

<h1>Change Bulletin</h1>			 <p>Tesco Corporation 5616 – 80th Avenue SE Calgary, Alberta, Canada T2C 4N5 Tel: 1-877-TESCO-77 (North America) Tel: 1 (713) 359-7195 (AMSS 24-hour support) Tel: 1 (713) 359-7295 (International) Email: bulletins@tescocorp.com www.tescocorp.com www.tescoparts.com</p>
No: CB046	Rev: 0	Date: 14 Sept 2011	
<h2>Update EXI Gearbox Seal and Grease Procedures</h2>			

BACKGROUND INFORMATION:

Four EXI Top Drives have been identified to be leaking gearbox oil from the upper section of the gearbox. These incidents occurred even though the top drives were operating for very short periods of time. After investigation, it was discovered that a choke point in the flow path of the upper bearing retainer (P/N 810387) caused an unwarranted increase in pressure (Figure 1 and Figure 2).

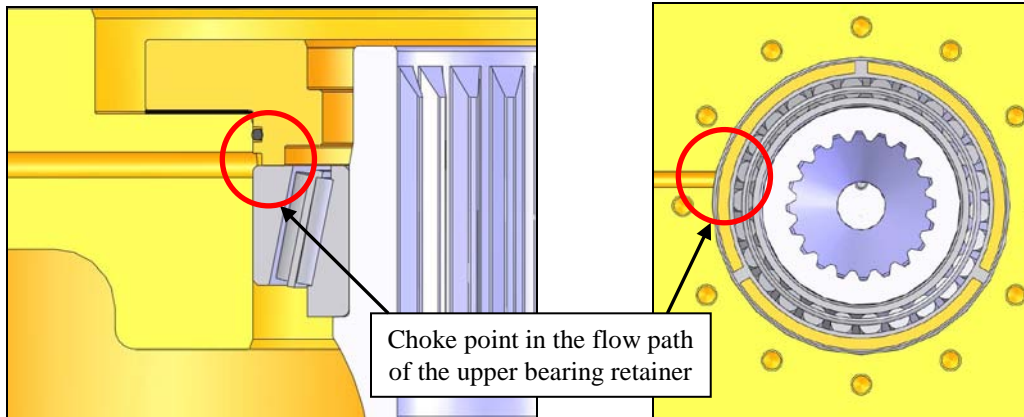


Figure 1: Upper bearing retainer (side view)

Figure 2: Upper bearing retainer (top view)

It was also found that the lower bearing retainer seals on the main pinion were wearing out prematurely due to improper installation. This, in combination with low grease levels surrounding the pinion, was compromising the seals and leading to premature seal failure.

TESCO has modified the flow path for the gearbox upper bearing retainer (Figure 3 and Figure 4), removing the choke point to eliminate any reoccurrence of increasing pressure.

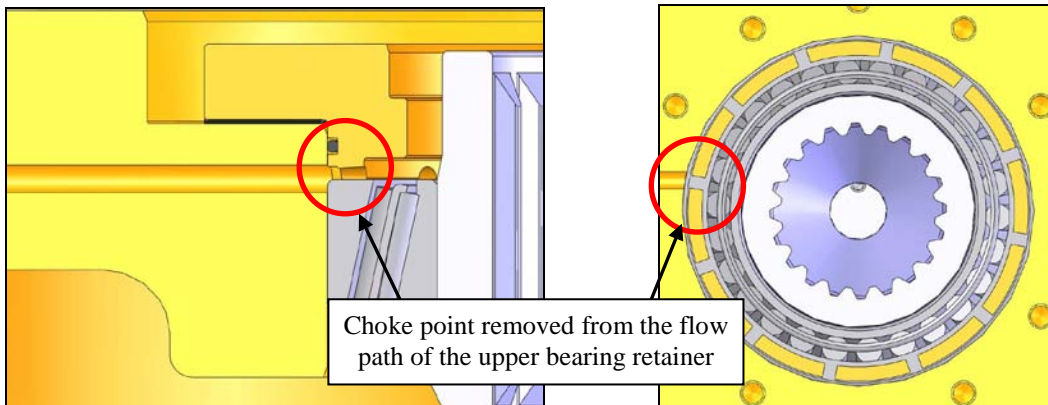


Figure 3: Modified upper bearing retainer (side view)

Figure 4: Modified Upper bearing retainer (front view)

EXI illustrations have also been updated to clearly communicate greasing procedures and to ensure that the O-rings from the PolySeals (P/N 820275) on the lower bearing retainer (P/N 820274) are removed to reduce excess wear on seals (Figure 5).

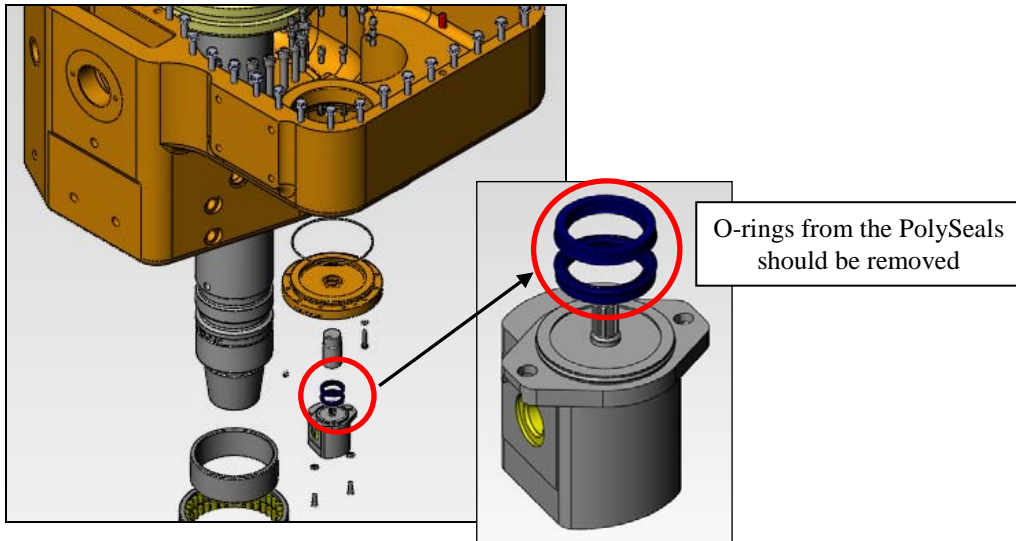


Figure 5: PolySeals on lower bearing retainer

AFFECTED PRODUCT:

The following 350-EXI-600 Top Drive parts and illustrations are affected:

Part Number (P/N)	Description
1124303	Module, Gearbox, 11.11:1 Ratio, 350-EXI-600
1410197	Gearbox, 11.11:1 Ratio, 350-EXI-600, Huisman
5006201	Gearbox, Pull Down 12.5 Ton, 11.11:1 Ratio, 350-EXI-600
810368	Gearbox, 11.11:1 Ratio, 350-EXI-600
2270006	Kit, Upgrade, Lube System, 350-EXI-600

ACTION REQUIRED:

When installing PolySeals on the EXI lower bearing retainer, ensure that the O-rings are removed from the PolySeals before installation.

Before completing the EXI gearbox assembly, a minimum of 10 shots of grease (P/N 510486) must be inserted into the grease port attached to the lower bearing retainer, along with 1-1/2 tubes of grease being put into the upper cavity of the motor pinion.

Version	Date (D/M/Y)	ECN	Description of changes
Rev 0	14/09/2011	197-0003	Initial release of document