



440-440 Shift Lever Housing by HVDA

Installation Instructions

For:

Triumph TR w/ HVDA Toyota W58 5-Speed Conversion

Tools Required:

- Ratchet
- 14mm socket
- 12mm socket
- 24mm or $1\frac{5}{16}$ " Box Wrench or Socket
- Snap Ring Pliers
- Rubber Mallet
- Blue Loctite
- RTV Gasket Maker (Toyota FIPG, Yamabond, or similar)
- (optional) Input shaft Seal (Napa part # 11615)
(Carquest/National # 1981)
- (optional) Output shaft seal (Napa part # 14753)
(Carquest/National # 223840)
- (optional) Transmission Gasket set

Transmission must be removed from the vehicle for installation. Installing this part requires partial disassembly of the transmission. Read and understand all instructions prior to beginning the installation. If you are uncomfortable with the process, bring the transmission to a specialist.

Since the transmission will be partially disassembled, now is a convenient time to reseal the case and replace the input and output shaft seals if you desire. The Toyota shop manual recommends using Toyota FIPG (Formed in Place Gasket) RTV, in lieu of paper gaskets, but paper gasket sets are available from aftermarket transmission parts retailers if you prefer.

Note: The Toyota W58 was used in a wide variety of vehicles, and came equipped from the factory with different shifter components to adapt to the vehicle it was intended for. Photos of certain components may vary from what is shown in these instructions, but the installation process is the same.

Although every effort has been made to ensure the accuracy and clarity of this information, any suggestions that you may have that will improve the information (especially detailed installation notes and photos) are welcome. These instructions were developed and written by Moss Technical Support. If you have any questions or difficulties with your installation of this product, telephone 800-667-7872 between 7:00 a.m. and 4:00 p.m., Pacific Time for assistance.

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Installation Instructions

Installation:

- 1) Remove the speedometer gear assembly using a 12mm socket.

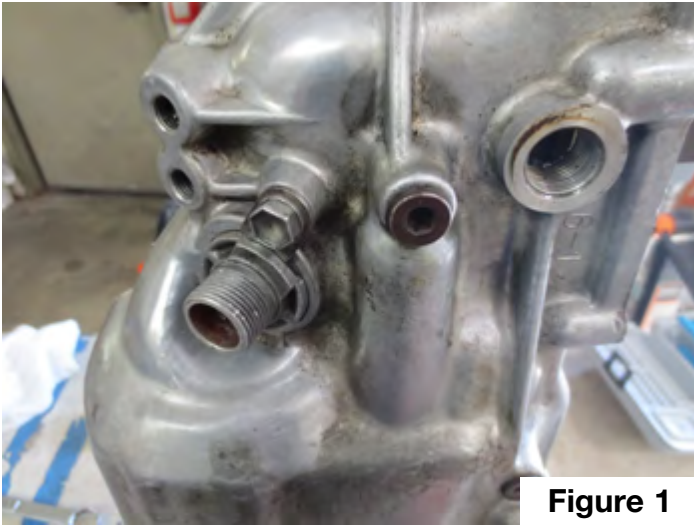


Figure 1

- 2) Remove the 6 bolts securing top cover of the shifter housing, and remove the cover.
- 3) Using a 24mm or 15/16" wrench, remove the two restricting pins on either side of the shifter housing. Note the pins are handed. Mark them and be sure to reinstall on the correct side. The dark colored pin is installed on reverse/5th gear side.
- 4) Using a 12mm socket, remove the special shouldered bolt securing the shift lever to the shaft.

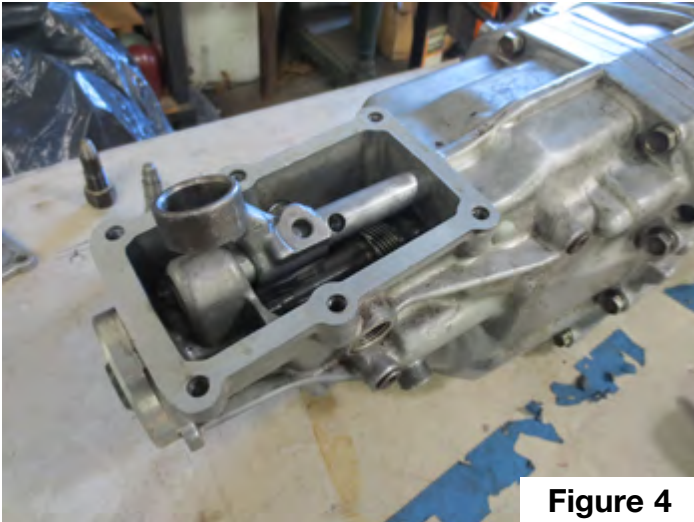


Figure 4

- 5) Place the transmission flat on your workbench with the tail housing facing up. Using a 14mm socket, remove the 9 bolts holding the tailhousing to the center support. Using the rubber mallet, loosen the tail housing from the center support. It may take some effort to break it free if it's held in place by gasket sealer.

- 6) Lift the tailhousing up enough to remove the shift housing lever from the shaft, then remove the tailhousing from the transmission. Ensure the two locating dowel pins stay in the center support. The front section of the case can remain in place. Now is a good time to replace the output shaft seal on the end of the tailhousing, if desired.

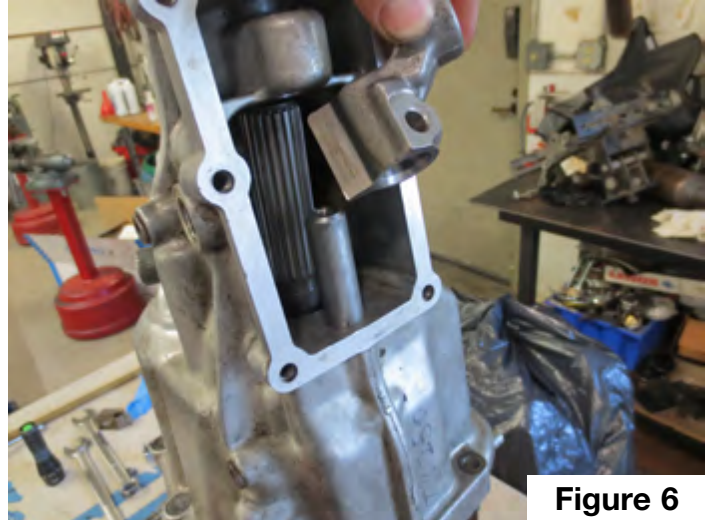


Figure 6

- 7) If you wish to reseat the entire transmission, follow steps 8-10. If not, proceed to step 11.
- 8) Using a 12mm socket, remove the 7 bolts holding the front bearing retainer. Replace the input shaft seal inside the bearing retainer, if desired.

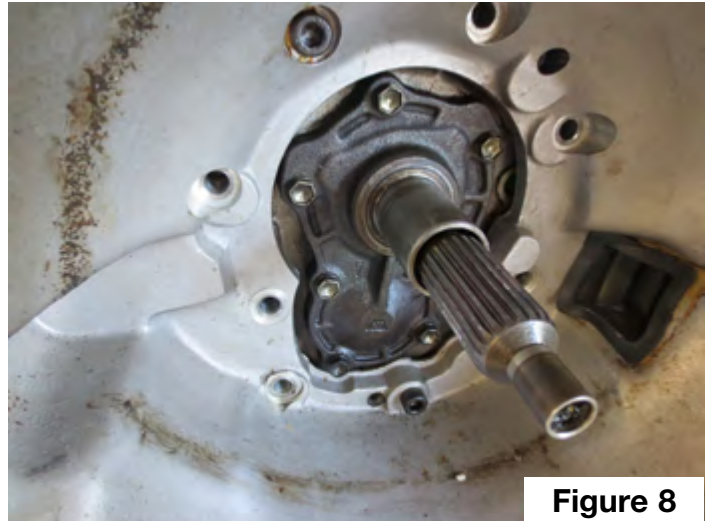


Figure 8

- Using snap ring pliers, remove the two large snap rings securing the bearings to the front section of the case. The smaller ones do not need to be removed.

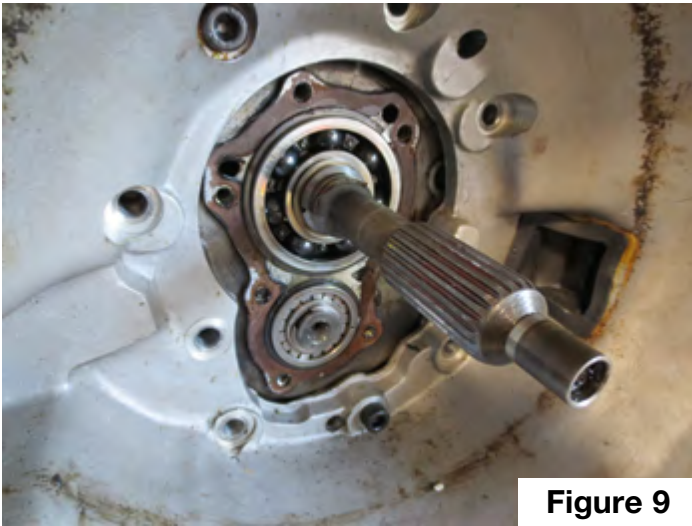


Figure 9

- Separate and remove the front section of the case from the center support.
- Clean all mating surfaces thoroughly and apply gasket sealer (or paper gaskets) for reassembly.
- Reverse steps 1-9 for reassembly, taking note of the following steps:
- Apply some grease to the rollers on the rear mainshaft bearing and carefully push them all inwards towards the shaft. The grease will hold the rollers in place. Place the shifter shaft into the shift fork as shown.

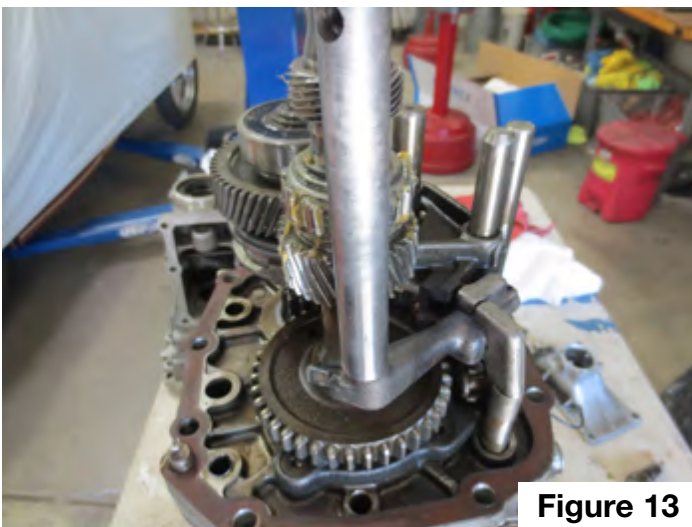


Figure 13

- When installing the tailhousing, carefully slide the shifter shaft through the bore in the tailhousing then slide the Moss shift lever housing on the shaft before you fully install the tailhousing. Carefully line up the bore in the tailhousing case with the roller bearing and push it down into place. If a roller bearing gets pushed out of place you will have to remove the tailhousing, reposition the rollers and try again. If everything is lined up, it should easily push into place with minimal pressure or a light tap with the rubber mallet.



Figure 14

- Tighten case to center support bolts to 27 ft-lbs. Tighten the shouldered bolt securing the Moss Shift Lever Housing to 29 ft-lbs. Tighten spring-loaded Restrict Pins to 30 ft-lbs. Tighten front bearing retainer bolts to 18 ft-lbs. A drop of blue Loctite on all bolts is recommended.
- Install your HVDA Shift housing adapter cover with the provided Hardware as outlined in the HVDA instructions.