

FOR OFFICIAL USE ONLYAIR FORCE HEAD-QUARTERSBEAUFIGHTER ORDER NO. 6TECHNICAL ORDERAPPLICATION: All aircraft.
CLASSIFICATION: Class 2.TAIL WHEEL LOCK - INSTALLATION.Introduction.

1. This order introduces a tailwheel lock to prevent tail-wheel shimmy during take off and landing.

Supply.

2. The following parts will be required to complete one modification set:-

Item No.	Ident No.	Part No.	Description	No. off pera/c.	Stores Class.
1	A19/20024	A3894/2	Lever	1	C
2	A19/20025	A3894/3	Knob for lever	2	C
3	A19/20026	A3894/4	Bush for lever	1	C
4	A19/20027	A3894/5	Bracket for pulley	1	C
5	A19/20028	A3894/6	Spacer for pulley	1	C
6	A19/20029	A3894/7	Brackets for pulleys	6	C
7	A19/20030	A3894/8	Bracket for pulley (com.)	1	C
8	A19/20031	A3894/9	Quadrant	1	C
9	A19/20032	A3894/10	Angle bracket for tension spring (cord.)	2	C
10	A19/20033	A3894/12	Cable guard	1	C
11	A19/20034	A3894/13	Angle stiffener	1	C
12	A19/20035	A3894/14	Link plates (aft.)	2	C
13	A19/20036	A3894/15	Fibre fairlead (fwd.)	1	C
14	A19/20037	A3894/16	Fibre fairlead (aft.)	2	C
15	A19/20038	A3894/17	Link plates (fwd.)	2	C
16	A19/20039	E2-34954	Actuating lever assembly	1	C
17	A19/20040	A-3930	Jack cross bar assembly	1	C
18	A19/20023	A3929	Tail strut complete	1	A
19	A19/20041	E2-34964	Adjusting screws	2	C
20	H28C/4051	AGS702/1	Tension rod	1	C
21	H28C/4063	AGS702/13	Thimbles	2	C
22	H28B/1201	AGS166/1	Split pins	4	C
23	H128F/30140	B276	Pulleys	5	C
24	H28B/812	SP4/A2	Pins	4	C
25	H28/5233	AGS673/C	Locknut R.H.	1	C
26	H28/5220	AGS673/CL	Locknut L.H.	1	C
27	H28/549	BSI/SP3/412	Fork R.H.	1	C
28	H28/550	BSI.SP3/4121	Fork L.H.	1	C
29	H28C/3495	BSI.5W2/2	5 cwt. cable	35 ft.	C
30	H28/5	BSI.5A1/B4	4 B.A. bolts 0.4" long	21	C
31	H28/27	BSI.5A1/B10	4 B.A. bolts 1.0" long	7	C
32	H28/18	BSI.5A1/C8	2 B.A. bolts 0.8" long	4	C
33	H28/93	BSI.5A1/C22	2 B.A. bolts 2.2" long	2	C
34	H28/25565	BSI.5A1/C12	2 B.A. bolts 1.2" long	4	C
35	H28/5851	C.P.I.	2 B.A. stop nuts	14	C
36	H28/5850	B.P.I.	4 B.A. stop nuts	24	C
37	H28/5896	B.G.I.	4 B.A. anchor nuts	7	C
38	T32C/1	BSI.4F/16	Shock absorber cord	46"	C
39	H28/5457	AGS897/D	Ferrules	4	C

3. Items Nos. 1 to 19 inclusive will be forwarded to No. 1 Aircraft Depot from the contractors (Collins and Keogh Pty. Ltd.).

4. Items Nos. 1 to 39 inclusive are to be made up into complete modification sets by No. 1 Aircraft Depot and forwarded to units according to the number of aircraft requiring modification.

5. Redundant parts are to be returned to No.1 Aircraft Depot by the quickest means of transport available.

6. No.1 Aircraft Depot is to forward unmodified tail-wheel struts received from units to the contractor (Collins & Keogh Pty.Ltd.) for modification and fitment of tailwheel locks.

Method of Incorporation.

7. This modification should be carried out only at aircraft depots, aircraft parks, or at units holding suitable equipment.

8. Full details of the installation are shown on Drawings A-3894, A-3894/1 and A-3930 and the following is a brief summary of the sequence of operations:-

- (a) Trestle the rear end of the aircraft and remove all fairings and cowlings to give access to the rudder and elevator control cables and the tailwheel retracting mechanism.
- (b) Drill the control cable fairleads as shown on the drawing at section F-F.

NOTES.-

- (i) Use space between Nos.2 and 3 cable runs.
- (ii) Drill 5/32" diam. for "locking control" cable.
- (iii) Counter drill the metal brackets supporting the fairleads 3/16" diam. to prevent the cable coming into direct contact with the metal.
- (c) Remove the existing map case in the front cockpit and install the control quadrant (Item No.8) 7 $\frac{1}{8}$ inches aft from station 40.75 inches in the space obtained.
- (d) Fit cable guard (Item No.10) using pivot bolt on quadrant and attaching to cockpit floor as shown in the drawing.
- (e) Fit fibre fairlead (Item No.13) under cockpit floor.
- (f) Locate front pulley bracket in its correct position in relation to the holes already drilled in the fairleads.
- (g) Fit remaining guide pulleys as shown in detail on the drawings A-3894 and A-3894/1.
- (h) Fit angle stiffener (Item No.11) to rear bulkhead.
- (i) Disconnect and remove tail wheel strut and tail wheel retracting mechanism complete from the aircraft.
- (j) Assemble the modified tail wheel strut (Item No.15) to the retracting mechanism using jack cross bar assembly (Item No.17) and adjusting screws (Item No.19).

NOTE.- The jack cross bar is to be drilled and reamed at this assembly and is to be positioned relative to the operating jack as shown on drawing A-3930.

- (k) Assemble the actuating lever (Item No.16) to the cross shaft and fit the shock absorber cords (Item No.38).
- (l) Re-assemble the complete tail wheel strut and mechanism in the aircraft and check operation of the retracting mechanism.
- (m) Cut to length, splice and fit control cable and adjust to ensure correct operation of the lock.
- (n) Prepare the aircraft for flight test.

9. The map case removed in paragraph 8(c) is to be fitted to the panel immediately in rear of the pilot's seat.

Effect on Weight and Balance.

10. The weight and balance of the aircraft are not affected by this modification.

References: Files R.A.A.F. 9/32/36 and 150/4/2493.

Drawings: A-3894, A-3894/1 and A-3930 supplied separately to squadron, area and group engineer officers, aircraft depots, aircraft repair units and repair and salvage units.

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