

CHAP. 2 AIRFRAME S.P. 117A A.L. 4 SHEET 1 OF 5	SERVICING PROCEDURE F53	BAC F53 & T55 (SA) 5A3A Section 1 2nd Edition
Air-Ventilated Suit And Anti-G System Check		AFSC 42251
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.		TIME EST
SPECIAL TOOLS AND EQUIPMENT		ASSOCIATED PROCEDURES
Air supply trolley (4G/4272). Tyre inflation rig (4G/1050542). Gauge (quantity 2) 0-15lbf/in <sup>2</sup> . (4G/5809). PEC Adapter (Locally manufactured).		
NOTE: In this servicing procedure if the radar head is removed or incomplete, the pressure pipe must be disconnected and blanked off at a point between the forward pressure bulkhead (Frame 6) and the radar head system reducing valve.		
<u>42251</u>		
1. PREPARATION		
1.1	Test point for air-ventilated suit and anti-g system (access panel 26S (right)).	(i) Remove blank. (ii) Connect tyre inflation rig (4G/1050542).
1.2	Air supply trolley.	Connect to tyre inflation rig.
1.3	Radar bullet pressurization test point (Forward equipment bay FR 5 (left)).	Ensure blank fitted.
2. AIR-VENTILATED SUIT SYSTEM TEST		
2.1	Tyre inflation rig at test point (Access panel 26S (right)).	Set to deliver 30 lbf/in <sup>2</sup> .
2.2	PEC test adapter.	Fit to seat.
2.3	Air-ventilated suit flow controller (Right console).	(i) Operate control sleeve. (ii) Ensure air flow at PEC adapter responds to selection.
2.4	Tyre inflation rig (4G/1050542).	Shut off air supply.
2.5	PEC test adapter.	Connect an O to 15 lbf/in <sup>2</sup> pressure gauge (4G/5809).
Continued Overleaf		
SERVICING PROCEDURE INSPECTION STAGES DO NOT EXCLUDE ADDITIONAL INSPECTION STAGES INCORPORATED AS NECESSARY IN MAINTENANCE CERTIFICATION DOCUMENTS		

CHAP 2 AIRFRAME SP 117A AL 4 SHEET 2 OF 5	SERVICING PROCEDURE F53	BAC F53 & T55 (SA) 5A3A Section 1 2nd Edition
-------------------------------------------------	----------------------------	-----------------------------------------------------

Safety and Servicing Notes are to be complied with throughout the work detailed on this card.

42251

2. AIR-VENTILATED SUIT SYSTEM TEST (Contd)

2.6 Air-ventilated suit flow controller. Set to fully open.

2.7 Tyre inflation rig (4G/1050542). (i) Turn on air supply. (ii) Adjust delivery pressure to 20 lbf/in<sup>2</sup>.

2.8 PEC test adapter gauge. Ensure indication between 5 and 7 lbf/in<sup>2</sup>.

NOTE: Sub-item 2.9 must be carried out simultaneously with sub-item 2.10.

2.9 Tyre inflation rig (4G/1050542). Adjust delivery pressure to 40, 60 and 80 lbf/in<sup>2</sup> in turn.

2.10 PEC test adapter gauge. Ensure indicating between 5 and 7 lbf/in<sup>2</sup>.

2.11 Tyre inflation rig (4G/1050542). Shut off air supply.

2.12 Air-ventilated suit datum vent pipe (Located on pressure bulkhead behind left fuse box cover and under cockpit longeron). Blank off.

NOTE: Sub-item 2.13 must be carried out simultaneously with sub-item 2.14.

2.13 Tyre inflation rig (4G/1050542). (i) Turn on air supply. (ii) Adjust delivery pressure to 20 lbf/in<sup>2</sup>.

2.14 PEC test adapter gauge. Ensure not reading in excess of 13 lbf/in<sup>2</sup>.

NOTE: Sub-item 2.15 must be carried out simultaneously with sub-item 2.16.

2.15 Tyre inflation rig (4G/1050542). Adjust delivery pressure to 40, 60 and 80 lbf/in<sup>2</sup> in turn.

Continued

CHAP. 2 AIRFRAME	SERVICING PROCEDURE	BAC F53 & T55 (SA)
S.P. 117A A.L. 4	F53	5A3A Section 1
SHEET 3 OF 5		2nd Edition

Safety and Servicing Notes are to be complied with throughout the work detailed on this card.

42251

2. AIR-VENTILATED SUIT SYSTEM TEST (Contd)

2.16 PEC test adapter gauge. Ensure not reading in excess of 13 lbf/in<sup>2</sup>.

2.17 Air-ventilated suit datum vent pipe. Remove blank.

2.18 Water separator and heat exchanger drains (No.2 Engine intake duct upper skin between FR 15 and 16). Ensure air is issuing from drains.

2.19 Tyre inflation rig (4G/1050542). Shut off air supply.

2.20 Air-ventilated suit flow controller. Shut off.

3. ANTI-G SYSTEM TEST

3.1 Anti-G shut off valve. Ensure closed.

3.2 PEC test adapter. Connect 0 to 15 lbf/in<sup>2</sup> gauge (4G/5809).

3.3 Tyre inflation rig (4G/1050542). (i) Turn on air supply. (ii) Adjust delivery pressure to 20 lbf/in<sup>2</sup>.

3.4 PEC test adapter gauge. Ensure indicating zero.

NOTE: Sub-item 3.5 must be carried out simultaneously with sub-item 3.6.

3.5 Tyre inflation rig (4G/1050542). Adjust delivery pressure to 40, 60 and 80 lbf/in<sup>2</sup> in turn.

3.6 PEC test adapter gauge. Ensure indication remains at zero.

3.7 Tyre inflation rig (4G/1050542). Adjust delivery pressure to 20 lbf/in<sup>2</sup>.

3.8 Anti-G valve control. Set to ON.

3.9 Anti-G valve test button. Press.

Continued Overleaf

CHAP 2 AIRFRAME SP 117A AL 4 SHEET 4 OF 5	SERVICING PROCEDURE F53	BAC F53 & T55 (SA) 5A3A Section 1 2nd Edition
-------------------------------------------------	----------------------------	-----------------------------------------------------

Safety and Servicing Notes are to be complied with throughout the work detailed on this card.

42251

3. ANTI-G SYSTEM TEST (Contd)

NOTE: The pressure indicated at sub-item 3.10 will be directly related to the force applied at sub-item 3.9.

3.10 PEC test adapter gauge. Ensure indication does not exceed 10.5 lbf/in<sup>2</sup>.

NOTE: Sub-item 3.11 must be carried out simultaneously with sub-item 3.12.

3.11 Anti-G valve test button. Release.

3.12 PEC test adapter gauge. Ensure indicating zero.

3.13 Tyre inflation rig (4G/1050542). Adjust delivery pressure to 40, 60 and 80 lbf/in<sup>2</sup> in turn and repeat sub-item 3.9 to 3.12 inclusive at each pressure.

3.14 Tyre inflation rig (4G/1050542). Ensure delivery pressure is reading 80 lbf/in<sup>2</sup>.

3.15 Anti-G valve test button. Press sufficiently hard to open relief valve at anti-g valve outlet.

NOTE: Force required on test button will be approximately 9 lbs.

3.16 PEC test adapter gauge. Ensure gauge reading is not in excess of 10.5 lbf/in<sup>2</sup>.

NOTE: Sub-item 3.17 must be carried out simultaneously with sub-item 3.18.

3.17 Anti-G valve test button. Release.

3.18 PEC test adapter gauge. Ensure indicating zero.

3.19 Tyre inflation rig (4G/1050542). Turn off air supply.

Continued

CHAP 2 AIRFRAME	SERVICING PROCEDURE	BAC F53 & T55 (SA)
SP 117A AL 4	F53	5A3A Section 1
SHEET 5 OF 5		2nd Edition

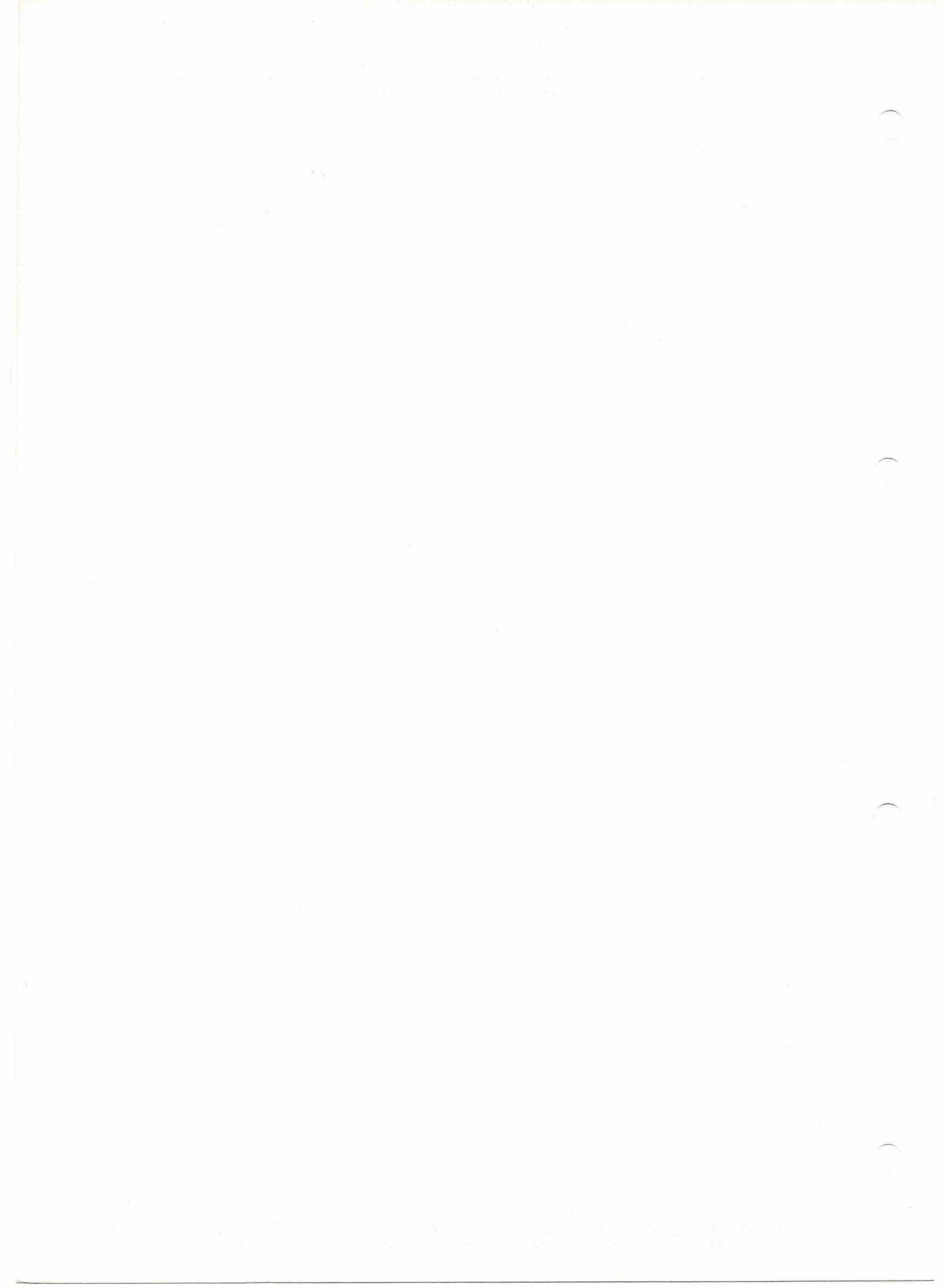
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.

42251

4. COMPLETION

- 4.1 Gauges. Remove.
- 4.2 PEC adapter. Remove.
- 4.3 Air supply trolley. Remove.
- 4.4 Test point  
(Access panel 26S (right)). (i) Fit blank.  
(ii) Wirelock.
- 4.5 Anti-G system. Ensure set to OFF.
- 4.6 Access panels. Refit.

NOTE: All wirelocking to be of 22 SWG stainless steel unless otherwise stated.



This file was downloaded  
from the RTFM Library.

Link: [www.scottbouch.com/rtfm](http://www.scottbouch.com/rtfm)

Please see site for usage terms,  
and more aircraft documents.