Wing Centre Joint - Leak Testing

AFSC 42450

TIME EST

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

SPECIAL TOOLS AND EQUIPMENT

Nil.

ASSOCIATED PROCEDURES

NOTE: During this Servicing Procedure ensure that attitude of aircraft is such that adequate testing of joint and draining of fluid is accomplished.

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1. PREPARATION

1.1	Top wing centre joint fairing (No.2 engine intake).	Remove.
1.2	Top wing centre joint.	Remove one bolt at a left aft position.
1.3	Wing centre joint overboard drains (See Figure 1).	(i) Place suitable containers underneath to catch drained fluid. (ii) Seal off left drain.

2. TESTING

2.1	Wing centre joint.	Using suitable container begin to slowly transfer 0.5 gallon of AVTUR through bolt hole.
2.2	Wing centre joint right overboard drain.	(i) As soon as AVTUR is observed to be issuing, cease transfer. NOTE: AVTUR should begin to drain out soon after a small quantity has been injected.

Continued Overleaf

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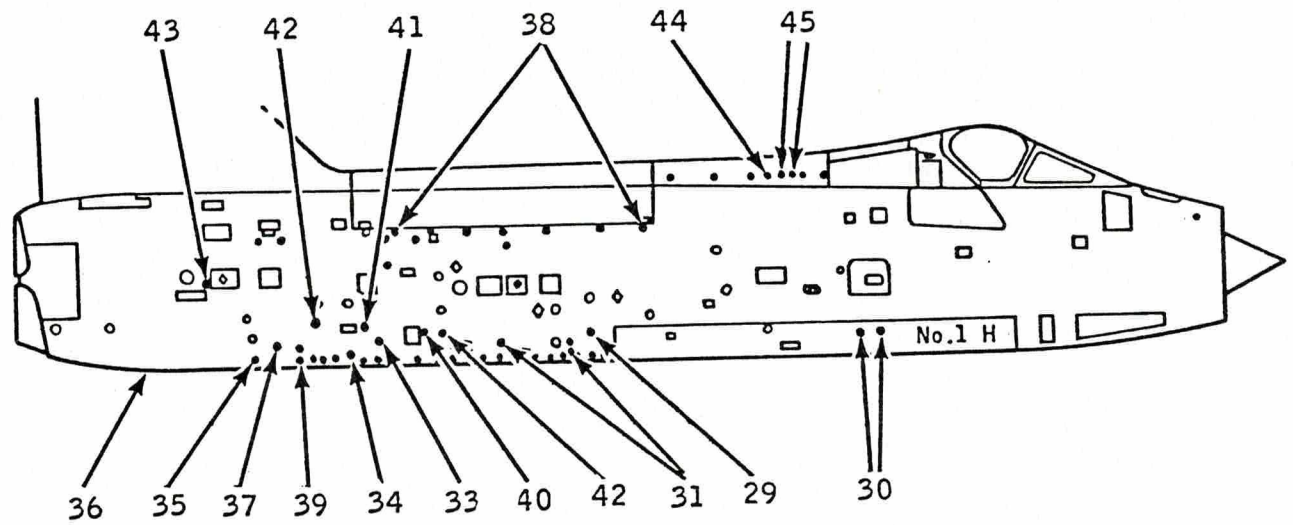
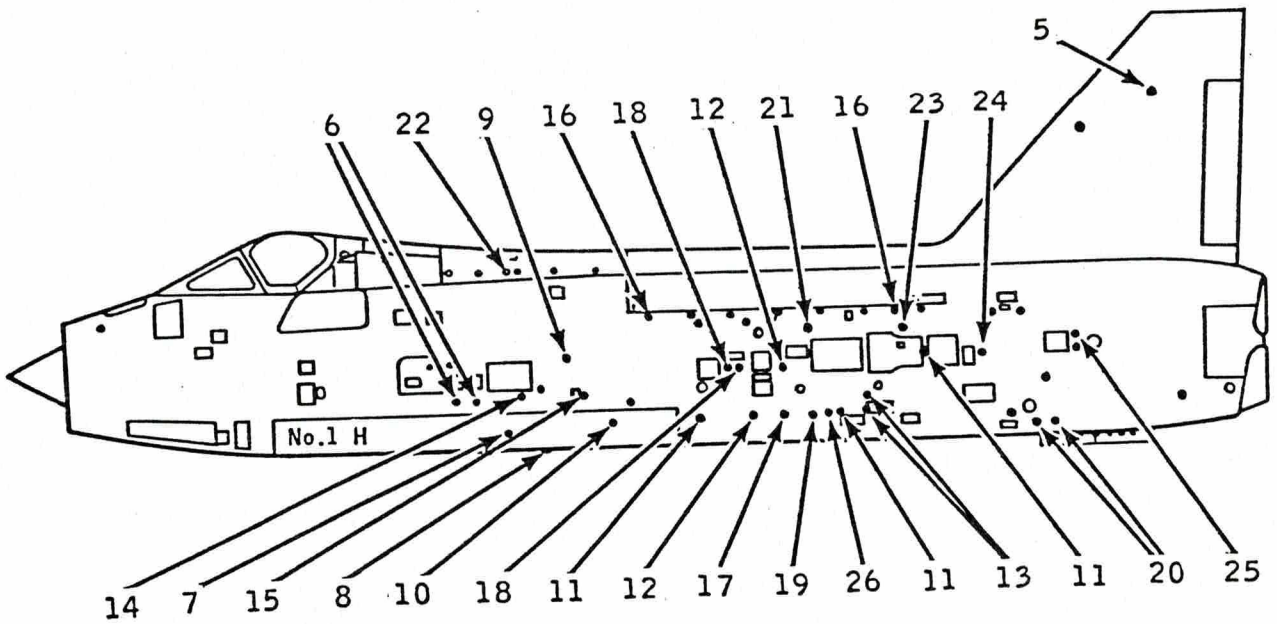


RIGHT



LEFT

DRAINS

FIGURE 1

Continued

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

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1. } Not used.
2.
3.
4.
5.
6. No.1 Reheat Pump Drains.
7. Hydraulic Pump Drain.
8. Combustion Chamber Drain.
9. Centre Section Fuel Box Drain.
10. Longeron Drain.
11. Fuel Drain.
12. Combustion Chamber Drains.
13. No.1 Controls and Services Reservoir Drains.
14. Overboard Drain Wing Centre Joint (Post Mod.4283).
15. Fueldraulic Double Walled Pipe Indicator Drain.
16. Longeron Drains.
17. Fuel Cooled Oil Cooler Drain.
18. No.2 Reheat Pump Drains.
19. Fuel Control Unit Drain.
20. No.1 Jet Pipe Drains.
21. Engine Driven Pump Drain.
22. Left Starter Pump Drain.
23. Ram Air Cooling Water Trap Drain.
24. Air Turbine Gearbox Breather Connexion.
25. AMCU Drains.
26. No.1 Controls Auxiliary Reservoir Vent.
27. Centre Section Fuel Box Drain.
28. Longeron Drain.
29. Fuel Drain.
30. Water Glycol Level Drain.
31. No.2 Engine Bay Drains.
32. No.2 Engine Combustion Bay Drain.
33. No.2 Controls Reservoir Drain.
34. No.2 Engine Exhaust Shrouds Drain.
35. Reheat Jet Pipe Front Drain.
36. No.2 Jet Pipe Drain.
37. Overboard Vent Hydraulic Controls and Services Reservoir Air Relief Valves (Post Mod.4261).
38. Longeron Drains.
39. No.1 Jet Pipe Drains.
40. Overboard Drain Wing Centre Joint.
41. JP Engine Joint Drain.
42. ATDG Cooling Pipe Water Drain.
43. AMCU Drains.
44. Right Starter Pump Drain.
45. Starter Tank Drains.

KEY TO FIGURE 1

Continued Overleaf

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2. TESTING (contd)

2.2	Wing centre joint right overboard drain (contd).	(ii) Collect and measure quantity of drained AVTUR. (iii) Seal-off when draining has ceased.

NOTE: Sub-item 2.3 is applicable only if AVTUR has drained out satisfactorily in Sub-item 2.2.

2.3	Wing centre joint.	Continue to transfer AVTUR through bolt hole until transfer of 1 gallon is complete.

NOTE: Item 3 is applicable only if AVTUR does not drain out after 0.5 gallon has been transferred in Sub-item 2.1.

3. TESTING

3.1	Wing centre joint overboard drain.	Ensure not blocked by loose debris. NOTE: Access to drain pipes banjo bolts at wing spar joint can be achieved by removing heat shields Spar 5 to frame 42 in No.1 engine compartment.

NOTE: Sub-items 3.2 to 3.4 inclusive are applicable only if drain is found to be clear in Sub-item 3.1, indicating that leak paths from one side of joint space to other side have been inadvertently sealed during build.

3.2	Top wing centre joint.	Remove a further bolt from a right aft position.
3.3	Wing centre joint right overboard drain.	Seal off.
3.4	Wing centre joint.	Transfer 0.5 gallon AVTUR through right bolt hole.
3.5	Wing centre joint.	Leave AVTUR in joint space for a sufficient duration to enable any leaks to appear.

Continued

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3. TESTING (contd)

3.6	No.1 engine compartment.	Look for signs of leaks.
3.7	Wing centre joint overboard drains.	(i) Remove seals. (ii) Collect drained AVTUR and measure quantity collected in Sub-item 2.2 (if applicable) and compare with amount injected to ascertain that no appreciable amount remains in joint space. NOTE: If difference is appreciable, loose debris may be blocking drains.

4. COMPLETION

4.1	Wing centre joint bolts.	(i) Refit. (ii) Lock with wire.
4.2	Top wing centre joint fairing.	Refit.

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