SERVICE BULLETIN REVISION NOTICE

ENGINE INDICATING — EXHAUST GAS TEMPERATURE (EGT) WIRING HARNESS AND JUNCTION BOX ASSEMBLY — REPLACE WITH THERMOCOUPLE WIRING HARNESS ASSEMBLY

Turbojet Engine Service Bulletin No. V2500-ENG-77-0015 Revision No. 1 dated August 3, 2017.

Revision History

Original Issue March 8, 2017

Revision 1 dated August 3, 2017

Reason for the Revision

To update Material — Price and Availability.

To update the quantity of removed clamp and nuts within Material Information.

To provide industry support program information offered by Harco Laboratories Inc.

To correct Engine Manual Task reference from 72-00-40-020-073 to Task 72-00-40-020-001-B00 and add Subtask 72-00-40-020-178.

To correct the NOTE about the nuts and clamps not being necessary to just include clamps within the Accomplishment Instructions.

To include post-installation testing requirements for Engines Installed On Aircraft.

To remove non-saleable details PN AN123170, PN AN123469, PN 594412, PN 2A4338, PN 2A4339, and PN 2A4340 from Material Information.

Effect of Revision on Prior Compliance

None.

This is a Complete Revision (Not Applicable to the SGML version)

The contents are in accordance with the list of effective pages. All pages have the current revision number. Technical changes are marked with black bars.

MODEL APPLICATION

V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5

BULLETIN ISSUE SEQUENCE

V2500 Series 77-0015

Page	Revision No.	Date
1 thru 38	1	August 3/17

A copy of this Revision Notice and any future revision notices must be filed as a permanent record with your copy of the subject bulletin.

SERVICE BULLETIN

ENGINE INDICATING — EXHAUST GAS TEMPERATURE (EGT) WIRING HARNESS AND JUNCTION BOX ASSEMBLY — REPLACE WITH THERMOCOUPLE WIRING HARNESS ASSEMBLY

MODEL APPLICATION

V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5

BULLETIN ISSUE SEQUENCE

V2500 Series 77-0015

ATA NUMBER

77-21-43

Supplier Service Bulletin

Harco Service Bulletin SB1-77-21-43

Compliance Category

6

P&W Distribution Code

V2500

Summary

The purpose of this Service Bulletin is to resolve the Exhaust Gas Temperature (EGT) indication issues and the close clearance between the nacelle Thrust Reverser (TR) hold open rod and EGT junction box. The EGT junction box, EGT harness and core EGT harness were replaced with a single EGT harness that has wear sleeves and integral clamps to reduce wire harness chaffing and nacelle pinch points.

Planning Information

Effectivity Data

Engine Models Applicable

V2522-A5, V2524-A5, V2527M-A5, V2527-A5, V2527E-A5, V2530-A5, V2533-A5
Engine Serial Nos. V10001 thru V13190
Engine Serial No. V15001

V2522-A5, V2524-A5, V2527M-A5, V2527-A5, V2527E-A5, V2530-A5, V2533-A5
Engine Serial Nos. V15002 thru V18409
Engine Serial No. V18411
Engine Serial No. V18413
Engine Serial No. V18415
Engine Serial No. V18419

Concurrent Requirements

This Service Bulletin must be done at the same time or after Reference 7, Service Bulletin No. V2500-ENG-72-0189.

Reason

1. Condition: There have been incorrect EGT indication issues that have caused delays and cancellations. There have been some incidents of contact between nacelle TR hold open rod and the EGT Junction box.
2. Background: The EGT indication issues are believed to be caused by (1) water which goes into the EGT Junction Box and EGT Harness, resulting in a reduction of insulation resistance of the harness that leads to incorrect EGT indications; and (2) chafing between the loop clamps into the core EGT Harness.
3. Objective: A single-piece EGT harness has been incorporated to replace the current EGT harness, the EGT junction box, and the core EGT harness. A water shield has been incorporated to replace the EGT junction box and bracket as a means of (a) mitigating water collection on the EGT harness section at the bottom of engine and (b) supporting the EGT harness. Wear sleeves have been incorporated around the harness to address the core EGT wiring harness chafing. Integral clamps have been incorporated at select locations on the core wiring harness to guide the harness around engine/nacelle pinch points.
4. Substantiation: The means of compliance for the EGT harness and bracket is by similarity, analysis and test. The new harness and bracket installation interface has been validated by physical fit checks on new/in-service engines and on aircraft nacelle. The successful substantiation of the EGT harness design, bracket design and installation on engine and in nacelle has demonstrated the necessary design integrity of EGT harness and bracket for incorporation.
5. Effects of Bulletin on:

Removal/Installation: Affected.

Disassembly/Assembly: Affected.

Cleaning: Affected.

Inspection/Check: Affected.

Repair: Affected.

Testing: Affected.

6. Supplemental Information

None.

Description

Install a new EGT harness and wiring harness bracket assembly.

Compliance

Category 6

Accomplish when the subassembly (i.e. modules, accessories, components, build groups) is disassembled sufficiently to afford access to the affected part and to all affected spare parts.

Approval Data

The part number changes and/or part modifications specified in the Accomplishment Instructions and Material Information sections of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine model(s) given.

The technical content under the JAR 25 regulation of this document is approved under the authority of the DOA ref. EASA.21J.031.

Manpower

1. In Service

..... 8 hours.

2. At Overhaul

..... 8 hours.

Weight and Balance

1. Weight Change

- 0.6 lbs (- 0.27 kg)

2. Moment Arm

No Effect.

3. Datum

Engine Front Mount Centerline (Power Plant Station (PPS) 100)

Electrical Load Data

This Service Bulletin has no effect on the aircraft electrical load.

Software Accomplishment Summary

Not Applicable.

References

NOTE: In 2014 IAE converted the V2500 Technical Publications to a new system. As a result of the conversion, some manuals were consolidated. All manuals received new P&W part numbers. To facilitate the use of this Service Bulletin, a Technical Publications conversion table is provided in the Appendix.

1. ATA Locator — 72-00-00.
2. Internal Reference No. — 15VA004.
3. V2500 Standard Practices and Processes, P&W Ref. PN 2A4414, Chapter/Section 70-35-25 and 70-41-00.
4. V2500-A5 Series Illustrated Parts Catalog, P&W Ref. PN 2A4428, Chapter/Section 72-50-00.
5. V2500 A1/A5 Series Engine Manual, P&W Ref. PN 2A4407, Chapter/Section 72-00-50 and 72-00-40.
6. V2500 A1/A5 Series Aircraft Maintenance Manual, Chapter/Section 70-71-21, 77-21-43 and 77-50-00.
7. V2500 Service Bulletin V2500-ENG-72-0189 (Engine — Core Engine Tubes — Tube Assemblies Coupled To Bifurcation Panel, Re-Run To Clear Cowl Door Hold Open Rods).
8. V2500 Service Bulletin V2500-ENG-77-0011 (Engine Indicating — Thermocouple, Exhaust Gas Temperature (EGT) — Introduction Of).
9. V2500 Service Bulletin V2500-ENG-77-0009 (Engine — Provide New EGT Harness Junction Box Terminal Nuts).
10. V2500 Service Bulletin V2500-ENG-77-0012 (Engine Indicating — Harness And Junction Box Assembly, Exhaust Gas Temperature (EGT) — Introduction Of).
11. FAA - Order: 8120.11 “Disposition of scrap or salvageable aircraft parts and materials”, dated 2/12/96.
12. This Service Bulletin is subject to aircraft modification No. 159269 P15917 (classified minor) and is covered by aircraft Service Bulletin No. A320-77-1011. Under no circumstances shall the modified equipment, resulting from the application of this SB, be installed on the aircraft type unless its aircraft SB is approved.

Other Publications Affected

NOTE: In 2014 IAE converted the V2500 Technical Publications to a new system. As a result of the conversion, some manuals were consolidated. All manuals received new P&W part numbers. To facilitate the use of this Service Bulletin, a Technical Publications conversion table is provided in the Appendix.

1. V2500-A5 Series Illustrated Parts Catalog, P&W Ref. PN 2A4428, Chapter/Section 72-50-00.
2. V2500-A1/A5 Series Engine Manual, P&W Ref. PN 2A4407, Chapter/Section 72-00-50 and 72-00-40.
3. V2500-A1/A5 Series Aircraft Illustrated Parts Catalog, Chapter/Section 77-21-43.
4. V2500-A1/A5 Series Aircraft Maintenance Manual, Chapter/Section 77-21-43.

Interchangeability of Parts

Old and new parts are interchangeable only in full sets.

For interchangeability at the Aircraft level, refer to Reference 12, aircraft Service Bulletin A320-77-1011.

Information in the Appendix

Alternate Accomplishment Instructions (No)

Progression Charts (Yes)

Added Data (Yes)

Revision to Table of Limits (No)

Inspection Procedures (No)

Material Information

Material — Price and Availability

1. Part prices were not available at the time of Service Bulletin publication.
2. There is no kit provided to do this Service Bulletin.
3. Part availability information is provided in material data Instructions — Disposition.

Industry Support Program

A vendor support program is being offered directly by Harco Laboratories Inc. Harco has agreed to provide discounted pricing for the new EGT harness ship set per V2500-ENG-77-0015 to operators who purchased the current EGT harness configuration Reference 10, V2500-ENG-77-0012 and wish to upgrade to the new EGT harness ship set. The pricing will be as follows for the next three (3) years, following the March 8, 2017 SB release date. The PO must be placed with Harco or Seal Dynamics (Harco's distributor) prior to the expiration dates listed below.

Year 1 = Expires March 8, 2018 - The pricing for the new EGT harness ship set will be $6,620.

Year 2 = Expires March 8, 2019 - The pricing for the new EGT harness ship set will be $6,927.

Year 3 = Expires March 8, 2020 - The pricing for the new EGT harness ship set will be $7,249.

After March 8, 2020, the price of the new EGT Harness ship set per V2500-ENG-SB 77-0015 will escalate to Harco's WLP (world list price).

In addition, for operators who have NOT purchased the current EGT harness configuration Reference 10, V2500-ENG-77-0012, Harco has agreed to provide discounted pricing of $8,790 for the new EGT Harness ship set per V2500-ENG-77-0015 ONLY through March 8, 2018 (one (1) year following the March 8, 2017 Service Bulletin release date). After this date, the price of the new EGT Harness ship set will escalate to Harco's WLP.

The material data that follows is for each engine.

For V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, V2530-A5, V2533-A5 Engines:

New PN	Qty	Estimate of Unit Price ($)	Keyword	Old PN	Instructions — Disposition
2A4528-01	1	*	BRACKET, WIRING HARNESS, ASSEMBLY OF		(2)(A)(V)
	1		BRACKET, EGT JUNCTION BOX, ASSEMBLY OF	2A1091-01 (72-50-00-01-640)	(N)
2A4524 (30558-000)	1	*	WIRING HARNESS ASSEMBLY, THERMO-COUPLE		(2)(A)(V)

New PN	Qty	Estimate of Unit Price ($)	Keyword	Old PN	Instructions — Disposition
	1		BOX, CABLE TC	2A4337 (30040-000) (77-21-43-01-010)	(N)(V)
	1		HARNESS, CORE, ASSEMBLY	6A5878 (71-52-45-01-005)	(N)
TA025022-06	10	*	CLAMP	TA025022-05 (71-52-45-01-137) (71-52-45-01-041) (71-52-45-01-081) (71-52-45-01-129) (71-52-45-01-073) (71-52-45-01-121) (71-52-45-01-225) (71-52-45-01-217) (71-52-45-01-233) (71-52-45-01-241)	(2)(C1)
	6		CLAMP	TA025022-05 (71-52-45-01-249) (71-52-45-01-257) (71-52-45-01-153) (71-52-45-01-265) (71-52-45-01-273) (71-52-45-01-145)	(C1)
	1		CLAMP	TA025022-07 (71-52-45-01-169)	(N)
4W0109 (AS9556-12)	1	*	BOLT	4W0102 (71-52-45-01-166)	(2)(C1)(O4)(O5)
	1		BOLT	4W0164 (77-21-43-01-044)	(N)(O2)
4W0107 (AS9556-10)	2	*	BOLT	4W0164 (77-21-43-01-040)	(2)(N)(O2)(O3)
UP10479	1	*	SPACER		(2)(A)
	3		NUT	4W0002 (77-21-43-01-046) (77-21-43-01-020) (77-21-43-01-042)	(N)(O1)

Instructions/Disposition Code Statements:

Parts Modification Conditions

Estimated part prices are provided when they are available at time of publication. The Estimate of Unit Price is only for planning purposes and does not constitute a firm quotation. An asterisk (*) is shown where part pricing information was unavailable. In either case, contact IAE Spares for firm quotations.

(2) The new part is a replacement part only, and cannot be obtained by modification of the old part.

Spare Parts Availability

(A) The new part is available.

(C) The old part will continue to be supplied.

(C1) The old part will continue to be supplied for use at other locations.

(D) The new part is a detail of the assembly.

(N) The old part is not available.

(O1) Nut Option, PN 4W0002, consists of a Nut, PN AS3066-10 or PN AS3067-10.

(O2) Bolt Option, PN 4W0164, consists of a Bolt, PN AS21510 or PN MS9557-08.

(O3) Bolt Option, PN 4W0107, consists of a Bolt, PN AS21412, PN AS9556-10 or PN MS9556-10.

(O4) Bolt Option, PN 4W0102, consists of a Bolt, PN AS21407 or PN MS9556-05.

(O5) Bolt Option, PN 4W0109, consists of a Bolt, PN AS48014, PN AS9556-12 or PN MS9556-12.

(O6) Nut Option, PN 594412, consists of a Nut, PN 594405 or PN 594414.

(V) This is the Harco LLC part number.

Vendor Services or Special Components/Materials

Vendor Services or Special Components/Materials

P&W Designation	Vendor Designation	Name	Vendor Name & Address
2A4524	30558-000	WIRING HARNESS ASSEMBLY, THERMO-COUPLE	HARCO LLC 186 CEDAR STREET BRANFORD, CT 06405-6011 USA www.harcosemco.com
	SB1-77-21-43	SERVICE BULLETIN	
Vendor Manufacturer's Code: 00060 See Illustrated Parts Catalog Vendor Manufacturer's Code List			

NOTE: EXCEPT FOR WORK OR SUPPLIES TO BE PERFORMED OR FURNISHED BY IAE, IT IS UNDERSTOOD THAT IAE DOES NOT ENDORSE THE WORK PERFORMED BY THE COMPANY OR COMPANIES NAMED HEREIN OR ANY OTHER COMPANY AND DOES NOT ACCEPT RESPONSIBILITY TO ANY DEGREE FOR THE SELECTION OF SUCH COMPANY OR COMPANIES FOR THE PERFORMANCE OF ANY WORK OR PROCUREMENT OF SUPPLIES.

Tooling — Price and Availability

Special tools are not required to accomplish this Service Bulletin.

Reidentified Parts

Not Applicable.

Other Material Information Data

Not Applicable.

Accomplishment Instructions

FOR ENGINES REMOVED FROM AIRCRAFT

NOTE: Incorporation of Reference 8, Service Bulletin V2500-ENG-77-0011, prior to or concurrently with this Service Bulletin may be desirable and should be individually evaluated.

1. Remove the Cable TC Box, PN 2A4337 per Reference 5, Engine Manual, TASK 72-00-50-050-002-B00. See Figure 1, Sheet 1 and Sheet 2.

   NOTE: Subtask 72-00-50-050-002-062 disconnecting the harness core assembly from the junction box is not required.

2. Remove the EGT Junction Box Bracket, PN 2A1091-01 from the engine.

   A. Remove and retain the two Bolts, PN 4W0587 and two Nuts, PN 4W0002 that attach the bracket to the engine at the P-flange holes 57 and 58. See Figure 1, Sheet 3.

   B. Discard this bracket and make it unserviceable in an acceptable manner which is described in Reference 11, FAA - Order: 8120.11 “Disposition of scrap or salvageable aircraft parts and materials”, dated 2/12/96.

3. Remove the Harness Core Assembly, PN 6A5878. Reference 5, Engine Manual, TASK 72-00-40-020-001-B00, SUBTASK 72-00-40-020-178.

   NOTE: All clips removed during the removal of the core wiring harness are not required for installation of the new Wiring Harness Thermocouple Assy, (EGT Harness), PN 2A4524. All other hardware removed will be required for the installation of the new Thermocouple Wiring Harness Assy, PN 2A4524.

4. Inspect EEC Core Harness electrical connector 4007VC-A (which mates with EGT harness 4007VC). Examine the sockets (female contacts). See Figure 5, Sheet 1.

   A. Examine sockets (contacts) for alignment and damage.

   B. Examine to confirm no contacts are pushed rearward into the connector face.

   C. Examine connector sockets for corrosion, deformation, distortion or discoloration by inserting a harness connector pin into each socket. Friction must be felt while inserting and removing the harness connector pin.

   D. Replace contacts as necessary per Reference 3, Standard Practices and Processes, TASK 70-35-25-300-001 (VRS7002, Repair 001).

5. Move the Active Clearance Control (ACC) periseal housing. See Figure 2.

   A. Loosen bolt on retaining clamp to allow clamp to move along tube.

   B. Slide periseal connector along ACC tube until sufficient gap is present to route new EGT harness.

      NOTE: Lubricate the lower end of connector tube with soap and water, if needed.

   C. Lower Harness Core Assembly, PN 6A5878, through gap created and remove from engine.

6. Assemble the ACC periseal housing. See Figure 2.

   A. Feed Wiring Harness Thermocouple Assy, PN 2A4524 at harness marked location through periseal gap.

B. Move periseal connector on lower ACC tube to the original position to cover the opening.

C. Ensure that the pin of the retaining clamp engages in the location hole in the ACC tube.

D. Ensure that the two periseals are correctly seated in the U-slots of the periseal connector.

E. Torque the bolt on the retaining clamp to the periseal connector to between 36 – 45 lbf-in (4.1 – 5.1 Nm). Reference 3, Standard Practices and Processes, TASK 70-41-02-410-501.

7. Install the Wiring Harness Bracket Assembly, PN 2A4528-01 as follows;

A. Install the Wiring Harness Bracket Assembly, PN 2A4528-01 on the AFT side of the P-Flange at holes 57 and 58 using two Bolts, PN 4W0587 and two Nuts, PN 4W0002. See Figure 3, Sheet 1.

B. Torque the bolts to between 85 – 105 lbf-in (9.60 – 11.86 Nm). Reference 3, Standard Practices and Processes, TASK 70-41-02-410-501.

8. Install the new EGT harness to the wiring harness bracket assembly at the P-flange.

A. Install the Wiring Harness Thermocouple Assy, PN 2A4524 integral clamps 18 and 19 to the Wiring Harness Bracket Assembly, PN 2A4528-01 on the P-flange using two Bolts, PN 4W0107 or PN MS9556-10. See Figure 3, Sheet 2.

B. Torque the bolts to between 36 – 45 lbf-in (4.1 – 5.1 Nm). Reference 3, Standard Practices and Processes, TASK 70-41-02-410-501.

9. Install the Wiring Harness Thermocouple Assy, PN 2A4524 to the flange brackets AFT of the wiring harness bracket assembly. Reference 5, Engine Manual, TASK 72-00-50-450-002-B00.

NOTE: The side of the rear EGT harness marked “probe 2” on the ID band is installed on the right side of the Engine (AFT looking FWD). The side of the rear EGT harness marked “probe 3” on the ID band is installed on the left side of the Engine (AFT looking FWD).

10. Install the new Wiring Harness Thermocouple Assy, PN 2A4524 forward of the supporting bracket replace Clamp, PN TA025022-05 with Clamp, PN TA025022-06 with the exception of the following steps. Reference 5, Engine Manual, TASK 72-00-40-420-007-B00.

A. Install the harness at Position 5734 except omit the Clamp, PN TA025022-05. See Figure 4, Sheet 1 and Sheet 2.

B. Install the harness at Position 6055 except omit the Clamp, PN TA025022-05. See Figure 4, Sheet 1 and Sheet 2.

C. Install the harness at Position 5523 except omit the Clamp, PN TA025022-05. See Figure 4, Sheet 1 and Sheet 2.

D. Install the harness at Position 5552 except omit the Clamp, PN TA025022-05. See Figure 5, Sheet 1 and Sheet 2.

E. Install the harness at Position 5553 except omit the Clamp, PN TA025022-05. See Figure 5, Sheet 1 and Sheet 2.

F. Install the harness at Position 6085 except omit the Clamp, PN TA025022-05. See Figure 5, Sheet 1 and Sheet 2.

G. Install the harness at Position 6086 except omit the Clamp, PN TA025022-05. See Figure 5, Sheet 1 and Sheet 2.

11. Recording Instructions

A. A record of accomplishment is required.

FOR ENGINES INSTALLED ON AIRCRAFT

NOTE: Service bulletin incorporation on engines installed on aircraft may be desirable and should be individually evaluated.

NOTE: Incorporation of Reference 8, Service Bulletin V2500-ENG-77-0011, prior to or concurrently with this Service Bulletin may be desirable and should be individually evaluated.

1. Remove the Cable TC Box, PN 2A4337 per Reference 6, Aircraft Maintenance Manual TASK 77-21-43-000-010-B. See Figure 6, Sheet 1 and Sheet 2.

NOTE: Subtask 77-21-43-020-051-A disconnect the core EGT harness from the junction box is not required.

2. Remove the EGT Junction Box Bracket, PN 2A1091-01 from the engine.

A. Remove and retain the two Bolts, PN 4W0587 and two Nuts, PN 4W0002 that attach the bracket to the engine at the P-flange holes 57 and 58. See Figure 6, Sheet 3.

B. Discard this bracket and make it unserviceable in an acceptable manner which is described in Reference 11, FAA - Order: 8120.11 “Disposition of scrap or salvageable aircraft parts and materials”, dated 2/12/96.

3. Remove the Harness Core Assembly, PN 6A5878. Reference 6, Aircraft Maintenance Manual, TASK 77-21-43-000-804-B.

NOTE: All clips removed during the removal of the harness core assembly are not required for installation of the new Thermocouple Wiring Harness Assy, (EGT Harness), PN 2A4524. All other hardware removed will be required for the installation of the new Thermocouple Wiring Harness Assy, PN 2A4524.

4. Inspect EEC Core Harness electrical connector 4007VC-A (which mates with EGT harness 4007VC). Examine the sockets (female contacts) per Reference 6, Aircraft Maintenance Manual, TASK 71-50-00-210-010. See Figure 10, Sheet 1.

A. Examine sockets (contacts) for alignment and damage.

B. Examine to confirm no contacts are pushed rearward into the connector face.

C. Examine connector sockets for corrosion, deformation, distortion or discoloration by inserting a harness connector pin into each socket. Friction must be felt while inserting and removing the harness connector pin. Alternately, the Retention Test Tool HT210-16 may be used per Reference 6, Aircraft Maintenance Manual, TASK 70-71-21 Contact Replacement Procedure.

D. Replace contacts as necessary per Reference 6, Aircraft Maintenance Manual, TASK 70-71-21 Contact Replacement Procedure.

5. Move the Active Clearance Control (ACC) periseal housing. See Figure 7.

A. Loosen bolt on retaining clamp to allow clamp to move along tube.

B. Slide periseal connector along ACC tube until sufficient gap is present to route new EGT harness.

NOTE: Lubricate the lower end of connector tube with soap and water, if needed.

C. Lower Harness Core Assembly, PN 6A5878, through gap created and remove from engine.

6. Assemble the ACC periseal housing. See Figure 7.

A. Feed Wiring Harness Thermocouple Assy, PN 2A4524 at harness marked location through periseal gap.

B. Move periseal connector on lower ACC tube to the original position to cover the opening.

C. Ensure that the pin of the retaining clamp engages in the location hole in the ACC tube.

D. Ensure that the two periseals are correctly seated in the U-slots of the periseal connector.

E. Torque the bolt on the retaining clamp to the periseal connector to between 36 – 45 lbf-in (4.1 – 5.1 Nm). Reference 3, Standard Practices and Processes, TASK 70-41-02-410-501.

7. Install the Wiring Harness Bracket Assembly, PN 2A4528-01 as follows;

A. Install the Wiring Harness Bracket Assembly, PN 2A4528-01 on the AFT side of the P-Flange at holes 57 and 58 using two Bolts, PN 4W0587 and two Nuts, PN 4W0002. See Figure 8, Sheet 1.

B. Torque the bolts to between 85 – 105 lbf-in (9.60 – 11.86 Nm). Reference 3, Standard Practices and Processes, TASK 70-41-02-410-501.

8. Install the new EGT harness to the wiring harness bracket assembly at the P-flange.

A. Install the Wiring Harness Thermocouple Assy, PN 2A4524 integral clamps 18 and 19 to the Wiring Harness Bracket Assembly, PN 2A4528-01 on the P-flange using two Bolts, PN 4W0107 or PN MS9556-10. See Figure 8, Sheet 2.

B. Torque the bolts to between 36 – 45 lbf-in (4.1 – 5.1 Nm). Reference 3, Standard Practices and Processes, TASK 70-41-02-410-501.

9. Install the Wiring Harness Thermocouple Assy, PN 2A4524 to the flange brackets AFT of the wiring harness bracket assembly. Reference 6, Aircraft Maintenance Manual, TASK 77-21-43-400-804-B.

NOTE: The side of the rear EGT harness marked “probe 2” on the ID band is installed on the right side of the Engine (AFT looking FWD). The side of the rear EGT harness marked “probe 3” on the ID band is installed on the left side of the Engine (AFT looking FWD).

10. Install the new Wiring Harness Thermocouple Assy, PN 2A4524 forward of the supporting bracket replace (10) Clamps, PN TA025022-05 with (10) Clamps, PN TA025022-06 with the exception of the following steps. Reference 6, Aircraft Maintenance Manual, TASK 77-21-43-400-804-B.

A. Install the harness at Position “B” except omit the Clamp, PN TA025022-05. See Figure 9, Sheet 1 and Sheet 2.

B. Install the harness at Position “P” except omit the Clamp, PN TA025022-05. See Figure 9, Sheet 1 and Sheet 2.

C. Install the harness at Position “Q” except omit the Clamp, PN TA025022-05. See Figure 9, Sheet 1 and Sheet 2.

D. Install the harness at Position “J” except omit the Clamp, PN TA025022-05. See Figure 10, Sheet 1 and Sheet 2.

E. Install the harness at Position “K” except omit the Clamp, PN TA025022-05. See Figure 10, Sheet 1 and Sheet 2.

F. Install the harness at Position “M” except omit the Clamp, PN TA025022-05. See Figure 10, Sheet 1 and Sheet 2.

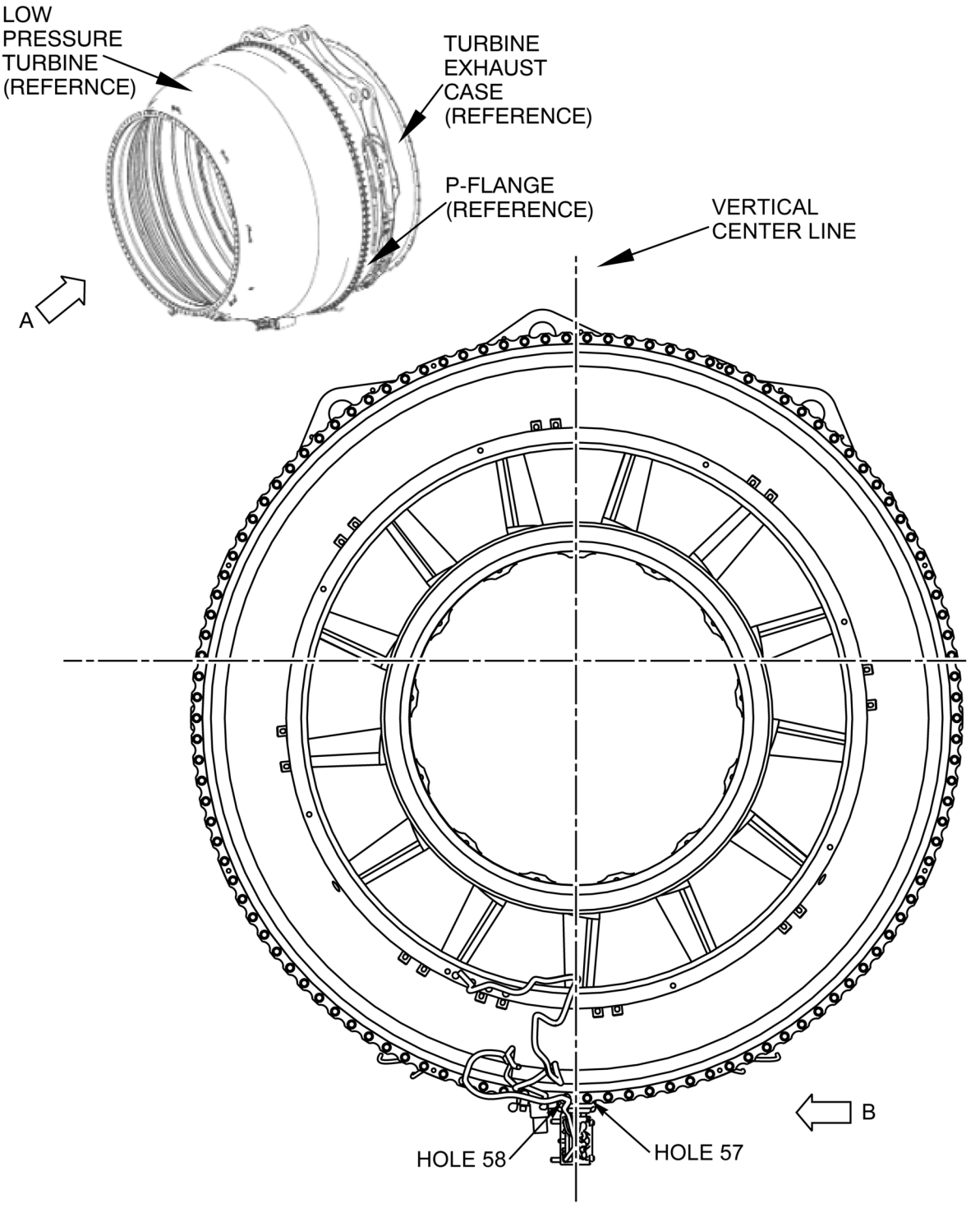
G. Install the harness at Position “N” except omit the Clamp, PN TA025022-05. See Figure 10, Sheet 1 and Sheet 2.

11. Test Requirement

A. Do an operational test of the FADEC, Reference 6, Aircraft Maintenance Manual, TASK 73-22-00-710-040, and a check on the CFDS to make sure no fault is shown related to the EGT harness.

12. Recording Instructions

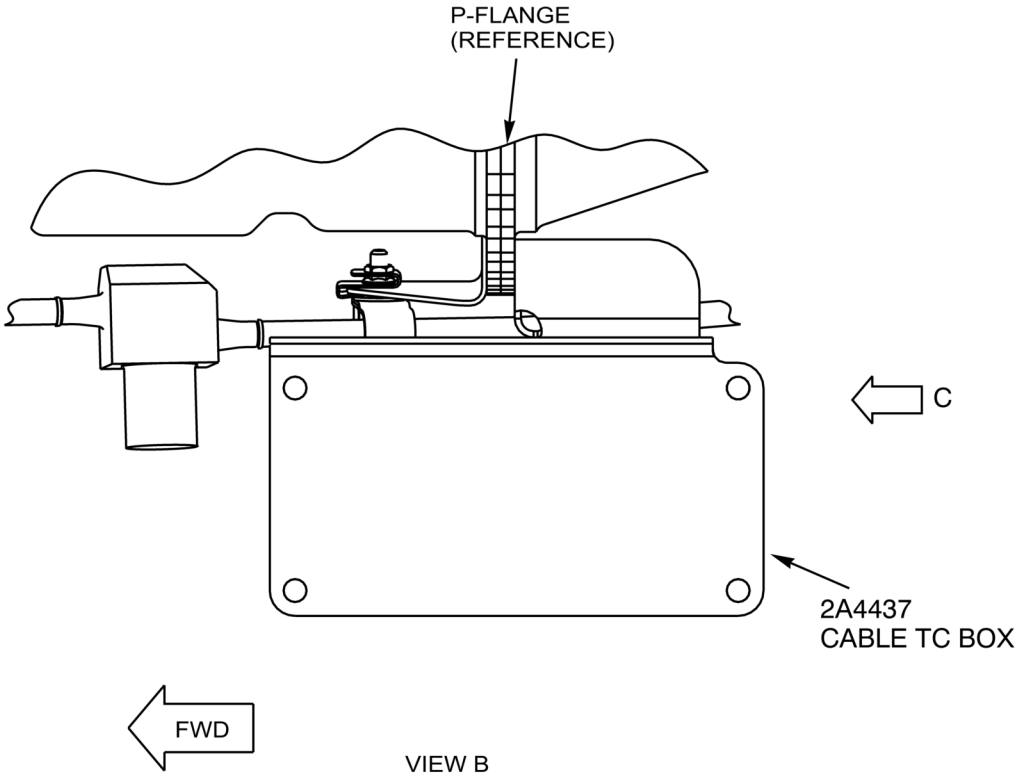
A. A record of accomplishment is required.



VIEW A
FORWARD LOOKING AFT

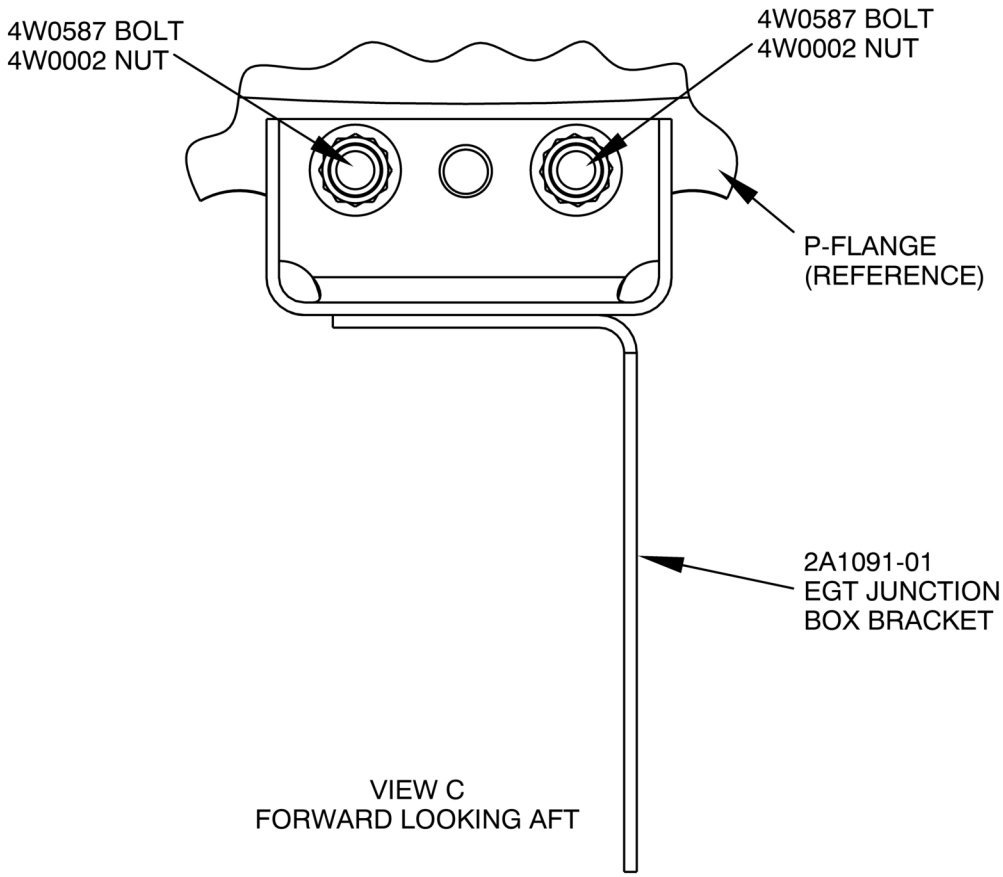
B526376

REMOVAL OF WIRING HARNESS AND BRACKET ASSEMBLY
FIGURE 1, SHEET 1



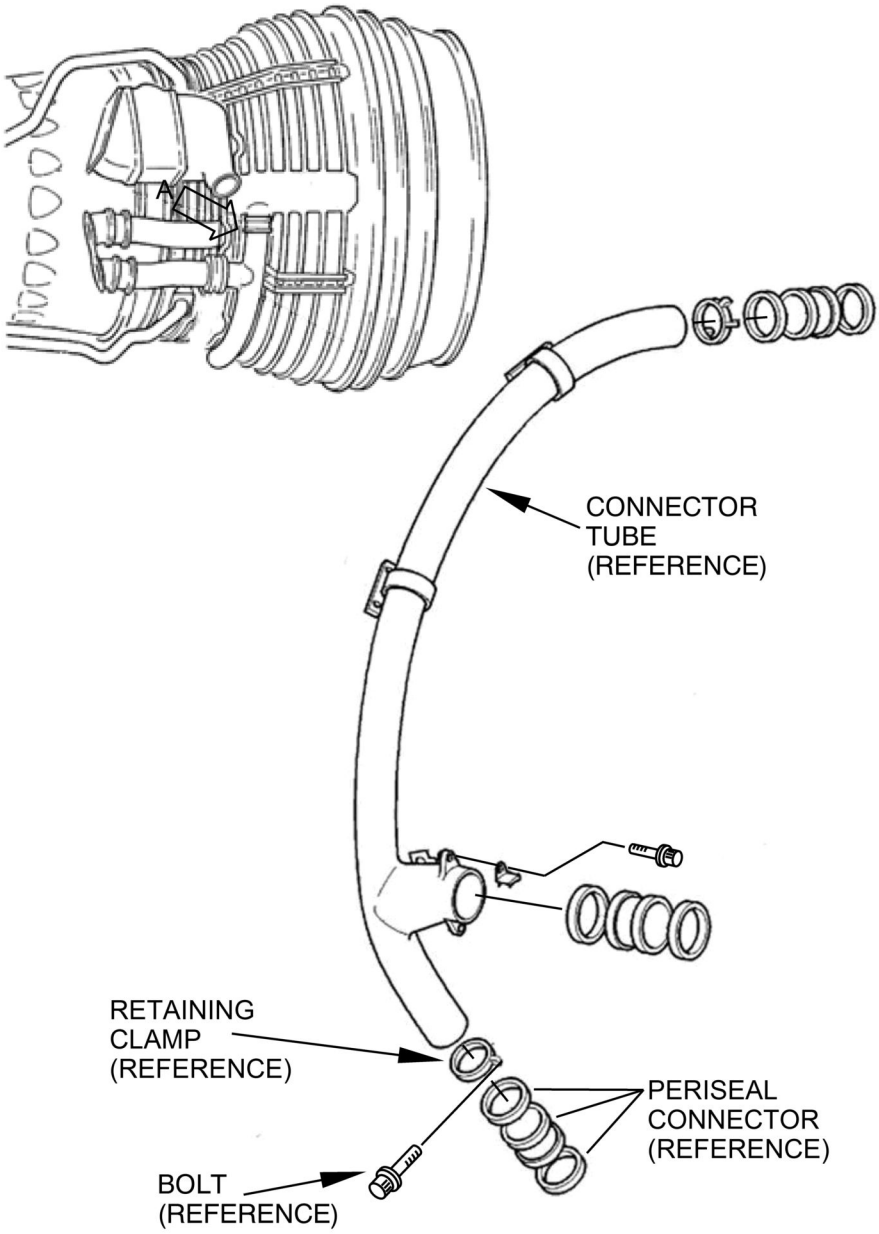
B526377

REMOVAL OF WIRING HARNESS AND BRACKET ASSEMBLY
FIGURE 1, SHEET 2



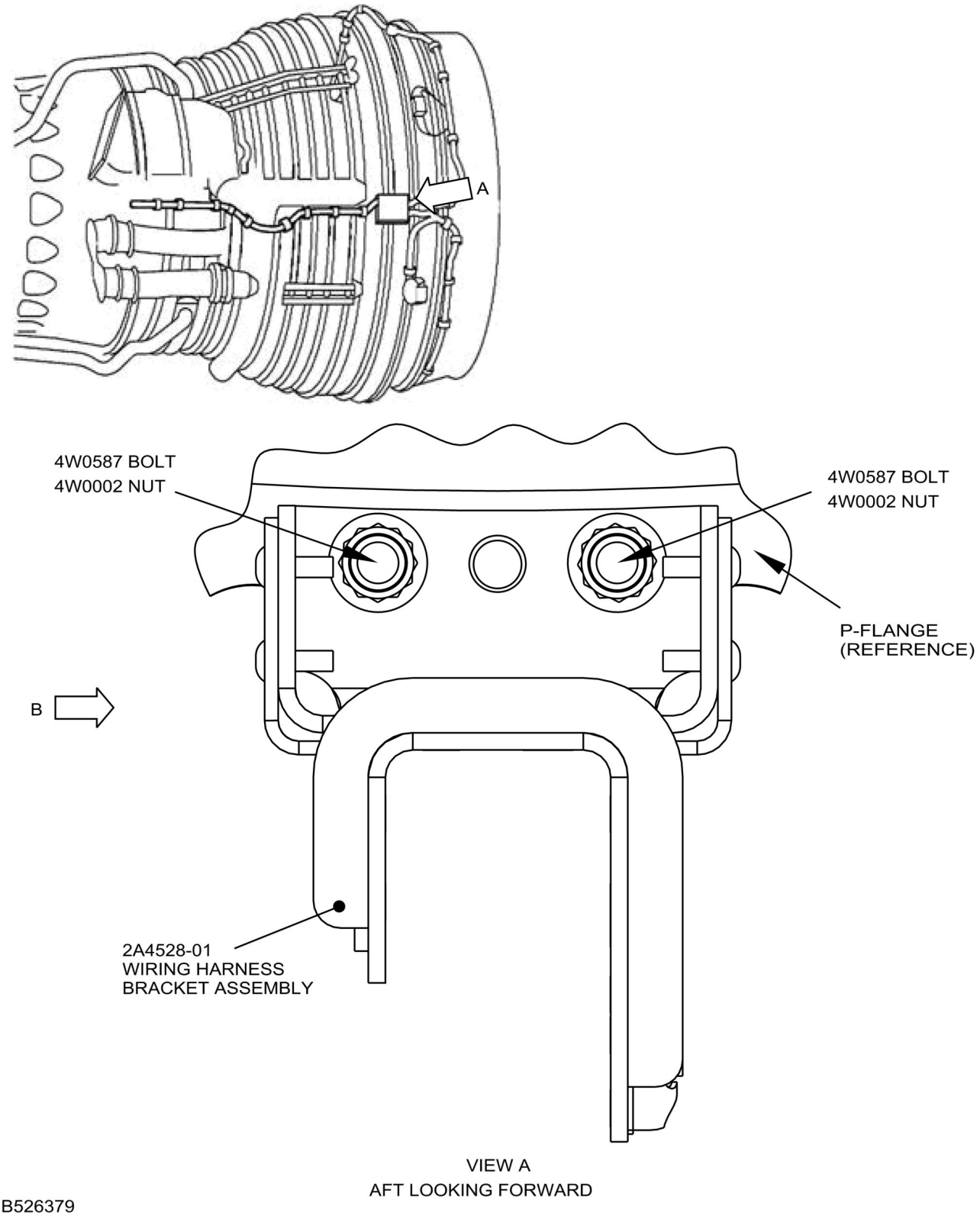
B526378

REMOVAL OF WIRING HARNESS AND BRACKET ASSEMBLY
FIGURE 1, SHEET 3

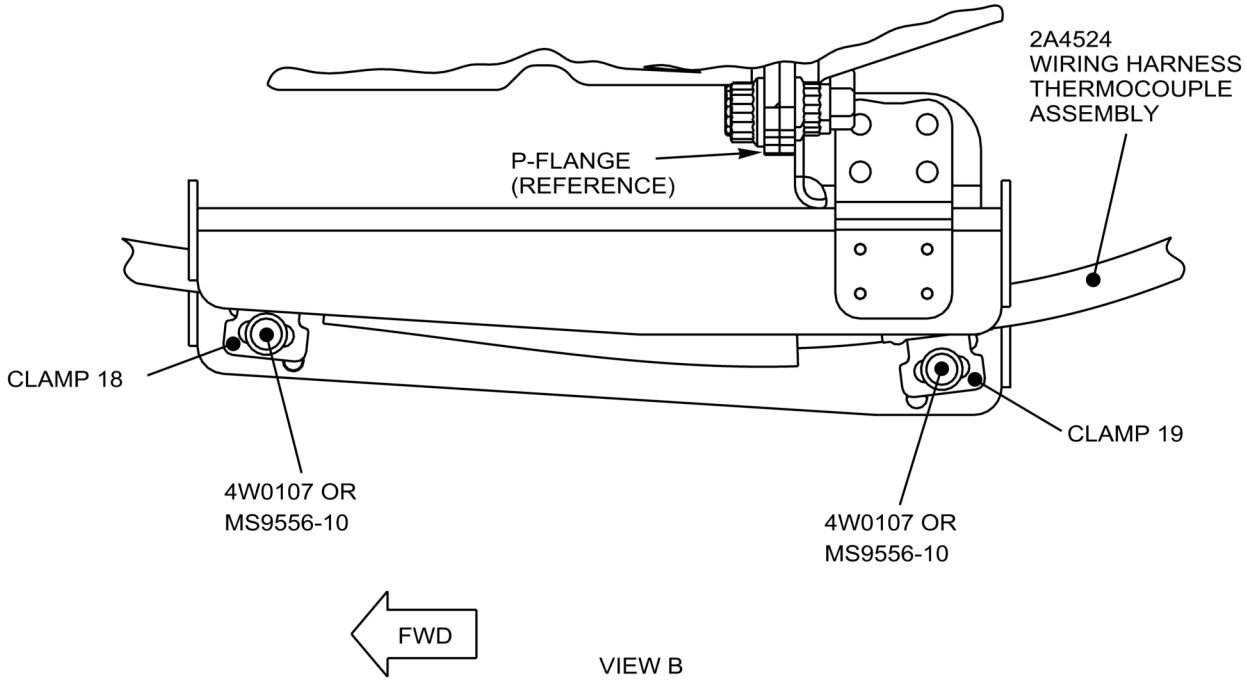


B526403

ACC PERISEAL CONNECTOR LOCATION
FIGURE 2

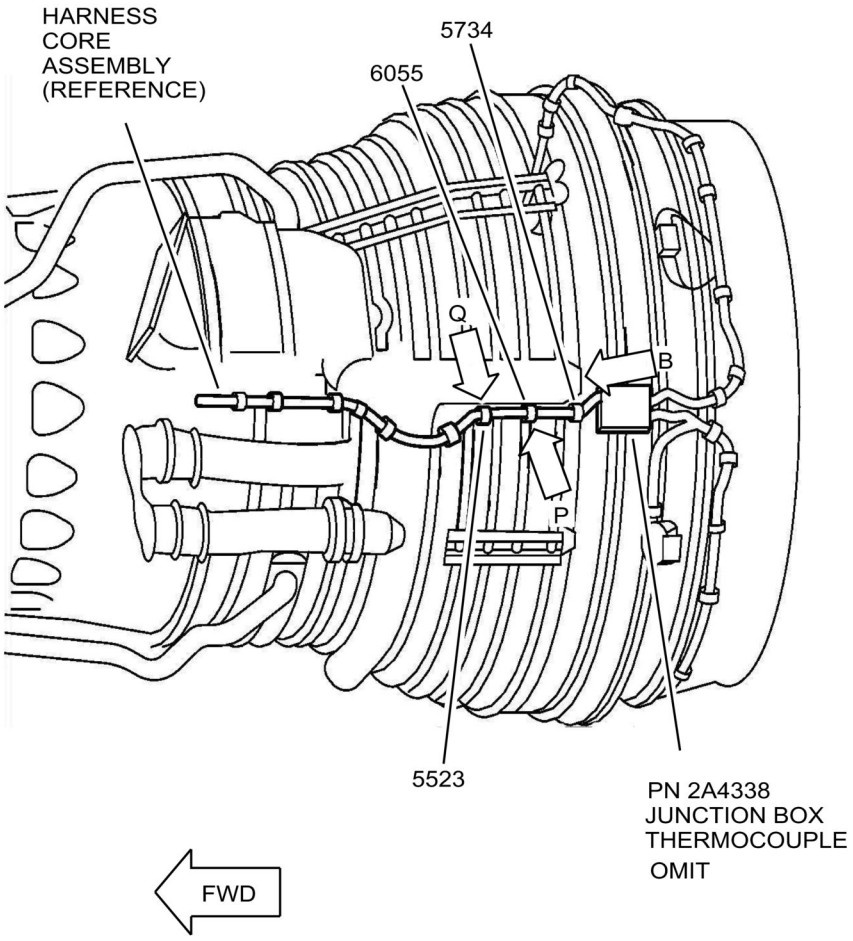


INSTALLATION OF WIRING HARNESS BRACKET ASSEMBLY
FIGURE 3, SHEET 1



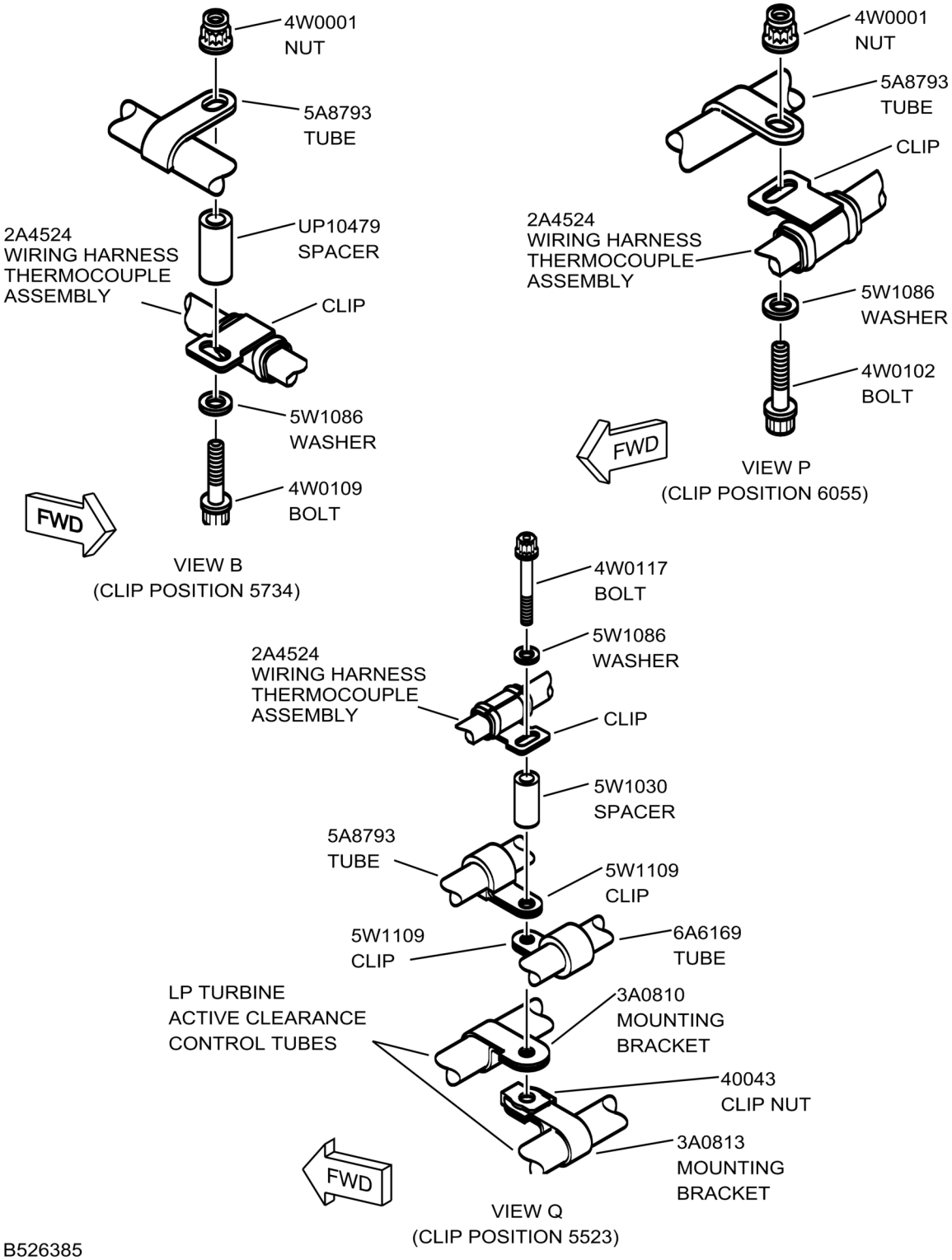
B526380

INSTALLATION OF WIRING HARNESS BRACKET ASSEMBLY
FIGURE 3, SHEET 2

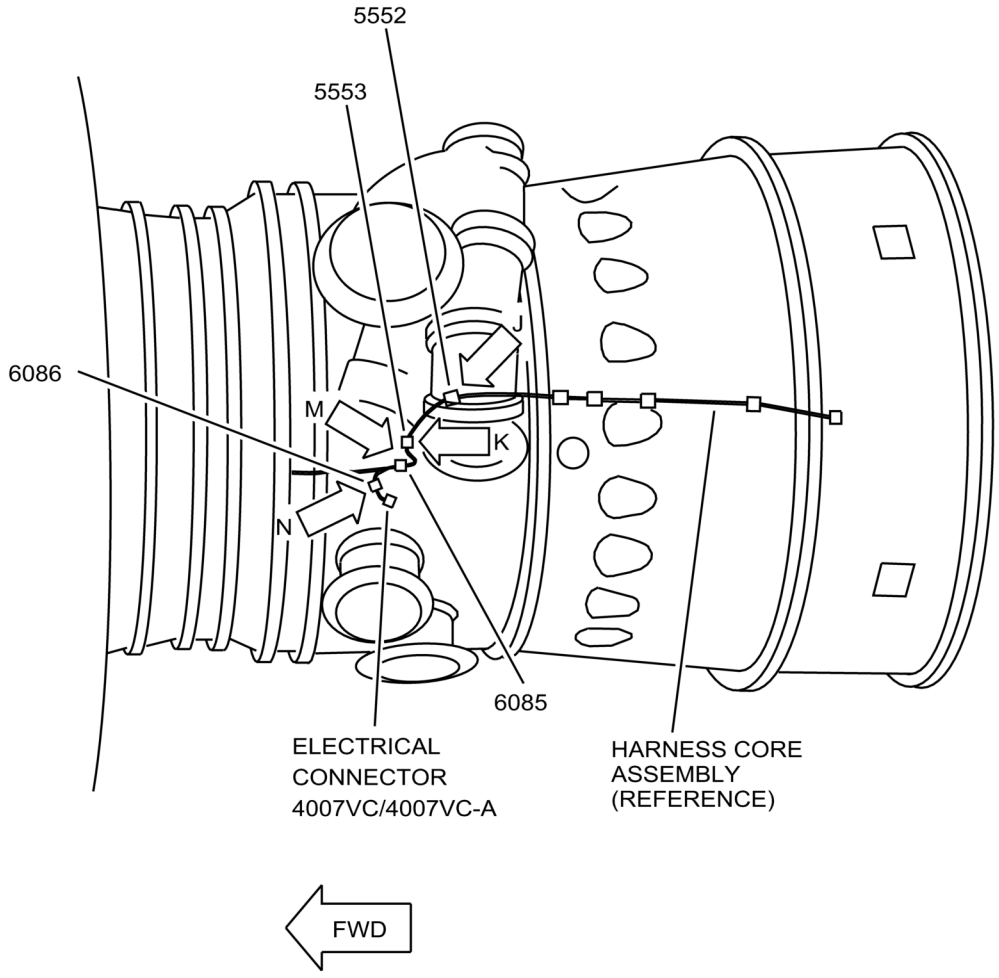


B526383

AFT WIRING HARNESS CLIP LOCATIONS
FIGURE 4, SHEET 1

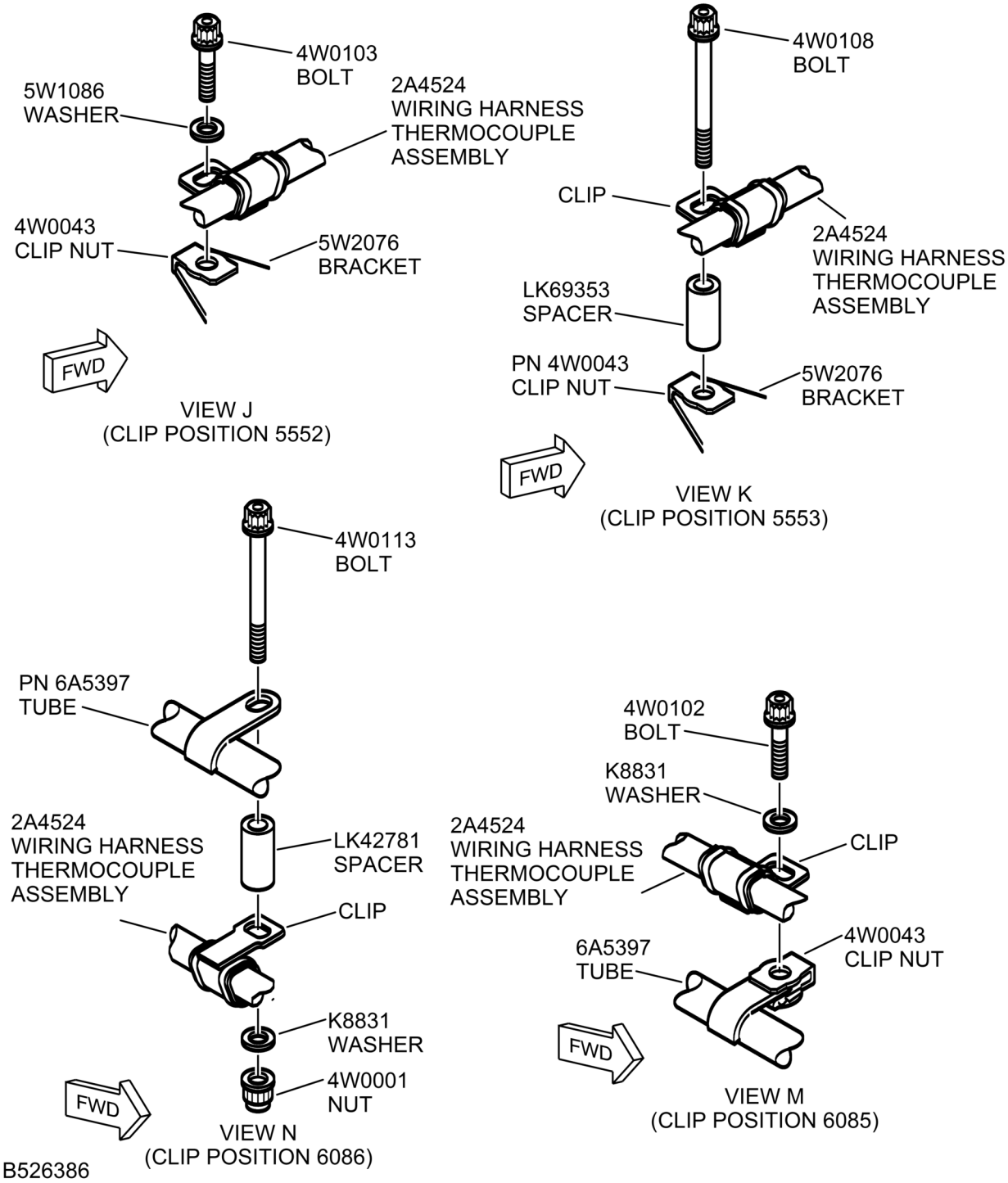


AFT WIRING HARNESS CLIP LOCATIONS
FIGURE 4, SHEET 2

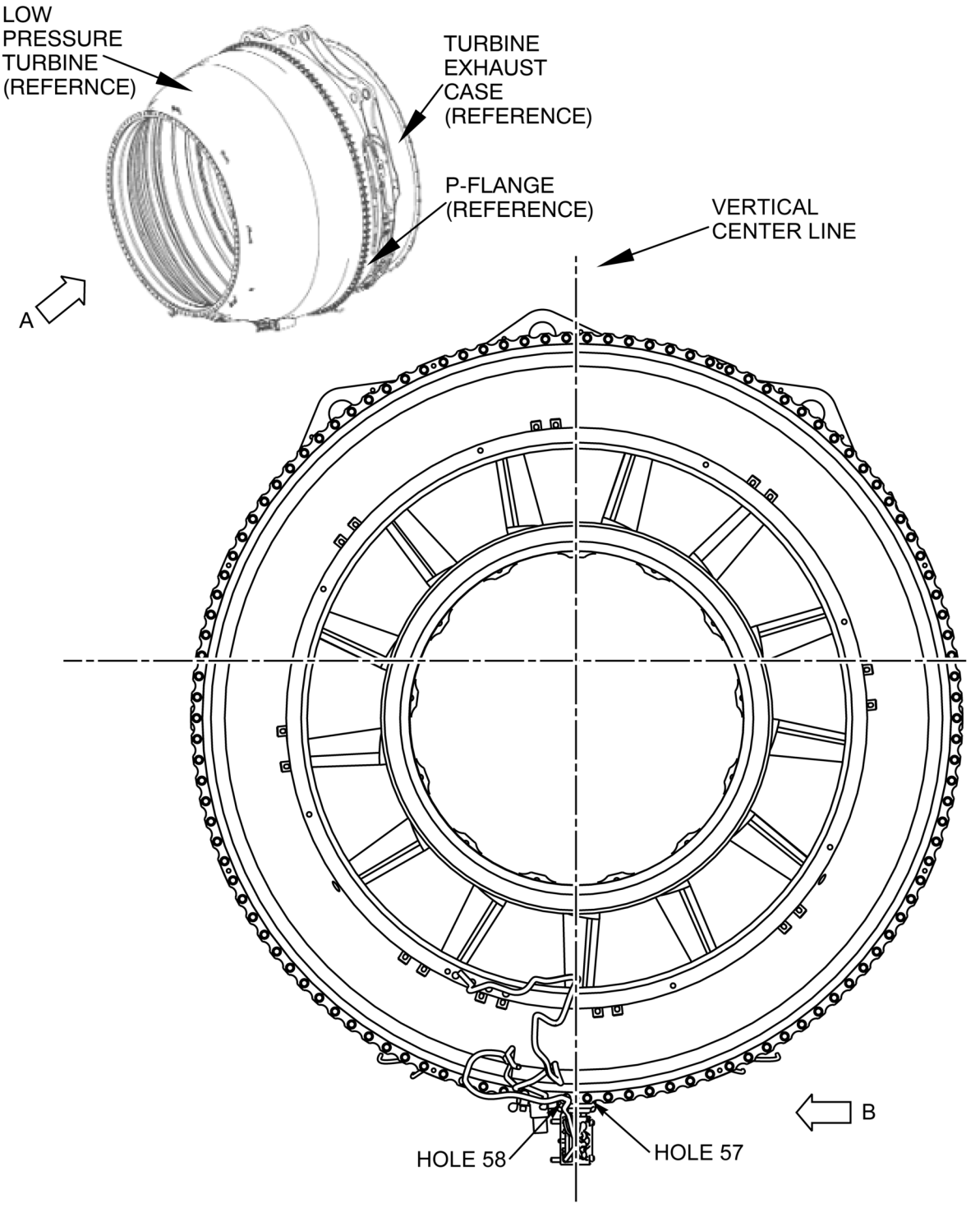


B526384

FORWARD WIRING HARNESS CLIP LOCATIONS
FIGURE 5, SHEET 1



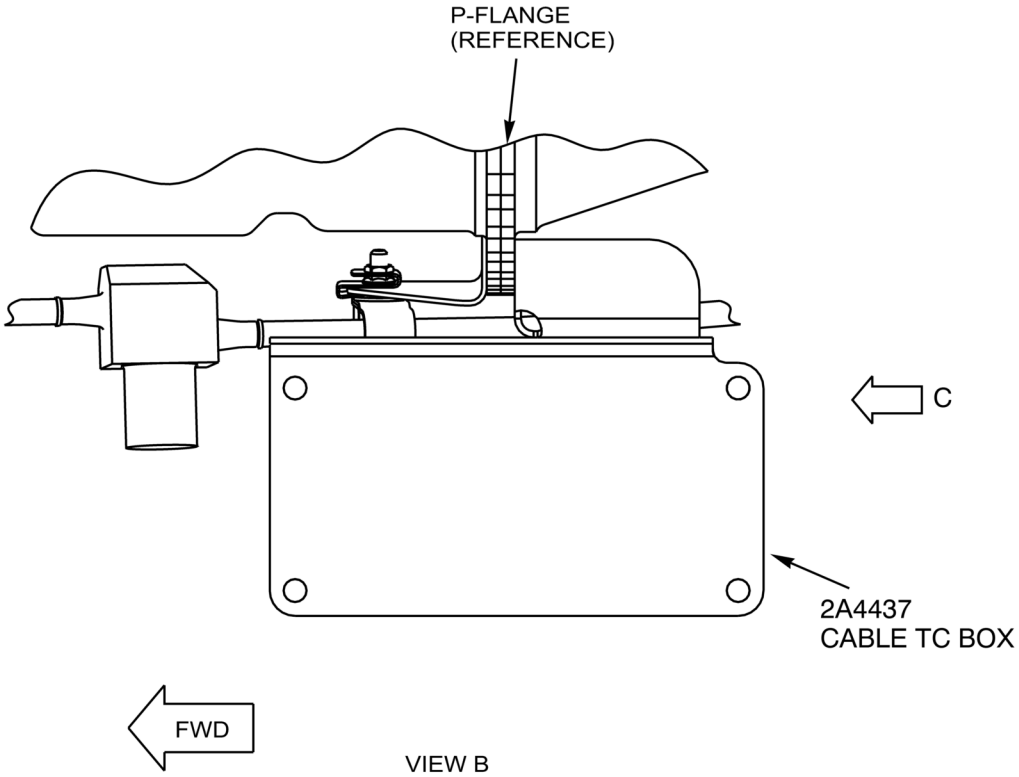
FORWARD WIRING HARNESS CLIP LOCATIONS
FIGURE 5, SHEET 2



VIEW A
FORWARD LOOKING AFT

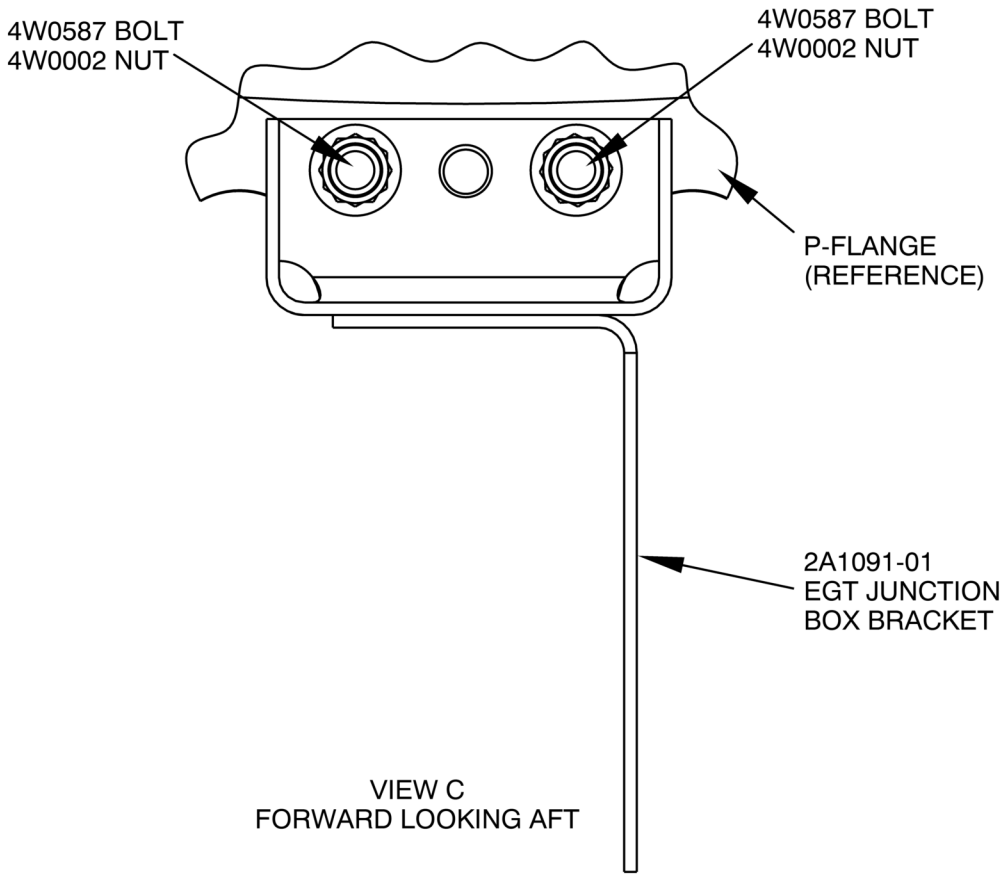
B526718

REMOVAL OF WIRING HARNESS AND BRACKET ASSEMBLY
FIGURE 6, SHEET 1



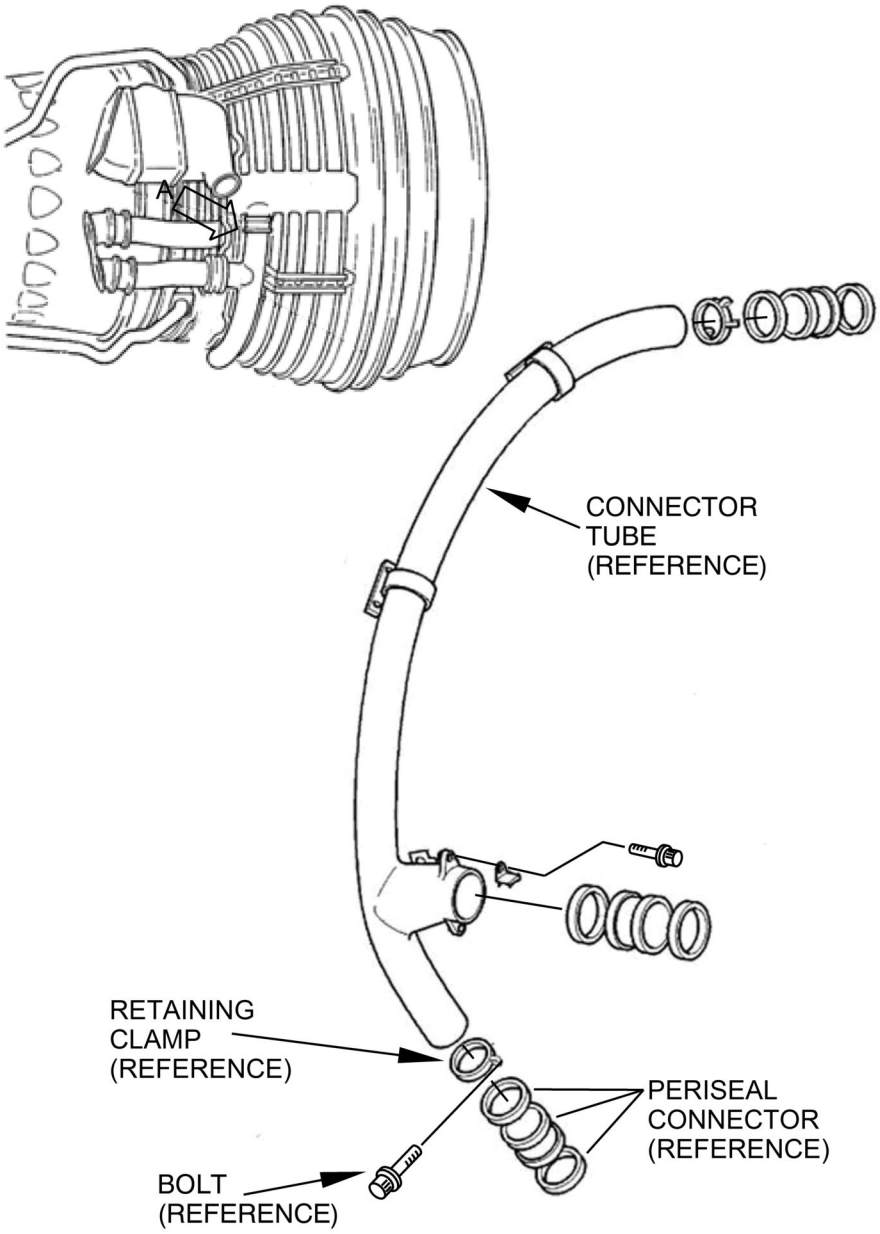
B526719

REMOVAL OF WIRING HARNESS AND BRACKET ASSEMBLY
FIGURE 6, SHEET 2



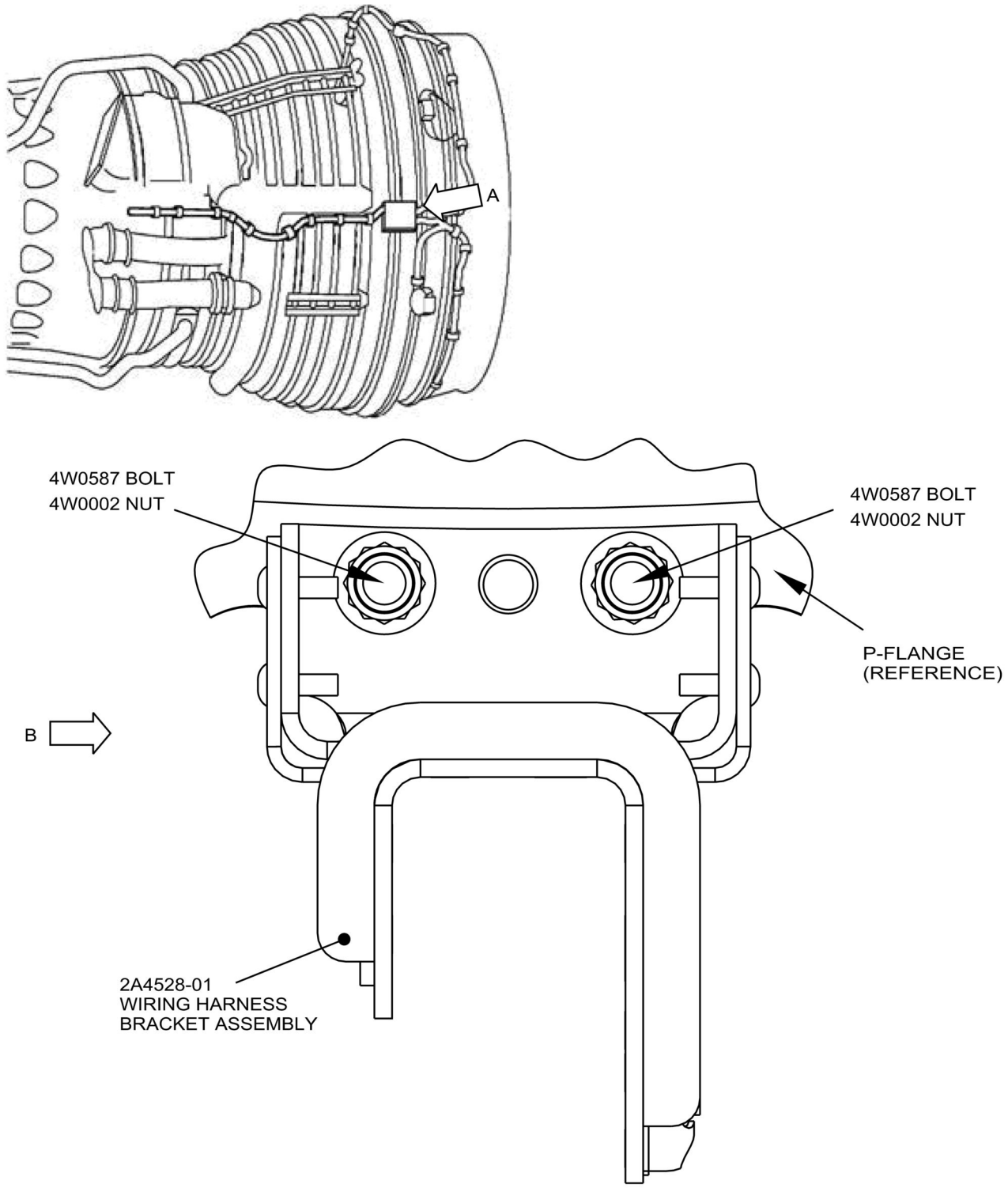
B526720

REMOVAL OF WIRING HARNESS AND BRACKET ASSEMBLY
FIGURE 6, SHEET 3

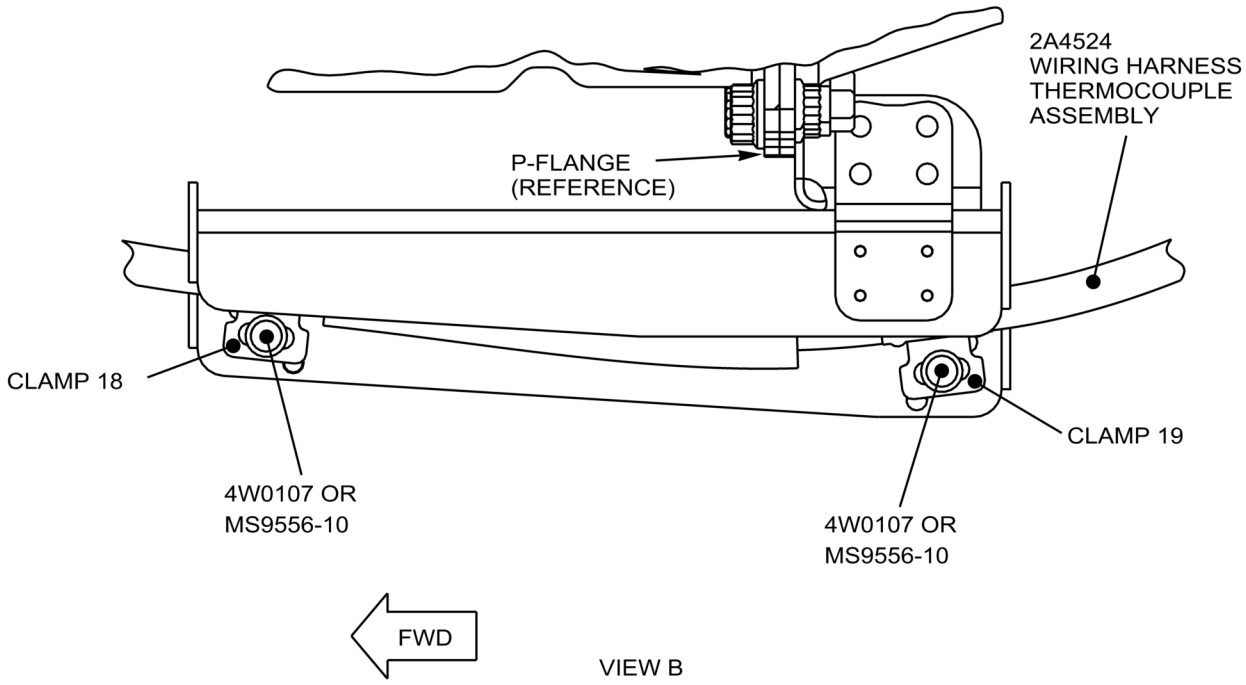


B526723

ACC PERISEAL CONNECTOR LOCATION
FIGURE 7

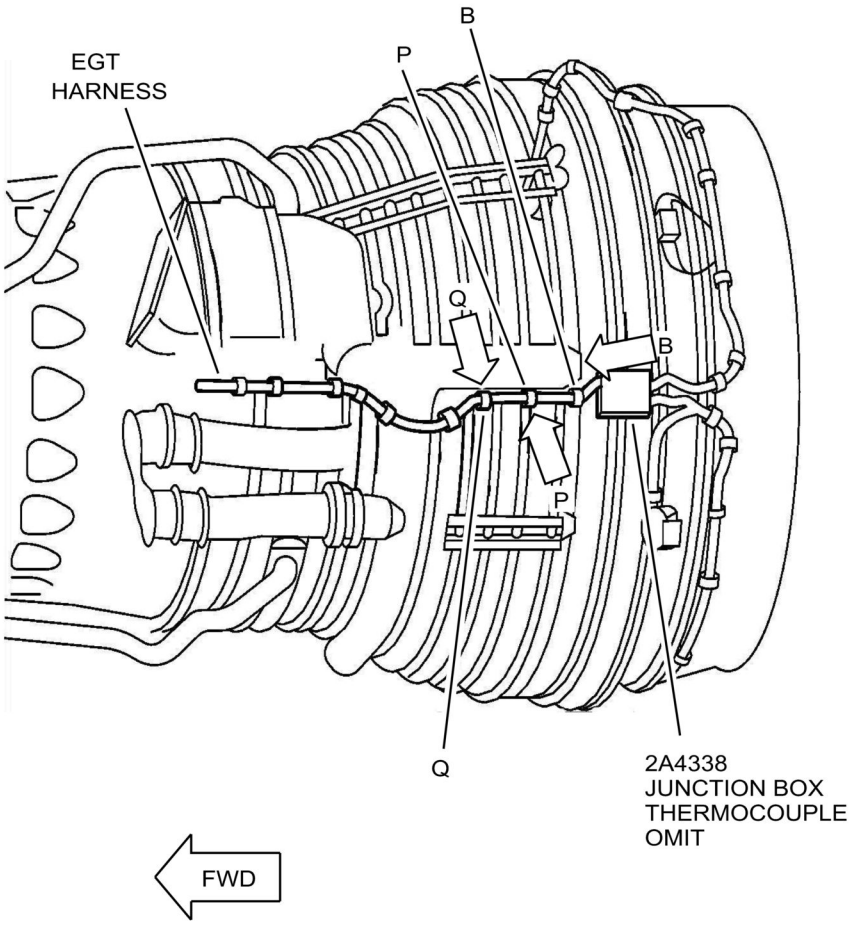


INSTALLATION OF WIRING HARNESS BRACKET ASSEMBLY
FIGURE 8, SHEET 1



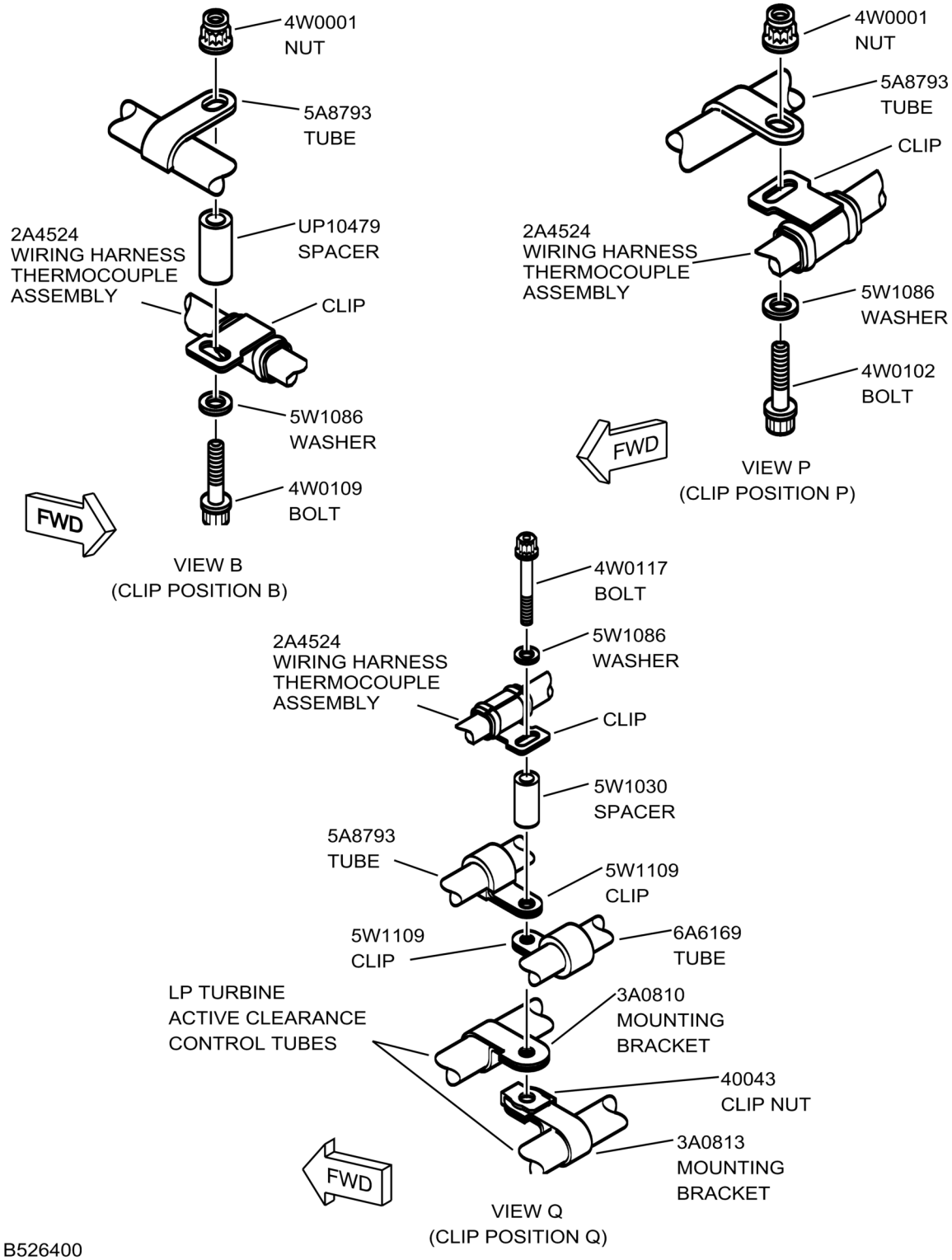
B526721

INSTALLATION OF WIRING HARNESS BRACKET ASSEMBLY
FIGURE 8, SHEET 2

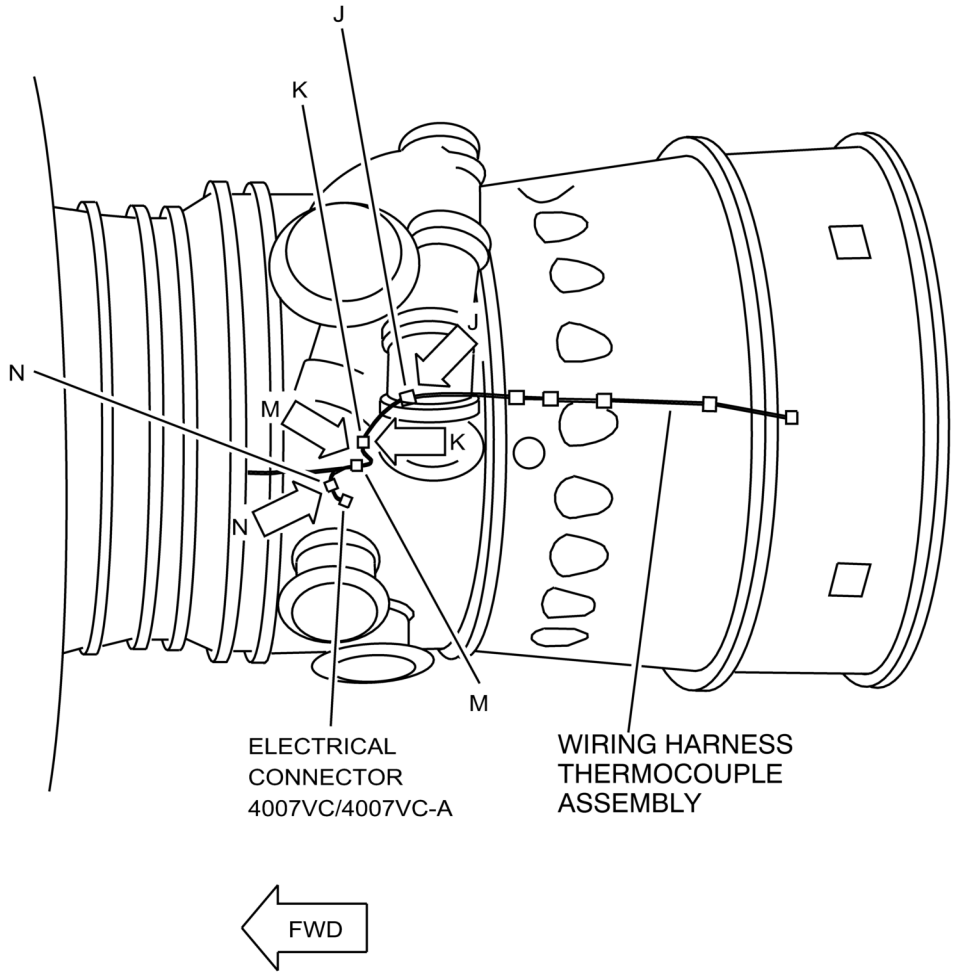


B526399

AFT WIRING HARNESS CLIP LOCATIONS
FIGURE 9, SHEET 1

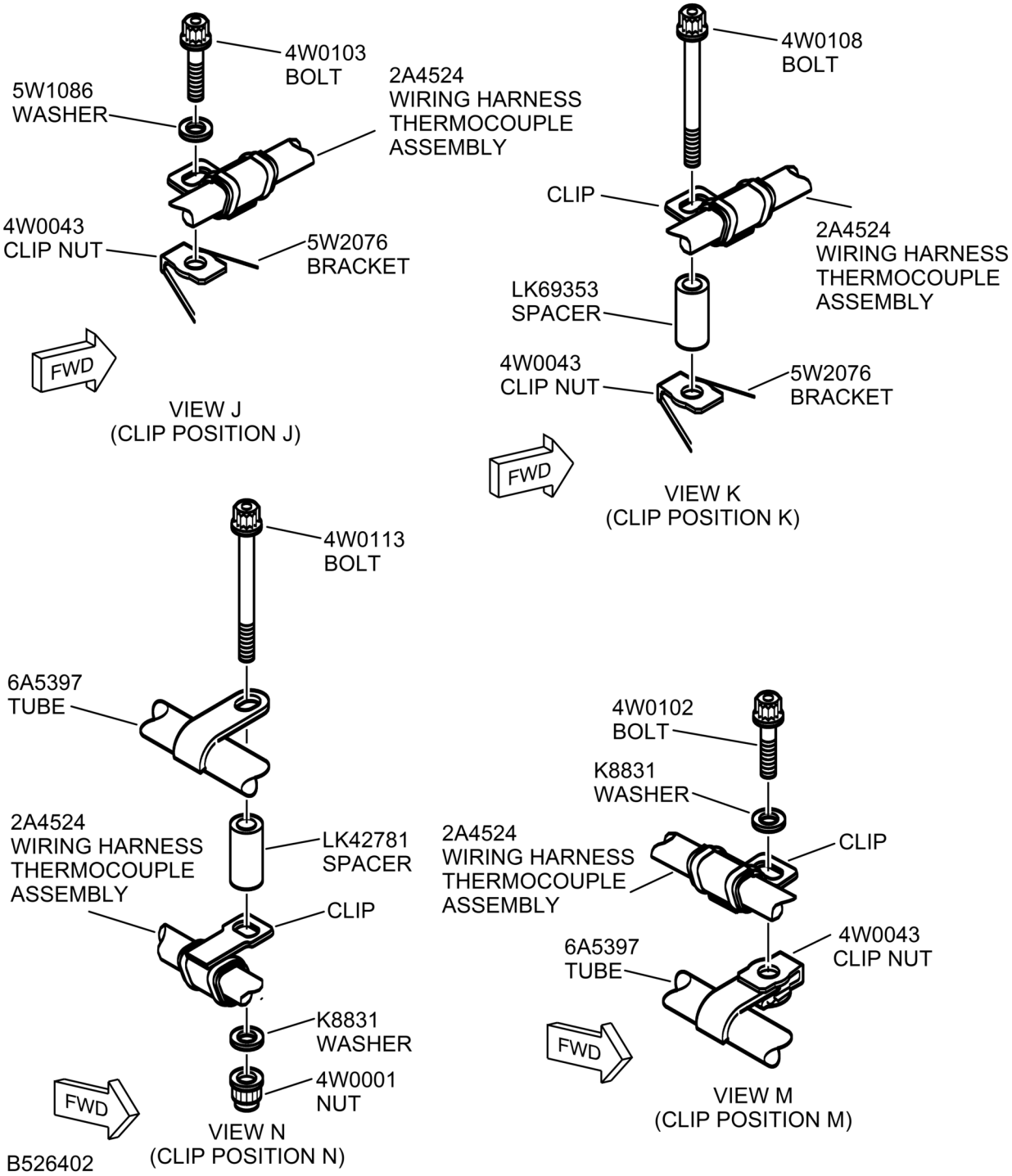


AFT WIRING HARNESS CLIP LOCATIONS
FIGURE 9, SHEET 2



B526401

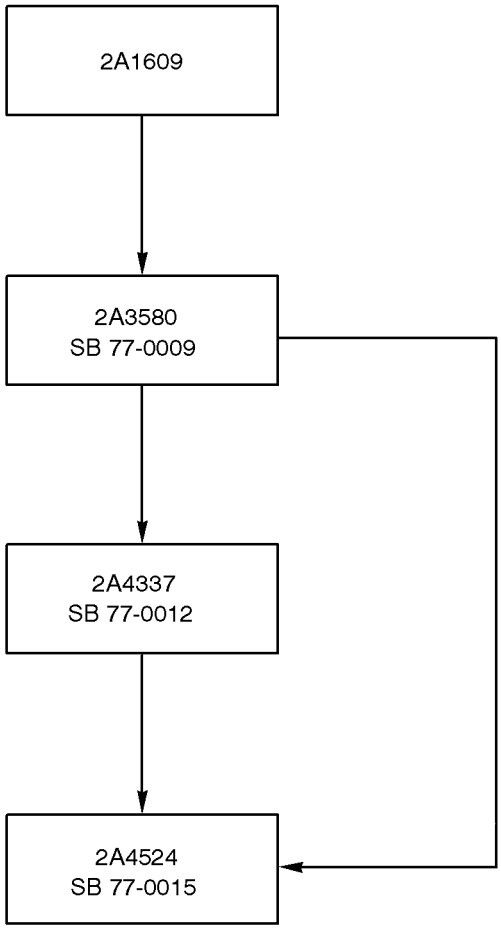
FORWARD WIRING HARNESS CLIP LOCATIONS
FIGURE 10, SHEET 1



FORWARD WIRING HARNESS CLIP LOCATIONS
FIGURE 10, SHEET 2

Appendix

Parts Progression To Show the Changed Part in Relation to Other Parts



B526398

THERMOCOUPLE WIRING HARNESS ASSEMBLY
CHART A

Added Data

Internal Reference Information

Revision No.	Reference Document	Origination
Original	EC 15VA004	HB/RCM
1	EC 15VA004 EA 17VC238	HB/RCM

Number values shown in parentheses adjacent to U.S. values are International System of units (SI) equivalents.

NOTE: In 2014 IAE converted the V2500 Technical Publications to a new system. As a result of the conversion, some manuals were consolidated. All manuals received new P&W part numbers. To facilitate the use of this Service Bulletin, the following Technical Publications cross reference table is provided.

Technical Publications Cross Reference Table

Publication	Engine Model(s)	IAE IETM Pub Ref	P&W Part Number
ENGINE MANUAL — A1, A5	All	E-V2500-1IA	2A4407
CMM-EHC — A1, A5	All	EHC-V2500-1IA	2A4409
CMM-FN — A1, A5	All	FN-V2500-1IA	2A4410
CMM-MMC — A1, A5	All	MECH-V2500-1IA	2A4411
CMM-THD — A1, A5	All	THD-V2500-1IA	2A4412
TLM — A1, A5	All	T-V2500-1IA	2A4408
SPPM (SPM) — A1, A5, D5	All	SPP-V2500-1IA	2A4414

Publication	Engine Model(s)	IAE IETM Pub Ref	P&W Part Number
EIPC — A5	V2522/V2524/V2527M-AQ02	S-V2500-6IA	2A4428
	V2522/V2524/V2527M-AQ03	S-V2500-6IB	
	V2522/V2524/V2527M-SQ02	S-V2500-6SA	
	V2522/V2524/V2527M-SQ03	S-V2500-6SB	
	V2522/V2524/V2527M-SQ04	S-V2500-6NA	
	V2522/V2524/V2527M-SQ05	S-V2500-6NB	
	V2527/V2527E-AQ02	S-V2500-7IA	
	V2527/V2527E-AQ03	S-V2500-7IB	
	V2527/V2527E-SQ02	S-V2500-7SA	
	V2527/V2527E-SQ03	S-V2500-7SB	
	V2527/V2527E-SQ04	S-V2500-7NA	
	V2527/V2527E-SQ05	S-V2500-7NB	
	V2530-AQ02	S-V2500-2IA	
	V2530-AQ03	S-V2500-2IB	
	V2530-SQ02	S-V2500-2SA	
	V2530-SQ03	S-V2500-2SB	
	V2530-SQ04	S-V2500-2NA	
	V2530-SQ05	S-V2500-2NB	
	V2533-AQ02	S-V2500-5IA	
	V2533-AQ03	S-V2500-5IB	
	V2533-SQ02	S-V2500-5SA	
	V2533-SQ03	S-V2500-5SB	
	V2533-SQ04	S-V2500-5NA	
	V2533-SQ05	S-V2500-5NB	