

12V and 24V DC Oil Change Systems

Technical Specifications

Model	Engine to System	System to Container	Maximum Total Length	Wire Gauge Minimum	12 Volt Breaker	24 Volt Breaker
GP-3010 Series	8 ft / 2.4m	5 ft / 1.5m	13 ft / 3.9m	#14	10 amp	5 amp
GP-3020 Series	12 ft / 3.6m	20 ft / 6m	32 ft / 9.7m	#14	20 amp	10 amp
GP-700 Series	15 ft / 4.5m	40 ft / 12m	55 ft / 16.7m	#12	20 amp	10 amp

Fluids

For oil only. This pump is not designed to pump gasoline. The motor is NOT ignition protected.

Installation

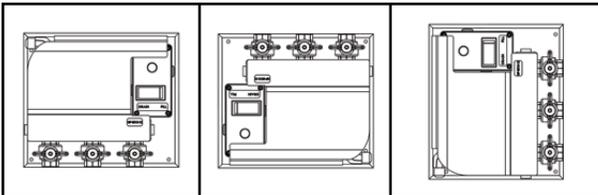


Figure A

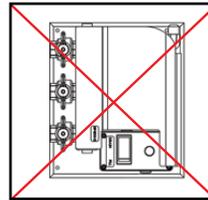
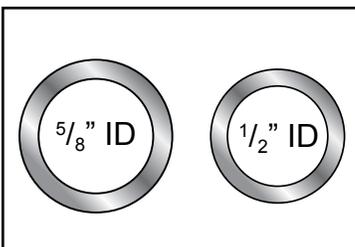
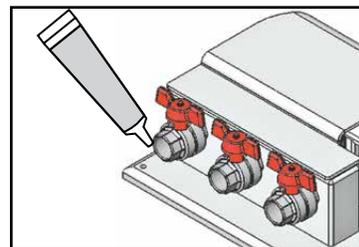


Figure B

1. Unit can be mounted in either directions shown (Figure A). Do not mount unit with the pump head above the pump motor (Figure B).



2. Connect hoses to the valves and the fill discharge fitting. A minimum 1/2" ID Type A1 or B1 fuel hose is recommended, however 5/8" ID hose is preferred.



3. Use a back up wrench to hold the valves from rotating when installing the hose fittings. Apply a compatible pipe sealant to all connections. (Loctite 565 or equivalent)

Most new engines come with oil pan adapters. If not, install oil pan fittings to the engines that will be serviced by the system. Ensure that the fitting has a minimum internal diameter of 1/4".

Install the proper hose connection to the pan fitting. Avoid the use of elbows or any other tight bends in the hose runs. Install a clamp or strap every 18" to adequately support the hose. Use care when installing hose runs to avoid any kinks or excessive bends in the line that would restrict the flow of oil.

NOTE: The valves have 1/2" female NPT (National Pipe Thread). The fill/discharge fitting is 1/2" SAE male flare.

Warning

Care must be taken not to operate the pump with either the suction or discharge sides closed. Ensure that only one valve is open prior to starting pump operation. Pumps can generate extremely high pressures which can damage plumbing and/or the pump.

Electrical Connection

The electrical installation of this product must be executed by a qualified marine electrician and following the ABYC requirements. Be sure that the power source available matches the power requirements on the specification sheet for this product model.

System Priming

To initiate suction and avoid unnecessary wear on the pump by running dry, it is necessary to prime the pump before initial use. Once the system is primed, this procedure does not have to be repeated again. The residual oil in the manifold and lines is sufficient to prime and lubricate the gears for subsequent use.

To to prime the system:

1. Pour a small amount of liquid to be pumped (about 3 oz.) into the fill/discharge hose.
2. Open one valve on the manifold.
3. Place the fill/discharge hose in a container of new oil.
4. Operate the pump for a few seconds to draw this liquid into this line (pump toward the engine).
5. Repeat steps #2 - #4 for each valve on the manifold.

Operation

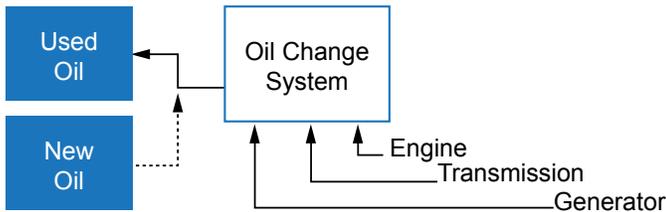


Figure C: Typical Installation

1. Place drain hose from the oil change system into your waste bucket. (Figure C)
2. Open one manifold drain valve - you'll have the choice to draw from the engine, transmission, or gen-set (unit comes with labels to indicate source). Only open one valve. The unit is not designed to pull from more than one valve at a time. (Figure C)
3. Press the switch to Drain position to move oil from source to the waste bucket. Do not leave pump unattended. This could result in running the pump completely dry and/or overfilling and spilling oil. Once flow has stopped, turn the unit off.
4. Remove the hose from the waste bucket; place it in the new oil bucket.
5. Press the switch to Fill position to refill the system with appropriate fluid. Close valve once finished.
6. Repeat process with other valves for additional equipment.

Troubleshooting

- Ensure all connections are properly tightened.
- Confirm correct wiring and voltage.
- Verify fittings, valves, and hoses, have the correct I.D. (inner diameter). Components with inner diameters smaller than 3/8" can cause the fuse/breaker to fail.
- Check for kinks or additional closed valves in the line that could be causing restriction.
- Check for debris in the gears.
- Facilitate draining the oil by warming up the engines first.