

# OPERATOR'S MANUAL

# 612999-21

INCLUDING: OPERATION, INSTALLATION & MAINTENANCE

Also include manuals: 650752 Diaphragm Pump (PN 97999-480)

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## 612999-21

## PUMP SYSTEM



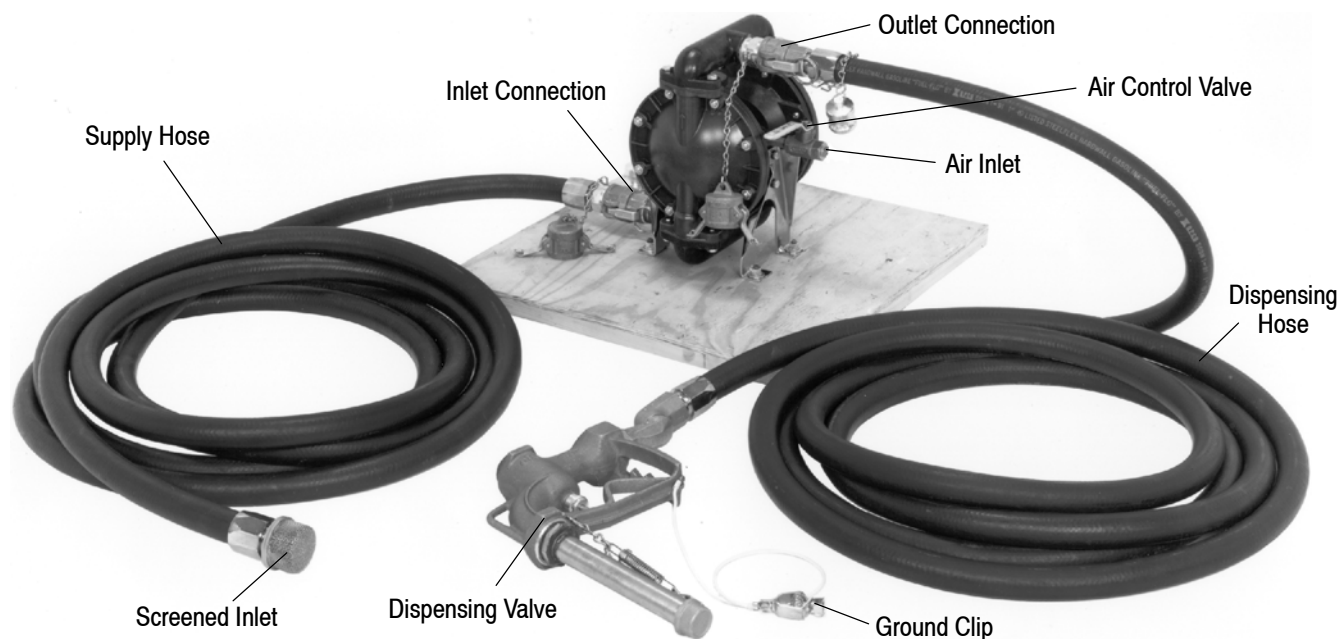
**READ THIS MANUAL CAREFULLY BEFORE INSTALLING, OPERATING OR SERVICING THIS EQUIPMENT.**

It is the responsibility of the employer to place this information in the hands of the operator. Keep for future reference.

### GENERAL DESCRIPTION

This pump system is designed to transfer and dispense fuel (fluid) from bulk containers into heavy equipment. It utilizes a 1" Diaphragm pump fitted with Viton diaphragms and ball checks which make it chemically compatible with most fuels and service fluids. Other features include:

cam-lock type fluid couplers and connectors, dispensing valve equipped with a ground wire and clip, a 2" bung compatible screened inlet supply hose, and a lever type air regulating valve.



### OPERATING AND SAFETY PRECAUTIONS

- **HEED ALL WARNINGS AND CAUTIONS**

- Use ARO replacement parts to assure compatible pressure rating.

**⚠ WARNING** DO NOT EXCEED MAXIMUM INLET AIR PRESSURE OF 120 P.S.I. (8 BAR). OPERATING PUMP AT HIGHER PRESSURE MAY CAUSE PUMP DAMAGE AND / OR PROPERTY DAMAGE.

**⚠ WARNING** PREVENT FIRES. ATTACH THE STATIC WIRE SUPPLIED. FAILURE TO SAFEGUARD AGAINST STATIC SPARK COULD RESULT IN EXPLOSION AND / OR FIRE CAUSING SEVERE PERSONAL INJURY OR DEATH AND / OR PROPERTY DAMAGE.

**⚠ WARNING** WEAR PROTECTIVE GOOGLES AND SAFETY EQUIPMENT. FLUID BEING PUMPED MAY SPLASH AND CAUSE INJURY.

**⚠ WARNING** DO NOT LEAVE UNATTENDED. THE DISPENSING VALVE IS NOT AN AUTO SHUT-OFF TYPE. The operator

must physically monitor the fluid level to prevent over filling and spillage.

**⚠ WARNING** PREVENT FUEL CONTAMINATION. KEEP SUPPLY HOSE AND SCREEN CLEAN AND CLEAR WHEN USING. KEEP HOSE CONNECTIONS CLEAR AND CLEAN. Thoroughly inspect the hose / screen assembly each time before inserting it into the bulk supply. Contaminated fuel can cause severe equipment damage and / or possible personal injury.

**⚠ WARNING** AIR MAY BE TRAPPED IN FLUID LINE. BE CAREFUL. Upon initial start-up an amount of air will be trapped in the material line which will be **UNDER PRESSURE**, this should clear once the dispensing valve is opened and fluid begins to flow. Keep face back when dispensing.

**NOTICE** Replacement warning label is available upon request: "WARNING, DO NOT LEAVE UNATTENDED, UNIT MUST BE GROUNDED" PN \ 74049."

## INSTALLATION AND OPERATING PROCEDURES

**⚠ WARNING** Maximum inlet air pressure - 120 p.s.i. (8 bar).

**⚠ WARNING** Safeguard against static spark - attach ground clip to adequate ground source.

1. Locate the pump near a convenient spot between the source of fuel and where the fuel is to be discharged.
2. Connect suction hose to the inlet connection of the pump and the discharge hose to the discharge connection of the pump.

**⚠ WARNING** Take care not to allow dirt to enter the connections or the inlet screen. Be sure all cam levers are completely closed.

3. Connect ground clip to an adequate ground source.
4. Be sure air valve on the pump is in the "OFF" position before connecting air hose and opening compressor service valve.
5. Connect 12-1/2" x 1/2" air hose with the auto quick coupler to the air inlet valve on the pump. This hose can be used with either one or two 3/4" x 25' length of hose from the compressor service valve.
6. Two (2) operators should be used to start and prime the transfer pump. One operator to run the controls, another to operate the dispensing valve. Open the pump air inlet valve slowly until the pump begins to run. Crack the dispensing valve to allow air to purge from

the system.

**⚠ WARNING** Wear protective goggles and safety equipment. Take precautions to avoid fluid blowing back onto face and clothing.

7. Once the air is purged from the system, the pump air valve can be opened fully or partially consistent with the rate of fuel flow desired. Rate of flow can also be controlled by the dispensing valve. If the dispensing valve is closed with the pump running, the pump will slow, near stall, and by-pass internally. This will prevent damage to the pump and related equipment.
8. Upon completion of the pumping, lift the screened inlet suction hose out of the fluid and continue pumping to remove as much fluid as possible from the suction hose, discharge hose and pump.
9. Replace protective covers, where provided, to avoid contamination.
10. Remove air hose and blow down before disassembly per previous instructions on use of hose and tools.
11. Store hoses in the storage box.

**⚠ WARNING** Do not allow dirt into the connections and use protective covers where provided.

## SERVICE

Refer to 66610X-X-C manual for Diaphragm Pump Service.

For Dispensing Valve Service Kit use 637260.

When assembling unit use an anaerobic pipe sealant on all pipe threads

## PARTS LIST / 612999-21

ITEM	DESCRIPTION (Size in Inches)	QTY	PART NO.
1	Adapter	(1)	92037
2	Fluid Coupler	(2)	92036
3	Nipple (1/4" N.P.T. x 2-1/2")	(1)	Y44-12-C
4	Chain Assembly	(4)	62144-1
5	Dust Plug	(2)	92059
6	Adapter	(1)	93775
7	Valve Assembly	(1)	61788
8	Carriage Bolt (5/16" - 18 x 1-1/2")	(4)	Y84-503-C
9	Lock Washer (5/16")	(4)	Y14-516-C
10	Washer (5/16")	(4)	Y13-5-C
11	Hex Nut (5/16" - 18)	(4)	Y12-5-C
12	Dust Cap	(2)	92024

ITEM	DESCRIPTION (Size in Inches)	QTY	PART NO.
13	Swivel	(1)	62107
14	Ground Clip	(1)	62143
15	Dispensing Valve	(1)	635202-Z
16	Screen	(1)	74047-3
17	Material Hose	(2)	628085
18	Nipple (1" N.P.T. x 3-1/2")	(1)	Y44-54-C
19	Pump Assembly	(1)	650752
20	Cap	(1)	74050
21	Chain Assembly	(1)	62144-2
22	Thumb Screw	(1)	74051-1
23	Hex Nut (1/4" - 20)	(1)	Y12-4-C
24	Washer (3/16")	(1)	Y13-3-C

