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MASTER
MANUFACTURING

100/150/200 GALLON SKID SPRAYER



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Model: SUL-01-200C-MM

Note: Do not return product to the distributor/dealer for warranty work. Call Master Manufacturing at (800) 864-1649 for any warranty work or replacement parts.

OPERATION

Service the engine with gas and oil according to the recommendations in the engine manual. Follow the engine manufacturer's instructions for starting and operating the engine.

Check the inside of the tank for any foreign objects or material that could cause damage to the pump.

Fill the tank with clean water. It is always better to have the tank at least half full of water before adding the chemical to avoid possible damage to the sprayer components by an undiluted chemical concentrate.

Before initially running the sprayer, loosen the tee handle of the relief valve. This adjustment should be checked while spraying because a pressure increase will be noted when the sprayer is shut off and the output of the pump is by-passed back to the tank through the relief valve.

Limit the pressure to 200 psi. The maximum operating speed of the pump is 1000 rpm. Excessive pressures and/or operating speeds will reduce the life of the pump. If, when adjusting the relief valve for more pressure, no increase in pressure occurs, it is an indication that the maximum output of the pump is being used. When the sprayer is shut off the pump will have to overcome the excessive tightness of the relief valve in order to by-pass back to the tank. This will cause pump strain and possible damage and should be avoided.

Choose an operating pressure that provides a spray pattern suitable for the particular operation. Follow the chemical manufacturer's recommendations for mixing and rates of application carefully. Judge the area sprayed by a tank full of spray material carefully to avoid over or under application rates. Do not use your sprayer for pumping petroleum products, strong acids, paint or other thick materials with heavy viscosity.

General Sprayer Maintenance

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, hose and spray gun. A neutralizing agent such as a solution of Nutra-Sol, detergent or household ammonia as recommended by the chemical manufacturer can assist in removal of a persistent chemical. Avoid getting chemical on the engine and other external parts of the unit in order to preserve the finish. Remove external spray material deposits when cleaning and flushing unit. A coat of wax applied to the exterior will protect the paint and make clean up easier.

When the unit is thoroughly cleaned, remove the tank filter bowl and drain the water from the tank, spray gun, pump boom and spray gun hose.

Troubleshooting

In the event of inefficient operation or malfunction, check the following:

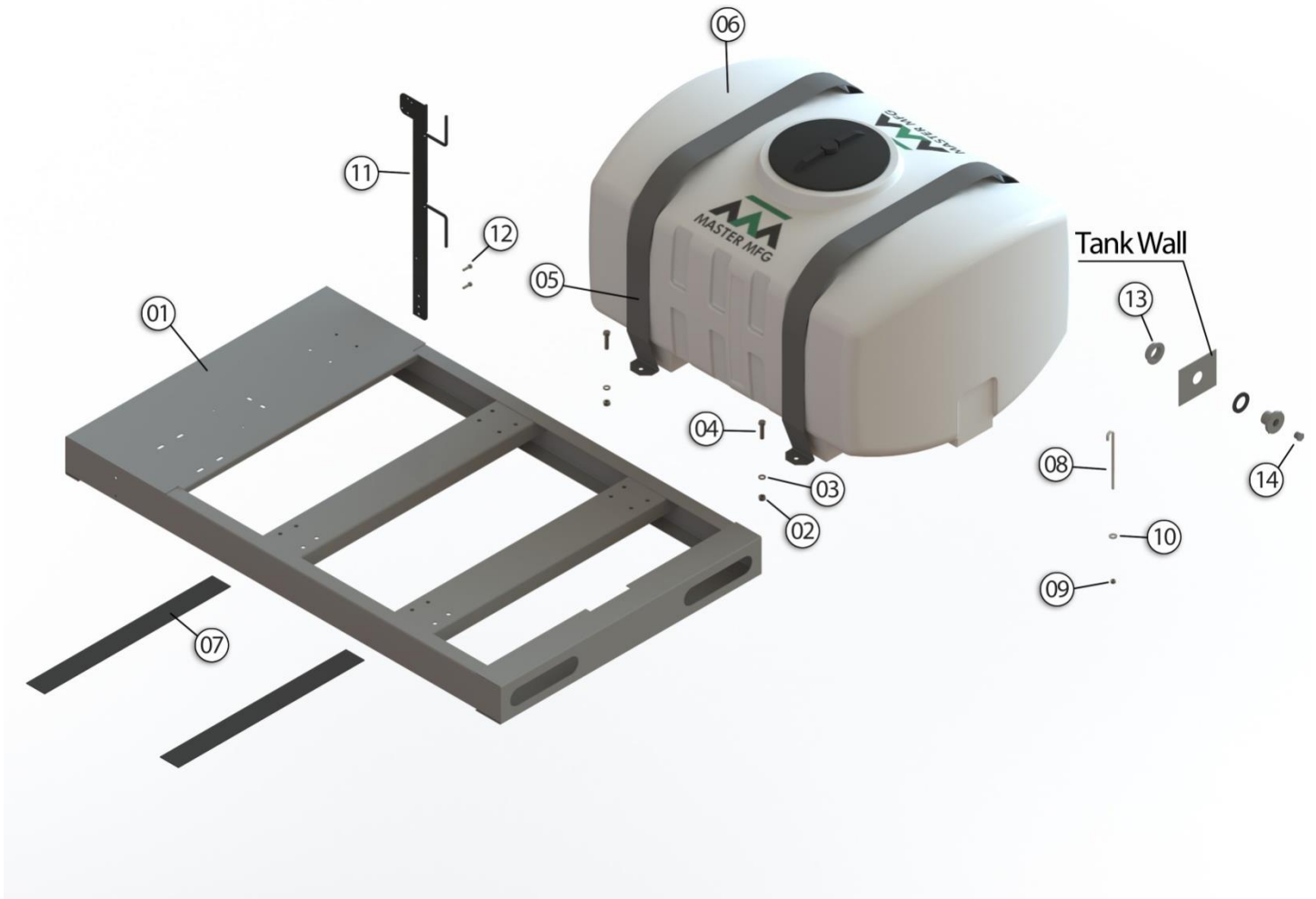
1. Clean the line strainer after each use or more often, if necessary. A plugged strainer will restrict the flow of liquid to the pump and cause it to perform poorly. Always use clean water and keep the strainer screen in place. Sandy or gritty liquids will damage the components of the pump.
2. Check the hoses for any kinks or leaks. Avoid letting a hose touch the engine muffler or be subjected to other objects that could cut or damage it. Be sure that suction hose is not collapsed or plugged.
3. Check the spray gun for any obstructions, especially the nozzles. Nozzle tips should be removed and cleaned with a toothpick or similar object. Avoid nails, wires, etc., that could damage the tip opening. The nozzle screens of the boom accessory should also be removed and cleaned periodically. Inspect and replace worn tips to insure satisfactory spraying performance.

Storage

This sprayer should always be cleaned and drained before storage. If the unit will be subjected to freezing temperatures, it is imperative that the whole sprayer; pump, hoses, spray gun, gauge, etc., be completely drained and dry. Any water left in the system could cause extensive damage when it freezes. Follow the recommendations of the pump instructions for preventing internal pump corrosion and protection against the rotor and rollers gumming and sticking during storage.

WARRANTY PARTS SERVICE

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 Master Manufacturing for warranty parts at (800) 864-1649. Do not return product to your distributor/dealer. Please have your original 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.



Frame and Tank Diagram

Item #	Part Number	Description	Qty.
1	32-100025	Frame, Skid, 100-200 PCO	1
2	33-100133	Nut, 1/2" – 13	2
3	33-100134	Lock Washer, 1/2"	2
4	33-100132	Bolt, 1/2"-13 x 1" Grade 5	2
5	31-100190	Strap, Tank, PCO200 Gallon	1
6	33-103331	Tank, 200 Gallon, PCO, 37X48x38	1
7	33-103739	Pad, Rubber, 1/8"x3"x25", Anti-Slip	2
8	33-100072	Bolt, J, 3/8" x 5"	2
9	33-100136	3/8" NyLock Nut	2
10	33-100130	3/8" Washer	2
11	32-100051	Sprayer, Control Post	1
12	33-100116	Bolt, 5/16-18 x 1"	2
13	BHF114	Bulk Head Fitting	1
14	3F114	Hex Plug: 1-1/4" MPT Poly	1
15	33-100113	Nut, 5/16-18, Serrated Flange(not shown)	2

Figure A

Mechanical Schematic

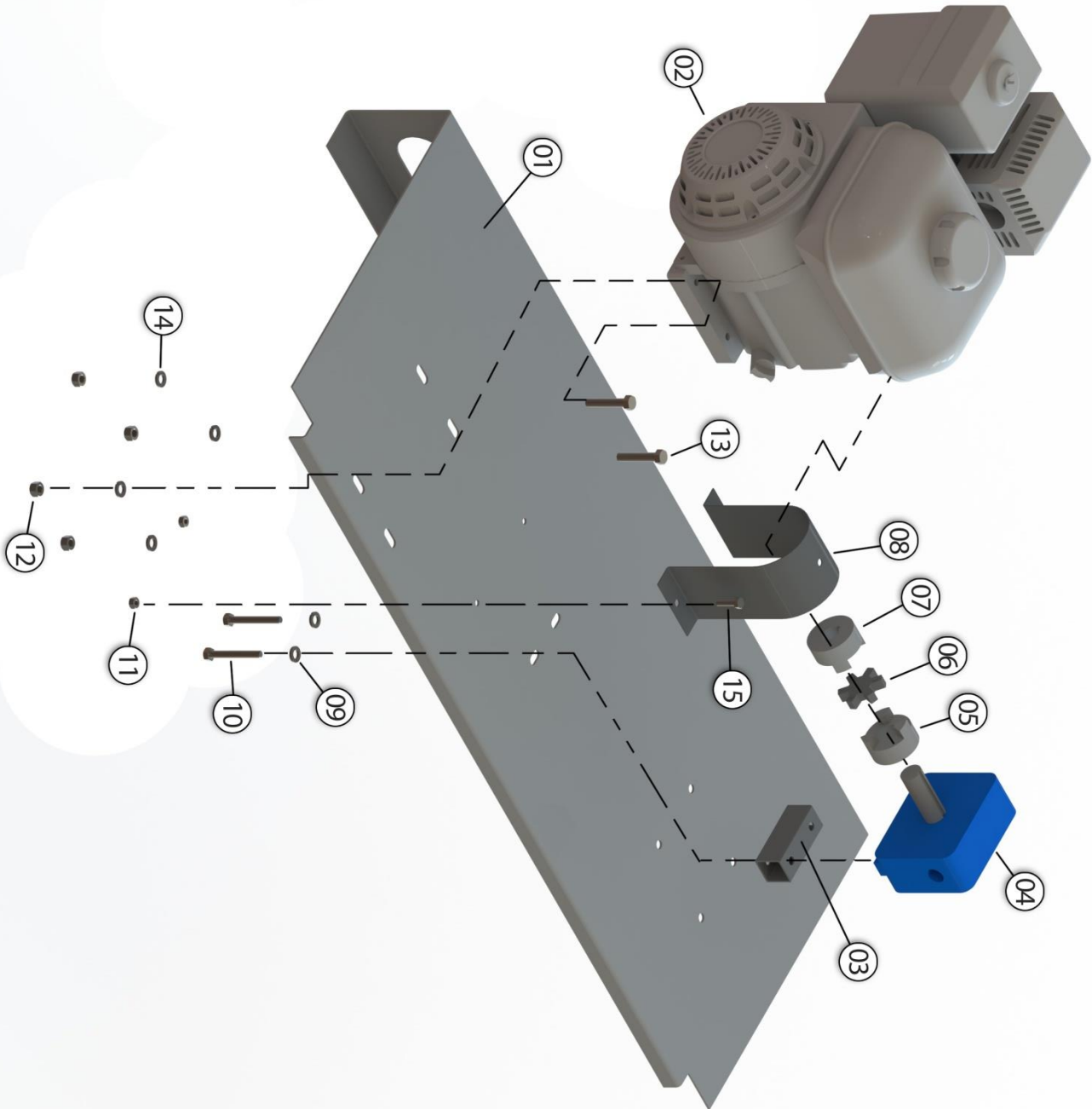


Figure A
Mechanical Schematic Parts List

Item #	Part Number	Description	Qty.
1	32-100025	Frame, Skid, 100-200 PCO	1
2	33-100102	Engine, Briggs, 6:1 Gear Reduc	1
3	31-100295	Spacer, Pump, 6900	1
4	6600-C-R	Pump, 6 Roller, Cast, CW Rotation	1
5	33-103154	Coupling Hub, 5/8" Lovejoy	1
6	33-103156	Insert, Spider 90inch-lbs	1
7	33-103155	Coupling Hub, 3/4" Lovejoy	1
8	31-100146	Shield, Pump, "J" Option	1
9	33-100115	Washer, 5/16", Zinc Plated	2
10	33-100123	Bolt, 5/16-18 x 2.5"	2
11	33-103149	1/4-20 SF Nut	2
12	33-100131	Nut 3/8, Serrated Flange	4
13	33-100129	Bolt, 3/8" x 3"	4
14	33-100139	Lock Washer, 3/8"	4
15	33-100128	Bolt, 1/4-20 x 1"	2

Figure B

Plumbing Schematic

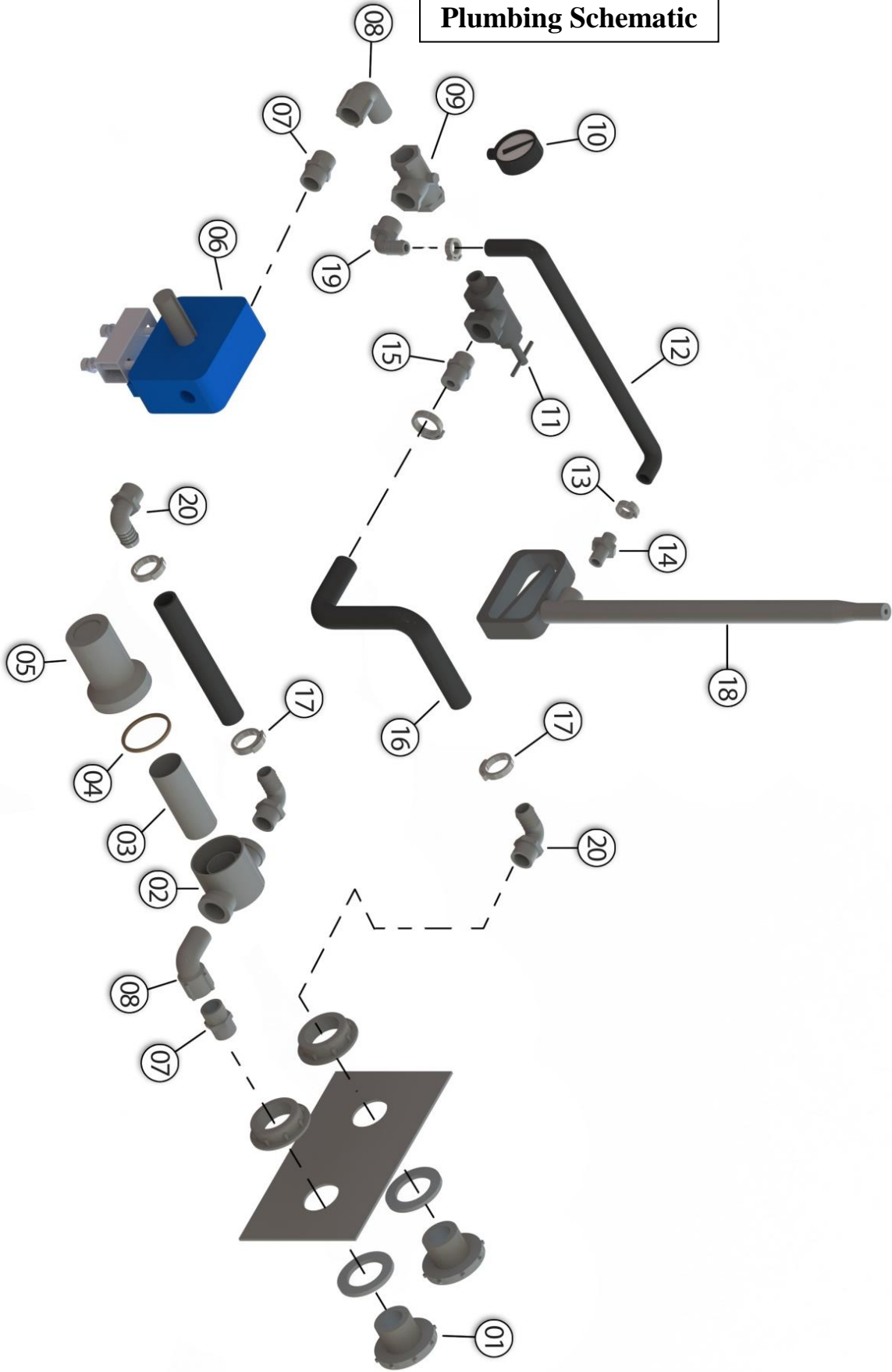


Figure B
Plumbing Schematic Parts list

Item #	Part Number	Description	Qty.
1	BHF34	Bulk Head Fitting	2
2	11317	Top 3/4" Poly Black GF	1
3	10684	Cyl. Reg ILS 50*36 SS w/Hem	1
4	11302	3/8", 1/2", 3/4" Gasket- EPDM	1
5	11278	Bowl-Reg Poly Black Thik Bott	1
6	6600C-R	Pump, 6 Roller, Cast, CW Rotation	1
7	3M34	Nipple: 3/4"MPT x 3/4"MPT Poly	2
8	3SE34	Str. Elb: 3/4"MPT x 3/4"FPT	2
9	GTT3414	Tee: 3/4"FPT x 3/4"FPT x 3/4"FPT	1
10	22200DSB400	Gauge, 2.5"BS 1/4"CBM	1
11	RV2066-06-58	Valve, Nylon, 3/4", 0-400psi	1
12	33-103622	Hose, 1/2"ID x 13/16" OD EPDM Braided	180in
13	SHC-H	Snapper Hose Clips, BLK	2
14	3A12	Straight: 1/2"MPT x 1/2"HB Poly	1
15	3A34	Straight: 3/4"MPT x 3/4"HB Poly	1
16	33-103623	Hose, Rubber, 3/4" ID Braided	81in
17	SHC-M	Snapper Hose Clips, BLK	4
18	1700-02-022	Superjet Spray Gun, Hamilton	1
19	3EL3412	Elbow: 3/4"MPT x 1/2"HB Poly	1
20	3EL34	Elbow: 3/4"MPT x 3/4"HB Poly	3