

# OPERATOR'S MANUAL

INCLUDING: OPERATION, INSTALLATION & MAINTENANCE

611118

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IPP/PSE

611118

## HAND-OPERATED TRANSFER PUMP

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

**MODEL - 611118**

**TYPE - Double-Action Piston, 4 Valve**

**MOUNT - 2" Bung, with 1" threaded intake pipe.**

**MAX. DELIVERY - 20 GPM**

**MAX. LIFT - 10 Feet**

**APPROX. WEIGHT - 15 LBS.**

### GENERAL DESCRIPTION

The ARO® Model 611118 Hand-Operated Transfer Pump is designed for clean, economical, and efficient transferring or dispensing of petroleum, petroleum-based products and other similar viscosity flowable materials from skid tanks, drums, or barrels into other containers or equipment. It is equipped with 8' of 3/4" gasoline resistant, fabric reinforced rubber hose and 3/4" straight tube, non-sparking nozzle. A covered nozzle boot offers protection against rain and dust.

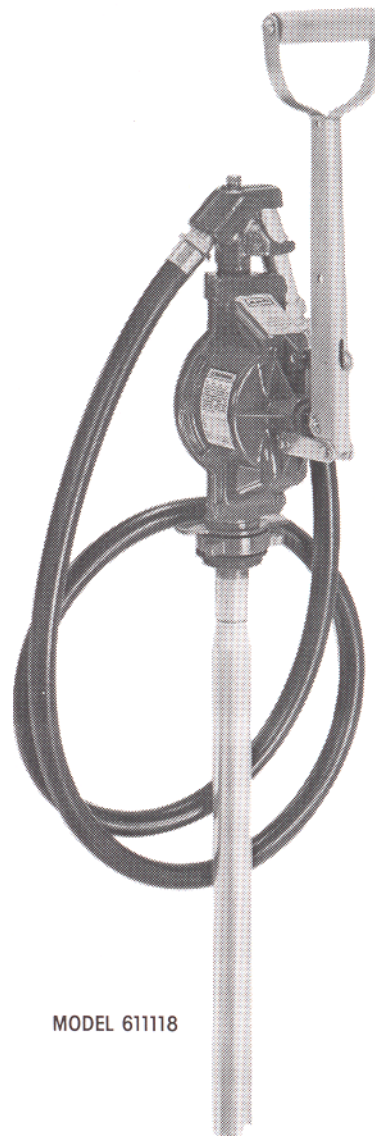
Anti-siphon device breaks vacuum when pumping stops—permits hose to drain completely, and prevents siphoning. High vacuum insures self-priming. No foot valve is required. A 1" telescoping intake pipe adjusts for 15-55 gallon drums. Delrin piston with integral lip seal. Equipped with locking device (locks not furnished) and convenient hose nozzle hanger.

### SERVICE KITS

Service Kit 637151 is available for valve, gasket, and packing ring replacement. See figure 8.

### OPERATING AND SAFETY PRECAUTIONS

- **HEED ALL WARNINGS AND CAUTIONS.**
- **WARNING: DO NOT USE III.—TRICHLOROETHANE, METHYLENE CHLORIDE OR OTHER HALOGENATED HYDROCARBON SOLVENTS IN THIS PUMP. THE PUMP CONTAINS ALUMINUM, WHICH MAY REACT WITH THE SOLVENT AND EXPLODE.**  
MATERIALS CONTAINING HALOGENATED HYDROCARBON SOLVENTS SHOULD NOT BE USED WITH THIS EQUIPMENT. CONSULT YOUR MATERIAL SUPPLIER FOR COMPATIBILITY WITH ALUMINUM.
- **WARNING: WHEN USING PUMP IN A LOCATION WHERE SURROUNDING ATMOSPHERE IS CONDUCTIVE TO SPONTANEOUS COMBUSTION OR WHEN PUMPING, FLUSHING OR RECIRCULATING INFLAMMABLE MATERIALS (E.G., PAINTS, SOLVENTS, LACQUERS, ETC.), FAILURE TO SAFEGUARD AGAINST STATIC SPARK, OPEN FLAME, HEAT AND IMPROPER VENTILATION COULD RESULT IN EXPLOSION AND/OR FIRE CAUSING SEVERE PERSONAL INJURY OR DEATH AND/OR PROPERTY DAMAGE.**
- Safety precautions should include:
  - Keeping inflammables away from heat, open flames and sparks.
  - Keeping containers closed when not in use.



MODEL 611118

- Proper grounding of pump, dispensing valve or device, hoses, any object to which material is being transferred, and containers. After grounding, periodically check to verify continuity of electrical path to ground. Test with ohm meter from each component (i.e., hoses, pump, clamp, container, spray gun, etc.) to ground to insure continuity. Ohmmeter reading shown should be 10 ohms or less. Consult local electric codes for specific grounding requirements.
- Submersion of outlet hose end, dispensing valve or device within material being dispensed whenever possible. (Avoid free streaming of material being dispensed.)
- Proper ventilation of area where pump and containers are located.

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\*PARTS AND QTY'S INDICATED ARE  
INCLUDED IN 637151 SERVICE KIT.

Ref. No.	Part Name (Size in Inches)	Qty. Required	Ref. No.	Part Name (Size in Inches)	Qty. Required
1	Vacuum Breaker Assembly .....	1	24	Cotter Pin .....	3
2	Vacuum Breaker Body .....	1	25	Handle Assembly .....	1
3	Vacuum Breaker Valve .....	1	26	Handle .....	1
4	Hose Elbow .....	1	27	Grip .....	1
5	Cover & Body Assembly .....	1	28	Rivet .....	1
6	Hex. Hd. Cap Screw (1/4-20 x 3/4) ...	10	29	Rivet (1/4 x 9/16) .....	1
7	Cover .....	1	30	Lock Link .....	1
8	Inlet Screen .....	1	31	Shake Proof Washer (1/4) .....	1
* 9	Gasket .....	1	32	Clevis Pin .....	1
* 10	Packing Ring .....	1	33	Link .....	2
11	Valve Mounting Plate Assembly .....	1	34	Clevis Pin .....	1
* 12	Valve .....	4	35	Clevis Pin .....	1
13	Valve Mounting Plate .....	1	36	Hose Assembly (8'-0" long) .....	1
* 14	Spring .....	4	37	Nozzle (Standard) .....	1
* 15	Retainer .....	4	38	Sliding Intake Assembly .....	1
16	Hex Nut (3/8-24) .....	1	39	Intake Sleeve .....	1
17	Lip Piston .....	1	40	Suction Pipe Seal .....	1
18	Clevis Bolt .....	1	41	Intake Tube .....	1
19	Body & Bearing Assembly .....	1	42	Nipple (1 x 2 1/2) .....	1
20	Cylinder .....	1	43	Retaining Ring .....	1
21	Body .....	1	44	Gasket .....	1
* 22	Packing Ring .....	2	45	Bung Adapter .....	1
23	Packing Nut .....	1	46	Lock Ring .....	1

## INSTALLATION

1. Thread 1" intake ass'y (38) into base of pump body.
  2. Extend intake ass'y fully and insert pump ass'y into 2" bung opening, rotate bung adapter (45), thread pump into bung, secure pump with retaining ring (43) after Step 4.
- NOTE: Use a suitable thread sealant on the following material hose ends.
3. Thread nozzle (37) onto hose ass'y (36) and secure.
  4. Thread the remaining end of hose ass'y (36) into hose elbow (4) and secure.

## CARE AND MAINTENANCE

**STORAGE:** Before pump is put away for winter season, or any extended period, pump a small quantity of S.A.E. 10 motor oil through it. This will coat the internal working parts and prevent gum deposits. When returning pump to service, flush it out with gasoline to remove oil, dust, or foreign particles.

**HOSE:** After making a delivery, always place nozzle in clip on (4) outlet elbow so that hose is off the ground. This will prevent damage and prolong life of hose.

**ANTI-SIPHON VACUUM BREAKER:** If liquid siphons after delivery or if fluid squirts out of vent opening during pumping, remove (1) vacuum breaker ass'y and wash it thoroughly in a good cleaning solvent or replace it, if necessary.

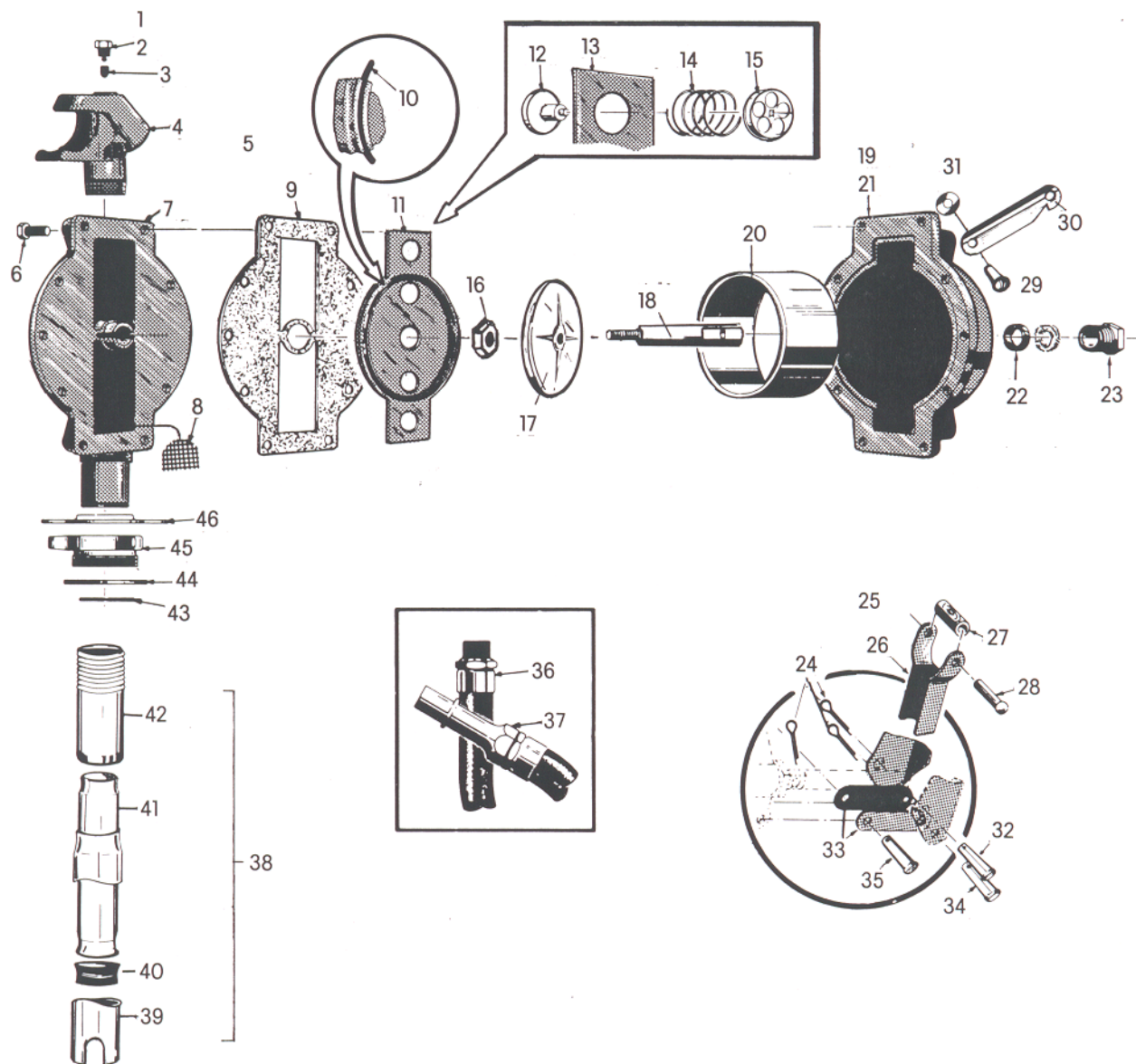
**PACKINGS:** It occasionally may be necessary to adjust (23) packing gland nut to prevent leaking around (18) piston rod. Packing rarely needs replacement, except after years of exceptionally hard use.

Disassembly should be done on a clean work bench with clean cloths to keep parts clean.

If replacement parts are necessary, consult parts list for identification.

Periodically flush pump with a solvent that is compatible with material being pumped.





## TROUBLE SHOOTING

The 611118 HAND-OPERATED TRANSFER PUMP has been designed and field and laboratory tested to give outstanding performance, easier operation, and greater serviceability. However, being mechanical, it may in time require some service attention. If slow delivery or loss of vacuum occurs, it may be traceable to one or more of the following causes:

- Intake pipe (42) not screwed tightly into base of pump. It is a good practice to shellac pipe threads to prevent leakage.
- Packing nut (23) loose or packings excessively worn. Tighten or replace, if necessary.
- Gasket (9) between pump body and cover may leak. Tighten the ten (6) bolts evenly, starting at the center and working outward. If necessary, replace gasket. Do not use cement or any other material on gasket. Refer to illustrations above for a guide in reassembling parts in their correct positions.
- Foreign matter on one or more of the valve seats or valve plates.
- Packing (10) in groove on (13) valve mounting plate may require placement.



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