

MICHIGAN

PARTS MANUAL

No. 1669-R1

MODEL 85A

Series II

TRACTOR SHOVEL

Information contained herein pertains to Machine Serial Numbers listed below:

85A WAUKESHA GAS — 2DA101 thru 2DA999

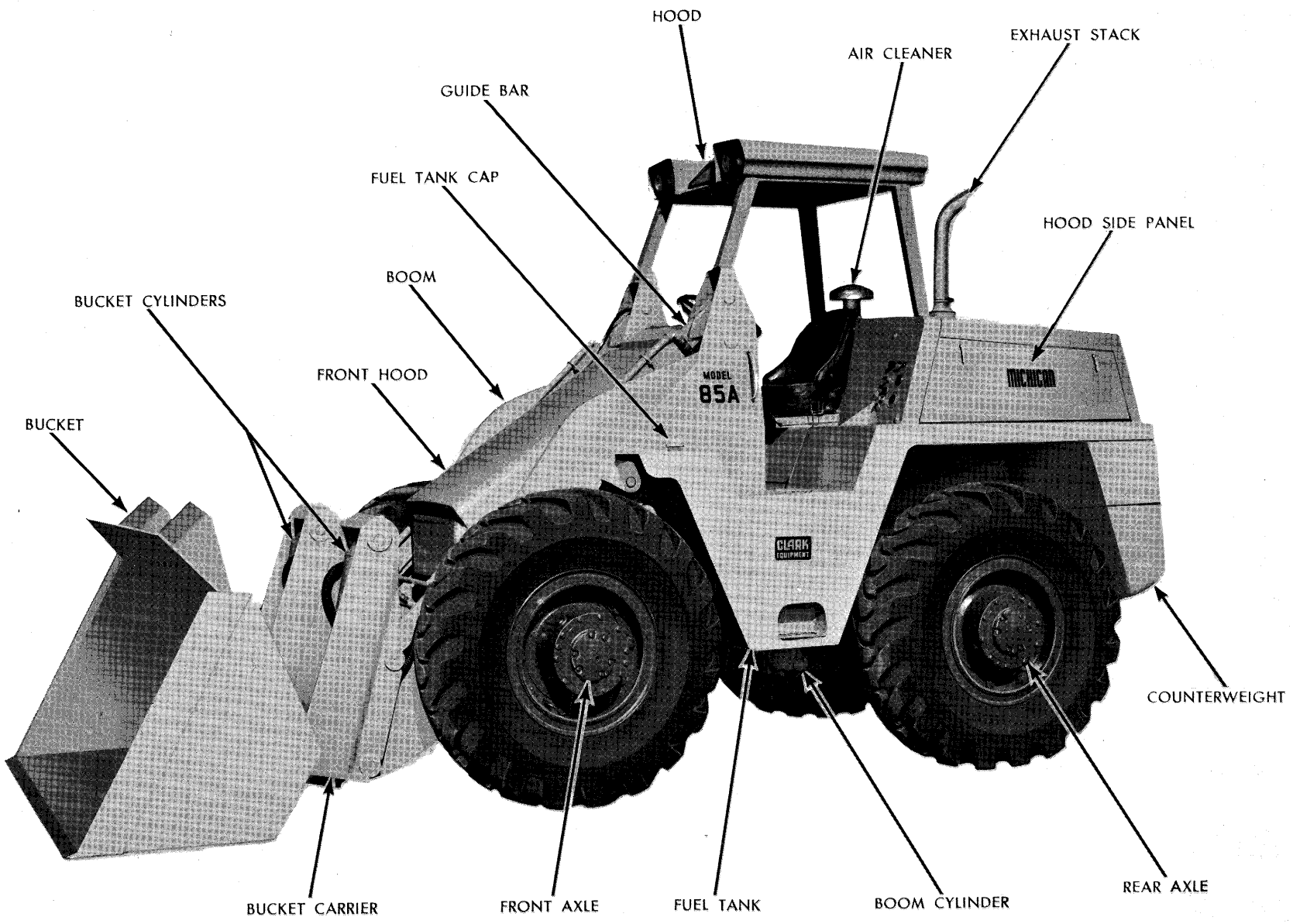
85A CUMMINS — 2DC101 thru 2DC999

85A G.M. — 2DG101 thru 2DG999

Data covering Machine Serial Ranges prefixed with designations 3DA, 4DA, 3DC, 4DC, 3DG, 4DG, etc. and machines powered with optional power plants will be found contained in supplements at rear of this Manual.

Record Your Machine
Serial Number Here

CLARK EQUIPMENT COMPANY



MODEL 85A TRACTOR SHOVEL — SERIES II

TS-3587-P



WHEN ORDERING REPAIR PARTS

To assure the best results and to maintain the original quality built into the machine it is important that genuine "Clark" 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.

INDEX MODEL 85A Series II

A	Page		Page
Accelerator Pedal and Linkage — Cummins	23	Bucket, Carrier and Indicator	9
Accelerator Pedal and Linkage — Gas	25	Bucket Cutting Edges	9
Accelerator Pedal and Linkage — G.M.	24	Bucket Cylinder Assembly	91
Air Cleaner and Muffler — Gas	19	Bucket Leveling Hydraulic System	85
Air Cleaner Assembly — G.M. and Cummins	16	Bucket Leveling Master Cylinder	89
Air Cleaner Connections and Muffler — Cummins	17	Bucket Seat Assembly	14
Air Cleaner Connections and Muffler — G.M.	18	Bucket Teeth Data	9
Air Pressure Sender Unit	63, 65		
Air Reservoir	63, 65	C	
Ammeter	97	Cab and Front Hood Group	13
Axle Assembly — Front Drive	51	Cab Door Kits	13B
Axle Assembly — Rear Drive Steer	53	Cap, Upper Pivot	13
Axle Mounting Parts	6	Carrier, Bucket	9
Axle Tie Rod	60	Cigarette Lighter	95
		Clip Diagram — Cummins	105
B		Clip Diagram — Gas	109
Battery, Battery Box and Horn — Cummins	98	Clip Diagram — G.M.	107
Battery, Battery Box and Horn — Waukesha Gas and G.M.	99	Control Cover, Transmission	37
Battery Cables	103	Control Valve Assembly — Bucket and Boom	93
Boom and Guide Bar	10	Control Valve Levers and Linkage	94
Boom Cylinder Assembly	90	Converter Assembly	43, 44
Brake Assembly — Front	66	Converter Charging Pump	46
Brake Assembly — Parking	70	Counterweight and Grille	7
Brake Assembly — Rear	67	Cradle, Rear Drive Steer Axle	6
Brake Controls	61	Cutting Edges, Bucket	9
Brake Controls — Parking	71	Cylinder, Boom	90
Brake De-Clutch, Valve Assembly	72	Cylinder, Bucket	91
Brake Lines — Cummins	63	Cylinder, Steering	76
Brake Lines — Waukesha Gas and G.M.	65		
Brake Power Cluster	69	D	
Brake Wheel Cylinder	68	Decals	103
Bucket and Boom Control Valve	93	De-Clutch Valve Assembly, Brake	72
Bucket and Boom Hydraulic Pump	84	Differential and Carrier Assembly — Front	55
Bucket and Boom Hydraulic System	87	Differential and Carrier Assembly — Rear	57
		Dipstick, Transmission Oil	49
		Drag Link, Steering	77

E	Page
Engine and Accessories	1
Engine By-Pass Oil Filter — Cummins	5
Engine Controls	23, 24
Engine Hourmeter	97
Engine Mounting Parts — Cummins	2
Engine Mounting Parts — Gas	4
Engine Mounting Parts — G.M.	3
Engine Oil Pressure Sender Unit	1
Engine Temperature Sender Unit	1

F	Page
Fender, Rear	11
Fender, R.H. Front	13
Filter, Engine By-Pass Oil — Cummins	5
Filter, Steering System Oil	79, 81
Filter, Transmission and Converter Oil	49
Flood Lamps	13
Floorboards and Support	15
Frame and Cradle Assembly	6
Front Brake Assembly	66
Front Differential and Carrier Assembly	55
Front Drive Axle Assembly	51
Front Hood	13
Front Instrument Panel	95
Fuel Lines — Cummins	26
Fuel Lines — Waukesha Gas	28
Fuel Lines — G.M.	27
Fuel Sender Unit	29
Fuel Tank	29
Fuses	103

G	Page
Gauge, Clutch Pressure	95
Gauges, Front Instrument Panel	95
Gear Shift Levers and Linkage — Transmission	40
Governor, Air Compressor	63, 65
Grille and Counterweight	7
Guide Bar and Boom	10
Guide Bar Pipes	87

H	Page
Head Lamp Assembly	13
Hood, Front	13
Hood, Rear	11
Horn	98, 99
Hourmeter, Engine	97
Hourmeter Pressure Switch	1
Hydraulic Oil Reservoir	83
Hydraulic Pump — Bucket and Boom	84
Hydraulic Pump — Converter Charging	46
Hydraulic Pump — Steering	46
Hydraulic System — Bucket and Boom	87

Page	Page
Hydraulic System — Bucket Leveling	85
Hydraulic System Steering — Cummins	79
Hydraulic System Steering — Waukesha Gas and G.M.	81
Hydraulic System — Transmission and Torque Converter	49

I	Page
Ignition Switch	97
Indicator, Bucket	9
Instrument Panel, Front	95
Instrument Panel, Side	97

L	Page
Lamp, Flood	13
Leveler Valve, Bucket	89
Lever Assembly, Brake Hand	70
Lighter, Cigarette	95
Light Switch	95
Light, Tail	7

M	Page
Master Cylinder, Bucket Leveling	89
Muffler and Air Cleaner — Gas	19
Muffler and Tail Pipes — Cummins	17
Muffler and Tail Pipes — G.M.	18

P	Page
Panel, Instrument — Front	95
Panel, Instrument — Side	97
Parking Brake Assembly	70
Parking Brake Controls	71
Planet Spider Assembly	58
Power Cluster, Brake	69
Pressure Switch, Hourmeter	1
Pressure Regulator Valve Assembly	45
Pressure Relief Valve, Steering System	82
Propeller Shaft Assemblies	59
Pump, Bucket and Boom	84
Pump, Converter Charging	46
Pump, Steering	46

R	Page
Radiator and Connections — Cummins	20
Radiator and Connections — Gas	22
Radiator and Connections — G.M.	21
Rear Brake Assembly	67
Rear Differential and Carrier Assembly	57
Rear Drive Steer Axle Assembly	53
Rear Fender	11
Rear Hood and Fender Group	11
Relief Valve, Steering Pressure	82
Reservoir, Air	63, 65
Reservoir, Hydraulic Oil	83

S

	Page
Safety and Pressure Regulating Valve	45
Seat and Support Group	14
Sender Unit, Air Pressure	63, 65
Sender Unit, Converter Temperature	49
Sender Unit, Engine Oil Pressure	1
Sender Unit, Engine Temperature	1
Sender Unit, Fuel	29
Side Instrument Panel	97
Starter Push Button	97
Steering Cylinder Assembly	76
Steering Drag Link	77
Steering Gear Assembly	75
Steering Hydraulic Pump	46
Steering Hydraulic System — Cummins	79
Steering Hydraulic System — Waukesha Gas and G.M.	81
Steering Linkage Group	73
Steering System Oil Filter	79, 81
Steering System Pressure Relief Valve	82
Steering Wheel	75
Switch, Hourmeter Pressure	1
Switch, Ignition	97
Switch, Light	95

T

Tail Light	7
Tail Pipes and Muffler	17, 18, 19
Tank, Fuel	29
Teeth, Bucket	9

Page

Tie Rod Assembly	60
Tools	103
Torque Converter Assembly	43, 44
Torque Converter Charging Pump	46
Transmission and Torque Converter Hydraulic System	49
Transmission Assembly	33, 34, 35
Transmission Control Cover	37
Transmission Control Levers and Linkage	39
Transmission Gear Shift Levers and Linkage	40
Transmission Mounting Parts	35
Transmission Oil Dipstick	49

U

Upper Pivot Cap	13
-----------------------	----

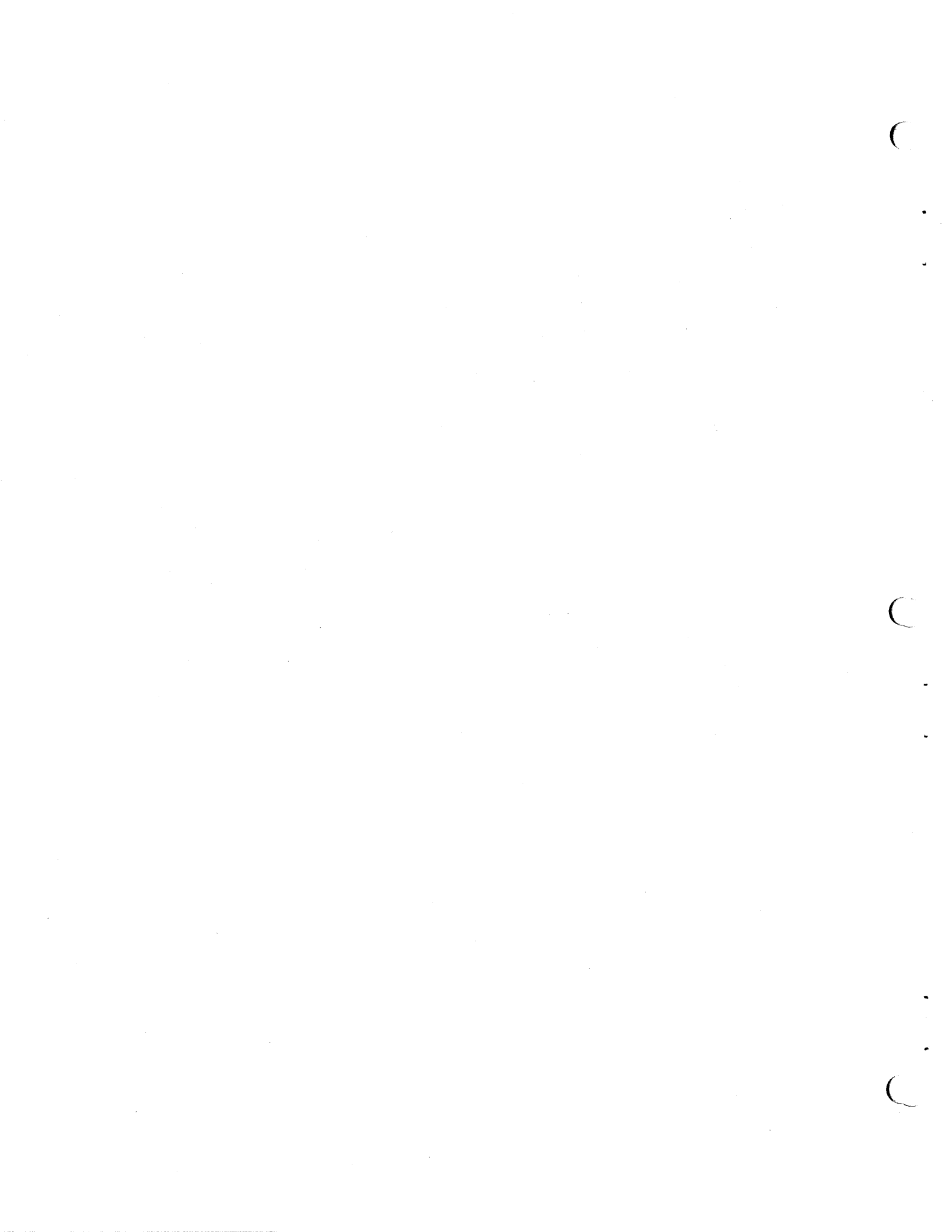
V

Valve Assembly — Brake De-Clutch	72
Valve Assembly, Pressure Regulator	45
Valve, Control — Bucket and Boom	93
Valve Control Levers and Linkage	94
Valve Installation & Parts — 3 Spool	113
Valve, Steering Pressure Relief	82
Voltage Regulator Mounting Bracket	1

W

Wheel and Tire Data	110
Wheel Cylinder	68
Wiring and Battery Cables	103
Wiring Diagram	101, 102

NOTES





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.

Table with 4 columns: Item No., Part No., Description, No. Req'd. listing parts 1-10 for Cummins engine accessories.

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 accessory group type number for the equipment required. This data is stamped on the options and accessories plate on the rocker cover of the engine.

Table with 4 columns: Item No., Part No., Description, No. Req'd. listing parts 11-23 for G.M. engine accessories.

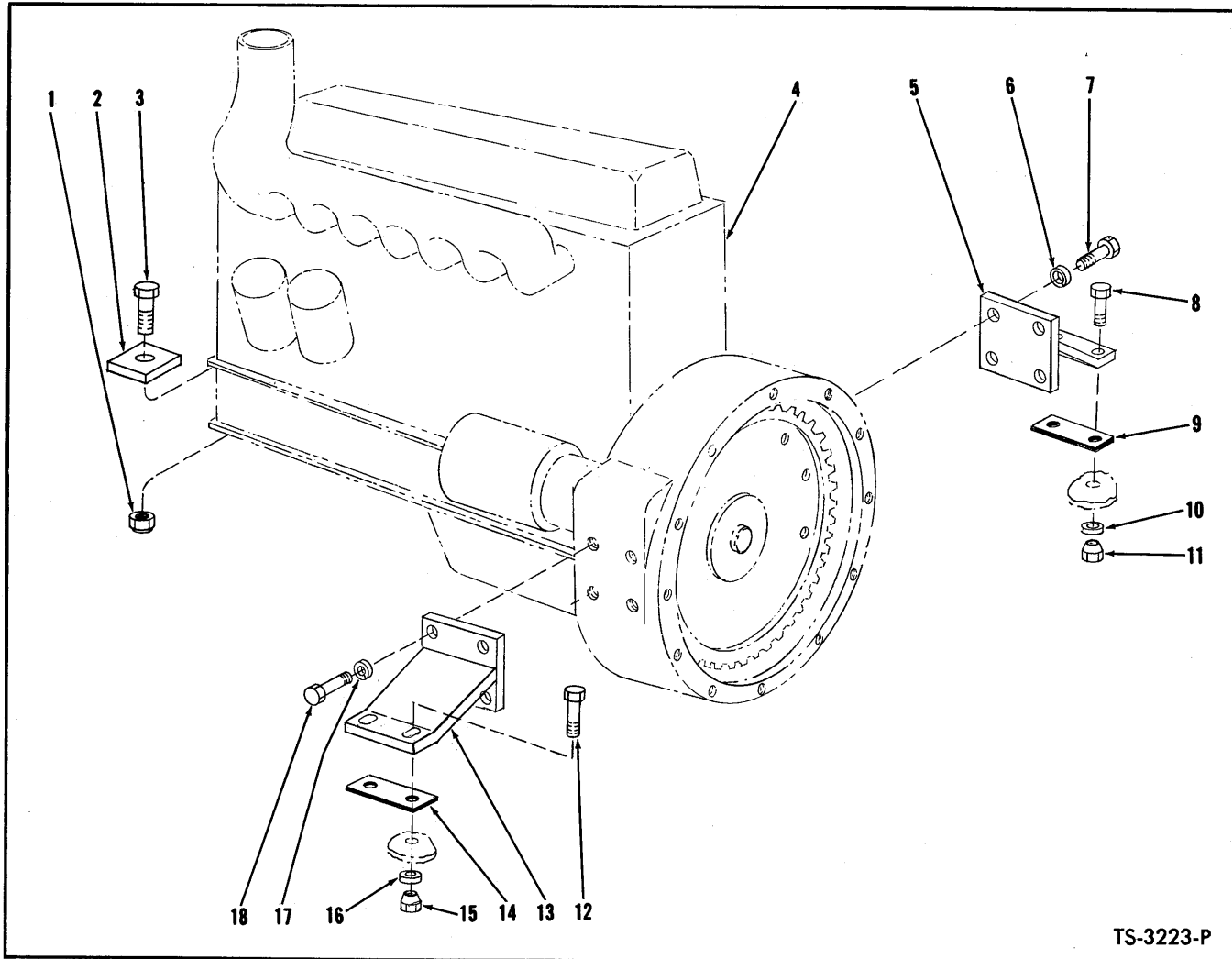
ENGINE AND ACCESSORIES - WAUKESHA GAS

All orders for engine assembly or components thereof should be placed with the nearest Waukesha Motor Co. Distributor. Always give model, specifications and serial number of your engine. This data will be found on nameplate attached to the side of the engine.

Table with 4 columns: Item No., Part No., Description, No. Req'd. listing parts 24-31 for Waukesha Gas engine accessories.

*These parts furnished with engine. See your nearest engine distributor for repair and replacement of same.

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

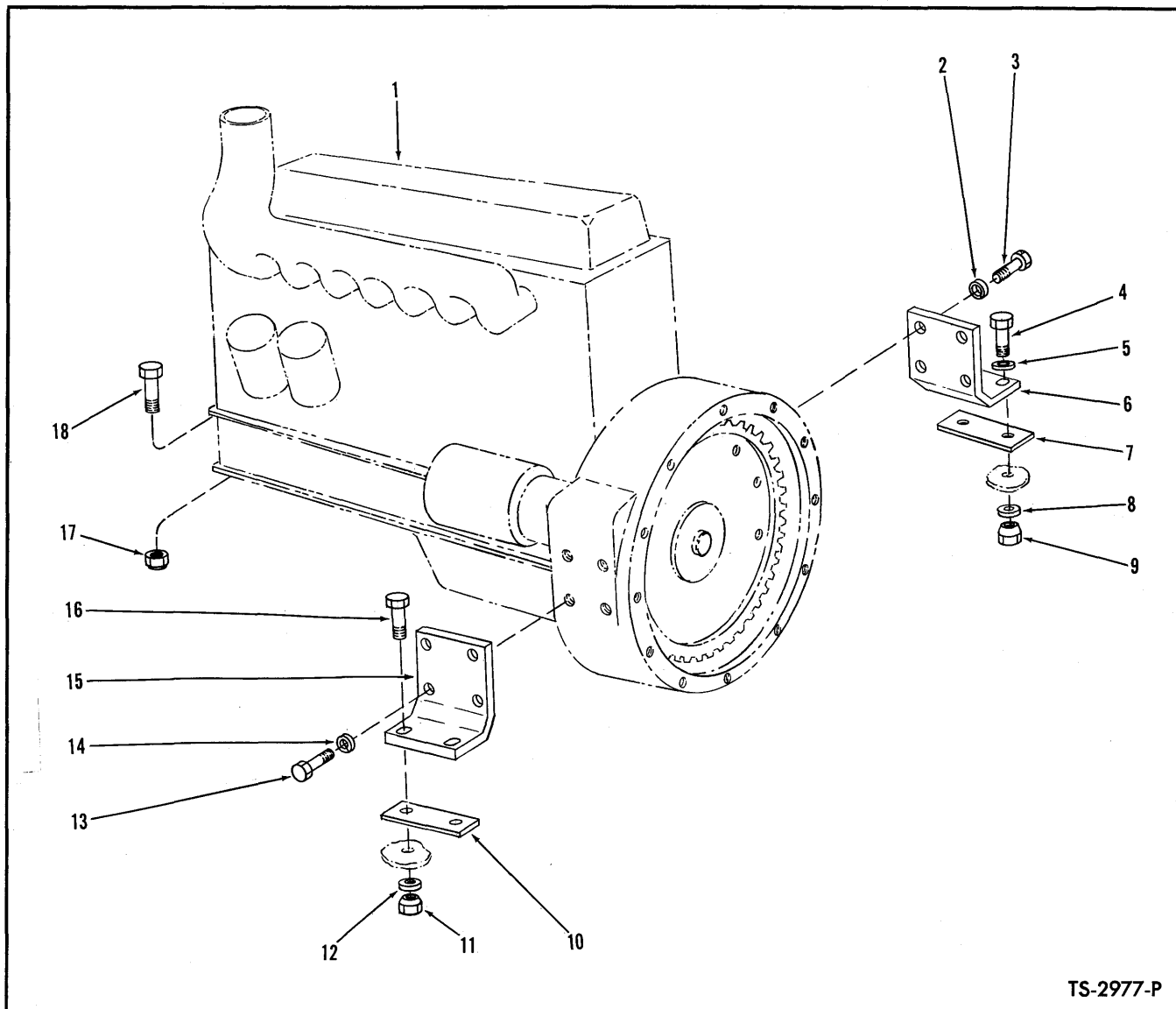


TS-3223-P

ENGINE MOUNTING – CUMMINS

Item No.	Part No.	Description	No. Req'd.
1	18D-10	NUT, Engine Trunnion to Frame	2
2	527350	BLOCK, Trunnion to Frame	2
3	18C-1052	BOLT, Engine Trunnion to Frame	2
4	-----	ENGINE — See Engine Parts Manual	—
5	546705	SUPPORT, L.H. Engine	1
6	4E-08	LKWSHR, Support to Engine	4
7	17C-820	BOLT, Support to Engine	4
8	18C-832	BOLT, Support to Frame	2
9	536746	PAD, Support to Frame	1
10	71D-08	BASE, Support to Frame Nut	2
11	70D-08	NUT, Support to Frame	2
12	18C-832	BOLT, Support to Frame	2
13	546706	SUPPORT, R.H. Engine	1
14	536746	PAD, Support to Frame	1
15	70D-08	NUT, Support to Frame	2
16	71D-08	BASE, Support to Frame Nut	2
17	4E-08	LKWSHR, Support to Engine	4
18	17C-820	BOLT, Support to Engine	4

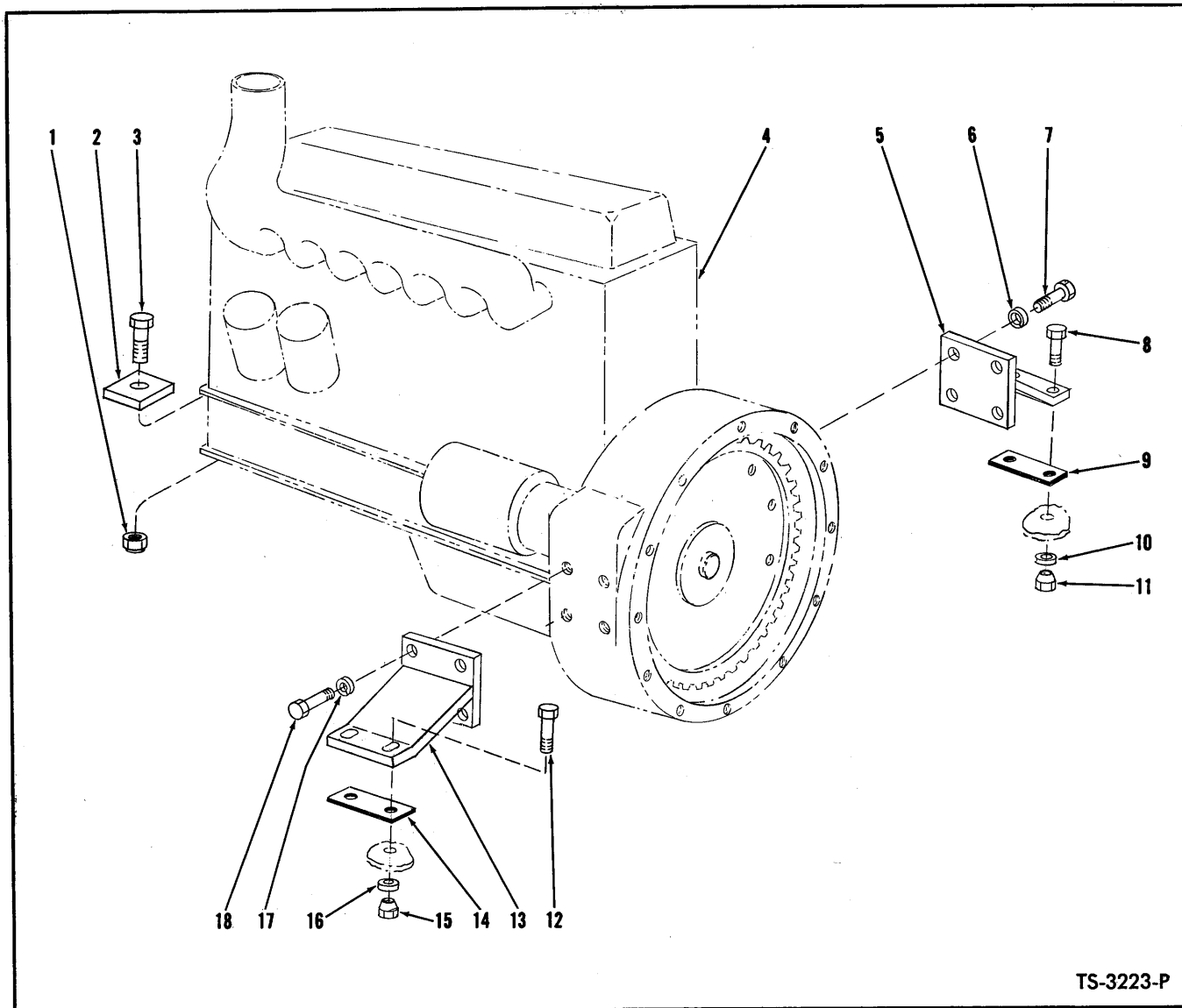
WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE



ENGINE MOUNTING PARTS — G.M.

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	—	ENGINE — See Engine Parts Manual	—	10	536746	PAD, Support	1
2	4E-08	LKWSHR, Support to Engine	4	11	70D-08	NUT, Support to Frame	2
3	17C-824	BOLT, Support to Engine	4	12	71D-08	BASE, Support to Frame Nut	2
4	18C-832	BOLT, Support to Frame	2	13	17C-824	BOLT, Support to Engine	4
5	619029	WASHER, L. H. Support to Frame	2	14	4E-08	LKWSHR, Support to Engine	4
6	540230	SUPPORT, Engine — L. H.	1	15	540229	SUPPORT, Engine — R. H.	1
7	536746	PAD, Support	1	16	18C-832	BOLT, Support to Frame	2
8	71D-08	BASE, Support to Frame Nut	2	17	18D-08	NUT, Front Engine to Frame	2
9	70D-08	NUT, Support to Frame	2	18	18C-828	BOLT, Front Engine to Frame	2

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

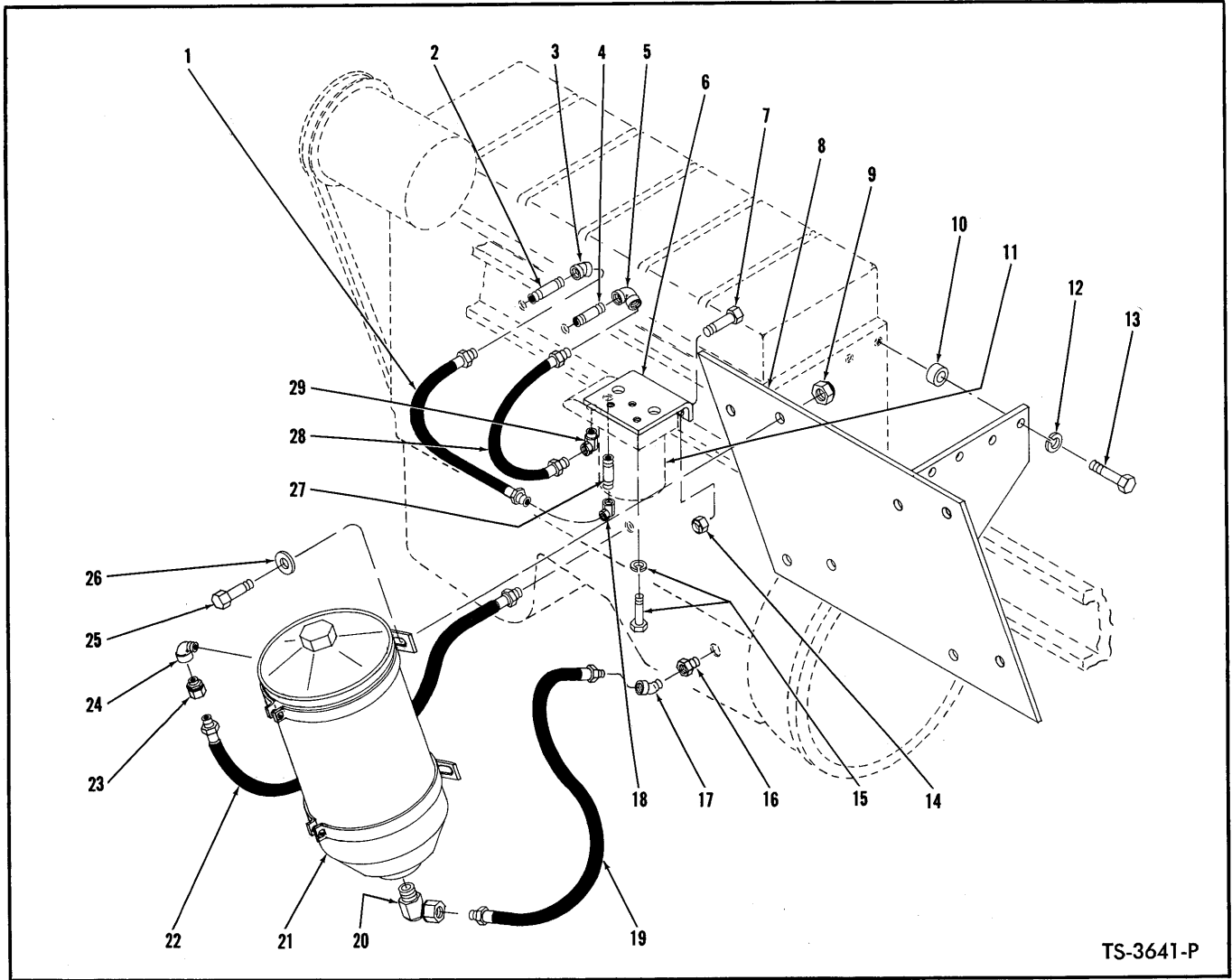


TS-3223-P

ENGINE MOUNTING PARTS — GAS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18D-08	NUT, Engine Trunnion to Frame	2	10	71D-08	BASE, Support to Frame Nut	2
2	594235	BLOCK, Trunnion to Frame	2	11	70D-08	NUT, Support to Frame	2
3	18C-848	BOLT, Engine Trunnion to Frame	2	12	18C-836	BOLT, Support to Frame	2
4	—	ENGINE—See Engine Parts Manual	—	13	543909	SUPPORT, R. H. Engine	1
5	543910	SUPPORT, L. H. Engine	1	14	536746	PAD, Support to Frame	1
6	4E-08	LKWSHR, Support to Engine	4	15	70D-08	NUT, Support to Frame	2
7	17C-820	BOLT, Support to Engine	4	16	71D-08	BASE, Support to Frame Nut	2
8	18C-836	BOLT, Support to Frame	2	17	4E-08	LKWSHR, Support to Engine	4
9	536746	PAD, Support to Frame	1	18	17C-820	BOLT, Support to Engine	4

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



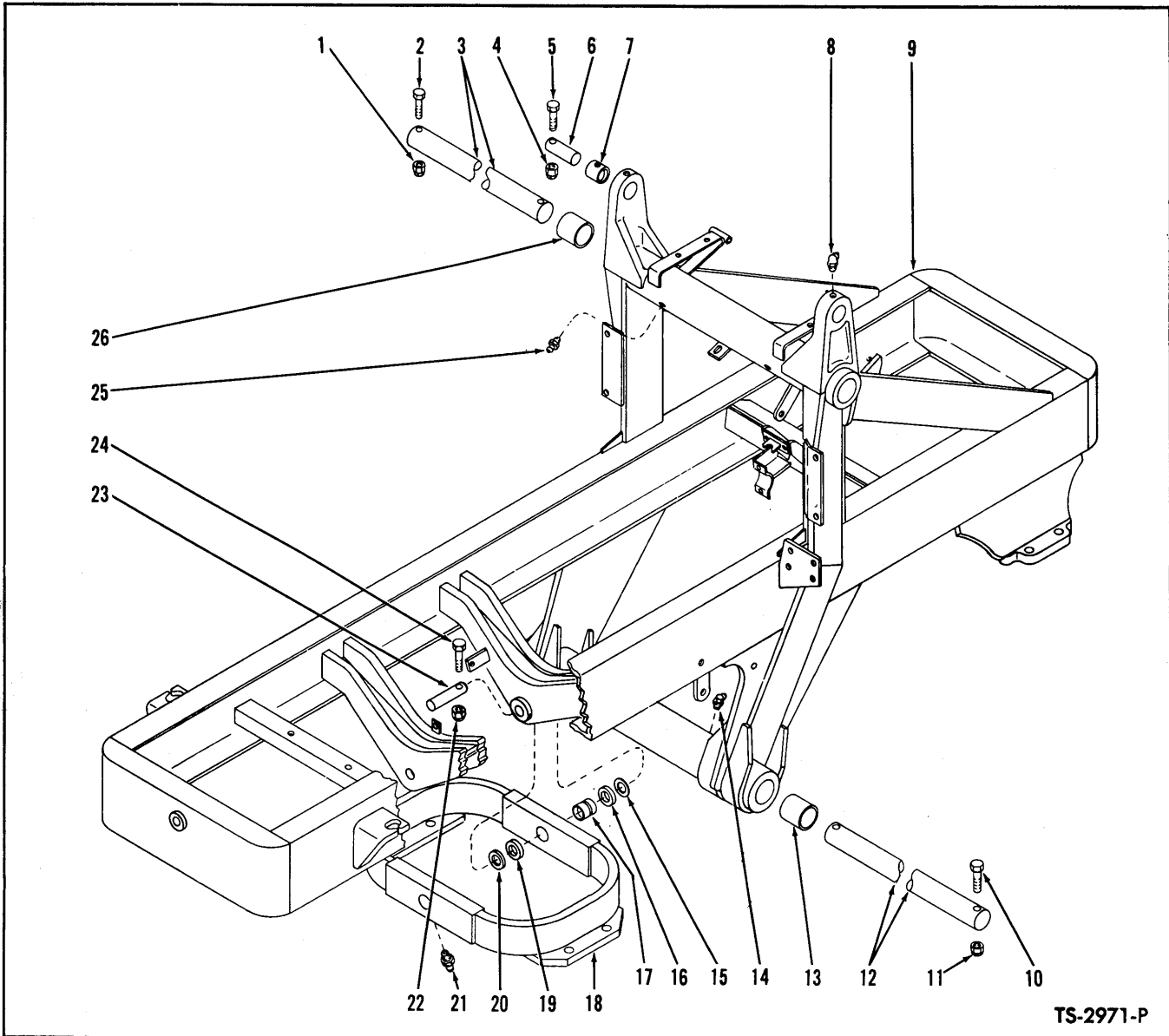
TS-3641-P

ENGINE OIL FILTER – CUMMINS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	548424	HOSE, Filter to Engine	1	15A	4E-07	LKWSHR, Filter to Bracket	3
2	5K-612	NIPPLE	1	16	356615	BUSHING, Reducing	1
3	23F-5	ELBOW	1	17	25F-2	ELBOW	1
4	5K-612	NIPPLE	1	18	32F-5	ADAPTER UNION	1
5	24F-5	ELBOW	1	19	624457	HOSE, Filter Return	1
6	547463	BRACKET, Lube Filter	1	20	33F-2	ADAPTER UNION	1
7	18C-632	BOLT, Bracket to Frame	2	21	524526	FILTER ASSY, By-Pass Oil (Inc. 21A)	1
8	547518	BRACKET, By-Pass Filter	1	21A	943954	†CARTRIDGE KIT	1
9	18D-05	NUT, Filter to Bracket	4	22	539981	HOSE, Filter Inlet	1
10	546642	SPACER, Bracket to Engine	2	23	672758	ADAPTER UNION	1
11	-----	FILTER, Lube Oil — Furnished with Engine	1	24	26F-2	ELBOW, Hose to Filter	1
12	4E-08	LKWSHR, Bracket to Engine	2	25	18C-516	BOLT, Filter to Bracket	4
13	17C-824	BOLT, Bracket to Engine	2	26	619019	WASHER, Filter to Bracket	4
14	18D-06	NUT, Bracket to Frame	2	27	5K-628	NIPPLE, Filter	1
15	17C-716	BOLT, Filter to Bracket	3	28	536513	HOSE	1
				29	31F-5	ADAPTER UNION	1

†Not Illustrated

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



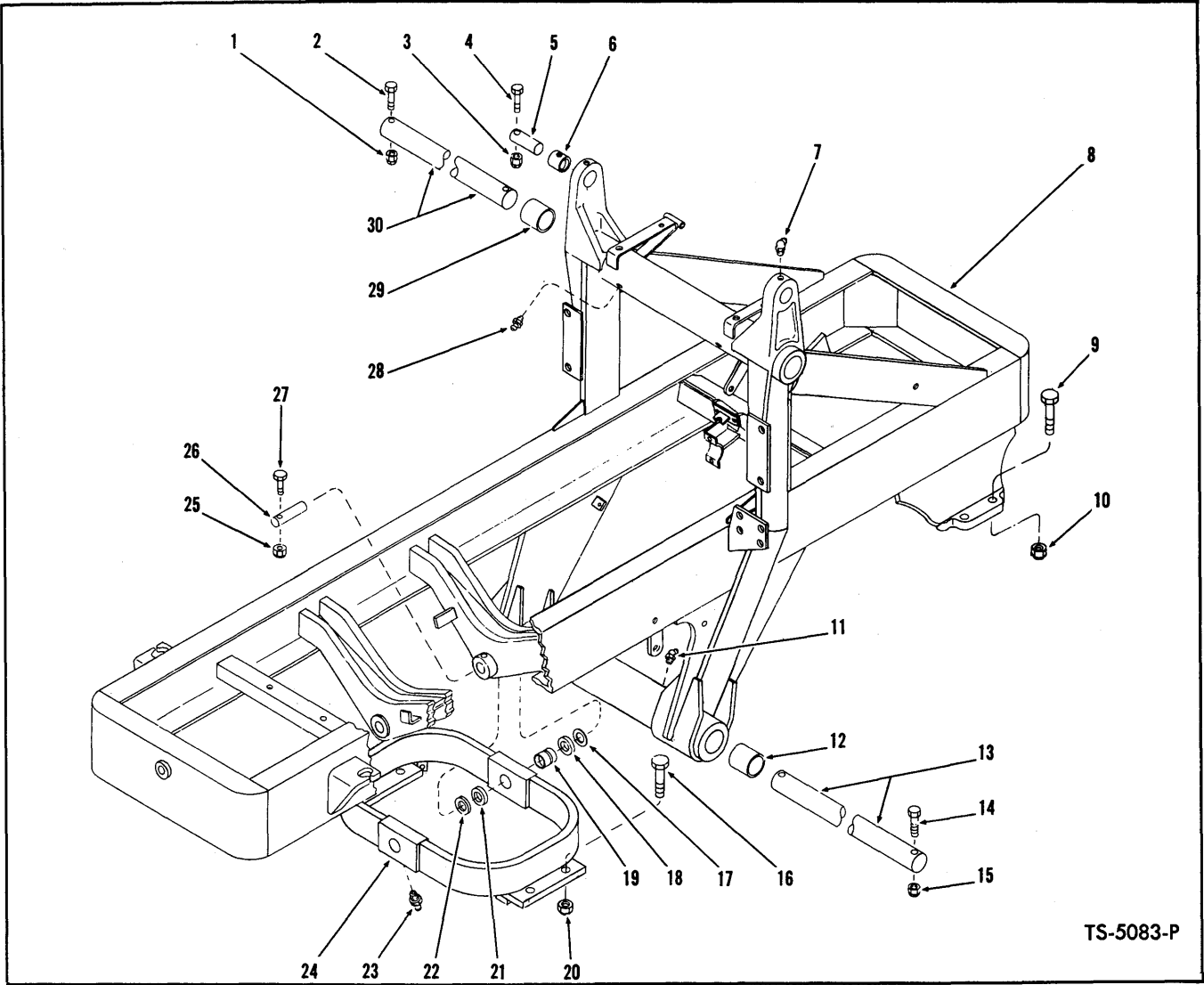
TS-2971-P

FRAME AND CRADLE ASSEMBLY
For Serial: Cummins — 2DC101 thru 3DC999
G.M. — 2DG101 thru 4DG999
Wauk. — 2DA101 and after, C3DA9-1 thru C3DA9-24

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18D-08	NUT, Shaft Retaining Bolt	2	12	537823	SHAFT, Cylinder Pivot	1
2	18C-880	BOLT, Shaft Retaining	2	13	538599	BUSHING, Pivot Tube	2
3	571022	SHAFT, Boom Pivot	1	14	10H-25	FITTING, Pivot Shaft Grease	2
4	18D-08	NUT, Pin Retaining Bolt	2	15	551348	‡WASHER, Cradle to Frame—1/16"	—
5	18C-872	BOLT, Pin Retaining	2	16	551347	‡WASHER, Cradle to Frame—1/8"	—
6	550188	PIN, Guide Bar to Frame	2	17	538585	BUSHING, Cradle	2
7	537802	BUSHING, Guide Bar	2	18	536104	CRADLE ASSY, Rear Axle (Inc. 17)	1
8	12H-25	FITTING, Guide Bar Grease	2	19	551347	‡WASHER, Cradle to Frame—1/8"	—
9		FRAME ASSY (Inc. 7, 13, 26)		20	551348	‡WASHER, Cradle to Frame—1/16"	—
9A	537790	For Waukesha Gas & Cummins Powered Machines	1	21	10H-25	FITTING, Cradle Grease	2
9B	540236	For G.M. Powered Machines	1	22	18D-08	NUT, Pin Retaining Bolt	2
10	18C-1080	BOLT, Shaft Retaining	2	23	536100	PIN, Cradle to Frame	2
11	18D-10	NUT, Shaft Retaining Bolt	2	24	18C-856	BOLT, Pin Retaining	2
				25	10H-25	FITTING, Boom Pivot Shaft Grease	2
				26	538599	BUSHING, Boom Pivot	2

‡As Required

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



TS-5083-P

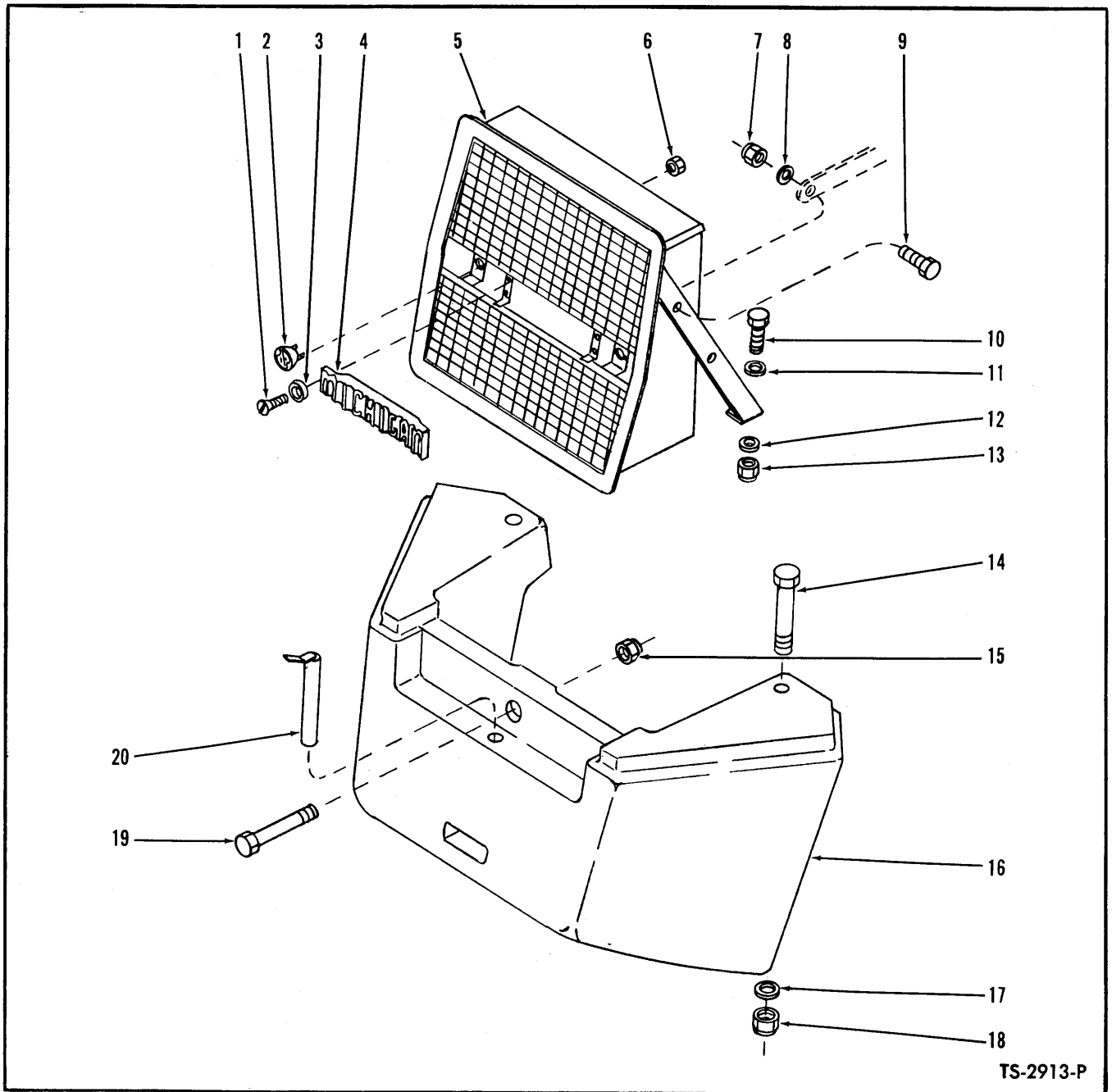
FRAME AND CRADLE ASSEMBLY
For Serial: Cummins — 4DC101 and after
G.M. — 5DG101 and after
Wauk. — C3DA9-25 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18D-08	NUT, Shaft Retaining Bolt	2	14	18C-1080	BOLT, Shaft Retaining	2
2	18C-880	BOLT, Shaft Retaining	2	15	18D-10	NUT, Shaft Retaining Bolt	2
3	18D-08	NUT, Pin Retaining Bolt	2	16	24C-16152	BOLT, Axle to Cradle	8
4	18C-872	BOLT, Pin Retaining	2	17	551348	‡WASHER, Cradle to Frame — 1/16"	—
5	550188	PIN, Guide Bar to Frame	2	18	551347	‡WASHER, Cradle to Frame — 1/8"	—
6	537802	BUSHING, Guide Bar	2	19	538585	BUSHING, Cradle	2
7	12H-25	FITTING, Guide Bar Grease	2	20	68D-16	NUT, Axle to Cradle	8
8		FRAME ASSY (Inc. 6, 12, 29)		21	551347	‡WASHER, Cradle to Frame — 1/8"	—
8A	537790	For Cummins Powered Machines & Waukesha Gas	1	22	551348	‡WASHER, Cradle to Frame — 1/16"	—
8B	588525	For G.M. Powered Machines	1	23	10H-25	FITTING, Cradle Grease	2
9	24C-16160	BOLT, Front Axle to Frame	8	24	566746	CRADLE ASSY, Rear Axle (Inc. 19) ..	1
10	68D-16	NUT, Front Axle to Frame	8	25	18D-08	NUT, Pin Retaining Bolt	2
11	12H-15	FITTING, Lower Pivot Shaft Grease ..	2	26	536100	PIN, Cradle to Frame	2
12	538599	BUSHING, Lower Pivot Tube	2	27	18C-856	BOLT, Pin Retaining	2
13	537823	SHAFT, Lower Pivot Cylinder	1	28	10H-25	FITTING, Upper Pivot (Shaft Grease) ..	2
				29	538599	BUSHING, Upper Boom Pivot Tube	2
				30	571022	SHAFT, Upper Boom Pivot	1

‡As Required

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



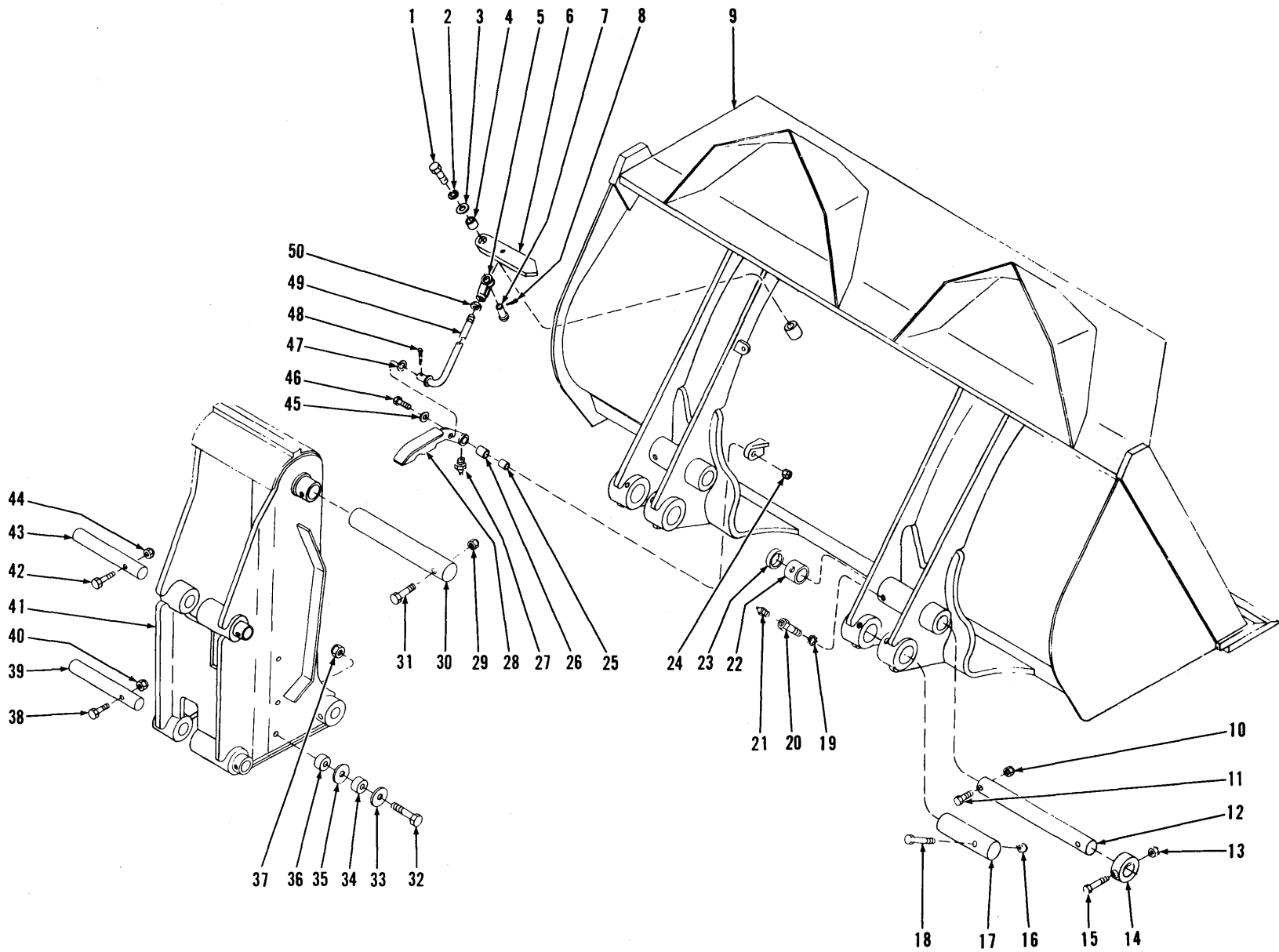


TS-2913-P

COUNTERWEIGHT AND GRILLE

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	7G-418	SCREW, Name Plate to Grille	4	12	71D-08	BASE, Grille to Frame Nut	4
2	5203855	TAIL LIGHT	2	13	70D-08	NUT, Grille to Frame	4
3	20E-04	LKWSHR, Name Plate to Grille	4	14	24C-1288	BOLT, Counterweight to Frame - Side	2
4	535649	NAME PLATE, Grille	1	15	68D-16	NUT, Counterweight to Frame - Rear	1
5	538965	GRILLE, Radiator	1	16	587518	COUNTERWEIGHT	1
6	17D-1	NUT, Tail Light to Grille	4	17	588187	WASHER, Counterweight to Frame - Side	2
7	18D-06	NUT, Radiator Clip to Grille	2	18	68D-12	NUT, Counterweight to Frame - Side	2
8	619023	WASHER, Radiator Clip to Grille	2	19	24C-1688	BOLT, Counterweight to Frame - Rear	1
9	18C-618	BOLT, Radiator Clip to Grille	2	20	538201	PIN, Drawbar	1
10	18C-828	BOLT, Grille to Frame	4				
11	619029	WASHER, Grille to Frame	4				

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



8.1

PM 1669

CARRIER, BUCKET AND INDICATOR

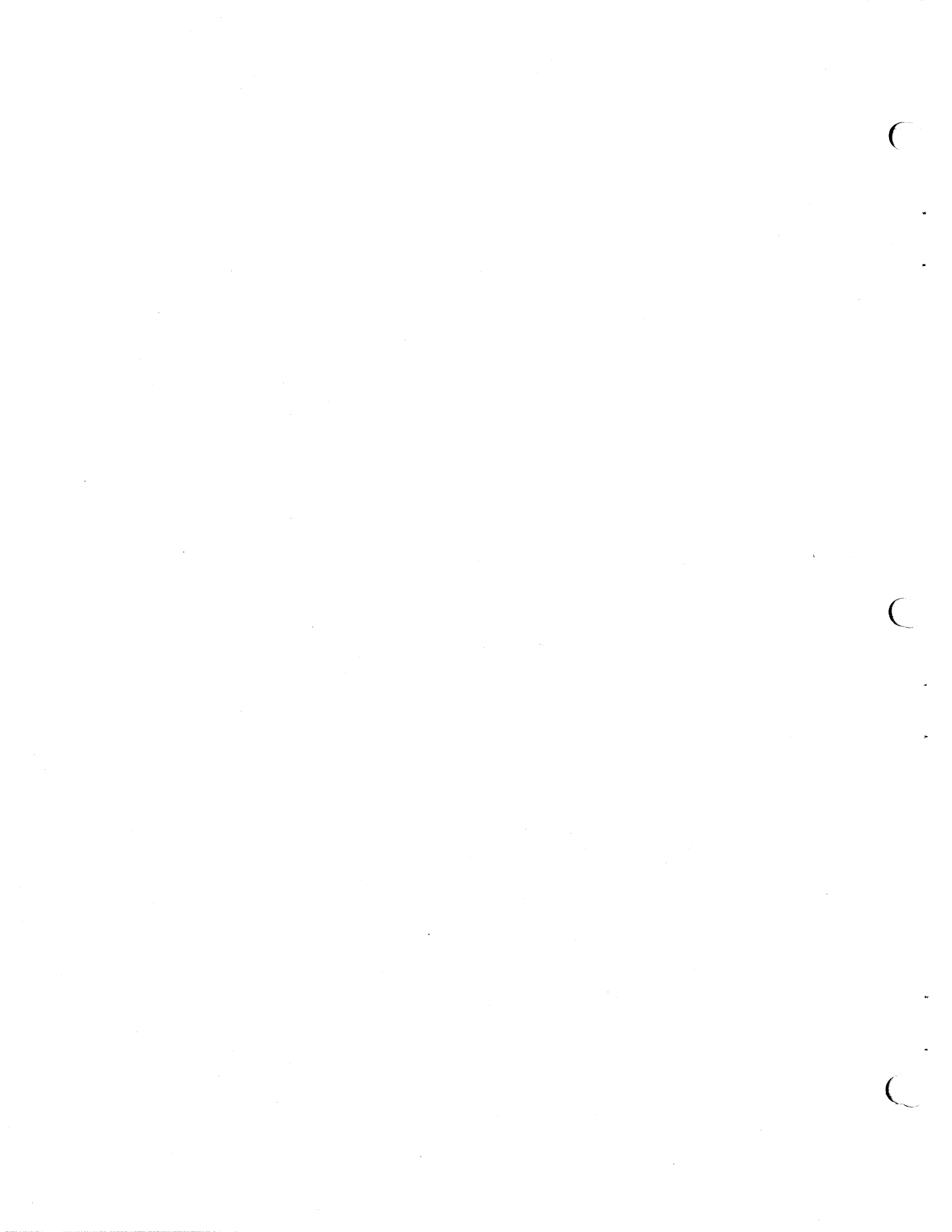
TS-4518

CARRIER, BUCKET AND INDICATOR

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18C-820	BOLT, Pointer to Bucket	1	27	12H-15	FITTING, Indicator Cam Grease	1
2	4E-08	LKWSHR, Pointer to Bucket	1	28	557076	*CAM, Indicator	1
3	619029	WASHER, Pointer to Bucket	1	29	18D-08	NUT, Pin Retaining	2
4	541730	**SLEEVE, Pointer to Bucket	1	30		<i>PIN, Carrier to Cylinder</i>	
5	2J-8300	CLEVIS, Rod to Pointer	1	30A	538011	For Serial: Waukesha—2DA101 thru 2DA999, 3DA101 thru 3DA999; Cummins—2DC101 thru 2DC999, 3DC101 thru 3DC999; G.M.—2DG101 thru 2DG999, 3DG101 thru 3DG999	2
6	557156	**POINTER, Indicator	1	30B	589097	For Serial: Waukesha—4DA101 & thereafter; Cummins—4DC101 & thereafter; G.M.—4DG101 & thereafter	2
7	4F-08127	PIN, Clevis to Pointer	1	31	18C-872	BOLT, Pin Retaining	2
8	1F-418	COTTER, Clevis Pin	1	32		**BOLT, Tube to Carrier Assy	
9	-----	BUCKET (Inc. 19, 20, 22) See Chart Below	1	32A	18C-1072	For Serial: Waukesha—2DA101 thru 2DA999, 3DA101 thru 3DA110; Cummins—2DC101 thru 2DC999, 3DC101 thru 3DC105; G.M.—2DG101 thru 2DG999, 3DG101 thru 3DG134	1
10		<i>NUT, Pin Retaining Bolt</i>		32B	18C-1068	**For Serial: Waukesha—3DA111 & thereafter; Cummins—3DC106 & thereafter; G.M.—3DG135 & thereafter	1
10A	18D-10	For Serial: Waukesha—2DA101 thru 2DA999, 3DA101 thru 3DA999; Cummins—2DC101 thru 2DC999, 3DC101 thru 3DC999; G.M.—2DG101 thru 2DG999, 3DG101 thru 3DG999	2	33	557084	**SPACER, Tube to Carrier	
10B	18D-12	For Serial: Waukesha—4DA101 & thereafter; Cummins—4DC101 & thereafter; G.M.—4DG101 & thereafter	2			For Serial: Waukesha—3DA111 & thereafter; Cummins—3DC106 & thereafter; G.M.—3DG135 & thereafter	1
11	18C-1080	BOLT, Pin Retaining	2	34		**TUBE, Cam Follower	
12	532416	PIN, Carrier to Bucket	2	34A	551523	**For Serial: Waukesha—2DA101 thru 2DA999, 3DA101 thru 3DA110; Cummins—2DC101 thru 2DC999, 3DC101 thru 3DC105; G.M.—2DG101 thru 2DG999, 3DG101 thru 3DG134	1
13	18D-10	NUT, Locking Collar Retaining	2	34B	557085	**For Serial: Waukesha—3DA111 & thereafter; Cummins—3DC106 & thereafter; G.M.—3DG135 & thereafter	1
14		<i>COLLAR, Pin Locking</i>		35	557084	**SPACER, Tube to Carrier	
14A	532302	For Serial: Waukesha—2DA101 thru 2DA999, 3DA101 thru 3DA999; Cummins—2DC101 thru 2DC999, 3DC101 thru 3DC999; G.M.—2DG101 thru 2DG999, 3DG101 thru 3DG999	2			For Serial: Waukesha—3DA111 & thereafter; Cummins—3DC106 & thereafter; G.M.—3DG135 & thereafter	1
14B	587715	For Serial: Waukesha—4DA101 & thereafter; Cummins—4DC101 & thereafter; G.M.—4DG101 & thereafter	2	36	557085	**TUBE, Cam Follower	
15	18C-1080	BOLT, Locking Collar Retaining	2			For Serial: Waukesha—3DA111 & thereafter; Cummins—3DC106 & thereafter; G.M.—3DG135 & thereafter	1
16	18D-08	NUT, Pin Retaining Bolt	2	37	18D-10	NUT, Tube to Carrier Assy Retaining	1
17	538010	PIN, Cylinder to Bucket	2	38		<i>BOLT, Pin Retaining</i>	
18	18C-872	BOLT, Pin Retaining	2	38A	18C-848	For Serial: Waukesha—2DA101 thru 2DA999, 3DA101 thru 3DA999; Cummins—2DC101 thru 2DC999, 3DC101 thru 3DC999; G.M.—2DG101 thru 2DG999, 3DG101 thru 3DG999	2
19	7E-08	LKWSHR, Grease Fitting Bolt	4	38B	18C-864	For Serial: Waukesha—4DA101 & thereafter; Cummins—4DC101 & thereafter; G.M.—4DG101 & thereafter	2
20	532118	BOLT, Grease Fitting	4				
21	10H-35	FITTING, Bucket Grease	4				
22	540406	BUSHING, Bucket	4				
23	532378	SEAL, Dust	4				
24	18D-08	NUT, Cam to Bucket	1				
25		**SLEEVE, Cam Retaining Bolt					
25A	543406	For Serial: Waukesha—2DA101 thru 2DA999, 3DA101 thru 3DA110; Cummins—2DC101 thru 2DC999, 3DC101 thru 3DC105; G.M.—2DG101 thru 2DG999, 3DG101 thru 3DG134	1				
25B	550646	**For Serial: Waukesha—3DA111 & thereafter; Cummins—3DC106 & thereafter; G.M.—3DG135 & thereafter	1				
26	526767	**BUSHING, Cam					
		For Serial: Waukesha—3DA111 & thereafter; Cummins—3DC106 & thereafter; G.M.—3DG135 & thereafter	1				

*NOTE: When replacement is necessary for Items 28 or 49 on Machine Serial: Waukesha—2DA101 thru 2DA999, 3DA101 thru 3DA110; Cummins—2DC101 thru 2DC999, 3DC101 thru 3DC105; G.M.—2DG101 thru 2DG999, 3DG101 thru 3DG134, both items have to be replaced at the same time, plus all items marked with a double asterisk (**). Item 49, select rod that is applicable to your bucket.

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



CARRIER, BUCKET AND INDICATOR (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
39		<i>PIN, Carrier to Guide Bar & Boom</i>				2DA999, 3DA101 thru 3DA999;	
39A 537702		For Serial: Waukesha — 2DA101 thru 2DA999, 3DA101 thru 3DA999; Cummins — 2DC101 thru 2DC999, 3DC101 thru 3DC999; G.M. — 2DG101 thru 2DG999, 3DG101 thru 3DG999	2			Cummins — 2DC101 thru 2DC999, 3DC101 thru 3DC999; G.M. — 2DG101 thru 2DG999, 3DG101 thru 3DG999	2
39B 589098		For Serial: Waukesha—4DA101 & thereafter; Cummins — 4DC101 & thereafter; G.M. — 4DG101 & thereafter	2	43B 589098		For Serial: Waukesha—4DA101 & thereafter; Cummins — 4DC101 & thereafter; G.M. — 4DG101 & thereafter	2
40 18D-08		NUT, Pin Retaining	2	44 18D-08		NUT, Pin Retaining Bolt	2
41 589095	***	CARRIER, Bucket — L.H.	1	45 616796		WASHER, Cam to Bucket	1
41A 589093	***†	CARRIER, Bucket — R.H.	1	46 18C-844	**	BOLT, Cam to Bucket	1
42		<i>BOLT, Pin Retaining</i>		47 550665	**	WASHER, Rod	
42A 18C-848		For Serial: Waukesha — 2DA101 thru 2DA999, 3DA101 thru 3DA999; Cummins — 2DC101 thru 2DC999, 3DC101 thru 3DC999; G.M. — 2DG101 thru 2DG999, 3DG101 thru 3DG999	2			For Serial: Waukesha—3DA111 & thereafter; Cummins — 3DC106 & thereafter; G.M. — 3DG135 & thereafter	1
42B 18C-864		For Serial: Waukesha—4DA101 & thereafter; Cummins — 4DC101 & thereafter; G.M. — 4DG101 & thereafter	2	48 1F-418	**	COTTER, Rod to Cam Clevis Pin	
43		<i>PIN, Carrier to Guide Bar & Boom</i>				For Serial: Waukesha—3DA111 & thereafter; Cummins — 3DC106 & thereafter; G.M.—3DG135 & thereafter	1
43A 537702		For Serial: Waukesha — 2DA101 thru		49		<i>ROD, Pointer to Indicator Cam</i>	
				49A 557184		For 545731 Bucket	1
				49B 557161		For 537586, 545617, 545599 Bucket	1
				50 8D-08		NUT, Clevis Jam	1

BUCKET ASSEMBLY DATA

BUCKET			MAIN CUTTING EDGE			SIDE CUTTING EDGE			
Width	Capacity	Part No.	Part No.	Size	Approx. Wt.	R.H. Part No.	L.H. Part No.	Size	Weight
81½"	1¼ cu. yd.	545731	545734	1 x 9 x 82¼	183	*545738	*545739	¾ x 6 x 36⅞	40
91½"	1¾ cu. yd.	537586	531969	1 x 9 x 92¼	206	*537591	*537592	¾ x 6 x 43¼	44
99½"	2 cu. yd.	545617	545620	1 x 9 x 100¼	224	*545624	*545625	¾ x 6 x 42⅞	44
111½"	2¾ cu. yd.	545599	545602	1 x 9 x 112¼	250	*545606	*545607	¾ x 6 x 49⅞	51

*NOTE: ¾" x 6" x 10" segments are available for above side cutting edges, 548970—R.H. and 548971—L.H.—Approximate weight 10 lbs

BUCKET TEETH DATA

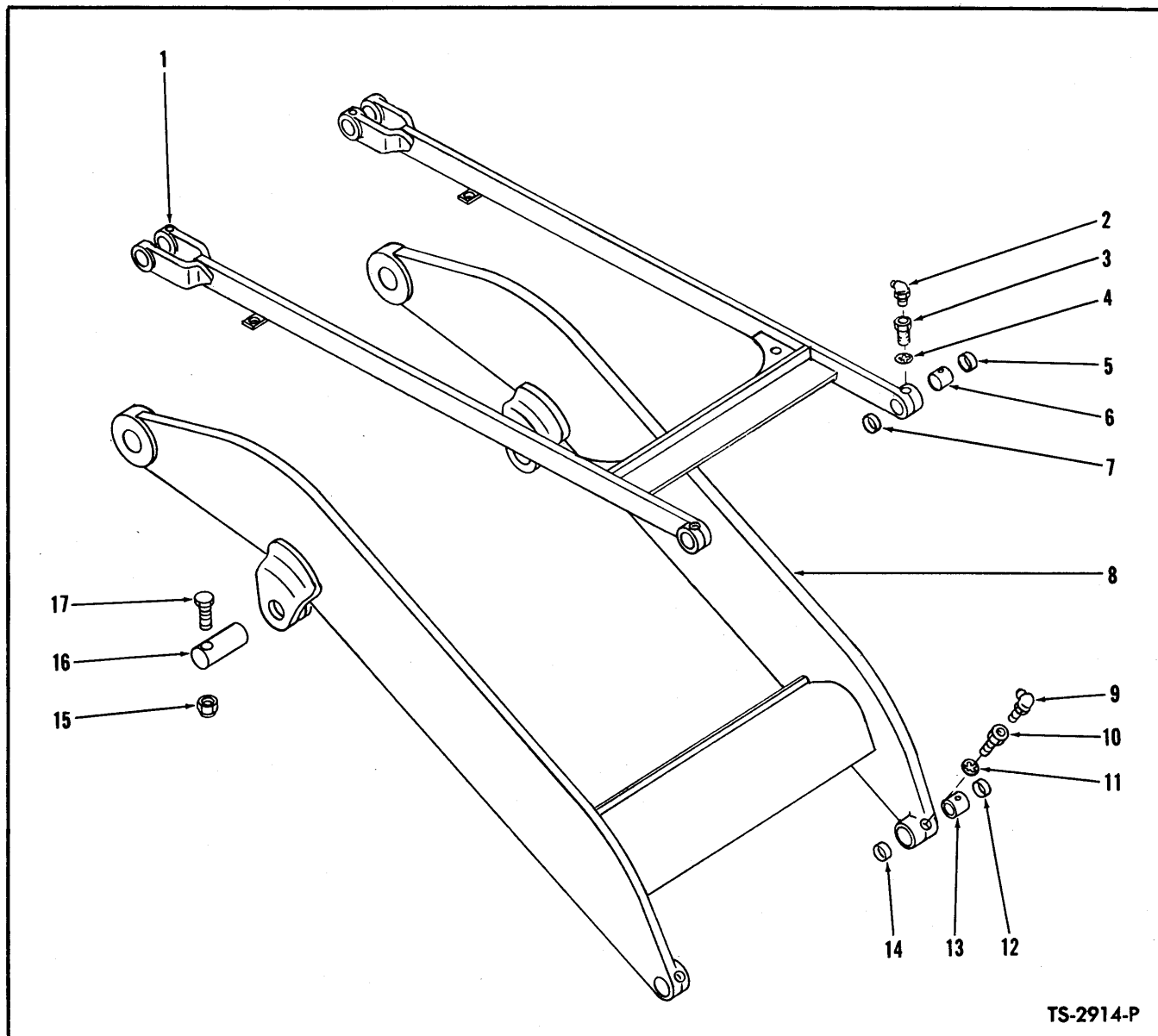
Bucket Width	One Piece Tooth No.	Replaceable Tip Tooth No.	No. Req'd.	Replaceable Tip No.	Replaceable Tip Pin No.
81½	552154	529968	8	529970	529971
91½	552154	529968	9	529970	529971
99½	552154	529968	9	529970	529971
111½	552154	529968	10	529970	529971

***NOTE: When 589095 or 589093 Carrier is installed on machine serial number: Waukesha — 2DA101 thru 2DA999, 3DA101 thru 3DA999; Cummins — 2DC101 thru 2DC999, 3DC101 thru 3DC999; G.M. — 2DG101 thru 2DG999, 3DG101 thru 3DG999, the following items must also be used:

- | | | | |
|-------------|----------------|--------------|------|
| 1 — 587715 | LOCKING COLLAR | 3 — 18C-1072 | BOLT |
| 2 — 589098 | PIN | 1 — 18D-10 | NUT |
| 2 — 18C-864 | BOLT | 1 — 589097 | PIN |

†Not Illustrated

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

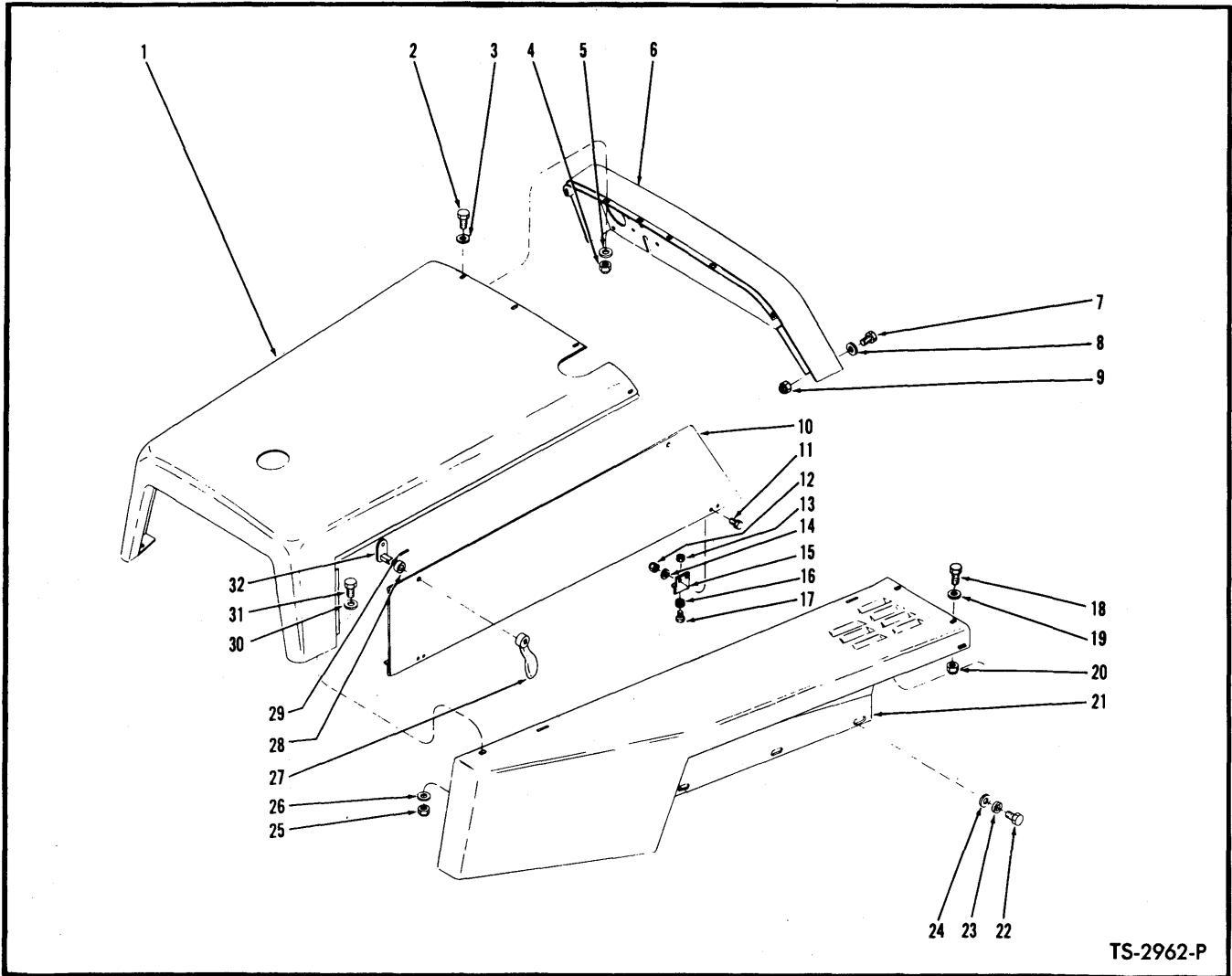


TS-2914-P

BOOM AND GUIDE BAR

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	534403	GUIDE BAR ASSY (Inc. 3, 4, 6)	1	10	532118	BOLT, Boom to Carrier Pin Retaining	2
2	12H-25	FITTING, Guide Bar Grease	2	11	7E-08	LKWSHR, Boom to Carrier Pin Retaining	2
3	532118	BOLT, Guide Bar Pin Retaining	2	12	532125	DUST SEAL, Boom	2
4	7E-08	LKWSHR, Guide Bar Pin Retaining	2	13	532162	BUSHING, Boom	2
5	532125	DUST SEAL, Guide Bar	2	14	532125	DUST SEAL, Boom	2
6	532162	BUSHING, Guide Bar	2	15	18D-08	NUT, Pin Retaining	2
7	532125	DUST SEAL, Guide Bar	2	16	516861	PIN, Boom Cylinder to Boom	2
8	537772	BOOM ASSY (Inc. 10, 11, 13)	1	17	18C-864	BOLT, Pin Retaining	2
9	12H-25	FITTING, Boom Grease	2				

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



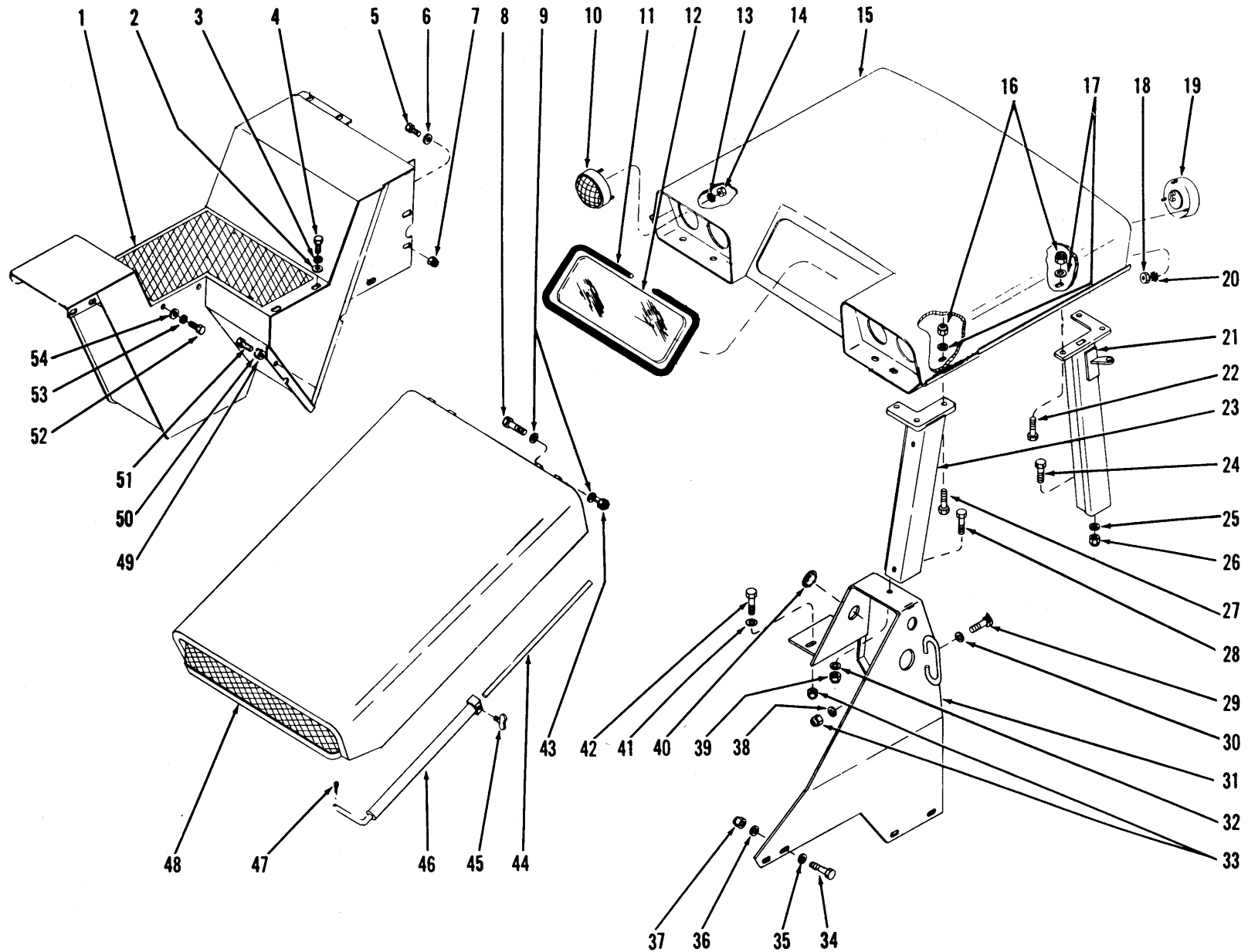
TS-2962-P

REAR HOOD ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1		HOOD, Rear		15	541035	BRACKET, Panel Support	4
1A	536956	For G.M. Powered Machines	1	16	551433	BUMPER, Side Panel—Rubber	4
1B	544988	For Gas Powered Machines	1	17	3G-1008	SCREW, Bumper to Bracket	4
1C	547152	For Cummins Powered Machines	1	18	18C-620	BOLT, Fender to Frame	6
2	18C-620	BOLT, Hood to Cowl	5	19	619021	WASHER, Fender to Frame	8
3	619021	WASHER, Hood to Cowl	5	20	18D-06	NUT, Fender to Frame	6
4	18D-06	NUT, Hood to Cowl	5	21	536951	FENDER, Rear—R.H.	1
5	619021	WASHER, Hood to Cowl	5	21A	536952	FENDER, Rear—L.H.	1
6	536955	COWL, Hood	1	22	18C-620	BOLT, Fender to Frame	6
7	18C-620	BOLT, Cowl to Seat Support	6	23	4E-06	LKWSHR, Fender to Frame	6
8	619021	WASHER, Cowl to Seat Support	6	24	619021	WASHER, Fender to Frame	6
9	18D-06	NUT, Cowl to Seat Support	6	25	18D-06	NUT, Hood to Fender	2
10	544952	PANEL, Hood Side—R.H.	1	26	619021	WASHER, Hood to Fender	2
10A	544953	PANEL, Hood Side—L.H.	1	27	142396	KIT, Handle (Inc. 28, 29, 32)	4
11	18C-412	BOLT, Bracket to Panel	8	28	§	SPACER, Handle	4
12	18D-04	NUT, Bracket to Panel	8	29	730432	PIN, Shaft	4
13	12D-10	NUT, Bumper to Bracket	4	30	619021	WASHER, Hood to Fender	2
14	619018	WASHER, Bracket to Panel	8	31	18C-620	BOLT, Hood to Fender	2
				32	§	SHAFT — See 27	4

§Not Sold Separately

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



CAB AND FRONT HOOD GROUP

For Serial: Cummins-2DC101 thru 3DC999. G.M.-2DG101 thru 4DG999. Wauk. 2DA101 and after.

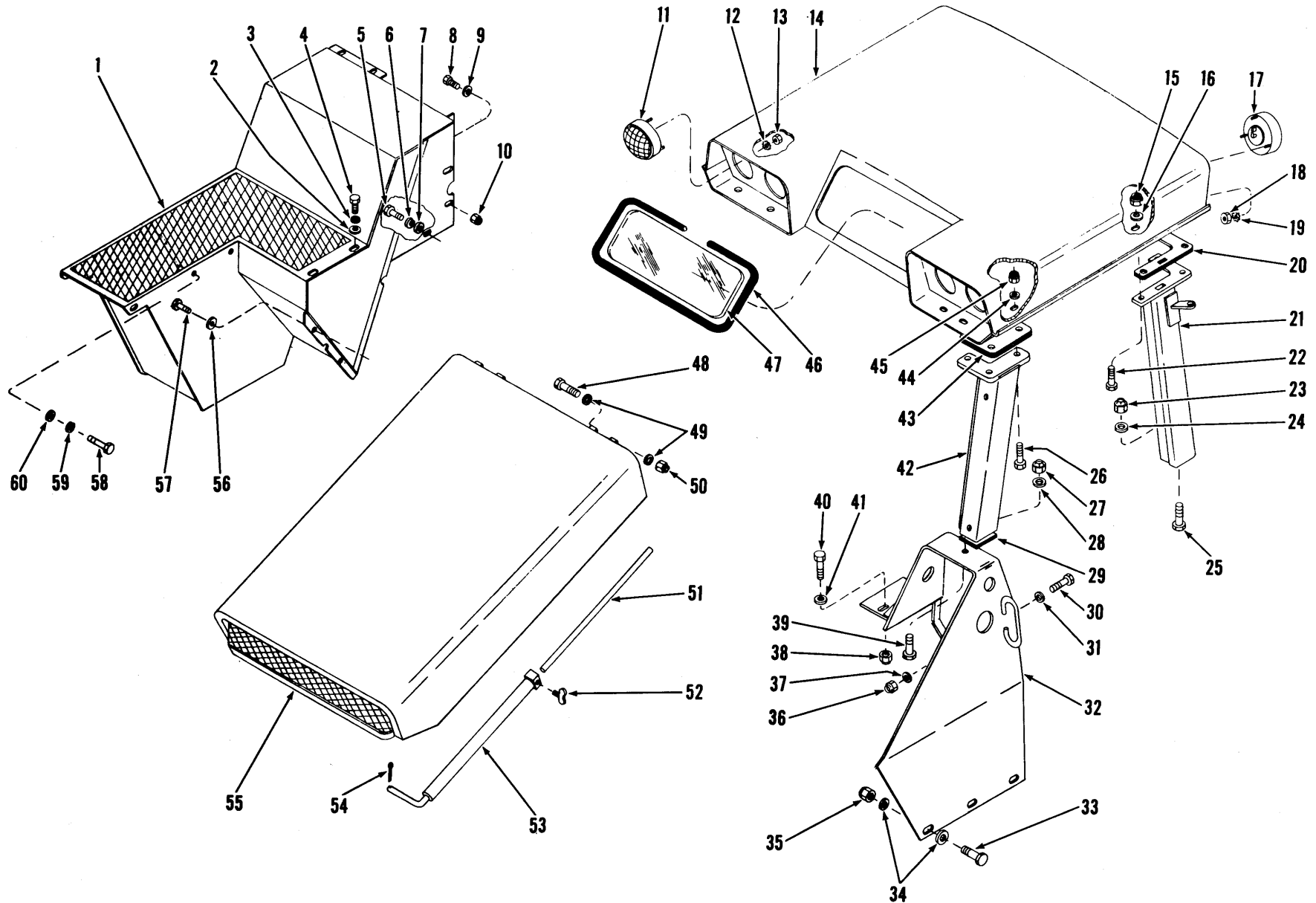
TS-2961-P

CAB AND FRONT HOOD GROUP
For Serial: Cummins — 2DC101 thru 3DC999
G.M. — 2DG101 thru 4DG999
Wauk. — 2DA101 and after

Item No.	Part No.	Description	No. Req'd.
1	536950	FENDER, R. H. Front	1
2	619021	WASHER, Fender to Seat Support	2
3	4E-06	LKWSHR, Fender to Seat Support	2
4	17C-616	BOLT, Fender to Seat Support	2
5	18C-620	BOLT, Fender to Seat Support	2
6	619021	WASHER, Fender to Seat Support	2
7	18D-06	NUT, Fender to Seat Support	2
8	18C-588	BOLT, Hood Hinge	2
9	619019	WASHER, Hood Hinge Bolt	4
10	546920	HEAD LAMP ASSY (Inc. 10B, 10D)	2
10A	546921	†FLOOD LAMP ASSY, Front (Inc. 10C, 10D)	2
10B	877752	†SEALED UNIT, Head Lamp	2
10C	944907	†SEALED UNIT, Flood Lamp	2
10D	946389	†RETAINER ASSY, Sealed Unit	4
11	544985	RUBBER, Front Glass Mounting	1
12	544984	GLASS PATTERN	1
13	12E-10	LKWSHR, Front Lamp Mounting	12
14	12D-10	NUT, Front Lamp Mounting	12
15	544962	ROOF, Cab	1
16	18D-06	NUT, Post to Roof	12
17	619023	WASHER, Post to Roof	12
18	12D-10	NUT, Rear Lamp Mounting	6
19	546921	FLOOD LAMP ASSY, Rear (Inc. 19A, 19B)	2
19A	944907	†SEALED UNIT, Flood Lamp	2
19B	946389	†RETAINER ASSY, Sealed Unit	2
20	12E-10	LKWSHR, Rear Lamp Mounting	6
21	544971	POST, L. H. Rear	1
21A	544970	POST, R. H. Rear	1
22	18C-620	BOLT, Rear Post to Roof	6
23	544964	POST, L. H. Front	1
23A	544963	POST, R. H. Front	1
24	18C-820	BOLT, Rear Post to Rear Hood	2
25	619027	WASHER, Rear Post to Rear Hood	2
26	18D-08	NUT, Rear Post to Rear Hood	2
27	18C-620	BOLT, Front Post to Roof	6
28	18C-820	BOLT, Front Post to Pivot Cap	2
29	18C-620	BOLT, Pivot Cap to Frame	4
30	619021	WASHER, Pivot Cap to Frame	4
31	536954	CAP, Upper Pivot — L.H.	1
31A	536953	CAP, Upper Pivot — R.H.	1
32	619027	WASHER, Front Post to Pivot Cap	2
33	18D-06	NUT, Pivot Cap Attaching	8
34	18C-620	BOLT, Pivot Cap to Tank & Fender	4
35	619021	WASHER, Pivot Cap to Tank & Fender	4
36	619021	WASHER, Pivot Cap to Tank & Fender	4
37	18D-06	NUT, Pivot Cap to Tank & Fender	4
38	619021	WASHER, Pivot Cap to Frame	4
39	18D-08	NUT, Front Post to Cap	2
40	648825	PLUG BUTTON, Pivot Cap	2
41	619021	WASHER, Pivot Cap to Frame	4
42	18C-620	BOLT, Pivot Cap to Frame	4
43	18D-05	NUT, Hood Hinge Bolt	2
44	544383	ROD, Hood Support	1
45	544610	THUMBSCREW	1
46	544379	TUBE, Hood Support	1
47	1F-414	COTTER, Tube to Reservoir	1
48	536959	HOOD, Front	1
49	619029	WASHER, Fender to Frame	2
50	4E-08	LKWSHR, Fender to Frame	2
51	18C-816	BOLT, Fender to Frame	2
52	17C-616	BOLT, Fender to Pivot Cap	2
53	4E-06	LKWSHR, Fender to Pivot Cap	2
54	619021	WASHER, Fender to Pivot Cap	2

†Not Illustrated

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



CAB AND FRONT HOOD GROUP
For Serial: Cummins-4DC101 and after. G.M.-5DG101 and after.

TS-5202-P

12A.1

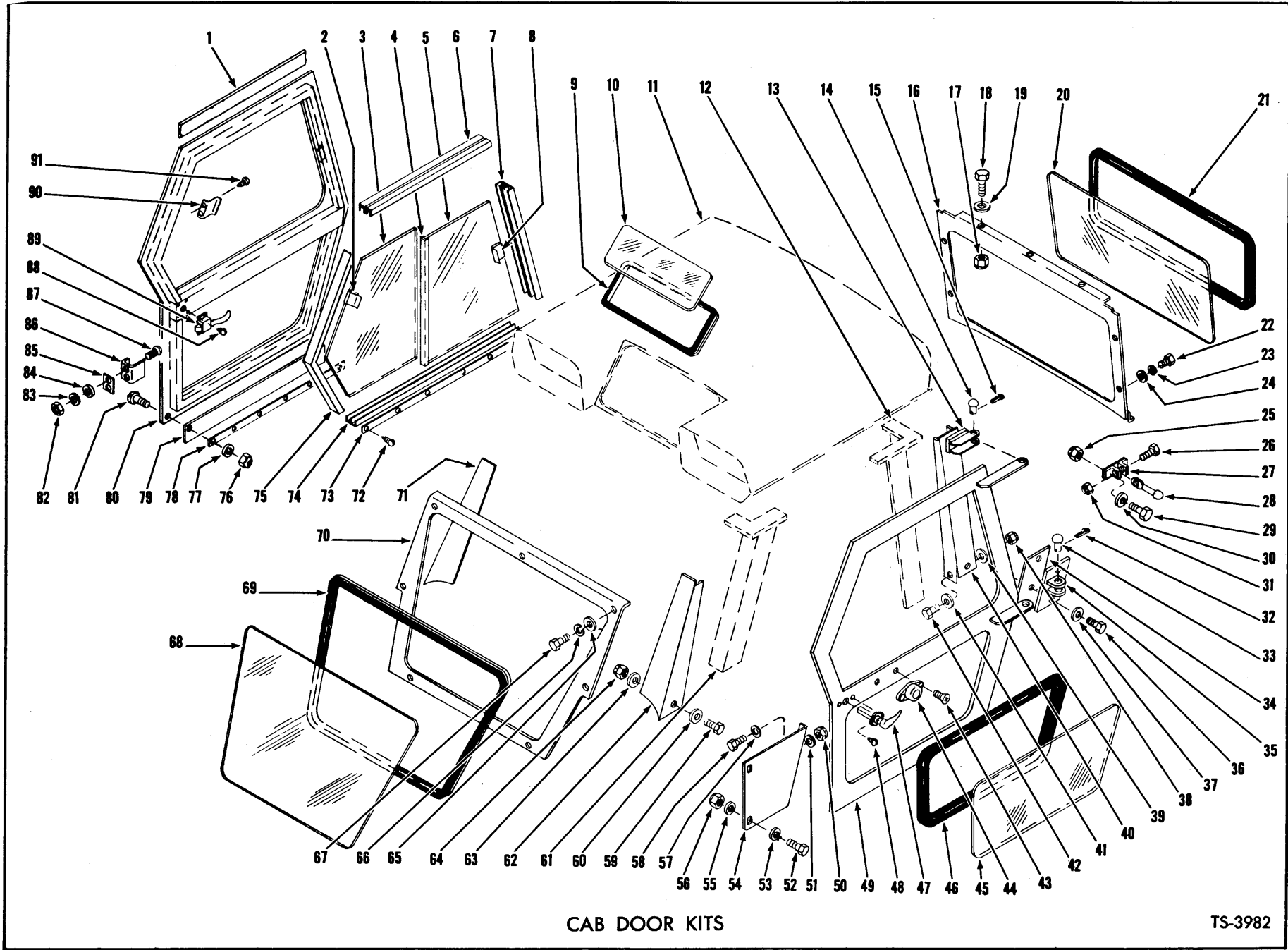
PM 1669

CAB AND FRONT HOOD GROUP
For Serial: Cummins — 4DC101 and after
G.M. — 5DG101 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	566061	FENDER, Front — R.H.	1	28	619027	WASHER, Front Post to Pivot Cap	2
2	619021	WASHER, Fender to Seat Support	2	29	588797	PAD, Front Post to Pivot Cap	2
3	4E-06	LKWSHR, Fender to Seat Support	2	30	18C-620	BOLT, Pivot Cap to Frame	4
4	17C-616	BOLT, Fender to Seat Support	2	31	619021	WASHER, Pivot Cap to Frame	4
5	18C-816	BOLT, Fender to Frame	1	32	566224	PIVOT CAP, L.H.	1
6	4E-08	LKWSHR, Fender to Frame	1	32A	566223	†PIVOT CAP, R.H.	1
7	619029	WASHER, Fender to Frame	1	33	18C-620	BOLT, Pivot Cap to Fender	2
8	18C-620	BOLT, Fender to Seat Support	2	34	619021	WASHER, Pivot Cap to Fender	4
9	619021	WASHER, Fender to Seat Support	2	35	18D-06	NUT, Pivot Cap to Fender	2
10	18D-06	NUT, Fender to Seat Support	2	36	18D-06	NUT, Pivot Cap to Frame	4
11	546920	HEAD LAMP ASSY, (Inc. 11B, 11D)	2	37	619021	WASHER, Pivot Cap to Frame	4
11A	546921	†FLOOD LAMP ASSY, Front (Inc. 11C, 11D)	2	38	18D-06	NUT, Pivot Cap to Frame	4
11B	877752	†SEALED UNIT, Head Lamp	2	39	18C-824	BOLT, Front Post to Pivot Cap	2
11C	944907	†SEALED UNIT, Flood Lamp	2	40	18C-620	BOLT, Pivot Cap to Frame	4
11D	944976	†RETAINER ASSY, Sealed Unit	4	41	619021	WASHER, Pivot Cap to Frame	4
12	12E-10	LKWSHR, Front Lamp Mounting	12	42	544964	POST, Front — L.H.	1
13	12D-10	NUT, Front Lamp Mounting	12	42A	544963	†POST, Front — R.H.	1
14	544962	ROOF, Cab	1	43	588783	PAD, Front Post to Roof	2
15	18D-06	NUT, Rear Post to Roof	6	44	619023	LKWSHR, Front Post to Roof	6
16	619023	LKWSHR, Rear Post to Roof	6	45	18D-06	NUT, Front Post to Roof	6
17	546921	FLOOD LAMP ASSY, Rear (Inc. 17A, 17B)	2	46	544985	RUBBER, Front Glass Mounting	1
17A	944407	†SEALED UNIT, Flood Lamp	2	47	544984	GLASS PATTERN	1
17B	944976	†RETAINER ASSY, Sealed Unit	2	48	18C-588	BOLT, Hood Hinge	2
18	12D-10	NUT, Rear Lamp Mounting	6	49	619019	WASHER, Hood Hinge Bolt	4
19	12E-10	LKWSHR, Rear Lamp Mounting	6	50	18D-05	NUT, Hood Hinge Bolt	2
20	588784	PAD, Rear Post to Roof	2	51	544383	ROD, Hood Support	1
20A	544971	POST, L.H. Rear	1	52	544610	THUMB SCREW	1
21	544970	†POST, R.H. Rear	1	53	544379	TUBE, Hood Support	1
22	18C-620	BOLT, Rear Post to Roof	6	54	1F-414	COTTER, Tube to Reservoir	1
23	18D-08	NUT, Rear Post to Hood	2	55	536959	HOOD, Front	1
24	619027	WASHER, Rear Post to Hood	2	56	616029	WASHER, Fender to Frame	1
25	18C-824	BOLT, Rear Post to Hood	2	56A	4E-08	†LKWSHR, Fender to Frame	1
26	18C-620	BOLT, Front Post to Roof	6	57	18C-816	BOLT, Fender to Frame	1
27	18D-08	NUT, Front Post to Pivot Cap	2	58	17C-616	BOLT, Pivot Cap to Tank & Fender..	4
				59	4E-06	LKWSHR, Pivot Cap to Tank & Fender	4
				60	619021	WASHER, Pivot Cap to Tank & Fender	4

†Not Illustrated

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



CAB DOOR KITS

TS-3982

12B.1

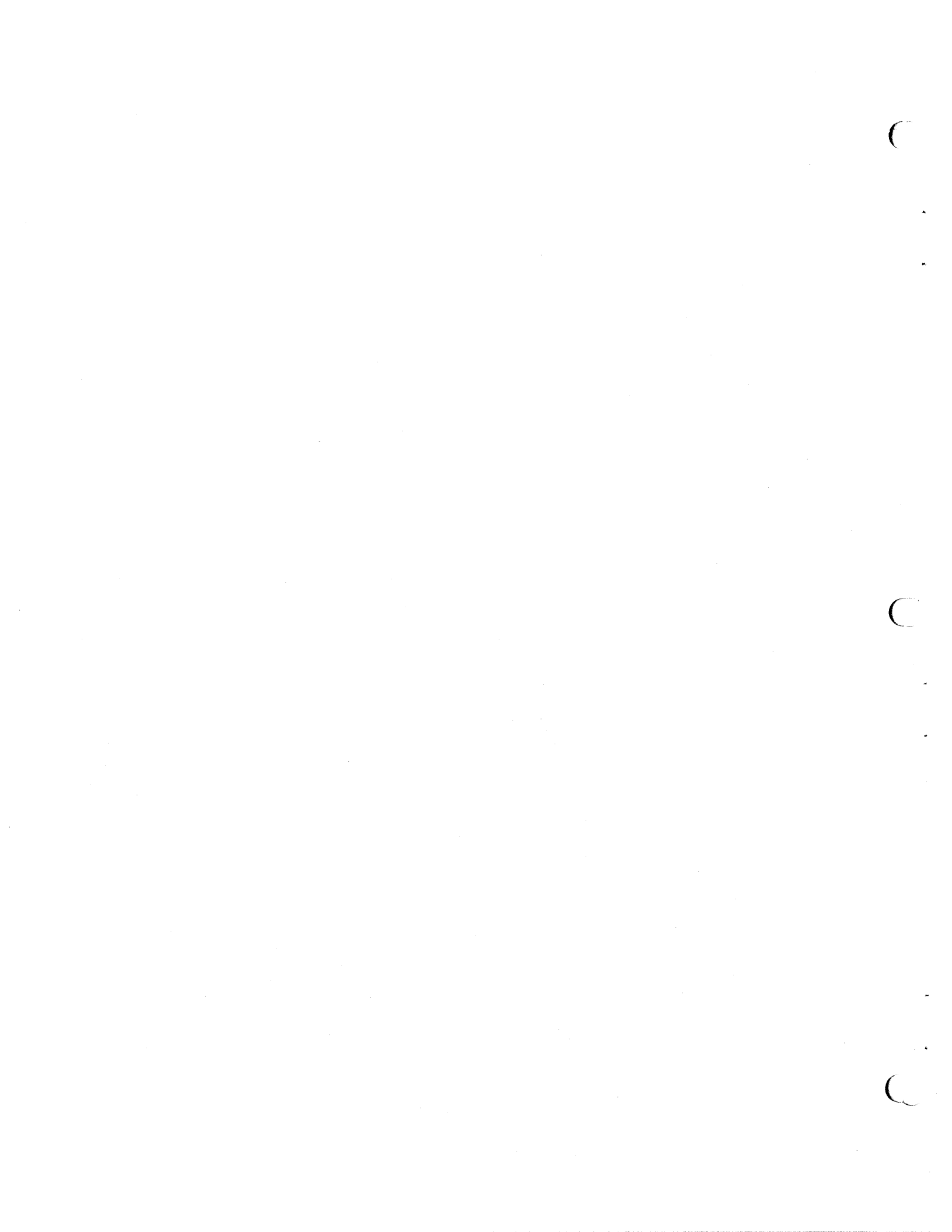
PM 1336

CAB DOOR KITS

Item No.	Part No.	Description	No. Req'd.
1	589569	SEAL, Cab Door	2
2	589571	LOCK, Sliding Glass Handle	2
2A	589572	†RUBBER GLAZING – Sliding Glass Lock	2
3	(See 92)	GLASS PATTERN – Front, Upper Door	2
4	589558	DIVIDER, Glass Channel	2
5	(See 92)	GLASS PATTERN – Rear, Upper Door	2
6	589546	CHANNEL, Upper Glass Double Run	2
7	589548	CHANNEL, Rear Glass Double Run	2
8	589571	LOCK, Sliding Glass Handle	2
8A	589572	†RUBBER GLAZING, Sliding Glass Lock	2
9	544985	RUBBER, Roof Glass Mounting	1
10	(See 92)	GLASS PATTERN – Roof Glass	1
11	-----	ROOF, Cab – See Index	—
12	-----	POST, L.H. Rear – See Index	—
13	556949	HINGE, Upper	2
14	4F-08127	PIN, Upper Hinge	2
15	1F-514	COTTER, Upper Hinge Pin	2
16	547648	PANEL, Rear Windshield	1
17	18D-05	NUT, Upper Rear Windshield Mounting	3
18	18C-512	BOLT, Upper Rear Windshield Mounting	3
19	626787	WASHER, Upper Rear Windshield Mounting	3
20	(See 92)	GLASS PATTERN, Rear Windshield	1
21	547652	RUBBER, Rear Windshield Mounting	1
22	17C-616	BOLT, Side Rear Windshield Mounting	4
23	4E-06	LKWSHR, Side Rear Windshield Mounting	4
24	656672	WASHER, Side Rear Windshield Mounting	4
25	18D-05	NUT, Bracket Mounting	4
26	18C-520	BOLT, Door Check Plug Mounting	2
27	588333	BRACKET, Hood Plunger Check	2
28	549032	PLUG, Door Check Male	2
29	18C-520	BOLT, Bracket Mounting	4
30	619019	WASHER, Bracket Mounting	4
31	18D-05	NUT, Door Check Plug Mounting	2
32	1F-514	COTTER, Lower Hinge Pin	2
33	4F-08127	PIN, Lower Hinge	2
34	556958	SHIM, Lower Hinge	10
34A	589024	†SHIM, Lower Hinge	2
35	588368	HINGE, Lower – R.H.	1
35A	588369	†HINGE, Lower – L.H.	1
36	18C-616	BOLT, Hinge Mounting	4
36A	18D-06	†NUT, Hinge Mounting	4
37	619021	WASHER, Hinge Mounting	4
38	18D-06	NUT, Hinge Panel Mounting	4
39	619021	WASHER, Hinge Panel Mounting	2
40	589071	PANEL, Rear Post Hinge – L.H.	1
40A	589070	†PANEL, Rear Post Hinge – R.H.	1
41	619021	WASHER, Hinge Panel Mounting	1
42	18C-616	BOLT, Hinge Panel Mounting	4
43	76G-412	SCREW, Door Check Socket	4
43A	20E-04	†LKWSHR, Socket Screw	4
44	547015	SOCKET, Door Check	2
45	(See 92)	GLASS PATTERN, Lower Door	2
46	589562	WEATHER-SEAL, Lower Door Glass	2
47	1525710	HANDLE, Door	2

†Not Illustrated

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

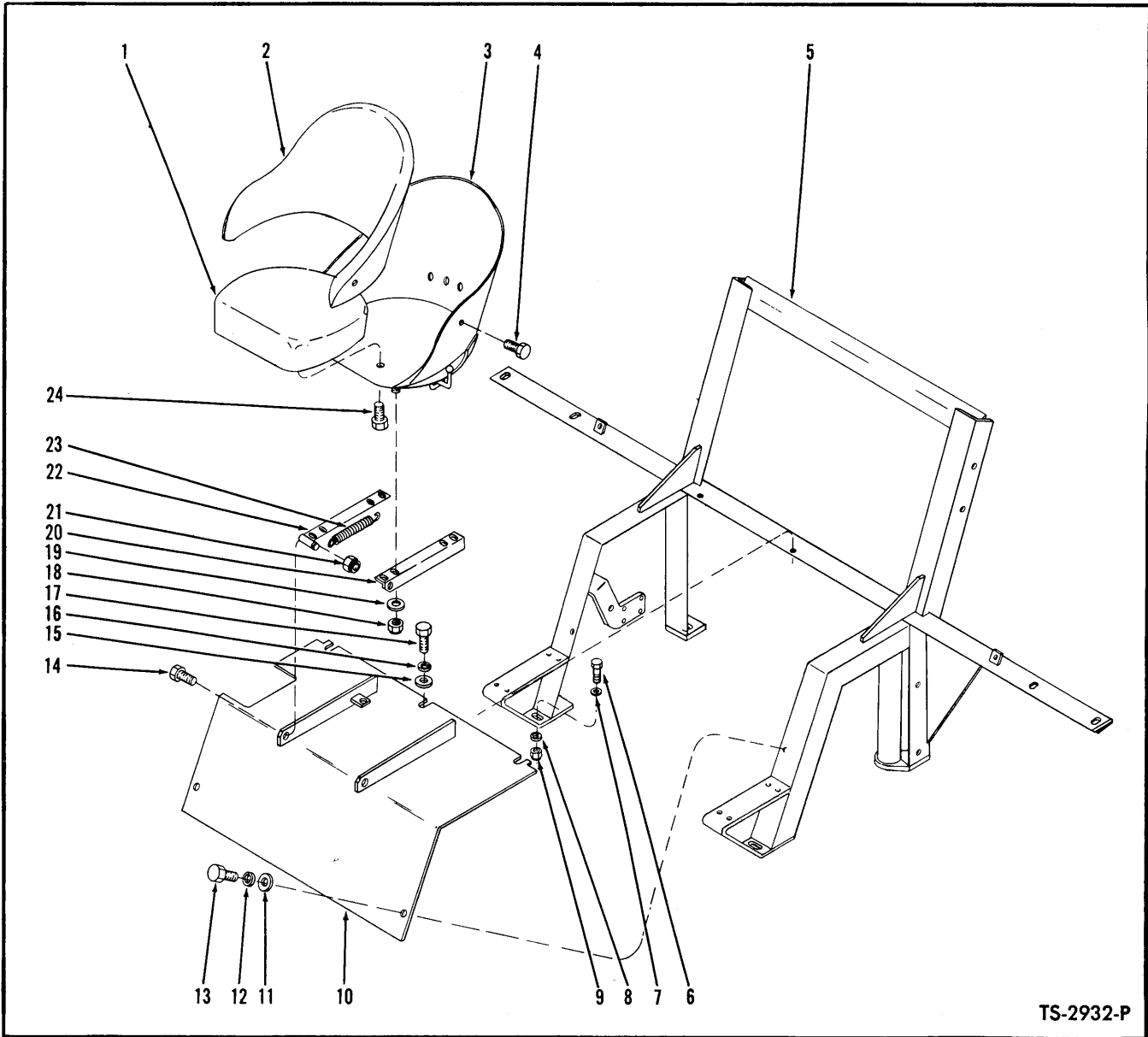


CAB DOOR KITS (Continued)

Item No.	Part No.	Description	No. Req'd.
48	65G-1008	SCREW, Door Handle Mounting	4
49	945426	DOOR, L.H. Panel	1
50	18D-06	NUT, Panel Mounting	4
51	619021	WASHER, Panel Mounting	4
52	18C-616	BOLT, Panel Mounting	4
53	619021	WASHER, Panel Mounting	4
54	547683	PANEL, Lower Side - L.H.	1
54A	547682	†PANEL, Lower Side - R.H.	1
55	619021	WASHER, Panel Mounting	4
56	18D-06	NUT, Panel Mounting	4
57	619021	WASHER, Panel Mounting	4
57A	-----	†LKWSHR, Panel Mounting	2
58	18C-616	BOLT, Panel Mounting	4
58A	-----	†BOLT, Panel Mounting	2
59	18C-616	BOLT, Panel Mounting	2
60	619021	WASHER, Panel Mounting	2
61	-----	POST, L.H. Front - See Index	-
62	589073	PANEL, Front Post Hinge - L.H.	1
63	619021	WASHER, Panel Mounting	2
64	18D-06	NUT, Panel Mounting	2
65	656672	WASHER, Windshield Side Mounting	4
65A	626787	†WASHER, Windshield Mounting	4
66	4E-06	LKWSHR, Windshield Side Mounting	4
67	17C-616	BOLT, Windshield Side Mounting	4
67A	18C-516	†BOLT, Windshield Mounting	4
67B	18D-05	†NUT, Windshield Mounting	4
68	(See 92)	GLASS PATTERN, Front Windshield	1
69	547652	RUBBER, Front Windshield Mounting	1
70	547704	PANEL, Front Windshield	1
71	589072	PANEL, Front Post Hinge - R.H.	1
72	65G-1008	SCREW, Lower Glass Retainer	12
73	595082	RETAINER, Lower Glass Channel	2
74	589549	CHANNEL, Lower Glass Double Run	2
75	589547	CHANNEL, Front Glass Double Run	2
76	12D-8	NUT, Drag Strip Retainer Mounting	12
77	17E-8	LKWSHR, Drag Strip Retainer Mounting	12
78	595083	RETAINER, Door Seal Drag Strip	2
79	589565	SEAL, Bottom Drag Strip Door	2
80	945425	DOOR, R.H. Panel	1
81	3G-808	SCREW, Drag Strip Retainer Mounting	12
82	62D-04	NUT, Lockstrike Mounting	4
83	4E-04	LKWSHR, Lockstrike Mounting	4
84	619018	WASHER, Lockstrike Mounting	4
85	588332	SHIM, Lockstrike	6
86	588331	LOCKSTRIKE	2
87	82G-410	SCREW, Lockstrike Mounting	4
88	65G-1008	SCREW, Door Lock Mounting	8
89	942874	LOCK, R.H. Door	1
89A	138249	†LOCK, L.H. Door	1
90	557465	LOCKSTRIKE, Window	4
91	63G-606	SCREW, Window Lockstrike Mounting	8
92	945139	GLASS PATTERN KIT, Cab Glass (Inc. 3, 5, 10, 20, 45, 68)	1

†Not Illustrated

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

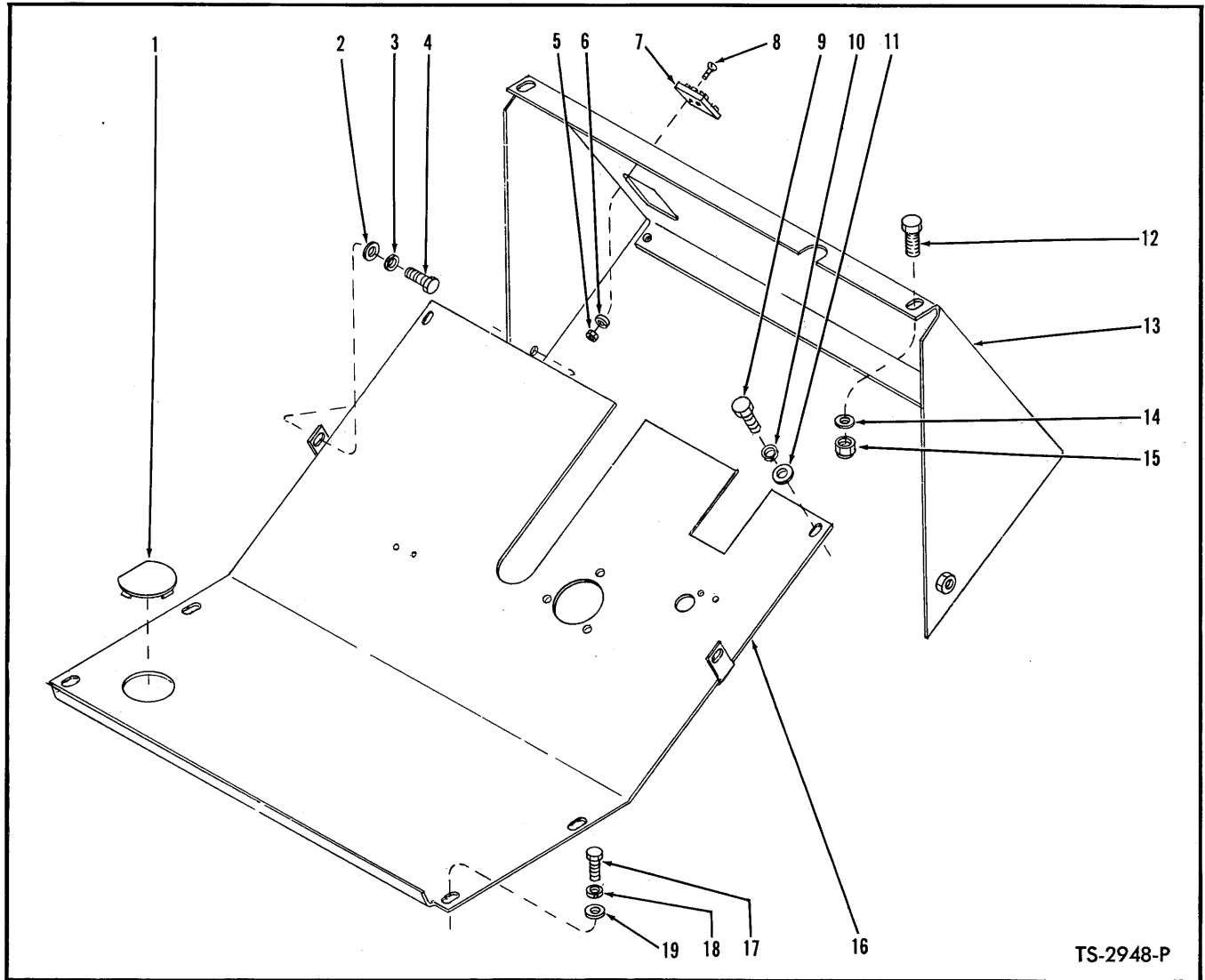


TS-2932-P

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, 4, 24)	1	13	17C-616	BOLT, Plate to Support	2
1	948144	CUSHION, Seat	1	14	18C-824	BOLT, Seat Pivot	2
2	948143	CUSHION, Back-Rest	1	15	619023	WASHER, Plate to Support	3
3	944982	BUCKET	1	16	4E-06	LKWSHR, Plate to Support	3
4	1C-610	BOLT, Cushion Mounting	3	17	17C-616	BOLT, Plate to Support	3
5	534578	SUPPORT, Seat	1	18	18D-05	NUT, Seat Mounting	4
6	18C-828	BOLT, Seat Support to Frame	4	19	619019	WASHER, Seat Mounting	4
7	619029	WASHER, Seat Support to Frame	4	20	538707	ANGLE, Left Hand	1
8	71D-08	BASE, Seat Support to Frame Nut	4	21	18D-08	NUT, Seat Pivot	2
9	70D-08	NUT, Seat Support to Frame	4	22	538708	ANGLE, Right Hand	1
10	534738	PLATE, Seat Support	1	23	550301	SPRING	1
11	619023	WASHER, Plate to Support	2	24	1C-610	BOLT, Cushion Mounting	2
12	4E-06	LKWSHR, Plate to Support	2				

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

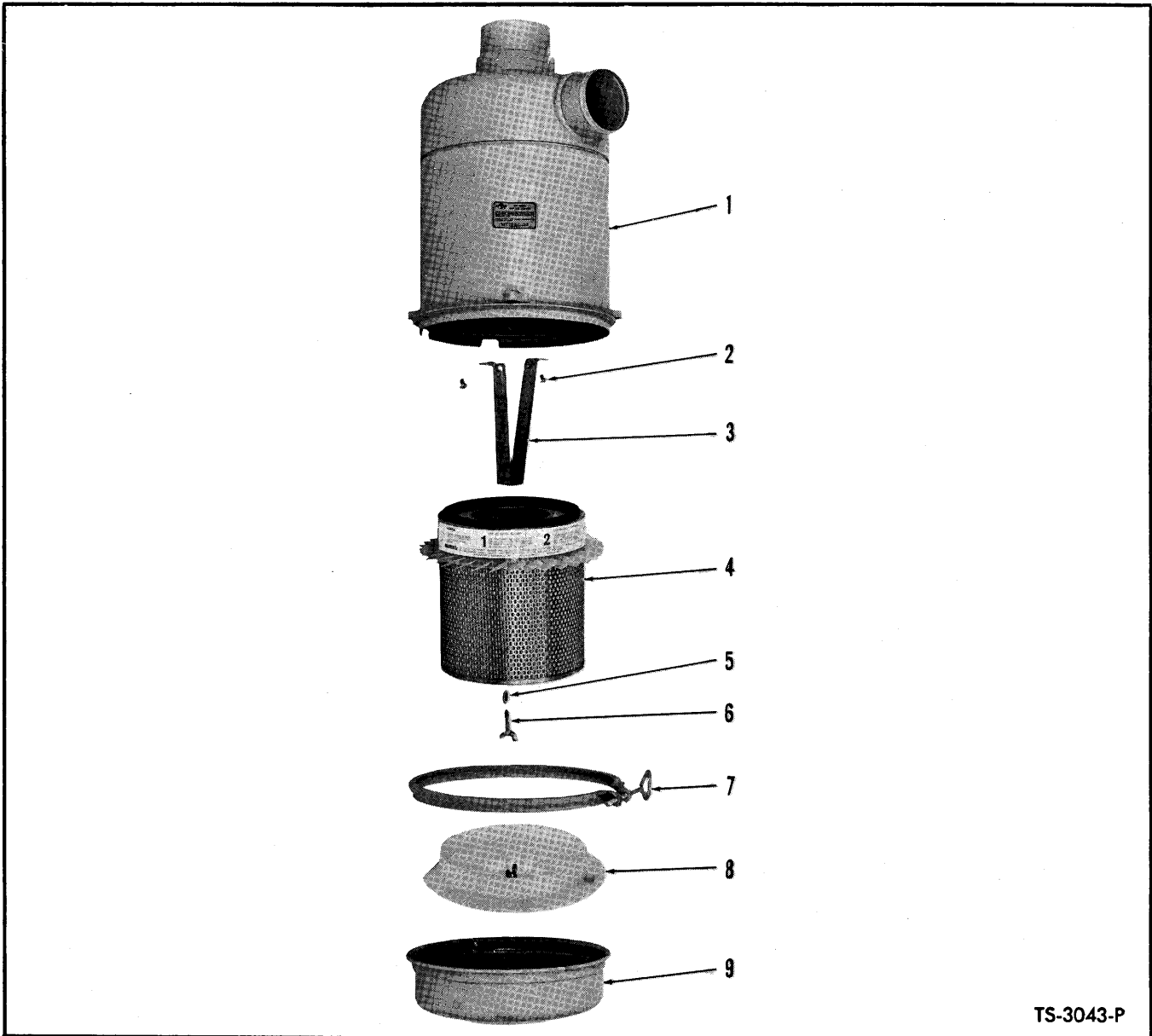


TS-2948-P

FLOORBOARD AND SUPPORT

Item No.	Part No.	Description	No. Req'd.
1	542983	PLATE, Cover	1
2	655630	WASHER, Floorboard to Support	2
3	4E-06	LKWSHR, Floorboard to Support	2
4	17C-612	BOLT, Floorboard to Support	2
5	14D-6	NUT, Fuse Block to Support	2
6	17E-6	LKWSHR, Fuse Block to Support	2
7	542272	FUSE BLOCK	1
8	20G-608	SCREW, Fuse Block to Support	2
9	17C-612	BOLT, Floorboard to Support Bracket	2
10	4E-06	LKWSHR, Floorboard to Support Bracket	2
11	655630	WASHER, Floorboard to Support Bracket	2
12	18C-618	BOLT, Support to Upper Pivot	2
13	540457	SUPPORT, Floorboard	1
14	655630	WASHER, Support to Upper Pivot	2
15	18D-06	NUT, Support to Upper Pivot	2
16	540459	FLOORBOARD	1
17	17C-616	BOLT, Floorboard to Support	4
18	4E-06	LKWSHR, Floorboard to Support	4
19	655630	WASHER, Floorboard to Support	4

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



TS-3043-P

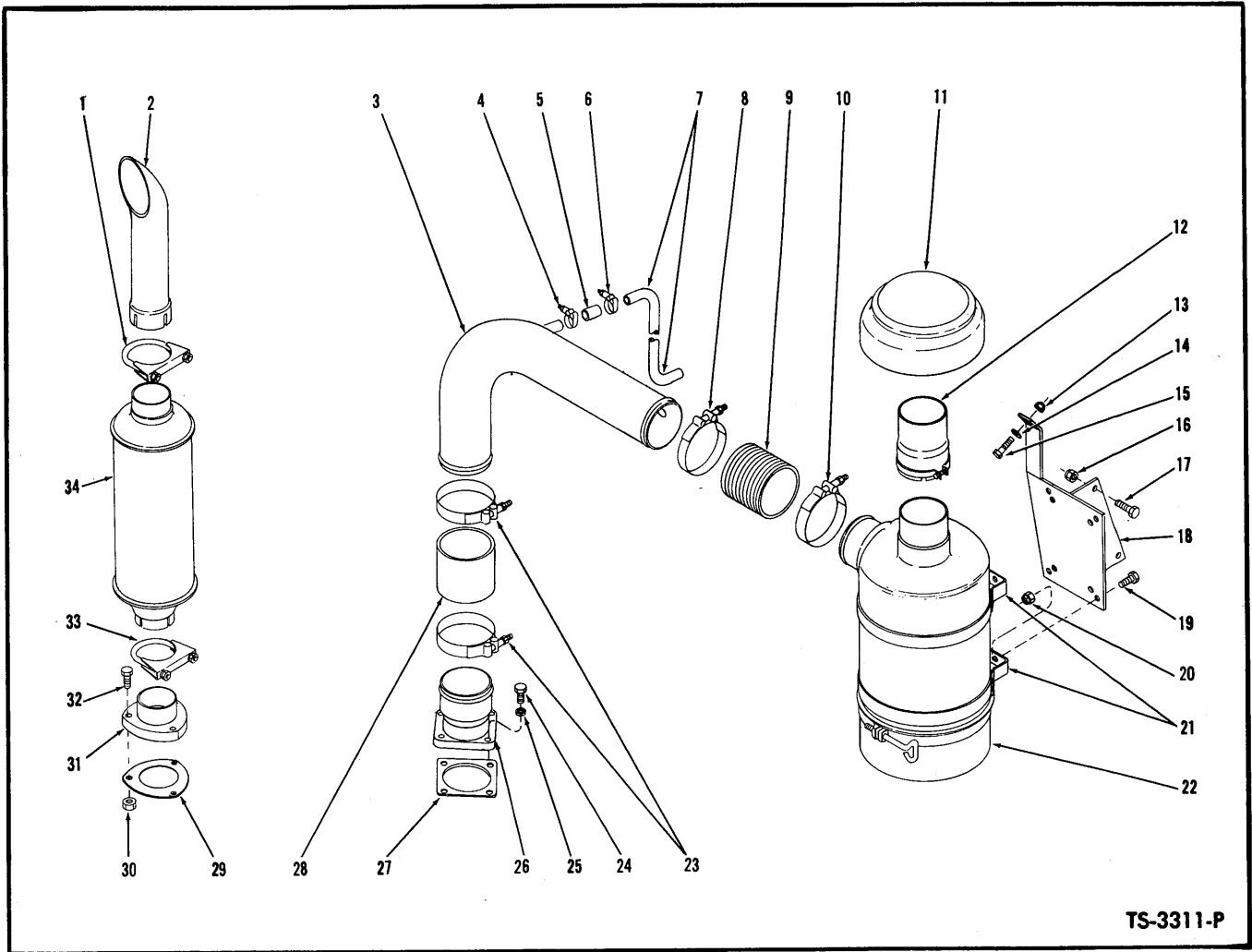
AIR CLEANER ASSEMBLY — G.M. AND CUMMINS

Item No.	Part No.	Description	No. Req'd.
A	539821	AIR CLEANER ASSY (Inc. 1 thru 9)	1
1	-----	§ BODY, Air Cleaner — See "A"	1
2	4G-508	SCREW, Yoke to Body	2
2A	8E-05	LKWSHR, Yoke to Body	2
3	944953	YOKE, Element Retaining	1
4	944954	ELEMENT	1
5	886287	WASHER	1
6	886285	THUMB SCREW	1
7	947242	CLAMP, Dust Cup	1
8	944956	*BAFFLE	1
9	944957	CUP, Dust	1

§ Not Sold Separately

*NOTE: For replacement use 894653 plus 1—894652 Cup.

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



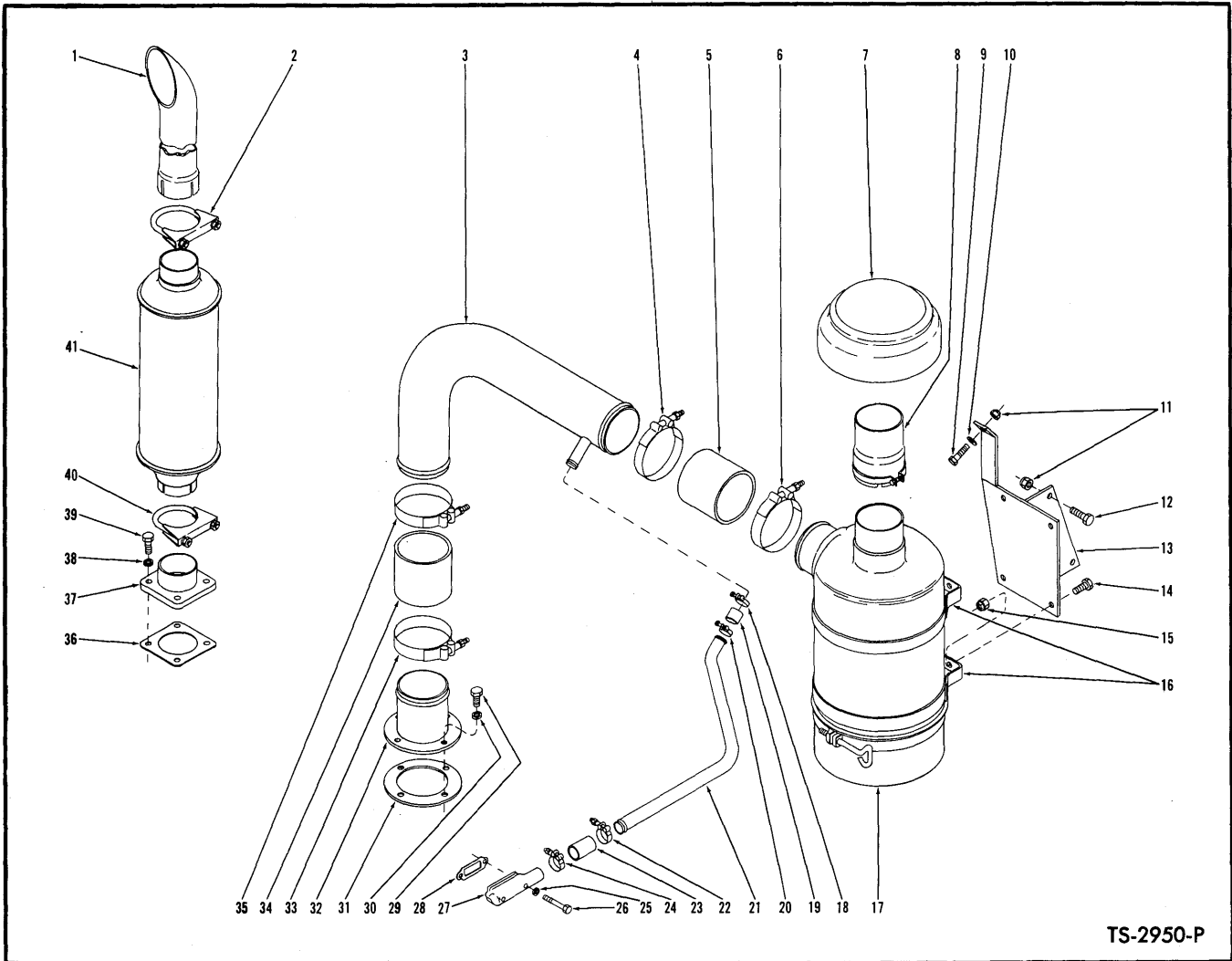
TS-3311-P

AIR CLEANER CONNECTIONS AND MUFFLER — CUMMINS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	507068	CLAMP, Tail Pipe to Muffler	1	18	547130	BRACKET, Air Cleaner Mounting	1
2	543576	PIPE, Tail	1	19	18C-616	BOLT, Air Cleaner Mounting	4
3	547126	TUBE ASSY, Air Intake	1	20	18D-06	NUT, Air Cleaner Mounting	4
4	1545186	CLAMP, Hose	1	21	420945	BAND, Air Cleaner Mounting	2
5	529979	HOSE, Compressor Intake Tube to Air Intake Tube	1	22	-----	AIR CLEANER—See Index	1
6	1545186	CLAMP, Hose	1	23	539042	CLAMP, Hose	2
7	547129	TUBE, Compressor Intake	1	24	1C-620	BOLT, Adapter Mounting	4
8	539042	CLAMP, Hose	1	25	4E-06	LKWSHR, Adapter Mounting	4
9	515424	HOSE, Flexible—Air Cleaner to Tube..	1	26	547139	ADAPTER, Air Intake Tube	1
10	539042	CLAMP, Hose	1	27	-----	*GASKET, Air Intake Adapter— Cummins #102131	1
11	511504	CAP, Air Cleaner	1	28	515424	HOSE, Adapter to Tube	1
12	539839	EXTENSION, Air Cleaner	1	29	-----	*GASKET, Adapter—Cummins #9579..	1
13	18D-06	NUT, Bracket Mounting	1	30	15D-08	NUT, Adapter Mounting	3
14	619021	WASHER, Bracket Mounting	1	31	551634	ADAPTER, Muffler	1
15	18C-620	BOLT, Bracket Mounting	1	32	17C-832	BOLT, Adapter Mounting	3
16	18D-06	NUT, Bracket Mounting	2	33	507069	CLAMP, Muffler to Adapter	1
17	18C-620	BOLT, Bracket Mounting	2	34	543575	MUFFLER	1

*NOTE: Your local authorized Cummins Distributor is equipped to service and supply these parts.

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

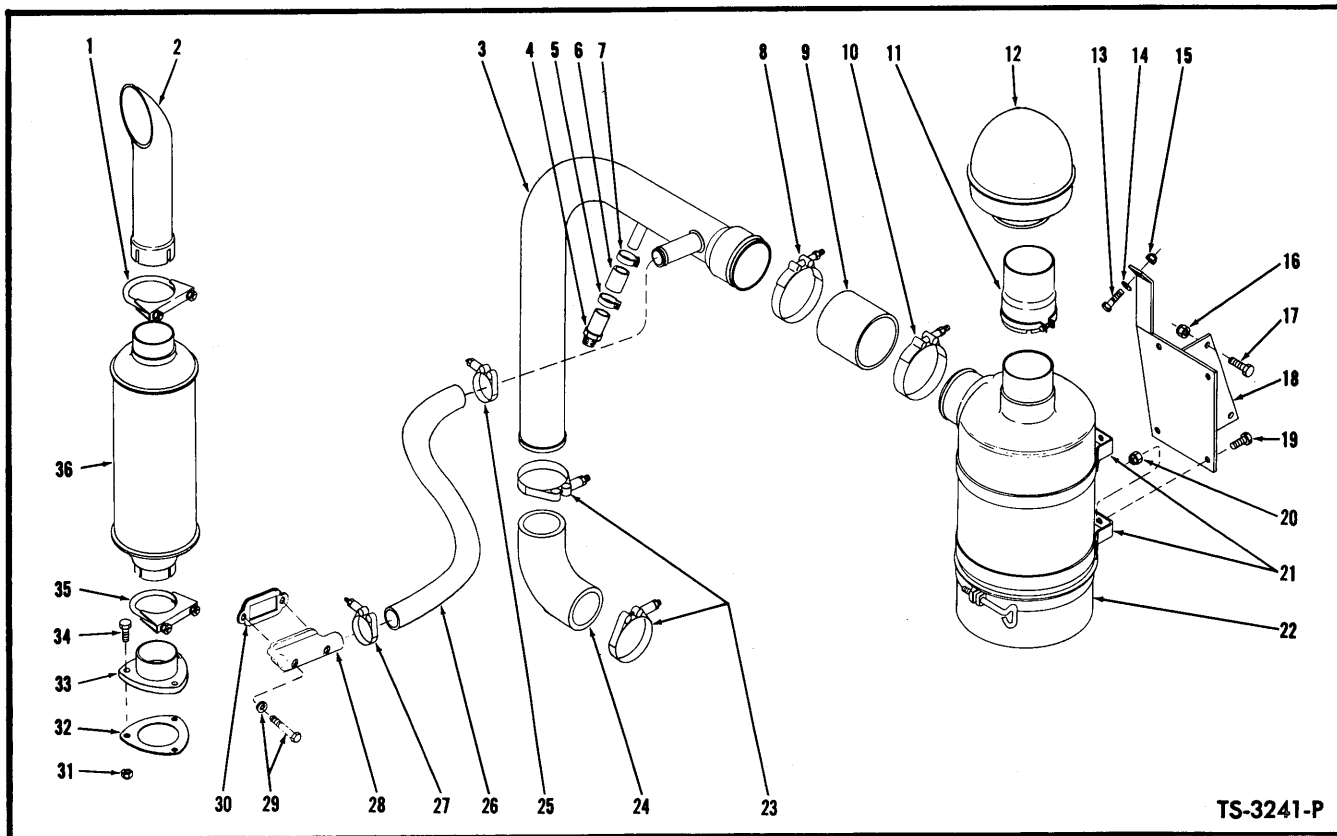


TS-2950-P

AIR CLEANER CONNECTIONS AND MUFFLER — G.M.

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	543576	TAIL PIPE	1	21	540407	TUBE, Compressor Air Intake	1
2	507068	CLAMP, Muffler to Tailpipe	1	22	1545186	CLAMP, Hose	1
3	540249	TUBE, Air Intake	1	23	509711	HOSE, Tube to Elbow	1
4	539042	CLAMP, Hose	1	24	1545186	CLAMP, Hose	1
5	515424	HOSE, Tube to Air Cleaner	1	25	4E-05	LKWSHR, Elbow to Compressor	2
6	539042	CLAMP, Hose	1	26	17C-532	BOLT, Elbow to Compressor	2
7	511504	CAP, Air Cleaner	1	27	540888	ELBOW, Compressor Air Inlet	1
8	539839	EXTENSION	1	28	875012	GASKET, Elbow to Compressor	1
9	18C-620	BOLT, Bracket to Frame	1	29	17C-516	BOLT, Adapter Mounting	4
10	619021	WASHER, Bracket to Frame	1	30	4E-05	LKWSHR, Adapter Mounting	4
11	18D-06	NUT, Bracket to Frame	3	31	527096	GASKET, Adapter	1
12	18C-620	BOLT, Bracket to Frame	2	32	527095	ADAPTER, Blower Inlet	1
13	541420	BRACKET, Air Cleaner	1	33	539042	CLAMP, Hose	1
14	18C-616	BOLT, Air Cleaner to Bracket	4	34	515424	HOSE, Tube to Adapter	1
15	18D-06	NUT, Air Cleaner to Bracket	4	35	539042	CLAMP, Hose	1
16	420945	BAND, Air Cleaner Mounting	2	36	509303	GASKET, Muffler Adapter	1
17		AIR CLEANER — See Index	1	37	509300	ADAPTER, Muffler	1
18	1545186	CLAMP, Hose	1	38	4E-07	LKWSHR, Adapter Mounting	4
19	509711	HOSE, Compressor Tube to Intake Tube	1	39	17C-716	BOLT, Adapter Mounting	4
20	1545186	CLAMP, Hose	1	40	507069	CLAMP, Muffler to Adapter	1
				41	543575	MUFFLER	1

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



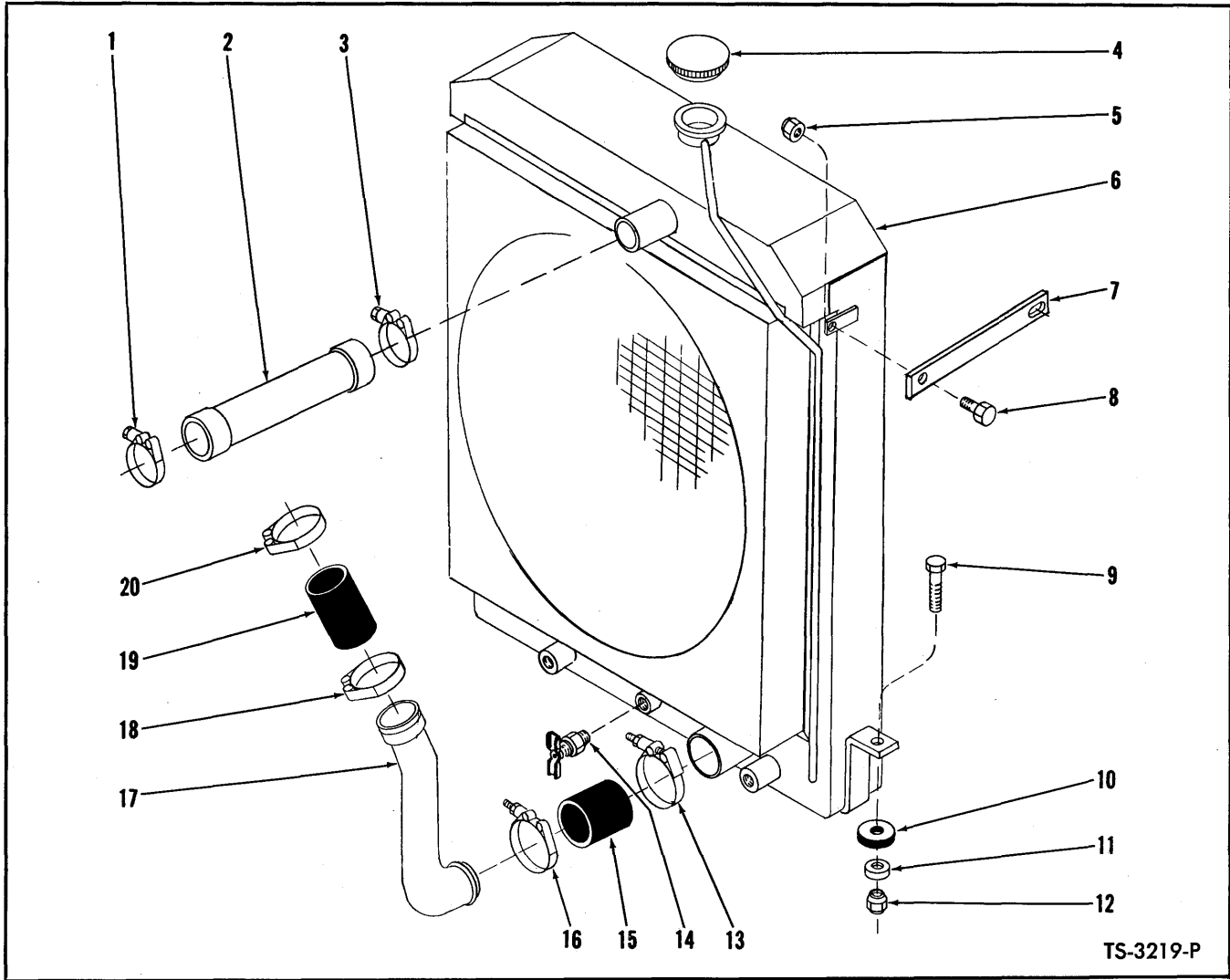
TS-3241-P

AIR CLEANER AND MUFFLER — GAS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	544288	CLAMP, Tailpipe to Muffler	1	20	18D-06	NUT, Air Cleaner to Bracket	4
2	547585	TAILPIPE, Muffler Exhaust	1	21	544222	STRAP, Air Cleaner Mounting	2
3	544248	TUBE, Air Cleaner	1	22	536191	AIR CLEANER	1
4	711393	NIPPLE, Hose	1	23	540104	CLAMP, Hose	2
5	4H-15	CLAMP, Hose	1	24	544221	HOSE, Tube to Carburetor	1
6	518707	HOSE	1	25	1545186	CLAMP, Hose	1
7	4H-15	CLAMP, Hose	1	26	713523	HOSE	1
8	540107	CLAMP, Hose	1	27	1545186	CLAMP, Hose	1
9	1M-24044	HOSE, Tube to Air Cleaner	1	28	540888	ELBOW, Compressor Air Inlet	1
10	540107	CLAMP, Hose	1	29	17C-532	BOLT, Elbow to Compressor	2
11	544250	*STACK, Air Cleaner Extension	1	29A	4E-05	LKWSHR, Elbow to Compressor	2
12	551618	CAP, Air Cleaner	1	30	875012	GASKET, Elbow to Compressor	1
13	18C-620	BOLT, Bracket to Frame	1	31	15D-08	NUT, Adapter to Exhaust Manifold	3
14	619021	WASHER, Bracket to Frame	1	32	551638	GASKET, Adapter to Exhaust Manifold	1
15	18D-06	NUT, Bracket to Frame	1	33	551634	ADAPTER, Muffler to Exhaust Manifold	1
16	18D-06	NUT, Bracket to Frame	2	34	17C-832	BOLT, Adapter to Exhaust Manifold	3
17	18C-620	BOLT, Bracket to Frame	2	35	507069	CLAMP, Muffler to Adapter	1
18	541420	BRACKET, Air Cleaner to Frame Mounting	1	36	547584	MUFFLER	1
19	18C-616	BOLT, Air Cleaner to Bracket	4				

*NOTE: For replacement use 1—2504659 Extension plus 1—565973 Clamp.

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

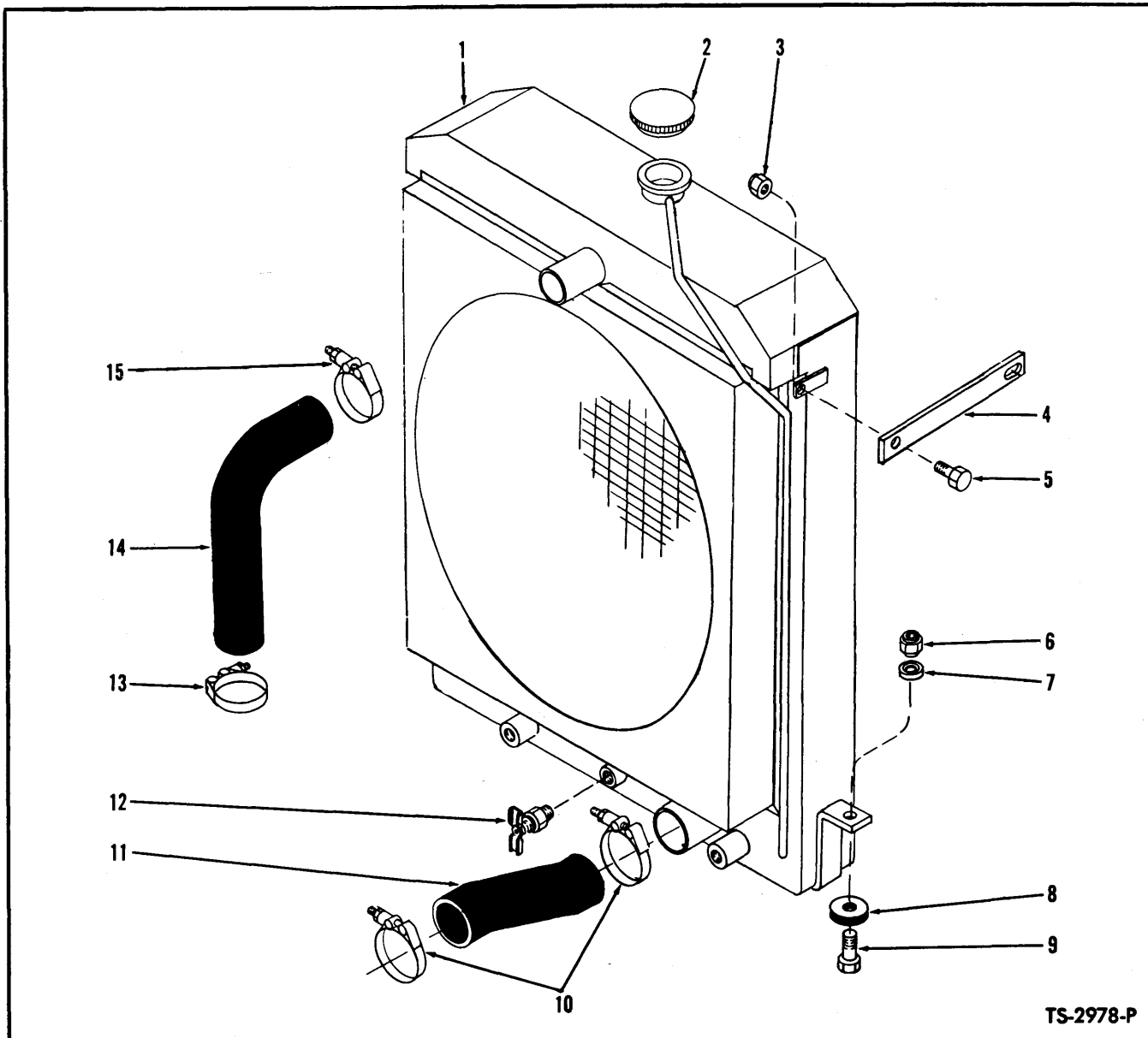


TS-3219-P

RADIATOR AND CONNECTIONS – CUMMINS

Item No.	Part No.	Description	No. Req'd.
1	540108	CLAMP, Hose	1
2	420564	HOSE, Engine to Radiator – Upper	1
3	540108	CLAMP, Hose	1
4	351495	CAP, Radiator	1
5	18D-06	NUT, Clip to Radiator	2
6	547162	RADIATOR	1
7	543878	CLIP, Radiator to Grille	2
8	18C-612	BOLT, Clip to Radiator	2
9	18C-828	BOLT, Radiator to Frame	2
10	518233	PAD, Radiator to Frame	2
11	71D-08	BASE, Radiator to Frame Nut	2
12	70D-08	NUT, Radiator to Frame	2
13	540104	CLAMP, Hose	1
14	72F-2	DRAIN COCK	1
15	1M-18030	HOSE, Tube to Radiator	1
16	540104	CLAMP, Hose	1
17	547160	TUBE, Lower Suction	1
18	540104	CLAMP, Hose	1
19	1M-18030	HOSE, Water Pump to Tube	1
20	540104	CLAMP, Hose	1

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

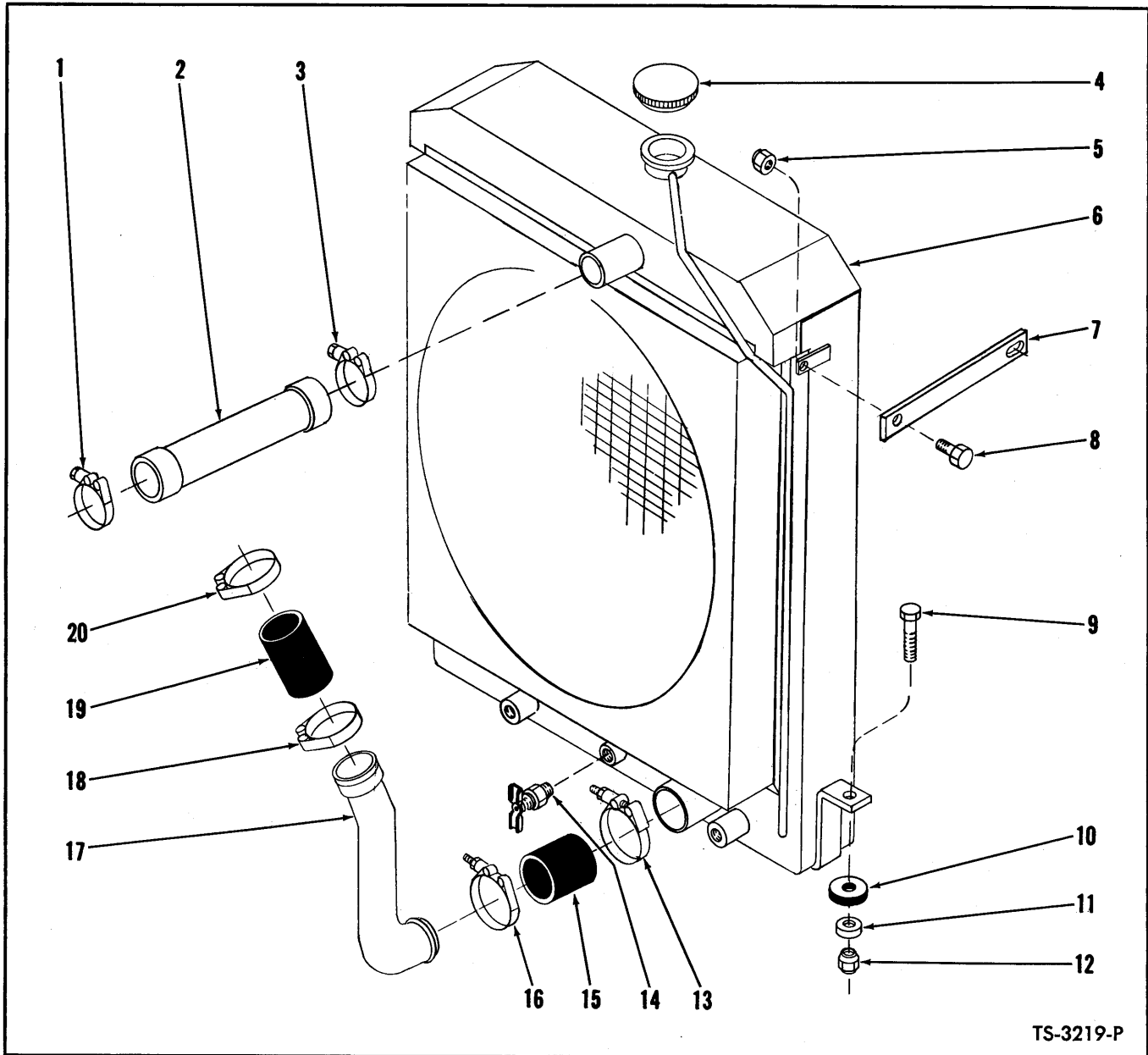


TS-2978-P

RADIATOR AND CONNECTIONS – G.M.

Item No.	Part No.	Description	No. Req'd.
1	545074	RADIATOR (Inc. 2)	1
2	351495	CAP, Radiator	1
3	18D-06	NUT, Clip to Radiator	2
4	539044	CLIP, Radiator to Grille	2
5	18C-612	BOLT, Clip to Radiator	2
6	70D-08	NUT, Radiator to Frame	2
7	71D-08	BASE, Radiator to Frame Nut	2
8	518233	PAD, Radiator to Frame	2
9	18C-828	BOLT, Radiator to Frame	2
10	540108	CLAMP, Hose	2
11	540244	HOSE, Lower Radiator	1
12	73F-2	DRAIN COCK, Radiator	1
13	540266	CLAMP, Hose	1
14	544015	HOSE, Upper	1
15	540266	CLAMP, Hose	1

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

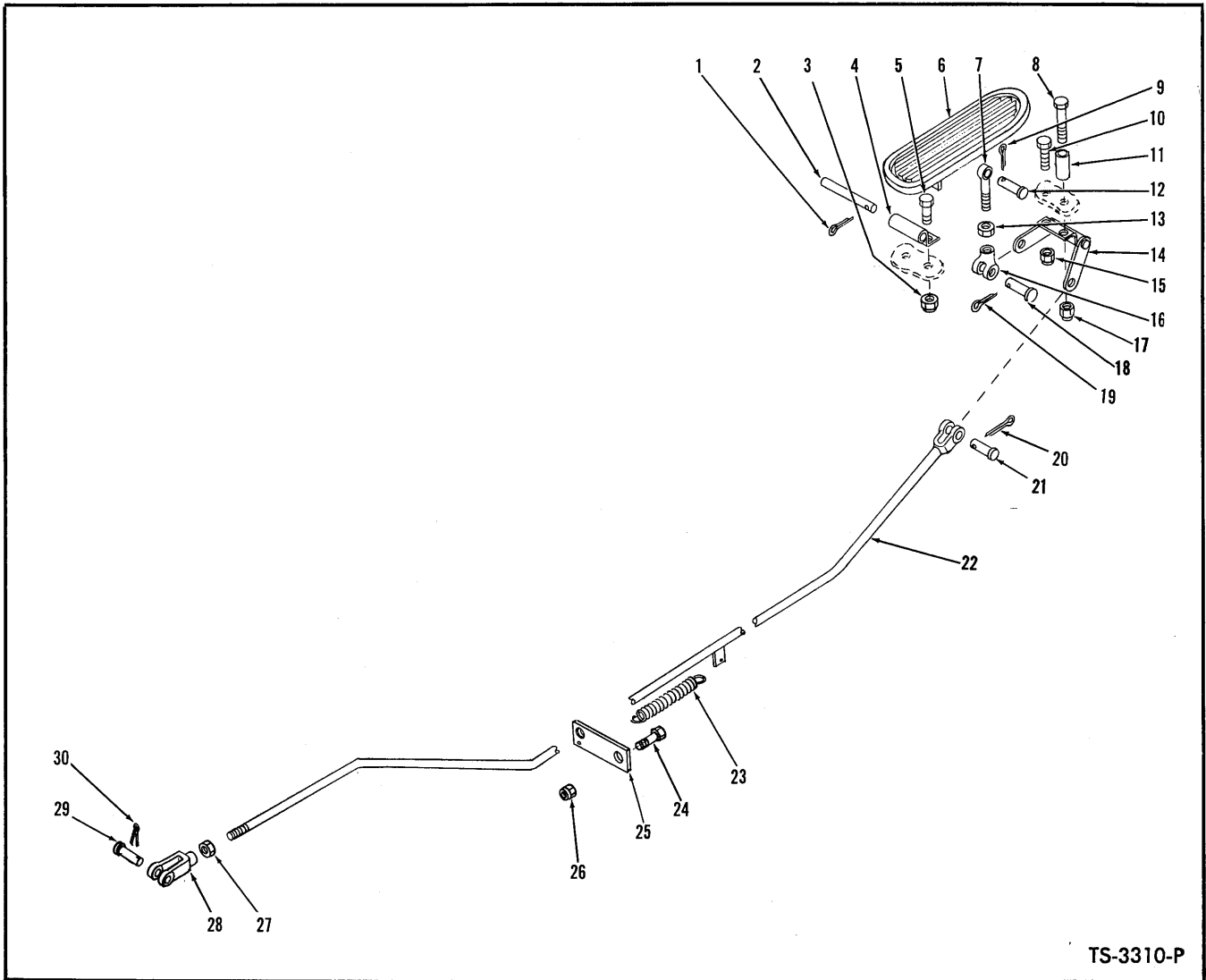


TS-3219-P

RADIATOR AND CONNECTIONS – GAS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	540108	CLAMP, Hose	1	11	71D-08	BASE, Radiator to Frame Nut	2
2	941439	HOSE, Radiator Upper	1	12	70D-08	NUT, Radiator to Frame	2
3	540108	CLAMP, Hose	1	13	540104	CLAMP, Hose	1
4	351495	CAP, Radiator	1	14	73F-2	DRAIN COCK	1
5	18D-06	NUT, Clip to Radiator	2	15	1M-18030	HOSE, Tube to Radiator	1
6	547380	RADIATOR	1	16	540104	CLAMP, Hose	1
7	543878	CLIP, Radiator to Grille	2	17	543877	TUBE, Lower Suction	1
8	18C-612	BOLT, Clip to Radiator	2	18	540106	CLAMP, Hose	1
9	18C-828	BOLT, Radiator to Frame	2	19	1M-20034	HOSE, Water Pump to Tube	1
10	518233	PAD, Radiator to Frame	2	20	540106	CLAMP, Hose	1

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

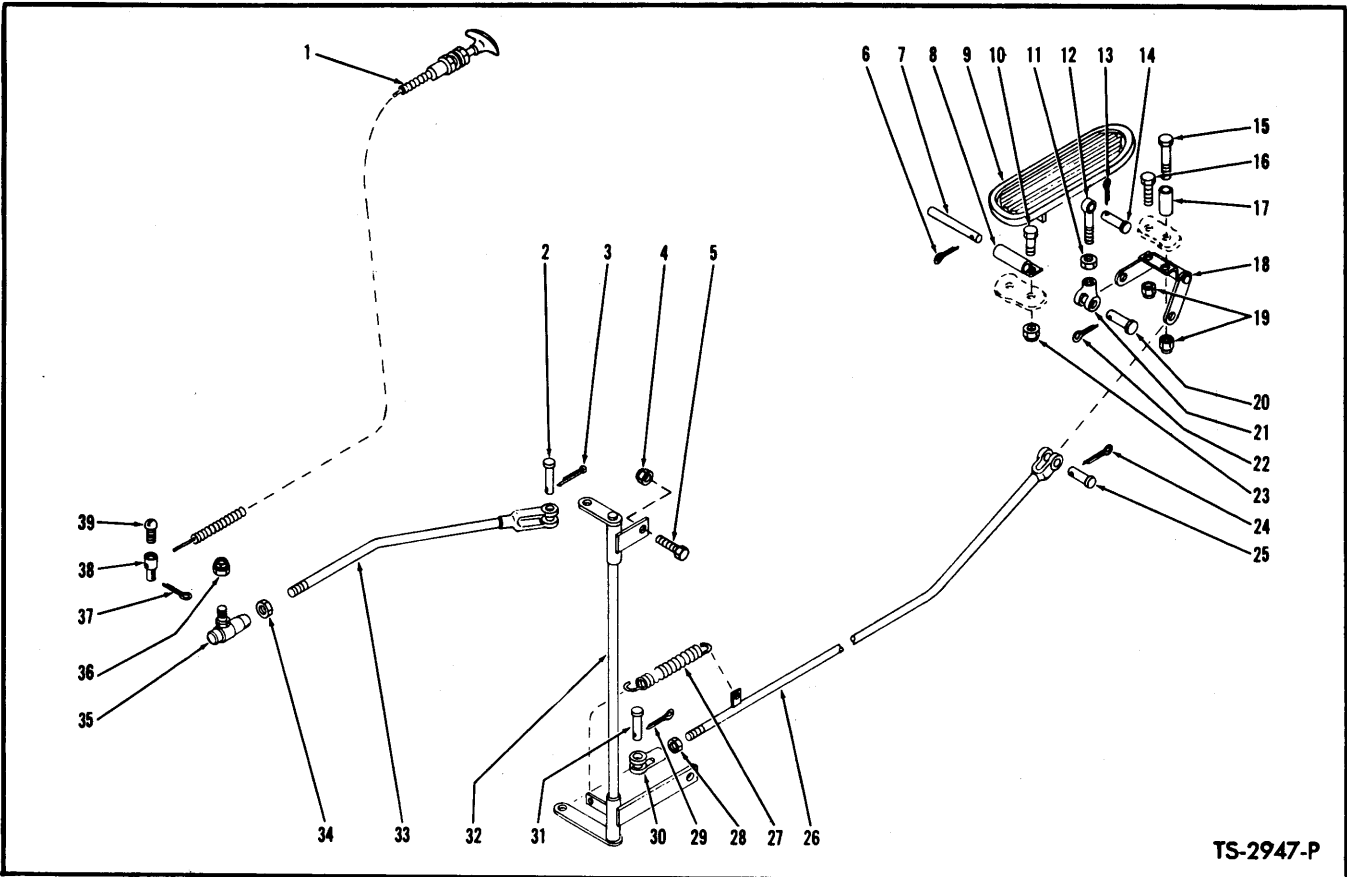


TS-3310-P

ACCELERATOR PEDAL AND LINKAGE — CUMMINS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1F-316	COTTER, Pedal Pivot Pin	1	16	2J-4200	CLEVIS, Rod to Bell Crank	1
2	623762	PIN, Pedal Pivot	1	17	18D-04	NUT, Pedal Stop & Bell Crank to Floorboard	1
3	18D-04	NUT, Pivot Bracket to Floorboard	2	18	4F-04051	PIN, Rod to Bell Crank Clevis	1
4	623760	BRACKET, Pedal Pivot	1	19	1F-207	COTTER, Rod to Bell Crank Clevis Pin	1
5	18C-412	BOLT, Pivot Bracket to Floorboard	2	20	1F-207	COTTER, Accelerator Rod Clevis Pin	1
6	623829	PEDAL, Accelerator	1	21	4F-04051	PIN, Accelerator Rod Clevis	1
7	536140	ROD, Pedal to Bell Crank	1	22	547537	ROD, Accelerator — Pedal to Engine	1
8	18C-428	BOLT, Pedal Stop & Bell Crank to Floorboard	1	23	551090	SPRING, Accelerator Rod Return	1
9	1F-207	COTTER, Rod to Pedal Pin	1	24	18C-716	BOLT, Rod Guide Mounting	1
10	18C-412	BOLT, Bell Crank to Floorboard	1	25	524556	GUIDE, Accelerator Rod	1
11	536141	STOP, Pedal	1	26	18D-07	NUT, Rod Guide Mounting	1
12	4F-04051	PIN, Rod to Pedal	1	27	8D-05	NUT, Clevis Jam	1
13	8D-04	NUT, Clevis Jam	1	28	2J-5204	CLEVIS, Accelerator Rod	1
14	516175	BELL CRANK, Pedal to Accelerator Rod	1	29	4F-05062	PIN, Accelerator Rod Clevis	1
15	18D-04	NUT, Bell Crank to Floorboard	1	30	1F-414	COTTER, Accelerator Rod Clevis Pin	1

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

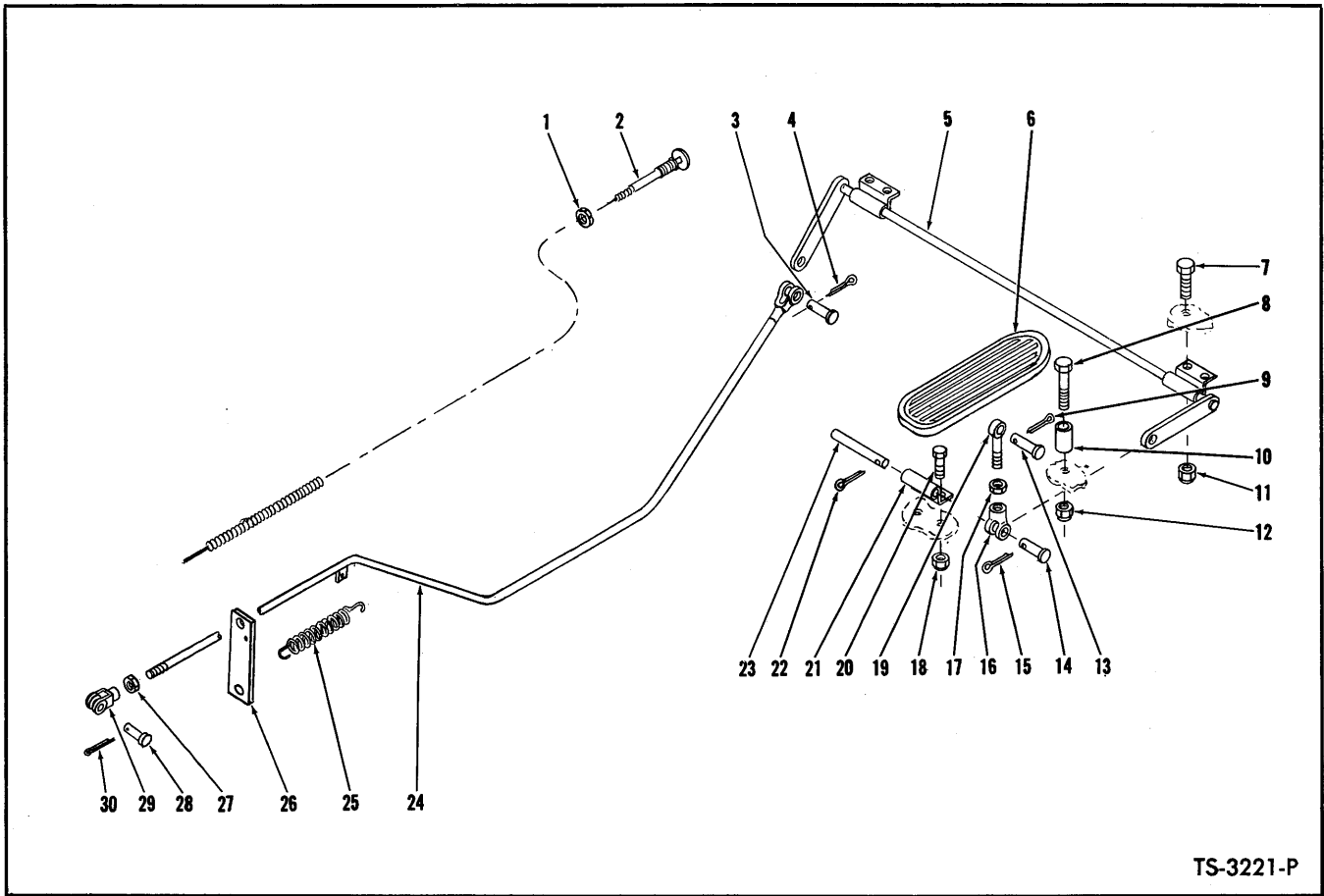


TS-2947-P

ACCELERATOR PEDAL AND LINKAGE – G.M.

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1520193	CABLE, Shutoff	1	21	2J-4200	CLEVIS, Rod to Bell Crank	1
2	4F-04051	PIN, Rod to Bell Crank	1	22	1F-207	COTTER, Clevis Pin	1
3	1F-207	COTTER, Clevis Pin	1	23	18D-04	NUT, Bracket to Floorboard	2
4	18D-06	NUT, Bell Crank Attaching Bolt	2	24	1F-207	COTTER, Clevis Pin	1
5	18C-620	BOLT, Bell Crank Attaching	2	25	4F-04051	PIN, Rod to Bell Crank	1
6	1F-316	COTTER, Clevis Pin	1	26	540858	ROD, Accelerator	1
7	623762	PIN, Pedal to Bracket	1	27	551090	SPRING, Accelerator Rod Return	1
8	623760	BRACKET, Accelerator Pedal Pivot	1	28	66D-05	NUT, Clevis Jam	1
9	623829	PEDAL, Accelerator	1	29	1F-310	COTTER, Clevis Pin	1
10	18C-412	BOLT, Bracket to Floorboard	2	30	2J-5204	CLEVIS, Rod to Bell Crank	1
11	8D-04	NUT, Clevis Jam	1	31	4F-05062	PIN, Rod to Bell Crank	1
12	536140	ROD, Pedal to Bell Crank	1	32	541133	BELL CRANK	1
13	1F-207	COTTER, Clevis Pin	1	33	540861	ROD, Accelerator	1
14	4F-04051	PIN, Pedal to Rod	1	34	8D-05	NUT, Ball Joint Jam	1
15	18C-428	BOLT, Stop to Floorboard	1	35	361939	BALL JOINT	1
16	18C-412	BOLT, Bell Crank to Floorboard	1	36	66D-05	NUT, Ball Joint	1
17	536141	STOP, Pedal	1	37	1F-308	COTTER, Wire Connector	1
18	550616	BELL CRANK	1	38	351131	CONNECTOR, Wire	1
19	18D-04	NUT, Bell Crank to Floorboard	2	39	3G-1008	SCREW, Wire Connector	1
20	4F-40451	PIN, Clevis to Bell Crank	1				

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

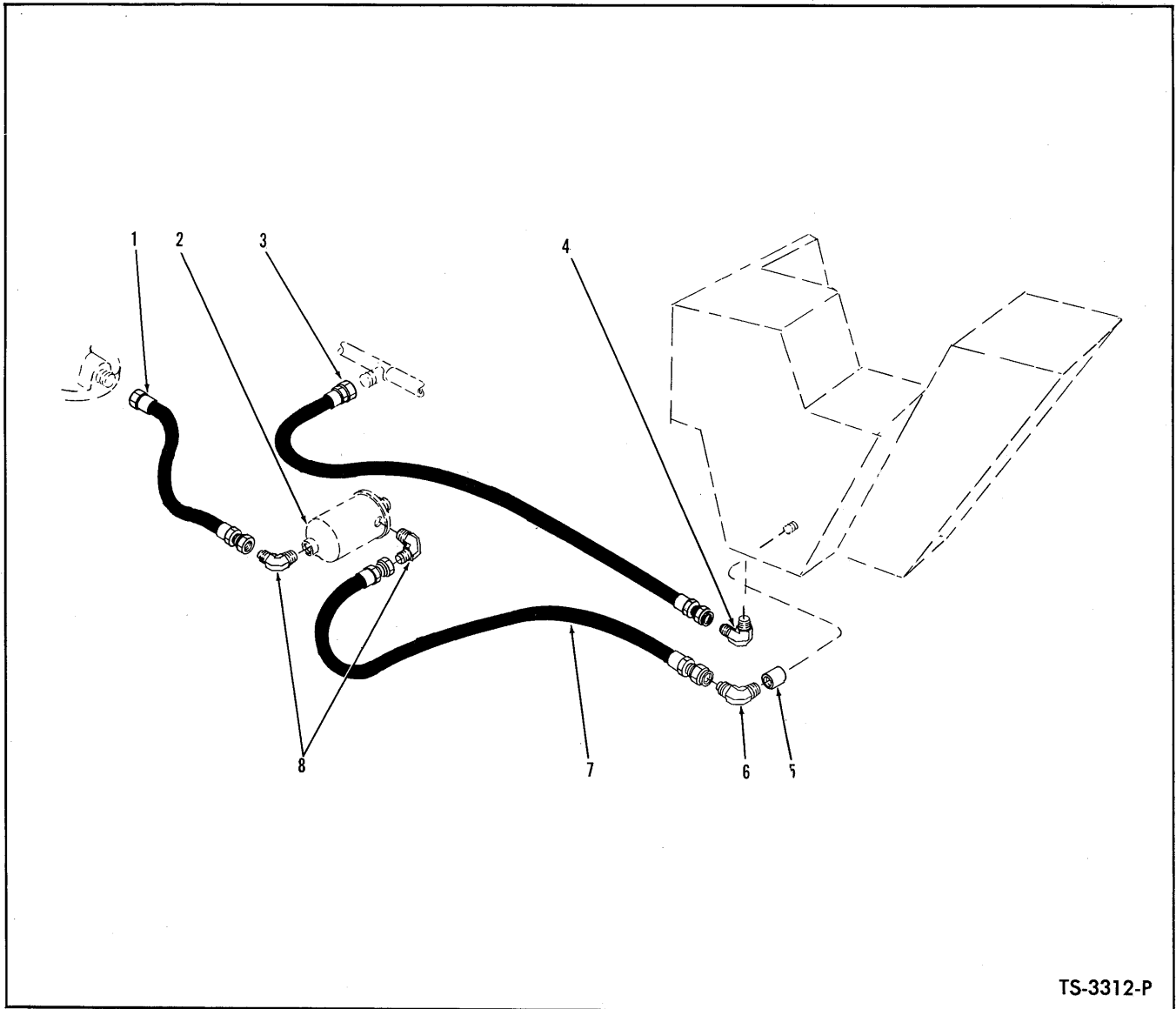


TS-3221-P

ACCELERATOR PEDAL AND LINKAGE – GAS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	66D-06	NUT, Choke Control Mounting	1	16	2J-4200	CLEVIS, Rod to Bell Crank	1
2	7H-11	CABLE, Choke Control	1	17	8D-04	NUT, Clevis Jam	1
3	4F-04051	PIN, Rod to Bell Crank	1	18	18D-04	NUT, Pivot Bracket to Floorboard	2
4	1F-207	COTTER, Clevis Pin	1	19	536140	ROD, Pedal to Bell Crank	1
5	525522	BELL CRANK ASSY	1	20	18C-412	BOLT, Pivot Bracket to Floorboard	2
6	623829	PEDAL, Accelerator	1	21	623760	BRACKET, Accelerator Pivot	1
7	18C-412	BOLT, Bell Crank to Floorboard	4	22	1F-316	COTTER, Pedal to Bracket Pin	1
8	18C-428	BOLT, Pedal Stop to Floorboard	1	23	623762	PIN, Pedal to Bracket	1
9	1F-207	COTTER, Clevis Pin	1	24	544421	ROD, Accelerator	1
10	536141	STOP, Pedal	1	25	551090	SPRING, Accelerator Rod Return	1
11	18D-04	NUT, Bell Crank to Floorboard	4	26	527936	GUIDE, Accelerator Rod	1
12	18D-04	NUT, Pedal Stop to Floorboard	1	27	8D-04	NUT, Clevis Jam	1
13	4F-04051	PIN, Pedal to Rod	1	28	4F-04051	PIN, Clevis to Pump	1
14	4F-04051	PIN, Clevis to Bell Crank	1	29	2J-4200	CLEVIS, Rod to Pump	1
15	1F-207	COTTER, Clevis Pin	1	30	1F-207	COTTER, Clevis Pin	1

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

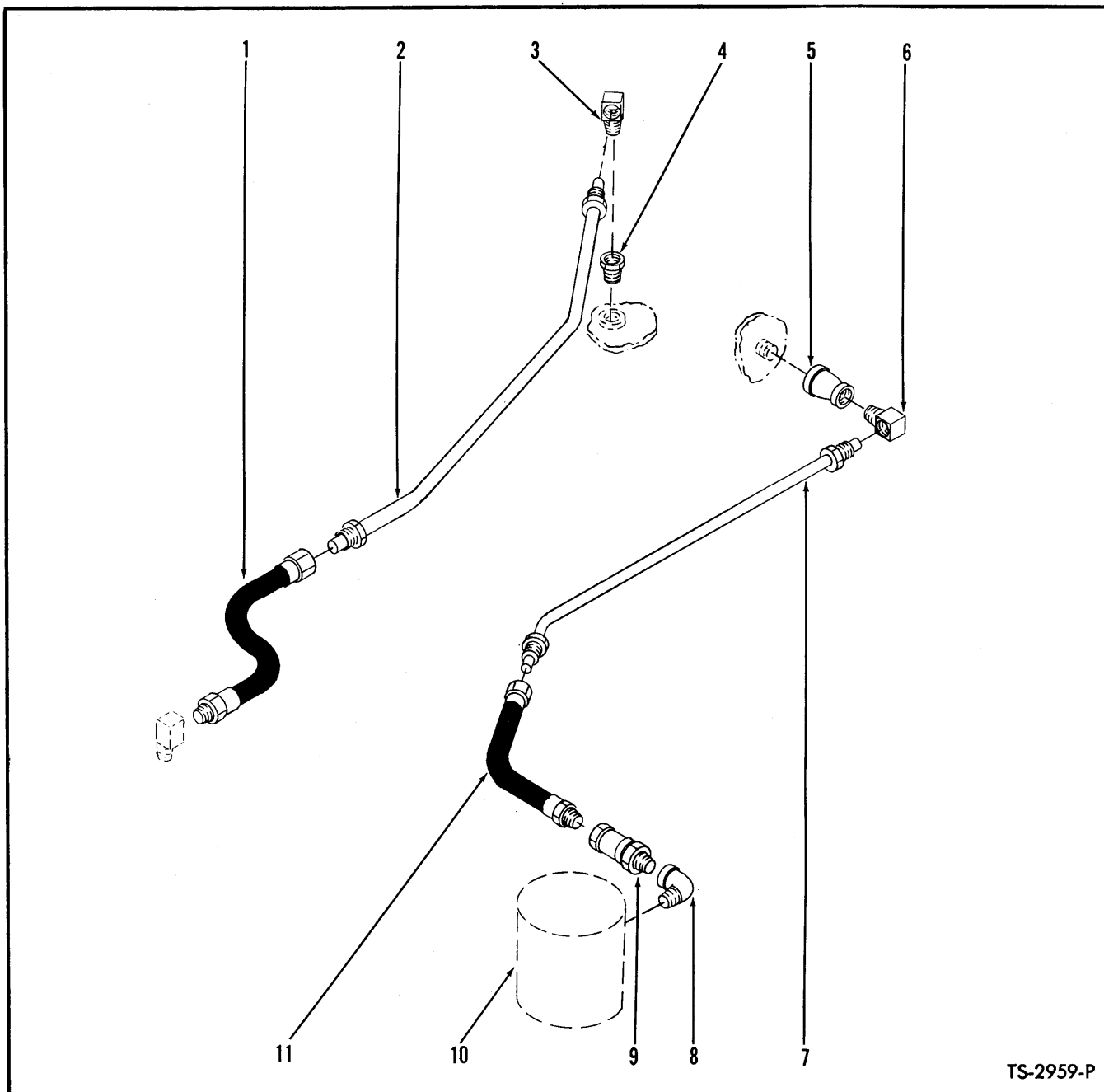


TS-3312-P

FUEL LINES — CUMMINS

Item No.	Part No.	Description	No. Req'd.
1	547546	HOSE, Fuel Pump to Fuel Filter	1
2	—	FUEL FILTER — See Engine Parts Manual	—
3	547545	HOSE, Drain — Manifold to Fuel Tank	1
4	42F-8	ELBOW, Hose to Tank	1
5	75F-4	COUPLING, Elbow to Tank	1
6	42F-9	FITTING, Hose to Coupling	1
7	547544	HOSE, Tank to Filter	1
8	42F-9	FITTING, Hose to Filter	2

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

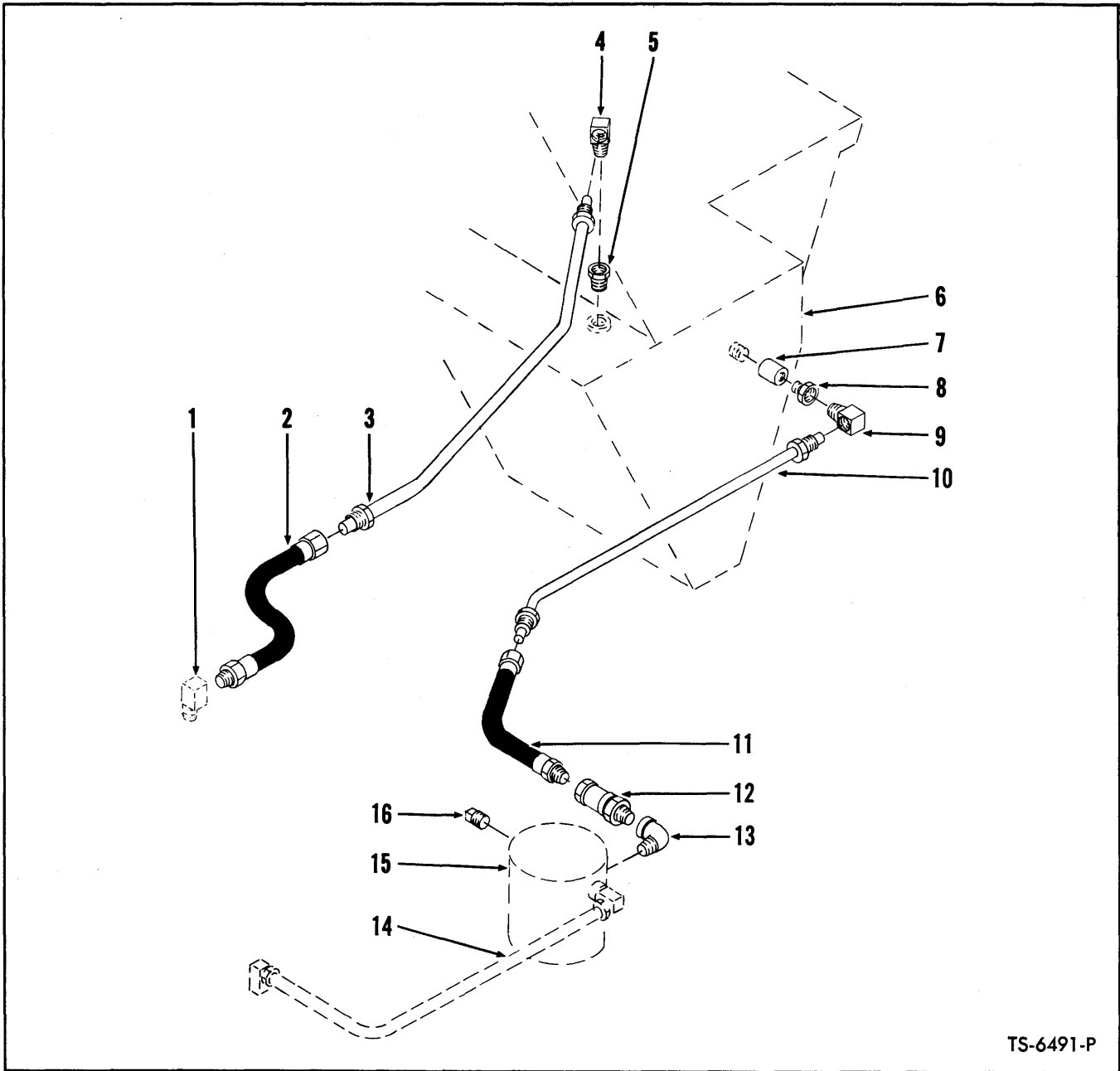


TS-2959-P

FUEL LINES — G.M.
For Serial: 2DG101 thru 2DG999

Item No.	Part No.	Description	No. Req'd.
1	541155	HOSE, Engine to Return Line	1
2	541156	LINE, Fuel Return	1
3	62F-5	ELBOW, Return Line to Tank	1
4	356612	BUSHING, Tank Reducing	1
5	75F-4	COUPLING, Reducing	1
6	62F-6	ELBOW, Line to Tank	1
7	541152	LINE, Tank to Filter	1
8	30K-304	ELBOW, Hose to Filter	1
9	531792	VALVE, Check	1
10	—	FUEL FILTER — See Engine Parts Manual	—
11	512133	HOSE, Line to Filter	1

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

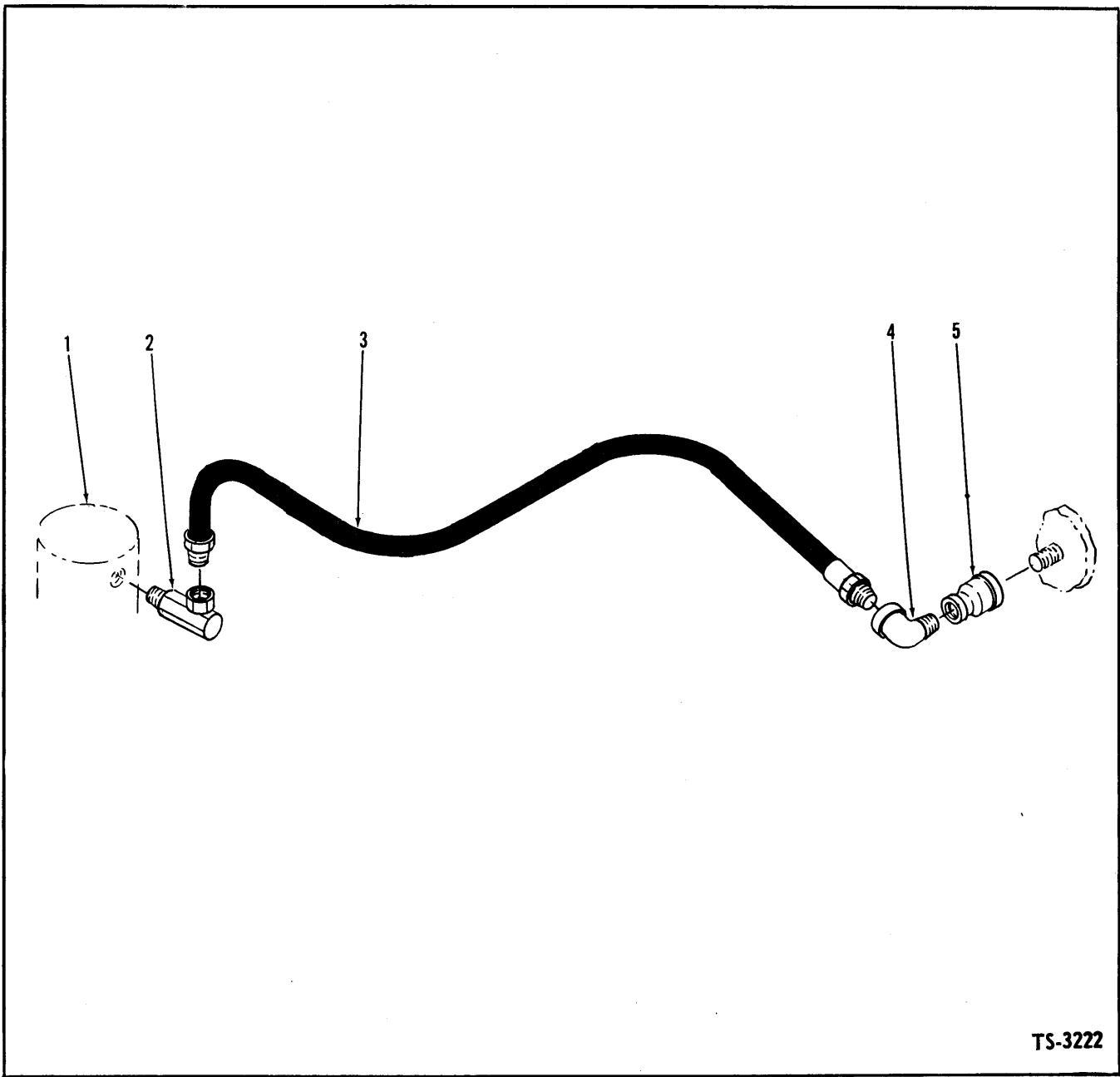


TS-6491-P

FUEL LINES – G.M.
For Serial: 3DG101 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	---	LINE, Injector Return – See Engine Parts Manual	—	9	62F-6	ELBOW, Line to Coupling	1
2	541155	HOSE, Line to Line	1	10	541152	LINE, Tank to Filter	1
3	541156	LINE, Fuel Return	1	11	512133	HOSE, Line to Filter	1
4	62F-5	ELBOW, Return Line to Tank	1	12	531792	VALVE, Check	1
5	356612	BUSHING, Tank Reducing	1	13	30K-304	ELBOW, Valve to Filter	1
6	---	FUEL TANK – See Index	—	14	---	LINE, Fuel Suction – See Engine Parts Manual	—
7	75F-4	COUPLING, Tank Reducing	1	15	---	FUEL FILTER – See Engine Parts Manual	—
8	356615	BUSHING, Coupling Reducing	1	16	13F-04	PLUG, Filter	1

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

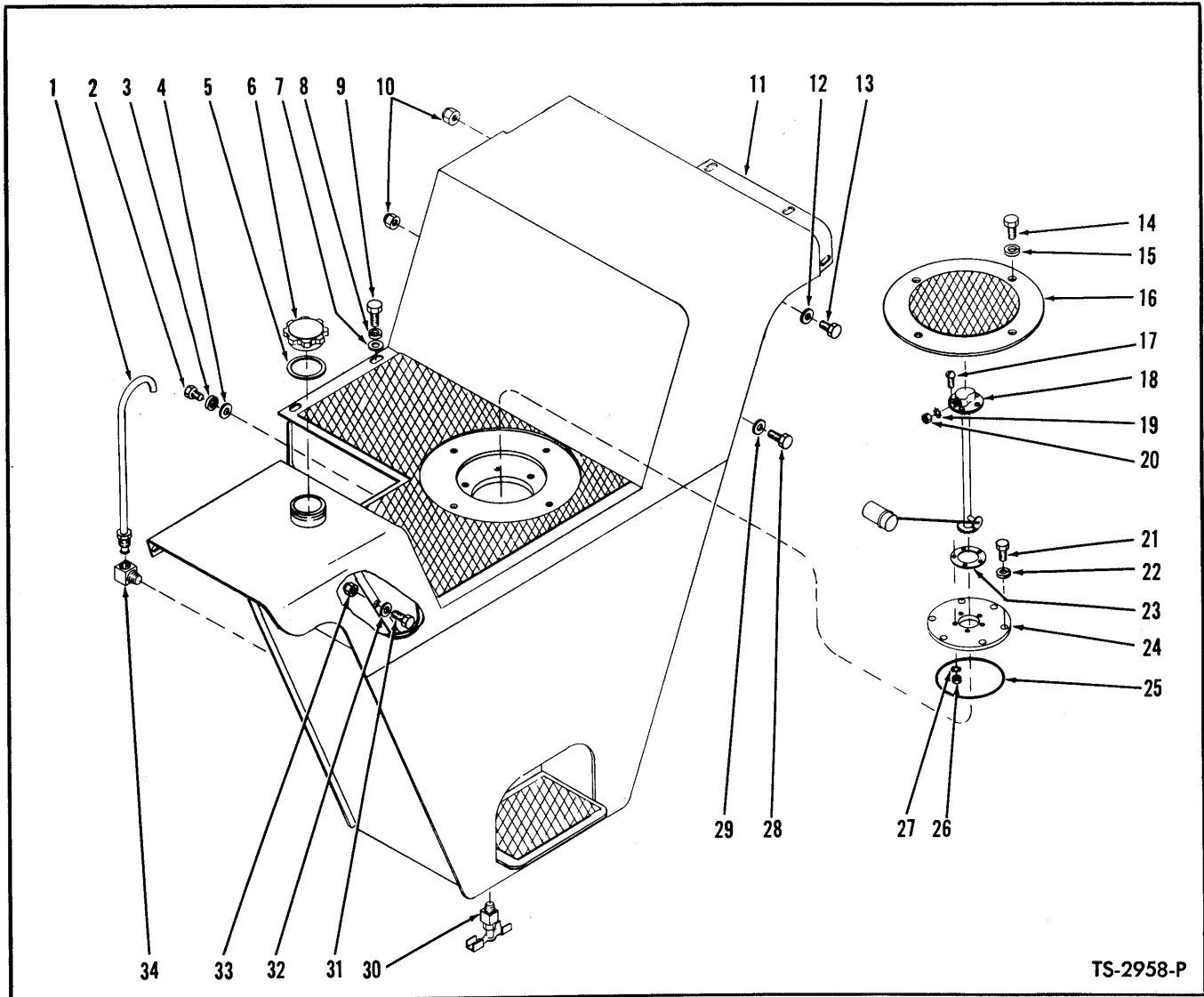


TS-3222

FUEL LINE — WAUKESHA GAS

Item No.	Part No.	Description	No. Req'd.
1	-----	FUEL PUMP — See Engine Parts Manual	—
2	31F-2	ADAPTER UNION	1
3	587456	HOSE, Fuel Tank to Pump	1
4	30K-304	ELBOW, Hose to Coupling	1
5	76F-3	COUPLING, Reducing — Elbow to Tank	1

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

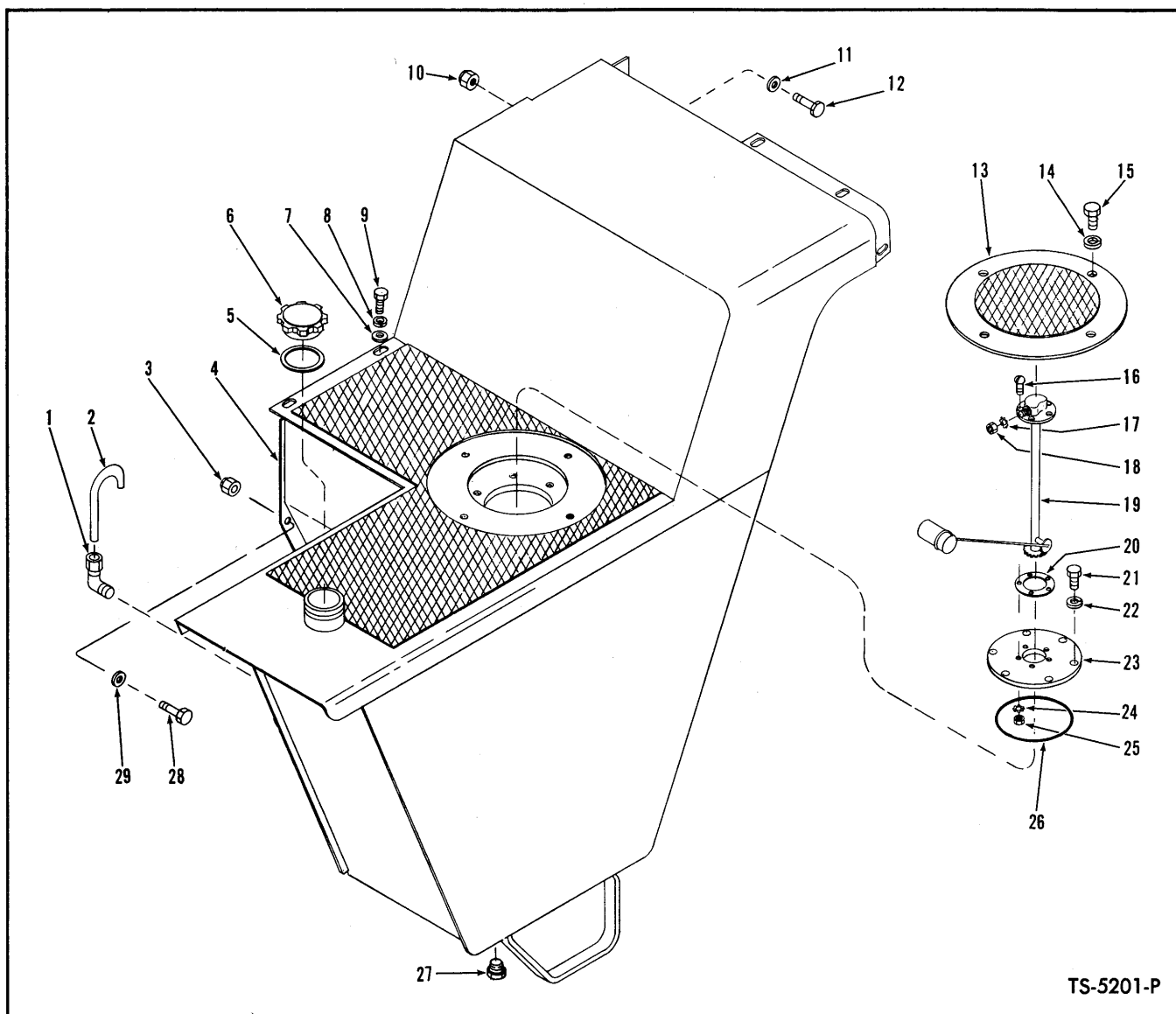


TS-2958-P

FUEL TANK
For Serial: Cummins — 2DC101 thru 3DC999
G.M. — 2DG101 thru 4DG999
Wauk. — 2DA101 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	543034	TUBE, Vent	1	18	536204	SENDER UNIT, Fuel Tank	1
2	17C-616	BOLT, Tank to Pivot Cap	2	19	12E-10	LKWSHR, Sender Unit Terminal	1
3	4E-06	LKWSHR, Tank to Pivot Cap	2	20	14D-10	NUT, Sender Unit Terminal	1
4	619021	WASHER, Tank to Pivot Cap	2	21	18C-612	BOLT, Support Ring to Tank	6
5	539318	GASKET, Filler Cap	1	22	4E-06	LKWSHR, Support Ring to Tank	6
6	539195	CAP, Filler	1	23	627982	GASKET, Sender Unit	1
7	619021	WASHER, Tank to Seat Support	2	24	536274	SUPPORT RING	1
8	4E-06	LKWSHR, Tank to Seat Support	2	25	25K-40428	"O" RING, Support Ring	1
9	17C-612	BOLT, Tank to Seat Support	2	26	12D-10	NUT, Sender Unit to Support Ring	5
10	18D-06	NUT, Tank to Frame	3	27	12E-10	LKWSHR, Sender Unit to Support Ring	5
11	536387	TANK, Fuel	1	28	18C-636	BOLT, Tank to Frame	1
12	619021	WASHER, Tank to Seat Support	2	29	619021	WASHER, Tank to Frame	1
13	18C-620	BOLT, Tank to Seat Support	2	30	72F-2	DRAIN COCK	1
14	17C-608	BOLT, Cover to Tank	4	31	18C-832	BOLT, Tank to Frame	2
15	4E-06	LKWSHR, Cover to Tank	4	32	619029	WASHER, Tank to Frame	2
16	540056	COVER	1	33	18D-08	NUT, Tank to Frame	2
17	3G-1008	SCREW, Sender Unit to Support Ring	5	34	62F-3	ELBOW, Tube to Tank	1

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

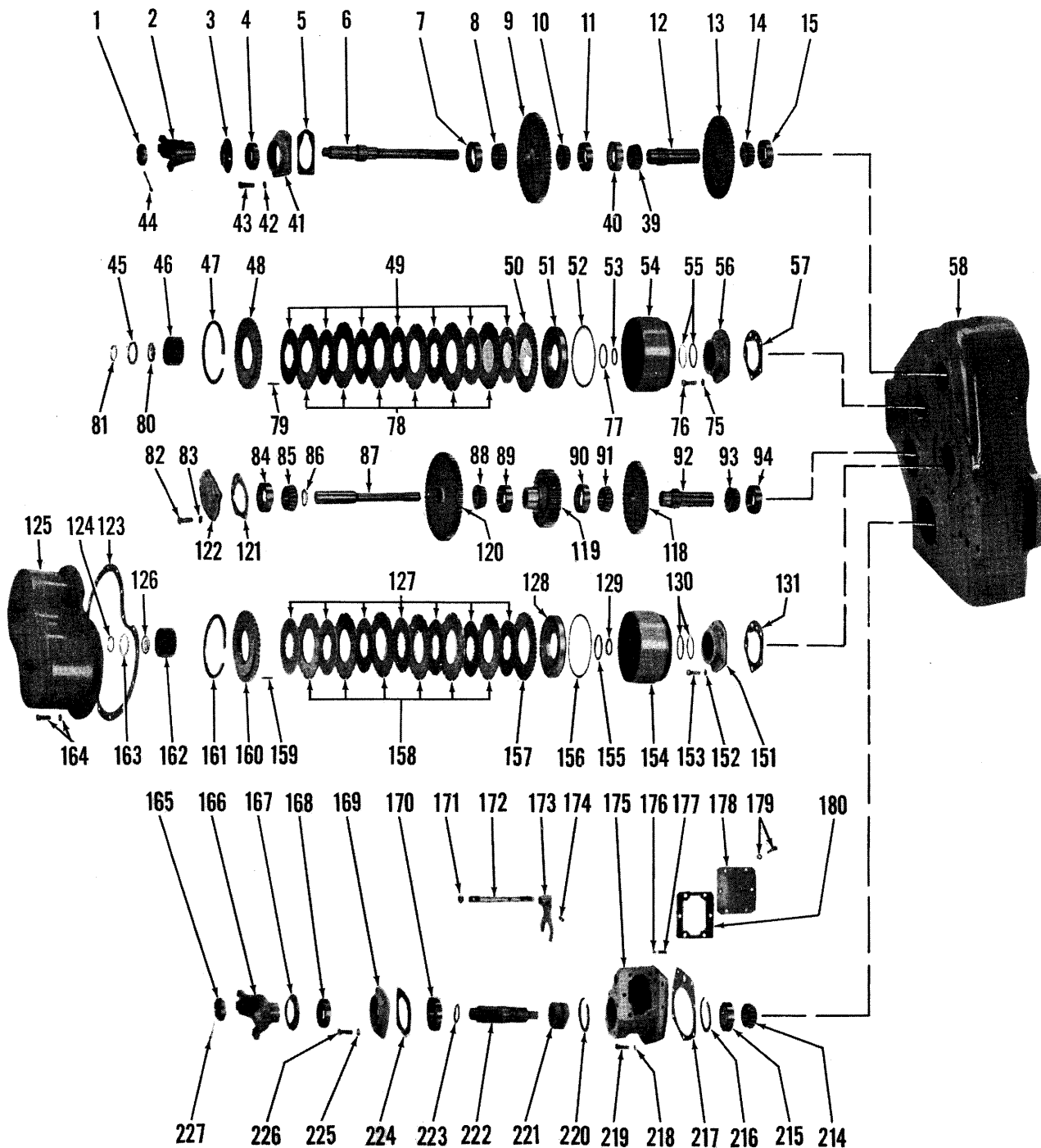


TS-5201-P

FUEL TANK
For Serial: Cummins — 4DC101 and after
G.M. — 5DG101 and after

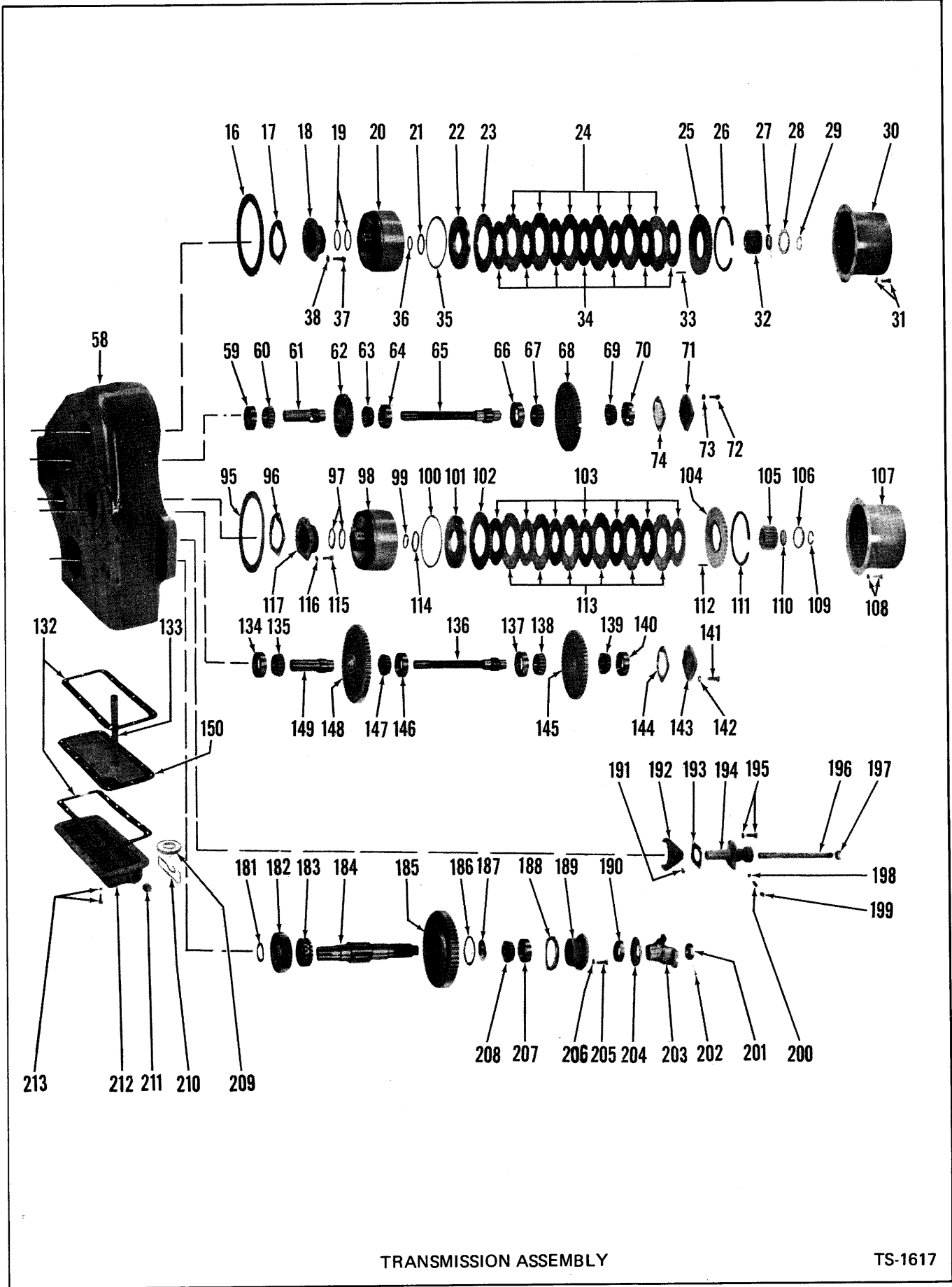
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	51F-3	ELBOW, Tube to Tank	1	16	3G-1008	SCREW, Sender Unit to Support Ring	5
2	567847	TUBE, Vent	1	17	12E-10	LKWSHR, Sender Unit	1
3	18D-08	NUT, Tank to Frame	2	18	14D-10	NUT, Sender Unit	1
4	566062	TANK, Fuel (Inc. 6)	1	19	536204	SENDER UNIT, Fuel Tank	1
5	539318	GASKET, Filler Cap	1	20	627982	GASKET, Sender Unit	1
6	539195	CAP, Filler (Inc. 5)	1	21	18C-612	BOLT, Support Ring to Tank	6
7	619021	WASHER, Tank to Seat Support	2	22	4E-06	LKWSHR, Support Ring to Tank	6
8	4E-06	LKWSHR, Tank to Seat Support	2	23	536274	SUPPORT RING	1
9	17C-612	BOLT, Tank to Seat Support	2	24	12E-10	LKWSHR, Sender Unit to Support Ring	5
10	18D-06	NUT, Tank to Seat Support	2	25	12D-10	NUT, Sender Unit to Support Ring	5
11	619021	WASHER, Tank to Seat Support	2	26	25K-40428	"O" RING	1
12	18C-620	BOLT, Tank to Seat Support	2	27	13F-04	PLUG, Fuel Tank Drain	1
13	540056	COVER, Fuel Tank	1	28	18C-832	BOLT, Tank to Frame	2
14	4E-06	LKWSHR, Cover to Tank	4	29	619029	WASHER, Tank to Frame	2
15	17C-608	BOLT, Cover to Tank	4				

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



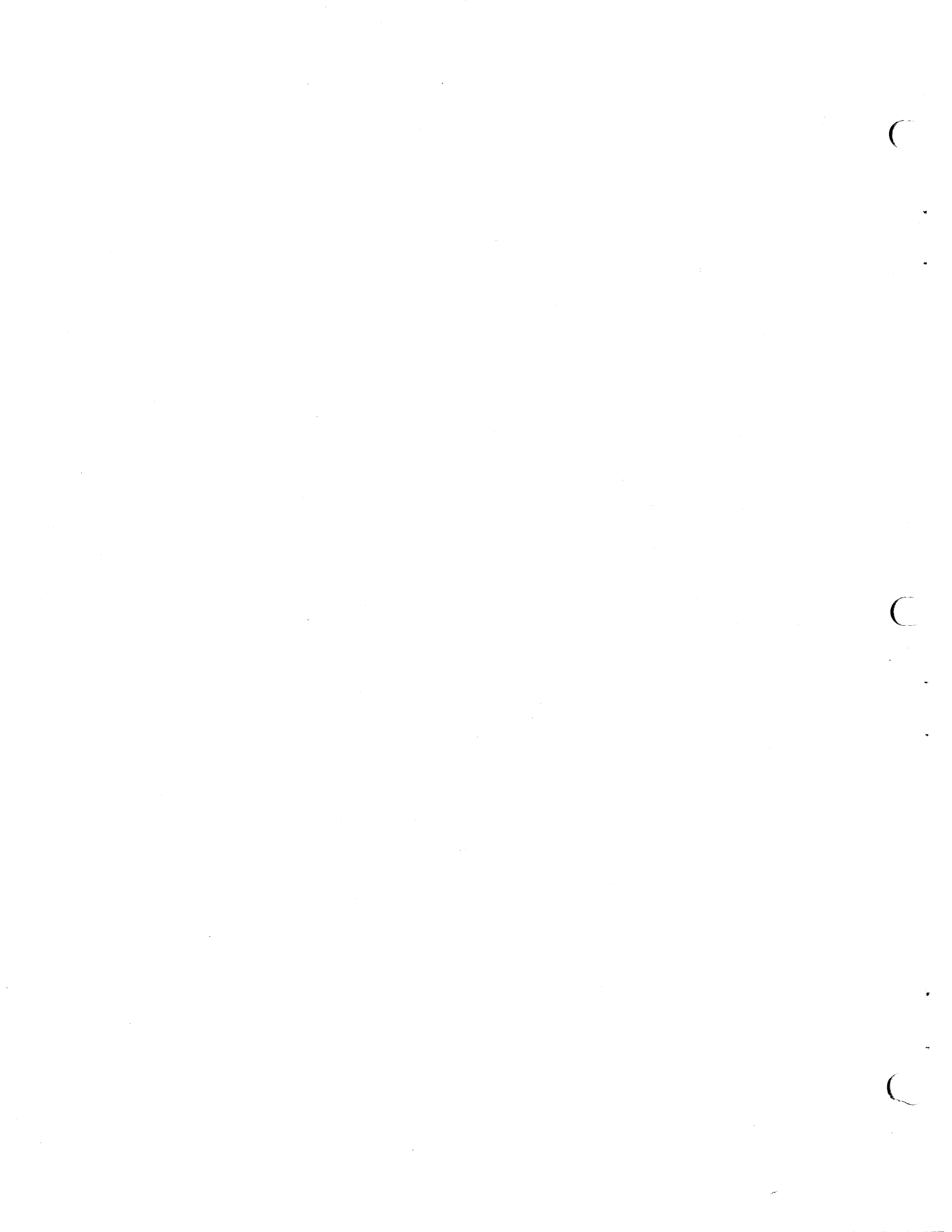
TRANSMISSION ASSEMBLY

TS-1617



TRANSMISSION ASSEMBLY

TS-1617



TRANSMISSION ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	281740	TRANSMISSION ASSY — R-300FS-5 (Inc. 1 thru 227)	1	40A	223881	†RING, Bearing Locating	1
1	201951	NUT, Input Flange	1	41	209339	CAP, Input Shaft Bearing	1
2	209343	FLANGE ASSY, Input (Inc. 3)	1	42	4E-07	LKWSHR, Bearing Cap	4
3	100949	DEFLECTOR, Input Flange	1	43	1C-718	BOLT, Bearing Cap	4
4	206864	SEAL, Input Shaft Oil	1	44	1F-424	COTTER, Flange Nut	1
5	209340	‡SHIM, Bearing Cap — .004"	—	45	223867	RING, Hub Washer Locating	1
5A	209341	‡SHIM, Bearing Cap — .007"	—	46	220398	HUB, Clutch Disc	1
5B	209342	‡SHIM, Bearing Cap — .010"	—	47	223942	RING, End Plate Retaining	1
6	220390	SHAFT, Input	1	48	208760	PLATE, Clutch Disc End	1
7	675544	CUP, Input Shaft Bearing	1	49	216677	DISC, Clutch Inner	7
8	675547	CONE, Input Shaft Bearing	1	50	221998	DISC, Clutch Outer	1
9	209377	GEAR, Input Shaft Reverse (45T)	1	51	221996	PISTON, Clutch	1
10	675547	CONE, Input Shaft Bearing	1	52	208776	RING, Piston Outer Sealing	1
11	675544	CUP, Input Shaft Bearing	1	53	224106	RING, Drum Hub Retaining	1
11A	223881	†RING, Bearing Locating	1	54	222409	DRUM ASSY, Clutch (Inc. 54A, 54B)	1
12	220389	SHAFT, Forward Gear Quill	1	54A	222407	†HOUSING, Bleed Valve	1
13	209369	GEAR, Input Shaft Forward (43T)	1	54B	10J-06	†BALL, Bleed Valve	1
14	731321	CONE, Quill Shaft Bearing	1	55	209387	RING, Drum Hub Sealing	2
15	731319	CUP, Quill Shaft Bearing	1	56	220469	CAP, Clutch Bearing	1
16	221401	GASKET, Clutch Cover	1	57	220471	‡SHIM, Bearing Cap — .004"	—
17	220471	‡SHIM, Bearing Cap — .004"	—	57A	220472	‡SHIM, Bearing Cap — .007"	—
17A	220472	‡SHIM, Bearing Cap — .007"	—	57B	220473	‡SHIM, Bearing Cap — .010"	—
17B	220473	‡SHIM, Bearing Cap — .010"	—	57C	221209	‡SHIM, Bearing Cap — .020"	—
17C	221209	‡SHIM, Bearing Cap — .020"	—	58	220934	CASE ASSY, Transmission	1
18	220469	CAP, Clutch Bearing	1	59	731319	CUP, Quill Shaft Bearing	1
19	209387	RING, Clutch Drum Sealing	2	60	731321	CONE, Quill Shaft Bearing	1
20	222409	DRUM ASSY, Clutch (Inc. 20A, 20B)	1	61	220389	SHAFT, 1st & 3rd Quill	1
20A	222407	†HOUSING, Bleed Valve	1	62	209374	GEAR, 1st & 3rd Drive (29T)	1
20B	10J-06	†BALL, Bleed Valve	1	63	675548	CONE, Quill Shaft Bearing	1
21	208777	RING, Piston Inner Sealing	1	64	675544	CUP, Quill Shaft Bearing	1
22	221996	PISTON, Clutch	1	64A	223881	†RING, Bearing Locating	1
23	221998	DISC, Clutch Outer	1	65	220388	SHAFT, 1st & 3rd Drive	1
24	208773	DISC, Clutch Outer	6	66	675544	CUP, Drive Shaft Bearing	1
25	208760	PLATE, Clutch Disc End	1	66A	223881	†RING, Bearing Locating	1
26	223942	RING, End Plate Retaining	1	67	675547	CONE, Drive Shaft Bearing	1
27	220468	WASHER, Disc Hub Retaining	1	68	209375	GEAR, 1st & 3rd Drop (44T)	1
28	223867	RING, Hub Washer Locating	1	69	675547	CONE, Drive Shaft Bearing	1
29	224047	RING, Hub Washer Retaining	1	70	675544	CUP, Drive Shaft Bearing	1
30	220391	COVER, Clutch	1	71	209364	CAP, Drive Shaft Bearing	1
31	5C-614	BOLT & LKWSHR, Clutch Cover	10	72	1C-718	BOLT, Bearing Cap	4
32	220398	HUB, Clutch Disc	1	73	4E-07	LKWSHR, Bearing Cap	4
33	220186	SPRING, Clutch Disc Release	10	74	209365	‡SHIM, Bearing Cap — .004"	—
34	216677	DISC, Clutch Inner	7	74A	209366	‡SHIM, Bearing Cap — .007"	—
35	208776	RING, Piston Outer Sealing	1	74B	209367	‡SHIM, Bearing Cap — .010"	—
36	224106	RING, Drum Hub Retaining	1	75	4E-07	LKWSHR, Bearing Cap	4
37	1C-718	BOLT, Bearing Cap	4	76	1C-718	BOLT, Bearing Cap	4
38	4E-07	LKWSHR, Bearing Cap	4	77	208777	RING, Piston Inner Sealing	1
39	675548	CONE, Quill Shaft Bearing	1	78	208773	DISC, Clutch Outer	6
40	675544	CUP, Quill Shaft Bearing	1	79	220186	SPRING, Clutch Disc Release	10
				80	220468	WASHER, Disc Hub Retaining	1

‡As Required
†Not Illustrated

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

TRANSMISSION ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
81	224047	RING, Hub Washer Retaining	1	121	220513	‡SHIM, Bearing Cap — .004"	—
82	1C-718	BOLT, Bearing Cap	5	121A	220514	‡SHIM, Bearing Cap — .007"	—
83	4E-07	LKWSHR, Bearing Cap	5	121B	220515	‡SHIM, Bearing Cap — .010"	—
84	731336	CUP, Drive Shaft Bearing	1	122	220508	CAP, Drive Shaft Bearing	1
85	711124	CONE, Drive Shaft Bearing	1	123	209370	GASKET, Clutch Cover	1
86	224031	RING, High Gear Locating	1	124	224047	RING, Hub Washer Retaining	1
87	220393	SHAFT, 2nd & 4th Drive	1	125	220386	COVER, Clutch	1
88	654875	CONE, Drive Shaft Bearing	1	126	220468	WASHER, Disc Hub Retaining	1
89	731336	CUP, Drive Shaft Bearing	1	127	216677	DISC, Clutch Inner	7
89A	223951	†RING, Bearing Locating	1	128	221996	PISTON, Clutch	1
90	675544	CUP, Quill Shaft Tapered Bearing	1	129	224106	RING, Clutch Drum Hub Retaining	1
91	675548	CONE, Quill Shaft Tapered Bearing	1	130	209387	RING, Drum Hub Sealing	2
92	220389	SHAFT, 2nd & 4th Quill	1	131	220471	‡SHIM, Bearing Cap — .004"	—
93	731321	CONE, Quill Shaft Tapered Bearing	1	131A	220472	‡SHIM, Bearing Cap — .007"	—
94	731319	CUP, Quill Shaft Tapered Bearing	1	131B	220473	‡SHIM, Bearing Cap — .010"	—
95	221401	GASKET, Clutch Cover	1	131C	221209	‡SHIM, Bearing Cap — .020"	—
96	220471	‡SHIM, Bearing Cap — .004"	—	132	209353	GASKET, Oil Pan	2
96A	220472	‡SHIM, Bearing Cap — .007"	—	133	220673	PIPE, Oil Suction	1
96B	220473	‡SHIM, Bearing Cap — .010"	—	134	731319	CUP, Quill Shaft Bearing	1
96C	221209	‡SHIM, Bearing Cap — .020"	—	135	731321	CONE, Quill Shaft Bearing	1
97	209387	RING, Drum Hub Sealing	2	136	220388	SHAFT, Reverse Drive	1
98	222409	DRUM ASSY, Clutch (Inc. 98A, 98B)	1	137	675544	CUP, Drive Shaft Bearing	1
98A	222407	†HOUSING, Bleed Valve	1	137A	223881	†RING, Bearing Locating	1
98B	10J-06	†BALL, Bleed Valve	1	138	675547	CONE, Drive Shaft Bearing	1
99	224106	RING, Drum Hub Retaining	1	139	675547	CONE, Drive Shaft Bearing	1
100	208776	RING, Piston Outer Sealing	1	140	675544	CUP, Drive Shaft Bearing	1
101	221996	PISTON, Clutch	1	141	1C-718	BOLT, Bearing Cap	4
102	221998	DISC, Clutch Outer	1	142	4E-07	LKWSHR, Bearing Cap	4
103	216677	DISC, Clutch Inner	7	143	209364	CAP, Reverse Shaft Bearing	1
104	208760	PLATE, Clutch Disc End	1	144	209365	‡SHIM, Bearing Cap — .004"	—
105	220398	HUB, Clutch Disc	1	144A	209366	‡SHIM, Bearing Cap — .007"	—
106	223867	RING, Hub Washer Locating	1	144B	209367	‡SHIM, Bearing Cap — .010"	—
107	220391	COVER, Clutch	1	145	209372	GEAR, Reverse Idler (52T)	1
108	5C-614	BOLT & LKWSHR, Clutch Cover	10	146	675544	CUP, Drive Shaft Bearing	1
109	224047	RING, Hub Washer Retaining	1	146A	223881	†RING, Bearing Locating	1
110	220468	WASHER, Disc Hub Retaining	1	147	675548	CONE, Drive Shaft Bearing	1
111	223942	RING, End Plate Retaining	1	148	209371	GEAR, Reverse Shaft Drive (54T)	1
112	220186	SPRING, Clutch Disc Release	10	149	220389	SHAFT, Drive Gear Quill	1
113	208773	DISC, Clutch Outer	6	150	220669	SCREEN, Oil	1
114	208777	RING, Piston Inner Sealing	1	151	220469	CAP, Clutch Bearing	1
115	1C-718	BOLT, Bearing Cap	4	152	4E-07	LKWSHR, Bearing Cap	4
116	4E-07	LKWSHR, Bearing Cap	4	153	1C-718	BOLT, Bearing Cap	4
117	220469	CAP, Clutch Bearing	1	154	222409	DRUM ASSY, Clutch (Inc. 154A, 154B)	1
118	209369	GEAR, 2nd & 4th Drive (43T)	1	154A	222407	†HOUSING, Bleed Valve	1
119	220395	GEAR, 2nd & 4th Low (32T)	1	154B	10J-06	†BALL, Bleed Valve	1
120	220394	GEAR, 2nd & 4th High (57T)	1				

‡As Required
†Not Illustrated

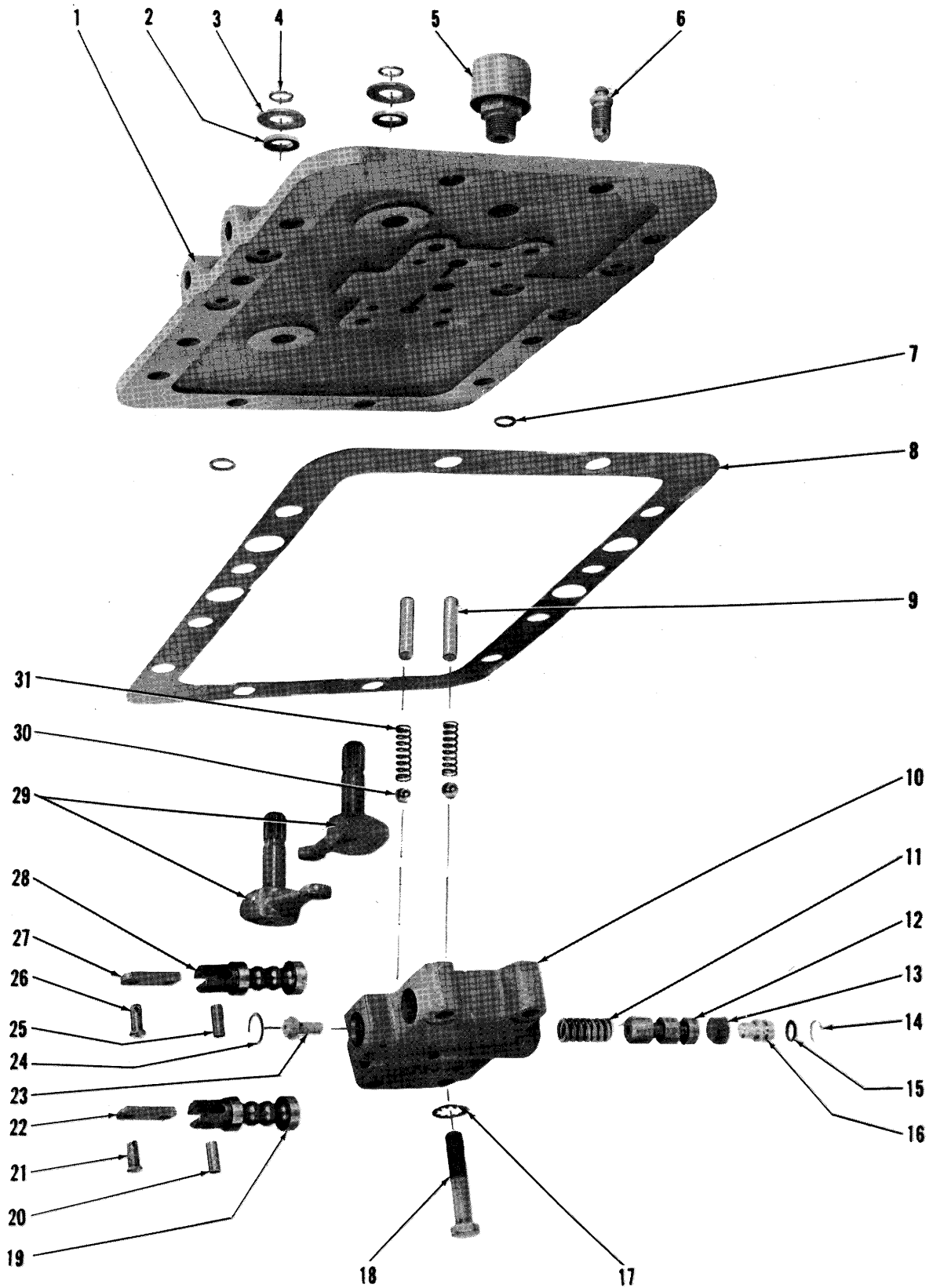
WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE

TRANSMISSION ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
155	208777	RING, Piston Inner Sealing	1	194	209405	SUPPORT, High & Low Shift Shaft	1
156	208776	RING, Piston Outer Sealing	1	195	5C-616	BOLT & LKWSHR, Shift Shaft Support	4
157	221998	DISC, Clutch Outer	1	196	209404	SHAFT, High & Low Shift	1
158	208773	DISC, Clutch Outer	6	197	208871	SEAL, Shift Shaft Support Oil	1
159	220186	SPRING, Clutch Disc Release	10	198	10J-12	BALL, Mesh Lock	1
160	208760	PLATE, Clutch Disc End	1	199	13F-04	PLUG, Mesh Lock	1
161	223942	RING, End Plate Retaining	1	200	201844	SPRING, Mesh Lock	1
162	220398	HUB, Clutch Disc	1	201	205928	NUT, Output Shaft Flange	1
163	223867	RING, Hub Washer Locating	1	202	1F-432	COTTER, Flange Nut	1
164	5C-614	BOLT & LKWSHR, Clutch Cover	16	203	209414	FLANGE ASSY, Output (Inc. 204)	1
165	205928	NUT, Output Flange	1	204	100949	DEFLECTOR, Output Flange	1
166	209414	FLANGE ASSY, Output (Inc. 167)	1	205	1C-718	BOLT, Front Bearing Cap	4
167	100949	DEFLECTOR, Output Flange	1	206	4E-07	LKWSHR, Front Bearing Cap	4
168	206864	SEAL, Bearing Cap Oil	1	207	675544	CUP, Output Shaft Bearing	1
169	209428	CAP, Rear Output Shaft Bearing	1	208	675548	CONE, Output Shaft Bearing	1
170	713997	BEARING, Rear Output Shaft	1	209	525293	MAGNET, Oil Screen	1
171	209435	SEAL, Shift Shaft Oil	1	210	223780	SPRING, Magnet Retaining	1
172	209434	SHAFT, Rear Output Shaft Shift	1	211	201120	PLUG, Drain (Magnetic)	1
173	209433	FORK, Rear Output Shaft Shift	1	212	215644	PAN, Oil	1
174	201566	SCREW, Shift Fork Lock	1	213	5C-616	BOLT & LKWSHR, Oil Pan	14
175	209430	HOUSING, Rear Output Shaft	1	214	675548	CONE, Output Shaft Bearing	1
176	10J-12	BALL, Mesh Lock	1	215	675544	CUP, Output Shaft Bearing	1
177	201844	SPRING, Mesh Lock	1	216	223881	RING, Bearing Retaining	1
178	209431	PLATE, Rear Housing Cover	1	217	209411	SHIM, Output Shaft Housing	1
179	5C-612	BOLT & LKWSHR, Cover Plate	6	218	4E-07	LKWSHR, Housing to Case	7
180	209432	GASKET, Cover Plate	1	219	1C-720	BOLT, Housing to Case	7
181	209407	WASHER, Output Shaft Gear Thrust	1	220	224069	RING, Bearing Retaining	1
182	209396	GEAR ASSY, Output Shaft High (Inc. Bushing)	1	221	209427	HUB, Rear Output Shaft Shift	1
183	209409	HUB, High & Low Shift	1	222	209426	SHAFT, Rear Output	1
184	209423	SHAFT ASSY, Output (Inc. 184A)	1	223	223925	RING, Bearing Locating	1
184A	225408	†BUSHING, Output Shaft	1	224	209429	GASKET, Rear Bearing Cap	1
185	800656	GEAR ASSY, Output Shaft Low (Inc. Bushing) (Inc. 186)	1	225	4E-07	LKWSHR, Rear Bearing Cap	4
186	209673	RING, Low Gear Oil	1	226	1C-718	BOLT, Rear Bearing Cap	4
187	209407	WASHER, Output Shaft Gear Thrust	1	227	1F-432	COTTER, Flange Nut	1
188	209701	‡SHIM, Front Bearing Cap — .004"	—	TRANSMISSION MOUNTING PARTS			
188A	209702	‡SHIM, Front Bearing Cap — .007"	—	228	532184	†MOUNT, Transmission — R.H.	1
188B	209703	‡SHIM, Front Bearing Cap — .010"	—	229	537625	†MOUNT, Transmission — L.H.	1
189	209692	CAP, Output Shaft Front Bearing	1	230	18C-828	†BOLT, Bracket to Frame	4
190	206864	SEAL, Bearing Cap Oil	1	231	70D-08	†NUT, Bracket to Frame	4
191	201566	SCREW, Shift Fork Lock	1	232	71D-08	†BASE, Bracket to Frame Nut	4
192	209403	FORK, High & Low Shift	1	233	18C-1044	†BOLT, Bracket to Transmission	8
193	209406	GASKET, Shift Shaft Support	1	234	18D-10	†NUT, Bracket to Transmission	8

†Not Illustrated
‡As Required

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



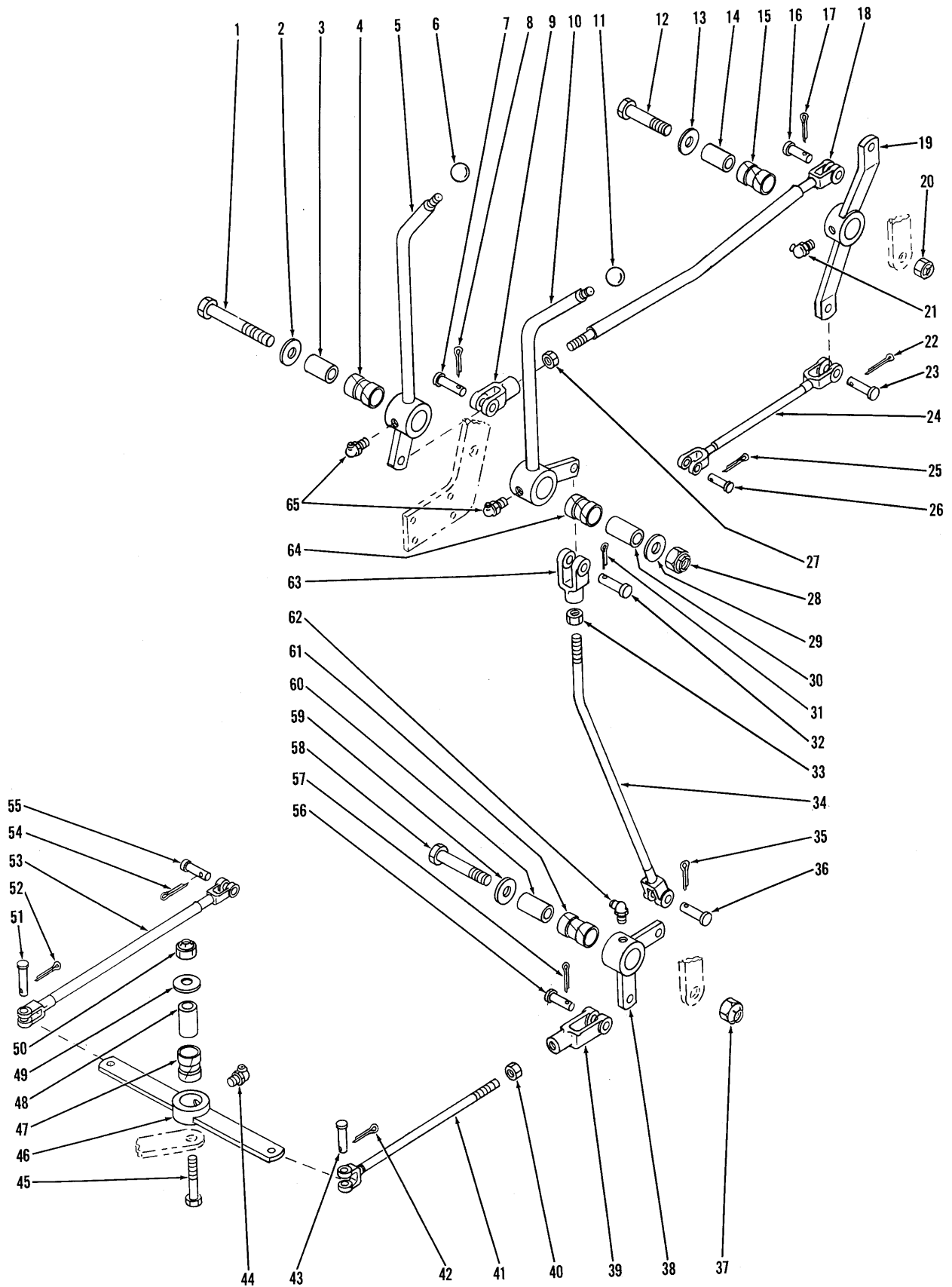
TRANSMISSION CONTROL COVER

TS-3816-P-48-55G

TRANSMISSION CONTROL COVER

Item No.	Part No.	Description	No. Req'd.
A	225854	COVER ASSY, Control (Inc. 1 thru 35).....	1
B	227872	VALVE ASSY, Selector Control (Inc. 10 thru 16, 19, 20, 22 thru 25, 27, 28).....	1
1	220957	COVER, Control	1
2	208812	SEAL, Selector Arm Shaft Oil	2
3	619027	WASHER, Selector Arm Shaft Seal.....	2
4	224095	RING, Selector Arm Shaft Washer Retaining.....	2
5	104942	BREATHER, Control Cover	1
6	208805	VALVE, Bleeder	1
7	25K-30016	"O" RING, Oil Passage.....	5
8	209379	GASKET, Cover to Case.....	1
9	209874	STOP, Selector Valve Detent Ball.....	2
10	-----	§HOUSING, Selector Valve — See "B".....	—
11	220363	SPRING, Shut-Off Valve	1
12	-----	§VALVE, Shut-Off — See "B".....	1
13	227874	CUP, Shut-Off Valve Sealing.....	1
14	223944	RING, Shut-Off Valve Stop Retaining.....	1
15	25K-30014	"O" RING, Shut-Off Valve Stop.....	1
16	209878	STOP, Shut-Off Valve	1
17	4E-06	LKWSHR, Valve to Cover Bolt.....	4
18	1C-626	BOLT, Valve to Cover.....	4
19	-----	§VALVE, Selector — See "B".....	1
20	208809	PIN, Selector Valve Link.....	1
21	208810	PIN, Selector Valve Link Clevis.....	1
21A	1F-208	†COTTER, Clevis Pin	1
22	209382	LINK, Selector Valve	1
23	227873	GUIDE, Valve Spring.....	1
24	223944	RING, Shut-Off Valve Spring Retainer.....	1
25	208809	PIN, Selector Valve Link.....	1
26	208810	PIN, Selector Valve Link Clevis.....	1
26A	1F-208	†COTTER, Clevis Pin	1
27	209382	LINK, Selector Valve	1
28	-----	§VALVE, Selector — See "B".....	1
29	209690	SHAFT ASSY, Selector	2
30	10J-12	BALL, Selector Valve Detent	2
31	203647	SPRING, Selector Valve Detent.....	2
32	40K-02	†PLUG, Control Cover Oil Passage.....	5
33	220947	†BAFFLE, Oil	1
34	1C-718	†BOLT, Control Cover to Case.....	9
35	4E-07	†LKWSHR, Control Cover to Case.....	9

§Not Sold Separately
†Not Illustrated



TRANSMISSION CONTROL LEVERS AND LINKAGE

TS-2972-P



TRANSMISSION CONTROL LINKAGE

Work and Travel, Two and Four Wheel Drive

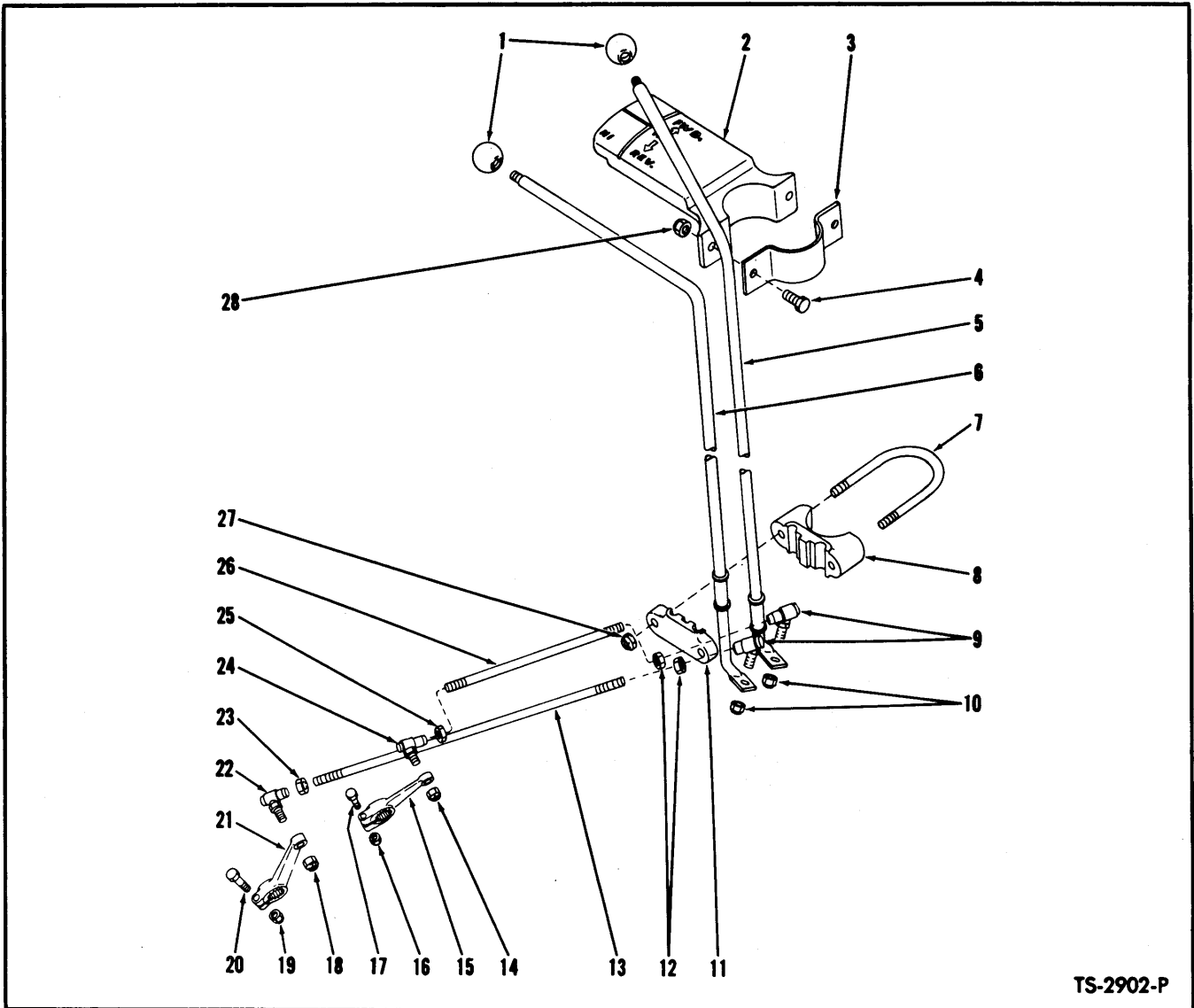
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18C-868	BOLT, Lever Mounting	1	34	537968	ROD, Lever to Bell Crank	1
2	616796	WASHER, Lever Mounting	1	35	1F-412	COTTER, Clevis Pin	1
3	550646	SLEEVE, Lever Mounting	1	36	4F-08127	PIN, Rod to Bell Crank Clevis	1
4	526767	BUSHING, Range Lever	1	37	18D-08	NUT, Bell Crank Mounting	1
5	534929	LEVER, Range	1	38	537966	BELL CRANK	1
6	509772	KNOB, Range Lever	1	39	2J-8300	CLEVIS, Rod to Bell Crank	1
7	4F-08127	PIN, Rod to Lever Clevis	1	40	8D-08	NUT, Clevis Jam	1
8	1F-412	COTTER, Clevis Pin	1	41	536294	ROD, 4 WD Shift	1
9	2J-8300	CLEVIS, Rod to Lever	1	42	1F-312	COTTER, Clevis Pin	1
10	534927	LEVER, 4 WD Shift	1	43	4F-06106	PIN, Rod to Bell Crank Clevis	1
11	509772	KNOB, 4 WD Shift Lever	1	44	12H-15	FITTING, Bell Crank Grease	1
12	18C-844	BOLT, Bell Crank Mounting	1	45	18C-844	BOLT, Bell Crank Mounting	1
13	616796	WASHER, Bell Crank Mounting	1	46	537963	BELL CRANK	1
14	550646	SLEEVE, Bell Crank Mounting	1	47	526767	BUSHING, Bell Crank	1
15	526767	BUSHING, Bell Crank	1	48	550646	SLEEVE, Bell Crank Mounting	1
16	4F-08127	PIN, Rod to Bell Crank Clevis	1	49	616796	WASHER, Bell Crank Mounting	1
17	1F-412	COTTER, Clevis Pin	1	50	18D-08	NUT, Bell Crank Mounting	1
18	538136	ROD, Range Lever to Bell Crank	1	51	4F-06106	PIN, 4 WD Shift Rod to Bell Crank Clevis	1
19	535710	BELL CRANK	1	52	1F-312	COTTER, Clevis Pin	1
20	18D-08	NUT, Bell Crank Mounting	1	53	536291	ROD, 4 WD Shift	1
21	12H-15	FITTING, Bell Crank Grease	1	54	1F-312	COTTER, Clevis Pin	1
22	1F-412	COTTER, Clevis Pin	1	55	4F-06106	PIN, Rod to Transmission Clevis	1
23	4F-08127	PIN, Bell Crank to Rod Clevis	1	56	4F-08127	PIN, Rod to Bell Crank Clevis	1
24	537965	ROD, Bell Crank to Transmission	1	57	1F-412	COTTER, Clevis Pin	1
25	1F-312	COTTER, Clevis Pin	1	58	18C-844	BOLT, Bell Crank Mounting	1
26	4F-06106	PIN, Rod to Transmission Clevis	1	59	616796	WASHER, Bell Crank Mounting	1
27	8D-08	NUT, Clevis Jam	1	60	550646	SLEEVE, Bell Crank Mounting	1
28	18D-08	NUT, Lever Mounting	1	61	526767	BUSHING, Bell Crank	1
29	616796	WASHER, Lever Mounting	1	62	12H-15	FITTING, Bell Crank Grease	1
30	550646	SLEEVE, Lever Mounting	1	63	2J-8300	CLEVIS, Rod to Lever	1
31	1F-412	COTTER, Clevis Pin	1	64	526767	BUSHING, 4 WD Lever	1
32	4F-08127	PIN, Rod to Lever Clevis	1	65	12H-15	FITTING, Control Lever Grease	2
33	8D-08	NUT, Clevis Jam	1				

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

C

C

C



TS-2902-P

GEAR SHIFT LEVERS AND LINKAGE

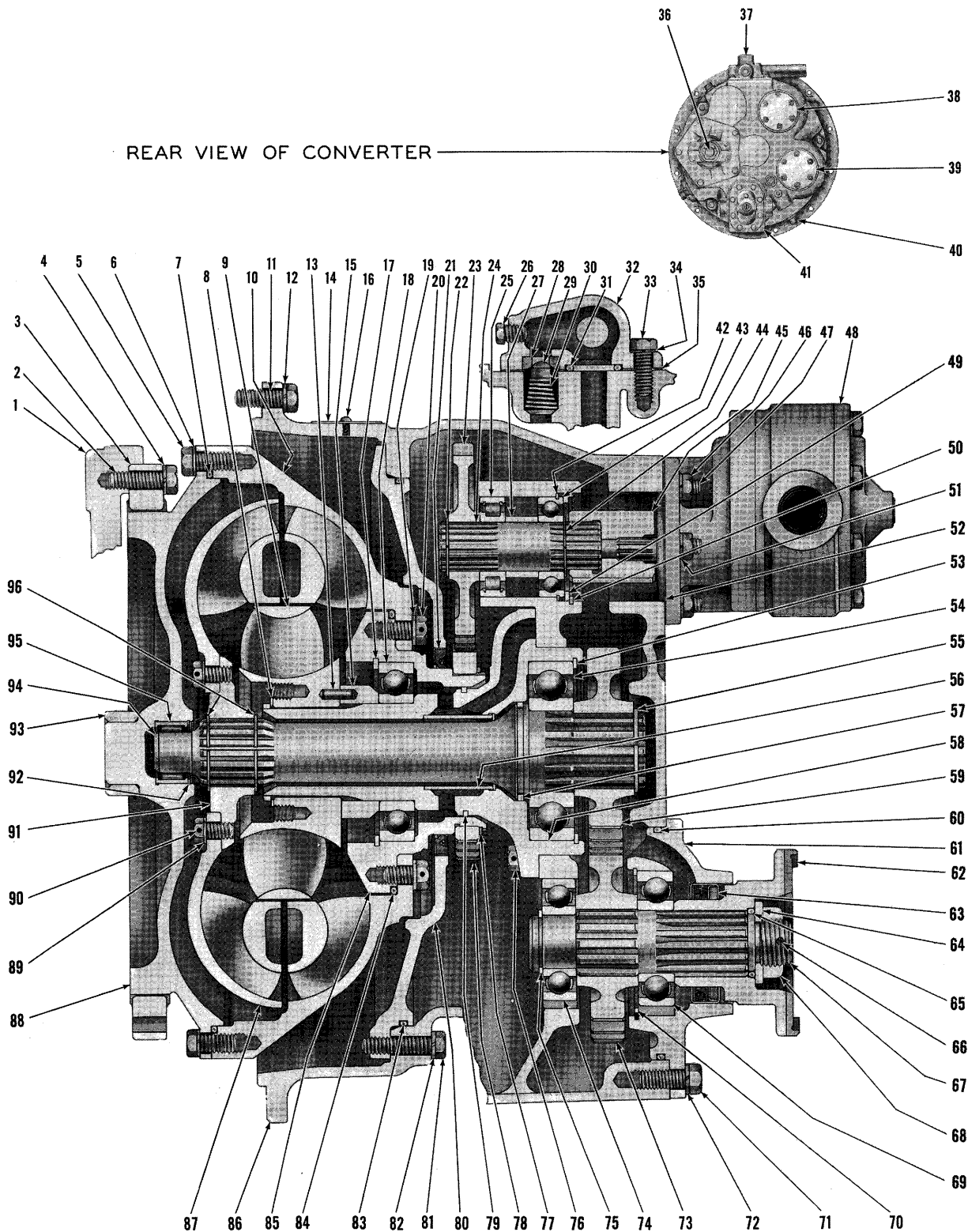
High and Low, Forward and Reverse

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	509772	KNOB, Shift Levers	2	15	550803	LEVER, Transmission	1
2	538891	*QUADRANT, Shift Indicator	1	16	18D-04	NUT, Lever Clamp	1
3	534606	CLAMP, Shift Indicator Quadrant	1	17	18C-424	BOLT, Lever Clamp	1
4	18C-412	BOLT, Shift Indicator Quadrant	2	18	66D-06	NUT, Ball Socket to Lever	1
5	536286	LEVER, Forward & Reverse Shift	1	19	18D-04	NUT, Lever Clamp	1
6	536287	LEVER, High & Low Shift	1	20	18C-424	BOLT, Lever Clamp	1
7	550672	U-BOLT, Shift Levers	2	21	521769	LEVER, Transmission	1
8	1508845	SUPPORT, Shift Levers (Inc. 11).....	2	22	519793	BALL SOCKET, Rod to Lever	1
9	519793	BALL SOCKET, Rod to Lever.....	2	23	8D-06	NUT, Ball Socket Jam	1
10	66D-06	NUT, Ball Socket to Lever	2	24	519793	BALL SOCKET, Rod to Lever	1
11	-----	§SUPPORT, Shift Levers - See 8	2	25	8D-06	NUT, Ball Socket Jam	1
12	8D-06	NUT, Ball Socket Jam	2	26	533553	ROD, Forward & Reverse Shift	1
13	535094	ROD, High & Low Shift	1	27	18D-05	NUT, U-Bolt	4
14	66D-06	NUT, Ball Socket to Lever	1	28	18D-04	NUT, Shift Quadrant Clamp	2

§Not Sold Separately

*NOTE: For replacement use 947409 kit. 947409 kit consists of 1-567946 Quadrant, 1-567947 F & R Plate, 1-567977 H & L plate, 6-6C-605 Screws, 1-567945 Clamp, 2-24C-412 Bolts, 2-18D-04 Nuts and 1-002553 Installation Drawing.

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



TORQUE CONVERTER ASSEMBLY

For Serial: Cummins-2DC101 thru 2DC146. G.M.-2DG101 thru 3DG114. Wauk.-2DA101 thru 3DA110

TS-1566-P

TORQUE CONVERTER ASSEMBLY

For Serial: Cummins — 2DC101 thru 2DC146

G.M. — 2DG101 thru 3DG114

Wauk. — 2DA101 thru 3DA110

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	281693	* CONVERTER ASSY (C-272-15) (Inc. 3, 5 thru 96)	1	27	214930	SPACER, Pump Shaft	3
1	-----	FLYWHEEL—See Engine Parts Manual —	—	28	214946	SEAT, Safety Valve	1
2	233092	BOLT, Drive Gear to Flywheel	8	29	222318	PLUNGER, Safety Valve	1
3	233089	GEAR, Converter Drive	1	30	222312	SPRING, Safety Valve	1
4	215909	WASHER, Drive Gear to Flywheel	8	31	25K-40104	"O" RING, Valve to Converter	1
5	1C-616	BOLT, Impeller to Drive Disc	24	32	-----	REGULATOR VALVE—See Index	—
6	4E-06	LKWSHR, Impeller to Drive Disc	24	33	1C-616	BOLT, Regulator Valve to Converter	4
7	214939	"O" RING, Impeller to Drive Disc	1	34	4E-06	LKWSHR, Regulator Valve to Conv. ...	4
8	743035	RING, Reaction Member Retaining	1	35	214949	GASKET, Regulator Valve to Conv.	1
9	214921	MEMBER, Reaction	1	36	-----	SHAFT, Output—See 67	—
10	214920	IMPELLER	1	37	-----	REGULATOR VALVE—See Index	—
11	17C-620	BOLT, Converter Hsg. to Engine	12	38	-----	STEERING PUMP GROUP—See Items 22 thru 25, 27, 42, 43, 44, 49, 50....	—
12	4E-06	LKWSHR, Converter Hsg. to Engine ...	12	39	-----	MAIN PUMP GROUP—See Items 22 thru 25, 27, 42, 43, 44, 49, 50	—
13	658244	PIN, Spacer to Reaction Member	1	40	13F-16	PLUG, Converter Housing	4
14	220725	PLATE, Name	1	41	-----	PUMP, Conv. Charging—See Index	—
15	214934	SPACER, Reaction Member	1	42	214954	RING, Bearing Retaining	3
16	207873	SCREW, Name Plate	2	43	214956	BEARING, Pump Drive Shaft	3
17	214953	RING, Hub Bearing Retaining	1	44	224039	RING, Bearing Retaining	3
18	214596	BEARING, Impeller Hub	1	45	214961	SLEEVE, Converter Pump Drive	1
19	619025	WASHER, Hub to Impeller Bolt	8	46	8D-06	NUT, Converter Pump to Converter ...	6
20	4C-714	BOLT, Hub to Impeller	8	47	207647	STUD, Converter Pump to Converter	6
21	214941	SEAL, Oil Baffle	1	48	-----	PUMP, Conv. Charging—See Index	—
22	711298	RING, Gear Retaining	3	49	214929	WASHER, Pump Shaft Bearing	3
23	214931	GEAR, Pump Drive (39T)	3	50	713186	RING, Washer Retaining	3
24	214928	SHAFT, Pump Drive	3	51	4E-06	LKWSHR, Converter Pump to Conv.	6
25	214936	BEARING, Pump Drive Shaft	3	52	551906	GASKET, Converter Pump to Conv.	1
26	40K-06	PLUG, Valve Housing	2				

*NOTE: For replacement use 282018 (C-273T-28) Converter Assembly.

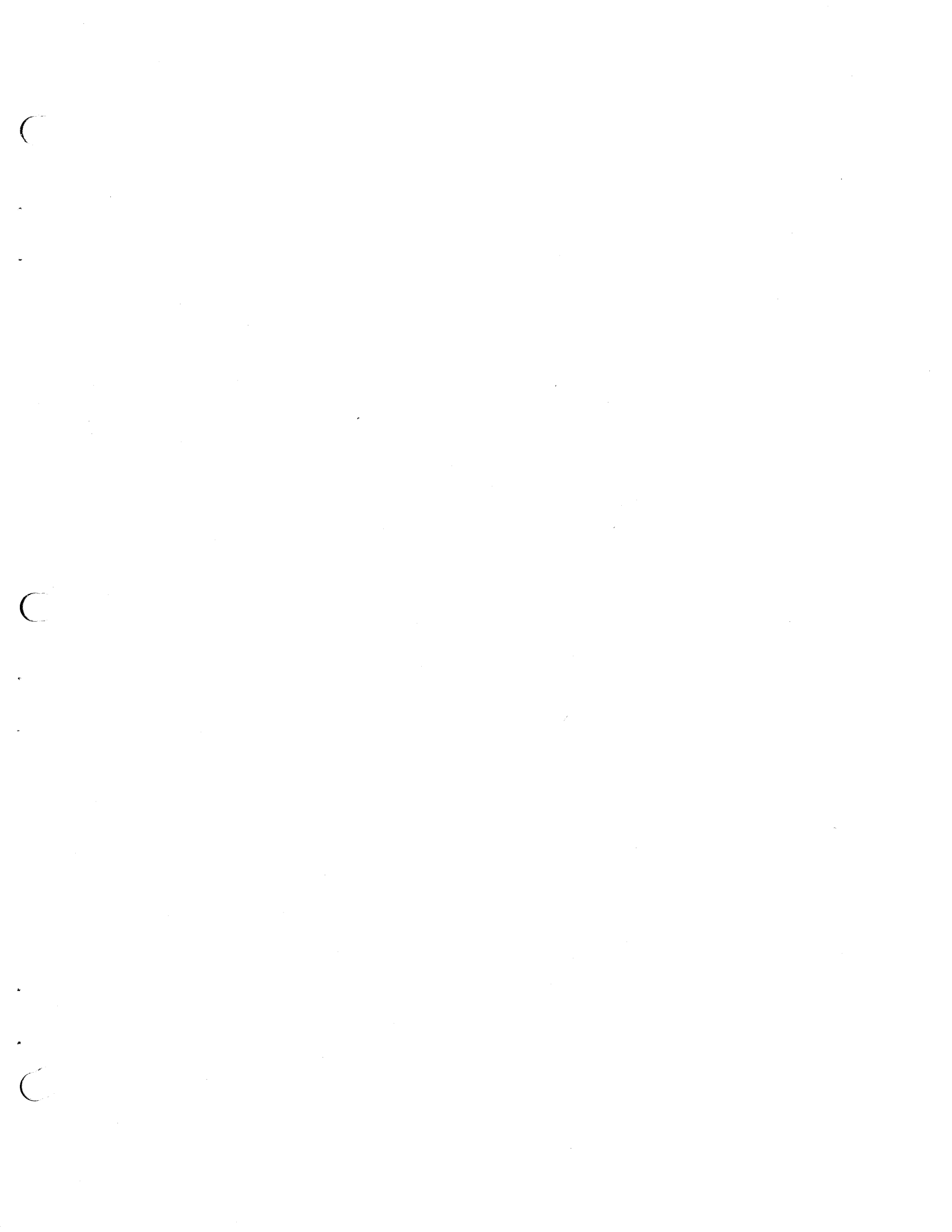
WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE

TORQUE CONVERTER ASSEMBLY (Continued)
For Serial: Cummins — 2DC101 thru 2DC146
G.M. — 2DG101 thru 3DG114
Wauk. — 2DA101 thru 3DA110

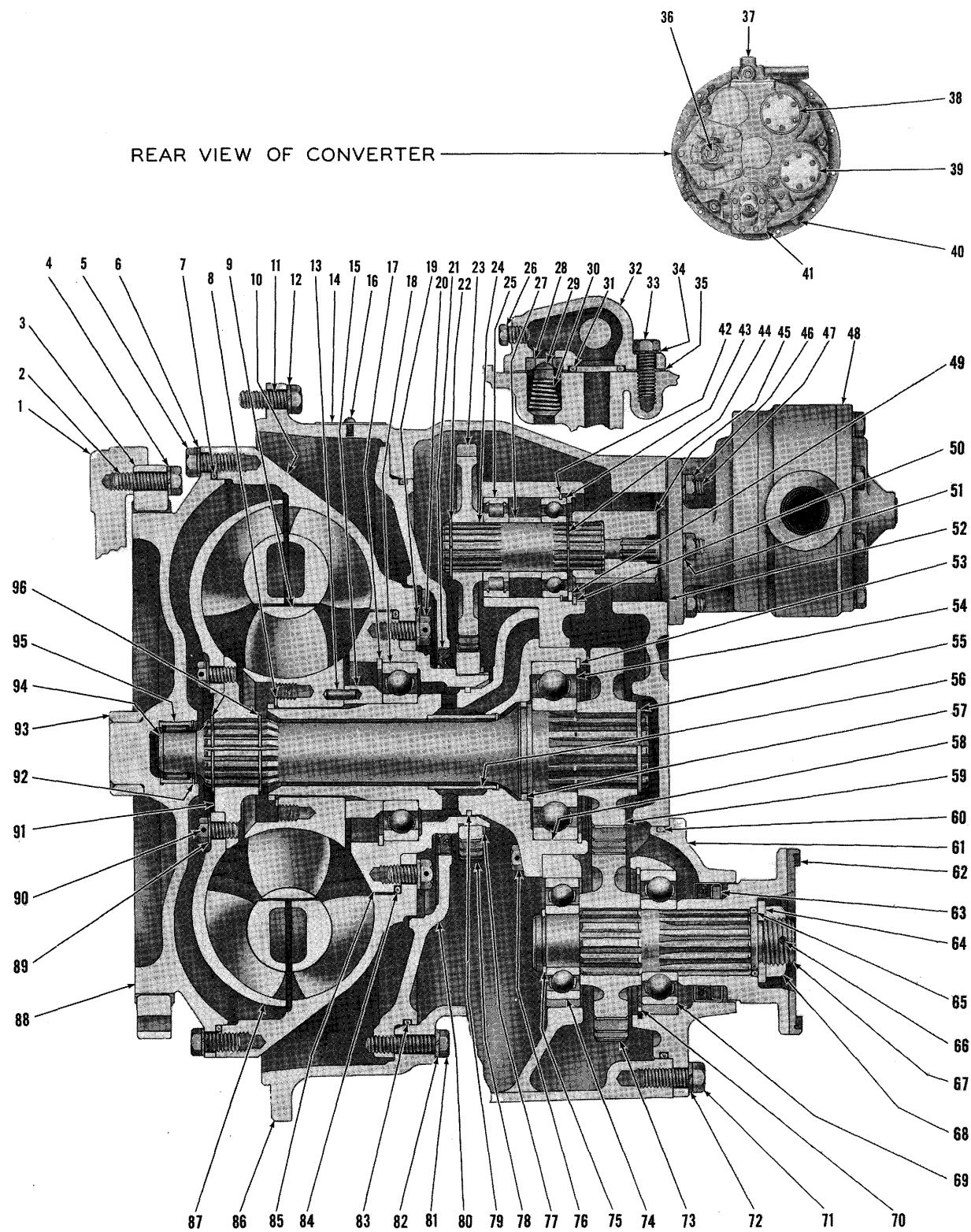
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
53	214953	RING, Shaft Bearing Retaining	1	77	224009	RING, Impeller Hub Gear Retaining	1
54	231554	BEARING, Turbine Shaft	1	78	214951	GEAR, Impeller Hub (41T)	1
55	224026	RING, Gear Retaining	1	79	221653	RING, Stator Support Sealing	1
56	—	§SLEEVE, Stator Support (See 58)	—	80	214925	BAFFLE, Oil	1
57	222079	RING, Turbine Shaft Sealing	1	81	1C-628	BOLT, Oil Baffle	3
58	214932	SUPPORT ASSY, Converter (Inc. 56)	1	82	4E-06	LKWSHR, Oil Baffle	3
59	216937	GEAR, Turbine Shaft (26T)	1	83	214939	"O" RING, Oil Baffle	1
60	25K-40512	"O" RING, Bearing Retainer	1	84	25K-40616	"O" RING, Impeller Hub	1
61	214945	RETAINER, Bearing	1	85	214923	HUB, Impeller	1
62	214940	FLANGE, Output	1	86	214950	HOUSING, Converter	1
63	206864	SEAL, Oil	1	86A	14F-08	†PLUG, Converter Housing	1
64	102745	WASHER, Output Flange	1	86B	40K-02	†PLUG, Converter Housing	1
65	25K-40112	"O" RING, Output Flange	1	86C	13F-20	†PLUG, Converter Housing	1
66	1F-424	COTTER, Output Flange Nut	1	87	222684	TURBINE	1
67	214937	SHAFT, Output	1	88	234503	DISC, Converter Drive	1
68	201951	NUT, Output Flange	1	89	619023	WASHER, Turbine Hub Bolt	8
69	743439	BEARING, Output Shaft—Rear	1	90	209313	BOLT, Turbine to Hub	8
70	223901	RING, Bearing Retaining	1	91	214924	HUB, Turbine	1
71	1C-720	BOLT, Bearing Retainer	3	92	666542	RING, Bearing Retaining	1
71A	214730	†STUD, Bearing Retainer	2	93	222006	SLEEVE, Converter Drive Disc	1
71B	8D-07	†NUT, Bearing Retainer Stud	2	94	214933	SHAFT, Turbine	1
72	4E-07	LKWSHR, Bearing Retainer	5	95	214988	BEARING, Converter Drive Disc	1
73	216938	GEAR, Output Shaft (29T)	1	96	659065	RING, Turbine Hub Retaining	2
74	742056	BEARING, Output Shaft—Front	1	97	216388	†ADAPTER, Bucket & Boom Pump	1
75	214955	RING, Bearing Retaining	1	98	551906	†GASKET, Adapter to Housing	1
76	1C-820	BOLT, Stator Support	6	99	3C-616	†BOLT, Adapter to Housing	6
76A	7E-08	LKWSHR, Stator Support	6	100	216555	†STUD, Bucket & Boom Pump	4
				101	207647	†STUD, Steering Pump	6

§Not Sold Separately
†Not Illustrated

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



REAR VIEW OF CONVERTER



TORQUE CONVERTER ASSEMBLY
For Serial: Cummins-2DC147 and after. G.M.-3DG115 and after.
Wauk.-3DA111 and after, C3DA9-14 and after.

TS-1566-P

TORQUE CONVERTER ASSEMBLY
For Serial: Cummins — 2DC147 and after
G.M. — 3DG115 and after
Wauk. — 3DA111 and after, C3DA9-14 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	282018	CONVERTER ASSY (C-273T-28) (Inc. 3, 5 thru 96)	1	27	214930	SPACER, Pump Shaft	3
1	—	FLYWHEEL—See Engine Parts Manual —	—	28	214946	SEAT, Safety Valve	1
2	233092	BOLT, Drive Gear to Flywheel	8	29	222318	PLUNGER, Safety Valve	1
3	233089	GEAR, Converter Drive	1	30	222312	SPRING, Safety Valve	1
4	215909	WASHER, Drive Gear to Flywheel	8	31	25K-40104	"O" RING, Valve to Converter	1
5	1C-616	BOLT, Impeller to Drive Disc	24	32	—	REGULATOR VALVE (See Page 5) ...	—
6	4E-06	LKWSHR, Impeller to Drive Disc	24	33	1C-616	BOLT, Regulator Valve to Converter	4
7	214939	"O" RING, Impeller to Drive Disc	1	34	4E-06	LKWSHR, Regulator Valve to Conv. ...	4
8	743035	RING, Reaction Member Retaining....	1	35	214949	GASKET, Regulator Valve to Conv.	1
9	214957	MEMBER, Reaction	1	36	—	SHAFT, Output—See 67	—
10	214959	IMPELLER	1	37	—	REGULATOR VALVE (See Page 5) ...	—
11	17C-620	BOLT, Converter Hsg. to Engine	12	38	—	STEERING PUMP GROUP—See Items 22 thru 25, 27, 42, 43, 44, 49, 50....	—
12	4E-06	LKWSHR, Converter Hsg. to Engine..	12	39	—	MAIN PUMP GROUP—See Items 22 thru 25, 27, 42, 43, 44, 49, 50.....	—
13	658244	PIN, Spacer to Reaction Member	1	40	13F-16	PLUG, Converter Housing	4
14	220725	PLATE, Name	1	41	—	PUMP, Conv. Charging (See Note A) —	—
15	214934	SPACER, Reaction Member	1	42	214954	RING, Bearing Retaining	3
16	207873	SCREW, Name Plate	2	43	214956	BEARING, Pump Drive Shaft	3
17	214953	RING, Hub Bearing Retaining	1	44	224039	RING, Bearing Retaining	3
18	214596	BEARING, Impeller Hub	1	45	214961	SLEEVE, Converter Pump Drive	1
19	619025	WASHER, Hub to Impeller Bolt	8	46	8D-06	NUT, Converter Pump to Converter....	6
20	4C-714	BOLT, Hub to Impeller	8	47	207647	STUD, Converter Pump to Converter	6
21	214941	SEAL, Oil Baffle	1	48	450072	PUMP, Conv. Charging (See Note A)	1
22	711298	RING, Gear Retaining	3	49	214929	WASHER, Pump Shaft Bearing	3
23	214931	GEAR, Pump Drive (39T)	3	50	713186	RING, Washer Retaining	3
24	214928	SHAFT, Pump Drive	3	51	4E-06	LKWSHR, Converter Pump to Conv. ...	6
25	214936	BEARING, Pump Drive Shaft	3	52	551906	GASKET, Converter Pump to Conv.	1
26	40K-06	PLUG, Valve Housing	2				

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

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

TORQUE CONVERTER ASSEMBLY (Continued)

For Serial: Cummins — 2DC147 and after

G.M. — 3DG116 and after

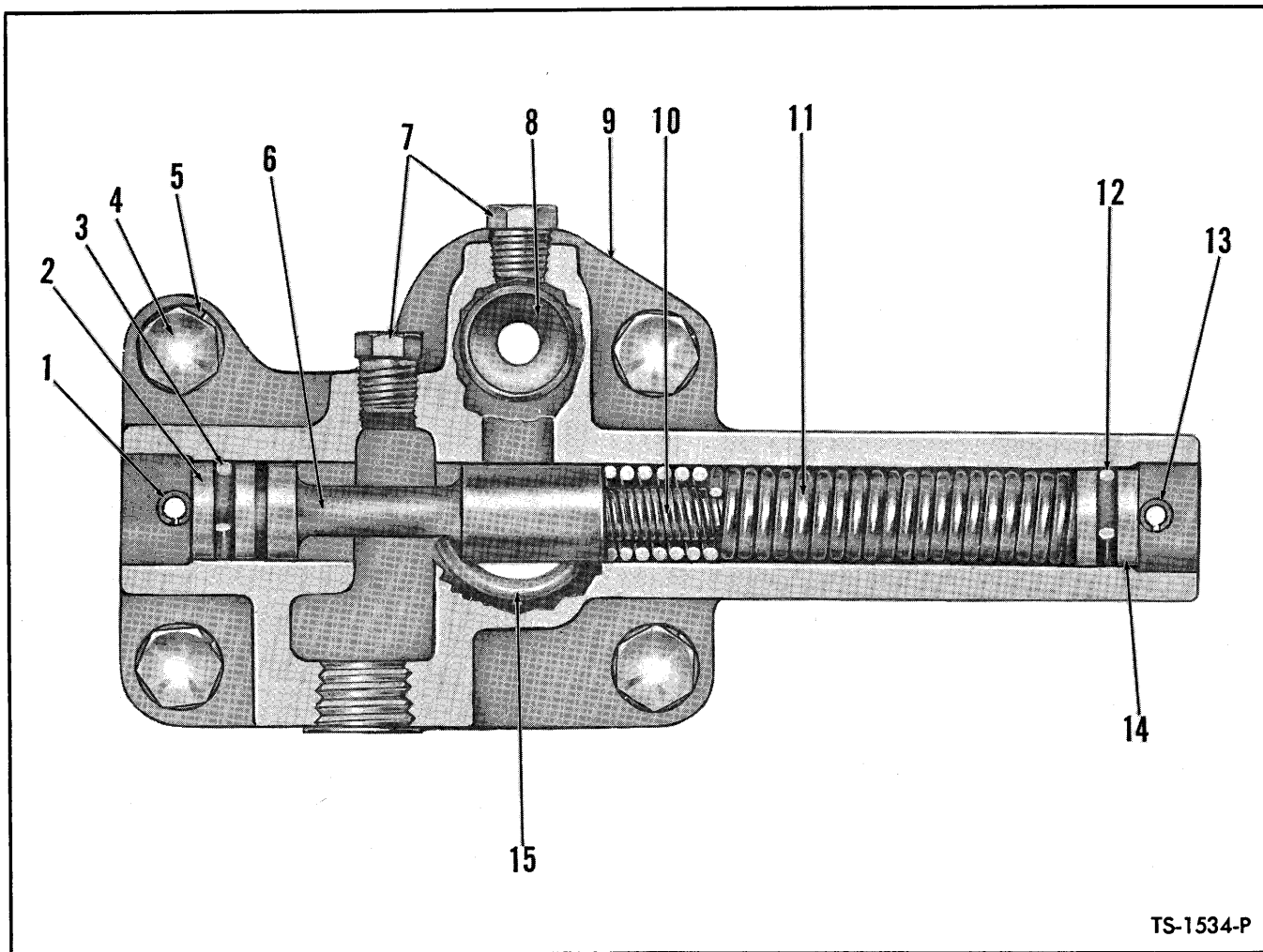
Wauk. — 3DA111 and after, C3DA9-14 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
53	214953	RING, Shaft Bearing Retaining	1	77	224009	RING, Impeller Hub Gear Retaining ..	1
54	231554	BEARING, Turbine Shaft	1	78	214951	GEAR, Impeller Hub (41T)	1
55	224026	RING, Gear Retaining	1	79	221653	RING, Stator Support Sealing	1
56	—	§SLEEVE, Stator Support (See 58)	—	80	214925	BAFFLE, Oil	1
57	222079	RING, Turbine Shaft Sealing	1	81	1C-628	BOLT, Oil Baffle	3
58	214932	SUPPORT ASSY, Converter (Inc. 56) ..	1	82	4E-06	LKWSHR, Oil Baffle	3
59	216937	GEAR, Turbine Shaft (26T).....	1	83	214939	"O" RING, Oil Baffle	1
60	25K-40512	"O" RING, Bearing Retainer	1	84	25K-40616	"O" RING, Impeller Hub	1
61	214942	RETAINER, Bearing	1	85	214958	HUB, Impeller	1
62	214940	FLANGE, Output	1	86	214950	HOUSING, Converter	1
63	206864	SEAL, Oil	1	86A	14F-08	†PLUG, Converter Housing	1
64	102745	WASHER, Output Flange	1	86B	40K-02	†PLUG, Converter Housing	1
65	25K-40112	"O" RING, Output Flange	1	86C	13F-20	†PLUG, Converter Housing	1
66	1F-424	COTTER, Output Flange Nut	1	87	223833	TURBINE	1
67	214937	SHAFT, Output	1	88	234503	DISC, Converter Drive	1
68	201951	NUT, Output Flange	1	89	619023	WASHER, Turbine Hub Bolt	8
69	743439	BEARING, Output Shaft—Rear	1	90	209313	BOLT, Turbine to Hub	8
70	223901	RING, Bearing Retaining	1	91	214924	HUB, Turbine	1
71	1C-720	BOLT, Bearing Retainer	3	92	666542	RING, Bearing Retaining	1
71A	214730	†STUD, Bearing Retainer	2	93	222006	SLEEVE, Converter Drive Disc	1
71B	8D-07	†NUT, Bearing Retainer Stud	2	94	214933	SHAFT, Turbine	1
72	4E-07	LKWSHR, Bearing Retainer	5	95	214988	BEARING, Converter Drive Disc	1
73	216938	GEAR, Output Shaft (29T)	1	96	659065	RING, Turbine Hub Retaining	2
74	742056	BEARING, Output Shaft—Front	1	97	216388	†ADAPTER, Bucket & Boom Pump	1
75	214955	RING, Bearing Retaining	1	98	551906	†GASKET, Adapter to Housing	1
76	1C-820	BOLT, Stator Support	6	99	3C-616	†BOLT, Adapter to Housing	6
76A	7E-08	LKWSHR, Stator Support	6	100	216555	†STUD, Bucket & Boom Pump	4
				101	207647	†STUD, Steering Pump	6

§Not Sold Separately

†Not Illustrated

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



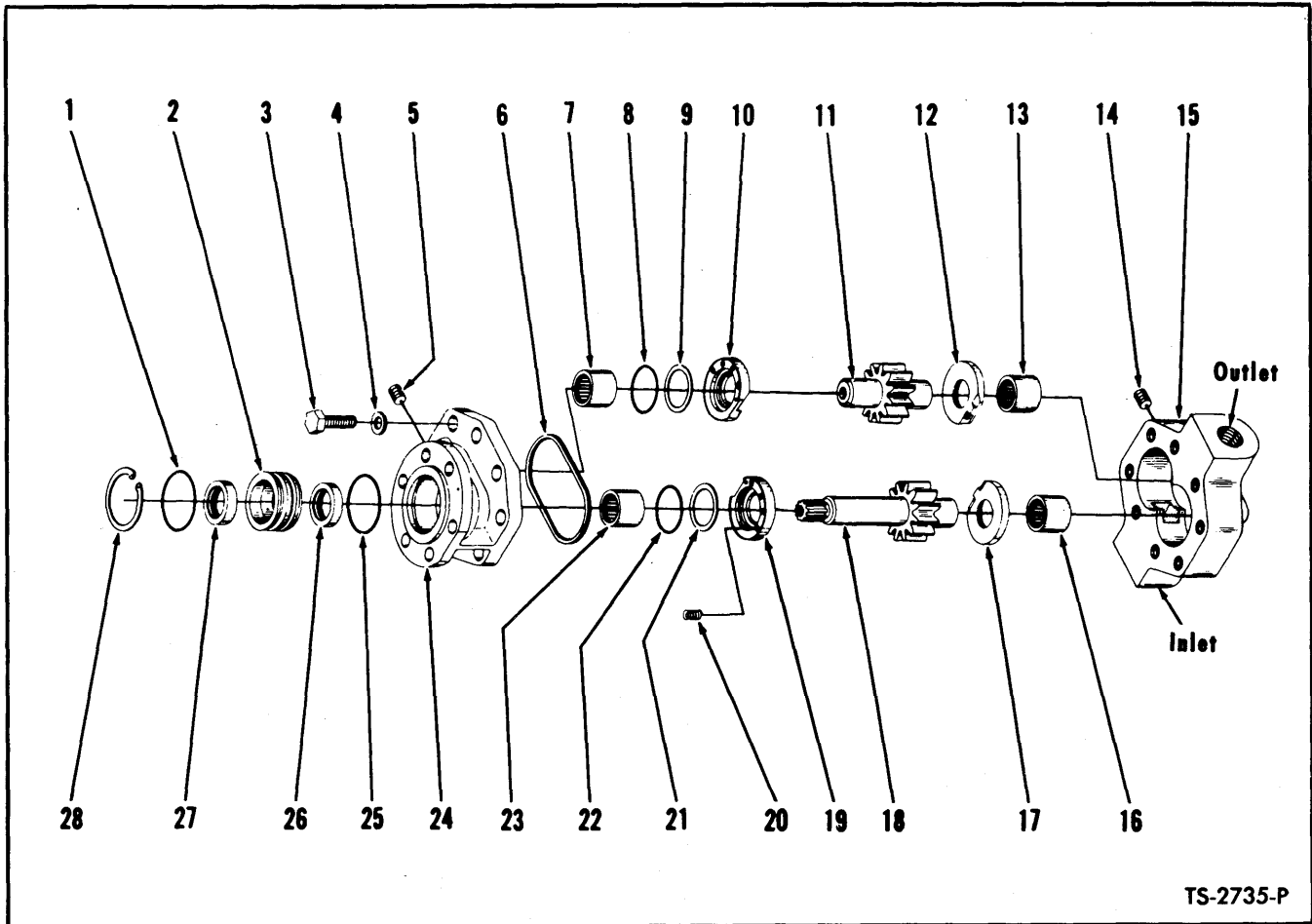
TS-1534-P

PRESSURE REGULATOR VALVE ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	214969	VALVE ASSY (Inc. 1, 2, 3, 6, 8 thru 16)	1	9	§BODY, Valve (See 16)		1
1	660178	PIN, Piston Stop	1	10	220982	SPRING, Valve — Inner	1
2	220983	STOP, Piston	1	11	220981	SPRING, Valve — Outer	1
3	25K-30018	"O" RING, Piston Stop	1	12	25K-30018	"O" RING, Piston Stop	1
4	1C-616	BOLT, Valve to Converter	4	13	660178	PIN, Piston Stop	1
5	4E-06	LKWSHR, Valve to Converter	4	14	220983	STOP, Piston	1
6	—	§PISTON, Valve (See 16)	1	15	25K-40104	"O" RING, Valve to Converter	1
7	40K-02	PLUG, Valve Housing	1	16	801101	HOUSING & PISTON ASSY (Inc. 6, 9)	1
8	214946	SEAT, Safety Valve	1	17	214949	†GASKET, Valve to Housing	1

§Not Sold Separately
†Not Illustrated

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



TS-2735-P

HYDRAULIC PUMP – CONVERTER CHARGING AND STEERING

Item No.	Part No.	Description	No. Req'd.
A	450072	PUMP ASSY (Inc. 1 thru 28)	2
NOTE: Two (2) pumps used on machine. Quantities listed below are for one pump.			
B	498128	REPAIR KIT, Major (Inc. 10, 12, 17, 19)	1
C	498127	*REPAIR KIT, Minor (Inc. 1, 3, 4, 6, 8, 9, 20, 21, 22, 25)	1
D	498024	GEAR SET, Drive & Driven (Inc. 11, 18)	1
E	498113	REPAIR KIT, Shaft Seal (Inc. 1, 2, 25 thru 28)	1
1	----	“O” RING, Retainer	1
2	----	RETAINER, Shaft Seal	1
3	----	BOLT, Cover to Body	8
4	----	WASHER, Cover to Body	8
5	----	PLUG, Cover	1
6	----	GASKET, Cover	1
7	----	** BEARING, Cover – Driven	1
8	----	“O” RING, Cover Thrust Plate	1
9	----	WASHER, “O” Ring Back-Up	1
10	----	THRUST PLATE, Cover	1
11	----	GEAR, Driven	1

Item No.	Part No.	Description	No. Req'd.
12	----	THRUST PLATE, Body	1
13	----	** BEARING, Body	1
14	----	PLUG, Body	1
15	----	** BODY	1
16	----	** BEARING, Body	1
17	----	THRUST PLATE, Body	1
18	----	GEAR, Drive	1
19	----	THRUST PLATE, Cover	1
20	----	SPRING, Cover Thrust Plate	6
21	----	WASHER, “O” Ring Back-Up	1
22	----	“O” RING, Cover Thrust Plate	1
23	----	** BEARING, Cover	1
24	----	** COVER	1
25	----	“O” RING, Retainer	1
26	----	SEAL, Inner Oil	1
27	----	SEAL, Outer Oil	1
28	----	RING, Seal Retaining	1
29	551906	†GASKET, Pump to Converter	1
30	8D-06	†NUT, Pump to Converter	6
31	214961	†SLEEVE, Pump Drive	1
32	4E-06	†LKWSHR, Pump to Converter	6

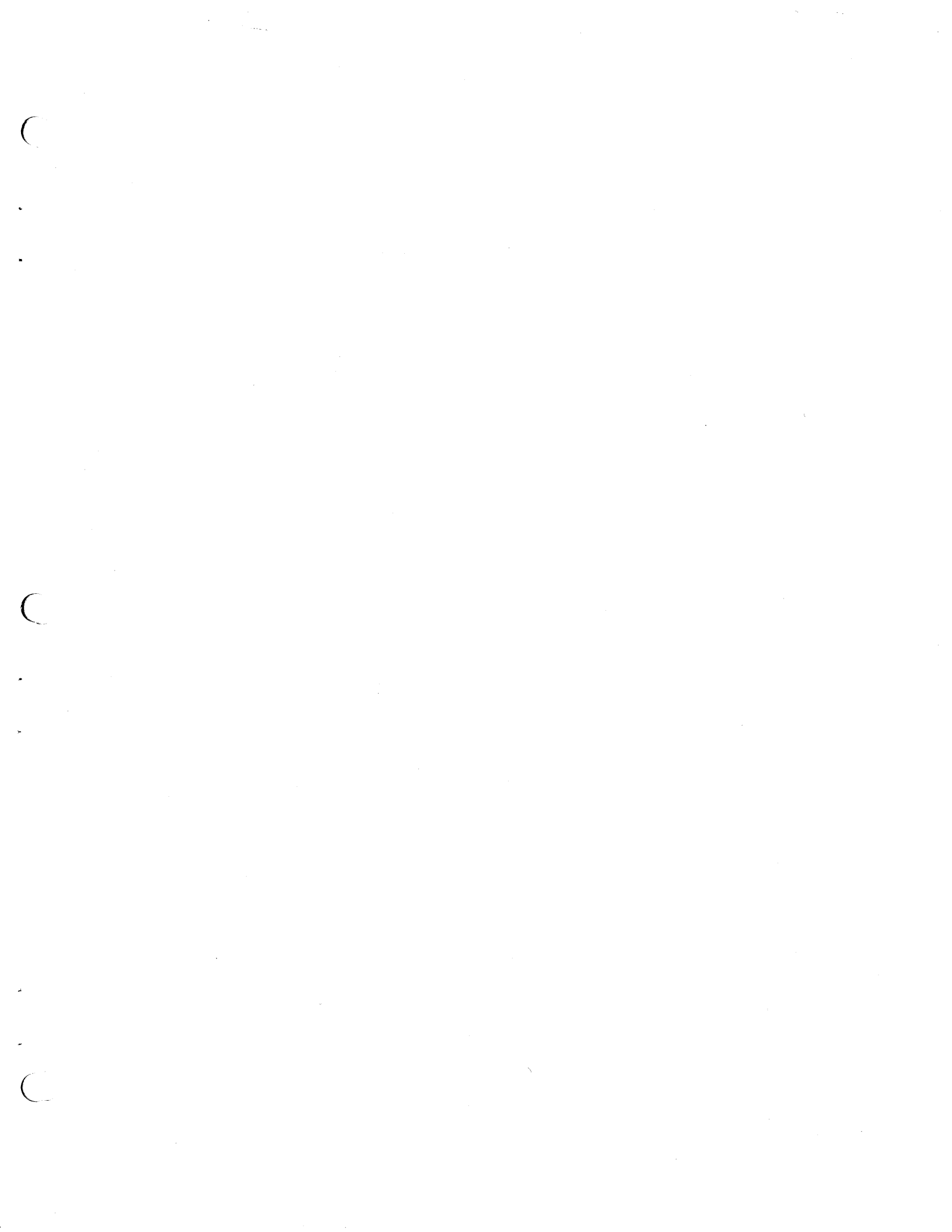
*NOTE: Minor Repair Kit consists of “O” Rings, Back-up Washers, Gaskets and approximately 20% of the hardware items such as bolts, nuts, springs and washers. The latter for the purpose of replacing any of these items lost or damaged in repair operation.

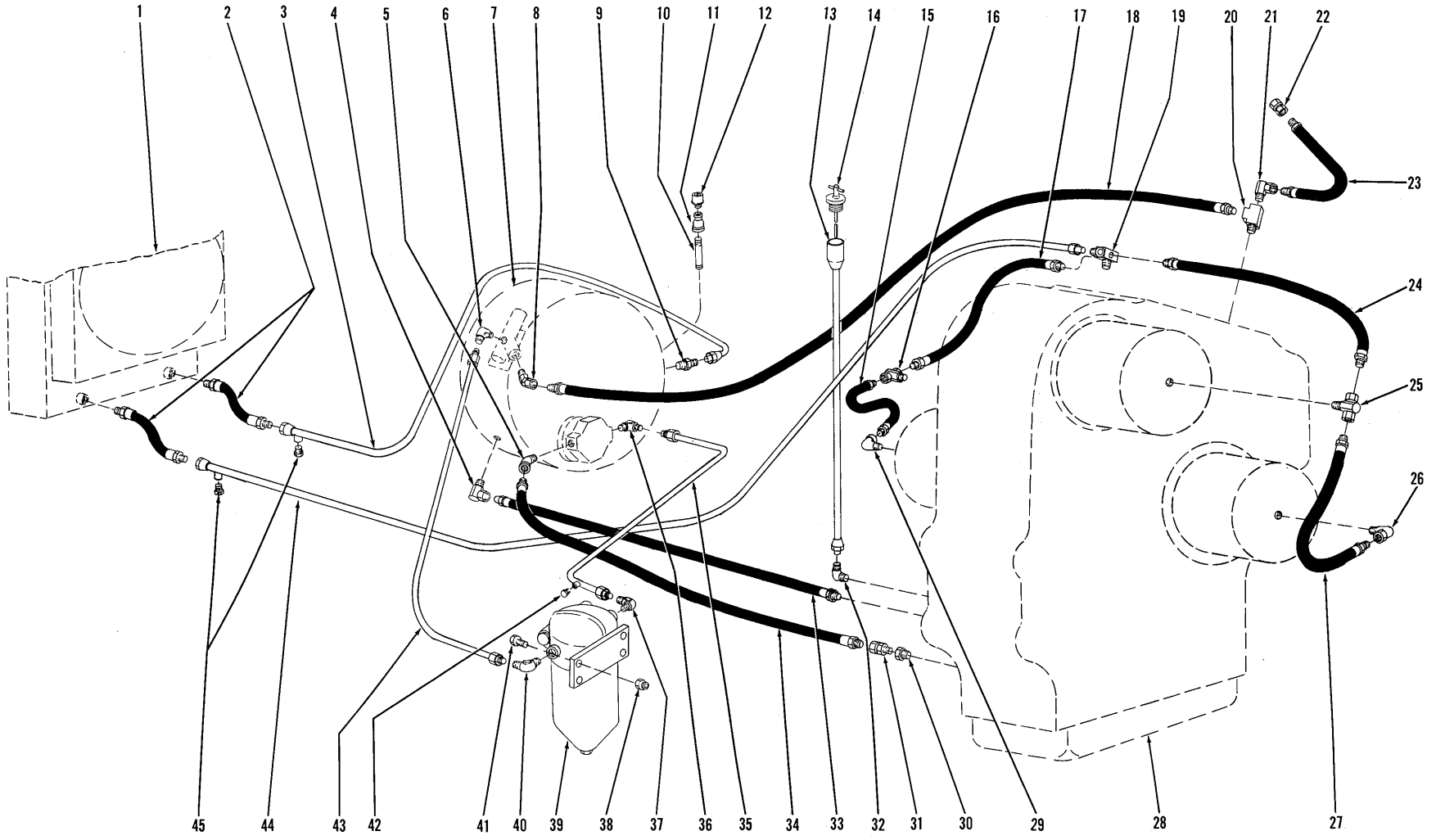
**NOTE: Pump Bodies, Covers and Bearings will not be made available for field use since when these items are worn beyond limits permitting re-use, the cost of rebuilding the pump exceeds practical limits. In such cases a new pump assembly should be utilized.

§Not Sold Separately – Order Kits.

†Not Illustrated

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





[48]

HYDRAULIC SYSTEM — TRANSMISSION AND TORQUE CONVERTER

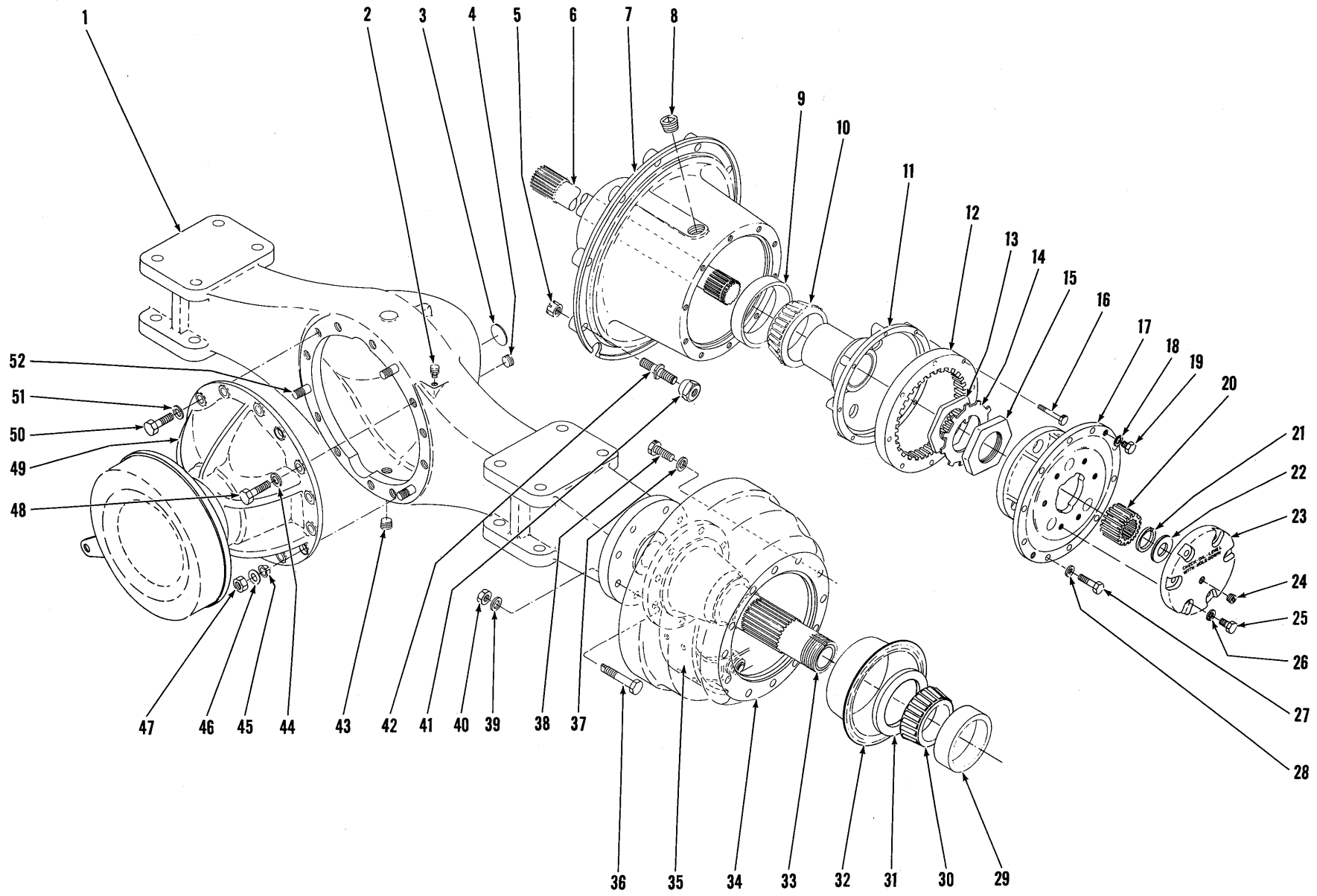
TS-2930-P

TRANSMISSION AND TORQUE CONVERTER HYDRAULIC SYSTEM

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	RADIATOR—See Index	—	28	-----	TRANSMISSION—See Index	—
2	540022	HOSE, Cooler Line to Radiator	2	29	26F-2	ELBOW, Hose to Transmission	1
3		LINE, Converter to Radiator (Inc. 44)		30	356626	BUSHING, Reducing	1
3A	540643	For G.M. Powered Machines	1	31	36F-6	ADAPTER UNION	1
3B	544164	For Waukesha Gas & Cummins Powered Machines	1	32	42F-10	ELBOW, Dipstick Tube to Trans.	1
4	31F-6	ADAPTER UNION	1	33		HOSE, Converter to Transmission — Return	
5	25F-6	ELBOW, Suction Hose to Pump	1	33A	536640	For G.M. Powered Machines	1
6	83F-8	ELBOW, Line to Valve	1	33B	582299	For Waukesha Gas & Cummins Powered Machines	1
7	-----	TORQUE CONVERTER—See Index ...	—	34		HOSE, Transmission to Converter — Suction	
8	33F-3	ADAPTER UNION	1	34A	667009	For G.M. Powered Machines	1
9	89F-8	CONNECTOR, Cooler Line to Conv. ...	1	34B	544197	For Waukesha Gas & Cummins Powered Machines	1
10	-----	OMIT, Not Used this Application	—	35		LINE, Pump to Filter	
11	227265	VALVE, Check	1	35A	540604	For G.M. Powered Machines	1
12	211433	BREATHER, Converter	1	35B	537994	For Waukesha Gas & Cummins Powered Machines	1
13	542194	TUBE, Dipstick	1	36	549283	ELBOW, Line to Pump & Filter	1
14	542195	DIPSTICK, Transmission Oil	1	37	83F-8	ELBOW, Line to Filter	1
15	536777	HOSE, 1st & 3rd to Reverse Clutch ...	1	38	18D-06	NUT, Filter Mounting	4
16	791879	TEE, 1st & 3rd Clutch	1	39	1533615	FILTER, Trans. & Conv. Oil (Inc. 38A)	1
17	536766	HOSE, Block to 1st & 3rd Clutch	1	39A	215502	†CARTRIDGE KIT, Oil Filter	1
18		HOSE, Valve to Transmission		40	83F-8	ELBOW, Line to Filter	1
18A	540606	For G.M. Powered Machines	1	41	18C-628	BOLT, Filter Mounting	4
18B	533587	For Waukesha Gas & Cummins Powered Machines	1	42	40K-04	PLUG, Pump to Filter Line	1
19	524543	JUNCTION BLOCK	1	43		LINE, Filter to Valve	
20	30F-1	TEE	1	43A	540647	For G.M. Powered Machines	1
21	31F-2	ADAPTER UNION	1	43B	537995	For Waukesha Gas & Cummins Powered Machines	1
22	37F-1	ADAPTER UNION	1	44	537927	LINE, Radiator to Trans. (Inc. 44)	1
23	537082	HOSE, Trans. to Pressure Gauge	1	45	40K-04	PLUG, Cooler Lines	2
24	536767	HOSE, Block to Forward Clutch	1	46	551323	†SENDER UNIT, Conv. Temperature ...	1
25	791879	TEE, Forward Clutch	1				
26	26F-2	ELBOW, Hose to Transmission	1				
27	536794	HOSE, Forward to 2nd & 4th Clutch ...	1				

†Not Illustrated

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



[50]

AXLE ASSEMBLY — FRONT DRIVE

TS-3076-P

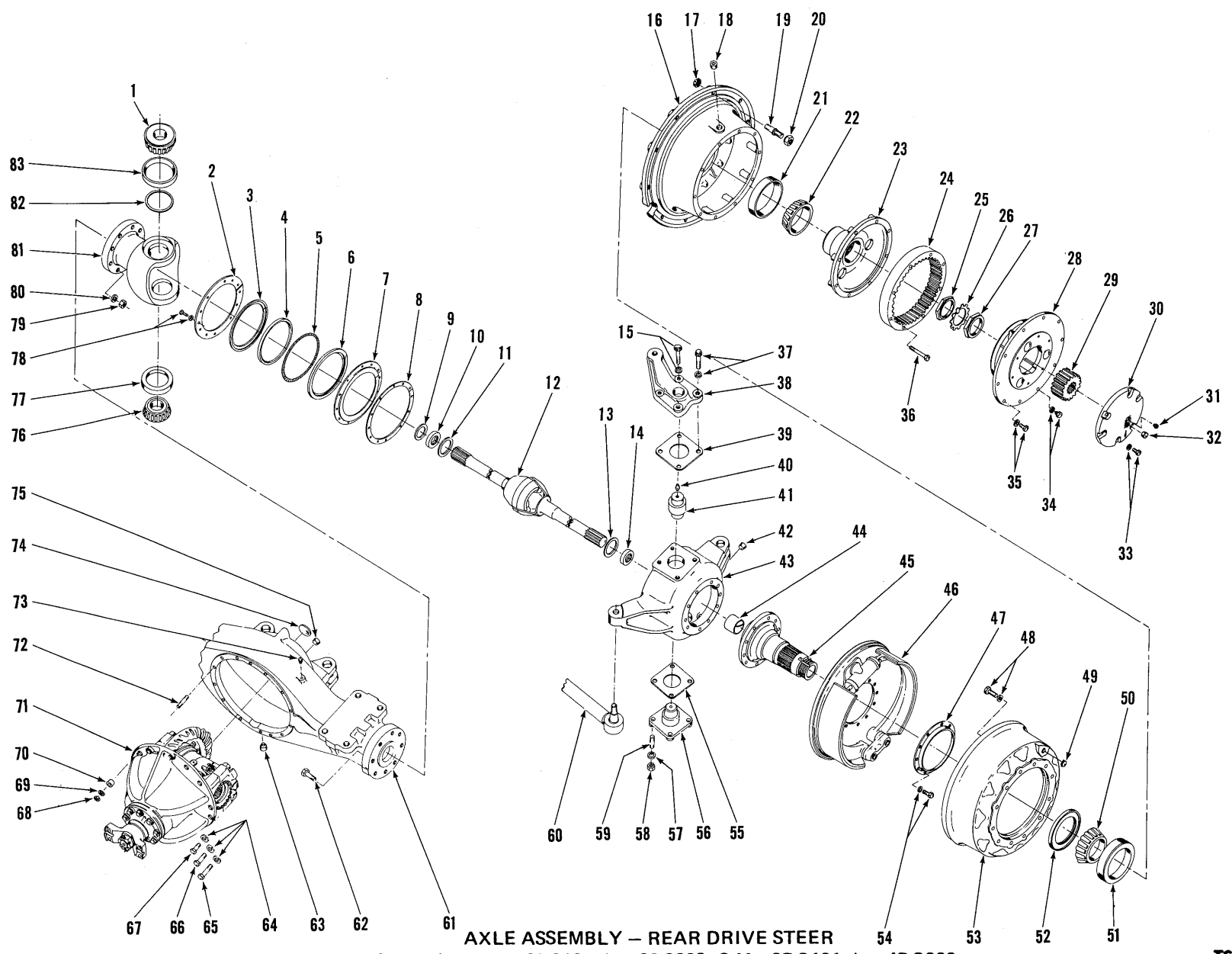


FRONT DRIVE AXLE ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	131078	AXLE ASSY (Inc. 1 thru 52)	1	27	100970	BOLT, Planet Spider to Hub	20
1	112086	HOUSING, Axle	1	28	106762	WASHER, Planet Spider to Hub	20
2	106656	BREATHER, Axle Housing	1	29	658985	CUP, Inner Hub Bearing	2
3	12F-204	PLUG, Housing Expansion	1	30	799408	CONE, Inner Hub Bearing	2
4	11F-12	PLUG, Housing Filler	1	31	112055	SEAL, Hub Oil	2
5	121062	NUT, Wheel Stud	20	32	109055	CATCHER, Hub Oil	2
6	112077	SHAFT, Axle	2	33	112078	SPINDLE	2
7	112073	HUB ASSY (Inc. 9, 29)	2	34	112085	DRUM, Brake	2
8	11F-12	PLUG, Hub Filler	2	35	-----	BRAKE ASSY—See Index	—
9	672181	CUP, Outer Hub Bearing	2	36	106736	BOLT, Spindle & Brake Attaching	18
10	672182	CONE, Outer Hub Bearing	2	37	104412	WASHER, Drum to Hub	24
11	106060	HUB, Internal Gear	2	38	107256	BOLT, Drum to Hub	24
12	106059	GEAR, Internal	2	39	104412	WASHER, Spindle & Brake Attaching	18
13	114433	NUT, Inner Spindle	2	40	106998	NUT, Spindle & Brake Attaching	18
14	101274	LOCK, Spindle Nut	2	41	103522	NUT, Wheel Attaching	20
15	114433	NUT, Outer Spindle	2	42	103445	STUD, Wheel Attaching	20
16	106880	BOLT, Internal Gear to Hub	16	43	11F-12	PLUG, Hub Drain	1
17	-----	PLANET SPIDER ASSY—See Index	—	44	106762	WASHER, Carrier to Housing	8
18	3E-08	LKWSHR, Planet Puller Hole	4	45	112287	DOWEL, Carrier Stud	3
19	1C-808	BOLT, Planet Puller Hole	4	46	106762	WASHER, Carrier Stud	3
20	109050	GEAR, Sun	2	47	64D-08	NUT, Carrier Stud	3
21	106247	RING, Sun Gear Retaining	2	48	17C-824	BOLT, Carrier Housing	8
22	106455	WASHER, Sun Gear Thrust	2	49	-----	DIFF. & CARRIER ASSY—See Index	—
23	945129	*KIT, Thrust Cap (Inc. 22)	2	50	17C-828	BOLT, Carrier to Housing	3
24	11F-04	PLUG, Oil Level	2	51	106762	WASHER, Carrier to Housing	3
25	1C-720	BOLT, Thrust Cap to Spider	12	52	112286	STUD, Carrier to Housing	3
26	4E-07	LKWSHR, Thrust Cap to Spider	12	53	24C-16160	†BOLT, Axle to Frame	8
				54	68D-16	†NUT, Axle to Frame	8

*NOTE: 945129 consists of 114119 Thrust Cap, 1—114089 Seal Ring & 6—112278 Washers.

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



AXLE ASSEMBLY - REAR DRIVE STEER

For Serial: Cummins-2DC101 thru 3DC999. G.M.-2DG101 thru 4DG999.
Wauk.-2DA101 and after, C3DA9-14 thru C3DA9-24.

TS-3622-P

AXLE ASSEMBLY — REAR DRIVE STEER
For Serial: Cummins — 2DC101 thru 3DC999
G.M. — 2DG101 thru 4DG999
Wauk. — 2DA101 and after,
C3DA9-14 thru C3DA9-24

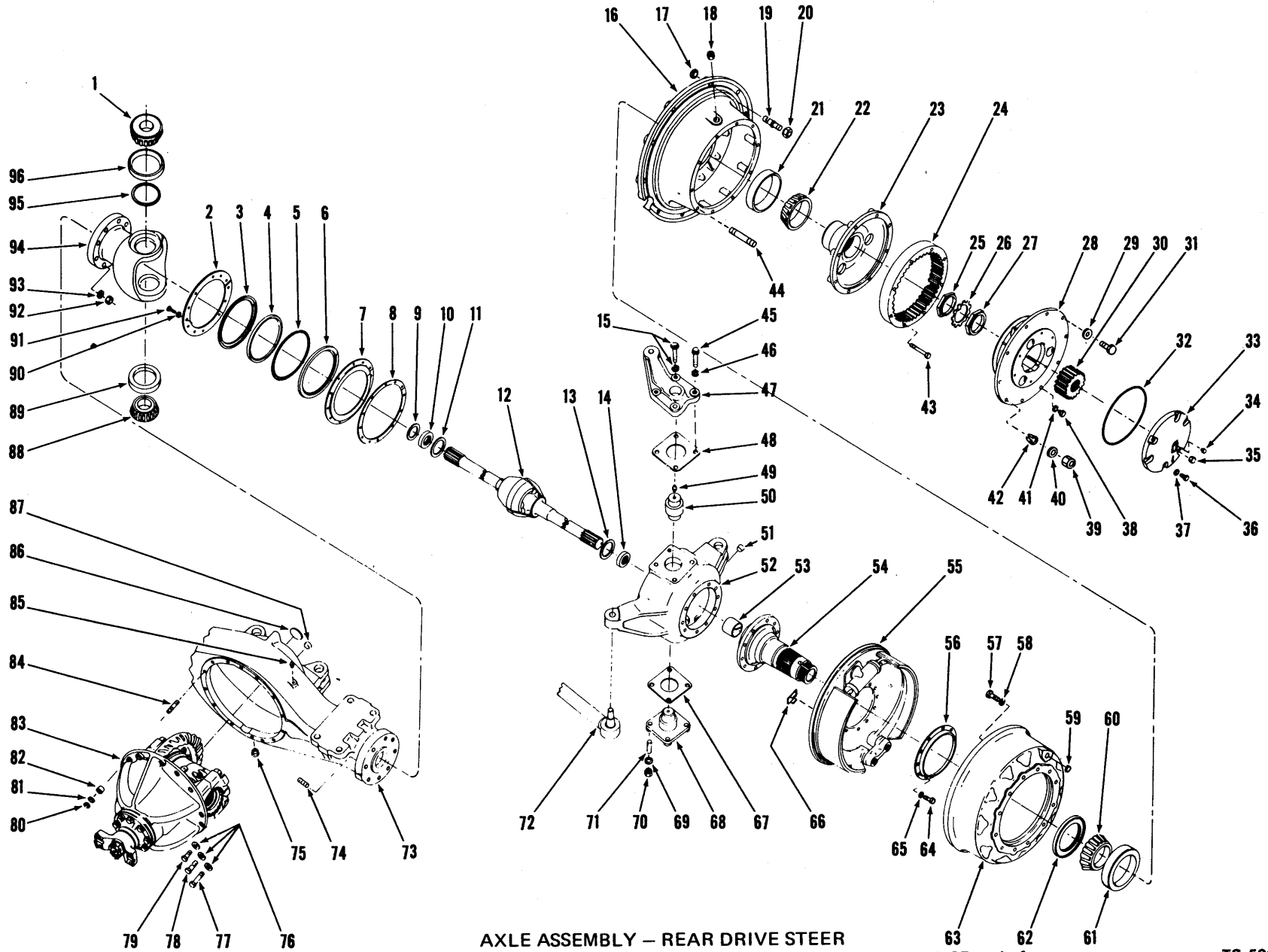
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	131077	AXLE ASSY (Inc. 1 thru 83).....	1	42	11F-12	PLUG, Spindle Support Filler	2
1	675305	CONE, Upper Trunnion Bearing	2	43	945136	* SUPPORT ASSY, L.H. Spindle (Inc. 59)	1
2	106136	RING, Outer End Seal Retaining	4	43A	945137	* SUPPORT ASSY, R.H. Spindle (Inc. 59)	1
3	106135	RING, Outer End Dust Seal Retaining	2	44	106099	BUSHING, Spindle	2
4	106133	SEAL, Outer End Dust	2	45	117925	SPINDLE ASSY, Steering (Inc. 44)	2
5	106134	SPRING, Outer End Dust Seal	2	46	-----	BRAKE ASSY — See Index	2
6	106132	SEAL, Outer End Oil	2	47	117913	SLINGER, Oil	2
7	106130	RETAINER, Outer End Oil Seal	2	48	107256	BOLT, Brake Drum to Hub	12
8	106131	GASKET, Oil Seal Retainer	2	48A	104412	WASHER, Brake Drum to Hub	12
9	106128	WASHER, Oil Seal	2	49	107608	PLUG BUTTON, Brake Drum	2
10	106127	SEAL, Universal Joint Oil	2	50	675253	CONE, Inner Hub Bearing	2
11	106129	WASHER, Universal Joint Thrust	2	51	675252	CUP, Inner Hub Bearing	2
12	112044	U-JOINT ASSY (Inc. 12A, 12B).....	2	52	111719	SEAL, Hub Oil	2
12A	675436	†PIN, Spiral	2	53	107646	DRUM, Brake	2
12B	874260	†PIN, Center Ball	2	54	114415	*BOLT, Spindle & Brake Attaching.....	20
13	106129	WASHER, Universal Joint Thrust	2	54A	106762	WASHER, Spindle & Brake Attaching	20
14	106127	SEAL, Universal Joint Oil	2	55	106125	‡SHIM, Steering Trunnion —.004"	—
15	106322	BOLT, Steering Arm	2	55A	106124	‡SHIM, Steering Trunnion —.007"	—
15A	106547	WASHER, Steering Arm Bolt	2	55B	106123	‡SHIM, Steering Trunnion —.010"	—
16	112047	HUB ASSY (Inc. 21, 51)	2	56	106119	TRUNNION, Lower Steering	2
17	121062	NUT, Wheel Stud	20	57	4E-09	LKWSHR, Trunnion Attaching	12
18	11F-12	PLUG, Hub Filler & Drain	2	58	2D-09	NUT, Trunnion Attaching	12
19	103445	STUD, Wheel	20	59	106115	STUD, Trunnion Attaching	12
20	103522	NUT, Wheel	20	60	-----	TIE ROD ASSY — See Index	1
21	675255	CUP, Outer Hub Bearing	20	61	112045	HOUSING, Axle	1
22	675256	CONE, Outer Hub Bearing	2	62	112090	BOLT, Outer End to Housing	16
23	106879	HUB, Internal Gear	2	63	11F-12	PLUG, Housing Drain	1
24	106059	GEAR, Internal	2	64	112278	WASHER, Carrier Attaching	11
25	114463	NUT, Inner Spindle	2	65	-----	OMIT — Not Applicable this Model	
26	100967	LOCK, Steering Spindle Nut	2	66	17C-728	BOLT, Carrier Attaching	8
27	114463	NUT, Outer Spindle	2	67	17C-722	BOLT, Carrier Attaching	3
28	-----	PLANET SPIDER — See Index	2	68	64D-07	NUT, Carrier Stud	3
29	106058	GEAR, Sun	2	69	112278	WASHER, Carrier Stud	3
30	945128	CAP, Sun Gear Thrust	2	70	103216	DOWEL, Carrier Stud	3
31	111805	VALVE, Relief	2	71	-----	DIFF. & CARRIER ASSY — See Index	1
32	11F-04	PLUG, Oil Level	2	72	112277	STUD, Carrier Attaching	2
33	1C-720	BOLT, Thrust Cap	12	72A	112924	STUD, Carrier Attaching	1
33A	4E-07	LKWSHR, Thrust Cap	12	73	106656	BREATHER, Axle Housing	1
34	1C-808	BOLT, Planet Puller Hole	4	74	12F-204	PLUG, Housing Expansion	1
34A	3E-08	LKWSHR, Planet Puller Hole	4	75	11F-12	PLUG, Housing Filler	1
35	100970	BOLT, Planet Spider to Hub	20	76	675305	CONE, Lower Trunnion Bearing	2
35A	106762	WASHER, Planet Spider to Hub	20	77	675306	CUP, Lower Trunnion Bearing	2
36	106880	BOLT, Internal Gear to Hub	16	78	1C-612	BOLT, Outer End Retainer	24
37	106313	BOLT, Steering Arm	2	78A	4E-06	LKWSHR, Outer End Retainer	24
37A	111656	WASHER, Steering Arm	2	79	106998	NUT, Outer End to Housing	16
38	110712	ARM, Steering	1	80	104412	WASHER, Outer End to Housing	16
39	106321	‡SHIM, Steering Arm —.004"	—	81	118048	OUTER END, Housing	2
39A	106320	‡SHIM, Steering Arm —.007"	—	82	106121	RETAINER, Upper Trunnion Oil	2
39B	106319	‡SHIM, Steering Arm —.010"	—	83	675306	CUP, Upper Trunnion Bearing	2
40	10H-25	FITTING, Upper Trunnion Grease	2	84	24C-1252	†BOLT, Axle to Cradle	8
41	106120	TRUNNION, Upper Steering — L.H.	1	85	68D-12	†NUT, Axle to Cradle	8
41A	108432	TRUNNION, Upper Steering — R.H.	1				

†Not Illustrated

‡As required

*NOTE: Spindle Supports include 10—114415 Bolts. When installing bolts only it will be necessary to rework Spindles. Refer to Service Gram S.G.-229 for instructions.

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



AXLE ASSEMBLY - REAR DRIVE STEER
For Serial: Cummins-4DC101 and after. G.M.-5DG101 and after. Wauk.-C3DA9-25 and after.

TS-5094-P

52A.1

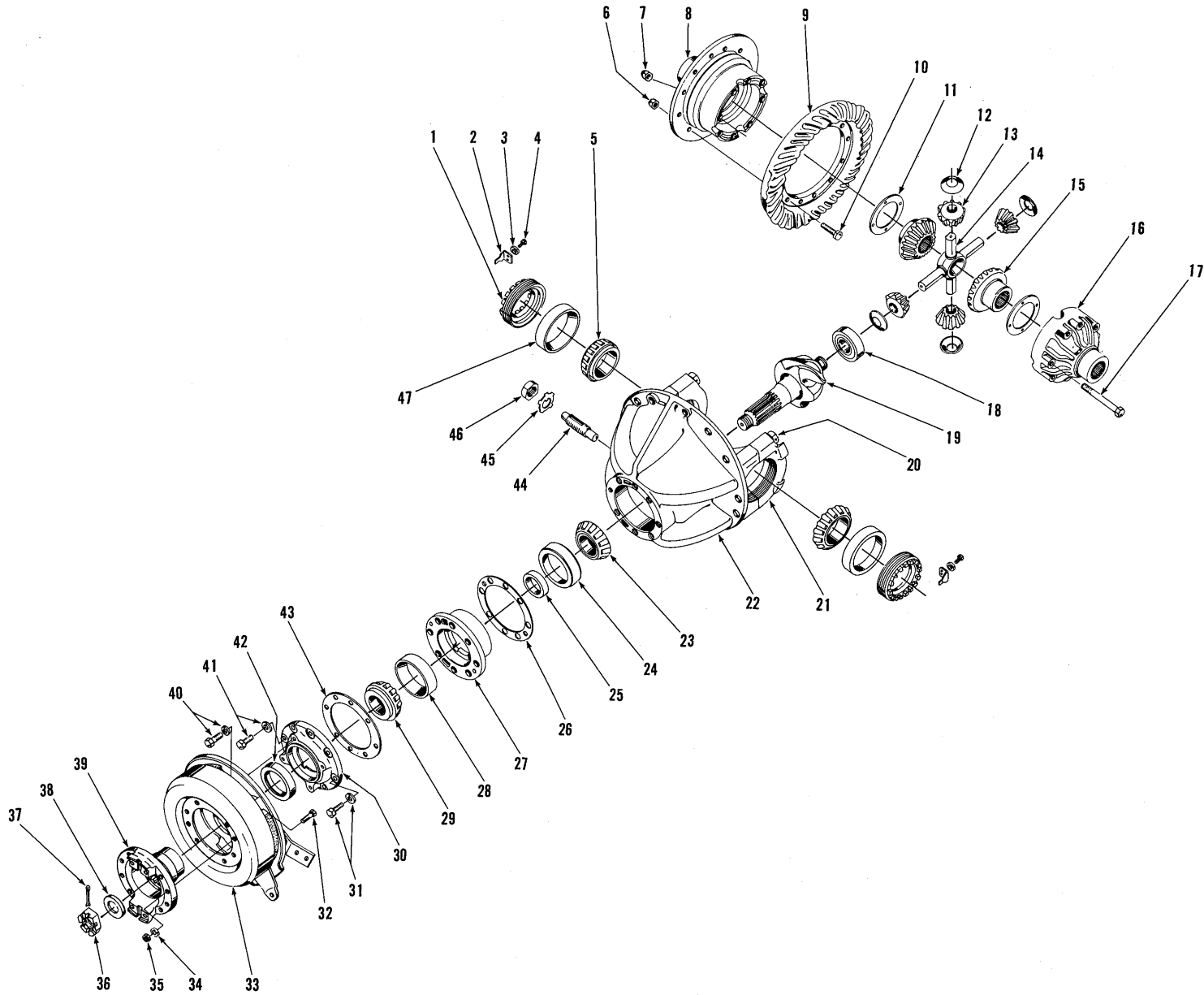
PM 1669

AXLE ASSEMBLY — REAR DRIVE STEER
For Serial: Cummins — 4DC101 and after
G.M. — 5DG101 and after
Wauk. — C3DA9-25 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	131662	AXLE ASSY (Inc. 1 thru 97)	1	49	10H-25	FITTING, Upper Trunnion Grease	2
1	667277	CONE, Upper Trunnion Bearing	2	50	106290	TRUNNION, Upper Steering — L.H.	1
2	106287	RING, Outer End Seal Retainer	4	50A	109887	†TRUNNION, Upper Steering — R.H.	1
3	106286	RETAINER, Outer Dust Seal	2	51	11F-12	PLUG, Spindle Support Filler	2
4	106284	SEAL, Outer End Dust	2	52	111126	SUPPORT, Spindle — L.H.	1
5	106285	SPRING, Outer End Dust Seal	2	52A	111125	†SUPPORT, Spindle — R.H.	1
6	106283	SEAL, Outer End Oil	2	53	106276	BUSHING, Spindle	2
7	106281	RETAINER, Outer End Oil Seal	2	54	106744	SPINDLE ASSY (Inc. 53)	2
8	106282	GASKET, Outer End Oil Seal Retainer	2	55	—	BRAKE ASSY — See Index	—
9	106297	WASHER, Oil Seal	2	56	106545	CATCHER, Oil	2
10	106296	SEAL, Universal Joint Shaft Oil	2	57	107256	BOLT, Brake Drum to Hub	24
11	106298	WASHER, Universal Joint Thrust	2	58	104412	WASHER, Brake Drum to Hub	24
12	106306	SHAFT ASSY, Axle & Universal Joint (Inc. 12A, 12B)	2	59	107608	PLUG, Button Inspection Hole	1
12A	874146	†PIN, Center Ball	2	60	672005	CONE, Inner Hub Bearing	2
12B	675436	†PIN, Spiral Roll	2	61	672004	CUP, Inner Hub Bearing	2
13	106298	WASHER, Universal Joint Thrust	2	62	111708	SEAL, Hub Oil	2
14	106296	SEAL, Universal Joint Shaft Oil	2	63	107646	DRUM, Brake	2
15	106313	BOLT, Steering Arm	2	64	106546	BOLT, Spindle & Brake Attaching	16
15A	106547	WASHER, Steering Arm Bolt	2	64A	111127	BOLT, Spindle & Brake Attaching	16
16	117220	HUB ASSY (Inc. 21, 61)	2	65	106547	WASHER, Spindle & Brake Attaching	16
17	121062	NUT, Wheel Stud	20	66	886886	COVER, Brake Adjusting Hole	8
18	11F-12	PLUG, Hub Filler & Drain	2	67	106316	‡SHIM, Steering Trunnion — .010	—
19	103445	STUD, Wheel	20	67A	106317	‡SHIM, Steering Trunnion — .007	—
20	103522	NUT, Wheel	20	67B	106318	‡SHIM, Steering Trunnion — .004	—
21	668553	CUP, Outer Hub Bearing	2	68	109886	TRUNNION, Lower Steering	2
22	675261	CONE, Outer Hub Bearing	2	69	4E-12	LKWSHR, Trunnion Attaching	12
23	117223	HUB, Internal Gear	2	70	—	OMIT (Use Bolt Item 71)	—
24	106059	GEAR, Internal	2	71	17C-1228	BOLT, Trunnion Attaching	12
25	114433	NUT, Steering Spindle	2	72	—	TIE ROD ASSY — See Index	—
26	101274	LOCK, Spindle Nut	2	73	109624	HOUSING, Axle	1
27	114433	NUT, Steering Spindle	2	74	112158	STUD, Housing to Outer End	16
28	—	PLANET SPIDER — See Index	—	75	11F-12	PLUG, Housing Drain	1
29	106762	WASHER, Planet Spider to Hub	10	76	106762	WASHER, Carrier Attaching	11
30	109050	GEAR, Sun	2	77	112923	STUD, Brake Line Tee Attaching	1
31	100970	BOLT, Planet Spider to Hub	10	78	17C-828	BOLT, Carrier Attaching	2
32	114089	SEAL RING, Cap to Carrier	2	79	17C-824	BOLT, Carrier Attaching	9
33	117242	CAP, Sun Gear Thrust	2	80	64D-08	NUT, Carrier Stud	3
34	111805	VALVE, Thrust Cap Relief	2	81	106762	WASHER, Carrier Stud	3
35	11F-04	PLUG, Thrust Cap	2	82	112287	DOWEL, Carrier Stud	3
36	1C-720	BOLT, Thrust Cap	12	83	—	DIFF. & CARRIER ASSY — See Index	—
37	112278	WASHER, Thrust Cap	12	84	112286	STUD, Carrier Attaching	2
38	1C-808	BOLT, Planet Puller Hole	4	85	106656	BREATHER, Axle Housing	1
39	64D-08	NUT, Planet Carrier Stud	10	86	12F-204	PLUG, Housing Expansion	1
40	106762	WASHER, Planet Carrier Stud	10	87	11F-12	PLUG, Housing Filler	1
41	3E-08	LKWSHR, Planet Puller Hole	4	88	667277	CONE, Trunnion Bearing — Lower	2
42	112287	DOWEL, Planet Carrier to Hub	10	89	675258	CUP, Trunnion Bearing — Lower	2
43	106880	BOLT, Internal Gear to Hub	16	90	1C-612	BOLT, Outer End Retainer	24
44	116419	STUD, Planet Carrier to Hub	10	91	4E-06	LKWSHR, Outer End Retainer	24
45	106313	BOLT, Steering Arm	2	92	107089	NUT, Outer End to Housing	16
46	111656	WASHER, Steering Arm Bolt	2	93	111656	WASHER, Outer End to Housing	16
47	109340	ARM, Steering	1	94	108877	OUTER END, Housing	2
48	106316	‡SHIM, Steering Arm — .010	—	95	106291	RETAINER, Upper Trunnion Oil	2
48A	106317	‡SHIM, Steering Arm — .007	—	96	675258	CUP, Upper Trunnion Bearing	2
48B	106318	‡SHIM, Steering Arm — .004	—	97	550320	†TEE, Brake Line	1

†Not Illustrated
‡As Required

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



DIFFERENTIAL AND CARRIER ASSEMBLY — FRONT DRIVE

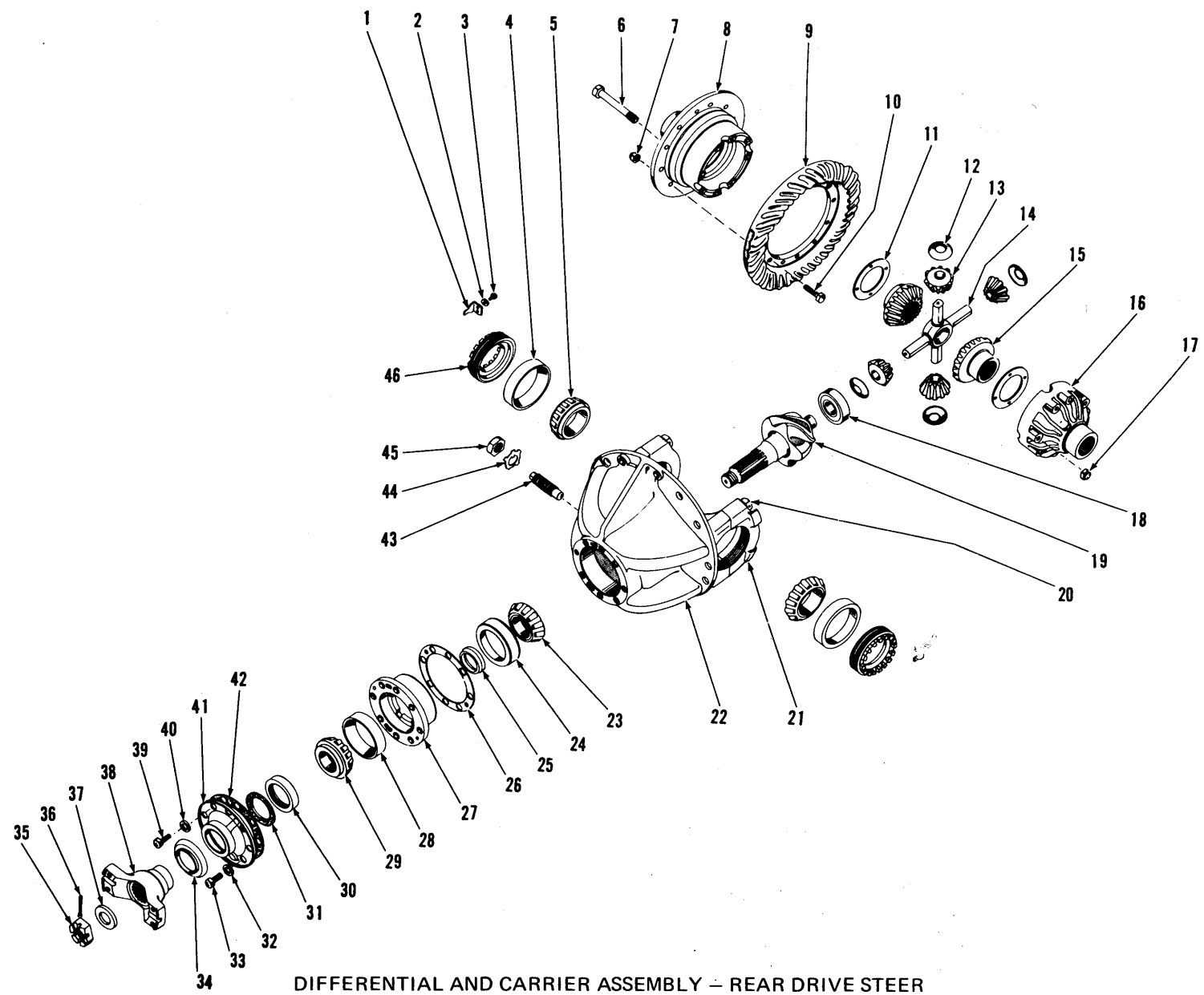
TS-3585-P

DIFFERENTIAL AND CARRIER ASSEMBLY — FRONT DRIVE

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	112056	DIFF. & CARRIER ASSY (Inc. 1 thru 47)	1	26A	101258	‡SHIM, Pinion Bearing Cage — .007	—
1	101252	NUT, Differential Adjusting	2	26B	101259	‡SHIM, Pinion Bearing Cage — .010	—
2	100941	LOCK, Differential Adjusting Nut	2	27	110843	CAGE ASSY, Pinion Bearing (Inc. 24, 29)	1
3	4E-06	LKWSHR, Adjusting Nut Lock	2	28	667278	CUP, Outer Pinion Bearing	1
4	3C-614	BOLT, Adjusting Nut Lock	2	29	667277	CONE, Outer Pinion Bearing	1
5	654144	CONE, Differential Bearing	2	30	110847	RETAINER, Pinion Oil Seal	1
6	104168	NUT, Ring Gear Bolt	12	31	1C-836	BOLT, Oil Seal Retainer Locating	1
7	104168	NUT, Differential Case Bolt	8	31A	4E-08	LKWSHR, Retainer Locating Bolt	1
8	-----	§DIFF. CASE, Flange Half—See 51	1	32	101144	BOLT, Brake Drum to Flange	8
9	-----	§RING GEAR—See 50	1	33	107261	DRUM, Parking Brake	1
10	101196	BOLT, Ring Gear	12	33A	-----	PARKING BRAKE ASSY—See Index	—
11	101245	WASHER, Side Gear Thrust	2	34	2E-06	LKWSHR, Brake Drum to Flange	8
12	111347	WASHER, Differential Pinion Thrust	4	35	2D-06	NUT, Brake Drum to Flange	8
13	101241	PINION, Differential	4	36	101262	NUT, Pinion Shaft	1
14	101243	SPIDER, Differential	1	37	1F-732	COTTER, Pinion Shaft Nut	1
15	104167	GEAR, Differential Side	2	38	101263	WASHER, Pinion Shaft Nut	1
16	-----	§DIFF. CASE—Plain Half—See 51	1	39	112084	FLANGE, Companion	1
17	111348	BOLT, Differential Case	8	40	1C-920	BOLT, Brake Attaching	4
18	667466	BEARING, Inner Pinion	1	40A	4E-09	LKWSHR, Brake Attaching Bolt	4
19	-----	§PINION—See 50	1	41	1C-936	BOLT, Oil Seal Retainer Attaching	7
20	101210	BOLT, Differential Carrier Cap	4	41A	4E-09	LKWSHR, Retainer Attaching Bolt	7
20A	111658	†WASHER, Carrier Cap Bolt	4	42	110897	SEAL, Pinion Oil	1
21	-----	§CAP, Differential Carrier—See 22	2	43	101254	GASKET, Oil Seal Retainer	1
22	112289	CARRIER ASSY, Differential (Inc. 20, 20A, 21)	1	44	101226	SCREW, Differential Thrust	1
23	667276	CONE, Center Pinion Bearing	1	45	101227	LOCK, Differential Thrust Screw	1
24	658988	CUP, Center Pinion Bearing	1	46	8D-18	NUT, Differential Thrust Screw	1
25	815172	SPACER KIT, Pinion Bearing	1	47	667275	CUP, Differential Bearing	1
26	101257	‡SHIM, Pinion Bearing Cage — .004	—	48	112079	DIFFERENTIAL ASSY (Inc. 6 thru 17, 19)	1
				49	111344	DIFF. BODY SUB-ASSY (Inc. 7, 8, 11 thru 17)	1
				50	112080	GEAR & PINION SET (Inc. 9, 19)	1
				51	815395	DIFFERENTIAL CASE KIT (Inc. 7, 8, 12, 16, 17)	1

§Not Sold Separately
 †Not Illustrated
 ‡As Required

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



DIFFERENTIAL AND CARRIER ASSEMBLY - REAR DRIVE STEER
For Serial: Cummins-2DC101 thru 3DC999. G.M.-2DG101 thru 4DG999.
Wauk.-2DA101 & after, C3DA9-14 thru C3DA9-24.

56.1

PM 1669



CONSTRUCTION MACHINERY DIVISION



DIFFERENTIAL AND CARRIER ASSEMBLY — REAR DRIVE STEER

For Serial: Cummins — 2DC10 thru 3DC999

G.M. — 2DG101 thru 4DG999

Wauk. — 2DA101 and after, C3DA9-1 thru C3DA9-24

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	112281	DIFF. & CARRIER ASSY (Inc. 1 thru 46)	1	26	112354	‡SHIM, Bearing Cage —.004"	—
1	100941	LOCK, Adjusting Nut	2	26A	112355	‡SHIM, Bearing Cage —.007"	—
2	4E-06	LKWSHR, Adjusting Nut Lock Bolt	2	26B	112356	‡SHIM, Bearing Cage —.010"	—
3	3C-614	BOLT, Adjusting Nut Lock	2	27	112350	CAGE ASSY, Pinion Bearing (Inc. 28)	1
4	675249	CUP, Differential Bearing	2	28	675257	CUP, Outer Pinion Bearing	1
5	675248	CONE, Differential Bearing	2	29	710288	CONE, Outer Pinion Bearing	1
6	100174	BOLT, Differential Case	8	30	111720	SEAL, Pinion Oil	1
7	104181	NUT, Ring Gear Bolt	12	31	100945	GASKET, Pinion Oil Seal	1
8	-----	§DIFF. CASE — Flanged Half — See 50	1	32	4E-09	LKWSHR, Oil Seal Retainer	5
9	-----	§RING GEAR — See 49	1	33	1C-928	BOLT, Oil Seal Retainer	5
10	100176	BOLT, Ring Gear	12	34	-----	OMIT — Not applicable this model	—
11	100173	WASHER, Side Gear Thrust	2	35	100950	NUT, Pinion Shaft	1
12	100172	WASHER, Pinion Thrust	4	36	1F-428	COTTER, Pinion Shaft Nut	1
13	815744	*KIT, Differential	1	37	100951	WASHER, Pinion Shaft Nut	1
14	100171	SPIDER, Differential	1	38	106081	FLANGE, Companion	1
15	100170	GEAR, Side	2	39	1C-828	BOLT, Oil Seal Retainer Locating	1
16	-----	§DIFF. CASE — Plain Half — See 50	1	40	4E-08	LKWSHR, Oil Seal Retainer Locating	1
17	104182	NUT, Differential Case Bolt	8	41	112352	RETAINER, Pinion Oil Seal	1
18	675536	BEARING, Inner Pinion	1	42	112353	GASKET, Oil Seal Retainer	1
19	-----	§PINION — See 49	1	43	100953	SCREW, Differential Thrust	1
20	100937	BOLT, Carrier Cap	4	44	100954	LOCK, Differential Thrust Screw	1
20A	111656	†WASHER, Carrier Cap Bolt	4	45	8D-14	NUT, Differential Thrust Screw	1
21	-----	§CAP, Carrier — See 22	2	46	100940	NUT, Differential Adjusting	2
22	112279	CARRIER ASSY (Inc. 20, 20A, 21)	1	47	106076	DIFF. ASSY (Inc. 6 thru 17, 19)	1
23	667277	CONE, Center Pinion Bearing	1	48	100160	DIFF. BODY SUB. ASSY (Inc. 6, 8, 11 thru 17)	1
24	667278	CUP, Center Pinion Bearing	1	49	815204	GEAR & PINION SET (Inc. 9, 19)	1
25	815040	SPACER KIT, Pinion Bearing	1	50	815033	DIFF. CASE KIT (Inc. 6, 8, 16, 17)	1

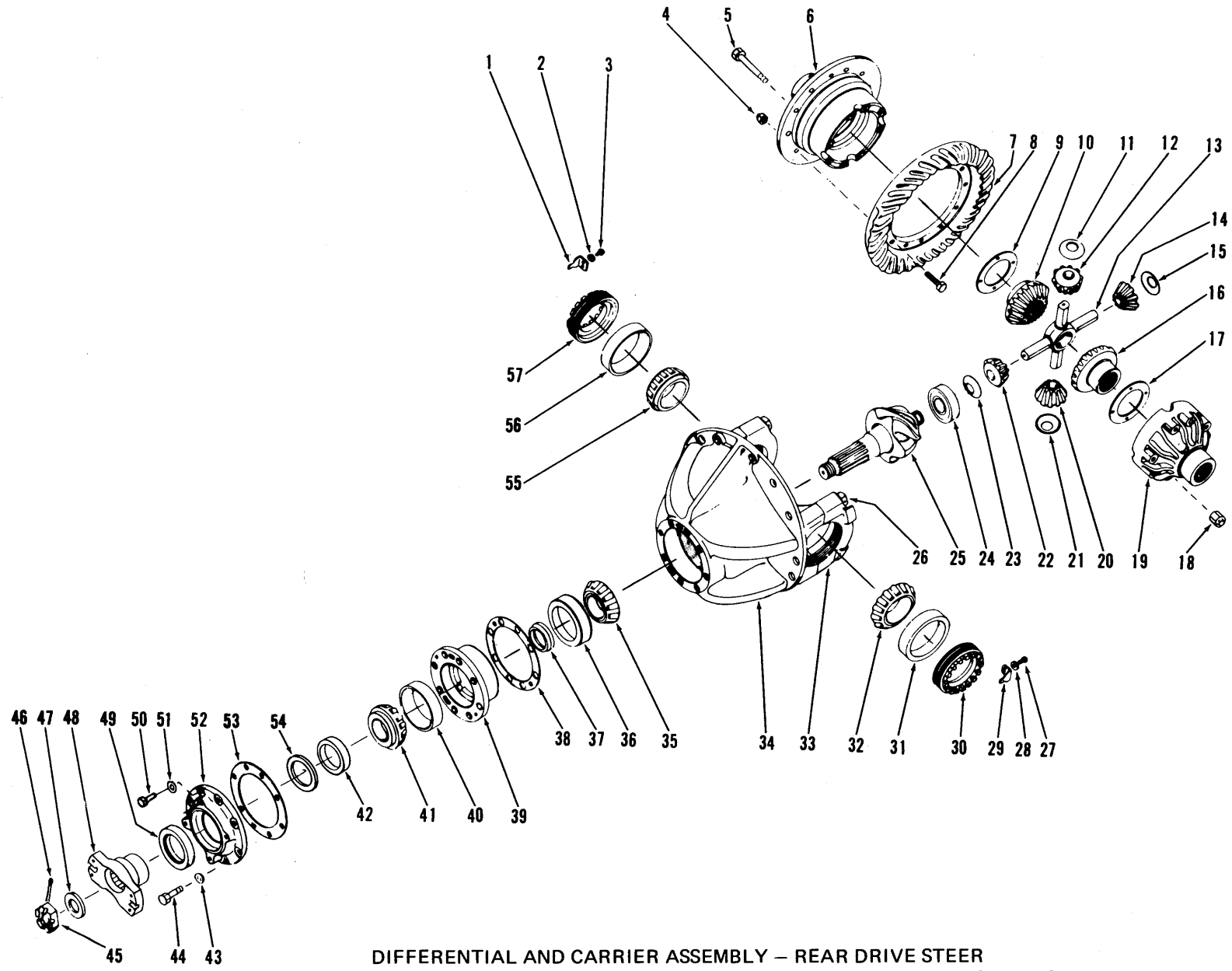
§Not Sold Separately

†Not Illustrated

‡As Required

*NOTE: 815744 includes 4—100169 Diff. Pinions.

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



DIFFERENTIAL AND CARRIER ASSEMBLY – REAR DRIVE STEER
For Serial: Cummins-4DC101 and after. G.M.-5DG101 and after. Wauk.-C3DA9-25 and after.

TS-5007-P

56A.1

PM 1669



CONSTRUCTION MACHINERY DIVISION
DIFFERENTIAL AND CARRIER ASSEMBLY — REAR DRIVE STEER
For Serial: Cummins — 4DC101 and after
G.M. — 5DG101 and after
Wauk. — C3DA9-25 and after



Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	117536	DIFF. & CARRIER ASSY (Inc. 1 thru 57)	1	33	-----	§CAP, Differential Carrier — See 34	2
1	100941	LOCK, Differential Adjusting Nut	1	34	116646	CARRIER ASSY, Diff. (Inc. 26, 26A, 33)	1
2	4E-06	LKWSHR, Adjusting Nut Lock	1	35	667276	CONE, Center Pinion Bearing	1
3	3C-614	BOLT, Adjusting Nut Lock	1	36	658988	CUP, Center Pinion Bearing	1
4	104168	NUT, Ring Gear Bolt	12	37	815172	SPACER, Pinion Bearing	1
5	111348	BOLT, Differential Case	8	38	101257	‡SHIM, Bearing Cage — .004"	—
6	-----	§DIFF. CASE — Flange Half — See 61	1	38A	101258	‡SHIM, Bearing Cage — .007"	—
7	-----	§RING GEAR — See 60	1	38B	101259	‡SHIM, Bearing Cage — .010"	—
8	101196	BOLT, Ring Gear	12	39	101250	CAGE ASSY, Pinion Bearing (Inc. 36, 40)	1
9	116998	WASHER, Side Gear Thrust	1	40	667278	CUP, Outer Pinion Bearing	1
10	104167	GEAR, Differential Side	1	41	667277	CONE, Outer Pinion Bearing	1
11	116997	WASHER, Differential Pinion Thrust	1	42	110897	SEAL, Pinion Oil	1
12	815745	*PINION, Differential	1	43	4E-09	LKWSHR, Oil Seal Retainer	7
13	117022	SPIDER, Differential	1	44	1C-928	BOLT, Oil Seal Retainer	7
14	-----	PINION, Differential—See 12	1	45	101262	NUT, Pinion Shaft	1
15	116997	WASHER, Differential Pinion Thrust	1	46	1F-732	COTTER, Pinion Shaft Nut	1
16	104167	GEAR, Differential Side	1	47	101263	WASHER, Pinion Shaft Nut	1
17	116998	WASHER, Side Gear Thrust	1	48	117218	FLANGE, Companion	1
18	104168	NUT, Differential Case	8	49	101261	SHIELD, Pinion Dust	1
19	-----	§DIFF. CASE — Plain Half — See 61	1	50	1C-828	BOLT, Oil Seal Retainer Locating	1
20	-----	PINION, Differential—See 12	1	51	4E-08	LKWSHR, Oil Seal Retainer Locating	1
21	116997	WASHER, Differential Pinion Thrust	1	52	101253	RETAINER, Pinion Oil Seal	1
22	-----	PINION, Differential—See 12	1	53	101254	GASKET, Oil Seal Retainer	1
23	116997	WASHER, Differential Pinion Thrust	1	54	101217	GASKET, Pinion Oil Seal	1
24	667466	BEARING, Inner Pinion	1	55	654144	CONE, Differential Bearing	1
25	-----	§PINION, Differential — See 60	1	56	667275	CUP, Differential Bearing	1
26	101210	BOLT, Differential Carrier Cap	4	57	101252	NUT, Differential Adjusting	1
26A	111658	WASHER, Carrier Cap Bolt	4	58	117537	†DIFF. ASSY (Inc. 4 thru 23, 25)	1
27	3C-614	BOLT, Adjusting Nut Lock	1	59	116993	†DIFF. BODY SUB ASSY (Inc. 5, 6, 9 thru 23)	1
28	4E-06	LKWSHR, Adjusting Nut Lock	1	60	117538	†GEAR & PINION SET (Inc. 7, 25)	1
29	100941	LOCK, Differential Adjusting Nut	1	61	815671	†DIFF. CASE KIT (Inc. 5, 6, 11, 15, 18, 19, 21, 23)	1
30	101252	NUT, Differential Adjusting	1				
31	667275	CUP, Differential Bearing	1				
32	654144	CONE, Differential Bearing	1				

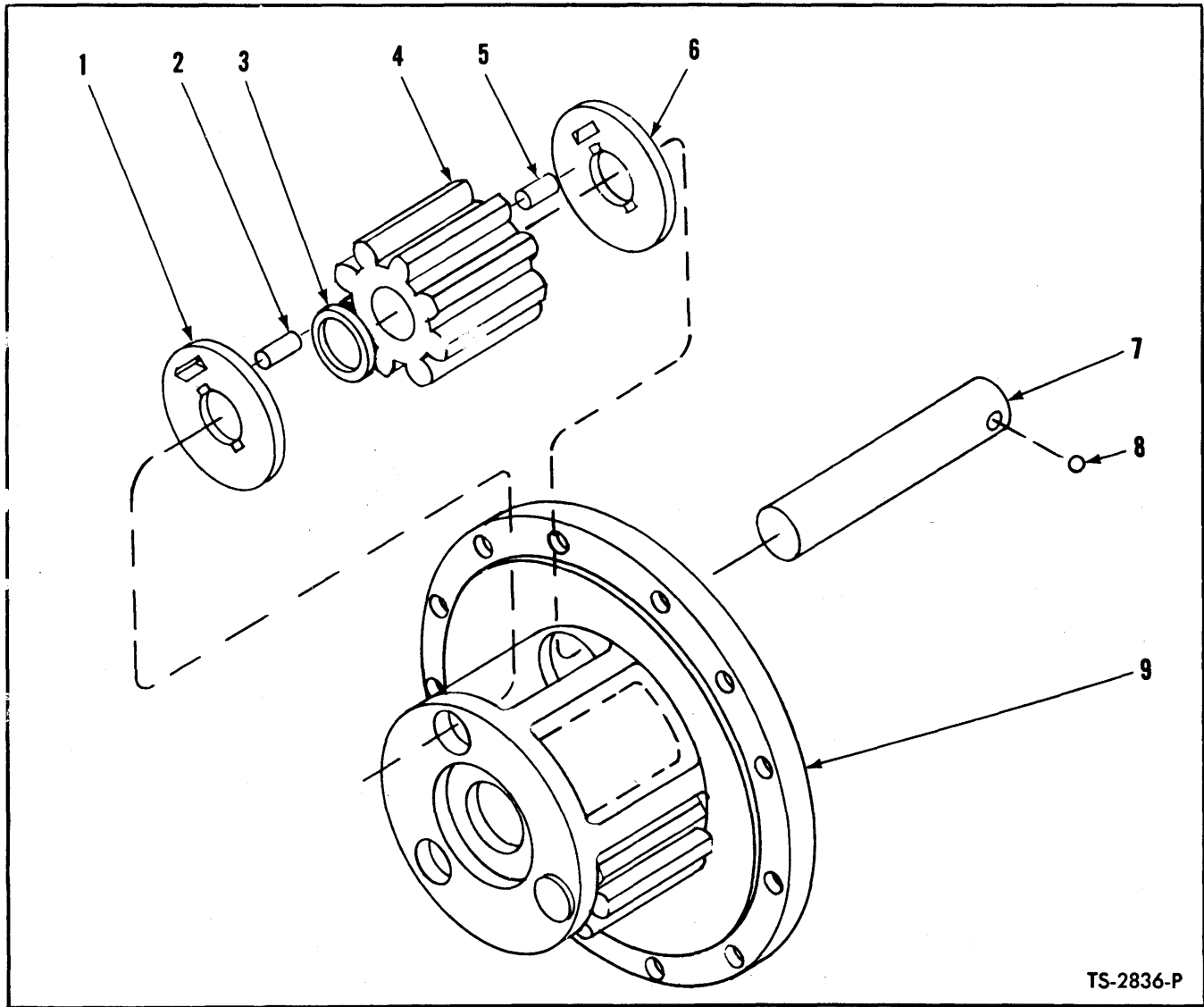
§Not Sold Separately

‡As Required

†Not Illustrated

*NOTE: 815745 Kit consists of 4—116996 Pinions.

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



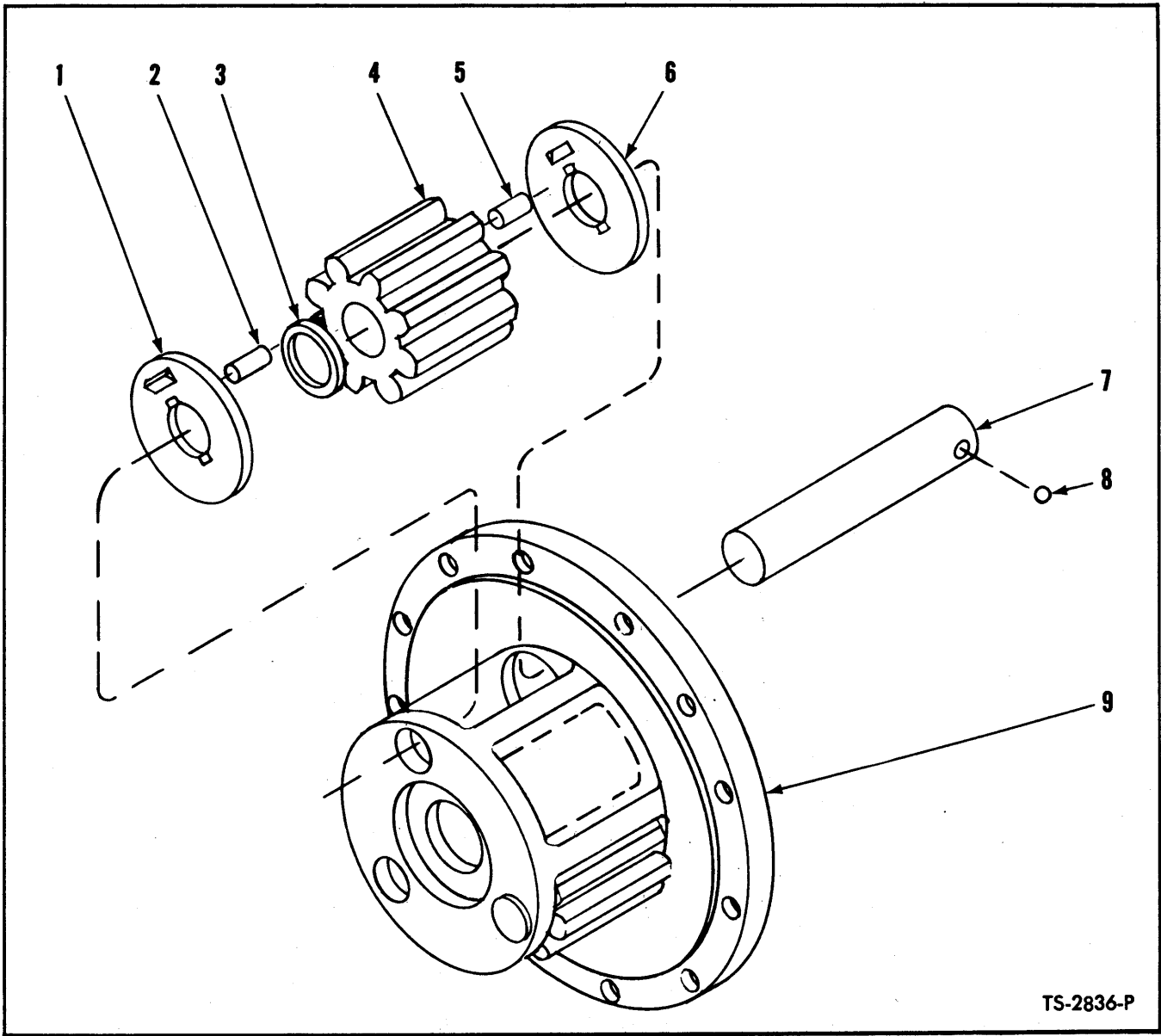
TS-2836-P

PLANET SPIDER ASSEMBLY
For Serial: Cummins — 2DC101 thru 3DC999
G.M. — 2DG101 thru 4DG999
Wauk. — 2DA101 and after, C3DA9-1 thru C3DA9-24

Item No.	Part No.	Description	No. Req'd.
A	945608	*SPIDER ASSY, Planet (Inc. 1 thru 8)	4
NOTE: Four (4) Planet Spider Assemblies used on machine. Quantities listed below are for 1 Planet Spider.			
1	106350	WASHER, Pinion Thrust	3
2	106351	ROLLER, Pinion	87
3	106352	SPACER, Pinion Roller	3
4	109088	PINION, Planet	3
5	106351	ROLLER, Pinion	87
6	106350	WASHER, Pinion Thrust	3
7	106349	SHAFT, Pinion	3
8	10J-12	BALL, Pinion Shaft	3
9	945609	SPIDER, Planet	1

*NOTE: 945608 also includes 5-112287 Dowels, 5-116419 Studs & 5-64D-08 Nuts to replace the 5-existing Spider to Hub Bolts.

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

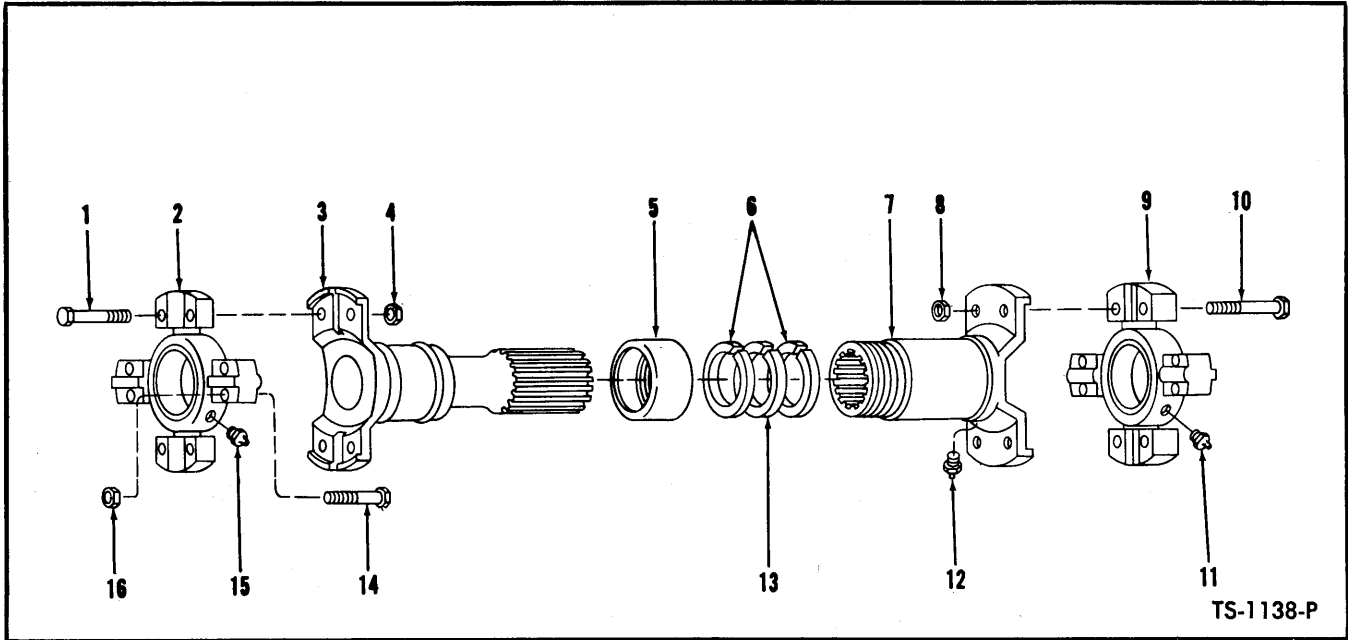


TS-2836-P

PLANET SPIDER ASSEMBLY
For Serial: Cummins — 4DC101 and after
G.M. — 5DG101 and after
Wauk. — C3DA9-25 and after

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

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



TS-1138-P

PROPELLER SHAFT ASSEMBLIES

For Serial: Cummins — 2DC101 thru 3DC999

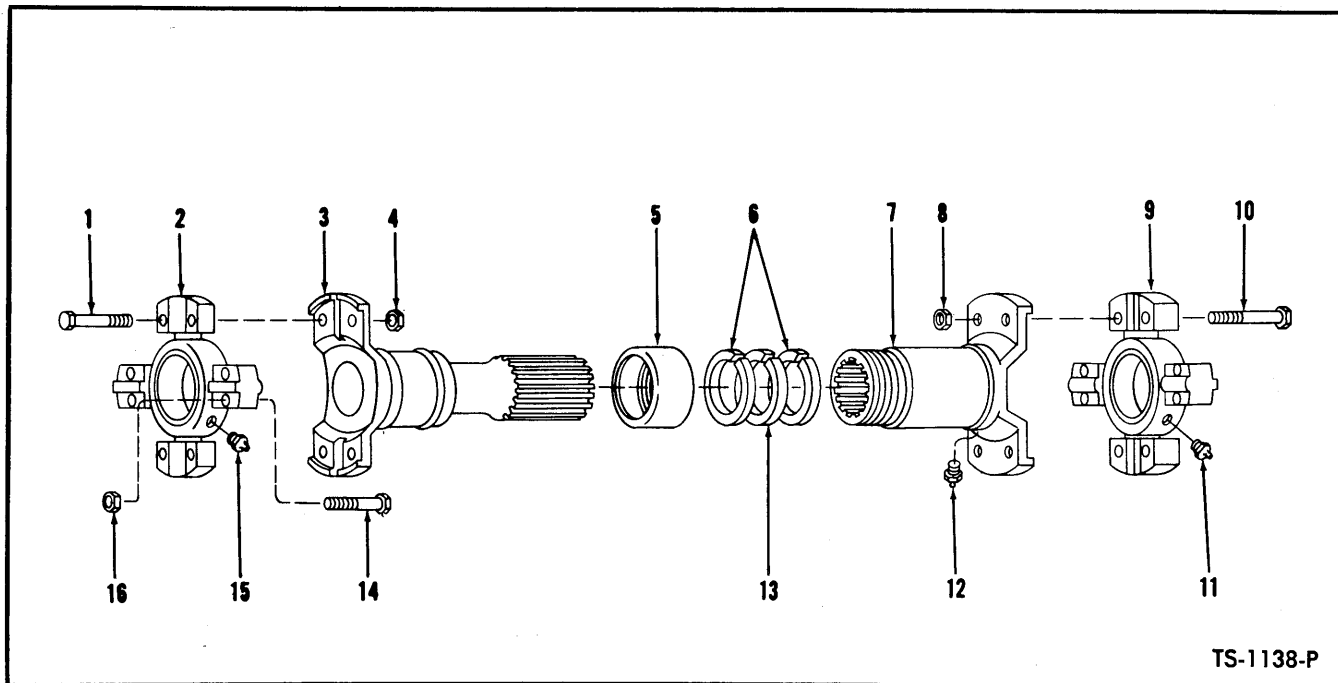
G.M. — 2DG101 thru 4DG999

Wauk. — 2DA101 and after, C3DA9-14 thru C3DA9-24

Item No.	Description	Converter to Transmission Waukesha Gas and Cummins	Converter to Transmission G.M.	Transmission to Front Axle	Transmission to Rear Axle	No. Req'd
A	PROPELLER SHAFT ASSY (Inc. 1 thru 16)	532197	540190	528998	550580	1
1	BOLT, Spider & Bearing to Tube	695808	695808	940089	940089	4
2	SPIDER & BEARING ASSY	887737	887737	944862	944862	1
3	TUBE	945098	945099	944690	940084	1
4	NUT, Spider & Bearing to Tube	8D-05	8D-05	8D-06	8D-06	4
5	RETAINER, Felt	940654	940654	940090	940090	1
6	WASHER, Felt Retainer	940653	940653	940091	940091	2
7	SLIP YOKE	942658	942658	940093	940093	1
8	NUT, Spider & Bearing to Slip Yoke	8D-05	8D-05	8D-06	8D-06	4
9	SPIDER & BEARING ASSY	887737	887737	944862	944862	1
10	BOLT, Spider & Bearing to Slip Yoke	69E808	695808	940089	940089	4
11	FITTING, Spider & Bearing Grease	10H-35	10H-35	10H-35	10H-35	1
12	FITTING, Slip Yoke Grease	10H-25	10H-25	10H-25	10H-25	1
13	FELT WASHER	940081	940081	940092	940092	1
14	BOLT, Spider & Bearing Attaching	945256	945256	940089	940089	8
15	FITTING, Spider & Bearing Grease	10H-35	10H-35	10H-35	10H-35	1
16	NUT, Spider & Bearing Attaching	*8D-05	*8D-05	8D-06	8D-06	8

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

*NOTE: Quantity required in these locations (16).



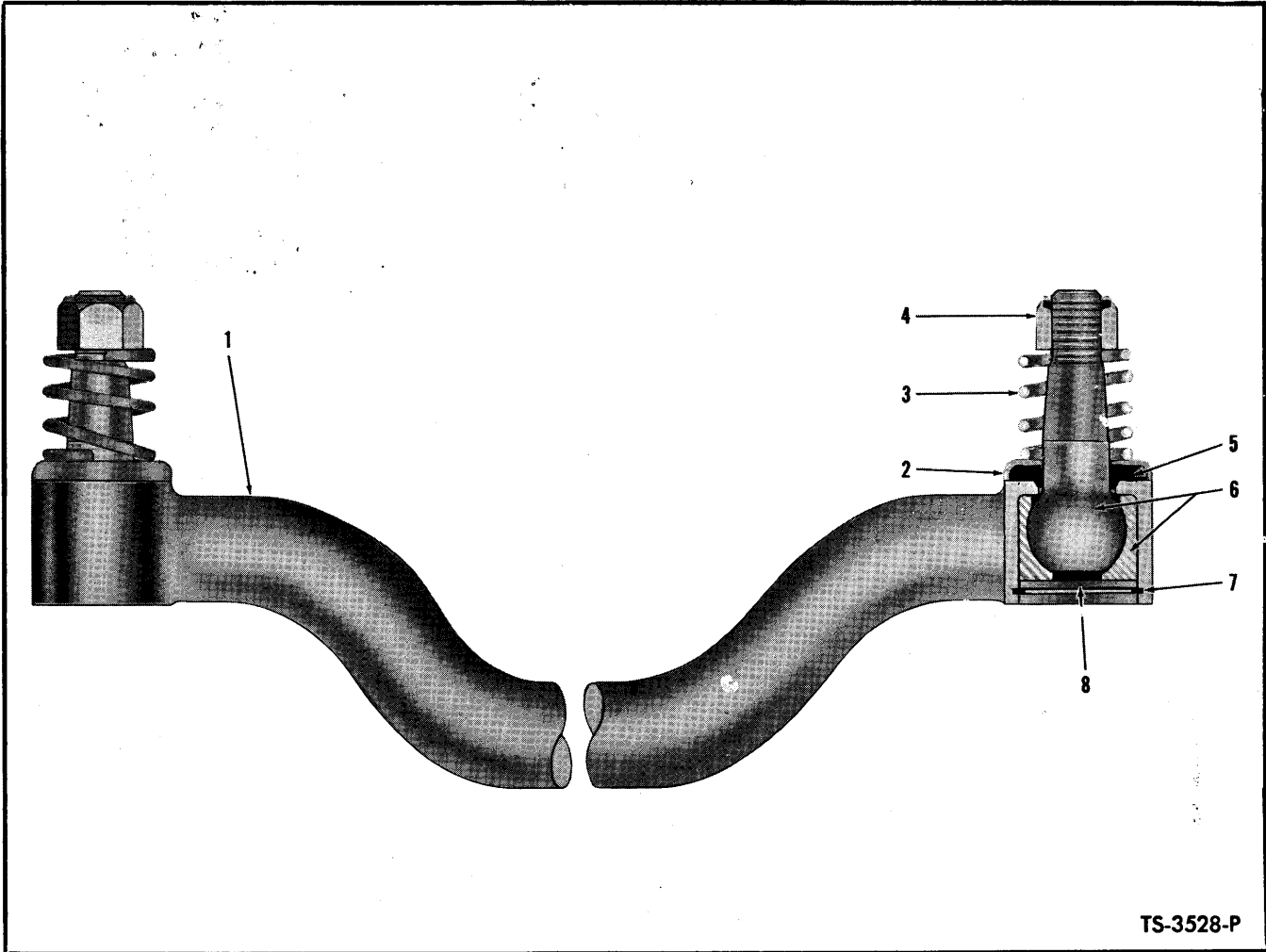
TS-1138-P

PROPELLER SHAFT ASSEMBLIES
For Serial: Cummins — 4DC101 and after
G.M. — 5DG101 and after
Wauk. — C3DA9-25 and after

Item No.	Description	Converter		Transmission to Front Axle	Transmission to Rear Axle	No. Req'd
		to Transmission Waukesha Gas and Cummins	to Transmission G.M.			
A	PROPELLER SHAFT ASSY (Inc. 1 thru 16)	532197	540190	528998	521000	1
1	BOLT, Spider & Bearing to Tube	695808	695808	940089	940089	4
2	SPIDER & BEARING ASSY	887737	887737	944862	944862	1
3	TUBE	945098	945099	944690	888281	1
4	NUT, Spider & Bearing to Tube	8D-05	8D-05	8D-06	8D-06	4
5	RETAINER, Felt	940654	940654	940090	940090	1
6	WASHER, Felt Retainer	940653	940653	940091	940091	2
7	SLIP YOKE	942658	942658	940093	940093	1
8	NUT, Spider & Bearing to Slip Yoke	8D-05	8D-05	8D-06	8D-06	4
9	SPIDER & BEARING ASSY	887737	887737	944862	944862	1
10	BOLT, Spider & Bearing to Slip Yoke	695808	695808	940089	940089	4
11	FITTING, Spider & Bearing Grease	10H-35	10H-35	10H-35	10H-35	1
12	FITTING, Slip Yoke Grease	10H-25	10H-25	10H-25	10H-25	1
13	FELT WASHER	940081	940081	940092	940092	1
14	BOLT, Spider & Bearing Attaching	945256	945256	940089	940089	8
15	FITTING, Spider & Bearing Grease	10H-35	10H-35	10H-35	10H-35	1
16	NUT, Spider & Bearing Attaching	*8D-05	*8D-05	8D-06	8D-06	8

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

*NOTE: Quantity required in these locations (16).



TS-3528-P

TIE ROD ASSEMBLY

For Serial: Cummins — 2DC101 thru 3DC999

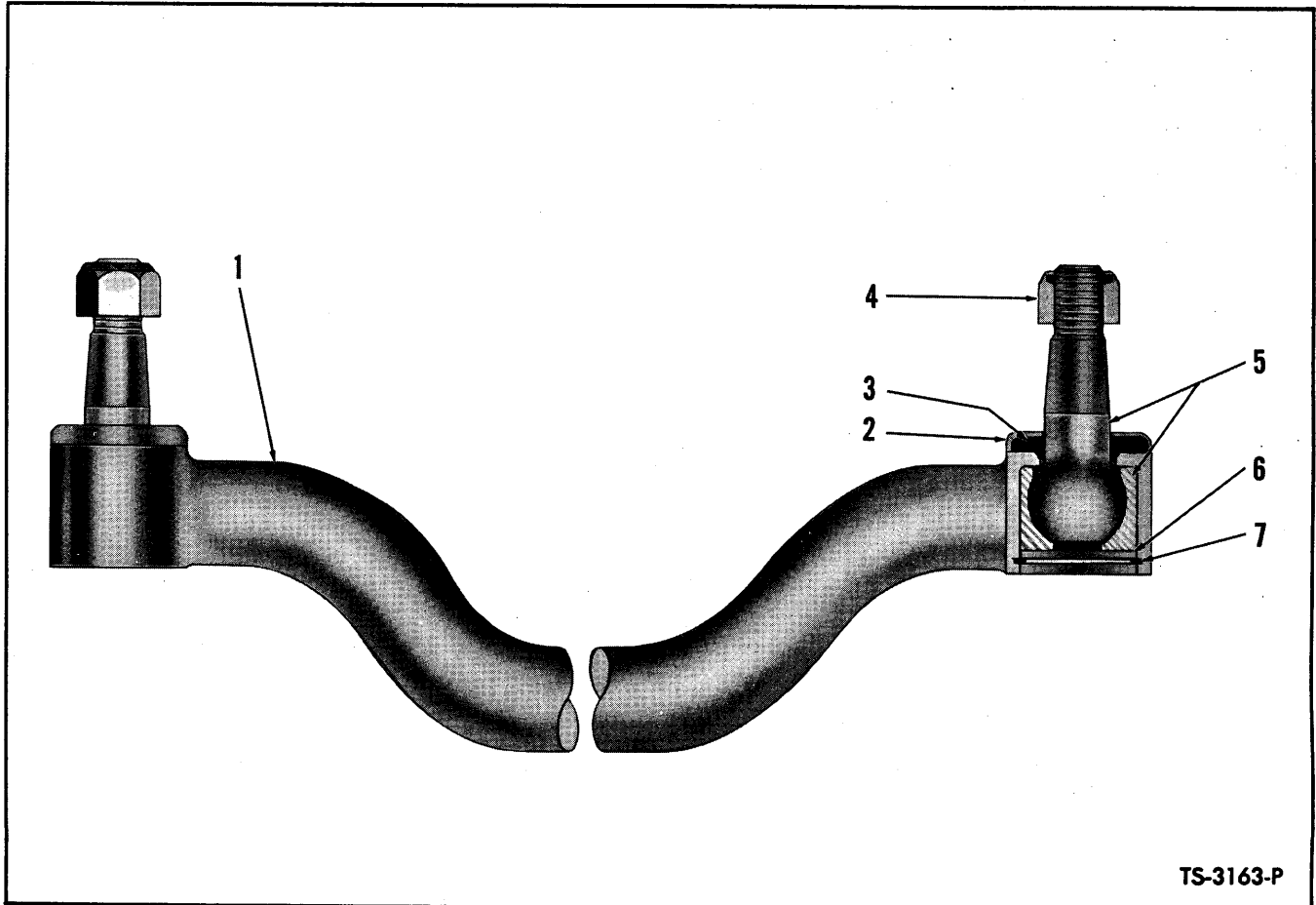
G.M. — 2DG101 thru 4DG999

Wauk. — 2DA101 and after, C3DA9-1 thru C3DA9-24

Item No.	Part No.	Description	No. Req'd.
A	117226	TIE ROD ASSY (Inc. 1 thru 8)	1
1	-----	SHOUSING, Tie Rod — See A	1
2	106138	RETAINER, Felt	2
3	106268	SPRING	2
4	112174	NUT, Ball Stud	2
5	106137	FELT	2
6	117228	BALL STUD	2
7	541879	PLATE, Ball Stud Retainer	2
8	507695	RING, Plate Retaining	2

§Not Sold Separately

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



TS-3163-P

TIE ROD ASSEMBLY

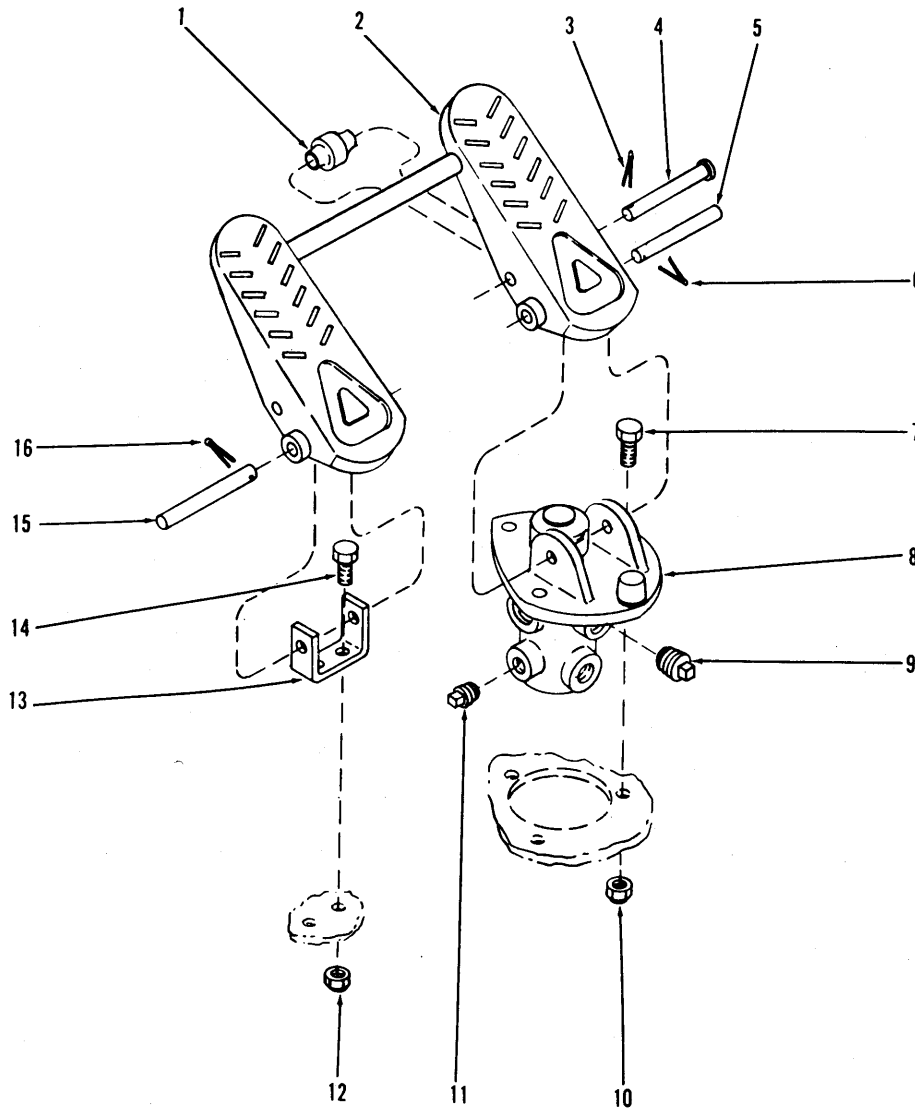
For Serial: Cummins — 4DC101 and after
 G.M. — 5DG101 and after
 Wauk. — C3DA9-25 and after

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

§Not Sold Separately

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





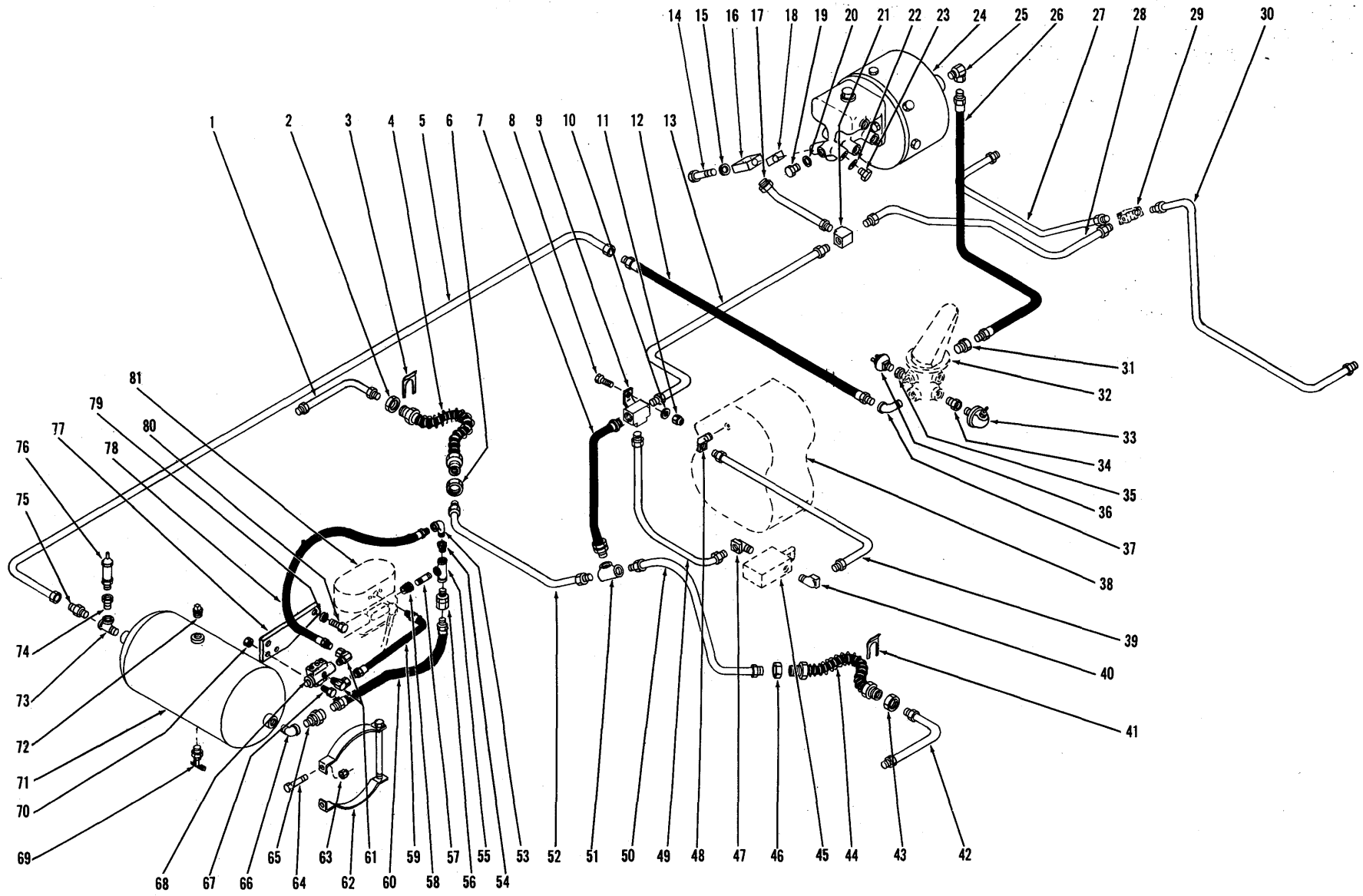
TS-2938-P

BRAKE CONTROLS

Item No.	Part No.	Description	No. Req'd.
1	518259	ROLLER, Pedal	1
2	542255	PEDAL, Air Brake	1
3	1F-312	COTTER, Clevis Pin	1
4	875766	PIN, Roller to Pedal	1
5	875767	PIN, Pedal to Valve	1
6	1F-320	COTTER, Clevis Pin	1
7	18C-516	BOLT, Valve to Floorboard	3
8	945996	* VALVE, Air Brake-B.W. 227472	1
9	13F-08	PLUG, Air Brake Valve	3
10	18D-05	NUT, Valve to Floorboard	3
11	13F-04	PLUG, Air Brake Valve	1
12	18D-05	NUT, Base to Floorboard	2
13	513873	BASE, Pedal	1
14	18C-516	BOLT, Base to Floorboard	2
15	875767	PIN, Pedal to Base	1
16	1F-320	COTTER, Clevis Pin	1

*NOTE: Your local Bendix-Westinghouse distributor is equipped to supply components of this part.

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



[62]

PM 1669

BRAKE LINES — CUMMINS

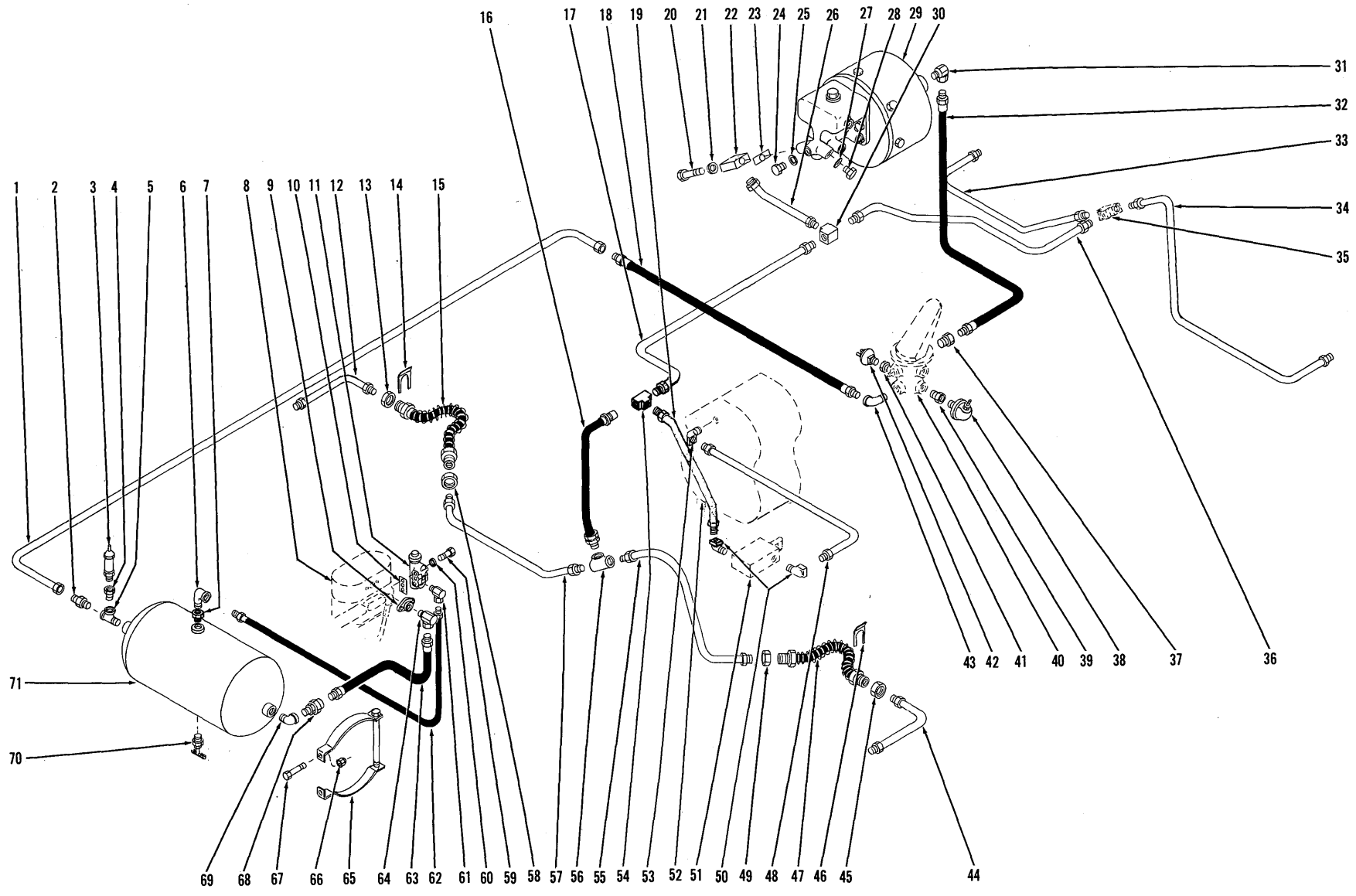
TS-3314-P

BRAKE LINES — CUMMINS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	552387	**LINE, Rear Brake—L.H.	1	42A	534214	***LINE, Rear Brake—R.H.	1
1A	534214	***LINE, Rear Brake—L.H.	1	43	8D-10	NUT, Hose to Rear Axle Line	1
2	8D-10	NUT, Hose to Rear Axle Line	1	44	552374	HOSE, Line to Line	1
3	550325	CLIP, Hose to Frame	1	45	-----	SELECTOR VALVE—See Index	—
4	552374	HOSE, Line to Line	1	46	8D-10	NUT, Hose to Line	1
5	540919	LINE, Air Reservoir to Brake Valve	1	47	507729	ELBOW, Line to Selector Valve	1
6	8D-10	NUT, Hose to Line	1	48	62F-3	ELBOW, Line to Transmission	1
7	546853	HOSE, Tee to Tee	1	49	542506	LINE, Tee to Selector Valve	1
8	18C-514	BOLT, Tee to Lug	1	50	534259	LINE, Tee to Hose	1
9	100582	TEE	1	51	550320	TEE—Furnished with Axle.....	1
10	710538	WASHER, Tee to Lug	1	52	534260	LINE, Tee to Hose	1
11	18D-05	NUT, Tee to Lug	1	53	26F-1	ELBOW, Hose to Tee.....	1
12	524497	HOSE, Line to Brake Valve	1	54	356616	BUSHING, Reducing	1
13	540925	LINE, Tee to Tee	1	55	18F-4	TEE, Compressor	1
14	692722	BOLT, Connector Mounting	1	56	36F-4	ADAPTER UNION	1
15	613750	GASKET, Connector Bolt	1	57	5K-410	NIPPLE, Tee to Compressor	1
16	620235	CONNECTOR, Master Cylinder.....	1	58	356617	BUSHING, Reducing	1
17	540923	LINE, Connector to Tee	1	59	546835	HOSE, Governor to Compressor.....	1
18	620238	GASKET, Connector to Master Cyl.	1	60	548400	HOSE, Air Reservoir to Compressor Tee	1
19	874007	PLUG, Master Cylinder Outlet	1	61	31F-1	ADAPTER UNION	2
20	613750	GASKET, Master Cylinder Plug	1	62	941214	*BRACKET, Reservoir Mounting— B.W. 205267	2
21	552897	TEE, Front Axle	1	63	18D-06	NUT, Bracket Mounting	4
22	613750	GASKET, Plug	1	64	18C-616	BOLT, Bracket Mounting	4
23	874007	PLUG, Master Cylinder Outlet	1	65	593370	*CHECK VALVE—B.W. 228194	1
24	-----	POWER CLUSTER—See Index	—	66	26F-4	ELBOW, Air Reservoir	1
25	31F-3	ADAPTER UNION	1	67	18C-548	BOLT, Governor Mounting	2
26	541983	HOSE, Power Cluster to Brake Valve	1	68	540306	*GOVERNOR—B.W. 275200	1
27	543741	LINE, Front Brake—L.H.	1	69	72F-4	DRAIN COCK, Reservoir	1
28	540924	LINE, Tee to Tee	1	70	18D-05	NUT, Governor to Bracket	2
29	550318	TEE, Furnished with Axle	1	71	540707	AIR RESERVOIR	1
30	543740	LINE, Front Brake—R.H.	1	72	14F-08	PLUG, Air Reservoir	1
31	356614	BUSHING, Reducing	1	73	17F-4	TEE, Air Reservoir	1
32	-----	BRAKE CONTROLS—See Index	—	74	356615	BUSHING, Reducing	1
33	940643	SENDER UNIT, Air Pressure	1	75	38F-10	FITTING, Hose to Tee	1
34	356616	BUSHING, Reducing	1	76	569586	*SAFETY VALVE—B.W. 279758	1
35	356616	BUSHING, Reducing	1	77	548338	BRACKET, Governor Mounting	1
36	636260	SWITCH, Stop Light	1	78	548401	HOSE, Governor to Elbow.....	1
37	26F-4	ELBOW, Hose to Brake Valve	1	79	4E-06	LKWSHR, Governor to Bracket	2
38	-----	TRANSMISSION—See Index	—	80	1C-612	BOLT, Governor to Bracket	2
39	542507	LINE, Selector Valve to Transmission....	1	81	-----	COMPRESSOR—See Engine Parts Manual	—
40	507729	ELBOW, Line to Selector Valve	1				
41	550325	CLIP, Hose to Frame	1				
42	552387	**LINE, Rear Brake—R.H.	1				

*NOTE: Your local authorized Bendix-Westinghouse distributor is equipped to supply components of these parts.
 **NOTE: For Serial Cummins 2DC101 thru 3DC999. G.M. 2DG101 thru 4DG999. WAUK 2DA101 and after, C3DA9-14 thru C3DA9-24.
 ***NOTE: For Serial Cummins 4DC101 and after. G.M. 5DG101 and after. WAUK C3DA9-25 and after.

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



BRAKE LINES — WAUKESHA GAS AND G.M.

TS-2937-P

[64]

PM 1669

BRAKE LINES — WAUKESHA GAS AND G.M.

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	540919	LINE, Reservoir to Foot Valve	1	41	356616	BUSHING, Foot Valve Reducing	1
2	38F-10	CONNECTOR, Line to Tee	1	42	636260	SWITCH, Stop Light	1
3	569586	*VALVE, Safety—B.W. 279758	1	43	26F-4	ELBOW, Hose to Foot Valve	1
4	356615	BUSHING, Tee Reducing	1	44	552387	**LINE, Right Rear Wheel	1
5	17F-4	TEE, Line to Reservoir	1	44A	534214	***LINE, Right Rear Wheel	1
6	25F-1	ELBOW, Line to Reservoir	1	45	8D-10	NUT, Hose to Line	1
7	356616	BUSHING, Reducing	1	46	550325	CLIP, Hose to Frame	1
8	-----	AIR COMPRESSOR—See Engine Parts Manual	—	47	552374	HOSE, Rear Wheel—R.H.	1
9	510452	FLANGE, Discharge	1	48	542507	LINE, Selector Valve to Trans.	1
10	942646	GASKET, Governor to Compressor	1	49	8D-10	NUT, Hose to Line	1
11	540306	*GOVERNOR—B.W. 275200	1	50	507729	ELBOW, Line to Valve	2
12	552387	**LINE, Left Rear Wheel	1	51	-----	SELECTOR VALVE—See Index	—
12A	534214	***LINE, Left Rear Wheel	1	52	-----	TRANSMISSION—See Index	—
13	8D-10	NUT, Hose to Line	1	53	62F-3	ELBOW, Line to Transmission	1
14	550325	CLIP, Hose to Frame	1	54	100582	TEE, Hose to Line	1
15	552374	HOSE, Rear Wheel—L.H.	1	54A	710538	†WASHER, Tee to Frame	1
16	546853	HOSE, Line to Rear Axle Tee	1	54B	18C-514	†BOLT, Tee to Frame	1
17	540925	LINE, Tee to Rear Axle	1	54C	18D-05	†NUT, Tee to Frame	1
18	524497	HOSE, Line to Foot Valve	1	55	534259	LINE, Right Hand—Rear	1
19	542506	LINE, Master Cylinder to Selector Valve	1	56	550320	TEE, Rear Axle Brake Line	1
20	692722	BOLT, Connector	1	57	534260	LINE, Left Hand—Rear	1
21	613750	GASKET, Connector Bolt	1	58	8D-10	NUT, Hose to Line	1
22	620235	CONNECTOR, Master Cylinder	1	59	17C-544	BOLT, Governor to Compressor	2
23	620238	GASKET, Connector	1	60	4E-05	LKWSHR, Governor to Compressor	2
24	874007	PLUG, Master Cylinder	1	61	31F-1	ADAPTER UNION	1
25	613750	GASKET, Master Cylinder Plug	1	62		<i>HOSE, Governor to Reservoir</i>	
26	540923	LINE, Master Cylinder to Tee	1	62A	536936	For G.M. Powered Machines	1
27	613750	GASKET, Master Cylinder Plug	1	62B	544273	For Gas Powered Machines	1
28	874007	PLUG, Master Cylinder	1	63		<i>HOSE, Compressor to Reservoir</i>	
29	-----	POWER CLUSTER ASSY—See Index ...	1	63A	593484	For G.M. Powered Machines	1
30	552897	TEE, Brake Line	1	63B	544272	For Gas Powered Machines	1
31	31F-3	ADAPTER UNION	1	64	31F-4	ADAPTER UNION	1
32	541983	HOSE, Foot Valve to Power Cluster ...	1	65	941214	*BRACKET, Reservoir—B.W. 205267	2
33	543741	LINE, Left Hand Brake—Front	1	66	18D-06	NUT, Bracket to Frame	4
34	543740	LINE, Right Hand Brake—Front	1	67	18C-616	BOLT, Bracket to Frame	4
35	550318	TEE, Front Axle Brake Line	1	68	593370	*VALVE, Check—B.W. 228194	1
36	540924	LINE, Tee to Front Axle	1	69	26F-4	ELBOW, Check Valve to Reservoir	1
37	356614	BUSHING, Foot Valve Reducing	1	70	72F-4	DRAIN COCK	1
38	940643	SENDER, Air Pressure	1	71	540707	AIR RESERVOIR	1
39	356616	BUSHING, Foot Valve Reducing	1				
40	-----	BRAKE CONTROLS—See Index	—				

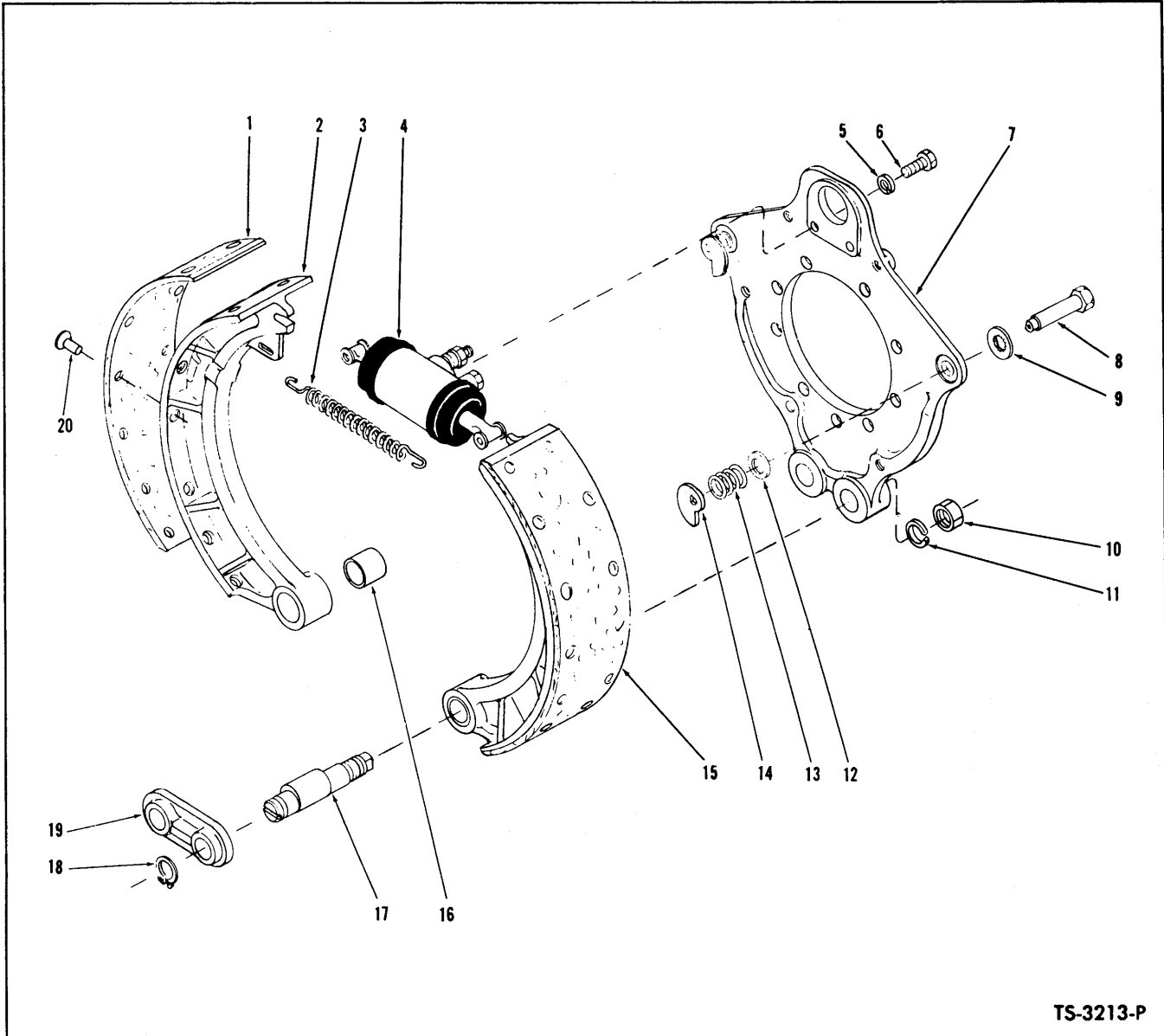
*Your local authorized Bendix-Westinghouse distributor is equipped to supply components of these parts.

†Not Illustrated

**NOTE: For Serial Cummins 2DC101 thru 3DC999. G.M. 2DG101 thru 4DG999. WAUK 2DA101 and after, C3DA9-14 thru C3DA9-24.

***NOTE: For Serial Cummins 4DC101 and after. G.M. 5DG101 and after. WAUK C3DA9-25 and after.

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



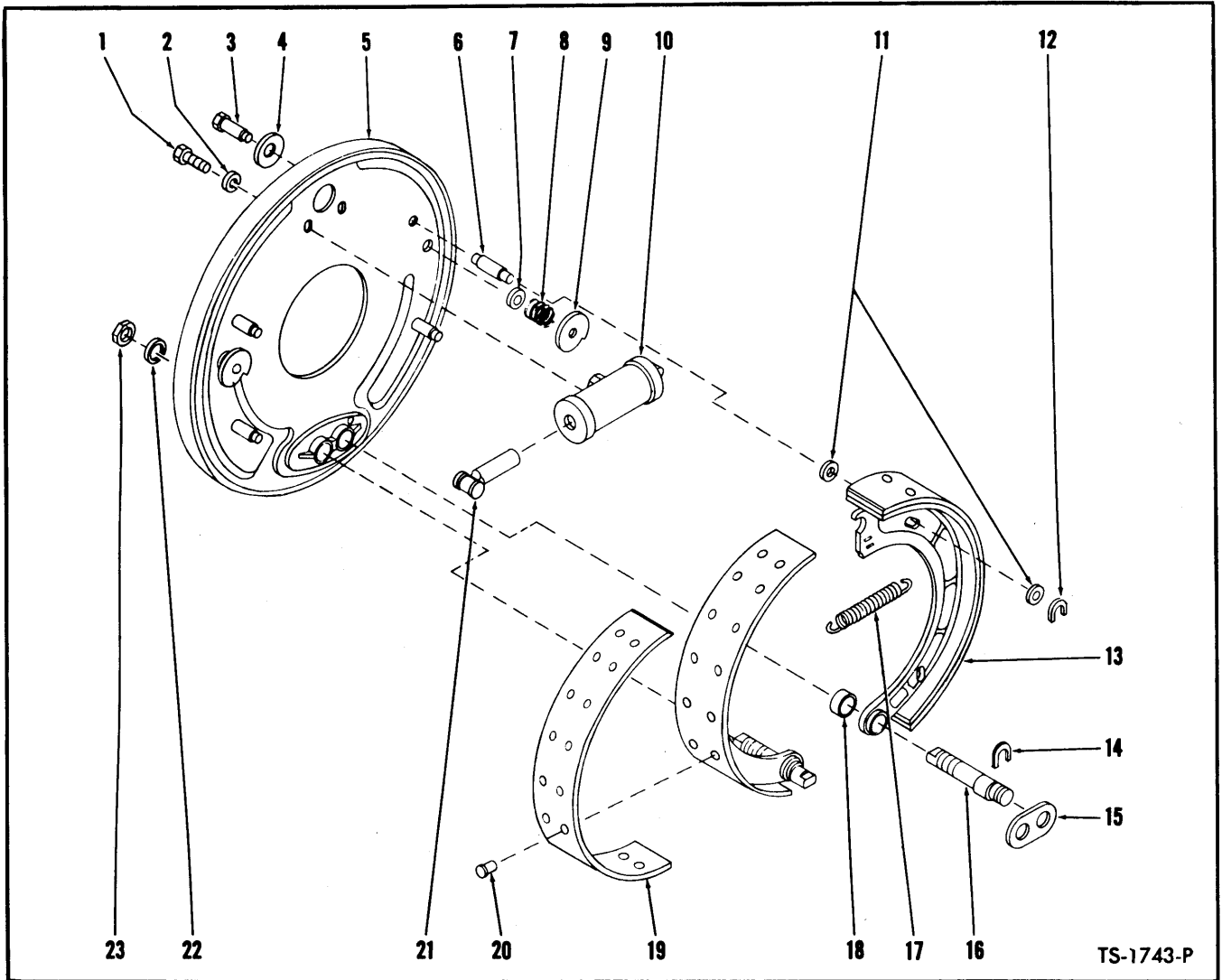
TS-3213-P

FRONT BRAKE ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	117150	BRAKE ASSY (Inc. 1 thru 20)	2	8	114173	PIN ASSY, Brake Shoe Adjusting (Inc. 9)	2
NOTE: 2 Brake Assemblies used on axle — Quantities listed below are for 1 Brake Assembly.				9	100867	WASHER, Brake Shoe Adj. Pin	2
B	LINING KIT, Brake (Inc. 1, 20)			10	2D-14	NUT, Anchor Pin	2
C	945614	Standard	1	11	2E-14	LKWSHR, Anchor Pin Nut	2
D	945621	*1/16" Oversize	1	12	851771	WASHER, Cam Spring	2
1	-----	§LINING, Brake Shoe — See C & D	2	13	943859	SPRING, Adj. Cam (Inc. 12)	2
2	-----	§SHOE, Brake—See 15	2	14	112062	CAM, Shoe Adjusting	2
3	116949	SPRING, Brake Shoe Return	1	15	118267	SHOE ASSY, Brake (Inc. 1, 2, 16, 20)	2
4	-----	WHEEL CYLINDER—See Index	1	16	112068	BUSHING, Brake Shoe	2
5	4E-06	LKWSHR, Wheel Cyl. Mounting	2	17	112069	PIN, Brake Shoe Anchor	2
6	1C-614	BOLT, Wheel Cyl. Mounting	2	18	710776	RING, Anchor Pin Retaining	2
7	112060	SPIDER ASSY, Brake (Inc. 8, 9, 12, 13, 14)	1	19	112070	STRUT, Anchor Pin	1
				20	23H-1008	RIVET, Lining to Shoe	40

*NOTE: When Lining Kit is utilized drums must be turned down to 17.370" — 17.380". DO NOT EXCEED THIS DIMENSION.

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



TS-1743-P

BRAKE ASSEMBLY – REAR

**For Serial: Cummins – 2DC101 thru 3DC999
G.M. – 2DG101 thru 4DG999
Wauk. – 2DA101 and after,
C3DA9-14 thru C3DA9-24**

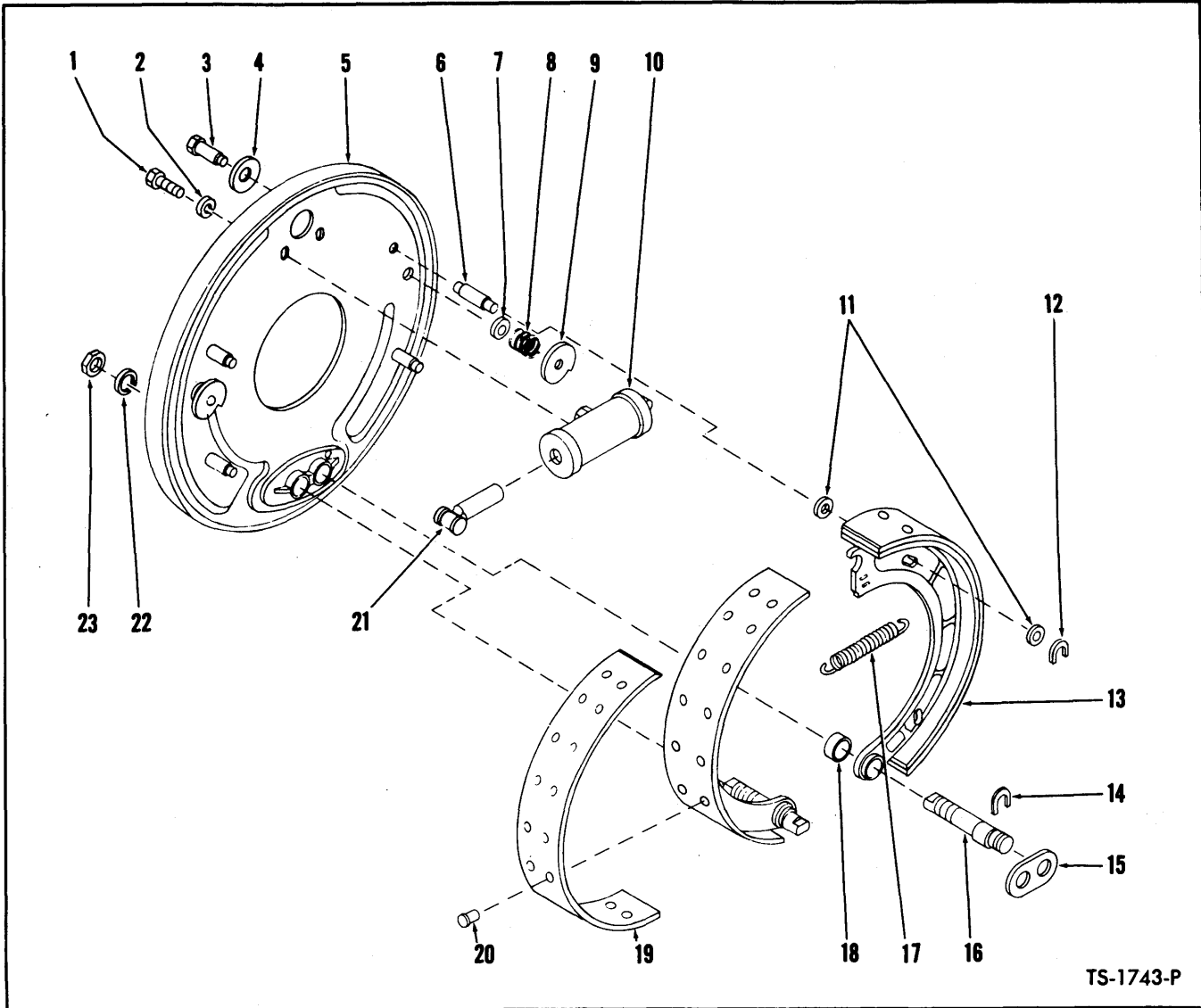
2 Brakes Used on Axle – Quantity Indicated is for 1 Brake

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	117914	BRAKE ASSY (Inc. 1 thru 23)	1	13	118254	SHOE ASSY, Brake (Inc. 18, 19A, 20)	2
1	1C-610	BOLT, Cylinder to Brake Disc	2	14	101332	"C" WASHER, Anchor Pin	2
2	4E-06	LKWSHR, Cylinder to Brake Disc	2	15	106970	STRUT, Anchor Pin	1
3	114169	PIN, Cam (Inc. 4)	2	16	106969	PIN, Anchor	2
4	100867	WASHER, Cam Pin	2	17	106216	SPRING, Brake Shoe Return	1
5	117915	DISC ASSY, Brake (Inc. 3, 4, 6 thru 9) ..	1	18	100872	BUSHING, Brake Shoe	2
6	106373	PIN, Guide	4	19		LINING KIT, Brake (Inc. 20)	
7	851771	WASHER, Cam Spring	2	19A	944217	Standard	1
8	943859	KIT, Cam Spring (Inc. 7)	2	19B	945100	*1/8" Oversize	1
9	100864	CAM, Brake Shoe Adjusting	2	20	3H-1216	RIVET, Lining to Shoe	36
10	-----	CYLINDER, Wheel—See Index	1	21	958553	LINK, Wheel Cylinder Connector ..	2
11	102322	WASHER, Guide Pin	8	22	4E-12	LKWSHR, Anchor Pin	2
12	100878	"C" WASHER, Guide Pin	4	23	2D-12	NUT, Anchor Pin	2

†Not Illustrated

*NOTE: When 945100 Lining Kit is utilized drums must be turned down to 16.370"—16.380". DO NOT EXCEED THIS DIMENSION.

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



TS-1743-P

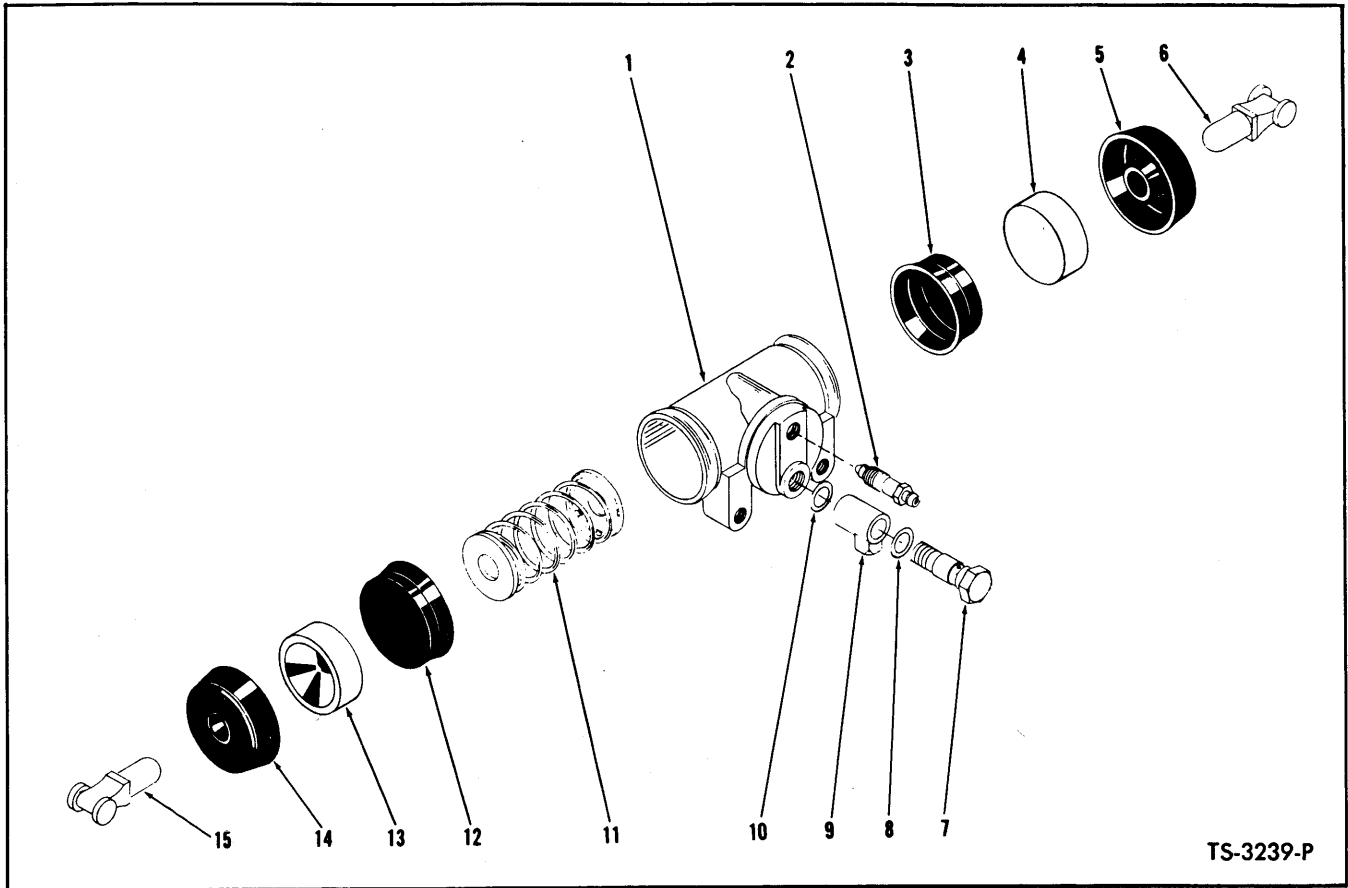
BRAKE ASSEMBLY – REAR
For Serial: Cummins – 4DC101 and after
G.M. – 5DG101 and after
Wauk. – C3DA9-25 and after

2 Brakes used on Axle – Quantity indicated is for 1 Brake

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	117558	BRAKE ASSY (Inc. 1 thru 23)	1	14	101332	"C" WASHER, Anchor Pin	2
1	1C-610	BOLT, Cylinder to Brake Disc	2	15	106970	STRUT, Anchor Pin	1
2	4E-06	LKWSHR, Cylinder to Brake Disc	2	16	106969	PIN, Anchor	2
3	114169	PIN, Cam (Inc. 4)	2	17	106216	SPRING, Brake Shoe Return	1
4	100867	WASHER, Cam Pin	2	18	100872	BUSHING, Brake Shoe	2
5	106549	DISC ASSY, Brake (Inc. 3, 4, 6 thru 9)	1	19		LINING KIT, Brake (Inc. 20)	
6	106373	PIN, Guide	4	19A	944217	STANDARD	1
7	851771	WASHER, Cam Spring	2	19B	945100	*1/16" Oversize	1
8	943859	KIT, Cam Spring (Inc. 7)	2	20	3H-1216	RIVET, Lining to Shoe	36
9	100864	CAM, Brake Shoe Adjusting	2	21	958553	LINK, Wheel Cylinder Connector	2
10		CYLINDER, Brake Wheel – See Index	—	22	4E-12	LKWSHR, Anchor Pin	2
11	102322	WASHER, Guide Pin	8	23	2D-12	NUT, Anchor Pin	2
12	100878	"C" WASHER, Guide Pin	4				
13	118254	SHOE ASSY, Brake (Inc. 18, 19A, 20)	2				

*NOTE: When 945100 Lining Kit is utilized, drums must be turned down to 16.370"—16.380". DO NOT EXCEED THIS DIMENSION.

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



TS-3239-P

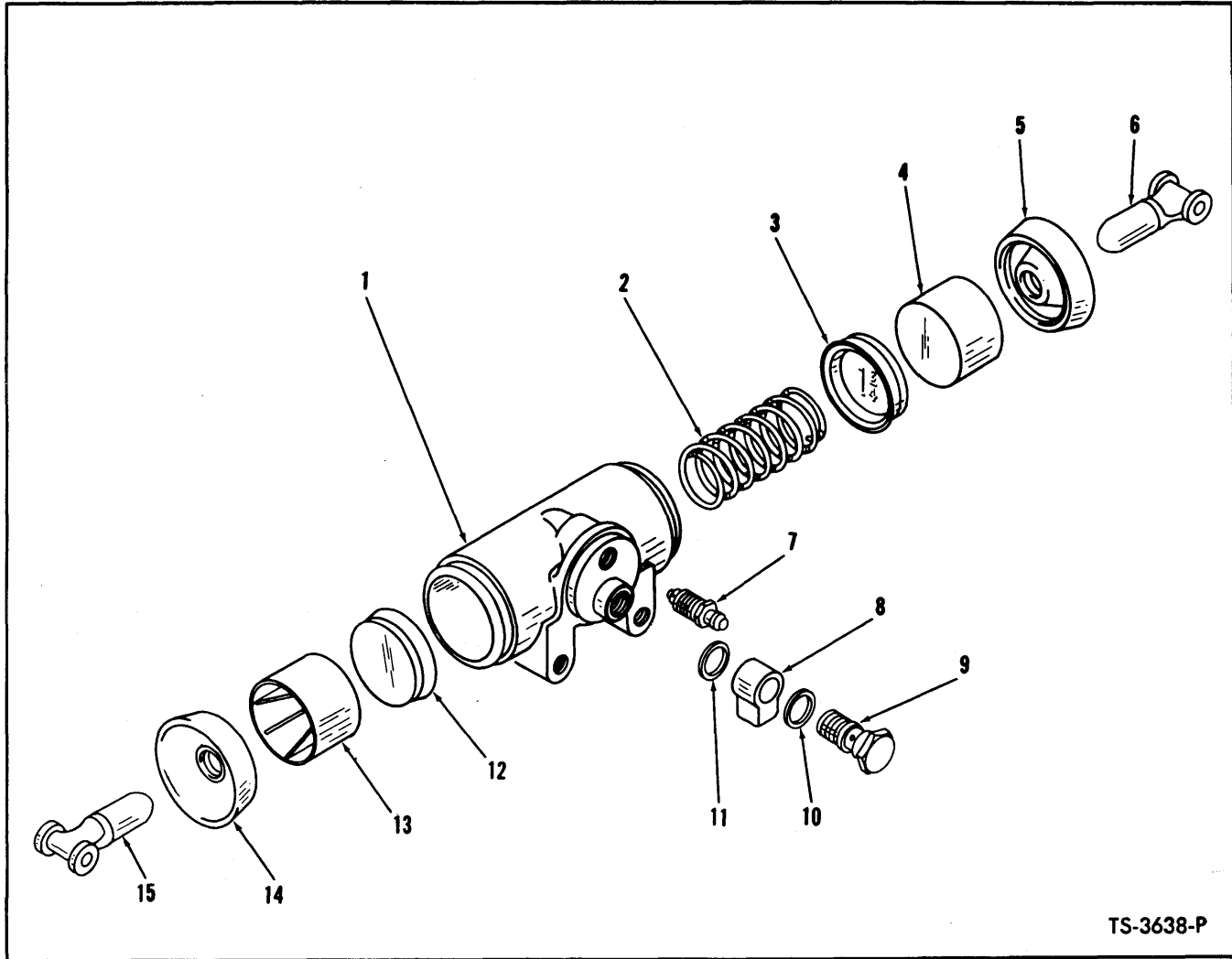
BRAKE WHEEL CYLINDER

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A		CYLINDER ASSY (Inc. 1 thru 5, 11 thru 15)		7		BOLT, Fitting to Cylinder	
B	112072	For Front Brake	2	7A	944966	For Front Cylinder	1
C	107014	* For Rear Brake	2	7B	692722	For Rear Cylinder	1
<p>NOTE: 2 wheel cylinders used per axle. Quantities listed below are for 1 wheel cylinder.</p>				8	620238	GASKET, Outer Cylinder	1
D		REPAIR KIT, Cylinder (Inc. 3, 5, 12, 14)		9		FITTING, Cylinder	
E	957995	For Front Cylinder	1	9A	944967	For Front Cylinder	1
F	940130	For Rear Cylinder	1	9B	620235	For Rear Cylinder	1
1		§CYLINDER, Wheel — See "A"	1	10	613750	GASKET, Inner Fitting	1
2		SCREW, Bleeder		11		SPRING, Cylinder	
2A	861356	For Front Cylinder	1	11A	956664	For Front Cylinder	1
2B	208805	For Rear Cylinder	1	11B	956622	For Rear Cylinder	1
3		§CUP, Piston — See "D"	1	12		§CUP, Piston — See "D"	1
4		§PISTON — See "A"	1	13		§PISTON — See "A"	1
5		§BOOT — See "D"	1	14		§BOOT — See "D"	1
6	958553	ROD, Push	1	15	958553	ROD, Push	1

§Not Sold Separately

*NOTE: For Serial Cummins 2DC101 thru 3DC999. G.M. 2DG101 thru 4DG999. WAUK 2DA101 and after, C3DA9-14 thru C3DA9-24.

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



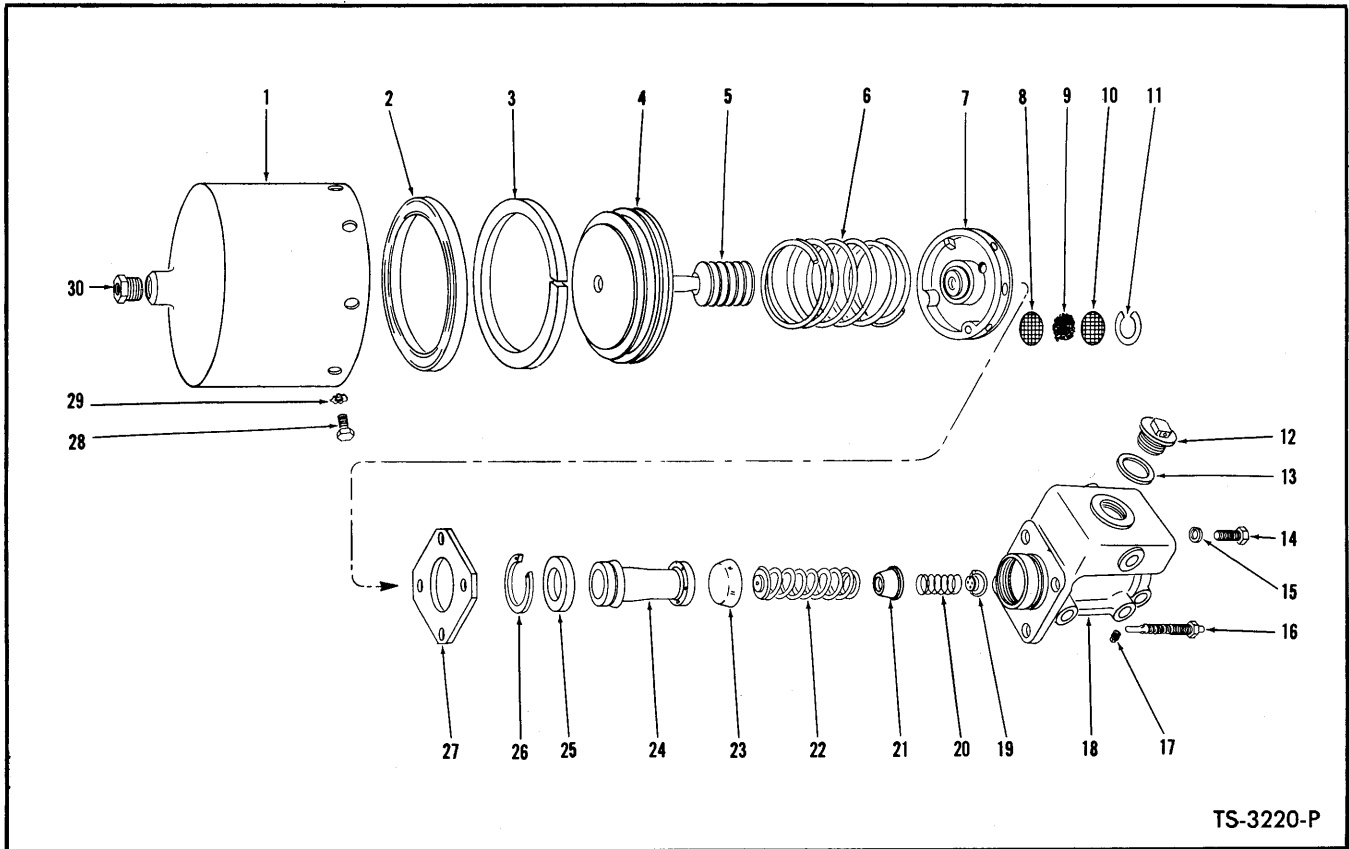
TS-3638-P

BRAKE WHEEL CYLINDER — REAR
For Serial: Cummins — 4DC101 and after
G.M. — 5DG101 and after
Wauk. — C3DA9-25 and after

Item No.	Part No.	Description	No. Req'd.
A	107014	CYLINDER ASSY (Inc. 1 thru 15)	2
NOTE: 2 Wheel Cylinders used on each Axle. Quantities listed below are for 1 Wheel Cylinder.			
B	940130	REPAIR KIT, Cylinder (Inc. 3, 5, 12, 14)	1
1	—	§BODY, Cylinder — See A	1
2	956622	SPRING	1
3	—	§CUP, Cylinder — See B	1
4	—	§PISTON, Cylinder — See A	—
5	—	§BOOT, Cylinder — See B	1
6	958553	LINK, Push	1
7	208805	BLEEDER	1
8	620235	FITTING, Cylinder	1
9	692722	BOLT, Fitting	1
10	620238	GASKET, Fitting	1
11	613750	GASKET, Fitting	1
12	—	§CUP, Cylinder — See B	1
13	—	§PISTON, Cylinder — See A	—
14	—	§BOOT, Cylinder — See B	1
15	958553	LINK, Push	1

§Not Sold Separately

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



TS-3220-P

POWER CLUSTER ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	526879	POWER CLUSTER ASSY (Inc. 1 thru 30)	1	17	10F-02	PLUG, Master Cylinder	1
1	945034	SHELL, Air Cylinder	1	18	947740	CASTING, Master Cylinder	1
2	-----	§CUP, Piston—See 31	1	19	-----	§VALVE, Check—See 31	1
3	-----	§WIPER, Piston—See 31	1	20	945026	SPRING, Check Valve	1
4	945035	PISTON, Air Cylinder	1	21	945042	RETAINER, Check Valve Spring	1
5	-----	§BOOT, Piston Rod—See 31	1	22	955321	SPRING, Piston Return	1
6	945036	SPRING, Piston Return	1	23	-----	§CUP, Primary—See 31	1
7	945037	HEAD ASSY, Air Cylinder (Inc. 8 thru 11)	1	24	-----	§PISTON ASSY, Master Cyl.—See 31	—
8	945029	SCREEN, Filtering	1	25	955326	PLATE, Piston Stop	1
9	945044	HAIR, Filtering	1	26	955323	RING, Stop Plate Retaining	1
10	945029	SCREEN, Filtering	1	27	945040	PLATE, Master Cyl. Mounting	1
11	992164	RING, Filter Retaining	1	28	1C-510	BOLT, Shell to Head	8
12	892287	CAP, Master Cylinder Filler	1	29	6E-05	LKWSHR, Shell to Head	8
13	857933	GASKET, Filler Cap	1	30	356612	BUSHING, Shell Reducing	1
14	1C-624	BOLT, Master Cyl. to Air Cylinder	3	31	945041	REPAIR KIT (Inc. 2, 3, 5, 19, 23, 24)	1
15	4E-06	LKWSHR, Master Cyl. to Air Cylinder	4	32	18C-716	†BOLT, Power Cluster Attaching	3
16	945038	INDICATOR, Stroke	1	33	4E-07	†LKWSHR, Power Cluster Attaching	3

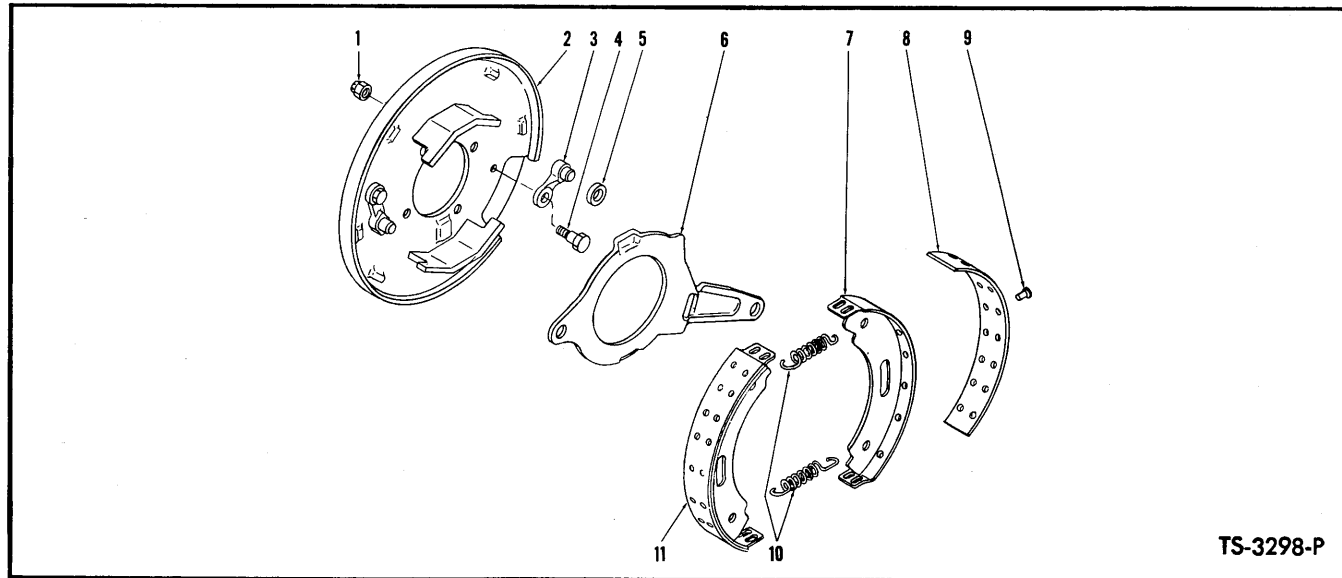
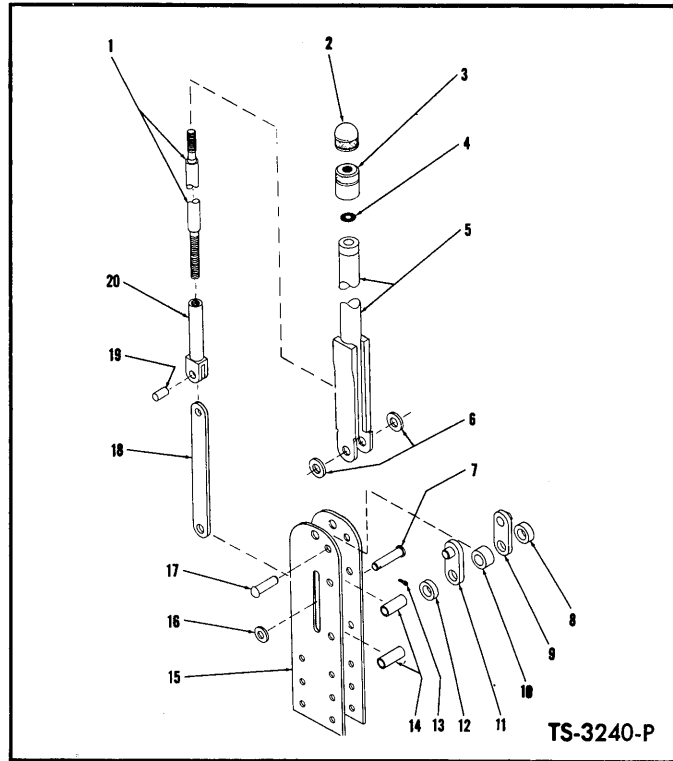
§Not Sold Separately
†Not Illustrated

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

PARKING BRAKE LEVER ASSEMBLY

Item No.	Part No.	Description	No. Req'd.
A	544998	LEVER ASSY (Inc. 1 thru 20)	1
1	866349	SCREW, Adjusting	1
2	949370	CAP, Adjusting Knob (Inc. 3)	1
3	—	§BASE, Adjusting Knob - See 2	1
4	946163	WASHER, Base to Body	1
5	866348	BODY, Brake Lever	1
6	619024	WASHER, Body to Bracket	2
7	862738	PIN, Adjusting Screw Link Pivot	1
8	862656	SPACER, Pivot Bracket	1
9	862653	BRACKET, Pivot	1
10	862655	SPACER, Pivot Bracket	1
11	862653	BRACKET, Pivot	1
12	862656	SPACER, Pivot Bracket	1
13	1F-312	COTTER, Link Pivot Pin	1
14	645095	SPACER, Mounting Bracket	2
15	944969	BRACKET, Lever Mounting	2
16	619019	WASHER, Link Pivot Pin	1
17	944054	RIVET, Pivot Bracket	1
18	862652	LINK, Adjusting Screw	1
19	941238	PIN, Link to Tube	1
20	944968	TUBE, Adjusting Screw	1

§Not Sold Separately



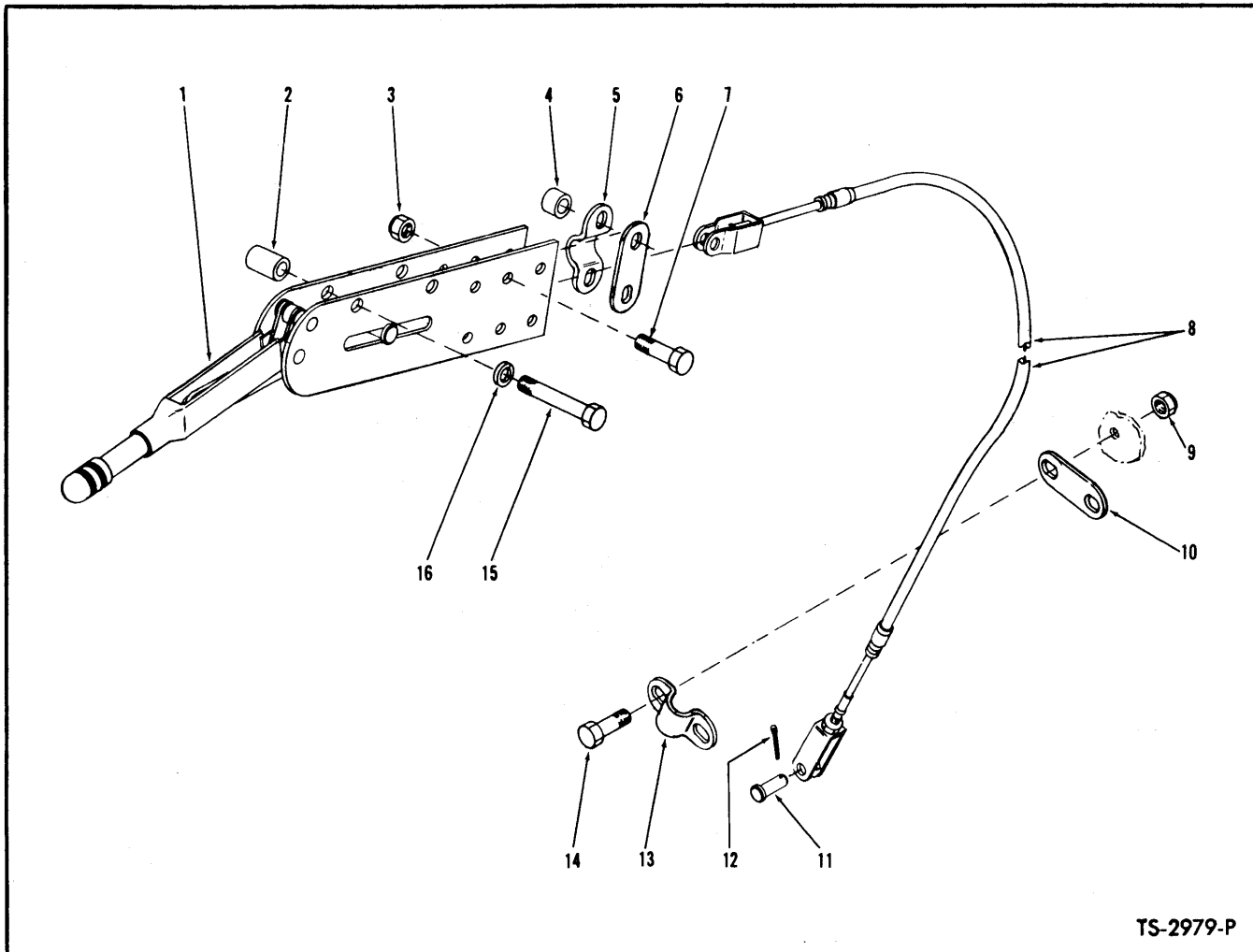
PARKING BRAKE ASSEMBLY

Item No.	Part No.	Description	No. Req'd.
A	112439	BRAKE ASSY (Inc. 1 thru 11)	1
1	—	§NUT, Pawl to Plate - See 3	2
2	945084	PLATE, Brake Backing	1
3	886719	PAWL KIT, Brake (Inc. 1, 4, 5)	2
4	—	§BOLT, Pawl to Plate - See 3	2
5	220968	ROLLER, Brake Actuating	1

Item No.	Part No.	Description	No. Req'd.
6	220965	LEVER, Operating Cam	1
7	—	§SHOE, Brake - See 11	2
8	942405	LINING KIT, Brake (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

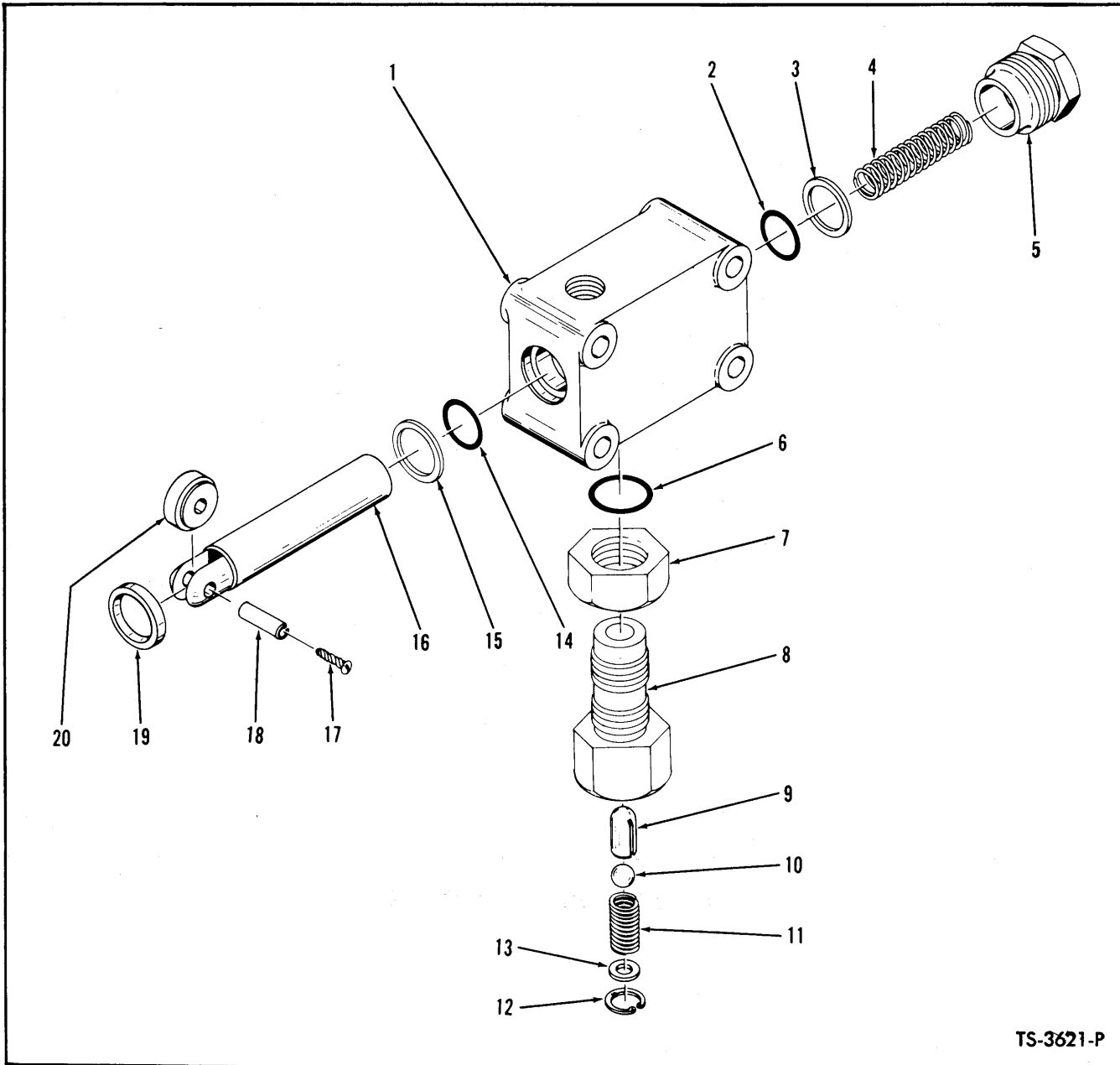


TS-2979-P

PARKING BRAKE CONTROLS

Item No.	Part No.	Description	No. Req'd.
1	----	LEVER ASSY, Brake Hand — See Index.....	1
2	545005	SPACER.....	2
3	18D-05	NUT, Cable Clamp.....	2
4	545006	SPACER.....	2
5	544512	CLAMP, Cable.....	1
6	645092	LINK, Cable Clamp.....	1
7	18C-528	BOLT, Cable Clamp.....	2
8	544625	CABLE, Parking Brake.....	1
9	18D-05	NUT, Cable Clamp.....	2
10	645092	LINK, Cable Clamp.....	1
11	4F-06106	PIN, Cable Clevis.....	1
12	1F-312	COTTER, Clevis Pin.....	1
13	544512	CLAMP, Cable.....	1
14	18C-516	BOLT, Cable Clamp.....	2
15	18C-628	BOLT, Lever Mounting.....	2
16	4E-06	LKWSHR, Lever Mounting.....	2

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



VALVE ASSEMBLY – BRAKE DE-CLUTCH

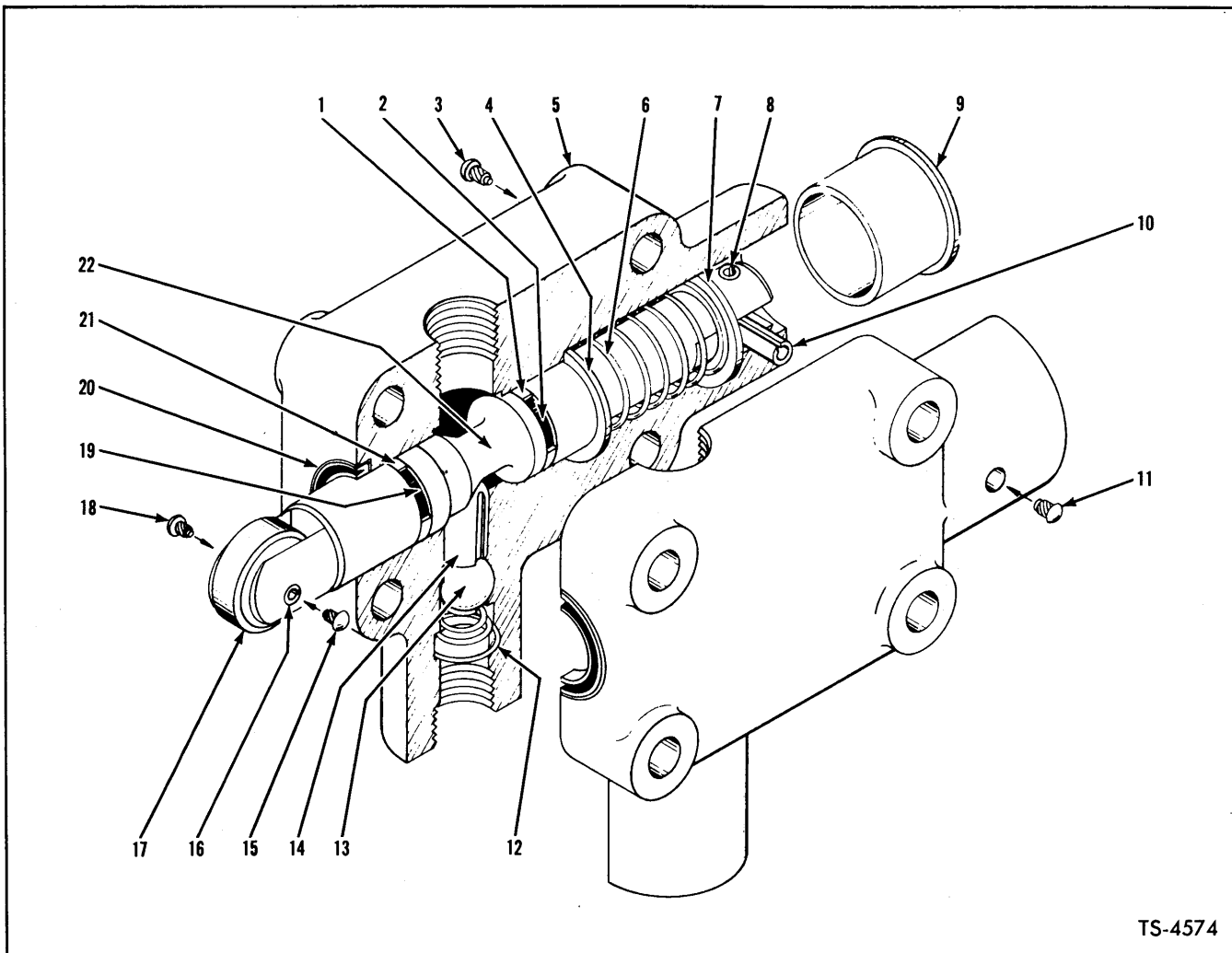
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	546830	*VALVE ASSY (Inc. 1 thru 20)	1	12	209964	RING, Retaining	1
1	-----	§HOUSING, Valve – See "A"	1	13	712093	WASHER	1
2	25K-30020	"O" RING, Plunger	1	14	25K-30020	"O" RING, Plunger	1
3	945244	RING, "O" Ring Back-up	1	15	945244	RING, "O" Ring Back-up	1
4	945245	SPRING	1	16	-----	§PLUNGER – See "A"	1
5	945246	CAP	1	17	6C-403	SCREW, Drive	2
6	91F-6	"O" RING	1	18	1302554	ROLL PIN	1
7	8D-12	NUT	1	19	945250	SEAL, Plunger	1
8	945247	HOUSING, Check Valve	1	20	945009	BEARING	1
9	945248	PIN, Check	1	21	18C-436	†BOLT, Valve Attaching	4
10	10J-12	BALL	1	22	18D-04	†NUT, Valve Attaching	4
11	945249	SPRING	1				

†Not Illustrated

§Not Sold Separately

*NOTE: For replacement use 556398.

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



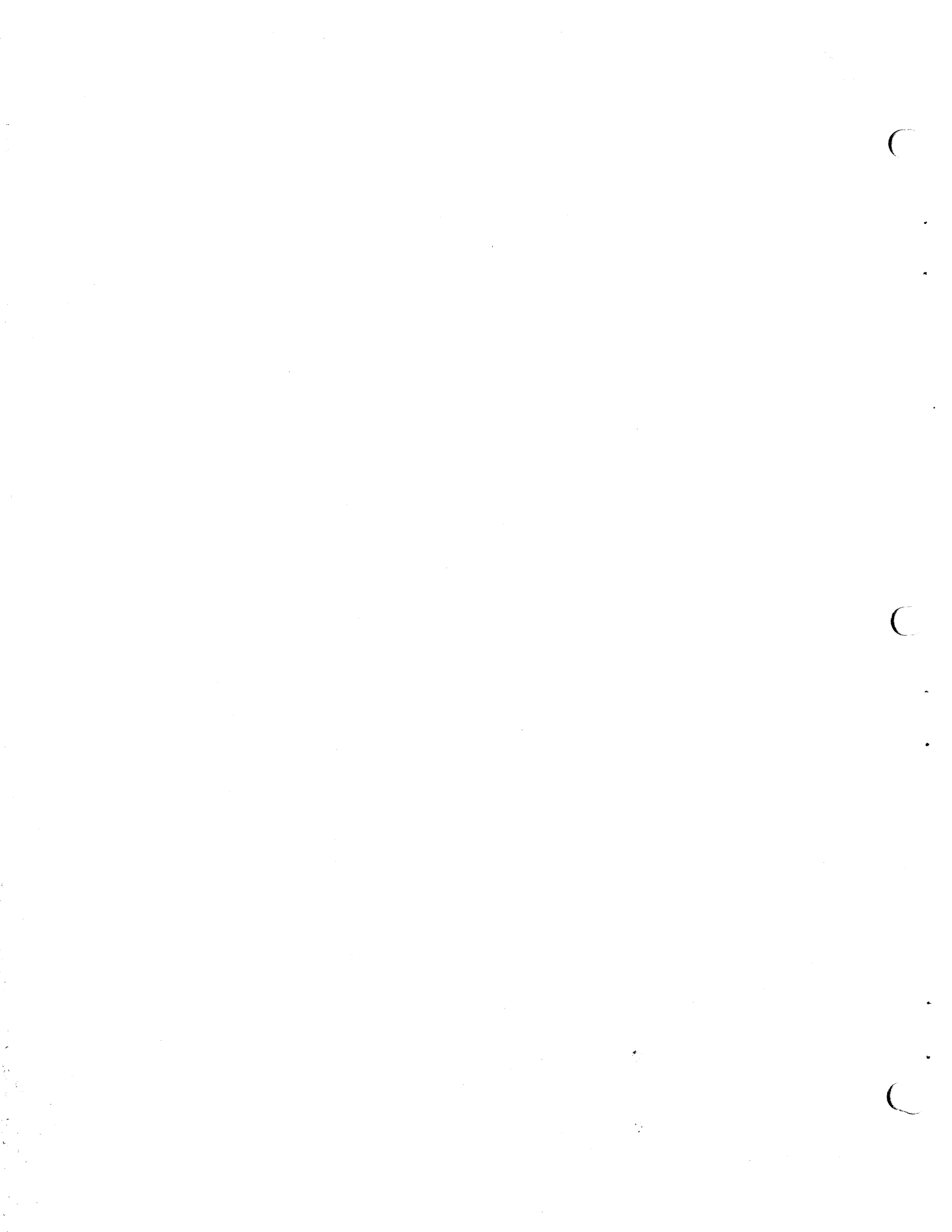
TS-4574

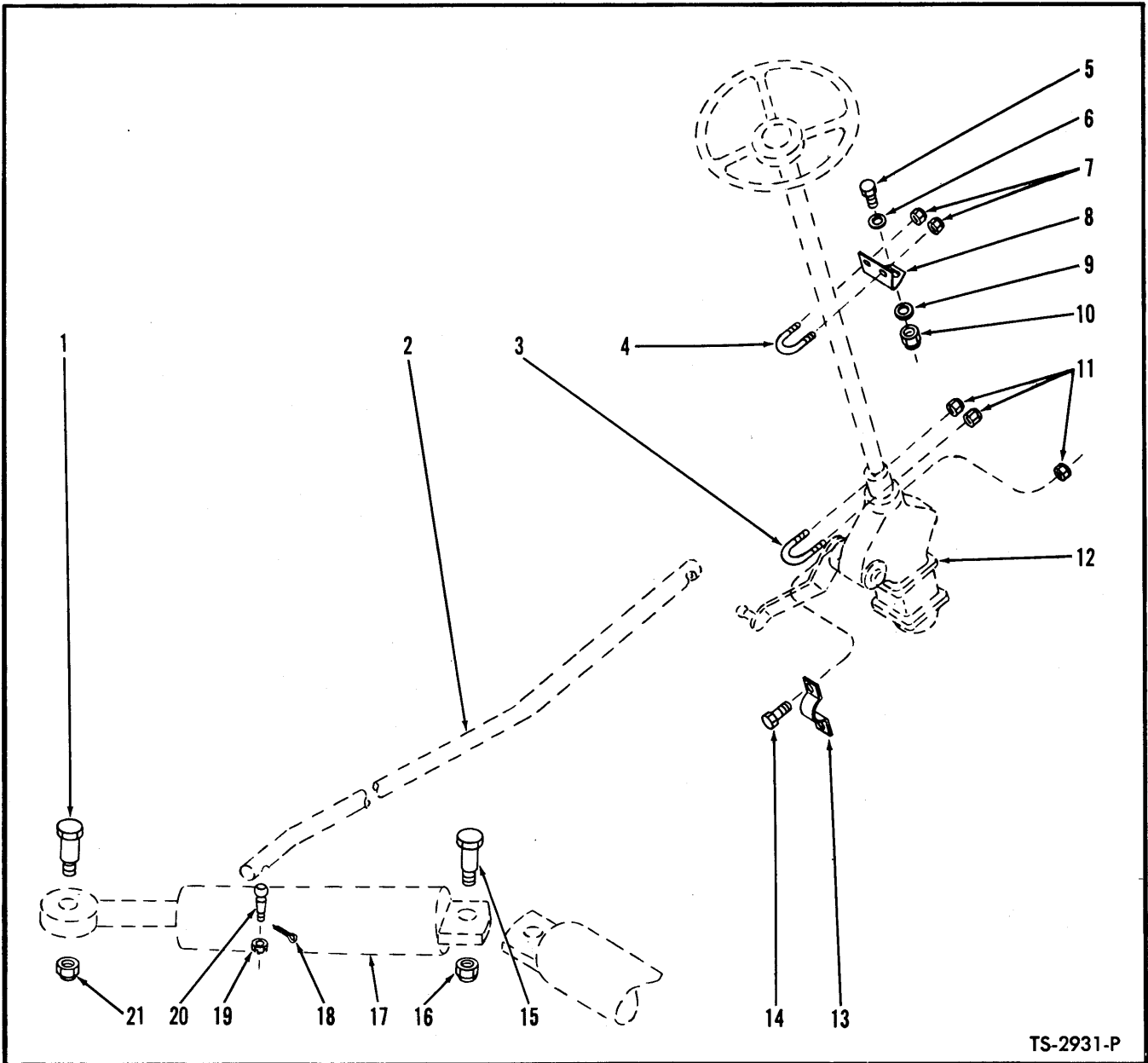
**VALVE ASSEMBLY - BRAKE DE-CLUTCH
(SERVICE ONLY)**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	556398	VALVE ASSY (Inc. 1 thru 22).....	1	13	10J-12	BALL	1
1	945764	RING, "O" Ring Back-Up	1	14	945248	PIN, Check	1
2	38K-20010	"O" RING, Plunger	1	15	6C-403	SCREW, Drive	1
3	6C-403	SCREW, Drive	1	16	1302554	ROLL PIN	1
4	945767	SPACER, Spring	1	17	945009	BEARING (Roller)	1
5	-----	§HOUSING, Valve (See Item A).....	1	18	6C-403	SCREW, Drive	1
6	946411	SPRING	1	19	38K-20010	"O" RING, Plunger	1
7	945767	SPACER, Spring	1	20	945250	SEAL, Plunger	1
8	742306	ROLL PIN	1	21	945764	RING, "O" Ring Back-Up	1
9	-----	§PLUG	1	22	-----	§PLUNGER (See Item A)	1
10	659648	ROLL PIN	1	23	18C-440	†BOLT, Valve Attaching	4
11	6C-403	SCREW, Drive	1	24	18D-04	†NUT, Valve Attaching	4
12	945769	SPRING	1				

§Not Sold Separately
†Not Illustrated

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



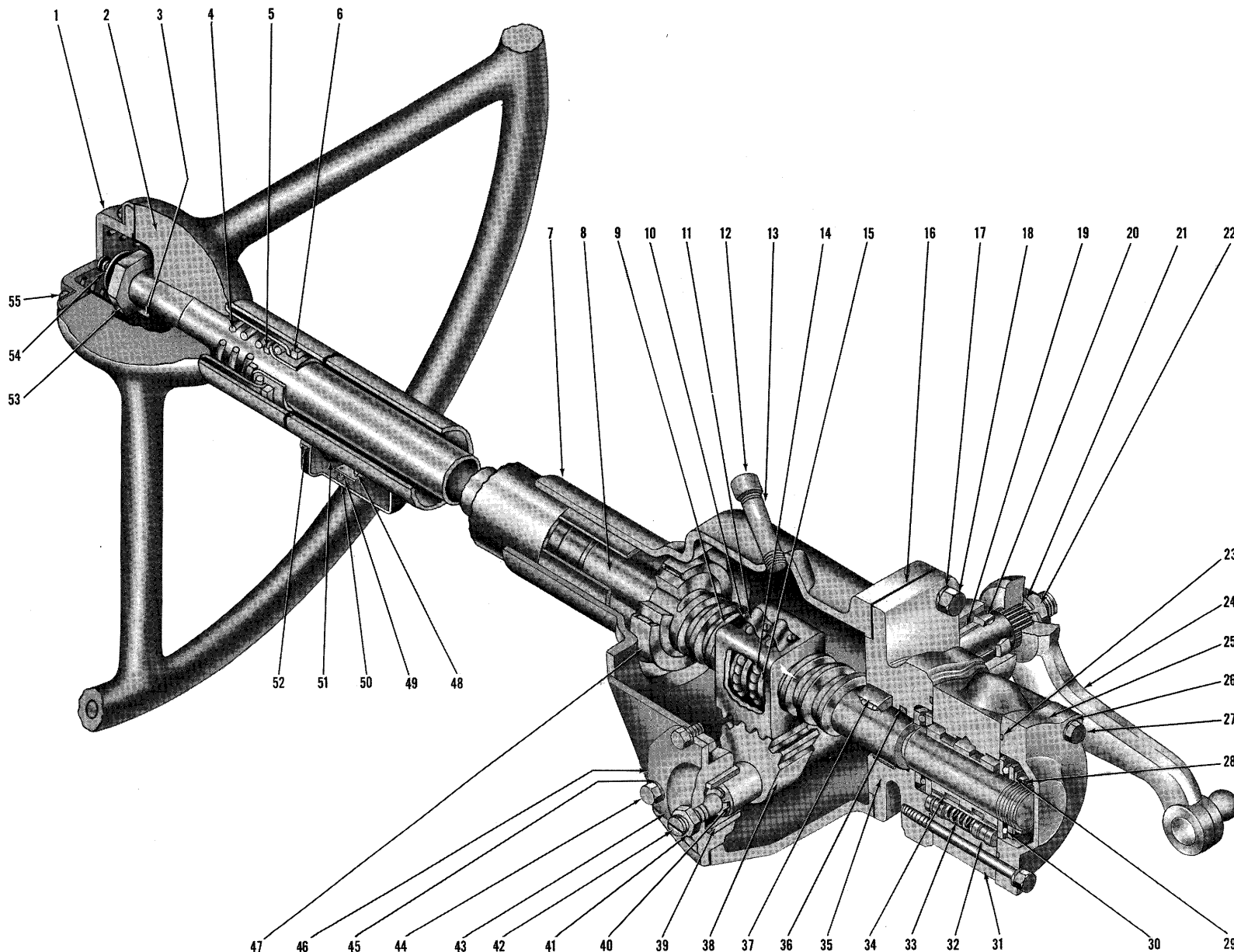


TS-2931-P

STEERING LINKAGE GROUP

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	24C-1244	BOLT, Steering Cylinder Anchor	2	12	—	STEERING GEAR—See Index	—
2	—	DRAG LINK—See Index	—	13	550044	CLAMP, Steering Gear	1
3	545941	U-BOLT, Steering Gear to Frame	1	14	18C-836	BOLT, Steering Gear Clamp	2
4	537998	U-BOLT, Steering Gear to Frame	1	15	24C-1244	BOLT, Steering Cylinder Anchor	2
5	18C-620	BOLT, Bracket to Frame	1	16	18D-12	NUT, Steering Cylinder Anchor Bolt	2
6	619024	WASHER, Bracket to Frame	1	17	—	STEERING CYLINDER—See Index	—
7	18D-04	NUT, U-Bolt	2	18	1F-332	COTTER, Ball Stud	1
8	537997	BRACKET, Steering Gear to Frame	1	19	18D-10	NUT, Ball Stud	1
9	619024	WASHER, Bracket to Frame	1	20	513122	BALL STUD, Drag Link to Axle	1
10	18D-06	NUT, Bracket to Frame	1	21	18D-12	NUT, Steering Cylinder Anchor Bolt	2
11	18D-08	NUT, U-Bolt & Steering Gear Clamp Bolt	4				

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



74.1

PM 1669

STEERING GEAR ASSEMBLY

For Serial: Cummins—2DC101 thru 3DC155. G.M.—2DG101 thru 4DG165.
Wauk.—2DA101 and after, C3DA9-14 thru C3DA9-19.

TS-2955-P

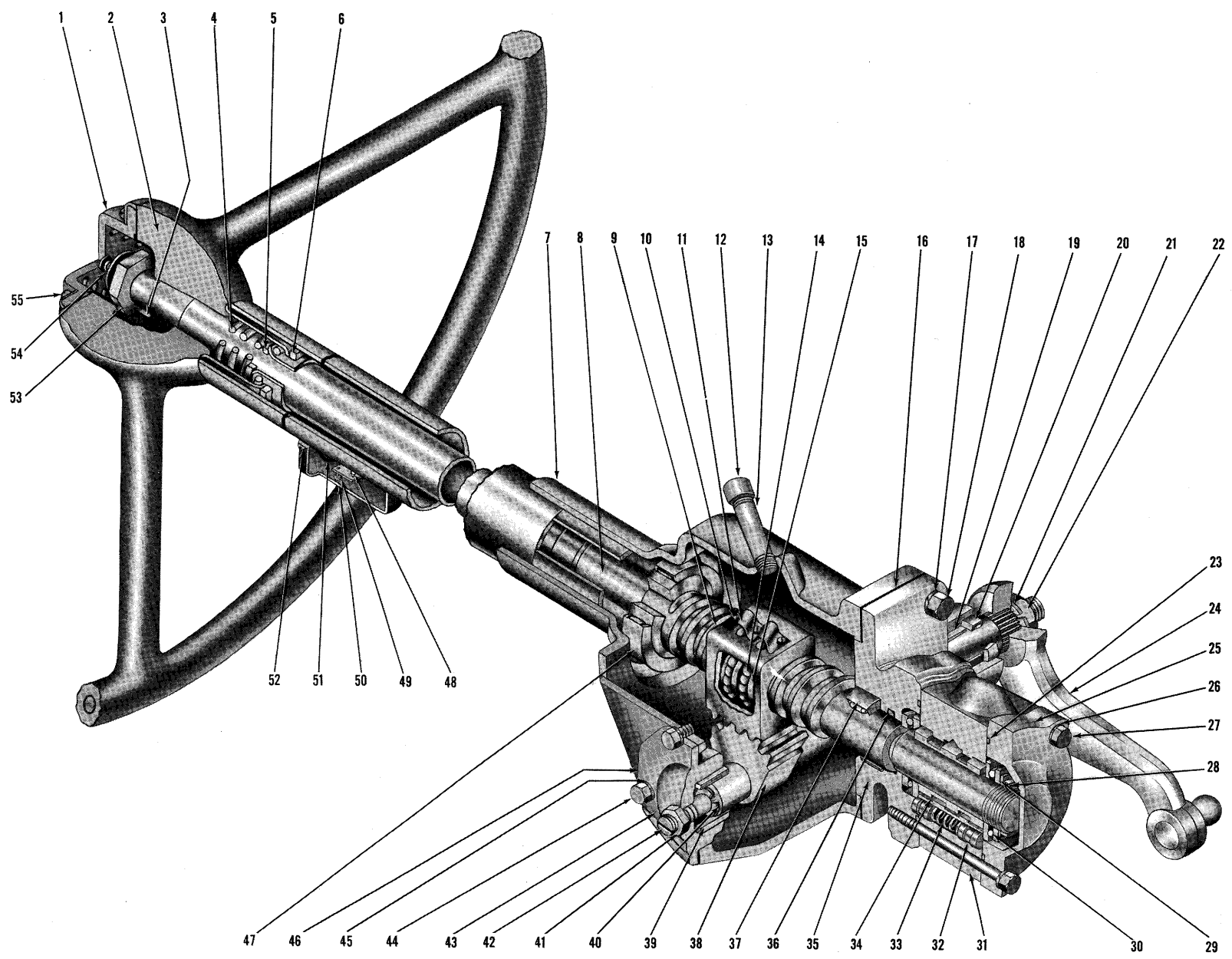
STEERING GEAR ASSEMBLY
For Serial: Cummins — 2DC101 thru 3DC155
G.M. — 2DG101 thru 4PG165
Wauk. — 2DA101 and after,
C3DA9-14 thru C3DA9-19

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	532192	*STEERING GEAR ASSY (Inc. 1, 3 thru 23, 25 thru 54)	1	29	943429	SPRING, Worm Bearing	1
1	639796	HORN BUTTON ASSY	1	30	860997	BEARING, Worm Thrust	2
2	1508704	WHEEL, Steering	1	31	944052	VALVE ASSY, Hydraulic (Inc. 32 thru 34)	1
3	853384	KEY, Steering Wheel	1	32	861755	PLUNGER, Valve Centering	6
4	853395	SPRING, Steering Shaft Upper	1	33	944053	SPRING, Valve Centering	3
5	861768	WASHER, Steering Shaft Upper	1	34	—	§SPOOL, Valve (See 31)	1
6	857729	BEARING ASSY, Upper	1	35	861738	ADAPTER ASSY (Inc. 36, 37)	1
7	945205	HOUSING ASSY (Inc. 19, 47)	1	36	25K-40108	"O" RING, Adapter	1
8	945206	SHAFT ASSY (Inc. 9, 10, 11, 14, 15, 51 & 54)	1	37	861741	BEARING, Adapter	1
9	853408	NUT, Ball	1	38	940111	GEAR, Pitman Shaft	1
10	851762	BOLT & WASHER, Clamp	3	39	—	§BUSHING, Housing Side Cover (See Item 43)	1
11	853464	CLAMP, Ball Return	1	40	853187	SHIM KIT, Lash Adjuster	1
12	22F-4	CAP, Filler	1	41	8D-07	NUT, Lash Adjuster	1
13	5K-432	NIPPLE, Filler	1	42	851770	ADJUSTER, Lash	1
14	10J-09	BALL	106	43	853182	COVER ASSY, Housing Side (Inc. 39)	1
15	853412	GUIDE, Ball Return	4	44	1C-612	BOLT, Side Cover	3
16	853380	GASKET, Adapter	1	45	2E-06	LKWSHR, Side Cover	3
17	3E-07	LKWSHR, Adapter	4	46	851756	GASKET, Side Cover	1
18	1C-720	BOLT, Adapter	4	47	730143	BEARING, Housing	1
19	853357	BUSHING, Pitman Shaft	1	48	622026	CONNECTOR ASSY, Horn Cable	1
20	853391	SEAL, Pitman Shaft Grease	1	48A	518346	GASKET, Horn Connector	1
21	4E-18	LKWSHR, Pitman Shaft	1	49	622027	SCREW, Horn Connector	2
22	850756	NUT, Pitman Arm	1	50	622028	COVER, Horn Cable Connector	1
23	25K-40224	"O" RING, Valve	2	51	945050	CONTACT ASSY, Horn Cable	1
24	940125	ARM, Pitman	1	52	3G-1003	SCREW, Connector Cover	2
25	943667	COVER, Valve End	1	52A	17E-10	LKWSHR, Connector Cover	2
26	2E-06	LKWSHR, End Cover	3	53	648304	NUT, Steering Wheel	1
27	1C-656	BOLT, End Cover	3	54	853368	TERMINAL ASSY, Horn	1
28	873250	NUT, Worm Bearing	1	55	695930	SCREW, Horn Button	4

§Not Sold Separately

*NOTE: For replacement use 562502. On G.M. & Waukesha powered machines 1-19F-5 Bushing & 1-564159 Adapter must also be used. On Cummins powered machines 1-564119 Nipple must also be used.

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



STEERING GEAR ASSEMBLY

For Serial: Cummins-3DC156 and after. G.M.-4DG166 and after. Wauk. C3DA9-20 and after.

TS-2955-P

74A.1

PM 1669



CONSTRUCTION MACHINERY DIVISION

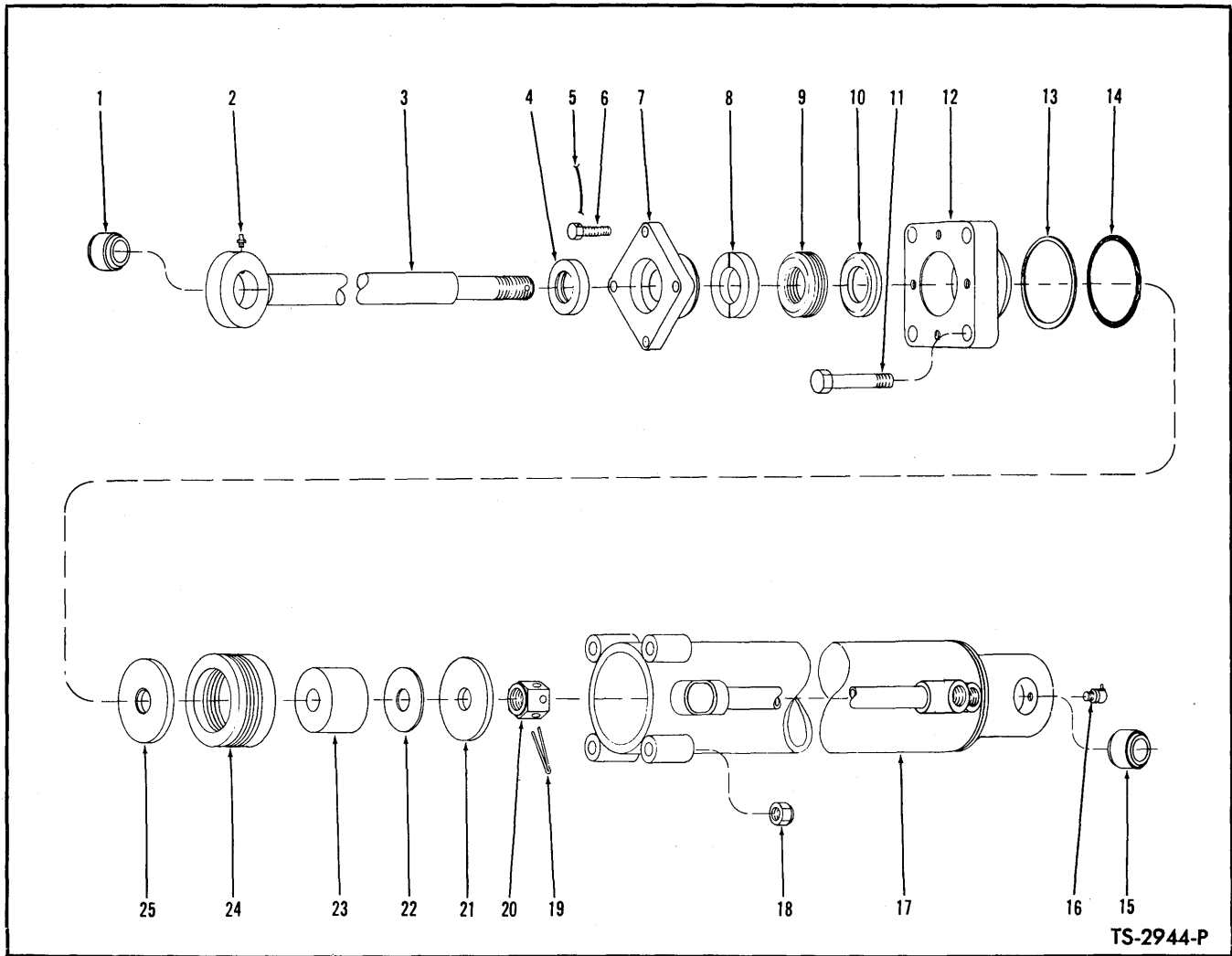


STEERING GEAR ASSEMBLY
For Serial: Cummins - 3DC156 and after
G.M. - 4DG166 and after
Wauk. - C3DA9-20 and after

Table with 4 columns: Item No., Part No., Description, No. Req'd. It lists various components for a steering gear assembly, including steering gear assy, horn button assy, wheel, key, spring, washer, bearing assy, housing assy, shaft assy, nut, bolt & washer, clamp, cap, nipple, ball, guide, gasket, adapter, bushing, seal, pitman shaft, nut, o-ring, pitman arm, cover, end cover, and worm bearing.

§Not Sold Separately
†Not Illustrated

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



TS-2944-P

STEERING CYLINDER ASSEMBLY
For Serial: Cummins — 2DC101 thru 3DC999
G.M. — 2DG101 thru 4DG999
Wauk. — 2DA101 and after,
C3DA9-14 thru C3DA9-24

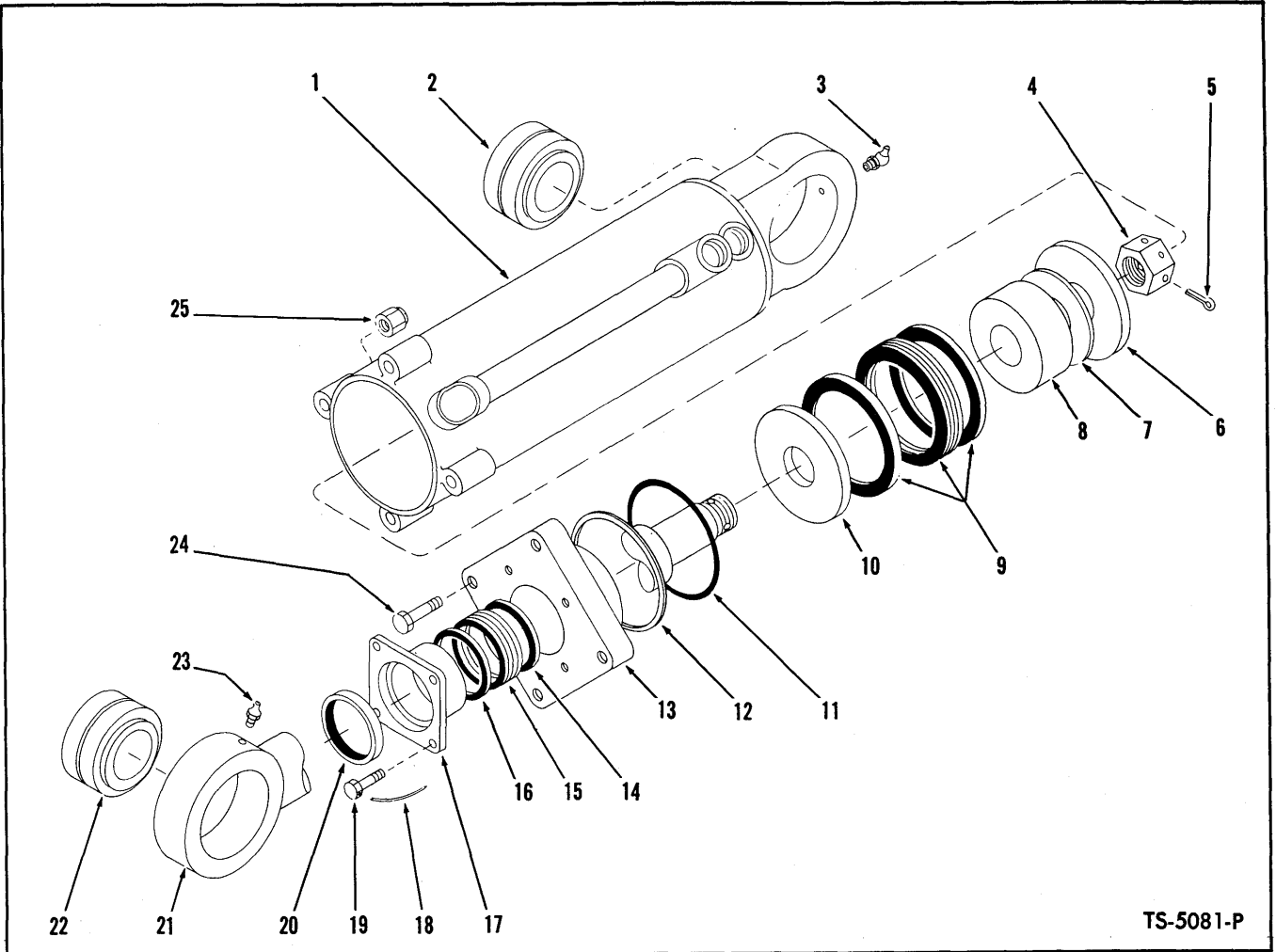
2 Cylinders Used on Machine — Quantity Indicated is for 1 Cylinder

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	533489	*CYLINDER ASSY (Inc. 1 thru 25) . . .	1	13	532948	RING, Backup	1
1	763451	BUSHING, Piston Rod	1	14	25K-40208	"O" RING	1
2	10H-35	FITTING, Piston Rod Grease	1	15	763451	BUSHING, Cylinder	1
3	545155	ROD, Piston	1	16	12H-25	FITTING, Cylinder Grease	1
4	526415	SEAL	1	17	533490	CYLINDER	1
5	28H-16130	LOCKWIRE	2	18	68D-06	NUT, Cap to Cylinder	4
6	4C-414	BOLT, Gland to Cap	4	19	1F-424	COTTER, Piston Rod Nut	1
7	526414	GLAND, Packing	1	20	523325	NUT, Piston Rod	1
8	526420	ADAPTER, Female	2	21	526423	PLATE, Backing	1
9	538065	PACKING SET	1	22	526424	‡SHIM	—
10	526419	ADAPTER, Male	2	23	526422	SLEEVE	1
11	18C-648	BOLT, Cap to Cylinder	4	24	538697	PACKING SET	1
12	532947	CAP, Cylinder	1	25	526423	PLATE, Backing	1

‡As Required

*NOTE: For replacement use 1503828 Cylinder Assy.

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



TS-5081-P

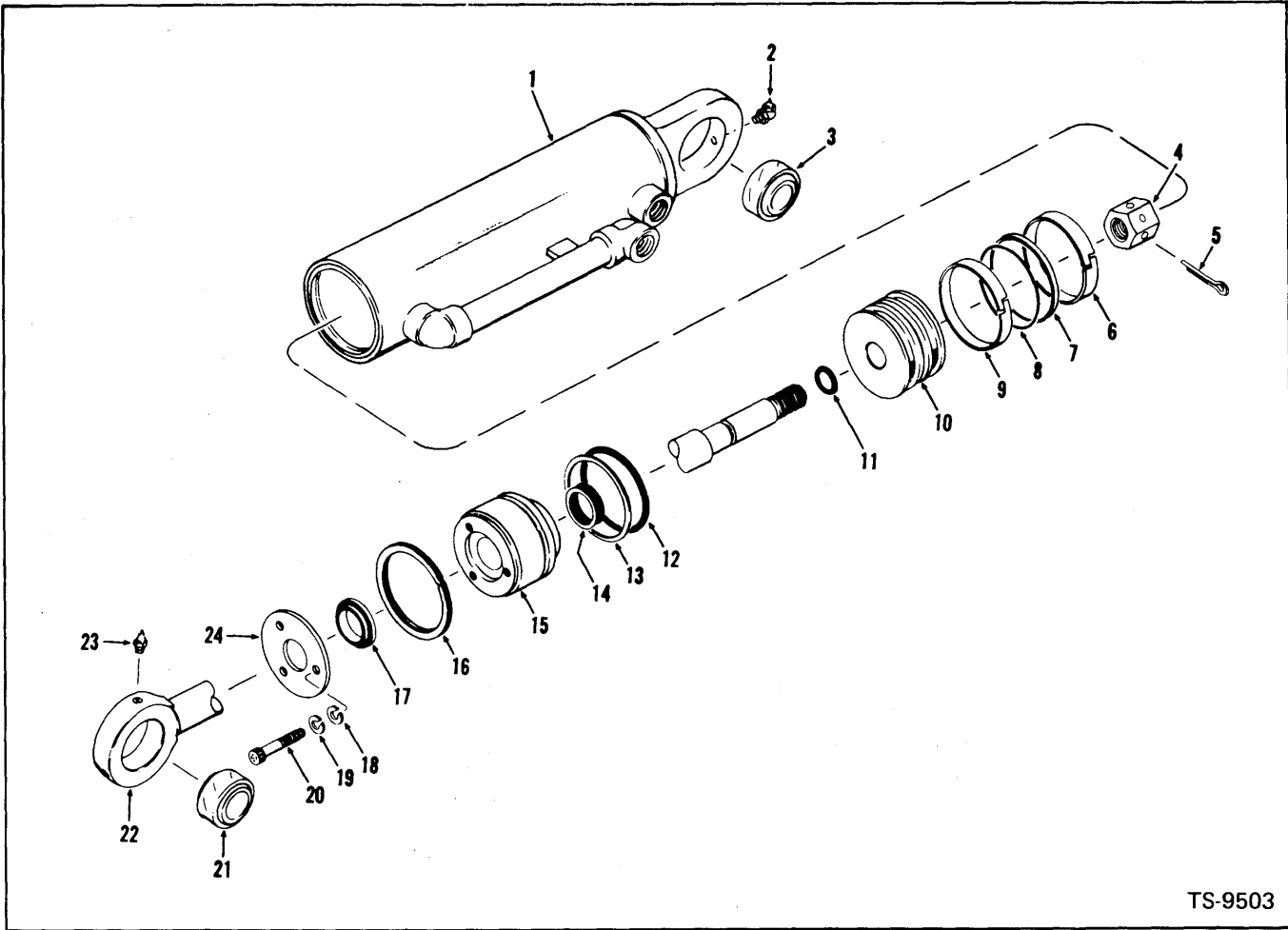
STEERING CYLINDER ASSEMBLY
For Serial: Cummins - 4DC101 and after
G.M. - 5DG101 and after
Wauk. - C3DA9-25 and after

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

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	562564	CYLINDER ASSY (Inc. 1, 3 thru 21, 23, 24, 25)	1	13	945118	CAP ASSY (Inc. 11, 12)	1
1	562565	CYLINDER	1	14	526419	ADAPTER, Male Chevron Packing	2
2	713418	BUSHING, Cylinder	1	15	538065	PACKING ASSY, Piston Rod	1
3	11H-15	FITTING, Cylinder Grease	1	16	526420	ADAPTER, Female Chevron Packing	2
4	523325	NUT, Piston Rod	1	17	526414	GLAND, Packing	1
5	1F-424	COTTER, Piston Rod Nut	1	18	---	LOCKWIRE (16 ga.-13" long)	2
6	526423	PLATE, Packing Assy Backing	1	19	4C-414	BOLT, Packing Gland to Cylinder Cap	4
7	526424	SHIM	—	20	526415	SEAL, Piston Rod	1
8	526422	SLEEVE, Piston	1	21	562572	ROD, Piston	1
9	538697	PACKING ASSY (Inc. Adapters)	1	22	713418	BUSHING, Piston Rod	1
10	526423	PLATE, Packing Assy Backing	1	23	10H-25	FITTING, Piston Rod Grease	1
11	25K-40208	"O" RING, Cylinder Cap	1	24	18C-648	BOLT, Cylinder Cap	4
12	532948	RING, "O" Ring Back-Up	1	25	18D-06	NUT, Cylinder Cap	4

‡As Required

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



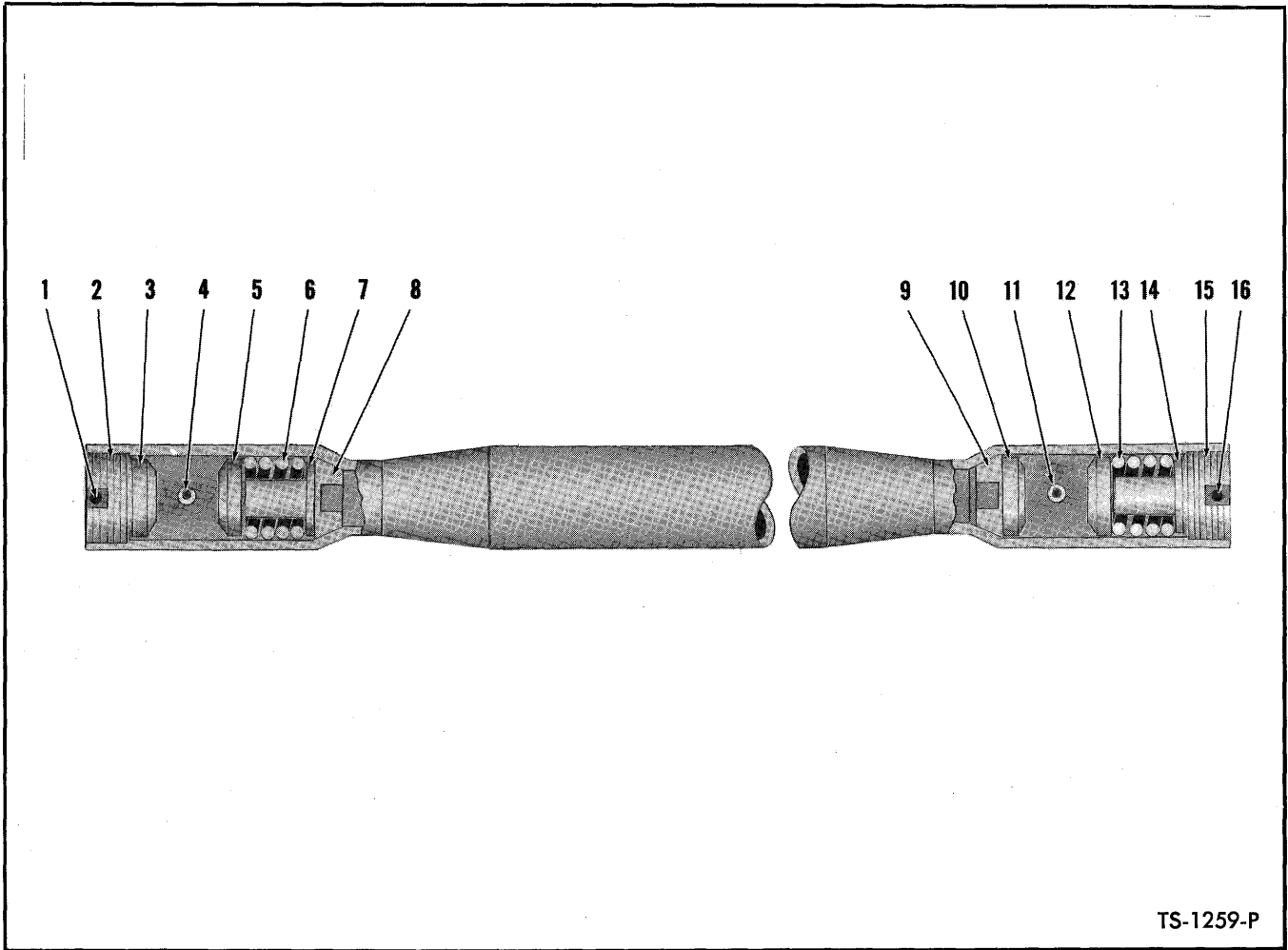
TS-9503

**STEERING CYLINDER ASSEMBLY
(SERVICE ONLY)**

Item No.	Part No.	Description	No. Req'd.
A	1503828	CYLINDER ASSEMBLY (Inc. 1 thru 24)	2
<p>NOTE: 2 Cylinders used per Machine – Quantities Listed Below are for 1 Cylinder</p>			
1	1503827	CYLINDER	1
2	12H-25	FITTING, Cylinder Grease	1
3	763451	BUSHING, Cylinder	1
4	523325	NUT, Piston Rod	1
5	1F-424	COTTER, Piston Rod Nut	1
6	1503572	RING, Piston Wear	1
7	1524560	RING, Piston Sealing	1
8	-----	OMIT, Not Used This Application	—
9	1503572	RING, Piston Wear	1

Item No.	Part No.	Description	No. Req'd.
10	1503568	PISTON	1
11	25K-20016	O-RING, Piston Rod	1
12	1306625	O-RING, C, linder Cap	1
13	532948	RING, Back-up	1
14	713285	“T” RING	1
15	1503570	CAP, Cylinder	1
16	791424	RING, Cap Retaining	1
17	1522535	WIPER, Piston Rod	1
18	-----	OMIT, Not Used This Application	—
19	4E-05	LKWSHR, Retaining Plate	3
20	71G-514	SCREW, Retaining Plate	3
21	763451	BUSHING, Piston Rod	1
22	545155	ROD, Piston	1
23	10H-35	FITTING, Piston Rod Grease	1
24	1503567	PLATE, Wiper Retaining	1

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

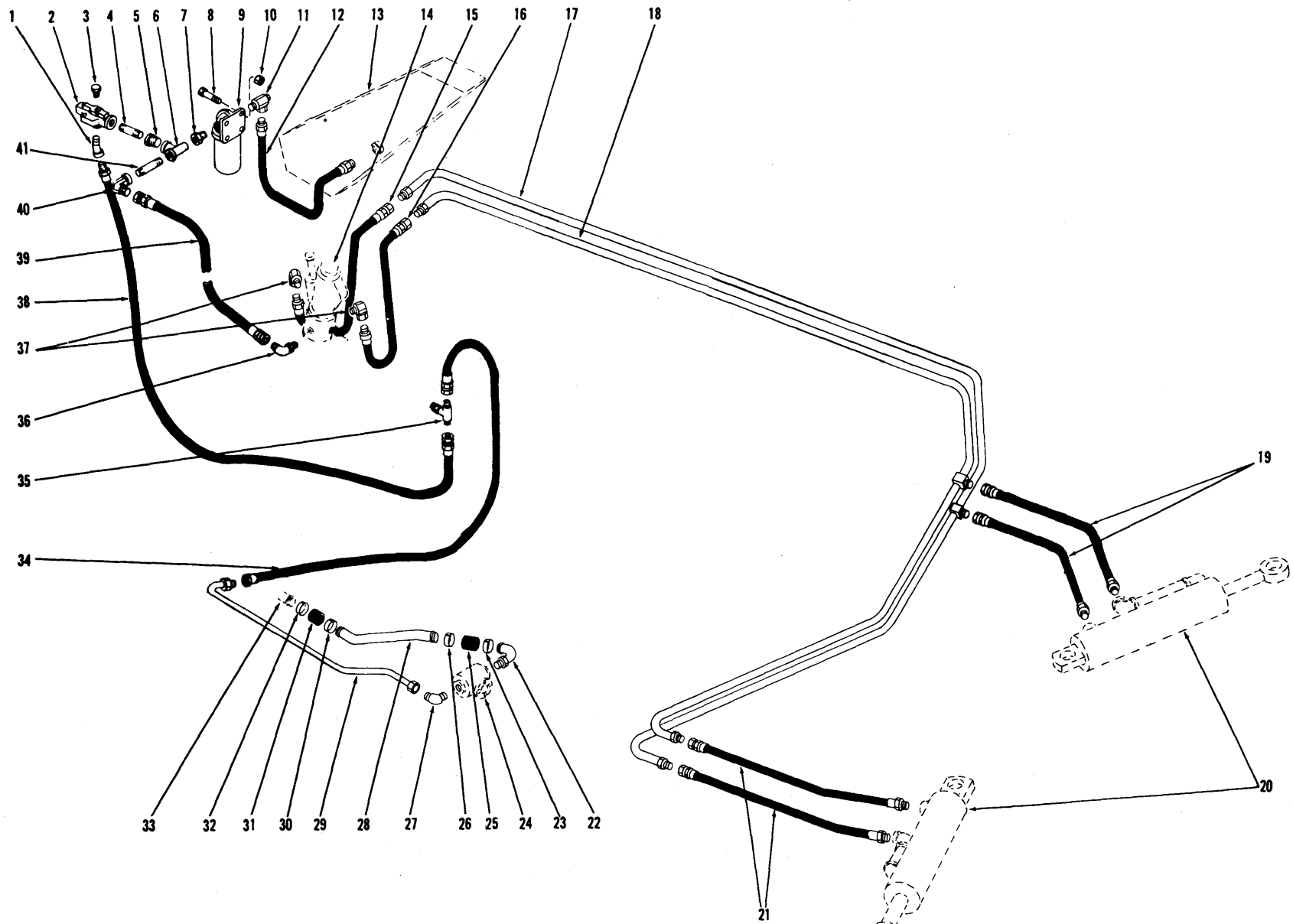


TS-1259-P

STEERING DRAG LINK

Item No.	Part No.	Description	No. Req'd.
A	548643	DRAG LINK ASSY (Inc. 2, 3, 5 thru 10, 12 thru 15)	1
1	1F-432	COTTER, Adjusting Nut	1
2	876575	NUT, Adjusting	1
3	865965	SEAT, Ball Stud	1
4	10H-25	FITTING, Drag Link Grease	1
5	865965	SEAT, Ball Stud	1
6	865961	SPRING	1
7	662691	SEAT, Spring	1
8	865963	SEAT	1
9	865963	SEAT	1
10	865965	SEAT, Ball Stud	1
11	10H-25	FITTING, Drag Link 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, Adjusting Nut	1

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



HYDRAULIC SYSTEM – STEERING – CUMMINS
For Serial: 2DC101 thru 3DC135

TS-3315-P

78.1

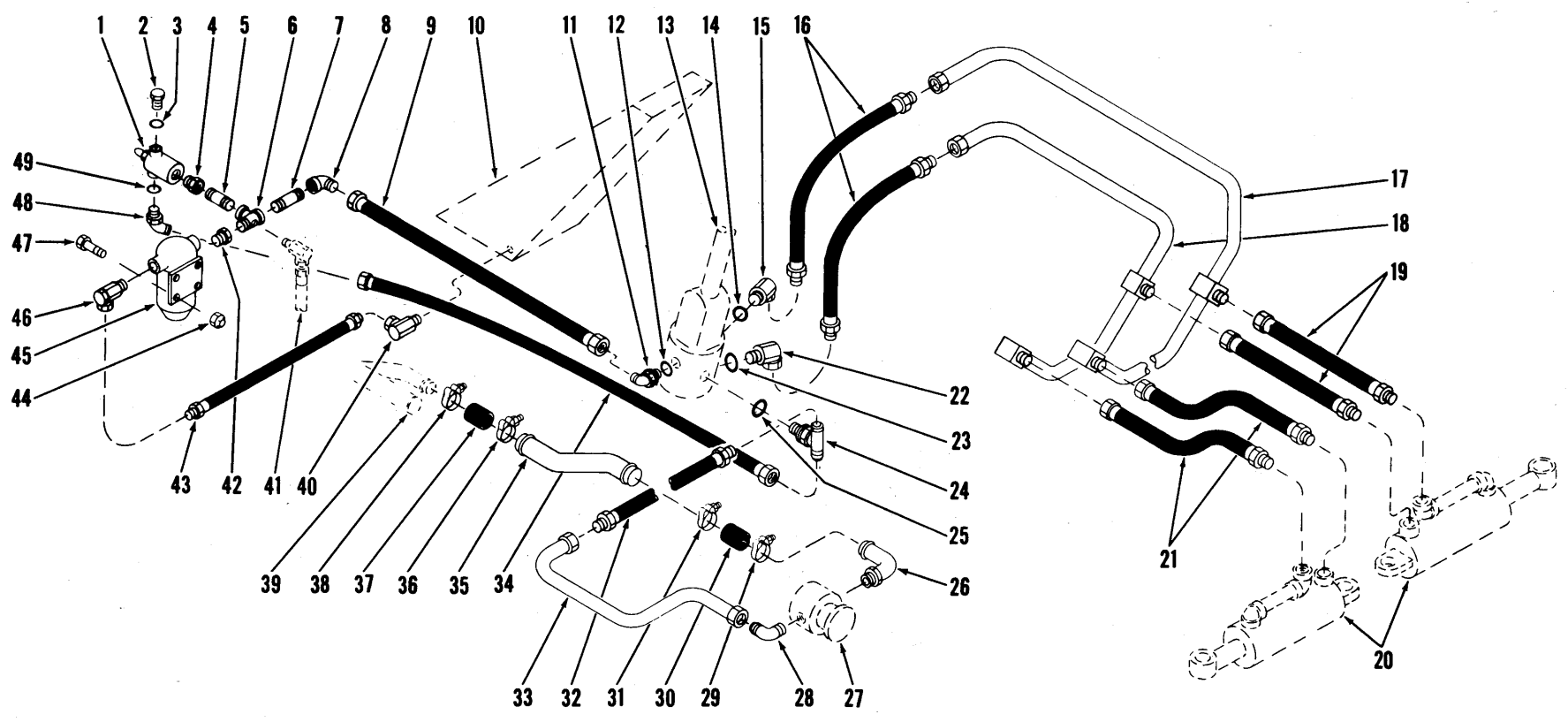
PM 1669

**STEERING HYDRAULIC SYSTEM – CUMMINS
For Serial: 2DC101 thru 3DC135**

Item No.	Part No.	Description	No. Req'd
1	18K-7	ELBOW, Relief Valve	1
2	-----	VALVE, Relief – See Index	1
3	24K-7	PLUG, Relief Valve	1
4	5K-414	NIPPLE, Relief Valve	1
5	356617	BUSHING, Reducing – Nipple to Tee	1
6	17F-4	TEE	1
7	620562	BUSHING, Reducing – Tee to Filter	1
8	18C-628	BOLT, Filter Mounting	4
9	1533615	FILTER, Steering System Oil (Inc. 9A)	1
9A	215502	†CARTRIDGE KIT, Filter	1
10	18D-06	NUT, Filter Mounting	4
11	6K-12	VALVE, Check	1
12	536332	HOSE, Check Valve to Reservoir	1
12A	31F-5	†ADAPTER, Hose to Reservoir	1
13	-----	RESERVOIR, Hydraulic Oil – See Index	—
14	-----	STEERING GEAR – See Index	—
15	540884	HOSE, Steering Gear to Line	1
16	540883	HOSE, Steering Gear to Line	1
17	533915	LINE, Steering Gear to Cylinders	1
18	533916	LINE, Steering Gear to Cylinders	1
19	533927	HOSE, Line to Steering Cylinder	2
20	-----	STEERING CYLINDER – See Index	—
21	533927	HOSE, Line to Steering Cylinder	2
22	535325	STEM, Steering Pump	1
23	540127	CLAMP, Hose	1
24	-----	STEERING PUMP – See Index	—
25	536749	HOSE, Tube to Stem	1
26	540127	CLAMP, Hose	1
27	83F-8	ELBOW, Line to Pump	1
28	540649	TUBE, Suction Tube to Pump	1
29	547419	LINE, Pump to Hose	1
30	540127	CLAMP, Hose	1
31	536749	HOSE, Tube to Suction Tube	1
32	540127	CLAMP, Hose	1
33	-----	TUBE, Suction – See Bucket and Boom Hydraulic System	—
34	547420	HOSE, Line to Steering Gear Tee	1
35	19K-7	TEE, Steering Gear	1
36	17K-7	ELBOW, Steering Gear	1
37	517089	ADAPTER UNION	2
38	547421	HOSE, Relief Valve to Tee	1
39	547420	HOSE, Steering Gear to Tee	1
40	85F-7	ELBOW, Hose to Nipple	1
41	5K-416	NIPPLE, Elbow to Tee	1

†Not Illustrated

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



78A.1

PM 1669

HYDRAULIC SYSTEM – STEERING
For Cummins Powered Machines – 3DC136 thru 3DC999

TS-3133-r



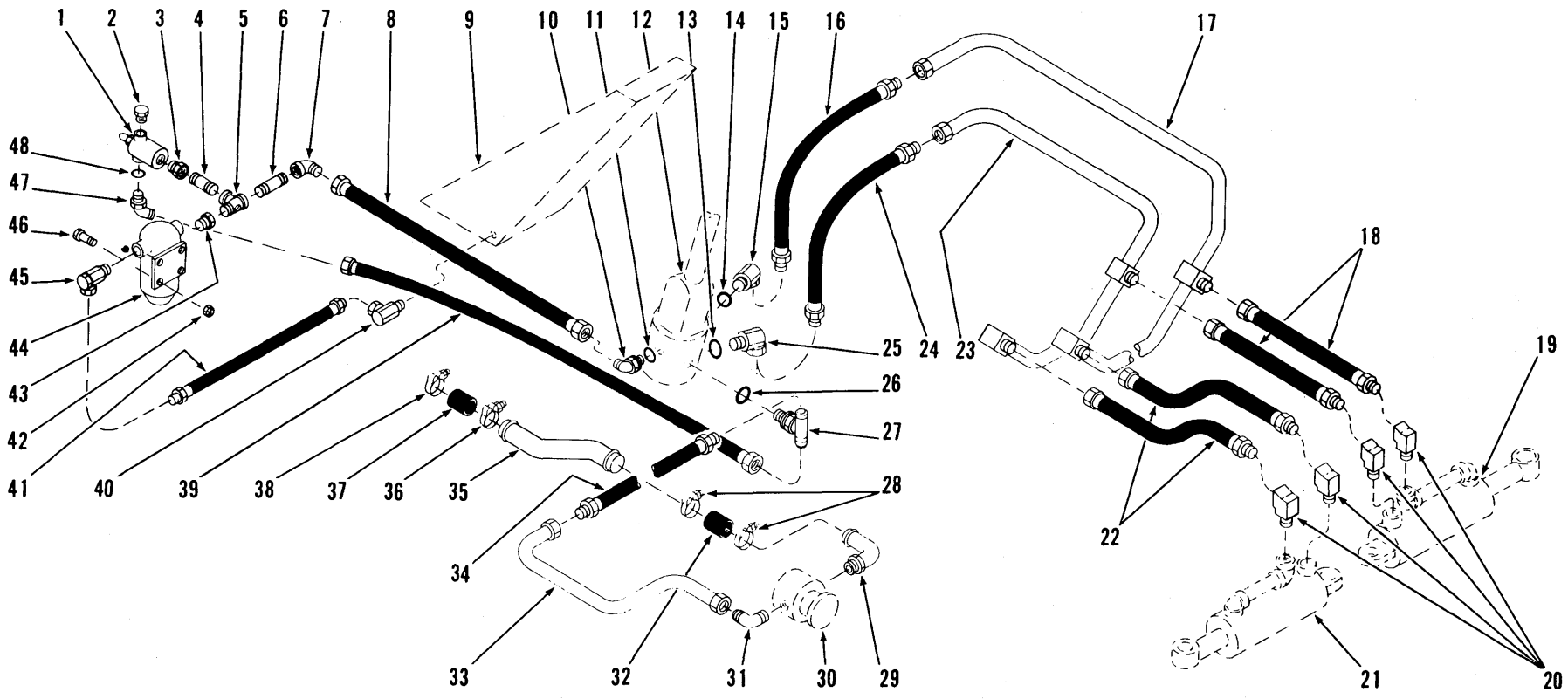
HYDRAULIC SYSTEM — STEERING

For Cummins Powered Machines — 3DC136 thru 3DC999

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	RELIEF VALVE, Steering Pressure — See Index	—	24	19K-7	TEE, Steering Gear (Inc. 25)	1
2	24K-7	PLUG, Relief Valve (Inc. 3)	1	25	91F-7	"O" RING, Tee	1
3	91F-7	"O" RING	1	26	535325	STEM, Steering Pump Suction	1
4	356617	BUSHING, Valve Reducing	1	27	-----	STEERING PUMP — See Index	—
5	5K-414	NIPPLE, Tee to Bushing	1	28	83F-8	ELBOW, Line to Pump — Pressure	1
6	566478	TEE	1	29	540129	CLAMP, Hose	1
7		NIPPLE, Elbow to Tee		30	536749	HOSE, Suction Tube to Stem	1
7A	5K-416	For Serial—3DC136 thru 3DC155	1	31	540129	CLAMP, Hose	1
7B	564119	For Serial—3DC156 thru 3DC999	1	32	547420	HOSE, Line to Steering Gear — Pressure	1
8	85F-7	ELBOW, Hose to Nipple	1	33	547419	LINE, Pump to Hose — Pressure	1
9	547420	HOSE, Steering Gear to Valve Tee — Return	1	34	547421	HOSE, Steering Gear to Valve — Pressure	1
10	-----	RESERVOIR, Hydraulic Oil — See Index	—	35	540649	TUBE, Suction	1
11	17K-7	ADAPTER UNION (Inc. 12)	1	36	540129	CLAMP, Hose	1
12	91F-7	"O" RING, Adapter Union	1	37	536749	HOSE, Suction Tube to Tube	1
13	-----	STEERING GEAR — See Index	—	38	540129	CLAMP, Hose	1
14	91F-6	"O" RING, Adapter Union	1	39	-----	SUCTION LINE — See Bucket & Boom Hydraulic	—
15	517089	ADAPTER UNION (Inc. 14)	1	40	31F-5	ADAPTER UNION	1
16	540883	HOSE, Steering Gear to Steer Lines	2	41	-----	HOSE — See Bucket Leveling Hyd. System — Index	1
17	533916	LINE, Steering Gear to Cylinders — L.H. Turn	1	42	620562	BUSHING, Tee to Filter Reducing	1
18	533915	LINE, Steering Gear to Cylinders — R.H. Turn	1	43	536332	HOSE, Filter to Reservoir Return	1
19	533927	HOSE, Steering Lines to Cylinders	2	44	18D-06	NUT, Filter Mounting	4
20	-----	STEER CYLINDERS — See Index	—	45	1533615	FILTER, Steering System Oil (Inc. 45A)	1
21	533927	HOSE, Steering Lines to Cylinders	2	45A	215502	†CARTRIDGE KIT, Oil Filter	1
22	517089	ADAPTER UNION (Inc. 23)	1	46	6K-12	CHECK VALVE	1
23	91F-6	"O" RING, Adapter Union	1	47	18C-628	BOLT, Filter Mounting	4
				48	18K-7	ADAPTER UNION (Inc. 49)	1
				49	91F-7	"O" RING, Adapter Union	1

†Not Illustrated

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



78B.1

PM 1669

STEERING HYDRAULIC SYSTEM – CUMMINS
For Serial: 4DC101 and after.

TS-5082-P

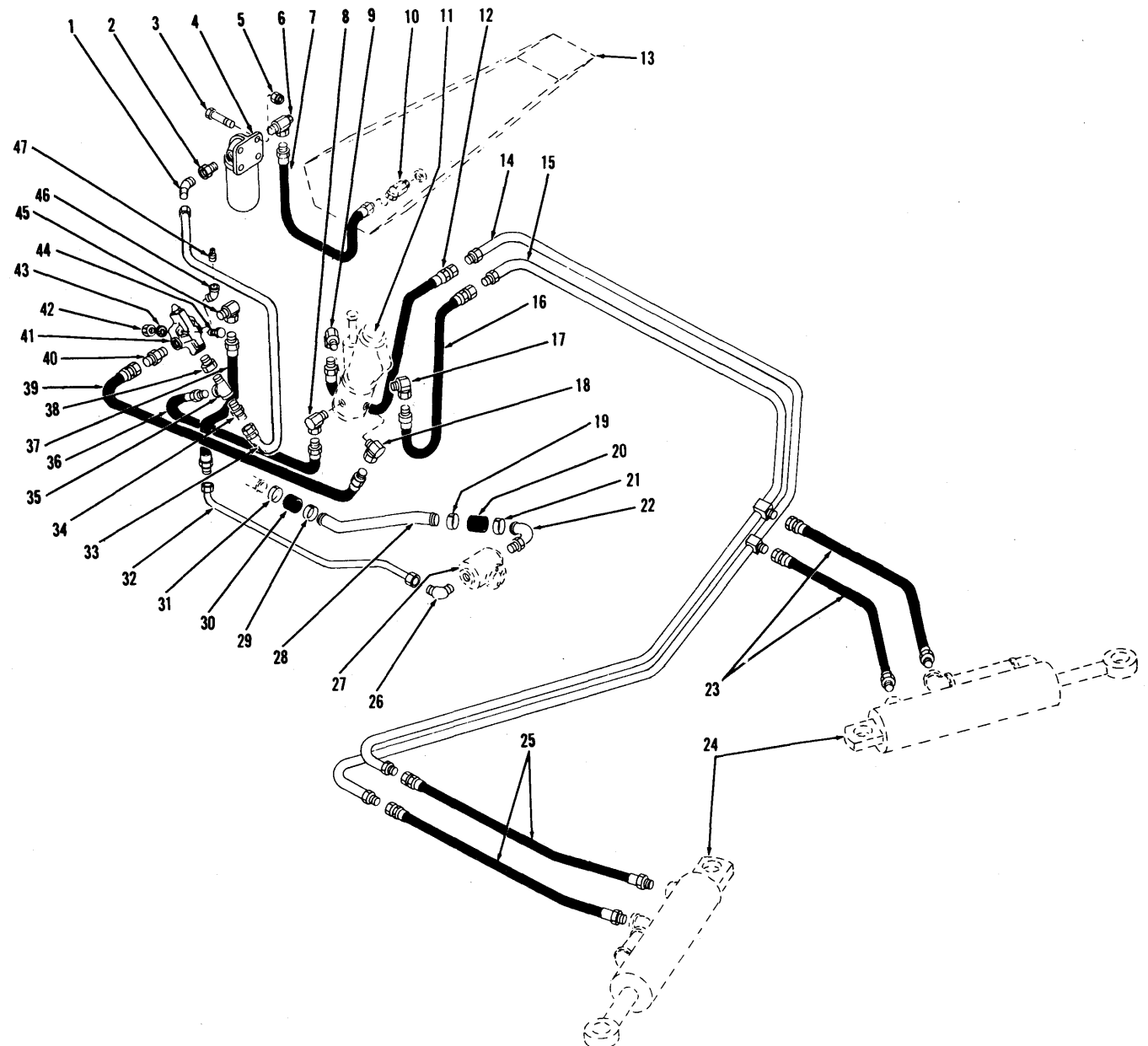
STEERING HYDRAULIC SYSTEM — CUMMINS

For Serial: 4DC101 and after

Item No.	Part No.	Description	No. Req'd.
1	-----	VALVE, Relief — See Index	—
2	24K-7	PLUG, Relief Valve (Inc. 2A)	1
2A	91F-7	†"O" RING, Relief Valve Plug	1
3	356617	BUSHING, Reducing — Nipple to Valve	1
4	5K-414	NIPPLE, Bushing to Tee	1
5	566478	TEE, Filter to Nipple	1
6	564119	NIPPLE, Elbow to Tee	1
7	85F-7	ELBOW, Hose to Nipple	1
8	547420	HOSE, Filter to Steering Gear — Return	1
9	-----	RESERVOIR, Hydraulic Oil — See Index	—
10	17K-7	ELBOW, Steering Gear to Hose (Inc. 11)	1
11	91F-7	"O" RING, Elbow	1
12	-----	STEERING GEAR — See Index	—
13	91F-6	"O" RING, Adapter Union	1
14	91F-6	"O" RING, Adapter Union	1
15	517089	ADAPTER UNION (Inc. 14)	1
16	540883	HOSE, Steering Gear to Line	1
17	533916	PIPE, Steering Gear to Cylinder	1
18	533927	HOSE, Pipe to Cylinder	2
19	-----	STEERING CYLINDER — See Index	—
20	81F-3	ELBOW, Hose to Cylinder	4
21	-----	STEERING CYLINDER — See Index	—
22	533927	HOSE, Pipe to Cylinder	2
23	533915	PIPE, Steering Gear to Cylinder	1
24	540883	HOSE, Steering Gear to Line	1
25	517089	ADAPTER UNION (Inc. 13)	1
26	91F-7	"O" RING, Tee	1
27	19K-7	TEE, Steering Gear to Hose (Inc. 26)	1
28	540129	CLAMP, Hose	2
29	535325	STEM, Steering Pump	1
30	-----	STEERING PUMP — See Index	—
31	83F-8	ELBOW, Tube to Pump	1
32	536749	HOSE, Tube to Stem	1
33	547419	TUBE, Pump to Steering Gear	1
34	547420	HOSE, Tube to Steering Gear	1
35	540649	TUBE, Suction Tube to Steering Pump	1
36	540129	CLAMP, Hose	1
37	536749	HOSE, Tube to Suction Tube	1
38	540129	CLAMP, Hose	1
39	547421	HOSE, Pressure Steering Gear to Relief Valve	1
40	31F-5	ADAPTER UNION, Hose to Reservoir	1
41	536332	HOSE, Filter to Reservoir	1
42	18D-06	NUT, Filter Mounting	4
43	620562	BUSHING, Reducing — Tee to Filter	1
44	1533615	FILTER, Steering System Oil (Inc. 44A)	1
44A	215502	†CARTRIDGE KIT, Filter	1
45	6K-12	VALVE, Filter to Reservoir Check	1
46	18C-628	BOLT, Filter Mounting	4
47	18K-7	ELBOW, Relief Valve to Hose (Inc. 48)	1
48	91F-7	"O" RING, Relief Valve Elbow	1

†Not Illustrated

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



HYDRAULIC SYSTEM - STEERING - WAUKESHA GAS AND G.M.
For Serial: G.M.-2DG101 thru 2DG999. Wauk.-2DA101 and after.

TS-2946-P

80.1

PM 1669

STEERING HYDRAULIC SYSTEM — WAUKESHA GAS AND G.M.

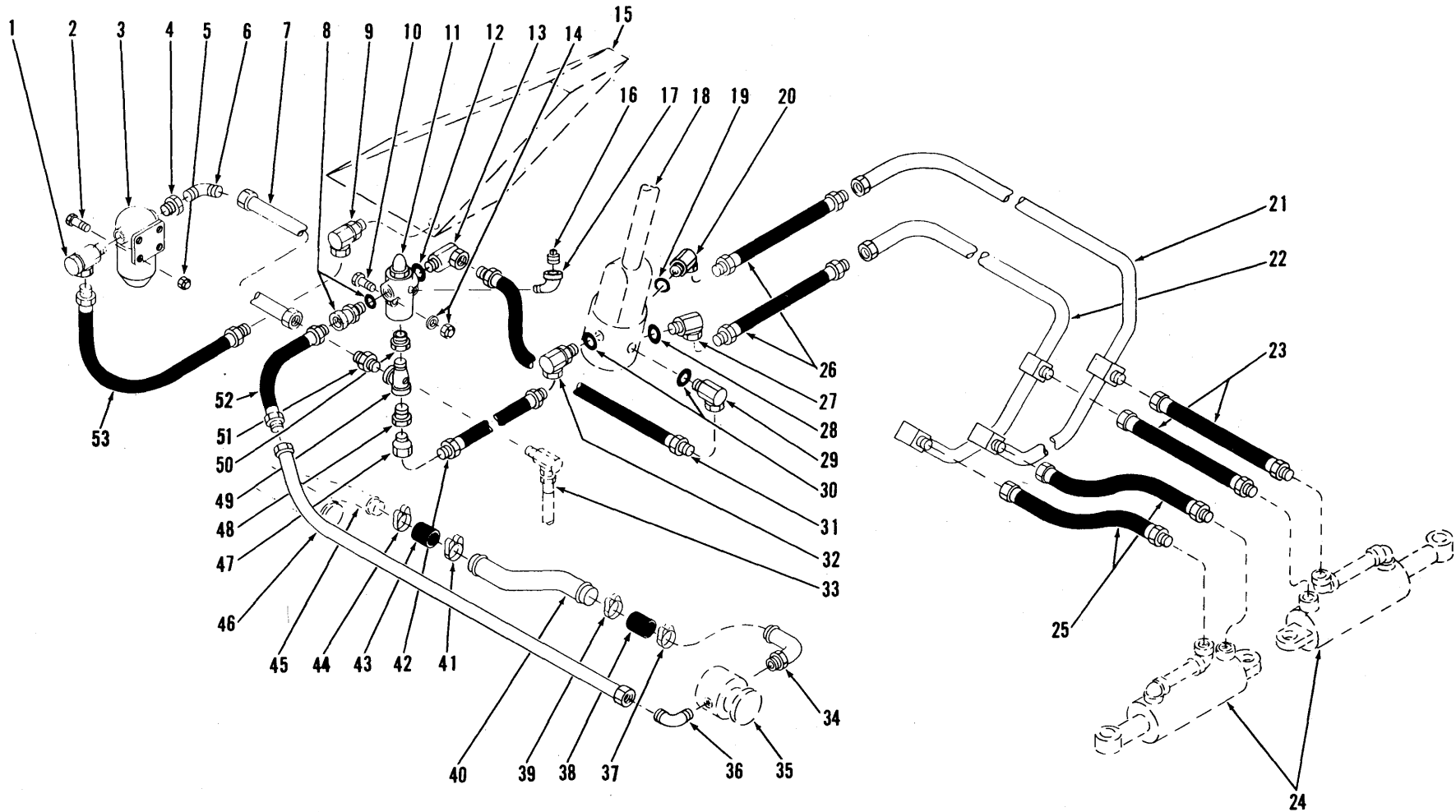
For Serial: G.M. — 2DG101 thru 2DG999

Wauk. — 2DA101 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	84F-7	ELBOW, Line to Filter	1	27	-----	STEERING PUMP—See Index	—
2	620562	BUSHING, Filter Reducing	1	28		TUBE, Suction	
3	18C-628	BOLT, Filter Attaching	4	28A	540572	For G.M. Powered Machines	1
4	1533615	FILTER, Steering System Oil (Inc. 4A)	1	28B	540649	For Gas Powered Machines	1
4A	215502	†CARTRIDGE KIT, Oil Filter	1	29	540127	CLAMP, Hose	1
5	18D-06	NUT, Filter Attaching	4	30	536749	HOSE, Suction	1
6	6K-12	CHECK VALVE	1	31	540127	CLAMP, Hose	1
7	536332	HOSE, Filter to Reservoir	1	32		LINE, Hose to Pump	
8	519275	ADAPTER UNION (Inc. 8A)	1	32A	540669	For G.M. Powered Machines	1
8A	91F-7	†O-RING, Adapter Union	1	32B	544005	For Gas Powered Machines	1
9	517089	ADAPTER UNION	1	33	536459	LINE, Relief Valve to Filter	1
10	31F-5	ADAPTER UNION	1	34	89F-7	CONNECTOR, Line to Tee	1
11	-----	STEERING GEAR—See Index	—	35	17F-4	TEE, Relief Valve	1
12	540884	HOSE, Steering Gear to Pipe	1	36	524530	HOSE, Tee to Steering Gear	1
13	-----	RESERVOIR, Hydraulic Oil—See Index	—	37	536445	HOSE, Line to Relief Valve	1
14	533915	PIPE, Steering	1	38	356617	BUSHING, Relief Valve Reducing	1
15	533916	PIPE, Steering	1	39	661561	HOSE, Relief Valve to Steering Gear	1
16	540883	HOSE, Steering Gear to Pipe	1	40	528691	ADAPTER UNION	1
17	517089	ADAPTER UNION	1	41	-----	RELIEF VALVE, Steering Pressure— See Index	—
18	519275	ADAPTER UNION (Inc. 18A)	1	42	18D-05	NUT, Relief Valve Mounting	2
18A	91F-7	†O-RING, Adapter Union	1	43	619019	WASHER, Relief Valve Mounting	2
19	540127	CLAMP, Hose	1	44	18C-540	BOLT, Relief Valve Mounting	2
20	536749	HOSE, Suction	1	45	531684	ADAPTER UNION	1
21	540127	CLAMP, Hose	1	46	25F-1	ELBOW	1
22	535325	STEM, Suction	1	47	13F-02	PLUG	1
23	533927	HOSE, Pipe to Cylinder	2				
24	-----	STEERING CYLINDER—See Index	—				
25	533927	HOSE, Pipe to Cylinder	2				
26	83F-8	ELBOW, Line to Pump	1				

†Not Illustrated

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



HYDRAULIC SYSTEM – STEERING
For Gas Powered Machines – C3DA9-14 thru C3DA9-24
For G.M. Powered Machines – 3DG101 thru 3DG999,
4DG101 thru 4DG999

TS-5146-P

80A.1

PM 1569

HYDRAULIC SYSTEM — STEERING

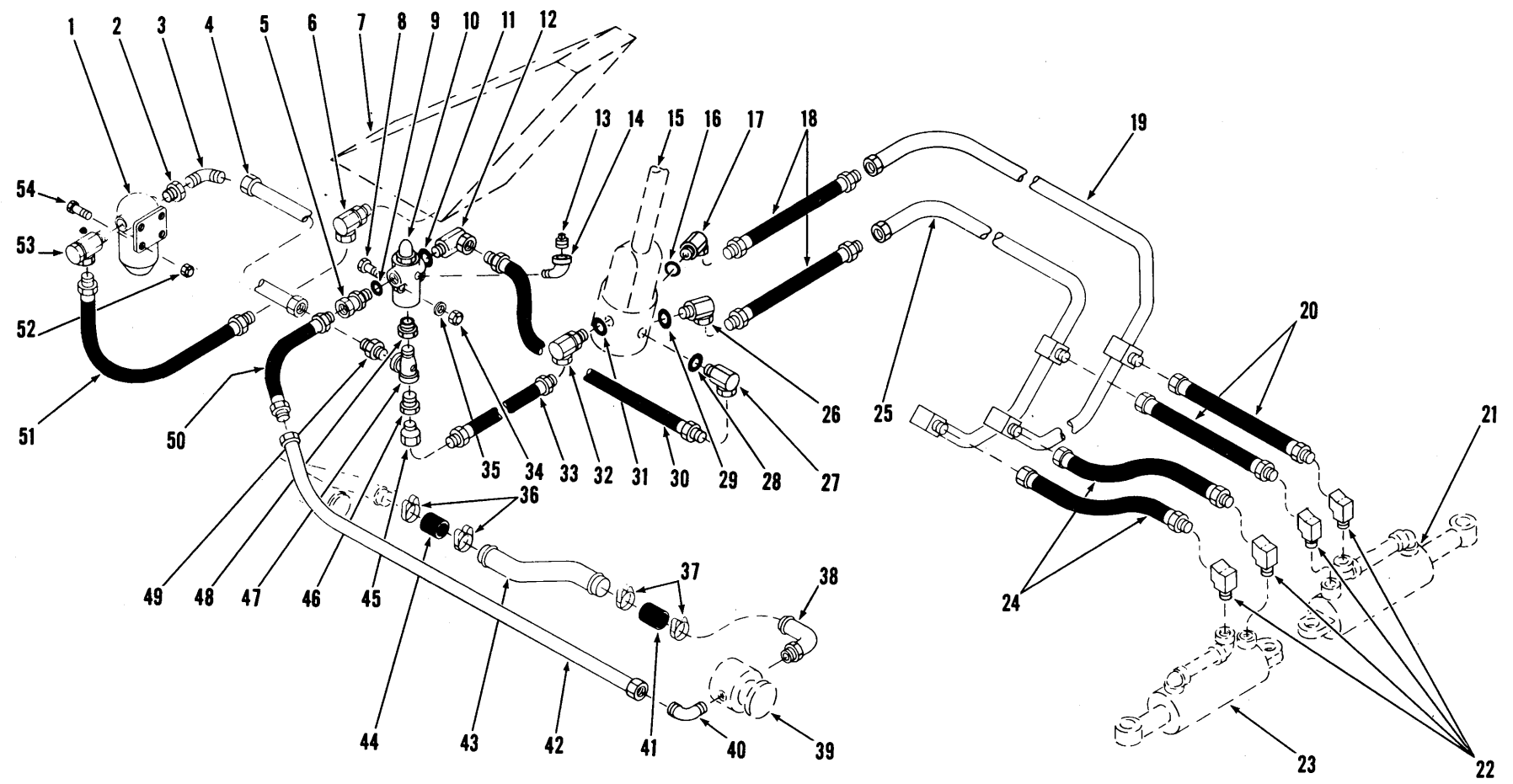
**For Gas Powered Machines — C3DA9-14 thru C3DA9-24
For G.M. Powered Machines — 3DG101 thru 3DG999,
4DG101 thru 4DG999**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	6K-12	CHECK VALVE	1	30	91F-7	"O" RING, Adapter Union	2
2	18C-628	BOLT, Oil Filter Mounting	4	31		HOSE, Relief Valve to Steering Gear — Pressure	
3	1533615	FILTER, Steering System Oil (Inc. 3A)	1	31A	661561	For Gas Powered Machines	1
3A	215502	†CARTRIDGE KIT, Oil Filter	1	31B	546042	For G.M. Powered Machines	1
4	620562	BUSHING, Filter Reducing	1	32	519275	ADAPTER UNION (Inc. 30)	1
5	18D-06	NUT, Oil Filter Mounting	4	33	-----	HOSE, See Bucket Leveler Hydraulic System — Index	—
6	84F-7	ELBOW, Line to Filter	1	34	535325	STEM, Pump Suction	1
7	536459	LINE, Relief Valve to Filter	1	35	-----	STEERING PUMP — See Index	—
8		ADAPTER UNION		36	83F-8	ELBOW, Pump to Line — Pressure	1
8A	528691	For Gas Powered Machines (Inc. 8C)	1	37	540129	CLAMP, Hose	1
8B	763322	For G.M. Powered Machines	1	38	536749	HOSE, Tube to Tube	1
8C	91F-7	"O" RING, Adapter Union	1	39	540129	CLAMP, Hose	1
9	31F-5	ADAPTER UNION, Hose to Reservoir	1	40		TUBE, Suction Tube to Steering Pump	
10	18C-548	BOLT, Relief Valve Mounting	2	40A	540649	For Gas Powered Machines	1
11	-----	RELIEF VALVE, Steering Pressure — See Index	—	40B	540572	For G.M. Powered Machines	1
12	91F-7	"O" RING, Adapter Union	1	41	540129	CLAMP, Hose	1
13		ADAPTER UNION (Inc. 12)		42	524530	*HOSE, Steering Gear to Relief Valve	1
13A	531684	For Gas Powered Machines	1	43	536749	HOSE, Tube to Tube	1
13B	519275	For G.M. Powered Machines	1	44	540129	CLAMP, Hose	1
14	18D-05	NUT, Relief Valve Mounting	2	45	-----	SUCTION TUBE — See Bucket & Boom Hyd.	—
14A	619019	WASHER, Relief Valve Mounting	2	46		LINE, Pump to Relief Valve Pressure	
15	-----	RESERVOIR, Hydraulic Oil — See Index	—	46A	544005	For Gas Powered Machines	1
16	13F-02	PLUG, Elbow	1	46B	540669	For G.M. Powered Machines	1
17	25F-1	ELBOW, Relief Valve	1	47	564159	RESTRICTOR, Adapter — For Serial: Gas — C3DA9-20 thru C3DA9-999; G.M. 4DG166 thru 4DG999	1
18	-----	STEERING GEAR, See Index	—	48	19F-5	BUSHING, Restrictor Reducing — For Serial: Gas—C3DA9-20 thru C3DA9-999; G.M. 4DG166 thru 4DG999 ..	1
19	91F-6	"O" RING, Adapter Union	1	49		TEE, Relief Valve	
20	517089	ADAPTER UNION (Inc. 19)	1	49A	17F-4	For Serial: G.M.—3DG101 thru 3DG999 ..	1
21	533916	LINE, Lower Steering — L.H. Turn	1	49B	566478	For Serial: Gas—C3DA9-14 thru 3CA9-24; G.M.—4DG101 thru 4DG999....	1
22	533915	LINE, Upper Steering — R.H. Turn	1	50	356617	BUSHING, Tee Reducing	1
23	533927	HOSE, Steering Lines to Cylinders	2	51	89F-7	ADAPTER, Line to Tee	1
24	-----	STEERING CYLINDERS — See Index	—	52		HOSE, Relief Valve to Pressure Line	
25	533927	HOSE, Steering Lines to Cylinders ..	2	52A	536445	For Gas Powered Machines	1
26	540883	HOSE, Steering Gear to Lines	2	52B	588696	For G.M. Powered Machines	1
27	517089	ADAPTER UNION (Inc. 28)	1	53	536332	HOSE, Filter to Reservoir Return	1
28	91F-6	"O" RING, Adapter Union	1				
29	519275	ADAPTER UNION (Inc. 30)	1				

†Not Illustrated

NOTE: When replacement is necessary for Hose (Item 42) for machine serial prior to Gas — C3DA9-20; G.M. — 4DG166, 1—Restrictor (Item 46) and 1—Bushing (Item 47) must also be used.

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



STEERING HYDRAULIC SYSTEM – G.M. AND WAUKESHA GAS
For Serial: G.M.—5DG101 and after. Wauk.—C3DA9-25 and after.

TS-5119-P

80B.1

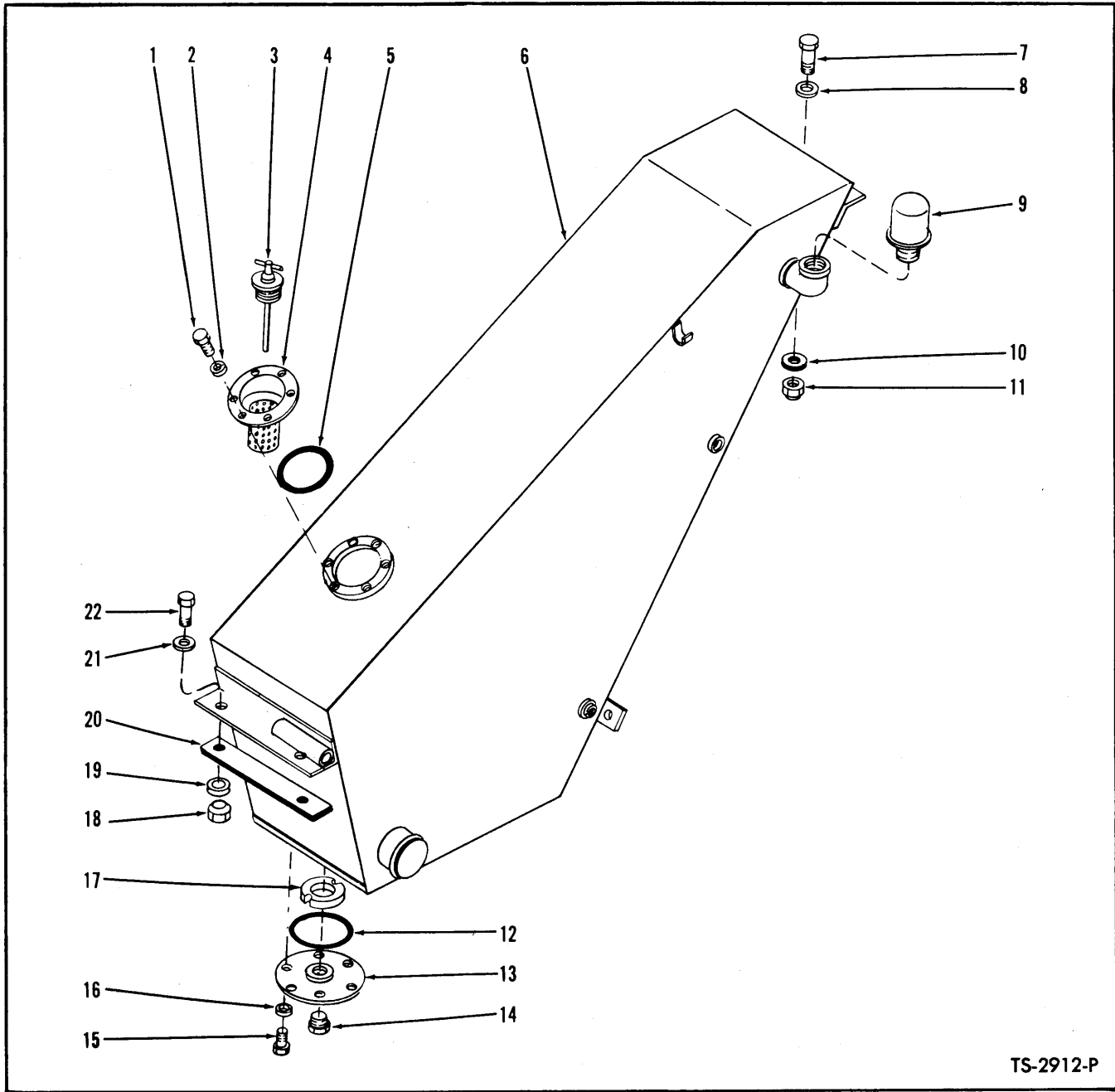
PM 1669

CONSTRUCTION MACHINERY DIVISION
STEERING HYDRAULIC SYSTEM — G.M. AND WAUKESHA GAS
For Serial: G.M. — 5DG101 and after
Wauk. — C3DA9-25 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1533615	FILTER, Steering System Oil (Inc. 1A)	1	30		HOSE, Relief Valve to Steering Gear	
1A	215502	†CARTRIDGE KIT, Filter	1	30A	546042	For G.M. Powered Machines	1
2	620562	BUSHING, Reducing, Filter to Elbow	1	30B	661561	For Gas Powered Machines	1
3	84F-7	ELBOW, Filter to Tube	1	31	91F-7	"O" RING, Adapter Union	1
4	536459	TUBE, Filter to Relief Valve	1	32	519275	ADAPTER UNION (Inc. 31)	1
5		ADAPTER, Hose to Relief Valve		33	524530	HOSE, Relief Valve to Steering Gear	1
5A	763322	For G.M. Powered Machines	1	34	18D-05	NUT, Relief Valve Mounting	2
5B	531684	For Gas Powered Machines	1	35	619019	WASHER, Relief Valve Mounting	2
6	31F-5	ADAPTER UNION, Hose to Reservoir	1	36	540129	CLAMP, Hose	2
7	-----	RESERVOIR, Hydraulic Oil — See Index	—	37	540129	CLAMP, Hose	2
8	18C-540	BOLT, Relief Valve Mounting	2	38	535325	STEM, Steering Pump	1
9	91F-7	"O" RING, Adapter	1	39	-----	STEERING PUMP — See Index	—
10	-----	VALVE, Relief — See Index	—	40	83F-8	ELBOW, Tube to Pump	1
11	91F-7	"O" RING, Adapter Union	1	41	536749	HOSE, Tube to Stem	1
12	519275	ADAPTER UNION (Inc. 11)	1	42		TUBE, Pump to Relief Valve	
13	13F-02	PLUG, Pipe	1	42A	540669	For G.M. Powered Machines	1
14	25F-1	ELBOW, Relief Valve	1	42B	544005	For Gas Powered Machines	1
15	-----	STEERING GEAR — See Index	—	43		TUBE, Suction Tube to Steering Pump	
16	91F-6	"O" RING, Adapter Union	1	43A	540572	For G.M. Powered Machines	1
17	517089	ADAPTER UNION (Inc. 16)	1	43B	540649	For Gas Powered Machines	1
18	540883	HOSE, Steering Gear to Pipe	2	44	536749	HOSE, Suction Tube to Tube	1
19	533916	PIPE, Steering Gear to Cylinder	1	45	564159	ADAPTER, Restricting	1
20	533927	HOSE, Pipe to Cylinder	2	46	19F-5	BUSHING, Reducing	1
21	-----	STEERING CYLINDER — See Index	—	47	566478	TEE, Relief Valve to Steering Gear	1
22	81F-3	ELBOW, Hose to Cylinder	4	48	356617	BUSHING, Reducing	1
23	-----	STEERING CYLINDER — See Index	—	49	89F-7	CONNECTOR, Tube to Street Tee	1
24	533927	HOSE, Pipe to Cylinder	2	50		HOSE, Tube to Relief Valve	
25	533915	PIPE, Steering Gear to Cylinder	1	50A	588696	For G.M. Powered Machines	1
26	517089	ADAPTER UNION (Inc. 29)	1	50B	536445	For Gas Powered Machines	1
27	519275	ADAPTER UNION (Inc. 28)	1	51	536332	HOSE, Filter to Reservoir	1
28	91F-7	"O" RING, Adapter Union	1	52	18D-06	NUT, Filter Mounting	4
29	91F-6	"O" RING, Adapter Union	1	53	6K-12	VALVE, Filter to Reservoir Check	1
				54	18C-628	BOLT, Filter Mounting	4

†Not Illustrated

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

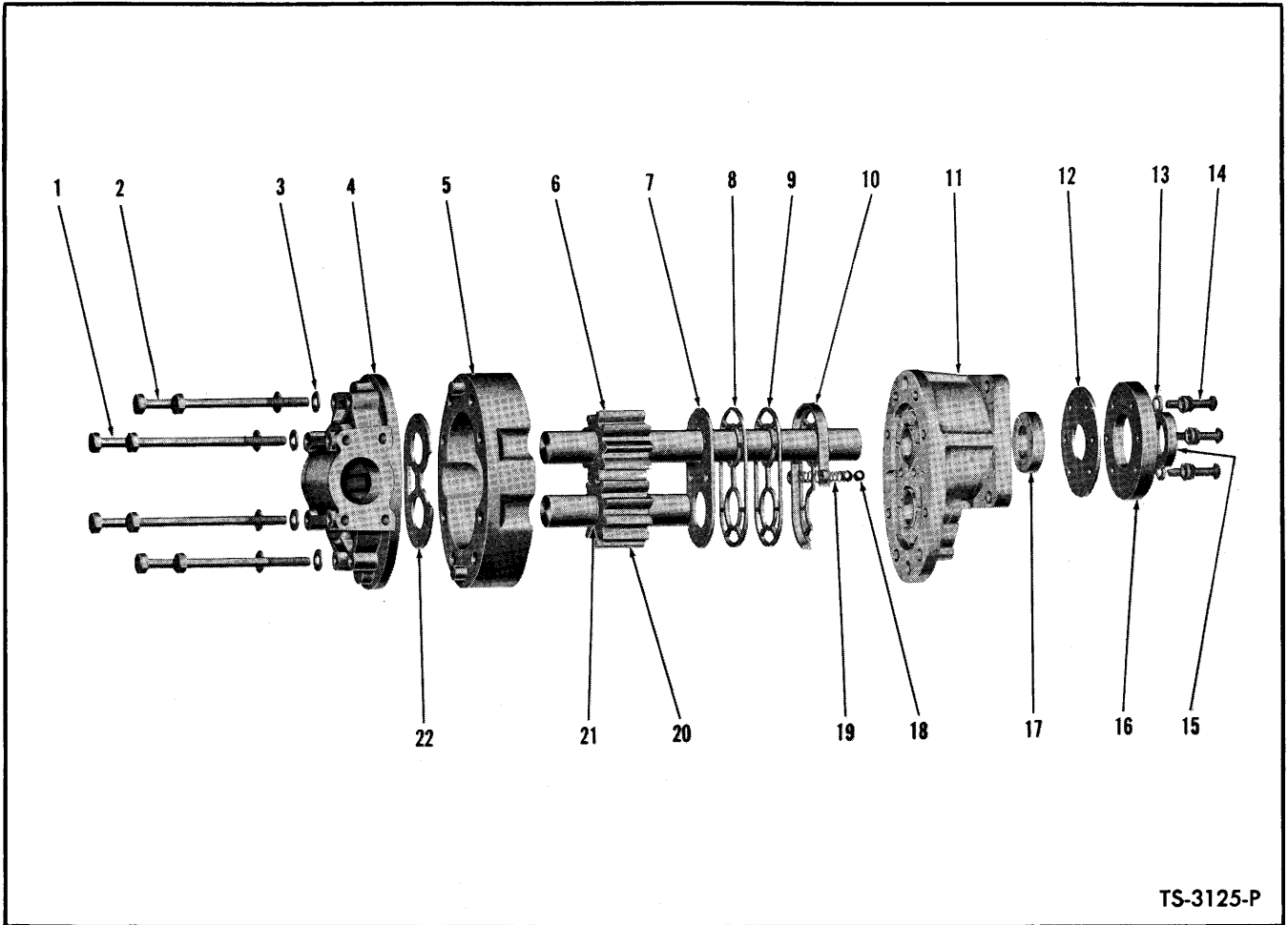


TS-2912-P

HYDRAULIC OIL RESERVOIR

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18C-612	BOLT, Filler Cap to Reservoir	6	13	587613	COVER, Reservoir Inspection	1
2	4E-06	LKWSHR, Filler Cap to Reservoir	6	14	40K-16	PLUG, Inspection Cover	1
3	538286	PLUG, Filler	1	15	18C-612	BOLT, Inspection Cover	6
4	539987	CAP, Filler	1	16	4E-06	LKWSHR, Inspection Cover	6
5	25K-40428	"O" RING, Filler Cap	1	17	525293	MAGNET, Reservoir	1
6	535898	RESERVOIR, Hydraulic Oil	1	18	70D-08	NUT, Reservoir Mounting - Bottom	2
7	18C-828	BOLT, Reservoir Mounting - Top	1	19	71D-08	BASE, Reservoir Mounting - Top	2
8	619027	WASHER, Reservoir Mounting - Top	1	20	549280	PAD, Reservoir Mounting - Bottom	1
9	538240	CAP, Reservoir Breather	1	21	619027	WASHER, Reservoir Mounting - Bottom	2
10	518233	PAD, Reservoir Mounting - Top	1	22	18C-836	BOLT, Reservoir Mounting - Bottom	2
11	18D-08	NUT, Reservoir Mounting - Top	1				
12	25K-40428	"O" RING, Inspection Cover	1				

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



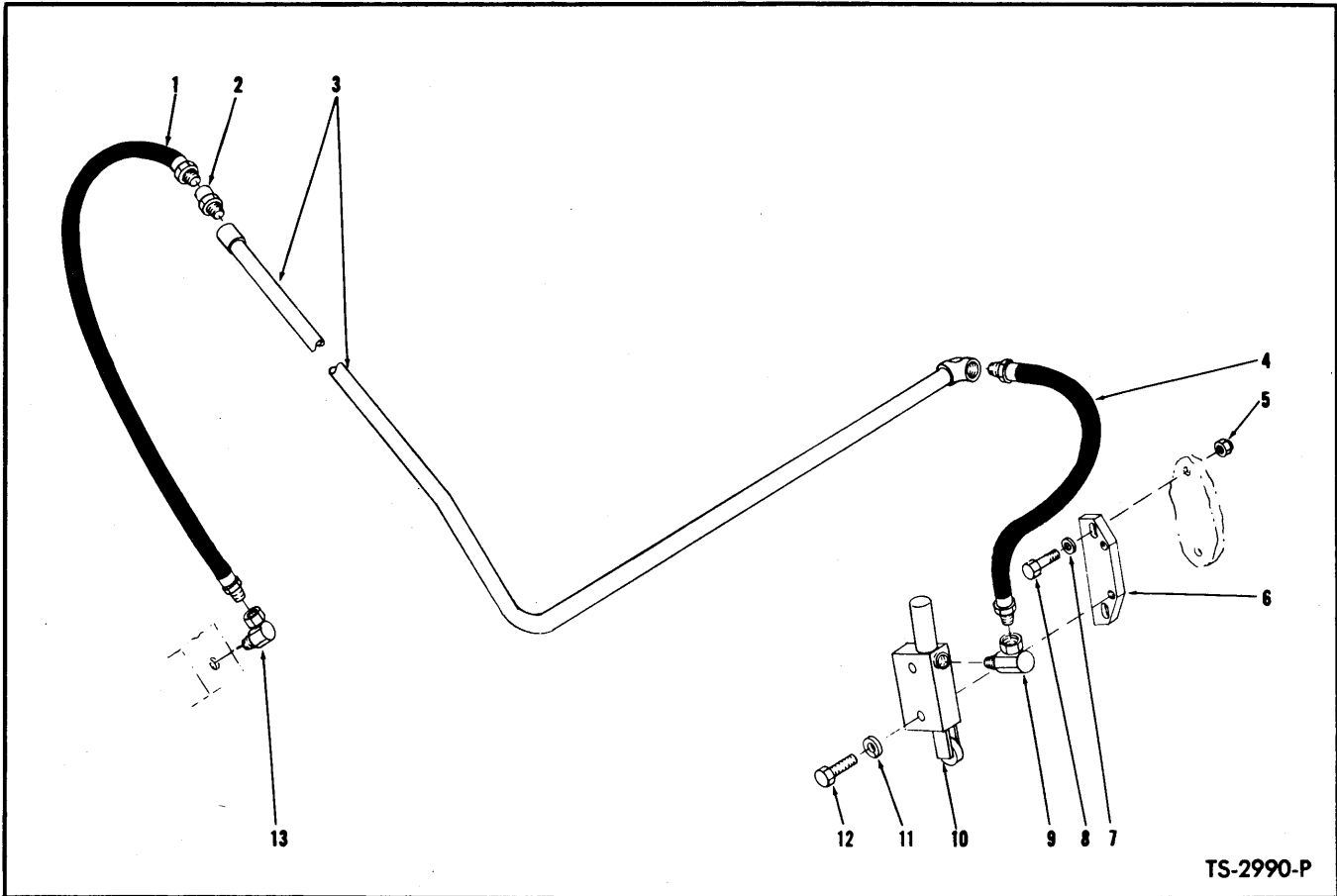
TS-3125-P

HYDRAULIC PUMP – BUCKET AND BOOM

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	543914	PUMP ASSY (Inc. 1 thru 22)	1	11	944951	FRONT PLATE	1
B	944948	REPAIR KIT, Major Seal (Inc. 3, 7, 8, 9, 10, 12 thru 19, 22)	1	12	----	§GASKET, Seal Retainer	1
C	944949	REPAIR KIT, Shaft Seal (Inc. 12 thru 17)	1	13	----	§LKWSHR, Seal Retainer	6
1	1C-888	BOLT, Back Plate & Body to Front Plate	4	14	----	§SCREW, Seal Retainer	6
2	1C-872	BOLT, Back Plate & Body to Front Plate	4	15	----	§SEAL, Outer Oil	1
3	----	§WASHER	8	16	----	§RETAINER, Oil Seal	1
4	944946	BACK PLATE	1	17	----	§SEAL, Inner Oil	1
5	944947	BODY	1	18	----	§BALL	2
6	944945	GEAR, Drive (Inc. 21)	1	19	----	§SPRING	2
7	----	§DIAPHRAGM	1	20	944944	GEAR, Driven (Inc. 21)	1
8	----	§GASKET, Back-up	1	21	----	§RING, Gear Retaining	4
9	----	§GASKET, Protector	1	22	----	§THRUST PLATE	1
10	----	§SEAL, Diaphragm	1	23	552161	†GASKET, Pump to Converter	1
				24	214963	†SLEEVE, Pump Drive	1
				25	223890	†RING, Drive Sleeve Retaining	1
				26	8D-08	†NUT, Pump to Converter	4
				26A	4E-08	†LKWSHR, Pump to Converter	4

§Not Sold Separately
†Not Illustrated

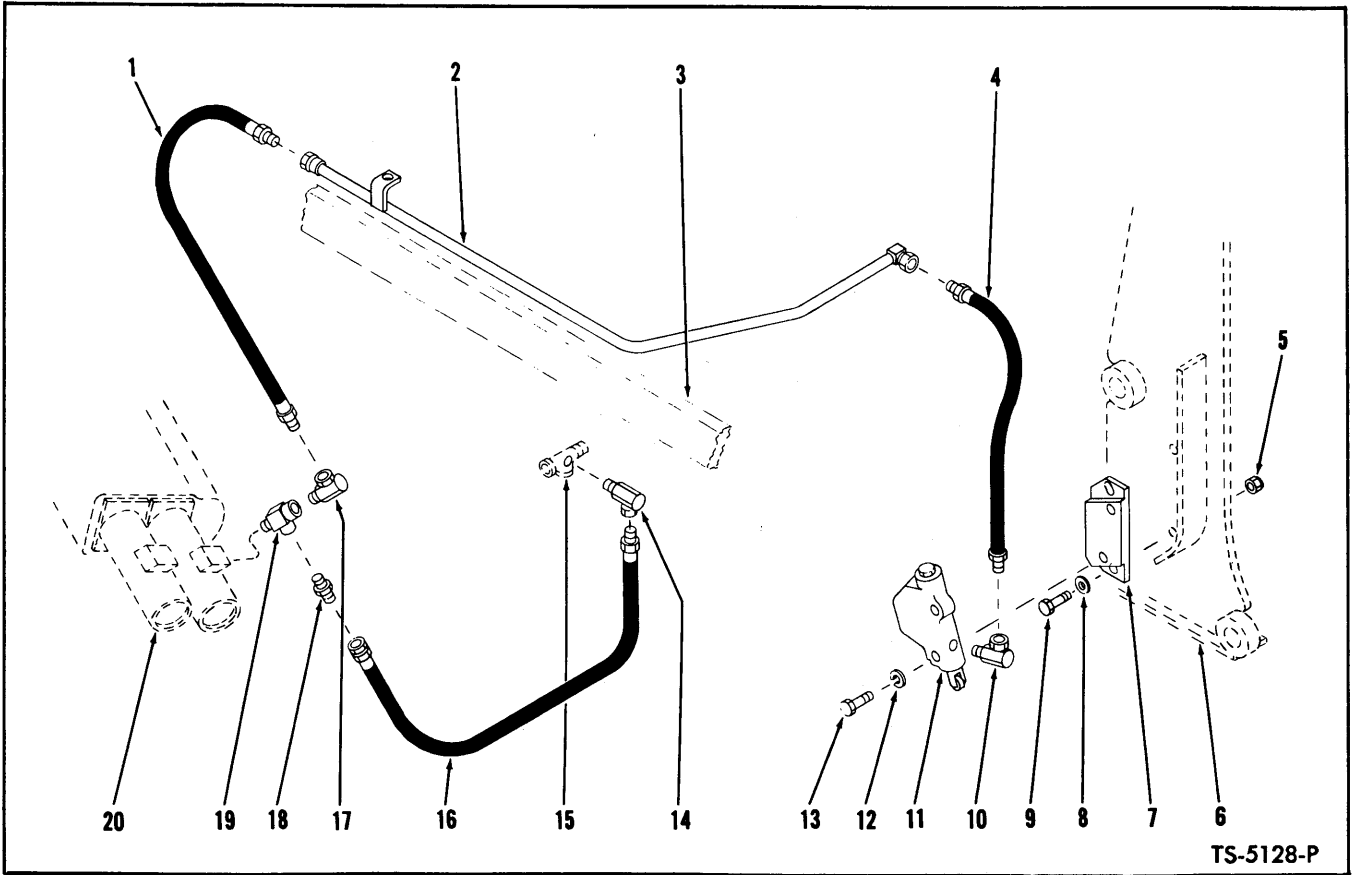
WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE



HYDRAULIC SYSTEM — BUCKET LEVELING
For Serial: Cummins — 2DC101 thru 3DC135
G.M. — 2DG101 thru 3DG999
Wauk. — 2DA101 and after

Item No.	Part No.	Description	No. Req'd.
1	541794	HOSE, Valve to Pipe	1
2	36F-2	ADAPTER UNION	1
3	545252	PIPE, Guide Bar	1
4	545211	HOSE, Pipe to Master Cylinder	1
5	18D-06	NUT, Plate to Carrier	2
6	542639	PLATE, Master Cylinder to Carrier	1
7	619023	WASHER, Plate to Carrier	2
8	18C-628	BOLT, Plate to Carrier	2
9	31F-2	ADAPTER UNION	1
10	-----	MASTER CYLINDER, Bucket Leveling — See Index	--
11	4E-06	LKWSHR, Cylinder to Plate	2
12	18C-640	BOLT, Cylinder to Plate	2
13	31F-2	ADAPTER UNION	1

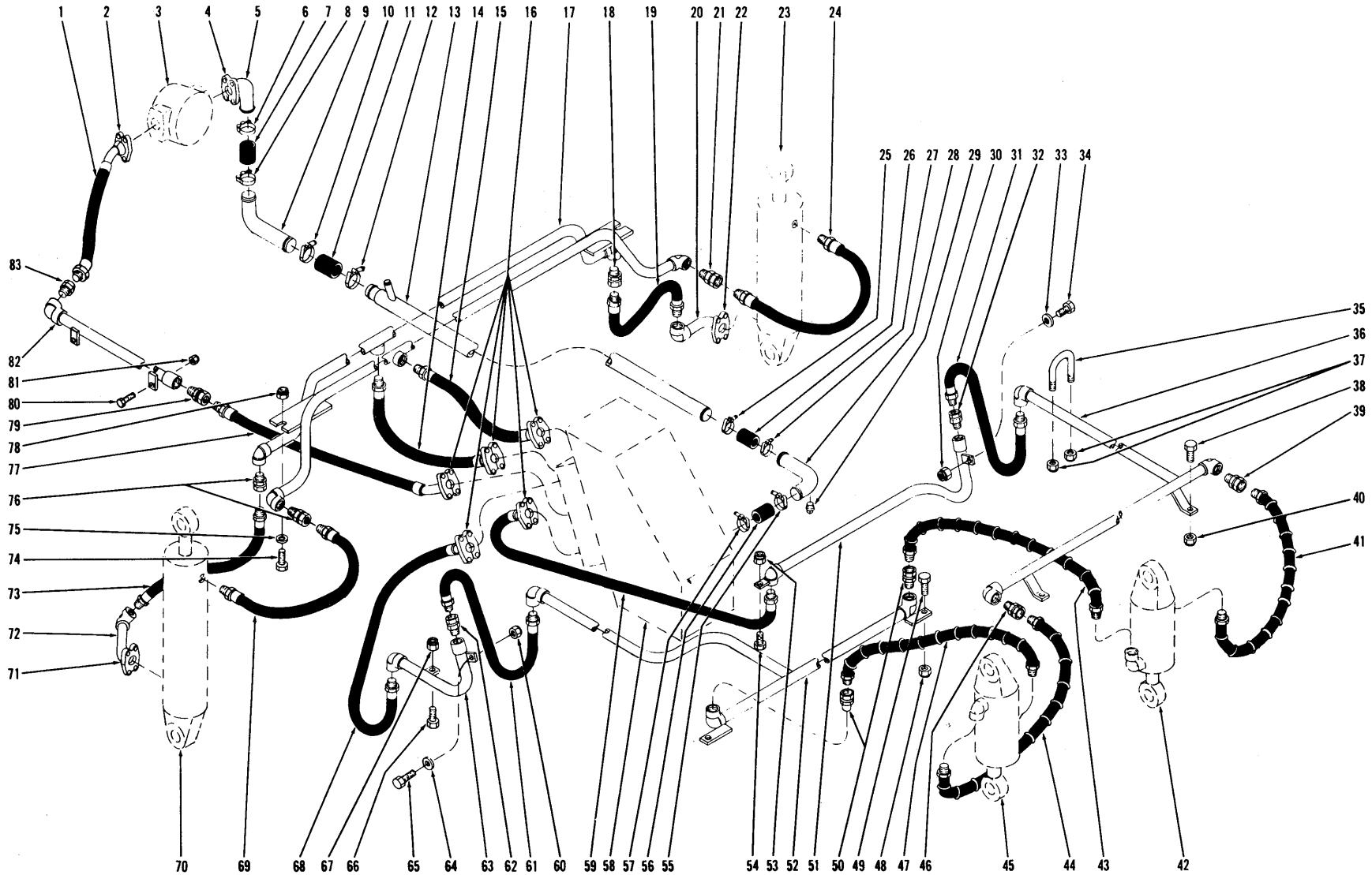
WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE



HYDRAULIC SYSTEM – BUCKET LEVELING
For Serial: Cummins – 3DC136 and after
G.M. – 4DG101 and after
Wauk. – C3DA9-14 and after

Item No.	Part No.	Description	No. Req'd.
1	541794	HOSE, Control Valve to Line	1
2	589947	*LINE, Control Valve to Leveler Valve.....	1
3	-----	GUIDE BAR – See Index	—
4	545211	HOSE, Leveler Valve to Line	1
5	18D-06	NUT, Plate Mounting	2
6	-----	BUCKET CARRIER – See Index	—
7	588224	PLATE, Master Cylinder Mounting	1
8	619023	WASHER, Plate Mounting	2
9	18C-628	BOLT, Plate Mounting	2
10	31F-2	ADAPTER UNION, Master Cylinder	1
11	-----	MASTER CYLINDER – See Index	—
12	4E-06	LKWSHR, Master Cylinder Mounting	2
13	18C-644	BOLT, Master Cylinder Mounting	2
14	31F-1	ADAPTER UNION, Hose to Steering Tee	1
15	-----	TEE, See Steering Hydraulic System, Index	—
16	562751	HOSE, Adapter Union to Check Valve	1
17	31F-2	ADAPTER UNION	1
18	568524	CHECK VALVE	1
19	30F-1	TEE, Hose to Control Valve	1
20	-----	CONTROL VALVE – See Index	—

*NOTE: For replacement use 545252 plus 1-36F-2 Adapter Union.
WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE



HYDRAULIC SYSTEM – BUCKET AND BOOM
For Serial: Cummins–2DC101 thru 2DC999. G.M.–2DG101 thru 2DG999. Wauk.–2DA101 and after.

TS-2939-P

86.1

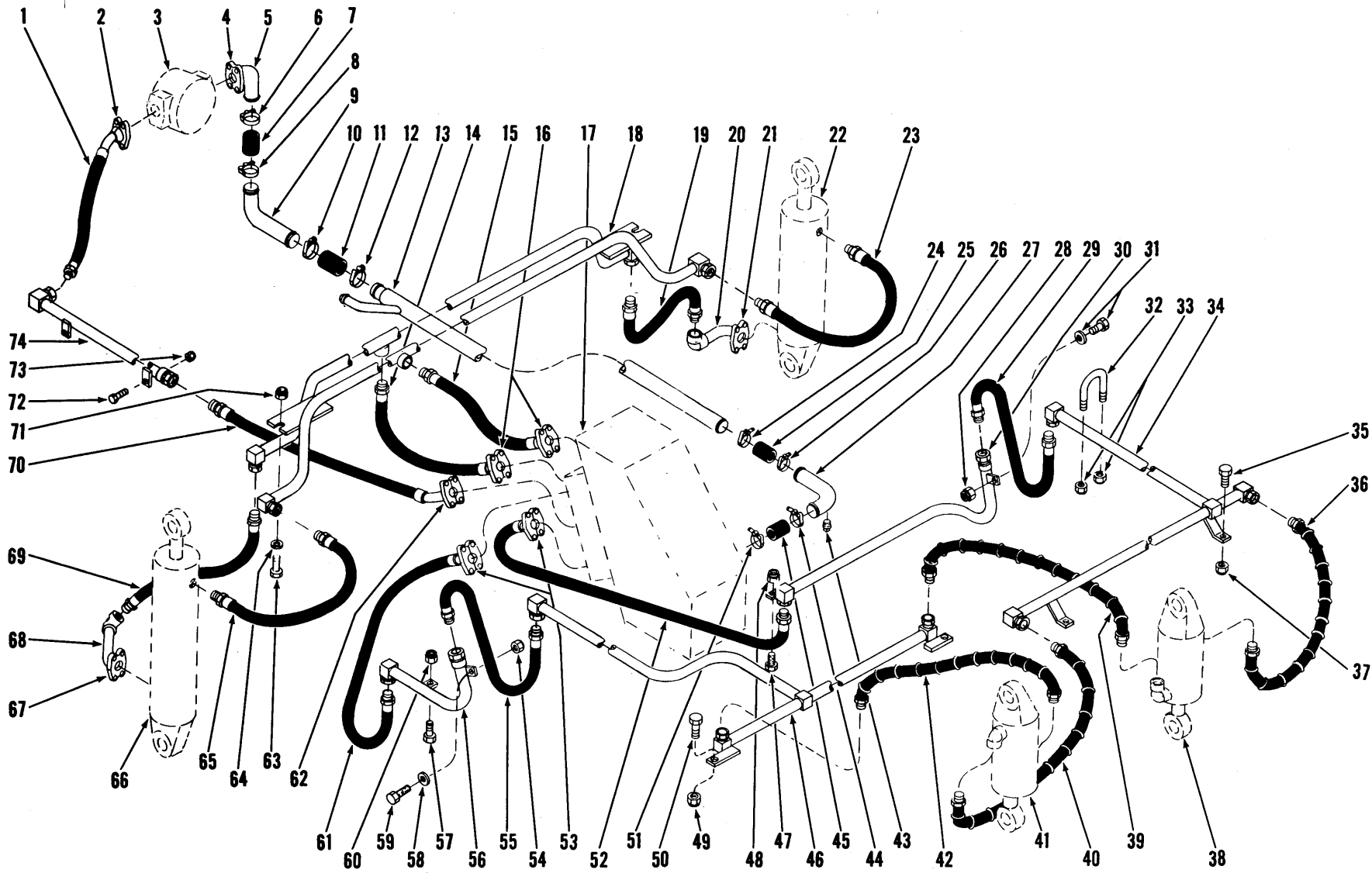
PM 1669

HYDRAULIC SYSTEM — BUCKET AND BOOM
For Serial: Cummins — 2DC101 thru 2DC999
G.M. — 2DG101 thru 2DG999
Wauk. — 2DA101 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	543923	HOSE, Pump to Valve	1	43	540761	HOSE, Crosspipe to Bucket Cylinder	1
2	-----	FLANGE HALF—See Group "B"	—	44	540760	HOSE, Crosspipe to Bucket Cylinder	1
3	-----	PUMP—Bucket & Boom—See Index	—	45	-----	BUCKET CYLINDER—See Index	—
4	-----	FLANGE HALF—See Group "C"	—	46	36F-5	ADAPTER UNION	1
5	543918	STEM	1	47	540761	HOSE, Crosspipe to Bucket Cylinder	1
6	540108	CLAMP, Hose	1	48	18D-06	NUT, R. H. Crosspipe to Frame	2
7	541181	HOSE, Suction	1	49	18C-624	BOLT, R. H. Crosspipe to Frame	2
8	540108	CLAMP, Hose	1	50	36F-5	ADAPTER UNION	2
9	-----	TUBE, Suction	—	51	542138	PIPE, L. H.	1
9A	543926	For Waukesha Gas & Cummins Diesel	1	52	542119	CROSSPIPE, R. H.	1
9B	543927	For G.M. Diesel	1	53	18D-06	NUT, L. H. Pipe to Frame	1
10	540104	CLAMP, Hose	1	54	18C-620	BOLT, L. H. Pipe to Frame	1
11	556415	HOSE, Suction	1	55	540106	CLAMP, Hose	1
12	540104	CLAMP, Hose	1	56	533478	HOSE, Suction	1
13	540611	TUBE, Suction	1	57	540106	CLAMP, Hose	1
14	543300	HOSE, Crosspipe to Reservoir	1	58	-----	RESERVOIR—See Index	—
15	543298	HOSE, Crosspipe to Reservoir	1	59	533417	HOSE, Reservoir to L. H. Pipe	1
16	-----	FLANGE HALF—See Group "A"	—	60	18D-06	NUT, R. H. Pipe to Frame	1
17	536350	CROSSPIPE, Boom Cylinder	1	61	523543	HOSE, R. H. Pipe to Crosspipe	1
18	36F-5	ADAPTER UNION	1	62	36F-5	ADAPTER UNION	1
19	669953	HOSE, Crosspipe to Boom Cylinder	1	63	542143	PIPE, R. H.	1
20	549877	TUBE, Hose to Boom Cylinder	1	64	619023	WASHER	1
21	36F-5	ADAPTER UNION	1	65	18C-628	BOLT, R. H. Pipe to Frame	1
22	-----	FLANGE HALF—See Group "A"	—	66	18C-620	BOLT, R. H. Pipe to Frame	1
23	-----	BOOM CYLINDER—See Index	—	67	18D-06	NUT, R. H. Pipe to Frame	1
24	672904	HOSE, Crosspipe to Boom Cylinder	1	68	543299	HOSE, Reservoir to R. H. Pipe	1
25	540106	CLAMP, Hose	1	69	672904	HOSE, Crosspipe to Boom Cylinder	1
26	533478	HOSE, Suction	1	70	-----	BOOM CYLINDER—See Index	—
27	540106	CLAMP, Hose	1	71	-----	FLANGE HALF—See Group "A"	—
28	540614	TUBE, Suction	1	72	549876	TUBE	1
29	13F-08	PLUG, Pipe	1	73	669953	HOSE, Crosspipe to Cylinder	1
30	18D-06	NUT, L. H. Pipe to Frame	1	74	18C-622	BOLT, Crosspipe to Frame	2
31	523543	HOSE, L. H. Pipe to Crosspipe	1	75	619023	WASHER, Crosspipe to Frame	2
32	36F-5	ADAPTER UNION	1	76	36F-5	ADAPTER UNION	2
33	619023	WASHER, L. H. Pipe to Frame	1	77	543301	HOSE, Reservoir to Pump	1
34	18C-628	BOLT, L. H. Pipe to Frame	1	78	18D-06	NUT, Crosspipe to Frame	2
35	537477	U-BOLT, Crosspipe to Frame	2	79	36F-6	ADAPTER UNION	1
36	542120	CROSSPIPE, L. H.	1	80	18C-632	BOLT, Reservoir to Pump Line to Frame	2
37	18D-06	NUT, U-Bolt	4	81	18D-06	NUT, Reservoir to Pump Line to Frame	2
38	18C-624	BOLT, L. H. Crosspipe to Frame	2	82	-----	LINE, Reservoir to Pump	—
39	36F-5	ADAPTER UNION	1	82A	543930	For Waukesha Gas & Cummins Diesel	1
40	18D-06	NUT, L. H. Crosspipe to Frame	2	82B	543928	For G.M. Diesel	1
41	540760	HOSE, Crosspipe to Bucket Cylinder	1	83	36F-6	ADAPTER UNION	1
42	-----	BUCKET CYLINDER—See Index	—				

GROUP	FLANGE HALF	"O" RING	BOLT	LKWSHR	SIZE
No. Req'd Per Connection	2	1	4	4	
A	663093	25K-40110	17C-620	4E-06	1"
B	663095	25K-40128	17C-824	4E-08	1½"
C	663096	25K-40208	17C-824	4E-08	2"

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



86A.1

PM 1669

HYDRAULIC SYSTEM – BUCKET AND BOOM
For Serial: Cummins-3DC101 and after. G.M.-3DG101 and after.

TS-5124-P

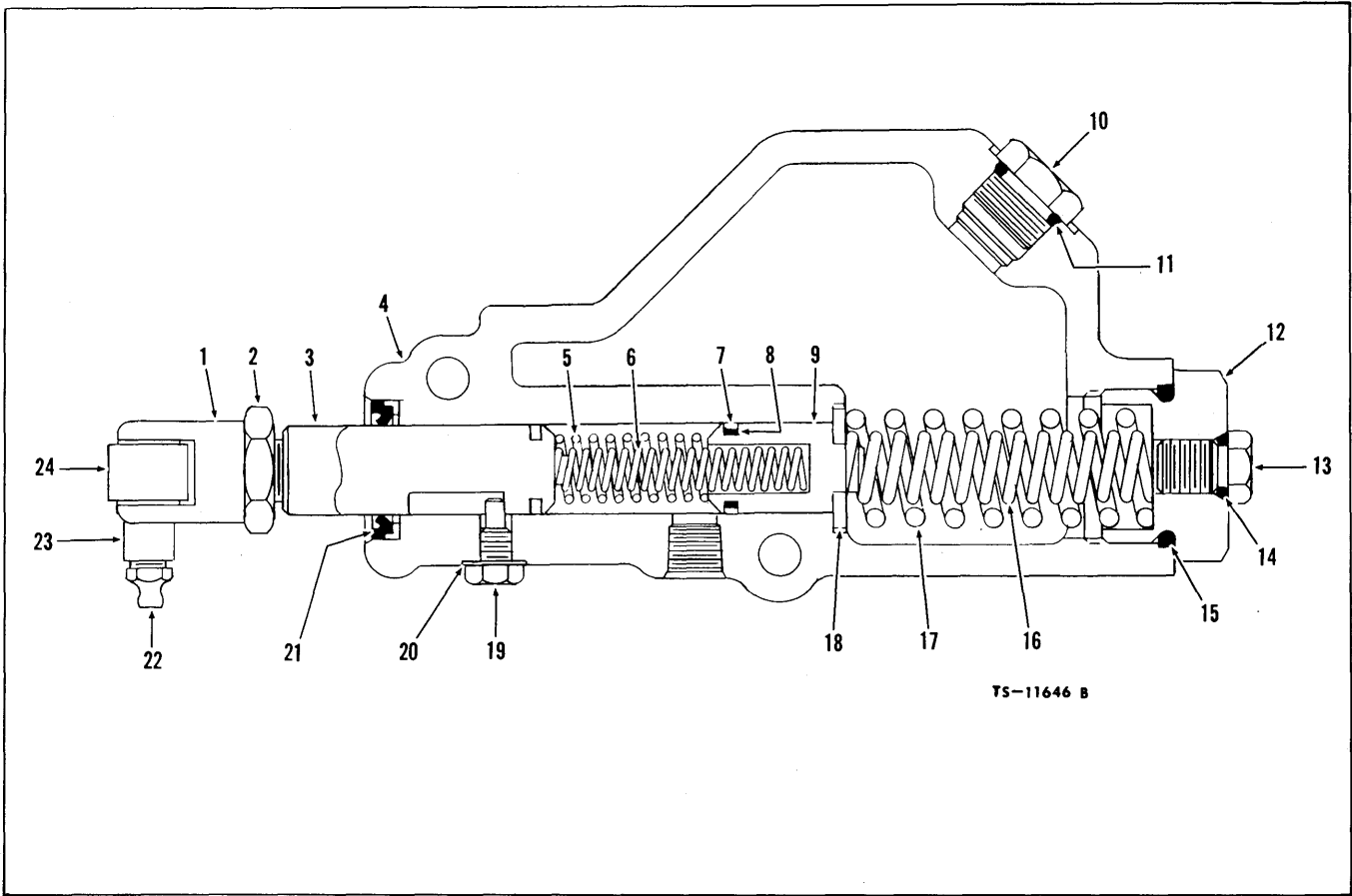
HYDRAULIC SYSTEM — BUCKET AND BOOM
For Serial: Cummins — 3DC101 and after
G.M. — 3DG101 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	541179	HOSE, Pump to Pressure Line	1	36	589923	HOSE, Crosstube to Bucket Cylinder	1
2	-----	FLANGE HALF — See Group "B" Below	-----	37	18D-06	NUT, L.H. Crosstube to Bucket Cyl.	2
3	-----	PUMP, Bucket & Boom — See Index	-----	38	-----	BUCKET CYLINDER — See Index	-----
4	-----	FLANGE HALF — See Group "C" Below	-----	39	589922	HOSE, Crosstube to Bucket Cylinder	1
5	543918	STEM, Suction Line	1	40	589923	HOSE, Crosstube to Bucket Cylinder	1
6	540108	CLAMP, Hose	1	41	-----	BUCKET CYLINDER — See Index	-----
7	541181	HOSE, Stem to Tube	1	42	589922	HOSE, Crosstube to Bucket Cylinder	1
8	540108	CLAMP, Hose	1	43	13F-08	PLUG, Pipe	1
9	-----	TUBE, Suction	-----	44	540106	CLAMP, Hose	1
9A	543926	For Cummins Powered Machines	1	45	533478	HOSE, Tube to Reservoir	1
9B	543927	For G.M. Powered Machines	1	46	589926	*CROSSTUBE, R.H.	1
10	540104	CLAMP, Hose	1	47	18C-620	BOLT, L.H. Tube to Frame	1
11	556415	HOSE, Tube to Tube	1	48	18D-06	NUT, L.H. Tube to Frame	1
12	540104	CLAMP, Hose	1	49	18D-06	NUT, Crosstube to Frame	2
13	540611	TUBE, Main Suction	1	50	18C-624	BOLT, Crosstube to Frame	2
14	543300	HOSE, Crosstube to Valve	1	51	540106	CLAMP, Hose	1
15	543298	HOSE, Crosstube to Valve	1	52	533417	HOSE, Valve to L.H. Tube	1
16	-----	FLANGE HALF — See Group "A" Below	-----	53	-----	FLANGE HALF — See Group "A" Below	-----
17	-----	RESERVOIR, Hydraulic Oil — See Index	-----	54	18D-06	NUT, R.H. Tube to Frame	1
18	589930	CROSSTUBE, Boom Cylinder — See Note "C"	1	55	589786	HOSE, R.H. Tube to Crosstube	1
19	612390	HOSE, Crosstube to Boom Cylinder	1	56	589934	*TUBE, R.H.	1
20	549877	TUBE, Hose to Boom Cylinder	1	57	18C-620	BOLT, R.H. Tube to Frame	1
21	-----	FLANGE HALF — See Group "A" Below	-----	58	619024	WASHER, R.H. Tube to Frame	1
22	-----	BOOM CYLINDER — See Index	-----	59	18C-628	BOLT, R.H. Tube to Frame	1
23	589924	HOSE, Boom Cylinder to Crosstube ..	1	60	18D-06	NUT, R.H. Tube to Frame	1
24	540106	CLAMP, Hose	1	61	543299	HOSE, Valve to R.H. Tube	1
25	533478	HOSE, Tube to Tube	1	62	-----	FLANGE HALF — See Group "A" Below	-----
26	540106	CLAMP, Hose	1	63	18C-622	BOLT, Crosstube to Frame	2
27	540614	TUBE, Suction (Inc. 43)	1	64	619021	WASHER, Crosstube to Frame	2
28	18D-06	NUT, L.H. Tube to Frame	1	65	589924	HOSE, Crosstube to Boom Cylinder ..	1
29	589786	HOSE, L.H. Tube to Crosstube	1	66	-----	BOOM CYLINDER — See Index	-----
30	589937	TUBE, L.H.	1	67	-----	FLANGE HALF — See Group "A" Below	-----
31	18C-628	BOLT, L.H. Tube to Frame	1	68	549876	TUBE, Hose to Boom Cylinder	1
31A	619024	WASHER, L.H. Tube to Frame	1	69	612390	HOSE, Crosstube to Cylinder	1
32	537477	U-BOLT, Crosstube to Frame	2	70	589925	HOSE, Valve to Pump	1
33	18D-06	NUT, Crosstube to Frame	4	71	18D-06	NUT, Crosstube to Frame	2
34	589941	***CROSSTUBE, L.H.	1	72	18C-632	BOLT, Tube to Frame	2
35	18C-624	BOLT, L.H. Crosstube to Frame	2	73	18D-06	NUT, Tube to Frame	2
				74	-----	TUBE, Pump to Valve Pressure	
				74A	589951	For Cummins Powered Machines — See Note "A"	1
				74B	589949	For G.M. Powered Machines — See Note "B"	1

*NOTE: For replacement use 542143 plus 1—36F-5 Adapter Union.
**NOTE: For replacement use 542119 plus 2—36F-5 Adapter Unions.
***NOTE: For replacement use 542120 plus 2—36F-5 Adapter Unions.
NOTE "A": For replacement use 543930 Tube plus 2—36F-6 Adapters.
NOTE "B": For replacement use 543928 Tube plus 2—36F-6 Adapters.
NOTE "C": For replacement use 536350 Crosspipe plus 4—36F-5 Adapters.

GROUP	FLANGE HALF	"O" RING	BOLT	LKWSHR	SIZE
No. Req'd. Per Connection	2	1	4	4	
A	663093	25K-40110	17C-620	4E-06	1"
B	663095	25K-40128	17C-824	4E-08	1½"
C	663096	25K-40208	18C-624	4E-08	2"

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

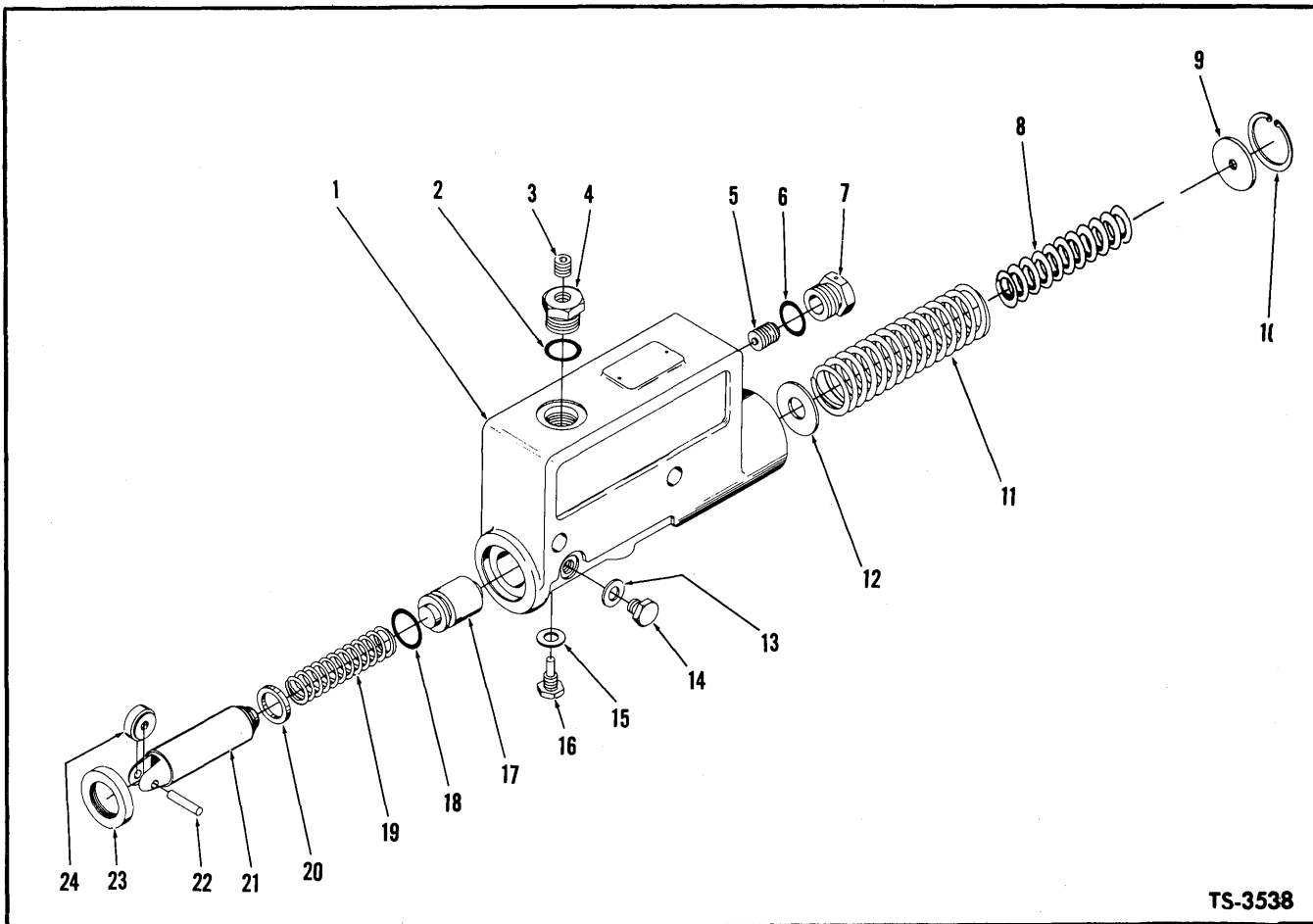


TS-11646 B

BUCKET LEVELER MASTER CYLINDER ASSEMBLY

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
A	1520300	MASTER CYLINDER ASSY (Inc. 1 thru 26)	1	12	945873	CAP	1
1	949540	YOKE	1	13	945874	PLUG	1
2	949541	NUT	1	14	91F-4	O-RING	1
3	949542	PLUNGER	1	15	25K-40108	O-RING	1
4	----	§ HOUSING, Master Cylinder—See "A"	—	16	945437	SPRING, Inner	1
5	946468	SPRING, Outer	1	17	945436	SPRING, Outer	1
6	949467	SPRING, Inner	1	18	945435	WASHER	1
7	945431	RING, Teflon Back-up	1	19	945006	SCREW, Lock	1
8	25K-20020	O-RING	1	20	865149	WASHER	1
9	945433	ACCUMULATOR PLUG	1	21	945011	SEAL	1
10	945872	CAP	1	22	10H-2	FITTING, Grease	1
11	91F-6	O-RING	1	23	946911	PIN	1
				24	667213	BEARING	1

§Not Sold Separately



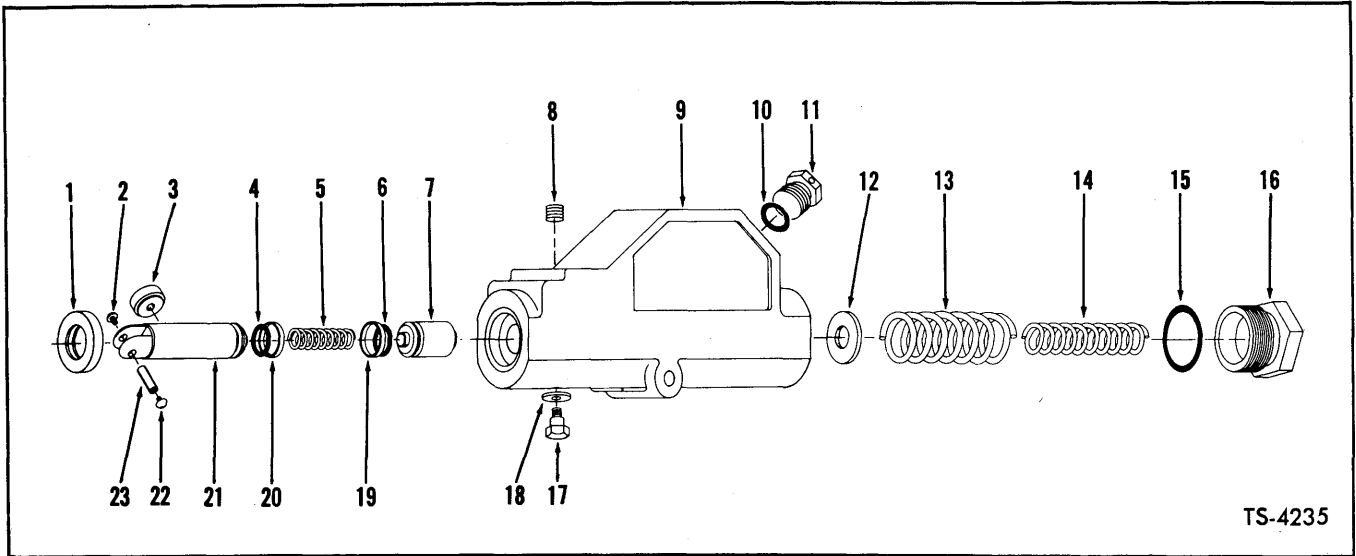
TS-3538

MASTER CYLINDER — BUCKET LEVELING
For Serial: Cummins — 2DC101 thru 2DC146
G.M. — 2DG101 thru 3DG114
Wauk. — 2DA101 and after,
C3DA9-1 thru C3DA9-13

Item No.	Part No.	Description	No. Req'd.
A	545268	* CYLINDER ASSY (Inc. 1 thru 23)	1
1	—	§ HOUSING, Cylinder - See "A"	1
2	91F-6	"O" RING, Cap	1
3	16F-02	PLUG, Cap	1
4	945000	CAP	1
5	945001	VALVE, Relief	1
6	91F-6	"O" RING, Cap	1
7	945002	CAP, Relief Valve	1
8	945238	SPRING, Inner	1
9	945003	PLUG, Spring Retaining	1
10	868744	RING, Plug Retaining	1
11	945004	SPRING, Outer	1
12	664426	WASHER, Spring	1
13	865149	WASHER	1
14	945005	BOLT	1
15	865149	WASHER	1
16	945006	LOCK SCREW	1
17	945012	PLUG	1
18	25K-30022	"O" RING	1
19	945007	SPRING	1
20	945008	"V" SEAL	1
21	945010	PLUNGER	1
22	876878	ROLL PIN	1
23	945011	SEAL	1
24	945009	ROLLER	1

§ Not Sold Separately
 * NOTE: For replacement use 549063 plus 1—588224 Mounting Plate.

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



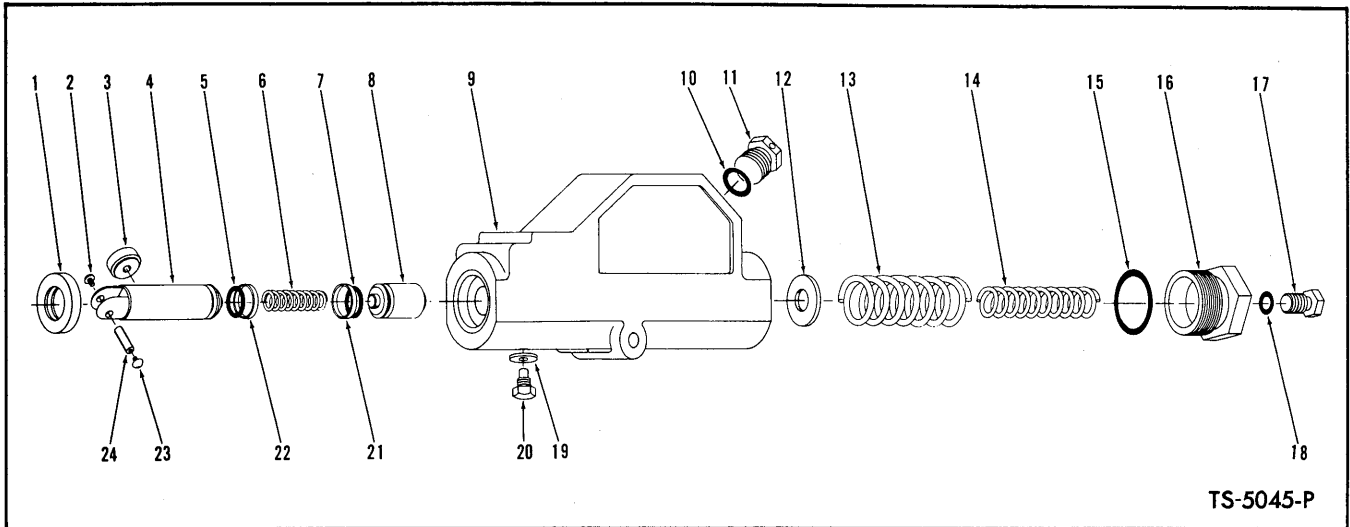
BUCKET LEVELER MASTER CYLINDER ASSEMBLY
For Serial: Cummins — 2DC147 thru 3DC999
G.M. — 3DG115 thru 4DG999
Wauk. — C3DA9-14 and after

Item No.	Part No.	Description	No. Req'd.
A	549063	* MASTER CYLINDER ASSY (Inc. 1 thru 23)	1
1	945011	SEAL	1
2	6C-403	SCREW, Drive	1
3	945009	BEARING	1
4	25K-20020	"O" RING	1
5	945432	SPRING, Plunger	1
6	25K-20020	"O" RING	1
7	945433	PLUG	1
8	16F-02	PLUG	1
9	-----	§ HOUSING, Master Cylinder	1
10	91F-6	"O" RING	1
11	945434	CAP	1
12	945435	SPACER	1
13	945436	SPRING	1
14	945437	SPRING	1
15	25K-40108	"O" RING	1
16	945873	CAP	1
17	945006	SCREW, Lock	1
18	865149	WASHER	1
19	945431	RING, Teflon	1
20	945431	RING, Teflon	1
21	-----	§ PLUNGER, Operating (Order Item A)	1
22	6C-403	SCREW, Drive	1
23	876878	PIN, Roll	1

§ Not Sold Separately

* NOTE: For replacement use 1520300 Cylinder plus 1—566732 Check Valve 1—1522273 Tube, 1—866179 Fitting, 2—31F-2 Adapter, 1—550301 Spring, 1—1522536 drawing, 1—1524040 drawing.

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



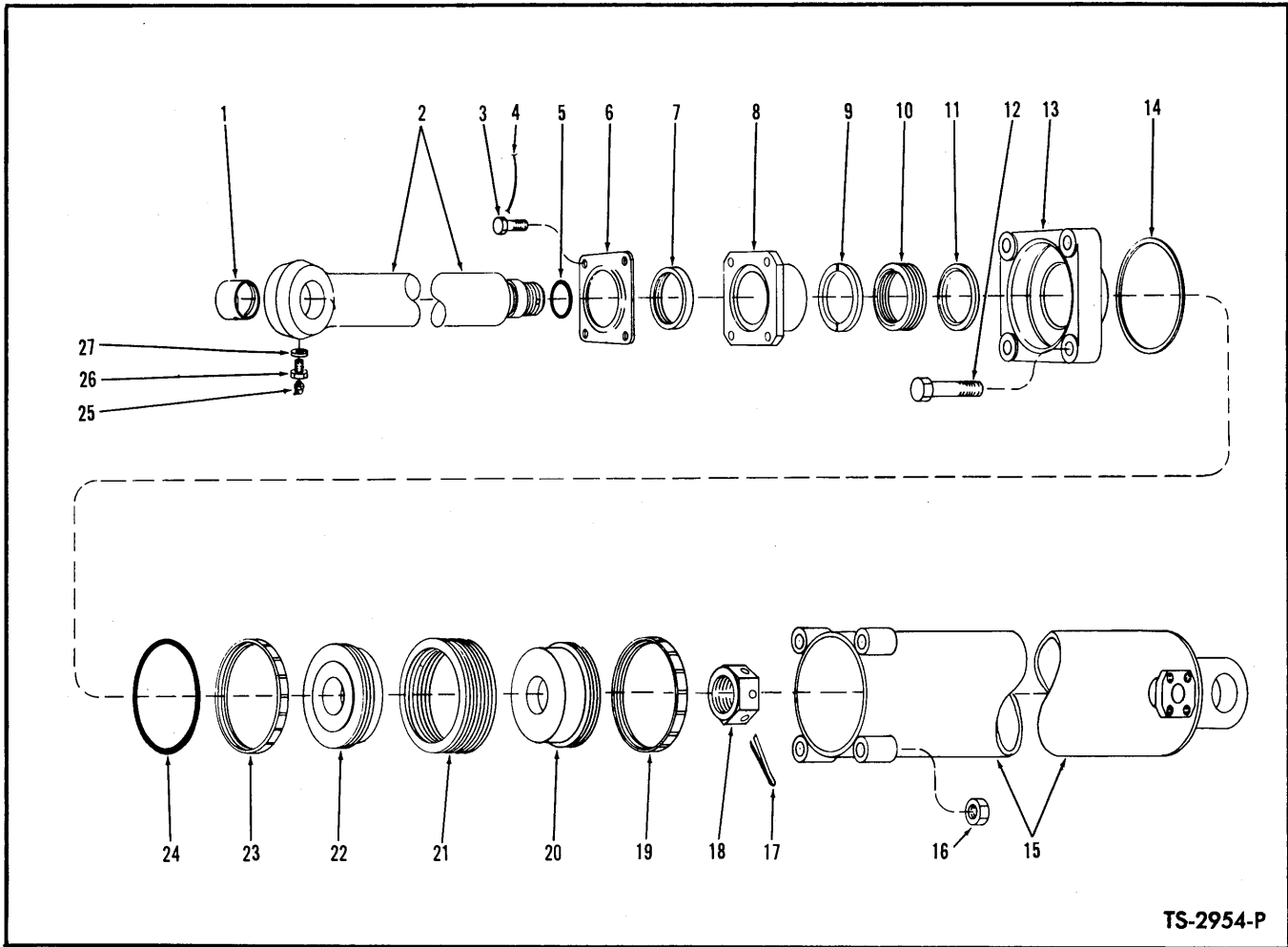
BUCKET LEVELER MASTER CYLINDER ASSEMBLY
For Serial: Cummins — 4DC101 and after
G.M. — 5DG101 and after

Item No.	Part No.	Description	No. Req'd.
A	567842	* MASTER CYLINDER ASSY (Inc. 1 thru 24)	1
1	945011	SEAL	1
2	6C-403	SCREW, Drive	1
3	945009	BEARING	1
4	-----	§PLUNGER, Operating — See Item A	1
5	25K-20020	"O" RING	1
6	945432	SPRING	1
7	25K-20020	"O" RING	1
8	945433	ACCUMULATOR	1
9	-----	§HOUSING, Master Cylinder — See Item A	1
10	91F-6	"O" RING	1
11	945872	CAP	1
12	945435	WASHER	1
13	945436	SPRING	1
14	945437	SPRING	1
15	25K-40108	"O" RING	1
16	945873	CAP	1
17	945874	PLUG	1
18	91F-4	"O" RING	1
19	865149	WASHER	1
20	945006	SCREW, Lock	1
21	945431	RING, Teflon Back-up	1
22	945431	RING, Teflon Back-up	1
23	6C-403	SCREW, Drive	1
24	876878	PIN, Roll	1

§Not Sold Separately

*NOTE: For replacement use 1520300 Cylinder plus 1—566732 Check Valve 1—1522273 Tube, 1—866179 Fitting, 2—31F-2 Adapter, 1—550301 Spring, 1—1522536 drawing, 1—1524040 drawing.

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



TS-2954-P

BOOM CYLINDER ASSEMBLY

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

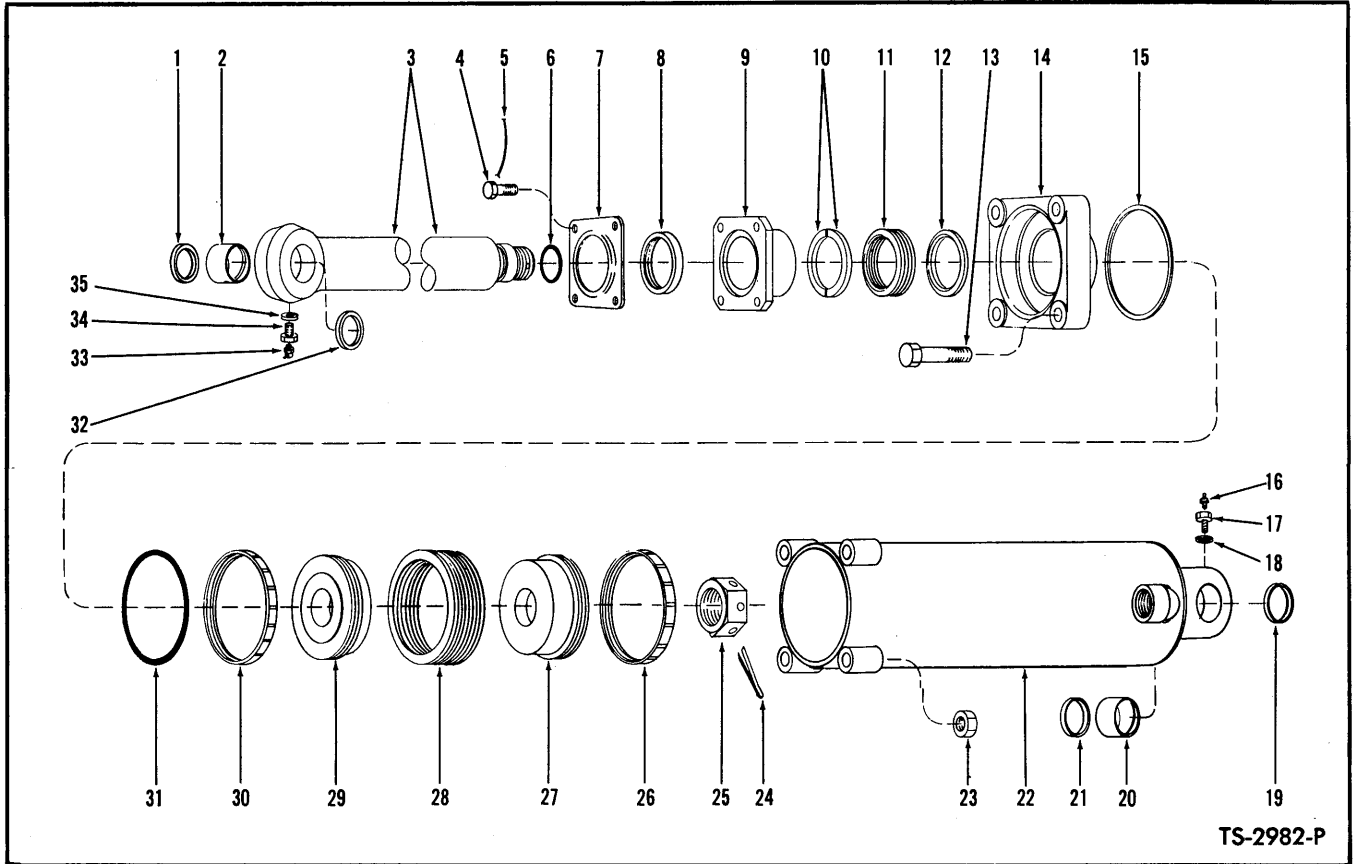
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	588192	CYLINDER ASSY (Inc. 1 thru 27)	1	14	73K-433	RING, "O" Ring Backup	1
1	537882	BUSHING, Piston Rod	1	15	588193	*CYLINDER	1
2	537454	ROD ASSY, Piston (Inc. 1, 26, 27)	1	16	18D-10	NUT, Cylinder Cap	4
3	3C-818	BOLT, Seal Retainer	4	17	1F-856	COTTER, Piston Rod Nut	1
4	28H-16310	LOCKWIRE, Seal Retainer	2	18	551606	NUT, Piston Rod	1
5	25K-60120	"O" RING, Piston Rod	1	19	550261	RING, Piston Wear	1
6	522617	RETAINER, Seal	1	20	541748	PISTON, Bottom Half	1
7	550450	SEAL, Piston Rod	1	21	541769	PACKING SET, Piston	1
8	527812	GLAND, Packing	1	22	541749	PISTON, Top Half	1
9	527497	ADAPTER, Female Chevron Packing	2	23	550261	RING, Piston Wear	1
10	538154	PACKING SET, Cylinder Cap	1	24	25K-80516	"O" RING, Cylinder Cap	1
11	527496	ADAPTER, Male Chevron Packing	2	25	12H-25	FITTING, Piston Rod Grease	1
12	18C-1072	BOLT, Cylinder Cap—See Note "A"	4	26	532118	BOLT, Bushing Retaining	1
12A	18C-1088	BOLT, Cylinder Cap—See Note "B"	4	27	7E-08	LKWSHR, Bushing Retaining Bolt	1
13	945115	CAP, Cylinder	1				

*NOTE: When replacing item 15 on machine S/N Cummins 2DC101 thru 2DC111, G.M. 2DG101 thru 2DG111, WAUK 2DA101 thru 2DA125, 4—18C-1088 Bolts (Item 12A) must also be used.

NOTE "A": For Serial Cummins 2DC101 thru 2DC111, G.M. 2DG101 thru 2DG111, WAUK 2DA101 thru 2DA125.

NOTE "B": For Serial Cummins 2DC112 and after, G.M. 2DG112 and after, WAUK 2DA126 and after.

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



TS-2982-P

BUCKET CYLINDER ASSEMBLY

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

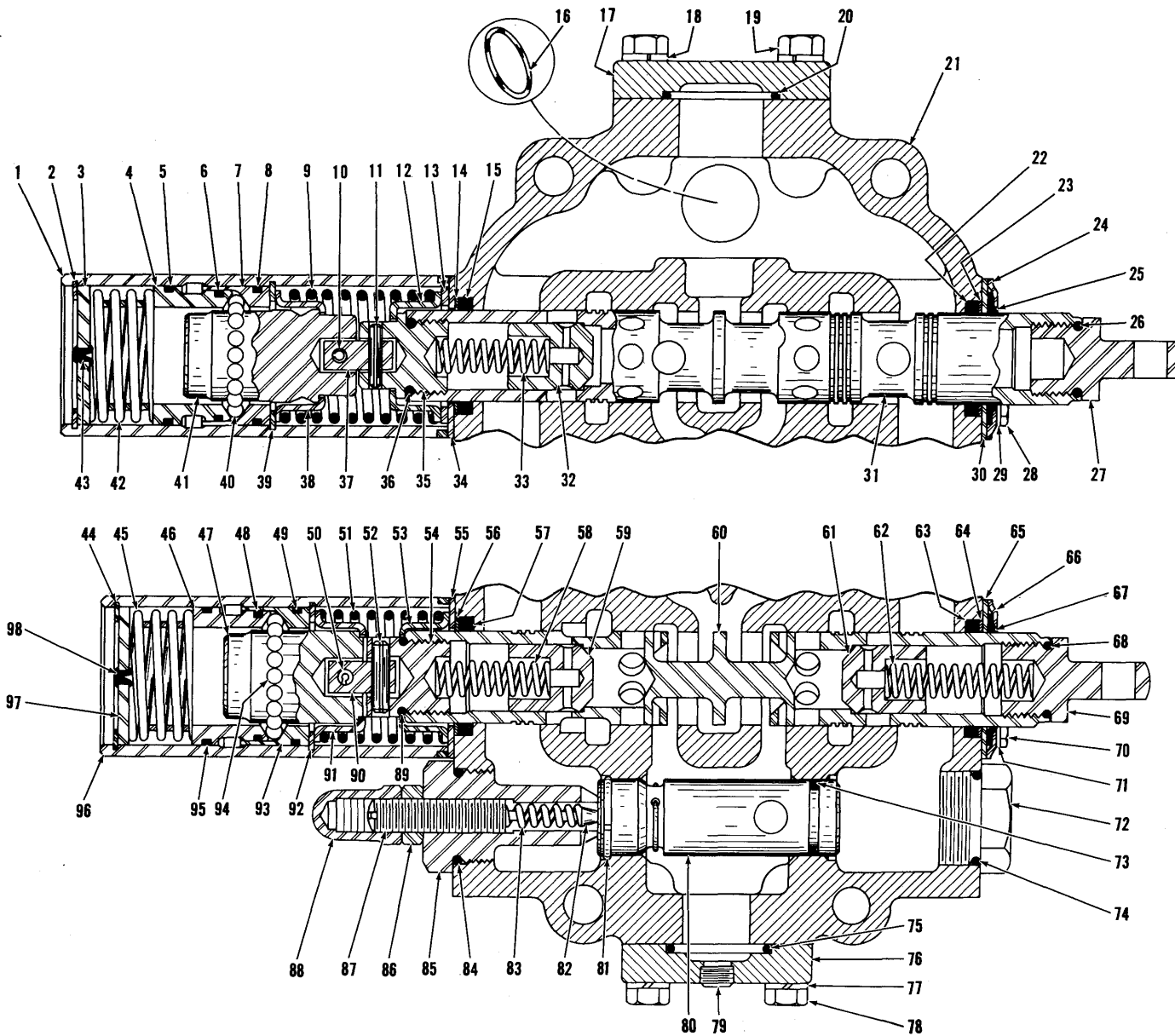
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	588194	CYLINDER ASSY (Inc. 1 thru 35)	1	18	7E-08	LKWSHR, Bushing Retaining Bolt	1
1	532378	SEAL, Piston Rod Dust	1	19	532378	SEAL, Cylinder Dust	1
2	532391	BUSHING, Piston Rod	1	20	532391	BUSHING, Cylinder	1
3	537460	ROD ASSY, Piston (Inc. 2, 34, 35)	1	21	532378	SEAL, Cylinder Dust	1
4	3C-818	BOLT, Seal Retainer	4	22	537457	CYLINDER (Inc. 17, 18, 20)	1
5	28H-16310	LOCKWIRE	2	23	18D-10	NUT, Cylinder Cap	4
6	25K-60120	"O" RING, Piston Rod	1	24	1F-856	COTTER, Piston Rod Nut	1
7	522617	RETAINER, Seal	1	25	551606	NUT, Piston Rod	1
8	550450	SEAL, Piston Rod	1	26	550261	RING, Piston Wear	1
9	527812	GLAND, Packing	1	27	541748	PISTON, Bottom Half	1
10	527497	ADAPTER, Female Chevron Packing	2	28	541769	PACKING SET, Piston	1
11	538154	PACKING SET, Cylinder Cap	1	29	541749	PISTON, Top Half	1
12	527496	ADAPTER, Male Chevron Packing	2	30	550261	RING, Piston Wear	1
13	18C-1072	BOLT, Cylinder Cap—See Note "A"	4	31	25K-80516	"O" RING, Piston	1
13A	18C-1088	BOLT, Cylinder Cap—See Note "B"	4	32	532378	SEAL, Piston Rod Dust	1
14	945115	CAP, Cylinder	1	33	10H-35	FITTING, Piston Rod Grease	1
15	73K-433	RING, Back-Up	1	34	532118	BOLT, Bushing Retaining	1
16	10H-35	FITTING, Cylinder Grease	1	35	7E-08	LKWSHR, Bushing Retaining Bolt	1
17	532118	BOLT, Bushing Retaining	1				

*NOTE: When replacing item 22 on machine S/N Cummins 2DC101 thru 2DC111, G.M. 2DG101 thru 2DG111, WAUK 2DA101 thru 2DA125, 4-18C-1088 Bolts (Item 13A) must also be used.

NOTE "A": For Serial Cummins 2DC101 thru 2DC111, G.M. 2DG101 thru 2DG111, WAUK 2DA101 thru 2DA125.

NOTE "B": For Serial Cummins 2DC112 and after. G.M. 2DG112 and after. WAUK 2DA126 and after.

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



CONTROL VALVE ASSEMBLY

For Serial: Cummins-2DC101 thru 4DC110. G.M.-2DG101 thru 5DG133. Wauk. 2DA101 and after.

TS-3525-P

CONTROL VALVE ASSEMBLY
For Serial: Cummins — 2DC101 thru 4DC110
G.M. — 2DG101 thru 5DG133
Wauk. — 2DA101 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	543315	** VALVE ASSY (Inc. 1 thru 98)	1	51	945856	SPRING	1
1	945203	COVER, Detent	1	52	302602	ROLL PIN	1
2	661389	RING, Plug Retaining	1	53	888302	GUIDE, Spring	1
3	945074	PLUG, Spring Retaining	1	54	945067	CAP	1
4	945071	RETAINER, Ball	1	55	888299	PLATE, Seal Retainer	1
5	25K-30128	"O" RING, Ball Retainer	1	56	888296	RING, Back-Up	1
6	25K-30124	"O" RING, Ball Retainer	1	57	946584	SEAL, Quad Ring	1
7	945070	RETAINER, Ball	1	58	888304	SPRING, Check	1
8	25K-30128	"O" RING, Ball Retainer	1	59	941463	CHECK	1
9	888303	SPRING	1	60	—	§ PLUNGER, Operating—See "A"	1
10	654618	ROLL PIN	1	61	941463	CHECK	1
11	1302114	ROLL PIN	1	62	888304	SPRING, Check	1
12	945066	GUIDE, Spring	1	63	946584	SEAL, Quad Ring	1
13	945065	SPACER	1	64	888296	RING, Back-Up	1
14	888296	RING, Back-Up	1	65	888305	* PLATE, Seal Retainer	1
15	946584	SEAL, Quad Ring	1	66	888306	* RETAINER, Wiper	1
16	25K-40116	"O" RING	1	67	888297	* WIPER, Plunger	1
17	947864	COVER	1	68	25K-40028	"O" RING, Plunger Eye	1
18	4E-07	LKWSHR, Cover Attaching	4	69	940279	EYE, Plunger	1
19	1C-720	BOLT, Cover Attaching	4	70	1C-410	BOLT, Retainer & Cover Attaching	6
20	25K-40116	"O" RING, Cover	1	71	4E-04	LKWSHR, Retainer & Cover Attaching	6
21	—	§ HOUSING, Valve—See "A"	1	72	888294	CAP	1
22	946584	SEAL, Quad Ring	1	73	945869	"O" RING	1
23	888296	RING, Back-Up	1	74	25K-40104	"O" RING, Cap	1
24	888306	* RETAINER, Wiper	1	75	25K-40100	"O" RING, Cover	1
25	888297	* WIPER, Plunger	1	76	945201	COVER	1
26	25K-40028	"O" RING, Plunger Eye	1	77	4E-06	LKWSHR, Cover	4
27	940279	EYE, Plunger	1	78	1C-620	BOLT, Cover	4
28	1C-410	BOLT, Retainer & Cover Attaching	6	79	16F-04	PLUG, Cover	1
29	4E-04	LKWSHR, Retainer & Cover Attaching	6	80	945868	VALVE, ASSY, Relief (Inc. 73, 81)	1
30	888305	* RETAINER, Wiper	1	81	945081	RING, Plunger Retaining	1
31	—	§ PLUNGER, Operating—See "A"	1	82	886739	POPPET, Relief	1
32	941463	CHECK, Plunger	1	83	886753	SPRING, Relief	1
33	888304	SPRING, Plunger Check	1	84	25K-40104	"O" RING, Adjusting Cap	1
34	888299	PLATE, Seal Retainer	1	85	945870	CAP, Adjusting	1
35	945200	CAP	1	86	8D-08	NUT, Jam	1
36	25K-40028	"O" RING, Cap	1	87	944855	SCREW, Adjusting	1
37	945069	PIN	1	88	944853	NUT, Acorn	1
38	888302	GUIDE, Spring	1	89	25K-40028	"O" RING, Cap	1
39	1302111	RING, Guide Retaining	1	90	944148	PIN	1
40	10J-08	BALL	17	91	888302	GUIDE, Spring	1
41	945072	CAP, Detent	1	92	1302111	RING, Guide Retaining	1
42	945073	SPRING	1	93	945070	RETAINER, Ball	1
43	886763	PLUG, Bleeder	1	94	10J-08	BALL	17
44	661389	RING, Plug Retaining	1	95	25K-30128	"O" RING, Ball Retainer	1
45	945073	SPRING	1	96	946457	COVER, Detent	1
46	945071	RETAINER, Ball	1	97	945074	PLUG, Spring Retaining	1
47	945077	CAP, Detent	1	98	886763	PLUG, Bleeder	1
48	25K-30124	"O" RING, Ball Retainer	1	99	18C-864	† BOLT, Valve to Reservoir	3
49	25K-30128	"O" RING, Ball Retainer	1	100	4E-08	† LKWSHR, Valve to Reservoir	3
50	660178	ROLL PIN	1				

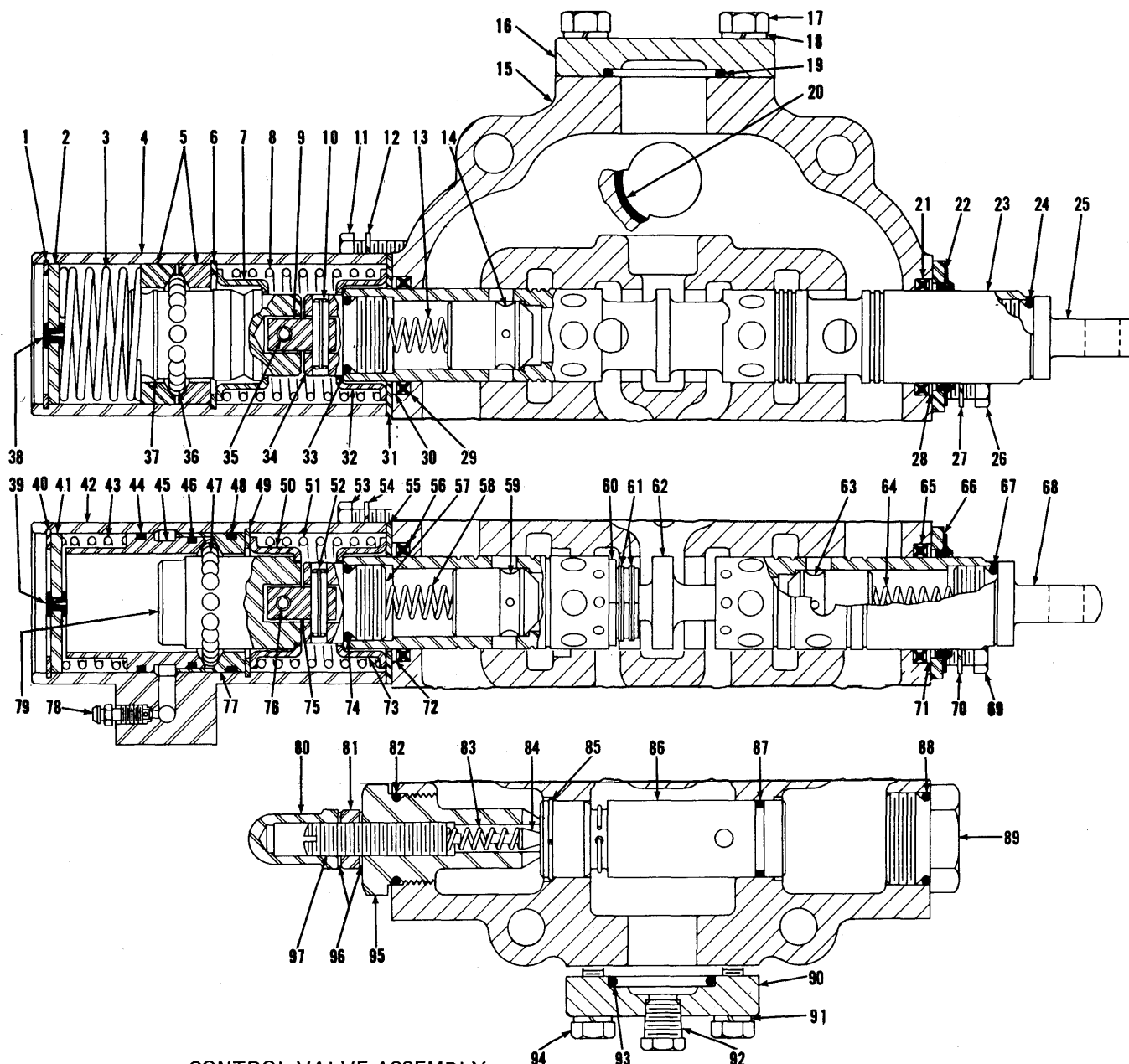
§ Not Sold Separately

† Not Illustrated

* NOTE: For replacement use 945864 Wiper (one piece)

** NOTE: For replacement use 947460 Kit, 947460 Kit Inc. 1—1510472 Valve Assy, 3—18C-840 Bolt, 9—619027 Washer, 1—Form 002854 Installation Instructions.

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



92A.1

PM 1669

CONTROL VALVE ASSEMBLY

For Serial: Cummins-2DC101 thru 4DC110. G.M.-2DG101 thru 5DG133. Wauk.-2DA101 and after.

TS-4936-P

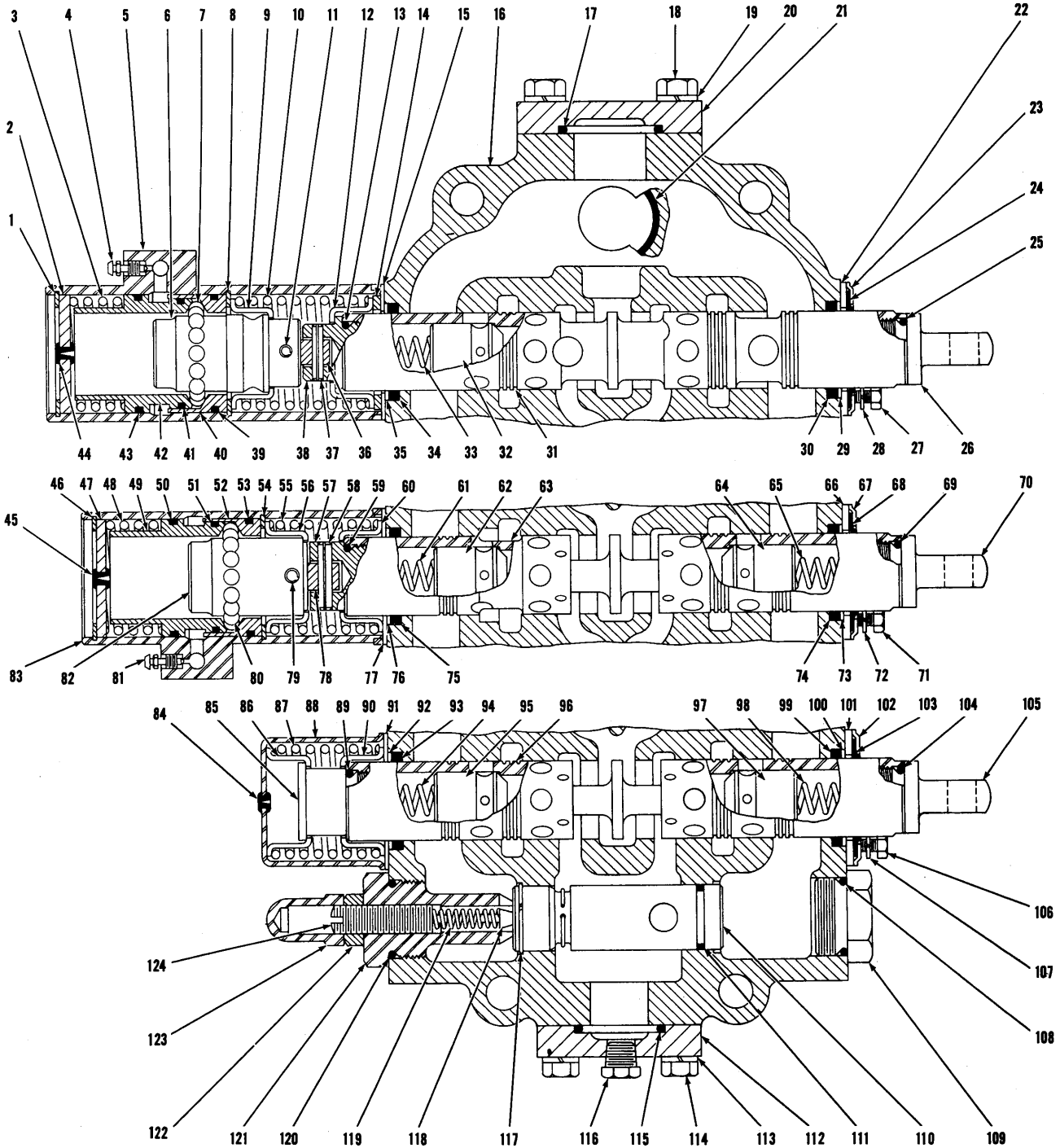
CONTROL VALVE ASSEMBLY
For Serial: Cummins — 4DC111 and after
G.M. — 5DG134 and after

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	562257	* VALVE ASSY, Control (Inc. 1 thru 97)	1	49	1302111	RING, Retaining	1
1	661389	RING, Retaining	1	50	888302	GUIDE, Spring	1
2	945074	PLUG, Detent	1	51	945856	SPRING	1
3	945863	SPRING, Detent	1	52	302602	ROLL PIN	1
4	945257	COVER, Detent	1	53	1C-416	BOLT, Cover to Housing	4
5	945258	RETAINER, Ball	2	54	4E-04	LKWSHR, Cover to Housing	4
6	1302111	RING, Retaining	1	55	888299	PLATE, Retaining	1
7	888302	GUIDE, Spring	1	56	888947	SEAL, Plunger Oil	1
8	888303	SPRING	1	57	945067	CAP, Plunger	1
9	944148	PIN	1	58	945866	SPRING, Check	1
10	302602	ROLL PIN	1	59	941463	CHECK	1
11	1C-416	BOLT, Cover to Housing	4	60	945867	CHECK	2
12	4E-04	LKWSHR, Cover to Housing	4	61	1307317	RING, Retaining	4
13	940166	SPRING, Check	1	62	-----	§ PLUNGER, Operating — See "A"	1
14	941463	CHECK	1	63	941463	CHECK	1
15	-----	§ HOUSING, Valve — See "A"	1	64	888304	SPRING, Check	1
16	947864	COVER	1	65	888947	SEAL, Plunger Oil	1
17	1C-412	BOLT, Cover to Housing	4	66	945864	WIPER, Plunger	1
18	4E-07	LKWSHR, Cover to Housing	4	67	25K-40028	O-RING, Plunger Eye	1
19	25K-40116	O-RING, Cover	1	68	940279	EYE, Plunger	1
20	25K-40116	O-RING	1	69	1C-410	BOLT, Wiper to Housing	2
21	888947	SEAL, Plunger Oil	1	70	4E-07	LKWSHR, Wiper to Housing	2
22	945864	WIPER, Plunger	1	71	888296	RING, Back-Up	1
23	-----	§ PLUNGER, Operating — See "A"	1	72	888296	RING, Back-Up	1
24	25K-40028	O-RING, Plunger Eye	1	73	888302	GUIDE, Spring	1
25	940279	EYE, Plunger	1	74	25K-40028	O-RING, Cap	1
26	1C-410	BOLT, Wiper to Housing	2	75	944148	PIN	1
27	4E-04	LKWSHR, Wiper to Housing	2	76	302602	ROLL PIN	1
28	888296	RING, Back-Up	1	77	945070	RETAINER, Ball	1
29	888947	SEAL, Plunger	1	78	641297	SCREW, Bleeder	1
30	888296	RING, Back-Up	1	79	945077	CAP, Detent	1
31	888299	PLATE, Retaining	1	80	944853	NUT, Acorn	1
32	888302	GUIDE, Spring	1	81	8D-08	NUT, Jam	1
33	25K-40028	O-RING, Cap	1	82	25K-40104	O-RING, Adjusting Cap	1
34	945067	CAP, Plunger	1	83	886753	SPRING, Poppet	1
35	302602	ROLL PIN	1	84	886739	POPPET	1
36	10J-08	BALL	17	85	945081	RING, Retaining	1
37	945865	CAP, Detent	1	86	945868	VALVE ASSY, Relief (Inc. 85, 87)	1
38	886763	PLUG, Bleeder	1	87	945869	O-RING, Relief Valve	1
39	886763	PLUG, Bleeder	1	88	25K-40104	O-RING, Cap	1
40	661389	RING, Retaining	1	89	888294	CAP	1
41	945074	PLUG, Detent	1	90	945201	COVER	1
42	946457	COVER, Detent	1	91	947865	LKWSHR, Cover to Housing	4
43	945073	SPRING, Detent	1	92	40K-04	PLUG	1
44	945079	O-RING, Ball Retainer	1	93	25K-40110	O-RING, Cover	1
45	945071	RETAINER, Ball	1	94	1C-620	BOLT, Cover to Housing	4
46	945080	O-RING, Ball Retainer	1	95	945870	CAP, Adjusting	1
47	10J-08	BALL	17	96	613750	WASHER	2
48	945079	O-RING, Ball Retainer	1	97	944855	SCREW, Adjusting	1

§Not Sold Separately

*NOTE: For replacement use 947460 Kit Inc. 1—1510472 Valve Assy 3—18C-840 Bolt, 9—619027 Washer, 1—Form 002854 Installation Instructions.

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



3 SPOOL VALVE

TS-4234

3 SPOOL VALVE

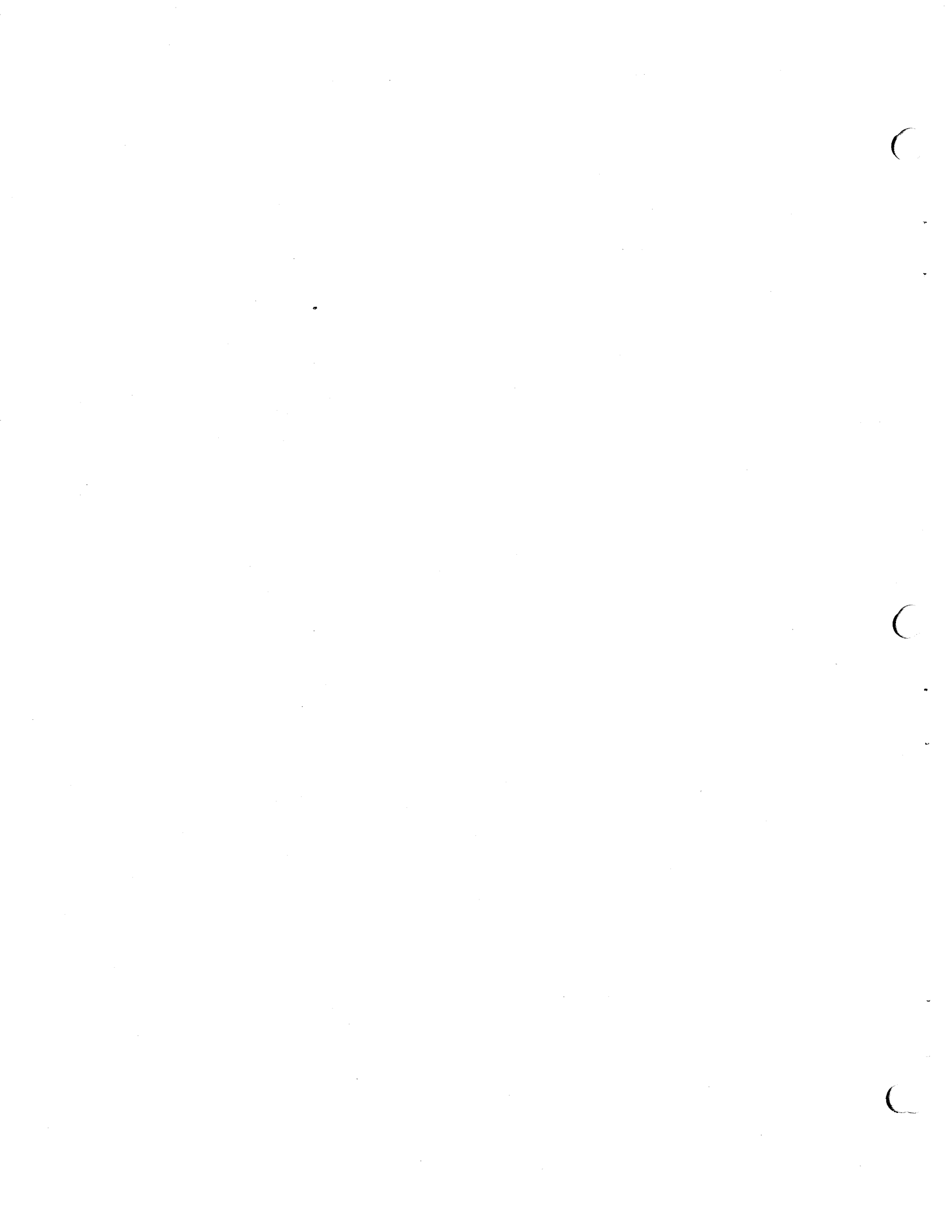
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	548100	**VALVE ASSY (Inc. 1 thru 124)	1	43	945079	"O" RING	1
1	661389	RING, Retaining	1	44	886763	PLUG, Bleeder	1
2	945074	PLUG	1	45	886763	PLUG, Bleeder	1
3	945073	SPRING	1	46	661389	RING, Retainer	1
4	641297	SCREW, Bleeder	1	47	945074	PLUG	1
5	945203	COVER, Detent	1	48	945073	SPRING	1
6	945072	CAP, Detent	1	49	945071	RETAINER, Ball	1
7	10J-08	BALL, Steel	17	50	945079	"O" RING	1
8	1302111	RING, Retaining	1	51	945080	"O" RING	1
9	888302	GUIDE, Spring	1	52	945070	RETAINER, Ball	1
10	888303	SPRING	1	53	945079	"O" RING	1
11	654618	PIN, Roll	1	54	1302111	RING, Retaining	1
12	945066	GUIDE, Spring	1	55	945856	SPRING	1
13	25K-40028	"O" RING	1	56	888302	GUIDE, Spring	1
14	945065	SPACER, Spring	1	57	945067	CAP, Plunger	1
15	888299	PLATE, Retaining	1	58	302602	PIN, Roll	1
16	-----	§HOUSING, Valve (See Item A)	1	59	25K-40028	"O" RING	1
17	25K-40116	"O" RING	1	60	888302	GUIDE, Spring	1
18	1C-720	BOLT	4	61	888304	SPRING, Check	1
19	4E-07	LKWSHR	4	62	941463	CHECK, Plunger	1
20	947864	COVER	1	63	-----	§PLUNGER, Operating (See Item A)	1
21	25K-40116	"O" RING	1	64	941463	CHECK, Plunger	1
22	888305	*PLATE, Retaining	1	65	888304	SPRING, Check	1
23	888306	*PLATE, Retaining	1	66	888305	*PLATE, Retaining	1
24	888297	*WIPER, Plunger	1	67	888306	*PLATE, Retaining	1
25	25K-40028	"O" RING	1	68	888297	*WIPER, Plunger	1
26	940279	EYE, Plunger	1	69	25K-40028	"O" RING	1
27	1C-410	BOLT	6	70	940279	EYE, Plunger	1
28	4E-04	LKWSHR	6	71	1C-410	BOLT	6
29	888296	RING, Back-up	1	72	4E-04	LKWSHR	6
30	946584	RING, Quad	1	73	888296	RING, Back-up	1
31	-----	§PLUNGER, Operating (See Item A)	1	74	946584	RING, Quad	1
32	941463	CHECK, Plunger	1	75	946584	RING, Quad	1
33	940166	SPRING, Check	1	76	888296	RING, Back-up	1
34	946584	RING, Quad	1	77	888299	PLATE, Retaining	1
35	888296	RING, Back-up	1	78	944148	PIN	1
36	945069	PIN	1	79	660178	PIN, Roll	1
37	1302114	PIN, Roll	1	80	10J-08	BALL, Steel	17
38	945200	CAP, Plunger	1	81	641297	SCREW, Bleeder	1
39	945079	"O" RING	1	82	945077	CAP, Detent	1
40	945070	RETAINER, Ball	1	83	946457	COVER, Detent	1
41	945080	"O" RING	1	84	886745	PLUG, Bleeder	1
42	945071	RETAINER, Ball	1	85	945096	CAP, Plunger	1

§Not Sold Separately

*NOTE: For replacement use 945864 Wiper (one piece)

**NOTE: For replacement use 563938.

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





CONSTRUCTION MACHINERY DIVISION



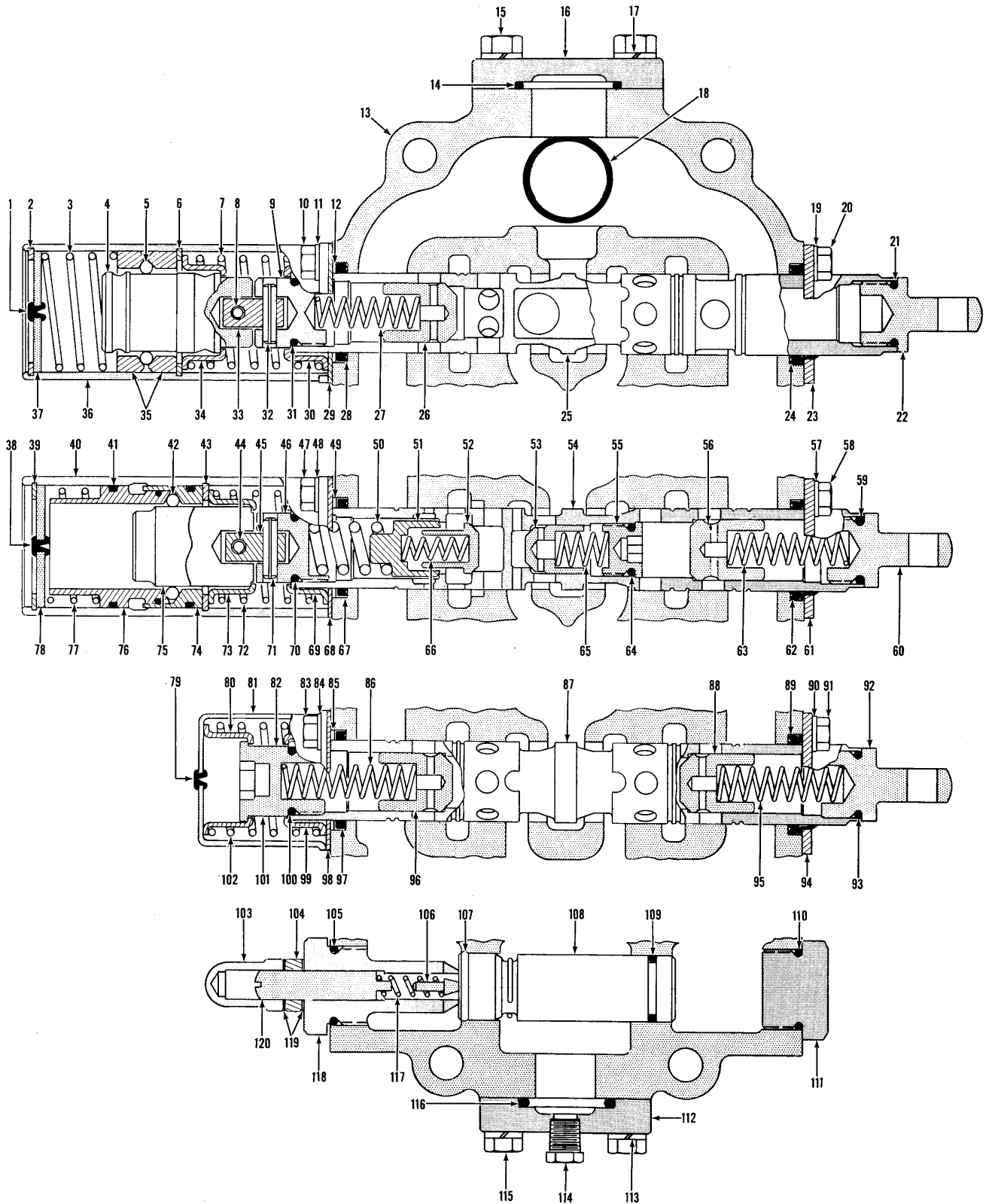
3 SPOOL VALVE (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
86	888302	GUIDE, Spring	1	106	1C-410	BOLT	6
87	945856	SPRING	1	107	4E-04	LKWSHR	6
88	888298	COVER, Spring	1	108	25K-40104	"O" RING	1
89	25K-40028	"O" RING	1	109	888294	CAP	1
90	888302	GUIDE, Spring	1	110	945868	VALVE ASSY, Relief (Inc. 111 & 117)	1
91	888299	PLATE, Retaining	1	111	945869	"O" RING	1
92	888296	RING, Back-up	1	112	947865	COVER	1
93	946584	RING, Quad	1	113	4E-06	LKWSHR	4
94	888304	SPRING, Check	1	114	1C-620	BOLT	4
95	941463	CHECK, Plunger	1	115	25K-40110	"O" RING	1
96	-----	§PLUNGER, Operating (See Item A)	1	116	40K-04	PLUG	1
97	941463	CHECK, Plunger	1	117	945081	RING, Retaining	1
98	888304	SPRING, Check	1	118	886739	POPPET, Relief	1
99	946584	RING, Quad	1	119	886753	SPRING, Relief	1
100	888296	RING, Back-up	1	120	25K-40104	"O" RING	1
101	888305	*PLATE, Retaining	1	121	945870	CAP, Adjusting	1
102	888306	*PLATE, Retaining	1	122	8D-08	NUT, Jam	1
103	888297	*WIPER, Plunger	1	123	944853	NUT, Acorn	1
104	25K-40028	"O" RING	1	124	944855	SCREW, Adjusting	1
105	940279	EYE, Plunger	1				

§Not Sold Separately

*NOTE: For replacement use 945864 Wiper (one piece)

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



CONTROL VALVE ASSEMBLY — THREE SPOOL

TS-10512

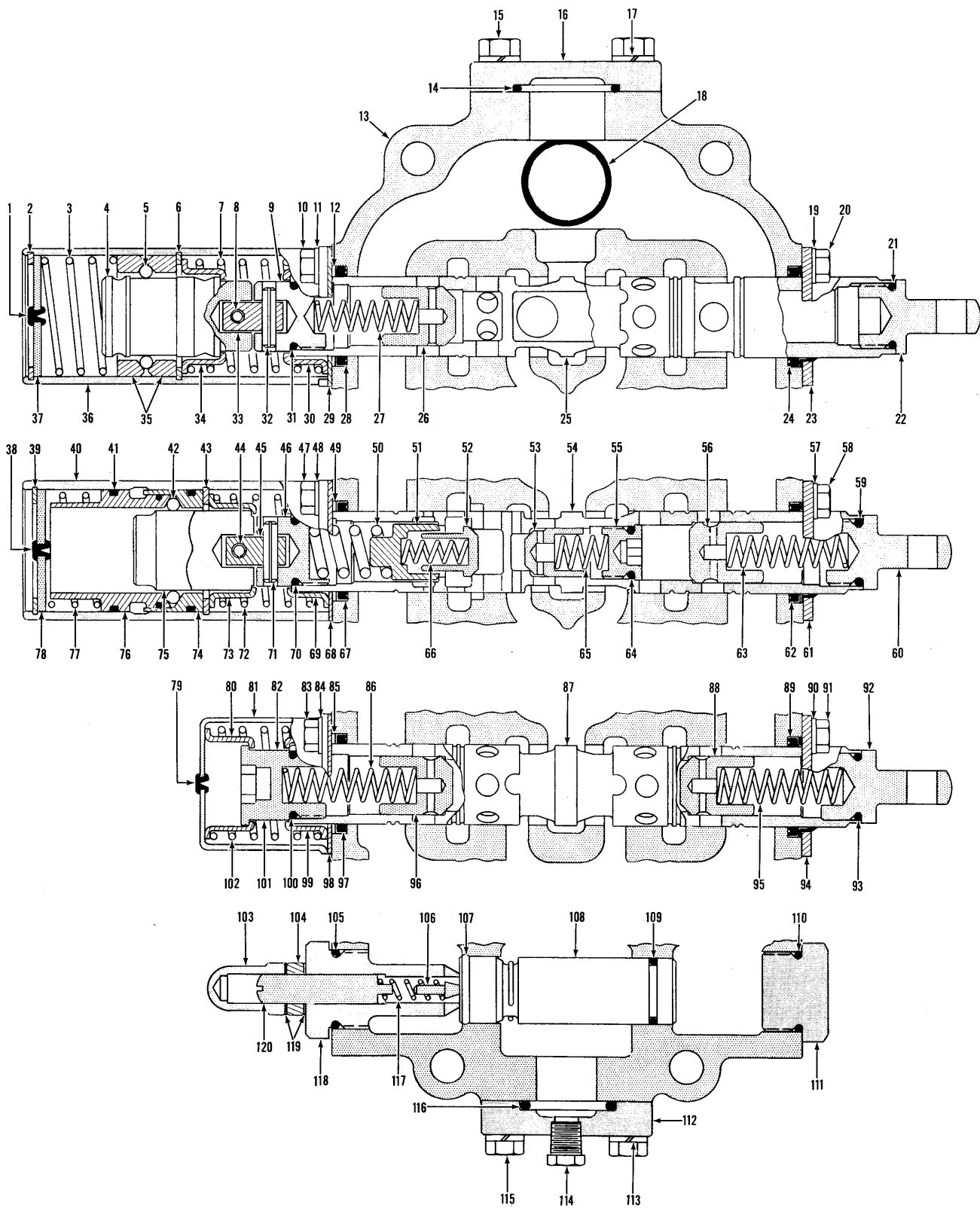
CONTROL VALVE ASSEMBLY — THREE SPOOL

Item No.	Part No.	Description	No. Req'd.
A	563938	CONTROL VALVE ASSY (Inc. 1 thru 120)	1
1	886763	PLUG, Bleeder	1
2	661389	RING, Plug Retainer	1
3	945863	SPRING, Detent	1
4	945865	CAP, Detent	1
5	10J-08	BALL, Detent	17
6	1302111	RING, Retainer	1
7	947853	SPRING, Plunger Return	1
8	302602	PIN, Roll	1
9	945067	CAP, Plunger	1
10	1C-416	BOLT, Cover to Housing	4
11	4E-04	LKWSHR, Cover to Housing	4
12	888296	RING, Back-Up	1
13	—	§HOUSING, Valve — See "A"	—
14	1306623	O-RING, Cover	1
15	1C-720	BOLT, Cover to Housing	4
16	947864	COVER, Housing	1
17	4E-07	LKWSHR, Cover to Housing	4
18	1306623	O-RING, Valve to Housing	1
19	4E-04	LKWSHR, Plate to Valve	2
20	1C-410	BOLT, Plate to Valve	2
21	25K-40028	O-RING, Plunger Eye	1
22	940279	EYE, Plunger	1
23	946637	PLATE, Wiper & Seal Retainer	1
24	946584	SEAL, Plunger Oil	1
24A	946638	†WIPER, Plunger	1
25	—	§PLUNGER, Operating — See "A"	—
26	941463	CHECK	1
27	940166	SPRING, Check	1
28	946584	SEAL, Plunger Oil	1
29	946427	PLATE, Seal Retainer	1
30	888302	RETAINER, Spring	1
31	25K-40028	O-RING, Cap	1
32	302602	PIN, Roll	1
33	944148	PIN, Plunger Connecting	1
34	888302	RETAINER, Spring	1
35	945258	RETAINER, Ball	2
36	945257	COVER, Detent	1
37	945072	PLUG, Detent Cover	1
38	886763	PLUG, Bleeder	1
39	661389	RING, Plug Retainer	1
40	946457	COVER, Detent	1
40A	641297	†SCREW, Bleeder	1
40B	16F-02	†PLUG, Pipe	1
41	945079	O-RING, Retainer Ball	1
42	10J-08	BALL, Detent	17
43	1302111	RETAINER, Ball	1
44	660178	PIN, Roll	1
45	944148	PIN, Plunger Connecting	1
46	946452	CAP, Plunger	1
47	1C-416	BOLT, Cover to Housing	4
48	4E-04	LKWSHR, Cover to Housing	4
49	888296	RING, Seal Back-Up	1
50	946433	SPRING, Check	1
51	946432	CHECK	1
52	946431	CHECK	1
53	944885	CHECK	1
54	—	§PLUNGER, Operating — See "A"	—
55	946454	CAP, Plunger	1
56	946450	CHECK	1
57	4E-04	LKWSHR, Plate to Housing	2
58	1C-410	BOLT, Plate to Housing	2

§Not Sold Separately

†Not Illustrated

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



CONTROL VALVE ASSEMBLY — THREE SPOOL

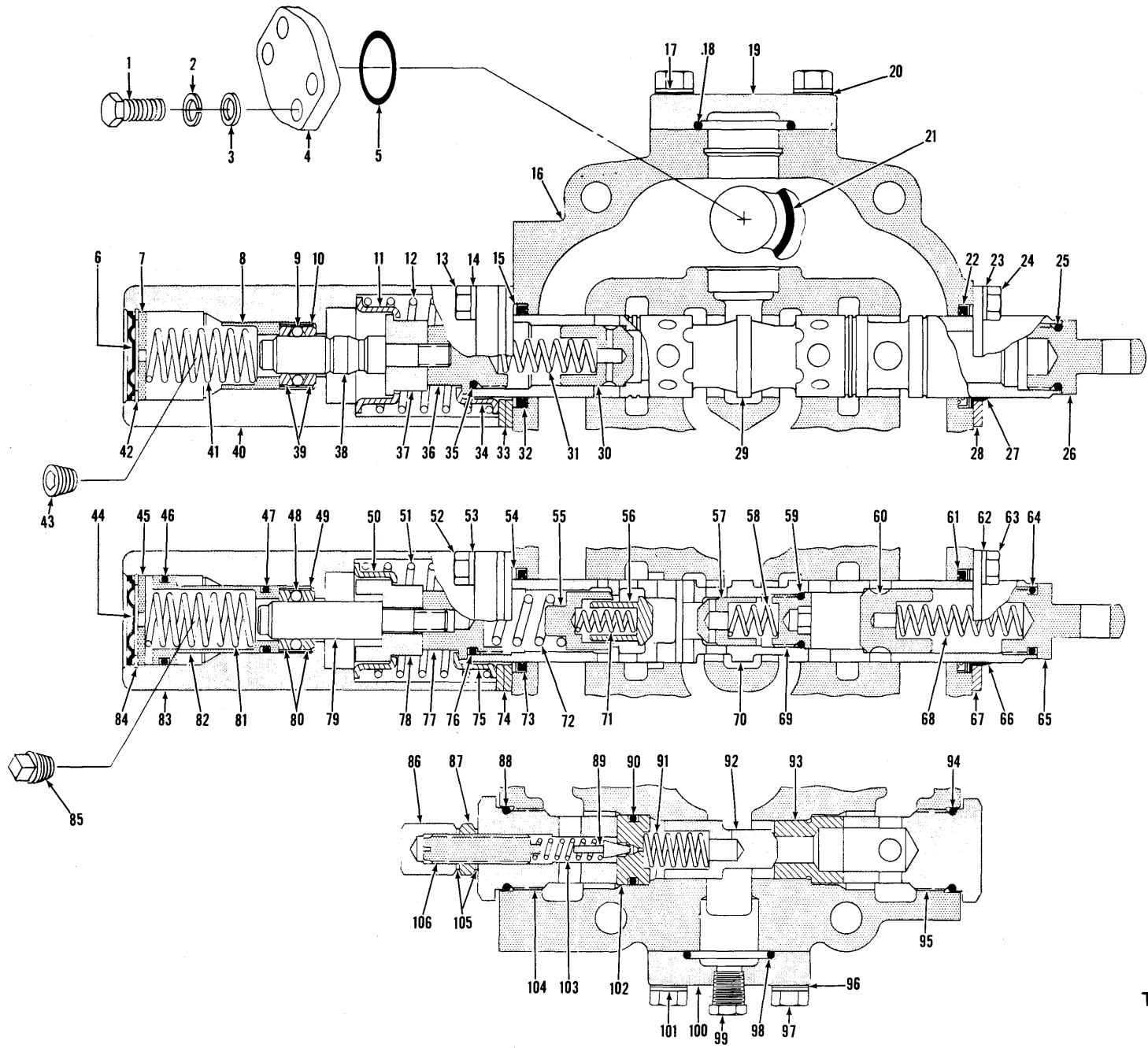
TS-10512

CONTROL VALVE ASSEMBLY — THREE SPOOL (Continued)

Item No.	Part No.	Description	No. Req'd.
59	25K-40028	O-RING, Plunger Eye	1
60	940279	EYE, Plunger	1
61	946637	PLATE, Seal Retainer	1
62	946584	SEAL, Plunger Oil	1
63	888304	SPRING, Check	1
64	25K-30022	O-RING, Cap	1
65	946455	SPRING, Check	1
66	946813	SPRING, Check	1
67	946584	SEAL, Plunger Oil	1
68	946427	PLATE, Seal Retainer	1
69	888302	RETAINER, Spring	1
70	25K-40028	O-RING, Cap	1
71	302602	PIN, Roll	1
72	945856	SPRING, Plunger Return	1
73	888302	RETAINER, Spring	1
74	945070	RETAINER, Ball	1
75	945077	CAP, Detent	1
76	945071	RETAINER, Ball	1
77	945073	SPRING, Detent	1
78	945074	PLUG, Detent Cover	1
79	886745	PLUG, Bleeder	1
80	888302	RETAINER, Spring	1
81	888298	COVER	1
82	888300	CAP, Plunger	1
83	1C-410	BOLT, Cover to Housing	4
84	4E-04	LKWSHR, Cover to Housing	4
85	888296	RING, Seal Back-Up	1
86	888304	SPRING, Check	1
87	—	PLUNGER, Operating — See "A"	—
88	941463	CHECK	1
89	946584	SEAL, Plunger Oil	1
89A	946638	†WIPER, Plunger Oil	1
90	4E-04	LKWSHR, Plate to Housing	2
91	1C-420	BOLT, Plate to Housing	2
92	940279	EYE, Plunger	1
93	25K-40028	O-RING, Plunger Eye	1
94	946637	PLATE, Seal Retainer	1
95	888304	SPRING, Check	1
96	941463	CHECK	1
97	946584	SEAL, Plunger Oil	1
98	946427	PLATE, Seal Retainer	1
99	888302	RETAINER, Spring	1
100	25K-40028	O-RING, Cap	1
101	—	CAP, Plunger — See 82	—
102	947853	SPRING, Plunger Return	1
103	944890	NUT, Acorn	1
104	8D-08	NUT, Jam	1
105	25K-40104	O-RING, Cap	1
106	886739	POPPET	1
107	945081	RING, Relief Valve Retainer	1
108	945868	RELIEF VALVE ASSY (Inc. 107 & 109)	1
109	945869	†O-RING, Relief Valve	1
110	25K-40104	O-RING, Cap	1
111	888294	CAP	1
112	947865	COVER	1
113	4E-06	LKWSHR, Cover to Housing	4
114	40K-04	PLUG, Pipe	1
115	1C-618	BOLT, Cover to Housing	4
116	1306622	O-RING, Cover to Housing	1
117	867753	SPRING, Poppet	1
118	945870	CAP, Adjusting	1
119	613750	WASHER, Jam Nut	1
120	944853	SCREW, Adjusting	1

†Not Illustrated

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



92F.1

PM 1669

T.S.11042



CONSTRUCTION MACHINERY DIVISION

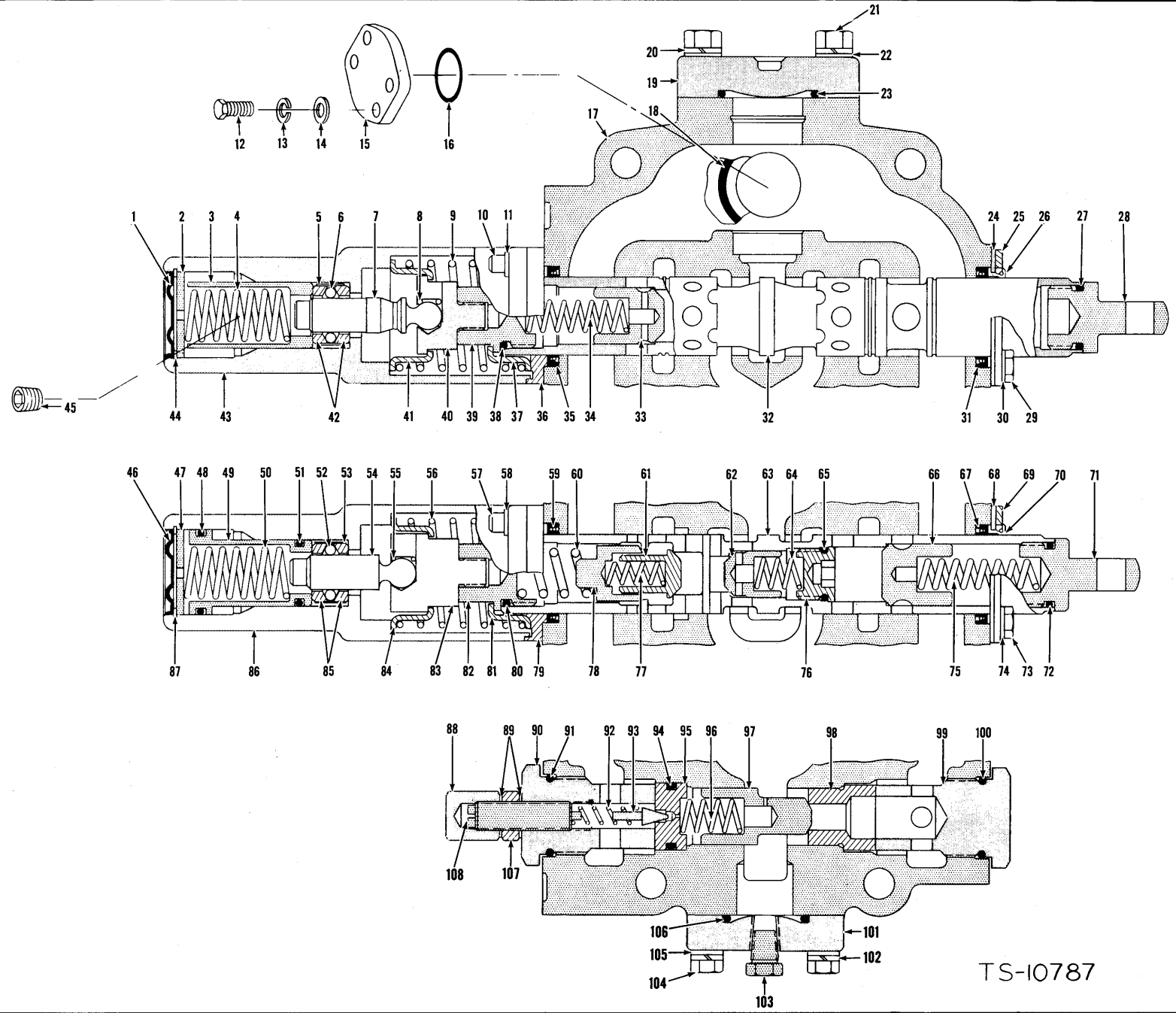


CONTROL VALVE ASSEMBLY (Service)

Item	Part No.	Description	Qty.
A	1508801	CONTROL VALVE ASSY (Inc. 1 thru 105)	1
1	1C-724	BOLT, Cover to Housing	4
2	4E-07	LKWSHR, Cover to Housing	4
3	867747	WASHER, Cover to Housing	4
4	947864	COVER, Housing	1
5	1306623	O-RING, Cover	1
6	948202	DIAPHRAGM	1
7	948202	DIAPHRAGM	1
8	947842	RETAINER, Spring	1
9	10J-06	BALL	11
10	875364	SLEEVE, Ball Retainer	1
11	888302	RETAINER, Spring	1
12	947857	SPRING, Plunger Return	1
13	1C-420	BOLT, Cover to Housing	4
14	4E-04	LKWSHR, Cover to Housing	4
15	888296	RING, Back-Up	1
16	-----	§HOUSING, Valve - See A	-
17	4E-07	LKWSHR, Cover to Housing	4
18	1306623	O-RING, Cover	1
19	947864	COVER, Housing	1
20	867747	WASHER, Cover to Housing	4
21	1306623	O-RING, Valve Mounting	1
22	946585	SEAL, Plunger Oil	1
23	4E-04	LKWSHR, Plate to Housing	2
24	1C-410	BOLT, Plate to Housing	2
25	25K-40028	O-RING, Plunger Eye	1
26	940279	EYE, Plunger	1
27	946638	WIPER, Plunger Oil	1
28	946637	PLATE, Wiper & Seal Retainer	1
29	-----	§PLUNGER, Operating - See A	-
30	941463	CHECK	1
31	940166	SPRING, Check	1
32	946584	SEAL, Plunger Oil	1
33	946427	PLATE, Seal Retaining	2
34	945066	RETAINER, Spring	1
35	25K-40028	O-RING, Cap	1
36	947858	CAP, Plunger	1
37	947862	SPACER, Detent	1
38	947859	CAP, Detent	1
39	947843	RETAINER, Ball	2
40	947847	COVER, Detent	1
41	947842	SPRING, Detent Return	1
42	666542	RING, Plug Retaining	1
43	16F-04	PLUG, Detent Housing	1
44	948202	DIAPHRAGM	1
45	947848	PLUG, Cover	1
46	25K-40106	O-RING, Piston	1
47	25K-40028	O-RING, Piston	1
48	10J-06	BALL	11
49	875364	SLEEVE, Ball Retainer	1
50	888302	RETAINER, Spring	1
51	947868	SPRING, Plunger Return	1
52	1C-420	BOLT, Cover to Housing	4

Item	Part No.	Description	Qty.
53	4E-04	LKWSHR, Cover to Housing	4
54	888296	RING, Back-Up	1
55	946432	CHECK	1
56	946431	CHECK	1
57	944885	CHECK	1
58	946455	SPRING, Check	1
59	25K-30022	O-RING, Cap	1
60	946450	CHECK	1
61	946584	SEAL, Plunger Oil	1
62	4E-04	LKWSHR, Plate to Housing	2
63	1C-410	BOLT, Plate to Housing	2
64	25K-40028	O-RING, Plunger Eye	1
65	940279	EYE, Plunger	1
66	946638	WIPER, Plunger Oil	1
67	946637	PLATE, Wiper & Seal Retainer	1
68	888304	SPRING, Check	1
69	946454	CAP, Plunger	1
70	-----	§PLUNGER, Operating - See A	-
71	946813	SPRING, Check	1
72	946433	SPRING, Check	1
73	946584	SEAL, Plunger Oil	1
74	946427	PLATE, Seal Retainer	2
75	888302	RETAINER, Spring	1
76	25K-40028	O-RING, Cap	1
77	947855	CAP, Plunger	1
78	947856	SPACER, Plunger	1
79	947854	CAP, Detent	1
80	947843	RETAINER, Ball	2
81	947842	SPRING, Detent	1
82	947867	PISTON	1
83	947847	COVER, Detent	1
84	666542	RING, Plug Retainer	1
85	16F-04	PLUG, Cover	1
86	49D-08	NUT, Acorn	1
87	8D-08	NUT, Jam	1
88	25K-40104	O-RING, Cap	1
89	886745	POPPET	1
90	25K-40030	O-RING, Seat	1
91	946805	SPRING, Poppet	1
92	947844	POPPET	1
93	947840	SEAT, Poppet	1
94	25K-40104	O-RING, Cap	1
95	947845	CAP	1
96	4E-06	WASHER, Cover to Housing	4
97	1C-618	BOLT, Cover to Housing	4
98	893676	O-RING, Cover	1
99	40K-04	PLUG, Cover	1
100	947865	COVER, Housing	1
101	1C-618	LKWSHR, Cover to Housing	4
102	947841	SEAT, Poppet	1
103	886753	SPRING, Poppet	1
104	947845	CAP, Adjusting	1
105	613750	WASHER, Jam Nut	2
106	944890	SCREW, Adjusting	1

*NOTE: For Replacement use 947460 Kit, 947460 Kit Inc. 1-1510472 Valve Assy, 3-18C-840 Bolt, 9-619027 Washer, 1-Form 002854 Installation Instructions.
 §Not Sold Separately



92G.1

PM 1669

TS-10787



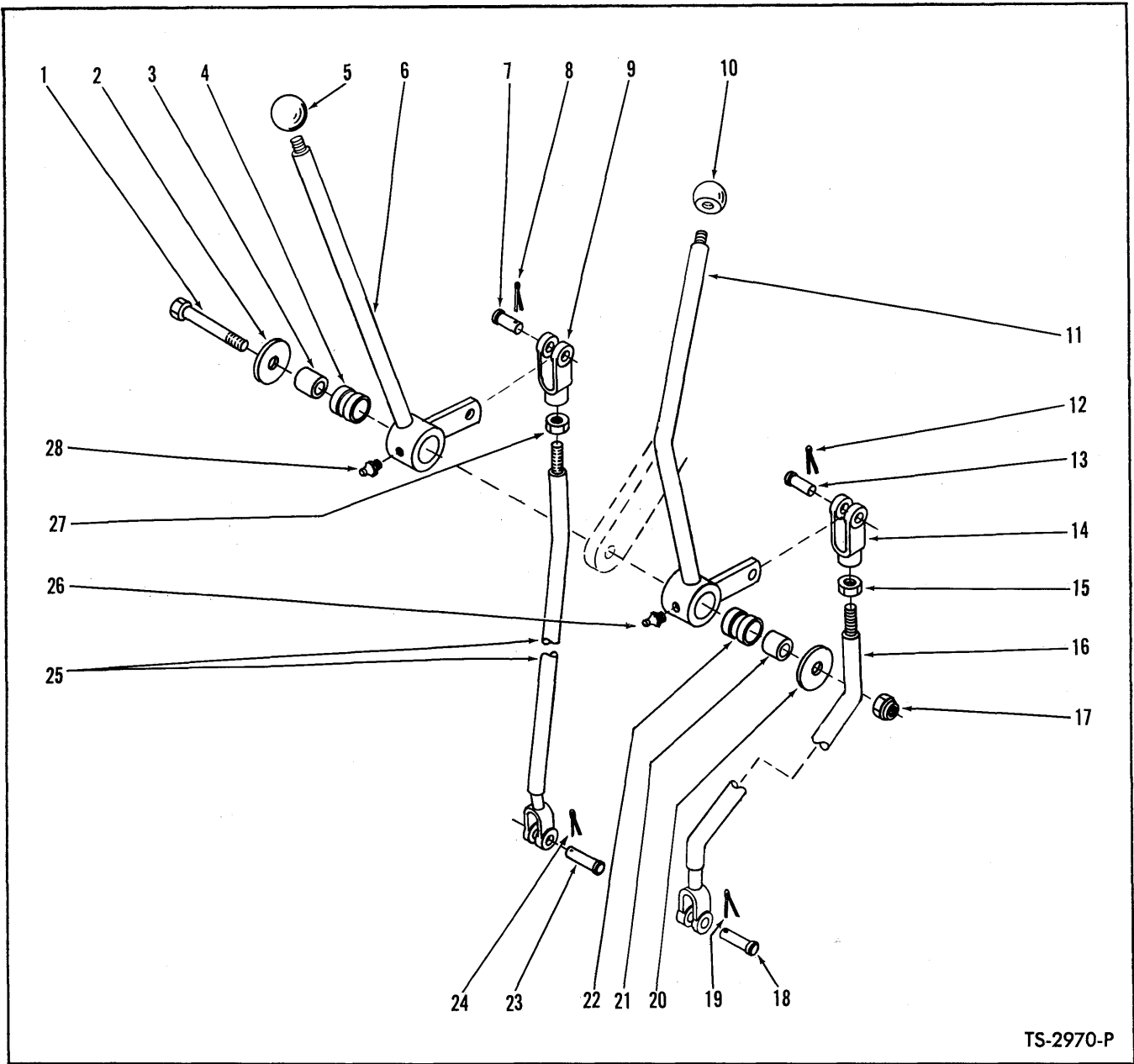
CONSTRUCTION MACHINERY DIVISION



CONTROL VALVE ASSEMBLY

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
A	1510472	CONTROL VALVE ASSY (Inc. 1 thru 108)	1	54	948722	PLUNGER, Detent	1
1	948202	DIAPHRAGM, Detent	1	55	948726	RING, Plunger Retaining	1
2	947848	PLUG, Detent	1	56	947868	SPRING, Plunger Return	1
3	948954	RETAINER, Detent Spring	1	57	11G-420	BOLT, Cover to Housing	4
4	947852	SPRING, Detent	1	58	4E-04	LKWSHR, Cover to Housing	4
5	948727	SLEEVE, Ball Retainer	1	59	948950	SEAL, Plunger	1
6	948730	BALL, Detent	11	60	946433	SPRING, Check	1
7	948737	PLUNGER, Detent	1	61	946431	CHECK	1
8	948726	RING, Detent Plunger	1	62	944885	CHECK	1
9	947857	SPRING, Plunger Return	1	63	-----	§PLUNGER, operating, See Item A	1
10	11G-420	BOLT, Detent Cover to Housing	4	64	946455	SPRING, Check	1
11	4E-04	LKWSHR, Detent Cover to Housing	4	65	25K-30022	O-RING, Cap	1
12	1C-724	BOLT, Cover to Housing	4	66	946450	CHECK	1
13	4E-07	LKWSHR, Cover to Housing	4	67	948950	SEAL, Plunger	1
14	867747	WASHER, Cover to Housing	4	68	888299	PLATE, Seal Retainer	1
15	947864	COVER, Housing	1	69	948953	PLATE, Wiper Retainer	1
16	1306623	O-RING, Cover	1	70	948951	WIPER, Plunger	1
17	-----	§HOUSING, See A	—	71	940279	EYE, Plunger	1
18	1306623	O-RING, Valve Mounting	1	72	25K-40028	O-RING, Plunger Eye	1
19	947864	COVER, Housing	1	73	1C-412	BOLT, Retainer to Housing	4
20	4E-07	LKWSHR, Cover to Housing	4	74	4E-04	LKWSHR, Retainer to Housing	4
21	1C-724	BOLT, Cover to Housing	4	75	888304	SPRING, Check	1
22	867747	WASHER, Cover to Housing	4	76	946454	CAP	1
23	1306623	O-RING, Cover	1	77	946813	SPRING, Check	1
24	888299	PLATE, Seal Retaining	1	78	946432	CHECK	1
25	948953	PLATE, Wiper Retaining	1	79	948952	PLATE, Seal Retaining	1
26	948951	WIPER, Plunger	1	80	25K-40028	O-RING, Plunger Cap	1
27	25K-40028	O-RING, Plunger Eye	1	81	945066	RETAINER, Detent Spring	1
28	940279	EYE, Plunger	1	82	948738	CAP, Plunger	1
29	1C-412	BOLT, Retainer to Housing	4	83	948733	SOCKET, Detent	1
30	4E-04	LKWSHR, Retainer to Housing	4	84	888302	RETAINER, Detent Spring	1
31	948950	SEAL, Plunger Oil	1	85	947843	RETAINER, Detent Ball	1
32	-----	§PLUNGER, See A	—	86	948735	COVER, Detent	1
33	941463	CHECK	1	87	666542	RING, End Plug Retainer	1
34	940166	SPRING, Check	1	88	49D-08	NUT, Acorn	1
35	948950	SEAL, Plunger Oil	1	89	613750	WASHER, Jam Nut	2
36	948952	PLATE, Seal Retaining	1	90	947846	CAP, Adjusting	1
37	945066	RETAINER, Detent Spring	1	91	25K-40104	O-RING, Adjusting Cap	1
38	25K-40028	O-RING, Plunger Cap	1	92	886753	SPRING, Relief Valve	1
39	948739	CAP, Plunger	1	93	886739	POPPET, Relief Valve	1
40	948734	SOCKET, Detent	1	94	25K-40030	O-RING, Poppet Seat	1
41	888302	RETAINER, Detent Spring	1	95	947841	SEAT, Poppet	1
42	947843	RETAINER, Detent Ball	2	96	945805	SPRING, Check	1
43	948753	COVER, Detent	1	97	947844	CHECK	1
44	666542	RING, End Plug Retainer	1	98	947840	SEAT, Check	1
45	16F-04	PLUG, Pipe	1	99	947845	CAP, Relief Valve	1
46	948202	DIAPHRAGM, Detent	1	100	25K-40104	O-RING, Relief Valve Cap	1
47	947848	PLUG, Detent End	1	101	947865	COVER, Housing	1
48	25K-40106	O-RING, Piston	1	102	4E-06	LKWSHR, Cover to Housing	4
49	947867	PISTON, Detent	1	103	40K-04	PLUG, Pipe	1
50	947852	SPRING, Detent	1	104	1C-618	BOLT, Cover to Housing	4
51	25K-40028	O-RING, Piston	1	105	946378	WASHER, Cover to Housing	4
52	948730	BALL, Detent	11	106	893676	O-RING, Cover	1
53	948727	SLEEVE, Ball Retainer	1	107	8D-08	NUT, Jam	1
				108	944890	SCREW, Adjusting	1

§ Not Sold Separately

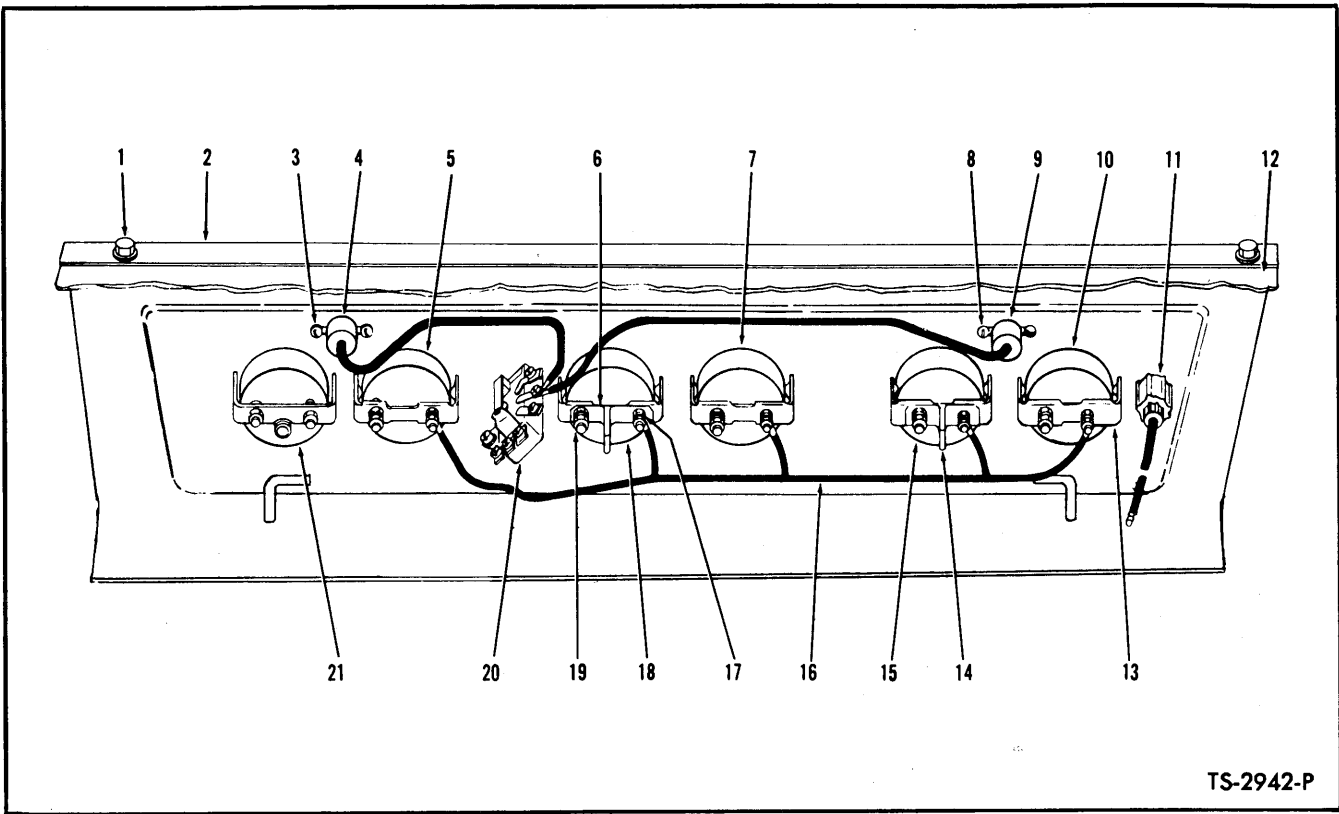


TS-2970-P

VALVE CONTROL LEVERS AND LINKAGE

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18C-868	BOLT, Lever Mounting	1	15	8D-08	NUT, Clevis Jam	1
2	616796	WASHER, Lever Mounting	1	16	532261	ROD, Boom Control	1
3	550646	SLEEVE, Lever Mounting	1	17	18D-08	NUT, Lever Mounting	1
4	526767	BUSHING, Bucket Lever	1	18	4F-08127	PIN, Rod to Valve Clevis	1
5	509772	KNOB, Bucket Lever	1	19	1F-414	COTTER, Clevis Pin	1
6	532243	LEVER, Bucket Control	1	20	616796	WASHER, Lever Mounting	1
7	4F-08127	PIN, Rod to Lever Clevis	1	21	550646	SLEEVE, Lever Mounting	1
8	1F-414	COTTER, Clevis Pin	1	22	526767	BUSHING, Boom Lever	1
9	2J-8300	CLEVIS, Rod to Lever	1	23	4F-08127	PIN, Rod to Valve Clevis	1
10	509772	KNOB, Boom Lever	1	24	1F-414	COTTER, Clevis Pin	1
11	532255	LEVER, Boom Control	1	25	532258	ROD, Bucket Control	1
12	1F-414	COTTER, Clevis Pin	1	26	10H-25	FITTING, Bucket Lever Grease	1
13	4F-08127	PIN, Rod to Lever Clevis	1	27	8D-08	NUT, Clevis Jam	1
14	2J-8300	CLEVIS, Rod to Lever	1	28	10H-25	FITTING, Boom Lever Grease	1

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



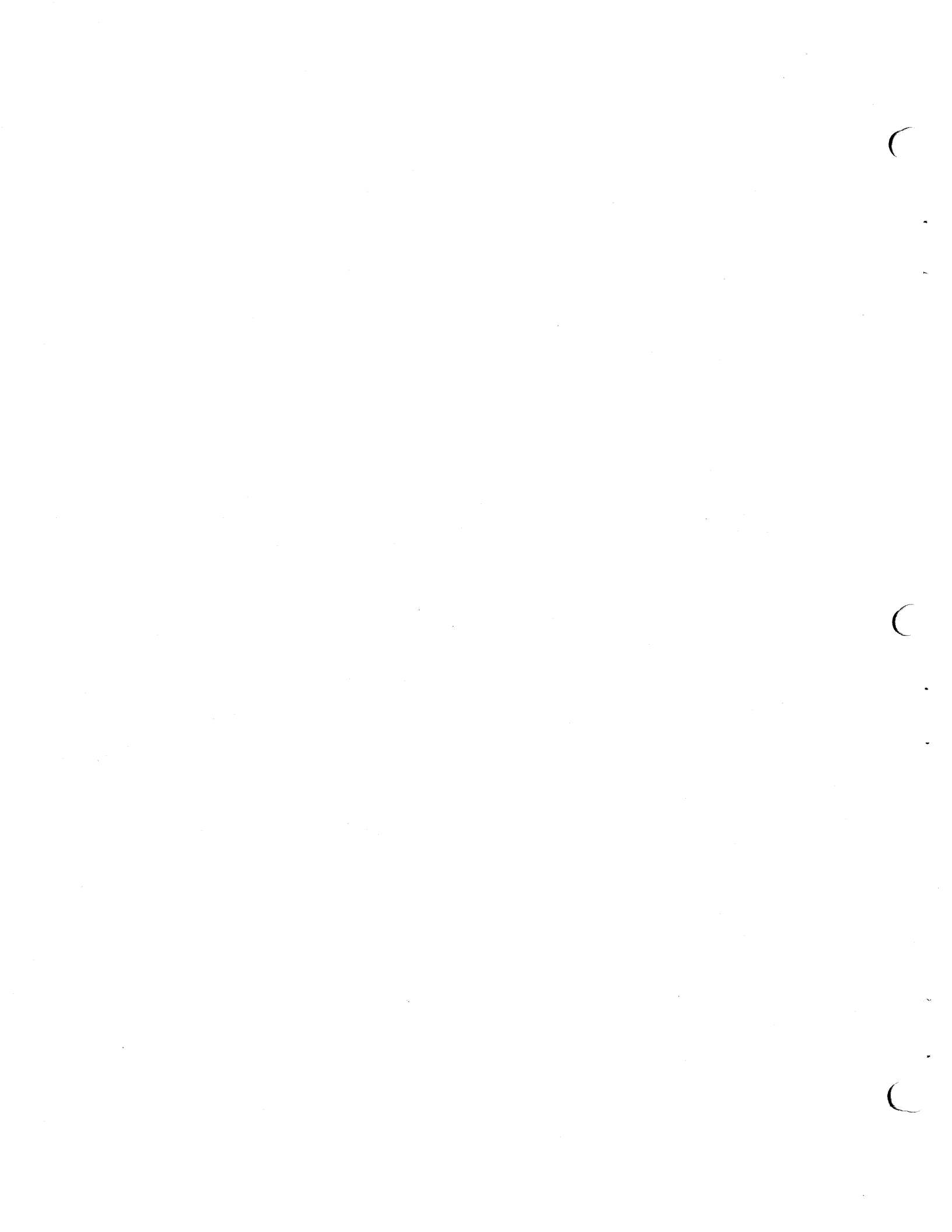
TS-2942-P

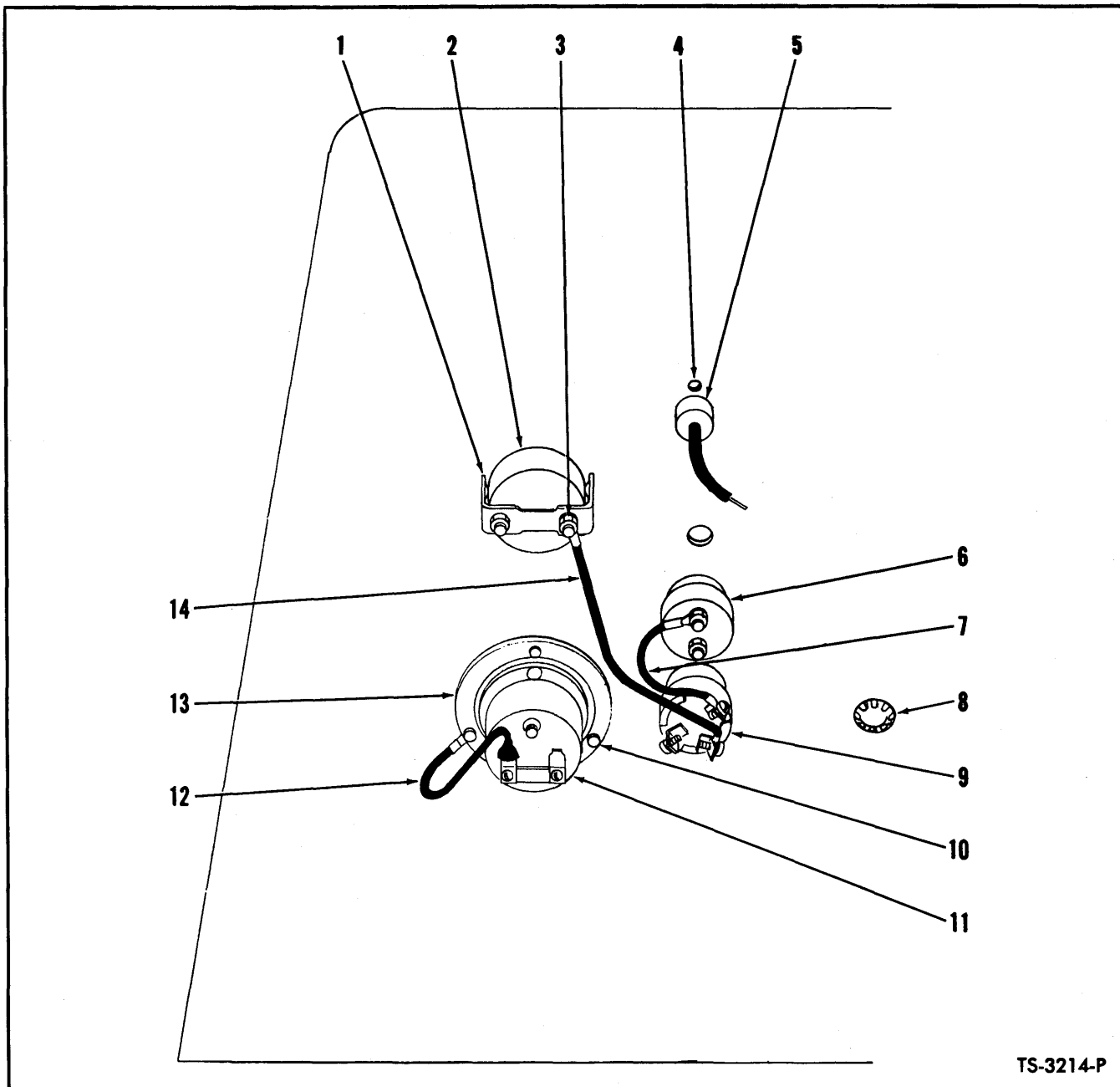
FRONT INSTRUMENT PANEL

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	17C-612	BOLT, Panel Mounting	2	12	534950	PLATE	1
1A	4E-06	†LKWSHR, Panel Mounting	2	12A	18C-612	†BOLT, Plate Attaching	4
1B	619023	†WASHER, Panel Mounting	2	12B	619023	†WASHER, Plate Attaching	4
2	534953	PANEL, Instrument	1	12C	18D-06	†NUT, Plate Attaching	4
3	18G-606	SCREW, Dash Lamp to Panel	2	13	626530	CLAMP, Instruments	5
3A	12E-6	†LKWSHR, Dash Lamp to Panel	2	14	602350	SEPARATOR, Oil Pressure Gauge Terminals	1
4	539045	*LAMP, Dash	1	15	551319	GAUGE, Engine Oil Pressure	1
5	551321	GAUGE, Torque Conv. Temperature	1	16	539985	WIRE, Instruments	1
6	602350	SEPARATOR, Fuel Gauge Terminals	1	17	12D-8	NUT, Ignition Terminal	10
7	517228	GAUGE, Air Pressure	1	17A	12E-8	†LKWSHR, Ignition Terminal	7
8	18G-606	SCREW, Dash Lamp to Panel	2	18	551320	GAUGE, Fuel	1
8A	12E-6	†LKWSHR, Dash Lamp to Panel	2	19	14D-10	NUT, Sender Terminal	10
9	538161	*LAMP, Dash	1	19A	12E-10	†LKWSHR, Sender Terminal	5
10	551322	GAUGE, Engine Temperature	1	20	550741	SWITCH, Light	1
11	538677	LIGHTER, Cigarette (Inc. 11A, 11B, & 11C)	1	20A	550742	†ROD, Light Switch	1
11A	944803	†ELEMENT, Lighter	1	20B	550743	†BUSHING, Light Switch	1
11B	549024	†RECEPTACLE, Lighter	1	21	----	OMIT, Not Used this Application	—
11C	944804	†FUSE, Lighter	1				

†Not Illustrated
 *NOTE: For replacement use 574276 plus 1-427237 Bulb & 1-574275 Tab.

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





TS-3214-P

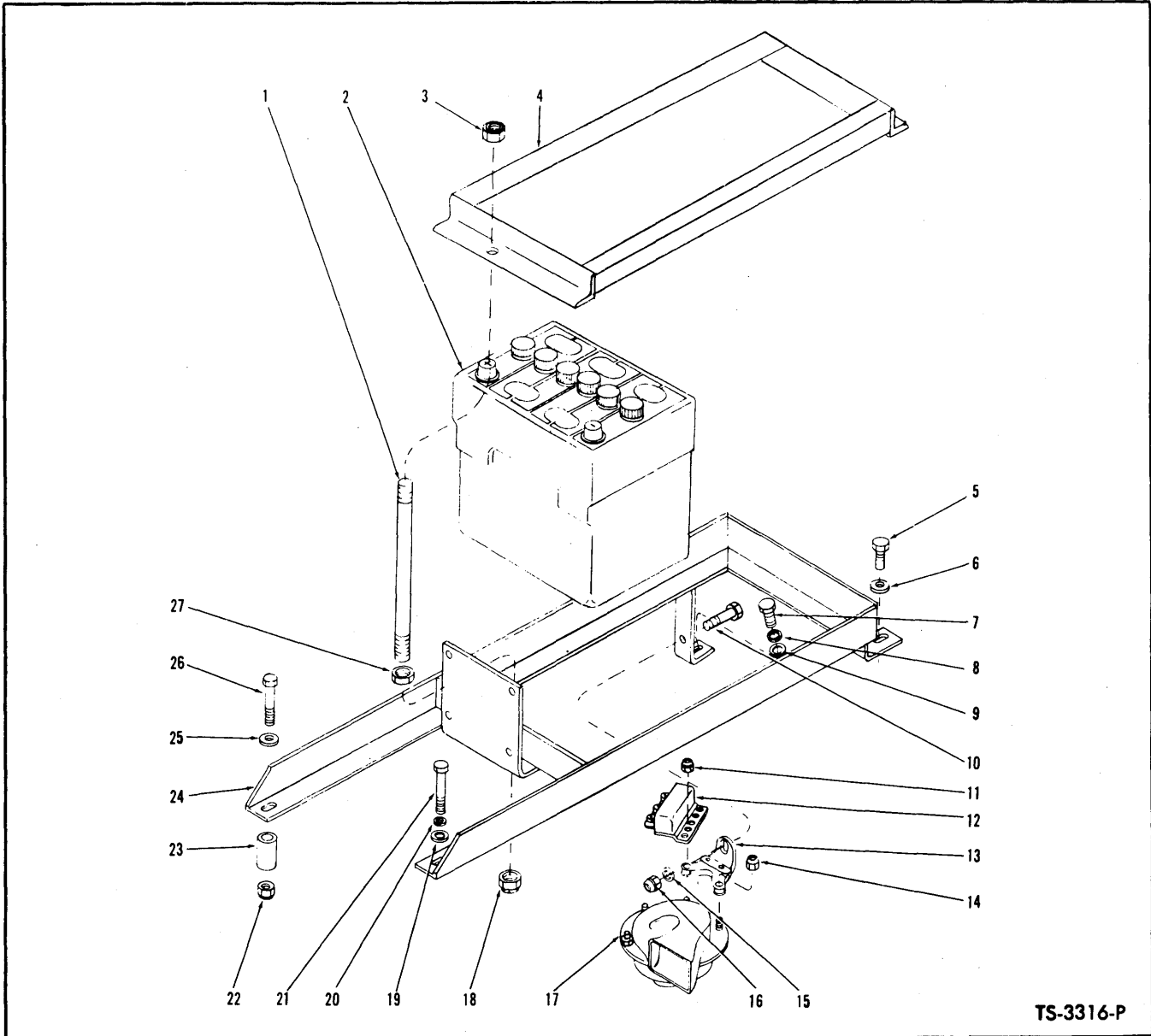
SIDE INSTRUMENT PANEL

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	601212	CLAMP, Ammeter	1	8	661862	PLUG, Button—Waukesha Gas & Cummins Only	1
2	550735	AMMETER	1	9	573548	SWITCH, Ignition (Keyed)	1
3	14D-10	NUT, Ammeter Terminal	4	10	3G-604	SCREW, Hourmeter to Panel	3
3A	12E-10	†LKWSHR, Ammeter Terminal	2	10A	12E-6	†LKWSHR, Hourmeter to Panel	3
4	18G-606	SCREW, Dash Lamp to Panel	2	11	1743825	HOURMETER	1
4A	12E-6	†LKWSHR, Dash Lamp to Panel	2	12	536999	WIRE, Hourmeter Ground	1
5	534960	*LAMP, Dash	1	13	685514	DAMPENER, Hourmeter Vibration	1
6	600259	BUTTON, Starter Push	1	14	553405	WIRE, Ignition Switch to Ammeter	1
6A	857420	†RUBBER BOOT, Starter Push Button	1				
7	690048	WIRE, Ignition Switch to Starter Button	1				

†Not Illustrated

*NOTE: For replacement use 946282 plus 1—940316 Bulb.

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



TS-3316-P

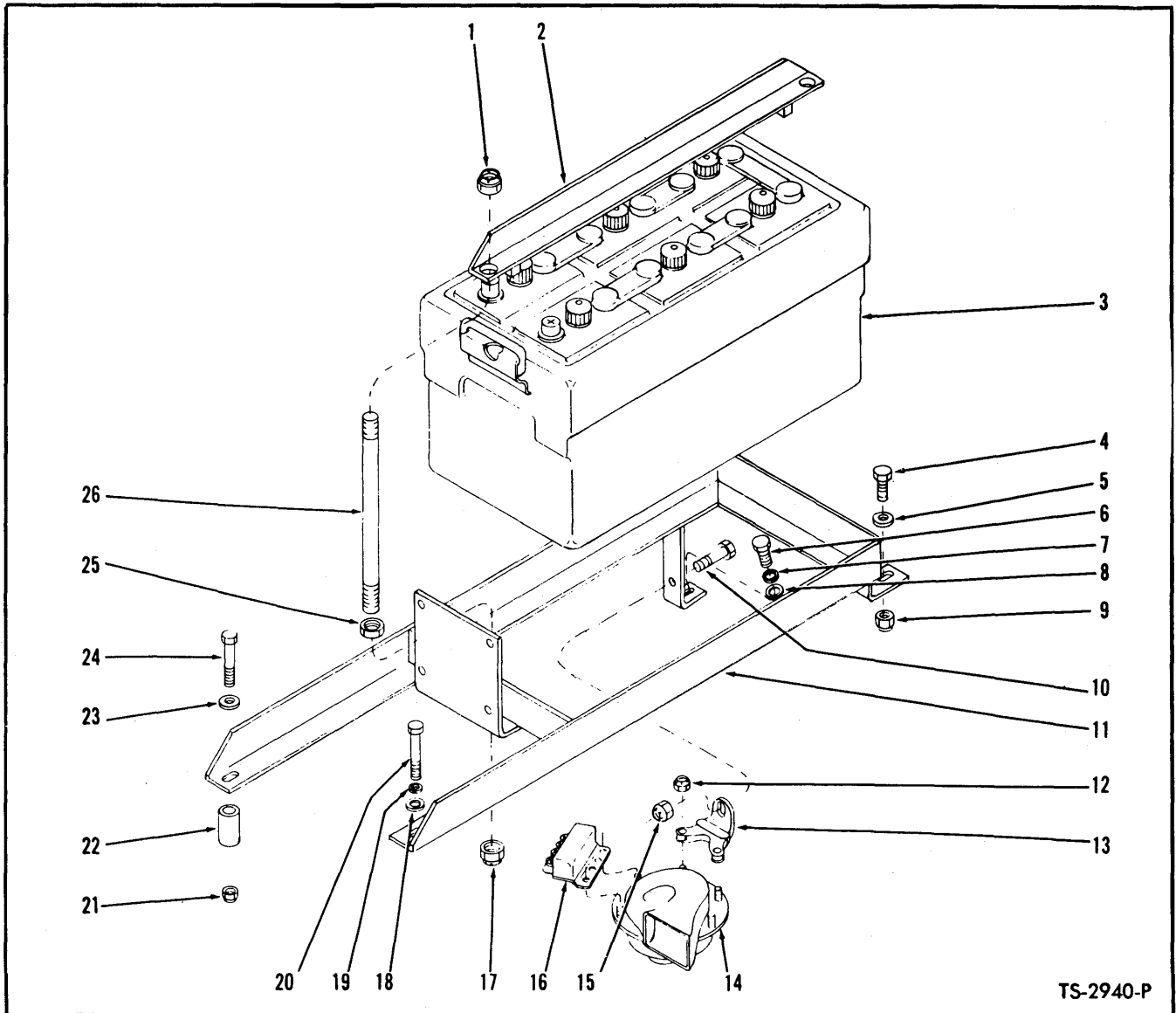
BATTERY, BATTERY BOX AND HORN – CUMMINS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	535680	STUD, Battery Hold Down	2	15	619023	WASHER, Horn Bracket to Battery Box	1
2	-----	§ BATTERY—Exide 5SH	3	16	18D-06	NUT, Horn Bracket to Battery Box	1
3	18D-06	NUT, Battery Hold Down	2	17	647300	* HORN	1
4	547451	HOLD DOWN, Battery	1	18	18D-06	NUT, Hold Down Stud to Battery Box	2
5	18C-620	BOLT, Battery Box to Frame	1	19	664423	WASHER, Battery Box to Frame	1
6	664423	WASHER, Battery Box to Frame	1	20	4E-06	LKWSHR, Battery Box to Frame	1
7	18C-620	BOLT, Battery Box to Frame	1	21	18C-618	BOLT, Battery Box to Frame	1
8	4E-06	LKWSHR, Battery Box to Frame	1	22	18D-06	NUT, Battery Box to Frame	1
9	664423	WASHER, Battery Box to Frame	1	23	537825	SPACER, Battery Box to Frame	1
10	18C-616	BOLT, Horn Bracket to Battery Box	1	24	547445	BOX, Battery	1
11	18D-04	NUT, Relay & Horn to Bracket	1	25	664423	WASHER, Battery Box to Frame	1
12	647310	RELAY, Horn	1	26	18C-652	BOLT, Battery Box to Frame	1
13	621279	BRACKET, Horn Mounting	1	27	8D-06	NUT, Hold Down Stud to Battery Box	2
14	18D-04	NUT, Horn to Horn Bracket	1				

§ Not Sold Separately

* NOTE: For replacement use 733624 plus 1-557438 Wire, Relay to Horn.

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



TS-2940-P

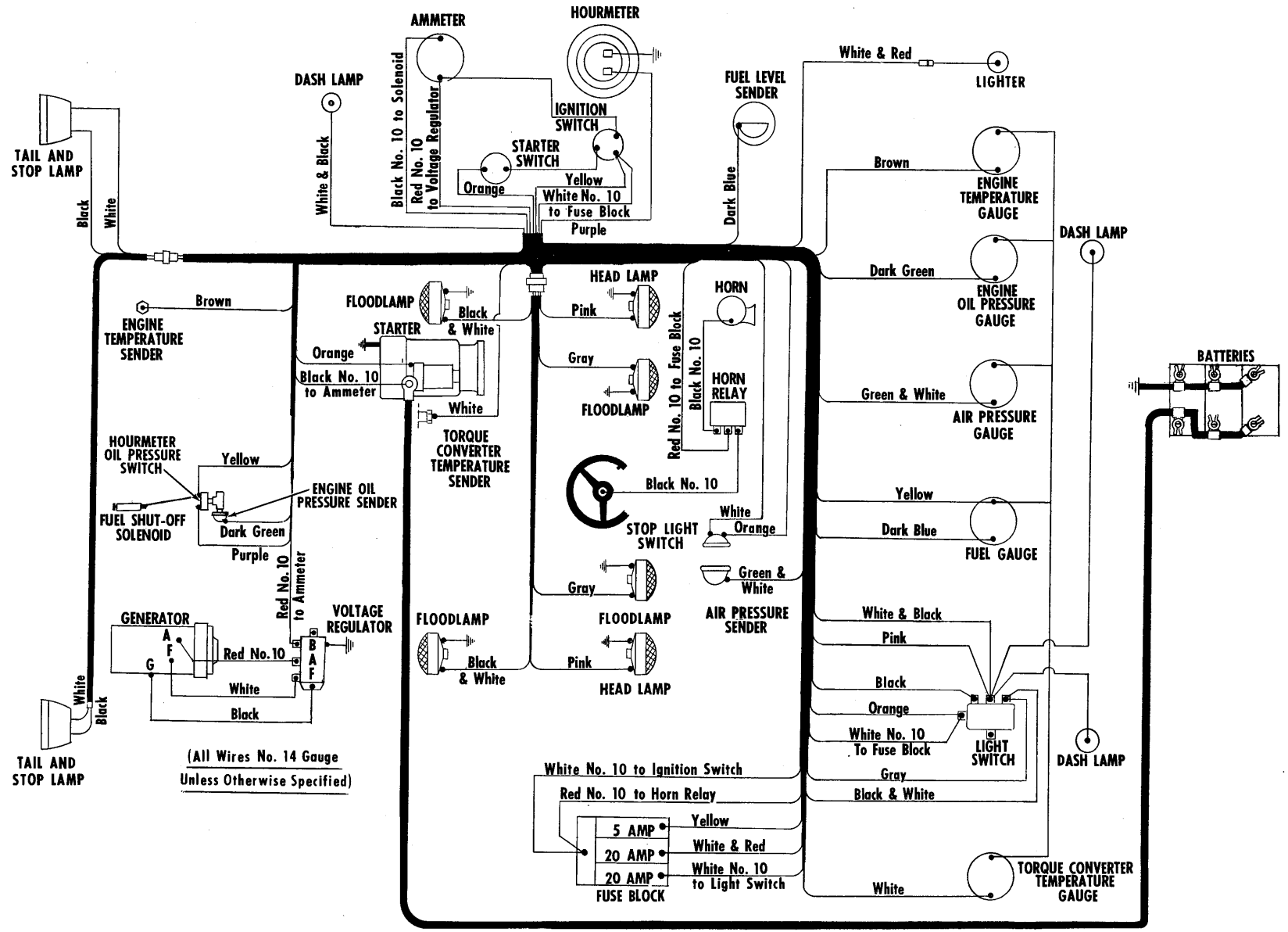
BATTERY, BATTERY BOX AND HORN – WAUKESHA GAS AND G.M.

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	17D-2	NUT, Hold Down Stud	2	11	536522	BOX, Battery	1
2	566626	ANGLE, Battery Hold Down	1	12	18D-04	NUT, Horn to Bracket	2
3		BATTERY		13	621279	BRACKET, Horn	1
3A	-----	EXIDE #8-D for G.M. Powered Machines	1	14	647300	*HORN	1
3B	-----	EXIDE #4-D-1133H for Gas Powered Machines	1	15	18D-06	NUT, Horn Bracket to Battery Box	1
4	18C-620	BOLT, Battery Box to Frame	1	16	647310	RELAY, Horn	1
5	664423	WASHER, Battery Box to Frame	1	17	17D-2	NUT, Hold Down Stud	2
6	18C-618	BOLT, Battery Box to Frame	1	18	664423	WASHER, Battery Box to Frame	1
7	4E-06	LKWSHR, Battery Box to Frame	1	19	4E-06	LKWSHR, Battery Box to Frame	1
8	664423	WASHER, Battery Box to Frame	1	20	18C-620	BOLT, Battery Box to Frame	1
9	18D-06	NUT, Battery Box to Frame	1	21	18D-06	NUT, Battery Box to Frame	1
10	18C-616	BOLT, Horn Bracket to Battery Box	1	22	537825	SPACER, Battery Box	1
				23	664423	WASHER, Battery Box to Frame	1
				24	18C-652	BOLT, Battery Box to Frame	1
				25	7D-05	NUT, Hold Down Stud Jam	2
				26	540969	STUD, Hold Down	2

*NOTE: For replacement use 733624 plus 1-557438 Wire, Relay to Horn.

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

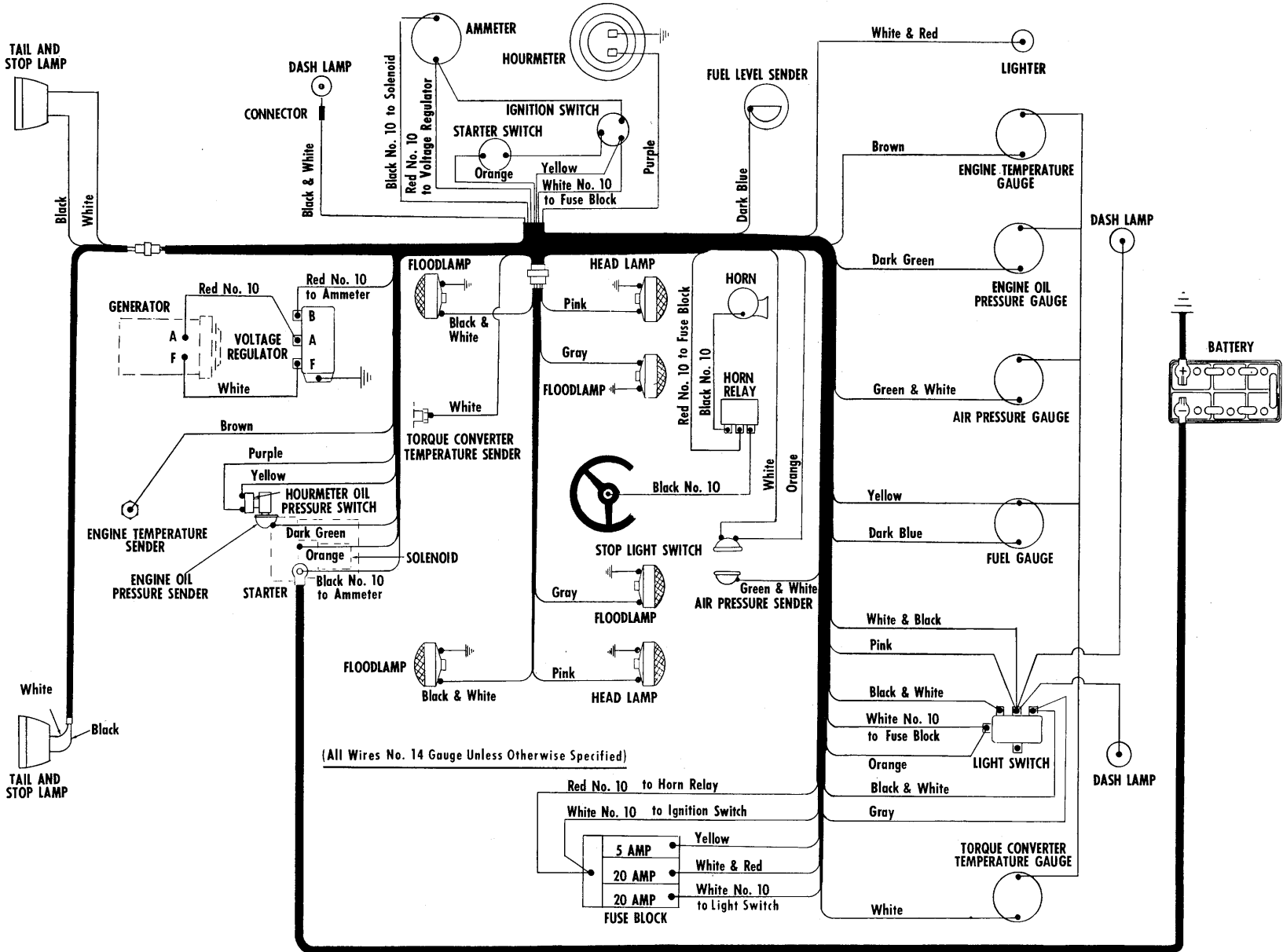
[100]



— FRONT OF MACHINE —>

WIRING DIAGRAM (CUMMINS)

TS-3317-P



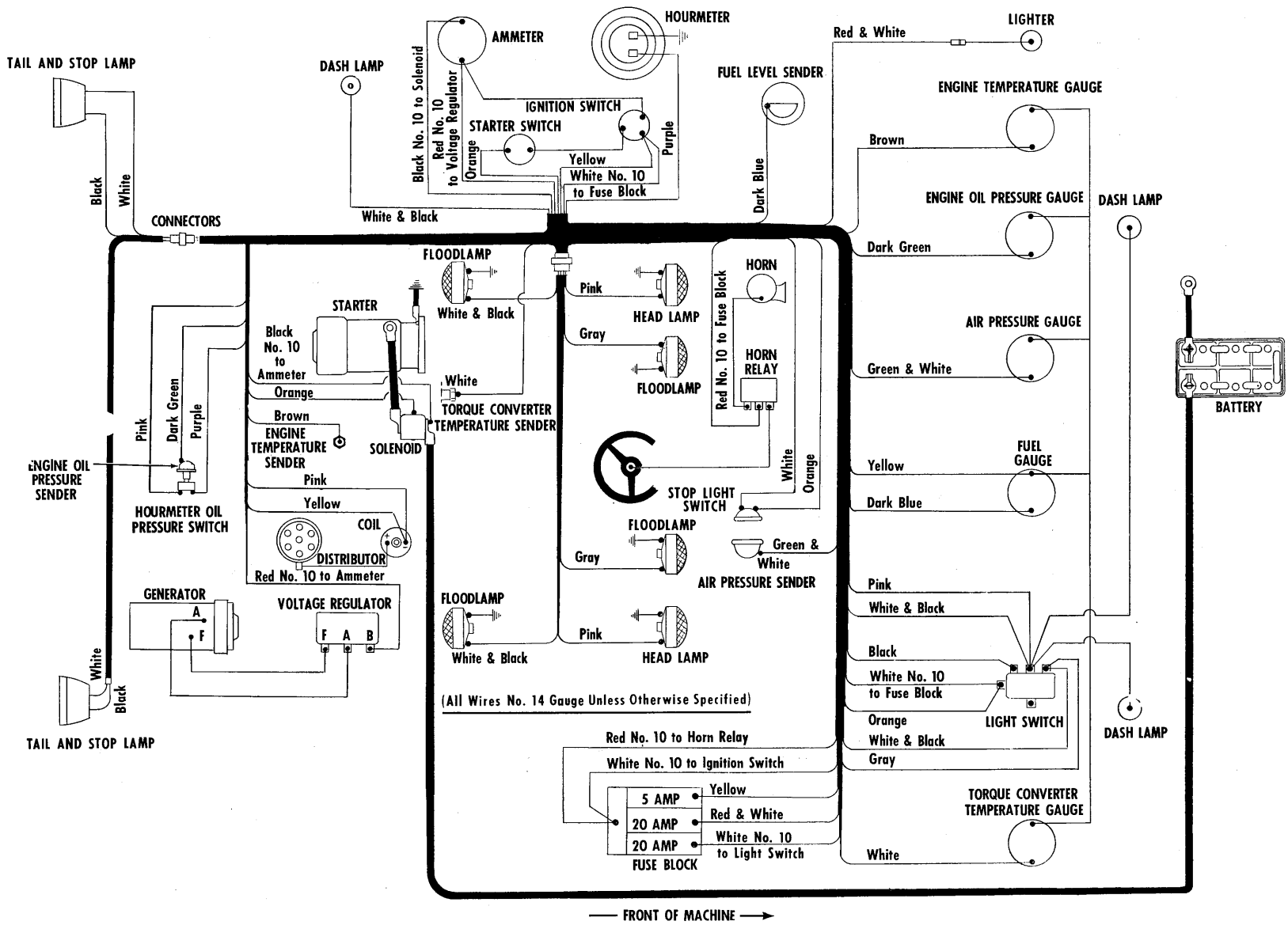
(All Wires No. 14 Gauge Unless Otherwise Specified)

— FRONT OF MACHINE —>

WIRING DIAGRAM (G.M.)

TS-3201-P

[102]



WIRING DIAGRAM (WAUKESHA GAS)

TS-3268-P

WIRING AND BATTERY CABLES — CUMMINS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	548426	HARNESS, Main Wiring	1	7	551879	WIRE, Voltage Regulator Ground	1
2	541657	HARNESS, Tail Light Wiring	1	8	548322	HARNESS, Generator to Regulator Wiring	1
3	541659	HARNESS, Cab Wiring	1	9	548417	CABLE, Solenoid to Battery	1
4	550745	WIRE, Cab Light Ground	6	10	587972	CABLE, Battery Ground	1
5	653976	WIRE, Horn Relay to Horn	1	11	581063	CABLE, Generator Ground	1
6	763235	WIRE, Horn Relay to Horn Switch	1				

WIRING AND BATTERY CABLES — G.M.

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
12	541656	HARNESS, Main Wiring	1	17	653976	WIRE, Horn Relay to Horn	1
13	541657	HARNESS, Tail Light Wiring	1	18	551879	WIRE, Voltage Regulator Ground	1
14	541659	HARNESS, Cab Wiring	1	19	763235	WIRE, Horn Relay to Horn Switch	1
15	541509	HARNESS, Generator to Regulator Wiring	1	20	541658	CABLE, Solenoid to Battery	1
16	550745	WIRE, Cab Light Ground	6	21	648577	CABLE, Battery Ground	1

WIRING AND BATTERY CABLES — WAUKESHA GAS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
22	545090	HARNESS, Main Wiring	1	27	763235	WIRE, Horn Relay to Horn Switch	1
23	541657	HARNESS, Tail Light Wiring	1	28	545193	CABLE, Solenoid to Battery	1
24	541659	HARNESS, Cab Wiring	1	29	545194	CABLE, Solenoid to Starter	1
25	550745	WIRE, Cab Light Ground	1	30	648577	CABLE, Battery Ground	1
26	653976	WIRE, Horn Relay to Horn	1	30A	637279	WIRE, Solenoid Ground	1

FUSES

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
31	611074	FUSE — 20 Amp.	2	32	542321	FUSE — 5 Amp.	1

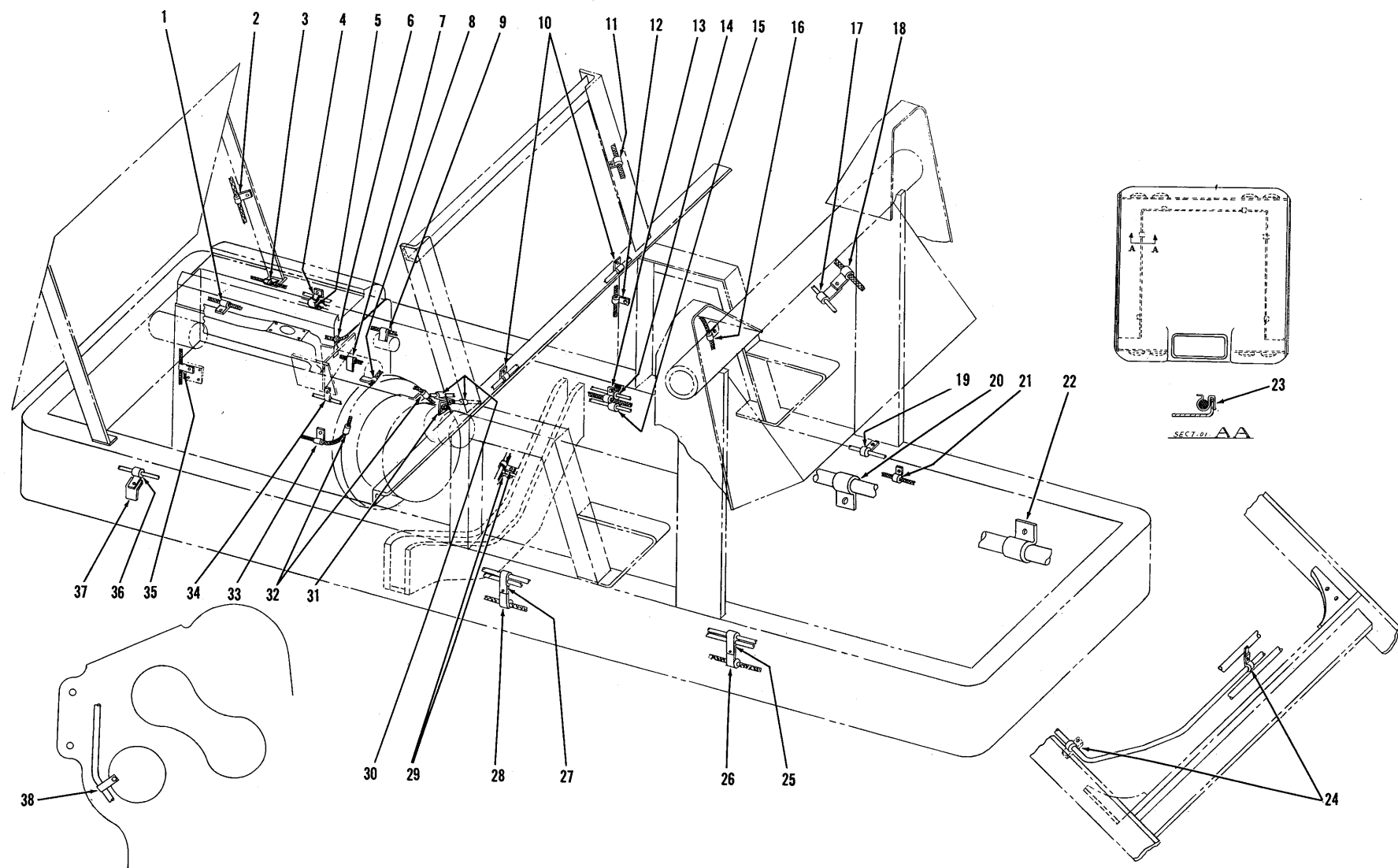
TOOLS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
33	711264	WRENCH, Wheel	1	37		RING, Packing Compressor	
34	552164	HANDLE, Wheel Wrench	1	37A	953068	For Boom & Bucket Cylinders	1
35	552172	WRENCH, Hub Bearing — 3 $\frac{3}{8}$ " Hex....	1	37B	526643	For Steering Cylinder	1
36	552170	WRENCH, Hub Bearing — 3 $\frac{1}{16}$ " Hex	1	38		SLEEVE, Piston Rod Wiper Taper	
				38A	953066	For Boom & Bucket Cylinders	1
				38B	530822	For Steering Cylinder	1

DECALS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
39	542074	PLATE, Patent	1	44	547814	DECAL, Model	2
40	538250	PLATE, Range Shift	1	45	538258	DECAL, Starter	1
41	6C-605	SCREW, Plate Attaching	8	46	538256	DECAL, Drain	1
42	547852	DECAL, Michigan	2	47	1505537	DECAL, Safety Warning	1
43	547851	DECAL, Clark Equipment	2				

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



[104]

PM 1669

CLIP CHART — CUMMINS

TS-3323-P

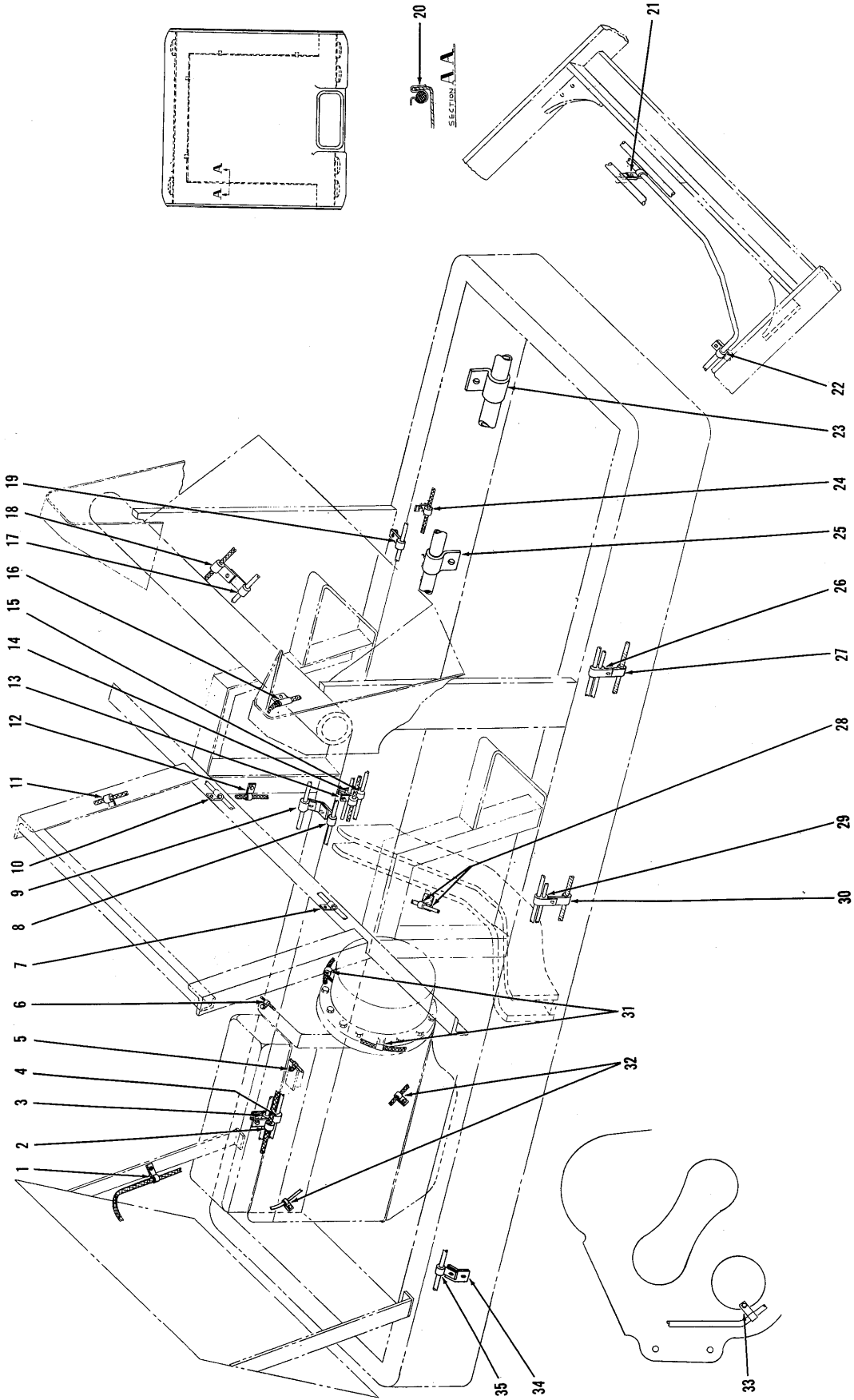
CLIP DIAGRAM — CUMMINS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	30H-27	CLIP, Generator Harness	1	20	533482	CLIP, Suction Tube—Main Hydraulic Line	1
1A	17C-612	†BOLT, Clip to Engine	1	20A	533483	†PAD, Rubber Strap—Suction Tube	1
1B	4E-06	†LKWSHR, Clip to Engine	1	21	30H-38	CLIP, Wiring Harness	1
2	30H-16	CLIP, Wiring Harness	1	21A	18C-628	†BOLT, Clip to Frame	1
2A	18C-618	†BOLT, Clip to Frame	1	21B	18D-06	†NUT, Clip to Frame	1
2B	18D-06	†NUT, Clip to Frame	1	22	533482	CLIP, Suction Tube—Main Hydraulic Line	1
3	6H-6	CLIP, Wiring Harness	1	22A	533483	†PAD, Rubber Strap—Suction Tube	1
4	30H-46	CLIP, Cooler Line	1	22B	18C-828	†BOLT, Clip & Pad to Frame	1
4A	18D-06	†NUT, Clip to Frame	1	22C	18D-08	†NUT, Clip & Pad to Frame	1
5	531088	CLIP, Air Brake Line	1	23	541988	CLIP, Cab Harness	6
5A	18C-628	†BOLT, Clips to Frame	1	24	30H-35	CLIP, Bucket Leveler Pipe	2
6	548454	CLIP, Generator Harness	1	24A	18C-616	†BOLT, Clip to Bracket	2
6A	18C-408	†BOLT, Generator Harness Clip	1	24B	18D-06	†NUT, Clip to Bracket	2
6B	18D-04	†NUT, Generator Harness Clip	1	25	31H-34	CLIP, Steering Pipes	1
7	30H-14	CLIP, Wiring Harness	1	25A	18C-628	†BOLT, Clips to Frame	1
8	30H-46	CLIP, Battery Cable	1	25B	18D-06	†NUT, Clips to Frame	1
8A	17C-614	†BOLT, Battery Cable Clip	1	26	30H-46	CLIP, Battery Cable	1
8B	4E-06	†LKWSHR, Battery Cable Clip	1	27	31H-34	CLIP, Steering Pipes	1
9	30H-46	CLIP, Battery Cable	1	27A	18C-628	†BOLT, Clips to Frame	1
9A	17C-614	†BOLT, Clip to Converter	1	27B	18D-06	†NUT, Clips to Frame	1
9B	4E-06	†LKWSHR, Clip to Converter	1	28	30H-46	CLIP, Battery Cable	1
10	30H-16	CLIP, Brake Line	2	29	30H-38	CLIP, Steering Pipe	2
10A	18C-616	†BOLT, Clip to Seat Support	2	29A	18C-624	†BOLT, Clips to Frame	1
10B	18D-06	†NUT, Clip to Seat Support	2	29B	18D-06	†NUT, Clips to Frame	1
11	30H-27	CLIP, Wiring Harness	1	30	30H-50	CLIP, Fuel Hose	2
11A	18C-616	†BOLT, Clip to Seat Support	1	30A	18C-614	†BOLT, Clips to Bracket	1
11B	18D-06	†NUT, Clip to Seat Support	1	30B	18D-06	†NUT, Clips to Bracket	1
12	30H-27	CLIP, Wiring Harness	1	31	548455	BRACKET, Clip Mounting	1
13	30H-38	CLIP, Wiring Harness	1	32	30H-35	CLIP, Wiring Harness	2
13A	18D-06	†NUT, Clip Mounting	1	33	30H-35	CLIP, Wiring Harness	1
14	30H-16	CLIP, Brake Line	1	33A	17C-614	†BOLT, Clip to Engine	1
14A	18D-06	†NUT, Clips to Frame	1	33B	4E-06	†LKWSHR, Clip to Engine	1
15	531088	CLIP, Brake Line	1	34	30H-50	CLIP, Fuel Hose	1
16	30H-38	CLIP, Bucket Leveler Hose	1	35	30H-12	CLIP, Water Temperature Sender	1
16A	18C-616	†BOLT, Clip to Pivot Tube	1	35A	17C-612	†BOLT, Clip to Engine	1
16B	4E-06	†LKWSHR, Clip to Pivot Tube	1	35B	4E-06	†LKWSHR, Clip to Engine	1
17	30H-38	CLIP, Clutch Pressure Hose	1	36	30H-46	CLIP, Cooler Line	1
18	30H-38	CLIP, Wiring Harness	1	36A	18C-612	†BOLT, Clip to Bracket	1
18A	18C-616	†BOLT, Wiring Harness Clip	1	36B	18D-06	†NUT, Clip to Bracket	1
18B	18D-06	†NUT, Wiring Harness Clip	1	37	537869	BRACKET, Clip Mounting	1
19	6H-18	CLIP, Steering Pipe	1	37A	18C-624	†BOLT, Bracket to Frame	1
19A	616783	†SPACER, Clip to Frame	1	37B	18D-06	†NUT, Bracket to Frame	1
19B	18C-624	†BOLT, Clip & Spacer to Frame	1	38	30H-47	CLIP, Transmission Dipstick Tube	1
19C	18D-06	†NUT, Clip & Spacer to Frame	1				

†Not Illustrated

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

TS-2943-P



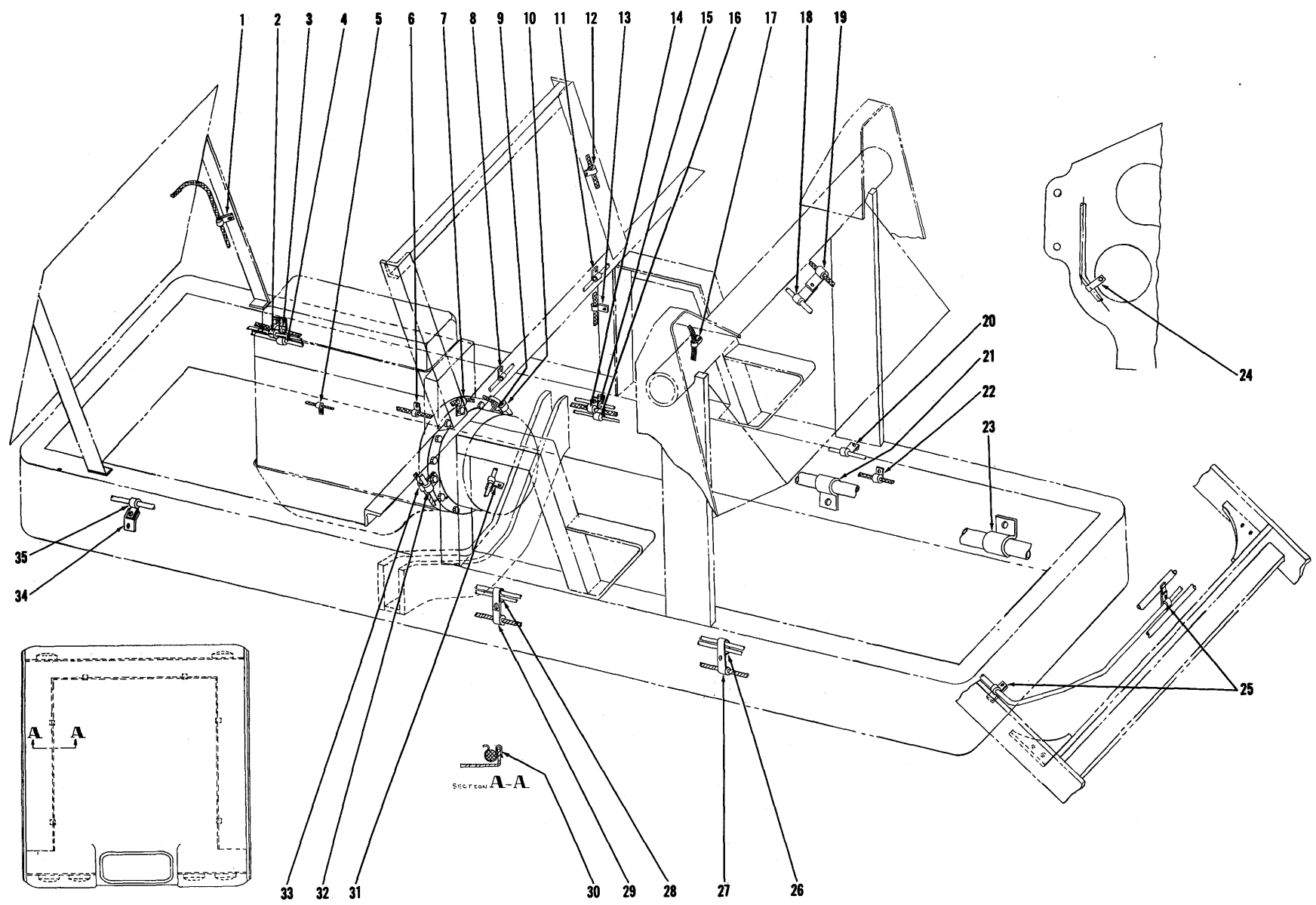
CLIP CHART — G.M.

CLIP DIAGRAM — G.M.

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	30H-16	CLIP, Wiring Harness	1	19A	616783	†SPACER, Clip to Frame	1
1A	18C-618	†BOLT, Clip to Frame	1	19B	18C-624	†BOLT, Clip to Frame	1
1B	18D-06	†NUT, Clip to Frame	1	19C	18D-06	†NUT, Clip to Frame	1
2	30H-16	CLIP, Wiring Harness	1	20	541988	CLIP, Cab Wiring Harness	6
2A	18D-06	†NUT, Clip to Frame	1	21	30H-35	CLIP, Bucket Leveler Pipe	1
3	30H-46	CLIP, Cooler Line	1	21A	18C-616	†BOLT, Clip to Frame	1
3A	18D-06	†NUT, Clip to Frame	1	21B	18D-06	†NUT, Clip to Frame	1
4	531088	CLIP, Air Brake Line	1	22	30H-35	CLIP, Bucket Leveler Pipe	1
4A	18C-636	†BOLT, Clip to Frame	1	22A	18C-616	†BOLT, Clip to Frame	1
5	30H-10	CLIP, Engine Stop Cable	1	22B	18D-06	†NUT, Clip to Frame	1
6	30H-12	CLIP, Engine Stop Cable	1	23	533482	CLIP, Suction Tube	1
6A	17C-612	†BOLT, Clip to Frame	1	23A	533483	†PAD, Rubber Strap	1
6B	4E-06	†LKWSHR, Clip to Frame	1	23B	18C-828	†BOLT, Clip to Frame	1
7	30H-16	CLIP, Brake Line	1	23C	18D-08	†NUT, Clip to Frame	1
7A	18C-616	†BOLT, Clip to Frame	1	24	30H-38	CLIP, Wiring Harness	1
7B	18D-06	†NUT, Clip to Frame	1	24A	18C-628	†BOLT, Clip to Frame	1
8	30H-20	CLIP, Fuel Line	1	24B	18D-06	†NUT, Clip to Frame	1
8A	18C-620	†BOLT, Clip to Frame	1	25	533482	CLIP, Suction Tube	1
8B	18D-06	†NUT, Clip to Frame	1	25A	533483	†PAD, Rubber Strap	1
9	541865	CLIP, Fuel Line	1	26	31H-34	CLIP, Steering Pipes	1
9A	18C-410	†BOLT, Clip to Frame	1	26A	18C-628	†BOLT, Clip to Frame	1
9B	18D-04	†NUT, Clip to Frame	1	26B	18D-06	†NUT, Clip to Frame	1
10	30H-16	CLIP, Brake Line	1	27	30H-35	CLIP, Battery Cable	1
10A	18C-616	†BOLT, Clip to Frame	1	28	30H-38	CLIP, Steering Pipes	2
10B	18D-06	†NUT, Clip to Frame	1	28A	18C-624	†BOLT, Clips to Frame	2
11	30H-27	CLIP, Wiring Harness	1	28B	18D-06	†NUT, Clips to Frame	2
11A	18C-616	†BOLT, Clip to Frame	1	29	31H-34	CLIP, Steering Pipes	1
11B	18D-06	†NUT, Clip to Frame	1	29A	18C-628	†BOLT, Clip to Frame	1
12	30H-27	CLIP, Wiring Harness	1	29B	18D-06	†NUT, Clip to Frame	1
13	30H-38	CLIP, Wiring Harness	1	30	30H-35	CLIP, Battery Cable	1
13A	18D-06	†NUT, Clip to Frame	1	31	30H-27	CLIP, Wiring Harness	2
14	531088	CLIP, Brake Line	1	32	30H-16	CLIP, Wiring Harness	2
15	30H-16	CLIP, Brake Line	1	32A	17C-612	†BOLT, Clip to Frame	2
15A	18D-06	†NUT, Clips to Frame	1	32B	4E-06	†LKWSHR, Clip to Frame	2
16	30H-38	CLIP, Bucket Leveler Hose	1	33	30H-47	CLIP, Trans. Dipstick Tube	1
16A	18C-616	†BOLT, Clip to Frame	1	34	537869	BRACKET	1
16B	4E-06	†LKWSHR, Clip to Frame	1	34A	18C-624	†BOLT, Bracket to Frame	1
17	30H-38	CLIP, Clutch Pressure Hose	1	34B	18D-06	†NUT, Bracket to Frame	1
18	30H-38	CLIP, Wiring Harness	1	35	30H-46	CLIP, Cooler Line	1
18A	18C-616	†BOLT, Clips to Frame	1	35A	18C-612	†BOLT, Clip to Bracket	1
18B	18D-06	†NUT, Clips to Frame	1	35B	18D-06	†NUT, Clip to Bracket	1
19	6H-18	CLIP, Steering Pipe	1				

†Not Illustrated

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



CLIP CHART — WAUKESHA GAS

TS-3238-P

[108]

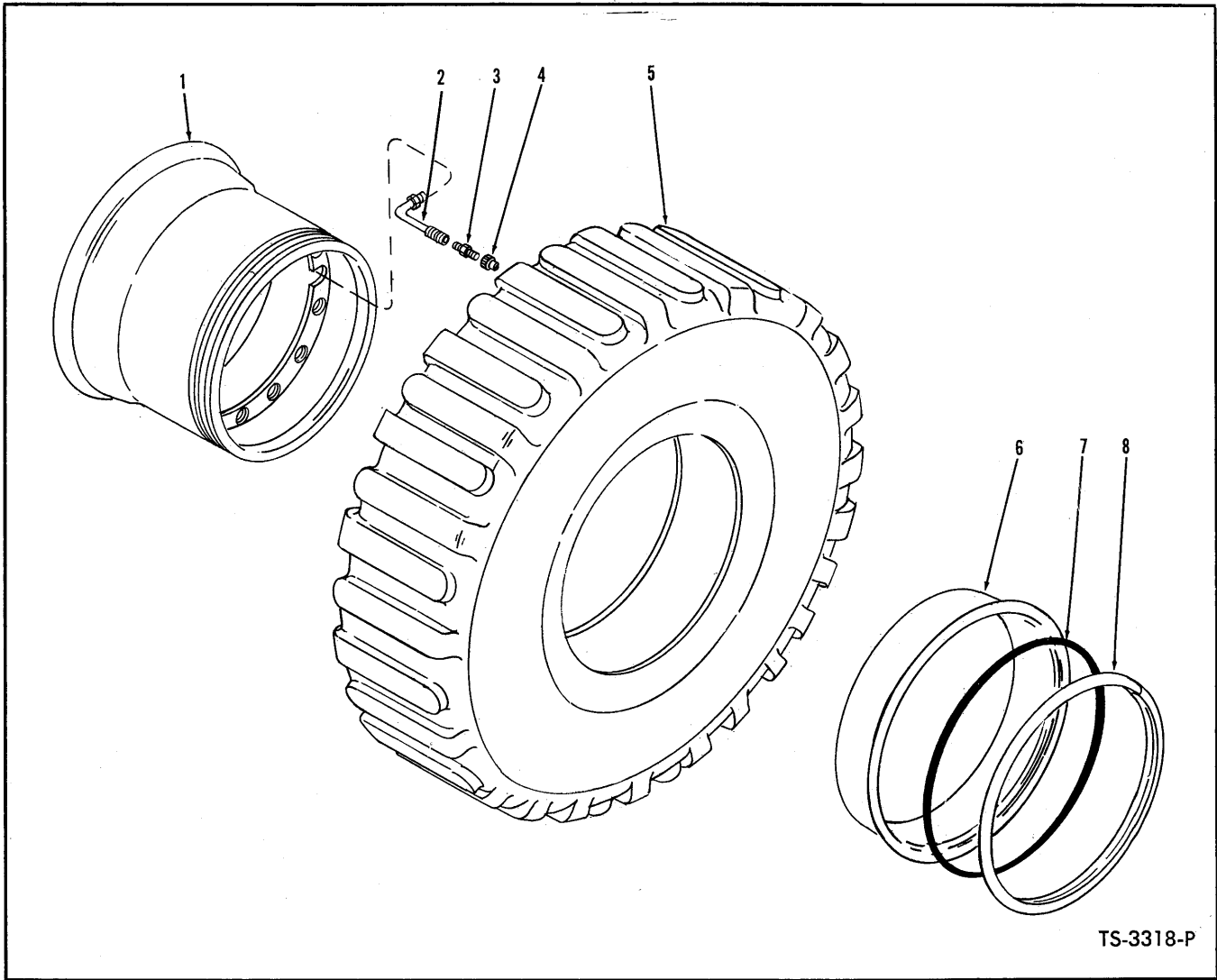
PM 1669

CLIP DIAGRAM — GAS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	30H-16	CLIP, Wiring Harness	1	20A	18C-624	†BOLT, Clip to Frame	1
1A	18C-618	†BOLT, Wiring Harness	1	20B	616783	†SPACER, Clip to Frame	1
1B	18D-06	†NUT, Wiring Harness	1	20C	18D-06	†NUT, Clip to Frame	1
2	30H-46	CLIP, Cooler Line	1	21	533482	CLIP, Suction Tube	1
2A	18D-06	†NUT, Cooler Line	1	21A	533483	†PAD, Suction Tube Clip	1
3	30H-16	CLIP, Wiring Harness	1	22	30H-38	CLIP, Wiring Harness	1
3A	18D-06	†NUT, Wiring Harness	1	22A	18C-628	†BOLT, Clip to Frame	1
4	531088	CLIP, Air Brake Line	1	22B	18D-06	†NUT, Clip to Frame	1
4A	18C-636	†BOLT, Air Brake Line	1	23	533482	CLIP, Suction Tube	1
5	30H-8	CLIP, Wiring Harness	1	23A	533483	†PAD, Suction Tube Clip	1
6	30H-27	CLIP, Wiring Harness	1	23B	18C-828	†BOLT, Clip to Frame	1
7	30H-35	CLIP, Battery Cable	1	23C	18D-08	†NUT, Clip to Frame	1
8	30H-16	CLIP, Brake Line	1	24	30H-47	CLIP, Trans. Oil Dipstick Tube	1
8A	18C-616	†BOLT, Brake Line	1	25	30H-35	CLIP, Bucket Leveler Pipe	2
8B	18D-06	†NUT, Brake Line	1	25A	18C-616	†BOLT, Bucket Leveler Pipe Clip	2
9	30H-35	CLIP, Wiring Harness	1	25B	18D-06	†NUT, Bucket Leveler Pipe Clip	2
10	30H-27	CLIP, Fuel Hose	1	26	31H-34	CLIP, Steering Pipe	1
11	30H-16	CLIP, Brake Line	1	26A	18C-628	†BOLT, Clip to Frame	1
11A	18C-616	†BOLT, Brake Line	1	26B	18D-06	†NUT, Clip to Frame	1
11B	18D-06	†NUT, Brake Line	1	27	30H-35	CLIP, Battery Cable	1
12	30H-27	CLIP, Wiring Harness	1	28	31H-34	CLIP, Steering Pipe	1
12A	18C-616	†BOLT, Wiring Harness	1	28A	18C-628	†BOLT, Clip to Frame	1
12B	18D-06	†NUT, Wiring Harness	1	28B	18D-06	†NUT, Clip to Frame	1
13	30H-27	CLIP, Wiring Harness	1	29	30H-35	CLIP, Battery Cable	1
14	30H-38	CLIP, Wiring Harness	1	30	541988	CLIP, Cab Wiring Harness to Cab	6
14A	18D-06	†NUT, Wiring Harness	1	31	30H-38	CLIP, Steering Pipes	2
15	30H-16	CLIP, Brake Line	1	31A	18C-624	†BOLT, Steering Pipe Clip	1
15A	18D-06	†NUT, Brake Line	1	31B	18D-06	†NUT, Steering Pipe Clip	1
16	531088	CLIP, Brake Line	1	32	30H-27	CLIP, Fuel Hose	1
17	30H-38	CLIP, Bucket Leveler Hose	1	33	30H-35	CLIP, Battery Cable	1
17A	18C-616	†BOLT, Bucket Leveler Hose	1	34	537869	BRACKET, Clip to Frame	1
17B	4E-06	†LKWSHR, Bucket Leveler Hose	1	34A	18C-624	†BOLT, Bracket to Frame	1
18	30H-38	CLIP, Clutch Pressure Hose	1	34B	18D-06	†NUT, Bracket to Frame	1
19	30H-38	CLIP, Wiring Harness	1	35	30H-46	CLIP, Cooler Line	1
19A	18C-616	†BOLT, Clip to Clip	1	35A	18C-612	†BOLT, Clip to Bracket	1
19B	18D-06	†NUT, Clip to Clip	1	35B	18D-06	†NUT, Clip to Bracket	1
20	6H-18	CLIP, Steering Pipe	1				

†Not Illustrated

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

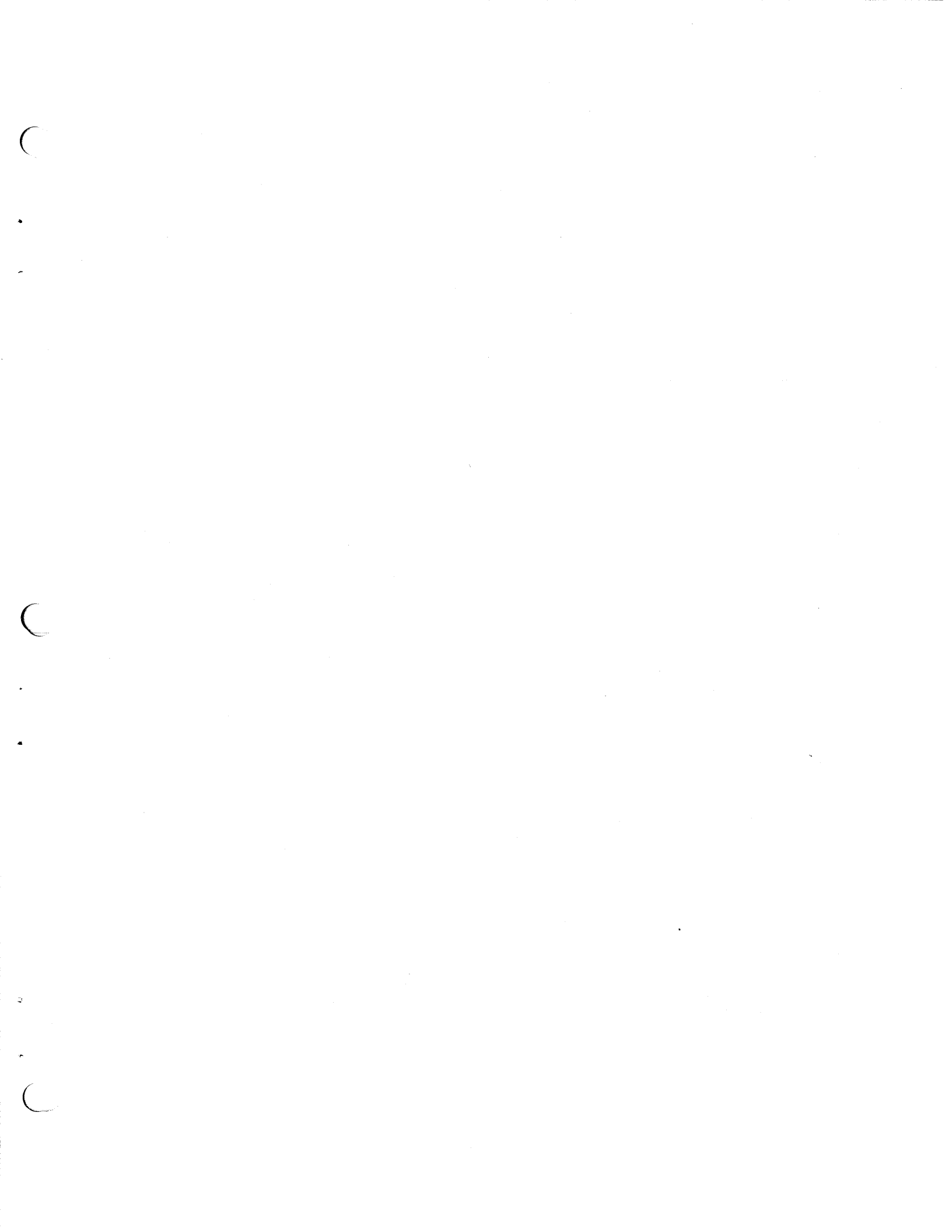


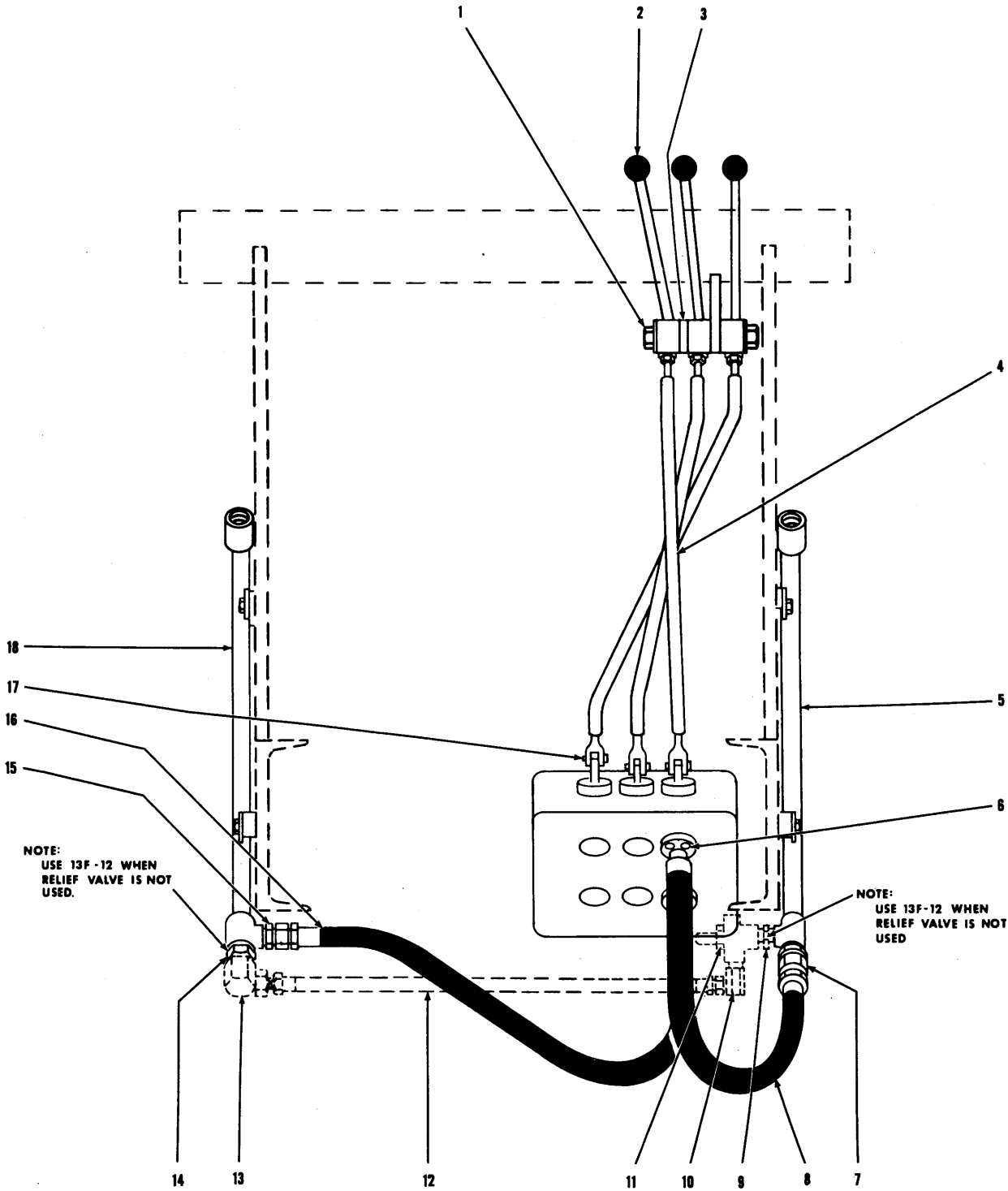
WHEEL AND TIRE

Item No.	Part No.	Description	No. Req'd.
	<u>14:00 x 24</u>	<u>17.5 x 25</u>	
1	532253	545957 WHEEL	4
2	517963	509445 STEM, Valve (Inc. 3, 4)	4
3	551684	551684 ADAPTER, Valve Stem	4
4	551685	551685 CAP, Valve	4
5	-----	----- §TIRE	4
6	941326	112461 FLANGE	4
7	941329	112462 "O" RING	4
8	941325	112460 LOCK RING	4

§Not Sold Separately

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





USE ITEMS 9 THRU 14 ONLY WHEN RELIEF VALVE IS CALLED FOR.
RELIEF VALVE IS USE ON SIDE DUMP, BUT IS NOT USE ON
ULRICH BUCKET.

3-SPOOL VALVE INSTALLATION AND PARTS

TS-4365

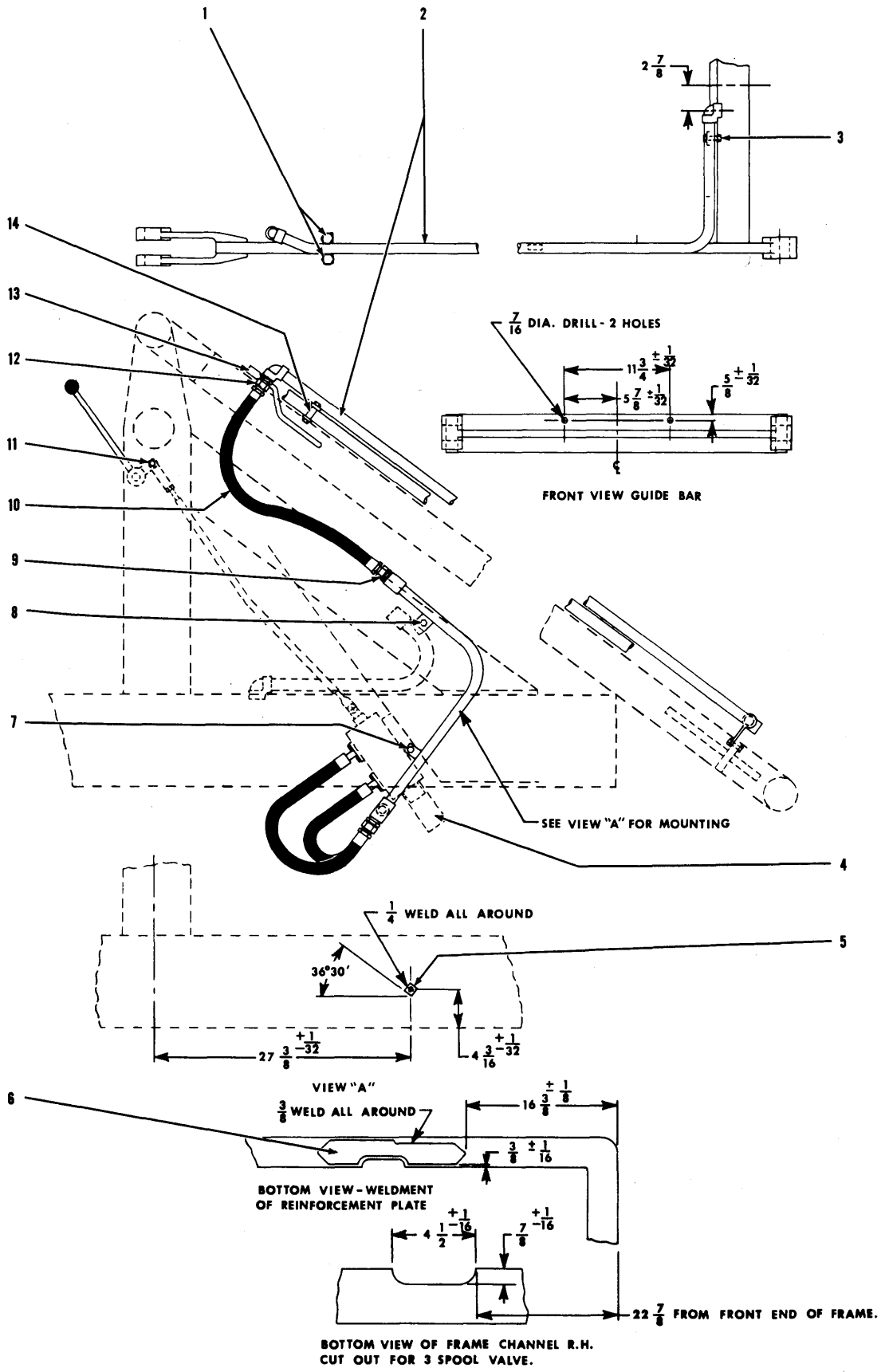
3 SPOOL VALVE INSTALLATION AND PARTS

Item No.	Part No.	Description	No. Req'd.
1	24C-8100	BOLT, Valve Lever Mounting	1
1A	550646	SLEEVE, Valve Lever Mounting	1
1B	526767	BUSHING, Nylon – Lever Mounting	1
1C	10H-25	FITTING, Grease	1
2	509772	KNOB, Valve Lever	2
2A	548804	LEVER, Valve Control	1
3	548808	SPACER, Valve Lever	1
4	548806	ROD ASSY, Valve Push	1
5	549977	PIPE ASSY – R.H.	1
6	17C-620	BOLT, Hose to Valve	8
6A	4E-06	LKWSHR, Hose to Valve	8
6B	663093	FLANGE, Split	4
7	36F-5	ADAPTER	1
8	515751	HOSE, Valve to R.H. Pipe	1
9	550358	*NIPPLE, Pipe Reducing	1
10	31F-4	*ADAPTER	1
11	540681	*VALVE ASSY, Relief	1
12	604616	*HOSE, Relief Valve to L.H. Pipe Assy	1
13	31F-4	*ADAPTER	1
14	356617	*BUSHING	1
15	36F-5	ADAPTER	1
16	593160	HOSE, Valve to L.H. Pipe	1
17	4F-08127	PIN, Clevis	1
17A	1F-414	COTTER, Clevis Pin	1
18	549978	PIPE ASSY, L.H.	1

*Use items 9 thru 14 only when Relief Valve is called for. Relief Valve is used on Side Dump, but is not used on Ulrich Bucket.

NOTES

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



3 SPOOL VALVE INSTALLATION AND PARTS

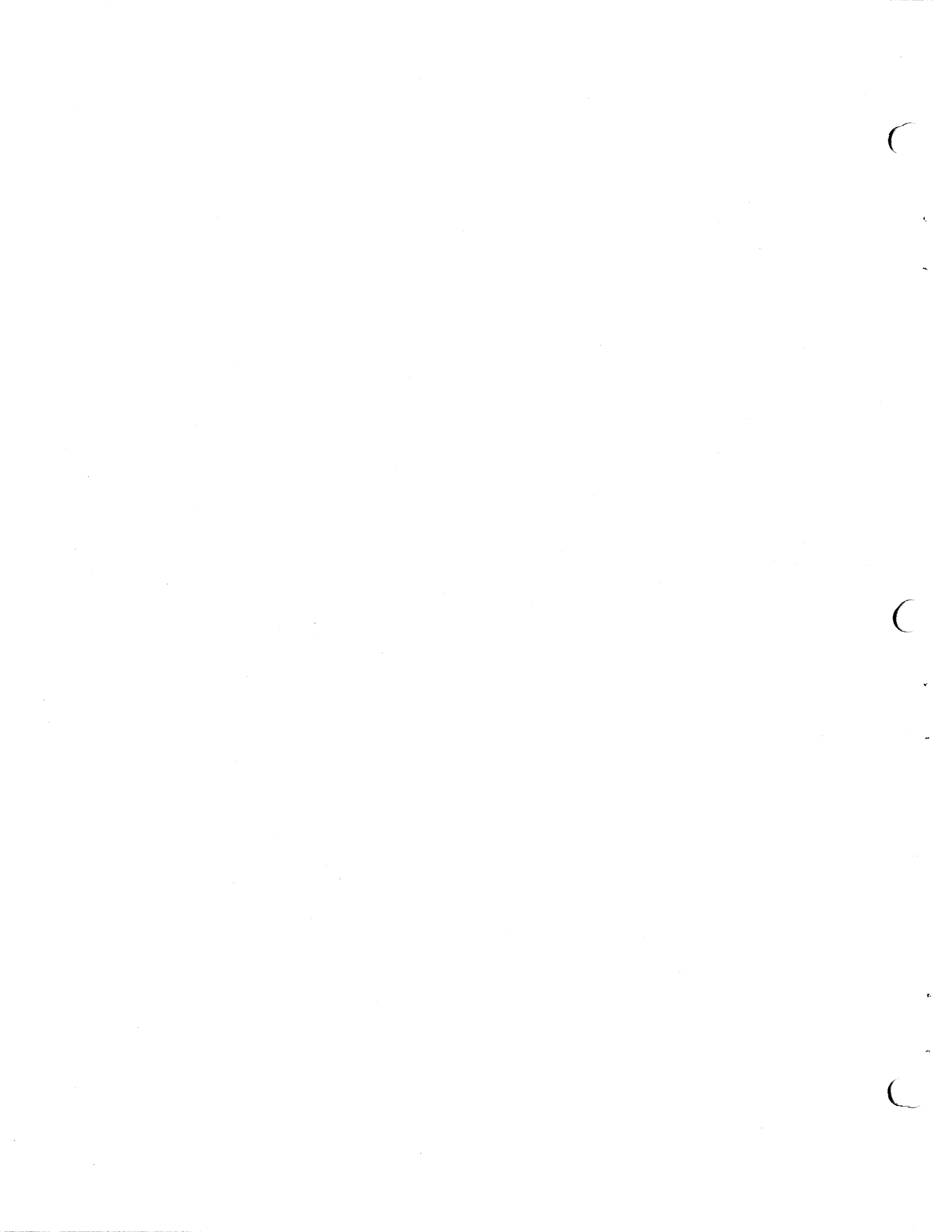
TS-4364

3 SPOOL VALVE INSTALLATION AND PARTS

Item No.	Part No.	Description	No. Req'd.
1	18C-636	BOLT, Guide Bar Pipe Mounting	4
1A	18D-06	NUT, Guide Bar Pipe Mounting	4
2	549969	PIPE ASSY, Guide Bar — R.H.	1
2A	549971	PIPE ASSY, Guide Bar — L.H.	1
3	18C-628	BOLT, Guide Bar Mounting Bracket	2
3A	18D-06	NUT, Guide Bar Mounting Bracket	2
4	548100	VALVE ASSY (Inc. 4A) — See Index	—
4A	25K-40110	"O" RING, Valve	2
5	548844	BLOCK, Mounting — Pipe Assy	2
6	548811	PLATE, Frame Reinforcing	1
7	18C-616	BOLT, Pipe Mounting	2
8	18C-632	BOLT, Pipe Mounting	2
8A	4E-06	LKWSHR, Pipe Mounting	4
9	661427	ADAPTER	1
10	591896	HOSE, Guide Bar Pipe to Side Pipe	2
11	4F-08127	PIN, Clevis	1
11A	1F-414	COTTER, Clevis Pin	1
12	661427	ADAPTER	1
13	549975	PIPE ASSY, Leveler	1
14	549973	SLEEVE, Guide Bar Pipe Mounting	4

NOTES

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



NUMERICAL INDEX

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
100160	57	106128	53	109624	53A	114463	53
100169	57	106129	53	109886	53A	116419	53A, 58
100170	57	106130	53	109887	53A	116646	57A
100171	57	106131	53	110712	53	116949	66
100172	57	106132	53	110843	55	116993	57A
100173	57	106133	53	110847	55	116996	57A
100174	57	106134	53	110897	55, 57A	116997	57A
100176	57	106135	53	111125	53A	116998	57A
100582	63, 65	106136	53	111126	53A	117022	57A
100864	67, 67A	106137	60	111127	53A	117150	66
100867	66, 67, 67A	106138	60	111344	55	117218	57A
100872	67, 67A	106216	67, 67A	111347	55	117220	53A
100878	67, 67A	106247	51	111348	55, 57A	117223	53A
100937	57	106266	60A	111656	53, 53A, 57	117226	60
100940	57	106267	60A	111658	55, 57A	117228	60
100941	55, 57, 57A	106268	60	111708	53A	117242	53A
100945	57	106276	53A	111719	53	117536	57A
100949	33, 35	106281	53A	111720	57	117537	57A
100950	57	106282	53A	111805	53, 53A	117538	57A
100951	57	106283	53A	112044	53	117558	67A
100953	57	106284	53A	112045	53	117913	53
100954	57	106285	53A	112047	53	117914	67
100967	53	106286	53A	112055	51	117915	67
100970	51, 53, 53A	106287	53A	112056	55	117925	53
101144	55	106290	53A	112060	66	118048	53
101196	55, 57A	106291	53A	112062	66	118254	67, 67A
101210	55, 57A	106296	53A	112068	66	118267	66
101217	57A	106297	53A	112069	66	121062	51, 53, 53A
101226	55	106298	53A	112070	66	131077	53
101227	55	106306	53A	112072	68	131078	51
101241	55	106313	53, 53A	112073	51	131662	53A
101243	55	106316	53A	112077	51	138249	13C
101245	55	106317	53A	112078	51	142396	11
101250	57A	106318	53A	112079	55	201120	35
101252	55, 57A	106319	53	112080	55	201566	35
101253	57A	106320	53	112084	55	201844	35
101254	55, 57A	106321	53	112085	51	201951	33, 44, 44A
101257	55, 57A	106322	53	112086	51	203647	37
101258	55, 57A	106349	58, 58A	112090	53	205928	35
101259	55, 57A	106350	58, 58A	112158	53A	206864	33, 35, 44, 44A
101261	57A	106351	58, 58A	112174	60	207647	43, 43A, 44, 44A
101262	55, 57A	106352	58, 58A	112175	60A	207873	43, 43A
101263	55, 57A	106373	67, 67A	112277	53	208760	33, 34, 35
101274	51, 53A	106455	51	112278	51, 53, 53A	208773	33, 34, 35
101332	67, 67A	106545	53A	112279	57	208776	33, 34, 35
102322	67, 67A	106546	53A	112281	57	208777	33, 34, 35
102745	44, 44A	106547	53, 53A	112286	51, 53A	208805	37, 68, 68A
103216	53	106549	67A	112287	51, 53A, 58	208809	37
103445	51, 53, 53A	106656	51, 53, 53A	112289	55	208810	37
103522	51, 53, 53A	106736	51	112350	57	208812	37
104167	55, 57A	106744	53A	112352	57	208871	35
104168	55, 57A	106762	51, 53, 53A	112353	57	209313	44, 44A
104182	57	106879	53	112354	57	209339	33
104412	51, 53, 53A	106880	51, 53, 53A	112355	57	209340	33
104942	37	106969	67, 67A	112356	57	209341	33
106058	53	106970	67, 67A	112439	70	209342	33
106059	51, 53, 53A	106998	51, 53	112460	110	209343	33
106060	51	107014	68, 68A	112461	110	209353	34
106076	57	107089	53A	112462	110	209364	33, 34
106081	57	107256	51, 53, 53A	112923	53A	209365	33, 34
106099	53	107261	55	112924	53	209366	33, 34
106115	53	107608	53, 53A	114089	51, 53A	209367	33, 34
106119	53	107646	53, 53A	114119	51	209369	33, 34
106120	53	108432	53	114169	67, 67A	209370	34
106121	53	108877	53A	114173	66	209371	34
106123	53	109050	51, 53A	114415	53	209372	34
106124	53	109055	51	114433	51, 53A	209374	33
106125	53	109088	58, 58A	114449	58A	209375	33
106127	53	109340	53A	114450	58A	209377	33

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
209379	37	215644	35	225854	37	524556	23
209382	37	215909	43, 43A	227265	49	525293	35, 83
209387	33, 34	216388	44, 44A	227872	37	525522	25
209396	35	216555	44, 44A	227874	37	526414	76, 76A
209403	35	216677	33, 34	228873	37	526415	76, 76A
209404	35	216937	44, 44A	228944	37	526419	76, 76A
209405	35	216938	44, 44A	231554	44, 44A	526420	76, 76A
209406	35	220186	33, 34, 35	233089	43, 43A	526422	76, 76A
209407	35	220363	37	233092	43, 43A	526423	76, 76A
209409	35	220386	34	234503	44, 44A	526424	76, 76A
209411	35	220388	33, 34	281693	43	526643	103
209414	35	220389	33, 34	281740	33	526767	9, 39, 94, 113
209423	35	220390	33	282018	43, 43A	526879	69
209426	35	220391	33, 34	302602	93, 93A, 93B, 93D, 93E	527095	18
209427	35	220393	34			527096	18
209428	35	220394	34	351131	24	527350	2
209429	35	220395	34	351495	20, 21, 22	527496	90, 91
209430	35	220398	33, 34, 35	356612	27, 27A, 69	527497	90, 91
209431	35	220468	33, 34	356614	63, 65	527812	90, 91
209432	35	220469	33, 34	356615	5, 27A, 63, 65	527936	25
209433	35	220471	33, 34	356616	63, 65	528691	81, 81A
209434	35	220472	33, 34	356617	63, 79, 79A, 79B, 81, 81A, 81B, 113	528998	59, 59A
209435	35	220473	33, 34			529968	9A
209673	35	220508	34	356626	49	529970	9A
209690	37	220513	34	361939	24	529971	9A
209692	35	220514	34	420564	20	529979	17
209701	35	220515	34	420945	17, 18	530822	103
209702	35	220669	34	427237	95	531088	105, 107, 109
209703	35	220673	34	450072	43A, 46	531684	81, 81A, 81B
209874	37	220725	43, 43A	498024	46	531792	27, 27A
209878	37	220934	33	498113	46	531969	9A
209882	37	220947	37	498127	46	532118	9, 10, 90, 91
209964	72	220957	37	498128	46	532125	10
211433	49	220965	70	507068	17, 18	532162	10
214596	43, 43A	220968	70	507069	17, 18, 19	532184	35
214730	44, 44A	220969	70	507695	60	532192	75
214920	43	220981	45	507729	63, 65	532197	59, 59A
214921	43	220982	45	509300	18	532243	94
214923	44	220983	45	509303	18	532253	110
214924	44, 44A	221209	33	509445	110	532255	94
214925	44, 44A	221209	34	509711	18	532258	94
214928	43, 43A	221401	33, 34	509772	39, 40, 94, 113	532261	94
214929	43, 43A	221653	44, 44A	510452	65	532302	9
214930	43, 43A	221996	33, 34	511504	17, 18	532378	9, 91
214931	43, 43A	221998	33, 34, 35	512133	27, 27A	532391	91
214932	44, 44A	222006	44, 44A	513122	73	532416	9
214933	44, 44A	222079	44, 44A	513873	61	532947	76
214934	43, 43A	222312	43, 43A	515424	17, 18	532948	76, 76A, 76B
214936	43, 43A	222318	43, 43A	515751	113	533417	87, 87A
214937	44, 44A	222407	33, 34	516175	23	533478	87, 87A
214939	43, 43A, 44, 44A	222409	33, 34	516861	10	533482	105, 107, 109
214940	44, 44A	222684	44	517089	79, 79A, 79B, 81, 81A	533483	105, 107, 109
214941	43, 43A	223780	35			533489	76
214942	44A	223833	44A	517228	95	533490	76
214945	44	223867	33, 34, 35	517963	110	533553	40
214946	43, 43A, 45	223881	33, 34, 35	518233	20, 21, 22, 83	533587	49
214949	43, 43A, 45	223890	84	518259	61	533915	79A, 79B, 81, 81A, 81B
214950	44, 44A	223901	44, 44A	518346	75, 75A		
214951	44, 44A	223925	35	518707	19	533916	79, 79A, 79B, 81, 81A, 81B
214953	43, 43A, 44, 43A	223942	33, 34, 35	519275	81, 81A, 81B		
214954	43, 43A	223944	37	519793	40	533927	79, 79A, 79B, 81, 81A, 81B
214955	44, 44A	223951	34	521000	59A		
214956	43, 43A	224009	44, 44A	521769	40	534214	63, 65
214957	43A	224026	44, 44A	522617	90, 91	534259	63, 65
214958	44A	224031	34	523325	76, 76A, 76B	534260	63, 65
214959	43A	224039	43, 43A	523461	60A	534403	10
214961	43, 43A, 46	224047	33, 34	523467	60A	534578	14
214963	84	224069	35	523543	87	534606	40
214969	45	224095	37	524497	63, 65	534738	14
214988	44, 44A	224106	33, 34	524526	5	534927	39
215502	49, 79, 79A, 79B, 81, 81A, 81B	225408	35	524530	81, 81A, 81B	534929	39
				524543	49	534950	95

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
534953	95	538010	9	540924	63, 65	544273	65
534960	97	538011	9	540925	63, 65	544288	19
535094	40	538065	76, 76A	540969	99	544379	13, 13A
535325	79, 79A, 79B, 81, 81A, 81B	538136	39	541035	11	544383	13, 13A
535649	7	538154	90, 91	541133	24	544421	25
535680	98	538161	95	541152	27, 27A	544512	71
535710	39	538201	7	541155	27, 27A	544610	13, 13A
535898	83	538240	83	541156	27, 27A	544625	71
536100	6, 6A	538250	103	541179	87A	544952	11
536104	6	538256	103	541181	87, 87A	544953	11
536140	23, 24, 25	538258	103	541251	1	544962	13, 13A
536141	23, 24, 25	538286	83	541420	18, 19	544963	13, 13A
536191	19	538585	6, 6A	541509	103	544964	13, 13A
536204	29, 29A	538599	6, 6A	541656	103	544970	13, 13A
536274	29, 29A	538677	95	541657	103	544971	13, 13A
536286	40	538697	76, 76A	541658	103	544984	13, 13A
536287	40	538707	14	541659	103	544985	13, 13A, 13B
536291	39	538708	14	541730	9	544988	11
536294	39	538891	40	541748	90, 91	544998	70
536332	79, 79A, 79B, 81, 81A, 81B	538891	7	541749	90, 91	545005	71
536350	87, 87A	539042	17, 18	541769	90, 91	545006	71
536387	29	539044	21	541794	85, 85A	545074	21
536445	81, 81A, 81B	539045	95	541865	107	545090	103
536459	81, 81A, 81B	539195	29, 29A	541879	60	545155	76, 76B
536513	5	539318	29, 29A	541880	60A	545193	103
536522	99	539821	16	541983	63, 65	545194	103
536640	49	539839	17, 18	541988	105, 107, 109	545211	85, 85A
536746	2, 3, 4	539981	5	542074	103	545252	85, 85A
536749	79, 79A, 79B, 81, 81A, 81B	539985	95	542119	87, 87A	545268	89
536766	49	539987	83	542120	87, 87A	545599	9A
536767	49	540022	49	542138	87	545602	9A
536777	49	540056	29, 29A	542143	87, 87A	545606	9A
536794	49	540104	19, 20, 22, 87, 87A	542194	49	545607	9A
536936	65	540106	22, 87, 87A	542195	49	545617	9A
536950	13	540107	19	542255	61	545620	9A
536951	11	540108	20, 21, 22, 87, 87A	542272	15	545624	9A
536952	11	540127	79, 81	542321	103	545625	9A
536953	13	540129	79A, 79B, 81A, 81B	542506	63, 65	545731	9A
536954	13	540190	59, 59A	542507	63, 65	545734	9A
536955	11	540229	3	542639	85	545738	9A
536956	11	540230	3	542983	15	545739	9A
536959	13, 13A	540236	6	543034	29	545941	73
536999	97	540244	21	543298	87, 87A	545957	110
537082	49	540249	18	543299	87, 87A	546042	81A, 81B
537454	90	540266	21	543300	87, 87A	546642	5
537457	91	540306	63, 65	543301	87	546705	2
537460	91	540406	9	543315	93	546706	2
537477	87, 87A	540407	18	543406	9	546830	72
537586	9A	540457	15	543575	17, 18	546835	63
537591	9A	540459	15	543576	17, 18	546853	63, 65
537592	9A	540572	81, 81A, 81B	543740	63, 65	546920	13, 13A
537625	35	540604	49	543741	63, 65	546921	13, 13A
537702	9A	540606	49	543877	22	547015	13B
537772	10	540611	87, 87A	543878	20, 22	547126	17
537790	6, 6A	540614	87, 87A	543909	4	547129	17
537802	6, 6A	540643	49	543910	4	547130	17
537823	6, 6A	540647	49	543914	84	547139	17
537825	98, 99	540649	79, 79A, 79B, 81, 81A, 81B	543918	87, 87A	547152	11
537869	105, 107, 109	540669	81, 81A, 81B	543923	87	547160	20
537882	90	540681	113	543926	87, 87A	547162	20
537927	49	540707	63, 65	543927	87, 87A	547380	22
537963	39	540760	87	543928	87, 87A	547419	79, 79A, 79B
537965	39	540761	87	543930	87, 87A	547420	79, 79A, 79B
537966	39	540858	24	544005	81, 81A, 81B	547421	79, 79A, 79B
537968	39	540861	24	544015	21	547445	98
537994	49	540883	79, 79A, 79B, 81, 81A, 81B	544164	49	547451	98
537995	49	540884	79, 81	544197	49	547463	5
537997	73	540888	18, 19	544221	19	547518	5
537998	73	540919	63, 65	544222	19	547537	23
		540923	63, 65	544248	19	547544	26
				544250	19	547545	26
				544272	65	547546	26

Part No.	Page No.	Part No.	Page No.	Part No.	Page No.	Part No.	Page No.
945764	72A	946468	89	947867	93F, 93G	992164	69
945767	72A	946584	93, 93B, 93C, 93D, 93E, 93F	947868	93F, 93G	1302111	93, 93A, 93B, 93D
945769	72A	946585	93F	948143	14	1302114	93, 93B
945773	75A	946637	93D, 93E, 93F	948144	14	1302554	72, 72A
945774	75A	946638	93D, 93E, 93F	948202	93F, 93G	1306622	93E
945775	75A	946805	93F	948722	93G	1306623	93D, 93F, 93G
945805	93G	946813	93E, 93F, 93G	948726	93G	1306625	76B
945356	93, 93A, 93B, 93C, 93E	946911	89	948727	93G	1307317	93A
945863	93A, 93D	947242	16	948730	93G	1503567	76B
945864	93, 93A, 93B	947409	40	948733	93G	1503568	76B
945865	93A, 93D	947460	93, 93A, 93F	948734	93G	1503570	76B
945866	93A	947740	69	948735	93G	1503572	76B
945867	93A	947840	93F, 93G	948737	93G	1503827	76B
945868	93, 93A, 93C, 93E	947841	93F, 93G	948738	93G	1503828	76B
945869	93, 93A, 93C, 93E	947842	93F	948739	93G	1505537	103
945870	93, 93A, 93C, 93E	947843	93F, 93G	948753	93G	1507663	14
945872	89, 89B	947844	93F, 93G	948950	93G	1508704	75, 75A
945873	89, 89A, 89B	947845	93F, 93G	948951	93G	1508801	93F
945874	89, 89B	947846	93G	948952	93G	1508845	40
945884	93C	947847	93F	948953	93G	1510472	93, 93A, 93F, 93G
945996	61	947848	93F, 93G	948954	93G	1520193	24
946163	70	947852	93G	949370	70	1520300	89, 89A, 89B
946282	97	947853	93D, 93E	949467	89	1522273	89A, 89B
946378	93G	947854	93F	949540	89	1522535	76B
946389	13	947855	93F	949541	89	1522536	89A, 89B
946411	72A	947856	93F	949542	89	1524040	89A, 89B
946427	93D, 93E, 93F	947857	93F, 93G	953066	103	1524560	76B
946431	94D, 93F, 93G	947858	93F	953068	103	1525710	13B
946432	93D, 93F, 93G	947859	93F	955321	69	1533615	49, 79, 79A, 79B, 81, 81A, 81B
946433	93D, 93F, 93G	947862	93F	955323	69	1545186	17, 18, 19
946450	93D, 93F, 93G	947864	93, 93A, 93B, 93D, 93F, 93G	955326	69	1743825	97
946452	93D	947865	93A, 93C, 93E, 93F, 93G	956622	68, 68A	2504659	19
946545	93D, 93F, 93G			956664	68	5203855	7
946455	93E, 93F, 93G			957995	68		
946457	93, 93A, 93B, 93D			958553	67, 67A, 68, 68A		

C

.

.

C

.

.

.

.

C

