

MICHIGAN

PARTS MANUAL

No. 2252-R1

Model 75 IIIA Articulated Tractor Shovel

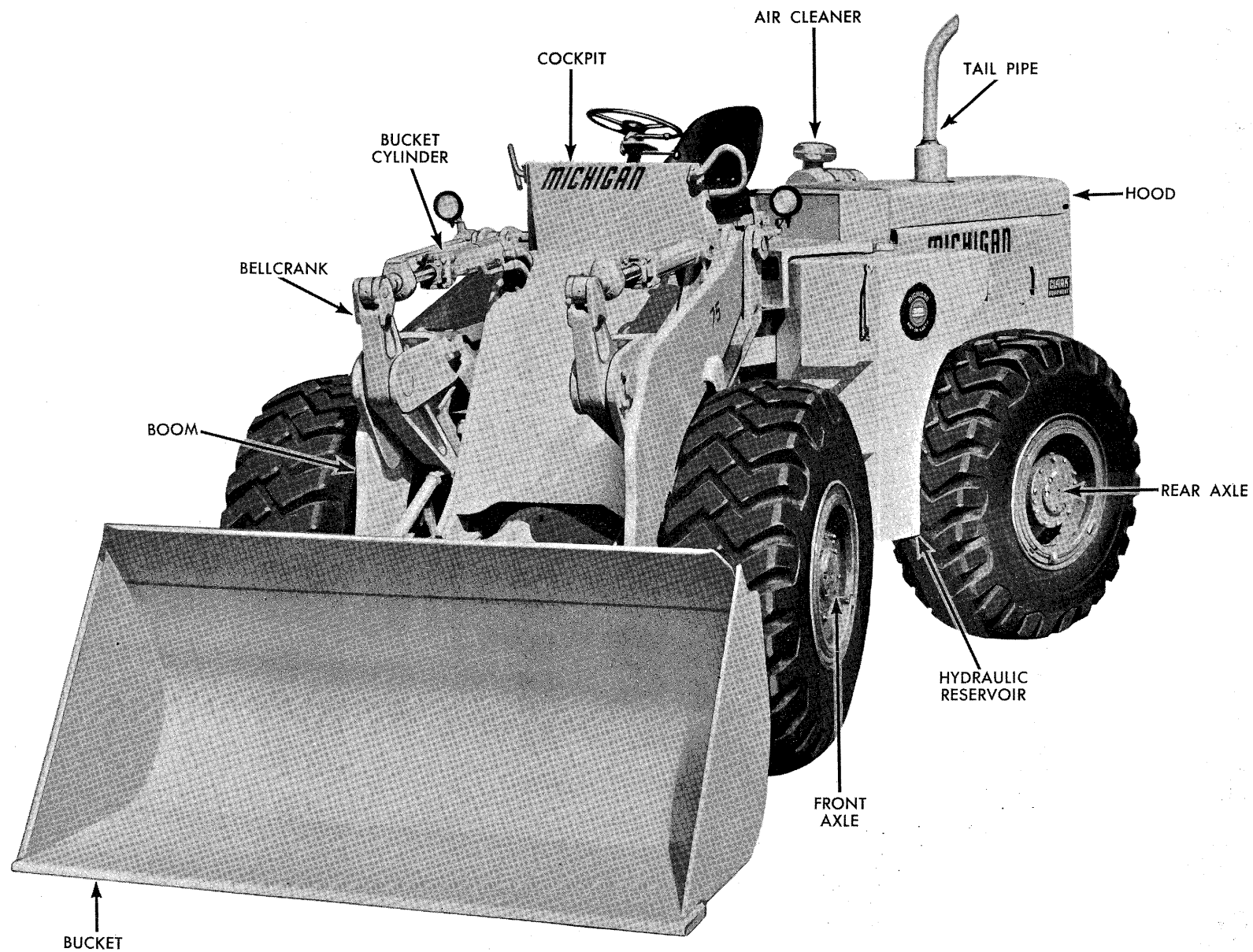
Information contained herein
pertains to Machine Serial
Numbers listed below:

75IIIA CUMMINS - 1ACC101 and After

Data covering Machine Serial Ranges prefixed with designations
2ACC, 3ACC 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 75 IIIA (ARTICULATED) TRACTOR SHOVEL

TS-8325-P

WHEN ORDERING REPAIR PARTS

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

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

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

Always give serial number of machine.

Furnish: Quantity, Part Number and Description.

WHEN PARTS ARE RECEIVED

Check immediately for quantity, correctness and condition.

Advise your Michigan Distributor of any error.

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

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NOTES

ENGINE AND ACCESSORIES

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

ENGINE ACCESSORIES

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

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

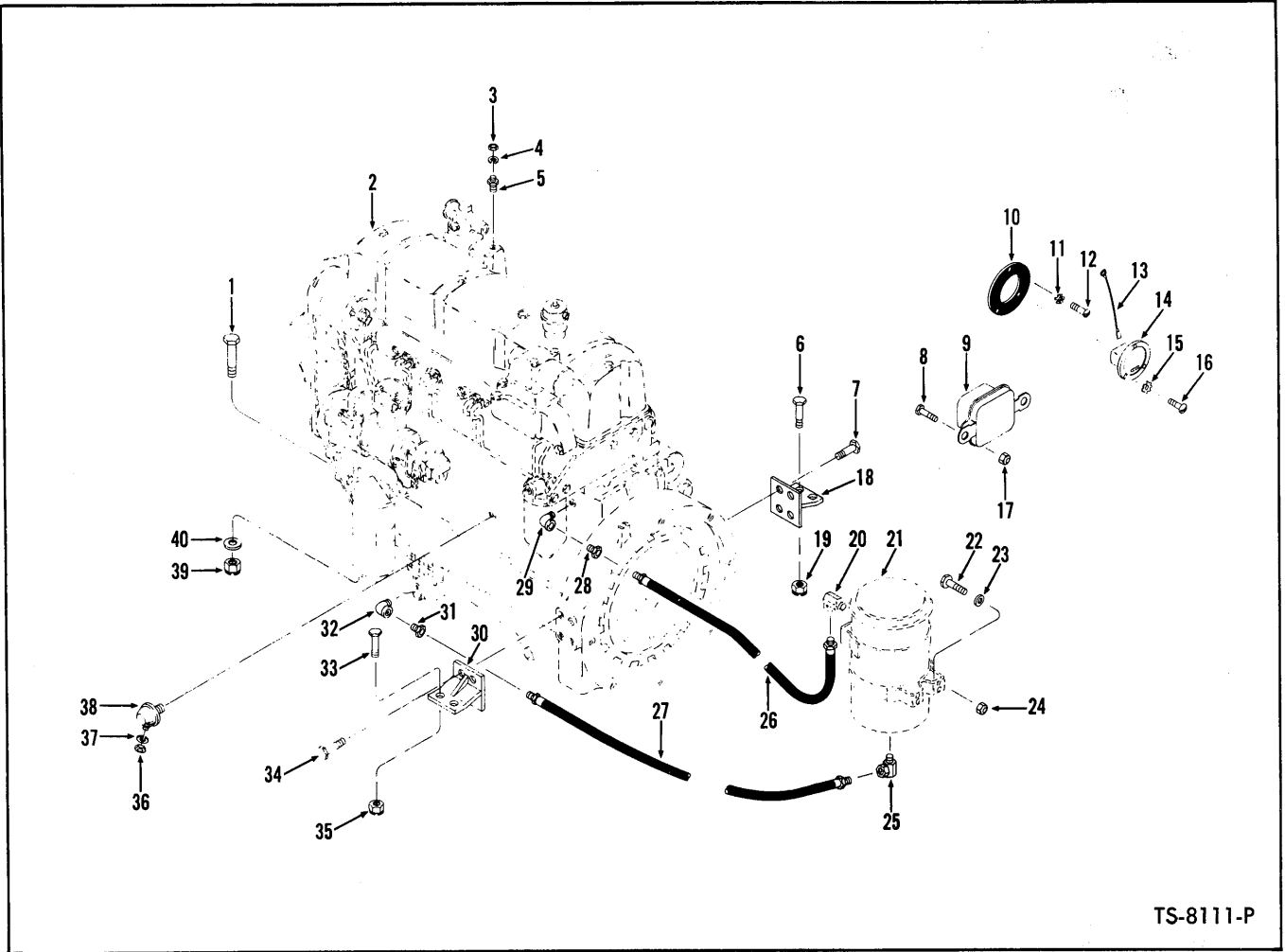
ALTERNATOR, FAN AND WATER PUMP DRIVE BELTS

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

REPLACEMENT FILTER ELEMENTS

Item No.	Part No.	Description	No. Req'd.
11	946011	ELEMENT, Engine Full Flow Lube Filter	1
12	947293	ELEMENT, Engine By-Pass Filter	1
13	946010	ELEMENT, Engine Fuel Filter	1
14	215502	ELEMENT, Trans. & Converter Hyd. System Filter	1
15	1530600	ELEMENT, Hydraulic Reservoir Return Filter	1

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



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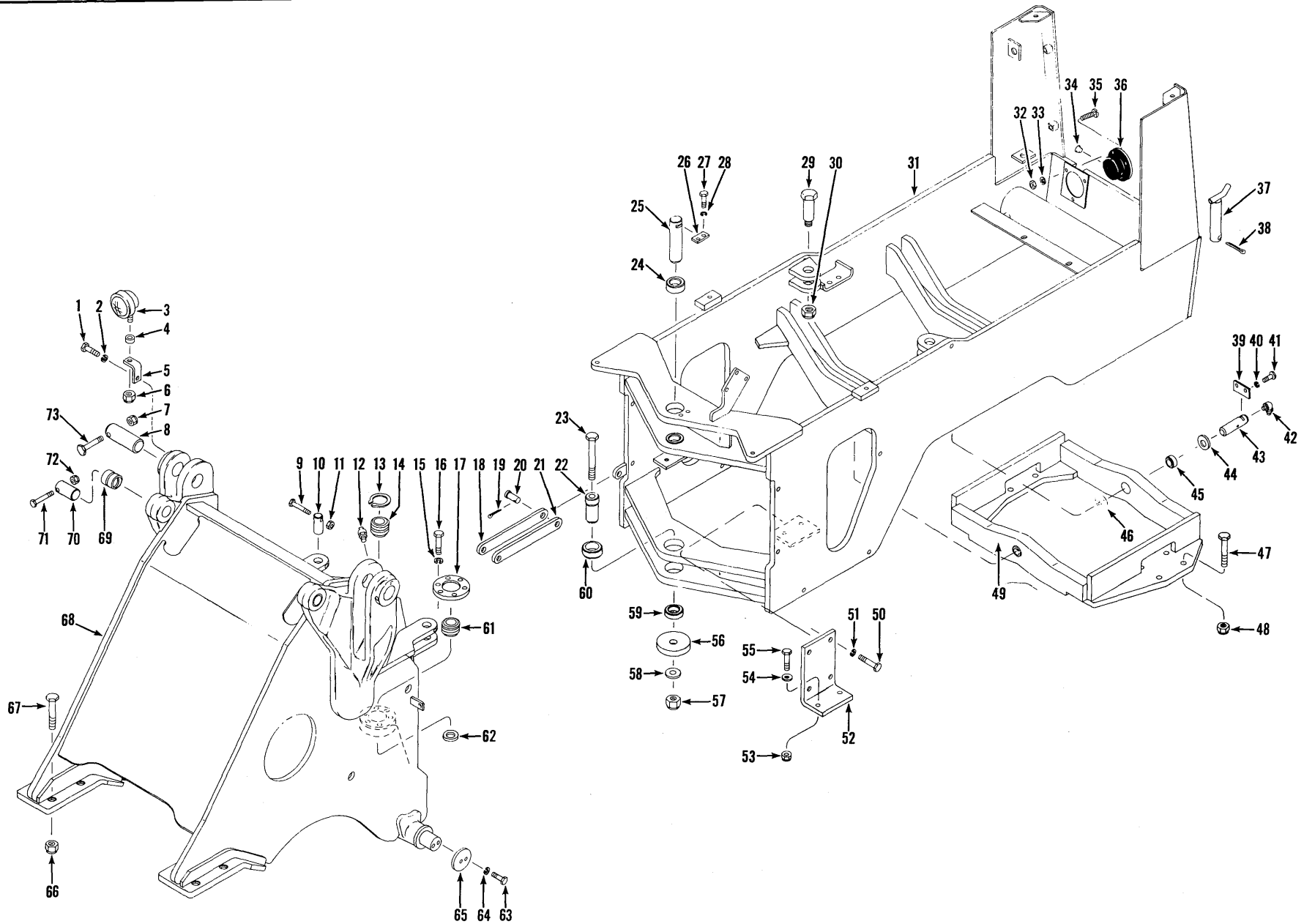
ENGINE SUPPORT AND AUXILIARY PARTS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18C-1052	BOLT, Trunnion to Frame	2	21	-----	BYPASS FILTER — Furnished with Engine	—
2	-----	ENGINE — See Cummins Engine Parts Manual	—	22	18C-416	BOLT, Filter Mounting	8
3	14D-10	NUT, Sender Unit	1	23	25E-14	WASHER, Filter Mounting	8
4	12E-10	LKWSHR, Sender Unit	1	24	18D-04	NUT, Filter Mounting	8
5	551323	SENDER UNIT, Engine Temperature	1	25	31F-3	ADAPTER UNION, Hose to Filter	1
6	18C-832	BOLT, Support to Frame	2	26	639122	HOSE, Filter to Engine	1
6A	635682	†WASHER, Support to Frame	2	27	663772	HOSE, Filter to Engine Oil Pan	1
7	8C-824	BOLT, Support to Engine	4	28	-----	OMIT, Not Used this Application	—
8	18C-412	BOLT, Regulator Mounting	2	29	26F-3	ELBOW, Hose to Engine	1
9	336290	*REGULATOR, Voltage	1	30	571153	SUPPORT, Engine	1
10	551251	DAMPENER, Hourmeter Vibration	1	31	19F-6	BUSHING, Reducing	1
11	12E-6	LKWSHR, Vibration Dampener Mtg.	3	32	26F-3	ELBOW, Hose to Engine Oil Pan	1
12	3G-608	SCREW, Vibration Dampener Mtg.	3	33	18C-832	BOLT, Support to Frame	2
13	558960	WIRE, Hourmeter Ground	1	33A	635682	†WASHER, Support to Frame	2
14	1743825	HOURMETER KIT (Inc. 15, 16)	1	34	8C-824	BOLT, Support to Engine	4
15	12E-6	LKWSHR, Hourmeter to Dampener	3	35	18D-08	NUT, Support to Frame	2
16	3G-608	SCREW, Hourmeter to Dampener	3	36	14D-10	NUT, Sender Unit	1
17	18D-04	NUT, Regulator Mounting	2	37	12E-6	LKWSHR, Sender Unit	1
18	571153	SUPPORT, Engine	1	38	1618574	SENDER UNIT, Engine Oil Pressure	1
19	18D-08	NUT, Support to Frame	2	39	68D-10	NUT, Trunnion to Frame	2
20	31F-3	ADAPTER UNION, Hose to Filter	1	40	25E-25	WASHER, Trunnion to Frame	2

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

†Not Illustrated

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



FRONT AND REAR FRAME AND CRADLE

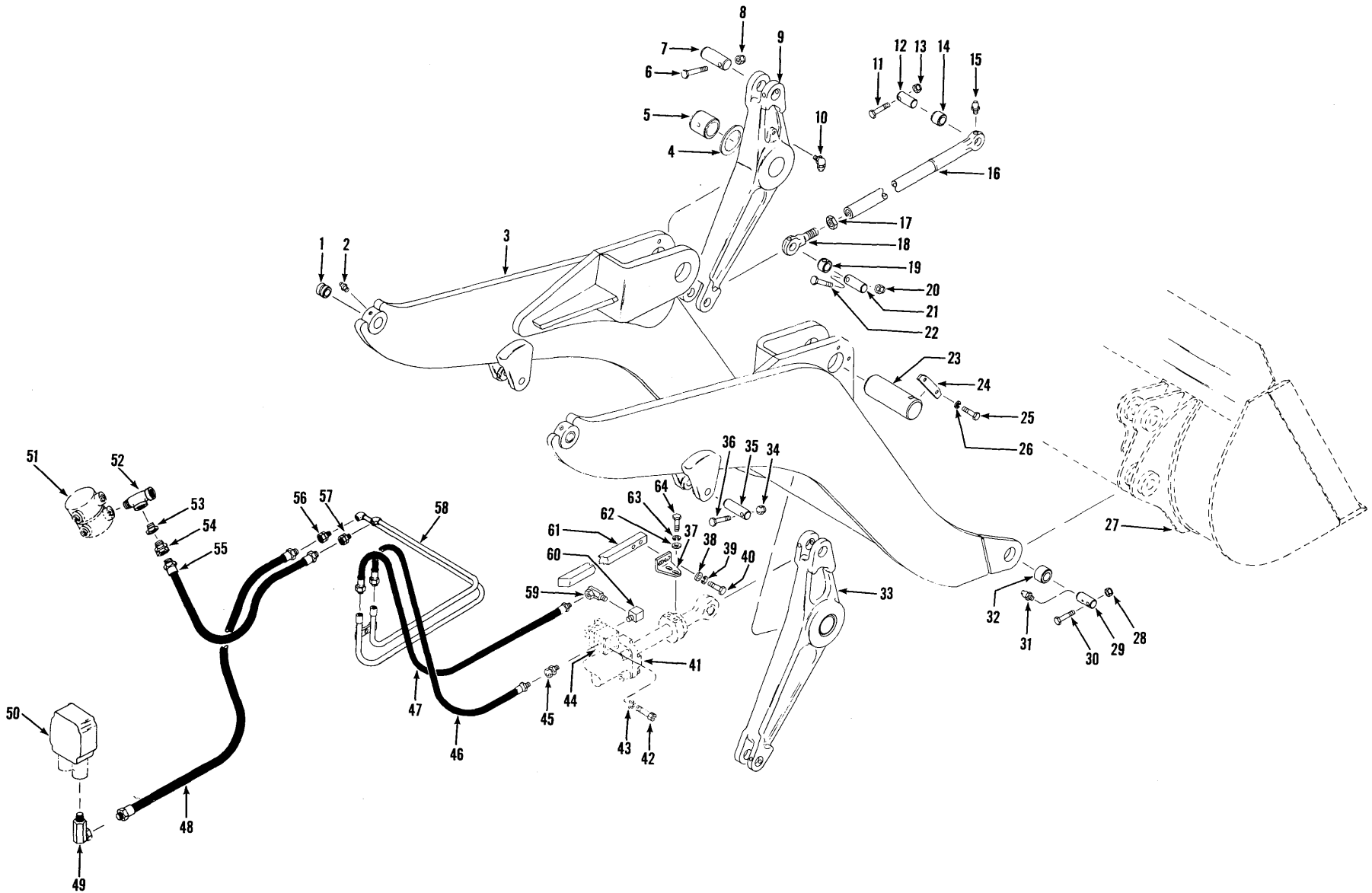
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FRONT AND REAR FRAME AND CRADLE

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18C-1224	BOLT, Bracket to Frame	2	36B	942746	†BULB, Stop & Tail Lamp	2
2	4E-12	LKWSHR, Bracket to Frame	2	37	1506818	PIN, Drawbar	1
3	547529	LAMP, Flood (Inc. 3A)	2	38	1F-1252	COTTER, Drawbar Pin	1
3A	944907	†SEALED UNIT	2	39	1506190	LOCK PLATE, Cradle Pin Retaining	2
4	509320	SPACER, Lamp to Bracket	2	40	4E-08	LKWSHR, Lock Plate to Cradle	4
5	569233	BRACKET, Flood Lamp Mounting	2	41	18C-820	BOLT, Lock Plate to Cradle	4
6	17D-6	NUT, Flood Lamp Mounting	2	42	12H-15	FITTING, Cradle Pin Grease	2
7	18D-10	NUT, Pin Retaining	2	43	1521805	PIN, Cradle to Frame	2
8	1522538	PIN, Boom to Frame	2	44	552146	‡SPACER, Cradle Pin — 1/16"	—
9	18C-668	BOLT, Pin Retaining	2	45	1521804	BUSHING, Cradle	2
10	1521896	PIN, Steer Cylinder Anchor	2	46	552147	‡SPACER, Cradle Pin — 1/8"	—
11	18D-06	NUT, Pin Retaining	2	47	18C-16160	BOLT, Axle to Cradle	8
12	12H-15	FITTING, Hinge Pin Grease	2	48	68D-16	NUT, Axle to Cradle	8
13	710943	RING, Bushing Retaining	1	49	1521810	CRADLE ASSY (Inc. 46)	1
14	669896	BUSHING, Upper Hinge Pin	1	50	17C-1228	BOLT, Transmission to Bracket	8
15	4E-08	LKWSHR, Cap to Frame	6	51	4E-12	LKWSHR, Transmission to Bracket	8
16	18C-820	BOLT, Cap to Frame	6	52	589573	BRACKET, Transmission Mounting	2
17	1522024	CAP, Lower Hinge Pin	1	53	18D-08	NUT, Bracket to Frame	4
18	1533777	BAR, Safety Link	1	54	619029	WASHER, Bracket to Frame	4
19	1F-540	COTTER, Clevis Pin	2	55	18C-836	BOLT, Bracket to Frame	4
20	358640	PIN, Safety Link Clevis	2	56	1506853	PLATE, Bushing Retaining	1
21	1533777	BAR, Safety Link	1	57	68D-16	NUT, Lower Hinge Pin Retaining	1
22	1522025	PIN, Lower Hinge	1	58	589596	WASHER, Lower Hinge Pin Retaining	1
23	18C-16144	BOLT, Lower Hinge Pin Retaining	1	59	1522029	BUSHING, Lower Pivot — Lower	1
24	1522035	BUSHING, Upper Pivot	2	60	1522030	BUSHING, Lower Pivot — Upper	1
25	1522023	PIN, Upper Hinge	1	61	669896	BUSHING, Lower Hinge Pin	1
26	1532917	LOCK PLATE, Pin Retaining	1	62	1522027	SPACER, Lower Hinge Pin	1
27	18C-820	BOLT, Lock Plate to Frame	2	63	17C-620	BOLT, Retainer to Frame	4
28	4E-08	LKWSHR, Lock Plate to Frame	2	64	4E-06	LKWSHR, Retainer to Frame	4
29	517355	BOLT, Steering Cylinder Anchor	2	65	1522797	RETAINER, Boom Cylinder	2
30	66D-22	NUT, Steering Cylinder Anchor	2	66	68D-16	NUT, Axle to Frame	8
31	1523017	FRAME ASSY, Rear (Inc. 24)	1	67	18C-16160	BOLT, Axle to Frame	8
32	14D-10	NUT, Tail Lamp Mounting	6	68	1522568	FRAME ASSY, Front (Inc. 69)	1
33	17E-10	LKWSHR, Tail Lamp Mounting	6	69	585007	BUSHING, Bucket Cylinder to Frame	2
34	1010736	PLUG, Tail Lamp — R.H. Only	1	70	556960	PIN, Bucket Cylinder to Frame	2
35	2G-1012	SCREW, Tail Lamp Mounting	6	71	18C-880	BOLT, Pin Retaining	2
36	2520770	LAMP, Stop & Tail (Inc. 36A)	2	72	18D-08	NUT, Pin Retaining	2
36A	1010449	†LENS, Stop & Tail Lamp	2	73	18C-1096	BOLT, Pin Retaining	2

†Not Illustrated
‡As Required

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



BOOM, BELLCRANKS, BUCKET LEVELER AND PIPING

TS-8080-P

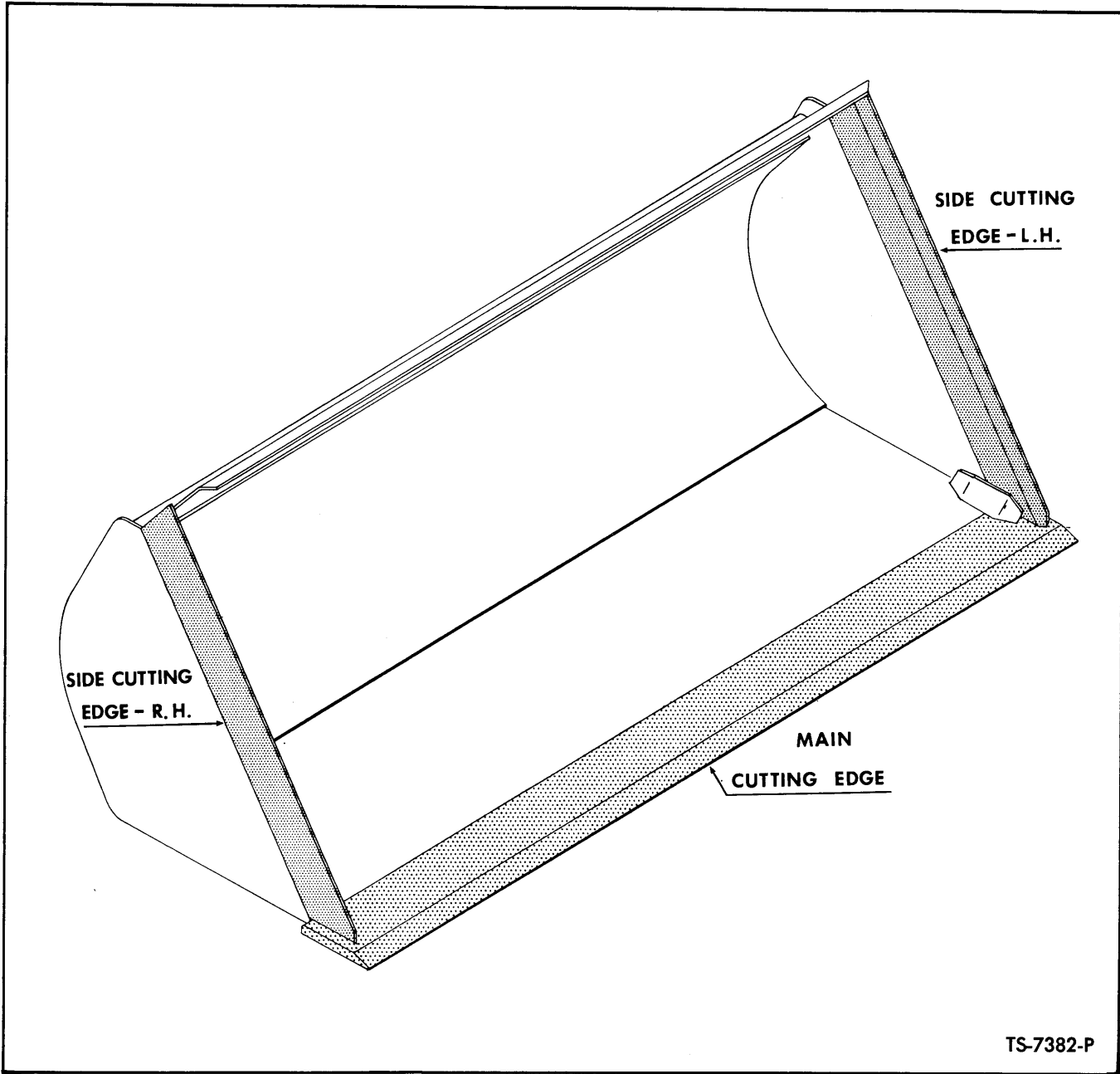
BOOM, BELLCRANKS, PUSHRODS, BUCKET LEVELER AND PIPING

Item No.	Part No.	Description	No. Req'd.
1	1521559	BUSHING, Boom Arm	2
2	10H-25	FITTING, Boom Arm Grease	2
3	1532526	BOOM ASSY (Inc. 1 & 32)	1
3A	1547964	‡SPACER, Boom to Bucket	—
3B	1547891	‡SPACER, Boom to Frame	—
4	1535341	SPACER, Bellcrank to Boom	2
5	1509735	BUSHING, Bellcrank Pivot	2
6	18C-876	BOLT, Pin Retaining	2
7	587900	PIN, Cylinder to Bellcrank	2
8	18D-08	NUT, Pin Retaining	2
9	1502909	BELLCRANK ASSY — L.H. (Inc. 5)	1
10	10H-25	FITTING, Bellcrank Pivot Grease	2
11	18C-864	BOLT, Pin Retaining	2
12	542631	PIN, Pushrod to Bucket	2
13	18D-08	NUT, Pin Retaining	2
14	587908	BUSHING, Pushrod Eye	2
15	10H-25	FITTING, Pushrod Grease	4
16	1505343	PUSHROD ASSY (Inc. 14)	2
17	8D-24	NUT, Eye Jam	2
18	570850	EYE ASSY, Pushrod Adjusting (Inc. 19)	2
19	587908	BUSHING, Pushrod Adjusting Eye	2
20	18D-06	NUT, Pin Retaining	2
21	587901	PIN, Pushrod to Bellcrank	2
22	18C-668	BOLT, Pin Retaining	2
23	1529902	PIN, Bellcrank to Boom	2
24	573525	LOCK PLATE, Pin Retaining	2
25	18C-1224	BOLT, Lock Plate Retaining	4
26	4E-12	LKWSHR, Lock Plate Retaining	4
27	—	BUCKET ASSY (See Index)	—
28	18D-08	NUT, Pin Retaining	2
29	568483	PIN, Boom to Bucket	4
30	18C-880	BOLT, Pin Retaining	2
31	10H-25	FITTING, Bucket Pivot Grease	2
32	568482	BUSHING, Bucket Pivot	3
33	1502908	BELLCRANK ASSY — R.H. (Inc. 5)	1

Item No.	Part No.	Description	No. Req'd.
34	18D-06	NUT, Pin Retaining	2
35	514921	PIN, Boom Cylinder to Boom	2
36	18C-656	BOLT, Pin Retaining	2
37	1528870	BRACKET, Bucket Leveler Cam	1
38	656672	WASHER, Cam to Bracket	2
39	4E-06	LKWSHR, Cam to Bracket	2
40	18C-616	BOLT, Cam to Bracket	2
41	—	BUCKET CYLINDER (See Index)	—
42	2G-1010	SCREW, Air Valve Mounting	4
43	12E-10	LKWSHR, Air Valve Mounting	4
44	—	AIR VALVE ASSY, Bucket Leveler — See Index	1
45	36F-2	ADAPTER, Hose to Valve	1
46	559820	HOSE, Tube to Air Valve	1
47	1502687	HOSE, Tube to Air Valve	1
48	1502686	HOSE, Control Valve to Tube	1
49	31F-2	ADAPTER, Hose to Control Valve	1
50	—	CONTROL VALVE (See Index)	—
51	—	BRAKE FOOT VALVE (See Index)	—
52	17F-4	TEE, Brake Valve	1
53	19F-5	BUSHING, Reducing	1
54	36F-2	ADAPTER, Hose to Bushing	1
55	1502687	HOSE, Brake Valve to Tube	1
56	36F-2	ADAPTER, Hose to Tube	1
57	36F-2	ADAPTER, Hose to Tube	1
58	1502690	TUBE ASSY, Bucket Leveler	1
58A	18C-616	†BOLT, Tube Mounting	2
58B	656672	†WASHER, Tube Mounting	2
58C	4E-06	†LKWSHR, Tube Mounting	2
59	31F-2	ADAPTER, Hose to Elbow	1
60	29F-1	ELBOW, Adapter to Valve	1
61	1528869	CAM, Bucket Leveler	1
62	656672	WASHER, Cam Bracket Mounting	2
63	4E-06	LKWSHR, Cam Bracket Mounting	2
64	18C-616	BOLT, Cam Bracket Mounting	2

‡As Required
†Not Illustrated

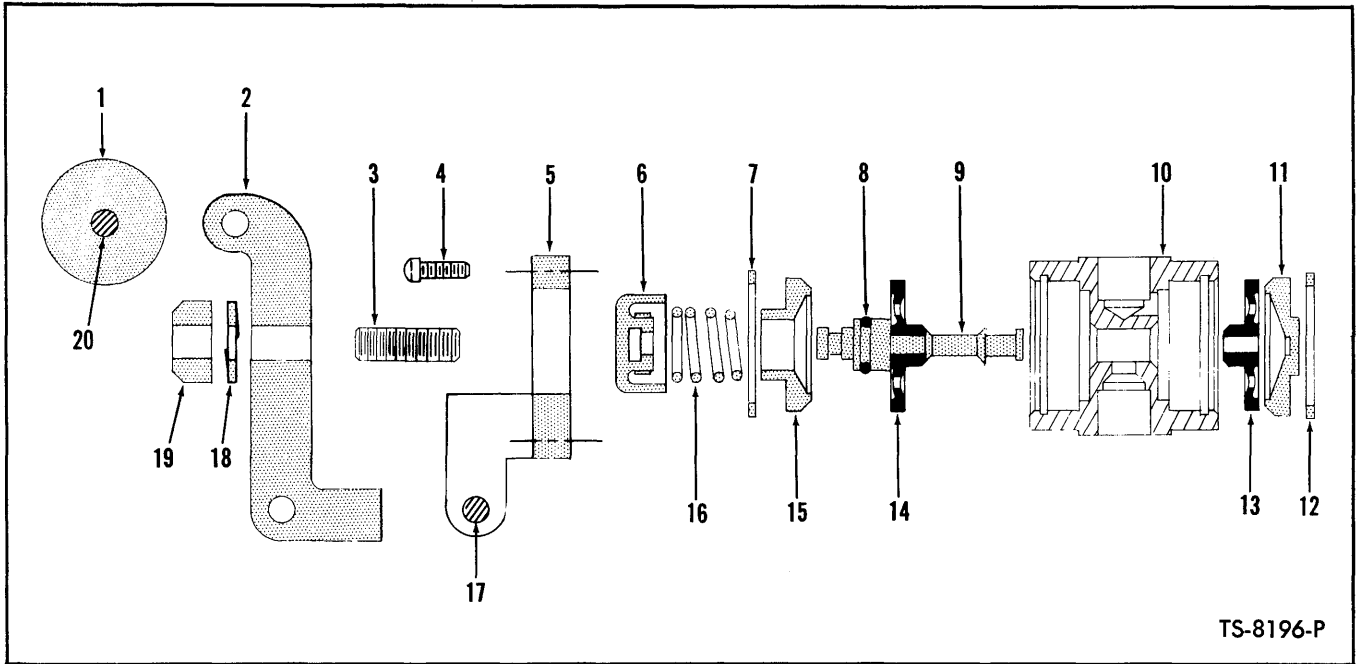
WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE



TS-7382-P

BUCKET ASSEMBLY DATA

BUCKET			MAIN CUTTING EDGE			SIDE CUTTING EDGE			
Width	S.A.E. Heaped Capacity	Part No.	Part No.	Size	Approx. Weight	RH. Part No.	LH. Part No.	Size	Approx. Weight
95¼	2 cu. yd.	1525082	551765	1 x 9 x 97	218	570108	570110	¾ x 6 x 42⅝	42
95¼	2¼ cu. yd.	1527394	551765	1 x 9 x 97	218	1527389	1527388	¾ x 6 x 43⅝	44
95¼	2½ cu. yd.	1525955	551765	1 x 9 x 97	218	570240	570240	¾ x 6 x 46¼	46
111½	3½ cu. yd.	1535665	545222	1 x 9 x 112¼	250	1535657	1535599	¾ x 6 x 47⅝	50
95¼	2¾ cu. yd.	1535609	551765	1 x 9 x 97	218	1535600	1535601	¾ x 6 x 47	49
111½	4 cu. yd.	1535838	545222	1 x 9 x 112¼	250	1535715	1535714	¾ x 6 x 49⅝	54
103¼	3 cu. yd.	1503531	1544189	1 x 9 x 104	233	1535600	1535601	¾ x 6 x 47	49



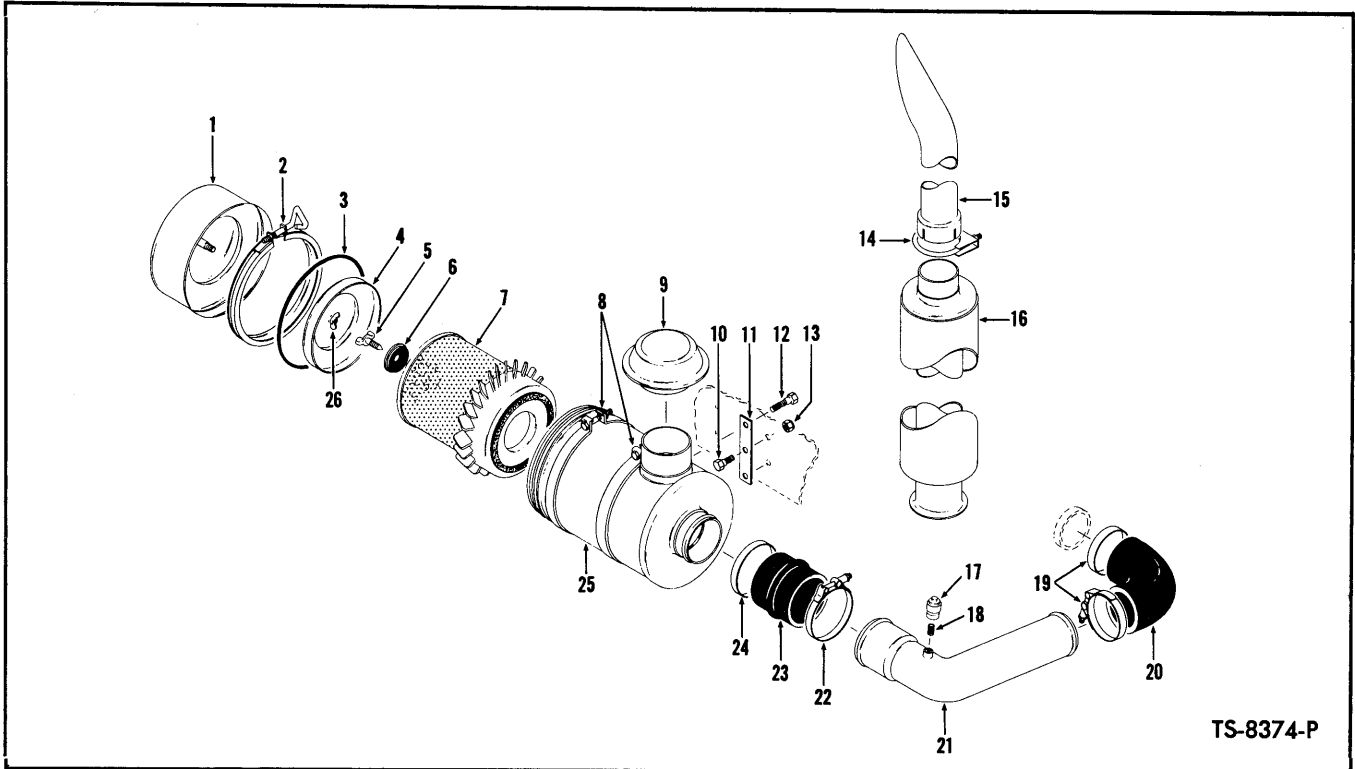
TS-8196-P

AIR VALVE ASSEMBLY

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

§Not Sold Separately

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



MUFFLER, AIR CLEANER, INDICATOR AND CONNECTIONS
For Serial: 1ACC101 thru 1ACC229

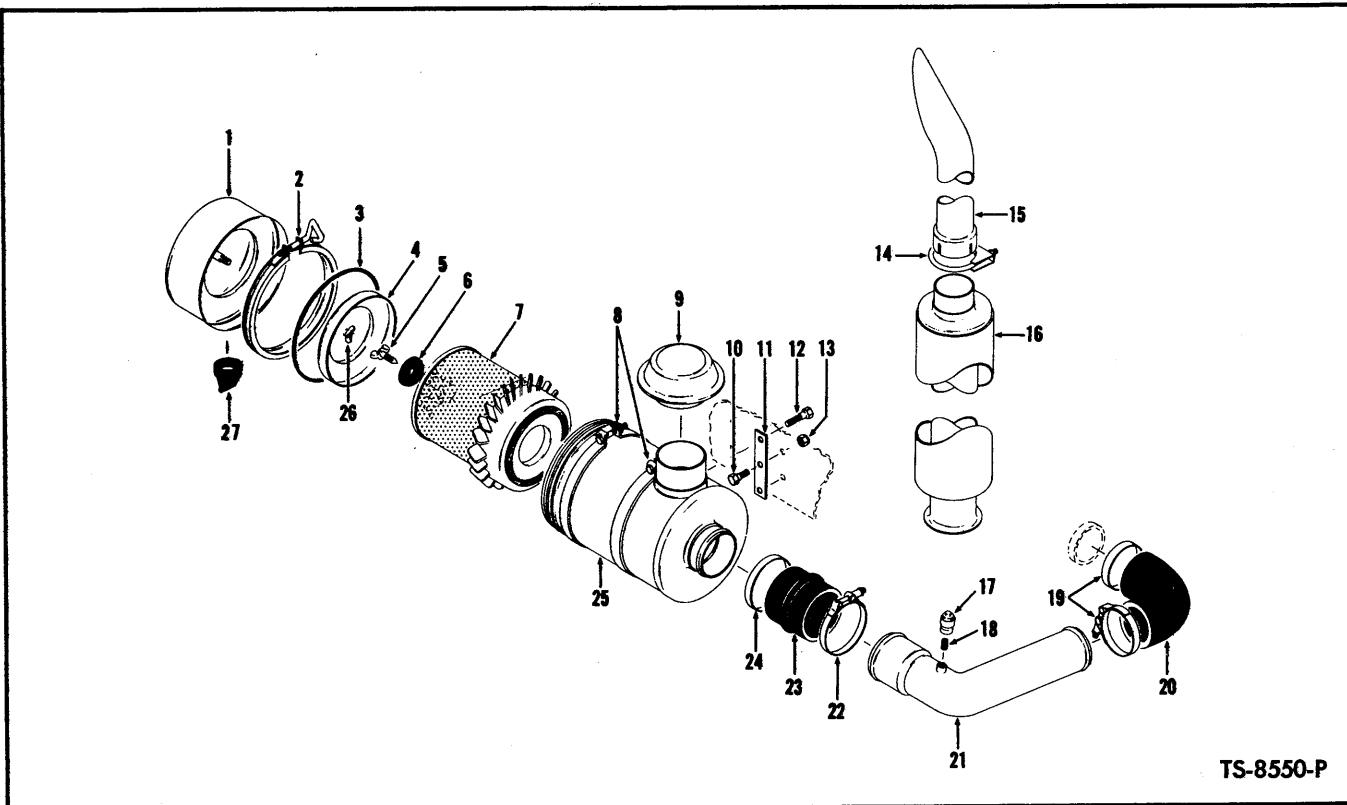
No. Item	No. Part	Description	No. Req'd.
A	1632441	* AIR CLEANER ASSY (Inc. 1 thru 7, 25, 26)	1
1	894652	CUP, Dust	1
2	947242	CLAMP, Dust Cover	1
3	886288	GASKET, Air Cleaner	1
4	894653	BAFFLE, (Inc. 26)	1
5	886285	BOLT, Element Attaching	1
6	886287	WASHER, Element Attaching	1
7	944954	ELEMENT	1
8	420945	BAND, Air Cleaner Mounting	2
9	568391	CAP, Air Inlet	1
9A	543531	† CLAMP, Cap to Body	1
10	18C-624	BOLT, Air Cleaner Mounting	2
11	1526035	STRAP, Air Cleaner Mounting	2
12	18C-624	BOLT, Band to Strap	4
13	18D-06	NUT, Air Cleaner Mounting	1
14	660738	CLAMP, Tail Pipe to Muffler	1
15	547585	TAIL PIPE	1
16	571453	MUFFLER	1
17	1721628	INDICATOR, Air Cleaner (Inc. 18)	1
18	946293	NIPPLE, Pipe	1
19	540102	CLAMP, Hose	2
20	526030	HOSE, Air Intake Tube to Engine	1
21	1535652	TUBE, Air Intake	1
22	539042	CLAMP, Hose	1
23	515424	HOSE, Intake Tube to Air Cleaner	1
24	539042	CLAMP, Hose	1
25	---	§ BODY, Air Cleaner (See A)	—
26	---	§ SWING NUT (See 4)	—

*NOTE: For complete replacement of 1632441 use 1503287 which is listed on following pages.

†Not Illustrated

§Not Sold Separately

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

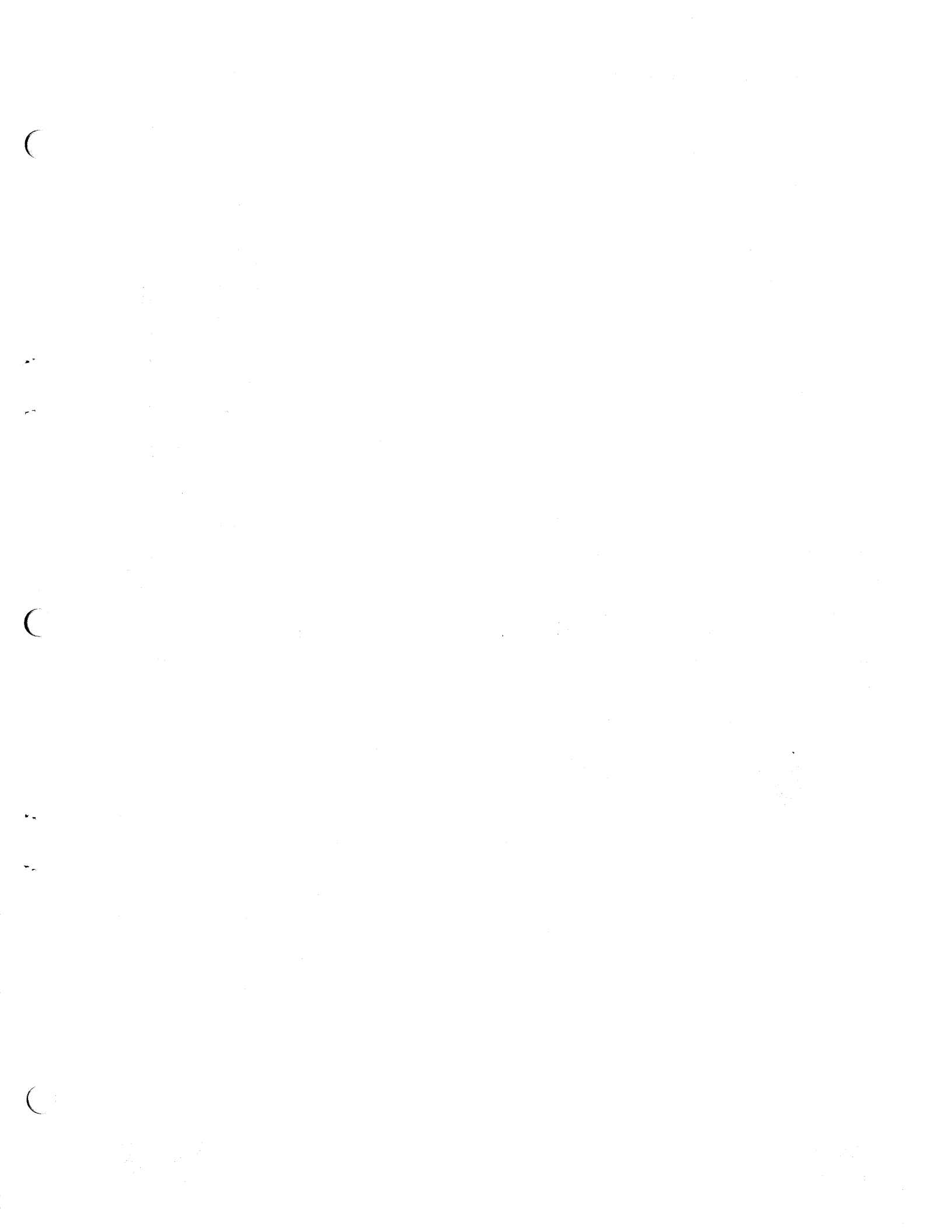


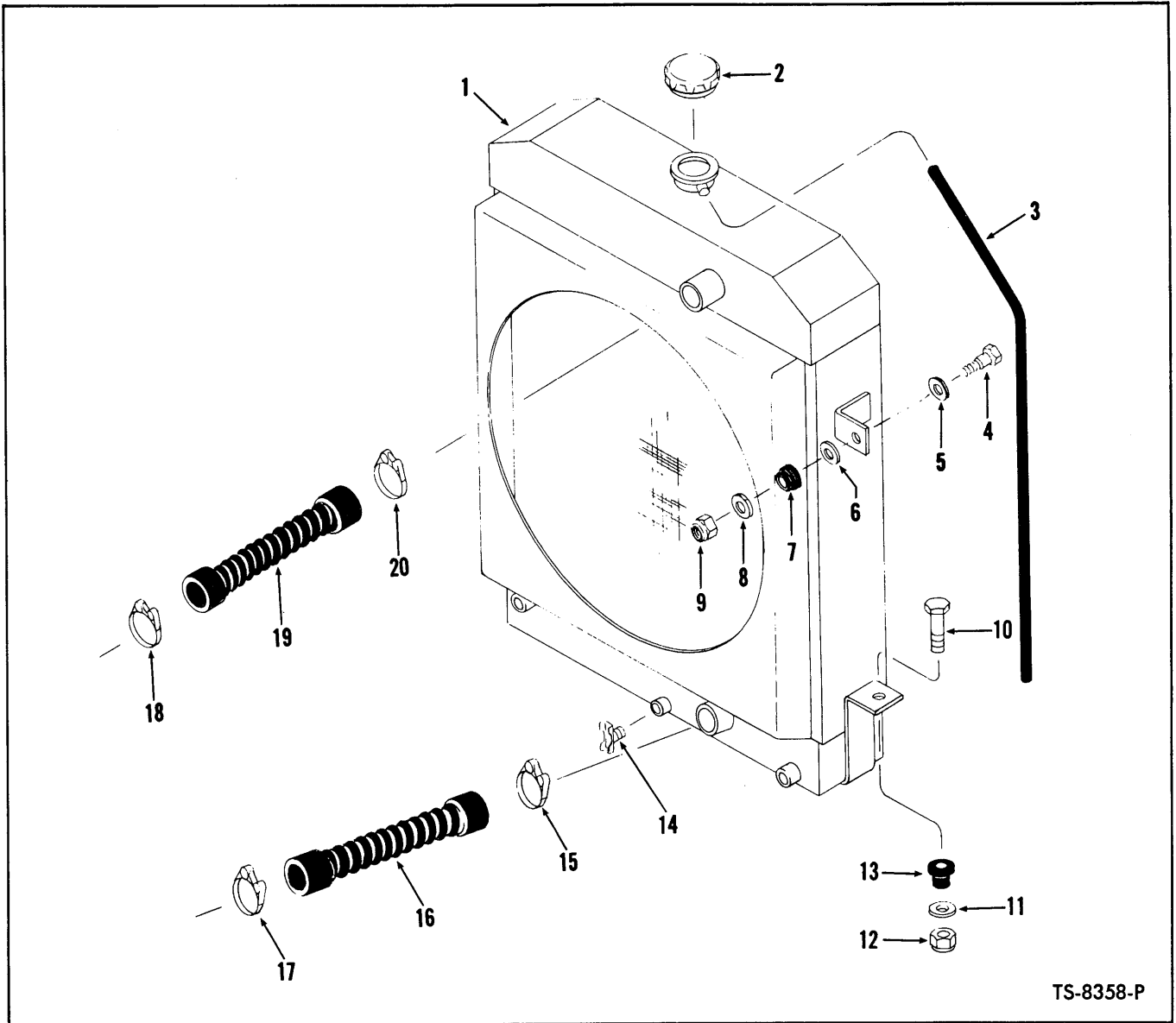
MUFFLER, AIR CLEANER, INDICATOR AND CONNECTIONS
For Serial: 1ACC230 and thereafter

Item No.	Part No.	Description	No. Req'd.
A	1503287	AIR CLEANER ASSY (Inc. 1 thru 7, 25, 26, 27)	1
1	947241	CUP, Dust	1
2	947242	CLAMP, Dust Cover	1
3	895982	GASKET, Air Cleaner	1
4	894653	BAFFLE, (Inc. 26)	1
5	886285	BOLT, Element Attaching	1
6	886287	WASHER, Element Attaching	1
7	944954	ELEMENT	1
8	420945	BAND, Air Cleaner Mounting	2
9	568391	CAP, Air Inlet	1
10	18C-624	BOLT, Air Cleaner Mounting	2
11	1526035	STRAP, Air Cleaner Mounting	2
12	18C-624	BOLT, Band to Strap	4
13	18D-06	NUT, Air Cleaner Mounting	1
14	660738	CLAMP, Tail Pipe to Muffler	1
15	547585	TAIL PIPE	1
16	571453	MUFFLER	1
17	1721628	INDICATOR, Air Cleaner (Inc. 18)	1
18	946293	NIPPLE, Pipe	1
19	543531	CLAMP, Hose	2
20	526030	HOSE, Air Intake Tube to Engine	1
21	1535652	TUBE, Air Intake	1
22	539042	CLAMP, Hose	1
23	515424	HOSE, Intake Tube to Air Cleaner	1
24	539042	CLAMP, Hose	1
25	—	§BODY, Air Cleaner (See A)	—
26	—	§WING NUT (See 4)	—
27	946860	VACUATOR	1

§Not Sold Separately

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

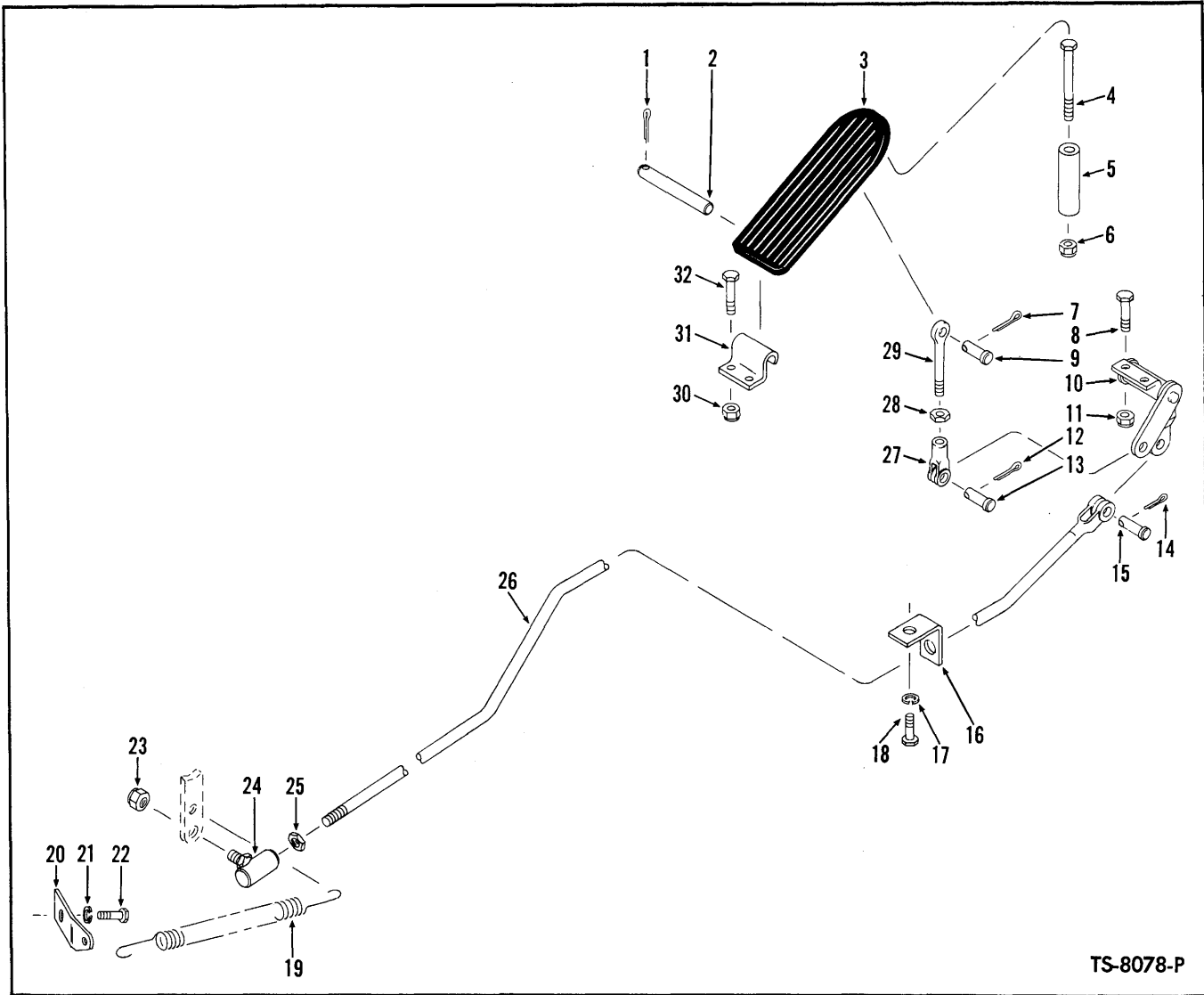




RADIATOR AND CONNECTIONS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1533795	RADIATOR ASSY (Inc. 2, 3)	1	11	584502	WASHER, Radiator to Frame	2
2	351495	CAP, Radiator	1	12	18D-08	NUT, Radiator to Frame	2
3	945460	HOSE, Overflow	1	13	584501	DAMPENER, Vibration — Radiator to Frame	2
4	18C-836	BOLT, Radiator to Frame	2	14	72F-2	DRAIN COCK	1
5	619029	WASHER, Radiator to Frame	2	15	540104	CLAMP, Radiator Hose — Lower	1
6	584502	WASHER, Radiator to Frame	2	16	571414	HOSE, Radiator — Lower	1
7	584501	DAMPENER, Vibration — Radiator to Frame	2	17	540104	CLAMP, Radiator Hose — Lower	1
8	584502	WASHER, Radiator to Frame	2	18	540104	CLAMP, Radiator Hose — Upper	1
9	18D-08	NUT, Radiator to Frame	2	19	1533797	HOSE, Radiator — Upper	1
10	18C-836	BOLT, Radiator to Frame	2	20	540104	CLAMP, Radiator Hose — Upper	1

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

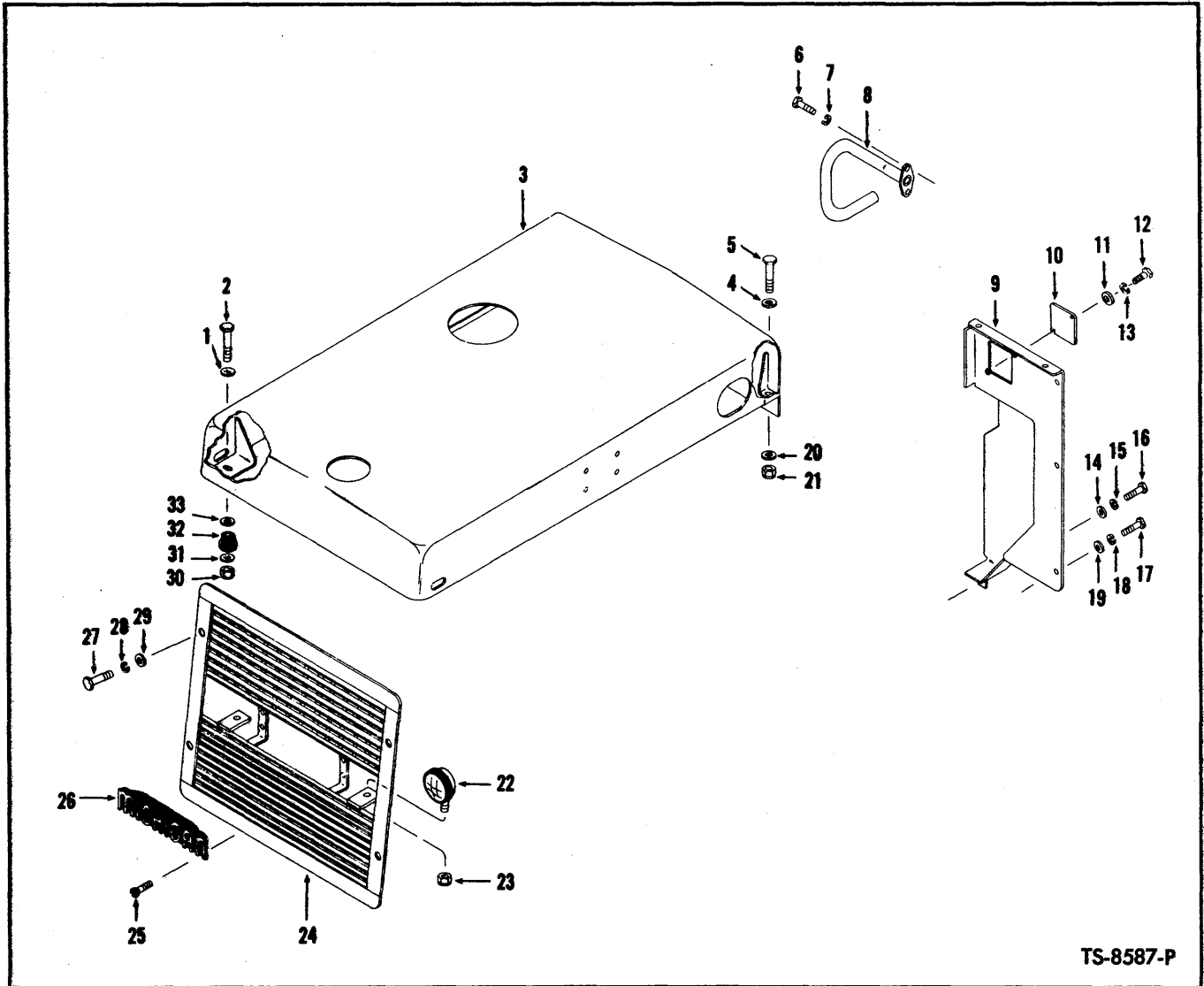


TS-8078-P

ACCELERATOR PEDAL AND LINKAGE

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

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



TS-8587-P

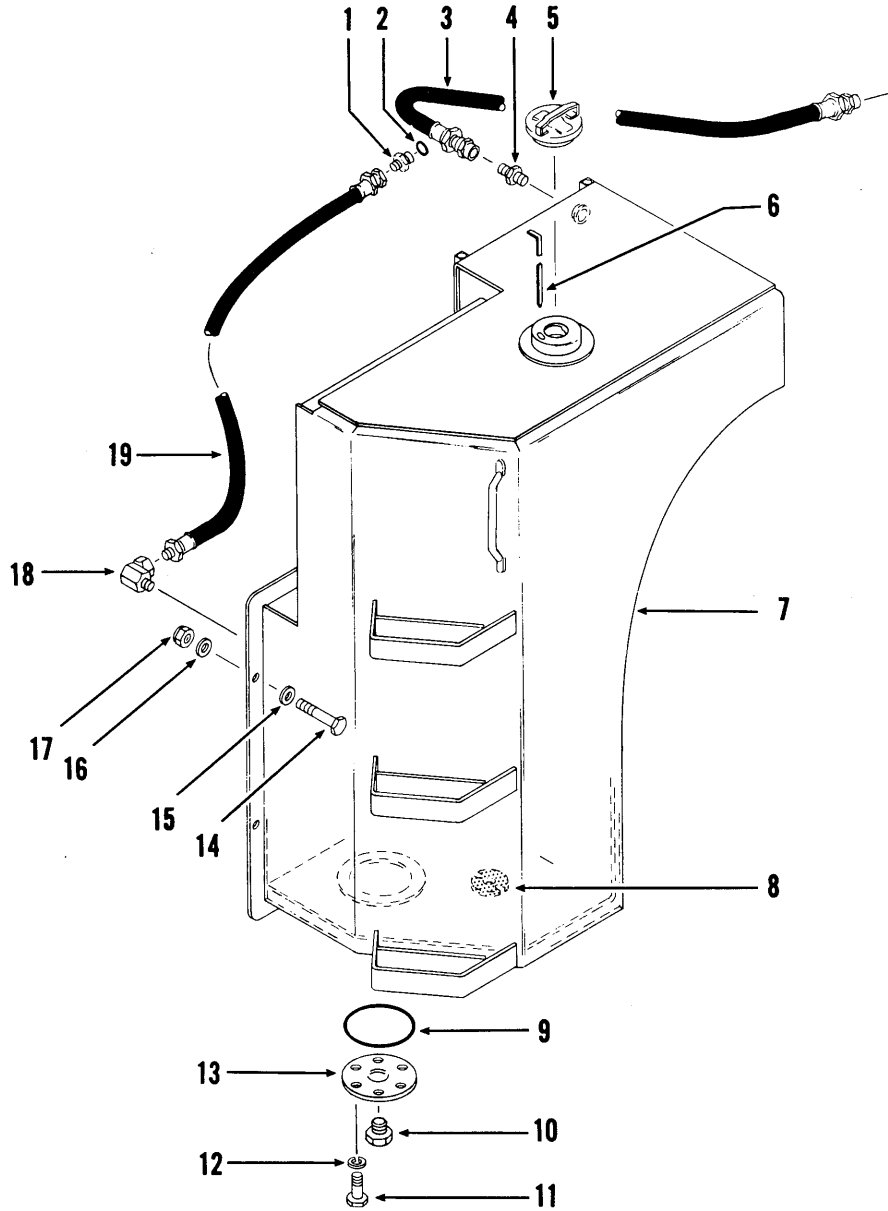
HOOD, HAND RAILS, VALVE COVER AND GRILLE

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	619021	WASHER, Hood to Frame	2	18	4E-06	LKWSHR, Valve Cover Mounting	1
2	18C-632	BOLT, Hood to Frame	2	19	206699	WASHER, Valve Cover Mounting	1
3	1521556	HOOD	1	20	619021	WASHER, Hood to Frame	2
4	619021	WASHER, Hood to Tanks	2	21	18D-06	NUT, Hood to Frame	2
5	18C-624	BOLT, Hood to Tanks	2	22	547529	LAMP, Back-Up (Inc. 22A)	2
6	17C-616	BOLT, Hand Rail to Cockpit	4	22A	944907	†SEALED UNIT, Back-Up Lamp	2
7	4E-06	LKWSHR, Hand Rail to Cockpit	4	22B	675467	†SPACER, Back-Up Lamp	2
8	1521678	HAND RAIL — L.H.	1	23	17D-6	NUT, Back-Up Lamp	2
8A	1521677	†HAND RAIL — R.H.	1	24	1521554	GRILLE	1
9	1536670	*COVER, Valve	1	25	44G-418	SCREW, Name Plate Mounting	4
10	1503511	PLATE, Valve Cover	1	26	564011	NAME PLATE — "Michigan"	1
11	206699	WASHER, Plate to Valve Cover	2	27	18C-824	BOLT, Grille to Frame	4
12	17C-616	BOLT, Plate to Valve Cover	2	28	4E-08	LKWSHR, Grille to Frame	4
13	4E-06	LKWSHR, Plate to Valve Cover	2	29	635682	WASHER, Grille to Frame	4
14	206699	WASHER, Valve Cover Mounting	4	30	18D-06	NUT, Hood to Frame	2
15	4E-06	LKWSHR, Valve Cover Mounting	4	31	619021	WASHER, Hood to Frame	2
16	17C-616	BOLT, Valve Cover Mounting	4	32	568276	DAMPENER, Hood to Frame Vibration	2
17	18C-616	BOLT, Valve Cover Mounting	1	33	619021	WASHER, Hood to Frame	2

†Not Illustrated

*NOTE: When replacing Item 9 on Machine Serial 1ACC101 thru 1ACC229, Items 10, 11, 12 and 13 must also be used.

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

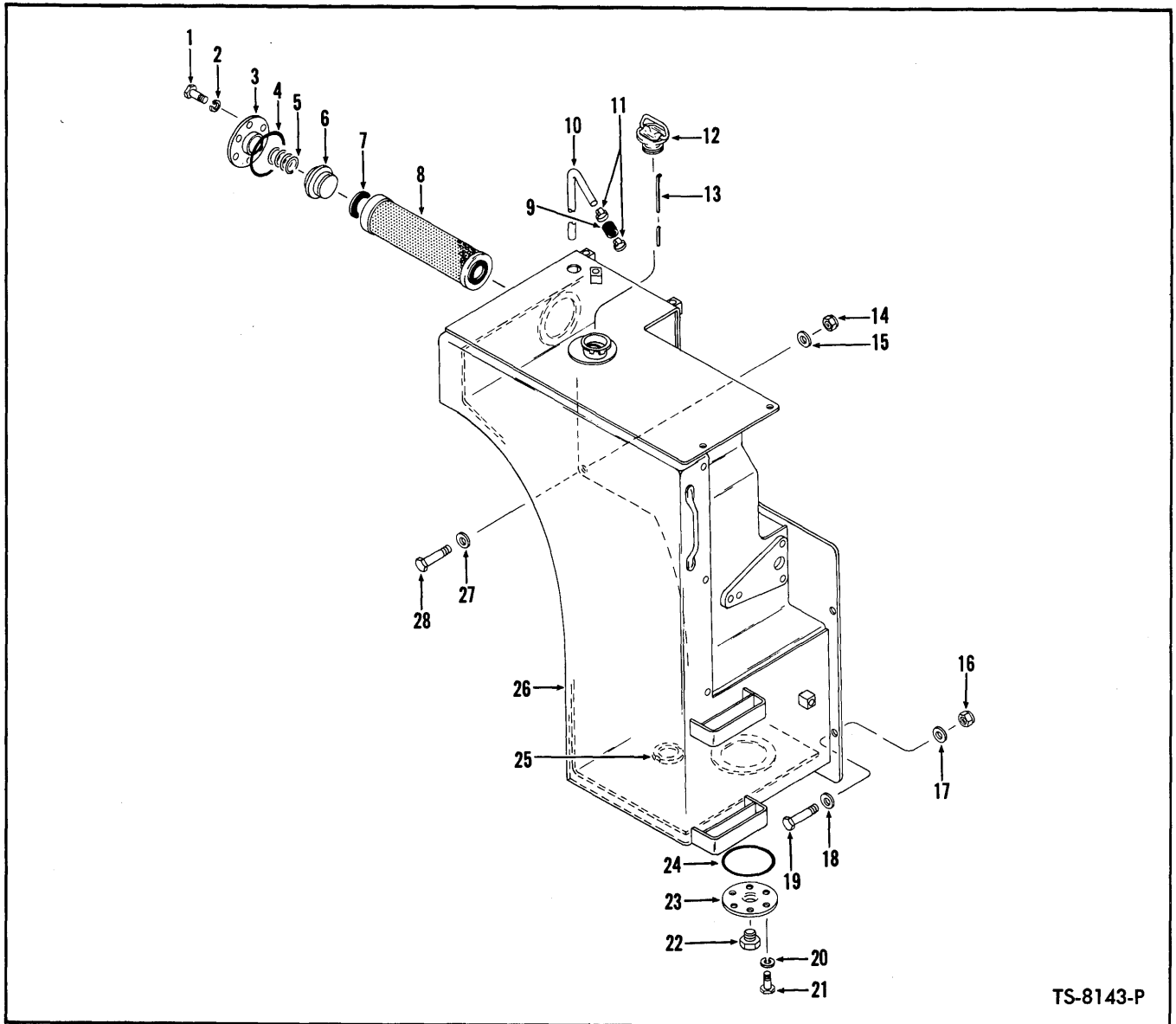


TS-8092-P

FUEL TANK AND LINES

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	15K-7	ADAPTER FITTING, Fuel Supply (Inc. 2)	1	11	18C-612	BOLT, Inspection Cover to Fuel Tank	6
2	91F-7	"O" RING, Adapter Fitting	1	12	4E-06	LKWSHR, Inspection Cover to Fuel Tank	6
3	1528230	HOSE, Fuel Return	1	13	587613	INSPECTION COVER, Fuel Tank	1
4	38F-7	TUBE FITTING, Fuel Return Line	1	14	18C-836	BOLT, Fuel Tank Mounting	5
5	1521881	CAP, Fuel Filler	1	15	1522284	WASHER, Fuel Tank Mounting	5
6	1522239	DIPSTICK, Fuel Tank	1	16	1522284	WASHER, Fuel Tank Mounting	5
7	1522266	TANK ASSY, Fuel	1	17	18D-08	NUT, Fuel Tank Mounting	5
8	525293	MAGNET, Fuel Tank	1	18	31F-4	ADAPTER UNION, Fuel Supply Line	1
9	25K-40428	"O" RING, Inspection Cover	1	19	1502552	HOSE, Fuel Supply	1
10	40K-16	PLUG, Inspection Cover	1				

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



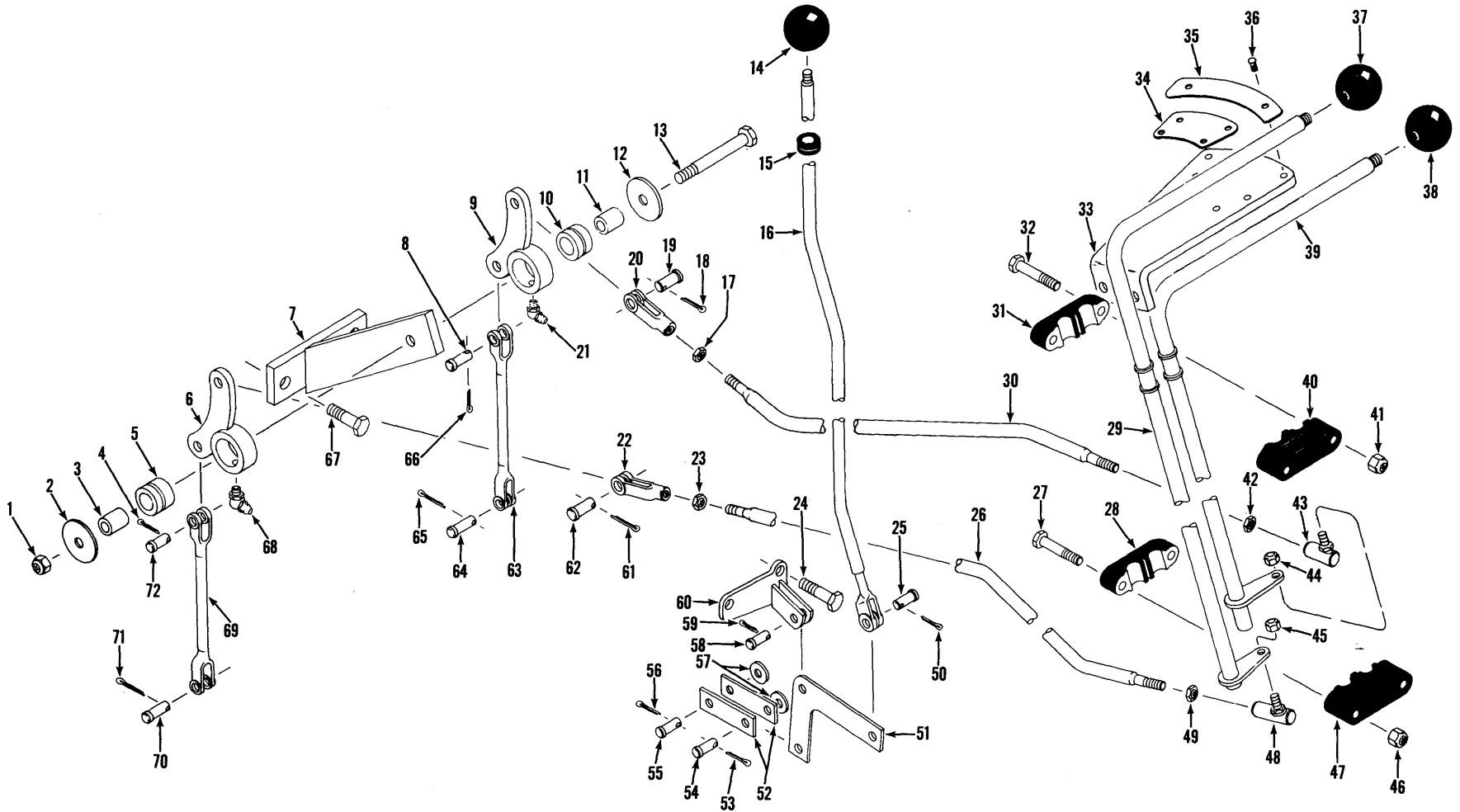
TS-8143-P

HYDRAULIC OIL RESERVOIR AND FILTER

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18C-612	BOLT, Cover Plate to Reservoir	6	15	1522284	WASHER, Reservoir to Frame	2
2	4E-06	LKWSHR, Cover Plate to Reservoir	6	16	18D-08	NUT, Reservoir to Frame	3
3	1535143	PLATE, Cover	1	17	1522284	WASHER, Reservoir to Frame	3
4	25K-40624	"O" RING, Cover Plate	1	18	1522284	WASHER, Reservoir to Frame	3
5	732923	SPRING	1	19	18C-836	BOLT, Reservoir to Frame	3
6	1535139	RETAINER, Spring	1	20	4E-06	LKWSHR, Cover to Reservoir	6
7	1535778	GASKET, Filter	1	21	18C-612	BOLT, Cover to Reservoir	6
8	1530600	FILTER, Return	1	22	40K-16	PLUG, Drain	1
9	743563	HOSE, Relief Tube to Filler Neck	1	23	587613	COVER, Reservoir Inspection	1
10	1534004	TUBE, Reservoir Relief	1	24	25K-40428	"O" RING, Inspection Cover	1
11	521874	CLAMP, Hose	2	25	525293	MAGNET	1
12	554843	CAP, Filler	1	26	1522271	RESERVOIR, Hydraulic Oil	1
13	1522243	DIPSTICK, Hydraulic Oil Reservoir	1	26A	40K-12	†PLUG, Reservoir	1
14	18D-08	NUT, Reservoir to Frame	2	27	1522284	WASHER, Reservoir to Frame	2
				28	18C-840	BOLT, Reservoir to Frame	2

†Not Illustrated

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



TRANSMISSION CONTROL LEVERS AND LINKAGE

TS-8347-P

TRANSMISSION CONTROL LEVERS AND LINKAGE

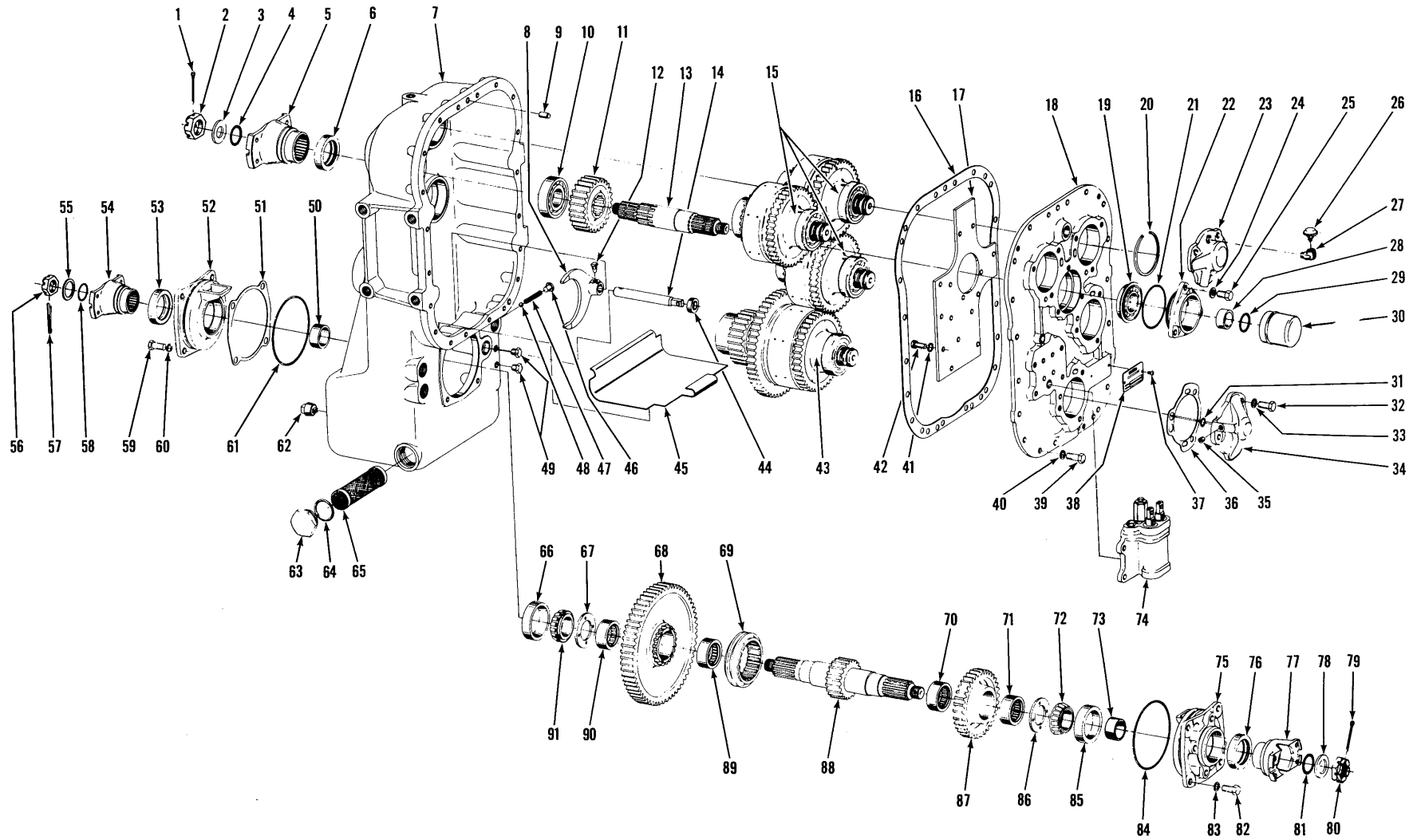
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18D-08	NUT, Bellcrank to Bracket	1	35	567977	PLATE, Forward & Reverse	1
2	616795	WASHER, Bellcrank to Bracket	1	36	6C-605	SCREW, Plate to Quadrant	6
3	585596	SLEEVE, Bellcrank	1	37	509772	KNOB, Shift Lever	1
4	1F-310	COTTER, Clevis Pin	1	38	509772	KNOB, Shift Lever	1
5	585597	BUSHING, Bellcrank	1	39	1522226	LEVER, High & Low	1
6	585500	BELLCRANK, Forward & Reverse ...	1	40	-----	§SUPPORT, Shift Lever - See 31	1
7	1522217	*BRACKET, Bellcrank to Transmission	1	41	18D-05	NUT, Lever Support Mounting	2
8	4F-06106	PIN, Clevis	1	42	8D-06	NUT, Ball Joint Jam	1
9	585500	BELLCRANK, High & Low	1	43	1201362	BALL JOINT, Control Rod	1
10	585597	BUSHING, Bellcrank	1	44	66D-06	NUT, Ball Joint	1
11	585596	SLEEVE, Bellcrank	1	45	66D-06	NUT, Ball Joint	1
12	616795	WASHER, Bellcrank to Bracket	1	46	18D-05	NUT, Lever Support Mounting	2
13	18C-852	BOLT, Bellcrank to Bracket	1	47	-----	§SUPPORT, Shift Lever - See 28	1
14	509772	KNOB, High & Low Control	1	48	1301362	BALL JOINT, Control Rod	1
15	565073	GROMMET, Control Rod	1	49	8D-06	NUT, Ball Joint Jam	1
16	1522196	ROD, High & Low Control	1	50	1F-310	COTTER, Clevis Pin	1
17	8D-06	NUT, Clevis Jam	1	51	1522219	BELLCRANK, High & Low	1
18	1F-310	COTTER, Clevis Pin	1	52	743878	LINK, Connecting	2
19	4F-06106	PIN, Clevis	1	53	1F-310	COTTER, Clevis Pin	1
20	2J-6208	CLEVIS, Control Rod	1	54	4F-06106	PIN, Clevis	1
21	12H-15	FITTING, Bellcrank Grease	1	55	4F-06106	PIN, Clevis	1
22	2J-6208	CLEVIS, Control Rod	1	56	1F-310	COTTER, Clevis Pin	1
23	8D-06	NUT, Clevis Jam	1	57	980055	WASHER, Clevis Pin	2
24	17C-724	BOLT, Bracket to Transmission	2	58	4F-06106	PIN, Clevis	1
25	4F-06106	PIN, Clevis	1	59	1F-310	COTTER, Clevis Pin	1
26	1502640	*ROD, Forward & Reverse Control (Inc. 22, 23, 48, 49)	1	60	1522216	BRACKET, High & Low Bellcrank	1
26A	1505228	**ROD, Forward & Reverse Control	1	61	1F-310	COTTER, Clevis Pin	1
27	18C-536	BOLT, Lever Support Mounting	2	62	4F-06106	PIN, Clevis	1
28	1508846	SUPPORT, Shift Lever (Inc. 4?)	1	63	1522220	*ROD, High & Low Control	1
29	1522225	LEVER, Forward & Reverse	1	63A	1505272	**ROD, High & Low Control	1
30	1522159	*ROD, High & Low Control (Inc. 17, 20, 42, 43)	1	64	4F-06106	PIN, Clevis	1
30A	1505228	**ROD, High & Low Control	1	65	1F-310	COTTER, Clevis Pin	1
31	1508846	SUPPORT, Shift Lever (Inc. 40)	1	66	1F310	COTTER, Clevis Pin	1
32	18C-536	BOLT, Lever Support Mounting	2	67	17C-724	BOLT, Bracket to Transmission	2
33	1536275	QUADRANT, Shift	1	68	12H-15	FITTING, Bellcrank Grease	1
33A	18C-620	BOLT, Shift Quadrant	1	69	1522220	*ROD, Forward & Reverse Control	1
33B	18D-06	NUT, Shift Quadrant	1	69A	1505272	**ROD, Forward & Reverse Control	1
34	567947	PLATE, Hi-Lo	1	70	4F-06106	PIN, Clevis	1
				71	1F-310	COTTER, Clevis Pin	1
				72	4F-06106	PIN, Clevis	1

*NOTE: For Serial No. 1ACC101 thru 1ACC230.

**NOTE: For Serial No. 1ACC231 & thereafter.

§Not Sold Separately

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



TRANSMISSION ASSEMBLY

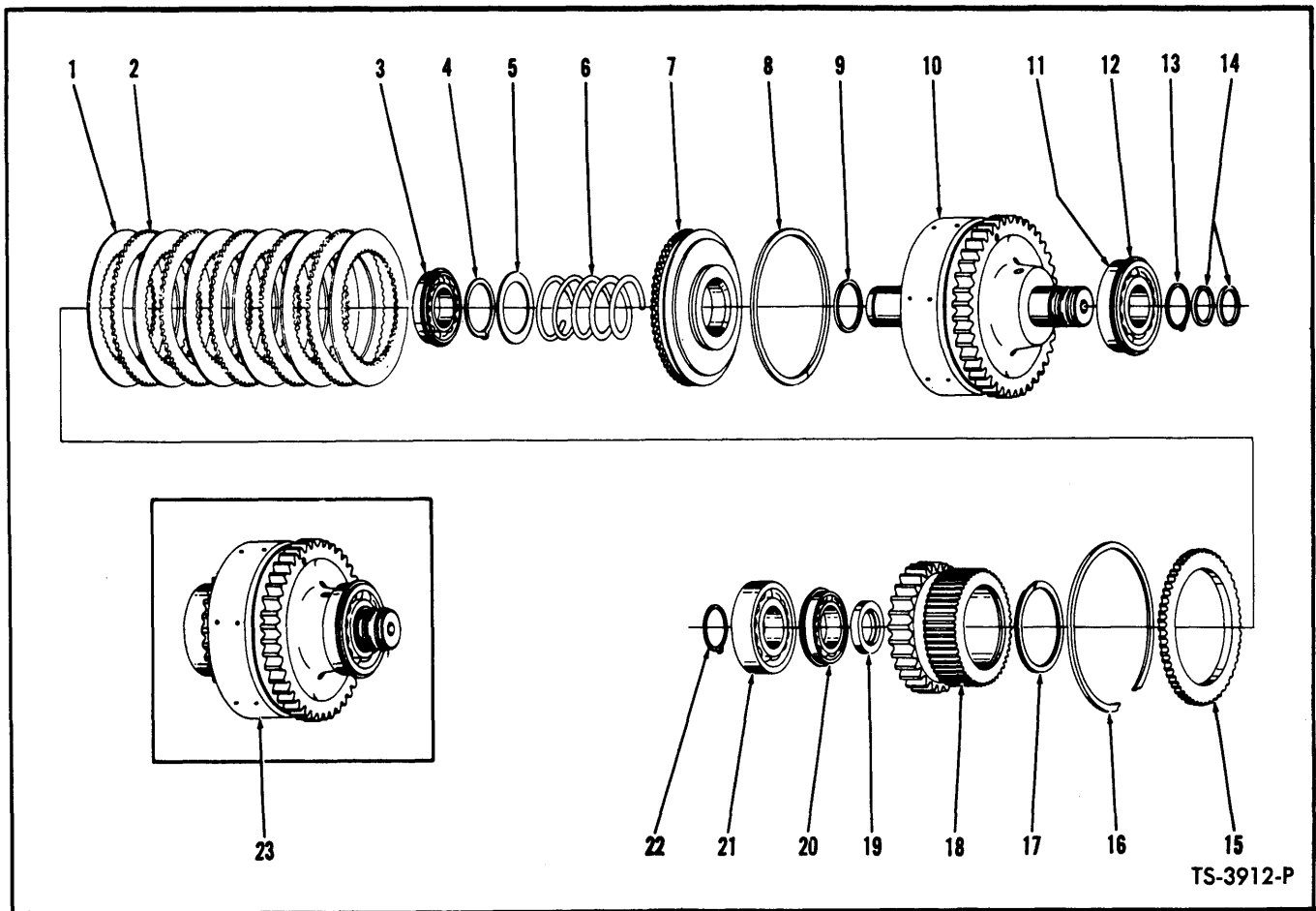
TS-6775-P

TRANSMISSION ASSEMBLY AND MOUNTING BRACKETS

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	282791	TRANSMISSION ASSEMBLY (2420H-15) (Inc. 1 thru 91 and all Items listed on pages 18 thru 20)	1	44	234653	SEAL, Range Shift Oil	1
1	1F-428	COTTER, Flange Nut	1	45	228943	PLATE, Baffle	1
2	201951	NUT, Input Flange	1	46	40K-04	PLUG, Range Shift Rail Detent	1
3	102745	WASHER, Input Flange	1	47	215191	SPRING, Range Shift Rail Detent	1
4	25K-40112	"O" RING, Input Flange	1	48	10J-12	BALL, Range Shift Rail Detent	1
5	214940	FLANGE, Input Shaft	1	49	40K-04	PLUG, Oil Level	2
6	206864	SEAL, Input Shaft Oil	1	50	227945	SPACER, Brake Flange	1
7	801363	CASE ASSY, Transmission (Inc. 6)	1	51	215156	‡SHIM, Bearing Cap — .004"	—
8	215146	FORK, Range Shift	1	51A	215157	‡SHIM, Bearing Cap — .007"	—
9	214295	PIN, Cover to Case Dowel	2	51B	215158	‡SHIM, Bearing Cap — .010"	—
10	225603	BEARING, Input Shaft	1	52	227960	CAP, Output Shaft Bearing	1
11	215166	GEAR, Input Shaft (26T)	1	53	225823	SEAL, Bearing Cap Oil	1
12	201566	SCREW, Shift Fork Lock	1	54	222029	FLANGE, Output	1
13	217952	SHAFT, Input	1	55	222179	WASHER, Flange Nut	1
14	215145	RAIL, Range Shift	1	56	205928	NUT, Flange	1
15	—	CLUTCH GROUP — Forward, Reverse & Low — See Index (Inc. 20)	—	57	1F-436	COTTER, Flange Nut	1
16	215144	GASKET, Cover to Case	1	58	25K-60116	"O" RING, Flange	1
17	215143	PLATE, Oil Circuit	1	59	1C-820	BOLT, Bearing Cap	4
18	215141	COVER ASSY, Trans. (Inc. 17, 41, 42)	1	60	5E-08	LKWSHR, Bearing Cap	4
19	225824	BEARING, Input Shaft Locating	1	61	25K-40524	"O" RING, Bearing Cap	1
20	945374	RING, Bearing Retaining	4	62	215757	PLUG, Drain — Magnetic	1
21	25K-40316	"O" RING, Input Shaft Bearing Cap	1	63	219370	PLUG, Suction Screen	1
22	215198	CAP ASSY, Input Shaft Bearing (Inc. 22A)	1	64	219373	GASKET, Suction Screen Plug	1
22A	206864	†SEAL, Input Shaft Oil	1	65	215205	SCREEN, Suction	1
23	—	CAP, Distributor Bearing—See Item 34	—	66	661721	CUP, Output Shaft Bearing	1
24	4E-07	LKWSHR, Bearing Cap	3	67	227947	WASHER, Output Shaft Thrust	1
25	1C-718	BOLT, Bearing Cap	3	68	228068	GEAR, Low (61T)	1
26	—	OMIT, Not Used on this Application	—	69	215149	HUB, Output Shaft Shift	1
27	—	OMIT, Not Used on this Application	—	70	227944	BEARING, High Gear	1
28	215162	SPACER, Input Flange	1	71	227944	BEARING, High Gear	1
29	659065	RING, Bearing Retaining	1	72	227946	CONE, Output Shaft Bearing	1
30	209412	CAP, Input Shaft	1	73	227945	SPACER, Brake Flange	1
31	25K-30016	"O" RING, Bearing Cap	4	74	—	CONTROL VALVE — See Index	—
32	1C-718	BOLT, Bearing Cap	9	75	227960	CAP, Output Shaft Bearing	1
33	4E-07	LKWSHR, Bearing Cap	9	76	225823	SEAL, Bearing Cap Oil	1
34	215163	CAP, Distributor Bearing	4	77	222233	FLANGE, Output	1
35	16F-02	PLUG, Bearing Cap Pipe	4	78	222179	WASHER, Flange Nut	1
36	215164	GASKET, Bearing Cap	4	79	1F-436	COTTER, Flange Nut	1
37	207873	SCREW, Name Plate	2	80	205928	NUT, Flange	1
38	—	§PLATE, Name	1	81	25K-60116	"O" RING, Flange	1
39	1C-718	BOLT, Cover to Case	20	82	1C-820	BOLT, Bearing Cap	4
40	4E-07	LKWSHR, Cover to Case	20	83	5E-08	LKWSHR, Bearing Cap	4
41	5E-06	LKWSHR, Plate to Cover	15	84	25K-40524	"O" RING, Bearing Cap	1
42	1C-614	BOLT, Plate to Cover	15	85	661721	CUP, Output Shaft Bearing	1
43	—	CLUTCH GROUP — High — See Index (Inc. 20)	—	86	227947	WASHER, Output Shaft Thrust	1
				87	228069	GEAR, High (34T)	1
				88	228887	SHAFT, Output	1
				89	227944	BEARING, Low Gear	1
				90	227944	BEARING, Low Gear	1
				91	227946	CONE, Output Shaft Bearing	1

†Not Illustrated
‡As Required
§Not Sold Separately

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



TS-3912-P

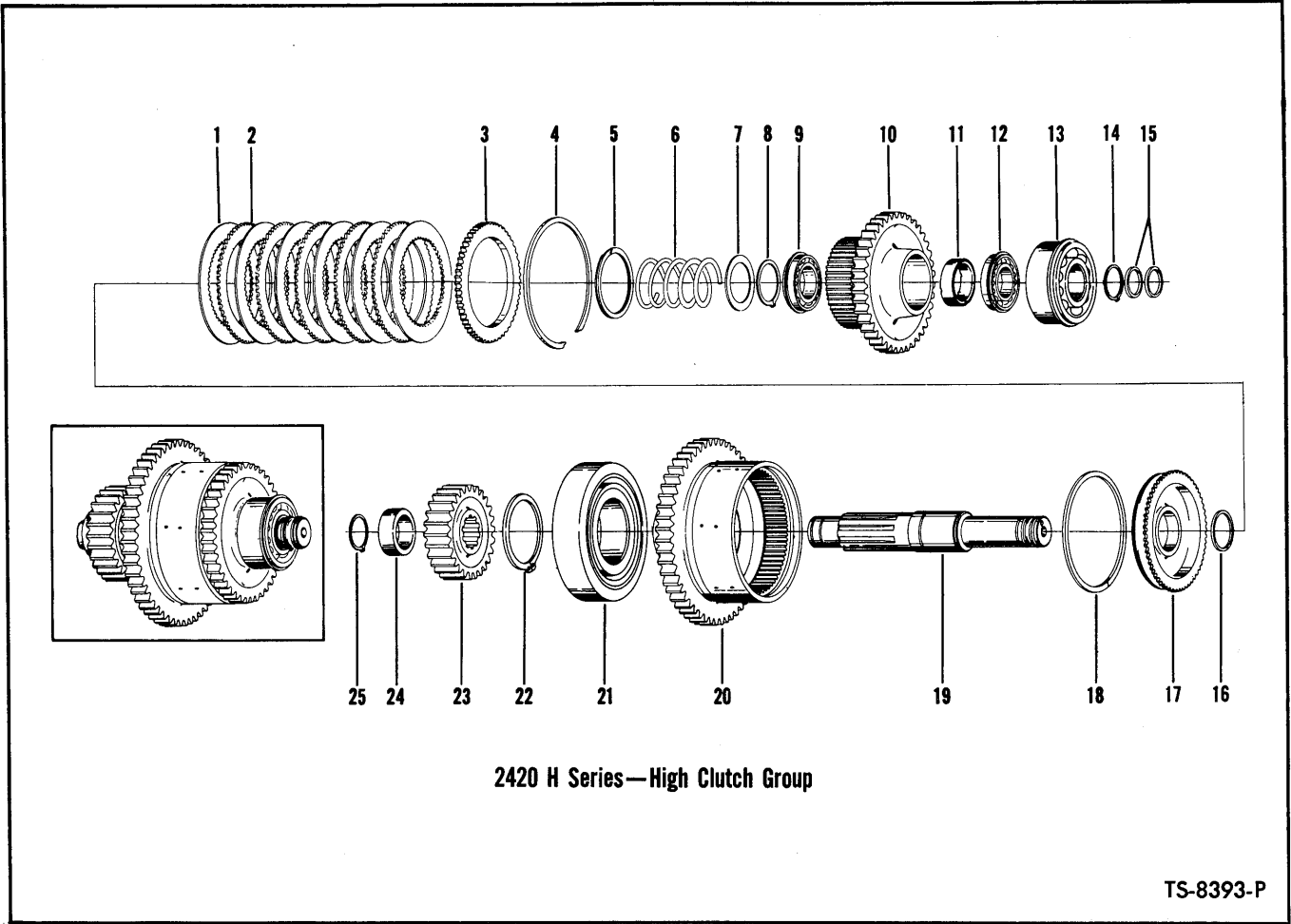
CLUTCH GROUP – FORWARD, REVERSE AND LOW

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

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

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

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



2420 H Series—High Clutch Group

TS-8393-P

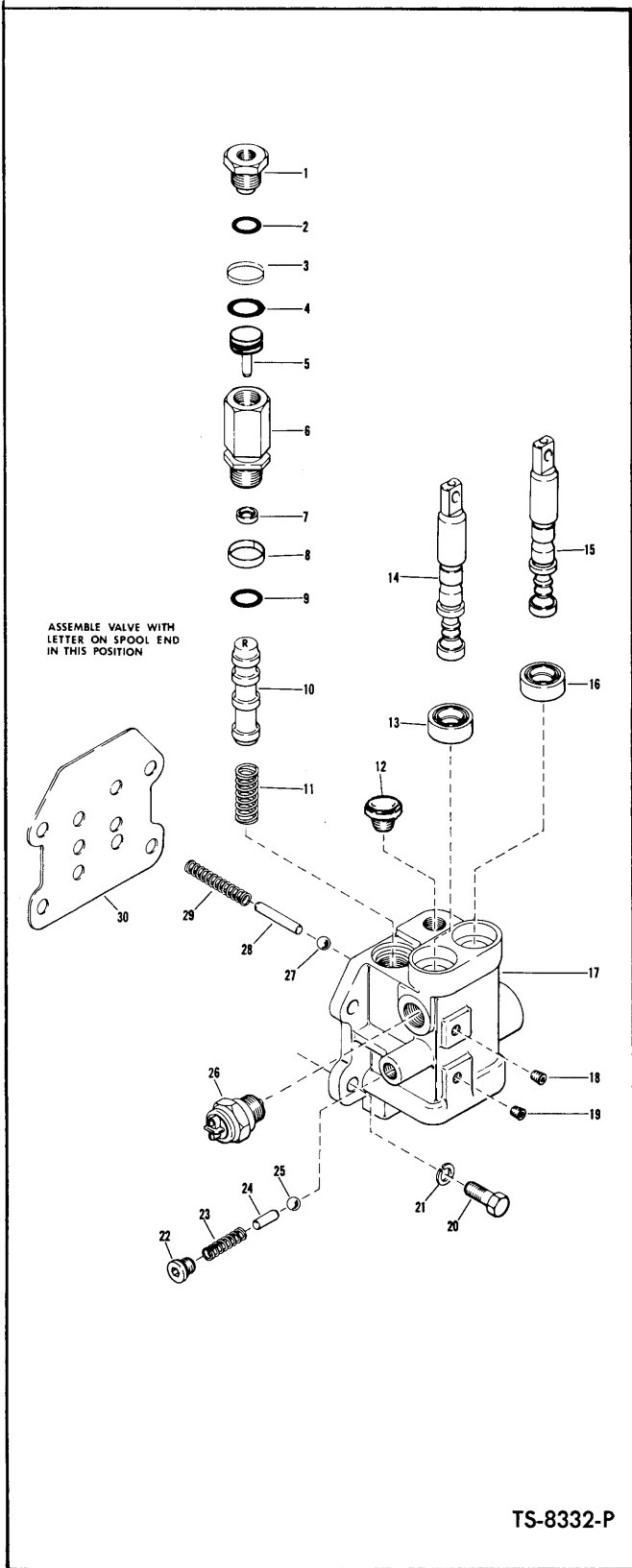
CLUTCH GROUP — HIGH

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

†Not Illustrated

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

CONTROL VALVE – TRANSMISSION



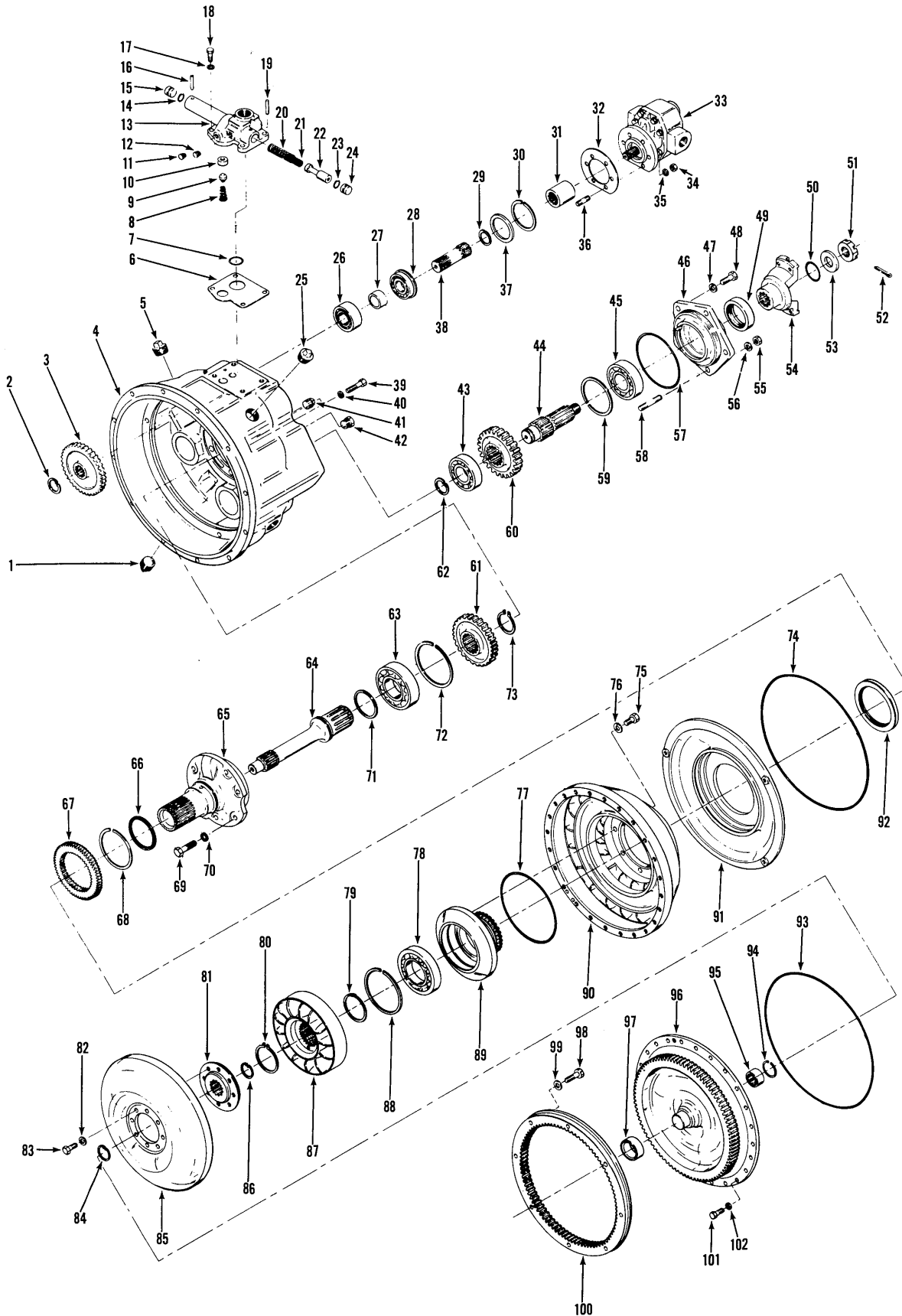
Item No.	Part No.	Description	No. Req'd.
A	230505	CONTROL VALVE ASSY (Inc. 1 thru 30)	1
1	217928	PLUG, Stop	1
2	91F-8	"O" RING, Stop Plug	1
3	227672	SEAL, Piston – Outer	1
4	25K-30020	"O" RING, Piston	1
5	227674	PISTON	1
6	219342	VALVE, De-Clutch (Inc. 1 thru 5, 7, 8, 9)	1
7	229131	SEAL, Oil	1
8	228931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

§Not Sold Separately

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

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





TORQUE CONVERTER ASSEMBLY

TS-8081-P

TORQUE CONVERTER ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	283024	CONVERTER ASSY, Torque (C273T-61) (Inc. 1 thru 97, 100, 101, 102) -----	1	36	207647	STUD, Pump Mounting -----	6
1	13F-16	PLUG, Pipe -----	1	37	214929	WASHER, Pump Drive Shaft -----	3
2	711298	RING, Gear Retaining -----	3	38	214928	SHAFT, Pump Drive -----	3
3	214931	GEAR, Pump Drive (38T) -----	3	39	1C-628	BOLT, Baffle to Housing -----	3
4	801546	HOUSING, Converter -----	1	40	4E-06	LKWSHR, Baffle to Housing -----	3
5	13F-16	PLUG, Pipe -----	2	41	16F-08	PLUG, Pipe -----	1
6	214949	GASKET, Regulating Valve to Converter -----	1	42	40K-02	PLUG, Pipe -----	2
7	25K-40104	"O" RING, Regulating Valve to Converter -----	1	43	235057	BEARING, Output Shaft — Front -----	1
8	222312	SPRING, Safety Valve -----	1	44	214937	SHAFT, Output -----	1
9	222318	PLUNGER, Safety Valve -----	1	45	743439	BEARING, Output Shaft — Rear -----	1
10	214946	SEAT, Safety Valve -----	1	46	214945	RETAINER, Brg.—See Note "A" -----	1
11	40K-02	PLUG, Valve Housing -----	1	47	4E-07	LKWSHR, Bearing Retainer -----	3
12	40K-02	PLUG, Valve Housing -----	1	48	1C-720	BOLT, Bearing Retainer -----	3
13	214943	VALVE ASSY, Pressure Regulating (Inc. 10, 14, 15, 16, 19, 20 thru 24) -----	1	49	206864	SEAL, Oil -----	1
14	25K-30018	"O" RING, Piston Stop -----	1	50	25K-40112	"O" RING, Companion Flange -----	1
15	220983	STOP, Piston -----	1	51	201951	NUT, Output Shaft -----	1
16	660178	PIN, Piston Stop -----	1	52	1F-424	PIN, Cotter -----	1
17	4E-06	LKWSHR Valve to Converter -----	4	53	102745	WASHER, Output Shaft -----	1
18	1C-616	BOLT, Valve to Converter -----	4	54	214940	FLANGE, Companion -----	1
19	660178	PIN, Piston Stop -----	1	55	8D-07	NUT, Bearing Retainer -----	2
20	224369	SPRING, Valve — Outer -----	1	56	4E-07	LKWSHR, Bearing Retainer -----	2
21	224368	SPRING, Valve — Inner -----	1	57	25K-40512	"O" RING, Bearing Retainer -----	1
22	-----	§PISTON, Valve — See Item 13 -----	—	58	214730	STUD, Bearing Retainer -----	2
23	25K-30018	"O" RING, Piston Stop -----	1	59	223901	RING, Bearing Retaining -----	1
24	220983	STOP, Piston -----	1	60	214935	**GEAR, Output Shaft (28T) -----	1
25	13F-16	PLUG, Pipe -----	1	61	214938	**GEAR, Turbine Shaft (27T) -----	1
26	214936	BEARING, Pump Drive Shaft -----	3	62	214955	RING, Bearing Retaining -----	1
27	214930	SPACER, Pump Drive Shaft -----	3	63	231554	BEARING, Turbine Shaft -----	1
28	214956	BEARING, Pump Drive Shaft -----	3	64	214933	SHAFT, Turbine -----	1
28A	214954	†RING, Bearing Retaining -----	3	65	214932	STATOR SUPPORT ASSY -----	1
29	224039	RING, Bearing Retaining -----	3	66	221653	RING, Sealing -----	1
30	713186	RING, Washer Retaining -----	3	67	214951	GEAR, Impeller Hub -----	1
31	214961	SLEEVE, Pump Drive Adapter -----	1	68	224009	RING, Gear Retaining -----	1
32	235961	GASKET, Pump to Converter -----	1	69	1C-820	BOLT, Support to Housing -----	6
33	450230	*PUMP, Converter Charging -----	1	70	7E-08	LKWSHR, Support to Housing -----	6
34	8D-06	NUT, Pump Mounting -----	6	71	222079	RING, Turbine Shaft Sealing -----	1
35	4E-06	LKWSHR, Pump Mounting -----	6	72	214953	RING, Bearing Retaining -----	1
				73	224116	RING, Gear Retaining -----	1
				74	60K41200	"O" RING, Oil Baffle -----	1
				75	4C-714	BOLT, Hub to Impeller -----	8
				75A	-----	†‡LOCKWIRE, Impeller Hub Bolt (18 ga.) -----	—
				76	25E-19	WASHER, Hub to Impeller -----	8

§Not Sold Separately

†Not Illustrated

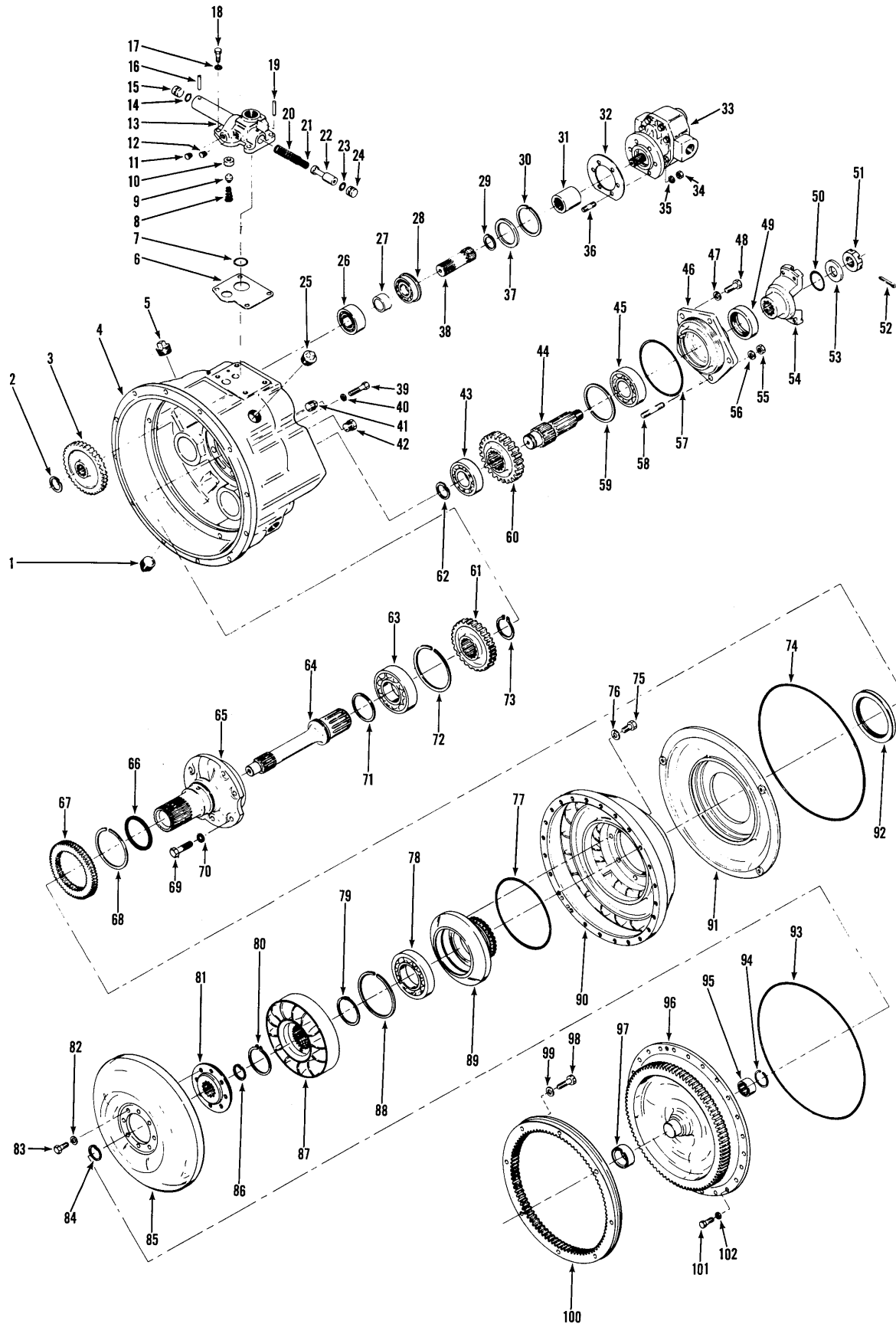
‡As Required

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

**NOTE: When replacing Item 60 or 61 on Machine Serial 1ACC101 thru 1ACC255 both gears must be replaced at the same time.

NOTE "A": For replacement use 1—214942 Cap plus 1—206864 Seal.

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



TORQUE CONVERTER ASSEMBLY

TS-8081-P



TORQUE CONVERTER ASSEMBLY (Continued)

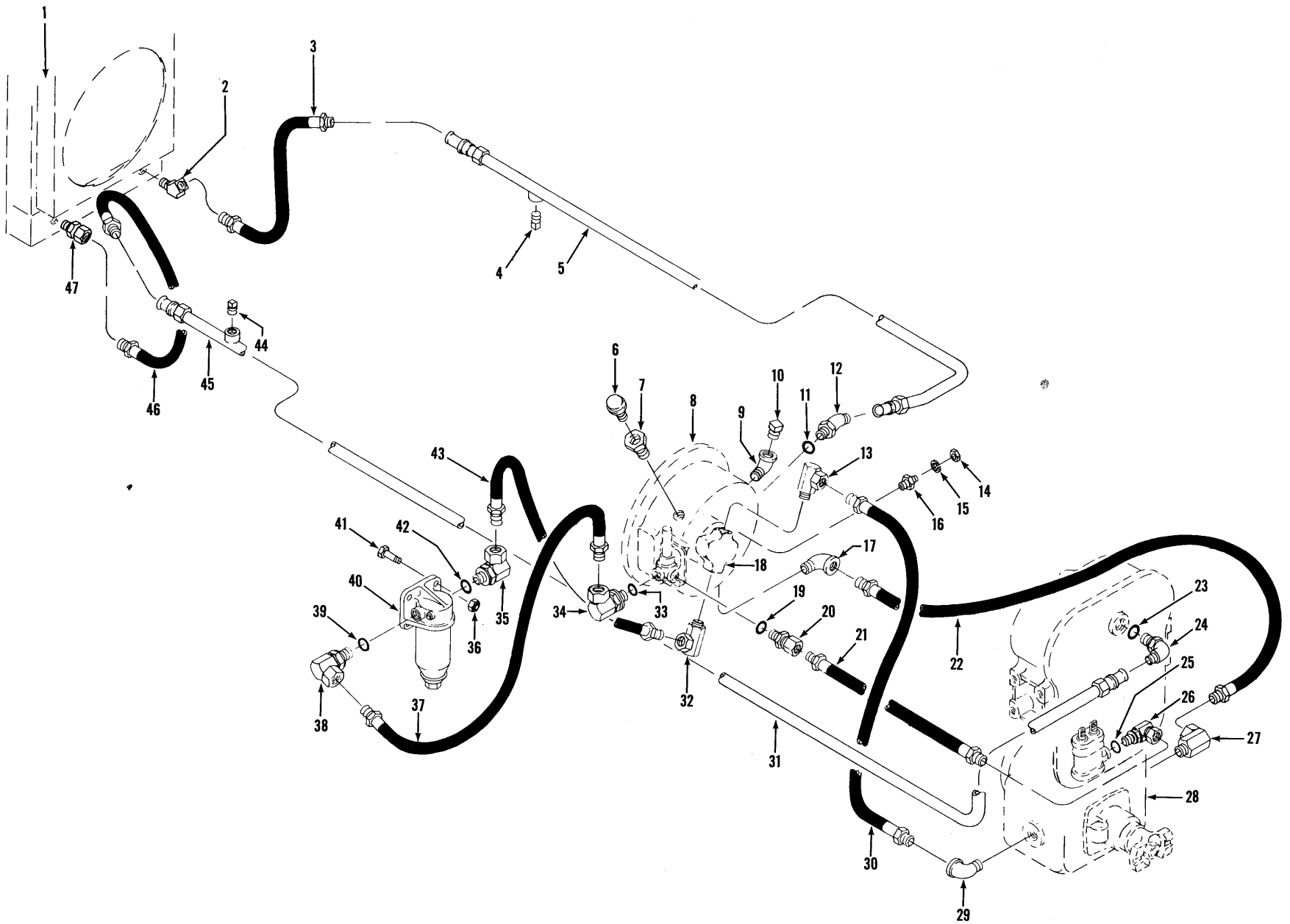
Item No.	Part No.	Description	No. Req'd.
77	25K-40616	"O" RING, Impeller Hub	1
78	214596	BEARING, Impeller Hub	1
79	214934	SPACER, Reaction Member	1
80	743035	RING, Reaction Member Retaining	1
81	214924	HUB, Turbine	1
82	619023	WASHER, Turbine Hub	8
83	209313	BOLT, Turbine Hub	8
83A	---	†‡ LOCKWIRE, Turbine Hub Bolt (18 ga.)	—
84	659065	RING, Turbine Hub Retaining	1
85	223833	TURBINE	1
86	659065	RING, Turbine Hub Retaining	1
87	801608	MEMBER, Reaction	1
87A	658244	† PIN, Member to Spacer — Lock	1
88	214953	RING, Bearing Retaining	1
89	214958	HUB, Impeller	1
90	214959	IMPELLER	1

Item No.	Part No.	Description	No. Req'd.
91	214925	BAFFLE, Oil	1
92	214941	SEAL, Oil Baffle	1
93	60K41200	"O" RING, Impeller to Cover	1
94	666542	RING, Bearing Retaining	1
95	214988	BEARING, Impeller Cover	1
96	214922	COVER, Impeller See Note "B"	1
97	222006	SLEEVE, Impeller Cover	1
98	233092	BOLT, Drive Gear to Flywheel	8
98A	---	† LOCKWIRE, Impeller Bolt (18 ga. 20" lg.)	4
99	215909	WASHER, Drive Gear to Flywheel	8
100	233089	GEAR, Converter Drive	1
101	1C-616	BOLT, Impeller to Cover	24
102	4E-06	LKWSHR, Impeller to Cover	24
103	17C-620	† BOLT, Converter to Flywheel Housing	12
104	4E-06	† LKWSHR, Converter to Flywheel Housing	12

† Not Illustrated
‡ As Required
NOTE "B": For replacement use 801524 which consists of 1-234503 Impeller Cover, plus 1-222006 Impeller Cover Sleeve.

NOTES

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



HYDRAULIC SYSTEM — TRANSMISSION AND TORQUE CONVERTER

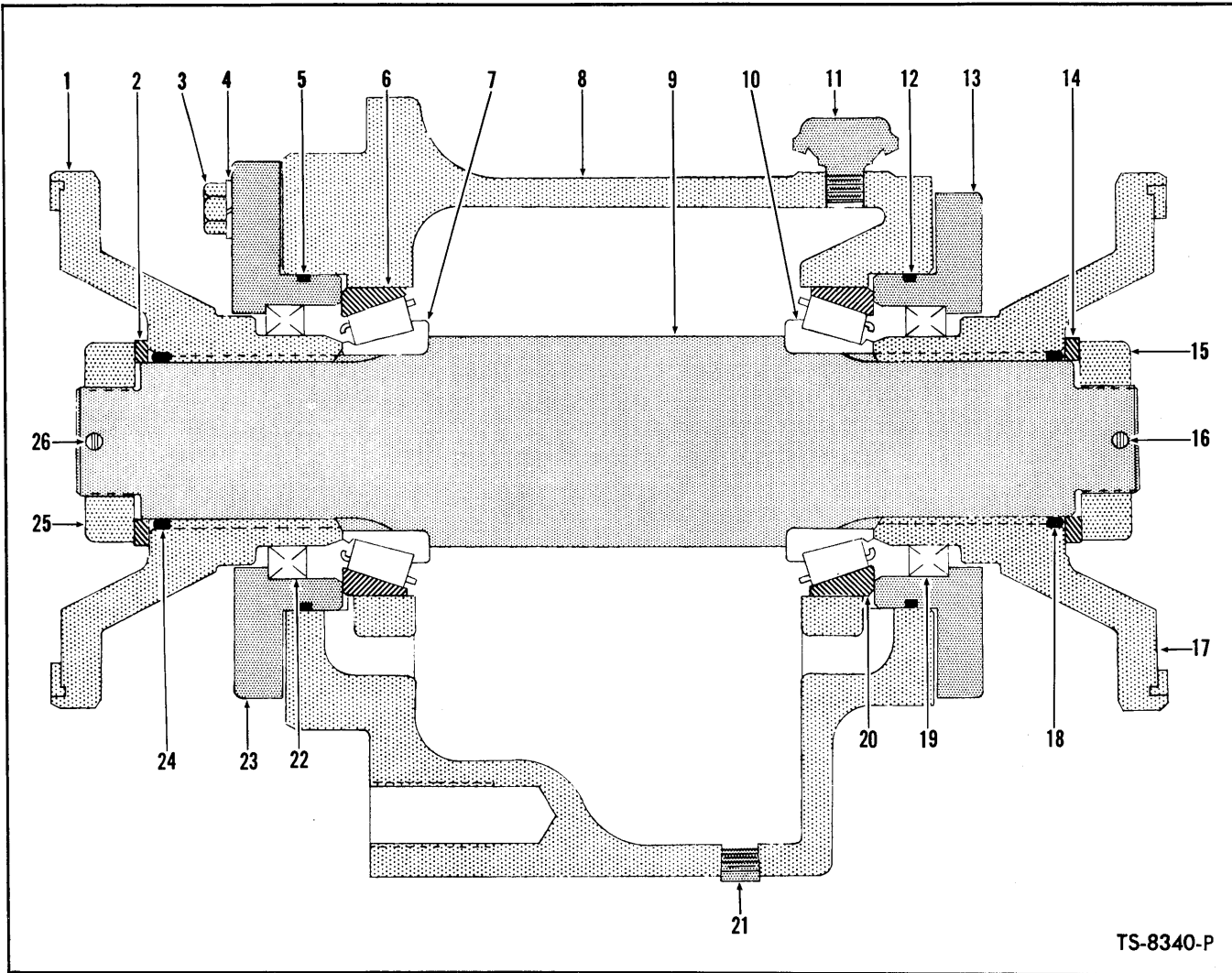
TS-8357-P

HYDRAULIC SYSTEM — TRANSMISSION AND TORQUE CONVERTER

Item No.	Part No.	Description	No. Req'd.
1	-----	RADIATOR — See Index	—
2	81F-4	ELBOW, Hose to Radiator	1
3	1534213	HOSE, Cooler Line to Radiator	1
4	40K-04	PLUG, Cooler Line	1
5	1521900	LINE, Cooler to Converter (Inc. 4)	1
6	211433	BREATHER, Converter Air	1
7	227265	VALVE, Air Breather Check	1
8	-----	CONVERTER — See Index	—
9	25F-6	ELBOW, Converter Fill	1
10	13F-16	PLUG, Filler (Furnished with Converter)	1
11	91F-8	"O" RING, Elbow to Converter	1
12	17K-8	ELBOW, Cooler Line to Converter (Inc. 11)	1
13	31F-6	ADAPTER, Suction Hose to Converter	1
14	14D-10	NUT, Temperature Sender	1
15	12E-10	LKWSHR, Temperature Sender	1
16	551323	SENDER UNIT, Converter Temperature	1
17	25F-6	ELBOW, Drain Hose to Converter	1
18	-----	PUMP, Converter Charging — See Index	—
19	91F-6	"O" RING, Adapter to Valve	1
20	690279	ADAPTER, Hose to Converter Valve (Inc. 19)	1
21	712699	HOSE, Converter to Transmission	1
22	543280	HOSE, Converter Drain	1
23	91F-8	"O" RING, Elbow	1
24	17K-8	ELBOW, Cooler Line to Transmission (Inc. 23)	1
25	91F-6	"O" RING, Adapter to Transmission	1
26	1301856	ADAPTER, Hose to Transmission (Inc. 25)	1
27	31F-6	ADAPTER, Drain Hose to Transmission	1
28	-----	TRANSMISSION — See Index	—
29	26F-6	ELBOW, Suction Hose to Transmission	1
30	589367	HOSE, Pump Suction	1
31	1521901	LINE, Radiator to Transmission (Inc. 44)	1
32	31F-5	ADAPTER, Hose to Pump	1
33	91F-8	"O" RING, Adapter to Converter Valve	1
34	526676	ADAPTER, Filter Hose to Converter Valve (Inc. 33)	1
35	526676	ADAPTER, Hose to Filter (Inc. 42)	1
36	18D-06	NUT, Filter Mounting	4
37	546809	HOSE, Filter to Converter Valve	1
38	526676	ADAPTER, Hose to Filter (Inc. 39)	1
39	91F-8	"O" RING, Adapter to Filter	1
40	1533614	FILTER, Converter and Transmission (Inc. 40A)	1
40A	215502	†CARTRIDGE KIT, Filter	1
41	18C-624	BOLT, Filter Mounting	4
42	91F-8	"O" RING, Adapter to Filter	1
43	583573	HOSE, Pump to Filter	1
44	40K-04	PLUG, Cooler Line	1
45	-----	LINE, Radiator to Transmission — See 31	—
46	1534212	HOSE, Cooler Line to Radiator	1
47	36F-5	ADAPTER, Hose to Radiator	1

†Not Illustrated

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

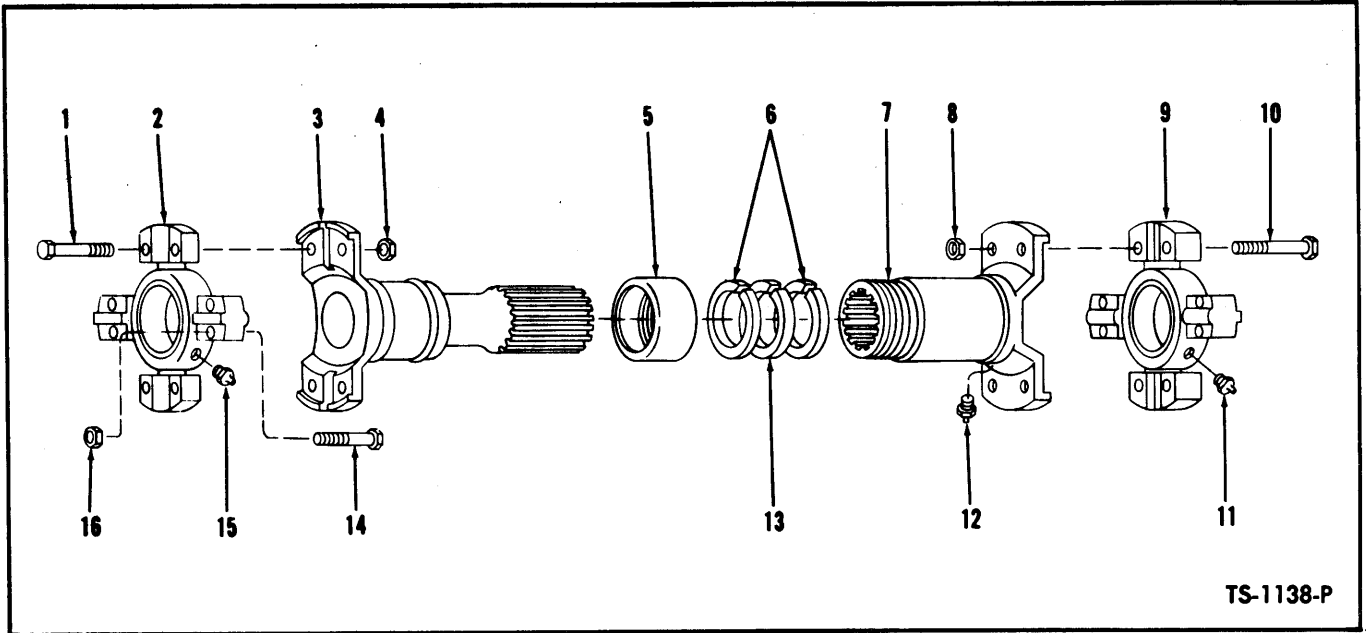


MID-MOUNT BEARING ASSEMBLY

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

†Not Illustrated
‡As Required

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

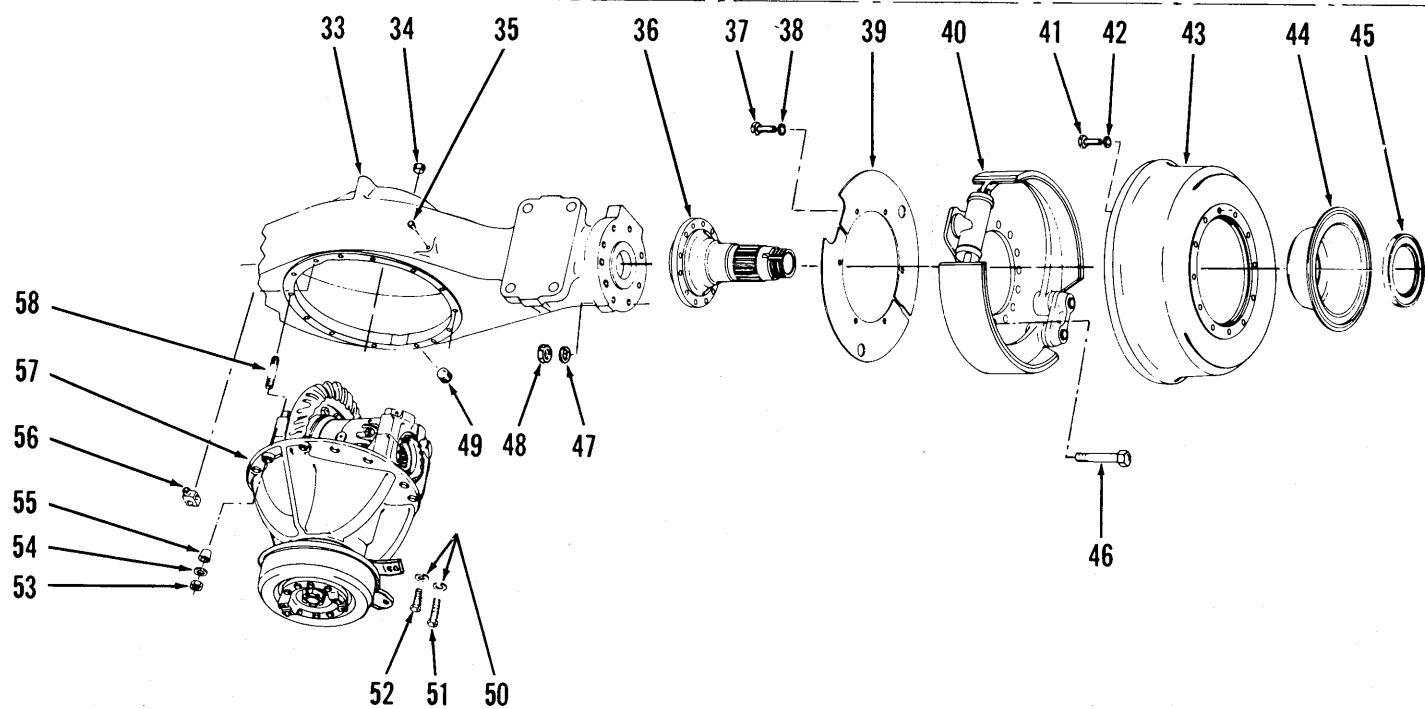
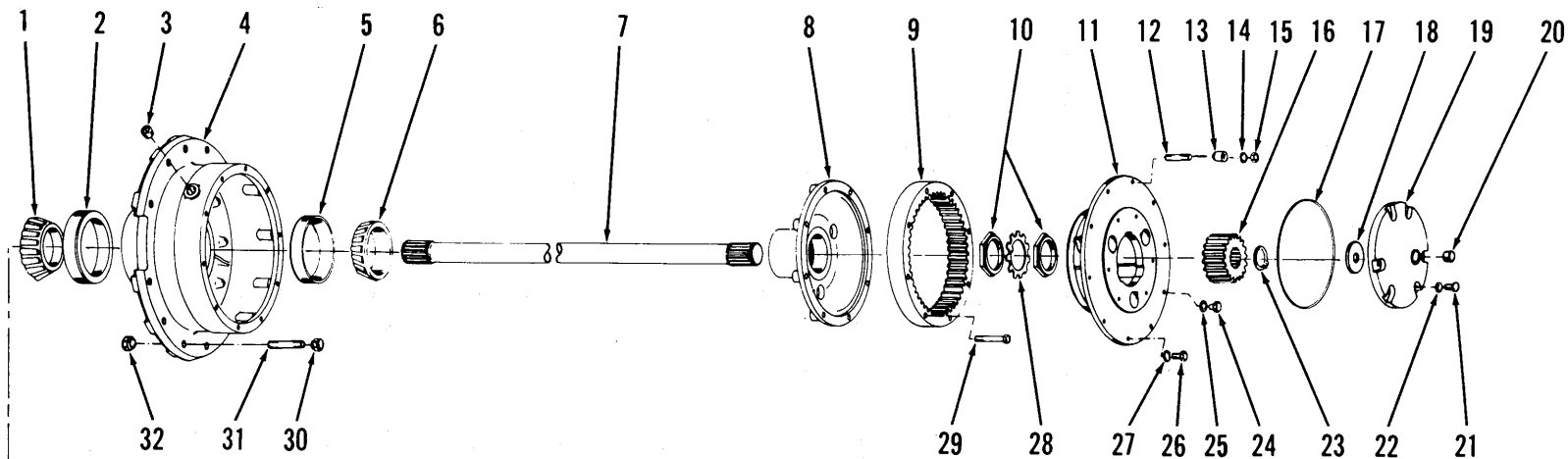


TS-1138-P

PROPELLER SHAFT ASSEMBLIES

Item No.	Description	Transmission to Rear Axle	Converter to Transmission	Mid Mount Bearing to Front Axle	Transmission to Mid Mount Bearing (Rear)	No. Req'd.
A	PROPELLER SHAFT ASSY (Inc. 1 thru 16)	550778	574386	528998	569816	1
1	BOLT, Spider & Bearing to Tube	18C632	695808	18C632	940229	4
2	SPIDER & BEARING ASSY	944862	887737	944862	942735	1
3	TUBE	940230	946288	944690	946017	1
4	NUT, Spider & Bearing to Tube	8D-06	8D-05	8D-08	8D-08	4
5	RETAINER, Felt	940090	940654	940090	940250	1
6	WASHER, Felt Retainer	940091	940653	940091	940251	2
7	SLIP YOKE (Inc. 12)	940224	942658	940224	942734	1
8	NUT, Spider & Bearing to Slip Yoke	8D-06	8D-05	8D-08	8D-08	4
9	SPIDER & BEARING ASSY	944862	887737	944862	942735	1
10	BOLT, Spider & Bearing to Slip Yoke	18C632	695808	18C632	940229	4
11	FITTING, Spider & Bearing Grease	10H-35	10H-35	10H-35	944688	1
12	FITTING, Slip Yoke Grease	10H-25	10H-25	10H-25	10H-25	1
13	FELT WASHER	940092	940081	940092	942749	1
14	BOLT, Spider & Bearing Attaching	18C632	945256	18C632	940229	8
15	FITTING, Spider & Bearing Grease	10H-35	10H-35	10H-35	944688	1
16	NUT, Spider & Bearing Attaching	8D-06	18D-05	8D-08	8D-08	8

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



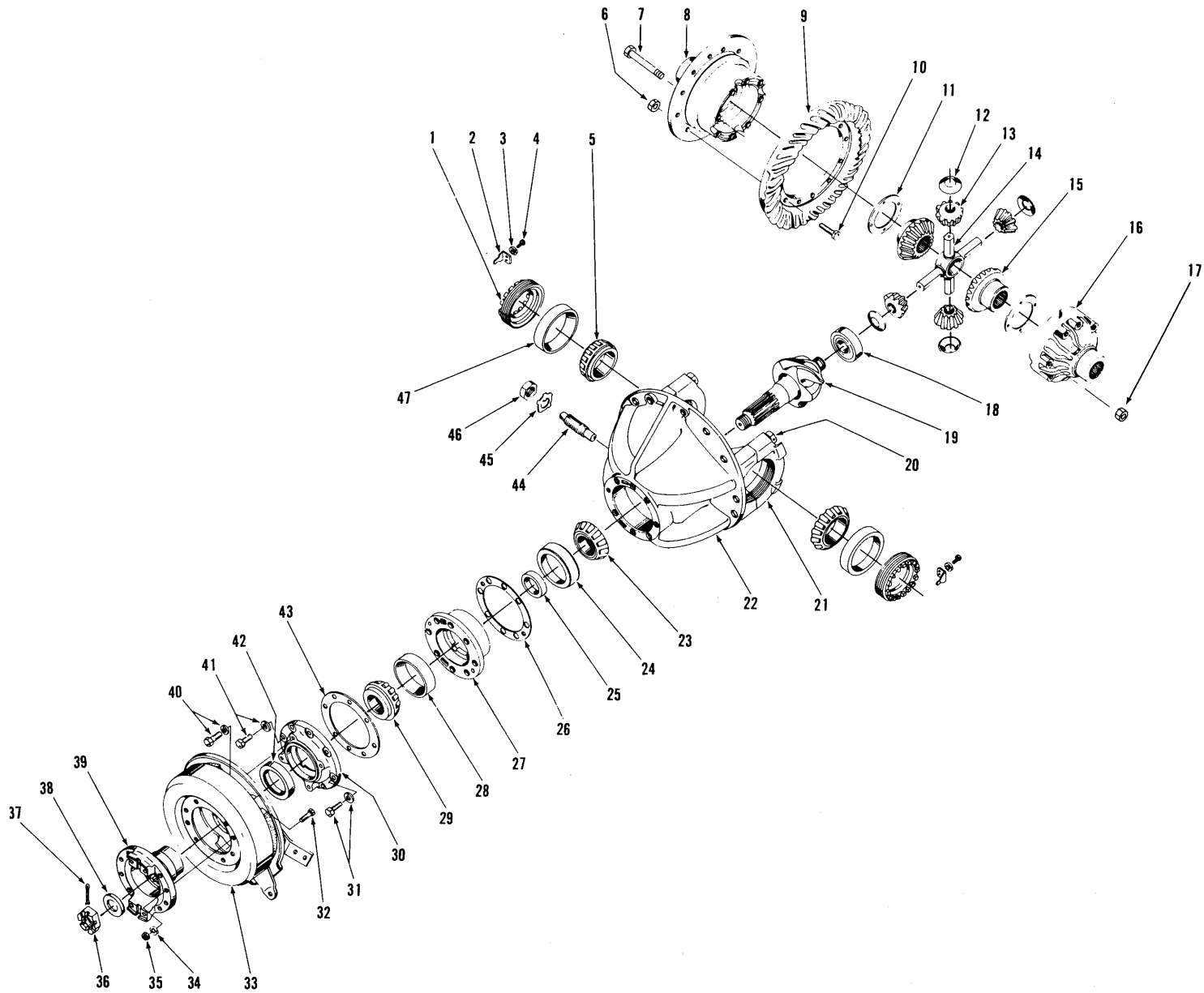
AXLE ASSEMBLY — FRONT DRIVE

TS-6782-P

AXLE ASSEMBLY — FRONT DRIVE

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	131599	AXLE ASSY (Inc. 1 thru 58)	1	29	106880	BOLT, Internal Gear to Hub	16
1	799408	CONE, Inner Hub Bearing	2	30	103522	NUT, Wheel	20
2	658985	CUP, Inner Hub Bearing	2	31	103445	STUD, Wheel	20
3	119469	PLUG, Hub Filler	2	32	86D-12	NUT, Wheel Stud	20
4	112073	HUB ASSY (Inc. 2, 5)	2	33	112086	HOUSING, Axle	1
5	672181	CUP, Outer Hub Bearing	2	34	114969	PLUG, Housing Filler	1
6	672182	CONE, Outer Hub Bearing	2	35	106656	BREATHER, Axle Housing	1
7	112077	AXLE SHAFT	2	36	112078	SPINDLE	2
8	106060	HUB, Internal Gear	2	37	1C-612	BOLT, Dust Shield Mounting	12
9	106059	GEAR, Internal	2	38	4E-06	LKWSHR, Dust Shield Mounting	12
10	114433	NUT, Inner Spindle	4	39	114453	SHIELD, Brake Dust	4
11	-----	PLANET CARRIER — See Index	—	40	-----	FRONT BRAKE ASSY — See Index	—
12	116419	STUD, Planet Carrier Mounting	10	41	17C1024	BOLT, Brake Drum to Hub	24
13	112287	DOWEL, Planet Carrier Mounting	10	42	104412	WASHER, Brake Drum to Hub	24
14	106762	WASHER, Planet Carrier Mounting	10	43	112085	DRUM, Brake	2
15	64D-08	NUT, Planet Carrier Stud	10	44	109055	CATCHER, Oil	2
16	109050	GEAR, Sun	2	45	112055	SEAL, Hub Oil	2
17	114089	"O" RING, Cap to Carrier	2	46	118350	BOLT, Spindle & Brake Attaching	16
18	106455	WASHER, Sun Gear Thrust Cap	2	47	104412	WASHER, Spindle & Brake Attaching	16
19	945129	KIT, Sun Gear Thrust Cap (Inc. 17, 18, 20)	2	48	106998	NUT, Spindle & Brake Attaching	16
20	11F-04	PLUG, Thrust Cap	2	49	11F-12	PLUG, Housing Drain	1
21	1C-720	BOLT, Thrust Cap	12	50	106762	WASHER, Carrier to Axle Housing	14
22	112278	LKWSHR, Thrust Cap	12	51	17C-828	BOLT, Carrier to Axle Housing	3
23	106247	RING, Sun Gear Snap	2	52	17C-824	BOLT, Carrier to Axle Housing	8
24	1C-808	BOLT, Planet Puller Hole	4	53	64D-08	NUT, Carrier to Axle Housing	3
25	3E-08	LKWSHR, Planet Puller Hole	4	54	106762	WASHER, Carrier to Axle Housing	3
26	100970	BOLT, Planet Carrier to Hub	10	55	112287	DOWEL, Carrier to Axle Housing	3
27	106762	WASHER, Planet Carrier to Hub	10	56	550319	TEE, Brake Line	1
28	101274	LOCK, Spindle Nut	2	57	-----	DIFF. & CARRIER ASSY — See Index	—
				58	126416	STUD, Carrier to Axle Housing	3

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



DIFFERENTIAL AND CARRIER ASSEMBLY — FRONT DRIVE

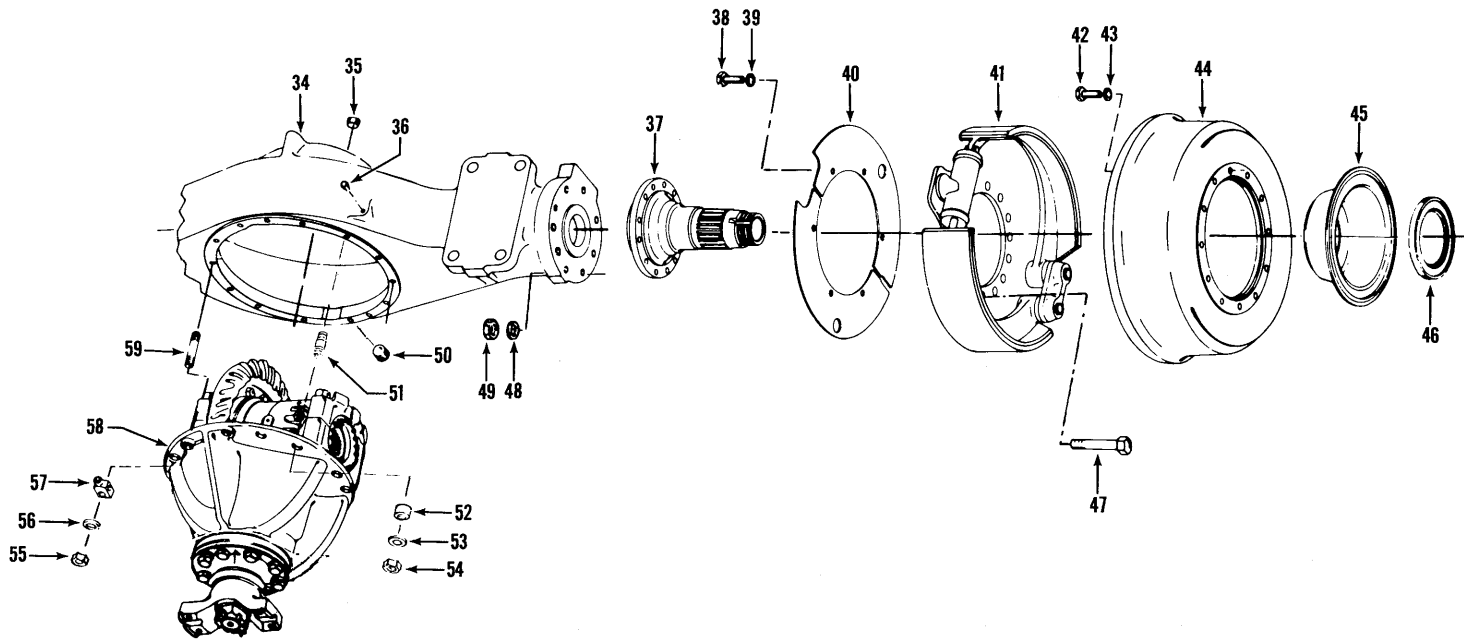
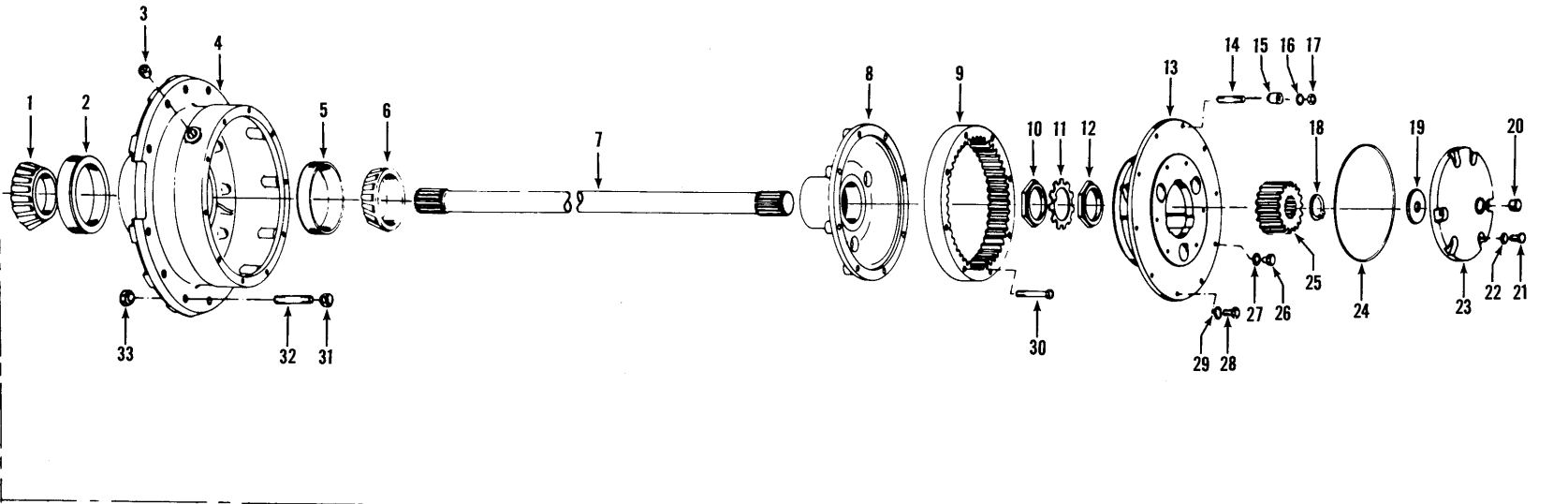
TS-8113-P

DIFFERENTIAL AND CARRIER ASSEMBLY — FRONT DRIVE

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	118508	DIFFERENTIAL & CARRIER ASSY (Inc. 1 thru 47)	1	26B	125568	‡SPACER, Bearing Cage — Thick	—
1	123747	NUT, Differential Adjusting	2	27	110843	CAGE ASSY, Pinion Bearing (Inc. 24, 28)	1
2	100941	LOCK, Differential Adjusting Nut	2	28	667278	CUP, Pinion Bearing — Outer	1
3	4E-06	LKWSHR, Adjusting Nut Lock	2	29	667277	CONE, Pinion Bearing — Outer	1
4	3C-614	BOLT, Adjusting Nut Lock	2	30	110847	RETAINER, Pinion Oil Seal	1
4A	—	†‡LOCKWIRE — 18 ga.	—	31	1C-936	BOLT, Pinion Oil Seal Retainer	7
5	654144	CONE, Differential Bearing	2	31A	4E-09	LKWSHR, Pinion Oil Seal Retainer	7
6	86D-09	NUT, Ring Gear	12	32	101144	BOLT, Drum to Flange	8
7	118475	BOLT, Differential Case	8	33	—	PARKING BRAKE — See Index	—
8	—	§DIFFERENTIAL CASE — Flange Half — See 51	—	33A	107261	†DRUM, Parking Brake	1
9	—	§RING GEAR — See 50	—	34	2E-06	LKWSHR, Drum to Flange	8
10	101196	BOLT, Ring Gear	12	35	62D-06	NUT, Drum to Flange	8
11	118474	WASHER, Side Gear Thrust	2	36	101262	NUT, Pinion Shaft	1
12	101244	WASHER, Differential Pinion Thrust ..	4	37	1F-732	COTTER, Pinion Shaft Nut	1
13	815745	PINION KIT, Differential	1	38	101263	WASHER, Pinion Shaft	1
14	117022	SPIDER, Differential	1	39	112084	FLANGE, Companion	1
15	104167	GEAR, Differential Side	2	40	1C-920	BOLT, Brake Mounting	4
16	—	§DIFFERENTIAL CASE — Plain Half — See 51	—	40A	4E-09	LKWSHR, Brake Mounting	4
17	86D-09	NUT, Differential Case	8	41	1C-836	BOLT, Pinion Oil Seal Retainer	1
18	667466	BEARING, Inner Pinion	1	41A	4E-08	LKWSHR, Pinion Oil Seal Retainer	1
19	—	§PINION — See 50	—	42	110897	SEAL, Pinion Shaft Oil	1
20	101210	BOLT, Carrier Cap	4	43	—	OMIT	—
20A	111658	†WASHER, Carrier Cap	4	44	101226	SCREW, Thrust	1
21	—	§CAP, Differential Carrier — See 22 ..	—	45	101227	LOCK, Thrust Screw	1
22	112289	CARRIER ASSY, Differential (Inc. 20, 20A, 21)	1	46	8D-18	NUT, Thrust Screw	1
23	667276	CONE, Pinion Bearing — Center	1	47	667275	CUP, Differential Bearing	2
24	658988	CUP, Pinion Bearing — Center	1	48	126595	†DIFFERENTIAL ASSY (Inc. 6 thru 17, 19)	1
25	104226	SPACER, Pinion Bearing	1	49	118499	†DIFFERENTIAL BODY SUB-ASSY (Inc. 7, 8, 11 thru 17)	1
26	101257	‡SPACER, Bearing Cage — Thin	—	50	815170	†GEAR & PINION SET (Inc. 9, 19)	1
26A	125567	‡SPACER, Bearing Cage — Medium	—	51	815736	†DIFFERENTIAL CASE KIT (Inc. 7, 8, 11, 12, 16, 17)	1

§Not Sold Separately
†Not Illustrated
‡As Required

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



AXLE ASSEMBLY — REAR DRIVE

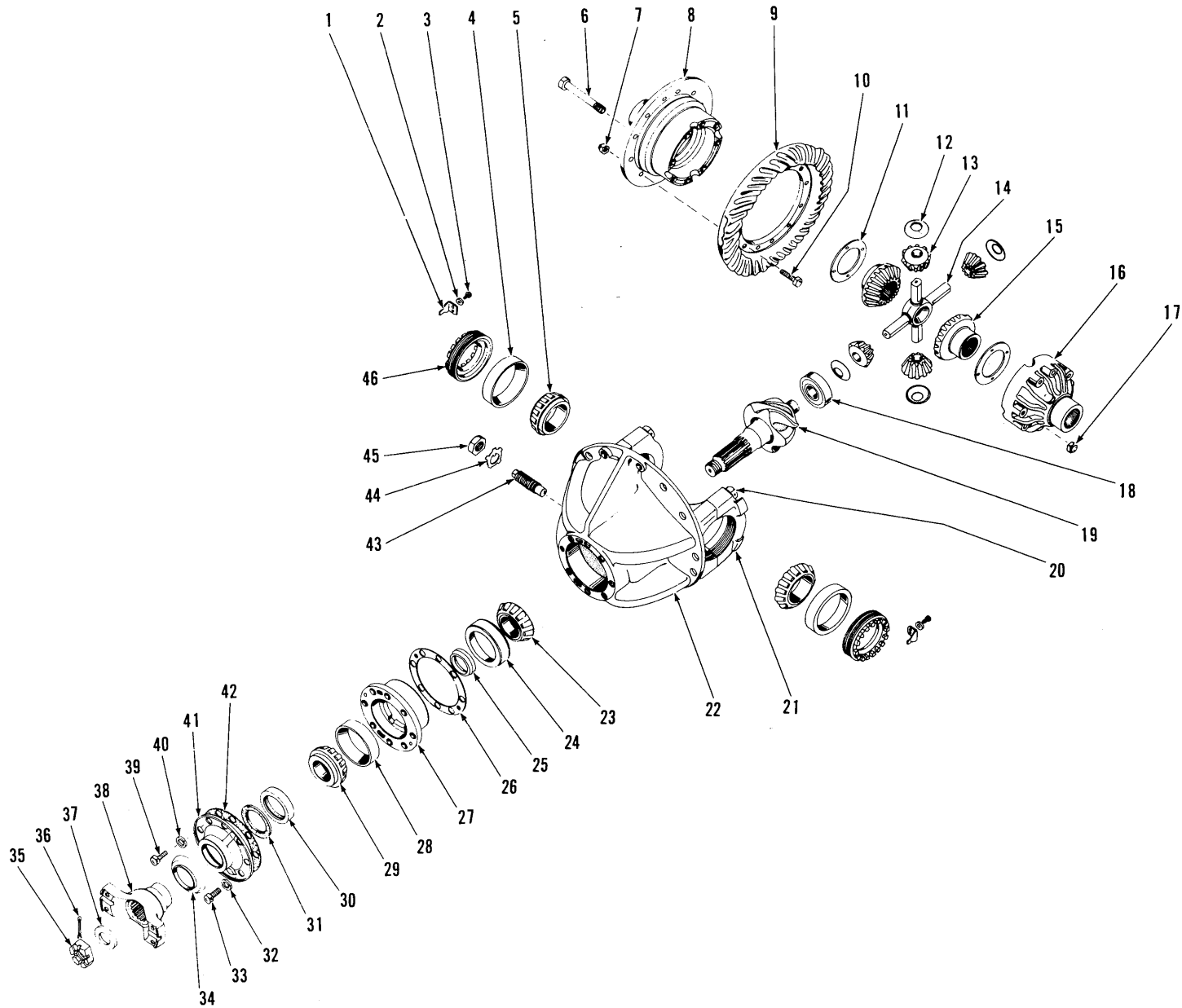
TS-8375-P

AXLE ASSEMBLY — REAR DRIVE

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	190534	AXLE ASSY (Inc. 1 thru 59)	1	30	106880	SCREW, Gear to Gear Hub	16
1	799408	CONE, Inner Hub Bearing	2	31	103522	NUT, Wheel	20
2	658985	CUP, Inner Hub Bearing	2	32	103445	STUD, Wheel	20
3	119469	PLUG, Hub Filler	2	33	86D-12	NUT, Wheel Stud	20
4	112073	HUB ASSY (Inc. 2 & 5)	2	34	112086	HOUSING, Axle	1
5	672181	CUP, Outer Hub Bearing	2	35	119469	PLUG, Housing Filler	1
6	672182	CONE, Outer Hub Bearing	2	36	106656	BREATHER, Housing	1
7	112077	SHAFT, Axle	2	37	112078	SPINDLE	2
8	106060	HUB, Internal Gear	2	38	1C-612	BOLT, Dust Cover	12
9	106059	GEAR, Internal Ring	2	39	4E-06	LKWSHR, Dust Cover	12
10	114433	NUT, Spindle Inner	2	40	114453	COVER, Brake Dust	4
11	101274	LOCK, Spindle Nut	2	41	117150	BRAKE ASSY	2
12	114433	NUT, Spindle Outer	2	42	17C1024	BOLT, Drum to Hub	24
13	—	PLANET CARRIER (See Index)	—	43	104412	WASHER, Drum to Hub	24
14	116419	STUD, Planet Carrier to Hub	10	44	112085	DRUM, Brake	2
15	122287	DOWEL, Planet Carrier to Hub	10	45	109055	CATCHER, Oil	2
16	106762	WASHER, Planet Carrier to Hub	10	46	112055	SEAL, Hub Oil	2
17	64D-08	NUT, Planet Carrier to Hub	10	47	118350	BOLT, Brake & Spindle Attaching	18
18	106247	RING, Sun Gear Retaining	2	48	104412	WASHER, Brake & Spindle Attaching	18
19	106455	WASHER, Sun Gear Thrust	2	49	106998	NUT, Brake & Spindle Attaching	18
20	11F-04	PLUG, Planet Filler	2	50	11F-12	PLUG, Housing Drain	1
21	1C-720	SCREW, Thrust Cap	12	51	112286	*STUD, Carrier to Housing	13
22	112278	WASHER, Thrust Cap	12	52	112287	*DOWEL, Stud	3
23	114119	CAP ASSY, Sun Gear Thrust (Inc. 19)	2	53	106762	*WASHER, Carrier to Housing	14
24	114089	"O" RING, Cap to Planet Carrier	2	54	64D-08	*NUT, Carrier to Housing	14
25	109050	GEAR, Sun	2	55	—	*NUT, Carrier to Housing (See 54)	—
26	1C-808	SCREW, Puller Hole	4	56	—	*WASHER (See 53)	—
27	3E-08	LKWSHR, Puller Hole	4	57	550320	TEE, Brake Line	1
28	100970	BOLT, Planet Carrier to Hub	10	58	—	DIFF. & CARRIER ASSY (See Index)	—
29	106762	WASHER, Planet Carrier to Hub	10	59	112923	*STUD, Carrier to Housing	1

*NOTE: Machine Serial 1ACC101 thru 1ACC105, 1ACC107, 1ACC111, 1ACC123, 1ACC126 and 1ACC127 used 3 — 17C-828 Bolts, 8 — 17C-824 Bolts, 3 — 126416 Studs, 3 — 112287 Dowels, 14 — 106762 Washers and 3 — 64D-08 Nuts for mounting the Differential and Carrier Assembly to the axle housing. When removing the Differential and Carrier Assembly for any reason replace the afore listed items with the following: 1 — 112923 Stud, 13 — 112286 Studs, 3 — 112287 Dowels, 14 — 106762 Washers and 14 — 64D-08 Nuts.

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DIFFERENTIAL AND CARRIER ASSEMBLY — REAR DRIVE

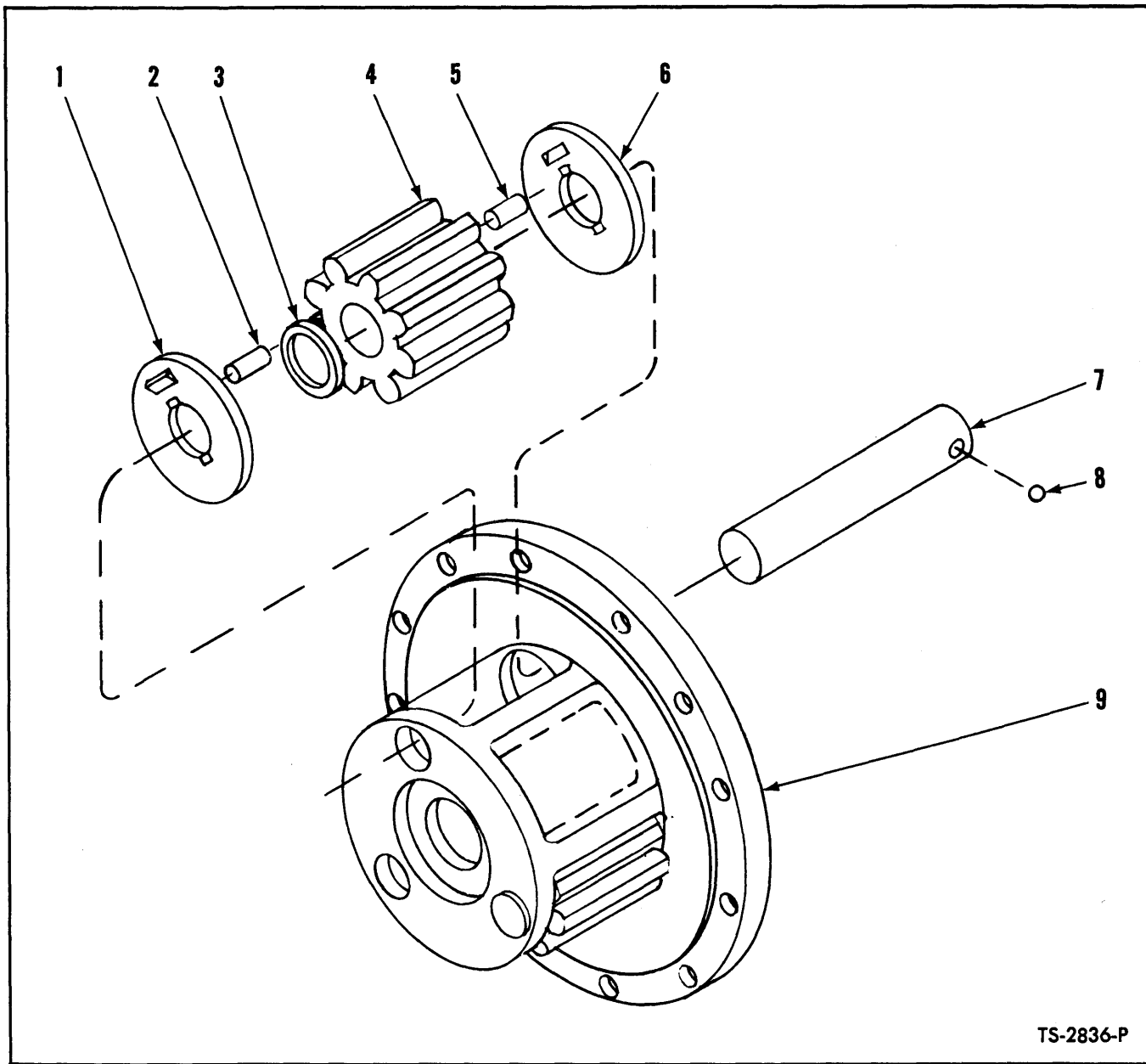
TS-2649-P

DIFFERENTIAL AND CARRIER ASSEMBLY — REAR DRIVE

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	118509	DIFF. & CARRIER ASSY (Inc. 1 thru 46)	1	26	125568	SHIM, Bearing Cage — Thick	—
1	100941	LOCK, Differential Adjusting Nut	2	26A	125567	†‡ SHIM, Bearing Cage — Medium	—
2	4E-06	LKWSHR, Differential Adjusting Lock	2	26B	101257	†‡ SHIM, Bearing Cage — Thin	—
3	3C-614	BOLT, Differential Adjusting Lock	2	27	101250	CAGE ASSY, Pinion Bearing (Inc. 24, 28)	1
4	667275	CUP, Differential Bearing	2	28	667278	CUP, Pinion Bearing	1
5	654144	CONE, Differential Bearing	2	29	667277	CONE, Outer Pinion Bearing	1
6	118475	BOLT, Differential Case	8	30	110897	SEAL, Pinion Oil	1
7	86D-09	NUT, Ring Gear Bolt	12	31	101256	GASKET, Pinion Oil Seal	1
8	—	§DIFF. CASE — Flange Half — See Item 50	—	32	4E-09	LKWSHR, Pinion Oil Seal Retainer	7
9	—	§RING GEAR — See Item 49	—	33	1C-928	BOLT, Pinion Oil Seal Retainer	7
10	101196	BOLT, Ring Gear	12	34	101261	SHIELD, Companion Flange Dust	1
11	118474	WASHER, Side Gear Thrust	2	35	101262	NUT, Pinion Shaft	1
12	101244	WASHER, Differential Pinion Thrust	4	36	1F-732	COTTER, Pinion Shaft Nut	1
13	815745	KIT, Differential Pinion	1	37	101263	WASHER, Pinion Shaft Nut	1
14	117022	SPIDER, Differential	1	38	117218	FLANGE, Companion	1
15	104167	GEAR, Differential Side	2	39	1C-828	BOLT, Pinion Oil Seal Retainer	1
16	—	§DIFF. CASE — Plain Half — See Item 50	—	40	4E-08	LKWSHR, Pinion Oil Seal Retainer	1
17	86D-09	NUT, Differential Case	8	41	101253	RETAINER, Pinion Oil Seal	1
18	667466	BEARING, Inner Pinion	1	42	—	OMIT	—
19	—	§PINION, Differential — See Item 49	—	43	101226	SCREW, Thrust	1
20	101210	BOLT, Differential Carrier Cap	4	44	101227	LOCK, Thrust Screw	1
20A	111658	†WASHER, Carrier Cap Bolt	4	45	8D-18	NUT, Thrust Screw	1
21	—	§CAP, Differential Carrier — See Item 22	—	46	123747	NUT, Differential Adjusting	2
22	112289	CARRIER ASSY (Inc. 20, 20A, 21)	1	47	126585	†DIFF. ASSY (Inc. 6 thru 17)	1
23	667276	CONE, Center Pinion Bearing	1	48	118499	†DIFF. BODY SUB ASSY (Inc. 6, 8, 11 thru 17)	1
24	658988	CUP, Center Pinion Bearing	1	49	815369	†GEAR & PINION SET (Inc. 9, 19)	1
25	104226	SPACER, Pinion Bearing	1	50	815736	†DIFF. CASE KIT (Inc. 6, 8, 12, 16, 17)	1

§Not Sold Separately
†Not Illustrated
‡As Required

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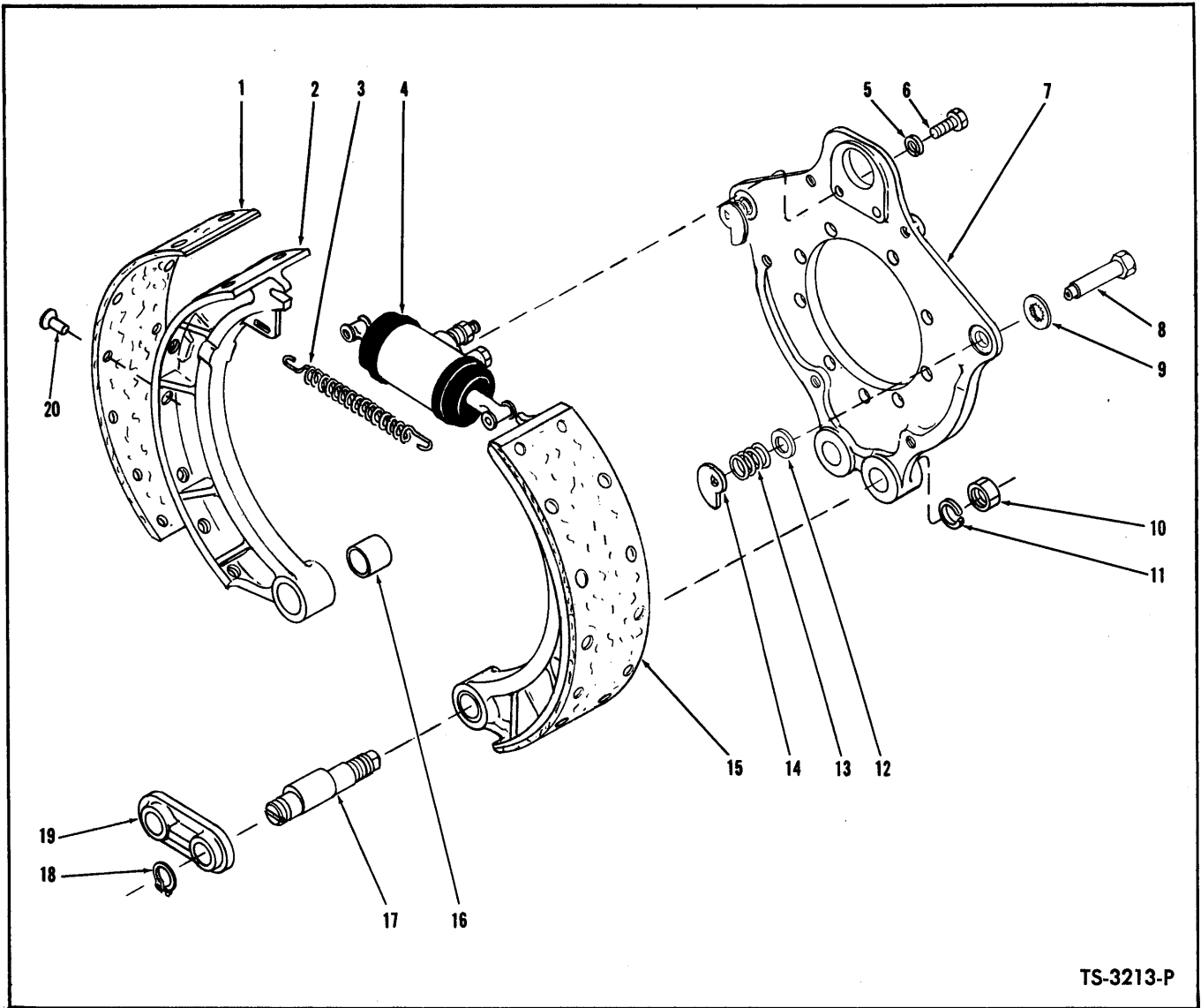


TS-2836-P

PLANET CARRIER ASSEMBLY – FRONT AND REAR

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

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



TS-3213-P

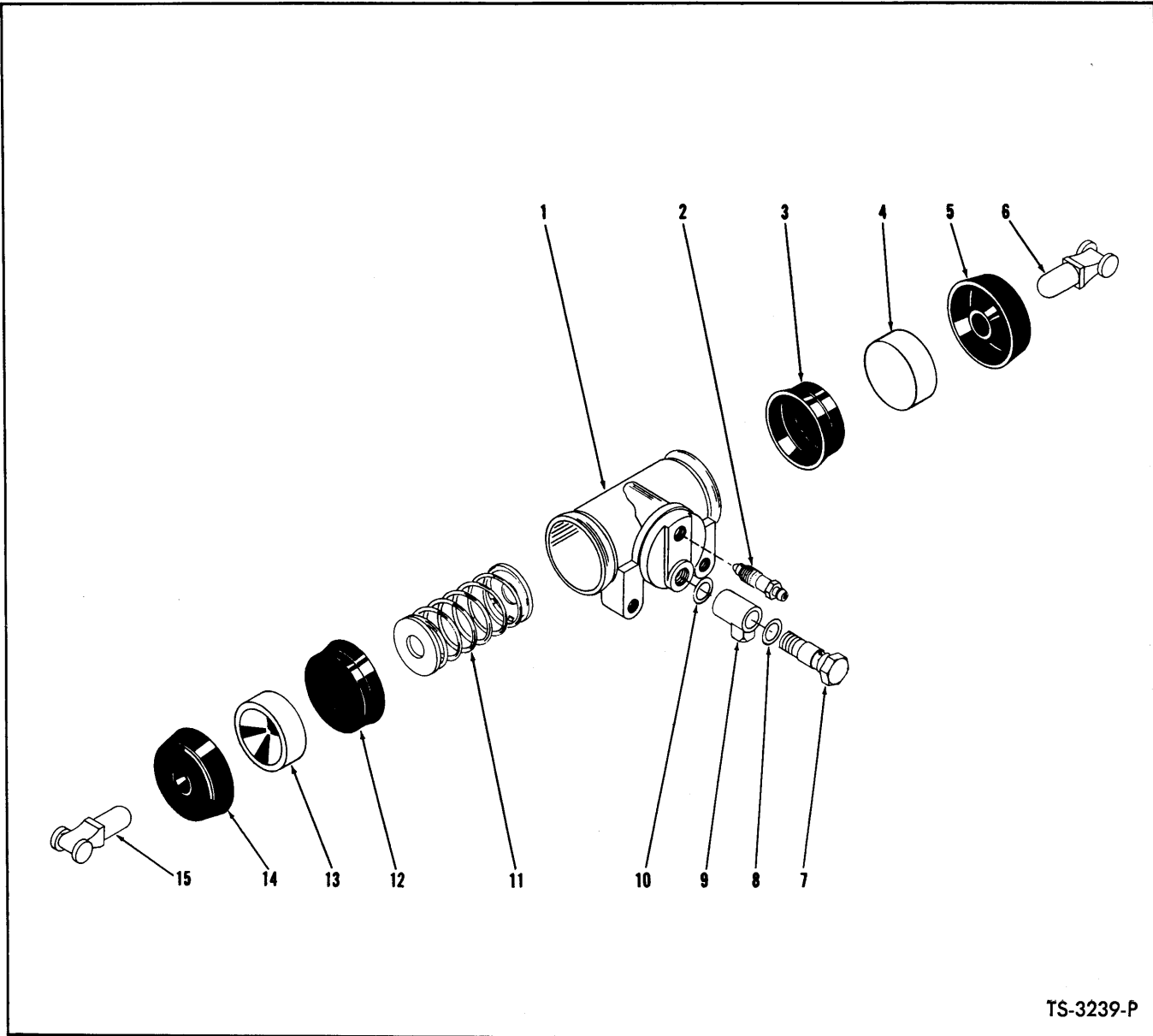
BRAKE ASSEMBLY — FRONT AND REAR

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	117150	BRAKE ASSY (Inc. 1 thru 20)	4	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 Adjusting Pin	2
B		LINING KIT, Brake (Inc. 1, 20)		10	62D-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	KIT, Adjusting Cam Spring (Inc. 12)	2
2		§SHOE, Brake — See 15	2	14	112062	CAM, Shoe Adjusting	2
3	119670	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 Cylinder 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

§Not Sold Separately

*NOTE: When 945621 Lining Kit is utilized Drums must be turned down to 17.370 — 17.380. Do Not Exceed this Dimension.

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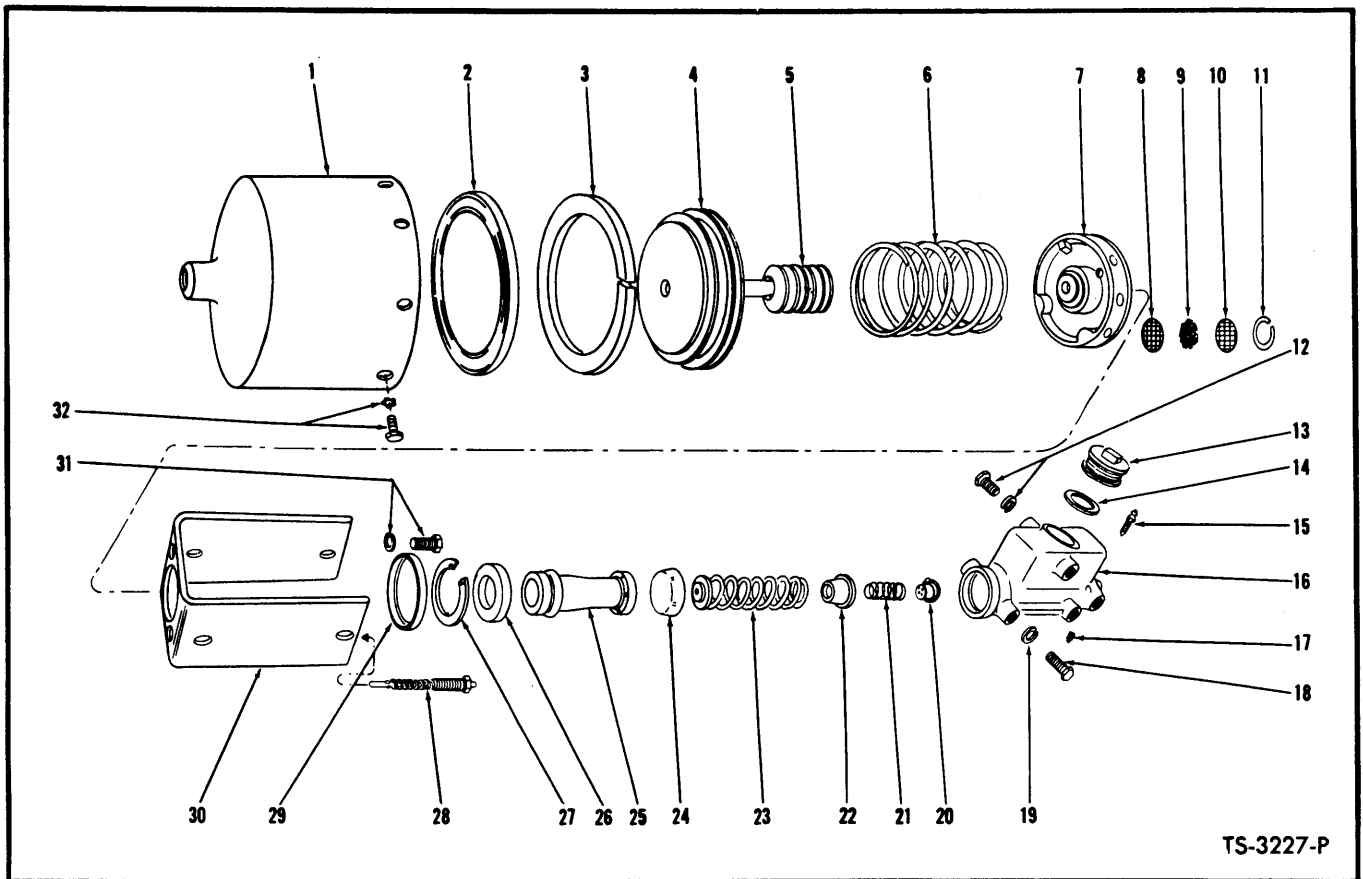
TS-3239-P

BRAKE WHEEL CYLINDER – FRONT AND REAR

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

§Not Sold Separately

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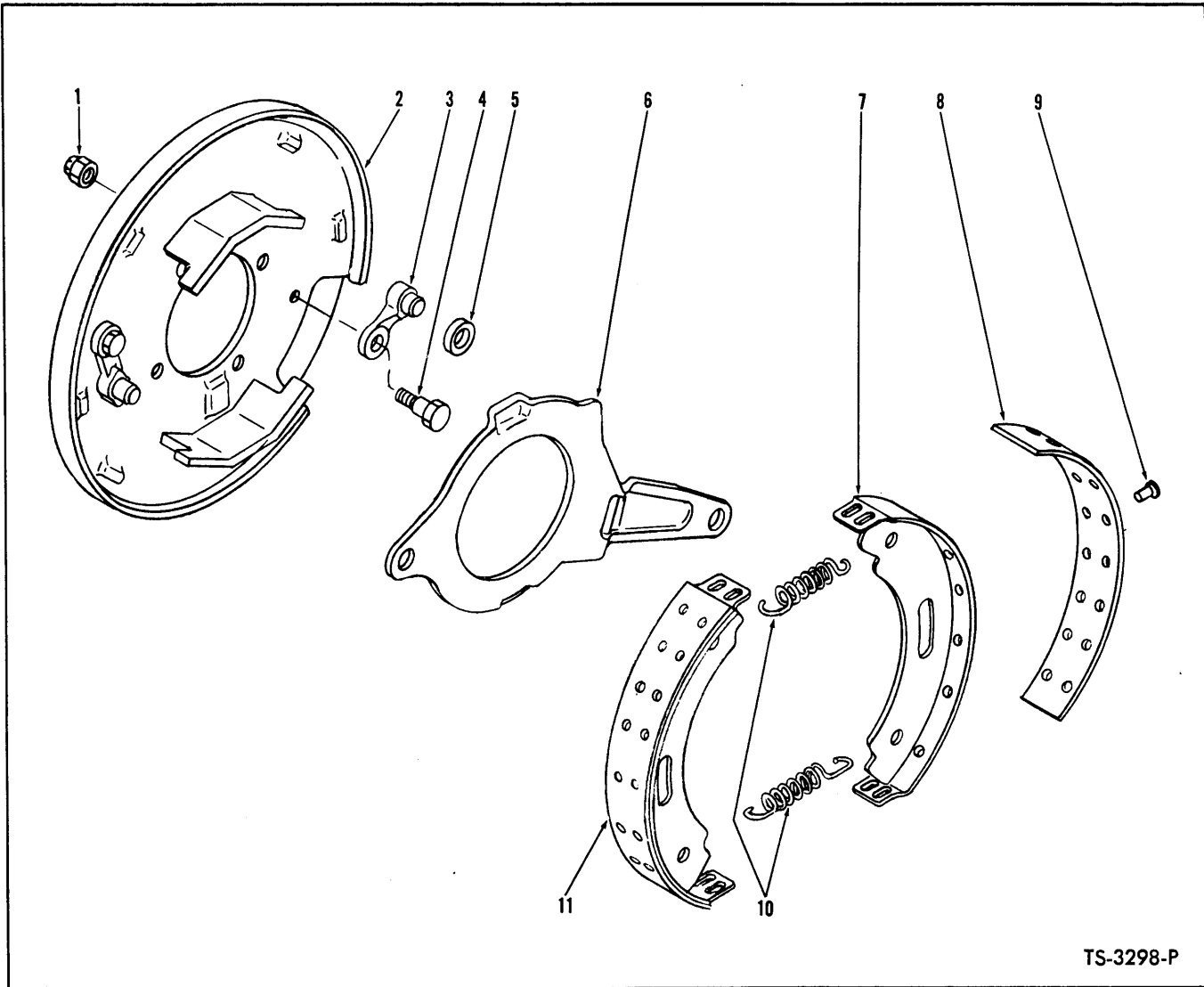
TS-3227-P

POWER CLUSTER ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	540555	POWER CLUSTER ASSY (Inc. 1 thru 32A)	1	17	10F-02	PLUG, Master Cylinder	1
1	945033	SHELL, Air Cylinder	1	18	2C-714	BOLT, Cylinder to Bracket	2
2	-----	§CUP, Piston—See 33	1	19	4E-07	LKWSHR, Cylinder to Bracket	2
3	-----	§WIPER, Piston—See 33	1	20	-----	§VALVE, Check—See 33	1
4	945032	PISTON, Air Cylinder	1	21	945026	SPRING, Check Valve	1
5	-----	§BOOT, Piston—See 33	1	22	945042	RETAINER, Check Valve Spring	1
6	945031	SPRING, Piston Return	1	23	874001	SPRING, Piston Return	1
7	945037	HEAD ASSY, Air Cylinder (Inc. 8 thru 11)	1	24	-----	§CUP, Piston — See 33	1
8	945029	SCREEN, Filtering	1	25	-----	§PISTON, Master Cylinder—See 33	1
9	992163	HAIR, Filtering	1	26	874003	PLATE, Piston Stop	1
10	945029	SCREEN, Filtering	1	27	874028	RING, Stop Plate Lock	1
11	992164	RING, Filter Retaining	1	28	945030	INDICATOR, Stroke	1
12	2C-714	BOLT, Cylinder to Bracket	2	29	945023	BAND, Master Cylinder Sealing	1
12A	4E-07	LKWSHR, Cylinder to Bracket	2	30	945024	BRACKET, Master Cylinder Support	1
13	860205	CAP, Filler	1	31	1C-616	BOLT, Bracket to Head	3
14	850287	GASKET, Filler Cap	1	31A	4E-06	LKWSHR, Bracket to Head	4
15	851806	SCREW, Cylinder Bleeder	1	32	1C-510	BOLT, Head to Cylinder	8
16	-----	§CASTING, Master Cylinder (See 34) ..	1	32A	6E-05	LKWSHR, Head to Cylinder	8
				33	945025	REPAIR KIT (Inc. 2, 3, 5, 20, 24, 25) ..	1
				34	945800	Hydraulic Cyl. Assy (Inc. 13 thru 17, 20 thru 27)	1

§Not Sold Separately

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



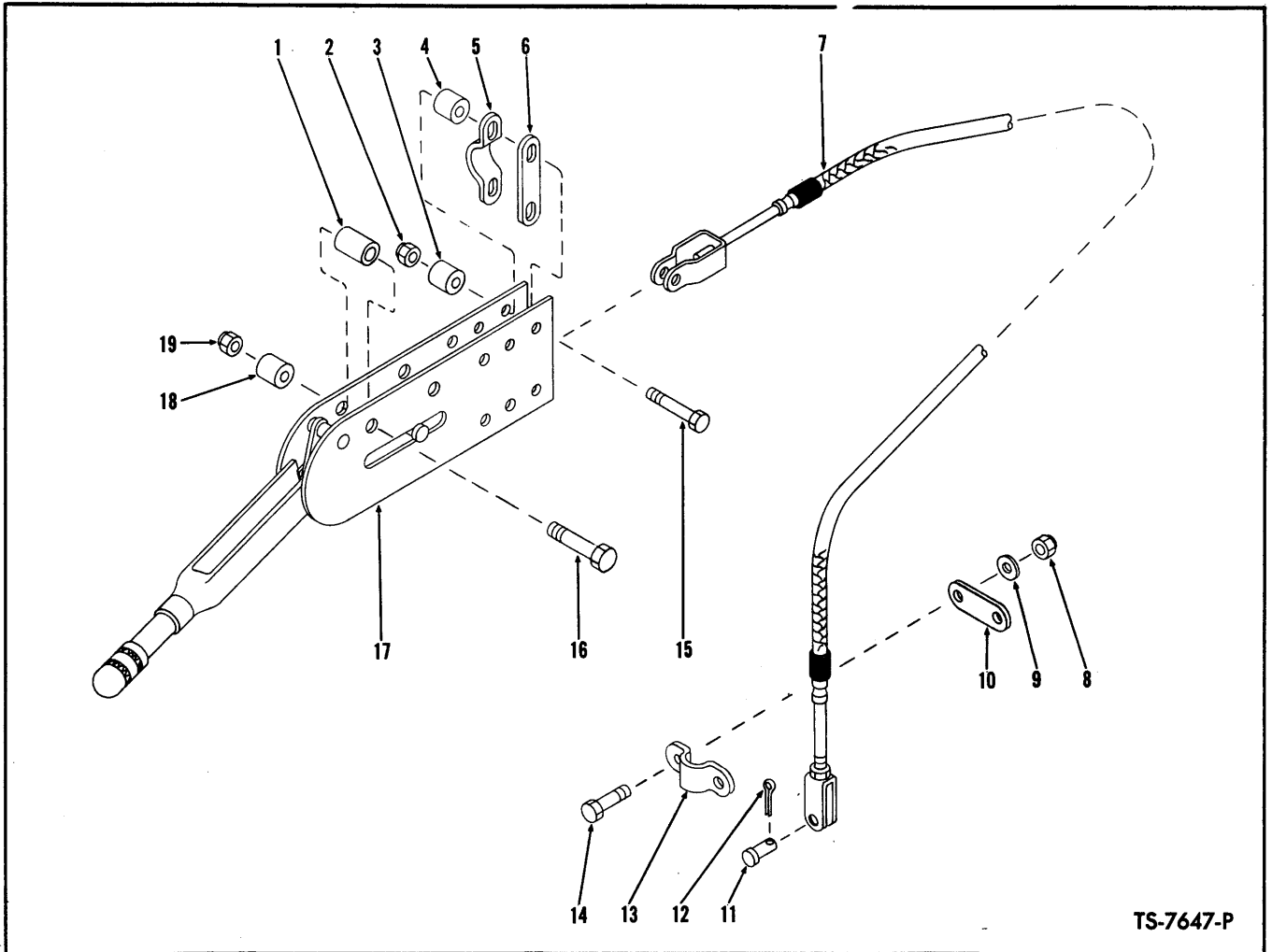
TS-3298-P

PARKING BRAKE ASSEMBLY

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

§Not Sold Separately

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

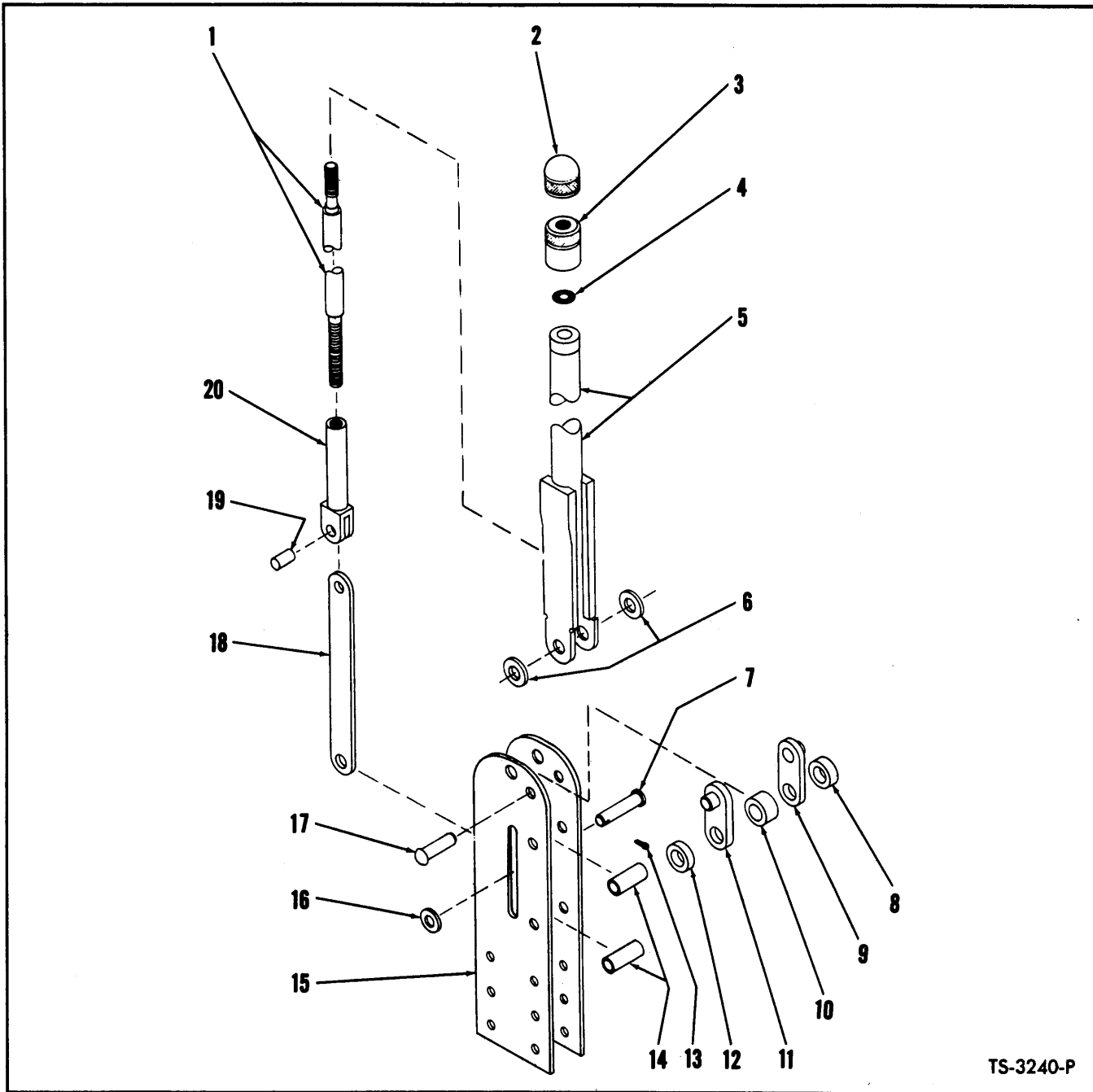


TS-7647-P

PARKING BRAKE CONTROLS

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

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



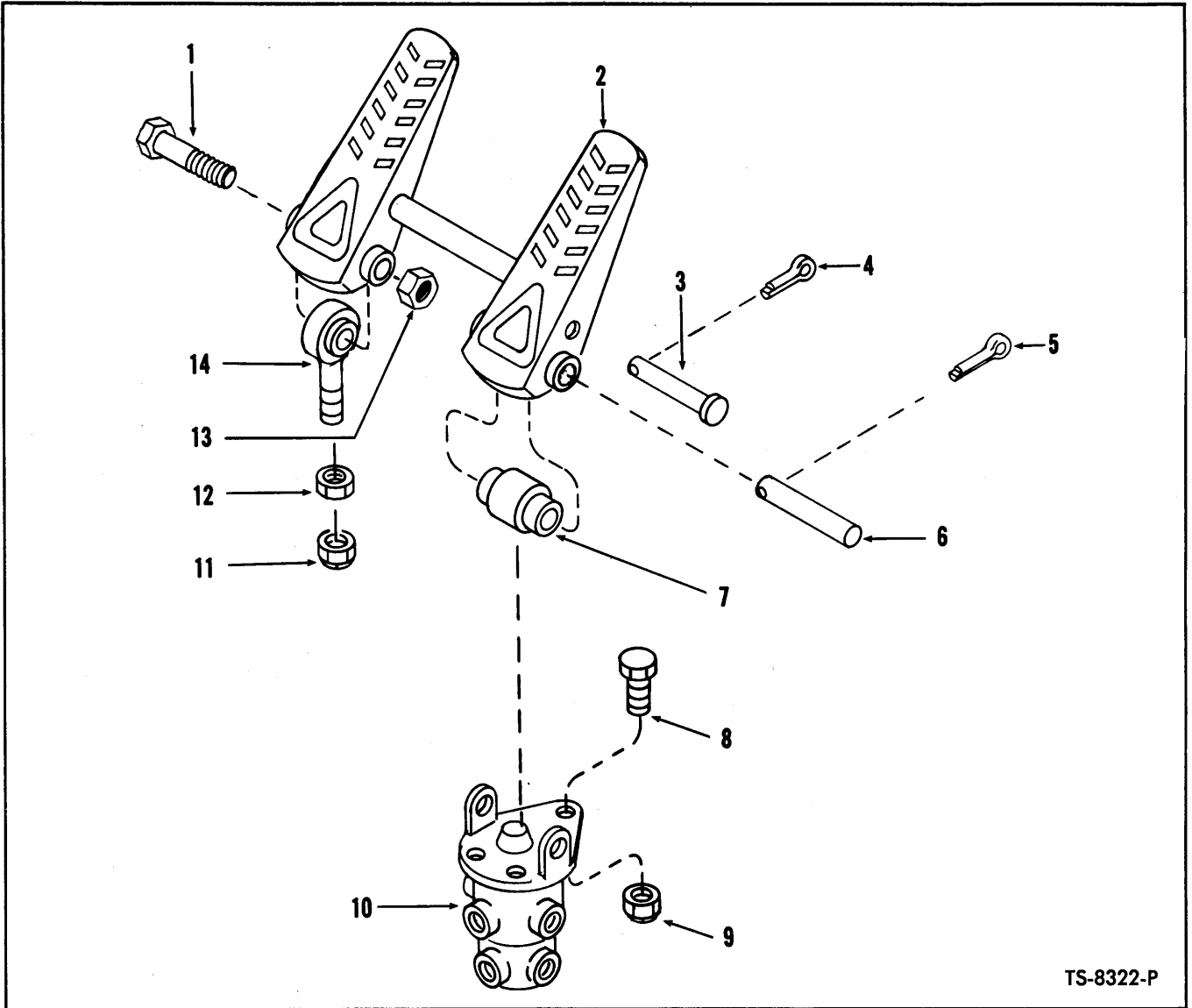
TS-3240-P

PARKING BRAKE LEVER ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	3951954	LEVER ASSY (Inc. 1 thru 20)	1	11	862653	BRACKET, Pivot	1
1	866349	SCREW, Adjusting	1	12	862656	SPACER, Pivot Bracket	1
2	949370	CAP, Adjusting Knob (Inc. 3)	1	13	1F-312	COTTER, Link Pivot Pin	1
3	-----	§BASE, Adjusting Knob - See 2	1	14	645095	SPACER, Mounting Bracket	2
4	946163	WASHER, Base to Body	1	15	944969	BRACKET, Lever Mounting	2
5	-----	§BODY, Brake Lever - See A	1	16	25E-15	WASHER, Link Pivot Pin	1
6	25E-18	WASHER, Body to Bracket	2	17	-----	§RIVET, Pivot Bracket - See A	1
7	862738	PIN, Adjusting Screw Link Pivot	1	18	862652	LINK, Adjusting Screw	1
8	862656	SPACER, Pivot Bracket	1	19	941238	PIN, Link to Tube	1
9	862653	BRACKET, Pivot	1	20	-----	§TUBE, Adjusting Screw - See A	1
10	862655	SPACER, Pivot Bracket	1				

§Not Sold Separately

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



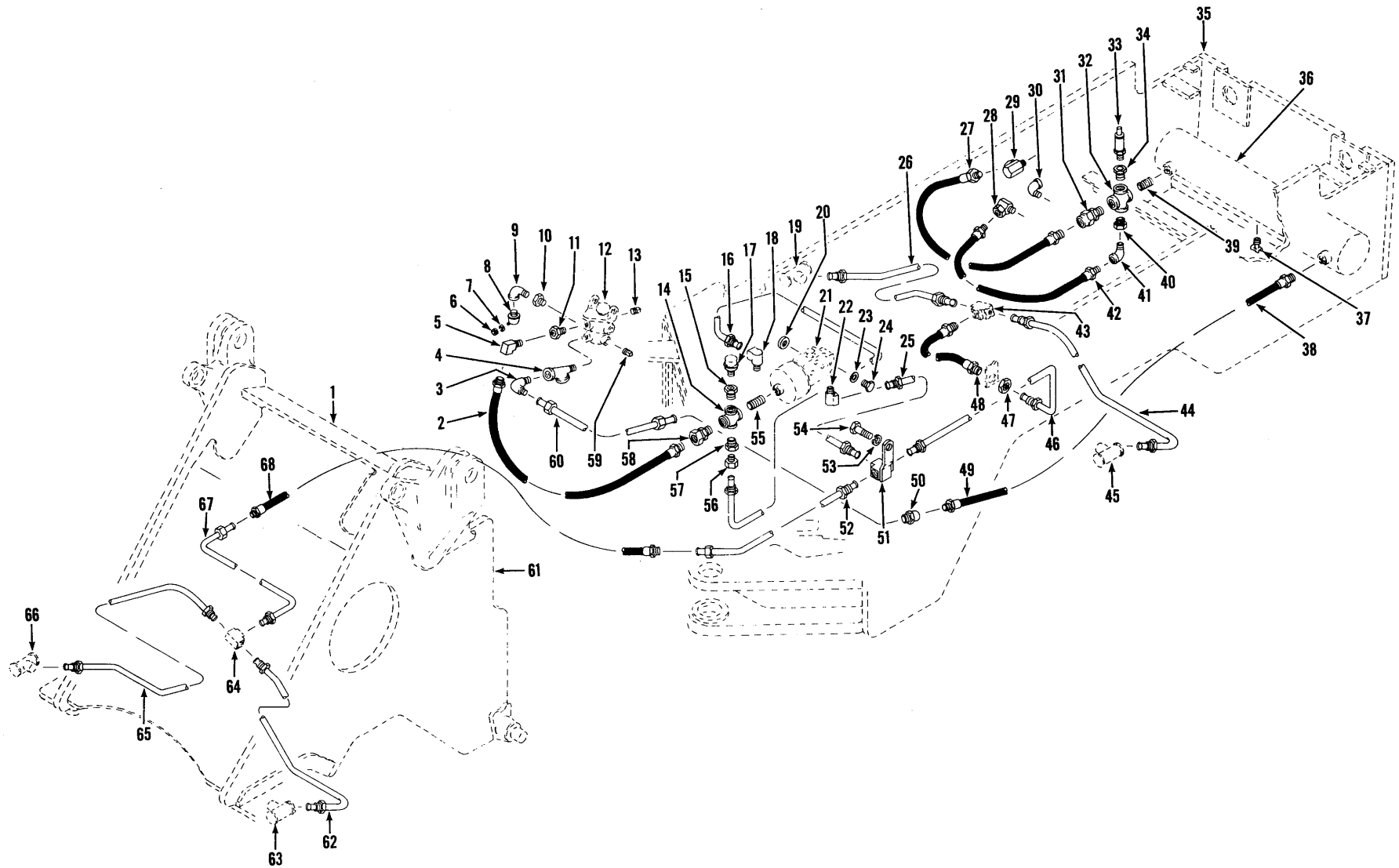
TS-8322-P

BRAKE VALVE AND CONTROLS

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

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

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



BRAKE LINES

TS-8350-P

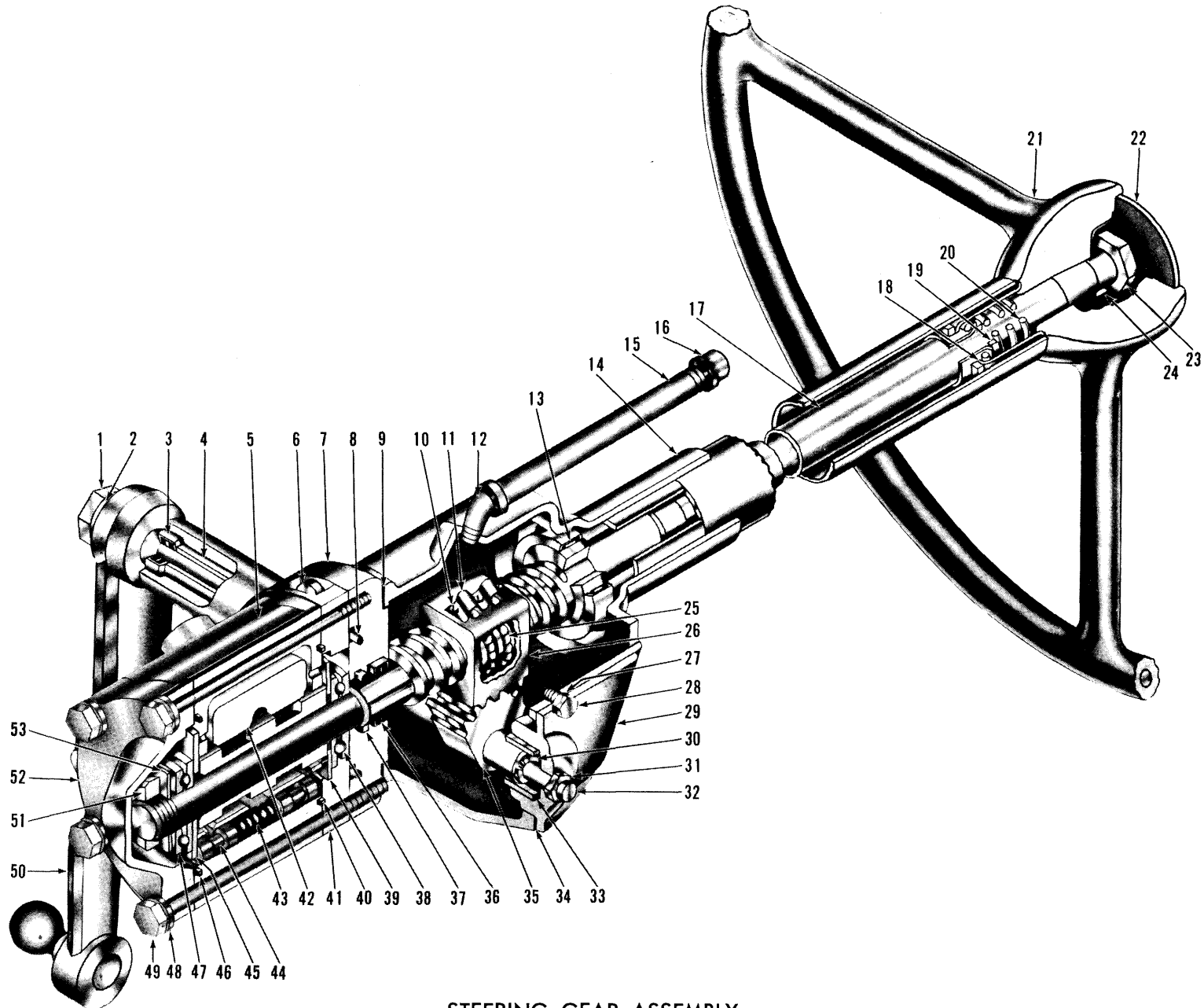
BRAKE LINES

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	FRONT FRAME — See Index	1	35	-----	REAR FRAME — See Index	1
2	564670	HOSE, Foot Valve to Power Cluster ..	1	36	-----	STANK, Air Reservoir (Welded Part of Frame)	1
3	42F-9	ELBOW, Tube to Foot Valve	1	37	72F-4	DRAIN COCK, Reservoir	1
4	17F-4	TEE, Connecting	1	38	586694	HOSE, Foot Valve to Reservoir	1
5	29F-2	ADAPTER UNION, Hose to Foot Valve	1	39	5K-409	NIPPLE, Cross to Reservoir	1
6	14D-10	NUT, Sender Unit	1	40	19F-4	BUSHING, Reducing	1
7	12E-10	LKWSHR, Sender Unit	1	41	26F-1	ELBOW, Hose to Cross	1
8	1534135	SENDER UNIT, Air Pressure (Inc. 6, 7)	1	42	1527928	HOSE, Governor to Reservoir	1
9	26F-2	ELBOW, Sender Unit to Foot Valve	1	43	-----	TEE, Connecting (Furnished with Axle)	1
10	19F-1	BUSHING, Reducing	1	44	543740	TUBE, Tee to Brake — L.H. Rear	1
11	19F-6	BUSHING, Reducing	1	45	-----	BRAKE WHEEL CYLINDER — See Index	1
12	-----	BRAKE FOOT VALVE — See Index	1	46	1526341	TUBE, Tee to Rear Axle	1
13	13F-08	PLUG, Pipe	1	47	8D-10	NUT, Hose to Clip	1
14	21F-3	CROSS, Connecting	1	48	1526426	HOSE, Tube to Axle Tee	1
15	19F-2	BUSHING, Reducing	1	49	-----	HOSE — See 38	1
16	1526342	TUBE, Power Cluster to Transmission De-Clutch	1	50	39F-9	CONNECTOR, Tube to Hose	1
17	636260	SWITCH, Stop Light	1	51	552897	TEE, Tube Connecting	1
18	62F-3	ELBOW, Tube to Trans. Control Valve	1	52	1502638	TUBE, Tee to Pivot Hose	1
19	-----	BRAKE WHEEL CYLINDER — See Index	1	53	4E-06	LKWSHR, Tee to Frame	1
20	669829	SPACER, Power Cluster Mounting	1	54	18C-612	BOLT, Tee to Frame	1
21	-----	POWER CLUSTER — See Index	1	55	5K-308	NIPPLE, Cross to Power Cluster	1
22	62F-3	ELBOW, Tube to Power Cluster	1	56	59F-3	CONNECTOR, Tube to Cross	1
23	613750	GASKET, Plug	3	57	19F-2	BUSHING, Reducing	1
24	874007	PLUG, Master Cylinder	3	58	36F-3	ADAPTER UNION, Hose to Cross	1
25	1526343	TUBE, Power Cluster to Tee	1	59	13F-04	PLUG, Pipe	1
26	543741	TUBE, Tee to Brake — R.H. Rear	1	60	1526344	TUBE, Foot Valve to Reservoir	1
27	1534079	HOSE, Compressor to Reservoir	1	61	-----	FRONT FRAME — See Index	1
28	31F-1	ADAPTER UNION, Hose to Governor	1	62	543741	TUBE, Tee to Brake — L.H. Front	1
29	31F-4	ADAPTER UNION, Hose to Compressor	1	63	-----	BRAKE WHEEL CYLINDER — See Index	1
30	26F-1	ELBOW	1	64	-----	TEE, Connecting (Furnished with Axle)	1
31	593370	* VALVE, Check (B.W. #228194)	1	65	543740	TUBE, Tee to Brake — R.H. Front	1
32	21F-4	CROSS, Connecting	1	66	-----	BRAKE WHEEL CYLINDER — See Index	1
33	507815	* VALVE, Safety (B.W. #205105)	1	67	1502637	TUBE, Hose to Axle Tee	1
34	19F-5	BUSHING, Reducing	1	68	1502643	HOSE, Connecting Pivot	1

§Not Sold Separately

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

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



STEERING GEAR ASSEMBLY

TS-4787-P

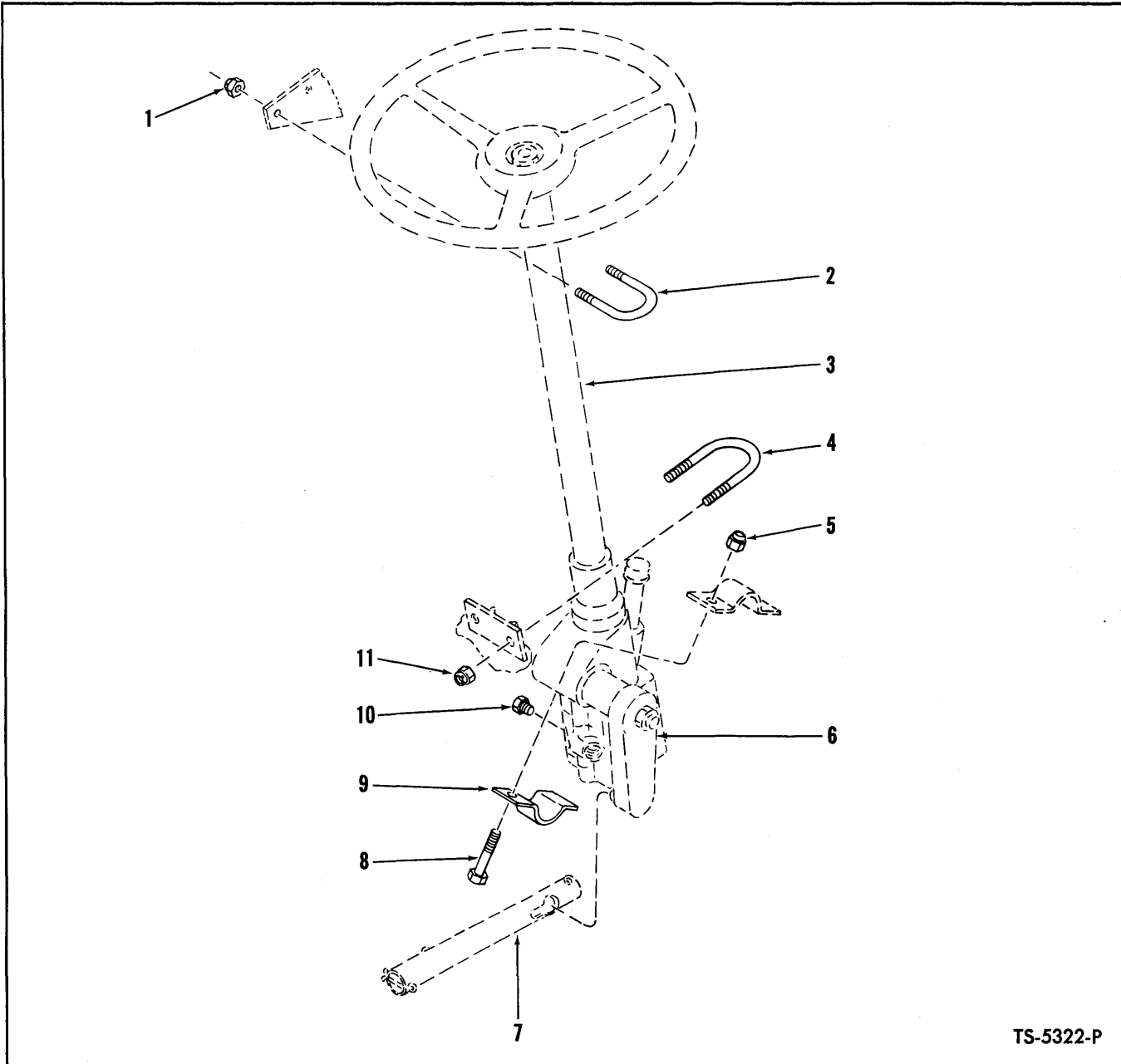
STEERING GEAR ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1502890	GEAR ASSY (Inc. 1 thru 20, 24 thru 49, 51, 52, 53)	1	25A	853526	†GUIDE, Ball Return	4
1	850756	NUT, Pitman Arm	1	26	853525	NUT, Ball	1
2	4E-18	LKWSHR, Pitman Arm	1	27	2E-06	LKWSHR, Side Cover	3
3	853391	SEAL, Pitman Shaft Grease	1	28	1C-612	BOLT, Side Cover	3
4	853357	BUSHING, Pitman Shaft	1	29	853182	COVER, Housing Side (Inc. 33)	1
5	945334	*VALVE ASSY (Inc. 42, 43, 44)	1	30	853187	SHIM KIT, Lash Adjuster	1
6	73G-732	BOLT, Adapter to Housing	4	31	8D-07	NUT, Lash Adjuster	1
6A	4E-07	†LKWSHR, Adapter to Housing	4	32	851770	ADJUSTER, Lash	1
7	961260	**ADAPTER, Valve to Hsg. (Inc. 36, 37A) 1	1	33	-----	§BUSHING, Side Cover — See 29	—
8	58K-232	“O” RING, Spacer to Adapter	1	34	851756	GASKET, Side Cover	1
9	853380	GASKET, Adapter to Housing	1	35	940111	GEAR, Pitman Shaft	1
10	851762	BOLT & WASHER ASSY, Clamp	3	36	861741	BEARING, Adapter	1
11	853527	CLAMP, Ball Return Guide	1	37	25K-40108	“O” RING, Adapter	1
12	25F-4	ELBOW, Filler	1	37A	873293	†SEAL	1
13	730143	BEARING, Needle	1	38	860997	BEARING, Worm Thrust	1
14	946138	HOUSING ASSY (Inc. 4, 13)	1	39	943438	WASHER, Worm Thrust	1
15	5K-432	NIPPLE, Filler	1	40	25K-40312	“O” RING, Valve to Spacer	1
16	22F-4	CAP, Filler	1	41	943440	SPACER, Valve	1
17	946139	SHAFT ASSY (Inc. 10, 11, 25, 25A, 26) 1	1	42	-----	§SPOOL, Valve — See Item 5	—
18	857729	BEARING ASSY, Upper	1	43	943437	SPRING, Valve	4
19	861768	WASHER, Upper Bearing	1	44	943436	PLUNGER, Valve.....	8
20	853395	SPRING, Upper Bearing	1	45	943438	WASHER, Bearing Thrust	1
21	1508704	WHEEL, Steering	1	46	58K-237	“O” RING, Valve to Spacer	1
22	1511710	PLATE, Operating Precaution	1	47	860997	BEARING, Worm Thrust	1
22A	63G-406	†SCREW, Plate Attaching	4	48	3E-08	LKWSHR, End Cover	6
23	648304	NUT, Steering Wheel	1	49	1C-888	BOLT, End Cover	6
24	853384	KEY, Steering Wheel	1	50	566433	ARM, Pitman	1
25	10J-09	BALL	106	51	873250	NUT, Worm Bearing Lock	1
				52	943439	COVER, Valve End	1
				53	943429	SPRING, Valve Spool Preload	1

†Not Illustrated
§Not Sold Separately
*Shown out of position.

**NOTE: For replacement see Service Gram S.G.-551.

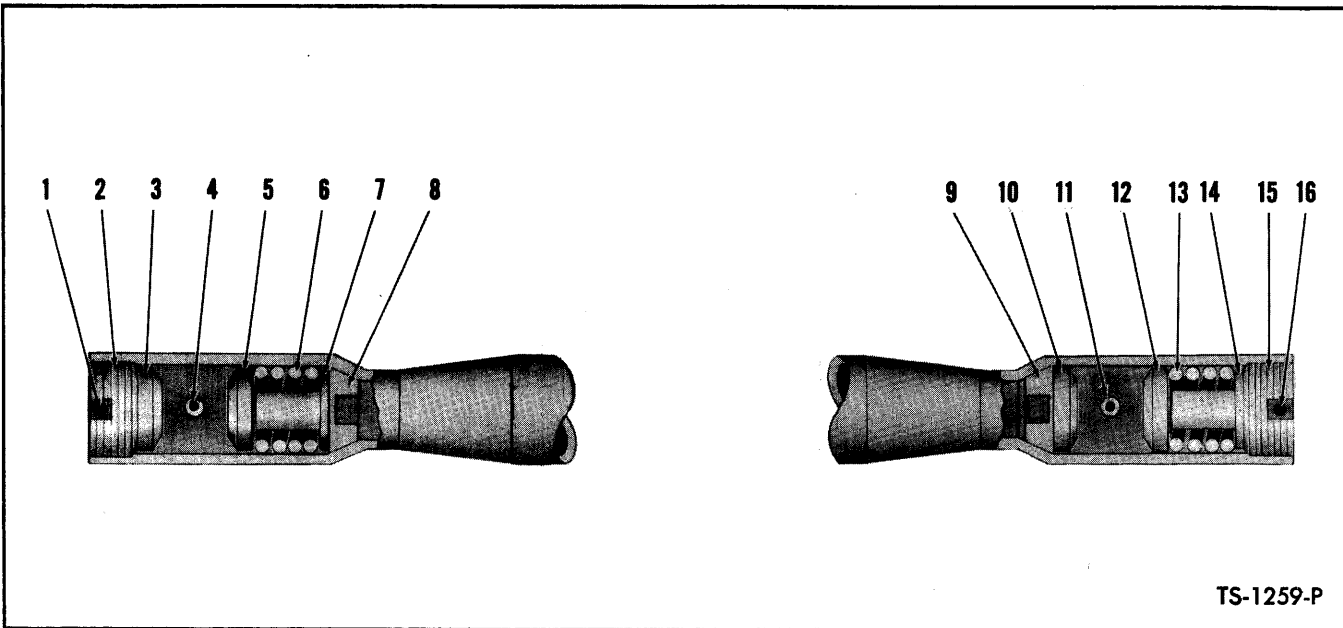
WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE



STEERING GEAR MOUNTING GROUP

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

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

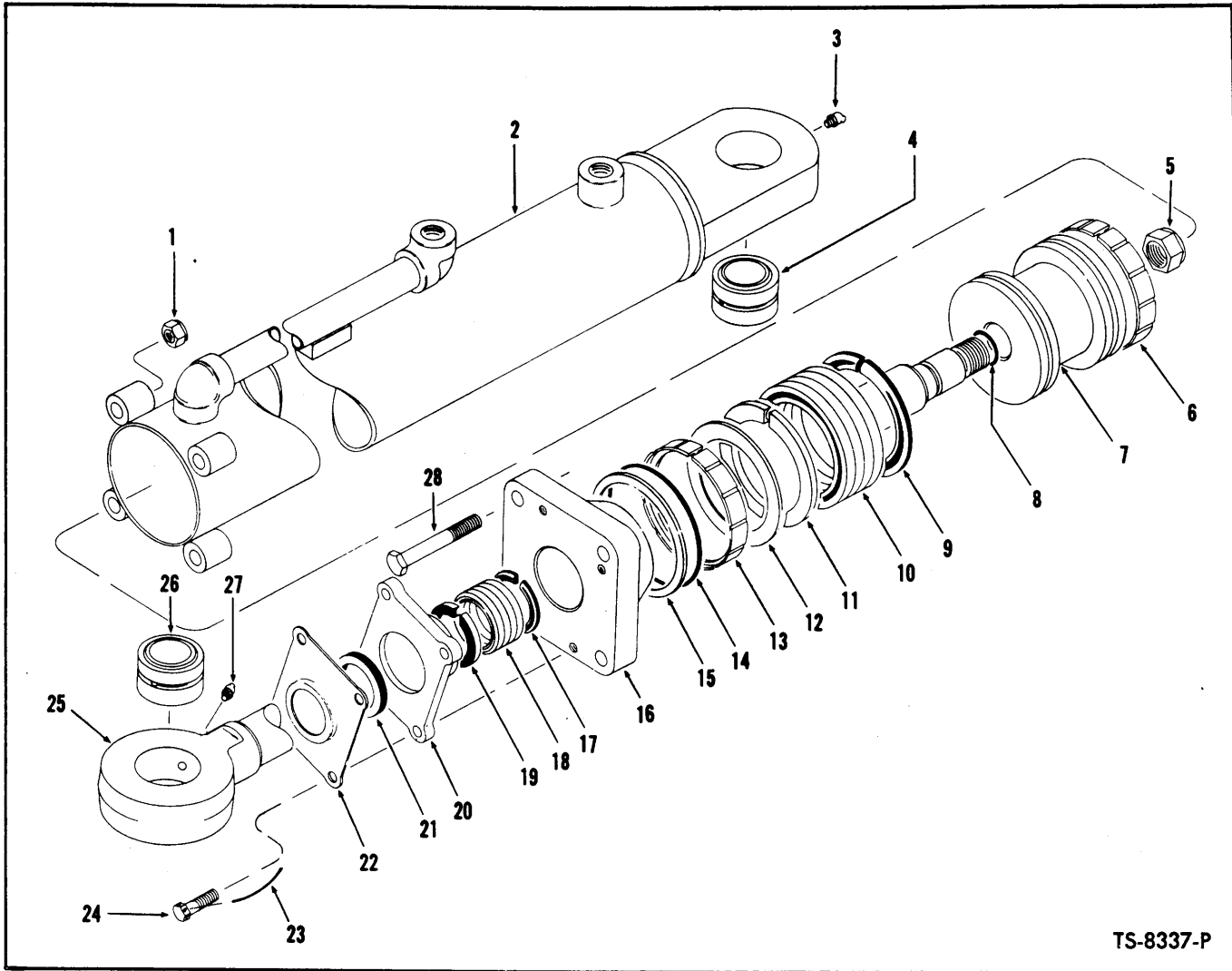


TS-1259-P

STEERING DRAG LINK

Item No.	Part No.	Description	No. Req'd.
A	1533311	DRAG LINK ASSY (Inc. 2, 3, 5 thru 10, 12 thru 15)	1
1	1F-432	COTTER	1
2	876575	PLUG, Adjusting	1
3	865965	SEAT, Ball Stud	1
4	12H-15	FITTING, Grease	1
5	865965	SEAT, Ball Stud	1
6	865961	SPRING	1
7	662691	SEAT, Spring	1
8	865963	SEAT	1
9	865963	SEAT	1
10	865965	SEAT, Ball Stud	1
11	12H-15	FITTING, Grease	1
12	865965	SEAT, Ball Stud	1
13	865961	SPRING	1
14	662691	SEAT, Spring	1
15	876575	NUT, Adjusting	1
16	1F-432	COTTER	1

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



TS-8337-P

STEERING CYLINDER ASSEMBLY

Item No.	Part No.	Description	No. Req'd.
A	1521837	CYLINDER ASSY (Inc. 1, 2, 4 thru 26, 28)	2
<p>NOTE: Two (2) Cylinders used per machine — Quantities listed below are for one (1) Cylinder only</p>			
B	2516074	**KIT (Inc. 6, 8 → 15, 17 → 19, 21) ..	1
1	18D-07	NUT, Cylinder Cap	4
2	1521836	CYLINDER, Steering	1
3	11H-15	FITTING, Cylinder Grease	1
4	713418	BUSHING, Cylinder	1
5	60D20	NUT, Piston Rod	1
6	-----	§ RING, Piston — See B	1
7	512789	*PISTON	1
8	-----	§ "O" RING, Piston to Rod—See B	1
9	-----	§ ADAPTER, Male — See B	2
10	-----	§ ADAPTER, Male — See B	2
11	-----	§ ADAPTER, Female — See B	2
12	-----	§ ‡ SHIM — See B	—

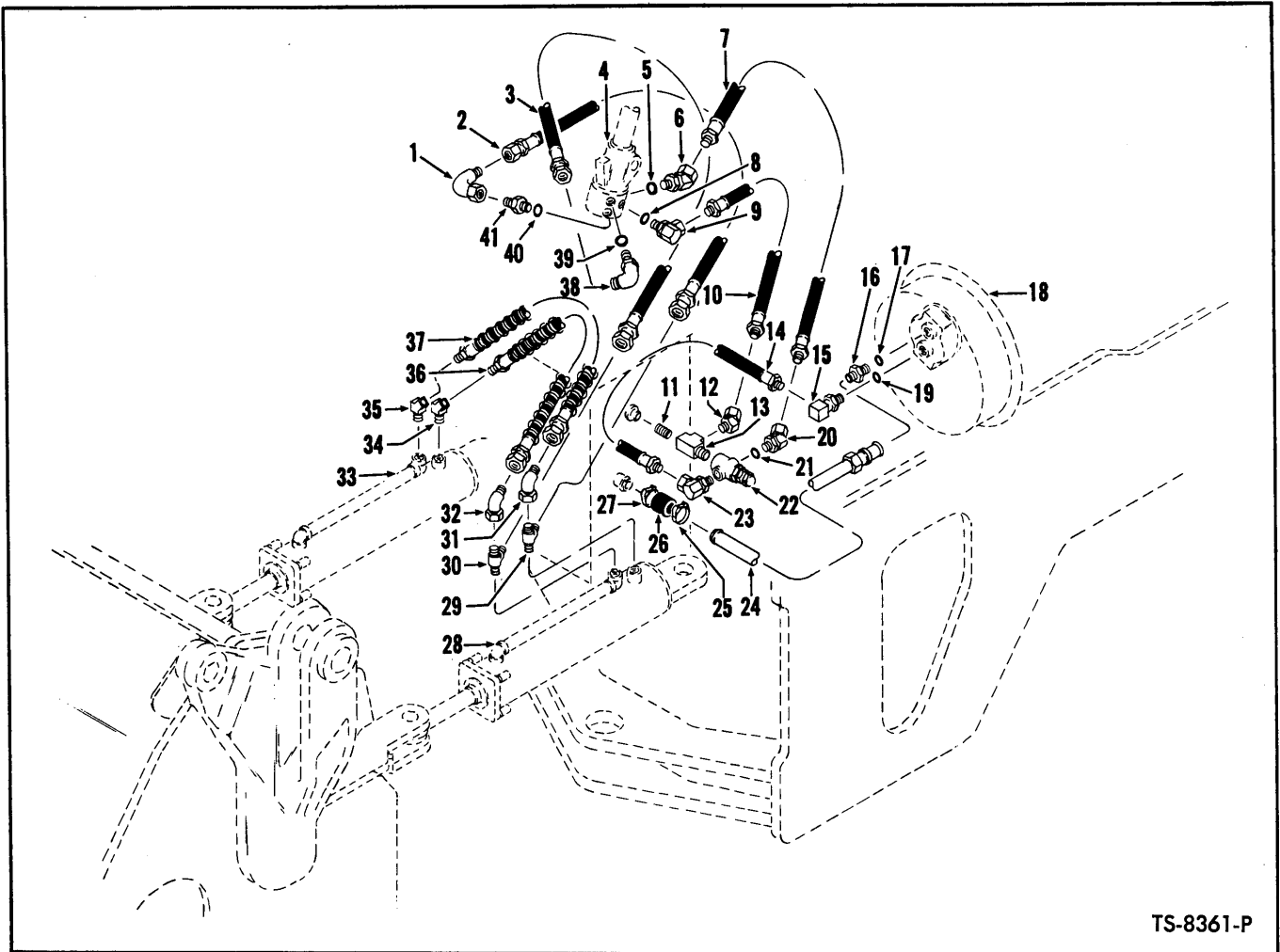
Item No.	Part No.	Description	No. Req'd.
13	-----	§ RING, Piston — See B	1
14	-----	§ "O" RING, Cylinder Cap—See B	1
15	-----	§ RING, "O" Ring Back Up — See B ...	1
16	945112	CAP, Cylinder	1
17	-----	§ ADAPTER, Male — See 18	2
18	2501106	PACKING ASSY, Chevron (Cylinder Cap) (Inc. 17, 19)	1
19	-----	§ ADAPTER, Female — See 18	2
20	526451	GLAND, Packing	1
21	941568	SEAL, Piston Rod	1
22	512797	RETAINER, Seal	1
23	-----	LOCKWIRE (16 ga. x 20" lg.)	2
24	4C-620	BOLT, Packing Gland	4
25	1521832	ROD, Piston	1
26	713418	BUSHING, Piston Rod	1
27	10H-25	FITTING, Piston Rod Grease	1
28	18C-748	BOLT, Cylinder Cap	4

‡ As Required

*NOTE: For replacement use 1—1503639 Piston plus 1—2516071 Kit.

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

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

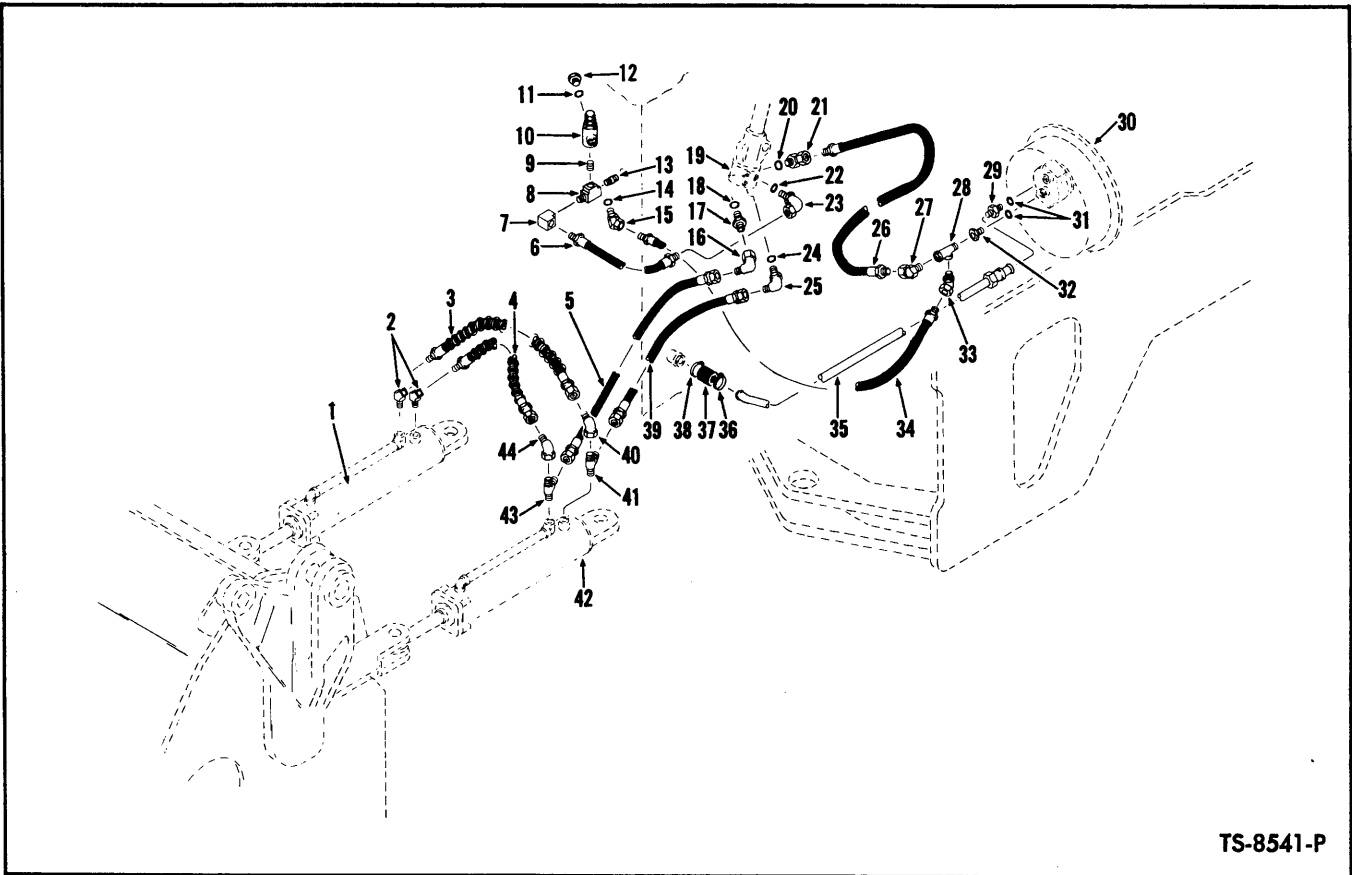


TS-8361-P

**HYDRAULIC SYSTEM — STEERING
For Serial: 1ACC101 thru 1ACC299**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	11K-6	ELBOW, Hose to Steering Gear	1	22	—	VALVE, Steering Pressure Relief — See Index	1
2	1533601	HOSE, Steering Gear to Cylinder	1	23	531684	ELBOW, Hose to Valve	1
3	1533602	HOSE, Steering Gear to Cylinder	1	24	1522364	TUBE, Suction	1
4	—	STEERING GEAR — See Index	—	25	540127	CLAMP, Hose to Tube	1
5	91F-7	"O" RING, Elbow	1	26	536749	HOSE, Suction Tube	1
6	534894	ELBOW, Hose to Steering Gear (Inc. 5)	1	27	540127	CLAMP, Hose to Reservoir	1
7	550877	HOSE, Steering Gear to Valve	1	28	—	STEERING CYLINDER — See Index	—
8	91F-7	"O" RING, Adapter	1	29	42K-7	TEE, Steering Cylinder — L.H.	1
9	531684	ADAPTER, Hose to Steering Gear (Inc. 8)	1	30	42K-7	TEE, Steering Cylinder — L.H.	1
10	533463	HOSE, Steering Gear to Valve Tee	1	31	12K-7	ELBOW, Hose to Tee	1
11	5K-624	NIPPLE, Valve to Reservoir	1	32	12K-7	ELBOW, Hose to Tee	1
12	33F-5	ELBOW, Hose to Tee	1	33	—	STEERING CYLINDER — See Index	—
13	30F-4	TEE, Valve to Reservoir	1	34	81F-3	ELBOW, Hose to Cylinder — R.H.	1
14	595027	HOSE, Pump to Valve	1	35	81F-3	ELBOW, Hose to Cylinder — R.H.	1
15	731016	CONNECTOR, Hose to Pump (Inc. 19)	1	36	1522361	HOSE, Cylinder Cross-Over	1
16	15K-11	CONNECTOR, Tube to Pump	1	37	1522361	HOSE, Cylinder Cross-Over	1
17	91F-11	"O" RING, Connector	1	38	17K-6	ELBOW, Hose to Steering Gear (Inc. 39)	1
18	—	TORQUE CONVERTER — See Index	—	39	91F-6	"O" RING, Elbow	1
19	91F-10	"O" RING, Connector	1	40	91F-6	"O" RING, Connector	1
20	534894	ELBOW, Hose to Valve (Inc. 21)	1	41	15K-6	CONNECTOR, Hose to Steering Gear (Inc. 40)	1
21	91F-7	"O" RING, Elbow	1				

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



TS-8541-P

HYDRAULIC SYSTEM – STEERING
For Serial: 1ACC230 and thereafter.

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	STEERING CYLINDER – See Index	1	23	531684	ADAPTER UNION, Hose to Steering Gear (Inc. 22)	1
2	81F-3	ELBOW, Hose to Cylinder – R.H.	2	24	91F-6	“O” RING, Elbow	1
3	1522361	HOSE, Cylinder Cross-over	1	25	17K-6	ELBOW, Hose to Steering Gear (Inc. 24)	1
4	1522361	HOSE, Cylinder Cross-over	1	26	658914	HOSE, Steering Gear to Pump	1
5	1533602	HOSE, Gear to Cylinder	1	27	33F-5	ADAPTER UNION, Hose to Tee	1
6	1503832	HOSE, Gear to Relief Valve	1	28	30F-4	TEE, Hoses to Pump	1
7	32F-5	ELBOW, Hose to Tee	1	29	15K-11	CONNECTOR, Tube to Pump	1
8	30F-4	TEE, Relief Valve to Reservoir	1	30	-----	TORQUE CONVERTER – See Index	1
9	5K-611	NIPPLE, Relief Valve to Tee	1	31	91F-11	“O” RING	2
10	-----	VALVE, Steering Pressure Relief – See Index	1	32	522969	CONNECTOR, Tee to Pump	1
11	91F-7	“O” RING, Plug	1	33	514788	ADAPTER UNION, Hose to Tee	1
12	24K-7	PLUG, Relief Valve (Inc. 11)	1	34	1520093	HOSE, Relief Valve to Pump	1
13	5K-620	NIPPLE, Relief Valve to Reservoir	1	35	1503364	TUBE, Pump to Reservoir	1
14	91F-7	“O” RING, Adapter Union	1	36	540127	CLAMP, Hose to Tube	1
15	594542	ADAPTER UNION, Hose to Gear (Inc. 14)	1	37	536749	HOSE, Tube to Reservoir	1
16	11K-6	ELBOW, Hose to Steering Gear	1	38	540127	CLAMP, Hose to Reservoir	1
17	15K-6	CONNECTOR, Steering Gear to Elbow (Inc. 18)	1	39	1533601	HOSE, Gear to Cylinder	1
18	91F-6	“O” RING, Connector	1	40	12K-7	ELBOW, Hose to Tee	1
19	-----	STEERING GEAR – See Index	1	41	42K-7	TEE, Hose to Cylinder	1
20	91F-7	“O” RING, Adapter Union	1	42	-----	STEERING CYLINDER – See Index	1
21	534894	ADAPTER UNION, Hose to Steering Gear (Inc. 20)	1	43	42K-7	TEE, Hose to Cylinder	1
22	91F-7	“O” RING, Adapter Union	1	44	12K-7	ELBOW, Hose to Tee	1

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

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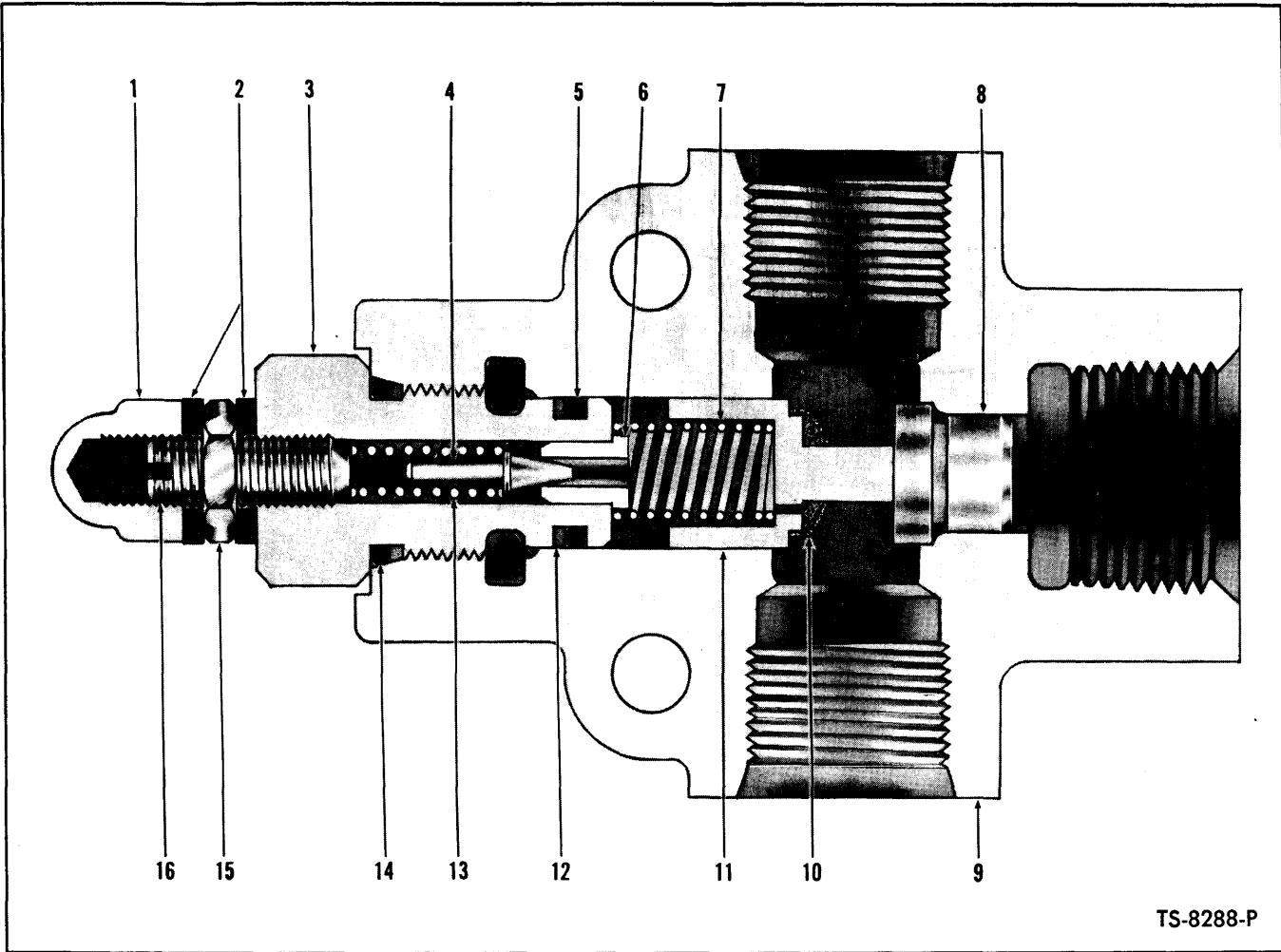
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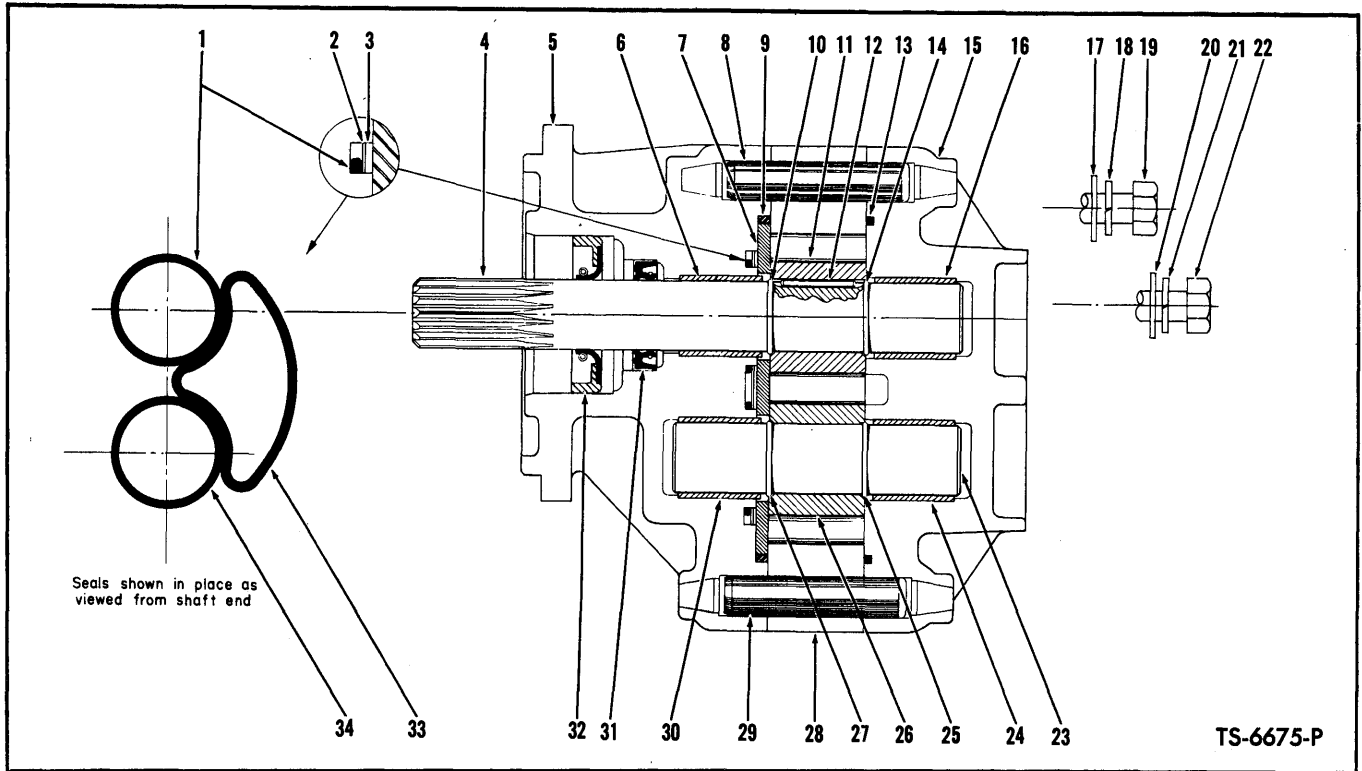


PRESSURE RELIEF VALVE – STEERING SYSTEM

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

§Not Sold Separately
†Not Illustrated

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



HYDRAULIC PUMP – STEERING

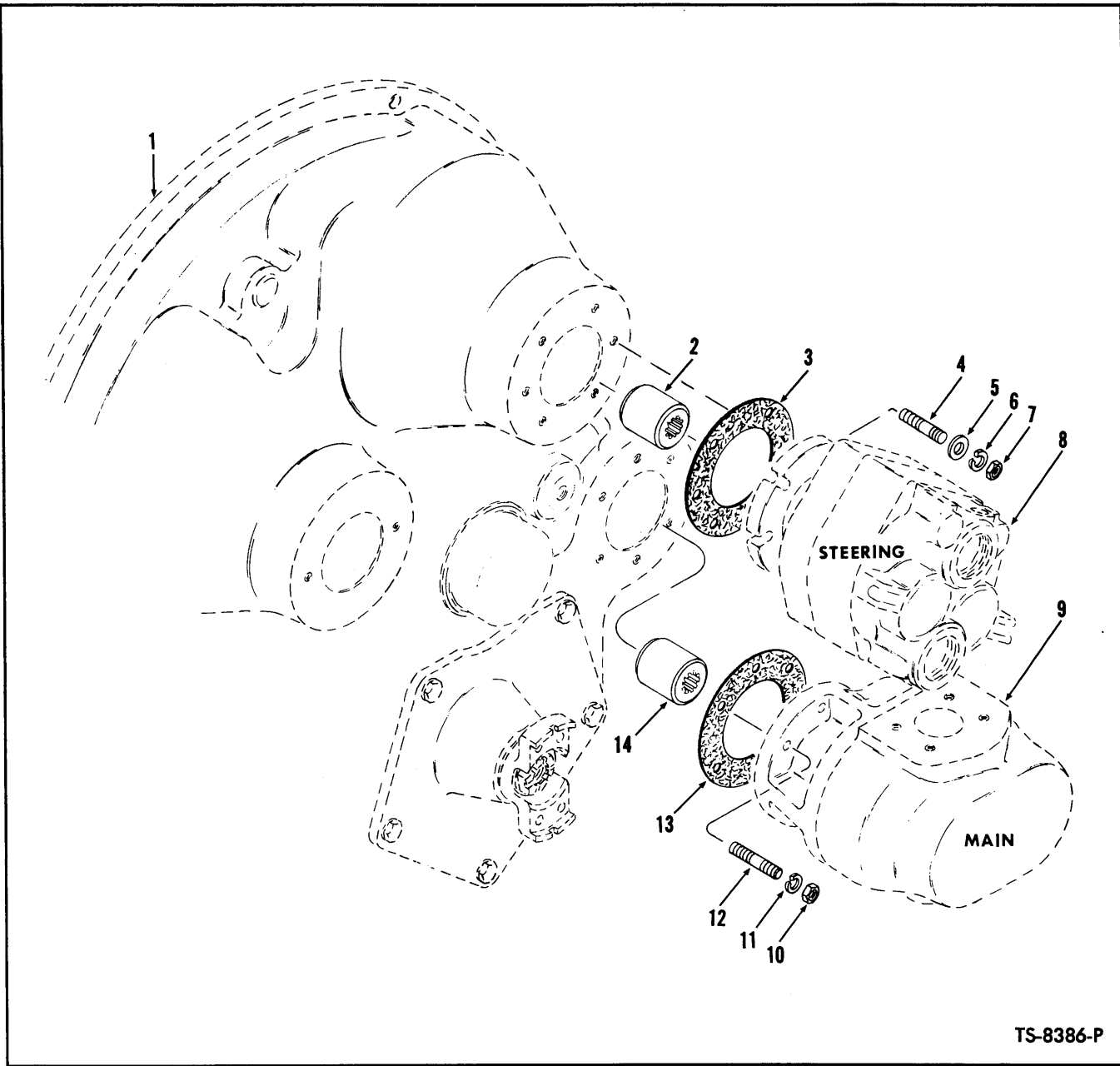
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	571497	*PUMP ASSY (Inc. 1 thru 34)	1	20	---	§WASHER, Cover Mounting — See Item "A"	4
B	946372	SEAL KIT (Inc. 1, 2, 3, 9, 13, 31 thru 34)	1	21	---	§LKWSHR, Cover Mounting — See Item "A"	4
1	---	§"O" RING — See Item "B"	1	22	---	§BOLT, Cover Mounting — See Item "A"	4
2	---	§RING, Back-up — See Item "B"	1	23	---	§SHAFT, Driven — See Item "A"	1
3	---	§RING, Back-up — See Item "B"	1	24	---	§BUSHING, Shaft — See Item "A"	1
4	---	§SHAFT, Drive — See Item "A"	1	25	---	§RING, Retaining — See Item "A"	1
5	---	§ADAPTER, Pump — See Item "A"	1	26	---	§GEAR, Driven — See Item "A"	1
6	---	§BUSHING, Shaft — See Item "A"	1	27	---	§RING, Retaining — See Item "A"	1
7	---	§PLATE, Wear — See Item "A"	1	28	---	§HOUSING, Pump — See Item "A"	1
8	---	§DOWEL, Adapter & Cover — See Item "A"	1	29	---	§DOWEL, Adapter & Cover — See Item "A"	1
9	---	§"O" RING — See Item "B"	1	30	---	§BUSHING, Shaft — See Item "A"	1
10	---	§RING, Retaining — See Item "A"	1	31	---	§SEAL, Shaft — See Item "B"	1
11	---	§GEAR, Drive — See Item "A"	1	32	---	§SEAL, Shaft — See Item "B"	1
12	---	§DOWEL — See Item "A"	1	33	---	§SEAL — See Item "B"	1
13	---	§"O" RING, See Item "B"	1	34	---	§"O" RING — See Item "B"	1
14	---	§RING, Retaining — See Item "A"	1	35	214962	†SLEEVE, Pump Drive	1
15	---	§COVER, Pump — See Item "A"	1	36	235961	†GASKET, Pump to Converter	1
16	---	§BUSHING, Shaft — See Item "A"	1	37	619023	†WASHER, Pump Mounting	3
17	---	§WASHER, Cover Mounting — See Item "A"	4	38	4E-06	†LKWSHR, Pump Mounting	3
18	---	§LKWSHR, Cover Mounting — See Item "A"	4	39	8D-06	†NUT, Pump Mounting	3
19	---	§BOLT, Cover Mounting — See Item "A"	4	40	203253	†STUD, Pump Mounting	3

§Not Sold Separately

†Not Illustrated

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

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

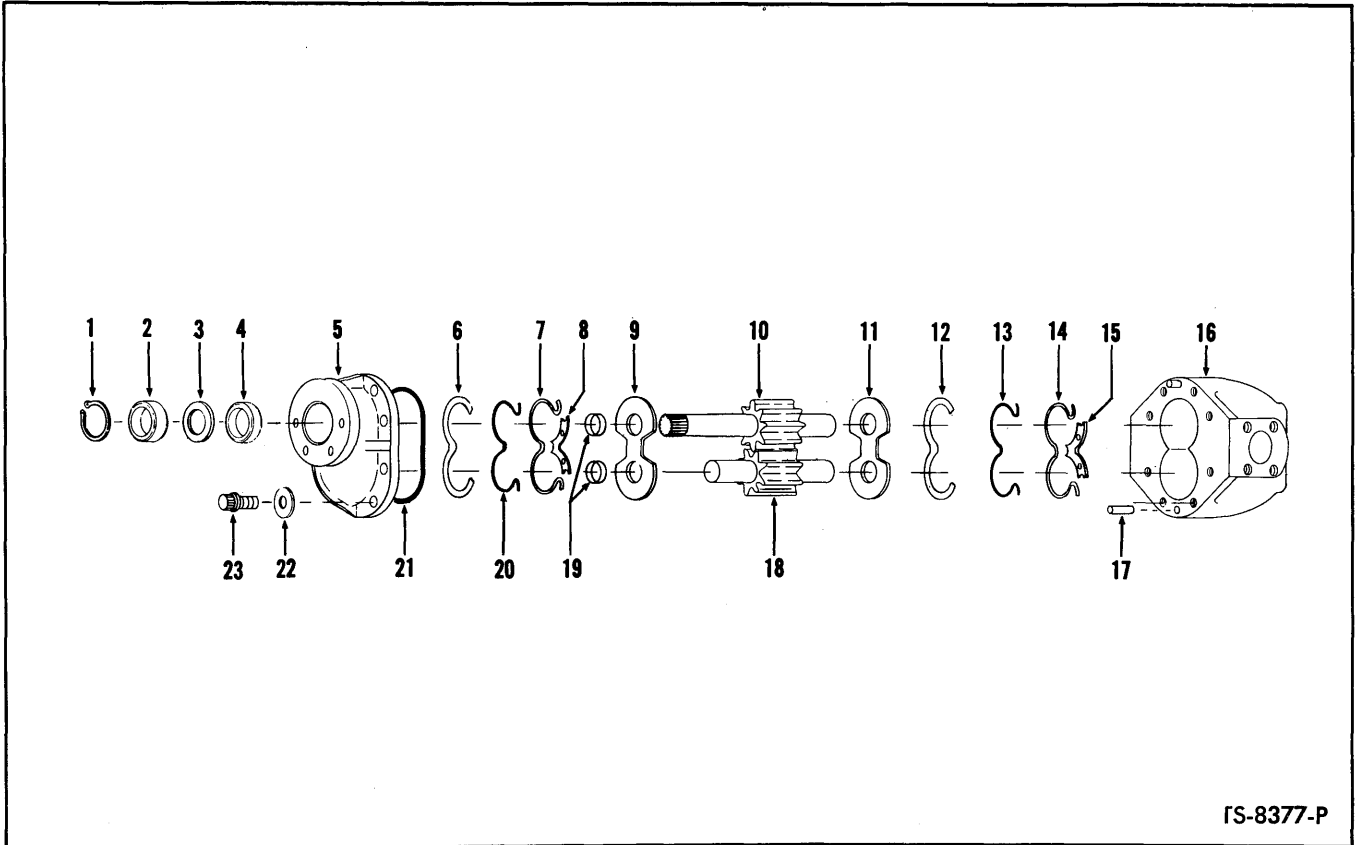


TS-8386-P

HYDRAULIC PUMP INSTALLATION

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	-----	TORQUE CONVERTER ASSY — See Index	—	8	-----	PUMP ASSY, Hydraulic Steering — See Index	—
2	214962	SLEEVE, Steering Pump Drive	1	9	-----	PUMP ASSY, Main Hydraulic — See Index	—
3	235961	GASKET, Pump to Converter	1	10	8D-06	NUT, Pump Mounting	4
4	203253	STUD, Pump Mounting	3	11	4E-06	LKWSHR, Pump Mounting	4
5	619023	WASHER, Pump Mounting	3	12	1502715	STUD, Pump Mounting	4
6	4E-06	LKWSHR, Pump Mounting	3	13	235961	GASKET, Pump to Converter	1
7	203253	NUT, Pump Mounting	3	14	214962	SLEEVE, Main Pump Drive	1

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



FS-8377-P

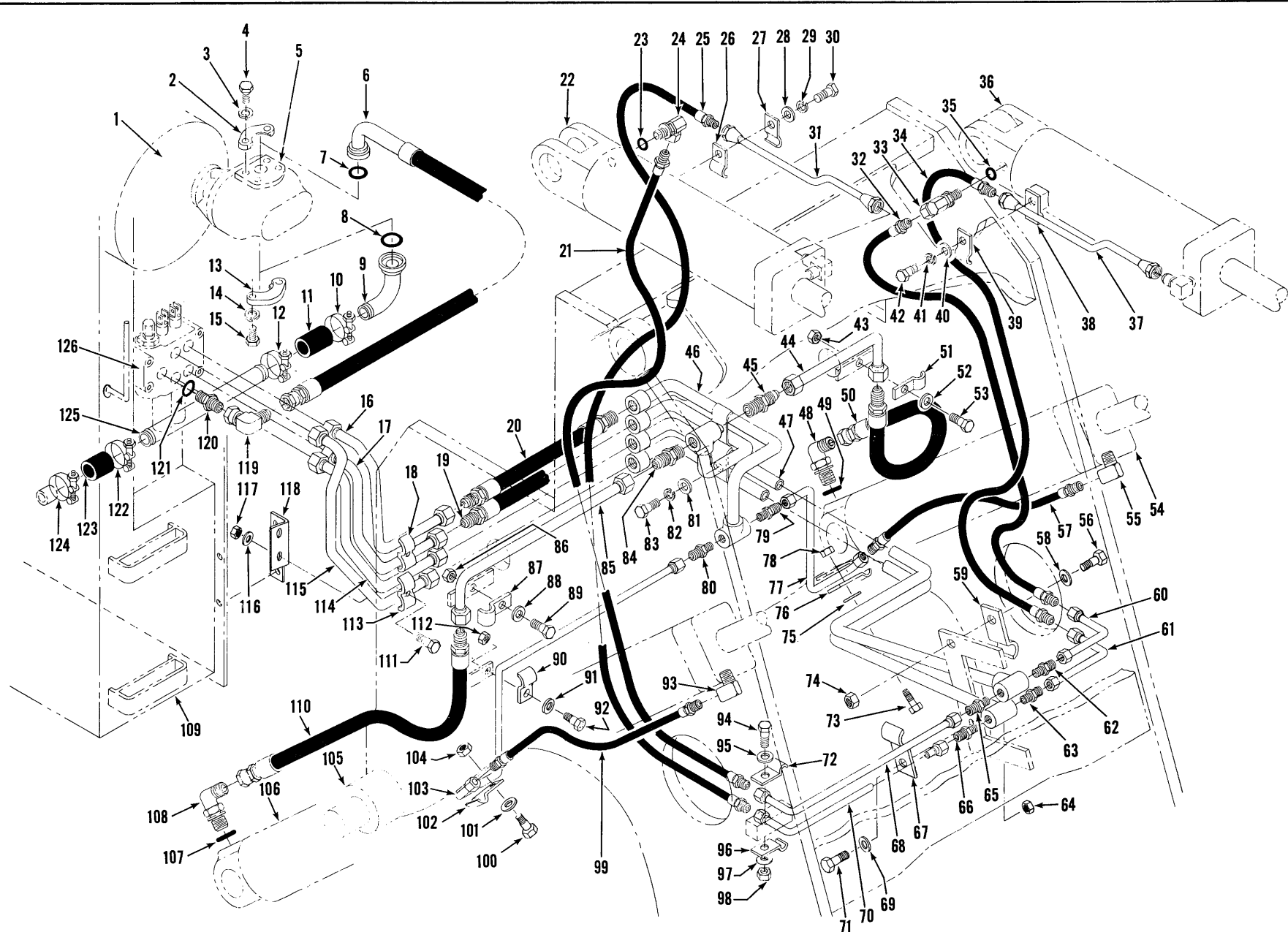
HYDRAULIC PUMP – BUCKET AND BOOM

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

§Not Sold Separately
†Not Illustrated

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

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



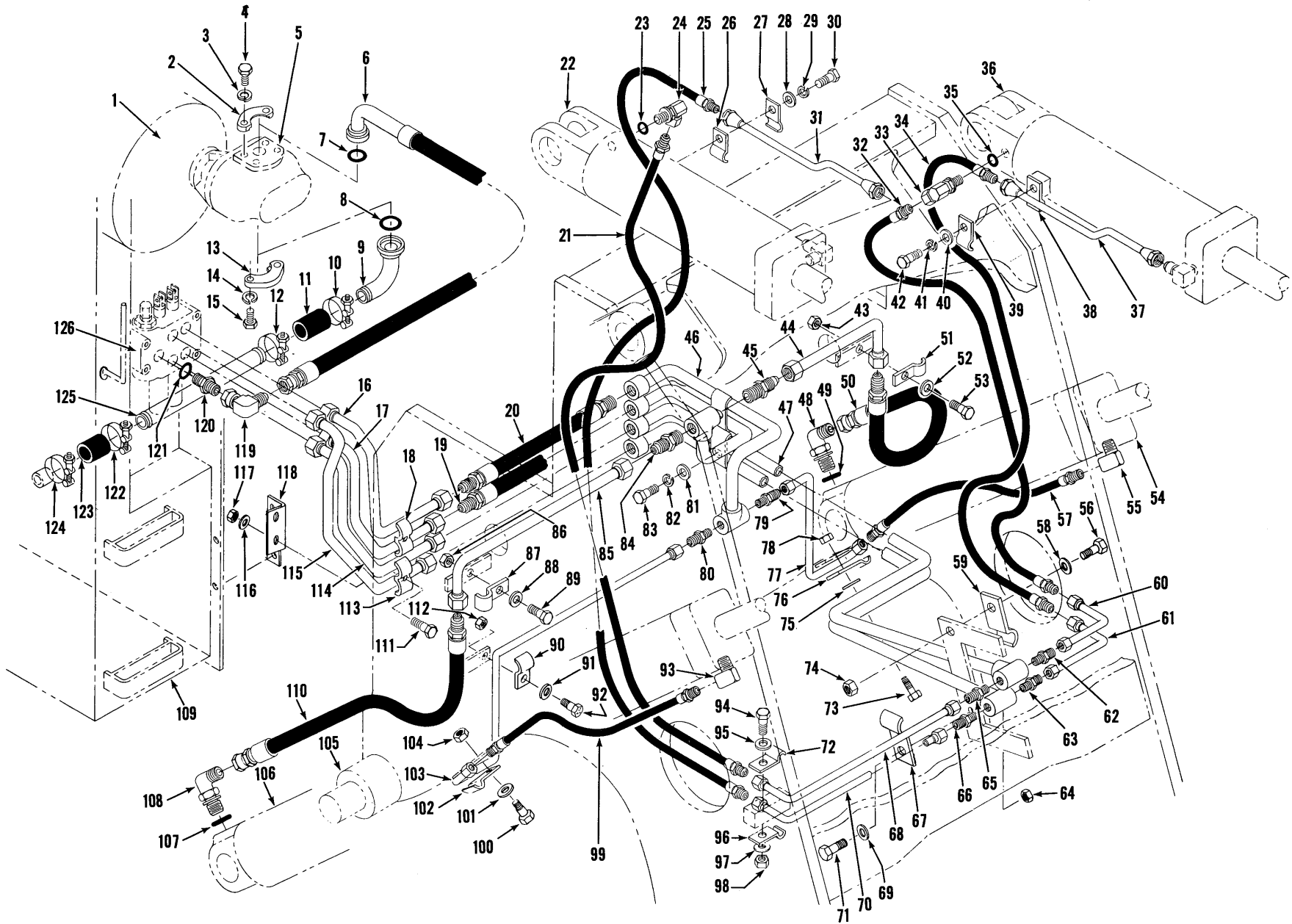
HYDRAULIC SYSTEM — BUCKET AND BOOM

TS-8295-P

HYDRAULIC SYSTEM — BUCKET AND BOOM

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	—	TORQUE CONVERTER — See Index	—	37	563805	TUBE, Bucket Cylinder	1
2	19J-20	FLANGE HALF, Hose to Pump	2	38	1533865	CLIP, Tube to Cylinder	1
3	4E-07	LKWSHR, Flange Half	4	39	1533865	CLIP, Tube to Cylinder	1
4	17C-724	BOLT, Flange Half	4	40	656672	WASHER, Clip Retaining	1
5	—	PUMP, Main Hydraulic — See Index	—	41	4E-06	LKWSHR, Clip Retaining	1
6	1533907	HOSE, Pump to Valve	1	42	18C-620	BOLT, Clip Retaining	1
7	58K-222	"O" RING, Hose to Pump	1	43	18D-06	NUT, Clip Retaining	1
8	58K-225	"O" RING, Stem to Pump	1	44	1536257	TUBE, Boom Cylinder Base End — L.H.	1
9	1536254	STEM, Suction	1	45	89F-10	CONNECTOR, Tube	1
10	540130	CLAMP, Hose to Stem	1	46	1536260	TUBE ASSY, Boom	1
11	536710	HOSE, Stem to Tube	1	47	1522613	TUBE ASSY, Bucket	1
12	540130	CLAMP, Hose to Tube	1	48	17K-10	ELBOW, Hose to Cylinder (Inc. 49)	1
13	19J-24	FLANGE HALF, Stem to Pump	2	49	91F-10	"O" RING, Elbow	1
14	4E-08	LKWSHR, Flange Half	4	50	1536263	HOSE, Boom Cylinder Base End	1
15	17C-824	BOLT, Flange Half	4	51	1536262	CLIP, Tube to Frame Bracket	1
16	1526015	TUBE, Valve to Hose — Boom Cylinder Rod End	1	52	656672	WASHER, Clip Retaining	1
17	1526012	TUBE, Valve to Hose — Boom Cylinder Base End	1	53	18C-624	BOLT, Clip Retaining	1
18	561804	CLIP, Tubes to Bracket	1	54	—	BOOM CYLINDER — See Index	—
19	—	HOSE, Center Pivot — See Item 20	—	55	29F-4	ELBOW, Hose to Cylinder	1
20	1536587	HOSE, Center Pivot	4	56	18C-620	BOLT, Clip Retaining	1
21	1533765	HOSE, Bucket Cylinder Base End	1	57	1536264	HOSE, Boom Cylinder Rod End	1
22	—	BUCKET CYLINDER — See Index	—	58	656672	WASHER, Clip Retaining	1
23	91F-8	"O" RING, Adapter Union	1	59	1533672	CLIP, Tubes to Frame Bracket	1
24	526676	ADAPTER UNION (Inc. 23)	1	60	1522591	TUBE, Bucket Cylinder Base End — L.H.	1
25	1533766	HOSE, Bucket Cylinder Rod End	1	61	1522597	TUBE, Bucket Cylinder Rod End — L.H.	1
26	1533865	CLIP, Tube to Cylinder	1	62	89F-8	CONNECTOR, Tube	1
27	1533865	CLIP, Tube to Cylinder	1	63	89F-8	CONNECTOR, Tube	1
28	656672	WASHER, Clip Retaining	1	64	18D-06	NUT, Clip Retaining	1
29	4E-06	LKWSHR, Clip Retaining	1	65	89F-8	CONNECTOR, Tube	1
30	18C-620	BOLT, Clip Retaining	1	66	89F-8	CONNECTOR, Tube	1
31	563805	TUBE, Bucket Cylinder	1	67	1533672	CLIP, Tubes to Frame Bracket	1
32	1533765	HOSE, Bucket Cylinder Base End	1	68	1522593	TUBE, Bucket Cylinder Base End — R.H.	1
33	526676	ADAPTER UNION (Inc. 35)	1	69	656672	WASHER, Clip Retaining	1
34	1533766	HOSE, Bucket Cylinder Rod End	1	70	1522595	TUBE, Bucket Cylinder Rod End — R.H.	1
35	91F-8	"O" RING, Adapter Union	1				
36	—	BUCKET CYLINDER — See Index	—				

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



HYDRAULIC SYSTEM — BUCKET AND BOOM

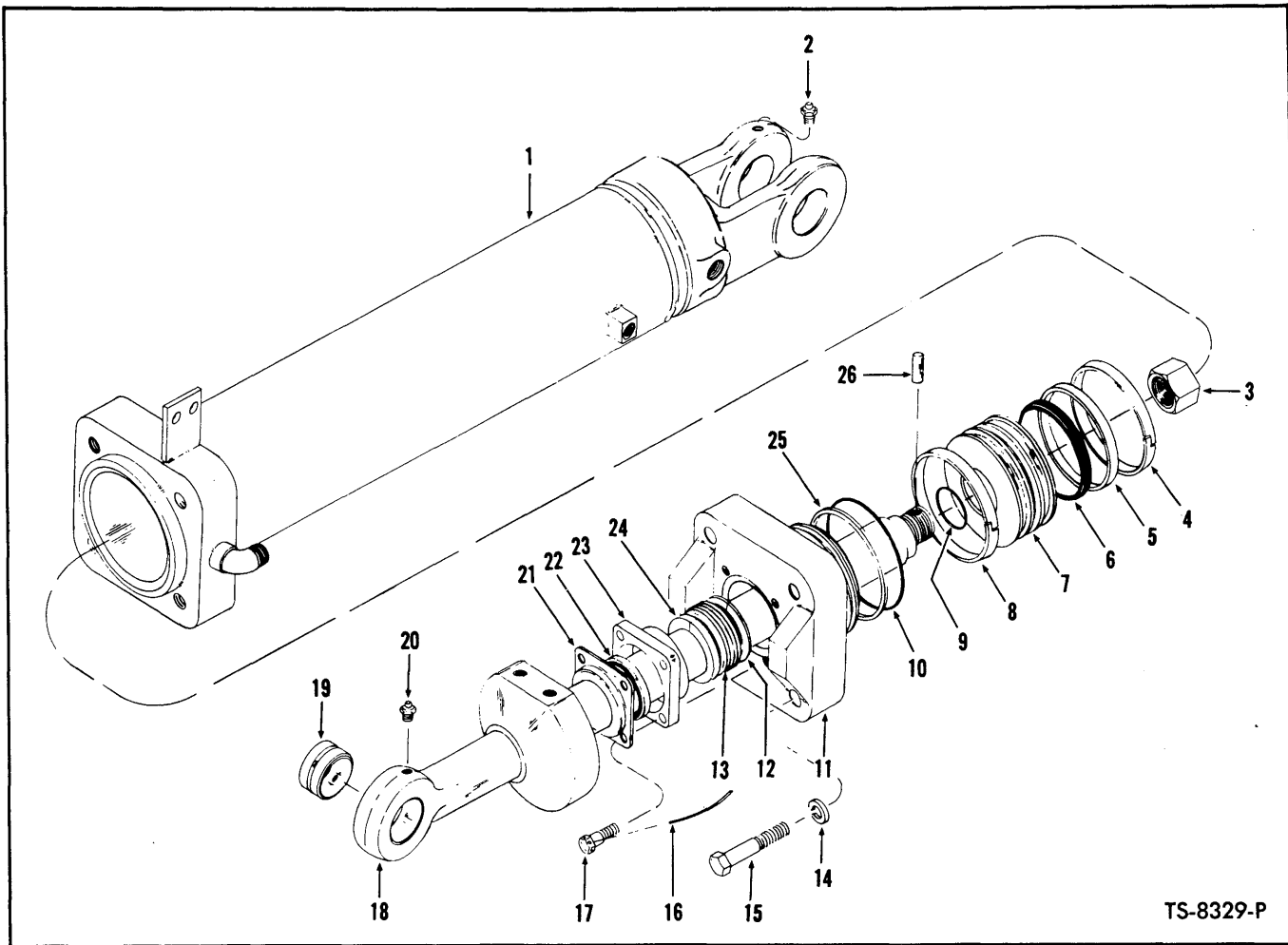
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HYDRAULIC SYSTEM — BUCKET AND BOOM (Continued)

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

NOTES

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



TS-8329-P

BUCKET CYLINDER ASSEMBLY

Item No.	Part No.	Description	No. Req'd.
A	1536064*	CYLINDER ASSY, Bucket (Inc. 1, 3 thru 19, 21 thru 26)	2
B	2516070	KIT (Inc. 4 thru 6, 8, 9, 10, 12, 13, 22, 24, 25) See Note "A"	2
NOTE: Two (2) Cylinders used per machine — Quantities listed below are for one (1) Cylinder			
1	1536065**	CYLINDER	1
2	10H-25	FITTING, Cylinder Grease	1
3	1536074***	NUT, Piston Rod	1
4	-----	§ RING, Piston Wear — See B	1
5	-----	§ RING — Outer — See B	1
6	-----	§ RING — Inner — See B	1
7	1536071	PISTON	1
8	-----	§ RING, Piston Wear — See B	1
9	-----	§ O-RING, Piston Rod — See B	1
10	-----	O-RING, Cylinder Cap — See B	1
11	567996	CAP, Cylinder	1

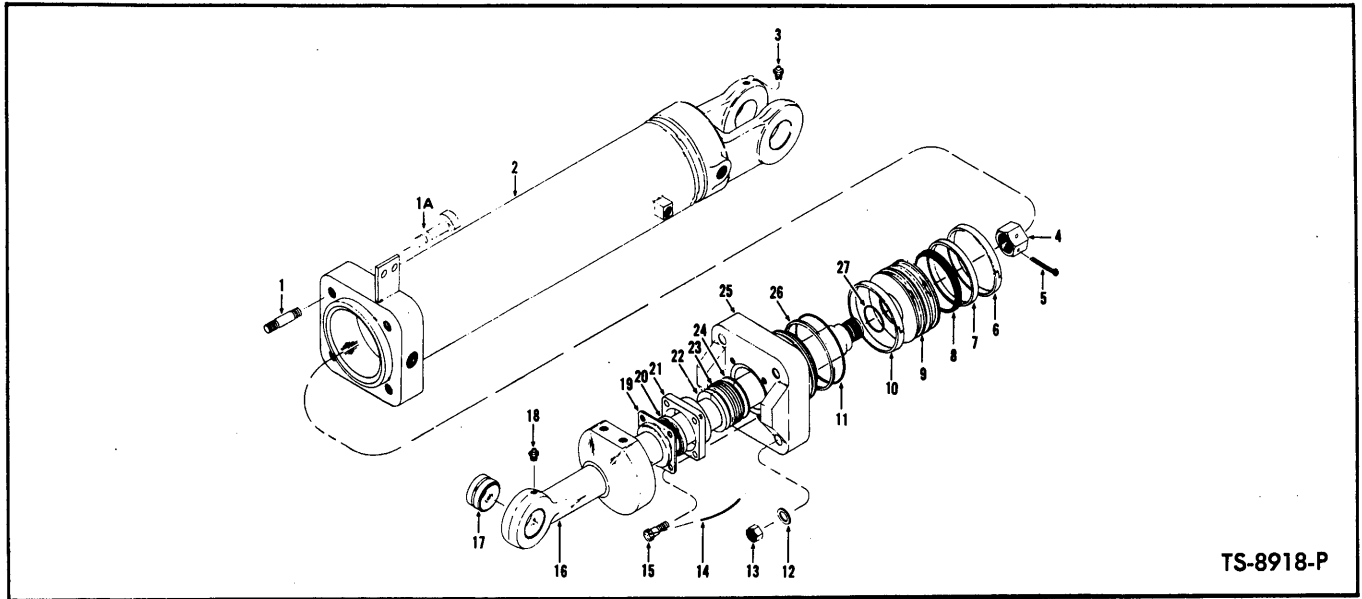
Item No.	Part No.	Description	No. Req'd.
12	-----	§ ADAPTER, Male — See 13	2
13	2501109	PACKING ASSY — (Inc. 12, 24)	1
14	4E-10	LKWSHR, Cylinder Cap Bolt	4
15	24C-1040	BOLT, Cylinder Cap	4
16	-----	LOCKWIRE (16 ga. x 15" lg.)	4
17	4C-616	BOLT, Seal Retainer	4
18	1536076	ROD ASSY, Piston (Inc. 19)	1
19	1521241	BUSHING, Piston Rod	1
20	10H-25	FITTING, Piston Rod Grease	1
21	562701	RETAINER, Seal	1
22	2516953	SEAL, Piston Rod	1
23	562700	GLAND, Packing	1
24	-----	§ ADAPTER, Female — See 13	2
25	-----	§ RING, Back-up — See B	1
26	2536075	INSERT, Piston Rod Nut Locking	1

*NOTE: For complete replacement of 1536064 Cylinder Assy use 1509802 Cylinder Assy.

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

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

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



TS-8918-P

**BUCKET CYLINDER ASSEMBLY
(SERVICE)**

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

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

**NOTE: When replacing Cylinder on machines equipped with studs, 4 #1509548 Bolts will also be required. Follow steps 4 and 5 of Procedure below.

PROCEDURE

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

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

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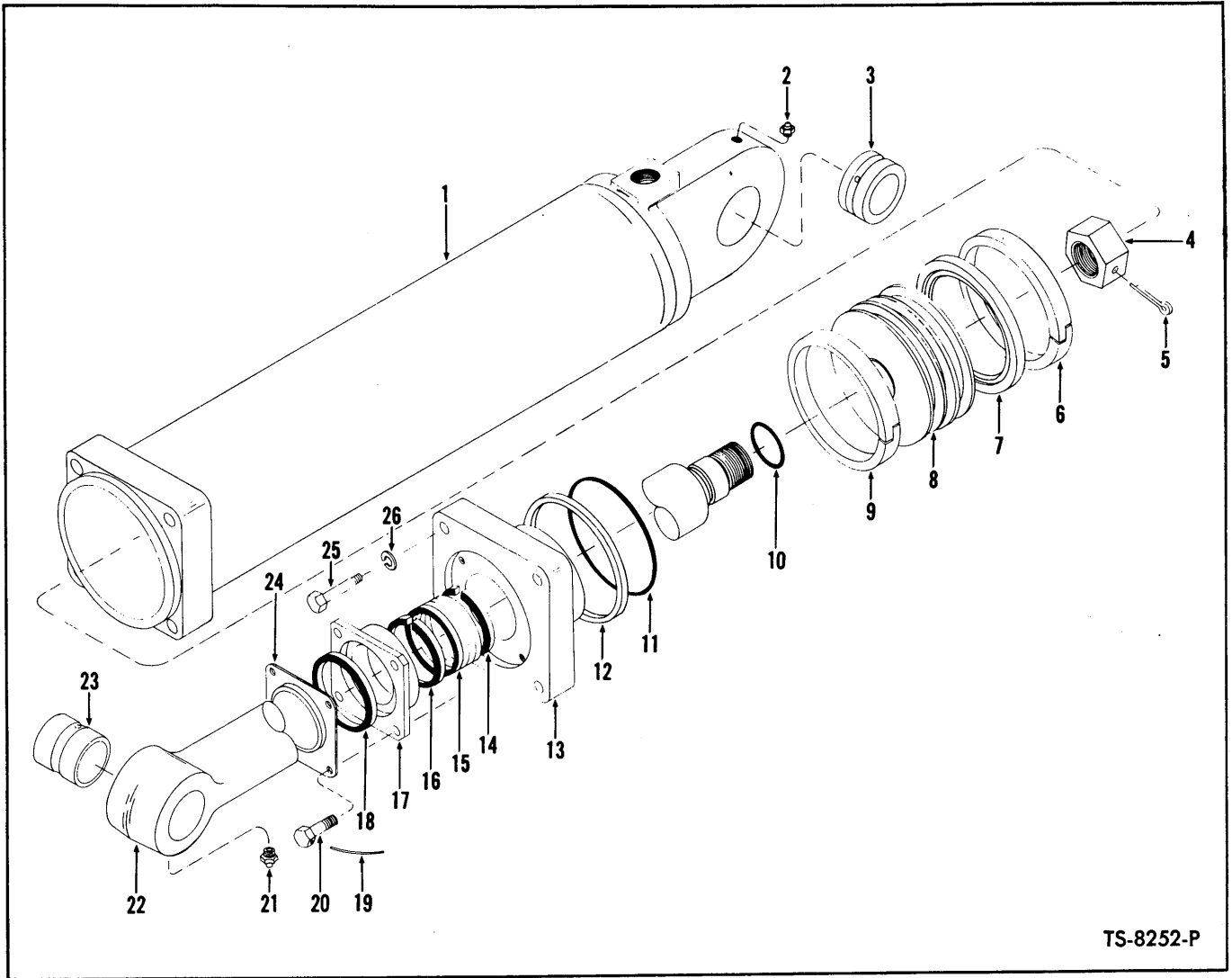
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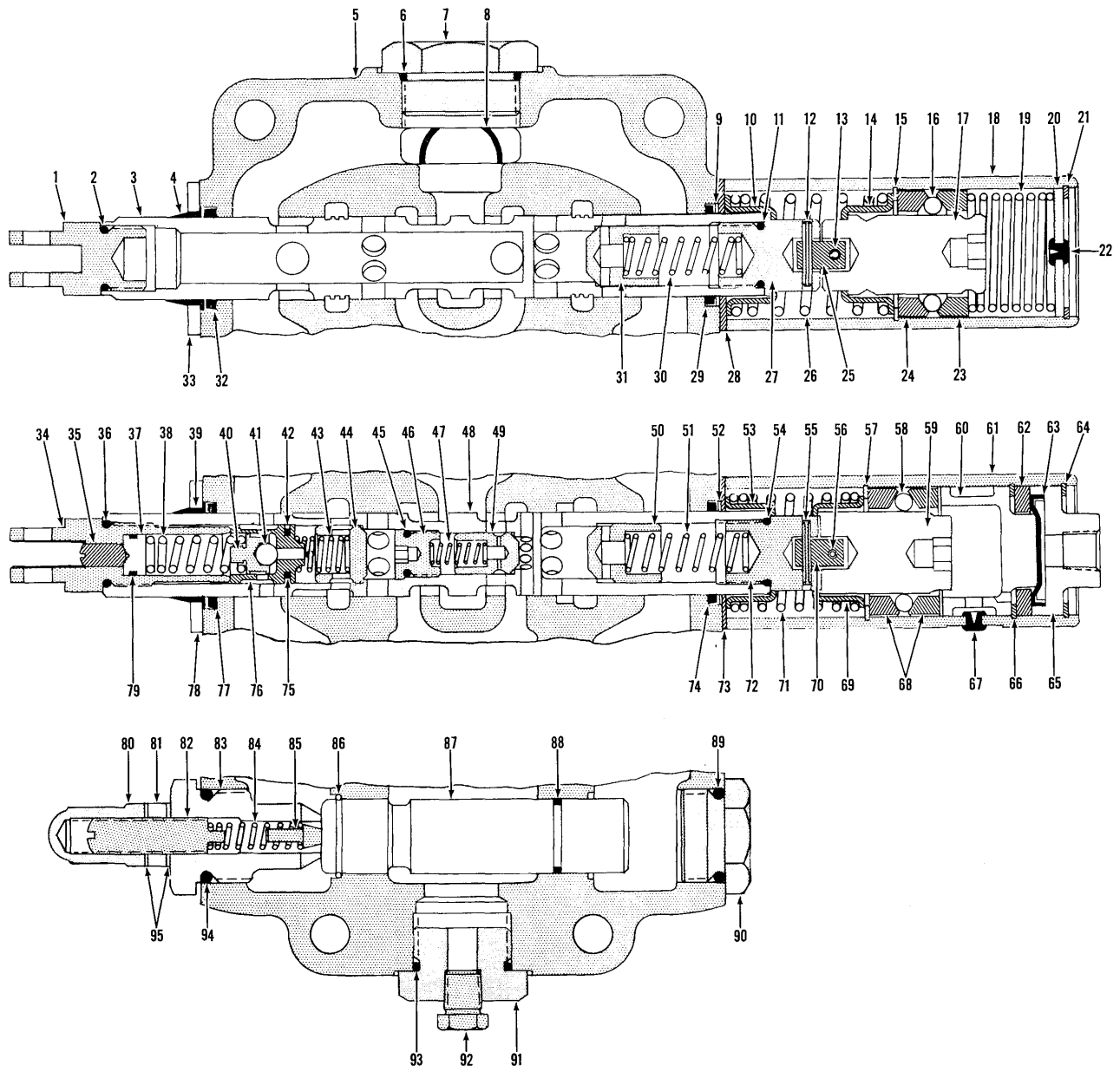


TS-8252-P

BOOM CYLINDER ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1535946	CYLINDER ASSY, Boom (Inc. 1, 3 thru 20, 22 thru 26)	2	11	----	§ "O" RING, Cylinder Cap — See B	1
B	2516061	*KIT (Inc. 5 thru 7A, 9 thru 12, 14, 15, 16, 18)	2	12	----	§ RING, Back-Up — See B	1
NOTE: Two (2) Cylinders used per machine — Quantities listed below are for one (1) Cylinder				13	1535961	CAP, Cylinder	1
1	1535947	CYLINDER (Inc. 3)	1	14	----	§ ADAPTER, Male — See 15	2
2	10H-25	FITTING, Cylinder Grease	1	15	2501109	PACKING ASSY (Inc. 14, 16)	1
3	1522765	BUSHING, Cylinder	1	16	----	§ ADAPTER, Female — See 15	2
4	1535960	NUT, Piston Rod	1	17	562700	GLAND, Packing	1
5	1F-844	COTTER, Piston Rod Nut	1	18	2516953	SEAL, Piston Rod	1
6	----	§ RING, Piston Wear — See B	1	19	----	LOCKWIRE (16 ga. x 15" lg.)	2
7	----	§ RING, Piston Seal — Outer—See B	1	20	4C-620	BOLT, Packing Gland	4
7A	----	§ †RING, Piston Seal — Inner — See B	1	21	10H-25	FITTING, Piston Rod Grease	1
8	1535957	PISTON	1	22	1521231	ROD ASSY, Piston (Inc. 23)	1
9	----	§ RING, Piston Wear — See B	1	23	1521218	BUSHING, Piston Rod	1
10	----	§ "O" RING, Piston Rod — See B	1	24	562701	RETAINER, Seal	1
		†Not Illustrated		25	18C-836	BOLT, Cylinder	4
		§Not Sold Separately		26	4E-08	LKWSHR, Cylinder Cap Bolt	4

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



CONTROL VALVE ASSEMBLY — MAIN

TS-8105-P

CONTROL VALVE ASSEMBLY

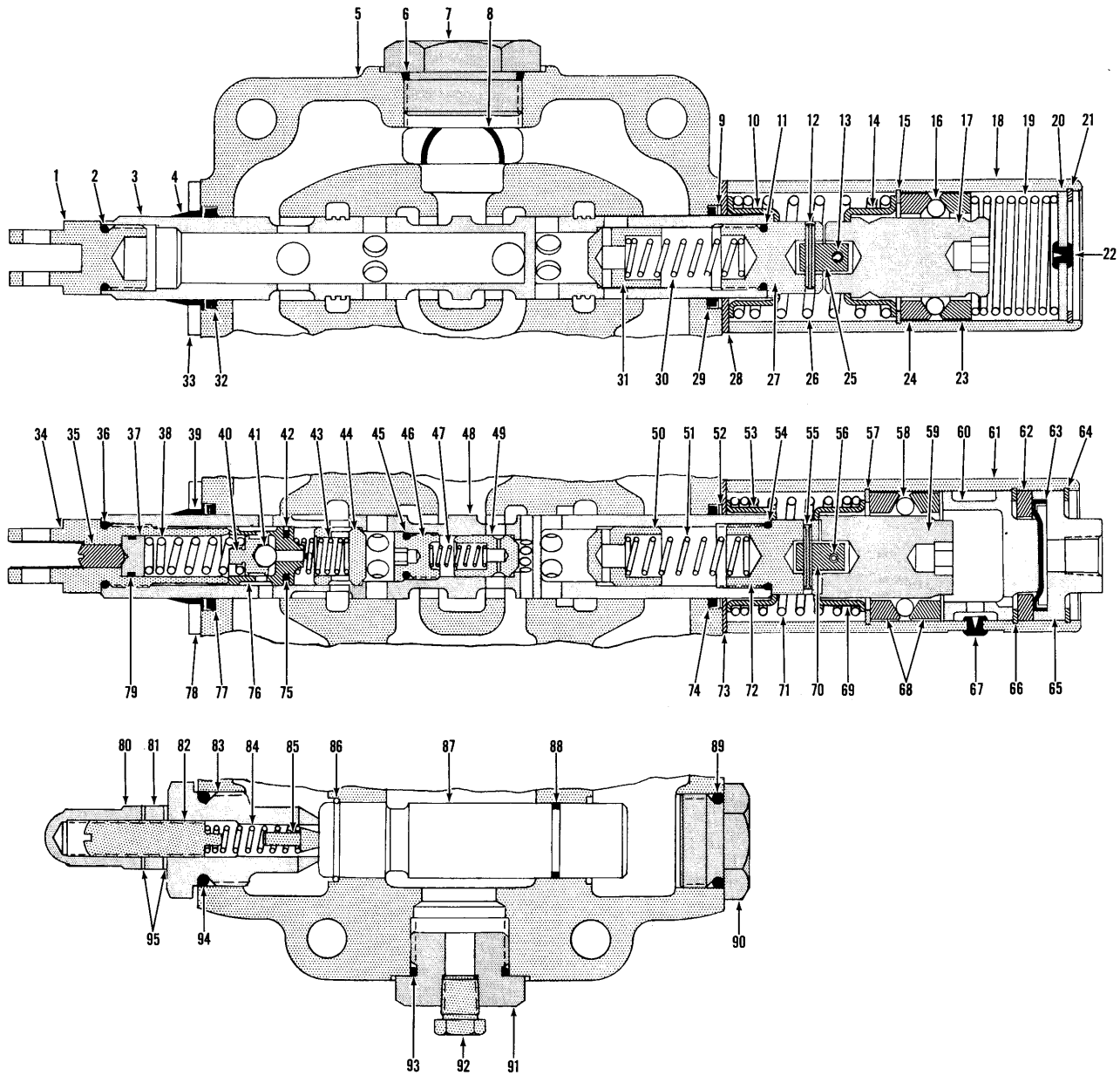
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1522148	*CONTROL VALVE ASSY (Inc. 1 thru 95)	1	33	946914	PLATE, Wiper & Seal Retainer	1
1	946360	EYE, Plunger	1	33A	1C-410	†BOLT, Retainer Plate to Housing	2
2	25K-30022	"O" RING, Plunger Eye	1	33B	4E-04	†LKWSHR, Retainer Plate to Housing	2
3	-----	PLUNGER, Operating — See Item "A"	—	34	946361	EYE, Plunger	1
4	946918	WIPER, Plunger	2	35	946541	SCREW, Adjusting	1
5	-----	§HOUSING, Valve — See Item "A"	—	36	25K-30022	"O" RING, Plunger Eye	1
6	91F-11	"O" RING, Cap	1	37	946363	GUIDE, Spring	1
7	24K-11	CAP, Valve	1	38	946364	SPRING, Poppet	1
8	58K-222	"O" RING, Valve Mounting	1	39	946918	WIPER, Plunger	1
9	944883	RING, Back-up	1	40	946884	POPPET (Inc. Item 41)	1
10	944878	GUIDE, Spring	1	41	-----	BALL, Poppet — See Item 40	—
11	25K-30022	"O" RING, Cap	1	42	946556	SEAL, Seat	1
12	108301	ROLL PIN	1	43	946545	SPRING, Check	1
13	108301	ROLL PIN	1	44	946543	CHECK	1
14	944878	GUIDE, Spring	1	45	945221	"O" RING, Cap	1
15	1301194	RING, Retaining	1	46	946555	CAP	1
16	10J-08	BALL	15	47	946536	SPRING	1
17	946030	CAP, Detent	1	48	-----	§PLUNGER — See Item "A"	—
18	945805	COVER, Detent	1	49	945590	SPRING, Check	1
18A	1C-416	†BOLT, Cover to Housing	4	50	944885	CHECK	1
18B	4E-04	†LKWSHR, Cover to Housing	4	51	946544	SPRING, Check	1
19	946029	SPRING	1	52	944883	RING, Back-up	1
20	944900	PLUG, Detent Cover	1	53	944878	GUIDE, Spring	1
21	507695	RING, Plug Retaining	1	54	25K-30022	"O" RING, Cap	1
22	886763	PLUG, Bleeder	1	55	108301	ROLL PIN	1
23	944897	RETAINER, Ball	1	56	305307	ROLL PIN	1
24	944897	RETAINER, Ball	1	57	1301194	RING, Retaining	1
25	888449	PIN, Connecting	1	58	10J-08	BALL	15
26	945090	SPRING	1	59	946912	CAP	1
27	945095	CAP, Plunger	1	60	946917	PLUG	1
28	944882	PLATE, Seal Retaining	1	61	946913	COVER, Detent	1
29	946583	SEAL, Plunger Oil	1	61A	1C-416	†BOLT, Cover to Housing	4
30	893293	SPRING, Check	1	61B	4E-04	†LKWSHR, Cover to Housing	4
31	944885	CHECK	1	62	946916	SPACER	1
32	946583	SEAL, Plunger Oil	1	63	946919	DIAPHRAGM	1
				64	507695	RING, Plug Retaining	1

§Not Sold Separately

†Not Illustrated

*NOTE: For replacement use 1512156 Valve Assy plus 1—1508082 Bracket, 2—1509125 Clips & 2—4E-06 Lockwashers.

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



CONTROL VALVE ASSEMBLY -- MAIN

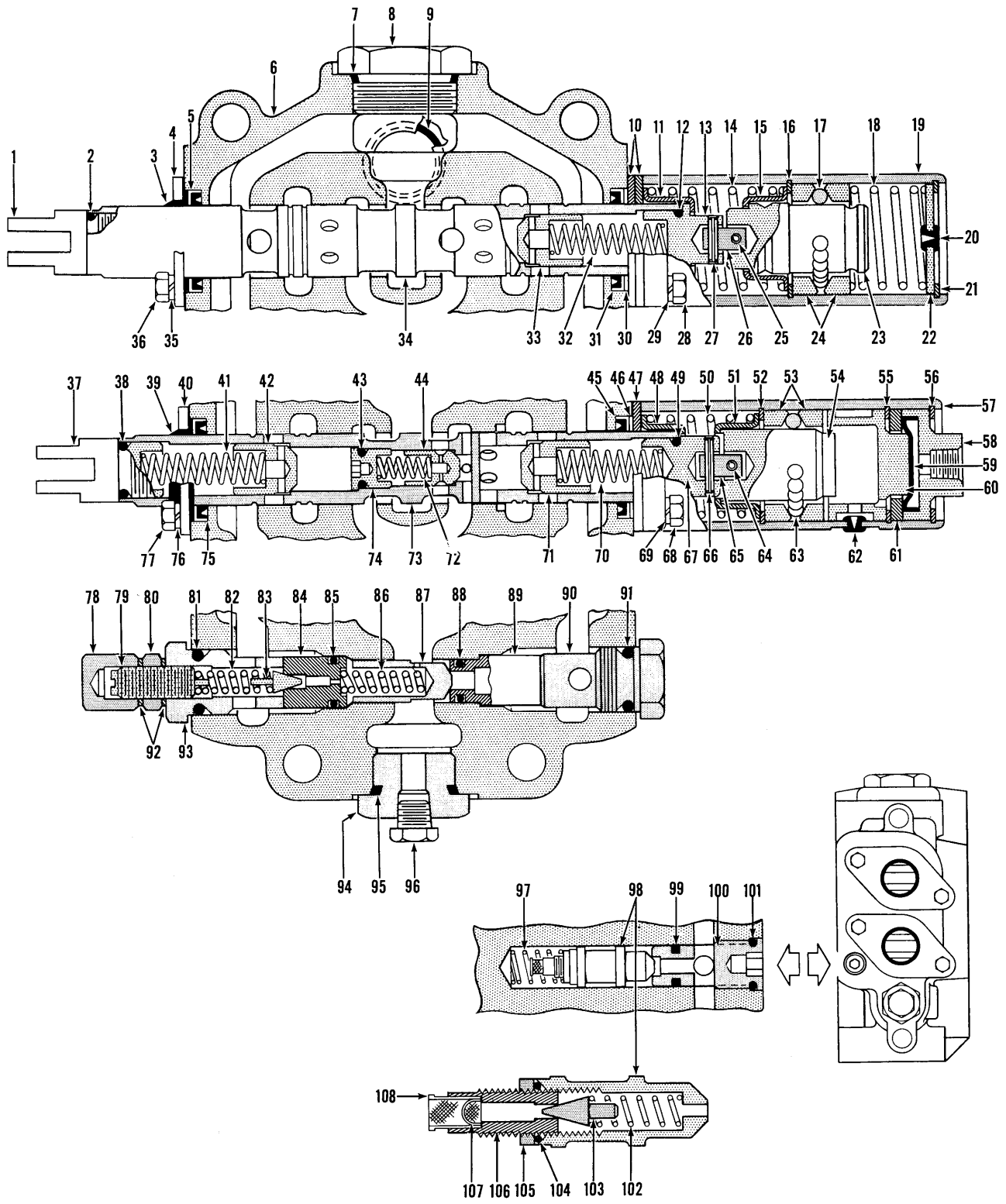
TS-8105-P

CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
65	946915	PLUG, Detent	1	80	944853	NUT, Acorn	1
66	507695	RING, Plug Retaining	1	81	8D-08	NUT, Jam	1
67	886763	PLUG, Bleeder	1	82	944890	SCREW, Adjusting	1
68	944897	RETAINER, Ball	2	83	893296	CAP, Adjusting	1
69	944878	GUIDE, Spring	1	84	886753	SPRING, Poppet	1
70	888449	PIN, Connecting	1	85	886739	POPPET, Relief	1
71	944879	SPRING	1	86	946033	RING, Relief Valve Retaining	1
72	945095	CAP, Plunger	1	87	893298	VALVE ASSY, Relief (Inc. 86, 88)	1
73	946535	PLATE, Seal Retaining	1	88	58K-021	"O" RING, Relief Valve	1
74	946583	SEAL, Plunger Oil	1	89	58K-214	"O" RING, Cap	1
75	25K-20018	"O" RING, Seat	1	90	944894	CAP	1
76	946883	SEAT	1	91	946882	PLUG, Gauge	1
77	946583	SEAL, Plunger Oil	1	92	40K-04	PLUG, Pipe	1
78	946914	PLATE, Wiper & Seal Retaining	1	93	91F-10	"O" RING, Gauge Plug	1
78A	1C-410	†BOLT, Retainer Plate to Housing	2	94	58K-214	"O" RING, Adjusting Cap	1
78B	4E-04	†LKWSHR, Retainer Plate to Housing ..	2	95	613750	WASHER, Jam Nut	2
79	25K-20014	"O" RING, Spring Guide	1				

†Not Illustrated

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



CONTROL VALVE ASSEMBLY

TS-8905-F

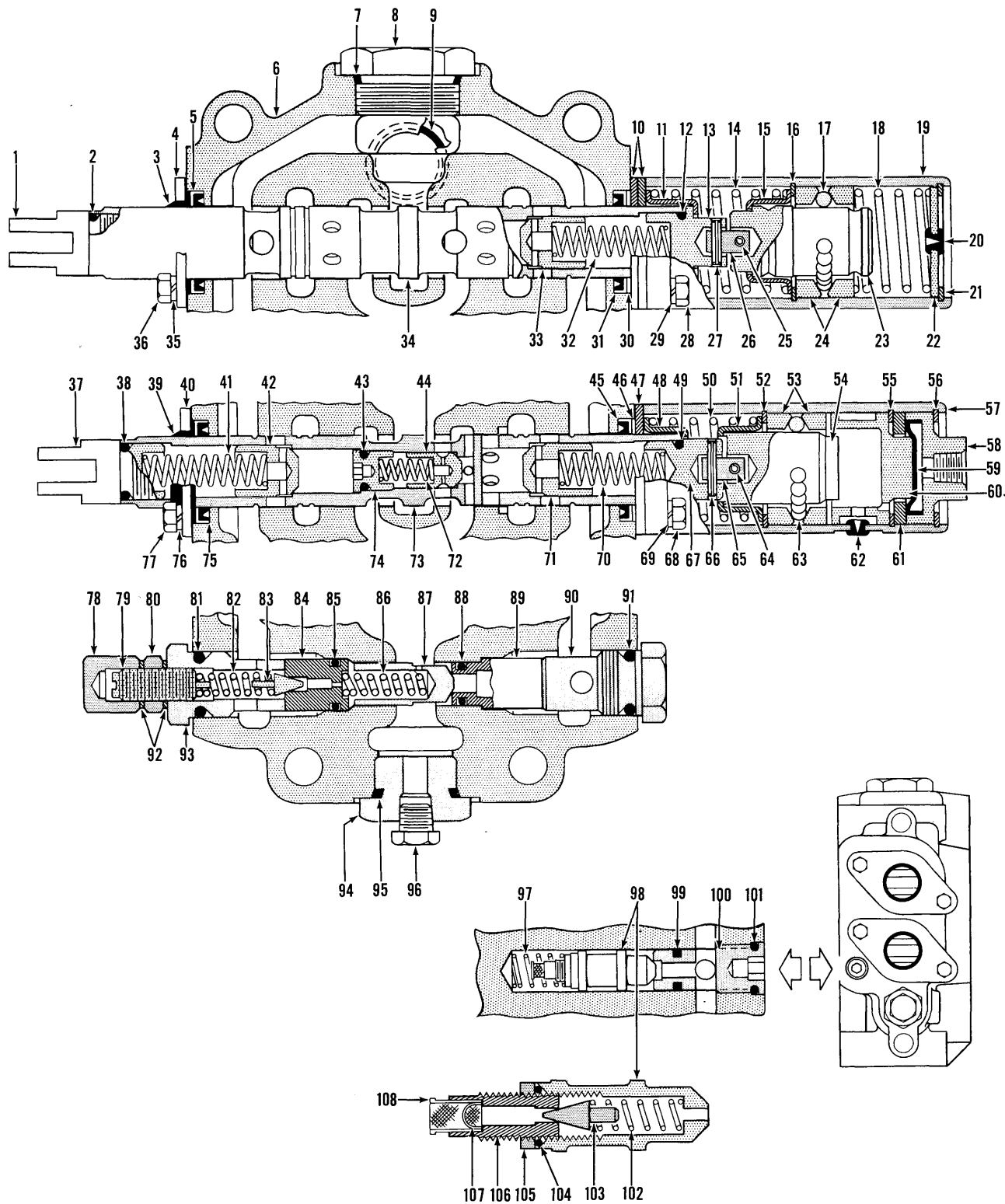
**CONTROL VALVE ASSEMBLY
(SERVICE ONLY)**

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1536682	* VALVE ASSY (Inc. 1 thru 108)	1	29	4E-06	LKWSHR, Cover Mtg.	2
1	946360	EYE, Plunger	1	30	944883	RING, Back-Up	1
2	25K-30022	O-RING, Plunger Eye	1	31	946583	SEAL, Plunger Oil	1
3	946918	WIPER, Plunger	1	32	893293	SPRING, Check	1
4	980831	RETAINER, Wiper	1	33	944885	CHECK	1
5	946583	SEAL, Plunger Oil	1	34	-----	§ PLUNGER — See "A"	1
6	-----	§ HOUSING, Valve — See "A"	1	35	4E-06	LKWSHR, Wiper Retainer	2
7	91F-11	O-RING, Cap	1	36	1C-612	BOLT, Wiper Retainer	2
8	24K-11	CAP	1	37	946360	EYE, Plunger	1
9	58K-222	O-RING, Valve Mtg.	1	38	25K-30022	O-RING, Plunger Eye	1
10	980832	PLATE, Seal Retaining	2	39	946918	WIPER, Plunger	1
11	945092	GUIDE, Spring	1	40	980831	RETAINER, Wiper	1
12	25K-30022	O-RING, Cap	1	41	893293	SPRING, Check	1
13	945091	CAP, Plunger	1	42	944885	CHECK	1
14	945090	SPRING, Return	1	43	945221	O-RING, Cap	1
15	944878	GUIDE, Spring	1	44	945590	CHECK	1
16	1301194	RING, Retaining	1	45	946583	SEAL, Plunger Oil	1
17	10J-08	BALL, Detent	15	46	944883	RING, Back-up	1
18	946029	SPRING, Detent	1	47	980832	PLATE, Retaining	1
19	947776	COVER, Detent	1	48	944878	GUIDE, Spring	1
20	886763	PLUG, Bleeder	1	49	25K-30022	O-RING, Cap	1
21	507695	RING, Retaining	1	50	944879	SPRING, Return	1
22	944900	PLUG, Detent Cover	1	51	944878	GUIDE, Spring	1
23	947786	CAP, Detent	1	52	1301194	RING, Retaining	1
24	944897	RETAINER, Ball	2	53	944897	RETAINER, Ball	2
25	108301	ROLL PIN	1	54	946912	CAP, Detent	1
26	888449	PIN, Connecting	1	55	507695	RING, Retaining	1
27	300232	ROLL PIN	1	56	507695	RING, Retaining	1
28	1C-616	BOLT, Cover Mtg.	2				

§ Not Sold Separately

* NOTE: For replacement use 1512156 Valve Assembly

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



CONTROL VALVE ASSEMBLY

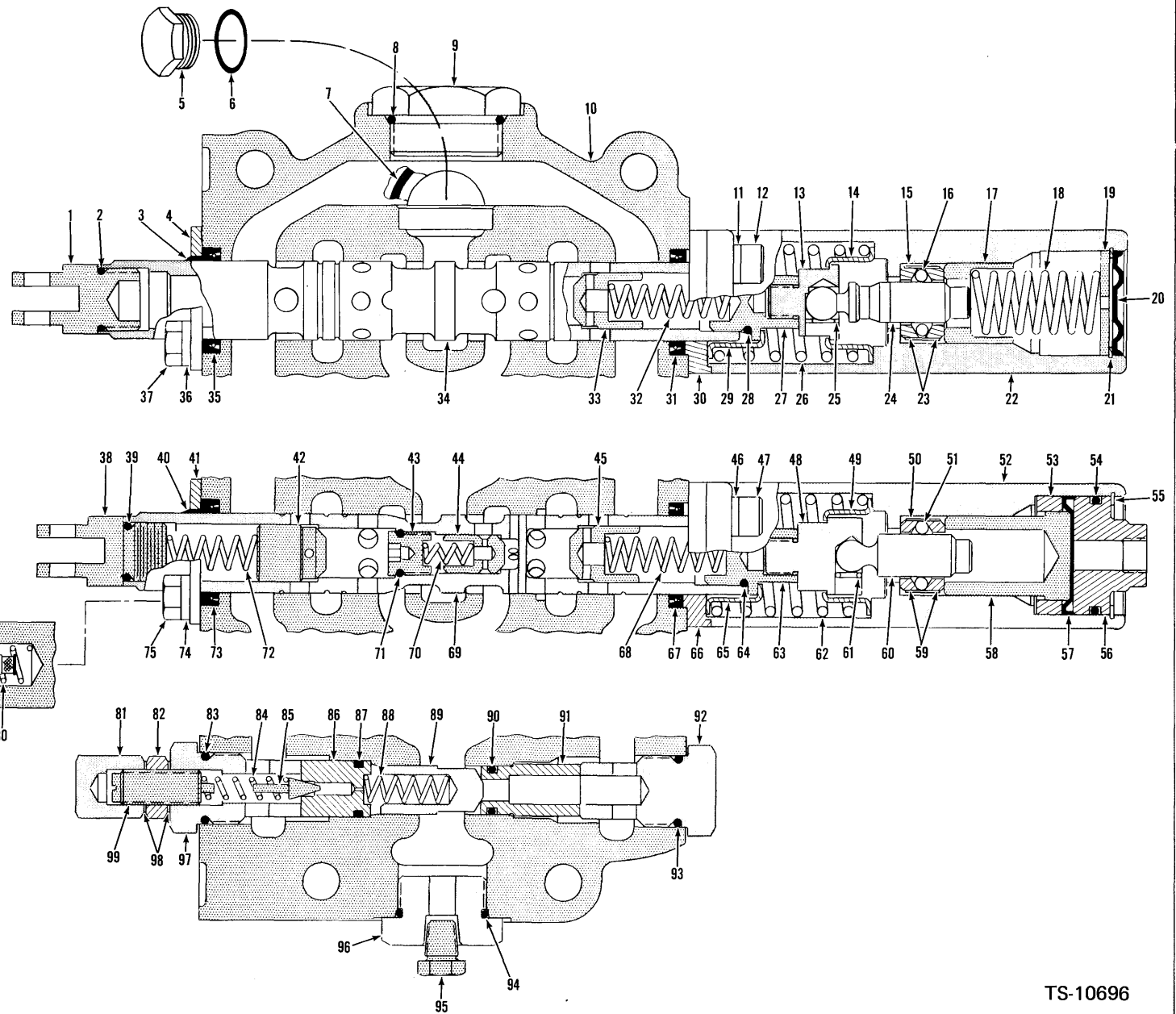
TS-8905-P

CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
57	961072	KIT, Detent	1	84	980836	SEAT, Relief	1
58	946915	PLUG, Cover	1	85	25K-30020	O-RING, Relief Seat	1
59	946919	DIAPHRAGM	1	86	947791	SPRING, Check	1
60	946917	PISTON	1	87	960965	CHECK	1
61	946916	RING, Spacer	1	88	25K-30016	O-RING, Check Seat	1
62	886763	PLUG, Bleeder	1	89	980840	SEAT, Check	1
63	10J-08	BALL, Detent	15	90	980838	CAP	1
64	305307	ROLL PIN	1	91	58K-210	O-RING, Cap	1
65	888449	PIN, Connecting	1	92	613750	WASHER, Jam Nut	2
66	108301	ROLL PIN	1	93	980835	CAP, Adjusting	1
67	945095	CAP, Plunger	1	94	946882	CAP	1
68	1C-416	BOLT, Cover Mtg.	2	95	91F-10	O-RING, Cap	1
69	4E-06	LKWSHR, Cover Mtg.	2	96	40K-04	PIPE PLUG	1
70	946544	SPRING, Check	1	97	886764	SPRING	1
71	944885	CHECK	1	98	948159	POPPET ASSY (Inc. 102 thru 108)	1
72	946536	SPRING, Check	1				
73	-----	§PLUNGER — See "A"	1				
74	945221	CAP	1	99	25K-20014	O-RING, Relief Seat	1
75	946583	SEAL, Plunger Oil	1	100	947774	SEAT, Relief	1
76	4E-06	LKWSHR, Wiper Retainer	2	101	25K-20016	O-RING, Relief Seat	1
77	1C-612	BOLT, Wiper Retainer	2	102	-----	§SPRING — See 98	1
78	49D-08	NUT, Acorn	1	103	-----	§POPPET — See 98	1
79	980834	SCREW, Adjusting	1	104	-----	§O-RING, Poppet — See 98	1
80	8D-08	NUT, Jam	1	105	-----	§NUT, Jam — See 98	1
81	58K-210	O-RING, Adj. Cap	1	106	-----	§SEAT, Relief — See 98	1
82	886753	SPRING, Relief	1	107	-----	§SCREEN, Filter — See 98	1
83	886739	POPPET, Relief	1	108	-----	§GUIDE, Spring — See 98	1

§Not Sold Separately

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



TS-10696

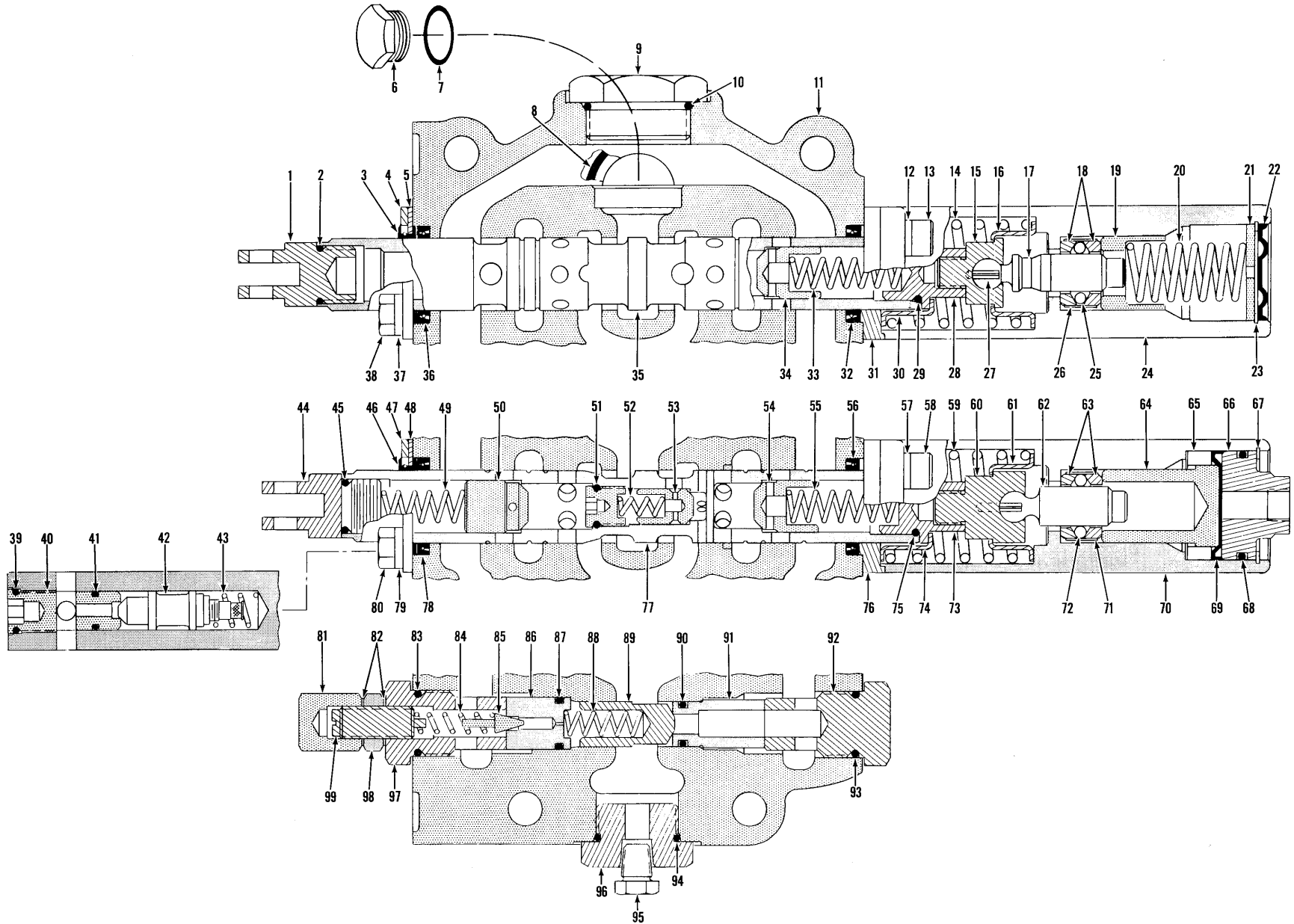
CONTROL VALVE ASSEMBLY (Cont'd.)
(Service Only)

Item	Part No.	Description	Qty.
47	11G-620	BOLT, Plate to Housing	2
48	948718	SOCKET, Detent	1
49	944878	RETAINER, Spring	1
50	948727	SLEEVE, Ball Retainer	1
51	948730	BALL	11
52	948721	COVER, Detent	1
52A	16F-04	†PLUG, Cover	1
53	948728	SPACER, Detent	1
54	25K-40114	O-RING, Plug	1
55	948729	RING, Plug Retainer	1
56	948724	PLUG, Detent	1
57	948731	DIAPHRAGM	1
58	948725	PISTON	1
59	947843	RETAINER, Ball	2
60	948722	PLUNGER, Detent	1
61	948726	RING, Plunger Retainer	1
62	945090	SPRING, Plunger Retainer	1
63	948732	CAP, Plunger	1
64	25K-30022	O-RING, Cap	1
65	945092	RETAINER, Spring	1
66	948717	PLATE, Seal Retaining	1
67	946583	SEAL, Plunger Oil	1
68	946544	SPRING, Check	1
69	---	§PLUNGER, Operating - See A	---
70	946536	SPRING, Check	1
71	25K-30014	O-RING, Cap	1
72	893293	SPRING, Check	1
73	946583	SEAL, Plunger Oil	1
74	4E-06	LKWSHR, Plate to Housing	2
75	11G-620	BOLT, Plate to Housing	2
76	947822	POPPET ASSY	1
77	947774	SEAT, Relief	1
78	25K-20016	O-RING, Seat	1
79	25K-20014	O-RING, Seat	1
80	886764	SPRING, Poppet	1
81	49D-08	NUT, Acorn	1
82	8D-08	NUT, Jam	1
83	25K-30016	O-RING, Cap	1
84	886753	SPRING, Poppet	1
85	886739	POPPET	1
86	980836	SEAT, Poppet	1
87	25K-30020	O-RING, Seat	1
88	947791	SPRING, Check	1
89	960965	CHECK	1
90	25K-30016	O-RING, Seat	1
91	980840	SEAT, Poppet	1
92	980838	CAP	1
93	58K-210	O-RING, Cap	1
94	91F-10	O-RING, Cap	1
95	40K-04	PLUG, Cap	1
96	946882	CAP	1
97	980835	CAP, Adjusting	1
98	613750	WASHER, Jam Nut	1
99	980834	SCREW, Adjusting	1

§Not Sold Separately

†Not Illustrated

*NOTE: For replacement use 1512156 Valve Assembly.



TS-11566 B



CONSTRUCTION MACHINERY DIVISION

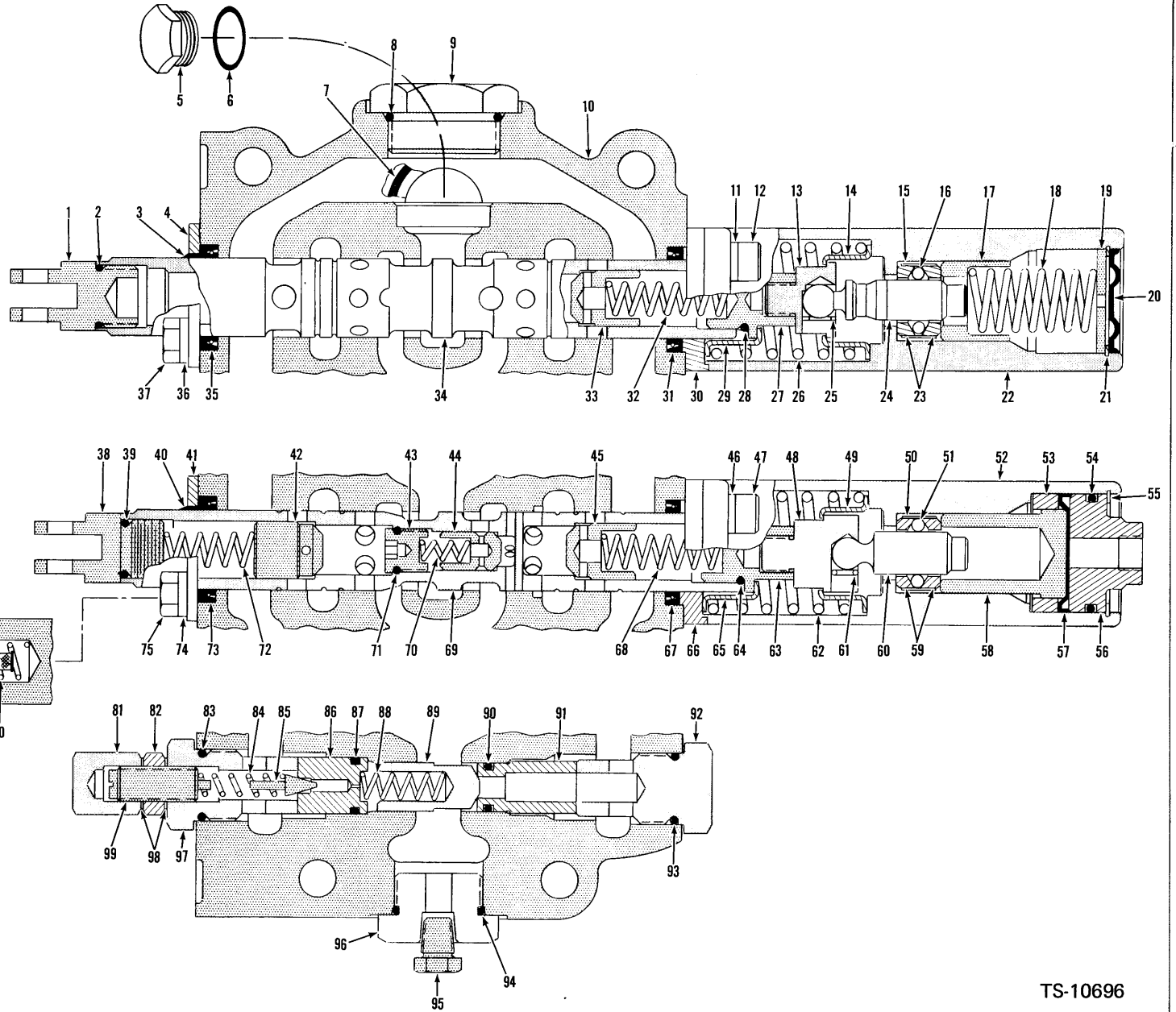


CONTROL VALVE ASSEMBLY (Service Only)

Table with 4 columns: Item, Part No., Description, Qty. Lists various components like CONTROL VALVE ASSY, EYE, Plunger, O-RING, etc.

§ Not Sold Separately
† Not Illustrated
*NOTE: For replacement use 1512156 Valve Assembly.

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



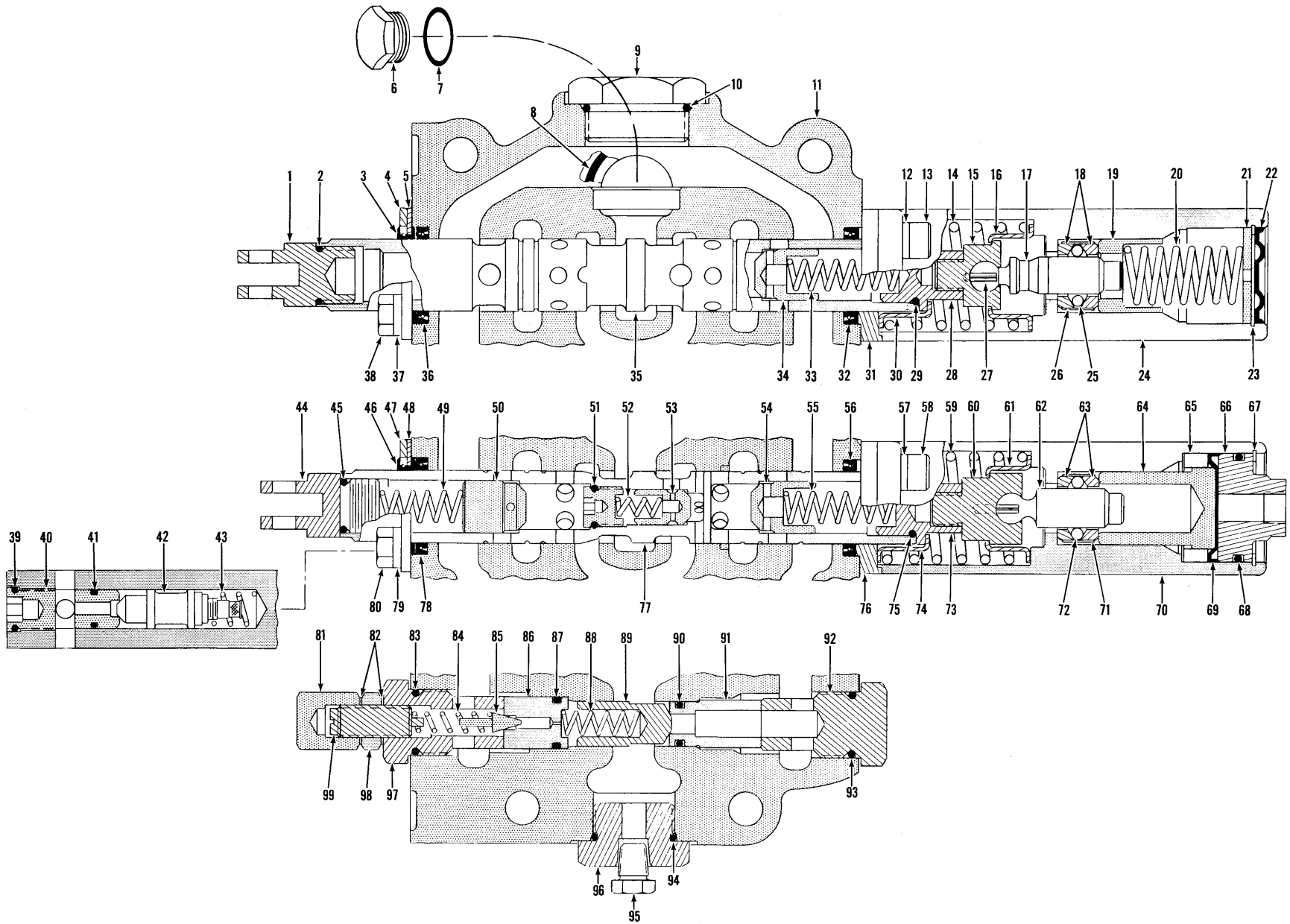
TS-10696

CONTROL VALVE ASSEMBLY
(Service Only)

Item	Part No.	Description	Qty.
A	1512156	CONTROL VALVE ASSY (Inc. 1 thru 99)	1
1	893295	EYE, Plunger	1
2	25K-30022	O-RING, Plunger Eye	1
3	949305	WIPER, Plunger	1
4	949303	PLATE, Wiper Retaining	1
5	949302	PLATE, Oil Seal Retaining	1
6	24K-11	CAP, Housing	1
7	91F-11	O-RING, Cap	1
8	58K-222	O-RING, Valve Mounting	1
9	24K-11	CAP, Housing	1
10	91F-11	O-RING, Cap	1
11	-----	§ HOUSING	-----
12	4E-06	LKWSHR, Cover to Housing	2
13	11G-620	BOLT, Cover to Housing	2
14	945090	SPRING, Plunger Return	1
15	949278	SOCKET, Detent	1
16	944878	GUIDE, Spring	1
17	948723	PLUNGER, Detent	1
18	947843	RETAINER, Ball	2
19	948954	RETAINER, Spring	1
20	947852	SPRING, Detent	1
21	947848	PLUG, Detent End	1
22	948202	DIAPHRAGM, Detent	1
23	666542	RING, Plug Retaining	1
24	948720	COVER, Detent	1
25	948730	BALL, Detent	11
26	948727	SLEEVE, Ball Retainer	1
27	742306	PIN, Roll	1
28	948732	CAP	1
29	25K-30022	O-RING, Cap	1
30	945092	GUIDE, Spring	1
31	949299	‡ PLATE, Oil Seal Retaining	-----
31A	949300	‡ PLATE, Oil Seal Retaining	-----
31B	949301	‡ PLATE, Oil Seal Retaining	-----
32	949304	SEAL, Plunger Oil	1
33	893293	SPRING, Check	1
34	944885	CHECK	1
35	-----	§ PLUNGER, Operating - See A	-----
36	949304	SEAL, Plunger Oil	1
37	4E-06	LKWSHR, Plate to Housing	2
38	1C-612	BOLT, Plate to Housing	2
39	25K-20016	O-RING, Seat	1
40	947774	SEAT, Relief	1
41	25K-20014	O-RING, Seat	1
42	947822	POPPET ASSY	1
43	886764	SPRING, Poppet	1
44	946360	EYE, Plunger	1
45	25K-30022	O-RING, Plunger Eye	1
46	949305	WIPER, Plunger	1
47	949303	PLATE, Wiper Retaining	1
48	949302	PLATE, Oil Seal Retaining	1
49	893293	SPRING, Check	1
50	944885	CHECK	1
51	25K-30014	O-RING, Cap	1
52	946536	SPRING, Check	1
53	945590	CHECK	1
54	944885	CHECK	1
55	946544	SPRING, Check	1

‡ As Required
§ Not Sold Separately

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



TS-11566 B



CONSTRUCTION MACHINERY DIVISION

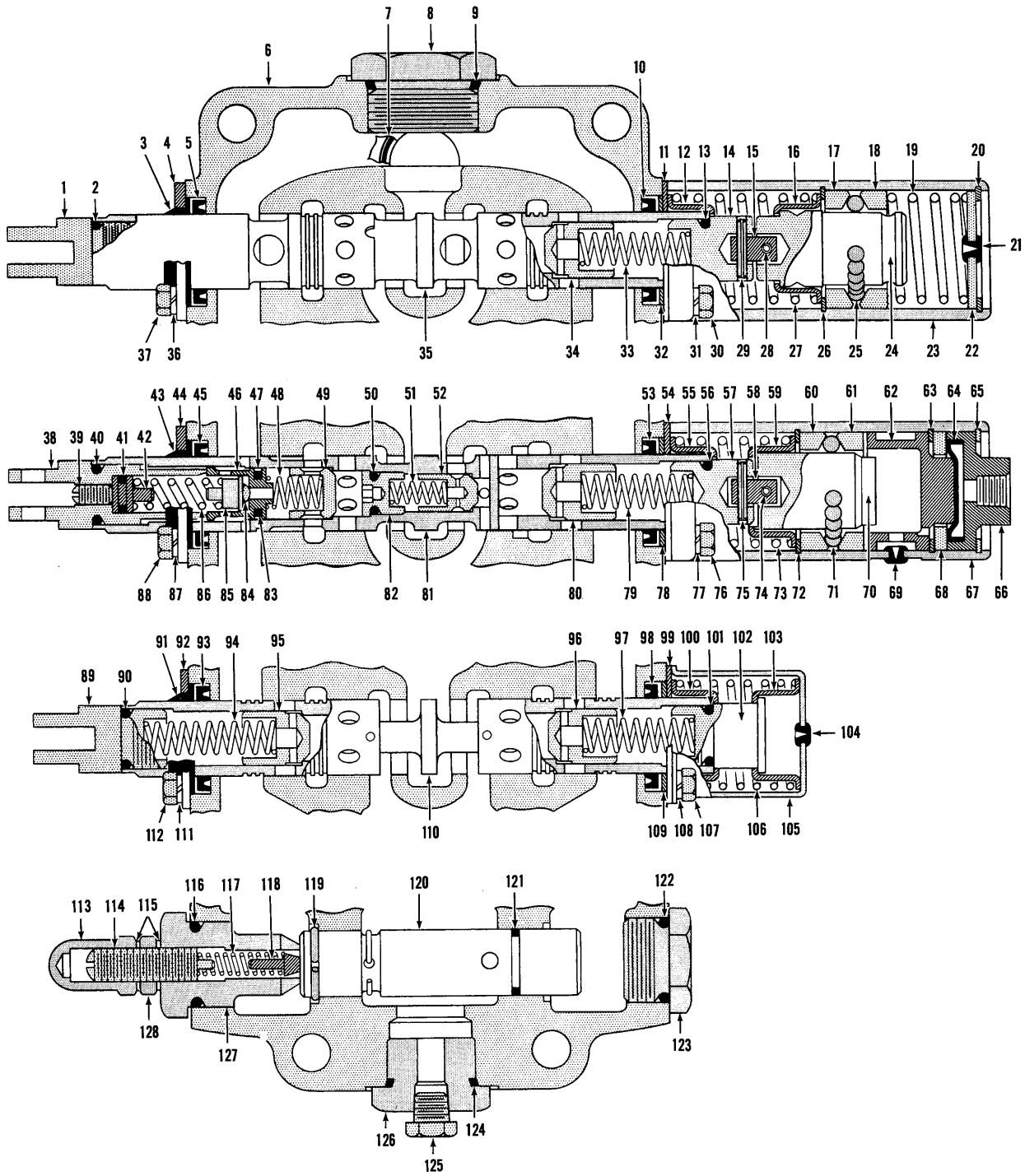


CONTROL VALVE ASSEMBLY (Cont'd.)
(Service Only)

Table with 4 columns: Item, Part No., Description, Qty. Lists various parts like SEAL, PLUNGER OIL, LKWSHR, BOLT, SPRING, SOCKET, GUIDE, PLUNGER, RETAINER, PISTON, SPACER, PLUG, RING, O-RING, DIAPHRAGM, COVER, SLEEVE, BALL, CAP, PLATE, PLUNGER, ACORN, WASHER, POPPET, SEAT, SPRING, CHECK, ADJUSTING CAP, JAM NUT, ADJUSTING SCREW.

†As Required
§Not Sold Separately

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



THREE SPOOL CONTROL VALVE ASSEMBLY

TS-8586-P

THREE SPOOL CONTROL VALVE ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1503807	*CONTROL VALVE ASSY (Inc. 1 thru 128)	1	44	946914	PLATE, Wiper & Seal Retaining	1
1	946360	EYE, Plunger	1	45	946583	SEAL, Plunger Oil	1
2	25K-30022	"O" RING, Plunger Eye	1	46	946883	SEAT, Check	1
3	946918	WIPER, Plunger	1	47	946556	RING, Back-Up	1
4	946914	PLATE, Wiper & Seal Retaining	1	48	946545	SPRING, Check	1
5	946583	SEAL, Plunger Oil	1	49	946543	CHECK	1
6	-----	§HOUSING, Valve — See "A"	—	50	945221	"O" RING, Cap	1
7	58K-222	"O" RING, Valve Mounting	1	51	946536	SPRING, Check	1
8	24K-11	PLUG, Housing (Inc. 9)	1	52	945590	CHECK	1
9	91F-11	"O" RING, Plug	1	53	946583	SEAL, Plunger Oil	1
10	946583	SEAL, Plunger Oil	1	54	946535	PLATE, Seal Retaining	1
11	944882	PLATE, Seal Retaining	1	55	944878	GUIDE, Spring	1
12	944878	GUIDE, Spring	1	56	25K-30022	"O" RING, Cap	1
13	25K-30022	"O" RING, Plunger Cap	1	57	945095	CAP, Plunger	1
14	945095	CAP, Plunger	1	58	888449	PIN, Connecting	1
15	888449	PIN, Connecting	1	59	944878	GUIDE, Spring	1
16	944878	GUIDE, Spring	1	60	944897	RETAINER, Ball	1
17	944897	RETAINER, Ball	1	61	944897	RETAINER, Ball	1
18	944897	RETAINER, Ball	1	62	946917	PLUG	1
19	946029	SPRING	1	63	507695	RING, Retaining	1
20	507695	RING, Plug Retaining	1	64	946919	DIAPHRAGM	1
21	886763	PLUG, Bleeder	1	65	507695	RING, Plug Retaining	1
22	944900	PLUG, Detent Cover	1	66	946915	PLUG	1
23	945805	COVER, Detent	1	67	946913	COVER, Detent	1
24	946030	CAP, Detent	1	68	946916	SPACER	1
25	10J-08	BALL	15	69	886763	PLUG, Bleeder	1
26	1301194	RING, Retaining	1	70	946912	CAP, Detent	1
27	945090	SPRING	1	71	10J-08	BALL	15
28	108301	ROLL PIN	1	72	1301194	RING, Retaining	1
29	108301	ROLL PIN	1	73	944879	SPRING	1
30	1C-416	BOLT, Cover to Housing	4	74	305307	ROLL PIN	1
31	4E-04	LKWSHR, Cover to Housing	4	75	108301	ROLL PIN	1
32	944883	RING, Back-Up	1	76	1C-416	BOLT, Cover to Housing	4
33	893293	SPRING, Check	1	77	4E-04	LKWSHR, Cover to Housing	4
34	944885	CHECK	1	78	944883	RING, Back-Up	1
35	-----	§PLUNGER, Operating — See "A"	—	79	946544	SPRING, Check	1
36	4E-04	LKWSHR, Plate to Housing	2	80	944885	CHECK	1
37	1C-410	BOLT, Plate to Housing	2	81	-----	§PLUNGER, Operating — See "A"	—
38	946361	EYE, Plunger	1	82	946555	*CAP	1
39	946541	SCREW, Adjusting	1	83	25K-20018	"O" RING, Seat	1
40	25K-30022	"O" RING, Plunger Eye	1	84	-----	§BALL, Poppet — See 85	—
41	25K-20014	"O" RING, Spring Guide	1	85	946884	POPPET — Inc. 84	1
42	946363	GUIDE, Spring	1	86	946364	SPRING	1
43	946918	WIPER, Plunger	1	87	4E-04	LKWSHR, Plate to Housing	2
				88	1C-410	BOLT, Plate to Housing	2

§ Not Sold Separately

*NOTE: For replacement use 1513174 Valve Assy. Plus 1—1508082 Bracket, 3—1509125 Clips & 3—4E-06 Lockwashers.

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

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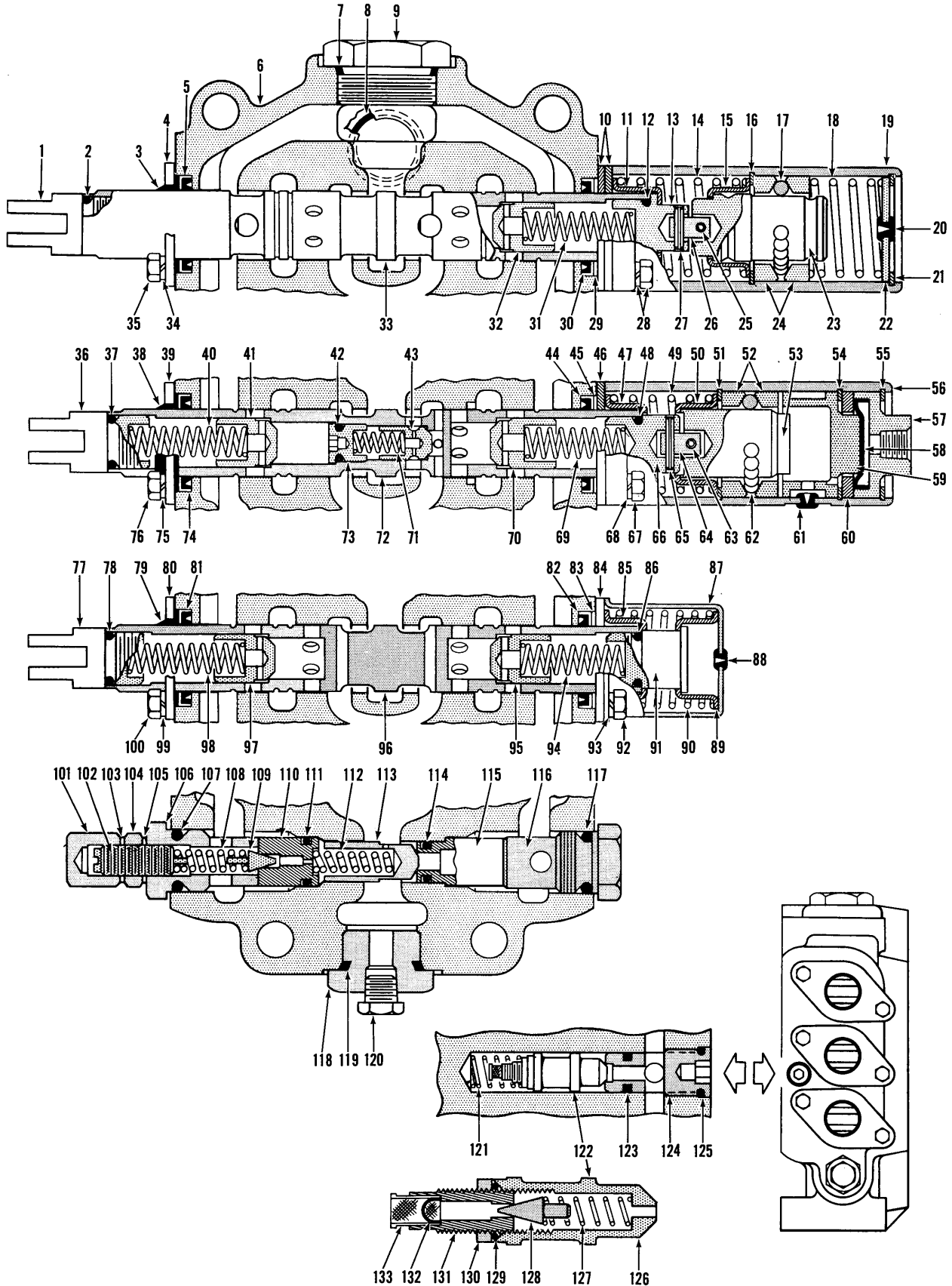
THREE SPOOL CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
89	946360	EYE, Plunger	1	109	944883	RING, Back-Up	1
90	25K-30022	"O" RING, Plunger Eye	1	110	-----	§PLUNGER, Operating — See "A"	—
91	946918	WIPER, Plunger	1	111	4E-04	LKWSHR, Plate to Housing	2
92	946914	PLATE, Wiper & Seal Retaining	1	112	1C-410	BOLT, Plate to Housing	2
93	946583	SEAL, Plunger Oil	1	113	944853	NUT, Acorn	1
94	893293	SPRING, Check	1	114	944890	SCREW, Adjusting	1
95	944885	CHECK	1	115	613750	WASHER, Jam Nut	2
96	944885	CHECK	1	116	58K-214	"O" RING, Cap	1
97	893293	SPRING, Check	1	117	886753	SPRING, Poppet	1
98	946583	SEAL, Plunger Oil	1	118	886739	POPPET, Relief	1
99	944882	PLATE, Seal Retaining	1	119	946033	RING, Relief Valve Retaining	1
100	945348	GUIDE, Spring	1	120	893298	RELIEF VALVE ASSY (Inc. 119 & 121) ..	1
101	25K-30022	"O" RING, Cap	1	121	58K-021	"O" RING, Relief Valve	1
102	944895	CAP, Detent	1	122	58K-214	"O" RING, Cap	1
103	945348	GUIDE, Spring	1	123	944894	CAP	1
104	886745	PLUG, Bleeder	1	124	91F-10	"O" RING, Cap	1
105	944896	COVER, Detent	1	125	40K-04	PLUG, Pipe	1
106	944879	SPRING	1	126	946882	CAP	1
107	1C-410	BOLT, Cover to Housing	4	127	893296	CAP, Adjusting	1
108	4E-04	LKWSHR, Cover to Housing	4	128	8D-08	NUT, Jam	1

§Not Sold Separately
*NOTE: Torque to 25 Ft./Lbs.

NOTES

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



CONTROL VALVE ASSEMBLY

TS-8911-P

**CONSTRUCTION MACHINERY DIVISION
CONTROL VALVE ASSEMBLY
(SERVICE)**

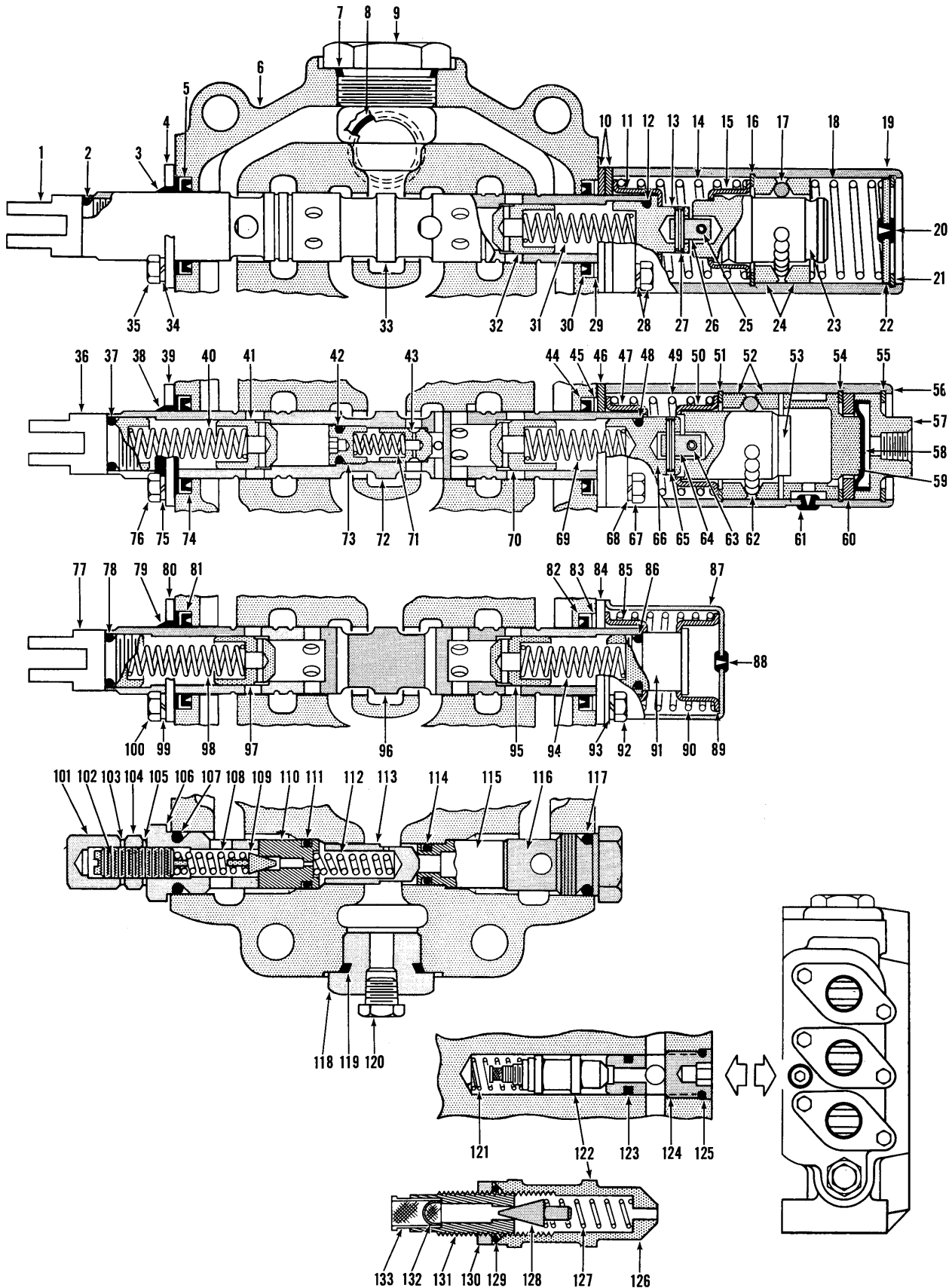
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1536681	*CONTROL VALVE (Inc. 1 thru 133)	1	32	944885	CHECK	1
1	946360	EYE, Plunger	1	33	-----	§PLUNGER — See "A"	—
2	25K-30022	O-RING, Plunger Eye	1	34	4E-06	LKWSHR, Retainer to Housing	2
3	946918	WIPER, Plunger	1	35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

†Not Illustrated

§Not Sold Separately

*NOTE: For replacement use 1513174 Valve Assembly

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



CONTROL VALVE ASSEMBLY

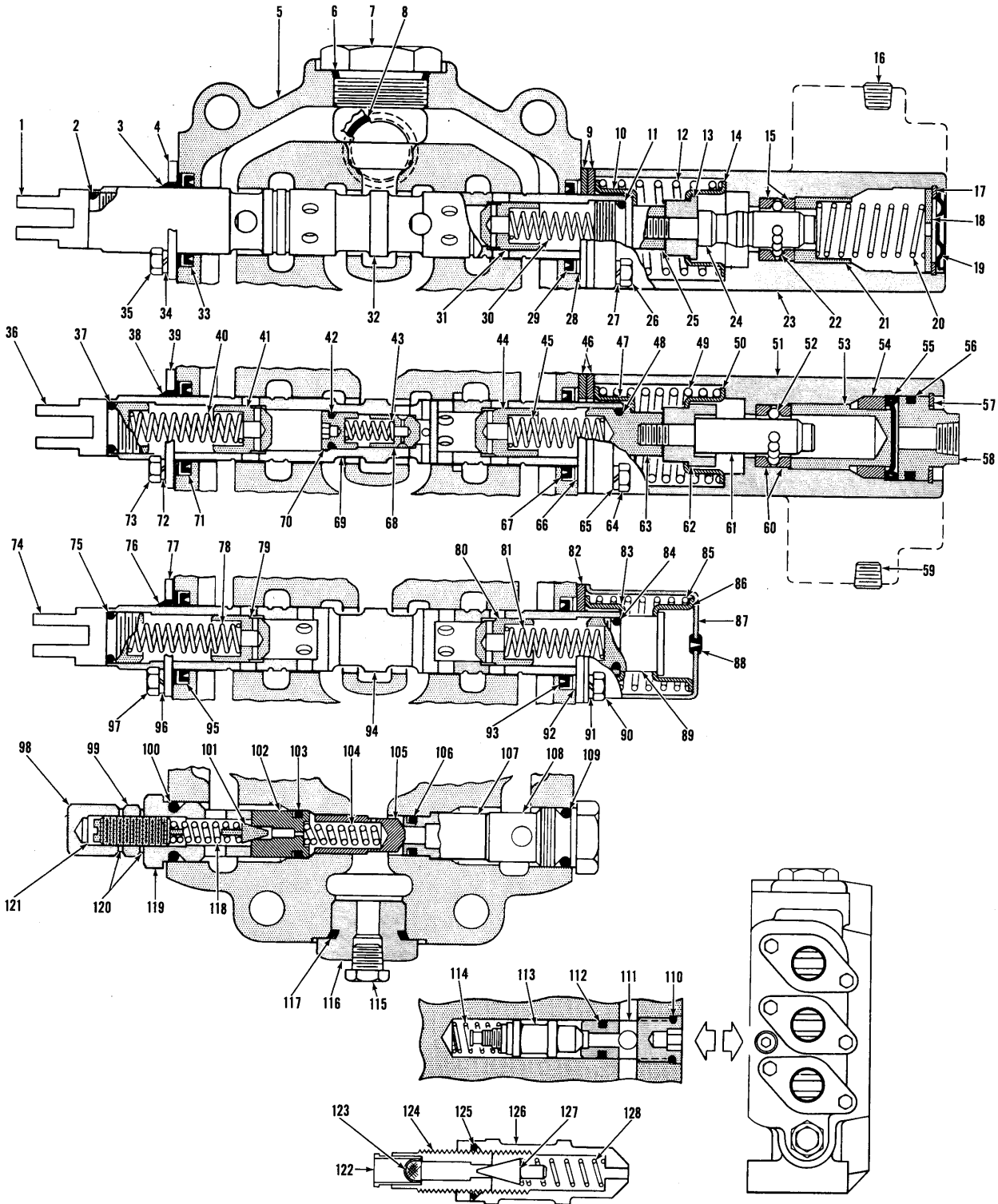
TS-8911-P

CONTROL VALVE ASSEMBLY (Continued)

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
66	945095	CAP, Plunger	1	100	1C-612	BOLT, Cover to Housing	2
67	1C-616	BOLT, Cover to Housing	2	101	49D-08	NUT, Acorn	1
68	4E-06	LKWSHR, Cover to Housing ..	2	102	980834	SCREW, Adjusting	1
69	946544	SPRING, Check	1	103	613750	WASHER	1
70	944885	CHECK	1	104	8D-08	NUT, Jam	1
71	946536	SPRING, Check	1	105	613750	WASHER	1
72	-----	§PLUNGER — See "A"	—	106	980835	CAP, Adjusting	1
73	945221	CAP, Check	1	107	58K-210	O-RING, Adjusting Cap	1
74	946583	SEAL, Plunger Oil	1	108	886753	SPRING, Relief	1
75	4E-06	LKWSHR, Retainer to Housing	2	109	886739	POPPET, Relief	1
76	1C-612	BOLT, Retainer to Housing ..	2	110	980836	SEAT, Relief	1
77	946360	EYE, Plunger	1	111	25K-30020	O-RING, Seat	1
78	25K-30022	O-RING, Plunger Eye	1	112	947791	SPRING, Check	1
79	946918	WIPER, Plunger	1	113	960965	CHECK	1
80	980831	PLATE, Wiper & Seal Retaining	1	114	25K-30016	O-RING, Seat	1
81	946583	SEAL, Plunger Oil	1	115	980840	SEAT, Check	1
82	946583	SEAL, Plunger Oil	1	116	980838	CAP	1
83	944883	PLATE, Seal Retaining	1	117	58K-210	O-RING, Cap	1
84	980832	RING, Retaining	1	118	946882	CAP	1
85	945348	GUIDE, Spring	1	119	91F-10	O-RING, Cap	1
86	25K-30022	O-RING, Cap	1	120	40K-04	PLUG, Pipe	1
87	980828	COVER, Detent	1	121	886764	SPRING	1
88	886745	PLUG, Bleeder	1	122	948159	POPPET ASSY (Inc. 126 thru 133)	1
89	945348	GUIDE, Spring	1	123	25K-20014	O-RING	1
90	980830	SPRING, Return	1	124	947774	SEAT, Relief	1
91	944895	CAP, Plunger	1	125	25K-20016	O-RING	1
92	1C-612	BOLT, Cover to Housing	2	126	-----	§POPPET, Relief — See 122 ...	1
93	4E-06	LKWSHR, Cover to Housing ..	2	127	-----	§SPRING — See 122	1
94	893293	SPRING, Check	1	128	-----	§POPPET, Pilot — See 122	1
95	944885	CHECK	1	129	-----	§O-RING — See 122	1
96	-----	§PLUNGER — See "A"	—	130	-----	§NUT, Jam — See 122	1
97	944885	CHECK	1	131	-----	§SEAT, Relief — See 122	1
98	893293	SPRING, Check	1	132	-----	§SCREEN, Filter — See 122 ...	1
99	4E-06	LKWSHR, Cover to Housing ..	2	133	-----	§GUIDE, Spring — See 122	1

§Not Sold Separately

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



THREE SPOOL CONTROL VALVE ASSEMBLY

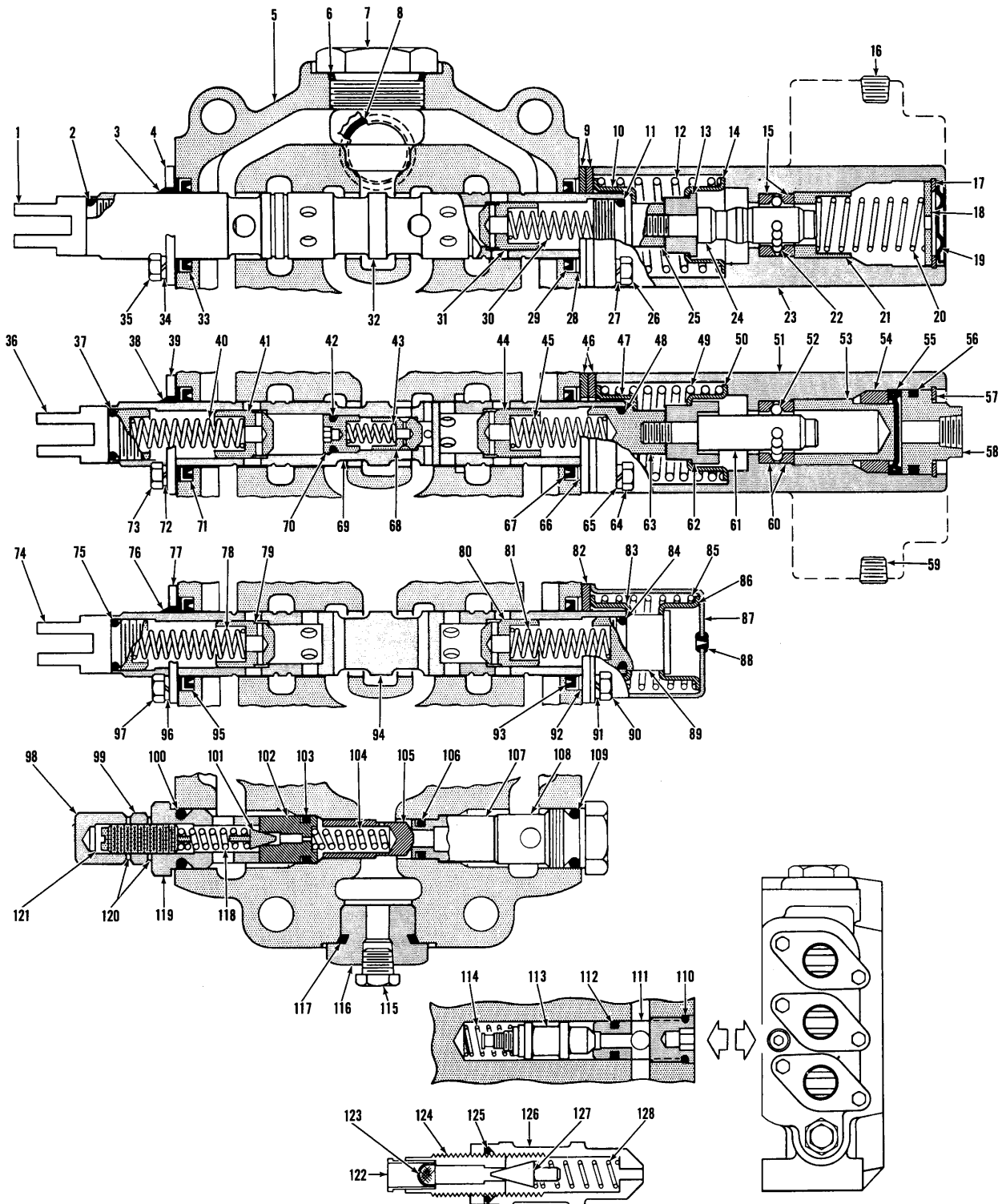
TS-9374

CONTROL VALVE ASSEMBLY – THREE SPOOL
(Service)

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
A	1541956	*CONTROL VALVE ASSY (Incl. 1 thru 128)	1	37	25K-30022	O-RING, Plunger Eye	1
1	946360	EYE, Plunger	1	38	946918	WIPER, Plunger Oil	1
2	25K-30022	WIPER, Plunger Oil	1	39	980831	PLATE, Wiper & Seal Retainer	1
4	980831	PLATE, Wiper & Seal Retainer	1	40	893293	SPRING	1
5	----	§HOUSING, Valve – See A	—	41	944885	CHECK	1
6	91F-11	O-RING, Plug	1	42	25K-30014	O-RING, Cap	1
7	24K-11	PLUG, Pipe	1	43	946536	SPRING, Check	1
8	58K-222	O-RING, Valve Mounting	1	44	944885	CHECK	1
9	980832	PLATE, Seal Retainer	2	45	946544	SPRING, Check	1
10	945092	RETAINER, Spring	1	46	980832	PLATE, Seal Retaining	2
11	25K-30022	O-RING, Cap	1	47	945092	RETAINER, Spring	1
12	945010	SPRING, Plunger Return	1	48	25K-30022	O-RING, Cap	1
13	948205	SPACER, Detent	1	49	945090	SPRING, Plunger Return	1
14	944878	RETAINER, Spring	1	50	944878	RETAINER, Spring	1
15	947843	RETAINER, Ball	2	51	948201	HOUSING, Detent	1
16	16F-04	PLUG, Pipe	1	52	10J-06	BALL	10
17	666542	RING, Plug Retainer	1	53	948460	PISTON, Detent	1
18	947848	PLUG, Detent	1	54	948459	SPACER	1
19	948202	DIAPHRAGM	1	55	946919	DIAPHRAGM	1
20	947852	SPRING, Detent	1	56	25K-40108	O-RING, Plug	1
21	947842	RETAINER, Spring	1	57	666542	RING, Plug Retainer	1
22	10J-06	BALL	10	58	947340	PLUG, Detent	1
23	948201	HOUSING, Detent	1	59	16F-04	PLUG, Pipe	1
24	948204	CAP, Detent	1	60	947843	RETAINER, Ball	2
25	948203	CAP, Plunger	1	61	948206	CAP, Plunger	1
26	1C-618	BOLT, Cover to Housing	2	62	948207	SPACER, Detent	1
27	4E-06	LKWSHR, Cover to Housing	2	63	948203	CAP, Plunger	1
28	944883	RING, Back-Up	1	64	1C-618	BOLT, Cover to Housing	2
29	946583	SEAL, Plunger Oil	1	65	4E-06	LKWSHR, Cover to Housing	2
30	893293	SPRING, Check	1	66	944883	RING, Back-Up	1
31	944885	CHECK	1	67	946583	SEAL, Plunger Oil	1
32	----	§PLUNGER, Operating – See A	—	68	945590	CHECK	1
33	946583	SEAL, Plunger Oil	1	69	----	§PLUNGER, Operating – See A	—
34	4E-06	LKWSHR, Plate to Housing	2	70	948203	CAP, Plunger	1
35	1C-610	BOLT, Plate to Housing	2	71	946583	SEAL, Plunger Oil	1
36	946360	EYE, Plunger	1	72	4E-06	LKWSHR, Cover to Housing	2
				73	1C-610	BOLT, Cover to Housing	2

§ Not Sold Separately
*NOTE: For replacement use 1513174 Valve Assembly.

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



THREE SPOOL CONTROL VALVE ASSEMBLY

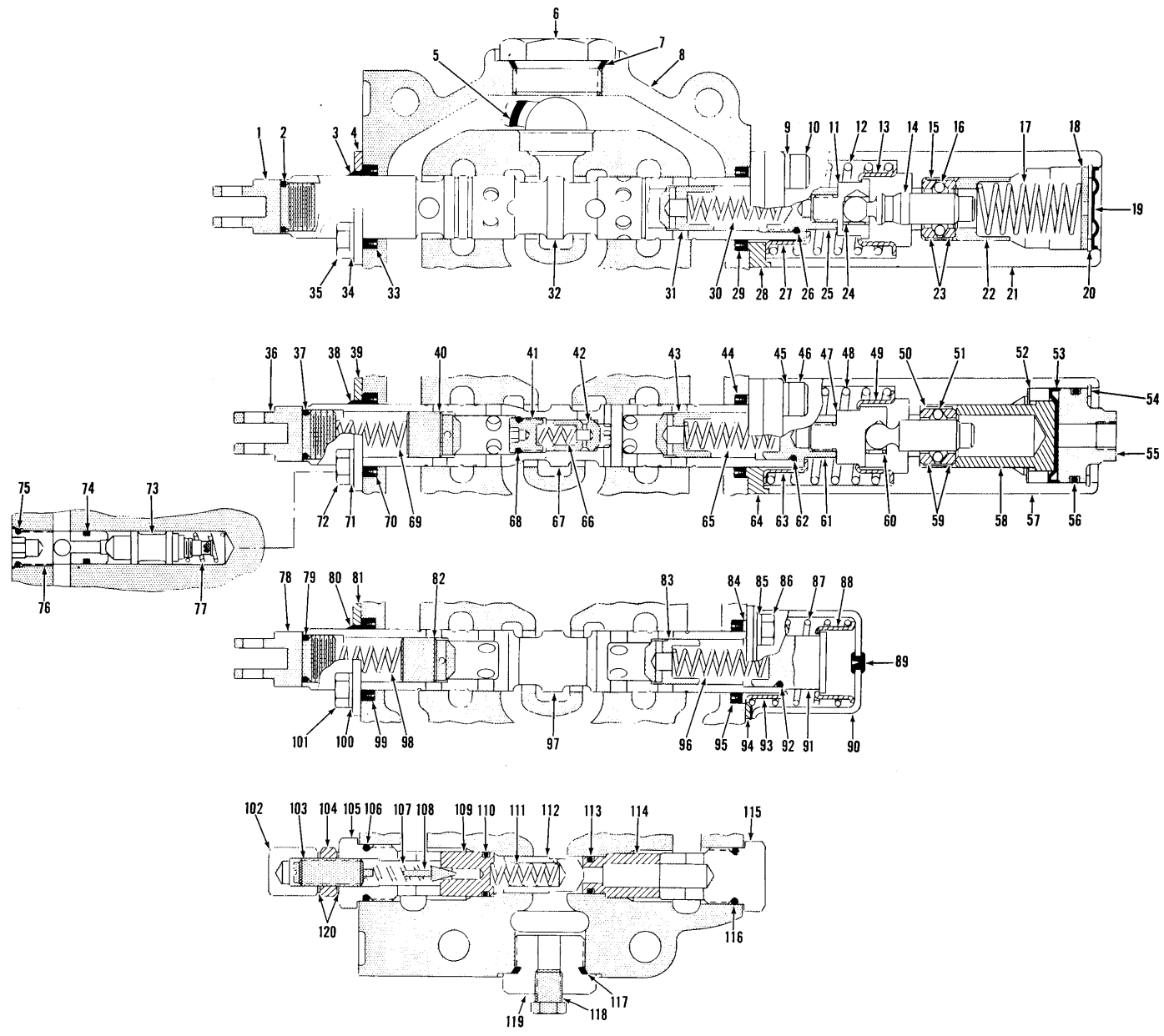
TS-9374

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

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

§Not Sold Separately

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



TS-10715

CONTROL VALVE ASSEMBLY – THREE SPOOL
(Service Only)

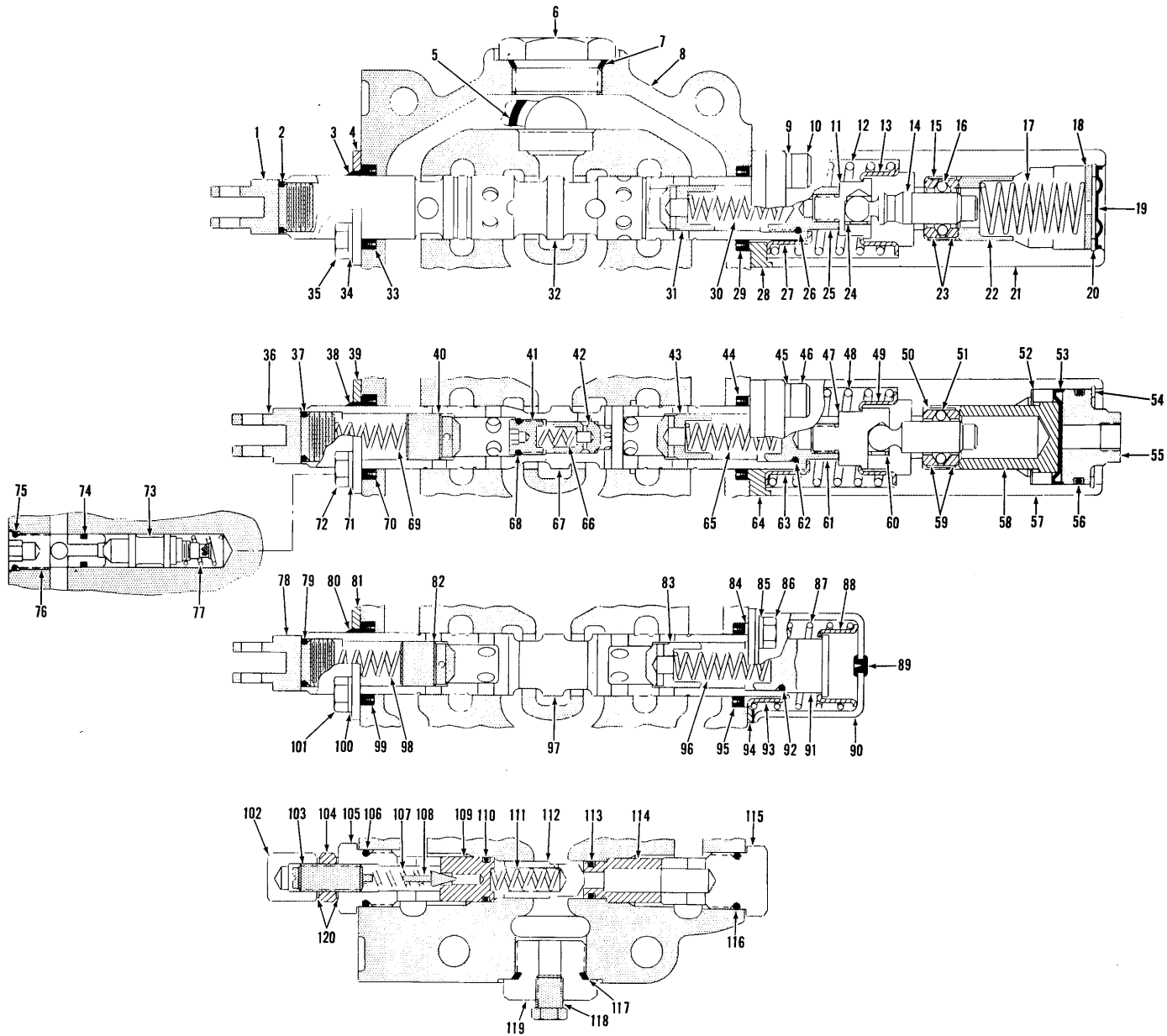
Item	Part No.	Description	Qty.
A	1548531	*CONTROL VALVE ASSY (Inc. 1 thru 120)-----	1
1	946360	EYE, Plunger-----	1
2	25K-30022	O-RING, Plunger Eye-----	1
3	946918	WIPER, Plunger Oil-----	1
4	980831	PLATE, Seal & Wiper Retainer-----	1
5	58K-222	O-RING, Valve Mounting-----	1
6	24K-11	PLUG, Pipe-----	1
7	91F-11	O-RING, Plug-----	1
8	-----	§HOUSING, Valve – See A-----	—
9	4E-06	LKWSHR, Cover to Housing-----	2
10	11G-620	SCREW, Cover to Housing-----	2
11	948719	SOCKET, Detent-----	1
12	945090	SPRING, Plunger Return-----	1
13	944878	RETAINER, Spring-----	1
14	948723	PLUNGER, Detent-----	1
15	948727	SLEEVE, Ball-----	1
16	948730	BALL-----	11
17	947852	SPRING, Detent-----	1
18	947848	PLUG, Detent-----	1
19	948202	DIAPHRAGM, Detent-----	1
20	666542	RING, Plug Retainer-----	1
21	948720	HOUSING, Detent-----	1
21A	16F-04	†PLUG, Detent-----	1
22	947842	RETAINER, Spring-----	1
23	947843	RETAINER, Bolt-----	2
24	948726	RING, Plunger Retainer-----	1
25	948732	CAP, Plunger-----	1
26	25K-30022	O-RING, Cap-----	1
27	945092	RETAINER, Spring-----	1
28	948717	PLATE, Seal Retainer-----	1
29	946583	SEAL, Plunger Oil-----	1
30	893293	SPRING, Check-----	1
31	944885	CHECK-----	1
32	-----	§ PLUNGER, Operating – See A-----	—
33	946583	SEAL, Plunger Oil-----	1
34	4E-06	LKWSHR, Plate to Housing-----	4
35	1C-612	BOLT, Plate to Housing-----	2
36	946360	EYE, Plunger-----	1
37	25K-30022	O-RING, Plunger Eye-----	1
38	946918	WIPER, Plunger Oil-----	1
39	980831	PLATE, Wiper & Seal Retainer-----	1
40	944885	CHECK-----	1
41	946555	CAP, Check-----	1
42	945590	CHECK-----	1
43	944885	CHECK-----	1
44	946583	SEAL, Plunger Oil-----	1
45	4E-06	LKWSHR, Cover to Housing-----	2
46	11G-620	SCREW, Cover to Housing-----	2
47	948718	SOCKET, Detent-----	1
48	945090	SPRING, Plunger Return-----	1
49	944878	RETAINER, Spring-----	1
50	948727	SLEEVE, Ball-----	1
51	948730	BALL-----	11
52	948728	SPACER, Detent-----	1
53	948731	DIAPHRAGM-----	1
54	948729	RING, Plug Retainer-----	1
55	948724	PLUG, Detent-----	1
56	25K-40114	O-RING, Plug-----	1
57	948721	HOUSING, Detent-----	1
58	948725	PISTON, Detent-----	1

§Not Sold Separately

†Not Illustrated

*NOTE: For replacement use 1513174 Valve Assy.

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



TS-10715



CONSTRUCTION MACHINERY DIVISION

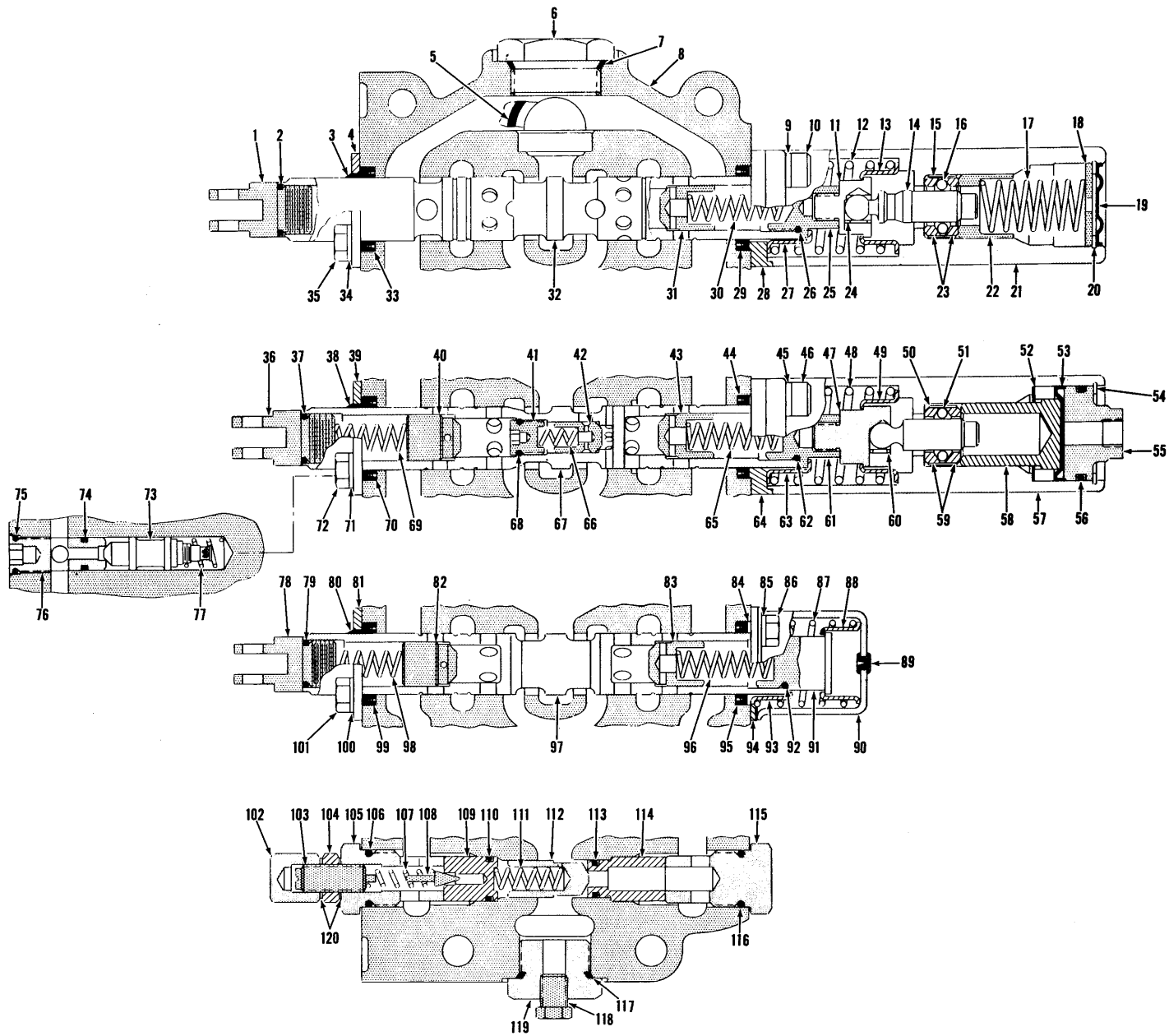


CONTROL VALVE ASSEMBLY – THREE SPOOL (Cont'd.)
(Service Only)

Table with 4 columns: Item, Part No., Description, Qty. Lists various components like RETAINER, RING, CAP, O-RING, SPRING, SEAL, etc. with their respective quantities.

§Not Sold Separately

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



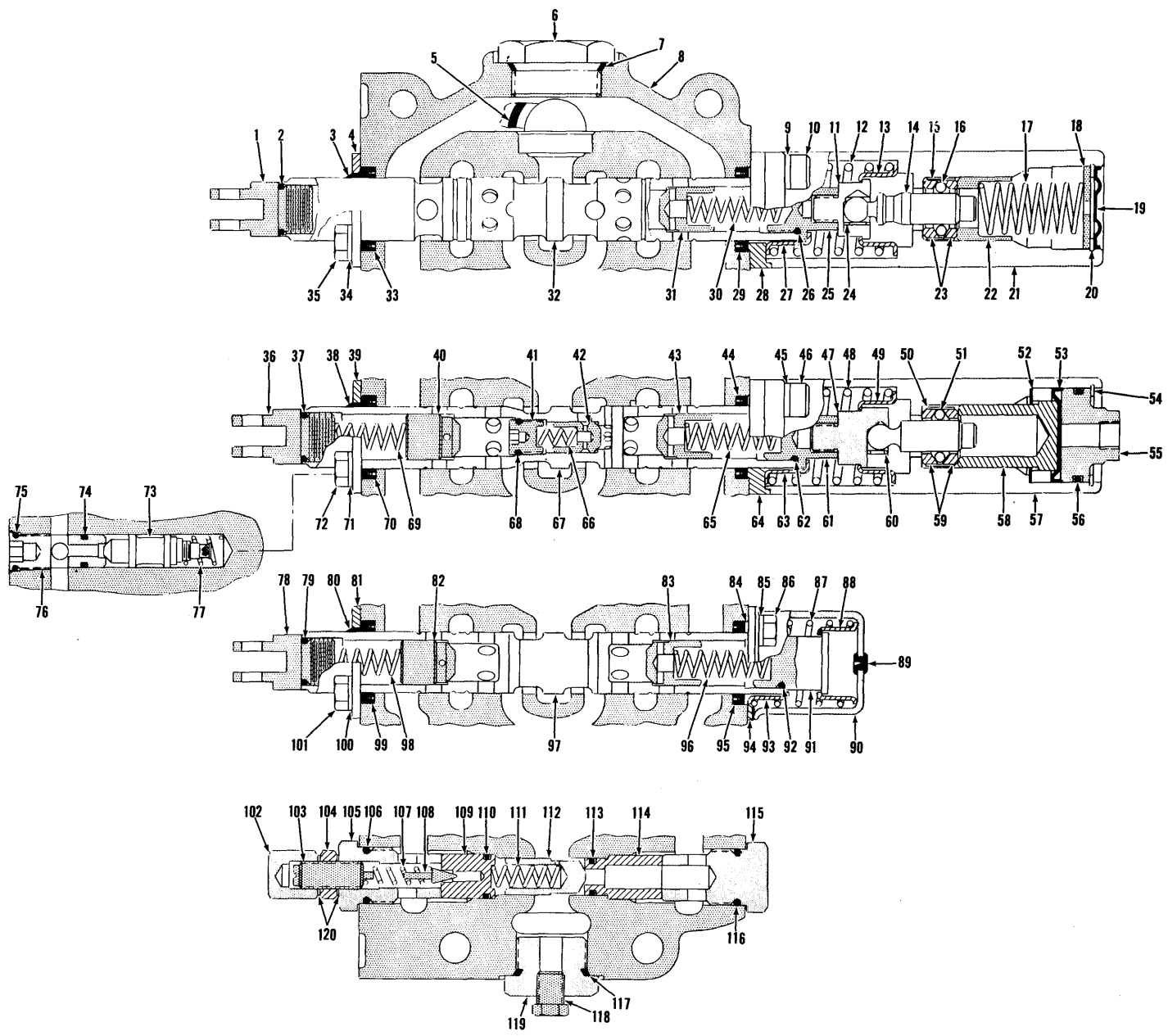
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**CONTROL VALVE ASSEMBLY – THREE SPOOL
(SERVICE)**

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

†Not Illustrated
§Not Sold Separately

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



66H.1

PM 2252
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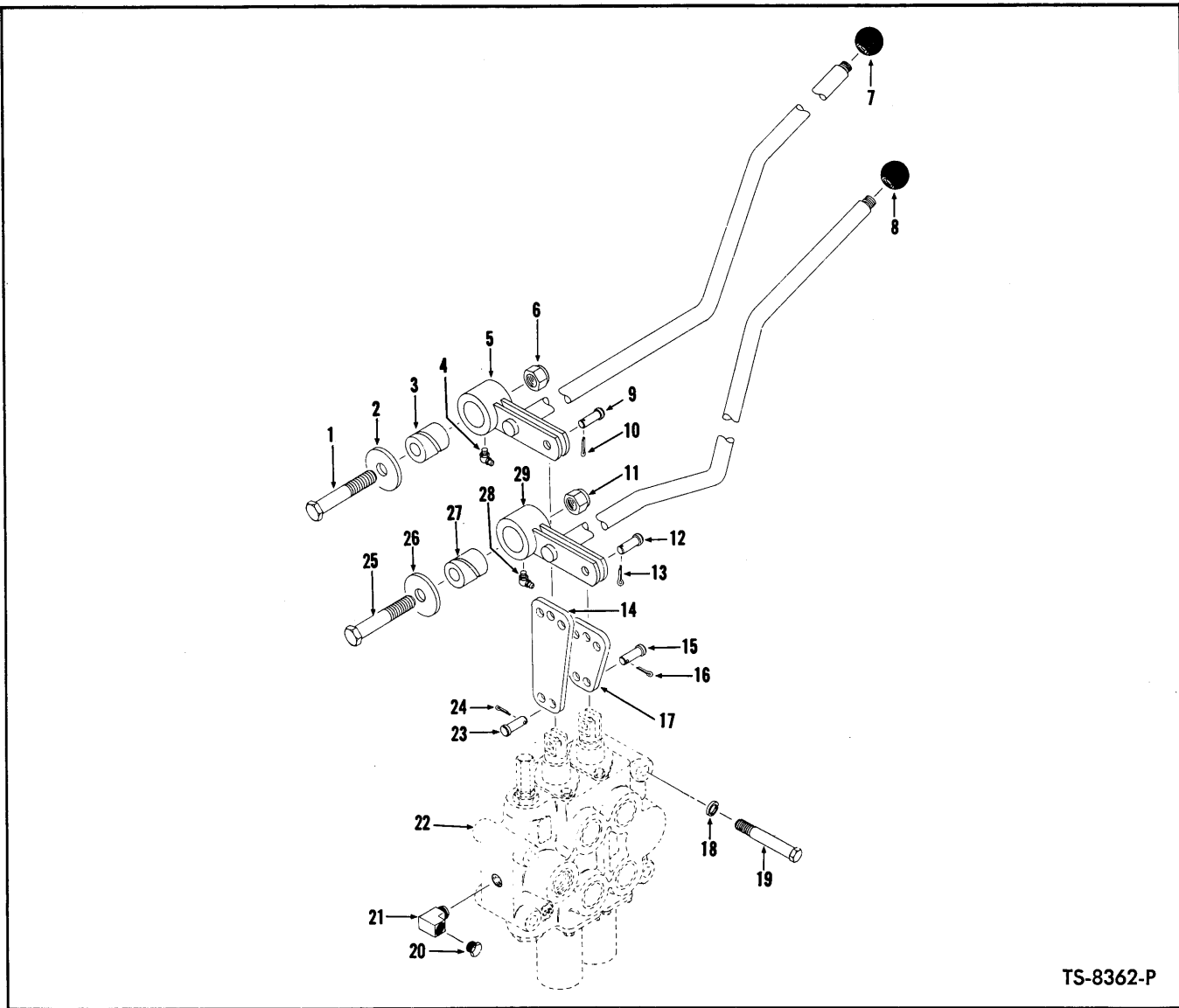
TS-10715

CONTROL VALVE ASSEMBLY – THREE SPOOL

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

§Not Sold Separately
†Not Illustrated

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

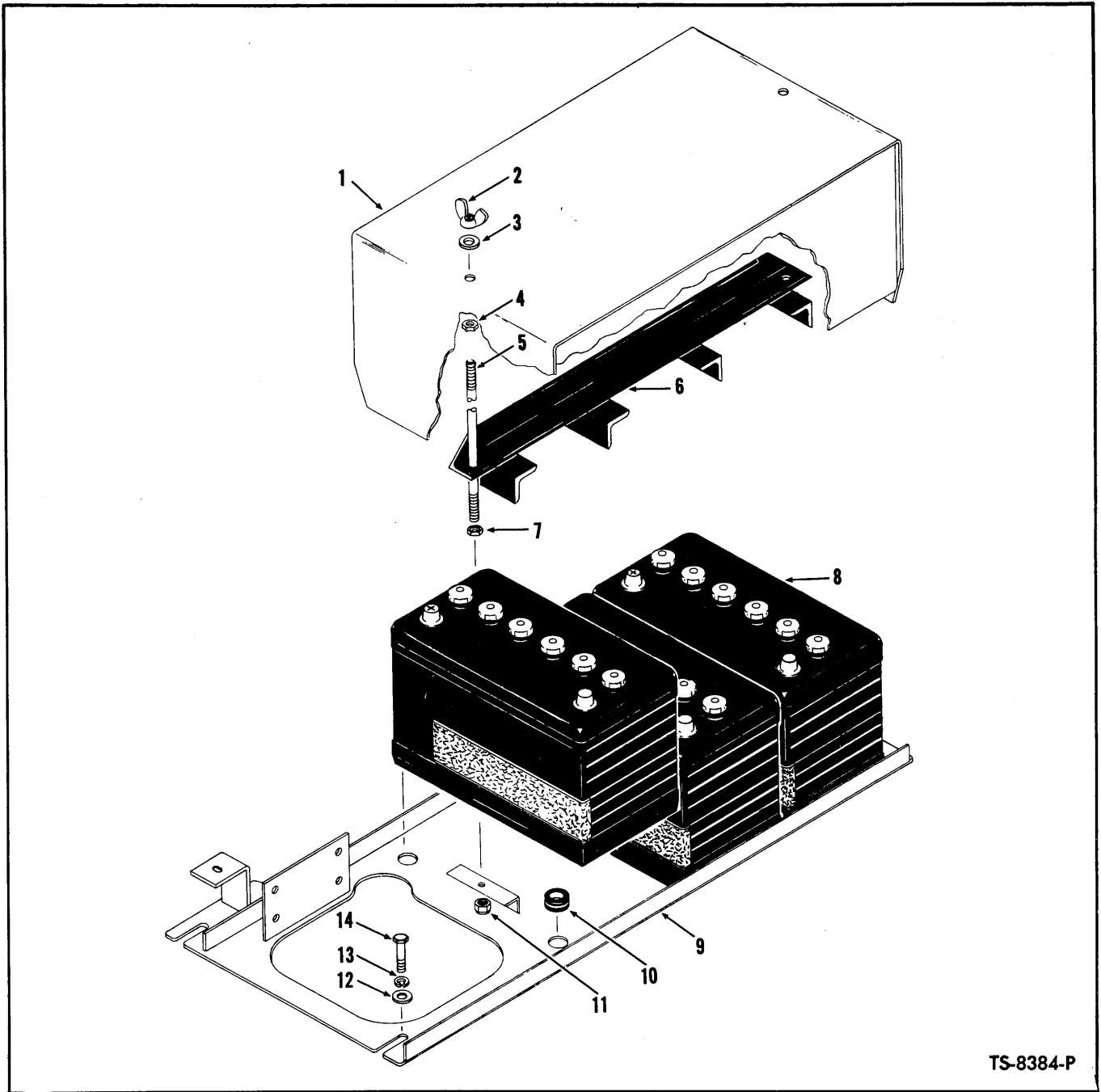


TS-8362-P

VALVE CONTROL LEVERS AND LINKAGE

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	18C-1252	BOLT, Valve Lever Mounting	1	16	1F-414	COTTER, Pin Retaining	1
2	585972	WASHER, Valve Lever Mounting	1	17	1526016	LINK, Valve Control — Boom	1
3	570676	SLEEVE, Valve Lever Mounting	1	18	4E-08	LKWSHR, Valve to Reservoir	3
4	12H-15	FITTING, Lever Grease	1	19	18C-860	BOLT, Valve to Reservoir	3
5	1526022	LEVER ASSY, Bucket	1	20	40K-04	PLUG, Elbow	1
6	18D-12	NUT, Valve Lever Mounting	1	21	29F-1	ELBOW, Control Valve	1
7	565389	KNOB, Bucket Lever	1	22	————	CONTROL VALVE — See Index	—
8	565389	KNOB, Boom Lever	1	23	4F-06106	PIN, Link to Valve	1
9	4F-06106	PIN, Lever to Link	1	24	1F-414	COTTER, Pin Retaining	1
10	1F-414	COTTER, Pin Retaining	1	25	18C-1252	BOLT, Valve Lever Mounting	1
11	18D-12	NUT, Valve Lever Mounting	1	26	585972	WASHER, Valve Lever Mounting	1
12	4F-06106	PIN, Lever to Link	1	27	570676	SLEEVE, Valve Lever Mounting	1
13	1F-414	COTTER, Pin Retaining	1	28	12H-15	FITTING, Lever Grease	1
14	1526016	LINK, Valve Control — Bucket	1	29	1526020	LEVER ASSY, Boom	1
15	4F-06106	PIN, Link to Valve	1				

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

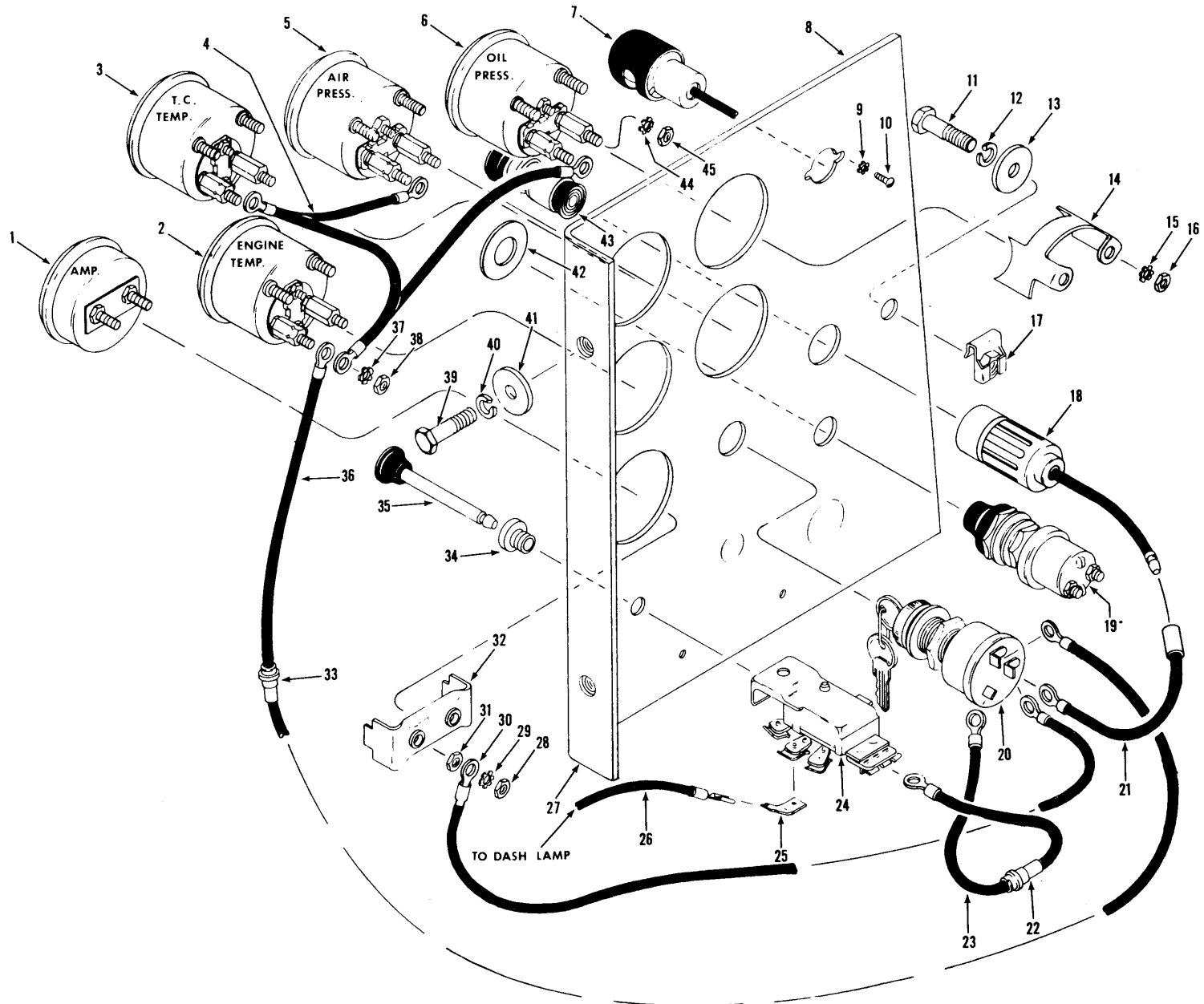


TS-8384-P

BATTERIES, BATTERY BOX AND HOLD DOWN

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
1	1526004	COVER ASSY, Battery Box	1	8	1800613	BATTERY	3
2	16D-05	WING NUT, Cover Retaining	2	9	1528084	BOX ASSY, Battery	1
3	25E-16	WASHER	2	10	565129	GROMMET, Battery Cable	2
4	17D-2	NUT, Stud	2	11	7D-05	NUT, Stud — Lower	2
5	1526002	STUD, Hold Down	2	12	25E-18	WASHER, Battery Box Mounting	4
6	563526	HOLD DOWN, Battery	1	13	4E-06	LKWSHR, Battery Box Mounting	4
7	17D-2	NUT, Stud	2	14	18C-618	BOLT, Battery Box, Mounting	4

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



INSTRUMENT PANEL

TS-8366-P

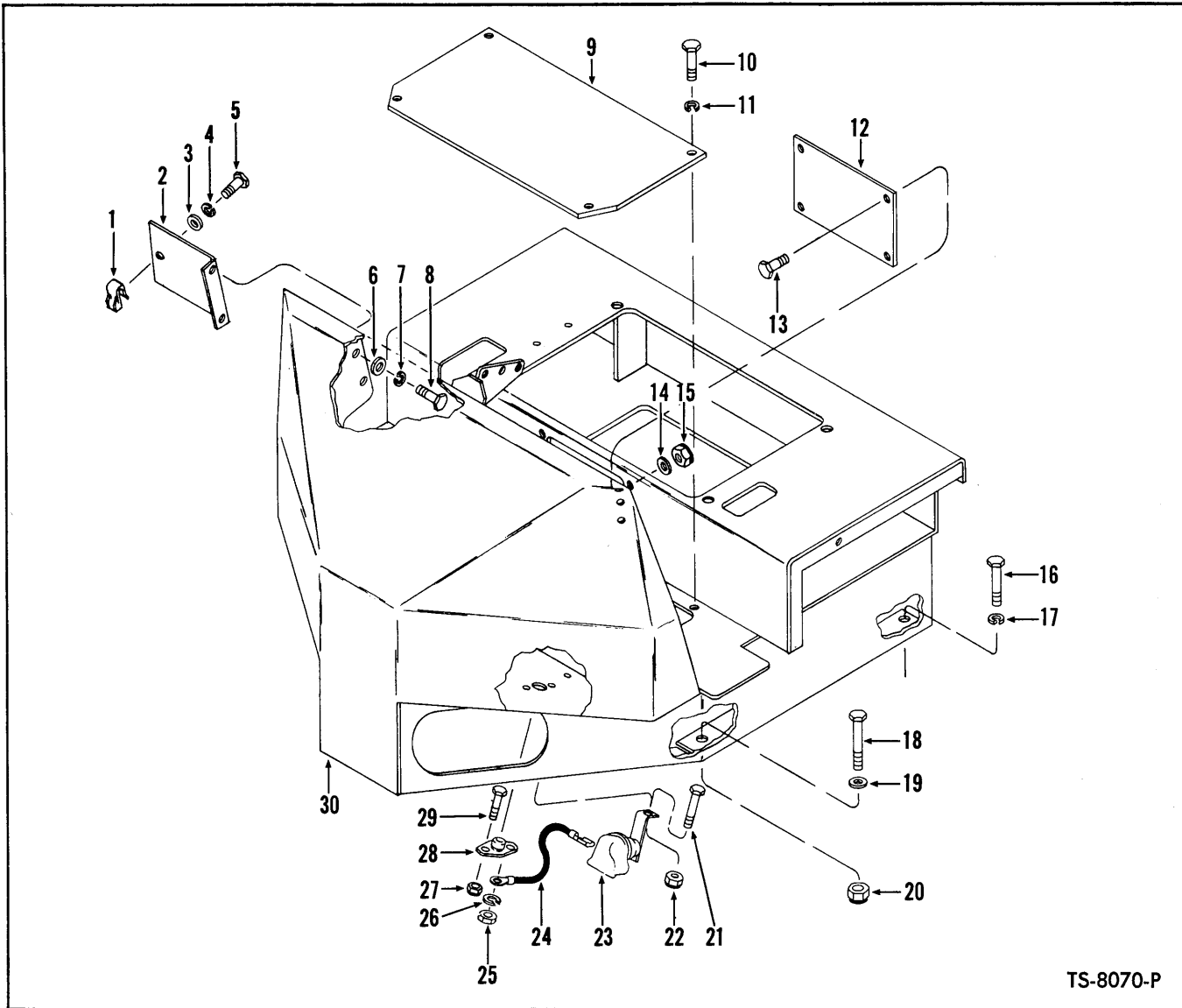
INSTRUMENT PANEL ASSEMBLY

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

§Not Sold Separately
†Not Illustrated

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

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

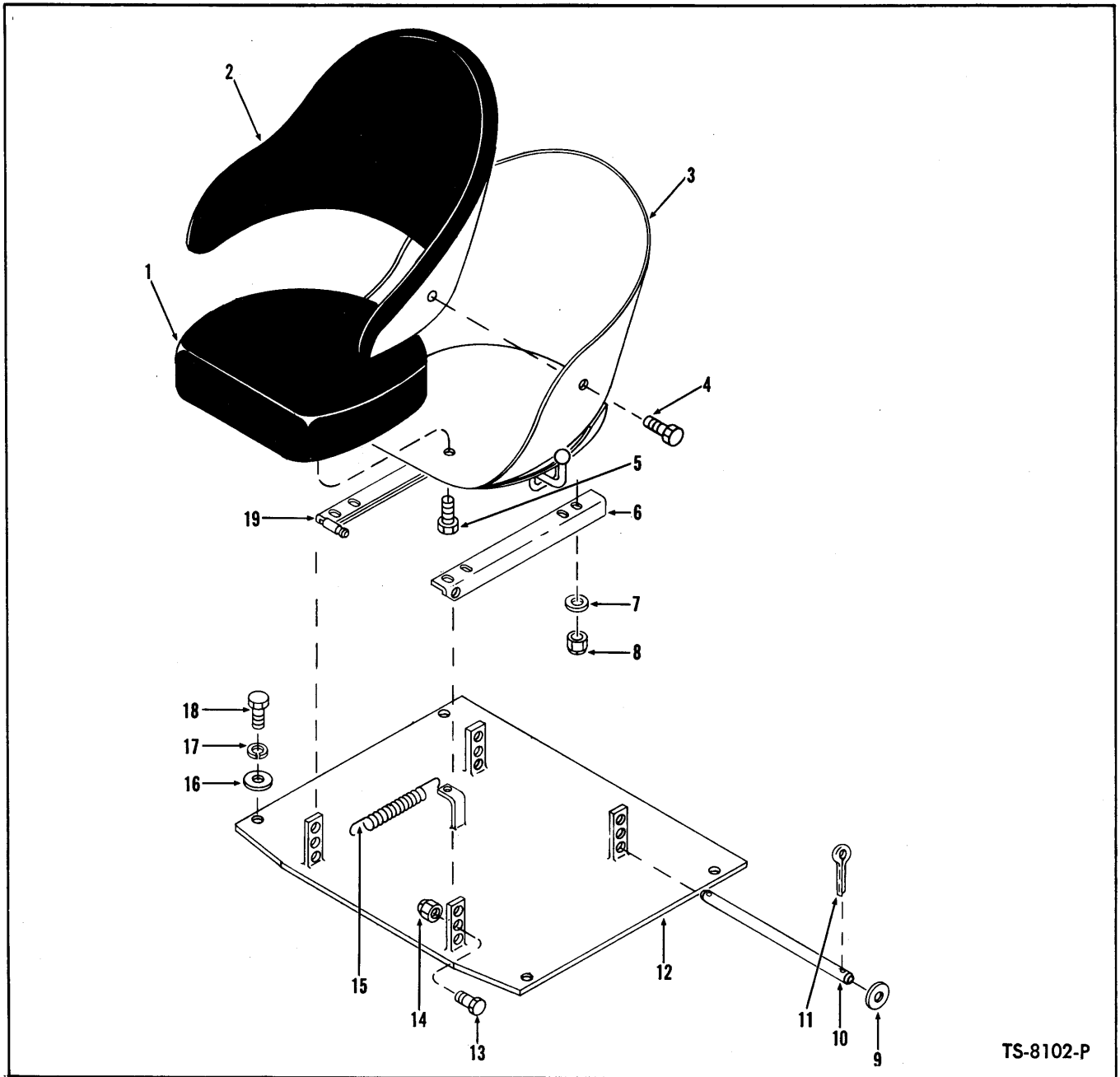


TS-8070-P

COCKPIT, HORN AND HORN SWITCH

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

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



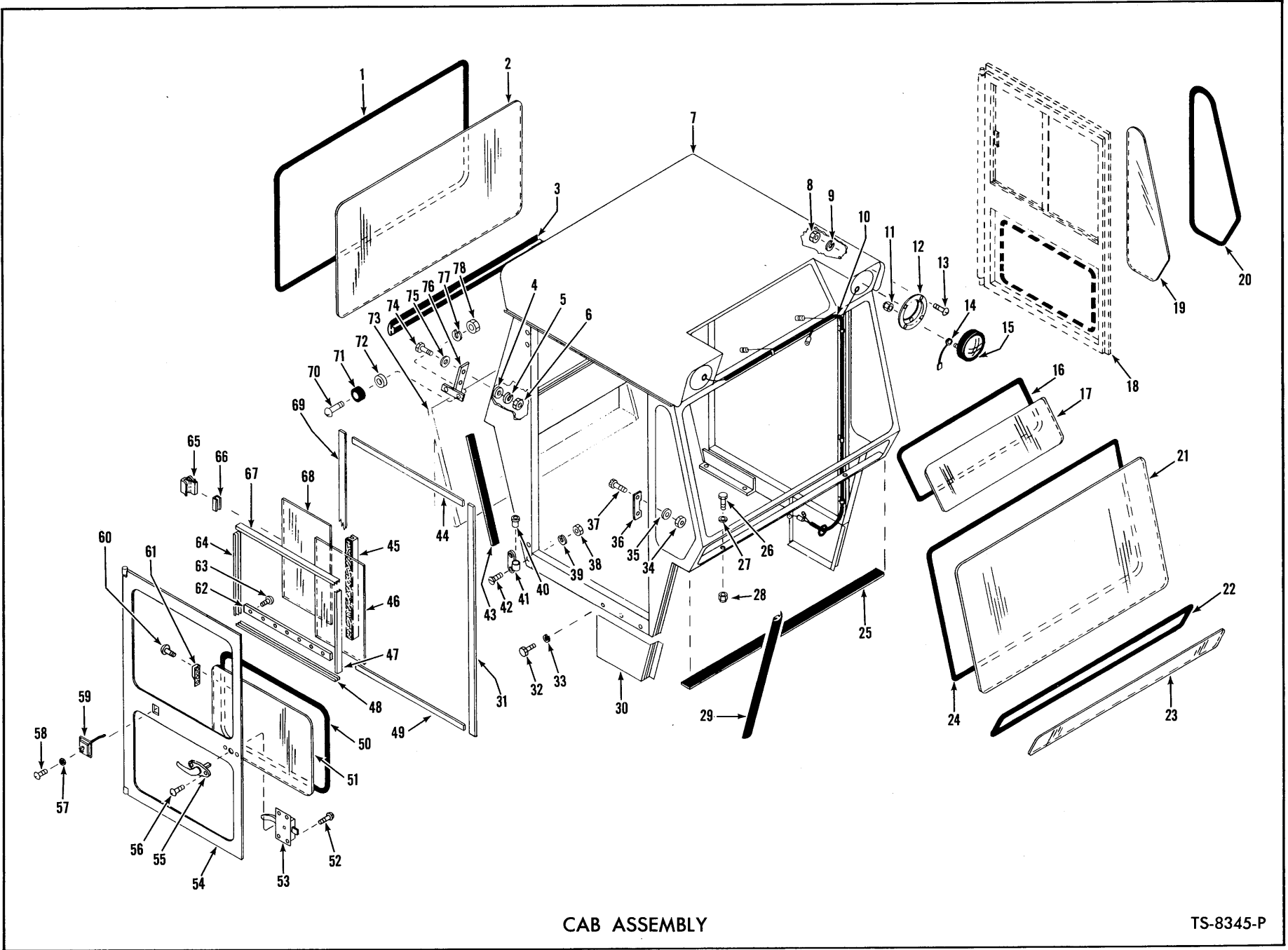
TS-8102-P

SEAT AND SUPPORT GROUP

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1507663	SEAT ASSY, Bucket (Inc. 1 thru 5)	1	9	25E-22	WASHER, Seat Mounting Bar	2
1	948144	CUSHION, Seat	1	10	557458	BAR, Seat Mounting	1
2	948143	CUSHION, Back Rest	1	11	1F-420	COTTER, Seat Mounting Bar	2
3	944982	BUCKET	1	12	1533590	SUPPORT, Seat	1
4	1C-610	BOLT, Cushion Mounting	5	13	18C-824	BOLT, Seat Pivot	2
4A	103293	†WASHER, Cushion Mounting	5	14	18D-08	NUT, Seat Pivot	2
5	1C-610	BOLT, Cushion Mounting	2	15	550301	SPRING	1
5A	103293	†WASHER, Cushion Mounting	2	16	619029	WASHER, Seat Support to Frame	4
6	558779	ANGLE, Left Hand	1	17	4E-08	LKWSHR, Seat Support to Frame	4
7	25E-15	WASHER, Seat Mounting	4	18	17C-820	BOLT, Seat Support to Frame	4
8	18D-05	NUT, Seat Mounting	4	19	558777	ANGLE, Right Hand	1

†Not Illustrated

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



CAB ASSEMBLY

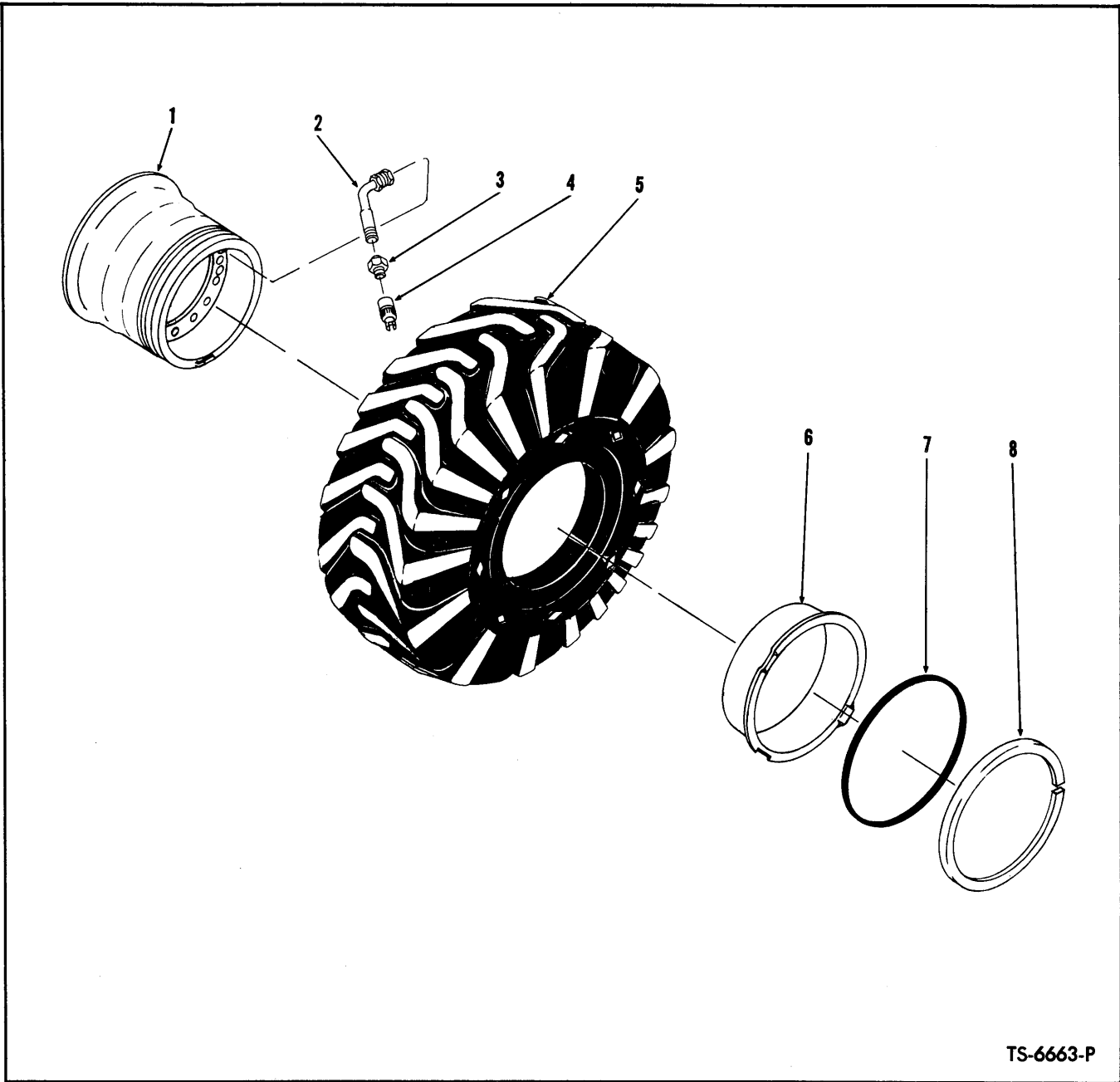
TS-8345-P

CAB ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1535656	CAB ASSY (Inc. 1 thru 9, 12, 13, 16 thru 72, 74 thru 78)	1	41	945555	HINGE, Cab Door - R.H. Upper & L.H. Lower	2
1	569694	MOULDING, Rear Window	11 ft.	41A	945554	†HINGE, Cab Door - L.H. Upper & R.H. Lower	2
2	-----	§GLASS PATTERN, Rear Window (See 79)	-----	42	76G-512	SCREW, Cab Door Hinge Attaching.	8
3	1521846	WEATHERSTRIP, Cab - Rear	5 ft.	43	943623	WEATHERSTRIP, Cab Rear	3 ft.
4	25E-13	WASHER, Door Latch Strike Attaching	4	44	943623	WEATHERSTRIP, Door Upper	5 ft.
5	4E-04	LKWSHR, Door Latch Strike Attaching	4	45	139149	CHANNEL, Glass Divider	4 ft.
6	1D-04	NUT, Door Latch Strike Attaching	4	46	-----	§GLASS PATTERN, Sliding Door (See 79)	-----
7	-----	§CAB (See "A")	-----	47	569696	CHANNEL, Side Glass Run - Front	4 ft.
8	12D-10	NUT, Head Lamp Adapter Attaching	8	48	569696	CHANNEL, Side Glass Run - Lower	4 ft.
9	17E-10	LKWSHR, Head Lamp Adapter Attaching	8	49	943623	WEATHERSTRIP, Door Lower	5 ft.
10	1544318	WIRING HARNESS, Cab	1	50	569694	MOULDING, Door Glass - Lower	12 ft.
10A	541988	†CLIP, Wiring Harness	4	51	-----	§GLASS PATTERN, Door Glass Lower (See 79)	-----
10B	515069	†GROMMET, Cab Wiring Harness	1	52	66G-1008	SCREW, Door Lock to Door	8
11	50D-10	NUT, Head Lamp Attaching	6	53	942874	LOCK, Door - R.H.	1
12	568675	ADAPTER, Head Lamp	2	53A	138249	†LOCK, Door - L.H.	1
13	3G-1012	SCREW, Head Lamp Adapter	8	54	568669	DOOR - R.H.	1
14	540882	WIRE, Head Lamp Ground	2	54A	568670	†DOOR - L.H.	1
15	582057	HEAD LAMP ASSY - 24 VOLT (Inc. 15A & 15B)	2	55	1525710	HANDLE, Door	2
15A	551244	†SEALED UNIT, Head Lamp	2	56	32G-1008	SCREW, Handle to Door	4
15B	944977	†RETAINER, Head Lamp	2	57	17E-10	LKWSHR, Door Catch Attaching	8
16	569694	MOULDING, Roof Glass	6 ft.	58	79G-1010	SCREW, Door Catch Attaching	8
17	-----	§GLASS PATTERN, Roof (See 79)	-----	59	560650	CATCH, Door	2
18	-----	DOOR (See 54)	-----	60	5G-606	SCREW & LKWSHR ASSY, Window Lock Strike Attaching	8
19	-----	§GLASS PATTERN, Quarter Window (See 79)	-----	61	557465	STRIKE, Window Lock	4
20	569694	MOULDING, Quarter Window	10 ft.	62	945577	RETAINER, Glass Channel	2
21	-----	§GLASS PATTERN, Upper Windshield (See 79)	-----	63	63G-1008	SCREW, Retainer to Door	14
22	569694	MOULDING, Lower Windshield	10 ft.	64	569696	CHANNEL, Side Glass Run (Rear)	4 ft.
23	-----	§GLASS PATTERN, Lower Windshield (See 79)	-----	65	589571	LOCK, Sliding Glass	4
24	569694	MOULDING, Upper Windshield	12 ft.	66	589572	RUBBER, Lock to Glass Mounting	1 ft.
25	1521844	WEATHERSTRIP, Cab Front	4 ft.	67	569696	CHANNEL, Side Glass Run (Upper)	4 ft.
26	18C-628	BOLT, Cab Attaching (Front)	2	68	-----	§GLASS PATTERN, Sliding Door (See 79)	-----
26A	18C-624	†BOLT, Cab Attaching (Side)	4	69	943623	WEATHERSTRIP, Door - Rear	7 ft.
27	616783	WASHER, Cab Attaching	6	70	3G-1016	SCREW, Bumper to Latch Strike	2
28	18D-06	NUT, Cab Attaching	6	71	560651	BUMPER, Latch Strike	2
29	569692	WEATHERSTRIP, Cab Front	5 ft.	72	874767	SPACER, Bumper Mounting	2
30	568686	PANEL, Lower Quarter - R.H.	1	73	1533903	PANEL, Cab - Rear	1
30A	568687	†PANEL, Lower Quarter - L.H.	1	73A	18C-616	†BOLT, Panel Attaching	11
31	943623	WEATHERSTRIP, Door - Front	7 ft.	73B	25E-17	†WASHER, Panel Attaching	11
32	17C-410	BOLT, Quarter Panel to Cab	6	73C	18D-06	†NUT, Panel Attaching	11
33	4E-04	LKWSHR, Quarter Panel to Cab	6	74	17C-416	BOLT, Latch Strike Attaching	4
34	1D-04	NUT, Door Lock Strike Attaching	4	75	25E-13	WASHER, Latch Strike Attaching	4
35	4E-04	LKWSHR, Door Lock Strike Attaching	4	76	574992	STRIKE, Door Latch	2
36	945576	STRIKE, Door Lock	2	77	17E-10	LKWSHR, Bumper to Strike Attaching	2
37	47G-412	SCREW, Door Lock Strike Attaching	4	78	12D-10	NUT, Bumper to Strike Attaching	2
38	1D-05	NUT, Cab Door Hinge Attaching	8	79	945903	†GLASS PATTERN KIT (Inc. 2, 17, 19, 21, 23, 46, 51 & 68)	1
39	4E-05	LKWSHR, Cab Door Hinge Attaching	8				
40	568700	BUSHING, Cab Door Hinge	4				

§Not Sold Separately
†Not Illustrated

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



TS-6663-P

WHEEL AND TIRE DATA

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

§Not Sold Separately

†Not Illustrated

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

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

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

DECALS AND NAME PLATES

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

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

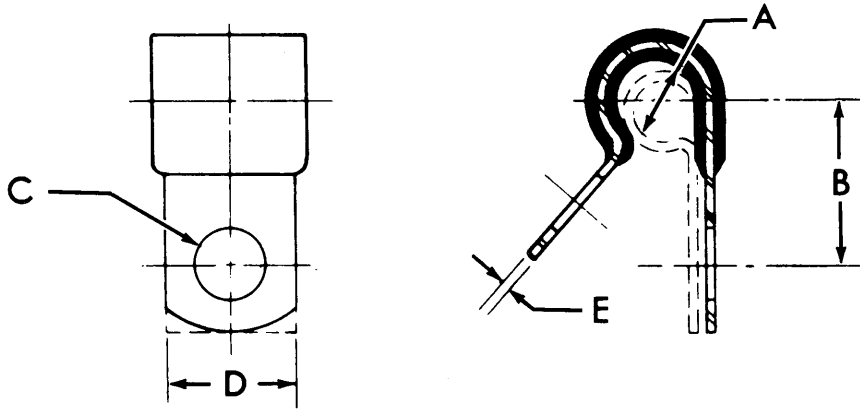
NOTES

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

WIRING, PIPE AND HOSE CLIPS

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

INSULATED CLIP



TS-5008-P

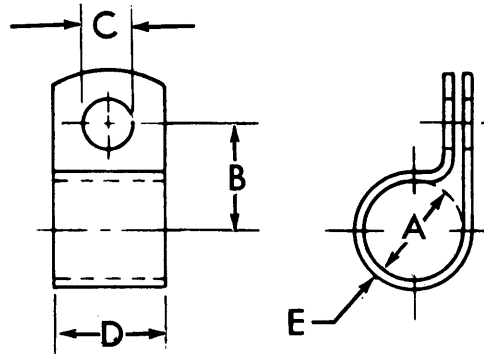
Item No.	PART NUMBER	A	B	C	D	E	F
1	30H-14	1/4	1 7/32	3/32	1/2	.032	-----
2	30H-16	1/4	2 1/32	1 3/32	3/4	.032	-----
3	30H-18	5/16	9/16	3/32	1/2	.032	-----
4	30H-20	5/16	1 1/16	1 3/32	3/4	.032	-----
5	30H-23	3/8	2 3/32	1 3/32	3/4	.032	-----
6	30H-31	1/2	2 5/32	1 3/32	3/4	.048	-----
7	30H-38	5/8	2 7/32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

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

WIRING, PIPE AND HOSE CLIPS

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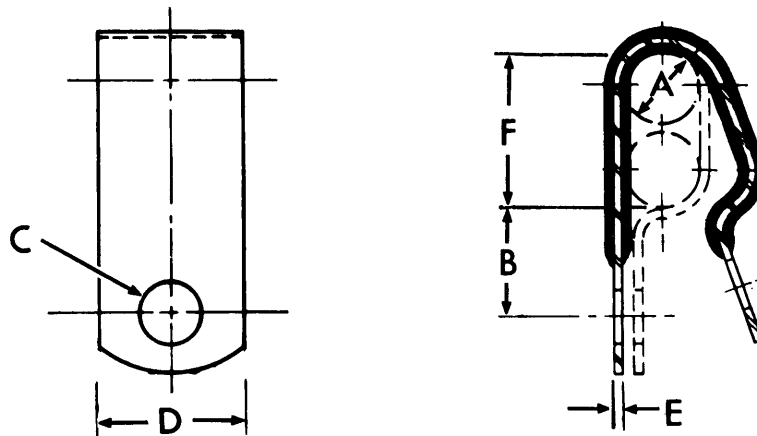
CLOSED CLIP



TS-5009-P

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

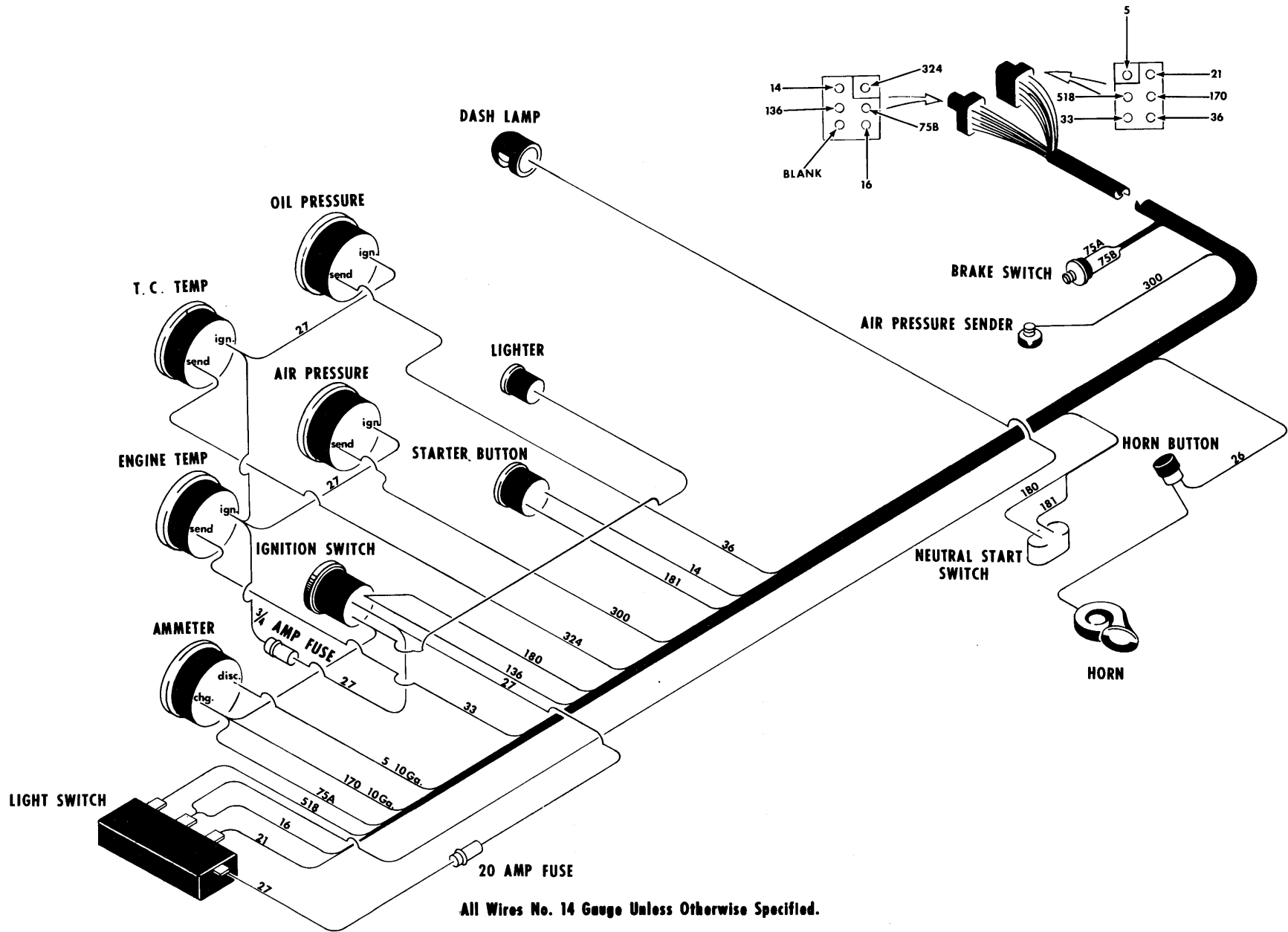
INSULATED CLIP



TS-6372-P

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

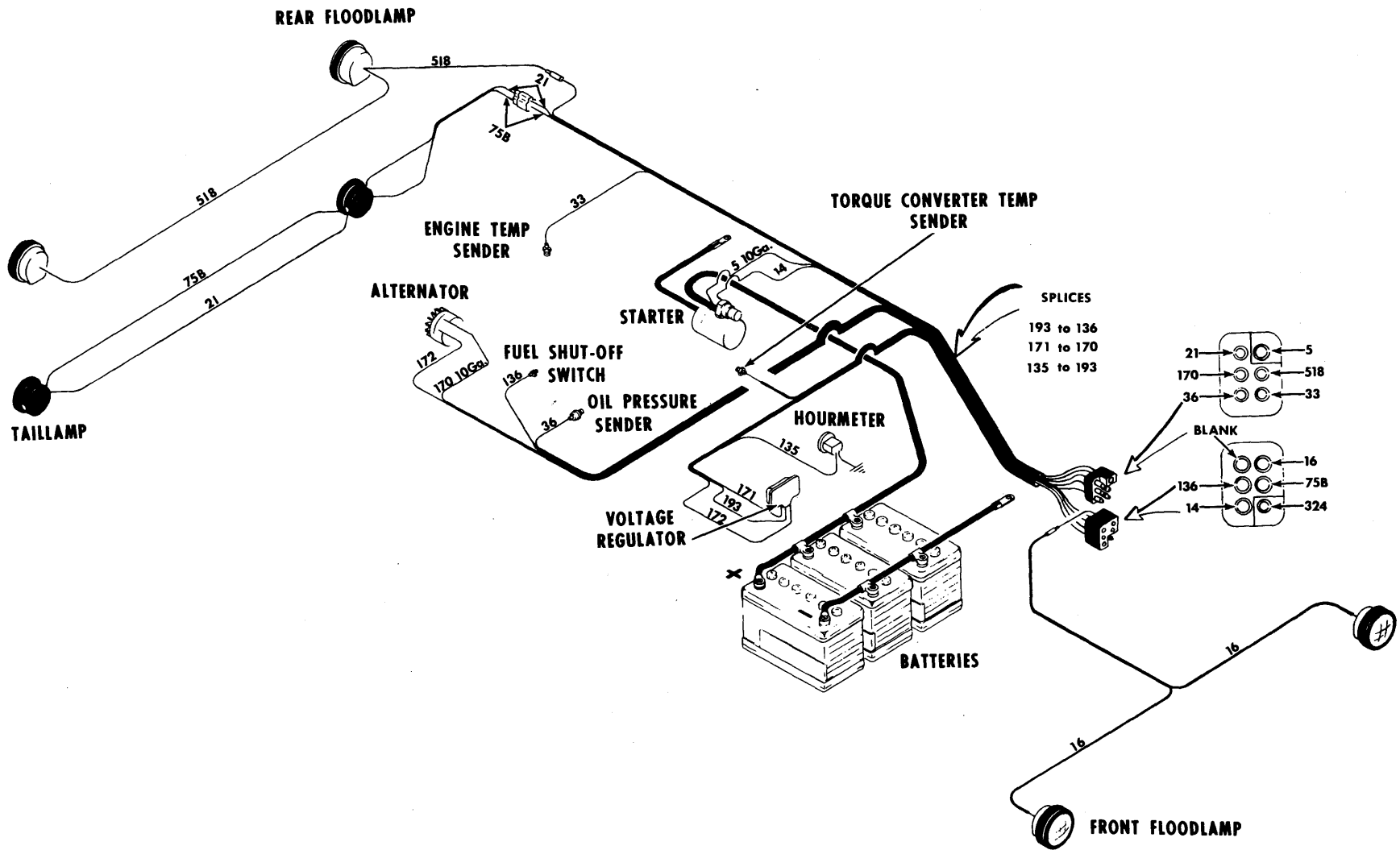
WHEN ORDERING PARTS, ALWAYS STATE MODEL AND SERIAL NO. OF MACHINE



All Wires No. 14 Gauge Unless Otherwise Specified.

WIRING DIAGRAM — COCKPIT

TS-8981-P



All Wires No. 14 Gauge Unless Otherwise Specified.

WIRING DIAGRAM — ENGINE

TS-8382-P

WIRING

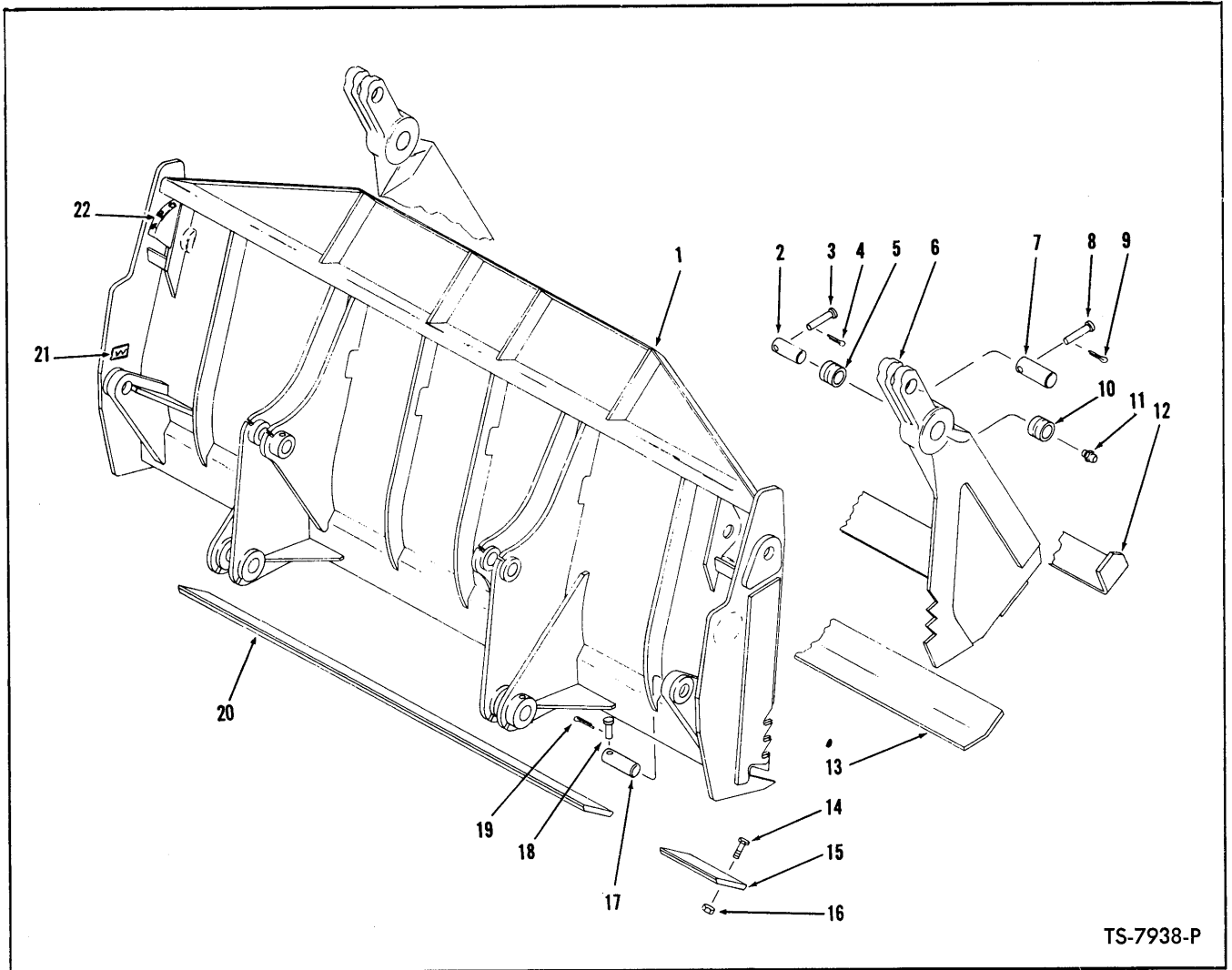
Item No.	Part No.	Description	No. Req'd.
1	1522394	HARNESS, Engine Wiring	1
2	1544318	HARNESS, Cab	1
3	1522307	HARNESS, Cockpit	1
4	1535404	HARNESS, Flood Lights — Front	1
5	562010	HARNESS, Flood Lights — Rear	1
6	562008	HARNESS, Tail Light	1
7	558673	HARNESS, Instrument	1
8	558960	WIRE, Hourmeter Ground	1
9	565430	WIRE ASSY, Lighter to Ignition Switch	1
10	553405	WIRE ASSY, Ammeter to Ignition Switch	1
11	572373	WIRE ASSY, Horn to Horn Button	1
12	552946	WIRE & FUSE ASSY, Light Switch to Ignition Switch	1
13	573587	WIRE & FUSE ASSY, Engine Temperature to Ignition Switch	1

BATTERY CABLES

Item No.	Part No.	Description	No. Req'd.
1	1531820	CABLE, Battery to Ground	1
2	532549	CABLE, Starter to Ground	1
3	1525562	CABLE, Battery to Starter	1

NOTES

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



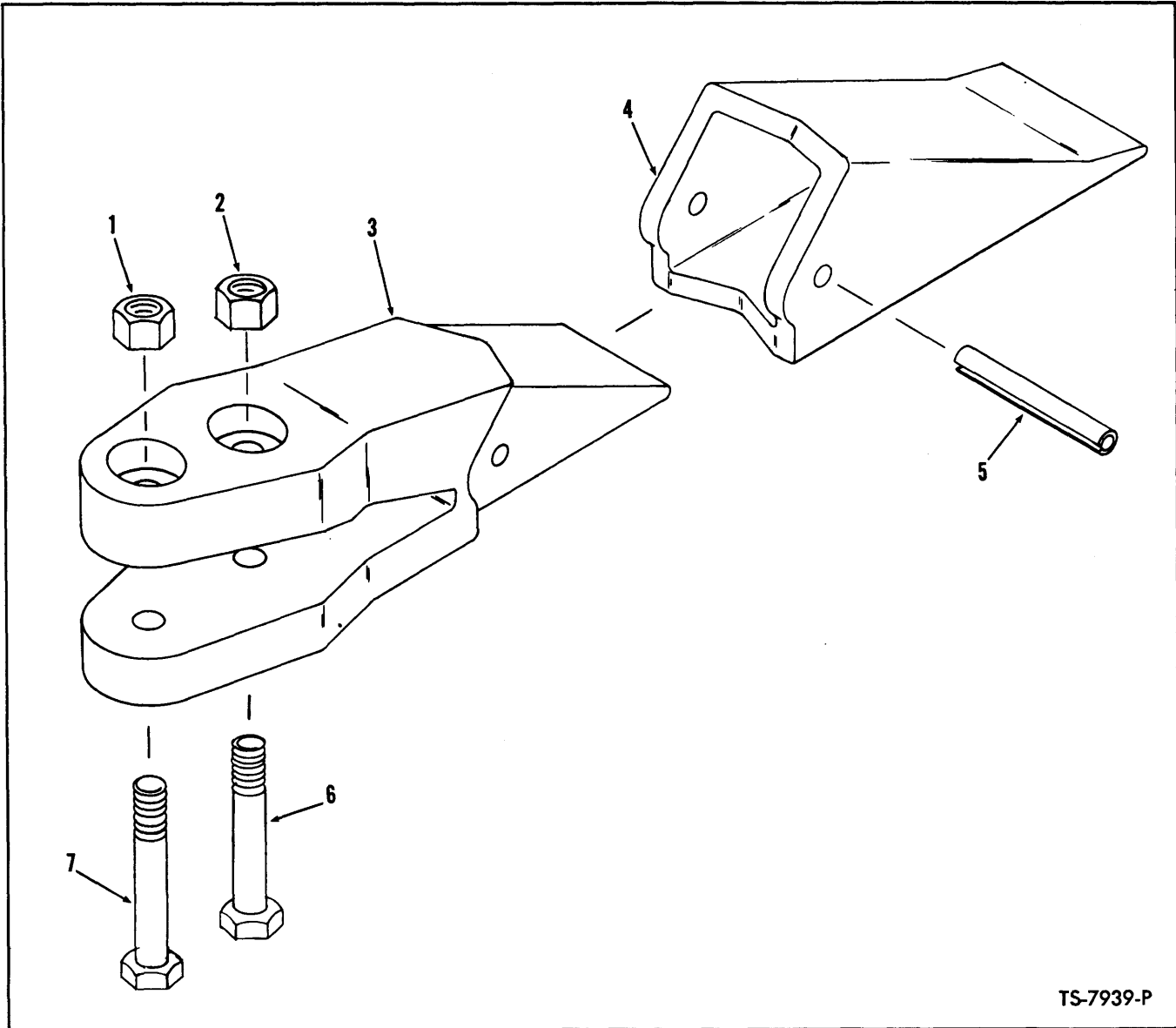
TS-7938-P

DROTT (4 in 1) BUCKET ASSEMBLY

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd.
A	1506560	BUCKET ASSY (Inc. 1 thru 24 & all items listed on pages 3, 4, 5) -----	1	11	10H-25	FITTING, Grease -----	2
1	1533396	BUCKET BACK ASSY (Inc. 14 thru 16, 20) -----	1	12	1533390	CUTTING EDGE — Front, Bucket Front	1
2	3677351	PIN, Bucket Front to Bucket Back -----	2	13	1533386	CUTTING EDGE — Rear, Bucket Front	1
3	1534323	PIN, Clevis -----	2	14	513603	BOLT, Plow (Inc. 16) -----	19
4	1F-416	COTTER -----	2	15	1533344	CORNER BIT, Bucket Back -----	2
5	1533356	BUSHING, Bucket Front -----	2	16	1D-12	NUT, Plow Bolt -----	19
6	1533397	BUCKET FRONT ASSY (Inc. 5, 6A, 10, 12, 13) -----	1	17	1533343	PIN, Cylinder to Bucket Back -----	2
6A	1533378	HINGE EAR -----	2	18	1534322	PIN, Clevis -----	2
7	1533352	PIN, Cylinder to Bucket Front -----	2	19	1F-416	COTTER -----	2
8	1534323	PIN, Clevis -----	2	20	1533391	CUTTING EDGE, Bucket Back -----	1
9	1F-416	COTTER -----	2	21	1533342	DECAL, Clean -----	2
10	1533356	BUSHING, Bucket Front -----	2	22	1533388	DECAL, Clam Opening -----	1
				23	1533395	†DECAL, Bucket Cylinder -----	1
				24	1506559	†INDICATOR, Bucket Cylinder -----	1

†Not Illustrated

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

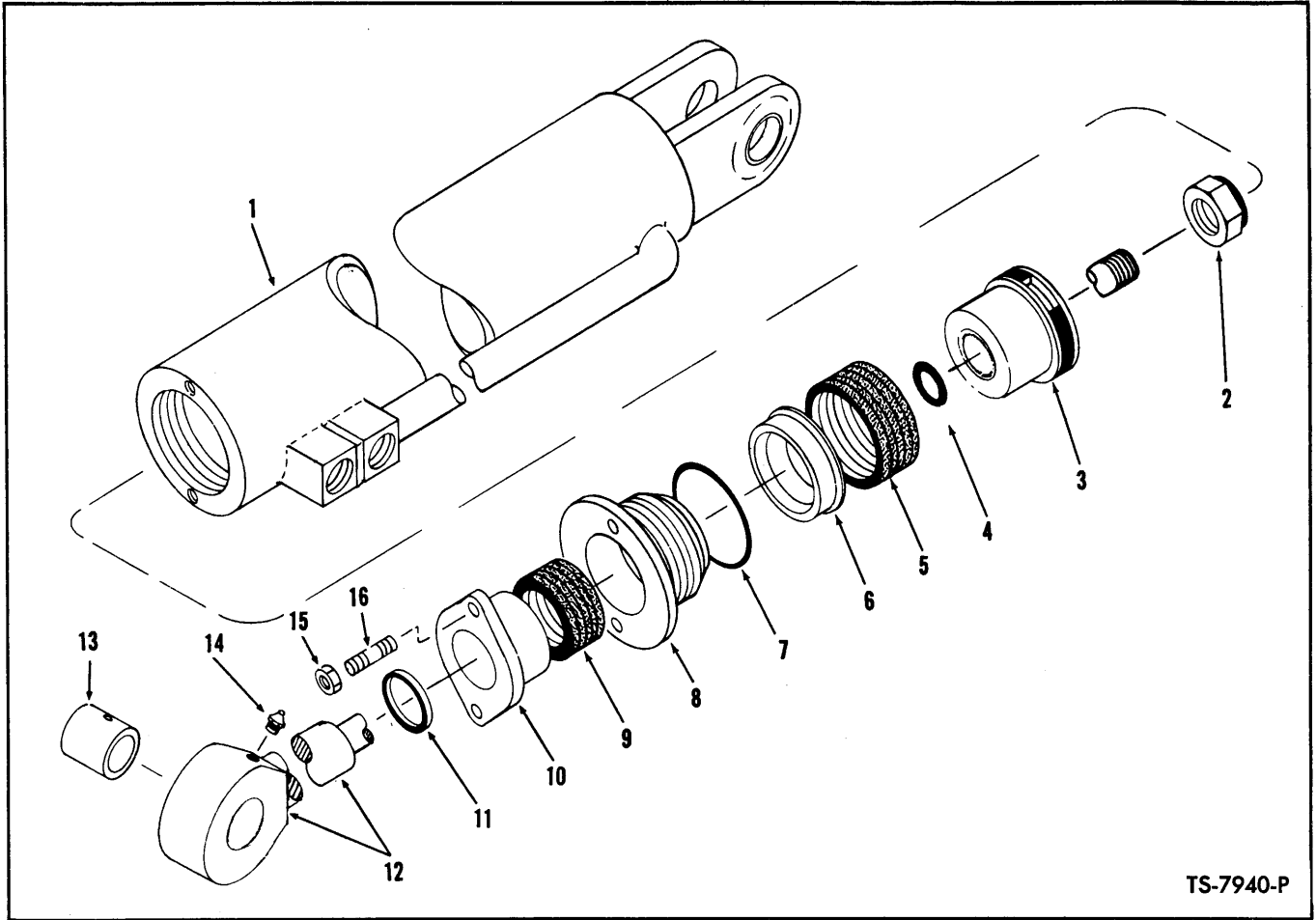


TS-7939-P

BUCKET TOOTH ASSEMBLY

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

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



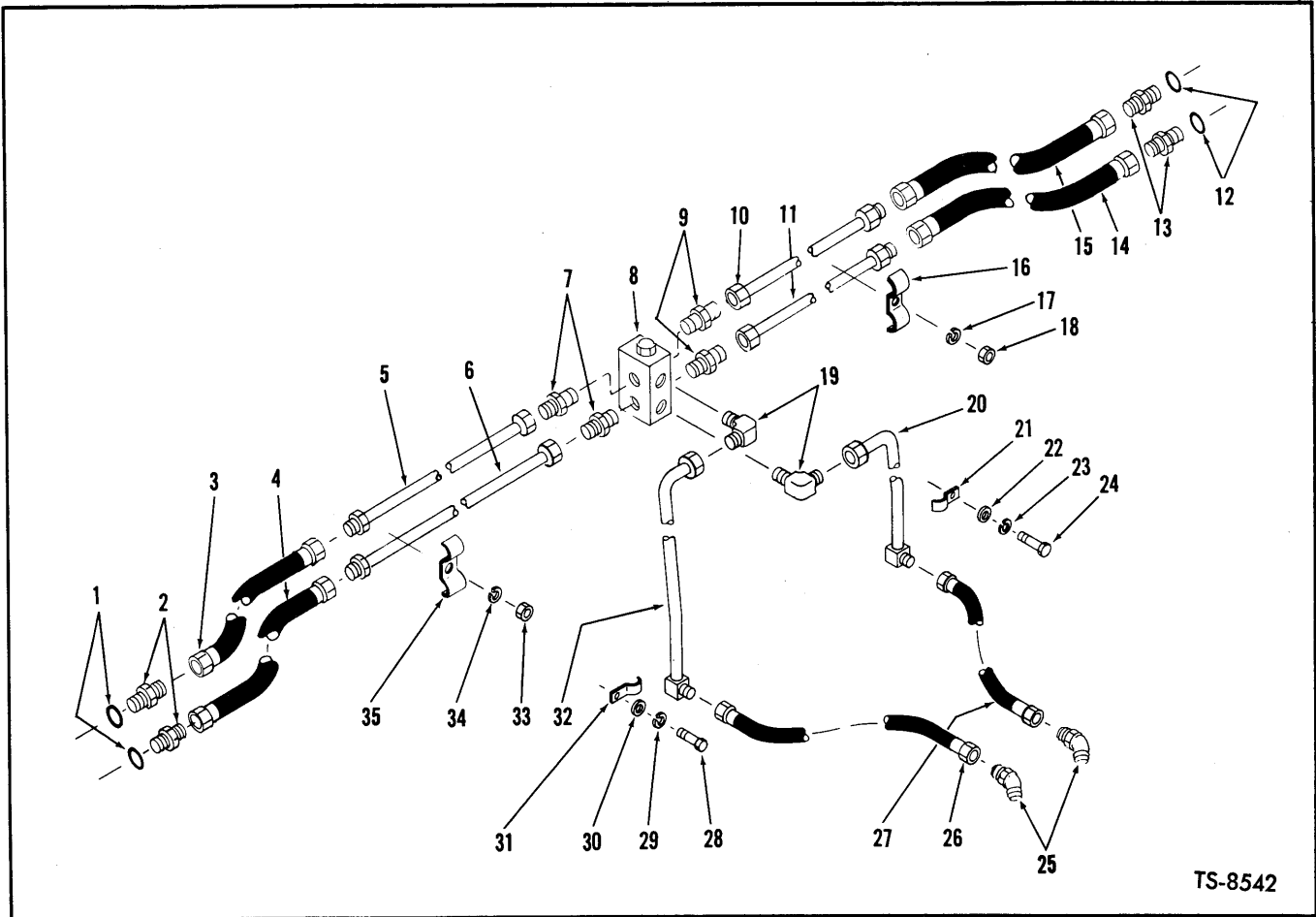
TS-7940-P

CLAMP CYLINDER ASSEMBLY

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

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

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



TS-8542

HYDRAULIC SYSTEM – DROTT BUCKET

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

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



1.

2.



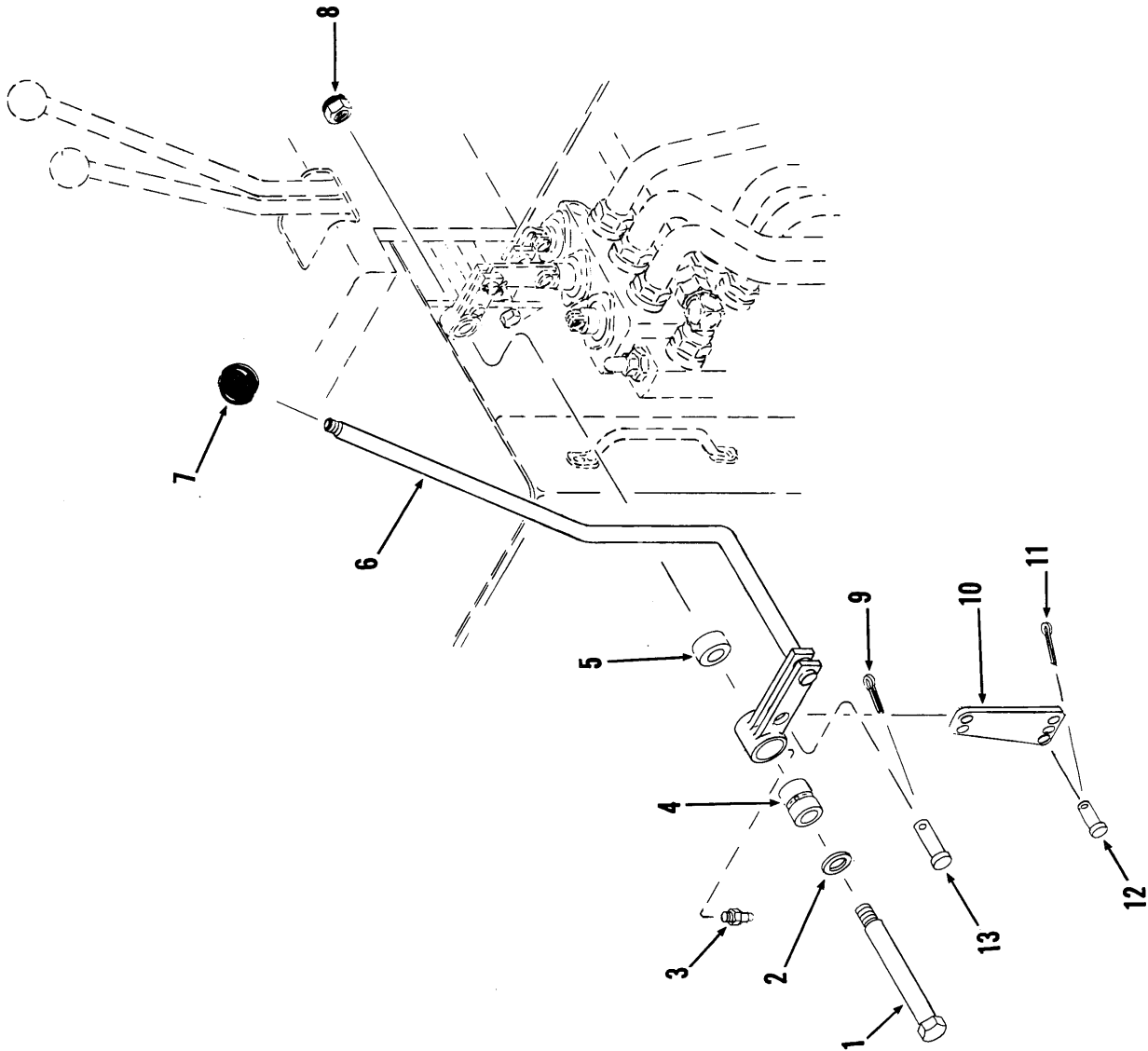
3.

4.



TS-8595-P

THREE SPOOL VALVE CONTROLS



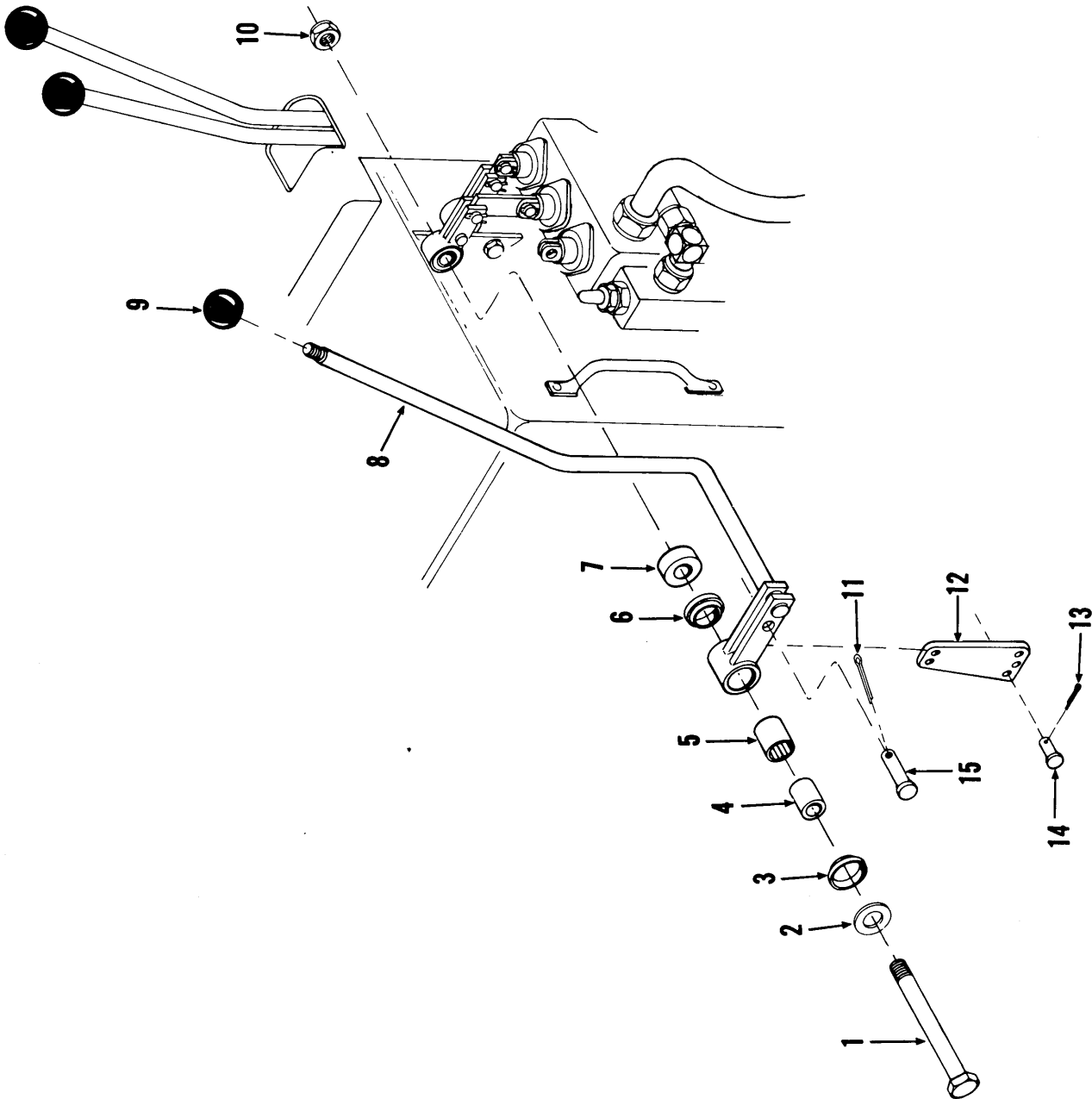
THREE SPOOL VALVE CONTROLS

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

NOTES

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

TS-11578 D



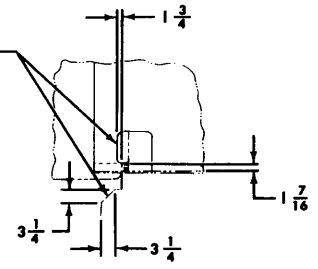
THREE SPOOL VALVE CONTROLS

THREE SPOOL VALVE CONTROLS

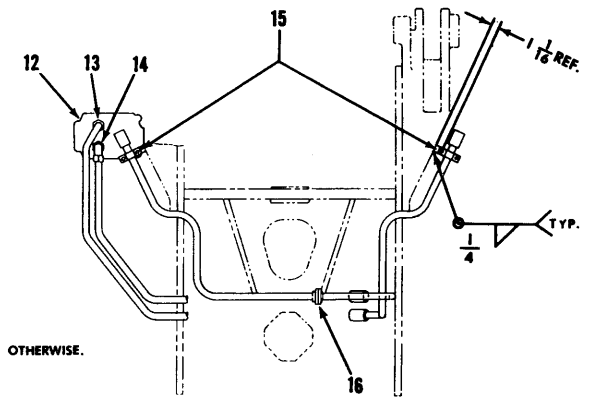
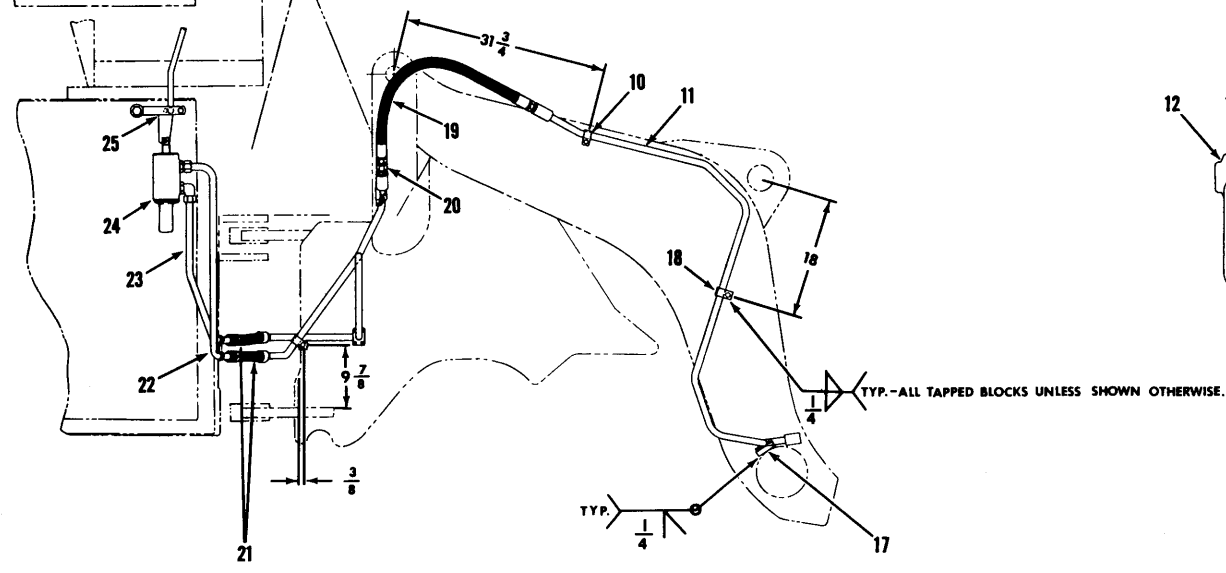
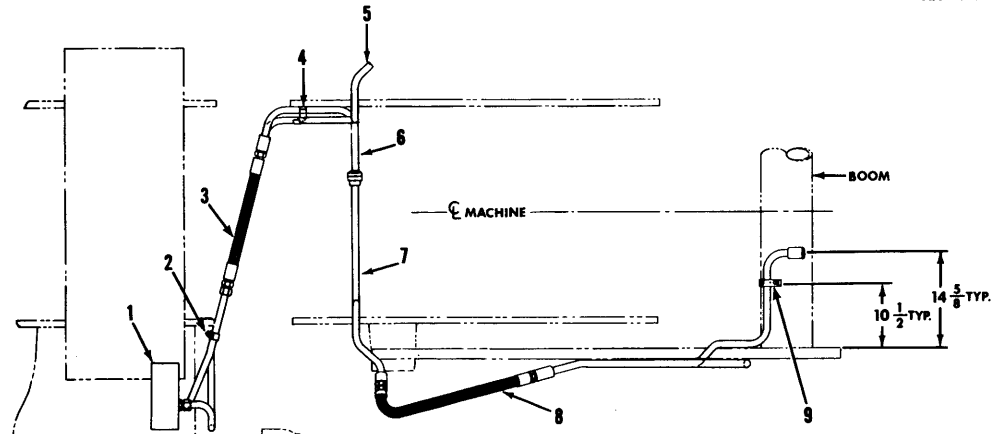
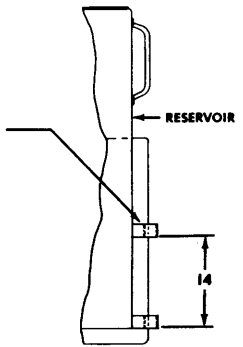
Item No.	Part No.	Description	No. Req'd.
1	24C-888	BOLT, Valve Lever	1
2	569909	WASHER, Valve Lever	1
3	1522535	SEAL, Bearing	1
4	1503251	SLEEVE, Valve Lever	1
5	675227	BEARING, Valve Lever	1
6	1522535	SEAL, Bearing	1
7	669750	SPACER, Valve Lever	1
8	1509047	LEVER, Valve Control	1
9	565389	KNOB, Valve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

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

CUT OUT COCKPIT FLOORBOARD
AND TANK PLATE AS SHOWN.



LOWER TOP STEP TO DIMENSION
WHICH IS SHOWN.



THREE SPOOL VALVE INSTALLATION AND PARTS

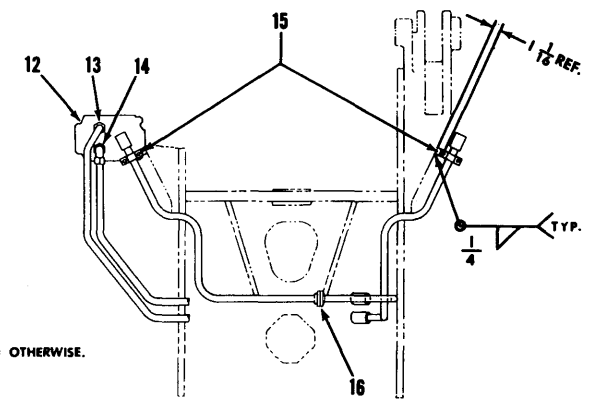
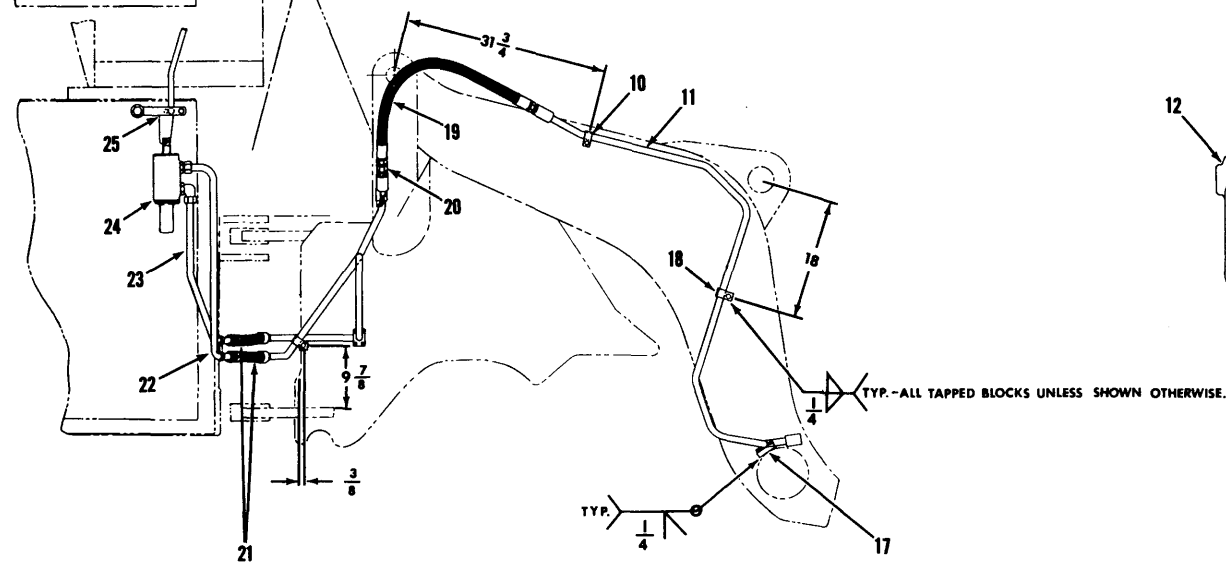
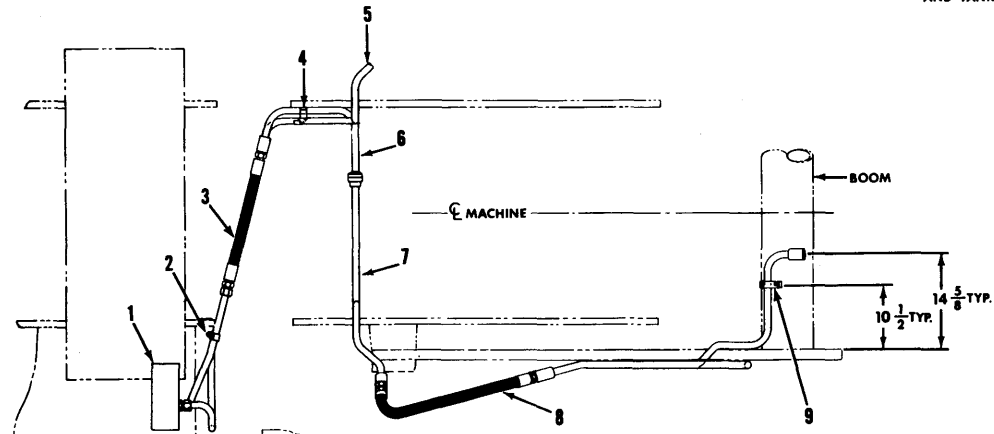
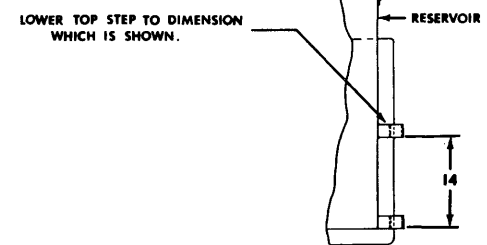
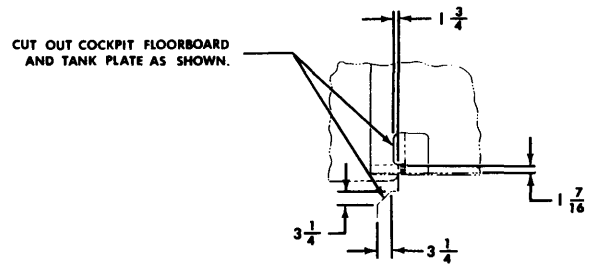
TS-8591-P

THREE SPOOL VALVE INSTALLATION AND PARTS

Item No.	Part No.	Description	No. Req'd.
1	-----	VALVE ASSY, Control — See Index	—
2	561804	CLIP, Valve Tube	1
2A	18C-620	BOLT, Valve Tube Attaching	1
2B	656671	WASHER, Valve Tube Attaching	1
2C	18D-06	NUT, Valve Tube Attaching	1
3	1536587	HOSE, Pivot	2
4	590384	BLOCK, Cross Tube to Frame	1
4A	1536656	CLIP — L.H. Cross Tube to Frame	1
4B	1536657	CLIP — R.H. Cross Tube to Frame	1
4C	1504641	SPACER, Cross Tube to Frame	1
4D	18C-824	BOLT, Cross Tube to Frame	1
4E	4E-08	LKWSHR, Cross Tube to Frame	1
5	1536675	TUBE — L.H. Pivot Hose to Boom Hose	1
6	1504642	TUBE — L.H. Tube to Cross	1
7	1536673	TUBE — R.H. Tube to Boom Hose	1
8	533463	HOSE, Boom	2
9	1536658	BRACKET, Boom Tube to Cross Tube on Boom Assy	2
9A	18C-616	BOLT, Bracket Attaching	4
9B	656672	WASHER, Bracket Attaching	4
9C	4E-06	LKWSHR, Bracket Attaching	4
10	590384	BLOCK, Boom Tube	2
10A	1536657	CLIP, Boom Tube	2
10B	18C-816	BOLT, Boom Tube Attaching	2
10C	4E-08	LKWSHR, Boom Tube Attaching	2
11	1536679	TUBE — R.H. Boom	1
11A	1536677	TUBE — L.H. Boom	1
12	-----	VALVE ASSY — See Item 1	—
13	15K-10	CONNECTOR (Inc. 13A)	1
13A	91F-10	†"O" RING	1
14	17K-10	ELBOW (Inc. 14A)	1
14A	91F-10	†"O" RING	1
15	1536790	BLOCK, Cross Tube to Upper Pivot	2
15A	1536658	BRACKET, Cross Tube to Upper Pivot	2
15B	18C-616	BOLT, Cross Tube Attaching	4
15C	4E-06	LKWSHR, Cross Tube Attaching	4
15D	656672	WASHER, Cross Tube Attaching	4
16	19J-12	FLANGE HALF	2
16A	58K-214	"O" RING, Flange Half	1
16B	17C-620	BOLT, Flange Half Attaching	4
16C	4E-06	LKWSHR, Flange Half Attaching	4
17	1504639	BLOCK, Boom Tube to Cross Tube on Boom	2
18	590384	BLOCK, Boom Tube	2
18A	1536657	CLIP, Boom Tube	2
18B	18C-816	BOLT, Boom Tube Attaching	2
18C	4E-08	LKWSHR, Boom Tube Attaching	2
19	-----	HOSE — See Item 8	—
20	36F-5	ADAPTER UNION	2
21	-----	HOSE — See Item 3	—
22	1536598	TUBE — Valve to Pivot Hose	1
23	1536660	TUBE — Valve to Pivot Hose	1
24	-----	VALVE ASSY — See Item 1	—
25	-----	VALVE CONTROLS — See Index	—

†Not Illustrated

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



THREE SPOOL VALVE INSTALLATION AND PARTS

TS-8591-P

89A.1

PM 2252

THREE SPOOL VALVE INSTALLATION & PARTS

Item No.	Part No.	Description	Req'd.
1	-----	VALVE ASSY, Control — See Index	—
2	1509125	CLIP, Valve Tube	1
2A	24C-620	†BOLT, Valve Tube Attaching	1
2B	656672	†WASHER, Valve Tube Attaching	1
2C	4E-06	†LKWSHR, Valve Tube Attaching	1
3	1536587	HOSE, Pivot	2
4	590384	BLOCK, Cross Tube to Frame	1
4A	1536656	†CLIP — L.H. Cross Tube to Frame	1
4B	1536657	†CLIP — R.H. Cross Tube to Frame	1
4C	1504641	†SPACER, Cross Tube to Frame	1
4D	24C-824	†BOLT, Cross Tube to Frame	1
4E	4E-08	†LKWSHR, Cross Tube to Frame	1
5	1536675	TUBE — L.H. Pivot Hose to Boom Hose	1
6	1504642	TUBE — L.H. Tube to Cross	1
7	1536673	TUBE — R.H. Tube to Boom Hose	1
8	533463	HOSE, Boom	2
9	1536658	BRACKET, Boom Tube to Cross Tube on Boom Assy	2
9A	24C-616	†BOLT, Bracket Attaching	4
9B	656672	†WASHER, Bracket Attaching	4
9C	4E-06	†LKWSHR, Bracket Attaching	4
10	590384	BLOCK, Boom Tube	2
10A	1536657	†CLIP, Boom Tube	2
10B	24C-816	†BOLT, Boom Tube Attaching	2
10C	4E-08	†LKWSHR, Boom Tube Attaching	2
11	1536679	TUBE — R.H. Boom	1
11A	1536677	†TUBE — L.H. Boom	1
12	-----	VALVE ASSY — See Item 1	—
13	15K-10	CONNECTOR (Inc. 13A)	1
13A	91F-10	†O-RING	1
14	17K-10	ELBOW (Inc. 14A)	1
14A	91F-10	†O-RING	1
15	1536790	BLOCK, Cross Tube to Upper Pivot	2
15A	1536658	†BRACKET, Cross Tube to Upper Pivot	2
15B	24C-616	†BOLT, Cross Tube Attaching	4
15C	4E-06	†LKWSHR, Cross Tube Attaching	4
15D	656672	†WASHER, Cross Tube Attaching	4
16	663092	FLANGE HALF	2
16A	19J12	†O-RING, Flange Half	1
16B	58K-214	†BOLT, Flange Half Attaching	4
16C	4E-06	†LKWSHR, Flange Half Attaching	4
17	1504639	BLOCK, Boom Tube to Cross Tube on Boom	2
18	590384	BLOCK, Boom Tube	2
18A	1536657	†CLIP, Boom Tube	2
18B	24C-816	†BOLT, Boom Tube Attaching	2
18C	4E-08	†LKWSHR, Boom Tube Attaching	2
19	-----	HOSE — See Item 8	—
20	36F-5	ADAPTER UNION	2
21	-----	HOSE — See Item 3	—
22	1536598	TUBE — Valve to Pivot Hose	1
23	1536660	TUBE — Valve to Pivot Hose	1
24	-----	VALVE ASSY — See Item 1	—
25	-----	VALVE CONTROLS — See Index	—

†Not Illustrated

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

C

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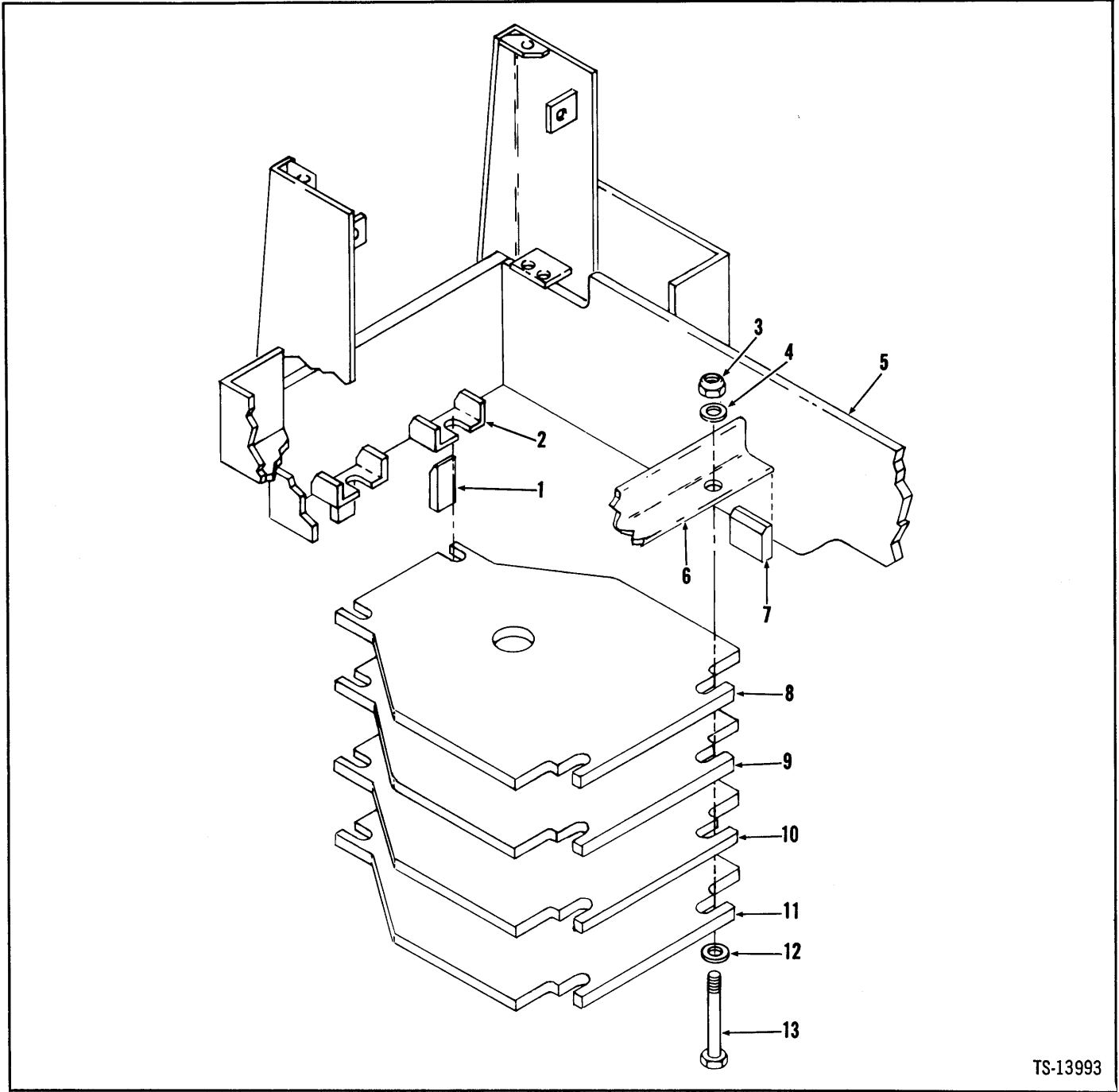
C

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C

Counterweight*



TS-13993

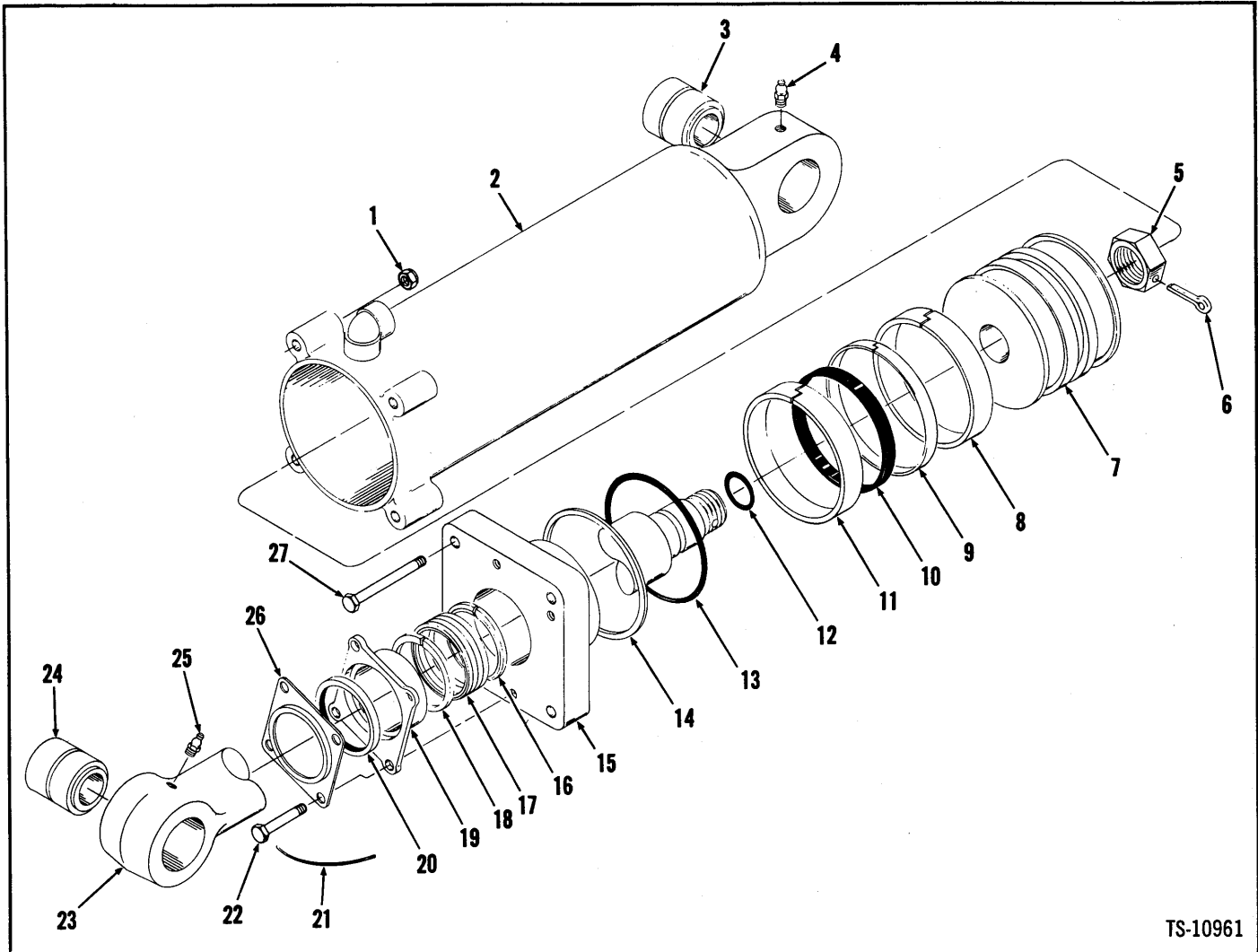
No.	Part No.	Qty.	Description
1	1506606	2	Retainer
2	1506604	2	Channel
3	18D-16	4	Nut
4	102745	4	Washer
5	2-----	—	Frame rear
6	1506605	1	Angle
7	1506607	2	Block

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

*1700 lbs. (773 kg)
 2See Index

Cylinder Assembly, Clamp – 3.5 in. (88,9 mm)

MICHIGAN



TS-10961

No.	Part No.	Qty.	Description
A	^{2,3} 1539308	2	Cylinder assembly
B	2516071	1	Kit
1	68D-07	4	Nut
2	⁴ 537205	1	Cylinder bucket
3	538604	1	Bushing
4	10H-35	1	Fitting grease
5	1514638	1	Nut
6	1F-640	1	Pin cotter
7	1503639	1	Piston
8	^{§10} -----	1	Ring
9	^{§10} -----	1	Ring
10	^{§10} -----	1	Ring
11	^{§10} -----	1	Ring
12	^{§10} -----	1	O-ring
13	^{§10} -----	1	O-ring

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

²Inc. 1 → 3, 5 → 24, 26, 27

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

⁴Inc. 3

⁵Inc. 13, 14

⁶See 17

⁷Inc. 16, 18

⁸16 gauge x 20 in. (508 mm) long

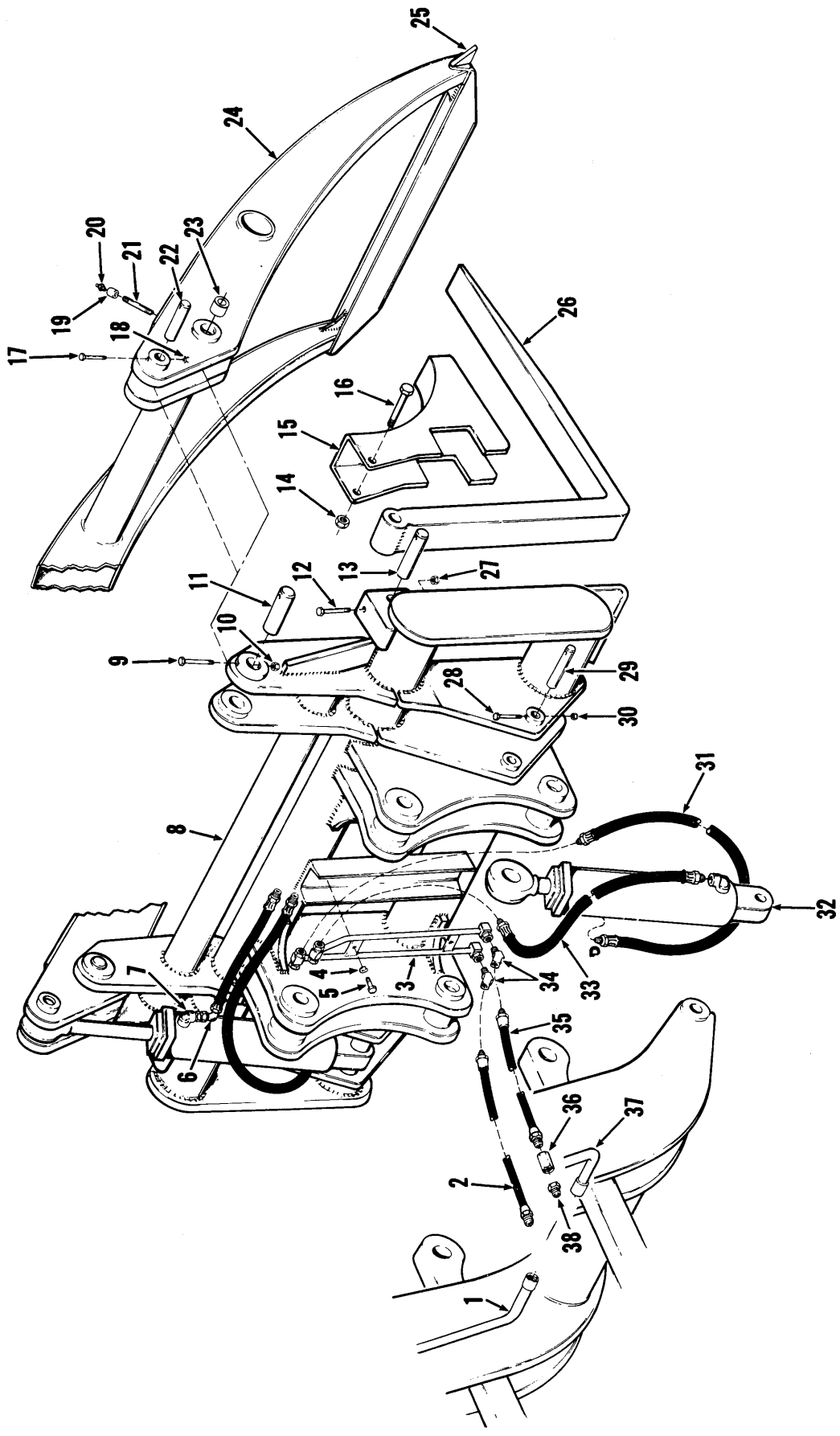
⁹Inc. 24

¹⁰See B

¹¹Inc. 6, 8 → 14, 16 → 18, 20

¹²For reference see Service Gram S.G.-597A.





TS-13968

Logger Fork Attachment

MICHIGAN

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

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

¹See Index

²Inc. C → 8, 9 → 38

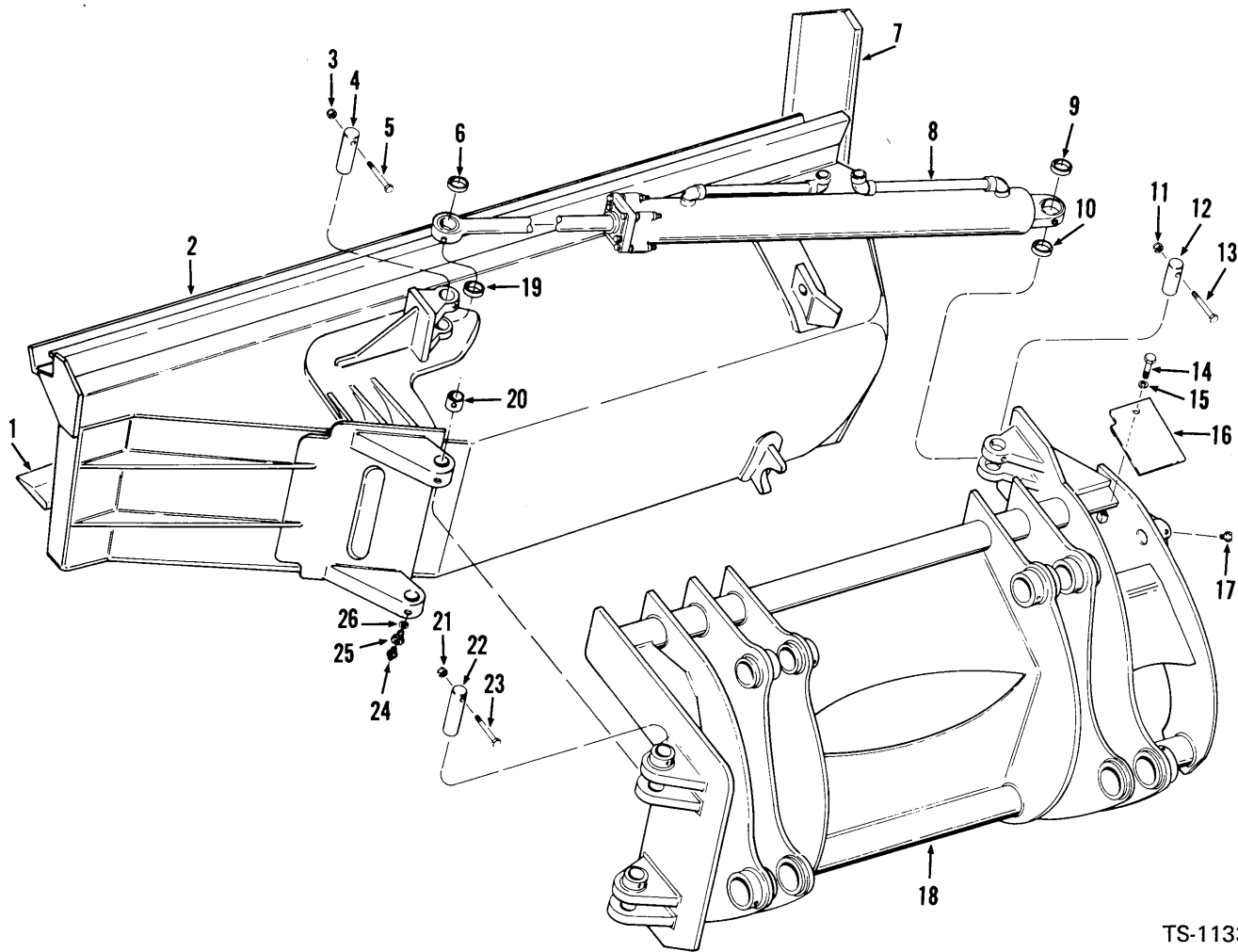
³Cummins 1ACC101 → 408B255, G.M. 409A101 → 409B275

⁴This attachment utilizes the existing mounting pins. See Index for Boom & Pushrod Service parts.

⁵Inc. C → 7, 8A → 38

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

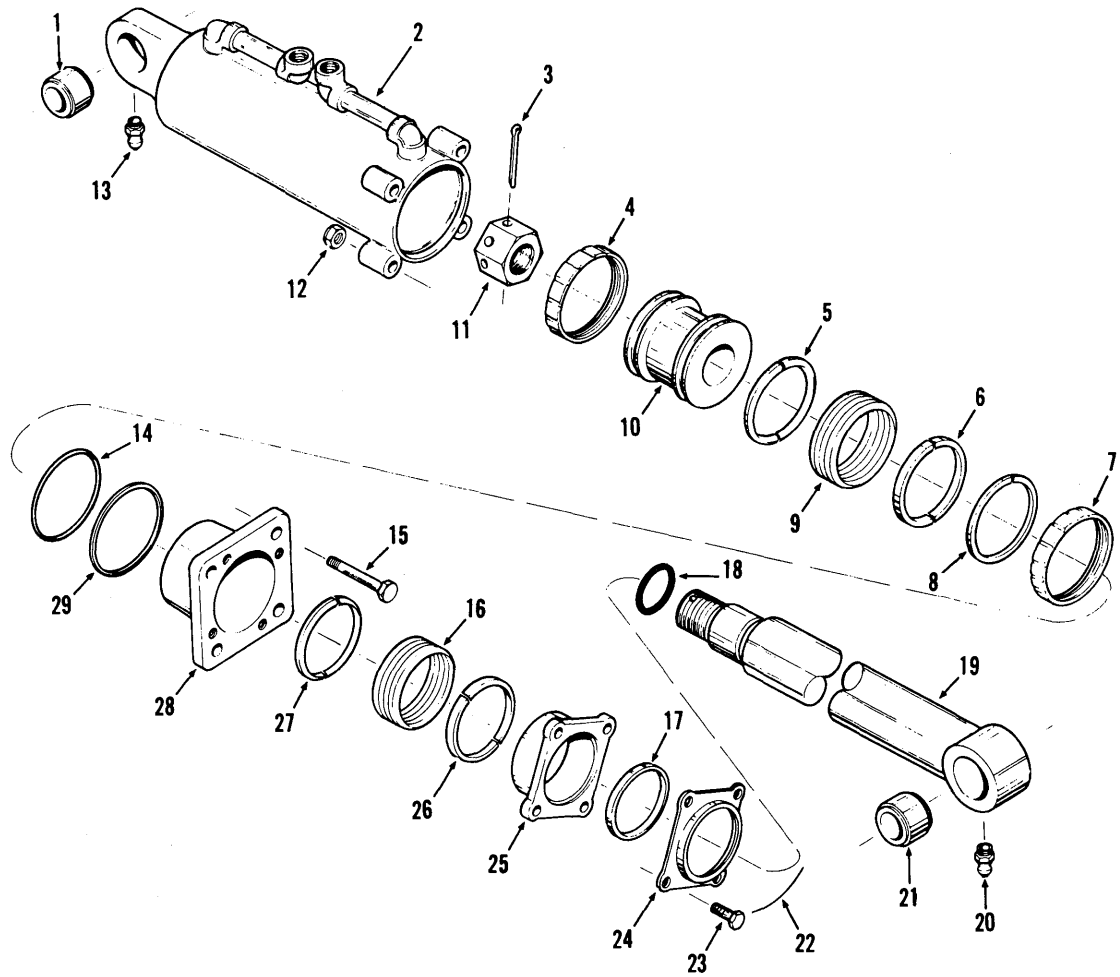
⁷Inc. 22



TS-11334

BUCKET, CARRIER & CYLINDER ASSEMBLY

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

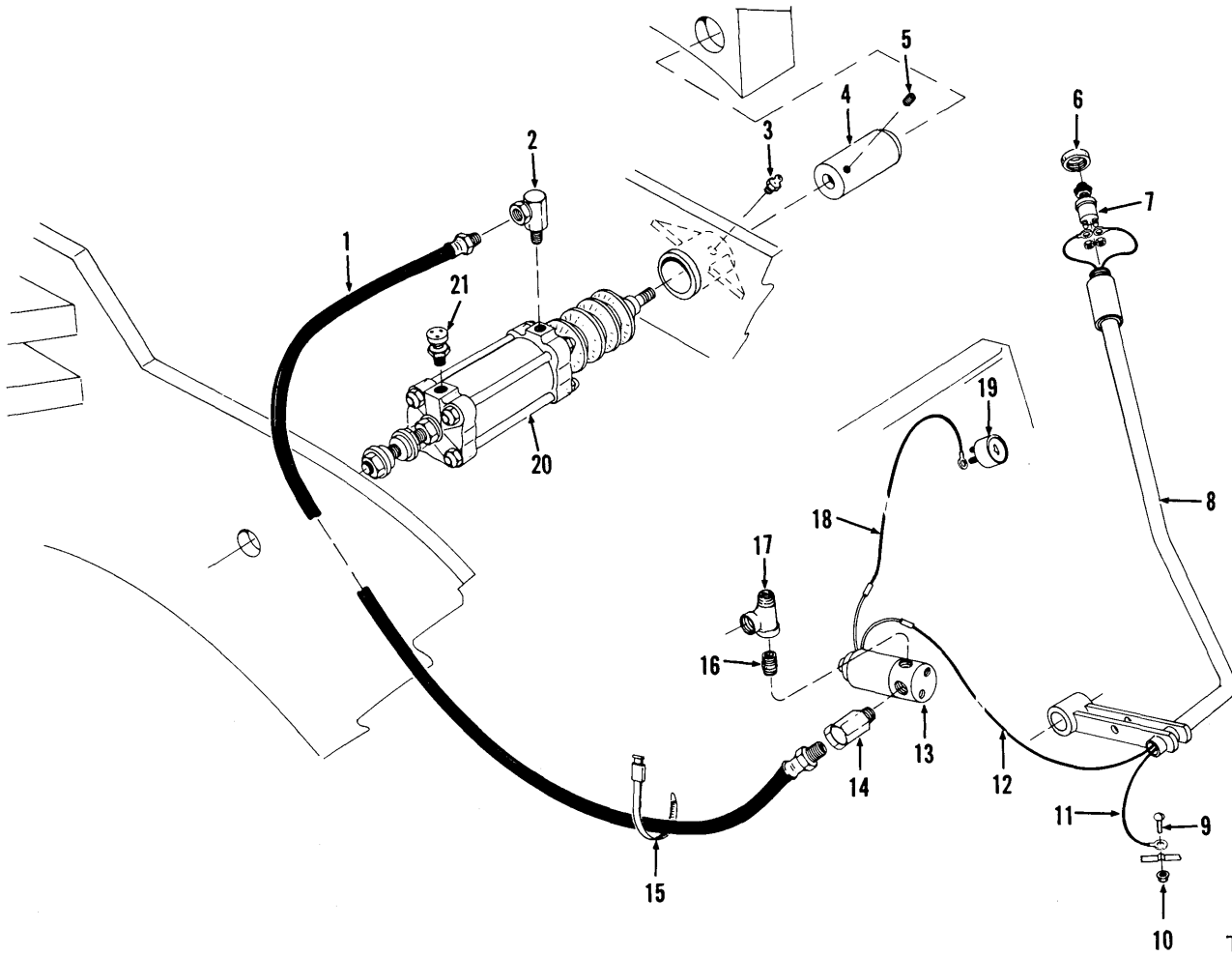


TS-11232

**CYLINDER ASSEMBLY – 3-1/2”
(Side Pump Bucket)**

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
A	567904	CYLINDER ASSY, Side Dump (Inc. 1 thru 29)	1	14	-----	§ RING, Back-Up – See B	1
B	2516074	**KIT (Inc. 3 → 9, 14, 17, 18, 29)	1	15	18C-752	BOLT, Cylinder Cap	4
1	669928	BUSHING, Cylinder	1	16	2501107	PACKING SET, Cylinder Cap (Inc. 26, 27)	1
2	567905	CYLINDER (Inc. 1)	1	17	2516952	SEAL, Piston Rod	1
3	1F-540	COTTER, Piston Rod Nut	1	18	-----	§ O-RING, Piston Rod – See B	1
4	-----	§ RING, Piston Wear – See B	1	19	567911	ROD ASSY, Piston (Inc. 21)	1
5	-----	§ ADAPTER, Male – See B	2	20	10H-25	FITTING, Piston Rod Grease	1
6	-----	§ ADAPTER, Female – See B	2	21	669928	BUSHING, Piston Rod	1
7	-----	§ RING, Piston Wear – See B	1	22	-----	LOCKWIRE (16 ga. x 13” lg.)	1
8	-----	§ ‡ SHIM, Piston Packing – See B	—	23	4C-620	BOLT, Seal Retainer	4
9	-----	§ PACKING SET, Piston (Inc. 5, 6) – See B	1	24	544890	RETAINER, Seal	1
10	512789	*PISTON	1	25	544889	GLAND, Packing	1
11	517298	NUT, Piston Rod	1	26	-----	§ ADAPTER, Female – See 16	2
12	68D-07	NUT, Cylinder Cap	4	27	-----	§ ADAPTER, Male – See 16	2
13	10H-25	FITTING, Cylinder Grease	1	28	945953	CAP, Cylinder	1
				29	-----	§ O-RING, Piston – See B	1

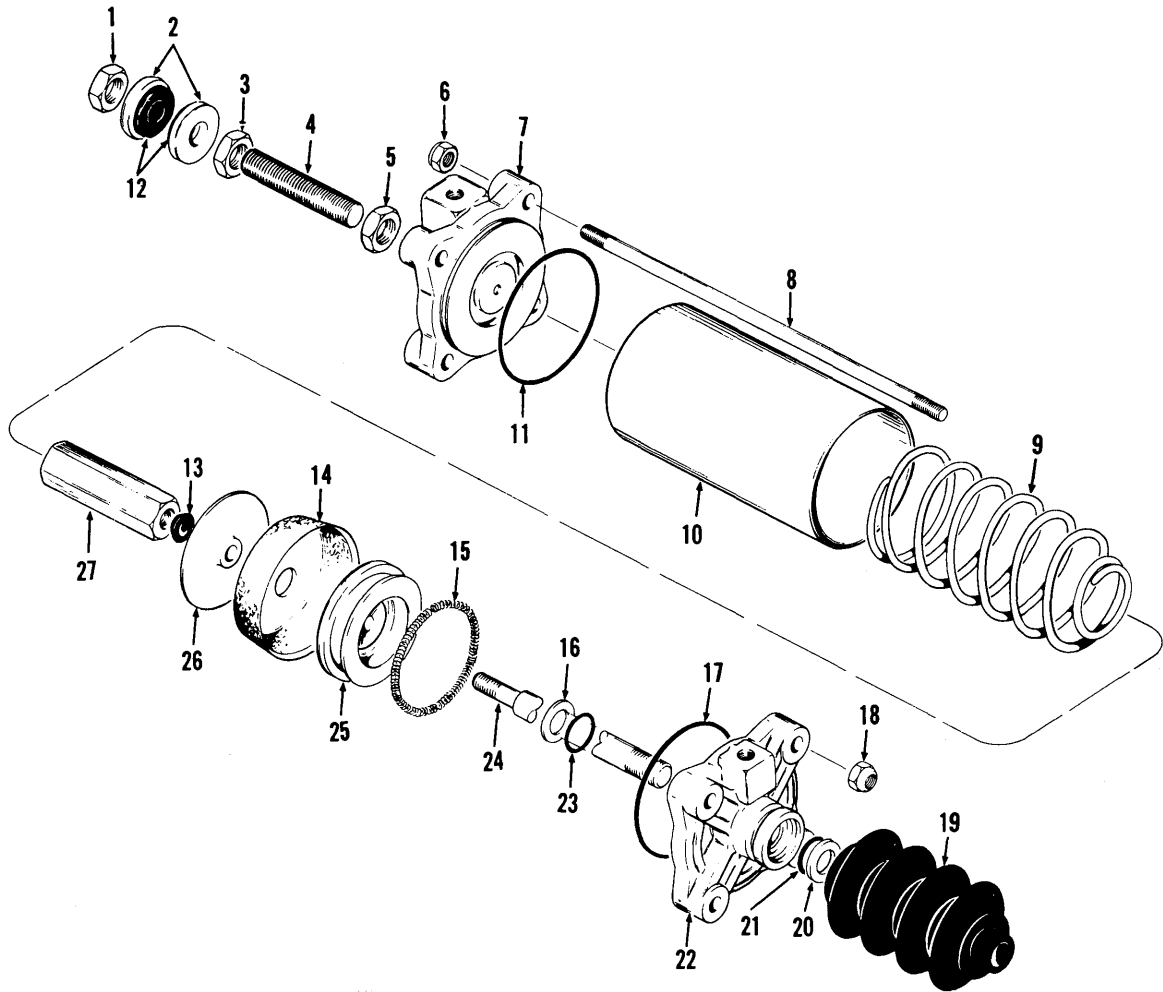
*NOTE: For replacement use 1503639 Piston plus 2516071 Kit.
**NOTE: For reference see Service Gram S.G.-597A.



TS-11286

AIR PIPING SYSTEM – SIDE DUMP BUCKET

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

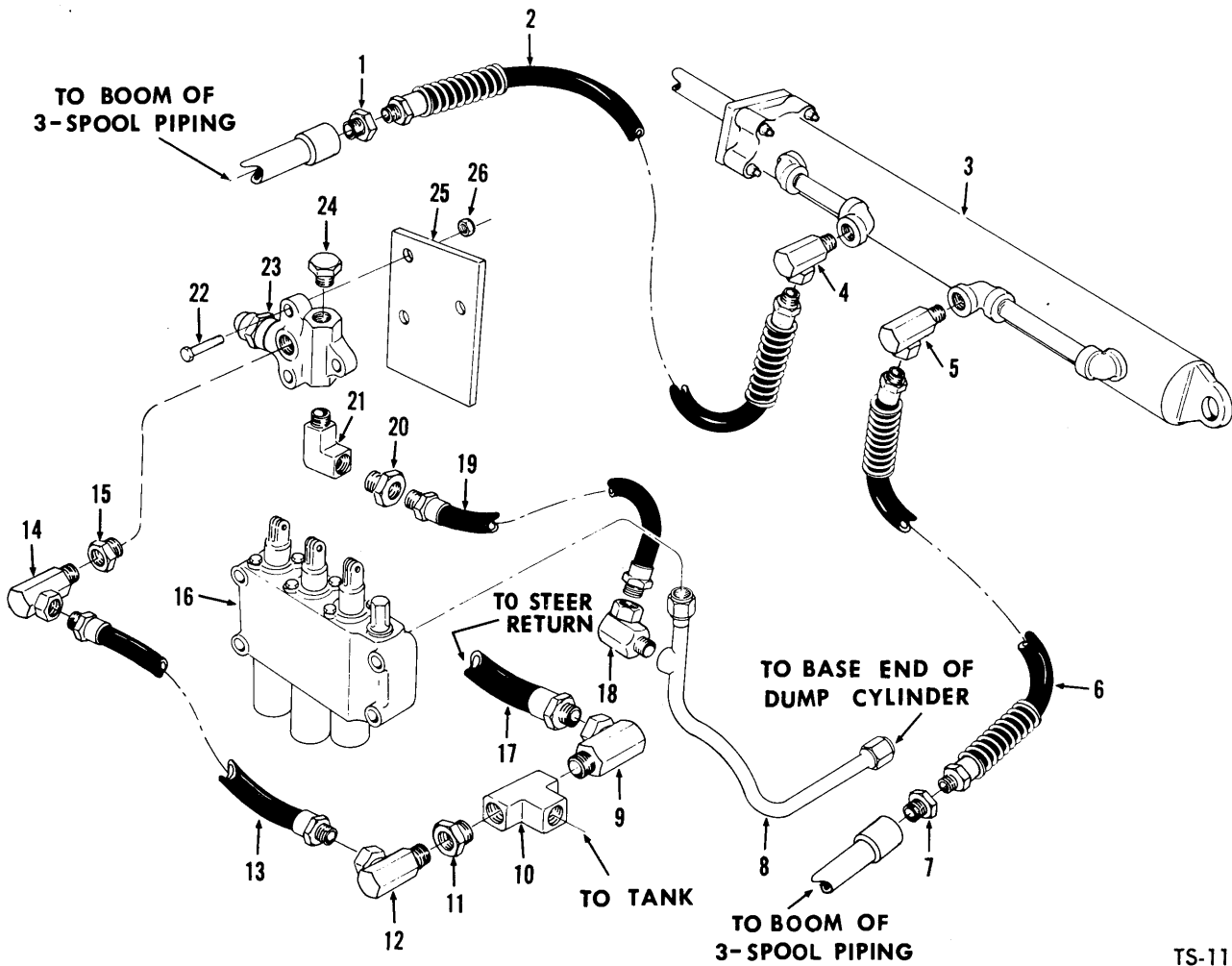


TS-11427

AIR CYLINDER ASSEMBLY – SIDE DUMP BUCKET

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

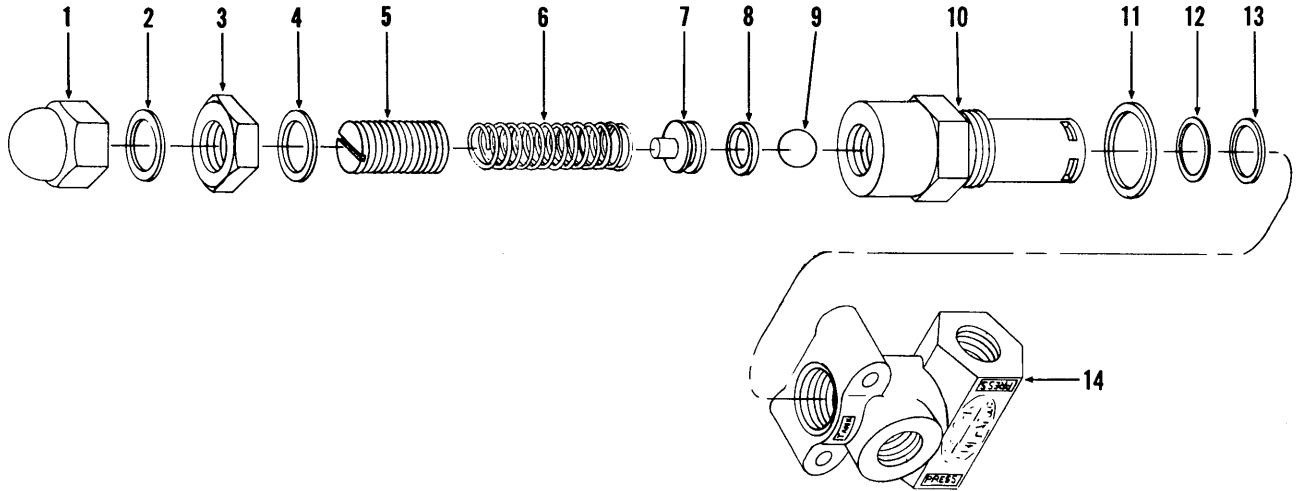
§Not Sold Separately



TS-11337

HYDRAULIC SYSTEM — SIDE DUMP BUCKET

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	356617	BUSHING, Reducing	1	15	356617	BUSHING, Reducing	1
2	1524998	HOSE, Boom Tube to Dump Cyl.	1	16	-----	THREE SPOOL VALVE — See P.M.A. 2820	—
3	-----	CYLINDER, Side Dump — See Index	—	17	1503832	HOSE, Steer Return	1
4	31F-4	ADAPTER UNION, Hose to Cyl.	1	18	31F-4	ADAPTER UNION, Hose to Tube	1
5	31F-4	ADAPTER UNION, Hose to Cyl.	1	19	352617	HOSE, Tube to Relief Valve	1
6	1524998	HOSE, Boom Tube to Cylinder	1	20	356617	BUSHING, Reducing	1
7	356617	BUSHING, Reducing	1	21	29F-4	ELBOW, Hose to Relief Valve	1
8	1505017	TUBE ASSY, Valve to Base of Cyl.	1	22	24C-644	BOLT, Relief Valve to Mtg. Plate	3
9	31F-5	ADAPTER UNION, Hose to Tee	1	23	-----	RELIEF VALVE — See Index	—
10	28F-4	TEE	1	24	40K-12	PLUG, Valve	1
11	356617	BUSHING, Reducing	1	25	1504992	PLATE	1
12	31F-4	ADAPTER UNION, Hose to Tee	1	26	18D-06	NUT, Relief Valve to Mtg. Plate	3
13	541764	HOSE, Valve to Steer Return Line	1				
14	31F-4	ADAPTER UNION, Valve to Hose	1				



TS-9980

RELIEF VALVE ASSEMBLY – SIDE DUMP BUCKET

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

§ Not Sold Separately

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