

**POWER SPRAYERS**

# **MPS9910**

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## **PARTS & DECALS MANUAL**

Manual Part #: 075770P | Revision: A  
Language: English | Original Instructions



## NOTICE

This manual, or a copy of it, must be kept with the machine at all times.  
There is a manual storage container located on the machine for your convenience.

# POWER SPRAYER

## PARTS & DECALS MANUAL

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This manual covers the products listed below:

<b><u>Part No.</u></b>	<b><u>Description</u></b>
073600	SPRAYER, MPS9910

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**SECTION 1  
PARTS**

**SECTION 1  
PARTS**

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 insure 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.

## SECTION 1 PARTS

# Replacement Part Procedures

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 this manual. Please order replacement parts by the appropriate part number, not the key 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 insure 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 from the "PARTS" Section 1.
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.

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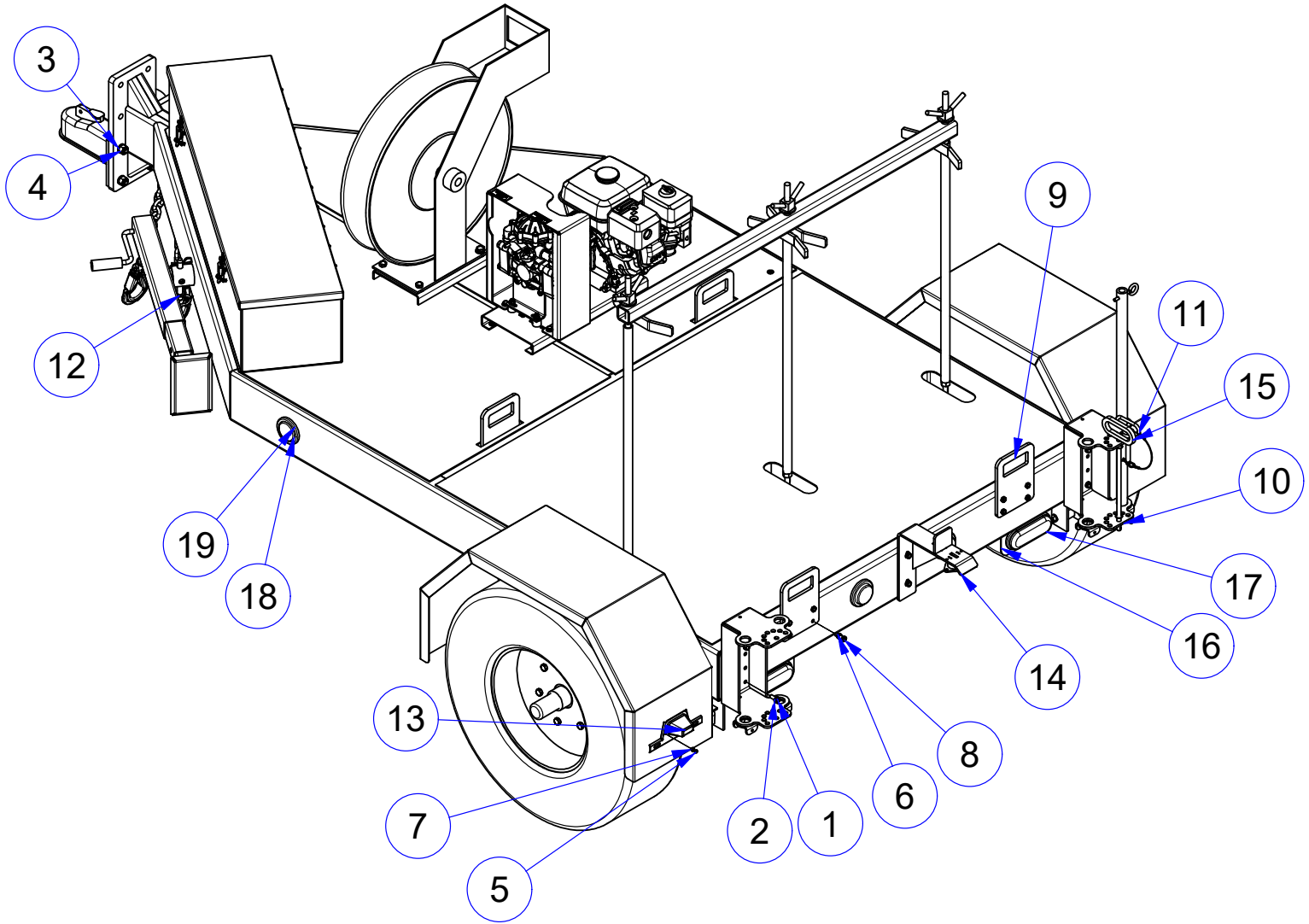
# General Assembly Parts List

## SECTION 1 PARTS

ITEM	PART #	DESCRIPTION	QTY
1	000750	CABLE, 1/8" 7 X 19" GALV. AC, 8 FT	1
2	075286	SPRAY GUN	1
3	053421	FASTENER, HHCS 5/8"-11 X 2-1/4" GRADE 8	4
4	063881	COUPLER, PLATE TYPE 2-5/16" 21,000 LB CAPACITY	1
5	064446	ASSEMBLY, WHEEL AND TIRE 16", 8 ON 6-1/2" CENTER, ST235/80R16	2
6	073595	DECAL, SPRAY GUN VALVE	1
7	073596	DECAL, SPRAY BOOM VALVE	1
8	073601	WELDMENT, TRAILER FRAME	1
9	073627	WELDMENT, FENDER	2
10	073630	ASSEMBLY, 9910 TOTE POWER UNIT	1
11	073633	TOW RING, BOLT ON 2-1/2"	1
12	073639	JACK, 2-1/2" SQUARE SIDE WIND 7,000LB DROP LEG	1
13	073640	WELDMENT, TOP BARREL HOLD DOWN BAR	1
14	073647	ASSEMBLY, HOLD DOWN ROD FOR BARREL	3
15	073656	ASSEMBLY, SPRAY BOOM	1
16	073959	TUBE, SUPPORT MAST	1
17	074039	ASSEMBLY, AXLE	1
18	074794	ASSEMBLY, TOOLBOX	1
19	075077	HOSE REEL, 100' RETRACTABLE	1

# SECTION 1 PARTS

## Trailer Frame Assembly



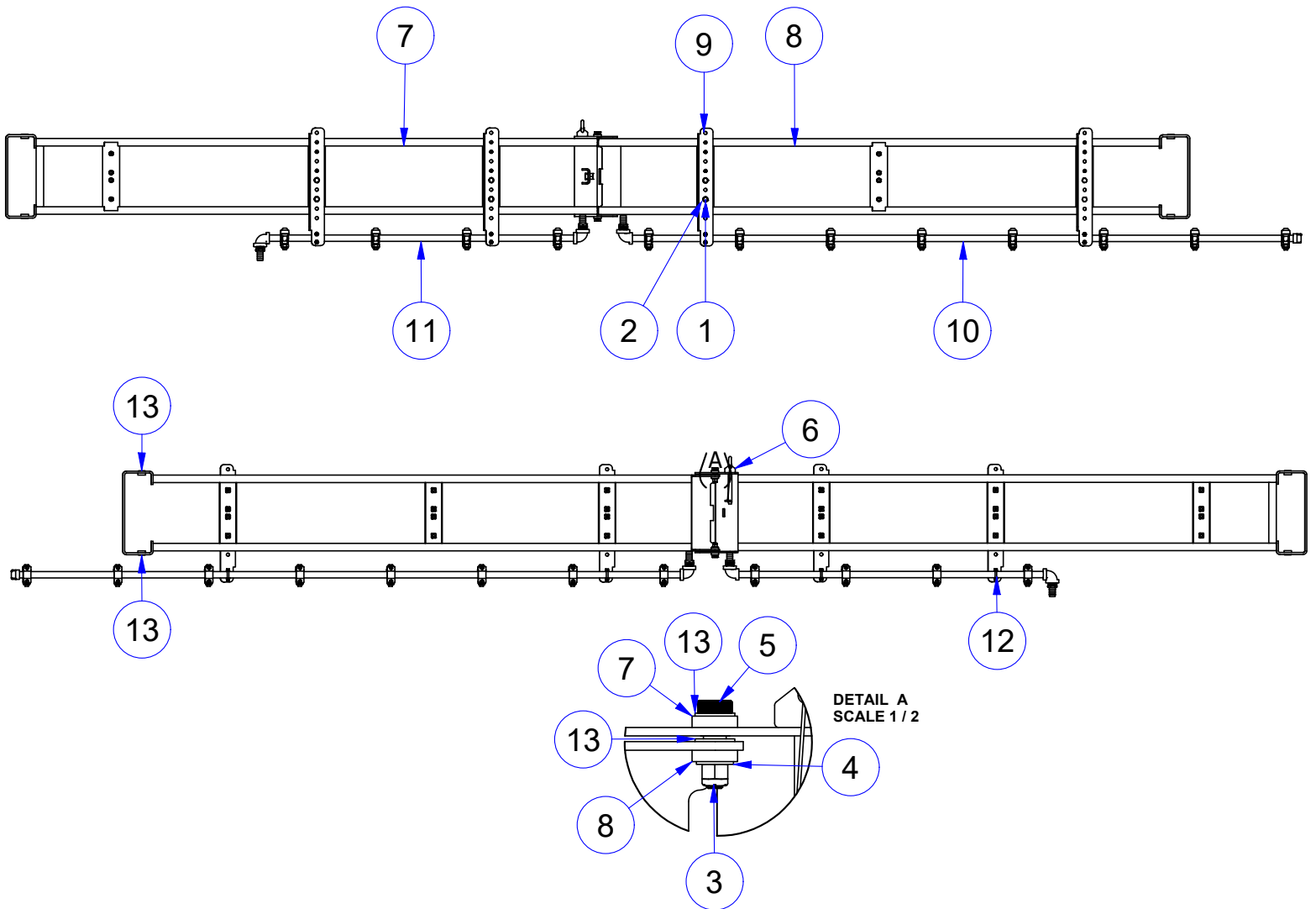
# Trailer Frame Assembly Parts List

## SECTION 1 PARTS

ITEM	PART#	DESCRIPTION	QTY
1	010036	FASTENER, HHCS 3/8"-16 X 1" GRADE 8	21
2	010091	FASTENER, LOCK WASHER 3/8" GRADE 8	16
3	010095	FASTENER, LOCK WASHER 5/8" GRADE 8	4
4	010110	FASTENER, HEX NUT 5/8"-11 GRADE 8	4
5	013727	FASTENER, RHMS 10-32 X 3/4"	2
6	020514	FASTENER, STOVER LOCK NUT 3/8-16"	33
7	029568	FASTENER, HEX NUT NYLOCK 10-32	2
8	032875	FASTENER, HHCS 3/8"-16 X 1-1/4" GRADE 8	16
9	073634	PLATE, STRAP AND CONTAINMENT	4
10	073651	WELDMENT, SPRAY BOOM MOUNTING BRACKET	2
11	073654	HITCH PIN WITH TETHER	1
12	073686	PIN, LOOP GRIP DIA.5/8" X 4"	1
13	074045	BRACKET, LICENSE PLATE	1
14	074223	WELDMENT, SPRAY BOOM SUPPORT	1
15	075050	PIN, HIND FOR SPRAY BOOM	1
16	075052	BRACKET, TAIL LIGHT MOUNT	2
17	075054	KIT, TRAILER TAIL LIGHT	2
18	075055	LIGHT, CLEARANCE/SIDE MARKER	4
19	075056	GROMMET, 2-1/2" FLUSH MOUNT FOR LIGHT	4

# SECTION 1 PARTS

## Spray Boom Assembly



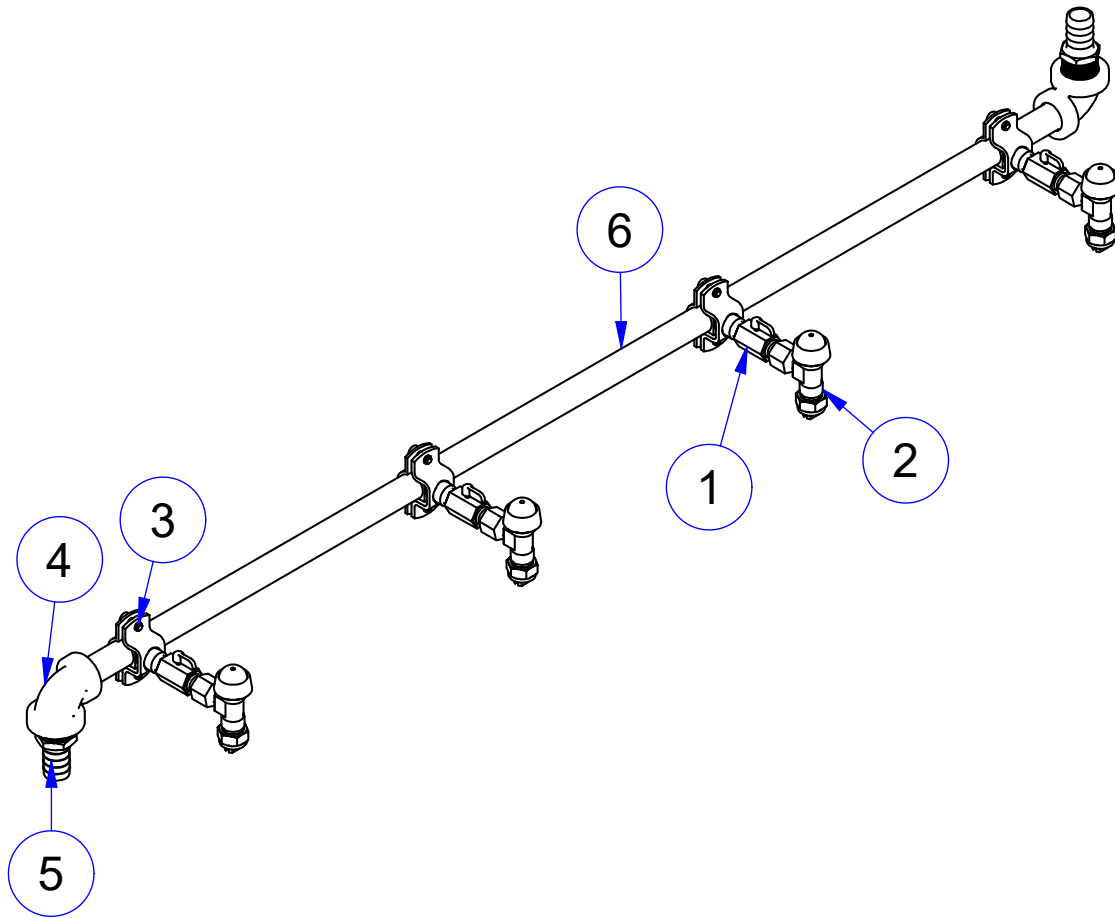
# Spray Boom Assembly Parts List

## SECTION 1 PARTS

ITEM	PART #	DESCRIPTION	QTY
-	073656	ASSEMBLY, SPRAY BOOM	1
1	010035	FASTENER, HHCS 3/8"-16 X 3/4" GRADE 8	8
2	010091	FASTENER, LOCK WASHER 3/8" GRADE 8	8
3	010464	FASTENER, NUT NYLOCK 3/8"-16 GRADE 8	2
4	017751	FASTENER, FLAT WASHER 3/8" HARD A325 GRADE 8	2
5	073646	FASTENER, SHCS 1/2" SHLDR DIA. X 1", 3/8"-16 THREAD	2
6	073654	HITCH PIN WITH TETHER	1
7	073657	WELDMENT, STAGE 1 BOOM	1
8	073666	WELDMENT, STAGE 2 BOOM	1
9	073670	BRACKET, LH SPRAY BAR SUPPORT	4
10	073672	ASSEMBLY, STAGE 2 SPRAY NOZZLE BOOM	1
11	073678	ASSEMBLY, STAGE 1 SPRAY NOZZLE BOOM	1
12	073681	CLAMP, U-BOLT 1/4"-20 THREAD, 0.875" ID	4
13	073683	BEARING, FLANGED 1/2" SHAFT, 5/8" ID	8

# SECTION 1 PARTS

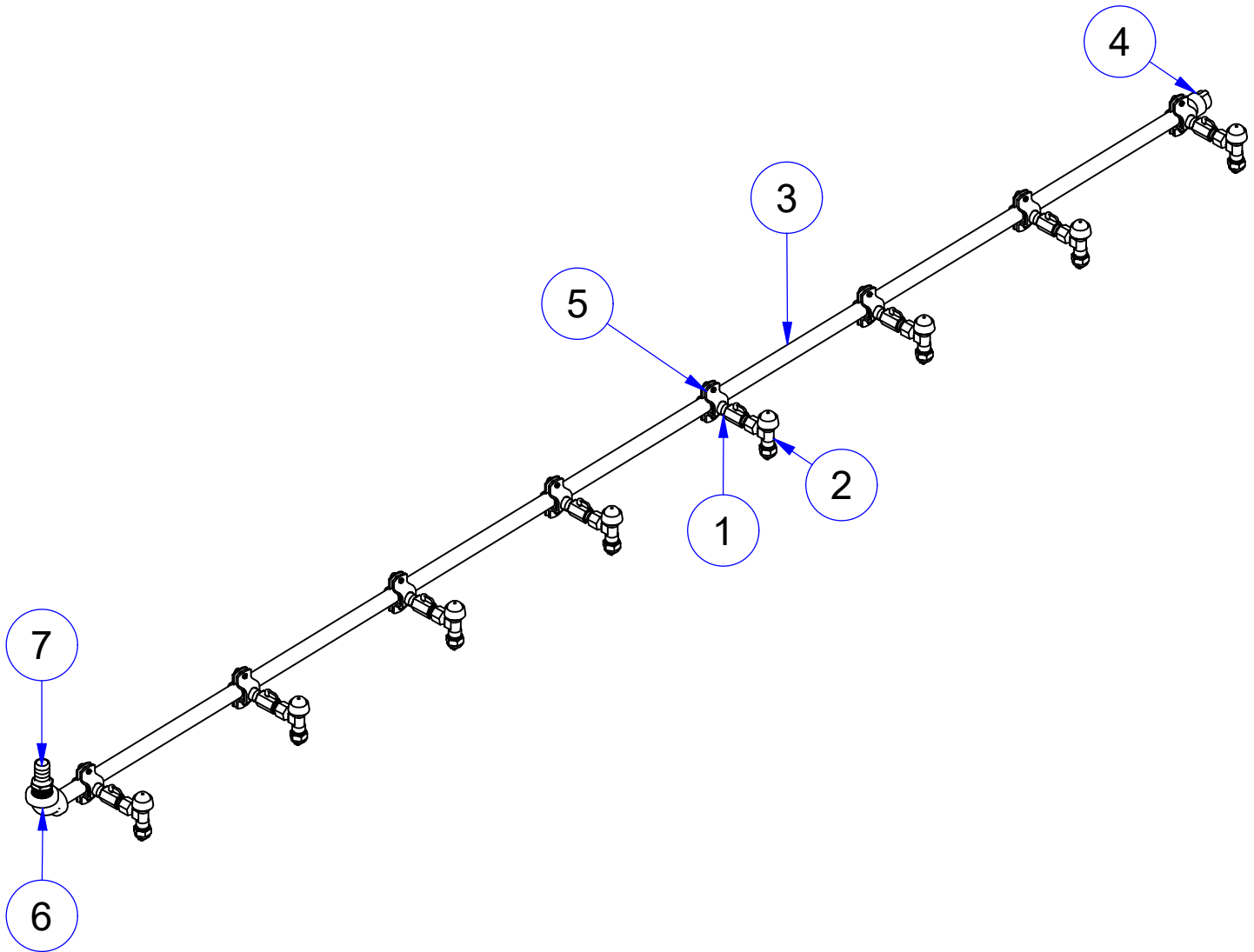
## Stage 1 Spray Nozzles Assembly



ITEM	PART #	DESCRIPTION	QTY
-	073678	ASSEMBLY, STAGE 1 SPRAY NOZZLE BOOM	1
1	053024	BALL VALVE 1/4" FEMALE TO MALE	4
2	056832	ASSEMBLY, SPRAY NOZZLE	4
3	073675	FITTING, QUICK MOUNT FOR SPRAY NOZZLES, 1/2" PIPE INLET	4
4	073676	FITTING, 90° ELBOW REDUCER 3/4" X 1/2" NPT	2
5	073677	FITTING, BARBED HOSE FOR 3/4" HOSE ID	2
6	073679	PIPE, FOR STAGE 1 SPRAY NOZZLE BOOM	1

# Stage 2 Spray Nozzles Assembly

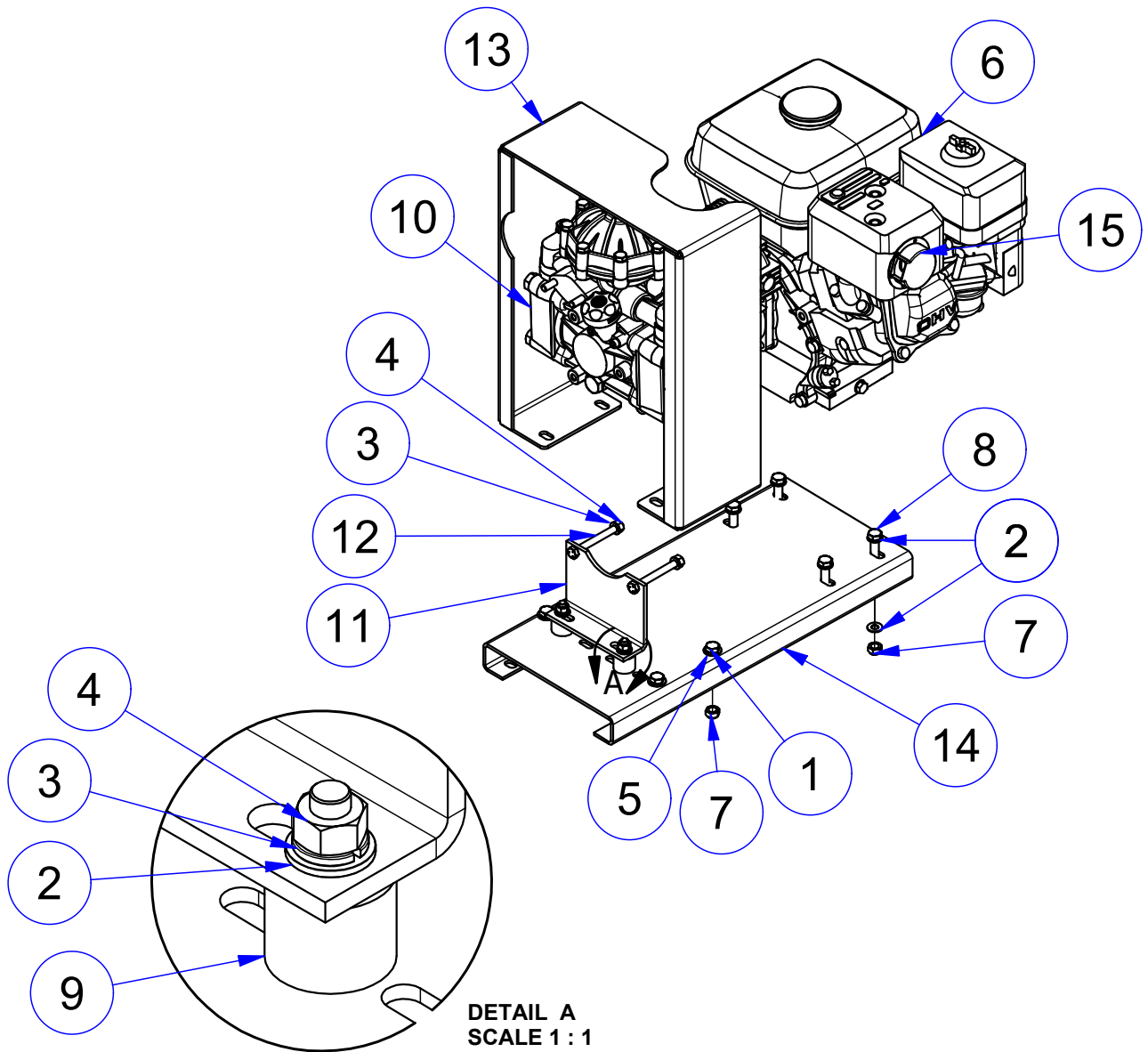
## SECTION 1 PARTS



ITEM	PART #	DESCRIPTION	QTY
-	073672	ASSEMBLY, STAGE 2 SPRAY NOZZLE BOOM	1
1	053024	BALL VALVE 1/4" FEMALE TO MALE	8
2	056832	ASSEMBLY, SPRAY NOZZLE	8
3	073673	PIPE, FOR STAGE 2 SPRAY NOZZLE BOOM	1
4	073674	FITTING, LOW PRESSURE ALUM. CAP, 1/2" FEMALE	1
5	073675	FITTING, QUICK MOUNT FOR NOZZLES, 1/2" PIPE INLET	8
6	073676	FITTING, 90° ELBOW REDUCER 3/4" X 1/2" NPT	1
7	073677	FITTING, BARBED HOSE FOR 3/4" HOSE ID	1

# SECTION 1 PARTS

## Power Unit Assembly



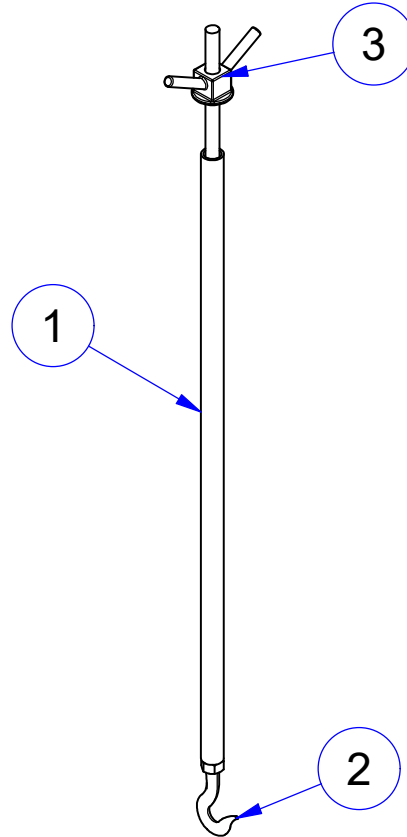
# Power Unit Assembly Parts List

## SECTION 1 PARTS

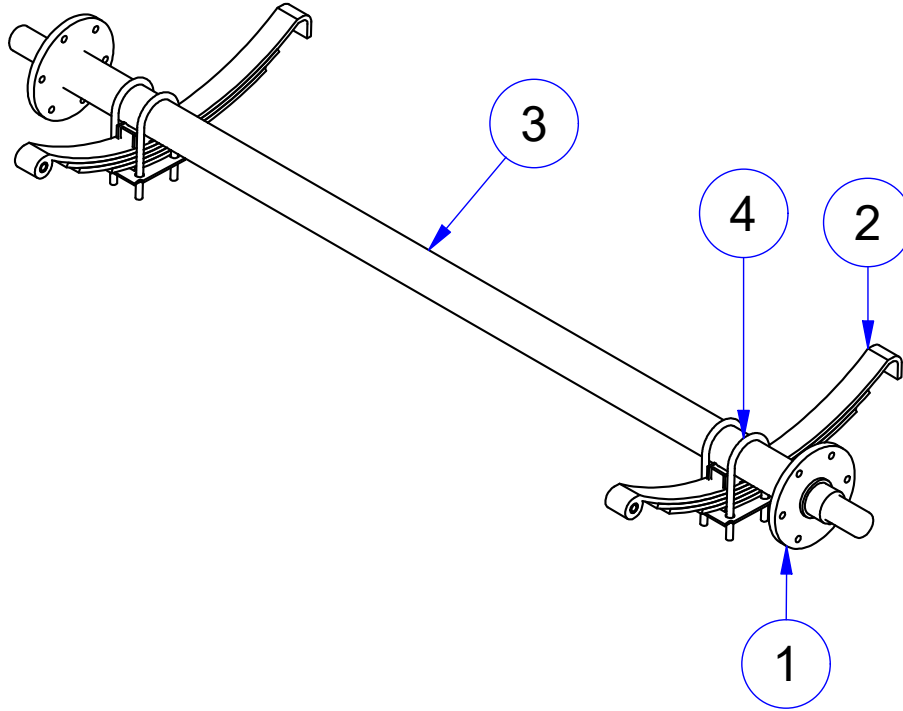
ITEM	PART #	DESCRIPTION	QTY
-	073630	ASSEMBLY, POWER UNIT	1
1	010035	FASTENER, HHCS 3/8"-16 X 3/4" GRADE 8	4
2	010082	FASTNER, FLAT WASHER 5/16" GRADE 8	12
3	010090	FASTENER, LOCK WASHER 5/16" GRADE 8	6
4	010100	FASTENER, HEX NUT 5/16"-18 GRADE 8	6
5	017751	FASTENER, FLAT WASHER 3/8" HARD A325 GRADE 8	4
6	018961	ENGINE, GX160-UT2QX2	1
7	020514	FASTENER, STOVER LOCK NUT 3/8"-16	8
8	028402	FASTENER, HHCS 3/8"-16 X 1-1/2" GRADE 8	4
9	028556	ISOLATOR, RUBBER	2
10	039070	PUMP M9910-D30GRGI SPRAYER	1
11	039072	BRACKET, M9910 ISOLATOR	1
12	039082	FASTENER, HHCS 5/16"-18 X 3" GRADE 8	2
13	073631	GUARD FOR SPRAYER POWER UNIT	1
14	073632	CHANNEL FOR SPRAYER POWER UNIT	1
15	076097	DEFLECTOR FOR EXHAUST	1

**SECTION 1  
PARTS**

**Barrel Hold Down Rod Assembly**



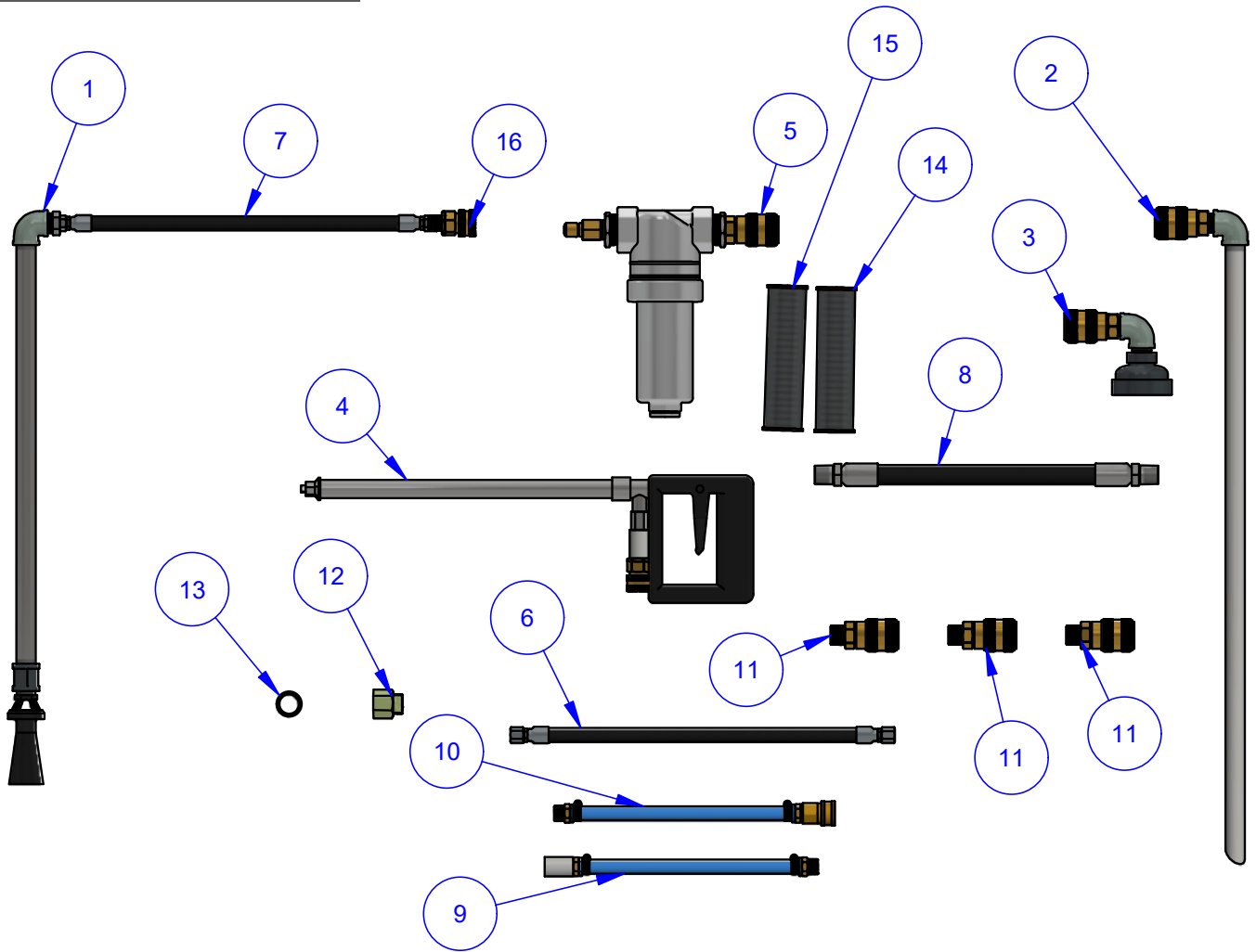
ITEM	PART #	DESCRIPTION	QTY
-	073647	ASSEMBLY, HOLD DOWN ROD FOR BARREL,	3
1	073643	WELDMENT, HOLD DOWN ROD	1
2	073648	HOOKED TURNBUKLE 5/8"-11 RH THREADED, 2,200 LB CAPACITY	1
3	073649	WING NUT, 3/4" TO 4 X 1/2" COIL THREAD	1



ITEM	PART #	DESCRIPTION	QTY
-	074039	ASSEMBLY, AXLE	1
1	064447	HUB, 8 ON 6-1/2" HOLE CENTER WITH GS42 (PAIR)	1
2	074034	LEAF SPRING, SLIPPER STYLE 7,000LB CAPACITY PER PAIR	2
3	074038	WELDMENT, AXLE	1
4	074040	KIT, 3" U-BOLT AND AXLE PLATE FOR 2" SPRING	1

# SECTION 1 PARTS

## Kit, Hose/Fitting for Tote Trailer



# Kit, Hose/Fitting Parts List & Suggested Spare Parts

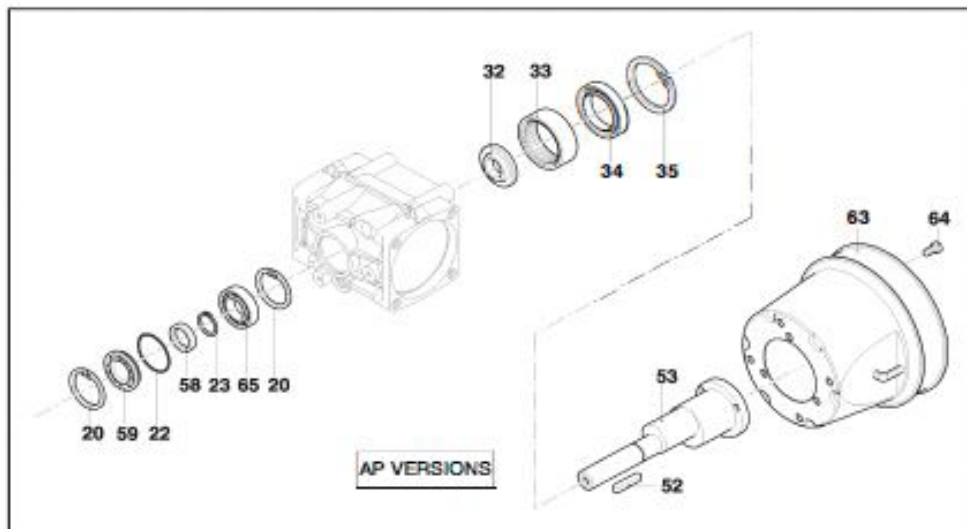
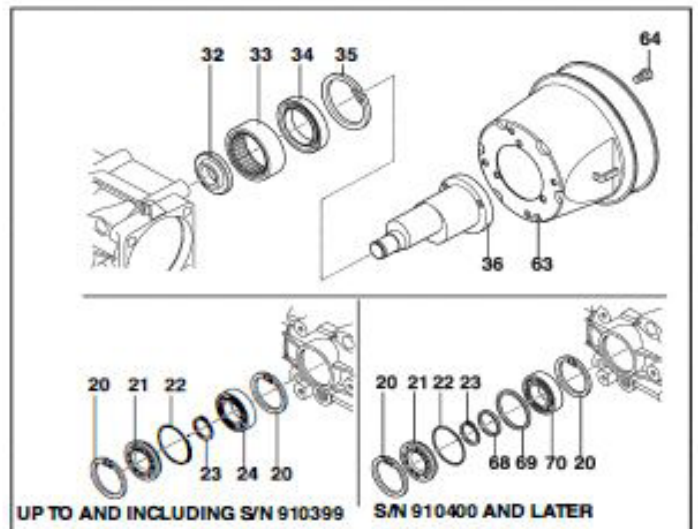
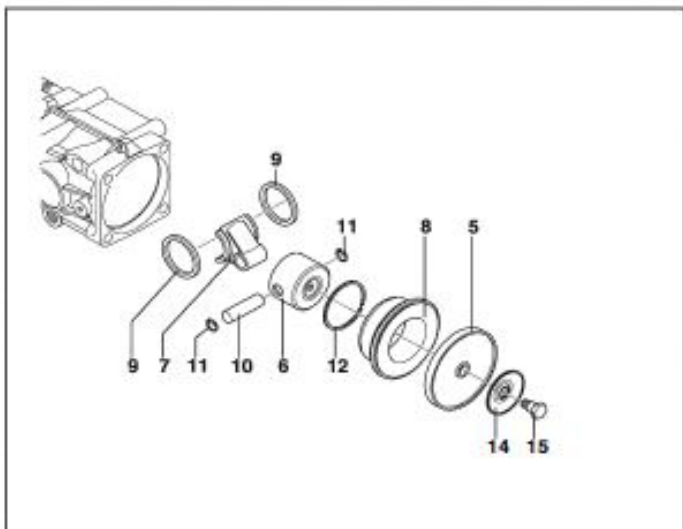
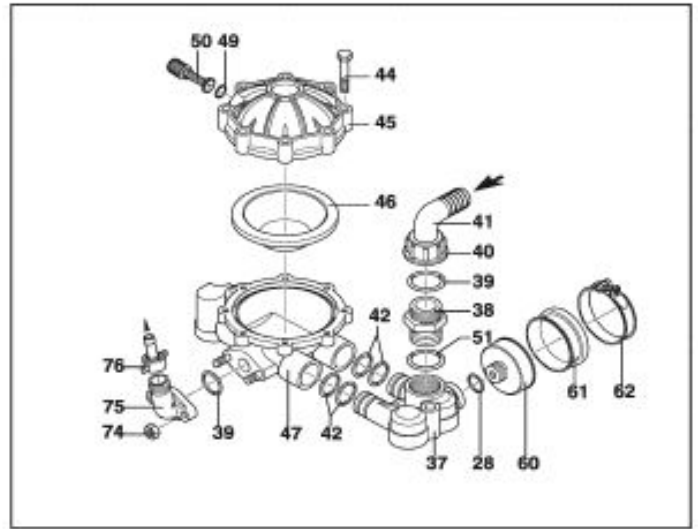
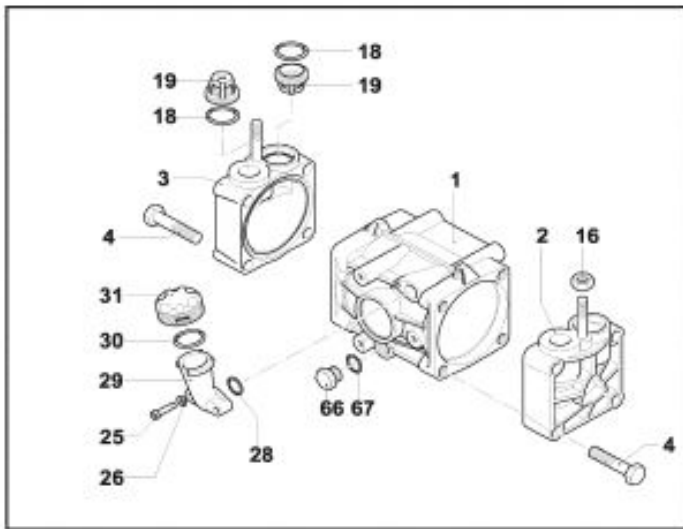
## SECTION 1 PARTS

ITEM	PART #	DESCRIPTION	QTY
-	075070	KIT, HOSE/FITTING FOR TOTE TRAILER	1
1	075280	RETURN LINE	1
2	075282	SUCTION LINE	1
3	075287	FITTING, FOR TOTE CONTAINER	1
4	075286	SPRAY GUN	1
5	075285	ASSEMBLY, FILTER AND FITTINGS	1
6	075290	HOSE FOR HOSE REEL	1
7	075281	HOSE, RETURN LINE	1
8	075283	HOSE, SUCTION LINE	1
9	075288	HOSE, FOR SPRAY BOOM CONNECTION	1
10	075289	HOSE, FOR HOSE REEL CONNECTION	1
11	010190	FITTING, COUPLER QDC FEMALE 3/4"	3
12	036349	ADAPTER BUSHING FOR 9910 PUMP	1
13	075020	BONDED SEAL 16BPP	1
14	043847	FILTER ELEMENT, 50 MESH	1
15	043849	FILTER ELEMENT. 16 MESH	1
16	010189	FITTING, COUPLER QDC FEMALE 1/2"	1

SUGGESTED SPARE PARTS			
ITEM	PART #	DESCRIPTION	QTY
1	043847	FILTER ELEMENT, 50 MESH	1
2	043849	FILTER ELEMENT. 16 MESH	1
3	056832	ASSEMBLY, NOZZLE FOR SPRAY BOOM	2
4	048407	STRAINER, BRASS 100 MESH FOR NOZZLE	6
5	048406	SPRAY TIP	6
6	044192	RETAINER NUT	6
7	053024	BALL VALVE, SHUTOFF 1/4" NPT FOR NOZZLE	4

# SECTION 1 PARTS

## Model 9910 Pump Assembly, Illustration (9910-D30GRGI)



# Model 9910 Pump Assembly, Parts List (9910-D30GRGI)

## SECTION 1 PARTS

ITEM	PART #	DESCRIPTION	QTY
1	9910-629011	Pump Body with Bolts	1
2	9910-620101	Assembly, Right Head (DX)	1
3	9910-620102	Assembly, Left Head (SX)	1
4	9910-621430	Fastener, Bolt, M12 x 55mm	8
5 <sup>1</sup>	9910-620085	Diaphragm, Desmopan (standard) [Repair Kit 9910-KIT1724]	2
	9910-620080	Diaphragm, Buna-N (optional) [Repair Kit 9910-KIT2110]	2
6	9910-620120	Piston	2
7	9910-620140	Connecting Rod	2
8	9910-620110	Sleeve	2
9	9910-580470	Retainer Ring	2
10	9910-380300	Connection Rod Pin	2
11	9910-380080	Ring Pin	4
12	9910-160230	Piston Ring	2
14	9910-1040180	Retaining Washer	2
15	9910-580360	Fastener, Bolt, for Diaphragm	2
16	9910-180150	Fastener, Nut	2
18 <sup>1,2,3</sup>	9910-620030	O-Ring	4
19 <sup>2</sup>	9910-1409050	Complete Valve Assembly	4
20	9910-111120	Retaining Ring	2
21	9910-620020	Cover	1
22 <sup>3</sup>	9910-620291	O-Ring	1
23	9910-620291	Retaining Ring	1
24	9910-620190	Bearing	1
25	082180	Fastener, Bolt, M6 x 30mm	2
26	082181	Washer	2
28 <sup>3</sup>	082188	O-Ring	2
29	9910-550030	Oil Sight Glass	1
30 <sup>3</sup>	9910-550040	O-Ring	1
31	9910-550056	Oil Sight Glass Cap	1
32	9910-620160	Spacer	1
33	9910-550060	Roller Bearing	1
34	9910-620130	Seal	1
35	9910-620330	Retaining Ring	1
36	9910-620170	Crankshaft	1
37	9910-620150	Suction Manifold	1
38	082186	Threaded Adapter	1
39 <sup>3</sup>	9910-550350	O-Ring	2
40	9910-550242	Ring Nut	1
41	082185	Hose Barb	1
42 <sup>3</sup>	9910-390060	O-Ring	4

Continued On Next Page

# SECTION 1 PARTS

## Model 9910 Pump Assembly, Parts List, continued (9910-D30GRGI)

Continued From Previous Page

ITEM	PART #	DESCRIPTION	QTY
44	9910-621780	Fastener, Bolt, M8 x 40mm	8
45	9910-629211	Upper Air Chamber	1
46 <sup>1</sup>	9910-550190	Accumulator, Diaphragm, Buna-N	1
47	9910-622070	Lower Air Chamber Body	1
49 <sup>3</sup>	9910-650542	O-Ring	1
50	082182	Air Valve	1
51 <sup>3</sup>	082187	O-Ring	1
52	9910-620680	Key (VP-A Model)	1
53	9910-620172	Thru-Shaft, 20mm Diameter (AP Version)	1
	9910-620174	Thru-Shaft, 3/4" Diameter (AP Version)	1
58	9910-620630	Seal	1
59	9910-620021	Cover	1
60	9910-650660	Diaphragm Holder	1
61	9910-650670	Suction Diaphragm	1
62	9910-650690	Clamp	1
63	9910-1500350	PTO Shield	1
64	9910-820670	Fastener, Bolt, M10 x 16mm	4
65	9910-620190	Bearing	1
66	2406-0023	Drain Plug, Oil	1
67 <sup>3</sup>	9910-740290	O-Ring	1
68	9910-620930	Spacer	1
69	9910-620940	Spacer	1
70	9910-380230	Bearing	1
74	082189	Fastener, Nut	2
75	082184	Flange	1
76	082183	Fitting, Hose Barb, 1/2"	1

FASTENER TORQUE REQUIREMENTS			
ITEM	DESCRIPTION	TIGHTENING TORQUE	
		In. Lbs.	Nm
4	Fastener, Bolt, M12 x 55mm	393.7	44.1
15	Fastener, Bolt, for Diaphragm	262.5	29.4
16	Fastener, Nut	350.0	39.2
25	Fastener, Bolt, M6 x 30mm	87.5	9.8
44	Fastener, Bolt, M8 x 40mm	175.0	19.6
64	Fastener, Bolt, M10 x 16mm	87.5	9.8
74	Fastener, Nut	175.0	19.6

*1	
<b>9910-KIT**** Diaphragm Kit</b>	
ITEM	QTY.
5	2
18	4
46	1

See Item 5 for appropriate kit #

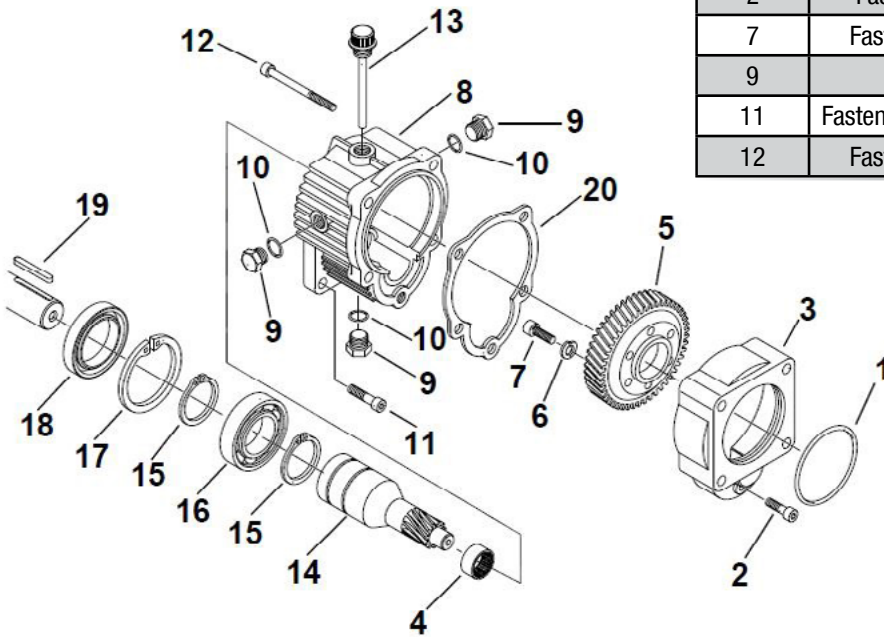
*2	
<b>9910-KIT1917 Valve Kit</b>	
ITEM	QTY.
18	4
19	4

*3	
<b>9910-KIT1916 O-Ring Kit</b>	
ITEM	QTY.
18	4
22	1
18	2
30	1
39	2
42	4
49	1
51	1
67	1

# Model 9910 Pump Gearbox, Illustration & Parts List (9910-D30GRGI)

## SECTION 1 PARTS

### Gearbox 9910-KIT1640

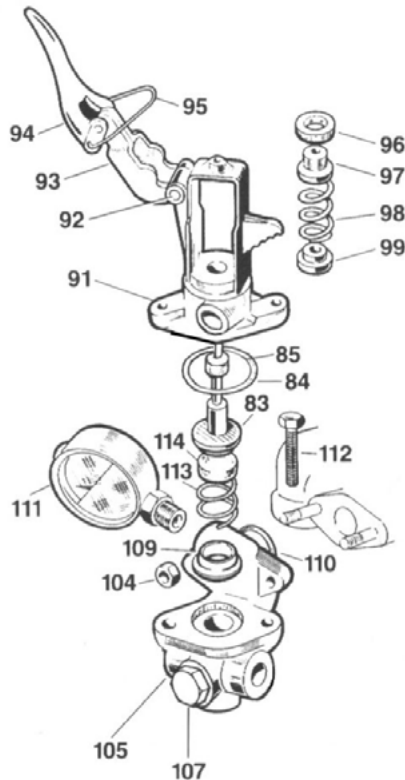


FASTENER TORQUE REQUIREMENTS			
ITEM	DESCRIPTION	TIGHTENING TORQUE	
		In. Lbs.	Nm
2	Fastener, Bolt, M8 x 20mm	218.7	24.5
7	Fastener, Bolt, M10 x 20mm	171.4	19.6
9	Plug	171.4	19.6
11	Fastener, Bolt, 5/16" x 24 UNF x 1	218.7	24.5
12	Fastener, Bolt, M10 x 75mm	218.7	24.5

ITEM	PART #	DESCRIPTION	QTY
1	9910-620561	O-Ring	1
2	9910-180030	Fastener, Bolt, M8 x 20mm	1
3	9910-621000	Pump Adapter Flange	1
4	9910-620990	Bearing	1
5	9910-651620	Gear	1
6	9910-200231	Lock Washer	6
7	9910-620470	Fastener, Bolt, M10 x 20mm	3
8	9910-620960	Gearbox Body	1
9	2406-0023	Plug	2
10	9910-740290	O-Ring	2
11	9910-651000	Fastener, Bolt, 5/16" x 24 UNF x 1	4
12	9100-621010	Fastener, Bolt, M10 x 75mm	4
13	9910-1140370	Vent Plug	1
14	9910-621660	Pinion Gear	1
15	9910-320240	Retaining Ring (External)	2
16	9910-961780	Bearing	1
17	9910-961790	Retaining Ring (Internal)	1
18	9910-961800	Seal	1
19	9910-881090	Key	1
20	9910-620950	Gasket	1

# SECTION 1 PARTS

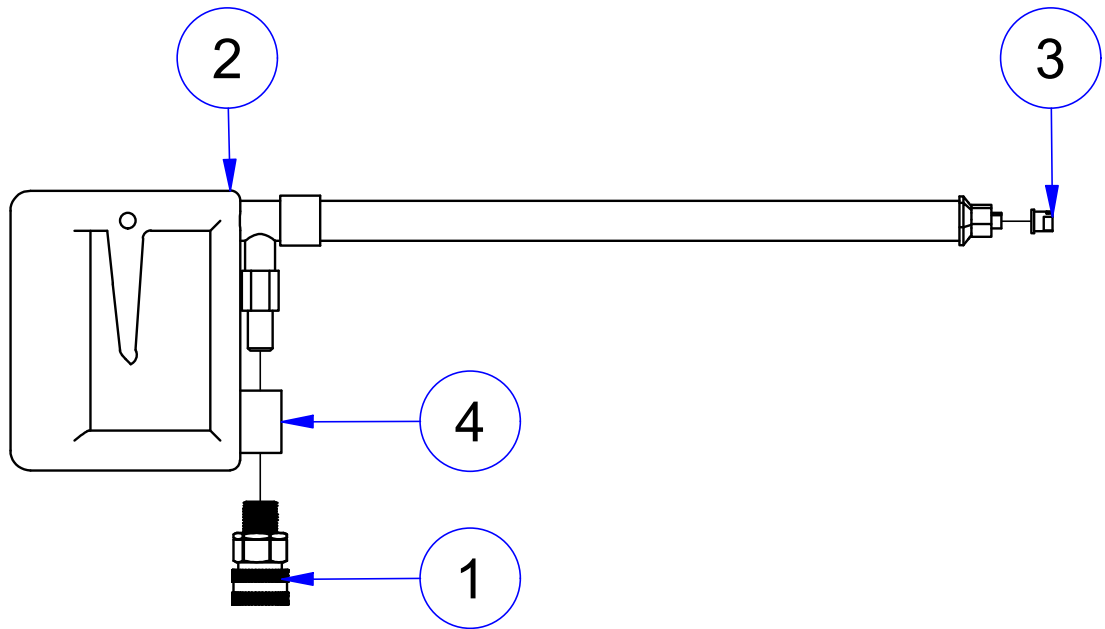
## Model 9910 Pump Control Kit Assembly, Illustration & Parts List



ITEM	PART #	DESCRIPTION	QTY
-	040139	Assembly, Pump Control Kit	-
83	9910-320433	Relief Valve Poppet Retainer	1
84	9910-320511	O-Ring, Gasket Seal	1
85	9910-390140	Tension Spring Guide/Seal	1
91	9910-320410	Tension Spring Housing	1
92	9910-320480	Pin	1
93	9910-320460	Lever Guide	1
94	9910-320470	Pressure Release Lever	1
95	9910-320490	Locking Clip	1
96	9910-320450	Pressure Adjustment Clip	1
97	9910-320440	Threaded Guide	1
98	9910-10190	Tension Spring	1
99	9910-230120	Tension Spring Retainer	1
105	9910-620220	Relief Valve Body	1
107	9910-130171	Plug	1
109	9910-450110	Spring Holder	1
110	9910-550350	O-Ring	1
111	9910-550545	Pressure Gauge (Oil Filled)	1
112	9910-180370	Fastener, Bolt, 8MA x 25	2
113	9910-320420	Tension Spring	1
114	9910-110122	Relief Valve Seat (Vinton)	1
	9910-110121	Relief Valve Seat (Urethane)	1

# Spray Gun Assembly, Illustration

## SECTION 1 PARTS



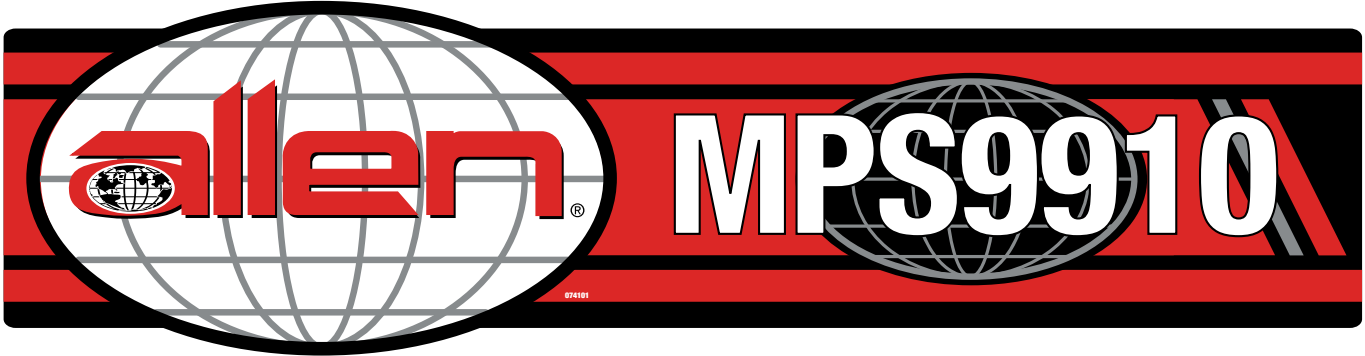
ITEM	PART #	DESCRIPTION	QTY
1	010189	FITTING, COUPLER QDC FEMALE 1/2"	1
2	029415	SPRAY GUN	1
3	029420	SPRAY TIP, LARGE	1
4	042869	FITTING, COUPLING 1/2" NPT BLK STEEL PIPE	1

**SECTION 2  
DECALS**

**Decals, MPS9910  
(Kit #: 074100)**

**SECTION 2  
DECALS**

**MPS9910 Model Decal  
Part #: 074101**



**MPS9910 Speed Decal  
Part #: 073594**



**MPS9910 Highway Use Decal  
Part #: 073593**



## SECTION 2 DECALS

## Decals, MPS9910 (Kit #: 074100)

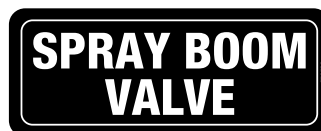
### MPS9910 Spray Gun Valve Decal

Part #: 073595



### MPS9910 Spray Boom Valve Decal

Part #: 073596



### Proposition 65 Decal Part #: 069225



### Engine Warnings Decal Part #: 068432

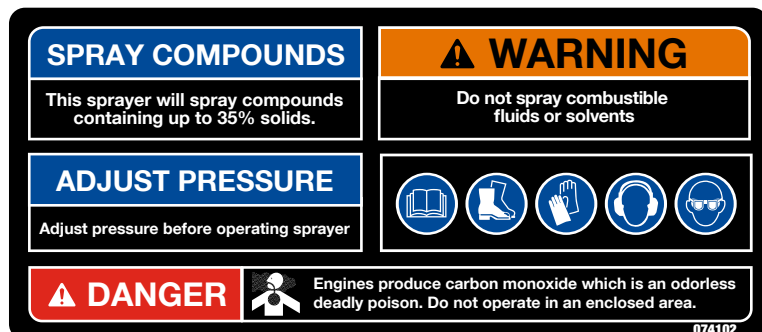


### AEC Info Decal Part #: 069123



### MPS9910 Sprayer Warnings Decal

Part #: 074102



## Revision Detail

### MANUAL REVISION DETAIL

REVISION #	REVISION DATE	REVISION REFERENCE #	REVISION BY
-	1/22	Initial Release	MK
A	3/26	Updated Part Numbers, ECR 26-145	IPR

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Allen Products are covered under one or more of the following patent numbers:

**U.S. Design Patents:** 344,736; 400,542; 400,544; 402,998; 402,999; 403,332; 404,041; 404,042; 410,931; 413,127; 416,564; 465,897; 466,909; 474,203.

**U.S. Utility Patents:** 5,108,220; 5,238,323; 5,328,295; 5,352,063; 5,405,216; 5,476,342; 5,480,257; 5,480,258; 5,533,831; 5,562,361; 5,567,075; 5,613,801; 5,658,089; 5,685,667; 5,803,658; 5,816,739; 5,816,740; 5,890,833; 5,934,823; 5,967,696; 5,988,938; 5,988,939; 6,019,433; 6,019,545; 6,048,130; 6,053,660; 6,089,786; 6,106,193; 6,857,815; 5,288,166; 6,582,153 B1, 7,108,449; 7,114,876; 7,316,523; 7,690,864 B2

**Canadian Patents:** 2,039,893.

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