

T-031 Inspection Limits and Repair

Engine Application(s):	250-C30, C30G, C30G/2, C30L, C30M, C30P, C30R, C30S		
Compliance:	Any time the Spur Adapter Gearshaft Assembly is removed except where noted. Refer to Table 1 and Figure 1 as applicable for Inspection and Rework Limits.		
Notes:	Refer to OEM's published data for installation, engine operation and disassembly.		
Revisions:	N/C	Dated: 6/16/97	Original Revision.
	A	Dated: 7/02/99	Updated format, Added E23008089 applicability, removed "Grinding checks on bearing shaft thrust shoulders" condition from Table 1, removed scribe check for spline wear from Figure 1, installed Race OD was 1.1407 - 1.1413, and added bearing race replacement instructions.
	B	Dated: 2/02/01	Added P/Ns E23056633 & E23056634.
	C	Dated: 1/18/05	Added P/Ns E23073520 & E23073521.
	D	Dated: 9/04/09	Updated EXTEX to TIMKEN.
	E	Dated: 2/02/16	Updated Timken to EXTEX Engineered Products.

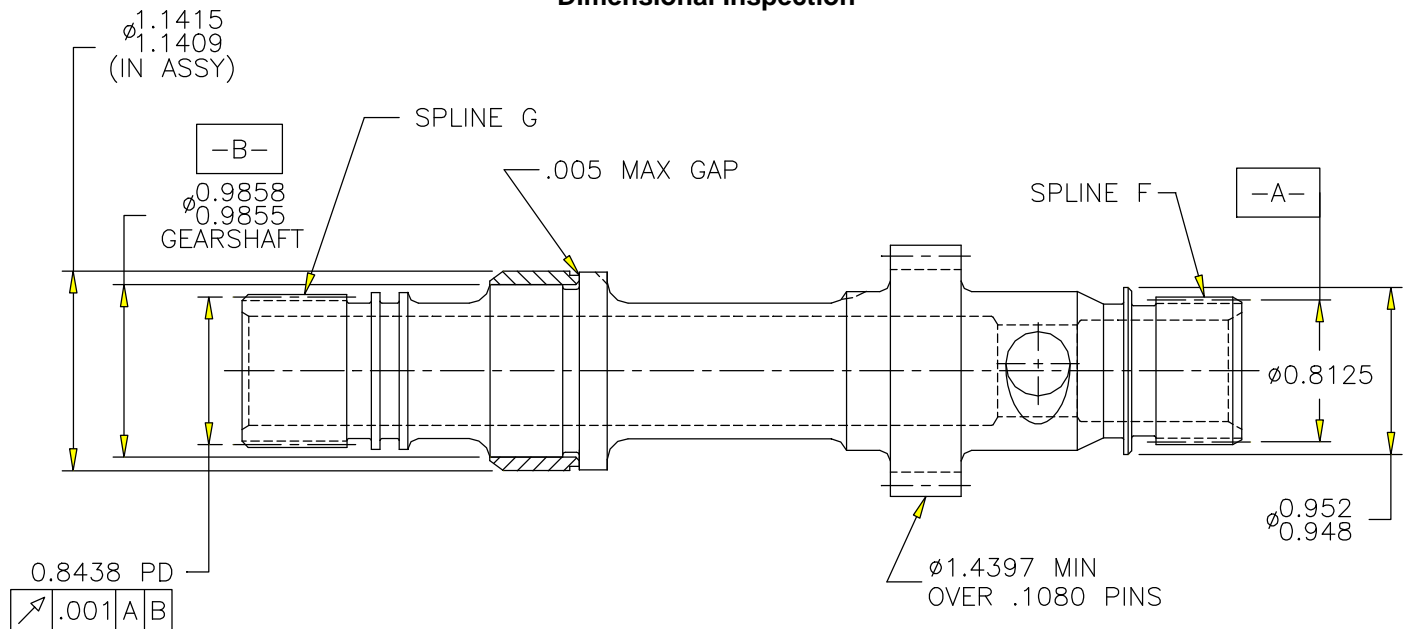
**E23008089/E23008090
E23056633/E23056634
E23073520/E23073521
Spur Adapter Gearshaft Assembly
Inspection and Rework Limits**

Condition	Service Limit	Repair Limit	Corrective Action
Wear	Slight normal wear with all mating parts in good condition and within PD limits.	No Repair.	Remove sharp edges by stoning. Replace gear with evidence of healed prior scuffing.
Spalling (Use 2X Magnification)	Spalling as witnessed by matte worn area over a maximum of 35% of tooth area.	No Repair.	Remove sharp edges by stoning.
Scuffing	Scuffing when accompanied by wearoff of metal pickup if gear assembly is still matched with mating gears.	No Repair.	Remove sharp edges by stoning.
External Spline Wear	The circumferential backlash shall not exceed 0.006 inch max. or be less than 0.002 inch min. when measured at three circumferential positions equally spaced. Note: Check back lash with splines mated and in normal operating axial position.	No Repair.	Replace.
Cracks In Radii Root Corners Of Spline Teeth Or In Line Or Parallel In Close Proximity On Involute Of A Gear Toothside (Visual With Magnification).	None.	No Repair.	Replace.

Table 1 (sheet 1 of 2)

T-031 Inspection Limits and Repair

**E23008089/E23008090
E23056633/E23056634
E23073520/E23073521
Spur Adapter Gearshaft
Dimensional Inspection**



Note: No cracks allowed.
No cracked or broken spline teeth allowed(MPI).

Note: For spline "F" OEM NO-GO gauge 23060755 and for spline "G" OEM NO-GO gauge 23060756 is permitted in lieu of over pin measurement.

Spline F: 0.8998 min. dia. allowed when measured over two 0.060 dia. pins, min. of two places.

Spline G: 0.9296 min. dim allowed when measured over two 0.060 dia. pins placed opposite each other (min. of 13 teeth between pins), min. of two places.

Note: Splines must satisfy pin inspections or OEM gauge to be acceptable.

Note: If unacceptable wear is found on the spur adapter gearshaft spline "F" or the mating spline of the compressor splined adapter, both parts must be replaced as a set.

Note: When bearing race is removed, 0.9855-0.9858 bearing journal diameter must be free from positive imperfections before an inner race may be re-installed. A fine abrasive cloth, fine file or Arkansas stone may be used to remove raised metal from the journal ends and a light abrasive cloth may be used to remove positive imperfections from the bearing journal surface. Diameter after all blending must be 0.9855-0.9858.

Dimensions Are In Inches

FIGURE 1