



BE-SMSExx10

40 & 60 Gallon Utility Sprayer



Operations & Parts Manual

For Models:

- BE-SMSE40-10
- BE-SMSE60-10

Purchase Date	Model No.	Serial No.
Dealer		

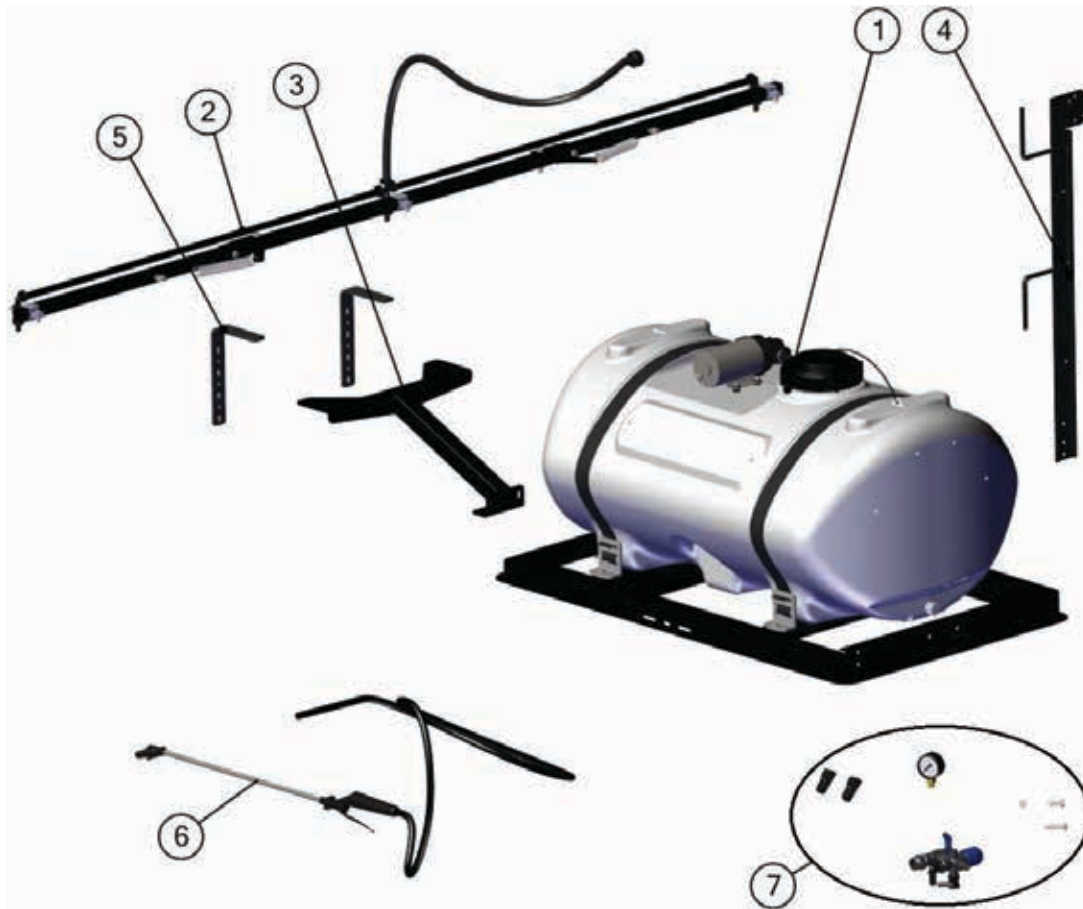
The purpose of this manual is to assist you in the assembly, operation and maintenance of your sprayer or accessories. Please read through this manual completely to fully understand how to operate and maintain your equipment. This product has been manufactured to provide years of dependable service; proper operation and maintenance will ensure its dependability. Keep your manual in a safe, convenient place for future reference. Always mention the model and part number in any correspondence.

Tools Required:

- 1/2" Wrench
- 9/16" Wrench
- Pliers
- Phillips Screwdriver

Box Contents:

(if you are missing any of the following components contact your local dealer about getting replacements).



REF NO.	PART NO.	DESCRIPTION	QTY
1	33-103245	40 Gallon Tank	1
2	34-140059	10 Ft. Folding Boom Assy.	1
3	32-100063	Boom Mount	1
4	32-100051	Sprayer Control Post	1

REF NO.	PART NO.	DESCRIPTION	QTY
5	31-100139	Spot Sprayer Mount Angle Bracket	2
6	SG-4507F-38-RUB15-P	Spray Gun Assy.	1
7	Hardware Bag		1

The 40 & 60 gallon Utility Sprayers come partially assembled. Please read the following directions fully before beginning the assembly process.

Pump Assembly:

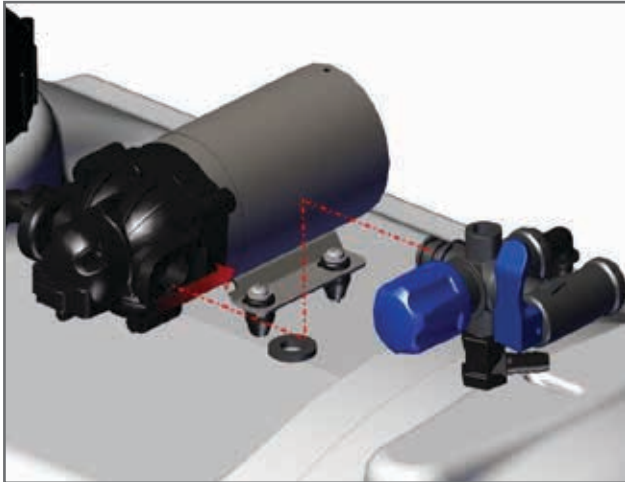


Fig. 1

Move the Outlet Port Clip on the pump into the open position. Locate the Regulator Body (Part No. 34-140118) and insert it into the Outlet Port of the pump so that the Blue Knob is facing the front of the Pump as shown (See fig. 1)

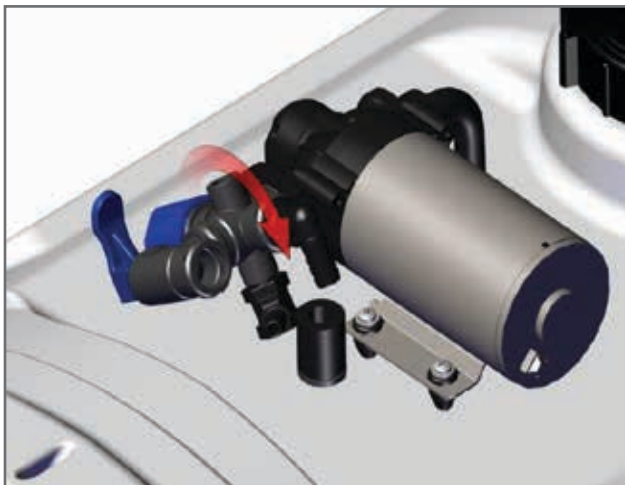


Fig. 2

Rotate the Regulator Body to clear access to the Top Hat Grommet. Locate Return Line. Dip one end of the line in dish soap and insert through Top Hat Grommet in Tank. Insert Bypass Port into the other end of the Return Line. Secure the Return Line with a Size-H clamp (SHC-H), using pliers to ensure it is tight. (See fig. 2)

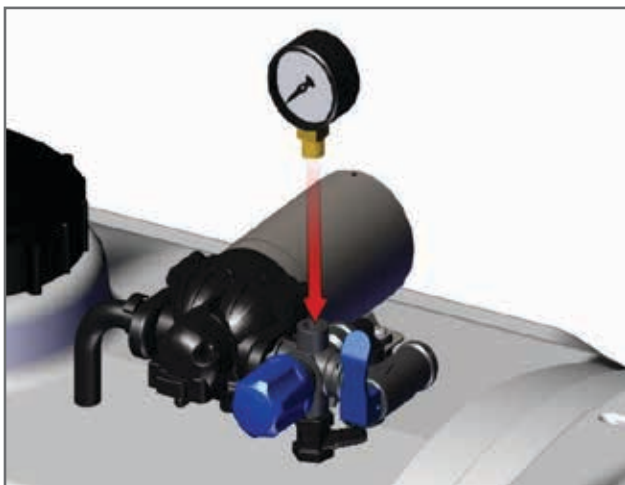


Fig. 3

Locate the Pressure Gauge (112DAB100) and thread into the Top Port on the Regulator Manifold. (See fig. 3)

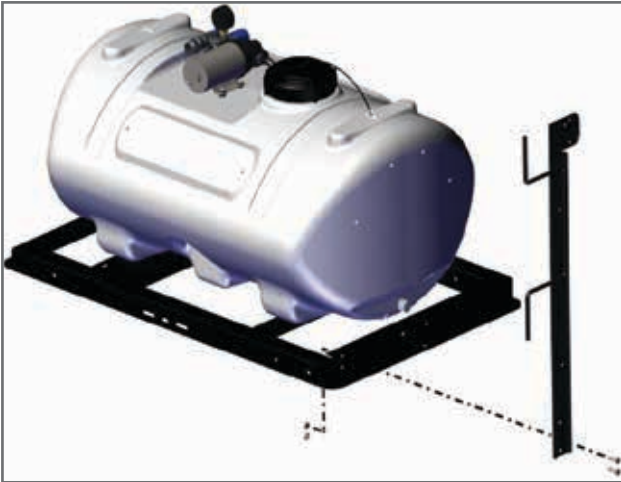
Control Pump Assembly:

Fig. 4

Position Control Post (Part No. 32-100051) on either end of the Skid Frame. Fasten with two 5/16-18x1" cap screws 5/16-18" nuts. (See fig. 4)

Boom Mount Assembly:

Fig. 5

Attach Boom Mount (Part No. 32-100063) to back end of Skid Frame using (4) 5/16-18x1" cap screws and 5/16-18" nuts.

Optional:

Attach Boom Mount to side of Skid Frame using (2) 5/16-18x1" cap screws and 5/16-18 nuts. (See fig. 5)



Fig. 6

Attach the Angled Spray Boom Brackets (Part No. 31-100139) to the Boom Mount using 5/16-18x1" bolts and 5/15-18" nuts. (See fig. 6)

Spray Boom Attachment:

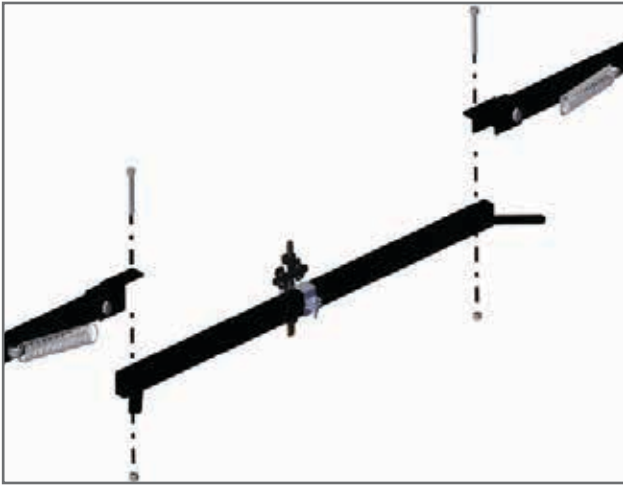


Fig. 7

Extend the Ten Foot Boom on a flat surface and remove the loose bolts on either end of the Center Boom Section. Position the Hinge over the holes. Tighten the bolt securely but ensure the Hinge moves freely in both directions. (See fig. 7)

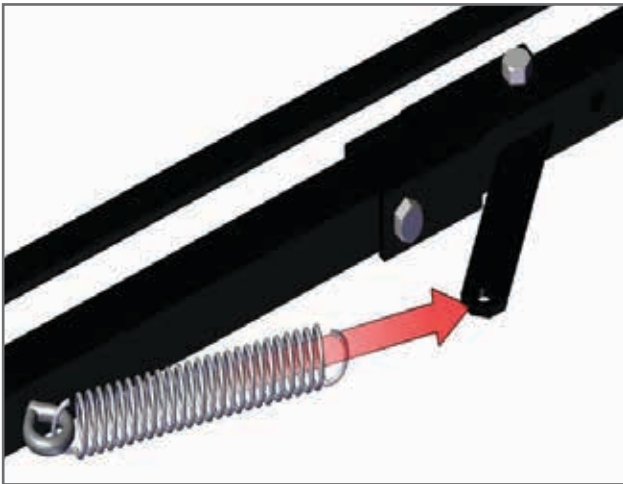


Fig. 8

Attach the Extension Springs (Part No. 33-100117) to the Center Boom Spring Mount and Eye Bolts. (See fig. 8)



Fig. 9

Attach the Spray Boom (Part No. 34-140059) to the Upright Spray Boom Brackets with 5/16-18x1" bolts and 5/26-18 nuts. (See fig. 9)

Spray Boom Attachment (Cont.)



Fig. 10

Attach the Boom Hose to the Manifold Valve on the Pump and tighten securely. (See fig. 10)

Spray Gun Attachment:



Fig. 11

Attach the Wand Clips (Part No. GC-100 KIT) to the Tank. (See fig. 11)



Fig. 12

Snap the Spray Wand into the Wand Clips. (See fig. 12)

Spray Gun Attachment:

Fig. 13

Attach the Spray Gun Hose to the Regulator and secure with Size F Clamp (SHC-F), using pliers to ensure it is tight. (See fig. 13)

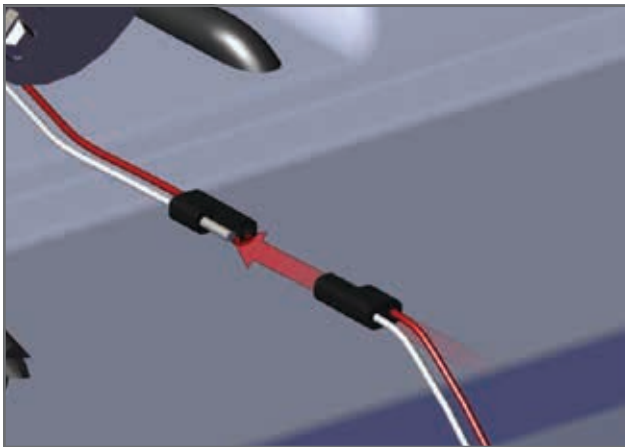
Wiring Harness:

Fig. 14

Attach the Wiring Harness with in-line switch to the Sprayer Pump by pushing the two terminal connectors together.

Refer to vehicle manual to locate battery and attach Wiring Harness Leads to battery. Ensure Red Lead attaches to Positive (+) side of battery and Black Lead connects to Negative (-) side of battery.

Using the 10 Ft. Boom:

Four things must be considered before spraying with the boom.

1. How much chemical must be mixed in the tank?
2. Rate of spray (gallons per acre to be sprayed).
3. What pressure (P.S.I.) will be used.
4. Speed traveled (M.P.H.) while spraying.

Refer to the chemical label to determine the chemical mixture.

See the tip chart to determine the pressure to be used. The chart will also show the speed used when spraying.

Open the valve lever to the boom nozzles.

Check the spray pattern. Usually you can see the coverage better on solid concrete surface, such as a driveway.

Raise or lower the boom to achieve a good coverage pattern. If you can see dry spots on the concrete surface you will need to raise the boom. Too much solution in the pattern areas means you need to lower the boom. Generally the proper height will be from 13 inches to 18 inches from the area to be sprayed.

The nozzles on the boom will spray approximately a 120" wide pattern. The nozzle height should be set approximately 15 inches above the object being sprayed.

Once you know how much you are going to spray then determine (from the tip chart) the spraying pressure (PSI) and the spraying speed (MPH). The pressure can be set by running the sprayer with the boom nozzles "ON" and then by adjusting the garden hose valve lever (valve with hose returning to tank) until the gauge reads the desired pressure. Notice that the pressure will go up when the garden hose valve is slowly closed.

When selecting pressure from the tip chart, it is a good idea to try for the 20 or 30 PSI range as this allows an excellent nozzle pattern. At 10 PSI the pattern begins to break up and at 40 PSI you may notice some drift. Conditions of weather and terrain must be considered when setting the sprayer. Do not spray on windy days. Protective clothing must be worn in some cases. Be sure to read the chemical label carefully.

After all calibrations have been completed, add water and chemical to the tank. Always follow chemical manufacturer's instructions for mixing.

CLEANING & STORAGE

Most spray materials are highly corrosive. The most important aspect of long dependable service from the sprayer is a thorough cleaning immediately following each use. In addition, the residue of one type of chemical could cause an undesirable effect when a different chemical is used for a different purpose.

The most effective cleaning method is to pump several rinses of clean water through the tank, pump, hoses, boom, spray gun, etc. A neutralizing agent such as a solution of Nutra-Sol, a detergent or household ammonia as recommended by the chemical manufacturer can assist in removal of a persistent chemical. When the system is thoroughly cleaned, drain the tank, suction line, pump, hoses, etc.

The following steps should be followed for the maintenance and storage of your sprayer.

1. Wash and flush out sprayer after completion of each phase of your program. Flush out sprayer when changing chemicals if there is a possibility of the chemicals being incompatible. Use of a detergent is advisable if the chemical manufacturer does not make specific cleaning recommendations. Flush system completely, including nozzles. Never use metal objects to open clogged nozzles.
2. Clean sprayer thoroughly before storing at the end of the spraying season. Permanent type anti-freeze added to the final rinse will leave a rust-inhibiting film in parts of the sprayer.

Products sold shall be warranted from defects in workmanship and material when used within the service and scope for which they were designed, for a period of one year from date of purchase. Warranty covers replacement parts ONLY. Contact local Dealership for warranty parts. Please have your sales receipt or other proof of purchase date when requesting any warranty parts. To ensure the correct parts are acquired always provide the model number of your sprayer/attachment and the part number and description obtained from the illustrated parts breakdown in this manual.

GALLONS PER ACRE (40" SPACING)

PART NO.	PSI	FLOW (GPM)	4 MPH	5 MPH	6 MPH	7 MPH	8 MPH	9 MPH	10 MPH
DF2.0	15	0.24	8.9	7.1	5.9	5.1	4.5	4.0	3.6
Red Colored	20	0.28	10.4	8.3	6.9	5.9	5.2	4.6	4.2
Nozzle	30	0.35	13.0	10.4	8.7	7.4	6.5	5.8	5.2
	40	0.4	14.9	11.9	9.9	8.5	7.4	6.6	5.9
	60	0.49	18.2	14.6	12.1	10.4	9.1	8.1	7.3
PART NO.	PSI	FLOW (GPM)	4 MPH	5 MPH	6 MPH	7 MPH	8 MPH	9 MPH	10 MPH
DF2.5	15	0.31	11.5	9.2	7.7	6.6	5.8	5.1	4.6
Brown Colored	20	0.35	13.0	10.4	8.7	7.4	6.5	5.8	5.2
Nozzle	30	0.43	16.0	12.8	10.6	9.1	8.0	7.1	6.4
	40	0.5	18.6	14.9	12.4	10.6	9.3	8.3	7.4
	60	0.61	22.6	18.1	15.1	12.9	11.3	10.1	9.1
PART NO.	PSI	FLOW (GPM)	4 MPH	5 MPH	6 MPH	7 MPH	8 MPH	9 MPH	10 MPH
DF3.0	15	0.37	13.7	11.0	9.2	7.8	6.9	6.1	5.5
Grey Colored	20	0.42	15.6	12.5	10.4	8.9	7.8	6.9	6.2
Nozzle	30	0.52	19.3	15.4	12.9	11.0	9.7	8.6	7.7
	40	0.6	22.3	17.8	14.9	12.7	11.1	9.9	8.9
	60	0.73	27.1	21.7	18.1	15.5	13.6	12.0	10.8

Note: All GPA calculations above are per nozzle.



WARNING!

**Ensure all bolts are securely tightened and unit is securely fastened to vehicle before each use.
Failure to do so do may lead to injury.**

**Total weight with filled tank must not exceed maximum weight limit set by manufacturer of pulling vehicle. Refer to vehicle manufacturers specifications.
Failure to follow manufacturer's specifications may lead to injury to breakdown.**

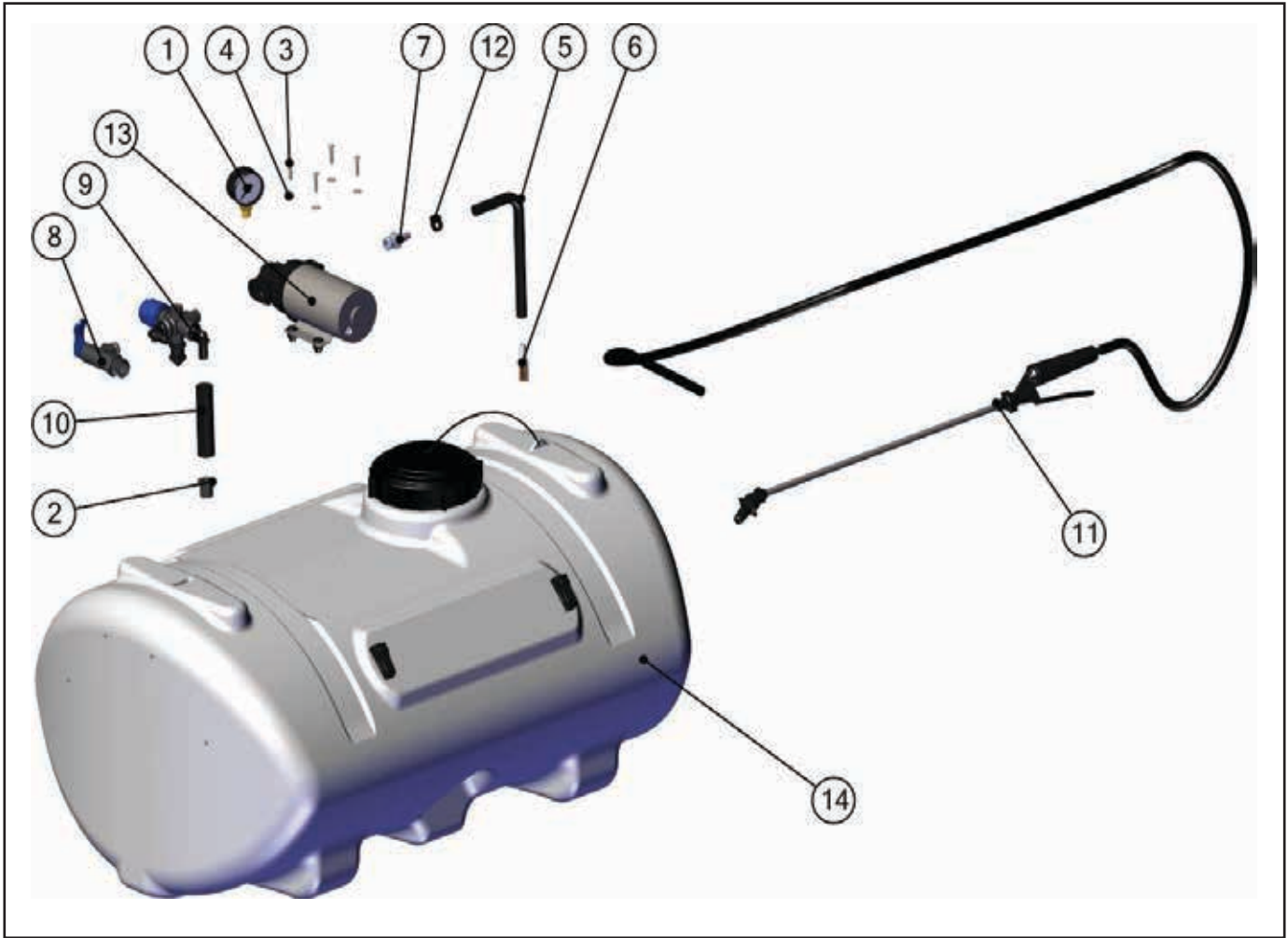


Fig. 15

REF NO.	PART NO.	DESCRIPTION	QTY
1	1124DAB100-Render	Gauge, 2" ABS LM 100PSI	1
2	33-100098	Grommet, Top Hat, Black, 3/4" HB, 1/2" Hose	1
3	33-103127	Screw, Machine, 10-24 x 1"	4
4	33-103131	Washer, #10, Zinc	4
5	33-103153	Gates 3/8" Rubber Hose	1
6	33-103121	Strainer, Inlet, 3/8" HB, SS	1
7	EF-QC-A38	Fitting, QA x 3/8" HB, Black, Straight	1
8	34-400001	Valve, On/Off, Male QA x Female QA Ports	1
9	34-140118	Regulator, Assy, Sprayer, Minus Outlet	1
10	33-103622-5	Hose, Rubber, EPDM, 1/2" ID x 5" Long, 13/16" OD	1
11	SG-4507F-38-RUB15-P	Spray Gun Assembly, 3/8" x 15'	1
12	SHC-F	Snapper Hose Clips, Black	1
13	EF2200-QA	Pump, 2.2GPM, 12V, Everflo, Quick Attach Ports	1
14	33-103245	Tank, 40 Gallon	1

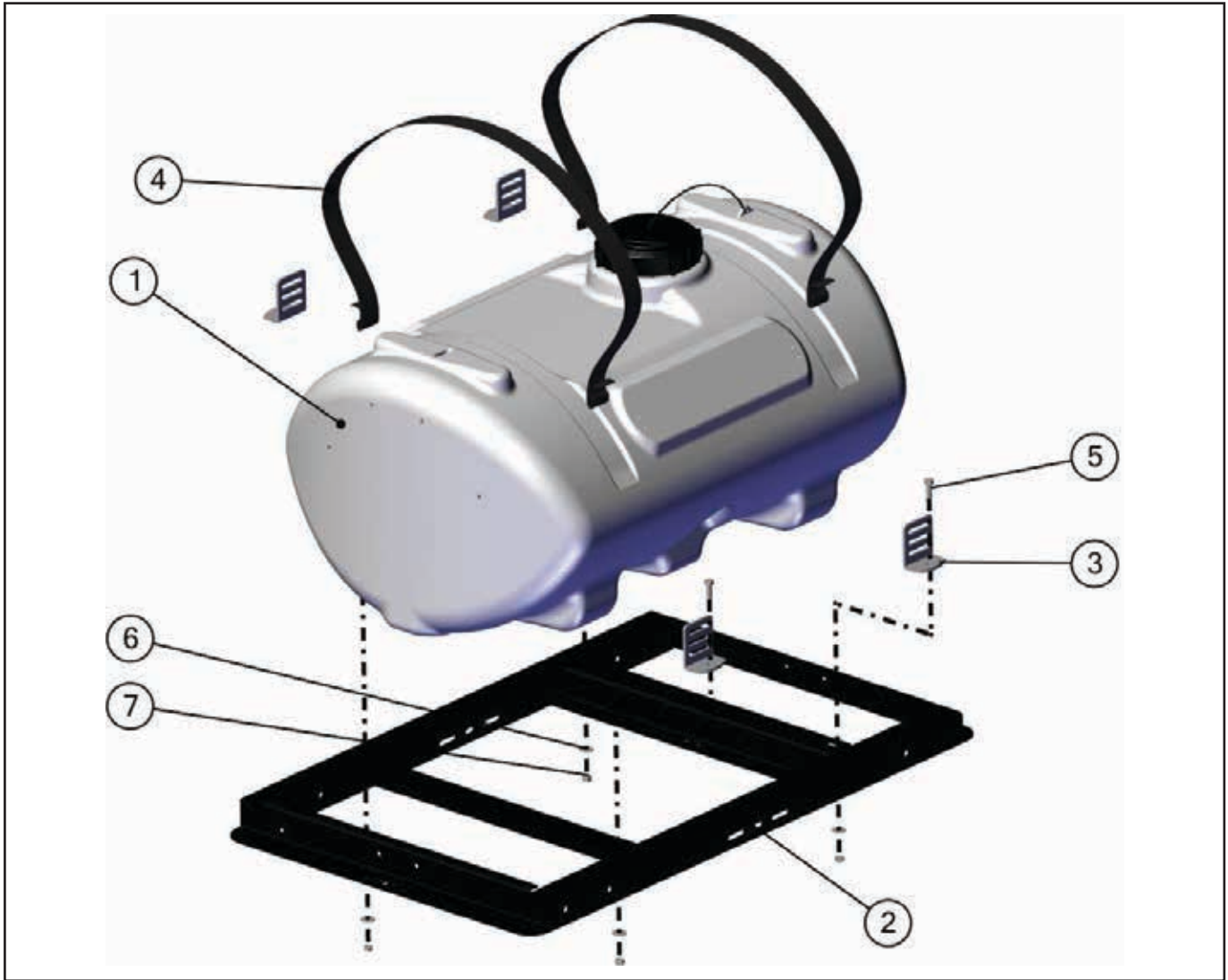


Fig. 16

REF NO.	PART NO.	DESCRIPTION	QTY
1	33-103245	Tank, 40 Gallon	1
2	32-100060	40 & 60 Gallon	1
3	TD-150	Clamp, Tie Down, 1.5" Strap, Zinc	4
4	TDS1.5-55	Tie Down Strap, Polyester, Black, 1.5" x 55"	2
5	33-100124	Bolt, 3/8-16 x 1"	4
6	33-100130	Washer, Flat, 3/8"	4
7	33-100136	Nut, Nylon Lock, 3/8-16	4

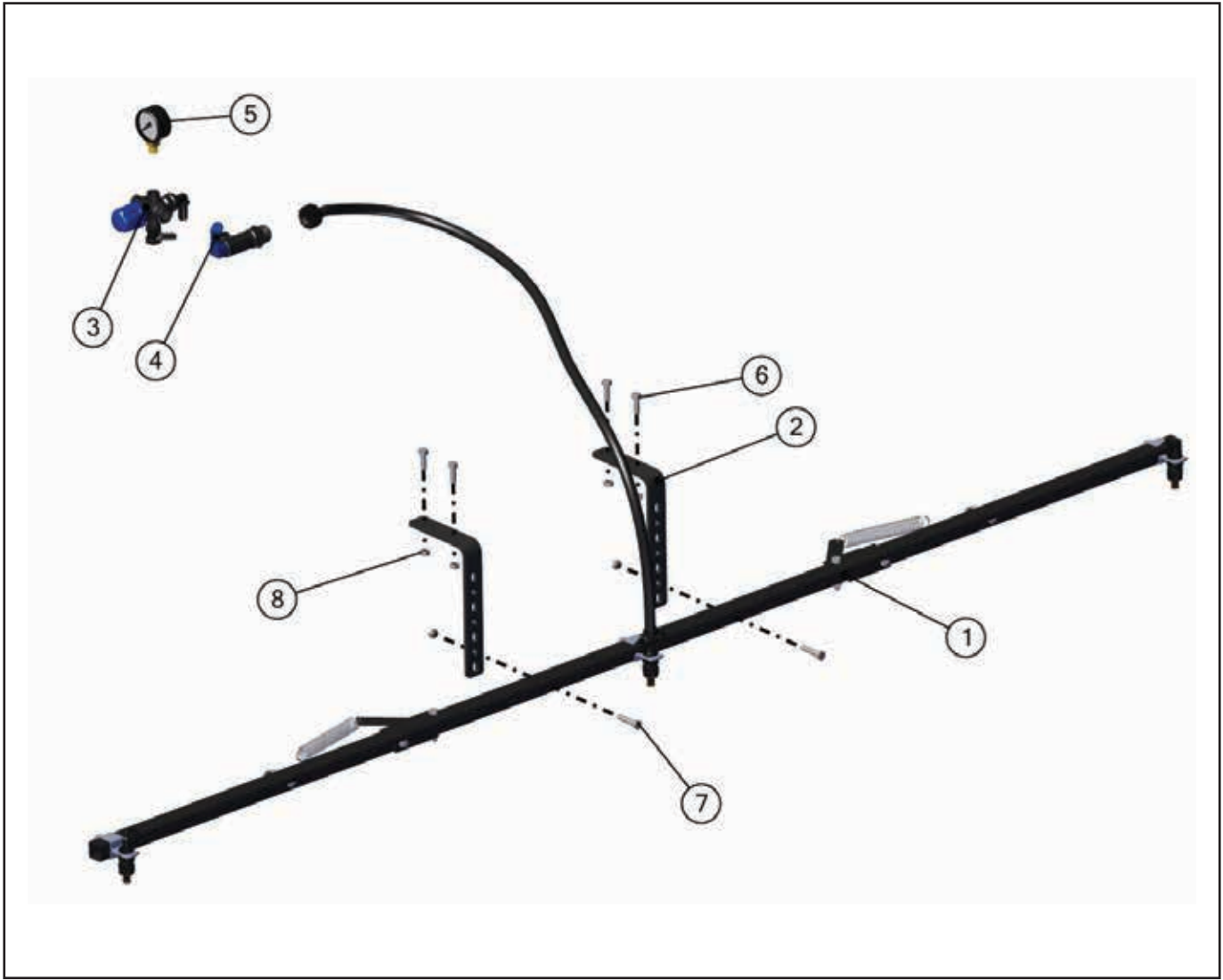


Fig. 17

REF NO.	PART NO.	DESCRIPTION	QTY
1	34-140059-P	Assy, 10' Folding Boom	1
2	31-100139	Bracket, Angle, Spot Sprayer Mount	2
3	34-140158	Regulator, Assembly, Sprayer, Minus Outlet	1
4	34-140161	Valve, On/Off, Male QA x Female QA Ports	1
5	1124DAB100	Gauge, 2" ABS 1/4" LM 100PSI	1
6	33-100116	Bolt, 5/16-18 x 1"	4
7	33-100119	Bolt, 5/16-18 x 1.75"	2
8	33-100113	Nut, 5/16-18, Serrated Flange	6

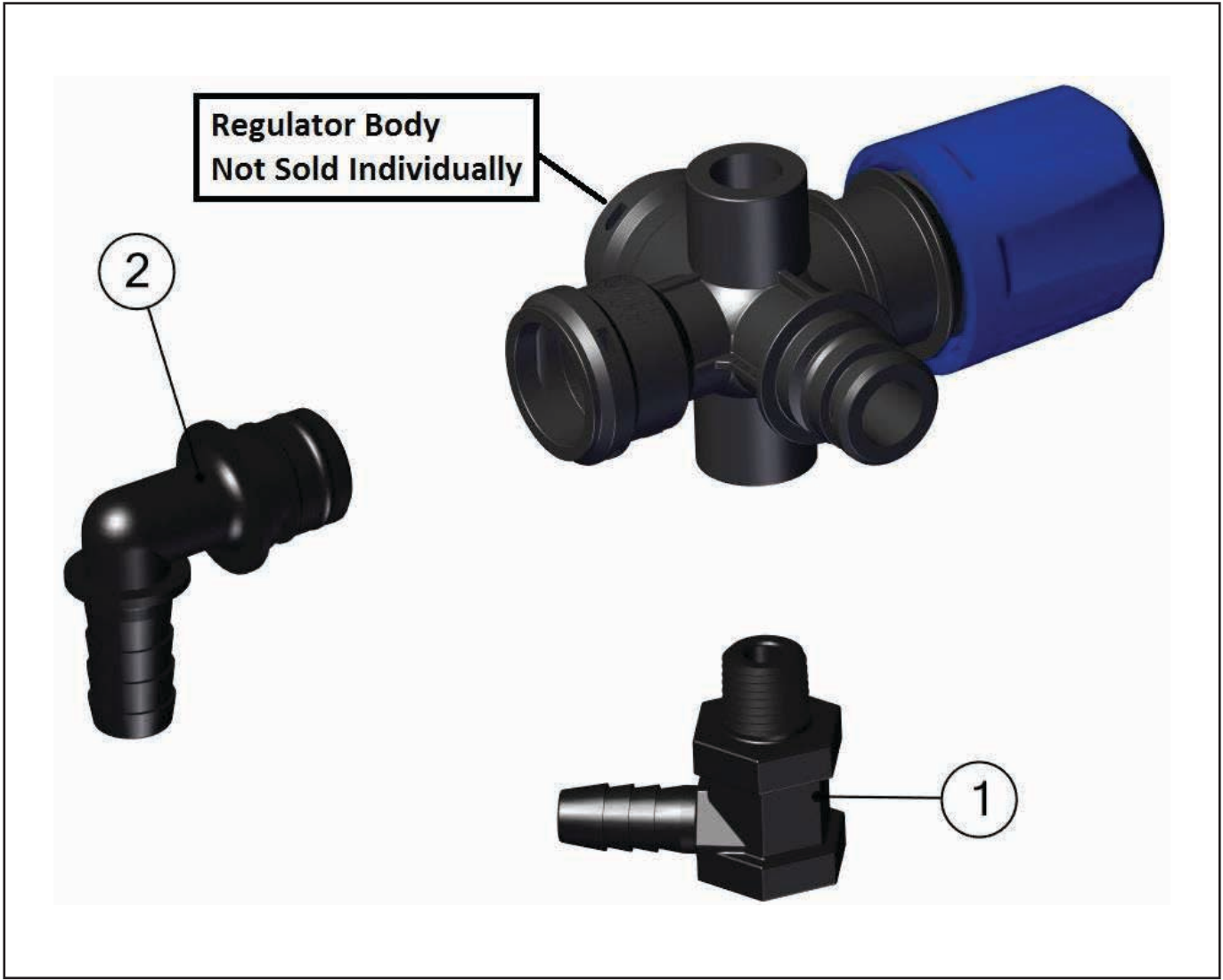


Fig. 18

REF NO.	PART NO.	DESCRIPTION	QTY
1	3EL1438	Elbow: 1/4" MPT x 3/8" HB Poly	1
2	EF-QC-EL12	Fitting, 1/2" HB 90 Elbow	1

