



MAJOR REPAIR

Number
9108064

Revision
A

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Release Date: 03/11/98

Title: Swirl, Fuel Nozzle - GTCP85

Affected Part Number(s): 3604180-1/-2/-3/-4/-5, 3609474-1/-2/-3/-4/-5

Application: Garrett GTCP85 - Series APU

Drawing(s): BMP3604180, BMP3609474

I CUSTOMER - MAJOR REPAIR INCORPORATION RECORD

AIR CARRIERS: The FAA (Federal Administration Association), requires all repair stations that perform maintenance for Air Carriers operating under FAR, Part 121 to perform such maintenance following that Air Carriers' Operation Specification. This FAA approved, Major Repair is beyond the scope of the current Original Equipment Manufacture's (OEM) Repair Manual. Therefore, all Part 121 Air Carriers who opt to use components repaired using the methods set forth within this repair must incorporate this repair in their applicable Operation Specification(s). Regulation may or may not be compliant or reciprocal with Air Carriers operating under foreign regulations.

REPAIR STATIONS/OTHER: BMP (Britt Metal Processing, Inc.) prefers your Company follow the same guidelines set forth for the Air Carriers.

Instructions: Please review this major repair and incorporate into your technical files. Return a signed copy of this acceptance record to our Document Control Department. If applicable, furnish a copy of your revised Operation Specification(s) that reflect incorporation of this repair.

Customers who sign below have authorized BMP to incorporate this FAA approved major repair procedure as a stand alone written document. Parts that require the repair embodied in this repair will be placed on hold pending proof of your acceptance. Thereafter, BMP will accomplish this major repair procedure without further notification.

Company Name Date

Company Representative Signature Printed Name Title

Reference: CFR 14, FAR Part 121, Sub-Part L, and FAR 145.2

BMP-95



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I REVISION INFORMATION

Revision	Description	Approved By:	Date
A	Revised to include P/N 3609474-1/-2/-3/-4/-5. This is a complete reissue.	Dashartha Harsewak	03/18/98

I DESCRIPTION

GTCP85-Series Fuel Nozzle Swirl P/N 3604180-1/-2/-3/-4/-5 and P/N 3609474-1/-2/-3/-4/-5 which exhibit cracking of the investment casting deflector will be repaired as follows:

1. Remove and replace damaged deflectors by brazing a new BMP fabricated deflector to the nozzle assembly.
2. Remove and replace damaged flanges by brazing a new BMP fabricated flange to the nozzle assembly.
3. Weld repair cracks in the vane gas path area.

I PROCEDURE

1. Remove and replace damaged deflectors as follows (see Figure 1):
 - 1.1 Machine cut to remove damaged deflector per BMP drawing BMP3604180 or BMP3609474
 - 1.2 Clean and prepare rework area for braze.
 - 1.3 Braze new deflector P/N BMP3604180-50 or BMP3609474-51 to the fuel nozzle assembly per BMP drawing BMP3604180 or BMP3609474 and process 7.1B or 7.1D using 4777 or 4779 braze alloy, respectively.



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- 1.4 Remove all excess braze alloy.

I PROCEDURE(Continued)

71/-81 to the fuel nozzle assembly per BMP drawing BMP3604180 or BMP3609474 and process 7.1B or 7.1D using 4777 or 4779 braze alloy, respectively.

- 2.4 Remove all excess braze alloy.

3. Weld repair vane gas path cracks as follows (see Figure 1):

NOTE: THE DEFLECTOR AND FLANGE MUST BE REMOVED IN ORDER TO COMPLETE THE FOLLOWING STEPS.

- 3.1 Clean and prepare crack for weld.
- 3.2 TIG weld crack per BMP process 6.1B using N-155 weld wire.
- 3.3 Rework excess weld and recontour vanes per BMP drawing BMP3604180 or BMP3609474

Title: **Swirl, Fuel Nozzle - GTCP85**

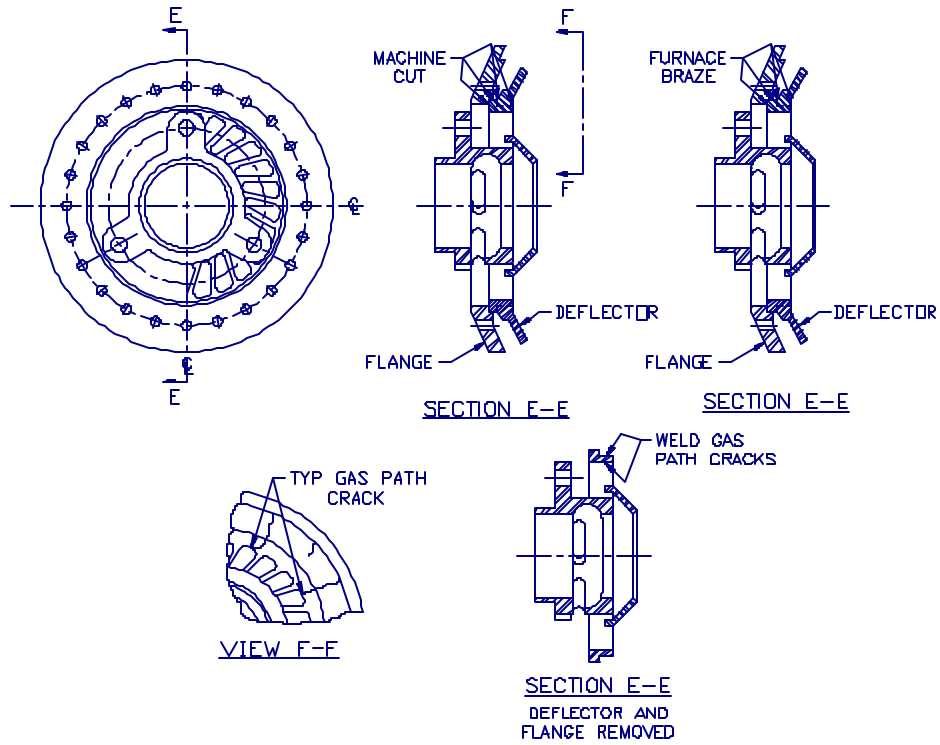


Figure 1



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I SUBSTANTIATION

ATTENTION: Substantiation Data is considered Proprietary and is not customarily included when major repairs are sent to our Customers. Please contact our Quality Control Department if you require any additional information.

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

DATE

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

March 18, 1998

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE Garrett	MODEL NO. GTCP85	TYPE (Airplane, Radio, Helicopter, etc.) APU	NAME OF APPLICANT Britt Metal Processing
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LIST OF DATA

IDENTIFICATION	TITLE
9108064 Rev. A (3/11/98)	Swirl, Fuel Nozzle - GTCP85 (P/N's 3604180-1/-2/-3/-4/-5, 3609474-1/-2/-3/-4/-5)
BMP3604180 Rev. A (6/9/92)	Swirl, Fuel Nozzle - GTCP85 APU
BMP3609474 (3/11/98)	Swirl, Fuel Nozzle - GTCP85 APU
----- End of Data -----	

PURPOSE OF DATA

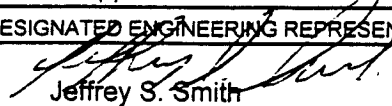
BMP defined major Repair for the GTCP85 APU Fuel Nozzle

APPLICABLE REQUIREMENTS (List specific sections)

FAR 33.15
TSO-C77a

CERTIFICATION - Under authority vested by direction of the Administrator and in accordance with conditions and limitations of appointment under Part 183 of the Federal Aviation Regulations, data listed above and on attached sheets numbered _____ have been examined in accordance with established procedures and found to comply with applicable

I (W) Therefore Recommend approval of these data
 Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
 Jeffrey S. Smith	SO-891	Engines / APU