

<b>MAINTENANCE &amp; ENGINEERING</b>  <b>FORMS</b>	<b>ENGINE BSI CONDITION REPORT</b>  <b>WORK ORDER 17989</b>  <b>A/C REG 5H-PAG...ESN.120578</b>
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## 1. GENERAL DATA

Date: 25/05/2017 Customer: \_\_\_\_\_

Station: \_\_\_\_\_

Aircraft Registration: \_\_\_\_\_ Aircraft MSN: 384

Engine Model: PW 121 Engine S/N: \*\*\*\*\*

Engine Position: RH

Engine TSN 26874:03 Engine CSN 27458

Engine TSO 2521:33 Engine CSO 2378

## 2. ENGINE BORESCOPE INSPECTION FINDINGS

A borescope inspection was performed to evaluate engine component condition in the following areas: RGB & TURBOMACHINERY (L.P. impeller, C.C. liner. H.P Vane assembly, H.P Blades, Shroud segments & SED duct). This borescope performed in accordance with Pratt and Whitney Canada Maintenance Manual **P/N 3034642 Rev 58.3 APRIL' 2017**

### 2.1 RGB- 121184

TSN- 23116:38 TSO 2521:33

CSN N/A CSO 2378

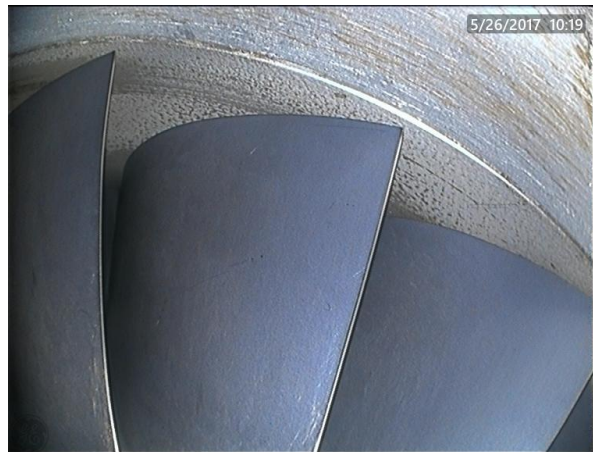
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**2.2 TURBOMACHINERY**

**2.2.1 L.P. Impeller Inspection:**

Access through the engine intake was used to inspect the L.P. compressor. The L.P compressor was found in good condition with L.E minor dent with dirty deposit observed.



Photos 1 - L.P. impeller condition is good

**2.2.2 Hot Section:**

Access through the igniter plug ports was used to inspect the H.P. turbine blades, shroud segments, H.P triple vanes, and small exit duct and CC liners.

The H.P turbine blades were found in good condition with L.E Light top coating material loss.

Shroud segments found in good condition with no signs of blade tip rub as observed.

H.P triple vanes found in good condition

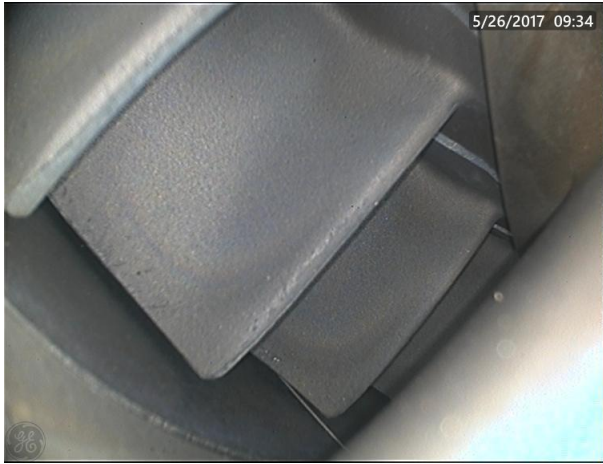
Small exit duct found in good condition

Combustion liner found in good condition with some black carbon deposit as observed.

Fuel nozzles inspected and found with good condition.

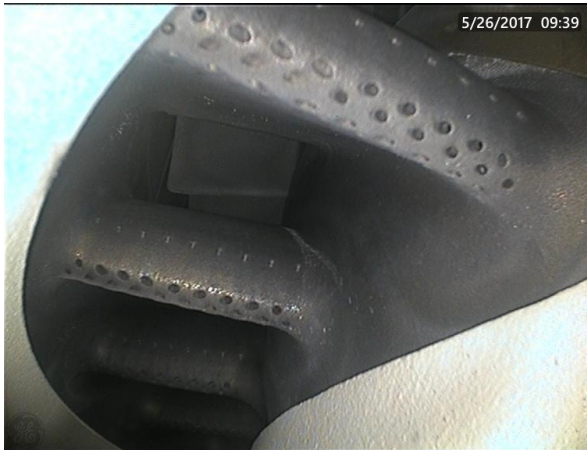
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Photos 2 - H.P. turbine blade and shroud segment condition. Is good with L.E Light with cobwebs.

Top coating material loss



Photos 3 - H.P. triple vane L.E. condition.good

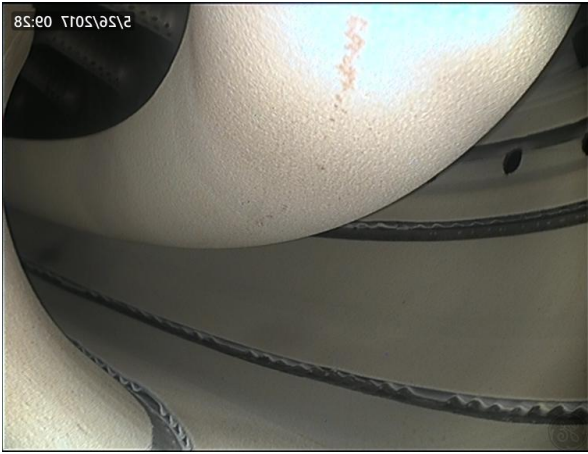


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Photos 4 - H.P. triple vane trailing edge condition good .



Photos 5 - S.E.D. (Small Exit Duct) condition good,



Photos 6 - C.C. liner condition good



Photos 7 - C.C. liner condition is good with black soot to some area.

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Photos 8 - Fuel nozzle condition GOOD

Borescope summary:

**ENGINE S/N: PCE 120578**

PART DESCRIPTION	FINDINGS
LP IMPELLER	GOOD CONDITION
CC OUTER LINER	GOOD CONDITION
CC INNER LINER	GOOD CONDITION
HPT VANES ASSY AND SMALL EXIT DUCT	GOOD CONDITION
HPT TURBINE BLADES AND SHROUDS	GOOD CONDITION

The overall condition of the viewed components is considered to be good. It is recommended to perform more regular compressor recovery washes to help remove the dirt build up observed inside the compressor sections.

Note:

Extended use of high engine power settings is also known to cause accelerated hot section wear on engine CC liner and H.P. vane assemblies. Where possible, reduced power settings will contribute to increased hot section component durability and lower operating costs.

*Note:*

*Due to the nature of borescope inspections and the limited access to internal components, the findings in this report are limited to the viewed areas only. This report does not constitute Certificate of release.*

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All pertinent information held on file at \*\*\*\* Services \*\*\*\*\* under Work Order no **17989**

The data relevant to the accumulated service life of engine have been updated on date **25/05/2017**

<b>Technician</b>	<b>Engineer</b>
Name :	Name:
Date: 25/05/2017	Date:
Signature:	Signature and Stamp