

PARTS MANUAL



MAYCO SERIES MODEL ST-45HRM CONCRETE PUMP (Hatz 3M41 DIESEL ENGINE) FINAL REVISION

Revision #5 (12/09/21)

THIS MANUAL MUST ACCOMPANY THE EQUIPMENT AT ALL TIMES.

ST45HRM Concrete Pump

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SUGGESTED SPARE PARTS

ST45HRM CONCRETE PUMP WITH HATZ 3M41 DIESEL ENGINE

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
1.....	EM98021	WEAR RING
2.....	EM16816-1	ENERGIZER RING
1.....	EM16816-2	INSERT RING
2.....	EM98065	SLEEVE SEAL
1.....	EM98022	WEAR PLATE
2.....	EM97024	SWITCH, PROXIMITY
1.....	EM50417	CUP
1.....	EM20709-1	SOLENOID
2.....	EM97050	RELAY
1.....	EM97048	RELAY
1.....	EM97036	SWITCH, PUMP CONTROL
1.....	EM97045	SW. OPERATION PUMP/ENG
1.....	EM98065	RUBBER RING

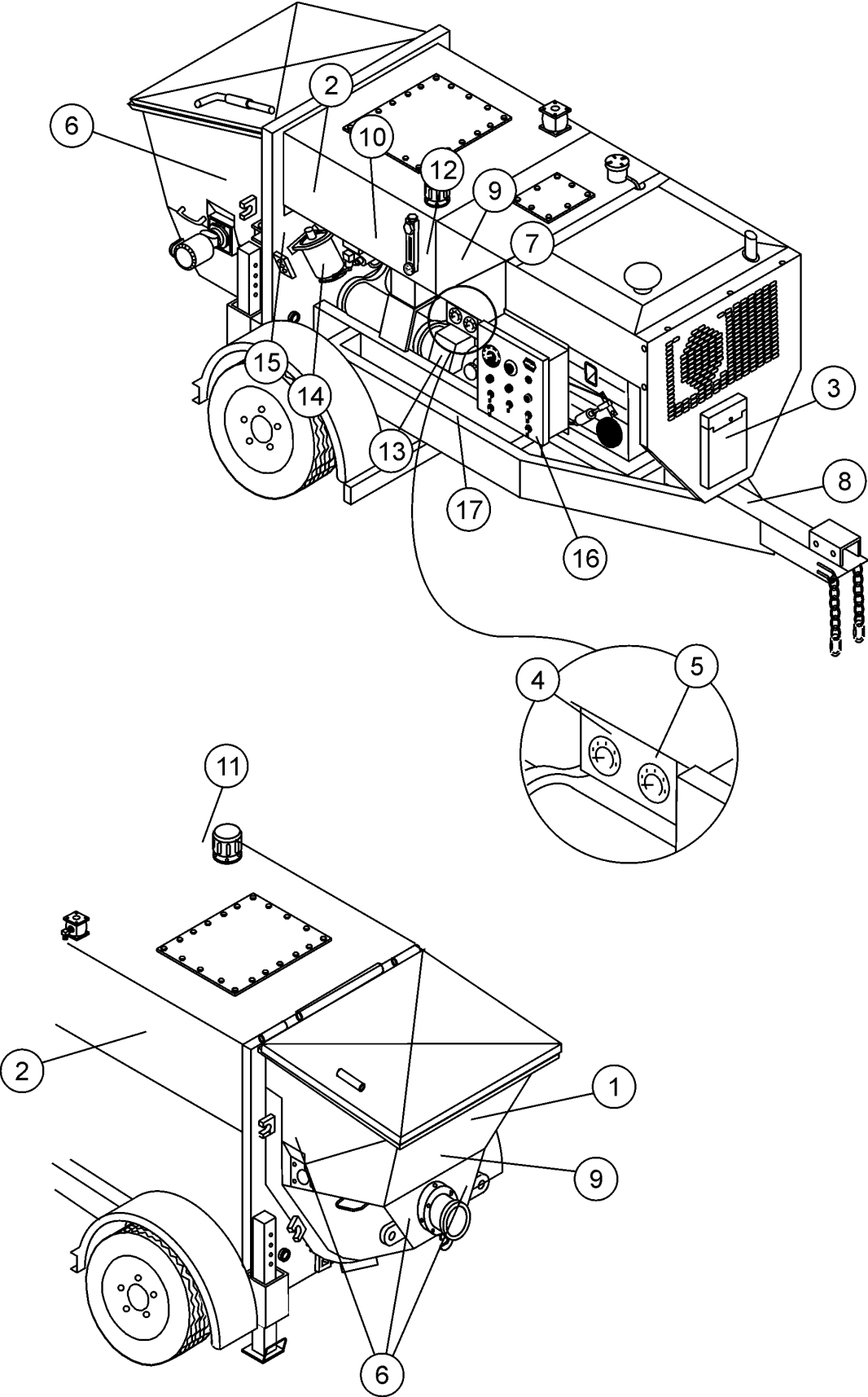
3 units

Qty.	P/N	Description
1.....	EM16459	PIN
2.....	EM18801	CONCRETE CYLINDER
2.....	EM16462	FELT HOLDER
6.....	EM98050	PISTON CUP, ORANGE
8.....	EM16493	FELT RING
2.....	EM98033	OIL PLATE
2.....	EM14408	BRONZE RING
4.....	EM16145	BUSHING, SWING AXLE
3.....	EM98021	WEAR RING
4.....	EM16816-1	ENERGIZER RING
2.....	EM16816-2	INSERT RING
4.....	EM98065	SLEEVE SEAL
2.....	EM98022	WEAR PLATE
4.....	EM97024	SWITCH, PROXIMITY
3.....	EM50417	CUP
2.....	EM20709-1	SOLENOID
4.....	EM97050	RELAY
2.....	EM97048	RELAY
2.....	EM97021	SOLENOID
2.....	EM97036	SWITCH, PUMP CONTROL
2.....	EM97045	SW. OPERATION PUMP/ENG
1.....	EM98065	RUBBER RING

NOTICE

Part numbers on this Suggested Spare Parts list may supersede/replace the part numbers shown in the following parts lists.

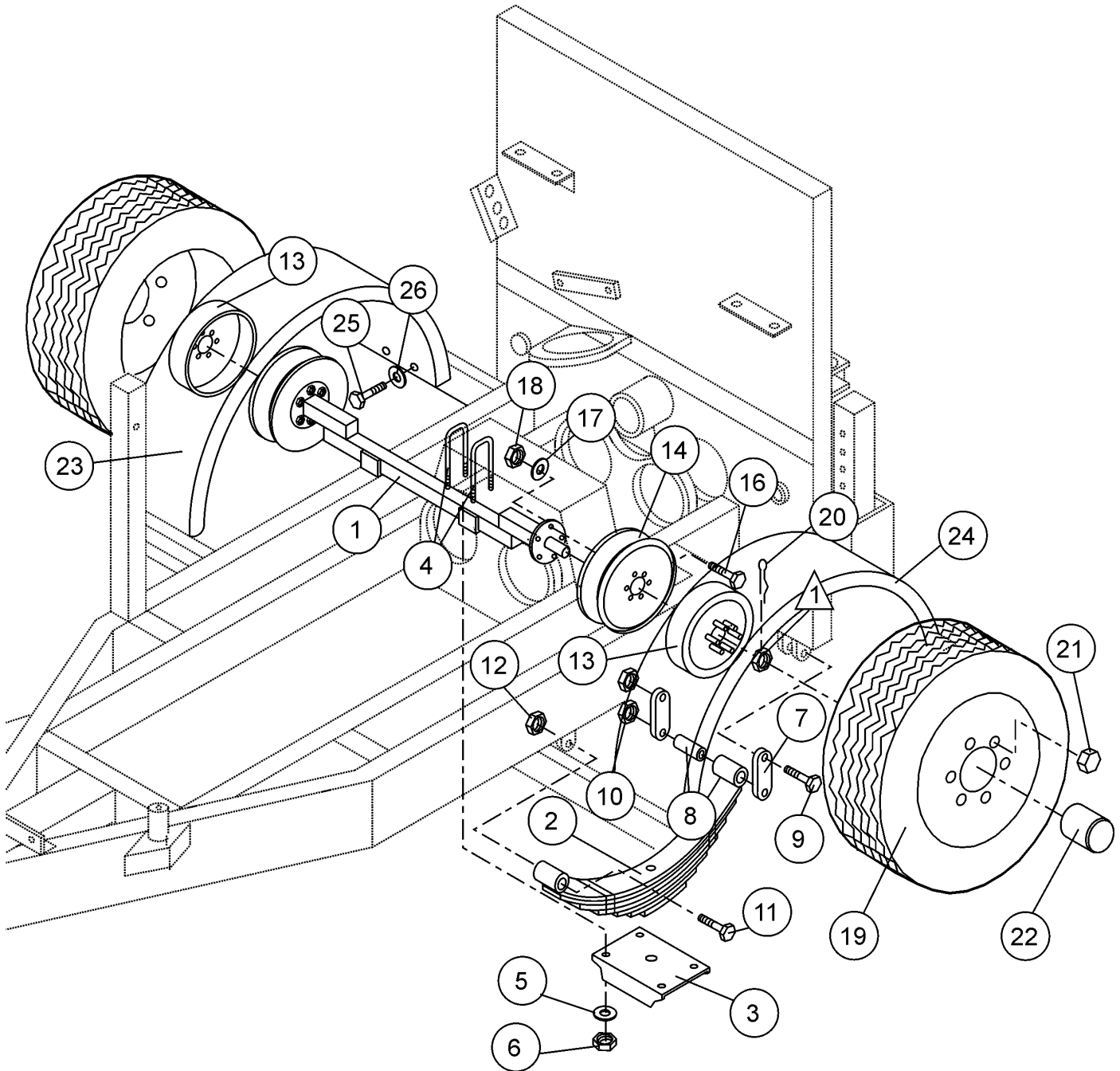
NAMEPLATE AND DECALS ASSY.



NAMEPLATE AND DECALS ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	511709	DECAL, 800-30-MAYCO	1	
2	EM97082	DECAL, ST-45	2	
3	34536	DECAL, OWNERS MANUAL	1	
4	EM97070	DECAL, ACCUMULATOR PRESSURE	1	
5	EM97070	DECAL, PUMPING PRESSURE DECAL	1	
6	EM93000	DECAL, CAUTION - GREASE 2 HOURS	4	
7	EM98022	DECAL, WARNING - CHECK MANUAL	1	
8	EM696	DECAL, CAUTION - TOWING DECAL	1	
9	EM97072	DECAL, CAUTION - OP. INSTRUCTIONS	2	
10	TBD	DECAL, HOPPER REXMIXER	1	
11	EM985	DECAL, HYDRAULIC OIL	1	
12	EM97071	DECAL, CAUTION - MINIMUM OIL LEVEL	1	
13	EM97084	DECAL, MAINTENANCE	1	
14	EM955	DECAL, CAUTION - REFER TO MANUAL	1	
15	EM97083	DECAL, WARNING - ACCUM. SAFETY	1	
16	TBD	DECAL, REMOTE OUTLET	1	
17	EM965	DECAL, VOLUME CONTROL	1	
18	TBD	DECAL, SHUTTLE TUBE DANGER	1	
19	EM1023	DECAL, MAYCO	2	

AXLE ASSY.



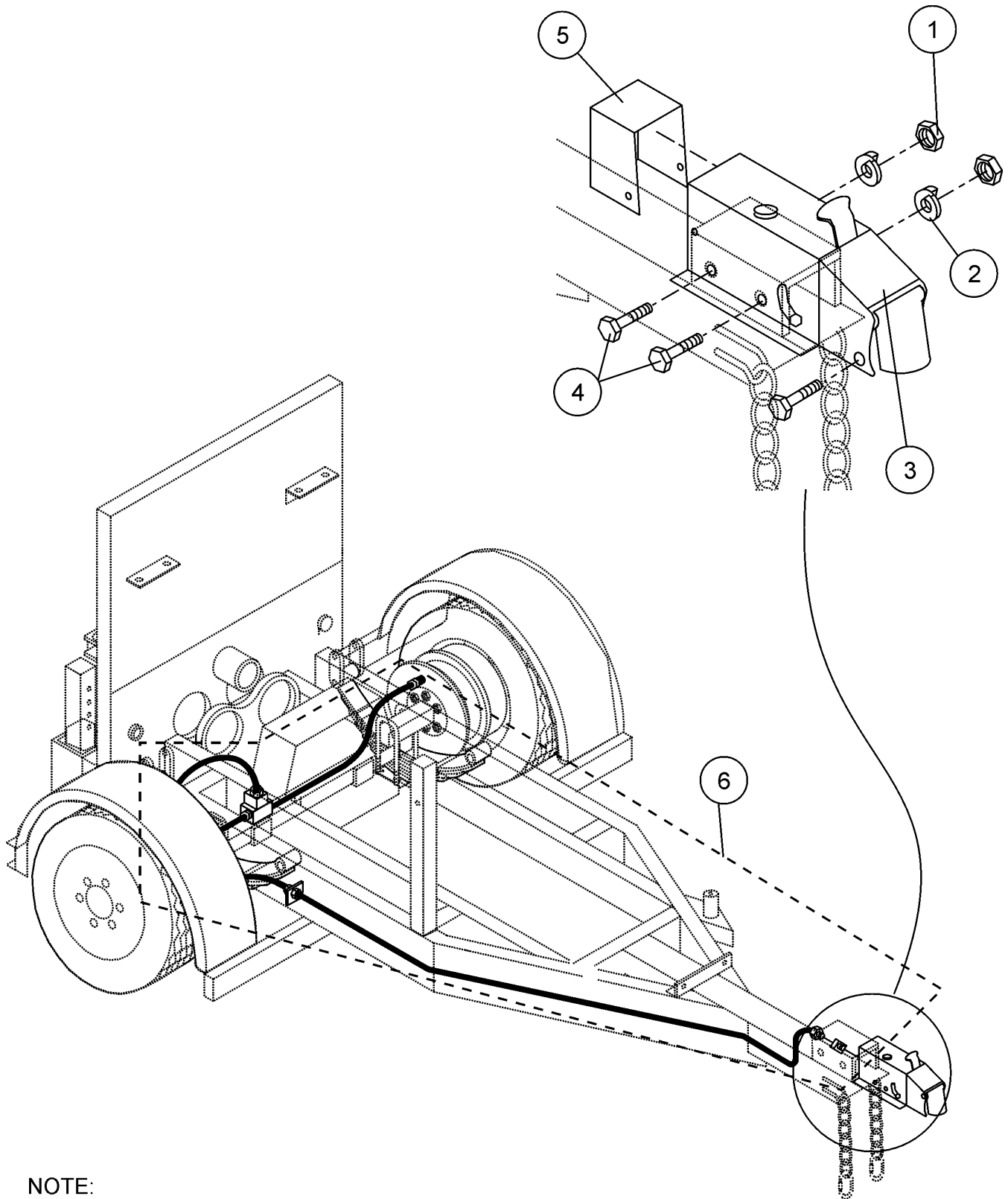
NOTES

▲ 1 INCLUDED WITH
ITEM 2

AXLE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM25611	AXLE	1	
2	EM16608	LEAF SPRING	2	
3	EM16607	SADDLE, SPRING	2	
4	EM16605	U BOLT WITH NUTS AND WASHERS	4	
5	EM923347	9/16" LOCK WASHER	8	
6	EM16612	9/16" LOCK NUT	8	
7	EM16609	LINK SHACKLE L1A	4	
8	EM166081	BUSHING, PLASTIC	2	
9	EM966259	SHACKLE BOLT	4	
10	EM16612	LOCK NUT	4	
11	EM16611	BOLT	2	
12	EM16612	LOCK NUT	2	
13	EM16610	DRUM, BRAKE	2	
14	EM166141	BRAKE ASSY.	2	
16	EM492451	BOLT, 3/8"- 24 X 1 HEX HEAD	10	
17	0166A	3/8" LOCK WASHER	10	
18	EM492574	NUT 3/8"- 24	10	
19	EM26615	15 INCH TIRE AND WHEEL	2	
20	EM924006	COTTER PIN	2	
21	EM26519	LUG NUT, CHROME	12	
22	EM26520	CAP, 15" CHROME	2	
23	EM511418	FENDER RIGHT-SIDE	1	
24	EM513087	FENDER LEFT-SIDE	1	
25	981635	BOLT, HHC 1/2- 13 X 3/4	8	
26	6109180	WASHER LOCK 1/2"	8	

BRAKE LINE ASSY.

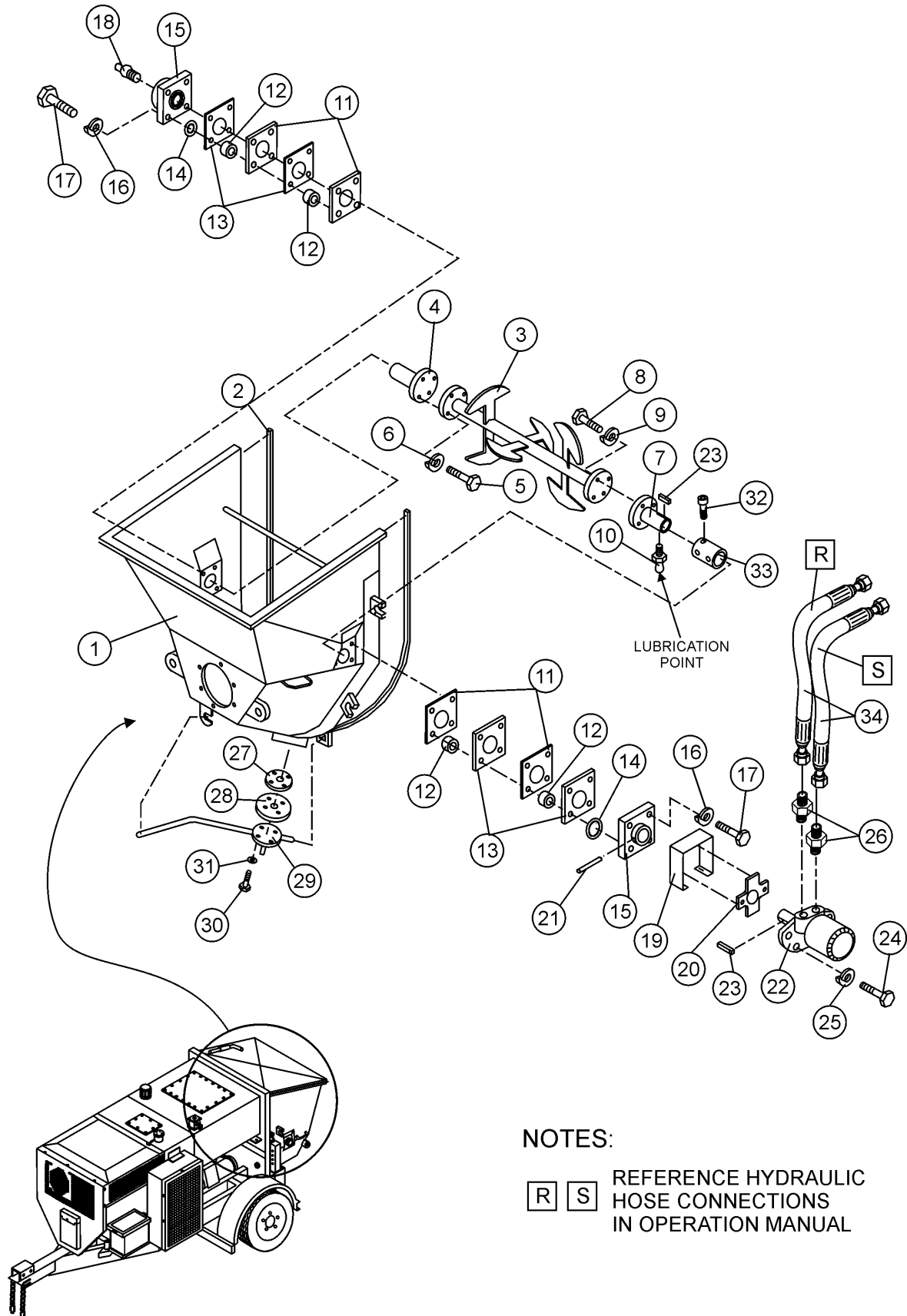


NOTE:
ITEM 6 INCLUDES ALL ITEMS
WITHIN DASHED LINE

BRAKE LINE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	TBD	NUT	2	
2	TBD	LOCK WASHER	2	
3	EM16602	SURGE BRAKE ACTUATOR	1	
4	TBD	BOLT	1	
5	EM166021	ACTUATOR COVER	1	
6	EM16116	BRAKE LINE KIT	1	

HOPPER ASSY.



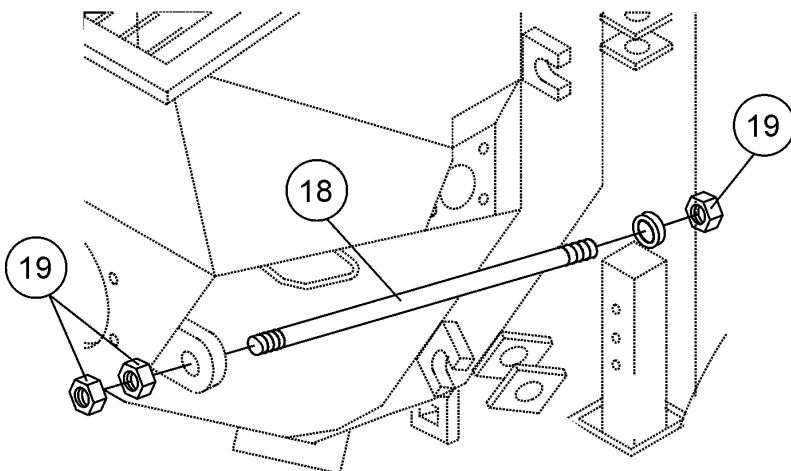
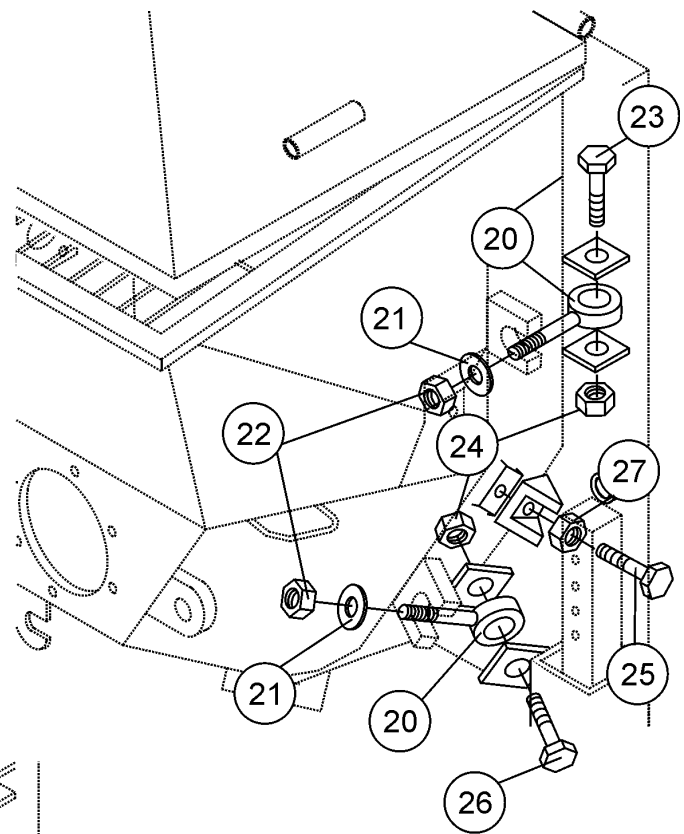
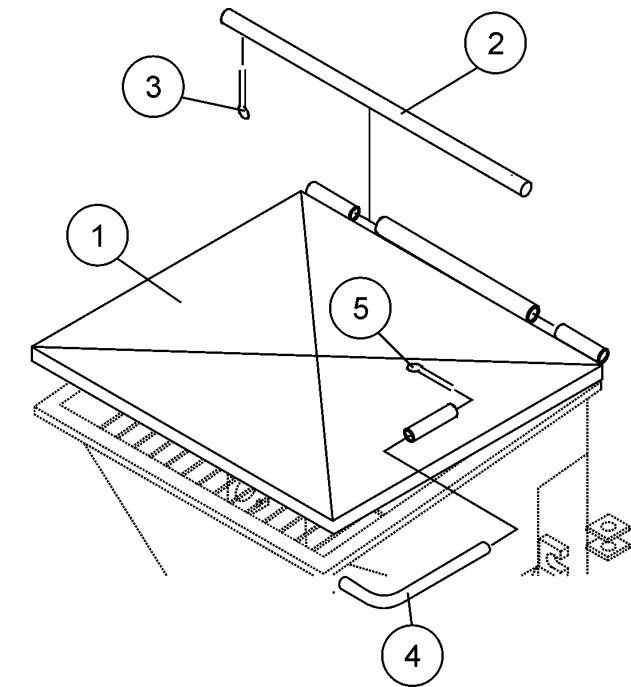
NOTES:

R **S** REFERENCE HYDRAULIC HOSE CONNECTIONS IN OPERATION MANUAL

HOPPER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM25174	HOPPER ASSY.	1	
2	EM16184	HOPPER SEAL 3/8" X 1/2	1	
3	EM25863	REMIXER, SHAFT	1	
4	EM23305	SHAFT, ADAPTOR	1	
5	EM963610	CAPSCREW	4	
6	0166A	LOCK WASHER 3/8"	4	
7	EM25301	SHAFT, DRIVE END	1	
8	EM963610	CAPSCREW	4	
9	0166A	LOCK WASHER 3/8"	4	
10	EM916001	GREASE FITTING	1	
11	EM18137	SHAFT GASKET	4	
12	EM18138	SPACER	16	
13	EM181361	SPACER PLATE	4	
14	EM621	1/2" WILLIAMS WASHER	4	
15	EM18135	BEARING FLANGE	2	
16	6109180	LOCK WASHER 1/2"	8	
17	EM492397	BOLT, HEX 1/2"- 13 X 2 1/2"	8	
18	EM916001	GREASE FITTING	1	
19	EM50141	MOUNT, REMIX MOTOR	1	
20	EM501411	MOTOR MOUNT PLATE	1	
22	EM25425	MOTOR, HYDRAULIC REMIX	1	
23	EM750	KEY 1/4" X 3/8" X 1	1	
23	505719	KEY 1/4" SQ.	1	
24	EM963692	CAPSCREW 1/2" X 13 X 1 1/2"	2	
25	6109180	LOCK WASHER 1/2"	2	
26	506203	FITTING	2	
27	EM708601	PISTON CUP HOLDER	1	
28	EM50417	PISTON CUP	1	
29	EM708602	HANDLE	1	
30	492378	BOLT	4	
31	0166A	LOCK WASHER	4	
32	492465	ALLEN SCREW	4	
33	512791	MOTOR COUPLING	1	
34	EM25483	HOSE	2	

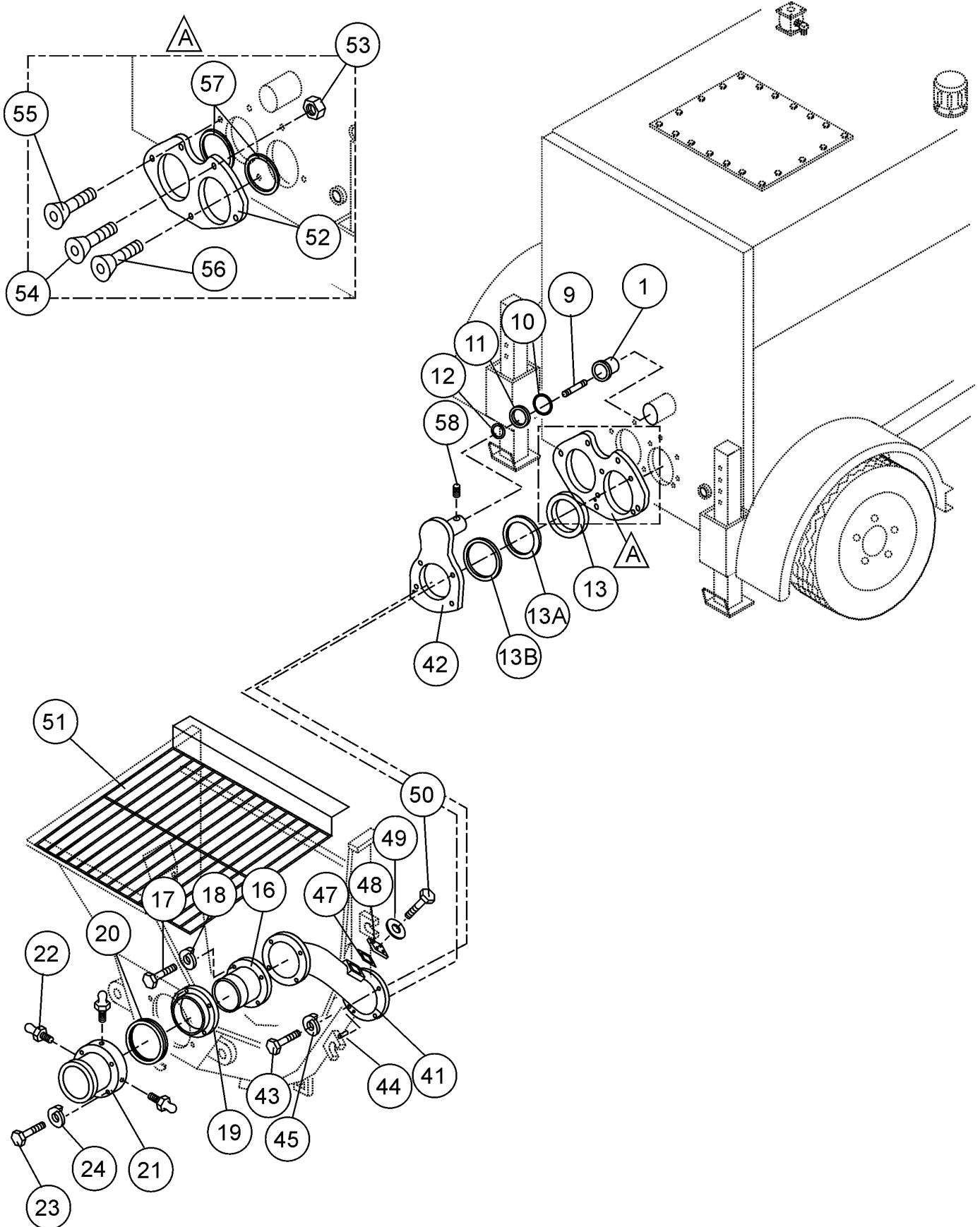
HOPPER ATTACHMENT ASSY.



HOPPER ATTACHMENT ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM70134-1	SPLASH PLATE	1	
2	EM16159	HINGE PIN	1	
3	EM491686	COTTER PIN 1/8" x 1-3/4"	2	
4	EM70134-2	SPLASH PLATE PIN	1	
5	EM505723	COTTER PIN 5/32" x 1-1/2"	1	
18	EM16166	ROD TIE, 1"- 8 NC X 28	2	
19	EM505728	NUT, HEX 1" NC	6	
20	EM14165	EYE BOLT	4	
21	EM619	WILLIAMS WASHER 3/4"	4	
22	EM968446	NUT, HEX 3/4"	4	
23	EM505121	BOLT, HEX	4	
24	EM968446	NUT, HEX 3/4"	4	
25	505123	BOLT 1/2" N/C X 2.1/2"	2	
26	EM968446	BOLT 1/2" N/C X 2.1/2"	2.....	REPLACES 492558
27	6109160	NUT, HEX 1/2" X 13	3	

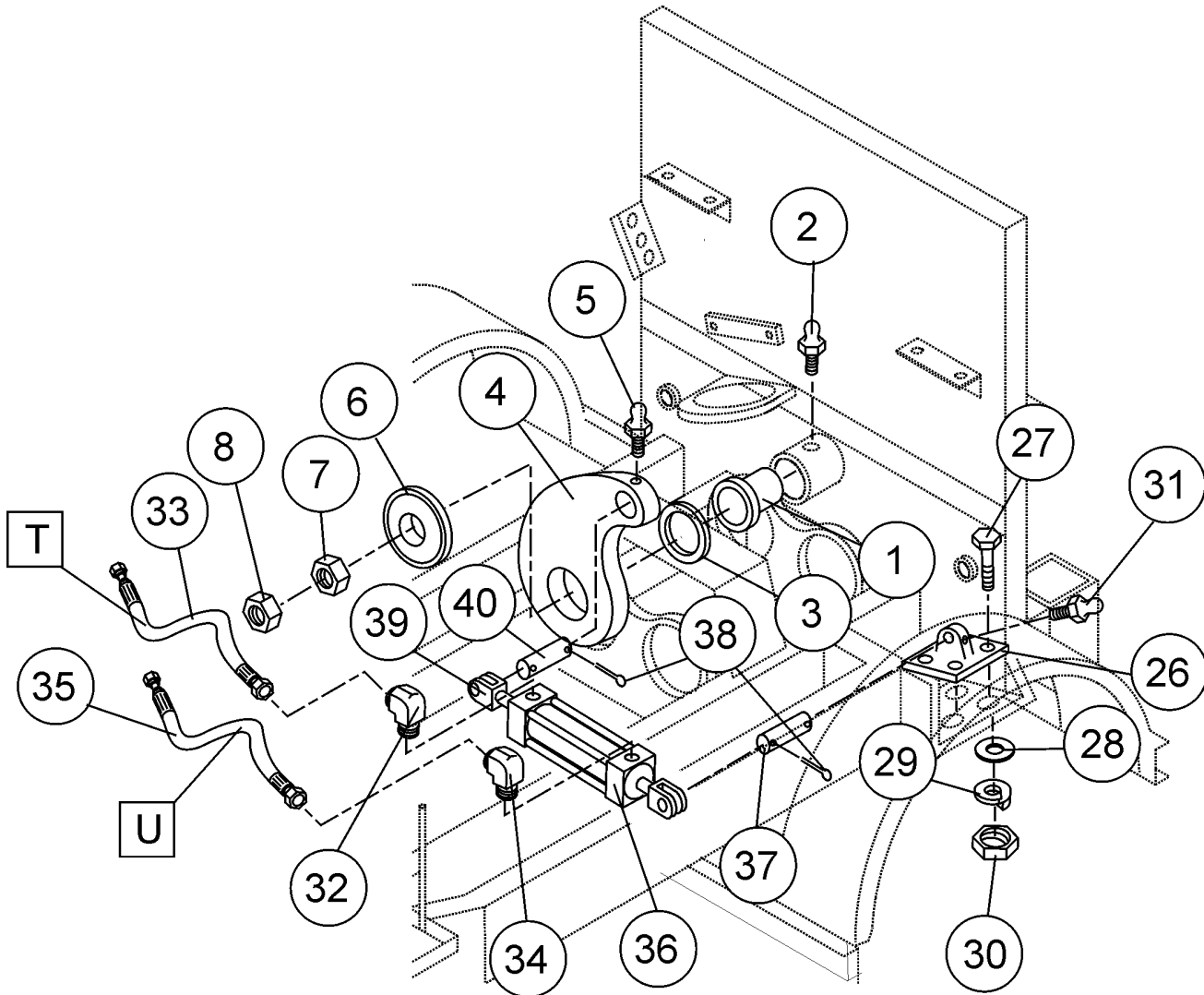
HOPPER INTERIOR ASSY.



HOPPER INTERIOR ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM16145	SWING AXLE BUSHING	1	
9	EM284	1- 14 X 5 STUD GR8	1	
10	EM16175	O- RING	1	
11	EM16170	SHUTTLE AXEL RING SEAL	1	
12	EM16176	O- RING	1	
13	EM98022	WEAR RING, hard faced	1	
13A	EM16816-2	RING, INSERT STEEL	1	
13B	EM16816-1	RING, ENERGIZED RUBBER	1	
14	EM98039	BEVELED RING	4	
16	EM16804	DISCHARGE SLEEVE	1	
17	EM104	BOLT 1/2- 13 X 5	4	
18	EM923348	5/8" LOCK WASHER	4	
19	EM25803	DISCHARGE PLATE BEARING	1	
20	EM98065	SEAL	1	
21	512215	DISCHARGE NIPPLE	1	
22	EM491701	GREASE FITTING	3	
23	EM210	BOLT, HEX 1/2" NC X 3 1/4 G5	6	
24	EM6109180	1/2" LOCK WASHER	6	
41	EM16811	SHUTTLE TUBE	1	
42	EM25843	NUN PLATE	1	
43	EM492393	BOLT, HEX HEAD 1/2" NC X 1 1/4	4	
44	491719	PIN	1	
45	EM923348	5/8 LOCK WASHER	4	
47	EM20816	O- RING	1	
48	EM16802	INSPECTION PLATE	1	
49	EM963102	CAP SCREW, HEX BOLT	4	
50	6109180	1/2" LOCK WASHER	4	
51	EM16188	HOPPER SCREEN	1	
52	EM295	BOLT, COUNTERSUCK 3/4-10 X 2	1	
53	EM969023	NUT LOCK 5/8"	2	
54	EM265	BOLT, FLAT HEAD 5/8"- 11 X 3"	2	
55	EM295	BOLT, FLAT HEAD 3/4"- 10 X 2"	2	
56	EM264	BOLT, HEX SOC 1/2"- 13 X 3"	1	
57	EM16190	"O" RING	2	

SHUTTLE CYLINDER ASSY.



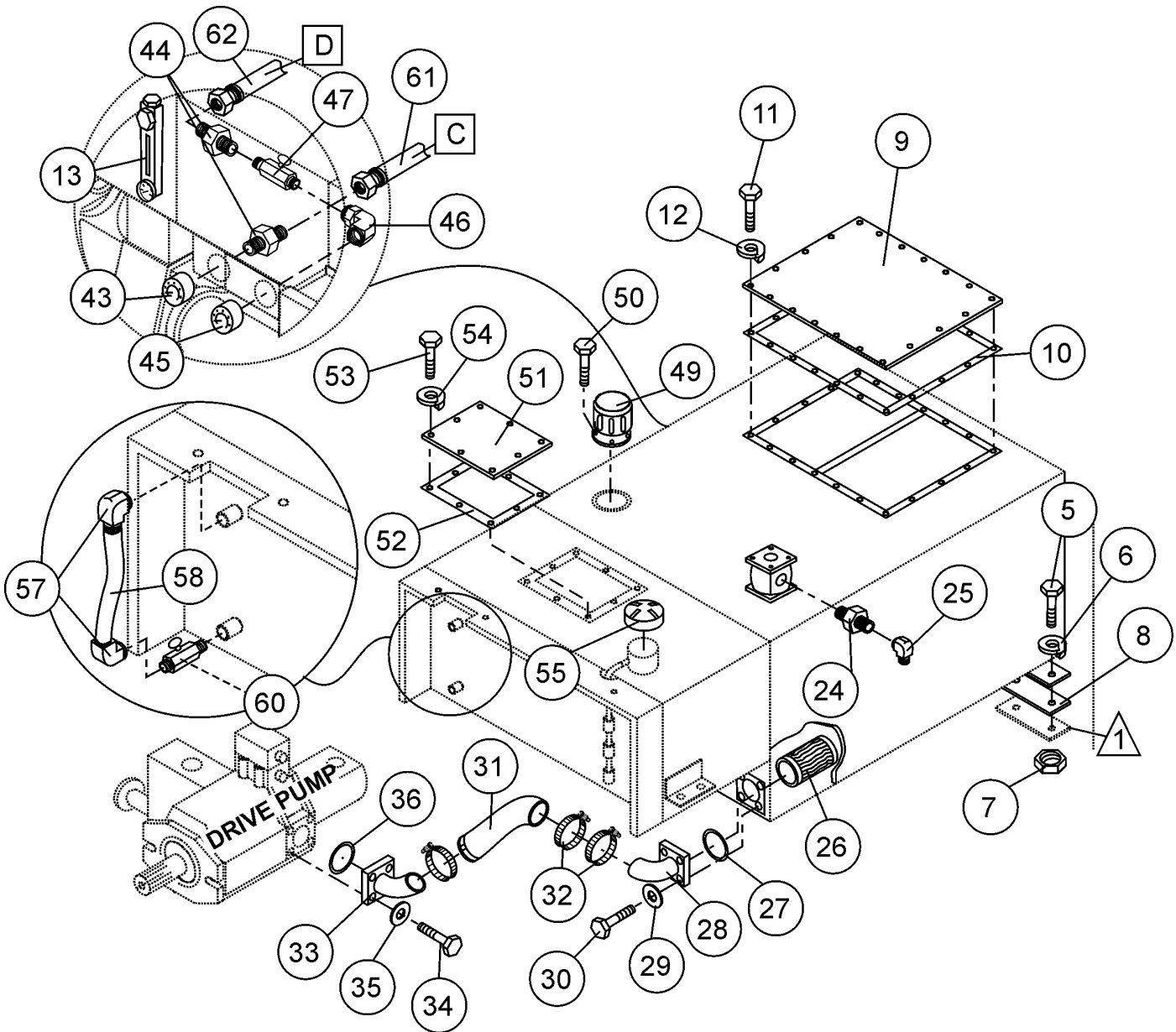
NOTES:

- T REFERENCE HYDRAULIC
- U HOSE CONNECTIONS
IN OPERATION MANUAL

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	1	
2	510684	GREASE FITTING		
3	EM16169	THRUST WASHER	1	
4	EM25236	SHUTTLE CRANK, SPLINED SHAFT	1	
5	EM505490	GREASE FITTING	1	
6	EM16814	TENSIONER	1	
7	EM458	NUT 1- 14	1	
8	EM417	NUT FLEX LOCK	1	
26	EM254549	PIVOT BRACKET	1	
27	492397	BOLT, HEX 1/2"- 13 X 2 1/2"	4	
28	492600	1/2" FLAT WASHER	4	
29	6109180	1/2" LOCK WASHER	4	
30	492584	1/2" LOCK NUT	4	
31	EM505490	FITTING	1	
32	EM25500	FITTING	1	
33	EM509372	HOSE	1	
34	EM25459	FITTING	1	
35	EM509373	HOSE	1	
36	EM25454	SHUTTLE CYLINDER	1	
37	EM254542	CLEVIS PIN 3/4"	1.....	BOTTOM OF ITEM 36
38	EM717	COTTER PIN	2	
39	EM254541	FEMALE CLEVIS	2	
40	EM26126	CLEVIS PIN	1.....	TOP OF ITEM 36

FUEL AND HYDRAULIC TANK CONNECTIONS ASSY.



NOTES:

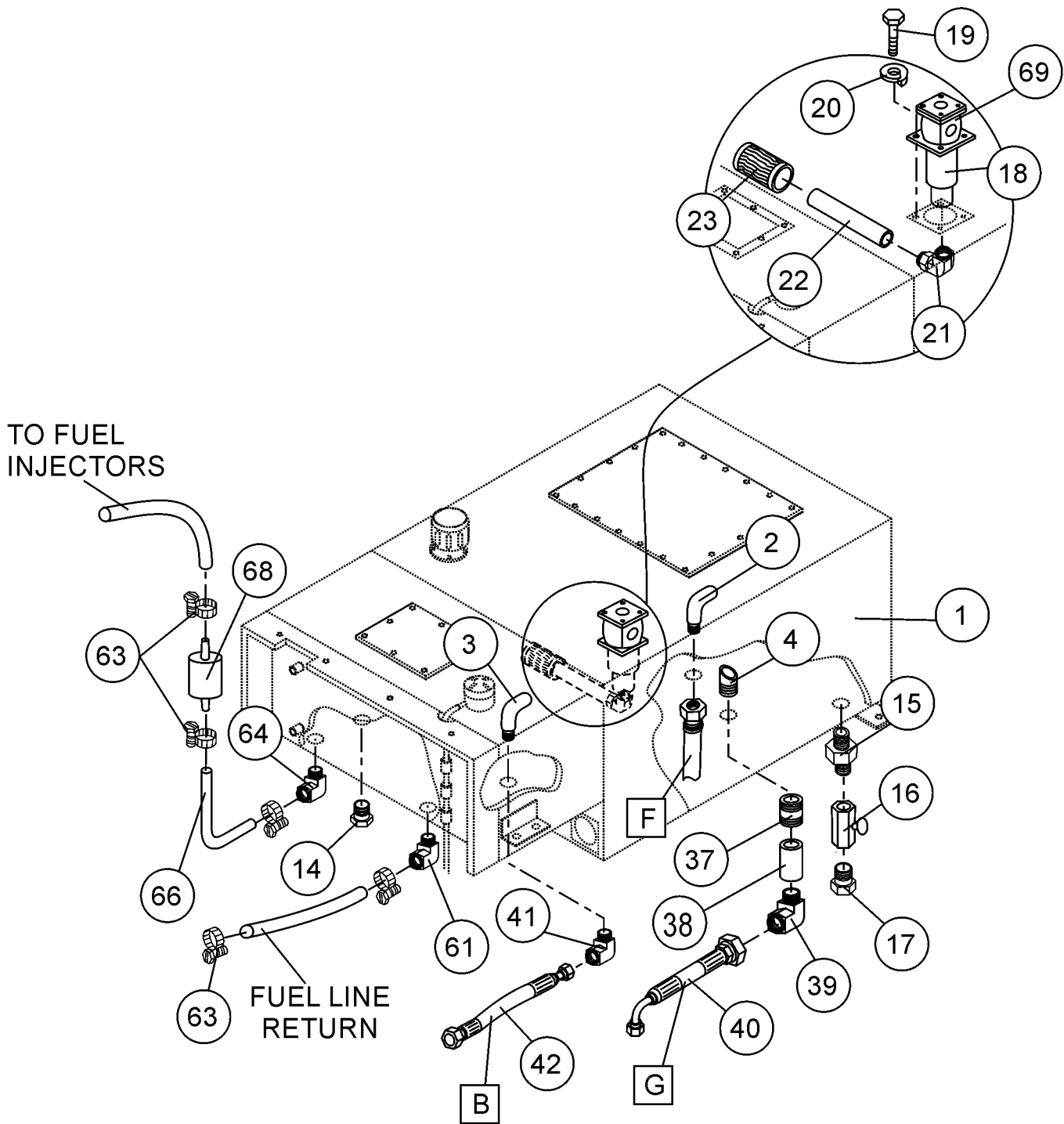
▲ PART OF FRAME

C
D
 REFERENCE HYDRAULIC
 HOSE CONNECTIONS
 IN OPERATION MANUAL

FUEL AND HYDRAULIC TANK CONNECTIONS ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
5	EM963610	BOLT 3/8"	2	
6	3019092	WASHER FLAT 3/8"	2	
7	EM969013	NUT LOCK 3/8"	2	
8	EM25169	GASKET, RUBBER	2	
9	EM251191	TANK COVER PLATE	1	
10	EM25184	RESEVOIR GASKET	1	
11	492364	BOLT HHC 5/16" X 18 X 1"	20	
12	EM923343	WASHER LOCK 5/16" DIAMETER	20	
13	EM16478	SIGHT GAUGE, HYDRAULIC OIL	1	
24	EM16517	BUSHING 912 X 2 RED, REMOVER	1	
25	EM18436	ELBOW, 90 DEGREE MALE	1	
26	EM50424	STRAINER, 2.5 SUCTION	1	
27	EM50466	O- RING	1	
28	EM27441	ELBOW	1	
29	EM635	LOCK 1/2" HI COLLAR	4	
31	EM509437	HOSE	1	
32	EM26471	CLAM 2"	4	
33	EM27442	ELBOW	1	
34	EM963692	BOLT 1/2" UNC X 1- 1/2"	4	
35	EM635	LOCK 1/2"	4	
36	509436	O-RING	1	
43	EM90766	GAUGE 3000 PSI	1	
44	EM25523	ADAPTER 4- 4- GTX- S	1	
45	EM97067	GAUGE 5000 PSI	1	
46	EM491396	ELBOW	1	
47	EM16414	VALVE NEEDLE	1	
49	EM16477	CAP HYDRAULIC OIL TANK	1	
50	492267	BOLT, ALLEN 3/16" DIAMETER	6	
51	511010	COVER PLATE	1	
52	511012	GASKET	1	
53	492357	BOLT HHC 1/4"- 20 X 12	8	
54	2101402	WASHER LOCK 1/4" DIAMETER	8	
55	EM25217	FUEL FILLER CAP- BR	1	
57	20426	90° FITTING	1	
58	508827	HOSE, FUEL GAUGE	1	
60	EM20421	FITTING, BALL END CNTRL, CABLE	1	
61	509517	HOSE	1	
62	509516	HOSE	1	

FUEL AND HYDRAULIC TANK CONNECTIONS ASSY. (CONT'D.)



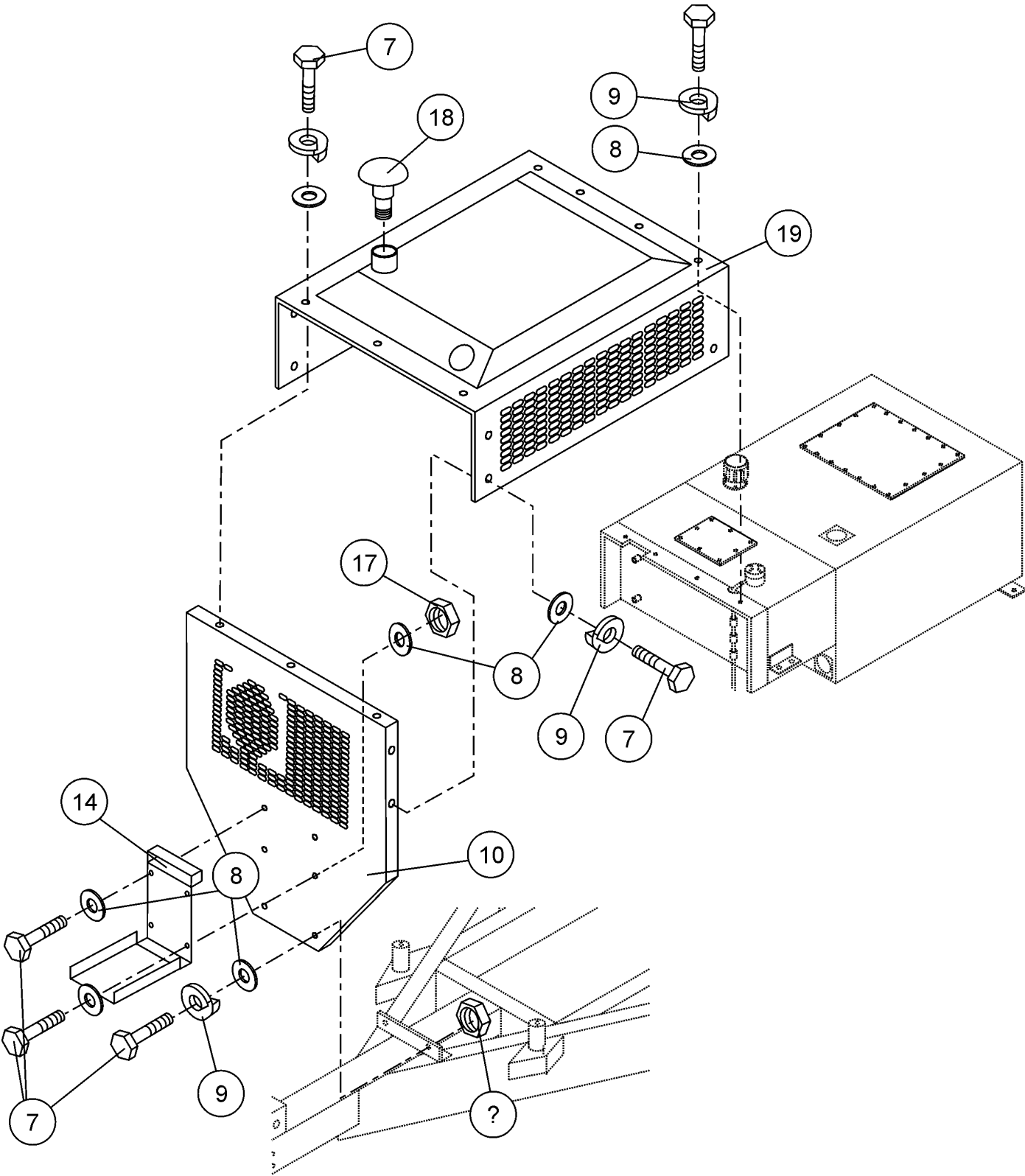
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|---|---|--|
| B | F | REFERENCE HYDRAULIC
HOSE CONNECTIONS
IN OPERATION MANUAL |
| G | | |

FUEL AND HYDRAULIC TANK CONNECTIONS ASSY. (CONT'D.)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	509772	RESERVOIR, FUEL AND HYDRAULIC OIL	1	
2	509786	ELBOW, SUCTION	1	
3	510591	ELBOW	1	
4	491164	SUCTION NIPPLE 3/4"	1	
14	EM18447	PLUG 3/4" PIPE SQ H	1	
15	509369	ADAPTER 1/2- FF- S	1	
16	491237	GATE VALVE 1/2" NPT FEMALE VALVE	1	
17	506094	PLUG 1/2" NPT GALVANIZED	1	
18	16512	RETURN FILTER ASSY.	1	
19	EM963610	CAP SCREW	4	
20	0166A	WASHER, LOCK 3/8" DIAMETER	4	
21	16433	ELBOW	1	
22	16516	TUBE	1	
23	EM16513	DEFUSER	1	
37	510674	NIPPLE 1-1/4" x 2-1/2"	1	
38	509794	COUPLING GALV 1 1/4"	1	
39	EM509795	ELBOW, 1- 1/4 PIPE/ 1- 1/4 JIC	1	
40	510675	HOSE	1	
41	EM510676	ELBOW	1	
42	EM509371	HOSE	1	
61	20426	FITTING	1	
62	512769	HOSE, FUEL	1	
63	506208	CLAMP, HOSE	2	
64	20426	FITTING	1	
68	EM20763	FILTER, FUEL	1	
69	EM165121	RETURN FILTER ELEMENT	1	

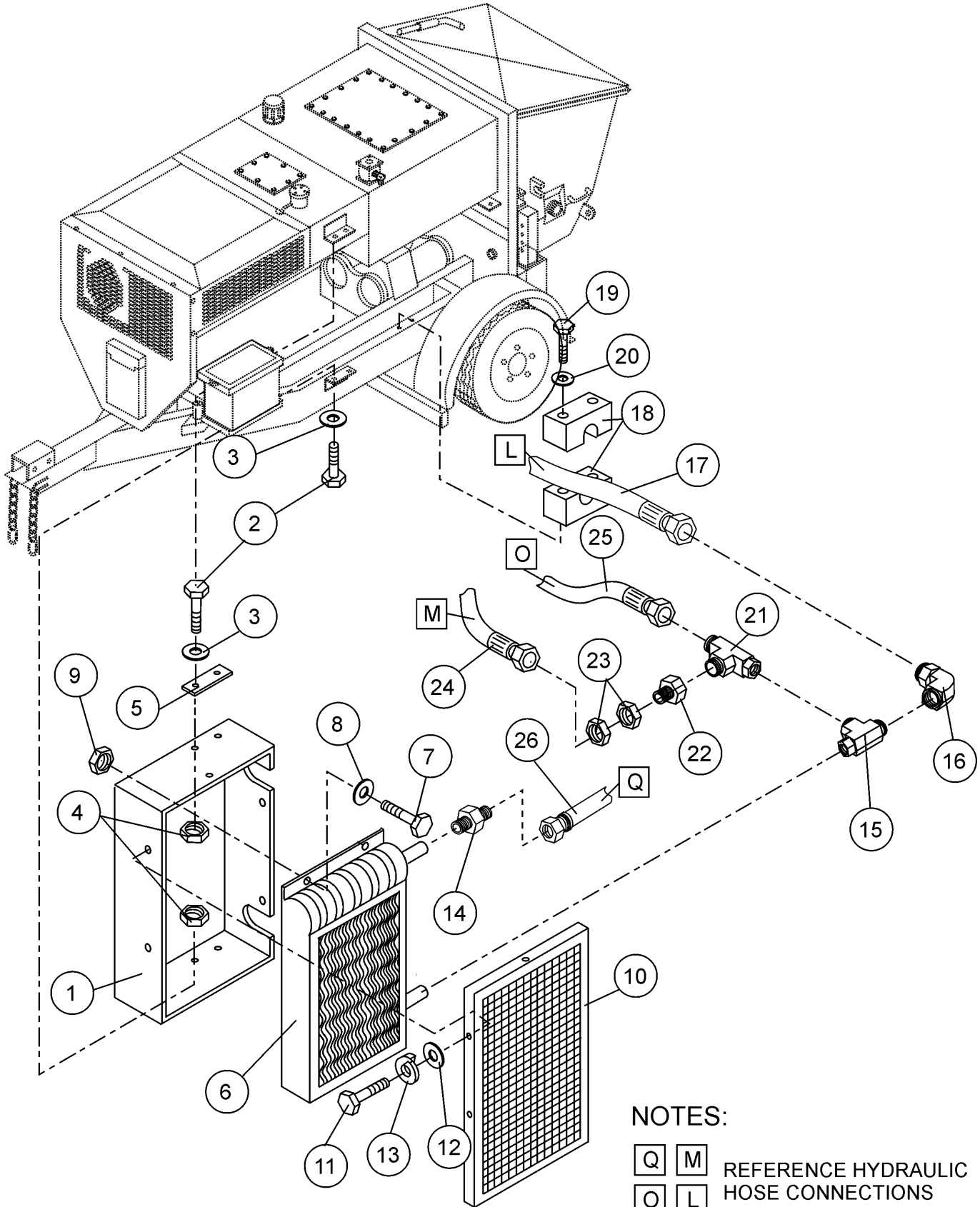
FRONT COVER ASSY.



FRONT COVER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
7	EM963003	BOLT 1/4" NC X 3/4"	19	
8	EM923057	WASHER, FLAT 1/4"	23	
9	2101402	WASHER, LOCK 1/4" DIAMETER	15	
10	EM510271	COVER, FRONT	1	
14	29057	DOCUMENT BOX	1	
17	EM969079	NUT LOCK NYLON 1/4"	4	
18	4384102	CAP, AIR INTAKE	1	
19	510687	COVER, TOP	1	

HEAT EXCHANGER ASSY.



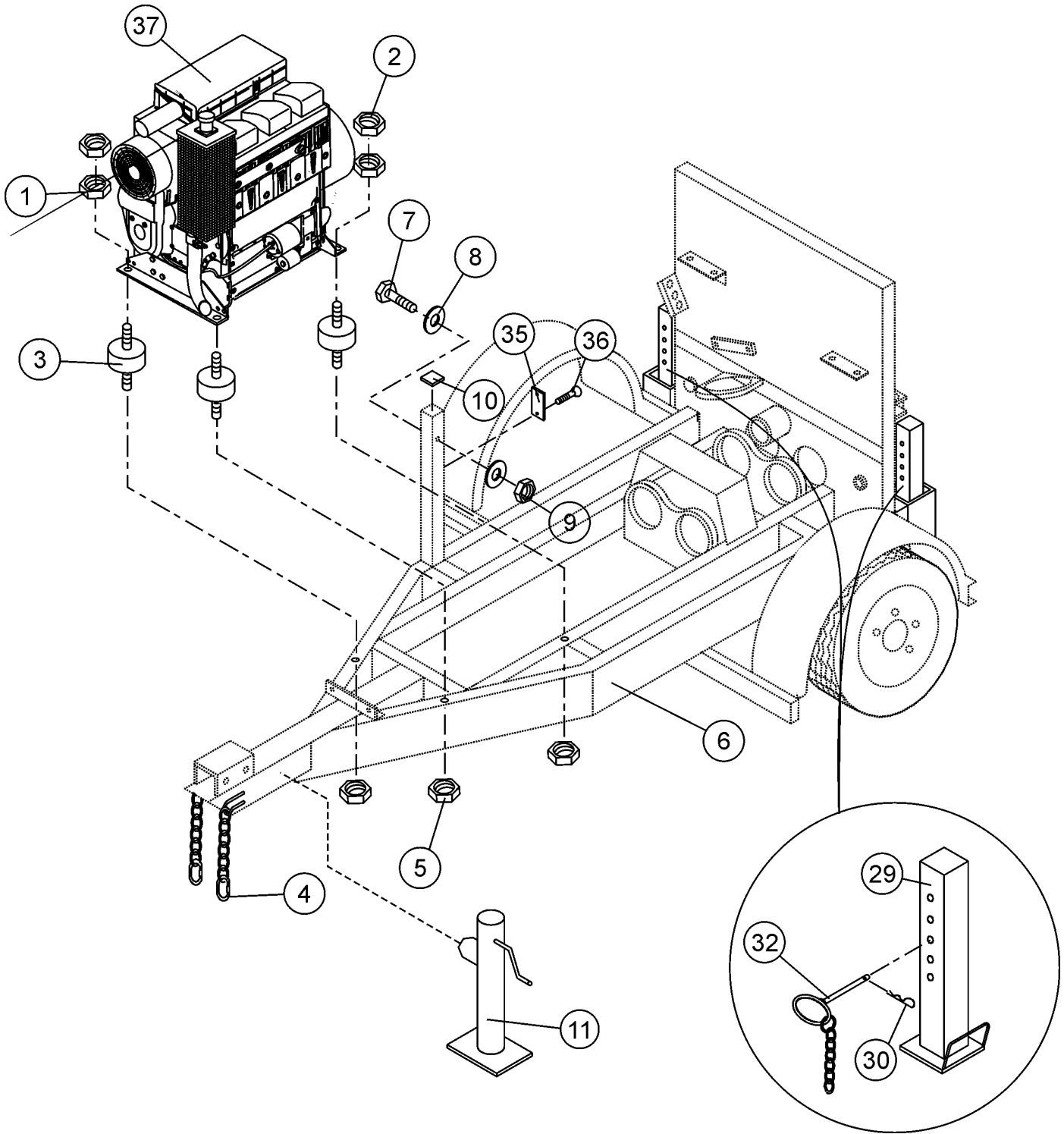
NOTES:

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| Q | M | REFERENCE HYDRAULIC |
| O | L | HOSE CONNECTIONS |
| | | IN OPERATION MANUAL |

HEAT EXCHANGER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
2	EM963610	BOLT 3/8"	4	
3	3019892	WASHER, FLAT 3/8"	6	
4	EM969013	NUT, LOCK 3/8"	4	
5	EM25171	GASKET, RUBBER	1	
6	EM98049	HEAT EXCHANGER	1	
7	492364	SCREW HHC 5/16" X 18 X 1"	4	
8	EM923023	WASHER, FLAT 5/16"	4	
9	2105164	NUT, NYLON 5/16"- 18	4	
10	EM509805	COVER	1	
11	EM963003	BOLT 1/4" NC X 3/4"	6	
12	EM923057	WASHER, FLAT 1/4"	6	
13	2101402	WASHER, LOCK 1/4"	6	
14	EM25498	FITTING, HYDRAULIC	1	
15	EM25566	TEE, FITTING	1	
16	EM509401	ELBOW	1	
17	EM509400	HOSE	1	
18	EM98048	CLAMP	1	
20	EM492625	WASHER LOCK 7/16"	2	
21	EM509344	TEE, FITTING	1	
22	EM509345	FITTING	1	
23	EM509402	NUT	1	
24	EM509378	HOSE, HYDRAULIC	1	
25	EM510984	HOSE, HYDRAULIC	1	
26	EM509374	HOSE, HYDRAULIC	1	

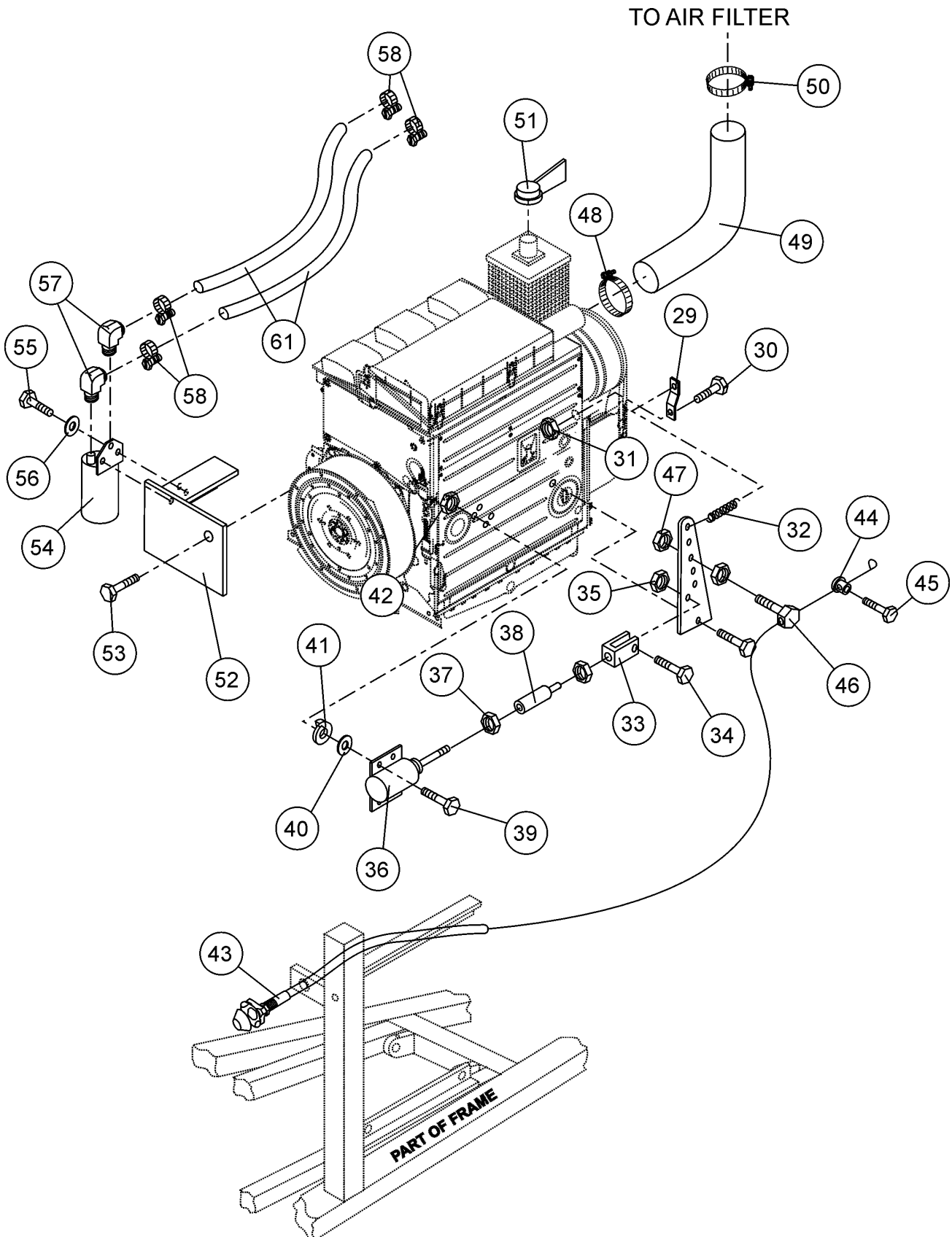
ENGINE AND FRAME ASSY.



ENGINE AND FRAME ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	TBD	NUT	4	
2	020310080	NUT	4	
3	EM23118	SHOCK MOUNT	4	
4	EM01005	CONNECTOR LINK, CHAIN	2	
5	TBD	NUT	4	
6	509405	FRAME, MAIN	1	
7	503117	BOLT, HEX 3/8"	2	
8	3019092	WASHER 3/8"	2	
9	EM969013	NUT, NYLOC	1	
10	508776	RUBBER PAD	1	
11	EM25610	JACK STAND, FRONT	1	
29	EM70186	JACK STAND, REAR	2	
30	EM745	PIN	2	
31	EM744	CLEVIS PIN 1/2" X 4"	2	
32	EM20732	CONNECTOR	2	
35	EM942	TAG, IDENTIFICATION	1	
36	491744	RIVET	2	
37	EM60701	HATZ DIESEL ENGINE 57HP	1	

THROTTLE AND WATER FILTER ASSY.

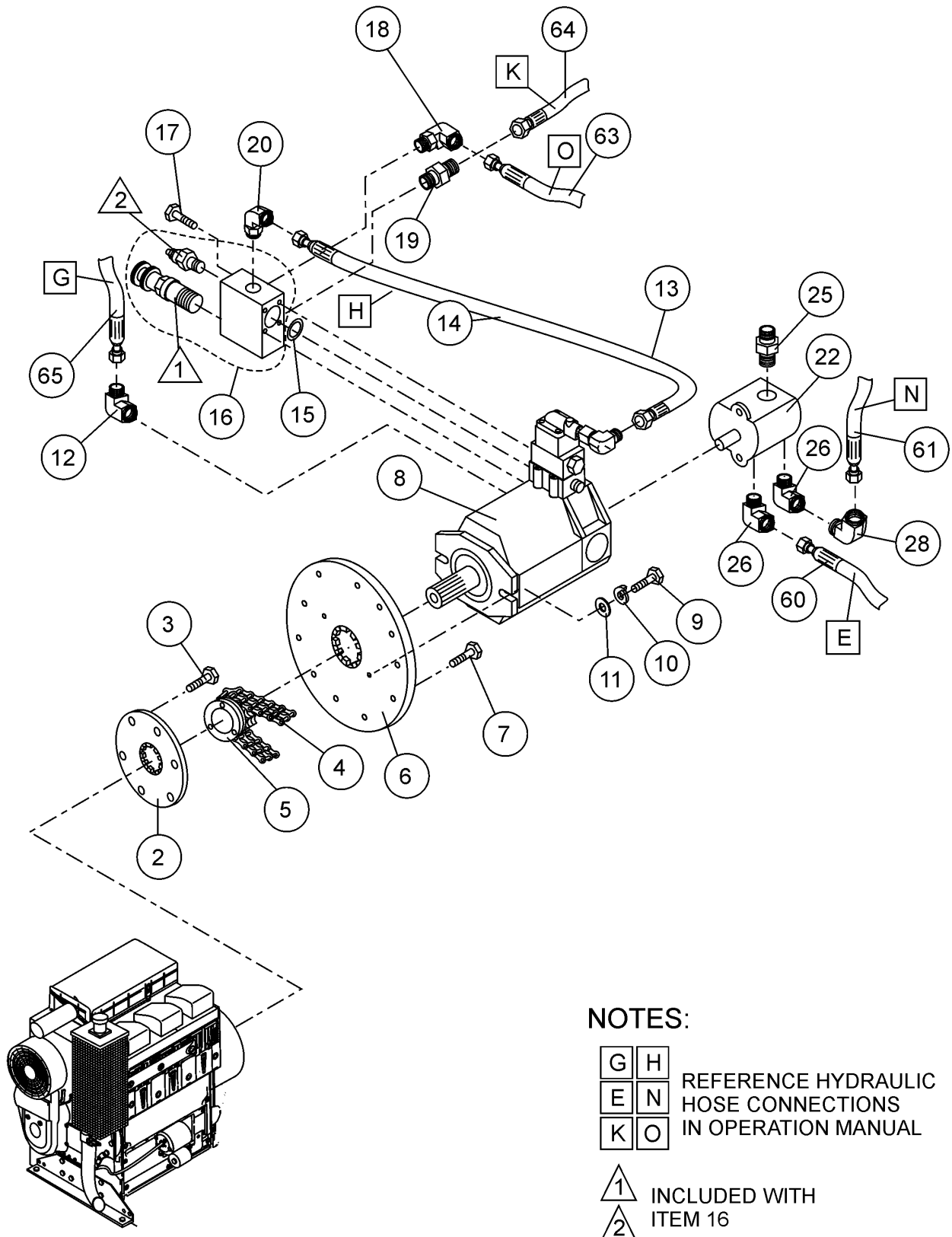


THROTTLE AND WATER FILTER ASSY.

NO.	PART NO.	PART NAME	QTY.	REMARKS
29	EM509414	BRACKET	1	
31	EM969013	NUT LOCK 3/8"	1	
32	EM509510	SPRING	1	
33	EM959119	CLEVIS YOKE 1/4- 28	1	
34	492357	SCREW HHC 1/4"- 20 X 12	1	
35	EM959179	NUT LOCK NYLON 1/4"	1	
36	EM207091	KIT, SOLENOID W/BRACKET	1	
37	EM968435	NUT 1/4"- 20" HEX	2	
38	EM26315	SAFETY LINK ASSEMBLY	1	
39	EM963003	BOLT 1/4" NC X 3/4"	4	
40	2101402	WASHER, LOCK 1/4" DIAMETER	4	
41	EM923057	WASHER, FLAT 1/4"	4	
42	492561	NUT, HEX 1/4"- 20	4	
43	510229	CABLE THROTTLE ASSY.	1	
44	EM501102	BUSHING, LOCK	1	
45	EM491089	BOLT	1	
46	492364	SCREW HHC 5/16" X 18 X 1"	1	
47	2105164	NUT NYLON 5/16- 18	2	
48	510732	HOSE CLAMP	1	
49	EM510733	HOSE	1	
50	510725	CLAMP	1	
51	EM510731	CAP, RAIN	1	
52	EM509449	BRACKET	1	
53	EM269	M10 X 30MM SOC HDCS	2	
54	EM16747	FILTER ASSY, WATER SEPERATOR	1	
55	EM963003	BOLT 1/4" NC X 3/4"	3	
56	2101402	WASHER, LOCK 1/4" DIAMETER	3	
57	EM20426	FITTING	4	
58	506208	CLAMP	2	
61	512790	HOSE, FUEL	1	

HYDRAULIC PUMP ASSY.

PUMP.CDR



NOTES:

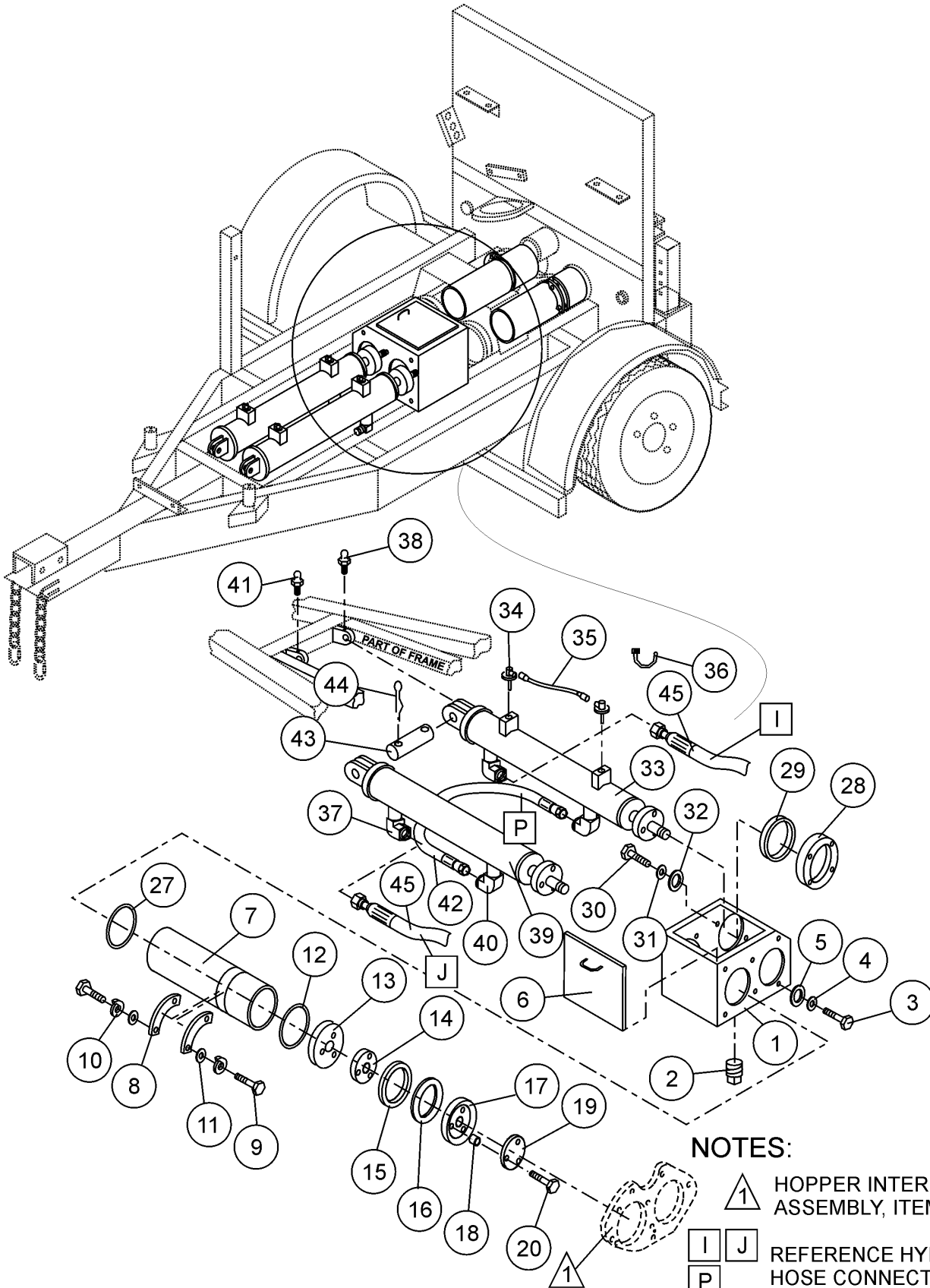
G	H	REFERENCE HYDRAULIC HOSE CONNECTIONS IN OPERATION MANUAL
E	N	
K	O	

1 INCLUDED WITH
 ITEM 16
 2 INCLUDED WITH
 ITEM 16

HYDRAULIC PUMP ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
2	EM16306	COUPLING, ENGINE	1	
3	EM146	BOLT 12 MM X 1" ALLEN HEAD	6	
4	EM16303	COUPLING, CHAIN	1	
5	EM16302	COUPLING, PUMP	1	
6	EM16741	COVER, ENGINE	1	
7	EM162	BOLT 10 X 25MM SOC. HEAD	10	
8	EM98025	PUMP, PISTON	1	
9	EM510902	SCREW	2	
10	EM635	WASHER, LOCK 1/2"	2	
11	492600	WASHER, FLAT 1/2" DIAMETER	2	
12	EM25507	FITTING 8C5 X- S	1	
13	EM25429	ELBOW 6801- 04- 04	1	
14	EM509366	HOSE	1	
15	EM505533	O- RING	1	
16	EM97001	MANIFOLD ASSY.	1	
17	EM509341	BOLT, ALLEN 3/8" - 16 X 5"	4	
18	EM25497	FITTING	1	
20	EM25429	ELBOW 6801- 04- 04	1	
22	EM97002	PUMP, DUAL GEAR	1	
23	EM963610	CAP SCREW	2	
24	0166A	WASHER, LOCK 3/8" DIAMETER	2	
25	EM25498	FITTING - ADAPTOR	1	
26	EM16524	FITTING, 90°	1	
28	506195	FITTING, 90°	1	
60	509637	HOSE	1	
61	509370	HOSE	1	
63	510984	HOSE	1	
64	509374	HOSE	1	
65	509371	HOSE	1	

LUBRICATION PISTONS ASSY.



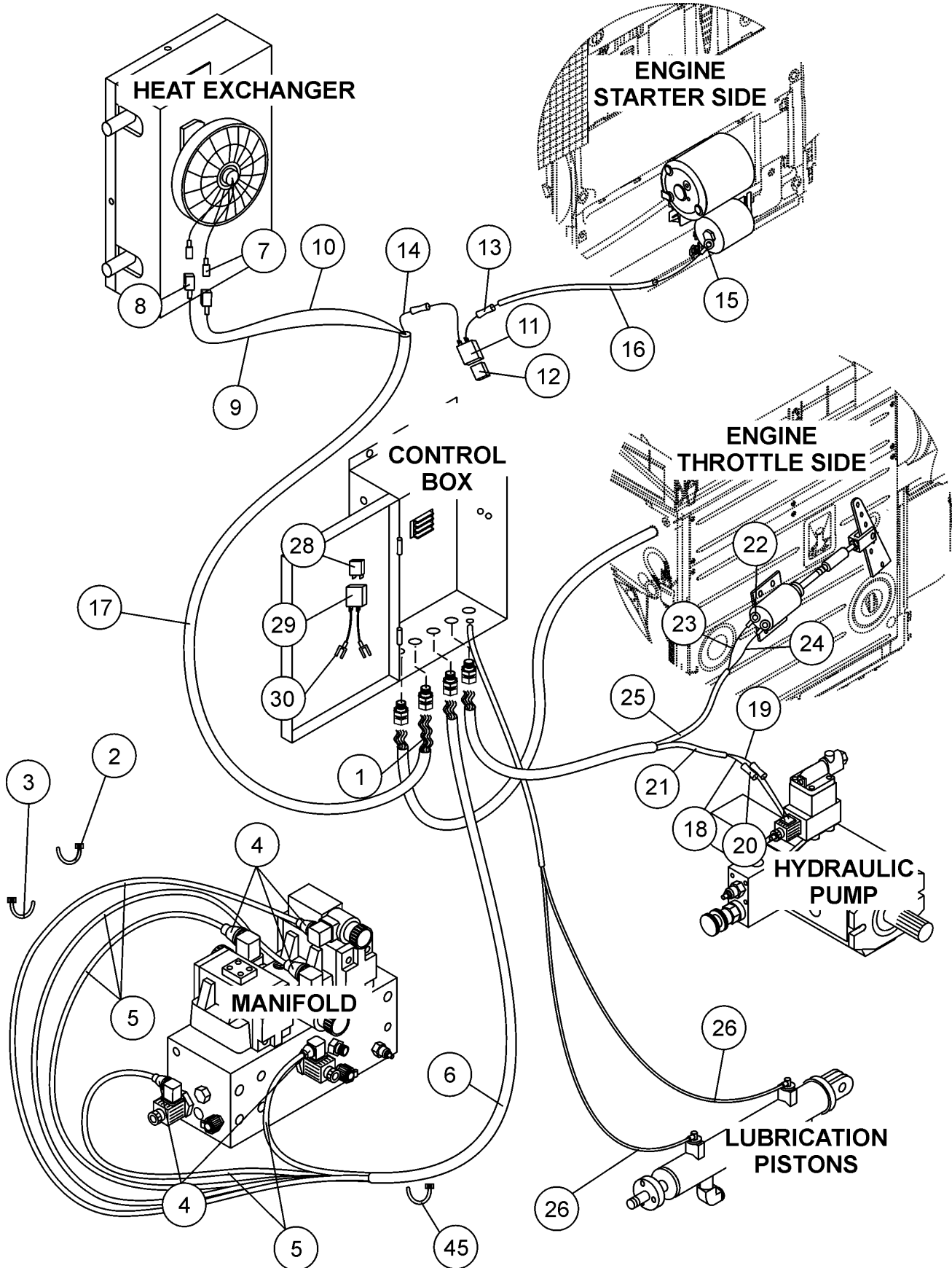
NOTES:

- △ 1 HOPPER INTERIOR ASSEMBLY, ITEM 55
- I J REFERENCE HYDRAULIC HOSE CONNECTIONS IN OPERATION MANUAL
- P

LUBRICATION PISTONS ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM97017	VALVE REMIXER W/LEVER	1	
1	510749	LUBRICATION BOX	1	
2	EM507895	PLUG	1	
3	492378	BOLT G5 HHCS	6	
4	3019092	WASHER, FLAT 3/8"	6	
5	0166A	WASHER, LOCK3/8" DIAMETER	6	
6	510755	COVER, LUBRICATION BOX	1	
7	EM80801	CYLINDER, CONCRETE	2	
8	EM25110	RETAINER, CYLINDER	4	
9	EM963610	CAP SCREW	8	
10	EM0166A	WASHER LOCK 3/8" DIAMETER	8	
11	3019092	WASHER FLAT 3/8"	8	
12	EM14407	O- RING, OILER PLATE	2	
13	EM98033	OILER PLATE	2	
14	EM16462	FELT HOLDER	2	
15	EM16493	RING, FELT	2	
16	EM14408	RING, BRONZE	2	
17	EM98050	CUP, PISTON- ORANGE	2	
18	EM16465	PISTON CUP SPACER	6	
19	EM16464	FACE PLATE	2	
20	510265	BOLT, HEX HEAD 3/8 NC x 3-1/4 IN GS	6	
27	EM16174	O- RING	2	
28	EM50425	FLANGE, RING	2	
29	EM274351	SEAL LUBE BOX	2	
30	EM492451	BOLT 3/8"- 24 X 1" HEX HEAD	8	
31	3019092	WASHER, FLAT 3/8"	8	
32	EM50443	SEAL, OIL BOX	8	
33	EM80424	CYLINDER, DRIVE	1	
34	EM97024	SWITCH PROXIMITY	2	
35	EM97025	CABLE PROXIMITY SWITCH	2	
36	504505	WRAP TIE	8	
37	EM25497	FITTING, 90°	2	
38	EM491701	FITTING, GREASE	2	
39	EM80423	CYLINDER, SLAVE	1	
40	EM25497	FITTING, 90°	2	
42	EM25474	HOSE, HYDRAULIC	1	
43	EM16454	PIN, WRIST	2	
44	505723	PIN, COTTER	4	
45	EM509511	HOSE, HYDRAULIC	2	

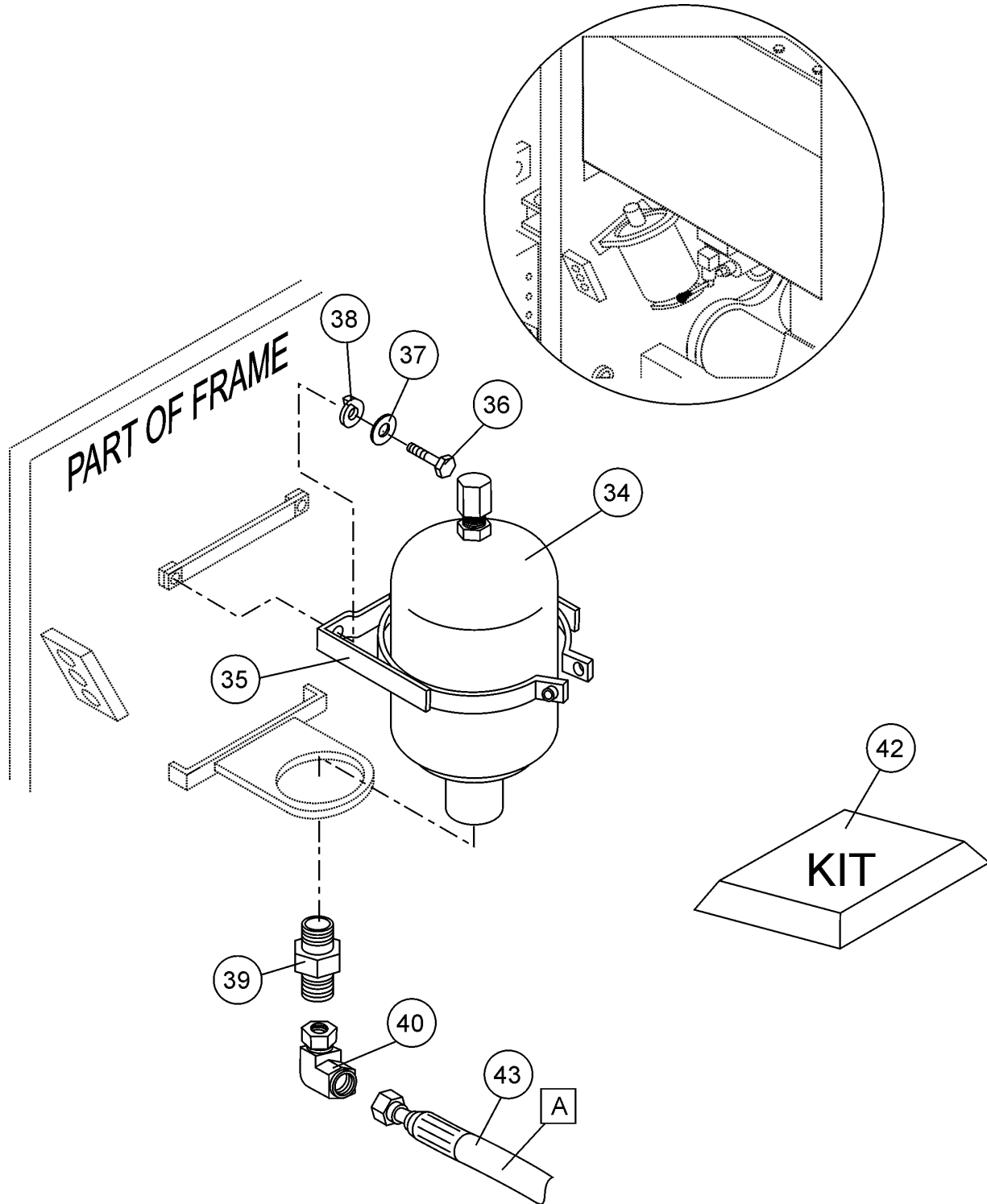
ELECTRICAL SYSTEM ASSY.



ELECTRICAL SYSTEM ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	512759	CABLE HARNESS	1	
2	491028	CABLE WRAP	5	
3	491030	CABLE WRAP	5	
4	EM256073	CONNECTOR BOOT II	5	
5	512760	CONDUCTOR CABLES	5	
6	512761	SHIELD, CABLE	1	
7	505303	TERMINAL CONNECTION	2	
8	508437	TERMINAL CONNECTOR	2	
9	512762	WIRE, HEAT EXCHANGER.....	1.....	WHITE
10	512763	WIRE, HEAT EXCHANGER.....	1.....	BLUE
11	EM98066	HOLDER, FUSE	1	
12	508632	FUSE 25 AMP	1	
13	508259	CONNECTOR	2	
14	512764	WIRE - 1.5M	1.....	RED
15	504984	TERMINAL CONNECTOR 3.8"	1	
16	512800	STARTER CONDUCTOR CABLE	1	
17	512801	SHIELD, CABLE	1	
18	512802	WIRE, PUMP	1.....	BLUE
19	512803	PUMP WIRE	1	
20	508259	CONNECTOR	2	
21	512804	PUMP CONDUCTOR CABLES	1	
22	491894	TERMINAL CONNECTOR.....	2.....	BLUE
23	512805	CABLE, SOLENOID.....	1.....	RED
24	512806	CABLE, SOLENOID.....	1.....	WHITE
25	512807	CABLE, SOLENOID CONDUCTOR	1	
26	EM97025	CABLE, PROXIMITY SWITCH	2	
28	508632	FUSE 25 AMPS	1	
29	508238	BLOCK FUSE	1	
30	505501	FUSE TERMINAL	2	

ACCUMULATOR ASSY.



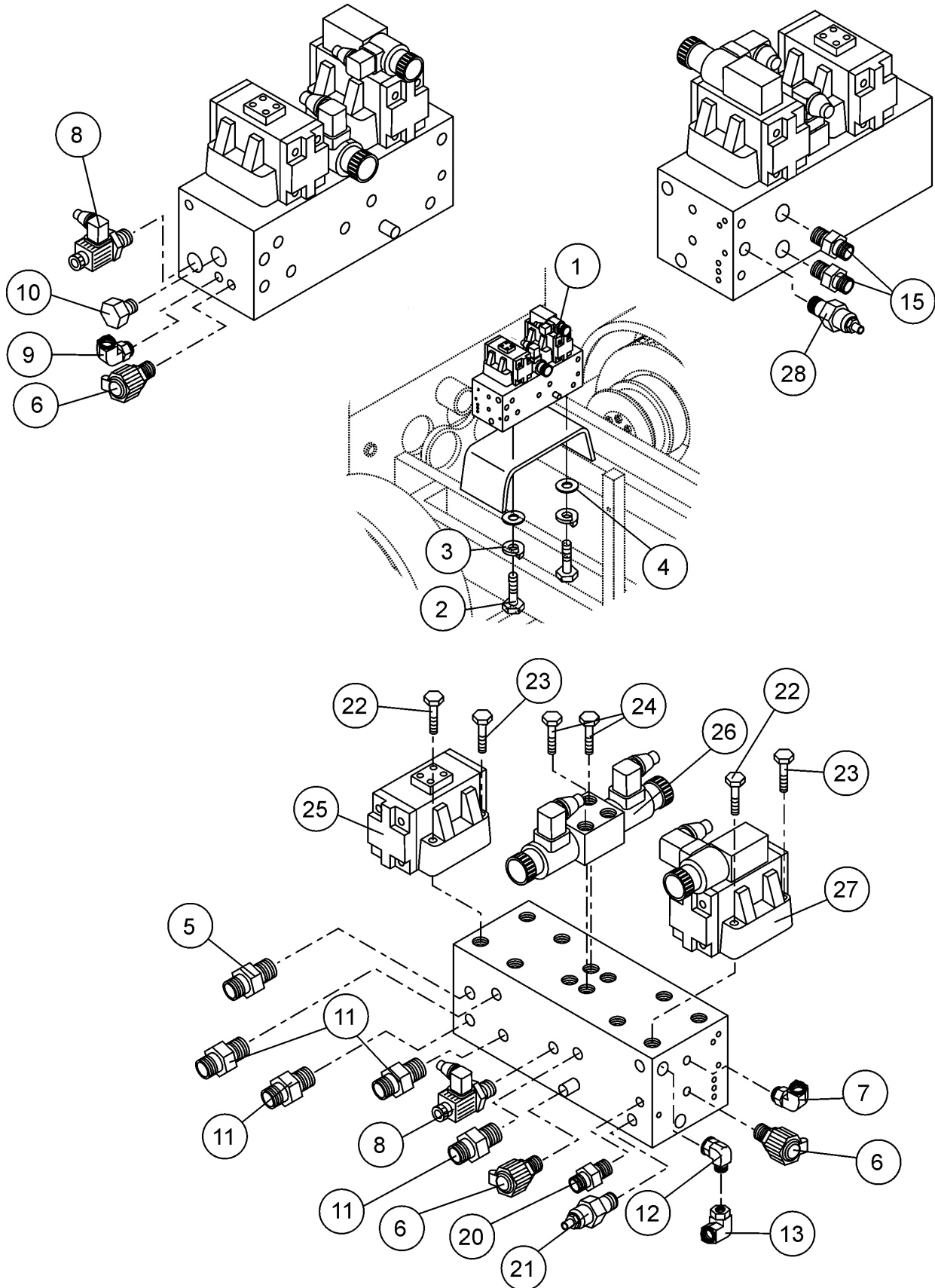
NOTES

- A** REFERENCE HYDRAULIC HOSE CONNECTIONS IN OPERATION MANUAL

ACCUMULATOR ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	518761	COVER, ENGINE	1	
34	EM97015	ACCUMULATOR 1 GALLON	1	
35	EM97016	BRACKET, ACCUMULATOR	1	
36	EM9603055	HHCS 3/8" DIAMETER	2	
37	3019092	WASHER, FLAT 3/8"	2	
38	0166A	WASHER, LOCK 3/8" DIAMETER	2	
39	EM509425	FITTING	1	
40	EM509353	ELBOW	1	
42	EM98009	ACCUMULATOR REPAIR KIT	1	
43	509372	HOSE, ACCUMULATOR	1	

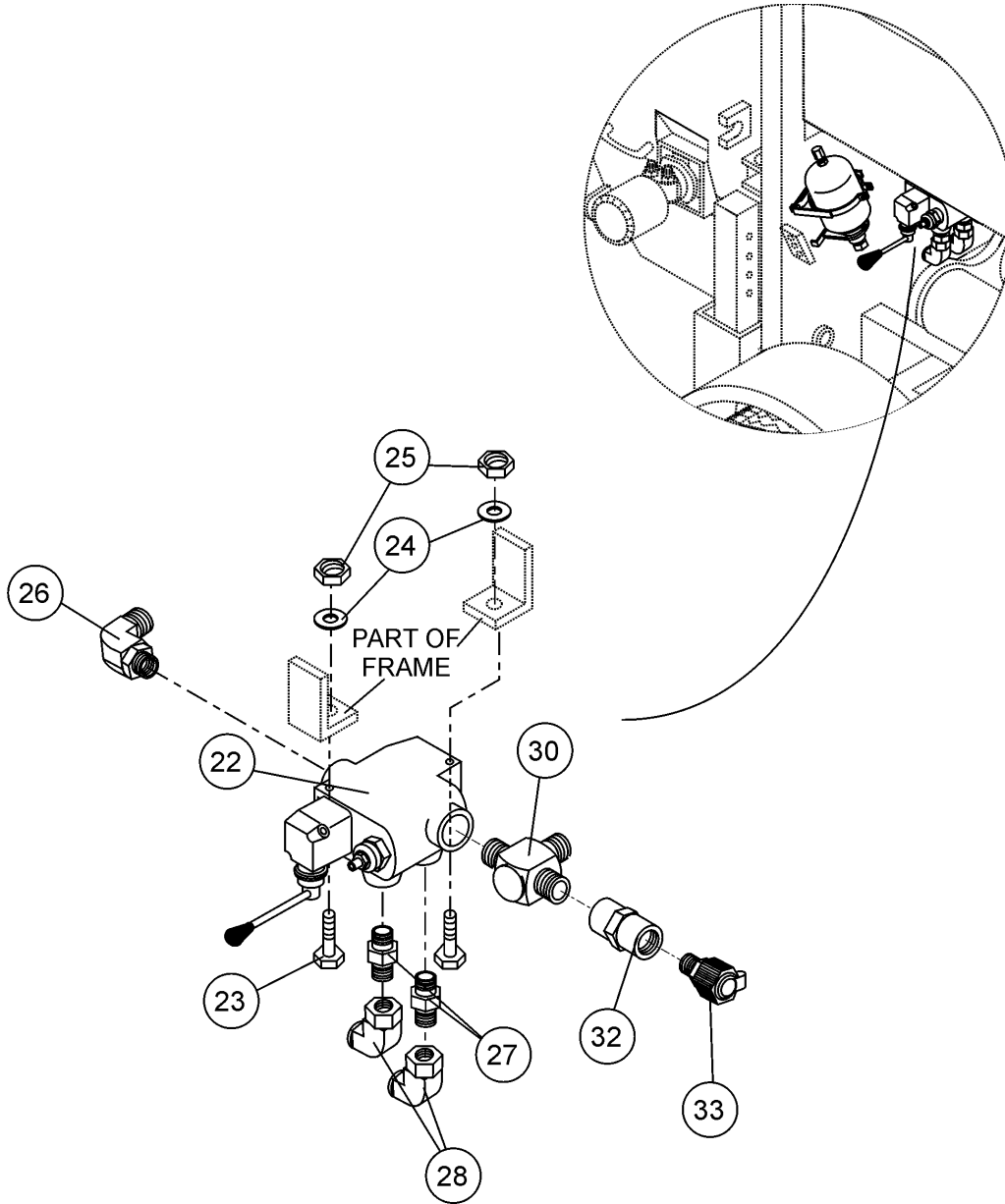
MANIFOLD ASSY.



MANIFOLD ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM97000	MANIFOLD ASSY.	1	
2	EM963610	BOLT 3/8"	4	
3	3019092	WASHER, FLAT 3/8"	4	
4	0166A	WASHER, LOCK 3/8" DIAMETER	4	
5	EM25462	STRAIGHT CONNECTOR 12- 16F5X	1	
6	EM98018	TEST PORT	3	
7	EM25429	ADAPTOR, ELBOW 6801- 04- 04	2	
8	EM98015	TEST PORT	2	
9	TBD	ADAPTOR, ELBOW	1	
10	TBD	PLUG	1	
11	EM25498	FITTING, HYDRAULIC	4	
12	EM509352	ADAPTOR, ELBOW	1	
13	EM509353	ADAPTOR, ELBOW	1	
15	EM25462	STRAIGHT CONNECTOR 12- 16F5X	2	
20	EM509398	ADAPTER	1	
21	EM97010	CARTRIDGE, PILOT RELIEF	1	
22	EM50932	SOCKET HEAD 3/8"-NCx2.5"	8	
23	EM196	SOCKET HEAD 1/4"-NCx2.25"	4	
24	EM508804	SOCKET HEAD 10-NCx2"	4	
25	EM97011	DIRECTIONAL CONTROL VALVE	1	
26	EM97002	PILOT VALVE	1	
27	EM97013	DIRECTIONAL CONTROL VALVE	1	
28	EM97008	CARTRIDGE, UNLOADING VALVE	1	

REMIXER CONTROL ASSY.



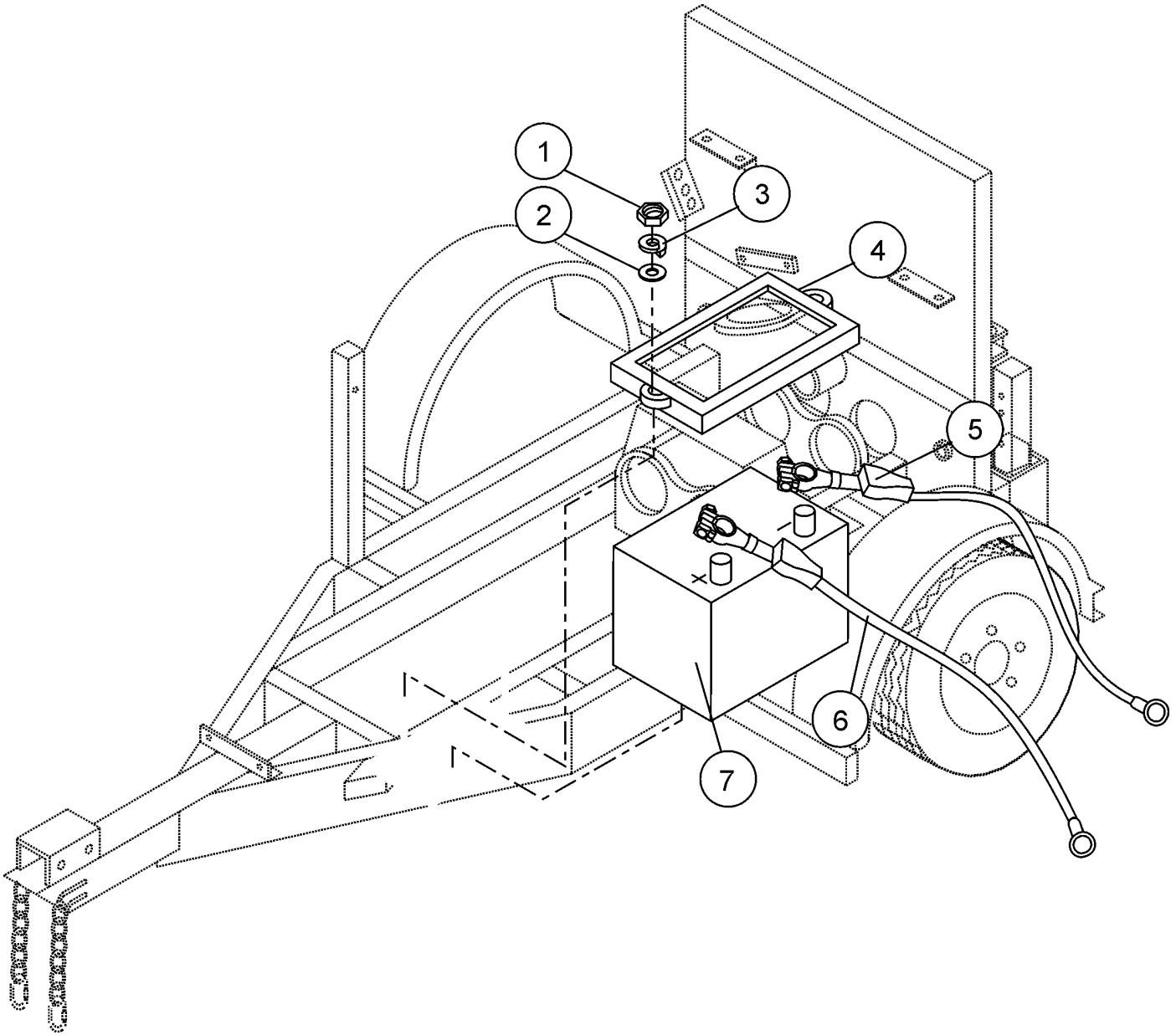
NOTES:

M	N	REFERENCE HYDRAULIC HOSE CONNECTIONS IN OPERATION MANUAL
R	S	

REMIXER CONTROL ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
22	EM97017	VALVE REMIX W/LEVER	1	
23	EM218	BOLT 5/16"- 18 X 2, 1/2HXHDCS	2	
24	EM923343	WASHER, LOCK 5/16" DIAMETER	2	
25	492553	NUT, HEX 5/16" DIAMETER- NC	2	
26	EM25507	FITTING, 90°	1	
27	EM512655	ADAPTER	2	
28	506195	FITTING, 90°	2	
30	EM25563	TEE, CUSTOM	1	
32	EM98012	ADAPTER GAUGE	1	
33	EM98015	COUPLING, TEST PORT	1	

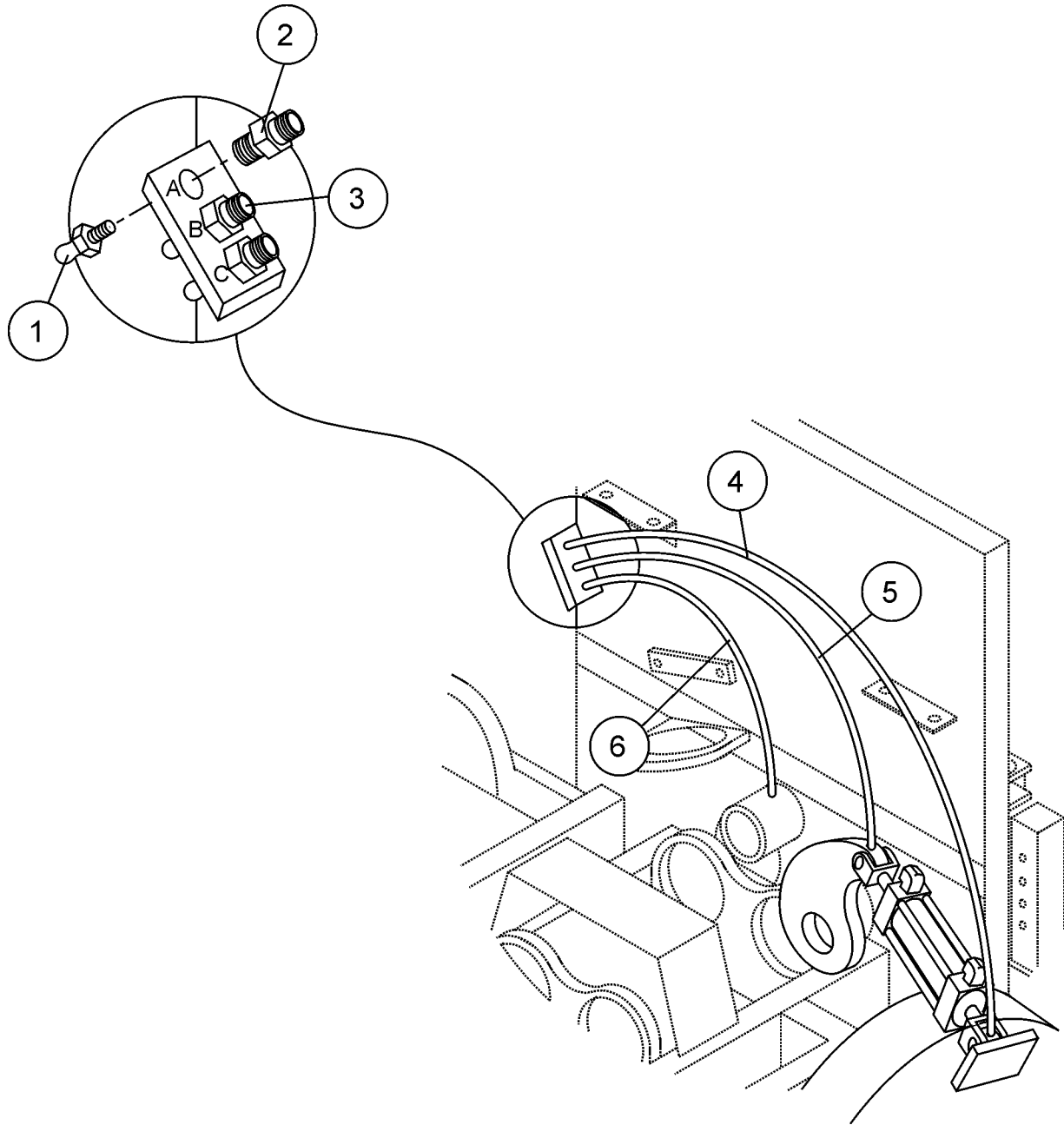
BATTERY ASSY.



BATTERY ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	492561	NUT, HEX 1/4" X 20	2	
2	EM923057	1/4" FLAT WASHER	2	
3	EM492622	1/4" LOCK WASHER	2	
4	EM25708	BATTERY HOLDER FRAME	1	
5	EM16707	CABLE, BATTERY NEGATIVE	1	
6	EM509105	CABLE, BATTERY POSITIVE	1	
7	EM16738	BATTERY	1	

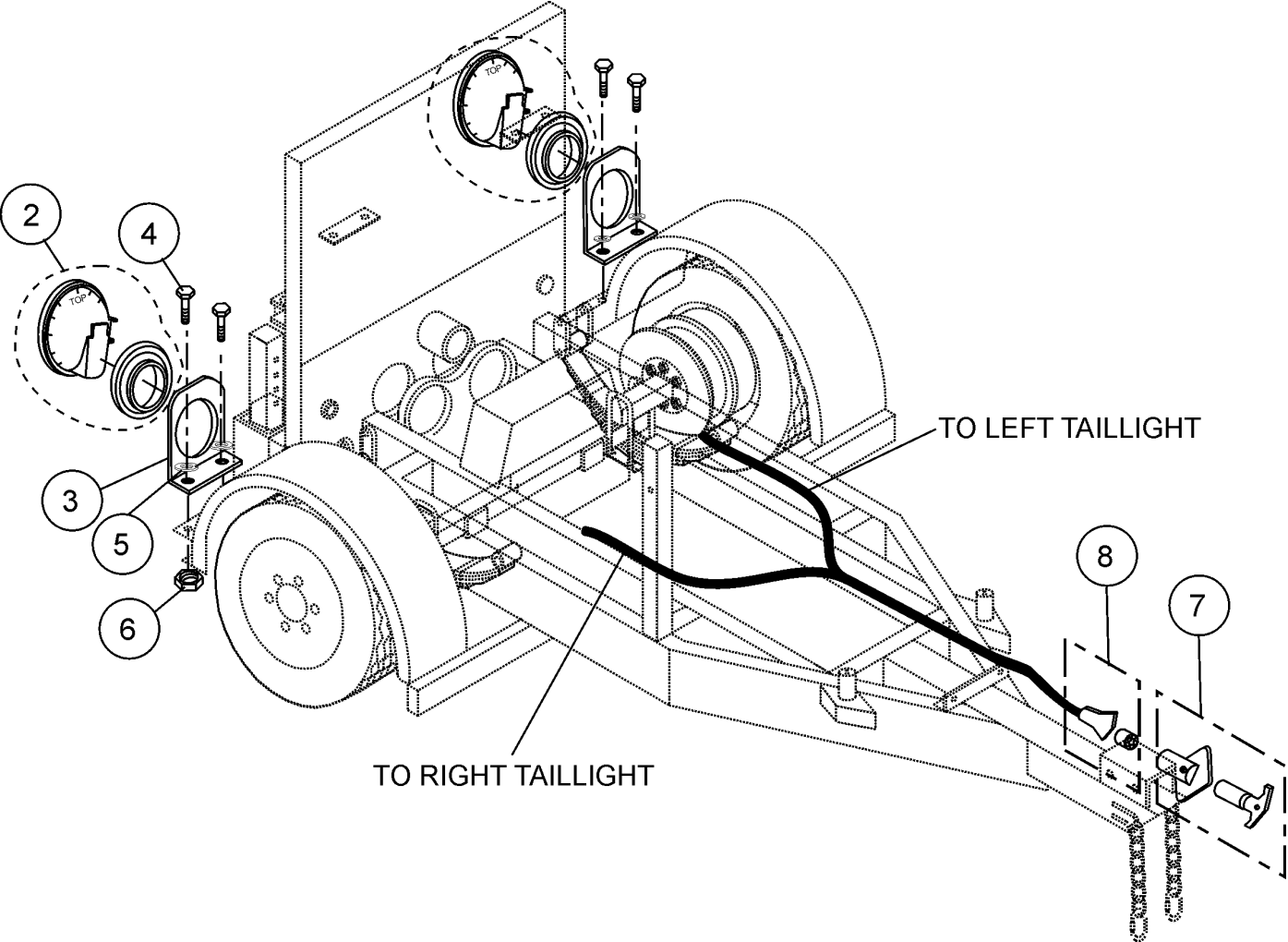
LUBRICATION PANEL ASSY.



LUBRICATION PANEL ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM491701	GREASE FITTING	3	
2	EM208812	CONNECTOIR	2	
3	EM510684	CONNECTOR	3	
4	EM510486	HOSE, PLASTIC	1	
5	EM510487	HOSE, PLASTIC	1	
6	TBD	HOSE, STEEL	1	

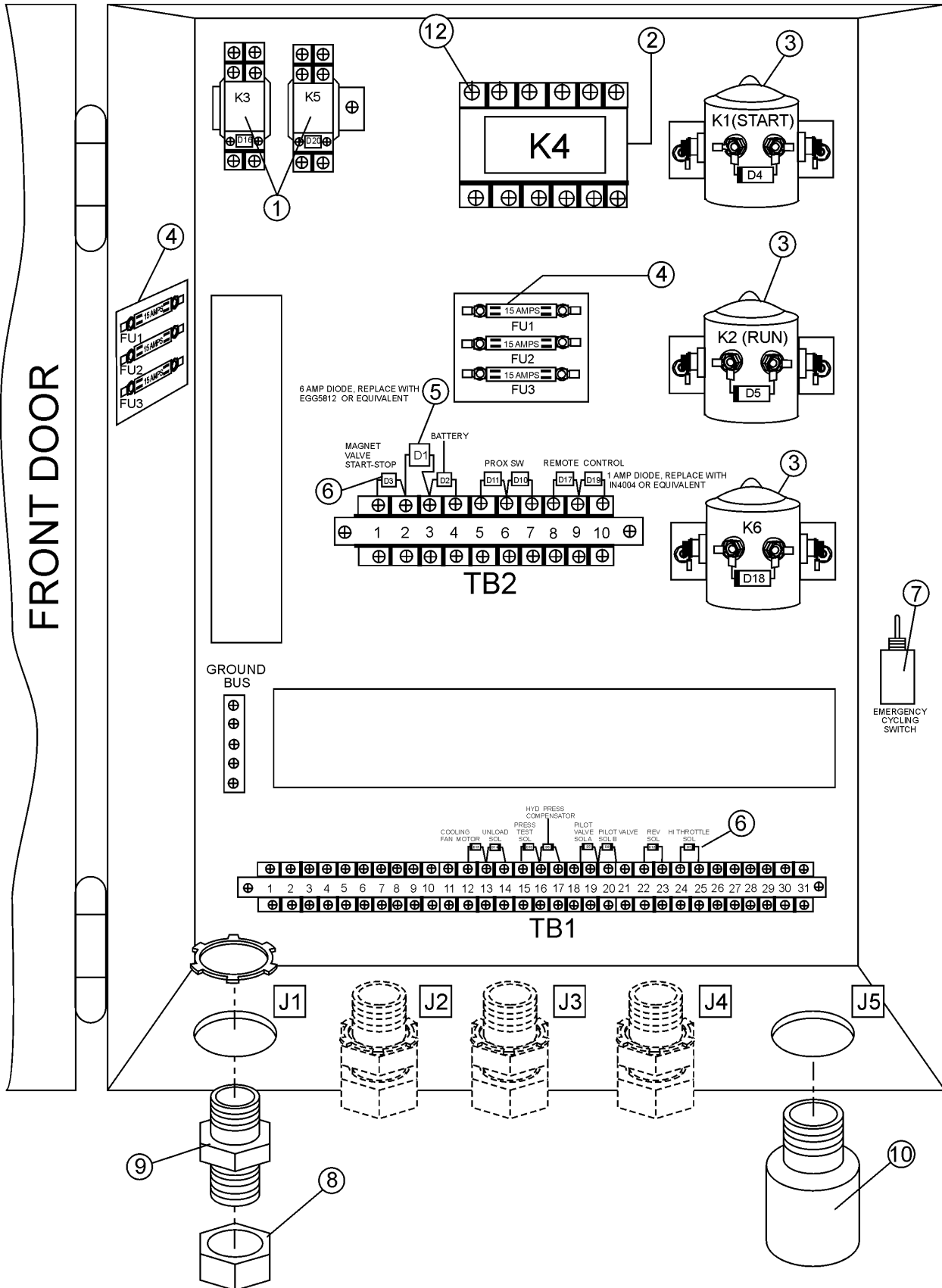
TAIL LIGHT ASSY.



TAIL LIGHT ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
2	EM26536	TAIL LIGHT ASSY.	2	
3	EM265361	TAIL LIGHT BRACKET	2	
4	492364	SCREW, HHC 5/16" X 18- 1	4	
5	EM923343	5/16" LOCK WASHER	4	
6	492553	NUT, HEX 5/16"	4	
7	EM256072	SOCKET, FEMALE	1	
8	EM256071	PLUG, MALE	1	

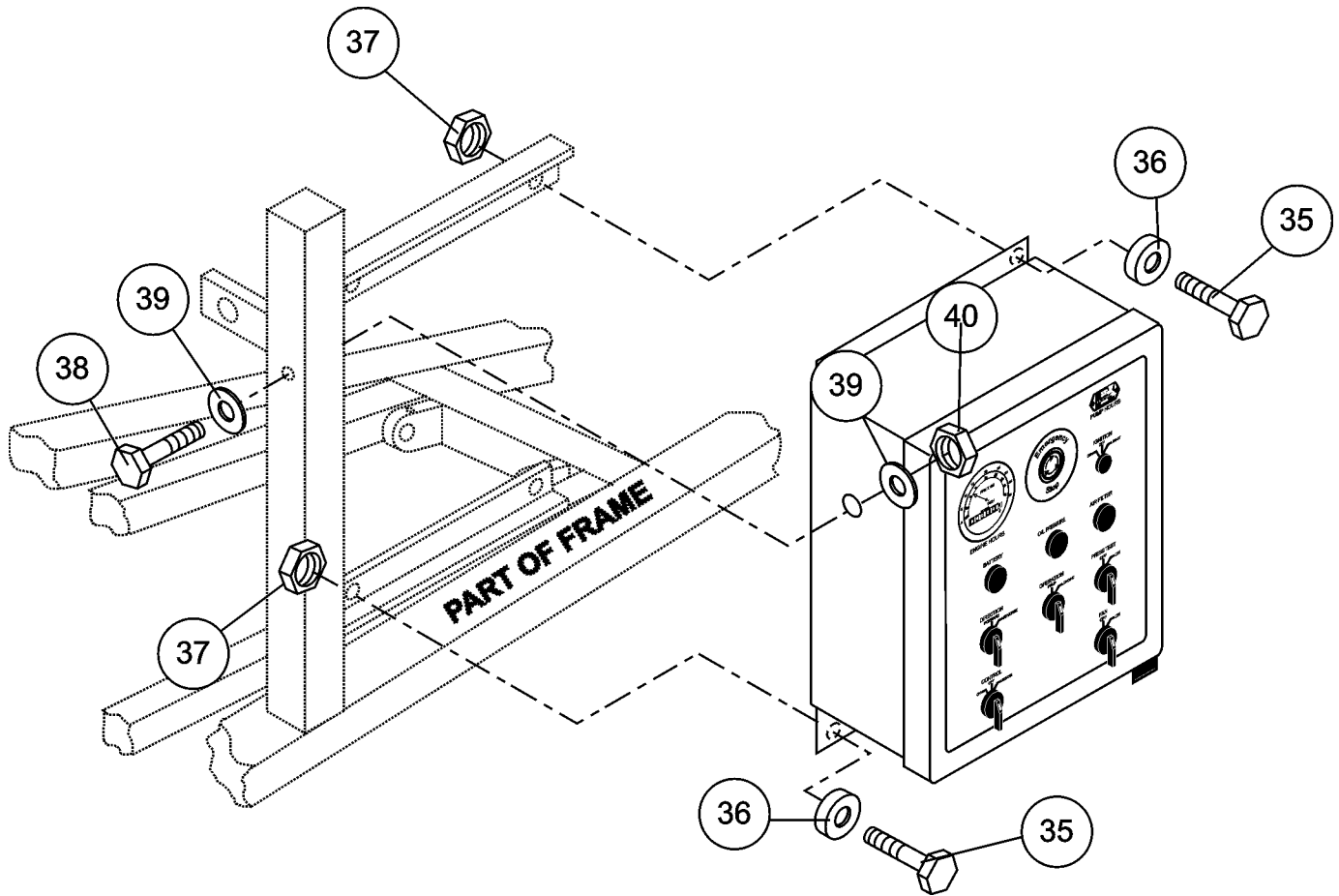
CONTROL BOX INTERIOR DOOR ASSY.



CONTROL BOX INTERIOR DOOR ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM97050	RELAY , SMALL	2	
2	EM97048	RELAY, LARGE	1	
3	EM97027	SOLENOID, 12 VOLT	3	
4	EM97078	FUSE, 15 AMP	6	
5	EM98001	DIODE, 6 AMP	1	
6	EM98002	DIODE	19	
7	EM40711	SWITCH, EMERGENCY CYCLE	1	
8	TBD	NUT	4	
9	TBD	CONNECTOR	4	
10	EM97068	REMOTE CONTROL RECEPTACLE	1	
12	EM97049	BASE, SOCKET	1 2	

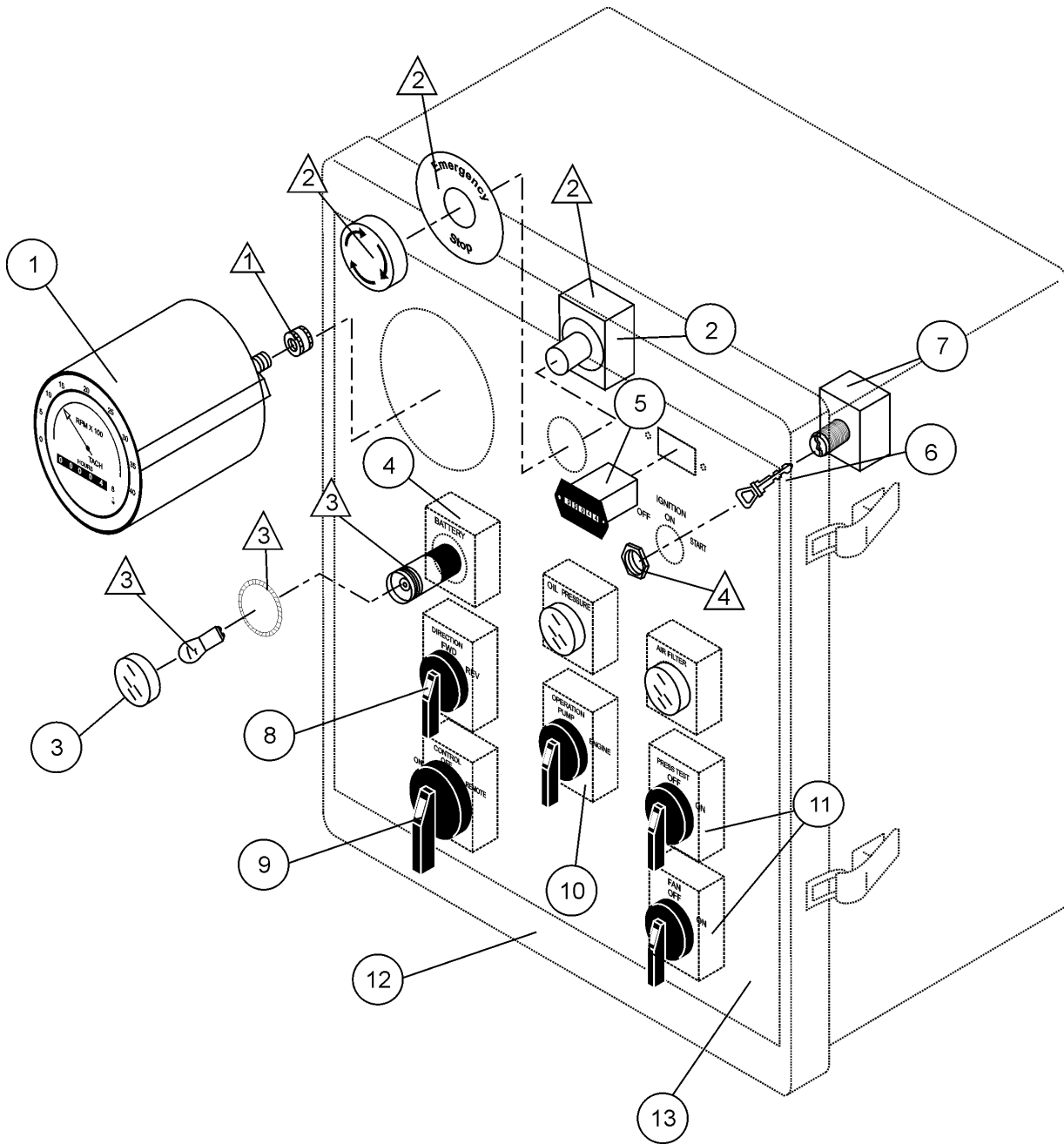
CONTROL BOX MOUNTING ASSY.



CONTROL BOX MOUNTING ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
35	492366	SCREW HHC 5/16-18x1-1/2	4	
36	EM510703	SHOCK MOUNT	4	
37	2105164	NUT 3/8 IN.....	4.....	REPLACES P/N 492582
38	EM503112	BOLT HHC 3/8-16x2-3/4	2	
39	3019092	FLAT WASHER.....	4.....	REPLACES P/N 492598
40	EM969013	NUT.....	2.....	REPLACES P/N 492583

CONTROL BOX ASSY.



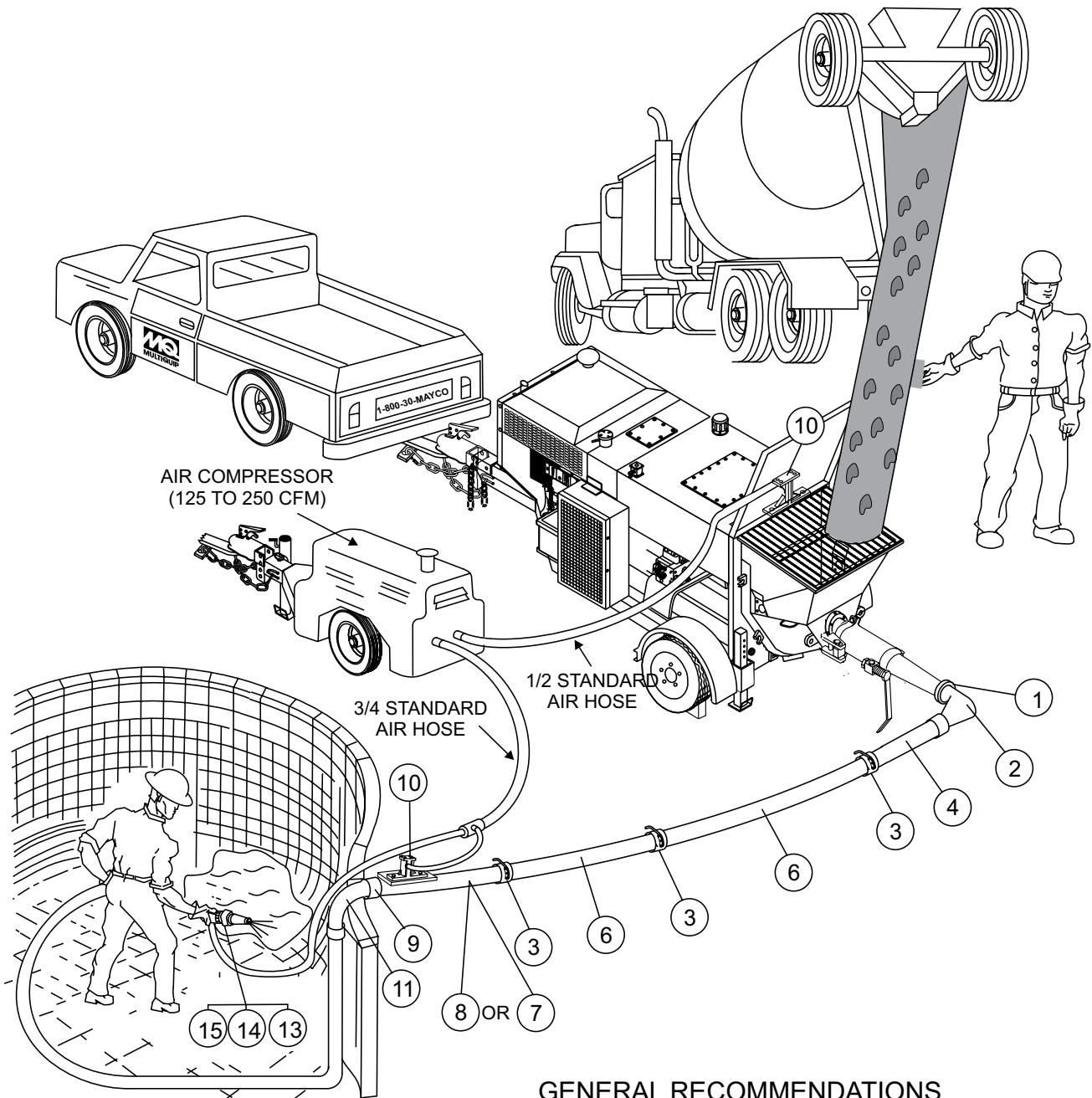
NOTES:

- ▲ INCLUDED WITH ITEM 1,
TACHOMETER P/N EM25704
- ▲ INCLUDED WITH ITEM 2,
STOP SWITCH P/N EM97063
- ▲ INCLUDED WITH ITEM 3
LIGHT P/N EM97039
- ▲ INCLUDED WITH ITEM 7
IGNITION SWITCH
P/N EM97028

CONTROL BOX ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM25704	TACHOMETER	1	
2	EM97063	EMERGENCY STOP SWITCH	1	
3	EM97039	LENS, BATTERY, OIL FILTER, AIR FILTER	3	
4	EM97041	CONTACT BLOCK	3	
5	EM97062	HOUR METER	1	
6	EM97028K	KEY, IGNITION	1	
7	EM97028	IGNITION SWITCH W/ KEY	1	
8	EM97030	DIRECTIONAL CONTROL SWITCH	1	
9	EM97036	PUMP CONTROL SWITCH	1	
10	EM97045	OPERATION PUMP/ENGINE SWITCH	1	
11	EM97032	SWITCH, FAN CONTROL, TEST FUNCTION	2	
12	EM97073	CONTROL BOX ASSY, COMPLETE	1	
13	EM98039	PANEL, FACE	1	

RECOMMENDED SHOTCRETE SYSTEM



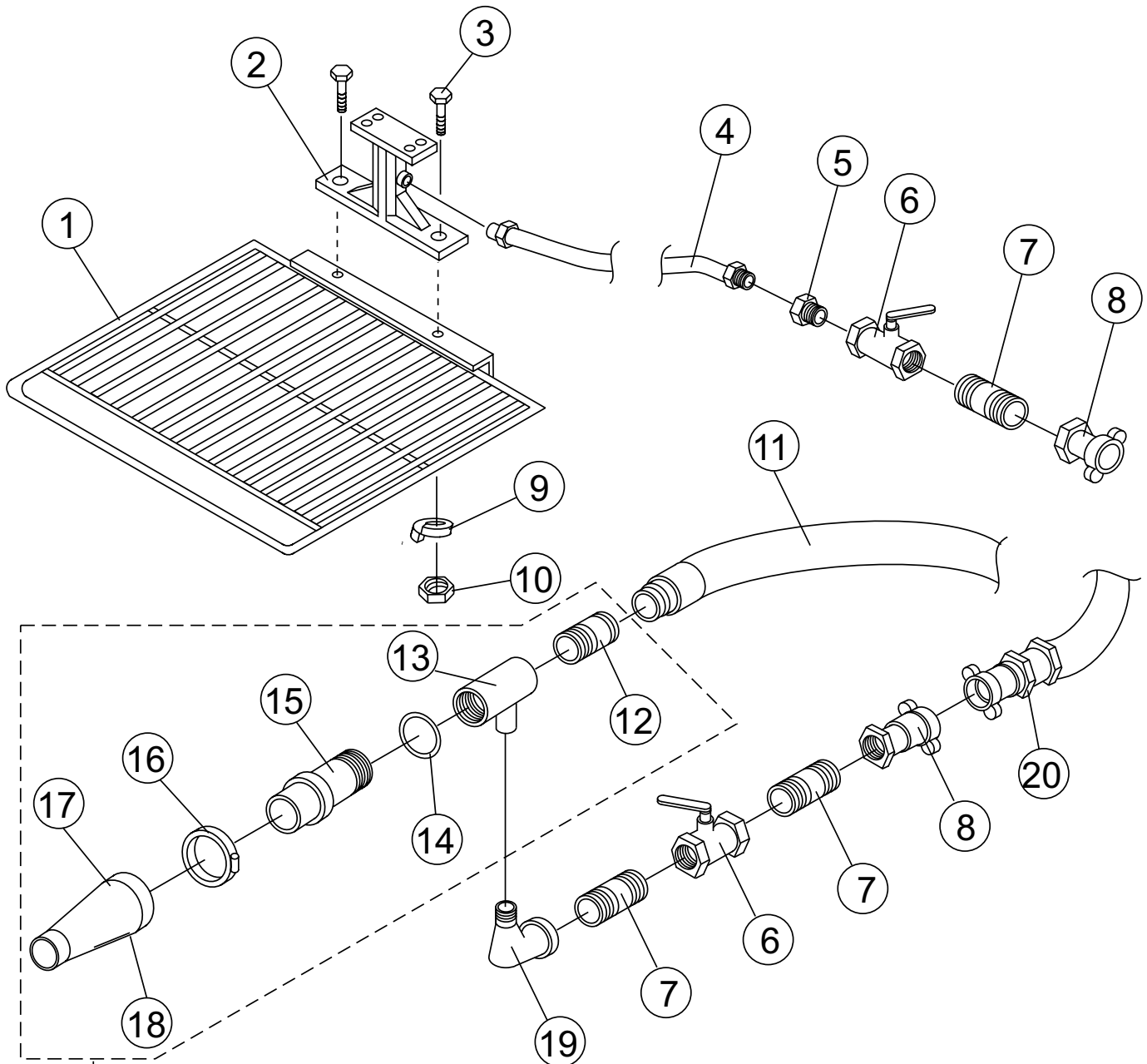
GENERAL RECOMMENDATIONS

- 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.

RECOMMENDED SHOTCRETE SYSTEM

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	EM28904	COUPLING, 3" H-D "CF"	1	
2	EM23946	ELBOW, 3"x90°	1	
3	EM28903	COUPLING, 2.5" H-D w/GASKET & PIN	1	
4	EM28005DD	REDUCER, 3"x2.5"x36" H-D ENDS	1	
5	EM28061	PIPE, 2.5"x120w x 10' H-D	1	
6	EM24849	HOSE, 2.5"x2"x36" H-D	1	
7	EM28001DD	REDUCER, 2.5"x2"x36" H-D	1	
8	EM23815D	REDUCER, 2.5"x2" w/AIR VIBRATOR		
9	EM28902	COUPLING, 2" H-D w/GASKET & PIN	1	
10	EM23101	AIR VIBRATOR ASSY.	2	
11	TBD	2"x2" ELBOW	1	
12	EM24841	HOSE, 2"x25' H-D w/ENDS	1	
13	EM23808D	NOZZLE ASSEMBLY, 2" H-D	1	
14	EM23806	NOZZLE TIP, RUBBER 1-3/8"	1	
15	EM23807	NOZZLE TIP, RUBBER 1.25	1	

RECOMMENDED SHOTCRETE ACCESSORIES



NOTES:

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 PASSEDTHROUGHTHE 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.

NOZZLE FOR SHOTCRETE

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		
	EM24841	2"X25' RAISED HOSE		
	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/#