

Windscreen and canopy (fig. 3)

6. The windscreen and canopy are constructed as a unit and the assembly is then secured to the fuselage by special bolts. The glass windscreen and the Perspex canopy panels are mounted in a light-alloy framework. The aft portion of the canopy has a light-alloy centre panel.

Canopy hatch (fig. 3, 4 and 5)

7. The canopy hatch consists of a light-alloy framework in which are mounted the Perspex panels. The hatch, which is hinged at the rear to the canopy frame, is opened and closed by internal and external interlinked handles, the locking mechanism being illustrated in fig. 4.

8. The hatch is jettisoned in an emergency by pulling out the jettison handle on the instrument panel (Sect. 1, Chap. 3, fig. 1). This handle directly operates a selector valve (Chap. 6) to admit hydraulic pressure to the jettison jack. The jack ram forces up the jettison operating lever and releases the claws holding the beam heel eye-bolt. The piston-rod continues to push the lever upwards, until the roller overrides the cam arm and frees the rear hinges. The movement of the jettison operating lever also releases the latches via the connecting-rods in the hatch centre beam. When the latches and hinges are released, the hatch is carried clear of the aircraft by the slipstream.

9. The hatch is sealed by the automatic locking forward of the air seal operating lever (fig. 4), which actuates the hatch seal valve and so inflates the rubber seal around the periphery of the hatch; the seal retains cabin pressure during flight and gives weather protection when the aircraft is parked.

10. The hatch, after manual opening, is raised to the fully open position by a pneumatic strut, which is actuated by pressing a button on the instrument panel (Sect. 1, Chap. 1, fig. 3), and is automatically locked in this position by the engagement of a spring-loaded plunger in a radial groove in the strut piston. When closing the hatch, its

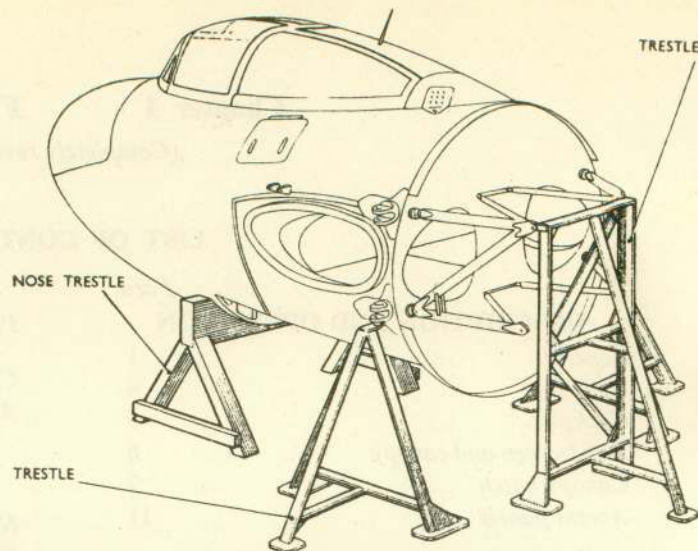


Fig. 1. Fuselage trestling

weight must be supported while the release handle is pulled to disengage the plunger from the piston; the hatch may then be lowered carefully. This strut is retained, if the hatch is jettisoned, by means of a rubber cord. Details of the hatch lifting strut are given in Chap. 7.

Access panels

11. The position and function of the various access panels is illustrated in Sect. 2, Chap. 4. None of the access panels are subject to cabin pressure except the canopy hatch.

SERVICING

Trestling

12. The trestling of the fuselage, after the main planes and engine have been removed, is illustrated in fig. 1.

Protective treatment of external surfaces

13. The processes for the protective treatment of all wooden and metal surfaces are detailed in A.P.2656A, Vol. 1.

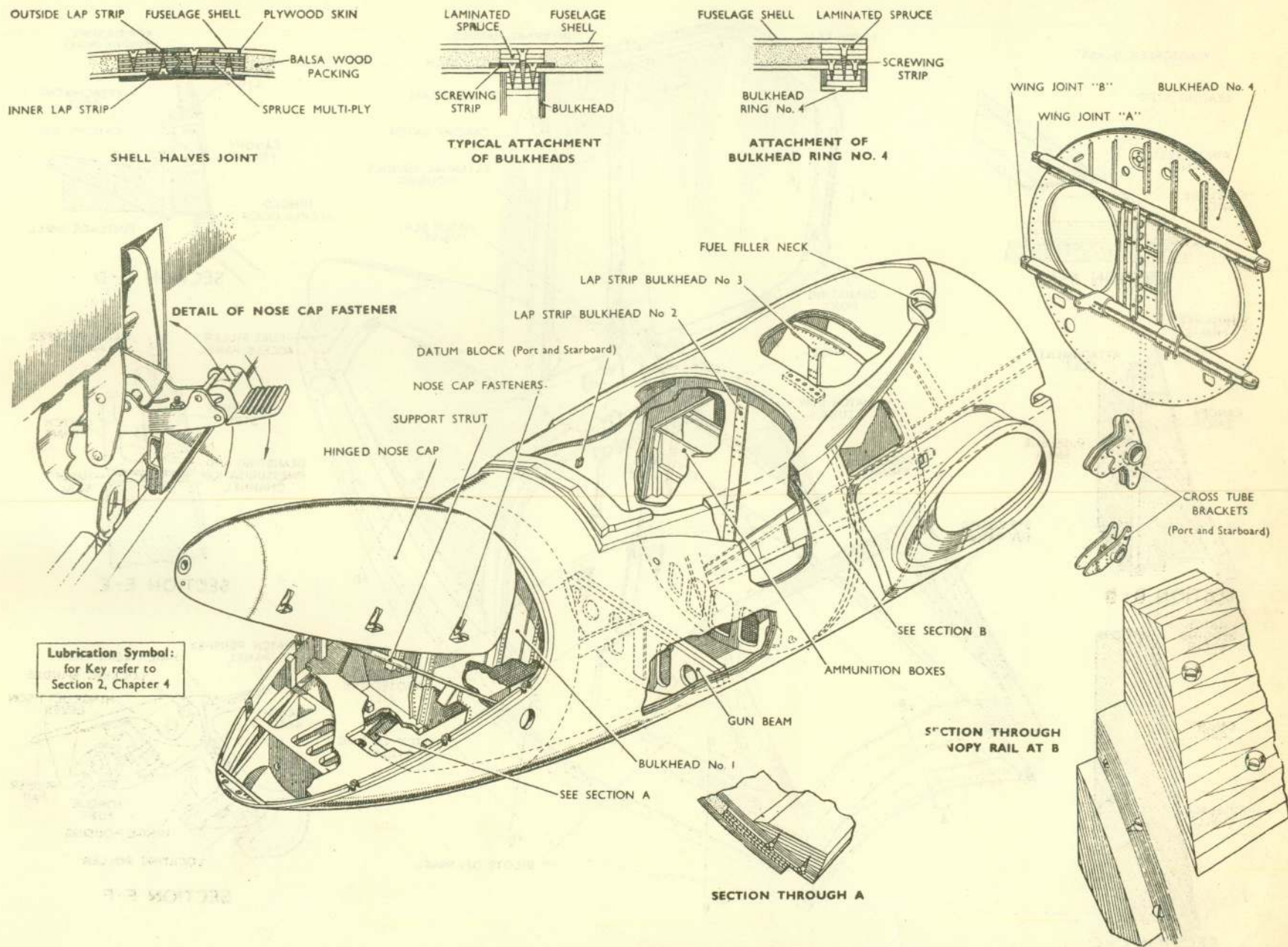
Cockpit sealing process

14. The Bostik sealing process, which is described in A.P.1464B, Vol. 1, is applied to all possible sources of air leakage in the interior of the pressurised cockpit.

Adjustment of the hatch locking mechanism (fig. 4)

15. The following is the procedure for adjusting the hatch locking mechanism:—

- (1) Close the hatch and move the internal and external handles to the closed position.
- (2) Adjust the connecting-rods until the latches engage and disengage fully under the action of either release handle.
- (3) Check that the slide pin in the forward connecting-rod has full travel in the slot of the telescopic connection (Detail 'B') to avoid possible jamming of the hatch.
- (4) Check that the hatch seal inflates correctly; if adjustment of the inflation valve is required refer to Chapter 7.



Lubrication Symbol:
for Key refer to
Section 2, Chapter 4

Fig. 2 Fuselage construction

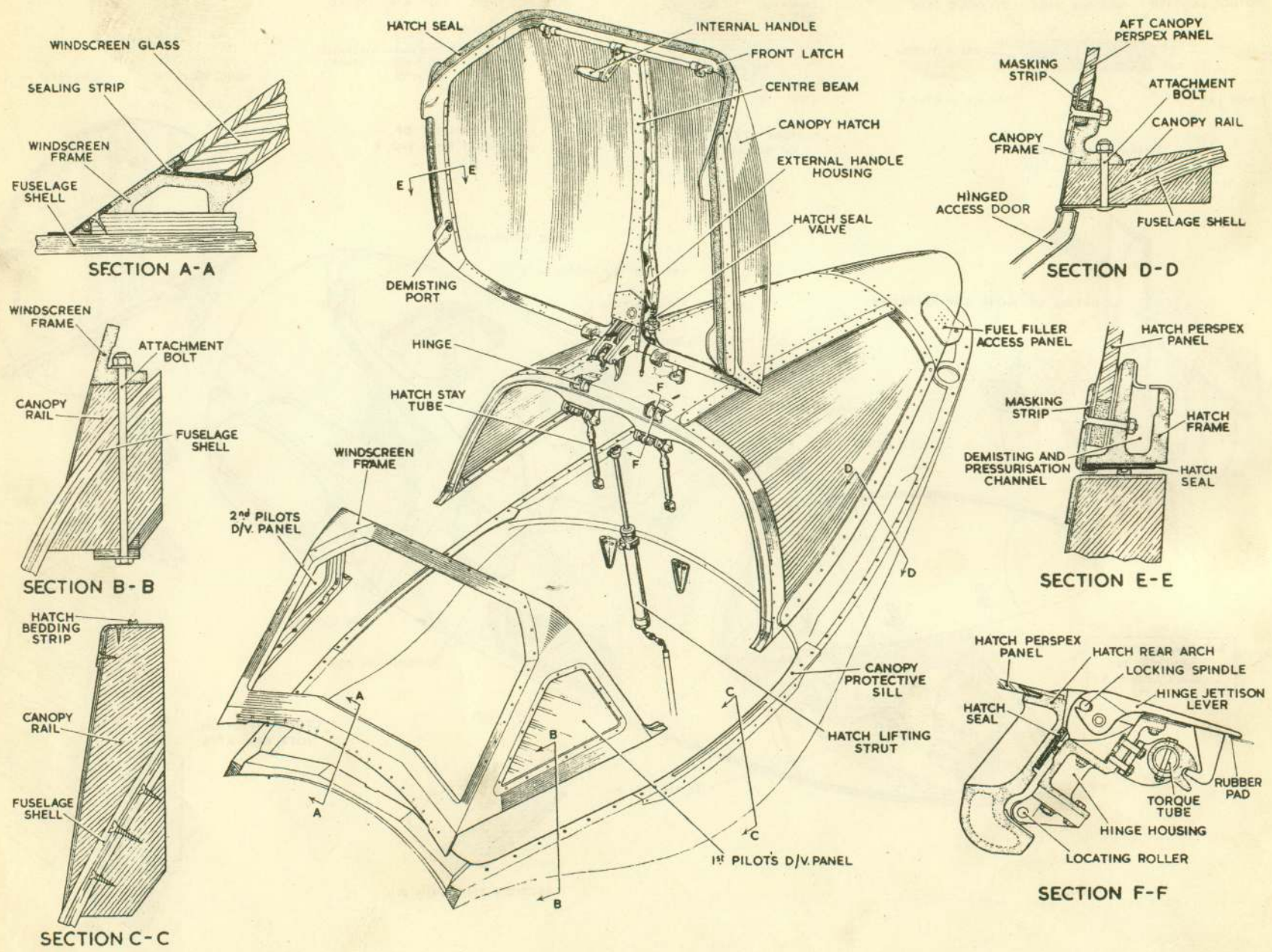


Fig. 3. Canopy

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REMOVAL AND ASSEMBLY

Nose cap

16. To remove the nose cap, proceed as follows:—

- (1) Open the nose cap using a temporary support to hold it in the open position.
- (2) Detach the support strut (*fig. 2*) from the fuselage by removing the $\frac{1}{4}$ in. B.S.F. stiffnut and bolt securing it to the fork end.
- (3) Disconnect the bonding leads from the two nose cap hinges.
- (4) Remove the $\frac{1}{4}$ in. B.S.F. stiffnuts securing the two hinge bolts and withdraw the bolts to remove the nose cap.

Note . . .

Assembly is the reverse of removal.

Canopy hatch

17. The hatch may be removed by employing the jettison procedure or as follows:—

- (1) Unlock and open the hatch fully.
- (2) Disconnect the flexible tube from the seal inflator union.
- (3) Rotate the lifting strut head by means of the stud (*fig. 4*) to release the claws.

(4) Withdraw the Pip pin from the jettison tie-rod.

(5) Remove the hatch and place it on protective material.

18. Assembly is the reverse of removal, noting that, if the Pip pin does not re-engage, the following procedure should be adopted:—

- (1) Pull the jettison handle to free the hinge release arm and insert the Pip pin.
- (2) Return the jettison handle to the OFF position then lock with 26 s.w.g. locking wire.
- (3) Press the roller down until it engages the cam face of the hinge release arm.

Note . . .

Fitment of a replacement hatch is considered a repair and reference should be made to A.P.4099 & 4269, Vol. 2.

Canopy (*fig. 3*)

19. The procedure for removing the canopy is as follows:—

- (1) Disconnect the pneumatic piping, then remove the hatch as described in para. 17.

(2) Withdraw the countersunk bolts securing the front windscreen fairing to the lower windscreen frame.

(3) Withdraw the countersunk bolts securing the side and top masking strips to the windscreen frame and remove the windscreen.

(4) Withdraw the special attachment bolts securing the canopy frame to the fuselage.

(5) Withdraw the countersunk bolts securing the aft portion of the canopy to the canopy rail.

(6) Remove the windscreen and aft portion of the canopy as separate units.

Note . . .

Re-fitting the canopy is considered as a repair and reference should be made to A.P.4099 & 4269, Vol. 2.

Ejection seats

20. The procedure for the removal of the ejection seats is given in Sect. 3, Chap. 11 and A.P.4288C, Vol. 1.

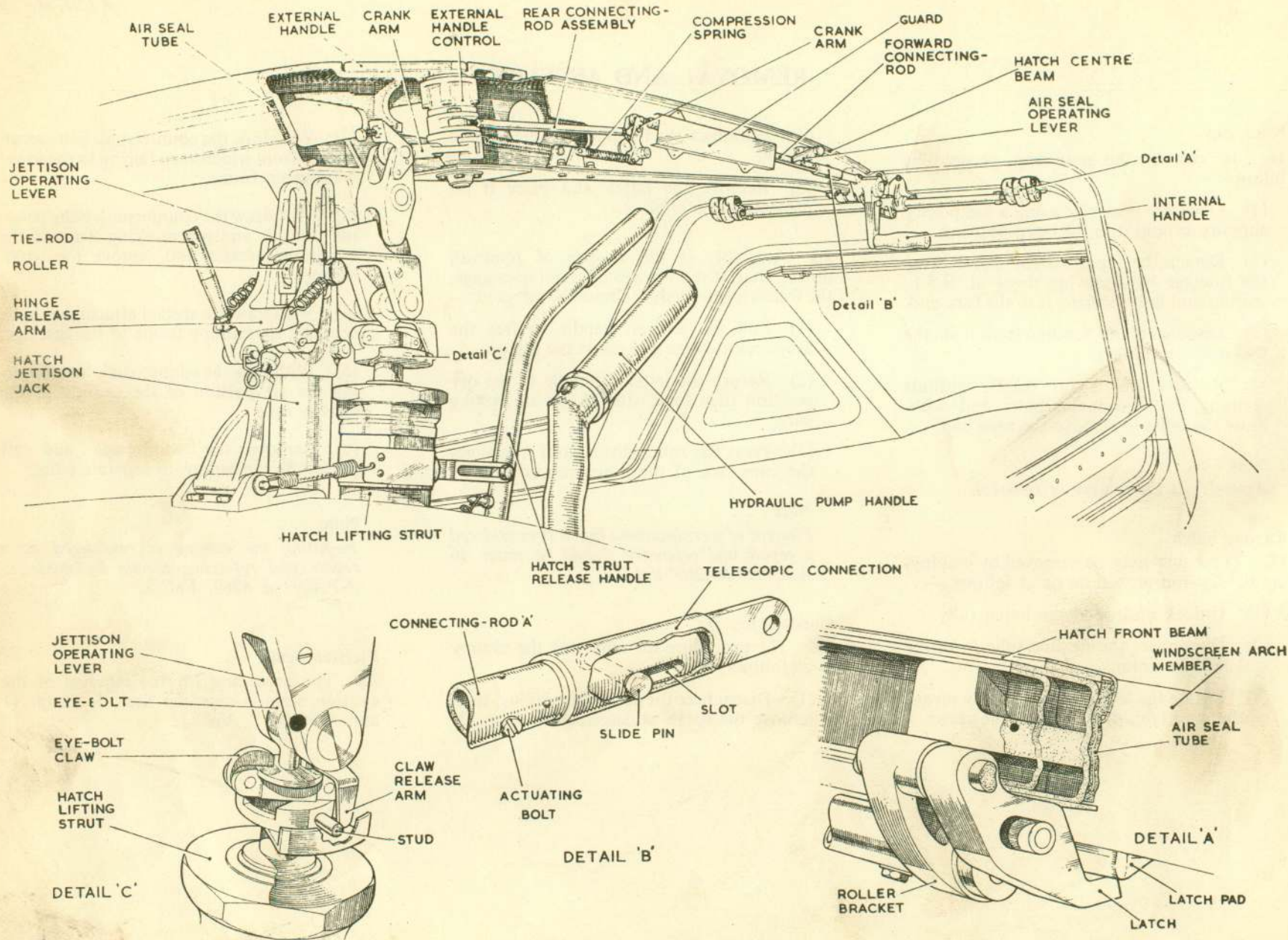


Fig. 4. Hatch locking mechanism

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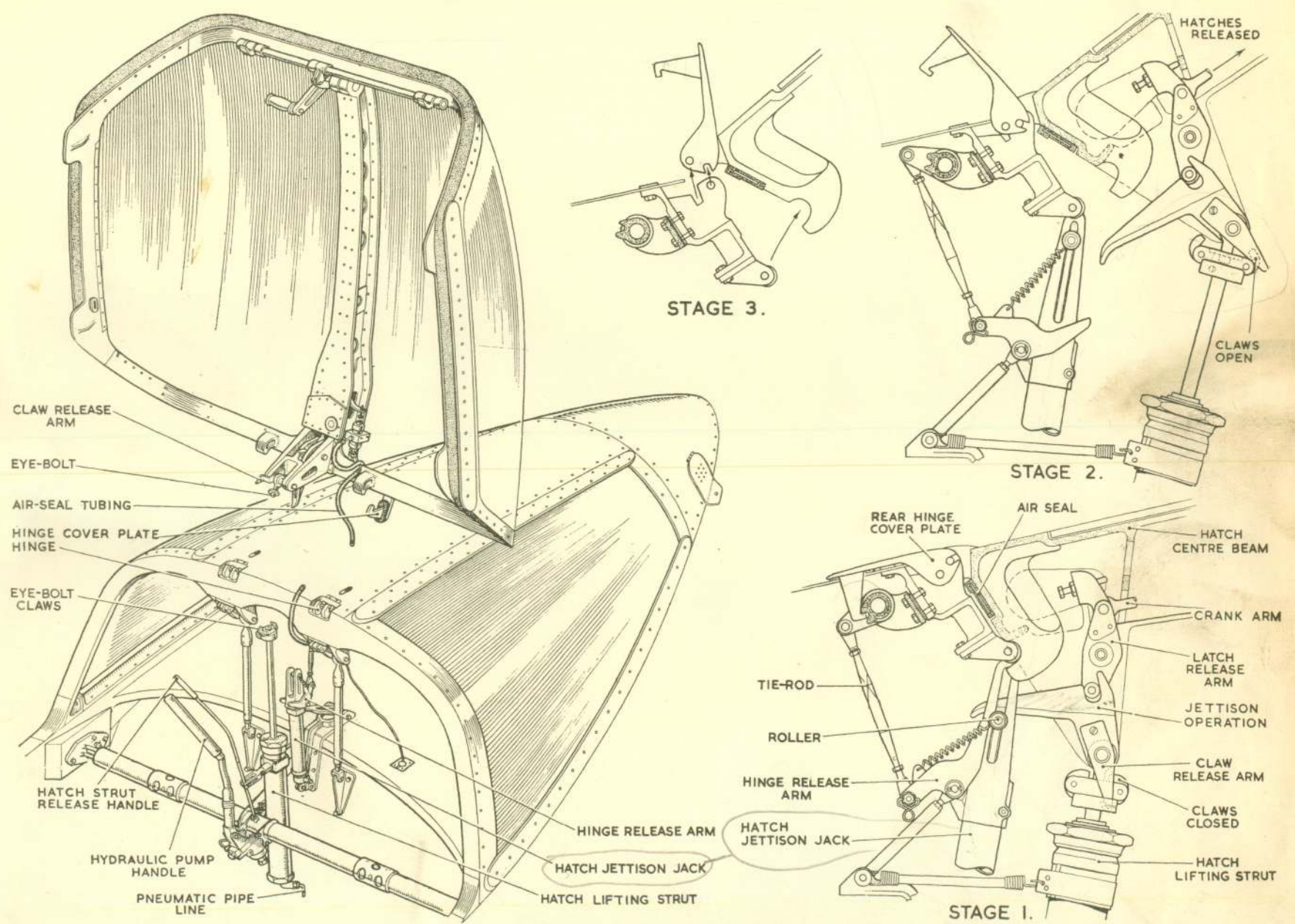


Fig. 5. Hatch jettison mechanism

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