	<h2 style="margin: 0;"><u><b>HOT SECTION INSPECTION</b></u></h2> <p style="margin: 0;"><b>(PT6A-140)</b></p> <p style="margin: 0;">The purpose of this form is to <b><u>record</u></b> that the activities have been performed <b><u>in accordance with the P&amp;WC Maintenance Manual Turboprop Gas Turbine Engine Model PT6-Series</u></b>. For the correct methods, fits and clearances, torque figures, safety locking requirements, lubrications, sealants etc. refer to the appropriate manual sections.</p>		
REFERENCE: P&WC MM PN. 3075742 Task 72-00-00-280-812			
Customer		Engine Model	
Aircraft Registration		A/C TTIS.	
Engine SN.		A/C Landing.	
Engine TSN		Date Performed.	
Engine CSN		Work. No.	
<b>• REMOVAL INSPECTION</b>			
<b>No.</b>	<b>Description</b>		<b>Stamp Eng.</b>
1.	Ground Performance Run.  <b><u>Note:</u></b> Perform for Normal Schedule Only		
2.	Remove Externals.		
3.	Remove Power Section.		
4	Record CT Blade Tip Clearance. “Form CT BLADE TIP CLEARANCE – ASSEMBLY”  Note: Minimum Clearance 0.012 in. (0.30 mm)		
5.	Remove CT Disk Assembly		

6.	Remove Fuel Nozzles.	
7.	Remove Ignitor Plugs.	
8.	Remove Compressor Turbine Stators.	
7	Remove Combustion Chamber Inner Liner.	
8.	Remove Large Exit Duct	
9.	Test T5 Harness / Thermocouples	
<b>• INTERNAL COMPONENT INSPECTION</b>		
1.	<p>Examine for general condition, including cracks, distortion, corrosion and evidence of overheating.</p> <p><b><u>Note:</u></b> <b>Measure and takes pictures of defects and damage found.</b></p> <div style="border: 2px solid black; height: 300px; margin: 10px 0; position: relative;"> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); border: 1px dashed black; padding: 10px;">Place for Picture</div> </div>	

2.	<b>Removed Parts Records.</b> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <th style="width: 30%;">Description</th> <th style="width: 20%;">PN.</th> <th style="width: 20%;">SN.</th> <th style="width: 30%;">Qty.</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	Description	PN.	SN.	Qty.									
Description	PN.	SN.	Qty.											
<b>B.2. Combustion Chamber Liners, Large and Small Exit Ducts.</b>														
1.	<p>Examine for general condition, including cracks, distortion, burning, blockage of cooling holes due to repair and coating loss. Any amount of coating loss is acceptable provided burning of parent metal has not occurred. Verify the cooling ring gaps.</p> <p><b><u>Note:</u></b></p> <ul style="list-style-type: none"> <li>- Measure and takes pictures of defects and damage found.</li> </ul> <div style="border: 2px solid black; height: 300px; margin-top: 20px; position: relative;"> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); border: 1px dotted black; padding: 10px;"> Place for Picture </div> </div>													
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Description	PN.	SN.	Qty.											

**B.3. Compressor Vane Ring Assembly, Shroud Housing.**

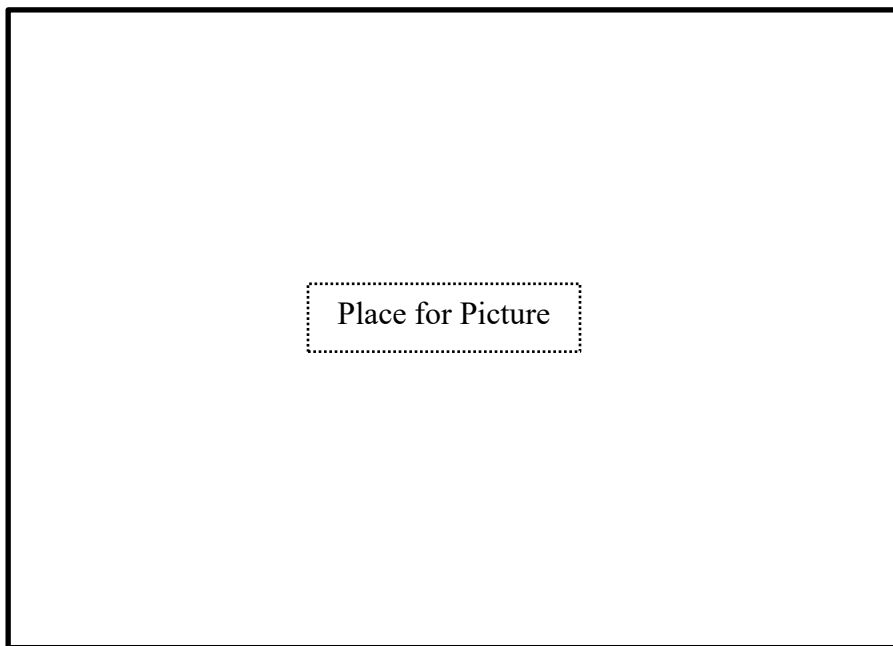
1.	<p>Examine for general condition including cracks, coating loss, erosion of parent metal or impact damage. Examine vane ring cooling air inlet and outlet ports for blockage.</p>																	
	<p><b><u>Note:</u></b> <b>Measure and takes pictures of defects and damage found.</b></p> <div style="border: 2px solid black; width: 50%; margin: 20px auto; height: 250px; position: relative;"> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); border: 1px dashed black; padding: 10px;"> Place for Picture </div> </div>																	
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Description	PN.	SN.	Qty.															

#### **B.4. Compressor Turbine Shroud Segments.**

1. Examine for general condition including cracks, distortion, erosion and metal build-up.

**Note:**

**Measure and takes pictures of defects and damage found.**



2. **Removed Parts Records.**

Description	PN.	SN.	Qty.

#### **B.5. Compressor Turbine Disk Assembly.**

1. Measure Compressor Turbine Rotor Diameter.

2. Examine CT blades for tip rub, erosion, impact damage, coating loss, cracks, shift and circumferential movement. If a crack is found on any blade, ship the CT disk assembly to an approved overhaul facility. The complete set of blades must be discarded and replaced with a new set of CT blades.

3.	Examine blade retaining rivets for condition.																	
5.	<p><b>Removed Parts Records.</b></p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <th style="width: 30%;">Description</th> <th style="width: 20%;">PN.</th> <th style="width: 20%;">SN.</th> <th style="width: 30%;">Qty.</th> </tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </table>	Description	PN.	SN.	Qty.													
Description	PN.	SN.	Qty.															
<b>B.6. Inter stage Sealing Rings.</b>																		
1.	<p>Examine for general condition including Wear, fretting and distortion.  <b><u>Note:</u></b>  <b>Measure and takes pictures of defects and damage found.</b></p> <div style="border: 2px solid black; width: 500px; height: 300px; margin: 20px auto; position: relative;"> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); border: 1px dashed black; padding: 10px;">Place for Picture</div> </div>																	
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Description	PN.	SN.	Qty.															

**B.7. Fuel Nozzles, Fuel Nozzle Sheaths**

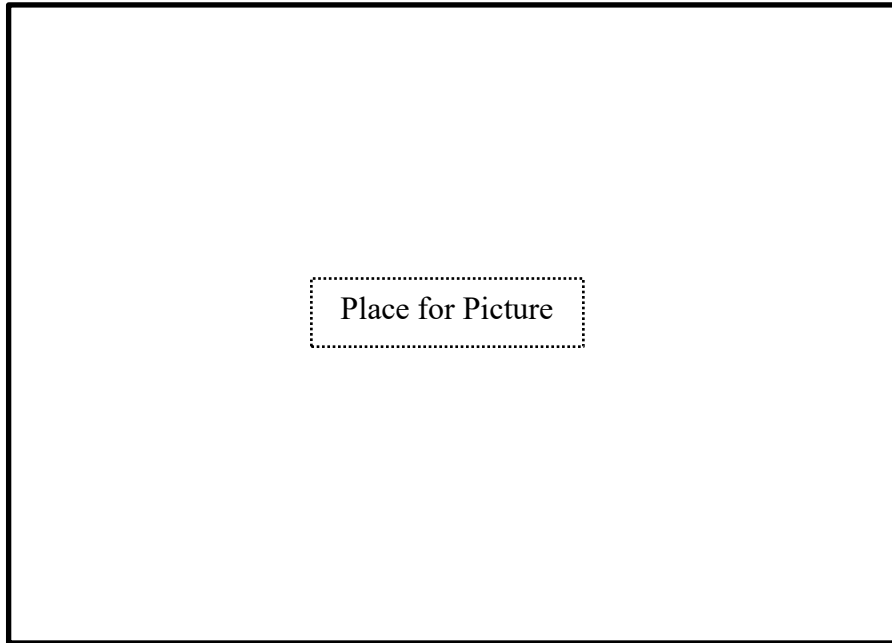
1.	Dissimilarity of carbon build-up. Perform functional test or replaced with serviceable set of cleaned and inspected fuel nozzle set.													
2.	<p>Examine for general condition including Fretting wear, erosion and carbon build-up.</p> <p><b><u>Note:</u></b> <b>Measure and takes pictures of defects and damage found.</b></p> <div style="border: 2px solid black; width: 500px; height: 250px; margin: 20px auto; position: relative;"> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); border: 1px dashed black; padding: 10px;">Place for Picture</div> </div>													
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Description	PN.	SN.	Qty.											

**B.8. Compressor Inlet.**

1. Remove air inlet screen, examine inlet area and struts, first-stage blades and vanes for dirt deposits, corrosion and cracks.

**Note:**

**Measure and takes pictures of defects and damage found.**



2. **Removed Parts Records.**

Description	PN.	SN.	Qty.

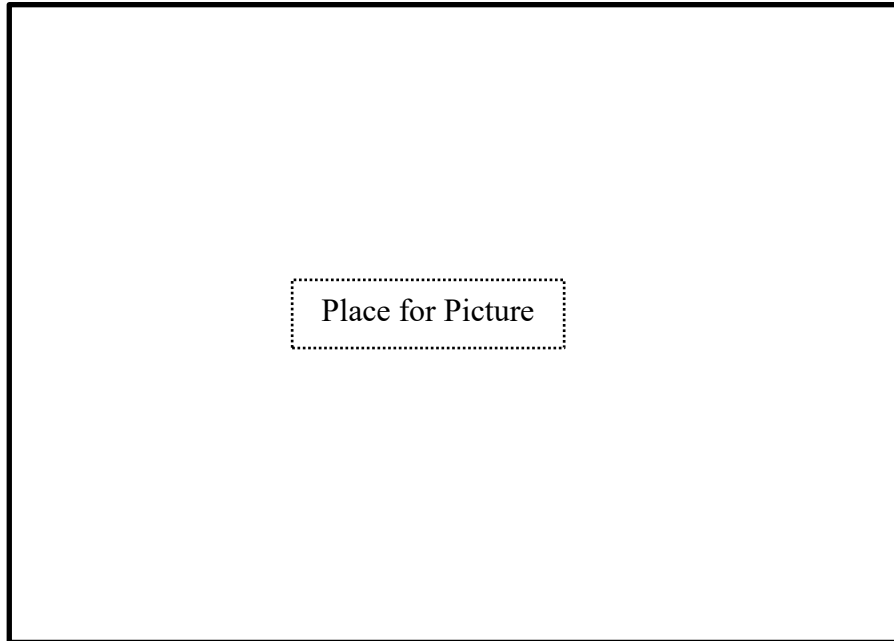


**B.9. Trim Thermocouple.**

1. Check attachment of lugs and leads. Carry out operational check.

**Note:**

**Measure and takes pictures of defects and damage found.**



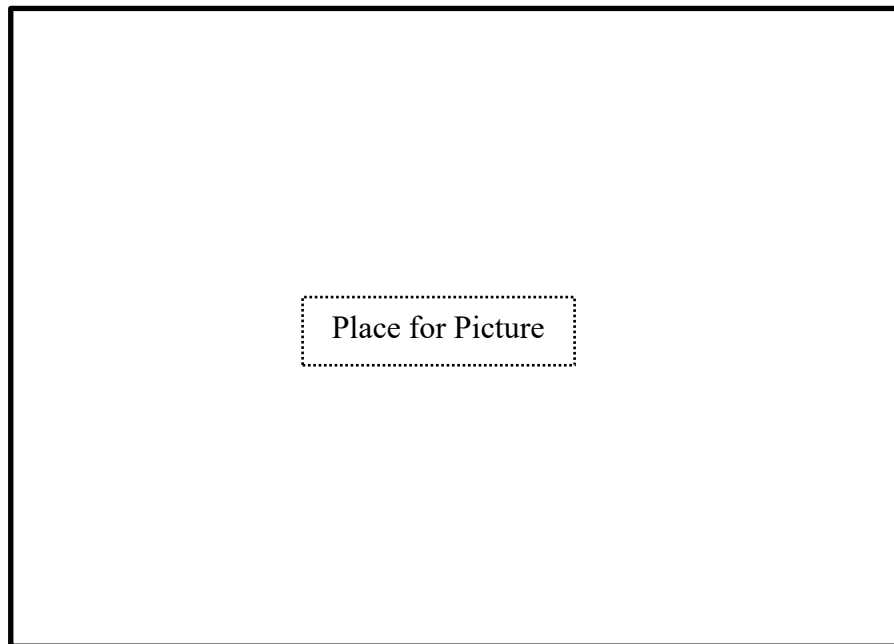
2. **Removed Parts Records.**

Description	PN.	SN.	Qty.

<b>A. Power Section Module</b>																
<b>C.1. Power Turbine Stator Housing</b>																
1.	<p>Cracks, none permitted. Check for proper sealing with inter stage sealing rings.  <b><u>Note:</u></b>  <b>Measure and takes pictures of defects and damage found.</b></p> <div style="border: 2px solid black; width: 500px; height: 300px; margin: 20px auto; position: relative;"> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); border: 1px dashed black; padding: 10px;">Place for Picture</div> </div>															
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Description	PN.	SN.	Qty.													

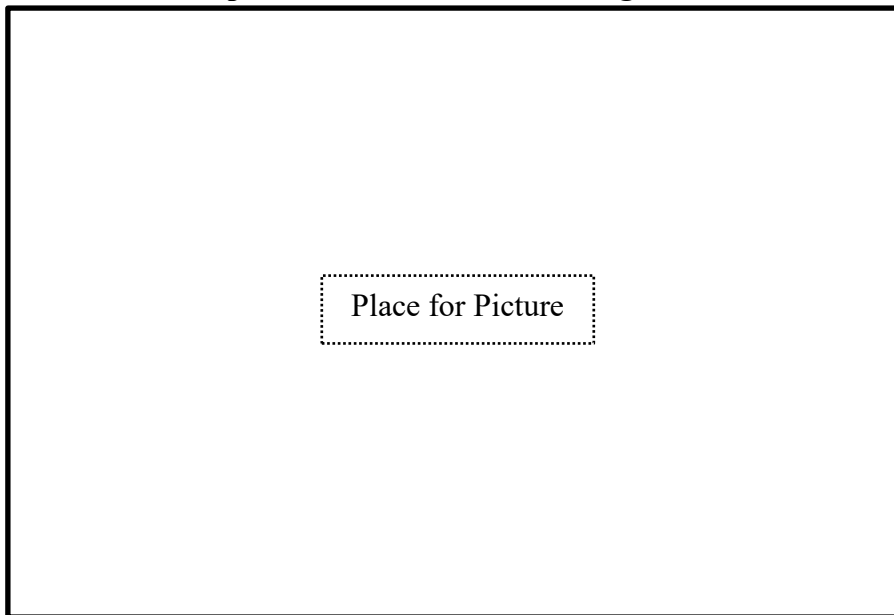
### C.2. T5 Temperature Sensing System

- |    |  |  |
|----|--|--|
| 1. | Attachment, wiring harness and lugs. Check operation.<br><b><u>Note:</u></b><br><b>Measure and takes pictures of defects and damage found.</b> |  |
|----|--|--|



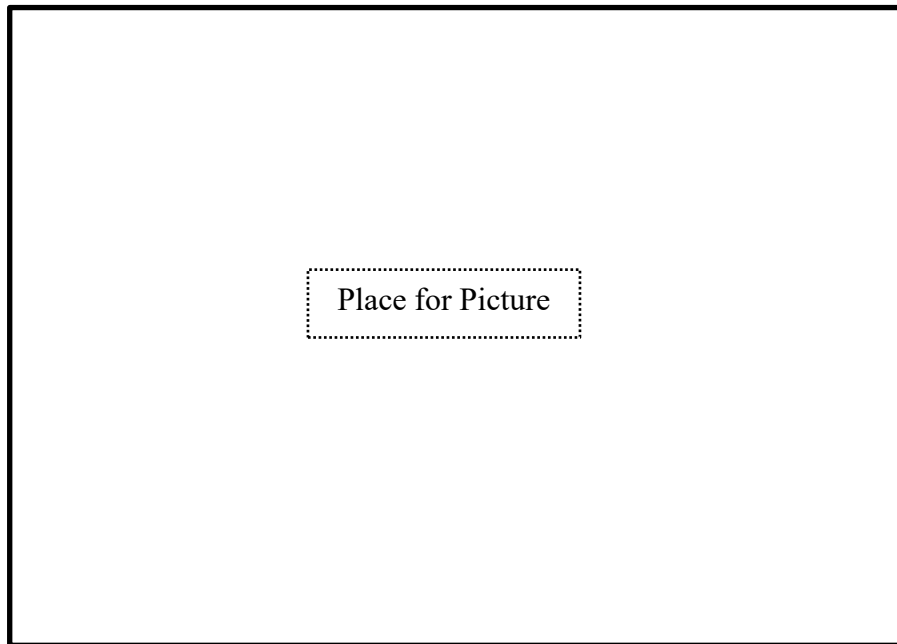
### C.3. Power Turbine Disk Assembly

- |    |  |  |
|----|--|--|
| 1. | Examine for general condition Blades for impact damage, erosion and cracks.<br><b><u>Note:</u></b><br><b>Measure and takes pictures of defects and damage found.</b> |  |
|----|--|--|



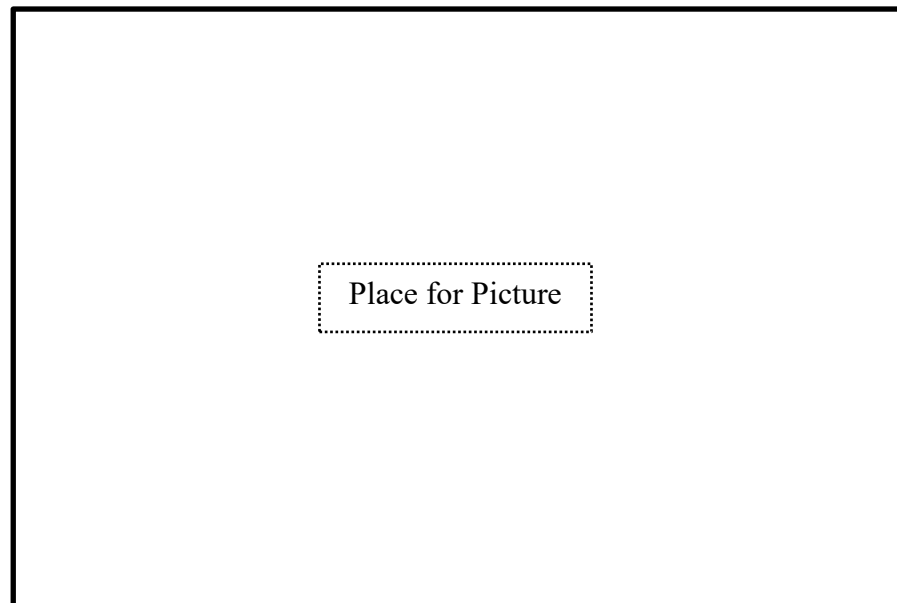
#### C.4. Power Turbine Stator Assembly

- |    |   |  |
|----|---|--|
| 1. | Examine for general condition Cracks, erosion and impact damage.<br><b><u>Note:</u></b><br><b>Measure and takes pictures of defects and damage found.</b> |  |
|----|---|--|



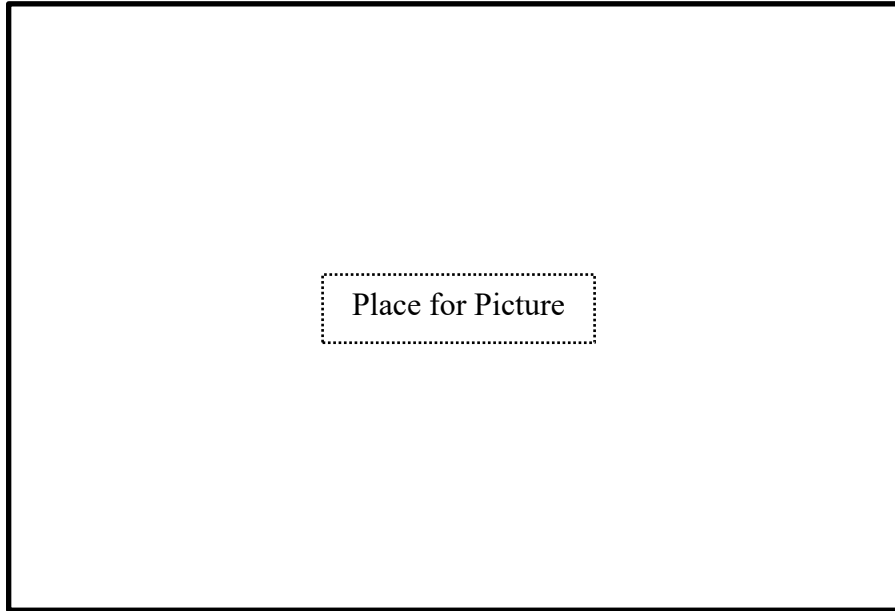
#### C.5. Exhaust Duct.

- |    |   |  |
|----|---|--|
| 1. | Examine for general condition Cracks and distortion.<br><b><u>Note:</u></b><br><b>Measure and takes pictures of defects and damage found.</b> |  |
|----|---|--|



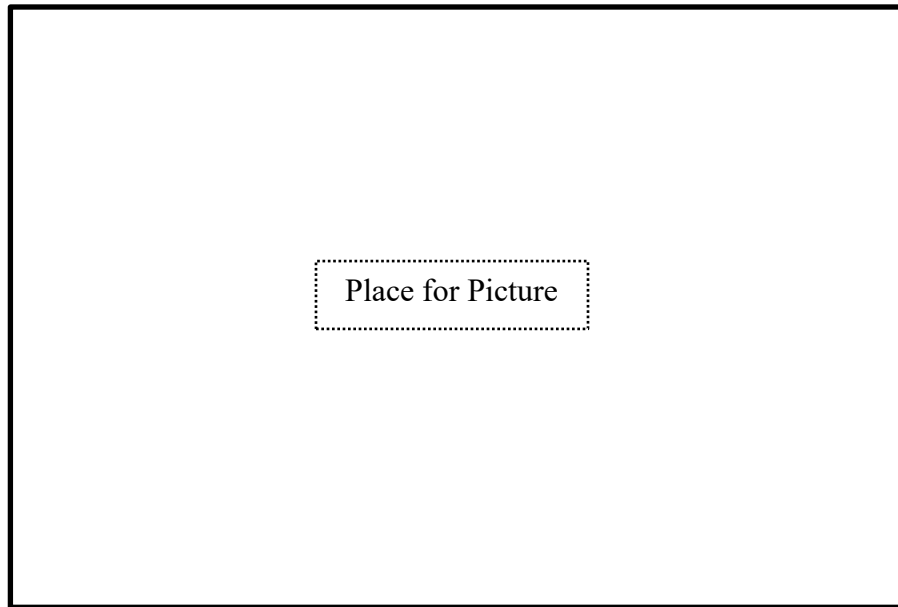
**C.6. Reduction Gearbox Oil Strainer.**

- |    |  |  |
|----|--|--|
| 1. | Remove and examine assembly for foreign matter.<br><u><b>Note:</b></u><br><b>Measure and takes pictures of defects and damage found.</b> |  |
|----|--|--|



**C.7. Chip Detector**

- |    |   |  |
|----|---|--|
| 1. | Remove and inspect chip detector for metal deposits.<br><u><b>Note:</b></u><br><b>Measure and takes pictures of defects and damage found.</b> |  |
|----|---|--|



2.	<b>Removed Parts Records.</b>			
	Description	PN.	SN.	Qty.
<b>• INSTALLATION INSPECTION</b>				
No.	Description	Stamp		
		Eng.	RII	
1.	Install Large Exit Duct			
2.	Install Combustion Liner			
3.	Install Fuel Nozzles			
4.	Install Ignitor Plugs			
5.	Install Compressor Turbine Stator			
6.	<p>Checking locking of Tabwashers.</p> <p><b>If N/A Locked Tabwashers photographed</b></p> <div style="border: 2px solid black; width: 400px; height: 200px; margin: 20px auto; position: relative;"> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); border: 1px dotted black; padding: 5px;">Place for Picture</div> </div>			

7.	Verify cleanliness of mating surface between CT disk and stubshaft		
8.	Install CT dis Assembly		
9.	Record CT Blade Tip Clearance “Form CT BLADE TIP CLEARANCE – ASSEMBLY”		
10.	<p>Check locking of cupwasher</p> <p><b>If N/A Locked cupwasher photographed</b></p> <div style="border: 2px solid black; width: 400px; height: 250px; margin: 20px auto; position: relative;"> <div style="border: 1px dashed black; width: 150px; height: 40px; position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); text-align: center; line-height: 40px;">Place for Picture</div> </div>		
11.	Test T5 Assembly		
12.	Install Power Section		
13.	Test T5 Assembly		
13.	Install Externals		



14.	Ground power check.		
<p style="text-align: center;"><b>MAINTENANCE RELEASE</b></p> <p>I hereby certify that the aircraft has been maintained in accordance with the PW&amp;C Engine Maintenance Manual and is determined to be for Return to Service.</p> <p>Name &amp; Stamp: _____ Date: _____</p>			





## CT BLADE TIP CLEARANCE DISASSEMBLY

REF FORM SCA-MTC 089 –  
HOT SECTION INSPECTION  
ITEM NO. A-4

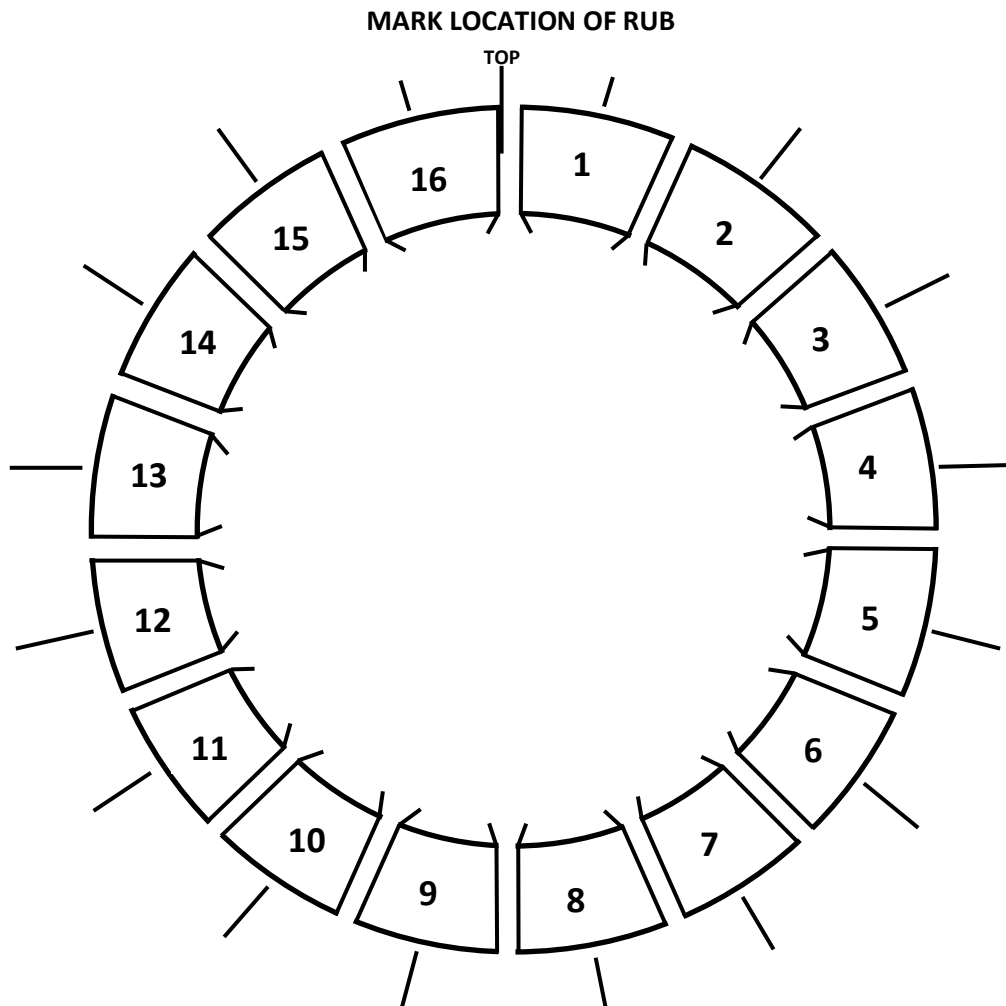
JOB. NO:	CUSTOMER:	ENGINE MODEL:	ENGINE SN:

CAUTION THIS WORKSHEET SERVES AS RECORD OF COMPLIANCE AND SHOULD BY NO MEANS BE USED AS REFERENCE DOCUMENT FOR CARRYING OUT ENGINE BUILD. THE MAINTENANCE/OVERHAUL MANUAL SHOULD AT ALL TIMES BE REFERRED TO FOR DETAILED INSTRUCTION

**NOTE: CHECK SERVICE BULLETIN STATUS FOR CORRECT TIP CLEARANCE**

RECORD MINIMUM REQUIRED: \_\_\_\_\_  
 MINIMUM TIP CLEARANCE: \_\_\_\_\_  
 MAXIMUM TIP CLEARANCE: \_\_\_\_\_

**MUST BE RESPECTED AT ALL POINTS**  
 (Disc loaded in direction of measurement)  
 AVERAGE TIP CLEARANCE: \_\_\_\_\_



NOTE: During tip clearance checks, if the measurement is less than minimum.

\*Remove CT Disc and reindex shroud assembly to better centralize.

\*Recheck clearance and grind localized high spots as necessary

DATE:		ENGINEER STAMP/SIGN:	



## CT BLADE TIP CLEARANCE ASSEMBLY

REF FORM SCA-MTC 089 –  
HOT SECTION INSPECTION  
ITEM NO. A-4

JOB. NO:	CUSTOMER:	ENGINE MODEL:	ENGINE SN:

CAUTION THIS WORKSHEET SERVES AS RECORD OF COMPLIANCE AND SHOULD BY NO MEANS BE USED AS REFERENCE DOCUMENT FOR CARRYING OUT ENGINE BUILD. THE MAINTENANCE/OVERHAUL MANUAL SHOULD AT ALL TIMES BE REFERRED TO FOR DETAILED INSTRUCTION

**NOTE: CHECK SERVICE BULLETIN STATUS FOR CORRECT TIP CLEARANCE**

RECORD MINIMUM REQUIRED: \_\_\_\_\_

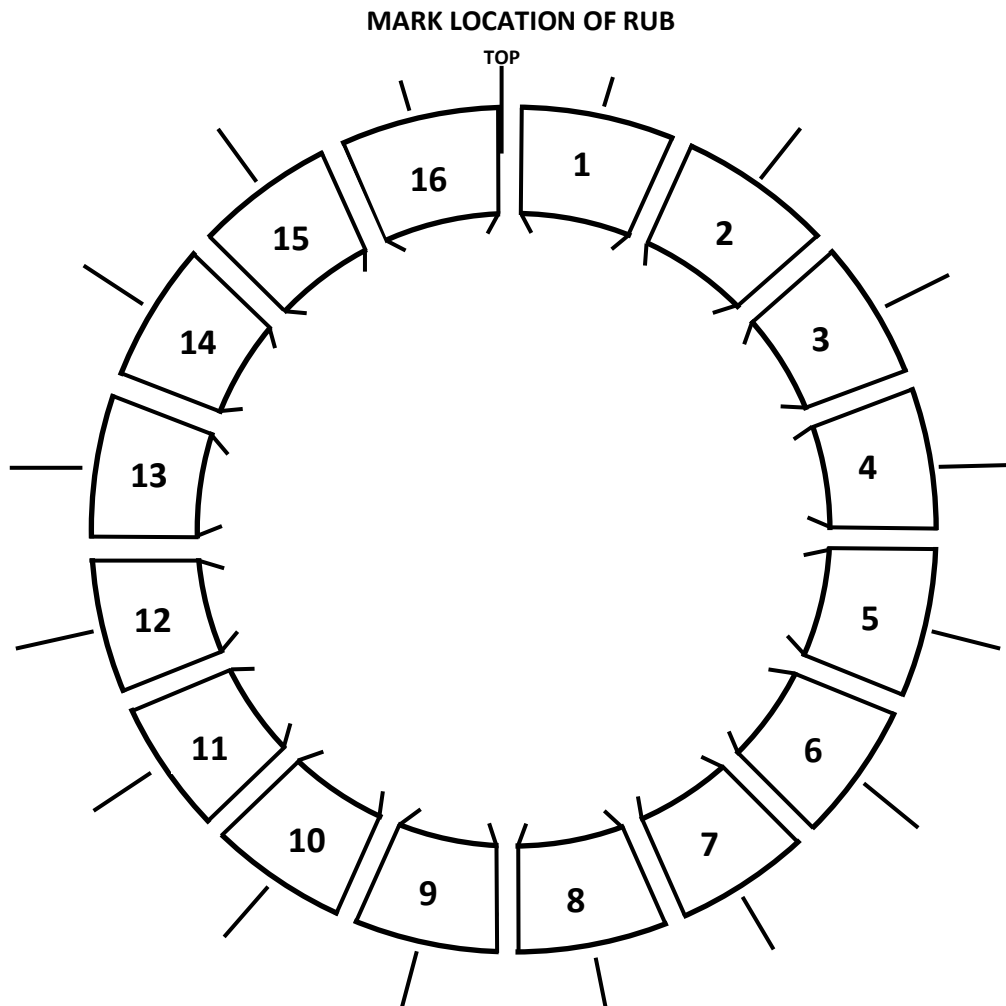
MINIMUM TIP CLEARANCE: \_\_\_\_\_

MAXIMUM TIP CLEARANCE: \_\_\_\_\_

**MUST BE RESPECTED AT ALL POINTS**

(Disc loaded in direction of measurement)

AVERAGE TIP CLEARANCE: \_\_\_\_\_



NOTE: During tip clearance checks, if the measurement is less than minimum.

\*Remove CT Disc and reindex shroud assembly to better centralize.

\*Recheck clearance and grind localized high spots as necessary

DATE:		ENGINEER STAMP/SIGN:	
-------	--	----------------------	--