

CHAP 1 AIRFRAME SP 35 AL 4 SHEET 1 OF 4	SERVICING PROCEDURE F53 T55	BAC F53 & T55 (SA) 5A3A Section 1 2nd Edition
Main Undercarriage Toggle Centre Pin - Replacement		AFSC 43151 42172 43171 42152
Safety and Servicing Notes are to be complied with throughout the work detailed on this card.		TIME EST
SPECIAL TOOLS AND EQUIPMENT		ASSOCIATED PROCEDURES
Torque Wrench (1C/1207077).		SP106 (AF) 426 (AF)
<u>43151</u>		
1. PREPARATION		
1.1 Aircraft.	(i) Raise on jacks until all wheels are clear of the ground. (ii) Trestle at frame 59.	
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2. REMOVAL		
2.1 Grease nipple.	Remove.	
2.2 Pivot pin (See Fig.1).	(i) Remove split pin and collar. (ii) Remove shackle pin. (iii) Remove domed nut and washer. (iv) Withdraw pivot pin, spherical seats (quantity 2) washer and shims (note thickness of shims).	
NOTE: If laminated shims have been distorted or displaced, it is an indication that the joint may have been overstressed and the shims are to be replaced with new items.		
3. WEAR CHECK		
3.1 Top and bottom toggles.	Carry out wear checks (SP 426 (AF)).	
4. REFITTING		
4.1 Pivot Pin.	(i) Refit pivot pin with spherical seats (2 off) washer and shims (See Fig.1). (ii) Refit domed nut and washer. (iii) Refit grease nipple.	

Continued Overleaf

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4. REFITTING (Contd)

4.2 Toggle assembly centre pivot pin. Lubricate (XG-287).

4.3 Domed nut. Torque tighten to 170 PLUS OR MINUS 10 lbf in. (using torque wrench 1C/1207077).

NOTE: The torque loading of 170 PLUS OR MINUS 10 lbf in. is achieved under lubricated conditions.

4.4 Toggle centre joint.

- (i) Check gap between flat face of centre spherical seat and washer (See Fig.1).
- (ii) Minimum gap is 0.005 in.
Maximum gap is 0.011 in.

NOTE: 1 The gap must be checked with two pairs of feeler gauges positioned diametrically opposite each other, to avoid false readings due to movement of spherical seat creating a wedge-gap effect.

NOTE: 2 Where the gap is above the limit, fit 0.010 in. thick solid shim, up to a maximum of three, to bring the gap within limits. (Shims are located around pivot pin shoulder outside diameter).

NOTE: 3 Where the gap is below the limit (normally only when a new pivot pin is fitted) it is permitted to machine off the flat face of the centre spherical seat to obtain a gap of 0.0005 to 0.0002 flat face is to be square with bore of seat within 0.0005 in per in. run.

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

4.5 Pivot pin. Drill 5/32 in. diameter hole.

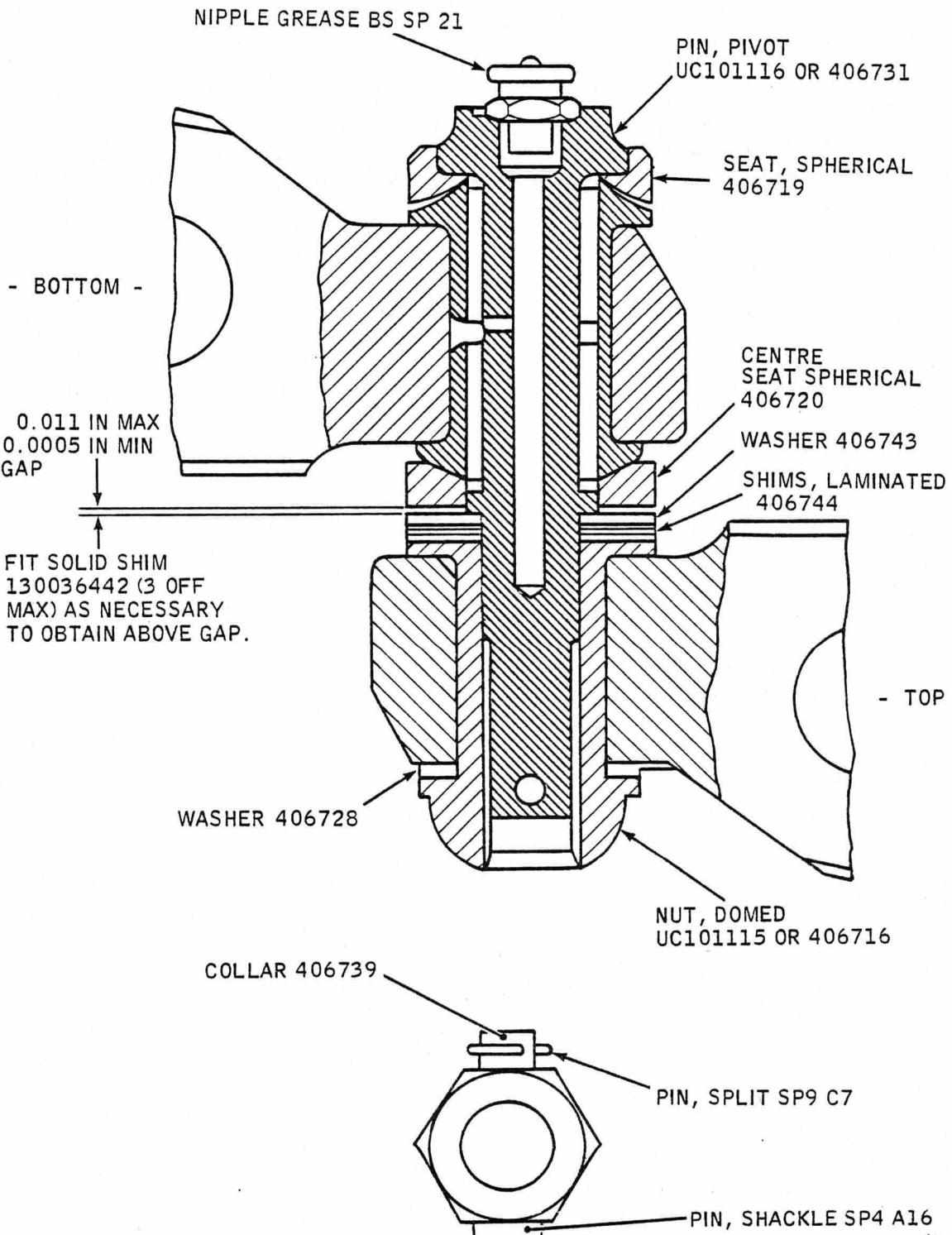
NOTE: On new pivot pins, when domed nut has been correctly torque-tightened, drill a 5/32 in. diameter hole through the nut and pivot pin using the original holes in the nut in order to enable fitment of the shackle pin.

4.6 Pivot pin nut.

- (i) Fit shackle pin and collar.
- (ii) Fit split pin.

Continued

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SECTIONED VIEW OF TOGGLE JOINT
FIGURE 1

Continued Overleaf

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4. REFITTING (Contd)

NOTE: It is necessary to ensure that the shackle pin is at an angle of 45 degrees to the centre line of the upper toggle, with the collar and split pin uppermost and nearest the undercarriage leg, to avoid a foul on retraction.

4.7 Toggle centre joint. Lubricate (XG-287).

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5. TESTING

5.1 Undercarriage. Carry out retraction test (SP 106 (AF)).

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6. INSPECTION STAGE

6.1 Inspect main undercarriage Independent check of:-
toggle centre pin.
(i) Assembly and locking.
(ii) Function.

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7. COMPLETION

7.1 Aircraft. Lower off jacks and trestles.

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