

4R70/75W INSTALLATION INSTRUCTIONS

PLEASE FEEL FREE TO CALL US ON OUR TECH LINE AT (330) 434-2757 BETWEEN 8:00 AM AND 5:00 PM EST IF YOU HAVE ANY QUESTIONS.

Please read instructions completely before installing your transmission. Also, we have provided a check list of necessary items to help you along with your installation. Please mark each box after you have completed the step.

REMOVE ALL RED CAP PLUGS ACCORDINGLY FROM YOUR TRANSMISSION DURING INSTALLATION!!!

Transmission Cooler:

- External stand alone transmission cooler supplied must be installed or **your warranty will be voided.**
 - DO NOT** use transmission cooler in conjunction with radiator cooler.
 - Cooler must be installed in front of the radiator.
 - Constant, forward air flow is a **MUST!** If not possible, then you need a cooler with an integrated fan and proper air flow. Either way the cooler is essential to the transmission.
 - NEVER** install the cooler under the floor pan of the vehicle. The best possible place to position the cooler is in front of the air conditioning condenser.
 - Only use hose supplied with cooler. If more hose is required, use only hose rated for automatic transmissions.
- DO NOT** use rubber fuel line, **EVER!!**
- If using your existing transmission lines, flush thoroughly with brake cleaner before installing new cooler.

Use only Gearstar's 6 A/N cooler line fittings. Gearstar's 6 A/N cooler fittings are straight 1/4" pipe threads. Using 1/4" tapered pipe threads fittings could crack transmission case and will void warranty.

PLEASE READ THIS FIRST

DO NOT REMOVE TORQUE CONVERTER BRACKET UNTIL YOU ARE READY TO INSTALL THE TRANSMISSION. THE TRANSMISSION AND TORQUE CONVERTER ARE TO BE INSTALLED AS ONE UNIT. UNDER NO CIRCUMSTANCES SHOULD THE TORQUE CONVERTER BE REMOVED FROM THE TRANSMISSION.

Electronics:

- When ordering a standalone transmission controller you to specify 4R70W or 4R75W. The 4R70W has **one** output sensor located on the driver's side rear transmission case. The 4R75W has **two** sensors on the driver's side of the transmission case. This unit uses an electronic speedometer. The speedometer housing supplied is also capable of using the original equipment speedo cable if needed.

Torque Converter and Transmission Installation:

- Make sure dowel pins are clean and free of rust and installed in engine.
- Clean crank shaft pilot of any rust or debris and apply light coating of grease in crank shaft pilot. **DO NOT** use NeverSeize.
- Midplate required between engine side of flexplate and engine block.** Failure to install midplate will cause zero torque converter to flexplate clearance and will damage transmission pump. Midplates are available from Summit Racing, JEGs, or you may contact your engine builder.
- Align converter studs with flexplate when securing transmission to the engine block. Misaligned converter studs will damage pump.

Torque Converter and Transmission Installation (Cont.):

- With transmission installed in vehicle, converter stud should rattle right and left between the flexplate.
- Torque converter clearance to flywheel should be at least 1/8".
- Pull Converter to flexplate to engage pilot.
- Tighten converter nuts one at a time before attempting to rotate flywheel to the next stud. Failure to do so will cause converter nut to contact back of engine block.
- Tighten converter nuts to 35 ft-lbs.
- Re-torque transmission pan bolts to 10ft-lbs and check drain plug on transmission pan for leaks.
- Do Not Use **AOD Drive Shaft Yoke in this unit. The output shaft splines are the same but the bushing diameter is smaller.**

Note: The 4R70/75W drive shaft yoke is exclusive to these units.

Linkage:

- Transmission selector shaft is a 360° adjustable Lokar lever to be used for a column or floor shifter.

Fluid:

- Use good, high quality automatic transmission fluid, such as Castrol Dextron VI.
- Please do not use any purple ATF, such as B&M Trick Shift, **this will void your warranty.**
- Check fluid level while idling in park on a level surface. DO NOT overfill, this may cause oil to leak out of the transmission breather tube.
- Check transmission for any leaks around the transmission lines at the cooler and on the transmission itself.

Road Test:

- If using the HGM CSII stand alone controller, pressures, shift feel, and lock up timing are programmable with the display box supplied with your computer. If you have any questions about adjusting your computer please call HGM at (877) 744-3887 PST.
- Recheck transmission fluid level.

Note: Breakage of the transmission case and/or bellhousing will void warranty.