

# SERVICE BULLETIN

SERVICE BULLETIN NO: 180

REF NO: 180

MODIFICATION NO: N/A

ATA CHAPTER: 27

## FLIGHT CONTROLS - HORIZONTAL STABILIZER - INSTALLATION OF A TRIM WARNING SYSTEM

### 1. Planning Information

#### A. Effectivity

All PC-6 aircraft.

#### B. Concurrent Requirements

None.

#### C. Reason

##### (1) Problem

There have been instances of PC-6 aircraft taking off with the horizontal stabilizer incorrectly trimmed. This can effect the control of the aircraft (more than usual stick forces) as it becomes airborne, specially for aircraft with mechanical stabilizer trim.

##### (2) Cause

The instructions in the AIRPLANE FLIGHT MANUAL (AFM) related to STABILIZER TRIM BEFORE TAKEOFF are not always obeyed.

##### (3) Solution

As soon as the problem was known, a Temporary Revision (TR-TRIM 1) to the AFM was issued. The TR made clear, the importance of the instructions related to STABILIZER TRIM BEFORE TAKEOFF and the possible results if the instructions are not obeyed. The permanent solution is to install a trim warning system which gives an audio signal and a visual warning to the pilot when the aircraft is on the ground and the trim is not in the safe-for-takeoff range.

Revision 1 to this Service Bulletin adds and corrects part numbers and revises the installation/ test procedure.

#### D. Description

This Service Bulletin gives the procedure to install the horizontal-stabilizer trim, visual and audio warning-system. The system has these components:

- A weight-on-wheels switch which is installed between the V-struts of the main landing gear
- A horizontal stabilizer proximity switch which is installed in the rear fuselage left fairing
- A wiper plate which is installed on one of the horizontal stabilizer ribs

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Related electrical items are as follows:

- circuit breaker
- relay
- lighted switch [warning annunciator]
- warning tone generator
- wiring
- support brackets.

**E. Compliance**

Highly Recommended for all PC-6 aircraft.

**F. Approval**

The technical data of this Service Bulletin has been approved by the Federal Office for Civil Aviation (FOCA) of Switzerland.

**NOTE:** PILATUS advises Operators/Owners to ask their local Airworthiness Authorities about changes that could possibly have been made. Also for local regulations and sanctions that could possibly have an effect on the embodiment of this Service Bulletin.

**G. Manpower**

	Total
Preparation	1.0
Modification - Electrical	30.0
Modification - Mechanical	30.0
Test	2.0
Close up	2.0
<b>TOTAL MAN-HOURS</b>	<b>65.0</b>

**H. Weight and Balance**

**(1) Weight Change**

Plus 2.1 kg (4.6 lb.)

**(2) Moment Change**

None

**I. Electrical Load Data**

2 amps max., from the battery bus.

**J. Software**

Not changed.

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**K. References**

Aircraft Maintenance Manual (AMM), Chapters 06-40-00, 07-10-00, 20-31-00 and 55-11-11.

**L. Publications Affected**

Aircraft Maintenance Manual (AMM), Chapters 11-30-00, 24-30-00, 31-57-00 (new), 32-11-11, 34-21-00 and 55-11-11.

Wiring Manual (WM), Chapter 31-50-30 (new)

Illustrated Parts Catalog (IPC), Chapter 11-30-00, 24-61-01, 31-57-00 (new), 32-11-01 and 55-11-01.

**M. Interchangeability of Parts**

Not applicable.

**2. Material Information**

**A. Material - Price and Availability**

Operators should send orders for Service Bulletin modification kits, to:

PILATUS AIRCRAFT LTD,  
CUSTOMER LIAISON MANAGER,  
CH 6371 STANS,      Tel: +41 41 619 65 09 (Government)  
SWITZERLAND      Fax: +41 41 610 33 51

**NOTE:** Operators are requested to advise Pilatus Aircraft Ltd. of the Manufacturer's Serial Number (MSN), the flying hours and landings of aircraft which are allocated for this Service Bulletin using the Service Bulletin Evaluation Form.

Modification Kit Number	Price	Availability
500.50.06.116	Contact address above	Contact address above

**B. Material Necessary for Each Aircraft**

**(1) Material to be Purchased**

Modification Kit No. 500.50.06.116, which has these parts:

New Part No.	Description	Old Part No.	Qty	Remarks	Fig	Item
972.11.72.102	Warning Tone Generator (Buzzer) (Ident. Code A100)	-	1	-	5	1
972.55.18.402	2 Amp Circuit Breaker (Ident. Code CB100)	-	1	-	6	1

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New Part No.	Description	Old Part No.	Qty	Remarks	Fig	Item
973.32.19.305	Lighted Switch (Ident. Code DS100)	-	1	-	4	1
972.81.12.550	Trim Warn Display Screen (Annunciator)	-	1	-		
974.20.04.203	Relay (20 second delay) (Ident. Code K100)	-	1	-	5	6
974.22.00.202	Relay Socket	-	1	-	5	5
971.75.16.500	Trim Warn Plug (Ident. Code P100)	-	1	-	2	6
971.74.98.311	Strain Relief	-	1	for P100	2	5
973.30.33.111	Proximity Switch (Ident. Code S100)	-	1	-	2	7
973.30.31.301	Weight-On-Wheels (WOW) Switch (Ident. Code S101)	-	1	-	1	1
971.42.31.706	Terminal Block, -1 Module (Ident. Code TB100)	-	1	-	5	2
971.42.31.570	Single Mounting	-	1	for TB100	5	3
919.79.41.106	Electrical Wire (AWG20)	-	20 m	-		
919.77.81.302	Shielded Electrical Cable (2 X AWG20)	-	12 m	-		
919.79.41.108	Electrical Cable (AWG16)	-	300 mm	-		
917.99.88.607	Thermofit Tubing (3/8 inch)	-	100 mm	for DS100 wire		
917.99.88.606	Thermofit Tubing (1/4 inch)	-	450 mm	for S100 and DS100 wires		
917.99.88.603	Thermofit Tubing (1/8 inch)	-	500 mm	for different wires		
917.96.92.106	Electrical Isolation Braid (4 mm)	-	2.65 m	-		
971.42.31.536	Pin	-	15	for TB100		
971.31.32.637	AMP Splice	-	1	red normal ring at S101		
971.31.18.816	Terminal Lug	-	3	red AWG20 for GND connection		

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New Part No.	Description	Old Part No.	Qty	Remarks	Fig	Item
971.31.18.834	Terminal Lug	-	1	blue small ring AWG16 for CB100		
971.31.18.816	Terminal Lug	-	1	red small ring AWG20 for CB100		
971.31.34.705	Splice	-	1	1 X 4 wire, AWG12-10 at DS100		
971.19.38.603	Shrink Cap		1			
971.31.34.704	Splice	-	1	1 X 2 wire, AWG16-14 at DS100		
971.19.38.602	Shrink Cap		1			
971.32.18.105	Distance Piece	-	30	for different wires		
971.32.51.101	Cable Tie (large)	-	10	use as necessary		
971.32.51.105	Cable Tie (medium)	-	100			
971.32.51.104	Cable Tie (small)	-	10			
116.40.06.116	Support Angle	-	1	for S101	1	5
938.77.11.122	Washer (NAS1149FO832P)	938.78.13.110 or 938.78.13.210	3	-	1	3 and 8
116.40.06.135	Insert (Sleeve)		1	for oversize V-strut spigot		
116.40.06.117	Expansion Bush	-	1	-	1	2
116.40.06.118	Rod	-	1	-	1	11
938.77.11.116	Washer (NAS1149FO532P)	-	1	-	1	12
938.07.68.306	Self-locking Nut (MS21045-C5E)	-	1	-	1	13
116.40.06.120	Mounting Bracket	-	1	for S100	2	3
116.40.06.124	Protection Plate (Rubber)	-	1	-	2	4
939.17.81.234	Rivet (MS20470AD4)	-	6	for S100 mounting bracket installation		
116.40.06.125	Wiper Plate	-	1	-	3	2

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New Part No.	Description	Old Part No.	Qty	Remarks	Fig	Item
939.31.86.102	Blind Rivet (CR3222-4-2)	-	5	for wiper plate installation		
940.17.00.323	Cotter Pin	-	1	-	2	1
116.40.06.127	Support Plate	-	1	for A100	5	13
935.63.12.066	Screw (7/32 inch) (MS35207-264)	-	4	for installation of A100 and its support plate	5	12
938.77.11.112	Washer (7/32 inch) (NAS1149FO332P)	-	8		5	11
938.07.68.304	Self-locking Nut (7/32 inch) (MS21045-3E)	-	4		5	10
944.87.31.039	Grommet (MS35489-35)	-	1	for A100	5	14
116.40.06.128	Support Plate	-	1	for K100 and TB100	5	4
116.40.06.134	CB Box Assembly	-	1	-	6	2
935.63.11.042	Screw (5/32 inch) (MS35206-230)	-	9	4 for installation of TB100 and its support plate, 4 for installation of the CB box and 1 for the ground connection of S101	5 6	7 3
938.77.11.108	Washer (5/32 inch) (NAS1149FN616P)	-	9		5 6	8 4
938.07.68.302	Self-locking Nut (5/32 inch) (MS21045-06E)	-	9		5 6	9 5
944.87.31.002	Grommet (MS35489-4)	-	1	-	1	15
944.87.31.005	Grommet (MS35489-6)	-	1	-	2	2
116.40.06.133	Support Bracket	-	1	for DS100	4	2
935.63.11.457	Screw (3/16 inch) (MS51957-45)	-	2	for installation of DS100 support bracket	4	3
938.77.61.011	Washer (3/16 inch) (AN960-8)	-	4		4	4
938.07.68.203	Self-locking Nut (3/16 inch) (MS21046-C087)	-	2		4	5
110.71.06.592	Placard, A100	-	1	-		
110.71.06.588	Placard, CB100	-	1	-		
110.71.06.589	Placard, K100	-	1	-		
110.71.06.590	Placard, S100	-	1	-		

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New Part No.	Description	Old Part No.	Qty	Remarks	Fig	Item
511.35.12.405	Placard, S101	-	1	-	1	9
110.71.06.593	Placard, DS100	-	1	-		
511.35.09.730	Placard, TB100	-	1	-		
110.71.06.591	Placard, TRIM WARN	-	1	-		
110.85.06.104	Installation Tool	-	1	See Tooling		

**(2) Operator Supplied Materials**

Part No.	Description	Qty	Remarks
910.42.22.037	Contact Adhesive (3M Fastbond 10)	A/R	Item No. P08-009 in Consumable Materials List of AMM, 20-31-00
919.01.11.104	Lockwire, 0,8 mm diameter	A/R	Item No P02-001 in Consumable Materials List of AMM, 20-31-00
907.10.11.222	Sealant (PR 1422A-2)	A/R	Item No. P08-020 in Consumable Materials List of AMM, 20-31-00
-	Warning Sign	2	DO NOT CONNECT ELECTRICAL POWER
-	Cable Clamp	2	Locally made (Ref. Fig. 9)

**C. Material Necessary for Each Spare**

Not applicable.

**D. Reidentified Parts**

None.

**E. Tooling**

Part No.	Description	Qty	Remarks
110.85.06.104	Installation Tool - used to find the correct location for the wiper plate on the horizontal stabilizer	1	Included in Modification Kit No. 500.50.06.116

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**3. Accomplishment Instructions - Aircraft (Ref. Fig. 1 thru Fig. 6)**

This Service Bulletin has been written for all variants of PC-6 aircraft. The instructions that are given are for variants with the same cockpit configurations, but it is possible that some aircraft can have differences that are not included in these instructions.

The installation of the horizontal-stabilizer trim, visual and audio warning-system is almost the same for all PC-6 aircraft. The modification kit that is supplied has items for all variants and cockpit configurations. Install those items that are applicable to the variant and the cockpit configuration and discard the items that are not used.

When you do the procedures in this SB, refer to the standard practices applicable to aeronautical engineering. Deburr holes, use corrosion prevention material and repair the aircraft surface finish as necessary.

**A. Preparation**

- (1) Make the aircraft electrically safe as follows:
  - (a) Make sure that all electrical switches are set to OFF and that the external power source is disconnected.
  - (b) Disconnect the battery (Ref. AMM 24-30-00) and put two signs, one on the battery and one adjacent to the external power connection, to tell persons **DO NOT CONNECT ELECTRICAL POWER**.
- (2) Remove the RH pilot seat
- (3) Remove the RH control column (if installed).
- (4) Remove the LH pilot seat and the LH control column (if necessary), to get full access to the area below and behind the instrument panels.
- (5) Get access to the area behind the RH instrument panel, as follows:
  - (a) Disconnect the RH instrument panel
    - (i) Pull the panel forward and down as much as possible. Do not put a strain on the wires or other items.
  - (b) Temporarily remove instruments from the RH instrument panel, as necessary.
- (6) Lift the aircraft on jacks (Ref. AMM Chapter 07-10-00, Page Block 201).

**B. Modification**

- (1) Install the weight-on-wheels (WOW) switch S101 and its related cam (expansion bush) as follows (Ref. Fig. 1):
  - (a) Remove the V-strut front fairing (6).
  - (b) Attach the support angle (5) to the V-strut fitting (10) as follows:
    - (i) Remove the two nuts (4) and the two washers that attach the V-strut fitting (10) to the aircraft structure at the bottom of Frame 2.
    - (ii) Discard the two washers .



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- (iii) Attach the support angle (5) to the V-strut fitting (10), with the two new (thinner) washers (3) and the two nuts (4).
  - (iv) Remove the nut (7) and the washer (8).
  - (v) Discard the washer (8).
  - (vi) Install the new (thinner) washer (8) and the nut (7)
- (c) Put the rod (11) in the expansion bush (2).
- (d) Install the washer (12) and the nut (13).
- (e) Tighten the nut (13), but do not make the bush expand at this time.
- (f) Measure the internal diameter of the V-strut spigot (14). If the internal diameter of the spigot is 18 mm, install the sleeve supplied.
- (g) Put the expansion bush (2) and rod (11) assembly in the V-strut spigot (14) as far as possible.
- (h) Make sure that the cam of the expansion bush (2) is approximately at the position shown.
- (i) Tighten the nut (13), but only sufficiently to keep the expansion bush and rod assembly in position.
- (j) Install the WOW switch (1) in the support angle (5), make sure that it is in a position that lets it touch the start of the expansion bush cam (2).
- (k) Tighten the nut (13) (max torque 5 Nm (44 lbf in.)) to keep the expansion bush (2) in position.
- (l) Tighten the two locknuts of the WOW switch (1).
- (m) Make sure that after you tighten the two locknuts, the WOW switch (1) touches the expansion bush (2) (Ref. Fig.1) at the correct position.
- (n) Safety the two locknuts with lockwire (Material No. P02-001).
- (o) Drill an 8 mm hole at a position 20 mm to the right of the rear RH hole of the four holes which are for installation of ski equipment.
- (p) Install the grommet (15) in the new hole.
- (q) Put the WOW switch wire through the grommet (15).
- (r) Ground the WOW switch wire with the red identifier to the aircraft structure.
- (2) Put the horizontal stabilizer in the neutral (0) position.
- NOTE:** The neutral position is when the vertical distance from the top edge of the rear fuselage to the trailing edge of the horizontal stabilizer is 54 mm (Ref. Fig. 2).
- (3) Measure and record the distance between the fairing and horizontal stabilizer before you remove the horizontal stabilizer.
- (4) For horizontal stabilizers with a mechanical trim actuator:

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- (a) Remove access panel FL2 (Ref. AMM Chapter 06-40-00).
- (b) Install two locally-made clamps on the trim actuator cables, make sure that one touches the actuator and the other one touches the rear of Frame 12 (Ref. Fig. 9).

**NOTE:** This is to hold the actuator cables in their grooves. It stops forward movement of the cables after the horizontal stabilizer is disconnected from the actuator.

- (5) Remove the horizontal stabilizer (Ref. AMM Chapter 55-11-11, Page Block 401).

**NOTE:** The horizontal stabilizer removal procedure is in the AMM and includes the removal of the elevator units. For this Service Bulletin it is not necessary to remove the elevator units, but only to disconnect them from their control cables.

- (6) Install the proximity switch S100 as follows (Ref. Fig. 2):

- (a) Remove the hinged tab at the rear of the rear-fuselage left fairing.
  - (i) Open the hinged tab and disconnect it from its spring.
  - (ii) Remove and discard the cotter pin (1) from the inboard end of the hinge pin.
  - (iii) Remove the hinge pin and the tab.
- (b) Drill the four 3,3 mm holes in the rear-fuselage left fairing
  - (i) Use the mounting bracket (3) as a template to drill the holes.
  - (ii) Mark and drill the two 3,3 mm holes in the top of the rear-fuselage left fairing.
  - (iii) Mark and drill the two 3,3 mm holes in the side of the rear-fuselage left fairing.
  - (iv) Install the placard S100 on the mounting bracket (3).
- (c) Install the proximity-switch mounting bracket (P/N: 116.40.06.120) (3)
  - (i) Hold the bracket (3) in position and install the two bottom rivets (P/N: 939.17.81.234).
  - (ii) Make sure the bracket (3) is parallel with the vertical stabilizer and install the top two rivets (P/N: 939.17.81.234).
- (d) Mark and drill a 25 mm hole in the side of the rear-fuselage left fairing.

**NOTE:** The 25 mm hole in the side of the rear-fuselage left fairing must be aligned with the 16.5 mm hole in the mounting bracket (3) (Fig. 2).

- (e) Use contact adhesive (Ref. AMM 20-31-00 Item No P08-009) and attach the rubber protection plate (4) to the rear fuselage structure.
- (f) Connect the strain relief (5) and the wire W1C20 to plug P100 (6) (Ref. wiring data in step (12) and Fig. 7).
- (g) Connect the plug P100 (6) to the proximity switch S100 (7).

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- (h) Install the proximity switch S100 (7) and set the clearance between the wiper plate and the proximity switch to 2 mm (0.078 in.).
- (i) Put the wires of the proximity switch rearward.
- (j) Tighten the two locknuts on the proximity switch.
- (k) After you have tightened the two locknuts, make sure the clearance between the proximity switch and the wiper plate is correct.
- (l) Safety the two locknuts with lockwire (Material No. P02-001).
- (m) Make a mark and drill a 11.1 mm hole in the structure (Ref. Fig. 2).
- (n) Install the grommet (6).
- (o) Make sure that the area is clean and clear of unwanted material.
- (p) Install the hinged tab at the rear of the rear-fuselage left fairing.
  - (i) Put the hinged tab in position at the rear of the rear-fuselage left fairing.
  - (ii) Install the hinge pin so that the end with the cotter pin hole points inboard.
  - (iii) Safety the hinge pin with a new cotter pin.
  - (iv) Connect the spring to the hinged tab.
- (7) Temporarily install the horizontal stabilizer.
- (8) Hold the horizontal stabilizer in the neutral position (Ref. Fig. 2 for data on the stabilizer neutral position).
- (9) Install the wiper plate as follows (Ref. Fig. 3):
  - (a) Use the installation tool and put the wiper plate (1) in the correct position on the horizontal stabilizer.
  - (b) Mark the location for the wiper plate on the horizontal stabilizer.
  - (c) Remove the horizontal stabilizer.
  - (d) Make sure that the wiper plate is in the correct position on the horizontal stabilizer.
  - (e) Mark and drill three 4.3 mm holes.

**WARNING: OBEY THE MANUFACTURER'S INSTRUCTIONS RELATED TO SAFE USE OF THE SEALANT.**

  - (f) Apply a thin layer of sealant (Ref. AMM 20-31-00, Item No. P08-020) to the interface of the stabilizer and the wiper plate (1).
  - (g) Use the blind rivets (CR3222-4-2) and attach the wiper plate (1) to the horizontal stabilizer.
  - (h) Make sure that the area is clean and clear of unwanted material.
- (10) Install the horizontal stabilizer (Ref. AMM Chapter 55-11-11, Page Block 401).

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- (11) Remove the two locally-made clamps from the trim actuator cables.
- (12) Install access panel FL2.

**NOTE:** Step 11 thru step 12 is only applicable to horizontal stabilizers with a mechanical trim actuator

- (13) Install the lighted switch DS100 (Ref. Fig. 4).
  - (a) Put a cover over the local area to keep out unwanted material.
  - (b) Put the support bracket (2) in position.
  - (c) Mark the locations for the two 4.3 mm holes on the support bracket of the stand-by magnetic compass.
  - (d) Drill the two 4.3 mm holes.
  - (e) Install the DS100 placard on the lighted-switch support bracket (2).
  - (f) Attach the support bracket (2) to the support bracket of the stand-by magnetic compass with the two screws (3), the two washers (4) and the two nuts (5).
  - (g) Install the lighted switch DS100 (1) in the support bracket (2).
  - (h) Remove the cover and the unwanted material.

**NOTE:** Step a thru step h, is only applicable to aircraft which do not have an instrument to the left of the stand-by magnetic compass

- (14) Install the lighted switch DS100 (1) in a spare lighted switch location (Ref. Fig. 4).
- (15) Install the DS100 placard behind the panel adjacent to the switch.

**NOTE:** Step 14 thru step 15, is only applicable to aircraft which have an instrument installed to the left of the stand-by magnetic compass.

- (16) Install the warning tone generator A100, the terminal block TB100 and the relay K100 as follows (Ref. Fig. 5):
  - (a) Put a cover over the local area to keep out unwanted material.
  - (b) Put the support plate (13) in position on the right crossbeam and mark the position of the two 5.1 mm holes.
  - (c) Drill the two 5.1 mm holes.
  - (d) Attach the A100 placard on the tone-generator support bracket (13).
  - (e) Attach the support plate (13) to the crossbeam with the two screws (12), the four washers (11) and the two nuts (10).
  - (f) Disconnect the two parts of the tone generator A100 (1).
  - (g) Install the grommet (14).
  - (h) Attach the applicable part of the tone generator to the support plate (13) with the two screws (12), the four washers (11) and the two nuts (10).

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- (i) Assemble the two parts of the tone generator A100 (1).
  - (j) Put the support plate (4) in position on the right crossbeam and mark the position of the two 5.1 mm holes.
  - (k) Drill the two 5.1 mm holes.
  - (l) Attach the TB100 and the K100 placards on the support bracket (4).
  - (m) Attach the support plate (4) to the crossbeam with the two screws (7), the two washers (8) and the two nuts (9).
  - (n) Put the terminal block (2) in position in the single mounting (3).
  - (o) Attach the single mounting (3) to the support plate (4) with two screws (7), two washers (8) and two nuts (9).
  - (p) Attach the relay socket (5) to the support plate (4) with the three pillar screws, the three washers and the three nuts (supplied with the relay socket).
  - (q) Attach the relay K100 (6) to the relay socket (5) with the three screws (supplied with the relay).
  - (r) Remove the cover and the unwanted material.
- (17) Install the circuit breaker CB100 as follows (Ref. Fig. 6):

**NOTE:** If the top of the left circuit-breaker (CB) box assembly has been used to mount another item. Install the CB box (2) on the RH CB box assembly or use a spare CB location and discard the CB box (2).

**NOTE:** Step a thru step l is only applicable to aircraft which have a CB box assembly on the LH or RH side of the cockpit.

- (a) Temporarily release the fasteners and move the CB panel away from the box assembly as much as possible, but do not put a strain on the wires
- (b) Put a cover over the local area to keep out unwanted material.
- (c) Put the CB box (2) in position (approximately center if possible) on the top of the CB box assembly.
- (d) Mark the locations for the four 4.1 mm holes on the top of the CB box assembly.
- (e) Drill the four 4.1 mm holes.
- (f) Install the CB100 placard on the side of the new CB box.
- (g) Install the TRIM WARN placard below the circuit breaker CB100 placard.
- (h) Attach the CB box (2) to the CB box assembly with the four screws (3), washers (4) and nuts (5).
- (i) Install the CB100 (1) in the CB box (2).
- (j) Attach the CB panel to the box assembly with the fasteners.
- (k) Remove the cover and unwanted material.

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- (l) Make sure that there is no metal swarf remaining near the CB electrical connections.
- (18) Install the CB100 (1) in a spare CB location.
- (19) Install the CB100 and TRIM WARN placards behind the panel adjacent to CB100 (1).
- NOTE:** Step 18 thru step 19, is only applicable to aircraft which do not have a circuit breaker box assembly on the LH or RH side of the cockpit.
- (20) Install the wiring (Ref. Fig. 7):
- (a) To install the wiring related to the electrical items of the horizontal stabilizer trim warning-system, use the table that follows:.

WIRE NO.	SIZE	APPROX LENGTH	PART NUMBER	FROM	TO
-	AWG16	0.3 m	919.79.41.108	BATT BUS	CB100
W1A20	AWG20	3 m	919.79.41.106	CB100	TB100, Pin A
W1B20	AWG20	0.5 m	919.79.41.106	TB100, Pin B	A100, Pin +
W1C20 (2 wires, 1 with red and 1 with green identifiers)	2 X AWG20	12 m	919.77.81.302	S100, Pin A (red identifier)  S100, Pin C (green identifier)	TB100, Pin C (red identifier)  K100, Pin B2 (green identifier)
W1D20	AWG20	0.5 m	919.79.41.106	K100, Pin X1	TB100, Pin D
W1E20	AWG20	3 m	919.79.41.106	DS100, Pin B4	TB100, Pin E
W4A20N	AWG20	3 m	919.79.41.106	DS100, Pin C3	Ground
W6A20	AWG20	3 m	919.79.41.106	S101, cable with green identifier (S101 cable with red identifier goes to Ground)	K100, Pin X2
W7A20	AWG20	3 m	919.79.41.106	DS100, Pin A4	K100, Pin B1
W8A20	AWG20	3 m	919.79.41.106	DS100, Pin C1	A100, Pin -
W9A20	AWG20	0.5 m	919.79.41.106	A100, Pin -	K100, Pin A1

**C. Test**

- (1) Remove the two signs **DO NOT CONNECT ELECTRICAL POWER**.
- (2) Connect the battery (Ref. AMM 24-30-00).
- (3) Set the BATTERY switch to ON.
- (4) Close the TRIM WARN circuit breaker.

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- (5) Do the checks that follow to make sure that the horizontal stabilizer trim warning-system operates correctly:
  - (a) Operate the horizontal stabilizer to the fully nose up position and make sure that the horizontal stabilizer trim warning-system does not operate.
  - (b) Operate the horizontal stabilizer to the fully nose down position and make sure that the horizontal stabilizer trim warning-system does not operate.
  - (c) With the horizontal stabilizer in the fully nose down position, push and hold the WOW switch plunger and make sure that the horizontal stabilizer trim warning-system operates after approximately 20 seconds.
  - (d) Release the WOW switch plunger and make sure that the horizontal stabilizer trim warning-system goes off.
- (6) Move the horizontal stabilizer trim to the neutral (0) position.
- (7) Lower the aircraft to the ground (Ref. AMM Chapter 07-10-00, Page Block 201).
- (8) Do the checks that follow to make sure that the horizontal stabilizer trim warning-system operates correctly:
  - (a) Operate the horizontal stabilizer trim to the -2 units nose-up position and make sure that the warning system does not operate.
  - (b) Operate the horizontal stabilizer trim through the -2 units nose-up position and make sure the horizontal-stabilizer trim warning-system comes on immediately.
  - (c) Operate the horizontal stabilizer trim to the +2 units nose-down position. Make sure the horizontal-stabilizer trim warning-system goes off when the trim indication goes through the -2 position.
  - (d) Operate the horizontal stabilizer trim through the +2 units nose-down position and make sure the horizontal-stabilizer trim warning-system comes on immediately.
  - (e) Operate the horizontal stabilizer trim to the neutral (0) position. Make sure the horizontal-stabilizer trim warning-system goes off when the trim indication goes through the +2 units nose-down position.

**D. Close up**

- (1) Install the V-strut front fairing (6) (Ref. Fig. 1).
- (2) Install the instruments that were temporarily removed from the RH instrument panel.
- (3) Install the RH instrument panel.
- (4) Install the RH pilot seat.
- (5) Install the RH control column (if removed).
- (6) Install the LH pilot seat. (if removed)
- (7) Install the LH control column (if removed).

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- (8) It is recommended that a check compass swing is done (Ref. AMM, Chapter 34-21-00, Page Block 501), on aircraft with the lighted switch DS100 installed adjacent to the stand-by magnetic compass.
- (9) Make sure the work area is clean and clear of tools and other items.

**E. Documentation**

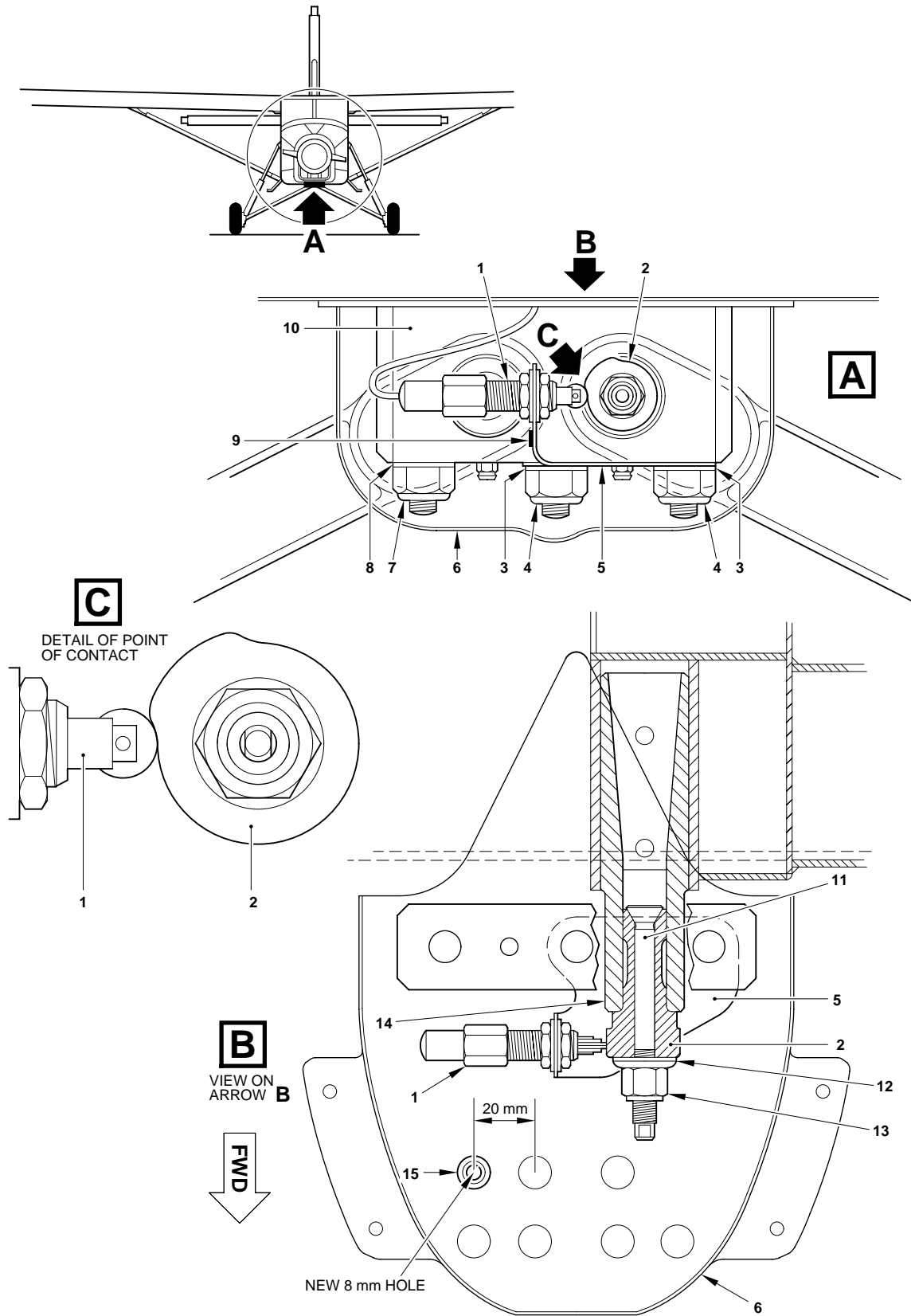
- (1) Make an entry in the Aircraft Logbook that this Service Bulletin has been included.
- (2) Use the Service Bulletin Evaluation Sheet to report your results and the serial number of the modified aircraft to PILATUS.

**4. Accomplishment Instructions - Spares**

Not applicable



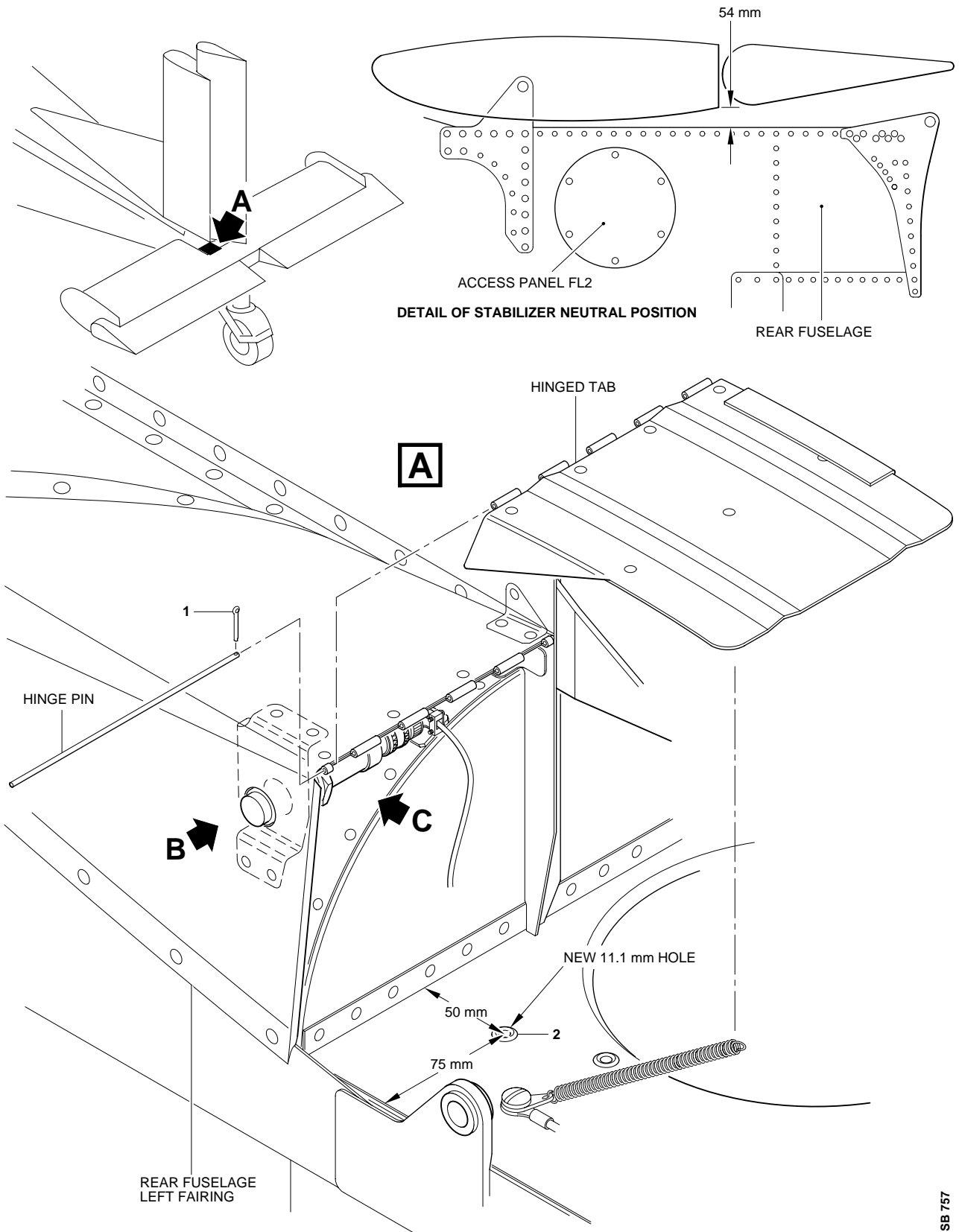
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Expansion Bush and Weight-On-Wheels (WOW) Switch S101 Installation  
 Figure 1

SB740

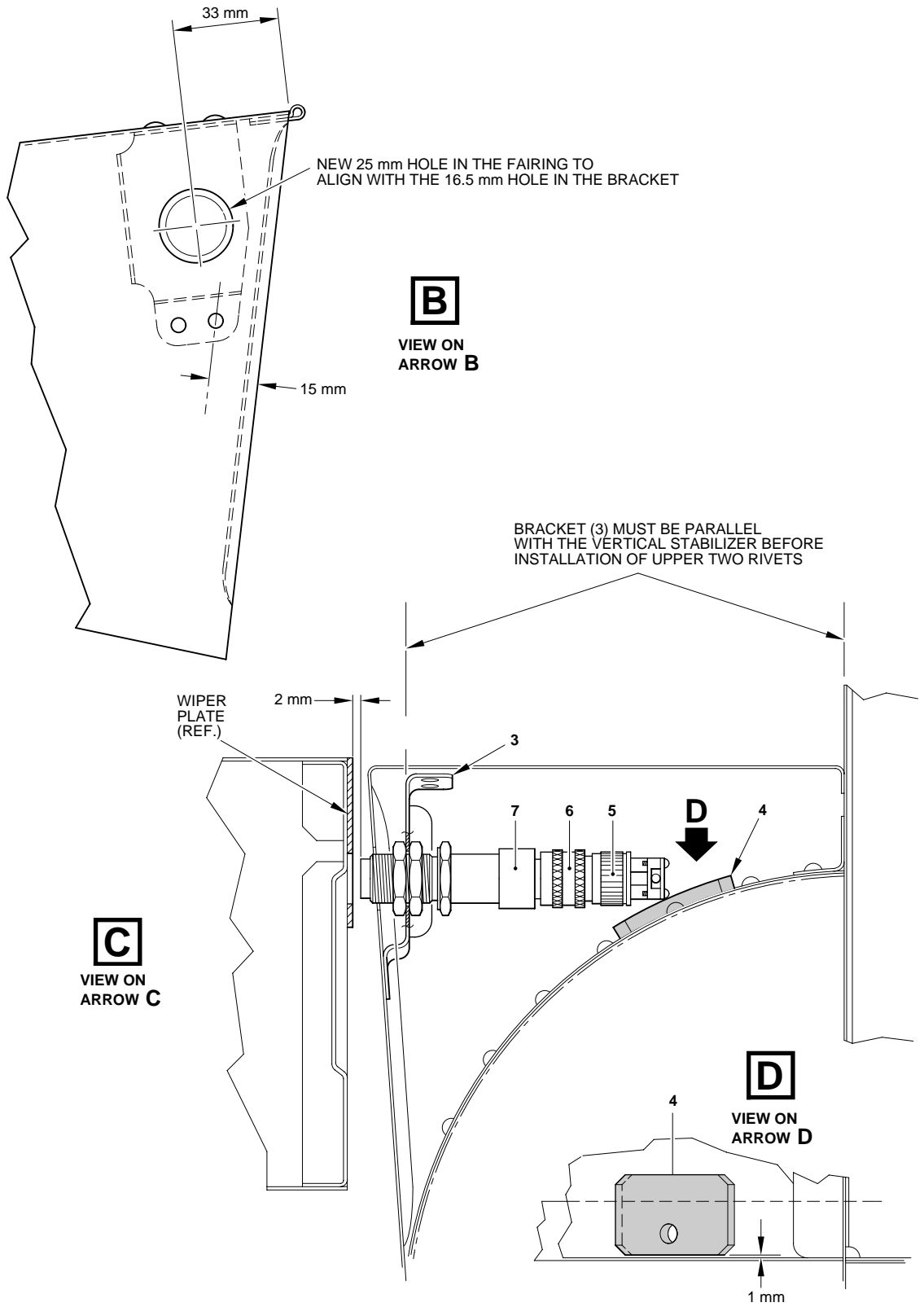
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SB 757

Proximity Switch S100 Installation  
 Figure 2 (Sheet 1 of 2)

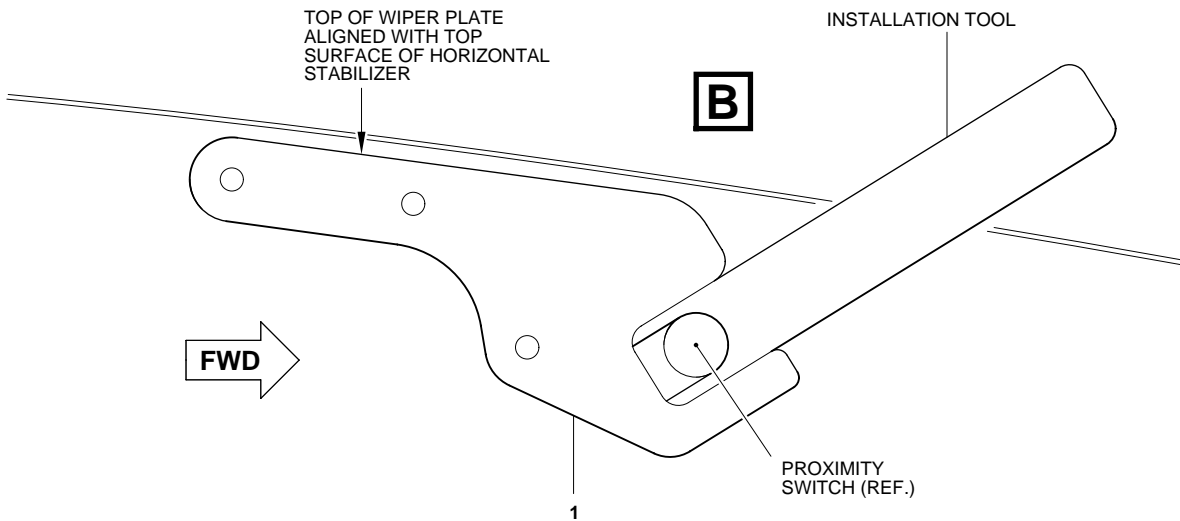
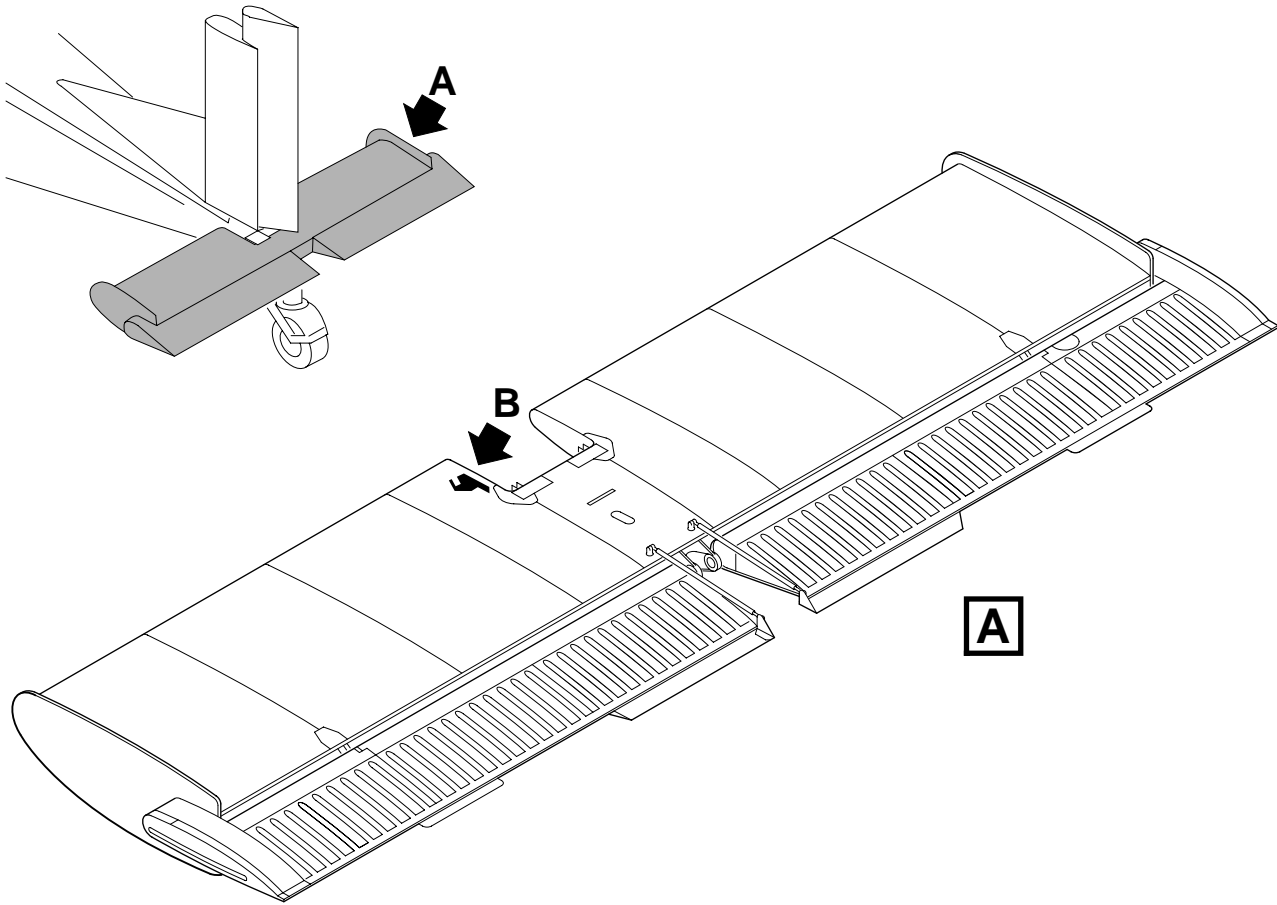
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Proximity Switch S100 Installation  
Figure 2 (Sheet 2 of 2)

SB 778

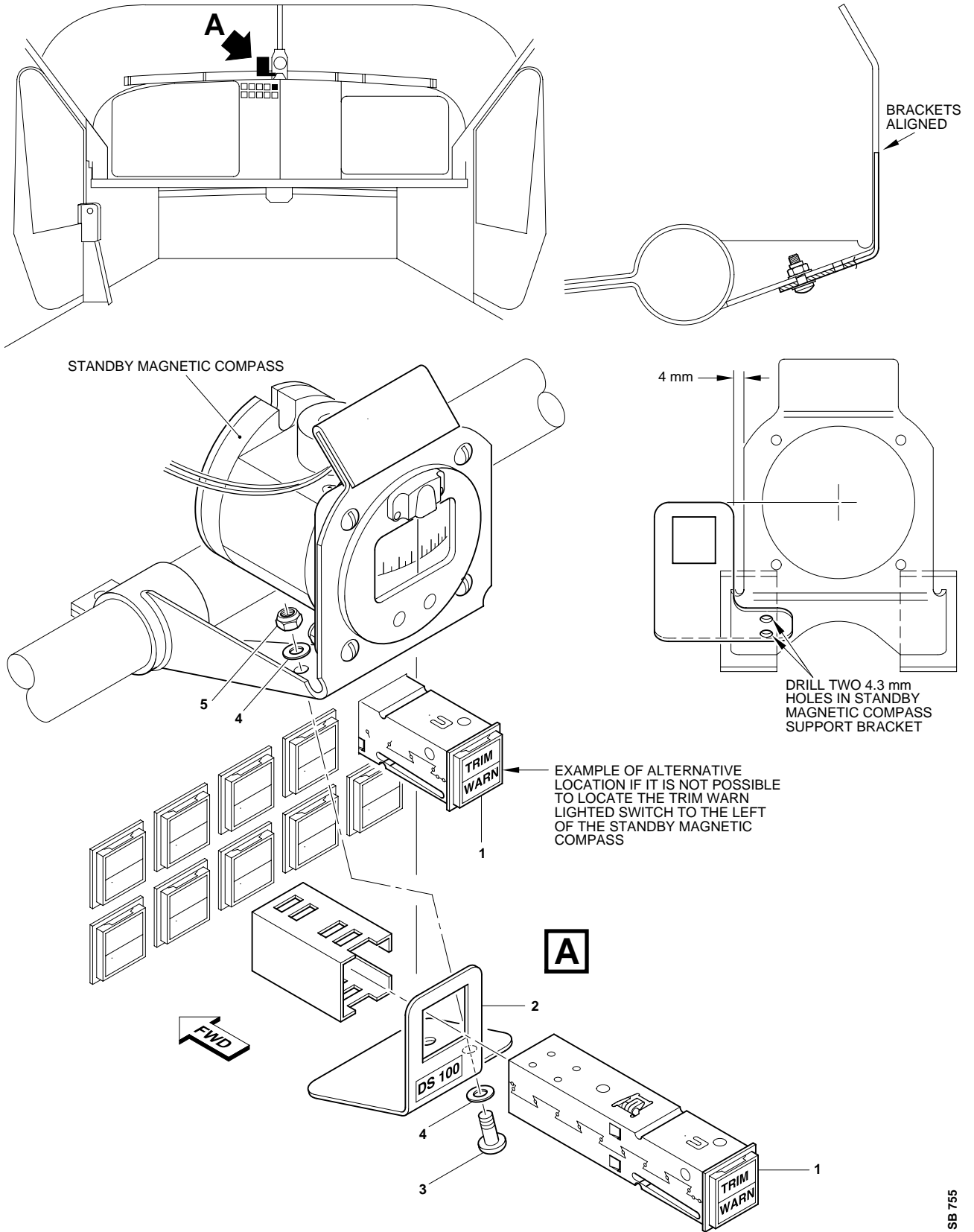
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Wiper Plate Installation  
Figure 3

SB 777

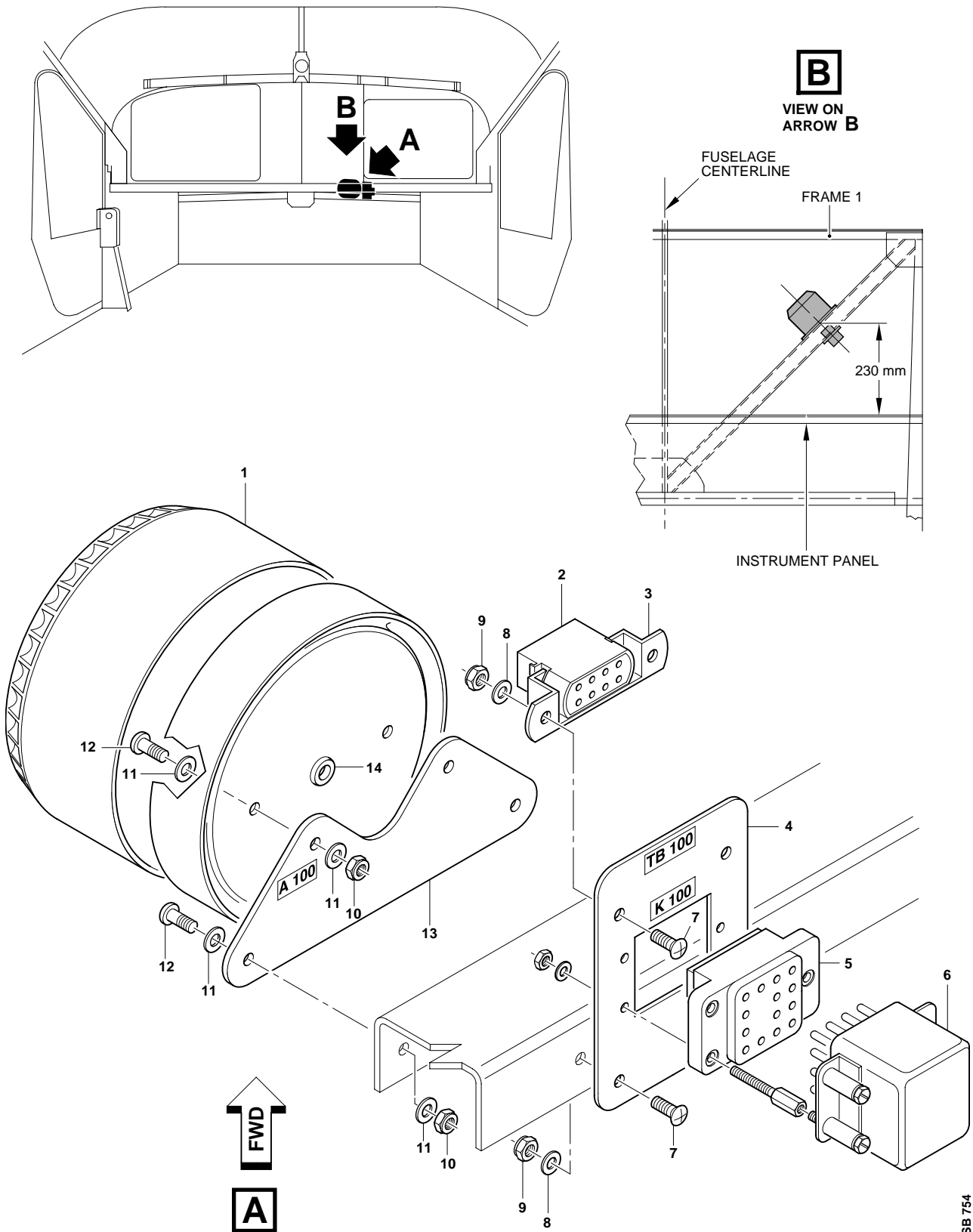
# PILATUS PC-6 SERVICE BULLETIN



Lighted Switch (Warning Annunciator) DS100 Installation  
Figure 4

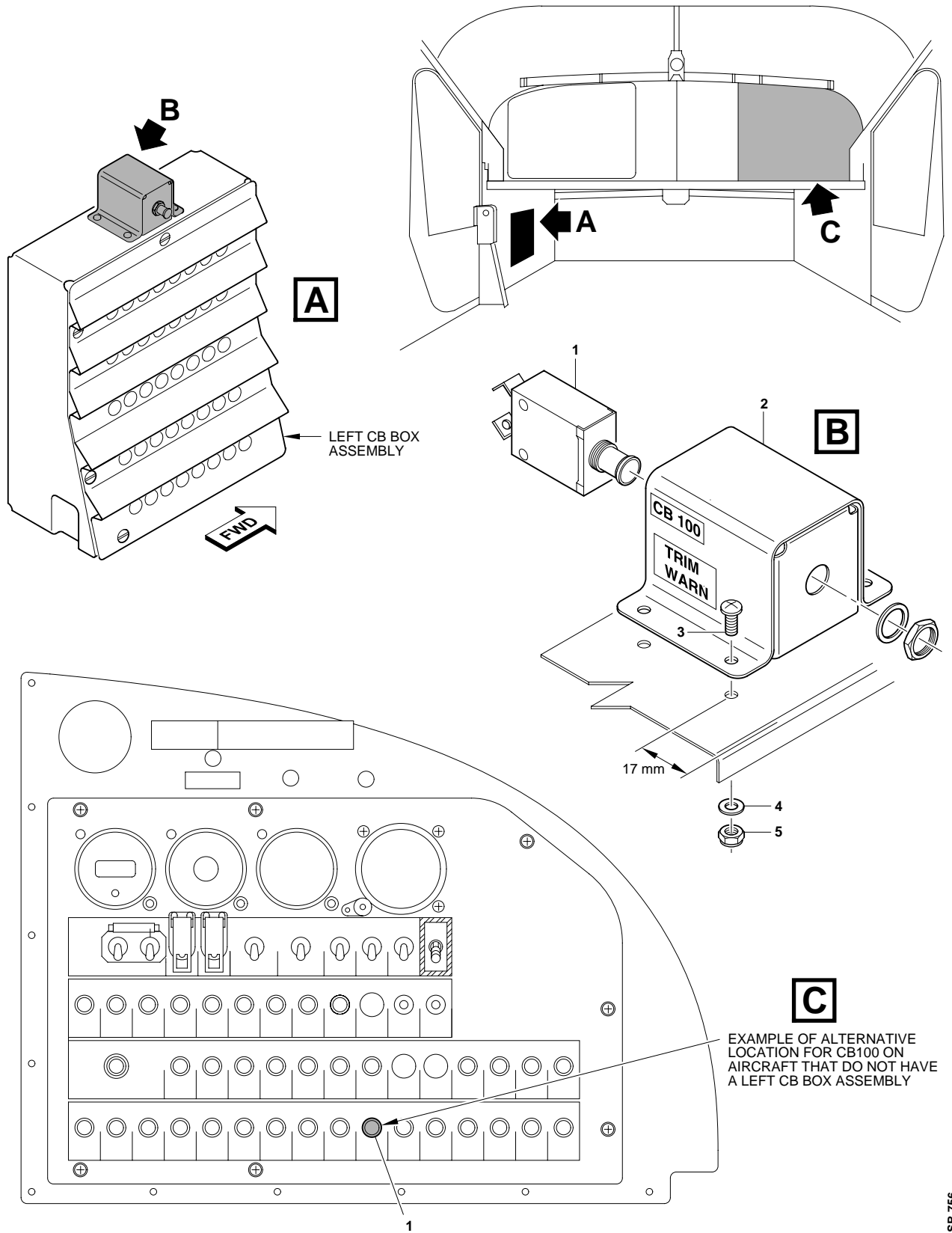
SB 755

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Warning Tone Generator A100, Terminal Block TB100 and Relay K100 Installation  
Figure 5

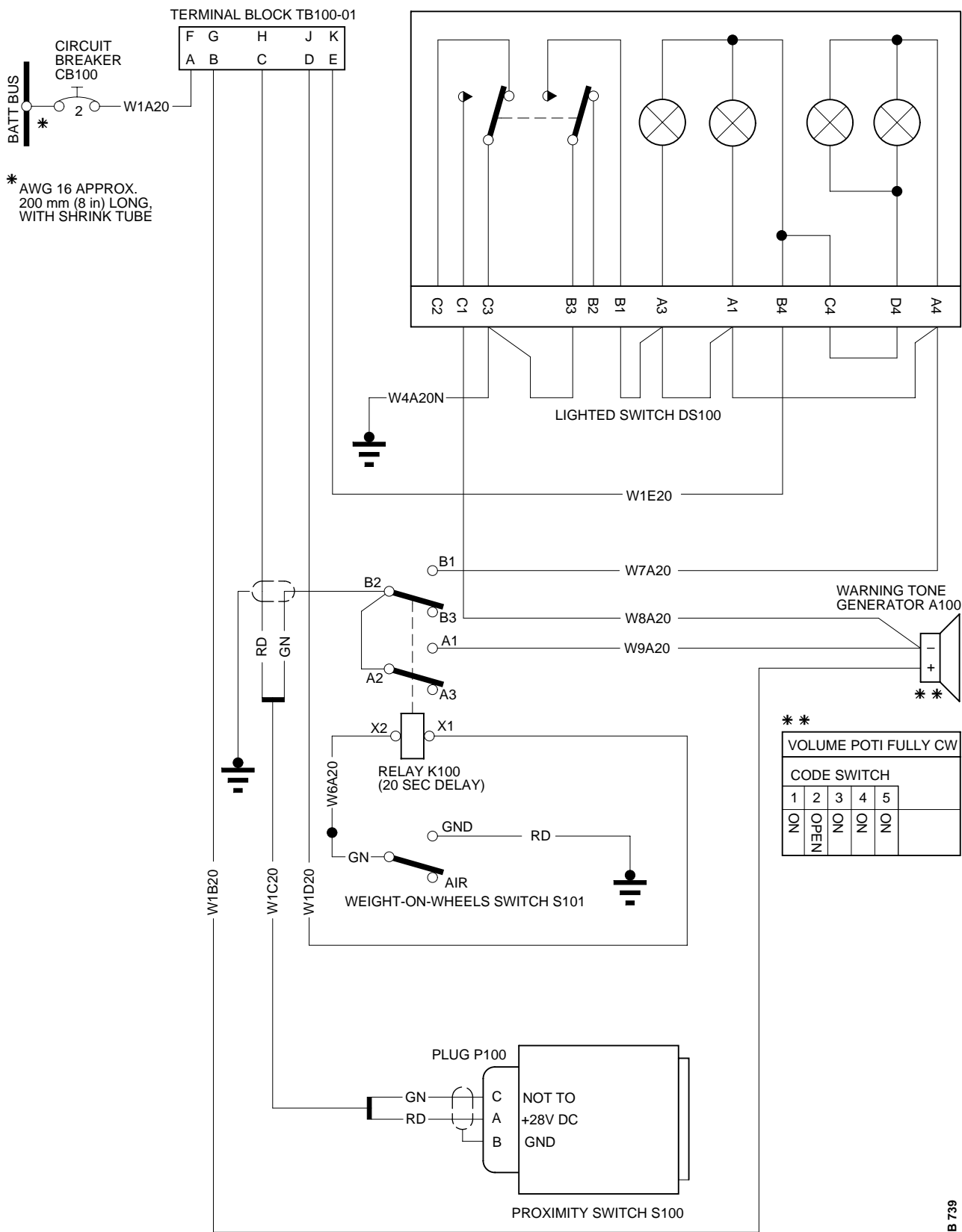
# PILATUS PC-6 SERVICE BULLETIN



CB Box and CB100 Installation  
Figure 6

SB 756

# PILATUS PC-6 SERVICE BULLETIN

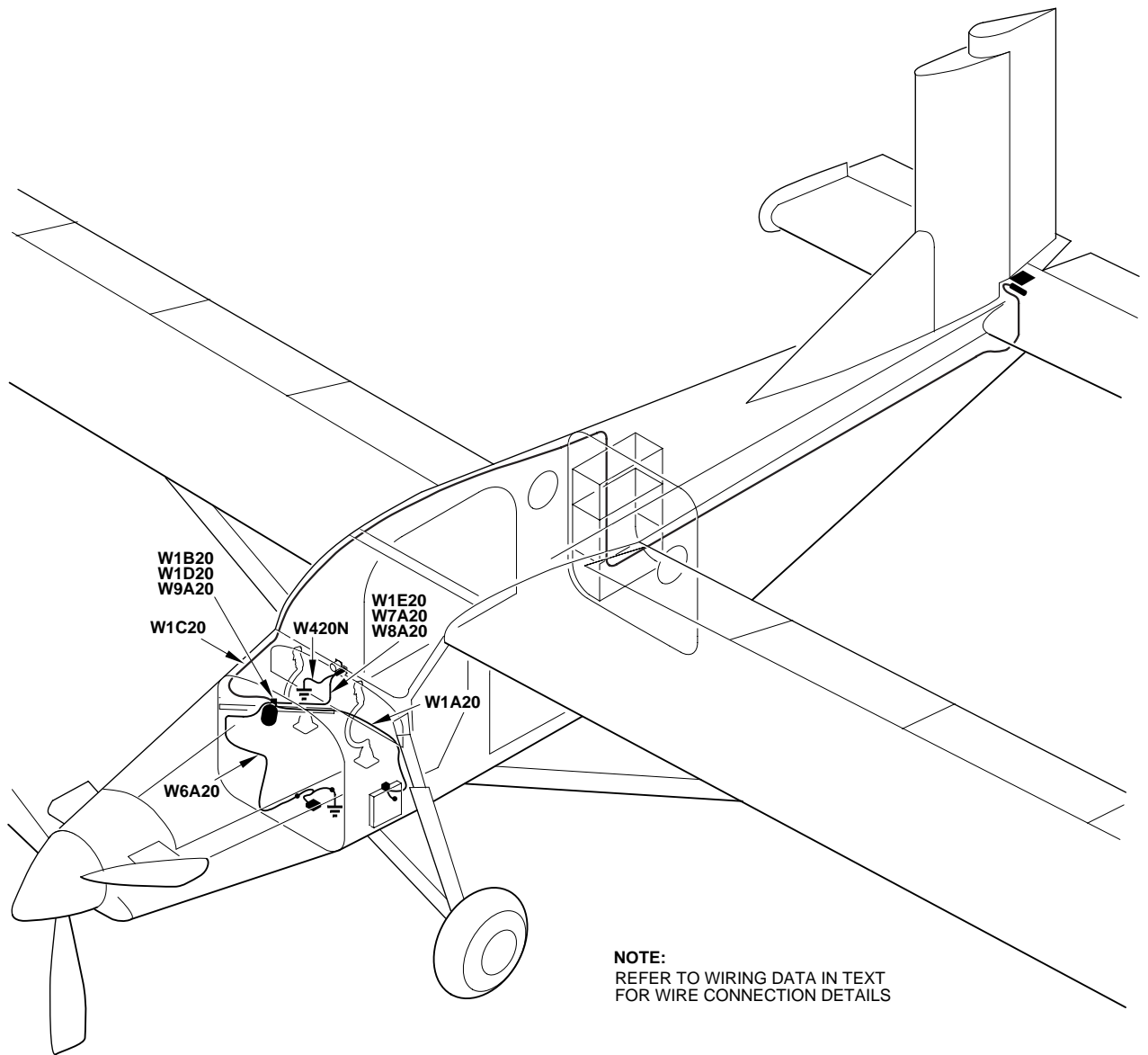


SB 739

Horizontal Stabilizer Trim Warning System - Electrical Schematic and Wiring Data  
Figure 7



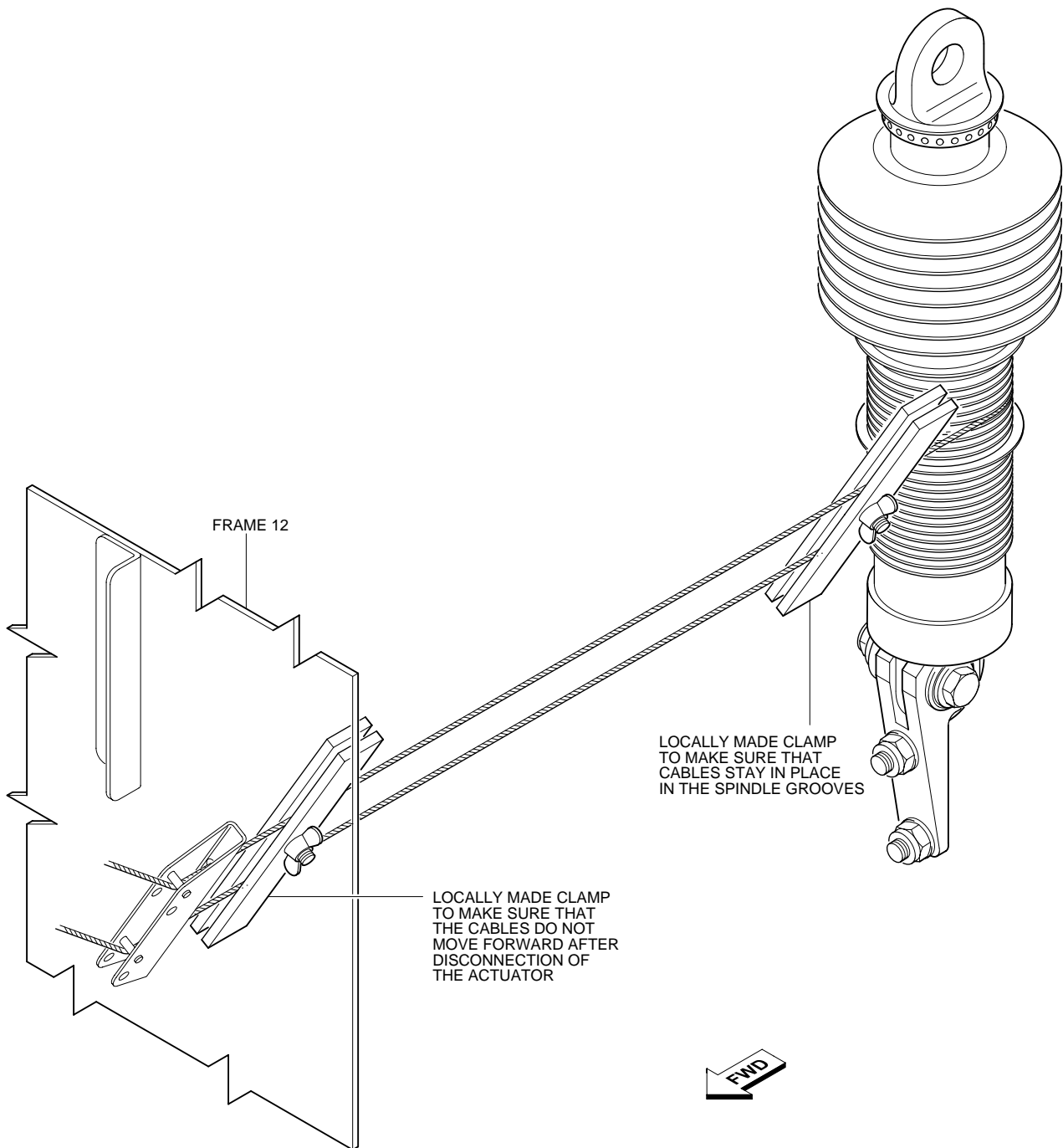
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Horizontal Stabilizer Trim Warning System - General Wiring Overview

SB 753

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CR 774

Aircraft with Mechanical Actuator for Horizontal Stabilizer Trim - Recommended Cable Clamps  
Figure 9