

RIDING TROWEL

HDX780



PARTS & DECALS MANUAL

Manual Part #: 069971P | Revision: C
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:

Part No.

069600

Description

HDX780 Riding Trowel, HATZ 74HP Diesel T4, 12ft

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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:

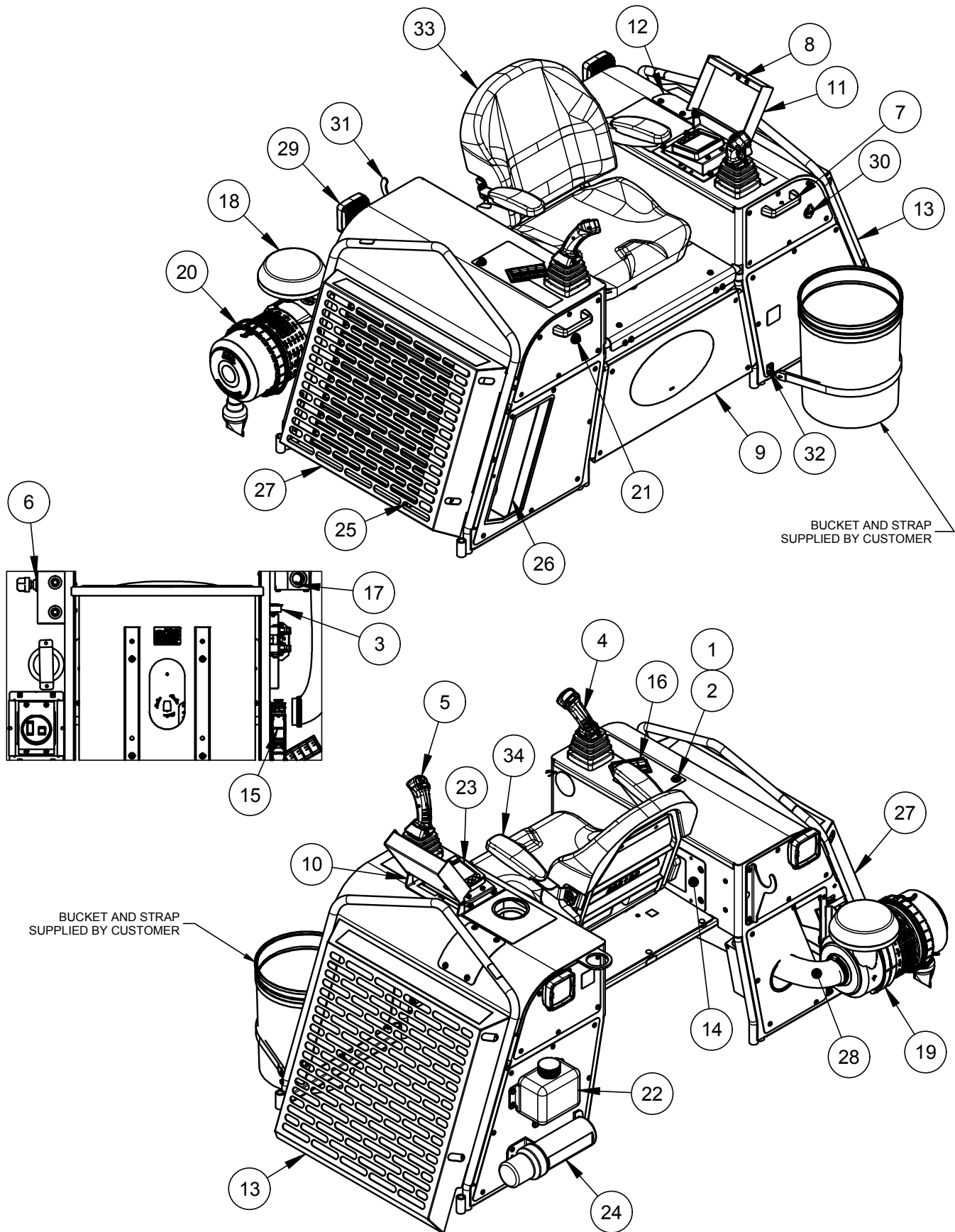
1. All orders for service parts - include the serial number for the machine. Shipment will be delayed if this information is not available.
2. Include correct description and part number
3. Specify exact shipping instructions, including the preferred routing and complete destination address.
4. **DO 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



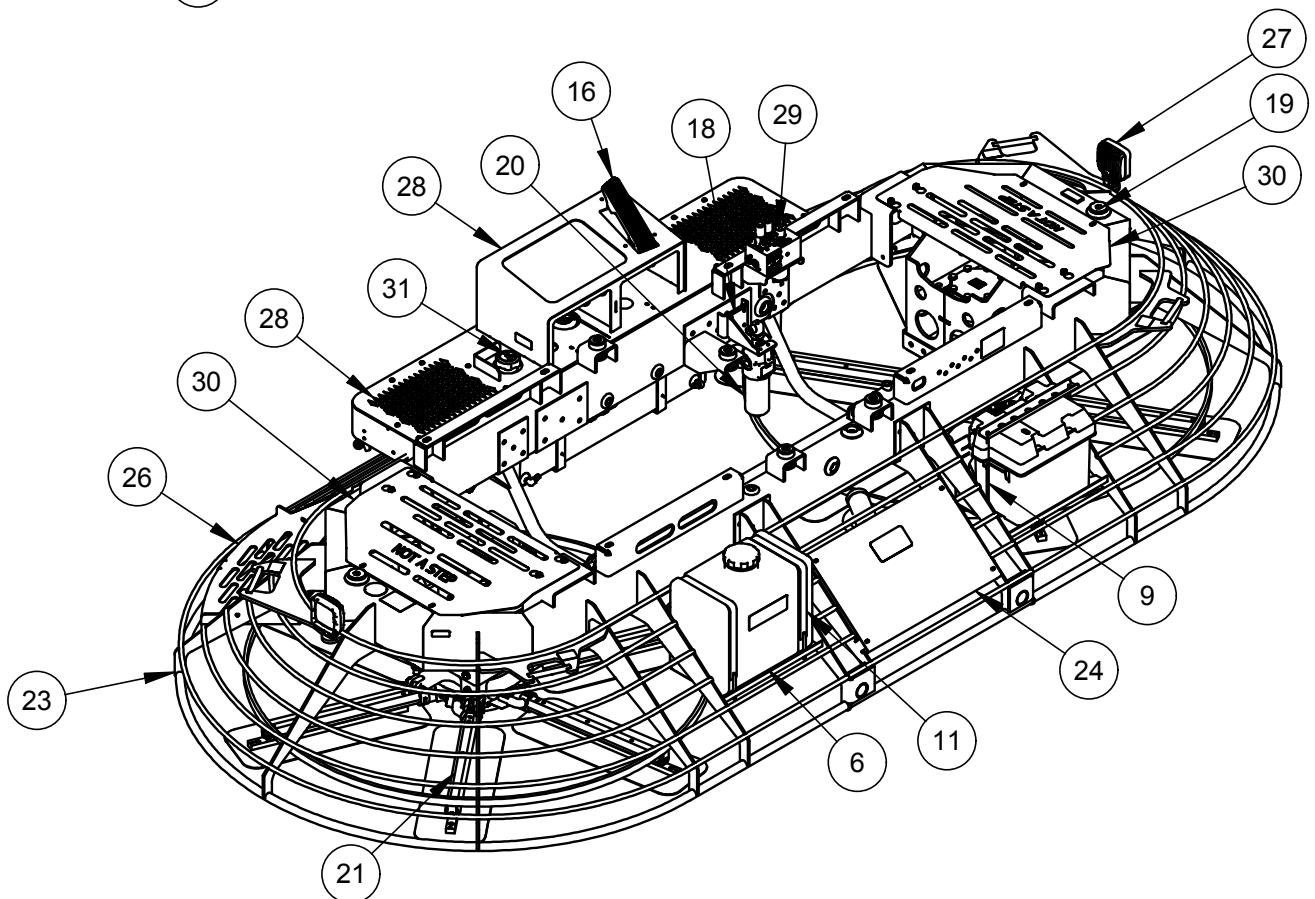
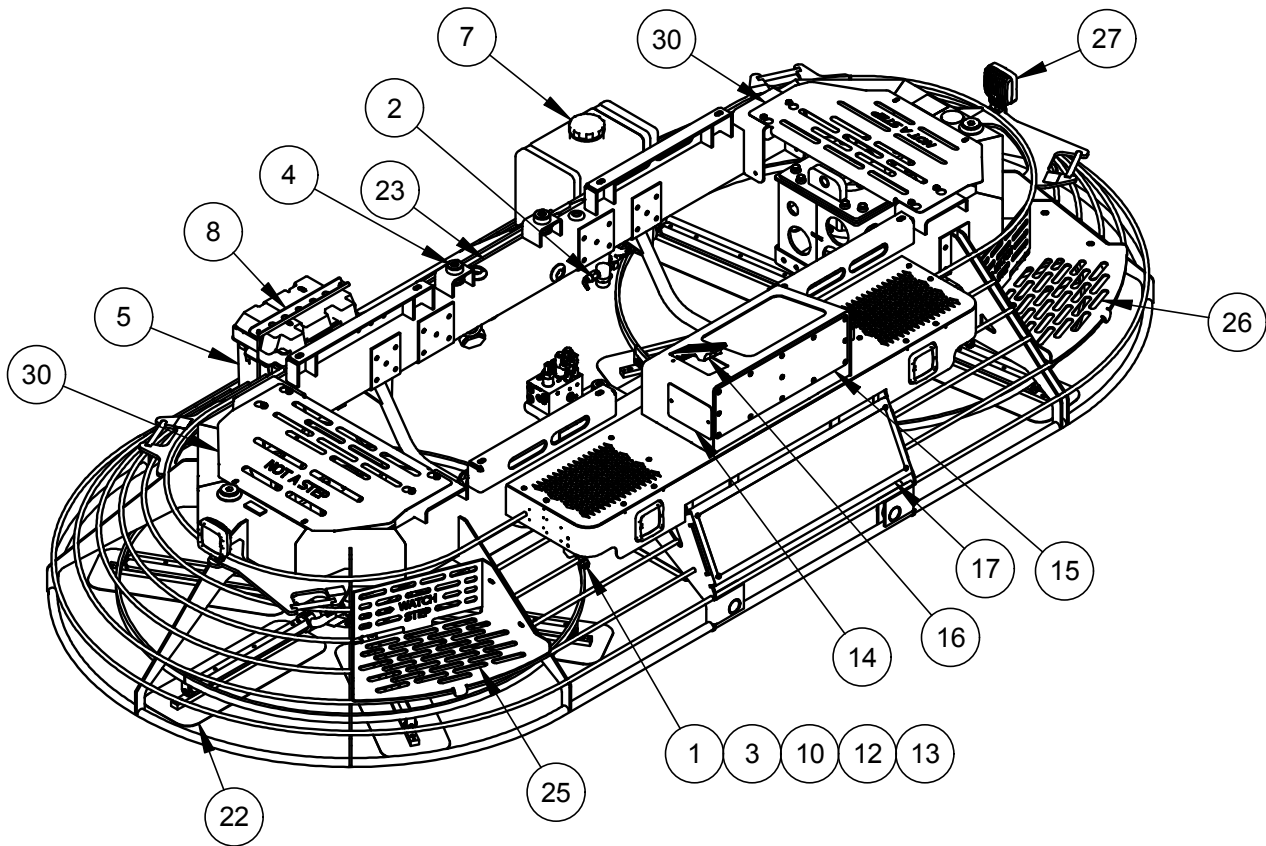
Seat Frame Assembly

SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
-	069827	Assembly, Seat Frame, HDX780	-
1	034610	Socket, Lamp, T-2 Slide, Base	1
2	034614	Lens, Lamp, T-2, Jeweled	1
3	034621	Horn, 12 Volt	1
4	048302	Joystick, Right Hand, Dual Axis	1
-	047585	REPLACEMENT - Joystick, Right Hand, Upper Handle ONLY (Not Shown)	-
5	048303	Joystick, Left Hand, Single Axis	1
-	046556	REPLACEMENT - Joystick, Left Hand, Upper Handle ONLY (Not Shown)	-
6	048595	Tank, Vent	1
7	048678	Handle, Nylon	2
8	056920	Latch, Magnetic	1
9	064509	Cover, Front Center	1
10	064525	Bracket, Hinge for Murphy Display, Left Hand	1
11	064526	Cover, Murphy Display	1
12	064528	Cover, Radiator Access	1
13	064760	Guard, End, Seat Frame	1
14	065134	Cover, Fuse / Relay Block	1
15	065139	Controller, Bosh	1
16	065143	Kit, Block, 4 Switch	1
17	065144	Header, Manifold	1
18	065188	Bonnet, Air Cleaner, for HATZ H50 Engine	1
19	065189	Band, Air Cleaner, for HATZ H50 Engine	1
20	065190	Breather, Air Cleaner, for HATZ H50 Engine	1
21	065191	Switch, Ignition, for HATZ H50 Engine	1
-		REPLACEMENT - Key, for Hatz xH50 Engine (Not Shown)	-
22	066028	Bottle, Recovery Coolant	1
23	066227	Controller, Murphy, PV380, Version 2	1
24	066255	Tube, Manual	1
25	066911	Assembly, Cooler, Oil	1
26	066912	Shroud, Cooler, Includes Fan, Outer	1
27	066913	Cover, over Cooler, Right Hand	1
28	069233	Hose, Exhaust, Flexible	1
29	069835	Light, LED, 1200 Lumens, 12 VDC, 1.3 AMP	2
30	069850	USB, Receptical, 12 VDC	1
31	069853	Bracket, Tool Holder	1
32	069854	Bracket, Bucket Tie Down	1
33	069874	Seat Rider	1
34	069875	Arm Rest, for 069875 Seat, Right/Left Set	1

SECTION 1 PARTS

Lower Unit Assembly



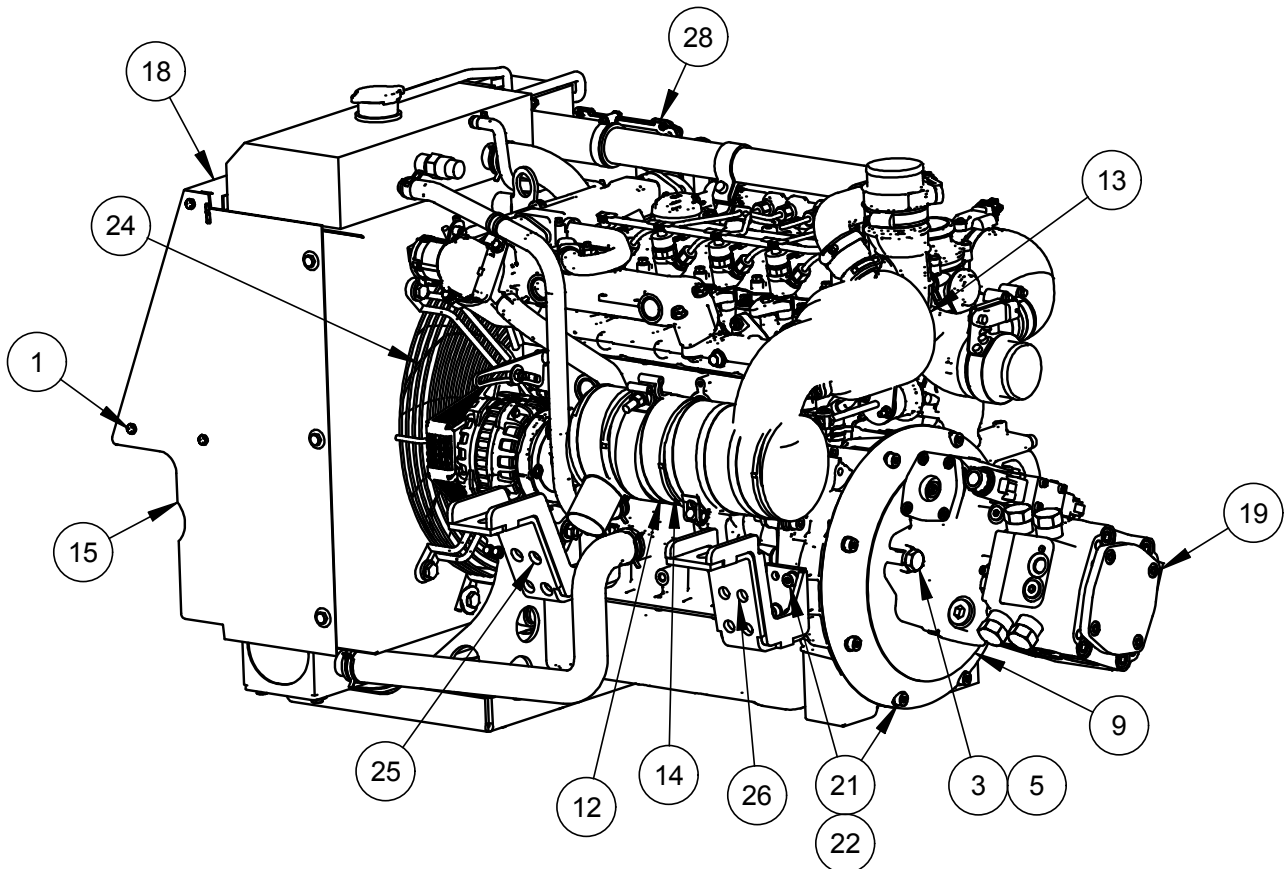
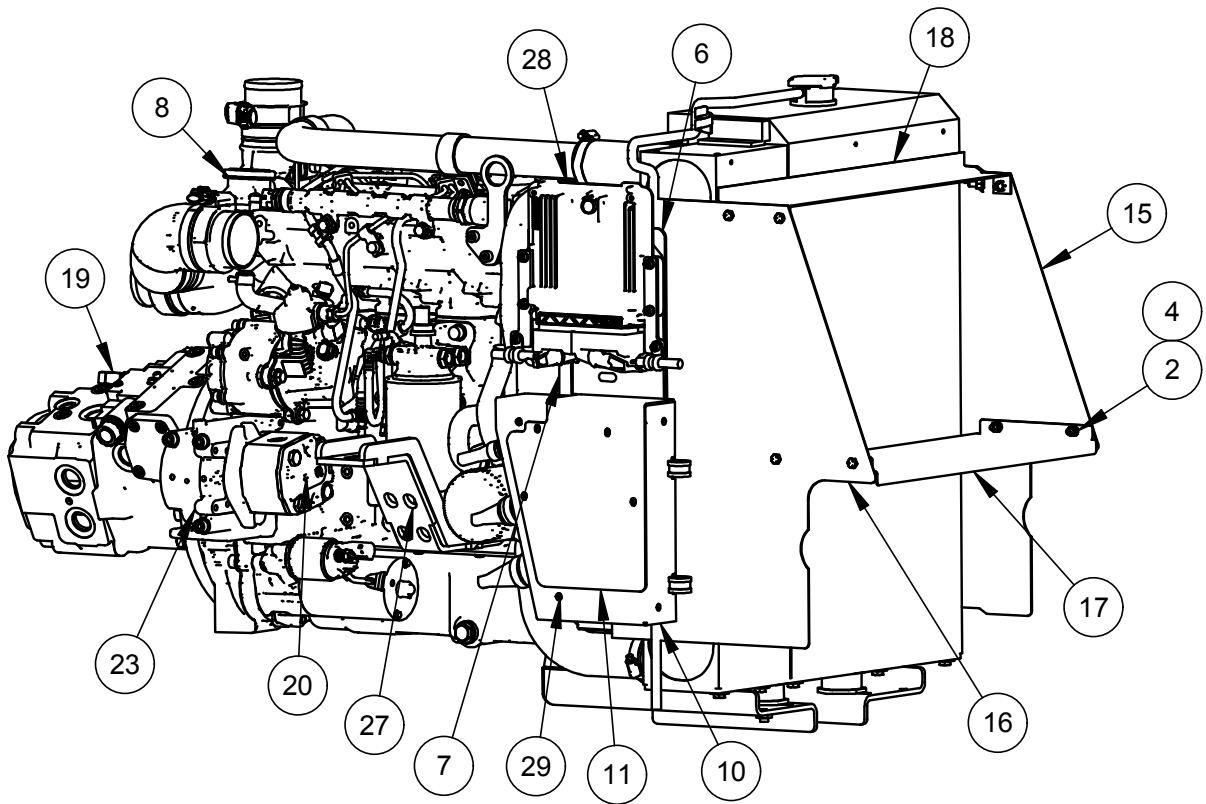
Lower Unit Assembly

SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
-	069828	Assembly, Main Frame, HDX780	-
1	012702	Tip, Spray, Brass, 80° x 0.10 GPM	2
2	040388	Fitting, FM to FM Reducer, 3/8" x 1/4", Brass	1
3	012705	Retainer, Metal Spray Tip	2
4	045757	Isolator, Rear Motor Mount	4
5	046696	Box, Standard Battery	1
6	047700	Tank, 6 Gallon, Plastic, Black	1
7	047701	Cap, 3-1/2", Vented, Black	1
8	048563	Channel, Battery Hold Down	1
9	048589	Rod, All-Thread, 1/2"-20, for Battery Hold Down	2
10	048653	Barb, Hose, 1/4" x 1/4" NPT, Plastic	2
11	048921	Strap, for Tank	2
12	071531	Nozzle, Body, Male, Straight	2
13	049981	Weldment, Spray Bracket, Right Hand	1
14	060492	Plate, Cover, Top Deck	1
15	060560	Cover, Front Foot Rest	1
16	063341	Foot Pedal, Electronic	1
17	063375	Cover, Front	1
18	064515	Bracket, Mount, High Pressure Filter	1
19	065017	Fastener, Plug, Hex, Hollow, SAE #20	2
20	065141	Filter, High Pressure	1
21	069760	Rotor Assembly, Counter Rotation, Left Hand	1
22	069770	Rotor Assembly, Counter Rotation, Right Hand	1
23	069781	Weldment, Main Frame	1
24	069820	Panel, Rear Ring	1
25	069823	Step, Right Hand	1
26	069824	Step, Left Hand	1
27	069835	Light, LED, 1200 Lumens	2
28	069957	Plate, Deck	1
29	069958	Manifold, Auxillary	1
30	070575	Cover, Main Frame, End	2
31	070610	Assembly, Fuel Tank, 18 Gallon	1

SECTION 1 PARTS

Engine Assembly



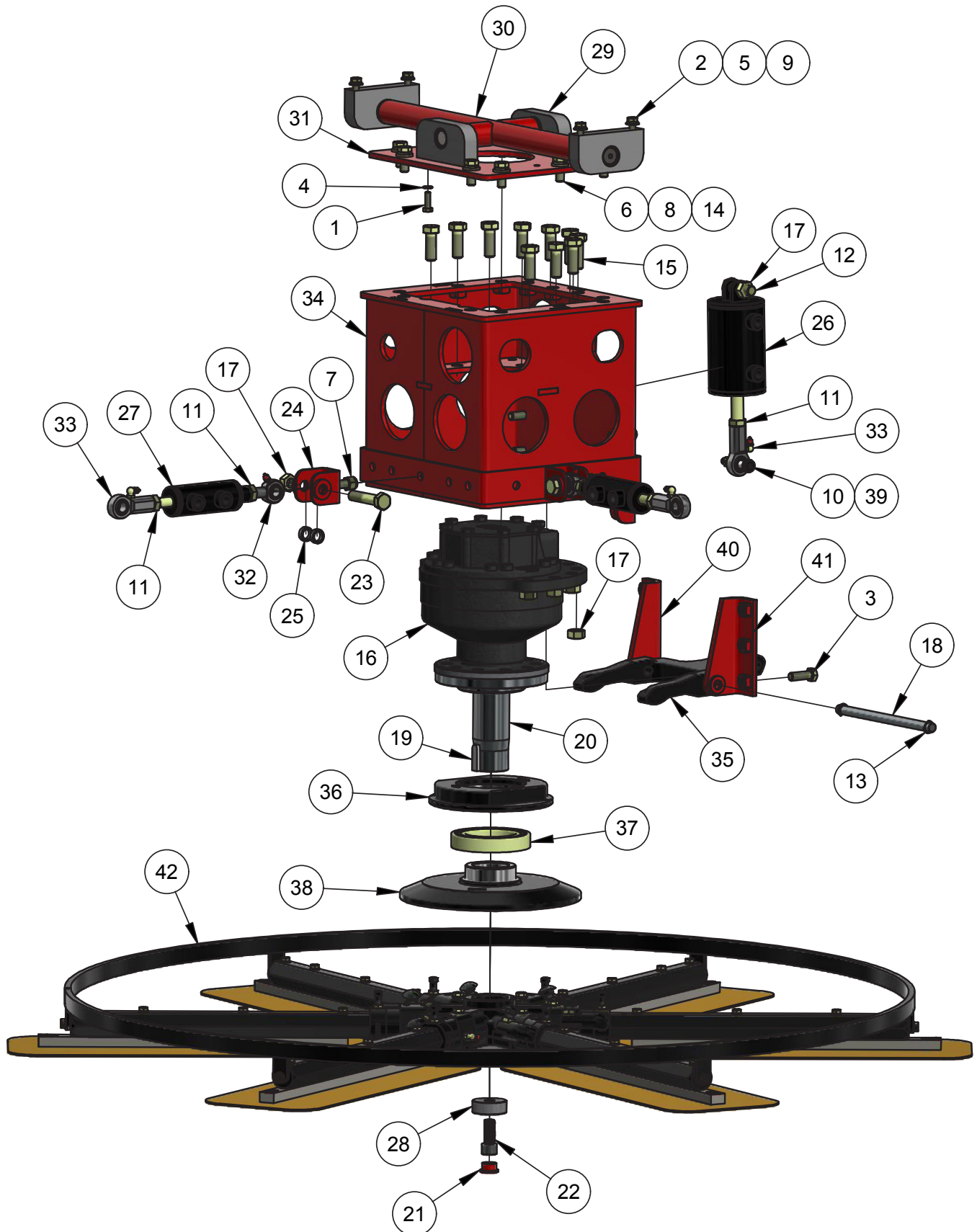
Engine Assembly

SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
-	063002	Assembly, Engine, HDX780	-
1	010002	Fastener, HHCS, 1/4"-20 x 3/4"	9
2	010089	Fastener, Washer, Lock, 1/4"	9
3	010095	Fastener, Washer, Lock, 5/8"	2
4	010098	Fastener, Nut, Hex, 1/4"-20	9
5	029311	Fastener, HHCS, 5/8"-11 x 1-3/4", Grade 8	2
6	061333	Mount, Fuse Panel / CPU	1
7	061334	Bracket, Fuse Panel / CPU	1
8	064286	Engine, HATZ 4H50TIC	1
9	064357	Assembly, Housing / Coupling	1
10	064538	Weldment, Cover Electrical Panel	1
11	064539	Cover, Outer for Engine Electrical Box	1
12	064872	Wrap, DOC	1
13	064873	Wrap, Blanket, Turbo	1
14	064874	Tie, 24" SS Preferated Cable	3
15	065124	Shroud, Rear, Radiator	1
16	065125	Shroud, Front, Radiator	1
17	065126	Shroud, Bottom, Radiator	1
18	065127	Shroud, Top, Radiator	1
19	065138	Pump, Hydraulic Piston, Single/Dual	1
20	065140	Pump, Auxillary	1
21	065243	Fastener, SHCS, M10 x 1.5mm x 30mm, Grade 8	17
22	065383	Fastener, Washer, Lock, M10, Zinc	17
23	065398	Drive, Auxilliary	1
24	065834	Fan, Pusher, 30°	1
25	069419	Mount, Engine, V2, Rear, Left Hand	1
26	069420	Mount, Engine, V2, Rear, Right Hand	1
27	069424	Mount, Engine, V2, Front, Right Hand	1
28	-	Module, Engine (02368603 DMU ASM)	1
29	-	Bracket (02382302 DMU)	1

SECTION 1 PARTS

Rotor Assembly - Left Hand



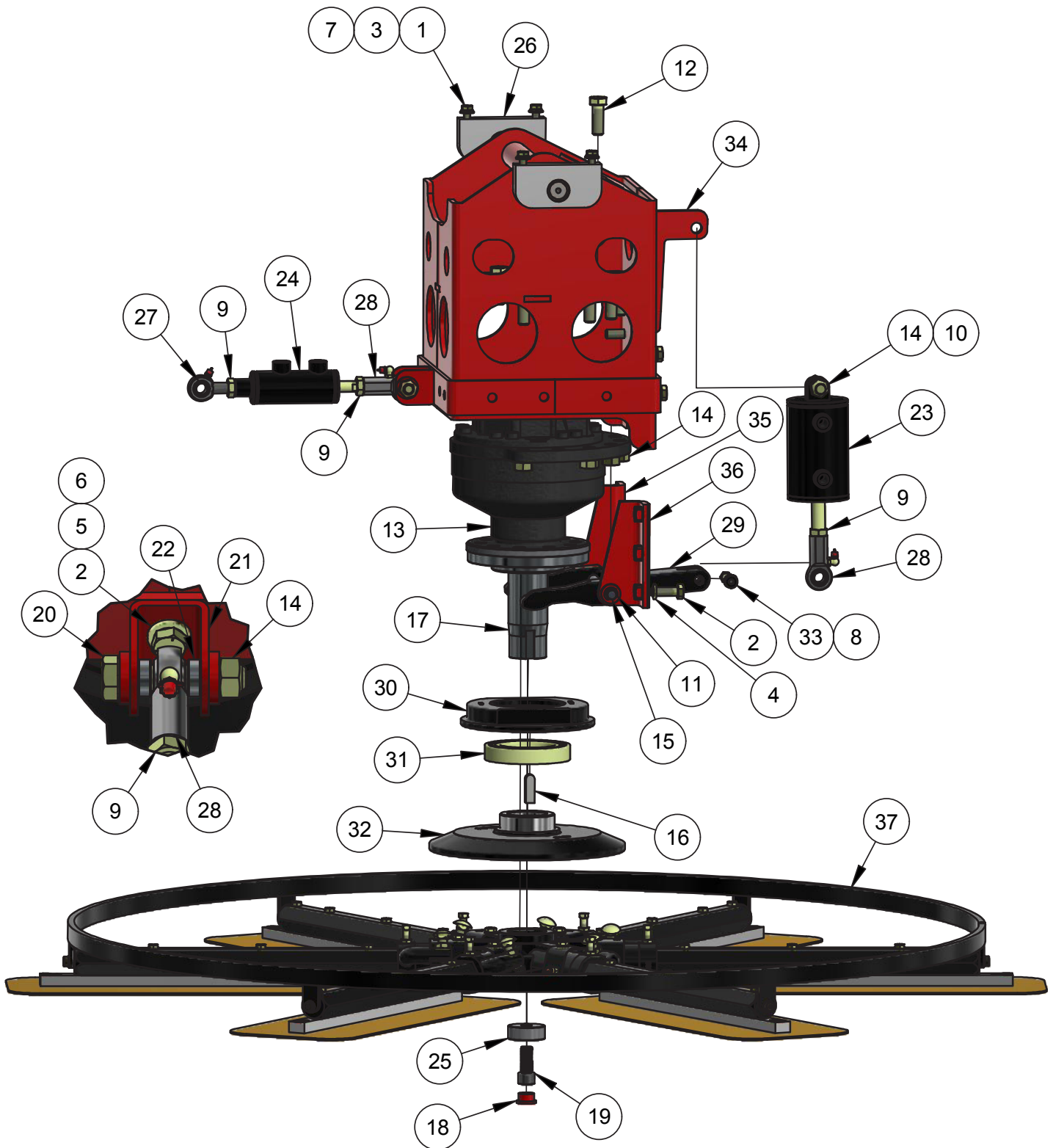
Rotor Assembly - Left Hand

SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
-	069760	Assembly, Rotor, Left Hand, HDX780	-
1	010020	Fastener, HHCS, 5/16"-15 x 1", Grade 8	4
2	010036	Fastener, HHCS, 3/8"-16 x 1", Grade 8	4
3	010069	Fastener, HHCS, 1/2"-13 x 1-1/2", Grade 8	8
4	010090	Fastener, Washer, Lock, 5/16", Grade 8	4
5	010091	Fastener, Washer, Lock, 3/8", Grade 8	4
6	010093	Fastener, Washer, Lock, 1/2", Grade 8	18
7	011238	Fastener, Nut, Hex, Nylok, 1/2"-13	2
8	011490	Fastener, Washer, Flat, 1/2"	12
9	017751	Fastener, Washer, Flat, 3/8"	4
10	020514	Fastener, Nut, Stover, 3/8"-16	1
11	020688	Fastener, Nut, Hex, 5/8"-18, Right Hand	5
12	027969	Fastener, HHCS, 5/8"-18 x 2", Grade 8	1
13	015677	Clip, E-Retaining	2
14	038508	Fastener, HHCS, 1/2"-13 x 1-1/4", Grade 8	12
15	040319	Fastener, Bolt, 5/8"-18 x 1-1/4", Grade 8	10
16	043062	Motor, RDL Piston, Multi-Stroke	1
17	043269	Fastener, Nut, Stover, 5/8"-18	13
18	044799	Pin, Yoke Arm, #2	1
19	046231	Key, Rotor Shaft	1
20	046645	Shaft, Rotor, Right Hand Thread, Type 3	1
21	046646	Cap, Plug, 7/8", to Protect Threads on Bolt	1
22	046647	Fastener, Bolt, 5/8"-18 x 1-1/2", Right Hand, Cap	1
23	048339	Fastener, HHCS, 5/8"-18 x 3, Grade 8	2
24	048624	Channel, Connector, Cylinder Rod End	2
25	048627	Spacer, Steering Connection	4
26	048659	Cylinder, Pitch, 3" Bore, 1-1/2" Stroke	1
27	050718	Cylinder, Steering, 1-1/2" x 1-1/2"	2
28	064253	Washer, Retaining	1
29	064260	Assembly, Bearing, Bronze	4
30	064280	Weldment, Crosshead, Right/Left/Forward/Reverse	1
31	064741	Plate, Left Hand Hydraulic Motor Mount, Top	1
32	065446	Rod, End, Male, 5/8"	2
33	066188	Red, End, Female, 5/8"	3
34	069761	Mount, Rotor Motor, Left Hand	1
35	069766	Arm, Yoke	1
36	069767	Cap, Pressure Plate	1
37	069768	Bearing, 80mm ID, 125mm OD, 22mm Width, Deep Groove	1
38	069769	Plate, Pressure	1
39	069772	Fastener, Bolt, Shoulder, 1/2" x 1-7/8"	1
40	069776	Bracket, Mount, Yoke Arm, Right Hand	1
41	069779	Bracket, Mount, Yoke Arm, Left Hand	1
42	071157	Assembly, Lower Rotor, Left Hand, 6-Blade	1

SECTION 1 PARTS

Rotor Assembly - Right Hand



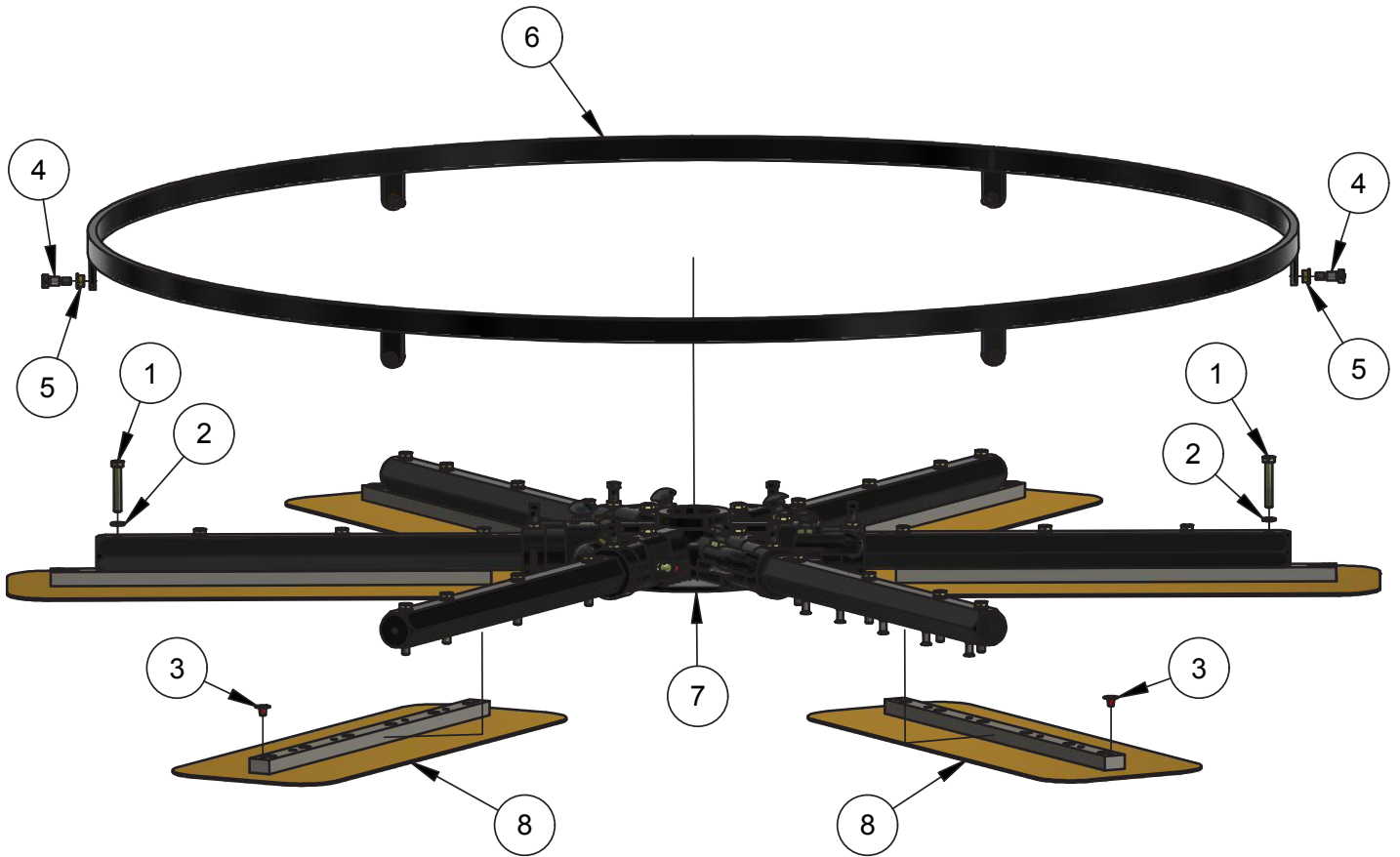
Rotor Assembly - Right Hand

SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
-	069770	Assembly, Rotor, Right Hand, HDX780	-
1	010036	Fastener, HHCS, 3/8"-16 x 1", Grade 8	4
2	010069	Fastener, HHCS, 1/2"-13 x 1-1/2", Grade 8	7
3	010091	Fastener, Washer, Lock, 3/8", Grade 8	4
4	010093	Fastener, Washer, Lock, 1/2", Grade 8	6
5	011238	Fastener, Nut, Hex, Nylock, 1/2"-13	1
6	011490	Fastener, Washer, Flat, 1/2"	1
7	017751	Fastener, Washer, Flat, 3/8"	4
8	020514	Fastener, Nut, Stover, 3/8"-16	1
9	020688	Fastener, Nut, Jam, 5/8"-18, Right Hand	3
10	027969	Fastener, HHCS, 5/8"-18 x 2", Grade 8	1
11	015677	Clip, E-Retaining, 1/2"	2
12	040319	Bolt, 5/8"-18 x 1-1/4", Grade 8	10
13	043062	Motor, RDL Piston, Multi-Stroke	1
14	043269	Fastener, Nut, Stover, 5/8"-18	12
15	044799	Pin, #2, Yoke Arm	1
16	046231	Key, Rotor Shaft	1
17	046644	Shaft, Rotor, Left Hand Threads, Type 3	1
18	046646	Plug, Cap, 7/8", for Thread Protection	1
19	046648	Bolt, 5/8"-18 x 1-1/2", Left Hand Thread	1
20	048339	Fastener, HHCS, 5/8"-18 x 3", Grade 8	1
21	048624	Channel, End Connector, Cylinder Rod	1
22	048627	Spacer, Steering Connection	2
23	048659	Cylinder, Pitch, 3" Bore, 1-1/2" Stroke	1
24	050718	Cylinder, Steering, 1-1/2" x 1-1/2"	1
25	064253	Fastener, Washer, Retaining	1
26	064260	Assembly, Bearing, Bronze	2
27	065446	Rod, End, Male, 5/8"	1
28	066188	Rod, End, Female, 5/8"	2
29	069766	Arm, Yoke	1
30	069767	Cap, Pressure Plate	1
31	069768	Bearing, 80mm ID, 125mm OD, 22mm Width, Deep Groove	1
32	069769	Plate, Pressure	1
33	069772	Fastener, Bolt, Shoulder, 1/2" x 1-7/8"	1
34	069773	Weldment, Mount, Hydraulic Motor	1
35	069776	Bracket, Mount, Yoke, Right Hand	1
36	069779	Bracket, Mount, Yoke, Left Hand	1
37	071158	Assembly, Lower Rotor, Right Hand, 6-Blade	

SECTION 1 PARTS

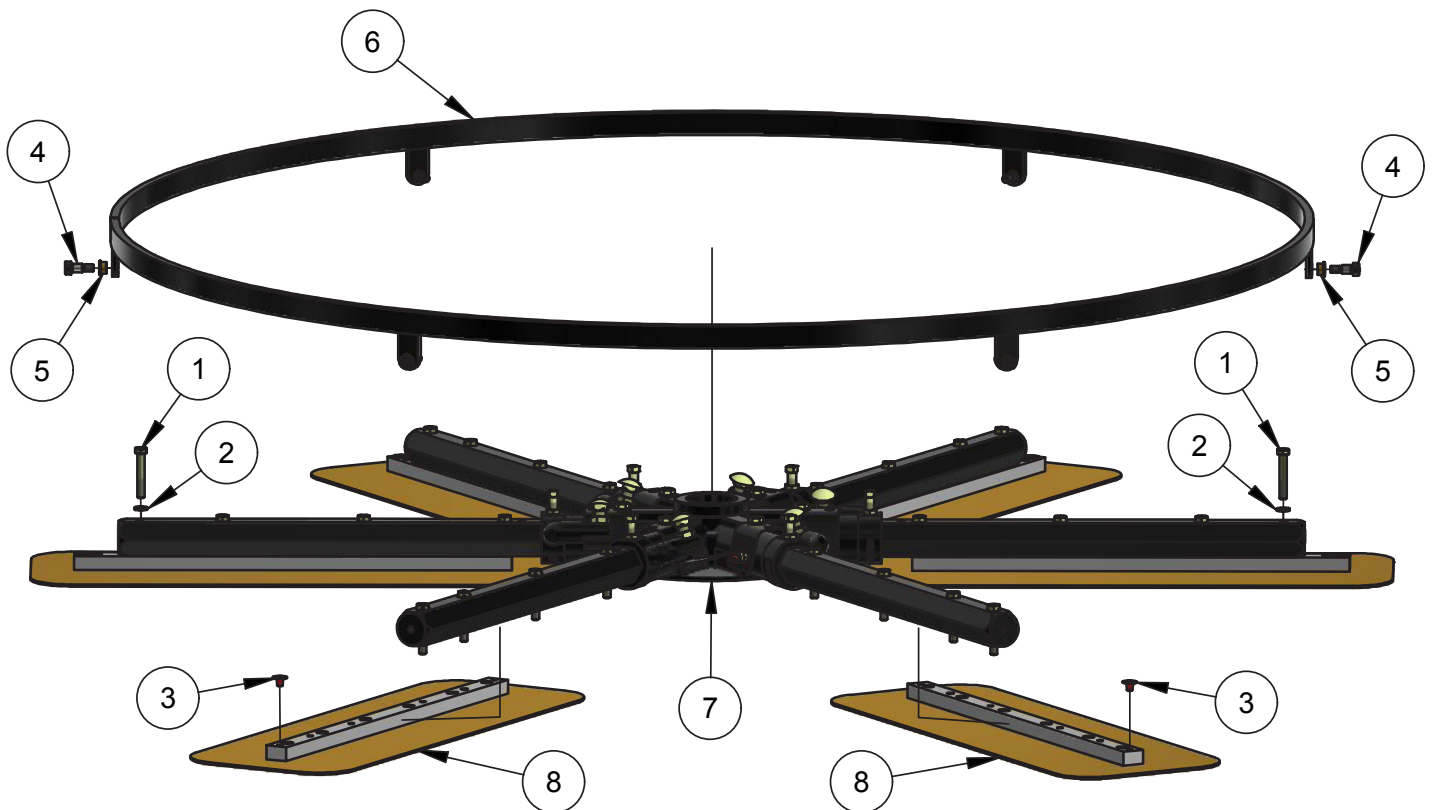
Lower Rotor Assembly - Left Hand



ITEM	PART #	DESCRIPTION	QTY
-	071157	Assembly, Lower Rotor, Left Hand	-
1	010024	Fastener, Bolt, HHCS, 5/16"-18 x 2", Grade 8	24
2	010090	Fastener, Washer, Lock, 5/16", Grade 8	24
3	015694	Cap, Grease, W-1, Red, Plastic, Tapered	6
4	025091	Fastener, Bolt, Shoulder, 3/8" x 1/2"	6
5	025092	Bushing, Bronze, 3/8" x 1/2" x 5/16"	6
6	047428	Ring, Stabilizer, 1200VG, Standard, 6-Blade	1
7	047429	Assembly, Spider, Left Hand, 6-Blade	1
8	047973	Blade, Flat Finish, 8" x 17", Gold	6

Lower Rotor Assembly - Right Hand

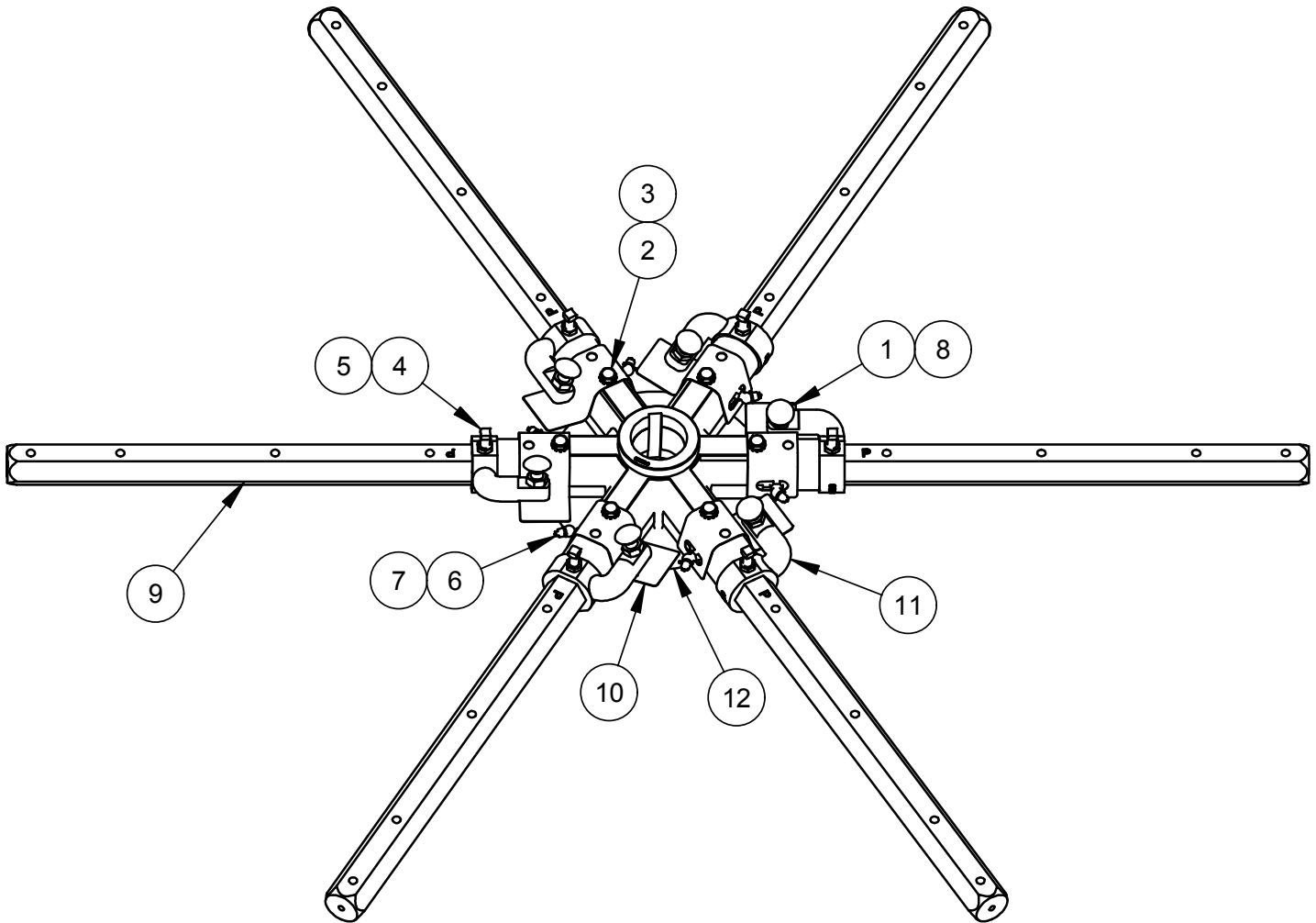
SECTION 1 PARTS



ITEM	PART #	DESCRIPTION	QTY
-	071158	Assembly, Lower Rotor, Right Hand	-
1	010024	Fastener, Bolt, HHCS, 5/16"-18 x 2", Grade 8	24
2	010090	Fastener, Washer, Lock, 5/16", Grade 8	24
3	015694	Cap, Grease, W-1, Red, Plastic, Tapered	6
4	025091	Fastener, Bolt, Shoulder, 3/8" x 1/2"	6
5	025092	Bushing, Bronze, 3/8" x 1/2" x 5/16"	6
6	047428	Ring, Stabilizer, 1200VG, Standard, 6-Blade	1
7	047430	Assembly, Spider, Right Hand, 6-Blade	1
8	047973	Blade, Flat Finish, 8" x 17", Gold	6

SECTION 1 PARTS

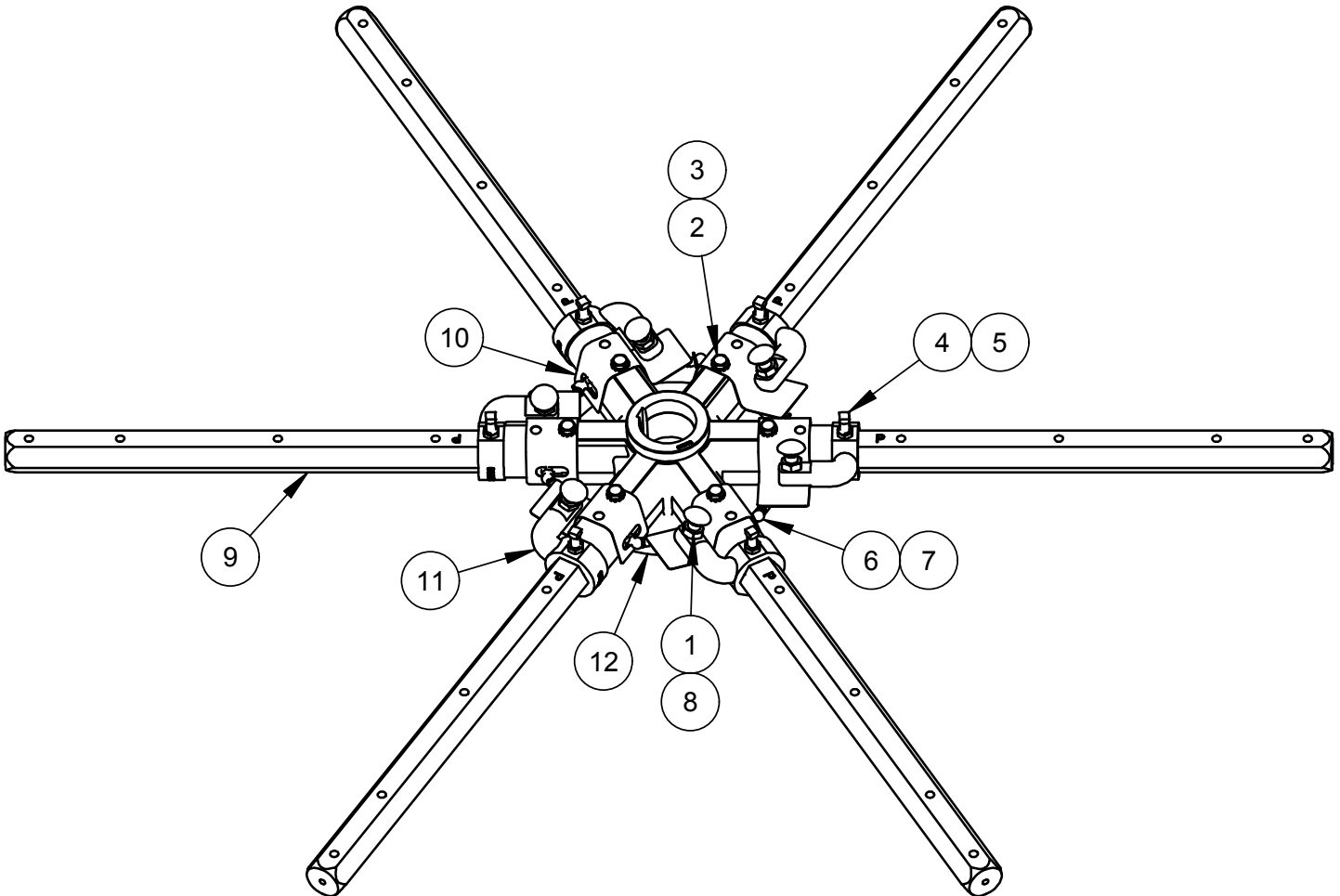
Spider Assembly - Left Hand



ITEM	PART #	DESCRIPTION	QTY
-	047429	Assembly, Spider, Left Hand, 6-Blade	-
1	010050	Fastener, Nut, Hex, 1/2"-13	6
2	015682	Fastener, External Tooth, 3/8"	6
3	015683	Fastener, Bolt, Hex Head, 3/8"-16 x 7/8"	6
4	015684	Fastener, Nut, Hex, 3/8"-16	6
5	015686	Fastener, Bolt, SQHSS, 3/8"-16 x 1"	6
6	015692	Cap, Grease, 1/4", Plastic, Red	6
7	024755	Fitting, Grease, 1/8"-27 NPT, 45°	6
8	028216	Fastener, Bolt, 1/2"-13 x 1-1/2", Grade 8	6
9	039525	Arm, Spring	6
10	039874	Clip, Spring	6
11	039880	Lever, Lift, Ø1.375 ID	6
12	046560	Boss, for Spider Assembly, 6-Arm, Universal	1

Spider Assembly - Right Hand

SECTION 1 PARTS

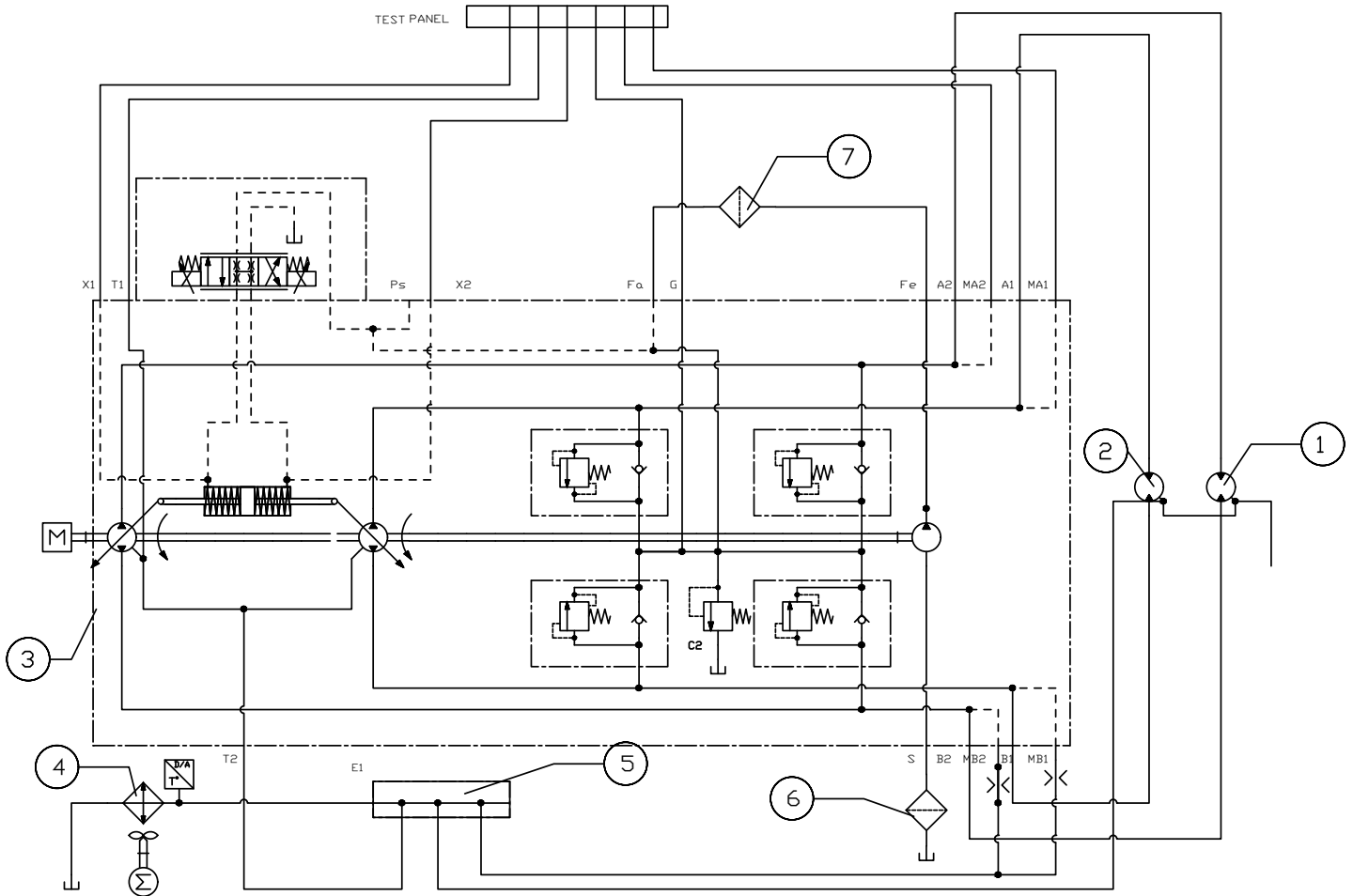


ITEM	PART #	DESCRIPTION	QTY
-	047430	Assembly, Spider, Right Hand, 6-Blade	-
1	010050	Fastener, Nut, Hex, 1/2"-13	6
2	015682	Fastener, External Tooth, 3/8"	6
3	015683	Fastener, Bolt, Hex Head, 3/8"-16 x 7/8"	6
4	015684	Fastener, Nut, Hex, 3/8"-16	6
5	015686	Fastener, Bolt, SQHSS, 3/8"-16 x 1"	6
6	015692	Cap, Grease, 1/4", Plastic, Red	6
7	024755	Fitting, Grease, 1/8"-27 NPT, 45°	6
8	028216	Fastener, Bolt, 1/2"-13 x 1-1/2", Grade 8	6
9	039525	Arm, Spring	6
10	039874	Clip, Spring	6
11	039880	Lever, Lift, Ø1.375 ID	6
12	046560	Boss, for Spider Assembly, 6-Arm, Universal	1

SECTION 1 PARTS

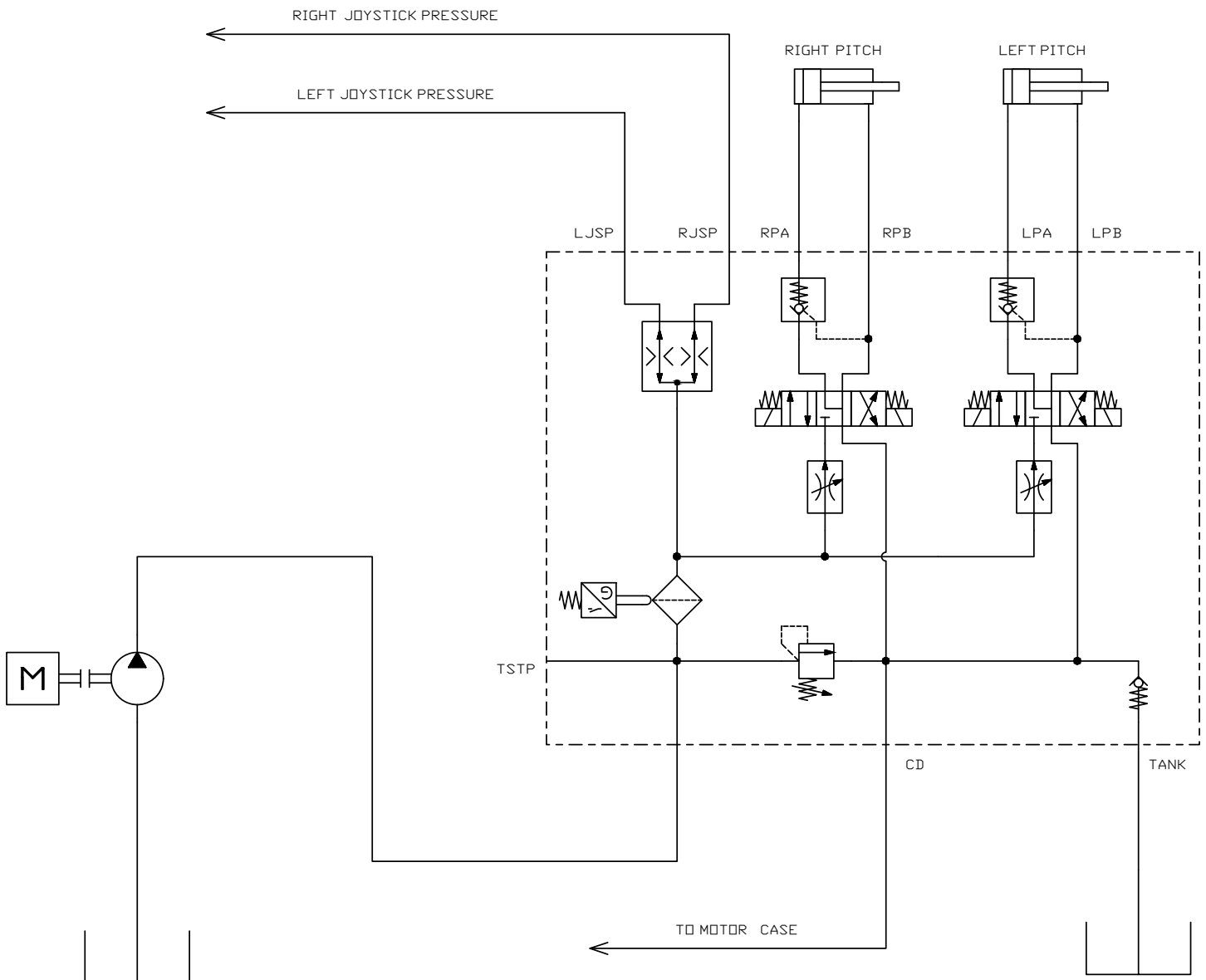
Hydraulic Schematic

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

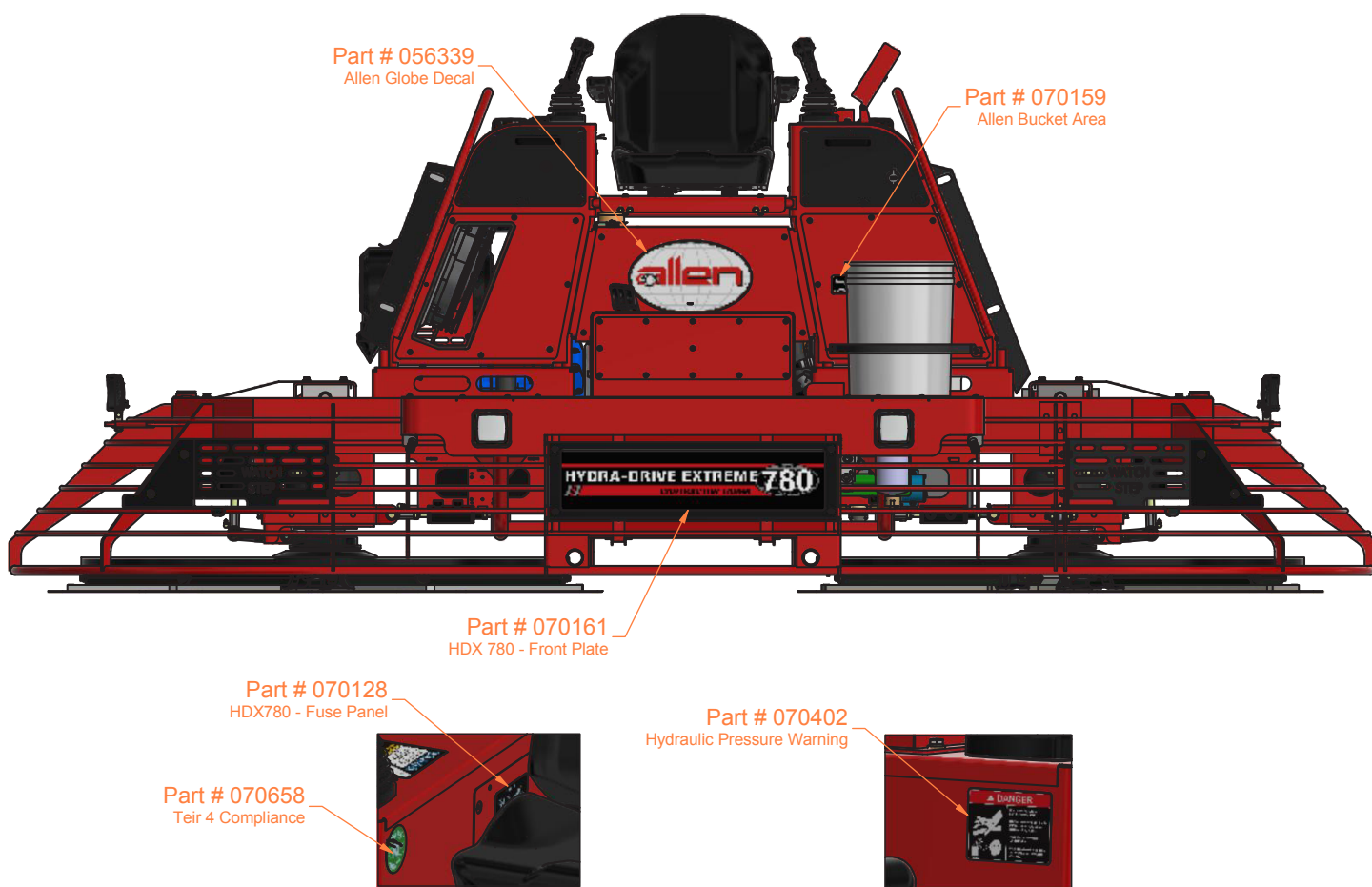
Hydraulic Kits

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

SECTION 2 DECALS

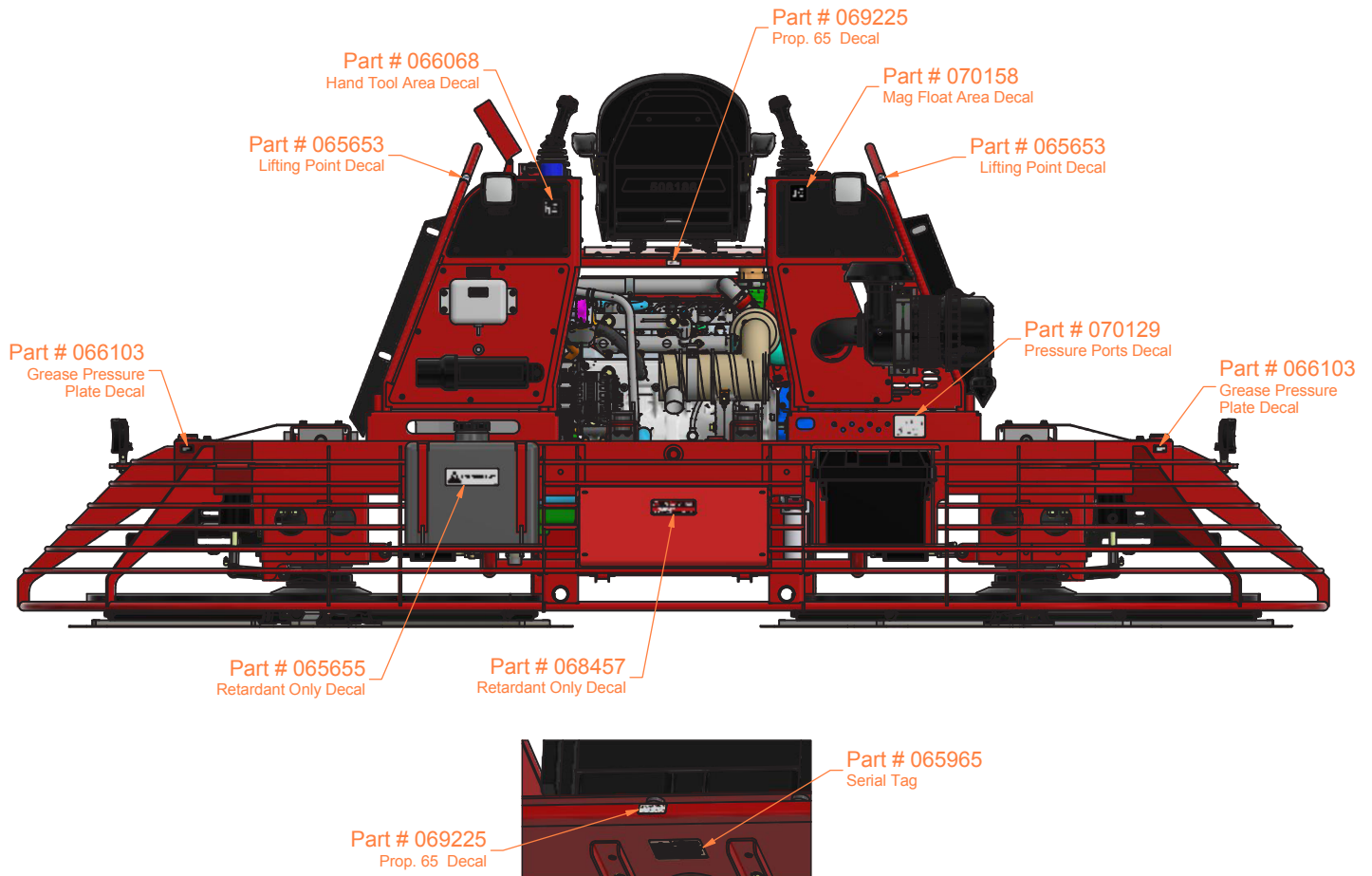
SECTION 2 DECALS

Decals - Front (Kit #: 070156)



Decals - Rear (Kit #: 070156)

SECTION 2 DECALS

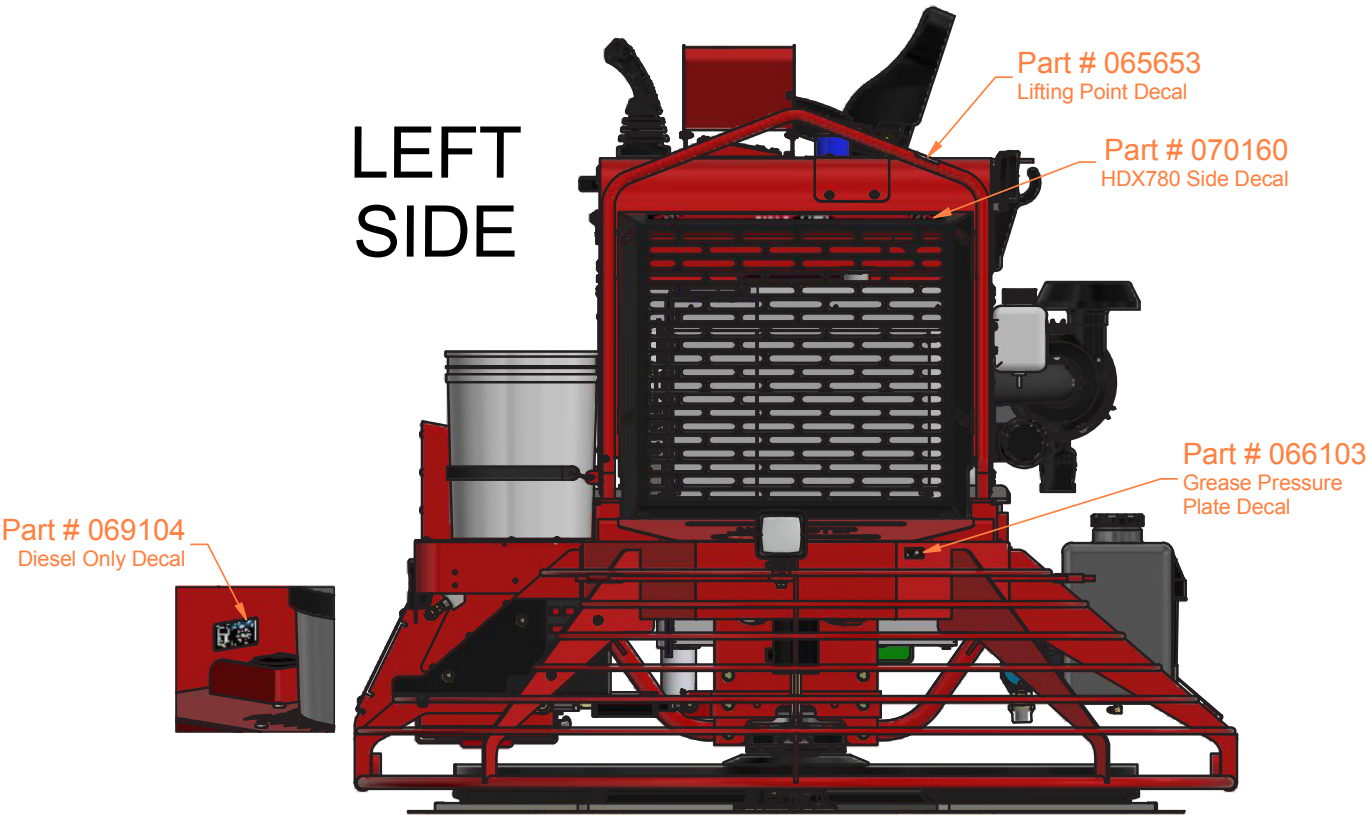
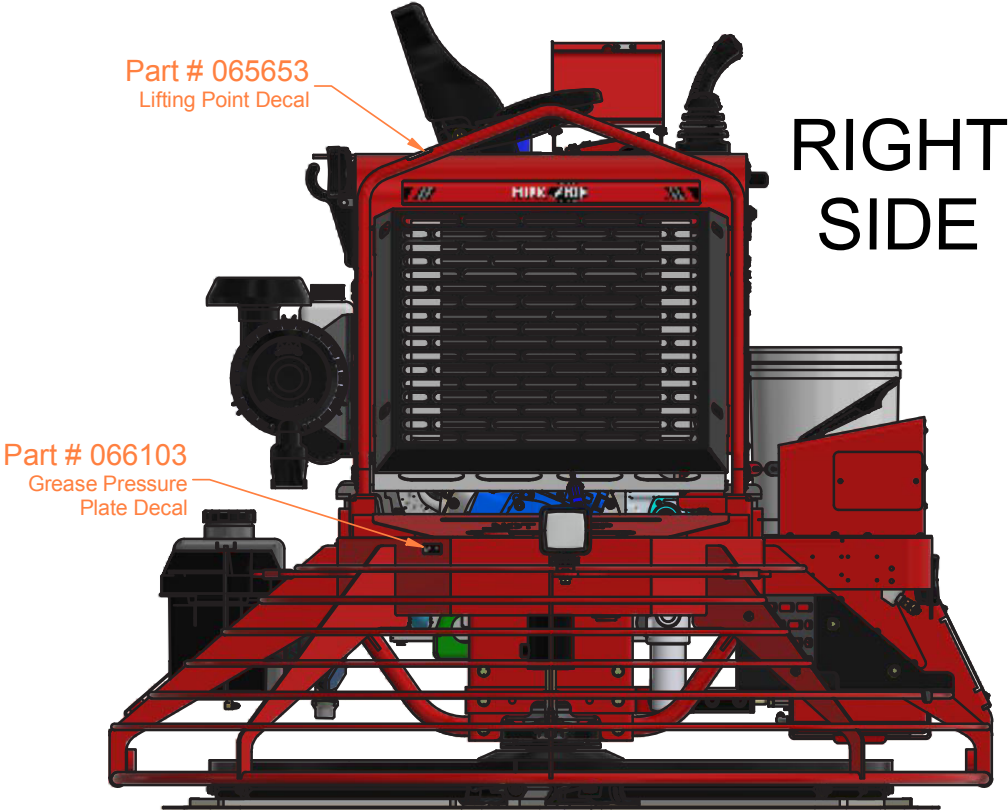


Decals - Top (Kit #: 070156)



**Decals - Right / Left
(Kit #: 070156)**

**SECTION 2
DECALS**



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

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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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