

Oil Transfer Pump

312008 ev.A

For pumping non-flammable fluids, including motor oils, hydraulic fluid, and antifreeze only. Do not use to pump water.

Model 260547, 5.8 gpm (22.0 lpm), 65 psi (.45 MPa, 4.5 bar) 12 VDC
Model 260548, 4.25 gpm (16.1 lpm), 65 psi (.45 MPa, 4.5 bar) 115 VAC

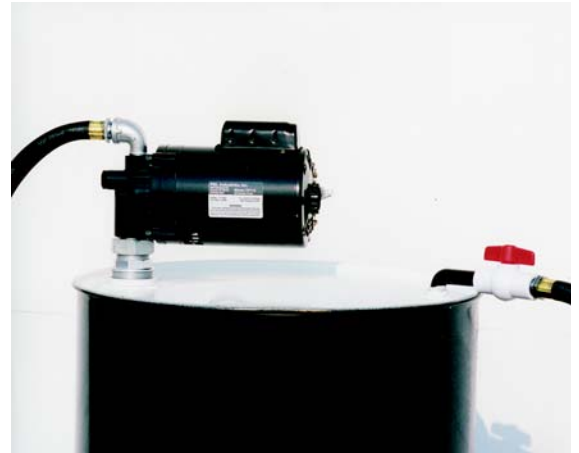


Important Safety Instructions

Read all warnings and instructions in this manual. Save these instructions.

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Warnings

The following general warnings are for the setup, use, grounding, maintenance, and repair of this equipment. Additional, more specific warnings may be found throughout the body of this manual where applicable. *Symbols appearing in the body of the manual refer to these general warnings. When these symbols appear throughout the manual, refer back to these pages for a description of the specific hazard.*

 WARNING	
	FIRE AND EXPLOSION HAZARD When flammable fluids are present in the work area, such as gasoline and windshield wiper fluid, be aware that flammable fumes can ignite or explode. To help prevent fire and explosion: • Use equipment only in well ventilated area. • Eliminate all ignition sources, such as cigarettes and portable electric lamps. • Keep work area free of debris, including rags and spilled or open containers of solvent and gasoline. • Do not plug or unplug power cords or turn lights on or off when flammable fumes are present. • Ground all equipment in the work area. • Use only grounded hoses. • If there is static sparking or you feel a shock, stop operation immediately. Do not use equipment until you identify and correct the problem. • Keep a fire extinguisher in the work area.
	ELECTRIC SHOCK HAZARD Improper grounding, setup, or usage of the system can cause electric shock. • Turn off and disconnect power at main switch before disconnecting any cables and before servicing equipment. • Connect only to grounded power source. • All electrical wiring must be done by a qualified electrician and comply with all local codes and regulations.
	PERSONAL PROTECTIVE EQUIPMENT You must wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect you from serious injury, including eye injury, inhalation of toxic fumes, burns, and hearing loss. This equipment includes but is not limited to: • Protective eyewear • Clothing and respirator as recommended by the fluid and solvent manufacturer • Gloves • Hearing protection

 WARNING	
	PRESSURIZED EQUIPMENT HAZARD Fluid from the gun/dispense valve, leaks, or ruptured components can splash in the eyes or on skin and cause serious injury. • Follow Pressure Relief Procedure in this manual, when you stop dispensing and before cleaning, checking, or servicing equipment. • Tighten all fluid connections before operating the equipment. • Check hoses, tubes, and couplings daily. Replace worn or damaged parts immediately.
	EQUIPMENT MISUSE HAZARD Misuse can cause death or serious injury. • Do not operate the unit when fatigued or under the influence of drugs or alcohol. • Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See Technical Data in all equipment manuals. • Use fluids and solvents that are compatible with equipment wetted parts. See Technical Data in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request MSDS forms from distributor or retailer. • Check equipment daily. Repair or replace worn or damaged parts immediately with authorized replacement parts only. • Do not alter or modify equipment. • Use equipment only for its intended purpose. Call your distributor for information. • Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces. • Do not kink or over bend hoses or use hoses to pull equipment. • Keep children and animals away from work area. • Comply with all applicable safety regulations.
	BURN HAZARD Equipment surfaces and fluid that's heated can become very hot during operation. To avoid severe burns, do not touch hot fluid or equipment. Wait until equipment/fluid has cooled completely.

Installation



The oil transfer pumps are positive displacement pumps. The motors are drip proof rated at 3/4 hp. The motors have sealed bearings and require minimal maintenance. All models come with hose, nozzle, 34 in. (864 mm) suction tube assembly, and bung adapter.

When unpacking check for shipping damage. Report any shipping damage to delivering carrier immediately. See **Parts**, page 8.

Mounting Pump on Barrel or Tank

1. Install bung adapter (14) in barrel bung and tighten.
2. Assemble suction tube sections (18) by applying PVC cement (21) to the inside diameter of the PVC couplers (19, 20). Make sure PVC cement is applied to the complete inside diameter and slide the pipe sections into the coupler with a twisting motion.

 For tanks deeper than 36 in. (914 mm) you will need a standard 1 in. (25 mm) pipe with 1 in. npt threads on one end. If pumping used oil, install suction screen assembly to filter large contaminants.

For tanks less than 36 in. (914 mm) deep, cut the suction tube to leave about 2 in. (21 mm) of clearance between the bottom of the suction tube and the bottom of the tank.

3. Apply pipe sealant (not the supplied PVC cement) to the threaded end of the suction tube and then screw the tube into the pump inlet port. Make sure tube is tight.
4. Insert suction tube already attached to the pump through bung adapter and lower the pump onto the bung adapter. Position the pump as desired and tighten swivel nut to the bung adapter (14).

Mounting Hose and Nozzle

1. Before connecting hose to the pump, pour 8 oz (0.24 l) of oil in the pump outlet port so that the pump does not run dry during initial start-up.
2. Apply pipe sealant to male threads of the elbow (12) and screw the elbow into the outlet port.
3. Apply pipe sealant to one end of hose assembly (17) and screw hose end into the elbow (12).
4. Apply pipe sealant to other end of hose assembly and screw the nozzle (15, 16) onto the hose.

Electrical Installation

115 VAC



The 115 VAC models (260548) come wired with a short power cord and a grounded electrical plug. Power to the unit must be 115 VAC single phase. If an extension cord is required, it should be a 3-wire cord with a ground. Use a 20 amp circuit to supply power to the pump.

Electrical Installation

12 VDC

The 12 VDC model (260547) is not shipped with a power cord since the installation will determine the length of the power cord.

1. Verify the on/off switch is in the off position.
2. Remove the wiring junction box cover by removing the four screws.
3. Use 10 AWG wire to connect the red (+) and black (-) wires to the 12 VDC supply.
4. Reattach the wiring junction box cover with the four screws.

Operation

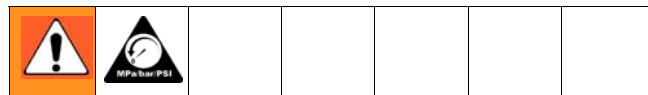
CAUTION

Do not operate pump dry. Do not run pump for more than 5 minutes with nozzle closed.

 See **Parts**, page 8 for items referenced in parentheses, i.e., (17).

1. On/Off switch is located on the motor (9). Move switch to ON position.
2. Insert nozzle into container or fill tube and open nozzle to dispense fluid.
3. Close nozzle to stop flow. The pump has an internal bypass valve that will bypass the fluid internally with nozzle closed.
4. Immediately after dispensing, turn switch to OFF position.

Pressure Relief Procedure



1. Verify pump switch is OFF.
2. Open nozzle to relieve any residual pressure.
3. To prevent damage to the pump, use inlet suction screen (260306) when pumping used oils.

Troubleshooting

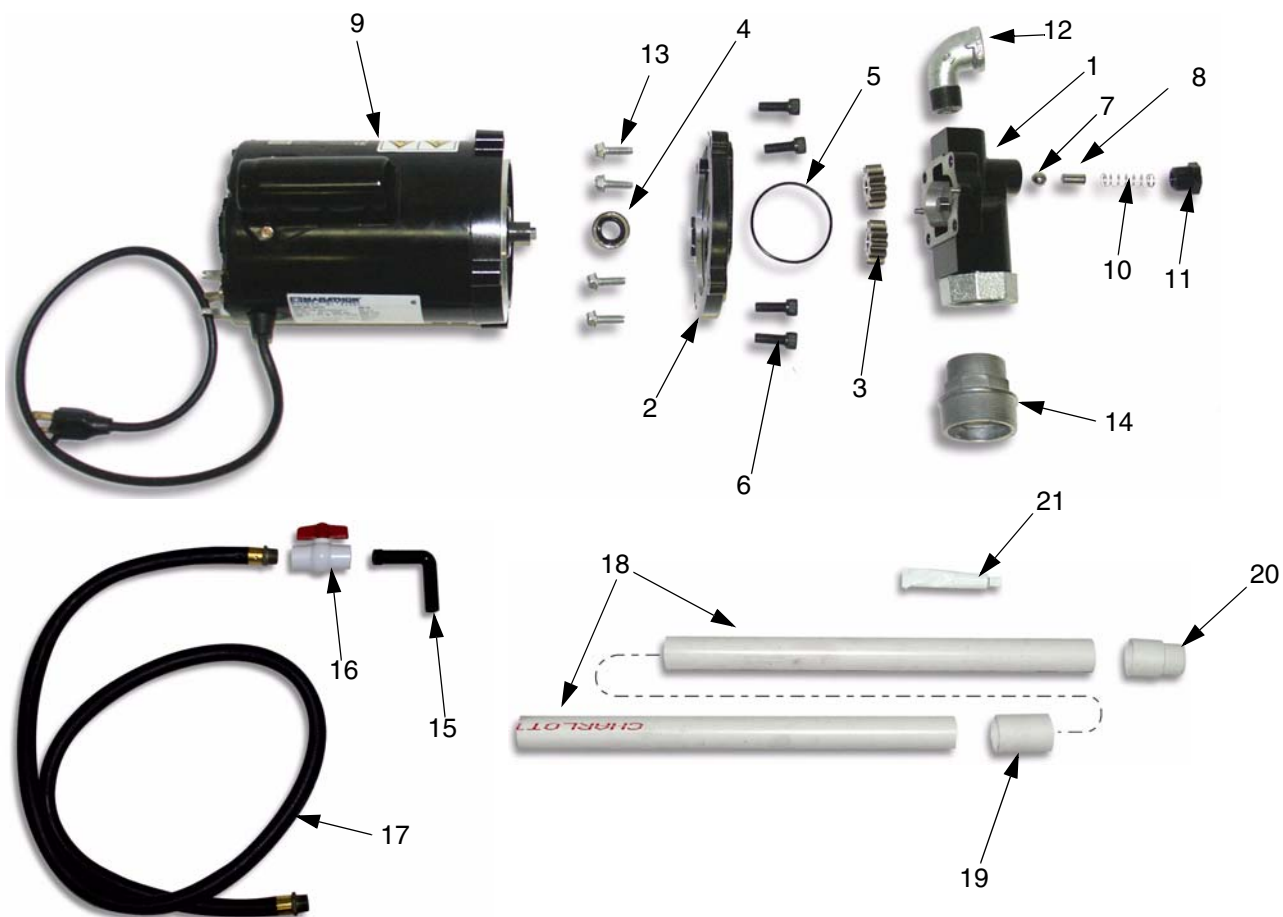
Problem	Cause	Solution
Motor runs but pump will not prime.	Motor rotation wrong. (260547 only)	Check wiring instructions for possible problems.
	Dirt under pressure relief valve.	Remove pressure relief valve and inspect, clean, or replace if damaged.
	Worn or damaged gears.	Remove cover and inspect gears. Replace if worn or damaged.
	Oil level low.	Refill tank.
	Cover seal (5) damaged.	Replace if worn or damaged.
	Inlet suction screen clogged (used oil).	Remove and clean or replace.
	Air leak in suction tube.	Inspect all joints in suction tube, make sure all threaded joints have sealant applied.
	Air lock in system.	This may occur if filter or meter or automatic shut-off nozzle is used. If this occurs, fill pump and meter with fluid through top of pump.
Oil leaking in motor mount.	Motor does not run at proper speed.	Check electric connections. Ensure supply voltage is at proper level.
	Faulty or damaged motor shaft seal.	Replace shaft seal (4).
	Operating pump extended time with nozzle closed.	Do not exceed 5 minutes of operation with nozzle closed.
	Motor shaft worn.	Replace motor if shaft has groove worn in seal area.

Problem	Cause	Solution
Unit pumps but output flow is low.	Clogged inlet suction screen (used oil).	Clean or replace.
	Air leak in suction tube.	Check to make sure all joints in suction tube are sealed.
	Suction tube too close to tank bottom.	Suction tube must have a 2 in. (51 mm) minimum clearance.
	Tank empty.	Refill tank.
	Tank not vented.	Tank must be vented to atmosphere.
	Worn or damaged gears.	Remove cover and inspect gears. Replace if worn or damaged.
	Damaged motor.	Replace motor.
	Clogged suction tube, hose, or nozzle.	Inspect and clean.
Motor stalls when nozzle is closed.	Bypass relief valve is stuck.	Inspect relief valve, making sure ball is free. Replace if damaged.
	Low supply voltage.	Check supply voltage.
	Gears damaged and binding.	Inspect gears. Gears should turn freely. Replace if damaged.
	Faulty motor.	Replace motor.
Motor overheating.	Gears binding.	Check to make sure gears turn freely on shaft.
	Operating pump extended time with nozzle closed.	Do not exceed 5 minutes of operation with nozzle closed.
	Clogged inlet suction screen.	Clean or replace.
	Clogged suction tube, hose, or nozzle.	Inspect and clean if required.
	Operating pump more than 30 minutes continuous duty.	Limit operation to 30 minutes per hour.
Switch will not turn pump on.	Blown fuse or circuit breaker.	Check electrical supply.
	Electrical problem.	Check that supply voltage is proper and getting to pump.
	Defective switch.	Check and replace motor (9) if defective.
	Damaged or defective motor.	Check motor, replace if damaged or defective.

Parts

Model 260547, 12 VDC

Model 260548, 115 VAC



Ref. No.	Description	Qty.	Ref. No.	Description	Qty.
1	PUMP BODY	1	12	ELBOW, street, 3/4 npt	1
2	ADAPTER, pump motor	1	13	SCREW, cap, 5/16-18	4
3	GEAR, pump	2	14	ADAPTER, bung	1
4	SEAL, shaft	1	15	NOZZLE	1
5	O-RING	1	16	VALVE, ball	1
6	SCREW, 3/8-16 socket head, cap	4	17	HOSE, petroleum	1
7	BALL, relief valve	1	18	PIPE, PVC	2
8	PIN, dowel, steel, 3/8 x 3/4	1	19	COUPLER, PVC, female	1
9a	MOTOR, 115 VAC	1	20	ADAPTER, PVC male	1
9b	MOTOR, 12 VDC	1	21	CEMENT, PVC	1
10	SPRING, relief valve	1	22▲	LABEL, warning (not shown)	1
11	PLUG, 1/2 npt	1		Part no. 15G901	

▲ Replacement Danger and Warning labels, tags, and cards are available at no cost.

Kits

Kit Number	Description	Includes Items
260040	ELBOW, street, 3/4npt	12
260061	ADAPTER, bung	14
260125	KIT, valve	15, 16
260216	HOSE, 8 ft	17
260292	KIT, packing	4, 5
260293	KIT, gear	3, 4, 5
260297	KIT, pressure relief	7, 10a, 11
260300	KIT, suction pipe	18, 19, 20, 21
260495	KIT, fluid, 115 VAC, 12 VDC	1, 2, 3, 4, 5, 7, 8, 10a, 11, 13
260497	KIT, motor, 115 VAC	9a
260500	KIT, motor, 12 VDC	9d

Technical Data

Maximum Working Pressure	65 psi (0.45 MPa, 4.5 bar)
Automatic Relief Setting	65 psi (0.45 MPa, 4.5 bar)
Output Flow	Model 260547: 5.8 gpm (22.0 lpm) Model 260548: 4.25 gpm (16.15 lpm)
Inlet Size	1 in. npt
Outlet Size	3/4 in. npt
Weight	Model 260547: 34 lb (15.3 kg) Model 260548: 25 lb (11.25 kg)
Voltage/current	Model 260548: 115 VAC, 60 Hz, 9.2 amps
Power Cord	Model 260547: 30 in. (762 mm)
Hose size	8 ft (2.4 m), 3/4 in. (19 mm) ID
Suction tube	34 in. (864 mm)
Wetted parts	carbon steel with zinc plating, stainless steel, galvanized steel, aluminum, nitrile, rubber, PVC, PVC cement