CHAPTER

26

FIRE PROTECTION

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CHAPTER 26 - FIRE PROTECTION
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FIRE PROTECTION - GENERAL

1. General (Ref. to Fig. 1)

   The fire protection system detects the presence of a fire or a local overheat condition in the engine fire zones. An optional extinguishing system (when installed) discharges extinguishant into the fire zone when selected by the flight crew.

2. Detection (Ref. to Chapter 26-10-00)

   The detection system is a pneumatic system. The sensing element around the engine operates an integral pressure switch, which causes an engine fire warning on the centralized warning panel.

3. Extinguishing (Optional) (Ref. to Chapter 26-20-00)

   A one shot fire bottle discharges extinguishant into the engine fire zones through diffuser tubes. Two guarded push switches on the LH and RH glareshield (one for each engine) operate the explosive cartridges to release the extinguishant.

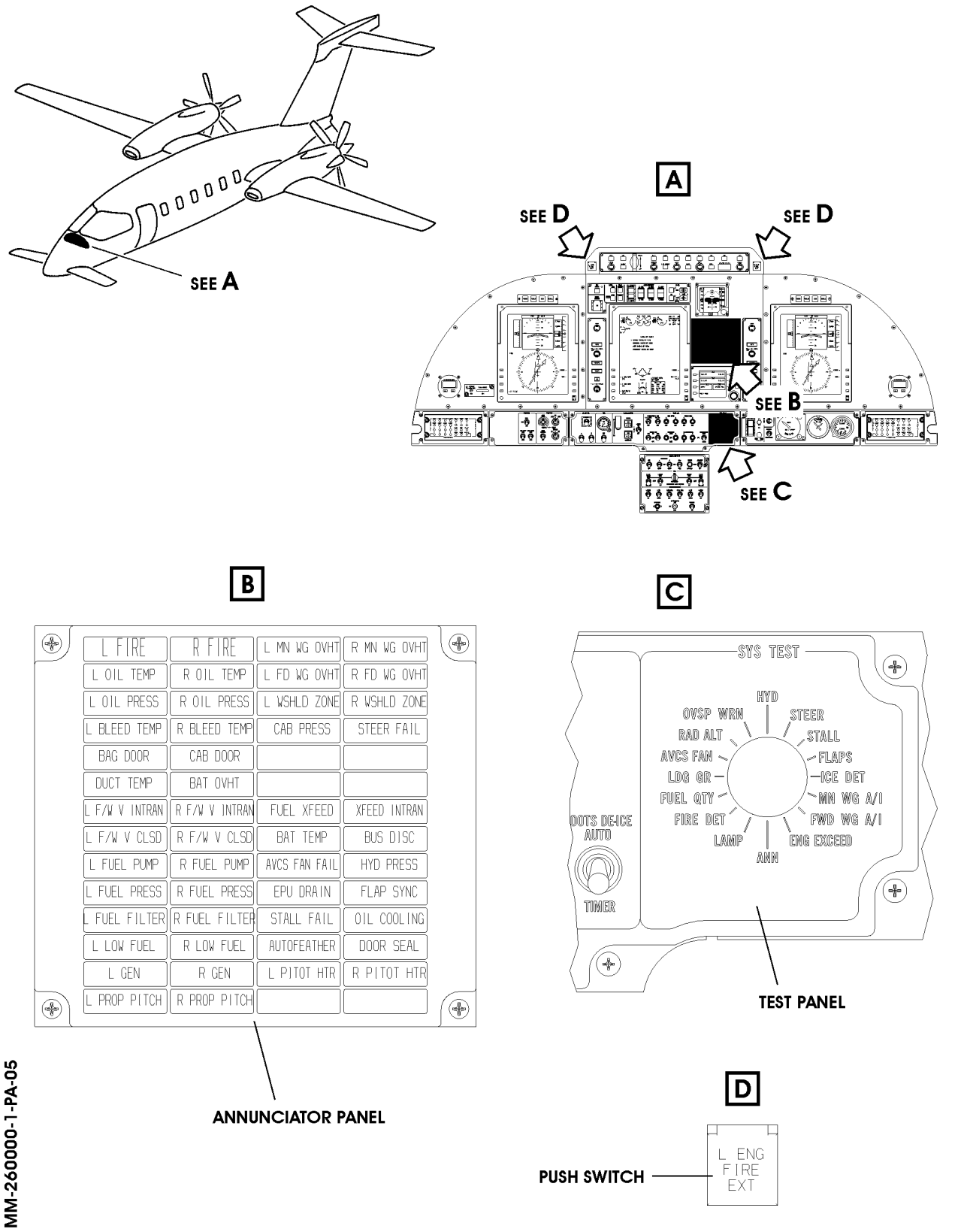

Fig. 1 - Fire Protection - General

DETECTION - DESCRIPTION AND OPERATION

1. General (Ref. to Fig. 1)

NOTE: Two identical systems are installed LH and RH, only the description of the LH system is given. Data specific to the RH system is given between parentheses.

A. The fire detection system warns the flight crew of an overheat or fire condition in the nacelle fire zones.

B. The system has the following components:

– The fire/overheat detector.

The system also uses the following system/component.

– The central warning system (CWS) (Ref. to Chapter TABLE OF CONTENTS)
– The pilot switch panel (Ref. to Chapter TABLE OF CONTENTS).

2. Description

A. The fire/overheat detector detects the change in temperature in the accessory gearbox zone and the propellor gearbox zone of the engine.

B. The detector is installed around the engine in zone 430 (440).

C. The detector has a continuous stainless steel tube sealed at one end. Attached to the other end is a responder assembly which contains an alarm pressure switch and an integrity pressure switch. The tube contains a porous metal core, charged with an inert gas. A connector on the responder connects the detector to the engine electrical harness. Clamps attach the detector to brackets on the engine.

D. The 28 Vdc RH single feed bus supplies electrical power to the system through a 3 A circuit breaker.

3. Operation

A. Normal Operation

(1) The pressure of the charge gas holds the integrity switch closed.
(2) The alarm pressure switch is in the normal (open) position.
(3) The gas pressure in the detector varies in proportion to the change in temperature in the fire zone.

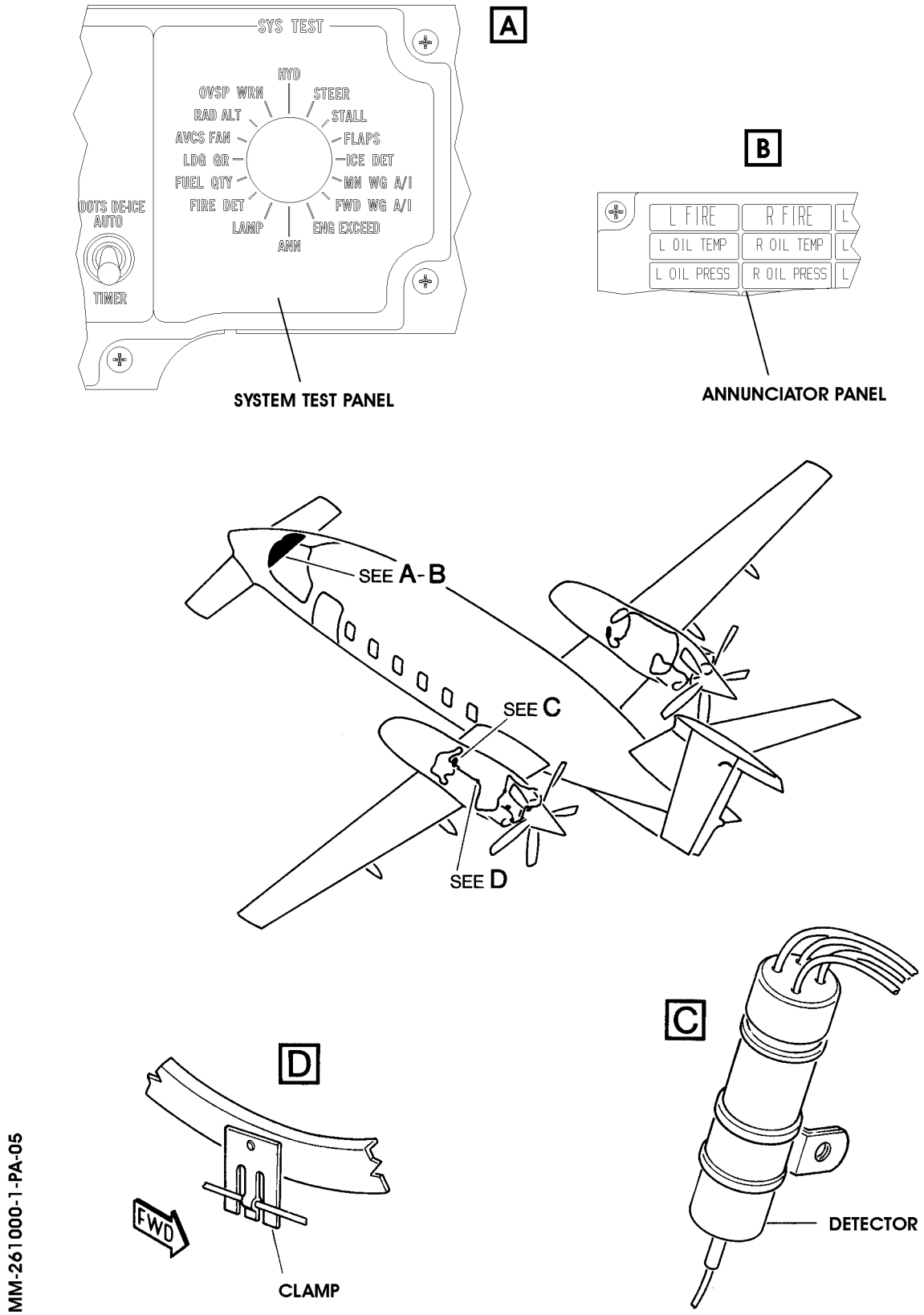

Fig. 1 - Fire Detection - Component Location and Identification

B. Fire/Overheat Warning

(1) If the temperature in the cowl increases to more than
- 1013 °F (545 °C) for localized fire or a high intensity overheat
- 428 °F (250 °C) for a general overheat.

the increase in gas pressure in the detector closes the alarm pressure switch. The L FIRE (R FIRE) annunciator on the CWP comes on. At the same time the lamp in the liighted L ENG FIRE EXT (R ENG FIRE EXT) push - switch comes on.

(2) When the temperature in the cowl decreases to less than the figures given above the lamps go off.

C. System Test

(1) When the system test switch on the pilot switch panel is set to FIRE DET and the momentary hold test button is pushed (in) and released the L FIRE (R FIRE) annunciators and the L ENG FIRE EXT (R ENG FIRE EXT) lamp come on and then go off.

D. System Fault

(1) If the charge pressure in the overheat detector decreases (because of damage or leakage) the integrity pressure switch operates (opens). In this condition or if the system electrical continuity is broken the annunciators will not come on during the test.

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DETECTION - MAINTENANCE PRACTICES

1. General

A. Two identical systems are installed LH and RH. The procedures that follow are for the LH system. Data specific to the RH system is given between parentheses.

B. This page block contains the following maintenance practices:

- The removal/installation of the fire/overheat detector
- The functional test of the detection system
- The inspection/check of the fire/overheat detector.

2. Detector - Removal (Ref. to Fig. 201)

A. Fixtures, Test and Support Equipment

Warning signs	Not specified
Access platform 2 m (6 ft)	Not specified
Blanking caps	Not specified

B. Referenced Information

Maintenance Manual Chapter 54-00-00

C. Procedure

(1) Put up a warning sign on the engine controls in the flight compartment to tell personnel "DO NOT START OR TURN THE ENGINE".

(2) Remove the engine cowls 410AT, 430AR and 430AL (420AB, 440AL and 440AR) (Ref. to Chapter 54-00-00)

(3) Open, tag and safety the FIRE DET TEST circuit breaker on the pilot circuit breaker panel.

CAUTION: THE MINIMUM BEND RADIUS FOR THE DETECTOR MUST BE NOT LESS THAN 0.375 IN (9.5 mm).

(4) Disconnect the electrical connector (11) from the receptacle (12) on the responder. Fit caps to the connector and the receptacle.

NOTE: Remove the detector from the sealed end (the rear of the engine) towards the responder. Coil the detector for ease of handling.

(5) Remove the detector (3) from the low profile clamps (2).

(6) Remove the nuts (9), spacers (5) and bolts (7) and remove the clamps (6) from the detector.

(7) Remove the insulators (8) from the detector.
(8) Remove the bolt (15) and the spacer (10) and remove the clamp (14) from the responder (13) and the engine accessory gearbox case.
(9) Remove the detector.

3. Detector - Installation (Ref. to Fig. 201)

A. Fixtures, Test and Support Equipment

Warning Signs	Not specified
Access platform 2 m (6 ft)	Not specified

B. Referenced Information

Maintenance Manual Chapter 24-00-00
Maintenance Manual Chapter 54-00-00

C. Procedure

(1) Make sure as necessary that:
- The warning signs are in position
- The circuit breaker is open, tagged and safetied
- The access platform is in position.

(Refer to the removal procedure).

(2) Install the responder (13) on the engine accessory gear box case with the clamp (14) and the spacer (10) and bolt (15).

CAUTION: THE MINIMUM BEND RADIUS FOR THE DETECTOR MUST BE NOT LESS THAN 0.375 IN (9.5 MM).

(3) Install the insulators (8) on the detector.
(4) Install the detector around the engine and engage the insulators with the clamps (6).
(5) Close the clamps and attach them to the clamps (4) with the bolts (7), spacers (5) and nuts (9).
(6) Install the detector into the low profile clamps (2).
(7) Remove the caps from the connector and the receptacle.
(8) Connect the electrical connector (11) to the receptacle (12) on the responder.
(9) Remove the safety tag and close the FIRE DET TEST circuit breakers on the pilot circuit breakers panel.
(10) Make sure electrical power is available (Ref. to Chapter 24-00-00).
(11) Do a fire detector test.
(12) Install the cowls 410AT, 430AR and 430AL (420AB 440AL and 440AR).
(13) Remove the access platform.
(14) Remove the warning sign.

4. Detector - Test

A. Referenced Information

Maintenance Manual Chapter 24-00-00

B. Procedure

(1) Make sure electrical power is available (Ref. to Chapter 24-00-00).
(2) Do the test:

	Action	Result
(a)	On the SYS TEST panel on the instrument panel in the flight compartment, set the rotary switch to FIRE DET.	
(b)	Push (in) and release the momentary holt test button in the center of the test switch.	On the CWP the L FIRE (R FIRE) annunciator comes on and goes off. On the glareshield the LH FIRE EXT (RH FIRE EXT) comes on and goes off.

(3) Remove the electrical power.

5. Detector - Inspection/Check

A. Fixtures, Test and Support Equipment

Access platform 2 m (6 ft)	Not specified
Warning signs	Not specified

B. Referenced Information

Maintenance Manual Chapter 54-00-00

C. Procedure

(1) Put the access platform in position
(2) Put a warning sign on the engine controls in the flight compartment to tell personnel "DO NOT START OR TURN THE ENGINES".
(3) Remove the engine cowls 410AT, 430AR and 430AL (420AB, 440AL and 440AR).

(4) Examine the detector:

(a) Make sure that the detector is correctly clamped and that the insulators are correctly positioned in the clamps.

(b) Make sure that the detector does not touch any part of the engine installation. Adjust the detector position as necessary.

NOTE: Minor damage to the detector is permissable if the system test can be done without evidence of a fault.

(c) Do a system test of the detector (Ref. to Paragraph 4.).

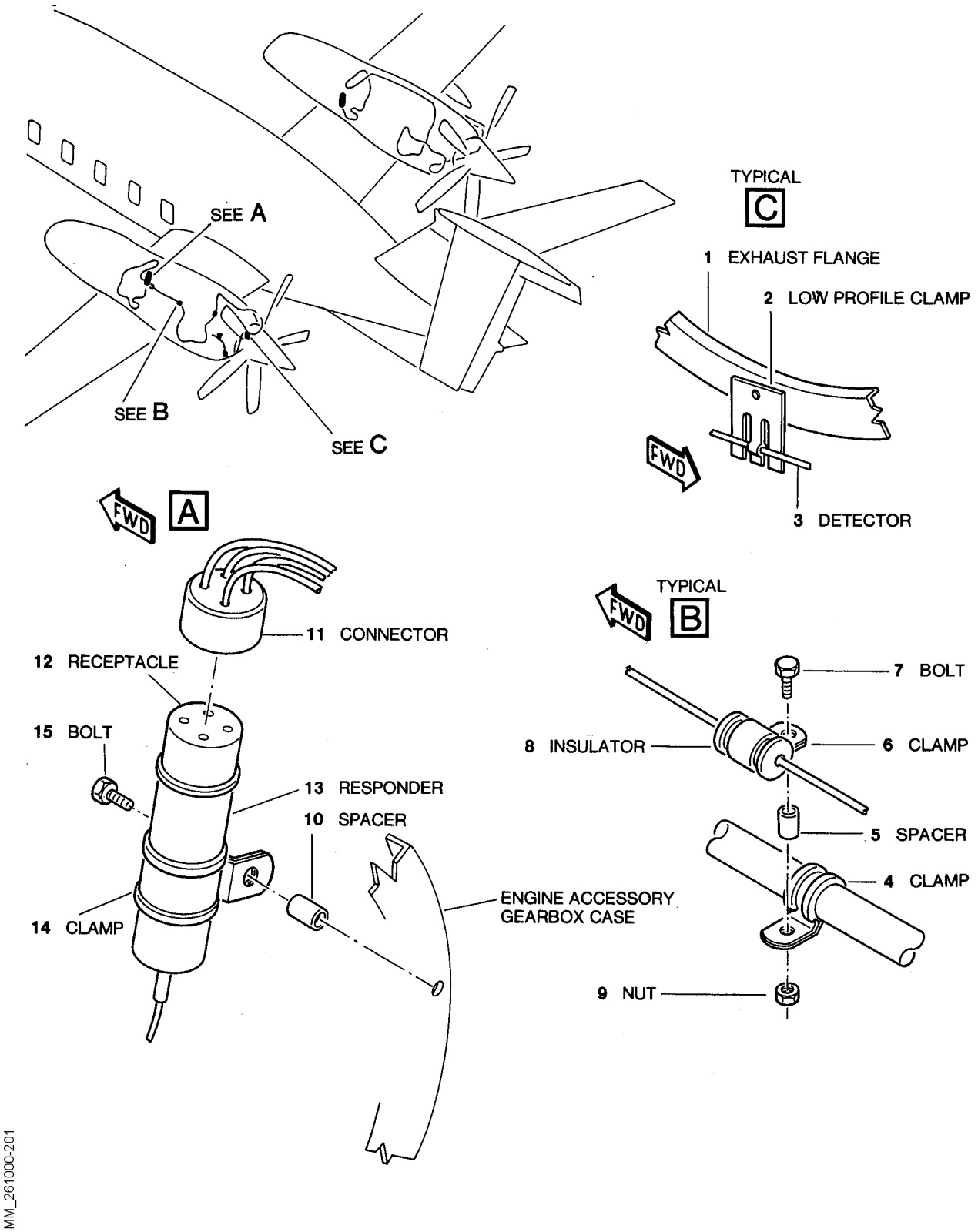

Fig. 201 - Detector - Removal/Installation

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EXTINGUISHING - DESCRIPTION AND OPERATION

1. General (Ref. to Fig. 1)

   A. The fire extinguishing system has an engine extinguishing system and a portable extinguishing installation. The portable extinguisher is discharged by hand when a fire occurs in the flight compartment or the cabin. The engine extinguisher system is operated electrically by the flight crew when a fire occurs in the engine nacelle.

   B. The engine fire extinguishing system has the following components:

   – The fire extinguisher bottle
   – The tubes and bellows
   – The extinguisher push switches.

   The system also uses the centralized warning system (Ref. to Chapter TABLE OF CONTENTS).

   C. The portable system has a bromochlorodifluoromethane extinguisher in a storage behind the captain seat in the flight compartment.

2. Description

   A. Engine Fire Extinguishing

   NOTE: Two identical systems are installed (one for each engine), only the LH system is described. Specific data for the RH system is given between parentheses.

   (1) The fire bottle is a steel container attached by clamps to a bracket on the engine mounting frame in zone 410 (420). Installed on the bottle is a contents/pressure gage. At the base of the bottle is a mounting assembly for the following parts:
   – The valve plug and stem
   – The discharge outlet
   – The cartridge housing assembly
   – The explosive cartridge.

   On the side of the bottle is a mounting for a fill and relief valve. Bonded to the surface of the assembly are the data and identification plates.

   (2) The stainless steel tubes and nozzles duct the extinguishant to the accessory gearbox zone and the propeller gearbox zone 410 and 430 (420 and 440). They are attached to the engine frame with clamps.

   (3) The lighted push-switches are on the LH and RH glareshield in zone 226. The switches are guarded to prevent inadvertent discharge of the fire bottles.

B. Portable Fire Extinguishing

(1) The portable fire extinguisher is installed in a drawer assembly at the bottom of the LH flight compartment partition in zone 121. An optional structural provision for a supplementary fire extinguisher can be installed in the cabin compartment close to Rear RH Partition.

(2) The extinguisher has a pressurized cylinder and an operating head. The operating head has a discharge nozzle, an operating lever, a safety catch and a red discharge indicator. A pressure gage in the head indicates the charged condition of the extinguisher.

3. Operation

A. Engine Fire Extinguishing

(1) In the event of a fire warning the lighted push-switch for the affected engine comes on. When the push-switch is pushed (in) the switch connects the HOT BATTERY BUS to the explosive cartridge in the bottle. When the cartridge discharges it breaks the housing assembly which permits the extingushant to discharge through the discharge outlet and tubes and nozzles into the fire zone.

(2) If there is no system fault the light in the push-switch goes off. If a system fault prevents the operation of the cartridge the light remains on.

B. Portable Fire Extinguishing

(1) When the extinguisher is released from the mounting and held upright pointing towards the fire, it is ready for use. The safety catch must be released and the operating lever operated to discharge the bottle. Operation of the operating lever pushes the red indicator disc from the head to show that the bottle has been used.

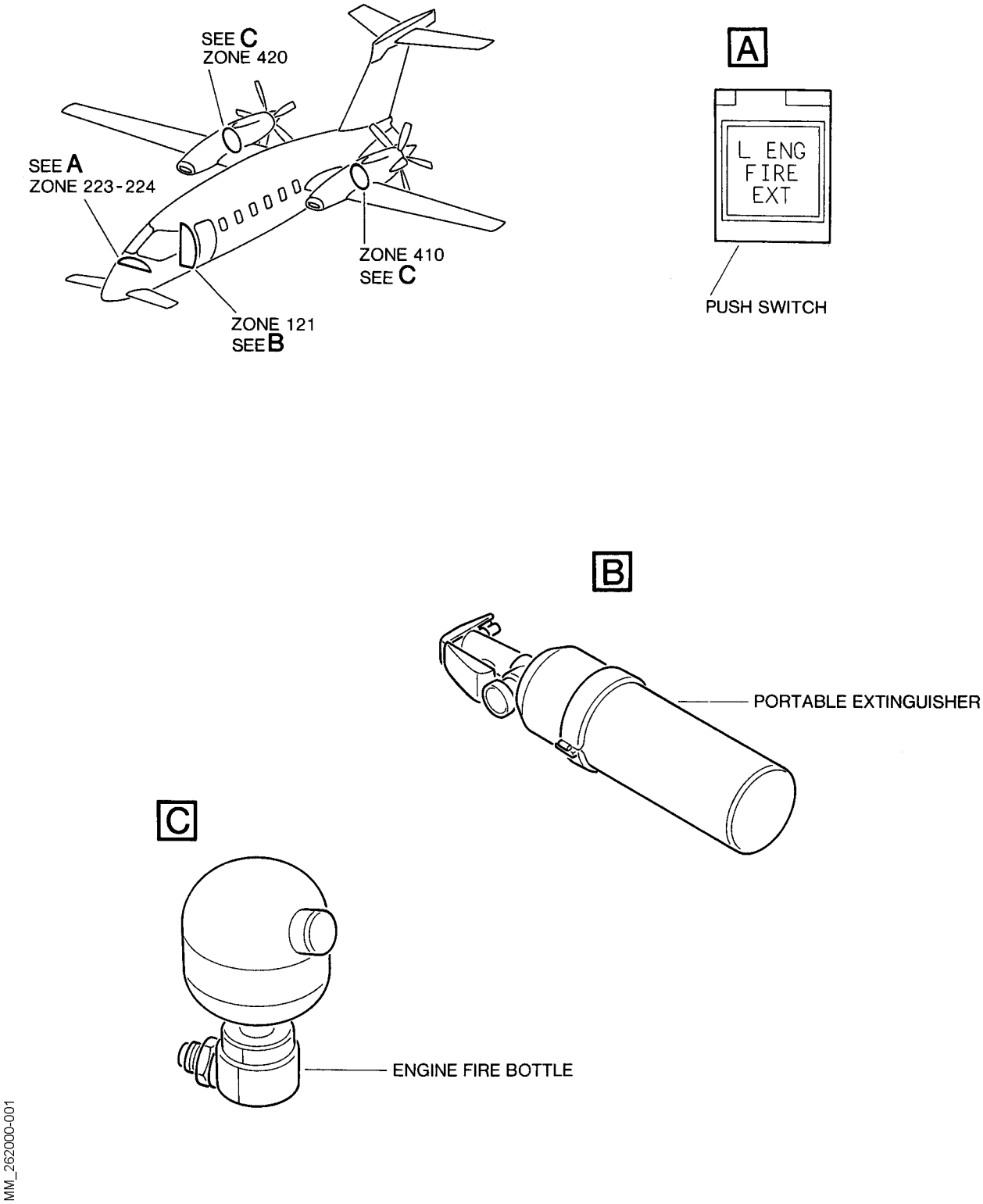

Fig. 1 - Extinguishing - Component Location/Identification

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EXTINGUISHING - MAINTENANCE PRACTICES

1. General

A. Two identical systems are installed LH and RH. The procedures that follow are for the LH system. Specific data for the RH system is given between parentheses.

B. This page block contains the following maintenance practices:

- The removal/installation of the engine fire bottles
- The inspection/check of the engine fire bottles and deployment tubes
- The removal/installation of the deployment tubes
- The inspection/check of the portable fire extinguisher.

2. Engine Fire Bottle - Weight Check

NOTE: The Extinguishing Agent is Bromotrifluoromathane and the bottle Total Weight (Max) is 4.51 lbs (2.04 Kg).

A. Check that the engine fire bottle weight is within the limit values indicated on the placard. If the weight does not correspond to the indicated placard values, ± 0,10 pound (0,05 Kg) , discard the bottle. The placard is located on the bottle body.

3. 4.Engine Fire Bottles - Removal (Ref. to Fig. 201)

A. Fixtures, Test and Support Equipment

Access platform 2 m (6 ft)	Not specified

B. Referenced Information

Maintenance Manual Chapter 54-00-00

C. Procedure

(1) Open the baggage compartment door zone 840.
(2) Open, tag and safety the FIRE EXT LH (RH) circuit breaker on the main junction box circuit breaker panel.
(3) Remove the engine cowl 410AT (420AB) (Ref. to Chapter 54-00-00).

WARNING: BE CAREFUL WHEN YOU DISCONNECT THE CARTRIDGE. THE CARTRIDGE ASSEMBLY IS AN EXPLOSIVE DEVICE WHICH CAN CAUSE INJURY IF AN EXPLOSION OCCURS.

WARNING: MAKE SURE SHUNT PLUGS ARE INSTALLED IN THE CARTRIDGE TO PREVENT ACCIDENTAL EXPLOSION.

WARNING: IF THE FIRE BOTTLES DISCHARGE:

- DO NOT GET THE EXTINGUISHANT ON YOUR SKIN OR IN YOUR EYES

– DO NOT BREATHE THE GASES
– CLEAN THE AREA
– MAKE SURE THAT THE AREA IS VENTILATED.

THE EXTINGUISHANT CAN CAUSE IRRITATION OF THE SKIN AND EYES.

(4) Remove the nuts (8) from the actuation stud (6) and the ground stud (9).
(5) Disconnect the cables (7).
(6) Connect a shunt plug between the two terminals and install the nuts.
(7) Disconnect the union (4) from the discharge outlet (11) on the fire bottle. Remove and discard the seal (12).
(8) Loosen the clamps (5) and release the fire bottle from the support bracket.
(9) Remove the bottle.

5. Engine Fire Bottle - Installation (Refer to Fig. 201)

A. Fixtures, Test and Support Equipment

Access platform 2 m (6 ft)	Not specified

B. Expendable Parts

Seal	Refer to Parts Catalog

C. Referenced Information

Maintenance Manual Chapter 26-10-00
Maintenance Manual Chapter 54-00-00

D. Procedure

(1) Make sure as necessary that:
– The access platform is still in position
– The circuit breaker is still open, tagged and safetied

(2) Position the fire bottle in the support bracket and tighten the clamp nuts (5).

NOTE: Make sure that the pressure gage faces the viewing aperture in the cowl before you tighten the clamp nuts.

(3) Install a new seal (12) into the discharge union and connect the union (4) to the discharge outlet (11).

NOTE: The discharge union turns through 360 degrees on a swivel joint for ease of alignment.

(4) Remove the shunt plug from the terminals of the cartridge.

WARNING: BE CAREFUL WITH CARTRIDGE ASSEMBLIES. THE CARTRIDGE ASSEMBLIES ARE EXPLOSIVE DEVICES WHICH CAN CAUSE INJURY IF AN EXPLOSION OCCURS.

(5) Connect the electrical connectors (7) to the actuation stud (6) and the ground stud (9).
(6) Remove the safety tag and close the FIRE EXT LH (RH) circuit breakers.
(7) Do the fire detection system test to check the electrical continuity of the system (Ref. to Chapter 26-10-00).
(8) Install the engine cowl 410AT (420AB) (Ref. to Chapter 54-00-00).
(9) Remove the access platform.
(10) Remove all tools, materials and equipment from the work area. Make sure the area is clean.
(11) Close the baggage compartment door.

6. Fire Bottle and Deployment Tubes - Inspection/check

A. Fixtures, Test and Support Equipment

Test set	HTL 13060 A
Warning signs	Not specified
Access platform 2 m (6 ft)	Not specified
Strong light source	Not specified
Magnifying glass	Not specified

B. Procedure

(1) Put up a warning sign in the flight compartment to tell personnel "DO NOT START OR TURN THE ENGINES".
(2) Open the baggage compartment door zone 840.
(3) Open, tag and safety the FIRE EXT LH (RH) circuit breaker on the main junction box circuit breaker panel in the baggage compartment.
(4) Remove the engine cowl 410AT (420AB).
(5) Put the access platform in position.
(6) Use a strong light source and a magnifying glass to examine the fire bottle for the following defects:
- Nicks, cracks, cuts, corrosion, chaffing and scoring on the bottle and attachments.
- Crossed or stripped threads
- Dents in the bottle surface.

NOTE: Dents of more than 0.025 in (0.64 mm) with an area greater than 1.0 in (25.4 mm) are not acceptable. Scratches with a depth of more than 0.004 in (0.1 mm) are not acceptable.

NOTE: Examine in particular the weld areas for any damage that can reduce the strength of the pressure vessel.

- Examine the electrical connectors for security of attachment and corrosion.

(7) Replace the bottle or the cartridge as necessary.

(8) Use a strong light source and a magnifying glass to examine the discharge tubes for the following defects:
- Blockage of the outlet nozzles, clean (or replace) as necessary.
- Insecurity of attachment
- Distortion or damage which may cause leakage.

(9) Repair or replace as necessary.

7. Deployment Tubes - Removal (Ref. to Fig. 201)

A. Fixtures, Test and Support Equipment

Access platform 2m (6 ft)	Not specified
Warning signs	Not specified

B. Referenced Information

Maintenance Manual Chapter 54-00-00

C. Procedure

(1) Put up a warning sign in the flight compartment to tell personnel "DO NOT START OR TURN THE ENGINES".
(2) Open, the baggage compartment door zone 840.
(3) Open, tag and safety the FIRE EXT LH (RH) circuit breakers on the main junction box circuit breakers panel in the baggage compartment.
(4) Remove the engine cowl 410AT (420AB) (Ref. to Chapter 54-00-00)
(5) Remove the deployment tubes from the fire bottle to NS 1412.12 and NS 885.71.
  (a) Disconnect the union (4) from the discharge outlet on the bottle.
  (b) Disconnect the union (13) from the flange adaptor (14) on the firewall at NS 1412.12.
  (c) Disconnect the union (23) from the flange adaptor (2) at NS 885.71.
  (d) Remove the tube from the engine.
(6) Remove the deployment tube from NS 1412.12 to the discharge nozzle.
  (a) Disconnect the union (17) from the adaptor (16).
  (b) Remove the two bolts from the firewall at NS 1412.2 and the flange (14).
  (c) Remove the first section of the tube.
  (d) Remove the nuts (18) and bolts (21) from the clamps (22) (three places) and remove the discharge nozzle from the engine.
  (e) Remove the clamps from the nozzle tube.
(7) Remove the deployment tube from NS 885.71.
  (a) Remove the two bolts (1) from the firewall and the flange (2).
  (b) Remove the tube from the engine.

8. Deployment Tubes - Installation (Ref. to Fig. 201)

A. Fixtures, Test and Support Equipment

Access platform 2m (6 ft)	Not specified
Warning signs	Not specified

B. Referenced Information

Maintenance Manual Chapter 54-00-00.

C. Procedure

(1) Make sure that:
– Access is available
– The access platform is still in position
– The circuit breaker is still open, tagged and safety.

(2) Install the deployment tube at NS 885.71
  (a) Install the tube into the firewall at NS 885.71 and align the flange attachment holes.
  (b) Install and tighten the two flange attachment bolts (1).

(3) Install the deployment tube from NS 1412.12 to the discharge nozzle.
  (a) Install the clamps on the tubes.
  (b) Install the first section of the tube into the firewall at NS 1412.2 and align the flange attachment holes.
  (c) Install and tighten the two attachment bolts (15).
  (d) Position the nozzle tube on the engine mounting struts and attach it loosely with the clamps (22).
  (e) Connect the union (17) to the adaptor (16) and tighten it.
  (f) Adjust and tighten the clamps (22).

(4) Install the deployment tube between NS 1412.2 and NS 885.71
  (a) Put the tube in position and loosely connect the unions (13), (4) and (23).
  (b) Tighten the unions.

(5) Install the engine cowl (Ref. to Chapter 54-00-00)

(6) Remove the access platform.

(7) Remove all tools, materials and equipment from the work area. Make sure the area is clean.

(8) Remove the safety tag and close the FIRE EXT LH (RH) circuit breaker.

(9) Close the baggage bay door.

(10) Remove the warning sign.

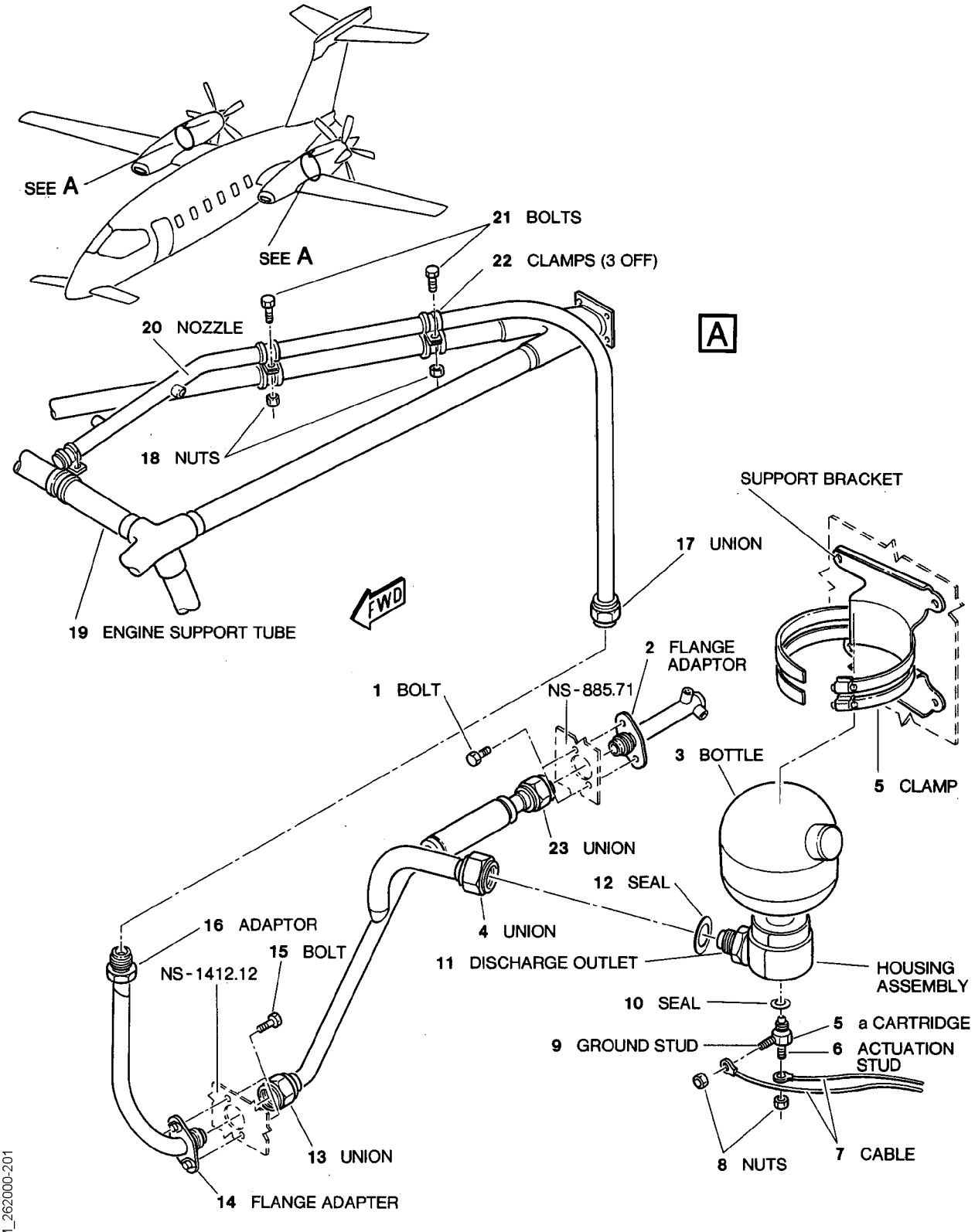

Fig. 201 - Fire Bottle and Deployment Tubes - R/I

9. Portable Fire Extinguisher - Inspection/Check

A. Fixtures, Test and Support Equipment

Weighing scales	Not specified

B. Procedure

(1) Remove the extinguisher from the storage drawer.
(2) Make sure the operating head discharge nozzle is free from obstruction.
(3) Make sure that the discharge indicator disc is complete. If the disc is disturbed or damaged, replace the extinguisher.
(4) Check that the pressure gage indication is in the green sector. If it is below the green sector, replace the bottle.
(5) Weigh the extinguisher and record the weight.
(6) If the weight has decreased more than 2 oz (56.7 g) with reference to the original bottle weight, replace the bottle.
(7) Install the extinguisher in the stowage drawer and close the drawer.

10. Engine Fire Bottle - Replace Cartridge (Ref. to Fig. 201)

A. Fixtures, Test and Support Equipment

Access platform 2 m (6 ft)	Not specified
Torque wrench 100 lbf in (11.5 Nm)	Not specified
Warning sign	Not specified

B. Expendable Parts

O-ring	Refer to Parts Catalog

C. Referenced Information

Maintenance Manual Chapter 26-10-00
Maintenance Manual Chapter 54-00-00

D. Procedure

WARNING: BE CAREFUL WHEN YOU DISCONNECT THE CARTRIDGE ASSEMBLY. THE CARTRIDGE ASSEMBLY IS AN EXPLOSIVE DEVICE WHICH CAN CAUSE INJURY IF AN EXPLOSION OCCURS.

WARNING: MAKE SURE SHUNT PLUGS ARE INSTALLED IN THE CARTRIDGE TO PREVENT ACCIDENTAL EXPLOSION.

WARNING: IF THE FIRE BOTTLES DISCHARGE:

- DO NOT GET THE EXTINGUISHANT ON YOUR SKIN OR IN YOUR EYES
- DO NOT BREATHE THE GASES

– CLEAN THE AREA
– MAKE SURE THAT THE AREA IS VENTILATED.

THE EXTINGUISHANT CAN CAUSE IRRITATION OF THE SKIN AND EYES.

(1) Open the baggage compartment door zone 840.
(2) Open, tag and safety the FIRE EXT LH (RH) circuit breaker on the main junction box circuit breaker panel in the baggage compartment.
(3) Put up a warning sign in the Flight compartment to tell personnel "DO NOT START OR TURN THE ENGINES".
(4) Put the access platform in position.
(5) Remove the engine cowl 410AT (420AB).
(6) Disconnect the electrical connectors from the actuation stud and the ground stud.
(7) Install a shunt plug to the studs on the cartridge.
(8) Cut and remove the lockwire from the housing assembly and the cartridge (5a).

WARNING: DO NOT LOOSEN THE HOUSING ASSEMBLY. THIS CAN CAUSE THE EXTINGUISHER TO DISCHARGE AND CAUSE INJURY TO PERSONNEL.

(9) Hold the housing assembly and remove the cartridge.
(10) Install a new seal (10) on the new cartridge and install the cartridge in the housing assembly.
(11) Tighten the cartridge to a torque of 100 lbf in. (11.5 Nm).
(12) Safety the cartridge and the housing assembly with lockwire.
(13) Remove the shunt plug from the cartridge electrical connector.
(14) Connect the electrical connectors (17) to the actuation stud (6) and the ground stud (9).
(15) Remove the safety tag and close the FIRE EXT LH (RH) circuit breakers.
(16) Do the test of the fire detection system (Ref. to Chapter 26-10-00).
(17) Remove all tools, materials and equipment from the work area. Make sure the area is clean.
(18) Install the engine cowl 410AT (420AB).
(19) Close the baggage compartment door.
(20) Remove the access platform.
(21) Remove the warning sign.

11. RH Fire Extinguisher Electrical Circuitry-Electrical Continuity Check(Ref. to Fig. 201)

A. Fixtures, Test and Support Equipment

Voltmeter	Not specified

B. Referenced Information

Wiring Diagram 26-10-00
Maintenance Manual Chapter 06-00-00

C. Procedure

WARNING: BE CAREFUL WHEN YOU DISCONNECT THE CARTRIDGE ASSEMBLY. THE CARTRIDGE ASSEMBLY IS AN EXPLOSIVE DEVICE WHICH CAN CAUSE INJURY IF AN EXPLOSION OCCURS.

WARNING: MAKE SURE SHUNT PLUGS ARE INSTALLED IN THE CARTRIDGE TO PREVENT ACCIDENTAL EXPLOSION.

WARNING: IF THE FIRE BOTTLES DISCHARGE:

- DO NOT GET THE EXTINGUISHANT ON YOUR SKIN OR IN YOUR EYES
- DO NOT BREATHE THE GASES
- CLEAN THE AREA
- MAKE SURE THAT THE AREA IS VENTILATED.

THE EXTINGUISHANT CAN CAUSE IRRITATION OF THE SKIN AND EYES.

(1) Open the baggage compartment door zone 840.
(2) Open, tag and safety the FIRE EXT RH and LH circuit breakers on the main junction box circuit breaker panel in the baggage compartment.
(3) Put up a warning sign in the Flight compartment to tell personnel "DO NOT START OR TURN THE ENGINES".
(4) Put the access platform in position.
(5) Remove the engine cowl 420AT.
(6) Take a note of the electrical cables (7) attachment position.
(7) Remove nuts (8) that fasten the electrical cables (7) to the ground and actuation studs (6, 9).
(8) Connect the Voltmeter to the cables (7). The Fire Extinguisher electrical cables have Y positive (WD52D20) and X negative (W60A20N), Refer to Wiring Diagram 26-20-00 pag. 1.
(9) Remove the safety tag and close the FIRE EXT RH circuit breaker.
(10) Push the R ENG FIRE EXT switch located on the instrument panel (copilot side) and verify that the value on the voltmeter is 28Vdc.
(11) Connect the electrical cables (7) to the actuation stud (6) and the ground stud (9).
(12) Remove the safety tag and close the FIRE EXT LH circuit breaker.
(13) Do the test of the fire detection system (Ref. to Chapter 26-20-00).
(14) Remove all tools, materials and equipment from the work area. Make sure the area is clean.
(15) Install the engine cowl 420AT.
(16) Close the baggage compartment door.
(17) Remove the access platform.
(18) Remove the warning sign.

12. LH Fire Extinguisher Electrical Circuitry-Electrical Continuity Check(Ref. to Fig. 201)

A. Fixtures, Test and Support Equipment

Voltmeter	Not specified

B. Referenced Information

Wiring Diagram 26-10-00

Maintenance Manual Chapter 06-00-00

C. Procedure

WARNING: BE CAREFUL WHEN YOU DISCONNECT THE CARTRIDGE ASSEMBLY. THE CARTRIDGE ASSEMBLY IS AN EXPLOSIVE DEVICE WHICH CAN CAUSE INJURY IF AN EXPLOSION OCCURS.

WARNING: MAKE SURE SHUNT PLUGS ARE INSTALLED IN THE CARTRIDGE TO PREVENT ACCIDENTAL EXPLOSION.

WARNING: IF THE FIRE BOTTLES DISCHARGE:

- DO NOT GET THE EXTINGUISHANT ON YOUR SKIN OR IN YOUR EYES
- DO NOT BREATHE THE GASES
- CLEAN THE AREA
- MAKE SURE THAT THE AREA IS VENTILATED.

THE EXTINGUISHANT CAN CAUSE IRRITATION OF THE SKIN AND EYES.

(1) Open the baggage compartment door zone 840.
(2) Open, tag and safety the FIRE EXT RH and LH circuit breakers on the main junction box circuit breaker panel in the baggage compartment.
(3) Put up a warning sign in the Flight compartment to tell personnel "DO NOT START OR TURN THE ENGINES".
(4) Put the access platform in position.
(5) Remove the engine cowl 410AT.
(6) Take a note of the electrical cables (7) attachment position.
(7) Remove nuts (8) that fasten the electrical cables (7) to the ground and actuation studs (6, 9).
(8) Connect the Voltmeter to the cables (7). The Fire Extinguisher electrical cables have Y positive (WD54D20) and X negative (W61A20N), Refer to Wiring Diagram 26-20-00 pag. 1.
(9) Remove the safety tag and close the FIRE EXT LH circuit breaker.
(10) Push the L ENG FIRE EXT switch located on the instrument panel (pilot side) and verify that the value on the voltmeter is 28Vdc.
(11) Connect the electrical cables (7) to the actuation stud (6) and the ground stud (9).

(12) Remove the safety tag and close the FIRE EXT RH circuit breaker.
(13) Do the test of the fire detection system (Ref. to Chapter 26-10-00).
(14) Remove all tools, materials and equipment from the work area. Make sure the area is clean.
(15) Install the engine cowl 410AT.
(16) Close the baggage compartment door.
(17) Remove the access platform.
(18) Remove the warning sign.

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