

# OPERATOR'S MANUAL

# 650556-1

## INCLUDING: OPERATION, INSTALLATION & MAINTENANCE

INCLUDE MANUALS: 66302-X LOWER PUMP END (PN 97999-648), 650685-X PUMP (97999-657), 65142X-X FILTER (97999-6), P292X1-XXX PIGGYBACK (PN 100400-8) & GENERAL INFORMATION S-636 (97999-636)

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(REV. B)

## 650556-1

### AIRLESS SPRAY PUMP SYSTEM - CART MOUNTED

6" STAINLESS STEEL, TWO BALL PUMP, 60:1 RATIO



READ THIS MANUAL CAREFULLY BEFORE INSTALLING, OPERATING OR SERVICING THIS EQUIPMENT.

#### SERVICE KITS

- Use only genuine ARO® replacement parts to assure compatible pressure rating and longest service life.
- **61355 for repair of Air Motor section.**  
Service Note: The Air Motor Service / Parts Manual is not shipped with the pump but it is included with each Service Kit. If this Service / Parts Information is needed, request the Air Motor Operator's Manual from ARO. (Manual 6564X-X, PN 97999-174).
- **637307-P43 for repair of Lower Pump section.**

#### PUMP SYSTEM DATA

Model	650556-1
Pump System Type	Cart Mounted Portable, Air Operated, Two Ball S'Steel
Pump Model	650685-P43
Ratio	60:1
Air Inlet	1/2"-14 N.P.T.F.-1 (female)
Air Exhaust	Muffler included
Material Inlet	Suction Tube
Dimensional Data	See page 3.
Air Motor	65665-B
Motor Repair Kit	61355
Lower Pump End	66302-P43
Lower Pump Repair Kit	637307-P43
Weight (less carton)	111 Lbs (50 Kgs)

#### PERFORMANCE

Air Inlet Pressure Range	30-100 p.s.i. (2-6.9 bar)
Fluid Pressure Range	1800-6000 p.s.i. (124-414 bar)
Max. Rec'd Cycles / Minute	60
Displacement In <sup>3</sup> Per Cycle	5.5
Volume / Cycle	3 oz. (90 ml)
Cycles Per Gallon	41.9
Flow @ 60 Cycles / Minute	1.4 g.p.m. (5.4 lpm)
Noise Level @ 60 Psi - 40 Cpm	84.8 db(A) *

\* The pump sound pressure level has been updated to an Equivalent Continuous Sound Level (L<sub>Aeq</sub>) to meet the intent of ANSI S1. 13-1971, CAGI-PNEUROP S5.1 using four microphone locations.

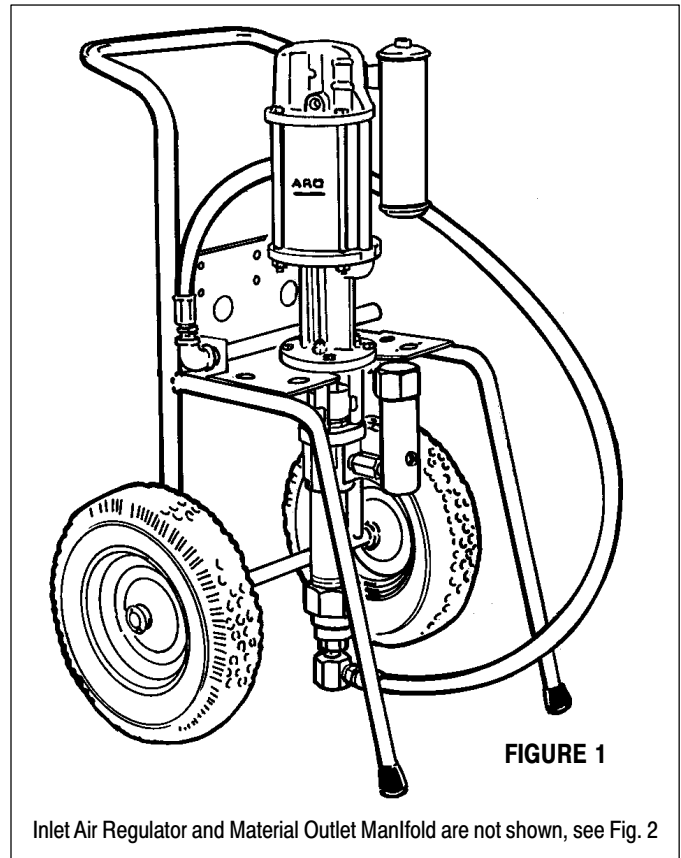


FIGURE 1

Inlet Air Regulator and Material Outlet Manifold are not shown, see Fig. 2

**IMPORTANT** This is one of the six documents which support the system. Replacement copies of these forms are available upon request.

- 66302-X LOWER PUMP END OPERATOR'S MANUAL (97999-648)
- 650556-1 PUMP SYSTEM MANUAL (97999-840)
- 650685-X PUMP MODEL OPERATOR'S MANUAL (97999-657)
- P292X1-XXX PIGGYBACK OPERATOR'S MANUAL (100400-8)
- 65142X-X MATERIAL FILTER (97999-6)
- GENERAL INFORMATION MANUAL S-636 (97999-636)



## PARTS LIST / 650556-1

ITEM	DESCRIPTION (Size in Inches)	QTY	PART NO.
1	Two Ball Piston Pump	(1)	650685-P43
2	Cart Assembly (Includes Items 3 thru 14)	(1)	67139
3	Cotter Pin (3/32")	(2)	Y15-35-C
4	Washer	(4)	91522
5	Tip	(2)	91011
6	Washer (3/8")	(6)	Y13-6-C
7	Screw (3/8" - 16 x 1-1/4")	(4)	Y6-66-C
8	Nut (3/8" - 16)	(4)	Y12-6-C
9	Wheel Assembly	(2)	91515
10	Brace	(1)	95102
11	Screw (5/16" - 18 x 3/4")	(4)	Y6-53-C
12	Nut (5/16" - 18)	(4)	Y12-5-C
13	Washer (5/16")	(4)	Y14-516-C
14	Cart Welding Assembly	(1)	67138
15	Material Filter (Includes Item 16)	(1)	651422-70
16	Plug (3/8")	(1)	Y17-13-S
17	Muffler	(1)	91790-ZZ

ITEM	DESCRIPTION (Size In Inches)	QTY	PART NO.
<input type="checkbox"/> 18	3/4" Suction Hose Assembly	(1)	622606-5
<input type="checkbox"/> 19	90° Elbow (3/4")	(1)	Y43-15-S
<input type="checkbox"/> 20	Suction Tube (5 Gallon)	(1)	94263-1
21	Hose Assembly	(1)	628092-F
22	Gauge	(1)	100067
23	Modular Piggyback Filter/Regulator	(1)	P29241-100
24	Nipple (1/2" x 1-1/2" (m))	(1)	Y27-54-C
25	Bushing (1/2" - 14 (m) x 1/4" - 18 (f))	(1)	94271
26	Nipple (1/4" - 18 (m))	(2)	1950
27	Street Tee (1/4" - 18)	(1)	94270
28	Needle Valve	(1)	94269
29	Adapter (1" (m) x 1/2" (f))	(1)	94256
30	90° Adapter (1" (m) x 1/4" (f) x 3/4" (f))	(1)	94254
31	Plug	(1)	Y17-11-S

Parts included in 67140-1 Asm (std)  
Available: 67140-2 Asm. uses 94263-2 (36" Inlet Tube)

## OPERATING INSTRUCTIONS

**⚠ WARNING** DO NOT EXCEED MAXIMUM OPERATING PRESSURE OF 6000 P.S.I. (414 BAR) AT 100 P.S.I. (6.9 BAR) AIR INLET PRESSURE.

**⚠ WARNING** REFER TO THE PUMP MANUAL FOR ADDITIONAL OPERATING AND SAFETY PRECAUTIONS AND OTHER IMPORTANT INFORMATION.

## INSTALLATION

### OPERATING INSTRUCTIONS / INITIAL SETUP PROCEDURE

This unit comes assembled except for the air supply hose, gun and material hose which must be attached.

- A connector, coupler and air supply hose and must be supplied to the air regulator.
- Attach a Ground wire to a suitable ground and the Ground Lug provided on the pump Air Motor.
- Keep containers covered to prevent contamination.

1. Turn the knob on the air regulator counter-clockwise to zero p.s.i.
2. Attach hose and gun. Place pump inlet tube into a full container of material.
3. Start the pump to cycle by turning the air regulator knob clockwise. The pump will cycle several strokes until pressure is built up in the system, at which time it will stall, check for any loose fittings or leakage. Check all connections and re-tighten as necessary.
4. Relief Valve (28) is used to relieve pressure in the hose in order to change spray tips. Open the relief valve to relieve pressure. Close the relief valve to continue spray operation.

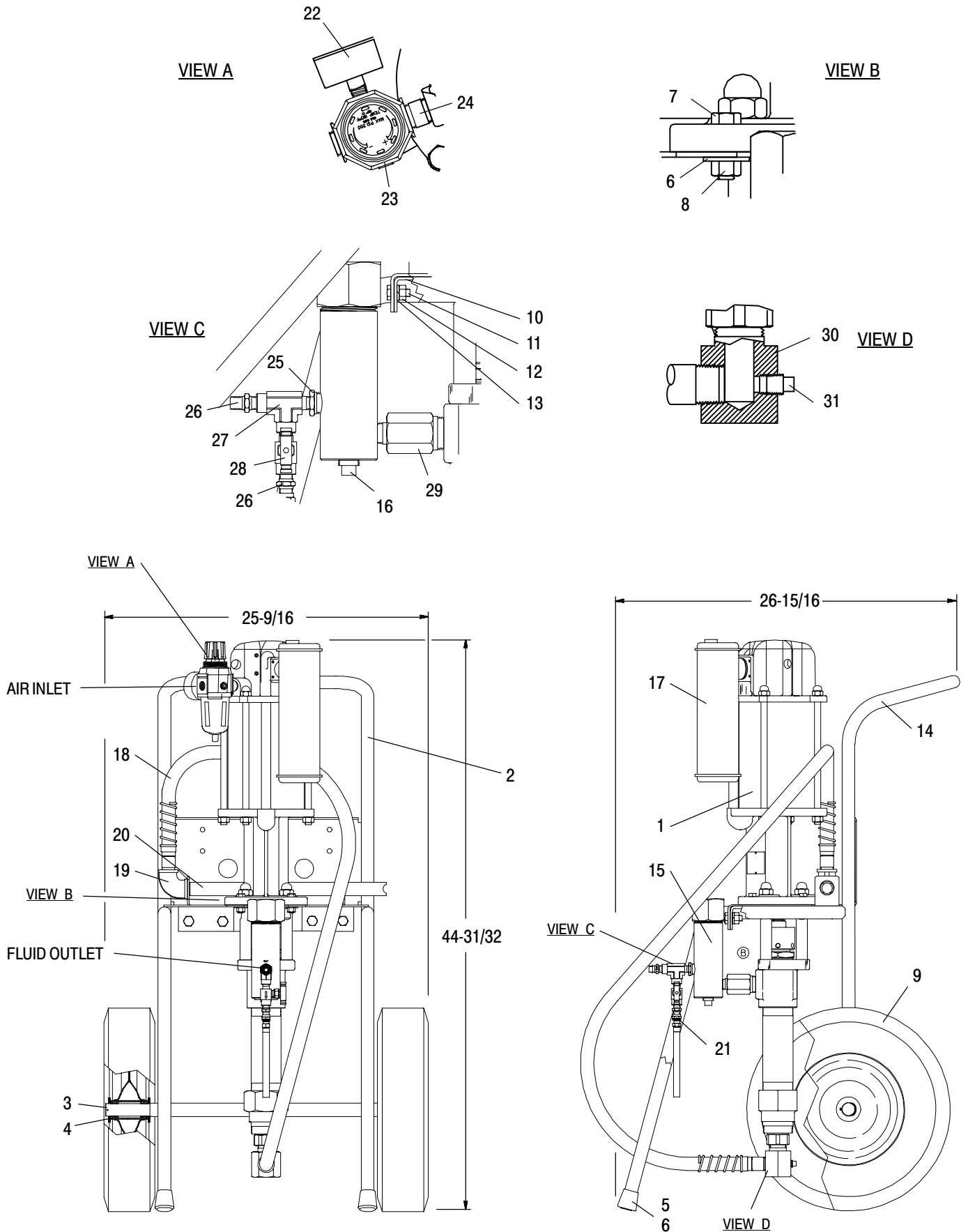


FIGURE 2

