#### RIDING TROWEL

# **MSP475**



# PARTS & DECALS MANUAL

Manual Part #: 069599P | Revision: B Language: English | Original Instructions



#### For information regarding the following, please see the "MSP475- Safety & Operator Manual"

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

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## MSP475 RIDING TROWEL

#### **PARTS & DECAL**

**MANUAL** 

This manual covers the products listed below:

Part No. Description

067405 MSP475, 8ft, Kubota 57HP, Gas, Hydraulic Steering

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#### **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.



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



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.



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.

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#### **Replacement Part Procedure**

## SECTION 1 PARTS

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.

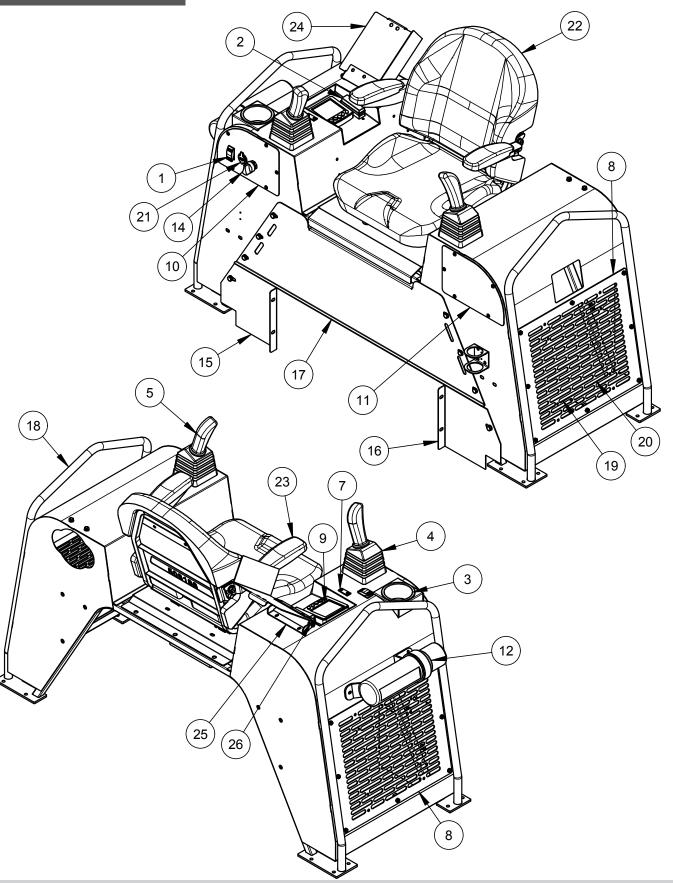
This manual contains an illustrated parts list for help in ordering replacement parts for your machine. Follow the instructions below when ordering parts to ensure prompt and accurate delivery:

- 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.



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.

#### **Seat Frame Assembly**

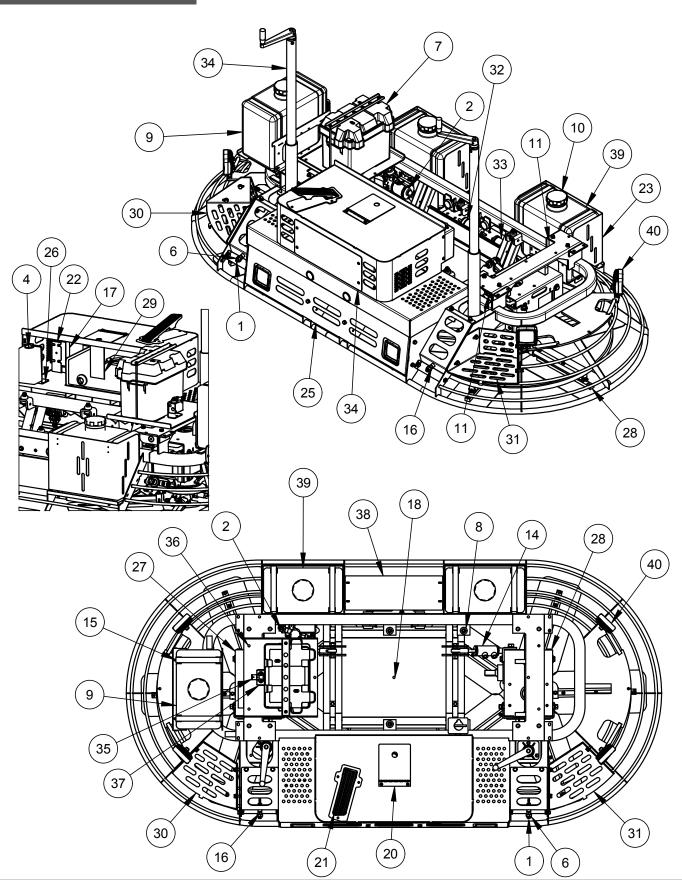


#### **Seat Frame Assembly**

#### SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
-	069305	Assembly, Seat Frame, MSP475	-
1	032125	Switch, Rocker, Single Pole	1
2	046737	Block, Fuse, 8 Pole	1
3	041537	Cup Holder	1
4	046736	Joystick, Right Hand	1
-	064844	(REPLACEMENT) Joystick, Right Hand, Upper Handle ONLY (Not Shown)	-
5	046737	Joystick, Left Hand	1
-	064843	(REPLACEMENT) Joystick, Left Hand, Upper Handle ONLY (Not Shown)	-
6	053211	Seat Prop (Not Shown	1
7	056920	Latch, Magnetic	1
8	060885	Cover, for Fan	2
9	066227	Controller, Murphy, PV380.2	1
10	066234	Cover, Right Hand	1
11	066235	Cover, Left Hand	1
12	066255	Manual Tube	1
13	067676	Bracket, for Controller Connections (Not Shown)	1
14	068166	Switch, Key	1
-	070075	(REPLACEMENT) Key, Engine	-
15	069300	Panel, Filler, Right Hand	1
16	069301	Panel, Filler, Left Hand	1
17	069302	Screen, Front	1
18	069306	Weldment, Seat Frame	1
19	069651	Shroud, Air, Left Hand	1
20	069652	Shroud, Air, Right Hand	1
21	069850	USB, 12 VDC	1
22	069874	Seat, Rider	1
23	069875	Seat, Arm Rests, Left/Right	1
24	070579	Cover, Control Panel	1
25	070580	Bracket, Hinge for Controller Panel	1
26	070583	Bearing, Sleeve, Flanged, 1/4" I.D. x 1/4", Bronze	2

#### **Lower Unit Assembly**

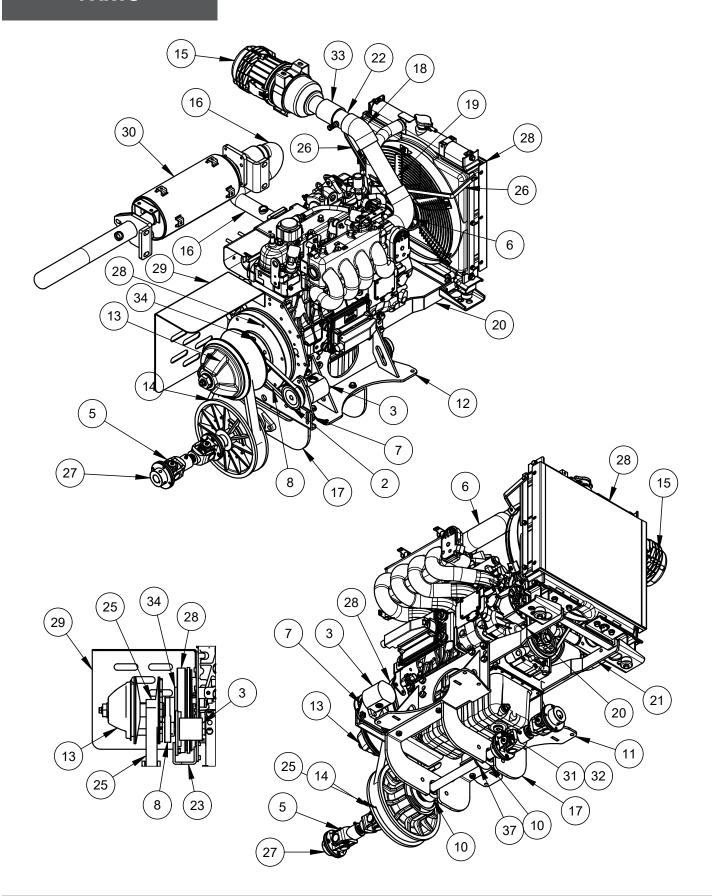


## **Lower Unit Assembly**

## SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
-	069310	Assembly, Lower Unit, MSP475	-
1	012702	Tip, Spray, Brass, 80° x 0.10 GPM	2
2	033735	Pump, for Spray System	1
3	037771	Battery, 12 V, 655 CA (Not Shown)	1
4	037791	Tank, Overflow, with Bracket	1
5	040209	Filter, for Spray System (Not Shown)	1
6	012705	Retainer, Metal Spray Tip	2
7	046696	Box, for Battery	1
8	046744	Mount, Vibration, 90#, for Engine	4
9	047700	Tank, Water, 6 Gallon, Plastic	1
10	047701	Cap, 3-1/2", Vented, Black, for Gas Tank	2
11	048559	Block, Mounting, for Rotor Assembly	4
12	048560	Bearing, Ø1" I.D., Plastic Flange (Not Shown)	4
13	048627	Spacer, Steering Connection	6
14	048660	Cylinder, Steering, 1-1/2" x 5/8"	3
15	048921	Strap, Tank	2
16	071531	Nozzle, Male, Straight	2
17	052930	Cooler, Air/Oil	1
18	056888	Pan, for Undercarriage	1
19	059544	Plate, Front Cover	1
20	060910	Weldment, Door	1
21	063341	Pedal, Foot, Electronic	1
22	064247	Brace, for Cooler	2
23	064562	Weldment, Tank Guard	2
24	065244	Strainer, Poly, 100 micron Mesh, with Check Valve	2
25	066198	Weldment, Front Panel	1
26	066228	Bracket, Mounting, for Overflow	1
27	066301	Assembly, Rotor, Right Hand	1
28	066314	Assembly, Rotor, Left Hand	1
29	066329	Weldment, Hydraulic Tank	1
30	067193	Weldment, Step, Right Hand	1
31	067198	Weldment, Step, Left Hand	1
32	067269	Pump, Fuel, for Kubota WG1605	1
33	067275	Filter, Fuel, for Kubota WG1605	1
34	068442	Assembly, Pitch Control	2
35	069231	Manifold, Fuel, for Kubota WG1605	1
36	069304	Tray, for Battery	1
37	069313	Mounting Bracket, for Fuel Manifold	1
38	069314	Cover Plate	1
39	069503	Tank, 6 Gallon, Plastic	2
40	069835	Light, LED, 1200 Lumens, 12 VDC (1.3 AMP)	6

#### **Engine Assembly**



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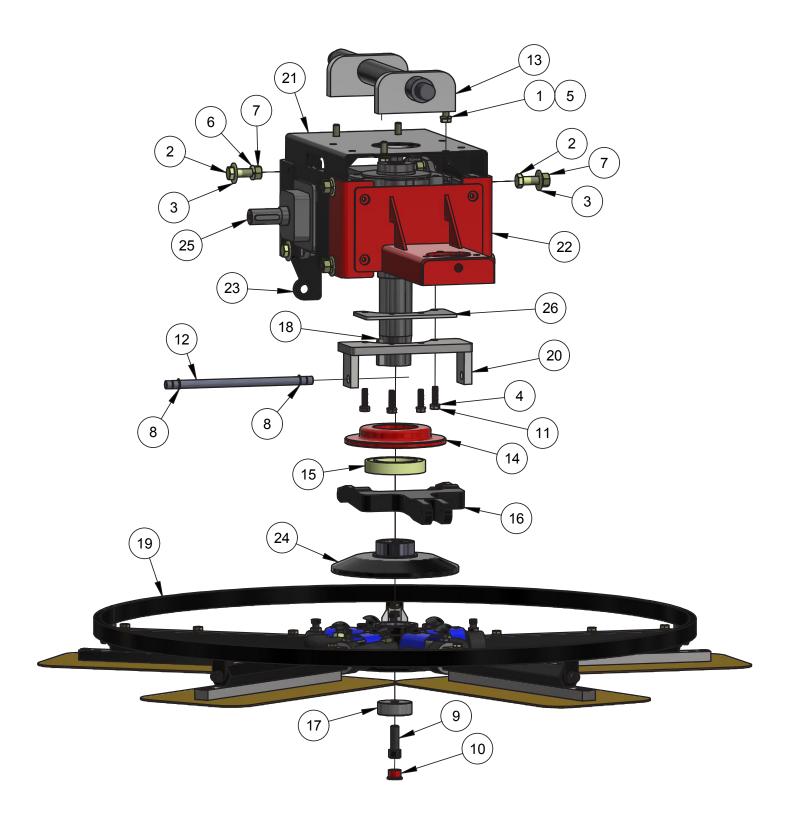
## **Engine Assembly**

## SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
-	069309	Assembly, Engine, MSP475	-
1	024820	Key, 1/4" x 4"	1
2	046550	Pulley, AK30 x 1/2" Bore with 2 Set Screws	1
3	046738	Pump, Hydraulic, Auxiliary	1
4	047635	Hub, Ø1" Bore, U-Joint, Center Shaft	2
5	047637	Assembly, U-Joint, Telescoping	2
6	049581	Elbow, Rubber, 2" I.D., 90°	1
7	056912	Weldment, Mounting Plate, for Hydraulic Pump	1
8	056922	Belt, V-Type, 24"L x 1/2"W x 5/16"H, High-Power	1
9	063337	Weldment, Tail Pipe	1
10	064254	Bearing, Flange, 1"	2
11	065220	Weldment, Engine Mount, Rear	1
12	065224	Weldment, Engine Mount, Front	1
13	065967	Clutch, Driver	1
14	066107	Pulley, Driven	1
15	066237	Assembly, Air Cleaner	1
16	066344	Inlet, Exhaust	1
17	066678	Support, for Bearing	1
18	066902	Elbow, Rubber, 2" I.D., 45°	1
19	066929	Tube, Intake, for Breather	1
20	067246	Bracket, for Radiator Mount Pusher Fan, Right Hand	1
21	067247	Bracket, for Radiator Mount Pusher Fan, Left Hand	1
22	067367	Connector, Intake Hose	1
23	067397	Bracket, Mounting, for Hydraulic Pump	1
24	067407	Spacer, for Clutch	1
25	067506	Belt, CVT	1
26	068317	Bracket, Radiator Support Pusher Fan	2
27	068500	Hub, U-Joint, Ø24mm Bore, Center Shaft	2
28	068955	Engine, Kubota WG1605	1
29	069299	Guard, for Clutch	1
30	069619	Muffler, CAT, for Kubota WG1605	1
31	069654	Plug, Oil, M22 x 1-1/2	1
32	069655	Gasket, for Drain Plug	1
33	069730	Sleeve, 2" I.D. x 2-1/2", Connecting, Silicone	1
34	071373	Shaft, Stub, with Pulley	1
35	071535	Plate, Spacer for Power Steering Pump	1
36	071538	Shield, Heat	1
37	071546	Shaft, Drive	1

ITEM	PART #	DESCRIPTION	QTY
Α	043920	(REPLACEMENT) Filter, Fuel, Kubota WG1605	1
В	064828	(REPLACEMENT) Filter, Oil, Kubota WG1605	1
С	069428	(REPLACEMENT) Filter, Air, Primary, Kubota WG1605	1
D	069249	(REPLACEMENT) Filter, Air, Safety, Kubota WG1605	1

#### **Rotor Assembly - Left Hand**



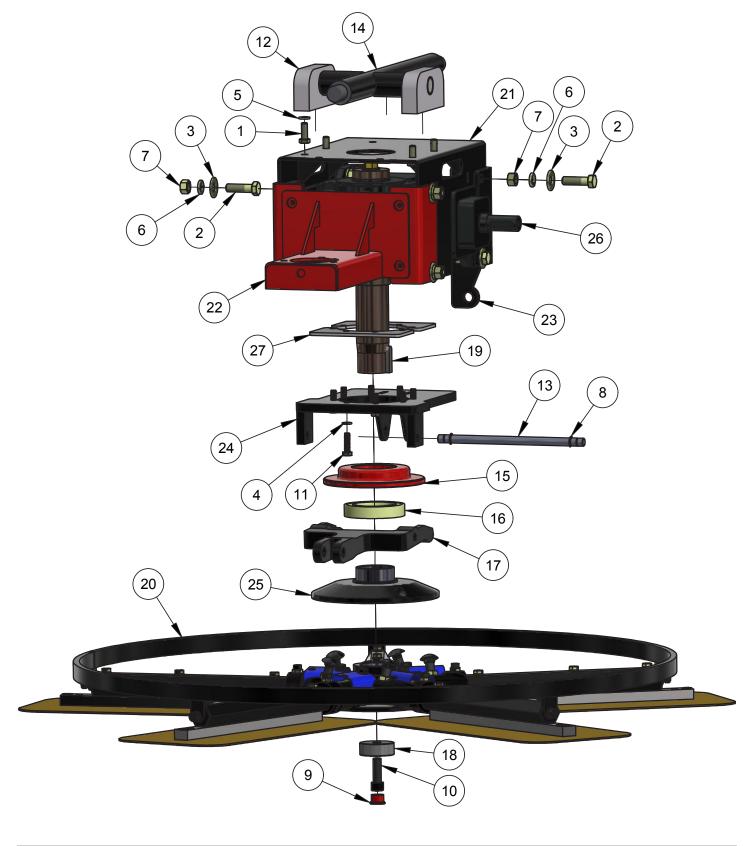
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### **Rotor Assembly - Left Hand**

#### SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
-	066314	Assembly, Rotor, Left Hand	-
1	010036	Fastener, Bolt, HHCS, 3/8"-16 x 1", Grade 8	4
2	010070	Fastener, Bolt, HHCS, 1/2"-13 x 1-3/4", Grade 8	8
3	010085	Fastener, Washer, Flat, 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	8
7	010106	Fastener, Nut, Hex, 1/2"-13, Grade 8	8
8	015677	Ring, Retaining, Ø7/16", E-Style	2
9	015691	Fastener, SHCS, 1/2"-13 x 1-1/2", Right Hand	1
10	015693	Plug, Plastic Cap, EC12	1
11	037820	Fastener, HHCS, 8mm x 1-1/4 x 30mm	4
12	048628	Pin, for Yoke Arm	1
13	048966	Crosshead, 2-Way	1
14	049599	Cap, for Bearing	1
15	049697	Bearing, for Spider Assembly	1
16	049698	Pitch, Yoke Arm	1
17	049708	Washer, Retaining	1
18	050700	Key, Engine, for Rotor	1
19	060543	Assembly, Spider, Left Hand	1
20	065231	Bracket, for Gearbox	1
21	065242	Weldment, Gearbox Housing	1
22	066302	Weldment, Crosshead Gearbox Mount	1
23	066318	Bracket, Cylinder Mount, Left Hand	1
24	067589	Plate, Pressure	1
25	069161	Gearbox, Left Hand	1
26	069653	Shim, for Gearbox Bracket	1

#### **Rotor Assembly - Right Hand**



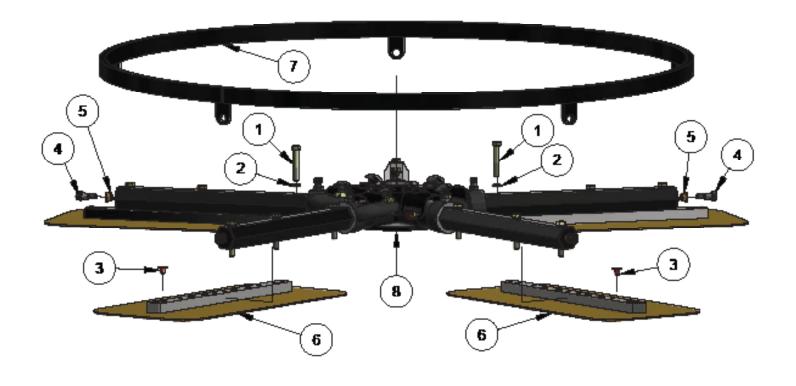
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### **Rotor Assembly - Right Hand**

#### SECTION 1 PARTS

ITEM	PART NO.	DESCRIPTION	QTY
-	066109	Assembly, Rotor, Right Hand	-
1	010036	Fastener, Bolt, HHCS, 3/8"-16 x 1", Grade 8	4
2	010070	Fastener, Bolt, HHCS, 1/2"-13 x 1-3/4", Grade 8	8
3	010085	Fastener, Washer, Flat, 1/2", Grade 8	8
4	010090	Fastener, Washer, Lock, 5/16", Grade 8	8
5	010091	Fastener, Washer, Lock, 3/8", Grade 8	4
6	010093	Fastener, Washer, Lock, 1/2", Grade 8	8
7	010106	Fastener, Nut, Hex, 1/2"-13, Grade 8	8
8	015677	Ring, Retaining, Ø7/16", E-Style	2
9	015693	Plug, Cap, Plastic, EC12	1
10	020155	Fastener, SHCS, Screw, 1/2"-13 x 1-1/2, Left Hand	1
11	037820	Fastener, HHCS, 8mm x 1.25 x 30mm	8
12	048561	Assembly, Bearing, for Rotor Mount	2
13	048628	Pin, Yoke Arm	1
14	048964	Creooshead, 4-Way	1
15	049599	Cap, Bearing	1
16	049697	Bearing, for Spider Assembly	1
17	049698	Pitch, Yoke Arm	1
18	049708	Washer, Retaining	1
19	050700	Key, Rotor	1
20	060544	Assembly, Spider, Right Hand	1
21	065242	Weldment, Gearbox Housing	1
22	066302	Weldment, Crosshead Gearbox Mount	1
23	066304	Bracket, Cylinder Mount, Right Hand	1
24	066305	Bracket, for Gearbox	1
25	067589	Plate, Pressure	1
26	068160	Gearbox, Right Hand	1
27	069653	Shim, for Gearbox Bracket	2

#### **Lower Rotor Assembly - Left Hand**

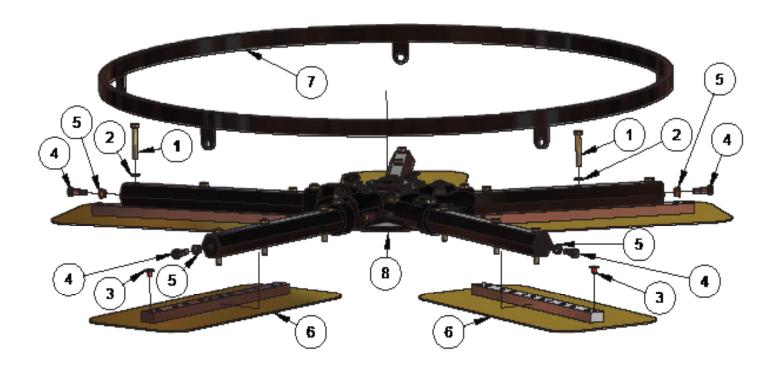


ITEM	PART #	DESCRIPTION	QTY
-	060543	Assembly, Lower Rotor, Left Hand	-
1	010024	Fastener, Bolt, HHCS, 5/16"-18 x 2", Grade 8	15
2	010090	Fastener, Washer, Lock, 5/16", Grade 8	15
3	015694	Cap, Grease, W-1, Red, Plastic, Tapered	5
4	025091	Fastener, Bolt, Shoulder, 3/8" x 1/2"	5
5	025092	Bushing, Bronze, 3/8" x 1/2" x 5/16"	5
6	028778V	Blade, Flat Finish, 8" x 17", Gold	5
7	040833	Ring, Stabilizer, 1200VG, Standard, 5-Blade	1
8	067587	Assembly, Spider, Left Hand, 5-Blade	1

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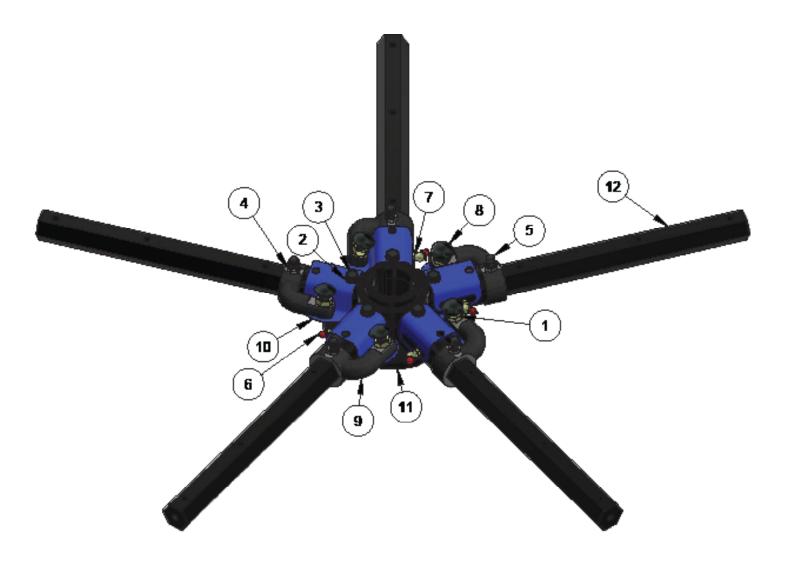
#### **Lower Rotor Assembly - Right Hand**

#### SECTION 1 PARTS



ITEM	PART #	DESCRIPTION	QTY
-	060544	Assembly, Lower Rotor, Right Hand	-
1	010024	Fastener, Bolt, HHCS, 5/16"-18 x 2", Grade 8	15
2	010090	Fastener, Washer, Lock, 5/16", Grade 8	15
3	015694	Cap, Grease, W-1, Red, Plastic, Tapered	5
4	025091	Fastener, Bolt, Shoulder, 3/8" x 1/2"	5
5	025092	Bushing, Bronze, 3/8" x 1/2" x 5/16"	5
6	028778V	Blade, Flat Finish, 8" x 17", Gold	5
7	040833	Ring, Stabilizer, 1200VG, Standard, 5-Blade	1
8	067588	Assembly, Spider, Right Hand, 5-Blade	1

### Spider Assembly - Left Hand

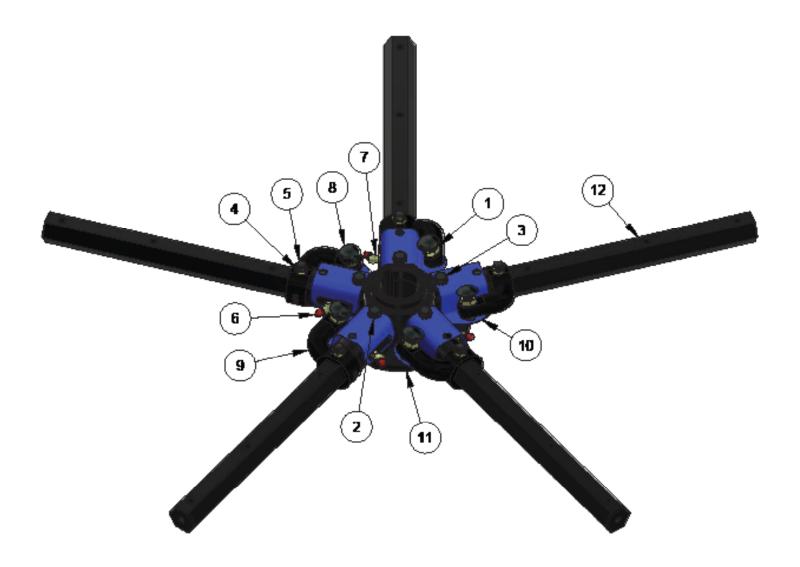


ITEM	PART #	DESCRIPTION	QTY
-	067587	Assembly, Spider, Left Hand	-
1	010050	Fastener, Nut, Hex, 1/2"-13	5
2	015682	Fastener, External Tooth, 3/8"	5
3	015683	Fastener, Bolt, Hex Head, 3/8"-16 x 7/8"	5
4	015684	Fastener, Nut, Hex, 3/8"-16	5
5	015686	Fastener, Bolt, SQHSS, 3/8"-16 x 1"	5
6	015692	Cap, Grease, 1/4", Plastic, Red	5
7	024755	Fitting, Grease, 1/8"-27 NPT, 45°	5
8	028216	Fastener, Bolt, 1/2"-13 x 1-1/2", Grade 8	5
9	033034	Lever, Lift, Universal	5
10	040792	Clip, Spider Spring, 46-48	5
11	067586	Boss, Spider, Machined	1
12	069909	Arm, Trowel, 46", for 5 Point Spider	5

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### **Spider Assembly - Right Hand**

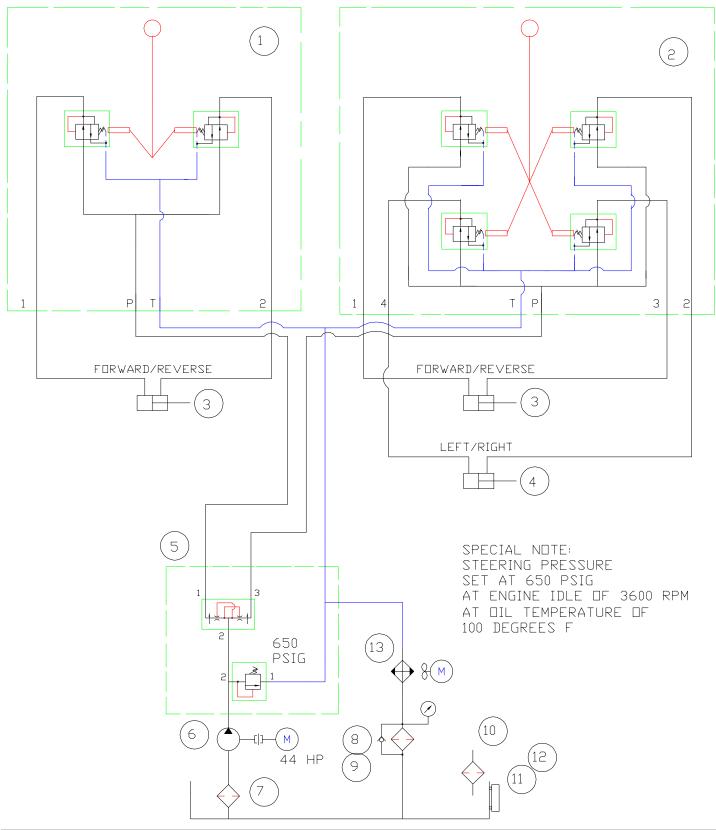
#### SECTION 1 PARTS



ITEM	PART #	DESCRIPTION	QTY
-	067588	Assembly, Spider, Right Hand	-
1	010050	Fastener, Nut, Hex, 1/2"-13	5
2	015682	Fastener, External Tooth, 3/8"	5
3	015683	Fastener, Bolt, Hex Head, 3/8"-16 x 7/8"	5
4	015684	Fastener, Nut, Hex, 3/8"-16	5
5	015686	Fastener, Bolt, SQHSS, 3/8"-16 x 1"	5
6	015692	Cap, Grease, 1/4", Plastic, Red	5
7	024755	Fitting, Grease, 1/8"-27 NPT, 45°	5
8	028216	Fastener, Bolt, 1/2"-13 x 1-1/2", Grade 8	5
9	033034	Lever, Lift, Universal	5
10	040792	Clip, Spider Spring, 46-48	5
11	067586	Boss, Spider, Machined	1
12	069909	Arm, Trowel, 46", for 5 Point Spider	5

#### **Hydraulic Steering Schematic**

LEFT HAND JOYSTICK STEERING CONTROL RIGHT HAND JOYSTICK STEERING CONTROL



## **Hydraulic Component Kit**

## SECTION 1 PARTS

		Bill of Material - MSP475 Hydraulic System Components	
ITEM #	AEC PART #	DESCRIPTION	QTY
-	069747	Kit, Component, Hydraulic, MSP475	1
1	064817	Joystick, Single Axis	1
2	064818	Joystick, Dual Axis	1
3	048661	Cylinder, Steering, Forward/Reverse	2
4	048660	Cylinder, Steering, Left/Right	1
5	046735	Manifold, Steering	1
6	046738	Pump, Gear	1
7	046732	Strainer, Suction	1
8	049978	Filter, Return Line	1
9	046241	Gauge, Filter	1
10		Breather / Dip Stick	1
11	052929	Indicator, Sight Level	1
12	045948	Plug, Magnetic Tank	1
13	052930	Cooler, Air / Oil	1
14	063341	Controller, Foot Pedal	1
15	069748	Kit, Fitting, Hydraulic, MSP475	1
16	069749	Kit, Fitting, Hydraulic, MSP475	1

### **Hydraulic Fitting Kit / Hose Kits**

Bill of Material - MSP475 Hydraulic System Fitting Kit							
ITEM #	AEC PART #	DESCRIPTION	QTY				
-	069748	Kit, Fitting, Hydraulic, MSP475	1				
1	045922	Fitting, Straight Thread Connector	8				
2	045915	Fitting, Hydraulic	3				
3	052786	Fitting, Straight Thread Connector	2				
4	047518	Fitting, ML Connector	1				
5	049058	Fitting, Elbow, 90°, Male	1				
6	045928	Fitting, Straight Thread Connector	8				
7	046777	Fitting, Straight Thread Connector	2				
8	052889	Fitting, Male JIC x Male BSPP/WC Washer & O-Ring	2				
9	043476	Fitting, Test Point	1				
10		Fitting	1				

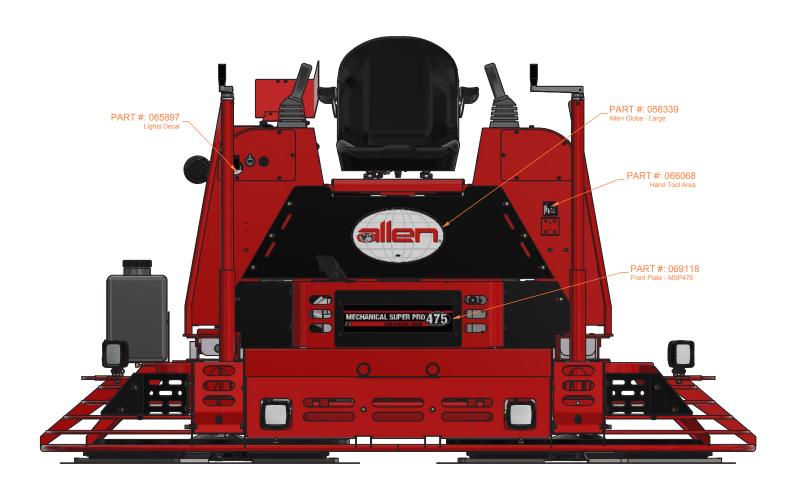
Bill of Material - MSP475 Hydraulic System Hoses							
HOSE #	PART #	CUT LENGTH (IN)	CONNECTION DETAIL	QTY			
-	069749	-	Kit, Hose, Hydraulic, MSP475	1			
1		45	Forward / Reverse for Left / Right Joystick Steering	4			
2		62	Left Hand Joystick to Manifold	1			
3		25	Right Hand Joystick to Manifold	1			
4		58	Left / Right for Right Hand Joystick Steering	2			
5		20	Right Hand Joystick to T1 Manifold	1			
6		66	Left Hand Joystick to T1 Manifold	1			
7		28	Auxiliary Pump out to Manifold P Port	1			
8		50	Cooler to T2 Manifold	1			
9		18	Cooler to Return Filter	1			
10		12	Auxiliary Pump Suction to Tank	1			

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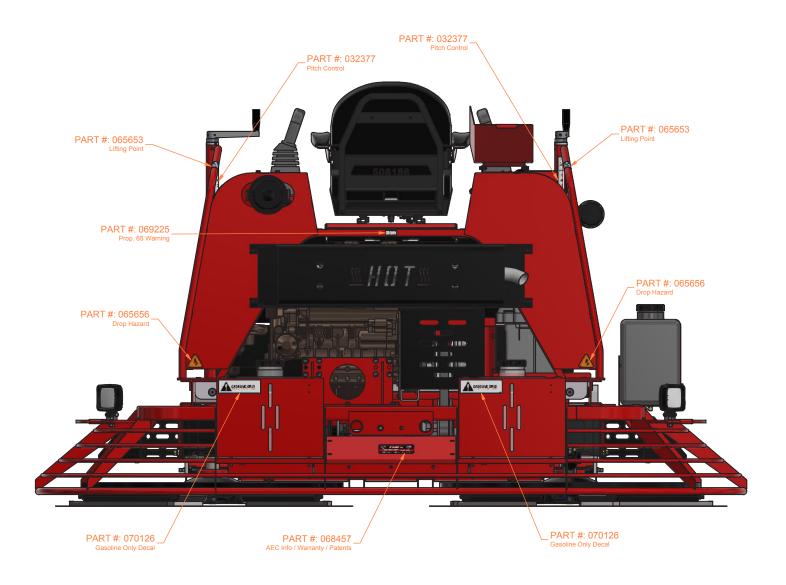
# SECTION 2 DECALS

## SECTION 2 DECALS

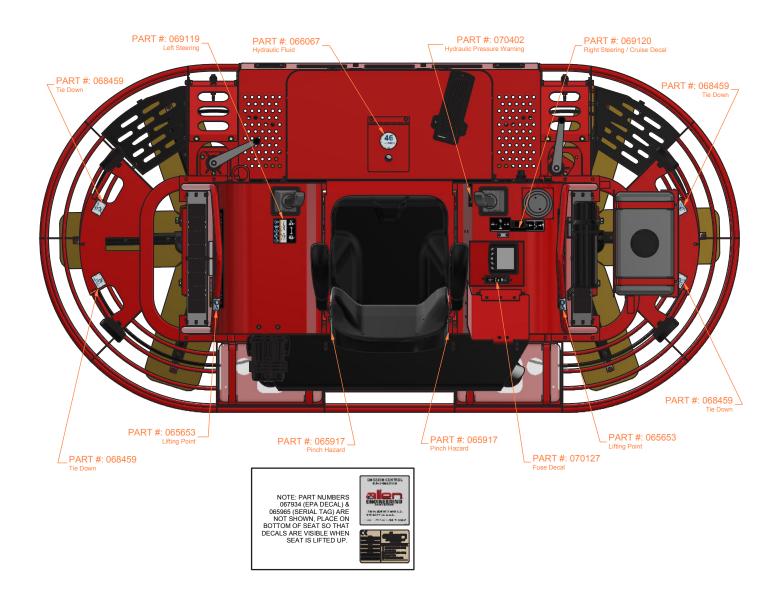
# **Decals - Front** (Kit #: 069116)



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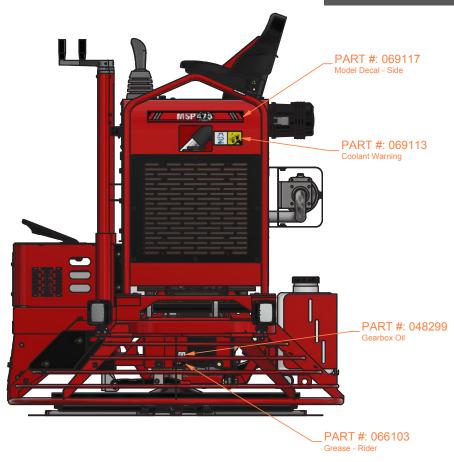
## **Decals - Top** (Kit #: 069116)

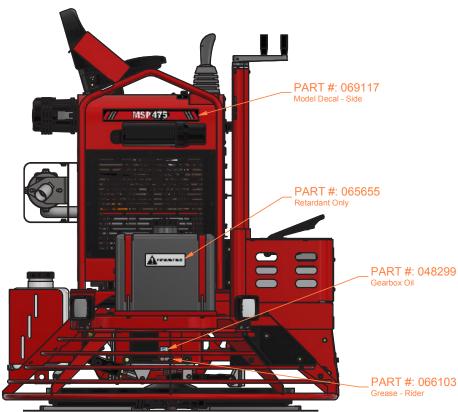


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#### Decals - Left / Right (Kit #: 069116)

## SECTION 2 DECALS





#### **Revision Detail**

MANUAL REVISION DETAIL							
REVISION #	REVISION DATE	REVISION REFERENCE #	REVISION BY				
-	11/19	Initial Release	MW				
Α	02/21	MN 21-003	MW				
В	01/22	Updated Covers	MK				

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Printed in U.S.A.

With other Patents Pending.



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