TRINITY
AVIATION SERVICES

Bell 206 Driveshaft Cover Instructions for Continued Airworthiness

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Revision: O

Aircraft Serial Number:

Kit Serial Number:

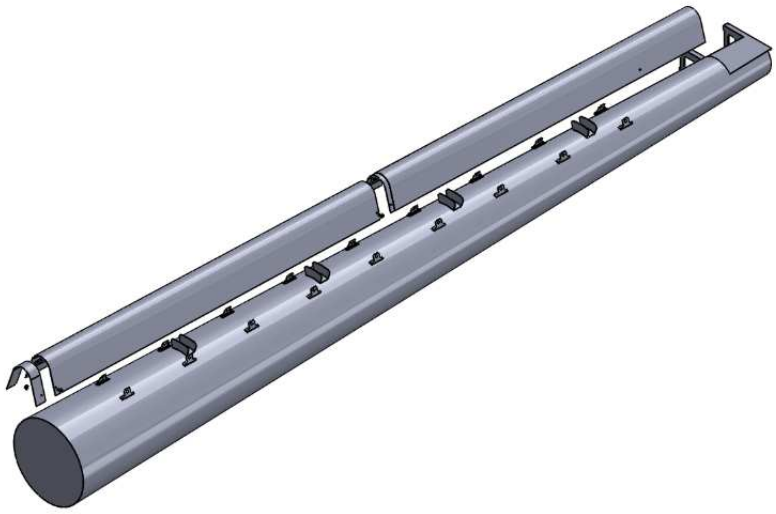

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Table of Contents

Log of Revisions

Revision	Date	Description	Pages	Approved
O	06-OCT-15	Complete rewrite and reformat of Helitech Corporation report number HC-051228.	ALL	J Wilfong

List of Effective Pages

Page	Revision	Date
1	O	06-OCT-15
2	O	06-OCT-15
3	O	06-OCT-15
4	O	06-OCT-15
5	O	06-OCT-15
6	O	06-OCT-15
7	O	06-OCT-15
8	O	06-OCT-15
9	O	06-OCT-15
10	O	06-OCT-15
11	O	06-OCT-15
12	O	06-OCT-15

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Date Accepted: _____

1 Introduction

The content of this document provides the Instructions for Continued Airworthiness for Trinity Aviation Services Ltd. carbon fiber driveshaft cover system T05165-000 on the Bell 206 series rotorcraft. Because a majority of the installation does not affect the standard airworthiness of the aircraft, only the items that are different will be identified. This document supersedes Helitech Corporation Report number HC-051228.

The information and data contained in this document supplements that contained in the basic operators Approved Maintenance Manual and any applicable Maintenance Manual Supplements, in those areas listed here-in. These Instructions for Continued Airworthiness only apply to the components listed here in and is only applicable to the aircraft and parts specified. For limitations not contained in this document refer to the basic OEM Rotorcraft Maintenance Manual and other applicable OEM Maintenance Manual Supplements.

These Instructions for Continued Airworthiness are to be attached to the specific Operators Rotorcraft Maintenance Manual of the aircraft with the subject Design Change incorporated.

1.1 Arrangement

These Instructions for Continued Airworthiness are arranged as far as practical to reference or follow as required the Operators Aircraft Maintenance Manual Section as required.

1.2 Description

The carbon fiber driveshaft cover system T05165-000 consists of a two piece cover to replace the original single cover and a carbon fiber transition flange to replace the engine cowling aft fairing flange. The carbon fiber driveshaft cover is less susceptible to damage than the original aluminum cover providing many hours of damage free operation and reduced replacement. There are two styles available, a hinged version which allows for inspection of the drive train components without removing the entire cover assembly, and a non-hinged version.

1.3 Applicability

The model and serial number eligibility is listed below:

206B Series Serial Numbers: 1252-Subs

206L Series Serial Numbers: 45004-Subs

1.4 Distribution

This document and any revision thereto, shall be distributed to the operator of the rotorcraft incorporating this design change. CAR 521.368 / FAR 21.50(b) require the approval holder to make the ICA available to the operator of the rotorcraft. Trinity Aviation Services will retain a list of rotorcrafts in which the drive shaft cover is installed and will distribute in so far as practical updates to this manual.

1.5 Service Difficulty Reporting

Any service difficult with the installed drive shaft cover shall be reported back to Trinity Aviation Services Quality Assurance personnel at www.trinity av.ca. Service difficulty shall also be reported to Transport Canada following the Service Difficulty Reporting procedures identified on Transport Canada's website at www.tc.gc.ca.

1.6 Approval

The engineering design aspects of this alteration are Transport Canada approved.

2 Maintenance

2.1 Special Tools

There are no specific special tool requirements for the removal, installation, or maintenance of the drive shaft cover installation.

2.2 Removal

Referencing figure 1, loosen all the Camloc fasteners (3) on the LH and RH sides of the forward driveshaft cover (1) and lift cover from the tailboom. Loosen all the Camloc fasteners (3) on the LH and RH sides of the aft driveshaft cover (2) and lift cover from the tailboom.

2.3 Installation

Referencing figure 1, place the aft driveshaft cover (2) onto the tailboom in the aft position and tighten all the Camloc fasteners (3) on the LH and RH sides and inspect for proper grip length. Set the forward driveshaft cover (1) onto the tailboom in the forward position and tighten all the Camloc fasteners (3) on the LH and RH sides. Camloc fasteners (3) should fully engage and be of the proper grip length. If the covers are the hinged style, check for proper operation per section 2.5 of this document.

NOTE: Removal and installation instructions apply to both the hinged and unhinged cover assemblies.

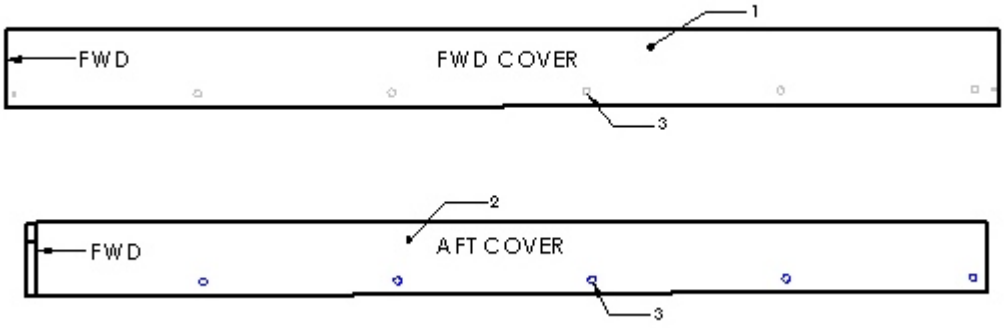


Figure 1

2.4 Cleaning and Storage

The driveshaft covers may be cleaned with a non-caustic mild detergent and water or aliphatic naphtha (TT-N-95, Type II0).

When removed from the rotorcraft the driveshaft covers should be stored in an area that precludes any damage.

2.5 Operation

NOTE: This section applies to the hinged style covers only.

2.5.1 Opening

Referencing figure 1, loosen all the Camloc fasteners (3) on the LH side of the forward driveshaft cover (1) and rotate cover to the RH side of the rotorcraft. Loosen all the Camloc fasteners (3) on the LH side of the aft driveshaft cover (2) and rotate cover to the RH side of the rotorcraft.

2.5.2 Closing

Referencing figure 1, rotate the aft driveshaft cover (2) to the LH side of the rotorcraft and tighten all Camloc fasteners (3). Rotate the forward driveshaft cover (1) to the LH side of the rotorcraft and tighten all Camloc fasteners (3).

2.5.3 Function

Hinge operation should be smooth without any binding or distortion of the cover. Camloc fasteners should fully engage and be of the proper grip length.

2.6 Protective Treatment

Whenever the driveshaft covers are opened or removed, inspect the chafe sealant per section 2.7 and correct any discrepancies per section 2.8 of this document.

2.7 Inspection

2.7.1 Preflight Inspection

Before each flight inspect and verify that the driveshaft covers are correctly installed and all Camloc fasteners are secure per section 2.3 of this document.

2.7.2 Maintenance Schedule

The rotorcraft's current inspection program may be followed as long as the interval for inspecting the driveshaft cover system does not exceed 100 hours or 12 months whichever occurs first.

2.7.3 Inspection Procedure

- Inspect the driveshaft covers for obvious damage and security of attachment.
- Press down firmly across the entire top edge of the driveshaft covers to remove any fastener play and verify a minimum clearance of 0.050" between the tailboom skin and covers.

- Verify that a clearance of 0.050" exists between the engine cowl aft fairing flange and the rotorcraft skin.
- Verify that all attachment fasteners are correctly installed and in serviceable condition.
- For hinged style, verify that the hinge assemblies operate smoothly and are in a serviceable condition.
- Remove the driveshaft covers per section 2.2 of this document and using a 10X magnifier inspect the area of the of the Camloc fasteners for cracking or edge breakout.
- Inspect all edges of the driveshaft covers and transitions for delamination or any other defect.
- Inspect the chafe sealant on the tailboom attachment clips and transition for condition and security.

2.7.4 Conditional Inspections

The inspections listed below are to supplement the inspection requirements identified in the applicable maintenance manual.

2.7.4.1 Hard Landing

- Check the driveshaft covers for proper fit and alignment. Misaligned driveshaft covers may indicate a distorted fuselage, resulting in major stresses and damage to components.
- Perform the inspection procedure identified in section 2.7.3 of this document.

2.7.4.2 Lightning Strike

- Remove the driveshaft covers and visually inspect for burn marks, heat discoloration, or delamination. Replace driveshaft covers that show evidence of a lightning strike.

2.7.5 Overhaul Schedule

There is no component overhaul of the driveshaft covers required.

2.7.6 Damage Limits

- Driveshaft covers and transitions that are punctured or have scratches that extend into the carbon fiber ply must be replaced with a new driveshaft cover assembly or transition as applicable.
- Driveshaft covers and transitions that exceed the minimum clearance requirement are to be corrected per section 2.8 of this document.
- Fasteners that are incorrectly installed, damaged, and/or corroded are to be corrected per section 2.8 of this document.
- Driveshaft covers with hinges that exhibit extensive wear must be replaced with a new driveshaft cover assembly. Hinges that are binding for any reason other than wear indicate possible improper installation of the covers or tailboom damage; contact Trinity Aviation Services Ltd. for disposition.

- Driveshaft covers and transitions that exhibit any cracking or edge breakout at the Camloc holes must be replaced with a new driveshaft cover assembly or transition as applicable.
- Edge delamination's that does not exceed 0.050" deep by 0.250" long with a minimum of 12.00" between any two delamination's may be filled with EA 934NA (299-947-100, Type II, Class2) adhesive or the equivalent, no limit. Driveshaft covers and transitions exceeding this limitation must be replaced with a new driveshaft cover assembly or transition as applicable.
- Chafe sealant areas that have the sealant missing or is becoming unbonded are to be corrected per section 2.8 of this document.

2.8 Repair

There are no approved repairs for the structure of the driveshaft cover assemblies and transition. Repairs/adjustments are limited to the items listed below.

- Replacement of the driveshaft covers assemblies or transition.
- Correcting the clearance between the driveshaft covers and tailboom skin.
- Correcting the clearance between the transition and the rotorcraft skin.
- Replacement of attachment hardware.
- Filling an edge delamination that does not exceed the limitations identified in section 2.7.6 of this document.
- Replacement of the chafe sealant on the attachment clips and transition.

All corrective actions listed above to be performed in accordance with the Installation Instructions document TAS-5410-101.

2.9 Replacement

Replacement of the driveshaft covers or transition is covered in the appropriate sections of the Installation Instructions document TAS-5410-101.

2.10 Weight and Balance

The following table is the weight of the driveshaft cover assemblies without the attachment fasteners installed.

Kit Part Number	Weight	Arm	Moment
T05165-000-0001	5.67	267.6	1,517.29
T05165-000-0002	5.25	267.6	1,404.90
T05165-000-0003	5.80	298.5	1,731.30
T05165-000-0004	5.38	298.5	1,605.93

2.11 Testing

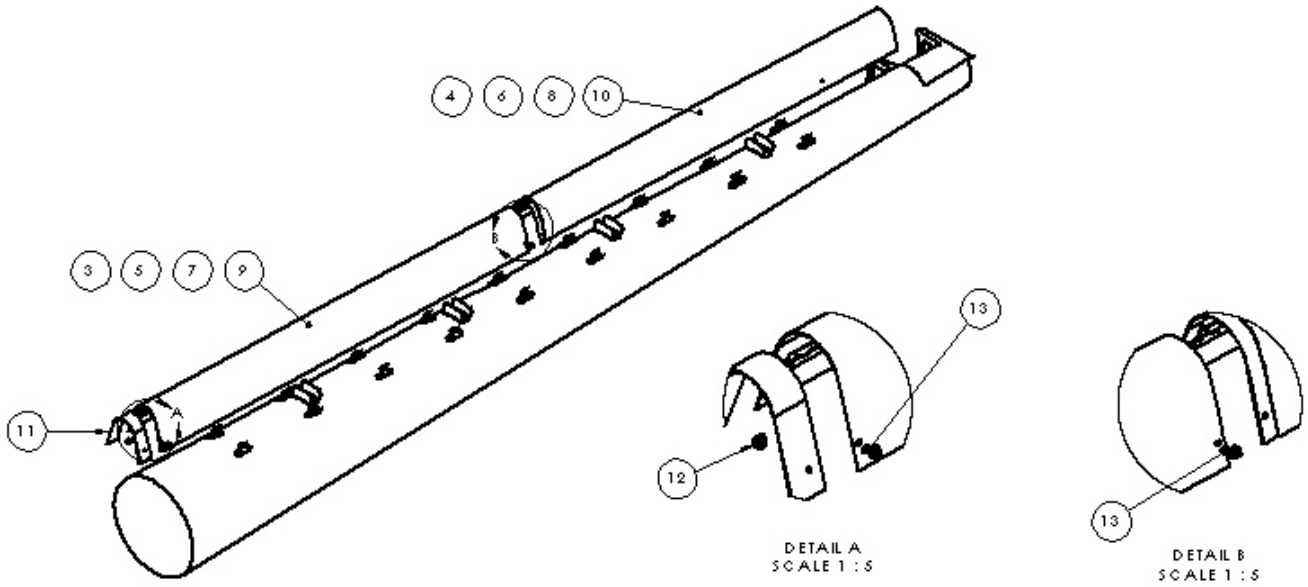
There are no specific testing requirements for the driveshaft cover installation.

3 Airworthiness Limitations

The Airworthiness Limitations section is approved by the Minister and specifies maintenance required by any applicable airworthiness or operating rule unless an alternative program has been approved by the Minister.

There is no airworthiness limitations associated with this installation.

4 Parts List



4	4	4	4	2600SW	RETAINING, WASHER	ASTM-A-666		18
7	7	7	7	140-001-11	WASHER, FLAT	140-001		17
A/R	A/R	A/R	A/R	CS 3204	SEALANT (OR EQUIVILANT)	AMS-S-8802 TYPE II		16
A/R	A/R	A/R	A/R	EA 934NA	PASTE ADHESIVE	MMM-A-132 TYPE I, CLASS 3		15
A/R	A/R	A/R	A/R	MS20615M4	RIVET, MONEL	MS20615		14
4	4	4	4	2600-3S	CAMLOC STUD	MIL-F-5591		13
1	1	1	1	KA4A1-2CB9393V5	RECEPTACLE KIT	CLICKBOND		12
1	1	1	1	T05165-000-0006	FLANGE, TRANSISTION	TCSPF-T-FC06		11
1				T05165-000-0042	SHELL, AFT	TCSPF-T-FC06		10
1				T05165-000-0041	SHELL, FWD	TCSPF-T-FC06		9
		1		T05165-000-0022	SHELL, AFT	TCSPF-T-FC06		8
		1		T05165-000-0021	SHELL, FWD	TCSPF-T-FC06		7
	1			T05165-000-0032	DRIVESHAFT COVER, AFT, SUBASSY	TCSPF-T-FC06		6
	1			T05165-000-0031	DRIVESHAFT COVER, FWD, SUBASSY	TCSPF-T-FC06		5
			1	T05165-000-0012	DRIVESHAFT COVER, AFT, SUBASSY	TCSPF-T-FC06		4
			1	T05165-000-0011	DRIVESHAFT COVER, FWD, SUBASSY	TCSPF-T-FC06		3
		X	X	T05165-000	DRIVESHAFT COVER ASSY. 206L SERIES	TCSPF-T-FC06		2
X	X			T05165-000	DRIVESHAFT COVER ASSY. 206B SERIES	TCSPF-T-FC06		1
-0004	-0003	-0002	-0001	PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	ZONE	ITEM NUM