

T-027 Inspection Limits and Repair

Revision: C Issued: 2/02/16

Turbine Tie Bolt

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|-------------------------------|---|
| Engine Application(s): | 250-C30, C30G, C30G/2, C30L, C30M, C30P, C30R, C30R/1, C30S, C30U |
| Subject: | Inspection and Rework Procedures for the E23008030 Turbine Tie Bolt. |
| Compliance: | Any time the Turbine Tie Bolt is removed. Refer to the Figure and Table for inspection and Rework Limits. Table 1: Inspection and Rework Limits Figure 1: Dimensional Limits Figure 2: Thread Displacement |
| Notes: | Refer to OEM's published data for installation, engine operation and disassembly. |
| Revisions: | N/C Dated: 6/16/97 Initial release. A Dated: 1/26/01 Updated format. B Dated: 9/04/09 Updated EXTEX to TIMKEN. C Dated: 2/02/16 Updated Timken to EXTEX Engineered Products. |

T-027 Inspection Limits and Repair

E23008030
**Turbine Tie Bolt Assembly
Inspection and Rework Limits**

- 1) All Tie bolts associated with rotor assemblies which have been subjected to a major in service failure should be suspect and replaced as a precautionary measure.
- 2) When installing new or serviceable Tie Bolts:
Always record the Tie Bolt uninstalled (free-state) length, stretched length, part number and serial number appropriately in the Engine Log Book.

| Condition | Service Limit | Repair Limit | Corrective Action |
|--|---|---|--|
| Cracks, visual and FPI* | Cracks are not acceptable. | No repair. | Replace Tie Bolt. |
| Worn, Fretted or Pitted Mutes | Minimum Mute diameter: 0.3125 inch. Pitting is not acceptable. | Minimum Mute diameter that can be repaired: 0.300 inch. | Replace Tie Bolt when Service Limit is exceeded. OR Plate mute to Figure 1 dimensions per approved procedure. |
| Worn, fretted, or scored threads (Visual with 10X magnification).** | Any sign of thread damage (i.e. wear step, fretting, or scoring) that could cause abnormal drag (resistance to rotation) during nut tightening shall cause rejection of the tie bolt. | No repair. | Replace Tie Bolt. |
| Stretched Tie Bolt | Maximum length increase: 0.002inch (Change in uninstalled length from previous uninstalled length recorded at last Tie Bolt installation.) or if free length exceeds 7.400 inch. | No repair. | Replace Tie Bolt. |

NOTES:

* FPI per approved Water Washable technique.

**See Figure 2.

TABLE 1

T-027 Inspection Limits and Repair

**E23008030
Turbine Tie Bolt
Dimensional Limits**

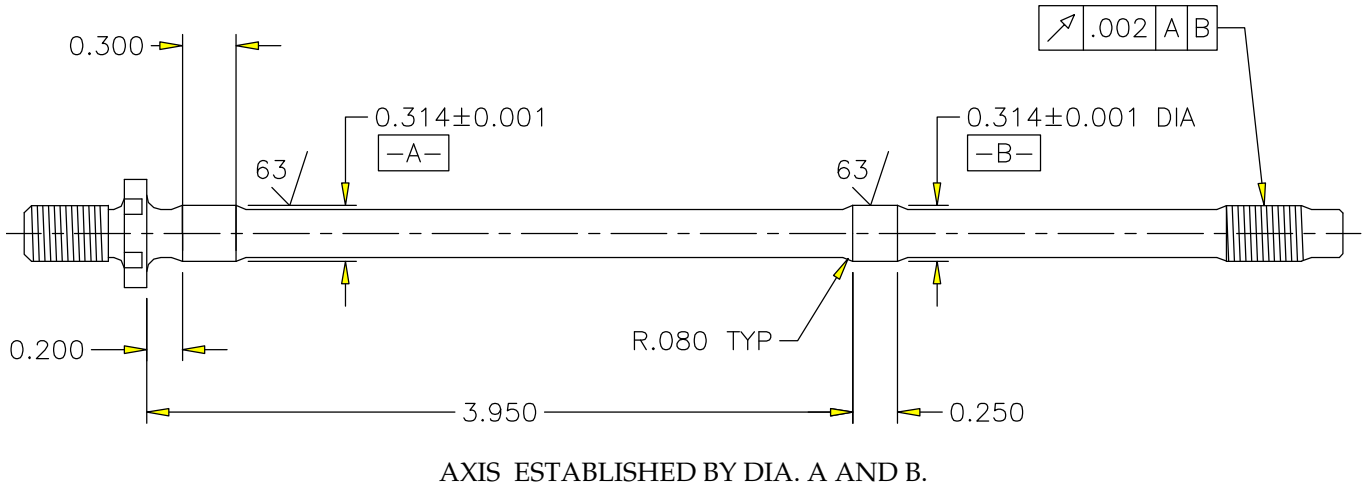


FIGURE 1

Thread Displacement

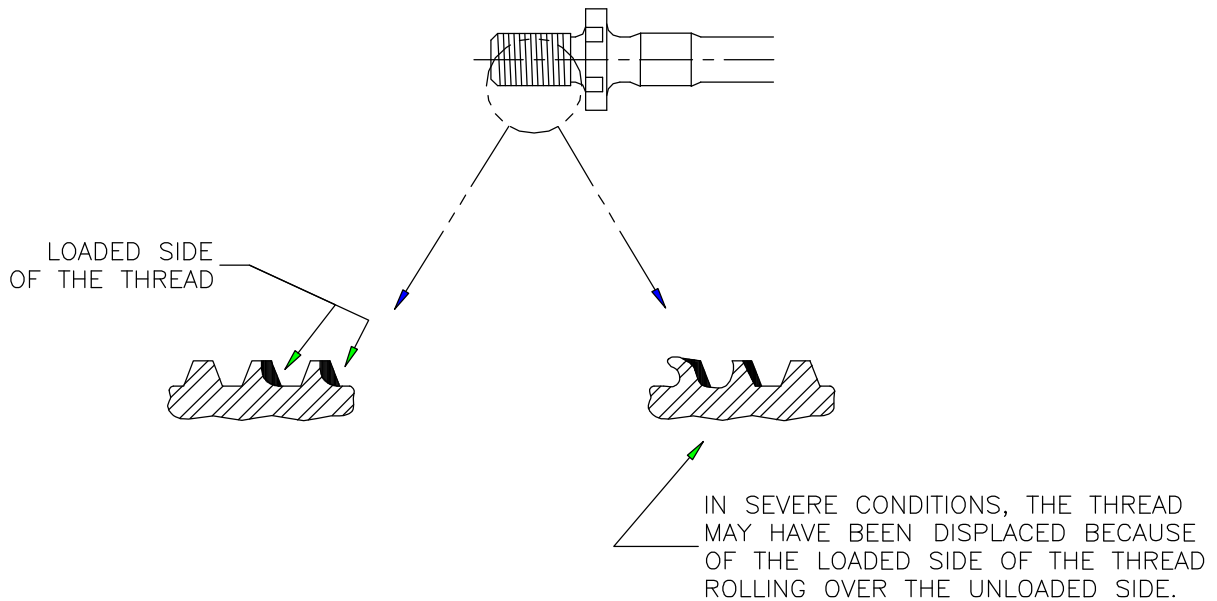


FIGURE 2