



## 233 HD Parts Manual

**Manual covers the following models;**

- T-233 HD, LH000101 Onward**
- T-203 HD, LL000101 Onward**
- T-183 HD, LJ000101 Onward**
- T-173, LK000101 To LK000554**



## THOMAS EQUIPMENT LIABILITY WARRANTY

THOMAS EQUIPMENT LIMITED (Hereinafter referred to as the "Company") warrants each new Thomas S/S Loader sold by the Company to be free from manufacturing defects when used in normal service for a period of twelve (12) months, commencing with delivery to the original user, if operated according to manufacturer instructions and by a competent and careful operator. This warranty shall not apply to the loader or any part thereof which has been subject to misuse, negligence, alteration, or accident or which shall have been repaired outside of an authorized Thomas dealer place of business.

The Company's obligation under this warranty is expressly limited to the replacement or repair at Thomas Equipment Limited, Centreville, New Brunswick, or at a designated Thomas Dealer, of such part of parts which in the opinion of the Company have been defective. The Company shall not be liable for consequential labour costs or transportation charges in connection with the replacement or repair of defective parts.

This warranty to repair applies only to new and unused Thomas S/S Loaders which after shipment from the factory have not been altered, changed, repaired, or treated in any manner whatsoever and does not extend to trade accessories though sold or operated with the Company's loader. Trade accessories such as, but not limited to, engines, tires, batteries, are subject to warranty of their respective manufacturers.

The Company and/or its authorized Thomas dealers shall not be liable for consequential damages or contingent liabilities for the fitness of any Thomas S/S Loader for any particular purpose.

This warranty is expressly in lieu of any other express or implied warranty, condition or guarantee of this Thomas S/S Loader or any part thereof, including any implied warranty or condition of merchantability or fitness and of any other obligations on the part of the Company or the selling dealer.

No representative of the company has authority to change this warranty in any manner whatsoever and no attempt to repair or promise to repair or improve the Thomas S/S Loader covered by this warranty by any representative of the Company shall waive or change or extend this warranty in any manner whatsoever.

*N.B. Read and practice your Thomas S/S Loader operating and servicing instructions. Failure to do this may void your warranty.*

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**MAIN  
FRAME**

**CONTROLS**

**FINAL  
DRIVE  
TRANSMISSION**

**HYDRAULIC  
SYSTEM**

**HYDROSTATIC  
DRIVE  
SYSTEM**

**ELECTRICAL  
SYSTEM**

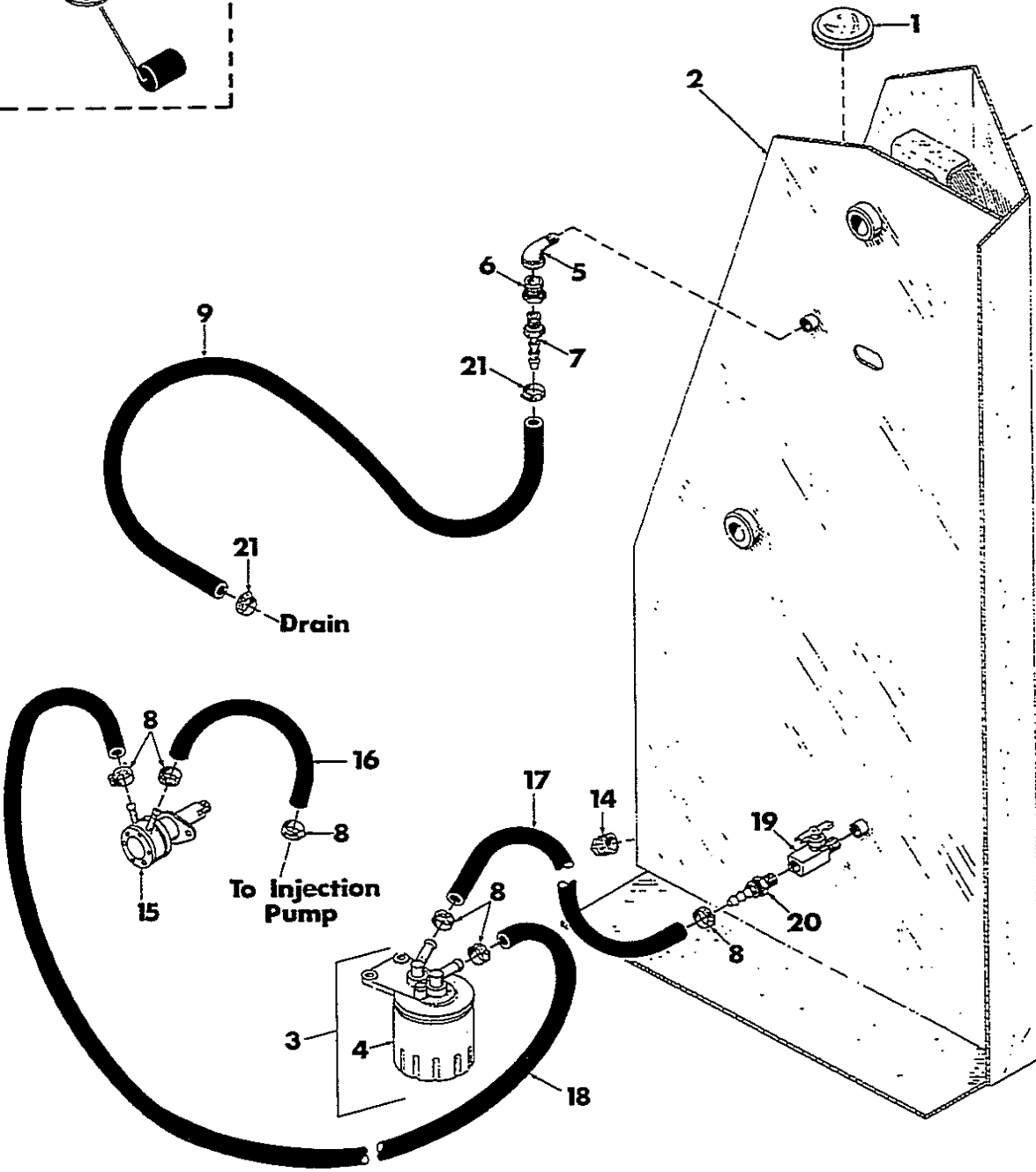
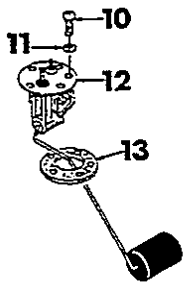
**ENGINE  
EQUIPMENT**

**MAIN FRAME 1.**

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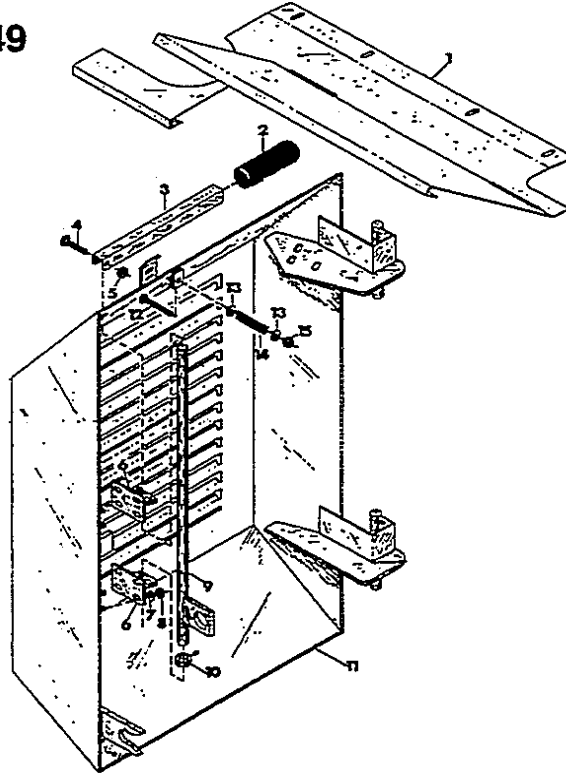
**MAIN  
FRAME**





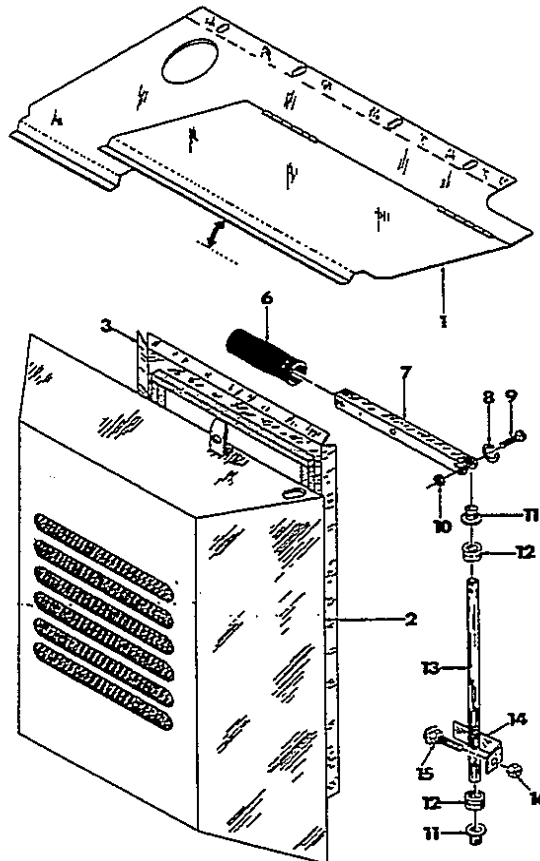


### T233HD TO LH000549



1212

### T183 AND T233HD LH000550 ONWARD



2347

# REAR DOOR and LATCH to LH000549

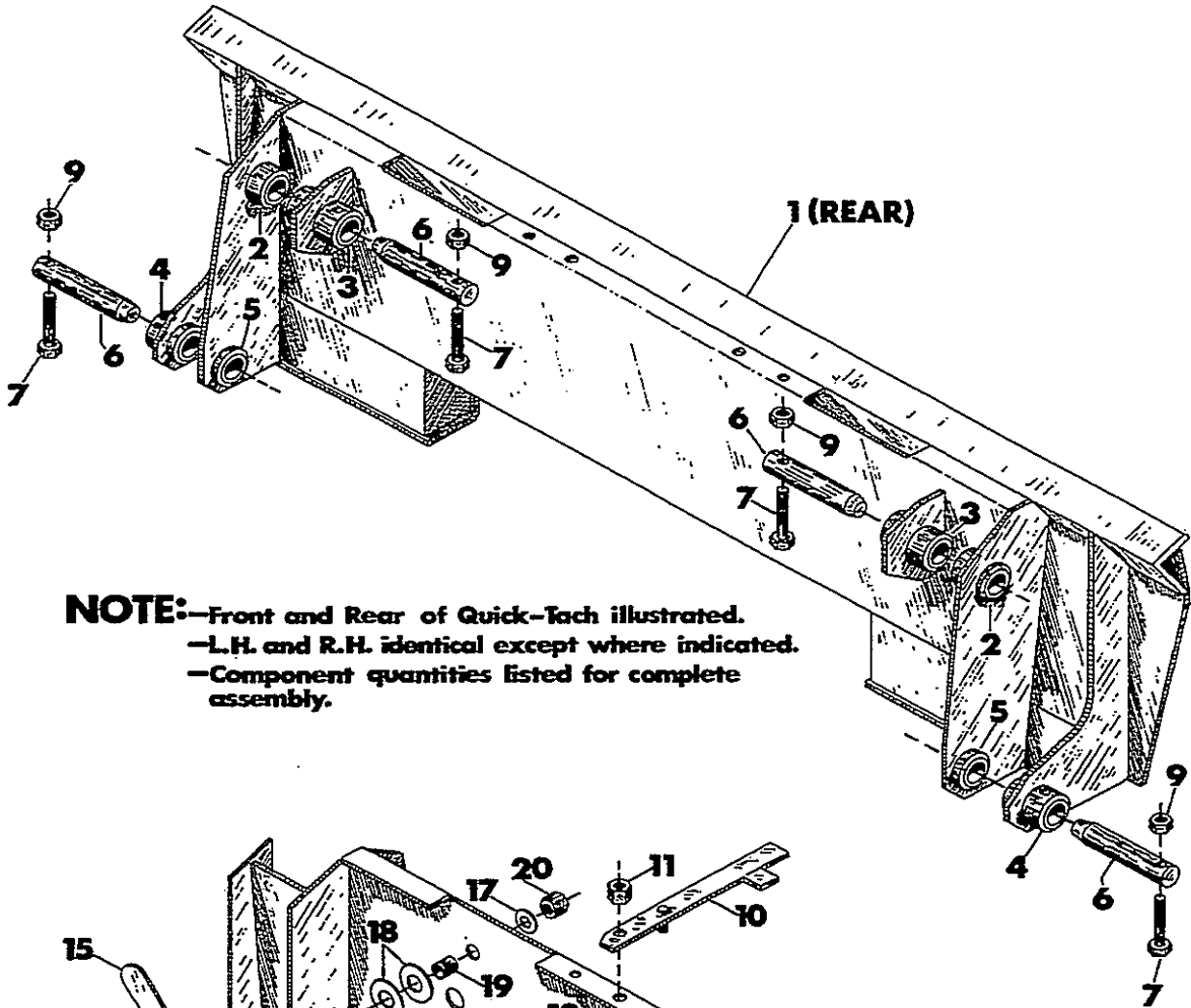
1.2

REF.	PART NO.	DESCRIPTION	QTY. T233HD	SERIAL NO.
1	957154	Engine Cover Shield Assembly	1	TO LH000107
1	956631	Engine Cover Shield Assembly	1	LH000108 - 568
2	3189	Lever Grip	1	
3	21362	Door Handle	1	
4	5897	Bolt 1/4" UNC x 1 3/4" L.	1	
5	6645	Nut 1/4" UNC Nylok	1	
6	954425	Door Lock Support Assembly	2	
7	1870	Springwasher 5/16" Dia.	8	
8	1191	Nut 5/16" UNC	8	
9	954507	Door Lock Assembly	1	TO LH000107
9	957156	Door Lock Assembly	1	LH000107 - 549
10	4842	Set Collar 3/4" Dia.	1	
11	956627	Rear Door Assembly	1	
12	3238	Bolt 1/4" UNC x 3" L.	1	TO LH000107
13	1650	Plainwasher 1/4" Dia.	2	TO LH000107
14	9202	Spring .063 W.D. x 13/32" O.D. x 2 1/2" L.	1	TO LH000107
15	1350	Nut 1/4" UNC	2	TO LH000107
16	26785	Radiator Baffle	1	
17	26787	Baffle Foam 1/2" x 1" x 19" L.	2	
18	26786	Baffle Foam 1/2" x 1" x 20 5/8" L.	1	

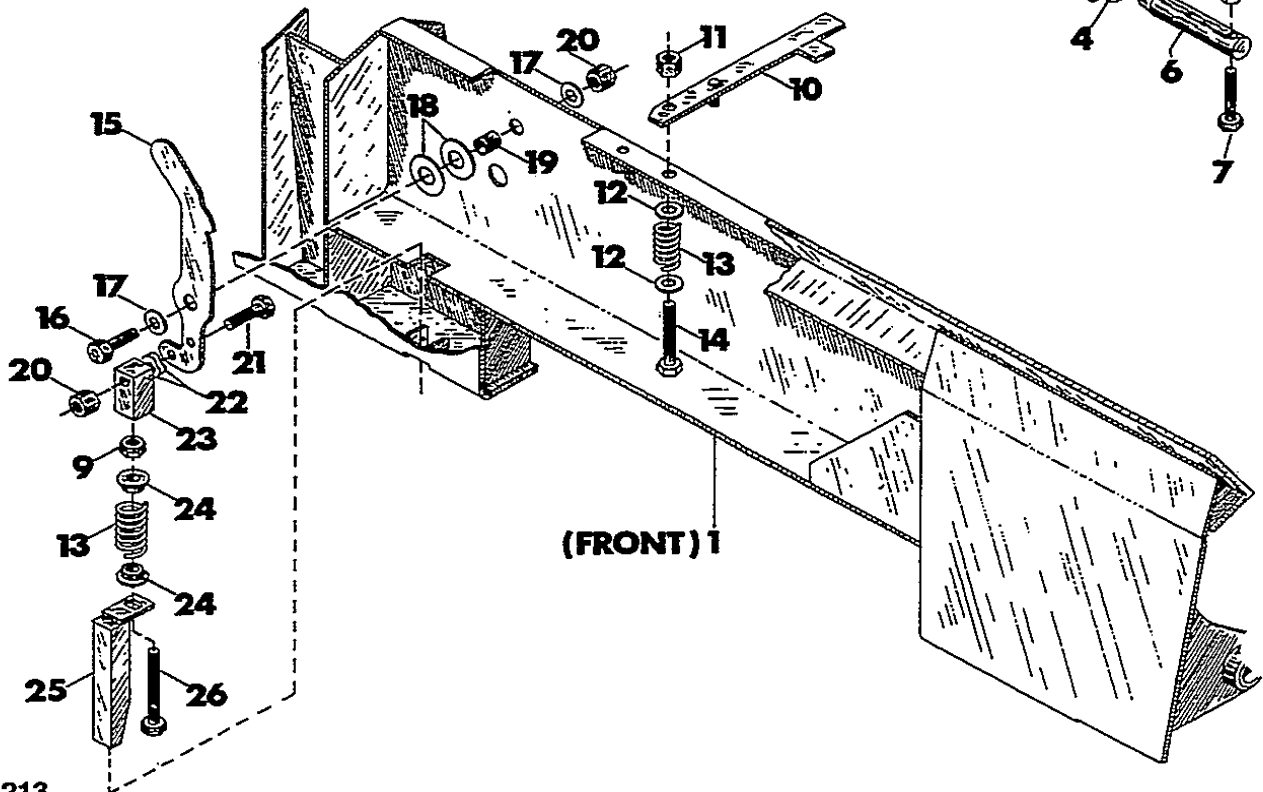
# REAR DOOR and LATCH LH000550-ONWARD

REF.	PART NO.	DESCRIPTION	QTY. T173HL	QTY. T183HD	QTY. T203HD	QTY. T233HD	SERIAL NO.
1	957917	Engine Cover Shield Assembly	—	1	—	1	LH000569-ONWARD
1	959576	Engine Cover Shield Assembly	1	—	1	—	
2	957919	Rear Door Assembly	—	1	—	1	LH000569-ONWARD
2	959747	Rear Door Assembly	1	—	—	—	
2	959698	Rear Door Assembly	—	—	1	—	
3	26664	Radiator Baffle	—	—	—	1	
3	31337	Radiator Baffle	1	1	1	—	
6	3189	Lever Grip	1	1	1	1	
7	21362	Door Handle	1	1	1	1	
8	1642	Springwasher 5/16" Dia.	1	1	1	1	LH000550-ONWARD
9	5897	Bolt 1/4" UNC x 1 3/4" L.	1	1	1	1	
10	6645	Nut 1/4" UNC Nylok	1	1	1	1	
11	16989	Bearing .750 I.D. x 1.000 O.D.	2	2	2	2	LH000550-ONWARD
12	4842	Set Collar 3/4" Dia.	2	2	2	2	
13	957915	Door Lock Assembly	1	1	1	1	LH000550-ONWARD
14	See Item 13	Rear Door Latch	1	1	1	1	LH000550-ONWARD
15	2823	Bolt 1/2" x 1 1/2" UNC	1	1	1	1	LH000550-ONWARD
16	See Item 13	Door Latching Nut	1	1	1	1	LH000550-ONWARD
* 17	1024	Nut 1/2" UNC	1	1	1	1	

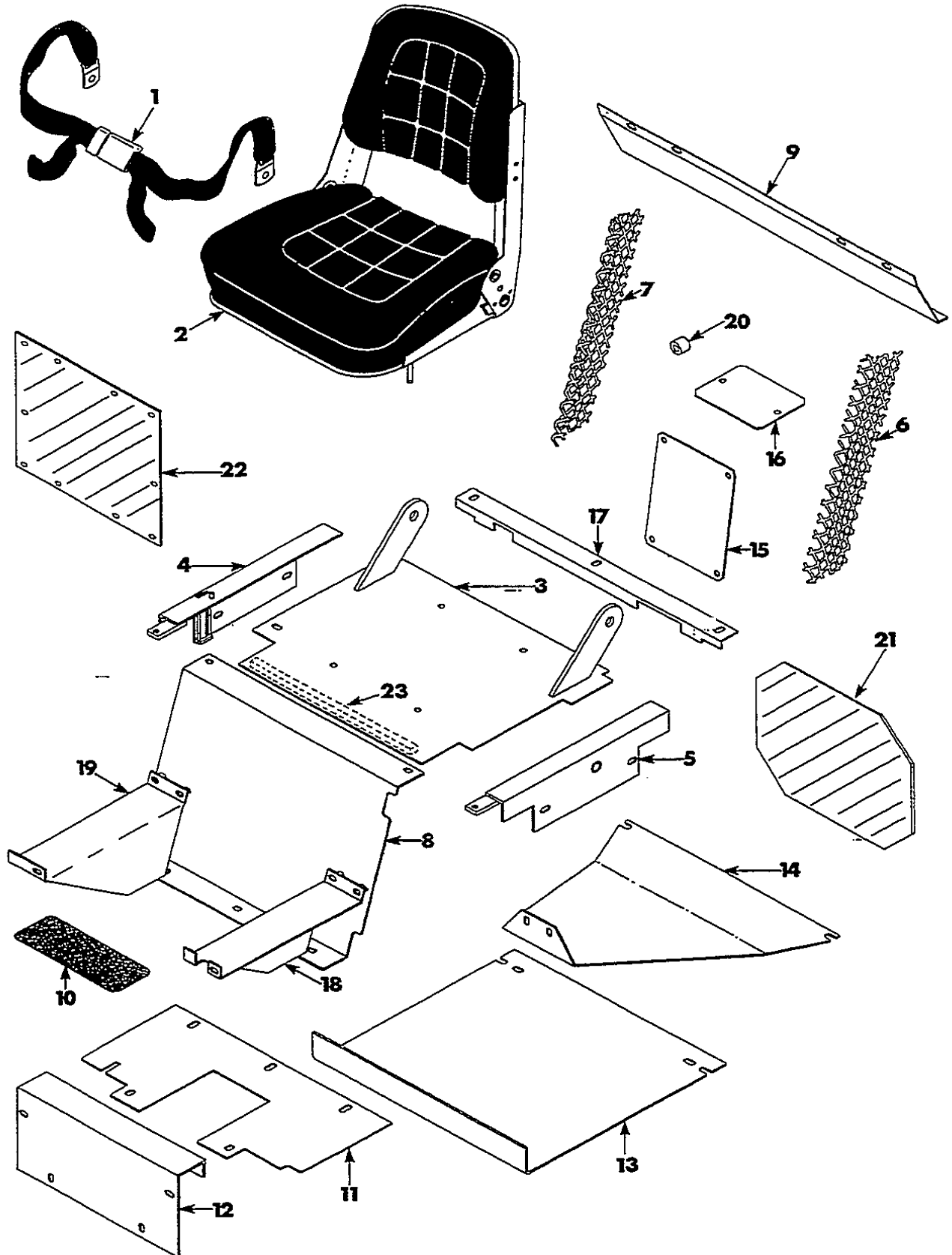
\* Not Illustrated



**NOTE:**—Front and Rear of Quick-Tach illustrated.  
 —L.H. and R.H. identical except where indicated.  
 —Component quantities listed for complete assembly.







# SEAT AND BELT — SHIELDS

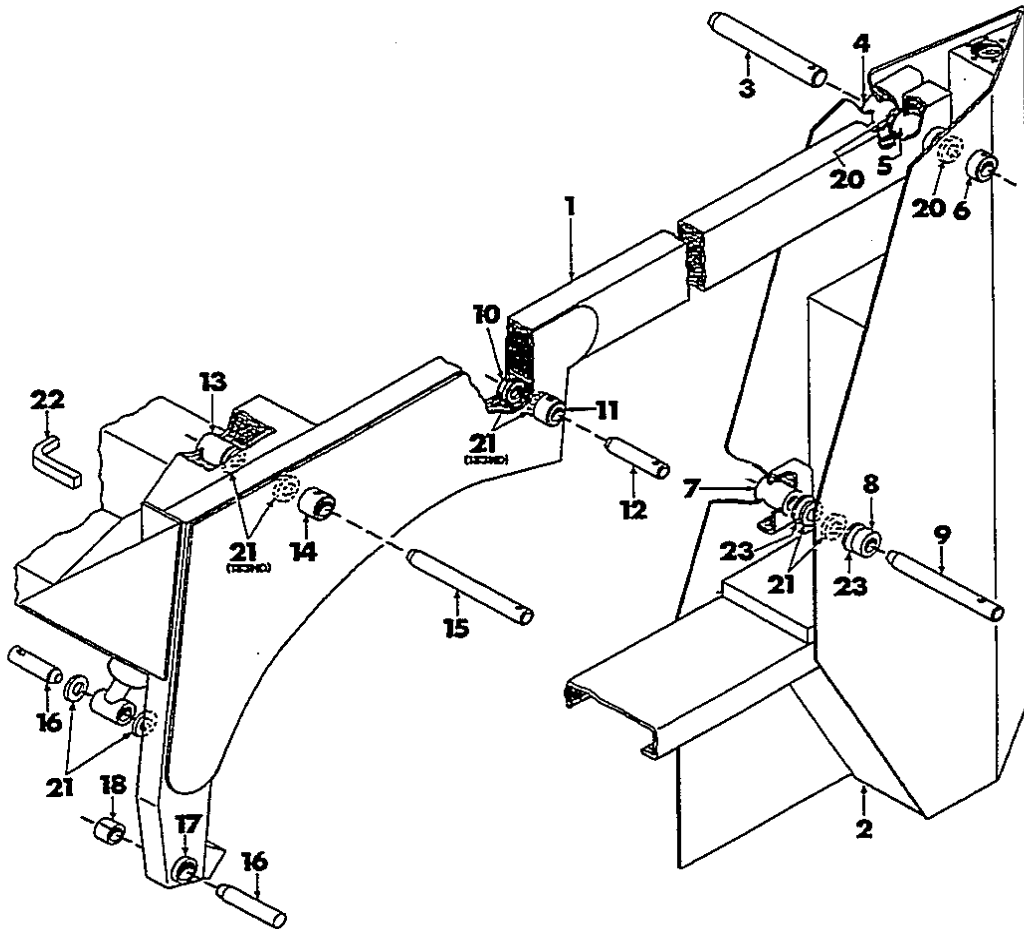
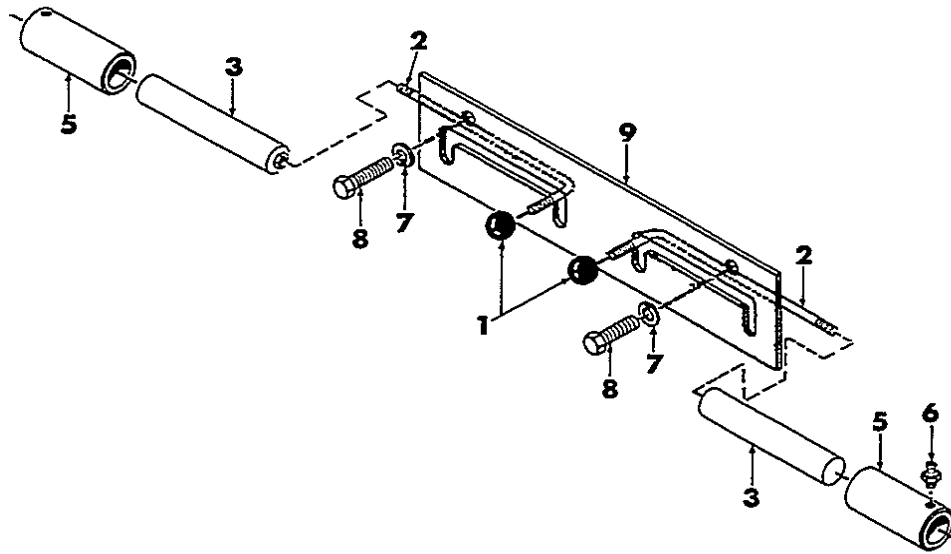
1.4

REF. NO.	PART NO.	DESCRIPTION	QTY. T173HL	QTY. T183HD	QTY. T203HD	QTY. T233HD	SERIAL NO.
1	5845	Seat Belt Assembly	1	1	1	1	
2	955064	Fold Down Seat Assembly	1	1	1	1	
3	956628	Seat Plate Assembly	—	1	—	—	
3	959489	Seat Plate Assembly	1	—	1	1	
4	956630	R.H. Seat Mount Assembly	—	—	—	1	TO LH000549
4	958270	R.H. Seat Mount Assembly	—	1	—	—	
4	959601	R.H. Seat Mount Assembly	1	—	1	1	LH000550 ONWARD
5	956629	L.H. Seat Mount Assembly	—	—	—	1	TO LH000549
5	958271	L.H. Seat Mount Assembly	—	1	—	—	
5	959599	L.H. Seat Mount Assembly	1	—	1	1	LH000550 ONWARD
6	26782	L.H. ROPS Side Filler	—	—	—	1	
6	28958	L.H. ROPS Side Filler	1	1	1	—	
7	26781	R.H. ROPS Side Filler	—	—	—	1	
7	28957	R.H. ROPS Side Filler	1	1	1	—	
8	26784	Hydrostatic Shield	—	—	—	1	TO LH000549
8	32473	Hydrostatic Shield	—	1	—	—	
8	36390	Hydrostatic Shield	1	—	1	1	LH000550 ONWARD
9	28981	Upper Rear Filler	—	—	—	1	
9	17544	Upper Rear Filler	1	1	1	—	
10	24420	Safety Track	—	—	—	1	
10	30607	Safety Track	1	1	1	—	
11	28985	Bottom Floor Shield	—	—	—	1	TO LH000549
12	25762	Front Step Shield	1	1	1	1	
13	26742	Front Belly Pan	1	1	1	1	
14	31581	Rear Belly Pan	1	1	1	1	
15	23422	Battery Access Cover	1	1	1	1	
16	23423	Battery Inspection Cover	1	1	1	1	
17	18228	Seat Plate Filler Shield	—	—	—	1	TO LH000549
17	31582	Seat Plate Filler Shield	1	1	1	1	LH000550 ONWARD
18	957196	L.H. Foot Rest Assembly	—	—	—	1	TO LH000549
19	957197	R.H. Foot Rest Assembly	—	—	—	1	TO LH000549
20	15332	Isolators, Rear	1	1	1	1	
20	17308	Isolators, Bottom	4	4	4	4	
21	17549	Rear Window	1	1	1	1	
22	23116	Top Window	1	1	1	1	
23	15931	Weather Strip, 18"	1	1	1	1	
<b>DECALS AND PAINT</b>							
1	36443	T233HD Model Designation Kit	—	—	—	1	
1	34763	T183HD Model Designation Kit	—	1	—	—	
1	36352	T173HL Model Designation Kit	1	—	—	—	
1	36469	T203HD Model Designation Kit	—	—	1	—	
2	26120	Common Decal Kit	1	1	1	1	
3	23579	Paint (Spray Can) Equipment Orange	As Req'd.	As Req'd.	As Req'd.	As Req'd.	
4	35487	Paint (Liter Can) Equipment Orange	As Req'd.	As Req'd.	As Req'd.	As Req'd.	
<b>WHEEL EQUIPMENT</b>							
1	959711	12.00 X 16.5 Tire & Rim Ass'y. (Complete)	4 Std.	4 Std.	4 Std.	4 Std.	
1	956643	12.00 X 16.5 Tire & Rim Ass'y. (Complete)	4 Opt.	4 Opt.	4 Opt.	4 Std.	
1	957985	10.00 X 16.5 Tire & Rim Ass'y. (Complete)	4 Std.	4 Std.	4 Std.	4 Opt.	
2	16982	12.00 X 16.5 Flotation Tire, 8 Ply	4 Opt.	4 Opt.	4 Opt.	4 Std.	
2	6800	10.00 X 16.5 Flotation Tire, 6 Ply	4 Std.	4 Std.	4 Std.	4 Opt.	
3	29064	16.5 X 9.75, 8 Bolt Rim	4 Opt.	4 Opt.	4 Opt.	4 Std.	
3	31583	16.5 X 8.25, 8 Bolt Rim	4 Std.	4 Std.	4 Std.	4 Opt.	
3	36491	16.5 X 9.75, 8 Bolt Rim	4	4	4	4	
4	7019	Valve Stem	4	4	4	4	
5	5832	Wheel Nut	32	32	32	32	
6	26188	Wheel Stud	32	32	32	32	





# BOOM LOCK PIVOT PINS



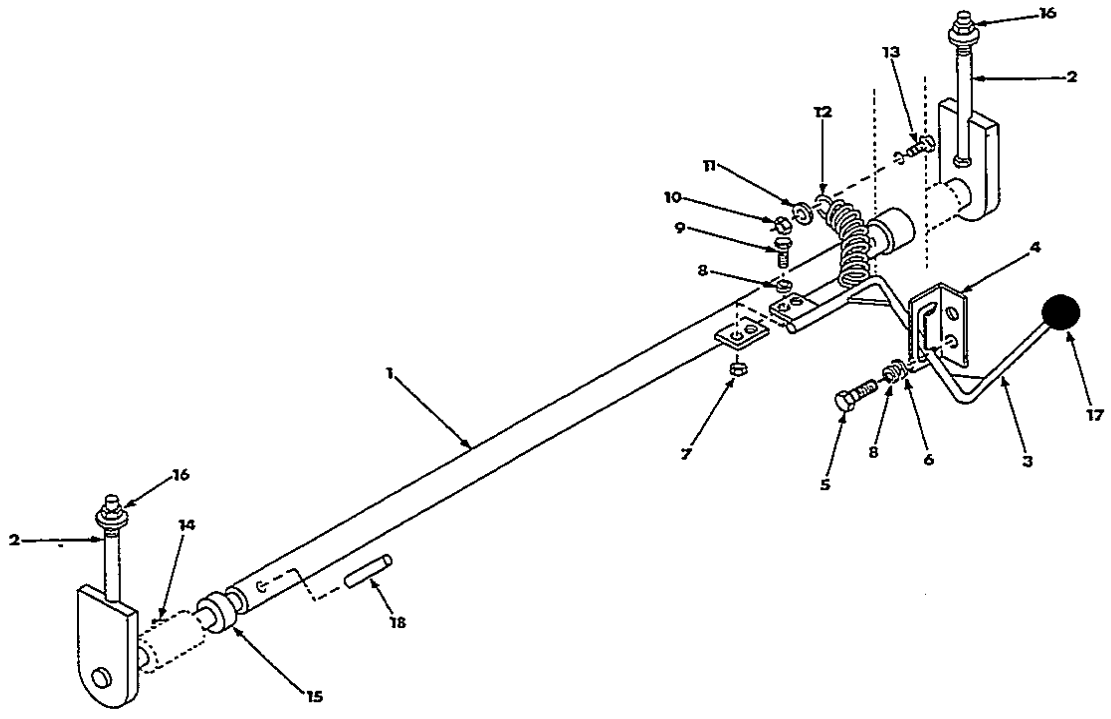
# BOOM LOCK

1.5

REF.	PART NO.	DESCRIPTION	QTY. T173HL	QTY. T183HD	QTY. T203HD	QTY. T233HD	SERIAL NO.
1	11848	Knob	2	2	2	2	
2	29056	Locking Pin Arm	2	2	2	2	
3	25532	Locking Pin	2	2	2	2	
4	1350	Nut 1/4" Dia. UNC	2	2	2	2	
5	17518	Lock Bushing	2	2	2	2	
6	2010	Grease Fitting	2	2	2	2	
7	6356	Springwasher 1/4" Cadmium Plate	2	2	2	2	
8	2593	Bolt 5/16" X 1/2" UNC	2	2	2	2	
9	29047	Boom Lock Plate	1	1	1	1	
*	6086	Captive Nut	2	2	2	2	

# PIVOT PINS

1	958757	Lift Arm Assembly	—	—	—	1	
1	957925	Lift Arm Assembly	—	1	1	—	
1	959593	Lift Arm Assembly	1	—	—	—	
2	N.S.P.	L.H. Oil Tank Assembly	1	1	1	1	
3	26321	Lift Arm Hinge Pin	—	1	1	1	
3	22605	Lift Arm Hinge Pin	1	—	—	—	
4	30893	Short Hinge Bushing	—	2	2	2	
4	30908	Short Hinge Bushing	2	—	—	—	
5	30771	Hinge Bushing	—	2	2	2	
5	30770	Hinge Bushing	2	—	—	—	
6	30892	Long Hinge Bushing	—	2	2	2	
6	30907	Long Hinge Bushing	2	—	—	—	
7	30895	Short Hinge Bushing	—	2	2	2	
7	30910	Short Hinge Bushing	2	—	—	—	
8	30894	Long Lift Bushing	—	2	2	2	
8	30909	Long Lift Bushing	2	—	—	—	
9	32326	Lift Cylinder Rear Pin	—	2	2	2	
9	22604	Lift Cylinder Rear Pin	2	—	—	—	
10	30897	Short Ram Hinge Bushing	—	2	2	2	
10	30939	Short Ram Hinge Bushing	2	—	—	—	
11	30896	Ram Hinge Bushing	—	2	2	2	
11	30917	Ram Hinge Bushing	2	—	—	—	
12	29245	Lift Arm Lift Pin	—	2	2	2	
12	5702	Lift Arm Lift Pin	2	—	—	—	
13	30899	Inside Tilt Bushing	—	2	2	2	
13	30919	Inside Tilt Bushing	2	—	—	—	
14	30898	Outside Tilt Bushing	—	2	2	2	
14	30918	Outside Tilt Bushing	2	—	—	—	
15	26735	Tilt Cylinder Hinge Pin	—	—	—	2	
15	31376	Tilt Cylinder Hinge Pin	—	2	2	—	
15	20316	Tilt Cylinder Hinge Pin	2	—	—	—	
16	26518	Hardened Bushing	2	—	—	—	
16	29059	Hardened Pin	—	2	2	2	
17	25616	Front Arm Hinge Sleeve	—	2	2	2	
17	30916	Front Arm Hinge Sleeve	2	—	—	—	
18	26743	Hardened Bushing	—	—	—	4	TO LH000226
18	30641	Hardened Bushing w/Grease Groove	—	4	4	4	LH000227 ONWARD
18	30915	Hardened Bushing w/Grease Groove	2	—	—	—	
19	2010	Grease Fitting	—	4	4	4	
19	35449	Grease Fitting	4	—	—	—	
20	32614	1 1/2" Neoprene Flat Washer	4	2	4	2	
21	32615	1 1/4" Neoprene Flat Washer	14	14	14	8	
22	33741	Turnbuckle Anchor	2	2	2	2	
23	36736	Spacer	4	—	—	—	

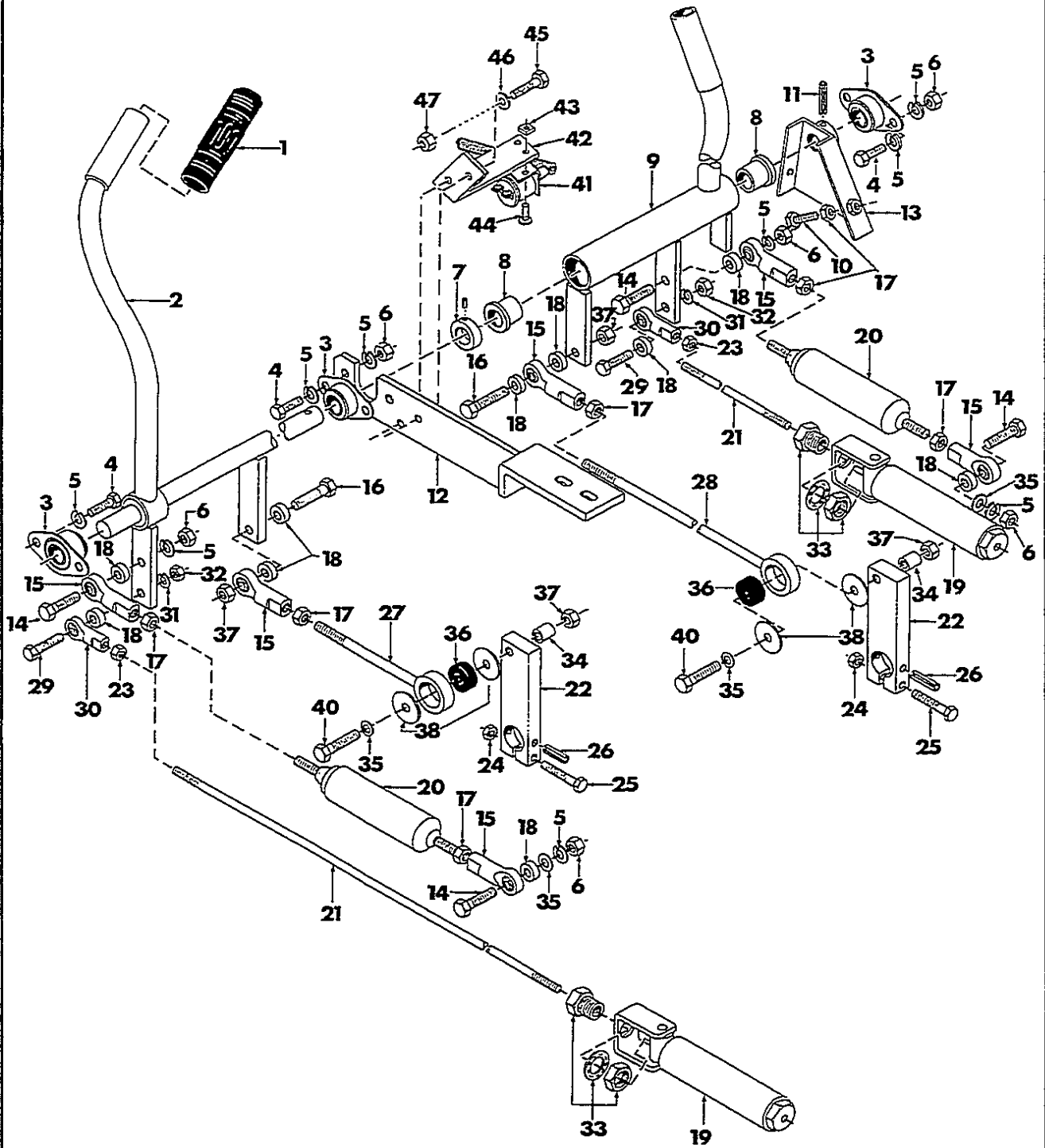




## CONTROLS 2.

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CONTROLS



# CONTROL LEVERS and NEUTRAL CENTERING DEVICE S/N LH000101 - LH000106

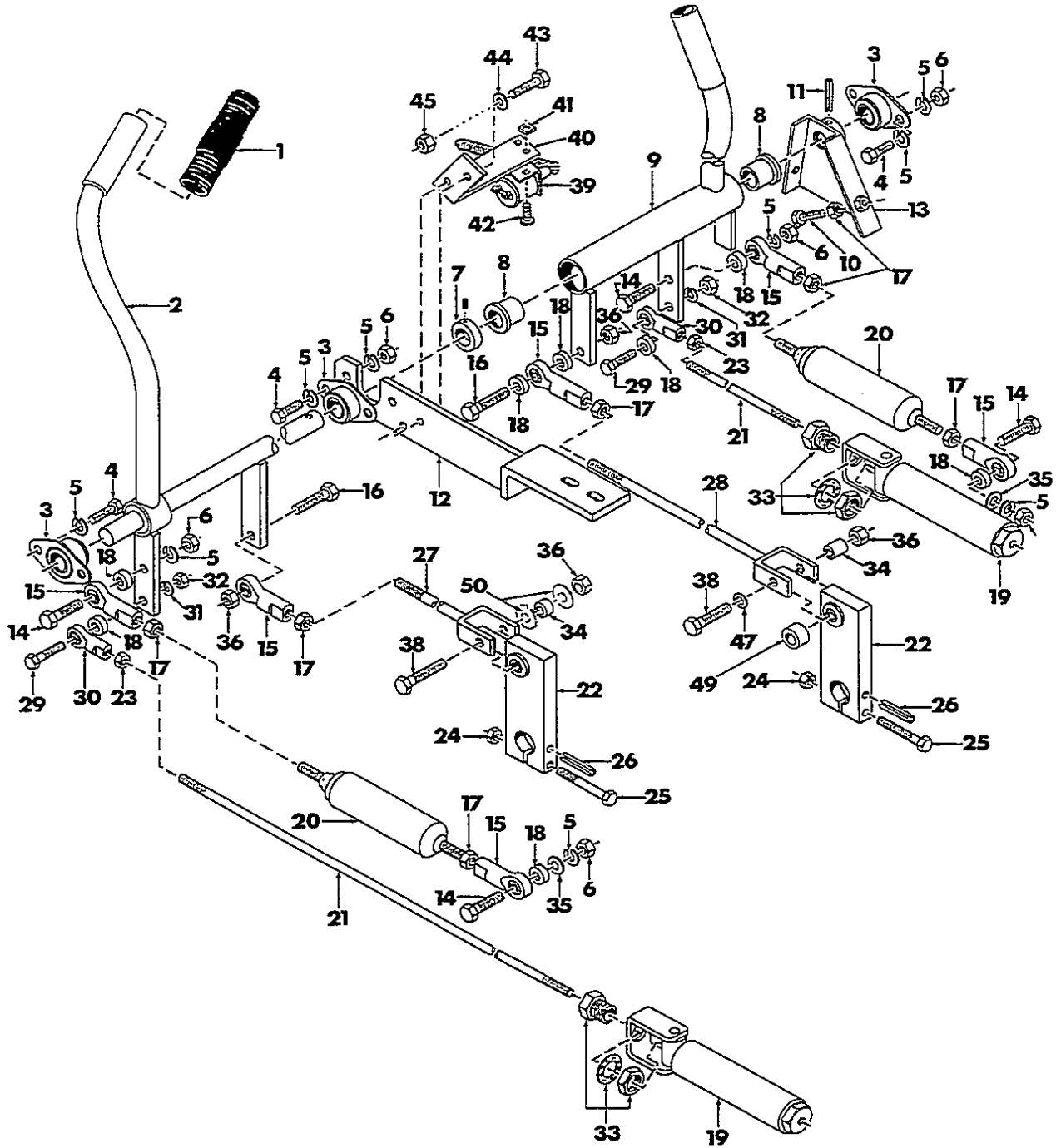
2.1

REF.	PART NO.	DESCRIPTION	QTY. T233HD	SERIAL NO.
1	3189	Lever Grip	2	
2	956706	L.H. Control Lever Assembly	1	
3	5891	Flange Bearing	3	
4	1673	Bolt 3/8" UNC x 3/4" L.	6	
5	1642	Springwasher 3/8" Dia.	16	
6	1194	Nut 3/8" UNC	10	
7	4842	Set Collar 3/4" Dia.	1	
8	16989	Nylon Bearing	2	
9	956707	R.H. Control Lever Assembly	1	
10	8023	Bolt 3/8" UNF x 1 1/4" L.	2	
11	5896	Rollpin 1/4" Dia. x 1 1/4" L.	1	
12	956708	Center Support Bracket	1	
13	952851	Control Limiter Bracket Assembly	1	
14	1193	Bolt 3/8" UNC x 1" L.	4	
15	5803	Female Rod End	6	
16	1672	Bolt 3/8" UNC x 1 1/2" L.	2	
17	1898	Nut 3/8" UNF	8	
18	21174	Spacer	10	
19	956701	Hydroback Assembly	2	
20	14860	Air Shock Absorber	2	
21	29035	Hydroback Rod	2	
22	17167	Pintle Lever	2	
23	1626	Nut 5/16" UNF	2	
24	1350	Nut 1/4" UNC	2	
25	3237	Bolt 1/4" UNC x 2" L.	2	
26	14916	Rollpin 3/8" Dia. x 1 1/2" L.	2	
27	956692	Short Pintle Rod Assembly	1	
28	956691	Long Pintle Rod Assembly	1	
29	1678	Bolt 5/16" Dia. x 1 1/2" UNC	2	
30	26174	Female Rod End 5/16" Dia.	2	
31	1870	Lockwasher 5/16" Dia.	2	
32	16771	Nut 5/16" UNC Nylok	2	
33	956882	Rod Support Fitting	2	
34	29349	Spacer	2	
35	1643	Plainwasher 3/8" Dia.	4	
36	18467	Isolator	2	
37	7465	Nut 3/8" UNC Nylok	4	
38	29384	Washer 3/8" I.D. x 1 1/2" O.D.	4	
39	8280	Bolt 3/8" x 1 3/4" L.	2	
40	29281	Bolt 3/8" Dia. x 3" L. Gr. 8	2	
*41	17099	Backup Alarm Switch	2	
*42	17615	Backup Alarm Bracket (R.H.)	1	
*42	17614	Backup Alarm Bracket (L.H.)	1	
*43	N.S.P.	Nut 3/16" Dia.	4	
*44	N.S.P.	Bolt 3/16" Dia.	4	
*45	7723	Bolt 1/4" UNC x 1 1/4" L.	4	
*46	1650	Plainwasher 1/4" Dia.	4	
*47	1350	Nut 1/4" UNC	4	
*48	955562	Backup Alarm Complete (not illustrated)	1	

\*Optional Equipment



# CONTROL LEVERS and NEUTRAL CENTERING DEVICE 2.1.1 LH000107 - ONWARD



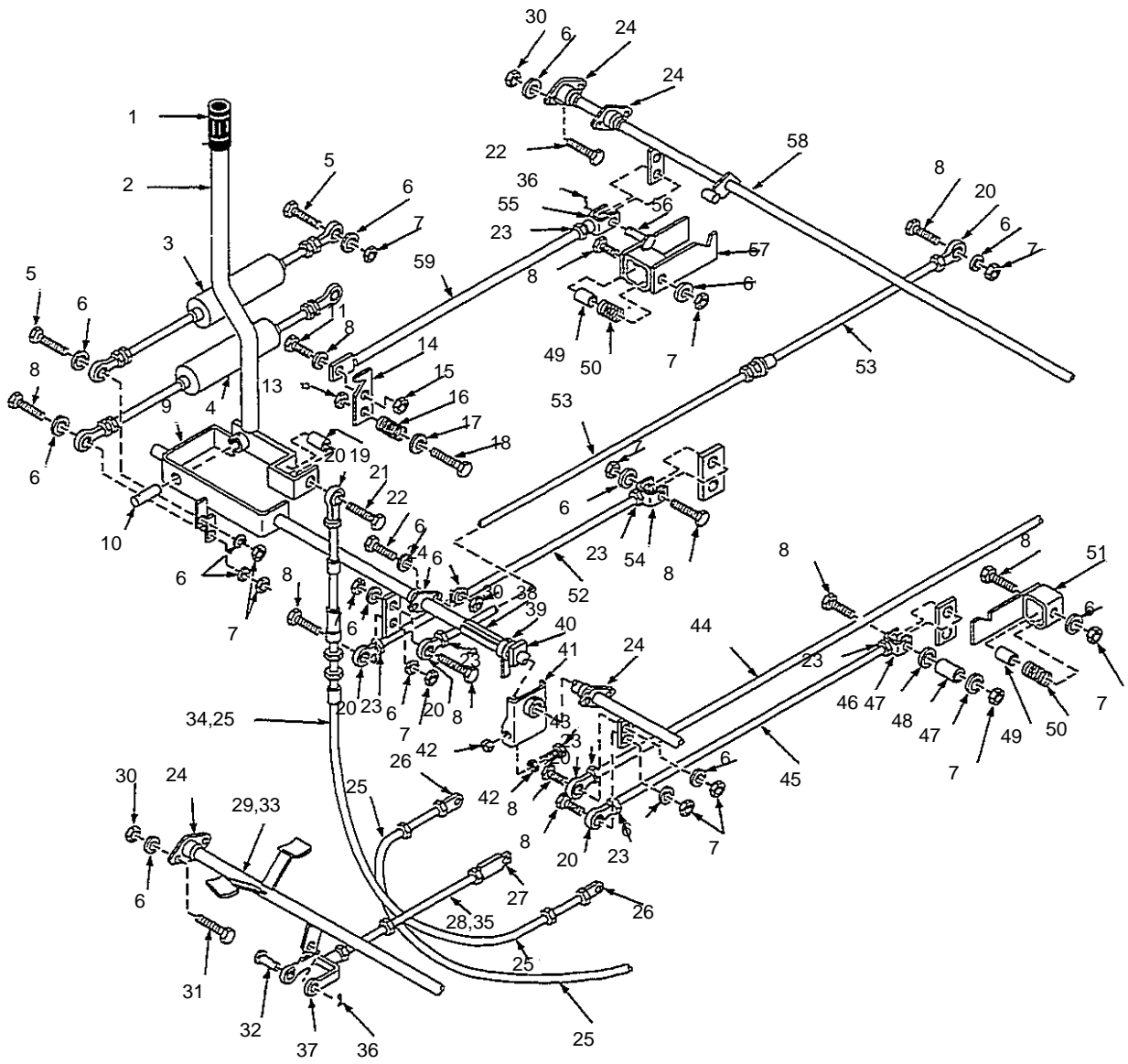


# CONTROL LEVERS and NEUTRAL CENTERING DEVICE LH000107 - ONWARD

2.1.1

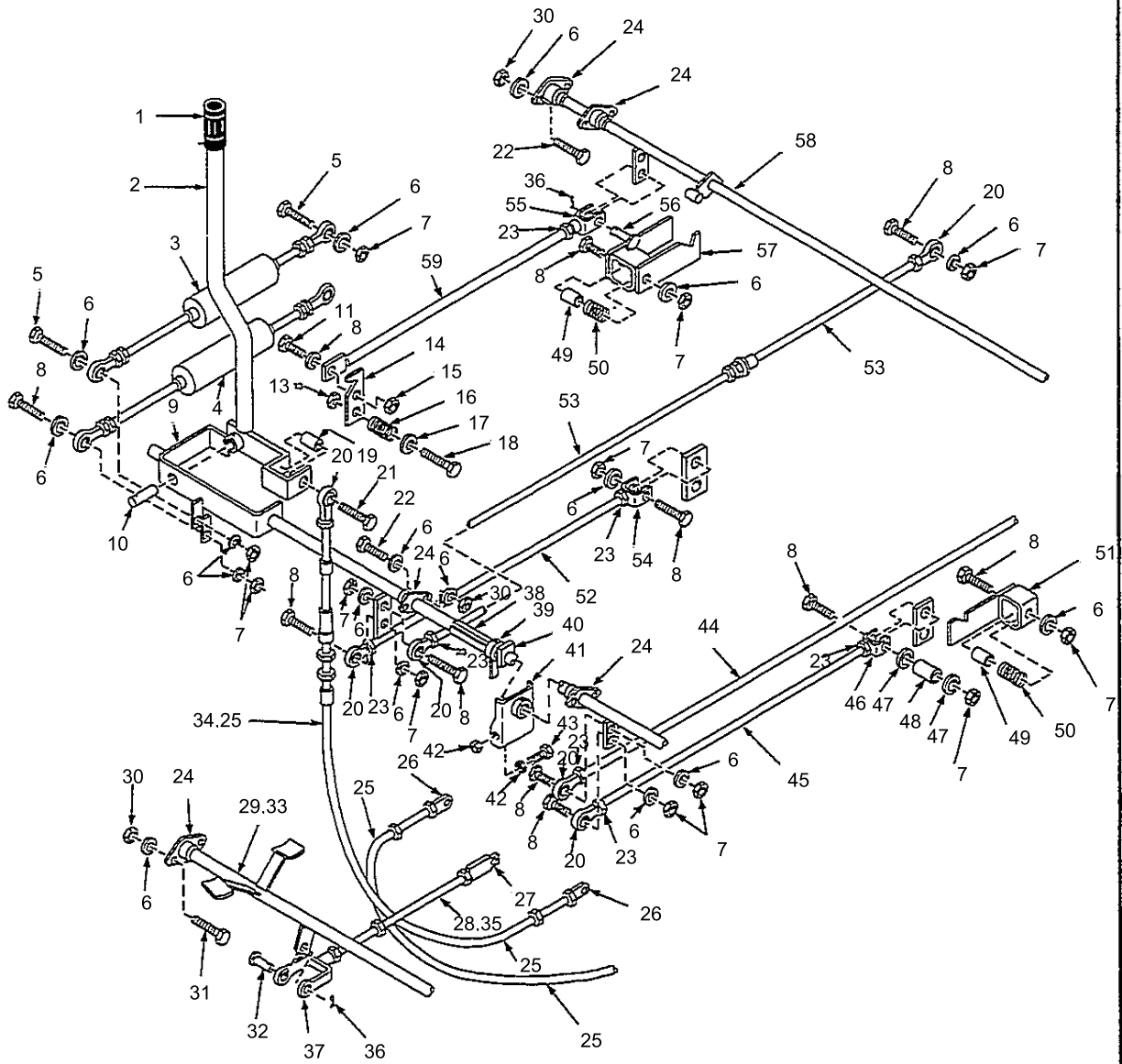
REF.	PART NO.	DESCRIPTION	QTY. T173HL	QTY. T183HD	QTY. T203	QTY. T233HD	SERIAL NO.
1	3189	Lever Grip	2	2	2	2	
2	957238	L.H. Control Lever Assembly	1	1	1	1	
3	5891	Flange Bearing	3	3	3	3	
4	1673	Bolt 3/8" UNC x 3/4" L.	6	6	6	6	
5	1642	Springwasher 3/8" Dia.	16	16	16	16	
6	1194	Nut 3/8" UNC	10	10	10	10	
7	4842	Set Collar 3/4" Dia.	1	1	1	1	
8	16989	Nylon Bearing	2	2	2	2	
9	957237	R.H. Control Lever Assembly	1	1	1	1	
10	8023	Bolt 3/8" UNF x 1 1/4" L.	2	2	2	2	
11	5896	Rollpin 1/4" Dia. x 1 1/4" L.	1	1	1	1	
12	956708	Center Support Bracket	1	1	1	1	
13	952851	Control Limiter Bracket Assembly	1	1	1	1	
14	1672	Bolt 3/8" UNC x 1 1/2" L.	4	4	4	4	
15	5803	Female Rod End	6	6	6	6	
16	25687	Bolt 3/8" UNC x 3" L.	2	2	2	2	
17	1898	Nut 3/8" UNF	8	8	8	8	
18	21174	Spacer	8	8	8	8	
19	956701	Hydroback Assembly	2	2	2	2	
20	14860	Air Shock Absorber	2	2	2	2	
21	29035	Hydroback Rod	2	2	2	2	
22	957239	Pintle Lever, Complete W/Isolator	2	2	2	2	
23	1626	Nut 5/16" UNF	2	4	4	2	
24	1350	Nut 1/4" UNC	2	2	2	2	
25	3237	Bolt 1/4" UNC x 2" L.	2	2	2	2	
26	29266	Rollpin 3/8" Dia. x 1 1/2" L.	2	2	2	2	
27	957235	Short Yoke Assembly	1	1	1	1	
28	957236	Long Yoke Assembly	1	1	1	1	
29	1678	Bolt 5/16" Dia. x 1 1/2" L.	2	2	2	2	
30	26174	Female Rod End 5/16" Dia.	2	2	2	2	
31	1870	Lockwasher 5/16" Dia.	2	2	2	2	
32	16771	Nut 5/16" Dia. UNC Nylok	2	2	2	2	
33	956882	Rod Support Fitting	2	2	2	2	
34	29349	Spacer	2	2	2	2	
35	1643	Plainwasher 3/8" Dia.	2	2	2	2	
36	7465	Nut 3/8" UNC Nylok	4	4	4	4	
37	8280	Bolt 3/8" x 1 3/4" L.	2	2	2	2	
38	29281	Bolt 3/8" x 3" L. Gr. 8	2	2	2	2	
*39	17099	Backup Alarm Switch	2	2	2	2	
*40	17615	Backup Alarm Bracket (R.H.)	1	1	1	1	
*40	17614	Backup Alarm Bracket (L.H.)	1	1	1	1	
*41	N.S.P.	Nut 3/16" Dia.	4	4	4	4	
*42	N.S.P.	Bolt 3/16" Dia.	4	4	4	4	
*43	7723	Bolt 1/4" UNC x 1 1/4" L.	4	4	4	4	
*44	1650	Plainwasher 1/4" Dia.	4	4	4	4	
*45	1350	Nut 1/4" UNC	4	4	4	4	
*46	955562	Backup Alarm Complete (not illustrated)	1	—	—	1	
+46	955561	Backup Alarm Complete	—	1	1	—	
47	21174	Washer 3/8" I.D. x 5/8" O.D.	1	1	1	1	
+48	3553	Grease Fitting 45°	1	1	1	1	
49	29135	Isolator	1	1	1	1	
50	29384	Washer	1	1	1	1	

\* Optional Equipment  
† not shown



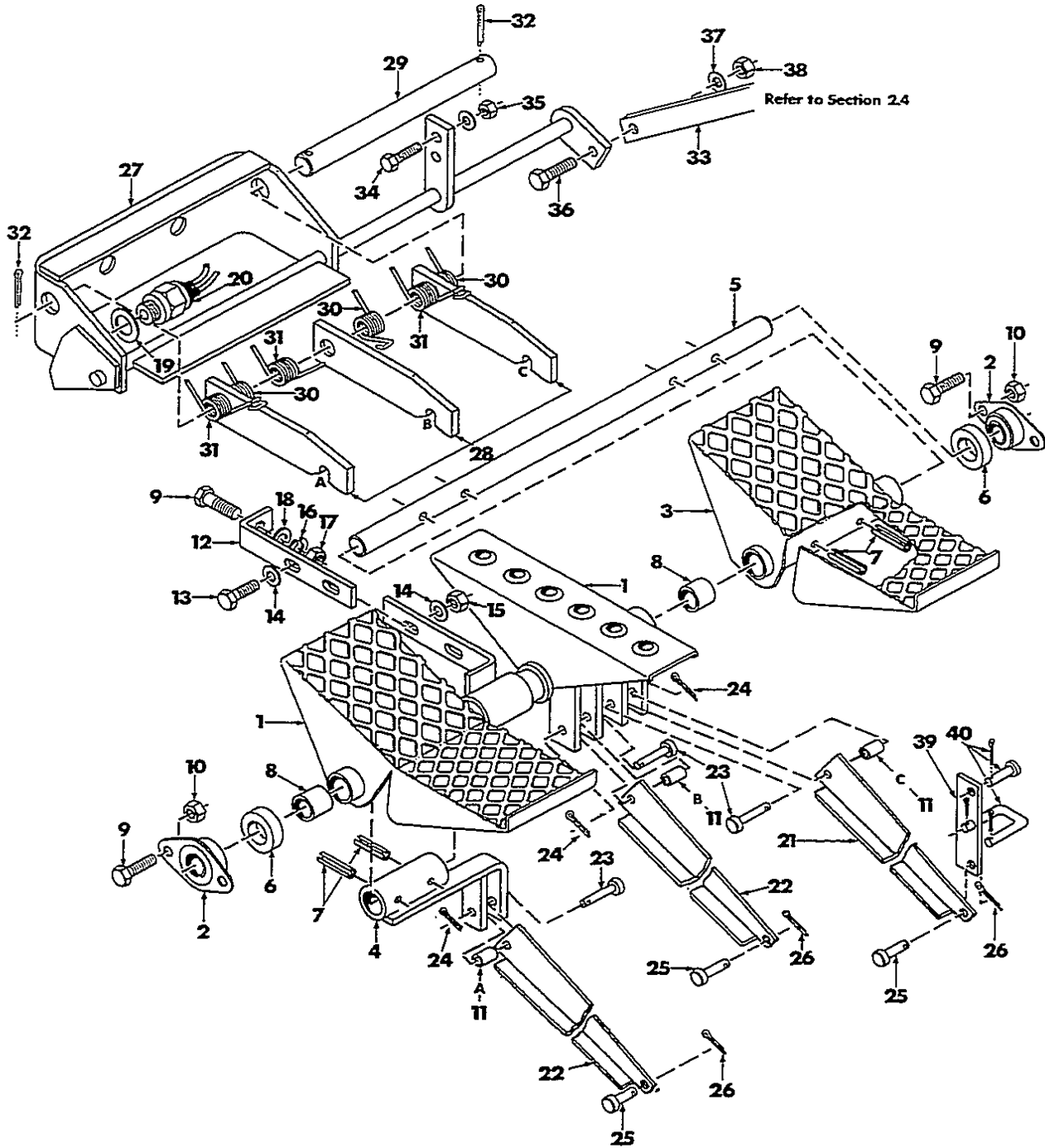
# CONTROL LEVERS WITH HAND CONTROLS

REF.	PART NO.	DESCRIPTION	QTY. T173HL	QTY. T183HD	QTY. T203HD	QTY. T233HD	SERIAL NO.
1	3189	Lever Grip	2	2	2	2	
2	959473	R.H. Control Lever Assembly	1	1	1	1	
	959391	L.H. Control Lever Assembly	1	1	1	1	
3	14860	Air Shock Absorber	2	2	2	2	
4	959090	Hydroback Assembly	2	2	2	2	
5	1364	Hex. Bolt 3/8" x 2" UNC	4	4	4	4	
6	1642	Washer, Lock 3/8"	22	22	22	22	
7	7465	Nut, Nylok 3/8" UNC	21	21	21	21	
8	1672	Bolt, Hex. 3/8" x 1 1/2" UNC	10	10	10	10	
9	958998	Pivot Arm Ass'y.	1	1	1	1	
10	36043	Bar, .750" x 2.375"	2	2	2	2	
11	5170	Bolt, Hex. 1/4" x 1" UNC	2	2	2	2	
12	1650	Washer, Flat 1/4"	6	6	6	6	
13	20860	Nut, Hex. 1/2" UNC	2	2	2	2	
14	29982	Lock Arm Straight Sheet 3/16"	2	2	2	2	
15	1350	Nut, Hex. 1/4" UNC	10	10	10	10	
16	956138	Spring, Tension .115" Dia. x 1.043"	2	2	2	2	
17	25583	Washer, Lock 1/4" St.	2	2	2	2	
18	1080	Bolt, Hex. 1/2" x 2 1/2" UNC	2	2	2	2	
19	4842	Collar, Set. 3/4"	2	2	2	2	
20	5803	Rod End Assembly	8	8	8	8	
21	17423	Bolt, Hex. 1/4" x 2" UNC	2	2	2	2	
22	1673	Bolt, Hex. 3/8" x 3/4" UNC	8	8	8	8	
23	1898	Nut, Hex. 3/8" UNF	18	18	18	18	
24	5891	Flange Bearing, 2 Bolt 3/4"	6	6	6	6	
25	35783	Push Pull Cable 1/4" - 28 UNF	—	2	2	2	
26	35883	Rod End Assembly .250 UNF	2	2	2	2	
27	35817	Control Rod Eye Bar	—	1	1	1	
28	36080	Control Rod Valve Linkage Bar	—	—	—	1	
29	959329	Auxiliary Foot Pedal	—	—	—	1	
29	959396	Auxiliary Foot Pedal	1	—	—	—	
30	1194	Nut, Hex. 3/8" UNC	14	14	14	14	
31	1193	Bolt, Hex. 3/8" x 1" UNC	4	4	4	4	
32	35455	Clivis Pin, 1/4" x 1 1/8" L.	1	1	1	1	
33	959396	Auxiliary Foot Pedal	—	—	1	1	
34	042244	Push Pull Cable	3	—	—	3	LH001076 and LH001111 onward
35	36080	Control Rod Valve Linkage Bar	1	—	—	—	
36	1631	Cotter Pin 3/32" x 3/4"	4	4	4	4	
37	35453	Clivis Pin 1/4" x 3/8"	1	1	1	1	
38	35933	Tube, .750 O.D. x .120" Wall	2	2	2	2	
39	35879	Lock Bushing Bar	2	2	2	2	
40	35876	Flat Locking Arm Bar	2	2	2	2	
41	952851	Control Lever Limiter Assembly	1	1	1	1	
42	1898	Nut, Hex. 3/8" UNF	2	2	2	2	
43	8023	Bolt, Hex. 3/8" x 1 1/4" UNF	2	2	2	2	





up to LH001110 (excluding LH001076)



# FOOT PEDALS and LOCK

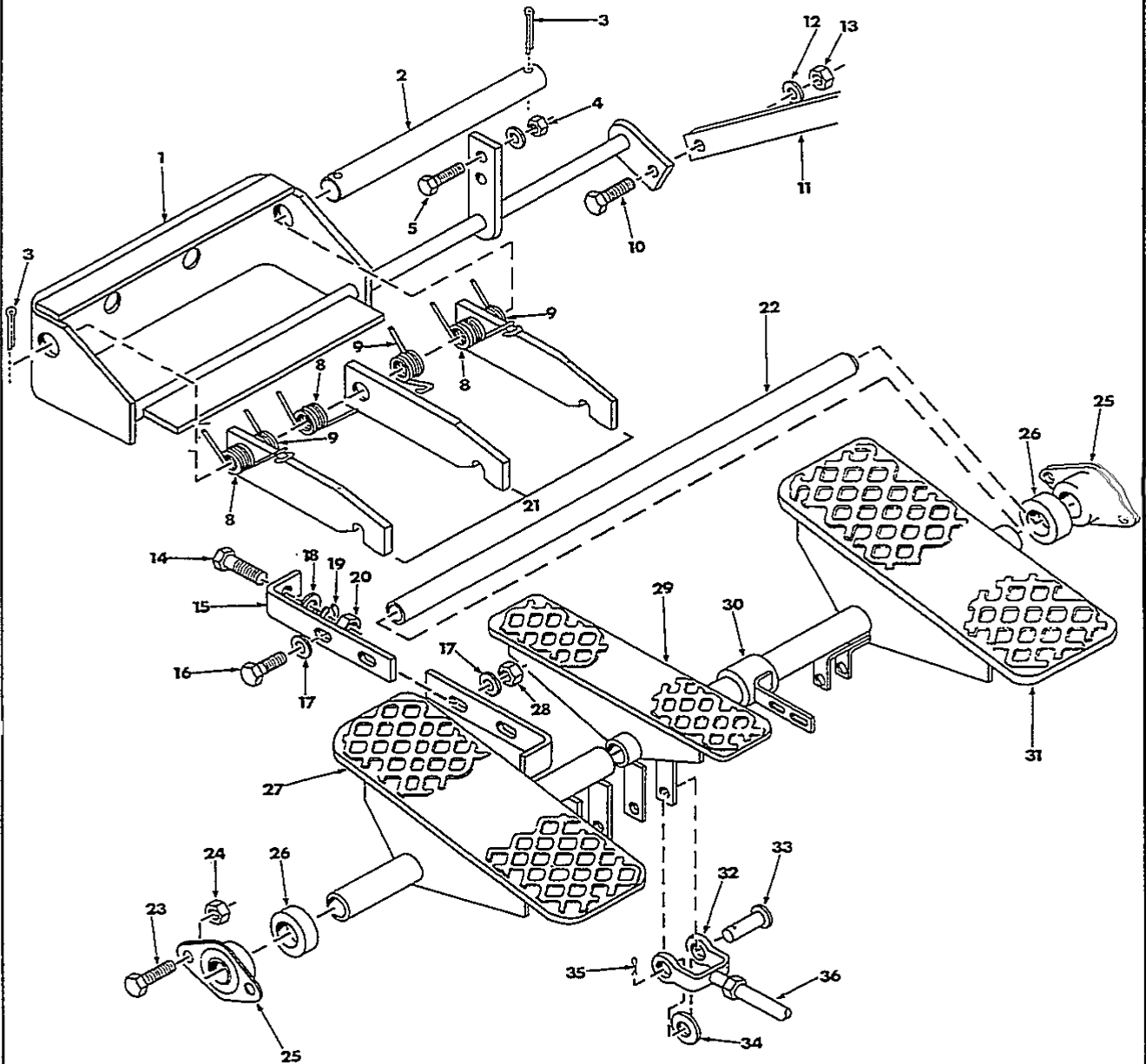
2.2.1

REF.	PART NO.	DESCRIPTION	QTY. T183HD	QTY. T203HD	QTY. T233HD	SERIAL NO.
1	956260	L.H. Foot Pedal Assembly	1	1	1	
2	5891	Nylon Bearing	2	2	2	
3	956258	R.H. Foot Pedal Assembly	1	1	1	
4	955917	Cross-over Linkage Assembly	1	1	1	
5	28965	Foot Pedal Shaft	—	—	1	
5	25500	Foot Pedal Shaft	1	1	—	
6	4842	3/4" Dia. Set Collar	2	2	2	
7	1636	Roll Pin 1/4" Dia. x 1 1/2" L.	4	4	4	
8	5893	Oilite Bushing 3/4" I.D. x 7/8" L.	2	2	2	
9	1387	Bolt 3/8" UNC x 1 1/4" L.	4	4	4	
9	1193	Bolt 3/8" UNC x 1" L.	1	1	1	
10	7465	Nut 3/8" UNC Nylok	4	4	4	
11	25204	Foot Pedal Linkage Spacer	3	3	3	
12	28970	Foot Pedal Stiffener	1	1	1	
13	1190	Bolt 5/16" UNC x 1" L.	2	2	2	
14	1651	Plainwasher 5/16" Dia.	4	4	4	
15	16771	Nut 5/16" UNC Nylok	2	2	2	
16	1642	Springwasher 3/8" Dia.	1	1	1	
17	1194	Nut 3/8" UNC	1	1	1	
18	1643	Plainwasher 3/8" Dia.	1	1	1	
19	17516	Washer 1 1/4" O.D. x 3/4" I.D. x 14 Ga.	—	—	As Req'd.	TO LH000257
20	23493	Neutral Safety Switch	—	—	1	TO LH000257
21	029774	Control Valve Linkage	—	—	1	TO LH000782
21	31267	Control Valve Linkage	1	1	—	TO LJ000277
21	959087	Control Valve Linkage	1	1	—	LJ000278-ONWARD
21	959086	Control Valve Linkage	—	—	1	LH000783-ONWARD
22	29770	Control Valve Linkage	—	—	2	
22	31266	Control Valve Linkage	2	2	—	
23	30045	Clavis Pin 1/4" x 1 1/2" L.	3	3	3	
24	1631	Cotter Pin 3/32" x 3/4" L.	3	3	3	
25	29272	Clavis Pin 1/4" x 7/8" L.	3	3	3	TO LH000257
26	1631	Cotter Pin 3/32" x 3/4" L.	3	3	3	LH000258-ONWARD
27	956711	Lock Support Bracket Assembly	—	—	1	
27	957596	Lock Support Bracket Assembly	1	1	1	
28	25508	Locking Arm	3	3	3	
29	25513	Locking Arm Shaft	1	1	1	
30	956138	R.H. Neutral Lock Spring	3	3	3	
31	956137	L.H. Neutral Lock Spring	3	3	3	
32	1546	Cotter Pin 1/8" x 1" L.	2	2	2	
33	29028	Bar 1/8" x 3/4" x 20" L.	2	2	2	
34	2580	Bolt 5/16" Dia. x 1 1/4" L.	2	2	2	
35	1191	Nut 5/16" UNC Nylok	2	2	2	
36	1190	Bolt 5/16" Dia. x 1" L.	1	1	1	
37	1651	Plainwasher 5/16" Dia.	1	1	1	
38	16771	Nut 5/16" Dia. UNC	1	1	1	
39	28968	Reverse Linkage Bar	1	1	1	
40	4200	Reverse Linkage Kit	1	1	1	

up to LH001110 (excluding LH001076)

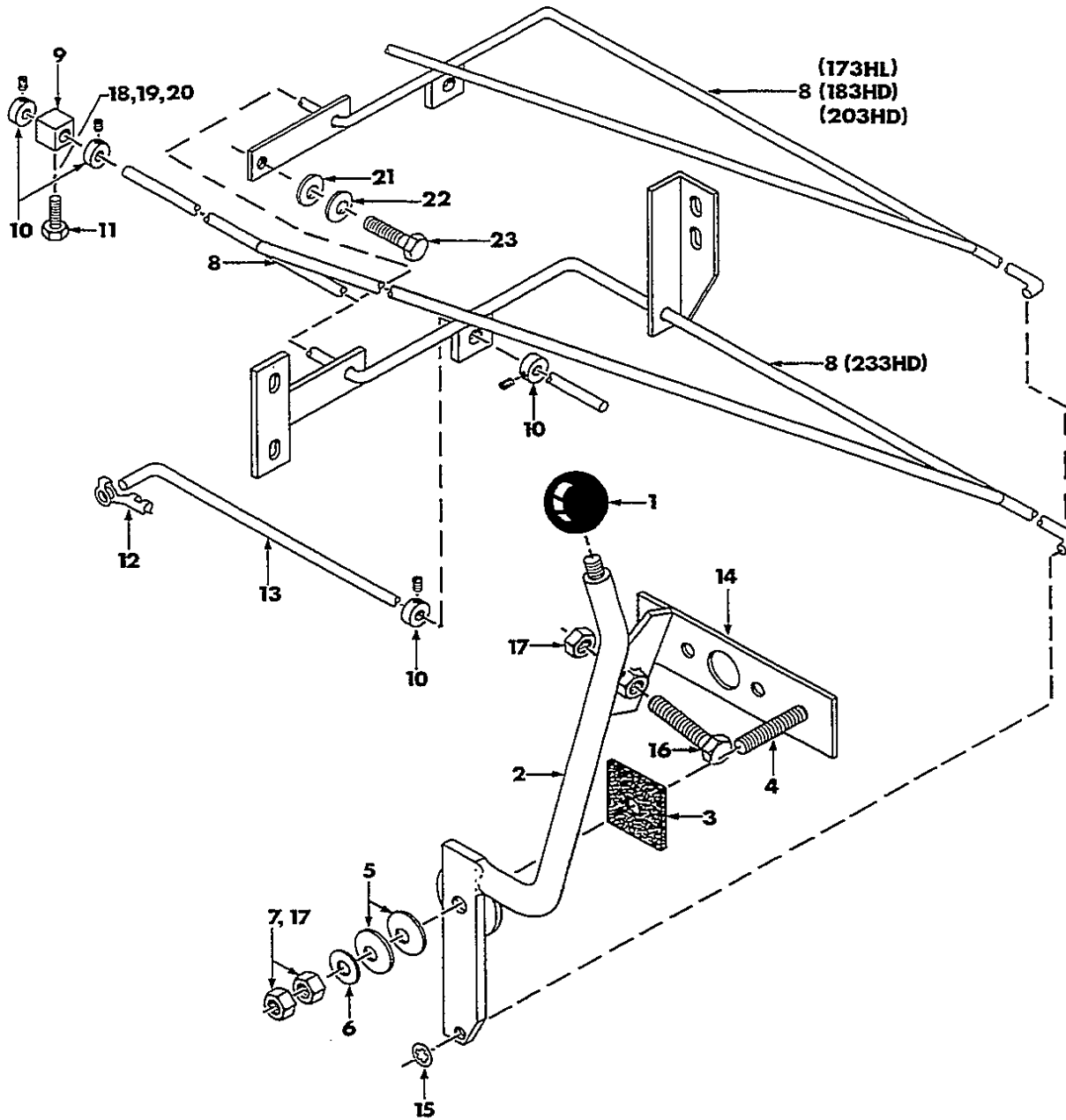


FOOT PEDALS WITH LOCKS/T173HL 2.2.2  
And T233 - LH001111 Onward (including LH001076)

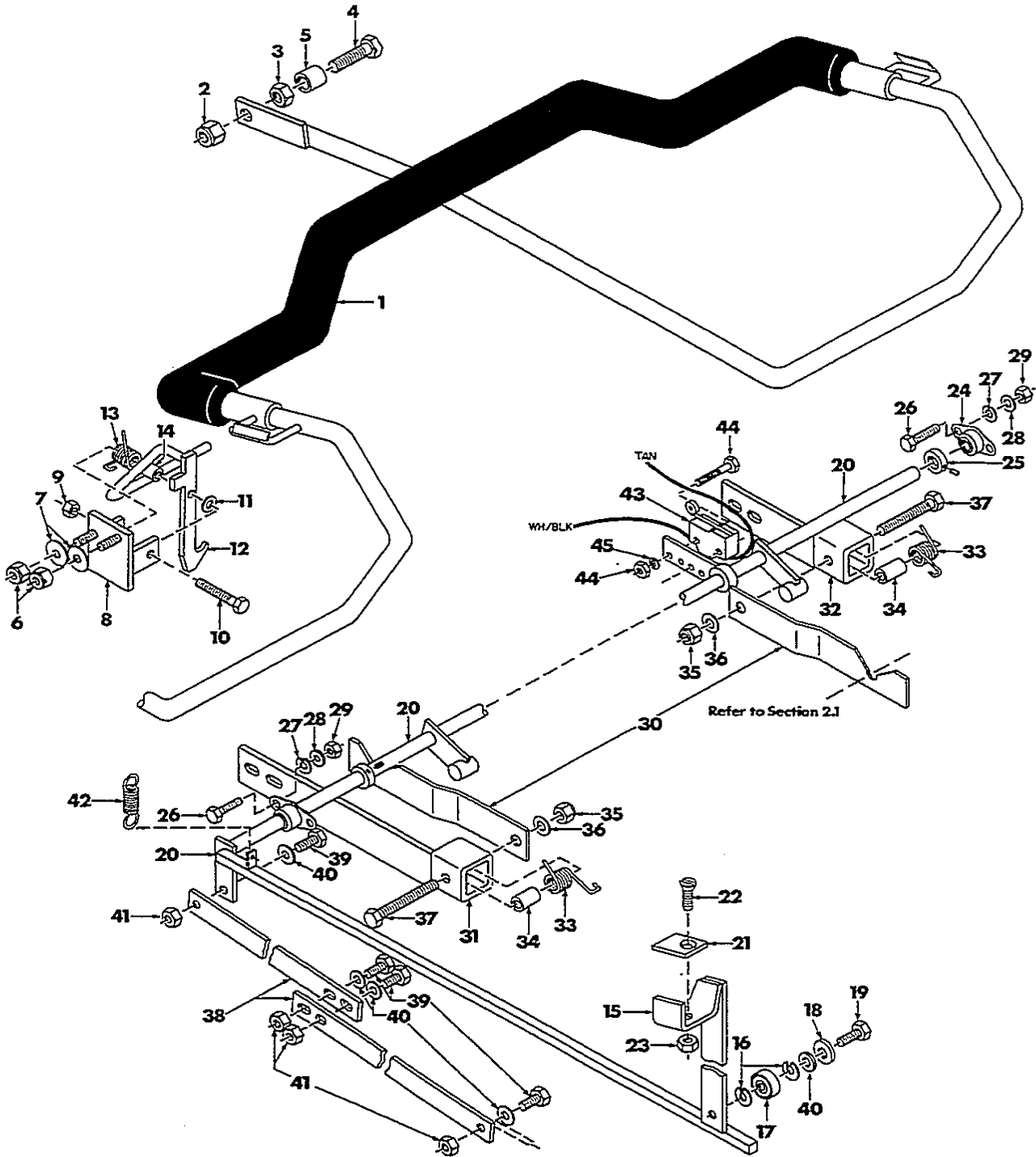








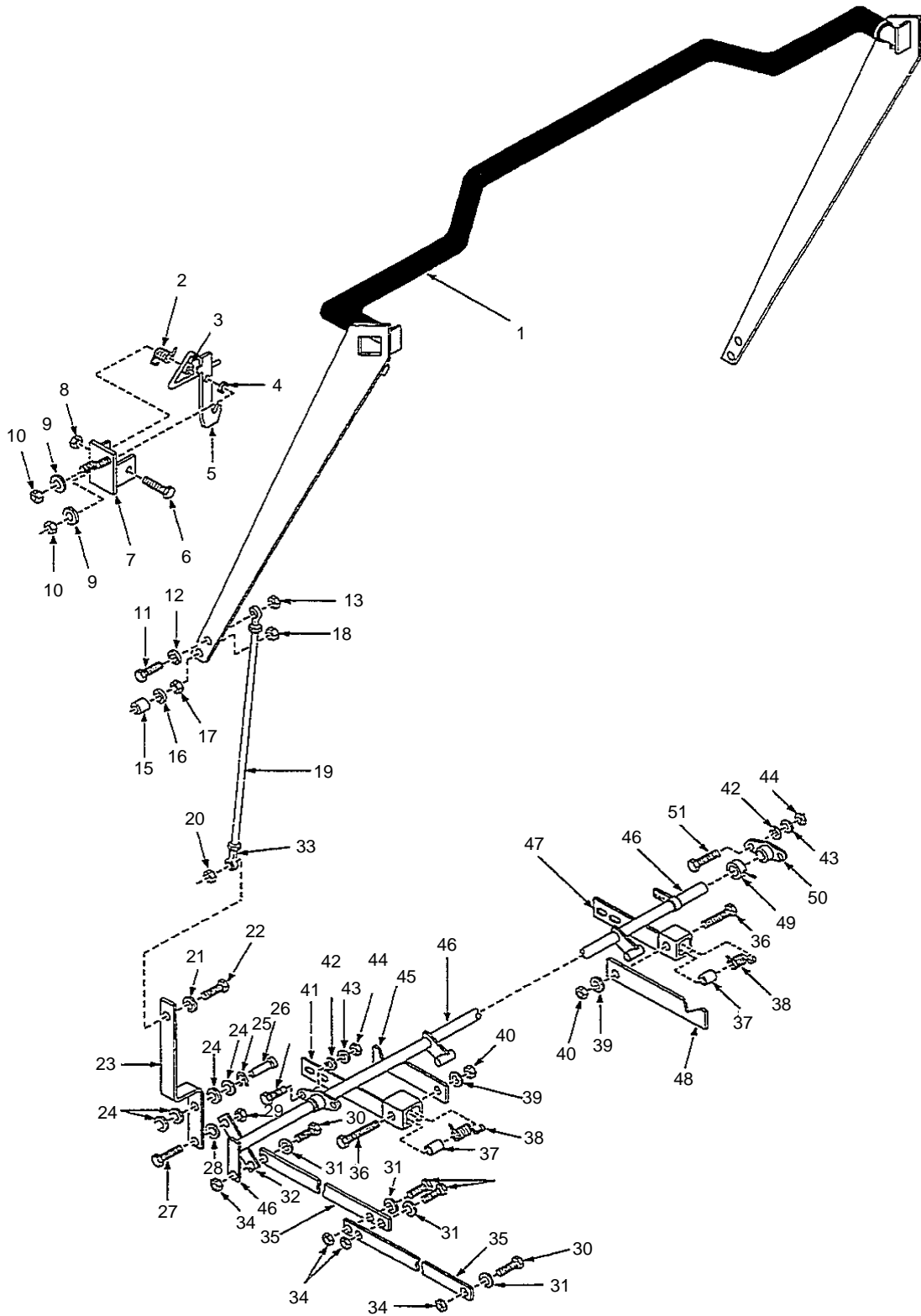




# RESTRAINT BAR and SAFETY SYSTEM

2.4

REF.	PART NO.	DESCRIPTION	QTY. T183HD	QTY. T233HD	SERIAL NO.
1	956700	Restraint Bar Assembly	1	1	
2	8613	Nut 1/2" UNC Nylok	2	2	
3	1024	Nut 1/2" UNC	2	2	
4	24980	Bolt 1/2" UNC x 2 1/4" L.	2	2	
5	22653	Spacer	2	2	
6	16771	Nut 5/16" Dia. Nylok	4	4	
7	26108	Fender Washer 5/16" x 1" x 1/16"	4	4	
8	956694	L.H. Latch Mount Assembly (not illustrated)	1	1	
8	956729	R.H. Latch Mount Assembly	1	1	
9	6645	Nut 1/4" UNC Nylok	2	2	
10	3237	Bolt 1/4" Dia. x 2" L.	2	2	
11	8154	Nylon Washer	2	2	
12	956718	L.H. Hook Latch Assembly (not illustrated)	1	1	
12	956717	R.H. Hook Latch Assembly	1	1	
13	955790	L.H. Latch Spring Assembly (not illustrated)	1	1	
13	955791	R.H. Latch Spring Assembly	1	1	
14	29248	Spring Bushing	2	2	
15	956662	Restrain Bar Slide Ass'y.	1	1	
16	1870	Lockwasher 5/16" Dia.	2	2	
17	29085	Sealed Ball Bearing	1	1	
18	29384	3/8" x 1 1/2" O.D. Washer	1	1	
19	1190	Bolt 5/16" x 3/4" L.	1	1	
20	956709	Pintle Lock Assembly	—	1	TO LH000257
20	957600	Pintle Lock Assembly	1	1	LH000258 - Onward
21	29367	Garland (Restraint Bar Slide)	1	1	
22	14846	Bolt, Hex Socket Head 5/16" x 3/4"	1	1	
23	16771	Nut 5/16" Nylok	1	1	
24	29065	Flange Bearing	1	1	
25	29066	Set Collar 1/2"	4	4	
26	2663	Bolt 1/4" Dia. x 3/4" L.	4	4	
27	1650	Plainwasher 1/4" Dia.	4	4	
28	2279	Lockwasher 1/4" Dia.	4	4	
29	1350	Nut 1/4" Dia.	2	2	
30	29982	Lock Bar (Pintle Lever)	1	1	
31	956714	Pivot Assembly (Long)	1	1	
32	956712	Pivot Assembly (Short)	1	1	
33	956137	Spring Assembly	2	2	
34	23012	Bushing 3/8" O.D. x 14" Ga. x 1" L.	2	2	
35	7465	Nut 3/8 UNC Nylok	2	2	
36	1643	Plainwasher 3/8" Dia.	2	2	
37	14620	Bolt 3/8" x 2 1/2" L.	2	2	
38	29028	Bar 1/8" x 3/4" x 20" L.	4	4	
39	1190	Bolt 5/16" Dia. x 3/4" L.	5	5	
40	1651	Plainwasher 5/16" Dia.	5	5	
41	16771	Nut 5/16" Dia. UNC Nylok	1	1	
42	11835	Extension Spring 1 3/4" L.	1	1	
43	26857	Neutral Safety Switch	2	2	LH000258 - Onward
44	27011	Bolt & Nut	2	2	LH000258 - Onward
45	27013	Lockwasher			LH000258 - Onward



# RESTRAINT BAR and SAFETY SYSTEM T173HL/203HD

2.4.1

REF.	PART NO.	DESCRIPTION	QTY. T173HL	QTY. T203HD	SERIAL NO.
1	958982	Restraint Bar Assembly	2	2	
2	955790	L.H. Latch Spring Assembly	1	1	
2	955791	R.H. Latch Spring Assembly	1	1	
3	29248	Spring Bushing	2	2	
4	8154	Nylon Washer	2	2	
5	956718	L.H. Hook Latch Assembly	1	1	
5	956717	R.H. Hook Latch Assembly	1	1	
6	3237	Bolt, 1/4" Dia. x 2" L.	2	2	
7	956694	L.H. Latch Mount Assembly	1	1	
7	956729	R.H. Latch Mount Assembly	1	1	
8	6645	Nut 1/4" UNC Nylok	2	2	
9	26108	Fender Washer 5/16" x 1" x 1/16"	4	4	
10	16771	Nut 5/16" Dia. Nylok	4	4	
11	24980	Bolt, 1/2" UNC x 2 1/4" L.	2	2	
12	1645	Washer	2	2	
13	8613	Nut 1/2" UNC Nylok	2	2	
14	24980	Bolt 1/2" UNC x 2 1/4" L.	2	2	
15	22653	Spacer	1	1	
16	1645	Washer	1	1	
17	1024	Nut 1/2" UNC	1	1	
18	8613	Nut 1/2" UNC Nylok	1	1	
19	34610	Restraint Bar Rod	1	1	
20	1194	Nut, 3/8" UNC	1	1	
21	1642	Washer 3/8" Dia.	1	1	
22	1673	Bolt, 3/8" x 3/4"	1	1	
23	958998	Bar	1	1	
24	1650	Washer, 1/4" Dia.	8	8	
25	8872	Retaining Ring	2	2	
26	30739	Pin 1/4" x 3/4"	2	2	
27	1672	Bolt, Hex. 3/8" x 1 1/2" UNC	2	2	
28	1642	Washer, 3/8" Dia.	2	2	
29	7465	Nut, 3/8" UNC Nylok	2	2	
30	1190	Bolt 5/16" Dia. x 3/4" L.	4	4	
31	1651	Plainwasher 5/16" Dia.	4	4	
32	34442	Bar	1	1	
33	5803	Female Rod End	2	2	
34	16771	Nut 5/16" Dia. UNC Nylok	4	4	
35	29028	Bar 1/8" x 3/4" x 20" L.	4	4	
36	14620	Bolt 3/8" x 2 1/2" L.	2	2	
37	23012	Bushing 3/8" O.D. x 14" Ga. x 1" L.	2	2	
38	956137	Spring Assembly	2	2	
39	1643	Plainwasher 3/8" Dia.	2	2	
40	7465	Nut 3/8" UNC Nylok	2	2	
41	956714	Pivot Assembly (Long)	1	1	
42	1650	Plainwasher 1/4" Dia.	4	4	
43	2279	Lockwasher 1/4" Dia.	4	4	
44	1350	Nut 1/4" Dia.	2	2	
45	29982	Lock Bar (Pintle Lever)	1	1	
46	958994	Pintle Lock Assembly	1	1	
47	956712	Pivot Assembly (Short)	1	1	
48	29982	Lock Bar (Pintle Lever)	1	1	
49	29066	Set Collar 1/2"	4	4	
50	29065	Flange Bearing	2	2	
51	2663	Bolt 1/4" Dia. x 3/4" L.	4	4	

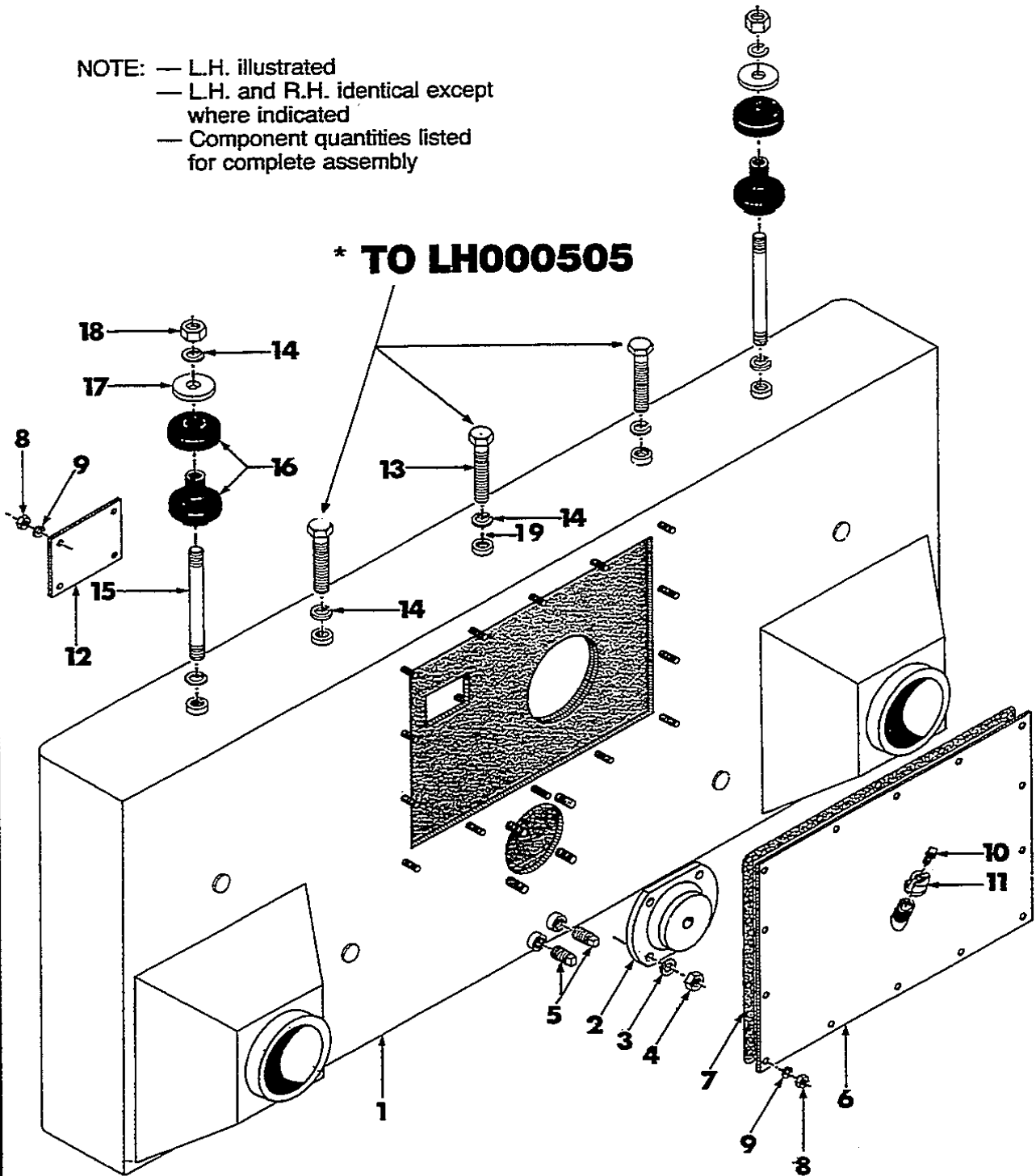
**FINAL DRIVE TRANSMISSION 3.**

B-3 Transmission Housing .....3.1  
B-4 Axle Assembly .....3.2  
B-5 Idler Sprocket Assembly .....3.3  
B-5 Drive Chains .....3.3  
B-6 Torque Motor and Parking Brake .....3.4

**FINAL  
DRIVE  
TRANSMISSION**



NOTE: — L.H. illustrated  
 — L.H. and R.H. identical except  
 where indicated  
 — Component quantities listed  
 for complete assembly



\* NOTE: From S/N LH000506 Onward The transmission housing is welded to the mainframe.

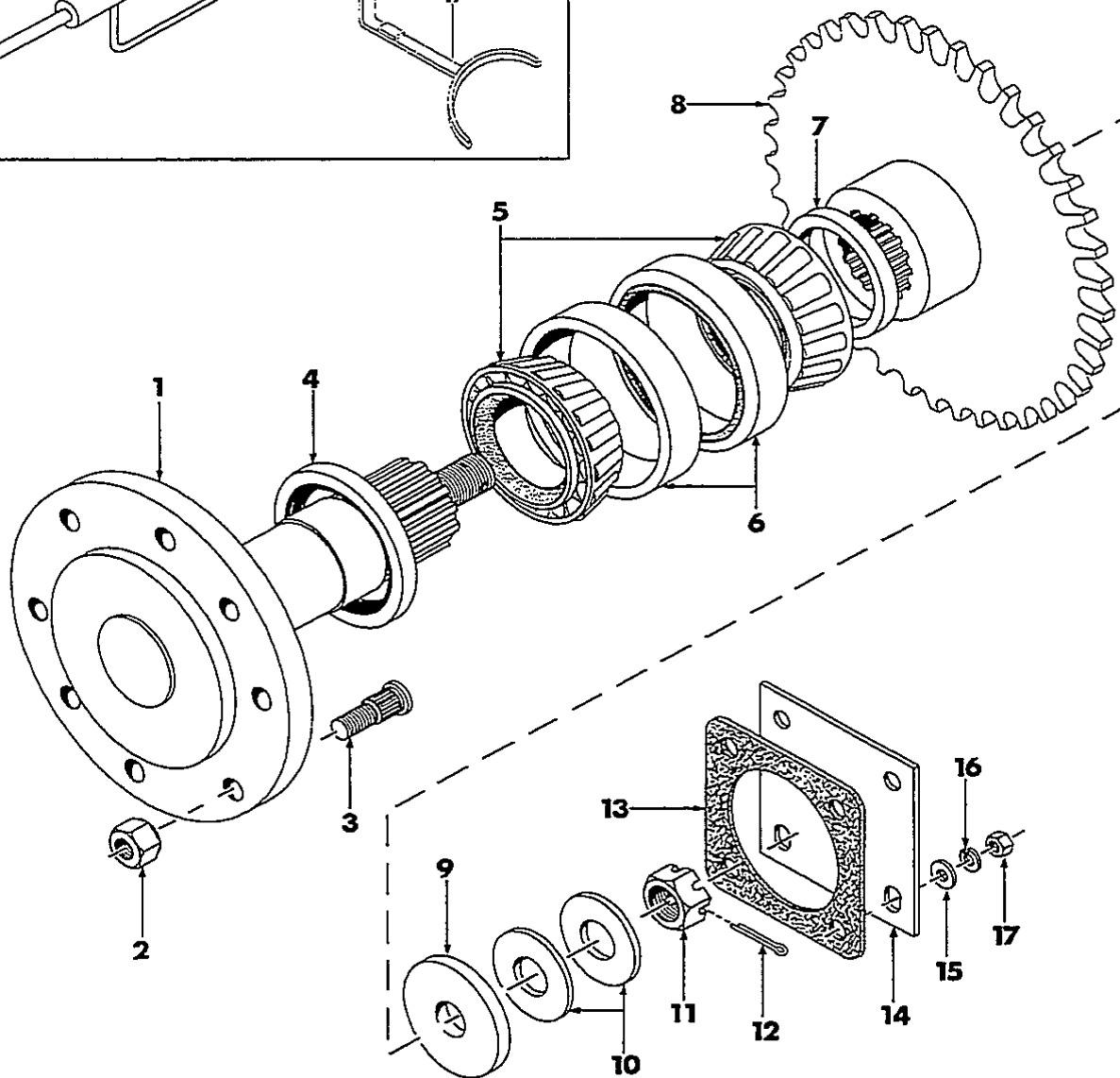
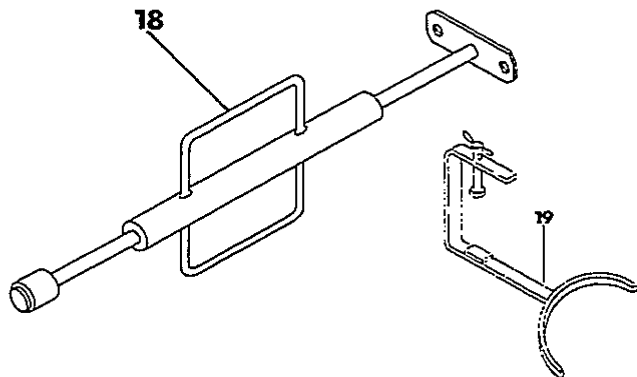
# TRANSMISSION HOUSING

## 3.1

REF.	PART NO.	DESCRIPTION	QTY. T173HL	QTY. T183HD	QTY. T203HD	QTY. T233HD	SERIAL NO.
1	956432	L.H. Studded Transmission Assembly	—	—	—	1	
1	957892	L.H. Studded Transmission Assembly	—	1	—	—	
1	959637	L.H. Transmission Assembly	1	—	1	—	
1	956436	R.H. Studded Transmission Assembly	—	—	—	1	
1	957906	R.H. Studded Transmission Assembly	—	1	—	—	
1	959638	R.H. Transmission Assembly	1	—	1	—	
1	959635	L.H. Transmission Assembly	—	—	—	1	
1	959636	R.H. Transmission Assembly	—	—	—	1	
2	954434	Bearing Flange	4	4	4	4	
3	25845	Plainwasher 1/2" Dia.	8	8	8	8	
4	8613	Nylok Nut 1/2"	8	8	8	8	
5	1456	Drain Plug	4	4	4	4	
6	956434	Inspection Cover	—	—	—	2	
6	31262	Inspection Cover	2	2	2	—	
7	20901	Inspection Cover Gasket (Silicon Tube)	As Req'd.	As Req'd.	As Req'd.	As Req'd.	
8	1191	Nut 5/16" UNC	36	36	36	36	
9	1870	Springwasher 5/16" Dia.	36	36	36	36	
10	6377	Breather Bushing	2	2	2	2	
11	952766	Breather	2	2	2	2	
12	25879	Cover Plate	2	2	2	2	
13	1529	Bolt 5/8" UNC x 4" L.	12	12	12	12	
14	1647	Springwasher 5/8" Dia.	8	8	8	8	
15	17633	R.O.P.S. Mounting Stud	4	4	4	4	
16	17308	R.O.P.S. Isolator	4	4	4	4	
17	23452	Snubbing Washer	4	4	4	4	
18	1149	Nut 5/8" UNC	8	8	8	8	
*19	25845	Washer 1/2" Dia.	8	8	8	8	

\* Not illustrated

### SPECIAL TOOLS

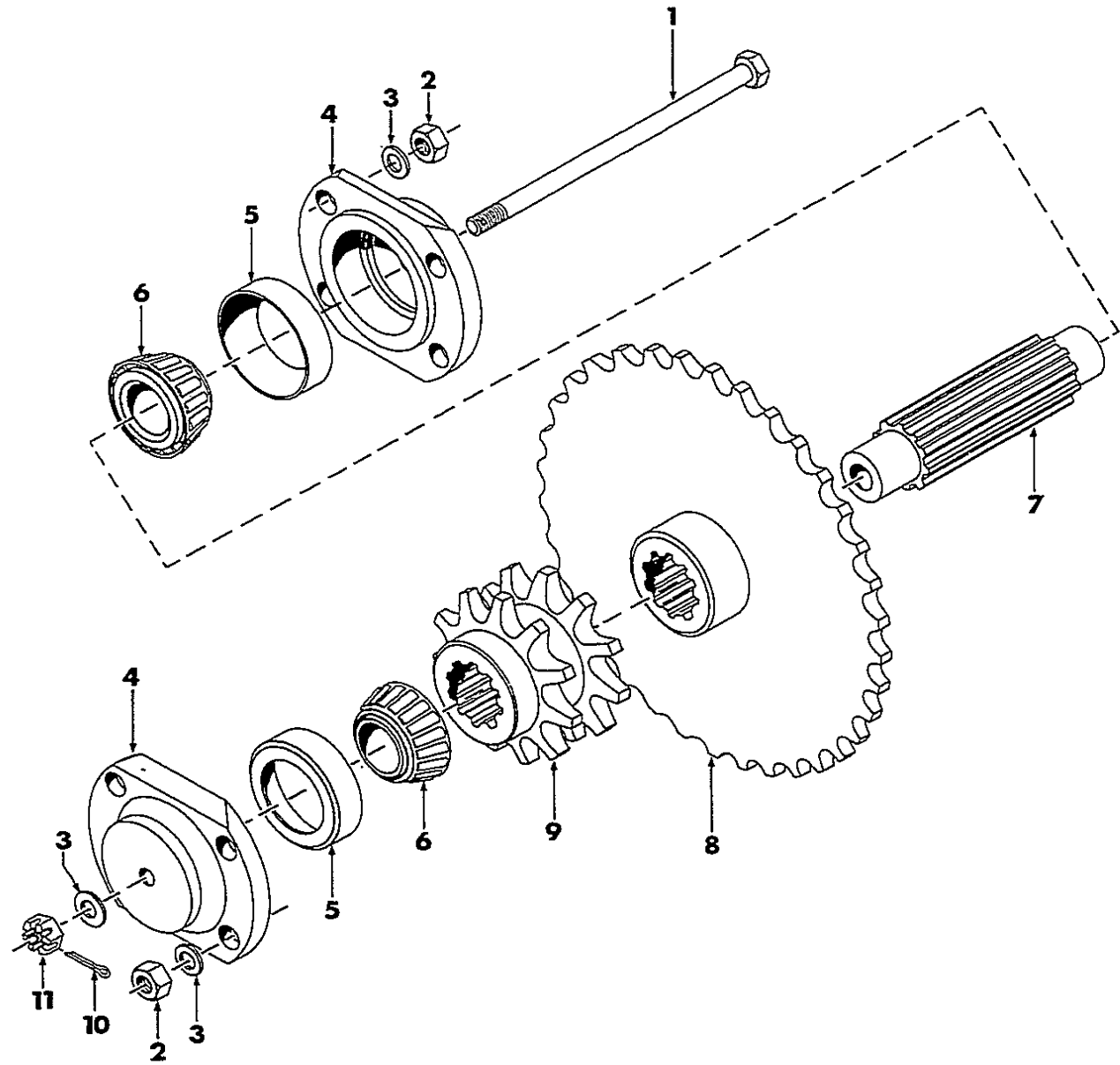


# AXLE ASSEMBLY

3.2

REF.	PART NO.	DESCRIPTION	QTY. T173HL	QTY. T183HD	QTY. T203HD	QTY. T233HD	SERIAL NO.
1	956702	Axle Assembly W/Studs	—	—	—	1	TO LH000338
1	957785	Axle Assembly W/Studs	1	1	1	1	LH00339 - onward
2	5832	Wheel Nuts	8	8	8	8	
3	26188	Wheel Studs 9/16" Dia. Gr. 8	8	8	8	8	
4	29029	Seal	1	1	1	1	
5	26509	Bearing	2	2	2	2	
6	26510	Race	2	2	2	2	
7	25618	Spacer	1	1	1	1	
8	26042	Sprocket 27 T100	1	1	1	1	
9	29361	Axle Spacer	1	1	1	1	
10	22448	Axle Washer	2	2	2	2	
11	14877	Castle Nut 1" UNC	1	1	1	1	
12	1634	Split Pin 3/16" x 1 1/2"	1	1	1	1	
13	N.S.P.	Gasket	1	1	1	1	
14	26315	Axle Rear Cap	1	1	1	1	
15	1651	Plainwasher 5/16"	4	4	4	4	
16	1870	Lockwasher 5/16	4	4	4	4	
17	1191	Nut 5/16" UNC	4	4	4	4	
18	957372	Axle Puller	1 Req'd.	1 Req'd.	1 Req'd.	1 Req'd.	
19	957189	Seal Inst. Tool	—	—	—	2 Req'd.	TO LH000338
19	958674	Seal Inst. Tool	2 Req'd.	2 Req'd.	2 Req'd.	2 Req'd.	LH000339- LJ000101-onward

\*Note: Quantity listings are for separate axle assembly



# IDLER SPROCKET ASSEMBLY

3.3

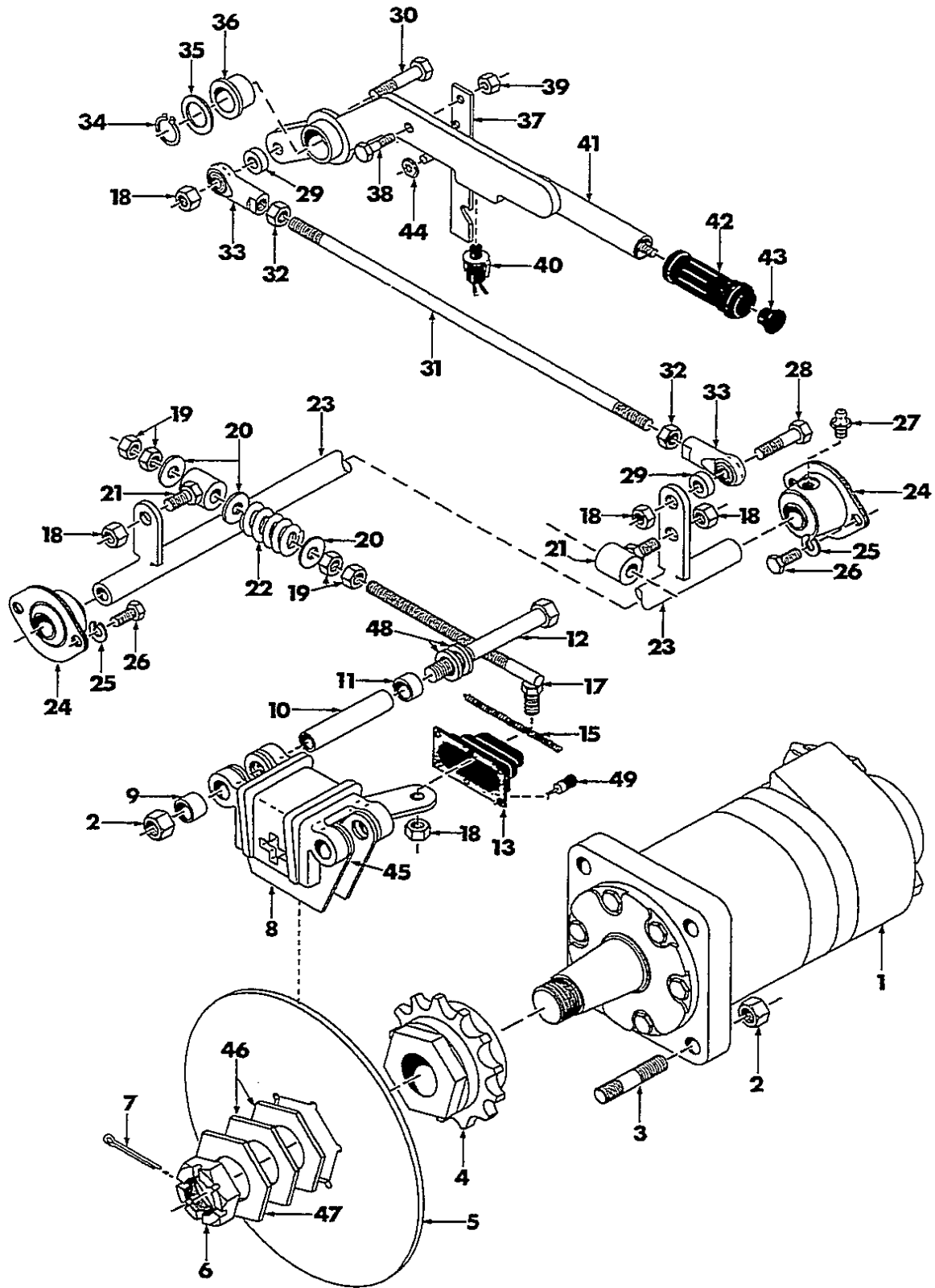
REF.	PART NO.	DESCRIPTION	QTY. T173HL	QTY. T183HD	QTY. T203HD	QTY. T233HD	SERIAL NO.
1	956429	Bolt Assembly	1	1	1	1	
2	8613	1/2" Nylok Nuts	8	8	8	8	
3	25845	1/2" Plainwasher	10	10	10	10	
4	954434	Bearing Flange	2	2	2	2	
5	8705	Bearing Race	2	2	2	2	
6	8704	Bearing	2	2	2	2	
7	25104	Splined Shaft	1	1	1	1	
8	26041	38T80 Sprocket	1	1	1	1	
9	22734	11T100 Double Sprocket	1	1	1	1	
10	1546	1/8" x 1" L. Split Pin	1	1	1	1	
11	17340	1/2" UNF Castle Nut	1	1	1	1	

\*Quantities listed are for single assembly

# CHAINS AND CONNECTING LINKS

REF.	PART NO.	DESCRIPTION	QTY. T173HL	QTY. T183HD	QTY. T203HD	QTY. T233HD	SERIAL NO.
1	31044	No. 80 Roller Chain, 45 Links Plus Connector	1	1	1	1	LJ000101 - onward LH000528 - onward
2	31045	No. 100 Front Chain, 51 Links Plus Connector	1	1	1	1	LJ000101 - onward LH000528 - onward
3	32759	No. 100 Rear Chain, 49 Links Plus Connector	1	1	1	—	LJ000101 - onward
4	31046	No. 100 Rear Chain, 51 Links Plus 2 Pitch Offset and 2 Connectors	—	—	—	1	LH000528 - onward
5	32906	No. 80 Press Fit Connector (spare parts only)	As Req'd.	As Req'd.	As Req'd.	As Req'd.	
6	32907	No. 100 Press Fit Connector (spare parts only)	As Req'd.	As Req'd.	As Req'd.	As Req'd.	
7	32578	No. 100 Two Pitch Offset Conn. (spare parts only)	As Req'd.	As Req'd.	As Req'd.	As Req'd.	

\*Quantities listed are for single transmission assembly



# TORQUE MOTOR and PARKING BRAKE

3.4

REF.	PART NO.	DESCRIPTION	QTY. T183HD	QTY. T233HD	SERIAL NO.
1	26765	Torque Motor 6000 Series	1	1	
2	8613	Nut 1/2" Nylok	1	1	
3	29093	Machine Stud 1/2" Dia.	8	8	
4	25842	Drive Sprocket 13T80	2	2	
5	25843	Brake Disc	2	2	
6	N.S.P.	Castle Nut (w/torque motor)	2	2	
7	30471	Split Pin 1/8" x 3" L	2	2	
*8	28979	Brake Caliper	2	2	
9	29477	Bushing, 3/4" O.D. x 13 Ga. x 9/16"	4	4	
10	See Item 8	Sleeve (Part of Brake Caliper)	4	4	
11	29476	Bushing, 3/4" O.D. x 13 Ga. x 7/16"	4	4	
12	1663	Bolt 1/2" Dia. x 4 1/2" L.	4	4	
13	28982	Boot Assembly	1	1	
15	3273	Boot Tie	2	2	
17	956659	Threaded Rod Ass'y.	2	2	
18	7465	Nut 3/8" UNC Nylok	5	5	
19	1194	Nut 3/8" Dia. UNC	8	8	
20	1643	Plainwasher 3/8" Dia.	6	6	
21	956600	Bushing Ass'y.	2	2	
22	1205	Spring	2	2	
23	956661	Brake Shaft Ass'y.	1	1	
24	24914	Flange Bearing	2	2	
25	1870	Lockwasher 5/16"	4	4	
26	1341	Bolt 5/16" x 3/4" UNC	4	4	
27	2010	Grease Nipple	2	2	
28	8280	Bolt 3/8" x 1 3/4" L.	1	1	
29	21174	Spacer	2	2	
30	8280	Bolt 3/8" x 1 3/4" L.	1	1	
31	28973	Parking Brake Rod	1	1	
32	1898	Nut 3/8" UNF	2	2	
33	5803	Female Rod End	2	2	
34	4839	Circlip 3/4"	1	1	
35	17516	Spacer	1	1	
36	16989	Arguto Bushing	1	1	
37	17225	Park Brake Lock	1	1	
38	5170	Bolt 1/4" x 1"	1	1	
39	6645	Nut 1/4" UNC Nylok	1	1	
40	26208	Brake Light Switch	1	1	
41	956658	Brake Lever Assembly	1	1	
42	11841	Lever Grip	1	1	
43	25175	Lever Knob	1	1	
44	22966	1/4" Retaining Ring	1	1	
45	30487	Brake Pads	4	4	
46	30470	Washer, Hex, 2 1/4" x .179"	4	4	
47	30474	Washer, Hex, 2 1/4" x .135"	2	2	
48	30485	Washer, Hardened 1/2"	4	4	
49	31402	Super Bonder, Lock Tight	As Req'd.	As Req'd.	

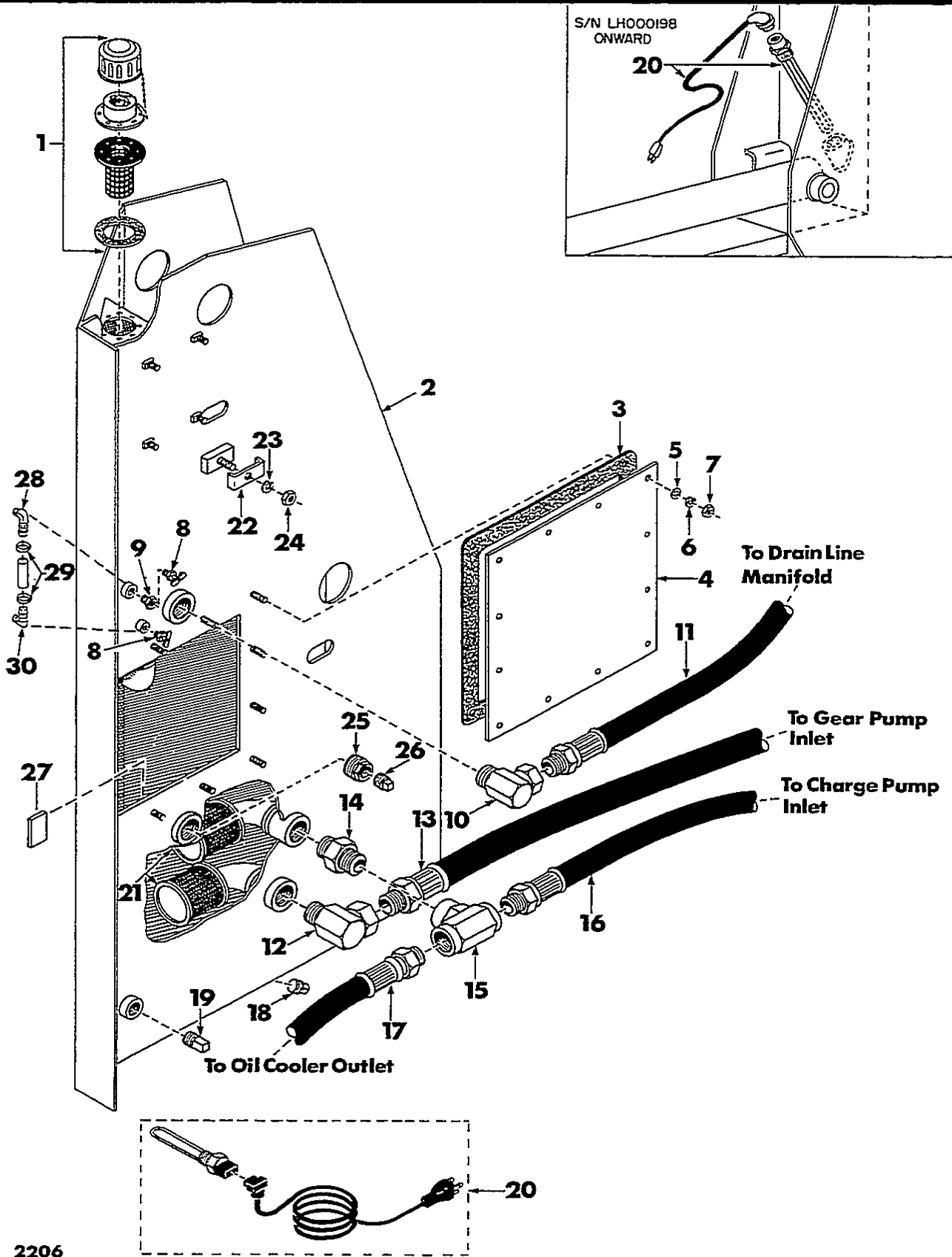
\*May require assembly for L.H. & R.H. use. Refer to Service Instruction Sheet No. 33736/



## HYDRAULIC SYSTEM 4.

B-7	Oil Reservoir .....	4.1
B-8	Boom Lift Circuit (T233HD) .....	4.2
B-9	Boom Lift Circuit (T183HD/T203HD) .....	4.2.1
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C-1	Bucket Tilt Circuit (T173HL) .....	4.3.2
C-2	Auxiliary Hydraulic Circuit (T183HD/T203HD/T233HD) .....	4.4
C-3	Auxiliary Hydraulic Circuit (T173HL) .....	4.4.1
C-4	Auxiliary Gear Pump .....	4.5
C-5	Control Valve (T183HD/T203HD/T233HD) .....	4.6
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C-7	Hydraulic Oil Cooler and Filter .....	4.7
C-8	Hydraulic Oil Cooler and Filter .....	4.7.1
C-9	Lift Cylinder (T183HD/T203HD/T233HD) .....	4.8
C-10	Lift Cylinder (T173HL) .....	4.8.1
C-11	Tilt Cylinder .....	4.8.2
C-12	Self Level Valve .....	4.9

**HYDRAULIC  
SYSTEM**

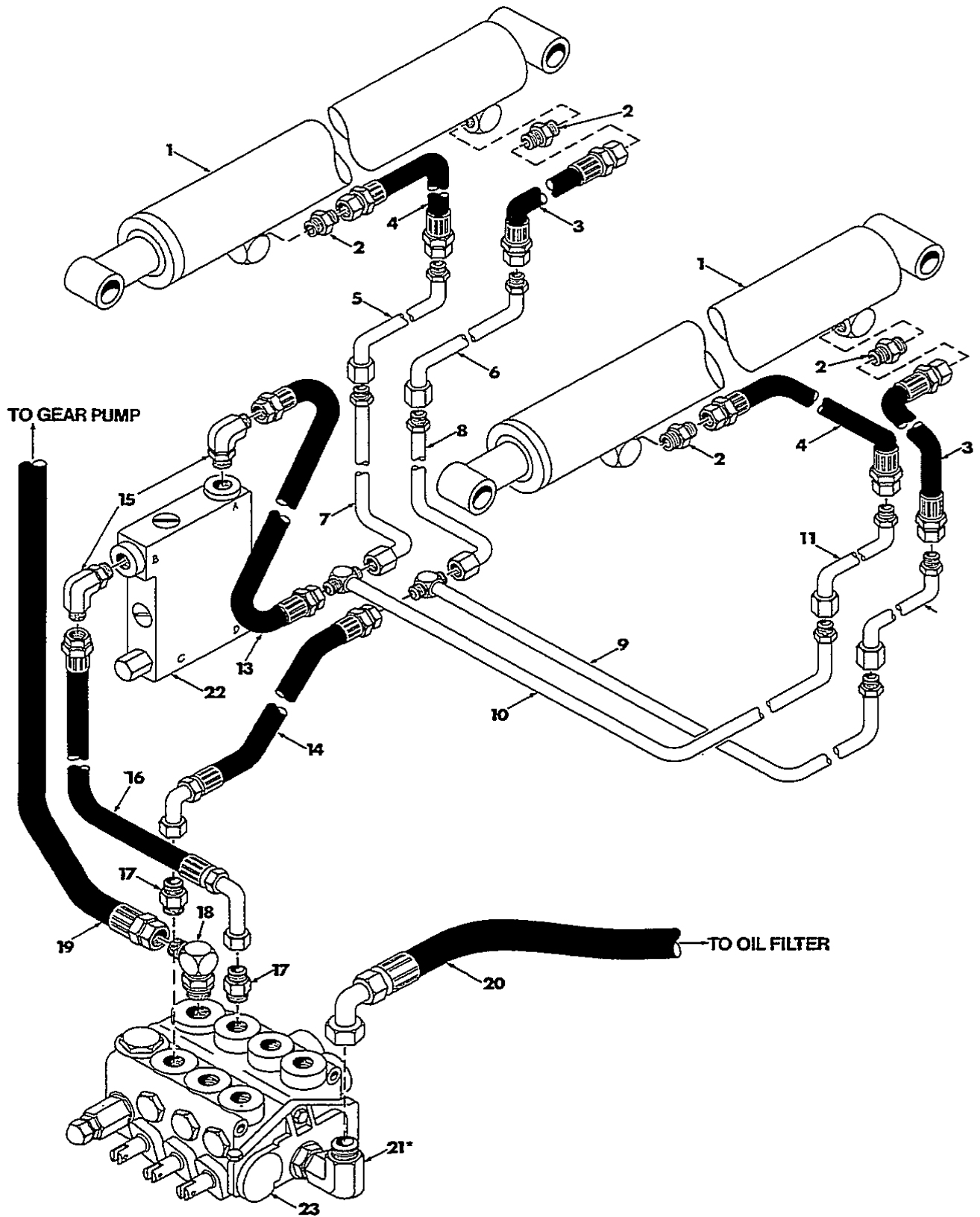


# OIL RESERVOIR

4.1

REF. NO.	PART NO.	DESCRIPTION	QTY. T173HL	QTY. T183HD	QTY. T203HD	QTY. T233HD	SERIAL NO.
1	36733	Filler Cap Assembly	1	1	1	1	
1	26202	Pressurized Filler Cap (Optional)	—	—	—	—	
2	N.S.P.	L.H. Oil Tank Assembly	1	1	1	1	
3	20384	Gasket	1	1	1	1	
4	20232	Inspection Hole Cover	1	1	1	1	
5	1651	Plainwasher 5/16" Dia.	12	12	12	12	
6	1870	Lockwasher 5/16" Dia.	12	12	12	12	
7	1191	Nut 5/16" UNC	12	12	12	12	
8	17085	Drain Cock 1/4" NPT	—	2	—	2	TO LJ000289 TO LH000796
9	6854	Reducing Bushing 3/8" x 1/4"	—	1	—	1	TO LJ000289 TO LH000796
10	6111	3/4" NPT x 90° Swivel Elbow	1	1	1	1	
11	953633	Hydraulic Hose 3/4" NPT x 44" L.	—	—	—	1	
11	957922	Hydraulic Hose 3/4" NPT x 45 1/2" L.	—	1	1	—	
11	959626	Hydraulic Hose, 3/4" x 45 1/2" L.	1	—	—	—	
12	6115	1" NPT x 90° Swivel Elbow	1	1	1	1	
13	953630	Hydraulic Hose 3/4" NPT x 1" NPT x 54" L.	—	—	—	1	
13	957921	Hydraulic Hose 3/4" NPT x 1" NPT x 50" L.	—	1	1	—	
13	959628	Hydraulic Hose, 1" NPT x 23 1/4" L.	1	—	—	—	
14	15304	Hex. Connector 3/4" NPT	1	1	1	1	
15	6114	3/4" NPT Female Tee	1	1	1	1	
16	953632	Hydraulic Hose 3/4" NPT x 50" L.	—	—	—	1	
16	957922	Hydraulic Hose 3/4" NPT x 45 1/2" L.	—	1	1	—	
16	959626	Hydraulic Hose, 3/4" x 45 1/2" L.	1	—	—	—	
17	956448	Hydraulic Hose 3/4" NPT x 43" L.	—	—	—	1	
17	957929	Hydraulic Hose 3/4" NPT x 51" L.	1	1	1	—	
18	17144	Magnetic Drain Plug 3/4" NPT	1	1	1	1	
19	1458	Drain Plug 3/4" NPT	1	1	1	1	
20	30549	Reservoir Heater (Optional) 110-120 V only	1	1	1	1	
21	14898	Suction Filter 100 Micron	2	2	2	2	
22	18321	Tubing Clamp	5	9	9	9	
23	2279	Springwasher 1/4" Dia.	—	1	1	1	
24	1350	Nut 1/4" Dia.	—	1	1	1	
25	4549	Reducing Bushing 1 1/4" x 1/2" NPT	1	1	1	1	
26	1457	Plug 1/2" NPT	1	1	1	1	
27	32478	Magnet	1	1	1	1	
28	34899	Elbow 1/4"	1	1	1	1	LJ000290 - onward LH000797 - onward
29	34919	Circle Clamp 9/16"	2	2	2	2	LJ000290 - onward LH000797 - onward
30	34903	Elbow 3/8"	1	1	1	1	LJ000290 - onward LH000797 - onward
*	36778	Tubing Clamp	1	—	—	—	

\* Not illustrated

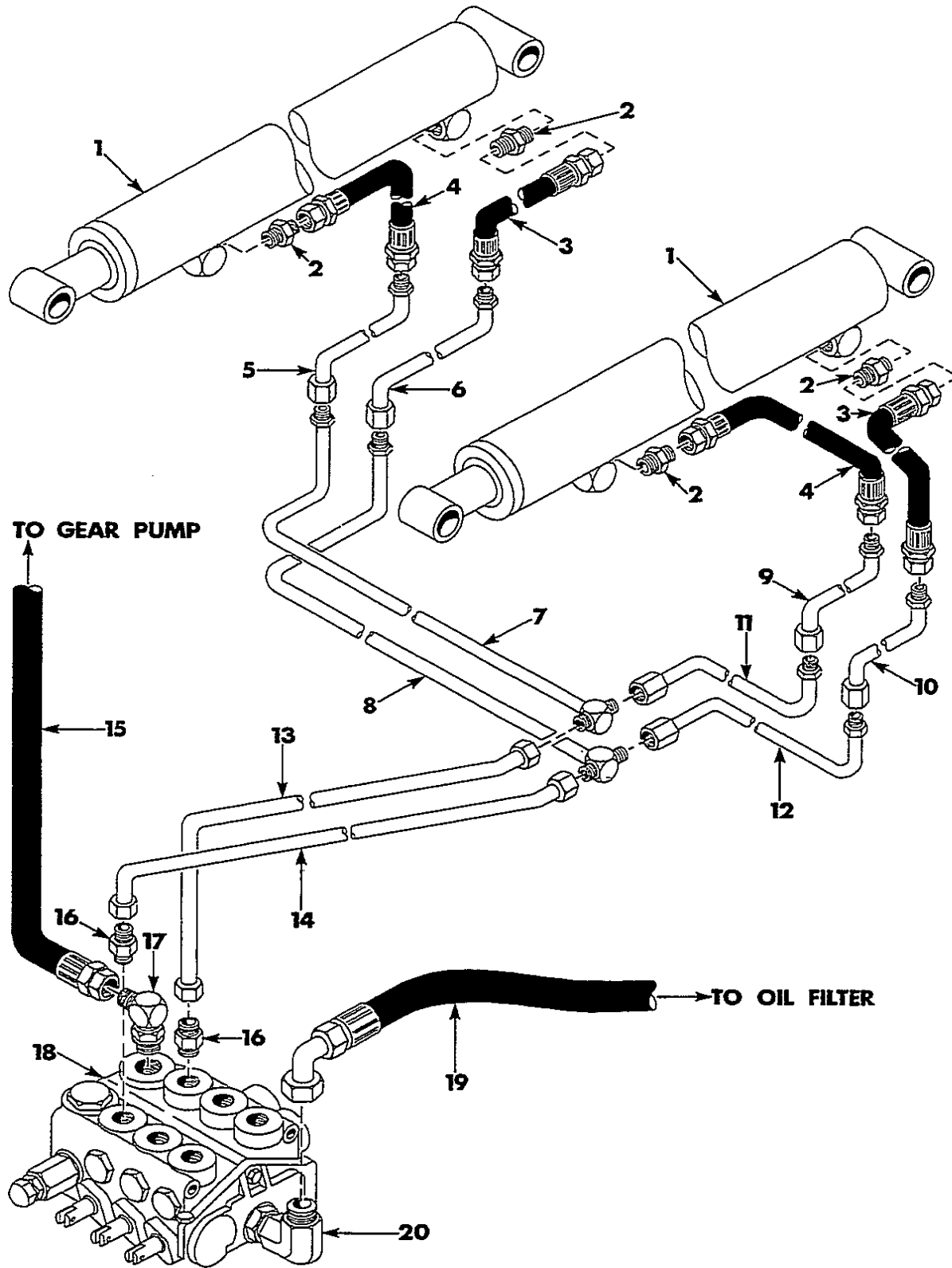


# BOOM LIFT CIRCUIT T233HD

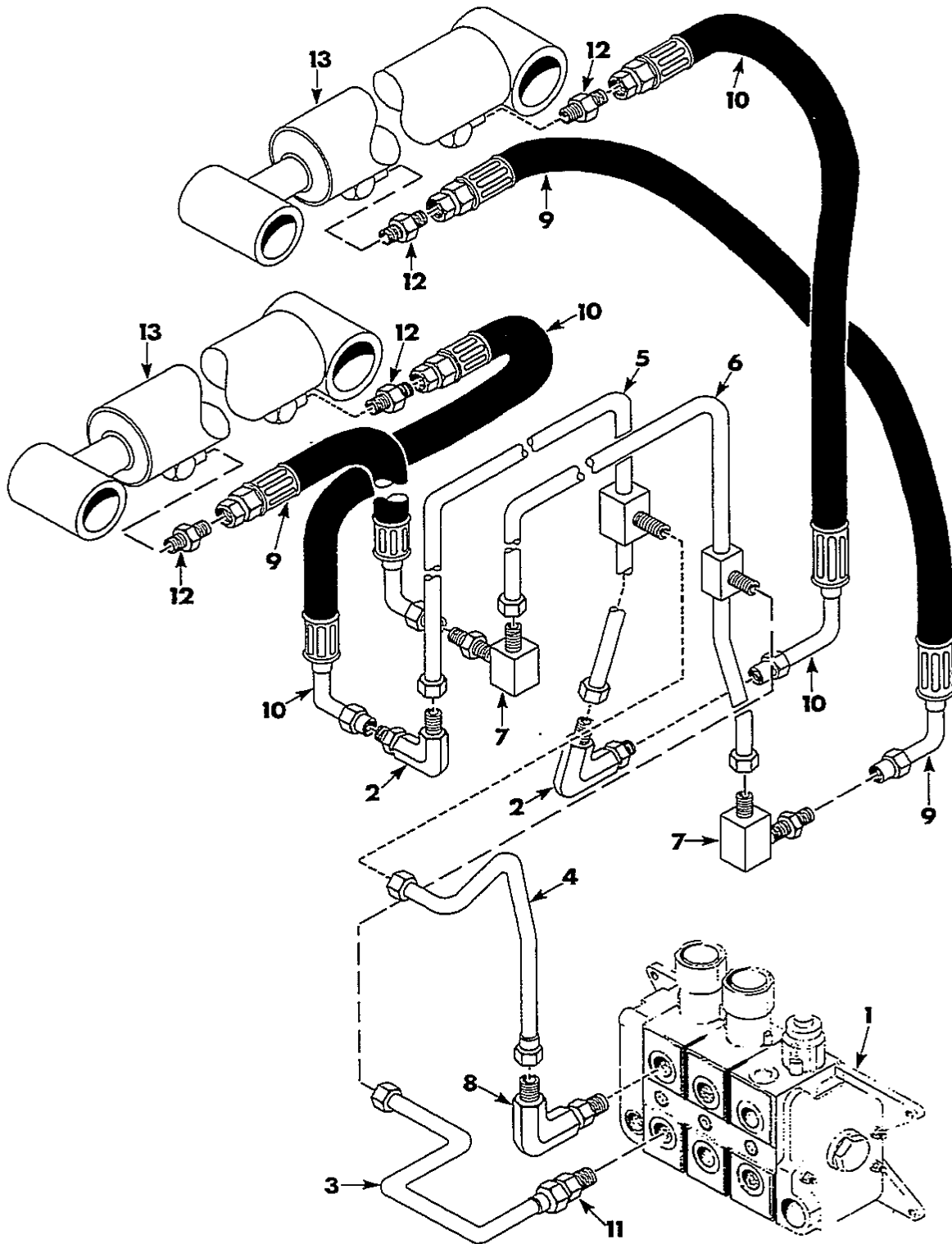
4.2

REF.	PART NO.	DESCRIPTION	QTY. T233HD	SERIAL NO.
1	26520	Hydraulic Cylinder 3" I.D. x 27" Stroke	2	LH000101 TOLH000106
1	29689	Hydraulic Cylinder 3" I.D. x 26 9/16" Stroke	2	LH000107 - Onward
2	29438	Connector 3/4" JIC x 1/2" NPT	4	
3	956245	Hydraulic Hose 29' L.	2	
4	956244	Hydraulic Hose 45' L.	2	
5	25898	Hydraulic Tubing	1	
6	25899	Hydraulic Tubing	1	
7	25897	Hydraulic Tubing	1	
8	25896	Hydraulic Tubing	1	
9	25920	Hydraulic Tubing	1	
10	25919	Hydraulic Tubing	1	
11	25903	Hydraulic Tubing	1	
12	25902	Hydraulic Tubing	1	
13	956879	Hydraulic Hose 83 1/4" L.	1	
14	956875	Hydraulic Hose 17' L.	1	
15	19232	Elbow 90°	2	
16	956880	Hydraulic Hose 71 1/2" L.	1	
17	19226	Connector 7/8" SIC x 7/8" ORB	2	
18	25011	Elbow 90°	1	
19	956881	Hydraulic Hose 13 1/4" L.	1	
20	956449	Hydraulic Hose 76" L.	1	
*21	14867	Connector, 1 1/16" JIC x 1 1/16" ORB	1	
22	26549	Self Level Valve	1	
23	26760	Gresen Control Valve	1	

\* Not as illustrated

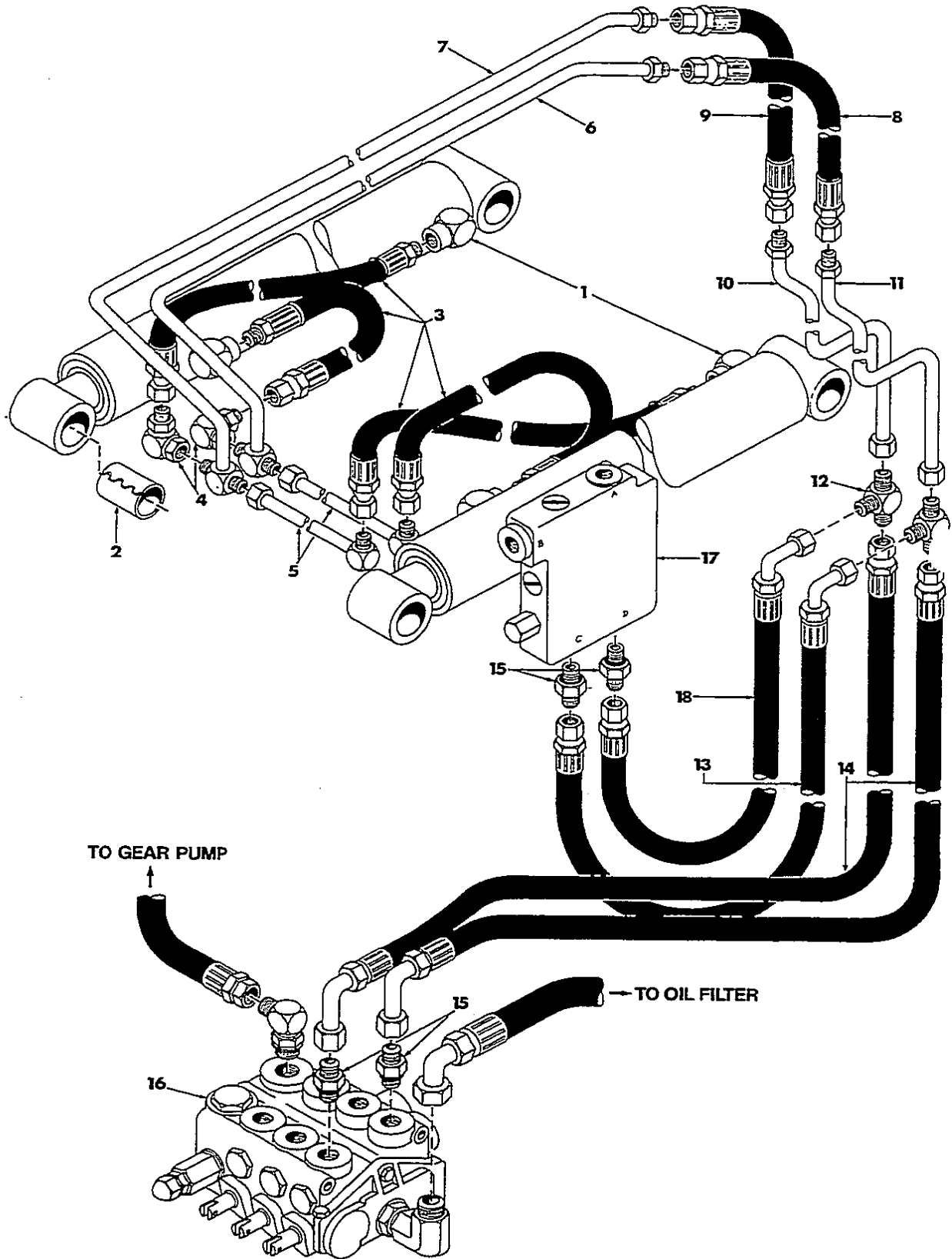




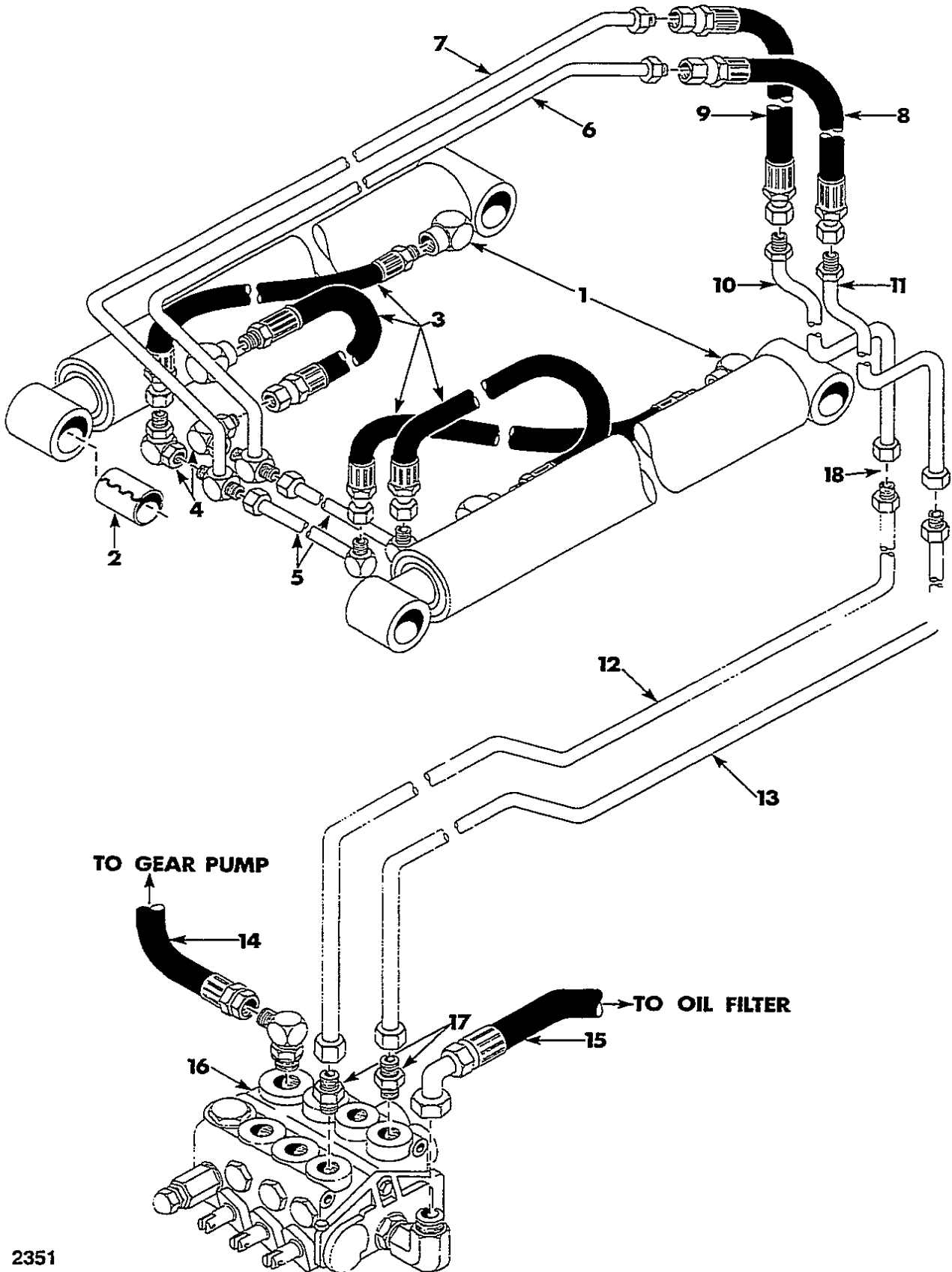




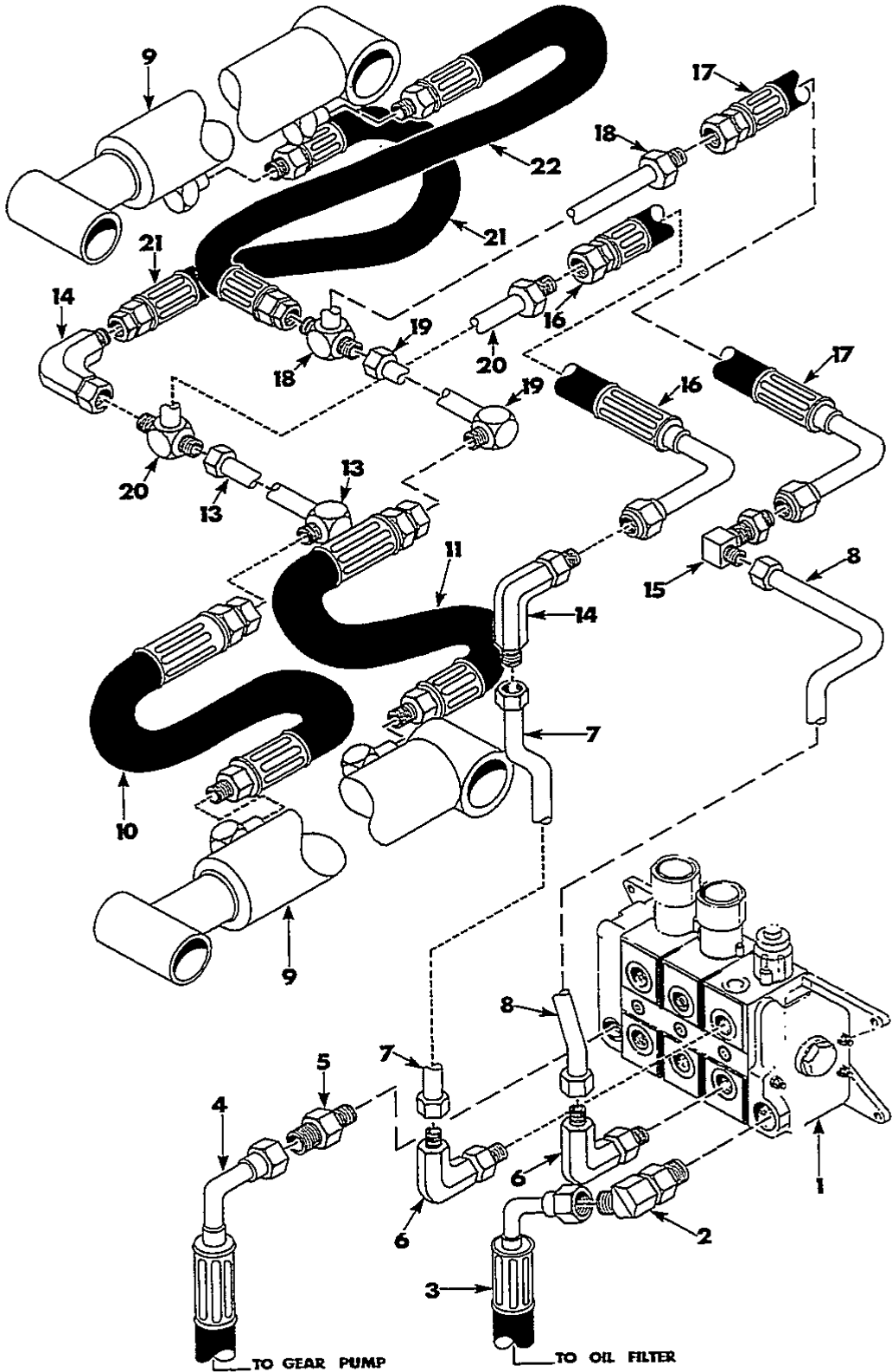




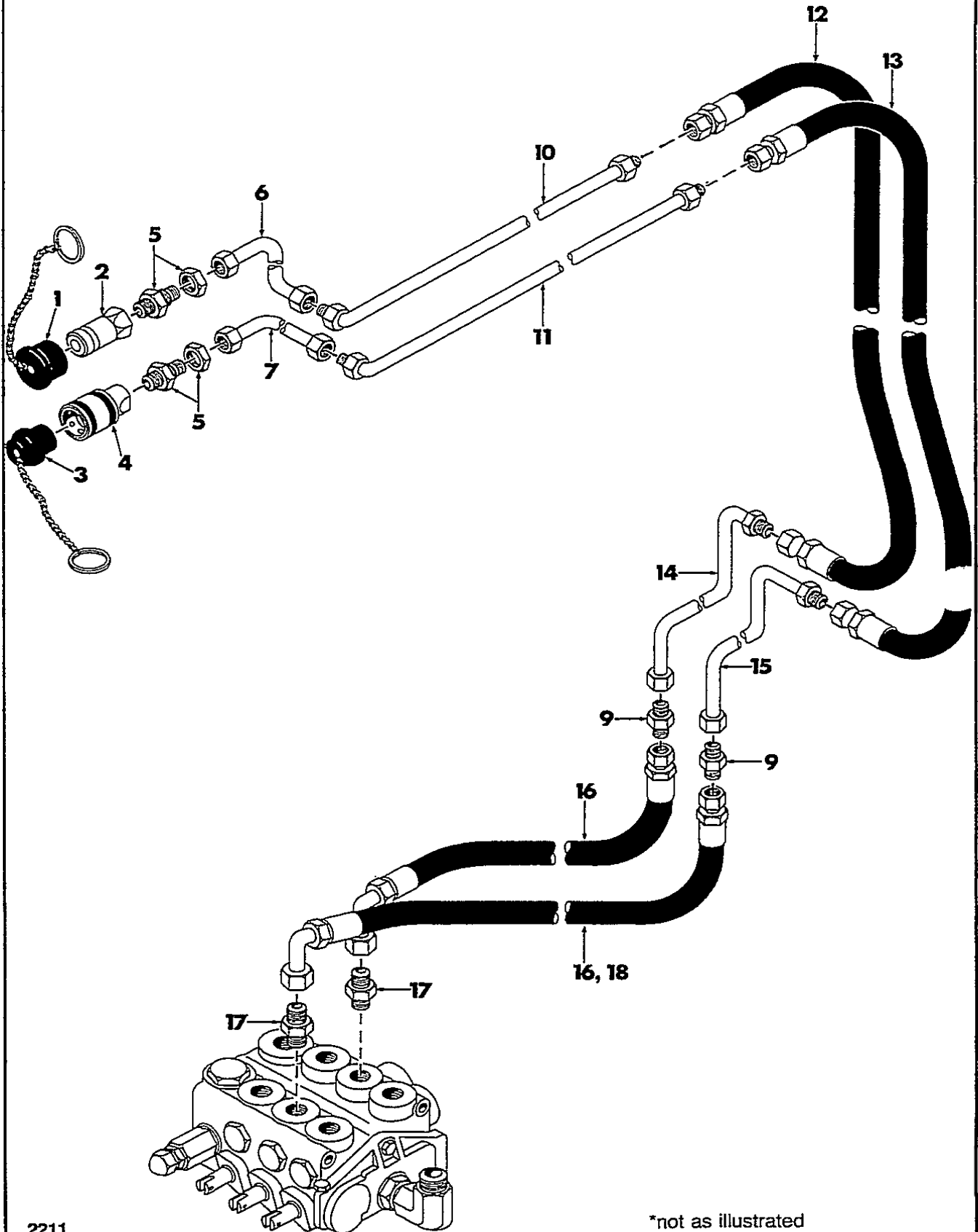












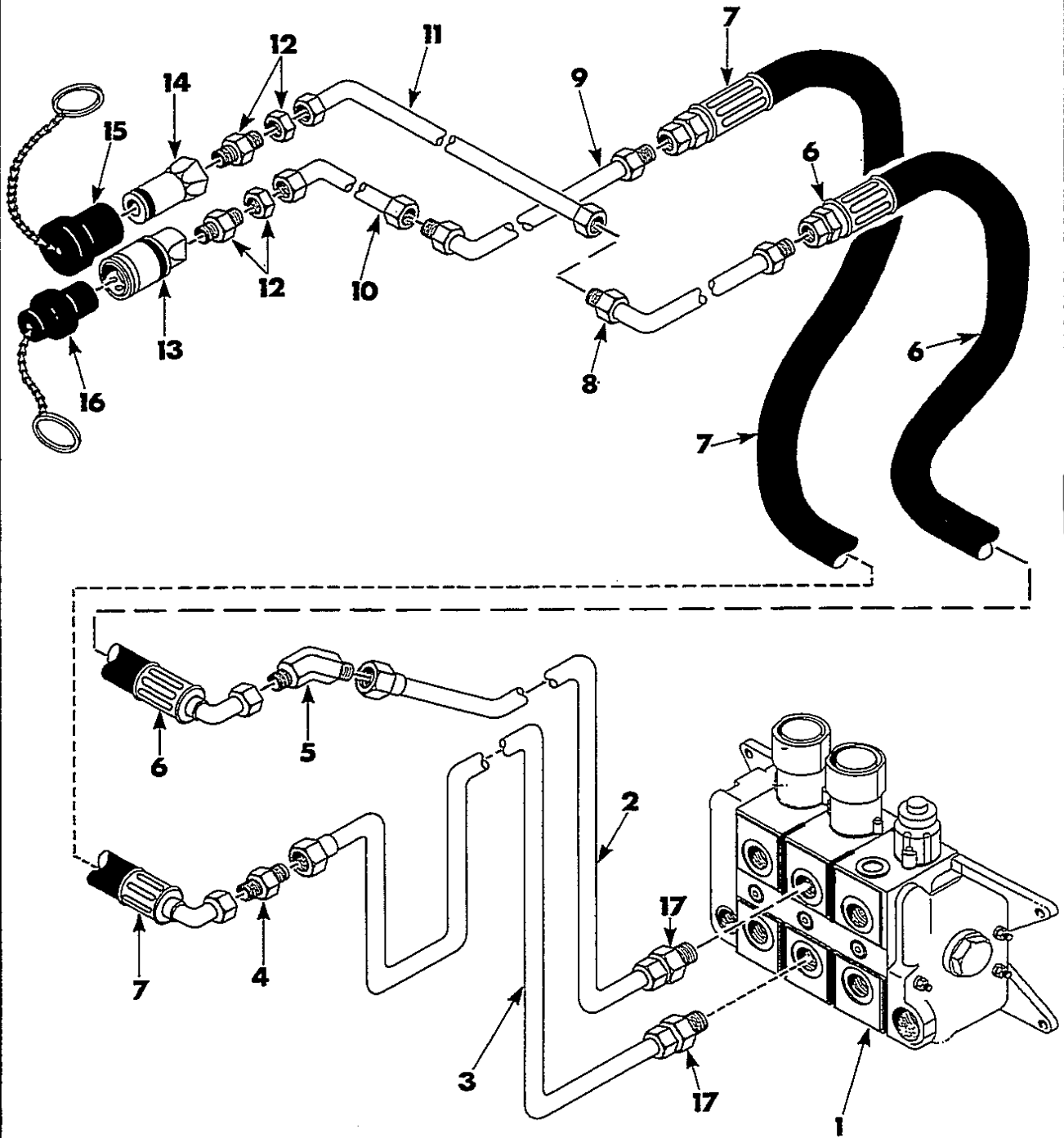


# AUXILIARY HYDRAULIC SYSTEM T183HD/T203HD/T233HD

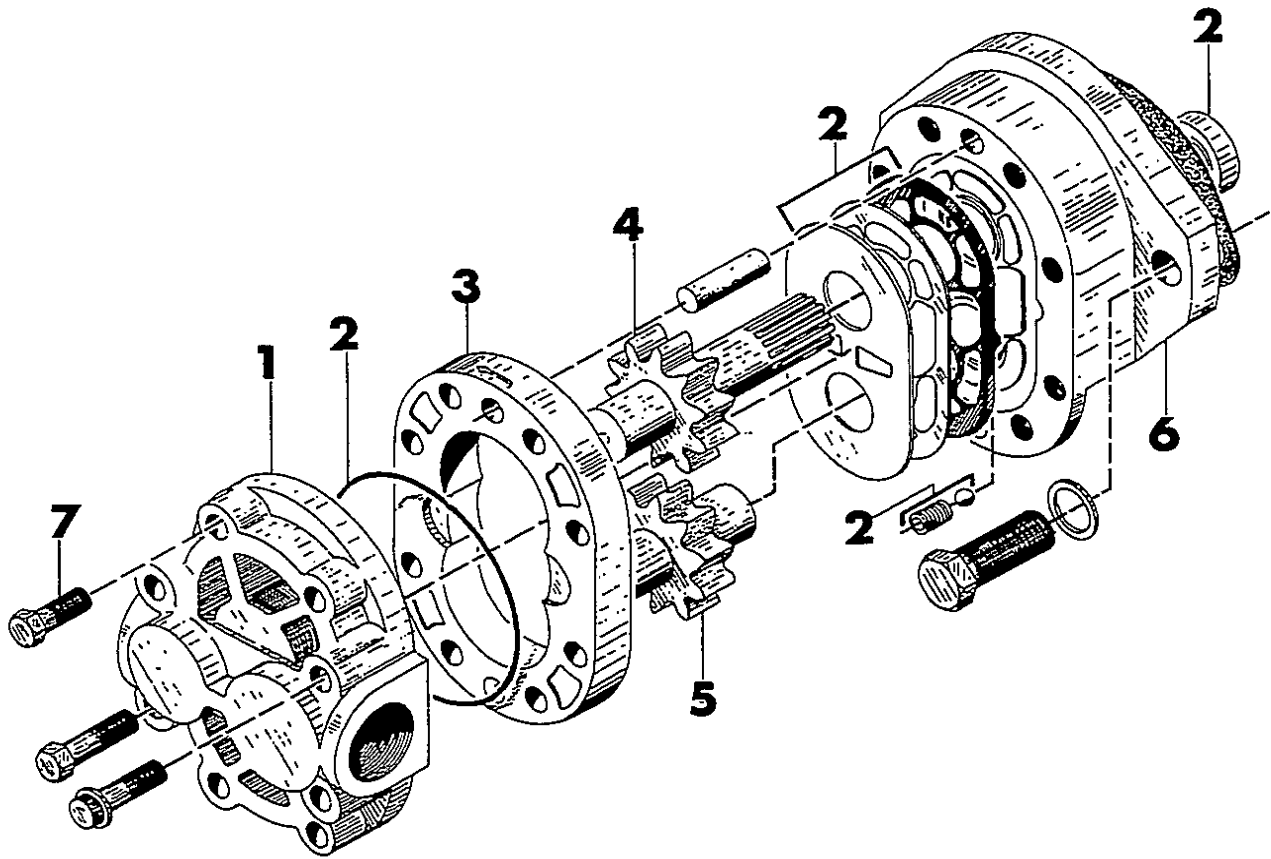
4.4

REF.	PART NO.	DESCRIPTION	QTY. T183HD	QTY. T203HD	QTY. T233HD	SERIAL NO.
1	7124	Male End Cap	1	1	1	
2	1803	Male Quick Change Coupling	1	1	1	
3	7667	Female End Cap	1	1	1	
4	6608	Female Quick Change Coupling	1	1	1	
5	29437	Bulkhead Connector 7/8" JIC x 3/4" NPT	2	2	2	
6	29436	Hydraulic Tubing	1	1	1	
7	29435	Hydraulic Tubing	1	1	1	
9	26152	7/8" JIC Union M x M	—	—	2	
*10	29434	Hydraulic Tubing	1	1	1	
*11	29433	Hydraulic Tubing	1	1	1	
12	956450	Hydraulic Hose 23" L.	1	1	1	
13	956451	Hydraulic Hose 21" L.	1	1	1	
14	25908	Hydraulic Tubing	1	1	1	
15	25906	Hydraulic Tubing	1	1	1	
16	956876	Hydraulic Hose 65 1/2" L.	—	—	2	
16	31352	Hydraulic Tubing	1	1	—	
17	19226	7/8" JIC x 7/8" ORB Connector	2	2	2	
18	31351	Hydraulic Tubing	1	1	—	

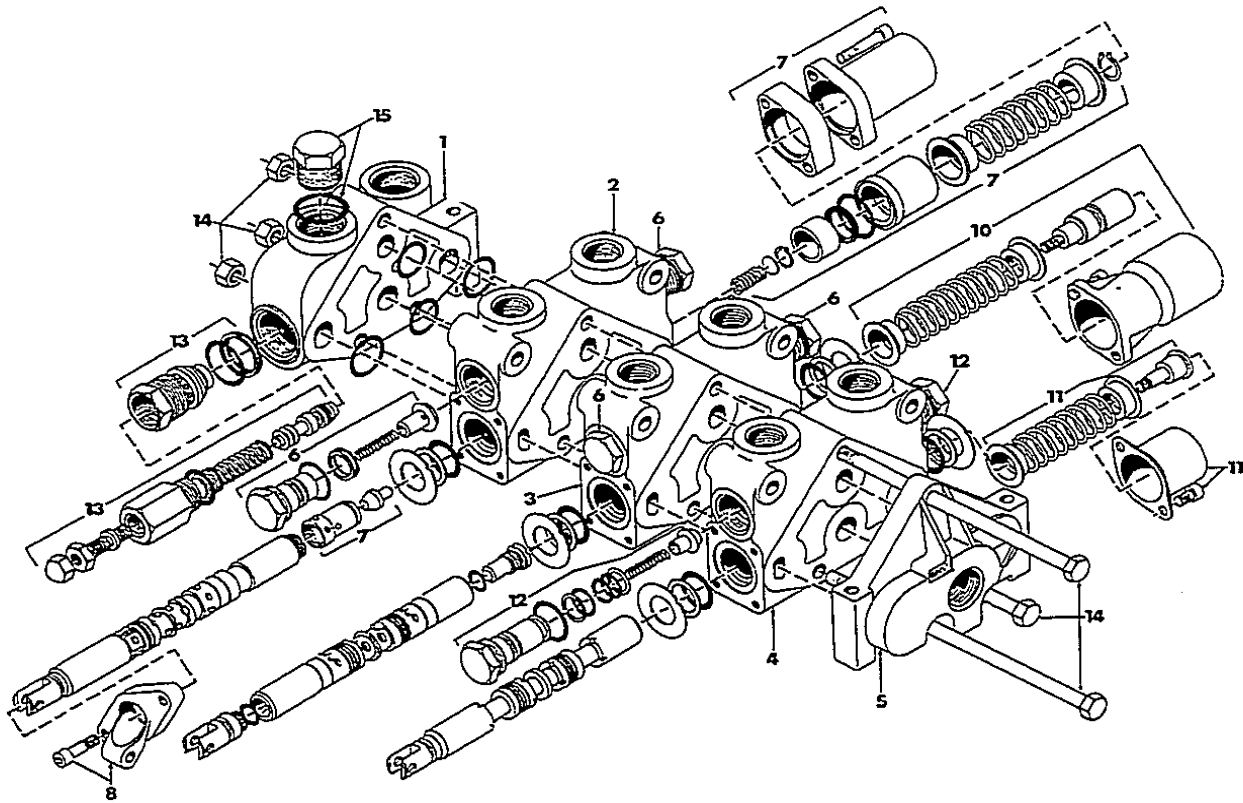
\* Not exactly as illustrated



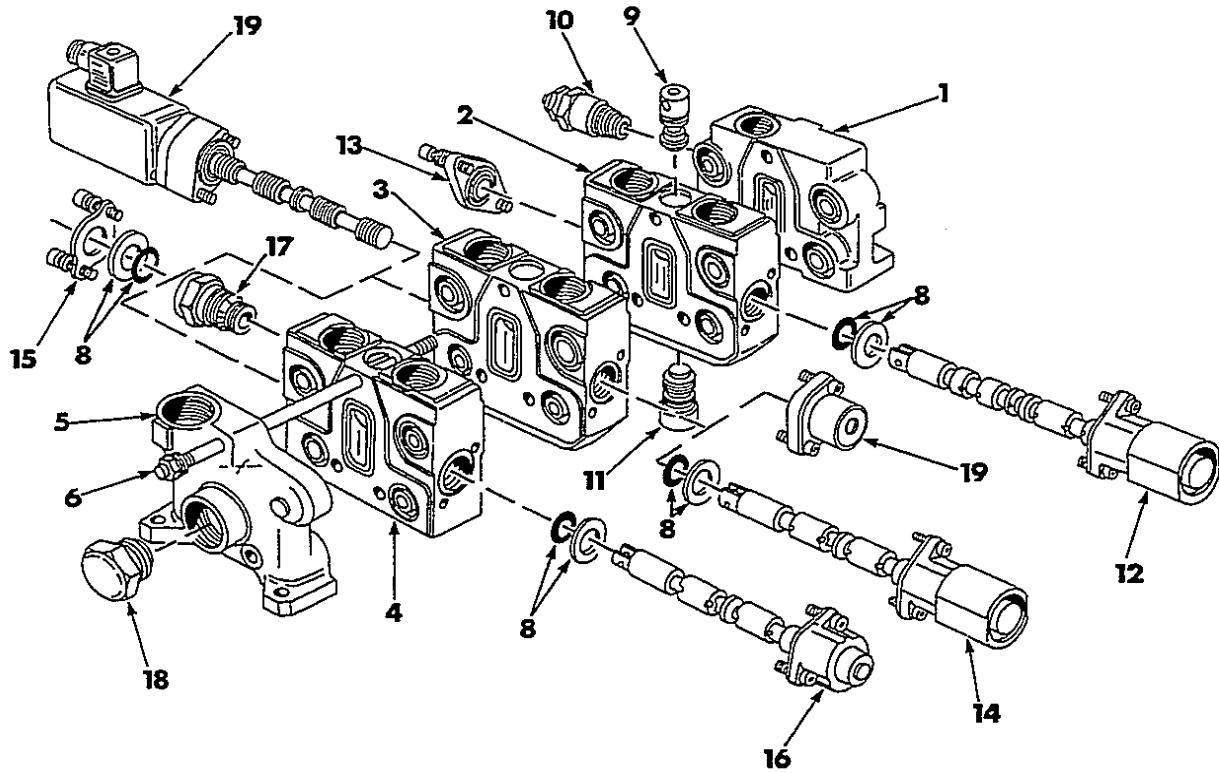






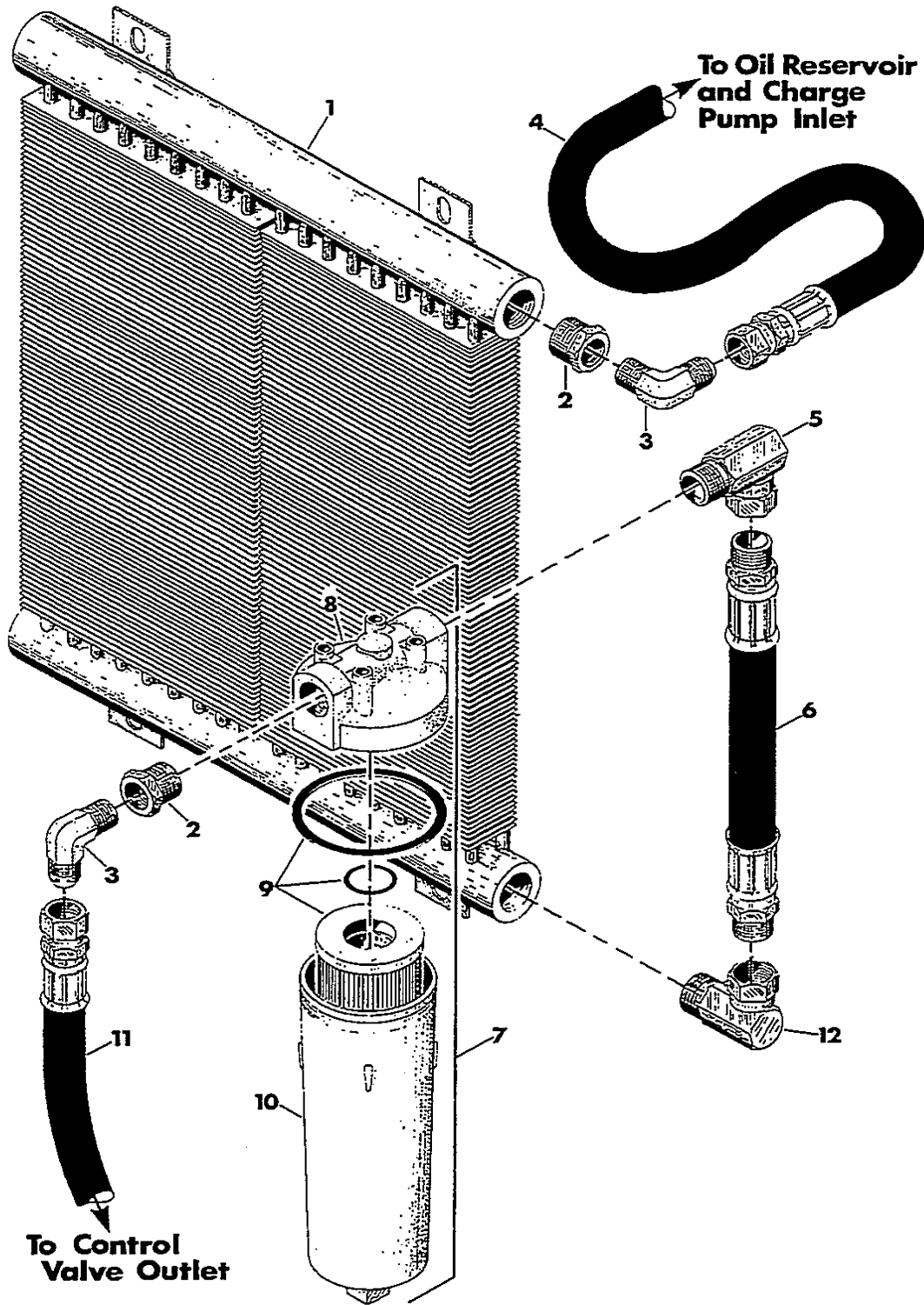




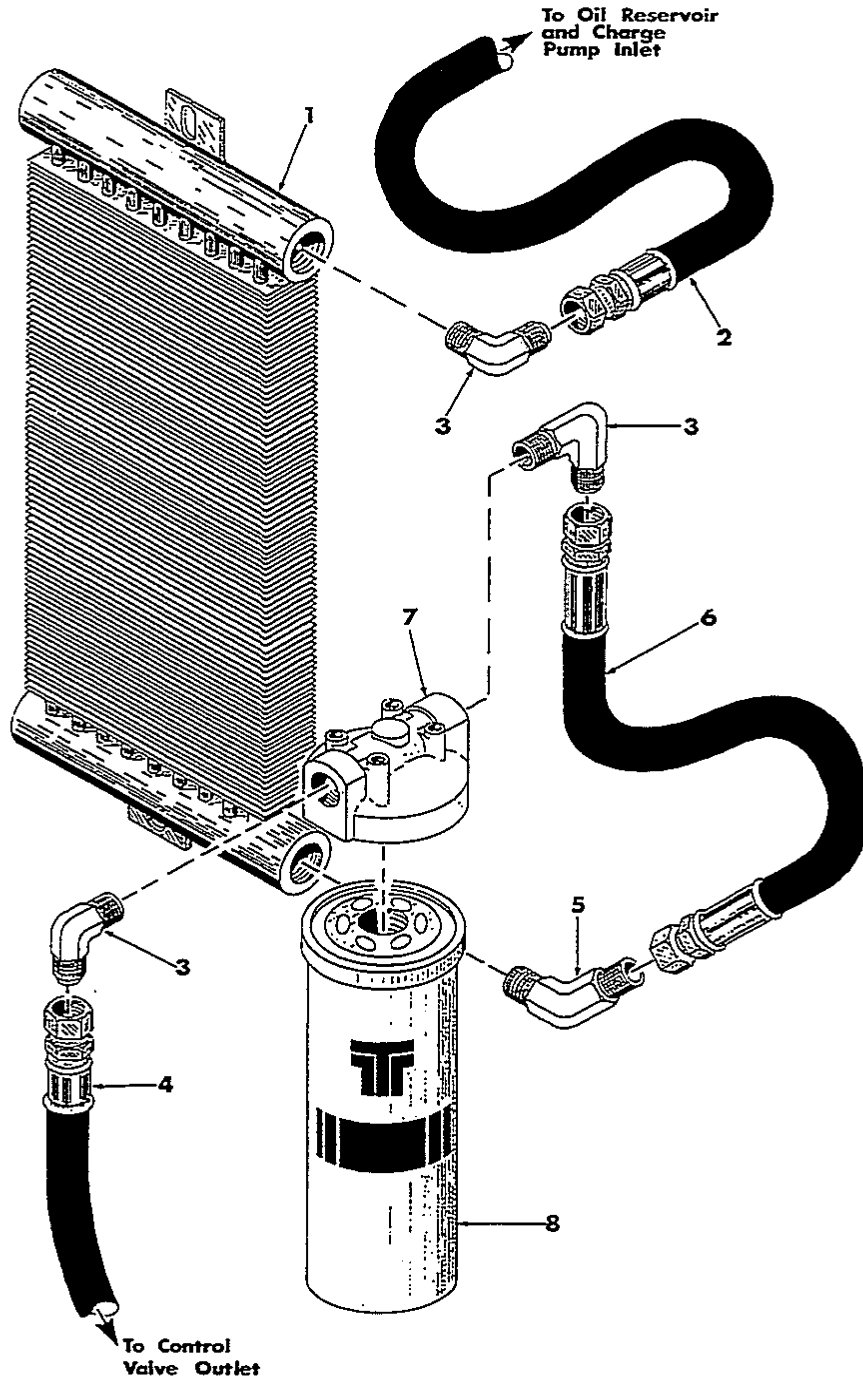




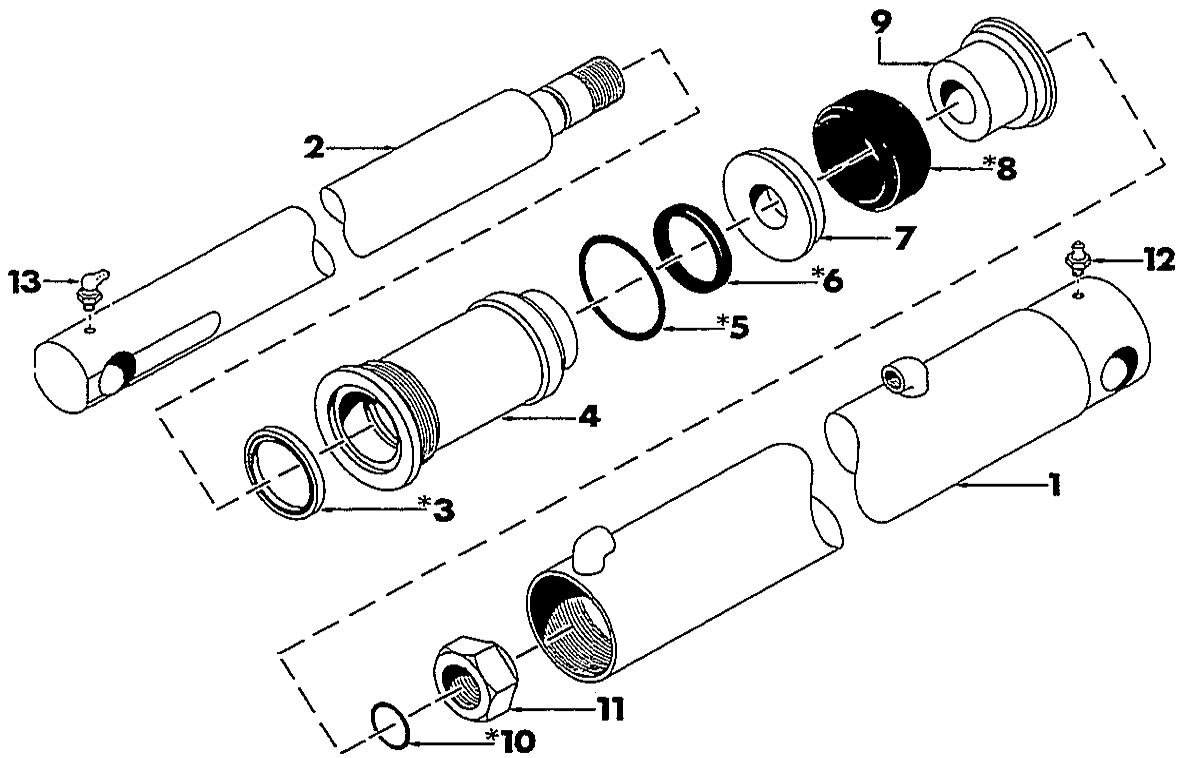












# T233HD LIFT CYLINDER

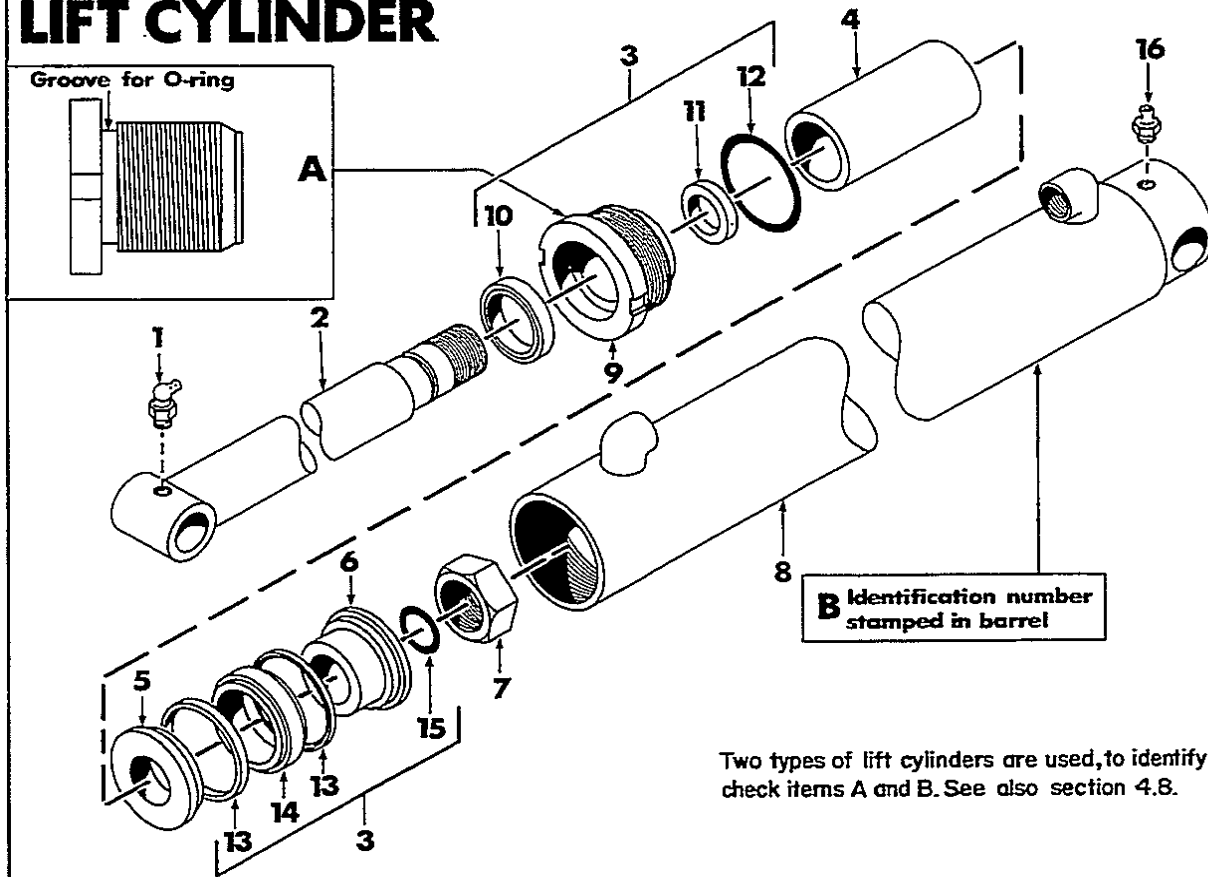
4.8

REF.	PART NO.	DESCRIPTION	QTY. T233HD	SERIAL NO.
	26520	Lift Cylinder, 3" x 27" x 45"	2	TO LH000106
	29689	3" Dia. x 27 15/16" Stroke Hydraulic Cylinder	2	LH000107 ONWARD
1	29855	Cylinder Tube	1	
2	29856	Piston Rod	1	
3	See item 14	Wiper Seal 2" I.D. x 2 1/2" O.D. x 1/4"	1	
4	29857	Head Plate	1	
5	See item 14	'O' Ring 2 5/8" I.D. x 3" O.D. x 3/16" C.S.	1	
6	See item 14	Rod Seal 2" I.D. x 2 3/8" O.D. x 5/16"	1	
7	29861	Piston Part 'B'	1	
8	See item 14	Piston Seal	1	
9	29862	Piston Part 'A'	1	
10	See item 14	'O' Ring 1 1/8" I.D. x 1 1/4" O.D. x 1/16" C.S.	1	
11	29869	Hex. Lock Nut	1	
12	2010	Grease Fitting 1/8" NPTF	1	
13	1413	Grease Fitting 1/8" NPTF x 90°	1	
14	29878	Seal Kit Complete	1	

# T183HD, T203HD LIFT CYLINDER

REF.	PART NO.	DESCRIPTION	QTY. T183HD	QTY. T203HD	SERIAL NO.
	26847	2 1/2" x 27 3/4" Stroke Hydraulic Cylinder	2	2	
1	31420	Cylinder Tube	1	1	
2	31419	Piston Rod	1	1	
3	See item 14	Wiper Seal 1 1/2" I.D. x 2" O.D. x 1/4"	1	1	
4	29860	Head Plate	1	1	
5	See item 14	'O' Ring 2 1/8" I.D. x 2 1/2" O.D. x 3/16"	1	1	
6	See item 14	Rod Seal 1 1/2" I.D. x 1 7/8" O.D. x 1/4"	1	1	
7	29979	Piston Part 'B'	1	1	
8	See item 14	Piston Seal	1	1	
9	29978	Piston Part 'A'	1	1	
10	See item 14	'O' Ring 1 1/8" I.D. x 1 1/4" O.D. x 1/16"	1	1	
11	6297	Hex. Lock Nut	1	1	
12	2010	Grease Fitting 1/8" NPTF	1	1	
13	1413	Grease Fitting 1/8" NPTF x 90°	1	1	
14	29875	Seal Kit Complete	1	1	

### LIFT CYLINDER



Two types of lift cylinders are used, to identify check items A and B. See also section 4.8.



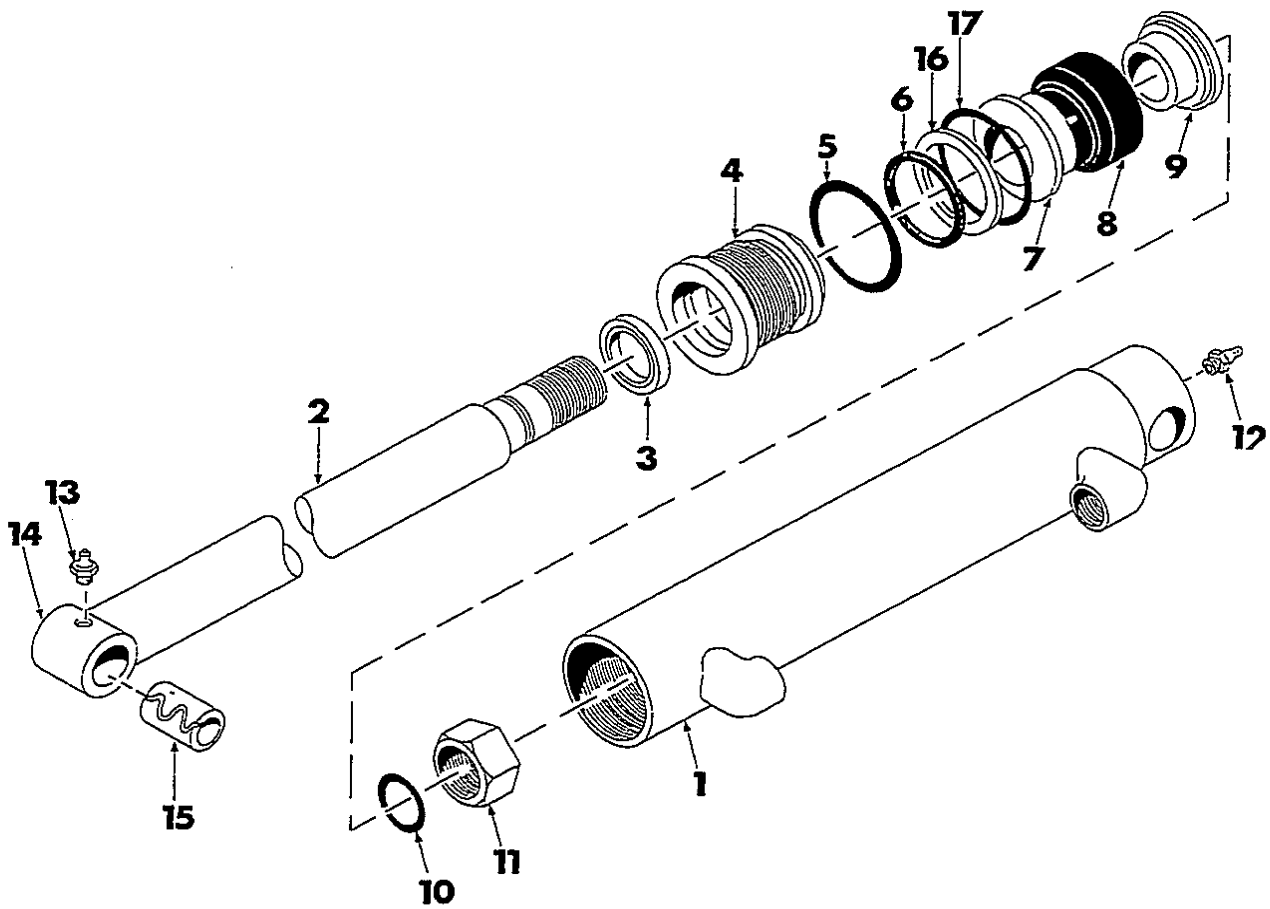
## LIFT CYLINDER — T173HL

4.8.1

REF. NO.	PART NO.	DESCRIPTION	QTY. T173HL	SERIAL NO.
	29879	Lift Cylinder 2 1/2" x 32" x 45" Stroke	2	
1	1314	Grease Fitting 1/8" NPT x 90°	1	
2	29992	Shaft	1	
3	29875	Complete Seal Kit	1	
4	30013	Spacer	1	
5	29979	Piston Front Section	1	
6	29978	Piston Rear Section	1	
7	6297	Nut	1	
8	29993	Cylinder Barrel	1	
9	29860	Cylinder Head	1	
10	See item 3	Seal	1	
11	See item 3	Rod Seal	1	
12	See item 3	'O' Ring	1	
13	See item 3	Wear Ring	2	
14	See item 3	Piston Seal	1	
15	See item 3	'O' Ring	1	
16	2010	Grease Fitting 1/8" NPT	1	

## HEAVY DUTY LIFT CYLINDER — T173HL

REF. NO.	PART NO.	DESCRIPTION	QTY. T173HL	SERIAL NO.
	29887	Lift Cylinder, 3" x 32" x 45"	2	
1	2010	Grease Fitting 1/8" NPT	1	
2	30003	Piston Rod Ass'y.	1	
3	29878	Seal Kit	1	
4	30027	Spacer Tube	1	
5	29861	Piston Part B	1	
6	29862	Piston Part A	1	
7	29896	Hex. Lock Nut	1	
8	30004	Cylinder Barrel	1	
9	30006	Head Plate	1	
10	See Item 3	Seal	1	
11	See Item 3	Rod Seal	1	
12	See Item 3	'O' Ring	1	
13	See Item 3	Wear Ring	1	
14	See Item 3	Piston Seal	1	
15	See Item 3	'O' Ring	1	
16	2010	Grease Fitting 1/8" NPT	1	



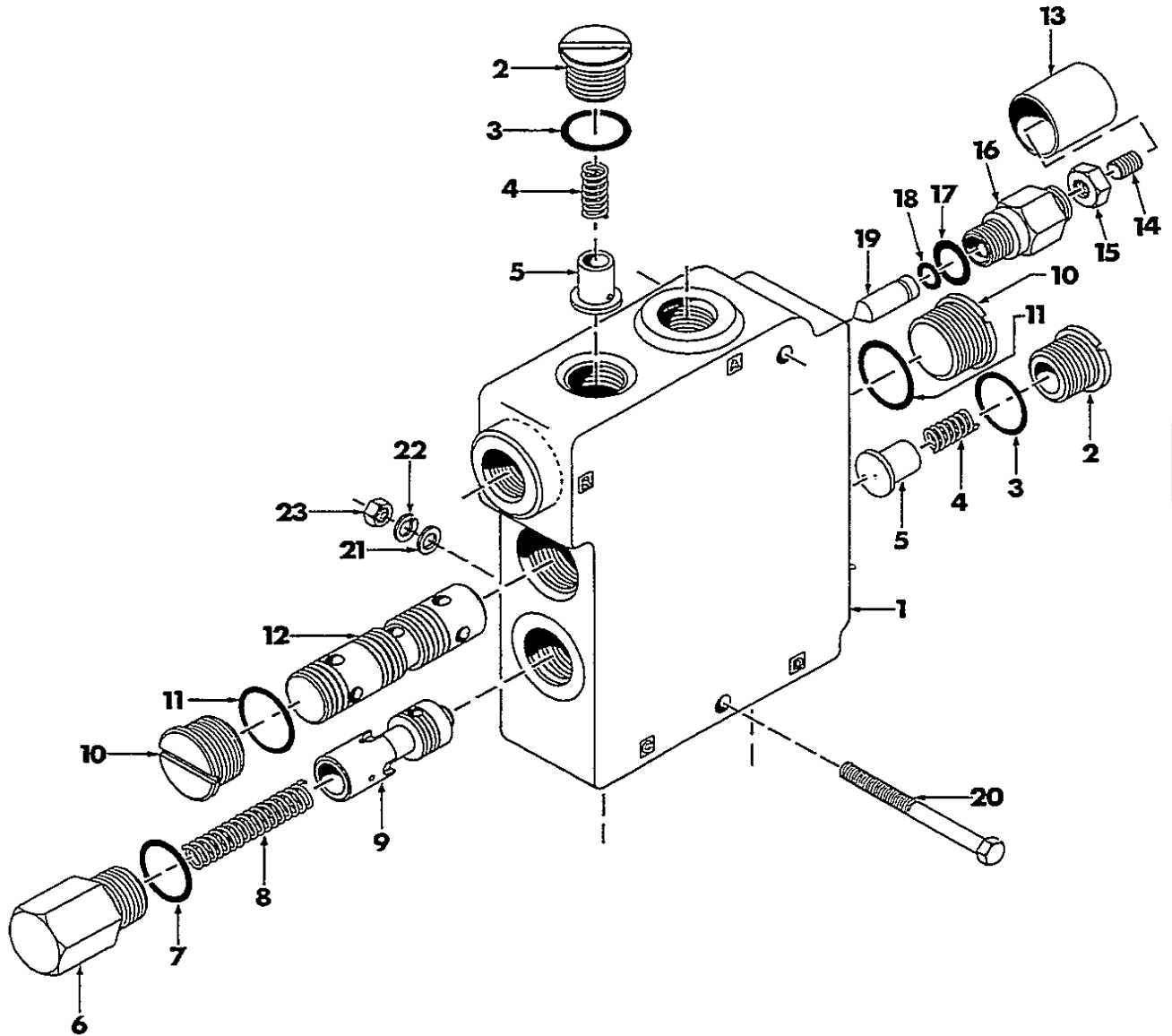
# T233HD TILT CYLINDER

4.8.2

REF.	PART NO.	DESCRIPTION	QTY. T233HD	SERIAL NO.
	29709	2 1/2" Dia. x 15 9/16" Stroke Hyd. Cyl.	2	LH000107 - LH000200
	30292	2 1/2" Dia. x 15 3/4" Stroke Hyd. Cyl.	2	LH000201 - LH000569
	32506	2 1/2" Dia. x 15 3/4" Stroke Hyd. Cyl.	2	LH000570 - LH000776
	33153	3" Dia. x 15 1/2" Stroke Hyd. Cyl.	2	LH000777 - onward
1	29858	Cylinder Tube (29709 Cylinder)	1	LH000107 - LH000200
1	30293	Cylinder Tube (30292 Cylinder)	1	LH000201 - LH000569
1	32895	Cylinder Tube (32506 Cylinder)	1	LH000570 - LH000776
1	33155	Cylinder Tube (33153 Cylinder)	1	LH000777 - onward
2	29859	Piston Rod (29709 Cylinder)	1	LH000107 - LH000200
2	30294	Piston Rod (30292 Cylinder)	1	LH000201 - LH000569
2	32894	Piston Rod (32506 Cylinder)	1	LH000570 - LH000776
2	33154	Piston Rod (33153 Cylinder)	1	LH000777 - onward
3	See Item 14	Wiper Seal 1 1/2" I.D. x 2" O.D. x 1/4"	1	
4	29860	Head Plate (30292 Cylinder)	1	TO LH000569
4	32893	Head Plate (32506 Cylinder)	1	LH000570 - LH000776
4	33868	Head Plate (33153 Cylinder)	1	LH000777 - onward
5	See Item 14	'O' Ring 2 1/4" x 2 1/2" x 1/8" C.S.	1	
6	See Item 14	Rod Seal 1 1/2" I.D. x 1 7/8" O.D. x 1/4"	1	
7	29979	Piston Part B	1	TO LH000776
7	29861	Piston Part B	1	LH000777 - onward
8	See Item 14	Piston Seal 1 7/8" I.D. x 2 1/4" O.D. x 1 1/4"	1	
9	29978	Piston Part A	1	TO LH000776
9	29862	Piston Part A	1	LH000777 - onward
10	See Item 14	'O' Ring 2 1/8" x 2 1/2" x 3/16" C.S.	1	
11	6297	Hex Locknut	1	
12	1413	Grease Fitting 1/8" NPTF x 90°	1	
13	2010	Grease Fitting 1/8" NPTF	1	
14	29875	Seal Kit Complete (30292 Cylinder)	1	TO LH000569
14	32510	Seal Kit Complete (32506 Cylinder)	1	LH000570 - LH000776
14	32511	Seal Kit Complete (33153 Cylinder)	1	LH000777 - onward
15	26743	Connex Bushing	1	TO LH000569
15	30641	Hardened Bushing	1	LH000570 - onward

# T183HD/173HL/203HD TILT CYLINDER

REF. NO.	PART NO.	DESCRIPTION	QTY. T173HL	QTY. T183HD	QTY. T203HD	SERIAL NO.
	32507	3" Dia. x 15 3/4" Stroke Hyd. Cylinder	—	2	—	LJ000103 - LJ000258
	33153	3" Dia. x 15 1/2" Stroke Hyd. Cylinder	—	2	2	LJ000259 - onward
	31031	2.5" Dia. x 16 1/2" Stroke Hyd. Cylinder	2	—	—	
1	32889	Cylinder Tube	—	1	—	LJ000103 - LJ000258
1	33155	Cylinder Tube	—	1	1	LJ000259 - onward
1	31451	Cylinder Tube	1	—	—	
2	32888	Piston Rod	—	1	—	LJ000103 - LJ000258
2	33154	Piston Rod	—	1	1	LJ000258 - onward
2	31034	Piston Rod	1	—	—	
3	See Item 14	Wiper Seal 1 1/2" I.D. x 1 7/8" O.D. x 3/16"	1	1	1	
4	32887	Head Plate	—	1	—	LJ000103 - LJ000258
4	33868	Head Plate	—	1	1	LJ000259 - onward
4	29860	Head Plate	1	—	—	
5	See Item 14	'O' Ring 2 5/8" x 3" x 3/16" C.S.	1	1	1	
6	See Item 14	Rod Seal 1 1/2" I.D. x 1 7/8" O.D. x 5/16"	1	1	1	
7	29861	Piston Part B	—	1	1	
7	29979	Piston Part B	1	—	—	
8	See Item 14	Piston Seal 2 1/4" I.D. x 3" O.D. x 1 7/16"	1	1	1	
9	29862	Piston Part A	—	1	1	
9	29978	Piston Part A	1	—	—	
10	See Item 14	'O' Ring 1 1/8" I.D. x 1 1/4" O.D. x 1/16" C.S.	1	1	1	
11	6297	Hex. Lock Nut	1	1	1	
12	1413	Grease Fitting 1/8" NPTF x 90°	1	1	1	
13	2010	Grease Fitting 1/8" NPTF	1	1	1	
14	32511	Complete Seal Kit	—	1	1	
14	29875	Complete Seal Kit	1	—	—	
15	30641	Hardened Bushing	—	1	1	
15	31032	Hardened Bushing	1	—	—	
16	See Item 14	Back-up Washer	1	1	1	
17	See Item 14	'O' Ring	1	1	1	

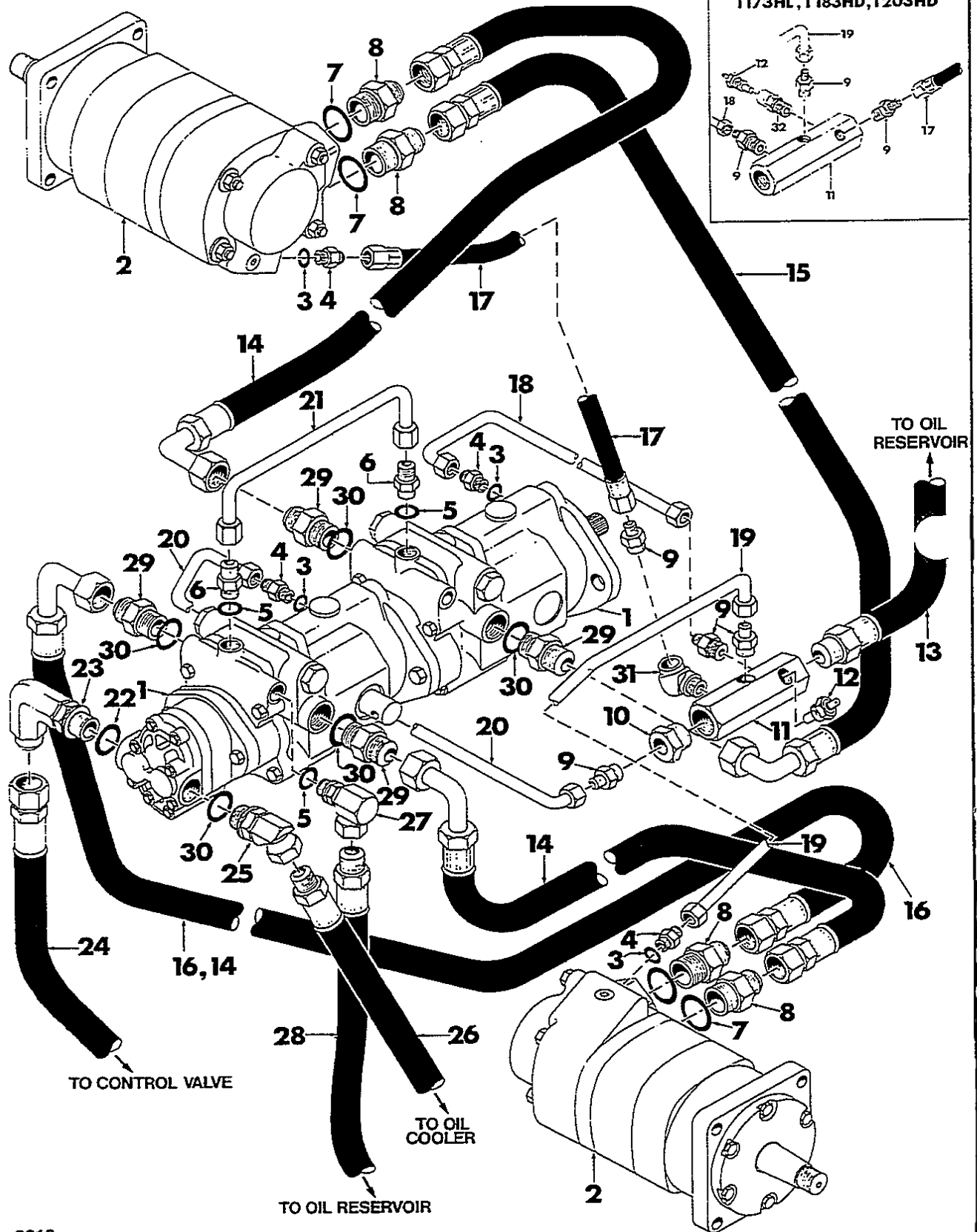




**HYDROSTATIC DRIVE SYSTEM 5.**

D-1	Hydrostatic Drive Circuit .....	5.1
D-2	Front Hydrostatic Pump (with Charge Pump) .....	5.2
D-3	Front Hydrostatic Pump (with Charge Pump) .....	5.2.1
D-4	Rear Hydrostatic Pump .....	5.3
D-5	Rear Hydrostatic Pump .....	5.3.1
D-6	Hydrostatic Motor .....	5.4

**HYDROSTATIC  
DRIVE  
SYSTEM**

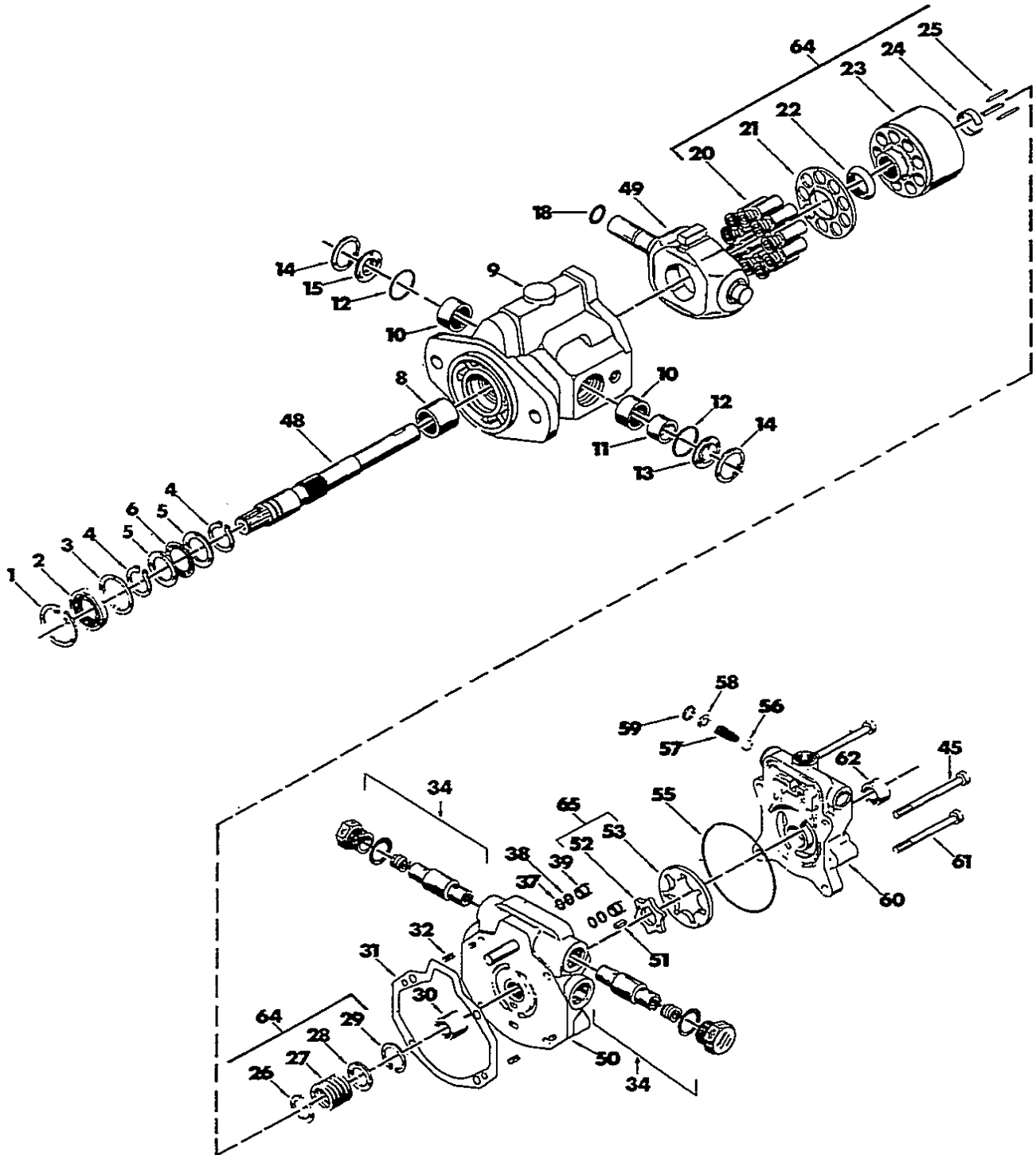




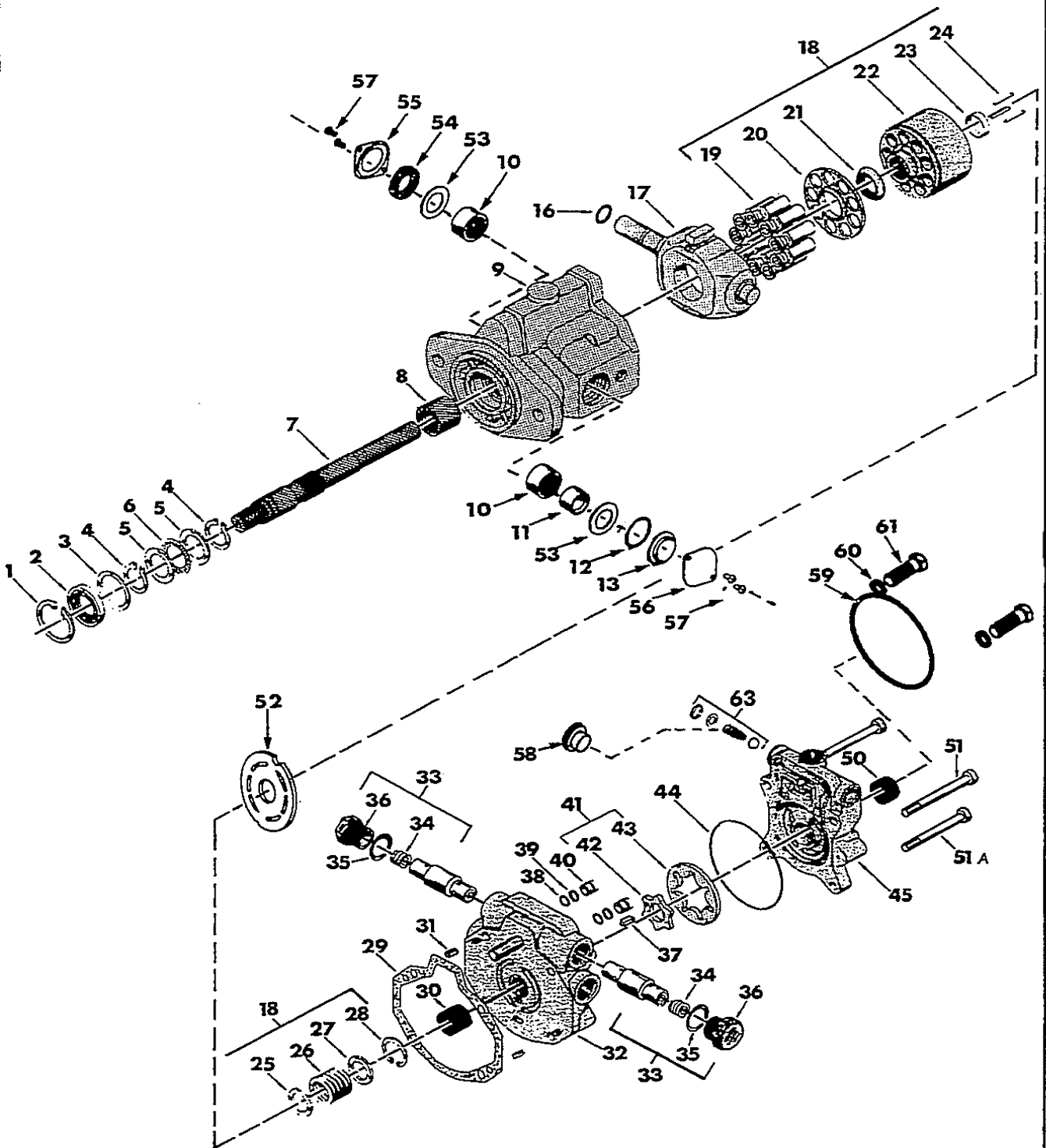




# FRONT HYDROSTATIC PUMP, (WITH CHARGE PUMP)





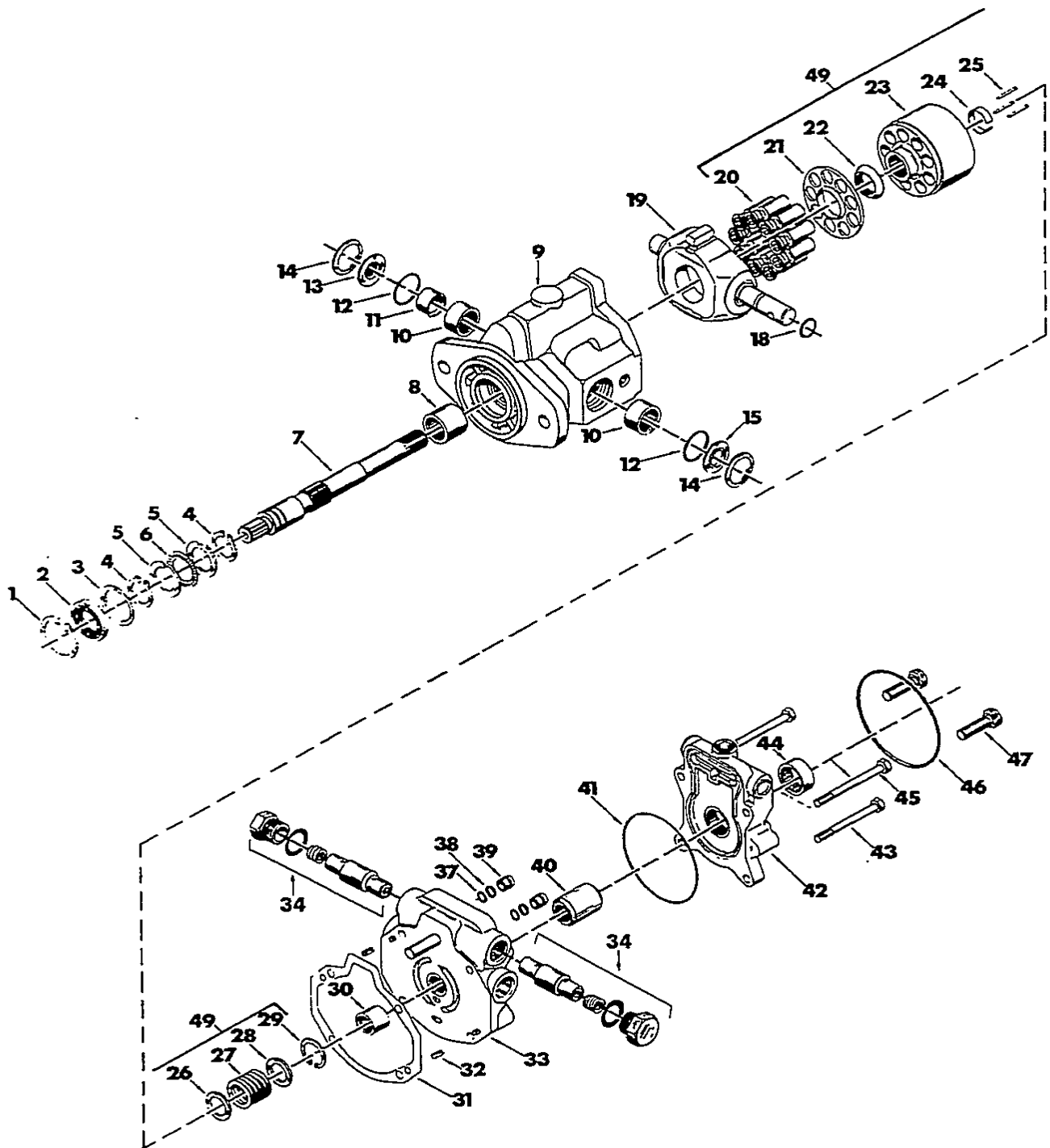


# FRONT HYDROSTATIC PUMP (WITH CHARGE PUMP)

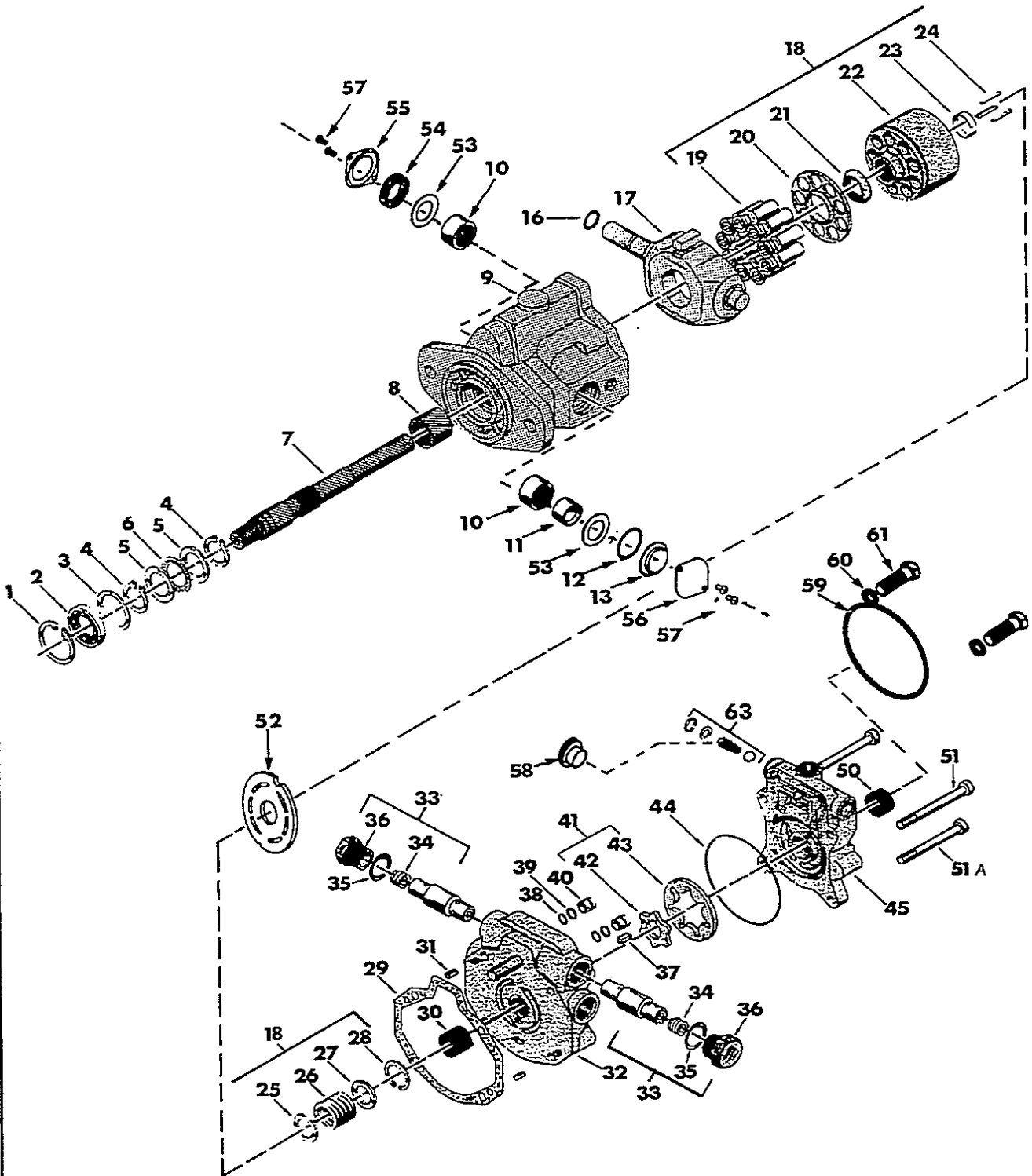
5.2.1

REF.	PART NO.	DESCRIPTION	QTY. T173HL	QTY. T183HD	QTY. T203HD	QTY. T233HD	SERIAL NO.
	37202	Hydrostatic Pump	1	1	1	1	
1	8871	Snap Ring	1	1	1	1	
2	8873	Shaft Seal (Incl. in Item 62)	1	1	1	1	
3	14971	Washer	1	1	1	1	
4	8872	Retaining Ring	2	2	2	2	
5	8863	Thrust Washer	2	2	2	2	
6	8864	Thrust Bearing	1	1	1	1	
7	34465	Drive Shaft	1	1	1	1	
9	34466	Housing	1	1	1	1	
10	14959	Bearing	2	2	2	2	
11	26650	Inner Race	1	1	1	1	
12	34467	'O' Ring	2	2	2	2	
13	34471	'O' Ring Cover	1	1	1	1	
16	14966	'O' Ring (Incl. in Item 62)	1	1	1	1	
17	34474	Camplate	1	1	1	1	
18	34475	Rotating Group (Inc. 19 through 28)	1	1	1	1	
29	14961	Gasket (Inc. in Item 62)	1	1	1	1	
31	34478	Pin	2	2	2	2	
32	34479	Back Plate Ass'y.	1	1	1	1	
33	34987	Relief Valve Kit 4500 psi (310 Bar)	2	2	2	2	
34	N.S.P.	Spring	2	2	2	2	
35	N.S.P.	'O' Ring	2	2	2	2	
36	N.S.P.	Plug Ass'y.	2	2	2	2	
37	15237	Key	1	1	1	1	
41	15238	Charge Pump Kit (Inc. 42 & 43)	1	1	1	1	
42	15469	Inner Gerotor Gear	1	1	1	1	
43	15468	Outer Gerotor	1	1	1	1	
44	34484	'O' Ring, Molded (Inc. in Item 62)	1	1	1	1	
45	15231	Pump Adaptor	1	1	1	1	
46	See Item 63	Poppet	1	1	1	1	
47	See Item 63	Spring	1	1	1	1	
48	See Item 63	Washer	1	1	1	1	
49	See Item 63	Washer	1	1	1	1	
51	N.S.P.	Bolts, Torque 27-31 ft. lbs. (37-42 N.M.)	2	2	2	2	
51A	N.S.P.	Bolts, Torque 27-31 ft. lbs. (37-42 N.M.)	1	1	1	1	
52	34476	Valve Plate	1	1	1	1	
53	34468	Washer	2	2	2	2	
54	34469	Shaft Seal	1	1	1	1	
55	34470	Seal Cover	1	1	1	1	
56	34472	Trunnion Cover	1	1	1	1	
57	34473	Screws	4	4	4	4	
58	34486	Spring Retainer	1	1	1	1	
59	8786	'O' Ring	1	1	1	1	
60	34488	Washer	4	4	4	4	
61	34487	Cap Screw	2	2	2	2	
62	33924	Seal Kit, Complete	1	1	1	1	
63	35298	Kit, Poppet	1	1	1	1	

\* LJ000291 - onward  
LH000782 - onward

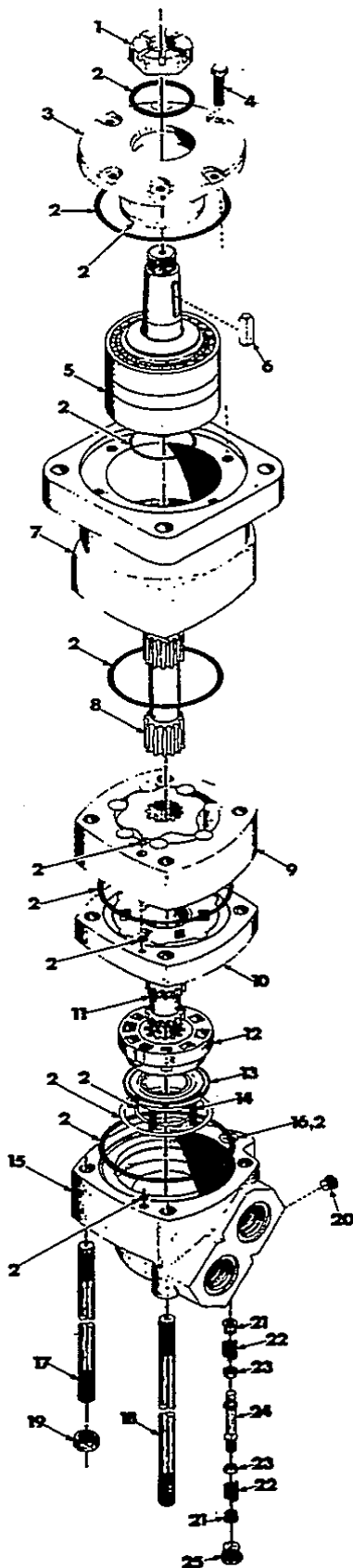












# TORQUE MOTOR

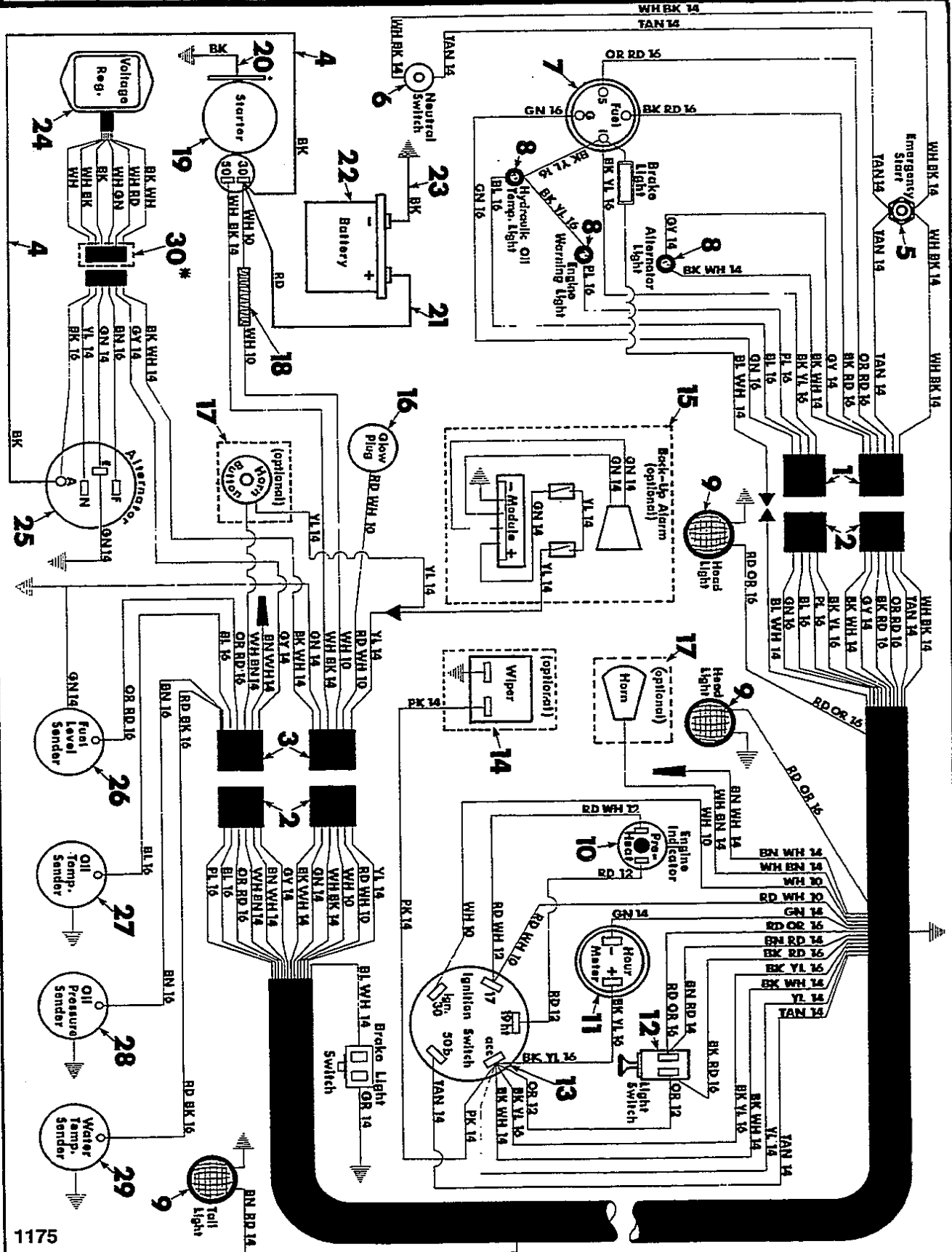
REF.	PART NO.	DESCRIPTION	QTY. T173HL	QTY. T183HD	QTY. T203HD	QTY. T233HD	SERIAL NO.
	26765	Hydraulic Torque Motor Assembly	2	2	2	2	
1	22071	Nut, Hex (Slotted)	1	1	1	1	
2	22117	Seal Kit	1	1	1	1	
3	22072	Retainer, Front	1	1	1	1	
4	22073	Bolt, Retainer	6	6	6	6	
5	22074	Shaft, Sub-Assembly	1	1	1	1	
6	22075	Key	1	1	1	1	
7	22087	Housing, Bearing	1	1	1	1	
8	29894	Drive, Main	1	1	1	1	
9	29895	Geroler, Sub-Assembly	1	1	1	1	
10	22105	Plate, Valve	1	1	1	1	
11	22106	Drive, Valve	1	1	1	1	
12	22107	Valve	1	1	1	1	
13	22108	Balancing Ring Sub-Assembly	1	1	1	1	
14	22109	Spring, Compression	3	3	3	3	
15	22112	Housing, Valve	1	1	1	1	
16	22089	Plug	1	1	1	1	
17	26765	Bolt	2	2	2	2	
18	22581	Bolt	2	2	2	2	
19	22116	Nut, Hex	4	4	4	4	
20	22110	Plug, Sub-Assembly	1	1	1	1	
21	22111	Sleeve, Dash Pot	2	2	2	2	
22	22115	Spring	2	2	2	2	
23	22119	Poppet	2	2	2	2	
24	22120	Piston	1	1	1	1	
25	22121	Plug, Sub-Assembly	1	1	1	1	

NOTE: Parts list quantities are for single Torque Motor assembly.

**ELECTRICAL SYSTEM 6.**

D-7 Electrical System (T183HD/T203HD).....6.1  
D-8 Electrical System (T233HD/T173HL) .....6.2

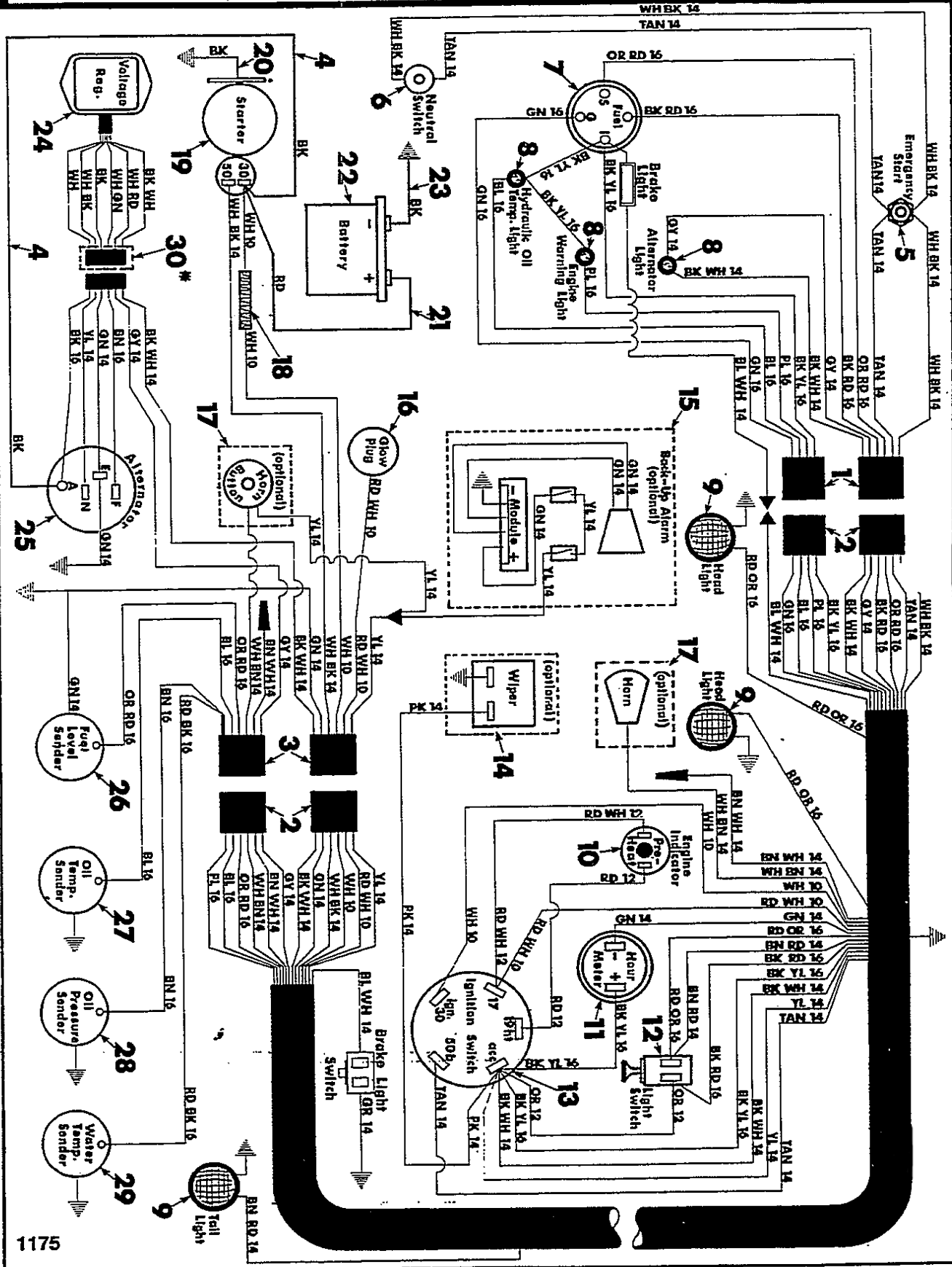
**ELECTRICAL  
SYSTEM**



# ELECTRICAL SYSTEM T183HD/203HD

6.1

REF.	PART NO.	DESCRIPTION	QTY. T183HD	QTY. T203HD	SERIAL NO.
1	957733	L.H. ROPS Harness	1	1	
2	23519	R.H. ROPS Harness	1	1	
3	30043	Engine Harness	1	1	
4	20432	Alternator to Starter Wire	1	1	
5	23665	Emergency Start Switch	1	1	
6	26857	Neutral Switch	1	1	
7	17121	Fuel Gauge	1	1	
8	22962	Warning Light	3	3	
9	29971	Work Lights (round)	1	1	
9	25760	Work Lights (rectangular)	1	1	
10	22962	Pre-Heat Indicator (only on V2203B)	1	1	
11	5825	Hour Meter	1	1	
12	6526	Light Switch	1	1	
13	19605	Ignition Switch	1	1	
		Wiper — Optional	1	1	
14	15935	Windshield Wiper Motor	1	1	
	15936	Wiper Arm	1	1	
	15937	Wiper Blade	1	1	
		Back-up Alarm — Optional	1	1	
15	24961	Horn and Module	1	1	
	17099	Switch	1	1	
16	33105	Glow Plug	1	1	
16	35536	Glow Plug	1	1	
17	6521	Horn — Optional	1	1	
	6522	Horn Button	1	1	
18	21927	40 Amp Circuit Breaker	1	1	
19	33073	Starter	1	1	
20	22819	Battery Cable 18' L. (ground)	2	2	
20	23272	Battery Cable 16' L. (ground)	1	1	
21	23525	Positive Battery Cable (66' L.)	1	1	
22	8301	Battery	1	1	
23	23272	Ground Battery Cable (Battery to Cab)	—	—	
24	957384	Voltage Regulator	1	1	
25	33141	Alternator	1	1	
26	23178	Fuel Level Sender	1	1	
27	31381	Oil Temp. Sender (225°F) (107°C)	1	1	
28	18724	Oil Pressure Sender	1	1	
29	31381	Water Temp. Sender (225°F) (107°C)	1	1	
30	30038	Six Contact Connector (locking)	1	1	
31	26231	Brake Light	1	1	
32	26208	Brake Light Switch	1	1	
33	958766	Relay Kit Incl. Plug & Wire Ends	1	1	
	33513	Relay	1	1	
	33514	Plug, Relay	1	1	



# ELECTRICAL SYSTEM T233HD/T173HL

6.2

REF.	PART NO.	DESCRIPTION	QTY. T173HL	QTY. T233HD	SERIAL NO.
1	25688	L.H. ROPS Harness	—	1	TO LH000257
1	26851	L.H. ROPS Harness	1	1	LH000258 - ONWARD
2	23519	R.H. ROPS Harness	1	1	
3	30043	Engine Harness	1	1	
4	20432	Alternator to Starter Wire	1	1	
5	23665	Emergency Start Switch	1	1	
6	23439	Neutral Switch	—	1	TO LH000257
6	26857	Neutral Switch	1	1	LH000258 - ONWARD
7	17121	Fuel Gauge	1	1	
8	22962	Warning Light	3	3	
9	29971	Work Lights (round)	1	1	
9	25760	Work Lights (rectangular)	1	1	
10	21527	Pre-Heat Indicator	—	1	
10	22962	Pre-Heat Indicator	1	—	
11	5825	Hour Meter	1	1	
12	6526	Light Switch	1	1	
13	19605	Ignition Switch	1	1	
		Wiper — Optional	1	1	
14	15935	Windshield Wiper Motor	1	1	
	15936	Wiper Arm	1	1	
	15937	Wiper Blade	1	1	
	017099	Back-up Alarm — Optional , switch linkage	1	1	
15	24961	Horn and Module	1	1	
	17099	Switch	1	1	
16	22026	Glow Plug	1	1	
16	35536	Glow Plug	1	1	
17	6521	Horn — Optional	1	1	
	6522	Horn Button	1	1	
18	21926	50 Amp Circuit Breaker	1	1	
19	22203	Starter	1	1	
20	22819	Battery Cable 18' L. (ground)	1	1	
20	23272	Battery Cable 16' L. (ground)	1	1	
21	23525	Positive Battery Cable (66' L.)	1	1	
22	8301	Battery	1	1	
23	23272	Ground Battery Cable (Battery to Cab)	1	1	
24	19602	Voltage Regulator	1	1	
25	22049	Alternator	1	1	
26	23178	Fuel Level Sender	1	1	
27	31381	Oil Temp. Sender (225°F) (107°C)	1	1	
28	21835	Oil Pressure Sender	1	1	
29	31381	Water Temp. Sender (225°F) (107°C)	—	1	
30	30038	Six Contact Connector (locking)	1	1	
31	26231	Brake Light	1	1	
32	26208	Brake Light Switch	1	1	

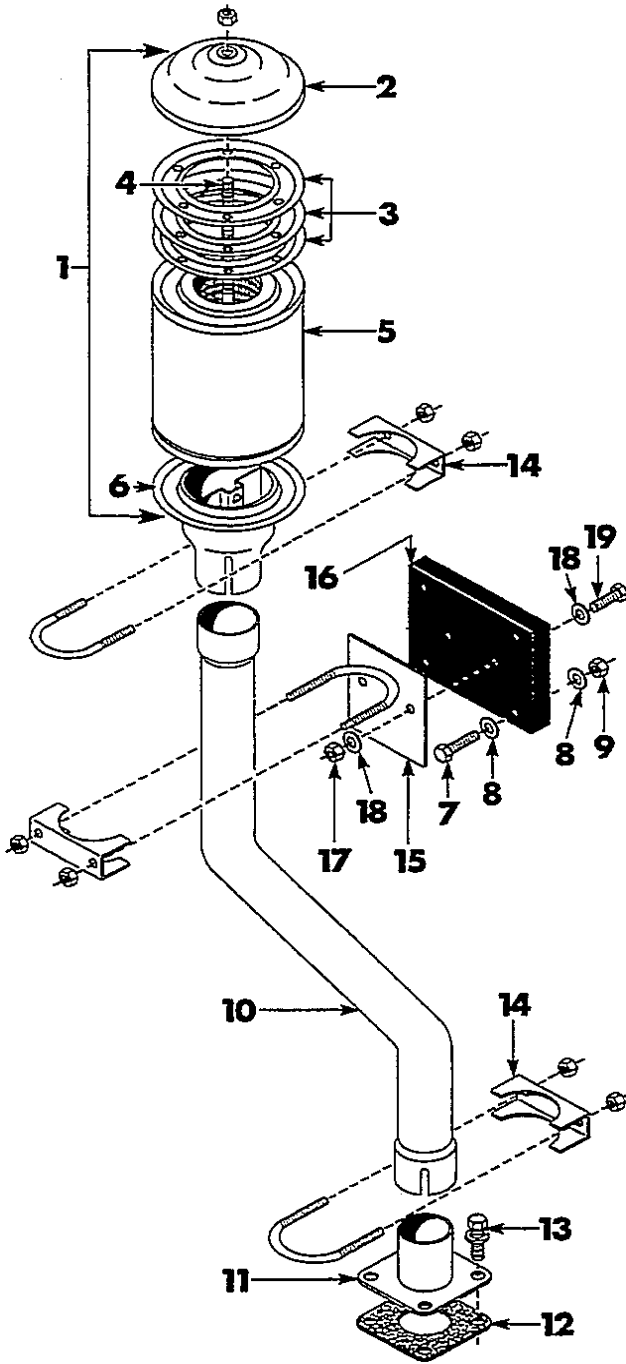
**ENGINE EQUIPMENT 7.**

D-9 Exhaust System.....7.1  
D-9 Air Cleaner.....7.1  
D-10 Radiator & Engine Mounts.....7.2  
D-11 Universal Joint.....7.3

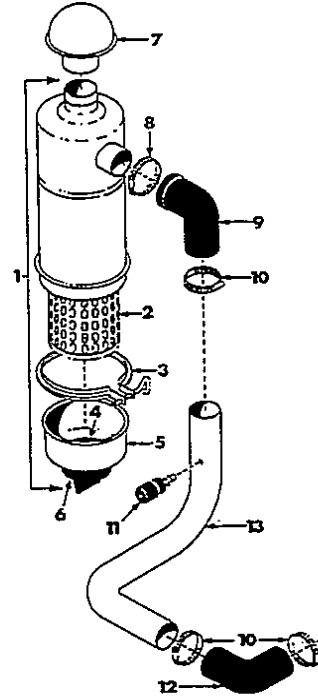
**ENGINE  
EQUIPMENT**



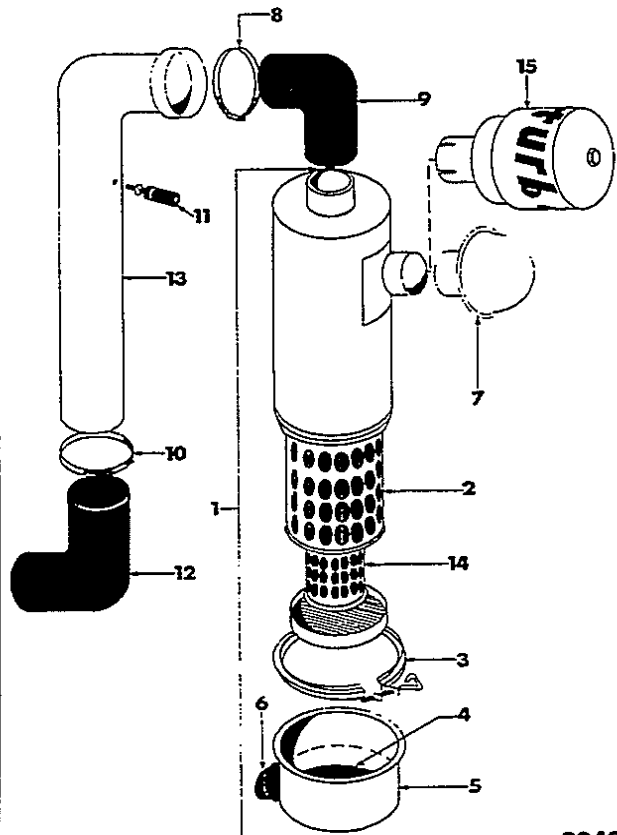
### EXHAUST SYSTEM



### AIR CLEANER TO LH000568



### LH000569 ONWARD



# EXHAUST SYSTEM

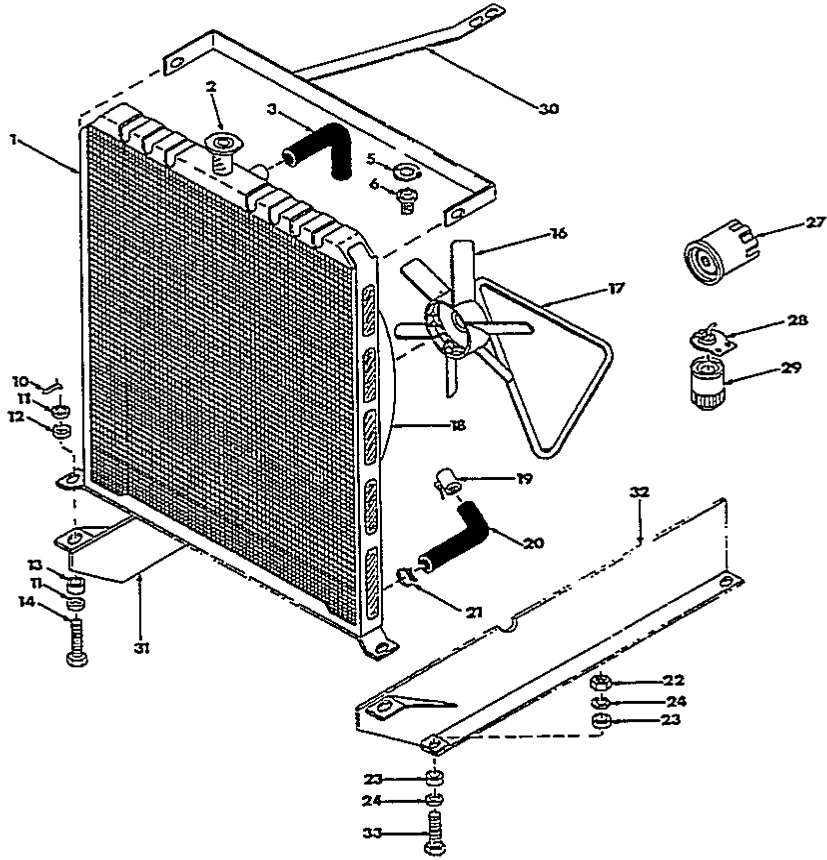
7.1

REF.	PART NO.	DESCRIPTION	QTY. T173HL	QTY. T183HD	QTY. T203HD	QTY. T233HD	SERIAL NO.
1	21148	Muffler Complete	1	1	1	1	
2	21293	End Cap	1	1	1	1	
3	21294	Diffuser Disc, 3/Pack	3	3	3	3	
4	21295	Center Bolt	1	1	1	1	
5	21296	Resonator	1	1	1	1	
6	21297	Adaptor	1	1	1	1	
7	7223	Bolt 1/4" UNC x 1 1/4" L.	8	8	8	8	
8	1650	Plainwasher 1/4" Dia.	4	4	4	4	
9	6645	Nut 1/4" UNC Nylok	4	4	4	4	
10	21197	Exhaust Pipe	—	—	—	1	
10	32426	Exhaust Pipe	1	1	1	—	
11	954397	Exhaust Flange Assembly	—	—	—	1	
11	958264	Exhaust Flange Assembly	1	1	1	—	
12	21274	Exhaust Gasket	—	—	—	1	
12	35258	Exhaust Gasket	1	1	1	—	
13	22968	10 mm x 20 mm L.	4	4	4	4	
14	6262	Muffler Clamp 2"	2	2	2	2	
15	954704	Exhaust Clamp Assembly	1	1	1	1	
16	30311	Exhaust Pipe Mount	1	1	1	1	
17	16771	Nut 5/16" UNC Nylok	2	2	2	2	
18	1651	Plainwasher 5/16" Dia.	2	2	2	2	
19	2580	Bolt 5/16" UNC x 1 1/4" L.	2	2	2	2	

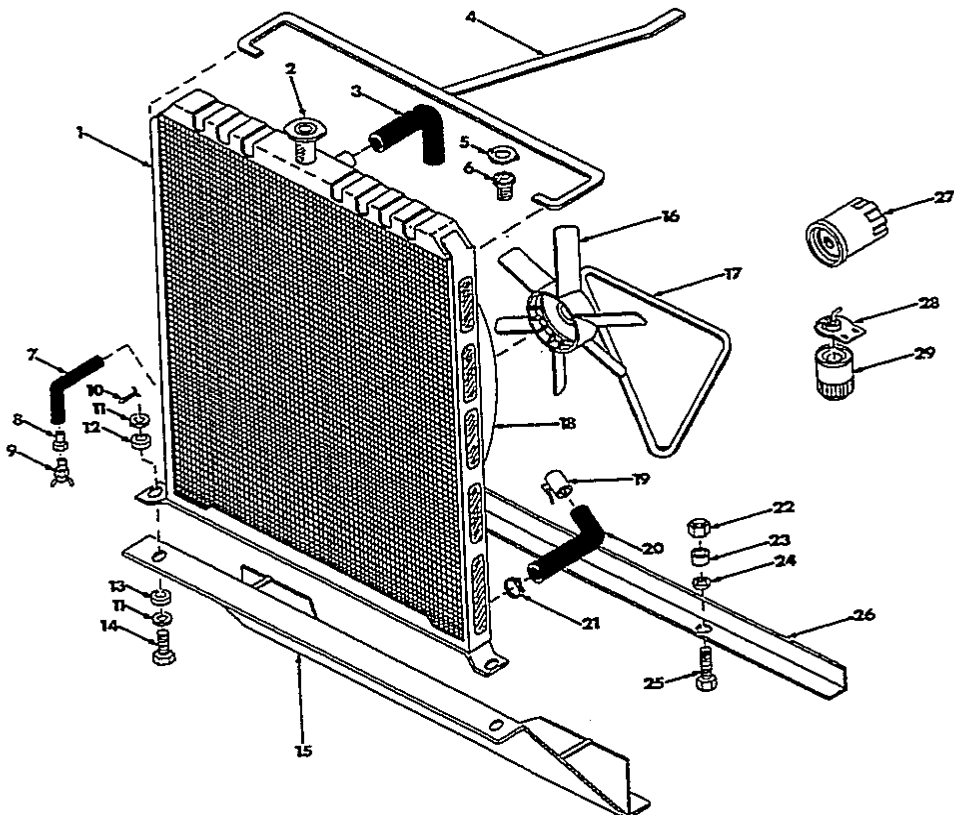
# AIR CLEANER

REF.	PART NO.	DESCRIPTION	QTY. T173HL	QTY. T183HD	QTY. T203HD	QTY. T233HD	SERIAL NO.
1	21575	Air Cleaner	—	—	—	1	TO LH000568
1	31783	Air Cleaner	1	1	1	1	LH000569-ONWARD
2	6505	Element	—	—	—	1	TO LH000568
2	31787	Element	1	1	1	1	LH000569-ONWARD
3	23743	Clamp Assembly	1	1	1	1	
4	24287	Rubber Baffle	1	1	1	1	
5	23745	Cup (only)	1	1	1	1	
6	24286	Vacuator Valve	1	1	1	1	
7	20485	Air Cleaner Cap	—	—	—	1	TO LH000568
7	31785	Air Cleaner Cap	1	1	1	1	LH000569-ONWARD
8	16138	Hose Clamp No. 36	1	1	1	—	
8	12117	Hose Clamp No. 40	2	2	2	2	
9	32520	Air Cleaner Hose Ass'y.	1	1	1	1	
10	6268	Hose Clamp No. 32	1	1	1	2	
11	6270	Service Indicator	1	1	1	1	
12	954443	Air Cleaner Hose Ass'y	—	—	—	1	TO LH000568
12	32521	Air Cleaner Hose Ass'y	—	—	—	1	LH000569-ONWARD
12	954442	Air Cleaner Hose Ass'y	1	1	1	—	
13	23240	Intake Tube	—	—	—	1	TO LH000568
13	31297	Intake Tube	—	1	—	—	TO LJ000344
13	32428	Intake Tube	—	1	1	1	LH000569-ONWARD LJ000345-ONWARD
13	36332	Intake Tube	1	—	—	—	
14	31788	Safety Element (optional)	1	1	1	1	
15	22233	Turbo Precleaner (optional)	1	1	1	1	
*16	31786	Mounting Band	2	2	2	2	

\* Not illustrated

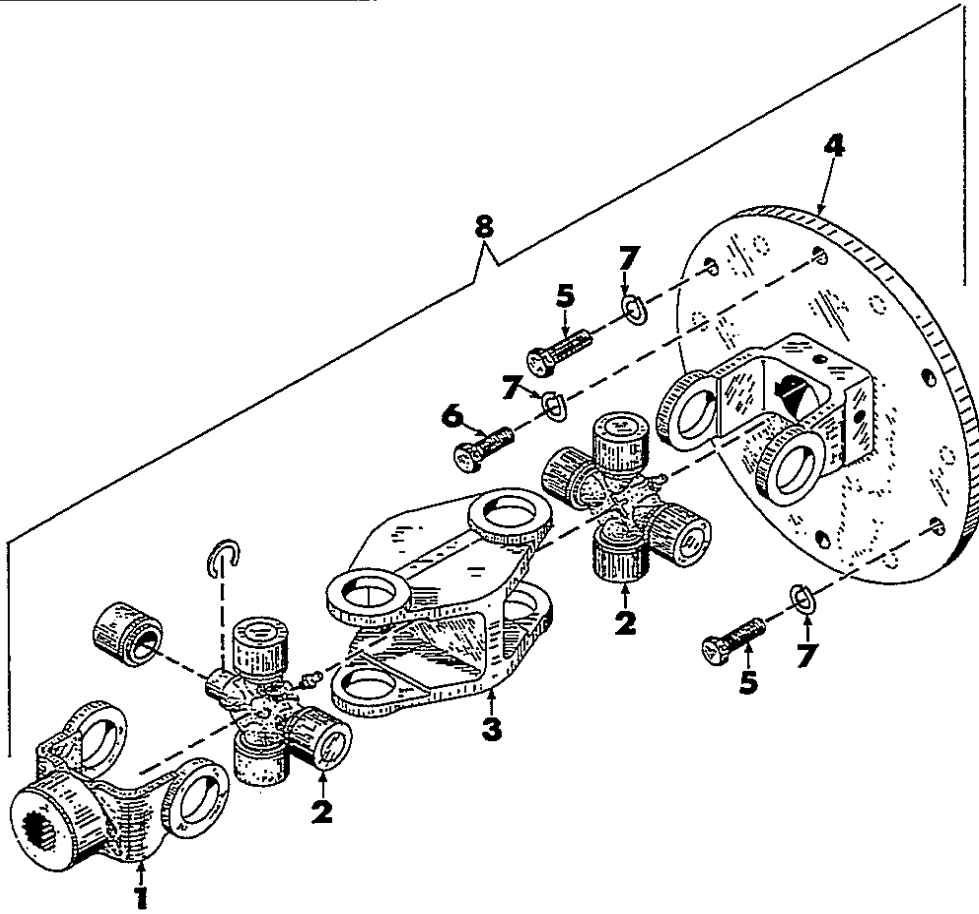


2379



2352





1219

REF.	PART NO.	DESCRIPTION	QTY. T173HL	QTY. T183HD	QTY. T203HD	QTY. T233HD	SERIAL NO.
1	15141	End Yoke Splined	1	1	1	1	
2	15052	Cross and Bearing Kit	2	2	2	2	
3	15140	Double Pivot Yoke	1	1	1	1	
4	954282	U.J. Plate Assembly	—	—	—	1	
4	958284	U.J. Plate Assembly	—	1	1	—	
4	954265	U.J. Plate Assembly	1	—	—	—	
6	19029	Bolt M8 x 25mm L. x 1.25 P	4	4	4	12	
†	21559	Bolt M8 x 30mm L. x 1.25 P	2	2	2	—	
7	21029	Springwasher 8mm Dia.	6	6	6	12	
8	958277	U.J. Complete	—	1	1	—	
8	954503	U.J. Complete	1	—	—	—	
8	954501	U.J. Complete	—	—	—	1	

† Not illustrated

# NUMERICAL INDEX

PART NO.	SECTION	PART NO.	SECTION	PART NO.	SECTION
33702	1.6	35879	2.2	954275	7.2
33741	1.5	35883	2.2	954282	7.3
33831	4.2.2, 4.4.1	35933	2.2	954397	7.1
33868	4.8.1, 4.8.2	36080	2.2	954425	1.2
33922	4.5	36095	4.2.2, 4.3.2, 4.4.1, 4.6.1	954434	3.1, 3.3
33923	5.3.1	36305	2.2	954442	7.1
33924	5.2.1, 5.3.1	36332	7.1	954443	7.1
34262	2.2	36336	4.2.2	954501	7.2, 7.3
34266	2.2	36337	4.4.1	954503	7.3
34442	2.4.1	36338	4.2.2	954507	1.2
34465	5.2.1	36339	4.2.2	954548	5.1
34466	5.2.1, 5.3.1	36340	4.2.2	954704	7.1
34467	5.2.1, 5.3.1	36341	4.2.2	955064	1.4
34468	5.2.1, 5.3.1	36342	4.4.1	955561	2.1.1
34469	5.2.1, 5.3.1	36343	2.2, 4.4.1	955562	2.1, 2.1.1
34470	5.2.1, 5.3.1	36344	4.3.2	955790	2.4, 2.4.1
34471	5.2.1, 5.3.1	36345	4.3.2	955791	2.4, 2.4.1
34472	5.2.1, 5.3.1	36350	2.2.2	955917	2.2
34473	5.2.1, 5.3.1	36363	4.3.2	956053	2.2
34474	5.2.1, 5.3.1	36390	1.4	956137	2.2, 2.4, 2.4.1
34475	5.2.1, 5.3.1	36422	4.7.1	956138	2.2, 2.2.2
34476	5.2.1, 5.3.1	36430	4.3.2	956244	4.2, 4.2.1
34478	5.2.1, 5.3.1	36443	1.4	956245	4.2, 4.2.1
34479	5.2.1	36643	4.6.1	956258	2.2
34484	5.2.1	36644	4.6.1	956260	2.2
34486	5.2.1	36645	4.6.1	956429	3.3
34487	5.2.1	36646	4.6.1	956432	3.1
34488	5.2.1	36647	4.6.1	956434	3.1
34490	5.3.1	36648	4.6.1	956436	3.1
34491	5.3.1	36649	4.6.1	956442	2.3
34492	5.3.1	36650	4.6.1	956444	2.3
34493	5.3.1	36651	4.6.1	956445	2.3
34610	2.4.1	36652	4.6.1	956448	4.1, 4.7
34763	1.4	36653	4.6.1	956449	4.2, 4.7
34881	4.5	36654	4.6.1	956450	4.3, 4.3.1, 4.4
34882	4.5	36655	4.6.1	956451	4.3, 4.3.1, 4.4
34884	4.5	36656	4.6.1	956509	7.2
34885	4.5	36657	4.6.1	956510	7.2
34886	4.5	36658	4.6.1	956600	3.4
34887	4.5	36659	4.6.1	956625	7.2
34899	4.1	36660	4.6.1	956626	7.2
34903	4.1	36651	4.6.1	956627	1.2
34919	4.1	36733	4.1	956628	1.4
35242	4.7.1	36736	1.5	956629	1.4
35243	4.7.1	951078	4.5	956630	1.4
35244	4.7.1	952766	3.1	956631	1.2
35259	7.1	952826	5.2, 5.3	956643	1.4
35298	5.2.1, 5.3.1	952851	2.1, 2.1.1, 2.2	956651	4.7
35449	1.5	953577	1.3	956658	3.4
35453	2.2	953578	1.3	956659	3.4
35455	2.2	953603	5.1	956661	3.4
35487	1.4	953630	4.1, 5.1	956662	2.4
35536	6.1, 6.2	953632	4.1, 5.1	956691	2.1
35591	2.2	953633	4.1, 5.1	956692	2.1
35783	2.2	953820	1.1	956694	2.4, 2.4.1
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956714	2.2, 2.4, 2.4.1	958982	2.4.1
956717	2.4, 2.4.1	958994	2.4.1
956718	2.4, 2.4.1	958998	2.2, 2.4.1
956729	2.4, 2.4.1	959086	2.2
956875	4.2	959087	2.2
956876	4.4	959090	2.2
956877	4.3	959108	5.1
956878	4.3	959320	2.2
956879	4.2	959329	2.2
956880	4.2	959391	2.2
956881	4.2, 5.1	959394	2.2.2
956882	2.1, 2.1.1	959395	2.2.2
957137	2.2	959396	2.2, 2.2.2
957154	1.2	959440	2.2
957156	1.2	959441	2.2
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957235	2.1.1, 2.2	959568	2.3
957236	2.1.1, 2.2	959599	1.4
957237	2.1.1	959601	1.4
957238	2.1.1	959626	4.1
957239	2.1.1	959627	4.3.2
957258	2.3	959628	4.1
957259	5.1	959630	4.2.2
957260	4.3	959631	4.2.2
957372	3.2	959632	4.3.2, 4.4.1
957384	6.1	959633	4.3.2, 4.4.1
957596	2.2, 2.2.2	959635	3.1
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23371	2.3	25898	4.2, 4.2.1	28965	2.2
23422	1.4	25899	4.2, 4.2.1	28968	2.2
23439	6.2	25902	4.2, 4.2.1	28970	2.2, 2.2.2
23452	3.1	25903	4.2, 4.2.1	28973	3.4
23493	2.2	25906	4.4	28979	3.4
23519	6.1, 6.2	25908	4.4	28981	1.4
23525	6.1, 6.2	25919	4.2, 4.2.1	28982	3.4
23579	1.4	25920	4.2, 4.2.1	28985	1.4
23582	5.1	26041	3.3	29028	2.2, 2.4, 2.4.1
23583	5.1	26086	7.2	29029	3.2
23584	5.1	26108	2.4, 2.4.1	29032	3.3
23665	6.1, 6.2	26120	1.4	29035	2.1.1
23719	1.1	26127	7.2	29047	1.5
23743	7.1	26129	7.2	29056	1.5
23745	7.1	26134	7.2	29059	1.3, 1.5
23747	5.1	26135	4.3	29064	1.4
23748	5.1	26152	4.3.1, 4.4	29065	2.4, 2.4.1
23749	5.1	26174	2.1, 2.1.1	29066	2.4, 2.4.1
23750	5.1	26188	1.4, 3.2	29085	2.4
23861	1.1	26202	4.1	29093	3.4
24214	1.1	26208	3.4, 6.1, 6.2	29135	2.1.1
24259	6.2	26231	6.1, 6.2	29245	1.5
24264	1.1	26315	3.2	29248	2.4, 2.4.1
24286	7.1	26321	1.5	29266	2.1.1
24287	7.1	26351	2.3	29273	2.2
24420	1.4	26509	3.2	29281	2.1, 2.1.1
24452	1.4	26510	3.2	29282	4.3, 4.3.1, 4.3.2
24527	2.2	26518	1.5	29345	4.9
24621	1.3	26520	4.2, 4.8	29346	4.9
24622	1.3	26521	4.3, 4.8.1	29349	2.1, 2.1.1, 2.2
24914	3.4	26549	4.2, 4.3, 4.9	29361	3.2
24961	6.1, 6.2	26650	5.2, 5.2.1, 5.3, 5.3.1	29367	2.4
24980	2.4, 2.4.1	26664	1.2	29368	4.9
25011	4.2, 4.2.1	26735	1.5	29369	4.9
25104	3.3	26737	1.1	29370	4.9
25167	1.3	26742	1.4	29371	4.9
25175	3.4	26743	1.5, 4.8.1	29372	4.9
25204	2.2	26760	4.2, 4.2.1, 4.3, 4.3.1	29373	4.9
25298	1.6, 2.3		4.6	29375	4.9
25500	2.2	26765	3.4, 5.1, 5.4	29377	4.9
25508	2.2, 2.2.2	26781	1.4	29378	4.9
25513	2.2, 2.2.2	26782	1.4	29379	4.9
25532	1.5	26784	1.4	29382	4.9
25583	2.2	26785	1.2	29384	2.1, 2.1.1, 2.4
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25688	6.2	26847	4.2.1, 4.2.2, 4.3.1, 4.8	29433	4.4, 4.4.1
25760	6.1, 6.2	26851	6.1, 6.2	29434	4.4, 4.4.1
25762	1.4	26857	2.4, 6.1, 6.2	29435	4.4, 4.4.1
25842	3.4	27011	2.4	29436	4.4, 4.4.1
25843	3.4	27013	2.4	29437	4.4, 4.4.1
25845	3.1, 3.3	28845	7.2	29438	4.2
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29709	4.3, 4.8.1	30470	3.4	31402	3.4
29855	4.8	30471	3.4	31403	4.2.1, 4.8
29856	4.8	30474	3.4	31407	4.8
29857	4.8	30485	3.4	31408	4.8
29858	4.8.1	30487	3.4	31419	4.8
29859	4.8.1	30549	4.1	31420	4.8
29860	4.8, 4.8.1, 4.8.2	30641	1.5, 4.3, 4.3.1, 4.8.1,	31451	4.8.2
29861	4.8, 4.8.1, 4.8.2		4.8.2	31581	1.4
29862	4.8, 4.8.1, 4.8.2	30770	1.5	31582	1.4
29869	4.8	30771	1.5	31583	1.4
29875	4.8, 4.8.1, 4.8.2	30892	1.5	31654	2.3
29878	4.8, 4.8.1	30893	1.5	31754	2.2
29879	4.2.2, 4.8.1	30894	1.5	31783	7.1
29887	4.8.1	30895	1.5	31785	7.1
29894	5.4	30896	1.5	31786	7.1
29895	5.4	30897	1.5	31787	7.1
29896	4.8	30898	1.5	31788	7.1
29970	2.2	30899	1.5	32326	1.5
29971	6.1, 6.2	30900	1.3	32366	4.2.1
29974	2.2	30901	1.3	32367	4.2.1
29978	4.8, 4.8.1, 4.8.2	30902	1.3	32407	4.8
29979	4.8, 4.8.1, 4.8.2	30907	1.5	32426	7.1
29982	2.2, 2.4, 2.4.1	30908	1.5	32428	7.1
29992	4.8.1	30909	1.5	32473	1.4
29993	4.8.1	30910	1.5	32478	4.1
30003	4.8.1	30915	1.5	32506	4.3, 4.8.1
30004	4.8.1	30916	1.5	32507	4.8.1, 4.8.2
30009	1.1	30917	1.5	32510	4.8.1
30013	4.8.1	30918	1.5	32511	4.8.1, 4.8.2
30026	4.8.1	30922	1.3	32520	7.1
30027	4.8.1	30923	1.3	32521	7.1
30038	6.1, 6.2	30924	1.3	32578	3.3
30043	6.1, 6.2	30925	1.3	32614	1.5
30044	2.2.2	30939	1.5	32615	1.5
30045	2.2	30950	5.2, 5.2.1, 5.3, 5.3.1	32759	3.3
30130	4.6	31031	4.3.2, 4.8.2	32887	4.8.1, 4.8.2
30138	4.6	31032	4.8.2	32888	4.8.1, 4.8.2
30140	4.6	31034	4.8.2	32889	4.8.1, 4.8.2
30141	4.6	31044	3.3	32893	4.8.1
30142	4.6	31045	3.3	32894	4.8.1
30143	4.6	31046	3.3	32895	4.8.1
30144	4.6	31262	3.1	32906	3.3
30145	4.6	31266	2.2	32907	3.3
30146	4.6	31267	2.2	33023	7.2
30147	4.6	31297	7.1	33073	6.1
30148	4.6	31337	1.2	33105	6.1
30149	4.6	31339	5.1	33141	6.1
30150	4.6	31340	5.1	33143	7.2
30151	4.6	31341	5.1	33153	4.8.1, 4.8.2
30152	4.6	31347	4.2.1	33154	4.8.1, 4.8.2
30153	4.6	31348	4.2.1	33155	4.8.1, 4.8.2
30154	4.6	31349	4.3.1	33385	7.2
30211	1.3	31350	4.3.1	33513	6.1
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1064	1.6	2580	2.2.2, 7.1	8023	2.1, 2.1.1, 2.2
1080	2.2	2593	1.5	8063	5.1
1149	3.1	2663	1.6, 2.3, 2.4, 2.4.1	8104	5.1
1190	2.2, 2.4, 2.4.1	2823	1.2	8153	1.3
1191	2.2, 2.2.2, 3.1, 3.2,	3189	1.2, 2.1, 2.1.1, 2.2	8154	2.4, 2.4.1
	4.1, 4.9	3228	5.1	8280	2.1, 2.1.1, 3.4
1193	2.1, 2.1.1, 2.2	3237	2.1, 2.1.1, 2.4, 2.4.1	8301	6.1, 6.2
1194	1.3, 2.1, 2.1.1, 2.2	3238	1.2	8303	5.1
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1205	3.4	3550	1.3	8704	3.3
1314	4.8.1	3553	2.1.1	8705	3.3
1341	3.4	4200	2.2	8780	5.2
1350	1.2, 1.5, 2.1.1, 2.2	4539	1.1	8786	5.2.1
	2.3, 2.4, 2.4.1, 4.1	4549	4.1	8793	5.3
1361	1.3	4569	4.7	8797	5.2, 5.3
1364	1.3, 2.2	4839	3.4	8845	5.2, 5.3
1387	2.2, 2.2.2	4842	1.2, 2.1, 2.1.1, 2.2	8862	5.2, 5.3, 5.3.1
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1456	3.1	5170	1.6, 2.2, 3.4	8864	5.2, 5.2.1, 5.3, 5.3.1
1457	4.1	5702	1.5	8871	5.2, 5.2.1, 5.3, 5.3.1
1458	1.1, 4.1	5803	2.1, 2.1.1, 2.2, 2.4.1,	8872	5.2, 5.2.1, 5.3, 5.3.1
1461	5.1		3.4	8873	5.2, 5.2.1, 5.3, 5.3.1
1464	5.1	5825	6.1, 6.2	8897	5.1
1529	3.1	5832	1.4, 3.2	9202	1.2
1546	2.2, 2.2.2, 3.3	5842	1.1	9421	1.3
1564	3.3	5845	1.4	11495	7.2
1626	2.1, 2.1.1	5891	2.1, 2.1.1, 2.2	11835	2.4
1631	2.2, 2.2.2	5893	2.2	11841	3.4
1636	2.2	5896	2.1, 2.1.1	11848	1.5
1642	1.2, 2.1, 2.1.1, 2.2	5897	1.2	12117	7.1
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1643	1.3, 2.1, 2.3, 2.4,	6089	1.1	14797	1.1
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1645	2.4.1	6114	4.1	14860	2.1, 2.1.1, 2.2
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1649	2.3, 3.1	6262	7.1	14877	3.2
1650	1.2, 1.6, 2.1, 2.1.1,	6268	7.1	14898	4.1
	2.2, 2.3, 2.4, 2.4.1,	6270	7.1	14916	2.1
	7.1	6297	4.8, 4.8.1, 4.8.2	14937	4.5
1651	2.2, 2.4, 2.4.1, 3.2,	6356	1.5	14938	4.5
	4.1, 4.9, 7.1	6377	3.1	14939	4.5
1663	3.4	6505	7.1	14940	4.5
1671	1.3	6521	6.1, 6.2	14941	4.5
1672	1.3, 2.1, 2.1.1, 2.2	6522	6.1, 6.2	14944	4.5
1673	2.1, 2.1.1, 2.2, 2.4.1	6526	6.1, 6.2	14945	5.2
1675	4.9	6608	4.4, 4.4.1	14946	5.3
1678	2.1, 2.1.1	6645	1.2, 1.6, 2.4, 2.4.1,	14948	5.2
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1870	1.2, 2.1, 2.1.1, 2.4,	6800	1.4	14957	5.2, 5.3
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1898	2.1, 2.1.1, 2.2, 3.4	7019	1.4	14959	5.2, 5.2.1
2010	1.5, 1.6, 3.4, 4.8,	7124	4.4, 4.4.1	14960	5.2, 5.3
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14972	5.3, 5.3.1	17615	2.1, 2.1.1	21559	7.3
14973	5.2	17633	3.1	21575	7.1
15052	7.2, 7.3	17670	2.3	21677	1.1, 7.2
15140	7.2, 7.3	17798	4.7	21679	1.1
15141	7.2, 7.3	18199	4.7	21835	6.2
15227	5.2, 5.3	18228	1.4	21926	6.2
15228	5.2	18318	1.1	21927	6.1
15231	5.2, 5.2.1	18321	4.1	22026	6.2
15232	5.2	18467	2.1, 7.2	22049	6.2
15233	5.2	18468	7.2	22062	7.2
15234	5.2	18469	7.2	22071	5.4
15235	5.2	18478	7.2	22072	5.4
15236	5.2	18481	7.2	22073	5.4
15237	5.2, 5.2.1	18724	6.1	22074	5.4
15238	5.2, 5.2.1	19029	7.3	22075	5.4
15241	5.3	19226	4.2, 4.2.1, 4.2.2, 4.3	22087	5.4
15242	5.3		4.3.1, 4.3.2, 4.4, 4.4.1	22089	5.4
15243	5.3	19232	4.2, 4.2.2, 4.3.2, 5.1	22105	5.4
15246	5.3, 5.3.1	19235	4.7	22106	5.4
15304	4.1	19238	5.1	22107	5.4
15322	7.2	19239	5.1	22108	5.4
15323	7.2	19240	5.1	22109	5.4
15334	1.4	19241	5.1	22110	5.4
15468	5.2.1	19242	5.1	22111	5.4
15469	5.2.1	19243	5.1	22112	5.4
15931	1.4	19249	4.2.1, 4.2.2	22115	5.4
15935	6.1, 6.2	19328	7.2	22116	5.4
15936	6.1, 6.2	19574	7.2	22117	5.4
15937	6.1, 6.2	19586	7.2	22119	5.4
16027	4.7	19588	7.2	22120	5.4
16028	4.7	19602	6.2	22121	5.4
16138	7.1	19605	6.1, 6.2	22127	1.1
16711	1.3	19949	1.1	22203	6.2
16771	2.1, 2.1.1, 2.2, 2.4, 2.4.1, 7.1	20232	4.1	22207	5.3
16855	3.3	20235	7.2	22208	5.2
16982	1.4	20316	1.5	22233	7.1
16989	1.2, 2.1, 2.1.1, 3.4	20384	4.1	22273	4.3, 4.3.1
16995	4.7	20432	6.1, 6.2	22274	4.3, 4.3.1
17085	4.1	20485	7.1	22278	4.3, 4.3.1, 4.3.2
17099	2.1, 2.1.1, 6.1, 6.2	20860	2.2	22280	4.3, 4.3.1, 4.3.2
17121	6.1, 6.2	20901	3.1	22448	3.2
17144	4.1	21004	1.6	22470	1.6
17167	4.1	21029	7.3	22581	5.4
17225	3.4	21148	7.1	22653	2.4, 2.4.1
17308	1.4, 3.1	21174	2.1, 2.1.1, 2.2, 3.4	22734	3.3
17340	3.3	21197	7.1	22819	6.1, 6.2
17372	1.3	21219	7.2	22951	3.3
17378	1.3	21274	7.1	22957	4.7, 4.7.1
17379	1.3	21293	7.1	22962	6.1, 6.2
17423	2.2	21294	7.1, 7.2	22966	2.3, 3.4
17499	4.7	21295	7.1	22968	7.1
17516	2.2, 3.4	21296	7.1	23012	2.4, 2.4.1
17518	1.5	21297	7.1	23096	2.3
17544	1.4	21362	1.2	23166	1.1, 1.4
		21527	6.2	23178	1.1, 6.1, 6.2

# SAFETY PRECAUTIONS



1. Read the operators manual carefully and familiarize yourself with the operation of all controls, safety equipment and safety precautions before operating this loader.
2. Always fasten seat belt before starting or operating this loader.
3. Do not operate this loader without using seat bar, seat belt and operators guard.
4. Do not operate this loader unless all safety and instruction decals are in place and all safety equipment, shields, are in place and in proper working condition.
5. Do not get off the loader without first, lowering boom arms, stopping engine, engaging parking brake—foot pedal lock — neutral centering device and removing key from ignition.
6. Do not park on an incline. If necessary to park on an incline park across the slope — lower lift arms and ground bucket — engage the parking brake and block the wheels.
7. Do not exceed rated lift capacity of this loader.
8. Do not drive across a slope. Always go up or down a slope with the heavy end of the loader pointing up towards the top of the slope.
9. Do not allow anyone to ride on loader with the operator.
10. Always operate in a well ventilated area. Do not operate in atmosphere with explosive dusts or gasses.
11. Avoid jerky turns, starts or stops. Reduce operating speed on rough ground and slopes.
12. Keep load low — do not travel or turn with boom arms up.
13. Watch for others when operating.
14. Do not add fuel to the loader when the engine is running or is hot. No smoking.
15. Do not get under raised boom unless boom lock is engaged. Always engage boom lock before doing any servicing which requires the boom be up.
16. Do not attempt to repair or tighten any hydraulic hoses or fittings with the engine running and the hydraulic system is under pressure.
17. Replace all missing, illegible, or damaged safety and warning decals.
18. Do not modify or alter or permit anyone to modify or alter this equipment or any of its components.
19. Do not bypass the starter safety switch. Consult your dealer if your safety starter controls are malfunctioning.

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## SAFETY EQUIPMENT

The loader is equipped with the following safety equipment for your protection. Take care of them and inspect their condition daily.

**Safety Belt** — Check seat belts for frayed or cut webbing, damaged buckies or loose mounting brackets.

**Operator Guard (ROPS)** — Check for damage or loose mountings. Never remove protective screens.

**Safety Treads/Warning Decals** — Keep safety treads clean. Check for missing or damaged decals. Replace worn, damaged or missing safety treads or decals.

**Shields** — Keep all protective shields in place.

**Seat Bar/Parking Brake/Foot Pedal Lock/Neutral Centering Device** — Check operation and repair or replace as required.

**Boom Locks** — Check operation and repair or replace as required.

**Quick-Tach Lock** — Check operation and repair or replace as required.

**Operating Lights** — Check operation of all lighting.