

# **OPERATION AND PARTS MANUAL**



## **MAYCO SERIES MODEL LS-60TD STRUCTURAL CONCRETE PUMP (DEUTZ BF4L914 DIESEL ENGINE)**

Revision #4 (09/15/11)

**THIS MANUAL MUST ACCOMPANY THE EQUIPMENT AT ALL TIMES.**

# APPENDIX — RECOMMENDED SHOTCRETE SYSTEM

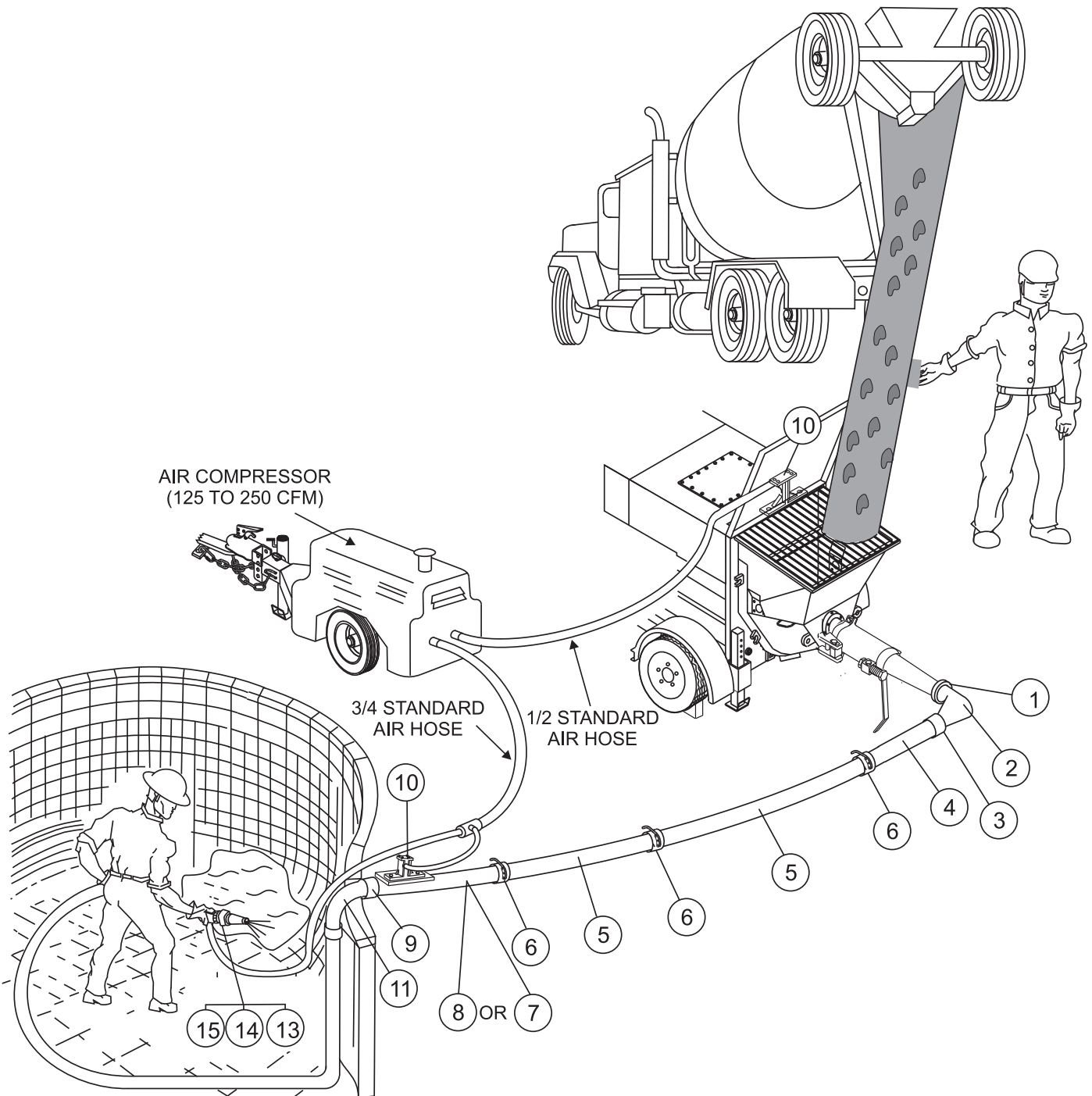


Figure 55. Recommended Shotcrete System

# APPENDIX — RECOMMENDED SHOTCRETE SYSTEM

## RECOMMENDED SHOTCRETE SYSTEM

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM28906	COUPLING, 5" H-D "CF"		
2	EM25837	ELBOW, 5"x4"x90°		
3	EM28905	COUPLING, 4" H-D w/GASKET & PIN		
4	EM402552	REDUCER, 4"x2.5"x53" H-D ENDS		
5	EM28061	PIPE, 2.5"x120w x 10' H-D		
6	EM289035	COUPLING, 2.5" H-D w/GASKET & PIN		
7	EM28001DD	REDUCER, 2.5"x2"x36" H-D		
8	EM23815D	REDUCER, 2.5"x2" w/AIR VIBRATOR		
9	EM28902	COUPLING, 2" H-D w/GASKET & PIN		
10	EMDC400	AIR VIBRATOR ASSY.		
11	EM28131D	2"x2" ELBOW 90°		
12	EM24841	HOSE, 2"x25' H-D w/ENDS		
13	EM23808D	NOZZLE ASSEMBLY, 2" H-D		
14	EM23806	NOZZLE TIP, RUBBER 1-3/8"		
15	EM23807	NOZZLE TIP, RUBBER 1.25"		

## GENERAL RECOMMENDATIONS

- If the site will permit, use steel pipe from the pump to the pool perimeter. It will reduce line pressures which is highly recommended.
- The vibrator on the reducer by the pool improves pumpability.
- Turn both air vibrators off whenever the pump is stopped to prevent separation of mix.
- The air vibrators are low consumption (4.2 scfm).
- Leave the air on at the nozzle when the pump is stopped to prevent clogging of air the hoses in the air insert.
- Use item #11 (steel elbow) at the edge of the pool to prevent collapse of the rubber hose, which can cause blockage.

# APPENDIX — RECOMMENDED SHOTCRETE ACCESSORIES

## RECOMMENDED SHOTCRETE ACCESSORIES

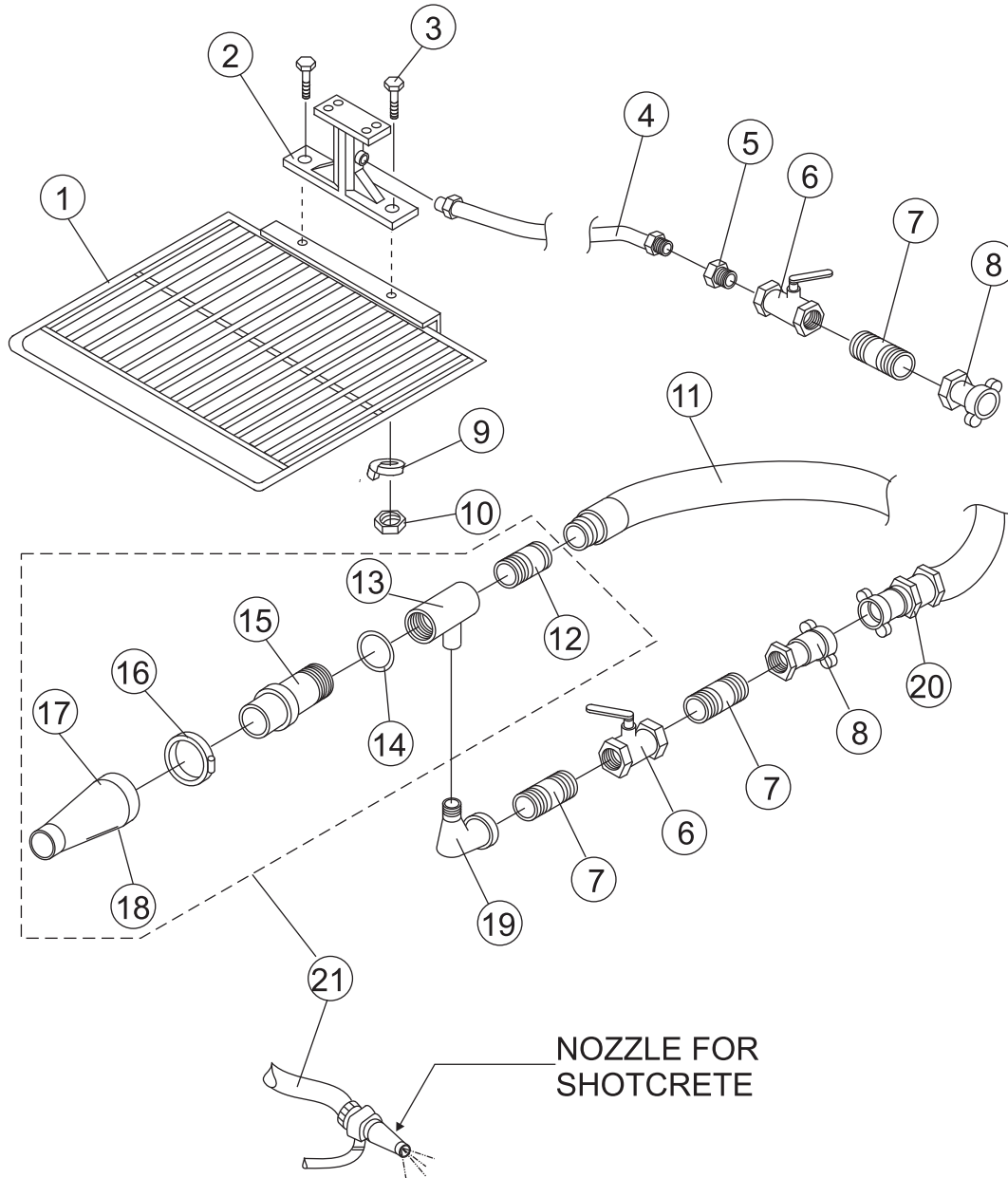
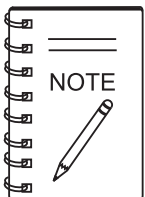


Figure 56. Shotcrete System Accessories



Use a 1-3/8" rubber nozzle tip for a wide spray pattern. Use a 1-1/4" rubber nozzle tip for a narrow spray pattern. **DO NOT INSTALL THE NOZZLE AT THE END OF THE HOSE UNTIL THE FIRST MATERIAL HAS PASSED THROUGH THE ENTIRE HOSE LENGTH.**

Disassemble and clean the nozzle assembly thoroughly after each job. Grease all threads before re-assembly. **DO NOT** close the air valve when pumping is stopped as a continued air flow keeps the air passages clean.

# APPENDIX — RECOMMENDED SHOTCRETE ACCESSORIES

## RECOMMENDED SHOTCRETE ACCESSORIES

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM26107	HOPPER SCREEN .....	1 .....	W/AIR VIBRATOR MOUNTING
2	EM23101	AIR VIBRATOR	1	
3	EM132	BOLT, 1/2-13X2	2	
4	EM23407	AIR HOSE	1	
5	EM23408	BUSHING	1	
6	EM23411	VALVE	1	
7	EM912073	NIPPLE	2	
8	EM23409	COUPLING	1	
9	EM923346	WASHER, 1/2 LOCK	2	
10	EM406	NUT, HEX 1/2-13	2	
11	EM23818	2"X25' GROOVED HOSE		
11	EM24841	2"X25' RAISED HOSE		
11	EM23845	2"X50' GROOVED HOSE		
12*	EM23802	VIC ADAPTER / EM23802D H.D	1	
13*	EM23803	GUN BODY	1	
14*	EM20816	"O" RING	1	
15*	EM23804	AIR INSERT	1	
16*	EM23805	NOZZLE CLAMP	1	
17*	EM23806	NOZZLE TIP, 1-3/8", SHORT	1	
18*	EM23807	NOZZLE TIP, 1-1/4", LONG	1	
19*	EM911076	STREET ELBOW	1	
20		AIR HOSE .....		NOT SUPPLIED BY MAYCO
21	EM23808	NOZZLE ASSEMBLY .....	1 .....	INCLUDES ITEMS W/*

# LS-60TD PUMP — SUGGESTED SPARE PARTS

## LS-60TD STRUCTURAL CONCRETE PUMP 1 Unit

Qty.	P/N	Description
1	EM16462	FELT HOLDER
4	EM98050	PISTON CUP, ORANGE
4	EM16493	FELT RING
1	EM98033	OIL PLATE
2	EM14408	BRONZE RING
2	EM16145	BUSHING, SWING AXLE (BRONZE)
1	EM98021	WEAR PLATE
2	EM168161A	ENERGIZER RING
1	EM16816-2	INSERT RING
2	EM98065	SLEEVE SEAL
1	EM98022	WEAR RING
1	EM98065	RUBBER RING
2	EM14407	O-RING
1	34507	CAP, FUEL
2	EM20763	FILTER, FUEL (IN LINE)
1	P53712	CARTRIDGE, WATER SEPERATOR
3	01174416	FILTER, OIL (ENGINE)
3	01174696	FILTER, FUEL (ENGINE)
2	EM98093P	ELEMENT, PRIMARY
2	EM98093S	ELEMENT, SECONDARY
1	EM98163	SWITCH, PROXIMITY
1	EM981121	ELEMENT, RETURN OIL

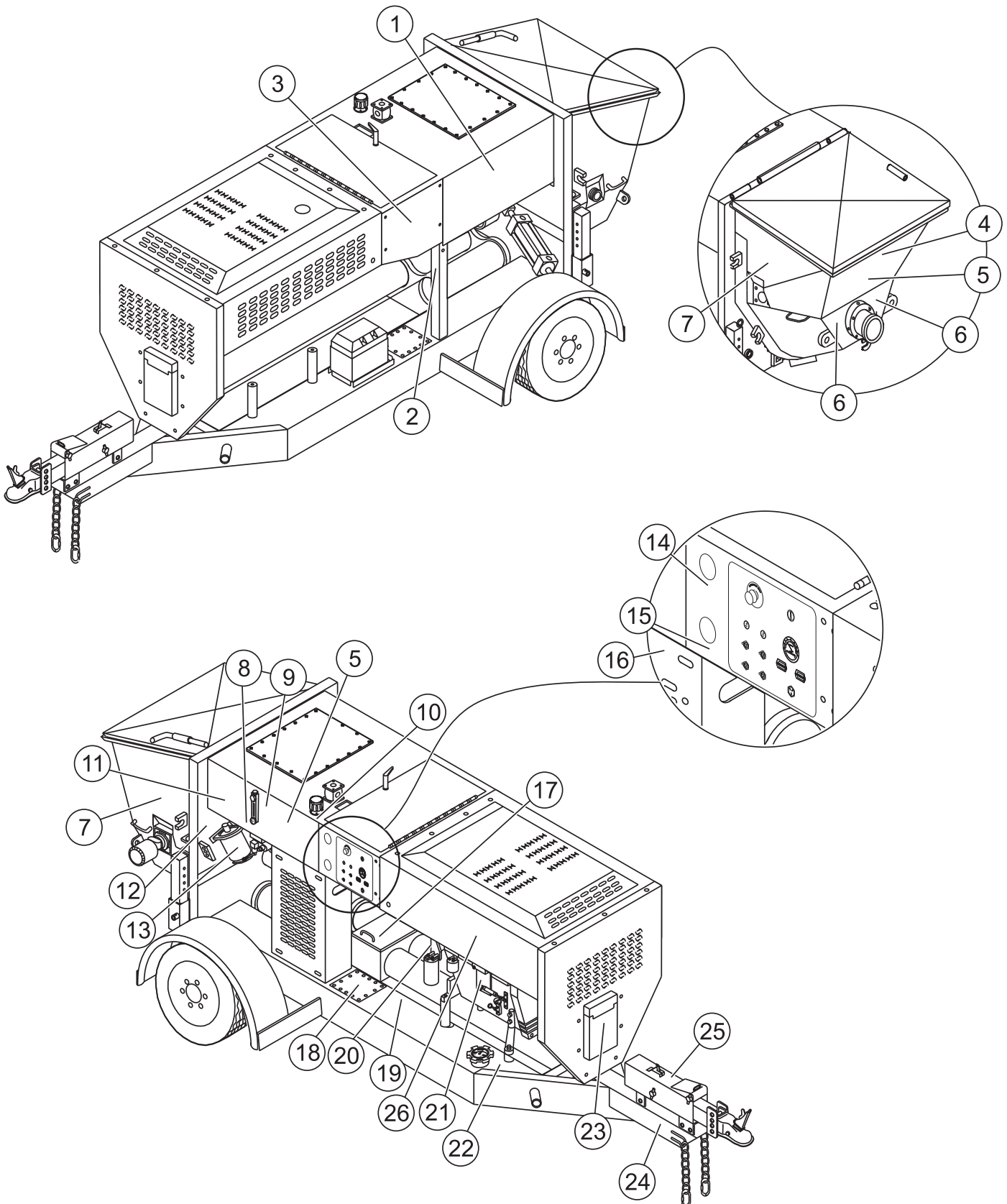
## LS-60TD STRUCTURAL CONCRETE PUMP 3 Units

Qty.	P/N	Description
1	EM16459	PIN
2	EM25801	CONCRETE CYLINDER
4	EM16462	FELT HOLDER
6	EM98050	PISTON CUP, ORANGE
8	EM16493	FELT RING
4	EN98033	OIL PLATE
4	EM14408	BRONZE RING
4	EM16145A	BUSHING, SWING AXLE (BRONZE)
3	EM98021A	WEAR PLATE
4	EM168161A	ENERGIZER RING
2	EM16816-2	INSERT RING
4	EM98065	SLEEVE SEAL
6	EM98022	WEAR RING
3	EM98065	RUBBER RING
6	EM14407	O-RING
2	EM16174	O-RING
2	EM98163	SWITCH, PROXIMITY
6	510265	BOLT, HEX HEAD 3/8 NC x 3-1/4 IN. G8
1	34507	CAP, FUEL
6	EM20763	FILTER, FUEL
3	P53712	CARTRIDGE, WATER SEPERATOR
9	01174416	FILTER, OIL (ENGINE)
9	01174696	FILTER, FUEL (ENGINE)
6	EM98093P	ELEMENT, PRIMARY
6	EM98093S	ELEMENT, SECONDARY
2	EM981121	ELEMENT, RETURN OIL



Part numbers on this Suggested Spare Parts List may supercede or replace the P/N shown in the text pages of this book.

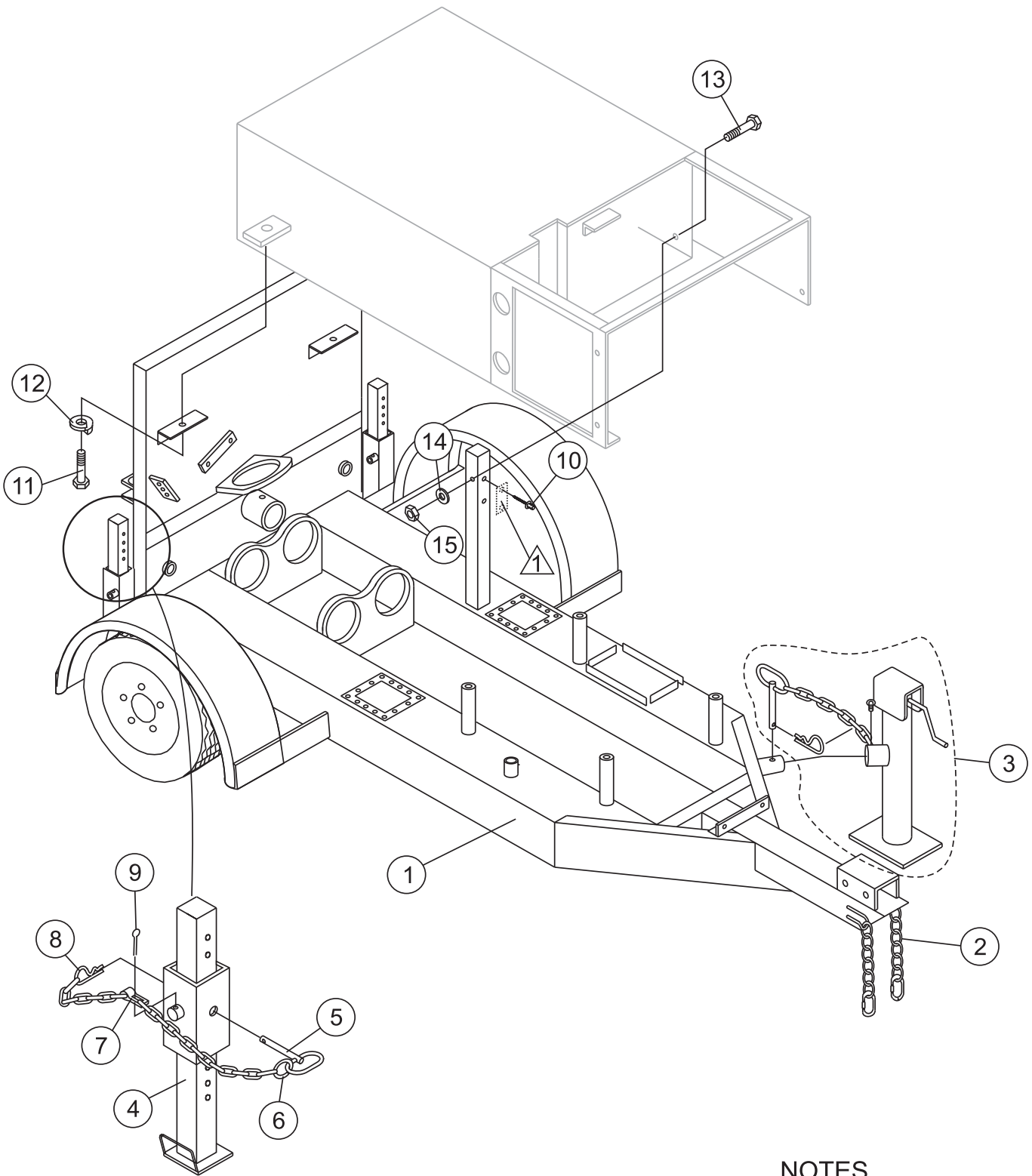
# LS-60TD PUMP — NAMEPLATE AND DECALS



## LS-60TD PUMP — NAMEPLATE AND DECALS

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM514238	DECAL, LS-60 SMALL	1	
2		SERIAL PLATE .....	1	..... CONTACT PARTS DEPT.
3	DCL302	DECAL, WARNING BURN HAZARD	1	
4	EM511709	DECAL, 800-30-MAYCO	1	
5	EM97072	DECAL, CAUTION - OP. INSTRUCTIONS	2	
6	EM98000	DECAL, CAUTION - GREASE 2 HOURS	4	
7	DCL301	DECAL, SHUTTLE TUBE DANGER	2	
8	EM970	DECAL, HOPPER REX MIXER	1	
9	EM511091	DECAL, MINIMUM OIL LEVEL	1	
10	EM985	DECAL, HYDRAULIC OIL ONLY	1	
11	DCL304	DECAL, DANGER IMPROPER CHARGING	1	
12	EM97083	DECAL, WARNING - ACCUM. SAFETY	1	
13	EM955	DECAL, DANGER CHARGING ACCUM.	1	
14	EM97070	DECAL, ACCUMULATOR PRESSURE	1	
15	EM97070	DECAL, PUMPING PRESSURE DECAL	1	
16	35137	DECAL, CAUTION READ MANUAL	1	
17	EM97084	DECAL, MAINTENANCE	1	
18	DCL300	DECAL, DANGER LUBRICATION BOX	1	
19	EM965	DECAL, VOLUME CONTROL	1	
20	EM965	DECAL, THROTTLE	1	
21	513580	DECAL, ENGINE RPM SETTING	1	
22	EM995	DECAL, CAUTION DIESEL FUEL	1	
23	34536	DECAL, OWNERS MANUAL	1	
24	DCL305	DECAL, WARNING REAR STABILIZERS	1	
25	EM696	DECAL, CAUTION - TOWING DECAL	1	
26	514666	DECAL, LS-60 LARGE	1	

# LS-60TD PUMP — FRAME ASSY.



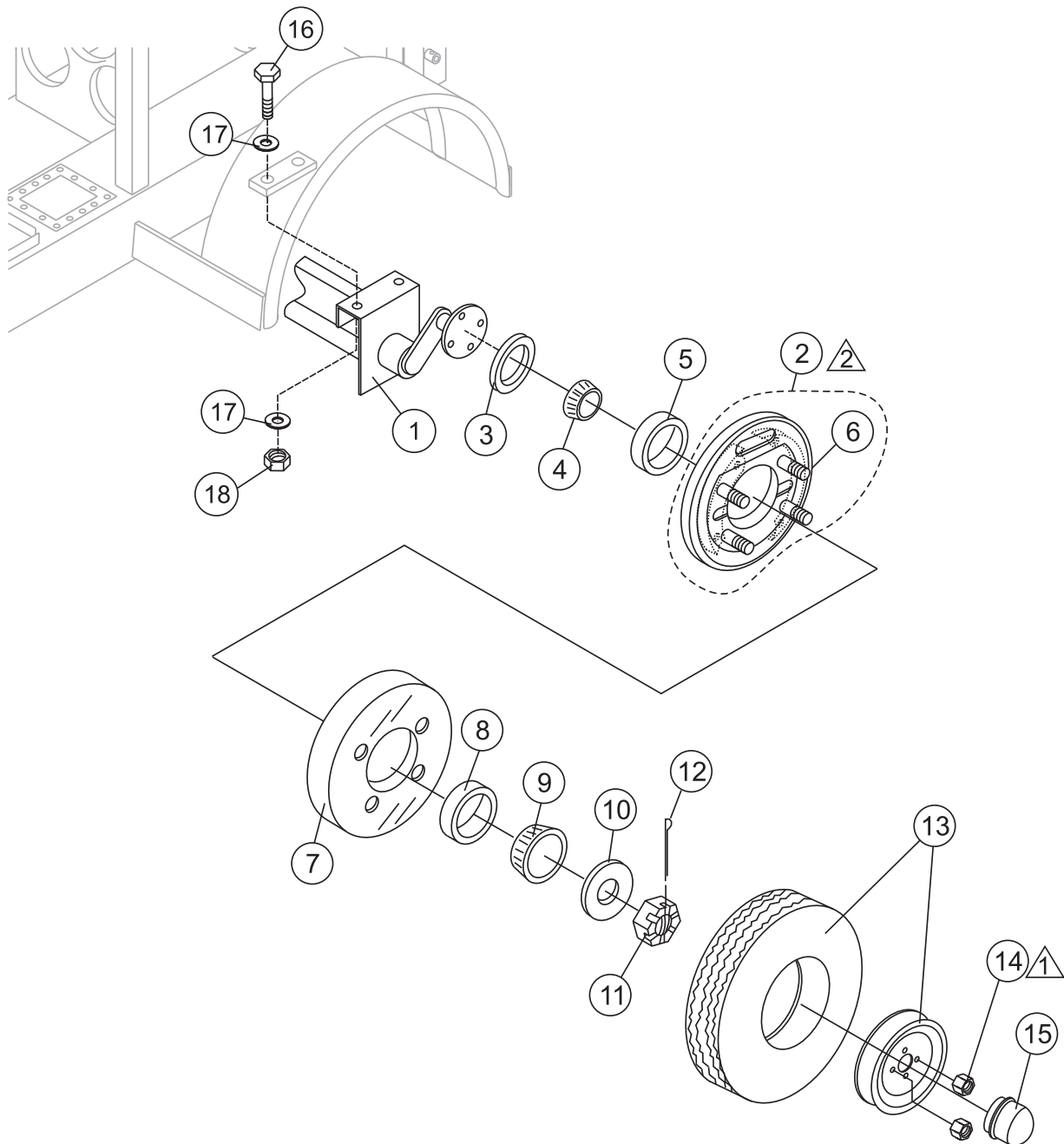
## NOTES

 SEE NAMEPLATE AND DECALS  
SERIAL PLATE, ITEM 2

## LS-60TD PUMP — FRAME ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM514355	FRAME, MAIN	1	
2	TBD	CHAIN, TRAILER HITCH, 3/8 X 40", GRADE 40	2	
3	EM25610	JACK STAND, FRONT	1	
4	EM70186	SUPPORT STAND	2	
5	EM491686	PIN	2	
6	EM491076	PIN RING 3/4"	2	
7	EM490236	CHAIN 15 3.5 GALV.	2	
8	EM744	PIN	2	
9	EM491686	PIN, COTTER	2	
10	EM491744	RIVET, POP AM-44	2	
11	509562	BOLT, 3/8" NC X 5/8" G5	2	
12	0166 A	LOCK, WASHER 3/8" .....	2 .....	REPLACES 492624
13	503112	BOLT 3/8" X 2-3/4"	1	
14	3019092	WASHER 3/8" .....	2 .....	REPLACES 492598
15	EM969013	NUT 3/8" .....	1 .....	REPLACES 492583

# LS-60TD PUMP — AXLE ASSY. (RIGHT/LEFT)



## NOTES:

▲ TORQUE LUG NUTS PER LUG NUT  
▲ TORQUE TABLE REFERENCED IN  
THIS MANUAL.

RIGHT AND LEFT SIDE AXLE  
ASSEMBLIES ARE IDENTICAL  
▲ WITH THE EXCEPTION OF THE  
BRAKE ASSEMBLY.

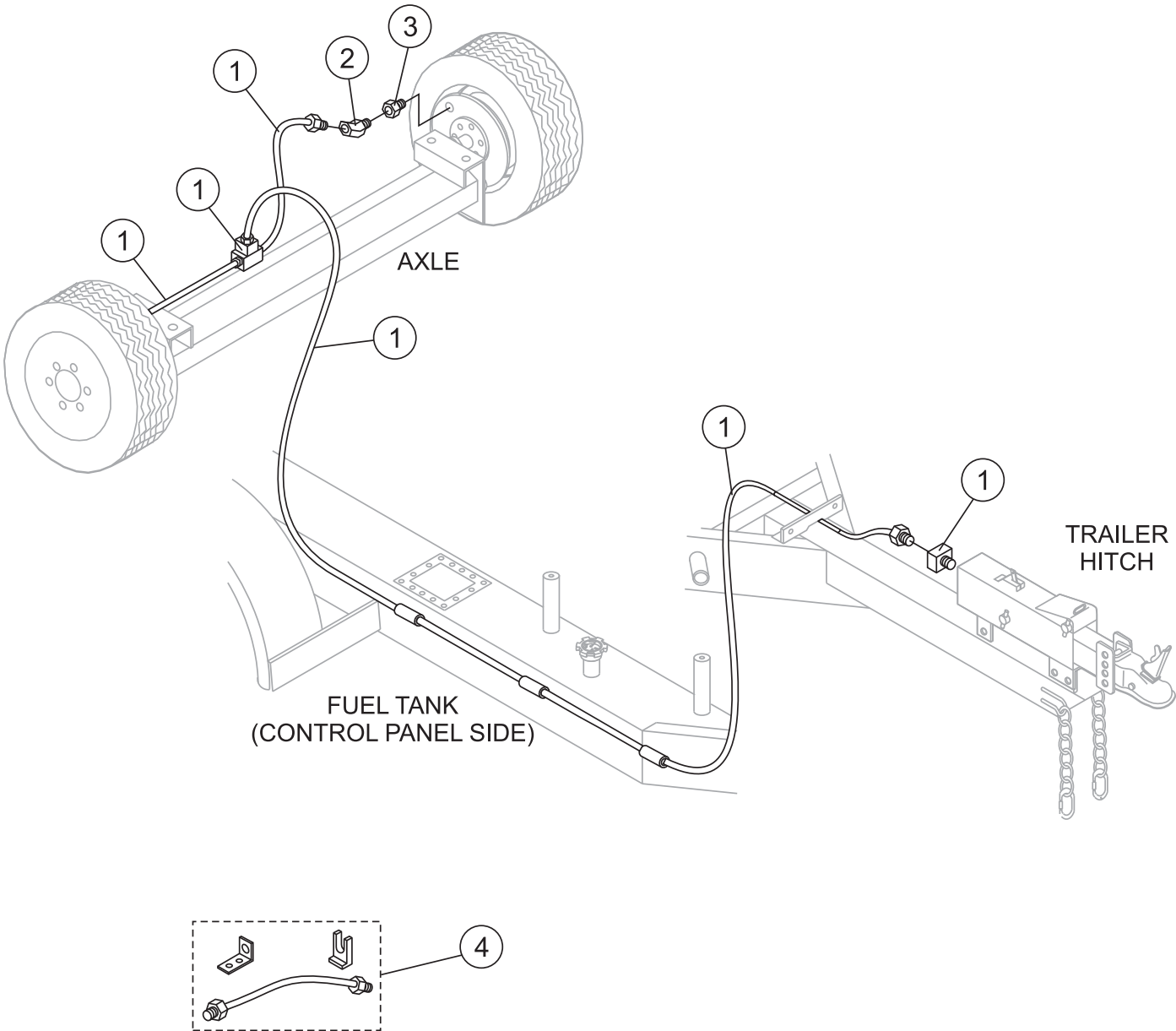
## LS-60TD PUMP — AXLE ASSY. (RIGHT/LEFT)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM98116	AXLE, TORSION BAR ASSY.	1	
2	EM092305	BRAKE ASSY COMPLETE, RIGHT .....	1 .....	INCLUDES ITEMS W/#
2	EM092306	BRAKE ASSY COMPLETE, LEFT .....	1 .....	INCLUDES ITEMS W/%
		.....		SEE NOTE BELOW
3	363198	OIL SEAL	1	
4	363196	INNER BEARING CONE 2 IN.	1	
5	383911	INNER BEARING CUP 2 IN.	1	
6#%	363909	WHEEL STUD 1/2 IN. - 20 UNF PRESS IN	8	
7	363239	HUB AND DRUM ASSY.	2	
8	363916	OUTER BEARING CONE	1	
9	363420	OUTER BEARING CUP	1	
10	568326	LOAD WASHER 1 IN. T5 HP	1	
11	363257	SLOTTED NUT, 1 IN. UNF	2	
12	363258	COTTER PIN 3/16 IN. X 1-1/2	2	
13	EM514813	RIM AND TIRE	2	
14	363203	WHEEL LUG NUTS 1/2 UNF 60 CON	8	
15	363199	GREASE CAP	2	
16	EM104	BOLT, HEX HEAD 5/8 IN. NC X 2 IN. G5 .....	4 .....	REPLACES 503982
17	0401450160	WASHER, FLAT 5/8 IN. ....	8 .....	REPLACES 492602
18	EM969023	NUT, LOCK 5/8 IN. ....	4 .....	REPLACES 492586



RIGHT AND LEFT SIDE AXLE ASSEMBLIES ARE IDENTICAL WITH THE EXCEPTION OF THE BRAKE ASSEMBLY.

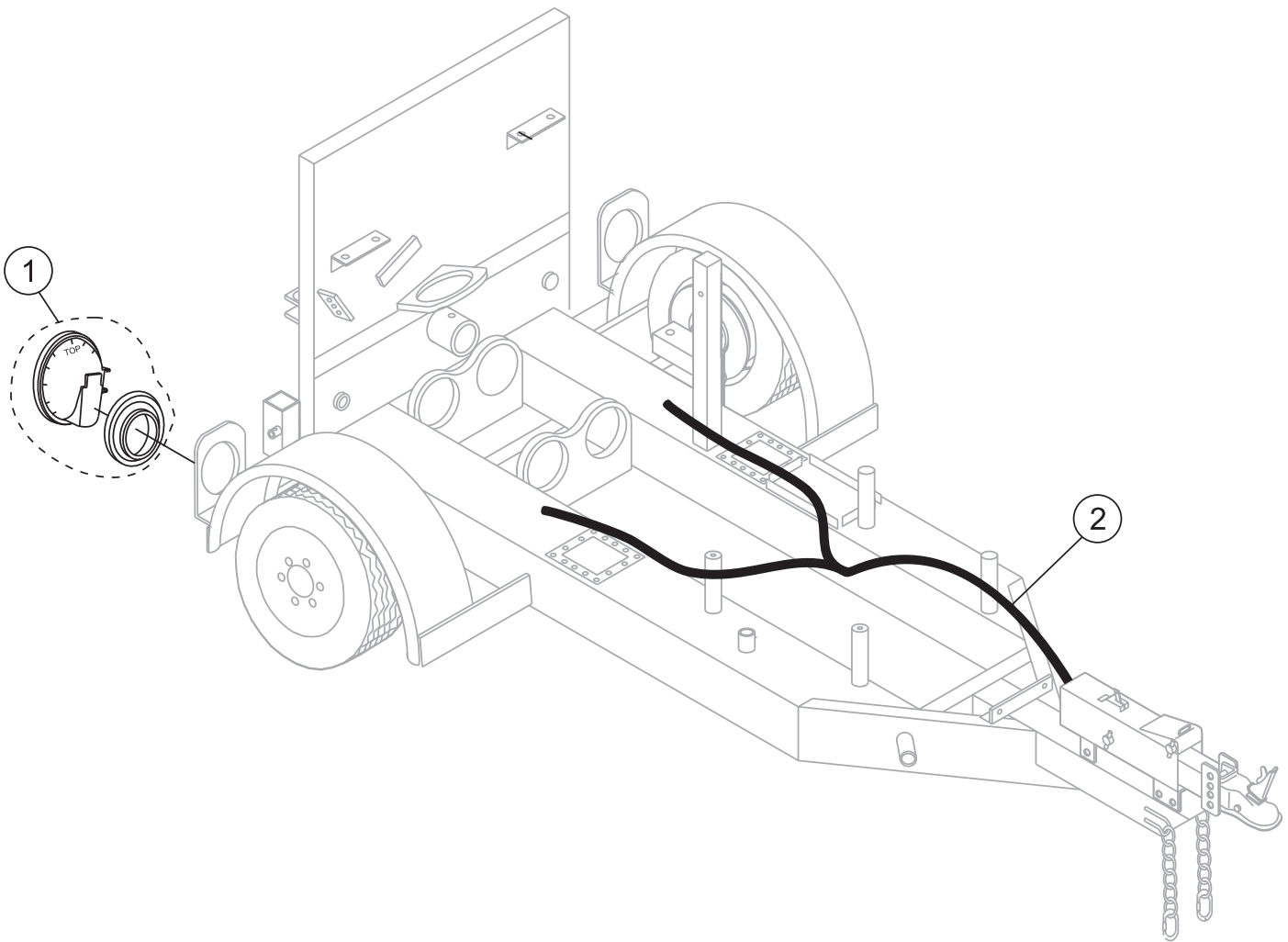
**LS-60TD PUMP — BRAKE LINE ASSY.**



## LS-60TD PUMP — BRAKE LINE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	34566	KIT, MAIN BRAKE LINE	1	
2	EM512877	ADAPTOR, STRAIGHT	2	
3	EM512876	ADAPTOR, ELBOW	2	
4	34565	KIT, WHEEL BRAKE LINE	1	

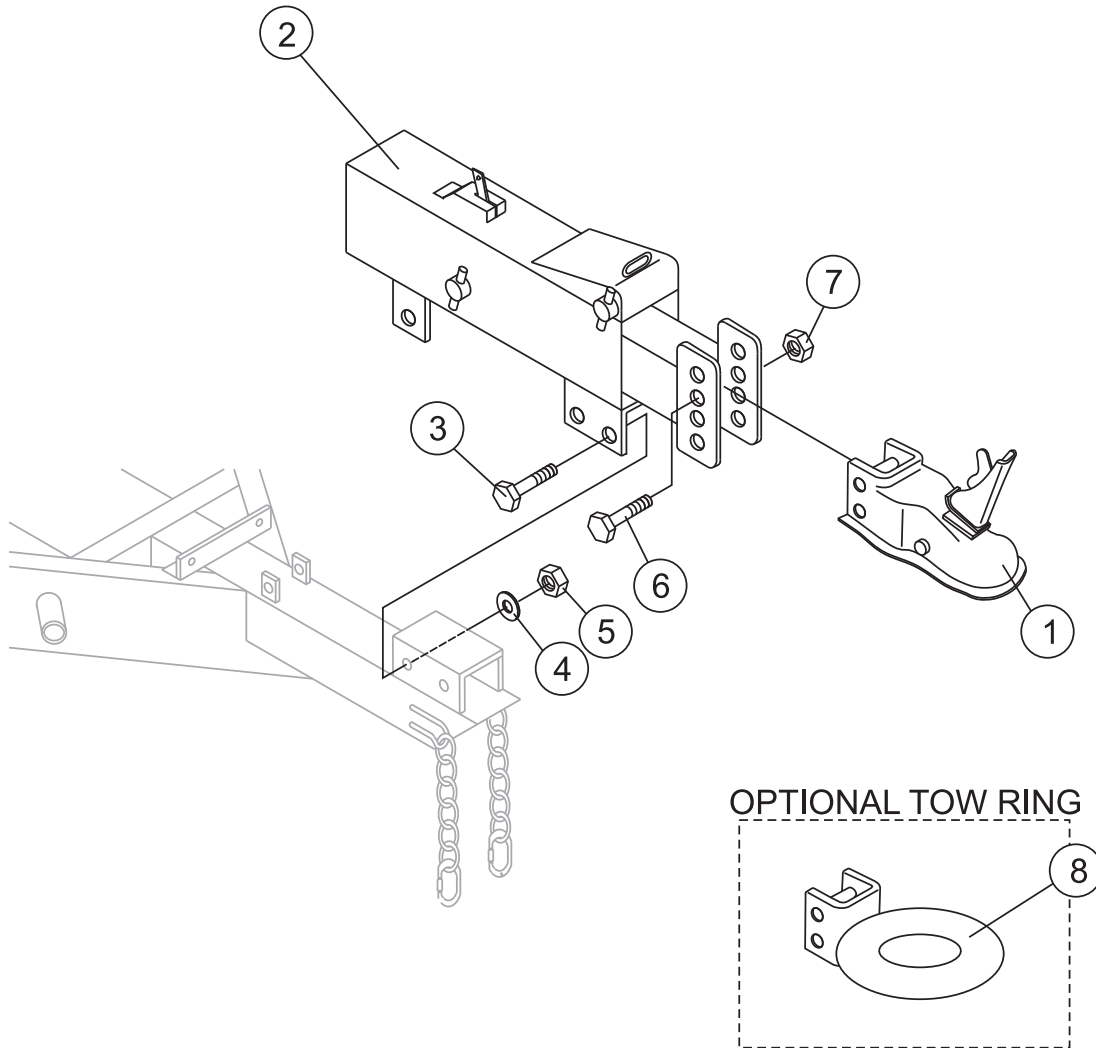
# LS-60TD PUMP — BRAKE LIGHT ASSY.



# LS-60TD PUMP — BRAKE LIGHT ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM26536	BRAKE LIGHT ASSY.	2	
2	29207	HARNESS ASSY. W/RECEPTACLES .....	1 .....	REPLACES V5425Y

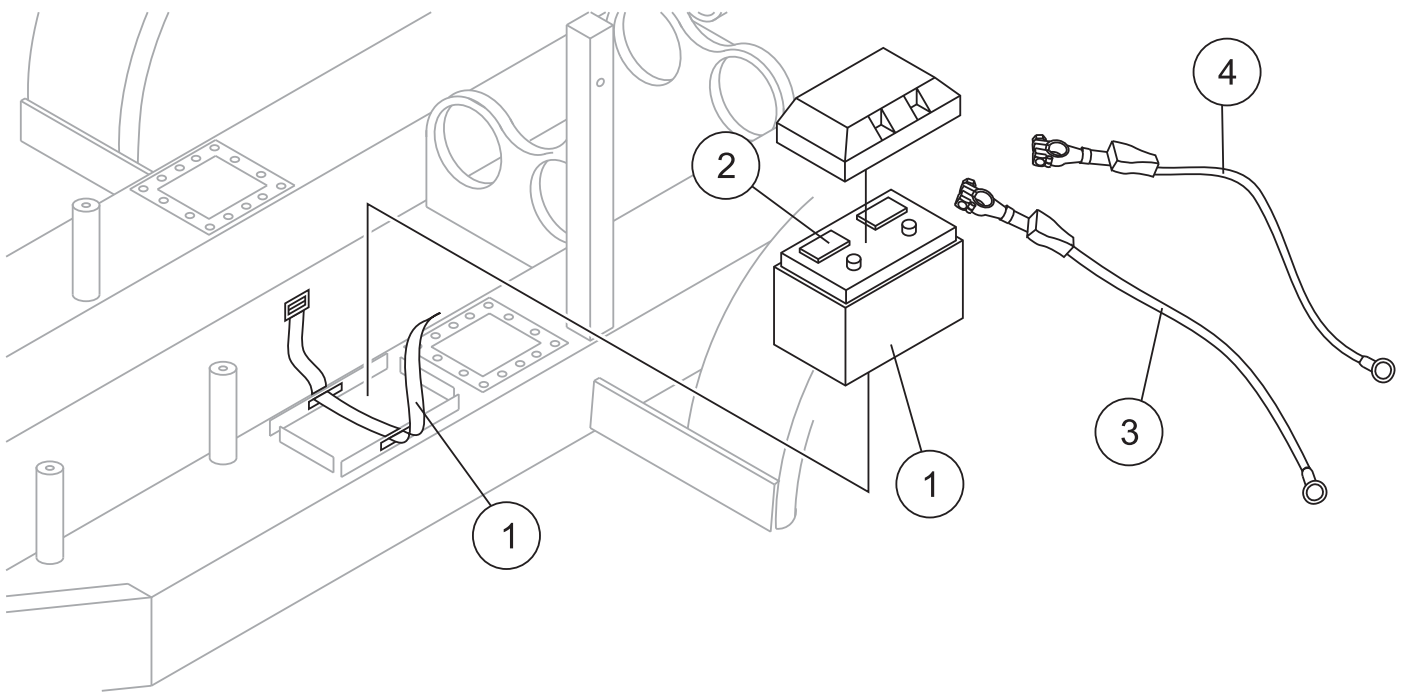
# LS-60TD PUMP — TRAILER HITCH ASSY.



## LS-60TD PUMP — TRAILER HITCH ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	29228	COUPLING, TRAILER 2 IN.BALL, 6000 LBS.	1	
2	19067	ACTUATOR, BRAKE	1	
3	503111	BOLT, HEX HEAD 1/2 NC X 4-1/2 IN.	3	
4	492600	WASHER, FLAT 1/2 IN.	3	
5	492584	NUT, LOCK 1/2 IN.	3	
6	EM507658	BOLT, HEX HEAD 5/8 NC X 4-1/2 IN. G5	2	
7	492586	NUT, LOCK 5/8 IN.	2	
8	29369	TOW RING, 3 IN. LUNETTE EYE .....	1	..... REPLACES 16137

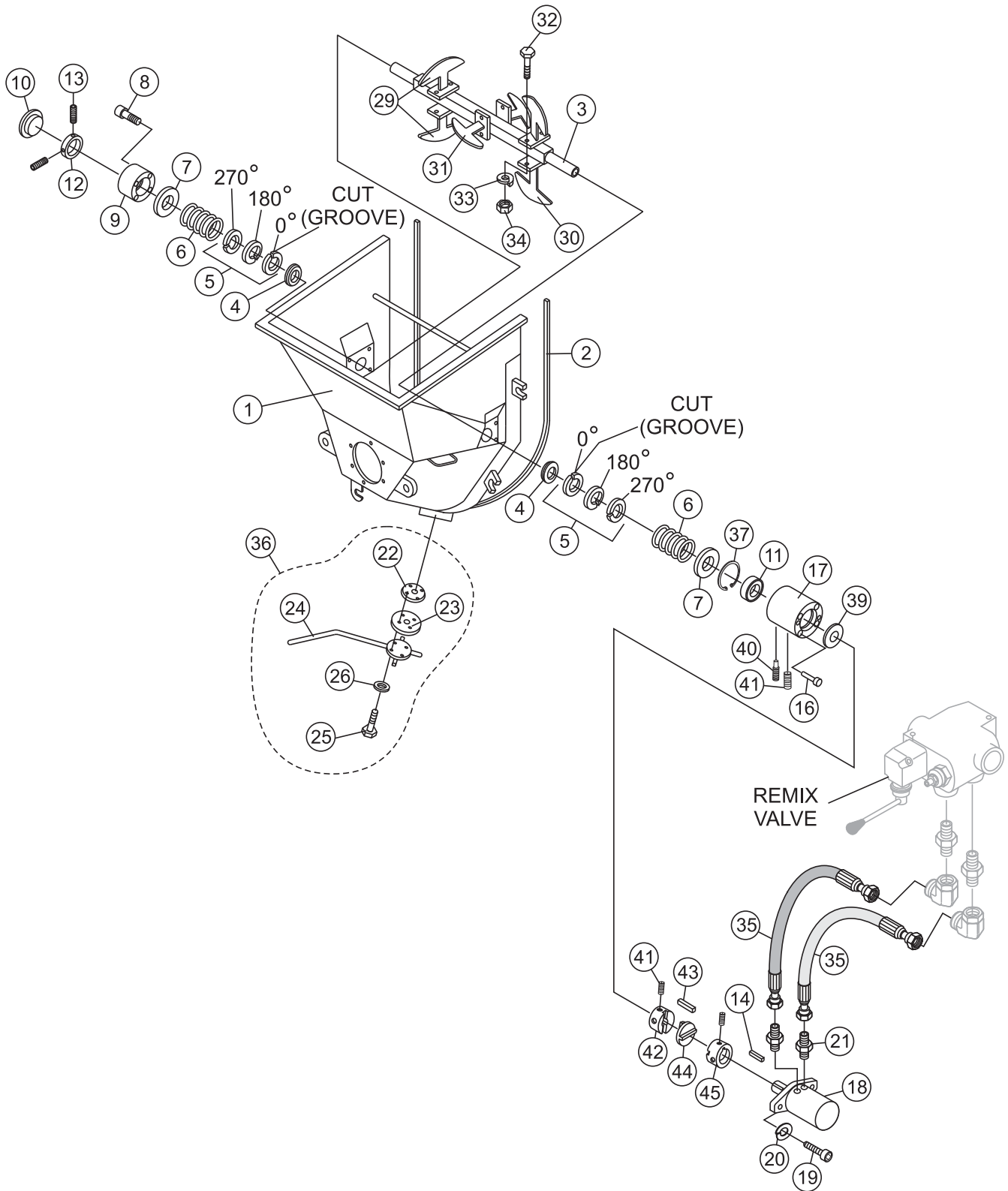
# LS-60TD PUMP — BATTERY ASSY.



## LS-60TD PUMP — BATTERY ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	34506	BATTERY BOX W/ BELT	1	
2	16738	BATTERY 12V 125A	1	
3	514856	BATTERY CABLE POSITIVE	1	
4	513577	BATTERY CABLE NEGATIVE	1	

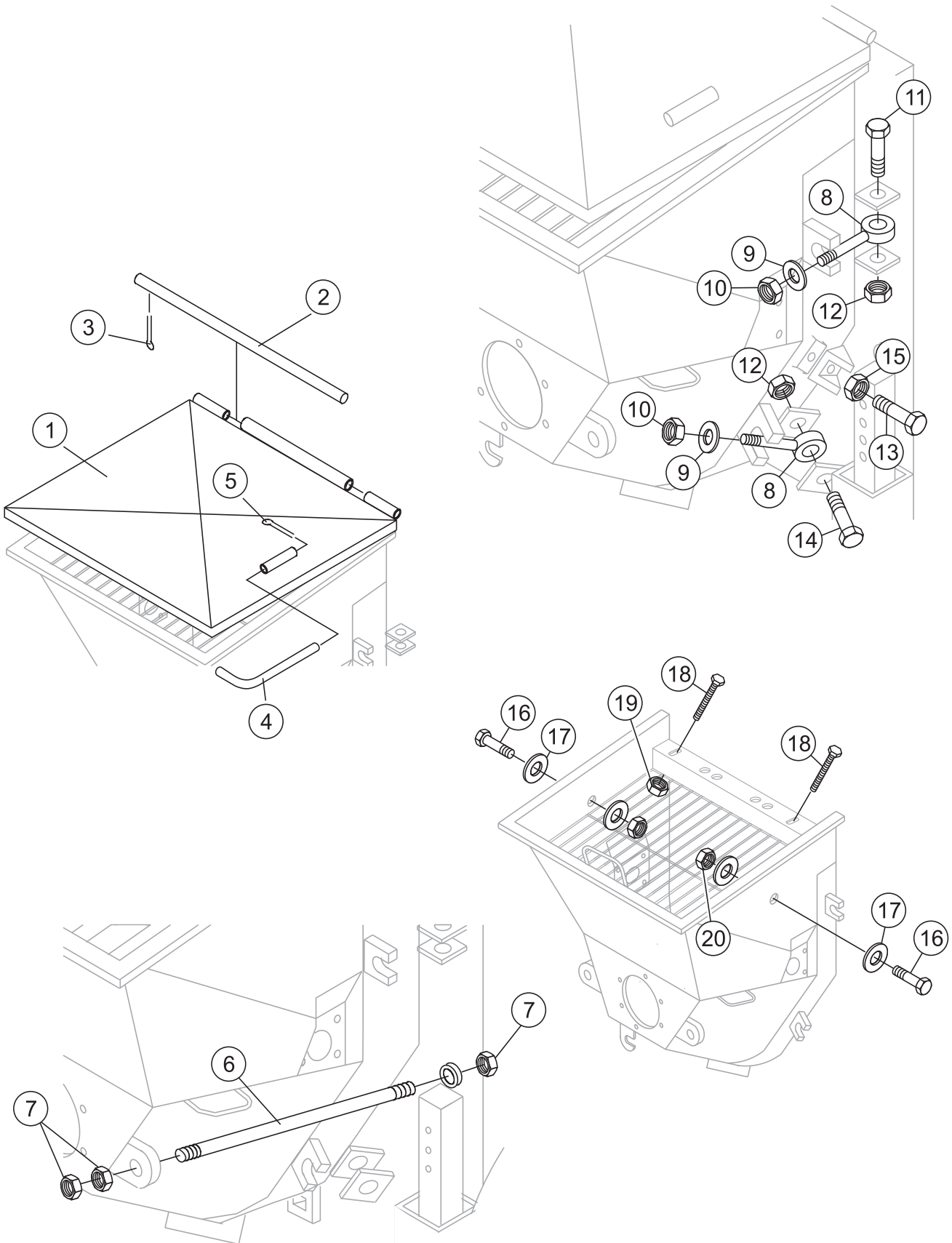
# LS-60TD PUMP — HOPPER ASSY.



# LS-60TD PUMP — HOPPER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM514354	HOPPER ASSY	1	
2	EM16184	HOPPER SEAL	1	
3	EM516779	REMIXER SHAFT	1	
4	EM200303	FOLLOWER RING	2	
5	EM200301	GRAPHITE SEAL	6	
6	EM516820	COMPRESSION SPRING	2	
7	EM514339	HOPPER SPRING SEAT	2	
8	510717	BOLT 1/2 X 1-3/4 IN.	4	
9	EM514338	SUPPORT, LEFT	1	
10	EM514706	END CAP, SHAFT SUPPORT	1	
11	EM902153	BEARING	2	
12	EM200018	SET COLLAR	1	
13	EM703	SET SCREW .....	2	REPLACES 492470
14	500264	KEY 3/8 IN.	1	
16	EM511428	BOLT 1/2 X 3-1/2 IN.	4	
17	EM516780	HOUSING	1	
18	EM98108	MOTOR, REMIX	1	
19	505989	BOLT 1/2 X 1-1/4 IN.	2	
20	6109180	WASHER, LOCK 1/2 IN. ....	2	REPLACES 492626
21	EM25508	ADAPTER, FITTING	2	
22	EM70860-1	PISTON CUP HOLDER	1	
23	EM50417	PISTON CUP	1	
24	EM508830	HANDLE	1	
25	492378	BOLT 3/8 X 1-3/4 IN.	4	
26	0166 A	WASHER, LOCK 3/8 IN. ....	4	REPLACES 492624
29	EM514031	PADDLE ARM, END	2	
30	EM514032	PADDLE ARM, MOTOR END	2	
31	EM514033	PADDLE ARM, CENTER	2	
32	513454	BOLT 1/2 X 3-1/4 IN.	6	
33	6109180	WASHER, LOCK 1/2 IN. ....	6	REPLACES 492626
34	492589	HEX NUT 1/2 IN. ....	6	REPLACES 507661
35	EM25483	HOSE .....	2	CONNECT TO REMIX VALVE
36	EM70860	HANDLE ASSY.	1	
37	EM515460	RETAINING RING	1	
39	516799	SPACER 6MM	1	
40	EM702	DOG POINT SET SCREW 3/8"	1	
41	EM703	SET SCREW 3/8"	3	
42	516787	REMIX SHAFT COUPLER	1	
43	EM500264	SQUARE KEY 3/8"	1	
44	516776	DRIVE MEMBER COUPLER	1	
45	516775	MOTOR SHAFT COUPLER	1	

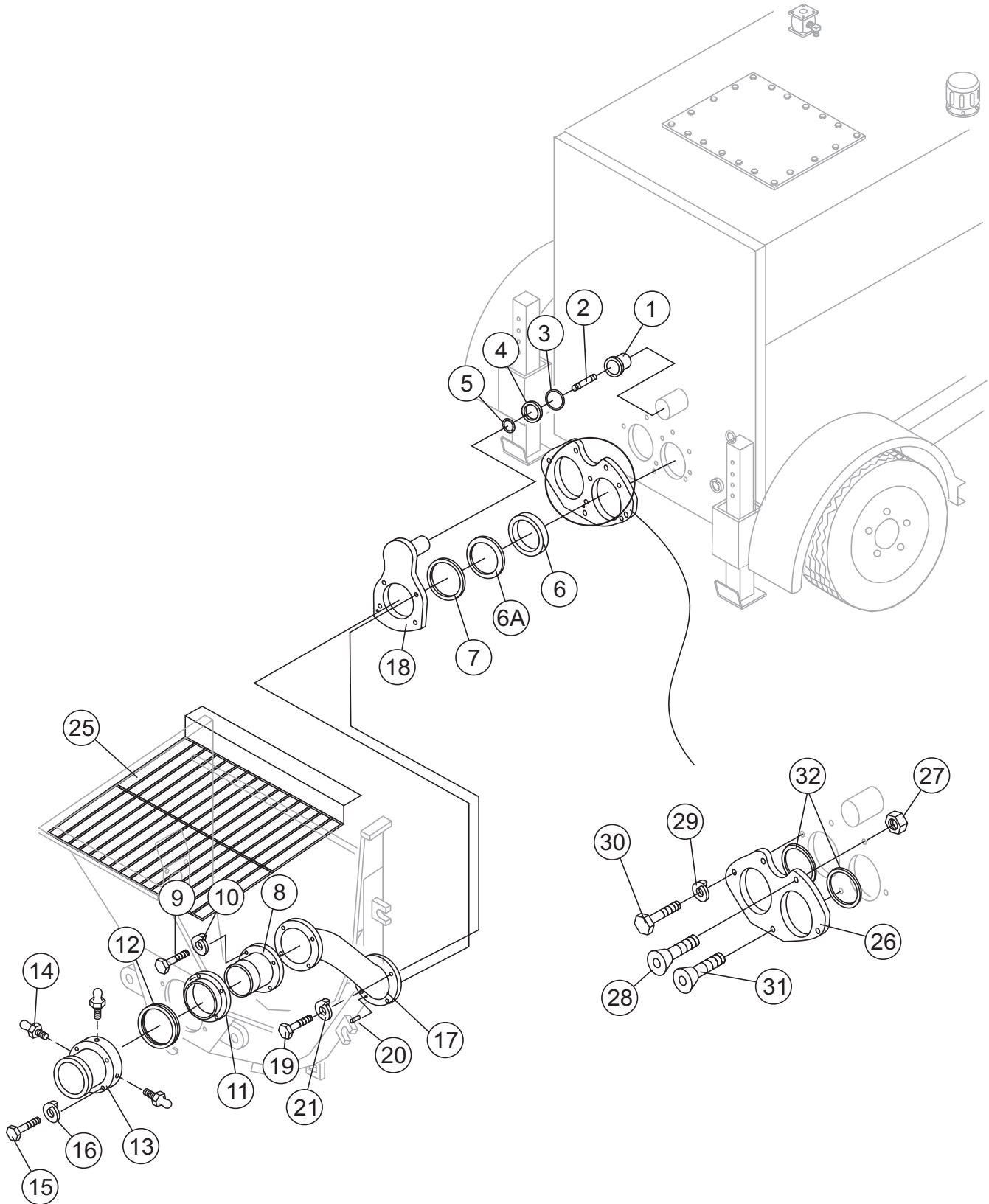
# LS-60TD PUMP — HOPPER ATTACHMENT ASSY.



## LS-60TD PUMP — HOPPER ATTACHMENT ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM514204	SPLASH PLATE	1	
2	EM514620	HINGE PIN	1	
3	EM491686	COTTER PIN 1/8 X 1-1/2 IN.	1	
4	EM70134-2	PIN, SPLASH PLATE	1	
5	EM505723	COTTER PIN 5/32 X 1-1/2 IN.	1	
6	EM16166	TIE ROD	1	
7	505728	NUT, HEX 1 IN. NC	6	
8	EM14165	EYE BOLT 3/4 IN.	4	
9	EM619	O-RING 3/4 IN.	4	
10	EM968446	NUT, HEX 3/4 IN.	4	
11	505121	BOLT 3/4 IN. X 3 IN.	4	
12	EM968446	HEX NUT 3/4 IN.	4	
13	505123	HEX BOLT 1/2 X 2-1/2 IN.	2	
14	492491	HEX BOLT 1/2 X 1-1/2 IN.	1	
15	6109160	HEX NUT 1/2 IN. ....	3	..... REPLACES 492556
16	492379	SCREW CAP 3/8"	2	
17	3019092	WASHER FLAT 3/8"	4	
18	515395	BOLT 7/16 NC X 4" G5	2	
19	492584	NUT LOCK 1/2"	2	
20	EM969013	NUT NYLOC	2	

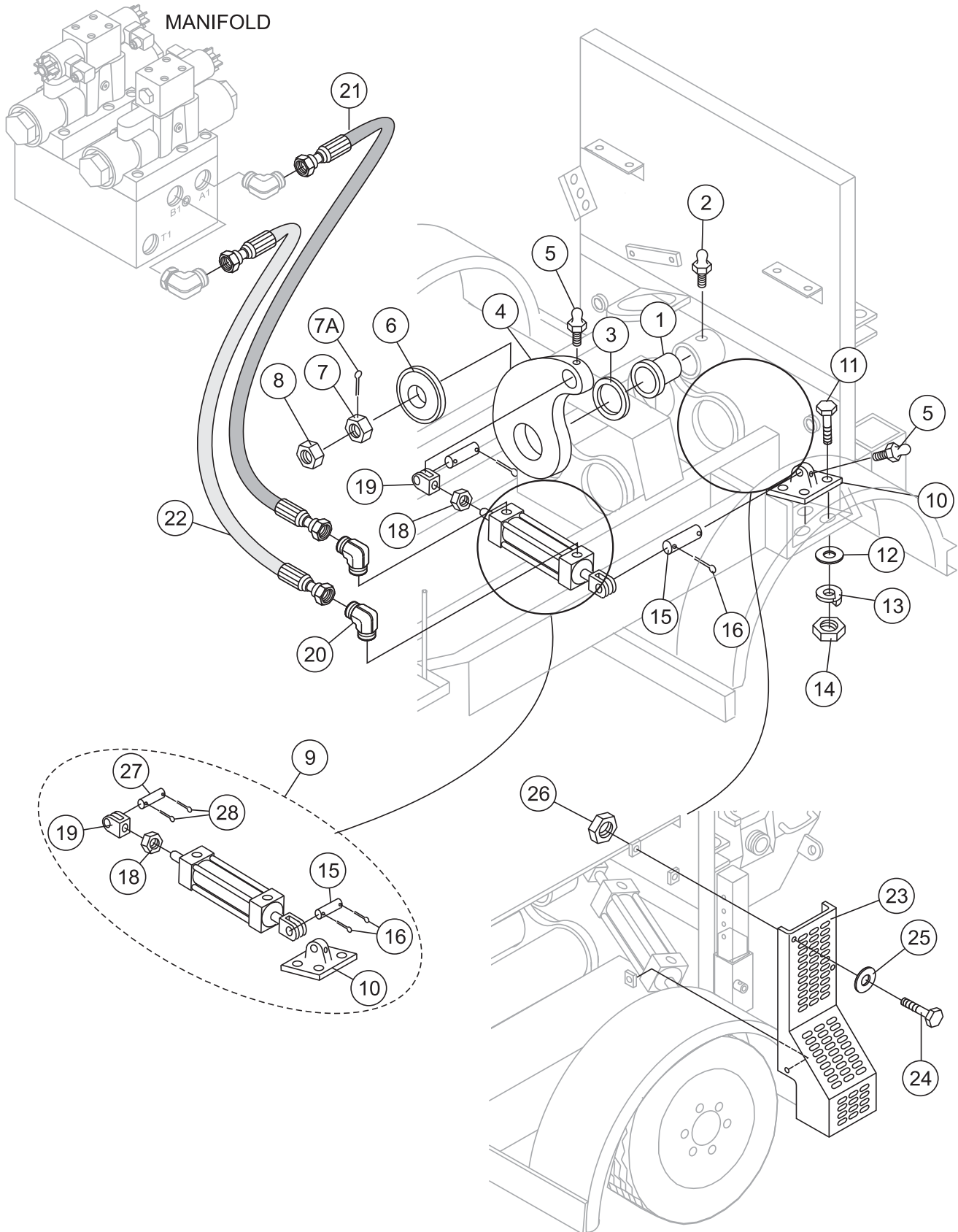
# LS-60TD PUMP — HOPPER INTERIOR ASSY.



## LS-60TD PUMP — HOPPER INTERIOR ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM16145A	SWING AXLE BUSHING	2	
2	EM284	STUD 1 IN. - 14 UNF	1	
3	EM16175	O-RING	1	
4	EM16170	RING SEAL, SHUTTLE AXLE	1	
5	EM16176	O-RING	1	
6	EM98022	WEAR RING HF	1	
6A	EM16816-1A	RING, ENERGIZER RUBBER	1	
7	EM16816-2	RING, INSERT STEEL	1	
8	EM16804	SLEEVE 5 IN.	1	
9	EM104	BOLT 5/8 X 2 IN. ....	4	REPLACES 503982
10	EM923348	WASHER, LOCK 5/8 IN. ....	4	REPLACES 492627
11	EM25803	DISCHARGE PLATE BEARING	1	
12	EM98065	SEAL, RUBBER	1	
13	EM512212	DISCHARGE NIPPLE	1	
14	491701	GREASE FITTING	3	
15	EM210	BOLT 5/8 X 2 IN.	6	
17	EM16811	SHUTTLE CYLINDER	1	
18	EM25843	NUN PLATE	1	
19	EM104	BOLT, HEX HEAD 5/8 X 2 IN. ....	4	REPLACES 503982
20	491719	PIN	1	
21	EM923348	WASHER, LOCK 5/8 IN.	4	
25	EM514357	HOPPER SCREEN	1	
26	EM98021	PLATE, WEAR HF	1	
27	EM969023	NUT, HEX 5/8 IN. NC INS. ....	2	REPLACES 492586
28	EM265	BOLT, COUNTER SUNK 5/8-11 x 3 IN.	2	
29	EM492628	WASHER, LOCK 3/4 IN.	2	
30	EM151	BOLT, HEX HEAD 3/4-10 X 2 IN.	2	
31	EM264	BOLT, COUNTER SUNK 1/2-13 x 3 IN.	2	
32	EM517700	O-RING	2	

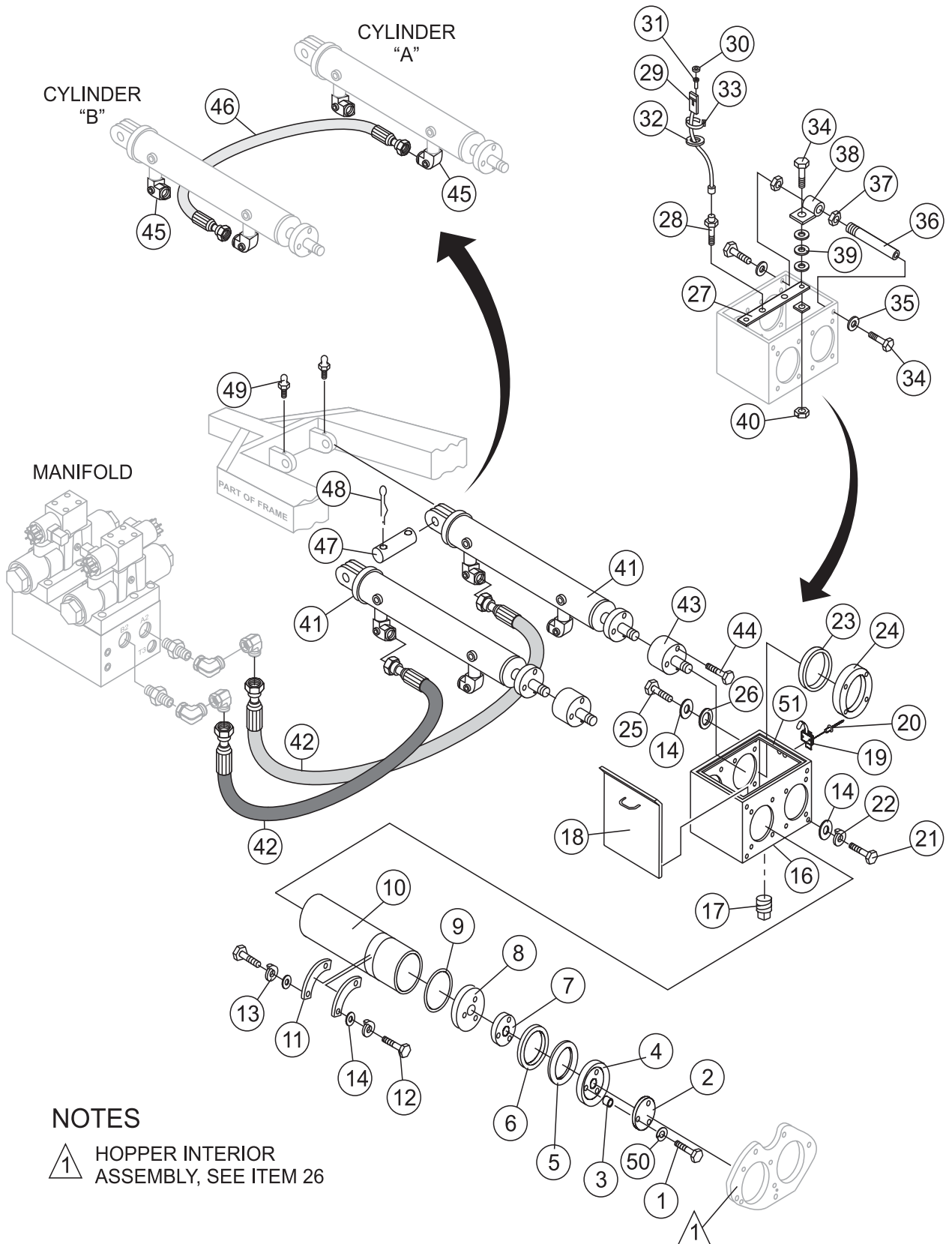
# LS-60TD PUMP — SHUTTLE CYLINDER ASSY.



# LS-60TD PUMP — SHUTTLE CYLINDER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM16145	SWING AXLE BUSHING	2	
2	EM510684	GREASE FITTING	1	
3	EM16169	THRUST WASHER	1	
4	EM25236	SHUTTLE CRANK, SPLINED SHAFT	1	
5	EM505490	GREASE FITTING	2	
6	EM16814	TENSIONER	1	
7	EM424	HEX NUT 1 IN. 14NF .....	1	REPLACES 491690
7A	EM924006	COTTER PIN 5/32 X 2 IN.	1	
8	EM417	NUT 1 IN. 14NF	1	
9	EM98106	SHUTTLE CYLINDER ASSY. ....	1	INCLUDES ITEMS W/*
10*	EM254549	BRACKET, PIVOT	1	
11	492397	BOLT 1/2 X 2-1/2 IN.	4	
12	EM621	WASHER 1/2 IN.	4	
13	6109180	WASHER, LOCK 1/2 IN. ....	4	REPLACES 492626
14	492584	NUT 1/2 IN.	4	
15*	0820270000	CLEVIS PIN 3/4 IN.	1	
16*	0820270000	COTTER PIN	2	
18*	515249	NUT JAM 1"-14	1	
19*	EM254541	FEMALE CLEVIS	1	
20	3322	FITTING, ELBOW	2	
21	EM514590	HOSE .....	1	CONNECT TO MANIFOLD PORT "A1"
22	EM514591	HOSE .....	1	CONNECT TO MANIFOLD PORT "B1"
23	EM515628	COVER, SHUTTLE CYLINDER	1	
24	0202	SCREW, HHC 5/16-18 X 1 ZINC .....	3	REPLACES 492364
25	EM923023	WASHER, FLAT .....	3	REPLACES 492597
26	2105164	NUT, HEX .....	3	REPLACES 492582
27*	EM26126	CLEVIS PIN	1	
28*	EM717	COTTER PIN	2	

# LS-60TD PUMP — LUBRICATION PISTONS ASSY.



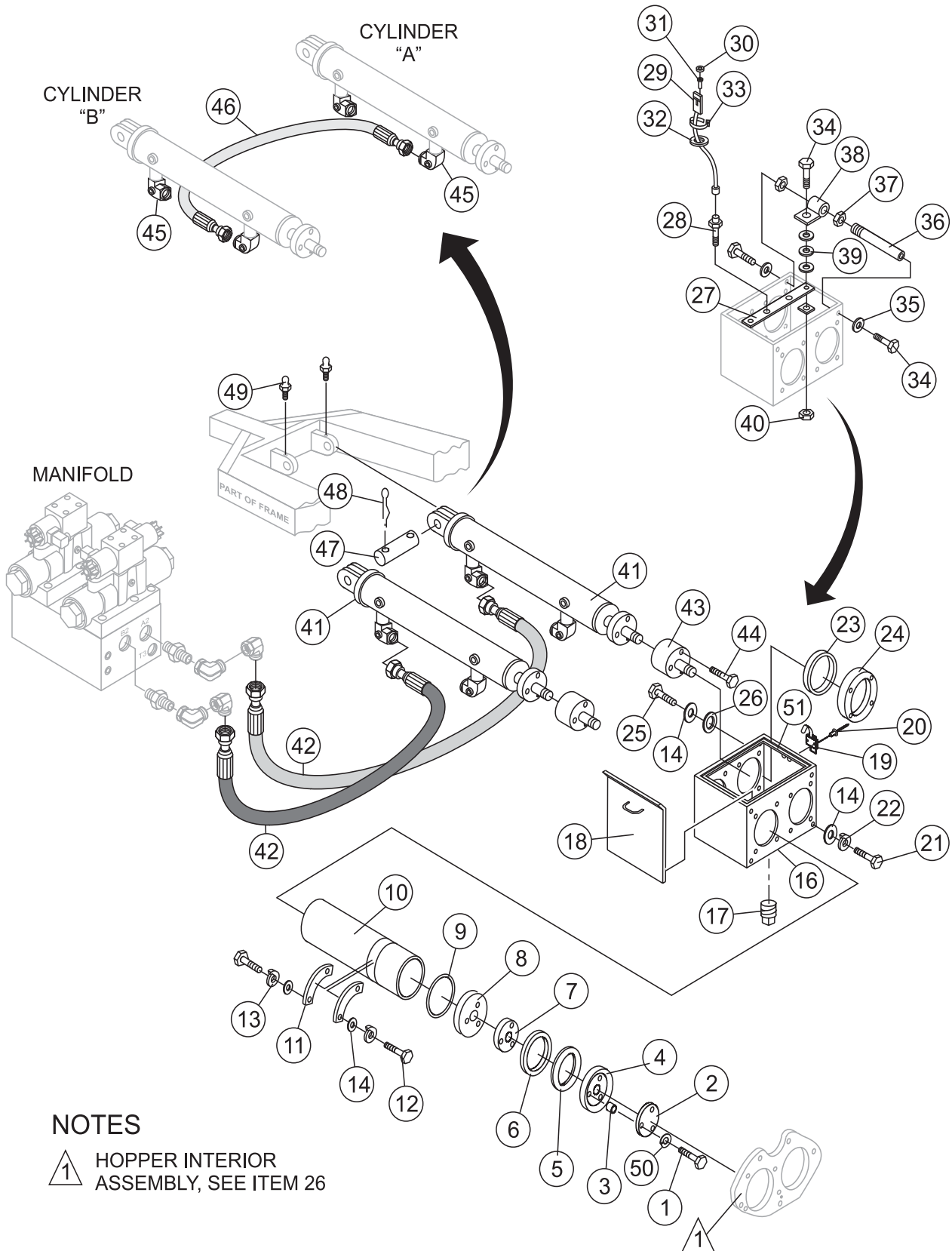
## NOTES

1 HOPPER INTERIOR ASSEMBLY, SEE ITEM 26

## LS-60TD PUMP — LUBRICATION PISTONS ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM963064	BOLT, HEX HEAD 3/8 NC X 3-1/2 IN., BLACK OXIDE G8	6	
2	EM16464	FACE PLATE	2	
3	EM16465	PISTON CUP SPACER	6	
4	EM98050	CUP, PISTON- ORANGE	2	
5	EM14408	RING, BRONZE	2	
6	EM16493	RING, FELT	2	
7	EM16462	FELT HOLDER	2	
8	EM16461	OILER PLATE	2	
9	EM14407	O- RING, OILER PLATE	2	
10	EM25801	CYLINDER, CONCRETE	2	
11	EM25110	RETAINER, CYLINDER	4	
12	EM963610	BOLT, 3/8 NC X 1.3/4 IN. G5.....	8.....	REPLACES 492375
13	0166 A	WASHER LOCK 3/8 IN. ....	8.....	REPLACES 492624
14	3019092	WASHER, FLAT 3/8 IN. ....	22.....	REPLACES 492598
16	514197	LUBRICATION BOX	1	
17	EM507895	PLUG	1	
18	515796	COVER, LUBRICATION BOX	1	
19	EM514610	LATCH, COVER	1	
20	EM491754	RIVET, AM-66	2	
21	492378	BOLT, 3/8 NC X 1.3/4 IN. G5	6	
22	0166 A	WASHER, LOCK 3/8" .....	6.....	REPLACES 492624
23	EM274351	SEAL LUBE BOX	2	
24	EM50425	FLANGE, RING	2	
25	EM492451	BOLT 3/8 - 24 X 1 IN. HEX HEAD	8	
26	EM50443	SEAL, OIL BOX	8	
27	EM514208	BAR, PROXIMITY SWITCH SUPPORT	1	
28	EM98163	SWITCH, PROXIMITY W/CABLE	2	
29	EM98135	CABLE HOUSING, FEMALE	2	
30	EM98134	SEAL, CONNECTOR HOUSING	6	
31	EM98138	TERMINAL PIN, FEMALE	6	
32	EM514611	GROMMET	2	
33	EM504505	WRAP TIE	8	

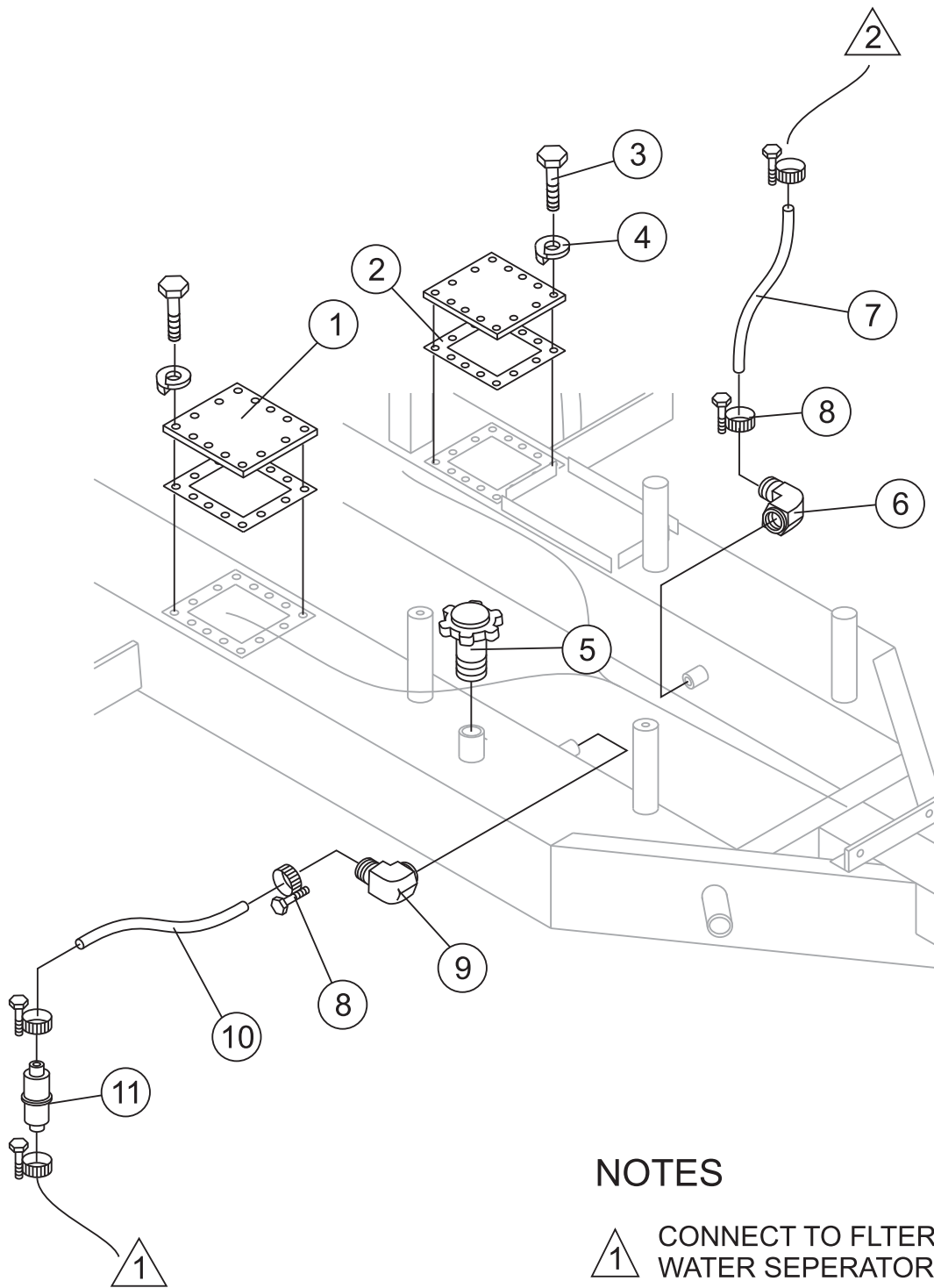
# LS-60TD PUMP — LUBRICATION PISTONS ASSY.



## LS-60TD PUMP — LUBRICATION PISTONS ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
34	492366	BOLT, HEX HEAD 5/16 NC X 1 IN. G5	6	
35	EM492623	WASHER, LOCK 5/16 IN.	4	
36	EM514216	ADJUSTMENT ROD, PROXIMITY SWITCH	2	
37	EM492556	NUT, HEX 1/2 IN.	4	
38	EM514207	BRACKET, ADJUSTMENT ROD	2	
39	EM492597	WASHER, FLAT 5/16 IN.	6	
40	EM492582	NUT, HEX HEAD 5/16 IN	2	
41	EM98211	CYLINDER, MAIN	2	
42	EM514920	HOSE, MAIN HYD. CYLINDER	2	
43	EM514202	EXTENSION, SPACER	2	
44	EM185	BOLT, SOCKET HEAD 3/8 NC X 3 IN., BLACK OXIDE G8	6	
45	EM25497	FITTING, 90°	4	
46	EM25474	HOSE, HYDRAULIC SLAVE	1	
47	EM16459	PIN, WRIST	2	
48	EM505723	PIN, COTTER	4	
49	EM491701	FITTING, GREASE	2	
50	EM517126	LOCK WASHER INTERNAL	6	
51	EM513352	SEAL, SQUARE	1	

# LS-60TD PUMP — FUEL TANK ASSY.



## NOTES

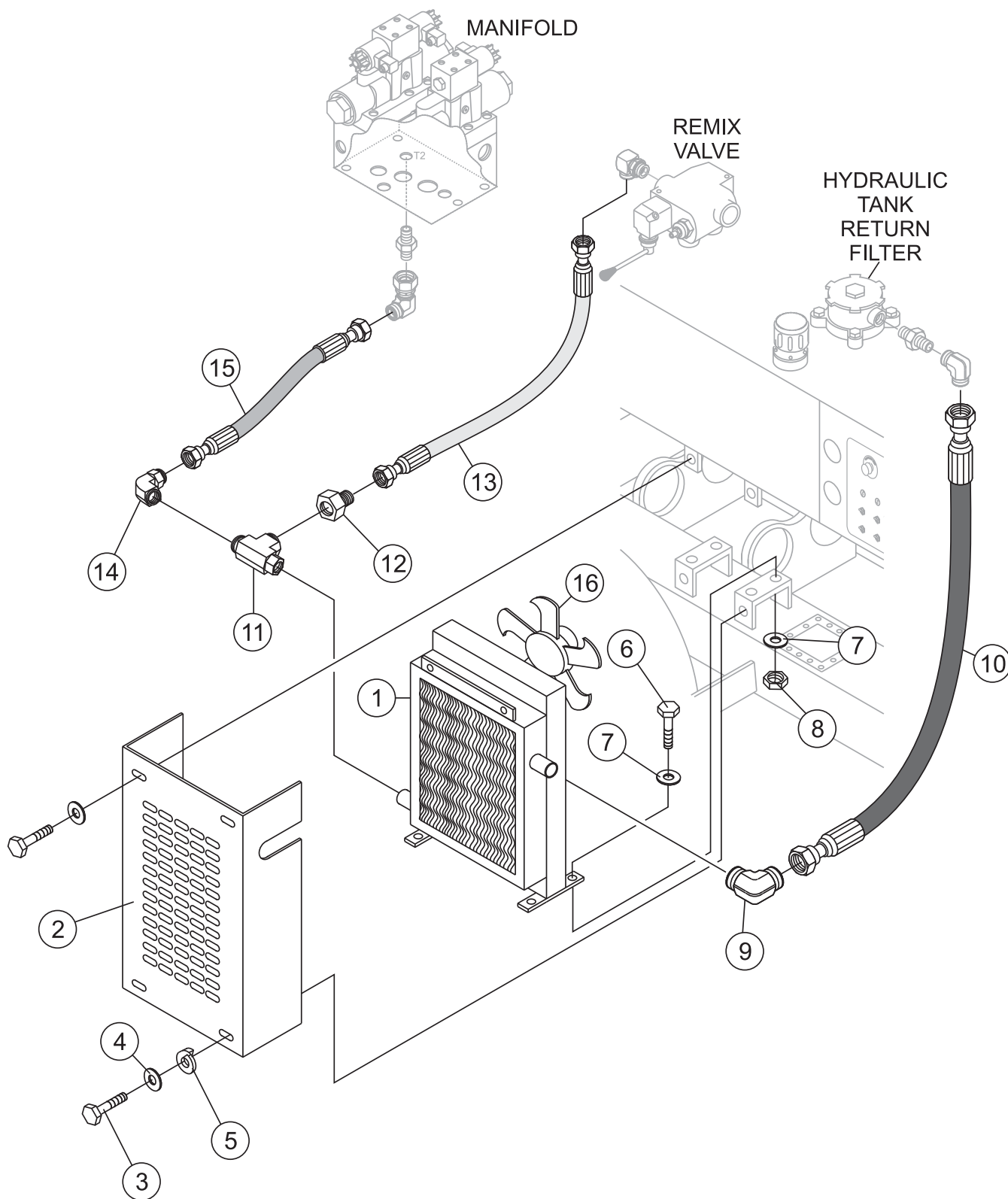
① CONNECT TO FILTER INLET HOSE  
WATER SEPERATOR ASSY., NOTE 1

② CONNECT TO FILTER OUTLET HOSE  
WATER SEPERATOR ASSY., NOTE 2

## LS-60TD PUMP — FUEL TANK ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM514084	COVER, DIESEL TANK	4	
2	514080	GASKET	4	
3	492362	BOLT 5/16 X 5/8 IN.	28	
4	EM923343	WASHER, LOCK 5/16 IN. ....	28	REPLACES 492623
5	34507	CAP, FUEL W\GAUGE	1	
6	EM514559	ADAPTOR	1	
7	506208	CLAMP	5	
8	EM514536	HOSE, FUEL RETURN 5/16 IN.	A/R	
9	EM20426	ADAPTER	1	
10	EM514536	HOSE, FUEL FILTER 5/16 IN.	A/R	
11	EM20763	FILTER, FUEL	2	

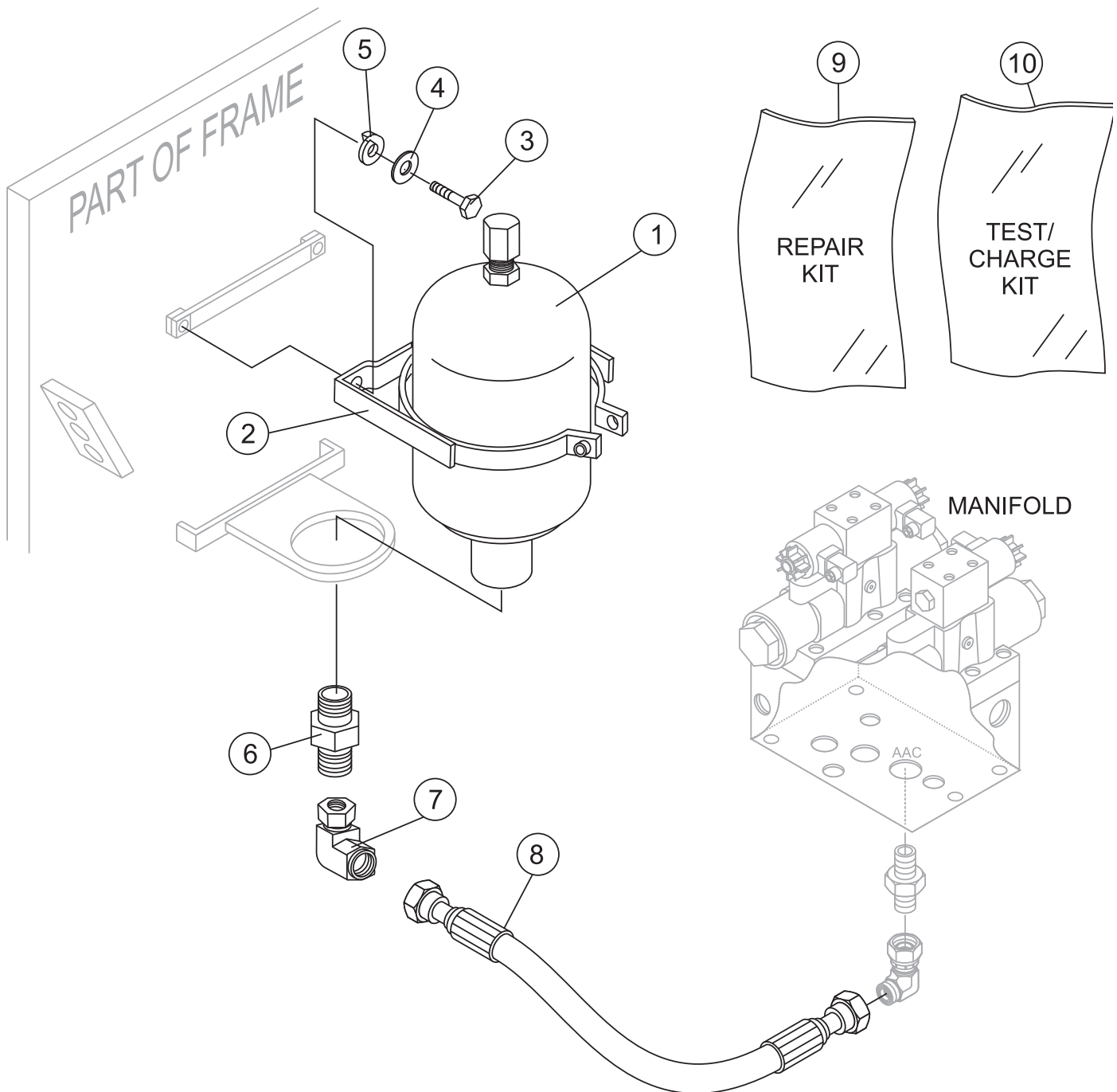
# LS-60TD PUMP — HEAT EXCHANGER ASSY.



## LS-60TD PUMP — HEAT EXCHANGER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM98118	HEAT EXCHANGER	1	
2	EM514175	COVER, HEAT EXCHANGER	1	
3	EM963610	BOLT 3/8 IN. X 1 IN. ....	4	REPLACES 492375
4	3019092	O-RING 3/8 IN. ....	4	REPLACES 492598
5	0166 A	WASHER, LOCK 3/8 IN. ....	4	REPLACES 492624
6	0202	BOLT 5/16 X 1 IN. ....	4	REPLACES 492364
7	EM923023	WASHER, FLAT 5/16 IN. ....	8	REPLACES 492597
8	2105164	NUT 5/16 IN. ....	4	REPLACES 492582
9	EM25497	ADAPTER	1	
10	EM514607	HOSE 4000 PSI	1	
11	EM25566	ADAPTER	1	
12	EM509345	ADAPTER	1	
13	EM514606	HOSE 2000 PSI	1	
14	EM509401	ADAPTER	1	
15	EM514604	HOSE, 2000 PSI	1	
16	EM98264	MOTOR AND FAN ASSY	1	

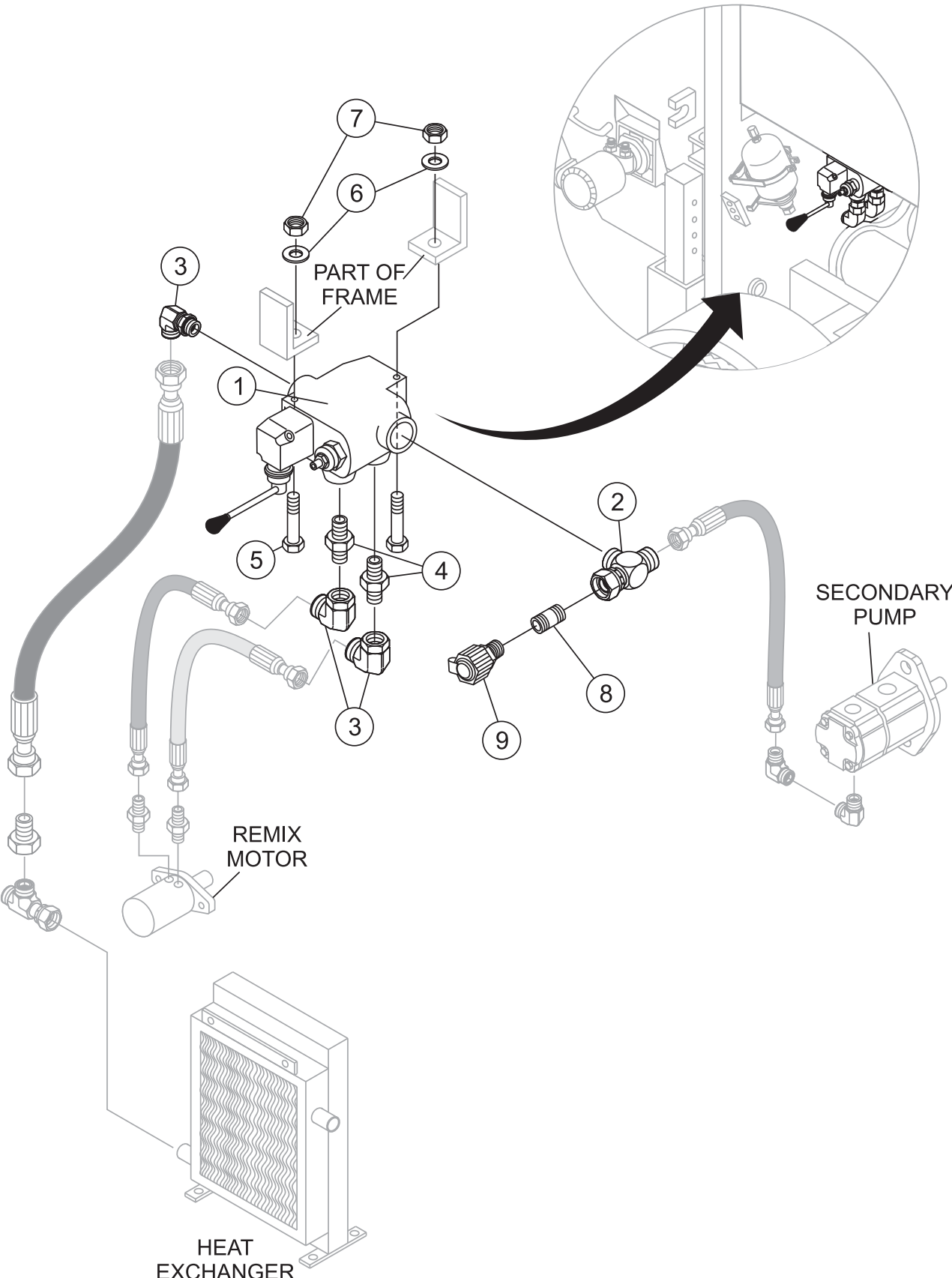
# LS-60TD PUMP — ACCUMULATOR ASSY.



## LS-60TD PUMP — ACCUMULATOR ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM97015	ACCUMULATOR 1 GAL.	1	
2	EM97016	BRACKET, ACCUMULATOR	1	
3	EM9603055	BOLT, HHCS 3/8 IN. DIA.	2	
4	3019092	WASHER, FLAT 3/8 IN.	2	
5	0166A	WASHER, LOCK 3/8 IN. DIA.	2	
6	EM509425	FITTING, STRAIGHT	1	
7	EM509353	FITTING, 90° ELBOW	1	
8	EM514603	HOSE, ACCUMULATOR	1	
9	EM98009	ACCUMULATOR REPAIR KIT	1	
10	EM98052	ACCUMULATOR TEST/CHARGE KIT	1	

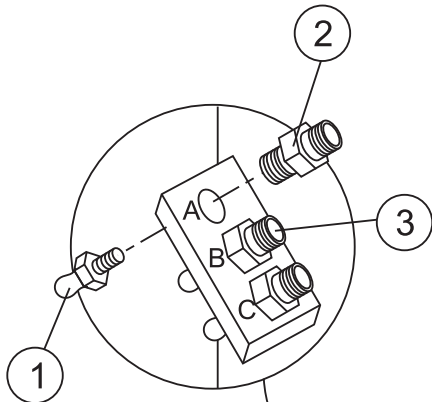
# LS-60TD PUMP — REMIXER CONTROL ASSY.



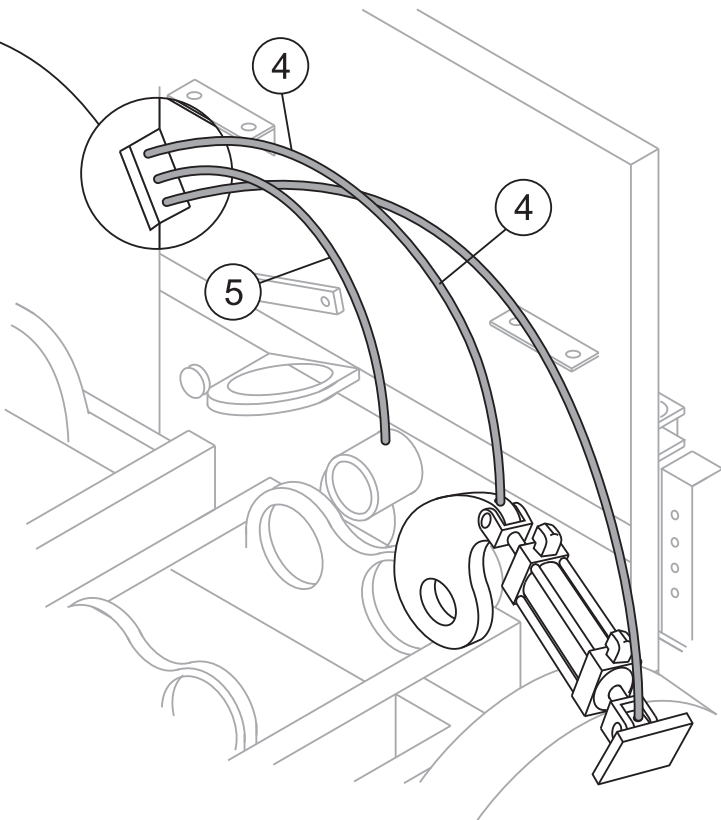
## LS-60TD PUMP — REMIXER CONTROL ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM25495	VALVE REMIXER W/ LEVER	1	
2	515384	ADAPTER FITTING, T	1	
3	506195	ADAPTER FITTING, 90° ELBOW	1	
4	EM25509	ADAPTER FITTING, STRAIGHT	2	
5	EM218	BOLT 5/16 X 2-1/2 IN.	2	
6	EM923343	WASHER, LOCK 5/16 IN. ....	2	REPLACES 492623
7	2105164	NUT, HEX 5/16 IN. ....	2	REPLACES 492553
8	EM98015	COUPLING	1	
9	EM98014	TEST PORT	1	

# LS-60TD PUMP — LUBRICATION PANEL



Grease daily, two or three times of #2 multi-purpose automotive grease. Over greasing any bearing will not damage the machine. **ALWAYS** grease *before and after* pump operation.

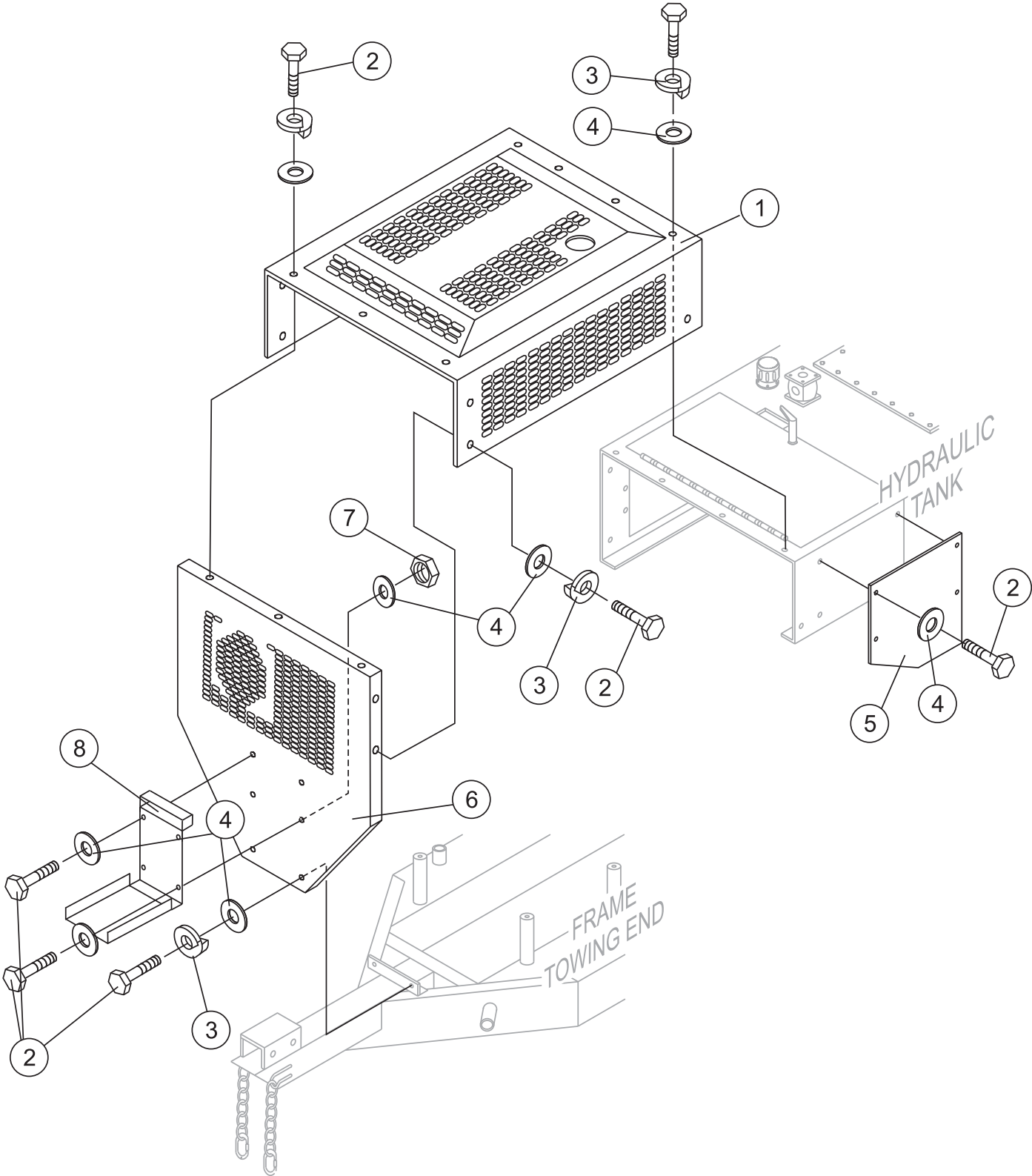


<u>POSITION</u>	<u>LOCATION</u>	<u>LENGTH OF LINES</u>
A .....	CLEVIS GREASE POINT .....	34 in. (1.1 m)
B .....	SWING AXLE BUSHING GREASE POINT .....	26 in. (.85 m)
C .....	PIVOT BRACKET GREASE POINT .....	41 in. (1.5 m)

## LS-60TD PUMP — LUBRICATION PANEL

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM491701	GREASE FITTING	3	
2	EM508812	CONNECTOR	2	
3	EM510684	CONNECTOR	3	
4	EM505516	HOSE, PLASTIC	A/R	
5	EM505516	HOSE, STEEL	1	

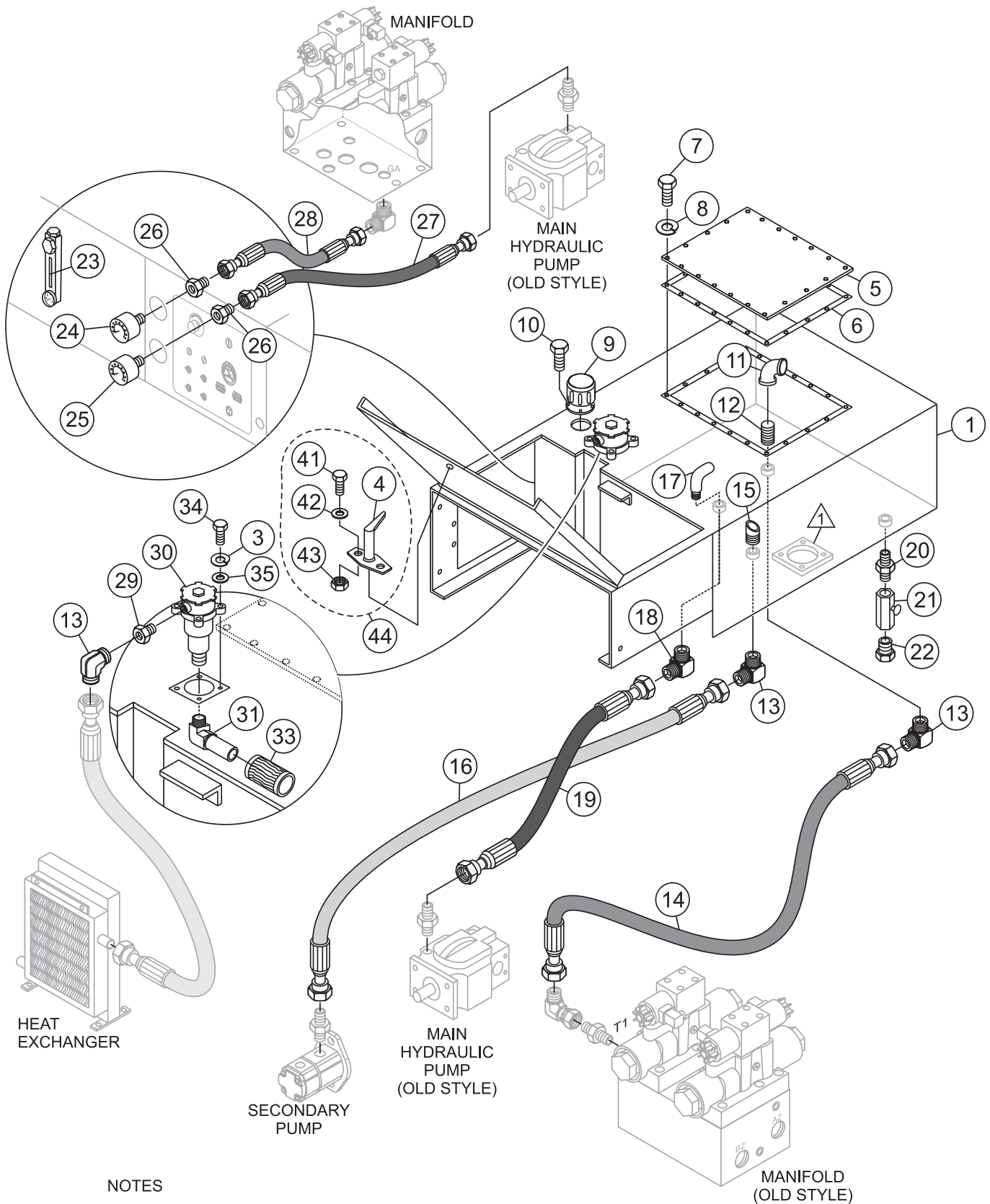
# LS-60TD PUMP — ENGINE COVER ASSY.



## LS-60TD PUMP — ENGINE COVER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM515132	COVER, TOP	1	
2	EM492356	BOLT, HEX 1/4 X 3/4 IN.	18	
3	EM492622	WASHER, LOCK 1/4 IN.	18	
4	EM492596	WASHER, FLAT 1/4 IN.	18	
5	EM514889	PLATE, SIDE COVER	1	
6	EM510271	COVER, FRONT ENGINE	1	
7	EM492581	NUT, HEX 1/4 IN. NC	4	
8	29057	DOCUMENT BOX	1	

# LS-60TD PUMP — HYD. TANK ASSY. (OLD STYLE)



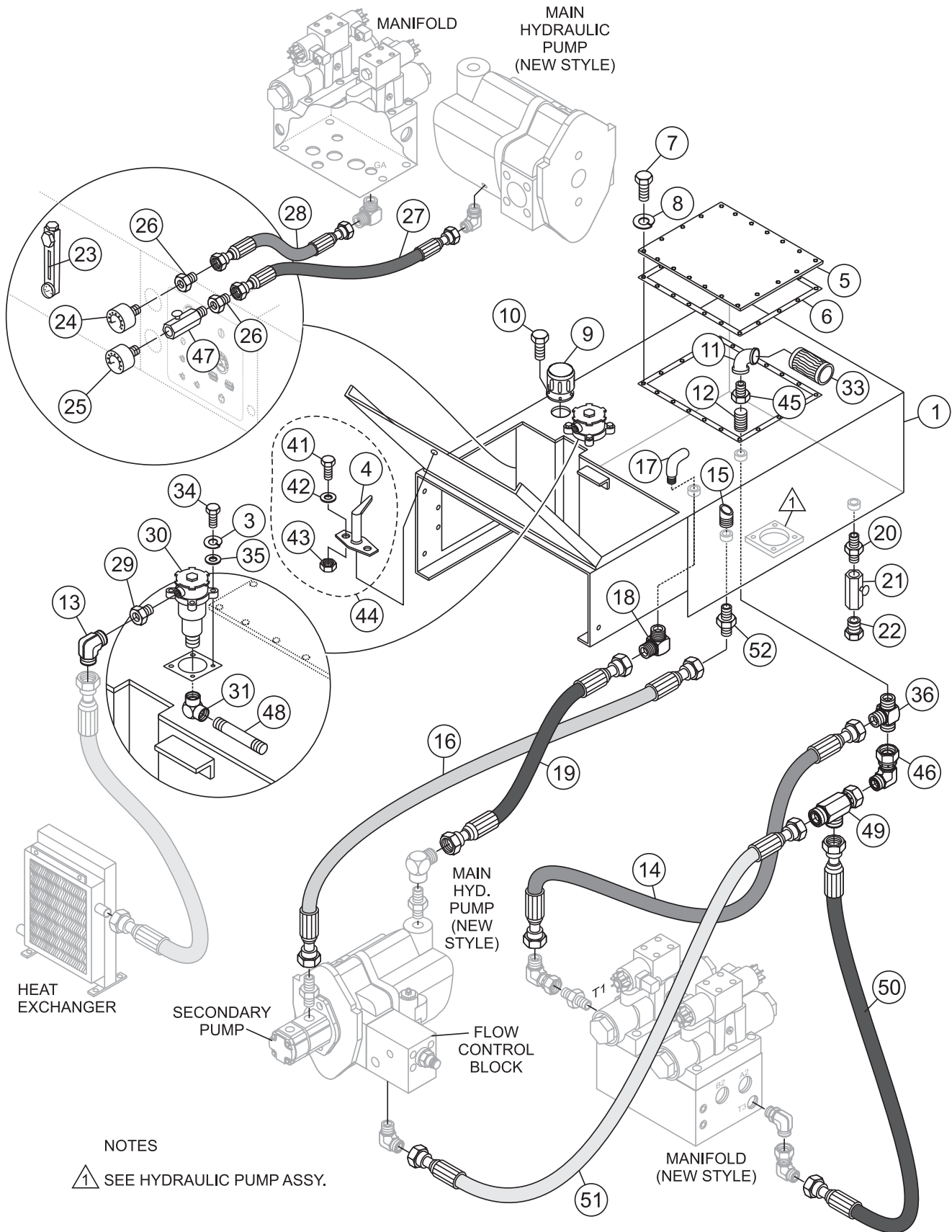
NOTES

⚠ SEE HYDRAULIC PUMP ASSY.

## LS-60TD PUMP — HYD. TANK ASSY. (OLD STYLE)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	514040	HYDRAULIC TANK, LS-S	1	
3	0166 A	LOCK, WASHER 3/8 IN. ....	4	REPLACES 492624
4%	517295	HANDLE	1	
5	EM251191	TANK COVER PLATE	1	
6	EM25184	RESERVOIR GASKET	1	
7	492362	BOLT 5/16 X 5/8 IN.	20	
8	EM923343	WASHER, LOCK 5/16 IN. ....	20	REPLACES 492623
9	EM98263	CAP ASSEMBLY, OIL FILL	1	
10	492267	BOLT 3/16 X 5/8 IN.	6	
11	16433	TUBE	1	
12	EM491189	FITTING	1	
13	EM18436	90° MALE ADAPTER 2103-16-16	3	
14	EM514605	HOSE	1	
15	EM514622	FITTING 1 IN.	1	
16	EM514597	HOSE	1	
17	EM491164	ELBOW, 3/4 IN.	1	
18	EM491375	ADAPTER 2103-12-08	1	
19	EM514598	HOSE (2000 PSI)	1	
20	EM509369	STRAIGHT MALE ADAPTOR , 0101-08-08	1	
21	491237	VALVE 1/2 IN.	1	
22	506094	CAP 1/2 IN.	1	
23	EM98188	GAUGE, LEVEL & TEMP. ....	1	REPLACES EM16478
24	EM97066	GAUGE 3000PSI, ACCUMULATOR	1	
25	EM97067	GAUGE 5000 PSI, MAIN	1	
26	EM25523	ADAPTER	2	
27	EM509517	HOSE, 4000 PSI MAIN GAUGE	1	
28	EM514602	HOSE, 4000 PSI ACCUMULATOR GAUGE	1	
29	EM16517	STRAIGHT MALE ADAPTER 0102-24-16	1	
30	EM98112	FILTER RETURN ASSY.	1	
31		ELBOW 1-1/2, 11-1/2 IN. NPT .....	1	DISCONTINUED. SEE HYD. TANK ASSY. (NEW STYLE) ITEMS 31 AND 48.
33	EM16513	DIFFUSER	1	
34	492376	BOLT 3/8 X 1-1/4 IN.	4	
35	492598	WASHER, FLAT 3/8 IN.	4	
41%	TBD	BOLT	2	
42%	TBD	WASHER	2	
43%	TBD	NUT	2	
44	EM508659	HANDLE ASSY. ....	1	INCLUDES ITEMS W/%

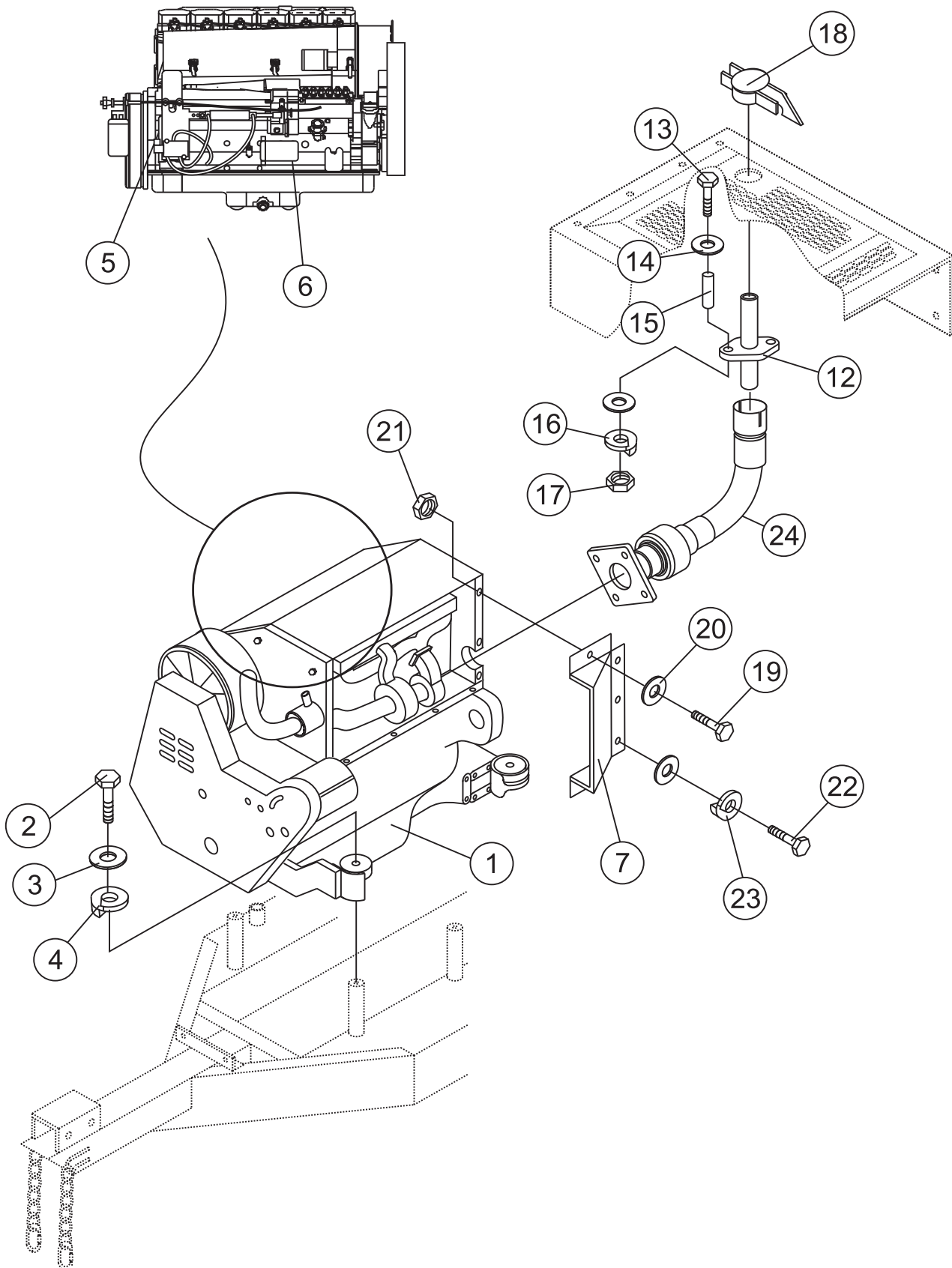
# LS-60TD PUMP — HYD. TANK ASSY. (NEW STYLE)



## LS-60TD PUMP — HYD. TANK ASSY. (NEW STYLE)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	514040	HYDRAULIC TANK, LS-S	1	
3	0166 A	LOCK, WASHER 3/8 IN. ....	4	REPLACES 492624
4%	517295	HANDLE	1	
5	EM251191	TANK COVER PLATE	1	
6	EM25184	RESERVOIR GASKET	1	
7	492362	BOLT 5/16 X 5/8 IN.	20	
8	EM923343	WASHER, LOCK 5/16 IN. ....	20	REPLACES 492623
9	EM98263	CAP ASSEMBLY	1	
10	492267	BOLT 3/16 X 5/8 IN.	6	
11	16433	TUBE	1	
12	EM491189	FITTING	1	
13	EM18436	90° MALE ADAPTER 2103-16-16	1	
14	EM514605	HOSE	1	
15	EM514622	FITTING 1 IN.	1	
16	EM514597	HOSE	1	
17	EM491164	ELBOW, 3/4 IN.	1	
18	509784	ADAPTER	1	
19	517002	HOSE .....	1	MAY 2006 AND ABOVE
20	EM509369	STRAIGHT MALE ADAPTOR , 0101-08-08	1	
21	491237	VALVE 1/2 IN.	1	
22	506094	CAP 1/2 IN.	1	
23	EM98188	GAUGE, LEVEL & TEMP. ....	1	REPLACES EM16478
24	EM97066	GAUGE 3000PSI, ACCUMULATOR	1	
25	EM97067	GAUGE 5000 PSI, MAIN	1	
26	EM25523	ADAPTER	2	
27	EM509517	HOSE, 4000 PSI MAIN GAUGE	1	
28	EM514602	HOSE, 4000 PSI ACCUMULATOR GAUGE	1	
29	EM16517	STRAIGHT MALE ADAPTER 0102-24-16	1	
30	EM98112	FILTER RETURN ASSY.	1	
31	516814	90° FITTING .....	1	MAY 2006 AND ABOVE
33	EM16513	DIFFUSER	1	
34	492376	BOLT 3/8 X 1-1/4 IN.	4	
35	492598	WASHER, FLAT 3/8 IN.	4	
36	509343	TEE FITTING .....	1	MAY 2006 AND ABOVE
41%	EM517129	BOLT	2	
42%	EM517130	WASHER	2	
43%	EM517131	NUT	2	
44	EM508659	HANDLE ASSY. ....	1	INCLUDES ITEMS W/%
45	516813	BUSHING .....	1	MAY 2006 AND ABOVE
46	409401	ADAPTOR 3903-16-16 .....	1	MAY 2006 AND ABOVE
47	EM16414	VALVE NEEDLE .....	1	MAY 2006 AND ABOVE
48	16516	NUT, JAM 1-5/6 NPT X16 .....	1	MAY 2006 AND ABOVE
49	509344	ADAPTOR 063T-16-16 .....	1	MAY 2006 AND ABOVE
50	514604	HOSE .....	1	MAY 2006 AND ABOVE
51	514604	HOSE .....	1	MAY 2006 AND ABOVE
52	517029	FITTING, STRAIGHT .....	1	MAY 2006 AND ABOVE

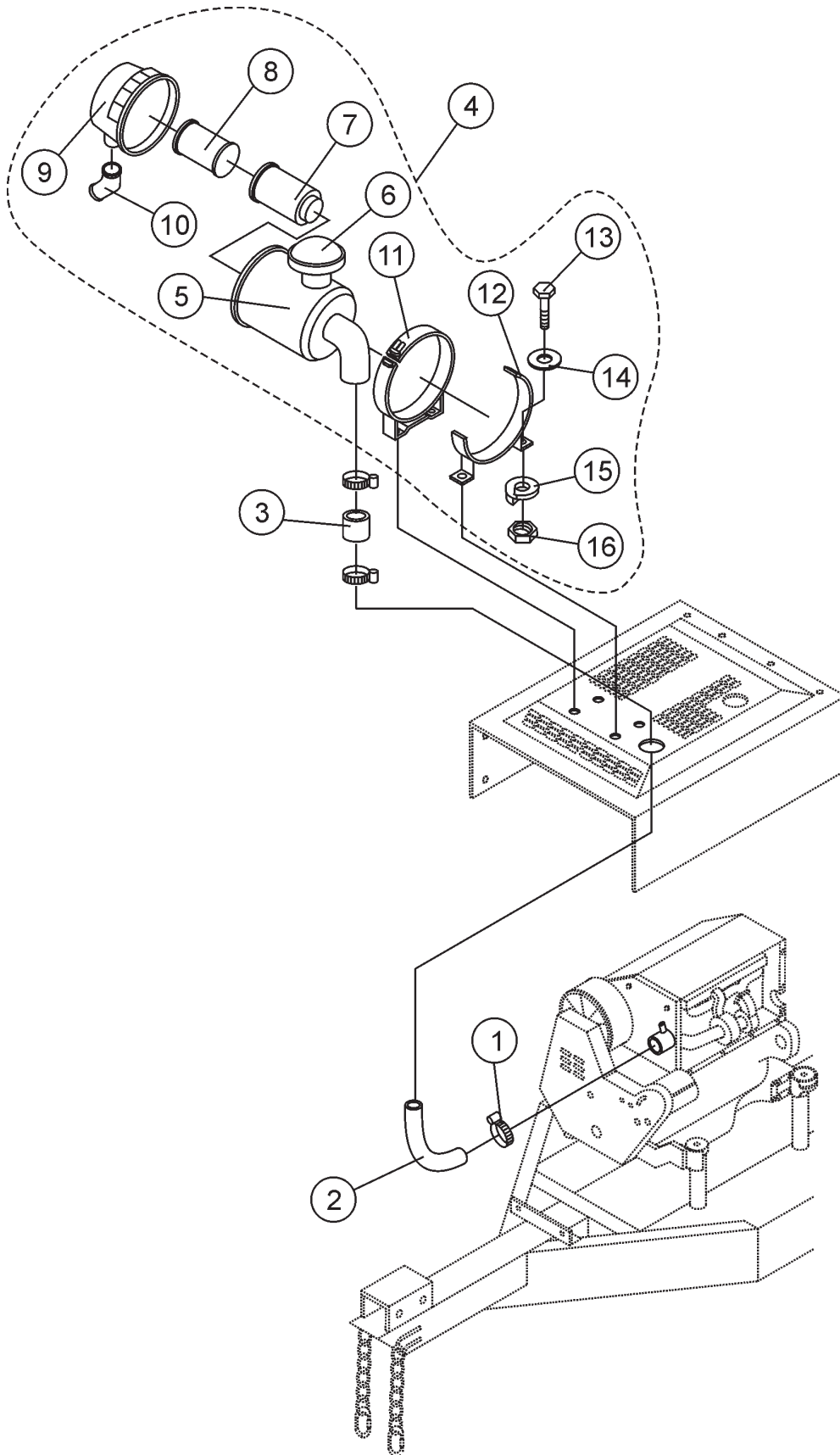
# LS-60TD PUMP — LS-60TD ENGINE ASSY.



## LS-60TD PUMP — LS-60TD ENGINE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM98197	ENGINE, DEUTZ TURBO 110 HP BF4L914	1	
2	492401	BOLT 1/2 IN. X 4 FT.	4	
3	6109170	WASHER, FLAT 1/2 IN. ....	4	REPLACES 492600
4	6109180	WASHER, LOCK 1/2 IN. ....	4	REPLACES 492626
5	01174416	FILTER, OIL (ENGINE)	1	
6	01174696	FILTER, FUEL (ENGINE)	1	
7	EM513776	DEFLECTOR	1	
12	EM514633	REDUCTION TUBE, EXHAUST	1	
13	492371	BOLT 5/16 NC X 3 IN. G5	2	
14	EM923023	WASHER, FLAT 5/16 IN. ....	4	REPLACES 492597
15	EM514714	SPACER, EXHAUST	2	
16	EM923343	WASHER, LOCK 5/16 IN. ....	2	REPLACES 492623
17	2105164	HEX NUT 5/16 IN. G5 .....	2	REPLACES 492553
18	EM510897	CAP, EXHAUST 2-1/2 IN.	1	
19	0202	BOLT 5/16 X 1 IN. ....	2	REPLACES 492364
20	EM923023	WASHER, FLAT 5/16 IN. ....	7	REPLACES 492597
21	2105164	NUT, HEX 5/16 IN. ....	3	REPLACES 492582
22	EM506886	BOLT M8 X 20 X 1-1/4 IN.	3	
23	EM923343	WASHER, LOCK 5/16 IN. ....	4	REPLACES 492623
24	EM516435	PIPE, EXHAUST	1	

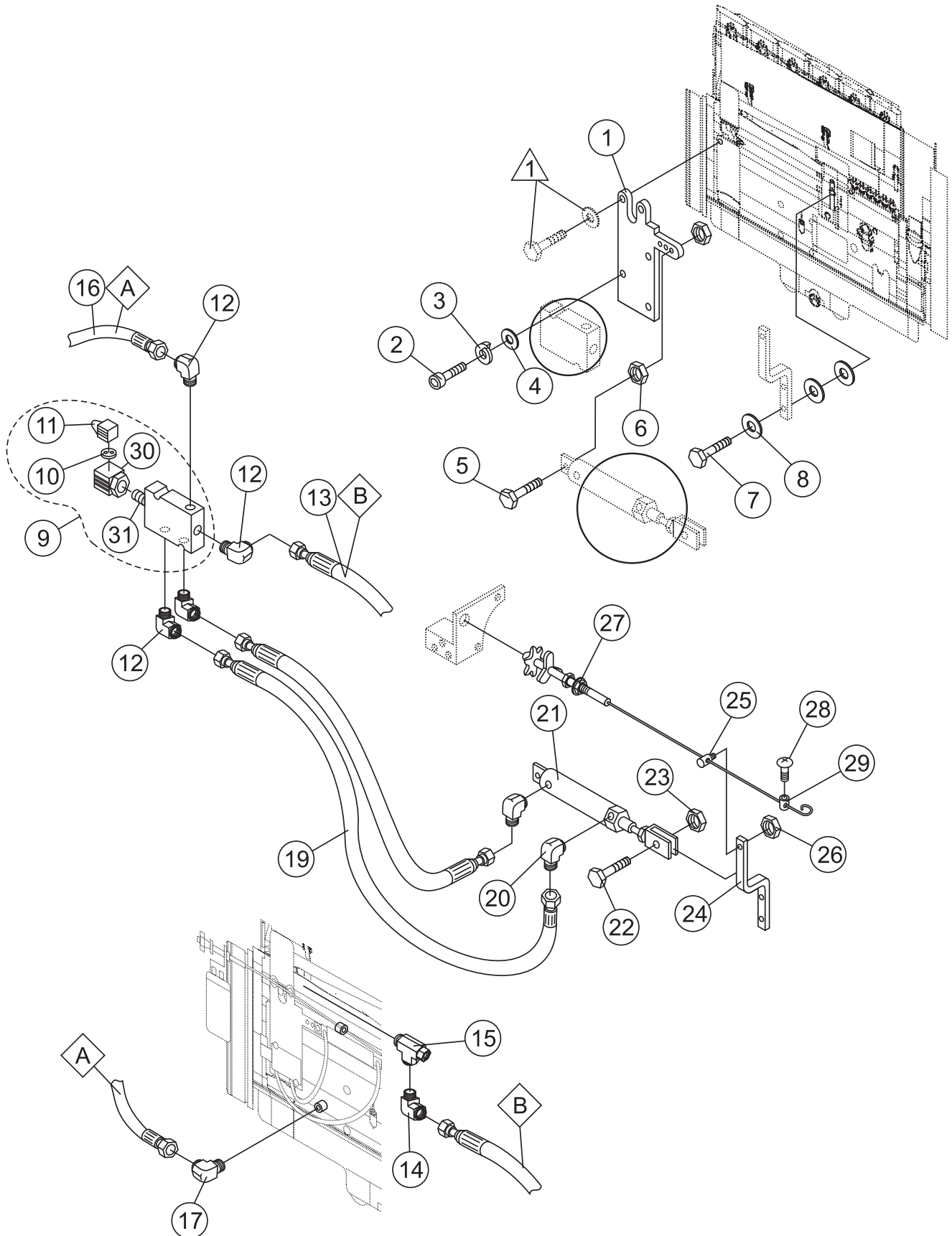
# LS-60TD PUMP — LS-60TD ENGINE AIR FILTER ASSY.



## LS-60TD PUMP — LS-60TD ENGINE AIR FILTER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM493108	CLAMP	3	
2	513227	AIR FILTER HOSE 3-1/2 IN.	.5	
3	EM514367	TUBE AIR FILTER UNION	1	
4	EM98093	AIR CLEANER ASSY. ....	1	INCLUDES ITEMS W/*
5*		FILTER, AIR .....	1	NOT SOLD SEPARATELY
6*	EM98207	CAP, RAIN	1	
7*	EM98093P	ELEMENT, PRIMARY	1	
8*	EM98093S	ELEMENT, SECONDARY	1	
9*		HOOD, AIR CLEANER .....	1	NOT SOLD SEPARATELY
10*		DUST EJECTOR .....	1	NOT SOLD SEPARATELY
11*		ADJUSTABLE SUPPORT, AIR FILTER.....	1	NOT SOLD SEPARATELY
12*		SUPPORT, AIR FILTER .....	1	NOT SOLD SEPARATELY
13*	492357	BOLT, HEX HEAD 1/4 X 1 IN.	4	
14*	EM923057	WASHER, FLAT 1/4 IN. ....	8	REPLACES 492596
15*	TBD	WASHER, LOCK 1/4 IN.	4	
16*	492581	NUT, HEX 1/4 IN.	4	

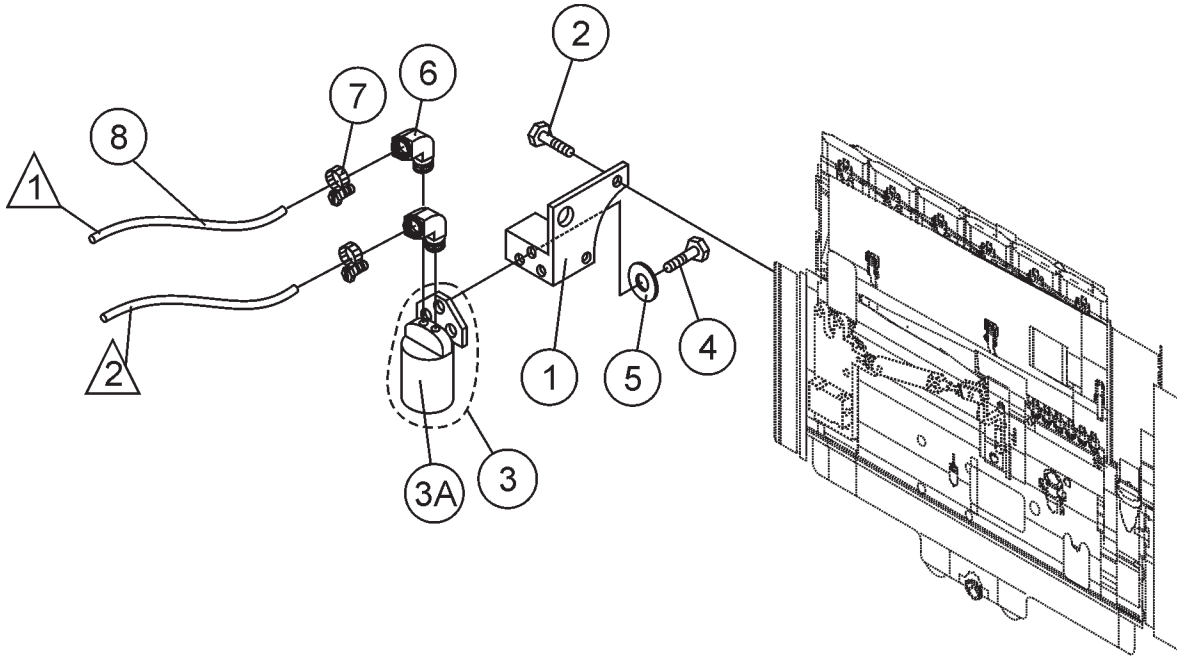
# LS-60TD PUMP — THROTTLE ASSY.





# LS-60TD PUMP — THROTTLE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM512837	SUPPORT BASE, ACCELERATOR	1	
2	EM492358	BOLT 1/4 X 1-1/4	2	
3	2101402	WASHER 1/4 IN. ....	2	REPLACES 492622
4	EM923057	LOCK WASHER 1/4 IN. ....	2	REPLACES 492596
5	512185	BOLT 1/4 X 1-3/4 IN.	1	
6	492581	HEX NUT 1/4 IN.	2	
7	EM506599	BOLT M6 X 15	2	
8	492622	WASHER, FLAT 1/4 IN.	4	
9	EM98168	THROTTLE BLOCK COUPLING .....	1	INCLUDES ITEMS W/*
10*	EM98167	SEAL CONNECTOR	1	
11*	EM98166	CONNECTOR, DIN PG9	1	
12	EM25429	ELBOW ADAPTER 90° MALE	4	
13	EM509937	HOSE, HYDRAULIC COMPENSATOR	1	
14	EM25577	ELBOW ADAPTER IN.T IN.	1	
15	EM50449	ELBOW ADAPTER 90 DEG. MALE	2	
19	EM509366	HOSE 13.75 IN. LONG	2	
20	EM50449	ELBOW ADAPTER 90° MALE	2	
21	EMCC700	HYDRAULIC CYLINDER	1	
22	492357	BOLT 1/4 IN. X 1 IN.	1	
23	492581	NUT 1/4 IN.	1	
24	515822	BRACKET, ACCELERATOR	1	
25	513213	THROTTLE CABLE GUIDE	1	
26	2101428	HEX NUT 1/4-20 IN.	1	
27	510229	CABLE CONTROL ACCELERATOR	1	
28	EM491089	BOLT 8 X 1/4 IN.	1	
29	EM501102	SLEEVE, ACCELERATOR	1	
30	EM98228	COIL, 12V	1	
31	EM98232	CARTRIDGE VAL VE	1	

# LS-60TD PUMP — WATER SEPARATOR ASSY.



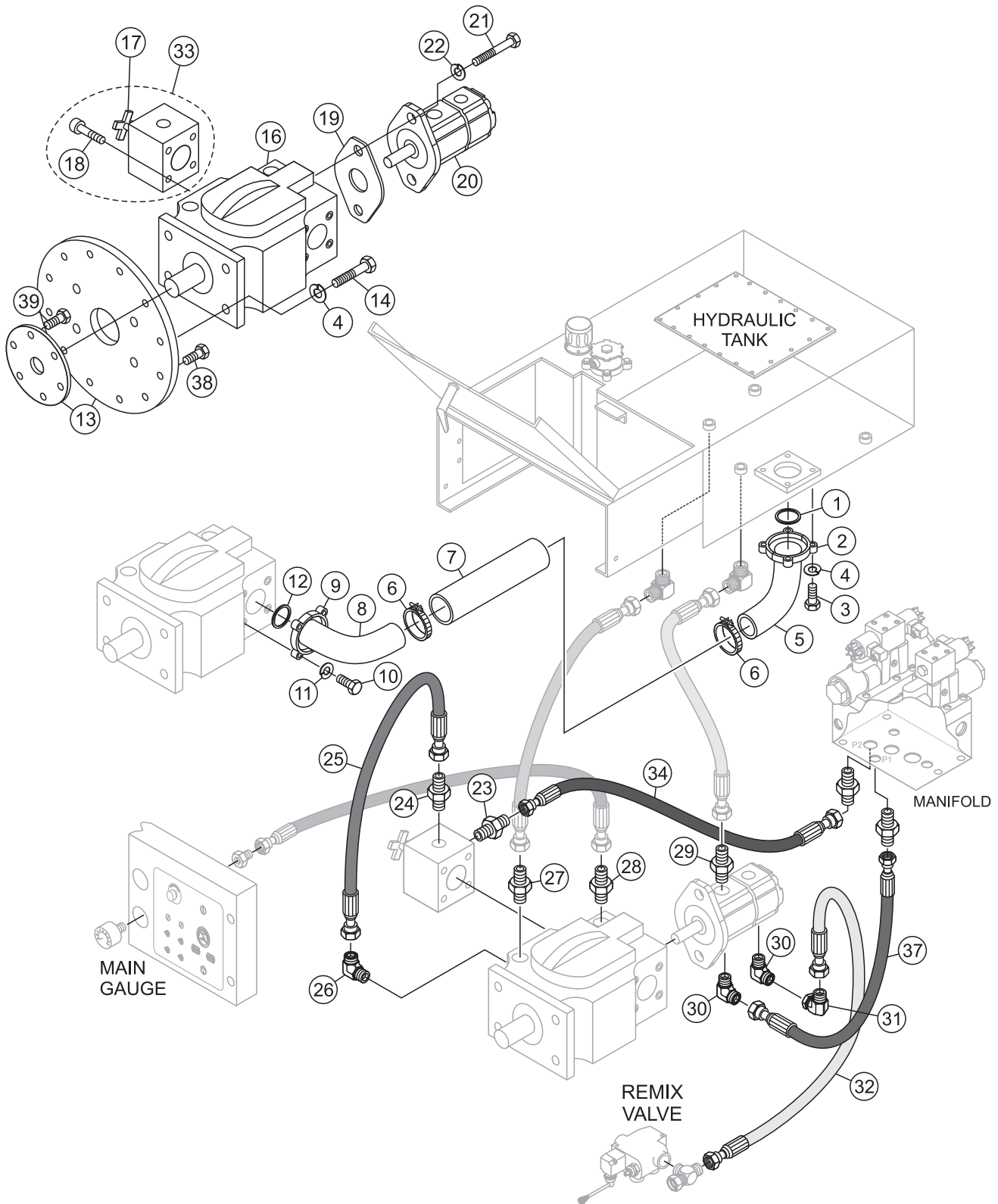
## NOTES

-  CONNECT TO FUEL FILTER  
FUEL TANK ASSY., ITEM 11
-  CONNECT TO FUEL RETURN HOSE  
FUEL TANK ASSY., ITEM 8

## LS-60TD PUMP — WATER SEPARATOR ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM509449	BRACKET, WATER SEPERATOR	1	
2	EM492356	BOLT	2	
3	EM16747	WATER SEPERATOR ASSEMBLY	1	
3A	EM167472	CARTRIDGE, WATER SEPERATOR .....	1 .....	REPLACES P53712
4	EM492356	BOLT 5/16 X 1 IN.	3	
5	2105164	HEX NUT 5/16 IN. ....	3 .....	REPLACES 492582
6	C514559	ELBOW ADAPTER 90° MALE	2	
7	EM506208	CLAMP, HOSE	2	
8	EM514536	HOSE 5/16 IN.	TBD	

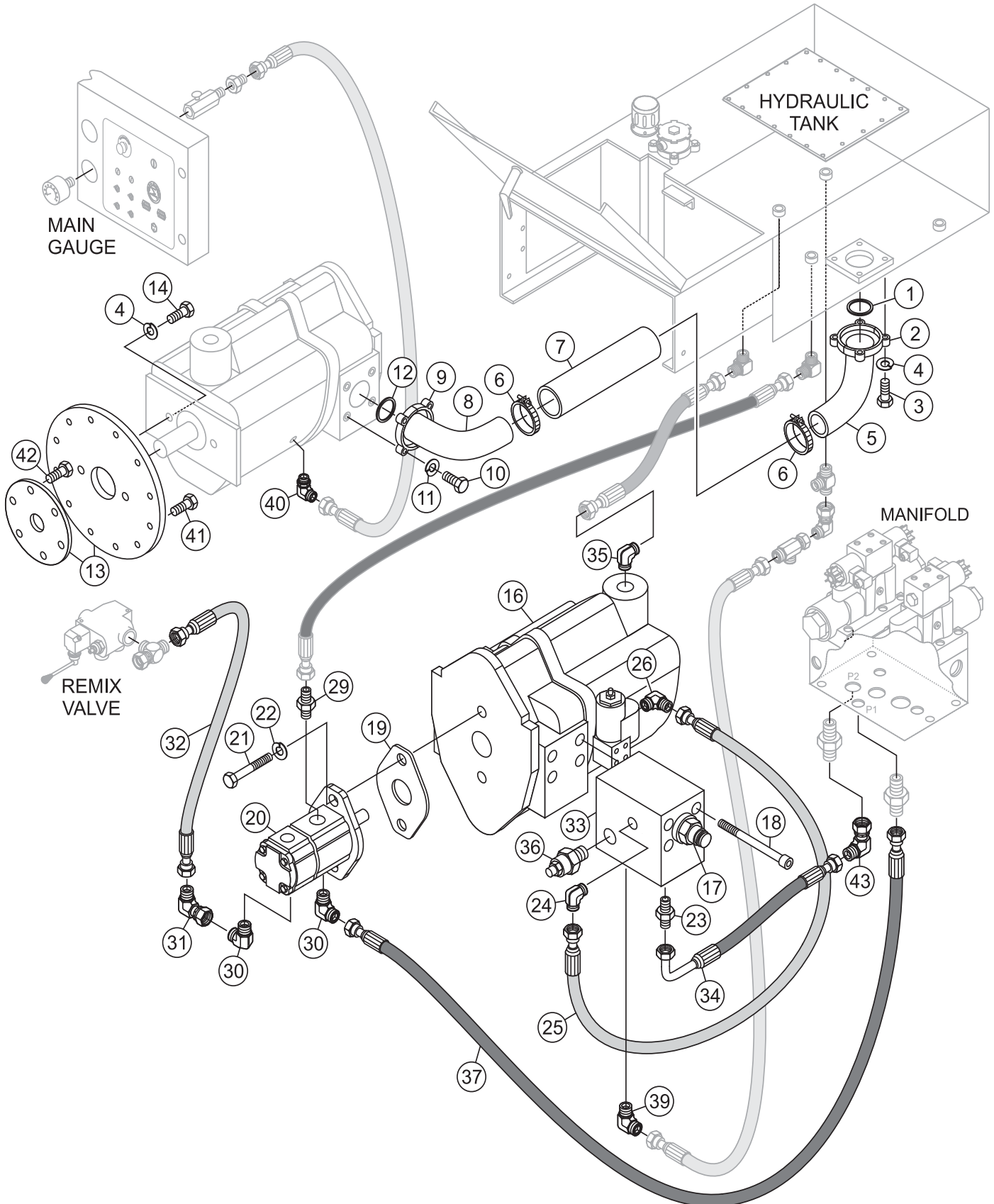
# LS-60TD PUMP — HYDRAULIC PUMP ASSY. (OLD STYLE)



## LS-60TD PUMP — HYDRAULIC PUMP ASSY. (OLD STYLE)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1*		O-RING	1	
2	EM514719	FLANGE, SUCTION PIPE .....	2 .....	INCLUDES ITEMS W/*
3	EM492455	BOLT 1/2 X 1-1/2 IN. ....	4 .....	MAY 2007 AND BELOW
4	6109180	WASHER, LOCK 1/2 IN. ....	8 .....	REPLACES 492626
5	EM514718	SUCTION PIPE ADAPTER, 40 SPECIAL	1	
6	EM26473	CLAMP TYPE 'J' 3 IN. ....	4 .....	MAY 2007 AND BELOW
7	EM514623	HOSE, SUCTION 2 IN.	1	
8	EM514627	ADAPTER, SUCTION PIPE 32	1	
9	EM514628	FLANGE, SUCTION PIPE .....	1 .....	INCLUDES ITEMS W/%
10	EM510902	BOLT 1/2 X 1-1/2 IN.	4	
11	6109180	WASHER, LOCK 1/2 IN. ....	4 .....	REPLACES 492626
12%		O-RING	1	
13	EM98176	COUPLER, ENGINE ASSY.	1	MAY 2007 AND BELOW
14	EM510902	BOLT 1/2 X 1-1/2 IN.	4	
16	EM98154	PUMP, MAIN 100CC, PARKER P2-100 SERIES	1	
17	EM98209	VALVE, CARTRIDGE	1	
18	EM506953	BOLT 7/16 X 3 IN.	4	
19	EM16190	GASKET	1	
20	EM98107	PUMP, SECONDARY	1	
21	EM963610	BOLT 3/8 X 1 IN. ....	2 .....	REPLACES 492375
22	0166 A	WASHER, LOCK 3/8 IN. ....	2 .....	REPLACES 492624
23	EM25462	STRAIGHT ADAPTER .....	1 .....	MAY 2007 AND BELOW
24	EM25511	ADAPTER.....	1 .....	MAY 2007 AND BELOW
25	EM514599	HOSE 4000 PSI, SENSOR .....	1 .....	MAY 2007 AND BELOW
26	EM25506	ELBOW ADAPTER .....	1 .....	MAY 2007 AND BELOW
27	EM16525	STRAIGHT ADAPTER .....	1 .....	MAY 2007 AND BELOW
28	TBD	STRAIGHT ADAPTER .....	1 .....	MAY 2007 AND BELOW
29	EM25498	STRAIGHT ADAPTER	1	
30	EM16524	ELBOW ADAPTER 90° MALE	2	
31	506195	ELBOW ADAPTER 90° FEMALE .....	1 .....	MAY 2007 AND BELOW
32	EM514601	HOSE 2000 PSI, REMIX VALVE	1	
33		FLOW CONTROL ASSY.....	1 .....	SEE HYD. PUMP ASSY. (NEW STYLE) ITEM 33
34	EM514614	HOSE, MAIN MANIFOLD.....	1 .....	MAY 2007 AND BELOW
37	EM514608	HOSE	1	
38	54812	SCREW ALLEN HEAD CAP .....	10 .....	REPLACES EM162
39	EM506611	BOLT	8	

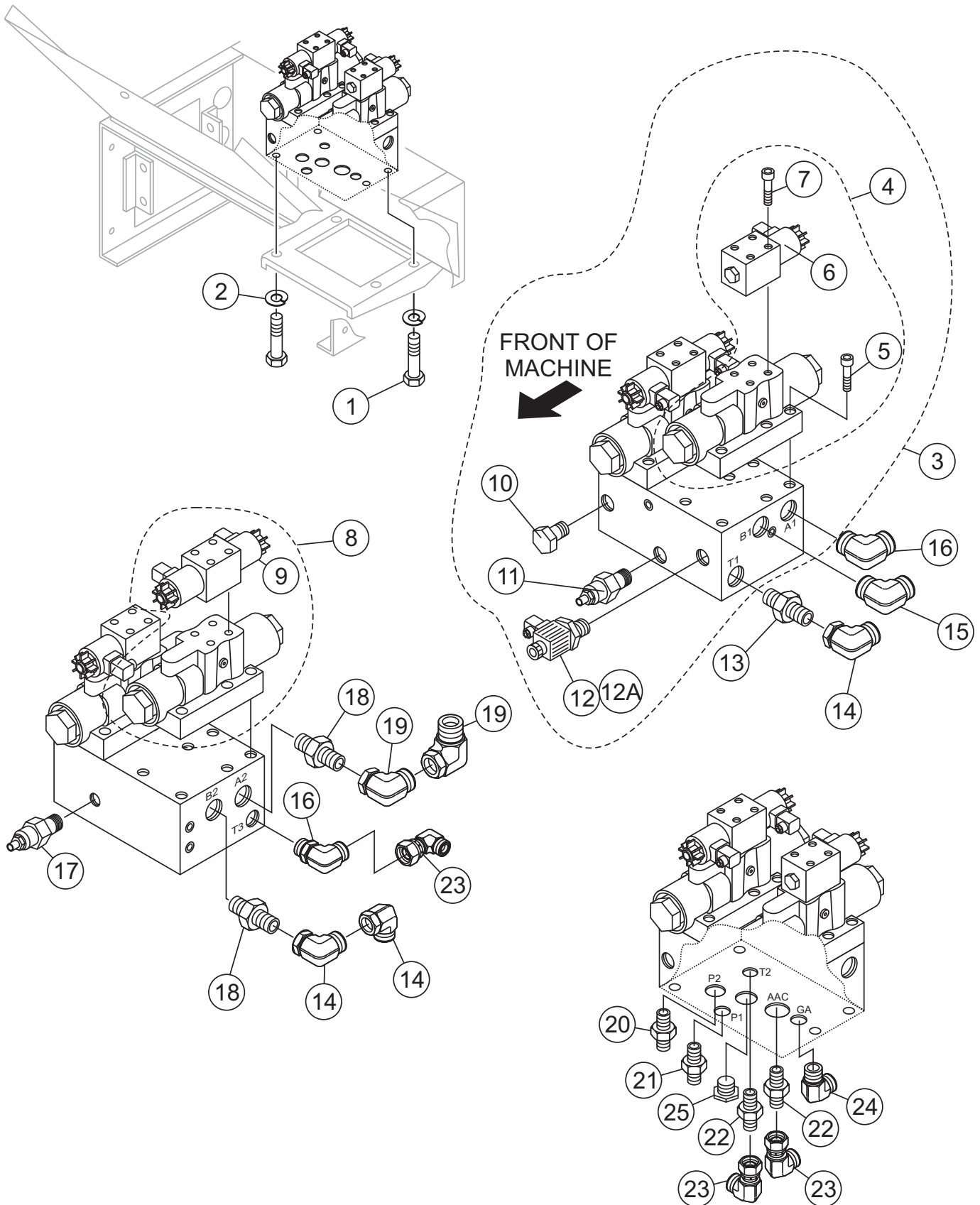
# LS-60TD PUMP — HYDRAULIC PUMP ASSY. (NEW STYLE)



# LS-60TD PUMP — HYDRAULIC PUMP ASSY. (NEW STYLE)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1*	TBD	O-RING	1	
2	EM514719	FLANGE, SUCTION PIPE .....	2	INCLUDES ITEMS W/*
3	EM492444	BOLT 1/2 X 1-1/4 IN. ....	4	JUNE 2007 AND ABOVE
4	6109180	WASHER, LOCK 1/2 IN. ....	6	REPLACES 492626
5	EM514718	SUCTION PIPE ADAPTER, 40 SPECIAL	1	
6	EM515207	CLAMP 2 IN. ....	2	JUNE 2007 AND ABOVE
7	EM514623	HOSE, SUCTION 2 IN.	1	
8	EM514627	ADAPTER, SUCTION PIPE 32	1	
9	EM514628	FLANGE, SUCTION PIPE .....	1	INCLUDES ITEMS W/%
10	EM510902	BOLT 1/2 X 1-1/2 IN.	4	
11	6109180	WASHER, LOCK 1/2 IN. ....	4	REPLACES 492626
12%		O-RING	1	
13	EM516777	COUPLER, ENGINE ASSY.	1	JUNE 2007 AND ABOVE
14	EM510902	BOLT 1/2 X 1-1/2 IN.	2	
16	EM98257	PUMP, MAIN 100CC, PARKER P1-100 SERIES .....	1	JUNE 2007 AND ABOVE
17	TBD	VALVE, CARTRIDGE	1	
18\$	511428	SCREW ALLEN HEAD 1/2-13X3	4	
19	EM16190	GASKET	1	
20	EM98107	PUMP, SECONDARY	1	
21	EM963610	BOLT 3/8 X 1 IN. ....	2	REPLACES 492375
22	0166 A	WASHER, LOCK 3/8 IN. ....	2	REPLACES 492624
23	EM509796	STRAIGHT ADAPTER .....	1	JUNE 2007 AND ABOVE
24	EM25429	ELBOW ADAPTER .....	1	JUNE 2007 AND ABOVE
25	516875	HOSE, 4000 PSI SENSOR .....	1	JUNE 2007 AND ABOVE
26	EM25429	ELBOW ADAPTER .....	1	JUNE 2007 AND ABOVE
29	EM25498	STRAIGHT ADAPTER	1	
30	EM16524	ELBOW ADAPTER 90° MALE	2	
31	506200	ELBOW ADAPTER .....	1	JUNE 2007 AND ABOVE
32	EM514601	HOSE 2000 PSI, REMIX VALVE	1	
33	EM98165A	FLOW CONTROL MANIFOLD ASSY. W/ PARKER P1-100 AND P2-100 PUMP .....	1	INCLUDES ITEMS W/\$ JUNE 2007 AND ABOVE
34	EM517032	HOSE, MAIN MANIFOLD .....	1	JUNE 2007 AND ABOVE
35	EM25459	ELBOW .....	1	JUNE 2007 AND ABOVE
36\$	TBD	VALVE, MAIN RELIEF .....	1	JUNE 2007 AND ABOVE
37	EM514608	HOSE	1	
39	EM25459	ELBOW .....	1	JUNE 2007 AND ABOVE
40	EM25429	ELBOW ADAPTER .....	1	JUNE 2007 AND ABOVE
41	54812	SCREW ALLEN HEAD CAP .....	10	REPLACES EM162
42	EM506611	BOLT	8	
43	EM517149	FITTING 90° .....	1	JUNE 2007 AND ABOVE

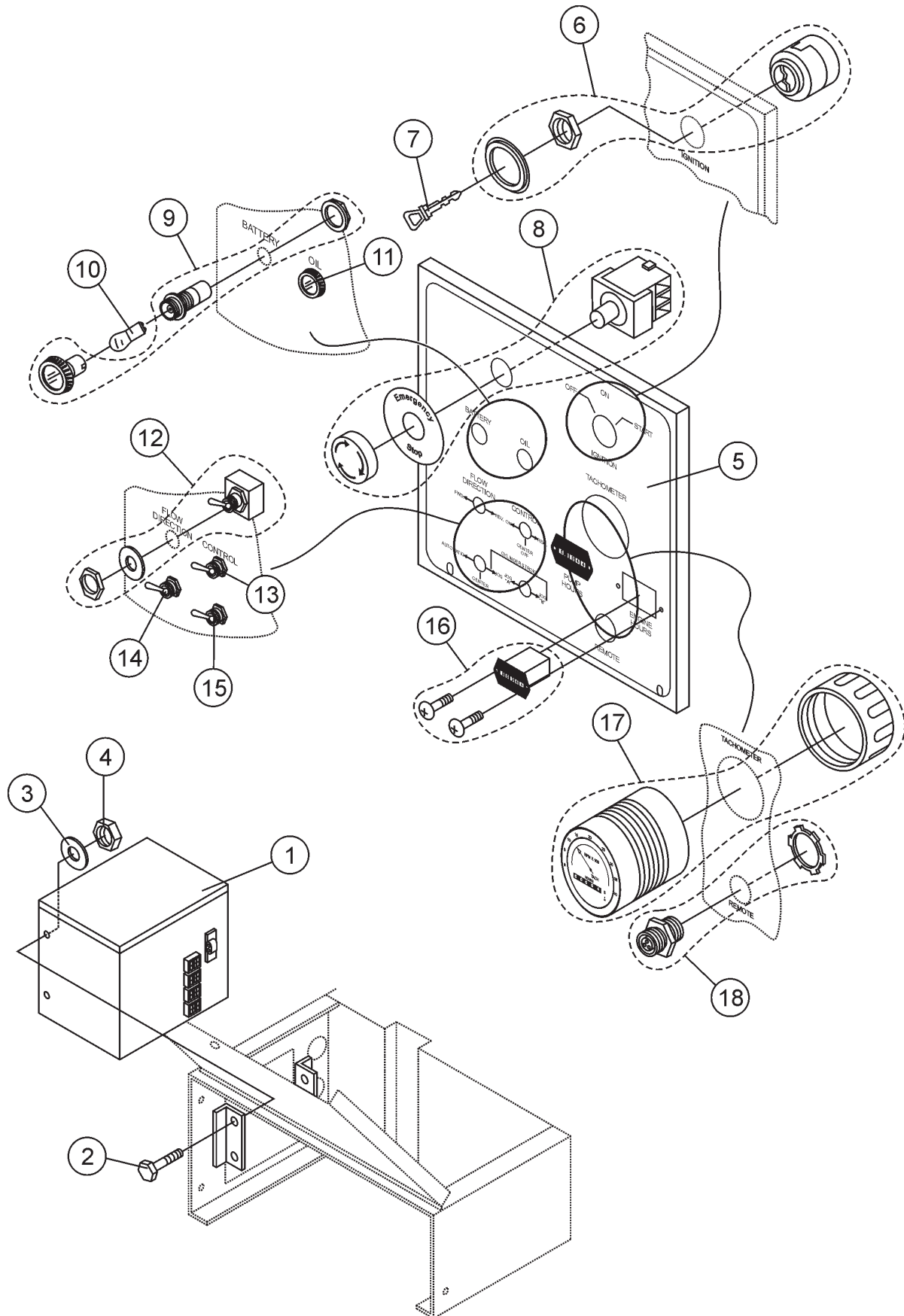
# LS-60TD PUMP — MANIFOLD ASSY.



## LS-60TD PUMP — MANIFOLD ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM963102	BOLT 1/2 X 1-1/4 IN. ....	4	REPLACES 492393
2	6109180	WASHER, LOCK 1/2 IN. ....	4	REPLACES 492626
3	EM98261	MANIFOLD ASSY COMPLETE .....	1	REPLACES EM98109
4%	EM98220	CYCLING VALVE ASSY, SWING .....	1	INCLUDES ITEMS W/ #
5%#	EMBK227	BOLT, ALLEN HEAD, 1/2 X 2 1/4" SHCS	12	
6%#	EM98223	PILOT VALVE, SHUTTLE	1	
7%#	EMK2097	BOLT, ALLEN HEAD, 1/2 X 1 1/4" SHCS	8	
8%	EM98221	CYCLING VALVE ASSY, MAIN .....	1	INCLUDES ITEM W/ &
9%&	EM98222	PILOT VALVE, MAIN CYLINDER	1	
10%	TBD	CHECK VALVE	1	
11%	EM98224	MAIN RELIEF VALVE .....	1	DISCONTINUED MAY 2007
12%	EM98228	COIL, 12VDC ACCUMULATOR	1	
12A%	EM98229	ACCUMULATOR UNLOADER CARTRIDGE ASSY	1	
13	EM25498	ADAPTER	1	
14	EM509401	ADAPTER	3	
15	EM514488	ADAPTER	1	
16	EM25459	ADAPTER	2	
17	EM98226	UNLOADING RELIEF VALVE, SHUTTLE	1	
18	EM514231	ADAPTER	2	
19	EM14489	ADAPTER .....	3	MAY 2007 AND BELOW
19	EM514489	ADAPTER .....	2	JUNE 2007 AND ABOVE
20	EM509796	ADAPTER	1	
21	506193	ADAPTER	1	
22	EM25462	ADAPTER	2	
23	EM509353	ADAPTER	3	
24	EM25429	ADAPTER	1	
25	TBD	CHECK VALVE	1	

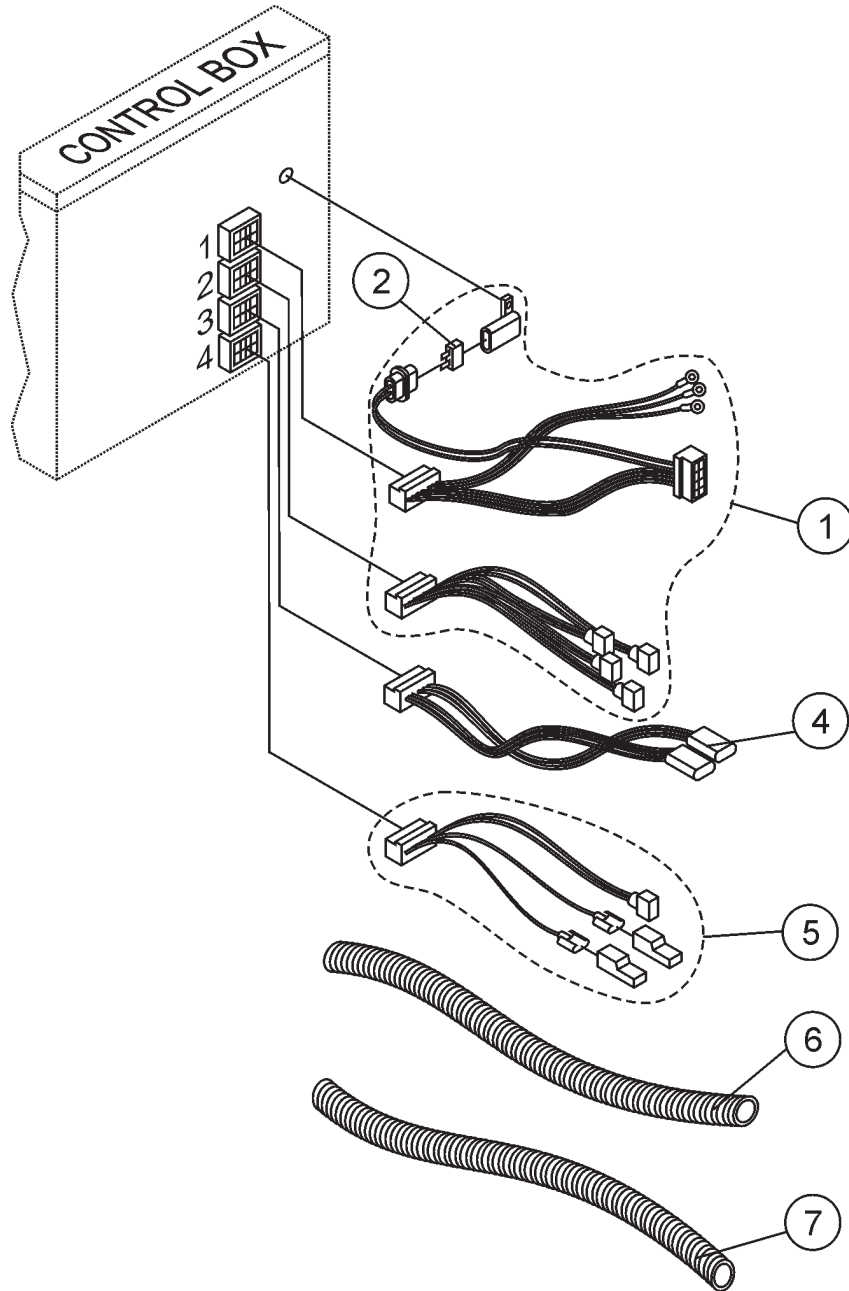
# LS-60TD PUMP — CONTROL BOX ASSY.



## LS-60TD PUMP — CONTROL BOX ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM9812560	CONTROL BOX ASSY	1	
2	492364	BOLT 5/16 X 1 IN.	4	
3	492597	WASHER, FLAT 5/16 IN.	4	
4	492582	NUT 5/16 IN.	4	
5	EM98171	OVERLAY, CONTROL PANEL	1	
6	EM98206	IGNITION SWITCH ASSY.	1	
7	EM98206K	KEY, IGNITION	1	
8	EM98208	EMERGENCY STOP SWITCH ASSY.	1	
9	01180384	BATTERY LIGHT ASSY.	1	
10	51908	BULB, LIGHT	1	
11	01180382	OIL LIGHT ASSY.	1	
12	EM98120	FLOW DIRECTION SWITCH ASSY.	1	
13	EM98119	MAIN CONTROL SWITCH ASSY.	1	
14	EM98121	AUTO/JOG SWITCH ASSY.	1	
15	EM98122	JOG A/B SWITCH ASSY.	1	
16	EM97062	HOUR METER ASSY.	2	
17	EM98124	TACHOMETER ASSY.	1	
18	EM97068	RECEPTACLE, REMOTE	1	

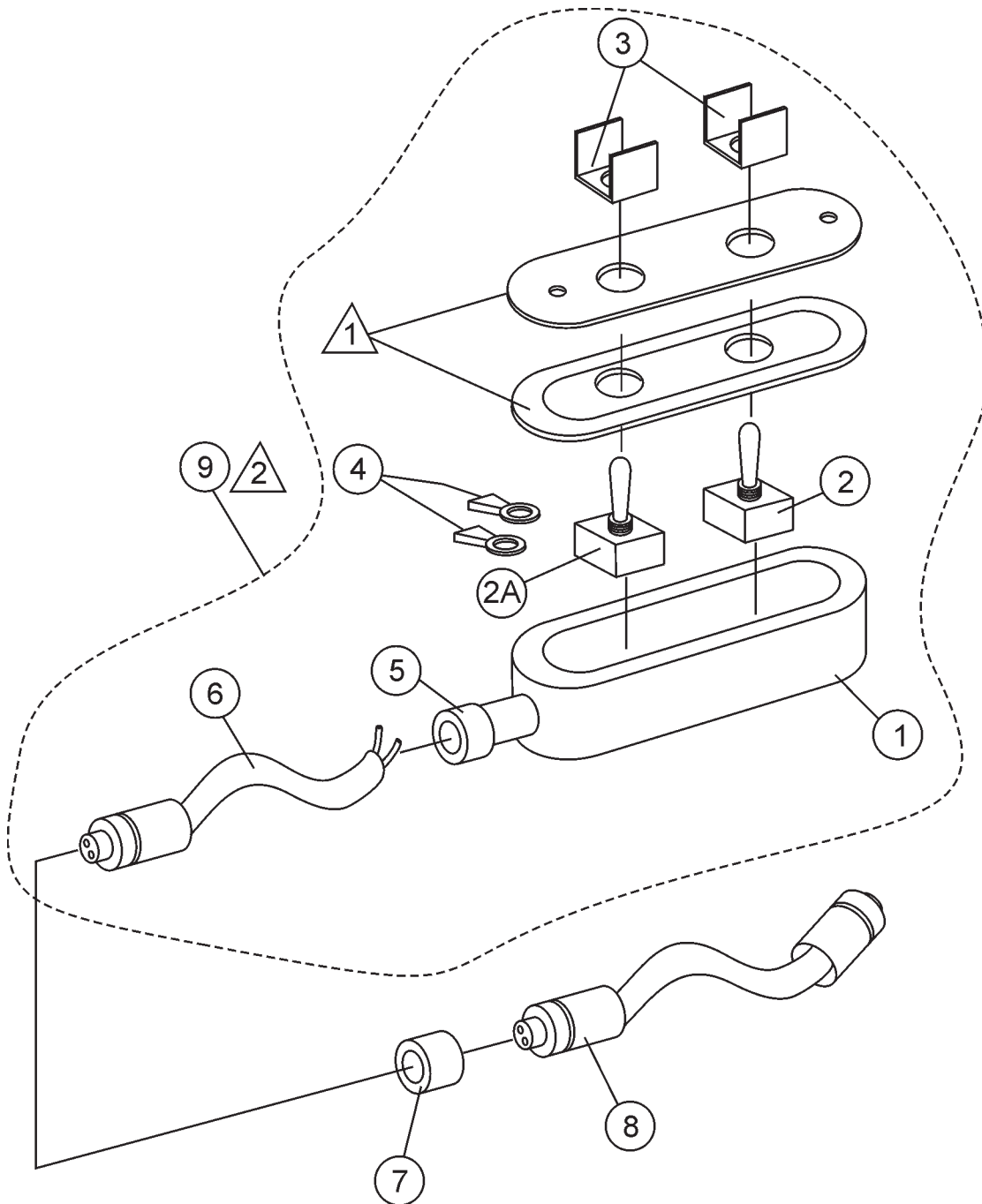
# LS-60TD PUMP — CONTROL BOX HARNESSES ASSY.



## LS-60TD PUMP — CONTROL BOX HARNESSSES ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM514639	WIRE HARNESS 1	1	
2	344102000	FUSE, 30 AMP	1	
4	EM514637	WIRE HARNESS 3	1	
5	EM514638	WIRE HARNESS 4	1	
6	509588	POLY FLEX TUBE 1/2 IN. BLACK	AR	
7	16716	CONDUCTIVE DIVIDER 3/8 IN.	AR	

# LS-60TD PUMP — REMOTE CONTROL CABLE ASSY.



## NOTES:

- △ 1 INCLUDED WITH ITEM 1.
- △ 2 COMPLETE CORD ASSY. INCLUDES ITEMS WITHIN DASHED LINE.

## LS-60TD PUMP — REMOTE CONTROL CABLE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1*	EM16753	JUNCTION BOX	1	
2*	EM16754	SWITCH	1	
2A	EM97075	SWITCH	1	
3*	EM491897	CONNECTOR, RING 3/16 IN.	4	
4*	EM16756	GUARD SWITCH - ALUMINUM	2	
5*	EM26791	SEAL, GRIP CORD	1	
6*	EM26790	CORD, MX P/E 25 FT.	1	
7	EM26793	ADAPTER, CORD GRIP 1/2 IN.	1	
8	EM97065	ADAPTER, CORD 100 FT.	1	
9	EM97099	COMPLETE CORD ASSY 25 FT .....	1 .....	INCLUDES ITEMS W/*