

PT6A-140

TURBINE ENGINES SERIES

INSTALLED IN CESSNA CARAVAN



WARRANTY

FOR NEW ENGINES

AND EXTENDED ENGINE SERVICE POLICY



Pratt & Whitney Canada
A United Technologies Company

PT6A-140

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**PRATT & WHITNEY CANADA CORP.
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WELCOME TO OUR GLOBAL FAMILY

We are pleased to introduce the Pratt & Whitney Canada Corp. (“P&WC”) Turbine Engine Warranty and Service Policies (the “Policy”) for PT6A-140 Engines (the “Engine”). This policy features:

warranty coverage for 1000 engine operating hours from the date of shipment of the engine from P&WC’s facilities;

renewable credit allowance coverage on primary parts; and

commercial support in the event of a premature engine overhaul, required as a result of an engine chargeable event (as further described in the Policy).

The Policy detailed in this booklet reflects the high level of confidence we have in our products and P&WC’s continuing commitment to you, our customer.

As with most advanced technology products, P&WC engines must be operated and maintained properly to ensure a long and reliable life. This Policy, together with the P&WC Maintenance and Overhaul Manuals, Service Bulletins, and Aircraft Flight Manual, explain the proper operation and engine maintenance required to ensure your Engine’s proper performance and the validity of our coverage.

Your local P&WC Field Support Representative, together with any of the overhaul facilities designated by P&WC Warranty Administration, are also important players to ensure continued satisfaction with your Engine. For additional information on the P&WC Worldwide Support Network, please consult our Customer Support brochure and International Support Facilities booklet or contact the P&WC Customer First Centre at 450-647-8000 (long distance and international), or 1-800-268-8000 (Canada and USA), or International Access Code (“IAC”) 8000-268-8000 (where facilities exist). You can also visit the P&WC website at www.pwc.ca.

**THANK YOU FOR DEMONSTRATING YOUR CONFIDENCE IN P&WC,
OUR PRODUCTS, AND SERVICES.**

BASIC COVERAGE PERIOD

P&WC warrants that the new Engine will be free from Defects ⁽¹⁾ in material and/or manufacturing workmanship and is covered for **1000 engine operating hours** from the date of shipment of the Engine from P&WC's facilities ⁽²⁾, during which time P&WC will:

at its option, repair or replace any Engine parts found to be defective (as defined below), including resultant damage to the Engine. Replacement parts may be new ⁽³⁾ or serviceable. When P&WC supplies a replacement part, or issues credit towards the acquisition of a new part, the removed part becomes the property of P&WC.

pay reasonable removal and reinstallation labour for the Engine, and reasonable transportation charges (excluding insurance, duties, brokerage fees and taxes) to and from the facility designated by P&WC Warranty Administration.

MILITARY OR GOVERNMENT SERVICE

This warranty is applicable to a military, paramilitary or government service when (i) the Engine is operated and maintained in accordance with Seller Instructions for Continued Airworthiness; and (ii) all parts replacements are made using commercial parts manufactured by Seller; and (iii) Seller has access to the hardware and can inspect all records of engine operation and maintenance, including but not limited to engine time, part time, logbooks, engine monitoring data demonstrating that the engine was operated within certified limits and in accordance with the Pilot Operating Handbook (POH).

(1) A Defect means the breakage or failure of a part which is determined to P&WC's satisfaction to be due to a defect in material and/or manufacturing workmanship. Such event will be considered by P&WC to be an "Engine Chargeable Event", subject to this Policy. Removal of a part from service because of hourly, cyclic or other limitations on its continued use will not, in the absence of breakage or failure verifiable by non-destructive inspection, constitute a Defect.

(2) As applicable, no operating time used by the Aircraft manufacturer for normal aircraft acceptance flight-testing shall be deducted as long as it has not exceeded one hundred (100) hours. If applicable, no storage time at the Aircraft manufacturer prior to first use in service shall be deducted from the coverage benefiting subsequent owners, as long as this period does not exceed fifteen (15) months.

(3) A part will be considered new if and only if it is accompanied by either the P&WC Manufacturer's Release Certificate or Canadian Department of Transport Certificate of Airworthiness (as applicable), or P&WC's Supplier's Release Certificate for that specific part and has not been subjected to running time (e.g. a part which has been subjected to engine test time and which must be subsequently re-inspected and tagged as serviceable will not be considered as new).

NEW ENGINE WARRANTY EXTENSION

Owner/Operator may purchase extended Basic Coverage “New Engine Warranty Extension Blocks”, after the Cessna Caravan (“Aircraft”) delivery as follows:

SUPPORT TYPE	OPTION	PRICE
New Engine Warranty Extension Blocks*	Available out to first Time Between Overhaul, in blocks of 500 hours or 1 year (whichever occurs first)	Quote**

*** NOTE**

In order to be eligible to purchase New Engine Warranty Extension Blocks, the Engine must still be covered by either Basic Coverage or an extension thereof

In order to be eligible to purchase the New Engine Warranty Extension Blocks, the installation and proper usage of the FAST unit on the Aircraft is required

Military, Paramilitary or Government Service shall not be eligible to purchase the New Engine Warranty Extension Blocks

** For further information on the above option, please contact warranty@pwc.ca
Subject: PT6A-140 “New Engine Warranty Extension Blocks” Request

ADDITIONAL COVERAGE – SERVICE POLICIES

Following the expiration of the Basic Coverage Period or the Policy, P&WC offers the following Service Policies: the **Primary Parts Service Policy** (“PPSP”) and the **Extended Engine Service Policy** (“EESP”)

The PPSP offers support in the cost of repairing or replacing Engine Primary Parts damaged within their class life due to a Defect in material and/or manufacturing workmanship. A class life refers to the life assigned to an Engine Primary Part by P&WC for the sole purpose of calculating the pro-rated credit allowance under the PPSP. Additionally, if an Engine Primary Part within its class life requires repair or replacement due to P&WC imposed hourly, cyclic, or other limitations⁽⁴⁾ on its continued use in normal operation, P&WC will provide a pro-rated credit allowance on the repair or the replacement cost of a new Primary Part.

A complete list of Primary Parts per engine model and their class lives is published in Annex 1 to this Policy.

The EESP was created to assist in case of extensive damage to the Engine resulting from an Engine Chargeable Event and where P&WC Warranty Administration determines, at its discretion, that a premature overhaul is required. In such an event, P&WC will, at its discretion, either limit the cost of the overhaul to be performed at a facility designated by P&WC Warranty Administration pursuant to the Limited Cost Overhaul (“LCO”) mechanism described below, or exchange the Engine with a like-value engine.

This LCO is calculated based on Engine operating hours and cycles since new or last overhaul, as well as the Engine’s age, and environmental, operational and maintenance conditions. The rates for calculating the LCO are communicated through the publication of a P&WC Service Information Letter (“SIL”).

P&WC reserves the right to cancel or change the EESP at any time. Shop visits required as a result of such an event which occurs prior to such change shall not be affected.

(4) Please note that the unused cycles (stub life) of an LCF part removed at the operator's request prior to reaching the service limit will not be eligible for pro-rated credit allowance under the PPSP.

COMMERCIAL SUPPORT PROGRAMS

P&WC may also provide commercial assistance for certain Airworthiness Directives (ADs) or product improvements through Commercial Support Programs. These programs will be published through Commercial Support Program Notifications (CSPNs).

Commercial Support Program offers cannot be combined with the PPSP as outlined above.

The terms and conditions of this Policy apply to the above Commercial Support Programs.

WHAT IS NOT COVERED

COSTS OF NORMAL SCHEDULED MAINTENANCE SERVICES

routine line maintenance and adjustment costs;

Hot Section Inspection (HSI) and refurbishment costs;

Engine overhaul or major refurbishment costs; and

any other costs related to Engine maintenance not specifically covered under this Policy.

NORMAL DETERIORATION

normal wear and tear and deterioration (note: a worn part capable of continued operation which, because it has been accessed, must be restored using repair schemes fully described in the applicable P&WC Engine Overhaul and/or Maintenance Manuals, is considered normal); and

no warranty coverage is provided for the overhaul life of assemblies, service life limits of parts, and/or operating time limits.

UNSUPPORTED PARTS

P&WC reserves the right to exclude Policy coverage (i) for the following parts, and (ii) for subsequent Engine repairs or damages directly attributable to the use of the following parts which:

are not originally supplied by P&WC or its authorized distributors and accompanied by the P&WC Manufacturer's Release Certificate or Canadian Department of Transport Certificate of Airworthiness, as applicable; or

are not identified in the applicable P&WC Illustrated Parts Catalogue ("IPC") and accompanied by the Supplier's Release Certificate; or

are not repaired in accordance with P&WC approved repair processes; or

are not traceable, e.g. insufficient supporting documentation; or

have been involved in an accident, and for other part or Engine failure attributable to that part.

FACTORS BEYOND P&WC'S CONTROL

improper storage, usage, maintenance or operation of an Engine, part or accessory (e.g. non-compliance with P&WC's written instructions, including without limitation, the applicable P&WC Engine Maintenance and Overhaul Manuals and P&WC Service Bulletins, or with the Aircraft Flight Manual and airworthiness regulations);

any work performed on Engines without due cause such as pre-purchase inspections, or scheduled maintenance performed at other than P&WC recommended intervals;

accidents, collisions, propeller strikes, fire, flood, lightning strike, theft, explosion, riot, war, rebellion, seizure or any other belligerent acts; foreign object damage (FOD), erosion, corrosion, sulphidation or any other damage due to the operating environment;

alteration to, modification of, or tampering with any Engine, part or accessory after delivery by P&WC, other than strictly in accordance with the applicable P&WC manuals and this Policy;

use of stolen parts, or use of a part or Engine from which P&WC's name, part number, identification mark or serial number has been removed or defaced;

workmanship performed by a facility other than P&WC-owned manufacturing facilities;

repair or overhaul of a defective part or Engine at a facility other than a facility designated by P&WC Warranty Administration;

unused cycles (stub life) of an Low Cycle Fatigue (LCF) part removed at the operator's request prior to reaching the service limit;

insurance, duties, brokerage fees, and taxes; and

any other factor beyond P&WC's control which is not specifically listed herein.

In addition, as all of the above are considered to be factors beyond P&WC's control, no pro-rata credit per the PPSP will be awarded on Primary Parts replaced, repaired, or exchanged following access to the Engine due to any of the above.

OWNER / OPERATOR RESPONSIBILITIES

The coverage provided herein is subject to the following conditions:

MAINTENANCE

The Engine must be operated and maintained in accordance with P&WC's written instructions (including, without limitation, the applicable P&WC Engine Maintenance and Overhaul Manuals and P&WC Service Bulletins), as well as the Aircraft Flight Manual and airworthiness regulations.

MAINTENANCE RECORDS

Adequate records of Engine operation and maintenance must be kept. Upon request, P&WC is entitled to have access to the records.

FOR WARRANTY SERVICE

P&WC must be notified of any Defect within thirty (30) days of discovery, and any claim must be submitted within one hundred and eighty (180) days after such discovery.

Any claim, which may include the return of defective parts, must be made through the P&WC source of supply (identified in the applicable P&WC IPC), or the P&WC designated facility or distributor which will furnish or has furnished the replacement parts.

For any warranty work (including, without limitation, disassembly), the Engine must be sent to a facility designated by P&WC Warranty Administration, in accordance with P&WC's written instructions. Any work performed at a facility other than a facility designated by P&WC Warranty Administration, without prior written authorization from P&WC Warranty Administration, will be at the claimant's expense.

LIMITATION OF P&WC'S LIABILITY

THIS IS THE ONLY WARRANTY APPLICABLE TO PT6A-140 TURBINE ENGINES AND IS GIVEN AND ACCEPTED IN PLACE OF ALL OTHER EXPRESS, IMPLIED OR STATUTORY TERMS, REPRESENTATIONS, WARRANTIES OR CONDITIONS, IN CONTRACT OR IN TORT, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND ALL SUCH OTHER TERMS, REPRESENTATIONS, WARRANTIES OR CONDITIONS ARE HEREBY EXPRESSLY DISCLAIMED. THE ONLY REMEDY FOR BREACH OF THIS WARRANTY IS AS SET OUT HEREIN. FOR GREATER CERTAINTY, IN NO EVENT SHALL P&WC BE RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH EITHER A BREACH OF THIS WARRANTY OR ANY TORTIOUS OR NEGLIGENT ACT OR OMISSION BY P&WC. SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES INCLUDE, WITHOUT LIMITATION, ECONOMIC LOSS, LOSS OR DAMAGE TO ANY PROPERTY OR PERSON OR ANY OTHER EXEMPLARY, PUNITIVE OR SIMILAR DAMAGES, AS WELL AS EXPENSES INCURRED EXTERNAL TO THE ENGINE AS A RESULT OF AN ENGINE OR PART DEFECT. NO VARIATION OR EXTENSION OF THIS WARRANTY OR REMEDIES SHALL BE BINDING UNLESS IN WRITING AND SIGNED BY A DULY AUTHORIZED REPRESENTATIVE OF P&WC.

YOUR ACCEPTANCE OF THIS TURBINE ENGINE WARRANTY AND SERVICE POLICIES, OR THE MAKING OF ANY CLAIM OR RECEIPT OF ANY BENEFIT HEREUNDER, CONSTITUTES YOUR ACCEPTANCE OF ALL THE FOREGOING TERMS, CONDITIONS AND LIMITATIONS.

THIS WARRANTY IS GOVERNED BY THE LAWS OF THE PROVINCE OF ONTARIO, CANADA.

ANNEX I – PRIMARY PARTS

Primary Parts covered by the **Primary Parts Service Policy** are attached hereto. The pro-rated credit allowance for the repair or replacement of Primary Parts damaged during their specified class life due to a Defect in material and/or manufacturing workmanship is calculated in accordance with the following formula:

$$A = P (1 - T/H)$$

where:

A = credit allowance;

T = operating hours (or cycles if class life is specified in cycles) on removed or damaged Primary Part;

P = current acquisition price at the time of repair or new replacement (net of all discounts)

H = class life of removed or damaged Primary Part.

In the case of resultant damage to a Primary Part, the part causing the damage must also be a Primary Part within its class life.

When a Primary Part is repaired, the class life continues. When a Primary Part is replaced with a new Primary Part, the new Primary Part class life commences from zero.

When pro-rata credit is issued against the embodiment of a new Primary Part, the removed part becomes the property of P&WC.

“**TBO**” means the P&WC-published Time Between Overhaul. Refer to the appropriate engine model Service Bulletin entitled “Operating Time Between Overhaul and Hot Section Inspection Frequency” for the applicable operating hours.

“**SB**” means the P&WC-published Service Bulletin. Refer to the appropriate engine model Service Bulletin entitled “Rotor Components – Service Life” for the applicable cycle life.

“**Class Life**” is expressed in hours unless “SB” is indicated.

PRIMARY PARTS	PARTS CLASS LIFE PT6A-140
	HOURS
Adapter Assembly – Fuel Nozzle	TBO
Baffle Assembly – Turbine Interstage, Including Housings & Seal	TBO
Bearing – all Ball and Roller	TBO
Blade – CT and PT	TBO
Blade – Compressor Rotor Assembly (all stages)	TBO
Bolt – CT and PT Disc	TBO
Bus Bar – T5 Thermocouple	TBO
Carrier – 1st and 2nd Stage Reduction Gear	TBO
Case Assembly – Compressor Inlet	5000
Case – Gas Generator	5000
Case – Reduction Gearbox Front and Rear	5000
Coupling – Power Turbine Shaft	TBO
Coupling – 2nd Stage Reduction Gear Flexible	TBO
Diaphragm Assembly – Accessory Gearbox	5000
Disk – Compressor Rotor – all Stages	SB
Disk – Compressor Turbine and Power Turbine	SB
Duct Assembly – Combustion Chamber Exit, Inner & Outer (large & small)	TBO
Duct Assembly – Exhaust	TBO
Gear – Accessory and Reduction (all)	TBO
Gear – Front Accessory Drive Bevel	TBO
Gear – Gearbox Accessory Drive	TBO
Gear Ring – 1st and 2nd Stage Reduction	TBO
Gear Set – 1st and 2nd Stage Reduction	TBO
Gear Sun – 1st and 2nd Stage Reduction	TBO
Gearshaft – Accessory Gearbox	TBO
Gearshaft – Accessory Gearbox Input Drive	TBO
Harness – T4 or T5 Wiring	TBO
Housing Assembly – Accessory Gearbox	5000
Housing Assembly – Power Turbine Shaft	TBO
Housing Assembly – Power Turbine Stator	TBO
Housing – Bleed Valve	TBO
Housing – Compressor Impeller	TBO
Housing – Compressor Turbine Shroud	TBO
Housing – No. 1 Bearing	TBO
Housing and Sleeve – Propeller Shaft Transfer	TBO
Impeller – Compressor	SB
Liner Assembly – Combustion Chamber	TBO
Nozzle Assembly – Fuel Metering	TBO
Piston and Cylinder – Torquemeter	TBO

PRIMARY PARTS	PARTS CLASS LIFE PT6A-140 HOURS
Probe – T4, T5, T6 Thermocouple	TBO
Pump – Oil, Housing and Gears	TBO
Ring – Power Turbine Case Sealing	TBO
Seal – Labyrinth (Stator and Rotor)	TBO
Segment – Compressor Turbine Shroud	TBO
Shaft – Accessory Gearbox Input Coupling	TBO
Shaft – Power Turbine	TBO
Shaft – Propeller	TBO
Sheath – Fuel Nozzle	TBO
Shield – Heat Compressor Turbine Housing	TBO
Shroud – Power Turbine	TBO
Spacer and Sleeve Assembly – Compressor Interstage	TBO
Support Assembly – Compressor Turbine Vane	TBO
Support and Adapter Set – Compressor No. 1 Bearing	TBO
Tie Rods – Compressor Rotor	TBO
Vane Ring – Compressor Turbine	TBO
Vane Ring – Power Turbine	TBO
Vane and Shroud Assembly – Compressor	TBO

This Policy document for New Engines is applicable to
PT6A-140 Turbine Engines operated in Cessna Caravan Aircraft

Issue Date: November 2012

This Policy follows the Engine to subsequent owners, if applicable please notify P&WC accordingly (refer to the Reply Card at the back of this Policy document).

IF YOU HAVE ANY QUESTIONS

or require assistance regarding this Policy, please call or write to:

MANAGER, WARRANTY ADMINISTRATION (01RD4)

Pratt & Whitney Canada Corp.
1000 Marie-Victorin
Longueuil, Quebec
Canada J4G 1A1

TELEPHONE 1 450 647-8180
FAX 1 450 647-2831
Email warranty@pwc.ca

or contact

P&WC CUSTOMER FIRST CENTRE

USA & CANADA 1 800 268-8000
INTERNATIONAL 1 450 647-8000, or
IAC 8000 268-8000 (where facilities exist)

WWW.PWC.CA

**THIS POLICY DOCUMENT IS FOR PT6A-140 TURBINE ENGINES
INSTALLED IN CESSNA CARAVAN AIRCRAFT, AND SUPERCEDES
ANY PREVIOUS VERSION OF THIS POLICY DOCUMENT**

ISSUE DATE: NOVEMBER 2012



Pratt & Whitney Canada

A United Technologies Company