

RIDING TROWEL

HDX780



PARTS & DECALS MANUAL

Manual Part #: 069971P | Revision: G
Language: English | Original Instructions



For information regarding the following, please see the “HDX780- Safety & Operator Manual”

- Warranty Information
- Dealer Information
- How to identify the Model / Serial Numbers on the machine
- Engine Detail

HDX780 RIDING TROWEL

PARTS & DECAL MANUAL

This manual covers the products listed below:

<u>Part No.</u>	<u>Description</u>
069600	HDX780 Riding Trowel, HATZ 74HP Diesel T4, 12ft (Counter Rotation)
073350	HDX780 Riding Trowel, HATZ 74HP Diesel T4, 12ft (Normal Rotation)

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Allen Products are covered under one or more of the following patent numbers:
10,100,537; 9,068,301; 9,068,300; 8,360,680; 7,690,864; 7,114,876B1; 6,857,815B2; 6,582,153
With other Patents Pending.

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SECTION 1: PARTS

SECTION 1 PARTS

Factory Service Information

This section contains the illustrated drawings and parts list for help in identifying and/or ordering replacement parts for your machine. Follow the instructions in the front section of this manual “Ordering Parts” when ordering replacement parts to ensure prompt and accurate delivery.

NOTE

All set screws have blue (LOC-TITE™) applied at the factory. If set screw is removed or loosened for any reason re-apply blue (LOC-TITE™).

NOTE

All grease fittings are capped with CAP PLUG GC-5 (AEC PN 015692) to protect the fitting. If cap becomes missing or damaged replace it as soon as possible.

NOTE

Anti-Seize is applied at the factory to all drive line coupling, gear box main and counter shafts and pitch control threaded rod assemblies. If these parts are disassembled re-apply a light coat of a graphite based anti-seize.

**ALL REFERENCES MADE TO LEFT/RIGHT SIDES IN THIS MANUAL ARE SITTING ON MACHINE (SOM)
[i.e. Left / Right are in reference from a sitting position on the machine]**

We recommend AEC quality replacement parts, available from the AEC Customer Service Department or your nearest AEC Dealer.

Part numbers are subject to change without notice. Part numbers might be different outside of the United States of America. Use part numbers listed in the applicable parts list table when you place your order. If a part number changes, the AEC Customer Service Department or your nearest AEC dealer will have the latest part number for the replacement part.

Remember when you order replacement parts, you will need your **MODEL NUMBER** and **SERIAL NUMBER**. These are the numbers that you have recorded in the UNIT ID section of the “Safety and Operations Manual” or by looking on the unit Identification Plate. Please order replacement parts by the appropriate part number, not the item number.

This manual contains an illustrated parts list for help in ordering replacement parts for your machine. Follow the instructions below when ordering parts to ensure prompt and accurate delivery:

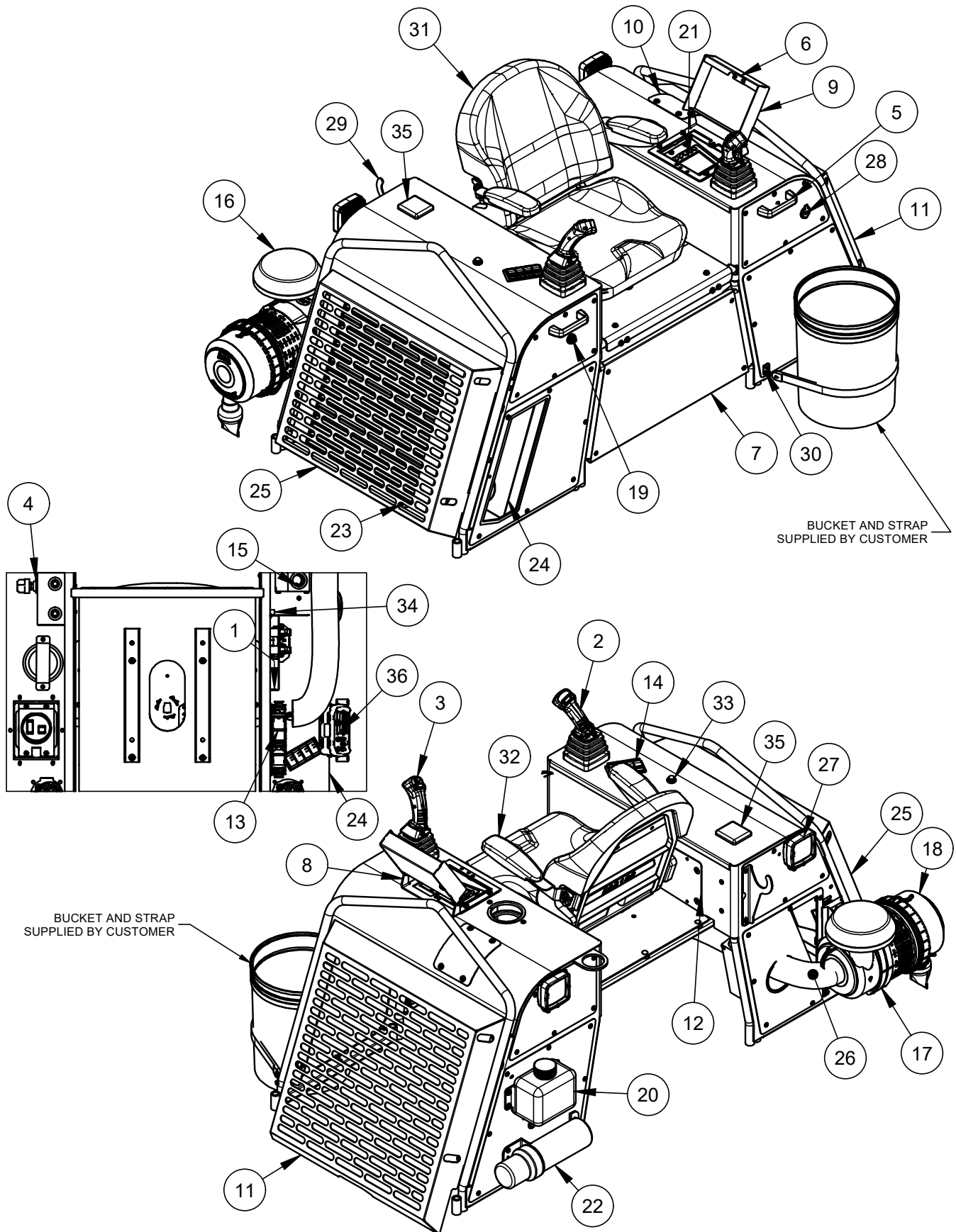
1. All orders for service parts - include the serial number for the machine. Shipment will be delayed if this information is not available.
2. Include correct description and part number
3. Specify exact shipping instructions, including the preferred routing and complete destination address.
4. **DO NOT** return parts to AEC without receiving written authorization from AEC. All authorized returns must be shipped pre-paid.
5. When placing an order, please contact the AEC Dealer nearest you.

NOTE

All information, specifications, and illustrations in this manual are subject to change without notice and are based on the latest information at the time of publication.

SECTION 1 PARTS

Seat Frame Assembly (069827)



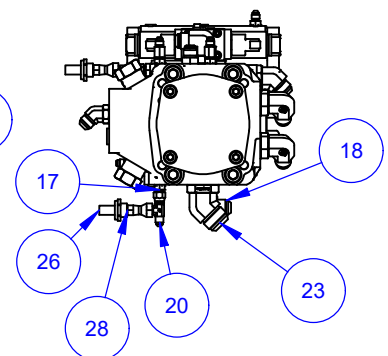
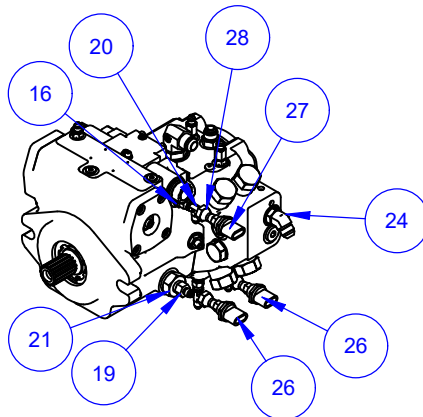
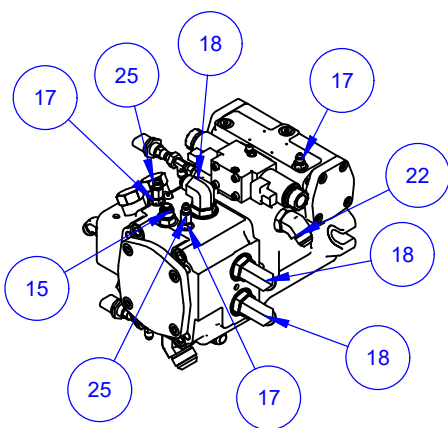
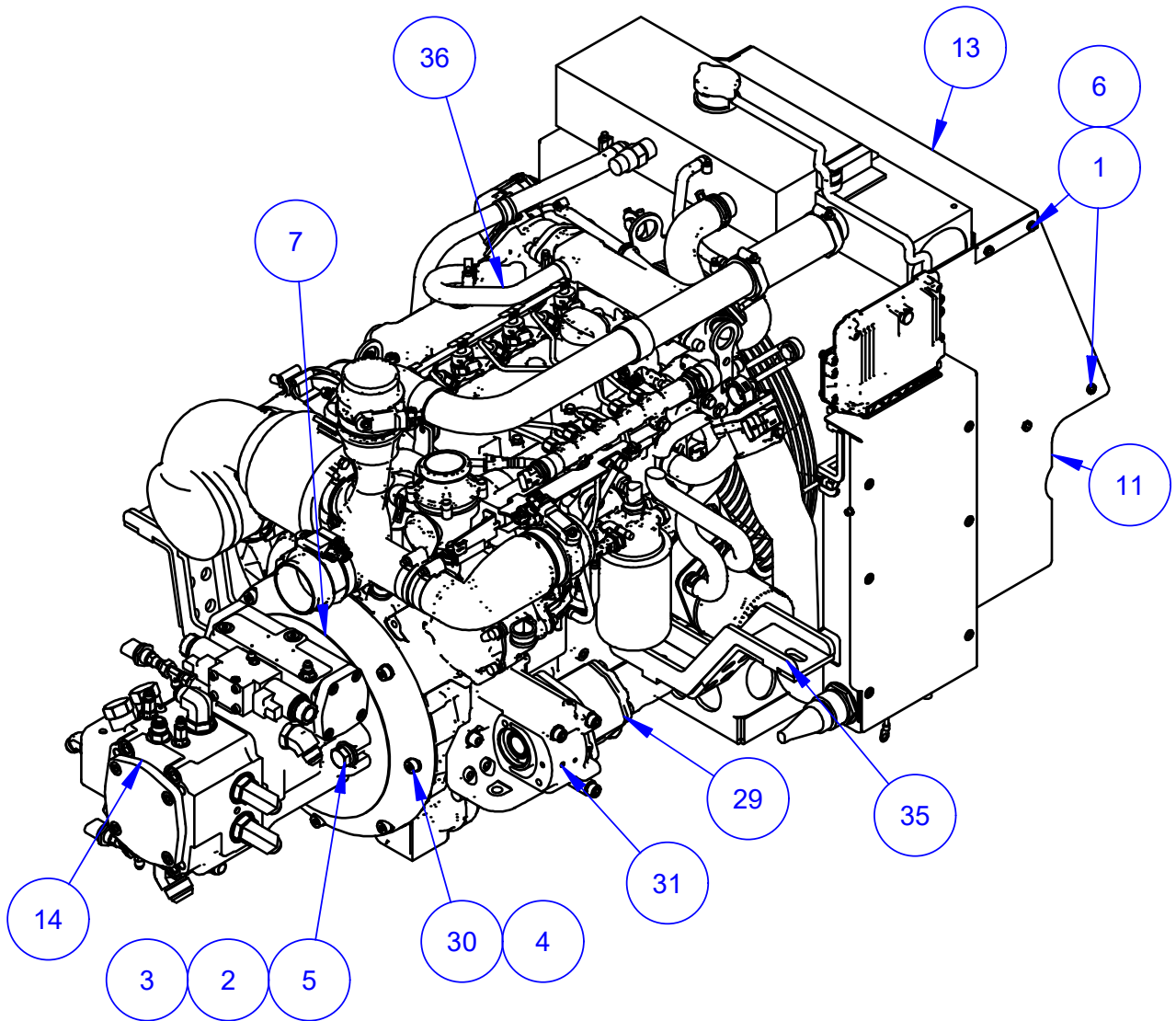
Seat Frame Assembly (069827) Parts List

SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
-	069827	Assembly, Seat Frame, HDX780	-
1	018264	Rubber insulator F/ Safety Switch	1
2	048302	Joystick, Right Hand, Dual Axis	1
-	047585	REPLACEMENT - Joystick, Right Hand, Upper Handle ONLY (Not Shown)	-
3	048303	Joystick, Left Hand, Single Axis	1
-	046556	REPLACEMENT - Joystick, Left Hand, Upper Handle ONLY (Not Shown)	-
4	048595	Tank, Vent	1
5	048678	Handle, Nylon	2
6	056920	Latch, Magnetic	1
7	064509	Cover, Front Center	1
8	064525	Bracket, Hinge for Murphy Display, Left Hand	1
9	064526	Cover, Murphy Display	1
10	064528	Cover, Radiator Access	1
11	064760	Guard, End, Seat Frame	1
12	065134	Cover, Fuse / Relay Block	1
13	065139	Controller, Bosh	1
14	065143	Kit, Block, 4 Switch	1
15	065144	Header, Manifold	1
16	065188	Bonnet, Air Cleaner, for HATZ H50 Engine	1
17	065189	Band, Air Cleaner, for HATZ H50 Engine	1
18	065190	Air Filter Assembly, for HATZ H50 Engine (Not Shown)	1
-	-	Element, Secondary (065855) Primary (065856)	-
19	065191	Switch, Ignition, for HATZ H50 Engine	1
-		REPLACEMENT - Key, for Hatz xH50 Engine (Not Shown)	-
20	066028	Bottle, Recovery Coolant	1
21	066227	Controller, Murphy, PV380, Version 2	1
22	066255	Tube, Manual	1
23	066911	Assembly, Cooler, Oil	1
24	066912	Shroud, Cooler, Includes Fan, Outer	1
25	066913	Cover, over Cooler, Right Hand	1
26	069233	Hose, Exhaust, Flexible	1
27	069835	Light, LED, 1200 Lumens, 12 VDC, 1.3 AMP	2
28	069850	USB, Receptical, 12 VDC	1
29	069853	Bracket, Tool Holder	1
30	069854	Bracket, Bucket Tie Down	1
31	069874	Seat Rider	1
32	069875	Arm Rest, for 069875 Seat, Right/Left Set	1
33	076952	LED, Red Indicator	1
34	077525	Buzzer, 12V Piezo Buzzer	1
35	077893	Antenna, F/ Telematics	1
36	077894	Controller, F/ Telematics	1

SECTION 1 PARTS

Engine Assembly (076040)



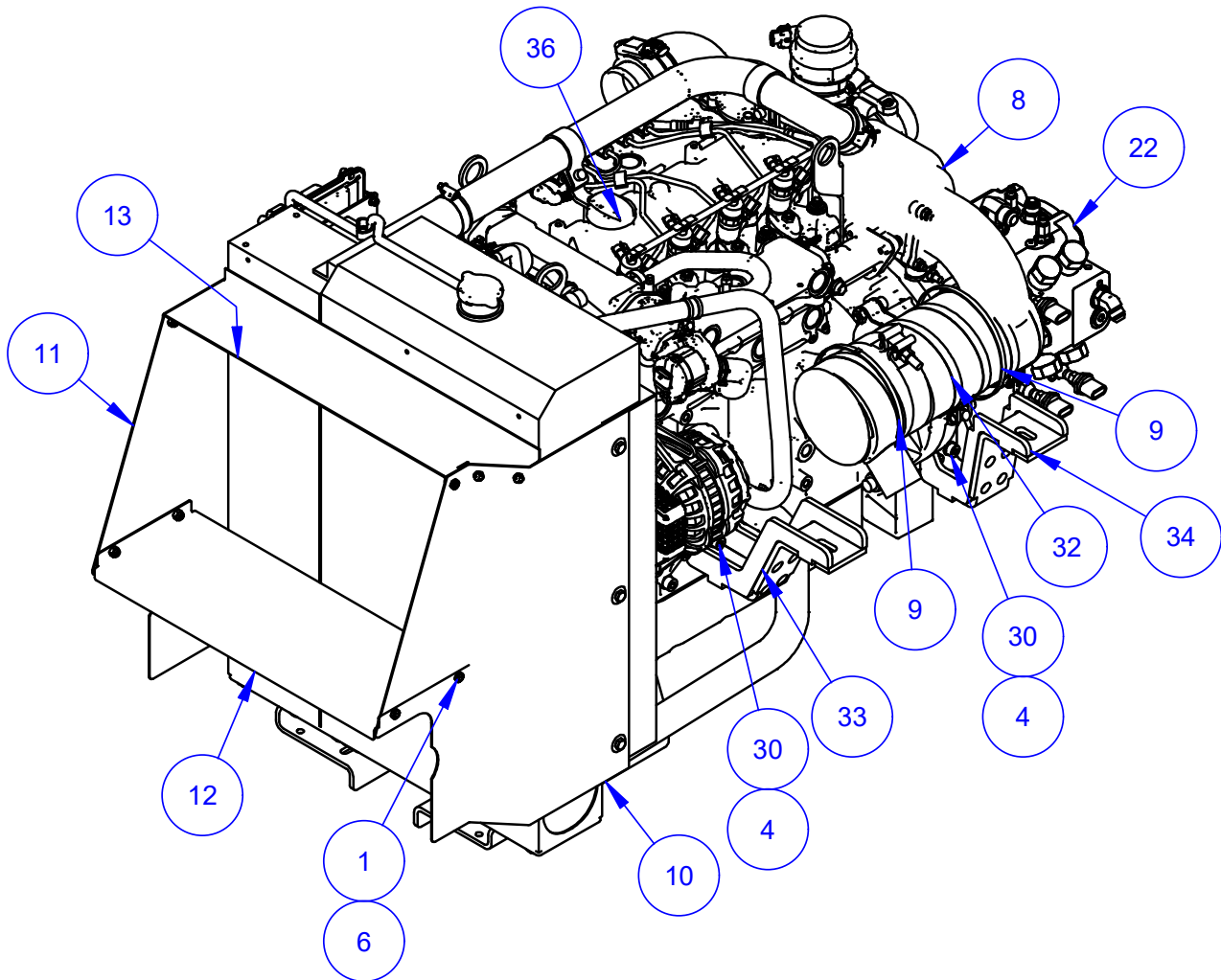
Engine Assembly (076040) Parts List

SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	010001	FASTENER, HHCS 1/4-20 X 1/2	9
2	010095	FASTENER, LW 5/8	2
3	012982	FASTENER, FW 5/8	2
4	021072	FASTENER, LW 10MM	17
5	029311	FASTENER, HHCS 5/8-11 X 1 3/4	2
6	029671	FASTENER, NUT HEX 1/4-20 NYLOCK	9
7	064357	HOUSING AND COUPLING ASSEMBLY HATZ	1
8	064873	TURBO WRAP BLANKET FOR HATZ ENGINE	1
9	064874	TIE, 24" SS PREFERATED CABLE .270 WIDE	2
10	065124	SHROUD, REAR RADIATOR FOR HATZ ENIGNE	1
11	065125	SHROUD, FRONT RADIATOR HATZ ENGINE	1
12	065126	BOTTOM COVER RADIATOR SHROUD	1
13	065127	TOP COVER RADIATOR SHROUD	1
14	065138	PUMP, HYDRAULIC PISTON	1
15	045921	FITTING, F6400-8-8-0 STR JIC-SAE	1
16	045922	FITTING, F6400-4-6-0 STR JIC-SAE	1
17	045928	FITTING, F6400-4-4-0 STR JIC-SAE	5
18	045946	FITTING, 6801-10-12-NWO 90DEG ELBOW JIC-SAE	4
19	046289	FITTING, 2406-6-4-0 STR FM-ML JIC	1
20	046361	FITTING, F6602-04-04-04-0 TEE	3
21	049387	FITTING., F6400-6-12-0 STR JIC-SAE	1
22	065527	FITTING, F6802-10-12 45 DEG ELBOW	1
23	065528	FITTING, F6802-16-16 45 DEG ELBOW	1
24	065529	FITTING, F6802-8-8 NWO 45 DEG ELBOW	1
25	065826	FITTING, CFJ4-055 ORIFICE ML-FL JIC	2
26	077889	SENSOR, PRESSURE ROTOR MOTOR	2
27	077895	SENSOR, CHARGE PRESSURE	1
28	079285	FITTING, 9027-04-04 FM BSPP-FM JIC SWIVEL	3
29	065140	PUMP, AUXILIARY	1
30	065243	FASTENER, SHCS M10 X 1.5 X 30 MM	17
31	065398	AUXILIARY DRIVE FOR HATS H50 ENGINE	1
32	066148	DOC WRAP FOR HATZ ENGINE	1
33	069419	ENGINE MOUNT,V2 REAR LH HATZ H50	1
34	069420	ENGINE MNT, V2 REAR RH HDX760 HATZ H50	1
35	069424	ENGINE MOUNT,V2 FRONT RH HATZ H50	1
36	076050	KIT, HATZ ENGINE 4H50TIC	1
-	080622	TURBO OIL SUPPLY LINE, FLEXIBLE/BRAIDED FOR HATZ ENG. (REPLACEMENT)	

SECTION 1 PARTS

Engine Assembly (076040) Continued



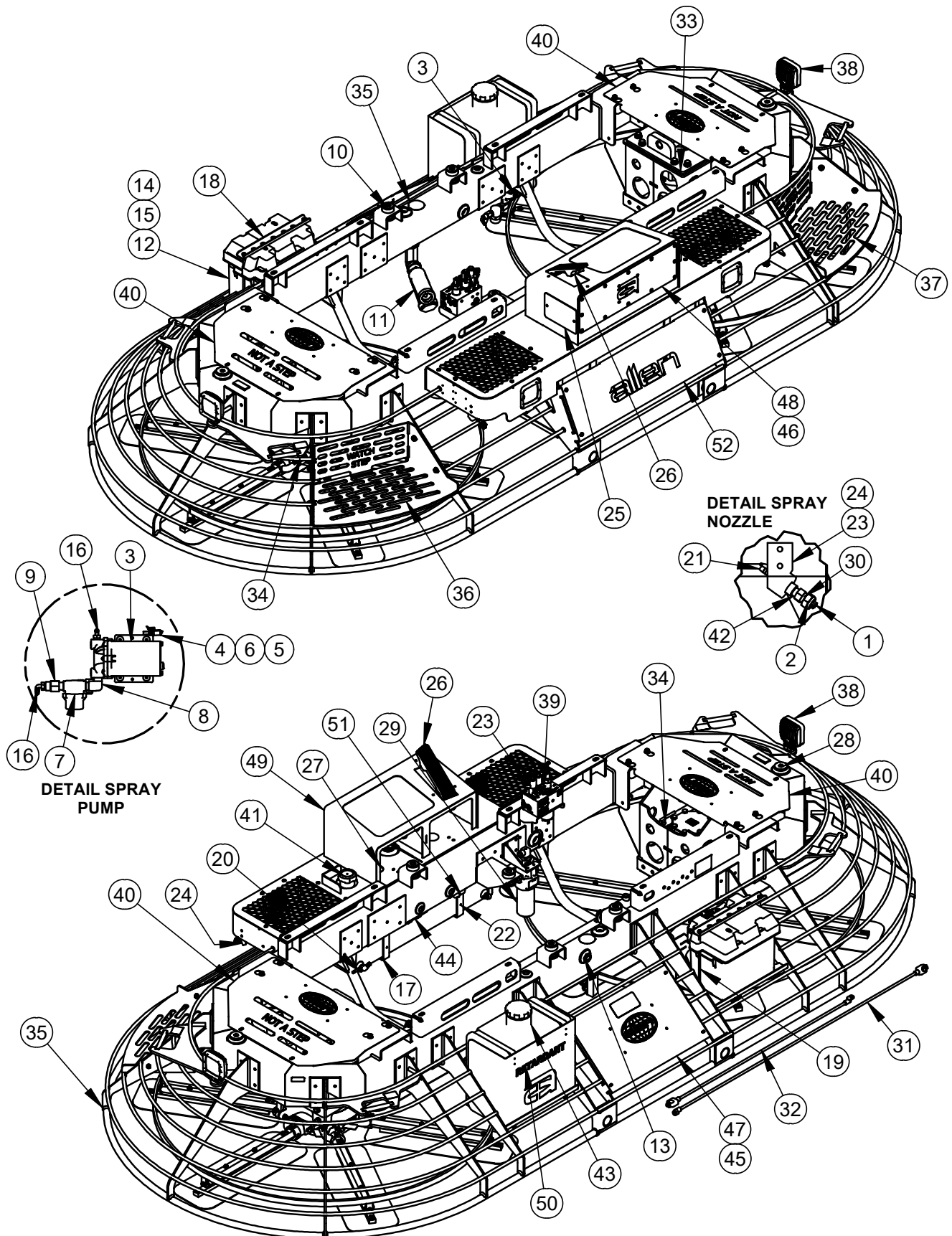
Engine Assembly (076040) Parts List

SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	010001	FASTENER, HHCS 1/4-20 X 1/2	9
2	010095	FASTENER, LW 5/8	2
3	012982	FASTENER, FW 5/8	2
4	021072	FASTENER, LW 10MM	17
5	029311	FASTENER, HHCS 5/8-11 X 1 3/4	2
6	029671	FASTENER, NUT HEX 1/4-20 NYLOCK	9
7	064357	HOUSING AND COUPLING ASSEMBLY HATZ	1
8	064873	TURBO WRAP BLANKET FOR HATZ ENGINE	1
9	064874	TIE, 24" SS PREFERATED CABLE .270 WIDE	2
10	065124	SHROUD, REAR RADIATOR FOR HATZ ENIGNE	1
11	065125	SHROUD, FRONT RADIATOR HATZ ENGINE	1
12	065126	BOTTOM COVER RADIATOR SHROUD	1
13	065127	TOP COVER RADIATOR SHROUD	1
14	065138	PUMP, HYDRAULIC PISTON	1
15	045921	FITTING, F6400-8-8-0 STR JIC-SAE	1
16	045922	FITTING, F6400-4-6-0 STR JIC-SAE	1
17	045928	FITTING, F6400-4-4-0 STR JIC-SAE	5
18	045946	FITTING, 6801-10-12-NWO 90DEG ELBOW JIC-SAE	4
19	046289	FITTING, 2406-6-4-0 STR FM-ML JIC	1
20	046361	FITTING, F6602-04-04-04-0 TEE	3
21	049387	FITTING., F6400-6-12-0 STR JIC-SAE	1
22	065527	FITTING, F6802-10-12 45 DEG ELBOW	1
23	065528	FITTING, F6802-16-16 45 DEG ELBOW	1
24	065529	FITTING, F6802-8-8 NWO 45 DEG ELBOW	1
25	065826	FITTING, CFJ4-055 ORIFICE ML-FL JIC	2
26	077889	SENSOR, PRESSURE ROTOR MOTOR	2
27	077895	SENSOR, CHARGE PRESSURE	1
28	079285	FITTING, 9027-04-04 FM BSPP-FM JIC SWIVEL	3
29	065140	PUMP, AUXILIARY	1
30	065243	FASTENER, SHCS M10 X 1.5 X 30 MM	17
31	065398	AUXILIARY DRIVE FOR HATS H50 ENGINE	1
32	066148	DOC WRAP FOR HATZ ENGINE	1
33	069419	ENGINE MOUNT,V2 REAR LH HATZ H50	1
34	069420	ENGINE MNT, V2 REAR RH HDX760 HATZ H50	1
35	069424	ENGINE MOUNT,V2 FRONT RH HATZ H50	1
36	076050	KIT, HATZ ENGINE 4H50TIC	1
-	080622	TURBO OIL SUPPLY LINE, FLEXIBLE/BRAIDED FOR HATZ ENG. (REPLACEMENT)	

SECTION 1 PARTS

Main Frame Assembly - Counter Rotation (069828)



Main Frame Assembly - Counter Rotation (069828) Parts List

SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	012702	TIP, 80°X0.10 GPM BRASS SPRAY	2
2	012705	RETAINER, BRASS SPRAY TIP	2
3	033735	PUMP, SPRAY SYSTEM	1
4	038641	HOUSING, 2 POSITION WEA PAK FEMALE	1
5	038644	TERMINAL, 16-14 WEA PAK FEMALE	2
6	038648	SEAL, 16-14 AWG GRAY CAVITY	2
7	040209	FILTER, RETARDANT SPRAY SYSTEM	1
8	040387	ELBOW, 3/8 BRASS 90° STREET	1
9	040388	FITTING, 3/8X1/4 BRASS FM TO FM REDUCER	1
10	045757	ISOLATOR, FOR ENG MOUNT	4
11	046472	Y-STRAINER	1
12	046696	BOX, STANDARD BATTERY	1
13	046731	SIGHT GLASS HYD RESERVOIR	1
14	047251	PAD, 10-7/8X7-1/4X1 BARRIER	1
15	047604	BATTERY, 700CCA 12V	1
16	047933	ELBOW, 1/4 PUSHLOCK X 1/4 NPT PLASTIC	2
17	048562	CUSHION, BOTTOM TANK (RUBBER)	2
18	048563	CHANNEL, BATTERY HOLD-DOWN	1
19	048589	ROD ALL THREAD, 1/4-20 BATTERY HOLD DOWN	2
20	048652	TEE, PLASTIC 1/4 X 1/4 X 1/4	1
21	048653	BARB, HOSE PLASTIC 1/4" X 1/4 NPT	2
22	048676	PLUG, HOLLOW RUBBER	8
23	049981	WELD'T, RH SPRAY BRACKET	1
24	049982	WELD'T, LH SPRAY BRACKET	1
25	060492	PLATE, COVER TOP DECK SIDE	1
26	063341	FOOT PEDAL ELECTRONIC	1
27	064501	CUSHION, TOP TANK (RUBBER)	1
28	065017	FITTING, PLUG SAE #20 HOLLOW HEX PLUG	2
29	065141	FILTER, HIGH PRESSURE	1
30	065244	STRAINER, POLY 50 MICRON MESH, W/ CHECK VALVE	2
31	065847	BATTERY CABLE, POSITIVE 2AWG	1
32	065848	BATTERY CABLE, NEGATIVE 2 AWG	1
33	069760	LH ROTOR ASSEMBLY HDX780	1
34	069770	RH ROTOR ASSEMBLY HDX780	1
35	069781	WELDMENT, MAIN FRAME	1

Main Frame Assembly - Counter Rotation (069828)



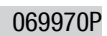
Main Frame Assembly - Counter Rotation (069828) Parts List Continued

SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
36	069823	STEP, RH	1
37	069824	STEP, LH	1
38	069835	LIGHT, LED 1200 LUMENS 12 VDC (1.5 AMP)	4
39	069958	MANIFOLD, WITH FILTER STEERING AND PITCH HDX600/760/780	1
40	070575	COVER, END MAIN FRAME HDX780	2
41	070610	FUEL TANK ASSEMBLY HDX780 (18 GALLON)	1
42	071531	NOZZLE BODY,MALE STRAIGHT TEE JET BRASS	2
43	071536	TANK, 7 GALLON RETARDANT ASSEMBLY (BLACK)	1
44	072559	FUEL PUMP	1
45	072856	PLATE, BACKER FOR EMBLEM PLATE RIDERS	3
46	074535	PLATE, BACKING FOR SMALL SYMBOL RED	1
47	075147	COVER REAR CENTER	1
48	075226	COVER FRONT, DECK FOR HDX780	1
49	075227	DECK PLATE FOR HDX780 RIDING TROWEL	1
50	075422	GUARD, TANK FOR 7 GALLON TANKS	1
51	078629	FILTER, IN-LINE PRE-FUEL FOR 3H50TIC/4H50TIC (MAIN FUEL FILTER 078612)	1
52	081059	PLATE, COVER FRONT BOTTOM CENTER FOR HDX780	1

Feb. 2023: Hatz main fuel filter moved to engine, added in-line filter. Old filters Pre-Fuel Filter (065851) main Fuel Filter (065852)

Rotor Assembly - Left Hand (069760)



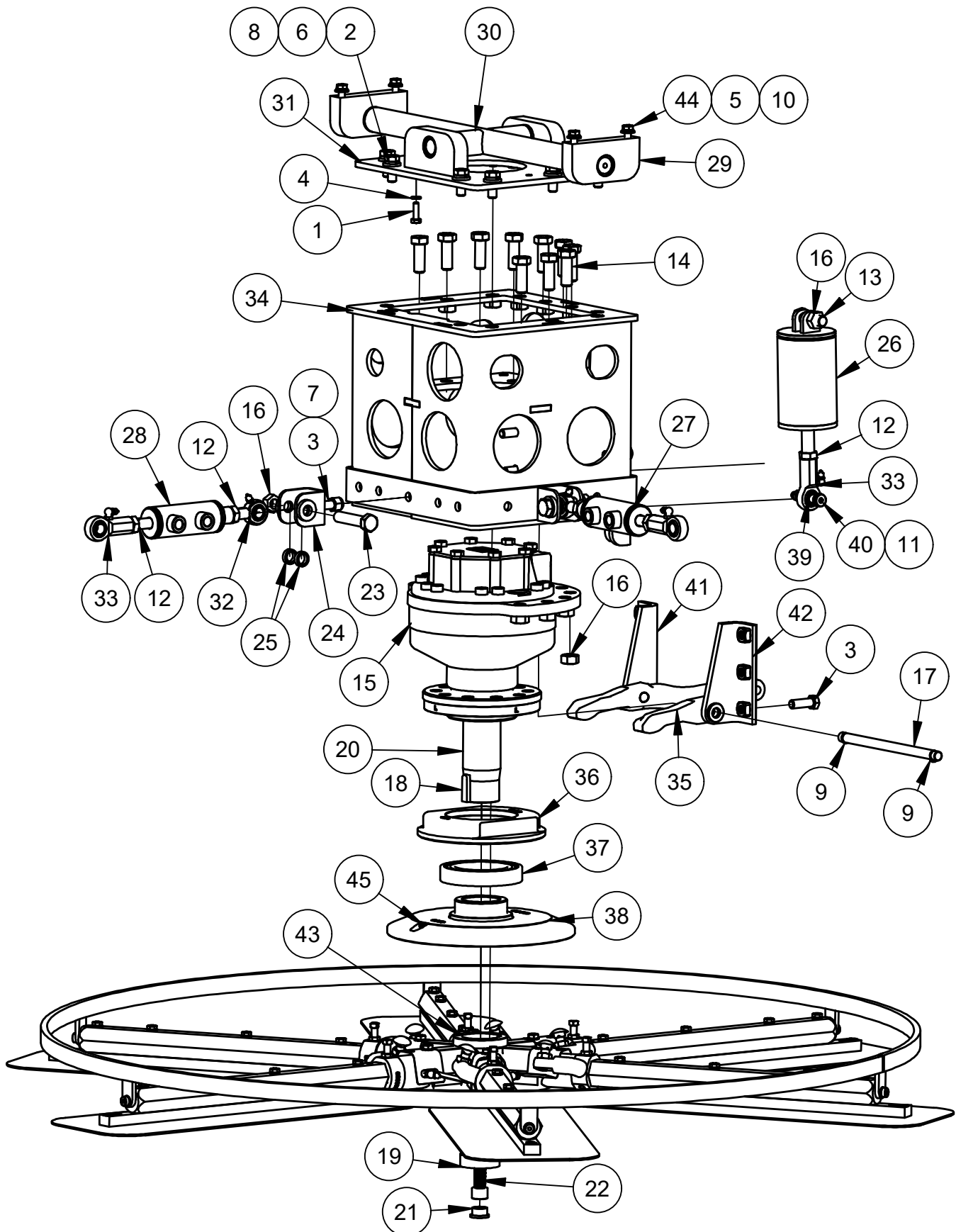
Rotor Assembly - Left Hand (069760)

SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	010020	FSTN, HHCS 5/16-18 X 1	4
2	010068	FSTN, HHCS 1/2-13 X 1-1/4	12
3	010069	FSTN, HHCS 1/2-13 X 1-1/2	8
4	010090	FSTN, LW 5/16	4
5	010091	FSTN, LW 3/8	4
6	010093	FSTN, LW 1/2	18
7	011238	FSTN, NUT HEX NYLOK 1/2-13	2
8	011490	FSTN, FW HARDENED 1/2	12
9	015677	RING, Ø7/16 E-STYLE RETAINING	2
10	017751	FSTN, FW 3/8	4
11	020514	FSTN, NUT STOVER LOCK 3/8-16	1
12	020688	FSTN, JAM HEX NUT 5/8-18 RH	5
13	027969	FSTN, HHCS 5/8-18 X 2	1
14	040319	FSTN, HHCS 5/8-18X1-1/4	10
15	043062	HYD MOTOR	1
16	043269	FSTN, NUT STOVER 5/8-18	13
17	044799	PIN, #2 YOKE ARM	1
18	046231	KEY, ROTOR SHAFT	1
19	046643	WASHER, TYPE 3 RETAINING	1
20	046645	ROTOR SHAFT, TYPE 3 RH THREAD	1
21	046646	PLUG, 7/8 THREAD PROTECT CAP	1
22	046647	FSTN, SHCS 5/8-18 RH X 1 1/2	1
23	048339	FSTN, HHCS 5/8-18 X 3	2
24	048624	CHANNEL, CYLINDER ROD END CONNECTOR	2
25	048627	SPACER, STEERING CONNECTION	4
26	048659	PITCH CYLINDER HDX SERIES 3" BORE 1 1/2" STROKE	1
27	048661	CYLINDER, 1.5X1.25 STEERING	1
28	050718	CYLINDER, 1.5X1.5 STEERING	1
29	064260	BEARING ASSEMBLY WITH BRONZE BEARING (068157)	4
30	064280	CROSSHEAD WELDMENT, L/R AND F/R	1
31	064741	PLATE, TOP FOR LH HYD. MOTOR MNT	1
32	065446	ROD, END MALE 5/8	2
33	066188	ROD END, FEMALE 5/8	3
34	069761	MOUNT, LH ROTOR MOTOR MNT	1
35	069766	YOKE ARM FOR HDX780	1
36	069767	CAP, PRESSURE PLATE	1

SECTION 1 PARTS

Rotor Assembly - Left Hand (069760), Continued



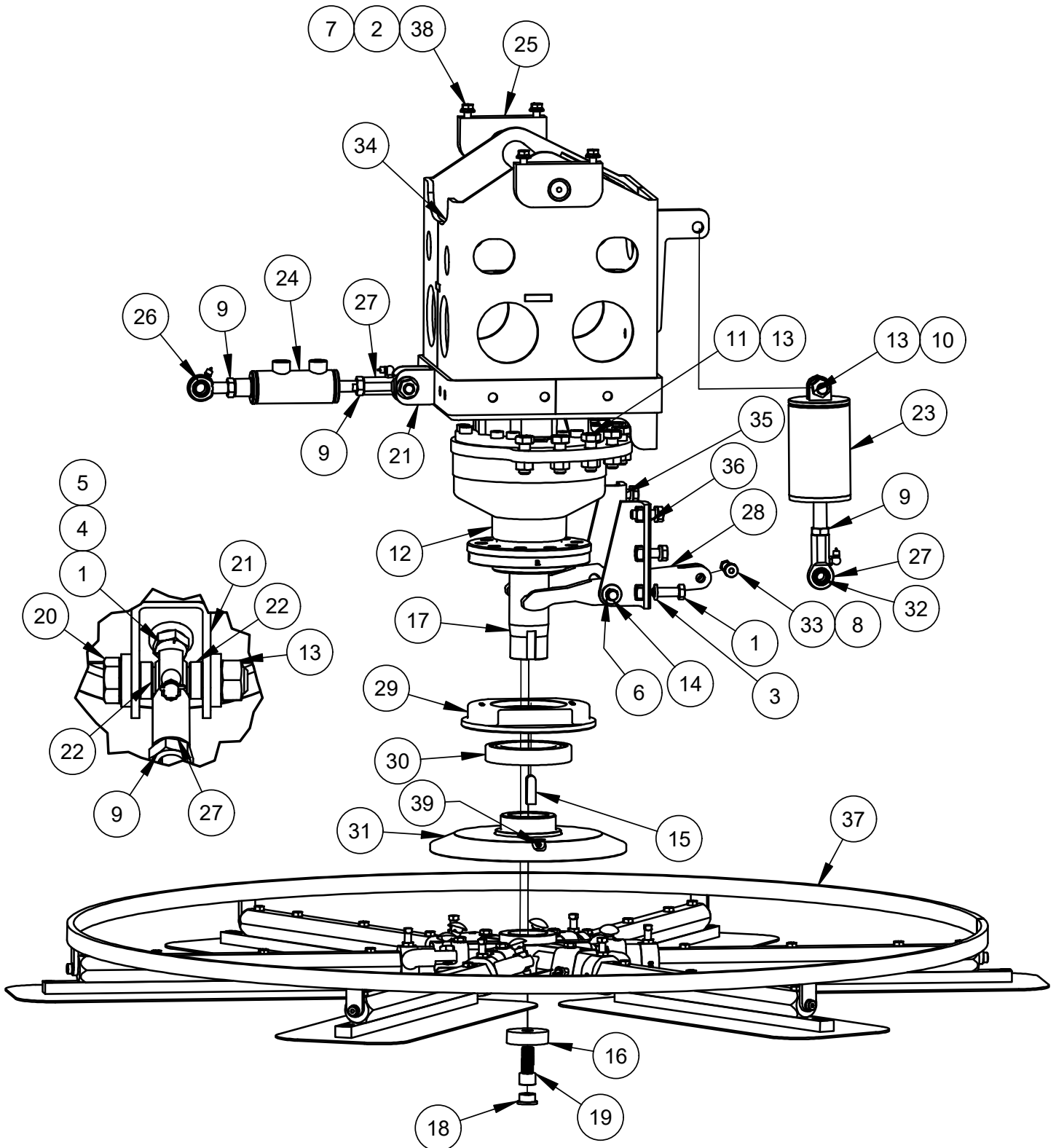
Rotor Assembly - Left Hand, (069760) Continued

SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
37	069768	BEARING, DEEP GROOVE BALL BEARING	1
38	069769	PLATE, PRESSURE	1
39	069771	TUBE SPACER FOR YOKE ARM TO CYLINDER	1
40	069772	FSTN, SHLDR BOLT 1/2" DIA X 1 7/8" LONG	1
41	069776	BRACKET, RH YOKE MNT. FOR ROTOR ASSEMBLIES	1
42	069779	BRACKET, LH YOKE MNT. FOR ROTOR ASSEMBLIES	1
43	071157	ASSEMBLY, LOWER ROTOR LH	1
44	074068	FSTN, HHCS 3/8-16 X 1	4
45	074697	FITTING, #10-32 UNF STRAIGHT GREASE	1

SECTION 1 PARTS

Rotor Assembly - Right Hand (069770)



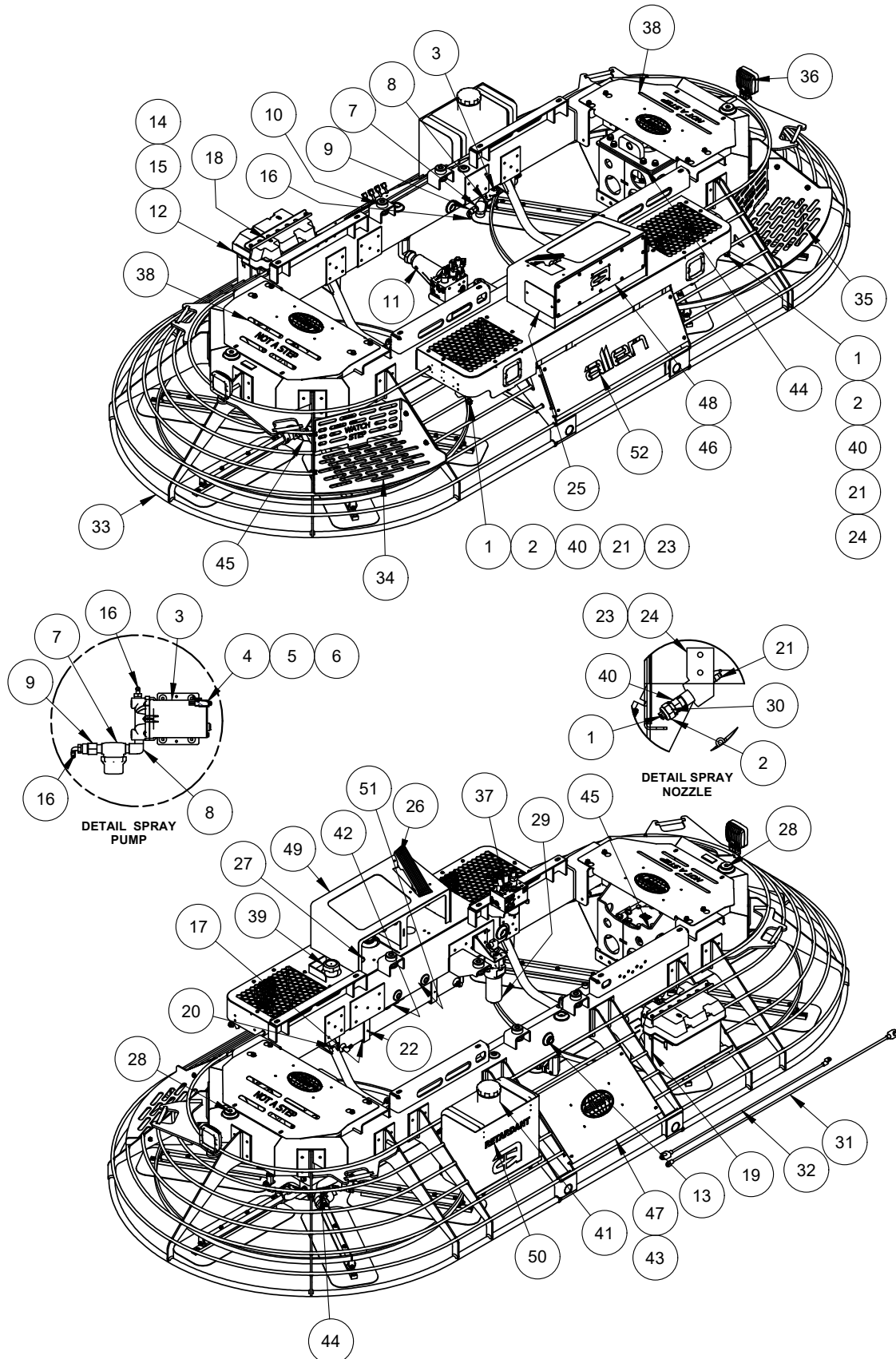
Rotor Assembly - Right Hand (069770)

SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	010069	FASTENER, HHCS 1/2-13 X 1-1/2	7
2	010091	FASTENER, LW 3/8	4
3	010093	FASTENER, LW 1/2	6
4	011238	FASTENER, NUT HEX NYLOCK 1/2-13	1
5	011490	FASTENER, FW 1/2	1
6	015677	RING, Ø7/16 E-STYLE RETAINING	2
7	017751	FASTENER, FW 3/8	4
8	020514	FASTENER, NUT STOVER LOCK 3/8-16	1
9	020688	FASTENER, JAM HEX NUT 5/8-18 RH	3
10	027969	FASTENER, HHCS 5/8-18 X 2	1
11	040319	FASTENER, HHCS 5/8-18X1-1/4	10
12	043062	HYDRAULIC MOTOR	1
13	043269	FASTENER, NUT STOVER 5/8-18	12
14	044799	PIN, #2 YOKE ARM	1
15	046231	KEY, ROTOR SHAFT	1
16	046643	WASHER, TYPE 3 RETAINING	1
17	046644	ROTOR SHAFT, TYPE 3 LH THREAD	1
18	046646	PLUG, 7/8 THREAD PROTECT CAP	1
19	046648	FASTENER, SHCS 5/8-18 LH X 1 1/2	1
20	048339	FASTENER, HHCS 5/8-18 X 3	1
21	048624	CHANNEL, CYLINDER ROD END CONNECTOR	1
22	048627	SPACER, STEERING CONNECTION	2
23	048659	PITCH CYLINDER HDX SERIES 3" BORE 1 1/2" STROKE	1
24	050718	CYLINDER, 1.5X1.5 STEERING	1
25	064260	BEARING ASSEMBLY WITH BRONZE BEARING (068157)	2
26	065446	ROD END, MALE 5/8	1
27	066188	ROD END, FEMALE 5/8	2
28	069766	YOKE ARM FOR HDX780	1
29	069767	CAP, FOR PRESSURE PLATE	1
30	069768	BEARING, DEEP GROOVE BALL BEARING	1
31	069769	PLATE, PRESSURE	1
32	069771	TUBE SPACER FOR YOKE ARM TO CYLINDER	1
33	069772	FASTENER, SHLDR BOLT 1/2" DIA X 1 7/8" LONG	1
34	069773	RH HYDRAULIC MOTOR MNT WLDT.	1
35	069776	BRACKET, RH YOKE MNT. FOR ROTOR ASSEMBLIES	1
36	069779	BRACKET, LH YOKE MNT. FOR ROTOR ASSEMBLIES	1
37	071158	ASSEMBLY, LOWER ROTOR RIGHT HAND	1
38	074068	FASTENER, HHCS 3/8-16 X 1 WITH BLUE LOCTITE	4
39	074697	FITTING, #10-32 UNF STRAIGHT GREASE	1

SECTION 1 PARTS

Main Frame Assembly - Normal Rotation (073549)



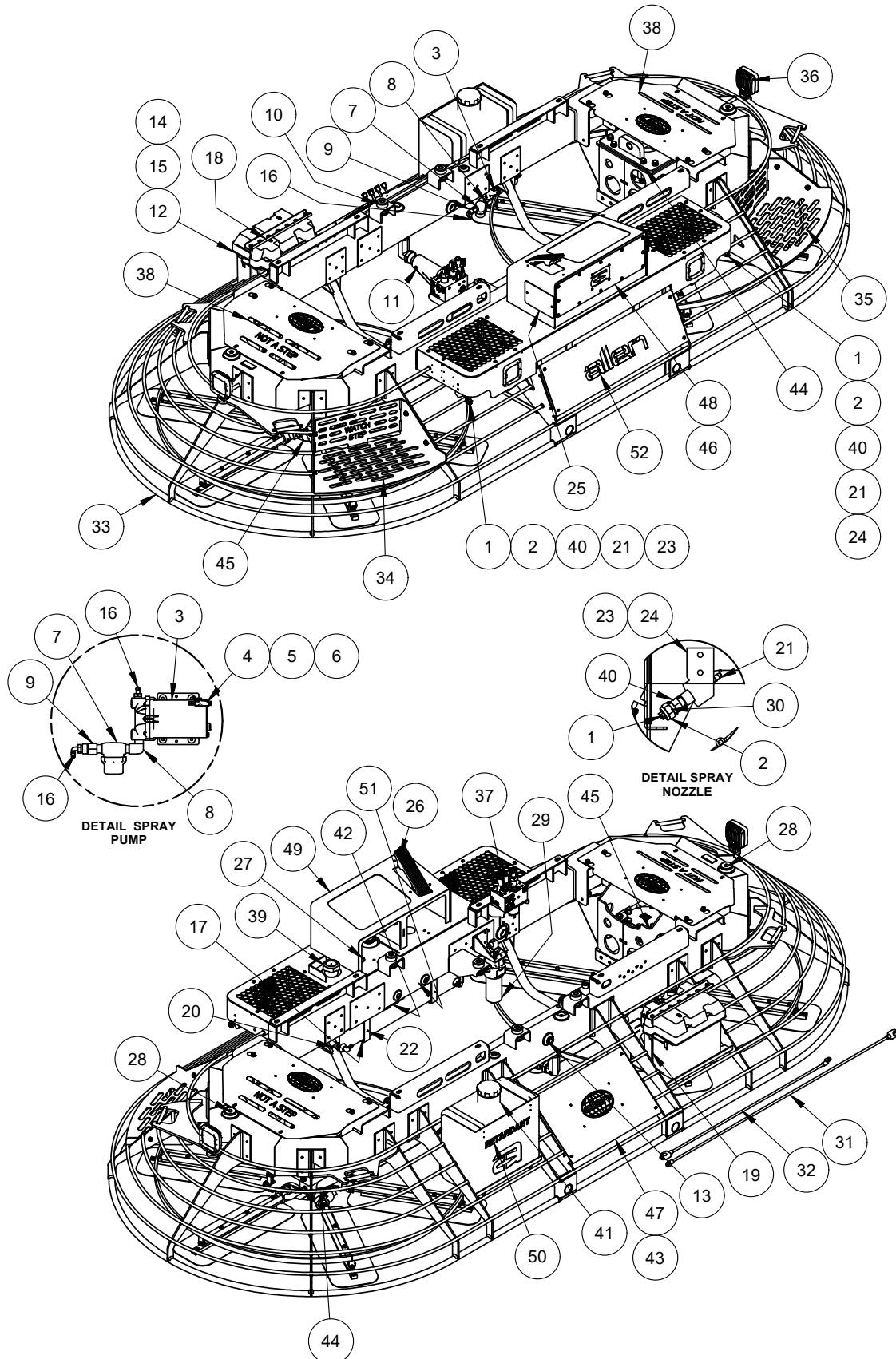
Lower Unit Assembly - Normal Rotation (073549) Parts List

SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	012702	TIP, 80°X0.10 GPM BRASS SPRAY	2
2	012705	RETAINER, BRASS SPRAY TIP	2
3	033735	PUMP, SPRAY SYSTEM	1
4	038641	HOUSING, 2 POSITION WEA PAK FEMALE	1
5	038644	TERMINAL, 16-14 WEA PAK FEMALE	2
6	038648	SEAL, 16-14 AWG GRAY CAVITY	2
7	040209	FILTER, RETARDANT SPRAY SYSTEM	1
8	040387	ELBOW, 3/8 BRASS 90° STREET	1
9	040388	FTG, 3/8X1/4 BRASS FM TO FM REDUCER	1
10	045757	ISOLATOR, FOR ENG MOUNT	4
11	046472	Y-STRAINER	1
12	046696	BOX, STANDARD BATTERY	1
13	046731	SIGHT GLASS HYD RESERVOIR	1
14	047251	PAD, 10-7/8X7-1/4X1 BARRIER	1
15	047604	BATTERY, 700CCA 12V	1
16	047933	ELBOW, 1/4 PUSHLOCK X 1/4 NPT PLASTIC	2
17	048562	CUSHION, BOTTOM TANK (RUBBER)	2
18	048563	CHANNEL, BATTERY HOLD-DOWN	1
19	048589	ROD ALL THREAD, 1/4-20 BATTERY HOLD DOWN	2
20	048653	BARB, HOSE PLASTIC 1/4" X 1/4 NPT	2
21	048676	PLUG, HOLLOW RUBBER	8
22	049981	WELD'T, RH SPRAY BRACKET	1
23	049982	WELD'T, LH SPRAY BRACKET	1
24	060492	PLATE, COVER TOP DECK SIDE	1
25	063341	FOOT PEDAL ELECTRONIC	1
26	064501	CUSHION, TOP TANK (RUBBER)	1
27	065017	FITTING, PLUG SAE #20 HOLLOW HEX PLUG	2
28	065141	FILTER, HIGH PRESSURE	1
29	065244	STRAINER, POLY 50 MICRON MESH, W/ CHECK VALVE	2
30	065847	BATTERY CABLE, POSITIVE 2AWG	1
31	065848	BATTERY CABLE, NEGATIVE 2 AWG	1
32	069781	MAIN FRAME WELDMENT	1
33	069823	STEP, RH	1
34	069824	STEP, LH	1
35	069835	LIGHT, LED 1200 LUMENS 12 VDC (1.5 AMP)	4
36	069958	MANIFOLD, WITH FILTER STEERING AND PITCH HDX600/760/780	1
37	070575	COVER, END MAIN FRAME HDX780	2

SECTION 1 PARTS

Lower Unit Assembly - Normal Rotation (073549)



Lower Unit Assembly - Normal Rotation (073549) Parts List Cont.

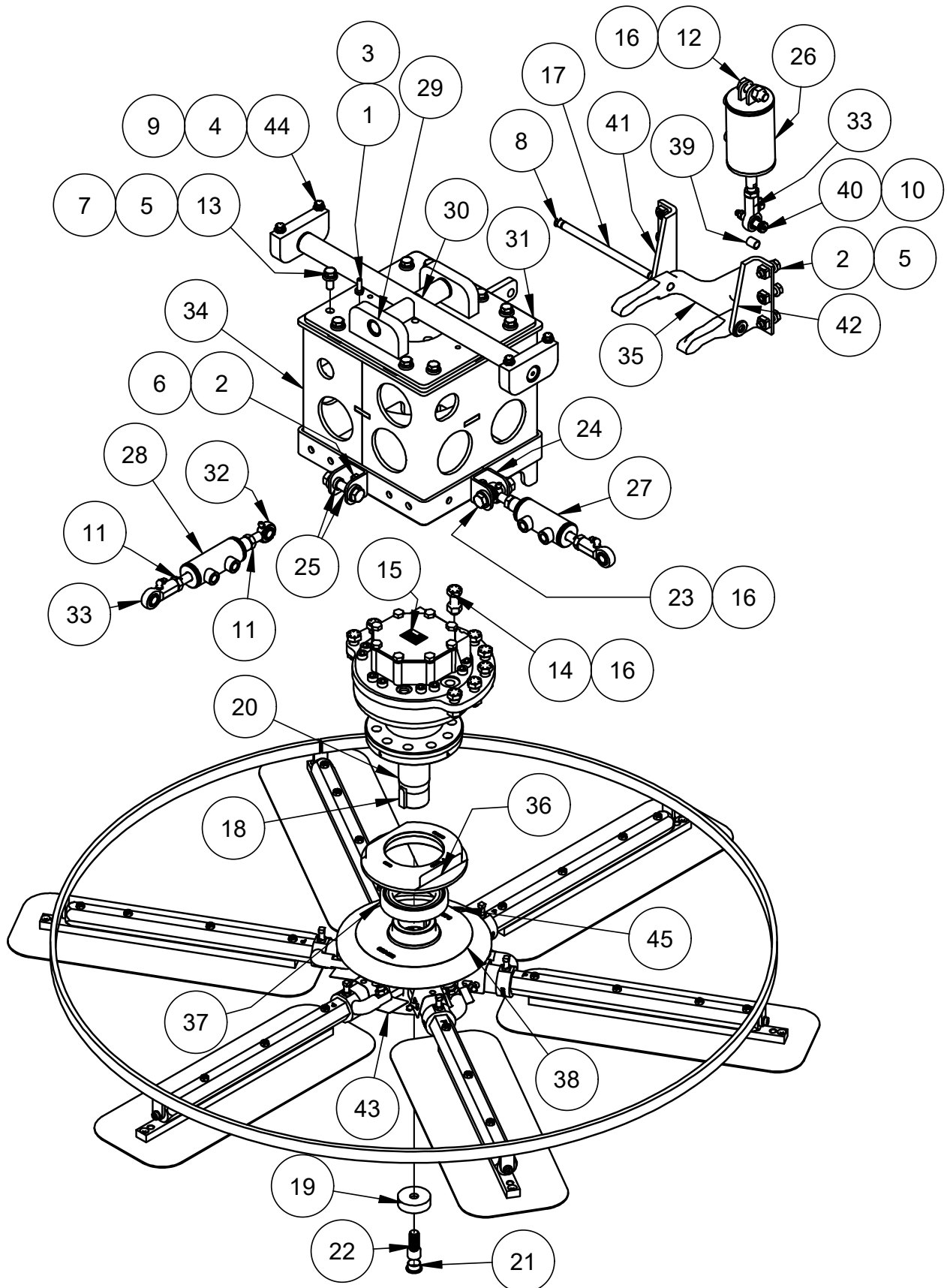
SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
38	070610	FUEL TANK ASSEMBLY HDX780 (18 GALLON)	1
39	071531	NOZZLE BODY,MALE STRAIGHT TEE JET BRASS	2
40	071536	TANK, 7 GALLON RETARDANT ASSEMBLY (BLACK)	1
41	072559	FUEL PUMP	1
42	072856	PLATE, BACKER FOR EMBLEM PLATE RIDERS	3
43	073547	ASSEMBLY, LH ROTOR FOR HDX780 (NORMAL ROTATION)	1
44	073548	ASSEMBLY, RH ROTOR FOR HDX780 (NORMAL ROTATION)	1
45	074535	PLATE, BACKING FOR SMALL SYMBOL RED	1
46	075147	COVER REAR CENTER	1
47	075226	COVER FRONT, DECK FOR HDX780	1
48	075227	DECK PLATE FOR HDX780 RIDING TROWEL	1
49	075422	GUARD, TANK FOR 7 GALLON TANKS	1
50	078629	FILTER, IN-LINE PRE-FUEL FOR 3H50TIC/4H50TIC (MAIN FUEL FILTER 078612)	1
51	081059	PLATE, COVER FRONT BOTTOM CENTER FOR HDX780	1

Feb. 2023: Hatz main fuel filter moved to engine, added in-line filter. Old filters Pre-Fuel Filter (065851) main Fuel Filter (065852)

SECTION 1 PARTS

Rotor Assembly Normal Rotation- Left Hand (073547)



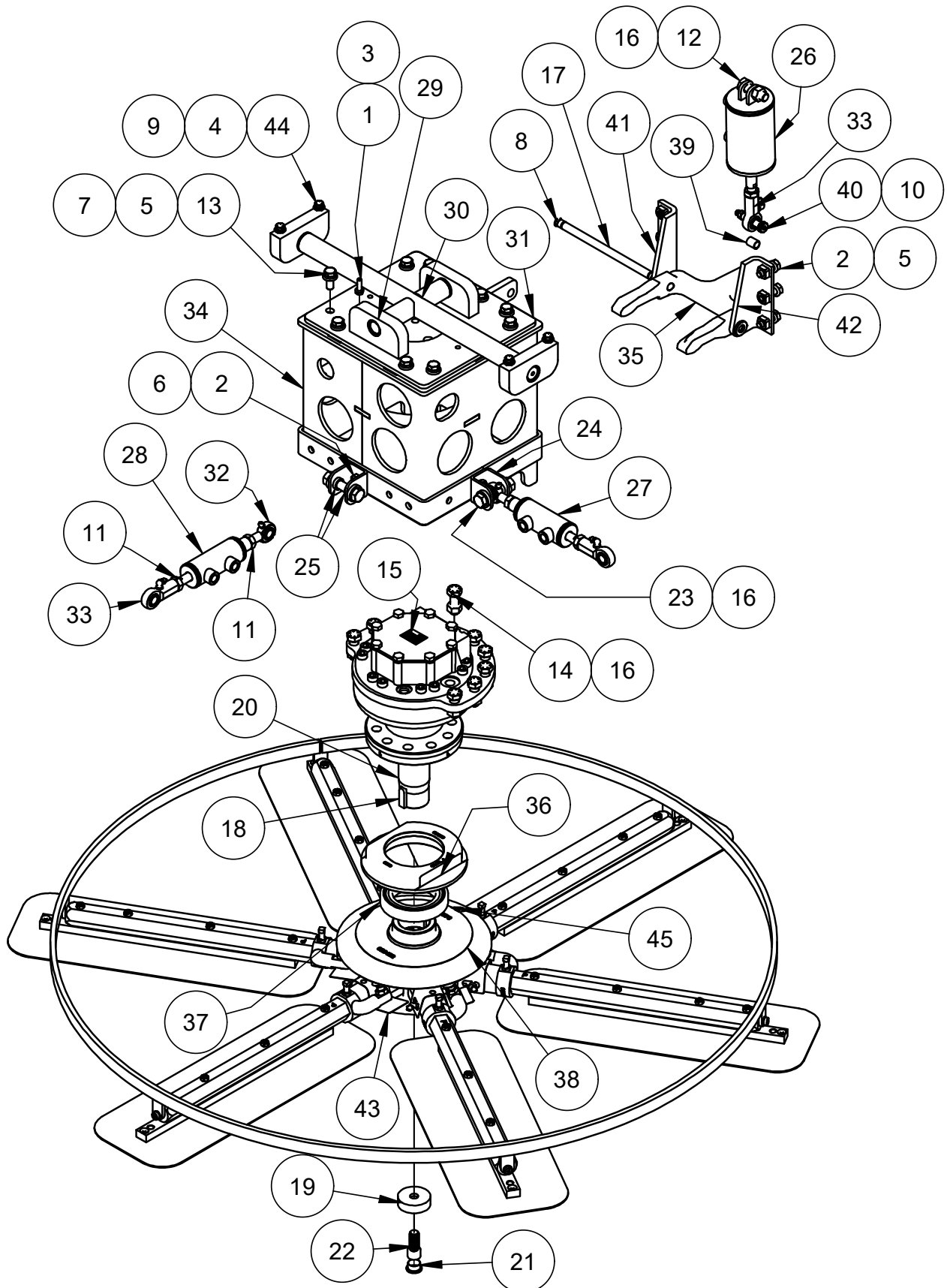
Rotor Assembly Normal Rotation - Left Hand (073547)

SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	010020	FASTENER, HHCS 5/16-18 X 1	4
2	010069	FASTENER, HHCS 1/2-13 X 1-1/2	8
3	010090	FASTENER, LW 5/16	4
4	010091	FASTENER, LW 3/8	4
5	010093	FASTENER, LW 1/2	18
6	011238	FASTENER, NUT HEX NYLOK 1/2-13	2
7	011490	FASTENER, FW 1/2	12
8	015677	RING, Ø7/16 E-STYLE RETAINING	2
9	017751	FASTENER, FW 3/8	4
10	020514	FASTENER, NUT STOVER LOCK 3/8-16	1
11	020688	FASTENER, JAM HEX NUT 5/8-18 RH	5
12	027969	FASTENER, HHCS 5/8-18 X 2	1
13	038508	FASTENER, HHCS 1/2-13 X 1 1/4	12
14	040319	FASTENER, HHCS 5/8-18X1-1/4	10
15	043062	HYDRAULIC MOTOR	1
16	043269	FASTENER, NUT STOVER 5/8-18	13
17	044799	PIN, #2 YOKE ARM	1
18	046231	KEY, ROTOR SHAFT	1
19	046643	WASHER, TYPE 3 RETAINING	1
20	046645	ROTOR SHAFT, TYPE 3 RH THREAD	1
21	046646	PLUG, 7/8 THREAD PROTECT CAP	1
22	046647	BOLT, 5/8-18 RH X 1 1/2 SHD CAP	1
23	048339	FASTENER, HHCS 5/8-18 X 3	2
24	048624	CHANNEL, CYLINDER ROD END CONNECTOR	2
25	048627	SPACER, STEERING CONNECTION	4
26	048659	PITCH CYLINDER HDX SERIES 3" BORE 1 1/2" STROKE	1
27	048661	CYLINDER, 1.5X1.25 STEERING	1
28	050718	CYLINDER, 1.5X1.5 STEERING	1
29	064260	BEARING ASSEMBLY WITH BRONZE BEARING (068157)	4
30	064280	CROSSHEAD WELDMENT, L/R AND F/R	1
31	064741	PLATE, TOP FOR LH HYD. MTR. MNT.	1
32	065446	ROD END, MALE 5/8	2
33	066188	ROD END, FEMALE 5/8	3
34	069761	MOUNT, LH ROTOR MOTOR MNT	1
35	069766	YOKE ARM FOR HDX780	1

SECTION 1 PARTS

Rotor Assembly Normal Rotation - Left Hand (073547)



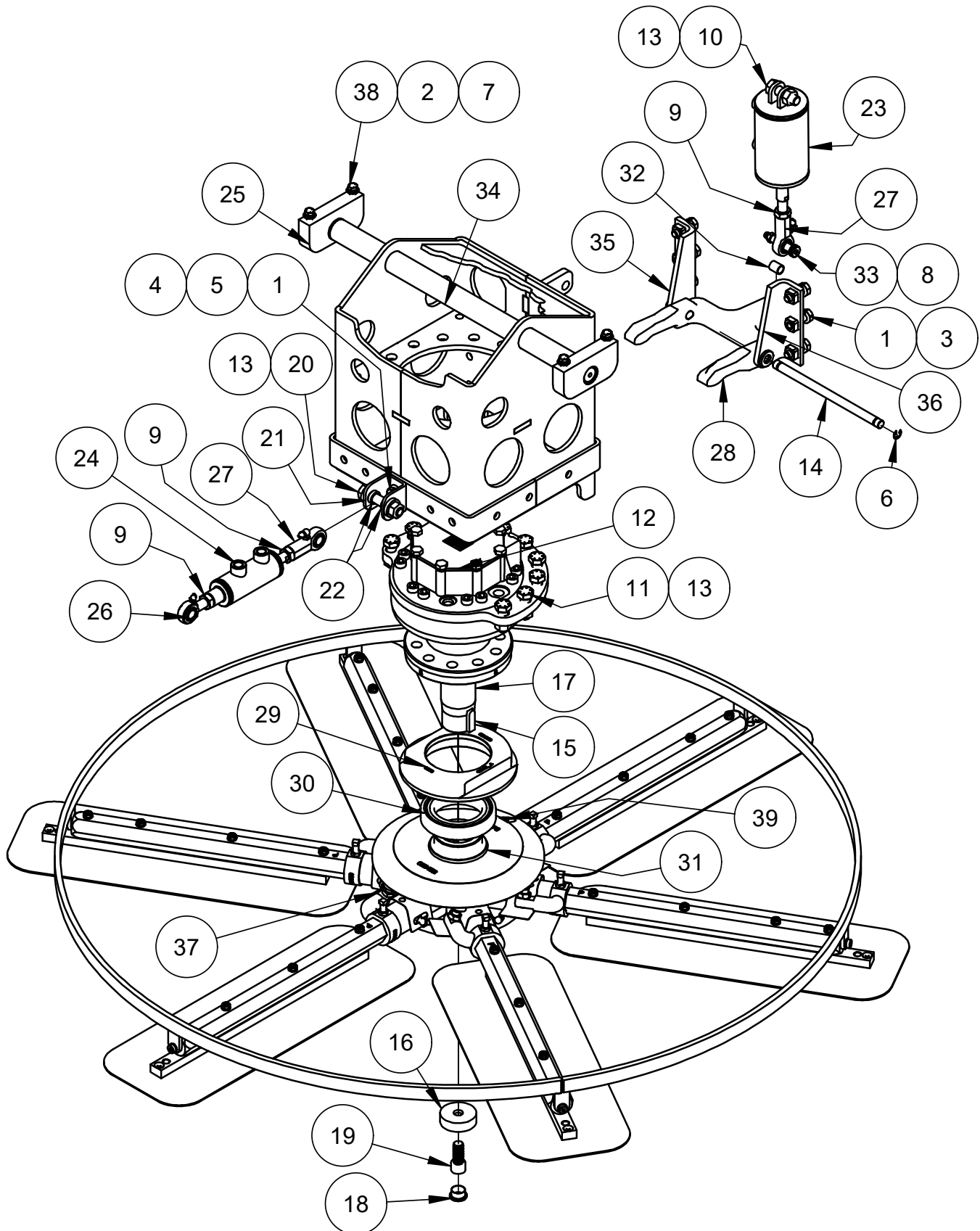
Rotor Assembly Normal Rotation - Left Hand (073547) Continued

SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
36	069767	CAP, FOR PRESSURE PLATE	1
37	069768	BEARING, DEEP GROOVE BALL BEARING	1
38	069769	PLATE, PRESSURE	1
39	069771	TUBE SPACER FOR YOKE ARM TO CYLINDER	1
40	069772	FASTENER, SHLDR BOLT 1/2" DIA X 1 7/8" LONG	1
41	069776	BRACKET, RH YOKE MNT. FOR ROTOR ASSEMBLIES	1
42	069779	BRACKET, LH YOKE MNT. FOR ROTOR ASSEMBLIES	1
43	071158	ASSEMBLY, LOWER ROTOR (RH)	1
44	074068	FASTENER, HHCS 3/8-16 X 1	4
45	074697	FITTING, #10-32 UNF STRAIGHT GREASE	1

SECTION 1 PARTS

Rotor Assembly - Right Hand (073548)



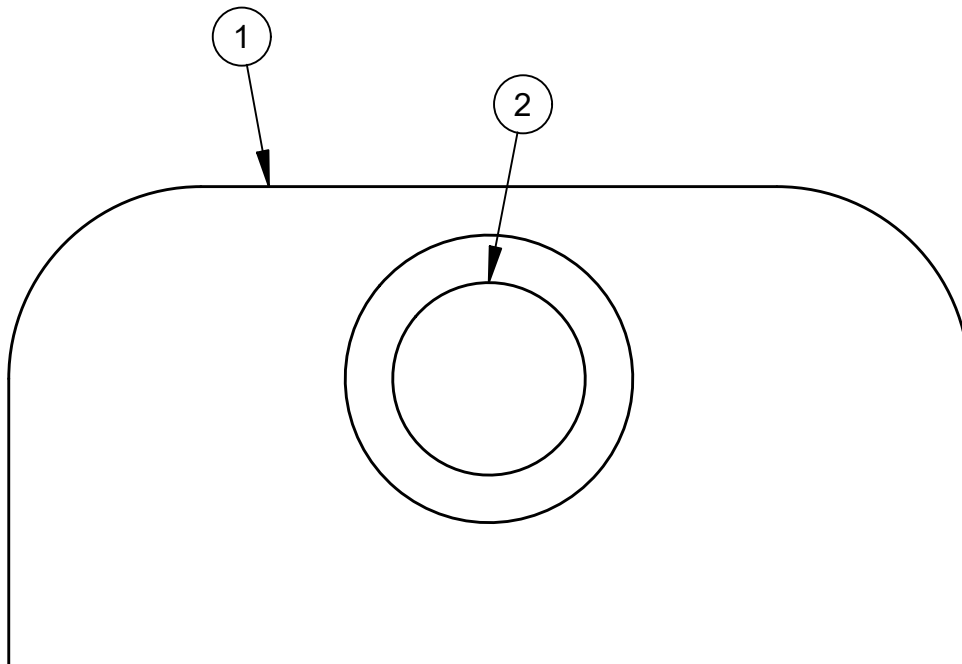
Rotor Assembly - Right Hand (073548)

SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
1	010069	FASTENER, HHCS 1/2-13 X 1-1/2	7
2	010091	FASTENER, LW 3/8	4
3	010093	FASTENER, LW 1/2	6
4	011238	FASTENER, NUT HEX NYLOK 1/2-13	1
5	011490	FASTENER, FW HARDENED 1/2	1
6	015677	RING, Ø7/16 E-STYLE RETAINING	2
7	017751	FASTENER, FW 3/8	4
8	020514	FASTENER, NUT STOVER LOCK 3/8-16	1
9	020688	FASTENER, JAM HEX NUT 5/8-18 RH	3
10	027969	FASTENER, HHCS 5/8-18 X 2	1
11	040319	FASTENER, HHS 5/8-18X1-1/4	10
12	043062	HYDRAULIC MOTOR	1
13	043269	FASTENER, NUT STOVER 5/8-18	12
14	044799	PIN, #2 YOKE ARM	1
15	046231	KEY, ROTOR SHAFT	1
16	046643	WASHER, TYPE 3 RETAINING	1
17	046644	ROTOR SHAFT, TYPE 3 LH THREAD	1
18	046646	PLUG, 7/8 THREAD PROTECT CAP	1
19	046648	BOLT, 5/8-18 LH X 1 1/2 SHD CAP	1
20	048339	FASTENER, HHCS 5/8-18 X 3	1
21	048624	CHANNEL, CYLINDER ROD END CONNECTOR	1
22	048627	SPACER, STEERING CONNECTION	2
23	048659	PITCH CYLINDER HDX SERIES 3" BORE 1 1/2" STROKE	1
24	050718	CYLINDER, 1.5X1.5 STEERING	1
25	064260	BEARING ASSEMBLY WITH BRONZE BEARING (068157)	2
26	065446	ROD, END MALE 5/8	1
27	066188	ROD END, FEMALE 5/8	2
28	069766	YOKE ARM FOR HDX780	1
29	069767	CAP, PRESSURE PLATE	1
30	069768	BEARING, DEEP GROOVE BALL BEARING	1
31	069769	PLATE, PRESSURE	1
32	069771	TUBE SPACER FOR YOKE ARM TO CYLINDER	1
33	069772	FASTENER, SHLDR BOLT 1/2" DIA X 1 7/8" LONG	1
34	069773	RH HYDRAULIC MOTOR MNT WLDT.	1
35	069776	BRACKET, RH YOKE MNT. FOR ROTOR ASSEMBLIES	1
36	069779	BRACKET, LH YOKE MNT. FOR ROTOR ASSEMBLIES	1
37	071157	ASSEMBLY, LOWER ROTOR (LH)	1
38	074068	FASTENER, HHCS 3/8-16 X 1	4
39	074697	FITTING, #10-32 UNF STRAIGHT GREASE	1

SECTION 1
PARTS

Bearing Block Assembly (064260)

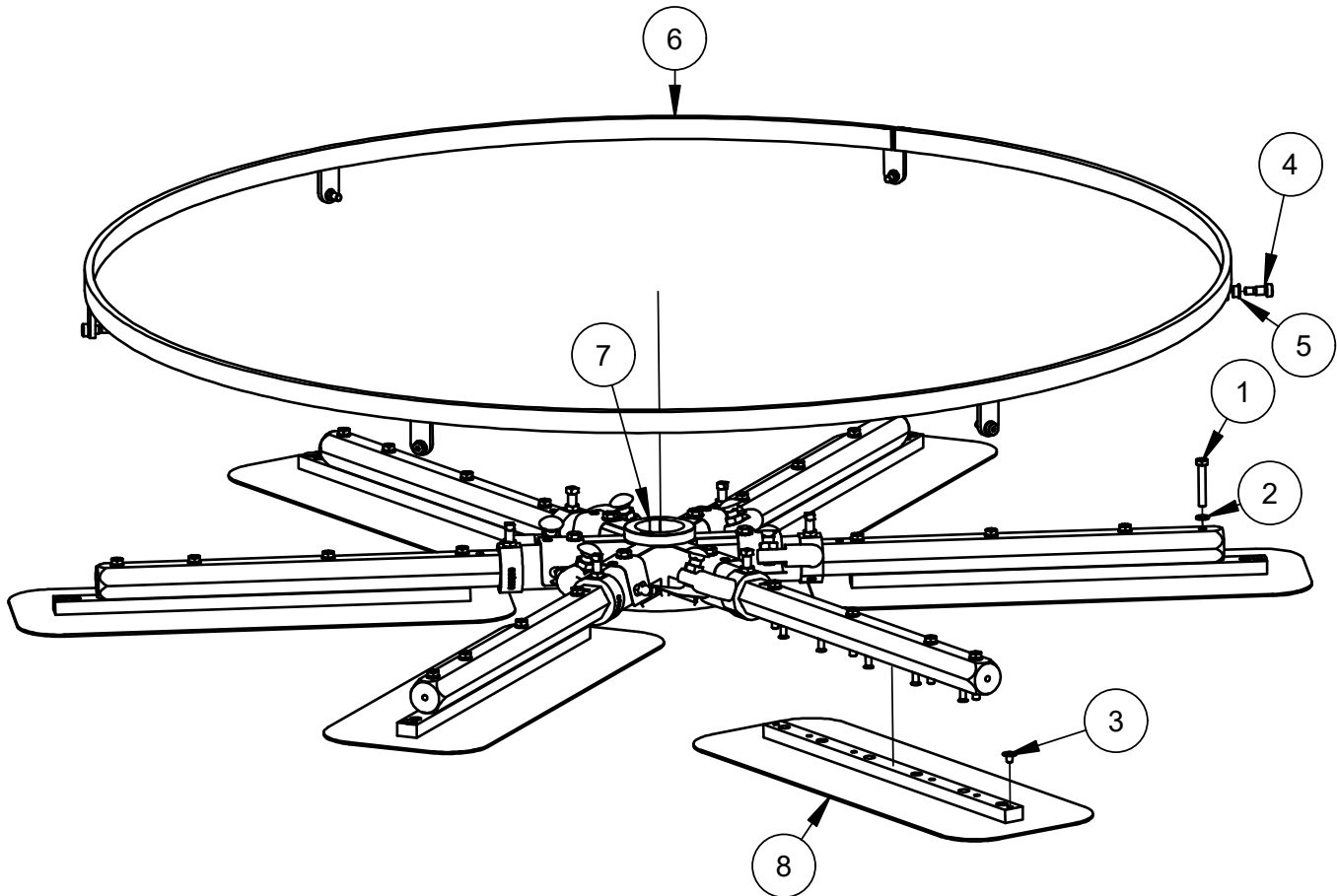


ITEM	PART NO.	DESCRIPTION	QTY
1	064259	BLOCK, FOR BEARING BLOCK	1
2	068157	FLANGED BEARING, 1" ID X 1 LONG OIL IMPREGNATED BRONZE	1

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SECTION 1 PARTS

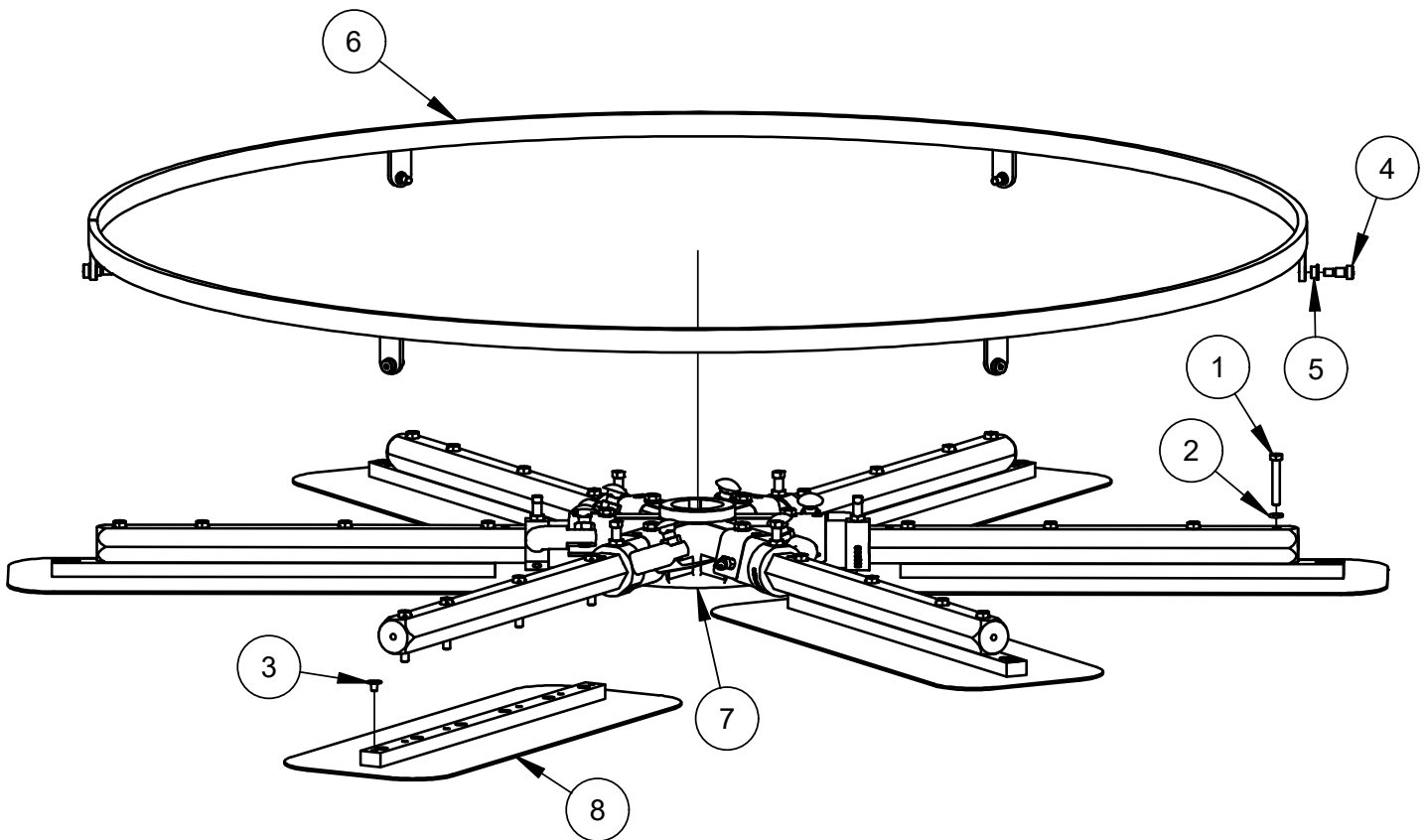
Lower Rotor Assembly - Left Hand (071157)



ITEM	PART NO.	DESCRIPTION	QTY
1	010024	FASTENER, HHCS 5/16-18 X 2	24
2	010090	FASTENER, LW 5/16	24
3	015694	PLUG W-1 RED PLASTIC TAPERED	6
4	025091	FASTENER, 3/8 SHOULDER BOLT X 1/2 LONG	6
5	025092	BUSHING, 3/8 X 1/2 X 5/16 BRONZE	6
6	047428	RING, 6 BLADE STABILIZER	1
7	047430	ASSY, RH 1500-6 SHD SPIDER	1
8	047973G	BLADE, 8 X 23 FLAT FINISH	6

Lower Rotor Assembly - Right Hand (071158)

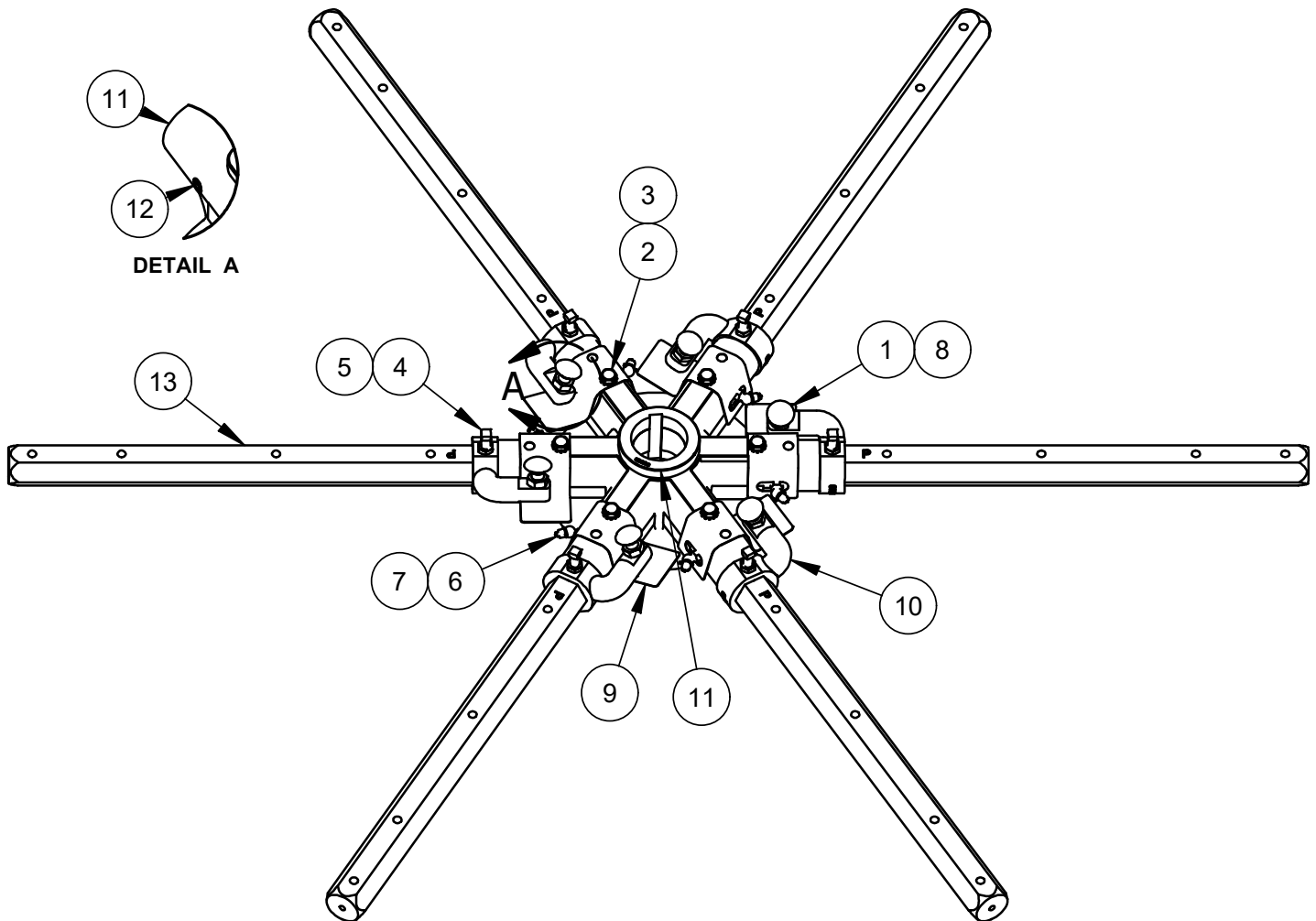
SECTION 1 PARTS



ITEM	PART NO.	DESCRIPTION	QTY
1	010024	FASTENER, HHCS 5/16-18 X 2	24
2	010090	FASTENER, LW 5/16	24
3	015694	PLUG W-1 RED PLASTIC TAPERED	6
4	025091	FASTENER, 3/8 SHOULDER BOLT X 1/2 LONG	6
5	025092	BUSHING, 3/8 X 1/2 X 5/16 BRONZE	6
6	047428	RING, 6 BLADE STABILIZER	1
7	047429	ASSEMBLY, LH 1500-6 SHD SPIDER	1
8	047973G	BLADE, 8 X 23 FLAT FINISH	6

SECTION 1 PARTS

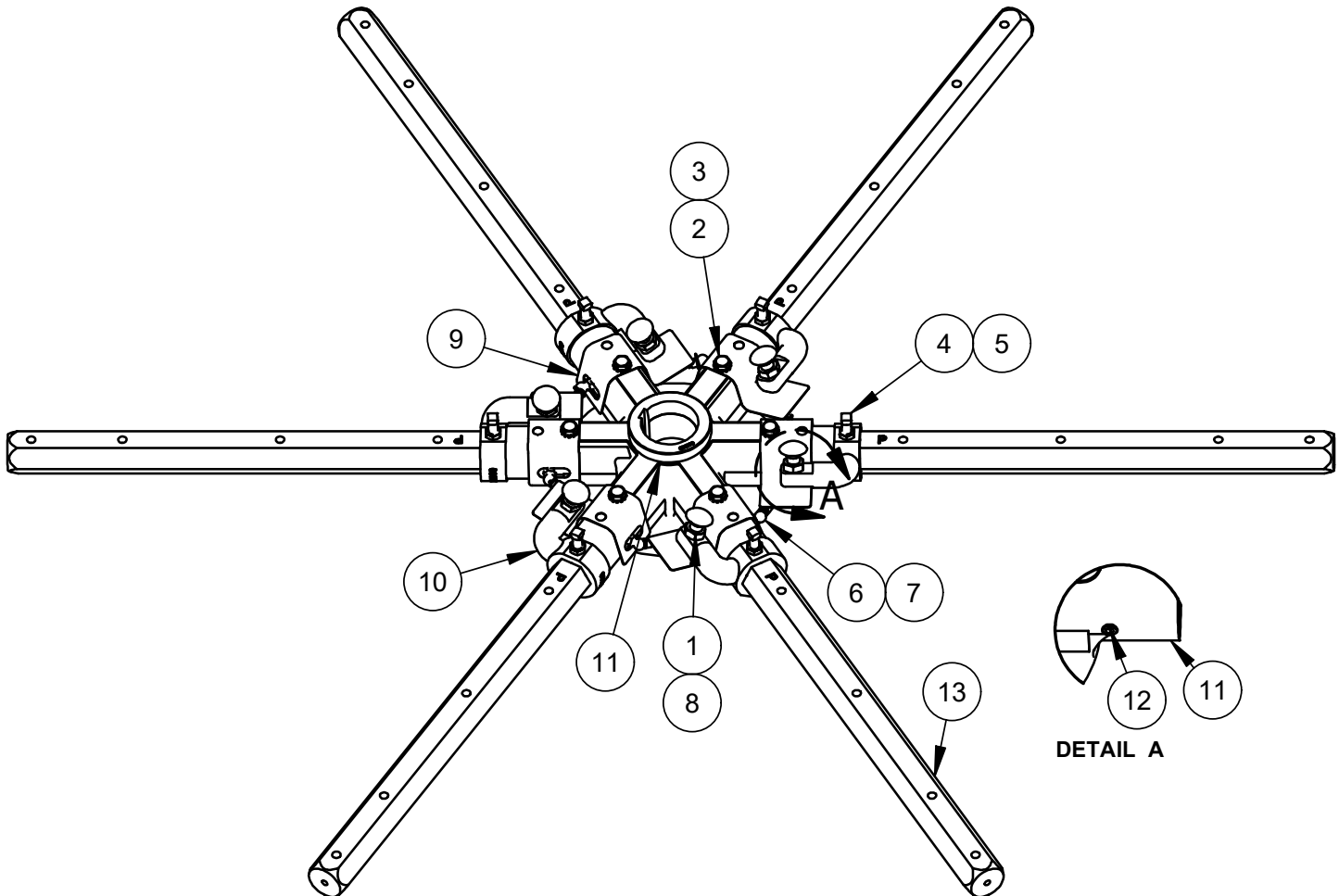
Spider Assembly - Left Hand (047429)



ITEM	PART NO.	DESCRIPTION	QTY
1	010050	FASTENER, NUT HEX JAM 1/2-13	6
2	015682	WASHER, 3/8 EXT TOOTH LOCK	6
3	015683	BOLT, 3/8-16 X 7/8 DOG PT HEX HD CAP	6
4	015684	FASTENER, NUT HEX JAM 3/8-16	6
5	015686	BOLT, 3/8-16 X 1 SQ SET HD	6
6	015692	CAP, Ø1/4 RED GREASE	6
7	024755	FITTING, 1/8-27 NPT 45° GREASE	6
8	028216	FASTENER, CABLT 1/2-13 X 1-1/2	6
9	039874	CLIP, SPRING	6
10	039880	LIFT LEVER, Ø1.375 ID	6
11	046560	SPIDER, LEFT HAND 6-BOSS	1
12	050963	PLUG, 1/8" NPT HEX SOCKET ZINC PLATED	6
13	069915	ARM, TROWEL	6

Spider Assembly - Right Hand (047430)

SECTION 1 PARTS

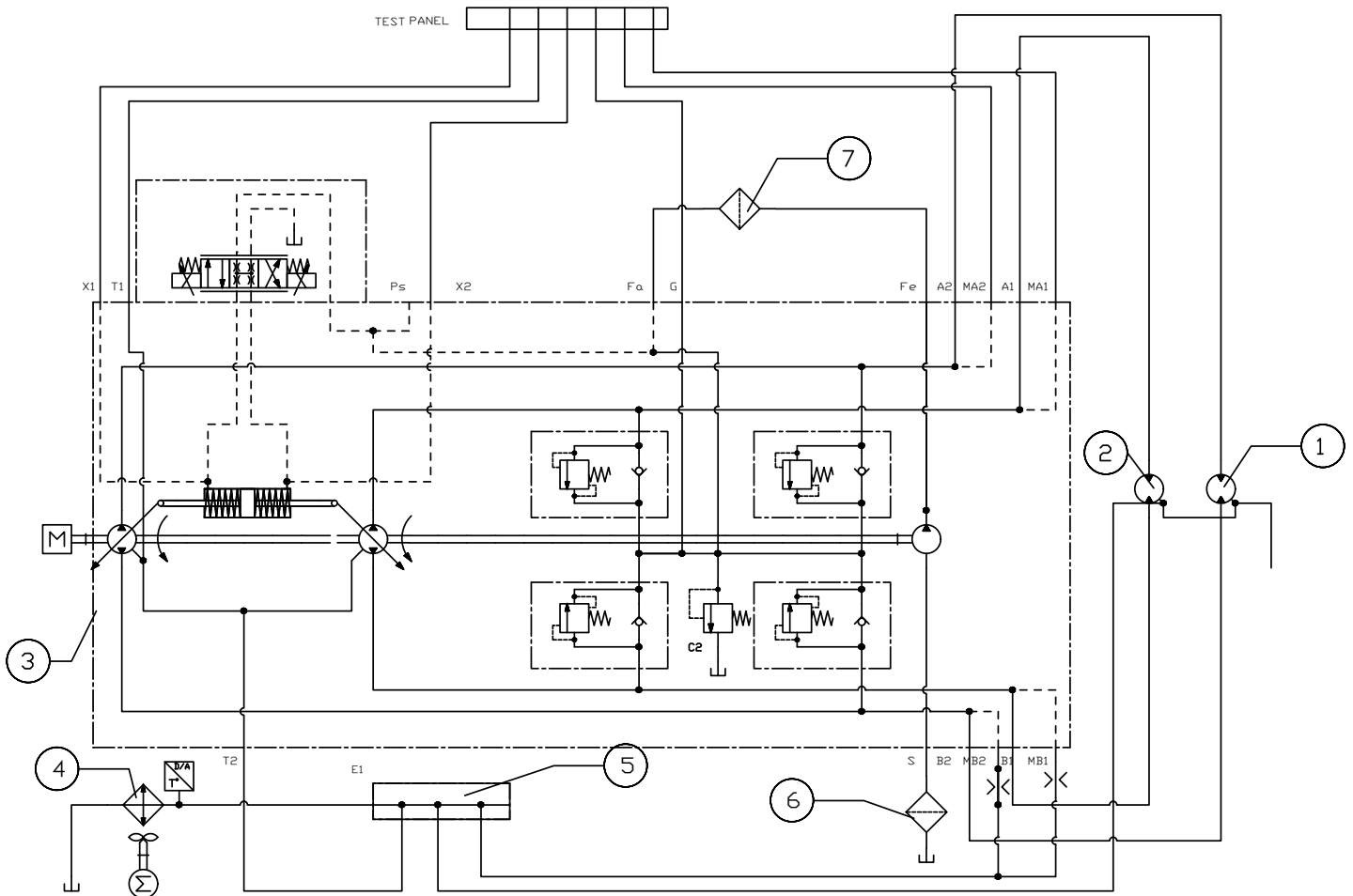


ITEM	PART NO.	DESCRIPTION	QTY
1	010050	FASTENER, NUT HEX JAM 1/2-13	6
2	015682	WASHER, 3/8 EXT TOOTH LOCK	6
3	015683	BOLT, 3/8-16 X 7/8 DOG PT HEX HD CAP	6
4	015684	FASTENER, NUT HEX JAM 3/8-16	6
5	015686	BOLT, 3/8-16 X 1 SQ SET HD	6
6	015692	CAP, Ø1/4 RED GREASE	6
7	024755	FITTING, 1/8-27 NPT 45° GREASE	6
8	028216	FASTENER, CABLT 1/2-13 X 1-1/2	6
9	039874	CLIP, SPRING	6
10	039880	LEVER, Ø1.375 ID LIFT	6
11	046560	SPIDER, LEFT HAND 6-BOSS	1
12	050963	PLUG, 1/8" NPT HEX SOCKET ZINC PLATED	6
13	069915	ARM, TROWEL	6

SECTION 1 PARTS

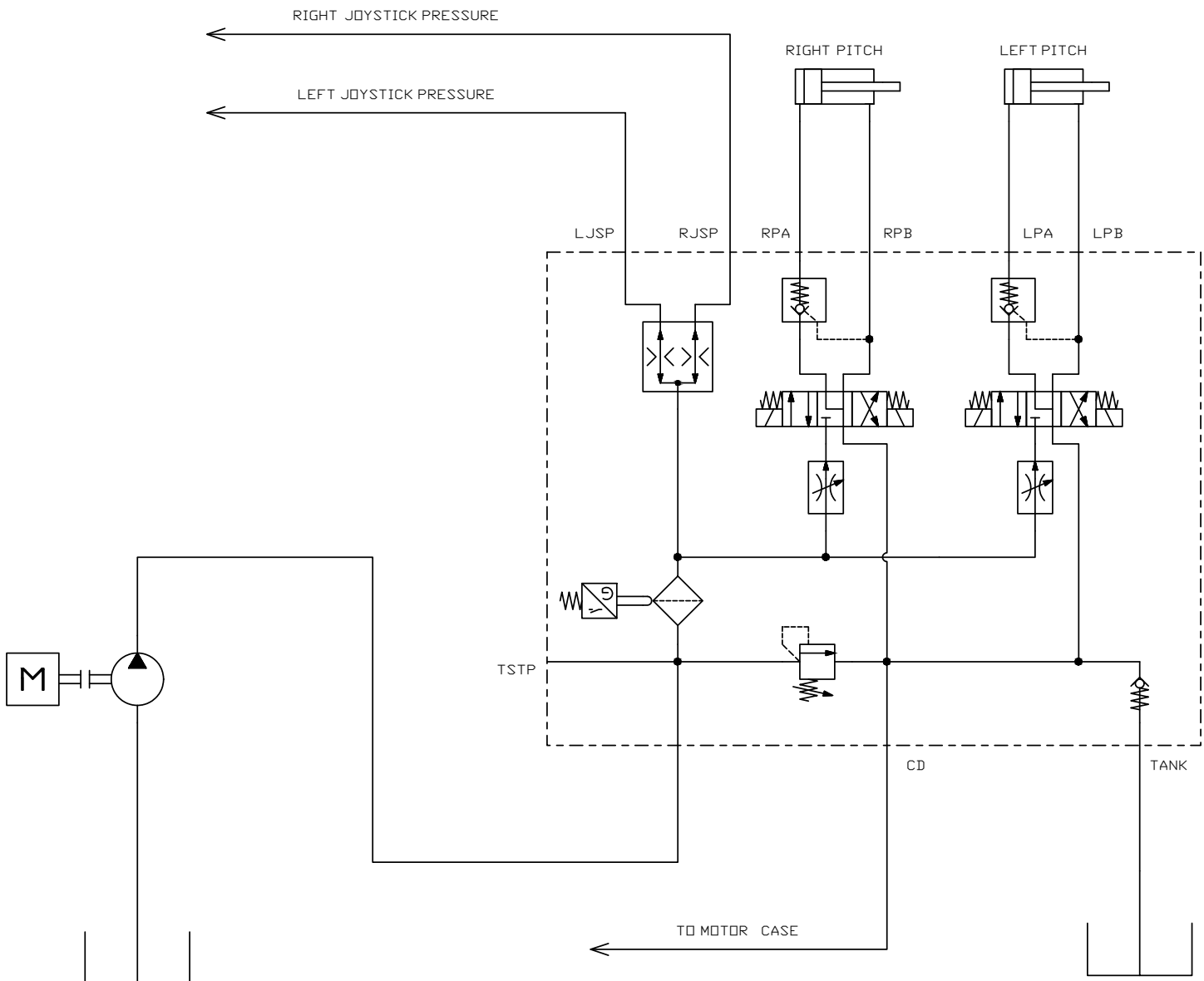
Hydraulic Schematic

Primary Hydraulic Circuit



Reference	Part Number	Quantity
<u>1</u>	<u>Rotor Motor</u>	<u>1</u>
<u>2</u>	<u>Rotor Motor</u>	<u>1</u>
<u>3</u>	<u>Primary Pump</u>	<u>1</u>
<u>4</u>	<u>HYD Cooler</u>	<u>1</u>
<u>5</u>	<u>Return Header</u>	<u>1</u>
<u>6</u>	<u>Y- Strainer</u>	<u>1</u>
<u>7</u>	<u>Charge Filter</u>	<u>1</u>

Auxiliary Hydraulic Circuit



SECTION 1 PARTS

Hydraulic System Parts

Replacement Parts

ITEM	PART #	DESCRIPTION	QTY
1	070522	Filter, Steering Element	1
2	043418	Filter, Charge	1
3	070097	Flow Divider / Combiner, Spool	1
4	070098	Check Valve - Ball	1
5	070099	Flow Control Valve, Pressure Compensated	1
6	071150	Relief Valve, Direct	1
7	071151	Solenoid Valve, 3/4"	1
8	071152	Check Valve	1
9	071153	Coil, 12VDC, Deutsch	1
10	071154	Clogging Indicator, 5-BAR	1

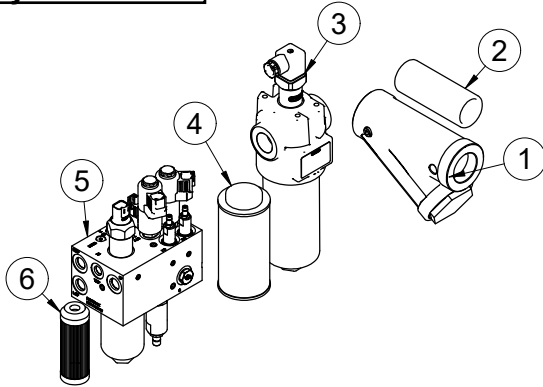
Hydraulic Kits

ITEM	PART #	DESCRIPTION	QTY
1	070336	Kit, Hydraulic, Fitting	1
2	070337	Kit, Hydraulic, Hose - Counter Rotation	1
3	070308	Kit, Hydraulic, Component	1

ITEM	PART #	DESCRIPTION	QTY
1	070336	Kit, Hydraulic, Fitting	1
2	073546	Kit, Hydraulic, Hose - Normal Rotation	1
3	070308	Kit, Hydraulic, Component	1

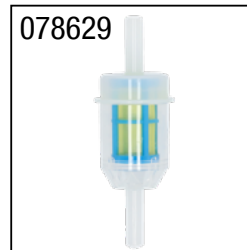
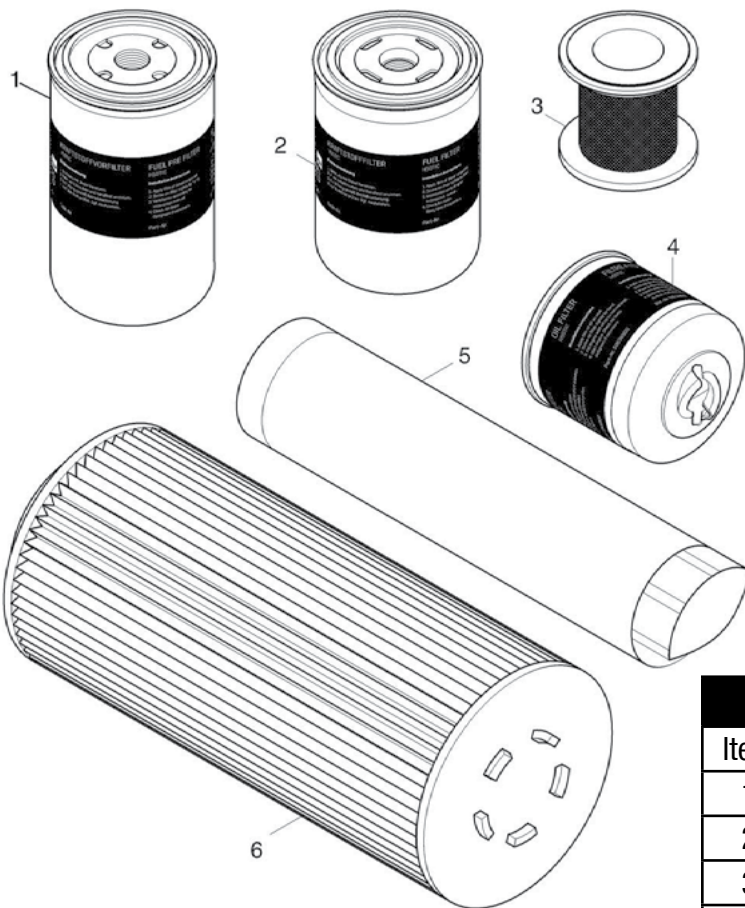
Note: Images for reference only

Hydraulic Filters



ITEM	PART NO.	DESCRIPTION	QTY
1	046472	Y-STRAINER	1
2	046473	FILTER, REPLACEMENT F/ Y-STRAINER	1
3	065141	HIGH PRESSURE CHARGE FILTER	1
4	043418	FILTER, REPLACEMENT F/ CHARGE FILTER	1
5	069958	MANIFOLD, WITH FILTER STEERING AND PITCH	1
6	070522	FILTER, REPLACEMENT F/ STEERING/PITCH MANIFOLD	1

Engine Filters

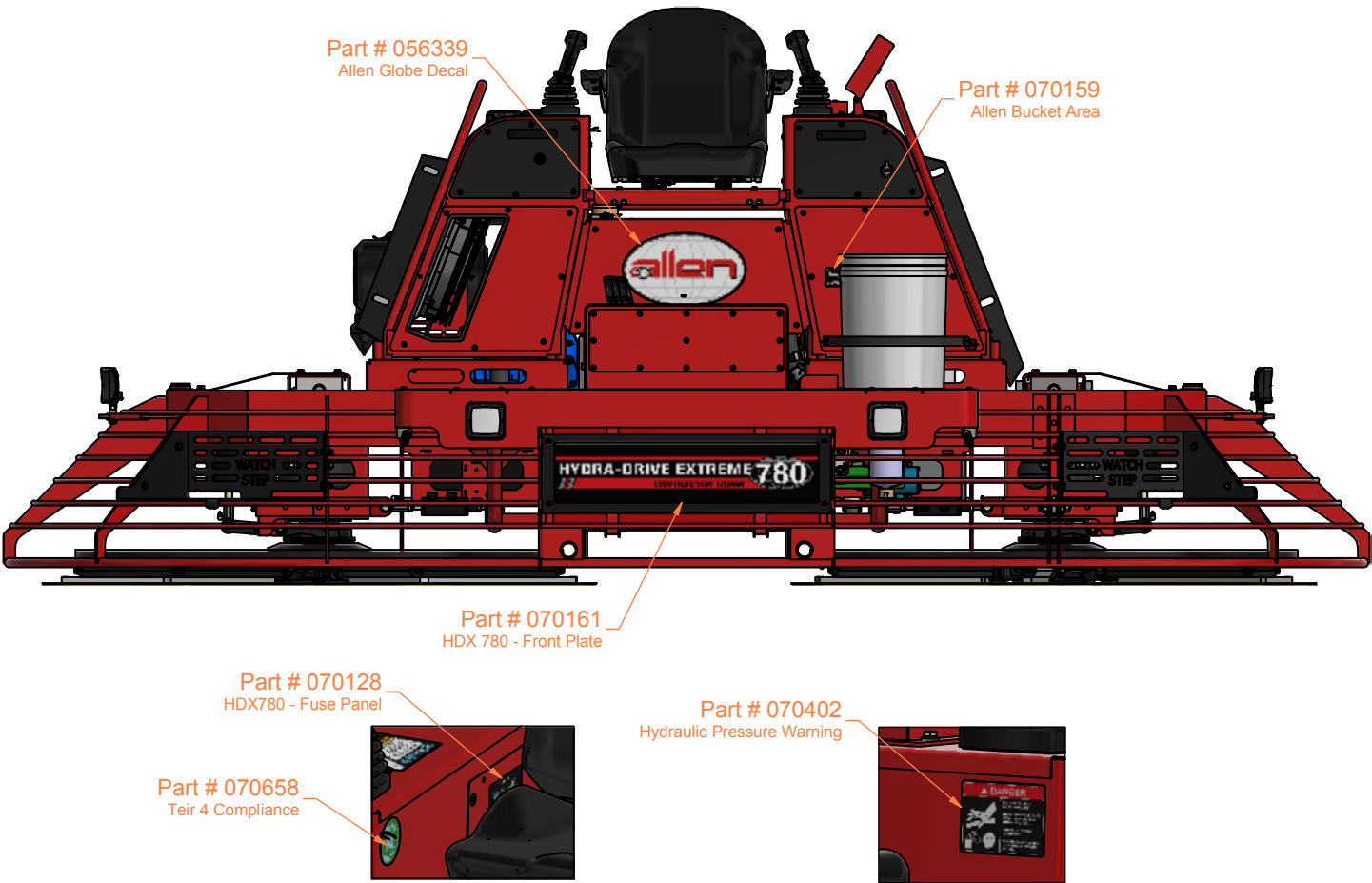


Note: February 2023 Hatz fuel system changed from Pre-Fuel and Main Fuel Filters (OLD) to an In-line Pre-Fuel and Main Fuel filters.

Replacement Filters

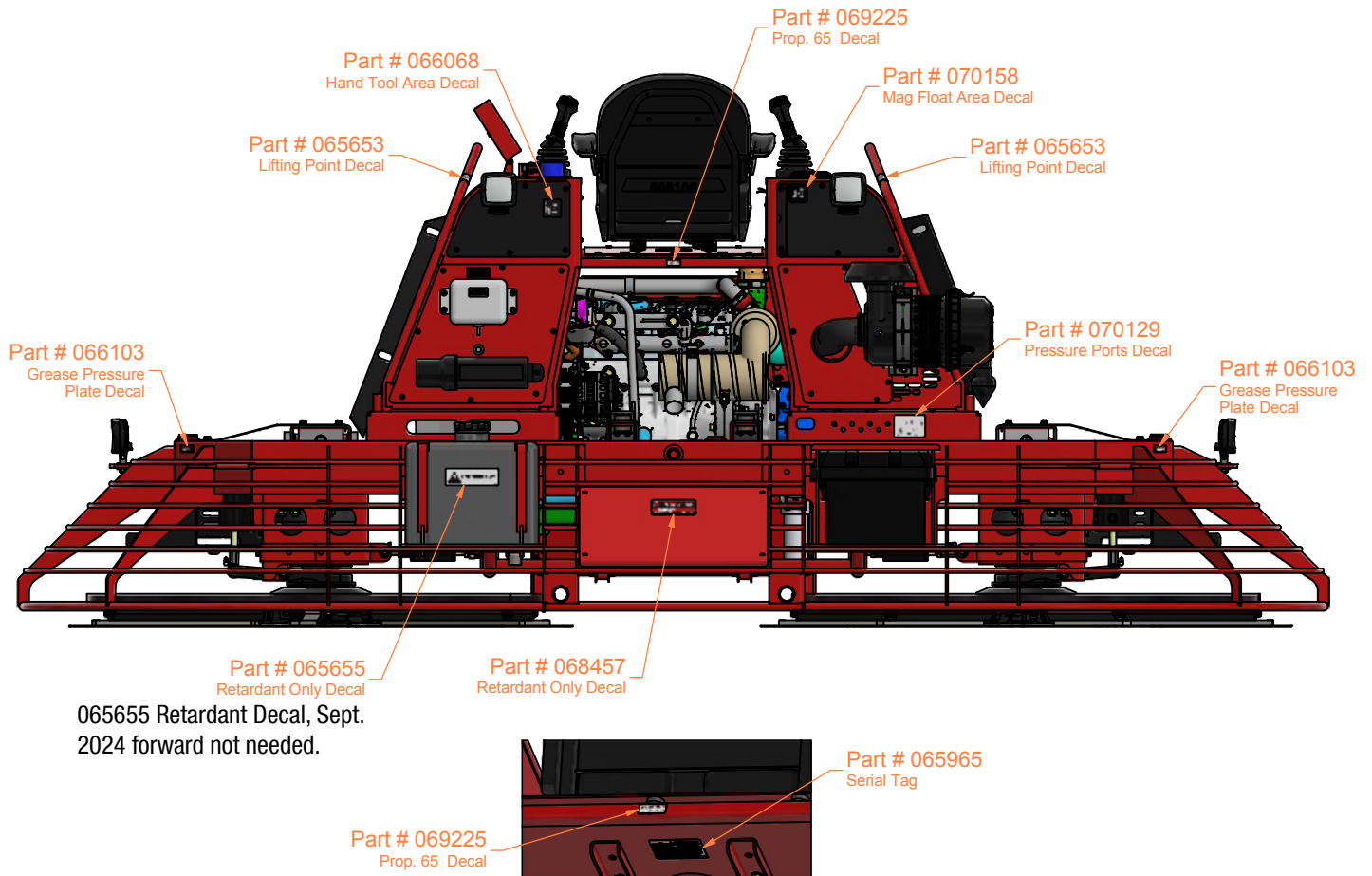
Item	Part #	Description	Qty
1	065851	Pre-Fuel Filter (Old part)	1
2	065852	Fuel Filter (Old part)	1
3	065853	Oil Separator	1
4	065854	Oil Filter	1
5	065855	Air Filter - Secondary	1
6	065856	Air Filter - Primary	1
-	078612	Fuel Filter, Element & O-Rings	1
-	078629	Pre-Fuel Filter, In-line	1

SECTION 2: DECALS



SECTION 2 DECALS

Decals - Rear (Kit #: 070156)

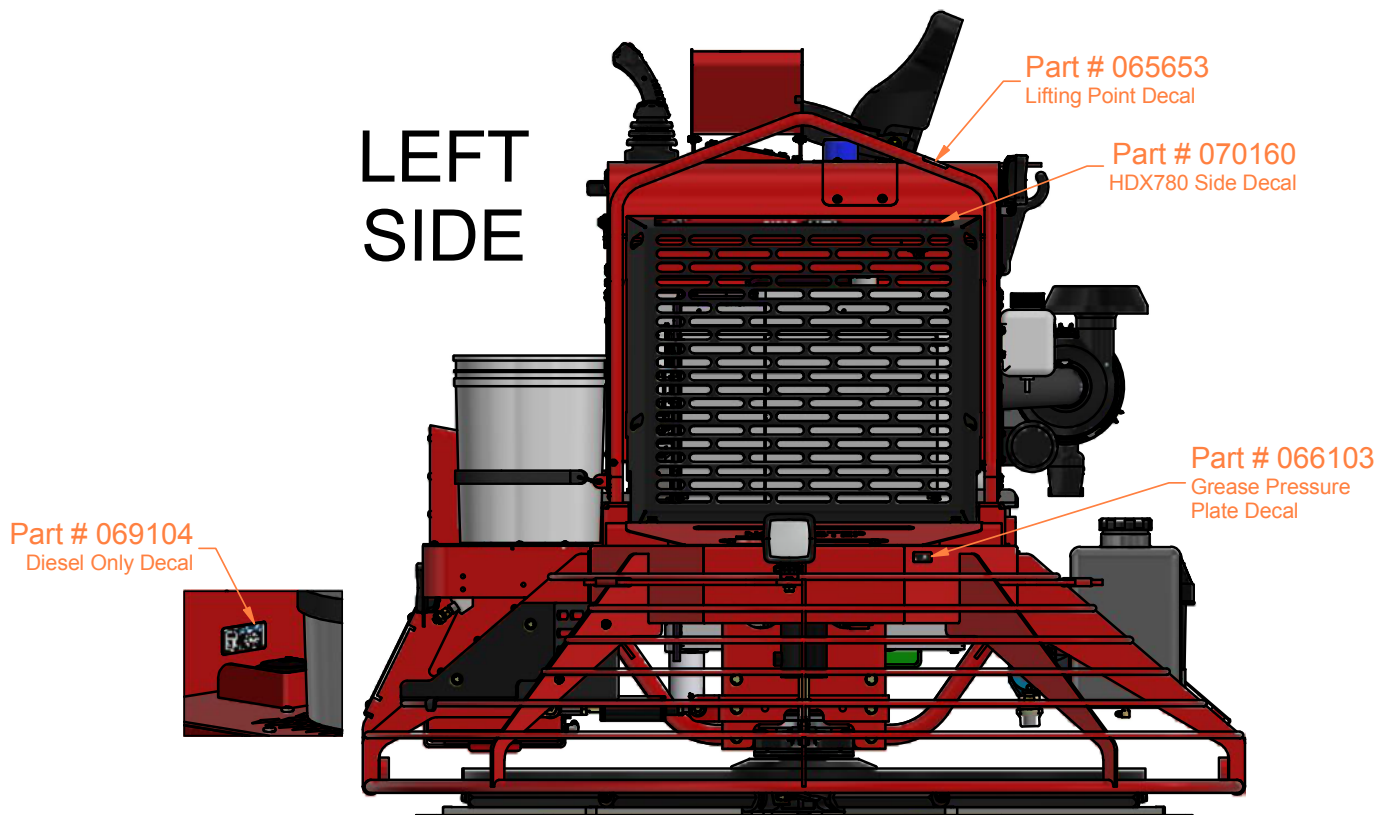
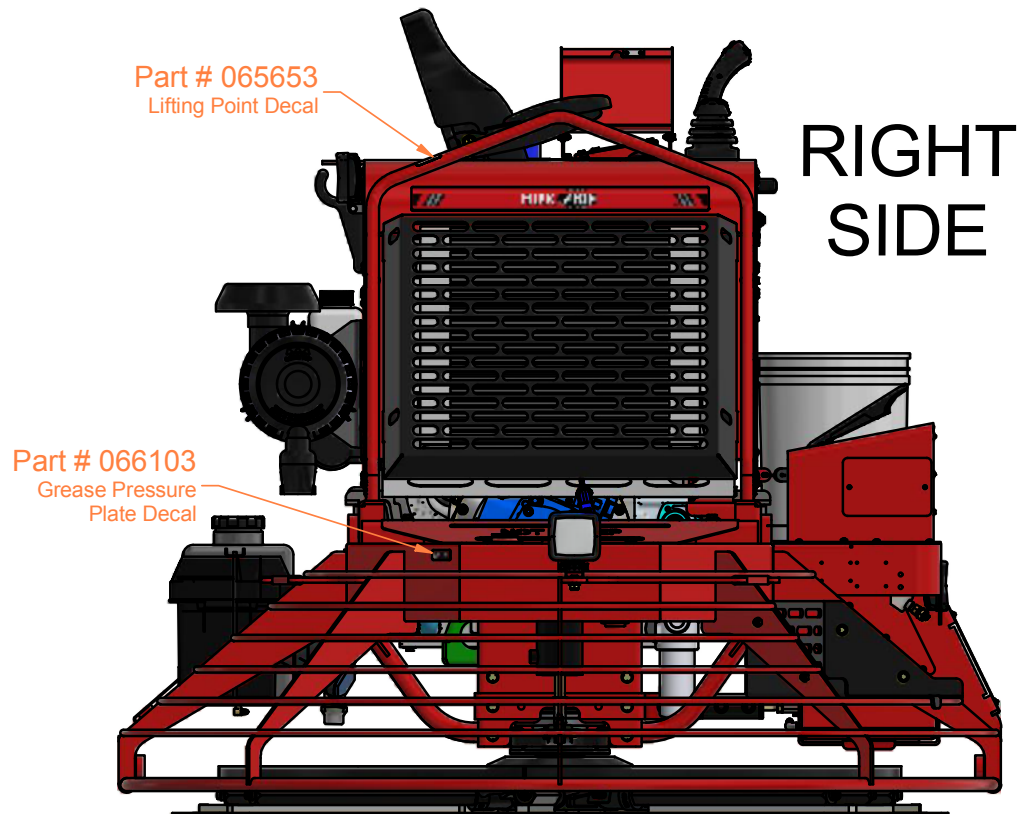


SECTION 2 DECALS



SECTION 2 DECALS

Decals - Right / Left (Kit #: 070156)



Revision Detail

MANUAL REVISION DETAIL

REVISION #	REVISION DATE	REVISION REFERENCE #	REVISION BY
-	02/20	Initial Release	MW
A	02/21	MN 21-003	MW
B	01/22	Updated Covers	MK
C	02/22	Update Part Number, ECR 22-114	MK
D	03/24	Telematics, Normal Rotation Parts	MK
E	11/24	24-505, 24-554, Telematics, Hatz Filter	MK
F	08/25	Updated Part Illustrations and Parts List	MK
G	10/25	Added Hyd and Eng service filter page	MK



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