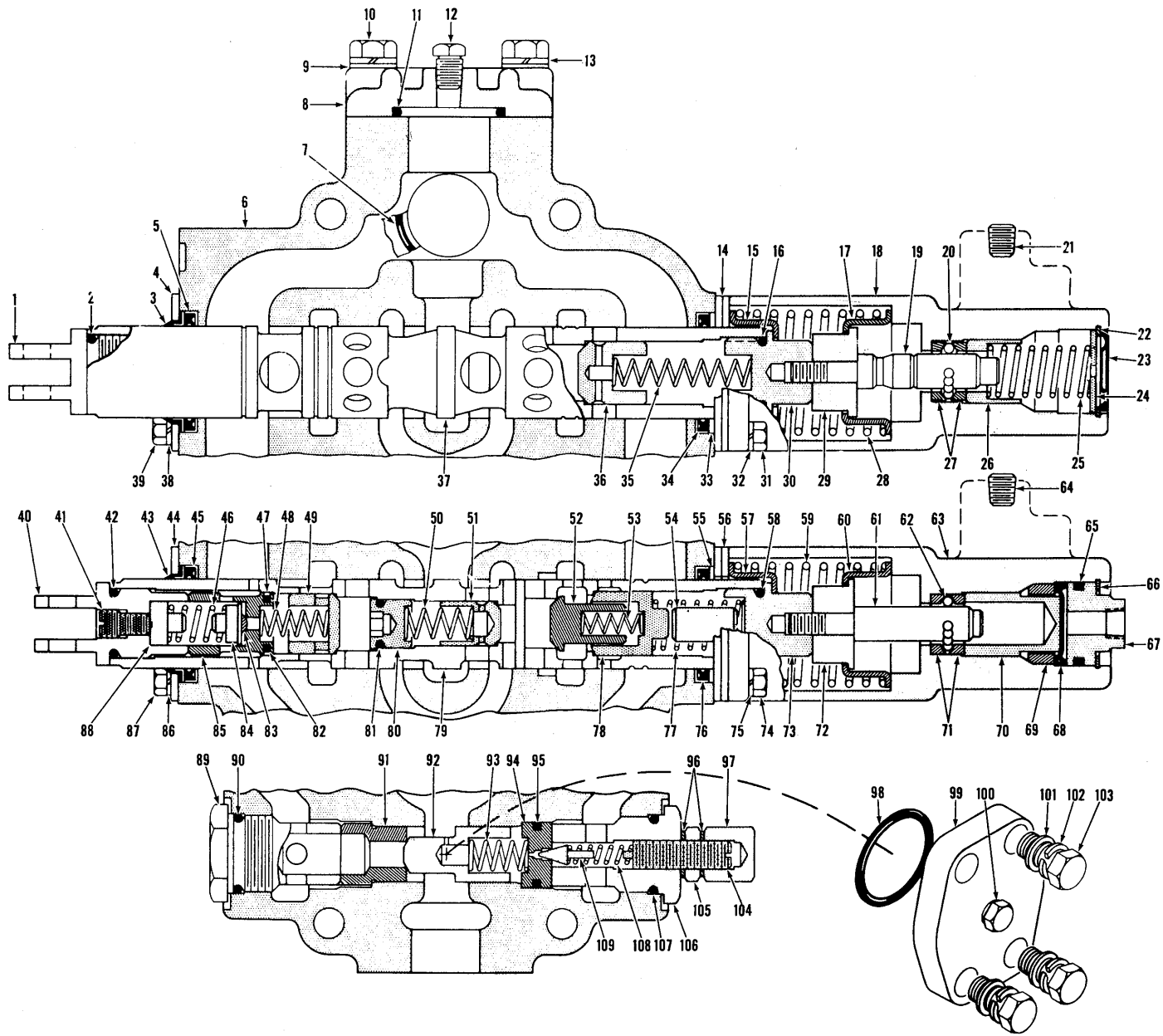
TS-8406-P

## CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
47	946864	CAP .....	1	73	633157	ROLL PIN .....	1
48	946623	SPRING, Check .....	1	74	944148	PIN, Connecting .....	1
49	946863	CHECK .....	1	75	947285	CAP .....	1
50	946619	CHECK .....	1	76	946615	PLATE, Seal Retaining .....	1
51	946620	CHECK .....	1	77	949150	SEAL, Plunger Oil .....	1
52	946621	SPRING .....	1	78	946813	SPRING .....	1
53	947286	SPACER .....	1	79	-----	§PLUNGER, Operating — See "A" .....	—
54	944837	RING, Back-up .....	1	80	25K-20028	O-RING, Relief Valve Seat....	1
55	944851	GUIDE, Spring .....	1	81	-----	§BALL, Poppet — See 42 .....	—
56	58K-214	O-RING, Plunger Cap .....	1	82	946118	SPRING .....	1
57	660178	ROLL PIN .....	1	83	949150	SEAL, Plunger Oil .....	1
58	944851	GUIDE, Spring .....	1	84	946614	** WIPER, Plunger .....	1
59	945857	SPRING .....	1	85	25K-20012	O-RING, Adjusting Screw .....	1
60	1301171	RING, Retaining .....	1	86	58K-214	O-RING, Plunger Eye .....	1
61	10J-08	BALL .....	20	87	25K-40108	O-RING, Cap .....	1
62	947281	COVER, Detent .....	1	88	945860	O-RING, Relief Valve .....	1
62A	1C-416	†BOLT, Cover to Housing .....	4	89	945496	RELIEF VALVE ASSY (Inc. 88, 90) .....	1
62B	4E-04	†LKWSHR, Cover to Housing ..	4	90	944802	RING, Relief Valve Retaining	1
63	947284	PLUG .....	1	91	886739	POPPET, Relief .....	1
64	663823	RING, Plug Retaining .....	1	92	886753	SPRING, Poppet .....	1
65	947214	DIAPHRAGM .....	1	93	944855	SCREW, Adjusting .....	1
66	947282	PLUG .....	1	94	25K-40108	O-RING, Adjusting Cap .....	1
67	663823	RING, Plug Retaining .....	1	95	8D-08	NUT, Jam .....	1
68	947283	SPACER .....	1	96	944853	NUT, Acorn .....	1
69	886763	PLUG, Bleeder .....	1	97	613750	WASHER, Jam Nut .....	2
70	945290	RETAINER, Ball .....	1	98	945497	CAP, Adjusting .....	1
71	945290	RETAINER, Ball .....	1	99	875279	CAP .....	1
72	947288	CAP .....	1				

§Not Sold Separately  
†Not Illustrated

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



150A.1

PM 2419

CONTROL VALVE ASSEMBLY

TS-9097

**CONTROL VALVE ASSEMBLY**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1508789	*CONTROL VALVE ASSY (Inc. 1 thru 109) .....	1	27A	948388	†SLEEVE, Retainer .....	1
1	946077	EYE, Plunger .....	1	28	947287	SPRING, Plunger Return.....	1
2	58K-214	O-RING, Plunger Eye .....	1	29	947898	SPACER, Return Spring .....	1
3	946614	**WIPER, Plunger .....	1	30	947895	CAP, Plunger .....	1
4	946613	**PLATE, Wiper & Seal Retainer .....	1	31	1C-420	BOLT, Detent to Housing .....	4
5	949150	SEAL, Plunger Oil .....	1	32	4E-04	LKWSHR, Detent to Housing..	4
6	-----	§HOUSING, Valve (See Item "A") .....	—	33	944837	RING, Back-Up .....	1
7	25K-40120	O-RING, Valve to Plate .....	1	34	949150	SEAL, Plunger Oil .....	1
8	947884	COVER .....	1	35	888304	SPRING, Check .....	1
9	878233	WASHER, Cover to Housing..	4	36	943184	CHECK .....	1
10	1C-828	BOLT, Cover to Housing .....	4	37	-----	§PLUNGER, Operating (See Item "A") .....	—
11	947885	O-RING, Cover to Housing....	1	38	4E-04	LKWSHR, Plate to Housing....	2
12	40K-04	PLUG, Cover .....	1	39	1C-412	BOLT, Plate to Housing .....	2
13	4E-08	LKWSHR, Cover to Housing..	4	40	946616	EYE, Plunger .....	1
14	946615	PLATE, Seal Retainer .....	2	41	946126	SCREW, Adjusting .....	1
15	944840	GUIDE, Spring .....	1	42	791553	RING, Back-Up .....	1
16	58K-214	O-RING, Cap .....	1	43	946614	**WIPER, Plunger .....	1
17	944851	GUIDE, Spring .....	1	44	946613	**PLATE, Wiper and Seal Retainer .....	1
18	947883	COVER, Detent .....	1	45	949150	SEAL, Plunger Oil .....	1
19	947901	CAP, Detent .....	1	46	946118	SPRING, Check .....	1
20	10J-06	BALL .....	11	47	946618	RING, Back-Up .....	1
21	16F-04	PLUG, Pipe .....	1	48	946623	SPRING, Check .....	1
22	666542	RING, Plug Retainer .....	1	49	946624	CHECK .....	1
23	948202	DIAPHRAGM, Cover .....	1	50	946623	SPRING, Check .....	1
24	947848	PLUG, Detent Cover .....	1	51	946863	CHECK .....	1
25	947852	SPRING, Detent .....	1	52	946619	CHECK .....	1
26	947842	GUIDE, Detent Spring .....	1	53	946813	SPRING, Check .....	1
27	947843	RETAINER, Ball .....	2	54	947286	SPACER .....	1
				55	944837	RING, Back-Up .....	1

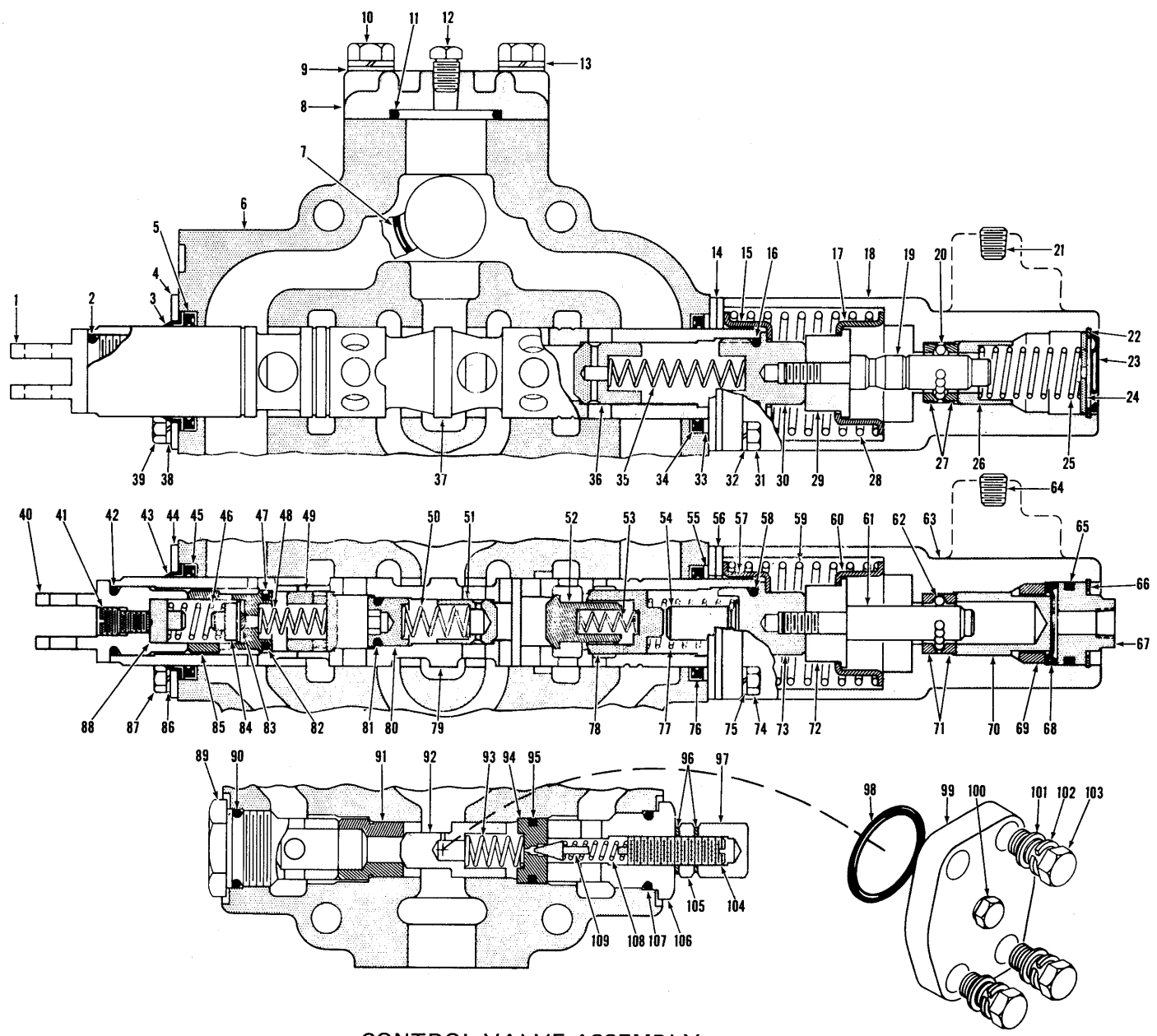
†Not Illustrated

§Not Sold Separately

\*NOTE: For replacement use 1548534.

\*\*For replacement use 949068 Kit which consists of 1-949236 Wiper, 1-949237 Plate, 1-949150 Seal & 1-944838 Plate.

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



152A.1

PM 2419

CONTROL VALVE ASSEMBLY

TS-9097

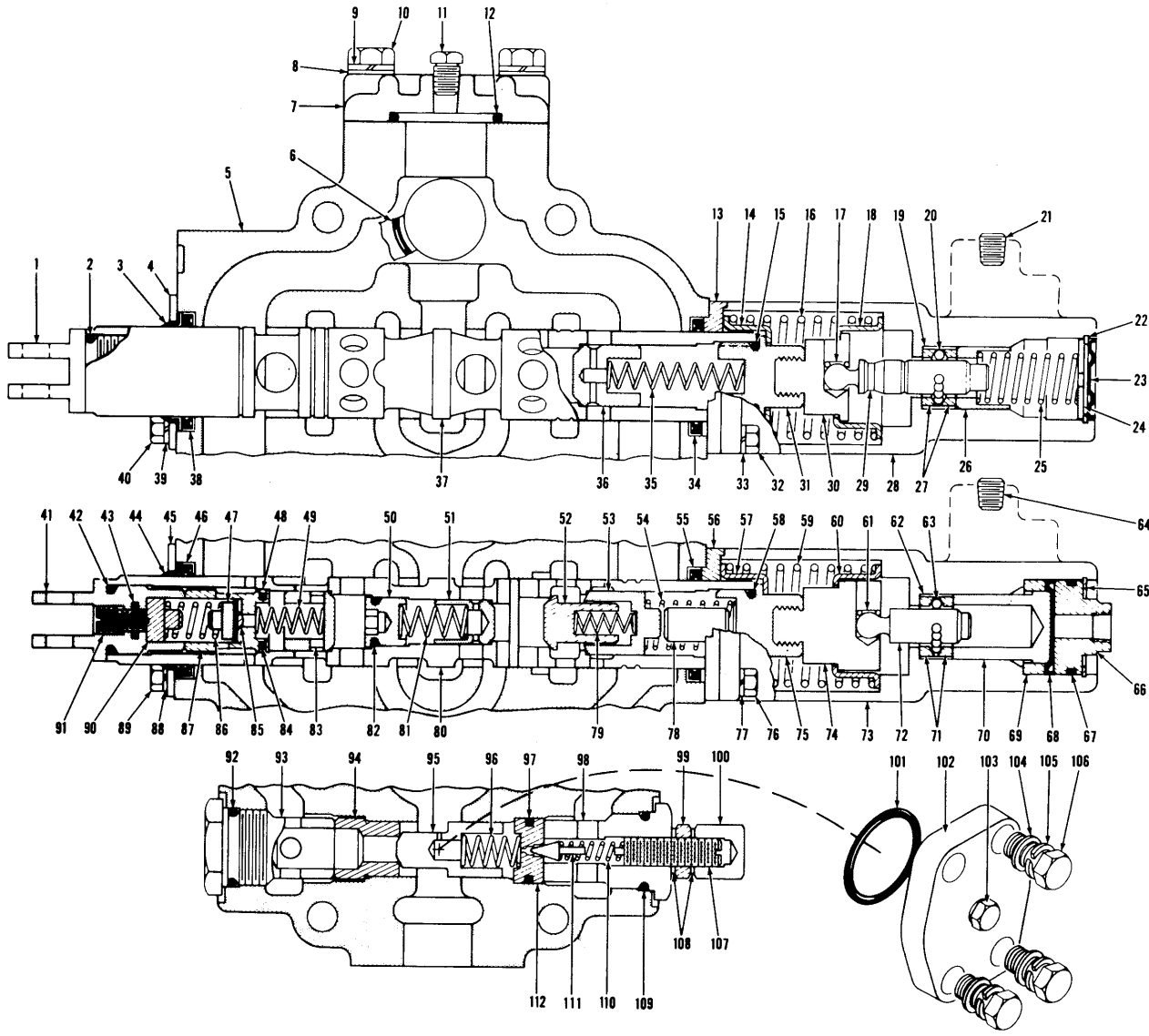


## CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
56	946615	PLATE, Seal Retaining .....	2	82	25K-20028	O-RING, Poppet Seat .....	1
57	944840	GUIDE, Spring .....	1	83	-----	§BALL (See Item 84) .....	—
58	791553	O-RING, Plunger Cap .....	1	84	946119	POPPET (Inc. Item 83) .....	1
59	947287	SPRING, Plunger Return .....	1	85	946617	SEAT, Poppet .....	1
60	944851	GUIDE, Spring .....	1	86	4E-04	LKWSHR, Plate to Housing....	2
61	947892	CAP, Detent .....	1	87	1C-412	BOLT, Plate to Housing .....	2
62	10J-06	BALL .....	11	88	946117	GUIDE, Spring .....	1
63	947883	COVER, Detent .....	1	89	947845	CAP, Relief Valve Cap .....	1
64	16F-04	PLUG, Pipe .....	1	90	25K-40104	O-RING, Cap .....	1
65	25K-40108	O-RING, Detent Plug .....	1	91	947840	SEAT, Check .....	1
66	666542	RING, Plug Retaining .....	1	92	947844	CHECK, Relief Valve .....	1
67	947340	PLUG, Detent .....	1	93	946805	SPRING, Relief Valve Check..	1
68	946919	DIAPHRAGM .....	1	94	947841	SEAT, Poppet .....	1
69	947850	SPACER, Diaphragm .....	1	95	25K-40030	O-RING, Seat .....	1
70	948460	PISTON, Detent .....	1	96	613750	WASHER, Jam Nut .....	2
71	947843	RETAINER, Ball .....	2	97	49D-08	NUT, Acorn .....	1
71A	948388	†SLEEVE, Retainer .....	1	98	1306623	O-RING, Cover to Housing....	1
72	947894	SPACER, Return Spring .....	1	99	948276	COVER .....	1
73	947893	CAP, Plunger .....	1	100	40K-04	PLUG, Cover .....	1
74	1C-420	BOLT, Detent to Housing .....	4	101	867747	WASHER, Cover to Housing..	4
75	4E-04	LKWSHR, Detent to Housing..	4	102	4E-07	LKWSHR, Cover to Housing..	4
76	949150	SEAL, Plunger Oil .....	1	103	1C-724	BOLT, Cover to Housing .....	4
77	946621	SPRING, Check .....	1	104	944890	SCREW, Relief Valve Adj. ....	1
78	946620	CHECK .....	1	105	8D-08	NUT, Jam .....	1
79	-----	§PLUNGER, Operating (See Item "A") .....	—	106	947846	CAP, Relief Valve Cap .....	1
80	946429	CAP .....	1	107	25K-40104	O-RING, Cap .....	1
81	25K-30022	O-RING, Cap .....	1	108	886753	SPRING, Relief Valve .....	1
				109	886739	POPPET .....	1

†Not Illustrated  
§Not Sold Separately

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



150B.1

PM 2419

CONTROL VALVE ASSEMBLY

TS-10672

## CONTROL VALVE ASSEMBLY

Item No.	Part No.	Description	No. Req'd.
A	1548534	VALVE ASSY, Control (Incl. 1-112) See Note 'A'	1
1	946077	EYE, Plunger	1
2	58K-214	O-RING, Plunger Eye	1
3	946614	** WIPER, Plunger	1
4	946613	** PLATE, Wiper Retainer	1
5	-----	§ HOUSING, Valve — See A	—
6	25K-40120	O-RING, Bottom Outlet	1
7	947884	COVER, Housing	1
8	878233	WASHER, Cover to Housing	4
9	4E-08	LKWSHR, Cover to Housing	4
10	1C-828	BOLT, Cover to Housing	4
11	40K-04	PLUG, Cover	1
12	947885	O-RING, Cover to Housing	1
13	948837	PLATE, Seal Retainer	1
14	944840	GUIDE, Spring	1
15	58K-214	O-RING, Plunger Cap	1
16	947287	SPRING, Plunger Return	1
17	948726	RING, Retainer	1
18	944851	GUIDE, Spring	1
19	948727	SLEEVE, Ball Retainer	1
20	948730	BALL, Detent	11
21	16F-04	PLUG, Detent Cover	2
22	666542	RING, Plug Retainer	1
23	948202	DIAPHRAGM, Detent	1
24	947848	PLUG, Detent End	1
25	947852	SPRING, Detent	1
26	947842	SEAT, Spring	1
27	947843	RETAINER, Ball	2
28	948744	COVER, Detent	1
29	948747	PLUNGER, Detent	1
30	948743	SOCKET, Detent	1
31	948749	CAP, Plunger	1
32	11G-420	BOLT, Detent Cover to Housing	4
33	4E-04	LKWSHR, Detent Cover to Housing	4
34	949150	SEAL, Plunger Oil	1
35	888304	SPRING, Check	1
36	943184	CHECK	1
37	-----	§ PLUNGER, Operating — See A	—
38	949150	SEAL, Plunger Oil	1
39	4E-04	LKWSHR, Retainer Plate to Housing	2
40	1C-412	BOLT, Retainer Plate to Housing	2
41	946616	EYE, Plunger	1
42	58K-214	O-RING, Plunger Eye	1
43	893675	O-RING, Adjusting Screw	1
44	946614	** WIPER, Plunger	1
45	946613	** PLATE, Wiper Retainer	1
46	949150	SEAL, Plunger Oil	1
47	946119	POPPET ASSY (Inc. 85)	1
48	946618	RING, Teflon	1
49	946623	SPRING, Check	1
50	946864	*CAP	1
51	946863	CHECK	1
52	946619	CHECK	1
53	946620	CHECK	1
54	946621	SPRING, Check	1
55	949150	SEAL, Plunger Oil	1
56	948837	PLATE, Seal Retainer	1

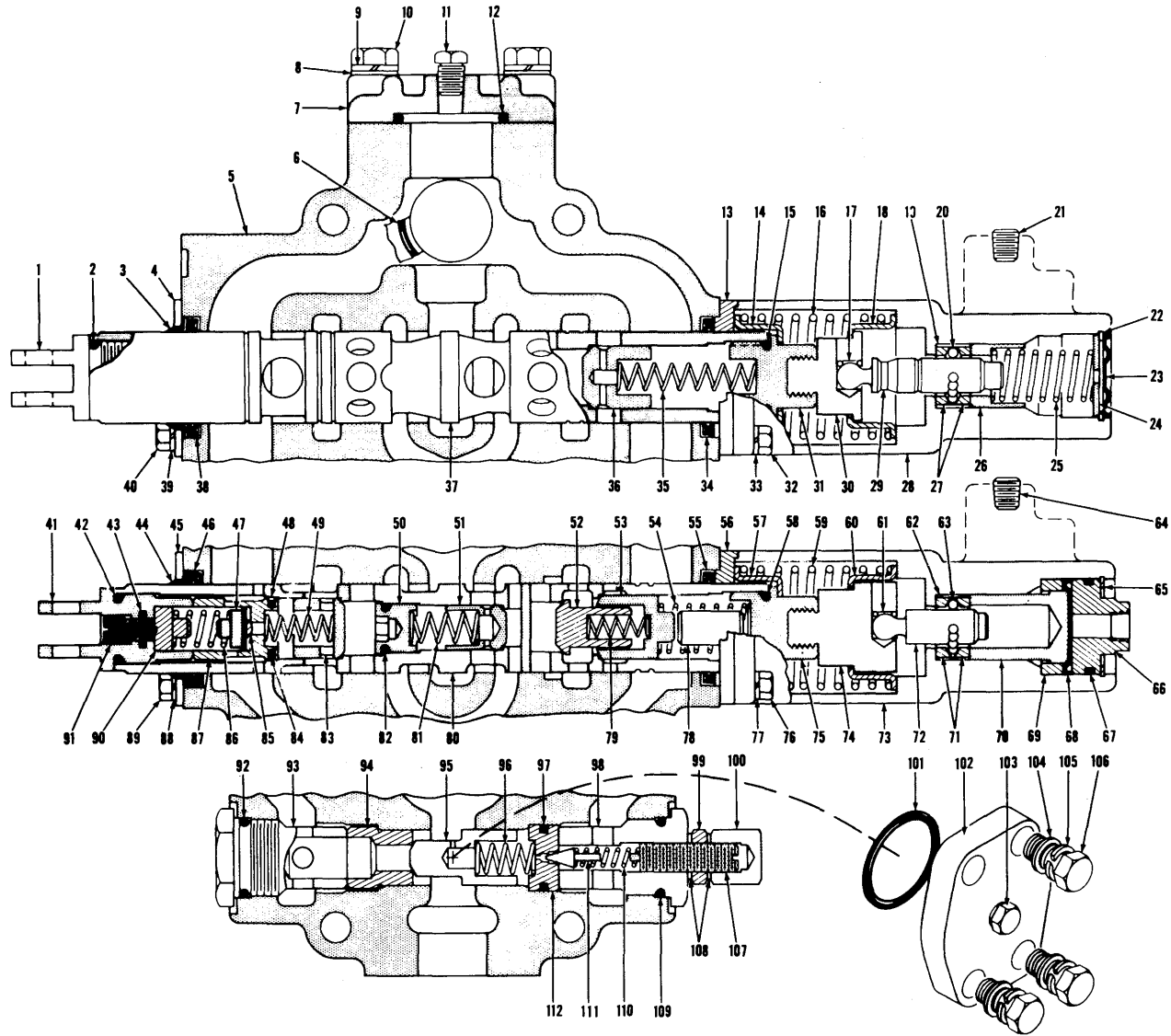
\*NOTE: Must be torqued to 25 ft. lbs.

§ Not Sold Separately

NOTE A: For replacement use 1512163.

\*\* For replacement use 949066 Kit, which consists of 1—949136 Wiper, 1—949237 Plate, 1—949150 Seal & 1—944838 Plate.

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



152B.1

PM 2419

CONTROL VALVE ASSEMBLY

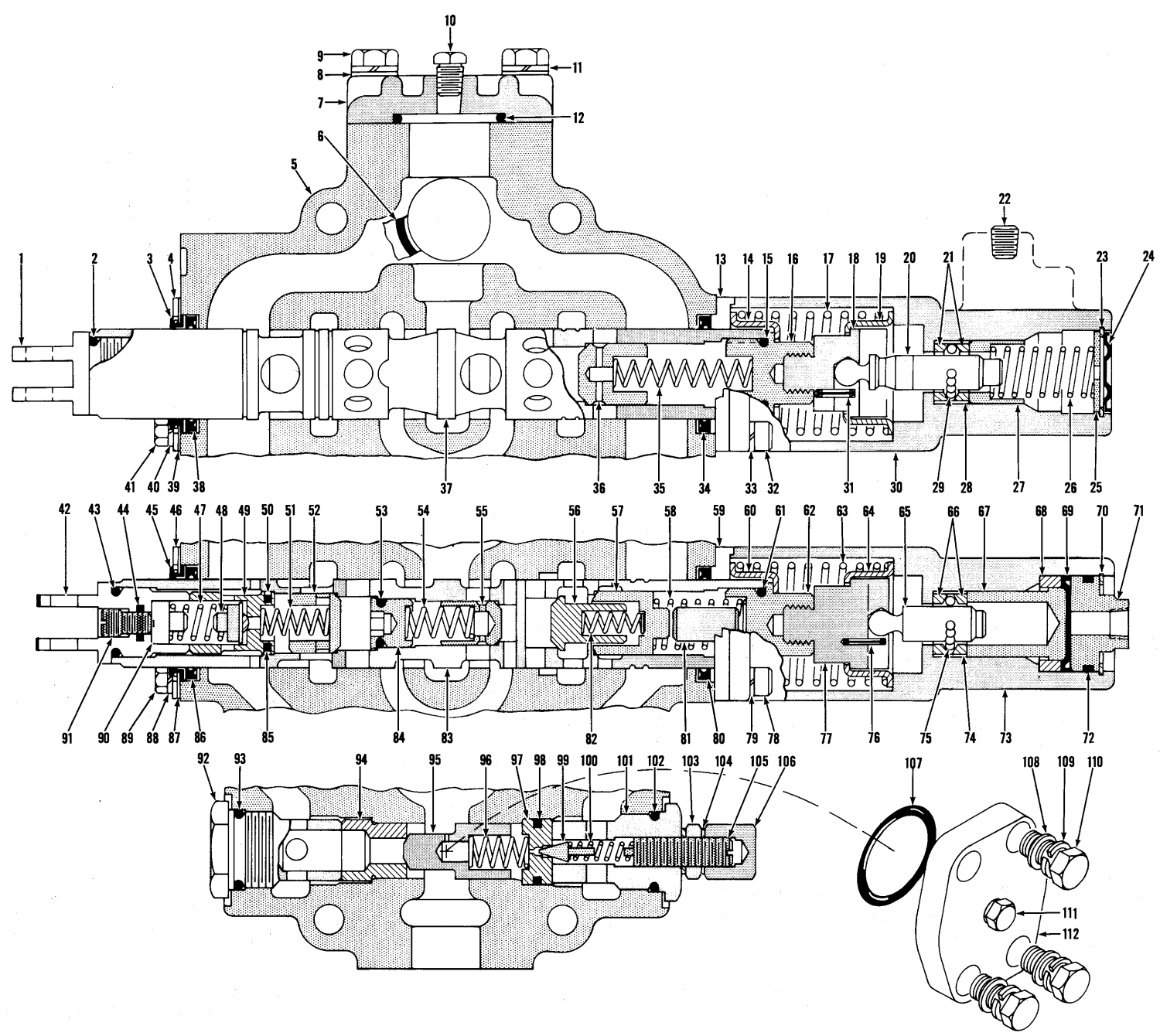
TS-10672

## CONTROL VALVE ASSEMBLY (Continued)

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

§Not Sold Separately

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



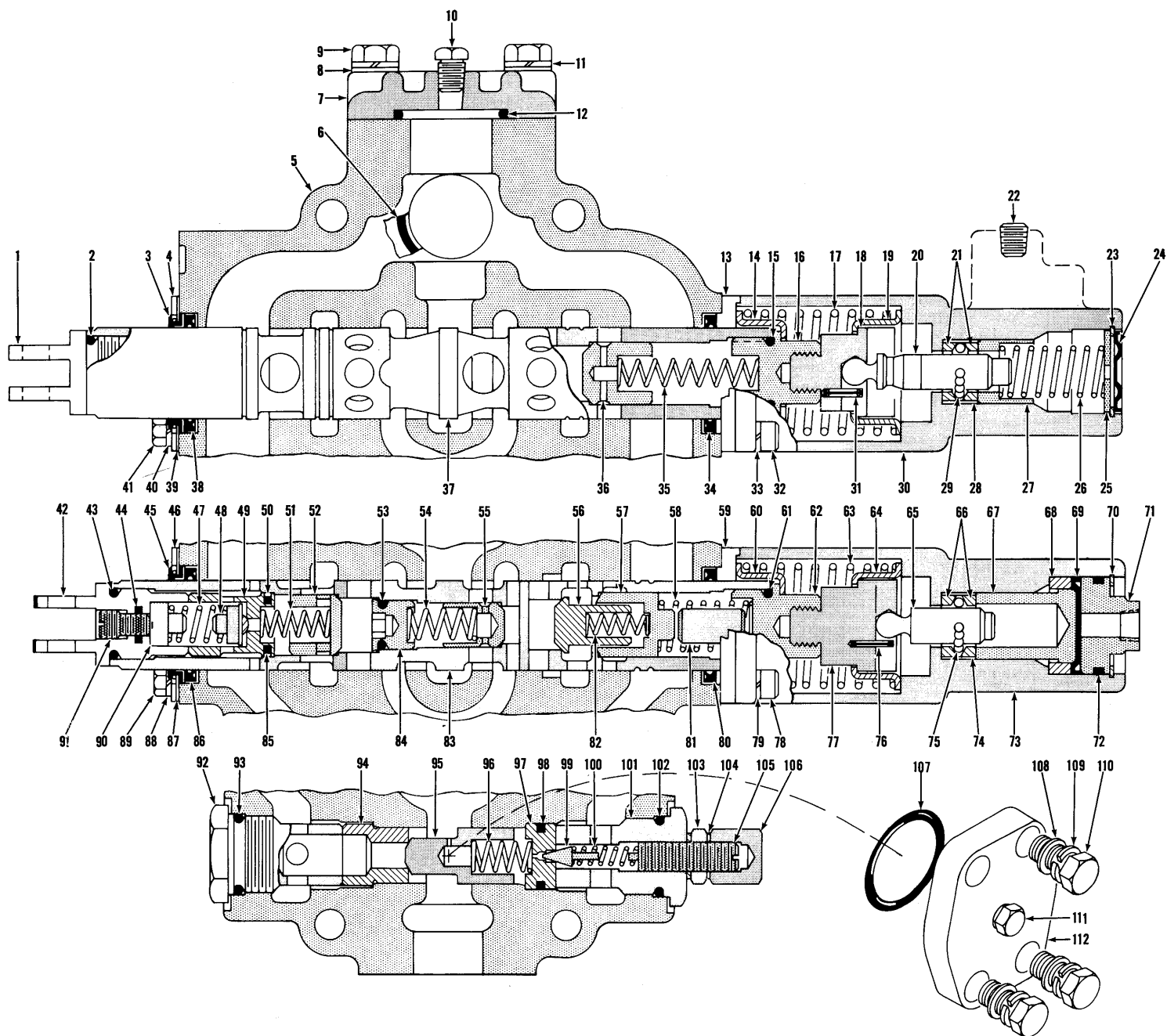
150C.1

PM 2419

## CONTROL VALVE ASSEMBLY

Item	Part No.	Description	Qty.
A	1512163	CONTROL VALVE ASSY (Inc. 1-112)	1
1	946077	EYE, Plunger	1
2	58K-214	O-RING, Plunger Eye	1
3	949236	WIPER, Plunger	1
4	949237	PLATE, Wiper Retaining	1
5	-----	§ HOUSING — See "A"	—
6	25K-40120	O-RING, Valve Mounting	1
7	947884	COVER, Housing	1
8	878233	WASHER, Cover to Housing	4
9	1C-828	BOLT, Cover to Housing	4
10	40K-04	PLUG	1
11	4E-08	LKWSHR, Cover to Housing	4
12	947885	O-RING, Cover	1
13	948841	‡ PLATE, Oil Seal Retaining	1
13A	948837	‡ PLATE, Oil Seal Retaining	1
13B	948842	‡ PLATE, Oil Seal Retaining	1
14	944840	RETAINER, Spring	1
15	58K-214	O-RING, Cap	1
16	948749	CAP, Plunger	1
17	947287	SPRING, Plunger Return	1
18	949271	SOCKET, Detent	1
19	944851	RETAINER, Spring	1
20	948747	PLUNGER, Detent	1
21	947843	RETAINER, Ball	2
22	16F-04	PLUG, Pipe	1
23	666542	RING, Plug Retaining	1
24	948202	DIAPHRAGM	1
25	947848	PLUG, Detent End	1
26	947852	SPRING, Detent	1
27	948954	RETAINER, Spring	1
28	948727	SLEEVE, Ball Retainer	1
29	948730	BALL, Detent	11
30	948744	COVER, Detent	1
31	300232	PIN, Roll	1
32	11G-420	BOLT, Cover to Housing	4
33	4E-04	LKWSHR, Cover to Housing	4
34	949150	SEAL, Plunger Oil	1
35	888304	SPRING, Check	1
36	943184	CHECK	1
37	-----	§ PLUNGER, Operating See "A"	—
38	949150	SEAL, Plunger Oil	1
39	944838	PLATE, Oil Seal Retaining	1
40	4E-04	LKWSHR, Plate to Housing	4
41	1C-412	BOLT, Plate to Housing	4
42	946616	EYE, Plunger	1
43	58K-214	O-RING, Plunger Eye	1
44	893675	O-RING, Adjusting Screw	1
45	949236	WIPER, Plunger	1
46	949237	PLATE, Wiper Retaining	1
47	946118	SPRING, Poppet	1
48	946119	POPPET	1
49	946617	SEAT, Poppet	1
50	946618	RING, Back-up	1
51	946623	SPRING, Check	1
52	946624	CHECK	1
53	25K-30022	O-RING, Cap	1
54	946623	SPRING, Check	1
55	946863	CHECK	1
56	946619	CHECK	1

‡As Required  
§Not Sold Separately



152C.1

PM 2419

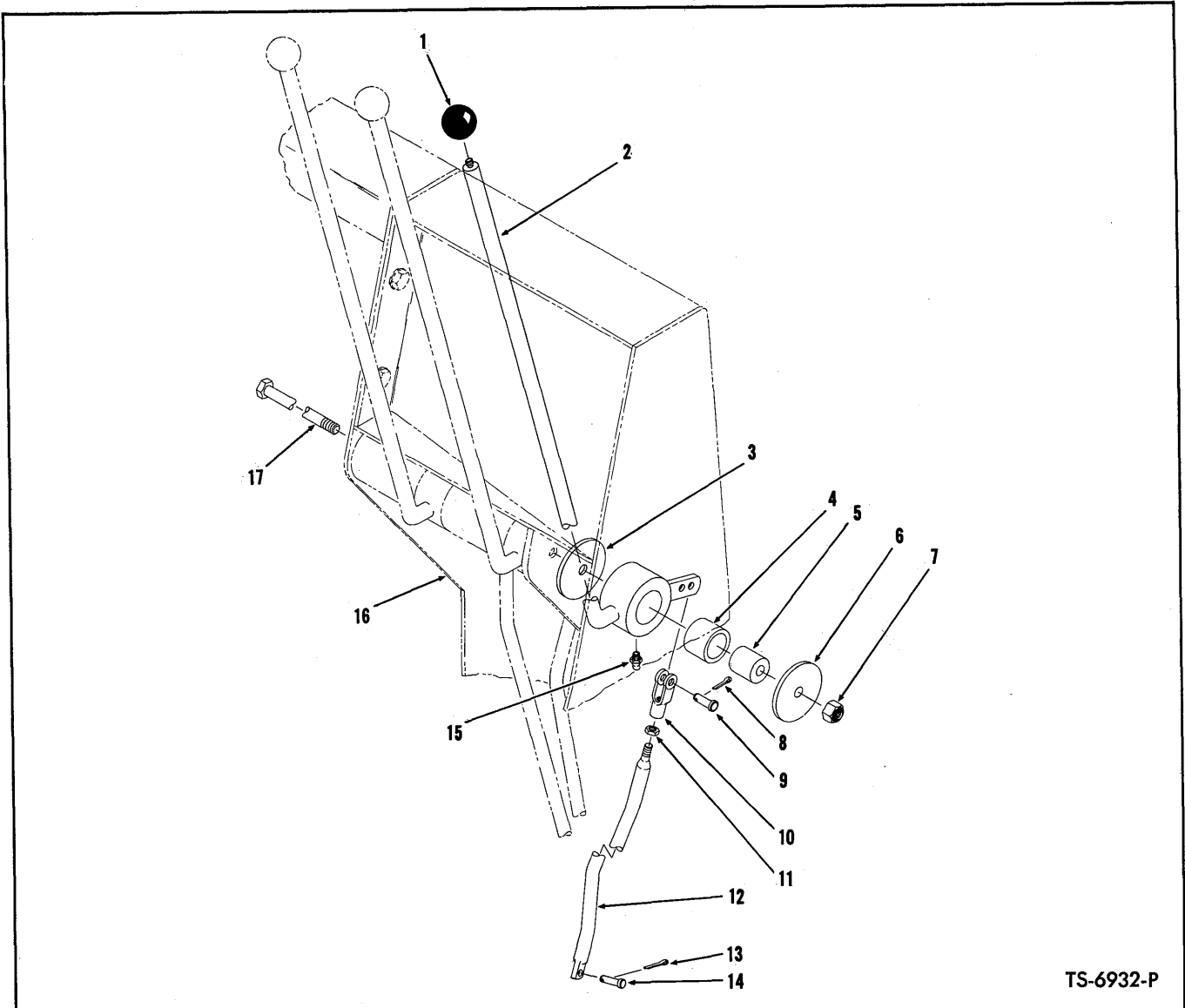
TS-11521



## CONTROL VALVE ASSEMBLY (Cont'd)

Item	Part No.	Description	Qty.
57	946620	CHECK	1
58	946621	SPRING, Check	1
59	948841	‡PLATE, Oil Seal Retaining	1
59A	948837	‡PLATE, Oil Seal Retaining	1
59B	948842	‡PLATE, Oil Seal Retaining	1
60	944840	RETAINER, Spring	1
61	58K-219	O-RING, Cap	1
62	948748	CAP, Plunger	1
63	947902	SPRING, Plunger Return	1
64	944851	RETAINER, Spring	1
65	948746	PLUNGER, Detent	1
66	947843	RETAINER, Ball	2
67	948725	PISTON	1
68	948728	SPACER	1
69	948731	DIAPHRAGM	1
70	948729	RING, Plug Retainer	1
71	948724	PLUG, Detent Housing	1
72	25K-40114	O-RING, Detent Plug	1
73	948745	COVER, Detent	1
74	948727	SLEEVE, Ball Retainer	1
75	948730	BALL, Detent	11
76	300232	PIN, Roll	1
77	949270	SOCKET, Detent	1
78	11G-420	BOLT, Cover to Housing	4
79	4E-04	LKWSHR, Cover to Housing	4
80	949150	SEAL, Plunger Oil	1
81	947286	SPACER	1
82	946813	SPRING, Check	1
83	-----	§PLUNGER, Operating — See "A"	—
84	946864	CAP, Plunger	1
85	25K-20028	O-RING, Poppet Seat	1
86	949150	SEAL, Plunger Oil	1
87	944838	PLATE, Oil Seal Retaining	1
88	4E-04	LKWSHR, Plate to Housing	4
89	1C-412	BOLT, Plate to Housing	4
90	946117	GUIDE, Spring	1
91	946126	SCREW, Adjusting	1
92	947845	CAP, Relief Valve	1
93	25K-40104	O-RING, Cap	1
94	947840	SEAT, Check	1
95	947844	POPPET	1
96	946805	SPRING, Poppet	1
97	947841	SEAT, Poppet	1
98	25K-40030	O-RING, Seat	1
99	886739	POPPET, Relief	1
100	886753	SPRING, Poppet	1
101	947846	CAP, Adjusting	1
102	25K-40104	O-RING, Cap	1
103	8D-08	NUT, Jam	1
104	613750	WASHER	2
105	944890	SCREW, Adjusting	1
106	49D-08	NUT, Acorn	1
107	58K-222	O-RING, Cover	1
108	867747	WASHER, Cover to Housing	4
109	4E-07	LKWSHR, Cover to Housing	4
110	1C-724	BOLT, Cover to Housing	4
111	40K-04	PLUG, Pipe	1
112	947887	COVER	1

‡As Required  
§Not Sold Separately



TS-6932-P

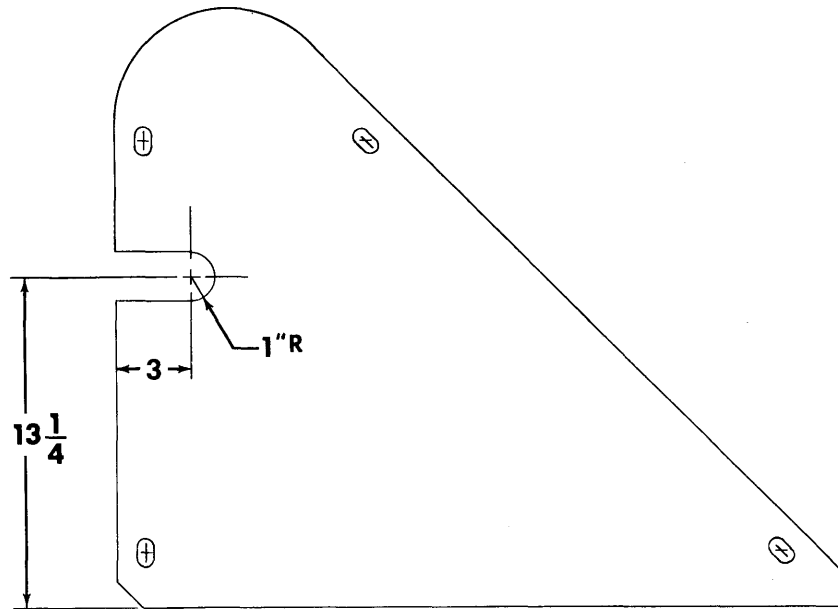
## VALVE CONTROLS — THREE SPOOL VALVE INSTALLATION AND PARTS

For Serial: Cummins — 5HC101 thru 5HC999, 6HC101 thru 6HC999;  
G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999, 7HG101 thru 7HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	509772	KNOB, Valve Lever .....	1	10	2J-8300	CLEVIS, Rod to Lever .....	1
2	572708	LEVER, Control (Inc. 4) .....	1	11	8D-08	NUT, Clevis Jam .....	1
3	616795	‡SPACER, Valve Lever .....	—	12	572638	ROD (Inc. 10, 11) .....	1
4	569055	BUSHING, Valve Lever .....	1	13	1F-414	COTTER, Rod Pin .....	1
5	550646	SLEEVE, Valve Lever .....	1	14	4F-08127	PIN, Rod to Valve .....	1
6	616795	‡SPACER, Valve Lever .....	—	15	10H-25	FITTING, Lever Grease .....	1
7	18D-08	NUT, Lever Mtg. Bolt .....	1	16	—	COCKPIT — See Index .....	—
8	1F-414	COTTER, Clevis Pin .....	1	17	24C-8160	BOLT, Valve Lever Mtg. ....	1
9	4F-08127	PIN, Clevis .....	1				

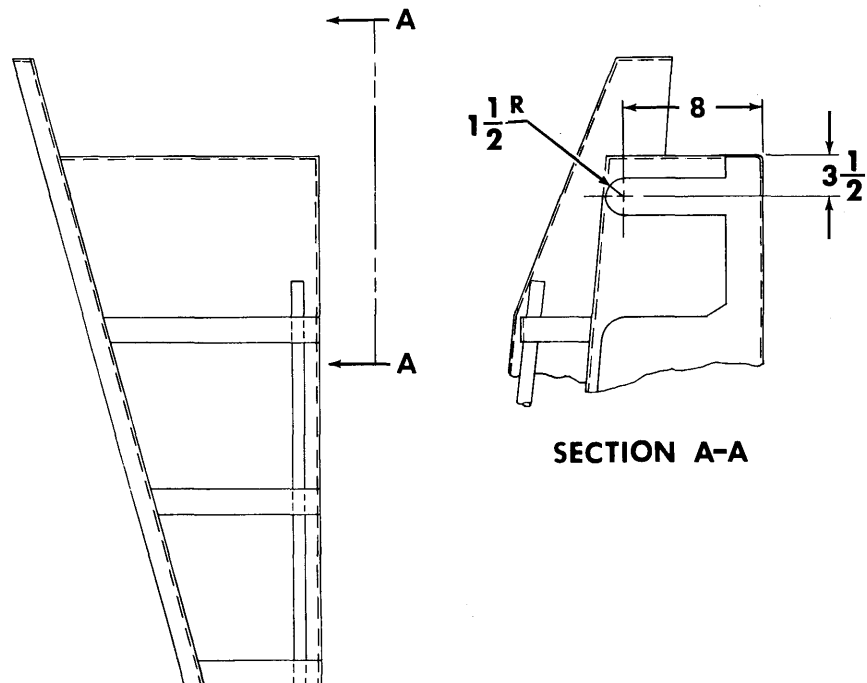
‡As Required

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



**SIDE PANEL**

**CAN BE MADE FROM 564317 FOR  
3-SPOOL VALVE INSTALLATION**



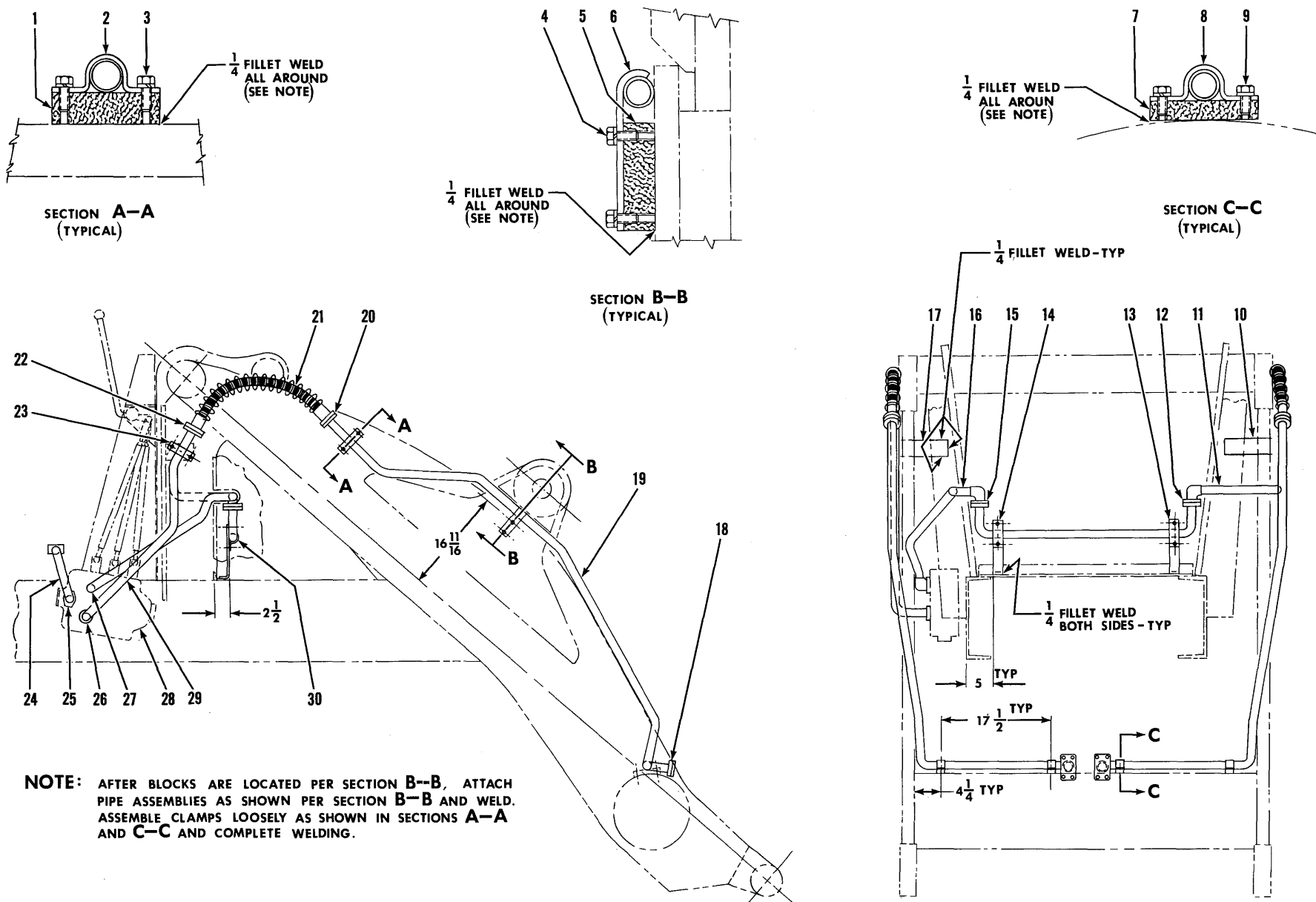
**R. H. STEP ASSEMBLY**

**CAN BE MADE FROM 562024  
FOR 3-SPOOL VALVE INSTALLATION**

**SIDE PANEL AND STEP INSTALLATION**

For Serial: Cummins — 5HC101 thru 5HC999;  
G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999

TS-6933-P



**NOTE:** AFTER BLOCKS ARE LOCATED PER SECTION B--B, ATTACH PIPE ASSEMBLIES AS SHOWN PER SECTION B--B AND WELD. ASSEMBLE CLAMPS LOOSELY AS SHOWN IN SECTIONS A--A AND C--C AND COMPLETE WELDING.

**THREE SPOOL VALVE INSTALLATION AND PARTS**  
 For Serial: Cummins — 5HC101 thru 5HC999;  
 G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999

TS-6907-P

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PM 2419

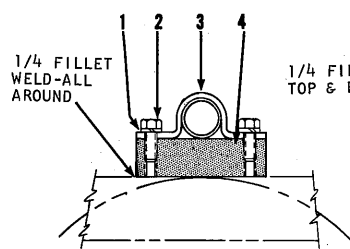
## THREE SPOOL VALVE INSTALLATION AND PARTS

For Serial: Cummins — 5HC101 thru 5HC999;  
G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999

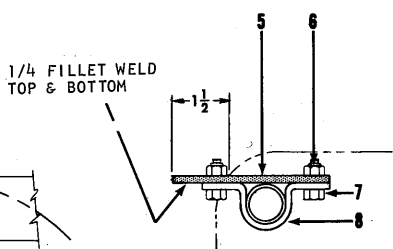
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1520677	BLOCK, Mtg. — Boom Tubes ..	2	19A	572609	TUBE, Boom — L.H. ....	1
2	572557	SUPPORT, Tube Mtg. ....	2	20	1511520	FLANGE HALF, Split .....	4
3	24C-616	BOLT, Support Mounting .....	4	20A	58K-222	† O-RING, Hose to Tube .....	2
3A	4E-06	LKWSHR, Support Mtg. ....	4	20B	23C-724	† BOLT, Flange to Tube .....	8
4	24C-616	BOLT, Clip Mtg. ....	4	20C	4E-07	† LKWSHR, Flange to Tube ...	8
4A	4E-06	LKWSHR, Clip Mtg. ....	4	21	572525	HOSE, Valve Tube to Boom Tube .....	2
5	1520677	BLOCK, Mtg. — Boom Tubes ..	2	22	1511520	FLANGE HALF, Split .....	4
6	1520678	CLIP, Tube Mounting .....	2	22A	58K-222	† O-RING, Hose to Tube .....	2
7	572665	BLOCK, Mtg. — Boom Tubes ..	4	22B	23C-724	† BOLT, Flange to Tube .....	8
8	572557	SUPPORT, Tube Mtg. ....	4	22C	4E-07	† LKWSHR, Flange to Tube ...	8
9	24C-616	BOLT, Support Mtg. ....	8	23	572557	SUPPORT, Tube Mtg. ....	2
9A	4E-06	LKWSHR, Support Mtg. ....	8	23A	24C-616	† BOLT, Support to Brk. ....	4
10	572947	BRACKET, Tube Support — L.H. ....	1	23B	18D-06	† NUT, Support to Brk. ....	4
11	565446	TUBE, Crosstube to Hose .....	1	24	574929	TUBE, Pump to Valve .....	1
12	58K-222	O-RING, Tube Mtg. ....	1	25	58K-222	O-RING, Tube to Valve .....	1
12A	23C-724	† BOLT, Tube to Crosstube .....	4	25A	23C-728	† BOLT, Tube to Valve .....	4
12B	4E-07	† LKWSHR, Tube to Crosstube ...	4	25B	4E-07	† LKWSHR, Tube to Valve .....	4
13	572946	BRACKET, Crosstube Support ..	1	26	1511520	FLANGE HALF, Split .....	2
14	572946	BRACKET, Crosstube Support ..	1	26A	58K-222	† O-RING, Tube to Valve .....	1
15	58K-222	O-RING, Tube Mtg. ....	1	26B	23C-724	† BOLT, Tube to Valve .....	4
15A	23C-724	† BOLT, Tube to Crosstube .....	4	26C	4E-07	† LKWSHR, Tube to Valve .....	4
15B	4E-07	† LKWSHR, Tube to Crosstube ...	4	27	58K-222	O-RING, Tube to Valve .....	1
16	565452	TUBE, Valve to Crosstube .....	1	27A	23C-724	† BOLT, Tube to Valve .....	4
17	572948	BRACKET, Tube Support — R.H. ....	1	27B	4E-07	† LKWSHR, Tube to Valve .....	4
18	509364	PAD, Flange Protector .....	2	28	-----	VALVE — See Index .....	—
18A	509501	† GASKET, Flange Protector ....	2	29	565450	TUBE, Valve to Hose .....	1
18B	23C-716	† BOLT, Flange Protector .....	8	30	572557	SUPPORT, Tube Mtg. ....	2
18C	4E-07	† LKWSHR, Flange Protector ....	8	30A	24C-616	† BOLT, Support to Brk. ....	4
19	572607	TUBE, Boom — R.H. ....	1	30B	18D-06	† NUT, Support to Bracket .....	4

† Not Illustrated

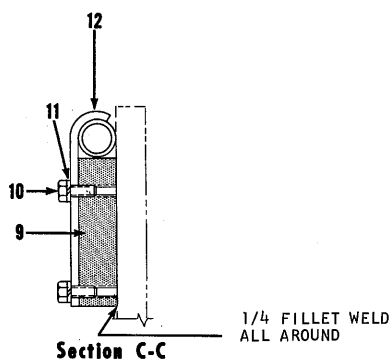
**WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE**



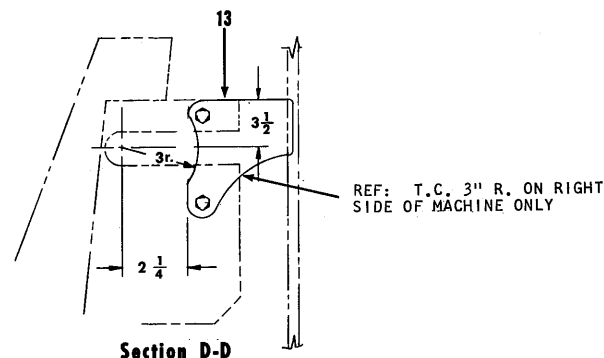
**Section A-A  
(typical)**



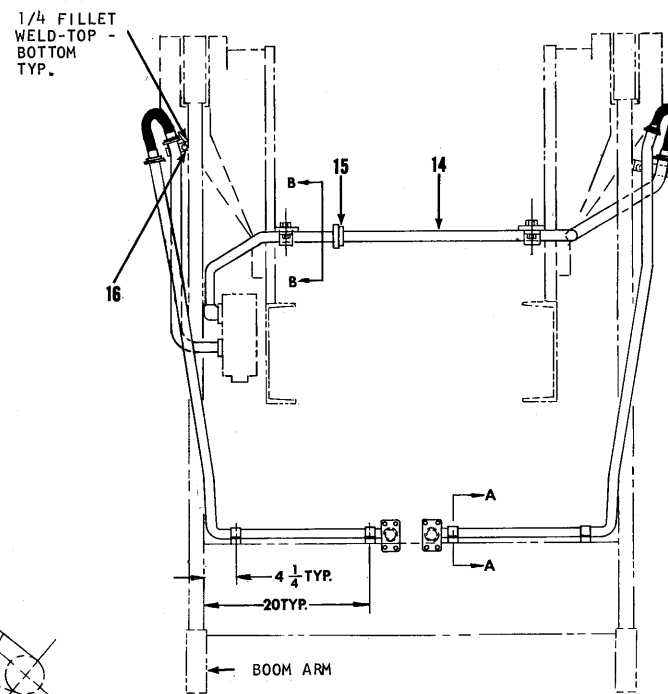
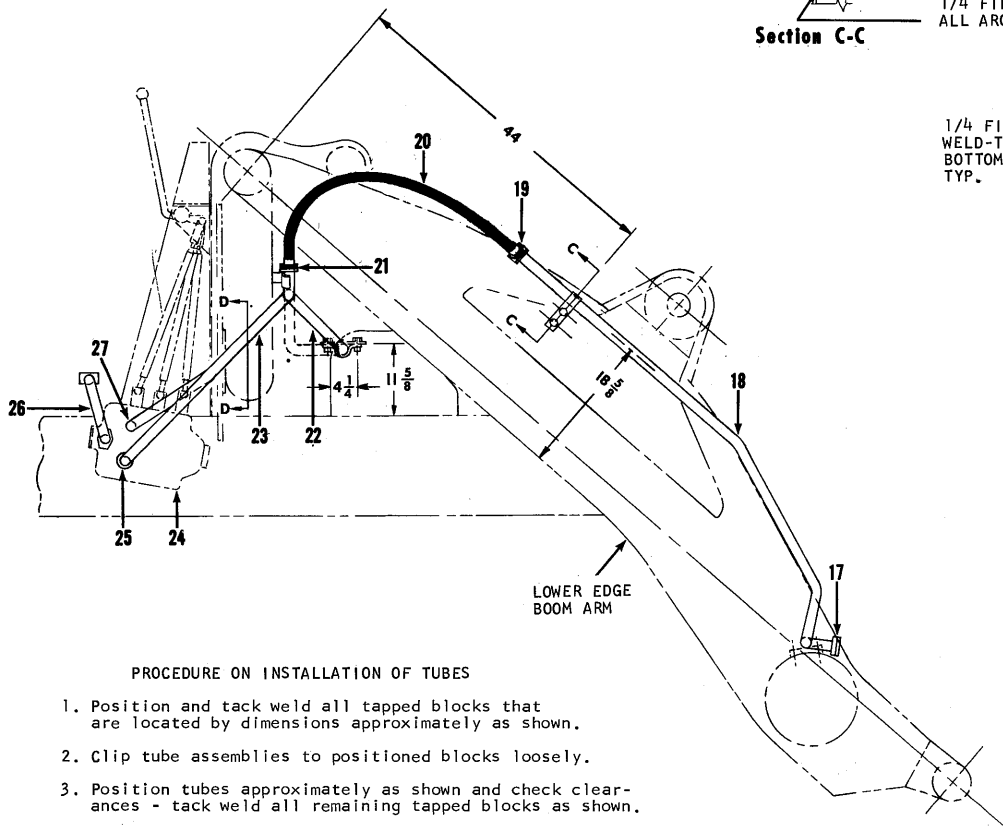
**Section B-B  
(typical)**



**Section C-C**



**Section D-D**



**PROCEDURE ON INSTALLATION OF TUBES**

1. Position and tack weld all tapped blocks that are located by dimensions approximately as shown.
2. Clip tube assemblies to positioned blocks loosely.
3. Position tubes approximately as shown and check clearances - tack weld all remaining tapped blocks as shown.
4. Remove tube assemblies and complete welding.

**THREE SPOOL VALVE INSTALLATION AND PARTS**

For Serial: Cummins - 6HC101 thru 6HC999;  
G.M. - 7HG101 thru 7HG999

TS-8985-P

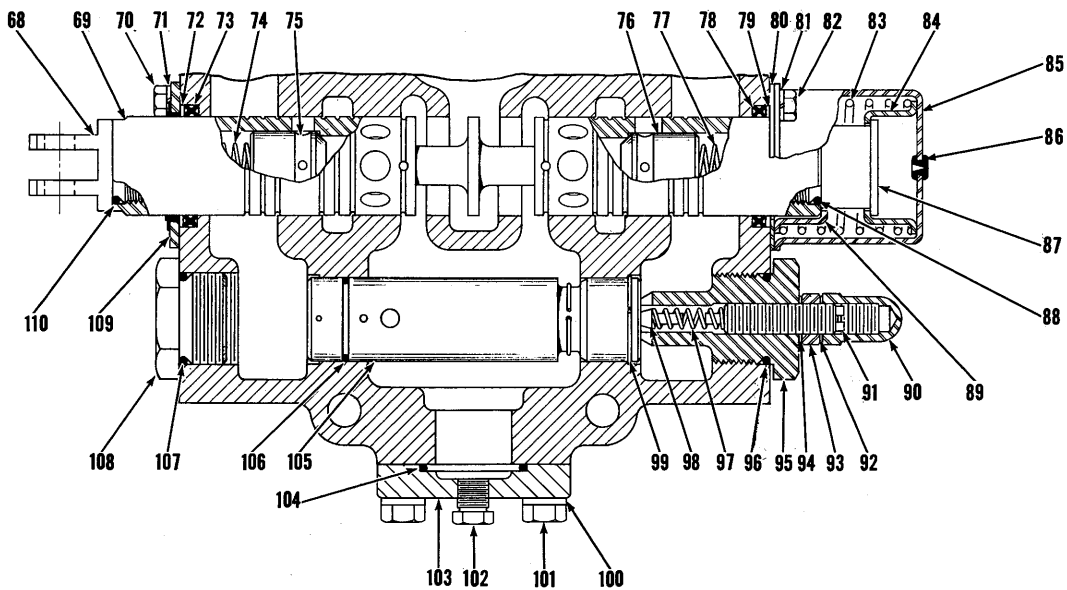
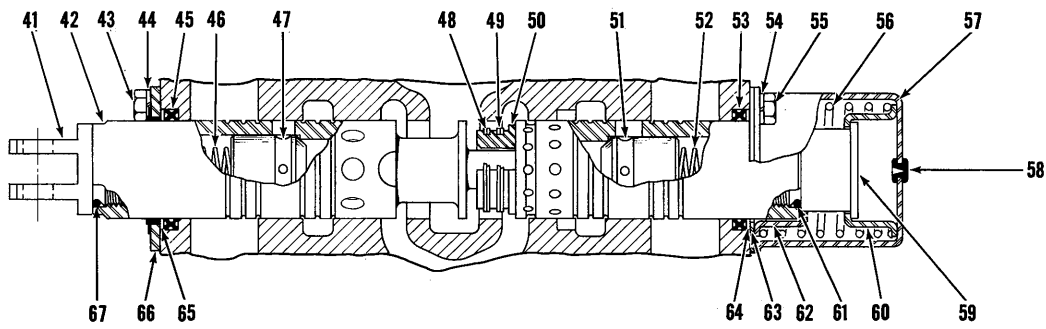
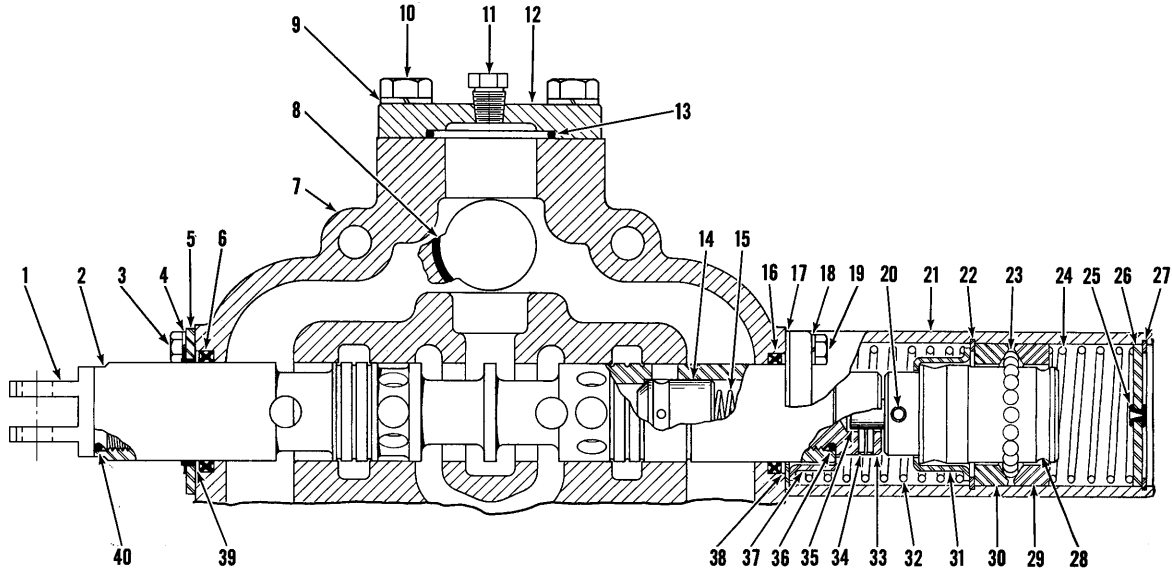
## THREE SPOOL VALVE INSTALLATION AND PARTS

For Serial: Cummins — 6HC101 thru 6HC999;  
G.M. — 7HG101 thru 7HG999

Item No.	Part No.	Description	No. Req'd.
1	4E-06	LKWSHR, Clip Mtg. ....	8
2	24C-616	BOLT, Support Mtg. ....	8
3	572557	SUPPORT, Tube Mtg. ....	4
4	572665	BLOCK, Tube Mtg. ....	4
5	1531272	PLATE, Tube Mtg. ....	2
6	18D-06	NUT, Support Mtg. ....	4
7	24C-616	BOLT, Support Mtg. ....	4
8	572557	SUPPORT, Tube Mtg. ....	2
9	1525625	BLOCK, Tube Mtg. ....	2
10	24C-616	BOLT, Support Mtg. ....	4
11	4E-06	LKWSHR, Support Mtg. ....	4
12	1520678	SUPPORT, Tube Mtg. ....	2
13	1520246	PLATE, Step Mount ....	1
14	1530141	CROSS TUBE ....	1
15	663093	FLANGE HALF, Split ....	2
15A	58K-219	†O-RING, Flange Mtg. ....	1
15B	23C-620	†BOLT, Flange Mtg. ....	4
15C	4E-06	†LKWSHR, Flange Mtg. ....	4
16	590424	BLOCK, Tube Support ....	2
16A	24C-816	†BOLT, Block Mtg. ....	2
16B	4E-08	†LKWSHR, Block Mtg. ....	2
17	509364	PAD, Flange Protector ....	2
17A	509501	†GASKET, Flange Protector ....	2
17B	23C-716	†BOLT, Flange Protector ....	8
17C	4E-07	†LKWSHR, Flange Protector ....	8
18	1523787	TUBE, Boom — R.H. ....	1
18A	1523785	†TUBE, Boom — L.H. ....	1
19	1511520	FLANGE HALF, Split ....	4
19A	58K-222	†O-RING, Flange Mtg. ....	2
19B	23C-724	†BOLT, Flange Mtg. ....	8
19C	4E-07	†LKWSHR, Flange Mtg. ....	8
20	1526422	HOSE, Valve Tube to Boom Tube ....	2
21	663093	†FLANGE HALF, Split ....	4
21A	58K-219	†O-RING, Flange Mtg. ....	2
21B	23C-620	†BOLT, Flange Mtg. ....	8
21C	4E-06	†LKWSHR, Flange Mtg. ....	8
22	1530140	TUBE, Valve to Cross Tube ....	1
23	1530144	TUBE, Valve to Hose ....	1
24	—	VALVE — See Index ....	—
25	663093	FLANGE HALF, Split ....	2
25A	58K-219	†O-RING, Flange Mtg. ....	1
25B	23C-620	†BOLT, Flange Mtg. ....	4
25C	4E-06	†LKWSHR, Flange Mtg. ....	4
26	574929	TUBE, Pump to Valve ....	1
26A	58K-222	†O-RING, Tube Mtg. ....	1
26B	23C-728	†BOLT, Tube Mtg. ....	4
26C	4E-07	†LKWSHR, Tube Mtg. ....	4
27	1511520	FLANGE HALF, Split ....	2
27A	58K-222	†O-RING, Flange Mtg. ....	1
27B	23C-724	†BOLT, Flange Mtg. ....	4
27C	4E-07	†LKWSHR, Flange Mtg. ....	4

†Not Illustrated

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



**THREE SPOOL CONTROL VALVE ASSEMBLY**  
 For Serial: Cummins — 5HC101 thru 5HC999;  
 G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999

TS-6692-P



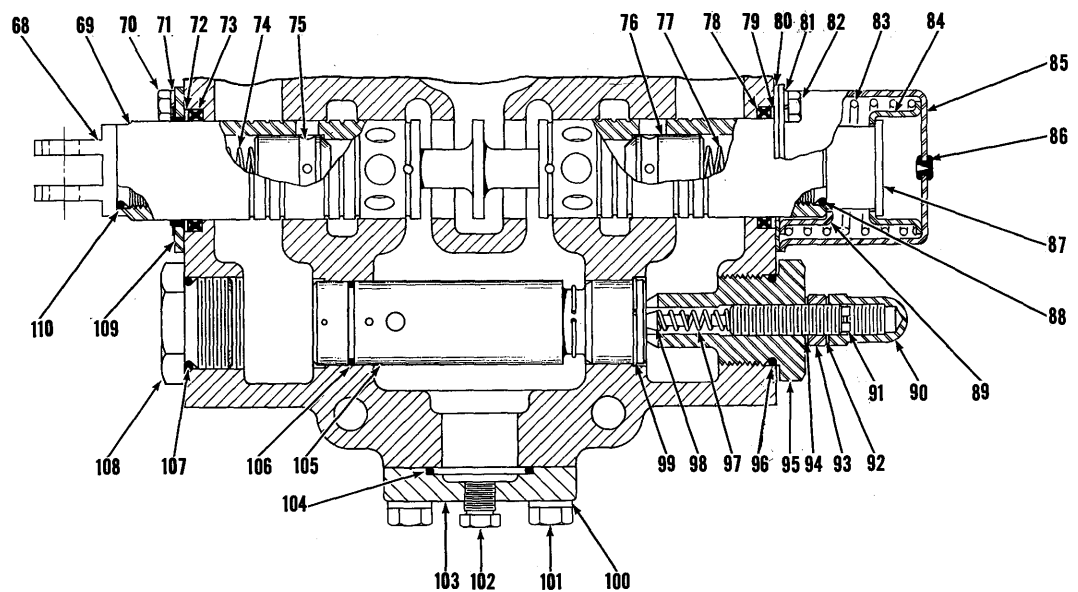
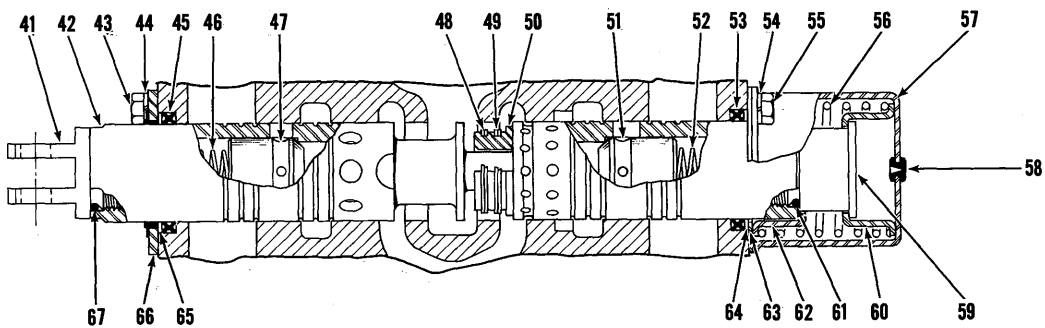
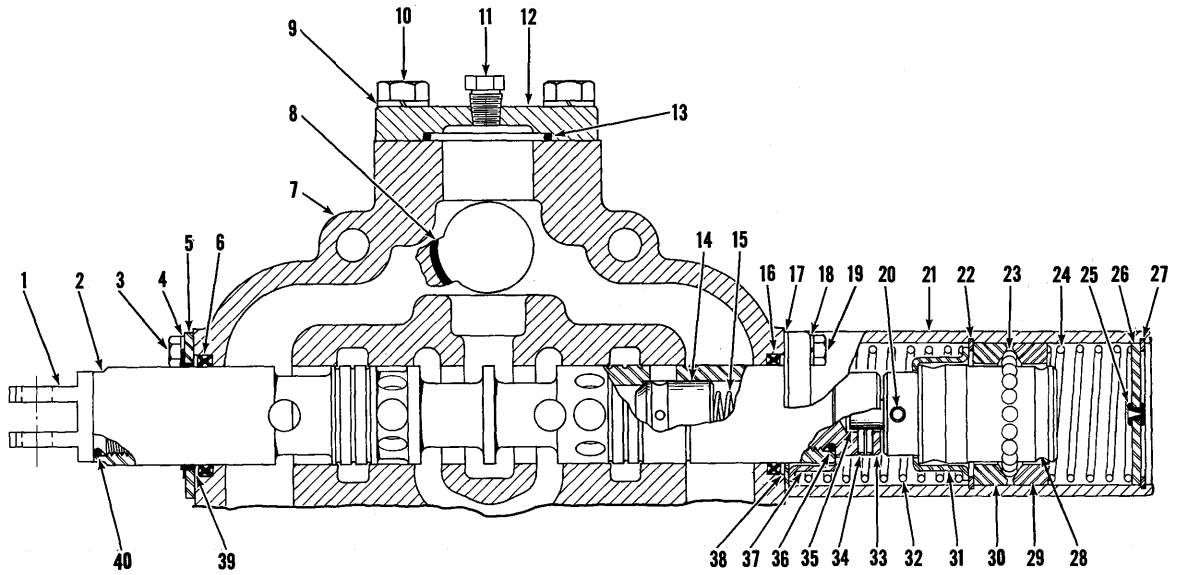
## THREE SPOOL CONTROL VALVE ASSEMBLY

For Serial: Cummins — 5HC101 thru 5HC999;  
G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	567824	VALVE ASSY, Control (Inc. 1 thru 110) .....	1	28	946045	CAP, Detent .....	1
1	946077	EYE, Plunger .....	1	29	945290	RETAINER, Ball .....	1
2	-----	§PLUNGER, Operating — See "A" .....	1	30	945290	RETAINER, Ball .....	1
3	1C-412	BOLT, Wiper to Housing .....	2	31	944851	GUIDE, Spring .....	1
4	4E-04	LKWSHR, Wiper to Housing ..	2	32	945857	SPRING .....	1
5	949066	WIPER, Plunger .....	1	33	944854	CAP, Plunger .....	1
6	949150	SEAL, Plunger Oil .....	1	34	660178	ROLL PIN .....	1
7	-----	§HOUSING — See "A" .....	1	35	944148	PIN .....	1
8	25K-40120	O-RING .....	1	36	58K-214	O-RING, Cap .....	1
9	4E-08	LKWSHR, Cover to Housing ..	4	37	944851	GUIDE, Spring .....	1
10	1C-820	BOLT, Cover to Housing .....	4	38	944837	RING, Back-Up .....	1
11	40K-04	PLUG, Pipe .....	1	39	944837	RING, Back-Up .....	1
12	946381	COVER, Housing .....	1	40	58K-214	O-RING, Eye .....	1
13	1306624	O-RING, Cover .....	1	41	946077	EYE, Plunger .....	1
14	943184	CHECK .....	1	42	-----	§PLUNGER, Operating — See "A" .....	1
15	944858	SPRING, Check .....	1	43	1C-412	BOLT, Wiper Mounting .....	2
16	949150	SEAL, Plunger Oil .....	1	44	4E-04	LKWSHR, Wiper Mounting .....	2
17	944838	PLATE, Retaining .....	1	45	949150	SEAL, Plunger Oil .....	1
18	4E-04	LKWSHR, Cover to Housing ..	4	46	944858	SPRING, Check .....	1
19	1C-416	BOLT, Cover to Housing .....	4	47	943184	CHECK .....	1
20	660178	ROLL PIN .....	1	48	1308117	RING, Retaining .....	2
21	945498	COVER, Detent .....	1	49	1308117	RING, Retaining .....	2
22	1301171	RING, Retaining .....	1	50	946046	CHECK (2 Pcs.) .....	1
23	10J-08	BALL .....	20	51	943184	CHECK .....	1
24	945494	SPRING .....	1	52	946047	SPRING, Check .....	1
25	886763	PLUG, Bleeder .....	1	53	949150	SEAL, Plunger .....	1
26	944844	PLUG .....	1	54	4E-04	LKWSHR, Cover Mounting .....	4
27	663823	RING, Retaining .....	1	55	1C-412	BOLT, Cover Mounting .....	4

§Not Sold Separately

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



**THREE SPOOL CONTROL VALVE ASSEMBLY**  
 For Serial: Cummins — 5HC101 thru 5HC999;  
 G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999

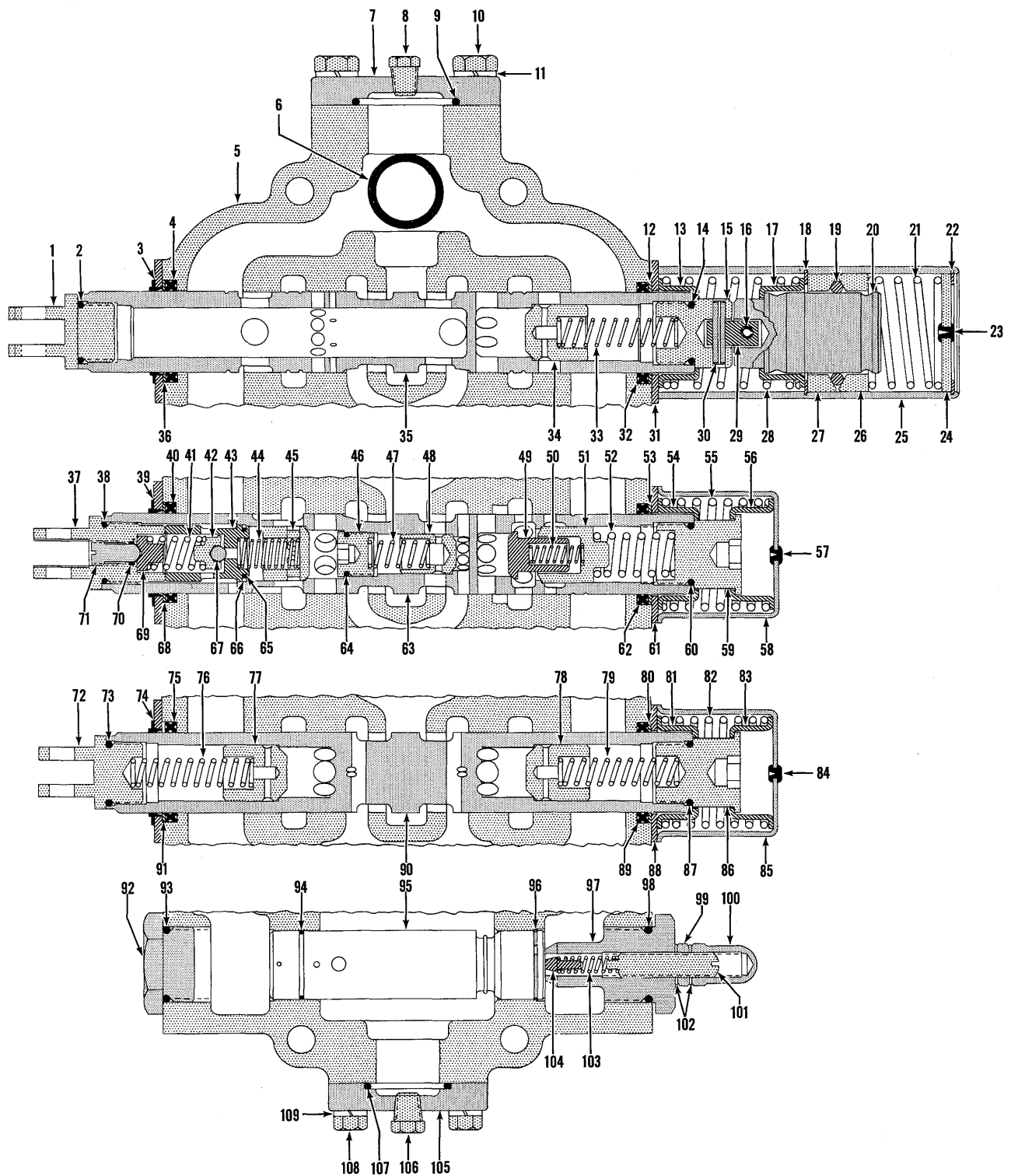
TS-6692-P

## THREE SPOOL CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
56	945857	SPRING, Check	1	84	944851	GUIDE, Spring	1
57	945294	COVER, Spring Return	1	85	945294	COVER, Spring Return	1
58	886745	PLUG, Bleeder	1	86	886745	PLUG, Bleeder	1
59	945289	CAP, Plunger	1	87	945289	CAP, Plunger	1
60	944851	GUIDE, Spring	1	88	58K-214	O-RING, Cap	1
61	58K-214	O-RING, Cap	1	89	944851	GUIDE, Spring	1
62	944851	GUIDE, Spring	1	90	944853	NUT, Acorn	1
63	944838	PLATE, Retaining	1	91	944855	SCREW, Adjusting	1
64	944837	RING, Back-Up	1	92	613750	WASHER	1
65	944837	RING, Back-Up	1	93	8D-08	NUT, Jam	1
66	949066	WIPER, Plunger	1	94	613750	WASHER	1
67	58K-214	O-RING, Eye	1	95	945497	CAP, Adjusting	1
68	946077	EYE, Plunger	1	96	25K-40108	O-RING, Adjusting Cap	1
69	-----	§ PLUNGER, Operating — See "A"	1	97	886753	SPRING, Poppet	1
70	1C-412	BOLT, Cover Mounting	2	98	886739	POPPET, Relief	1
71	4E-04	LKWSHR, Cover Mounting	2	99	944802	RING, Retaining	1
72	944837	RING, Back-Up	1	100	4E-07	LKWSHR, Cover to Housing	4
73	949150	SEAL, Plunger	1	101	1C-412	BOLT, Cover to Housing	4
74	944858	SPRING, Check	1	102	40K-04	PLUG, Pipe	1
75	943184	CHECK	1	103	946382	COVER, Housing	1
76	943184	CHECK	1	104	58K-222	O-RING, Cover	1
77	944858	SPRING, Check	1	105	945496	VALVE, Relief (Inc. 99, 106)	1
78	949150	SEAL, Plunger	1	106	945860	O-RING, Relief Valve	1
79	944837	RING, Back-Up	1	107	25K-40108	O-RING, Cap	1
80	944838	PLATE, Retaining	1	108	875279	CAP	1
81	4E-04	LKWSHR, Cover Mounting	4	109	949066	WIPER, Plunger	1
82	1C-412	BOLT, Cover Mounting	4	110	58K-214	O-RING, Eye	1
83	945857	SPRING, Check	1				

§Not Sold Separately

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



**THREE SPOOL CONTROL VALVE ASSEMBLY**  
 For Serial: Cummins — 6HC101 thru 6HC999;  
 G.M. — 7HG101 thru 7HG999

TS-8327-P

## THREE SPOOL CONTROL VALVE ASSEMBLY

For Serial: Cummins — 6HC101 thru 6HC999;  
G.M. — 7HG101 thru 7HG999

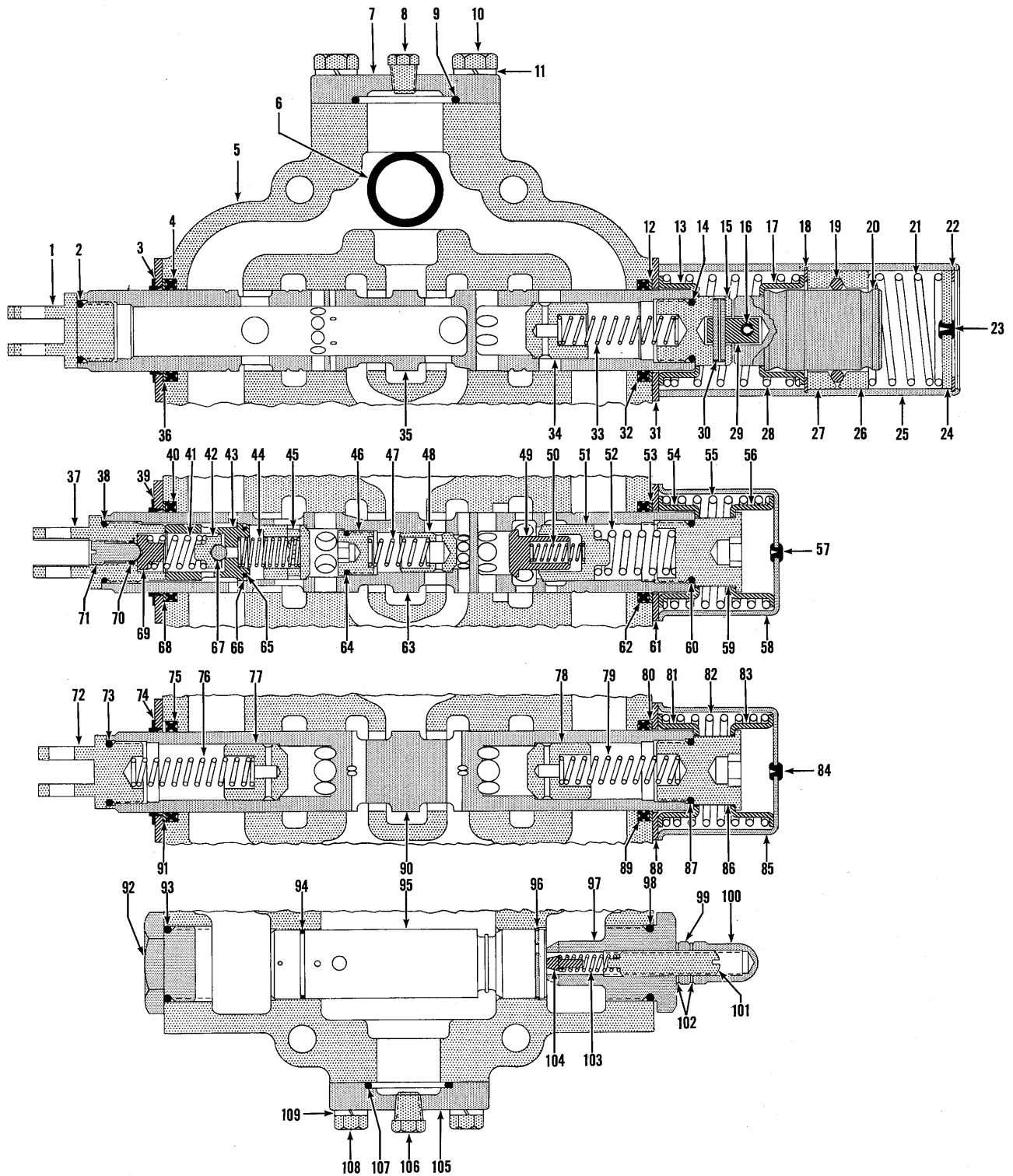
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1523959	*CONTROL VALVE ASSY (Inc. 1 thru 109) .....	1	25A	1C-416	†BOLT, Cover to Housing .....	4
1	946077	EYE, Plunger .....	1	25B	4E-04	†LKWSHR, Cover to Housing ..	4
2	58K-214	O-RING, Plunger Eye .....	1	26	945290	RETAINER, Ball .....	1
3	949066	PLATE, Oil Seal Retaining ....	1	27	945290	RETAINER, Ball .....	1
3A	1C-412	†BOLT, Plate to Housing .....	2	28	944852	SPRING .....	1
3B	4E-04	†LKWSHR, Plate to Housing....	2	29	944148	PIN, Connecting .....	1
4	949150	SEAL, Plunger Oil .....	1	30	660178	ROLL PIN .....	1
5	-----	§HOUSING — See "A" .....	—	31	946615	PLATE, Seal Retaining .....	1
6	25K-40120	O-RING, Valve to Reservoir ..	1	32	949150	SEAL, Plunger Oil .....	1
7	946381	COVER .....	1	33	944858	SPRING, Check .....	1
8	40K-04	PLUG, Cover .....	1	34	943184	CHECK .....	1
9	58K-225	O-RING, Cover to Housing ....	1	35	-----	§PLUNGER — See "A" .....	—
10	1C-820	BOLT, Cover to Housing .....	4	36	944837	RING, Back-Up .....	1
11	4E-08	LKWSHR, Cover to Housing ..	4	37	946616	EYE, Plunger .....	1
12	944837	RING, Back-Up .....	1	38	58K-214	O-RING, Plunger Eye .....	1
13	944851	GUIDE, Spring .....	1	39	949066	PLATE, Oil Seal Retaining ....	1
14	58K-214	O-RING, Cap .....	1	39A	1C-412	†BOLT, Plate to Housing .....	2
15	944854	CAP, Plunger .....	1	39B	4E-04	†LKWSHR, Plate to Housing ..	2
16	660178	ROLL PIN .....	1	40	949150	SEAL, Plunger Oil .....	1
17	944851	GUIDE, Spring .....	1	41	946118	SPRING, Poppet .....	1
18	1301171	RING, Retaining .....	1	42	946119	CHECK (Inc. 67) .....	1
19	10J-08	BALL .....	20	43	946617	SEAT, Check .....	1
20	946045	CAP, Detent .....	1	44	946623	SPRING, Check .....	1
21	945494	SPRING .....	1	45	946624	CHECK .....	1
22	663823	RING, Retaining .....	1	46	946864	**CAP .....	1
23	886763	PLUG, Bleeder .....	1	47	946623	SPRING, Check .....	1
24	944844	PLUG .....	1	48	946863	CHECK .....	1
25	945498	COVER, Detent .....	1	49	946619	CHECK .....	1
				50	946813	SPRING, Check .....	1

†Not Illustrated  
§Not Sold Separately

\*NOTE: For complete Vale replacement use 1548535.

\*\*NOTE: Torque to 25 ft/lbs.

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



## THREE SPOOL CONTROL VALVE ASSEMBLY

For Serial: Cummins — 6HC101 thru 6HC999;

G.M. — 7HG101 thru 7HG999

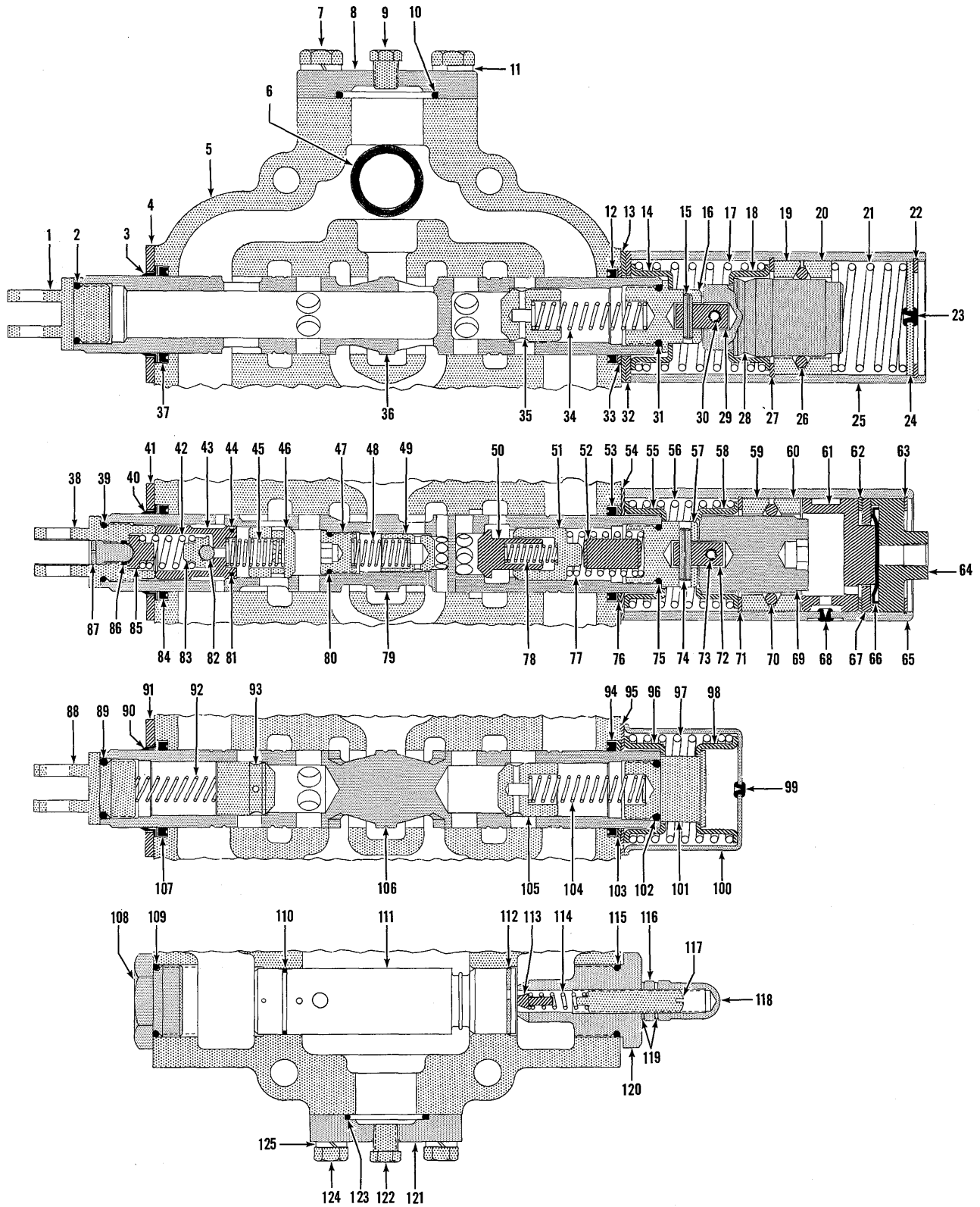
TS-8327-P

## THREE SPOOL CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
51	946620	CHECK .....	1	80	944837	RING, Back-Up .....	1
52	946621	SPRING, Check .....	1	81	944851	GUIDE, Spring .....	1
53	944837	RING, Back-Up .....	1	82	944852	SPRING .....	1
54	944851	GUIDE, Spring .....	1	83	944851	GUIDE, Spring .....	1
55	944852	SPRING .....	1	84	886745	PLUG, Bleeder .....	1
56	944851	GUIDE, Spring .....	1	85	945294	COVER, Detent .....	1
57	886745	PLUG, Bleeder .....	1	85A	1C-412	†BOLT, Cover to Housing .....	4
58	945294	COVER, Detent .....	1	85B	4E-04	†LKWSHR, Cover to Housing .....	4
58A	1C-412	†BOLT, Cover to Housing .....	4	86	945289	CAP, Detent .....	1
58B	4E-04	†LKWSHR, Cover to Housing .....	4	87	791553	O-RING, Cap .....	1
59	946622	CAP, Detent .....	1	88	946615	PLATE, Seal Retaining .....	1
60	58K-214	O-RING, Cap .....	1	89	949150	SEAL, Plunger Oil .....	1
61	946615	PLATE, Seal Retaining .....	1	90	-----	§PLUNGER — See "A" .....	—
62	949150	SEAL, Plunger Oil .....	1	91	944837	RING, Back-Up .....	1
63	-----	§PLUNGER — See "A" .....	—	92	875279	CAP .....	1
64	25K-30022	O-RING, Cap .....	1	93	25K-40108	O-RING, Cap .....	1
65	25K-20028	O-RING, Seat .....	1	94	945860	O-RING, Relief Valve .....	1
66	946618	RING, Sealing .....	1	95	945496	RELIEF VALVE ASSY (Inc. 94, 96) .....	1
67	-----	§BALL, Check — See 42 .....	—	96	944802	SNAP RING .....	1
68	944837	RING, Back-Up .....	1	97	945497	CAP, Adjusting .....	1
69	946117	GUIDE, Spring .....	1	98	25K-40108	O-RING, Cap .....	1
70	25K-20012	O-RING, Adjusting Screw .....	1	99	8D-08	NUT, Jam .....	1
71	946126	SCREW, Adjusting .....	1	100	944853	NUT, Acorn .....	1
72	946077	EYE, Plunger .....	1	101	944855	SCREW, Adjusting .....	1
73	58K-214	O-RING, Plunger Eye .....	1	102	613750	WASHER .....	2
74	949066	PLATE, Oil Seal Retaining .....	1	103	886753	SPRING, Relief .....	1
74A	1C-412	†BOLT, Plate to Housing .....	2	104	886739	POPPET, Relief .....	1
74B	4E-04	†LKWSHR, Plate to Housing .....	2	105	946382	COVER .....	1
75	949150	SEAL, Plunger Oil .....	1	106	40K-04	PLUG, Cover .....	1
76	944858	SPRING, Check .....	1	107	58K-222	O-RING, Cover to Housing .....	1
77	943184	CHECK .....	1	108	1C-720	BOLT, Cover to Housing .....	4
78	943184	CHECK .....	1	109	4E-07	LKWSHR, Cover to Housing .....	4
79	944858	SPRING, Check .....	1				

†Not Illustrated  
‡As Required

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



THREE SPOOL CONTROL VALVE ASSEMBLY

TS-8330-P



## THREE SPOOL CONTROL VALVE ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1536237	**CONTROL VALVE ASSY (Inc. 1 thru 125) .....	1	29	944148	PIN, Connecting .....	1
1	946077	EYE, Plunger .....	1	30	660178	ROLL PIN .....	1
2	58K-214	O-RING, Plunger Eye .....	1	31	58K-214	O-RING, Cap .....	1
3	949066	WIPER, Plunger .....	1	32	946615	PLATE, Seal Retaining .....	1
4	946613	PLATE, Wiper & Seal Retaining .....	1	33	944837	RING, Back-Up .....	1
4A	1C-412	†BOLT, Plate to Housing .....	2	34	888304	SPRING .....	1
4B	4E-04	†LKWSHR, Plate to Housing ..	2	35	943184	CHECK .....	1
5	-----	§HOUSING, Valve — See "A" —	—	36	-----	§PLUNGER — See "A" .....	—
6	25K-40120	O-RING, Valve Mounting ....	1	37	949150	SEAL, Plunger Oil .....	1
7	1C-820	BOLT, Cover to Housing .....	4	38	946616	EYE, Plunger .....	1
8	946381	COVER, Valve .....	1	39	58K-214	O-RING, Plunger Eye .....	1
9	40K-04	PLUG .....	1	40	949066	WIPER, Plunger .....	1
10	58K-225	O-RING, Cover to Housing ..	1	41	946613	PLATE, Wiper & Seal Retaining .....	1
11	4E-08	LKWSHR, Cover to Housing ..	4	41A	1C-412	†BOLT, Plate to Housing .....	2
12	949150	SEAL, Plunger Oil .....	1	41B	4E-04	†LKWSHR, Plate to Housing ..	2
13	946615	PLATE, Seal Retaining .....	1	42	946118	SPRING .....	1
14	944840	GUIDE, Spring .....	1	43	946617	SEAT, Relief Valve .....	1
15	302602	ROLL PIN .....	1	44	946618	RING, Sealing .....	1
16	944841	CAP, Plunger .....	1	45	946623	SPRING, Check .....	1
17	947287	SPRING .....	1	46	946624	CHECK .....	1
18	944851	GUIDE, Spring .....	1	47	946864	*CAP .....	1
19	945290	RETAINER, Ball .....	1	48	946623	SPRING, Check .....	1
20	945290	RETAINER, Ball .....	1	49	946863	CHECK .....	1
21	945494	SPRING .....	1	50	946619	CHECK .....	1
22	663823	RING, Plug Retaining .....	1	51	946620	CHECK .....	1
23	886763	PLUG, Bleeder .....	1	52	947286	SPACER .....	1
24	944844	PLUG, Detent Cover .....	1	53	949150	SEAL, Plunger Oil .....	1
25	945498	COVER, Detent .....	1	54	946615	PLATE, Seal Retaining .....	1
25A	1C-416	†BOLT, Cover to Housing .....	4	55	944851	GUIDE, Spring .....	1
25B	4E-04	†LKWSHR, Cover to Housing ..	4	56	945857	SPRING .....	1
26	10J-08	BALL .....	20	57	947285	CAP, Plunger .....	1
27	1301171	RING, Retaining .....	1	58	944851	GUIDE, Spring .....	1
28	944845	CAP, Detent .....	1	59	945290	RETAINER, Ball .....	1

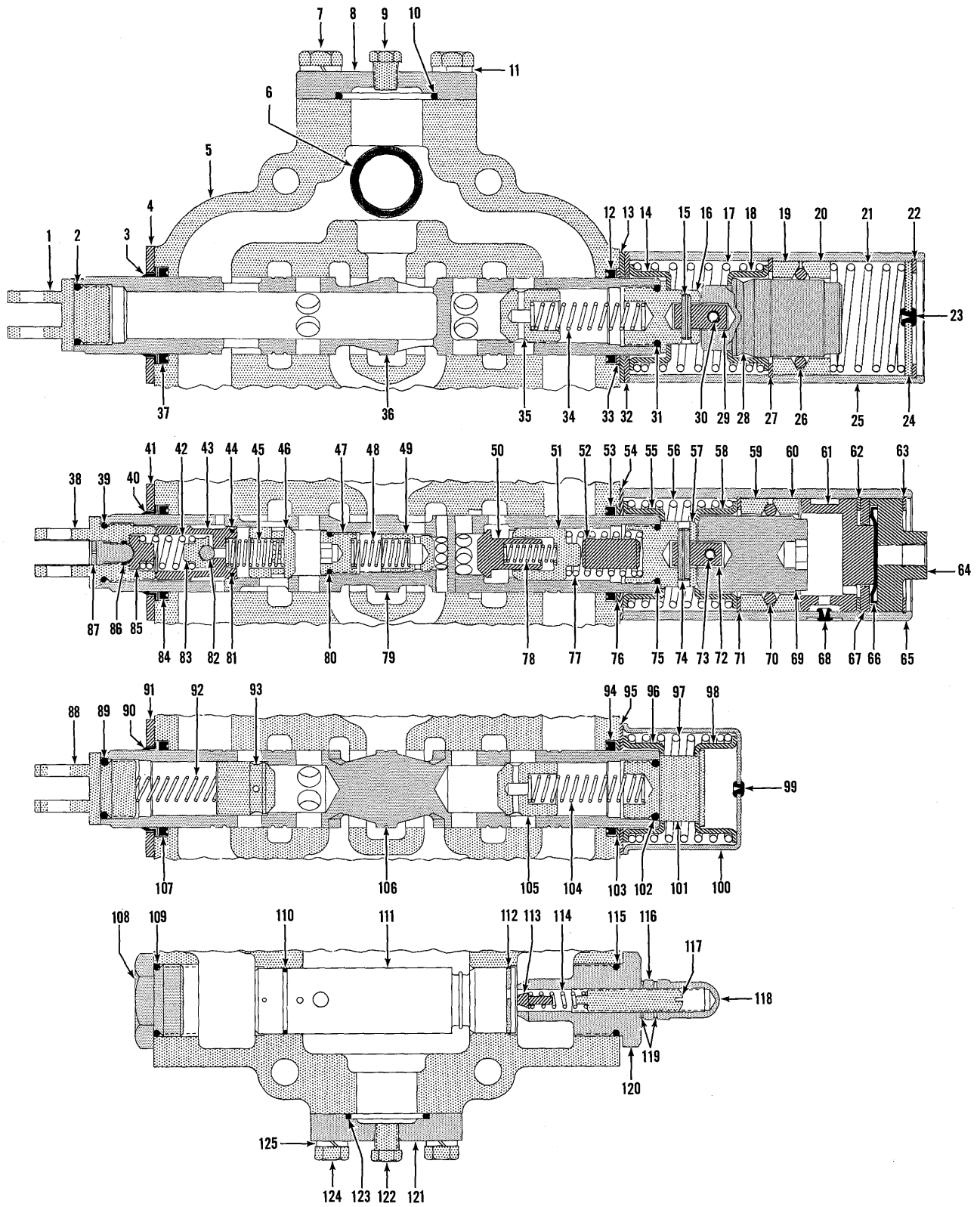
†Not Illustrated

§Not Sold Separately

\*NOTE: Torque to 25 ft./lbs.

\*\*NOTE: For replacement use 1548535.

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



THREE SPOOL CONTROL VALVE ASSEMBLY

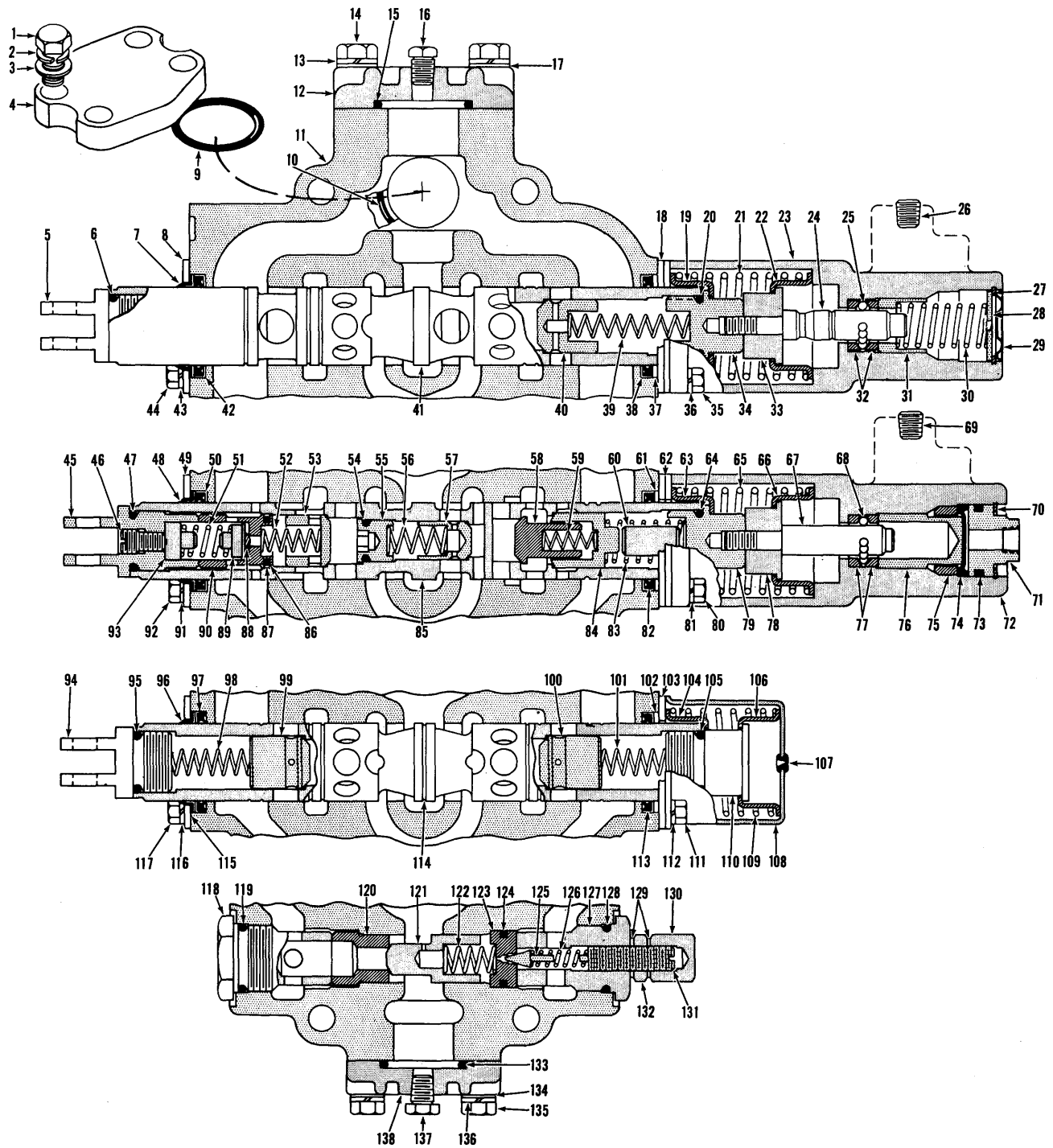
TS-8330-P

## THREE SPOOL CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
60	945290	RETAINER, Ball .....	1	92	888304	SPRING, Check .....	1
61	947284	PLUG .....	1	93	943184	CHECK .....	1
62	663823	RING, Retaining .....	1	94	949150	SEAL, Plunger Oil .....	1
63	663823	RING, Retaining .....	1	95	946615	PLATE, Seal Retaining .....	1
64	947282	PLUG, Detent .....	1	96	944851	GUIDE, Spring .....	1
65	947281	COVER, Detent .....	1	97	947326	SPRING .....	1
65A	1C-416	†BOLT, Cover to Housing .....	4	98	944851	GUIDE, Spring .....	1
65B	4E-04	†LKWSHR, Cover to Housing ..	4	99	886745	PLUG, Bleeder .....	1
66	947214	DIAPHRAGM .....	1	100	945294	COVER, Detent .....	1
67	947283	SPACER .....	1	100A	1C-412	†BOLT, Cover to Housing .....	4
68	886763	PLUG, Bleeder .....	1	100B	4E-04	†LKWSHR, Cover to Housing ..	4
69	947288	CAP .....	1	101	945289	CAP, Detent .....	1
70	10J-08	BALL .....	20	102	58K-214	O-RING, Cap .....	1
71	1301171	RING, Retaining .....	1	103	944837	RING, Back-Up .....	1
72	944148	PIN, Connecting .....	1	104	888304	SPRING, Check .....	1
73	633157	ROLL PIN .....	1	105	943184	CHECK .....	1
74	660178	ROLL PIN .....	1	106	-----	§PLUNGER — See "A" .....	—
75	58K-214	O-RING, Cap .....	1	107	949150	SEAL, Plunger Oil .....	1
76	944837	RING, Back-Up .....	1	108	875279	CAP .....	1
77	946621	SPRING .....	1	109	25K-40108	O-RING, Cap .....	1
78	946813	SPRING, Check .....	1	110	945860	O-RING, Relief Valve .....	1
79	-----	§PLUNGER — See "A" .....	—	111	945496	VALVE ASSY, Relief (Inc. 110, 112) .....	1
80	25K-30022	O-RING, Cap .....	1	112	944802	RING, Relief Valve Retaining	1
81	25K-20028	O-RING, Seat .....	1	113	886739	POPPET, Relief .....	1
82	-----	§BALL, Poppet — See 83 .....	—	114	886753	SPRING, Poppet .....	1
83	946119	POPPET (Inc. 82) .....	1	115	25K-40108	O-RING, Adjusting Cap .....	1
84	949150	SEAL, Plunger Oil .....	1	116	8D-08	NUT, Jam .....	1
85	946117	GUIDE, Spring .....	1	117	944855	SCREW, Adjusting .....	1
86	25K-20012	O-RING, Adjusting Screw .....	1	118	944853	NUT, Acorn .....	1
87	946126	SCREW, Adjusting .....	1	119	613750	WASHER, Jam Nut .....	2
88	947327	EYE, Plunger .....	1	120	945497	CAP, Adjusting .....	1
89	58K-214	O-RING, Plunger Eye .....	1	121	946382	COVER, Housing .....	1
90	949066	WIPER, Plunger .....	1	122	40K-04	PLUG, Cover .....	1
91	946613	PLATE, Wiper & Seal Retaining .....	1	123	58K-222	O-RING, Cover to Housing ..	1
91A	1C-412	†BOLT, Plate to Housing .....	2	124	1C-720	BOLT, Cover to Housing .....	4
91B	4E-04	†LKWSHR, Plate to Housing .....	2	125	4E-07	LKWSHR, Cover to Housing ..	4

†Not Illustrated  
§Not Sold Separately

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



THREE SPOOL CONTROL VALVE ASSEMBLY

TS-9096

## THREE SPOOL CONTROL VALVE ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1508788	*CONTROL VALVE ASSY (Inc. 1 thru 138)	1	30	947852	SPRING, Detent	1
1	1C-828	BOLT, Cover to Housing	4	31	947842	GUIDE, Detent Spring	1
2	4E-08	LKWSHR, Cover to Housing	4	32	947843	RETAINER, Ball	2
3	878233	WASHER, Cover to Housing	4	33	947898	SPACER, Return Spring	1
4	947888	COVER	1	34	947895	CAP, Plunger	1
5	946077	EYE, Plunger	1	35	1C-420	BOLT, Detent to Housing	1
6	58K-214	O-RING, Plunger Eye	1	36	4E-04	LKWSHR, Detent to Housing	4
7	949066	WIPER, Plunger	1	37	944837	RING, Back-up	1
8	946613	PLATE, Wiper & Seal Retainer	1	38	949150	SEAL, Plunger Oil	1
9	947885	O-RING, Cover to Housing	1	39	888304	SPRING, Check	1
10	25K-40120	O-RING, Valve to Plate	1	40	943184	CHECK	1
11	-----	§HOUSING, Valve — See Item "A"	—	41	-----	§PLUNGER, Operating — See Item "A"	—
12	947884	COVER	1	42	949150	SEAL, Plunger Oil	1
13	4E-08	LKWSHR, Cover to Housing	4	43	4E-04	LKWSHR, Retainer to Housing	2
14	1C-828	BOLT, Cover to Housing	4	44	1C-412	BOLT, Retainer to Housing	2
15	947885	O-RING, Cover to Housing	1	45	946616	EYE, Plunger	1
16	40K-04	PLUG, Pipe	1	46	946126	SCREW, Adjusting	1
17	878233	WASHER, Cover to Housing	4	47	58K-214	O-RING, Plunger Eye	1
18	946615	PLATE, Seal Retaining	2	48	949066	WIPER, Plunger	1
19	944840	GUIDE, Spring	1	49	946613	PLATE, Wiper & Seal Retainer	1
20	58K-214	O-RING, Cap	1	50	949150	SEAL, Plunger Oil	1
21	947287	SPRING, Plunger Return	1	51	946118	SPRING, Check	1
22	944851	GUIDE, Spring	1	52	946623	SPRING, Check	1
23	947883	COVER, Detent	1	53	946624	CHECK	1
24	947901	CAP, Detent	1	54	25K-30022	O-RING, Cap	1
25	10J-06	BALL	10	55	946429	CAP	1
26	16F-04	PLUG, Pipe	1	56	946623	SPRING, Check	1
27	666542	RING, Plug Retaining	1	57	946863	CHECK	1
28	947848	PLUG, Detent Cover	1	58	946619	CHECK	1
29	948202	DIAPHRAGM	1	59	946813	SPRING, Check	1
				60	947286	SPACER	1

§Not Sold Separately

\*NOTE: For complete Valve replacement use 1548535.

### NOTES

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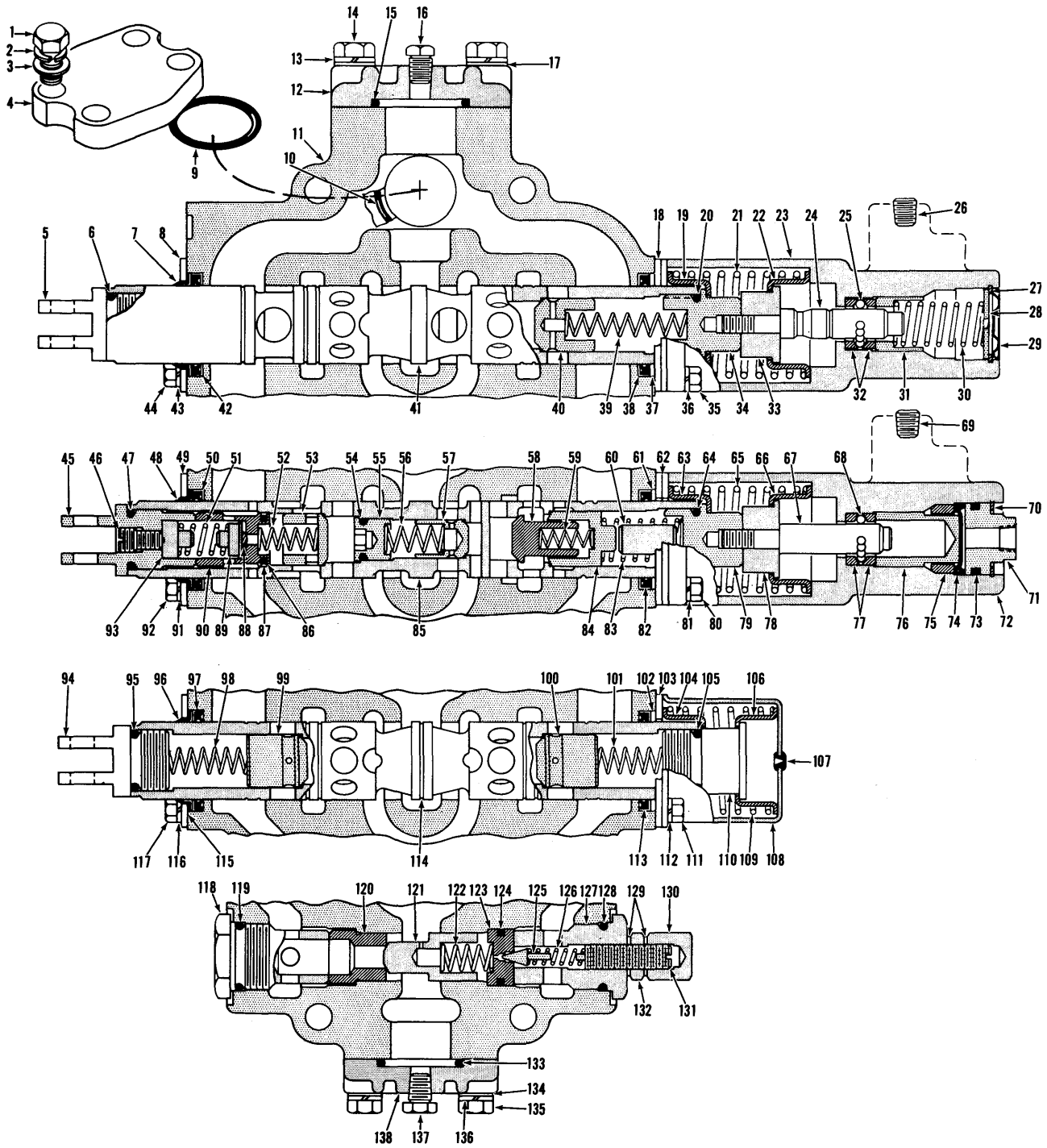


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WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE



THREE SPOOL CONTROL VALVE ASSEMBLY

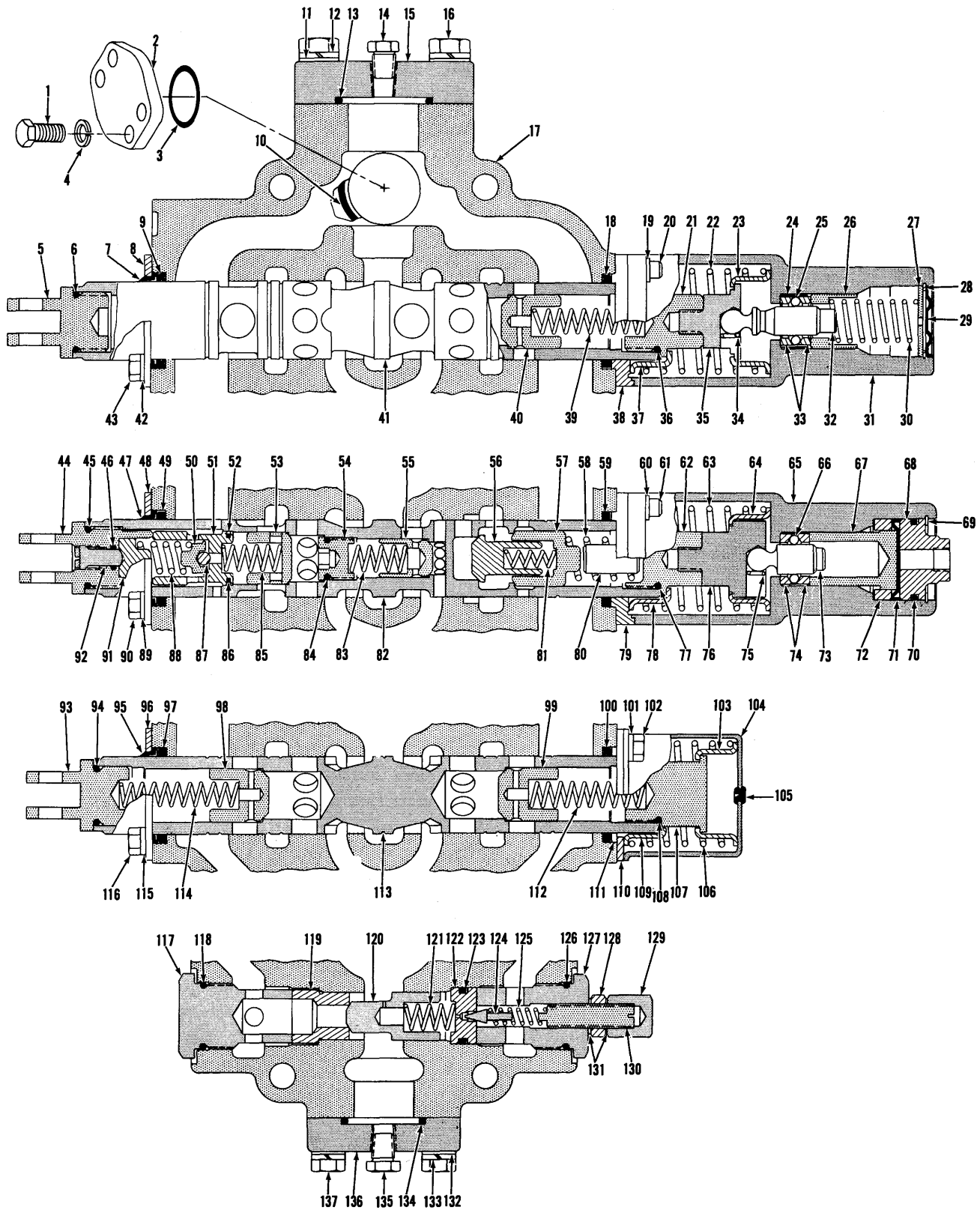
TS-9096

## THREE SPOOL CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
61	944837	RING, Back-up .....	1	101	888304	SPRING, Check .....	1
62	946615	PLATE, Seal Retaining .....	2	102	944837	RING, Back-up .....	1
63	944840	GUIDE, Spring .....	1	103	946615	PLATE, Seal Retainer .....	1
64	58K-214	O-RING, Plunger Cap .....	1	104	944851	GUIDE, Spring .....	1
65	947287	SPRING, Plunger Return .....	1	105	58K-214	O-RING, Plunger Cap .....	1
66	944851	GUIDE, Spring .....	1	106	944851	GUIDE, Spring .....	1
67	947892	CAP, Detent .....	1	107	886745	PLUG, Bleeder .....	1
68	10J-06	BALL .....	10	108	945294	COVER, Plunger Return Spring .....	1
69	16F-04	PLUG, Pipe .....	1	109	947326	SPRING, Plunger Return .....	1
70	666542	RING, Plug Retaining .....	1	110	945289	CAP, Plunger .....	1
71	947340	PLUG, Detent .....	1	111	1C-420	BOLT, Cover to Housing .....	4
72	947883	COVER, Detent .....	1	112	4E-04	LKWSHR, Cover to Housing ..	4
73	25K-40108	O-RING, Detent Plug .....	1	113	949150	SEAL, Plunger Oil .....	1
74	946919	DIAPHRAGM .....	1	114	-----	§PLUNGER, Operating — See Item "A" .....	—
75	947850	SPACER, Diaphragm .....	1	115	946613	PLATE, Wiper & Seal Retainer .....	1
76	948460	PISTON, Detent .....	1	116	4E-04	LKWSHR, Plate to Housing ..	2
77	947843	RETAINER, Ball .....	2	117	1C-412	BOLT, Plate to Housing .....	2
78	947894	SPACER, Retainer Spring .....	1	118	947845	CAP, Relief Valve .....	1
79	947893	CAP, Plunger .....	1	119	25K-40104	O-RING, Cap .....	1
80	1C-420	BOLT, Detent to Housing .....	4	120	947840	SEAT, Check .....	1
81	4E-04	LKWSHR, Detent to Housing ..	4	121	947844	CHECK, Relief Valve .....	1
82	949150	SEAL, Plunger Oil .....	1	122	946805	SPRING, Relief Valve Check..	1
83	946621	SPRING, Check .....	1	123	947841	SEAT, Poppet .....	1
84	946620	CHECK .....	1	124	25K-40030	O-RING, Poppet Seat .....	1
85	-----	§PLUNGER, Operating — See Item "A" .....	—	125	886739	POPPET, Relief Valve .....	1
86	25K-20028	O-RING, Poppet Seat .....	1	126	886753	SPRING, Relief Valve .....	1
87	946618	RING, Back-up .....	1	127	947846	CAP, Relief Valve .....	1
88	-----	§BALL — See Item "89" .....	—	128	25K-40104	O-RING, Cap .....	1
89	946119	POPPET — Inc. Item "88" .....	1	129	613750	WASHER, Jam Nut .....	2
90	946617	SEAT, Poppet .....	1	130	49D-08	NUT, Acorn .....	1
91	4E-04	LKWSHR, Plate to Housing ..	2	131	944890	SCREW, Relief Valve Adjusting .....	1
92	1C-412	BOLT, Plate to Housing .....	2	132	8D-08	NUT, Jam .....	1
93	946117	GUIDE, Spring .....	1	133	58K-222	O-RING, Cover to Housing ..	1
94	947327	EYE, Plunger .....	1	134	867747	WASHER, Cover to Housing ..	4
95	58K-214	O-RING, Plunger Eye .....	1	135	1C-724	BOLT, Cover to Housing .....	4
96	949066	WIPER, Plunger .....	1	136	4E-07	LKWSHR, Cover to Housing ..	4
97	949150	SEAL, Plunger Oil .....	1	137	40K-04	PLUG, Pipe .....	1
98	888304	SPRING, Check .....	1	138	948276	COVER .....	1
99	943184	CHECK .....	1				
100	943184	CHECK .....	1				

§Not Sold Separately

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



THREE SPOOL CONTROL VALVE ASSEMBLY

TS-10726



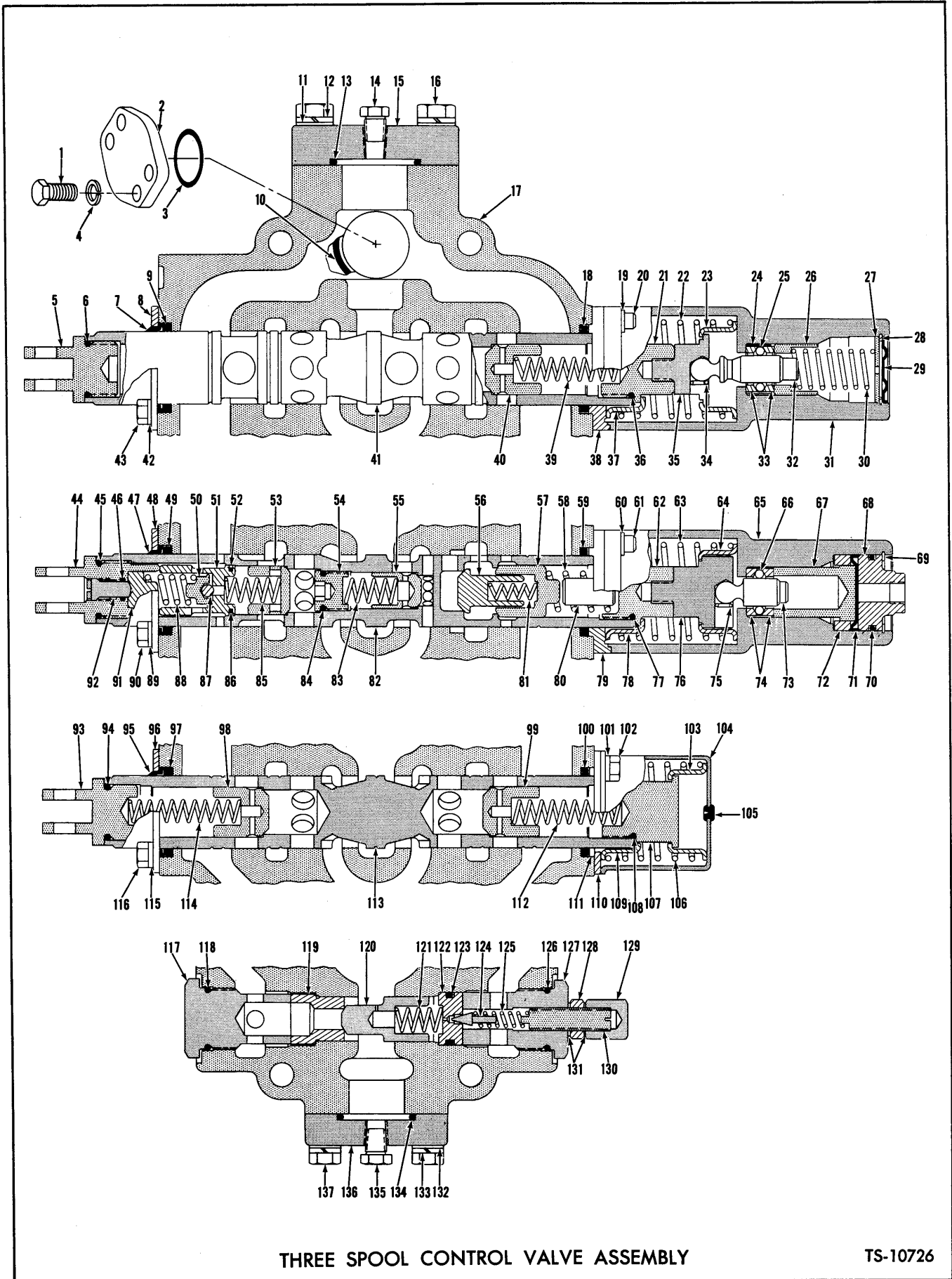
## THREE SPOOL CONTROL VALVE ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1548535	*CONTROL VALVE ASSY (Inc. 1 thru 9, 11 thru 137)	1	31	948744	HOUSING, Detent .....	1
1	1C-828	BOLT, Cover to Housing .....	4	31A	16F-04	†PLUG, Housing .....	1
2	947888	COVER, Housing .....	4	32	948747	PLUNGER, Detent .....	1
3	947885	O-RING, Cover to Housing ..	1	33	947842	RETAINER, Ball .....	2
4	4E-08	LKWSHR, Cover to Housing ..	4	34	948726	RING, Detent Retaining .....	1
4A	878233	†WASHER, Cover to Housing ..	4	35	948743	SOCKET, Detent .....	1
5	946077	EYE, Plunger .....	1	36	58K-214	O-RING, Cap .....	1
6	58K-214	O-RING, Plunger Eye .....	1	37	944851	GUIDE, Spring .....	1
7	949066	WIPER, Plunger Oil .....	1	38	948837	PLATE, Seal Retaining .....	1
8	946613	PLATE, Seal & Wiper Retaining .....	1	39	888304	SPRING, Check .....	1
9	949150	SEAL, Plunger Oil .....	1	40	943184	CHECK .....	1
10	25K-40120	O-RING, Valve Mtg. .....	1	41	-----	§PLUNGER, Operating — See Item "A" .....	—
11	878233	WASHER, Cover to Housing ..	4	42	4E-04	LKWSHR, Plate to Housing ..	2
12	4E-08	LKWSHR, Cover to Housing ..	4	43	1C-412	BOLT, Plate to Housing .....	2
13	947885	O-RING, Cover to Housing .....	1	44	946616	EYE, Plunger .....	1
14	40K-04	PLUG, Cover .....	1	45	58K-214	O-RING, Plunger Eye .....	1
15	947884	COVER, Housing .....	1	46	893675	O-RING, Adjusting Screw .....	1
16	1C-828	BOLT, Cover to Housing .....	4	47	949066	WIPER, Plunger .....	1
17	-----	§HOUSING, Valve — See "A" ..	—	48	946613	PLATE, Wiper & Seal Retaining .....	1
18	949150	SEAL, Plunger Oil .....	1	49	949150	SEAL, Plunger Oil .....	1
19	4E-04	LKWSHR, Housing Mtg. .....	4	50	946119	POPPET ASSY (Inc. 87) .....	1
20	11G-420	SCREW, Housing Mtg. .....	4	51	946617	SEAT, Check .....	1
21	948749	CAP, Plunger .....	1	52	946618	RING, O-Ring Retainer .....	1
22	947287	SPRING, Plunger Return .....	1	53	946624	CHECK .....	1
23	944840	GUIDE, Spring .....	1	54	946864	CAP, Plunger .....	1
24	948727	SLEEVE, Ball Retainer .....	1	55	946863	CHECK .....	1
25	948730	BALL .....	11	56	946619	CHECK .....	1
26	947842	RETAINER, Spring .....	1	57	946620	CHECK .....	1
27	947848	PLUG, Housing .....	1	58	946621	SPRING, Check .....	1
28	666542	RING, Plug Retainer .....	1	59	949150	SEAL, Plunger Oil .....	1
29	948202	DIAPHRAGM .....	1	60	4E-04	LKWSHR, Housing to Valve Housing .....	4
30	947852	SPRING, Detent .....	1				

†Not Illustrated  
§Not Sold Separately

\*For replacement use 1512158 Control Valve Assy.

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



THREE SPOOL CONTROL VALVE ASSEMBLY

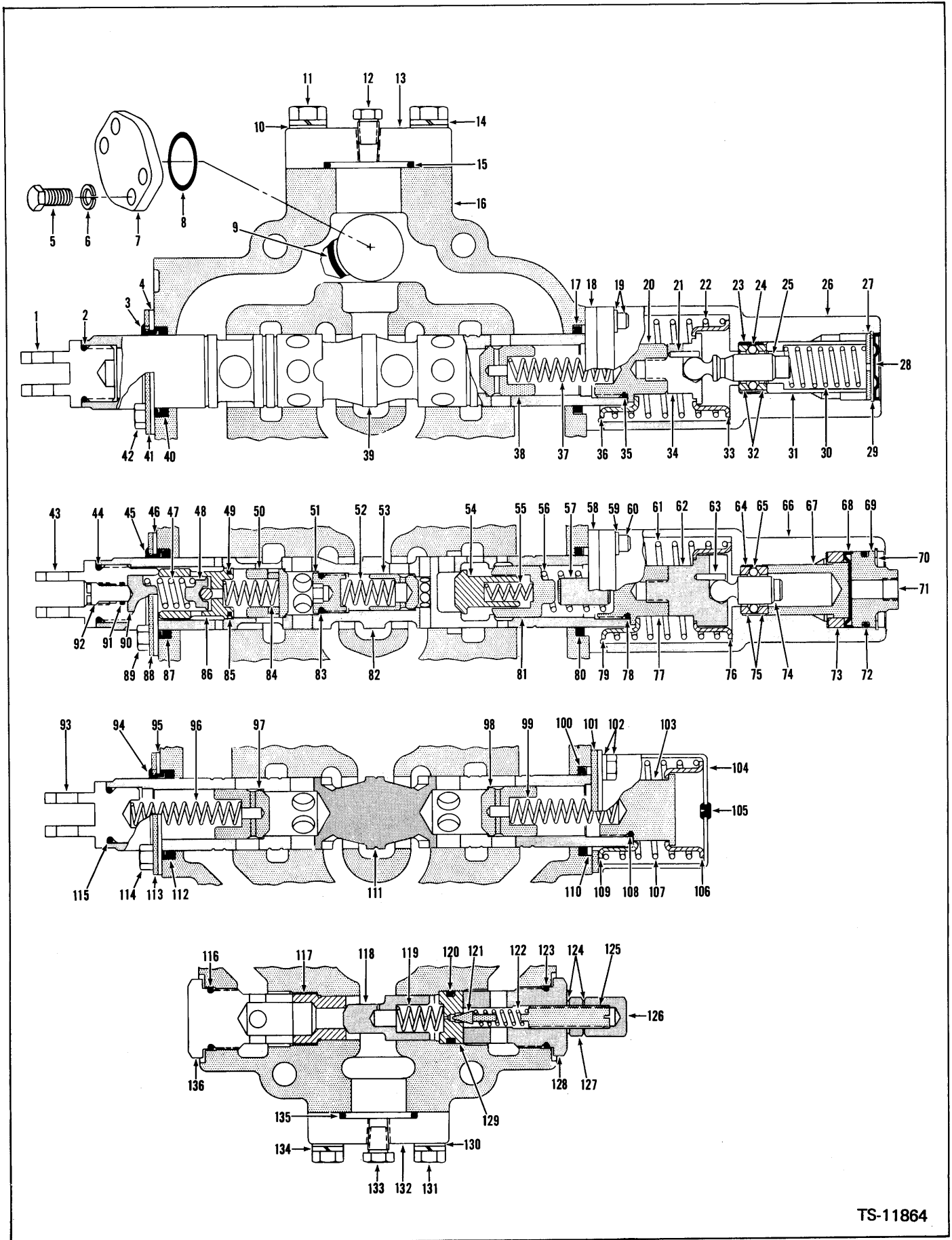
TS-10726

## THREE SPOOL CONTROL VALVE ASSEMBLY (Cont'd)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
61	11G-420	SCREW, Housing to Valve Housing .....	4	98	943184	CHECK .....	1
62	948748	CAP, Plunger .....	1	99	943184	CHECK .....	1
63	947902	SPRING, Plunger Return .....	1	100	949150	SEAL, Plunger Oil .....	1
64	944851	GUIDE, Spring .....	1	101	4E-04	LKWSHR, Cover to Housing ..	4
65	948745	HOUSING, Detent .....	1	102	1C-412	BOLT, Cover to Housing .....	4
65A	16F-04	†PLUG, Housing .....	1	103	944851	RETAINER, Spring .....	1
66	948730	BALL .....	11	104	945294	COVER, Plunger .....	1
67	948725	PISTON, Detent .....	1	105	886745	BLEEDER, Plug .....	1
68	948724	PLUG, Detent .....	1	106	947326	SPRING, Plunger Return .....	1
69	948729	RING, Plug Retainer .....	1	107	945289	CAP, Plunger .....	1
70	25K-40114	O-RING, Plug .....	1	108	58K-214	O-RING, Cap .....	1
71	948731	DIAPHRAGM .....	1	109	944851	RETAINER, Spring .....	1
72	948728	SPACER, Piston .....	1	110	946615	PLATE, Seal Retainer .....	1
73	948726	PLUNGER, Detent .....	1	111	944837	RING, Seal Back-up .....	1
74	947843	RETAINER, Ball .....	1	112	888304	SPRING, Check .....	1
74A	948727	†SLEEVE, Ball Retainer .....	1	113	-----	§PLUNGER, Operating — See Item "A" .....	—
75	948726	RING, Plunger Retainer .....	1	114	888304	SPRING, Check .....	1
76	948742	SOCKET, Detent .....	1	115	4E-04	LKWSHR, Plate to Housing ..	2
77	58K-214	O-RING, Cap .....	1	116	1C-412	BOLT, Plate to Housing .....	2
78	944840	GUIDE, Spring .....	1	117	947845	CAP .....	1
79	948837	PLATE, Seal Retainer .....	1	118	25K-40104	O-RING, Cap .....	1
80	947286	SPACER, Plunger .....	1	119	947840	SEAT, Relief .....	1
81	946813	SPRING, Check .....	1	120	947844	POPPET, Relief .....	1
82	-----	§PLUNGER, Operating — See Item "A" .....	—	121	946805	SPRING, Relief .....	1
83	946623	SPRING, Check .....	1	122	947841	SEAT, Pilot .....	1
84	25K-30022	O-RING, Cap .....	1	123	25K-40030	O-RING, Seat .....	1
85	946623	SPRING, Check .....	1	124	886739	POPPET .....	1
86	25K-20028	O-RING, Sleeve .....	1	125	886753	SPRING, Poppet .....	1
87	-----	§BALL, Poppet — See Item 50 ..	—	126	25K-40104	O-RING, Cap .....	1
88	946118	SPRING, Poppet .....	1	127	947846	CAP, Adjusting .....	1
89	4E-04	LKWSHR, Plate to Housing ..	2	128	8D-08	NUT, Jam .....	1
90	1C-412	BOLT, Plate to Housing .....	2	129	49D-08	NUT, Acorn .....	1
91	946117	GUIDE, Spring .....	1	130	944890	SCREW, Adjusting .....	1
92	946126	SCREW, Adjusting .....	1	131	613750	WASHER, Jam .....	2
93	946077	EYE, Plunger .....	1	132	878233	WASHER, Cover to Housing ..	4
94	58K-214	O-RING, Plunger Eye .....	1	133	4E-07	LKWSHR, Cover to Housing ..	4
95	949066	WIPER, Plunger .....	1	134	58K-222	O-RING, Cover .....	1
96	946613	PLATE, Wiper & Seal Retainer .....	1	135	40K-04	PLUG, Cover .....	1
97	949150	SEAL, Plunger Oil .....	1	136	947887	COVER .....	1
				137	1C-724	BOLT, Cover to Housing .....	4

†Not Illustrated  
§Not Sold Separately

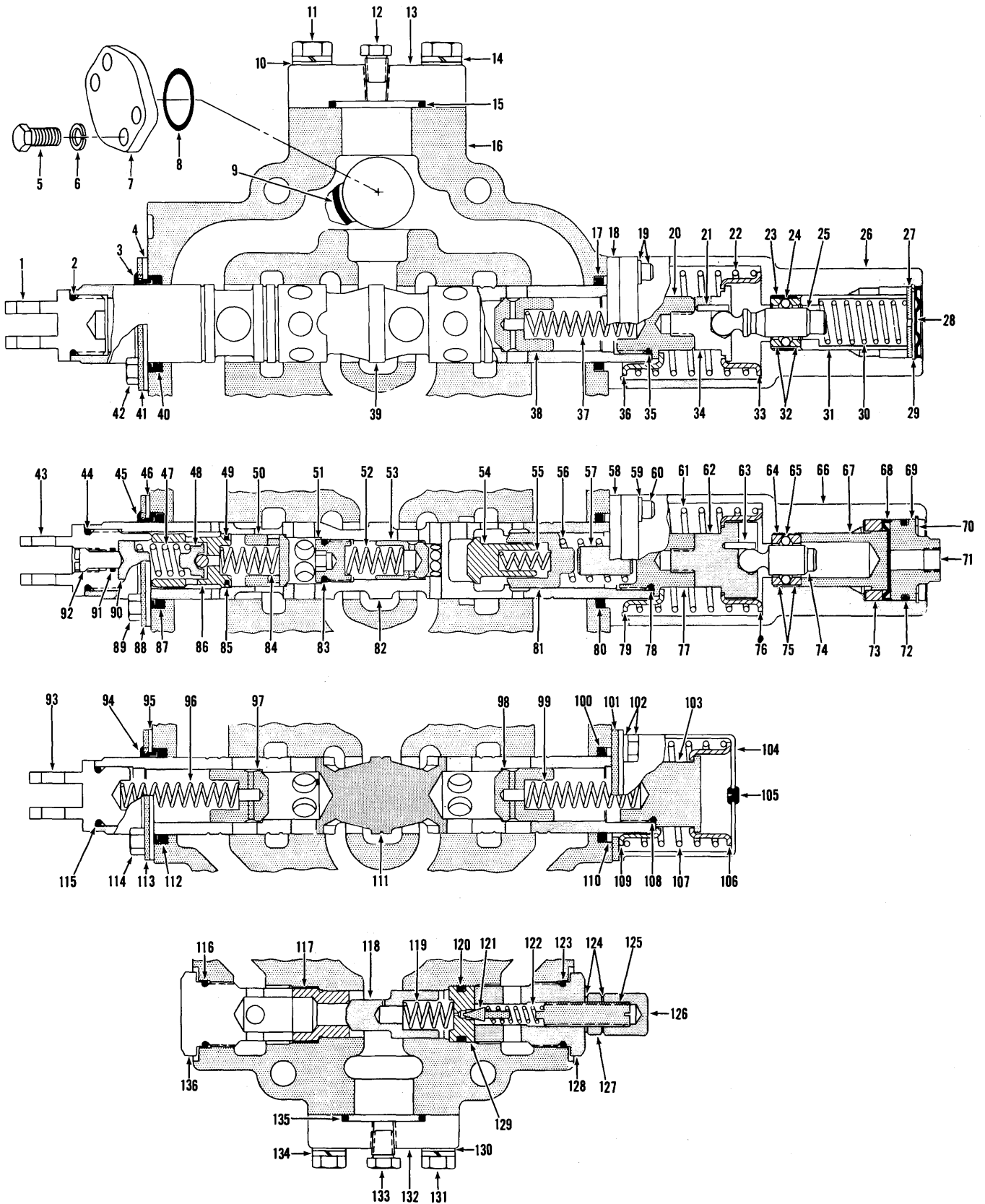
WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE



TS-11864

## CONTROL VALVE ASSEMBLY

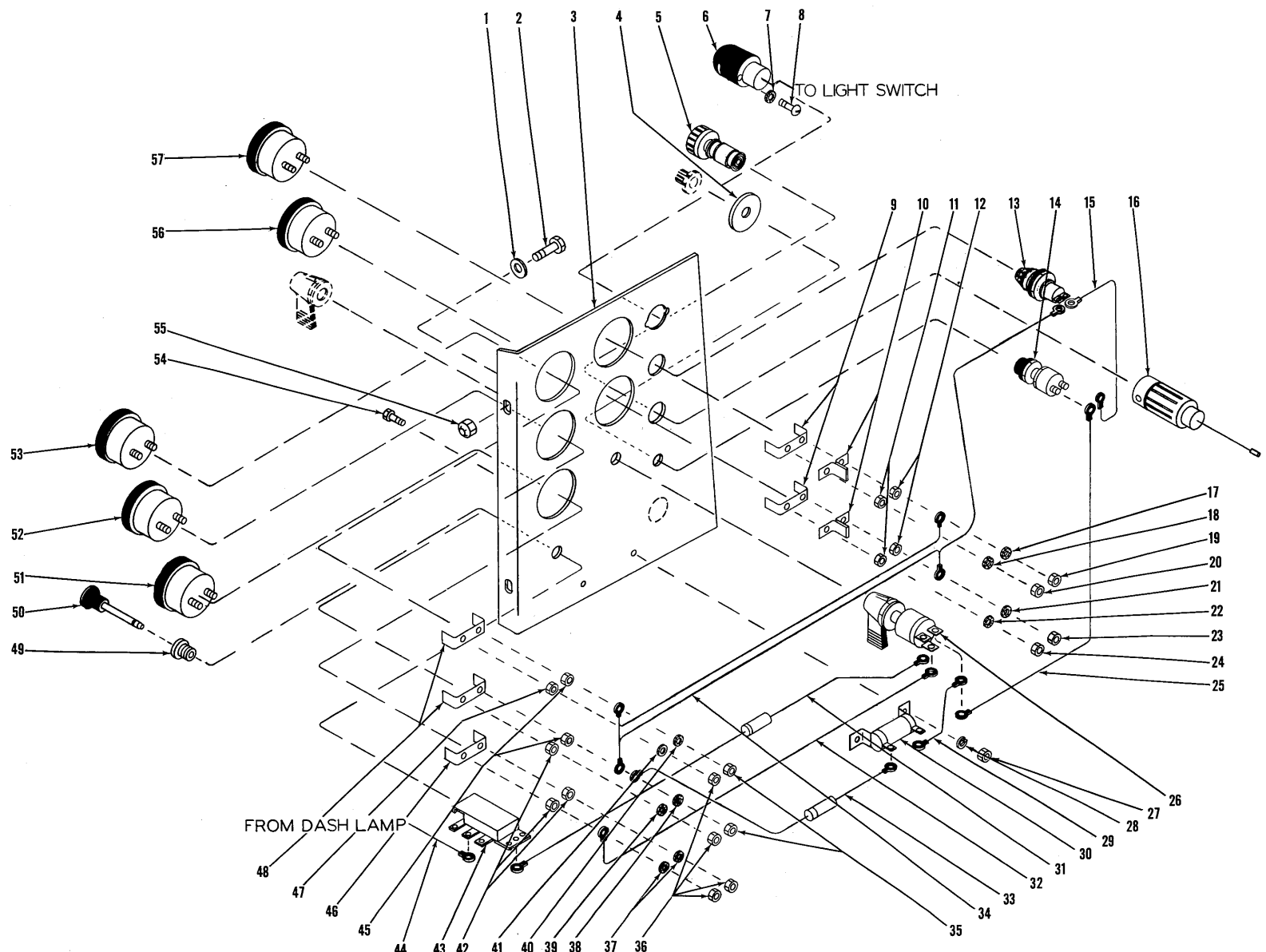
Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
A	1512158	CONTROL VALVE ASSY (Inc. 1-136)	1	34	949271	SOCKET, Det	1
1	946077	EYE, Plunger	1	35	58K-214	O-RING, Cap	1
2	58K-214	O-RING, Valve Mtg.	1	36	944840	GUIDE, Spring	1
3	949236	WIPER, Plunger	1	37	888304	SPRING, Check	1
4	944838	PLATE, Retaining	1	38	943184	CHECK, Spring	1
5	1C-828	BOLT, Cover Mtg.	4	39	-----	PLUNGER, See Item A	—
6	4E-08	LKWSHR, Cover Mtg.	4	40	949150	SEAL, Plunger	1
6A	878233	WASHER, Cover Mtg.	4	41	949237	PLATE, Retainer	1
7	947888	COVER	1	42	1C-412	BOLT, Ret. to Hsg.	4
8	947885	O-RING, Valve Mtg.	1	42A	4E-04	LKWSHR, Ret to Hsg.	4
9	25K-40120	O-RING, Valve Mtg.	1	43	946616	EYE, Plunger	1
10	878233	WASHER, Cover Mtg.	4	44	791553	O-RING, Plunger Eye	1
11	1C-828	BOLT, Cover Mtg.	4	45	949236	WIPER, Plunger	1
12	40K-4	PLUG, Cover	1	46	944838	PLATE, Retainer	1
13	947884	COVER	1	47	946118	SPRING, Guide	1
14	4E-08	LKWSHR, Cover Mtg.	4	48	946119	POPPET	1
15	947885	O-RING, Cover Mtg.	1	49	25K-20028	O-RING, Valve Seat	1
16	-----	HOUSING — See Item A	—	50	946624	CHECK, Spring	1
17	949150	SEAL, Plunger	1	51	946864	CAP, Spring	1
18	948837	PLATE, Retaining	1	52	946623	SPRING, Check	1
19	4E-04	LKWSHR, Cover to Hsg.	4	53	946863	CHECK, Spring	1
19A	11G-420	BOLT, Cover to Hsg.	4	54	946619	CHECK, Spring	1
20	948749	CAP, Plunger	1	55	946813	SPRING, Check	1
21	300232	PIN, Roll	1	56	946621	SPRING, Check	1
22	947287	SPRING, Guide	1	57	947286	SPACER, Cap	1
23	948727	SLEEVE	1	58	948837	PLATE, Retainer	1
24	948730	BALL	11	59	4E-04	LKWSHR, Cover to Hsg.	4
25	948747	PLUNGER, Det.	1	60	11G-420	BOLT, Cover to Hsg.	4
26	948744	DETENT, Hsg.	1	61	947902	SPRING, Guide	1
27	947848	PLUG, End	1	62	949270	SOCKET, Det	1
28	948202	DIAPHRAGM	1	63	300232	PIN, Roll	1
29	666542	RING, Retaining	1	64	948727	SLEEVE	1
30	947852	SPRING, Cap	1	65	948730	BALL	11
31	948954	RETAINER, Spring	1	66	948745	DETENT, Hsg.	1
32	947843	RETAINER, Ball	2	67	948725	PISTON	1
33	944851	GUIDE, Spring	1	68	948731	DIAPHRAGM	1



TS-11864

## CONTROL VALVE ASSEMBLY (Continued)

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



**INSTRUMENT PANEL ASSEMBLY**  
For Serial: Cummins — 5HC101 thru 5HC105;  
G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG170

TS-6327-P

[ 172 ]

PM 2419



## INSTRUMENT PANEL ASSEMBLY

For Serial: Cummins — 5HC101 thru 5HC105;  
G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG170

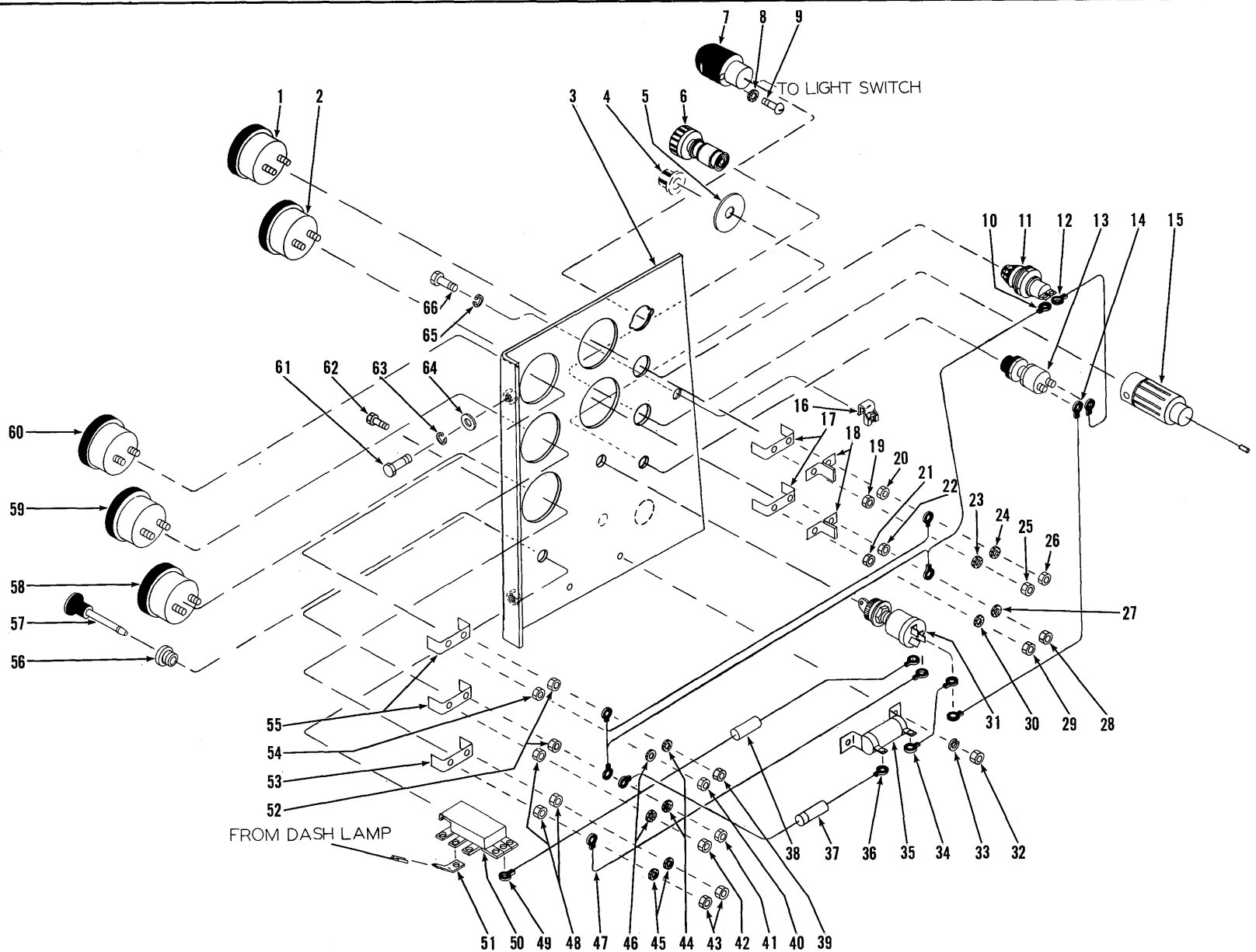
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	565280	WASHER, Panel Mtg. ....	2	29	553405	WIRE, Ignition Switch to Resistor .....	1
2	24C-616	BOLT, Panel Mtg. ....	2	30	556489	RESISTOR, Voltage .....	1
3	589992	PANEL, Instrument .....	1	31	552946	WIRE, Ignition Switch to Light Switch (Inc. 31A) .....	1
4	547237	DISC, Starter Switch .....	1	31A	611074	† FUSE, 20 Amp .....	1
5	944803	ELEMENT, Lighter .....	1	32	553405	WIRE, Ignition Switch to Ammeter .....	1
6	562178	* LAMP, Dash (Inc. 6A, 44) .....	1	33	573587	WIRE, Resistor to Engine Temperature Gauge .....	1
6A	945055	† BULB, Dash Lamp (24V) .....	1	33A	571021	† FUSE, ¾ Amp .....	1
7	12E-6	LKWSHR, Lamp Mtg. ....	2	34	558673	HARNESS, Instrument Wiring	1
8	18G-606	SCREW, Lamp Mtg. ....	2	35	12D-8	NUT, Wire to Gauge .....	2
9	601212	CLAMP, Instrument Mtg. ....	2	36	14D-10	NUT, Wire to Gauge .....	4
10	602350	SEPARATOR, Oil & Air Gauge Terminals .....	2	37	12E-10	LKWSHR, Wire to Gauge .....	2
11	14D-10	NUT, Gauge Mtg. ....	2	38	12E-8	LKWSHR, Wire to Gauge .....	1
12	12D-8	NUT, Gauge Mtg. ....	2	39	12E-10	LKWSHR, Wire to Gauge .....	1
13	562141	LIGHT, Indicator (Inc. 13A) .....	1	40	12E-8	LKWSHR, Wire to Gauge .....	1
13A	876574	† BULB, Indicator Light .....	1	41	12E-10	LKWSHR, Wire to Gauge .....	1
14	600259	BUTTON, Starter Push (Inc. 14A) .....	1	42	14D-10	NUT, Gauge Mtg. ....	3
14A	857420	† BOOT, Starter Button .....	1	43	550741	SWITCH, Light .....	1
15	565430	WIRE, Lighter to Warning Light .....	1	44	-----	WIRE, Light Switch to Dash Lamp — See Item 6 .....	—
16	549024	RECEPTACLE, Lighter .....	1	45	12D-8	NUT, Gauge Mtg. ....	2
16A	944804	† FUSE, Lighter .....	1	46	601212	CLAMP, Ammeter Mtg. ....	1
17	12E-8	LKWSHR, Wire to Gauge .....	1	47	14D-10	NUT, Gauge Mtg. ....	1
18	12E-10	LKWSHR, Wire to Gauge .....	1	48	601212	CLAMP, Instrument Mtg. ....	2
19	12D-8	NUT, Wire to Gauge .....	1	49	550743	BUSHING, Light Switch .....	1
20	14D-10	NUT, Wire to Gauge .....	1	50	550742	ROD, Light Switch .....	1
21	12E-8	LKWSHR, Wire to Gauge .....	1	51	550735	AMMETER .....	1
22	12E-10	LKWSHR, Wire to Gauge .....	1	52	551322	** GAUGE, Engine Temp. ....	1
23	12D-8	NUT, Wire to Gauge .....	1	53	551321	** GAUGE, Torque Converter Temperature .....	1
24	14D-10	NUT, Wire to Gauge .....	1	54	85G-608	SCREW, Resistor to Panel .....	2
25	553405	WIRE, Ignition Switch to Starter Button .....	1	55	18D-06	NUT, Panel Mtg. ....	2
26	573548	SWITCH, Ignition .....	1	56	517228	** GAUGE, Air Pressure .....	1
27	12D-6	NUT, Resistor to Panel .....	2	57	947249	GAUGE, Engine Oil Pressure	1
28	17E-6	LKWSHR, Resistor Mtg. ....	2				

† Not Illustrated

\* NOTE: For complete replacement of 562178 Dash Lamp use 574276 Dash Lamp plus one (1) 574275 Connecting Tab.

\*\* NOTE: For replacement use S.G. 326B

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



**INSTRUMENT PANEL ASSEMBLY**  
For Serial: Cummins — 5HC106 thru 5HC999;  
G.M. — 6HG171 thru 6HG999

[ 174 ]

PM 2419

TS-7067-P

## INSTRUMENT PANEL ASSEMBLY

For Serial: Cummins — 5HC106 thru 5HC999;  
G.M. — 6HG171 thru 6HG999

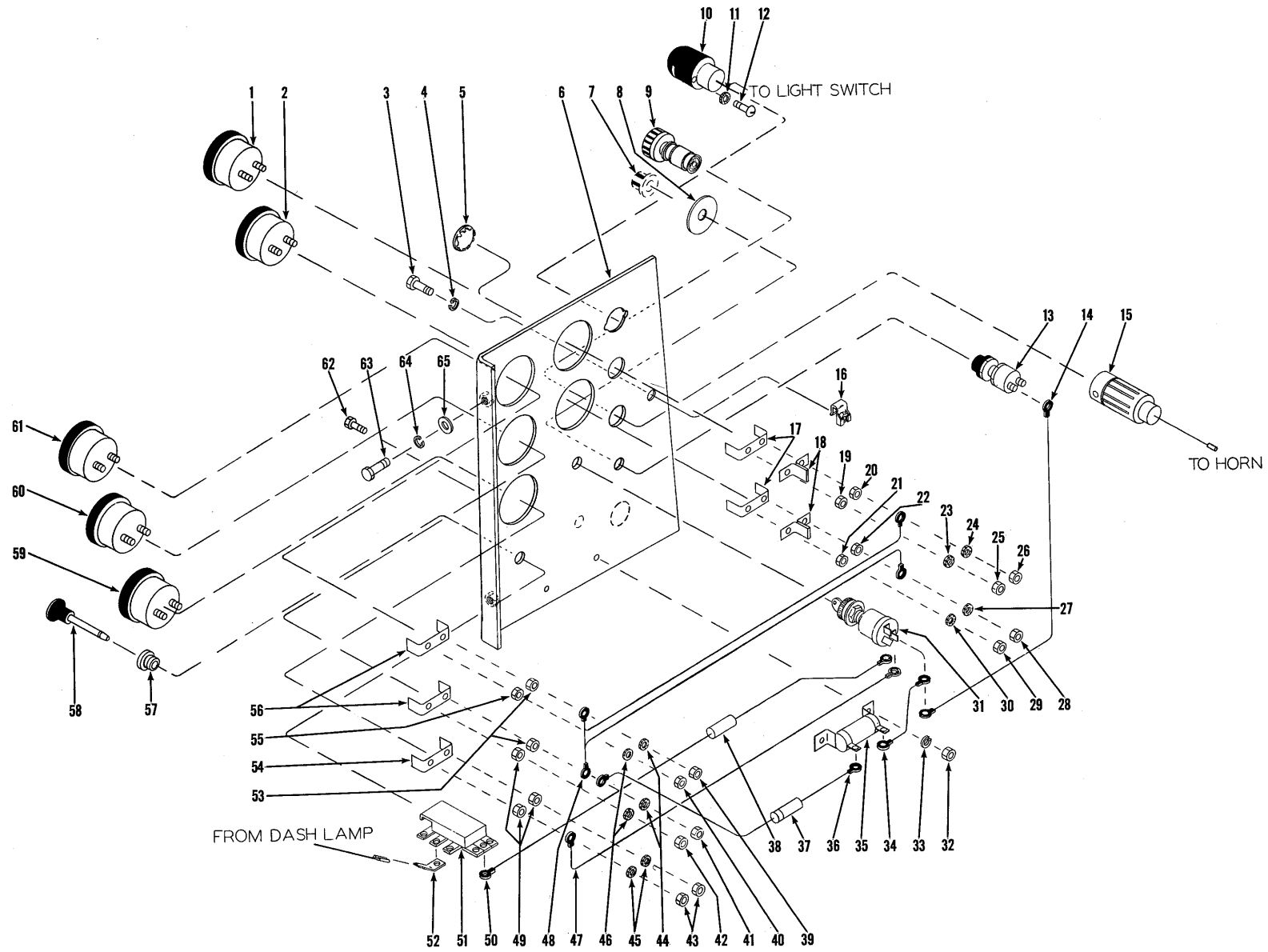
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	947249	GAUGE, Eng. Oil Press. ....	1	33	17E-6	LKWSHR, Resistor Mtg. ....	2
2	517228	* GAUGE, Air Pressure ....	1	34	553405	WIRE, Ignition Switch to Resistor .....	1
3	574117	PANEL, Instrument .....	1	35	556489	RESISTOR, Voltage .....	1
4	-----	§BUTTON, Push (See 13) ....	—	36	573587	WIRE, Resistor to Temp. Gauge .....	1
5	547237	PLATE, Starter Button .....	1	37	571021	FUSE, ¾ Amp. ....	1
6	944803	ELEMENT, Lighter .....	1	38	611074	FUSE, 20 Amp. ....	1
7	574276	LAMP, Dash .....	1	39	12D-8	NUT, Terminal to Gauge .....	1
7A	945055	†BULB, Dash Lamp .....	1	40	14D-10	NUT, Terminal to Gauge .....	1
8	12E-6	LKWSHR, Lamp Mtg. ....	2	41	12D-8	NUT, Terminal to Gauge .....	1
9	18G-606	SCREW, Lamp Mtg. ....	2	42	14D-10	NUT, Terminal to Gauge .....	1
10	558673	HARNESS, Instrument Wiring	1	43	14D-10	NUT, Terminal to Gauge .....	2
11	562141	LIGHT, Indicator .....	1	44	12E-8	LKWSHR, Terminal Mtg. ....	2
11A	427237	†BULB, Indicator Light .....	1	45	12E-10	LKWSHR, Terminal Mtg. ....	2
12	565430	WIRE, Lighter to Indicator Light .....	1	46	12E-10	LKWSHR, Terminal Mtg. ....	2
13	600259	BUTTON, Starter (Inc. 4, 13A)	1	47	553405	WIRE, Ignition Switch to Ammeter .....	1
13A	857420	†BOOT, Starter Button .....	1	48	14D-10	NUT, Gauge Mtg. ....	3
14	553405	WIRE, Ignition Switch to Starter Button .....	1	49	552946	WIRE, Ignition Switch to Light Switch (Inc. 38) .....	1
15	549024	RECEPTACLE, Lighter (Inc. 15A) .....	1	50	550741	SWITCH, Light .....	1
15A	944804	†FUSE, Lighter .....	1	51	574275	TAB, Dash Lamp Wire to Light Switch .....	1
16	572729	CAGED NUT, Panel Ref. ....	1	52	12D-8	NUT, Gauge Mtg. ....	2
17	601212	CLAMP, Instrument Mtg. ....	2	53	601212	CLAMP, Instrument Mtg. ....	1
18	602350	SEPARATOR, Oil & Air Gauges .....	2	54	14D-10	NUT, Gauge Mtg. ....	1
19	14D-10	NUT, Gauge Mtg. ....	1	55	601212	CLAMP, Instrument Mtg. ....	2
20	12D-8	NUT, Gauge Mtg. ....	1	56	550743	BUSHING, Light Switch .....	1
21	14D-10	NUT, Gauge Mtg. ....	1	57	550742	ROD, Light Switch .....	1
22	12D-8	NUT, Gauge Mtg. ....	1	58	550735	AMMETER .....	1
23	12E-10	LKWSHR, Terminal Mtg. ....	1	59	551322	*GAUGE, Engine Temp. ....	1
24	12E-8	LKWSHR, Terminal Mtg. ....	1	60	551321	*GAUGE, Torque Converter Temperature .....	1
25	14D-10	NUT, Terminal to Gauge .....	1	61	23C-616	BOLT, Panel Mtg. ....	2
26	12D-8	NUT, Terminal to Gauge .....	1	62	85G-608	SCREW, Resistor Mtg. ....	2
27	12E-8	LKWSHR, Terminal Mtg. ....	1	63	4E-06	LKWSHR, Panel Mtg. ....	2
28	12D-8	NUT, Terminal to Gauge .....	1	64	565280	WASHER, Panel Mtg. ....	2
29	14D-10	NUT, Terminal to Gauge .....	1	65	4E-06	LKWSHR, Panel Mtg. ....	1
30	12E-10	LKWSHR, Terminal Mtg. ....	1	66	23C-616	BOLT, Panel Mtg. ....	1
31	573548	SWITCH, Ignition .....	1				
32	12D-6	NUT, Resistor Mounting .....	2				

†Not Illustrated

§Not Sold Separately

\*NOTE: For replacement use S.G. 326B

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



[ 176 ]

PM 2419

**INSTRUMENT PANEL ASSEMBLY**  
For Serial: Cummins — 6HC101 thru 6HC999;  
G.M. — 7HG101 thru 7HG999

TS-7821-P

## INSTRUMENT PANEL ASSEMBLY

For Serial: Cummins — 6HC101 thru 6HC999;  
G.M. — 7HG101 thru 7HG999

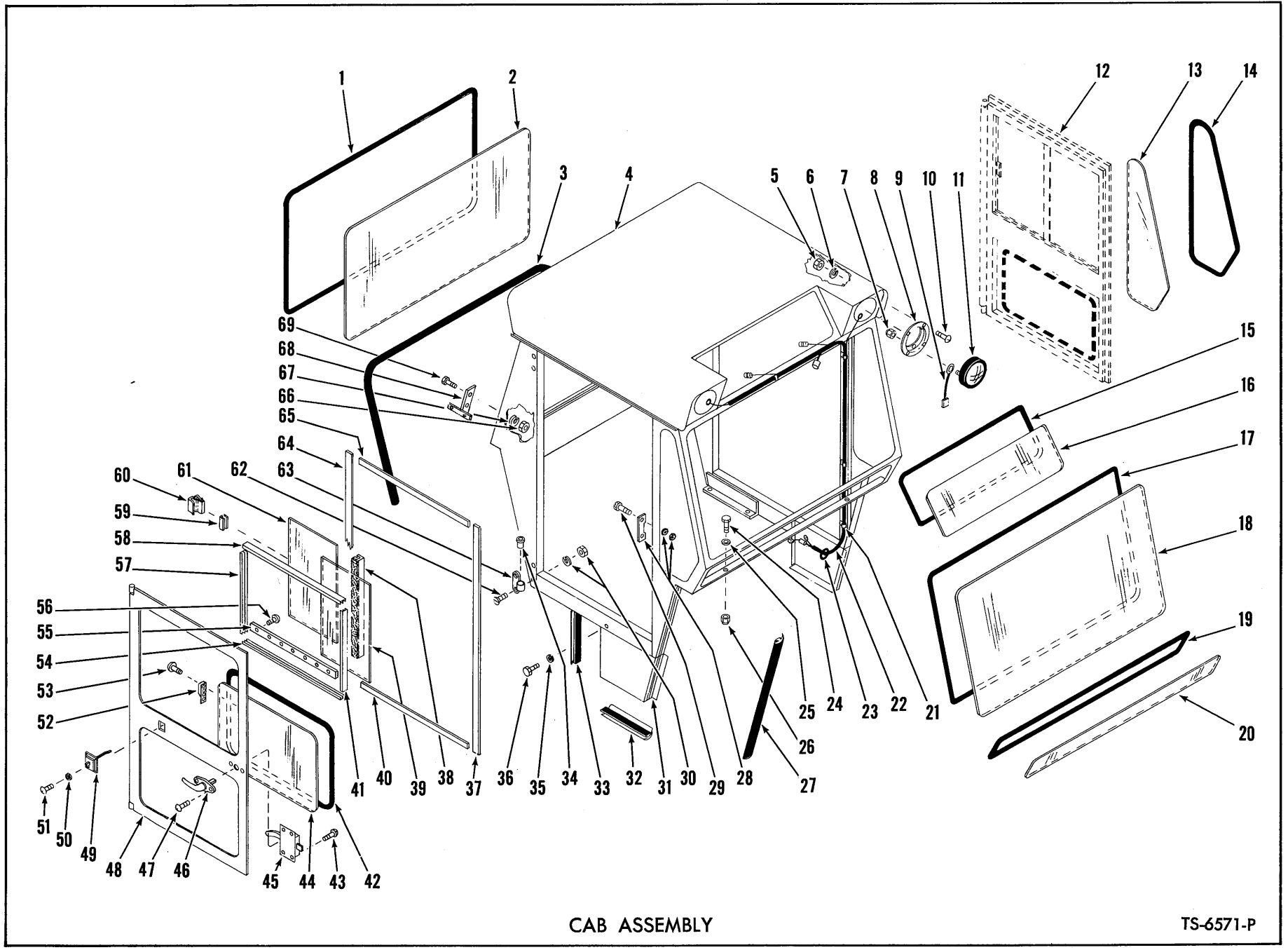
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	551319	*GAUGE, Eng. Oil Press. ....	1	33	17E-6	LKWSHR, Resistor Mtg. ....	2
2	517228	*GAUGE, Air Pressure .....	1	34	553405	WIRE, Ignition Switch to Resistor .....	1
3	23C-616	BOLT, Panel Mtg. ....	1	35	556489	RESISTOR, Voltage .....	1
4	4E-06	LKWSHR, Panel Mtg. ....	1	36	573587	WIRE, Resistor to Temp. Gauge .....	1
5	-----	OMIT .....	—	37	571021	FUSE, ¾ Amp. ....	1
6	1526350	PANEL, Instrument .....	1	38	611074	FUSE, 20 Amp. ....	1
7	-----	§BUTTON, Push — See 13 ....	1	39	12D-8	NUT, Terminal to Gauge ....	1
8	547237	PLATE, Starter Button .....	1	40	14D-10	NUT, Terminal to Gauge ....	1
9	944803	ELEMENT, Lighter .....	1	41	12D-8	NUT, Terminal to Gauge ....	1
10	574276	LAMP, Dash .....	1	42	14D-10	NUT, Terminal to Gauge ....	1
10A	945055	†BULB, Dash Lamp .....	1	43	14D-10	NUT, Terminal to Gauge ....	2
11	12E-6	LKWSHR, Lamp Mtg. ....	2	44	12E-8	LKWSHR, Terminal Mtg. ....	2
12	18G-606	SCREW, Lamp Mtg. ....	2	45	12E-10	LKWSHR, Terminal Mtg. ....	2
13	600259	BUTTON, Starter Push (Inc. 7, 13A) .....	1	46	12E-10	LKWSHR, Terminal Mtg. ....	2
13A	857420	†BOOT, Starter Button .....	1	47	553405	WIRE, Ignition Switch to Ammeter .....	1
14	553405	WIRE, Ignition Switch to Starter Button .....	1	48	558673	HARNESS, Instrument Wiring	1
15	549024	RECEPTACLE, Lighter (Inc. 15A) .....	1	49	14D-10	NUT, Gauge Mtg. ....	3
15A	944804	†FUSE, Lighter .....	1	50	552946	WIRE, Ignition Switch to Light Switch (Inc. 38) .....	1
16	572729	CAGED NUT, Panel Ret. ....	1	51	550741	SWITCH, Light .....	1
17	601212	CLAMP, Instrument Mtg. ....	2	52	574275	TAB, Dash Lamp Wire to Light Switch .....	1
18	602350	SEPARATOR, Oil & Air Gauges .....	2	53	12D-8	NUT, Gauge Mtg. ....	2
19	14D-10	NUT, Gauge Mtg. ....	1	54	601212	CLAMP, Instrument Mtg. ....	1
20	12D-8	NUT, Gauge Mtg. ....	1	55	14D-10	NUT, Gauge Mtg. ....	1
21	14D-10	NUT, Gauge Mtg. ....	1	56	601212	CLAMP, Instrument Mtg. ....	2
22	12D-8	NUT, Gauge Mtg. ....	1	57	550743	BUSHING, Light Switch .....	1
23	12E-10	LKWSHR, Gauge Mtg. ....	1	58	550742	ROD, Light Switch .....	1
24	12E-8	LKWSHR, Terminal Mtg. ....	1	59	550735	AMMETER .....	1
25	14D-10	NUT, Terminal Mtg. ....	1	60	551322	*GAUGE, Engine Temp. ....	1
26	12D-8	NUT, Terminal Mtg. ....	1	61	551321	*GAUGE, Converter Temp. ....	1
27	12E-8	LKWSHR, Terminal Mtg. ....	1	62	85G-608	SCREW, Resistor Mtg. ....	2
28	12D-8	NUT, Terminal Mtg. ....	1	63	23C-616	BOLT, Panel Mtg. ....	2
29	14D-10	NUT, Terminal Mtg. ....	1	64	4E-06	LKWSHR, Panel Mtg. ....	2
30	12E-10	LKWSHR, Terminal Mtg. ....	1	65	565280	WASHER, Panel Mtg. ....	2
31	573548	SWITCH, Ignition .....	1				
32	12D-6	NUT, Resistor Mtg. ....	2				

†Not Illustrated

§Not Sold Separately

\*NOTE: For replacement use SG 326B.

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



[ 178 ]

PM 2419

CAB ASSEMBLY

TS-6571-P

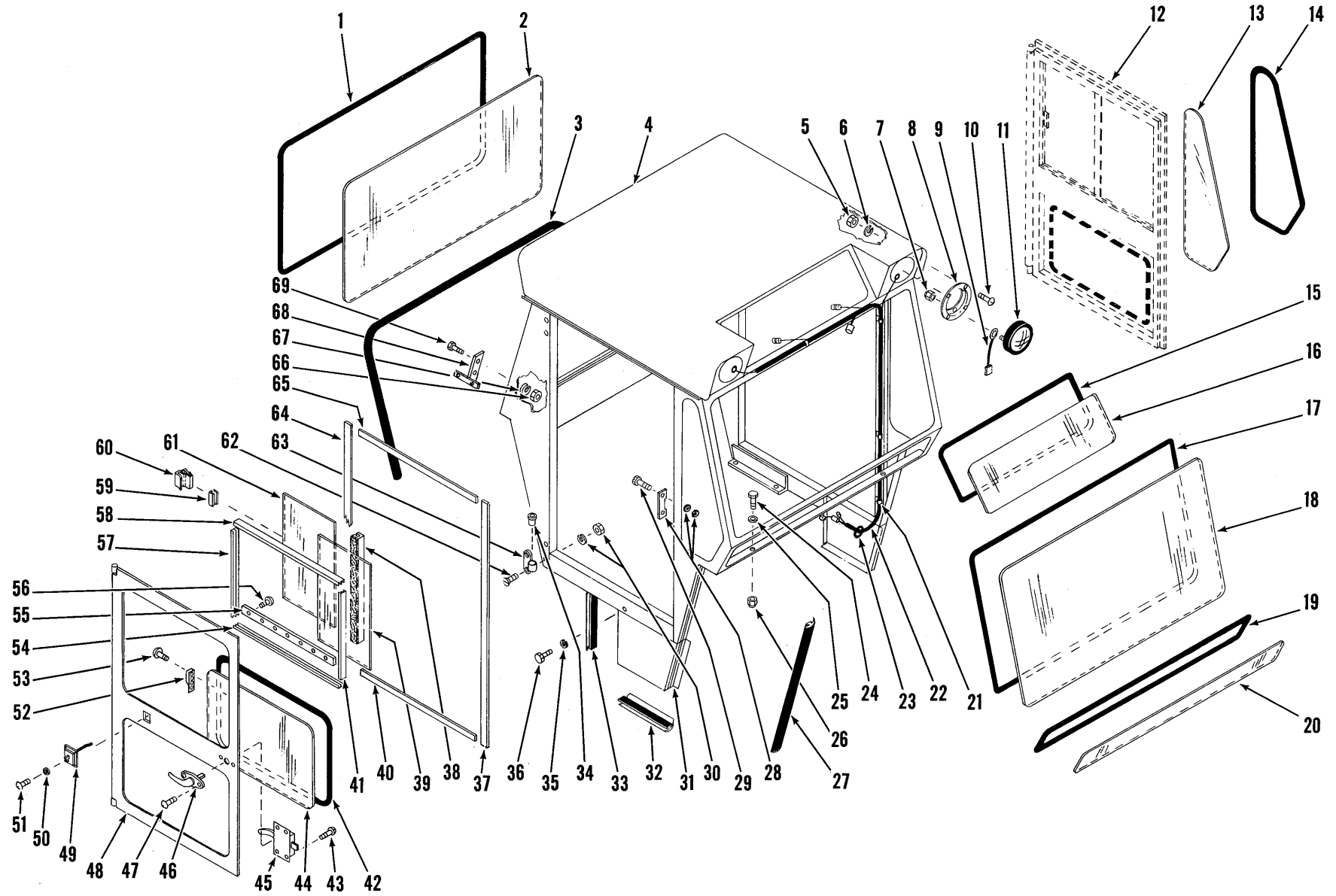
## CAB ASSEMBLY

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, 27 thru 69)	1	20	-----	§GLASS PATTERN, Lower Windshield — See Item 70	—
1	569694	MOULDING, Rear Window	11 ft.	21	541988	CLIP, Wiring Harness	4
2	-----	§GLASS PATTERN, Rear Window — See Item 70	—	22	1544318	WIRING HARNESS, Cab	1
3	1521844	WEATHERSTRIP, Cab — Rear	4 ft.	23	515069	GROMMET, Cab Wiring Harness	1
3A	1521846	†WEATHERSTRIP, Cab — Rear	5 ft.	24	24C-628	BOLT, Cab Attaching	6
4	-----	§CAB — See Item "A"	—	25	616783	WASHER, Cab Attaching	6
5	12D-10	NUT, Head Lamp Adapter Attaching	8	26	18D-06	NUT, Cab Attaching	6
6	17E-10	LKWSHR, Head Lamp Adapter Attaching	8	27	569692	WEATHERSTRIP, Cab — Front	6 ft.
7	50D-10	NUT, Head Lamp Attaching	6	28	945576	STRIKE, Door Lock	2
8	568675	ADAPTER, Head Lamp Panel	2	28A	1D-04	†NUT, Door Lock Strike Attaching	4
9	540882	WIRE, Head Lamp Ground	2	28B	4E-04	†LKWSHR, Door Lock Strike Attaching	4
10	85G-1012	SCREW, Head Lamp Adapter Attaching	8	29	47G-412	SCREW, Door Lock Strike Attaching	4
11	582057	HEAD LAMP ASSY — 24V (Inc. 11A, 11B)	2	30	1D-05	NUT, Cab Door Hinge Attaching	8
11A	551244	†SEALED UNIT, Head Lamp — 24V	2	30A	4E-05	LKWSHR, Cab Door Hinge Attaching	8
11B	944977	†RETAINER, Head Lamp	2	31	568686	§PANEL, Lower Quarter — R.H.	1
12	-----	DOOR — See Item 48	—	31A	568687	§PANEL, Lower Quarter — L.H.	1
13	-----	§GLASS PATTERN, Quarter Window — See Item 70	—	32	569692	WEATHERSTRIP, Cab Front — Lower	2 ft.
14	569694	MOULDING, Quarter Window	5 ft.	33	569692	WEATHERSTRIP, Cab Quarter Panel — Rear	2 ft.
15	569694	MOULDING, Roof	6 ft.	34	568700	BUSHING, Cab Door Hinge	4
16	-----	§GLASS PATTERN, Roof — See Item 70	—	35	4E-04	LKWSHR, Lower Quarter Panel Attaching	6
17	569694	MOULDING, Upper Windshield	12 ft.	36	23C-410	BOLT, Lower Quarter Panel Attaching	6
18	-----	§GLASS PATTERN, Upper Windshield — See Item 70	—	37	943623	WEATHERSTRIP, Door — Front	8 ft.
19	569694	MOULDING, Lower Windshield	10 ft.				

§Not Sold Separately  
†Not Illustrated

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

[ 180 ]



CAB ASSEMBLY

TS-6571-P

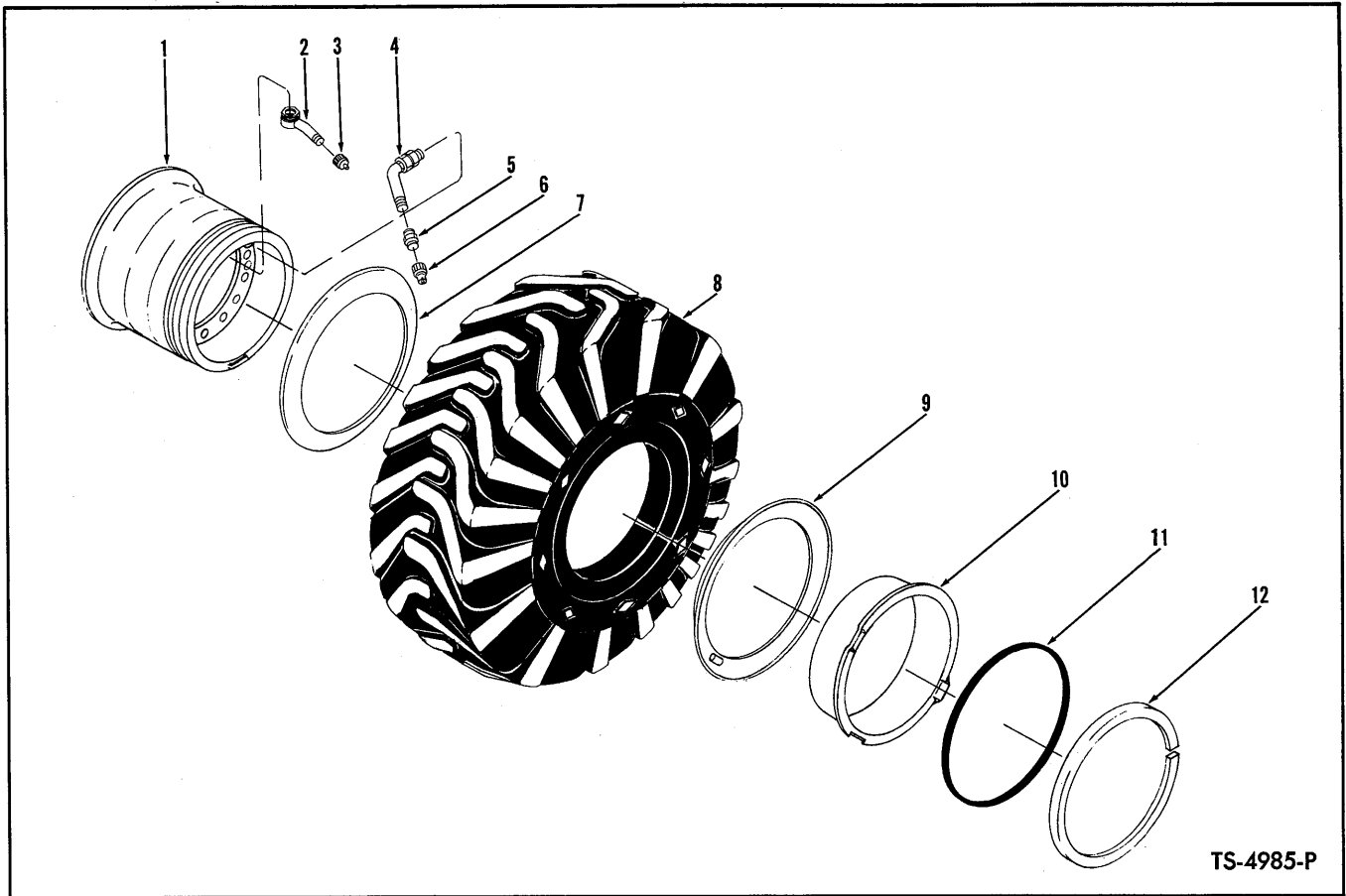


## CAB ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
38	139149	CHANNEL, Glass Divider....	2 ft.	58	569696	CHANNEL, Top Glass Track ..	4 ft.
39	-----	§GLASS PATTERN, Sliding Door — See Item 70 .....	—	59	946115	RUBBER, Lock to Glass Mounting .....	1 ft.
40	943623	WEATHERSTRIP, Door — Bottom .....	6 ft.	60	589571	LOCK, Sliding Glass .....	4
41	569696	CHANNEL, Side Glass Track	4 ft.	61	-----	§GLASS PATTERN, Sliding Door — See Item 70 .....	—
42	569694	MOULDING, Lower Door Glass .....	12 ft.	62	76G-512	SCREW, Hinge Attaching ...	8
43	66G-1008	SCREW, Lock to Door Attaching .....	8	63	945554	HINGE, Door — R.H. Lower & L.H. Upper .....	2
44	-----	§GLASS PATTERN, Lower Door — See Item 70 .....	—	63A	945555	†HINGE, Door — R.H. Upper & L.H. Lower .....	2
45	942874	LOCK, Door — R.H. ....	1	64	943623	WEATHERSTRIP, Door — Rear	8 ft.
45A	138249	†LOCK, Door — L.H. ....	1	65	943623	WEATHERSTRIP, Door — Top	6 ft.
46	1525710	HANDLE, Door — Keyed ...	2	66	1D-04	NUT, Door Latch Strike Attaching .....	4
47	32G-1008	SCREW, Handle to Door Attaching .....	4	67	4E-04	LKWSHR, Door Latch Strike Attaching .....	4
48	568669	DOOR — R.H. ....	1	67A	25E-13	†WASHER, Door Latch Strike Attaching .....	4
48A	568670	†DOOR — L.H. ....	1	68	574992	STRIKE, Door Latch .....	2
49	560650	CATCH, Door .....	2	69	23C-410	BOLT, Door Latch Strike Attaching .....	4
50	17E-10	LKWSHR, Door Catch Attaching .....	8	69A	619018	†WASHER, Door Latch Strike Attaching .....	8
51	87G-1010	SCREW, Door Catch Attaching .....	8	70	945903	†GLASS PATTERN KIT (Inc. 2, 13, 16, 18, 20, 39, 44, 61)	1
52	557465	STRIKE, Window Lock .....	4	71	560651	†BUMPER, Rubber — Cab to Door .....	2
53	5G-606	SCREW & LKWSHR ASSY, Window Lock Attaching ...	8	72	85G-1016	†SCREW, Rubber Bumper Attaching .....	2
54	569696	CHANNEL, Bottom Glass Track .....	4 ft.	72A	17E-10	†LKWSHR, Bumper Screw .....	2
55	945577	RETAINER, Door Channel ...	2	72B	12D-10	†NUT, Bumper Screw .....	2
56	65G-1008	SCREW, Channel Retainer to Door .....	14	72C	874767	†SPACER, Bumper to Strike ...	2
57	569696	CHANNEL, Side Glass Track ..	4 ft.	73	571854	†PANEL, Cab to Cockpit Rear	1
				74	24C-616	†BOLT, Panel Mounting .....	5
				75	18D-06	†NUT, Panel Mounting .....	5

§Not Sold Separately  
†Not Illustrated

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



TS-4985-P

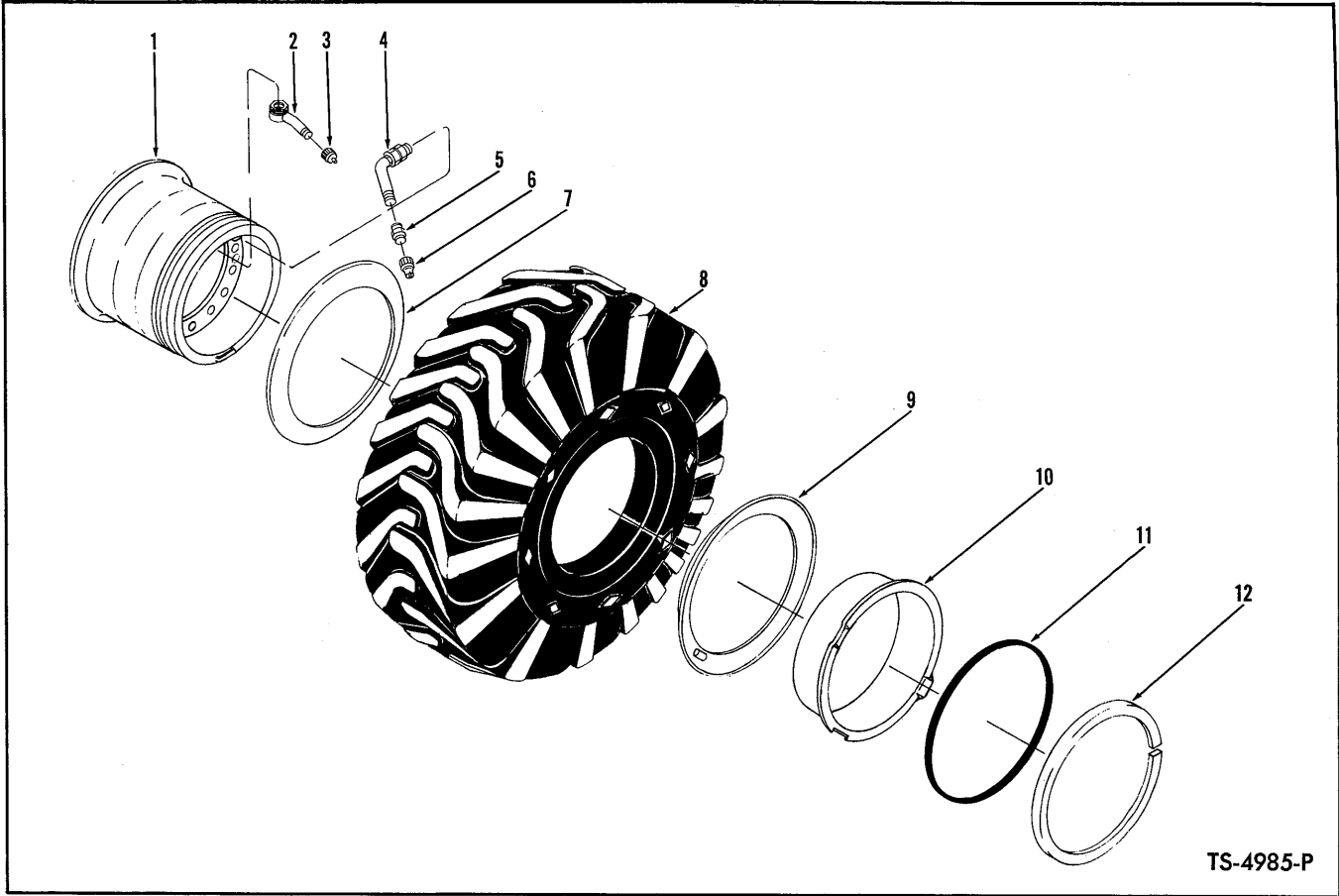
## WHEEL AND TIRE

For Serial: Cummins – 5HC101 thru 5HC999;  
G.M. – 5HG101 thru 5HG999, 6HG101 thru 6HG999

Item No.	Part No.	Description	No. Req'd.
	<u>18.00 x 25</u> <u>23.5 x 25</u>		
1	553954    509440	WHEEL .....	4
2	-----    531112	STEM, Water Filling (Inc. 2A, 2B, 3) .....	4
2A	-----    529605	†NUT .....	4
2B	-----    529606	†GROMMET .....	4
3	-----    531111	CAP .....	4
4	509445    509445	STEM, Valve (Inc. 5, 6) .....	4
5	551684    551684	ADAPTER, Valve Stem .....	4
6	551685    551685	CAP, Valve Stem .....	4
7	551341    551341	FLANGE .....	4
8	-----    -----	§TIRE .....	4
9	551341    551341	FLANGE .....	4
10	533956    533956	BAND, Bead Seat .....	4
11	580278    580278	O-RING .....	4
12	580274    580274	RING, Lock .....	4

†Not Illustrated  
§Not Sold Separately

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



TS-4985-P

**WHEEL AND TIRE**  
 For Serial: Cummins — 6HC101 thru 6HC999;  
 G.M. — 7HG101 thru 7HG999

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

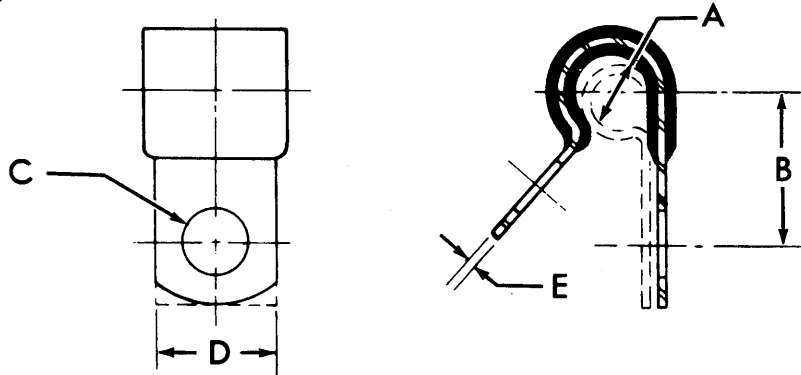
†Not Illustrated  
 §Not Sold Separately

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

## WIRING, PIPE AND HOSE CLIPS

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

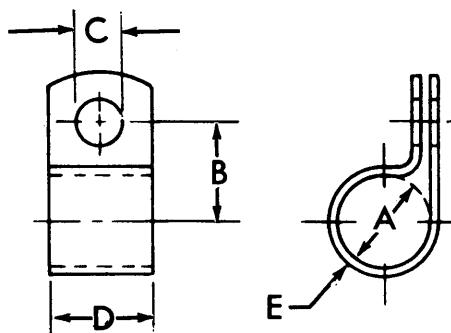
### INSULATED CLIP



TS-5008-P

ITEM NO.	PART NUMBER	A	B	C	D	E	F
1	30H-14	$\frac{1}{4}$	$1\frac{7}{32}$	$\frac{9}{32}$	$\frac{1}{2}$	.036	
2	30H-18	$\frac{5}{16}$	$\frac{9}{16}$	$\frac{9}{32}$	$\frac{1}{2}$	.036	
3	30H-23	$\frac{3}{8}$	$2\frac{3}{32}$	$1\frac{3}{32}$	$\frac{3}{4}$	.036	
4	30H-28	$\frac{7}{16}$	$1\frac{3}{16}$	$1\frac{5}{32}$	$\frac{7}{8}$	.050	
5	30H-35	$\frac{9}{16}$	$1\frac{3}{16}$	$1\frac{3}{32}$	$\frac{3}{4}$	.050	
6	30H-38	$\frac{5}{8}$	$2\frac{7}{32}$	$1\frac{3}{32}$	$\frac{3}{4}$	.050	
7	30H-40	$\frac{5}{8}$	$3\frac{1}{32}$	$1\frac{7}{32}$	1	.050	
8	30H-42	$1\frac{1}{16}$	$\frac{7}{8}$	$1\frac{1}{32}$	$\frac{3}{4}$	.050	
9	30H-43	$1\frac{1}{16}$	$1\frac{5}{16}$	$1\frac{5}{32}$	$\frac{7}{8}$	.050	
10	30H-44	$1\frac{1}{16}$	1	$1\frac{7}{32}$	1	.050	
11	30H-45	$1\frac{3}{16}$	$\frac{7}{8}$	$1\frac{1}{32}$	$\frac{5}{8}$	.050	
12	30H-46	$1\frac{3}{16}$	$1\frac{5}{16}$	$1\frac{3}{32}$	$\frac{3}{4}$	.050	
13	30H-50	$1\frac{5}{16}$	1	$1\frac{3}{32}$	$\frac{3}{4}$	.050	
14	538231	$\frac{5}{8}$	$2\frac{1}{2}$	$1\frac{7}{32}$	1	$\frac{1}{16}$	

### CLOSED CLIP



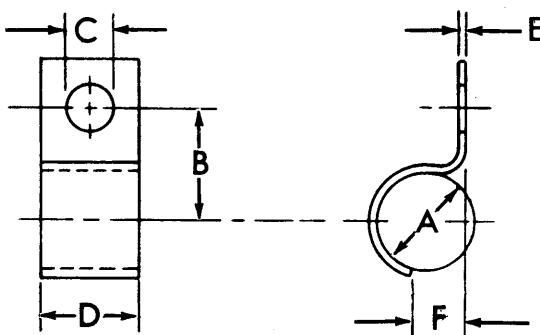
TS-5009-P

ITEM NO.	PART NUMBER	A	B	C	D	E	F
15	6H-4	$\frac{1}{4}$	$1\frac{1}{16}$	$1\frac{1}{32}$	$\frac{5}{8}$	.037	
16	6H-24	1	$1\frac{3}{8}$	$1\frac{7}{32}$	1	.065	
17	561993	$\frac{3}{8}$	$3\frac{1}{4}$	$1\frac{3}{32}$	$1\frac{1}{4}$	$\frac{1}{16}$	

## 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.

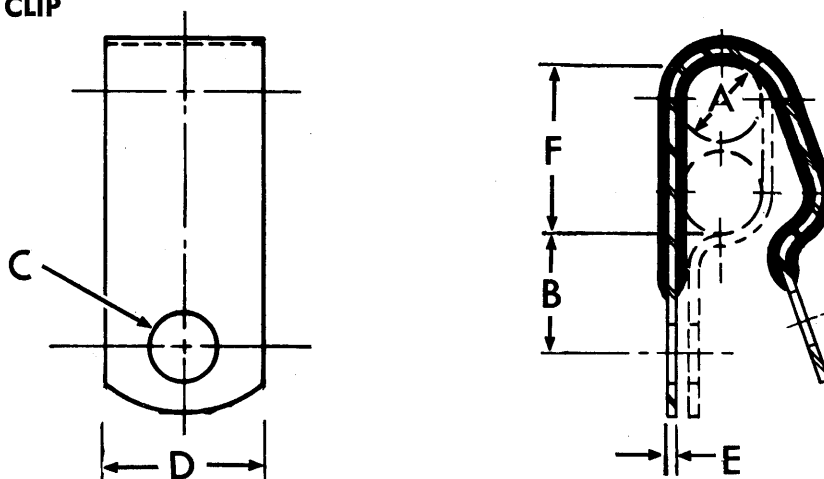
### OPEN CLIP



TS-5011-P

ITEM NO.	PART NUMBER	A	B	C	D	E	F
1	562183	1½	2⅞	⅞	1¼	⅜	1⅜
2	562185	1⅞	2¾	⅞	1¼	⅜	1

### INSULATED DOUBLE CLIP



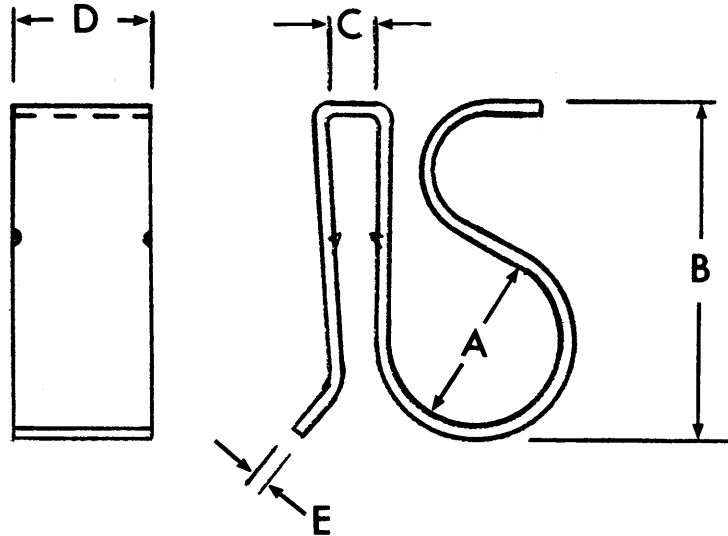
TS-6372-P

ITEM NO.	PART NUMBER	A	B	C	D	E	F
3	31H-42	1⅜	1⅞	1⅜	¾	.062	1⅞

## 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.

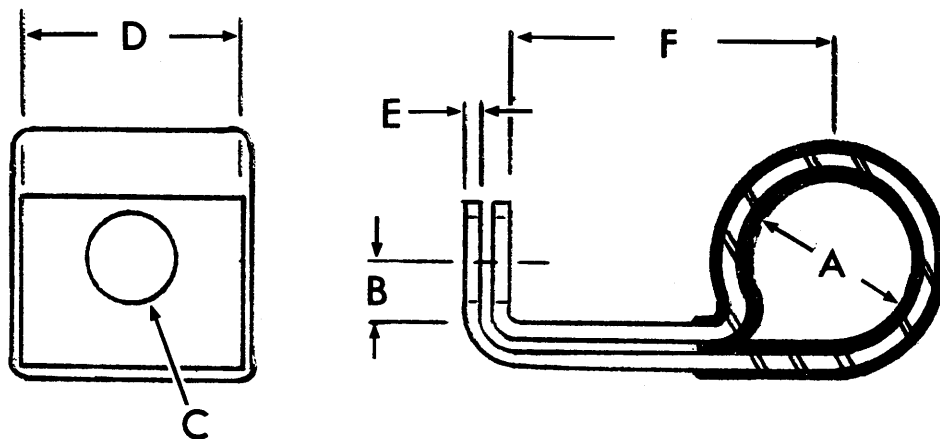
### SPRING CLIP



TS-6371-P

ITEM NO.	PART NUMBER	A	B	C	D	E	F
1	541988	$1\frac{1}{32}$	$2\frac{1}{32}$	$\frac{7}{64}$	$\frac{3}{8}$	$\frac{3}{32}$	

### 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	$1\frac{1}{8}$

## WIRING

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1		HARNESS, Main Wiring		3		HARNESS, Tail Light Wiring	
1A	1520862	For Serial: Cummins — 5HC101 thru 5HC999	1	3A	562008	For Serial Group "A"	1
1B	1527622	For Serial: Cummins — 6HC101 thru 6HC999	1	3B	1526349	For Serial Group "B"	1
1C	562680	For Serial: G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999	1	4	564436	WIRE, Assy. Back-Up Lamp	1
1D	1527616	For Serial: G.M. — 7HG101 thru 7HG999	1	5	564384	WIRE, Battery to Horn Button	1
2		HARNESS, Cockpit Wiring		6	558960	WIRE, Relay to Hourmeter — Serial Group "B"	1
2A	558952	For Serial Group "A"	1	7	540882	WIRE, Back-Up Light Ground	2
2B	1527116	For Serial Group "B"	1	8	558960	WIRE, Hourmeter Ground	1
				9	568462	WIRE, Head Lamp Feed	1
				10	562435	GROMMET, Cockpit Wiring Harness	3
				11	611074	FUSE — 20 Amp.	1
				12	571021	FUSE — .75 Amp.	1

## BATTERY, BATTERY HOLD DOWN AND CABLES

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
13	1310121	BATTERY	2	23	529359	CABLE, Battery to Starter	1
14	566629	HOLD DOWN, Battery	1	24	563901	CABLE, Battery to Starter	1
15	616714	STUD, Battery Hold Down	2	25		CABLE, Starter Ground	
16	17D-2	NUT, Battery Hold Down	2	25A	541063	Cummins powered machines	1
17	7D-05	NUT, Battery Hold Down	4	25B	562015	G.M. powered machines	1
18	567883	PLATE, Battery	1	26	24C-620	BOLT, Ground Cable Mtg.	1
19	24C-620	BOLT, Battery Plate Mtg.	4	27	25E-18	WASHER, Ground Cable Mtg.	1
20	619021	WASHER, Battery Plate Mtg.	4	28	18D-06	NUT, Ground Cable Mtg.	1
21	18D-06	NUT, Battery Plate Mtg.	4				
22	563899	CABLE, Battery to Ground	1				

## DECALS AND NAMEPLATES

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
29	547852	*DECAL, Michigan	2	45	6C-605	SCREW, Quadrant Plates	6
30	547851	*DECAL, Clark Equipment	2	46	1527430	PLATE, Reservoir Service Strainer	1
31	565972	*DECAL, Model	2	47	1511708	PLATE, Emergency Stop	1
32	1520495	*DECAL, "Best on Earth"	2	48	6C-605	SCREW, Emergency Stop Plate	2
33	538256	*DECAL, Transmission Drain	1	49	565138	**STRIP, Non-Skid Abrasive — 6" x 32"	1
34	1505581	*DECAL, Safety Wiring	1	50	1531606	**STRIP, Non-Skid Abrasive — 6" x 12½"	6
35	1505537	*DECAL, Safety Warning	1	51	558963	PANEL, Side — R.H. Front — Serial Group "B"	1
36	569451	*DECAL, Warning Light — Serial Group "A"	1	52	558964	PANEL, Side — L.H. Front — Serial Group "B"	1
37	569331	*DECAL, Bucket Indicator	1	53	558965	PANEL, Side — R.H. Rear — Serial Group "B"	1
38	1534502	*DECAL, Transmission Filter	1	54	558966	PANEL, Side — L.H. Rear — Serial Group "B"	1
39	542074	PLATE, Patent	1				
40	6C-605	SCREW, Patent Plate	4				
41	1510525	PLATE, Lubrication Instruction	1				
42	6C-605	SCREW, Lubrication Instruction Plate	4				
43	567978	PLATE, Shift Quadrant — 4 Speed	1				
44	567947	PLATE, Shift Quadrant — Fwd. & Rev.	1				

\*NOTE: Contact your local Michigan Distributor for the above listed decals.

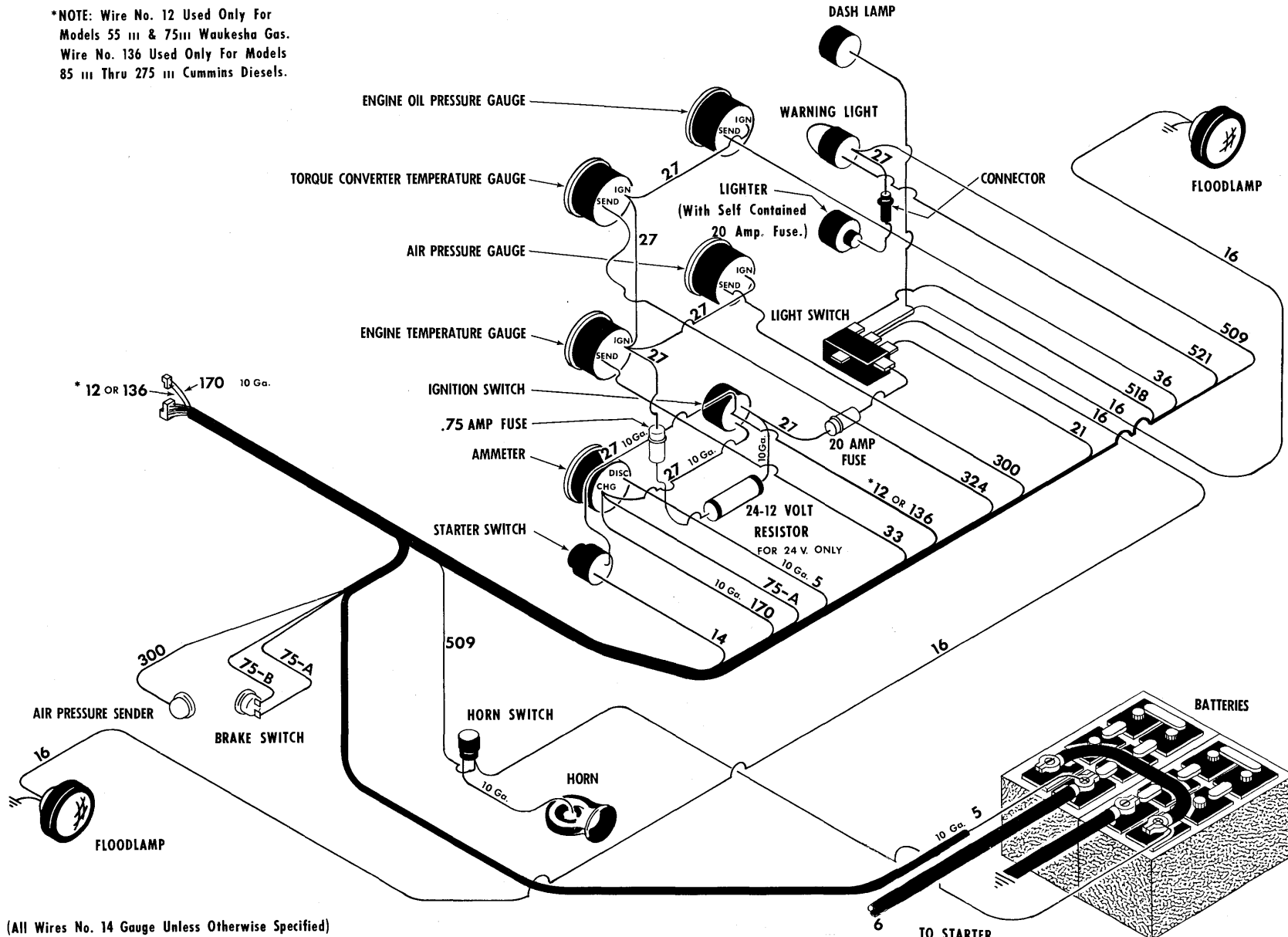
\*\*NOTE: Machines were not equipped with this feature but may be added if so desired.

Serial Group "A": Cummins — 5HC101 thru 5HC999; G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999.

Serial Group "B": Cummins — 6HC101 thru 6HC999; G.M. — 7HG101 thru 7HG999.

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

\*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.

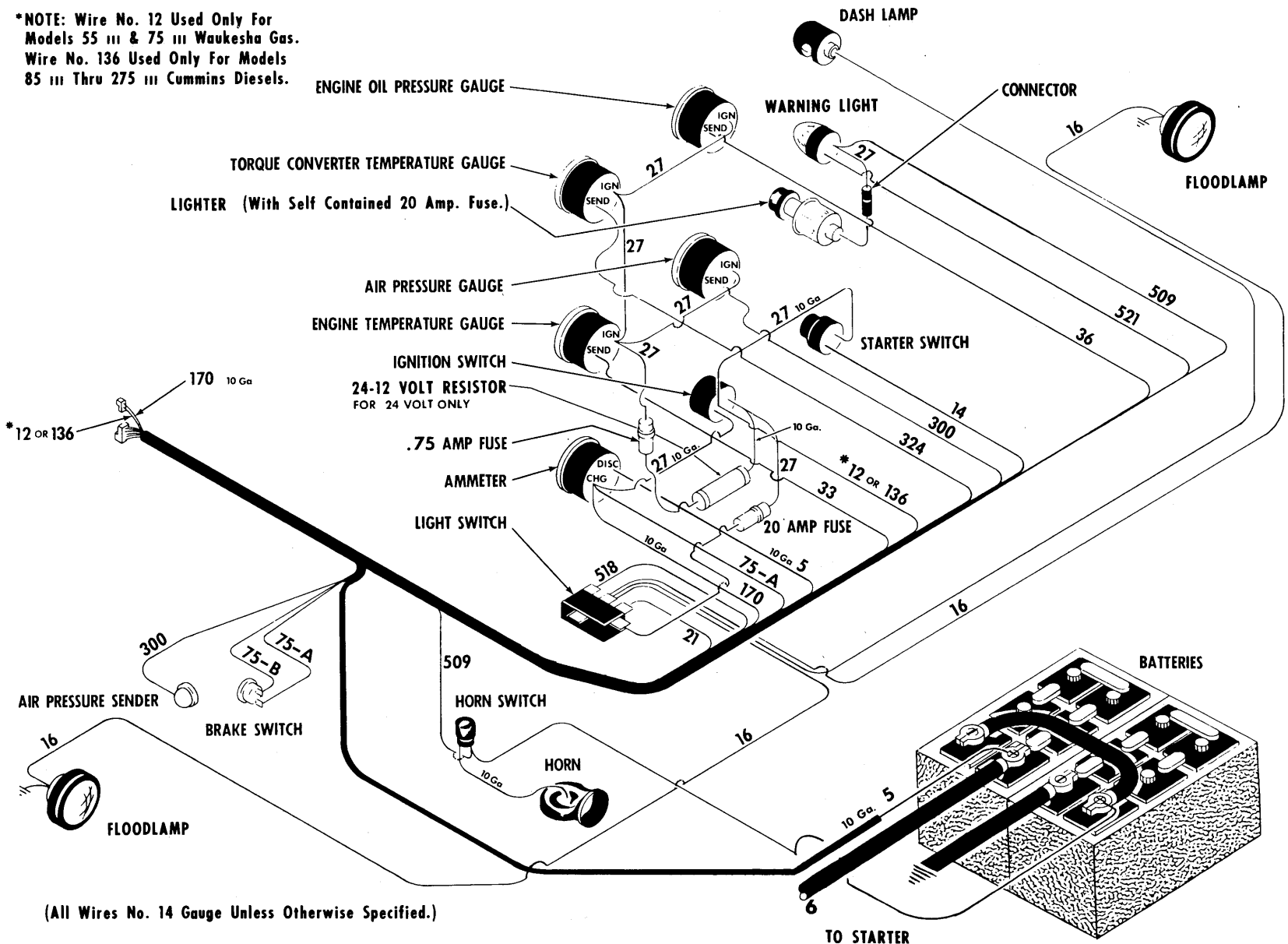


**WIRING DIAGRAM — COCKPIT**  
For Serial: Cummins — 5HC101 thru 5HC105;  
G.M. — 5HG101 thru 5HG999; 6HG101 thru 6HG170

TS-6887-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.



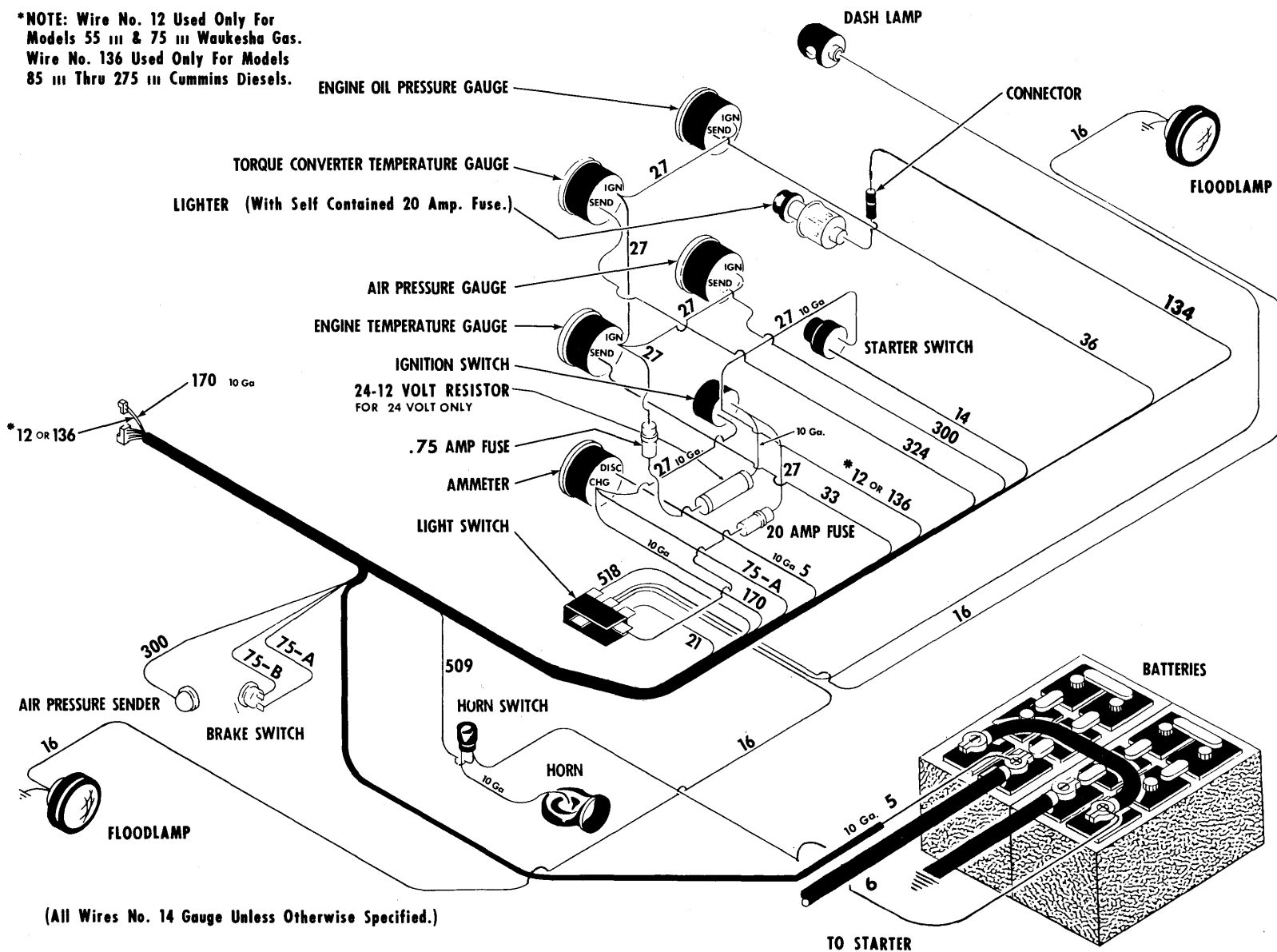
(All Wires No. 14 Gauge Unless Otherwise Specified.)

WIRING DIAGRAM - COCKPIT  
 For Serial: Cummins - 5HC106 thru 5HC999;  
 G.M. - 6HG171 thru 6HG999

TS-6841-P



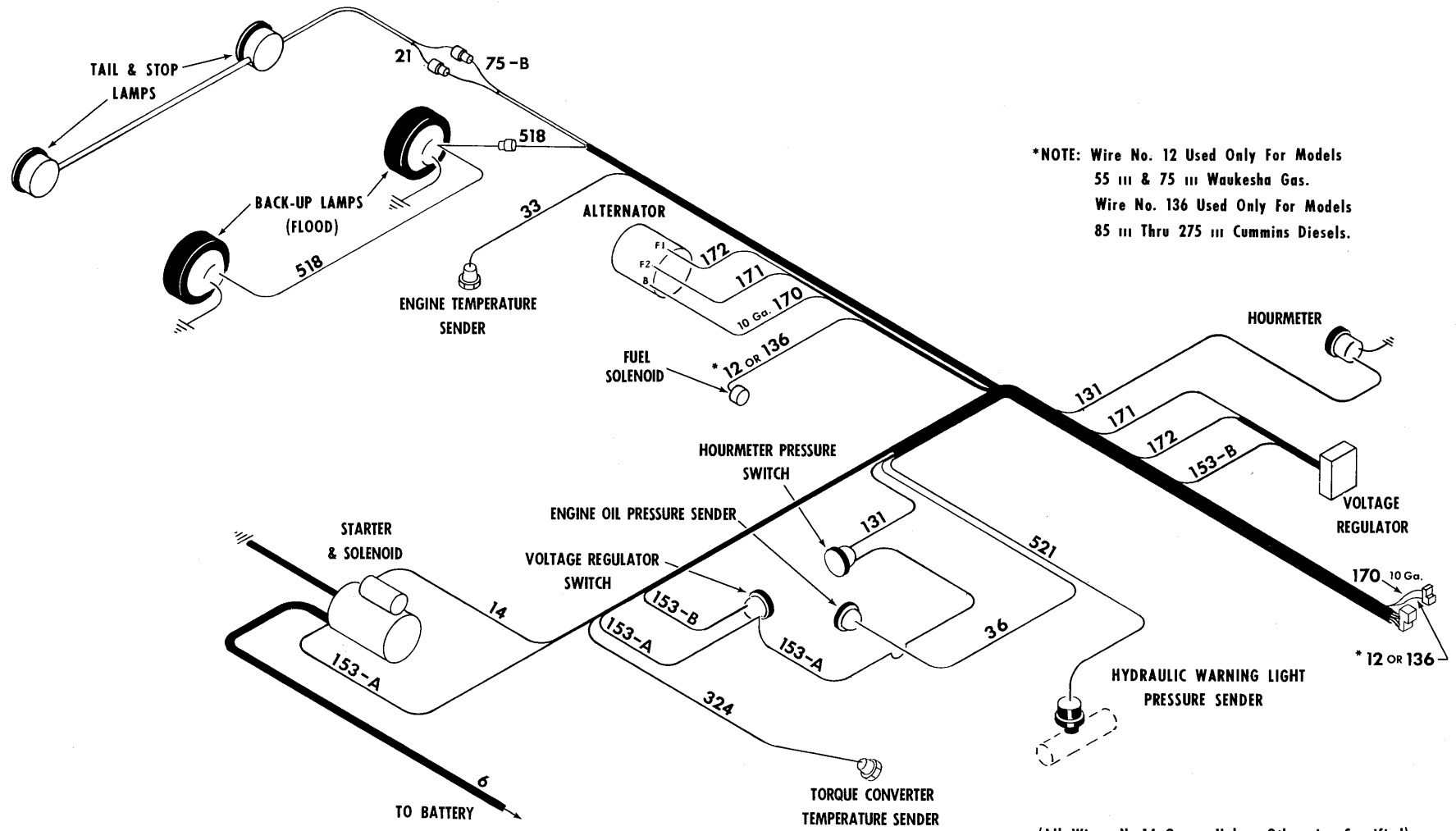
**\*NOTE: Wire No. 12 Used Only For Models 55 III & 75 III Waukesha Gas. Wire No. 136 Used Only For Models 85 III Thru 275 III Cummins Diesels.**



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

**WIRING DIAGRAM — COCKPIT**  
 For Serial: Cummins — 6HC101 thru 6HC999;  
 G.M. — 7HG101 thru 7HG999

TS-8960-P

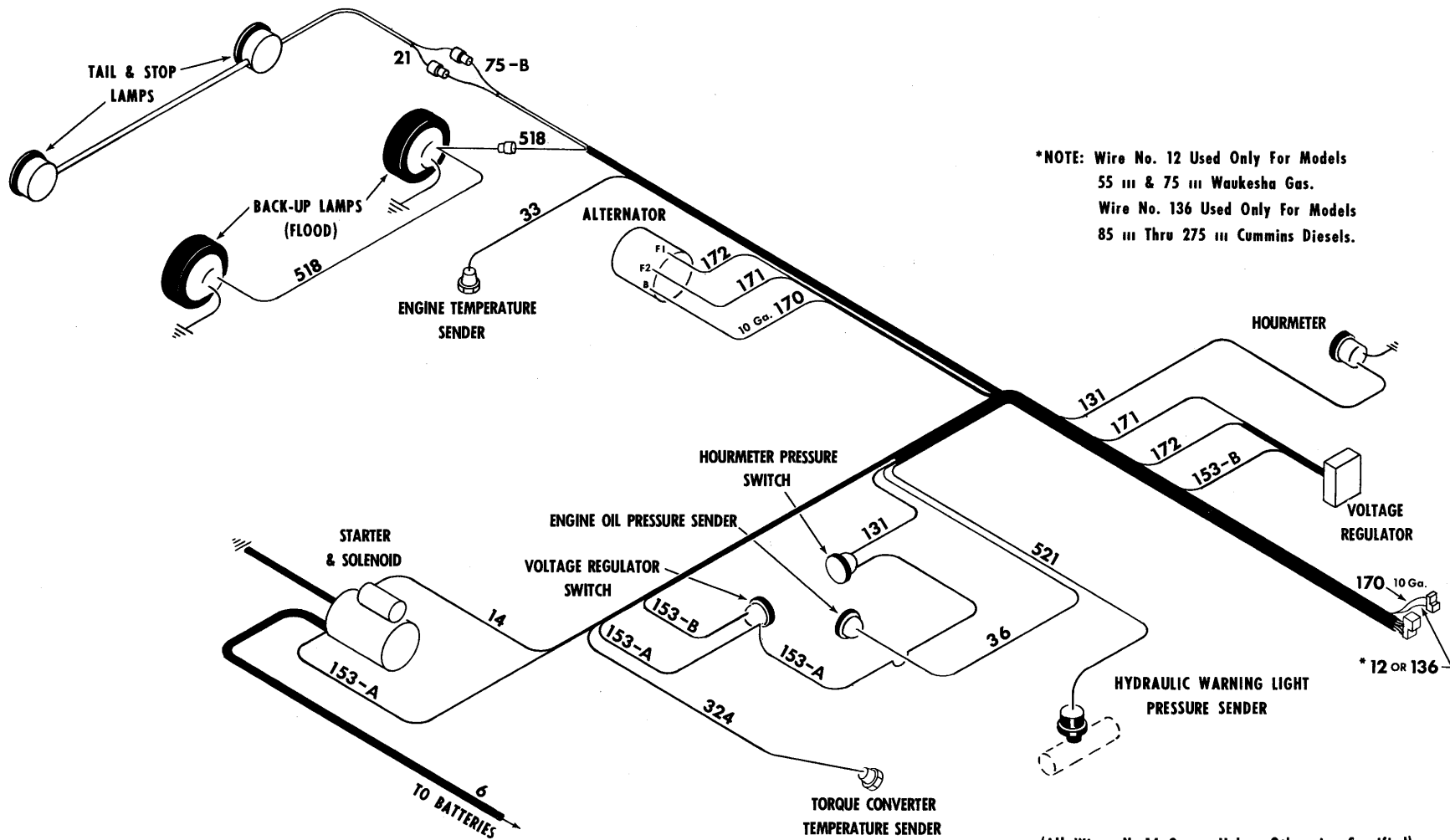


\*NOTE: Wire No. 12 Used Only For Models  
55 III & 75 III Waukesha Gas.  
Wire No. 136 Used Only For Models  
85 III Thru 275 III Cummins Diesels.

WIRING DIAGRAM — ENGINE  
For Serial: Cummins — 5HC101 thru 5HC999

TS-6844-P

(All Wires No.14 Gauge Unless Otherwise Specified)



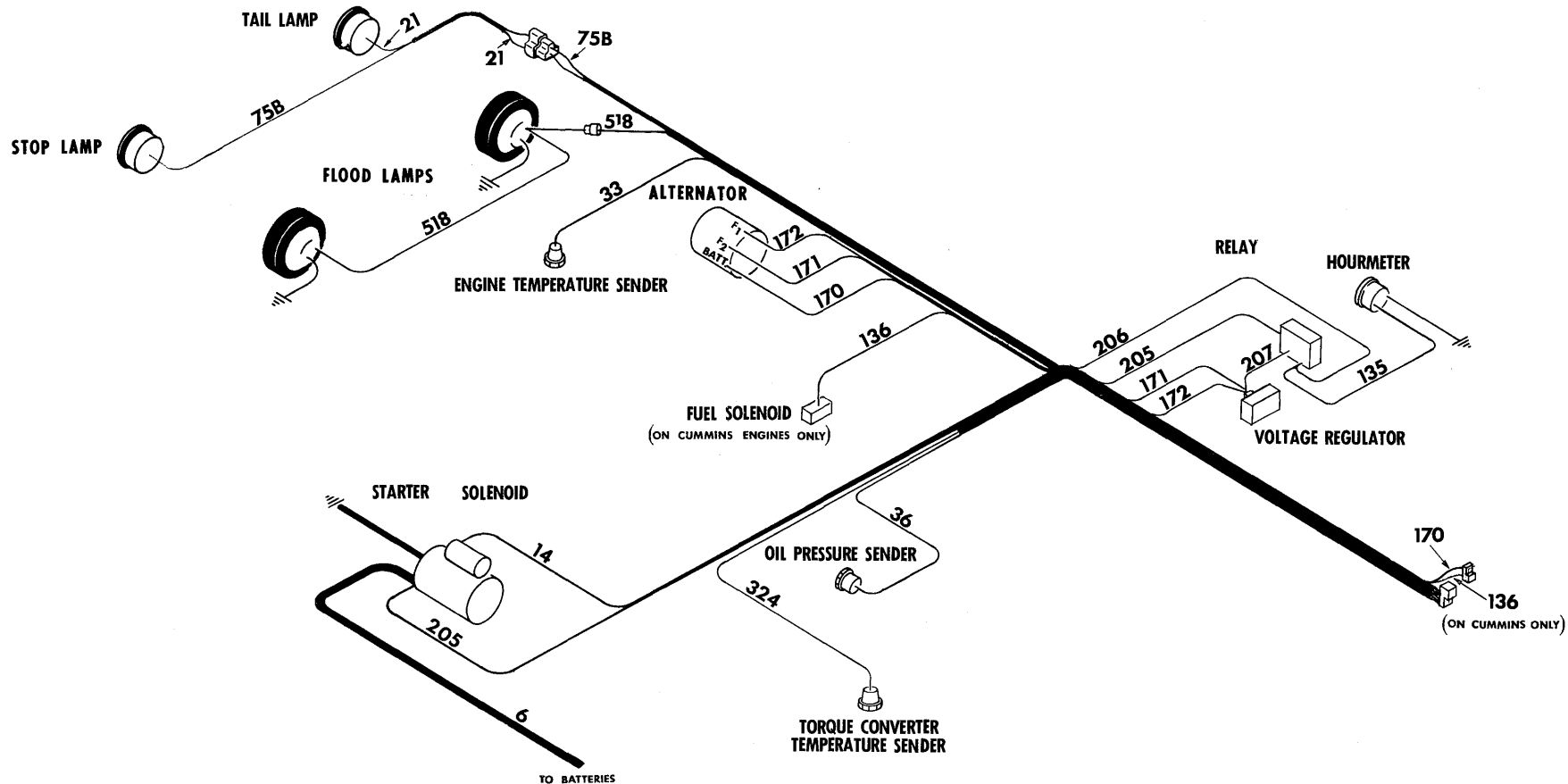
\*NOTE: Wire No. 12 Used Only For Models  
55 III & 75 III Waukesha Gas.  
Wire No. 136 Used Only For Models  
85 III Thru 275 III Cummins Diesels.

(All Wires No.14 Gauge Unless Otherwise Specified)

**WIRING DIAGRAM — ENGINE**

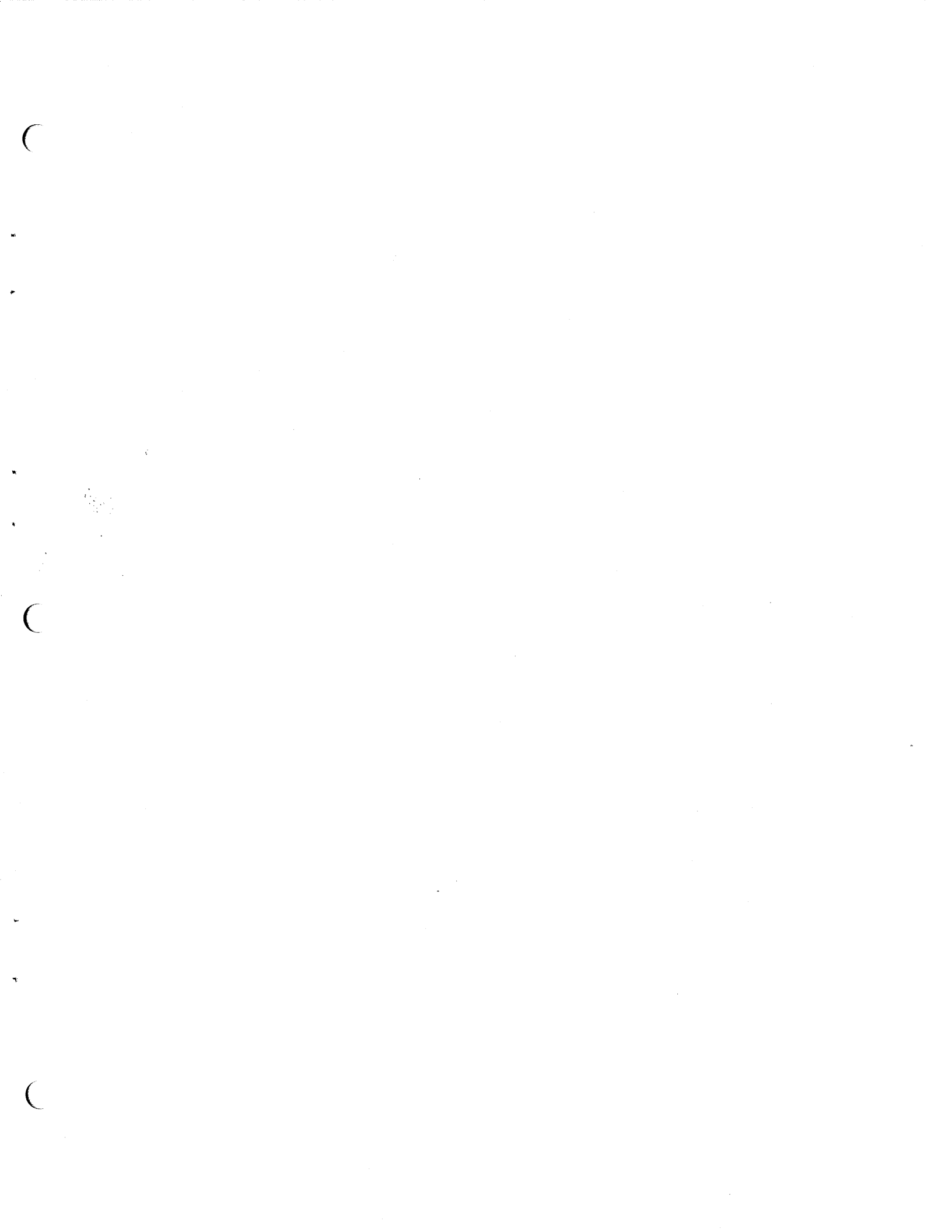
For Serial: G.M. — 5HG101 thru 5HG999, 6HG101 thru 6HG999

TS-6384-P



**WIRING DIAGRAM — ENGINE**  
 For Serial: Cummins — 6HC101 thru 6HC999;  
 G.M. — 7HG101 thru 7HG999

TS-8991-P



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