



# Plastic Tank Replacement Procedure For Hydraulic Leveling Systems

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#82-L0518, Rev. 0B

## ! WARNING

Keep people clear of the coach prior to turning the leveling system on and while leveling system is in use. Never expose hands or other parts of the body near hydraulic leaks. High-pressure oil leaks may cut and penetrate the skin causing serious injury.

Read, understand, and follow all instructions in this document before starting.

This document provides the procedures to remove and replace the plastic hydraulic fluid tank on Power Gear hydraulic pump assemblies.

The plastic tank kits (See figures 1 thru 4) include the following parts:

- O-Ring – Part No. 3510000266
- 4 Bolts – 1/4"-20 x.75" Hex Bolt Grade 50
- 4 Mounting Clamps – Part No. 2010000485
- 1 Corresponding Tank
- This Tip Sheet #82-L0518



### Already installed on the tank:

- Fill Cap Plug/Breather – Part No. 3010001126
- Grommet – Part No. 030-1040

**NOTE:** See label on the existing tank for proper size tank kit.

THE DIFFERENCE IS IN THE DETAILS™



# power level

Hydraulic power unit fill procedure:

- Fill with jacks fully retracted & coach parked on a level surface.
- Refer to oil level label for correct level.
- Use Dexron III, Mercon V or equivalent.
- Caution: overfilling may cause leakage.

P/N:

SIZE:

S/N:

MISHAWAKA, INDIANA

3010001090

## NOTE:

The dimensions listed below in Figures 1-4 can also be used to properly identify the correct tank replacement kit.

Part Number 1010002367



Figure 1 – Size 2.0 Gallon Horizontal

Dimensions: 16" L x 6.69" W x 7.57 H"

Part Number 1010002368



Figure 2 – Size 1.5 Gallon Horizontal

Dimensions: 13" L x 6.69" W x 7.57 H"



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Part Number 1010002369



Figure 3 – Size 1.5 Gallon Vertical

Dimensions: 6.82" L x 6.69" W x 13" H

Part Number 1010002370



Without float switch port

Figure 4 – Size 1.5 Gallon Vertical

Dimensions: 6.82" L x 6.69" W x 13" H

### Instructions

- 1) Fluid in the tank will need to be drained before removing a horizontal tank. This can be done by a siphon pump, or by tipping the pump assembly over if removed from the coach. **NOTE: In some situations, vertical tanks may be carefully removed with the fluid still in the tank (Step #4)**
- 2) If the tank has a float switch installed, disconnect the wire connector to the float switch. If tank has no float switch, skip to step 4.
- 3) Remove the float switch and set aside to install in new tank. For directions to remove the float switches, reference Tip Sheet 82-L0508 for horizontal tanks and Tip Sheet 81 (or 81-1298) for vertical tanks.
- 4) Loosen and remove the 4 bolts and mounting clamps around the neck of the tank. (See Figure 5) **NOTE: Extra help may be required to support and lower the tank.**
- 5) Pull the tank assembly away from the pump port plate.
- 6) Remove the old O-Ring and inspect and clean recess in the port plate that holds the O-Ring (See Figure 6)

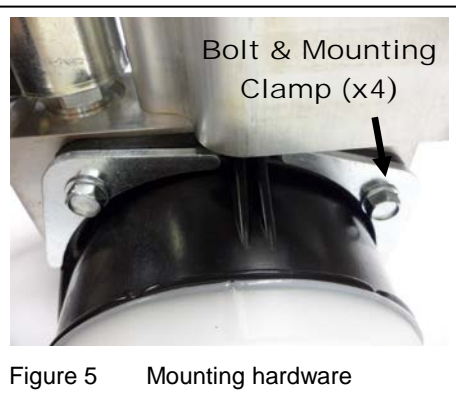


Figure 5 Mounting hardware

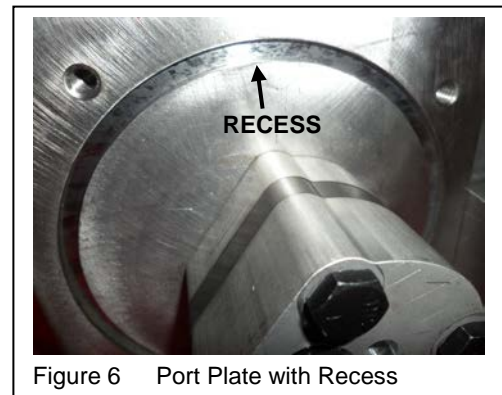


Figure 6 Port Plate with Recess

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- 7) Inspect and clean any debris from the fluid filter.
- 8) Lightly rub the new O-Ring with clean hydraulic fluid, and install in the recess. Make sure it sits flat inside the recess. (See Figure 7)
- 9) Hold the new tank to the pump port plate, install and finger tighten the bolts through the mounting clamps. **NOTE: Make sure the "flat" surface of the mounting clamp is up, or away from the plastic tank flange, while the side with the "rounded" edges sits against the neck flange. (See Figure 8 & 9)** Tighten the bolts to 3-4 foot pounds using a torque wrench.
- 10) Install the float switch and grommet, (See Figure 10) and connect to the harness connector. If float switch sits in a vertical tank, make sure to follow Tip Sheet 81 (81-1298) for proper orientation, or refer to the label on the side of the tank. (See Figure 11)
- 11) Fill the tank with fresh fluid (see info below) and run jacks down to the ground, wait 30 seconds, then retract. Check fluid level and fill as needed. Repeat 5 times to bleed system of air, and confirm the pump is working properly. Confirm fluid level is full.

### Recommended Hydraulic Fluids for Your Hydraulic Pump

The fluids listed here are acceptable to use in your pump assembly. Contact coach manufacturer or selling dealer for information about what specific fluid was installed in your system.

- It is not recommended that hydraulic fluid and automatic transmission fluids be mixed in the reservoir.
- In most applications, Type A automatic transmission fluid (ATF, Dexron III, etc.,) will work satisfactorily. Mercon V is also recommended as an alternative fluid for Power Gear hydraulic systems.
- If operating in cold temperatures (less than -10° F), the jacks may extend and retract slowly.
- For cold weather operation, fluid specially-formulated for low temperatures may be desirable. Mobil DTE 11M, Texaco Rando HDZ-15HVI, Kendall Hyden Glacial Blu, or any Mil. Spec. H5606 hydraulic fluids are recommended for cold weather operation.

- 12) Re-check that the fluid level is full, and make sure the "Jacks Down" light is off when the jacks are retracted.
- 13) Re-check the tank for leaks around the tank neck and the port plate.

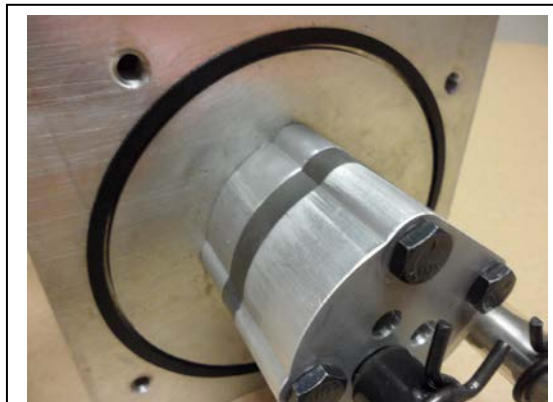


Figure 7 Port plate with O-Ring installed

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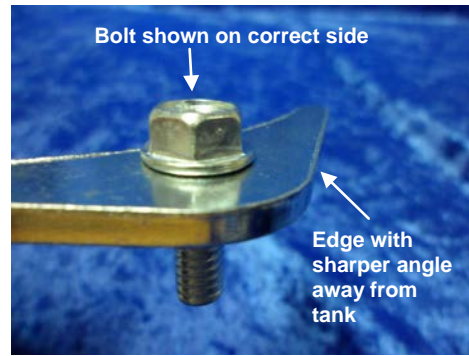


Figure 8 Mounting Clamp - Flat edge



Figure 9 Mounting Clamp - Rounded edge



Figure 10 Float switch installation



Figure 11 Label on side of vertical tank

### RELATED DOCUMENTS FOR PUMPS WITH PLASTIC TANKS

<u>Document #</u>	<u>Tip Sheet #</u>	<u>Description</u>
81-1298	#81	Float Switch Replacement Procedure (For Vertical Tanks)
82-L0508	NA	Float Switch Replacement Procedure (For Horizontal Tanks)
82-L0509	NA	Testing float switches #14-1085, 14-1101, & 14-1106 without resistor in vertical tanks
82-L0510	NA	Testing float switches 14-1136 & 14-1137 with resistor in vertical tanks.
82-L0511	NA	Testing float switches 140-1146, 3510000030, & 3510000070 in horizontal tanks
82-L0512	NA	Float switch ID Chart
82-L0516	NA	Magnet Proximity to Float Switch
82-L0519	NA	Pump Replacement Procedure for Systems with Plastic Tanks
NA	#216	Hydraulic Pump Motor Diagnosis

ADDITIONAL REFERENCE PUBLICATIONS LOCATIONS AT  
[WWW.LCI1.COM](http://WWW.LCI1.COM)