

CHAP 1 AIRFRAME	SERVICING PROCEDURE	BAC F53 & T55 (SA)
SP 61 AL 8	F53 T55	5A3A Section 1
SHEET 1 OF 6		2nd Edition
Main Undercarriage Shock Absorber- Replacement	AFSC	TIME EST
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.	43151 43171 42152 42172	
<b>SPECIAL TOOLS AND EQUIPMENT</b>		<b>ASSOCIATED PROCEDURES</b>
Adapter (4Q/2663).		SP1(AF)
Adapter (4Q/4230859).		SP2(AF)
Pillar jack 15 Ton (4Q/1045837).		SP3(AF)
Bracket (26DK/1503984) - (Post Mod.GE 8141/SA).		SP105(AF)
Extractor (26DK/95708).		SP106(AF)
Locally manufactured axle thread protector.		SP604(AF)
Jacking bracket (Main U/C) (26DK/95695).		
Trolley jack (16C/4247).		
Drift Pt No MT1316.		
Adapter (4G/1050581).		
Gauge (0-3500lbf/in <sup>2</sup> ) (4G/4420034).		
Gauge (0-600 lbf/in <sup>2</sup> ) (4G/4420032).		
Tyre inflation rig (4G/1050542).		
Brake unit alignment rig (27G/6804).		
Spanner (26DK/95082).		
Torque wrench (1C/1202795).		
Torque wrench (1C/1202793).		
Socket (1L/9106390).		
<u>43151 / 42152</u>		
<b>1. PREPARATION</b>		
1.1 Brake control lever.	Ensure set to OFF.	
1.2 Aircraft.	(i) Raise on jacks until wheels are clear of ground. (ii) Trestle at Frame 59.	
1.3 Main wheel.	Remove (SP 1 (AF)).	
1.4 Brake unit.	Remove (SP 2 (AF)).	
1.5 Maxaret unit.	(i) Remove (SP 3 (AF)). (ii) Note number of shims.	
<b>2. REMOVAL</b>		
2.1 Shock absorber.	(i) Release air pressure. (ii) Remove air charging valve, tab washer and filter sleeve.	
2.2 Swivel coupling.	Disconnect at lower end, support and secure to leg main fitting.	
Continued Overleaf		

CHAP 1 AIRFRAME  
SP 61 AL 8  
SHEET 2 OF 6

SERVICING PROCEDURE

F53

T55

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.

43151/42152

2. REMOVAL (Contd)

2.3 Toggle link.

- (i) Disconnect at bottom if replacement half fork is to be fitted.
- (ii) Disconnect at centre if same half fork is to be fitted.

2.4 Lower bearing retainer.

- (i) Remove circlip.
- (ii) Remove retaining ring.

2.5 Shock absorber.

Close by at least 6 in using jack 16C/4247 and adapter 4G/1050581.

2.6 Leg main fitting.

- (i) Remove the quantity 4 segments by using a drift (Pt No MT1316) to tap the lower bearing into the main housing.
- (ii) Move bearing to bottom of sliding tube.

2.7 Half fork.

Lower as far as it will go.

2.8 Undercarriage ground lock.

Remove appropriate ground lock.

2.9 Undercarriage selector.

- (i) Select UP.
- (ii) Using hand pump, raise the leg to half way up position.

2.10 Leg main fitting.

- (i) Support the half fork.
- (ii) Remove the quantity 2 shock absorber retaining bolts from the top of the leg main fitting.

2.11 Half fork, sliding tube and shock absorber assembly.

Lower from leg main fitting.

3. FITTING

3.1 Shock absorber.

Fully extend.

3.2 Shock absorber.

- (i) Grease segment groove (XG-287).
- (ii) Prior to fit ensure charging valve aperture faces outward.

Continued

CHAP 1 AIRFRAME SP 61 AL 9 SHEET 3 OF 6	SERVICING PROCEDURE F53 T55	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.

43151/42152

3. FITTING (Contd)

3.2 Shock absorber (contd). (iii) Slide the shock absorber, sliding tube abd half fork assembly into the leg main fitting. Align the locating bolt holes in the leg main fitting with the grooves in the top of the shock absorber.  
 (iv) Fit and wire lock the quantity 2 locating bolts.  
 (v) Screw the filter sleeve (new bonded seal) into the shock absorber and wire lock.

3.3 Dust excluder (Com Mod 29). (i) Examine.  
 (ii) Renew if required (5F/9133801).

43171/42172 (INSPECTOR)

4. INSPECTION STAGE

4.1 Locating bolts. Check for correct assembly and locking.

43151/42152

5. FITTING

5.1 Undercarriage selector and indicator lamps. (i) Select undercarriage DOWN.  
 (ii) Lower undercarriage using hand pump.  
 (iii) Ensure F53 quantity 3; T55 quantity 6, greens lit.  
 (iv) Fit U/C ground lock.

5.2 Half fork and sliding tube. (i) Close leg by at least six (6) in using a trolley jack 16C/4247.  
 (ii) Move lower bearing bush UP the sliding tube (using drift Pt.No.MT1316) until it is possible to place the quantity 4 segments in position.  
 (iii) Coat segments with grease XG-287.  
 (iv) Fit segments into leg main fitting position.

Continued Overleaf

CHAP 1 AIRFRAME	SERVICING PROCEDURE	BAC F53 & T55 (SA)
SP 61 AL 8	F53	5A3A Section 1
SHEET 4 OF 6		2nd Edition

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

43151/42152

5. FITTING (Contd)

5.2 Half fork and sliding tube (contd) (v) Drop bearing bush to hold segments in place.

43171/42171 (INSPECTOR)

6. INSPECTION STAGE

6.1 Segment inspection. Check for correct assembly.

43151/42152

7. FITTING

7.1 Shock absorber. Fully extend.

7.2 Leg main fitting. (i) Screw ring nut onto lower bearing and tighten.  
(ii) Fit circlip on ring nut.

7.3 Toggle link. (i) Re-assemble.  
(ii) Check and adjust end float (SP 35 (AF) and SP 36 (AF)).

8. REPLENISHMENT

8.1 Shock absorber. Replenish (SP 604 (AF)).

43151/42152

9. FITTING

9.1 Main wheel, brake unit and maxeret unit assembly. (i) Brake unit, refit (SP 2 (AF)).  
(ii) Main wheel, refit (SP 1 (AF)).  
(iii) Maxeret unit, fit (SP 3 (AF)).

10. CHECK

10.1 Mainwheel tracking. Check wheel tracking.  
Ref. Servicing manual Book 1, Sect.2, Chap.4 Fig.5 (Airframe symmetry).

PRINTED IN ENGLAND

Continued

CHAP 1 AIRFRAME	SERVICING PROCEDURE	BAC F53 & T55 (SA)
SP 61 A L 9	F53 T55	5A3A Section 1
SHEET 5 OF 6		2nd Edition

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

43171/42172 (INSPECTOR)

11. INSPECTION STAGE

11.1 Inspect. For correct assembly and locking of  
 (a) Maxaret unit.  
 (b) Brake unit.  
 (c) Axle nut.

43151/42152

12. TESTING

12.1 Wheelbrakes. Test (SP 105 (AF)).  
 12.2 Undercarriage. Test (SP 106 (AF)).

43171/42172 (INSPECTOR)

13. INDEPENDENT CHECKS

NOTE: The independent checks detailed in this item are to ensure that the undercarriage Hydel selector slide valve is correctly positioned and must be carried out personally by specialist inspectors who have not been directly concerned with the operations detailed in this Servicing Procedure.

13.1 Undercarriage selector. Ensure set to DOWN.  
 13.2 Services system. Pressurise to 3000 lbf/in<sup>2</sup>.  
 13.3 Undercarriage indicator lamps (green) (F53:  
 quantity 3, T55:  
 quantity 6). Ensure lit.  
 13.4 Aircraft job card. Endorse as follows:  
 Certified I have personally carried out the independent checks detailed in Servicing Procedures BAC F53 & T55 (SA) 5A3A Section 1 SP 61 (AF).

43151/42152

14. COMPLETION

14.1 Pitot/Static test set. (i) Exhaust pressure  
 (ii) Remove.

Continued Overleaf

CHAP. 1 AIRFRAME	SERVICING PROCEDURE	BAC F53 & T55 (SA)
S.P. 61 A.L. 8	F53 T55	5A3A Section 1
SHEET 6 OF 6		2nd Edition

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

43151/42152

14. COMPLETION (Contd)

14.2 Services system. Exhaust pressure by operating brake lever.

14.3 Battery isolating switch. Set to OFF.

14.4 Slave battery. Remove.

14.5 Aircraft. Lower to ground.

14.6 Ground equipment. Remove from the vicinity of the aircraft.

14.7 Hydraulic test trolley. (i) Disconnect.  
(ii) Remove.

14.8 Hydraulic pump quick release connexions (Services access panel 45P (left)). (i) Reconnect to aircraft.  
(ii) Wire lock.

14.9 Hydraulic reservoirs. Replenish (SP 603 (AF)).

14.10 Access panels. Refit.

14.11 Canopy seal guards. Remove.

14.12 Armament safety break. (i) Remove flag and lanyard from stowage.  
(ii) Reconnect lanyard.

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

PRINTED IN ENGLAND

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.

