

TECHNICAL BULLETIN

TORQUE ROD BUSH REPLACEMENT – 50mm

LIT NO: 97117-237

DATE: April 2018

REVISION: D

INTRODUCTION

Hendrickson Asia Pacific have developed and manufactured special tool part number 98596-020-P. This tool was developed to assist our customers and repairers with the replacement of the Hendrickson 50 mm bonded rubber torque rod bush.

This tool has been designed and tested to suit Hendrickson manufactured torque rods fitted with 50 mm bushes. Using this tool on other manufacturer's product may result in bush or tool damage.

The use of this specified insertion tool is critical in preventing damage to the torque rod bush during installation. The tool is available via any Hendrickson stockist.



Using specially designed special tool 98596-020-P will ensure that the 50 mm bushes are replaced easily and without causing any damage.

NOTICES

The following workshop resources are required:

- A vertical press with a capacity of at least 10,000 kilograms
- Torque rod bush receiving tool – workshop supplied
- Torque Rod Bush Installation Tool – 98596-020-P
- P-80™ Temporary Assembly Lubricant (Emulsion)

⚠ WARNING: Do not use heat or use a cutting torch to remove the bushes from the torque rod. The use of heat will adversely affect the strength of the torque rod. Heat can change the material properties. A component damaged in this manner can result in the loss of vehicle control and possible personal injury or property damage.

⚠ WARNING: Always wear proper eye protection and other required always wear personal protective equipment to help prevent personal injury when you perform vehicle maintenance repair or service.

DISASSEMBLY

1. Remove the torque rod assembly from the vehicle in accordance with vehicle manufacturer's instructions.
2. If it is a straddle type torque rod bush, mark the position of the torque rod bush bar pin flats on the torque rod with a paint stick prior to disassembly. This will enable accurate installation of the replacement bush to enable ease of re-installation of the rod to the vehicle. Taper and through bolt type bushes do not require this process.
3. Install the rod in the press.
4. Support the torque rod end on a receiving tool with the end of the torque rod centred on the receiving tool.

NOTICE Ensure that the torque rod is squarely supported on the press bed.

5. Push directly on the centre pin until the bush clears the rod.

INSPECTION AND CLEANING

1. Inspect the torque rod for straightness, wear or cracks.



Clean rubber remnants out of torque rod ends

2. Clean and inspect the inner diameter of the torque rod ends. Get rid of any sharp edges and smooth out with an emery cloth or rotary sander.

⚠ WARNING: Use care if using rotary sander that no metal is removed from torque rod. Do not enlarge torque rod aperture or it may render the torque rod unserviceable.

3. Measure inner diameter with a Vernier Calliper to determine serviceability of the rod.

ASSEMBLY

Assemble the new torque rod bush in the following sequence.



Check to see which side of the rod has a larger taper

1. The torque rod aperture is tapered. Take a note of which side of the rod has a larger taper than the other.
2. Seat the installation tool on each side of the rod to determine the side with the largest taper and install the bush from this side.



Fit installation tool squarely onto the rod

NOTICE: The installation tool must sit neatly in the rod opening. If the tool is not a perfect fit then modify the aperture taper to ensure a neat fit. Failure to do so may result in bush damage during installation.

3. Lubricate the inner diameter of the torque rod end hub, the assembly funnel, and the new rubber bush with a suitable temporary assembly lubricant, such as P-80. (This is available from Hendrickson in 10 ml tubes using part number 70867-001.)

⚠ CAUTION: Do not use a petroleum or soap based lubricant. These lubricants can adversely react with the bush rubber compounds and cause premature bush failure or movement. Rubber grease is also not acceptable because, even though it will not affect the rubber, it may allow the bush to move during use.

4. Support the torque rod end centrally on the receiving tool.
5. Place the installation tool on the torque rod end at the insertion side of the rod.



Lubricate tool and bush before installation

6. Place the torque rod bush into the installation tool. If this is a bar pin bush installation, ensure the mounting flats are aligned in the correct position as per the markings made prior to disassembly.
7. Press the bush through the installation tool into the torque rod until the rubber clears the installation tool and is centred in the torque rod.



Check that the bush is centred in the torque rod end

8. Remove tools and recheck that the bush is centred in the torque rod.
9. Wipe off any excess lubricant. Allow the P-80 emulsion lubricant to dry before use. This is typically around one hour.

WARNING: If the torque rod assembly is not allowed the allotted time for the lubricant to dry, the bush will slide from the torque rod. If this occurs, it will damage the bush, and possibly other components, which will then need removal and replacement again.

Revisions Table

DATE	REV	PAGE	DESCRIPTION
March 2018	D	All	New format and amendments.

Need Help? Call 03 8792 3600 or Email customerservice@hendrickson.com.au



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