

## T-033 Inspection Limits and Repair

Revision: E

Issued: 2/02/16

### 2<sup>nd</sup> Stage Turbine Splined Adapter

**Engine Application(s):**

**E23030974/EH23030974:** 250-C28B, C28C, C30, C30G, C30G/2, C30L, C30M, C30P, C30R, C30R/1, C30R/3, C30S, C40B, C47B, C47M

**E23076529:** 250-C28B, C28C, C30, C30G, C30G/2, C30M, C30P, C30S, C30R, C30R/1, C30U, C40B, C47B, C47M

**Subject:** Inspection and Rework Procedures for the E23030974, EH23030974 & E23076529 2<sup>nd</sup> Stage Turbine Splined Adapter.

**Compliance:** Any time the Turbine Splined Adapter is removed for overhaul. Refer to the Figures for Inspection and Rework Limits.

Table 1 Inspection and Rework Limits  
Figure 1 Dimensional Inspection Limits  
Table 2 Dimensional Inspection Limits

**Notes:** Refer to OEM's published data for installation, engine operation, and disassembly.

**Revisions:**

N/C	Dated: 07/30/97	Initial Release.
A	Dated: 01/04/01	Added P/N EH23030974.
B	Dated: 01/15/04	Added Silver Plating Note.
C	Dated: 08/12/05	Added P/N E23076529, table 2, and dimensioned Figure 1.
D	Dated: 09/04/09	Updated EXTEX to TIMKEN.
E	Dated: 2/02/16	Updated Timken to EXTEX Engineered Products.

**T-033 Inspection Limits and Repair**

E23030974, EH23030974, & E23076529  
**Turbine Splined Adapter  
Inspection and Rework Limits**

Condition	Service Limit	Repair Limit	Corrective Action
Cracks , (MPI*)	Cracks are not acceptable.	No Repair.	Install new or serviceable Splined Adapter.
External Spline Tooth Wear	Maximum of 0.001 inch wear normal to spline tooth profile. <b>** See Note Below.</b> Minimum over pin diameter (measured in two places): 0.9296 inch over 0.060 inch pins.	No Repair.	Install new or serviceable Splined Adapter if Service Limit is exceeded.
Spline Tooth Damage (metal displacement): chips, gouges, grooves, nicks, spalling, corrosion, pitting, etc.	Spline tooth damage is not acceptable.	No Repair.	Install new or serviceable Coupling Adapter if Service Limit is exceeded.
Internal Spline Tooth Wear	No spline wear allowed. Maximum between pin diameter (measured in two places): 0.6476 inch between 0.054 inch pins. (minimum of 11 teeth between pins.)	No Repair.	Install new or serviceable Splined Adapter if Service Limit is exceeded.
Dimensional Inspection (Pilot Diameter "A" and Pitch Diameter Run Out)	Check for compliance with Figure 1.	No Repair.	Install new or serviceable Splined adapter if Service Limit is exceeded.
Hardness check *** (over temperature inspection)	Hardness check must be made on OD. Hardness of 15N-79.5-81.5. See Figure 1.	No Repair.	Replace, if hardness is below limit minimum.
Wall thickness forward of internal splines (at internal spline relief). See Fig. 2.	0.0475 inch.	No Repair.	Install new or serviceable Coupling Adapter if Service Limit is exceeded.

**NOTES:**

\* MPI technique as follows: A) Circular between heads  
AND

B) Longitudinal in a coil

\*\* Use of OEM NO-GO gauge, 23060759, is permitted in lieu of over pin measurement.

\*\*\* Strip of silver plate is not required for hardness test. If silver plate is required, silver plate per AMS2410, .0001-.0003" thick.

**TABLE 1**

**T-033 Inspection Limits and Repair**

E23030974, EH23030974 & E23076529  
Turbine Splined Adapter  
Dimensional Inspection

Surface A must be parallel to surface F within 0.0005.

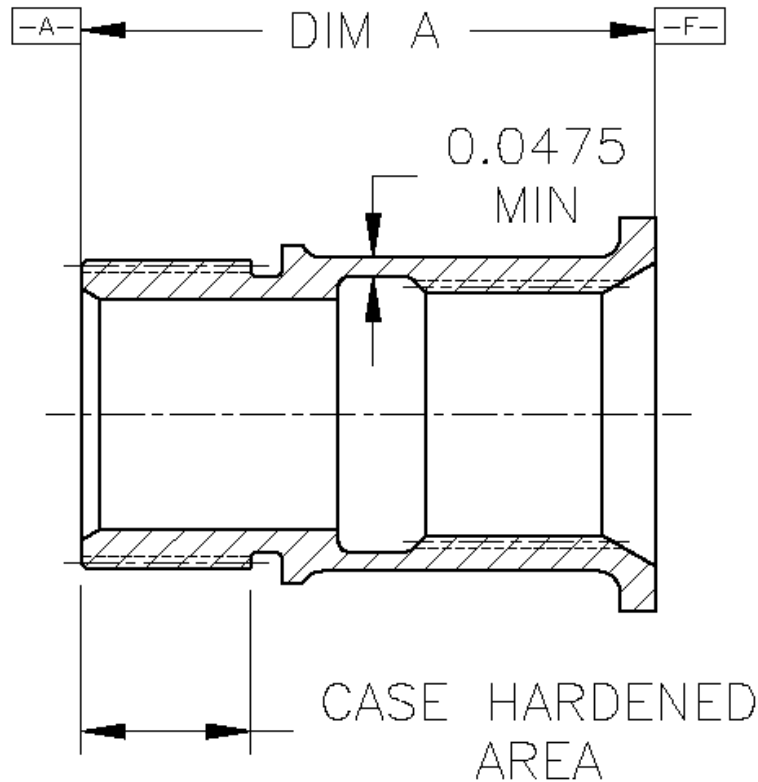


FIGURE 1

Table 2 - Dimension A	
E23076529	1.930/1.950
E23030974	1.620/1.640

DIMENSIONS ARE IN INCHES