MAINTENANCE PROGRAM

PILATUS PORTER PC6

DOCUMENT NUMBER	REVISION NUMBER	DATE
SCA/TEK/1-004	02	21 MARCH 2022
PT. Smart Cakrawala Aviation		

PREPARED BY	GUSRIL PANE TECHNICAL SUPPORT
REVIEWED BY	YANUAR ABDUL FATTAH CHIEF INSPECTOR
APPROVED BY	ISTIONO TECHNICAL MANAGER

PT.SCA

MAINTENANCE PROGRAM

CMP PC-6

REV 02

CN:ORIGINAL

PT.SCA

MAINTENANCE PROGRAM

CMP PC-6

REV 02

CN:ORIGINAL

MINISTRY OF TRANSPORTATION
DIRECTORATE GENERAL OF CIVIL AVIATION

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Our ref: AU.010/14/16/DKPPU-2022

Jakarta, 19 April 2022

To: **Mr. ISTIONO**
Maintenance Manager
Smartdeal Building 4th floor
Jl. Cideng Timur No. 16A, Petojo Utara, Gambir
Jakarta Pusat 10130, Indonesia

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Subject : **Approval Of Maintenance Program (MP) PC-6 Pilatus Porter**

Dear **Mr. Istiono**,

I refer to the submission of the above mentioned document for review and approval on April 11th, 2021.

The Maintenance Program PC-6 Pilatus Porter Revision No. 02, dated 21 March 2022 has been reviewed and found in compliance with the Civil Aviation Safety Regulation Part 135 and is **Approved.**

Faithfully yours

a.n.
SOKHIB AL ROKHMAN
Deputy Director of Airworthiness

MINISTRY OF TRANSPORTATION
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CONTROL PAGE

TITLE	PAGE	REVISION NO	DATE
List of Effective Page (LEP)	LEP-1	02	21 March 2022

This revision of Maintenance Program (MP) PC-6 Pilatus Porter updated to Revise, with reference to Aircraft Maintenance Manual, revision no. 32, dated 31 January 2022 and Pratt & Whitney Maintenance Manual PT6A Series revision no. 54, dated 17 January 2022 has been reviewed and is acceptable in its form and content.

The Maintenance Program (MP) PC-6 Pilatus Porter has been reviewed and found to meet all applicable requirements set forth in the Aviation Act No.1 Year 2009 and Civil Aviation Safety Regulations (CASR).

This Maintenance Program (MP) PC-6 Pilatus Porter is approved for used by PT. Smart Cakrawala Aviation with the Understanding that Director General of Civil Aviation (DGCA) may require further revision to this manual as regulatory requirements or airworthiness standards are amended.

Any change to these manuals shall be reported to the Director General of Civil Aviation (DGCA) for Approval.

Jakarta, 19 April 2022

On behalf of the Director of Airworthiness and Aircraft Operation

a.n.
SOKHIB AL ROKHMAN
Deputy Director of Airworthiness

DISTRIBUTION LIST OF MAINTENANCE PROGRAM PILATUS PORTER PC6

This Pilatus Porter PC6 Maintenance Program shall be distributed to all personnel involved and will be responsible of Inspection Unit as the copy's controller.

DISTRIBUTION	COPIES NUMBER
Library	ORIGINAL
Chief Inspector	01
Technical Manager	02
DGCA	03
Base Tarakan	04
Base Singkawang	05
Base Nabire	06
Base Malinau	07
Base Timika	08
Station Dekai	09
Station Tanah Merah	10

1. Printed Format Distribution List

   Any Printed-Format (Paper Copy) of this Maintenance Program is UNCONTROLLED except for Document as listed on Distribution List Table above.

2. Electronic Format Distribution List

   PT. Smart Cakrawala Aviation utilizes an electronic system for the management and control of this Maintenance Program. This document will be available and distributed throughout the organization in Portable Document Format (PDF).

RECORD OF REVISION

This record of revisions shall be retained in this Maintenance Program Pilatus Porter PC-6. Revisions shall be inserted to replace the superseded pages in this document with the revision date, insertion date and name of person incorporating the revision annotated in the appropriate block below.

REVISION NUMBER	REVISION DATE	INSERTION DATE	INSERTED BY (Name in BLK)
00	April 2021	April 2021	GZP
01	18 February 2022	18 February 2022	GZP
02	21 March 2022	21 March 2022	GZP

REVISION NUMBER	REVISION DATE	CHAPTER	PAGE	DESCRIPTION OF CHANGED
01	18 February 2022	Cover	Cover	Changed the Revision
		Distribution List	DL.1	Deleted PK-SNB in Distribution List Deleted PK-SNC in Distribution List Added Base Malinau in Distribution List Added Base Timika in Distribution List Added Station Dekai in Distribution List Added Station Tanah Merah in Distributin List
		Record of Revision	RoR.1	Added New Revision
		Revision Highlight	RH.2	Added New Revision Highlight
		List of Effective Page	LEP.1	Changed the Revision
		Table of Content	TOC.1 TOC.2	Added New Revision Added New Revision
		Chapter 1	Page 1.4	Changed AMM Revision Changed EMM Revision
		Chapter 4	Page 4.2	Deleted Stabilizer trim actuator Deleted Flap Actuator Added Aileron to rudder interconnect-tension springs Added NOTE 1
		Chapter 5	Page 5.6	Changed Interval Fuel Nozzle Inspection of Clean and Test from 200 Hrs to 400 Hrs.

REVISION NUMBER	REVISION DATE	CHAPTER	PAGE	DESCRIPTION OF CHANGED
02	21 March 2022	Cover	Cover	Changed the Revision
		Record of Revision	RoR.1	Added New Revision
		Revision Highlight	RH.3	Added New Revision Highlight
		List of Effective Page	LEP.1	Changed the Revision
		Table of Content	TOC.1 TOC.2	Added New Revision Added New Revision
		Chapter 1	Page 1.2	Revised Manual Approval from Chief Inspector to Technical Manager
		Chapter 1	Page 1.4	Added PK-SNE to Affected Aircraft List
		Chapter 3	Page 3.1	Added Item Authorization in Chapter 3.1 LINE MAINTENANCE CHECK

REVISION HIGHLIGHT

REVISION NUMBER	REVISION DATE	CHAPTER	PAGE	DESCRIPTION OF CHANGED
00	April 2021	All	All	Original

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LIST OF EFFECTIVE PAGES

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	CP-1	02	21 Mar 2022
	DL.1	01	18 Feb 2022
	RoR.1	02	21 Mar 2022
	RH.1	00	12 Apr 2021
	RH.2	01	18 Feb 2022
	RH.3	02	21 Mar 2022
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PT. SMART CAKRAWALA AVIATION	DGCA
Istiono Technical Manager	Hilman Nugraha SSI.T Principal Airworthiness Inspector

TABLE OF CONTENT

1.1. PREFACE

PT. Smart Cakrawala Aviation is engaged in the carriage of air charter under the terms and conditions of CASR Part 135. Air Operator Certificate Number: AOC/135-062 issued by Indonesian Directorate General of Civil Aviation. The Maintenance Program for Pilatus Porter PC-6 has been prepared in accordance with Maintenance Manual and Civil Aviation Safety Regulations, Parts 135.367 and is not contrary to any applicable Regulation, or the Company's Operations Specifications.

The Maintenance Program has been compiled for the use and guidance of all personnel responsible for performing maintenance and/or overhaul on aircraft, engine and appliances. Each manual is controlled and assigned to specific individual's aircraft type as necessary.

This manual is to be used in conjunction with other manuals, manufactures' maintenance and overhaul manuals and in accordance with applicable Aviation Regulations. The Maintenance Program will provide direction for use with aircraft, engine, and component maintenance and overhaul manuals. It also provides guidelines on how to fulfill requirements outlined in CASR's, AD's, SB's, etc. and the proper completion of the forms related to and distribution of the necessary reports in conjunction with the CASR's. If any material described in this Manual is in conflict with the CASR, the CASR will take priority. Manufacturer's manuals are also included and are considered part of the Company manual.

All maintenance employees are required to adhere to the instructions contained in this manual and follow the procedures outlined. In the event procedures in the manufacturers' publications differ from this manual, the manufacturer's manual prevails.

All personnel are encouraged to submit suggestions and recommendations to improve utilization and Maintenance quality of the manual.

1.2. INTRODUCTION

The purpose of this Maintenance Program is to provide official guide regarding the proper procedures and practices to be followed in conducting maintenance under the Air Operator Certificate issued by Directorate General of Civil Aviation in compliance with Civil Aviation Safety Regulation (CASR) Part 135 and related Parts.

Copies of this Maintenance Program shall be distributed to all out base utilizing Pilatus PC-6 Aircraft. Technical Publication shall determine the distribution of the manual as per Document Distribution Manual.

It shall be their responsibility of Technic Manager and Chief Inspector to assure that all mechanic, supervisors and inspectors are formally trained, kept current and familiar with the contents of this manual.

This Maintenance Program shall be subjected to revision as necessary. It shall be the responsibility of the person to whom this manual is issued to maintain it and insert all amendments and revisions. Such amendments and revisions shall be issued by whom this manual is issued in the form of new revised pages.

1.3. USE OF MAINTENANCE PROGRAM MANUAL

This Maintenance Program Manual gives the necessary information required to help maintenance personnel to know the maintenance program, required inspection item and hard

time components. It's designed to satisfy safety requirements, to avoid deterioration and to optimize aircraft availability with the reasonable costs in labor, material and facilities.

1.4. MANUAL CONTROL SYSTEM

1.4.1. Policy

Manuals are distributed on a required basis to the DGCA Office, PT. Smart Cakrawala Aviation Office and/or Maintenance Contract Agencies and should be used accordingly.

1. The manuals are not transferable. Holder shall retain the manuals originally issued regardless of change of station or location.
2. Text within a section (subject matter) should not be taken out of context. The reader should read the entire section for a complete understanding of the policies and procedures regarding a specific subject. If question arise, contact the Chief Inspector for clarification. A written response shall be made to clarify the matter in question.

1.4.2. Page Control System

1. Record of Revision
   Designed to quickly identify the current revision status of the manual.
2. List of Effective Pages
   Designed to provide a summary listing of all applicable pages and the revision date for the entire manual.

1.5. MANUAL REVISION AND PROCEDURE

1. Manual Revision

All amendments, revisions, and / or alterations to the Maintenance Program must be accepted by DGCA. The changes shall be recorded through incorporation in a Record of Revision.

This Maintenance Program is amended as necessary to keep the information contained therein up to date in accordance with CASR's, Manufacture's Manual, AD's and SB's.

Changes shall not be introduced through written notation on the documents but through the removal of expired pages and insertion of revised pages. The bottom of each page shall indicate the issue and amendment status (dates and numbers).

2. Procedures

a. Each Maintenance Program will have control number and assignment entry on the manual cover page. Master list containing the manual number, location and revision status will be kept.
b. Chief Inspector will periodically review the Maintenance Program with all relevant manufacture's manual, this review will either confirm that manual still current and valid for the Air Operator Certificate use or will be identified needed change.
c. This manual and revision will be approved by Technical Manager, and forward to DGCA for Approval. Upon acceptance and approved by DGCA, sufficient copies will be made and distributed the revision page to each manual holder.
d. A list effective pages will be issued with each revision so each manual can be checked and kept current.
e. Revision shall be numbered consecutively. The revised pages shall replace the earlier issued pages with the same part page number. Revision index shall be up dated; the revision status

in the bottom left hand corner must have been adjusted. The removed pages must be deleted / destroyed. The changes on the revised pages with respect to the preceding ones shall be indicated with one vertical line.

f. In case a new issue to be published, the respective issue number shall be one higher than the preceding manual. The revision number of all pages shall become zero. The preceding issued manual shall now be deleted / destroyed.

g. Whenever revisions are made, either by the company or the manufacturer, Chief Inspector shall route them to the holders of the manuals. The responsibility for inserting revisions is the direct responsibility of the manual holder.

h. The portion of text which has been revised by the addition of, or a change in, information is shown by yellow highlighting of the text. Each revised page will only show revision highlight for text changed by revision. There will be no highlight if text was deleted from the page.

1.6. GENERAL INFORMATION

1. Company Address

PT. Smart Cakrawala Aviation is authorized by the Indonesia Directorate General of Civil Aviation (DGCA) under the Civil Aviation Safety Regulations (CASRs) as a Commercial Aircraft Operator.

The company office is in Jakarta, mailing address is as follows:

PT. SMART CAKRAWALA AVIATION
Head Office
Gedung Smartdeal lt.4
Jalan Cideng Timur No.16A
Jakarta Pusat 11310
Indonesia
Phone Number : +62 216305210
Fax : +62 216324873
Email : info@smartaviation.co.id

2. Affected

a. Aircraft

Model	: Pilatus PC-6 / B2-H4
Manufacturer	: Pilatus Aircraft Ltd

b. Engine

Model	: PT6A-27
Manufacturer	: Pratt & Whitney Canada

c. Propeller

Model	: HC-D4N-3P/D9511F
Manufacturer	: Hartzell

1.7. AFFECTED AIRCRAFT

This Maintenance Program is applicable to the following aircraft:

NO.	Make and Model	Serial Number	Reg. Mark
1	Pilatus Porter PC6 G950	1015	PK-SNB
2	Pilatus Porter PC6 G950	1016	PK-SNC
3	Pilatus Porter PC6 G950	1017	PK-SNE

1.8. REFERENCES

This Maintenance Program is the basic document, which provides and specifies all scheduled and unscheduled inspection program for the Pilatus Porter PC-6 aircrafts and the related components in order to meet the minimum standard of airworthiness, which is required by the Civil Aviation Safety Regulations (CASRs) and manufacturers.

The Maintenance Program is prepared in accordance with the following Manufacturer's Technical Publications and Documents for maintenance:

a. Pilatus PC-6 Manufacture's Maintenance Manual Revision 32 – January 31, 2022.
b. Pratt & Whitney PT6A-27 Engine Maintenance Manual and other Pratt & Whitney PT6A-27 Manuals Revision 54 – January 17, 2022.
c. Hartzell Propeller's Owner Manual Doc. 149 Rev. 28 – Jun 2021.
d. Civil Aviation Safety Regulation (CASR).
e. Service Bulletins, Airworthiness Directives, Service Instructions, Service Letters etc.
f. Other documents concerning this Maintenance Program.

1.9. GRACE PERIOD FOR NEW/REVISED TASK

For Task introduced in Manufacture's Maintenance Manual as a result of Airworthiness Limitation and Inspection Requirement, SB or SIL revision without any specific grace periods, the initial accomplishment of the task may be deferred to the nearest down time or aircraft inspection.

1.10. SHORT TERM ESCALATION

Smart Aviation has privilege to escalate the inspections. The escalation is only applicable to Chapter 5, Inspection Time Limits, in the Aircraft Maintenance Manual, but does not apply to interval items required by CASR 91.411, CASR 91.413, or CASR 91.207.

Detail procedure of the escalation found in Smart Aviation Company Maintenance Manual Chapter 3.16

The Pilatus Porter PC-6 Maintenance Program contains instructions for continued airworthiness. It's designed to satisfy safety requirements, to avoid deterioration and optimize aircraft availability with the reasonable cost in labor, material and facilities.

2.1. SCHEDULE MAINTENANCE

The Scheduled inspection program includes all of the inspections for the Model Pilatus Porter PC-6 airplanes is recommended by manufacture. A Scheduled maintenance inspection program schedule applicable for airplane Smart Aviation must be selected as early as possible. The inspections are done at subsequent intervals that are related to hours, calendar months, years, or in accordance with (IAW) the manufacturer's instructions.

A calendar month starts on the first day of the month. You must complete the inspections on or before the last day of the month for their related calendar month interval.

2.2. UNSCHEDULED MAINTENANCE

Unscheduled maintenance checks are necessary if unusual incidents occur. These checks must be done before the next flight following the incident. Depending on the severity of an incident, it may be advisable to remove the wings, horizontal stabilizer, elevator, rudder and landing gear to allow a more comprehensive inspection to be done. If necessary, contact Pilatus Aircraft Limited for further advice.
These checks must be done after the following incidents occur:

2.2.1 High G-loads

These checks must be done when high g-loads that are more than the design limits occur during flight. If loose or cracked paint is found during this check, it can indicate that the structure of the aircraft is damaged.

2.2.2 Hard or Overweight Landing

If loose or cracked paint is found during this check, it can indicate that the structure of the aircraft is damaged.

a. Hard Landing
Hard landing is when the aircraft lands with a high sink rate or high sideslip, or both.

b. Overweight Landing
This is when the aircraft lands at a weight which is more than the maximum approved.

2.2.3 Tail Down Landing

A tail down landing is when the tail wheel touches the ground before the main wheels. If loose or cracked paint is found during this check, it may indicate that the structure of the aircraft is damaged.

2.2.4 Overspeed, more than V_{NE}

This check must be done if an airspeed of more than the never exceed speed (V_{NE}) is indicated. If loose or cracked paint is found during this check, it can indicate that the structure of the aircraft is damaged.

2.2.5 Overspeed with Flaps Extended (V_{FE})

This check must be done if an airspeed of more than the maximum permitted with flaps extended (VFE) is indicated. If loose or cracked paint is found during this check, it can indicate that the structure of the aircraft is damaged.

2.2.6 Engine Overtorque

a. This check must be done if the maximum permitted engine torque for the PC-6 installation is exceeded (Ref 71-00-00, Maintenance Practices).
b. If the overtorque is more than 53.5 psi during normal operation refer to the Engine Maintenance Manual.

2.2.7 Sudden Propeller Stoppage or Impact

A sudden propeller stoppage occurs when the propeller rotation stops due to contact with a hard object.

A propeller strike occurs when either a rotating propeller hits an object, or a stationary propeller is hit by a moving object.

2.2.8 Lightning Strike

Do this check if the aircraft is hit by lightning or it is suspected that it has been hit by lightning.

2.2.9 Alignment and Symmetry

These checks are done by taking selected measurements for comparison with the measurements taken at the same points on the aircraft when the aircraftwas prepared for delivery at the manufacturers.

The checks should only be done under the following conditions:

a. The aircraft must be parked in a hangar for a minimum of one hour before the check is done.
b. The aircraft must not be exposed to direct sunlight.
c. The aircraft must be on jacks.
d. Underwing fuel tanks must be removed.

If the measurements taken are outside the permitted tolerances the aircraftmust not be flown until Pilatus Aircraft Ltd advice is received.

A Recorded Aircraft Build Status Form is delivered with each aircraft and givesthe results of the symmetry check that is done before the aircraft leaves Pilatus.

2.2.10 Flight Through Volcanic Ash or Smoke

Do The check before The next flight if The aircraft was flown (or you suspect itwas flown) through volcanic smoke. The purpose of The check is to Find :

a. Abrasion or erosion of surfaces
b. Damage to the aircraft and/or engine
c. Deterioration of the aircraft Systems
d. Quantities of collected volcanic ash

2.3. UNSCHEDULED MAINTENANCE CHECKS – ENGINE

2.3.1 Engine Preservation and Depreservation

Preservation of engines in service depends on the period of inactivity and whether or not the engine may be rotated during the inactive period. An engine is considered inactive when it has not been operated either on the ground, or in flight for a minimum of ten minutes after the oil temperature has stabilized. The expected period of inactivity should be established and reference made to the Engine Preservation Procedures following.

2.3.2 Engine Inspection

Unscheduled inspection is done when the engine is subjected to the unusual stress or operating conditions, or exceeds operating limitations or gives unsatisfactory performance/handling occur. (Ref. P&WC EMM 72-00-00):

1. Engine Performance Deterioration.
2. Engine Overspeed.
3. Inadvertent Cut-off and Relight During Taxi.
4. Engine Overtemperature.
5. Overtorque.
6. Immersion in water (Send engine to an approved overhaul facility for Light Overhaul. Indicate immersion in water).
7. Dropped engine or component (Send engine or component to an approved overhaul facility for Light Overhaul. Indicated dropped engine or component; the type of surface the engine struck and from what height)
8. Material Ingestion.
9. Bird strike/Soft Material Ingestion.
10. Chip Detector Circuit Completion and/or Debris in Oil Filter.
11. Propeller Sudden Stoppage or Strike.
12. Propeller Lightning Strike.
13. Propeller Electrical Leads Shorting.

14. Heavy or Hard Landing.
15. Aircraft Flown Through Volcanic Ash or Smoke.
16. Sustained Running at Oil Temperature Outside Limits.
17. Loss of Oil/Oil Pressure or Low Oil Pressure.
18. Oil Pressure Follows Throttle.
19. Contamination by Fire Extinguishing Agents.
20. Audible Rubbing, Binding or Scraping (Any unusual engine noise requires immediate investigation).
21. Propeller Windmilling after In-flight Shutdown.
22. Contamination of Oil with Non-metallic Foreign Material.
23. Inspection of Main Oil Filter Secondary Screen
24. Starter – Generator replacement

3.1 LINE MAINTENANCE CHECK

3.1.1. Pre-flight Check

a. Definition of Service

Pre-flight Inspection is an inspection that shall be carried out before the first flight of the day. This inspection including: visual ”walk around check” and cockpit preparation, regarding aircraft system and appliances.

b. Interval

The Pre-flight Inspection accomplished not longer than 1 hour before the first flight of the day.

3.1.2. Post-flight Check

Definition of Service

Post flight inspection is an inspection that shall be carried out after flight andis recommended in the Maintenance Manual to avoid possible delays of subsequent flights that can often be eliminated by conducting a brief post flight inspection. Perform a visual inspection of the aircraft condition, security, leakage and tire inflation.

3.1.3. Authorization to Perform Pre-flight Check and Post-flight Check

Authorized engineer will perform and sign The Pre-flight and Post flight check.

Note:

In special circumtances whenever engineer not available on site the PIC maybe perform the Pre Flight or Post Flight provided the operation manual Part A has been revise and they have receive training to do so.

3.1. SCHEDULED INSPECTION

3.2.2 Inspection Requirements

As required by CASR Part 91, the aircraft must have a complete Annual Inspection each 12 calendar months of operation.

An Annual Inspection includes all the 100 Hour Inspection items.

The inspection intervals are based on normal usage of the aircraft under average environmental conditions. Aircraft operated in very hot and humid climates, or very cold and damp climates, or salt-laden atmospheres, may need more frequent inspections for wear, corrosion and lubrication. Under these adverse conditions the 100 Hour Inspection should be done in compliance with the inspection sheets at a more frequent interval until the owner or operator can set his own inspection interval based on field experience.

The 100 hours inspection interval should never be extended by more than 10 hours or according to a statement from Aircraft Maintenance Manual, which can only be used if additional time is required to get to a maintenance facility. Any extension of the 100 hours interval must be subtracted from the following inspection interval. For example, if a 100 Hours Inspection is done at 110 hours, the next is due 90 hours later at 200 hours. The owner or operator is responsible for compliance with any national regulations.

The owner or operator is primarily responsible for maintaining the aircraft in an airworthy condition. This includes compliance with Airworthiness Directives and any additional maintenance requirements from the Time Limits section of this chapter. It is further the responsibility of the owner or operator to make sure that the aircraft is inspected in accordance with the inspection sheets**.**

3.2.2 Recommended Scheduled Inspection Intervals

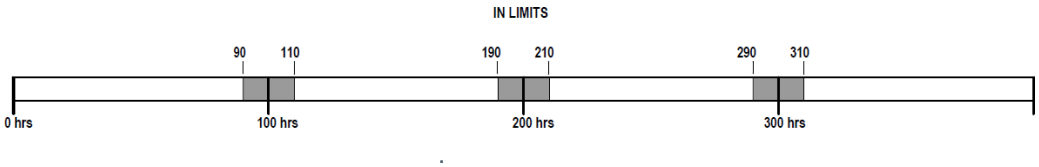
The aircraft maintenance cycle is completed each 7000 flying hours, or 14 years if this occurs first.

a. 100 Hour Inspection / Annual Inspection

The 100 Hour Inspection must be done each 100 flying hours, or each year whichever occurs first (Max. Tolerance 10 hours Ref. to OPSPEC & ACL D76).

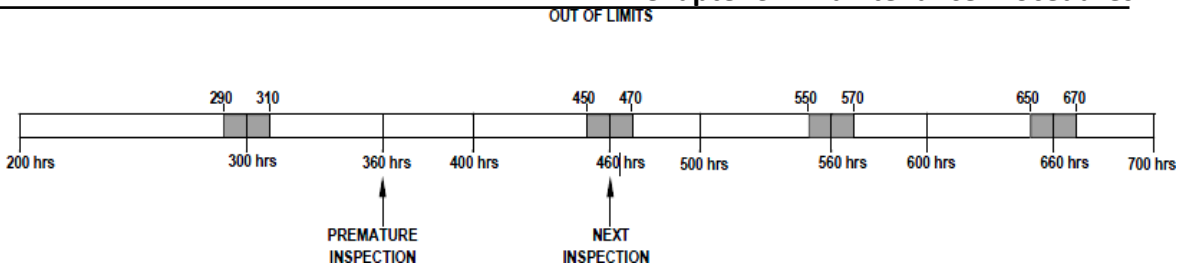
If you do the maintenance inside the permissible tolerance limits, the next planned maintenance times do not change, e.g:

1. If the standard interval is 100 hrs, the permissible tolerance is ± 10 hrs. if the maintenance work is done inside the shaded tolerance band, the maintenance intervals do not change:



You can do the maintenance earlier than the permissible tolerance limit, but if you do this the next planned maintenance times do change, e.g:

2. If the standard interval is 100 hrs, the permissible tolerance is ± 10 hrs.If the maintenance work is done earlier and outside the shaded tolerance band, the maintenance intervals do change.



a. Flying Hour Based Intervals

100 flying hours or less	: ± 10 flying hours.
More than 100 flying hours	: ± 10%, but not more than 500 flying hours.

b. Cycle Based Intervals

500 cycles or less	: ± 10%, but not more than 25 cycles.
More than 500 cycles	: ± 10%, but not more than 500 cycles.

c. Calendar Time Based Intervals

1 year or less	: ± 10%, but not more than 1 month.
More than 1 year	: ± 10%, but not more than 6 months.

3.2. SPECIAL INSPECTION

3.2.1 Partial Overhaul

A Partial Overhaul must be done when or before the aircraft completes 3500 flying hours, or at 7 years if this occurs first.

A component found to be defective during an inspection must be replaced or overhauled as applicable.

During these inspections it must be made sure that:

a. Life expired components are replaced

b. Components due for overhaul are replaced

c. Reference is made to 05-10-00 for component life's and components subject to

overhaul.

NOTE: For engine and propeller component life limits, reference must be made to the applicable Service Bulletin or Service Letter issued by the manufacturer.

3.2.2 Complete Overhaul

A Complete Overhaul must be done when or before the aircraft completes 7000 flying hours, or at 14 years if this occurs first.

When a Complete Overhaul is done the aircraft maintenance cycle starts again.

3.3. CASR REQUIREMENTS

3.3.1 Airplane Weight and Balance Control

Re-weighing of the aircraft should be accomplished when:

1. Every 5 (five) years.
2. After Paint stripping and repainting.
3. After any modification which significantly affecting empty weight.
4. If there is any complaint from the pilot flying the aircraft regarding the aircraft stability.
5. Empty weight of the aircraft has been changed more than 0.5% of the maximum takeoff weight or empty center of gravity (C.G. location) has been change more than 0.5% of Mean Aerodynamic Chord (M.A.C.).

Accomplishment of the Weight and Balance must be supervised by a person appointed and authorized by Smart Aviation. After accomplishment of the weight and balance, the maintenance release in the Aircraft Flight Maintenance Log should be signedand the weight and balance report should be issued.

3.3.2 Compass Compensating Interval

The calibration / checking of the Aircraft compass has to be carried out every 5 (five years) or after any of the following condition(s):

1. After lightning strike
2. After replacement of any compass.
3. Any complaint of the pilot flying the Aircraft about the Aircraft Accuracy of the compass installed on the Aircraft.

Compass Swing person appointed and approved (holder authorization) by Smart Aviation. After accomplishment of the compass swing, the maintenance release in the Aircraft Flight Maintenance Log should be signed and the Compass Swing report should be issued.

(Ref. Form No. SCA/MTC/026).

3.3.3 VOR Equipment Check for IFR Operations

This inspection must be carried out when the Aircraft is operated under Instrument Flight Rule (IFR). VOR equipment inspection is required by CASR 91.171, which states that VOR equipment should be checked within the preceding 1 calendar month or 30 days. This Inspection may be performed by Pilot.

3.4.4. ATC Transponders

The ATC Transponder is designated for ramp use as is capable of exacting functional, the inspection of Aircraft Transponder (XPDR) and Distance Measuring Equipment system. This inspection must be carried out at interval 24 calendar months or 2 years as require by CASR 43, Appendix F and CASR 91.413.

This Inspection must be performed and release by a person authorized. After accomplishment of this Inspection and its discrepancies rectification, the maintenance release in the Aircraft Flight Maintenance Log and the appropriate form should be signed.

3.4.5. Altimeters and Static Pressure Test

The altimeter measures the difference between the ambient static pressure andthe ground pressure as displayed on the scale. The sealed housing admits static pressure the variations of which distort the membranes of an aneroid chamber.

The setting control of ground barometric pressure actuates mechanism, which drives the pointer, dial and scale; swing the altitude according to the pressure altitude correspondence low. The maintenance and functional test as prescribed in the CASR Part 43 and CASR 91. 411 has been tested and inspected within the preceding 24 calendar months.

This Inspection must be performed and release by a person authorized. After accomplishment of this Inspection and its discrepancies rectification the maintenance release in the Aircraft Flight Maintenance Log and the appropriate form should be signed.

3.4.6. Emergency Locator Transmitter

ELT inspection is required by CASR Part 91.207 which stated in part that ELT must be inspected within 12 calendar months after the last Inspection.

This Inspection must be performed and release by a person Authorized. After accomplishment of this Inspection and its discrepancies rectification, the maintenance release in the Aircraft Flight Maintenance Log.

3.4. REQUIRED INSPECTION ITEM

a. Required Inspection is defined as inspection work items which, if improperly doneor if improper part is used, could endanger the safe operation of the aircraft. Smart Aviation will identify RII item and written in the Work Order.

NOTE: The individual performing a required inspection may be the employeesof an approved aircraft maintenance organization, in which case both certifications will be made on behalf of the approved organization.

NOTE: No person may release required inspection if he performed the items of work required to be inspected.

b. List of Required Inspection Item

Any assembly, system or appliance the function of which is such that its failure could prejudice the safety of an aircraft when undergoing maintenance or modification is subjected to a Required Inspection Items.

Each Required Inspection Item will be specifically identified by 'RII' on every work order/form on work packages.

ATA	REQUIRED INSPECTION ITEM
27	**FLIGHT CONTROLS** Installation of the Primary Flight Controls System.
32	**LANDING GEAR** Installation of the Landing Gear.
61	**PROPELLER** Installation of the Propeller Assembly.

71	**POWER PLANT** Installation of the Engine Assembly. - FCU Installation

Note: List of Required Inspection items reference Company Maintenance Manual Chapter 3.12.8.

3.5.1 Required Inspection Item Procedures

RII procedures are regulated by Company Maintenance Manual Chapter 3.19.2.

3.4.2 Anomalies Condition During Inspection

Sometimes during inspection, it is found some problems or defects whether it is on the airframe or the engine. Smart Aviation will record all the anomalies condition including the action taken to rectify the problems on Inspection Card (IC) Form. This form is always attached/accompanied by the Scheduled Inspection/Conditional Inspection Sheet at every inspection.

3.4.3 Authorized Personnel

The Person(s) who is authorized to perform inspection are listed in the Form No. SCA/MTC/031 and the requirements are as follows:

a. Licensed Aircraft Maintenance Engineer; and/or

b. Airworthiness Authorization Holder; and/or

c. Mechanic of Smart Aviation who works under direct supervision of a licensed Aircraft Maintenance Engineer or Airworthiness Authorization Holder.

d. Approved Aircraft Maintenance Organization.

3.4.4 Maintenance Release

Maintenance release shall be provided to certify the aircraft return to service after maintenance and then signed and completed by any persons authorizedto certify the Inspection.

Completion of the Maintenance Release certifies the following:

a. That maintenance work has been performed in accordance with the requirement of this Maintenance Program.

b. All items required to be inspected have been inspected by an authorized person who has determined that the maintenance work was satisfactorily

completed.

c. All discrepancies recorded in the Aircraft Flight Maintenance Log have been rectified and completed, or deferred in according with the approved MEL.

d. No known conditions exist that would make the aircraft un-airworthy.

e. So far as the work performed is concerned, the aircraft is in an airworthy condition and is safe for flight.

Maintenance release will be recorded in the Aircraft Flight Maintenance Log and inspection sheets of every inspection shall bear the title "Maintenance release" in the following wording:

"I hereby certify that aircraft parts and component mentioned above has been inspected and maintained in accordance with the Maintenance Program and meets requirements of applicable Civil Aviation Safety Regulations that is determined to be in an airworthy condition."

3.5. SCHEDULED MAINTENANCE DEVIATION

If an inspection due at a specified time interval is not performed punctually, refer to Smart Aviation Operation Specifications D-76 it is permissible to exceed the given intervals up to intervals described on the Chapter 3 of this manual.

3.6. FLIGHT TEST

Definition of Mandatory Flight Test

A complete flight test must be carried out:

a. Following important repairs due to an accident, except in the case of a dispense obtained during the approval of the repair.

b. After replacement of:

1. One or the two wings.
2. Engine.
3. The horizontal or vertical stabilizer.
4. Primary flight controls (Aileron, Rudder, and Elevator).
5. Primary flight control cables or equivalent.

c. After engine vibrations induced by other flight condition affecting the airworthiness,

which cause couldn't be detected during test or on ground visual inspection.

d. Following the modification of the aircraft, the requirement for a control flight is pointed out in the file of the approved modification form.

A flight test approved procedure is regulated by Company Maintenance Manual approval from Maintenance Manager or Chief Inspector and Operation Manager or Chief Pilot is required prior conducting the flight test.

4.1 COMPONENTS TIME LIMIT

4.1.1 MAINTENANCE REQUIREMENTS

The following table lists airplane components and systems which require overhaul or replacement schedule. Where an interval is given in both flight time and calendar time, the limit which is reached first must be applied.

Component	Model / Part Number	Maximum Life	Overhaul Interval	Remark
Chapter 24 - Electrical Power				
Starter-generator (250 Amp or 200 Amp)	23048-021 (978.91.23.434) or 23081-004 (978.91.23.201)		1000 FH	
Chapter 25 - Equipment and Furnishings				
Safety harnesses	2B25A2X-15 or 959.11.31.401		10 years (elapsed)	
Pilots' roof - mounted shoulder - harnesses			10 years (elapsed) Overhaul by Pilatus only (PC-6 specific modification)	
Altair internal ADAS battery (if installed)	Ref. P&W ADAS-G-260-1/F P & W Manufacturer to replace.	10 years		
ELT battery	S1820506-1 or S1820516-99	After a total of 1 hour of ELT use or as shown on the battery label or Before Battery Expiration Date		
First Aid Kit Contents check	1197206005		1 year	
Fire extinguisher	959.08.06.211 BA51015GR-3 / B21003-1	3 years		**(Life Limited)**
Powder Fire Extinguisher (if installed)	959.08.01.352 or 959.08.01.354	3 years		**(Life Limited)**
Halon Fire Extinguisher (if installed)	959.08.06.211	10 years		Replaced (discard) **(Life Limited)**
Seatbelt – Pilot & Co-pilot	959.11.31.111	120 months		Scrap
Seatbelt - Passenger	959.11.31.160	120 months		Scrap

Component	Model / Part Number	Maximum Life	Overhaul Interval	Remark
Chapter 27 - Flight Controls				
Aileron attachment bolts	932.53.46.407 & 932.53.46.405 (Ref. IPC 57-61-01)	7000 FH or 14 years		**(Life Limited)**
Elevator attachment bolts	932.53.47.119 (Ref. IPC 55-21-01)	7000 FH or 14 years		**(Life Limited)**
Rudder attachment bolts	932.53.47.119 (Ref. IPC 55-41-01)	7000 FH or 14 years		**(Life Limited)**
Flap attachment bolts	932.53.46.411 & 932.53.47.122 (Ref. IPC 57-51-01)	7000 FH or 14 years		**(Life Limited)**
Horizontal stabilizer attachment bolts	932.53.47.227 (Ref. IPC 55-11-01)	7000 FH or 14 years		**(Life Limited)**
Control column aileron/pitch trim switch	Switch 944.30.18.722	3500 FH or 10 years		
DELETED				
DELETED				
Aileron to rudder interconnect-tension springs	Ref. NOTE 1 Ref. 27-14-11, Page Block 401	3500 FH or 7 years (whichever comes first)		
Flap Actuator (Electrical System) (Electro-Metal Type 55.1-1100)	978.73.14.101		3000 landings	**(Life Limited)**
Flap actuator (Electrical System) (Electro-Metal Type 55.1-1100, Amdt. 2	978.73.14.103		5000 landings or 7 years (whichever comes first)	**(Life Limited)**
Chapter 28 - Fuel				
Flexible hoses	115.55.06.135, 115.55.06.136, 6538.0043.00 (Ref. 05-10-10)	10 years		
Fuel filter element (Airmaze) - cleanable type	968.35.21.147 and 115.55.06.360	600 FH		
Fuel filter element (Zenith) - disposable type	968.35.21.202, 968.35.21.141 / 968.35.21.146, 115.55.06.360	100 FH		

NOTE 1: Aircraft with aileron to rudder interconnect tension springs with more than 3500 flying hours or 7 years, whichever occurs first, must have the springs replaced within 12 months after publishing date of the AMM Revision 31 (Jun 30/21).

Component	Model / Part Number	Maximum Life	Overhaul Interval	Remark
Fuel Transfer pumps - underwing tanks (if installed)	115.55.06.413, 115.55.06.443	7000 FH		
Engine driven pump	968.84.51.101, 968.84.51.109		3500 FH	
Auxiliary pump	968.84.11.152		1200 FH or 7 years (whichever comes first)	
Chapter 32 - Landing Gear				
Flexible Hoses	10 years			
Main gear shock strut attachment bolts	6401.0066.01	10000 landings or 7 years		Replace (discard) **(Life Limited)**
V-Struts	114.35.06.051/052		7000 FH or 14 years (whichever comes first)	
Main gear shock struts	114.35.06.090		10000 landings or 7 years (whichever comes first)	
Tail gear attachment bolts	932.53.47.207 932.53.47.217	10000 landings or 7 years		Replace (discard) **(Life Limited)**
Tail shock strut	114.45.06.060		10000 landings or 7 years (whichever comes first)	
Beringer Wheel Units	Main wheel RF-003(A) & Tail wheel RA-001(A)	Ref. MC-STC-002, page 10	3500 FH or 7 years	
Tail landing gear assembly	114.45.06.050B		3500 FH or 7 years	
Beringer Brake unit	EA-001(A)	Ref. MC-STC-002, page 10	3500 FH or 7 years	
Beringer Brake Caliper Seals & Pistons	JNT-002N(A)	7 years		
Beringer Main Wheel O-Ring Seals	JJTR-009N	At each tire change		

Component	Model / Part Number	Maximum Life	Overhaul Interval	Remark
Beringer Main Wheel Lip Seal	J-JBE-002N	At each removal from inner wheel half Or 1 year – Annual Inspection		
Beringer Brake Master Cylinder	MP-001(A)	Ref. MC-STC-002, page 10	3500 FH Or 7 years (Ref. MM-STC-002, page 53)	
Beringer Brake Regulator	RE-001(A)	Ref. MC-STC-002, page 10	3500 FH or 7 years	
Beringer Wheel Assembly Bolts	V-CHC-009	At each tire replacement (Ref MM-STC-002, Page 7)		
Chapter 35 - Oxygen				
Oxygen Cylinder (If installed)			5 years	**(Life Limited)**
Chapter 37 - Vacuum (only for PC6 GNS430 (Legacy)				
Air Filter	D9-18-1	500 FH or 1 year		Replace
Instrument Regulator Filter	963.77.25.111	100 hours		Replace
Chapter 53 – Fuselage				
Fitting (Electrical Trim)	116.40.06.033 116.40.06.112	3500 FH		Replace (discard) **(Life Limited)**
Chapter 55 – Stabilizer				
Fork, Bearing (Electrical Trim)	116.40.06.034	3500 FH		Replace (discard) **(Life Limited)**
Self Aligning Rudder Ball Bearing	940.83.28.011	3500 FH or 84 months		Replace
Chapter 57 – Wings				
Wing attachment bolts	6100.0018.01 & 6100.0017.01	7000 FH or 14 years		Replace (discard) **(Life Limited)**
Wing strut attachment bolts	6100.0017.02			

Component	Model / Part Number	Maximum Life	Qty	Overhaul Interval	Remark
Chapter 61- Propeller					
Propeller (with attachment bolts) HC-D4N-3P	968.29.11.121		1	4000 FH or 6 years (Ref. Hartzell HC-SL-61, latest revision)	
Propeller overspeed governor	968.29.14.301 or 210615 A/F IPC 72-01-11		1	Engine TBO + 500 FH	
Chapter 71 - Power Plant					
Engine	PT6A-27		1	3600 FH	
Engine rotor components		Refer to P&WC SB 1002			
- Hub Compressor, Rear (1st Stage)	3013111	19000 Cycles	1		Replace
- Disc Compressor (2nd Stage)	3011712	24000 Cycles	1		Replace
- Disc Compressor (3rd Stage)	3011713	25000 Cycles	1		Replace
- Impeller – Centrifugal	3013176	19000 Cycles	1		Replace
- Disc Compressor Turbine	3013411	16000 Cycles	1		Replace
- Disc – Power Turbine	3026812	20000 Cycles	1		Replace
Engine accessories		Ref. P&WC SB 1002		(Ref. P&WC SB1803)	
- FCU	968.20.12.581 or 3049635-02	Ref. P&WC SB1803	1	Engine TBO + 500 FH	
- Fuel Heater	968.20.11.239 or 10552E/ Ref. C / 3032710	Ref. P&WC SB1803	1	Engine TBO + 500 FH	
- Ignition – Exciter	968.20.12.505 or 10-381550-4E	Ref. P&WC SB1803	1	Engine TBO + 500 FH	
- Compressor Bleed Valve	3100829-03	Ref. P&WC SB1803	1	Engine TBO + 500 FH	
- Flow Divider/ Dump Valve	3036641	Ref. P&WC SB1803	1	Engine TBO + 500 FH	
- Engine Main Fuel Pump	968.20.11. 504 or 3034794E ENG IPC 73-10-02	Ref. P&WC SB1803	1	Engine TBO + 500 FH	

Component	Model / Part Number	Maximum Life	Qty	Overhaul Interval	Remark
- Propeller Constant Speed Governor	3405798-02 or 8210-412-01 ENG IPC 61-20-00	Ref. P&WC SB1803	1	Engine TBO + 500 FH	
- T2 Compensator		Ref. P&WC SB1803	1	Inspection at O/H	
- T5 Harness	3117924-01 ENG IPC 77-20-00	Ref. P&WC SB1803	1	Engine TBO + 500 FH	
- T5 Thermocouple	3012077 ENG IPC 77-22-00	Ref. P&WC SB1803	1	Engine TBO + 500 FH	
***Note:** Engine Hot Section(HSI) N/A to P&WC SB 1803 Option A compliant engines with ECTM from delivery	PT6A-27		1		If Trend Monitoring is introduced part way through Engine Life. (on condition)

Component	Model / Part Number	Maximum Life	Overhaul Interval	Remark
Oil Cooler Assy	968.32.11.101	3500 FH	O/H	
Auxiliary Fuel Pump	968.84.51.109	3500 FH or 72 months	O/H	
*** Note: Not Applicable to Engine that have performed ECTM program from delivery.**				
Chapter 73 - Engine Fuel and Control				
FCU drive body inspection / bearing replacement (Ref. P&W EMM 72-00-00, Page Block 601 / Pilatus SL 076)	3049635-02	6000 FH	3600 FH or TBO, whichever is first. time limit is calculated from the time the unit has entered Service or last overhaul of the FCU	
P3 air filter (cleanable type)	3029268 (Ref.05-10-10)		1000 FH maximum	
P3 air filter (disposable type)	3031781 (Ref. 05-10-10)	1000 FH		
HP fuel pump outlet filter	3033355 or AN6235-3A (Ref. 05-10-10)	P & W 600 FH But Smart Aviation Policyis Every 100 FH		

Component	Model / Part Number	Maximum Life	Overhaul Interval	Remark
Fuel Nozzle Inspection	PT6A-27 Ref. EMM PT6A-27 / Ref. DOMR 1702R1	200 FH		Clean and test
		400 FH		New or newly overhauled engine
Chapter 77 – Engine Indicating				
Flexible Hose	6501.0131.00 (Ref. 05-10-10)	10 years		
Chapter 79 – Oil				
Flexible Hoses	115.60.06.054, 115.60.06.045, 6543.0111.00 (Ref. 05-10-10)	10 years		
Engine oil filter (Permanent type) (Post P&WC SB 1118 and Pre SB 1215)	(Ref. IPC 79-20-02)	1000 FH (Ref. EMM 72-00-00, Page Block 601)		
Engine oil filter (Disposable type) (Post P&WC SB 1215 and SB 1282)	3033315, 3034393, 3033310, 3024084 (Ref. IPC 79-20-02)	1000 FH (Ref. EMM 72-00-00, Page Block 601)		
Oil cooler	968.32.11.101		3500 FH	
Oil cooler shock mount	944.81.12.120	3500 FH, 7 Year, or when the cooler is removed		
Chapter 80 – Starting				
Starting control	968.20.11.290	5100 FH	O/H	

5.1 TIME LIMIT MAINTENANCE REQUIREMENTS

The following table lists of Time Limit Maintenance Requirements which must be inspect at a specific time. Where an interval is given in both flight time and calendar time, the limit which is reached first must be applied.

ITEM	MAINTENANCE REQUIREMENT	INTERVAL
Chapter 24 - Electrical Power		
Hawker Lead Acid Battery(if installed)	Remove and capacity test (ref. 24-32-11, Page Block 401 and Battery CMM)	Initial test: 4500 FHOr 18 months, then: Subsequent tests at 750 FH or 3 months
Emergency Battery	Replacement	3 years
	Capacity test	1 year
	Operational test	3 months
Starter / Generator Brushes	Check for wear (Ref. 24-31 -11,Page block 601)	200 FH
Starter Generator	Lubrication (AMM 24-31-11) (EMM 72-60-00)	500 FH
Chapter 25 - Equipment and Furnishings		
Halon Fire Extinguisher P/N 959.08.06.211 (if installed)	Examine Check Contents	1 year
Powder Fire Extinguisher P/N 959.08.01.352 or P/N 959.08.01.354 (if installed)	Examine and weight Max permitted weight loss is 10 grams (0.35 oz) Check pressure	1 year
ELT	Operational Test	1 year
Altair ADAS	Examine	200 FH
Chapter 27 - Flight Controls		
Aileron Control Cables and Pulleys	Examine (Ref. 27-00-00, Page 601)	3500 FH or 7 years
Rudder Control Cables and Pulleys	Examine (Ref. 27-00-00, Page 601)	3500 FH or 7 years
Elevator Control Cables and Pulleys	Examine (Ref. 27-00-00, Page 601)	3500 FH or 7 years

ITEM	MAINTENANCE REQUIREMENT	INTERVAL
Trim Control Cables (Mechanical Trim System Only)	Examine (Ref. 27-00-00, Page 601): Not applicable to aircraft equipped with electrical trim actuators installed.	3500 FH or 7 years
Aileron, Rudder, Elevatorand Flap Bellcranks and Levers **(Mandatory Structural)**	Examine (Non Destructive Inspection) See Note F bellow	7000 FH or 14 years (whichever comes first)
Aileron Trim Screw-Actuator (Mechanical Trim System Only) **(Mandatory Structural)**	Check for backlash. The maximum permitted backlash is0,3 mm (0.012 in)	3500 FH or 7 years (whichever comes first)
Rudder – Trim Friction – Brake (Mechanical System)	Functional Test (Ref.27-25-00)	2 years
Chapter 28 – Fuel		
Fuel Filter Element (Airmaze PT No. OW2440-231)	Clean (Ref. 28-21-12)	100 FH
Engine Driven Fuel Pump	Check pump drive shaft for Backlash. (Ref. 28-20-03)	400 FH
Chapter 32 - Landing Gear		
Beringer Main Wheel Disc Clips	Note: If found worn, all key disc mustbe replaced.	On condition replacement(Ref MC-STC-002, Page 8)
Beringer Brake Assembly Screws	On condition replacement (Ref MC-STC-002, Page 8)	4 years
Beringer Brake Pad Guides	On condition replacement (Ref MC-STC-002, Page 8)	4 years
Beringer Brake Pads	On Condition replacement (Ref MC-STC-002, Page 8)	4 years
Beringer Brake Disc	On Condition replacement (Ref MC-STC-002, Page 8)	7 years
Main and Tail Wheels	Cracks detect the wheel halves, as given in the latest revision of ABSC CMM AP 440. Magnetic particle inspect the tie bolts.	At each tire replacement At each tire replacement
Pedal Brake	Dye Penetrant or Non-destructive Testing.	800 FH
Wheel rotation & debur disc (LH/RH)	Examine	100 FH
Steering system	Inspect steering cable tension.	100 FH

ITEM	MAINTENANCE REQUIREMENT	INTERVAL
Chapter 34 - Navigation		
Pitot-Static System	Leak check Drain	2 years 2 years
Standby Magnetic Compass	Check swing	5 years
Encoding Altimeter System	Functional test Encoding calibration	IFR flight operations:2 years VFR flight operations: On condition
Chapter 34 - Navigation		
Altimeter	Functional test. Barometer calibration.	IFR flight operations:2 years VFR flight operations: On condition
Transponder System	Functional test	2 years
Chapter 35 - Oxygen		
Regulator Panels (if installed) P/N 957.12.16.604	Overhaul	2 years or 2000 FH
Regulator Panels (if installed) P/N 957.12.16.106 and 957.12.16.201	Overhaul	5 years
Port Regulator (02D1 & 02D2 Pulse-Demand Unit)	Send to service	2 years
Chapter 51 - Structures		
Complete Structure - Internal and External	Look for corrosion	1 year
Chapter 53 - Fuselage		
Fuselage, Seat Attachments and Surrounding Structure	Examine	2 years
Stabilizer Trim Attachment Components, FR12A **(Mandatory Structural)**	Examine (Ref. 53-30-00)	1100 flying hours or 12 months (Whichever comes first,
Fuselage-Wing-Strut Attachment-Brackets **(Mandatory Structural)**	Examine (Non Destructive Inspection) Fluorescent Dye Penetrant or Eddy Current inspection. (Ref. 53-28-00. Page Block 601)	3500 FH or 7 years (whichever comes first),
Fuselage Wing Fittings **(Mandatory Structural)**	Examine (Ref. 53-00-01. Page Block601) **NOTE:** This procedure is revised, see NOTE I below	7000 FH or 14 years (whichever comes first),

ITEM	MAINTENANCE REQUIREMENT	INTERVAL
Chapter 55 - Stabilizers		
Trim Actuator Attachment **(Mandatory Structural)**	Examine (Ref. 55-11-11)	1100 FH or 12 Months (whichever comes first), See Note C Note G bellow
Chapter 56 - Windows		
Emergency Windows (Aircraft without pilot/co-pilot doors)	Check operation Lubricate seals (Material No. P04-018)	300 FH or 1 year
Chapter 57 - Wings		
Left and Right Wing-Strut Fitting (All P/Ns) **(Mandatory Structural)**	Examine (Ref. 57-00-02 – Check 1 Visual Inspection)	3 Months (Ref. 04-00-00) Operate in a severe Corrosion Severity Zone
Left Wing-Strut Fitting (P/N 6102.0041.00, 111.35.06.055, 111.35.06.184 or 111.35.06.185) **(Mandatory Structural)**	Examine (Ref. 57-00-02 – Check 2 – Eddy Current Inspection)	1100 FH or 12 months (Whichever comes first. See Note D Note G bellow
Right Wing-Strut Fitting (P/N6102.0041.00, 111.35.06.056, 111.35.06.184 or 111.35.06.186) **(Mandatory Structural)**	Examine (Ref. 57-00-02 – Check 2 – Eddy Current Inspection)	1100 FH or 12 months (whichever comes first, See Note D Note G bellow
Left Wing-Strut Fitting (P/N111.35.06.193, 111.35.06.195, 111.35.06.216 or 111.35.06.217) **(Mandatory Structural)**	Examine (Ref. 57-00-02 – Check 2 - Eddy Current Inspection (Ref. SRM 51-00-09))	12 months See Note D Note G bellow
Right Wing-Strut Fitting (P/N111.35.06.194, 111.35.06.195, 111.35.06.216 or 111.35.06.218) **(Mandatory Structural)**	Examine (Ref. 57-00-02 – Check 2 – Eddy Current Inspection (Ref. SRM 51-00-09))	12 months See Note D and Note Gbellow
Wing to Fuselage Fittings **(Mandatory Structural)**	Examine (Ref. 57-00-03, Page Block 601)	7000 FH or 14 years (whichever comes first)
Aileron/Flap Support-Brackets **(Mandatory Structural)**	Examine (Ref. 57-26-01 - Non Destructive Inspection, see NOTE F below)	7000 FH or 14 years (whichever comes first)
Chapter 61 - Propeller		
Propeller	Lubricate (Ref. Propeller Owner's Chapter 61-00-49, Page 6-5)	400 FH or 1 year

ITEM	MAINTENANCE REQUIREMENT	INTERVAL
Propeller Overspeed Governor	Check operation. (Ref. 71-00-00)	200 FH
Chapter 71 – Powerplant		
Sand Filters (If Installed)	Clean (Ref. 71-12-00, Page 701) (Ref. P&WC EMM 72-30-05)	25 FH
Turbine	Examine for corrosion and Erosion (Ref. P&WC EMM 72-30-05)	400 FH or when FOD damage is suspected
	Wash (Ref. 71-00-00, Page 701)	Ref. P&WC EMM 71-00-00 Daily
Hot Section	Examine with borescope (Ref. P&WC EMM 72-00-00)	Ref. P&WC EMM 72-00-00, Table 601 Borescope Interval 400 FH
Compressor	Performance Recovery WashAll operation (Ref. 71-00-00)	100 FH to 200 FH (Ref. P&WC EMM 71-00-00)
	Desalination Wash Salt laden environment. (Ref. 71-00-00)	Daily to depending on operating conditions (Ref. P&WC EMM 71-00-00)
	Examine for corrosion and erosion (Ref. P&WC EMM 72-30-05)	400 FH or when FOD damage is suspected
Turbine	Wash (Ref.71-00-00)	As Required
Hot Section	Examine with boroscope (Ref.P&WC EMM 72-00-00)	In Junction with periodic fuel nozzle leak and functional test.
Chapter 72 – Engine		
Accessory Gearbox (AGB)	AGB inlet screen inspection Ref. P&W EMM 72-60-00	500 FH Or 6 months
Engine	Performance Check	100 FH
Interconnect rod	Inspect. (Ref. SAEM1707-AB-0005)	100 FH
Chapter 73 - Engine Fuel and Control		
HP fuel pump inlet screen	Clean Examine (Ref. P&WC EMM 73-10-02)	600 FH
HP Fuel Pump Coupling Shaft (If Sundstrand fuel pump installed)	Examine drive splines for fretting corrosion (Ref. P&WC EMM 73-10-02)	600 FH

ITEM	MAINTENANCE REQUIREMENT	INTERVAL
Fuel Nozzle Inspection	Clean and Test / Replacement Ref. EMM PT6A-27	400 FH
	DELETED	
Chapter 74 - Ignition		
Spark Ignitors or Glow plugs	Examine (Ref. P&WC EMM 74-20-02 and74-20-00)	400 FH
Chapter 75 – Bleed Air		
Bleed Valve	Inspection / Functional Test EMM 75-30-00	600 FH
Chapter 79 - Oil		
Chip Detector (Aircraft without CHIP caption on CAWS)	Examine (Ref. P&WC EMM 72-00-00)	100 FH
Chip Detector (All aircraft)	Examine (Ref. P&WC EMM 72-00-00)	600 FH or 1 year
Oil Separator (if installed)	Drain	50 FH

NOTE A: Refer to the appropriate engine and propeller maintenance manuals for the applicable airworthiness limitations.

NOTE B: If any of the above maintenance tasks were accomplished in accordance with an earlier revision of this AMM, the relevant interval starts from that date, except for items with NOTES C or D.

NOTE C: For parts with 1000 flying hours or more since the completion of SB 53-003- part B, the maintenance task must be accomplished within 100 flying hours or 100 landings, whichever comes first.

NOTE D: If the maintenance requirement of this task was accomplished as part of SB 57-005 or superordinate ADs, the interval starts from that date.

NOTE E: Any maintenance task listed above for which NOTES B, C or D do not applymust be accomplished within 12 months from the effective date of Feb 28/10.

NOTE F: You can do a Fluorescent Dye Penetrant Inspection or an Eddy CurrentInspection (Ref. SRM 51-00-09).

NOTE G: A 10% tolerance only to the calendar time interval is applicable.

NOTE I: In accordance with the design, the bush (P/N 6100.0020.01) must be installed with grease. If the bush (P/N 6100.0020.01) has been bonded as instructed in the AMM Doc No. 01975 Revision 29 (Feb 28/20) (Ref. 53-00-01, Page Block 601), the inspection / check of Frame 3 must be done again:

- Within 100 flying hours of the issue date of AMM Doc No. 01975 Revision 30 (Oct 30/20)
- With AMM Doc No. 01975 Revision 30 (Oct 30/20) or later versions of 53-00-01, Page Block 601
- Remove and discard the bonded bush (P/N 6100.0020.01) as described for the bonded bush (P/N 6201.0107.01).

Reg. Mark : PK - _____

Serial Number : _____

Preflight Check carried out and released by engineer, before the first flight of the day of applicable inspections, or at least 2 hours before first flight, and/or 6 hours after aircraft on ground before next flight schedule.

NOTE: FORBIDDEN TO BRING THIS DOCUMENT ONBOARD THE AIRCRAFT

Ref AMM 05-21-03

NO	ITEM	OPERATION	CHECKLIST (SIGN) DAYS						
			1	2	3	4	5	6	7
A. AIRFRAME									
1.	Protective covers, blanks and restraints	Remove							
2.	External flight control locks	Remove							
3.	Chocks	Make sure that chocks are in position ifrequired							
4.	Fuel system	Check contents Replenish as required							
5.	Fuel filler caps	Make sure correctly installed							
6.	External surface of the aircraft	Look for damage and leaks							
7.	Mainwheel dirt scrapers (If installed)	Look for damage							
8.	Mainwheels and tires	Check tire pressure							
9.	Static ports	Make sure that ports are clear							
10.	Stowage compartment	Make sure that service ladder, tail wheel steering arm and passenger seats aresecure							
11.	Tail wheel and tire	Check tire pressure							
12.	Pitot tube	Look for damage							
13.	Windshield and windows	Make sure that windows are clean							
14.	Park brake	Set ON or OFF as required (Set OFF if frost is expected)							

15.	Flight controls	Operationally test and check for full and free movement							
NO	**ITEM**	**OPERATION**	**CHECKLIST (SIGN)**						
			DAYS						
			1	**2**	**3**	**4**	**5**	**6**	**7**
16.	Co-pilot control column (If installed)	Look for damage Make sure installed correctly							
17.	Flaps	Install safety pin on flap control switch							
18.	Internal flight control lock	Engage							
19.	Cockpit and cabin	Make sure that the cockpit and cabin are free from loose articles							
B. ENGINE									
1.	Hinged engine cowls	Open							
2.	Fuel system	Look for water, drain at; - collector tank							
3.	Snow vanes	Remove if temperature is above 15 deg C (59deg F)							
4.	Engine and accessories	Look for damage and leaks							
5.	Engine compartment (external)	Look for damage and leaks							
6.	Hinged engine cowls	Close							
C. ELECT / INSTRUMENT									
1.	Electrics and avionics	Make sure all switches are set to OFF							
2.	Aircraft electrical system	Energize (use ground power supply ifavailable)							
3.	MASTER WARNING light	Make sure that light illuminates (at least one warning light must also illuminate on annunciator panel)							
4.	MASTER CAUTION light	Make sure that light illuminates (at least one caution light must also illuminate on annunciator panel)							
5.	Annunciator LAMP TEST (if annunciator installed)	Press Make sure all warning, caution and advisorylamps illuminate							

	WARNING: DO NOT LOOK DIRECTLY AT THE STROBE LIGHTS WHEN THEY ARE OPERATED. THE LIGHT FROM THE STROBE LIGHTS IS VERY BRIGHT AND CAN DAMAGE YOUR EYES.								
NO	**ITEM**	**OPERATION**	**CHECKLIST (SIGN)**						
			DAYS						
			1	**2**	**3**	**4**	**5**	**6**	**7**
6.	Landing lights, navigation and strobe lights (if installed)	Set to ON Make sure that lights illuminate							
	COUTION: THE ANTI-ICE HEATERS MUST NOT BE OPERATED FOR MORE THAN 60 SECONDS WHEN THE AIRCRAFT IS ON THE GROUND.								
7.	ANTI-ICE switch	Set to ON							
8.	ANTI-ICE caption	Make sure that caption illuminates							
9.	Pitot tube and static port heaters	Make sure heaters operate correctly							
10.	ANTI-ICE switch	Set to OFF							
11.	BEACON switch	Set to ON							
12.	Anti-collision beacons	Make sure beacons operate							
13.	BEACON switch	Set to OFF							
14.	Electrical system	De-energize (disconnect ground power supplyif connected)							
15.	BATTERY MASTER switch	Set to ON							
16.	VOLT / AMMETER	Check gage shows between23 and 27 volts							
17.	GENERATOR caption	Make sure that light comes on							
18.	BATTERY MASTER switch	Set to OFF							

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

DAY	**NAME**	**SIGNATURE**	**STAMP**	**PLACE/DATE**
1				

2				
3				
4				
5				
6				
7				

Ref. AMM Pilatus Porter PC6 Chapter 05-22-01, P&WC Maintenance Manual Model PT6A-27 Manual Part No. 3013242Chapter 72-00-00, Propeller Owner's Manual Hartzell (Manual 149)

100 HOURS / ANNUAL INSPECTION

Reg. Mark	:	PK -	Date	:	
MSN	:		Station	:	
TSN / CSN	:		WO No.	:	

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	Aircraft document Perform inspection document folder (onboard). Check content completeness of aircraft document. (Ref. CASR 91.25)		
2	Emergency equipment list Perform emergency equipment list. Form SCA/MTC/023. Make one copy and insert into the aircraft document folder.		
3	After engine run safety all screws bolts locknuts as applicable (duplicate inspection). Perform after engine run safety all screws bolts locknuts as applicable.		
4	After engine run check engine for signs of fuel, oil, air leaks. Perform after engine run check engine for signs of fuel, oil, air leaks.		
B. AIRFRAME			
Aircraft - General			
1	External surfaces Examine, particularly for fuel, oil and hydraulic leaks.		
2	Aircraft external Wash.		
3	Aircraft preparation Remove and examine the protective covers, blanks and restraints. Replace if damaged, torn or is not properly install.		
4	Placard and markings Examine and replace as necessary.		
5	Aircraft lifting Put the aircraft on jacks.		
6	Fuselage Remove access panels and fairings.		
7	Fuselage - internal Remove cockpit and cabin seats and interior fuselage linings.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
8	Wings Remove access panels and fairings (not fuel tanks).		
9	Engine cowls Remove.		
10	Empennage Remove access panels and fairings.		
Chapter 21 - Air Conditioning			
1	Engine bleed air line and hoses Examine.		
2	Air inlet screens, filters and hoses Clean and examine.		
3	Mixer unit Examine.		
4	Butterfly vents - passenger cabin Examine.		
5	Emergency shut-off valve Examine.		
6	System component, pipes, cables, controls and linkages. Examine.		
7	System cables, controls and linkages Lubricate (Material No. P04-037).		
8	Air conditioning system Check operation during engine ground run checks.		
Chapter 24 - Electrical Power			
1	Generator voltage Check generator voltage at high idle under load_____VDC.		
Chapter 25 - Equipment and Furnishings			
1	Pilot and Co-pilot seats Examine seat and seat attachments. Make sure that the seat adjustment mechanism operates correctly. Lubricate moving parts. (Material No. P04-011).		
2	Pilot and Co-pilot seats harnesses Examine. Inertial reel system - Operational test.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
3	Passenger seats Examine seats, seat attachments and seat harnesses. If seats with Torso Restraint System are installed, make sure the backrest release mechanism operates correctly. Lubricate moving parts (Material No. P04-028).		
4	Linings and curtains Examine.		
5	Emergency locator transmitter Examine Check battery expiry date _____		
6	Fire extinguisher Examine Check expiry date _____		
7	First aid kit Examine Check expiry date _____		
8	Crash axe Make sure it is stored correctly.		
9	Stretchers (if Installed) Examine stretchers and mountings.		
10	Parachute dispatch system (if Installed) Examine. Signal light system - Operational test.		
Chapter 27 - Flight Controls - General			
1	Control column Examine. Check for excessive play at Teflon bearing at base of column by pulling up and pushing down on column. Maximum play is 0,2 mm (0.008 in.).		
2	Control lock Examine.		
3	Rudder pedals Examine. Check for excessive play and full and free range of movement. Especially examine the brake pedal at the weld for cracks		
Chapter 27 - Flight Controls - Ailerons			
1	Aileron control system Examine system including stops, cables, pulleys, guides, and bellcranks.		
2	Aileron controls Do a functional test.		
3	Aileron to rudder interconnect spring Examine.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
4	Aileron trim tab electrical actuator (Electrical system) Examine.		
5	Aileron trim system (Mechanical or Electrical trim tab systems) Check neutral settings, sense and range of movement. Check cockpit indicator.		
Chapter 27 - Flight Controls - Rudder			
1	Rudder control system Examine system including stops, cables, pulleys, guides, and bellcranks.		
2	Rudder Do a functional test.		
3	Rudder trim lab electrical actuator (Electrical system) Examine.		
4	Rudder trim tab (Mechanical or Electrical trim tab systems) Do an inspection / check. Check neutral settings and range of movement. Check cockpit indicator.		
Chapter 27- Flight Controls - Elevator			
1	Elevator control system Examine system including stops, cables, pulleys, guides, and bellcranks.		
2	Elevator control system Do a functional test.		
3	Elevator balance tabs Check neutral settings, sense and range of movement.		
Chapter 27 - Flight Controls - Stabilizer			
1	Horizontal stabilizer trim actuator Electrical system Examine.		
2	Horizontal stabilizer trim actuator attachments Examine. On the Lugs, look for cracks and signs of excessive asymmetrical wear.		
3	Horizontal stabilizer trim system Examine.		
4	Electrical system Do a functional test.		
Chapter 27 - Flight Controls - Flaps			
1	Flap actuator and support bracket (Electrical system) Examine		

NO	TASK	SIGNATURE	
		SIGN	STAMP
2	Flap control system – Bellcranks, levers and push/pull rods (Elect. Sys) Examine		
3	Flaps Do a functional test.		
Chapter 28 - Fuel System			
1	Water collector tank and fuel filter Drain a minimum of 0,25 liters (0.5 pint) of fuel from each drain valve. Make sure that there is no water in the fuel.		
2	Fuel filter Examine.		
3	Fuel shut-off valve Examine.		
4	Main fuel tanks Examine vents, filler caps and seals.		
5	Fuel pipes and hoses Examine.		
6	Air maze fuel filter Examine inlet pipe and adjacent oil hose for chafing.		
7	Perform fuel filter clean (Airmaze). P/N: 968.35.21.147 S/N: NSN. P/N OFF : …… P/N ON : ……		
8	Fuel flow transmitter Examine.		
9	Engine driven fuel pump (EDP) Examine.		
10	Fuel system Set shut-off valve to OPEN and then set the AUX F PUMP to ON. Look for leaks on complete fuel system and unusual noise from the fuel pump. Set AUX F PUMP to OFF and then set shut-off valve to CLOSE.		
11	Fuel System Fuel distribution system test or adjustment.		
12	Fuel Indicating System Fuel indicating system test or adjustment.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
Chapter 28 - Fuel System - Underwing Tanks			
1	Underwing tanks Examine.		
2	Transfer pump filters Examine and clean.		
3	Underwing tank system Check operation.		
4	Underwing Tank Fuel System Fuel system underwing tank inspection (if installed).		
5	Underwing Tank Fuel System Fuel system underwing tank inspection transfer pump filter.		
Chapter 32 – Landing Gear and Brakes			
1	Brakes Check brake pad wear. Visual Insp. Beringer.		
2	Main wheels rotation and debur discs. Perform main wheels LH and RH rotation and debur discs.		
3	Hydraulic pipes Examine.		
4	Brake system Check brake fluid level. Apply brakes, examine system for leaks.		
5	Park brake system Examine. Make sure system operates correctly		
6	Main wheel tires Examine.		
7	Main wheels Remove. Examine bearings, axles and wheels. Lubricate bearings and axels with grease (MIL - G - 81322). On installation rotate the wheel position LH to RH and vice versa		
8	Main wheels Perform main wheels inspection fill out the main wheel's inspection.		
9	Brake discs Examine. Check for wear.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
10	V-struts Examine. Note: If you find damage that is more than 0,127 mm (0.005 in.) deep, reject the V-strut.		
11	V-struts If you find damage that is 0,127 mm (0.005 in.) deep or less, refer to Pilatus CMM 02270 for minor repair procedures.		
12	V-struts attachments Examine. Lubricate (Material No. P04-002)		
13	Main landing gear shock struts Examine. Lubricate (Material No. P04-002). Check fluid level.		
14	Main wheels Install. Inflate tire.		
15	Main wheel - dirt scraper Examine.		
16	Tail landing gear Examine. Make sure there are no cracks in the welded seams. Check the locking-lever pivot pins. Lubricate (Material No. P04-002)		
17	Tail wheel tire Examine.		
18	Tail wheel Remove. Examine bearings, axle and wheel. Lubricate bearings with grease (Material No. MIL-G-81322; Aeroshell 22, Royco22, Mobil 28)		
19	Tail wheel Install. Inflate tire.		
20	Steering system Examine. Check cable tension and range of movement.		
21	Debris guard Examine.		
22	Steering system Inspect steering cable tension with a turn buckle installed in the steering cable – adjust the turnbuckle to give a cable tension of minimum 32 lbs., maximal 35 lbs. and install two new locking clips.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
Chapter 35 - Oxygen System			
1	Oxygen bottle(s) and attachment brackets (if installed) Examine.		
2	Oxygen system pipes, flexible tubes and fittings (if installed) Examine.		
3	Oxygen regulators (if installed) Examine.		
Chapter 52 - Doors			
1	Pilot, Co-pilot doors Examine. Remove safety wire. Make sure that the emergency release mechanism and latching mechanism operate correctly. Do the check of vertical play of the door Lubricate mechanism (Material No. P04-011). Install safety wire. (Material No. P02-021)		
2	Cabin RH / LH sliding door Examine door, sliding rails, rollers, stops and seals Make sure that the latching mechanism operates correctly. Lubricate mechanism. (Material No. P04-037)		
3	Cabin trap-door (if Installed) Remove trap-door hatch cover. Examine doors, hinges, seal, and structural damage. Make sure that the latching mechanism and door release mechanism operate correctly. Test door for correct operation. Lubricate mechanism (Material No. P04-037)		
Chapter 53 - Fuselage			
1	Access panels and fasteners Examine.		
2	Fuselage - external Examine.		
3	Fuselage - internal Examine these structures as follows: - cockpit floor - cabin floor - cabin floor T-rails - door frames - accessible frames, stringers, and skin.		
4	Fuselage Make sure that the drain holes are not blocked.		
Chapter 55 - Stabilizers			

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	Empennage Examine internal skin and structures as far as possible. Examine panels and fasteners. Make sure that the water drain holes are not blocked.		
2	Dorsal fin Examine.		
3	Vertical stabilizer Examine.		
4	Rudder - support structure Examine rudder support brackets, torque tube, control rod attachment points and attaching parts.		
5	Rudder Examine rudder skin and structure, balance weight attachment and mountings for static discharge wicks		
6	Rudder upper attachment Remove access panel EL4. Examine the attachment bolt and lockwire for security. Install access panel EL4.		
7	Rudder trim tab Examine tab. hinge, control rod attachment point and attaching parts.		
8	Horizontal stabilizer Inspection/ Check.		
9	Horizontal stabilizer actuator Examine the attachment brackets		
10	Elevator support structure Examine elevator support brackets, hinge bearings, control rod attachment points, control lever and attaching parts		
11	Elevator Examine skin and structure, fixed tab (H4 only) and mountings for static discharge wicks		
12	Elevator attachments Remove access panels ET1 and EB1 Examine the attachment bolts and lock wire for security. Install access panels ET1 and EB1		
13	Elevator balance tab Examine tab, hinges, control attachment points and attaching parts. Lubricate hinges. (Material No. P04-011)		
Chapter 56 - Windows			
1	Windows and windshields Examine.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
2	Emergency window Examine.		
Chapter 57 - Wings			
1	Access panels and fasteners Examine.		
2	Wing - external Examine skin and structure, particularly in area of fuel tanks, all access hole and external component or equipment attaching points. Look for loose rivets along the main spar (this can indicate advanced corrosion of the spar cap).		
3	Wing - internal Examine internal skin and structure, particularly in the area of fuel tank, as far as possible. Look for signs of corrosion on the upper and lower main spar caps.		
4	Wings Make sure that the drain holes are not blocked.		
5	Wing struts - external Examine attachment brackets. Examine strut exterior.		
6	Wing struts - internal Examine.		
7	Wing tips Examine.		
8	Aileron support structure Examine aileron support brackets, hinge bearings, control rod attachment points and attaching parts.		
9	Ailerons Examine aileron skin and structure, balance arms and static discharge wicks.		
10	Aileron - balance tabs Examine balance tabs, tab control rods, rod ends, support brackets, hinges and attaching parts. Lubricate hinges (Material No. P04-011).		
11	Flap support structure Examine flap support brackets, hinge bearings, control rod attachments, actuator support bracket and attaching parts.		
12	Flaps Examine structure and skin. Use a mirror and light to examine the skin of the flaps and slats for cracks in the areas where the angles are attached.		
General - Close Up NOTE: Do these steps when the engine, electrical and avionic inspections are complete			

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	Access panels and fairings Install.		
2	Fuselage - internal Install internal linings.		
3	Engine cowls Install.		
4	Aircraft Remove the aircraft from jacks.		
5	Aircraft Make sure that the work area is clean and clear of tools and other items.		
C. PROPELLER & ENGINE **Chapter 61 - Propeller**			
1	Spinner dome Remove.		
2	Propeller de-ice boots, slip-ring and brushes Examine.		
3	Slip-ring (Beta) Examine. Check gap between slip-ring and carbon block is no more than 0,50 mm (0.02 in.).		
4	Spinner body and backplate Examine.		
5	Blades Examine.		
6	Spinner Dome Install.		
Chapter 71 - Powerplant			
1	Power Recovery Wash Perform power recovery wash.		
2	Engine Run Perform engine run IAW HARTZELL STC SA377CH.		
3	Engine compartment Clean engine, engine compartment and cowlings.		
4	Engine compartment Examine. Make sure water drain holes are not blocked.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
5	Powerplant and accessories Examine		
6	Powerplant and accessories Inspect and pay particular attention to rear linkage cam box, fuel control unit arm, telescopic rod and rod end fittings. Disconnect rod ends and clean using solvent (PWC11-027) or (PWC11-031). Examine rod end for corrosion, roughness in rotation, side play and radial play. Lubricate with light grease (PWC04-001) or MIL-G-23827 after engine external wash. Reinstall rod ends and torque to specified value. (Ref.76-10-00) Check free movement and linkages.		
7	Powerplant and accessories Air inlet screen - Inspect cleanliness. (Ref.72-20-00) Inspect the air inlet screen wire mesh for cleanliness and/or damage. Screens with broken wire mesh must be replaced. Clean undamaged screens (Ref. Cleaning / Painting). Inspect the rubber sealing rims and flanges of the screen for security and damage.		
8	Powerplant and accessories Gas Generator Case - Inspect External surface, and fire seal mount ring brackets for cracks, distortion and corrosion. (Ref. 72-30-04) Examine for general condition, including cracks, distortion, corrosion and evidence of overheating. Minor corrosion on exposed surface of gas generator case may be removed. (Ref. Approved Repairs). If the condition of the corrosion exhibited on the exposed surfaces of the gas generator case indicates that further examination of the fuel manifold and igniter bosses is required, remove the fuel manifold adapters (Ref. 73-10-05, Removal/Installation) and spark igniters. (Ref. 74-20-00, Removal/Installation). Examine the mounting pads, fuel nozzle bosses and machined surfaces for corrosion and wear. Isolated corrosion pitting not closely grouped, less than 0.010 inch deep, not covering more than 75 percent of the surface is acceptable without repair.		
9	Powerplant and accessories Fireseal Mount Rings - Inspect Cracks and attachment of brackets and seals (Ref. 72-30-01/-02) Examine the rear fireseal mount ring halves for attachment, damage and condition. NOTE: For the external tubes/lines passing through the mount rings, refer to the relevant chapters in this manual. Examine the circumferential insulating strips for attachment. Loosened strips may be rebonded.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
10	Powerplant and accessories Exhaust Duct - Inspect cracks and distortion. (Ref. 72-50-05, Maintenance practices) Examine the outer surface condition for buckling, ripples or similar distortion. Inspect outer surface, particularly in vicinity of flanges A and C for cracking in metal skin, welds, or flange bolt holes. Inspect exhaust port flanges for cracking. Cracks not exceeding 0.500 inch in length and do not progress into the stitch weld or cracks in a tangential direction not exceeding 1.000 inch long are acceptable provided they are stop drilled with a 1/16 (0.0625) inch drill. Check for the integrity of internal structure through the exhaust ports. NOTE: Refer to the Aircraft Maintenance Manual for removal/ installation of the exhaust stubs. Examine the internal structure as far as possible for cracks, looseness and distortion. Inspect Engines that exhibit interior welds (Ref. 72-50-05, Maintenance Practices) visually inspect the forward area of the exhaust duct for cracks, from the propeller reduction gearbox mounting flange to 2 inches aft around the entire circumference of the duct. Exhaust ducts are considered serviceable provided.		
11	Powerplant and accessories Accessories - Inspect attachment of accessories and linkages, air, oil, fuel lines (Ref. 73-10-07/-08) or (Ref. 70-00-00, Standard Practices Inspection). Inspect Fuel, Oil and Air Tubes from scratches, Nick, chafing, dents, pitting, rust and strainer. Inspect Security of pneumatic lines (Ref. 73-10-07/-08) Examine tube assemblies (Ref. 70-00-00, STANDARD PRACTICES - INSPECTION). Blend out minor damage that does not exceed specified limits. Replace the tube assemblies damaged beyond specified limits. Inspect heated rear pneumatic line.		
12	Engine External Examine.		
13	Engine flexible and rigid pipes Examine.		
14	Engine cowling and seals Examine.		
15	Fireshields and seals Examine.		
16	Shock mounts Examine.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
17	Support ring Examine.		
18	Support struts Examine.		
19	Electrical harnesses Examine.		
Chapter 72 - Engine			
1	Compressor inlet screen Clean. Examine.		
2	Gas generator case Examine.		
3	Propeller shaft oil seal Examine, look for oil leaks		
4	Accessories Examine.		
Chapter 73 - Engine Fuel and Control			
1	HP fuel pump Examine.		
2	HP fuel pump outlet filter Examine, replace if contaminated		
3	Fuel HP Outlet Filter Perform fuel HP outlet filter replacement. P/N : AN6235-3A or ALTERNATIVE P/N. P/N OFF : ..... P/N ON :		
4	Fuel control unit Examine Check for leaks from vent. (Ref. P&WC EMM 73-20-00) Check flow divider and dump valve for installation and leaks (Ref. EMM 73-10-06). Check FCU for installation, linkages and pneumatic tubes (Ref. EMM 73-20-00). Evidence of FCU bearing washout indicated by traces of blue dye effluent is caused by a mixture of bearing grease and fuel. For post-SB1472 engines fitted with a manual override on the fuel control, check FCU Manual Override System for static operation (Ref.EMM 71-00-00).		

NO	TASK	SIGNATURE	
		SIGN	STAMP
5	Fuel control unit Perform SIL NO. PT6A-221R01 – FCU Health Monitoring - Deceleration Check. Ref. P&WC PT6A-27 MM 71-00-00		
6	Pneumatic System Check P3 filter for installation. Clean or replace filter, dependent on condition, service experience or environment.		
7	Starting flow control unit Examine.		
8	Propeller governor Examine.		
9	Air pipes Examine.		
10	Fuel pipes Examine.		
11	Gas generator case drain valves Examine.		
12	Igniter exciter Examine and check ignition system/current regulator for installation and condition (Ref.74-10-01 and 74-10-02) Inspect the ignition exciters for signs of damage and general condition. Inspect the input and output connectors for damage, paying particular attention to the connector threads for corrosion. Inspect the cover and box of the regulator for general condition. A cracked or distorted mounting bracket on the box, or loose components on the box or cover, must be repaired at an overhaul facility. Inspect the seal on the box and the sealing gasket on the cover for general condition. A loose seal or gasket may be rebonded using adhesive cement (PWC08-010).		
13	Ignition cables Examine and check ignition cable for chafing, wear and installation (Ref.74-20-01) Inspect cables for signs of damage to braiding and general condition. Inspect cable coupling nuts for corrosion. Inspect central conductor and insulation for contamination and burning. Do retention test on igniter end of cable only: - Connect contact with tool (Ref. Table 201). - Contact must hold a 0.125 lb. weight. - If contact does not hold weight, ship cable to an authorized repair shop for inner cable replacement.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
14	Spark igniters Examine and check spark igniters/glow plugs for cleanliness and erosion. Check function (Ref. 74-20-02 and 74-00-00). Inspect the exterior cylindrical area of the firing end of the igniter shell for chafing wear. Wear is acceptable to a depth of 0.015 inch. Inspect the igniter shell and electrode for erosion (Ref. Fig. 207 and Table 202). If erosion equals or exceeds amounts shown, reject the spark igniter. Do a functional test on acceptable and replacement spark igniters (Ref. 74-00-00, Adjustment/Test).		
15	Interconnect rod Inspect accessible lockwire and safety cable for security and installation of the interconnect rod.		
16	Idle control system Examine.		
17	Power control system Examine.		
18	Propeller control system Examine.		
19	Engine controls Lubricate rod ends with grease. (Material No. P04-002).		
20	Emergency fuel control system Examine. Do a functional test.		
Chapter 78 - Exhaust			
1	Exhaust duct Examine.		
2	Exhaust stubs Examine.		
Chapter 79 - Oil			
1	Oil cooler system Examine. Flap - Do an operational test.		
2	Oil filter Examine and clean.		
3	Chip detector Do a functional test. Check Magnetic Detectors for continuity.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
4	Scavenge Oil pump Examine.		
5	Oil filler cap and dipstick Examine.		
6	Oil separator (Aircraft with SB75) Examine.		
General			
1	Powerplant Make sure that the work area is clean and clear of tools and other items.		
2	Powerplant Do a functional test.		
3	Powerplant (Post P&WC SB 1568 only) Do a deceleration check. NOTE: Not required if FCU is identified with 'RE52' or 'SB 73-3', or with a serial number that has the letter 'F' as a prefix.		
D. ELECTRICS AND INSTRUMENTS **Chapter 21 - Air Conditioning**			
1	Cockpit blower motor Examine and operational test.		
2	Cabin blower motor Examine and operational test.		
Chapter 24 - Electrical Power			
1	Battery mountings Examine attachment fittings, ventilation hoses, cable connectors, wiring.		
2	External power receptacle Examine.		
3	Starter/Generator Examine.		
4	Starter/Generator Examine QAD adaptor and clamp.		
5	Starter and power generation relays Examine. Functionally test during engine ground run.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
6	Voltage regulator Examine. Functionally test during engine ground run.		
7	Cockpit - switches and circuit breakers Examine. Make sure that placards are readable.		
8	Cables, plugs, connectors, relays, terminal blocks Examine in these areas: - engine compartment - cockpit - fuselage - empennage - wings		
9	Bonding Examine bonding leads in these areas: - engine compartment - cockpit - fuselage - empennage - wings - landing gear		
Chapter 27 - Flying Controls			
1	Aileron trim actuator Examine. Operational test.		
2	Rudder trim actuator Examine. Operational test.		
3	Flap actuator Examine. Operational test.		
4	Horizontal stabilizer actuator Examine. Operational test.		
Chapter 28 - Fuel			
1	Auxiliary fuel pump Operational test.		
2	Underwing fuel pumps. (if installed) Operational test.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
Chapter 30 - Ice and Rain Protection			
1	Pitot tube and static port heaters Operational test.		
Chapter 31 - Indicating/Recording			
1	Instrument panel shockmounts Examine.		
2	Instruments Examine.		
3	Annunciator panel Examine.		
Chapter 33 - Lights			
1	Navigation lights Examine. Operational test.		
2	Anti-collision strobe lights or beacons Examine. Operational test.		
3	Landing lights Examine. Operational test.		
4	Cockpit lights Examine. Operational test.		
5	Instrument lights Examine. Operational test.		
6	Warning lights Examine. Operational test.		
7	Passenger cabin lights Examine. Operational test.		
Chapter 34 - Navigation			
1	Pitot tube Examine.		
2	Static ports Examine.		
3	Pipes - pitot, static and vacuum Examine.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
4	Vertical speed indicator Reset to zero.		
5	Airspeed indicator Check, calibrate if necessary.		
6	Gyro operated instruments Operational test.		
7	Magnetic compass Check correction card date validity _____		
Chapter 37 – Vacuum			
1	Vacuum system suction regulator Clean filter.		
2	Vacuum system Examine. Replace if air filter is contaminated.		
3	Vacuum system pressure regulator Examine.		
4	Vacuum system ejector Examine.		
E. AVIONICS **Chapter 23 - Communications and Chapter 34 - Navigation**			
1	Antennas Examine.		
2	Headsets and microphones Clean. Examine.		
3	Avionic equipment Examine.		
4	Avionic connectors and cables Examine.		
5	Avionic equipment racks and shock mounts Examine.		
6	All Avionics systems Examine switches and circuit breakers.		

NO	TASK	SIGNATURE	
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7	All Avionics systems Operational test.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. AMM Pilatus Porter PC6 Chapter 05-23-01, P&WC Maintenance Manual Model PT6A-27 Manual Part No. 3013242 Chapter 72-00-00, Propeller Owner's Manual Hartzell (Manual 149)

3500 HOURS / PARTIAL OVERHAUL INSPECTION

Reg. Mark : PK - _____ Date : _____

MSN : _____ Station : _____

TSN / CSN : _____ WO No. : _____

NO	TASK	SIGNATURE	
		SIGN	STAMP
A. AIRFRAME			
AIRCRAFT - GENERAL			
1	External surfaces Examine for fuel and oil leaks.		
2	Landing gear shock struts Examine for leaks.		
3	Brake system Examine for hydraulic leaks		
4	Fuel system Defuel.		
5	Aircraft - external Wash.		
6	Aircraft - preparation Position aircraft in maintenance hangar. Remove and examine the protective covers, blanks and restraints. Replace if damaged, torn or is not properly installed.		
7	Placards and Markings Examine and replace as necessary.		
8	Aircraft Raise on jacks.		
9	Fuselage Remove access panels and fairings.		
10	Empennage Remove access panels and fairings.		
11	Wings Remove access panels and fairings.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
12	Main fuel tank access panels Remove.		
13	Underwing fuel tanks (If Installed) Remove.		
Chapter 21 - Air Conditioning			
1	Air inlet screen and hoses Examine.		
2	Engine bleed air line and hoses Examine.		
3	Mixer unit Examine.		
4	Emergency shut-off valve Examine.		
5	System components and pipes Examine.		
6	Butterfly vents - passenger cabin Examine.		
7	System controls Examine. Lubricate moving parts (Material No. P04-037)		
8	Air conditioning system and emergency shut-off control Check during engine ground run checks. Reset valve and replace indicator thread (Material No. P09-006)		
Chapter 25 - Equipment and Furnishings			
1	Pilot and Co-pilot seats Examine. Adjustment mechanism - Operational test. Lubricate (Material No. P04-011)		
2	Pilot and Co-pilot seat harnesses Examine. Check inertial reel system operates correctly.		
3	Seat attachments Examine.		
4	Passenger seats Examine seats, seat attachments and seat harnesses. If seats with Torso Restraint System are installed, make sure the backrest release mechanism operates correctly. Lubricate moving parts (Material No. P04- 028)		

NO	TASK	SIGNATURE	
		SIGN	STAMP
5	Seat attachments Examine.		
6	Linings and curtains Examine.		
7	Fire extinguisher Examine.		
8	First aid kit Examine.		
9	Crash axe Make sure it is stored correctly.		
10	Stretchers (If Installed) Examine.		
11	Stretcher mounts (If Installed) Examine.		
12	Parachute equipment (If Installed) Examine. Protective tube (for sliding door), left side door handle cover, external step-board, static-line attachment, parachute bench		
13	Parachute dispatch system (If Installed) Examine. Signal light system – Operational test		
Chapter 27 - Flight Controls - General			
1	Controls Control column Examine. Check for excessive play at Teflon bearing at base of column by pulling up and pushing down on column. Maximum play is 0,2 mm (0,008 in.).		
2	Control lock Examine.		
3	Rudder pedal assembly torque tube (Up to MSN 623) Remove. Examine. Do a crack detection test with dye penetrant. Lubricate (Material No. P04-002). Install.		
4	Rudder pedal assembly torque tube (From MSN 624) Examine for excessive wear. Lubricate (Material No. P04-002)		
5	Rudder pedal bar Examine.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
6	Bellcranks and levers Examine.		
7	Flight control cables Examine. Check tension.		
8	Aileron control rods Examine.		
9	Elevator control rods Examine.		
10	Flap control rods (Electrical system only) Examine.		
11	Horizontal stabilizer actuator Examine.		
12	Control rod bearings Lubricate. (Material No. P04-002)		
13	Control cable pulleys Examine.		
14	Aileron to rudder interconnect spring Examine. Check cable tension (Ref. 27-14-11, Page Block 501)		
Chapter 28 - Fuel System			
1	Fuel filter bypass Do a functional test with a dummy filter.		
2	Fuel shut-off valve Examine. Lubricate moving parts (Material No. P04-037)		
3	Main fuel tanks Clean. Examine internal seals. Repair sealing if required.		
4	Fuel tank float valves Remove. Examine. Gently blow through the valve to make sure it seals correctly. Install.		
5	Fuel tank vents Examine.		
6	Tank filler caps Examine.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
7	Fuel collector tank Examine.		
8	Water collector tank Examine.		
9	Fuel pipes and hoses Examine.		
10	Engine driven fuel pump Examine.		
11	Fuel flow transmitter Examine. Check fuel flow indication.		
12	Fuel system Do a Functional test.		
13	Underwing tanks, filler caps, seals, hoses and pylons.(If Installed) Examine.		
14	Transfer pump Examine and clean filters.		
15	Underwing tank system (If Installed) Do a Functional test.		
Chapter 32 – Landing Gear and Brakes			
1	Brake linings Check brake lining wear,		
2	Brake system Drain		
3	Brake discs Check for wear. (Ref. MC-STC-002, page 5)		
4	Brake system Examine pipes and hoses		
5	V-struts Do the partial overhaul inspection procedure.		
6	Main wheels Remove		

NO	TASK	SIGNATURE	
		SIGN	STAMP
7	Main wheels and tires Examine. (Form No. ASI-MD-71). Partial overhaul.		
8	Main gear shock struts Examine. Check fluid level.		
9	Tail landing gear Remove.		
10	Tail wheel and tire Examine. Partial overhaul. Check inflation pressure 47 psi		
11	Tail shock strut Examine. Check fluid level. Note: Check Shock Strut Pressure 24 bar / 348 psi		
12	Tail landing gear Examine.		
13	Tail landing gear Examine fuselage attachment points and adjacent structure.		
14	Debris guard. (if installed) Examine.		
15	Tail wheel steering Examine cables and springs. Lubricate (Material No. P04-002)		
16	Brake system Lubricate moving parts of controls. (Material Nc. P04-037)		
17	Brake system Flush system, fill with new fluid and bleed the system. Check brake fluid level.		
18	Brake system Apply the brakes and look for leaks.		
19	Main wheels Install serviceable main wheels.		
20	Tail landing gear Install.		
21	Steering system With a spring balance, check the system spring box assemblies are pre-loaded to 37 Kg ± 2 Kg (81 lb ±4.5 lb). Check cable tension (Ref. 32-51-11) and the rudder system range of movement (Ref. 27-20-00). Lubricate moving parts of controls. (Material No. P04-002)		

NO	TASK	SIGNATURE	
		SIGN	STAMP
Chapter 35 - Oxygen System			
1	Oxygen bottle(s) and attachment brackets (if installed) Examine.		
2	Oxygen system pipes, flexible tubes and fittings (if installed) Examine.		
3	Oxygen regulators (if installed) Examine.		
Chapter 52 - Doors			
1	Pilot, Co-pilot doors Examine. Latching handles - Do an Operational test. Remove safety wire. Emergency release mechanism - Do an Operational test. Lubricate mechanism (Material No. P04-011). Install safety wire (Material No. P02-021)		
2	Cabin sliding door Remove. Examine rollers, rails and door. Examine seals and stops. Latching mechanism - Do an Operational test. Install door. Lubricate mechanism (Material No. P04-037) Note: Latching Mechanism should spring back freely when the door handle is released		
3	Cabin trap-door. (If Installed) Remove trap-door hatch cover. Examine doors, hinges, seal, and structural damage. Latching and release mechanism - Do an Operational test. Lubricate mechanism (Material No. P04-037)		
Chapter 53 - Fuselage			
1	Access panels and fasteners Examine.		
2	Fuselage - external Examine.		
3	Fuselage - internal Examine these structures as follows: - cockpit floor - cabin floor - cabin floor T-rails - door frames - accessible frames, stringers, and skin.		
4	Fuselage Make sure that the drain holes are not blocked.		
5	Access door - RH rear fuselage Latching mechanism - Do an Operational test. Lubricate mechanism (Material No. P04-037)		

NO	TASK		SIGNATURE	
			SIGN	STAMP
Chapter 53 - Fuselage				
1	Fuselage - external Examine.			
2	Fuselage - internal Examine.			
3	Fuselage Make sure that the drain holes are not blocked.			
4	Wing attachment brackets and adjacent structure Examine. Use a light magnifying glass.			
5	Fuselage - wing strut attachment brackets and structure internal and external Examine (Using Fluorescent Dye penetrant Inspection).			
6	V-strut attachment brackets Examine.			
7	Access panels Examine panels, fairings and fasteners.			
8	Stabilizer Trim Attachment Components FR12A Support Brackets Examine.			
9	Stabilizer Trim Attachment Components FR12A Where the Horizontal Trim Actuator Support is Installed. Examine.			
Chapter 55 - Stabilizers				
1	Elevators Remove.	**RII:** Sign & Stamp		
2	Rudder Remove.	**RII:** Sign & Stamp		
3	Empennage - internal Examine as far as possible. Make sure that the water drain holes are not blocked.			
4	Dorsal fin and attachments Examine.			
5	Vertical stabilizer Examine.			
6	Rudder bearings Replace rudder hinge bearings.			

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7	Rudder torque shaft upper and lower bearing Replace.			
8	Empennage Examine panels, fairings and fasteners.			
9	Torque tube Examine.			
10	Rudder and trim tab Examine.			
11	Horizontal stabilizer Check for excessive play at attachment points by rocking stabilizer ends and listening for movement at attachment points. Maximum play is 1,5 mm (0.06 in.).			
12	Horizontal stabilizer Remove.			
13	Horizontal stabilizer Examine.			
14	Elevator and trim tab Examine.			
15	Elevator control bellcrank Examine.			
16	Elevator hinge bearings Replace.			
17	Horizontal stabilizer Install.	**RII:** Sign & Stamp		
18	Rudder Install.	**RII:** Sign & Stamp		
19	Elevators Install.	**RII:** Sign & Stamp		
Chapter 56 - Windows				
1	Windscreens Examine.			
2	Cabin - two round windows Examine.			

NO	TASK		SIGNATURE	
			SIGN	STAMP
3	Door windows Examine.			
4	Emergency window Examine seals.			
Chapter 57 - Wings				
1	Ailerons Remove.	**RII:** Sign & Stamp		
2	Flaps Remove.	**RII:** Sign & Stamp		
3	Wing - external Examine skin and structure, particularly in area of fuel tanks, all access hole and external component or equipment attaching points. Look for loose rivets along the main spar (this can indicate advanced corrosion of the spar cap).			
4	Wing - internal Examine internal skin and structure, particularly in the area of fuel tank, as far as possible. Look for signs of corrosion on the upper and lower main spar caps			
5	Wing - fuselage attachments Examine.			
6	Wing - strut attachment brackets Examine.			
7	External stores attachments Examine.			
8	Access panels Examine panels, fairings and fasteners.			
9	Wing tips Examine.			
10	Aileron support structure Examine aileron support brackets, hinge bearings, control rod attachment points and attaching parts.			
11	Ailerons Remove balance arms. Examine. Install balance arms. Examine mountings for the static discharge wicks. Lubricate bearings (Material No. P04-002).			
12	Aileron - tabs Examine tabs, tab control rods, support brackets, hinges and attaching parts.			

NO	TASK		SIGNATURE	
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13	Flap support structure control rod attachments, actuator support bracket and attaching parts Examine support brackets and hinge bearings.			
14	Flaps Examine.			
15	Wing struts Examine.			
16	Ailerons Install.	**RII:** Sign & Stamp		
17	Flaps Install.	**RII:** Sign & Stamp		
Aircraft - General **NOTE: Do these steps when the engine, electrical and avionic inspections are complete**				
1	Aileron controls Do a functional test.			
2	Elevator controls Do a functional test.			
3	Rudder controls Do a functional test.			
4	Flaps Do a functional test.			
5	Aileron trim Do a functional test.			
6	Horizontal stabilizer trim Do a functional test.			
7	Rudder trim Do a functional test.			
8	Aircraft Make sure that the work area is clean and clear of tools and other items.			
9	Main fuel tank access panels Examine seals.			
10	Main fuel tank access panels Install.			

NO	TASK	SIGNATURE	
		SIGN	STAMP
11	Fuselage Install access panels and fairings.		
12	Empennage Install access panels and fairings.		
13	Wings Install access panels and fairings.		
14	Underwing fuel tanks (If required) Install.		
15	Aircraft Lower off jacks.		
B. PARTIAL OVERHAUL - ENGINE **Chapter 61 - Propeller**			
1	Spinner Remove		
2	Propeller de-icer boots Examine		
3	Slip-ring (Beta) Examine. Check gap between slip-ring and carbon block is no more than 0,50 mm (0.02 in.)		
4	Blades Examine. Disconnect the pitch change mechanism and make sure the blades are free to turn. Connect the pitch change mechanism and safety with lockwire.		
5	Spinner body and backplate Examine.		
6	Propeller control system Examine. Check for full and free range of movement.		
Chapter 71 - Powerplant			
1	Engine Do a compressor wash. (Ref. 71 -00-00, Page Block 701)		
2	Engine and engine compartment Clean engine, engine compartment and cowlings.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
3	Engine Examine as far as accessible, all tubes, electrical wiring, control linkages, hoses and cowlings. Lubricate ball-end fitting of starting control rod, FCU rod and propeller interconnect rod with grease (Material No. P04-002).		
4	Engine compartment Examine all hoses and pipes. Examine compartment structure. Make sure that the drain holes are not blocked.		
5	Engine shockmounts Examine.		
6	Support ring Examine.		
7	Support struts Examine.		
8	Sand filters Clean.		
9	Engine cowlings and seals Examine.		
10	Fire shields and seals Examine.		
11	Electrical harnesses Examine.		
12	Fuel drain collector tank Examine.		
Chapter 72 - Engine			
1	Compressor inlet screen Remove. Examine.		
2	Compressor Examine as far as possible.		
3	Compressor inlet screen Install.		
4	Exhaust duct Examine.		
5	Gas generator case Examine.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
6	Propeller shaft oil seal Examine, look for oil leaks.		
7	Accessories Examine.		
Chapter 73 - Engine Fuel and Control			
1	HP fuel pump Examine. Clean filters.		
2	Fuel control unit Examine. Check for leaks from vent.		
3	Starting flow control unit Examine.		
4	Gas generator case drain valves Examine.		
Chapter 74 - Ignition			
1	Spark igniters Examine.		
2	Glow plugs Examine.		
3	Igniter exciter Examine.		
4	Ignition cables Examine.		
Chapter 76 - Engine Controls			
1	Engine control system Examine. Check for full and free range of movement.		
Chapter 78 - Exhaust			
1	Exhaust stubs Examine. Note: Exhaust duct check for cracking along the weld on the leading edge.		
Chapter 79 - Oil			
1	Oil filter Clean.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
2	Chip detector Remove. Clean. Examine. Check operation as follows: Connect detector, short across detector poles, energize aircraft electrical system and check that CHIP warning is activated. Install and connect chip detector		
General			
1	Powerplant Make sure that the work area is clean and clear of tools and other items		
2	Powerplant Do a functional test		
D. ELECTRICS AND INSTRUMENTS **General**			
1	Battery mounts Examine attachments, ventilation hoses, cable connectors and wiring.		
2	Battery compartment Examine.		
3	External power receptacle Examine.		
4	Starter/Generator Examine brushes, commutator, exterior surfaces.		
5	Starter and power generation relays Examine. Functionally test.		
6	Voltage regulator Examine. Functionally test during engine ground run.		
7	Cockpit - switches, circuit breakers Examine. Make sure that placards are readable.		
8	Cables looms, plugs, connectors relays, terminal blocks Examine in: - engine compartment - cockpit - fuselage - empennage - wings		

NO	TASK	SIGNATURE	
		SIGN	STAMP
9	Bonding leads Examine in: - engine compartment - cockpit - fuselage - empennage - wings - landing gear		
Chapter 24 - Electrical Power			
1	Battery mountings Examine attachment fittings, ventilation hoses, cable connectors, wiring.		
2	External power receptacle Examine.		
3	Starter/Generator Examine.		
4	Starter/Generator Examine QAD adaptor and clamp.		
5	Starter and power generation relays Examine. Functionally test during engine ground run.		
6	Voltage regulator Examine. Functionally test during engine ground run.		
7	Cockpit - switches and circuit breakers Examine. Make sure that placards are readable.		
8	Cables, plugs, connectors, relays, terminal blocks Examine in these areas: - engine compartment - cockpit - fuselage - empennage - wings		

NO	TASK	SIGNATURE	
		SIGN	STAMP
9	Bonding Examine bonding leads in these areas: - engine compartment - cockpit - fuselage - empennage - wings - landing gear		
Chapter 21 - Air Conditioning			
1	Cockpit blower motor Examine. Operational test.		
2	Passenger cabin blower motor Examine. Operational test.		
Chapter 23 - Communications			
1	Static discharge wicks Examine.		
Chapter 27 - Flight Controls			
1	Aileron trim actuator Examine. Operational test.		
2	Rudder trim actuator Examine. Operational test.		
3	Flap actuator Examine. Operational test.		
4	Horizontal stabilizer actuator (Main and Alternate systems) Examine. Operational test.		
Chapter 28 - Fuel			
1	Auxiliary pump Operational test.		
Chapter 30 - Ice and Rain Protection			
1	Pitot and static port heaters Operational test.		
Chapter 33 - Lights			
1	Navigation Lights Examine. Operational test.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
2	Anti-collision strobe lights Examine. Operational test.		
3	Landing Lights Examine. Operational test.		
4	Cockpit lights Examine. Operational test.		
5	Instrument lights Examine. Operational test.		
6	Warning lights Examine. Operational test.		
7	Passenger cabin lights Examine. Operational test.		
Chapter 34 - Navigation			
1	Pitot tube Examine.		
2	Static ports Examine.		
3	Pitot and static systems Functionally test system for leaks.		
4	Pitot and static pipes and connectors Examine.		
5	Vertical speed indicator Reset to zero.		
6	Altimeter Check barometric scale for accuracy. Calibrate if necessary.		
7	Airspeed indicator Check for accuracy, calibrate if necessary.		
8	Gyro operated instruments Operational test.		
9	Instruments Examine.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
10	Magnetic compass Check the correction card date is valid.		
11	Pitot tube Make sure that the tube has cooled Install the cover.		
Chapter 37 – Vacuum			
1	Vacuum suction regulator Clean the filter.		
2	Vacuum system air filter Examine. Replace if contaminated.		
3	Vacuum system pressure regulator valve Examine.		
4	Vacuum system ejector Examine.		
5	Vacuum pipes and connectors Examine.		
D. AVIONICS **General**			
1	Antenna Examine.		
2	Headsets and microphones Examine.		
3	Avionic equipment Examine. Examine cables and connectors as far as possible.		
4	Avionic equipment shockmounts Examine.		
5	Avionic equipment racks Examine.		
6	Switches and circuit breakers Examine.		
7	Avionic systems Operational test.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name	:	_____	Name of RII	:	_____
Signature	:	_____	Signature	:	_____
Stamp	:	_____	Stamp	:	_____
Place/Date	:	_____	Place/Date	:	_____

Ref. AMM Pilatus Porter PC6 Chapter 05-24-01, P&WC Maintenance Manual Model PT6A-27 Manual Part No. 3013242 Chapter 72-00-00, Propeller Owner's Manual Hartzell (Manual 149)

7000 HOURS / COMPLETE OVERHAUL INSPECTION

Reg. Mark : PK - _____ Date : _____

MSN : _____ Station : _____

TSN / CSN : _____ WO No. : _____

NO	TASK	SIGNATURE	
		SIGN	STAMP
A. AIRFRAME			
AIRCRAFT - GENERAL			
1	External surfaces Examine for fuel and oil leaks.		
2	Landing gear shock struts Examine for leaks.		
3	Brake system Examine for hydraulic leaks		
4	Fuel system Defuel.		
5	Aircraft - external Wash.		
6	Aircraft - preparation Position aircraft in maintenance hangar. Remove and examine the protective covers, blanks and restraints. Replace if damaged, torn or is not properly installed.		
7	Placards and Markings Examine and replace as necessary.		
8	Aircraft Raise on jacks.		
9	Fuselage Remove access panels and fairings.		
10	Empennage Remove access panels and fairings.		
11	Wings Remove access panels and fairings.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
12	Main fuel tank access panels Remove.		
13	Underwing fuel tanks (If Installed) Remove.		
Chapter 21 - Air Conditioning			
1	Air inlet screen and hoses Examine.		
2	Engine bleed air line and hoses Examine.		
3	Mixer unit Examine.		
4	Emergency shut-off valve Examine.		
5	System components and pipes Examine.		
6	Butterfly vents - passenger cabin Examine.		
7	System controls Examine. Lubricate moving parts (Material No. P04-037)		
8	Air conditioning system and emergency shut-off control Check during engine ground run checks. Reset valve and replace indicator thread (Material No. P09-006)		
Chapter 25 - Equipment and Furnishings			
1	Pilot and Co-pilot seats Examine. Adjustment mechanism - Operational test. Lubricate (Material No. P04-011)		
2	Pilot and Co-pilot seat harnesses Examine. Check inertial reel system operates correctly.		
3	Seat attachments Examine.		
4	Passenger seats Examine seats, seat attachments and seat harnesses. If seats with Torso Restraint System are installed, make sure the backrest release mechanism operates correctly. Lubricate moving parts (Material No. P04- 028)		

NO	TASK	SIGNATURE	
		SIGN	STAMP
5	Seat attachments Examine.		
6	Linings and curtains Examine.		
7	Fire extinguisher Examine.		
8	First aid kit Examine.		
9	Crash axe Make sure it is stored correctly.		
10	Stretchers (If Installed) Examine.		
11	Stretcher mounts (If Installed) Examine.		
Chapter 27 - Flight Controls - General			
1	Aileron control rods Remove		
2	Controls Control column Examine. Check for excessive play at Teflon bearing at base of column by pulling up and pushing down on column. Maximum play is 0,2 mm (0,008 in.).		
3	Control lock Examine.		
4	Rudder pedal assembly torque tube (Up to MSN 623) Remove. Examine. Do a crack detection test with dye penetrant. Lubricate (Material No. P04-002). Install.		
5	Rudder pedal assembly torque tube (From MSN 624) Examine for excessive wear. Lubricate (Material No. P04-002)		
6	Rudder pedal bar Examine.		
7	Bellcranks and levers Examine.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
8	Flight control cables Examine. Check tension.		
9	Aileron control rods Examine.		
10	Elevator control rods Examine.		
11	Flap control rods (Electrical system only) Examine.		
12	Horizontal stabilizer actuator Examine.		
13	Control rod bearings Lubricate. (Material No. P04-002)		
14	Control cable pulleys Examine.		
15	Aileron to rudder interconnect spring Examine. Check cable tension (Ref. 27-14-11, Page Block 501)		
Chapter 28 - Fuel System			
1	Fuel filter bypass Do a functional test with a dummy filter.		
2	Fuel shut-off valve Examine. Lubricate moving parts (Material No. P04-037)		
3	Main fuel tanks Clean. Examine internal seals. Repair sealing if required.		
4	Fuel tank inward vent-valves Examine. Replace floats		
5	Underwing fuel system vent-valves (if underwing tanks are installed) Examine Replace floats		
6	Fuel tank vents Examine		
7	Tank filler caps Examine		

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8	Fuel collector tank Examine		
9	Water collector tank Examine.		
10	Fuel pipes and hoses Examine.		
11	Engine driven fuel pump Examine.		
12	Fuel flow transmitter Examine. Check fuel flow indication.		
13	Fuel system Do a Functional test.		
14	Underwing tanks, filler caps, seals, hoses and pylons. (If Installed) Examine.		
15	Transfer pump Examine and clean filters.		
16	Underwing tank system (If Installed) Do a Functional test.		
Chapter 32 – Landing Gear and Brakes			
1	Brake linings Check brake lining wear,		
2	Brake system Drain		
3	Brake discs Check for wear. (Ref. MC-STC-002, page 5)		
4	Brake system Examine pipes and hoses		
5	V-struts Do the partial overhaul inspection procedure.		
6	Main wheels Remove		

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7	Main wheels and tires Examine. Partial overhaul.		
8	Main gear shock struts Examine. Check fluid level.		
9	Tail landing gear Remove.		
10	Tail wheel and tire Remove. Check inflation pressure 47 psi		
11	Tail shock strut Examine. Check fluid level. Note: Check Shock Strut Pressure 24 bar / 348 psi		
12	Tail landing gear Examine.		
13	Tail landing gear Examine fuselage attachment points and adjacent structure.		
14	Debris guard. Examine.		
15	Tail wheel steering Examine cables and springs. Lubricate (Material No. P04-002)		
16	Brake system Lubricate moving parts of controls. (Material Nc. P04-037)		
17	Brake system Flush system, fill with new fluid and bleed the system. Check brake fluid level.		
18	Brake system Apply the brakes and look for leaks.		
19	Main wheels Install serviceable main wheels.		
20	Tail landing gear Install.		
21	Steering system With a spring balance, check the system spring box assemblies are pre-loaded to 37 Kg ± 2 Kg (81 lb ±4.5 lb). Check cable tension and the rudder system range of movement. Lubricate moving parts of controls (Material No. P04-002)		

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Chapter 35 - Oxygen System			
1	Oxygen bottle(s) and attachment brackets (if installed) Examine.		
2	Oxygen system pipes, flexible tubes and fittings (if installed) Examine.		
3	Oxygen regulators (if installed) Examine.		
Chapter 52 - Doors			
1	Pilot, Co-pilot doors Examine. Latching handles - Do an Operational test. Remove safety wire. Emergency release mechanism - Do an Operational test. Lubricate mechanism (Material No. P04-011). Install safety wire (Material No. P02-021)		
2	Cabin sliding door Remove. Examine rollers, rails and door. Examine seals and stops. Latching mechanism - Do an Operational test. Install door. Lubricate mechanism (Material No. P04-037) Note: Latching Mechanism should spring back freely when the door handle is released		
3	Cabin trap-door. (If Installed) Remove trap-door hatch cover. Examine doors, hinges, seal, and structural damage. Latching and release mechanism - Do an Operational test. Lubricate mechanism (Material No. P04-037)		
4	Access door - RH rear fuselage Latching mechanism - Do an Operational test. Lubricate mechanism (Material No. P04-037)		
Chapter 53 - Fuselage			
1	Fuselage - external Examine.		
2	Fuselage - internal Examine.		
3	Fuselage Make sure that the drain holes are not blocked.		
4	Wing attachment brackets and adjacent structure Examine. Use a light magnifying glass.		
5	Fuselage - wing strut attachment brackets and structure internal and external Examine (Using Fluorescent Dye penetrant Inspection).		

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6	V-strut attachment brackets Examine.			
7	Access panels Examine panels, fairings and fasteners.			
8	Stabilizer Trim Attachment Components FR12A Support Brackets Examine.			
9	Stabilizer Trim Attachment Components FR12A Where the Horizontal Trim Actuator Support is Installed. Examine.			
Chapter 55 - Stabilizers				
1	Elevators Remove.	**RII:** Sign & Stamp		
2	Rudder Remove.	**RII:** Sign & Stamp		
3	Empennage - internal Examine as far as possible. Make sure that the water drain holes are not blocked.			
4	Dorsal fin and attachments Examine.			
5	Vertical stabilizer Examine.			
6	Rudder hinge bearings Replace			
7	Rudder torque shaft upper and lower bearing Replace (Ref., Page Block 401)			
8	Empennage Examine panels, fairings and fasteners.			
9	Torque tube Examine.			
10	Rudder and trim tab Examine.			
11	Horizontal stabilizer Check for excessive play at attachment points by rocking stabilizer ends and listening for movement at attachment points. Maximum play is 1,5 mm (0.06 in.).			

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12	Horizontal stabilizer Remove.			
13	Horizontal stabilizer Examine.			
14	Elevator and trim tab Examine.			
15	Elevator control bellcrank Examine.			
16	Elevator hinge bearings Replace.			
17	Horizontal stabilizer Install.	**RII:** Sign & Stamp		
18	Rudder Install.	**RII:** Sign & Stamp		
19	Elevators Install.	**RII:** Sign & Stamp		
Chapter 56 - Windows				
1	Windscreens Examine.			
2	Cabin - two round windows Examine.			
3	Door windows Examine.			
4	Emergency window Examine seals.			
Chapter 57 - Wings				
1	Ailerons Remove.	**RII:** Sign & Stamp		
2	Flaps Remove.	**RII:** Sign & Stamp		

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3	Wing - external Examine skin and structure, particularly in area of fuel tanks, all access hole and external component or equipment attaching points. Look for loose rivets along the main spar (this can indicate advanced corrosion of the spar cap).			
4	Wing - internal Examine internal skin and structure, particularly in the area of fuel tank, as far as possible. Look for signs of corrosion on the upper and lower main spar caps			
5	Wing - fuselage attachments Examine.			
6	Wing - strut attachment brackets Examine.			
7	External stores attachments Examine.			
8	Access panels Examine panels, fairings and fasteners.			
9	Wing tips Examine.			
10	Aileron support structure Examine aileron support brackets, hinge bearings, control rod attachment points and attaching parts.			
11	Ailerons Remove balance arms. Examine. Install balance arms. Examine mountings for the static discharge wicks. Lubricate bearings (Material No. P04-002).			
12	Aileron - tabs Examine tabs, tab control rods, support brackets, hinges and attaching parts.			
13	Flap support structure control rod attachments, actuator support bracket and attaching parts Examine support brackets and hinge bearings.			
14	Flaps Examine.			
15	Wing struts Examine.			
16	Ailerons Install.	**RII:** Sign & Stamp		

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17	Flaps Install.	**RII:** Sign & Stamp		
Aircraft - General **NOTE: Do these steps when the engine, electrical and avionic inspections are complete**				
1	Aileron controls Do a functional test.			
2	Elevator controls Do a functional test.			
3	Rudder controls Do a functional test.			
4	Flaps Do a functional test.			
5	Aileron trim Do a functional test.			
6	Horizontal stabilizer trim Do a functional test.			
7	Rudder trim Do a functional test.			
8	Aircraft Make sure that the work area is clean and clear of tools and other items.			
9	Main fuel tank access panels Install.			
10	Main fuel tank access panels Install.			
11	Fuselage Install access panels and fairings.			
12	Empennage Install access panels and fairings.			
13	Wings Install access panels and fairings.			
14	Underwing fuel tanks (If required) Install.			

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15	Aircraft Lower off jacks.		
B. PARTIAL OVERHAUL - ENGINE **Chapter 61 - Propeller**			
1	Spinner Remove		
2	Propeller de-icer boots Examine		
3	Slip-ring (Beta) Examine. Check gap between slip-ring and carbon block is no more than 0,50 mm (0.02 in.)		
4	Blades Examine. Disconnect the pitch change mechanism and make sure the blades are free to turn. Connect the pitch change mechanism and safety with lockwire.		
5	Spinner body and backplate Examine.		
6	Propeller control system Examine. Check for full and free range of movement.		
Chapter 71 - Powerplant			
1	Engine Do a compressor wash. (Ref. 71 -00-00, Page Block 701)		
2	Engine and engine compartment Clean engine, engine compartment and cowlings.		
3	Engine Examine as far as accessible, all tubes, electrical wiring, control linkages, hoses and cowlings. Lubricate ball-end fitting of starting control rod, FCU rod and propeller interconnect rod with grease (Material No. P04-002).		
4	Engine compartment Examine all hoses and pipes. Examine compartment structure. Make sure that the drain holes are not blocked.		
5	Engine shockmounts Examine.		
6	Support ring Examine.		

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7	Support struts Examine.		
8	Sand filters Clean.		
9	Engine cowlings and seals Examine.		
10	Fire shields and seals Examine.		
11	Electrical harnesses Examine.		
12	Fuel drain collector tank Examine.		
Chapter 72 - Engine			
1	Compressor inlet screen Remove. Examine.		
2	Compressor Examine as far as possible.		
3	Compressor inlet screen Install.		
4	Exhaust duct Examine.		
5	Gas generator case Examine.		
6	Propeller shaft oil seal Examine, look for oil leaks.		
7	Accessories Examine.		
Chapter 73 - Engine Fuel and Control			
1	HP fuel pump Examine. Clean filters.		
2	Fuel control unit Examine. Check for leaks from vent.		

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3	Starting flow control unit Examine.		
4	Gas generator case drain valves Examine.		
Chapter 74 - Ignition			
1	Spark igniters Examine.		
2	Glow plugs Examine.		
3	Igniter exciter Examine.		
4	Ignition cables Examine.		
Chapter 76 - Engine Controls			
1	Engine control system Examine. Check for full and free range of movement.		
Chapter 78 - Exhaust			
1	Exhaust stubs Examine. Note: Exhaust duct check for cracking along the weld on the leading edge.		
Chapter 79 - Oil			
1	Oil filter Clean.		
2	Chip detector Remove. Clean. Examine. Check operation as follows: Connect detector, short across detector poles, energize aircraft electrical system and check that CHIP warning is activated. Install and connect chip detector		
General			
1	Powerplant Make sure that the work area is clean and clear of tools and other items		
2	Powerplant Do a functional test		

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D. ELECTRICS AND INSTRUMENTS **General**			
1	Battery mounts Examine attachments, ventilation hoses, cable connectors and wiring.		
2	Battery compartment Examine.		
3	External power receptacle Examine.		
4	Starter/Generator Examine brushes, commutator, exterior surfaces.		
5	Starter and power generation relays Examine. Functionally test.		
6	Voltage regulator Examine. Functionally test during engine ground run.		
7	Cockpit - switches, circuit breakers Examine. Make sure that placards are readable.		
8	Cables looms, plugs, connectors relays, terminal blocks Examine in: - engine compartment - cockpit - fuselage - empennage - wings		
9	Bonding leads Examine in: - engine compartment - cockpit - fuselage - empennage - wings - landing gear		
Chapter 21 - Air Conditioning			
1	Cockpit blower motor Examine. Operational test		
2	Passenger cabin blower motor Examine. Operational test		

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Chapter 23 - Communications			
1	Static discharge wicks Examine		
Chapter 27 - Flight Controls			
1	Aileron trim actuator Examine. Operational test.		
2	Rudder trim actuator Examine. Operational test.		
3	Flap actuator Examine. Operational test.		
4	Horizontal stabilizer actuator (Main and Alternate systems) Examine. Operational test.		
Chapter 28 - Fuel			
1	Auxiliary pump Operational test.		
Chapter 30 - Ice and Rain Protection			
1	Pitot and static port heaters Operational test.		
Chapter 33 - Lights			
1	Navigation Lights Examine. Operational test.		
2	Anti-collision strobe lights Examine. Operational test.		
3	Landing Lights Examine. Operational test.		
4	Cockpit lights Examine. Operational test.		
5	Instrument lights Examine. Operational test.		
6	Warning lights Examine. Operational test.		
7	Passenger cabin lights Examine. Operational test.		

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Chapter 34 - Navigation			
1	Pitot tube Examine.		
2	Static ports Examine.		
3	Pitot and static systems Functionally test system for leaks.		
4	Pitot and static pipes and connectors Examine.		
5	Vertical speed indicator Reset to zero.		
6	Altimeter Check barometric scale for accuracy. Calibrate if necessary.		
7	Airspeed indicator Check for accuracy, calibrate if necessary.		
8	Gyro operated instruments Operational test.		
9	Instruments Examine.		
10	Magnetic compass Check the correction card date is valid.		
11	Pitot tube Make sure that the tube has cooled Install the cover.		
Chapter 37 – Vacuum			
1	Vacuum suction regulator Clean the filter.		
2	Vacuum system air filter Examine. Replace if contaminated.		
3	Vacuum system pressure regulator valve Examine.		

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4	Vacuum system ejector Examine.		
5	Vacuum pipes and connectors Examine.		
D. AVIONICS **General**			
1	Antenna Examine.		
2	Headsets and microphones Examine.		
3	Avionic equipment Examine. Examine cables and connectors as far as possible.		
4	Avionic equipment shockmounts Examine.		
5	Avionic equipment racks Examine.		
6	Switches and circuit breakers Examine.		
7	Avionic systems Operational test.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name	:	_____	Name of RII	:	_____
Signature	:	_____	Signature	:	_____
Stamp	:	_____	Stamp	:	_____
Place/Date	:	_____	Place/Date	:	_____

Ref. AMM Pilatus Porter PC6 Chapter 71-00-00,
P&WC Maintenance Manual Model PT6A-27 Manual Part No. 3013242 Chapter 72-00-00

ENGINE INSTALLATION SHEET

Date	:		**Engine P/N**	:	
Aircraft Registration	:		**Engine S/N**	:	
Aircraft Type	:	**PILATUS PC6, B2-H4**	**TSN**	:	
Aircraft Total Hours	:		**TSO**	:	
Aircraft Total Cycle	:		**CSN**	:	
Work Order Number	:		**CSO**	:	

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Job Set Up			
A	Make inventory records P/N and S/N of the engine and it's accessories from the engine that removed. Fill out into the form no ASI/MD-50 Engine Change- Major Component Inventory Records.		
Install the following item of Engine Accessories on the Engine before proceeding to install on the airplane:			
A	**CAUTION:** MAKE SURE THAT ALL BLANKS AND COVERS REMOVED FROM THE REPLACEMENT ENGINE ARE INSTALLED TO ALL OPENINGS ON THE REMOVED ENGINE		
	Oil Drain Valve (Ref. Fig. 409)		
	1. Remove the blank from the opening. 2. Install a new O-ring (4) to the oil drain valve (5). 3. Install the drain valve (5) with the lock pin (2). 4. Safety the lockpin (2) with a new cotter pin. 5. Install the bolt (1).		
B	**Oil Temperature Sensor (Ref. Fig. 409)**		
	1. Remove the blank from the opening. 2. Install a new O-ring (11) to the oil temperature sensor. 3. Install the oil temperature sensor (10).		
C	**Engine Breather Elbow (Ref. Fig. 409)**		
	1. Remove the blank from the opening. 2. Install a new O-ring (8) to the elbow (9). 3. Install the elbow (9) with the bolts (6) and washers (7). 4. Torque the bolts (6) to between 3.4 and 3.9 Nm (30 and 35 lbf in.). 5. Safety the bolts (6) with lockwire (Material No. P02-001).		

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D	**Control Levers (Ref. Fig. 405)** 1. Idle Control Lever: a) Put the lever (9) in position on the idle control unit. b) Install the washer (10) and nut (11), then tighten the nut (11) with your hand c) Install the bolt (6), control rod end (5), spacers (7) and (4), washer (3) and nut (2). d) Torque the nut (2) to between 1.3 and 2.0 Nm (12 and 18 lbf in.). e) Safety the nut (2) with a new cotter pin (1). f) Torque the nut (11) to between 1.3 and 2.0 Nm (12 and 18 lbf in.). g) Safety the nut (11) with a new cotter pin (8). **2. Power Control Input Lever** **CAUTION:** WHEN YOU INSTALL THE LEVER (18) IT MUST BE IN LINE WITH THE FOLLOWER LEVER ON THE SAME SHAFT OF THE CAM BOX. a) Install the lever (18) to the splined shaft. b) Install the bolt (17), the washer (19) and the nut (20). Safety the nut (20) with a new cotter pin (21).		
E	**Engine Driven Fuel Pump (Ref. Fig. 410)** 1. Remove the blank from the opening. 2. Install a new gasket (8). 3. Install the fuel pump (7), washers (5) and nuts (6). 4. Torque the nuts (6) to between 8,5 and 9,6 Nm (75 and 85 lbf in.).		
F	**Gas Generator and Propeller Tachometer Generators (Ref. Fig. 410)** 1. Remove the blank from the opening. 2. Install a new gasket (2). 3. Install the generator (1), washers (3) and nuts (4). 4. Torque the nuts (4) to between 8,5 and 9,6 Nm (75 and 85 lbf in.).		
G	**Torque Indicating System (Ref. Fig. 411, Sheets 1 and 2)** 1. Install a new O-ring (1). 2. Install the adapter (8). 3. Remove the bottom RH nut (6) from the propeller tachometer generator. 4. Install the P-clip (4) and torque transducer (3). 5. Install the nut (6). 6. Torque the nut (6) to between 8,5 and 9,6 Nm (75 and 85 lbf in.). 7. Install the torque pressure pipe (2). 8. Install the case reference pressure hose (7).		
H	**Propeller Overspeed Governor (Ref. Fig. 412)** 1. Install a new gasket (4) on the replacement engine. 2. Install the governor with the washers (1) and nuts (2). 3. Torque the nuts (2) to between 19,2 and 21,5 Nm (170 and 190 lbf in.).		

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	Drain Line Adapter, QAD Adapter (if applicable) and Starter-Generator (Ref. Fig. 413)		
I	1. Install the drain adapter (7). 2. Install a new gasket (1). 3. If applicable, install the QAD adapter (2) with the washers (3) and nuts (4). 4. Install the starter-generator (Ref. 24-31-11) but connect the electrical cables after you install the engine (Ref. Para. 7.H.(1))		
	Harness (Ref. Fig. 414)		
J	1. If applicable, install the propeller de-icer unit (Ref. 30-60-01, Page Block 401). 2. If necessary, replace the heat insulating tape installed on the harness between the engine flanges A and C. 3. Put the harness assembly in position on the engine. 4. Install the P-clips to secure the harness. 5. Remove the identity marks and connect the ITT indication leads to the T5 terminal block. 6. If applicable, remove the identity marks and connect the propeller de- icer leads to the de-icer unit terminal block. 7. Connect the electrical plugs at the: i. chip detector. ii. propeller tachometer generator. iii. torque pressure transducer. 8. Remove the two thrust bearing cover attaching nuts. 9. Install the low pitch warning switch mounting bracket and warning switch on to the mounting studs. 10. Install the warning switch linkage block on to mounting stud on the propeller reversing lever. 11. Install the washer and nut to secure the warning switch linkage block, then tighten the nut with your hand. Make sure that the block is free to turn on the stud. 12. Safety the nut with a new cotter pin.		
	Propeller Governor Maximum Stop Screw (Ref. Fig. 405)		
K	1. Check the maximum stop screw (35) on the propeller governor. If the screw is shorter than the stop screw on the removed engine, move the screws as follows: **NOTE:** The long stop screw is used to give the propeller speed of 2000 rpm used on B2H4 aircraft. a. On the removed engine: i. Loosen the locknut. ii. Remove the stop screw, at the same time count the number of turns necessary to remove the stop screw. iii. Make a record of the number of turns. b. Move the short stop screw from the replacement engine to the removed engine. c. Install the long stop screw on the propeller governor of the replacement engine with the same number of turns as recorded at (a) (iii). d. Tighten the stop screw locknut.		

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	Inner Bulkheads (Ref. Fig. 415)		
L	1. Put the forward bulkheads (1) and (13) in position. 2. Install the bolts (2), washers (3) and nuts (4). 3. Install the bolts (5), washers (10) and nuts (11). 4. Install the harness slot filler plate on to the engine forward bulkhead. 5. Use caulking putty (Material No. P08-001) to seal the gaps between the harness and the bulkhead. 6. Put the rear bulkheads (6) and (12) in position. 7. Install the bolts (7), washers (8) and nuts (9).		
Installation			
	Engine Mounting Ring (Ref. Fig. 408)		
A	1. Position the mounting ring on the engine to the rear of the attachment points. **NOTE:** Make sure that the support strut attachment lugs on the mounting ring are to the rear. 2. Install the engine lifting sling (Ref. P&WC EMM 72-00-00, SERVICING). **CAUTION:** THE BUSHES THAT ATTACH THE SHOCKMOUNT TO THE MOUNTING FRAME BOLT MUST BE INSTALLED. THE BUSH MUST HAVE THE THICK FLANGE TO THE REAR. IF THE BUSH IS INCORRECTLY INSTALLED, THE ENGINE WILL NOT ALIGN CORRECTLY. 3. Install the gaskets (7), shockmounts (10), washers (6) and bolts (5). 4. Torque the bolts (5) to between 31.0 and 34.0 Nm (275 and 300 lbf in.). 5. Safety the bolts in pairs with lockwire (Material No. P02-001). 6. Lubricate the shanks of the mounting ring attachment bolts (8). 7. Put the mounting ring in position. 8. Install the bolts (8), washers (9) and (12) and nuts (11). 9. Torque the nuts (11) to between 55.0 and 60.0 Nm (486 and 531 lb in.).		
	Install the Engine (Ref. Fig. 408)		
B	1. Lift the engine in position. 2. Install the bolts (16) and washers (13). 3. Torque the bolts (16) to between 46,0 and 51,0 Nm (407 and 450 lb in.). 4. Safety the bolts (16) with locking wire (Material No. P02-001).		

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C	**Support Struts (Ref. Fig. 408)** 1. Put the rear bulkhead over the engine. 2. Loosely install 10 bolts (five each side) to attach the upper and lower half of the bulkhead together. 3. Put the support struts in position through the holes in the engine rear bulkhead. 4. Install the bolt (1), washer (2) and nut (3). 5. Torque the nuts (3) to between 10,5 and 12,5 Nm (95 and 110 lb in.). 6. Safety the nuts with new cotter pins (4). 7. Make sure the bonded shim (18) is securely attached to the structure. 8. If the nuts (15) are self-locking nuts: i. Install the bolt (19) washer (17) and nut (15). When you do this measure the rundown torque of the nut (15). ii. Torque the nuts (15) to between 51 and 56 Nm (450 and 500 lb in.) plus the rundown torque. 9. If the nuts (15) are castellated nuts: i. Install the bolt (19), washer (17) and nut (15). ii. Torque the nuts (15) to between 51 and 56 Nm (450 and 500 lb in.). iii. Safety the nuts (15) with new cotter pins (14). 10. Remove the lifting sling from the engine		
D	**Connect the Engine Bulkheads (Ref. Fig. 407)** 1. Install the bolts (6) and washers (7) to attach the upper half of the engine rear bulkhead. 2. Tighten the bolts (4) and washers (3) that attach the support strut seal plates (5) and seals (2).		
E	**Case Drains and P3 Air Bleed (Ref. Fig. 402)** 1. Connect the gas generator case rear drain hose (8) at the rear drain valve. 2. Connect the gas generator case forward drain hose (1) at the engine forward bulkhead. 3. Connect the gas generator case forward drain pipe (7). 4. Install the gasket (6) to the mounting boss on the top of the gas generator case. 5. Put the adapter in position and install the four bolts (4). 6. Connect the P3 bleed air hose (2) to the adapter (5). 7. Install the P-clip (3) on the P3 bleed air hose (2) and engine forward bulkhead. 8. Safety the hose to the lower LH side of the engine mounting ring with a cable tie.		

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	Fuel Tubes (Ref. Fig. 404, Sheets 1 and 2)		
F	1. Install a new O-ring (11) on the adapter (12). 2. Install the adapter to the starting flow control unit. 3. Set the adapter to the position noted at 4. E. (10). 4. Hold the adapter and then tighten the adapter locknut. 5. Connect the fuel dump hose (14) to the adapter (12). 6. Install and tighten the worm-drive clamp (13). 7. Connect fuel bleed return hose (10) to starting flow control unit. 8. Install a new O-ring (1) to the adapter (2). 9. Install the adapter (2) to the oil fuel heater. 10. (10) Connect the fuel supply hose (3) to the adapter (2). 11. Connect the drain tube (8) to the LP fuel pump. 12. Install a new O-ring (5) to the adapter (6). 13. Install the adapter (6) to the HP fuel pump. 14. Connect the drain tube (7) to the adapter (6). 15. Connect the inlet hose (4) to the LP fuel pump. 16. Connect outlet hose (9) to the LP fuel pump.		
	Oil Tubes (Ref. Fig. 403)		
G	1. Connect the starter generator drain hose (Ref. Fig. 413): i. Connect the drain hose (5) to the drain adapter (7)below the starter generator drive. ii. Install and tighten the clamp (6). 2. Connect the engine breather hose (3) to the breather elbow. Install and tighten the clamp (2). 3. Connect the oil cooler return hose (1) to the adapter on top of theaccessory gearbox. 4. Connect the engine oil cooler supply hose (7) to the connector on thescavenge pump. 5. Install a new O-ring (4) to the adapter (5) at the RH of the accessorygearbox. 6. Install the adapter (5). 7. Connect the oil pressure transducer hose (6) to the adapter (5).		
	Electrical Connectors (Ref. Fig. 401)		
H	1. Connect the electrical cables (1) to the starter-generator. 2. Connect the electrical plug (8) to the oil temperature sensor. 3. Connect the electrical plug (7) to the FCU sense line heater. 4. Connect the electrical plug (5) to the gas generator tachometergenerator. 5. Connect the electrical plug (2) to the ignition unit. 6. Connect the electrical plug (9) at the RH of the front face of theengine rear bulkhead. 7. If the propeller de-icing system is installed: i. Install electrical plug (10) at the RH front face of the enginerear bulkhead. 8. Install the earth leads (6) to engine bulkhead. Connect bonding lead (3) to engine data plate securing bolt (4).		

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		SIGN	STAMP
I	**Connect the Propeller Control Cable (Ref. Fig. 406)** 1. Insert the cable through the hole in the engine rear bulkhead. 2. Install the two grommets to the cable. 3. Insert the cable through the hole in the forward bulkhead. 4. Position the cable on the engine. 5. Press the grommets in the holes of the bulkhead. 6. Put the support bracket (9) in position. 7. Install the bolts (12), washers (10) and nuts (11). 8. Put the cable in position on the support bracket (9). 9. Install the top plate (15) with the bolts (16), spring washers (14) andnuts (13).		
J	**Connect the Controls (Ref. Fig. 405)** 1. Insert the cable through the hole in the engine rear bulkhead. 2. Install the two grommets to the cable. 3. Insert the cable through the hole in the forward bulkhead. 4. Position the cable on the engine. 5. Press the grommets in the holes of the bulkhead. 6. Put the support bracket (9) in position. 7. Install the bolts (12), washers (10) and nuts (11). 8. Put the cable in position on the support bracket (9). 9. Install the top plate (15) with the bolts (16), spring washers (14) andnuts (13). **RII :** Sign & Stamp		
K	**Connect the Controls (Ref. Fig. 405)** **1. Idle Control:** i. Put the rod (15) in position and then install the bolt (16),washer (14) and nut (13). ii. Torque the nut (13) to between 1,3 and 2,0 Nm (12 and 18 lbfin.). iii. Safety the nut with a new cotter pin. **2. Power Control:** i. Put the rod end (25) in position and then install the bolt (26),washer (24) and nut (23). ii. Torque the nut (23) to between 1,3 and 2,0 Nm (12 and 18 lbfin.). iii. Safety the nut with a new cotter pin (22). **3. Propeller Control:** i. Put the control rod (31) in position and then install the bolt(34), washer (33), spacer (32), washer (29) and nut (26). ii. Torque the nut (26) to between 1,3 and 2,0 Nm (12 and 18 lbfin.). iii. Safety the nut (26) with a new cotter pin (22). **RII :** Sign & Stamp		

NO	TASK		SIGNATURE	
			SIGN	STAMP
Job Close Up				
A	1. Adjust the engine controls.	**RII:**		
	2. Install the exhaust stubs.			
	3. Install the propeller.	**RII:**		
	4. If applicable, install the oil cooler.			
	5. Fill the engine oil system.			
	6. If installed, remove the aircraft tail stand and lower aircraft tail.			
	7. Make sure that the work area is clean and clear of tools and otheritems.			
	8. Do a fuel system de-preservation.			
	9. Remove the engine compressor intake cover.			
	10. Install the engine cowlings.			
	11. Connect the aircraft battery,			
	12. Do an engine ground run and fill out Engine Ground Run Sheet.			
B	Make an appropriate entry in Work Order or Aircraft Flight Maintenance Log (AFML)			

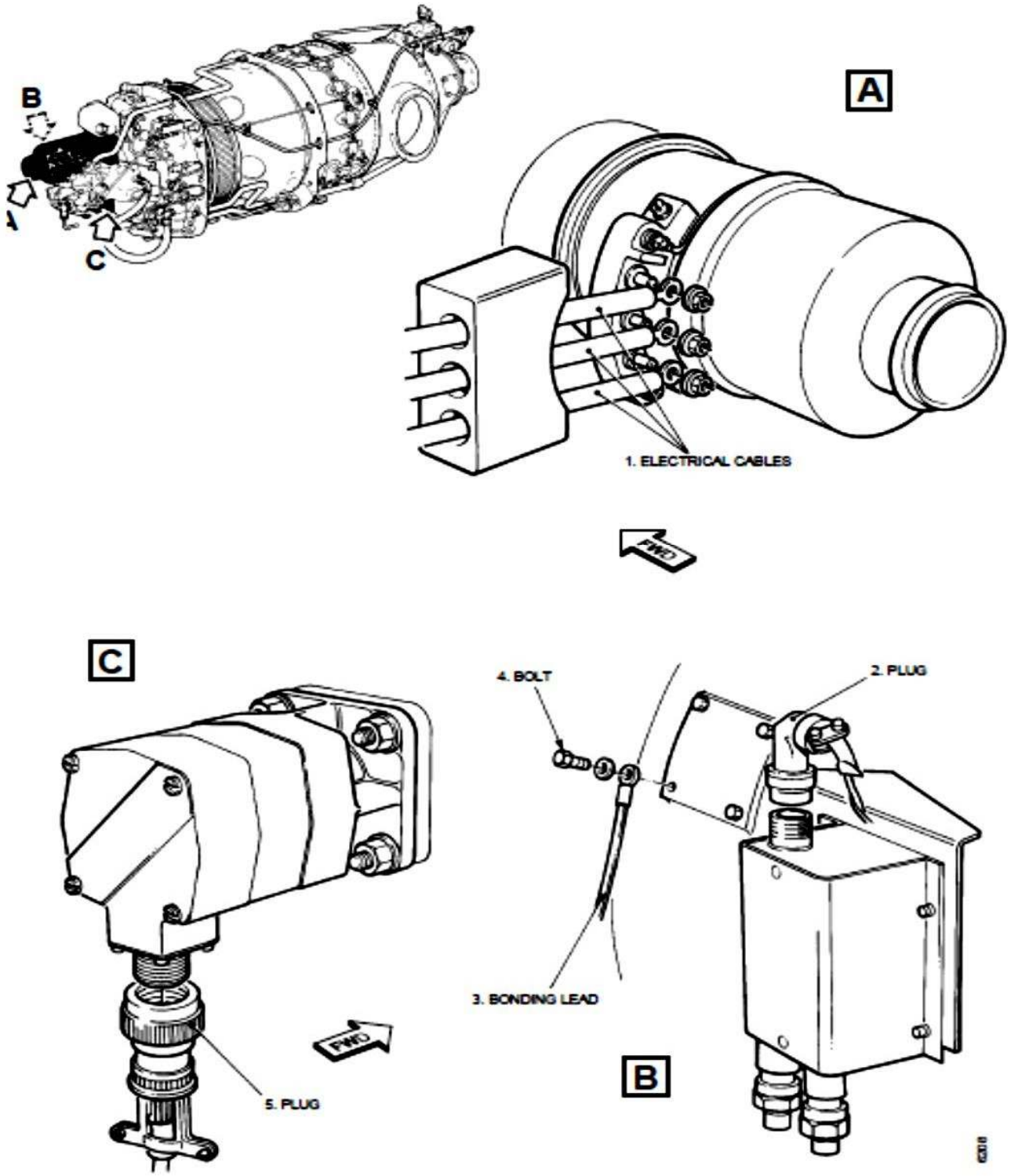
PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

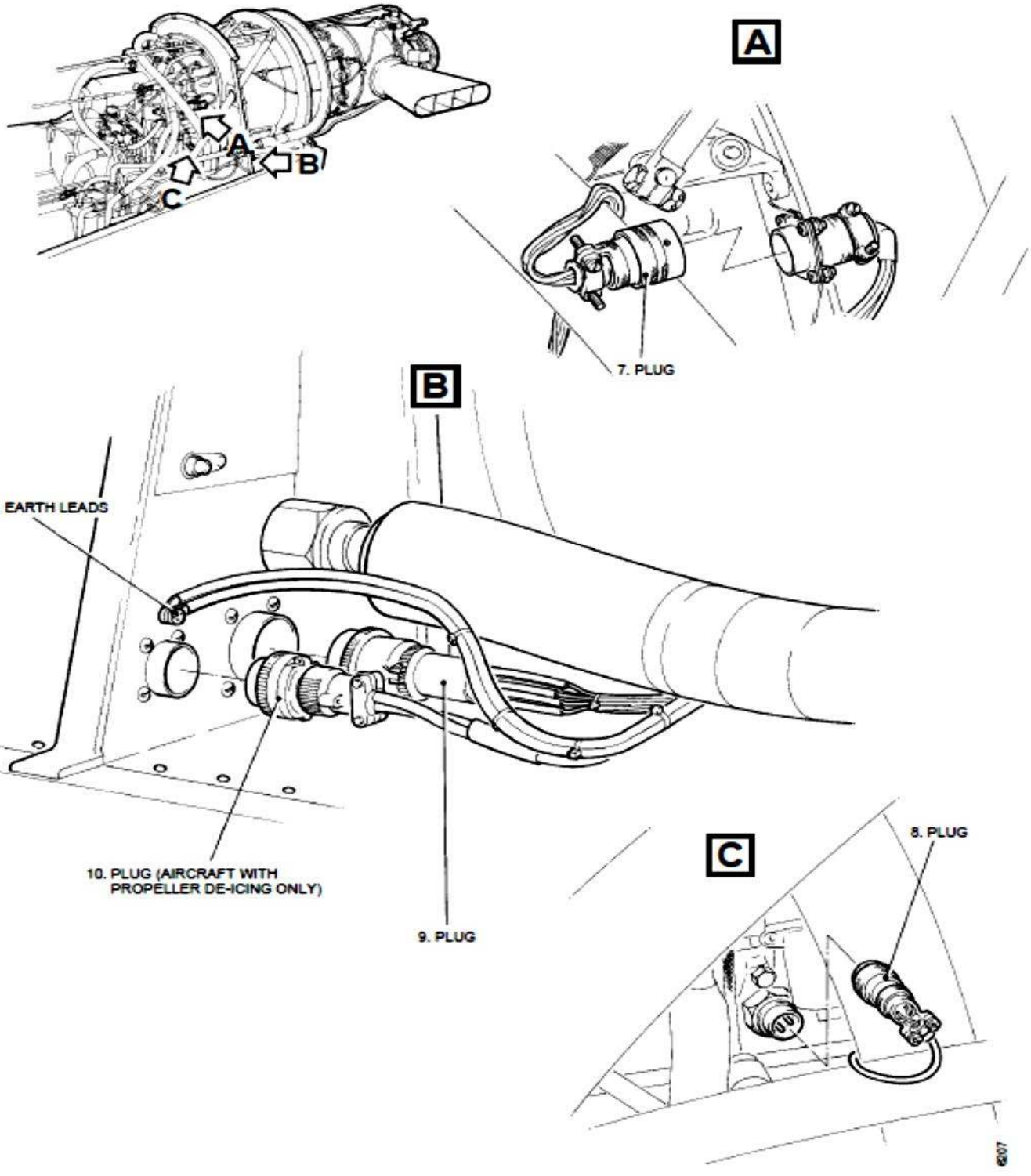
Name	:	_____	Name of RII	:	_____
Signature	:	_____	Signature	:	_____
Stamp	:	_____	Stamp	:	_____
Place/Date	:	_____	Place/Date	:	_____

PILATUS
PC-6
MAINTENANCE MANUAL



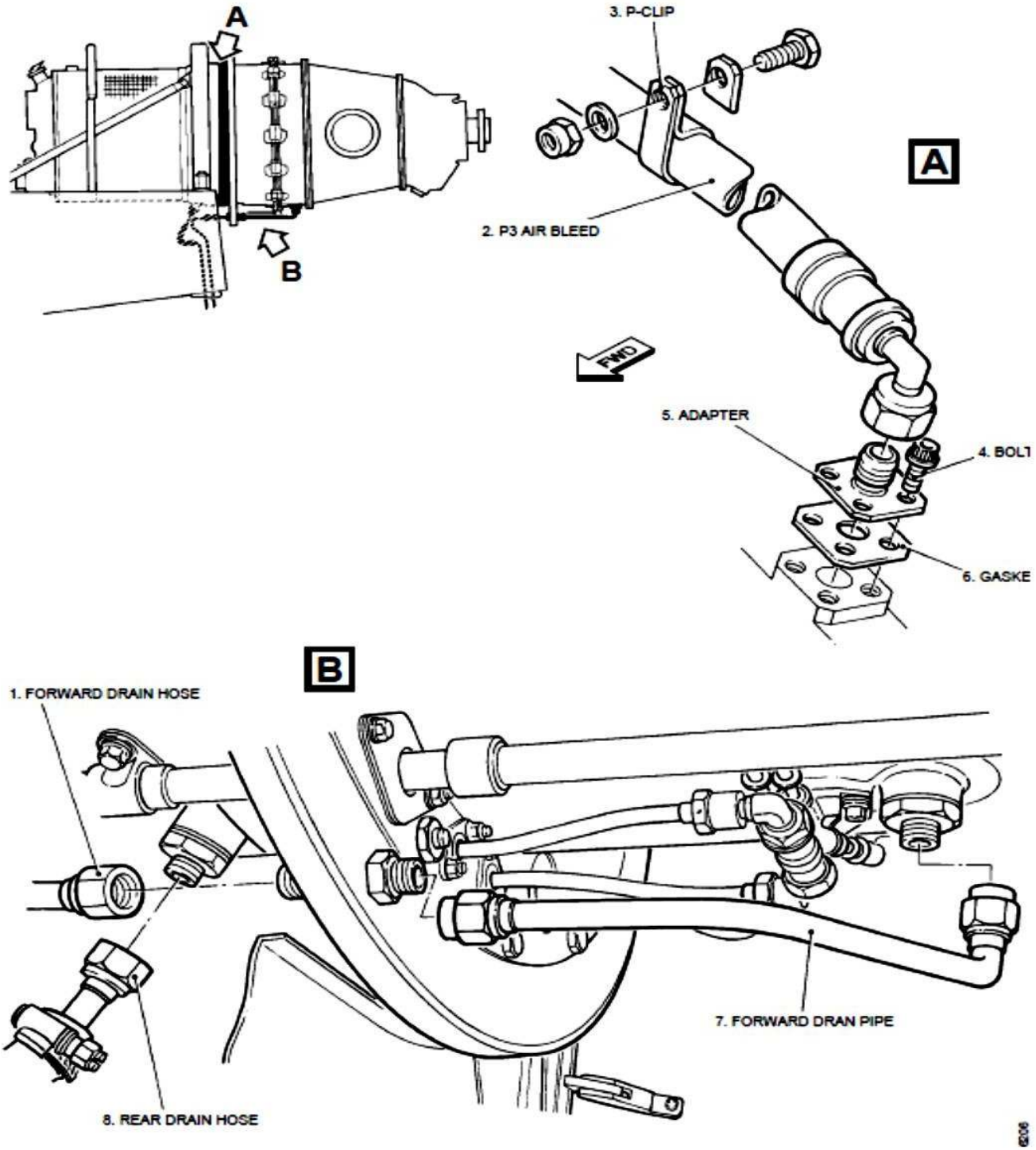
Powerplant - Removal / Installation - Electrical Connections
Figure 401 (Sheet 1 of 2)

PILATUS
PC-6
MAINTENANCE MANUAL



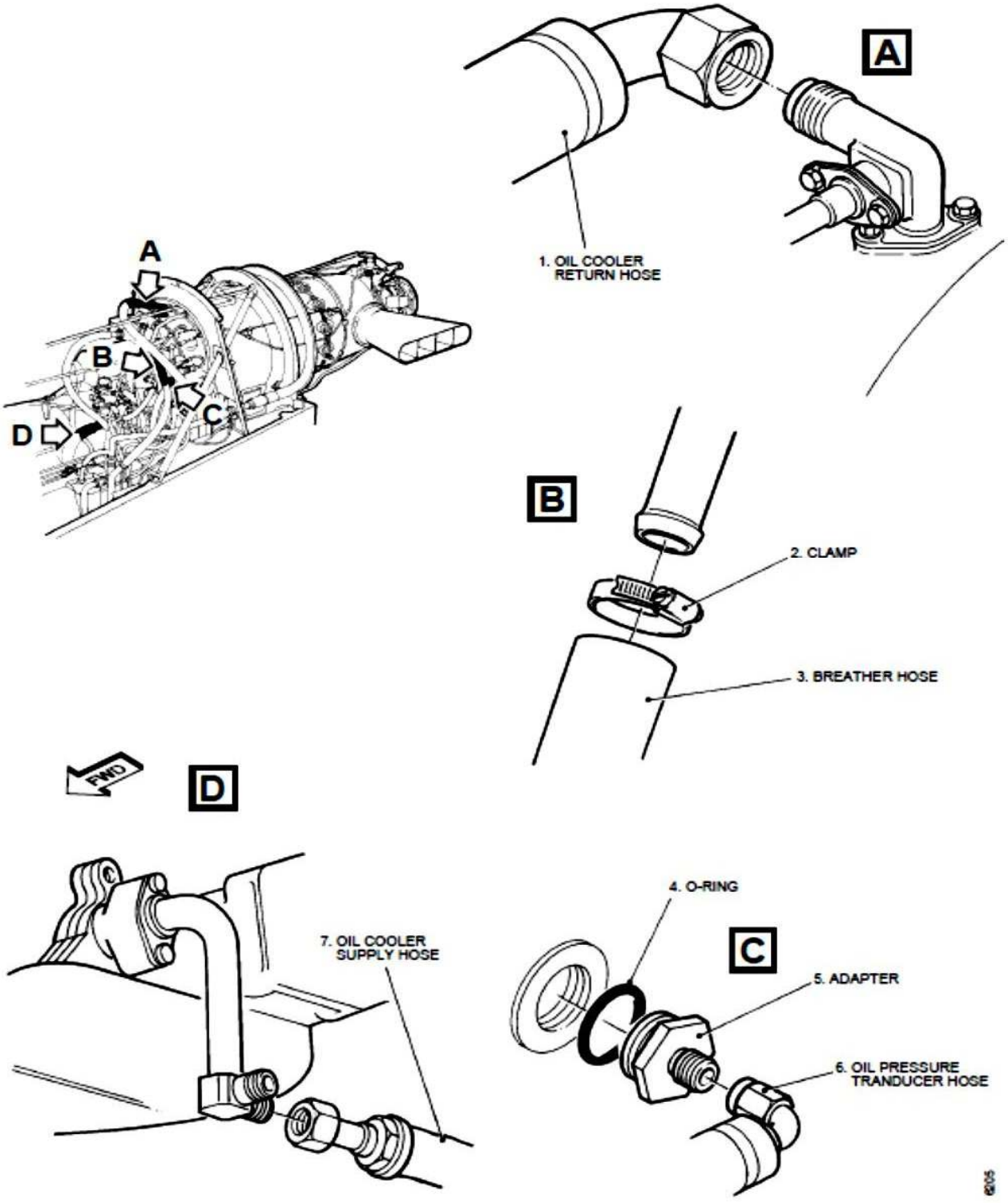
Powerplant - Removal / Installation - Electrical Connections
Figure 401 (Sheet 2 of 2)

PILATUS
PC-6
MAINTENANCE MANUAL



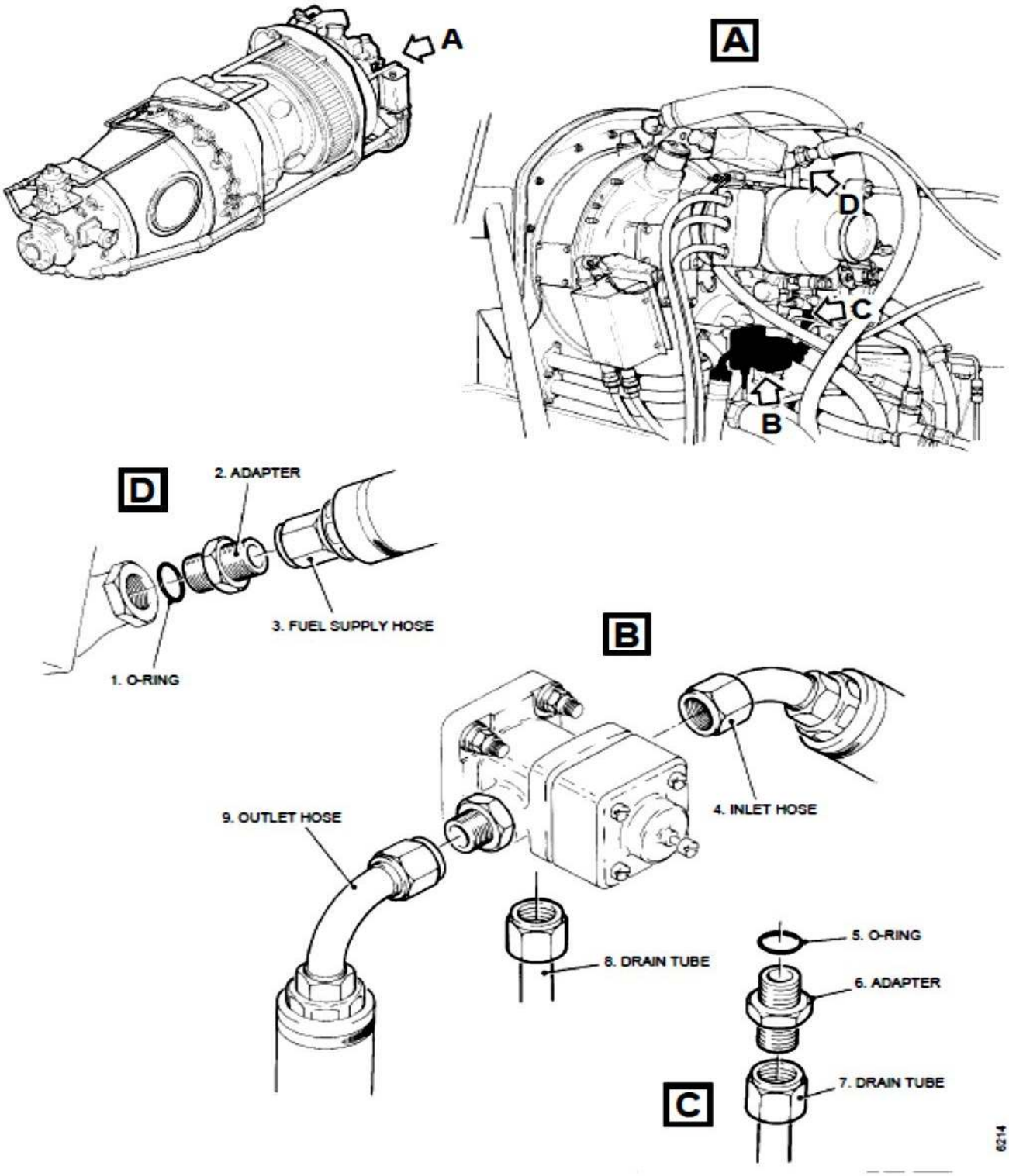
Powerplant - Removal / Installation - Case Drains and P3 Air Bleed
Figure 402

PILATUS
PC-6
MAINTENANCE MANUAL



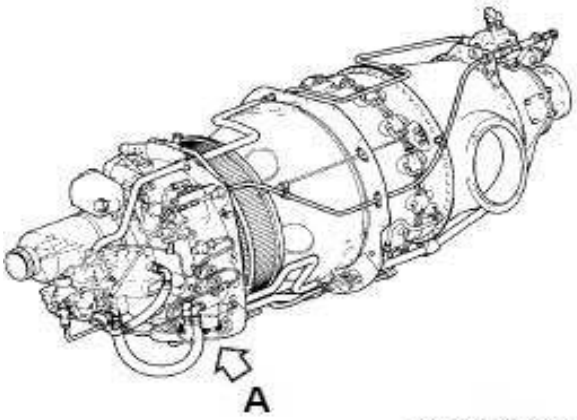
Powerplant - Removal / Installation - Oil Tubes
Figure 403

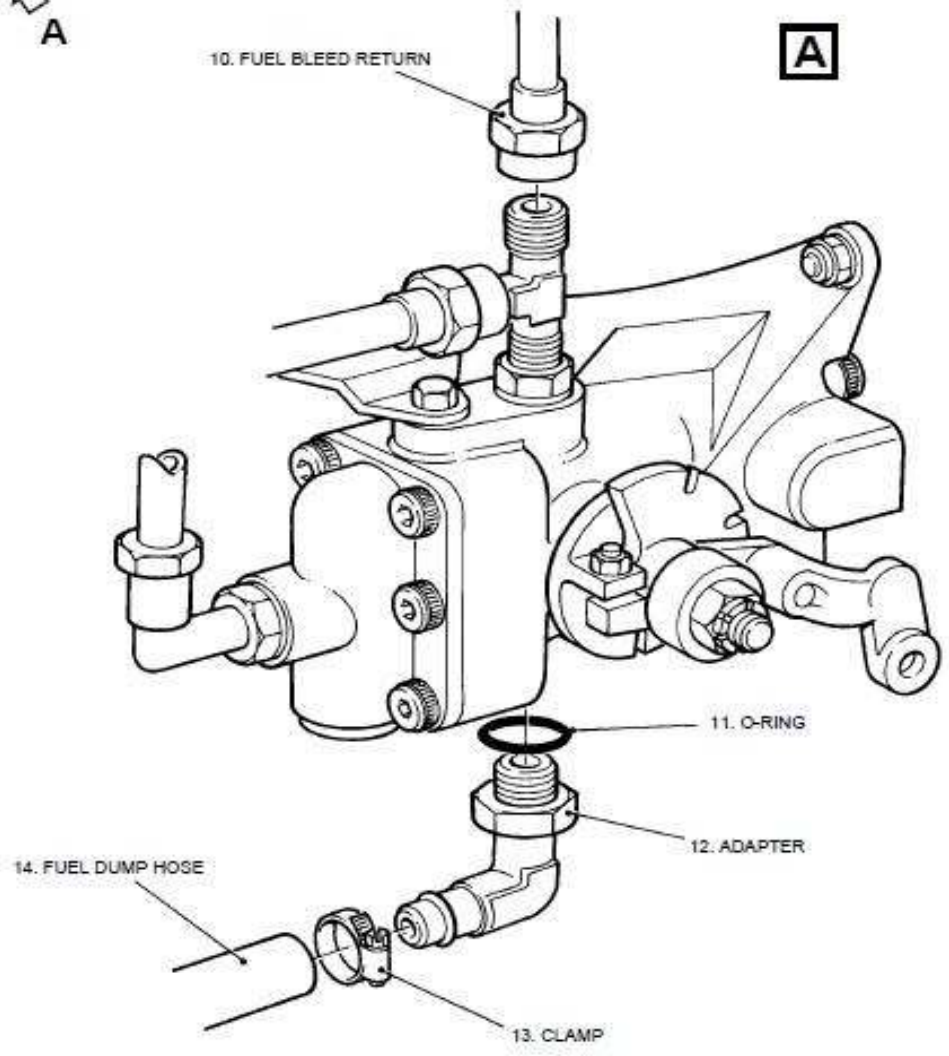
PILATUS
PC-6
MAINTENANCE MANUAL



Powerplant - Removal / Installation - Fuel Tubes
Figure 404 (Sheet 1 of 2)

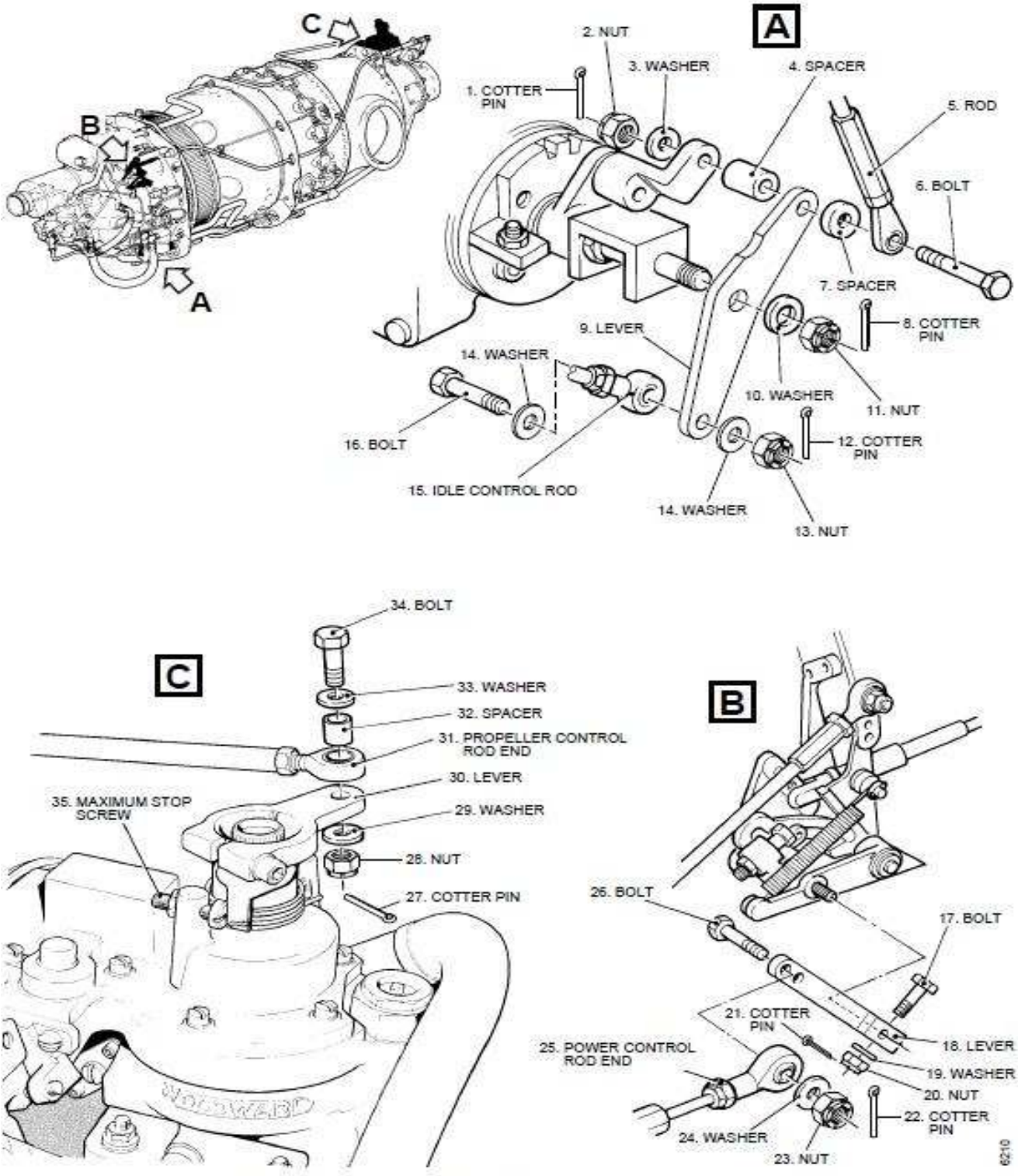
PILATUS
PC-6
MAINTENANCE MANUAL





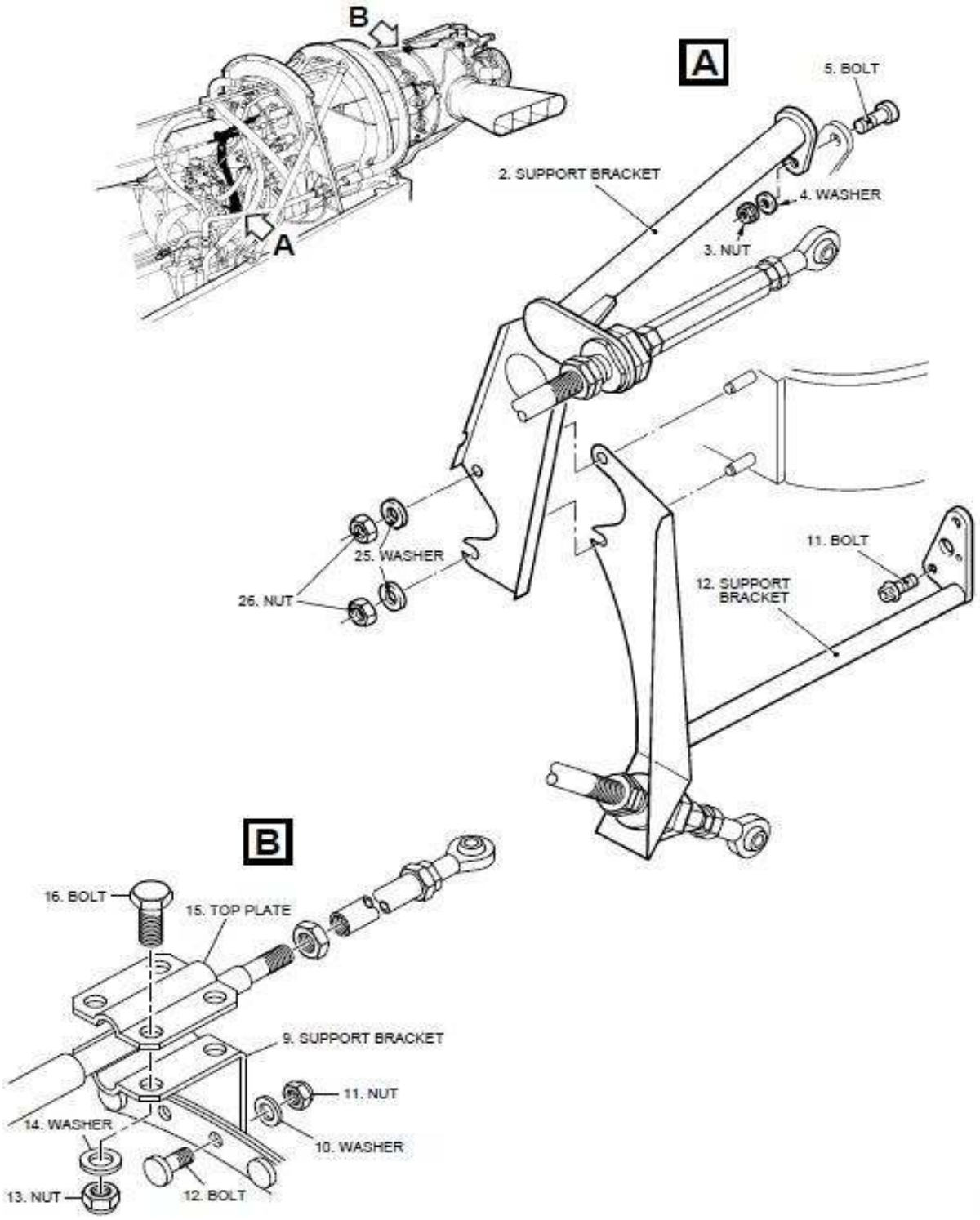
Powerplant - Removal / Installation - Fuel Tubes
Figure 404 (Sheet 2 of 2)

PILATUS
PC-6
MAINTENANCE MANUAL



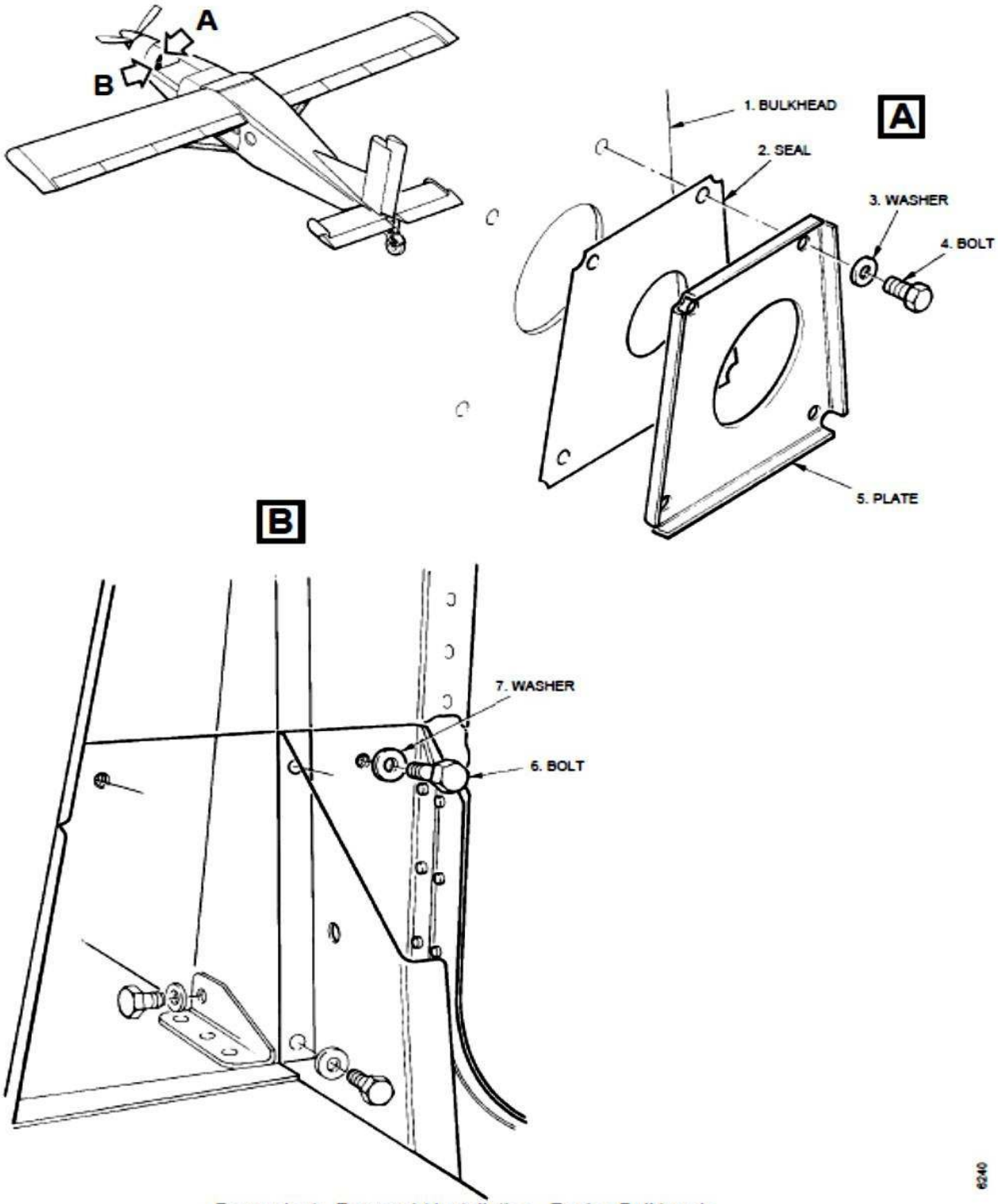
Powerplant - Removal / Installation - Control Connections and Levers
Figure 405

PILATUS
PC-6
MAINTENANCE MANUAL



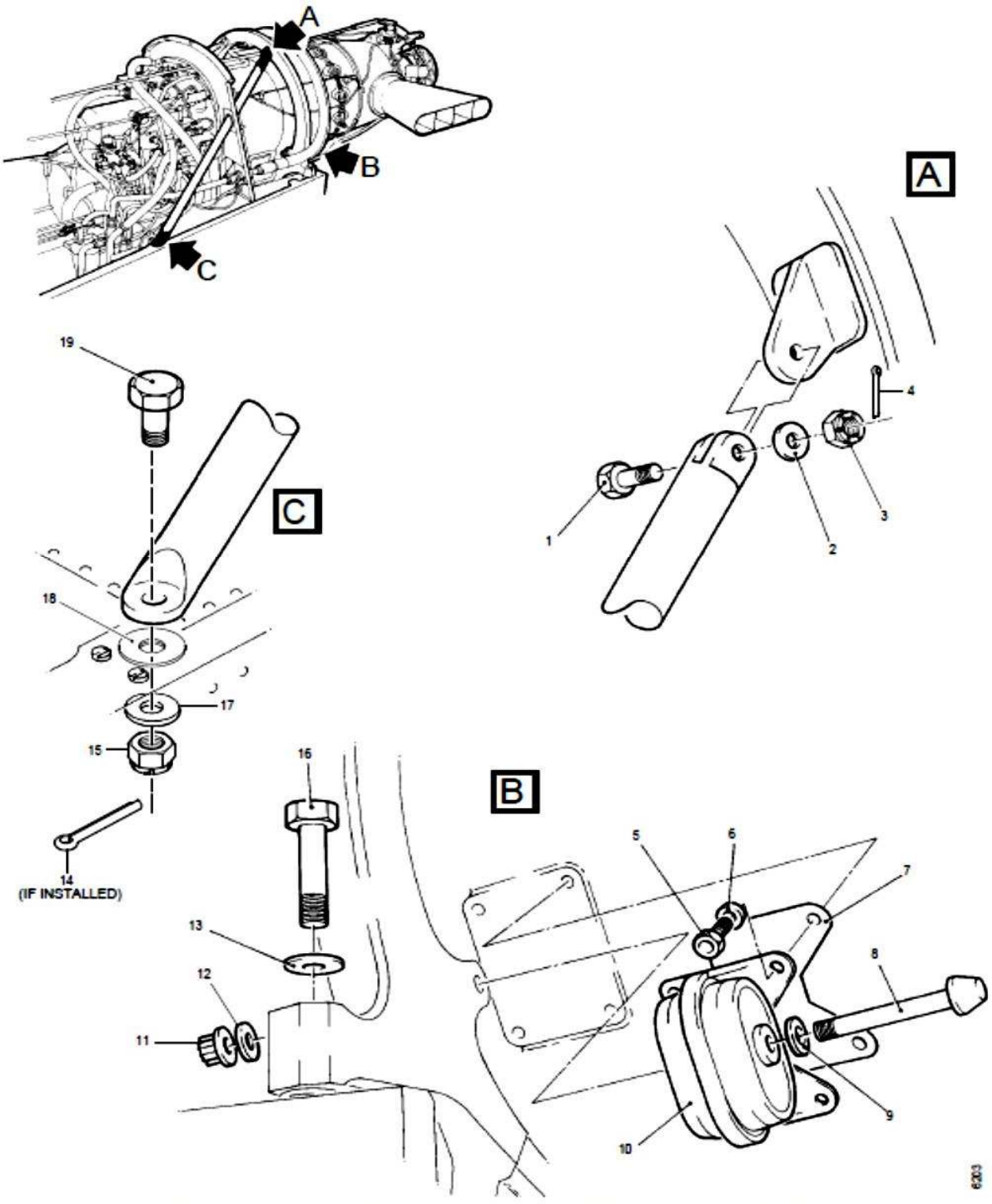
Powerplant - Removal / Installation - Control Cable Connections and Support Brackets
Figure 406

PILATUS
PC-6
MAINTENANCE MANUAL



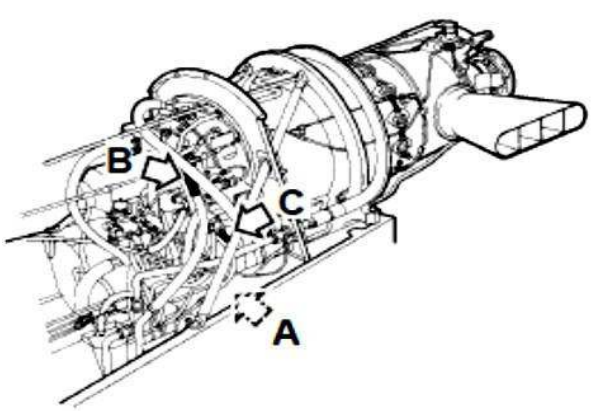
Powerplant - Removal / Installation - Engine Bulkheads
Figure 407

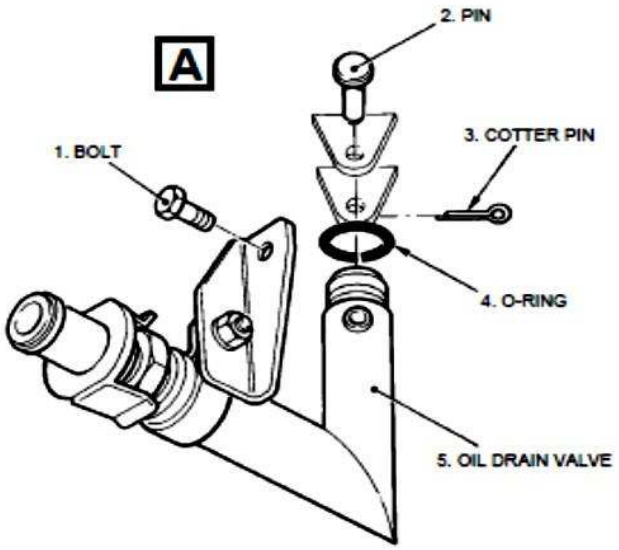
PILATUS
PC-6
MAINTENANCE MANUAL

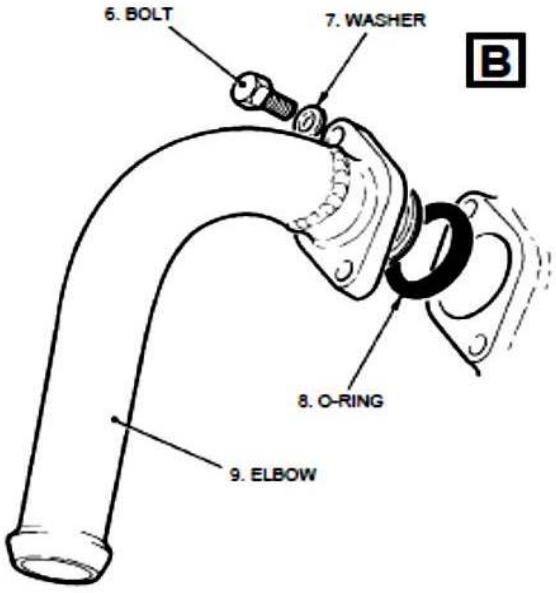


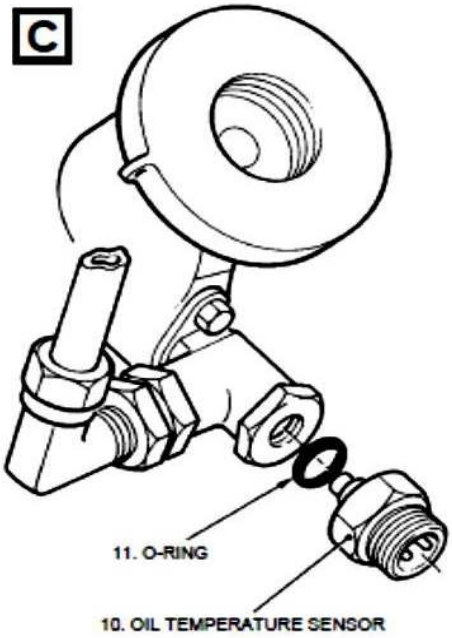
Powerplant - Removal / Installation - Engine Mounts and Support Struts
Figure 408

PILATUS
PC-6
MAINTENANCE MANUAL





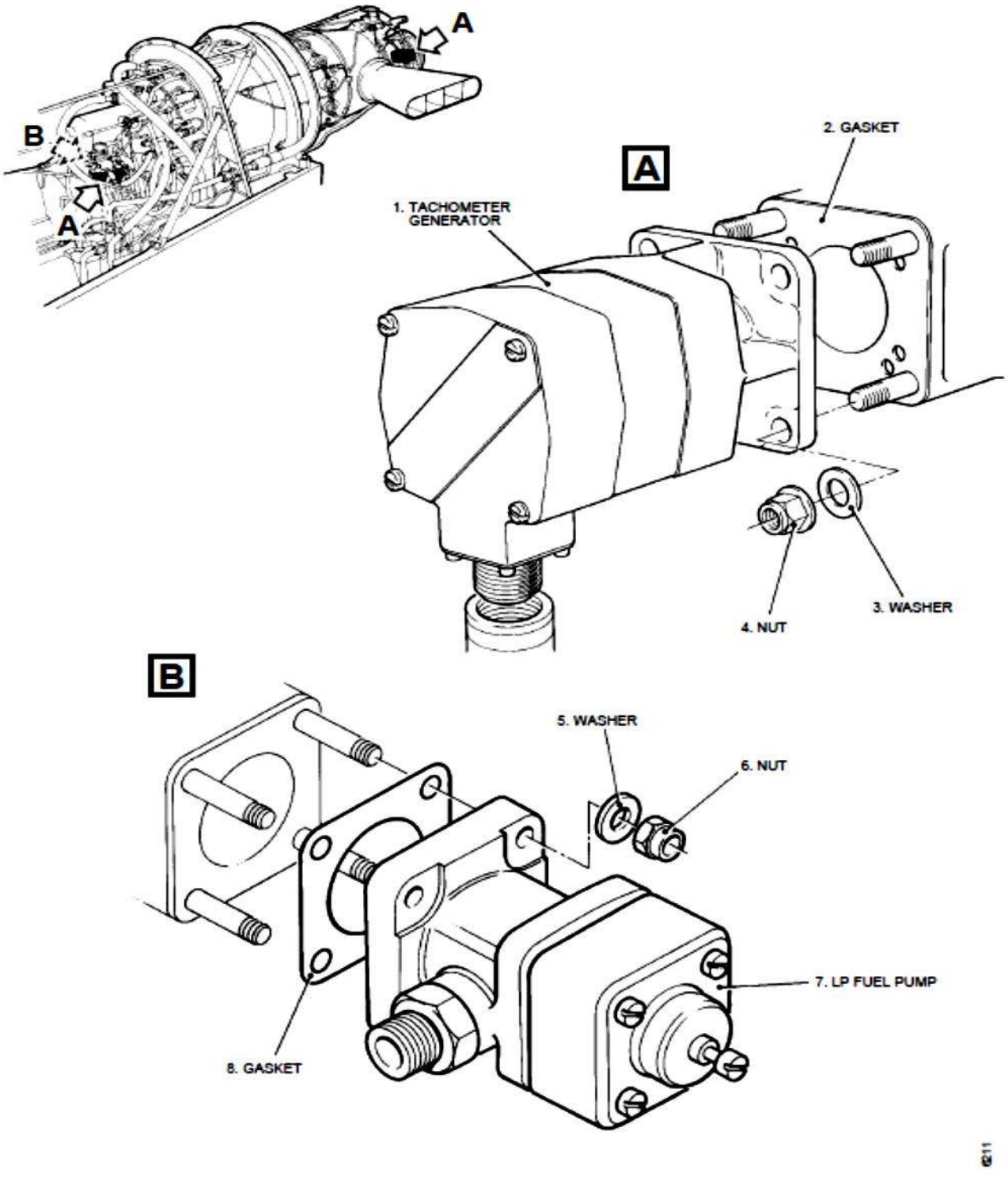




6265

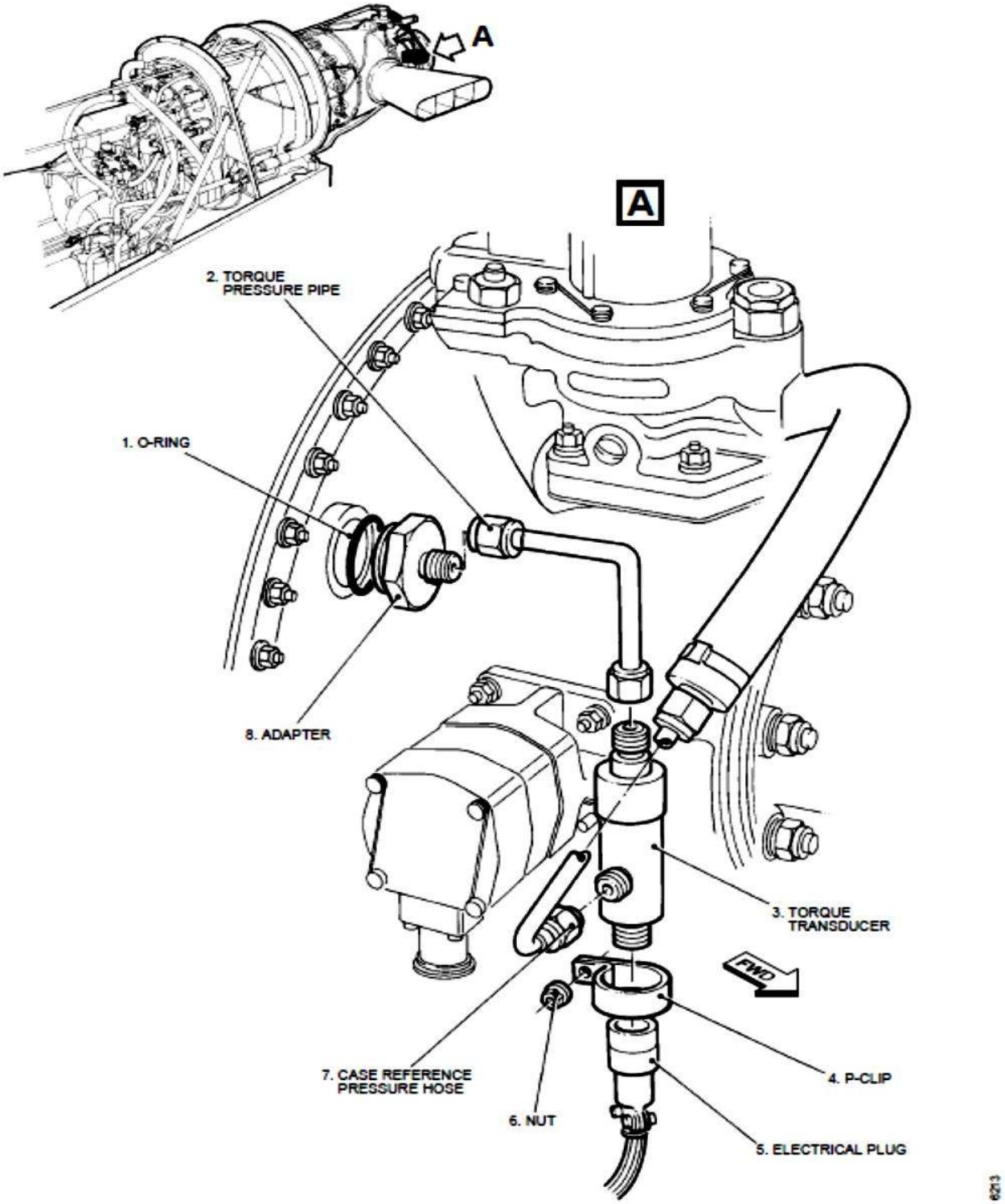
Powerplant - Removal / Installation - Oil Temperature Sensor, Breather and Drain Valve
Figure 409

PILATUS
PC-6
MAINTENANCE MANUAL



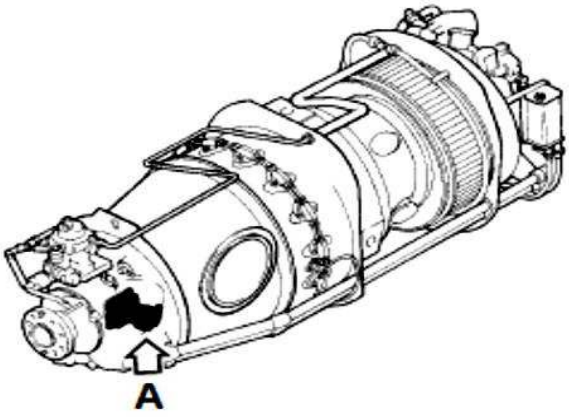
Powerplant - Removal / Installation - Engine Driven Fuel Pump and Gas Generator and Tachometer Generator
Figure 410

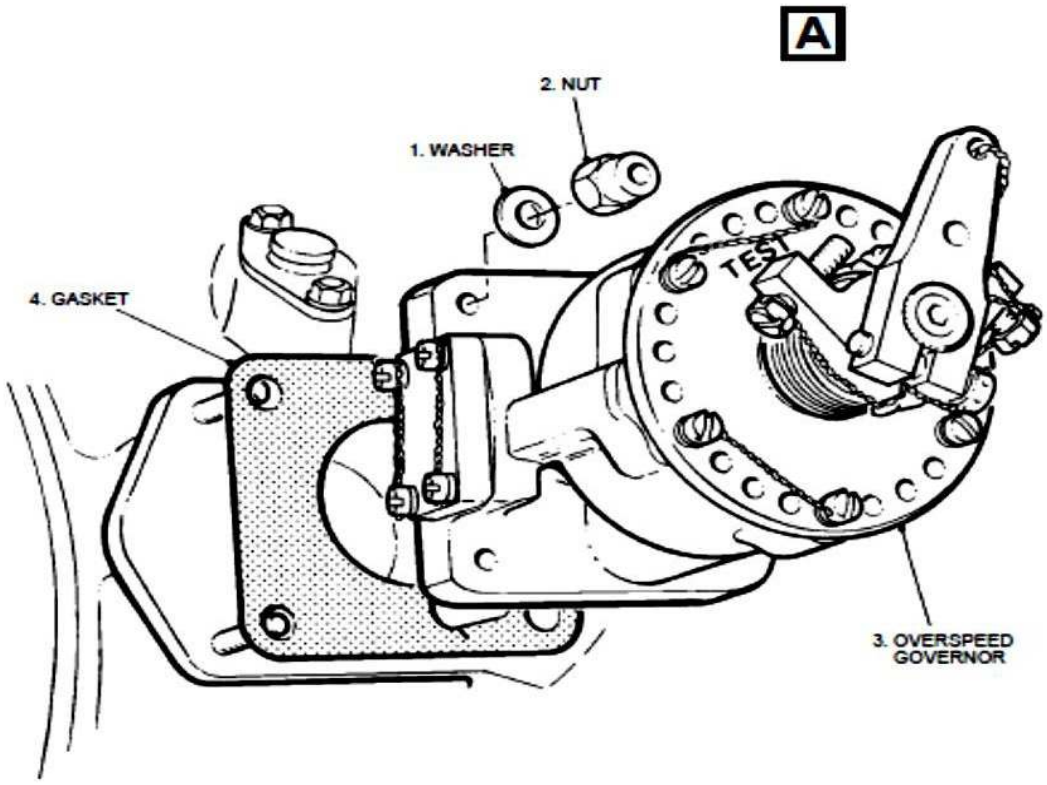
PILATUS
PC-6
MAINTENANCE MANUAL



Powerplant - Removal / Installation - Torque System (Aircraft from MSN 825)
Figure 411 (Sheet 2 of 2)

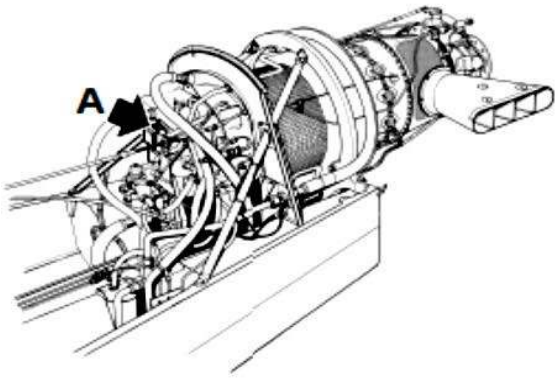
PILATUS
PC-6
MAINTENANCE MANUAL

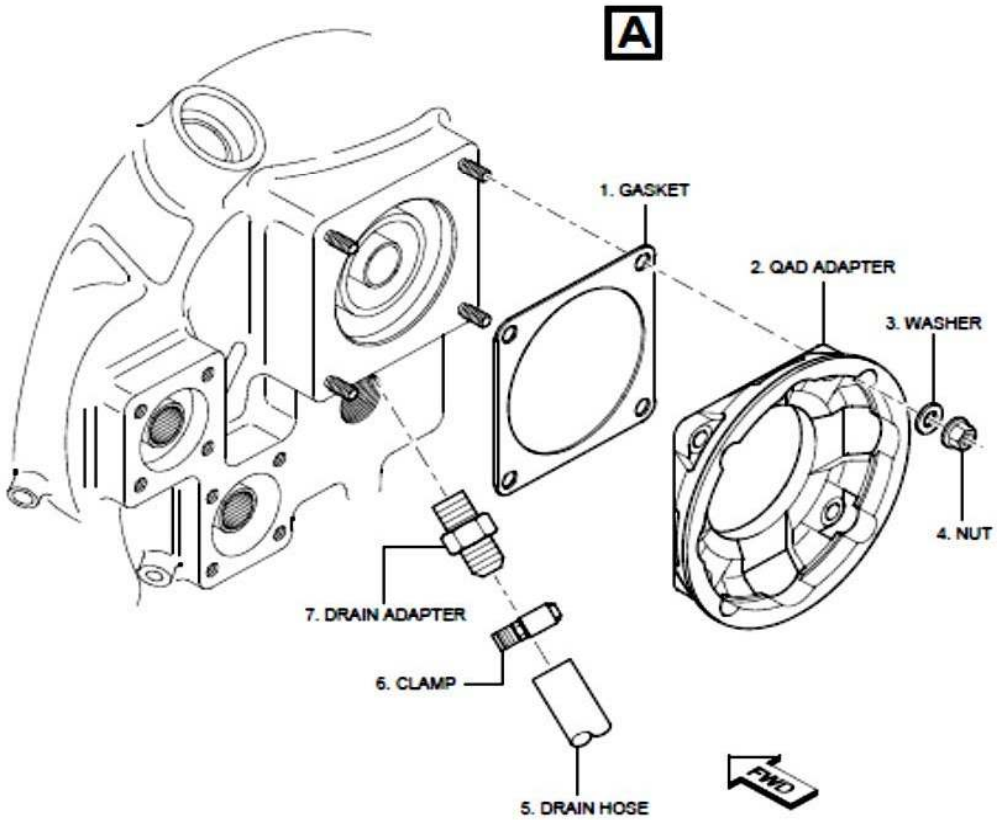




Powerplant - Removal / Installation - Propeller Overspeed Governor
Figure 412

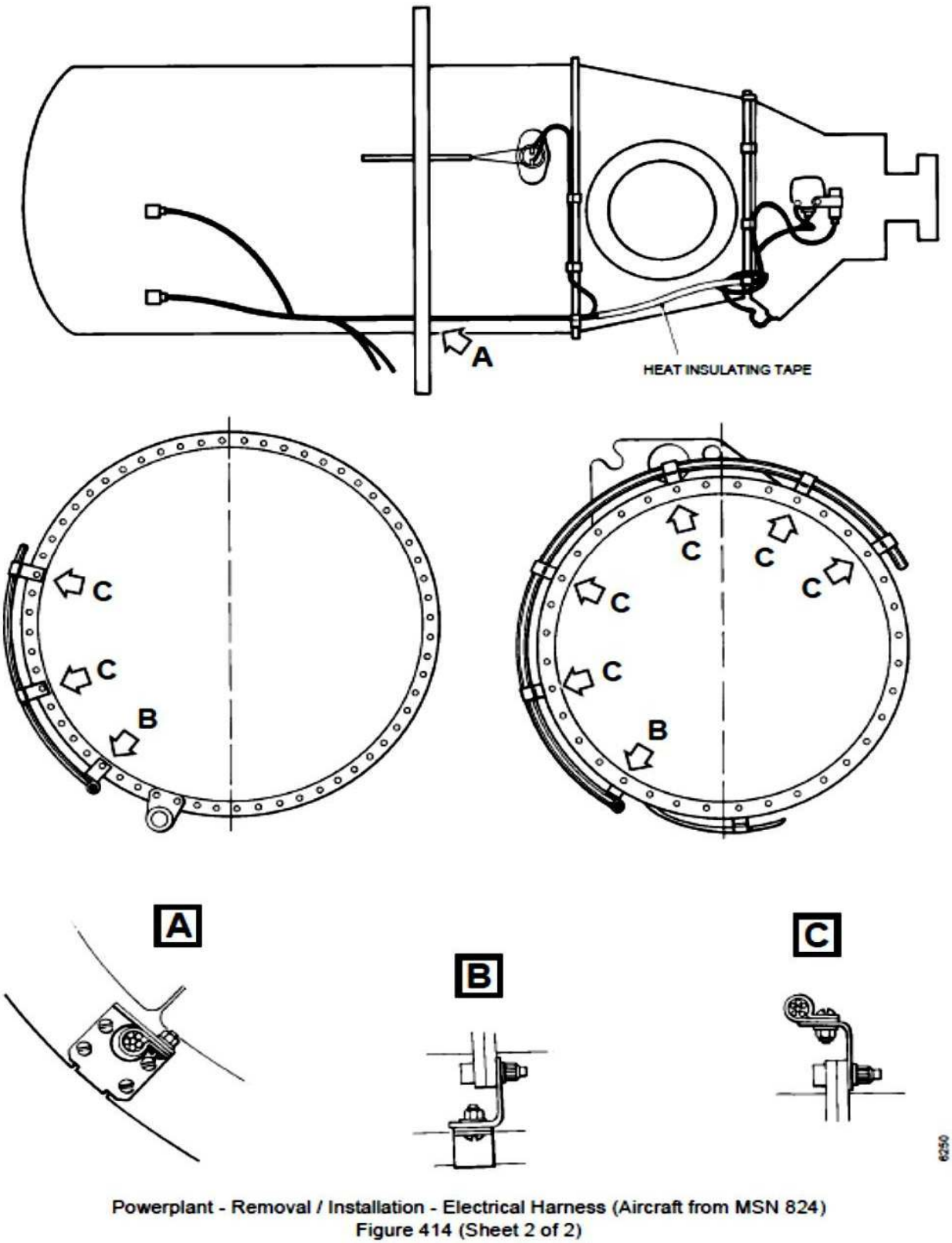
PILATUS
PC-6
MAINTENANCE MANUAL





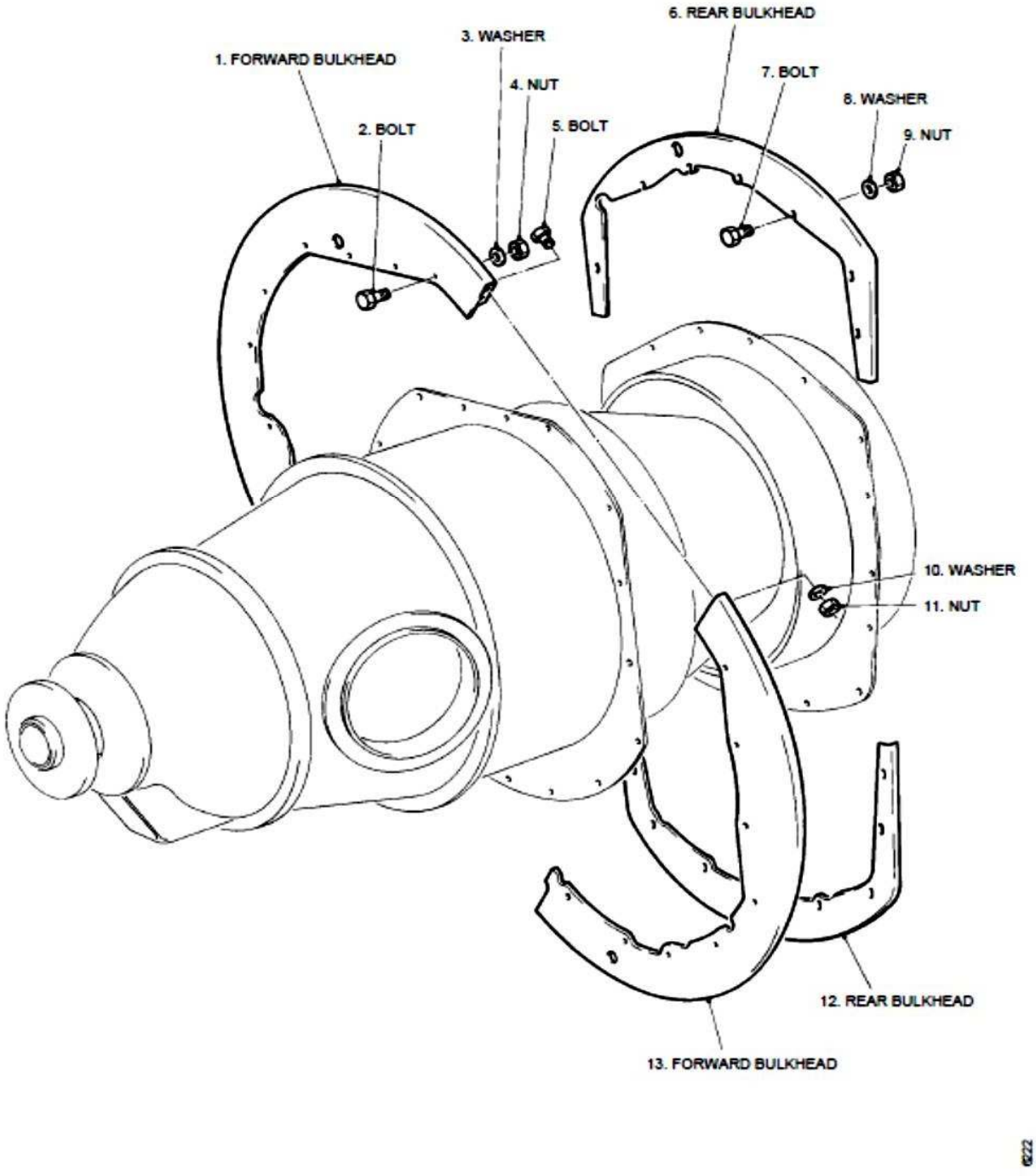
Powerplant - Removal / Installation - Starter-Generator, QAD Adapter (if installed) and Pad Drain Adapter
Figure 413

PILATUS
PC-6
MAINTENANCE MANUAL



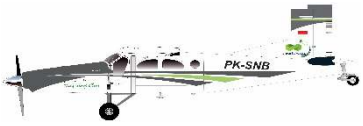
Powerplant - Removal / Installation - Electrical Harness (Aircraft from MSN 824)
Figure 414 (Sheet 2 of 2)

PILATUS
PC-6
MAINTENANCE MANUAL

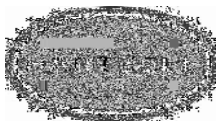


Powerplant - Removal / Installation - Engine Inner Bulkheads
Figure 415

ENGINE GROUND RUN CHECK SHEET - PT6A-27 ENGINE WITH FOUR BLADE PROPELLER (HARTZELL STC SA377CH)



PILATUS



WORK ORDER NO.		**:**	
Aircraft Registration		**Aircraft Total Hours**	
Aircraft Serial No.		**Aircraft Total Landings**	
Engine Serial No.		**Engine TSN / TSO**	
Propeller Serial No		**Propeller TSN / TSO**	
Ambient Temp	**°C**	**FBP (Field Barometric Pressure)**	**In.Hg**
Date		**Time**	
Mechanic / Engineer		**Authorized Engineer**	
Reason For Ground Run			

Checks to be carried out. No:	**1 2 4 5 7 8 9 10 11 12 13 14 15**

Engine Ground Run Check Frequency

Check Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Each 100 / Yearly	x	x		x			x	x			x	x	x	x	x
Each 200									x						
Pre-Complete Overhaul	x	x	x	x		x	x	x	x	x	x	x	x	x	x
After Short Term Storage															x
After Long Term Storage	x	x	x	x		x	x	x	x	x	x	x	x	x	x

In additional the following check must be carried out after Installation, Repair and Adjustment of any ofthe following components.

Check Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Engine Installation	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Propeller Installation		x	x	x	x			x							
Fuel Control Unit	x				x	x	x	x		x	x				
HP Fuel Pump						x	x								
Fuel Nozzle						x	x								
Starting Flow Control	x				x		x	x							
Emer Fuel Control Actuator											x				
Prop Governor	x		x	x	x		x	x							
Prop Overspeed Governor									x						
Compressor Bleed Valve						x	x								
Engine Controls	x			x	x			x	x						
Low Pitch Warning Switch				x											
Suction Components														x	

Use this sheet's to record engine run result, use in conjunction with task cards.

NO.	CHECK	TARGET	ACTUAL
	ENGINE START		
	ITT (Troubleshoot If More Than 925□C)	Max. 1090 □C	□C
	Cabin Heat	OFF	OK?
1	Low Idle (Minimum Governing) Speed	51 - 53 % Ng	% Ng
	Fuel Pressure / Boost Pump OFF	Light out or 25 ± 5 psi	OK?
	ITT		□C
	Oil Pressure		psi
	Oil Temperature		□C
2	Propeller Governor		
	Maximum Np	1980 - 2000 rpm (90.0 - 90.9 %)	rpm
	Py Disconnected		% Ng
	Py Connected		% Ng
	Difference	Maximum 0.3% Ng	%
	Airbleed Link at Minimum	1900 - 1950 rpm (86.4 - 88.6 %)	rpm
	Aircraft with SB 161:		
	Propeller Control Lever at Minimum	1880 - 1900 rpm (85.5 - 86.4 %)	rpm
3	Propeller Fine Pitch Setting (High Idle)		
	Target Torque	psi	psi
	Power Lever to Give Np	1694 rpm (77 %)	rpm
	Basic High Idle	68 - 72% Ng	%Ng
4	Propeller Low Pitch Warning		
	PCL from Reverse to Detent	Light OFF	
		1 to 2 mm before Detent	mm
5	Minimum Pitch in Flight		
	Ng	67 - 73 %	% Ng
	Np	1800 - 1950 rpm (81.8 - 88.6 %)	rpm
	Torque	4 - 7 psi	psi
6	FCU Maximum Governing Speed (Ng)	97.1 % Ng	% Ng
	(Trim stop deployed)		

NO.	CHECK	TARGET	ACTUAL
7	Engine Performance	Ref: AMM 71-00-00	
	Target Torque Pressure	psi	psi
	Fuel flow (Actual minus 23 lb / hr or 3.4 gal / hr)	lb / hr	lb / hr
	Target Ng	% Ng	% Ng
	Maximum ITT	^0C	^0C
8	Reverse Power Setting		
	Np	1880 - 1925 rpm (85.5 - 87.5 %)	rpm
	Torque	psi	psi
9	Propeller Overspeed Governor		
	Test Lever Selected to:		
	TEST	1880 - 1920 rpm (85.5 - 87.3 %)	rpm
	NORMAL	1980 - 2000 rpm (90.0 - 90.9 %)	rpm
10	Acceleration		
	64 % – 90 % Ng	2.5 – 4 secs	secs
	Deceleration		
	85% to 60% Ng or low idle speed(Whichever comes first)	Maximum 6-12 sec (Dependent upon altitude)	secs altitude (kFt)
	Manual Override (MOR) (Aircraft with SB 164)		
	Use Toggle Switch In Small Increment	Increase to 15% above Idle	OK?
	(REF. to WARNINGS and CAUTIONS in Check 11)	(Max Increase less than 4 % per Second)	
		Decrease To Idle	OK?
		(Max Decrease less Than 4% per Second)	
12	Oil Pressure	80 -100 psi	psi
13	Generator (Ref. 24-30-00)	Online by 60% Ng	% Ng
14	Suction (High Idle)	4.5 – 5.2 in. Hg	in. Hg
15	Engine Rundown Time After Stop	MIN 30 secs	secs
Additional			
Generator Check (High Idle Under Load)		27.75 – 28.25 VDC	VDC
After Engine Run			
Check Eng. For Signs of Fuel/Oil/Air Leaks		NO LEAKS FOUND	OK?
Safety All Screws, Bolts, Locknuts as Req.			OK?

Ref. AMM Pilatus Porter PC6 Chapter 71-00-00,
P&WC Maintenance Manual Model PT6A-27 Manual Part No. 3013242 Chapter 72-00-00

ENGINE REMOVAL SHEET

Date	:		**Engine P/N**	:	
Aircraft Registration	:		**Engine S/N**	:	
Aircraft Type	:	**PILATUS PC6, B2-H4**	**TSN**	:	
Aircraft Total Hours	:		**TSO**	:	
Aircraft Total Cycle	:		**CSN**	:	
Work Order Number	:		**CSO**	:	

NO	TASK	SIGNATURE	
		SIGN	STAMP
Job Set Up			
	Do Engine Run Ground Sheet before Engine Removal, fill out Form.		
2	Put chocks at the front and rear of the main wheels.		
3	If necessary lift the aircraft on to a tail stand.		
4	Disconnect the aircraft battery.		
5	Set the fuel system valve to CLOSED.		
6	Remove the engine cowlings.		
7	Drain the engine oil.		
8	Remove the propeller.		
9	Remove the exhaust stubs.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
REMOVAL			
1	Remove the oil cooler **CAUTION:** IF THE ENGINE IS REMOVED BECAUSE OF METAL CONTAMINATION OF THE OIL SYSTEM, THE OIL COOLER MUST BE REPLACED. IF THE OIL COOLER IS NOT REPLACED THE METAL CONTAMINATION CAN DAMAGE THE NEW ENGINE. If necessary, remove the oil cooler.		
2	**Oil Drain Valve (Ref. Fig. 409)** 1. Identify and disconnect the electrical cables (1) from the starter-generatorterminal block. 2. Disconnect the bonding lead (3) from the engine data plate securing bolt(4). 3. Disconnect the electrical plug (2) from the ignition unit. 4. Disconnect the electrical plug (5) from the gas generator tachometergenerator. 5. Disconnect the electrical plug (7) from the FCU sense line heater. Removethe cable ties as necessary. 6. Disconnect the electrical plug (8) from the oil temperature sensor. 7. Disconnect the electrical plug (9) at the front of the RH side rear bulkhead. 8. Disconnect the ground leads (6). 9. If a propeller de-iceing system is installed, disconnect the plug (10) at theengine rear bulkhead.		
3	**Disconnect the Case Drains and P3 Bleed Air Pipe (Ref. Fig. 402)** 1. Disconnect the P3 bleed air hose (2) from the top of the engine. 2. Release the P-clip (3) from the engine front bulkhead. 3. Remove and discard the cable tie at the engine mounting ring. 4. Remove the bolts (4), the adapter (5) and gasket (6). 5. Disconnect the forward drain hose (1) from the gas generator case. 6. Disconnect the rear drain hose (8) from the gas generator case. Remove the forward drain pipe (7) from the gas generator case.		
4	**Disconnect the Oil Tubes (Ref. Fig. 403)** 1. Disconnect the oil cooler return hose (1) from the accessory gearboxcasing. 2. Disconnect the oil cooler supply hose (7) at the oil scavenge pump. 3. Disconnect the oil pressure transducer supply hose (6). 4. Remove the adapter (5) and discard the O-ring (4). 5. Loosen the clamp (2) and disconnect the engine breather hose (3). 6. Loosen the clamp (6) and disconnect the drain hose (5) below the starter generator (Ref. Fig. 413).		

NO	TASK	SIGNATURE	
		SIGN	STAMP
5	**Disconnect the Fuel Tubes (Ref. Fig. 404 Sheets 1 and 2)**		
	1. Disconnect the fuel supply hose (3) at the oil fuel heater. 2. Remove the adapter (2) and discard the O-ring (1). 3. Disconnect the inlet hose (4) from the LP fuel pump. 4. Disconnect the outlet hose (9) from the LP fuel pump. 5. Disconnect drain tube (7) at the HP fuel pump. 6. Remove the adapter (6) and discard the O-ring (5). 7. Disconnect drain tube (8) at the LP fuel pump. 8. Disconnect the fuel bleed return pipe (10) from the starting flow controlunit. 9. Loosen the worm-drive clamp (13). 10. Disconnect the fuel dump hose (14) from the starting flow control unit. 11. Make a note of the position of the adapter (12) on the starting flow controlunit. 12. Loosen the locknut and remove adapter (12). 13. Remove and discard the O-ring (11).		
6	**Disconnect the Controls (Ref. Fig. 405)**		
	1. Idle Control: a. Remove and discard the cotter pin (12). b. Remove the nut (13), washers (14) and bolt (16) that attach the idlecontrol rod (15) to the lever (9).		
	2. Power Control: a. Remove and discard the cotter pin (22). b. Remove the nut (23), washer (24) and bolt (26) that attach the powercontrol rod end (25) to the lever (18).		
	3. Propeller Control: a. Remove and discard the cotter pin (27). b. Remove the nut (28), washer (29), spacer (32), washer (33) and bolt (34) that attach the control rod end (31) to the lever (30).		
7	Disconnect the Propeller Control Cable (Ref. Fig. 406)		
	1. Remove the nuts (13), spring washers (14), bolts (16) and the top plate(15). 2. Remove the cable from the clamp. 3. Push the cable grommets from the holes in the engine front and rearbulkheads. 4. Pull the cable rearwards through the bulkheads. 5. Remove the nuts (11), washers (10), bolts (12) and the support bracket(9).		
8	Remove the Control Cable Support Brackets (Ref. Fig. 406)		
	1. Remove the nuts (8) and washers (7). 2. Remove the nut (4), washer (3) and bolt (2). 3. Remove the bolt (5). Move the brackets (1) and (6) with the control cables, clear of the engine.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
9	Disconnect the Engine Bulkheads (Ref. Fig. 407) 1. Remove the bolts (6) and washers (7) from the rear bulkhead (1). 2. Remove the bolts (4) washers (3) plates (5) and seals (2).		
10	Remove the Engine (Ref. Fig. 408) 1. Install the engine sling (PT No. CPWA 32420) to the lugs on the accessory gearbox and reduction gearbox. 2. Position the hoisting equipment and adjust the sling lifting eye so that theengine will stay horizontal. 3. Operate the hoisting equipment to hold the weight of the engine. 4. Remove and discard the cotter pins (14) (if installed). **NOTE:** Some aircraft have self-locking nuts (15) installed. 5. Remove the nuts (15), washers (17) and bolts (19). 6. Remove and discard the cotter pins (4). 7. Remove the nuts (3), washers (2) and bolts (1). 8. Remove the struts. 9. Remove and discard the lockwire from the bolts (16). 10. Remove bolts (16) and washers (13). **CAUTION:** BEFORE YOU DO STEP (11), MAKE SURE THAT ALL OF THE DISCONNECTED ITEMS ARE CLEAR OF THEENGINE. 11. Lift and move the engine clear of the airframe. 12. Remove the upper half of the engine rear bulkhead.		
11	Remove the Engine Mounting Ring (Ref. Fig. 408) 1. Remove the nut (11), washers (12) and (9) and bolt (8). 2. Move the mounting ring to the rear. 3. Remove the bolts (5) and washers (6) and then remove each shockmount (10) from the engine. 4. Install the engine in the engine stand. 5. Remove engine mounting ring from engine.		
12	Remove the Accessories from the engine is to be returned for overhaul or replaced, is following item: **CAUTION:** MAKE SURE THAT BLANKS AND COVERS ARE INSTALLED TO ALL OPENINGS ON THE REMOVED ENGINE. YOU MUST MOVE THE BLANKS AND COVERS FROM THE REPLACEMENT ENGINE TO THE REMOVED ENGINE. **1. Oil Drain Valve (Ref. Fig. 409)** a. Remove and discard the cotter pin (3). b. Remove the lock pin (2). c. Remove the bolt (1) and then remove the oil drain valve (5) from theengine. d. Remove and discard the O-ring (4). Install a blank to the opening.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
	2. Oil Temperature Sensor (Ref. Fig. 409) a. Remove the oil temperature sensor (10). b. Remove and discard the O-ring (11). Install a blank to the opening.		
	3. Engine Breather Elbow (Ref. Fig. 409) a. Remove and discard the lockwire from the two bolts (6). b. Remove the two bolts (6) and washers (7). c. Remove the elbow (9). d. Remove and discard the O-ring (8). Install a blank to the opening.		
	4. Control Levers (Ref. Fig. 405) (1) Idle Control Lever (a) Remove and discard the cotter pin (1). (b) Remove the nut (2), washer (3), spacers (4) and (7) and bolt (6). (c) Move the rod (5) clear of the lever (9). (d) Remove and discard the cotter pin (8). (e) Remove the nut (11), washer (10) and the idle control lever (9).		
	(2) Power Control Input Lever (a) Remove and discard the cotter pin (21). (b) Remove the nut (20), washer (19) and bolt (17). (c) Remove the lever (18).		
	5. Engine Driven Fuel Pump (Ref. Fig. 410) a. Remove the nuts (6) and the washers (5). b. Remove the pump (7). c. Remove and discard the gasket (8). d. Install a blank to the opening.		
	6. Gas Generator and Propeller Tachometer Generators (Ref. Fig. 410) a. Remove the nuts (4) and washers (3). b. Remove the tachometer generator (1). c. Remove and discard the gasket (2). d. Install a blank to the opening.		
	7. Torque Indicating System (Ref. Fig. 411, Sheets 1 and 2) a. Disconnect the electrical plug (5). b. Remove the torque pressure pipe (2). c. Disconnect the case reference pressure hose (7). d. Remove the nut (6). e. Remove the P-clip (4) and the torque transducer (3). f. Remove the torque pressure pipe adapter (8) and discard the O-ring (1).		
	8. Propeller Overspeed Governor (Ref. Fig. 412) a. Remove nuts (2) and washers (1). b. Remove the overspeed governor (3). c. Remove and discard the gasket (4).		

NO	TASK	SIGNATURE	
		SIGN	STAMP
	9. Starter-Generator, QAD Adapter (if installed) and Drain Line Adapter(Ref. Fig. 413) a. Remove the starter-generator (Ref., Page Block 401). b. Remove the nuts (4) washers (3) and the QAD adapter (2). Remove the drain adapter (7).		
	10. Harness (Ref. Fig. 414) **NOTE:** Do not disconnect the low pitch warning switch cables. Transfer the electrical harness with the warning switch and switch mounting bracket attached. a. Remove the cotter pin. b. Remove the nut and washer that attaches the linkage block of the lowpitch warning switch to the propeller reversing lever. c. Remove the block. d. Remove the two nuts that attach the warning switch mounting bracket. e. Release the bracket from the mounting studs. f. Disconnect the electrical plug from the chip detector. g. If propeller de-icing is installed, identify and disconnect the leads fromthe terminal block of the propeller de-icer unit. h. Identify and disconnect the ITT leads from the T5 terminal block onthe RH side of the gas generator case. i. Remove the harness slot filler-plate from the engine front bulkhead. j. Release the harness support P-clips. k. Remove the harness. l. If installed, remove the propeller de-icer unit (Ref. 30-60-01, PageBlock 401).		
	11. Inner Bulkheads (Ref. Fig. 415) a. Remove the nuts (11), washers (10) and bolts (5). b. Remove the nuts (4), washers (3) and bolts (2). c. Remove the forward bulkheads (1) and (13). d. Remove the nuts (9), washers (8) and bolts (7). e. Remove the rear bulkheads (6) and (12).		
13	Make inventory records P/N and S/N of the engine and its accessories from theengine that removed. Fill out into the form no ASI/MD-50 Engine Change-MajorComponent Inventory Records.		
14	Make an appropriate entry in Work Order or Aircraft Flight Maintenance Log (AFML)		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

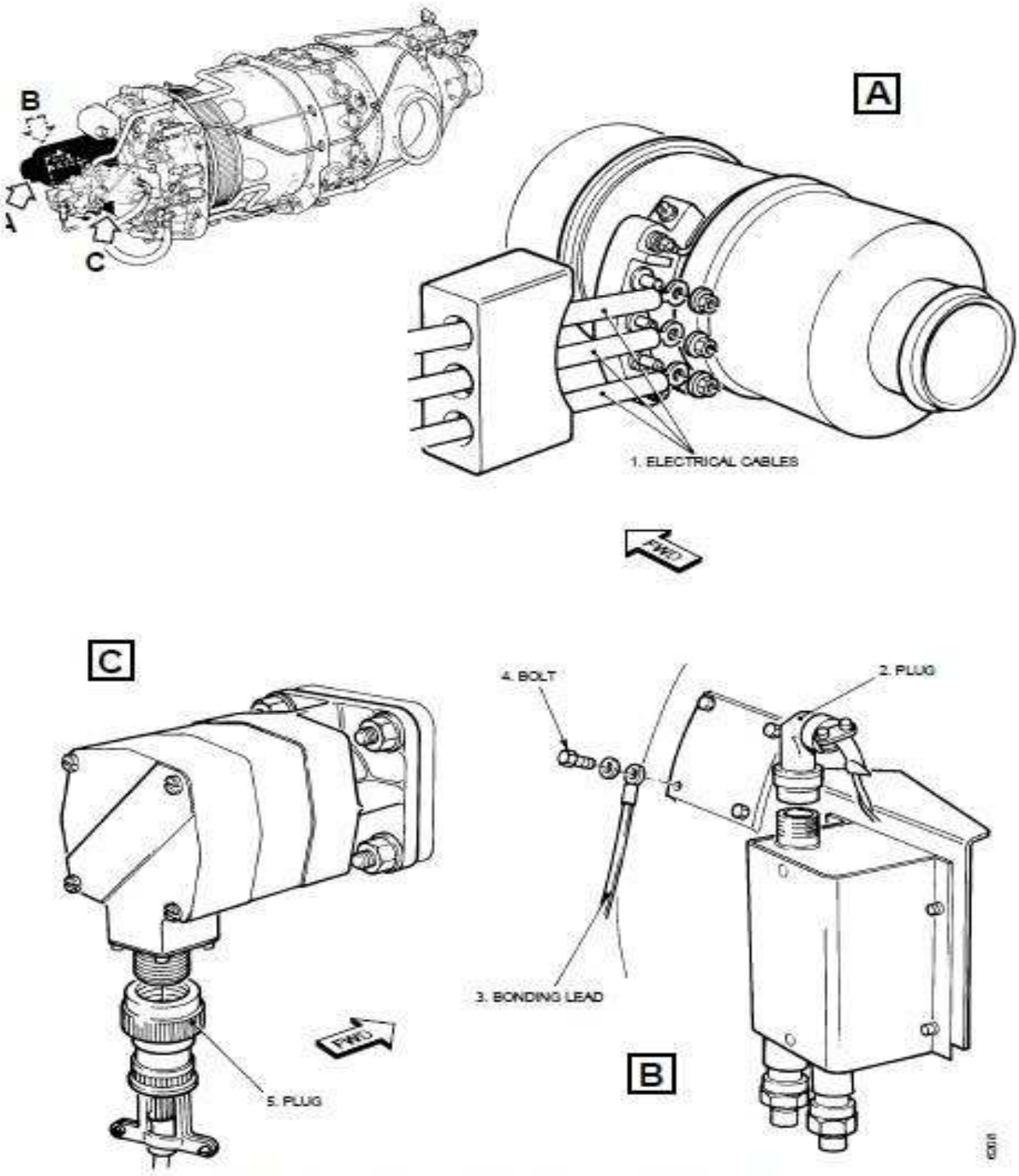
Name : _____

Signature : _____

Stamp : _____

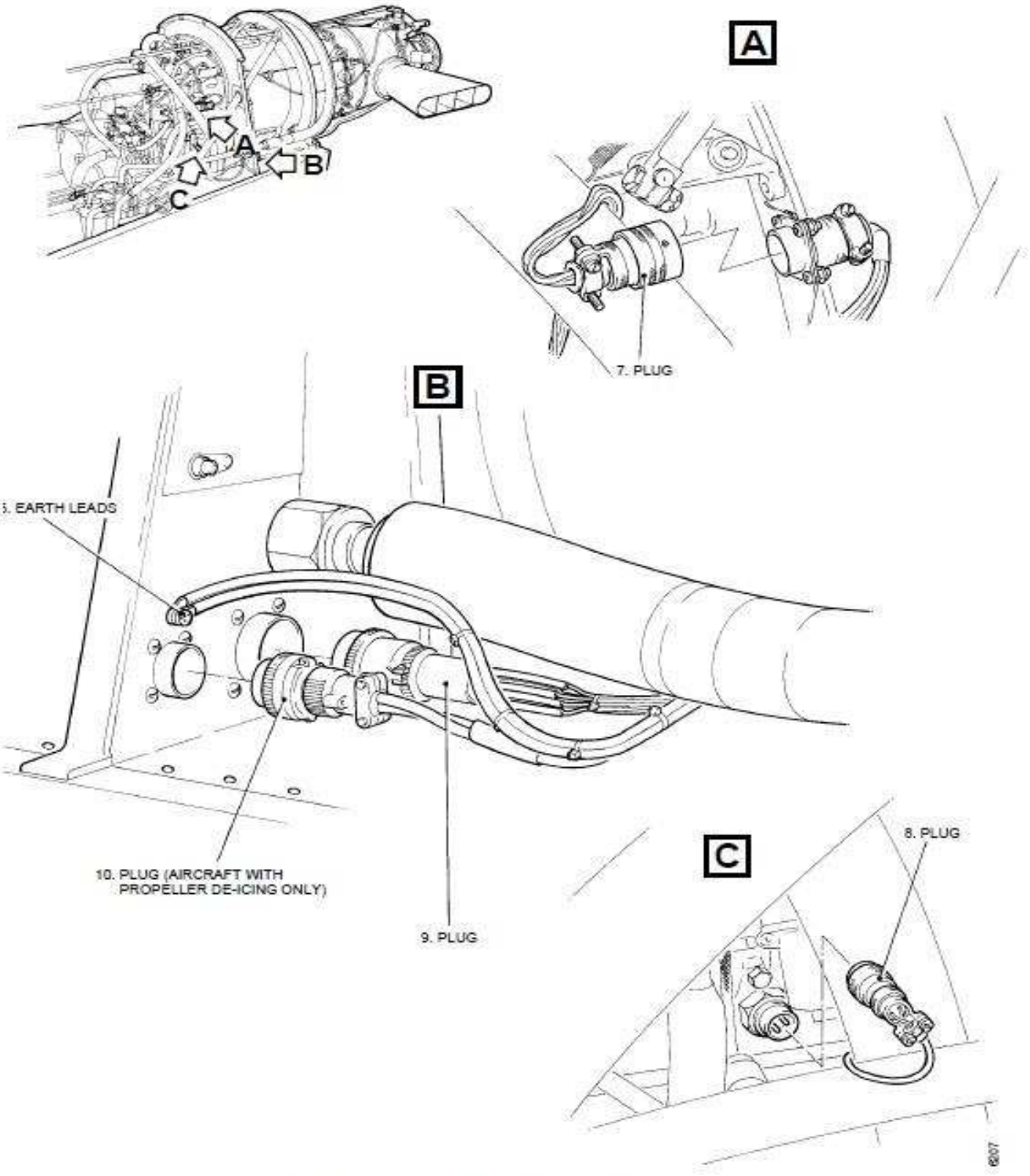
Place/Date : _____

PILATUS
PC-6
MAINTENANCE MANUAL



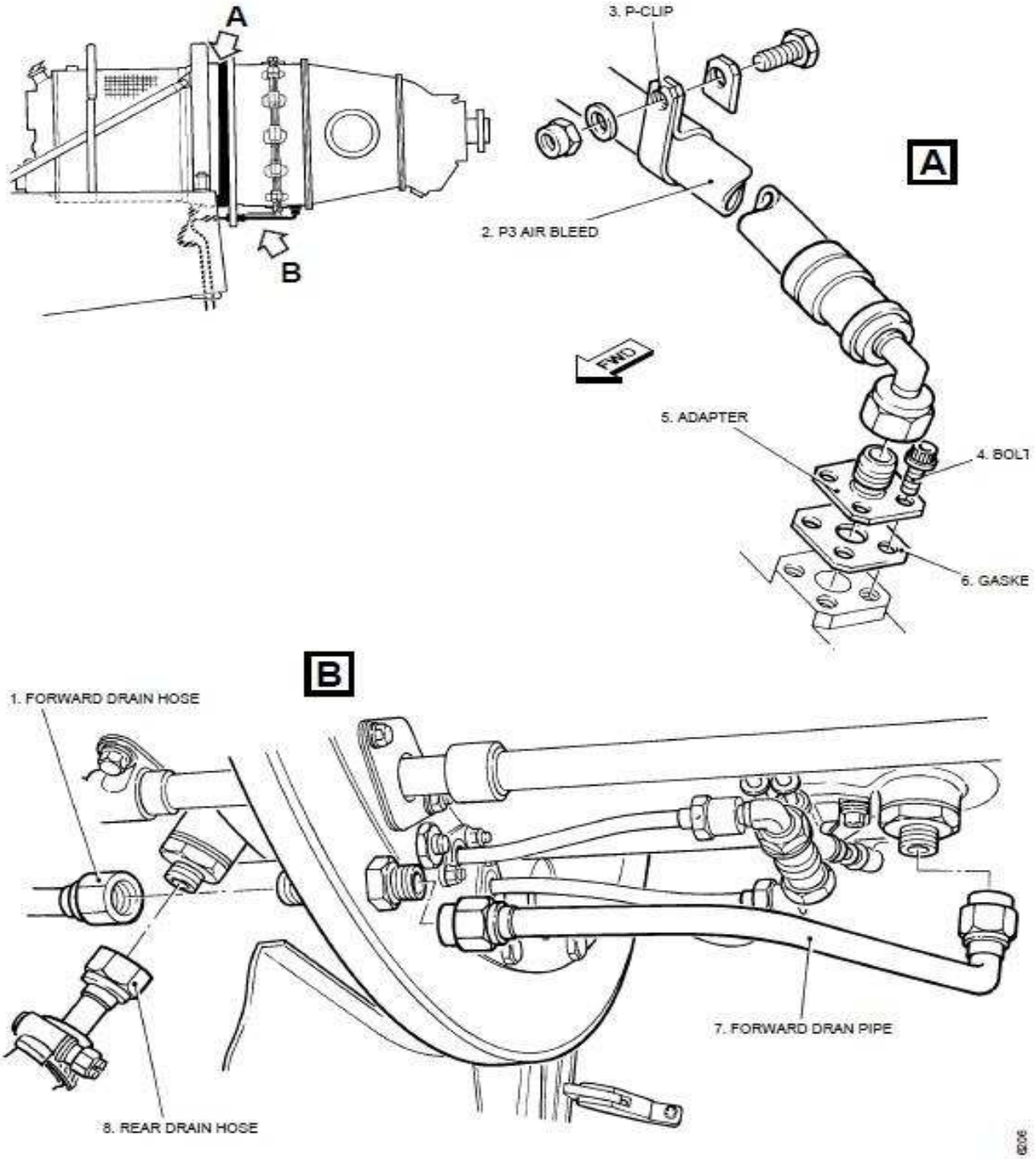
Powerplant - Removal / Installation - Electrical Connections
Figure 401 (Sheet 1 of 2)

PILATUS
PC-6
MAINTENANCE MANUAL



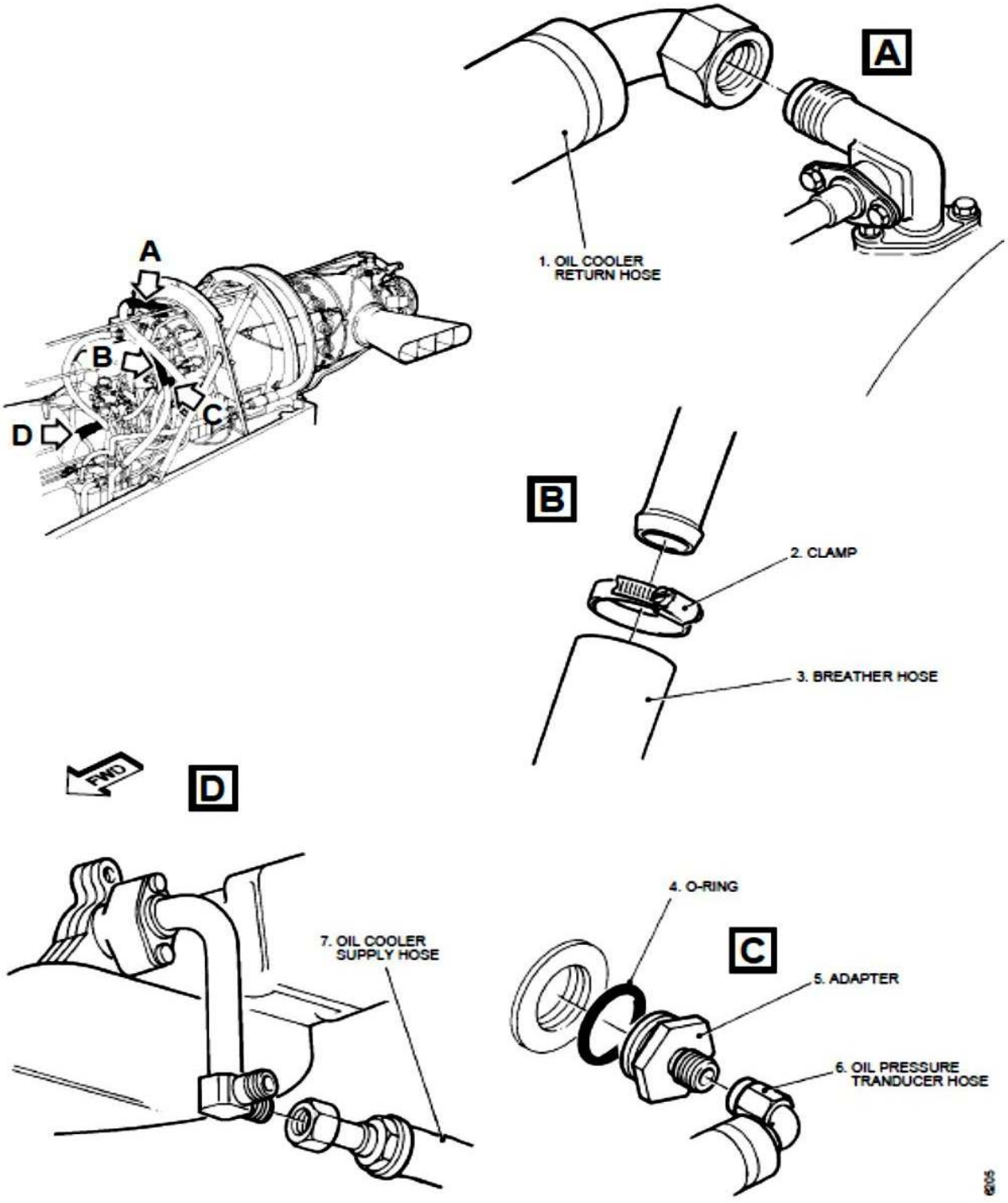
Powerplant - Removal / Installation - Electrical Connections
Figure 401 (Sheet 2 of 2)

PILATUS
PC-6
MAINTENANCE MANUAL



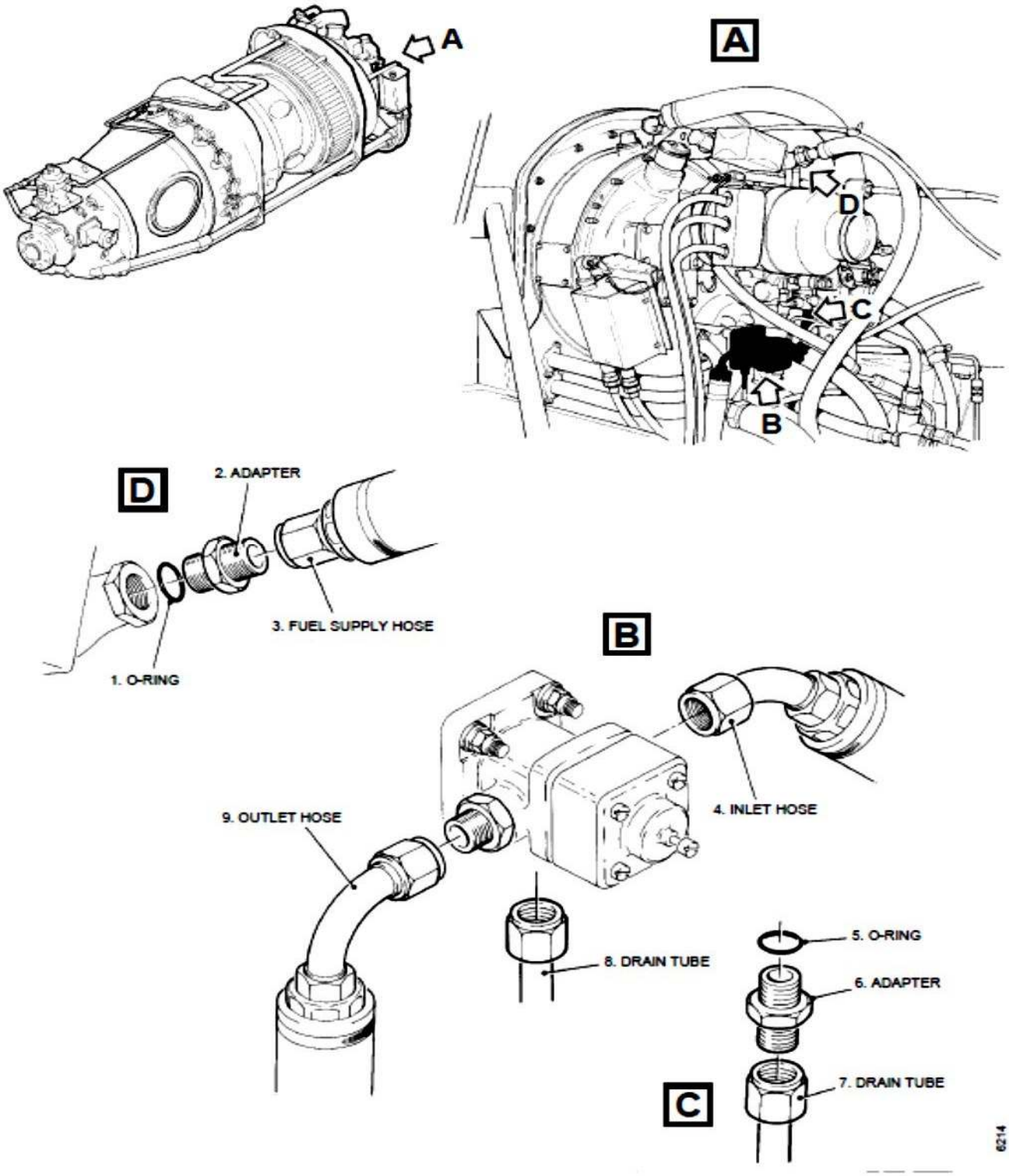
Powerplant - Removal / Installation - Case Drains and P3 Air Bleed
Figure 402

PILATUS
PC-6
MAINTENANCE MANUAL



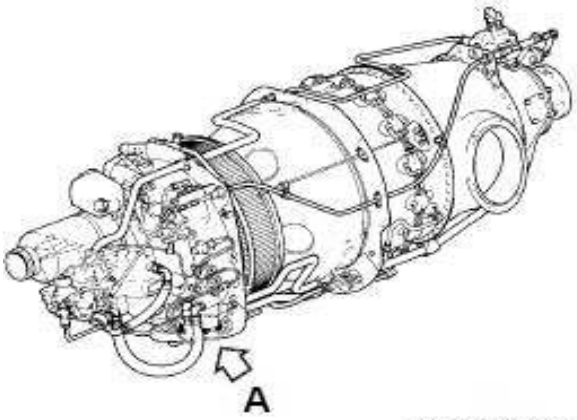
Powerplant - Removal / Installation - Oil Tubes
Figure 403

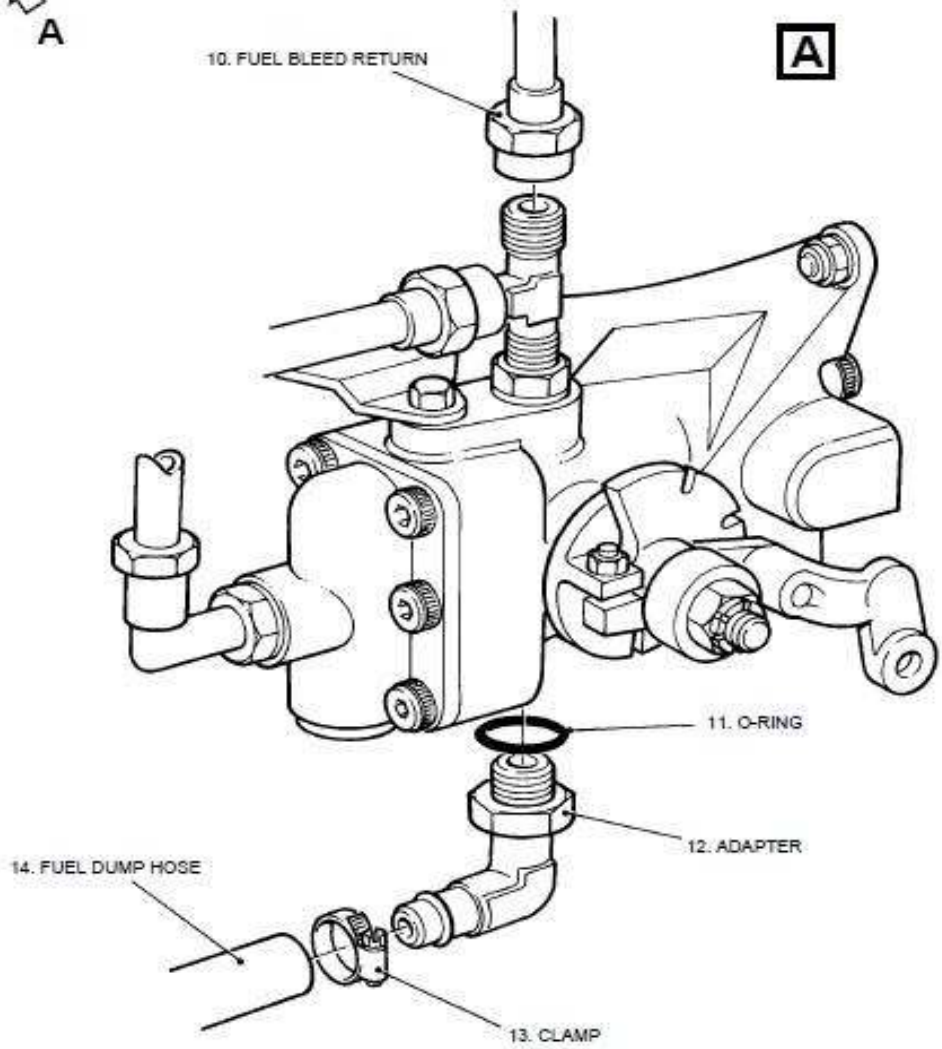
PILATUS
PC-6
MAINTENANCE MANUAL



Powerplant - Removal / Installation - Fuel Tubes
Figure 404 (Sheet 1 of 2)

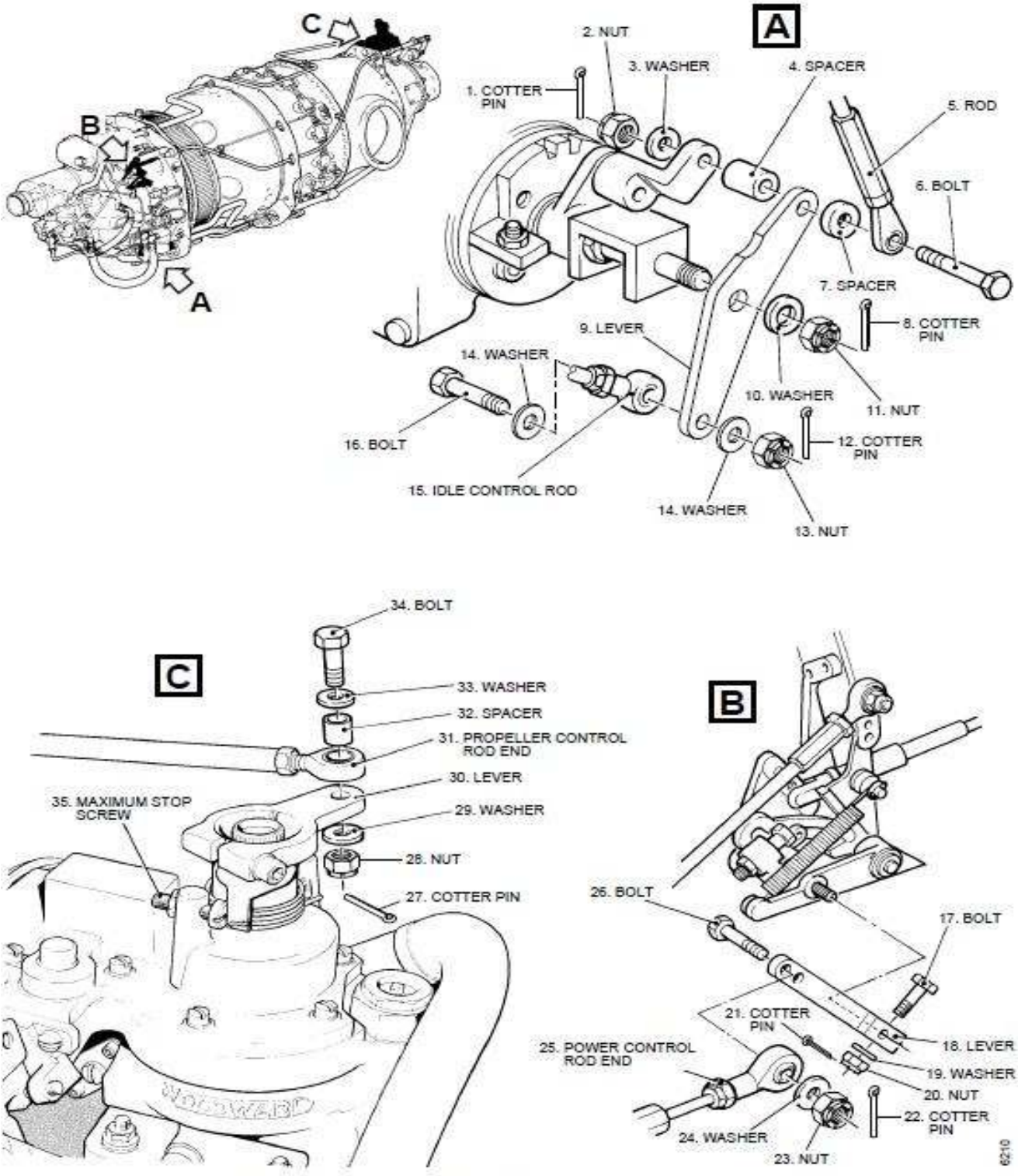
PILATUS
PC-6
MAINTENANCE MANUAL





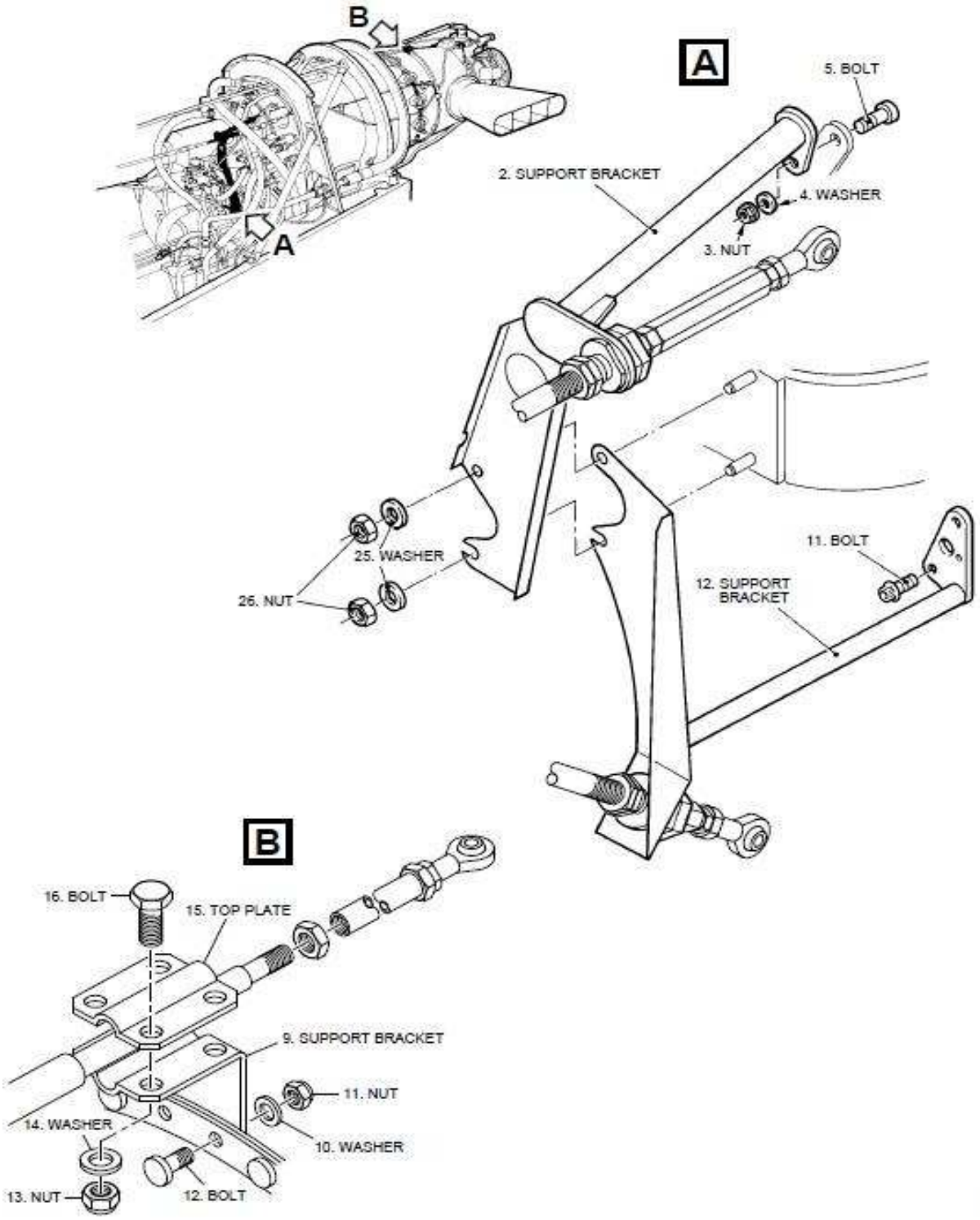
Powerplant - Removal / Installation - Fuel Tubes
Figure 404 (Sheet 2 of 2)

PILATUS
PC-6
MAINTENANCE MANUAL



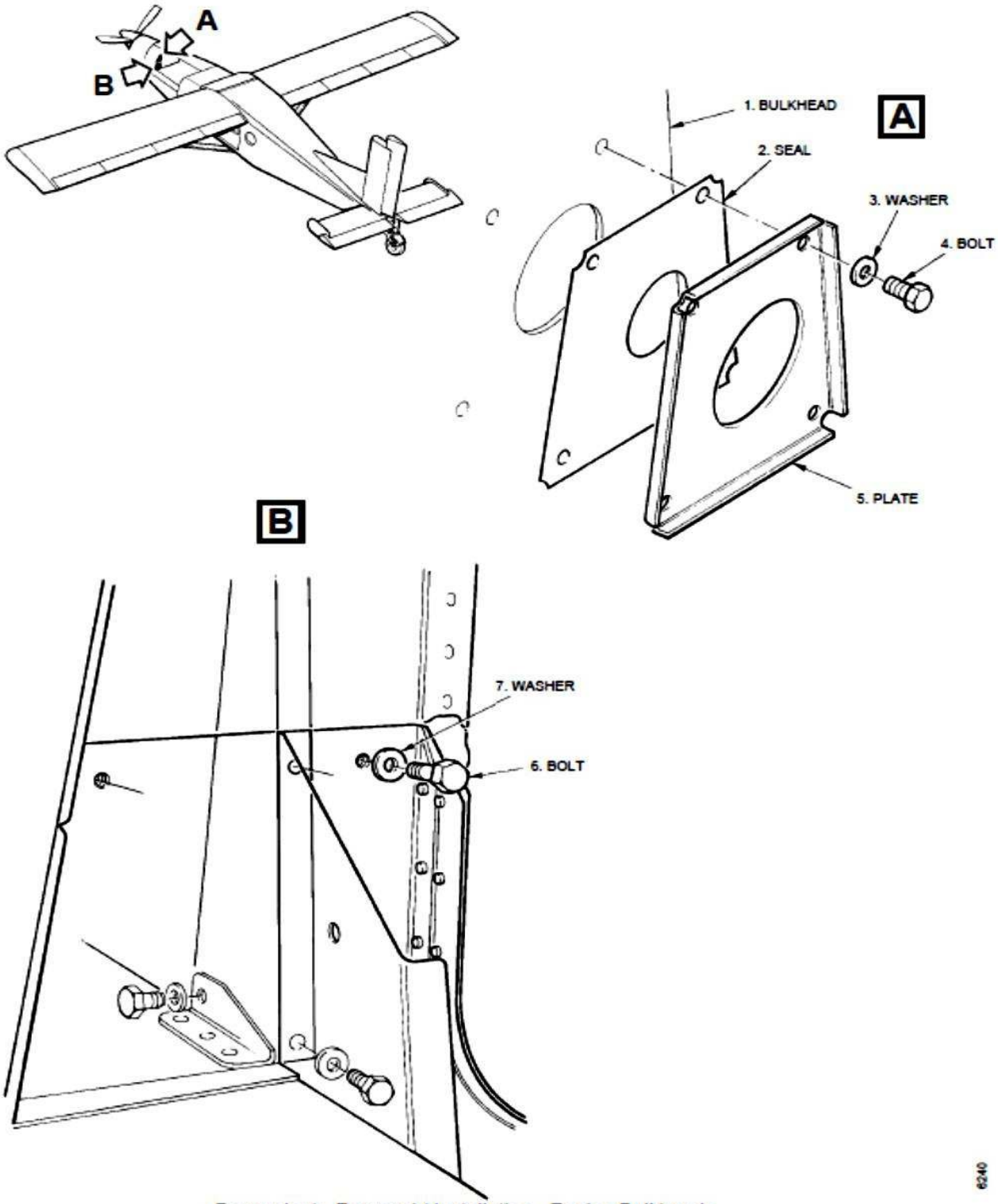
Powerplant - Removal / Installation - Control Connections and Levers
Figure 405

PILATUS
PC-6
MAINTENANCE MANUAL



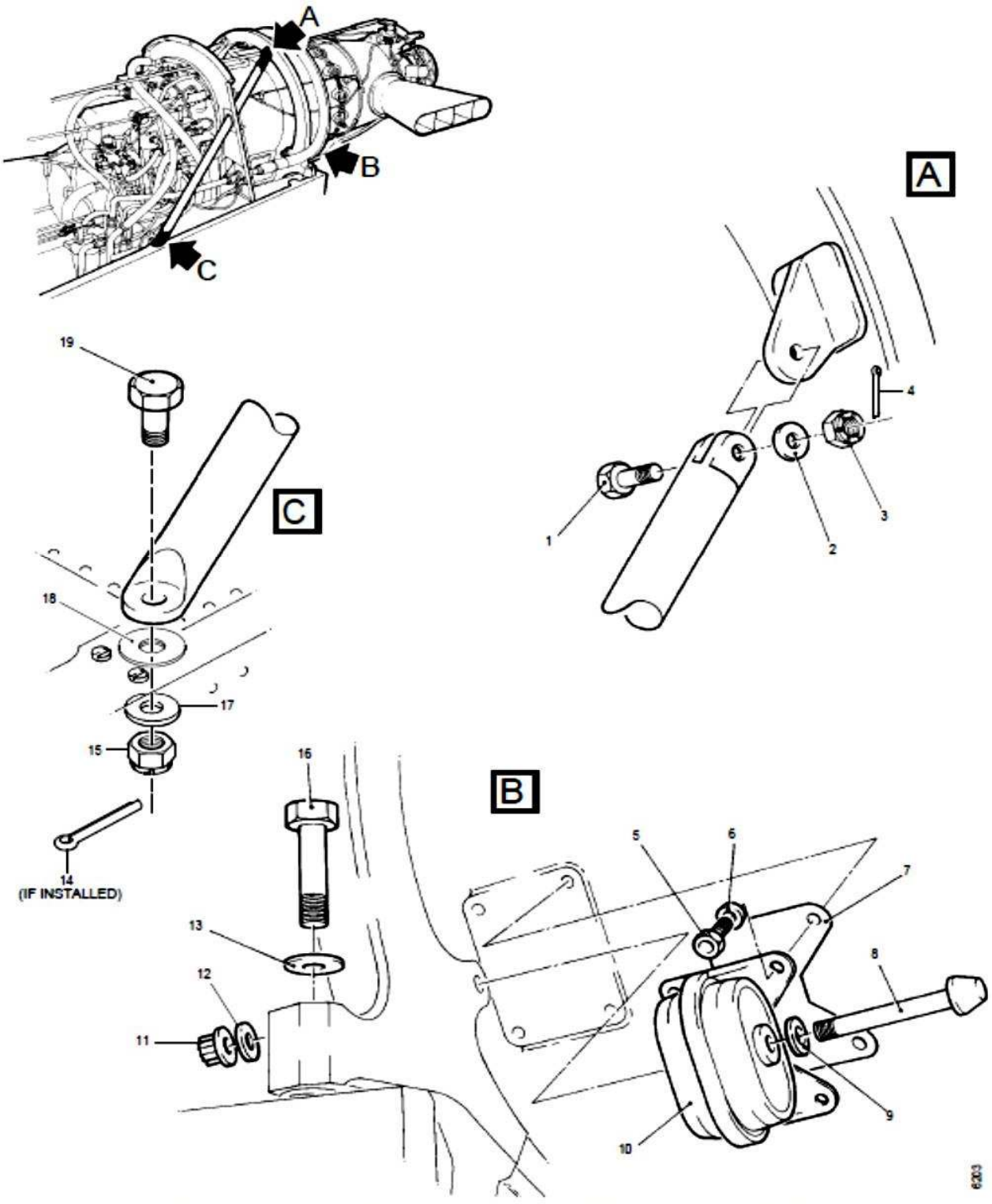
Powerplant - Removal / Installation - Control Cable Connections and Support Brackets
Figure 406

PILATUS
PC-6
MAINTENANCE MANUAL



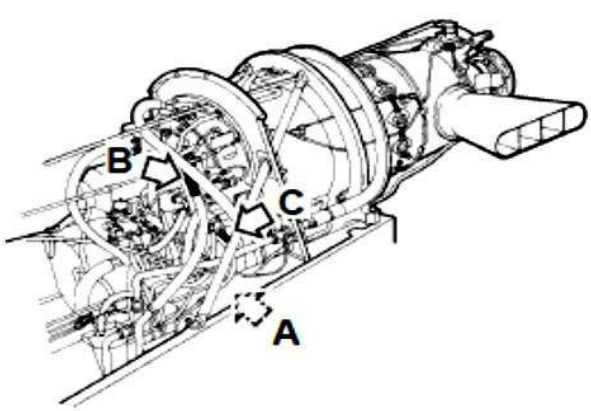
Powerplant - Removal / Installation - Engine Bulkheads
Figure 407

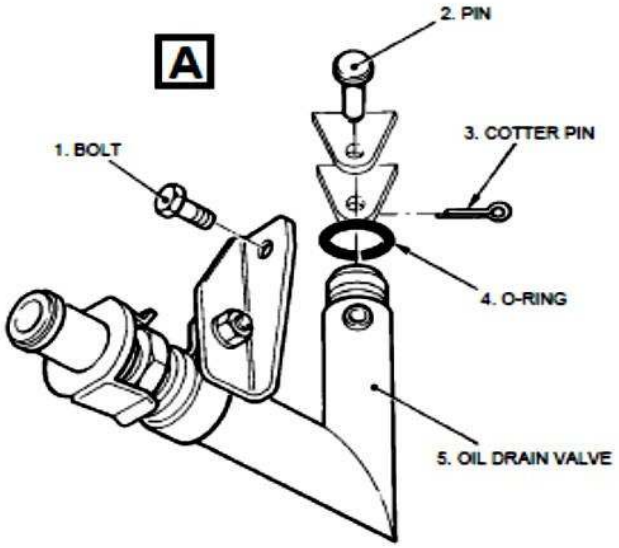
PILATUS
PC-6
MAINTENANCE MANUAL

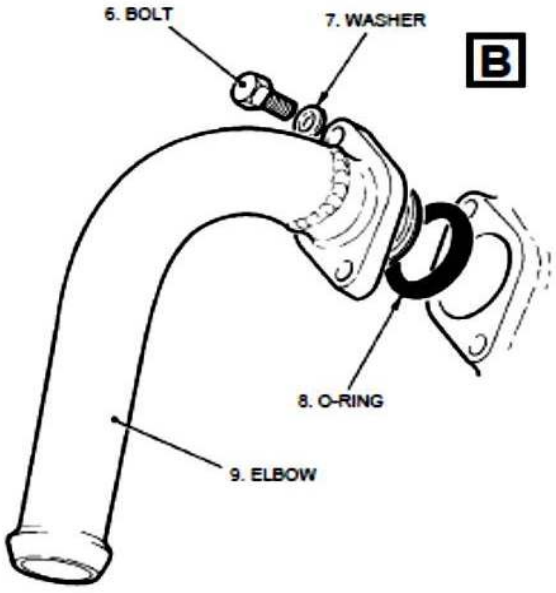


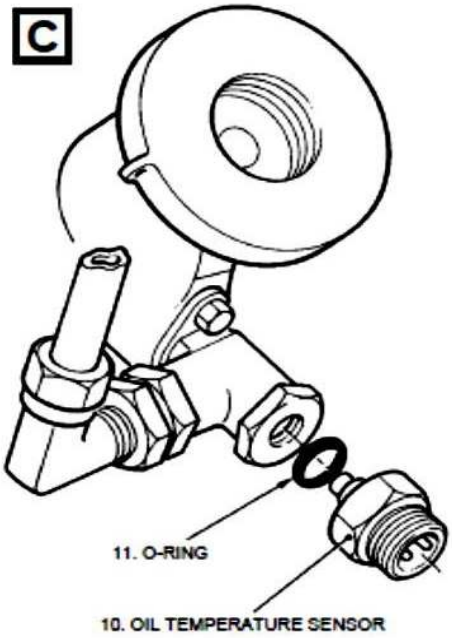
Powerplant - Removal / Installation - Engine Mounts and Support Struts
Figure 408

PILATUS
PC-6
MAINTENANCE MANUAL





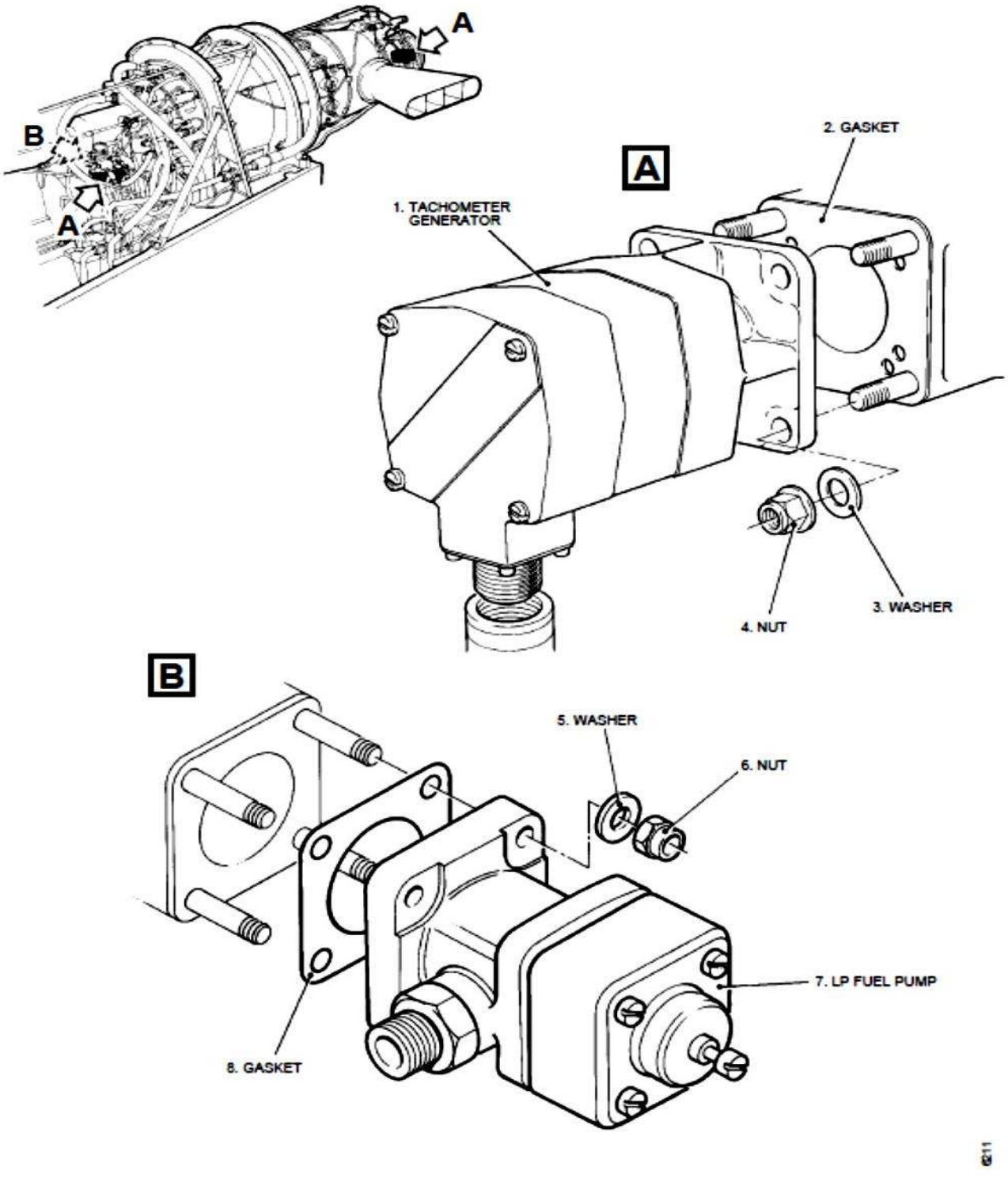




6265

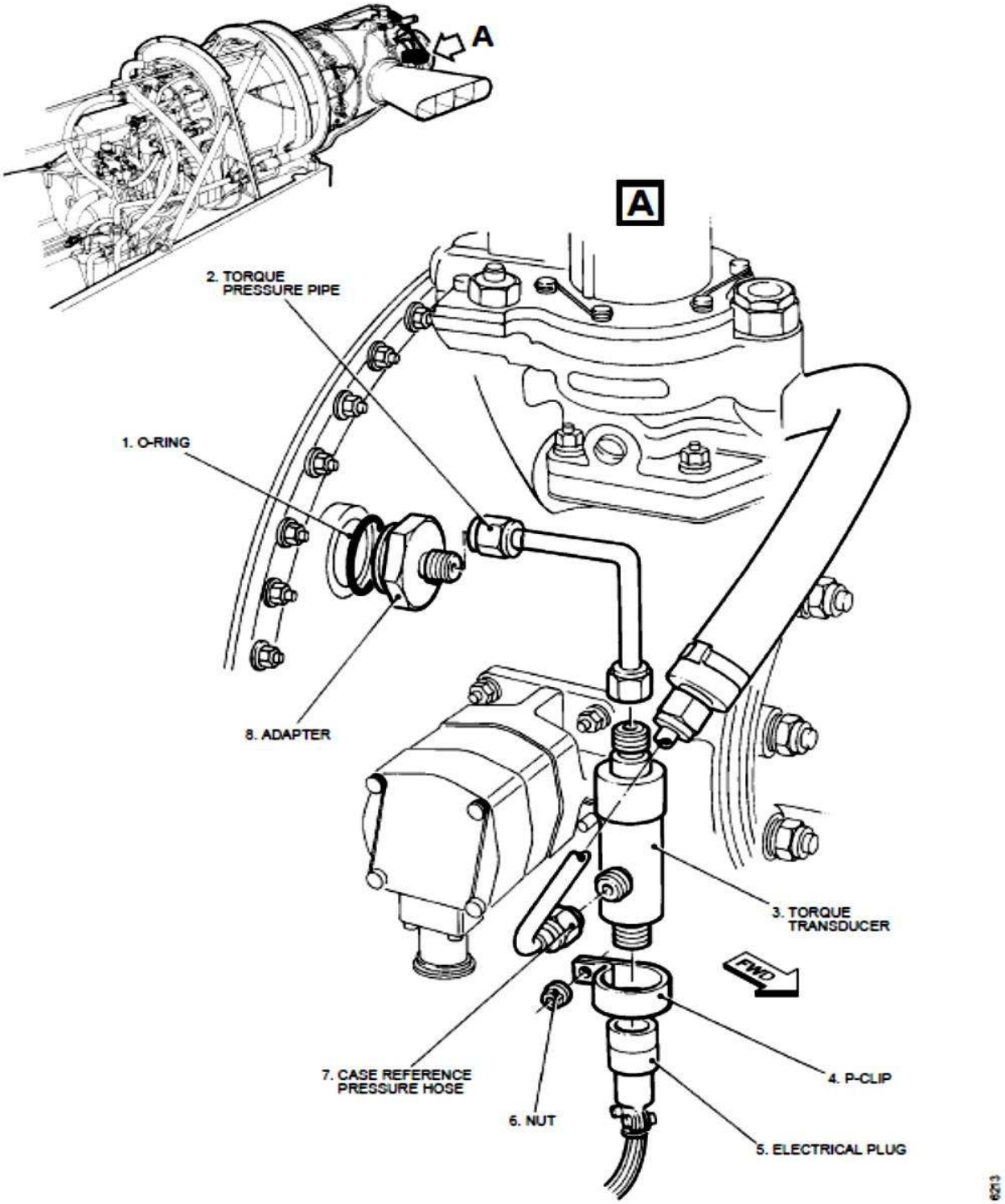
Powerplant - Removal / Installation - Oil Temperature Sensor, Breather and Drain Valve
Figure 409

PILATUS
PC-6
MAINTENANCE MANUAL



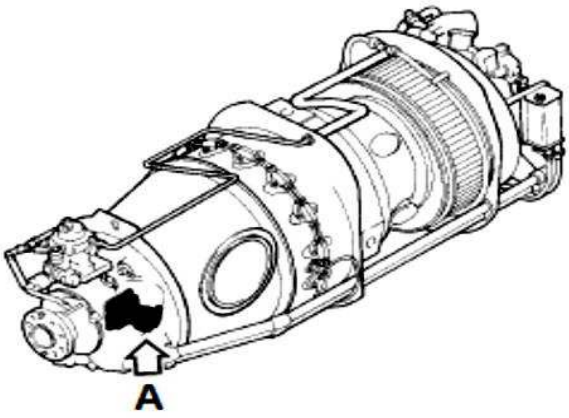
Powerplant - Removal / Installation - Engine Driven Fuel Pump and Gas Generator and Tachometer Generator
Figure 410

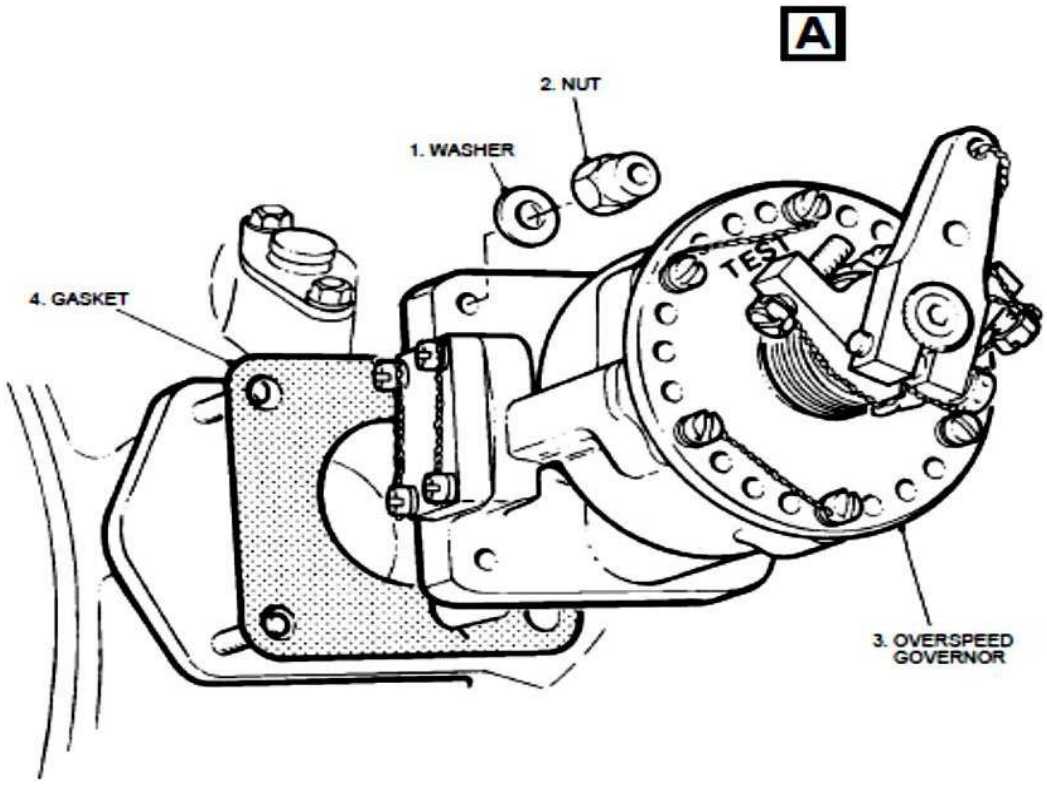
PILATUS
PC-6
MAINTENANCE MANUAL



Powerplant - Removal / Installation - Torque System (Aircraft from MSN 825)
Figure 411 (Sheet 2 of 2)

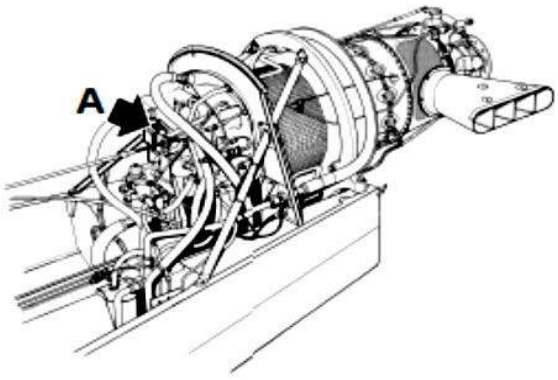
PILATUS
PC-6
MAINTENANCE MANUAL

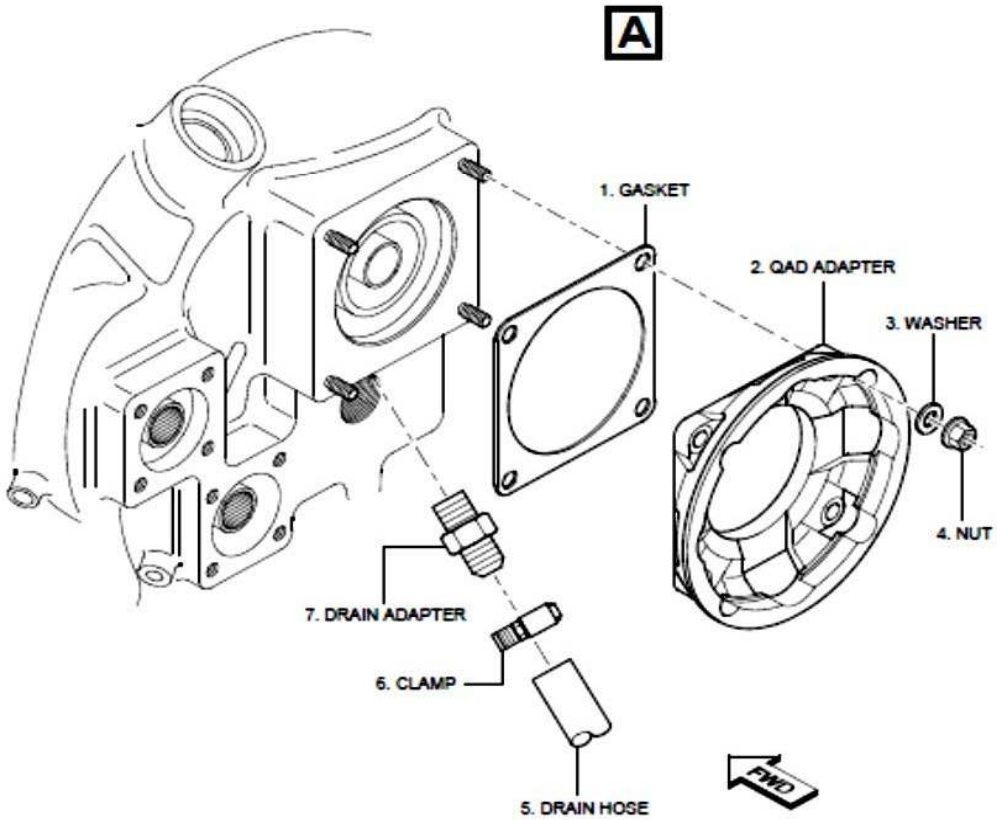




Powerplant - Removal / Installation - Propeller Overspeed Governor
Figure 412

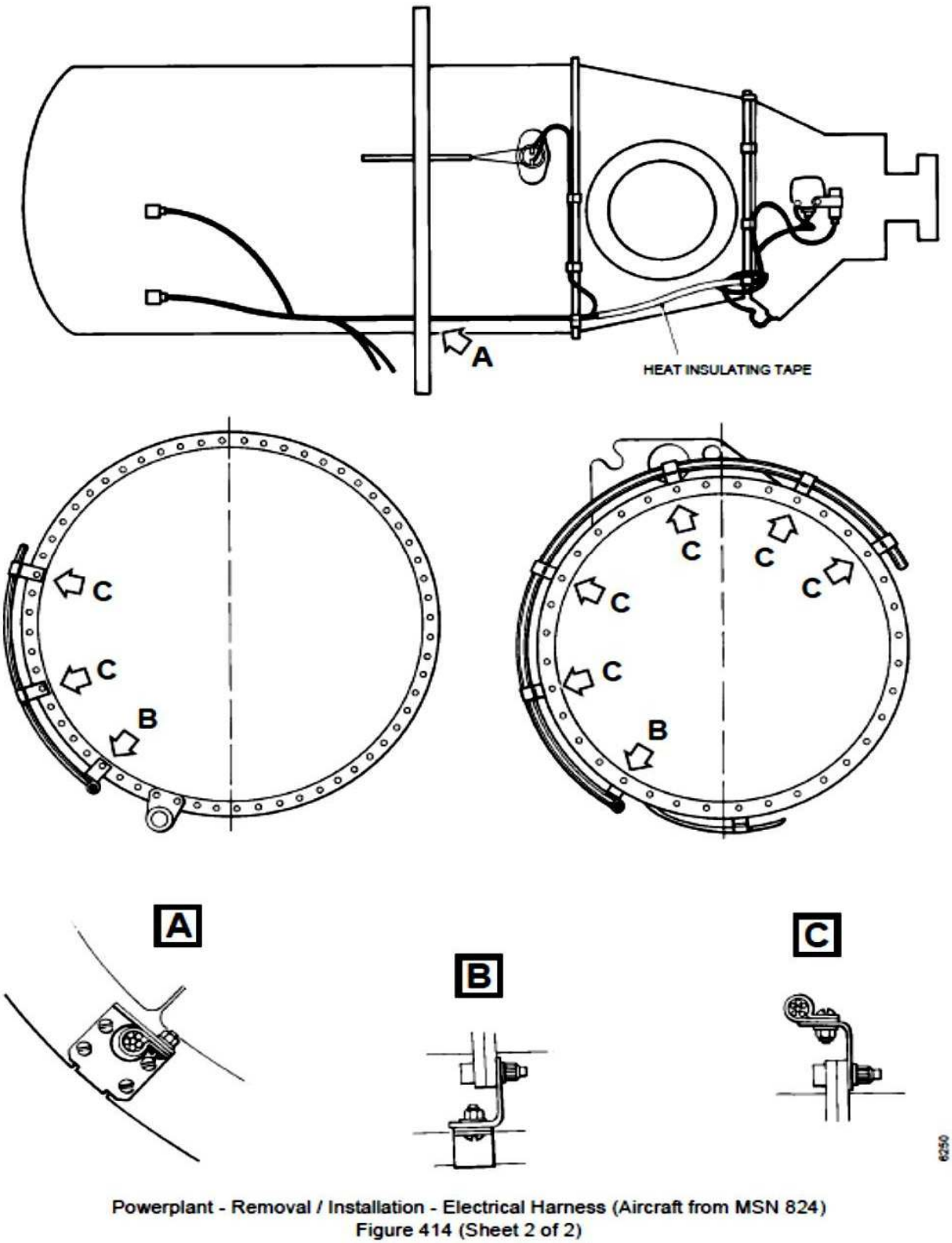
PILATUS
PC-6
MAINTENANCE MANUAL





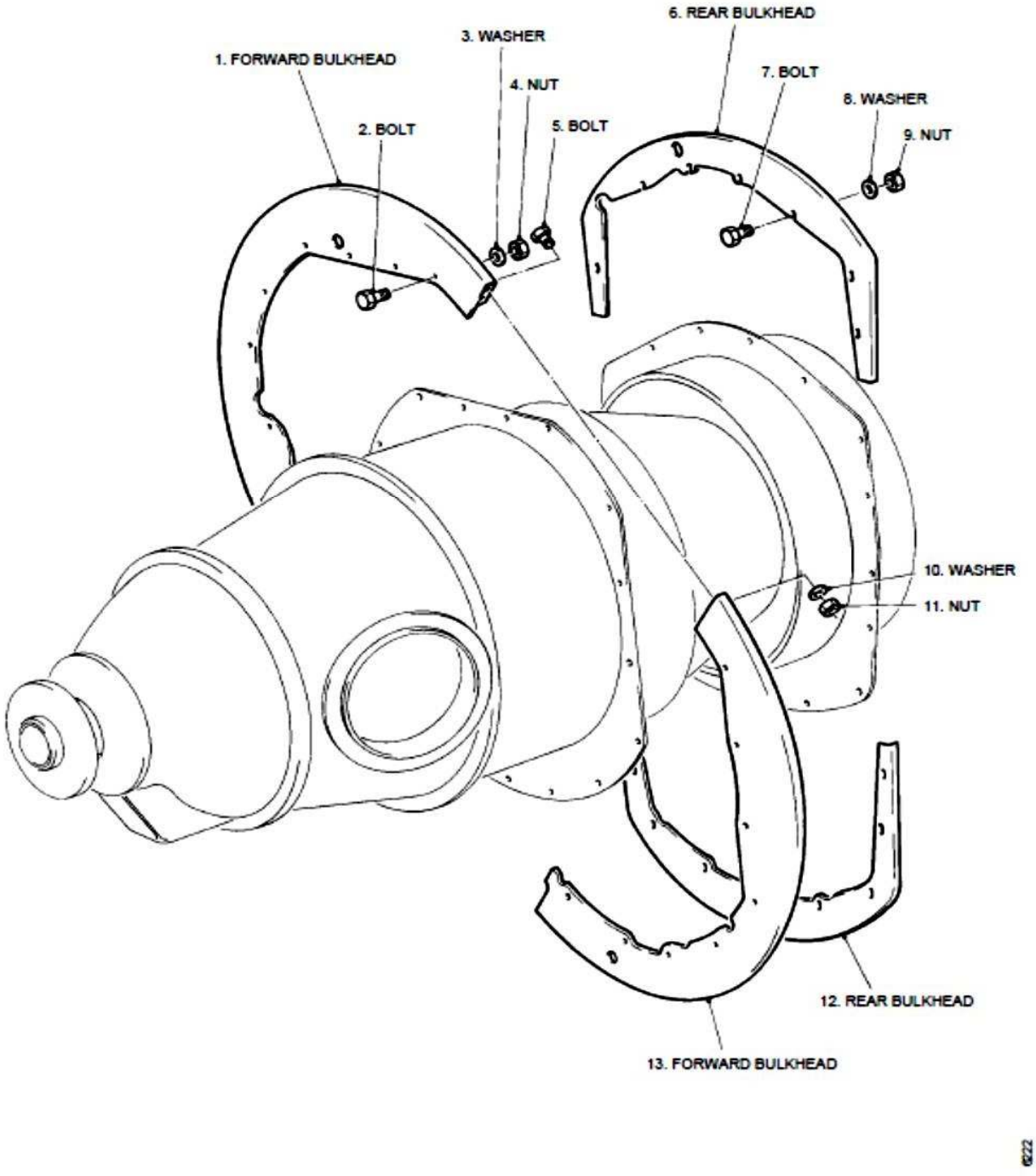
Powerplant - Removal / Installation - Starter-Generator, QAD Adapter (if installed) and Pad Drain Adapter
Figure 413

PILATUS
PC-6
MAINTENANCE MANUAL



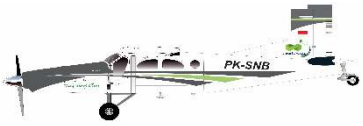
Powerplant - Removal / Installation - Electrical Harness (Aircraft from MSN 824)
Figure 414 (Sheet 2 of 2)

PILATUS
PC-6
MAINTENANCE MANUAL

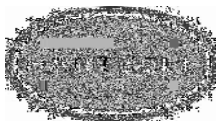


Powerplant - Removal / Installation - Engine Inner Bulkheads
Figure 415

ENGINE GROUND RUN CHECK SHEET - PT6A-27 ENGINE WITH FOUR BLADE PROPELLER (HARTZELL STC SA377CH)



PILATUS



WORK ORDER NO.		**:**	
Aircraft Registration		**Aircraft Total Hours**	
Aircraft Serial No.		**Aircraft Total Landings**	
Engine Serial No.		**Engine TSN / TSO**	
Propeller Serial No		**Propeller TSN / TSO**	
Ambient Temp	**°C**	**FBP (Field Barometric Pressure)**	**In.Hg**
Date		**Time**	
Mechanic / Engineer		**Authorized Engineer**	
Reason For Ground Run			

Checks to be carried out. No:	**1 2 4 5 7 8 9 10 11 12 13 14 15**

Engine Ground Run Check Frequency

Check Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Each 100 / Yearly	x	x		x			x	x			x	x	x	x	x
Each 200									x						
Pre-Complete Overhaul	x	x	x	x		x	x	x	x	x	x	x	x	x	x
After Short Term Storage															x
After Long Term Storage	x	x	x	x		x	x	x	x	x	x	x	x	x	x

In additional the following check must be carried out after Installation, Repair and Adjustment of any ofthe following components.

Check Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Engine Installation	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Propeller Installation		x	x	x	x			x							
Fuel Control Unit	x				x	x	x	x		x	x				
HP Fuel Pump						x	x								
Fuel Nozzle						x	x								
Starting Flow Control	x				x		x	x							
Emer Fuel Control Actuator											x				
Prop Governor	x		x	x	x		x	x							
Prop Overspeed Governor									x						
Compressor Bleed Valve						x	x								
Engine Controls	x			x	x			x	x						
Low Pitch Warning Switch				x											
Suction Components														x	

Use this sheet's to record engine run result, use in conjunction with task cards.

NO.	CHECK	TARGET	ACTUAL
	ENGINE START		
	ITT (Troubleshoot If More Than 925□C)	Max. 1090 □C	□C
	Cabin Heat	OFF	OK?
1	Low Idle (Minimum Governing) Speed	51 - 53 % Ng	% Ng
	Fuel Pressure / Boost Pump OFF	Light out or 25 ± 5 psi	OK?
	ITT		□C
	Oil Pressure		psi
	Oil Temperature		□C
2	Propeller Governor		
	Maximum Np	1980 - 2000 rpm (90.0 - 90.9 %)	rpm
	Py Disconnected		% Ng
	Py Connected		% Ng
	Difference	Maximum 0.3% Ng	%
	Airbleed Link at Minimum	1900 - 1950 rpm (86.4 - 88.6 %)	rpm
	Aircraft with SB 161:		
	Propeller Control Lever at Minimum	1880 - 1900 rpm (85.5 - 86.4 %)	rpm
3	Propeller Fine Pitch Setting (High Idle)		
	Target Torque	psi	psi
	Power Lever to Give Np	1694 rpm (77 %)	rpm
	Basic High Idle	68 - 72% Ng	%Ng
4	Propeller Low Pitch Warning		
	PCL from Reverse to Detent	Light OFF	
		1 to 2 mm before Detent	mm
5	Minimum Pitch in Flight		
	Ng	67 - 73 %	% Ng
	Np	1800 - 1950 rpm (81.8 - 88.6 %)	rpm
	Torque	4 - 7 psi	psi
6	FCU Maximum Governing Speed (Ng)	97.1 % Ng	% Ng
	(Trim stop deployed)		

NO.	CHECK	TARGET	ACTUAL
7	Engine Performance	Ref: AMM 71-00-00	
	Target Torque Pressure	psi	psi
	Fuel flow (Actual minus 23 lb / hr or 3.4 gal / hr)	lb / hr	lb / hr
	Target Ng	% Ng	% Ng
	Maximum ITT	^0C	^0C
8	Reverse Power Setting		
	Np	1880 - 1925 rpm (85.5 - 87.5 %)	rpm
	Torque	psi	psi
9	Propeller Overspeed Governor		
	Test Lever Selected to:		
	TEST	1880 - 1920 rpm (85.5 - 87.3 %)	rpm
	NORMAL	1980 - 2000 rpm (90.0 - 90.9 %)	rpm
10	Acceleration		
	64 % – 90 % Ng	2.5 – 4 secs	secs
	Deceleration		
	85% to 60% Ng or low idle speed(Whichever comes first)	Maximum 6-12 sec (Dependent upon altitude)	secs altitude (kFt)
	Manual Override (MOR) (Aircraft with SB 164)		
	Use Toggle Switch In Small Increment	Increase to 15% above Idle	OK?
	(REF. to WARNINGS and CAUTIONS in Check 11)	(Max Increase less than 4 % per Second)	
		Decrease To Idle	OK?
		(Max Decrease less Than 4% per Second)	
12	Oil Pressure	80 -100 psi	psi
13	Generator (Ref. 24-30-00)	Online by 60% Ng	% Ng
14	Suction (High Idle)	4.5 – 5.2 in. Hg	in. Hg
15	Engine Rundown Time After Stop	MIN 30 secs	secs
Additional			
Generator Check (High Idle Under Load)		27.75 – 28.25 VDC	VDC
After Engine Run			
Check Eng. For Signs of Fuel/Oil/Air Leaks		NO LEAKS FOUND	OK?
Safety All Screws, Bolts, Locknuts as Req.			OK?

Ref. AMM Pilatus Porter PC6 Chapter 61-10-00,

PROPELLER INSTALLATION SHEET

Date :		**Propeller P/N :**	
Aircraft Registration :		**Propeller S/N :**	
Aircraft Type :	**PILATUS PC6, B2-H4**	**TSN :**	
Aircraft Total Hours :		**TSO :**	
Aircraft Total Cycle :		**Work Order Number :**	

NO	TASK		SIGNATURE	
			SIGN	STAMP
Job Set Up				
1	Do Engine Run Ground Sheet before Propeller installation, fill out Form.			
2	Ensure airplane electrical power is OFF.			
Installation (Ref. Fig. 401)				
1	(1) Attach the puller (16) and pull the slip ring fully forward to touch the rear face of the propeller bulkhead.	**RII:** Sign & Stamp		
	(2) Install a new O-ring (15) on the propeller shaft.	**RII:** Sign & Stamp		
	(3) Install the sling and put the propeller in position on the engine flange.	**RII:** Sign & Stamp		
	(4) Lubricate the bolts (7) with grease (Material No. P04-009).	**RII:** Sign & Stamp		
	CAUTION: MAKE SURE THAT THE CHAMFERED SIDE OF THE WASHER FACES THE BOLT HEAD.			
	(5) Install the attachment bolts (7) and washers (8), with the chamfered side of the washer next to the bolt head.	**RII:** Sign & Stamp		
	(6) Torque the bolts in three steps as follows: a) To 54 Nm (480 lbf in.), (Ref. Fig. 402, Sequence A). b) To 108 Nm (960 lbf in.), (Ref Fig. 402, Sequence A). c) To between 136 and 142 Nm (1200 and 1260 lbf in.), (Ref. Fig402, Sequence B).	**RII:** Sign & Stamp		

NO	TASK		SIGNATURE	
			SIGN	STAMP
	(7) Safety the bolts with lockwire (Material No. P02-001).	**RII:** Sign & Stamp		
	(8) Remove the sling and puller.			
	(9) Put the carbon block (9) in position.	**RII:** Sign & Stamp		
	(10) Put the reversing lever (12) in position.	**RII:** Sign & Stamp		
	(11) Put the low pitch switch control rod in position.	**RII:** Sign & Stamp		
	(12) Install the nut (5) and washer (6).	**RII:** Sign & Stamp		
	(13) Safety the nut with a new cotter pin (4).	**RII:** Sign & Stamp		
	(14) Install the pin (3) and washer (11).	**RII:** Sign & Stamp		
	(15) Safety the pin with a new cotter pin (10).	**RII:** Sign & Stamp		
	(16) Install the bolt (2), bush (15), washer (14) and nut (13).	**RII:** Sign & Stamp		
	(17) Install the bolt (2), bush (15), washer (14) and nut (13).	**RII:** Sign & Stamp		
	(18) Safety the nut with a new cotter pin (1).	**RII:** Sign & Stamp		
	(19) Make sure the side clearance between the beta-ring and the carbon block (9) is between 0,03 and 0,25 mm (0.001 and 0.01 in). If necessary, remove material from, or replace, the carbon block (9) to get the correct clearance.	**RII:** Sign & Stamp		
Job Close Up				
1	(1) Install the spinner dome to the bulkhead assembly. Align the marks on the spinner with the marks on the bulkhead.	**RII:** Sign & Stamp		

NO	TASK	SIGNATURE	
		SIGN	STAMP
	NOTE: The spinner assembly (plate, bulkhead and dome) is balanced as a unit. The components are notinterchangeable.		
	(2) Do a balance check.		
	(3) Do a ground run.		
	(4) Check for oil leaks from the propeller, - No leaks are acceptable.		
	(5) Make sure that the work area is clean and clear of tools and other items.		
	(6) Install the engine cowls PT1 and PB1.		
2	Make an appropriate entry in Work Order or Aircraft Flight Maintenance Log (AFML)		

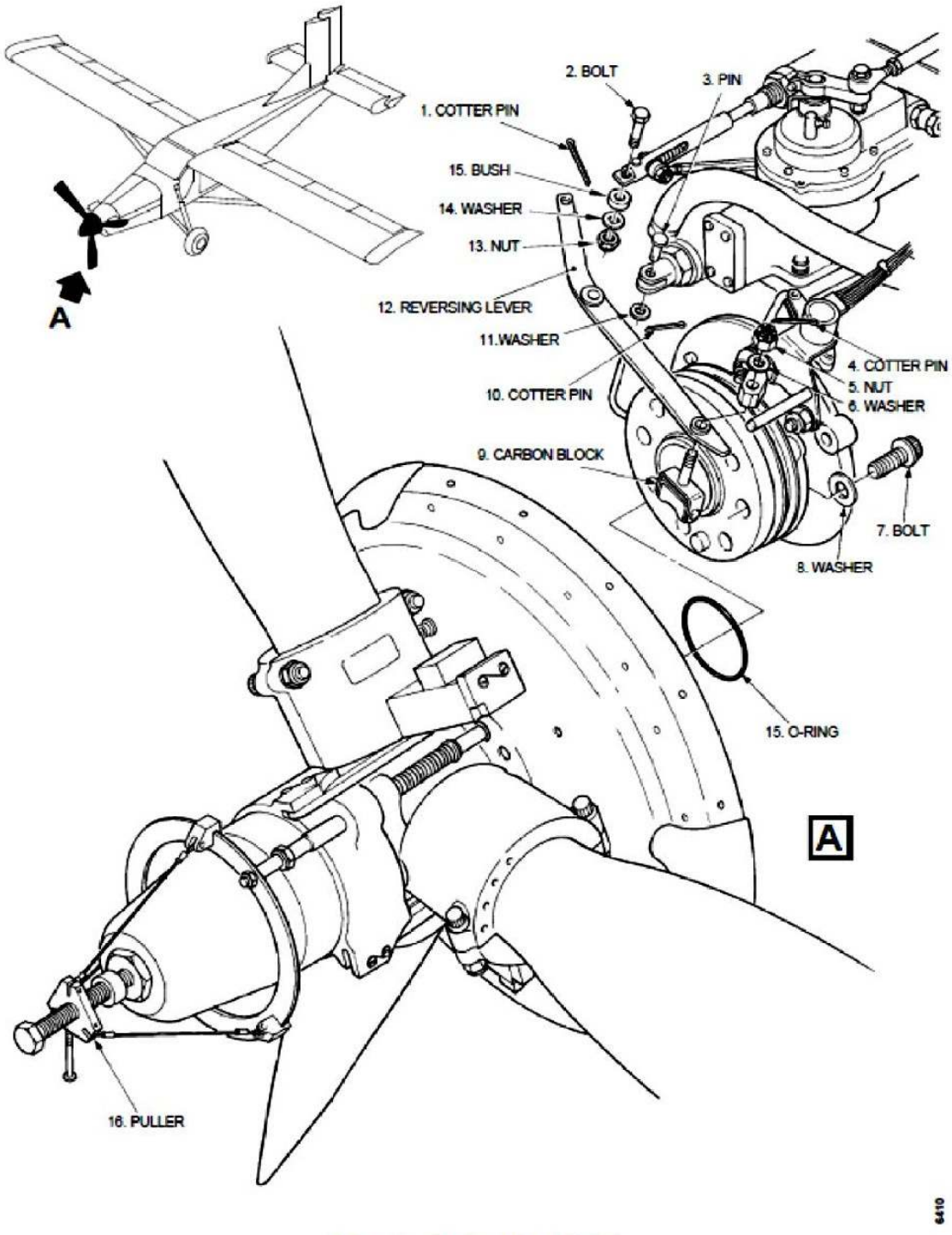
PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

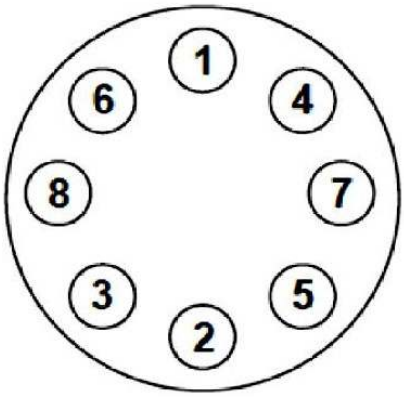
Name	:	_____	Name of RII	:	_____
Signature	:	_____	Signature	:	_____
Stamp	:	_____	Stamp	:	_____
Place/Date	:	_____	Place/Date	:	_____

PILATUS
PC-6
MAINTENANCE MANUAL

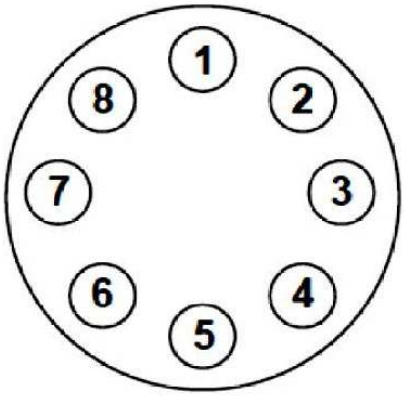


Propeller - Removal / Installation
Figure 401

PILATUS
PC-6
MAINTENANCE MANUAL



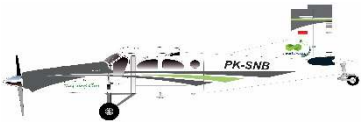
SEQUENCE A



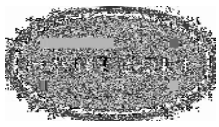
SEQUENCE B

Propeller - Bolt Tightening Sequence
Figure 402

ENGINE GROUND RUN CHECK SHEET - PT6A-27 ENGINE WITH FOUR BLADE PROPELLER (HARTZELL STC SA377CH)



PILATUS



WORK ORDER NO.		**:**	
Aircraft Registration		**Aircraft Total Hours**	
Aircraft Serial No.		**Aircraft Total Landings**	
Engine Serial No.		**Engine TSN / TSO**	
Propeller Serial No		**Propeller TSN / TSO**	
Ambient Temp	**°C**	**FBP (Field Barometric Pressure)**	**In.Hg**
Date		**Time**	
Mechanic / Engineer		**Authorized Engineer**	
Reason For Ground Run			

Checks to be carried out. No:	**1 2 4 5 7 8 9 10 11 12 13 14 15**

Engine Ground Run Check Frequency

Check Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Each 100 / Yearly	x	x		x			x	x			x	x	x	x	x
Each 200									x						
Pre-Complete Overhaul	x	x	x	x		x	x	x	x	x	x	x	x	x	x
After Short Term Storage															x
After Long Term Storage	x	x	x	x		x	x	x	x	x	x	x	x	x	x

In additional the following check must be carried out after Installation, Repair and Adjustment of any ofthe following components.

Check Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Engine Installation	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Propeller Installation		x	x	x	x			x							
Fuel Control Unit	x				x	x	x	x		x	x				
HP Fuel Pump						x	x								
Fuel Nozzle						x	x								
Starting Flow Control	x				x		x	x							
Emer Fuel Control Actuator											x				
Prop Governor	x		x	x	x		x	x							
Prop Overspeed Governor									x						
Compressor Bleed Valve						x	x								
Engine Controls	x			x	x			x	x						
Low Pitch Warning Switch				x											
Suction Components														x	

Use this sheet's to record engine run result, use in conjunction with task cards.

NO.	CHECK	TARGET	ACTUAL
	ENGINE START		
	ITT (Troubleshoot If More Than 925□C)	Max. 1090 □C	□C
	Cabin Heat	OFF	OK?
1	Low Idle (Minimum Governing) Speed	51 - 53 % Ng	% Ng
	Fuel Pressure / Boost Pump OFF	Light out or 25 ± 5 psi	OK?
	ITT		□C
	Oil Pressure		psi
	Oil Temperature		□C
2	Propeller Governor		
	Maximum Np	1980 - 2000 rpm (90.0 - 90.9 %)	rpm
	Py Disconnected		% Ng
	Py Connected		% Ng
	Difference	Maximum 0.3% Ng	%
	Airbleed Link at Minimum	1900 - 1950 rpm (86.4 - 88.6 %)	rpm
	Aircraft with SB 161:		
	Propeller Control Lever at Minimum	1880 - 1900 rpm (85.5 - 86.4 %)	rpm
3	Propeller Fine Pitch Setting (High Idle)		
	Target Torque	psi	psi
	Power Lever to Give Np	1694 rpm (77 %)	rpm
	Basic High Idle	68 - 72% Ng	%Ng
4	Propeller Low Pitch Warning		
	PCL from Reverse to Detent	Light OFF	
		1 to 2 mm before Detent	mm
5	Minimum Pitch in Flight		
	Ng	67 - 73 %	% Ng
	Np	1800 - 1950 rpm (81.8 - 88.6 %)	rpm
	Torque	4 - 7 psi	psi
6	FCU Maximum Governing Speed (Ng)	97.1 % Ng	% Ng
	(Trim stop deployed)		

NO.	CHECK	TARGET	ACTUAL
7	Engine Performance	Ref: AMM 71-00-00	
	Target Torque Pressure	psi	psi
	Fuel flow (Actual minus 23 lb / hr or 3.4 gal / hr)	lb / hr	lb / hr
	Target Ng	% Ng	% Ng
	Maximum ITT	^0C	^0C
8	Reverse Power Setting		
	Np	1880 - 1925 rpm (85.5 - 87.5 %)	rpm
	Torque	psi	psi
9	Propeller Overspeed Governor		
	Test Lever Selected to:		
	TEST	1880 - 1920 rpm (85.5 - 87.3 %)	rpm
	NORMAL	1980 - 2000 rpm (90.0 - 90.9 %)	rpm
10	Acceleration		
	64 % – 90 % Ng	2.5 – 4 secs	secs
	Deceleration		
	85% to 60% Ng or low idle speed(Whichever comes first)	Maximum 6-12 sec (Dependent upon altitude)	secs altitude (kFt)
	Manual Override (MOR) (Aircraft with SB 164)		
	Use Toggle Switch In Small Increment	Increase to 15% above Idle	OK?
	(REF. to WARNINGS and CAUTIONS in Check 11)	(Max Increase less than 4 % per Second)	
		Decrease To Idle	OK?
		(Max Decrease less Than 4% per Second)	
12	Oil Pressure	80 -100 psi	psi
13	Generator (Ref. 24-30-00)	Online by 60% Ng	% Ng
14	Suction (High Idle)	4.5 – 5.2 in. Hg	in. Hg
15	Engine Rundown Time After Stop	MIN 30 secs	secs
Additional			
Generator Check (High Idle Under Load)		27.75 – 28.25 VDC	VDC
After Engine Run			
Check Eng. For Signs of Fuel/Oil/Air Leaks		NO LEAKS FOUND	OK?
Safety All Screws, Bolts, Locknuts as Req.			OK?

Ref. AMM Pilatus Porter PC6 Chapter 61-10-00,

PROPELLER REMOVAL SHEET

Date :		**Propeller P/N :**	
Aircraft Registration :		**Propeller S/N :**	
Aircraft Type :	**PILATUS PC6, B2-H4**	**TSN :**	
Aircraft Total Hours :		**TSO :**	
Aircraft Total Cycle :		**Work Order Number :**	

NO	TASK	SIGNATURE	
		SIGN	STAMP
Job Set Up			
1	Do Engine Run Ground Sheet before Propeller installation, fill out Form.		
2	Ensure airplane electrical power is OFF.		
3	Remove the upper and lower engine cowls PT1 and PB1.		
4	Remove the screws and washers and remove the propeller spinner dome.		
REMOVAL (Ref. Fig. 401)			
1	Remove the cotter pin (4), nut (5) and washer (6). Discard the cotter pin.		
2	Remove the cotter pin (10), washer (11) and pin (3). Discard the cotter pin.		
3	Remove the cotter pin (1), nut (13), washer (14), bush (15) and bolt (2).		
4	Remove the reversing lever (12).		
5	Remove the carbon block (9) from the slip ring.		
6	Attach the puller (16) and pull the slip ring fully forward to touch the rear faceof the propeller bulkhead.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
7	Install a sling on the propeller.		
8	Remove the lockwire from the bolts (7).		
9	Remove the bolts (7) and washers (8).		
10	Remove the propeller from the engine.		
11	Remove and discard the O-ring (15).		
12	Put the propeller on a stand with the cylinder upwards. Let the oil drain andthen install a blank.		
13	Remove the slip ring puller and sling from the propeller.		
Job Close Up			
1	Make an appropriate entry in Work Order or Aircraft Flight Maintenance Log (AFML)		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

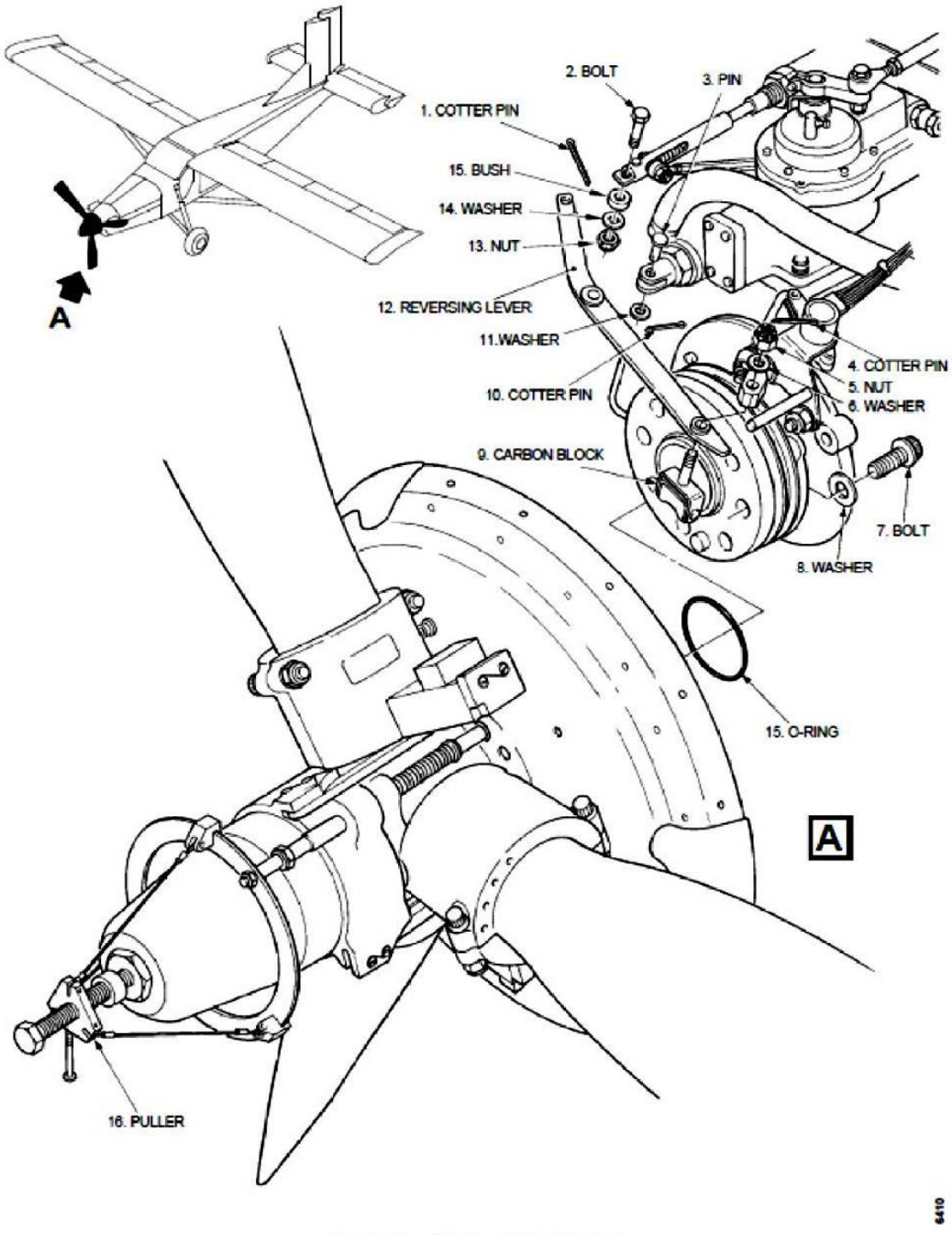
Name : _____ Name of RII : _____

Signature : _____ Signature : _____

Stamp : _____ Stamp : _____

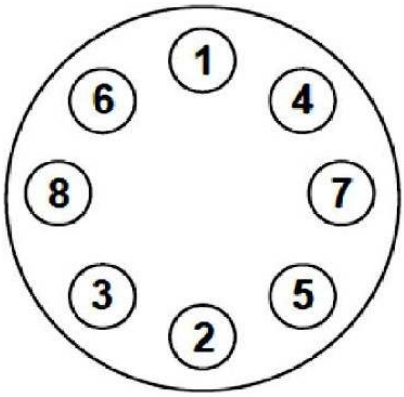
Place/Date : _____ Place/Date : _____

PILATUS
PC-6
MAINTENANCE MANUAL

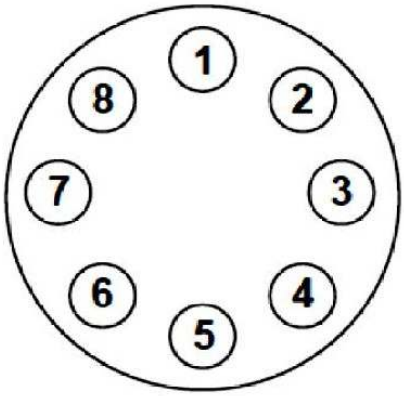


Propeller - Removal / Installation
Figure 401

PILATUS
PC-6
MAINTENANCE MANUAL



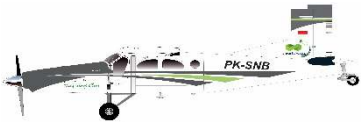
SEQUENCE A



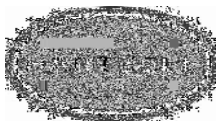
SEQUENCE B

Propeller - Bolt Tightening Sequence
Figure 402

ENGINE GROUND RUN CHECK SHEET - PT6A-27 ENGINE WITH FOUR BLADE PROPELLER (HARTZELL STC SA377CH)



PILATUS



WORK ORDER NO.		**:**	
Aircraft Registration		**Aircraft Total Hours**	
Aircraft Serial No.		**Aircraft Total Landings**	
Engine Serial No.		**Engine TSN / TSO**	
Propeller Serial No		**Propeller TSN / TSO**	
Ambient Temp	**°C**	**FBP (Field Barometric Pressure)**	**In.Hg**
Date		**Time**	
Mechanic / Engineer		**Authorized Engineer**	
Reason For Ground Run			

Checks to be carried out. No:	**1 2 4 5 7 8 9 10 11 12 13 14 15**

Engine Ground Run Check Frequency

Check Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Each 100 / Yearly	x	x		x			x	x			x	x	x	x	x
Each 200									x						
Pre-Complete Overhaul	x	x	x	x		x	x	x	x	x	x	x	x	x	x
After Short Term Storage															x
After Long Term Storage	x	x	x	x		x	x	x	x	x	x	x	x	x	x

In additional the following check must be carried out after Installation, Repair and Adjustment of any ofthe following components.

Check Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Engine Installation	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Propeller Installation		x	x	x	x			x							
Fuel Control Unit	x				x	x	x	x		x	x				
HP Fuel Pump						x	x								
Fuel Nozzle						x	x								
Starting Flow Control	x				x		x	x							
Emer Fuel Control Actuator											x				
Prop Governor	x		x	x	x		x	x							
Prop Overspeed Governor									x						
Compressor Bleed Valve						x	x								
Engine Controls	x			x	x			x	x						
Low Pitch Warning Switch				x											
Suction Components														x	

Use this sheet's to record engine run result, use in conjunction with task cards.

NO.	CHECK	TARGET	ACTUAL
	ENGINE START		
	ITT (Troubleshoot If More Than 925□C)	Max. 1090 □C	□C
	Cabin Heat	OFF	OK?
1	Low Idle (Minimum Governing) Speed	51 - 53 % Ng	% Ng
	Fuel Pressure / Boost Pump OFF	Light out or 25 ± 5 psi	OK?
	ITT		□C
	Oil Pressure		psi
	Oil Temperature		□C
2	Propeller Governor		
	Maximum Np	1980 - 2000 rpm (90.0 - 90.9 %)	rpm
	Py Disconnected		% Ng
	Py Connected		% Ng
	Difference	Maximum 0.3% Ng	%
	Airbleed Link at Minimum	1900 - 1950 rpm (86.4 - 88.6 %)	rpm
	Aircraft with SB 161:		
	Propeller Control Lever at Minimum	1880 - 1900 rpm (85.5 - 86.4 %)	rpm
3	Propeller Fine Pitch Setting (High Idle)		
	Target Torque	psi	psi
	Power Lever to Give Np	1694 rpm (77 %)	rpm
	Basic High Idle	68 - 72% Ng	%Ng
4	Propeller Low Pitch Warning		
	PCL from Reverse to Detent	Light OFF	
		1 to 2 mm before Detent	mm
5	Minimum Pitch in Flight		
	Ng	67 - 73 %	% Ng
	Np	1800 - 1950 rpm (81.8 - 88.6 %)	rpm
	Torque	4 - 7 psi	psi
6	FCU Maximum Governing Speed (Ng)	97.1 % Ng	% Ng
	(Trim stop deployed)		

NO.	CHECK	TARGET	ACTUAL
7	Engine Performance	Ref: AMM 71-00-00	
	Target Torque Pressure	psi	psi
	Fuel flow (Actual minus 23 lb / hr or 3.4 gal / hr)	lb / hr	lb / hr
	Target Ng	% Ng	% Ng
	Maximum ITT	^0C	^0C
8	Reverse Power Setting		
	Np	1880 - 1925 rpm (85.5 - 87.5 %)	rpm
	Torque	psi	psi
9	Propeller Overspeed Governor		
	Test Lever Selected to:		
	TEST	1880 - 1920 rpm (85.5 - 87.3 %)	rpm
	NORMAL	1980 - 2000 rpm (90.0 - 90.9 %)	rpm
10	Acceleration		
	64 % – 90 % Ng	2.5 – 4 secs	secs
	Deceleration		
	85% to 60% Ng or low idle speed(Whichever comes first)	Maximum 6-12 sec (Dependent upon altitude)	secs altitude (kFt)
	Manual Override (MOR) (Aircraft with SB 164)		
	Use Toggle Switch In Small Increment	Increase to 15% above Idle	OK?
	(REF. to WARNINGS and CAUTIONS in Check 11)	(Max Increase less than 4 % per Second)	
		Decrease To Idle	OK?
		(Max Decrease less Than 4% per Second)	
12	Oil Pressure	80 -100 psi	psi
13	Generator (Ref. 24-30-00)	Online by 60% Ng	% Ng
14	Suction (High Idle)	4.5 – 5.2 in. Hg	in. Hg
15	Engine Rundown Time After Stop	MIN 30 secs	secs
Additional			
Generator Check (High Idle Under Load)		27.75 – 28.25 VDC	VDC
After Engine Run			
Check Eng. For Signs of Fuel/Oil/Air Leaks		NO LEAKS FOUND	OK?
Safety All Screws, Bolts, Locknuts as Req.			OK?

Ref. AMM Pilatus Porter PC6 Chapter 05-51-01

PILATUS PC6 - HIGH G-LOADS INSPECTION SHEET

Reg. Mark : PK - Date :

MSN : Station :

TSN / CSN : WO No. :

NO	TASK	SIGNATURE	
		SIGN	STAMP
GENERAL			
1	Do an alignment and symmetry check		
FUSELAGE			
1	Internal Examine		
2	External Examine		
3	Wing attachments Examine		
ENGINE COMPARTMENT			
1	Structure Examine		
2	Engine mount ring Examine		
3	Support struts Examine		
4	Fireproof bulkhead Examine		
5	Fuselage attachment longerons Examine		
WINGS			
1	Structure Examine		
2	Structure Look for fuel leaks		

NO	TASK	SIGNATURE	
		SIGN	STAMP
3	Wing struts Examine		
4	Wing strut attachments Examine		
5	Underwing tanks (if installed) Examine		
6	Underwing tank pylons (if installed) Examine		
7	Pylon to wing attachments (if installed) Examine		
FLIGHT CONTROLS			
1	Aileron Examine		
2	Aileron support structure Examine		
3	Aileron tabs Examine		
4	Flaps Examine		
5	Flap support structure Examine		
6	Vertical stabilize Examine		
7	Dorsal fin Examine		
8	Rudder Examine		
9	Rudder support structure Examine		
10	Rudder trim tab Examine		

NO	TASK	SIGNATURE	
		SIGN	STAMP
11	Horizontal stabilizer Examine		
12	Horizontal stabilizer attachments Examine		
13	Horizontal stabilizer actuator Examine		
14	Horizontal stabilizer actuator attachment brackets Examine		
15	Elevator Examine		
16	Elevator trim tab Examine		
17	Elevator support structure Examine		
18	All flight controls Check rigging		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. AMM Pilatus Porter PC6 Chapter 05-51-02, EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 - HARD or OVERWEIGHT LANDING INSPECTION SHEET

Reg. Mark : PK - Date :

MSN : Station :

TSN / CSN : WO No. :

NO	TASK	SIGNATURE	
		SIGN	STAMP
ENGINE COMPARTMENT			
1	Structure Examine		
2	Engine mount ring Examine		
3	Support struts Examine		
4	Fireproof bulkhead Examine		
5	Fuselage attachment longerons Examine		
6	Engine shockmounts Examine		
7	Engine Do the engine heavy/hard landing inspection.		
MAIN LANDING GEAR			
1	V struts Examine		
2	V strut attachments Examine		
3	Shock strut Examine		
4	Shock strut attachments Examine		
5	Main wheels and tires Examine		

NO	TASK	SIGNATURE	
		SIGN	STAMP
6	Main wheels bearings Examine		
7	Brake units Examine		
TAIL LANDING GEAR			
1	Tail landing gear Examine		
2	Tail gear steering system Examine		
FUSELAGE			
1	Wing attachments Examine		
2	Wing strut attachments Examine		
3	Main landing gear attachments Examine		
4	Tail landing gear attachments Examine		
WINGS			
1	Wing strut attachments Examine		
2	Wing struts Examine		
3	Underwing tanks Examine		
4	Underwing tank pylons Examine		
5	Pylon to wing attachments Examine		
FLIGHT CONTROLS			
1	Horizontal stabilizer Examine		

NO	TASK	SIGNATURE	
		SIGN	STAMP
2	Horizontal stabilizer attachments Examine		
3	Horizontal stabilizer actuator Examine		
4	Horizontal stabilizer actuator attachment brackets Examine		
5	Elevator Examine		
6	Elevator trim tab Examine		
7	Elevator support structure Examine		
8	All controls Check rigging		
ENGINE			
NOTE: 1 Do the following checks in the event of a suspected heavy or hard landing. A landing must beconsidered hard if the aircraft incurred any airframe or landing gear damage.			
NOTE: 2 If the heavy/hard landing involved a windmilling (inoperative) engine, send the complete engine to an approved overhaul facility for Light Overhaul. Indicate heavy/hard landing of inoperative engine. Otherwise, proceed as follows:			
1	Inspect for cracks or distortion at all engine casings and housings, especially at or near the flanges.		
2	Remove the starter-generator and check all AGB pads and AGB mounted engine and airframe components. Look for shearing, cracks, distortion or mis-alignment, and loose/pulled fasteners. Similarly, inspect all other accessories and engine mounts.		
3	Inspect fireseals for warping or buckling, and all external tubes for damage and/or fluid leaks.		
4	Check all airframe/engine connections, including fuel inlet and oil cooler lines, air system, electrical, ignition and indicating systems, control linkages, and drains.		
5	Remove and inspect RGB chip detector, oil strainer, and main oil filter. If metallic debris is found, refer to FAULT ISOLATION.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
6	Rotate the compressor by hand and listen for rubbing, scraping, interference of rotating components with stationary parts, or rapid/abrupt deceleration. Check for rear accessory case mounted accessory drag. Check for compressor turbine tip rub (Ref. 72-50-02, Inspection/Check). Rotate the propeller by hand and listen for any interference of rotating components with stationary parts or any other unusual noises coming from the gearbox or turbines (Ref. Para. A.(4)). Examine PT disk assembly and exhaust area through exhaust ports for evidence of distress. If damage is found, inspect (Ref. 72-50-04, Inspection/Check).		
7	For casing or accessories damage, unusual noises that could indicate damage to the gears, bearings, seals or rotors, slow propeller acceleration on start or abrupt deceleration of compressor or power section on shutdown, send the complete engine to an approved overhaul facility for Light Overhaul. Indicate heavy landing and discrepancies observed.		
8	Operate the engine at 80% TO power for ten minutes. Remove and inspect RGB chip detector, oil strainer, and main oil filter (Ref. 72-10-00). If you did not find metallic debris, back engine to servicing and examine RGB chip detector regularly for one week (25 hours minimum).		
9	Inspect main oil filter after one week (25 hours minimum, 65 hours maximum). If no metallic debris is found, return to standard inspection schedule.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. AMM Pilatus Porter PC6 Chapter 05-51-03

PILATUS PC6 - TAIL DOWN LANDING INSPECTION SHEET

Reg. Mark : PK - Date :

MSN : Station :

TSN / CSN : WO No. :

NO	TASK	SIGNATURE	
		SIGN	STAMP
GENERAL			
1	Do an alignment and symmetry check Examine		
FUSELAGE			
1	From frame 12 rearward Examine		
2	Horizontal stabilizer attachments Examine		
3	Tail landing gear attachments Examine		
FLIGHT CONTROLS			
1	Horizontal stabilizer Examine		
2	Horizontal stabilizer attachments Examine		
3	Horizontal stabilizer actuator and attachments Examine		
4	Horizontal stabilizer Check rigging		
5	Elevator Examine		
6	Elevator attachments Examine		
7	Elevator Check rigging		
8	Rudder Examine		

NO	TASK	SIGNATURE	
		SIGN	STAMP
9	Rudder attachments Examine		
10	Rudder Check rigging		
TAIL LANDING GEAR			
1	Wheel and tyre Examine		
2	Tail landing gear Examine		
3	Tail gear steering system Examine		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. AMM Pilatus Porter PC6 Chapter 05-51-04

PILATUS PC6 - OVERSPEED - MORE THAN V_{NE} INSPECTION SHEET

Reg. Mark : PK - Date :

MSN : Station :

TSN / CSN : WO No. :

NO	TASK	SIGNATURE	
		SIGN	STAMP
WINGS			
1	Structure Examine		
2	Structure Look for fuel leaks		
3	Wing struts Examine		
4	Wing strut attachments Examine		
5	Underwing tanks Examine		
6	Underwing tank pylons Examine		
7	Pylon to wing attachments Examine		
FLIGHT CONTROLS			
1	Ailerons Examine		
2	Aileron support structure Examine		
3	Flaps Examine		
4	Flap support structure Examine		
5	Vertical stabilizer Examine		

NO	TASK	SIGNATURE	
		SIGN	STAMP
6	Dorsal fin Examine		
7	Rudder Examine		
8	Rudder support structure Examine		
9	Horizontal stabilizer Examine Examine		
10	Horizontal stabilizer attachments Examine		
11	Horizontal stabilizer actuator Examine		
12	Horizontal stabilizer actuator attachment brackets Examine		
13	Elevator Examine		
14	Elevator support structure Examine		
15	All flight controls Check rigging		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. AMM Pilatus Porter PC6 Chapter 05-51-05

PILATUS PC6 - OVERSPEED - MORE THAN V_{FE} INSPECTION SHEET

Reg. Mark	:	PK -	Date	:	
MSN	:		Station	:	
TSN / CSN	:		WO No.	:	

NO	TASK	SIGNATURE	
		SIGN	STAMP
FLIGHT CONTROLS			
1	Flaps. Examine		
2	Flaps support structure. Examine		
3	Flap actuating mechanism. Examine		
4	Flap actuator. Examine		
5	On the electrical flap system. If flaps were deplloyed or retracted at VFE + 10 knots or more - Send the actuator overhaul with details of the incident.		
6	The internal overload clutch may have operated under these conditions. The actuator may not operate correctly after the clutch has operated.		
7	Flap actuator attachments. Examine		
8	All flight controls. Check Rigging		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 - ENGINE OVERSPEED INSPECTION SHEET

Reg. Mark : PK - Date :

MSN : Station :

TSN / CSN : WO No. :

NO	TASK	SIGNATURE	
		SIGN	STAMP
ENGINE COMPARTMENT			
1	Check engine/aircraft indicating system. If satisfactory, do the following: If Ng exceeded 102.6% or Np exceeded 110%, determine and rectify cause of overspeed. Send gas generator or power section to an approved overhaul facility for Light Overhaul, Engine Overspeed, indicating Ng or Np observed.		
2	**If Np exceeded 100% for more than 20 seconds, but did not exceed 110%:**		
	a. Inspect PT blades and check for rubs.		
	b. Remove and inspect RGB chip detector, oil strainer, and main oil filter. If metallic debris is found, refer to FAULT ISOLATION.		
	c. Turn the propeller by hand and listen for unusual noises coming from the reduction gearbox or PT bearings (Ref. Para. A.(4)). For unusual noises, slow propeller acceleration on start or abrupt deceleration on shutdown, send power section to an approved overhaul facility for Light Overhaul. Indicate the maximum speed attained, the duration, and any inspection discrepancy.		
	d. Run at 80% TO power for ten minutes. Remove and inspect RGB chip detector, oil strainer, and main oil filter. If no metallic debris is found, return engine to service and check RGB chip detector daily for one week (25 hours minimum).		
	e. Inspect main oil filter after one week (25 hours minimum, 65 hours maximum). If no metallic debris is found, return to standard inspection intervals.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. AMM Pilatus Porter PC6 Chapter 05-51-08, EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 - ENGINE OVERTORQUE INSPECTION SHEET

Reg. Mark : PK - Date :

MSN : Station :

TSN / CSN : WO No. :

NO	TASK	SIGNATURE	
		SIGN	STAMP
ENGINE COMPARTMENT			
1	Structure Examine		
2	Engine mount ring Examine		
3	Support struts Examine		
4	Fireproof bulkhead Examine		
5	Fuselage attachment longerons Examine		
6	Engine shockmounts Examine		
7	Check engine/aircraft indicating system. If satisfactory, refer to Chapter 71-00-00, ADJUSTMENT/TEST and do the following.		
8	**If the overtorque is in Area B:**		
	a. Remove and inspect RGB chip detector, oil strainer and main oil filter. If metallic debris is found, refer to FAULT ISOLATION.		
	b. Turn the propeller by hand and listen for unusual noises coming from the reduction gearbox or PT bearings (Ref. Para. A.(4). For unusual noises, slow propeller acceleration on start or abrupt deceleration on shutdown, send power section to an approved overhaul facility for Light Overhaul. Indicate torque observed and duration.		
	c. Run at 80% TO power for ten minutes. Remove and inspect RGB chip detector, oil strainer, and main oil filter. If no metallic debris is found, return engine to service and check RGB chip detector daily for one week (25 hours minimum).		

NO	TASK	SIGNATURE	
		SIGN	STAMP
	d. Inspect main oil filter after one week (25 hours minimum, 65 hours maximum). If no metallic debris is found, return to standardinspection intervals.		
9	If the overtorque is in Area C, send PSM to an approved overhaul facility for Light Overhaul. Indicate torque observed and duration.		
10	Refer to Aircraft Maintenance Manual for related aircraft checks.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. AMM Pilatus Porter PC6 Chapter 05-51-09, EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 - SUDDEN PROPELLER STOPPAGE INSPECTION SHEET

Reg. Mark	: PK -	Date	:
MSN	:	Station	:
TSN / CSN	:	WO No.	:

NO	TASK	SIGNATURE	
		SIGN	STAMP
PROCEDURE WHEN SUDDEN PROPELLER STOPPAGE OCCURS			
1	Remove the power plant access panels.		
2	Remove the propeller and replace or overhaul.		
3	Examine the engine for Propeller sudden stoppage:		
	NOTE: 1 Propeller sudden stoppage occurs when propeller rotation stops due to contact (propeller strike) with a hard object (e.g. ground, ground service equipment, etc).		
	NOTE: 2 The term propeller strike is used when one of the two occurs. A rotating propeller hits an object which causes a speed variation (no stoppage) and blade damage, or a stationary propeller is hit by a moving object which causes blade damage.		
	a. Remove the power section from service and send it to an approved P&WC overhaul facility for the inspection required after propeller sudden stoppage. The inspection must be carried out in accordance with Overhaul Manual instructions (Ref. Light Overhaul).		
	Inspect remainder of engine:		
	1) Remove and inspect the main oil filter (Ref. 79-20-02, OIL FILTER, HOUSING AND CHECK VALVE - MAINTENANCE PRACTICES). If metallic debris is found refer to 72-00-00, ENGINE, TURBOPROP - FAULT ISOLATION.		
	2) Inspect for cracks or distortion at all the engine casings and housings, mainly at or near the flanges. Remove the starter-generator and examine all AGB pads and AGB mounted engine and airframe components for shearing, cracks, distortion or mis-alignment, and loose/pulled fasteners (Ref. 72-60-00, ACCESSORY GEARBOX ASSEMBLY – MAINTENANCE PRACTICES). Examine all the engine mounts (Ref. 72-30-04,GAS GENERATOR CASE - MAINTENANCE PRACTICES).		

NO	TASK	SIGNATURE	
		SIGN	STAMP
	3) Examine the fireseals for warping or buckling (Ref. 72-30-01, CENTER FIRESEAL MOUNT RING - MAINTENANCE PRACTICE and 72-30-02, REAR FIRESEAL MOUNT RING - MAINTENANCE PRACTICES) and all external tubes for damage and/or fluid leaks (Ref. 70-00-00, STANDARD PRACTICES - INSPECTION) or replace as necessary.		
	4) Check all airframe/engine connections, including fuel inlet and oil cooler lines, air system, electrical, ignition and indicating systems, control linkages, and drains.		
	5) Turn the compressor by hand and listen for rubbing, scraping, interference of rotating components with stationary parts, or fast/sudden deceleration. Examine the rear accessory case mounted accessory for drag. Examine for the compressor turbine tip rub.		
	6) As given above, for casing or accessories damage, sign of electrical discharge, unusual noises that could show damage to the gears, bearings, seals or rotors, slow compressor acceleration on start or sudden deceleration on shutdown, remove the complete engine from service and send it to an approved P&WC overhaul facility for light overhaul with an applicable document that show the reason for sudden propeller stoppage and extent of engine damage.		
	7) After installation of a repaired/replacement power section on the serviceable gas generator, run at 80% TO power for ten minutes. Remove and inspect the main oil filter. If no metallic debris is found, return the engine to service.		
	8) Examine the main oil filter after one week (25 hours minimum, 65hours maximum). If no metallic debris is found, return to standard inspection schedule.		
4	Examine the engine mounting (visually and using a straight edge) for distortion. If the frame is distorted, reject the frame.		
5	Examine the firewall for distortion.		
6	Install a new or overhauled propeller.		
7	Install the power plant access panels.		
8	Do the adjustment/test of the engine.		
PROCEDURE WHEN A PROPELLER STRIKE OCCURS			
1	Remove the power plant access panels.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
2	Examine the propeller. **WARNING: WHEN A PROPELLER BLADE IS BENT OR TWISTED, MAJOR REPAIR WILL BE NECESSARY AND AN OVERHAUL OF THE PROPELLER MUST BE DONE.** **CAUTION: PROPELLER BLADES MUST BE REPAIRED IMMEDIATELY AFTER DAMAGE IS FOUND, OR BLADE FAILURE CAN OCCUR.** Minor damage to the propeller blades can be repairea if the damage is less than the permitted limits.		
3	Examine the engine, (Ref. P&WC EMM 72-00-00) Propeller strike causes a blade structural/major damage, or propeller strike on a power line, or propeller strike at power above FLIGHT-IDLE (Ng above 82%). **NOTE**: Blade damage is considered to be structural/major when: • The blade is loose in the hub or • The blade retention component (ball bearings, races, etc.) in theor • The blade shell is damage sufficiently to show the sparor • The propeller blade spar is bent or • The spar composite material is not bonded to its steelretention component or • The blade is bent (out of track or angle) or • The blade is bent more than 1 in. or • The blade is bent more than 5 in. (composite blade) or • The blade tip missing or • The blade tip missing material more than 1 in. (compositeblade) or • Vibration during operation that was not present before theevent (Ref. AMM).		
	a. Remove the power section from service and send it to an approved P&WC overhaul facility for the inspection required after a propeller strike. The inspection must be carried out in accordance with Overhaul Manual instructions (Ref. Light Overhaul).		
	b. Inspect remainder of the engine		
	1. Remove and examine the main oil filter (Ref. 79-20-02, OIL FILTER, HOUSING AND CHECK VALVE - MAINTENANCE PRACTICES). If metallic debris is found, refer to FAULT ISOLATION.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
3	2. Examine for cracks or distortion at all the engine casings and housings, especially at or near the flanges. Remove the starter-generator, then do a check for all AGB pads and AGB-mounted engine and airframe components (Ref. 72-60-00, ACCESSORY GEARBOX ASSEMBLY - MAINTENANCE PRACTICES). Examine for shearing, cracks, distortion or mis-alignment, and loose/pulled fasteners. Similarly, examine all engine mounts (Ref. 72-30-04, GAS GENERATOR CASE - MAINTENANCEPRACTICES).		
	3. Examine the fireseals for warping or buckling (Ref. 72-30-01, CENTER FIRESEAL MOUNT RING - MAINTENANCE PRACTICE and 72-30-02, REAR FIRESEAL MOUNT RING - MAINTENANCE PRACTICES) and all external tubes for damage and/or fluid leaks (Ref. 70-00-00, STANDARD PRACTICES - INSPECTION) or replace as necessary.		
	4. Do a check for all the airframe/engine connections, including fuel inlet and oil cooler lines, air system, electrical, ignition and indicating systems, control linkages, and drains (Ref. AMM).		
	5. For propeller strike on a power line (power utility line does not include guide/support wires, telephone or telecommunications lines), examine for evidence of electrical discharge (local burn marks) at the Flange C or at the compressor turbine.		
	6. Turn the compressor by hand and listen for rubbing, scraping, interference of rotating components with stationary parts, or fast/sudden deceleration. Examine for rear accessory case mounted accessory drag. Examine for the compressor turbine tip rub (Ref. 72-50-02, COMPRESSOR TURBINE - MAINTENANCE PRACTICES).		
	7. As given above, for casing or accessories damage, sign of electrical discharge, unusual noises that could show damage to the gears, bearings, seals or rotors, slow compressor accelerationon start or sudden deceleration on shutdown, remove the complete engine from service and send it to an approved P&WC overhaul facility for light overhaul with an applicable document that show the reason for sudden propeller stoppage and extent of engine damage.		
	8. After installation of a repaired/replaced power section on the serviceable gas generator, run at 80% take-off power for 10 minutes. Remove and examine the main oil filter (Ref. 79-20-02, OIL FILTER, HOUSING AND CHECK VALVE - MAINTENANCE PRACTICES). If no metallic debris is found, return the engine to service.		
	9. Examine the main oil filter after one week (25 hours minimum, 65 hours maximum). If no metallic debris is found, return to standard inspection schedule.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
	Propeller strike causes minor blade damage (not structural), or propeller strike with engine at or below FLIGHT- IDLE power (Ng at or below 82 %) or while engine shutdown.		
	NOTE: Blade damage is considered minor or not structural, when: – The propeller blade spar is not bent – The damage shell does not slow the spar – The blade tip bent is small – The blade indentation – The blade delamination (composite blade) – The blade tip missing material equal or below 1 in. (composite blade) and – No vibrations reported by the operator (Ref. AMM)		
4	a) Remove and examine RGB chip detector, oil strainer, and main oil filter (Ref. 72-10-00, REDUCTION GEARBOX - MAINTENANCE PRACTICES and 79-20-02, OIL FILTER, HOUSING AND CHECK VALVE - MAINTENANCE PRACTICES). If metallic debris is found refer to 72-00-00, ENGINE, TURBOPROP - FAULT ISOLATION.		
	b) Turn the propeller by hand and listen for unusual noises that could come from the reduction gearbox or PT bearings (Ref. Para. A. (4)). For unusual noises, slow propeller acceleration on start or suddendeceleration on shutdown, remove the power section from service and send it to an approved P&WC overhaul facility for light overhaul with an applicable document that show the reason for sudden propeller stoppage and extent of engine damage.		
	c) Run the engine at 80% take-off power for 10 minutes. Remove and examine the RGB chip detector, oil strainer, and main oil filter (Ref. 72-10-00, REDUCTION GEARBOX - MAINTENANCE PRACTICES and 79-20-02, OIL FILTER, HOUSING AND CHECK VALVE - MAINTENANCE PRACTICES). If no metallic debris is found, return engine to service and examine RGB chip detector daily for one week(25 hours minimum).		
	d) Examine the main oil filter after one week (25 hours minimum, 65hours maximum) (Ref. 79-20-02, OIL FILTER, HOUSING AND CHECK VALVE - MAINTENANCE PRACTICES). If no metallic debris is found, return to standard inspection intervals.		
5	Install the power plant access panels.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. AMM Pilatus Porter PC6 Chapter 05-51-12, EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 - LIGHTNING STRIKE INSPECTION SHEET

Reg. Mark : PK -		Date :	
MSN :		Station :	
TSN / CSN :		WO No. :	

NO	TASK	SIGNATURE	
		SIGN	STAMP
AIRFRAME			
1	Find the point at which the lightning hit the aircraft.		
2	Examine the propeller for sign of sign of arc damage.		
3	Look for secondary damage such as burns or pits near the area where the lightning hit.		
4	Examine the aircraft for signs of discharge damage.		
5	Examine the static dischargers and nav/position lights.		
6	Examine the airframe and engine bonding leads between the area where the lightning hit and the discharge point.		
7	If the lightning hit the aircraft on a control surface examine the hinge and bearings on the control surface.		
8	Operationally test the flight control and make sure that the movement is full and smooth.		
9	Operationally test all electrical and avionic equipment.		
10	Perform a swing check on the main and standby compass system.		
11	Examine the engine.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
ENGINE			
1	If signs of arcing are found on the propeller blades, the propeller shaft and flange must be checked for magnetism. Check for magnetism using one of the following methods: Check propeller shaft, especially flange, using a magnetometer to make sure residual magnetism is within ± 3 gauss or 3 oersted of 2.38 A/cm. If reading is above limits, replace power section.		
2	**If propeller shaft or flange is magnetized:** a. Ship power section to an approved overhaul facility for Light Overhaul. Indicate Lightning Strike.		
	b. On the gas generator, check for evidence of electricaldischarge (localized burn marks) at the C-flange or at the compressor turbine. Evidence of discharge requires sending thecomplete engine to an approved overhaul facility.		
	c. Inspect the main oil filter (Ref. 79-20-02). If metallic debris is found, refer to FAULT ISOLATION.		
	If the propeller shaft or flange is not magnetized: a. Remove and inspect RGB chip detector, oil strainer, and main oil filter (Ref. 72-10-00, 79-20-02). If metallic debris is found, refer to FAULT ISOLATION.		
	b. Turn the propeller by hand and listen for unusual noises from the reduction gearbox or PT bearings (Ref. Para. A.(4)). For unusual noises, slow propeller acceleration on start or abrupt deceleration on shutdown, send power section to an approved overhaul facility for Light Overhaul and indicate lightning strike.		
	c. Run engine at 80% TO power for ten minutes. Remove and inspect RGB chip detector, oil strainer, and main oil filter (Ref. 72-10-00, 79-20-02). If no metallic debris is found, return the engine to service and check RGB chip detector daily for one week (25 hours minimum).		
	d. Inspect main oil filter after one week (25 hours minimum, 65 hours maximum) (Ref. 79-20-02). If no metallic debris is found, return to standard inspection intervals.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. AMM Pilatus Porter PC6 Chapter 05-57-01

PILATUS PC6 - ALIGNMENT & SYMMETRY INSPECTION SHEET

Reg. Mark	:	PK -	Date	:	
MSN	:		Station	:	
TSN / CSN	:		WO No.	:	

NO	TASK	SIGNATURE	
		SIGN	STAMP
Lateral Leveling Check (Ref. Fig. 1)			
1	Position the theodolite in front of the aircraft.		
2	Suspend the tape measure vertically from the left Reference Point RP6. The 'zero mark on the tape must be at the center of the painted rivet head.		
3	Adjust the theodolite tripod to allow readings to be taken on the tape.		
4	Level the theodolite:		
	a) Level the theodolite base, and rotate through 360°, checking every 90° to ensure base is level.		
	b) Level theodolite head by turning leveling adjuster to match bubblehalves visible through small leveling eyepiece.		
5	Zoom and focus the theodolite on the tape. Make a note of the reading.		
6	Suspend tape measure from right Reference Point RP6, with zero mark on tape measure at center of painted rivet head, approximately 1 m oftape exposed, and scale on tape measure facing theodolite.		
7	Zoom and focus the theodolite on the tape. Make a note of the reading.		
8	Compare readings noted from the right and left reference points.		
9	If the readings are not identical, adjust the main jacks and repeat thisprocedure.		
Longitudinal Leveling Check (Ref. Fig. 1)			
1	Put the theodolite in position at the side of aircraft.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
2	Suspend the tape measure from RP1a with the zero mark on the tape atthe center of the painted rivet head.		
3	Adjust the height of the theodolite tripod to allow a reading to be takenon the tape.		
	Level the theodolite:		
4	(a) Level the theodolite base, and rotate through 360°, checking every 90° to ensure base is level.		
	(b) Level theodolite head by turning leveling adjuster to match bubblehalves visible through small leveling eyepiece.		
5	Zoom and focus the theodolite on the tape. Make a note of the reading.		
6	Suspend the tape from RP1b with the zero mark on the tape at thecenter of the painted rivet head.		
7	Zoom and focus the theodolite on the tape. Make a note of the reading.		
8	Compare readings noted from the forward and aft reference points.		
9	If the readings are not identical, adjust the tail stand and repeat thisprocedure.		
Deformation and Symmetry Check (Ref. Fig. 1, Table 1 and 2)			
1	Put the theodolite in position so that readings can be taken from RP1 bright and from RP2, 3, 4, 5, 6, 7 and 8, on the left and right wings.		
2	Adjust the theodolite tripod to allow readings to be taken at a levelapproximately 100 to 200 mm below lowest point of fuselage.		
3	Level the theodolite:		
	a) Level the theodolite base, and rotate through 360°, checking every 90° to ensure base is level.		
	b) Level theodolite head by turning leveling adjuster to match bubble halves visible through small leveling eyepiece.		
4	Take reading from measuring tape suspended from the right side RP1b.		
5	Enter reading taken from RP1b right in the appropriate space on the In-Service Check FORM		

NO	TASK	SIGNATURE	
		SIGN	STAMP
6	Suspend a measuring tape from RP2 under right wing and take reading from tape. Record the reading on the In Service Check Form.		
7	Repeat the procedure for RP3 through to RP8 right and RP2 through to RP8 left.		
8	Measure dimensions A, B and C left and right. Record the dimensions on check form.		
	WARNING: IF THE PERMITTED DEVIATIONS ARE NOT IN LIMITS, THE AIRCRAFT MUST NOT BE FLOWN UNTIL ADVICE FROM PILATUS AIRCRAFT LTD HAS BEEN RECEIVED AND ANY RECTIFICATION WORK NECESSARY IS COMPLETED.		
9	Compare the recorded deviation and permitted deviation. If the readings are not in limits send copies of the check sheets to Pilatus Aircraft Ltd. with a report of the incident, and details of damage that was found. Pilatus will advise repair or inspection procedures that are required toreturn the aircraft to service.		
10	Install the underwing fuel tanks (if removed)		
11	Lower the aircraft and remove the jacks		
12	Make sure that the work area is clean and clear of tools and other items.		

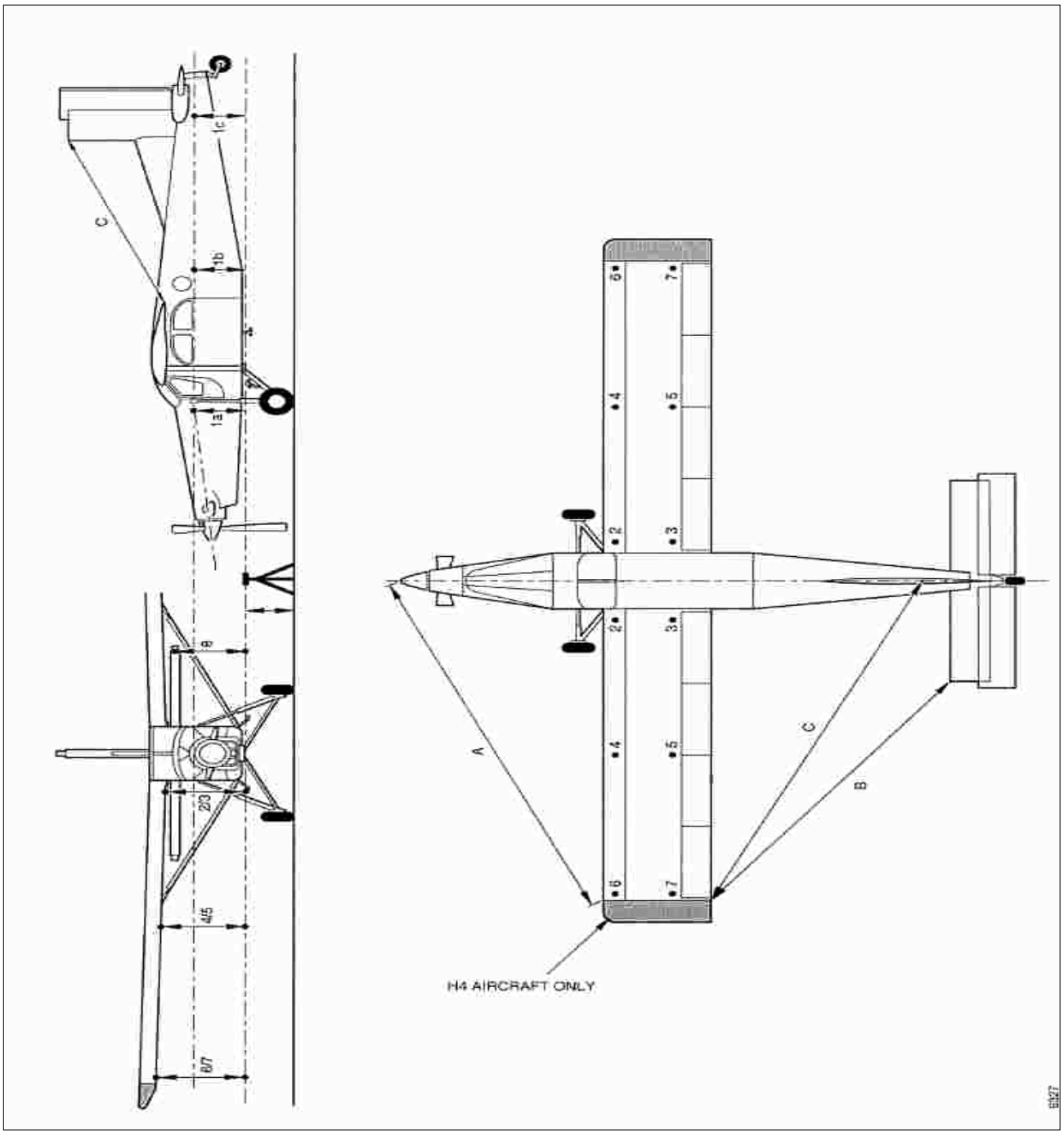
PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____



IN SERVICE ALIGNMENT AND SYMMETRY CHECK													
REASON FOR CHECK:								DATE:					
Reference Points	1a	1b	1c	2	3	4	5	6	7	8	A	B	C
Left													
Right	NA	NA	NA										

Table 1

STRUCTURAL DEFORMATION COMPARISON TABLE					
A/C MSN:	Recorded Aircraft Build Status				
Date:		In-Service Check Results			
Reason for Check:			Deviation from Build Status		
				Permitted Deviation	
					Remarks
Wing Torsional Deformation Check					
2-3 left				5	
2-3 right				5	
Difference					Must not be more than 20
4-5 left				12	
4-5 right				12	
Difference					Must not be more than 20
6-7 left				15	
6-7 right				15	
Difference					Must not be more than 20
Wing Bending Deformation Check					
4-2 left				10	
6-4 left				15	
5-3 left				10	
7-5 left				15	
4-2 right				10	
6-4 right				15	
5-3 right				10	
7-5 right				15	
Horizontal Stabilizer Deformation Check					
8 left - 1c				9	
8 right - 1c				9	
Symmetry Check					
A left					
A right					
Difference (L - R)*				12	
B left					
B right					
Difference (L - R)*				12	
C left					
C right					
Difference (L - R)*				12	
Maximum difference between 1a, 1b and 1c				2	
* Subtract right from left and indicate if the result is positive or negative **NOTE:** All dimensions are in mm.					

Table 2

Ref. EMM PT7A-27 Chapter 72-00-00

PILATUS PC6 – INADVERTENT CUT-OFF AND RELIGHT DURING TAXI

Reg. Mark : PK - Date :

MSN : Station :

TSN / CSN : WO No. :

NO	TASK	SIGNATURE	
		SIGN	STAMP
NOTE: An inadvertent cut-off and relight happens when the operator moves the fuel condition lever from Low Idle to Cut-off and immediately back to Low Idle. This may result in a short-term sub-idle overtemperature.			
1	**For operators WITH an engine monitor and have obtained a detailed recording of the overtemperature event:** Refer to Chap. 71-00-00, ADJUSTMENT/TEST, and Inadvertent Cut-off and Relight During Taxi figure.		
2	**For operators WITHOUT an engine monitor:** Return the compressor turbine blade and disk assembly to an overhaul shop facility for stretch check, fluorescent penetrant inspection and a metallurgical analysis (cut- up) of two blades.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 – ENGINE OVERTEMPERATURE

Reg. Mark : PK - Date :

MSN : Station :

TSN / CSN : WO No. :

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	Check engine/aircraft indicating system. If satisfactory, refer to Chapter 71-00-00, ADJUSTMENT/TEST for required action.		
2	When an overtemperature has occurred, and the maximum temperature reached and/or its duration cannot be established, or whenever an overtemperature is suspected to have occurred, send the engine to an overhaul facility for Light Overhaul. Indicate ''Unknown Overtemperature''. **NOTE:** Two compressor turbine blades must be sent for metallurgical analysis (cut-up) to determine the extent of any damage to the engine.		
3	If engine was subject to an inadvertent cut-off and relight during taxi, performed that inspection.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
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Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 – MATERIAL INGESTION

Reg. Mark : PK - Date :

MSN : Station :

TSN / CSN : WO No. :

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	Check compressor first-stage blades for damage.		
2	Do an engine performance (Ref. 71-00-00, ADJUSTMENT/TEST, Engine Performance Check) or ground power check.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

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Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 – BIRD STRIKE/SOFT MATERIAL INGESTION

Reg. Mark : PK - Date : _____

MSN : _____ Station : _____

TSN / CSN : _____ WO No. : _____

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	Remains on compressor first stage blades confirm if bird or soft material has passed through the engine and possibly contaminated the gas path and CT vane cooling passages. If contamination occurred, remove the power section and inspect hot section components (Ref. In-service Inspection). Evidence of possible contamination of the compressor turbine vane cooling passages necessitates an approved overhaul level inspection of the vane.		
2	If the engine remains in service, do a performance recovery wash (Ref. 71-00-00, POWER PLANT - CLEANING, Internal Washing) and a performance (Ref. 71-00-00, ADJUSTMENT/TEST, Engine Performance Check) or ground power check as applicable.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

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Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 – PROPELLER ELECTRICAL LEADS SHORTING

Reg. Mark	:	PK -	Date	:	
MSN	:		Station	:	
TSN / CSN	:		WO No.	:	

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	If signs of arcing between de-icer leads and the propeller spinner, bulkhead or hub assembly have been found, check propeller de-icing system (Ref. Aircraft Maintenance Manual) and rectify.		
2	**Inspect engine:** (a) Remove and inspect RGB chip detector, oil strainer, and main oil filter (Ref.72-10-00, 79-20-02). If metallic debris is found, refer toFAULT ISOLATION.		
	(b) Turn the propeller by hand and listen for unusual noises coming from the reduction gearbox or PT bearings (Ref. Para. A.(4)). For unusual noises, slow propeller acceleration on start or abrupt deceleration on shutdown, send power section to an approved overhaul facility for Light Overhaul. Indicate propeller electrical leads short and any discrepancy noted. Otherwise, run engine at 80% TO power for ten minutes.		
	(c) Remove and inspect RGB chip detector, oil strainer, and main oil filter (Ref. 72-10-00, 79-20-02). If no metallic debris is found, return engine to service and check RGB chip detector daily for one week (25 hours minimum).		
	(d) Inspect main oil filter after one week (25 hours minimum, 65 hours maximum) (Ref. 79-20-02). If no metallic debris is found, return tostandard inspection intervals.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

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Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. AMM Pilatus Porter PC6 Chapter 05-51-13, EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 – FLIGHT THROUGH VOLCANIC ASH OR SMOKE

Reg. Mark : PK - Date :

MSN : Station :

TSN / CSN : WO No. :

NO	TASK	SIGNATURE	
		SIGN	STAMP
Aircraft Exterior			
1	Do a visual examination of the areas that follow for contamination, abrasion and damage: a. The exterior surfaces of fuselage b. All parts of the aircraft that extend into the airflow c. Stabilizers d. Wings e. Flight control surfaces f. Antennas g. Windshields, side and cabin windows h. Landing gear i. All exterior lights		
Fuselage Interior			
1	Do a visual examination of all the aircraft compartments which haveaccess panels or doors.		
2	Do a visual examination of all the aircraft compartments which have vents and/or NACA inlets.		
Engine Area			
1	If the emergency shut-off valves for the air-conditioning were closedduring the flight, reset the valves.		
2	Clean the air-inlet screens and filters for the air conditioning system.		
3	If the aircraft is equipped with a cabin ventilation system, remove andclean the filter.		
4	Clean the engine-compressor inlet-screen.		
5	If the aircraft is equipped with a sand filter installation, remove and cleanthe sand filters.		
6	Examine the engine oil cooler for contamination. If necessary, clean theheat exchanger matrix with a soft bristle brush and/or low pressure air.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
7	Examine the propeller for contamination, abrasion and damage.		
Pitot/Static System			
1	Disconnect the pitot/static air pipes from the : a. Vertical speed indicator b. Altimeter(s) Airspeed Indicator		
2	Remove the pitot/static drain traps.		
3	Blow clean, dry, low pressure air through the pitot/static air pipes fromthe pitot head and static ports.		
4	Install the pitot/static drain traps.		
5	Connect the pitot/static air pipes to the : a. Vertical speed indicator b. Altimeter(s) Airspeed indicator		
6	Do a pitot/static system leak check.		
Aircraft Cleaning			
1	Do a wash of the aircraft. When you do this, do a rinse of the engine air intake.		
Detailed Examination/Test			
1	Do an operational test of the flight controls to make sure that the movement is full, free and smooth.		
2	If the aircraft has, or suspected to have, been struck by a coronal discharge, do the inspection for lightning strike.		
ENGINE			
1	Wash compressor and turbine.		
2	Drain and refill oil system with new oil (Ref. SERVICING, Lubricating OilSystem).		
3	Clean or change main oil filter.		
4	Examine compressor (Ref. INSPECTION/CHECK, Borescope).		

NO	TASK	SIGNATURE	
		SIGN	STAMP
5	Return engine to service if no defects are found.		
6	Drain and refill oil system with new oil (Ref. SERVICING, Lubricating OilSystem) 50 ± 10 flight hours after original oil change done in step (2).		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 – SUSTAINED RUNNING AT OIL TEMPERATURE OUTSIDE LIMITS

Reg. Mark	:	PK -	Date	:	
MSN	:		Station	:	
TSN / CSN	:		WO No.	:	

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	Check aircraft/engine indicating system and correct cause of high oil temperature (Ref. FAULT ISOLATION).		
2	Rotate the compressor rotor and check for indications of AGB or bearingdistress.		
3	Turn the propeller by hand and listen for unusual noises coming from thereduction gearbox or PT bearings (Ref. Para. A.(4)).		
4	For any presence of unusual noise, send the complete engine to an approved overhaul facility for Light Overhaul. Indicate the oil temperature that the engine was operated at, the engine power and the duration.		
5	Drain and discard oil (Ref. SERVICING, Lubricating Oil System).		
6	Remove and inspect RGB chip detector, oil strainer, and main oil filter. Ifmetallic debris is found, refer to FAULT ISOLATION.		
7	Fill oil system. (Ref. SERVICING, Lubricating Oil System).		
8	Operate the engine at 80% TO power for ten minutes. Remove and inspect RGB chip detector, oil strainer, and main oil filter (Ref. 72-10-00).If you did not find metallic debris, back engine to servicing and examine RGB chip detector regularly for one week (25 hours minimum).		
9	Inspect main oil filter after one week (25 hours minimum, 65 hours maximum). If no metallic debris is found, return to standard inspectionintervals.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

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Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 – LOSS OF OIL PRESSURE OR LOW OIL PRESSURE

Reg. Mark	:	PK -	Date	:	
MSN	:		Station	:	
TSN / CSN	:		WO No.	:	

NO	TASK	SIGNATURE	
		SIGN	STAMP
CAUTION: IF AIRCRAFT OIL SYSTEM CONTAMINATION IS SUSPECTED, REVERSE FLUSH ENGINE OIL SYSTEM,INCLUDING OIL-TO-FUEL HEATER. AIRCRAFT OIL COOLER MUST BE REJECTED. **NOTE:** Low oil pressure is defined as running the engine with the oil pressure below limits. (Ref. 71-00-00).			
1	If the loss of oil is 6 qt. or more, resulting in fluctuation of oil pressure ortorque indication or oil pressure dropped below minimum value. (a) Check oil pressure and torque indicating system. If correct, and the engine did not run above 1315 lb.ft. (PT6A-21), 1628 lb.ft. (PT6A- 27/28) torque with oil pressure below 80 psig (minimum time running is permitted to allow flight crew to follow the emergency procedure), remove main filters, strainer and chip detector. If metallic debris is found refer to 79-20-04, Inspection. **NOTE: 1.** Oil pressures below 40 psig are unsafe and require eitherthe engine to be shut down or an emergency landing made as soon as possible, using minimum power tosustain flight. **NOTE: 2.** If oil pressure fluctuates or drops below 80 psig, reduce the engine power from the maximum of 1315 lb.ft. (PT6A-21), 1628 lb.ft. (PT6A-27/28) torque. The engine may be kept running provided that the oil pressure does not fall lower than 40 psig; however the torque indicating system will be unreliable at this low pressure. Minimum time running is permitted to allow the flight crew to follow emergency procedure.		
	(b) Turn the propeller by hand and listen for unusual noises coming from the reduction gearbox or PT bearings. If unusual noises are heard, send power section to an approved overhaul facility for Light Overhaul. Indicate unusual oil conditions. **NOTE:** PT blades may rub, immediately after engine shutdown which is not an indication of distress, providing the rubbing/noise disappears after engine cool down.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
	(c) Turn the compressor rotor. Listen for unusual noises coming from bearings, seals, gears, compressor and/or CT.		
	(d) If unusual noises are heard, send gas generator to an approved overhaul facility for Light Overhaul. Indicate unusual oil conditions		
	(e) Remove main oil filter, strainer and chip detector and inspect for metallic debris. If metallic debris is found, refer to FAULT ISOLATION. If no metallic debris is found, reinstall main oil filter, strainer and chip detector. Run the engine at 80% TO power for 10 minutes; recheck RGB chip detector, oil strainer and main oil filter. If no metallic debris is found return engine to service. Inspect chip detector daily for one week (approx. 65 flight hours) and main oil filter after seven days (approx. 15 flight hours). If no metallic debris isfound, return to standard inspection intervals. If metallic debris is found, refer to FAULT ISOLATION.		
2	If the engine was kept running above 1315 lb.ft. (PT6A-21), 1628 lb.ft. PT6A-27/28) torque with oil pressure below 80 psig (Ref. 71-00-00), check oil pressure and torque indicating systems; and if correct, remove the engine and send it to an overhaul facility for Light Overhaul. Indicate low oil pressure.		
3	If the loss of oil is 6 qt. or more, and the engine oil pressure or torquemeter indication have fluctuated or oil pressure dropped below 40 psig: **NOTE:** If the oil pressure drops below 40 psig, an engine shut down is required. In single engine installations or in emergency, use minimum power to sustain flight and prepare for an emergency landing.		
	(a) Check oil pressure and torque indicating system. If correct, and the engine was kept running with oil pressure below 40 psig in excess of the time required to carry out the emergency engine shutdown procedure, ship the engine to an overhaul facility for Light Overhaul. Indicate unusual oil conditions.		
	(b) Remove and ship propeller governor for overhaul. Indicate loss of oil.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

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Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. MM PT6A-27 Chapter 72-00-00

PILATUS PC6 – OIL PRESSURE FOR LOW THROTTLE

Reg. Mark	:	PK -	Date	:	
MSN	:		Station	:	
TSN / CSN	:		WO No.	:	

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	Under normal operating conditions, oil pressure indication is stable. Malfunction of the pressure relief valve or oil leakage will cause indication to increase as throttle is advanced, or drop when throttle is retarded.		
	(a) Check external lines for breaks and leakage. Remove pressure reliefvalve and check for sticking, scoring, etc.		
	(b) Remove accessory gearbox. Check oil pump housing for cracks.		
	(c) Remove relief valve and housing. Examine housing for wear resulting from relief valve rotation. Replace housing if necessary.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

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Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 – CONTAMINATION BY FIRE EXTINGUISHER AGENT

Reg. Mark : PK - Date :

MSN : Station :

TSN / CSN : WO No. :

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	**Foam, powder or other chemical extinguishers:** (a) If only engine externals are exposed, then wash.		
	(b) In the event of internal contamination, return engine to an approved overhaul facility for Light Overhaul. Indicate the agent ingested by theengine. Depending on the agent, and at the option of the operator, an attempt may be made at cleaning the contaminating agent prior to shipping:		
	1. Do a dry motoring run to blow out any residual deposits.		
	2. Wash engine externally using drinkable quality water only.		
	3. Do an engine performance recovery wash followed by two dry motoring runs.		
2	**Halon:** - No engine maintenance required.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

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Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 – AUDIBLE RUBBING, BINDING AND SCRAPING

Reg. Mark : PK - Date :

MSN : Station :

TSN / CSN : WO No. :

NO	TASK	SIGNATURE	
		SIGN	STAMP
NOTE: Any unusual engine noise requires immediate investigation.			
1	Rotate compressor rotor and listen for any interference of rotating components with stationary parts and/or check for rapid deceleration on shutdown.		
	a. Do a visual inspection of the first-stage compressor rotor with a borescope or with the air inlet screen removed.		
	b. Check for rear accessory case mounted accessory drag		
	c. Check for compressor turbine tip rub		
	d. Check for the indications of compressor rub or bearing or AGB distress or unusual deposits seen on CT blade airfoil. Send engine to an approved overhaul facility for light overhaul **NOTE**: If you find deposits, look for the presence of debris at the bottom of the gas generator case. If you see one of these conditions, contact P&WC Customer Engineering for recommendations.		
	e. If no damage is found and condition is still present for one hour aftershutdown, send the engine to an approved overhaul facility		
2	Rotate the propeller and listen for any interference of rotating componentswith stationary parts (Ref. Para. A. (4)). If power turbine rotor rattles, or if there is rubbing or scraping, slow propeller acceleration on start or abrupt deceleration on shutdown:		
	a. Examine PT disk assembly and exhaust area through exhaust portsfor evidence of distress.		
	b. If damage is found, inspect.		
	c. Slow or stiff propeller rotation. Send power section to an approvedoverhaul facility for Light Overhaul. Indicate rubbing.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
3	If the suspected problem cannot be repeated or confirmed: a. Remove and inspect RGB chip detector, oil strainer, and main oil filter. If metallic debris is found, refer to FAULT ISOLATION.		
	b. Run engine at 80% TO power for ten minutes. Remove and inspect RGB chip detector, oil strainer, and main oil filter (Ref.). If no metallic debris is found, return engine to service and check RGB chip detector daily for one week (25 hours minimum).		
	c. Inspect main oil filter after one week (25 hours minimum, 65 hours maximum). If no metallic debris is found, return to standard inspection intervals.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 – PROPELLER WINDMILLING AFTER IN-FLIGHT SHUTDOWN

Reg. Mark : PK - _____ Date : _____

MSN : _____ Station : _____

TSN / CSN : _____ WO No. : _____

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	Investigate cause of shutdown. If suspected of being attributed to an engine or accessory problem, send engine or accessory to an approved overhaul facility for Light Overhaul. Indicate engine shutdown and the events and conditions at the time.		
2	With shutdown not related to an engine problem (serviceable engine):		
	a. With stabilized windmilling Np not more than 20 rpm and less than 6qt. of oil required to bring oil level to MAX on dipstick, no further action is necessary.		
	b. With an unknown (not recorded) Np or stabilized windmilling Np greater than 20 rpm or if 6 qt. or more of oil is required to bring oillevel to MAX on dipstick:		
	1. Remove and inspect RGB chip detector, oil strainer, and main oil filter. If metallic debris is found, refer to FAULT ISOLATION.		
	2. Rotate the compressor rotor and check for indications of AGB or bearing distress.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

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Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 – CONTAMINATION OF OIL WITH NON-METALLIC FOREIGN MATERIAL

Reg. Mark : PK - Date :

MSN : Station :

TSN / CSN : WO No. :

NO	TASK	SIGNATURE	
		SIGN	STAMP
	NOTE: 1 AGB/RGB internal protective coatings may be released within the engine and appear as flakes 1/64 inch to 3/8 inch in diameter, usually shiny, yellow, brown or green in color, and may or may not betransparent. **NOTE: 2** Inspect chip detector, main oil filter and AGB scavenge pump screen after approximately 10 hours. Ifno debris is found, inspect at 50 hours. **NOTE: 3** If no debris is found at 50 hours, refer to the standard periodic inspection interval for oil filter and chipdetector (Ref. Table 601). **NOTE: 4** If these flakes are found, immediately contact your local P&WC customer support representative. Send engine to an approved overhaul facility for Light Overhaul. Indicate oil contamination from released AGB/RGB internal protective coatings.		
1	Remove chip detector from reduction gearbox front housing (Ref. SERVICING, Oil Change) and scrub scavenge oil strainer sleeve with a brush to remove any foreign material blocking the screen.		
2	Remove accessory gearbox drain plug(s).		
3	Flush oil system (Ref. SERVICING, Oil System Flushing).		
4	Reinstall chip detector and plug(s) and tighten. Refill engine oil tank. **NOTE:** Do not lock wire chip detector and drain plug(s) at this time.		
5	Remove chip detector and inspect scavenge oil strainer sleeve for residual foreign material accumulated after system flush (Ref. NOTE 1).		
6	Repeat steps (2) thru (5), if required.		
7	Reinstall chip detector. Tighten all plugs and chip detector and lockwire.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

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Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 – STARTER-GENERATOR REPLACEMENT

Reg. Mark : PK - Date :

MSN : Station :

TSN / CSN : WO No. :

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	If there is an engine starting fault or an electrical generation defect, do the following inspections:		
	a. Inspect the starter-generator drive splines:		
	1) Inspect per Aircraft Maintenance Manual (AMM).		
	2) If there is no inspection procedure in the AMM Chapter 80-10-00, clean the starter-generator splines and inspect for evidence of electrical arcing damage (in the form of pitting) using a 10X magnifying glass. **NOTE**: 1. If there is any evidence of electrical arching, returnengine to an approved overhaul facility for Electrical Discharge Damage (EDD) repair. **NOTE**: 2. If there is NO evidence of electrical arching, inspectthe main oil filter (Ref. Step (b)).		
	3) If cause of pitting cannot be determined, metallurgical analysis may be required. Contact the Aircraft OEM.		
	b. Inspect the main oil filter:		
	1) Do a main oil filter patch check. The results of the filter patch analysis should be reviewed within the next 25 flight hours. If non allowable debris is found, follow the recommended maintenance actions.		
	2) Regardless of the results of the patch analysis, repeat step 1every 100 hours, for the next 700 flight hours.		
	3) If bearing material (AMS 6440/6444 or AMS 6490/6491 is found, remove the engine/gas generator module and send to anapproved overhaul facility for repair.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

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Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 – ENGINE PRESERVATION

(Engine Inactive 0-7 days)

Reg. Mark : PK - _____ Date : _____

MSN : _____ Station : _____

TSN / CSN : _____ WO No. : _____

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	If the engine was operated in a salt laden environment, do a compressorand turbine desalination wash.		
2	Engine may remain inactive with no preservation protection provided engine is sheltered, humidity is not excessively high and there is not extreme temperature changes that may produce condensation.		
3	Install inlet and exhaust covers.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref.EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 – ENGINE PRESERVATION

(Engine Inactive 8-28 days)

Reg. Mark : PK - _____ Date : _____

MSN : _____ Station : _____

TSN / CSN : _____ WO No. : _____

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	**Engines inactive 0 to 7 days.**		
	(a) If the engine was operated in a salt laden environment, do a compressor and turbine desalination wash.		
	(b) Engine may remain inactive with no preservation protection provided engine is sheltered, humidity is not excessively high and there is notextreme temperature changes that may produce condensation.		
	(c) Install inlet and exhaust covers.		
2	Place desiccant bags and humidity indicator on wooden racks in engineexhaust duct only.		
3	Seal off all engine openings. Make sure exhaust cover has suitable window to monitor humidity indicators.		
4	Check relative humidity every two weeks if engine is stored outside, and every 28 days if engine is stored inside. Relative humidity should be maintained at 40%. If humidity indicator turns pink, replace desiccant bags and indicator, find the reason for humidity and remove the source of humidity.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. AMM Pilatus Porter PC6 Chapter 05-51-01

PILATUS PC6 – ENGINE PRESERVATION

(Engine Inactive 29-90 days)

Reg. Mark : PK - Date :

MSN : Station :

TSN / CSN : WO No. :

NO	TASK	SIGNATURE	
		SIGN	STAMP
Do 0 to 7 days, and 8 to 28 days procedures.			
1	**Engines inactive 0 to 7 days.**		
	(a) If the engine was operated in a salt laden environment, do a compressor and turbine desalination wash.		
	(b) Engine may remain inactive with no preservation protection provided engine is sheltered, humidity is not excessively high and there is notextreme temperature changes that may produce condensation.		
	(c) Install inlet and exhaust covers.		
	Engines inactive 8 to 28 days.		
	(a) Place desiccant bags and humidity indicator on wooden racks in engineexhaust duct only.		
	(b) Seal off all engine openings. Make sure exhaust cover has suitable window to monitor humidity indicators.		
	(c) Check relative humidity every two weeks if engine is stored outside, and every 28 days if engine is stored inside. Relative humidity should be maintained at 40%. If humidity indicator turns pink, replace desiccant bags and indicator, find the reason for humidity and remove the source of humidity.		
Engines inactive 29 to 90 days.			
2	Wash engine externally.		
3	Do a compressor performance recovery/desalination wash and a turbinerinse.		
4	Examine all engine external protective coating, and touch-up/repair asnecessary.		
5	Lubricate all linkages.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
6	Place a suitable container under the engine.		
7	Disconnect fuel inlet to oil-to-fuel heater and connect suitable oil supplyline to oil-to-fuel heater fuel inlet. Blank off disconnected fuel supply line.		
8	Disconnect fuel line at flow divider and dump valve (PT6A-21) or from inlet of manifold adapter (PT6A-27 and PT6A-928) to prevent preservation oil from entering fuel manifold. Blank off elbow on adapter or valve, as applicable. **CAUTION:** UNDER NO CIRCUMSTANCES PERMIT PRESERVATIVE OIL TO ENTER ENGINE WHERE IT MAY COME INTO CONTACT WITH THERMOCOUPLE PROBE ASSEMBLY.OIL CONTAMINATION OF PROBES MAY CAUSE COMPLETE FAILURE OF THERMOCOUPLE SYSTEM.		
9	Supply preserving oil (PWC05-077) at 5 to 25 psig at least 16°C (60°F) tofuel supply line on oil-to-fuel heater. **CAUTION:** OBSERVE STARTER MOTOR OPERATING LIMITS (REF. STARTER MANUFACTURER'S MANUAL).		
10	With ignition system OFF, fuel condition lever to GROUND-IDLE and power control lever to TAKE-OFF, carry out normal motoring run until all preservative oil is displaced. During motoring run, move power control lever from TAKE-OFF to GROUND-IDLE and back to TAKE-OFF and fuel condition lever from GROUND-IDLE to OFF and back to GROUND-IDLE to displace fuel from system.		
11	After motoring run, check to see if preservative oil is coming from opened fuel line. If not, repeat motoring cycle until preservative oil flows from opened fuel line.		
12	Return power control lever to GROUND-IDLE and fuel condition lever to OFF. Reconnect fuel supply to oil-to-fuel heater and fuel line to flowdivider inlet.		
13	Install caps, covers and plugs as necessary to prevent entry of foreignmaterial and accumulation of moisture.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 – ENGINE PRESERVATION

(Engine Inactive Exceeding 90 Days)

Reg. Mark : PK - Date :

MSN : Station :

TSN / CSN : WO No. :

NO	TASK	SIGNATURE	
		SIGN	STAMP
Do 0 to 7, and 8 to 28, 29 to 90 Days procedures.			
1	**Engines inactive 0 to 7 days.**		
	(a) If the engine was operated in a salt laden environment, do a compressor and turbine desalination wash.		
	(b) Engine may remain inactive with no preservation protection provided engine is sheltered, humidity is not excessively high and there is notextreme temperature changes that may produce condensation.		
	(c) Install inlet and exhaust covers.		
	Engines inactive 8 to 28 days.		
	(a) Place desiccant bags and humidity indicator on wooden racks in engineexhaust duct only.		
	(b) Seal off all engine openings. Make sure exhaust cover has suitable window to monitor humidity indicators.		
	(c) Check relative humidity every two weeks if engine is stored outside, and every 28 days if engine is stored inside. Relative humidity should be maintained at 40%. If humidity indicator turns pink, replace desiccant bags and indicator, find the reason for humidity and remove the source of humidity.		
	Engines inactive 29 to 90 days.		
	(a) Wash engine externally.		
	(b) Do a compressor performance recovery/desalination wash and a turbinerinse.		
	(c) Examine all engine external protective coating, and touch-up/repair asnecessary.		
	(d) Lubricate all linkages.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
	(e) Place a suitable container under the engine.		
	(f) Disconnect fuel inlet to oil-to-fuel heater and connect suitable oil supplyline to oil-to-fuel heater fuel inlet. Blank off disconnected fuel supply line.		
	(g) Disconnect fuel line at flow divider and dump valve (PT6A-21) or from inlet of manifold adapter (PT6A-27 and PT6A-928) to prevent preservation oil from entering fuel manifold. Blank off elbow on adapter or valve, as applicable. **CAUTION:** UNDER NO CIRCUMSTANCES PERMIT PRESERVATIVE OIL TO ENTER ENGINE WHERE IT MAY COME INTO CONTACT WITH THERMOCOUPLE PROBE ASSEMBLY.OIL CONTAMINATION OF PROBES MAY CAUSE COMPLETE FAILURE OF THERMOCOUPLE SYSTEM.		
	(h) Supply preserving oil (PWC05-077) at 5 to 25 psig at least 16°C (60°F) tofuel supply line on oil-to-fuel heater. **CAUTION:** OBSERVE STARTER MOTOR OPERATING LIMITS (REF. STARTER MANUFACTURER'S MANUAL).		
	(i) With ignition system OFF, fuel condition lever to GROUND-IDLE and power control lever to TAKE-OFF, carry out normal motoring run until all preservative oil is displaced. During motoring run, move power control lever from TAKE-OFF to GROUND-IDLE and back to TAKE-OFF and fuel condition lever from GROUND-IDLE to OFF and back to GROUND-IDLE to displace fuel from system.		
	(j) After motoring run, check to see if preservative oil is coming from opened fuel line. If not, repeat motoring cycle until preservative oil flows from opened fuel line.		
	(k) Return power control lever to GROUND-IDLE and fuel condition lever to OFF. Reconnect fuel supply to oil-to-fuel heater and fuel line to flowdivider inlet.		
	(l) Install caps, covers and plugs as necessary to prevent entry of foreignmaterial and accumulation of moisture.		
Engine Inactive For Periods Exceeding 90 Days			
	CAUTION: OBSERVE STARTER MOTOR OPERATING LIMITS. (REF. STARTER MANUFACTURER'S MANUAL). (a) Close normal fuel supply shutoff valve and motor engine with starteruntil oil pressure and Ng are indicated. Disengage starter.		
	(b) Place suitable container under the engine.		
	(c) Drain engine oil.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
	(d) With drains open, motor engine (Ref. 71-00-00, ADJUSTMENT/TEST) to permit scavenge pumps to clear engine, indicated by cessation of steady stream of oil from drains. To prevent excessive operation with limited lubrication, limit rotation to shortest possible time to do complete draining.		
	(e) Remove oil filter element (Ref. 79-20-02) and allow to drain.		
	(f) Let oil to drain to a slow drip, approximately one drip per half hour,then install oil filter and close drains.		
	(g) Remove covers from accessory drive pads and spray exposed surfaces and gearshafts with engine oil (PWC03-001). Replace cover plates. **CAUTION:** COMPOUND MUST NOT TO BE APPLIED TO ANY BOLT THREADS USED TO RETAIN ACCESSORIES. THESE THREADS MUST BE COATED WITH REGULAR ENGINE OIL AS REQUIRED BY NORMAL TIGHTENING PROCEDURES. UNDER NOCIRCUMSTANCES MUST THE COMPOUND BE USED IN, OR PERMITTED TO ENTER ANY AREA WHERE IT COULD CONTAMINATE THE ENGINE LUBRICATION SYSTEM.		
	(h) Coat all external flanges, bolts, and studs with compound (PWC09-003). In particular, pay special attention to the RGB and compressorinlet case flanges.		
	(i) Install caps, covers and plugs, as necessary to prevent entry of foreign material and accumulation of moisture.		
	(j) Tag oil filler cap with date of preservation and enter date and type ofpreservation in engine log book.		
	(k) Install humidity indicator in air inlet and exhaust of engine compartment. Cover with suitable airtight moisture barrier. Provide inspection windows at each end for observation of humidity indicators. **NOTE:** Inspection of a preserved unit should be carried out every twoweeks if aircraft is stored outside, or every 30 days if aircraft is stored inside. If relative humidity, as indicated on humidity indicator, is less than 40 percent, no further action is required. If humidity indicated exceeds 40 percent, desiccant bags must be replaced or reactivated (Ref. Para. 7. D.).		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 – ENGINE PRESERVATION

(Engine Inactive Exceeding One Year)

Reg. Mark : PK -		Date :	
MSN :		Station :	
TSN / CSN :		WO No. :	

NO	TASK	SIGNATURE	
		SIGN	STAMP
Do 0 to 7, and 8 to 28, 29 to 90 and 91 days and over procedures.			
1	**Engines inactive 0 to 7 days.**		
	(a) If the engine was operated in a salt laden environment, do a compressor and turbine desalination wash.		
	(b) Engine may remain inactive with no preservation protection provided engine is sheltered, humidity is not excessively high and there is notextreme temperature changes that may produce condensation.		
	(c) Install inlet and exhaust covers.		
	Engines inactive 8 to 28 days.		
	(a) Place desiccant bags and humidity indicator on wooden racks in engineexhaust duct only.		
	(b) Seal off all engine openings. Make sure exhaust cover has suitable window to monitor humidity indicators.		
	(c) Check relative humidity every two weeks if engine is stored outside, and every 28 days if engine is stored inside. Relative humidity should be maintained at 40%. If humidity indicator turns pink, replace desiccant bags and indicator, find the reason for humidity and remove the source of humidity.		
	Engines inactive 29 to 90 days.		
	(a) Wash engine externally.		
	(b) Do a compressor performance recovery/desalination wash and a turbinerinse.		
	(c) Examine all engine external protective coating, and touch-up/repair asnecessary.		
	(d) Lubricate all linkages.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
	(e) Place a suitable container under the engine.		
	(f) Disconnect fuel inlet to oil-to-fuel heater and connect suitable oil supplyline to oil-to-fuel heater fuel inlet. Blank off disconnected fuel supply line.		
	(g) Disconnect fuel line at flow divider and dump valve (PT6A-21) or from inlet of manifold adapter (PT6A-27 and PT6A-928) to prevent preservation oil from entering fuel manifold. Blank off elbow on adapter or valve, as applicable. **CAUTION:** UNDER NO CIRCUMSTANCES PERMIT PRESERVATIVE OIL TO ENTER ENGINE WHERE IT MAY COME INTO CONTACT WITH THERMOCOUPLE PROBE ASSEMBLY.OIL CONTAMINATION OF PROBES MAY CAUSE COMPLETE FAILURE OF THERMOCOUPLE SYSTEM.		
	(h) Supply preserving oil (PWC05-077) at 5 to 25 psig at least 16°C (60°F) tofuel supply line on oil-to-fuel heater. **CAUTION:** OBSERVE STARTER MOTOR OPERATING LIMITS (REF. STARTER MANUFACTURER'S MANUAL).		
	(i) With ignition system OFF, fuel condition lever to GROUND-IDLE and power control lever to TAKE-OFF, carry out normal motoring run until all preservative oil is displaced. During motoring run, move power control lever from TAKE-OFF to GROUND-IDLE and back to TAKE-OFF and fuel condition lever from GROUND-IDLE to OFF and back to GROUND-IDLE to displace fuel from system.		
	(j) After motoring run, check to see if preservative oil is coming from opened fuel line. If not, repeat motoring cycle until preservative oil flows from opened fuel line.		
	(k) Return power control lever to GROUND-IDLE and fuel condition lever to OFF. Reconnect fuel supply to oil-to-fuel heater and fuel line to flowdivider inlet.		
	(l) Install caps, covers and plugs as necessary to prevent entry of foreignmaterial and accumulation of moisture.		
	Engine Inactive For Periods Exceeding 90 Days		
	CAUTION: OBSERVE STARTER MOTOR OPERATING LIMITS. (REF. STARTER MANUFACTURER'S MANUAL). (a) Close normal fuel supply shutoff valve and motor engine with starteruntil oil pressure and Ng are indicated. Disengage starter.		
	(b) Place suitable container under the engine.		
	(c) Drain engine oil.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
	(d) With drains open, motor engine (Ref. 71-00-00, ADJUSTMENT/TEST) to permit scavenge pumps to clear engine, indicated by cessation of steady stream of oil from drains. To prevent excessive operation with limited lubrication, limit rotation to shortest possible time to do complete draining.		
	(e) Remove oil filter element (Ref. 79-20-02) and allow to drain.		
	(f) Let oil to drain to a slow drip, approximately one drip per half hour,then install oil filter and close drains.		
	(g) Remove covers from accessory drive pads and spray exposed surfaces and gearshafts with engine oil (PWC03-001). Replace cover plates. **CAUTION:** COMPOUND MUST NOT TO BE APPLIED TO ANY BOLT THREADS USED TO RETAIN ACCESSORIES. THESE THREADS MUST BE COATED WITH REGULAR ENGINE OIL AS REQUIRED BY NORMAL TIGHTENING PROCEDURES. UNDER NOCIRCUMSTANCES MUST THE COMPOUND BE USED IN, OR PERMITTED TO ENTER ANY AREA WHERE IT COULD CONTAMINATE THE ENGINE LUBRICATION SYSTEM.		
	(h) Coat all external flanges, bolts, and studs with compound (PWC09-003). In particular, pay special attention to the RGB and compressorinlet case flanges.		
	(i) Install caps, covers and plugs, as necessary to prevent entry of foreign material and accumulation of moisture.		
	(j) Tag oil filler cap with date of preservation and enter date and type ofpreservation in engine log book.		
	(k) Install humidity indicator in air inlet and exhaust of engine compartment. Cover with suitable airtight moisture barrier. Provide inspection windows at each end for observation of humidity indicators. **NOTE:** Inspection of a preserved unit should be carried out every twoweeks if aircraft is stored outside, or every 30 days if aircraft is stored inside. If relative humidity, as indicated on humidity indicator, is less than 40 percent, no further action is required. If humidity indicated exceeds 40 percent, desiccant bags must be replaced or reactivated (Ref. Para. 7. D.).		
2	Remove the engine, and store in storage container.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 – ENGINE DEPRESERVATION

(Engine Inactive 0-7 days)

Reg. Mark : PK - _____ Date : _____

MSN : _____ Station : _____

TSN / CSN : _____ WO No. : _____

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	No depreservation required. Remove covers from inlet and exhaust and check for obstructions.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 – ENGINE DEPRESERVATION

(Engine Inactive 8-28 days)

Reg. Mark : PK - _____ Date : _____

MSN : _____ Station : _____

TSN / CSN : _____ WO No. : _____

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	Remove desiccant bags, humidity indicator and moisture barrier.		
2	Make sure previously sealed engine openings are reopened and are unobstructed.		
3	1) Propeller Reduction Gearbox Drain Plug (Pre-SB1217) 2) Preformed Packing 3) Chip Detector (Post-SB1217) 4) Preformed Packing (used for storage and shipping) 5) Cover (Post-SB1217) (used for storage and shipping) 6) Flat Head Pin 7) Preformed Packing 8) Oil Tank Drain Plug 9) Cotter pin 10) Accessory Gearbox Drain Plug 11) Preformed Packing		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

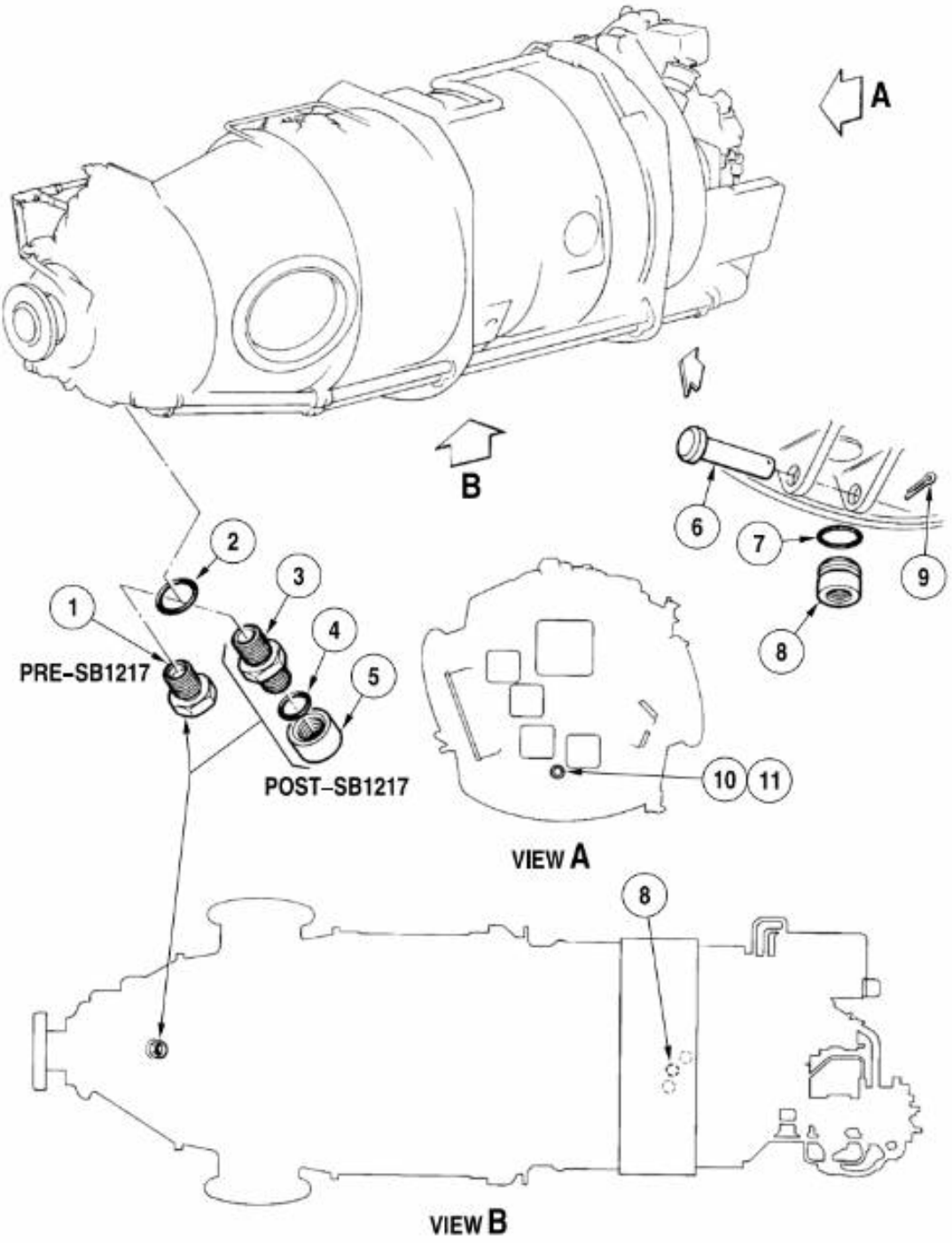


Figure Location of Drain plugs

Ref. EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 – ENGINE DEPRESERVATION

(Engine Inactive 29-90 days)

Reg. Mark : PK - _____ Date : _____

MSN : _____ Station : _____

TSN / CSN : _____ WO No. : _____

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	Remove engine intake and exhaust covers, moisture barriers, desiccant bags and humidity indicators. Depreserve engine fuel system.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Appendix – ENGINE DEPRESERVETION (Engine Inactive 91 Days To One Year)

Ref. EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 – ENGINE DEPRESERVATION

(Engine Inactive 91 days to one year)

Reg. Mark	:	PK -	Date	:	
MSN	:		Station	:	
TSN / CSN	:		WO No.	:	

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	Remove all moisture barriers, desiccant bags and humidity indicators.		
2	Open previously sealed openings.		
3	Check for any obstructions		
4	Inspect all external engine cases, flanges, accessories and hardware forevidence of corrosion.		
5	Remove the compressor inlet screen and inspect the inlet case and visible flanges internally for evidence of corrosion. If corrosion is found, inspect the accessory gearbox and the reduction gearbox internally for corrosion with a borescope.		
6	If corrosion is outside limits, remove the engine and overhaul for inspection after storage. Slowly rotate the propeller by hand and check forany stiffness, audible scraping, binding or rubbing.		
7	Service the engine oil system.		
8	Depreserve the fuel system. **NOTE:** During motoring, check for stiffness, audible scraping, binding orrubbing.		
9	After the engine run, inspect all gas generator and exhaust case drainvalves for presence of oil. If oil is evident, overhaul the engine for inspection after storage.		
10	Inspect all fuel filters. Clean or replace as necessary.		
11	Inspect the oil filter, reduction gearbox strainer and chip detector(s) forcontamination. If contamination is evident, and the engine has no previous recent contamination history, remove and overhaul the engine.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Appendix – ENGINE DEPRESERVETION (Engine Inactive One Year & Over)

Ref. EMM PT6A-27 Chapter 72-00-00

PILATUS PC6 – ENGINE DEPRESERVATION

(Engine Inactive one year and over)

Reg. Mark : PK - _____ Date : _____

MSN : _____ Station : _____

TSN / CSN : _____ WO No. : _____

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	Engine must be completely depreserved and lubrication system serviced.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Instructions (Note Post SB 1372 Engines Sheet).
Each Listed Inspection Item is to be performed in accordance with the P & W Maintenance Manual 3013242 Chapter 73-10-05 Latest Revision and any other applicable publications

FUEL NOZZLE CHANGE WORK SHEET PT6A-27

Date Performed :		**Engine S/N :**	
Removed from Aircraft :		**Engine TSN :**	
Aircraft Total Hours :		**Engine TSO :**	
Aircraft Total Cycle :		**Work Order Number :**	

NO	TASK	SIGNATURE	
		SIGN	STAMP
Procedure Before Removal			
1	To ease accessibility to the transfer tubes and manifold adapters adjacent to the spark igniters, disconnect the ignition leads (ref EMM 74-20-00/74-20-01). Release the ignition lead loop clamps from the support brackets at the center fire seal lower attachment brackets and move the leads clear. Install blanking caps on the spark igniters and lead connectors.		
2	Disconnect both lines from the fuel inlet adapter or flow divider and install blanking caps.		
Removal of Fuel Manifold Adapters			
	Note: The following procedure itemizes a removal sequence commencing with the No 8 fuel manifold inlet adapter which is best achieved by consideration of the Nos. 7, 8 and 9 adapters as a group. The procedural sequence may be modified by the operator as convenient for adapters at other locations.		
1	Using a suitable dye maker (PWC05-027) or (PWC05-046), number the position of each manifold adapter to identify its original position. (Refer to Figure 201) and toaid detecting hot section damage		
2	Remove bolts securing transfer tube locking plate (6, Fig 202) and inlet manifoldadapter (item 2) to gas generator case. Remove locking plate (item 6).		
3	Remove bolts securing locking plates (item 6) to the primary and secondary manifold adapters (item 5) adjacent to the inlet manifold adapter (item 2). Remove locking plates (item 6).		
4	Hold all the three adapters, then move the interconnecting fuel transfer tubes (item 1) into adapter bores (item 5). Use the puller (PWC54246) or pusher (PWC32366)to move the fuel transfer tubes in a clockwise direction, away from the inlet manifold adapter bores.		
5	Remove the inlet manifold adapter (item 2) (with flow divider and dump valve (item 14) installed). Use the pusher (PWC32366) or puller (PWC54246) to remove thefuel transfer tubes (item 1) from the adjacent adapters (item 5). Remove and discardpreformed packings (item 13) from the transfer tubes.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
6	Remove the gasket (item 4) from the sheath (item 3) on the inlet manifold adapter(item 2).		
7	Remove the remaining manifold adapters (5) progressively from the gas generator case by removing bolts and locking plates (6). As each adapter is removed, withdraw interconnecting fuel transfer tubes (1). Remove and discard preformed packing's (13). Remove metal gaskets (4) from sheaths (3) on the adapters. **CAUTION: DO NOT PRY THE SHEATHS OFF WITH A SCREWDRIVER.**		
8	Remove the sheaths (item 3) from the manifold adapters using puller (PWC30416) ifsheath is tight fitting on adapter boss.		
9	Straighten the lugs on the key washers (item 7) and remove the nozzle assemblies(item 8) from the adapters (item 2) and (item 5). Discard the keywashers.		
10	Note the relative angle of each elbow to the inlet manifold adapter (item 2) (starting control installation only) and remove the elbows (Item 9) and locknuts (item 10). Discard preformed packing's (item 11) and back up rings (item 12)		
11	To prevent exposure to dust and dirt, place manifold components in clean, and putin special boxes provided, with the removal positions identified in the box.		
12	Send rejected assemblies for repair or overhaul in original packaging to preventparts contacting each other during shipment.		

Removed Parts Record. (Post SB1372 worksheet)

Part Number	Description	Serial Number/s	Qty	Remarks/ Findings
	Secondary Inlet Adapter Manifold		1	
	Primary Inlet Adapters		10	
	Secondary Inlet Adapters		3	
	Fuel Nozzle Sheaths		14	

Installation of Fuel Manifold Adapters

	CAUTION: EXTREME CARE MUST BE EXERCISED WHEN HANDLING THE FULE NOZZLE ASSEMBLIES SINCE EVEN FINGERPRINTS ON THE ORIFICE MAY PRODUCE POOR SPRAY PATTERN, CLEAN LINT-FREE COTTON GLOVES OR SURGICAL GLOVES SHOULD BE WORN AT ALL TIMES WHEN HANDLING THESE PARTS.
	CAUTION: MAKE SURE TO CORRECTLY ENGAGE THE WRENCH SOCKET ON THE NOZZLE DURING INSTALLATION. HOLD THE STEM WHEN INSTALL THE NOZZLE TOPREVENT BENDING

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	With a 10X magnifying glass verify that each manifold adapter assembly carries thecorrect detail fuel nozzle assembly tip part number		
2	Install the elbows (Item 9) on the inlet adapter (starting control installation only) inthe same positions as noted on removal		
3	Install the fuel nozzle (Item 8, Fig 202) in the fuel manifold adapters (Item 2 and 5)with new keywasher (item 7) at each location		
	Use engine oil (PWC03-001) and torque the nozzle assemblies 45 to lbf. In.		
	NOTE: Leak test and function test of each Nozzle and Adapter Assembly may perform OFF WING in House or approvedoverhaul/repair vendor as required. A company serviceable tag with a copy of the Approved Parts Tag FAA Form 8130-3, EASA formone or equivalent for new parts.		
4	**CAUTION:** DO NOT USE SHARP EDGE TOOLS TO BEND OR SET KEYWASHER TABS.		
	On completion of installation lock each key washer on respective nozzle assembly. Do not exceed specified torque to align flat on tip with key washer.		
5	Install the manifold adapters and fuel transfer tubes as follows.		
	NOTE: Primary fuel manifold adapters are identified by a single weld blob on the larger mounting flange. Other weld blobs appearing on the knuckle section of the adapters should be ignored. (SeeFig 201)		
	a) Assemble Sheaths (Item 3) on all adapters (Items 2 & Item 5). Make sure eachlocating pin engages hole in each sheath.		
	b) With Nozzle adapter and sheath pressed together by hand, check clearance between adapter and sheath flanges. Maximum gap allowed is 0.003 inch (Ref. Fig 203 upper drawing) Larger gap suggests either or both parts are distorted. Iffound Send distorted parts to parts P &W for repair.		
	c) Carefully check gap between fuel nozzle tip and side hole in sheath; clearance of 0.020 inch is required (Ref. Fig 203). If clearance is less at any point, either orboth parts are distorted. If found Send distorted parts to parts Pratt and Whitney for repair.		
	d) Lubricate and install preformed packings (13, Fig. 202) on all fuel transfer tubes (1) using a thin layer of engine oil (PWC03-001). Position fuel transfer tubes intoports on one side of manifold adapters (2 and 5). Fully insert fuel transfer tubes in their respective ports until the bottom of manifold adapter is reached.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
	CAUTION: TO AVOID POSSIBLE OF THE STAINLESS STEEL GASKETS, IT IS ADVISABLE TO SLIDE THE GASKET OVER THE SHEATH, CAREFULLY ALIGN THE HOLES AND INSERT BOTH BOLTS, THE WHOLE ASSEMBLY CAN THEN BE MATED WITH THE PADS ON THE GAS GENERATOR CASE TUS AVOIDING ANY ATTEMPT TO LEVER THE GASKETS INTO ALIGNMENT WITH THE BOLTS.		
	e) Position the Pre SB 1276/ Post SB 1276 gasket (Item 4) over the sheath (Item3) on the inlet manifold adapter (Item 2) and align the bolt holes or mounting studs. The sheath flange must be flat. NOTE: The gasket may be put on either side. For consistency, all the gasketsshould be installed with the flat side against the gas generator. NOTE: **Post-SB1167**: For engines with the conversion coated gas generatorcase only, lightly coat both faces of the gasket (4) with corrosion- preventive compound (PWC09-003).		
	f) Position the gaskets (4) over the sheaths (3) on the primary and secondarymanifold adapters (5) and align on the bolt holes.		
	g) Start with each side of the inlet manifold adapter (2). Install the remaining manifold adapters (5) and sheaths (3) on the gas generator case at the locations specified before. Use the pusher (PWC32366) or puller (PWC54246)to engage fuel transfer tubes (1) to interconnect with the adjacent adapter at each location.		
	h) Install locking plate (Item 6) and bolts to the gas generator case. Torque boltsfinger tight.		
6	When all remaining manifold adapters (5) are positioned, remove bolts or locknuts, as applicable, from inlet manifold adapter (2). Assemble the locking plate (6) and reinstall the bolts or locknuts.		
	CAUTION: MAKE SURE ALL 14 MANIFOLD ADAPTER LOCKING PLATES ARE CORRECTLY INSTALLED.		
	CAUTION: PRIOR TO TIGHTENING BOLTS OR LOCKNUTS, CHECK SEATING OF METALGASKET RELATIVE TO SHEATH AND BOSS. TIGHTENING SHOULD BE DONE EVENLY ON EACH ADAPTER TO PROVIDE FULL SEATING POTENTIAL OF METAL GASKET.		
7	Tighten all adapter mounting bolts, in a sequence, 15 to 20 lb.in. Retighten 32 to 36lb. in. in the same sequence. **Secure bolts with lock wire.**		
	NOTE: After torqueing, a 0.001 in. gap is allowed between the adapter and sheath flanges (Ref. Fig. 203 lower drawing).		
8	Remove the blanking caps from the fuel delivery lines and connect the lines to theelbows. Tighten the coupling nuts 90 to 100 lb.in. and fasten with lockwire.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
9	Remove the blanking caps from the spark igniters and from harness leads and connect the leads to the igniters. Tighten the connections finger tight, plus 45 degrees and fasten with lock wire. Secure the ignition lead loop clamps to the support brackets at the center fire seal lower mounts and tighten the nuts 32 to 36 lb.in.		
10	Check function of fuel manifold installation (Ref. Adjustment/Test).		

Installed Parts Record. (Post SB1372 worksheet)

Part Number	Description	Serial Number/s	Qty	Remarks
	Secondary Inlet Adapter Manifold		1	
	Primary Inlet Adapters		10	
	Secondary Inlet Adapters		3	
	Fuel Nozzle Sheaths		14	

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

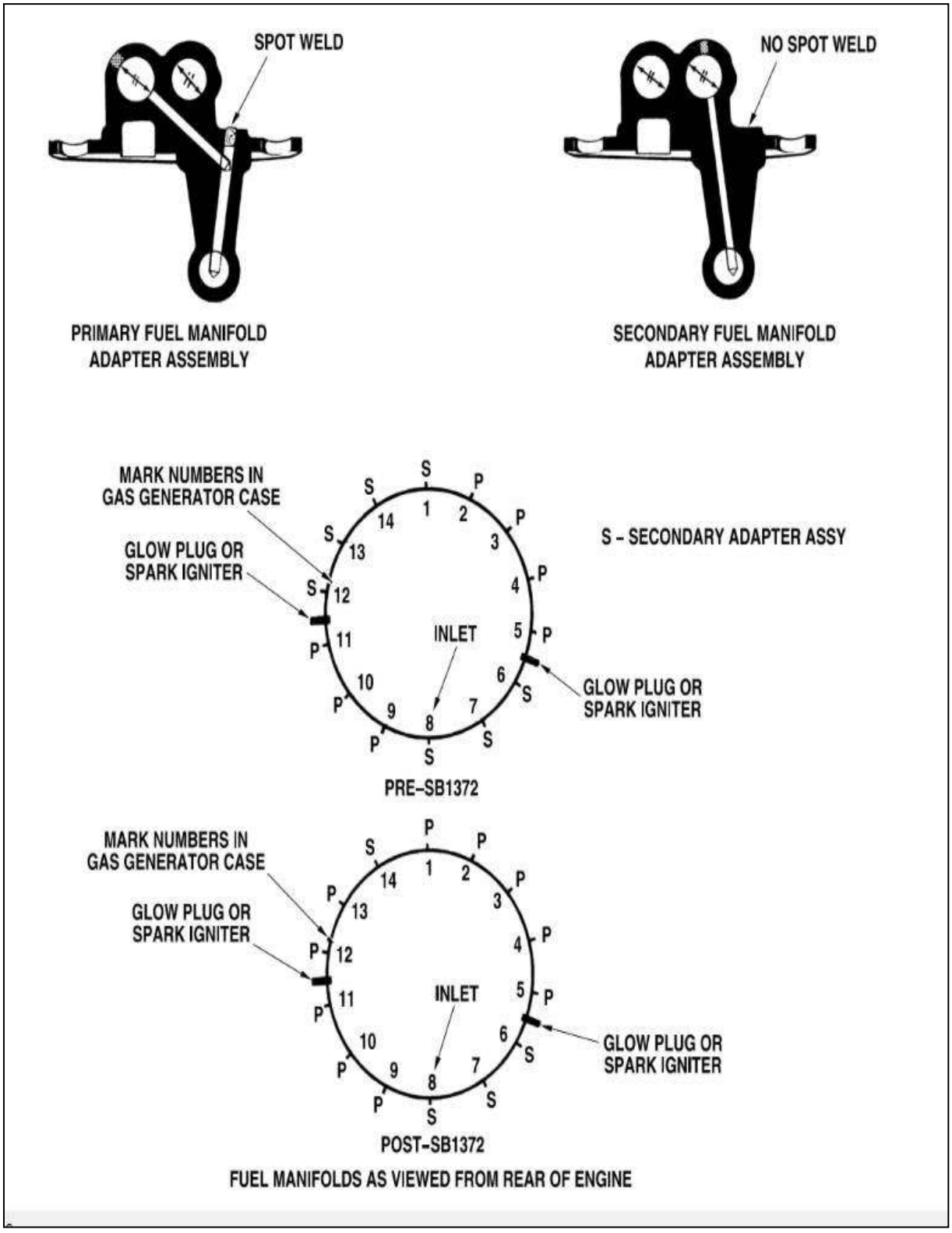


Figure 201 - Identification and Location of Fuel Manifold Adapters

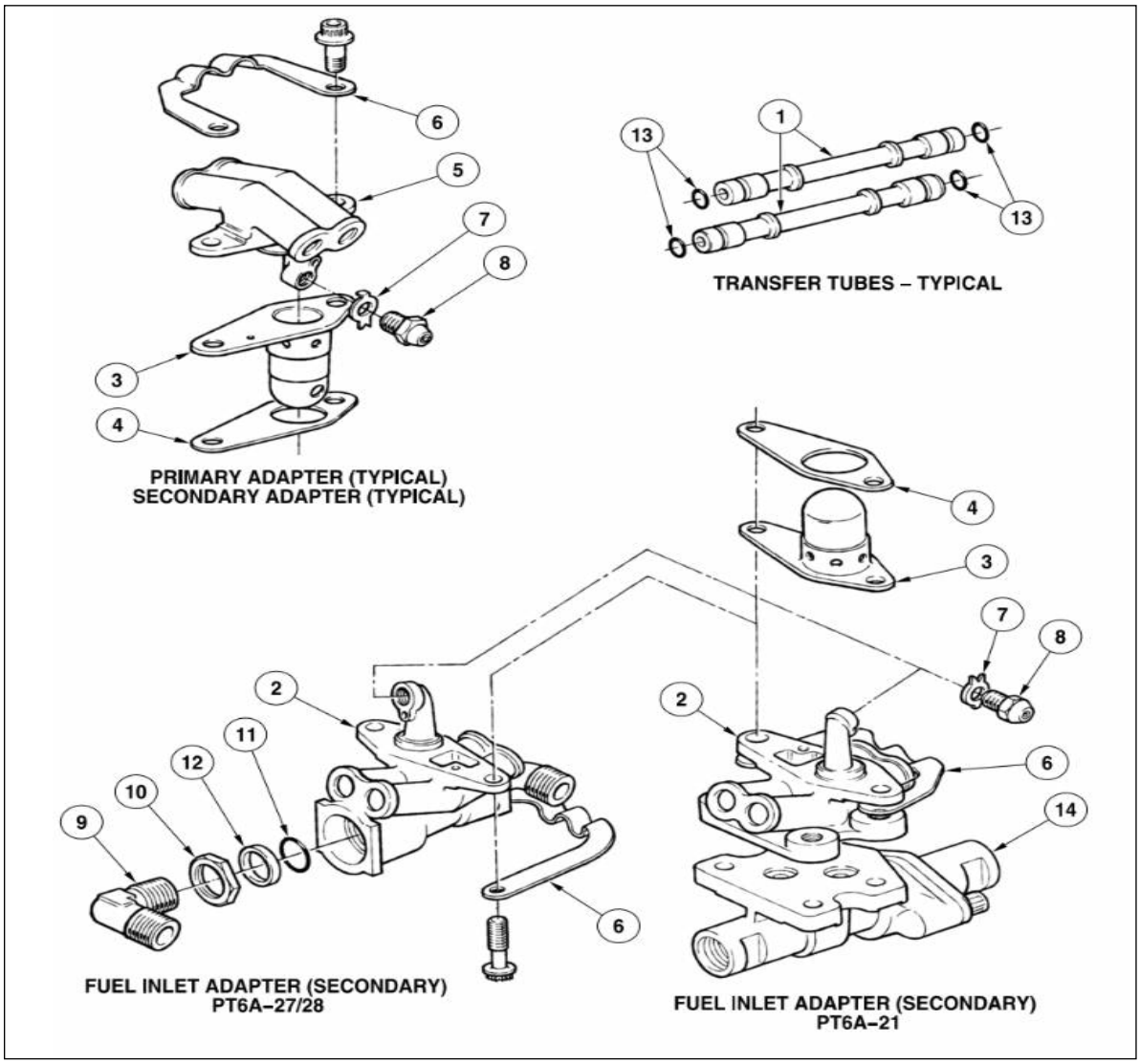


Figure 202 - Removal/ Installation of Fuel Manifold Adapter

Key to Figure 202

1. Fuel Transfer Tube
2. Fuel Manifold Inlet Adapter
3. Sheath
4. Gasket
5. Fuel Manifold Adapter
6. Lockplate
7. Keywasher
8. Fuel Nozzle
9. Elbow
10. Locknut
11. Preformed Packing
12. Back-up ring
13. Preformed Packing
14. Flow Divider and Dump or Purge Valve

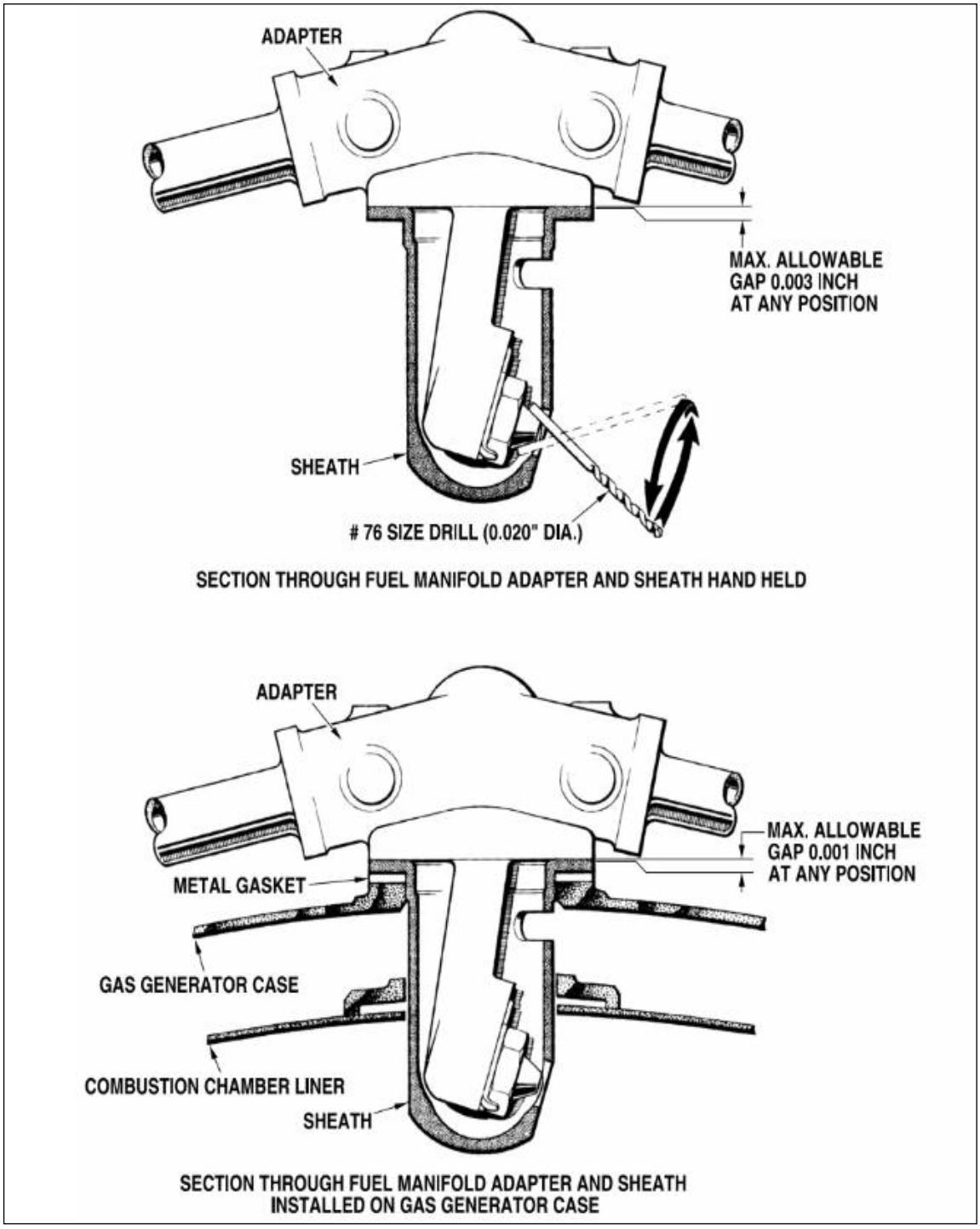


Figure 203 Fuel Manifold Installation - Clearance Checks

Ref. AMM Pilatus Porter Chapter 28-20-00
FUEL DISTRIBUTION SYSTEM – ADJUSTMENT TEST

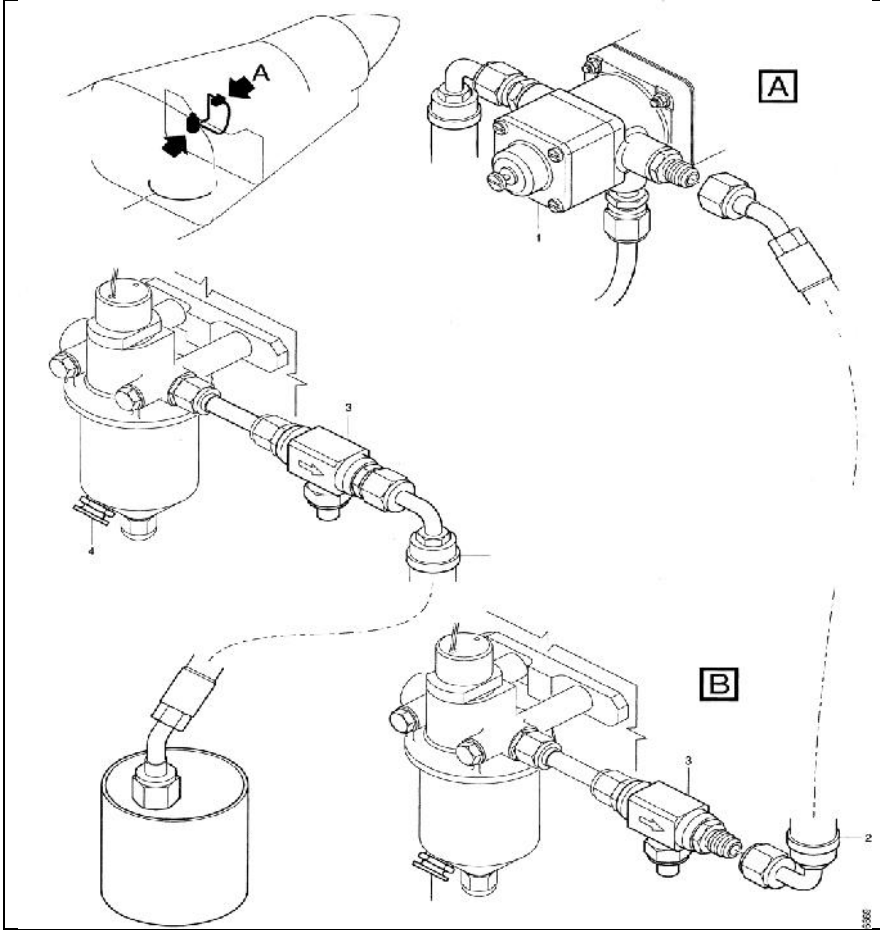
Reg. Mark	:	PK -	Date	:	
MSN	:		Station	:	
TSN / CSN	:		WO No.	:	

NO	TASK	SIGNATURE	
		SIGN	STAMP
Tools and Equipment Part No. — Description — Remarks — — Stopwatch — — Fuel container with measured graduation in liters or US gals — Minimum capacity 40 liters (10 US gals)			
Procedure **A. Job Set Up**			
1	Make sure that the aircraft is tall down ($10^{o} \pm 1^{o}$ nose up).		
2	Make sure that the aircraft is refueled to maximum (Ref. 12-11-28, page Block301).		
3	Set the fuel-system valve lever to CLOSED.		
4	Open the fuel-filter access panel PB3.		
5	Open the engine access panel PL1.		
B. Preparation			
1	Put the fuel container below the fuel filter.		
2	Open the filter drain valve (4) and let the fuel drain.		
3	When the flow of fuel stops, close the drain valve (4).		
4	Remove the outlet hose (2) from between the fuel flow transmitter (3) and theEngine Driven Pump (EDP) (1).		

NO	TASK	SIGNATURE	
		SIGN	STAMP
5	Turn the outlet hose through 180 degree, then install the outlet hose (2) to the fuelflow transmitter (3) with the other end through the access panel PB3.		
6	Put the fuel container below the disconnected end of the outlet hose (2). Do notextend the length of the hose for the test.		
7	Set the fuel-system valve-lever to OPEN until you get a constant flow of fuel in tothe container.		
8	Set the fuel-system valve-lever to CLOSED and empty the container.		
C. Gravity Flow System			
1	Put the fuel container below the disconnect end of the outlet hose.		
2	Set the fuel-system valve-lever to OPEN for 5 minutes.		
3	Set the fuel-system valve-lever to CLOSED.		
4	Make sure that there is not less than 6,95 liters (1,84 US gals) of fuel in thecontainer.		
5	Empty the container.		
D. Auxiliary Fuel Pump System			
1	Put the fuel container below the disconnected end of the outlet hose		
2	Energize the aircraft electrical system.		
3	Set the AUX F PUMP switch to ON and immediately set the fuel-system valvelever to OPEN.		
4	After 5 minutes, set the fuel-system valve lever to CLOSED and the AUX F PUMPswitch to OFF.		
5	De-energize the aircraft electrical system.		
6	Make sure that there is not less than 22,1 liters (5,84 US gals) of fuel in thecontainer.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
7	Empty the container.		
E. Close Up (Ref. Fig. 501)			
1	Remove the outlet hose (2) from the fuel flow transmitter (3).		
2	Install the outlet hose (2) between the fuel flow transmitter (3) and the EDP (1)		
3	Energize the aircraft electrical system.		
4	Set the fuel-system valve lever to OPEN.		
5	Set the AUX F PUMP switch to ON.		
6	Do leak checks at the outlet hose (2) and the tee adapter (3) connection. No leaksare permitted.		
7	Set the AUX F PUMP to OFF.		
8	Set the fuel-system valve lever to CLOSED.		
9	De-energize the aircraft electrical system.		
10	Discard the fuel as given in the local regulations.		
11	Make sure that the work area is clean and clear of tools and other items.		
12	Close the fuel-filter access panel PB3 and the engine access panel PL1.		

NO	TASK	SIGNATURE	
		SIGN	STAMP



PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

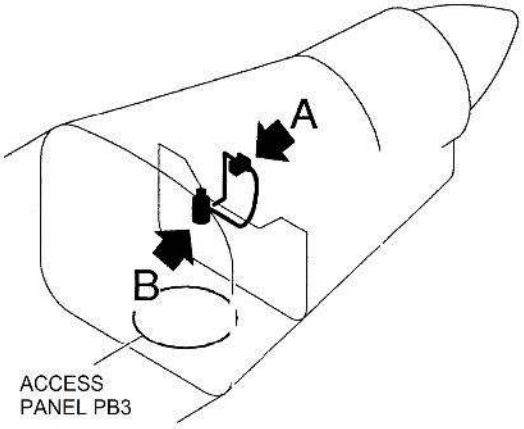
The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Ref. AMM Pilatus Porter Chapter 28-40-00
FUEL INDICATING SYSTEM – ADJUSTMENT/TEST

Reg. Mark : PK -		Date :	
MSN :		Station :	
TSN / CSN :		WO No. :	

NO	TASK	SIGNATURE	
		SIGN	STAMP
Tools and Equipment Part No. — Description — Remarks — — Stopwatch — — Fuel container with measured graduation in liters or US gals — Minimum capacity 40 liters (10 US gals)			
Procedure **A. Job Set Up**			
1	Make sure that the aircraft is tail down ($10^{o} \pm 1^{o}$ nose up)		
2	Make sure that the aircraft is refuelled to maximum (Ref. 12-11-28, Page Block 301)		
3	Set the fuel-system valve-lever to CLOSED		
4	Open the fuel-filter access-panel PB3. 		
5	Open the engine acces panel PL1		
B. Preparation (Ref. Fig. 1)			
1	Put the fuel container below the fuel filter.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
2	Open the filter drain valve (4) and let the fuel drain.		
3	When the flow of fuel stops, close the drain valve (4).		
4	Remove the outlet hose (2) from between the fuel flow transmitter (3) and the Engin**eDriven Pump (EDP) (1).**		

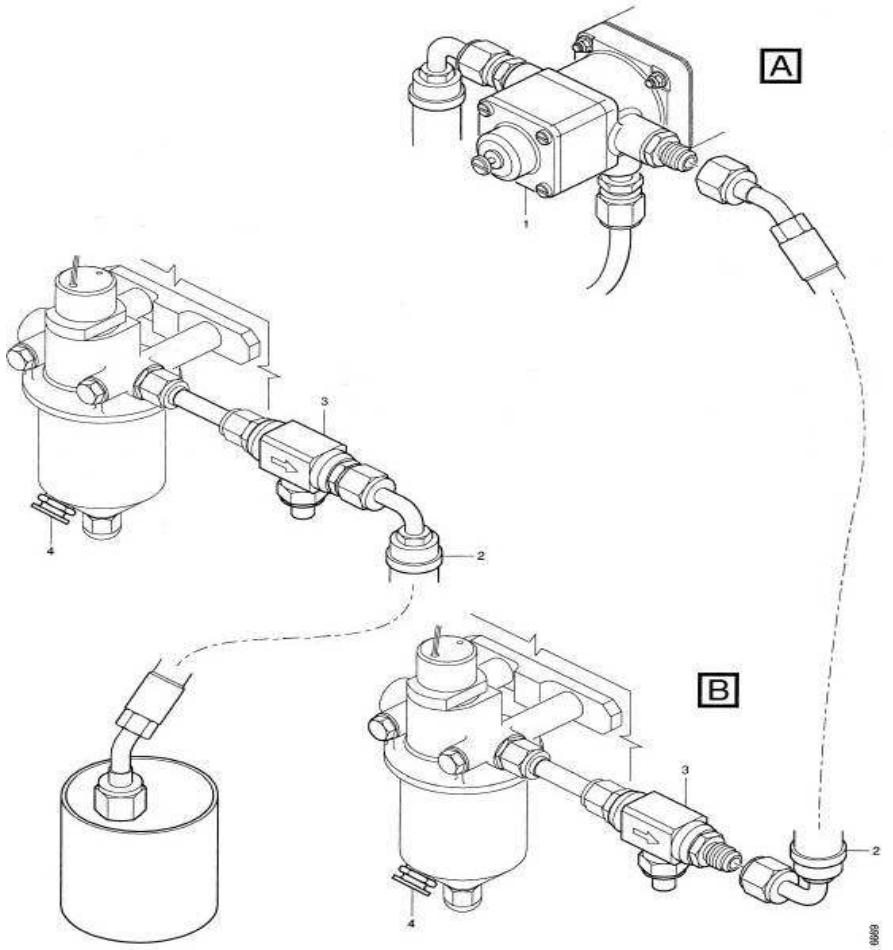


Figure 1 fuel Disrtibution – Adjusment/Test

5	Turn the outlet hose through 180 degrees, then install the outlet hose (2) to the fuelflow transmitter (3) with the other end through the access panel PB3.		
6	Put the container below the disconnect end of the outlet hose (2). Do not extend thelength of the hose for the test.		
7	Energize the aircraft electrical system.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
8	Set the fuel-system valve-lever to OPEN until you get a constant flow of fuel into thecontainer.		
9	Set the fuel-system valve-lever to CLOSED and empty the container.		
10	Reset the fuel used totalizer to zero.		
C. Low Fuel Flow Indication Check (Ref. Fig. 1)			
1	Set the fuel-system valve-lever to OPEN.		
2	When the fuel flow has stabilized, record the fuel flow indication. Fuel flow: _____		
3	After 5 minutes set the fuel-system valve-lever to CLOSED		
4	Record the fuel used from the fuel used totalizer. Fuel used: _____		
5	Measure the quantity of the fuel in the container. Quantity: _____		
6	Make sure the difference between the fuel used totalizer indication and the quantity offuel in the container is not more than ± 1 liter (± 0.26 US gals).		
7	Calculate the fuel rate for 1 hour as follows: - Quantity of fuel in container after 5 minutes x 12 = Flow rate/hour.		
8	Compare the calculated fuel flow with the actual fuel flow recorded at step (2): - The difference between the calculated fuel flow and the actual fuel flow must bethe same ± 12,5 liter/hour (± 3,3 gals/hour)		
9	If the difference between the actual and calculated fuel flow is out of limits, replacethe indicators, signal conditioner or fuel flow transmitter. **NOTE: IT IS RECOMMENDED THAT THE FUEL FLOW TRANSMITTER IS REPLACED FIRST.**		
10	Empty the container.		
D. High Fuel Flow Indication Check Using the Auxiliary Fuel Pump System (Ref. Fig. 1)			
1	Set the AUX F PUMP switch to ON.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
2	Move the fuel-system valve-lever towards the CLOSED position to get an indicated fuel flow of between 189 and 285 liters/hour (50 and 75 US gals/hour). Record the indicated fuel flow. Fuel flow: _____ **NOTE: TO MAKE THE TEST EASIER, YOU CAN MAKE AN ORIFICE TO GET THECORRECT FUEL FLOW. USE A METAL BLANK DRILLED WITH A 2,4 mm (3,32 in) HOLE INSTALLED IN THE END OF THE DISCONNECTED OUTLET HOSE (2). THIS WILL GIVE THE REQUIRED FUEL FLOW WITH THE FUEL-SYSTEM VALVE-LEVER FULLY "OPEN".**		
3	When the fuel flow is correct and constant, get a second person and do these steps atthe same time. Reset the fuel totalizer. Record the quantity of fuel in the container. Start the stopwatch.		
4	After 5 minutes, set the fuel-system valve-lever to CLOSED and the AUX F PUMPswitch to OFF.		
5	Record the fuel used from the fuel used totalizer. Fuel flow: _____		
6	Measure the quantity of the fuel in the container and subtract the quantity recorded inStep (3). Quantity: _____		
7	Make sure the difference between the fuel used totalizer indication and the quantity offuel in the container is not more than ± 1 liter (±0,26 US gals).		
8	Calculate and record the flow rate for 1 hour as follows: Quantity of fuel measured at step (6) x 12 = Fuel flow rate /hour.		
9	Make sure that the flow rate recorded at step (8) is not more than ± 12,5 liters/hour(±3.3 US gals/hour) different to the fuel flow indication recorded in Step (2).		
10	If the difference between the actual and calculated fuel flow is out of limits, replacethe indicators, signal conditioner or fuel flow transmitter. NOTE: IT IS RECOMMENDED THAT THE FUEL FLOW TRANSMITTER ISREPLACED FIRST.		
E. Close Up (Ref. Fig. 1)			
1	If necessary, remove the orifice from the outlet hose (2).		
2	Remove the outlet hose (2) from the fuel flow transmitter (3).		

NO	TASK	SIGNATURE	
		SIGN	STAMP
3	Install the outlet hose (2) between the fuel flow transmitter (3) and the EDP (1).		
4	Energize the aircraft electrical system.		
5	Set the fuel-system valve lever to OPEN.		
6	Set the AUX F PUMP switch ON.		
7	Do a leak check at the outlet hose (2) and the tee adapter (3) connection.No leaks are permitted.		
8	Set the AUX F PUMP switch to OFF.		
9	De-energized the aircraft electrical system.		
10	Discard the fuel in accordance with local regulation.		
11	Make sure that the work area is clean and clear of tools and other items.		
12	Close the fuel-filter access panel PB3.		
13	Close the engine access panel PL1.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

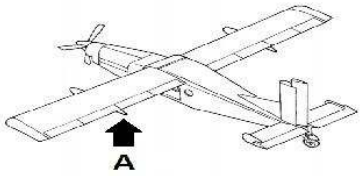
FUEL SYSTEM UNDERWING TANK INSPECTION
(If Installed)
PILATUS PORTER PC6

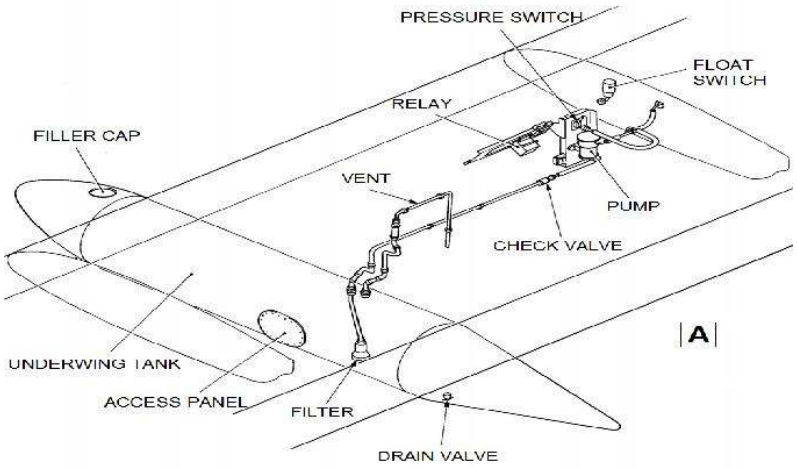
Reg. Mark : PK - _____ Date : _____

MSN : _____ Station : _____

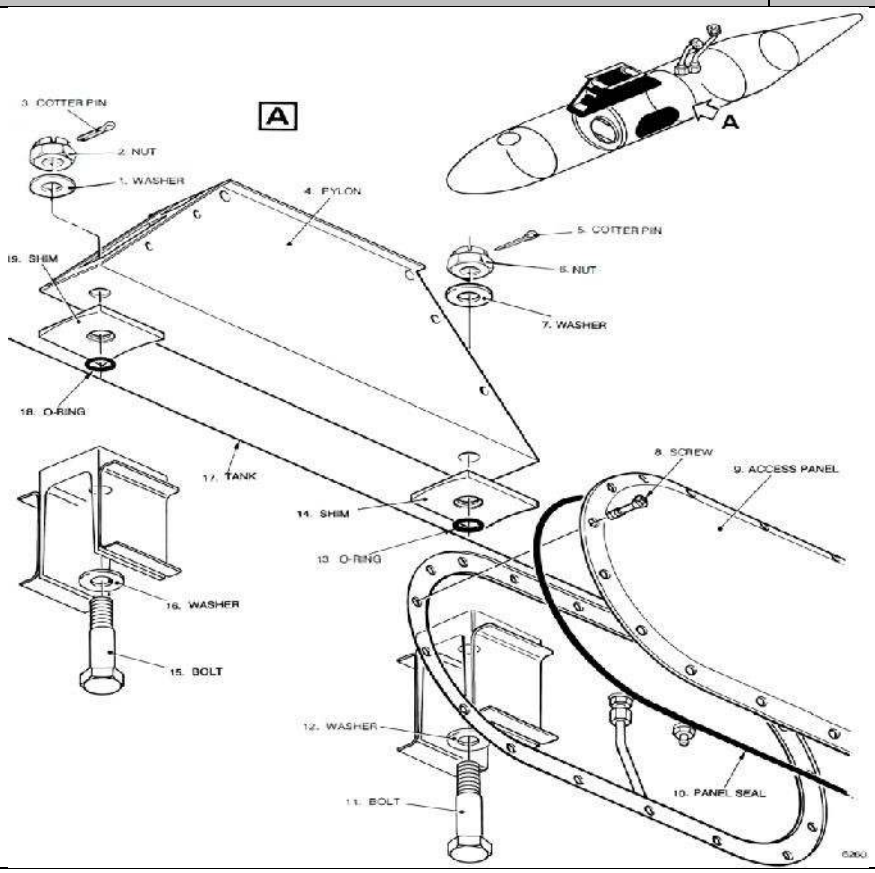
TSN / CSN : _____ WO No. : _____

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	Examine the Auxiliary Underwing Fuel tanks for Condition, Damage , Corrosion, Cracks, Deterioration, Distortion, Fractures, Security of attachments, Loose clips orfasteneres , Loose or missing rivets, Leaks , and scoring.		
2	Perform a Visual External Inspection of the Underwing Tank , pay particularattention to Filler Cap, Access Panels Drain Valves. On LH Auxiliary Fuel Tank.		
3	Perform a Visual External Inspection of the Underwing Tank, pay particularattention to Filler Cap, Access Panels Drain Valves. On RH Auxiliary Fuel Tank.		
4	Perform a Visual External Inspection of the Underwing Fuel Tank Pylon, Pay Particular Attention to the Attachment Bolts, Nuts a Cotter Pins for security ofinstallation LH Pylon.		
5	Perform a Visual External Inspection of the Underwing Fuel Tank Pylon, Pay Particular Attention to the Attachment Bolts, Nuts a Cotter Pins for security ofinstallation RH Pylon.		
6	Perform a Visual External Inspection of the Underwing Fuel tank fuel lines for Leaks, Damage, Corrosion, Cracks, Deterioration, Distortion, Fractures, Security ofattachments.		





NO	TASK	SIGNATURE	
		SIGN	STAMP



PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

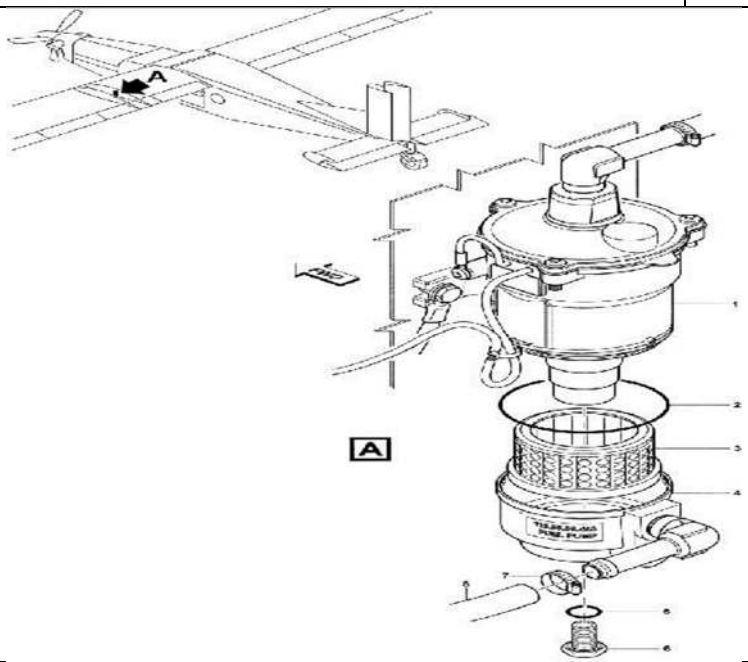
Ref. AMM Pilatus Porter Chapter 28-15-00

FUEL SYSTEM UNDERWING TANK INSPECTION TRANSFER PUMP FILTERS

Reg. Mark	:	PK -	Date	:	
MSN	:		Station	:	
TSN / CSN	:		WO No.	:	

NO	TASK	SIGNATURE	
		SIGN	STAMP
Tools Equipment for Aircraft with Underwing Fuel system and Fuel Transfer Pump. P/N: 115.55.06.443 Regulated Air supply			
Expendable Parts **Part no:** / **Description** / **Fig. Item no.** 968.84.30.305 / Filter (if required) / Fig 701, item 3 946.91.27.355 / O-ring / Fig 701, item 5 968.84.30.309 / O-ring / Fig 701, item 2			
WARNING: OBEY THE SAFETY PRECAUTIONS GIVEN IN 28-00-00, PAGE BLOCK 201, WHEN YOU DO WORK ON THE FUEL SYSTEM.			
1	Open and install the safety clip to the circuit breaker **EXT FUEL**.		
2	Remove the Access panel LB7, LB9, RB7 and RB8.		
3	Loosen the clamp (item 7) and disconnect the tube (item 8) from the elbow of thepump inlet.		
4	Remove the bolt (item 6), the bowl (item 4), the O-Ring (item 2) and filter (item 3)from the pump (item 1). **WARNING:** MAKE SURE YOUR HANDS ARE CLEAN BEFORE YOU CLEAN THE FILTER (3)DO NOT USE COTTON OR CLOTH TO CLEAN THE FILTER COTTON CAN CONTAMINATE THE FILTER.		
5	Use a regulated air supply to blow through from the inside of the filter (item 3) toremove unwanted material.		
6	If the filter (item 3) is damaged or cannot be cleaned, discard the filter and install anew one.		
7	Remove and discard the O-Ring (item 5) from the bolt (item 6) and install a new O-ring (item 5).		

NO	TASK	SIGNATURE	
		SIGN	STAMP
8	Put the filter (item 3), new O-ring (item 2) and bowl (item 4) in position and installthe bolt (item 6).		
9	Connect the tube (item 8) to the elbow of the pump outlet and tighten the clamp(item 7).		
10	Close the circuit breaker EXT FUEL.		
11	Energizer the aircraft electrical system (Ref. AMM 24-40-00, Page Block 1).		
12	Set the NORMAL-EMERG switch to EMERG and check that the pump operates.		
13	Check the pump for leaks. No leaks are permitted.		
14	Set the NORMAL-EMERG switch to NORMAL.		
15	Remove the electrical power from the aircraft (Ref. AMM 24-40-00, Page Block 1).		
16	Make sure that the work area is clean and clear of tools and other item.		
17	Install the access panel LB7, LB9, RB7 and RB8.		



PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

WHEEL AND BRAKES INSPECTION SHEET OF PILATUS PORTER PC6

Reg. Mark : PK - Date :

MSN : Station :

TSN / CSN : WO No. :

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	Perform Detail Visual Inspection with Flash Light, Mirror, and Magnifying Glass ofthe Brake Pedals and System for Cracks, Corrosion, and Security of Installation.		
2	Inspect Wheel and Brakes IAW ATA 32-40-00 and BERINGER Time Limits /Maintenance Checks MC-STC-002.		
3	Inspect hydraulic brake fluid reservoir, check brake fluid level, apply brakes,examine system for leaks, and service with MIL-PRF-5606 (ROYCO 756) hydraulic fluid as required.		
4	Inspect tire condition IAW ATA 12-14-32 and Michelin Aircraft Tire Care and Service Manual (Michelin Service Manual can be used as a guide line for all approved main tires but will not supersede manufacture inspection recommendations)		
5	Check Brake Disc Thickness Record_____mm/inch. Minimum brake disc thickness **0.252 inch / 6.4 mm.**		
6	Examine brake disc condition for Coning, Groove and Bumps. See figure 2 asattached.		
7	Inspect Brake Pad for wear. Brake Pad must be changed before grooves are invisible. See figure 3 as attached. Friction material on Brake Pad minimumthickness **0.100 inch / 2.5 mm.**		
8	Check play between disc and key disc drive. Max play **0.024 inch / 0.6 mm**. Seefigure 3 as attached.		
9	Check Main wheels Tire. Examine and check inflation pressure 3,3 bar (**49 psi**).		
10	Check Tail wheel. Examine and check for installation and inflation pressure 2,2bar (**47 psi**).		
11	Check and examine brake master cylinders for leaks and connections.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
12	After complete installation, check disc safety wire. Safety wire (**0.041**) must be inplace to prevent disc from sliding out the slots. See figure 1 as attached.		
13	Record both Main Wheel Tire: S/N LH_____and Hub S/N_____ S/N RH_____and Hub S/N_____		
14	Record Tail Wheel Tire S/N _____Hub S/N_____		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

BERINGER
Aeropole, 05130 TALLARD - FRANCE
Tel:+33 (0)4 92 20 16 19 Fax:+33 (0)4 92 52 69 66
e-mail : contact@beringer-aero.com

TIME LIMITS / MAINTENANCE CHECKS

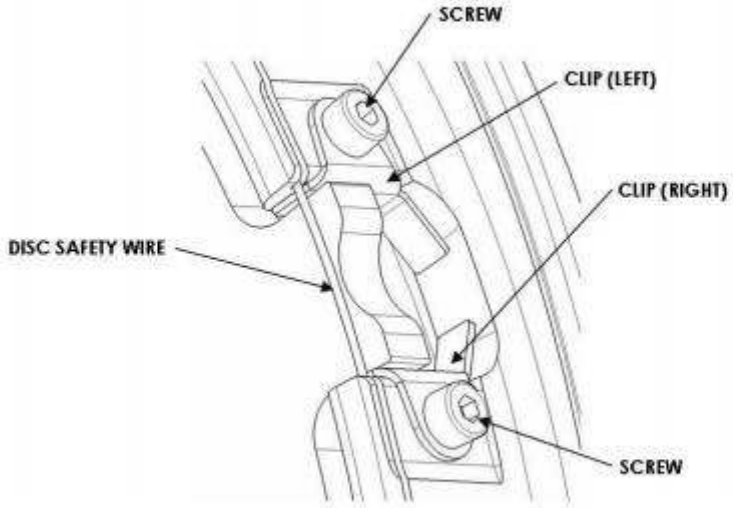
Manuel référence : BRG-ALTP-02
Référence document : MC-STC-002

2. Scheduled maintenance checks

2.1. Flight maintenance checks

Next flight maintenance checks are in addition to PC-6 maintenance manual.

Additional flight maintenance checks	Preflight inspection
Component	**Operation**
Safety wire of brake disc	Visual inspection
Brake pads	Inspect for wear and damage



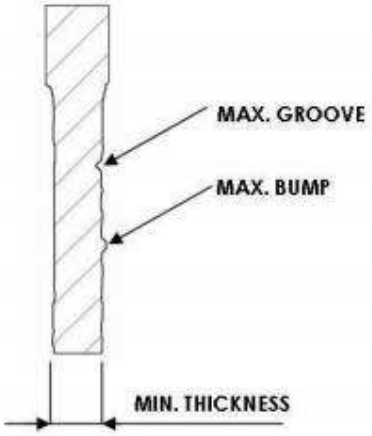
CAUTION: Disc safety wire must be in place, it prevents disc from sliding out the slots.

FIGURE 1

BERINGER
Aeropole, 05130 TALLARD - FRANCE
Tel:+33 (0)4 92 20 16 19 Fax:+33 (0)4 92 52 69 66
e-mail : contact@beringer-aero.com

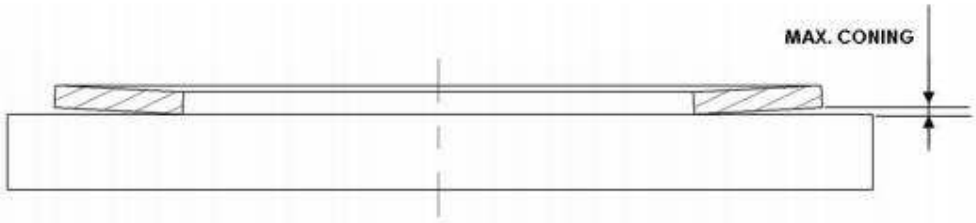
TIME LIMITS / MAINTENANCE CHECKS

Manuel référence : BRG-ALTP-02
Référence document : MC-STC-002



DISC WEAR LIMITS:

Min. Thickness DSC-011	6.4mm	0.252 in
Min. Thickness DSC-011.2	~~7.0mm~~	~~0.275 in~~
	6.4mm	0.252 in
Max. Coning	0.3mm	0.012 in
Max. Groove	0.2mm	0.008 in
Max. Bump	0.2mm	0.008 in



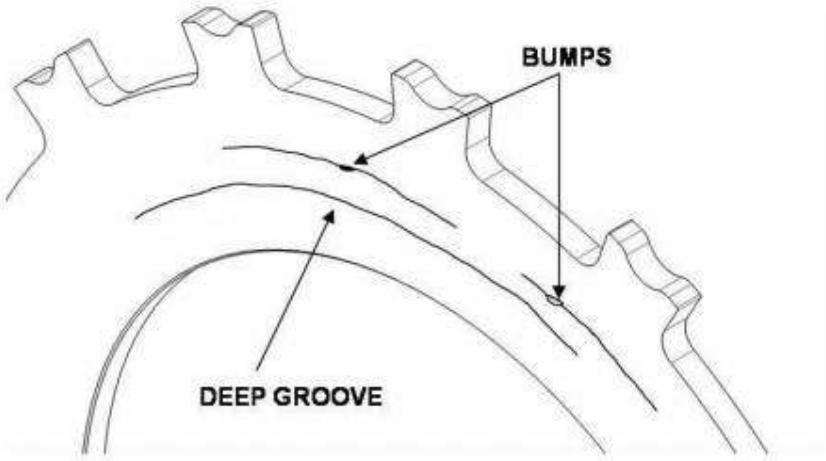


FIGURE 2

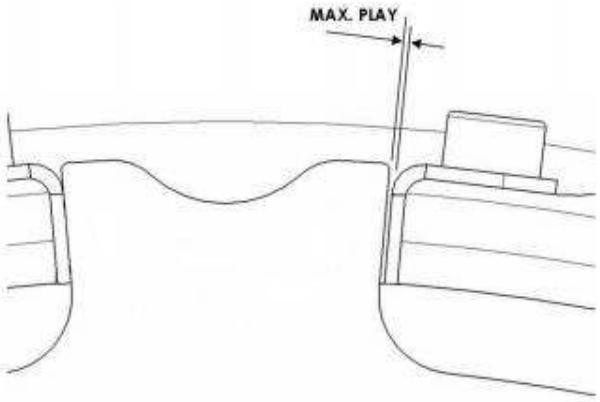
BERINGER
Aeropole, 05130 TALLARD - FRANCE
Tel:+33 (0)4 92 20 16 19 Fax:+33 (0)4 92 52 69 66
e-mail : contact@beringer-aero.com

TIME LIMITS / MAINTENANCE CHECKS

Manuel référence : BRG-ALTP-02
Référence document : MC-STC-002

CLIP WEAR LIMITS:

Max. Play 0.6mm 0.024 in



PAD WEAR LIMITS:

Min. Thickness groove nearly invisible
Friction material min. thickness 2.5mm (0.100 in)

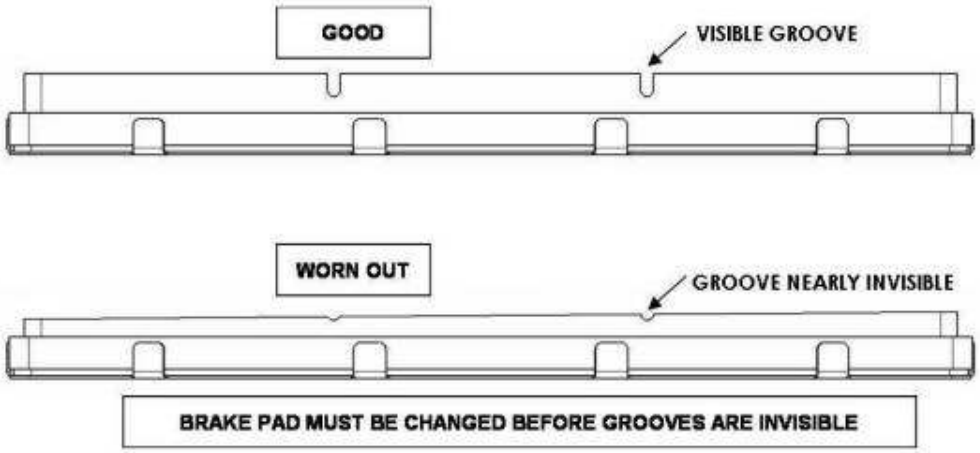


FIGURE 3

MAIN WHEEL INSPECTION SHEET OF PILATUS PORTER PC6

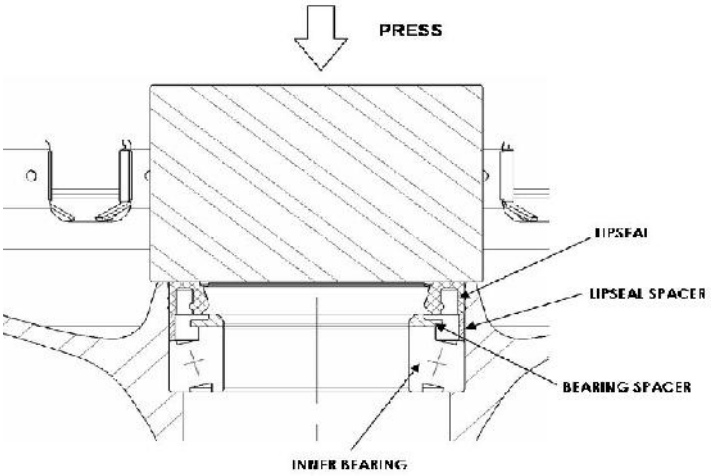
Reg. Mark : PK - Date :

MSN : Station :

TSN / CSN : WO No. :

NO	TASK	SIGNATURE	
		SIGN	STAMP
DISSASSEMBLY:			
WARNING:	Do not attempt to disassemble wheel until tire has been completely deflated. Otherwise, serious injury to personnel or damage to equipment can result.		
WARNING:	Do not attempt to remove valve core until tire has been completely deflated. Valve core will be ejected at high velocities if unscrewed before air pressure has been released.		
1	Remove valve cap and apply a tire deflator to release tire pressure completely.		
2	Remove wheel from aircraft, be careful not to drop the wheel bearing cones.		
3	Remove outer wheel bearing cone (inner wheel bearing cone is retained by Lip seal).		
4	Break the beads away from the wheel flanges by applying pressure by hand or using a wood tool all around the entire sidewall as close to the tire beadas possible.		
	CAUTION: Do not pry between tire bead and wheel flange this may destroy the structural and sealing properties of the wheel and tire.		
5	Remove all screws holding wheel halves together. (All screws must be changed at the same time – Send for Magnetic Particle Inspection).		
6	Separate wheel halves and remove tire, carefully remove O-rings and lay on a flat clean surface.		
	CAUTION: Do not use impact or power wrenches.		
7	Carefully lay the wheel halves on a flat clean bench.		
8	If inner bearing cones have to be greased, Lipseal must be removed and replaced		

NO	TASK	SIGNATURE	
		SIGN	STAMP
CLEANING:			
9	Clean all metal parts using soaped water and wipe dry with a clean cloth. Rubber valve must not be cleaned with solvent.		
	CAUTION: Do not use basic or acid agent on wheel halves. Anodizing can be totally removed within few minutes in contact with basic agent. Make sure that cleaning soap is not basic.		
10	Clean wheel bead seat with dry-cleaning solvent and wipe dry with a clean cloth.		
	CAUTION: Oily solvent must not be used on wheel bead seat because tire will not stick properly on the wheel.		
11	Clean O-ring groove with dry-cleaning solvent and wipe dry with a clean cloth.		
	WARNING: Dry-cleaning solvent are toxic and volatile. Use a well-ventilated room.		
	Avoid contact with skin or clothing. Do not inhale the vapor.		
	NOTE: If the seal must be reused clean with soaped water and dry with a soft cloth. Do not use thinner or alcohol for seals cleaning.		
12	Apply air pressure to dry internal thread.		
	CAUTION: Oily solvent or oily air pressure must not be used on internal thread because threadlocker will not properly lock the screws.		
INSPECTION :			
13	a. Perform Visual Inspection of wheel halves for cracks, nicks, corrosionor other damage. b. Causes for replacement of wheel half. 1. Signs of corrosion. 2. Anodizing colour removed from more than 15% of externalsurface. 3. Heavy nicks. 4. Deformed flanges. 5. Damaged bearing bore.		
REASSEMBLY :			
	NOTE: It is recommended that O-rings be replaced at each tire change. Rubber valve must be changed if damaged or corroded.		
	CAUTION: A tubeless tire that has been already mounted on another wheel type must not be installed. Tubeless tire will not stick properly on the wheel and may leak.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
	If lip seal has been removed, install inner bearing cone, bearing spacer, Lip seal spacer and press a new Lip seal in the inner wheel half.		
14	**NOTE:** Lip seal must be replaced at each removal from inner wheel half. **CAUTION:** Do not forget bearing spacer, it cannot be installed after lip seal. **NOTE:** Bearing cone cannot be removed without removing lipseal.		
			
15	Place inner wheel half on a clean bench.		
16	Clean tire bead seat with a cloth impregnated with dry-cleaning solvent to remove residual grease or wax.		
	CAUTION: Oily solvent must not be used on tire bead seat because tire will not stick properly on the wheel.		
17	Apply appropriate mounting soap from tire manufacturer on tire bead seat. Tubeless mounting soap in box or in spray (preferred) must be used.		
18	Install only the correct “tubeless” tire on the inner wheel half.		
19	Clean o-rings grooves with dry cloth and install small and large o-rings.		
20	Place the separator disc **NOTE:** Only when required.		
21	Place the outer wheel half with the valve positioned at the red balance doton the tire and align the bolt holes.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
	NOTE: Assembly screw must be replaced at each tire change.		
22	Put a drop of thread locker medium strength (Loctite 243 recommended) oneach end of assembly screw.		
	CAUTION: Using a wrong thread locker or not from recommended type may cause loose of screws or removal problem.		
23	Install all screws to contact.		
	CAUTION: Do not use impact or power wrenches.		
24	Torque all screws to 12 N.m (105 in-lb).		
25	Torque all screws a second time to 12 N.m (105 in-lb).		
26	Inflate tire just enough to seat beads.		
	WARNING: Place wheel in an inflation cage for initial inflation. do not inflate tire to full operating pressure until wheel has been installed on aircraft. tire and / or wheelfailure may occur causing injury to personnel or damage to equipment if the tireis inflated from any high-pressure source. tire and wheel assemblies must be serviced with inflation equipment that has been specifically designed for this operation.		
27	Check bearing cups and cones		
28	Pack bearing cones with clean bearing grease to specification MIL-G- 81322 and coat bearing cups with a light coat of grease.		
29	Install outer bearing cone in wheel and install on aircraft helping disc to take place in wheel slots.		
30	Adjust bearings to aircraft manufacturer's recommendations and safety.		
31	Install o-ring on wheel cap and screw the cap.		
32	Torque the cap to contact with hand force using BERINGER tool AV-PIL-101.		
	CAUTION: Excessive torque on the cap may cause problem to unscrew.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
33	Install disc safety wire diameter 1.01 mm (0.040") from stainless steel grade 302 in wheel ring groove.		
	CAUTION: Disc safety wire must be in place it prevents disc from sliding out the slots.		
34	Inflate tires to operating pressure and install valve caps.		
35	Check inflation pressure after 24 hours.		
	CAUTION: After 24 hours, inflate pressure should not be less than 90%. if so, check for a leakage at valve, o-ring or bead seat. **NOTE:** The installation of the small wheel 24x7.7 is identical to the standard wheel		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

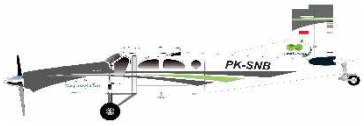
RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

ENGINE GROUND RUN CHECK SHEET - PT6A-27 ENGINE WITH FOUR BLADE PROPELLER (HARTZELL STC SA377CH)



PILATUS

WORK ORDER NO.		**:**	
Aircraft Registration		**Aircraft Total Hours**	
Aircraft Serial No.		**Aircraft Total Landings**	
Engine Serial No.		**Engine TSN / TSO**	
Propeller Serial No		**Propeller TSN / TSO**	
Ambient Temp	**°C**	**FBP (Field Barometric Pressure)**	**In.Hg**
Date		**Time**	
Mechanic / Engineer		**Authorized Engineer**	
Reason For Ground Run			

Checks to be carried out. No:	**1 2 4 5 7 8 9 10 11 12 13 14 15**

Engine Ground Run Check Frequency

Check Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Each 100 / Yearly	x	x		x			x	x			x	x	x	x	x
Each 200									x						
Pre-Complete Overhaul	x	x	x	x		x	x	x	x	x	x	x	x	x	x
After Short Term Storage															x
After Long Term Storage	x	x	x	x		x	x	x	x	x	x	x	x	x	x

In additional the following check must be carried out after Installation, Repair and Adjustment of any ofthe following components.

Check Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Engine Installation	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Propeller Installation		x	x	x	x			x							
Fuel Control Unit	x				x	x	x	x		x	x				
HP Fuel Pump						x	x								
Fuel Nozzle						x	x								
Starting Flow Control	x				x		x	x							
Emer Fuel Control Actuator											x				
Prop Governor	x		x	x	x		x	x							
Prop Overspeed Governor									x						
Compressor Bleed Valve						x	x								
Engine Controls	x			x	x			x	x						
Low Pitch Warning Switch				x											
Suction Components														x	

Use this sheet's to record engine run result, use in conjunction with task cards.

NO.	CHECK	TARGET	ACTUAL
	ENGINE START		
	ITT (Troubleshoot If More Than 925□C)	Max. 1090 □C	□C
	Cabin Heat	OFF	OK?
1	Low Idle (Minimum Governing) Speed	51 - 53 % Ng	% Ng
	Fuel Pressure / Boost Pump OFF	Light out or 25 ± 5 psi	OK?
	ITT		□C
	Oil Pressure		psi
	Oil Temperature		□C
2	Propeller Governor		
	Maximum Np	1980 - 2000 rpm (90.0 - 90.9 %)	rpm
	Py Disconnected		% Ng
	Py Connected		% Ng
	Difference	Maximum 0.3% Ng	%
	Airbleed Link at Minimum	1900 - 1950 rpm (86.4 - 88.6 %)	rpm
	Aircraft with SB 161:		
	Propeller Control Lever at Minimum	1880 - 1900 rpm (85.5 - 86.4 %)	rpm
3	Propeller Fine Pitch Setting (High Idle)		
	Target Torque	psi	psi
	Power Lever to Give Np	1694 rpm (77 %)	rpm
	Basic High Idle	68 - 72% Ng	%Ng
4	Propeller Low Pitch Warning		
	PCL from Reverse to Detent	Light OFF	
		1 to 2 mm before Detent	mm
5	Minimum Pitch in Flight		
	Ng	67 - 73 %	% Ng
	Np	1800 - 1950 rpm (81.8 - 88.6 %)	rpm
	Torque	4 - 7 psi	psi
6	FCU Maximum Governing Speed (Ng)	97.1 % Ng	% Ng
	(Trim stop deployed)		

NO.	CHECK	TARGET	ACTUAL
7	Engine Performance	Ref: AMM 71-00-00	
	Target Torque Pressure	psi	psi
	Fuel flow (Actual minus 23 lb / hr or 3.4 gal / hr)	lb / hr	lb / hr
	Target Ng	% Ng	% Ng
	Maximum ITT	^0C	^0C
8	Reverse Power Setting		
	Np	1880 - 1925 rpm (85.5 - 87.5 %)	rpm
	Torque	psi	psi
9	Propeller Overspeed Governor		
	Test Lever Selected to:		
	TEST	1880 - 1920 rpm (85.5 - 87.3 %)	rpm
	NORMAL	1980 - 2000 rpm (90.0 - 90.9 %)	rpm
10	Acceleration		
	64 % – 90 % Ng	2.5 – 4 secs	secs
	Deceleration		
	85% to 60% Ng or low idle speed(Whichever comes first)	Maximum 6-12 sec (Dependent upon altitude)	secs altitude (kFt)
	Manual Override (MOR) (Aircraft with SB 164)		
	Use Toggle Switch In Small Increment (REF. to WARNINGS and CAUTIONS in Check 11)	Increase to 15% above Idle (Max Increase less than 4 % per Second) Decrease To Idle (Max Decrease less Than 4% per Second)	OK? OK?
12	Oil Pressure	80 -100 psi	psi
13	Generator (Ref. 24-30-00)	Online by 60% Ng	% Ng
14	Suction (High Idle)	4.5 – 5.2 in. Hg	in. Hg
15	Engine Rundown Time After Stop	MIN 30 secs	secs
Additional			
Generator Check (High Idle Under Load)		27.75 – 28.25 VDC	VDC
After Engine Run			
Check Eng. For Signs of Fuel/Oil/Air Leaks		NO LEAKS FOUND	OK?
Safety All Screws, Bolts, Locknuts as Req.			OK?

HAWKER BATTERY ROUTINE CAPACITY INSPECTION SHEET OF PILATUS PORTER PC6

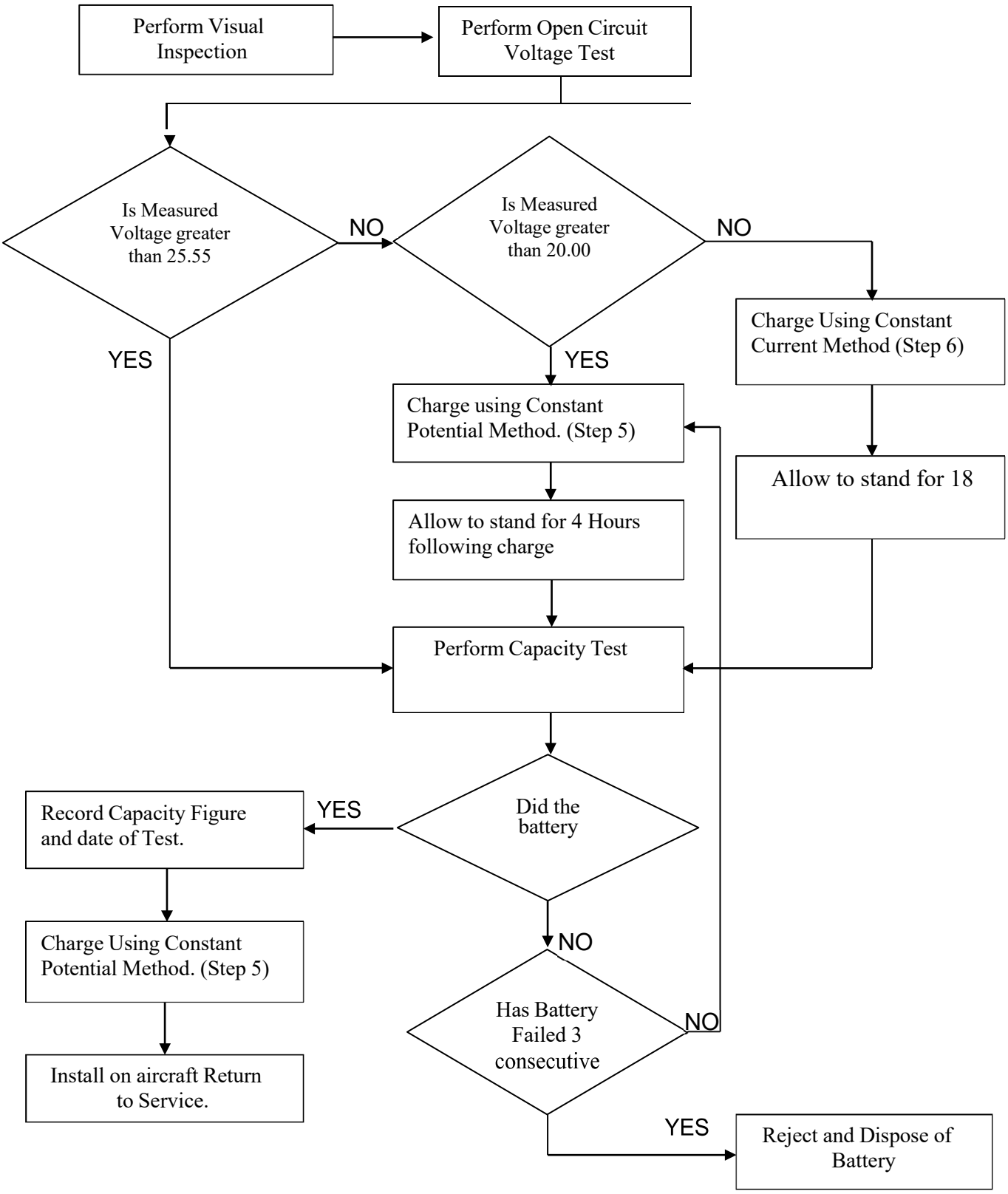
- Each Listed Inspection Item is to be performed in accordance with the Hawker document F2602-0032 (24-32-35) Sealed Lead Acid Battery PN 9750W0538 (40Ah Battery only).
- This Battery never needs Electrolyte Replenishment

Reg. Mark	:	PK -	Date	:	
MSN	:		Station	:	
TSN / CSN	:		WO No.	:	

NO	TASK	SIGNATURE	
		SIGN	STAMP
1	**Visual Inspection** **WARNING** Battery short circuit current may exceed 2600 amperes. All tools must be insulated. Care must be taken with all items of metal to include clothing items such as buckles, zippers and key chains, jewelry such as rings and necklaces. Failure to heed this warning could result in serious injury or loss of life. Visually inspect the exterior of the battery casing for obvious signs of damage (cracks dents, corrosion). Examine the battery terminals and the thermistor connector for signs of damage, corrosion and water or dirt ingress. Clean as necessary.		
2	**Open Circuit Voltage Test.** Note: This test can be performed on the aircraft provided the following conditions are met. Battery Open Circuit Voltage (OCV) checks shall be performed only after the battery has been removed from any connected load or charging source for at least 2 hours at + / - 23degrees C. If this cannot be achieved remove battery to another location off the aircraft to perform this test. Measure the battery's Voltage from the battery J1 DC Power Connector Between POS (+) and NEG (-) terminals using a digital voltmeter. No Loads or any other connections should be applied to the battery during this test. **Record the battery OCV_____Volts** IMPORTANT Batteries indicating less than 25.5 Volts must not be installed on aircraft.		

Test Procedure Figure 103

Figure 103 shows the flowchart used to determine the battery's remaining capacity during PERIODIC INSPECTION or SCHEDULED battery checks ONLY.



NO	TASK	SIGNATURE	
		SIGN	STAMP
3	Is the Measured Voltage Greater than **25.55** VDC? **YES / NO** If Yes Proceed to Perform Capacity Test. (Step 4) If Measured Voltage is between **25.55** and **20.00** VDC Charge Battery Using CONSTANT POTENTIAL METHOD. (Step 5) **YES / NO** If Measured Voltage is less than 20.00 VDC Charge Battery using CONSTANT CURRENT METHOD. (Step 6) **YES / NO**		
4	**CAPACITY CHECK TEST. (OFF WING)** Note: To ensure accurate battery capacity readings when the battery is removed from the aircraft allow the battery to stabilize at 23 Degree C +/- 5. The Capacity Test accurately determines the continued serviceability of the battery and its ability to retain charge. Ensure that the battery has been fully charged and allow it to stand with no further charging or discharging activity for at least the minimum required time period as outlined in Figure 103. (4 Hours or 18 hours as appropriate). Set the electronic load to zero amperes. After the required standing time verify the ambient temperature is at 23 Degree C +/- 5. Connect up the battery to the Test Set Up shown in figure 101, Discharge Equipment Test Set Up. Load the battery to 40 amperes using the electronic in a CONSTANT CURRENT MODE. Simultaneously begin timing the discharge cycle using a stop watch or another clock. Allow the battery to discharge until the measured terminal voltage drops to 18 VDC, then terminate the discharge test. **Record the amount of time._____Minutes.** If equal or greater than 54 Minutes then Remaining capacity if greater than 90 Percent, Next inspection due in Six months / 1500 Hrs		

NO	TASK	SIGNATURE	
		SIGN	STAMP
5	**CAPACITY CHECK TEST. (OFF WING)** If greater than 48 Minutes but less than 54 Minutes Remaining Capacity is between 90 and 81 Percent. **Next inspection due in three months** **If 48 Minutes or less Reject the Battery it has failed the Capacity test.**		

HAWKER
COMPONENT MAINTENANCE MANUAL
9750W0538, 40Ah Aircraft Battery

A. Test Equipment Set Up

Figures 101 and 102 show the test equipment setups for charging and discharging SLA batteries. Combination Battery Charger/Analyzers may be used providing all voltages and load requirements are respected.

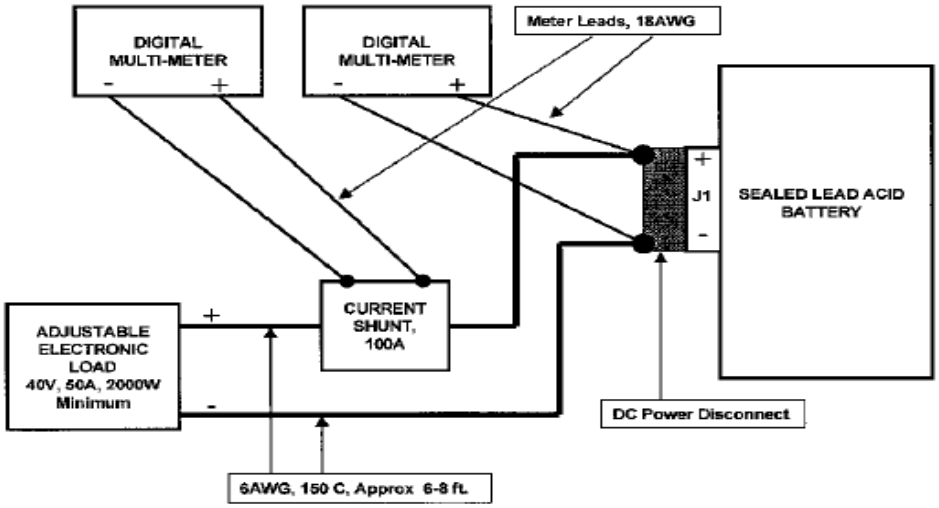


Figure 101. Discharging Test Equipment Setup

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NO	TASK	SIGNATURE	
		SIGN	STAMP
6	**<u>Charging using CONSTANT POTENTIAL METHOD</u>. (OFF WING)** Constant Potential Charging Method is the preferred method of charging the battery and is used for normal recharging of batteries that have NOT been subjected to deep discharge (an OCV less than 18 VDC). Prior to connecting the battery, ensure that the power supply is OFF, set up the equipment as shown in Figure 102, Charging Test Equipment Set up. Turn on the DC Power Supply. Set the power supply's current limit to the value shown in Table 103 that corresponds to the desired charge time. Set the power supply's output voltage to 29.0 +/- 0.3 VDC. Connect the battery to the Test Set Up and turn the power supply on. Charge the battery until the charge current drops below 0.5 amperes. *Alternatively, the battery may be charged for a fixed period of time that is dependent on current limit set point of the power supply as indicated in Table 103 Below (e.g.10 Amperes for 8 Hours duration). When the charge current drops below 0.5 amperes, *or the minimum charge time specified below has been satisfied, remove the battery from the test set up. Allow it to stand with no further charging or discharging activity for at least 4 hours before conducting any further tests.		

*Table 103. Current Limit Minimum Charge Time

Current Limit Set Point	Minimum Time Required
40 amperes and above	< 5 Hours
20 amperes	7 Hours
10 amperes	8 Hours

HAWKER

COMPONENT MAINTENANCE MANUAL
9750W0538, 40Ah Aircraft Battery

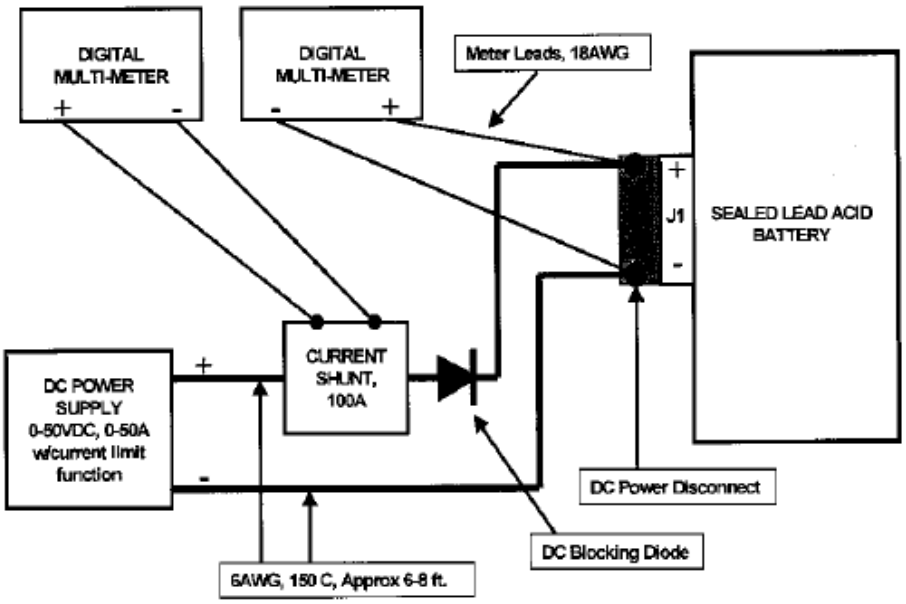

Figure 102. Charging Test Equipment Setup

NO	TASK	SIGNATURE	
		SIGN	STAMP
7	**<u>Charging using CONSTANT POTENTIAL METHOD</u>. (OFF WING)** **<u>Second Charge</u> Only Required if Open Voltage Measured was Between 25.55 VDC and 20.00 VDC. See Figure 103 Flowchart.** **If not applicable identify the columns N/A.** Constant Potential Charging Method is the preferred method of charging the battery and is used for normal recharging of batteries that have NOT been subjected to deep discharge (an OCV less than 18 VDC). Prior to connecting the battery, ensure that the power supply is OFF, set up the equipment as shown in Figure 102, Charging Test Equipment Set up. Turn on the DC Power Supply. Set the power supply's current limit to the value shown in Table 103 that corresponds to the desired charge time. Set the power supply's output voltage to 29.0 +/- 0.3 VDC. Connect the battery to the Test Set Up and turn the power supply on. Charge the battery until the charge current drops below 0.5 amperes. *Alternatively, the battery may be charged for a fixed period of time that is dependent on current limit set point of the power supply as indicated in Table 103 Below (e.g.10 Amperes for 8 Hours duration). When the charge current drops below 0.5 amperes, *or the minimum charge time specified below has been satisfied, remove the battery from the test set up. Allow it to stand with no further charging or discharging activity for at least 4 hours before conducting any further tests.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
8	**ONLY If during Open Voltage Circuit Test the Voltage measured is less than 20.00VDC then perform the following procedure.** Charging using CONSTANT CURRENT METHOD (OFF WING) Constant current charging is NOT the preferred charging method of charging the battery and is generally only used for charging batteries that have been subject to deep discharge (OCV less than 20.00). Prior to connecting the battery, ensure that the power supply is OFF, set up the equipment as shown in Figure 102, Charging Test Equipment Set up. **Record the Battery OCV_____Volts. (Test reading).** Turn on the DC power supply. Set the power supply's current limit to 3.8 +/-0.5 amperes Set the power supply's output voltage to 40.0 +/- VDC Turn the power supply off. Connect the battery to the Test Set Up and turn the power supply on. Charge the battery at 3.8 amperes for 30 Minutes. After 30 Minutes with the battery still charging, measure the battery terminal voltage (charge-on voltage), compare the reading with the 'Test reading' that was performed just prior to the Constant Current Charging sequence. **Record the charge – on Voltage_____Volts**		
9	This step determines if the battery has sulphated to the point of being unrecoverable if the on-charge voltage is greater than 29.0 VDC, and the voltage at the start was less than or equal to 22.5 VDC. STOP the charge and reject the battery. **BATTERY REJECTED? YES / NO**		
10	If the answer to 7 above is NO then charge the battery for 13 Hours. During the constant – current charge, the battery terminal voltage may rise as high as 35 VDC, before the voltage will stabilize at approx. 31 VDC. This occurrence is normal and will not degrade the battery.		

NO	TASK	SIGNATURE	
		SIGN	STAMP
11	After 13 hours remove the battery from the Test Set Up. Allow it to stand with no further charging or discharging activity for at least 18 hours, before conducting further tests.		
12	Make the appropriate entry in the Inspection Work Package/ additional worksheet, that Main Battery Capacity check has been performed. Attach a serviceable label with date of capacity check and store in accordance with Hawker document F2602-0032 (24-32-35) Sealed Lead Acid Battery PN 9750W0538 procedures, until returned to service.		

PERSONNEL PARTICIPATING IN THIS INSPECTION			
NAME	POSITION	SIGNATURE	LICENSE NUMBER

RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

Name : _____ Stamp : _____

Signature : _____ Place/Date : _____

Engine Borescope Hot Section Inspection

Work No: _____

Engine Serial Number	Date	Base / Location	Aircraft Registration
Aircraft Total Time	**Aircraft Total Cycle**	**Reason For Borescope**	

Note:
Record any discrepancies found during inspection, and/or take photographic evidence.
If None, then write No Findings. If you find defects, please quote EMM (Engine Maintenance Manual) Reference and Limitations.

Item	Work Description	SIGN	STAMP
1	Remove fuel manifold adapter as necessary (Ref. 73-10-05).		
2	Perform inspection of the First Stage Compressor. Defects: ……. If defects found, quote MM Limitation and References :		

Photo of First Stage Compressor 1st Quadrant	Photo of First Stage Compressor 2nd Quadrant
Photo of First Stage Compressor 3rd Quadrant	Photo of First Stage Compressor 4th Quadrant

		SIGN	STAMP
3	Perform inspection of Combustion Chamber Liner Assembly. Defects: …… If defects found, quote MM Limitation and References :		

Photo of Combustion Chamber 1st Quadrant	Photo of Combustion Chamber 2nd Quadrant
Photo of Combustion Chamber 3rd Quadrant	Photo of Combustion Chamber 4th Quadrant

		SIGN	STAMP
4	Perform Inspection of CT-Stator assembly. Defects: ……... If defects found, quote MM Limitation and References :		

Photo of CT Stator 1st Quadrant		Photo of CT Stator 2nd Quadrant	
Photo of CT Stator 3rd Quadrant		Photo of CT Stator 4th Quadrant	
5	Perform inspection of CT blades and shroud segments. Defects: …….. If defects found, quote MM Limitation and References :	SIGN	STAMP
Photo of Leading Edge CT-Blades 1st Quadrant		Photo of Leading Edge CT-Blades 2nd Q	

Photo of Leading Edge CT-Blades 3rd Quadrant		Photo of Leading Edge CT-Blades 4th Quadrant	
6	Perform inspection Trailing Edge CT-Blades Defects: …….. If defects found, quote MM Limitation and References :	SIGN	STAMP
Photo of Trailing Edge CT-Blades 1st Q		Photo of Trailing Edge CT-Blades 2nd Q	
Photo of Trailing Edge CT-Blades 3rd Q		Photo of Trailing Edge CT-B 4th Q	

7	Perform inspection of PT-Blades Defects: ……. If defects found, quote MM Limitation and References :	SIGN	STAMP

Photo of PT-Blades 1st Q	Photo of PT-Blades 2nd Q
Photo of PT-Blades 3rd Q	Photo of PT-Blades 4th Q

8	Install fuel manifold adapter(s) (Ref. 73-10-05).	SIGN	STAMP
9	Perform fuel leak check post fuel nozzle installation		

BORESCOPE PERFORMED BY

Name:_____ Signature : _____ Stamp :_____