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Instruction Sheet

**Part Number APG-28154R, Powerglide Pump, Race
APG-28154LV Powerglide Pump, Low Volume**

Contents:

Powerglide Race Pump
Turbo Input Shaft Bushing
Instruction Sheet

Note: Before installation, read instructions carefully. If you do not understand any part of these instructions please call our tech line at the number listed above.

Safety Warning!!

If you are unfamiliar with transmission repair and modifications, do not install this part. Instead, have it installed by a competent transmission technician who is familiar with such devices.

Failure to follow these directions and follow all safety procedures can result in serious injury or death!

Step 1:

All TSR Powerglide race pumps have the cooler by-pass valve circuit in the pump blocked. This directs all fluid from the converter through the cooler. ***This pump can not be installed without a cooler in place or the cooler lines looped.***

If you do not run a cooler you must fabricate a loop between the cooler fittings in the case. Refer to the photos below. You may also disassemble the pump and remove the cooler by-pass plug. This is not recommended however, should you decide to install a cooler at a later date.



**Location of cooler
bypass plug**



Step 2:

This pump is supplied with a replacement stator support installed. This stator support is pre-bored for the use of a Turbo input shaft bushing. The bushing is supplied with the pump, but not installed.

Do not install this bushing if your converter has the converter turbine bushed in the converter cover. **Most** race converters have the turbine bushed in the cover and do not require a bushing to be installed in the stator support. Check with your converter manufacturer if in doubt.

Step 3:

You must check the unit end-play when installing a replacement pump.
To check the end-play:

Install the pump with the gasket and the thrust washer/bearing you plan to run. Do not install the pump “O” ring or sealing rings on the pump or input shaft at this time.

Push the input shaft toward the rear of the transmission until all the end-play is removed then push the output shaft toward the front of the transmission until all the end-play is removed. This will seat the bearings and/or washers in place.

Install a dial indicator on the bell housing and “zero” the pointer with the input shaft pushed rearward. Push the output shaft forward and observe the reading on the indicator.

A reading of between .028” and .059” is acceptable with a washer behind the pump, with readings of .028” to .035” preferred in race units. When using a thrust bearing behind the pump a reading of .010” to .015” is acceptable.

Step 4:

Install the pump “O” ring, lube with assembly lube or ‘Door-Ease’ and install the pump, Tighten bolts to 15 ft-lbs. Install input shaft.

Step 5:

Fill the converter with 1 quart of fluid, lube the pump drive hub with assembly lube and install the converter. Be sure the converter engages the input shaft splines, stator support splines and the pump gear drive lugs.

Recommended Additional Components:

- APG-37680 Powerglide Roller Bearing Conversion
- APG-28154IK Powerglide Pump Installation Kit
- APG-28154IKB Powerglide Pump Installation Kit W/Bearing
- APG-28711-03K Powerglide Pump Stud Kit
- APG-28154BK Powerglide Pump Bolt Kit
- APG-K35412 Powerglide Thrust Shim Kit
- APG-28406BK Powerglide Thrust Washer Kit .061” W/Shims
- APG-28406CK Powerglide Thrust Washer Kit .078” W/Shims