CHAPTER

71

POWER PLANT

CHAPTER 71
POWER PLANT

A = Added, R = Revised, D = Deleted, O = Overflow, C = Customer Originated Change

71-EFFECTIVE PAGES

AIRLINE CARD NO		TITLE			BOEING CARD NO.
		INLET COWL - INNER SURFACE			**71-010-01-01**
DATE	TASK				RELATED CARD
	INSPECTION - DETAILED				
TAIL NUMBER	WORK AREA	VERSION	THRESHOLD	REPEAT	APPLICABILITY
	L INLET COWL	**1.1**	**2500 FH**	**2500 FH**	AIRPLANE **ALL** / ENGINE **ALL**
STATION	SKILL				
	AIRPL				
		ACCESS			ZONE **412**

Detailed inspection of the left inlet cowl's inner surface.

A. References

Reference	Title
AMM 71-11-01-300-801-F01	Replace the Thermal Anti-Ice (TAI) Exhaust Duct (P/B 801)
SRM 54-10-01	Structural Repair Manual

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO. 71-010-01-01

MECH	INSP

TASK 71-11-01-200-801-F00

1. Inlet Cowl Inspection

(Figure 1)

A. General

(1) This task examines the skin of the inlet cowl for damage.

B. Procedure

SUBTASK 71-11-01-210-001-F00

(1) Examine the internal skin, the external skin and the lip skin of the inlet cowl for the damage that follows:

(a) Cracks

(b) Nicks, gouges, scratches and corrosion

(c) Dents

(d) Holes

(e) Erosion (on the lip skin)

(f) Missing sealant between the lip skin segments (3 locations)

1) Missing sealant is permitted between the segments. It is not necessary to re-apply the sealant.

SUBTASK 71-11-01-220-001-F00

(2) If you find damage, refer to this reference (SRM 54-10-01) for the permitted limits.

SUBTASK 71-11-01-210-004-F00

(3) If you find blockage in the acoustic panel holes in the inner barrel, use the limits for acoustic area loss (Figure 2)

(a) Acoustic area loss is usually counted when more than half the holes in an area are blocked and the area is more than one square inch (6.45 square cm).

1) Holes are counted as blocked if fully or not fully filled with adhesive, resin, fibers, paint or other material.

2) Holes which are angled but are otherwise clear are permitted and not considered blocked.

3) Some small areas of perforation blockage are part of the new part production bonding process.

SUBTASK 71-11-01-210-003-F00

(4) Visually examine the cowl thermal anti-ice (TAI) duct louver for signs of cracks or missing louvers.

NOTE: The TAI duct louver is found at the 6 o'clock position of the inlet cowl.

NOTE: To repair the TAI exhaust duct, remove the duct from the inlet cowl. Do this task: Replace the Thermal Anti-Ice (TAI) Exhaust Duct, AMM TASK 71-11-01-300-801-F01. It is not necessary to remove the inlet cowl to do this repair.

(a) If one or more missing louvers are found with no cracks in the slotted areas, it is permitted to return the airplane to service with these conditions:

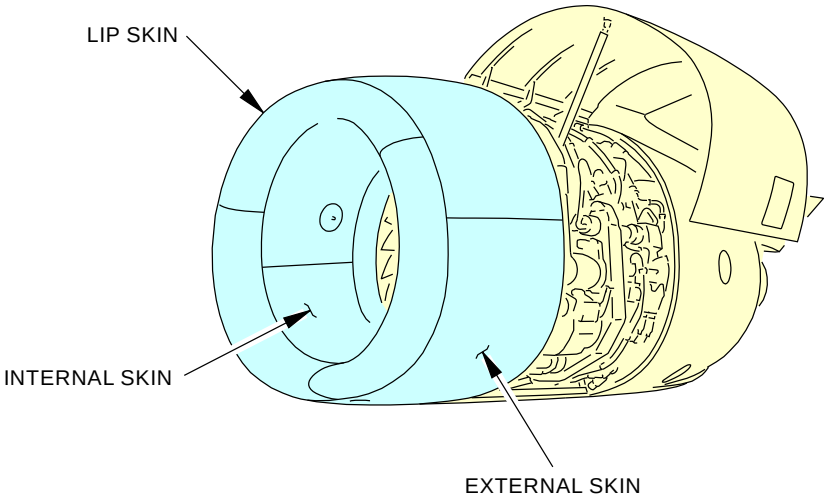
DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO. 71-010-01-01

MECH	INSP

1) If cracks are found in the slotted areas but do not exceed 1.0 inch (25.40 mm) in length, do these steps for a temporary repair:
   a) Do a stop drill repair with a #30 drill (0.1285 inch dia.) at the end of the cracks.
   b) Return the airplane to service.
2) Missing louvers and cracks should be repaired in 800 hrs after you note the missing louvers or after you do the temporary repair.
   a) Refer to component manual for the applicable repair.
3) If the crack damage is more than 1.0 inch (25.40 mm) in length in any slot area, the duct should be replaced or contact the vendor (Goodrich) for disposition.

——— END OF TASK ———

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-010-01-01



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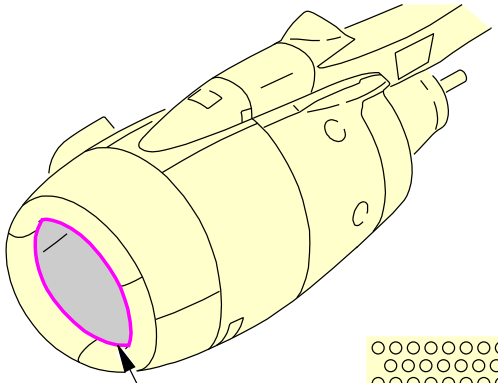
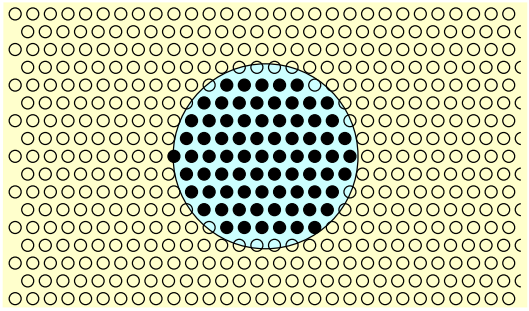
Inlet Cowl Inspection
Figure 1

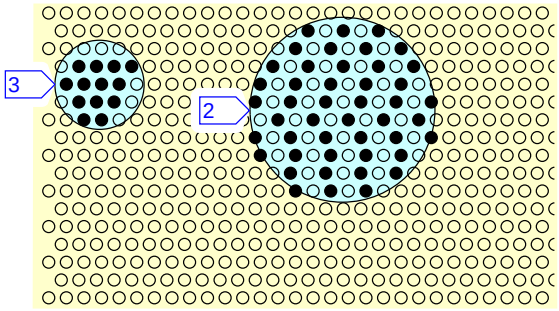
DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-010-01-01





ACOUSTIC AREA LOST

A 1



ACOUSTIC AREA NOT LOST

A

1 MORE THAN 1 SQUARE INCH (6.45 SQUARE cm) AND MORE THAN 50 OUT OF 100 ADJACENT HOLES BLOCKED.

2 MORE THAN 1 SQUARE INCH (6.45 SQUARE cm) AND LESS THAN 51 OUT OF 100 ADJACENT HOLES BLOCKED.

3 LESS THAN 1 SQUARE INCH (6.45 SQUARE cm).

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Inner Barrel Acoustic Panel Inspection
Figure 2

AIRLINE CARD NO		TITLE			BOEING CARD NO.
		INLET COWL - INNER SURFACE			**71-010-02-01**
DATE	TASK				RELATED CARD
	INSPECTION - DETAILED				
TAIL NUMBER	WORK AREA	VERSION	THRESHOLD	REPEAT	APPLICABILITY
	R INLET COWL	**1.1**	**2500 FH**	**2500 FH**	AIRPLANE **ALL** / ENGINE **ALL**
STATION	SKILL				
	AIRPL				
		ACCESS			ZONE **422**

Detailed inspection of the right inlet cowl's inner surface.

A. References

Reference	Title
AMM 71-11-01-300-801-F01	Replace the Thermal Anti-Ice (TAI) Exhaust Duct (P/B 801)
SRM 54-10-01	Structural Repair Manual

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO. 71-010-02-01

TASK 71-11-01-200-801-F00

MECH	INSP

1. Inlet Cowl Inspection

(Figure 1)

A. General

(1) This task examines the skin of the inlet cowl for damage.

B. Procedure

SUBTASK 71-11-01-210-001-F00

(1) Examine the internal skin, the external skin and the lip skin of the inlet cowl for the damage that follows:

(a) Cracks

(b) Nicks, gouges, scratches and corrosion

(c) Dents

(d) Holes

(e) Erosion (on the lip skin)

(f) Missing sealant between the lip skin segments (3 locations)

1) Missing sealant is permitted between the segments. It is not necessary to re-apply the sealant.

SUBTASK 71-11-01-220-001-F00

(2) If you find damage, refer to this reference (SRM 54-10-01) for the permitted limits.

SUBTASK 71-11-01-210-004-F00

(3) If you find blockage in the acoustic panel holes in the inner barrel, use the limits for acoustic area loss (Figure 2)

(a) Acoustic area loss is usually counted when more than half the holes in an area are blocked and the area is more than one square inch (6.45 square cm).

1) Holes are counted as blocked if fully or not fully filled with adhesive, resin, fibers, paint or other material.

2) Holes which are angled but are otherwise clear are permitted and not considered blocked.

3) Some small areas of perforation blockage are part of the new part production bonding process.

SUBTASK 71-11-01-210-003-F00

(4) Visually examine the cowl thermal anti-ice (TAI) duct louver for signs of cracks or missing louvers.

NOTE: The TAI duct louver is found at the 6 o'clock position of the inlet cowl.

NOTE: To repair the TAI exhaust duct, remove the duct from the inlet cowl. Do this task: Replace the Thermal Anti-Ice (TAI) Exhaust Duct, AMM TASK 71-11-01-300-801-F01. It is not necessary to remove the inlet cowl to do this repair.

(a) If one or more missing louvers are found with no cracks in the slotted areas, it is permitted to return the airplane to service with these conditions:

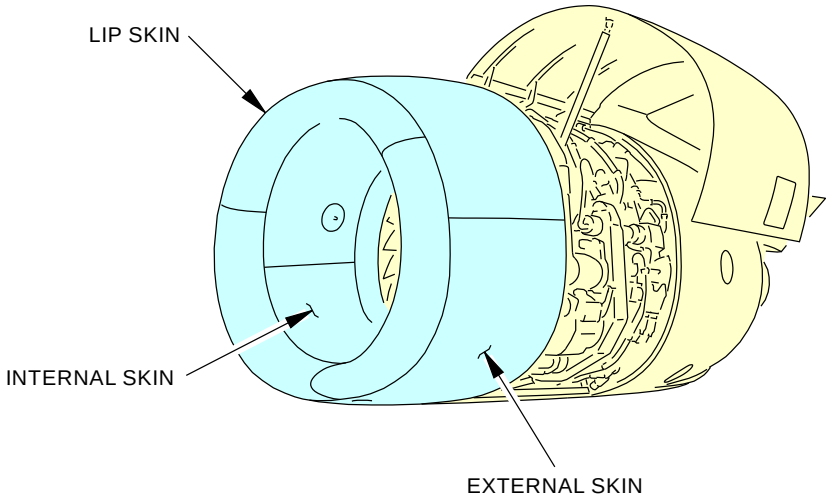
DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO. 71-010-02-01

MECH	INSP

1) If cracks are found in the slotted areas but do not exceed 1.0 inch (25.40 mm) in length, do these steps for a temporary repair:
   a) Do a stop drill repair with a #30 drill (0.1285 inch dia.) at the end of the cracks.
   b) Return the airplane to service.
2) Missing louvers and cracks should be repaired in 800 hrs after you note the missing louvers or after you do the temporary repair.
   a) Refer to component manual for the applicable repair.
3) If the crack damage is more than 1.0 inch (25.40 mm) in length in any slot area, the duct should be replaced or contact the vendor (Goodrich) for disposition.

——— END OF TASK ———

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-010-02-01



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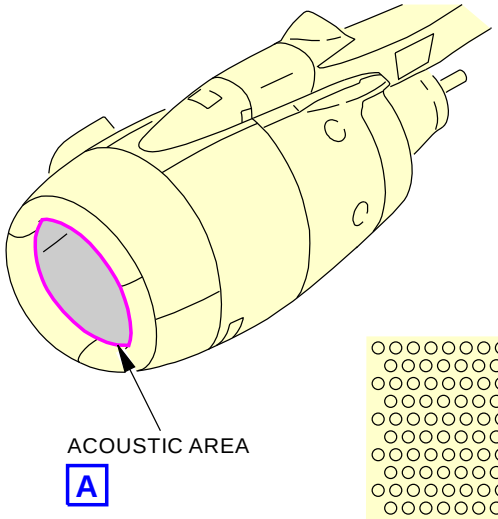
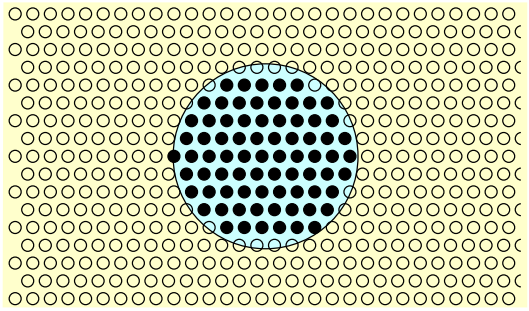
Inlet Cowl Inspection
Figure 1

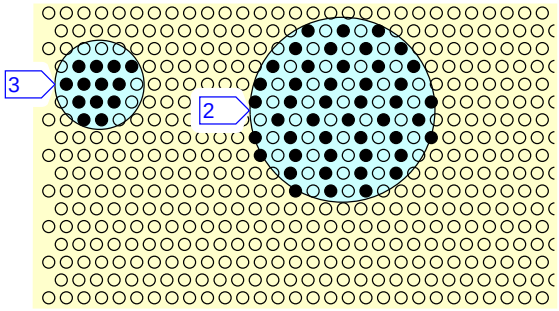
DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-010-02-01





ACOUSTIC AREA LOST

A 1



ACOUSTIC AREA NOT LOST

A

1 MORE THAN 1 SQUARE INCH (6.45 SQUARE cm) AND MORE THAN 50 OUT OF 100 ADJACENT HOLES BLOCKED.

2 MORE THAN 1 SQUARE INCH (6.45 SQUARE cm) AND LESS THAN 51 OUT OF 100 ADJACENT HOLES BLOCKED.

3 LESS THAN 1 SQUARE INCH (6.45 SQUARE cm).

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Inner Barrel Acoustic Panel Inspection
Figure 2

AIRLINE CARD NO		TITLE			BOEING CARD NO.
		CHECK LEFT ENGINE DRAIN LINES			**71-040-01-01**
DATE	TASK				RELATED CARD
	OPERATIONAL				
TAIL NUMBER	WORK AREA	VERSION	THRESHOLD	REPEAT	APPLICABILITY
	LEFT ENGINE	**1.1**	**6 YR**	**6 YR**	AIRPLANE: **ALL** ENGINE: **ALL**
STATION	SKILL				
	AIRPL				
		ACCESS			ZONE
		413 414 431AT			**411**

Operationally check left engine all drain lines.

A. References

Reference	Title
AMM 71-00-00-800-811-F00	Power Plant Test Reference Table (P/B 501)
AMM 71-11-02-010-801-F00	Open the Fan Cowl Panels (P/B 201)
AMM 71-11-02-410-801-F00	Close the Fan Cowl Panels (P/B 201)
AMM 78-31-00-010-801-F00	Open the Thrust Reverser (Selection) (P/B 201)
AMM 78-31-00-010-804-F00	Close the Thrust Reverser (Selection) (P/B 201)

B. Consumable Materials

Reference	Description	Specification
D00601 [CP2101]	High-temperature graphite compound	SAE AMS 2518

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
STD-1280	Source - Air, Regulated, Dry Filtered, 0-30 PSIG
STD-5497	Plug/Cap - To block each port

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-01-01

MECH	INSP

TASK 71-71-00-700-801-F00

1. Drain Lines Inspection (Operational Check)

(Figure 1, Figure 2, and Figure 3)

A. General

(1) This is a scheduled maintenance task which does an operational check of the engine drain lines.

B. Drain Lines Inspection (Operational Check)

SUBTASK 71-71-00-010-013-F00

(1) Do this task: Open the Fan Cowl Panels, AMM TASK 71-11-02-010-801-F00.

SUBTASK 71-71-00-010-010-F00

WARNING: DO THESE SPECIFIED TASKS IN THE CORRECT SEQUENCE BEFORE YOU OPEN THE THRUST REVERSERS: RETRACT THE LEADING EDGE, DO THE DEACTIVATION PROCEDURES FOR THE LEADING EDGE AND THE THRUST REVERSERS (FOR GROUND MAINTENANCE), AND OPEN THE FAN COWL PANELS. IF YOU DO NOT OBEY THE ABOVE SEQUENCE, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(2) Do this task: Open the Thrust Reverser (Selection), AMM TASK 78-31-00-010-801-F00.

SUBTASK 71-71-00-210-004-F00

(3) Do these steps to prepare for the procedure:

(a) Find the drain lines for the check (Figure 1):

(b) Find the applicable drain line connections at the engine component to disconnect (Figure 2 and Figure 3).

NOTE: Some connections are found at a different location than the engine component.

1) The forward sump drain is on the fan case (rear) at the 5:00 o'clock position.

2) The TBV drain is on the TBV fuel manifold.

3) The VSV drain is on the rod-end and head-end of the actuators.

SUBTASK 71-71-00-700-001-F00

(4) Do the operational check below for each drain line:

(a) It is not necessary to do a check of the engine aft sump drain.

(b) Disconnect the applicable drain line from the engine component and push the line away from the component.

1) It is not necessary to disconnect the oil tank scupper drain.

2) It can be necessary to disconnect the clamps on some of the drain lines.

AKS ALL PRE SB CFM56-7B 73-44

3) For the BSV/LPTACC valve drain line, disconnect the drain lines from the two components and alternately install a cap on the drain lines to do the check of each drain.

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO. 71-040-01-01

MECH | INSP

AKS ALL POST SB CFM56-7B 73-44

a) The BSV is not installed.

AKS ALL

4) For the HPTACC valve drain, do the applicable step to get access to the drain.

AKS ALL PRE SB 737-CFM56-7B-73-045

a) Disconnect the drain line at the fuel manifold.

AKS ALL POST SB 737-CFM56-7B-73-045

b) Remove the four bolts at the fuel manifold.

AKS ALL

(c) Connect an 0-30 psig dry filtered regulated air source, STD-1280 to the bottom of the applicable drain line.

(d) Make sure that the air flows freely through the line.

(e) If you find blockage, remove the blockage or replace the drain line.

(f) Re-connect the applicable drain line at the engine component.

1) For the HPTACC valve drain, do the applicable step to connect the drain:

AKS ALL PRE SB 737-CFM56-7B-73-045

a) Connect the drain line at the fuel manifold.

AKS ALL POST SB 737-CFM56-7B-73-045

b) Connect the fuel manifold.

<1> Lubricate the threads of the four bolts with graphite compound, D00601 [CP2101].

<2> Install the gasket between the fuel manifold and the HPTACC valve.

NOTE: Inspect the gasket prior to installation. Replace the gasket if it is damaged or deformed.

<3> Install the four bolts.

<4> Tighten the four bolts to 62-68 pound-inches (7-8 Newton-meters).

AKS ALL

(g) Connect the clamps that you loosened to move the drain line.

(h) Remove the 0-30 psig dry filtered regulated air source, STD-1280 from the bottom of the applicable drain line.

SUBTASK 71-71-00-410-003-F00

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO CLOSE THE THRUST REVERSER. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(5) Do this task: Close the Thrust Reverser (Selection), AMM TASK 78-31-00-010-804-F00.

SUBTASK 71-71-00-410-008-F00

(6) Do this task: Close the Fan Cowl Panels, AMM TASK 71-11-02-410-801-F00.

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO. 71-040-01-01

MECH	INSP

AKS ALL POST SB 737-CFM56-7B-73-045

SUBTASK 71-71-00-710-001-F00

(7) Do a leak check of the HPTACC valve fuel manifold (AMM TASK 71-00-00-800-811-F00).

AKS ALL

——— END OF TASK ———

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO. 71-040-01-01

TASK 54-55-01-200-801

MECH | INSP

2. Strut Fan Cowl Support Beam Drain - Operational Test

Figure 4

A. General

(1) This task gives steps to do an operational test of the Fan Cowl Support Beam Drain.

B. Prepare for the Operational Test

SUBTASK 54-55-01-010-001

(1) Open these access panels:

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

C. Strut Fan Cowl Support Beam Drain - Operational Test

SUBTASK 54-55-01-210-002

(1) Make sure that the Fan Cowl Support Beam and drain inlets are free of unwanted material.

SUBTASK 54-55-01-710-003

(2) Use a Plug/Cap, STD-5497 to plug one drain inlet.

SUBTASK 54-55-01-710-001

WARNING: BEFORE YOU USE COMPRESSED AIR, PUT ON GOGGLES FOR EYE PROTECTION. DO NOT POINT THE NOZZLE AT OTHER PERSONNEL. IF YOU DO NOT OBEY THESE PRECAUTIONS, INJURIES TO PERSONNEL CAN OCCUR.

(3) Use a 0-30 psig dry filtered regulated air source, STD-1280 to blow into the top of the applicable drain inlet.

SUBTASK 54-55-01-710-002

(4) Make sure that the air flows freely through the drain line.

SUBTASK 54-55-01-710-004

(5) Remove the Plug/Cap, STD-5497.

SUBTASK 54-55-01-710-005

(6) Use a Plug/Cap, STD-5497 to plug the other drain inlet.

SUBTASK 54-55-01-710-006

WARNING: BEFORE YOU USE COMPRESSED AIR, PUT ON GOGGLES FOR EYE PROTECTION. DO NOT POINT THE NOZZLE AT OTHER PERSONNEL. IF YOU DO NOT OBEY THESE PRECAUTIONS, INJURIES TO PERSONNEL CAN OCCUR.

(7) Use a 0-30 psig dry filtered regulated air source, STD-1280 to blow into the top of the applicable drain inlet.

SUBTASK 54-55-01-710-007

(8) Make sure that the air flows freely through the drain line.

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO. 71-040-01-01

MECH	INSP

SUBTASK 54-55-01-710-008

(9) Remove the Plug/Cap, STD-5497.

D. Put the Airplane Back to Its Usual Condition

SUBTASK 54-55-01-410-001

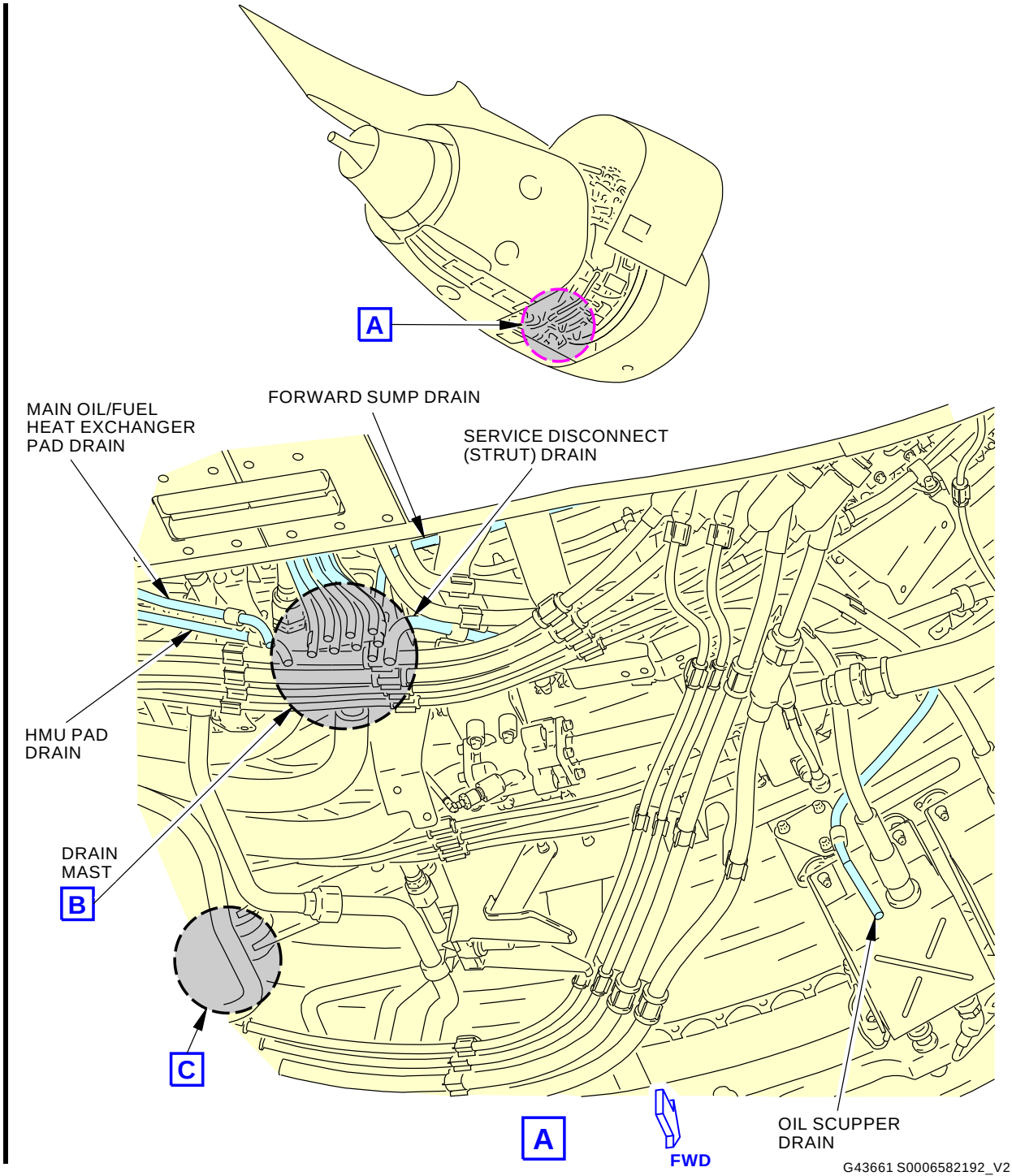
(1) Close the panels removed for access.

(a) Close these access panels:

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

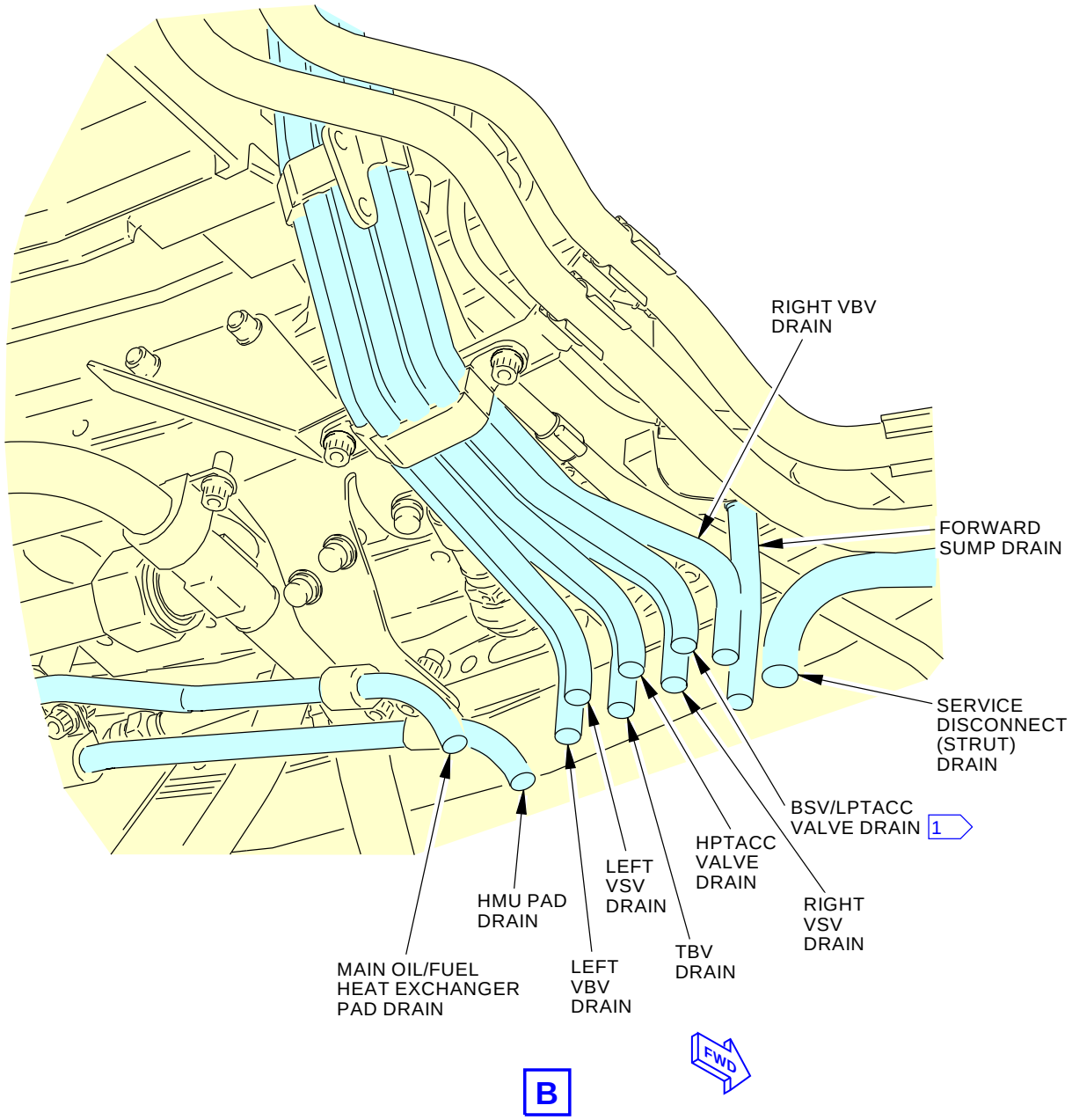
——— END OF TASK ———

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-01-01



Engine Vents and Drains Inspection
Figure 1 (Sheet 1 of 4)

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-01-01

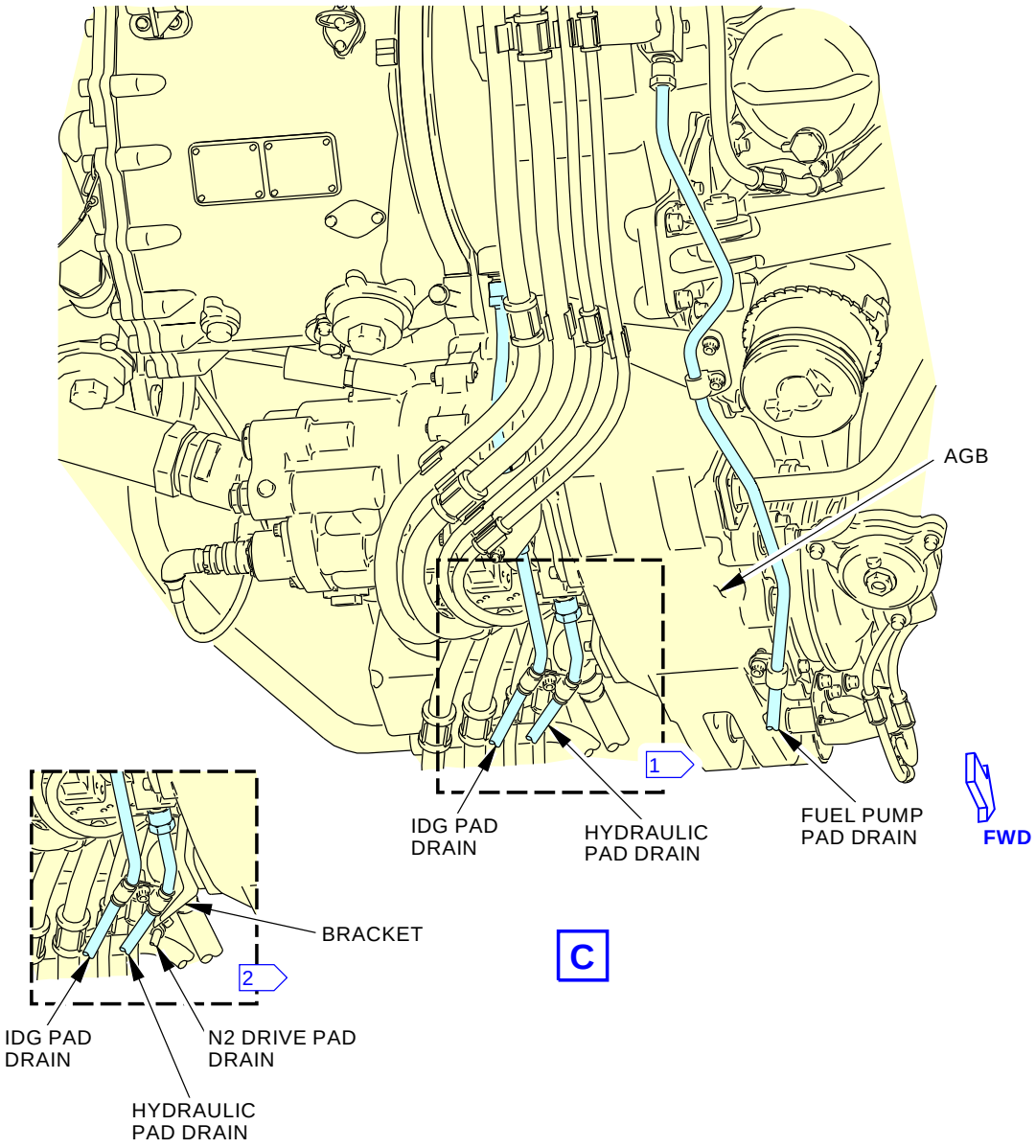


1 ENGINES POST-CFMI-SB 73-044; LPTACC VALVE DRAIN ONLY

G43758 S0006582193_V2

Engine Vents and Drains Inspection
Figure 1 (Sheet 2 of 4)

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-01-01



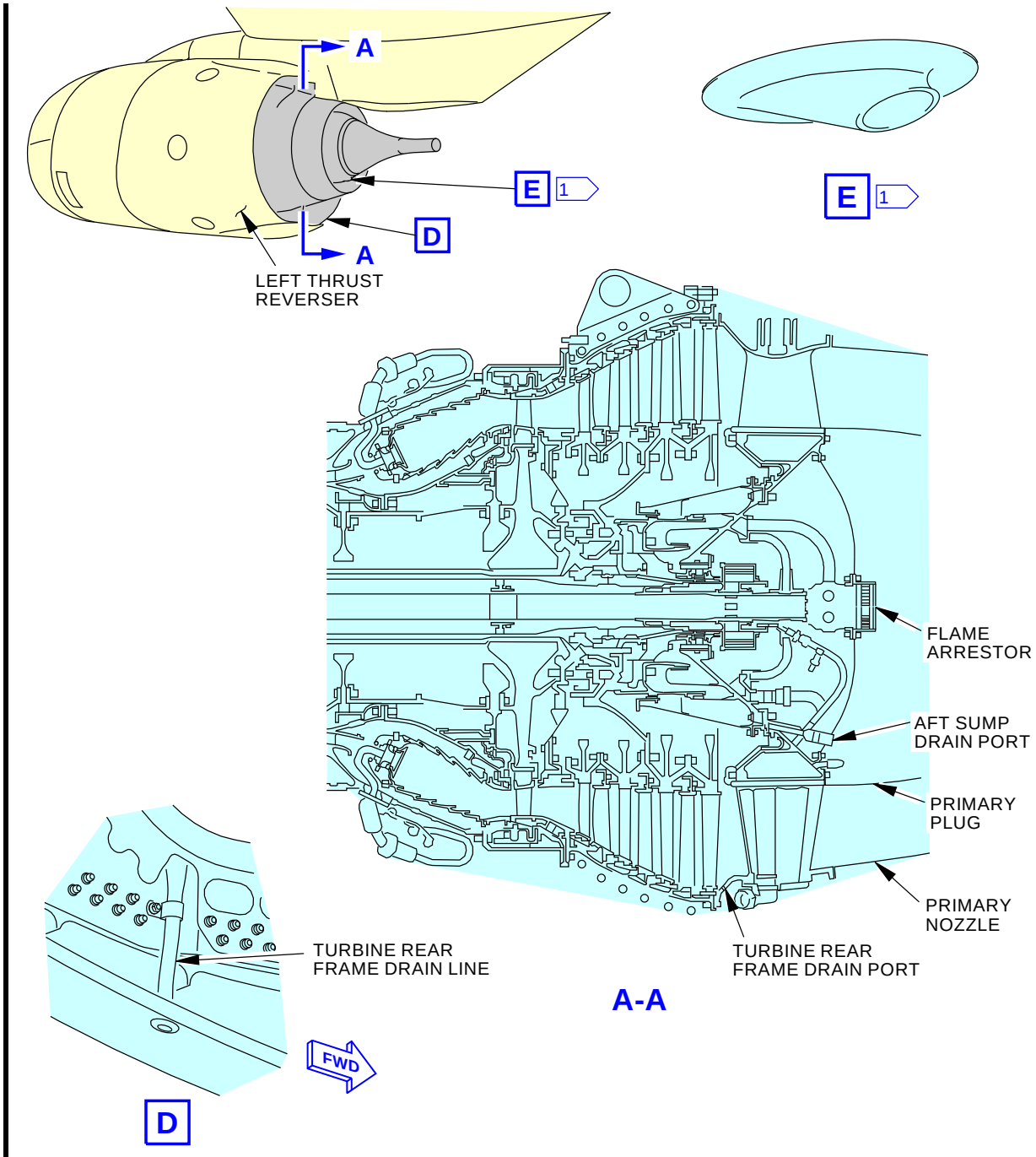
1 NON-7BE ENGINES PRE-CFM-SB 72-0564

2 NON-7BE ENGINES POST-CFM-SB 72-0564 OR 7BE ENGINES

G43663 S0006582196_V3

Engine Vents and Drains Inspection
Figure 1 (Sheet 3 of 4)

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-01-01

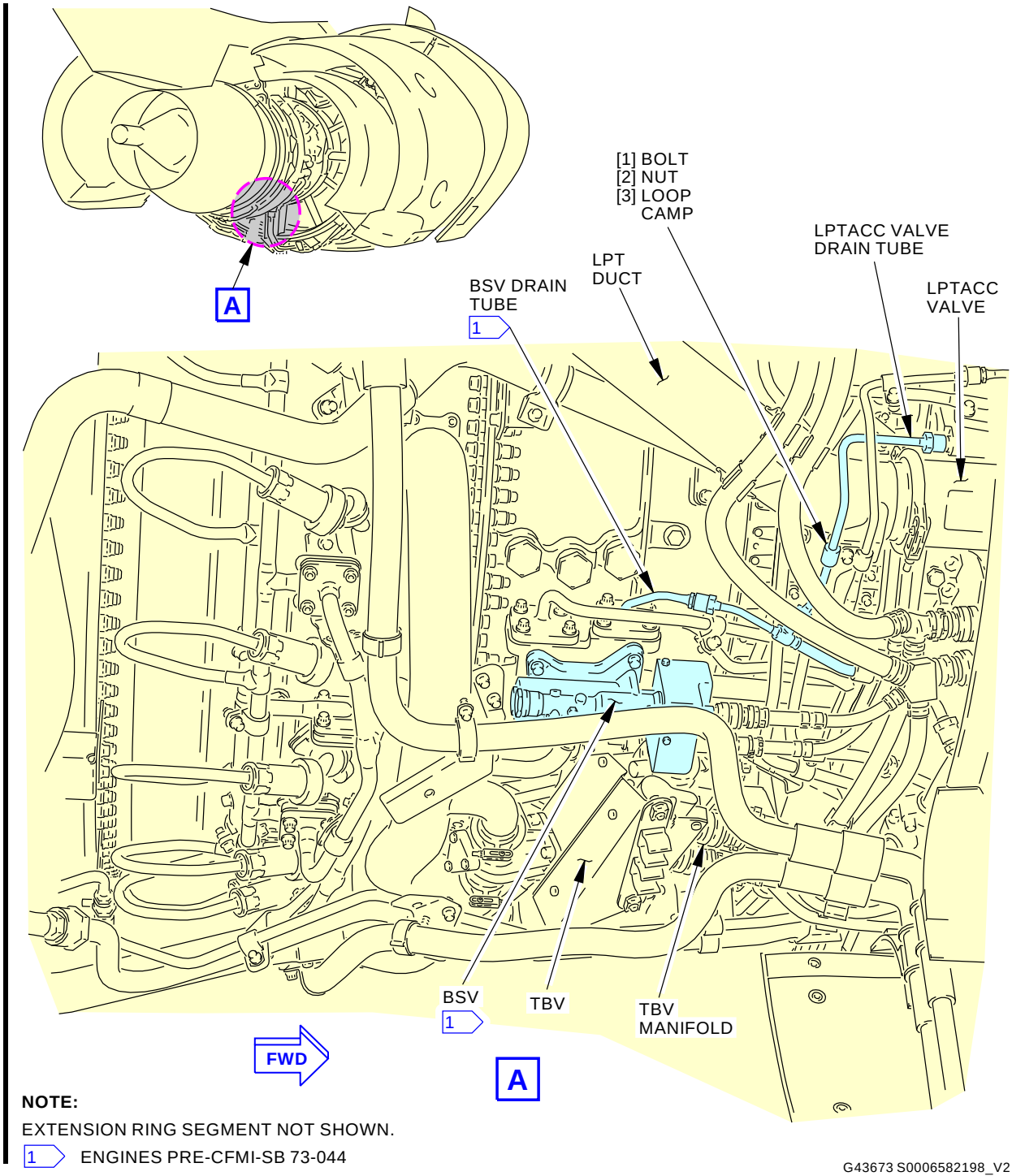


1 SHORT PRIMARY PLUG DRAIN

K21726 S0006582197_V5

Engine Vents and Drains Inspection
Figure 1 (Sheet 4 of 4)

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-01-01



NOTE:

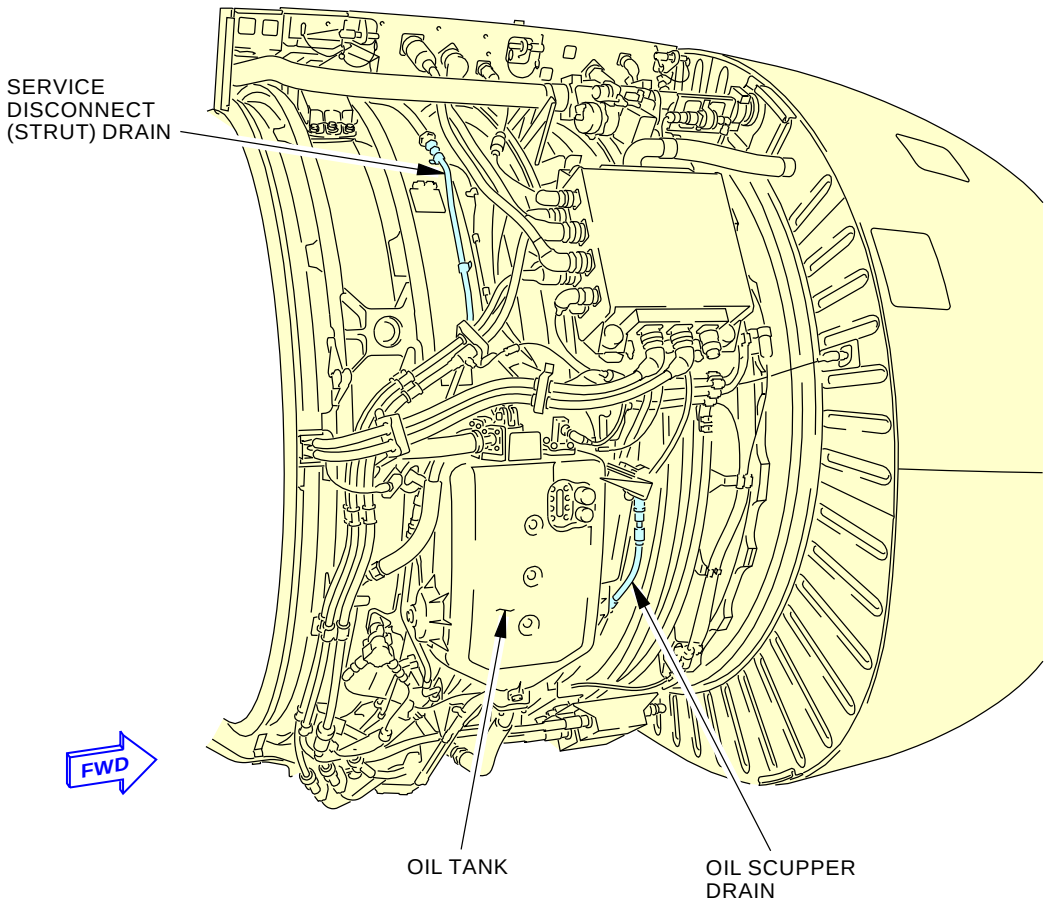
EXTENSION RING SEGMENT NOT SHOWN.

1 ENGINES PRE-CFMI-SB 73-044

G43673 S0006582198_V2

LPTACC Valve Drain Tube Disconnection
Figure 2

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-01-01

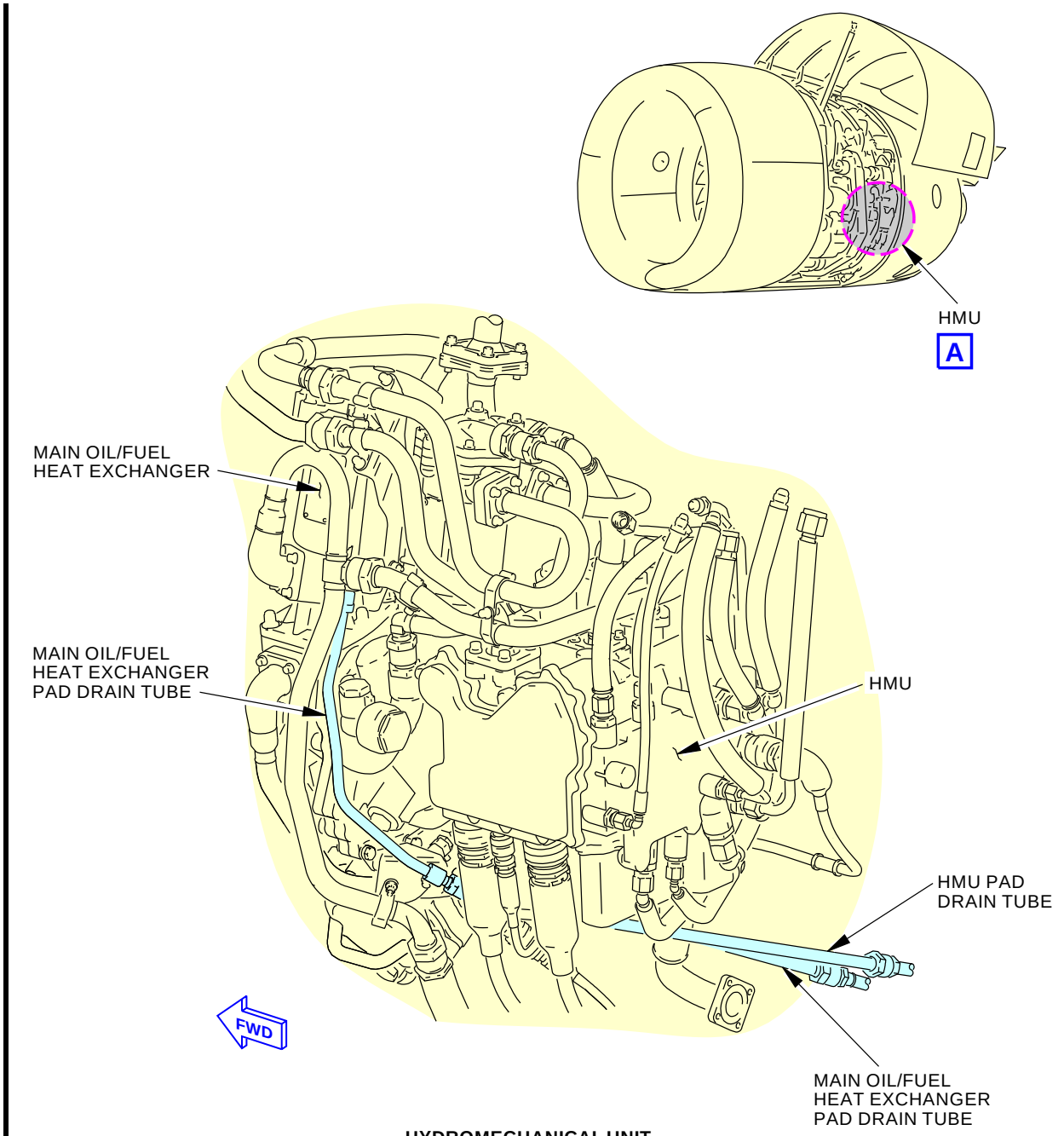


**FAN CASE
(RIGHT SIDE)**

L05070 S0006582202_V2

**Drain Lines Operational Check
Figure 3 (Sheet 1 of 6)**

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-01-01



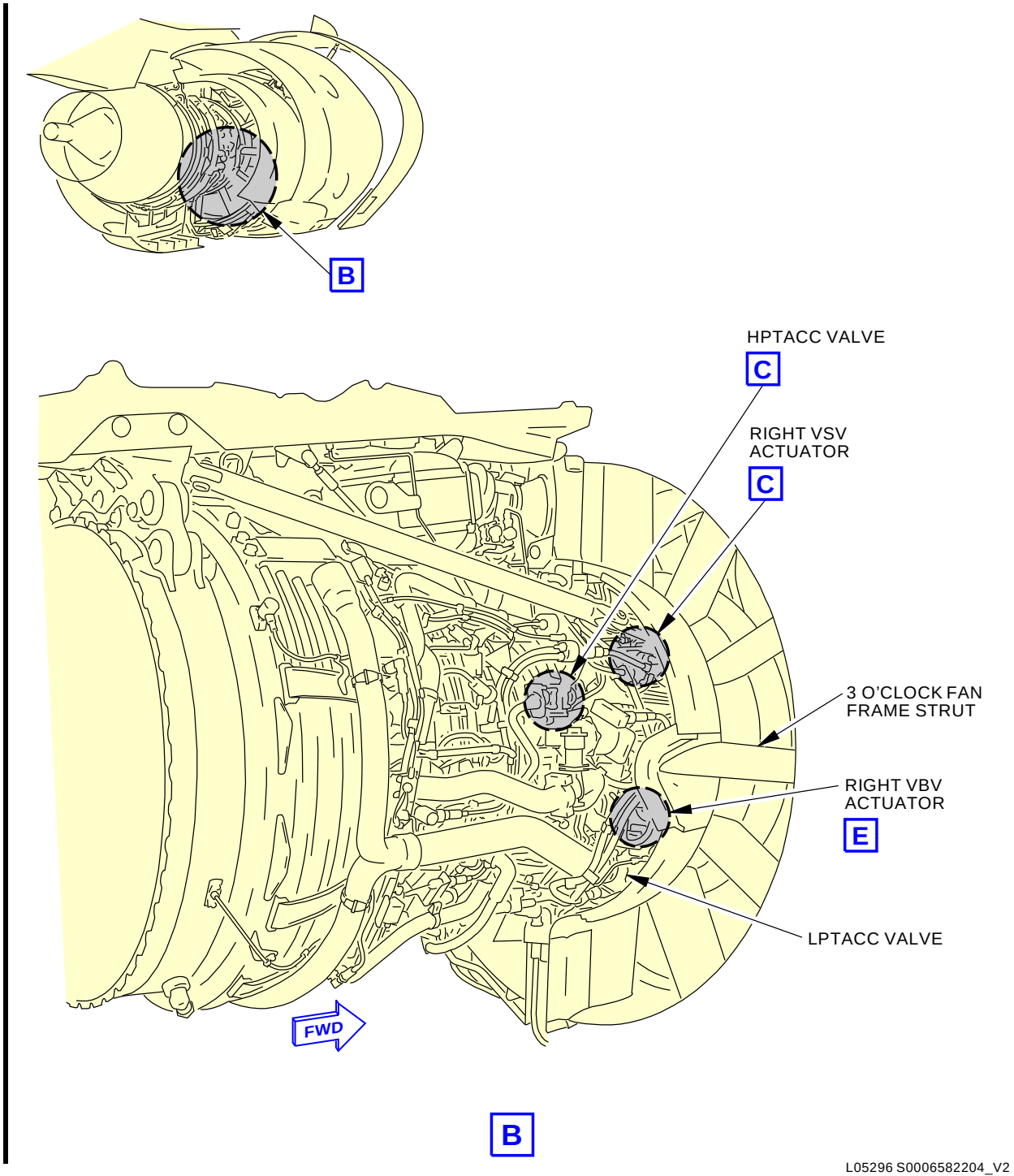
HYDROMECHANICAL UNIT (HMU)

A

L05256 S0006582203_V2

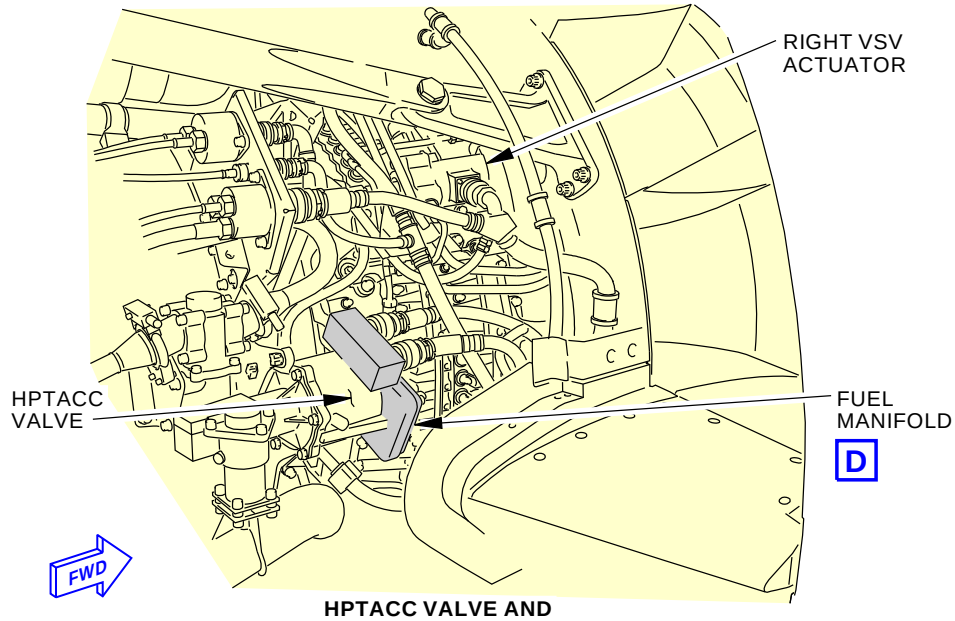
Drain Lines Operational Check
Figure 3 (Sheet 2 of 6)

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-01-01



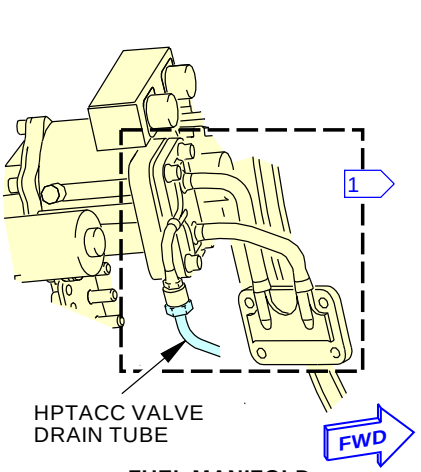
Drain Lines Operational Check
Figure 3 (Sheet 3 of 6)

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-01-01



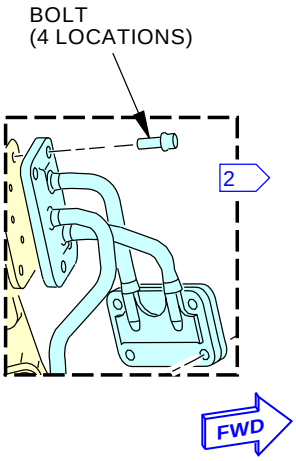
**HPTACC VALVE AND
RIGHT VSV ACTUATOR**

C



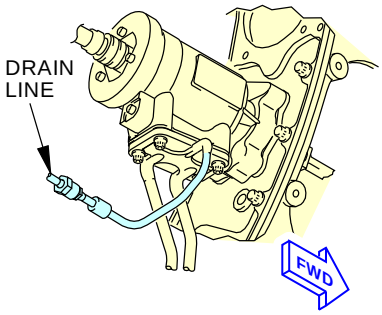
FUEL MANIFOLD

D



FUEL MANIFOLD

D



RIGHT VBV ACTUATOR

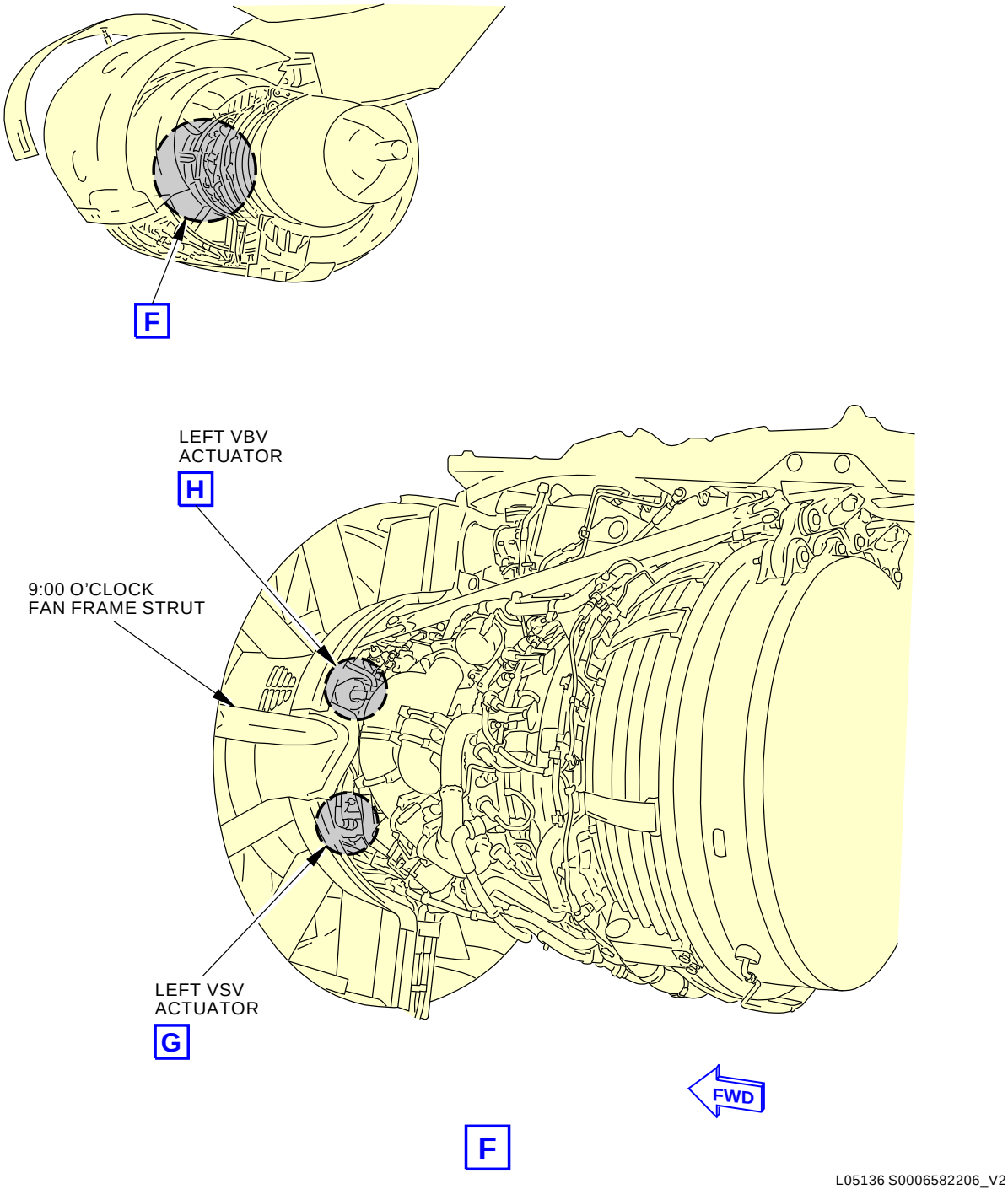
E

1 ENGINES PRE-CFM-SB 73-045
2 ENGINES POST-CFM-SB 73-045

L05200 S0006582205_V3

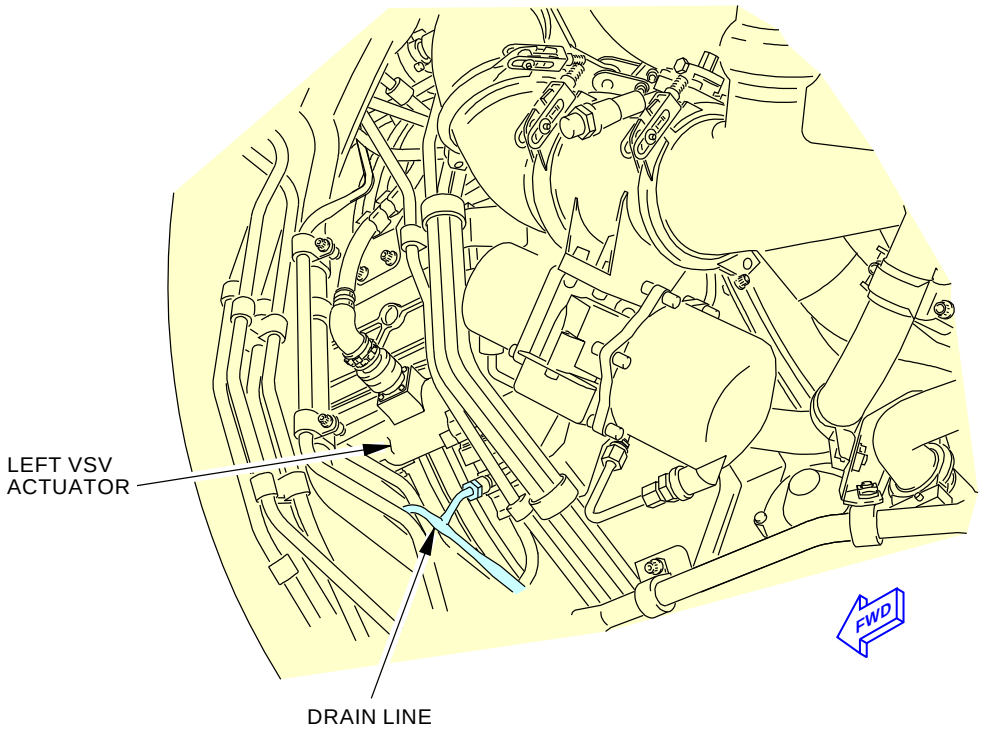
**Drain Lines Operational Check
Figure 3 (Sheet 4 of 6)**

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-01-01



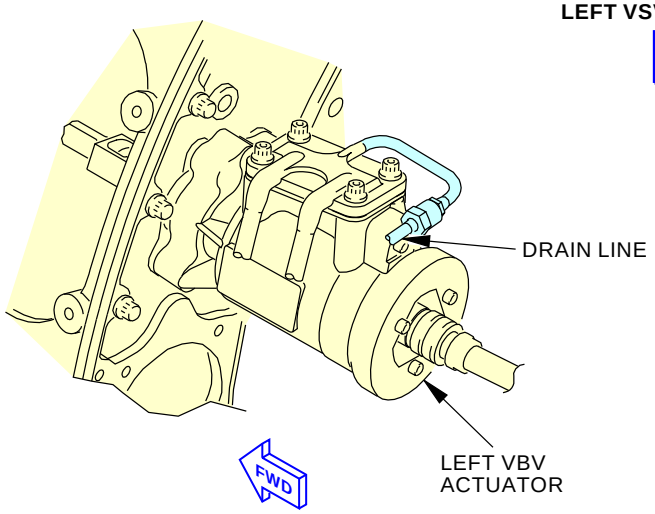
Drain Lines Operational Check
Figure 3 (Sheet 5 of 6)

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-01-01



LEFT VSV ACTUATOR

G



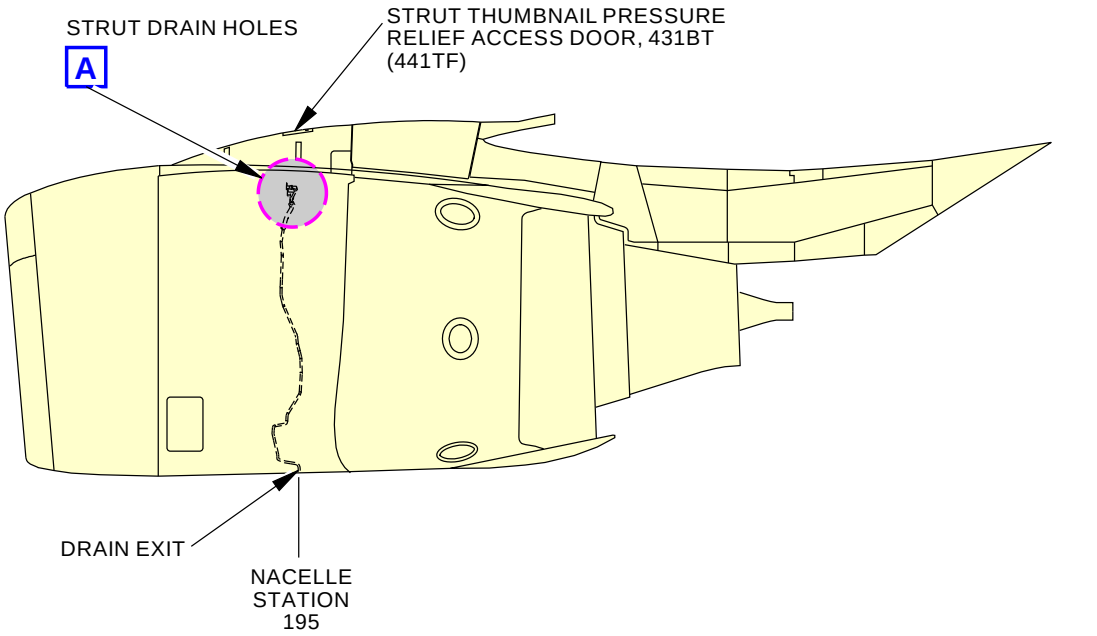
LEFT VBV ACTUATOR

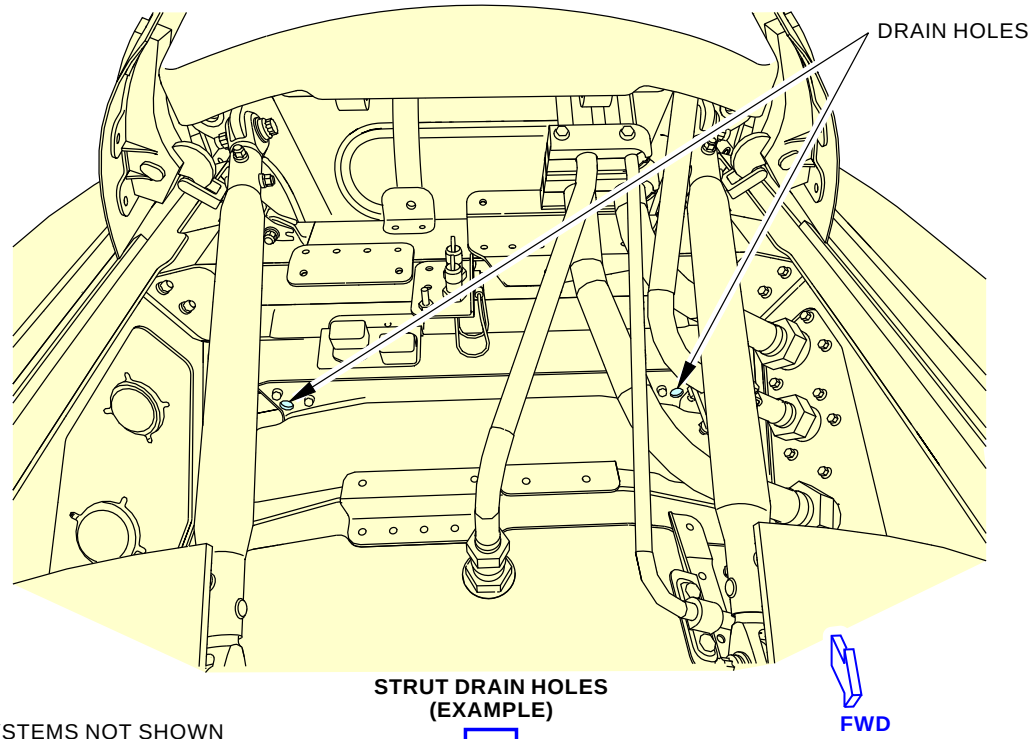
H

L05142 S0006582207_V2

Drain Lines Operational Check
Figure 3 (Sheet 6 of 6)

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-01-01





NOTE:

SOME SYSTEMS NOT SHOWN FOR CLARITY.

STRUT DRAIN HOLES (EXAMPLE)

A

2132113 S0000461051_V3

Fan Cowl Support Beam - Drain
Figure 4

AIRLINE CARD NO		TITLE			BOEING CARD NO.
		CHECK RIGHT ENGINE DRAIN LINES			**71-040-02-01**
DATE	TASK				RELATED CARD
	OPERATIONAL				
TAIL NUMBER	WORK AREA	VERSION	THRESHOLD	REPEAT	APPLICABILITY
	RIGHT ENGINE	**1.1**	**6 YR**	**6 YR**	AIRPLANE **ALL** ENGINE **ALL**
STATION	SKILL				
	AIRPL				
		ACCESS			ZONE
		423 424 441AT			**421**

Operationally check right engine all drain lines.

A. References

Reference	Title
AMM 71-00-00-800-811-F00	Power Plant Test Reference Table (P/B 501)
AMM 71-11-02-010-801-F00	Open the Fan Cowl Panels (P/B 201)
AMM 71-11-02-410-801-F00	Close the Fan Cowl Panels (P/B 201)
AMM 78-31-00-010-801-F00	Open the Thrust Reverser (Selection) (P/B 201)
AMM 78-31-00-010-804-F00	Close the Thrust Reverser (Selection) (P/B 201)

B. Consumable Materials

Reference	Description	Specification
D00601 [CP2101]	High-temperature graphite compound	SAE AMS 2518

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
STD-1280	Source - Air, Regulated, Dry Filtered, 0-30 PSIG
STD-5497	Plug/Cap - To block each port

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-02-01

MECH | INSP

TASK 71-71-00-700-801-F00

1. Drain Lines Inspection (Operational Check)

(Figure 1, Figure 2, and Figure 3)

A. General

(1) This is a scheduled maintenance task which does an operational check of the engine drain lines.

B. Drain Lines Inspection (Operational Check)

SUBTASK 71-71-00-010-013-F00

(1) Do this task: Open the Fan Cowl Panels, AMM TASK 71-11-02-010-801-F00.

SUBTASK 71-71-00-010-010-F00

WARNING: DO THESE SPECIFIED TASKS IN THE CORRECT SEQUENCE BEFORE YOU OPEN THE THRUST REVERSERS: RETRACT THE LEADING EDGE, DO THE DEACTIVATION PROCEDURES FOR THE LEADING EDGE AND THE THRUST REVERSERS (FOR GROUND MAINTENANCE), AND OPEN THE FAN COWL PANELS. IF YOU DO NOT OBEY THE ABOVE SEQUENCE, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(2) Do this task: Open the Thrust Reverser (Selection), AMM TASK 78-31-00-010-801-F00.

SUBTASK 71-71-00-210-004-F00

(3) Do these steps to prepare for the procedure:

(a) Find the drain lines for the check (Figure 1):

(b) Find the applicable drain line connections at the engine component to disconnect (Figure 2 and Figure 3).

NOTE: Some connections are found at a different location than the engine component.

1) The forward sump drain is on the fan case (rear) at the 5:00 o'clock position.

2) The TBV drain is on the TBV fuel manifold.

3) The VSV drain is on the rod-end and head-end of the actuators.

SUBTASK 71-71-00-700-001-F00

(4) Do the operational check below for each drain line:

(a) It is not necessary to do a check of the engine aft sump drain.

(b) Disconnect the applicable drain line from the engine component and push the line away from the component.

1) It is not necessary to disconnect the oil tank scupper drain.

2) It can be necessary to disconnect the clamps on some of the drain lines.

I **AKS ALL PRE SB CFM56-7B 73-44**

3) For the BSV/LPTACC valve drain line, disconnect the drain lines from the two components and alternately install a cap on the drain lines to do the check of each drain.

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO. 71-040-02-01

MECH | INSP

AKS ALL POST SB CFM56-7B 73-44

a) The BSV is not installed.

AKS ALL

4) For the HPTACC valve drain, do the applicable step to get access to the drain.

AKS ALL PRE SB 737-CFM56-7B-73-045

a) Disconnect the drain line at the fuel manifold.

AKS ALL POST SB 737-CFM56-7B-73-045

b) Remove the four bolts at the fuel manifold.

AKS ALL

(c) Connect an 0-30 psig dry filtered regulated air source, STD-1280 to the bottom of the applicable drain line.

(d) Make sure that the air flows freely through the line.

(e) If you find blockage, remove the blockage or replace the drain line.

(f) Re-connect the applicable drain line at the engine component.

1) For the HPTACC valve drain, do the applicable step to connect the drain:

AKS ALL PRE SB 737-CFM56-7B-73-045

a) Connect the drain line at the fuel manifold.

AKS ALL POST SB 737-CFM56-7B-73-045

b) Connect the fuel manifold.

<1> Lubricate the threads of the four bolts with graphite compound, D00601 [CP2101].

<2> Install the gasket between the fuel manifold and the HPTACC valve.

NOTE: Inspect the gasket prior to installation. Replace the gasket if it is damaged or deformed.

<3> Install the four bolts.

<4> Tighten the four bolts to 62-68 pound-inches (7-8 Newton-meters).

AKS ALL

(g) Connect the clamps that you loosened to move the drain line.

(h) Remove the 0-30 psig dry filtered regulated air source, STD-1280 from the bottom of the applicable drain line.

SUBTASK 71-71-00-410-003-F00

WARNING: OBEY THE INSTRUCTIONS IN THE PROCEDURE TO CLOSE THE THRUST REVERSER. IF YOU DO NOT OBEY THE INSTRUCTIONS, INJURIES TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

(5) Do this task: Close the Thrust Reverser (Selection), AMM TASK 78-31-00-010-804-F00.

SUBTASK 71-71-00-410-008-F00

(6) Do this task: Close the Fan Cowl Panels, AMM TASK 71-11-02-410-801-F00.

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO. 71-040-02-01

MECH	INSP

AKS ALL POST SB 737-CFM56-7B-73-045

SUBTASK 71-71-00-710-001-F00

(7) Do a leak check of the HPTACC valve fuel manifold (AMM TASK 71-00-00-800-811-F00).

AKS ALL

——— END OF TASK ———

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO. 71-040-02-01

MECH | INSP

TASK 54-55-01-200-801

2. Strut Fan Cowl Support Beam Drain - Operational Test

Figure 4

A. General

(1) This task gives steps to do an operational test of the Fan Cowl Support Beam Drain.

B. Prepare for the Operational Test

SUBTASK 54-55-01-010-001

(1) Open these access panels:

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

C. Strut Fan Cowl Support Beam Drain - Operational Test

SUBTASK 54-55-01-210-002

(1) Make sure that the Fan Cowl Support Beam and drain inlets are free of unwanted material.

SUBTASK 54-55-01-710-003

(2) Use a Plug/Cap, STD-5497 to plug one drain inlet.

SUBTASK 54-55-01-710-001

WARNING: BEFORE YOU USE COMPRESSED AIR, PUT ON GOGGLES FOR EYE PROTECTION. DO NOT POINT THE NOZZLE AT OTHER PERSONNEL. IF YOU DO NOT OBEY THESE PRECAUTIONS, INJURIES TO PERSONNEL CAN OCCUR.

(3) Use a 0-30 psig dry filtered regulated air source, STD-1280 to blow into the top of the applicable drain inlet.

SUBTASK 54-55-01-710-002

(4) Make sure that the air flows freely through the drain line.

SUBTASK 54-55-01-710-004

(5) Remove the Plug/Cap, STD-5497.

SUBTASK 54-55-01-710-005

(6) Use a Plug/Cap, STD-5497 to plug the other drain inlet.

SUBTASK 54-55-01-710-006

WARNING: BEFORE YOU USE COMPRESSED AIR, PUT ON GOGGLES FOR EYE PROTECTION. DO NOT POINT THE NOZZLE AT OTHER PERSONNEL. IF YOU DO NOT OBEY THESE PRECAUTIONS, INJURIES TO PERSONNEL CAN OCCUR.

(7) Use a 0-30 psig dry filtered regulated air source, STD-1280 to blow into the top of the applicable drain inlet.

SUBTASK 54-55-01-710-007

(8) Make sure that the air flows freely through the drain line.

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO. 71-040-02-01

MECH	INSP

SUBTASK 54-55-01-710-008

(9) Remove the Plug/Cap, STD-5497.

D. Put the Airplane Back to Its Usual Condition

SUBTASK 54-55-01-410-001

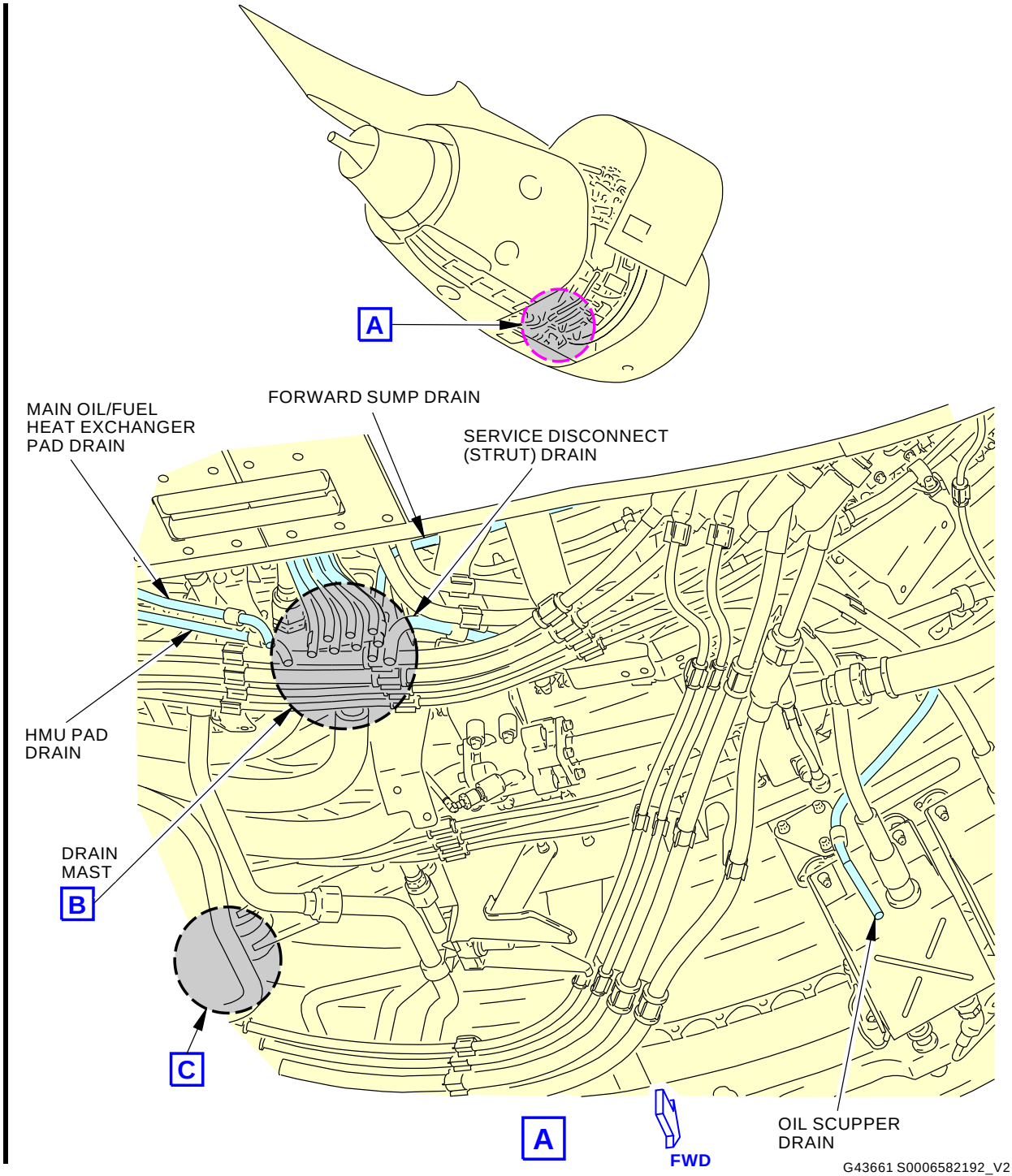
(1) Close the panels removed for access.

(a) Close these access panels:

Number	Name/Location
431AT	Forward Strut Fairing, Thumbnail Fairing, Strut 1
441AT	Forward Strut Fairing, Thumbnail Fairing, Strut 2

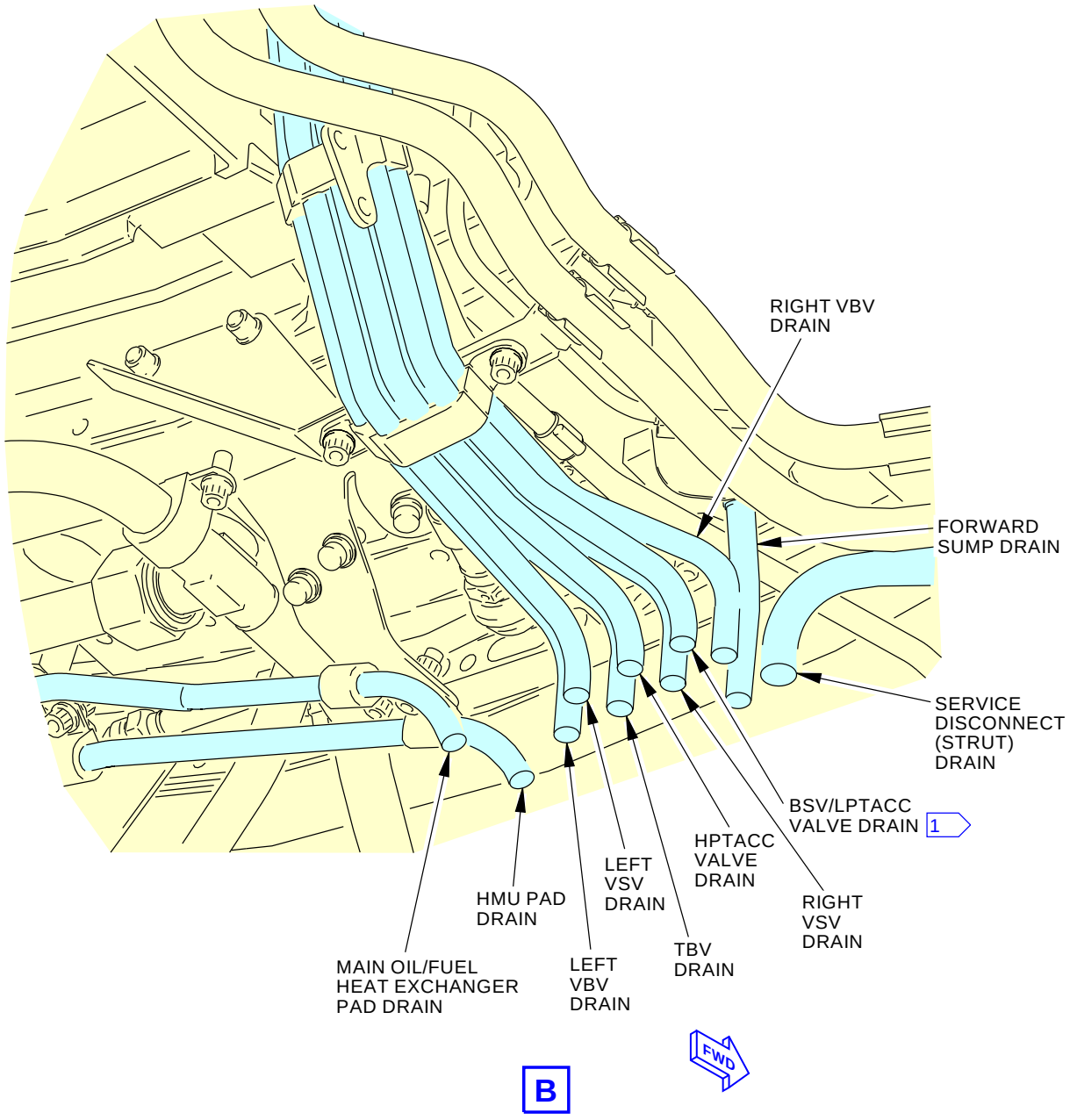
——— END OF TASK ———

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-02-01



Engine Vents and Drains Inspection
Figure 1 (Sheet 1 of 4)

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-02-01

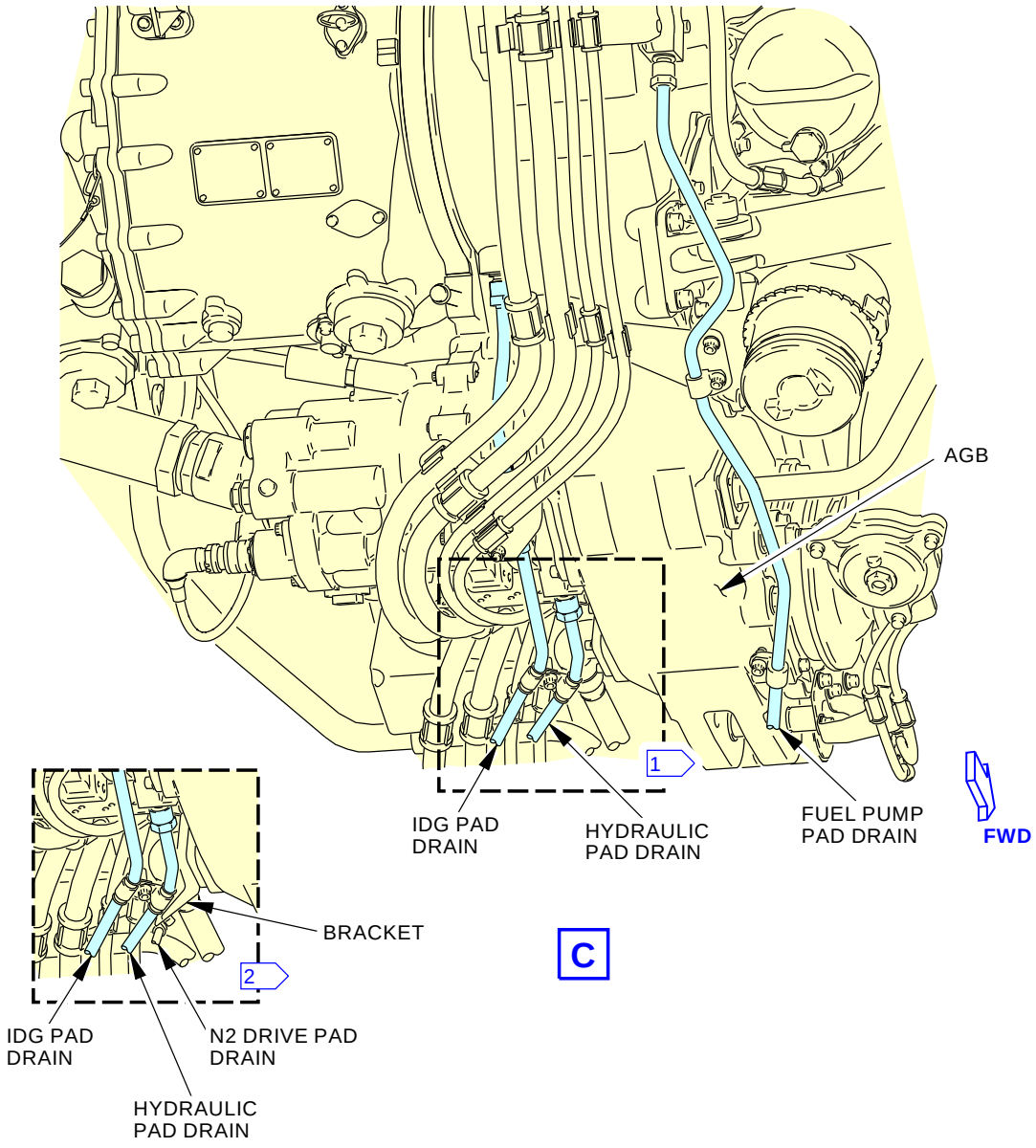


1 ENGINES POST-CFMI-SB 73-044;
LPTACC VALVE DRAIN ONLY

G43758 S0006582193_V2

Engine Vents and Drains Inspection
Figure 1 (Sheet 2 of 4)

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-02-01



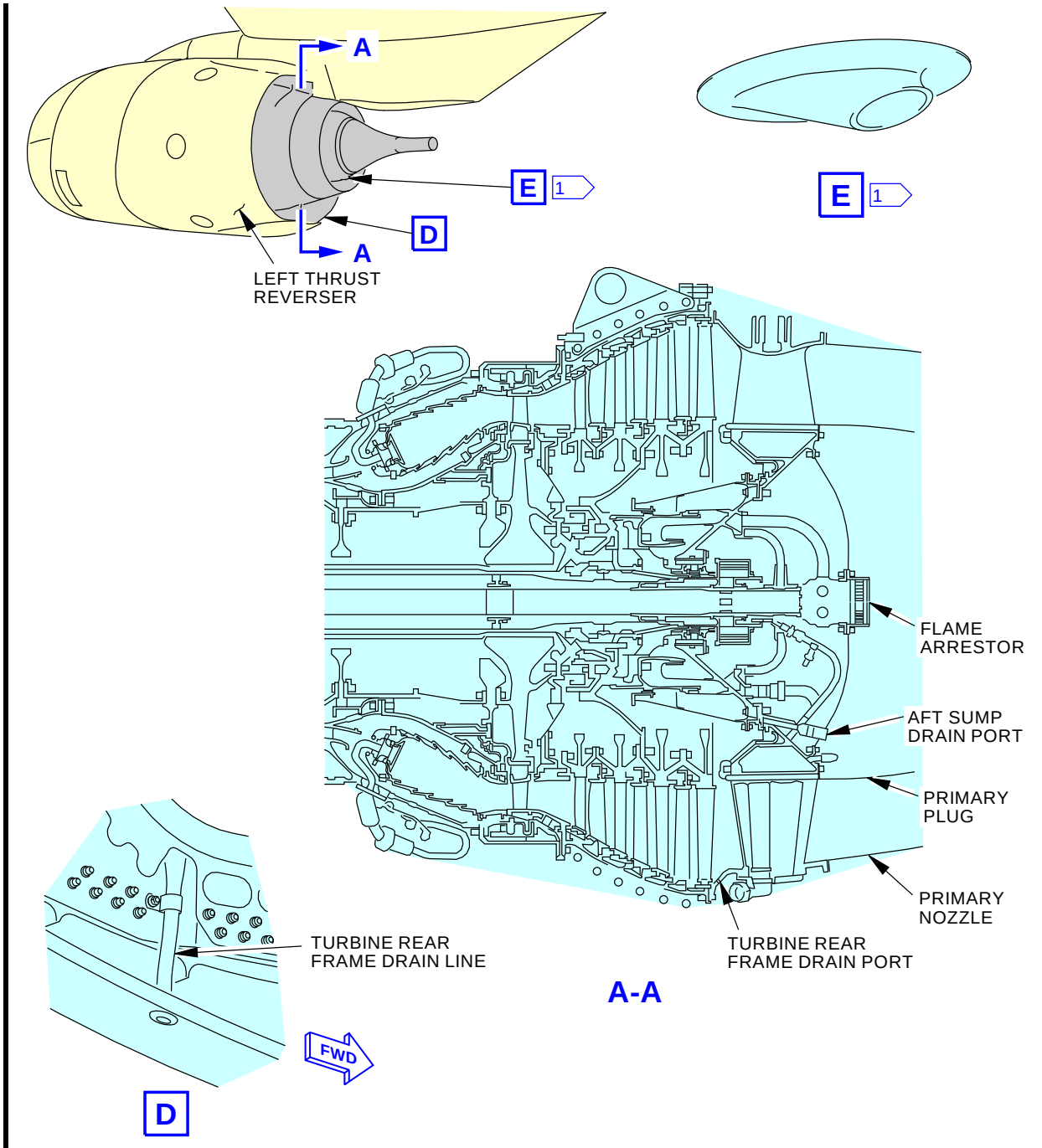
1 NON-7BE ENGINES PRE-CFM-SB 72-0564

2 NON-7BE ENGINES POST-CFM-SB 72-0564 OR 7BE ENGINES

G43663 S0006582196_V3

Engine Vents and Drains Inspection
Figure 1 (Sheet 3 of 4)

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-02-01



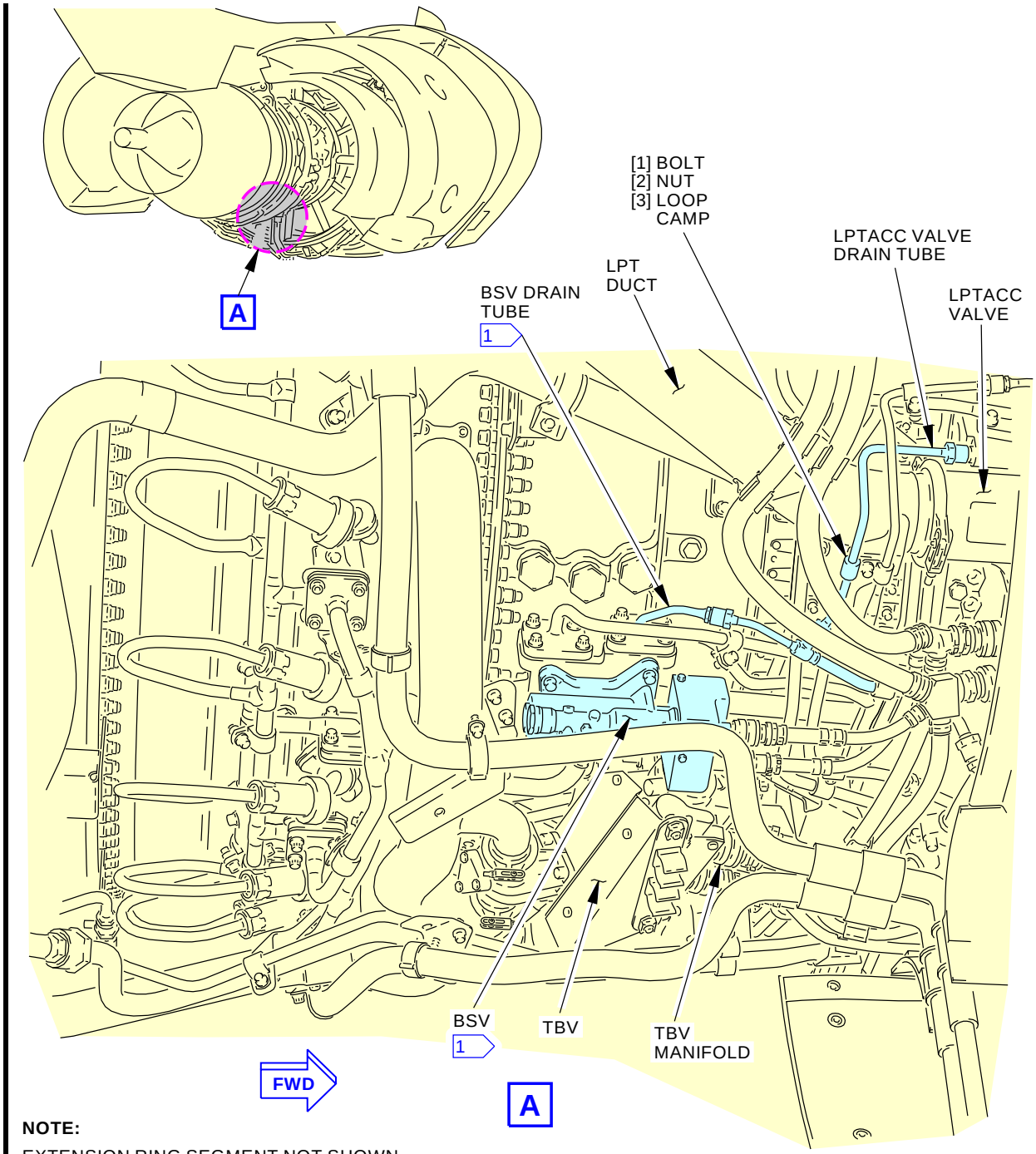
1 SHORT PRIMARY PLUG DRAIN

K21726 S0006582197_V5

Engine Vents and Drains Inspection
Figure 1 (Sheet 4 of 4)

EFFECTIVITY	SOURCE	
AKS ALL	**MRB**	**CHECK RIGHT ENGINE DRAIN LINES**

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-02-01



NOTE:

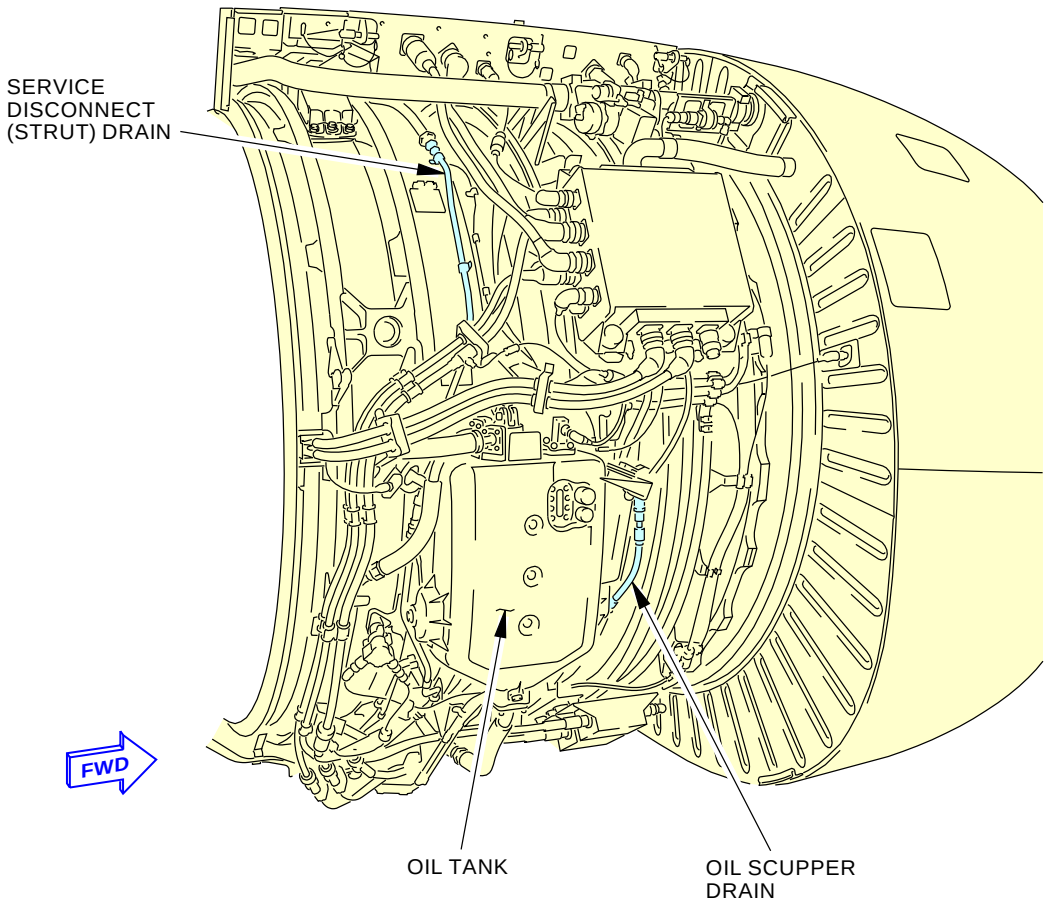
EXTENSION RING SEGMENT NOT SHOWN.

1 ENGINES PRE-CFMI-SB 73-044

G43673 S0006582198_V2

LPTACC Valve Drain Tube Disconnection
Figure 2

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-02-01

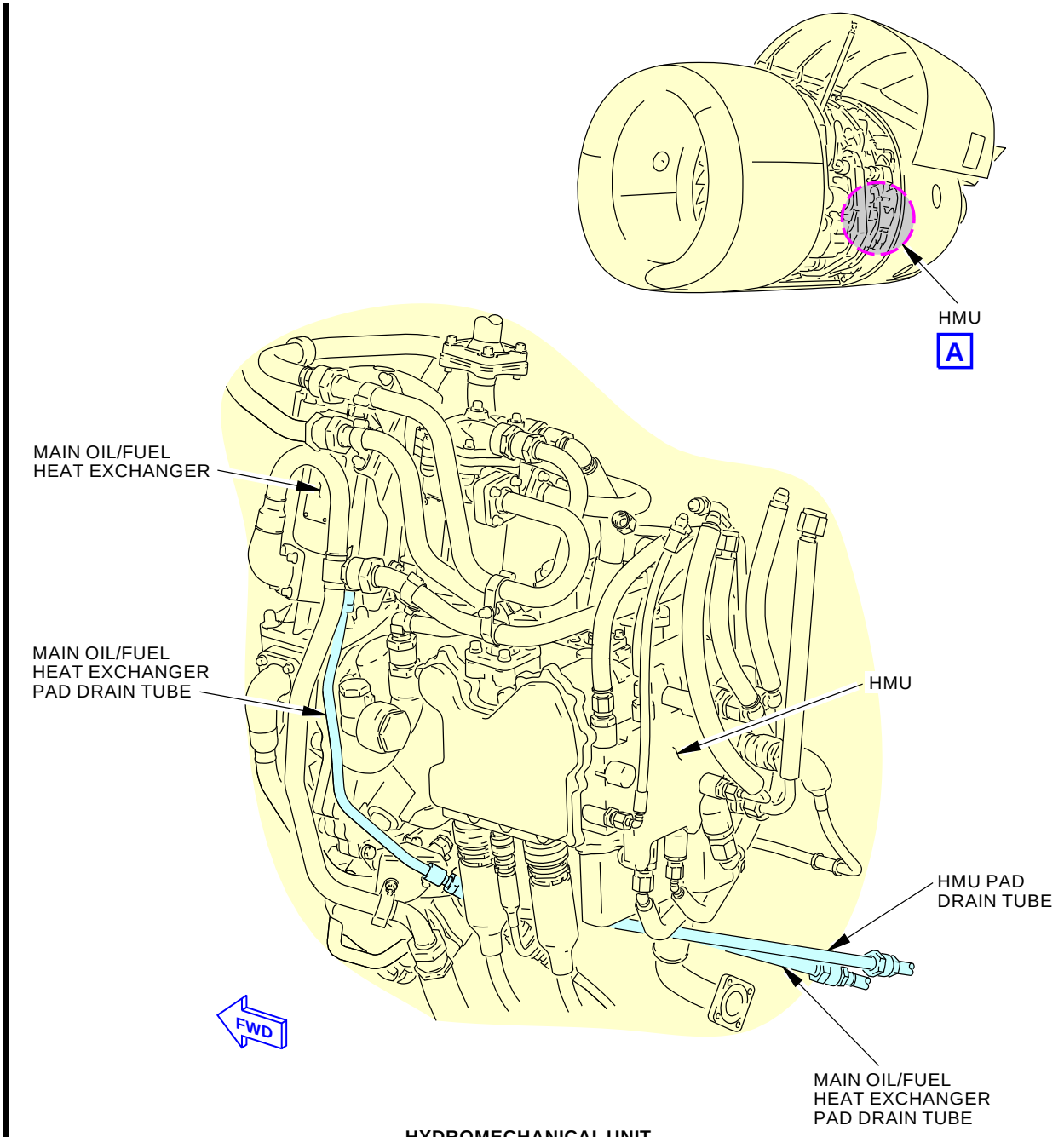


**FAN CASE
(RIGHT SIDE)**

L05070 S0006582202_V2

**Drain Lines Operational Check
Figure 3 (Sheet 1 of 6)**

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-02-01



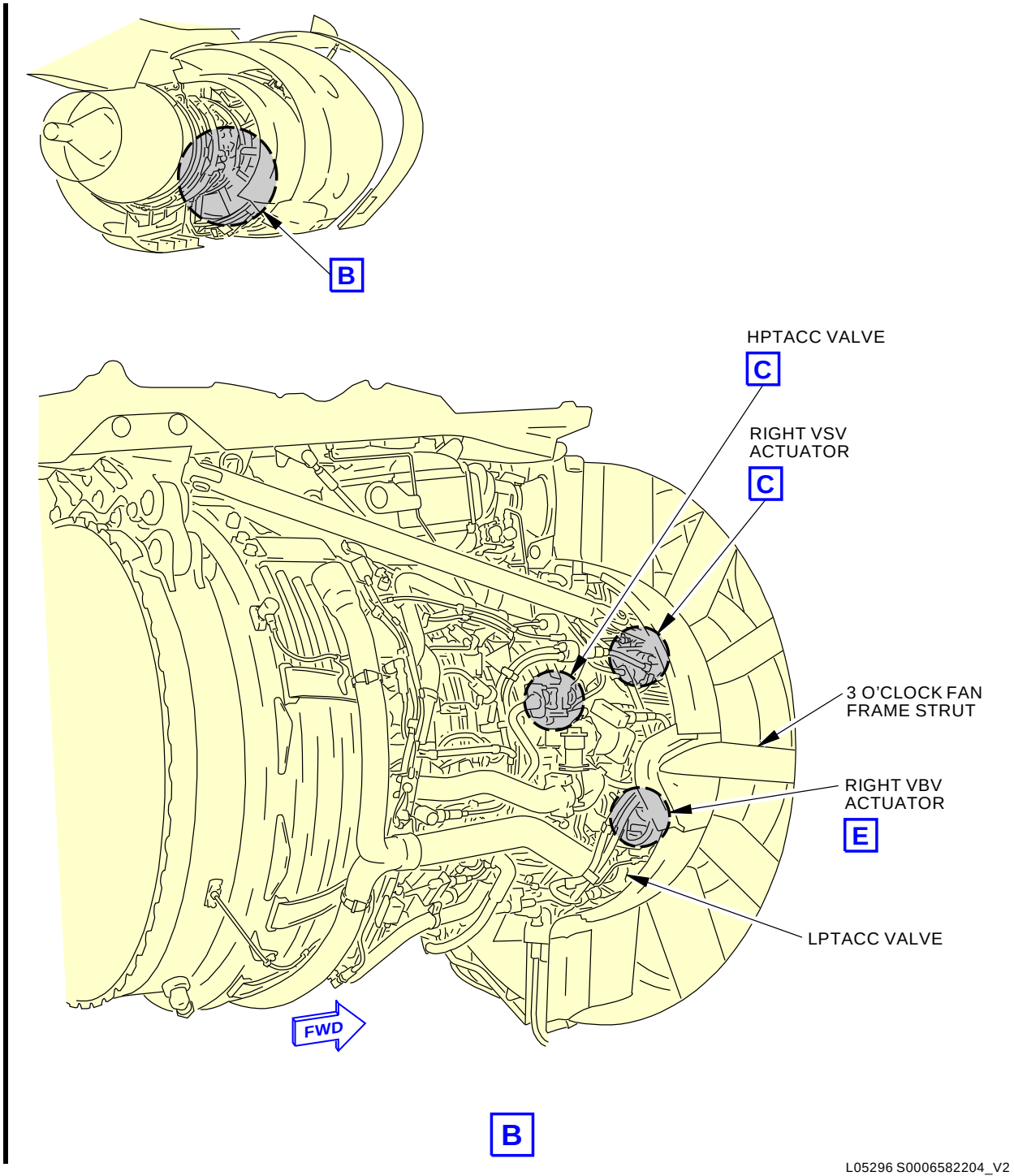
HYDROMECHANICAL UNIT (HMU)

A

L05256 S0006582203_V2

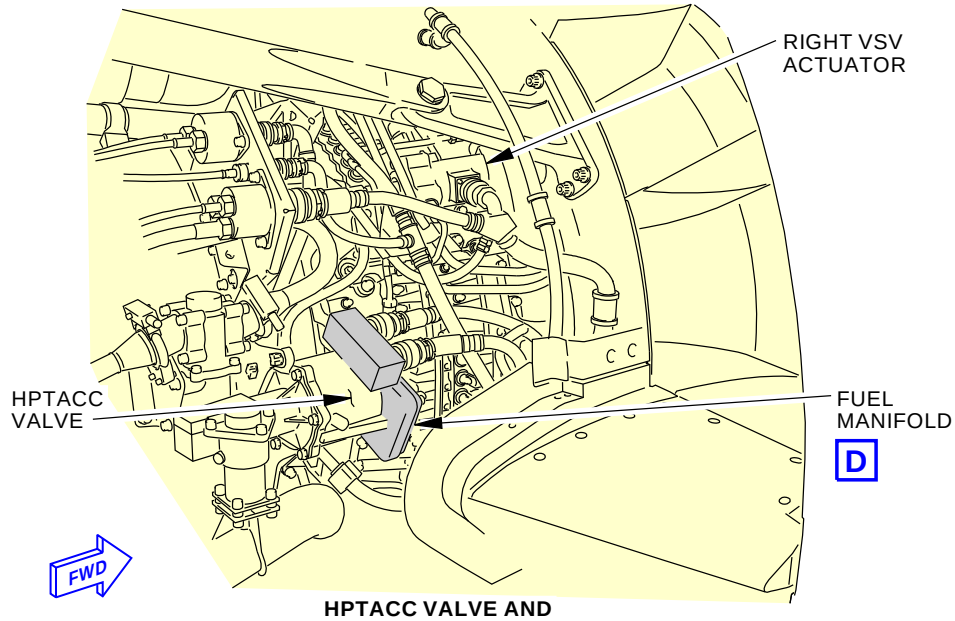
Drain Lines Operational Check
Figure 3 (Sheet 2 of 6)

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-02-01



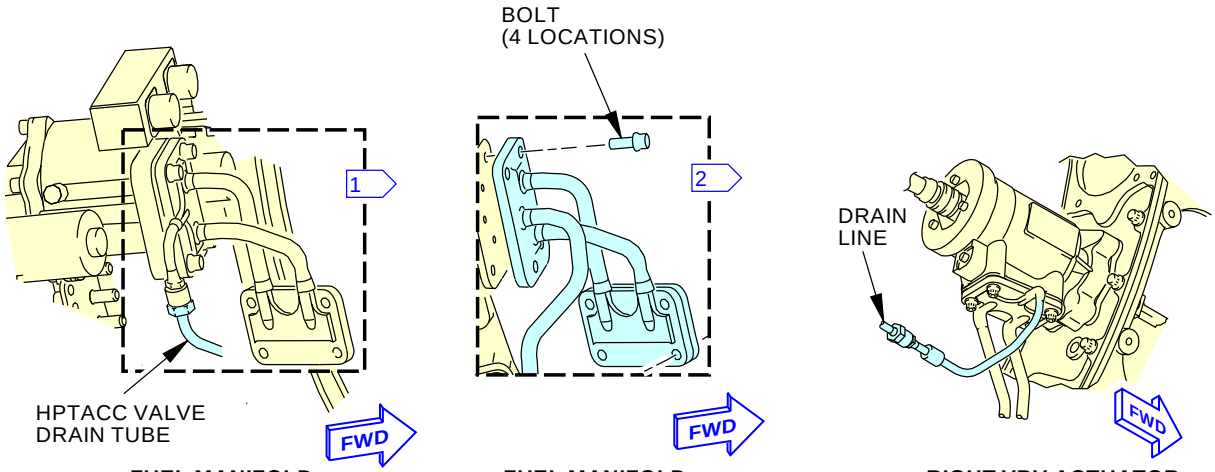
Drain Lines Operational Check
Figure 3 (Sheet 3 of 6)

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-02-01



**HPTACC VALVE AND
RIGHT VSV ACTUATOR**

C



FUEL MANIFOLD

D

FUEL MANIFOLD

D

RIGHT VBV ACTUATOR

E

1 ENGINES PRE-CFM-SB 73-045

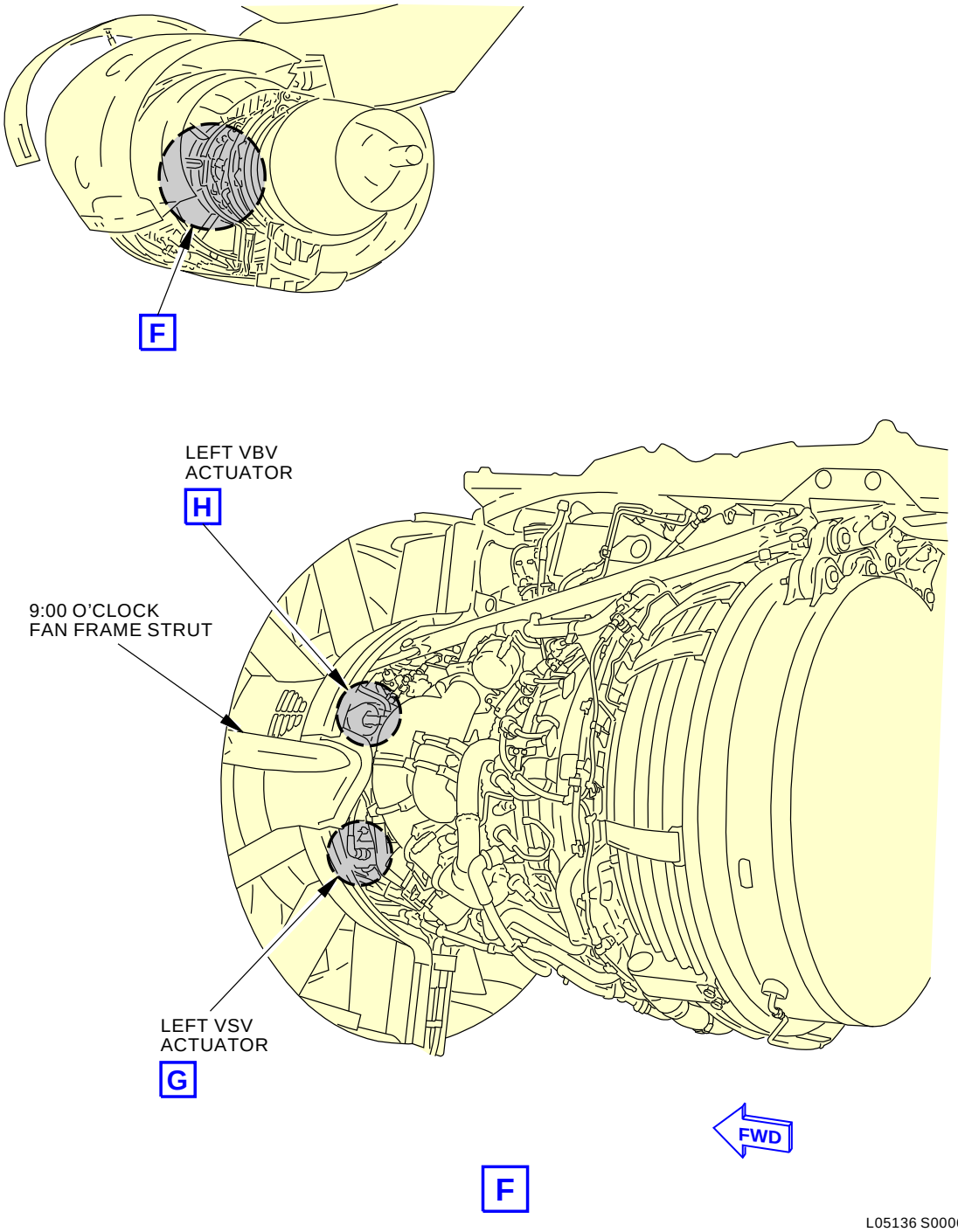
2 ENGINES POST-CFM-SB 73-045

L05200 S0006582205_V3

**Drain Lines Operational Check
Figure 3 (Sheet 4 of 6)**

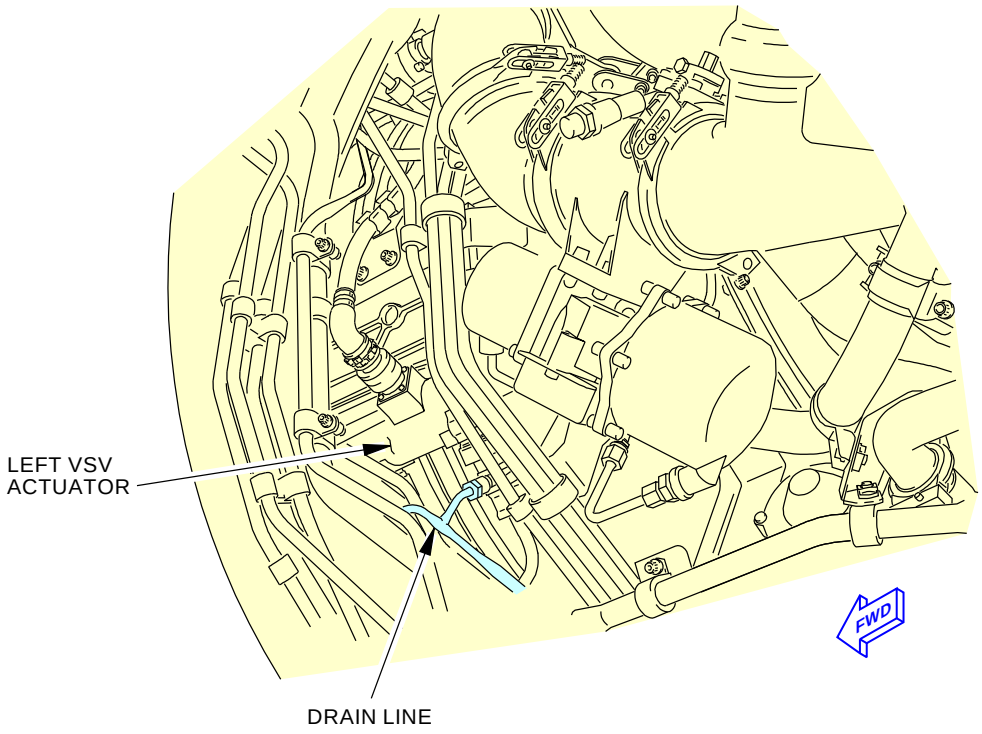
EFFECTIVITY	SOURCE	
AKS ALL	**MRB**	**CHECK RIGHT ENGINE DRAIN LINES**

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-02-01



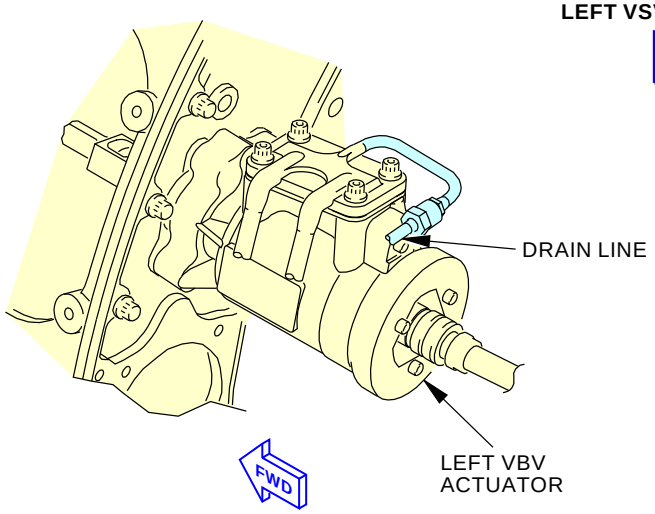
Drain Lines Operational Check
Figure 3 (Sheet 5 of 6)

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-02-01



LEFT VSV ACTUATOR

G



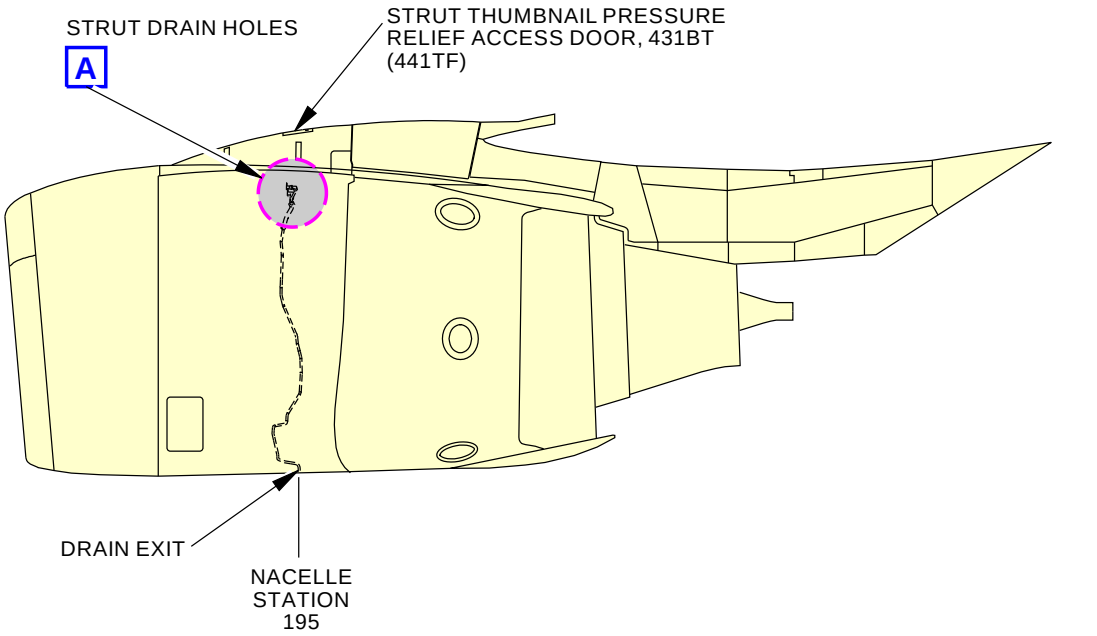
LEFT VBV ACTUATOR

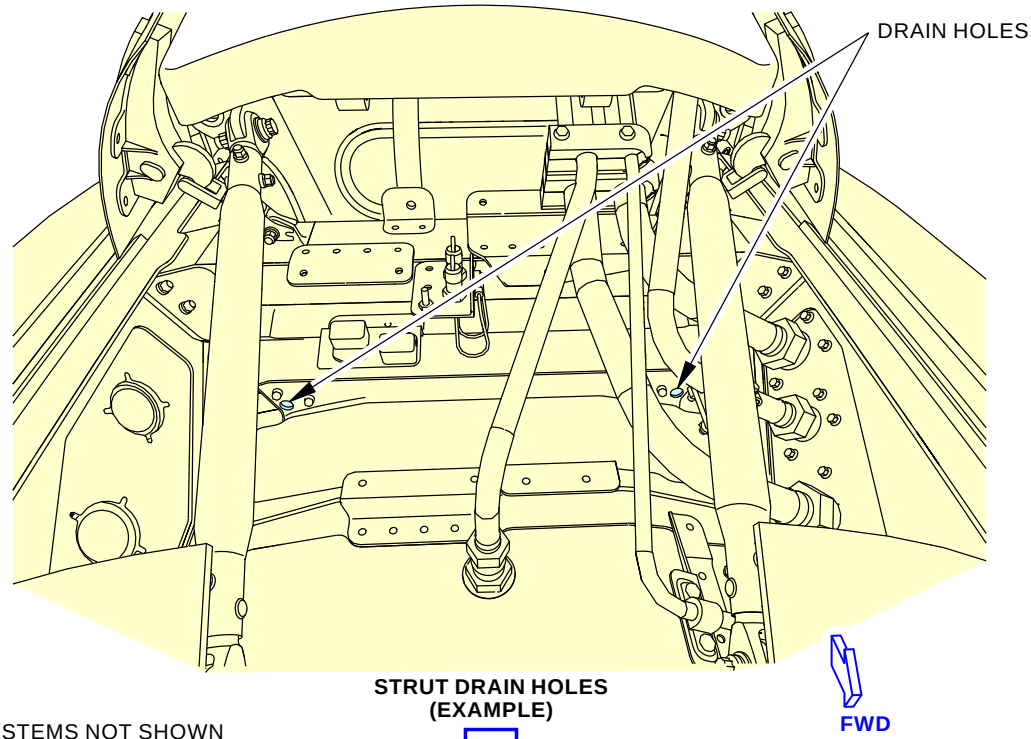
H

L05142 S0006582207_V2

Drain Lines Operational Check
Figure 3 (Sheet 6 of 6)

DATE	TAIL NUMBER	STATION	AIRLINE CARD NO.	BOEING CARD NO.
				71-040-02-01





NOTE:

SOME SYSTEMS NOT SHOWN FOR CLARITY.

STRUT DRAIN HOLES (EXAMPLE)

A

2132113 S0000461051_V3

Fan Cowl Support Beam - Drain
Figure 4