



Roadranger®

More time on the road™

Bulletin: TMIB-0127

Date: February 8, 2011

Bulletin Type: Service

Topic: PTO Applications

Issue/Background: This bulletin is to clarify the maximum allowable PTO torque on Eaton HD transmissions. Previously Eaton published a 500 lb.-ft limit for the PTO drive gear on the countershaft. Following the PTO manufactures differentiation between continuous and intermittent (less than 5 out of 15 minutes) operation, it was assumed that this limit would be considered only for intermittent operation. Some PTO dealers have advertised maximum limits to be 500 lb-ft for continuous and 650 lb-ft for intermittent operation. After careful review of design limits and test results, the following requirements have been established for all heavy duty transmission PTO applications.

In the future, Eaton will no longer differentiate between intermittent and continuous operation, but publish all PTO torque limitations based on continuous operation.

These limits are maximum allowable torque ratings that are not to be exceeded under any operating condition, continuous or intermittent.

All **Lightning, FR/FRO and UltraShift Plus** transmissions are rated at **500 lb.-ft**, while all

RT/RTO/RTLO transmissions are rated at **350 lb.-ft**. These limits are measured at the countershaft of the transmission.

RT/RTO/RTLO, AutoShift, and UltraShift transmissions may be **up-graded** to allow for **500 lb-ft** by using a roller type input bearing, **Eaton P/N 4301417**. Contact truck manufacturer for OEM specific order codes.

Eaton realizes that, especially in used or older vehicles, it might be impossible to determine what bearing is installed. In these cases it is better to assume that an upgraded bearing needs to be installed.

Warranty: In the event of an input shaft bearing failure where the PTO published

torque rating is above the Eaton recommended specification, warranty coverage may be denied.

The material contained in this bulletin is product improvement information. Eaton Corporation is not committed to, or liable for, canvassing existing transmissions.

The material contained in this bulletin is product improvement information. Eaton and Dana Corporation are not committed to, or liable for, canvassing existing products. FSUD: 2011-FSUD-1545