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SUPPORT

Subject: Proactive Precision Needle Bearing 4307821 Replacement Program

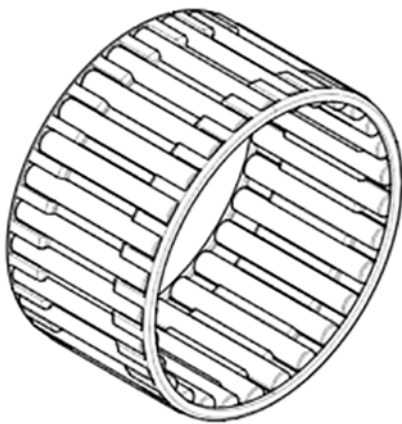
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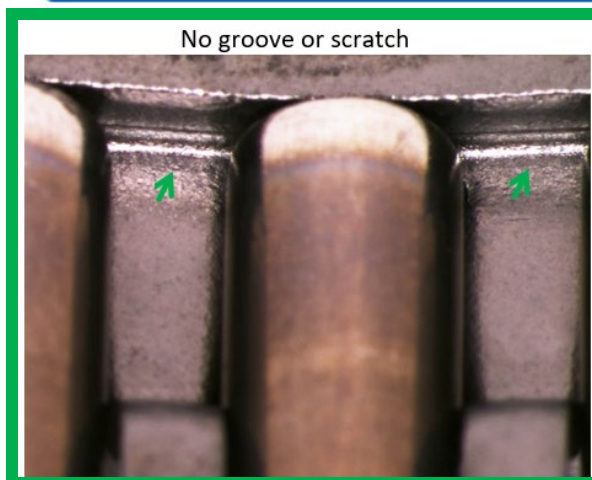
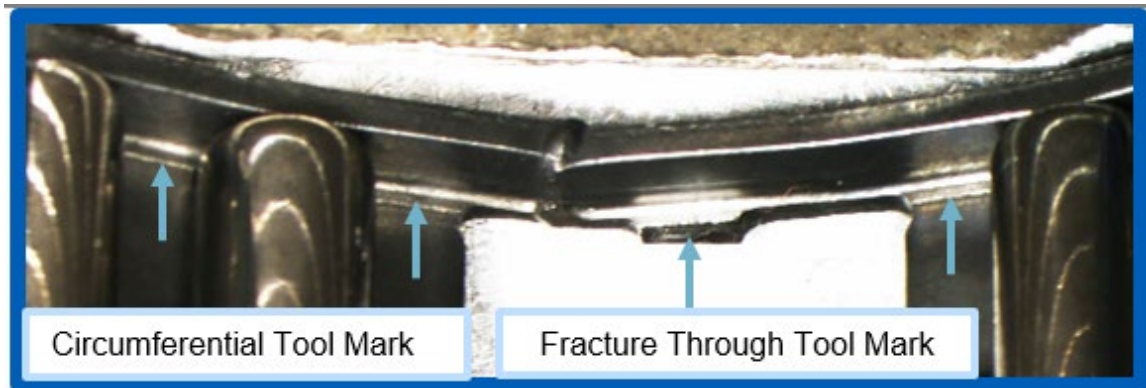
Updated: November 23, 2020

Issue Description: Precision transmission needle bearing 4307821 found in 4th and 6th gear have been found to fail. Driver may experience a 4th or 6th gear shifting complaint, and transmission may have logged various faults. See fault code tables below.

4th & 6th Gear Needle Bearing Failure – P/N 4307821



Root Cause: Tool marks on bearing cage bar



Containment/Corrective Action: New bearings that met quality standards were put in place at remanufacturers and Eaton Cummins Automated Transmission Technologies stock at ELC September 18, 2020.

Affected Models/Population:

Procision transmissions (Park Pawl and Non-Park Pawl)

- **Built:** February 28, 2019 to December 2, 2019 (End of Production); approximately 3,000 units
- **Start:** Serial Number Z0047382 – 19(Year) 02(Month) 28(Day)
- **End:** Serial Number Z0086163 – 19(Year) 12(Month) 02(Day)

Field Strategy:

Proactively replace needle bearings and small related parts (K-4507) in chassis; drain and replace transmission oil. Refer to the service procedure video at: <https://bcove.video/2GcE3gx>.

The RRMT0033 4th and 6th Gear Needle Bearing Service Procedure is available in the Appendix of the Precision Service Manual TRSM0990.

PRECISION 4TH & 6TH GEAR NEEDLE BEARING KIT - K-4507		
Description	Part Number	Qty
Needle Bearing	4307821	2
Oil Guide	4307858	1
Output Shaft Oil Seal	4307882	1
Roll Pin (6MMX35MM)	5558507	1
Output Yoke / Flange Retainer Kit	K-4291	1
Steel Ball 5MM	X-14-0500M	1
Snap Ring	X8870370	1

When the 4th gear is causing drag on the shaft because of the bearing failure, rail fault codes and initial speed fault codes are likely to occur. Fault codes may also result when the debris from the bearing cage attaches to either speed sensor magnets or rail position sensor magnets. Fault codes marked with an * are more likely to occur than others.

Possible Fault Codes Associated with Needle Bearing 4307821 Failure:

Fault Code	SPN	FMI
295*	4220*	1*
295*	4220*	18*
295	6146	1
365*	5961*	31*
375	191	21
375	191	14
700*	6150*	11*
710*	6151*	11*
710	6151	31
720	6144	17
760	6146	7
760	6146	15
760	6146	16
760	6146	17

Warranty Information:

Warranty Parts:

- K-4507
- 5564547 LUBRICANT, TRANS PS-278 (5 GAL)

Warranty Labor:

- Rear Housing / Section Assy Repair (2.0 hours)
- Rail Calibration (0.3)
- Clutch Calibration (0.3 hour)
- Transmission Range Sensor (TRS) for Park Pawl Models (0.5 hour)
- Road Test (0.5 hour)

Repair Order / Claim Text:

- Claim Text – Enter the following:
 - Primary Causal Part #: 4307821
 - Campaign #: NDL46
- Part Return Instructions: All 4307821 bearings and small related parts (K-4507). Claimed parts are to be returned to the Eaton Warranty Return Center (Galesburg MI.) “Collect” per TMIB0129. Follow packaging instructions per TCWY0600.

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