

DETAILED INSPECTION OF THE ENGINE NACELLES AND PYLONS

1. OVERVIEW OF THE JOB

Operation codes:

- 54-00-00-220-801-01 engine 1 (**L5EZ**)
- 54-00-00-220-801-02 engine 2 (**R5EZ**)

NOTE 1: The scope of the inspection to be performed, the types of damage to look for during this inspection and the possible repairs are given in the "INSPECTIONS" description section (**SDS 20-10-00**).

NOTE 2: When performing inspections or checks, if corrosion, cracks or other defects are found, refer to the applicable procedure (**RPI 51-00-05**) which will guide you through the damage classification and repair process identification.

2. LOGISTICS



3. JOB SET-UP

Refer to **fig. 1**

- A. Remove the access doors (**432AB**), (**432BB**), (**432DB**), (**433AB**), (**433AT**), (**433BB**), (**433CB**), (**434AB**), (**434CB**), (**442AB**), (**442BB**), (**442DB**), (**443AB**), (**443AT**), (**443BB**), (**443CB**), (**444AB**) and (**444CB**).

4. INSPECTION

Refer to **fig. 1**, **◆**, **fig. 2** and **fig. 3**

A. Nacelles

- (1) In engine compartment, check front bulkhead:
- mounts for condition and security of attachment,
 - condition of front edge, cowling seating surface.

B. Engine pylons

- (1) Check upper (1-fig. 2) and lower skin (3-fig. 2) for:
- impact damage,
 - missing or defective rivets,
 - delamination,
 - burns marks,
 - dents,
 - cracks,
 - nicks,
 - abrasion,
 - tears.
- (2) Inspect pylon-to-fuselage bracket (2-fig. 2) and (4-fig. 2) for:
- condition,
 - corrosion,
 - cracks.
- (3) Inspect pylon-to-nacelle connecting seals:
- (a) Check the attachment and condition of the upper and lower surface pylon-to-nacelle

connecting seals (10-fig. 2) (absence of damage or tears).

(b) Record defective seal(s) for replacement at next engine removal.

(4) Through all the access doors:

(a) Check the pylon box structure for cleanliness and absence of foreign matter.

(b) Check all the cables (electrical and coaxial) and connectors:

1 Check the clamps for condition and correct tightening.

2 Check the markings for condition.

3 Check the cables for wear or twisting.

4 Check the electrical connectors for:

- cleanliness,
- locking,
- safetying.

(c) Through access panels (432AB)/(442AB) and (432BB)/(442BB) (fig. 3):

1 Check the following items for condition, impact marks, leaks or corrosion:

- air starter pipe (4-fig. 3),
- fuel pipe (3-fig. 3),
- hydraulic pipes (1-fig. 3) and couplings.

2 Check the internal box structure for:

- paint condition,
- corrosion,
- distortion,
- separation,
- delamination,
- signs of overheating,
- condition of attachment,
- loose or missing rivets,
- cracks.

3 Check the electrical wiring for appearance, cleanliness, routing, security and marking.

4 Make sure that there is no contact between the electrical cables and the structure.

(d) Through access panels (433BB)/(443BB) (fig. 3):

1 Check the following items for condition, attachment, impact marks, leaks, burns or corrosion:

- air starter pipe (7-fig. 3),
- engine starting valve (8-fig. 3),
- engine bleed air valve (10-fig. 3),
- air pipe (6-fig. 3),
- extinguisher pipes (5-fig. 3),
- fuel pressurization pipe (11-fig. 3),
- shroud (9-fig. 3),
- hydraulic pipes (12-fig. 3) and couplings.

2 Check the internal structure box for:

- paint condition,
- corrosion,
- distortion,
- separation,

- delamination,
 - signs of overheating,
 - condition of attachment,
 - loose or missing rivets,
 - cracks.
- 3 Do a detailed inspection (DET) of the engine pylon rib at FR32a.
 - 4 Check the electrical wiring for appearance, cleanliness, routing, security and marking.
 - 5 Make sure that there is no contact between the electrical cables and the structure.
- (e) Through access panels (**434CB**)/(b>444CB) (**fig. 3**):
- 1 Check the following items for condition, attachment, impact marks, leaks, burns or corrosion:
 - hydraulic pipes (**15-fig. 3**) and couplings.
 - 2 Check the internal box structure for:
 - paint condition,
 - corrosion,
 - distortion,
 - separation,
 - delamination,
 - signs of overheating,
 - condition of attachment,
 - loose or missing rivets,
 - cracks.
- (f) Check firewall (**2-fig. 3**) for condition.
- ◆
- (g) Check seals (**9-fig. 2**), (**10-fig. 2**) and (**11-fig. 2**):
- 1 Check security of attachment and condition of upper and lower seals (**9-fig. 2**), (**10-fig. 2**) and (**11-fig. 2**) (no damage or tears).
 - 2 Replace any defective seal(s).

5. CLOSE-UP

- A. Make sure that the work area is clean and clear of tools or other items.
- B. Install the access doors (**432AB**), (**432BB**), (**432DB**), (**433AB**), (**433AT**), (**433BB**), (**433CB**), (**434AB**), (**434CB**), (**442AB**), (**442BB**), (**442DB**), (**443AB**), (**443AT**), (**443BB**), (**443CB**), (**444AB**) and (**444CB**).

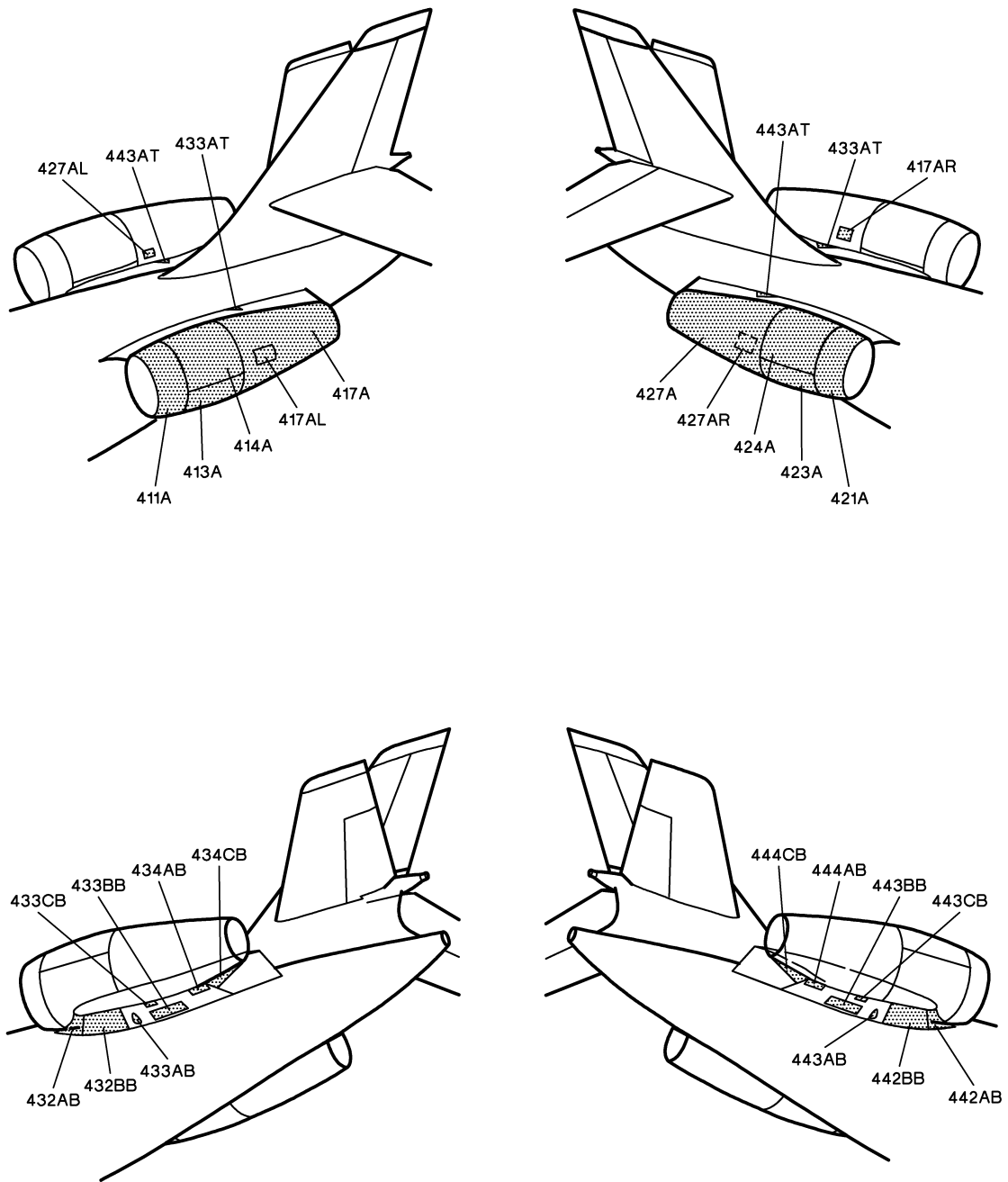


Figure 1: INSPECTION OF NACELLES AND ENGINE PYLONS



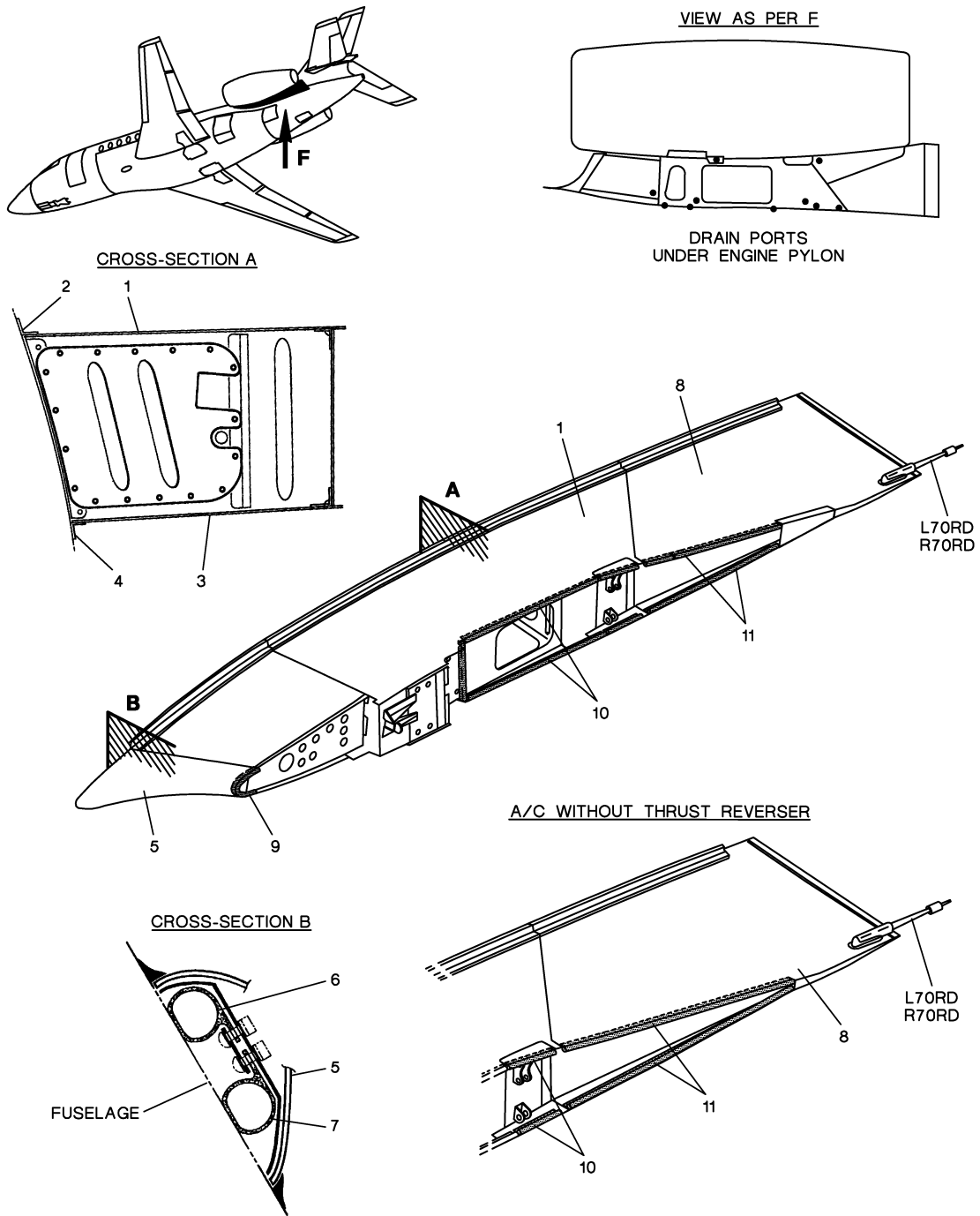


Figure 2: EXTERNAL INSPECTION OF ENGINE PYLONS

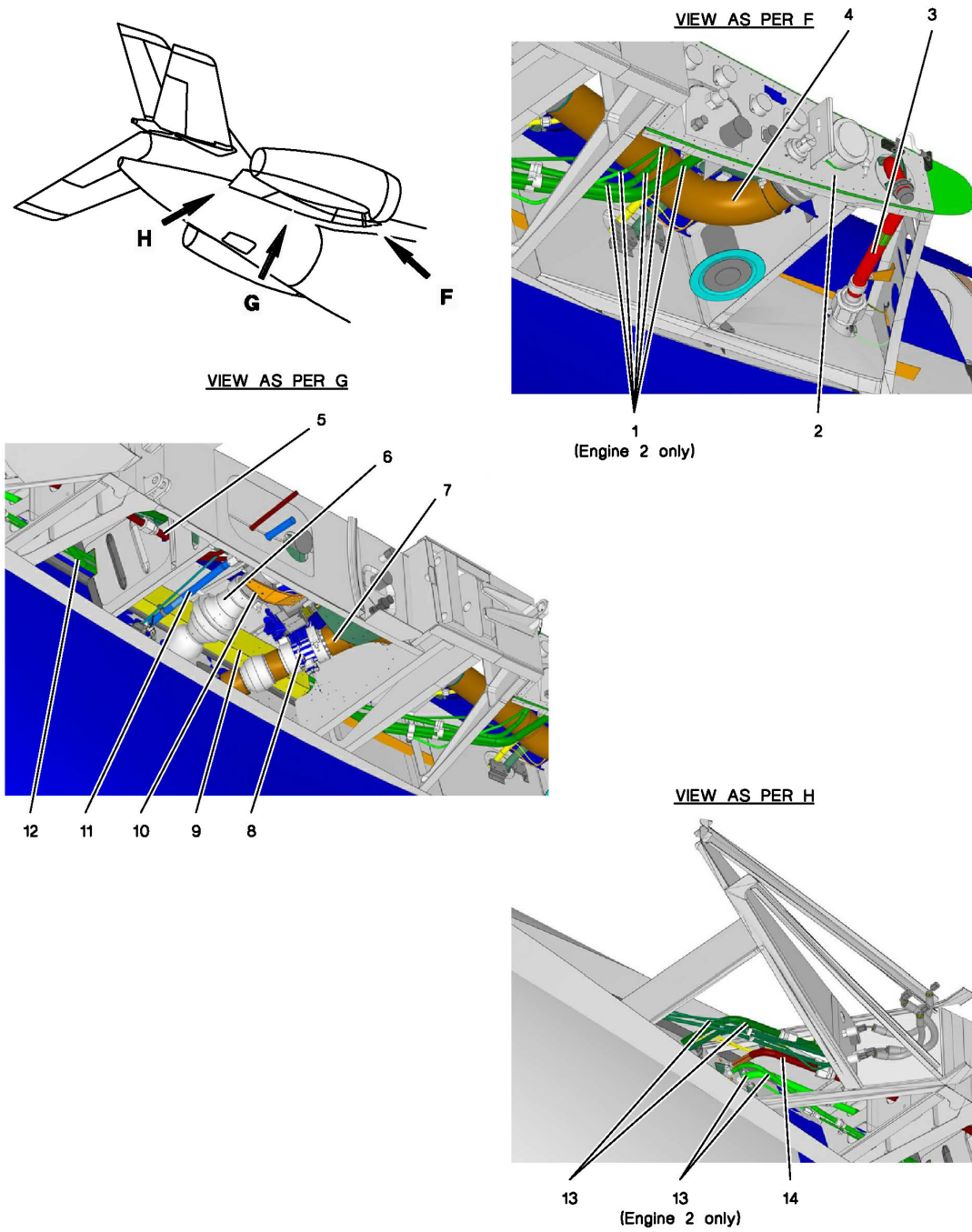


Figure 3: INTERNAL INSPECTION OF ENGINE PYLONS