

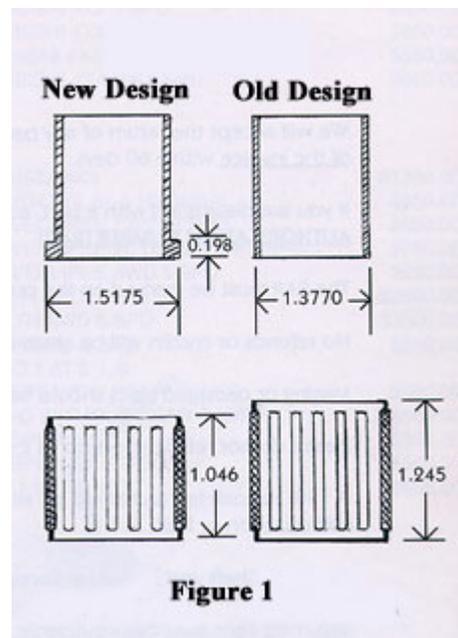
	ALTGK-MIT	w/Assembly		\$195.88
	ALTGK-MITA	FM146 Updated 5th Gear Set w/Assembly		\$216.78
	MTC- MW990006-R	5th Gear Bearing & Sleeve Update Kit See detailed discussion	1985-1992	\$46.62
Check "Tag to Component Identification Chart" to verify proper gear/kit application.				

The Mitsubishi 5 speed used in the Ford Ranger from 1985 to 1992 has had a notorious problem with the 5th gear bearing sleeve wearing into the 5th/reverse synchronizer hub. This problem further has cause the failure of the 5th gear on the mainshaft, causing the 5th gear to seize to the 5th/reverse hub and then break.

The problem is inherent, because the mating-surface area of the 5th gear bearing sleeve is too small. Although pressures against the hub are amplified while the transmission is a high operating temperatures, they decrease significantly when the transmission cools to ambient temperature. This continual pattern causes the sleeve to work loose against the 5th/reverse synchronizer hub and then begins to wear into the splined area of the hub.

As this wears, the preset factory clearances for end play are diminished to the point that the 5th gear on the mainshaft begins to heat the hub and scuffing begins to appear. If this situation is not corrected, it will cause the 5th gear to seize to the hub, breaking the gear teeth.

Given the size and load characteristics of the 5th gear, correcting the problem by simply changing the gear design is next to impossible. Now available is a unique answer to this nagging problem. Not only is it simple but also it is very inexpensive to install. The entire kit includes only tow pieces, a newly designed caged bearing and bearing sleeve (see Figure 1). Further design change directs the radial pressure from the gear to a more specified area on the bearing sleeve.



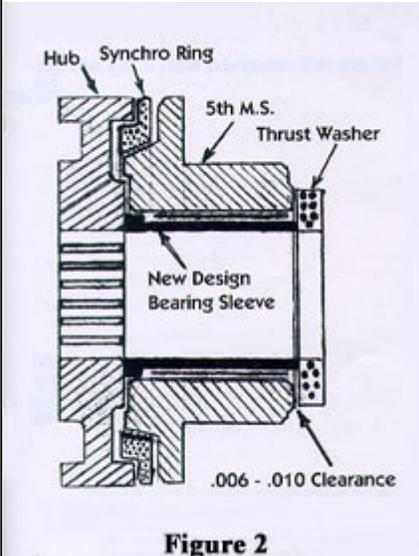


Figure 2

Installation

During inspection for a repair or re-build of the Mitsubishi-built 5 speed, closely examine the area where the 5th gear bearing sleeve contacts the 5th/reverse synchronizer hub. If there is any noticeable wear, replace the 5th/reverse synchronizer hub. Also compare old design 5th needle bearing sleeve to new design (see Figure 1), and after inspection install new design 5th bearing sleeve with flange against 5th/reverse synchronizer hub (see Figure 2). Figure 1 also shows the old design.

Apply assembly lube on all mating thrust surfaces and assemble remainder of main shaft. Torque mainshaft nut to 181-195 ft. lbs. Check that the .006" - .010" clearance is maintained between the 5th gear on the mainshaft and the 5th gear thrust washer (see Figure 1).

This installation will end you problems of poor th gear end clearance on the Mitsubishi-built rear wheel drive 5 speed. The update kit is approved by the OEM manufacture.

By Ray Schoenfelder

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