

T-004 Inspection Limits and Repair

1st Stage Turbine Nozzle Shield Assembly

Engine Application(s):	Allison 250-B15, B17, B17F, C18, C20, C20R Series
Subject:	Inspection and Rework Procedure for the A6890040, E6890040, E23062750, & E23073533 1 st Stage Turbine Nozzle Shield Assembly.
Compliance:	Any time the Nozzle Shield is removed during overhaul. Refer to the following Table for Inspection and Rework Procedures: Table 1: Inspection and Rework Limits
Notes:	Replaces Service Letter T94-003 issued by Superior Turbine on February 11, 1994. Refer to OEM's published data for installation, engine operation, and disassembly.
Revisions:	N/C Dated: 01/30/97 Initial release. A Dated: 11/27/97 Updated format. B Dated: 01/15/98 Haynes 230 was AMS 5798. C Dated: 02/01/01 Updated format. D Dated: 01/31/03 Updated format and added P/N E23073533. E Dated: 09/10/09 Updated EXTEX to TIMKEN. F Dated: 02/02/16 Updated Timken to EXTEX Engineered Products.

REASON:

To provide instructions for continued airworthiness

DESCRIPTION:

Instructions for Continued Airworthiness.

APPROVAL:

Technical aspects are FAA Approved

WEIGHT AND BALANCE:

Not Affected

PREREQUISITES:

None

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ACCOMPLISHMENT INSTRUCTIONS:

Inspect as follows:

Condition	Service Limit	Repair Limit	Corrective Action
Cracks, Visual and FPI*, circumferentially around heat shield spot weld(s)	Crack(s) less than 50% of distance around spot weld are acceptable.	Crack(s) up to 100% of distance around spot weld.	Weld repair or replace heat shield or replace Assembly.
Cracks, Visual and FPI*, in all other areas including radially from around heat shield spot welds.	No cracks are acceptable.	Any amount.	Weld repair or replace cracked detail(s) or Assembly.
FPI* indications (line type) in braze area joining saddles to inner or outer band.	Acceptable up to 0.12 inch Max**.	Line indications in braze only.	Replace Saddle(s) or replace Assembly.
Saddle Wear (outer side)	Minimum distance across saddle 0.339 inch. AND Minimum lip thickness: 0.010 inch.	No repair.	Replace Saddle(s) or replace Assembly.

NOTES:

* FPI per approved Water Washable technique.

** Indications in the adjacent band or saddle base material are not acceptable.

P/N's	MATERIAL	WELD ROD	BRAZE ALLOY
A6890040	Hast X	Hast X	BNi-10 or N99622 (UNS)
E6890040	Hast X	Hast X	BNi-10 or N99622 (UNS)
E23062750	Haynes 230	Haynes 230 or Hast X	BNi-10 or N99622 (UNS)
E23073533	Haynes 230	Haynes 230 or Hast X	BNi-10 or N99622 (UNS)

TABLE 1

Parts meeting the above criteria are eligible for return to service.

MATERIAL INFORMATION:

N/A