CHAPTER

34

NAVIGATION

CHAPTER 34
NAVIGATION

A = Added, R = Revised, D = Deleted, O = Overflow

34-EFFECTIVE PAGES

CHAPTER 34
NAVIGATION

34-CONTENTS

PART NUMBER: C34012-2, -21

NAME: TEST BOX - TOTAL AIR TEMPERATURE PROBE, AIR DATA SYSTEM

AIRPLANE MAINTENANCE: YES

COMPONENT MAINTENANCE: NO

USAGE & DESCRIPTION: The C34012-2 test box is used on all 737 airplanes equipped with the Goodrich (formerly Rosemount) total air temperature sensors 102AH2AF, 102AH2AG, 102AH2AJ, 1020P2AG, 102LA2AG or 102LJ2AG.

The C34012-21 test box is used on 737-100 thru -500 airplanes equipped with the Goodrich (formerly Rosemount) total air temperature sensor part number 102JE2FG.

C34012 is used to connect a customer-furnished decade resistance box in place of the total air temperature probe while performing the air data system test.

Refer to the C34012 drawing for complete usage instructions.

C34012-2 and -21 consist of:

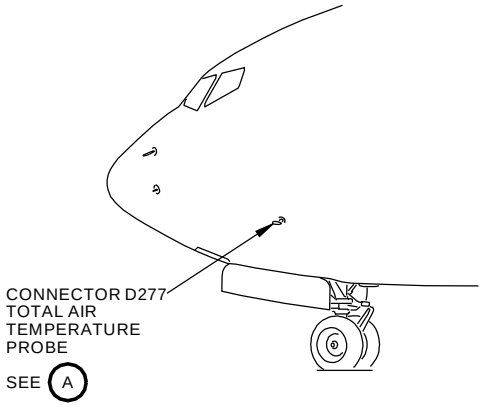
C34012-2		
QUANTITY	**NOMENCLATURE**	**PART NUMBER**
1	TEST BOX ASSEMBLY	C34012-4
1	STORAGE BOX	

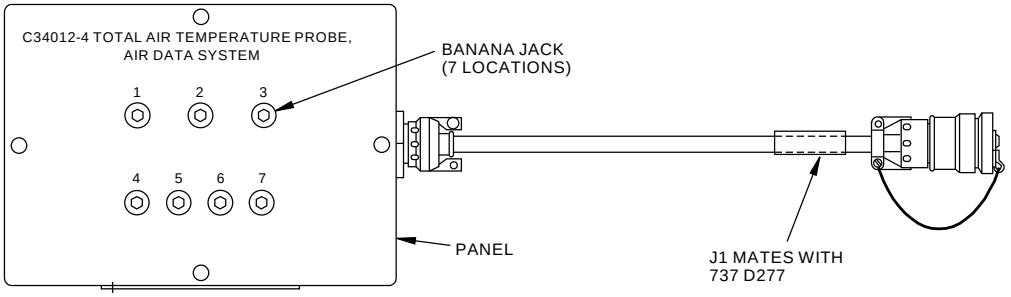
C34012-21		
QUANTITY	**NOMENCLATURE**	**PART NUMBER**
1	TEST BOX ASSEMBLY	C34012-22
1	STORAGE BOX	

WEIGHT: 4 lbs (1.8 kg)

DIMENSIONS: 5 x 5 x 10 inches (127 x 127 x 254 mm)

NOTE: C34012-21 supersedes C34012-1.





C34012-4
TEST BOX ASSEMBLY
C34012-22 SIMILAR

A

G85086 S0006831927_V4

Total Air Temperature Probe, Air Data System Test Box
Figure 1

PART NUMBER: A34011-1, -112

NAME: BREAKOUT BOX EQUIPMENT - ARINC 600, LINE MAINTENANCE

AIRPLANE MAINTENANCE: YES

COMPONENT MAINTENANCE: NO

OTHER MANUALS: YES

FIM

USAGE & DESCRIPTION: The A34011-1 and -112 ARINC line maintenance breakout box equipment are used on all 737-300 thru -900 airplanes.

A34011 is used to probe ARINC 600 airplane connectors for continuity checking and interfacing the ARINC 429 digital data bus analyzer with airplane wiring.

The A34011-112 connector kit provides an optional, lower cost, method to using the A34011-1 equipment. Using the A34011-112 connector kit, each connector pin to be checked is selected by the user with the aid of the Fault Isolation Manual (FIM) and/or appropriate wiring diagrams.

A34011-1 and -112 consist of:

A34011-1		
QUANTITY	**NOMENCLATURE**	**PART NUMBER**
1	BREAKOUT BOX ASSEMBLY	A34011-2
1	ADAPTER CABLE ASSEMBLY	A34011-66
1	ADAPTER CABLE ASSEMBLY	A34011-67
1	ADAPTER CABLE ASSEMBLY	A34011-68
1	ADAPTER CABLE ASSEMBLY	A34011-69
1	ADAPTER CABLE ASSEMBLY	A34011-70
1	ADAPTER CABLE ASSEMBLY	A34011-71
1	ADAPTER CABLE ASSEMBLY	A34011-72
1	ADAPTER CABLE ASSEMBLY	A34011-73
1	ADAPTER CABLE ASSEMBLY	A34011-100
1	DATA PACKAGE	A34011-132
1	STORAGE BOX	

A34011-112		
QUANTITY	**NOMENCLATURE**	**PART NUMBER**
1	CONNECTOR	BKA111623
1	CONNECTOR	BKA111625
1	CONNECTOR	BKA111627
1	CONNECTOR	BKA111640
1	CONNECTOR	BKA111640-001

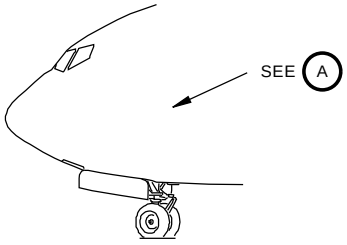
(Continued)

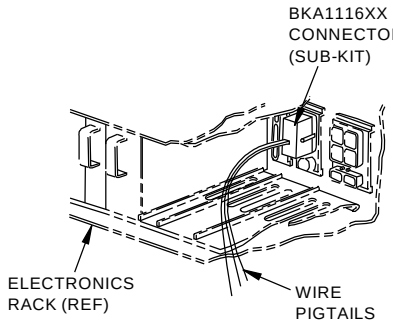
A34011-112		
QUANTITY	**NOMENCLATURE**	**PART NUMBER**
1	STORAGE BOX	

WEIGHT: A34011-1 - 25 lbs (11 kg)

DIMENSIONS: A34011-1 - 24 x 24 x 16 inches (610 x 610 x 406 mm)

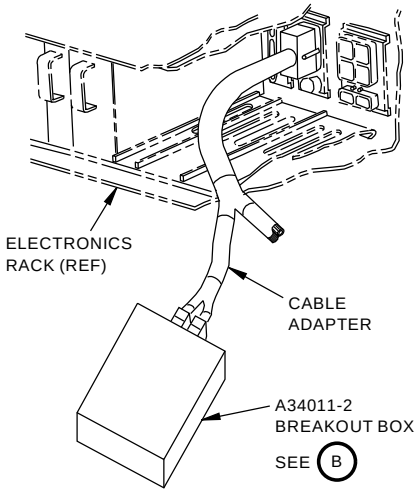
NOTE: A34016 replaces A34011 for future procurement.





A34011-112 ARINC 600 CONNECTOR SUB-KIT

A 1



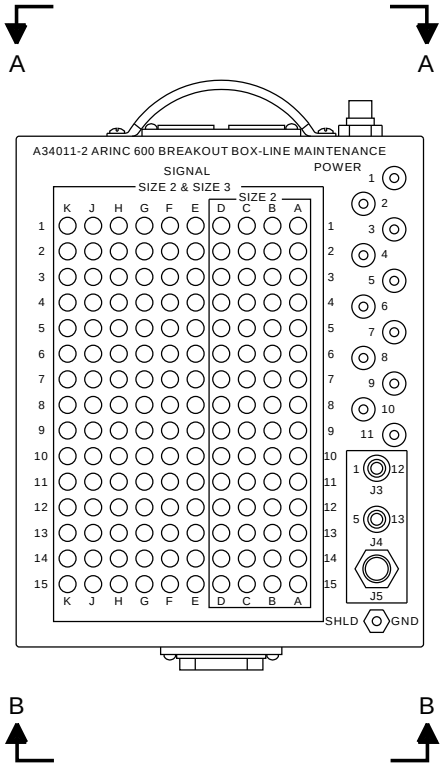
A34011-2 ARINC 600 BREAK OUT BOX

A

1 OPTIONAL TEST METHOD:
AN OPTIONAL METHOD OF TESTING INVOLVES USING THE -112 CONNECTOR KIT.
EACH CONNECTOR PIN TO BE CHECKED IS SELECTED BY THE USER WITH THE AID OF THE FAULT MANUAL AND/OR APPROPRIATE WIRING DIAGRAMS.
QUANTITIES OF EACH CONNECTOR SUB-KIT ARE DETERMINED BY USER.

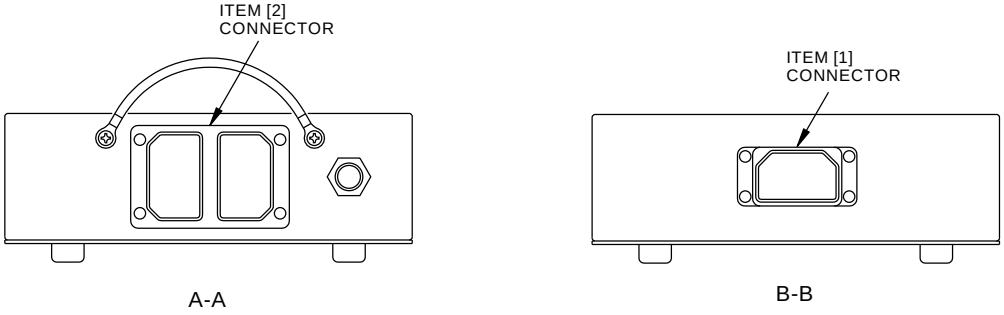
H59167 S0006831929_V2

Breakout Box Equipment Usage
Figure 1



A34011-2 ARINC 600 BREAKOUT BOX

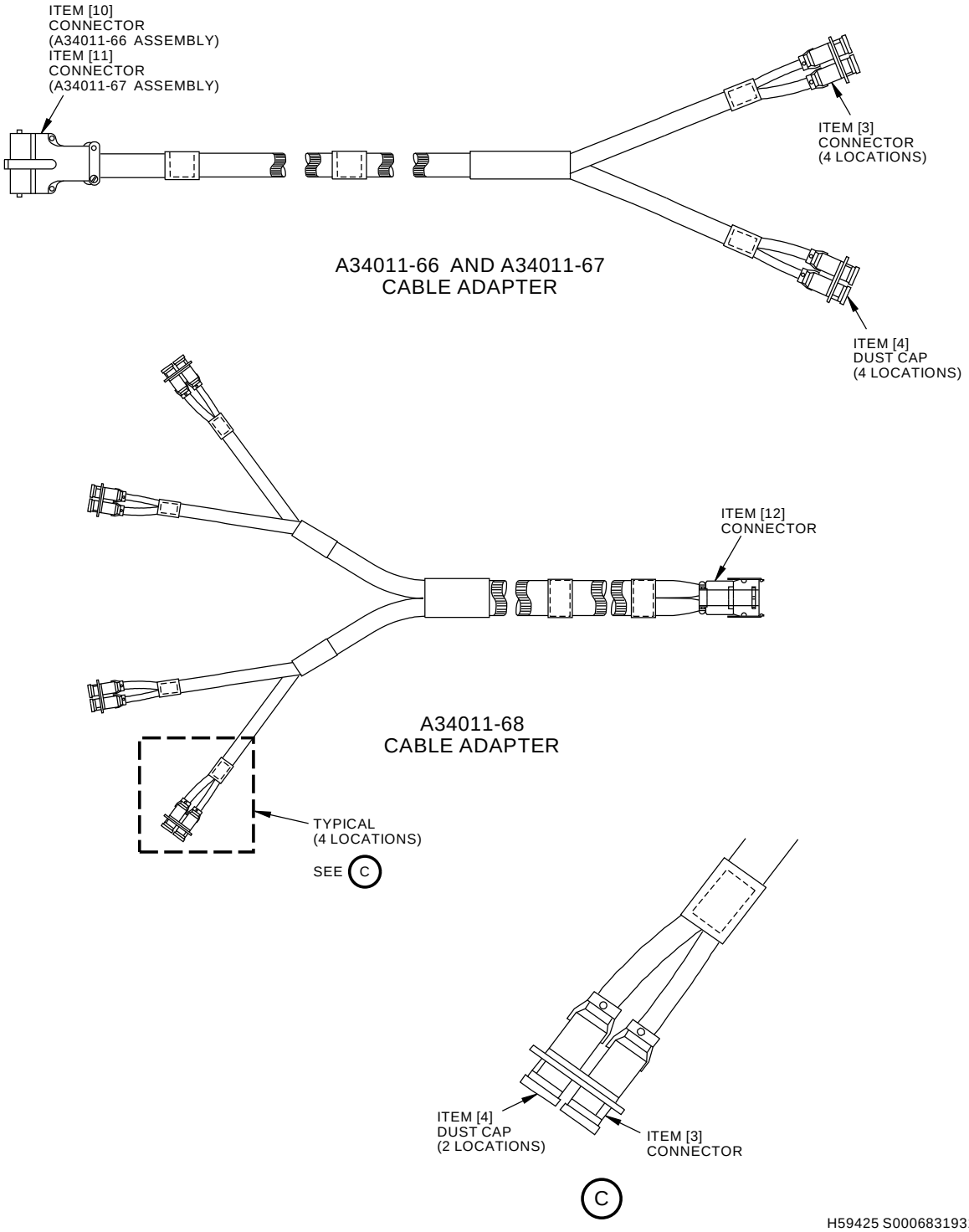
B



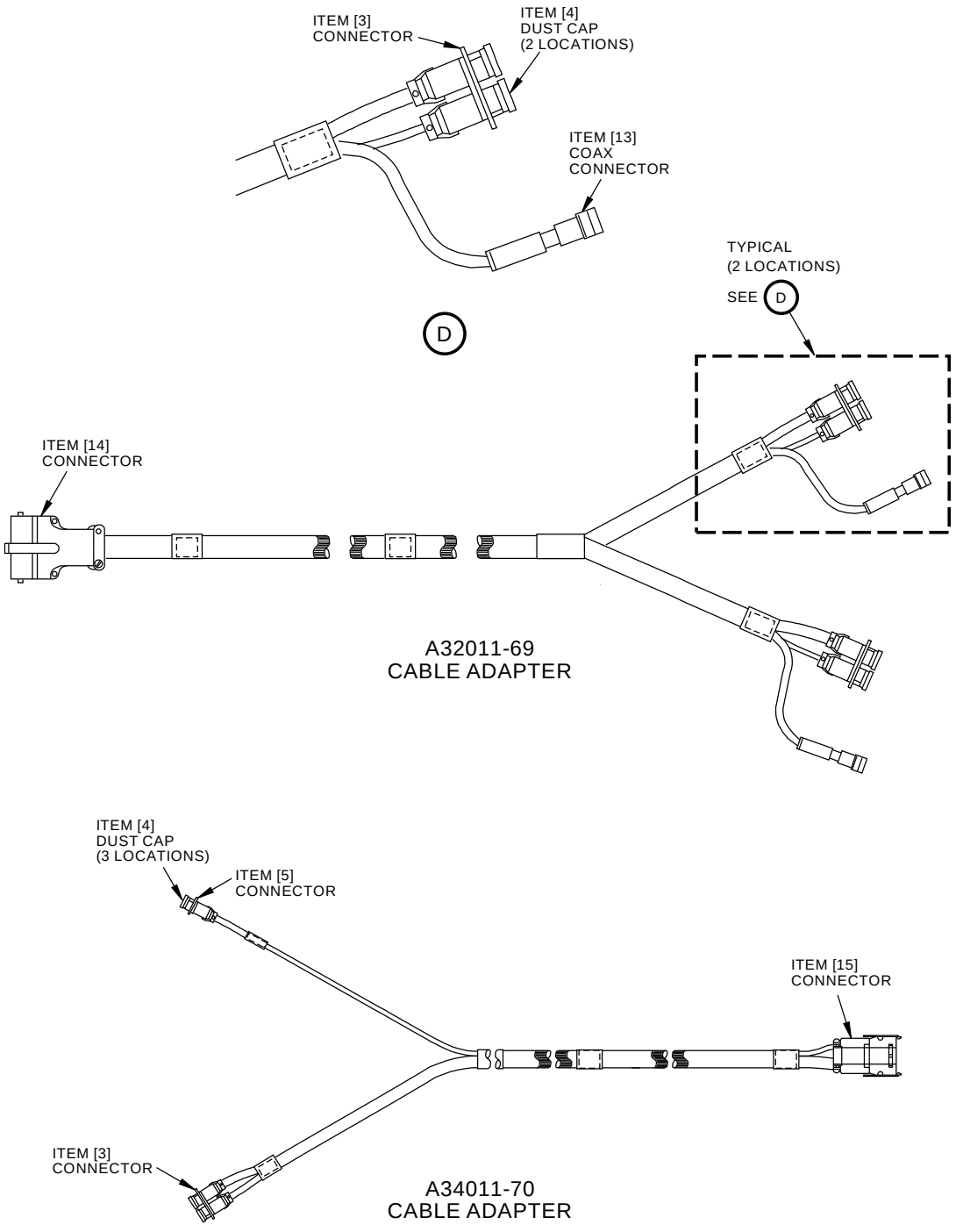
A-A B-B

H59169 S0006831930_V3

A34011 Breakout Box
Figure 2

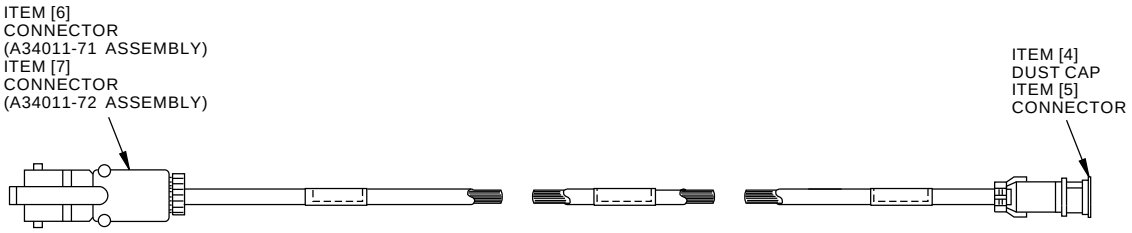


Breakout Box Cable Adapters
Figure 3 (Sheet 1 of 3)

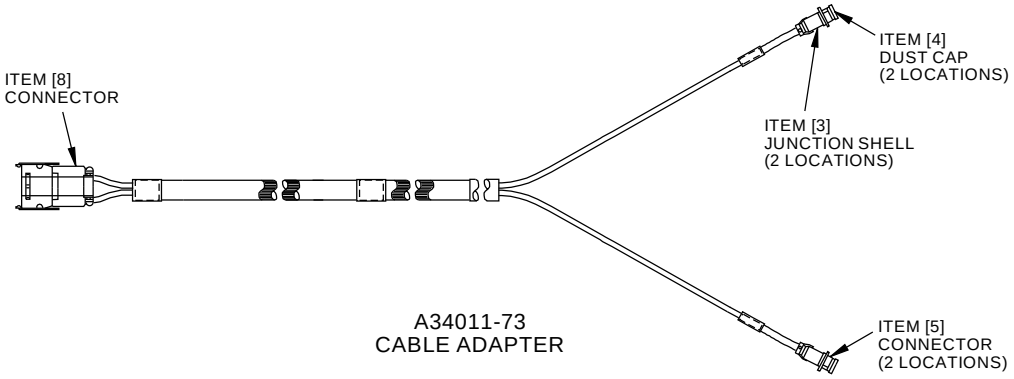


H59261 S0006831932_V3

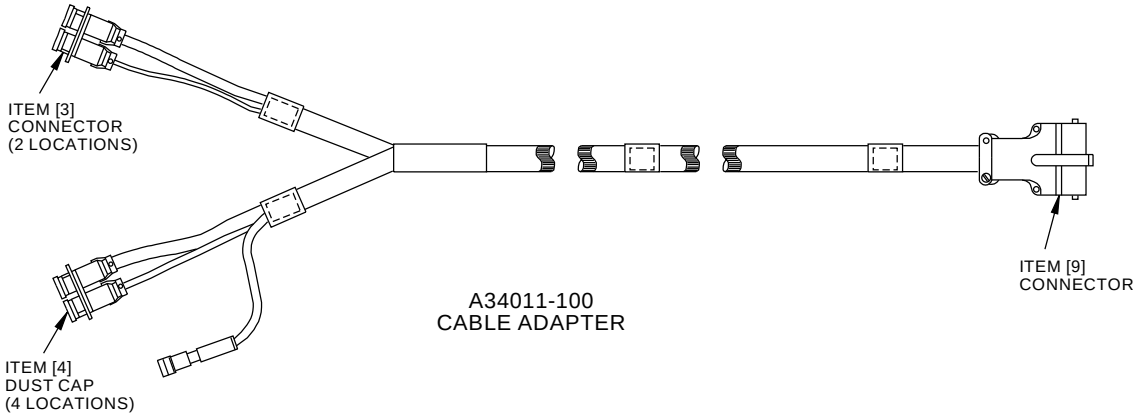
Breakout Box Cable Adapters
Figure 3 (Sheet 2 of 3)



A34011-71 AND -72
CABLE ADAPTERS



A34011-73
CABLE ADAPTER



A34011-100
CABLE ADAPTER

H59322 S0006831933_V3

Breakout Box Cable Adapters
Figure 3 (Sheet 3 of 3)

REPAIRABLE/REPLACEABLE PARTS			
ITEM NO.	**PART NO.**	**NOMENCLATURE**	**VENDOR CODE**
[1]	DPXAMA25W3-34P	CONNECTOR	0RYZR
[2]	DPX2MA-A1065675-34B-0000	CONNECTOR	0RYZR
[3]	DPX2MA-A106P67P-33B-1401	CONNECTOR	0RYZR
[4]	DPXA-59	DUST CAP	0RYZR
[5]	DPXAMA25W3-33S	CONNECTOR	0RYZR
[6]	BKA111622	CONNECTOR (SUBKIT OF BKA111642 KIT)	0RYZR
[7]	BKA111624	CONNECTOR (SUBKIT OF BKA111642 KIT)	0RYZR
[8]	BKA111626	CONNECTOR (SUBKIT OF BKA111642 KIT)	0RYZR
[9]	BKA111640-001	CONNECTOR (SUBKIT OF BKA111642 KIT)	0RYZR
[10]	BKA11625	CONNECTOR (SUBKIT OF BKA111642 KIT)	0RYZR
[11]	BKA11623	CONNECTOR (SUBKIT OF BKA111642 KIT)	0RYZR
[12]	BKA111627	CONNECTOR (SUBKIT OF BKA111642 KIT)	0RYZR
[13]	82-61	COAX CONNECTOR	Z2094
[14]	BKA111640	CONNECTOR (SUBKIT OF BKA111642 KIT)	0RYZR
[15]	BKA111641	CONNECTOR (SUBKIT OF BKA111642 KIT)	0RYZR

PART NUMBER: A34016-1, -2, -4, -5, -7, -8, -9, -10, -11, -12, -17, -19, -20, -21, -22, -23, -24, -26, -27, -28, -30, -35, -36, -38, -41, -42, -44, -46, -47, -48, -49, -50, -55, -57, -58, -59, -60, -61, -62, -64, -65, -67, -69, -181, -186, -205, -206, -208, -209, -217, -218, -223, -224

NAME: BREAKOUT BOX EQUIPMENT - ARINC 600, LINE MAINTENANCE

AIRPLANE MAINTENANCE: YES

COMPONENT MAINTENANCE: NO

OTHER MANUALS: YES

FIM

USAGE & DESCRIPTION: The A34016 breakout box assemblies (in fact, extender boxes) are used on 737-300 thru -900 airplanes for signal and continuity checks. A34016 is also used for interfacing the ARINC 429 data bus with an ARINC 429 data bus analyzer. A34016 uses multiple extender boxes and a few cables to analyze the various airplane system wiring from the electronic equipment centers (ARINC 600 type rack connectors).

To use A34016, the applicable LRU is removed from the electrical/ electronics rack connector and replaced with the applicable extender box and cable for pin access. Applicable connectors, airplane maintenance manuals, fault isolation manuals or airplane schematic and wire diagrams are to be determined by the user.

Equipment typical to 737-300 thru -900's are listed in the table.

A34016 BREAKOUT BOX APPLICATION TABLE

EXTENDER BOX PART NUMBER:	NOTES:
A34016-1 (WITH A STORAGE BOX) OR A34016-36 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX).	LIMITED APPLICABILITY, AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE
A34016-2 (WITH A STORAGE BOX) OR A34016-38 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX).	AIRPLANE TYPICALLY HAS 6 OR MORE LRU'S THAT ARE APPLICABLE
A34016-4 (WITH A STORAGE BOX) OR A34016-41 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX). *[2]	AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE
A34016-5 (WITH A STORAGE BOX) OR A34016-42 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX).	AIRPLANE TYPICALLY HAS 6 OR MORE LRU'S THAT ARE APPLICABLE
A34016-7 (WITH A STORAGE BOX) OR A34016-44 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX). *[1]	LIMITED APPLICABILITY, AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE.
A34016-8 (WITH A STORAGE BOX) OR A34016-46 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX).	AIRPLANE TYPICALLY HAS 3-5 LRU'S THAT ARE APPLICABLE
A34016-9 (WITH A STORAGE BOX) OR A34016-47 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX).	AIRPLANE TYPICALLY HAS 3-5 LRU'S THAT ARE APPLICABLE
A34016-10 (WITH A STORAGE BOX) OR A34016-48 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX).	AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE
A34016-11 (WITH A STORAGE BOX) OR A34016-49 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX). *[2]	LIMITED APPLICABILITY, AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE
A34016-12 (WITH A STORAGE BOX) OR A34016-50 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX). *[2]	LIMITED APPLICABILITY, AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE

(Continued)

A34016 BREAKOUT BOX APPLICATION TABLE	
EXTENDER BOX PART NUMBER:	**NOTES:**
A34016-17 (WITH A STORAGE BOX) OR A34016-55 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX). *[2]	LIMITED APPLICABILITY, AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE
A34016-19 (WITH A STORAGE BOX) OR A34016-57 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX). *[2]	LIMITED APPLICABILITY, AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE
A34016-20 (WITH A STORAGE BOX) OR A34016-58 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX). *[2]	AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE
A34016-21 (WITH A STORAGE BOX) OR A34016-59 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX). *[2]	LIMITED APPLICABILITY, AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE
A34016-22 (WITH A STORAGE BOX) OR A34016-60 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX). *[2]	LIMITED APPLICABILITY, AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE
A34016-23 (WITH A STORAGE BOX) OR A34016-61 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX). *[2]	LIMITED APPLICABILITY, AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE
A34016-24 (WITH A STORAGE BOX) OR A34016-62 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX). *[2]	LIMITED APPLICABILITY, AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE
A34016-26 (WITH A STORAGE BOX) OR A34016-64 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX). *[2]	LIMITED APPLICABILITY, AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE
A34016-27 (WITH A STORAGE BOX) OR A34016-65 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX).	AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE
A34016-28 (WITH A STORAGE BOX) OR A34016-67 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX). *[2]	AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE
A34016-30 (WITH A STORAGE BOX) OR A34016-69 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX). *[2]	AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE
A34016-35 CABLE ASSEMBLY/SPACER EQUIPMENT	REQUIRED FOR ALL TROUBLESHOOTING USING A34016 EXTENDER BOXES
A34016-181 (WITH A STORAGE BOX) OR A34016-186 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX). *[2]	LIMITED APPLICABILITY, AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE. THE EXTENDER BOX DOES NOT INCLUDE FIBER OPTIC BREAKOUT CAPABILITY. SEE BACC59D TEST ADAPTERS AND J45002 FIBER OPTIC BREAKOUT EQUIPMENT FOR MORE INFORMATION.
A34016-205 (WITH A STORAGE BOX) OR A34016-208 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX) *[2]	LIMITED APPLICABILITY, AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE
A34016-206 (WITH A STORAGE BOX) OR A34016-209 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX) *[2]	LIMITED APPLICABILITY, AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE
A34016-217 (WITH A STORAGE BOX) OR A34016-223 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX) *[2]	LIMITED APPLICABILITY, AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE
A34016-218 (WITH A STORAGE BOX) OR A34016-224 (THE SAME EXTENDER BOX WITHOUT A STORAGE BOX) *[2]	LIMITED APPLICABILITY, AIRPLANE TYPICALLY HAS 1-2 LRU'S THAT ARE APPLICABLE

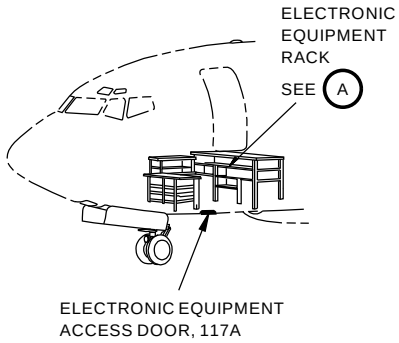
*[1] Typically for 737-300 thru -500

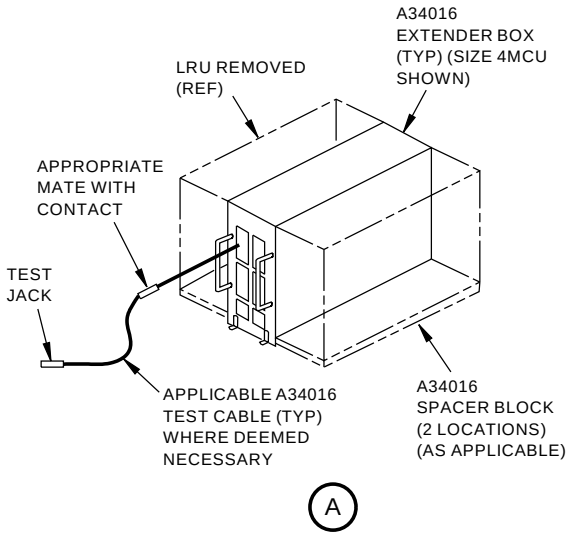
*[2] Typically for 737-600 thru -900

WEIGHT: A34016 typical extender box: 12 lbs (5.4 kg)
A34016-35 cable assemblies/spacer equipment: 22 lbs (10 kg)

DIMENSIONS: A34016 typical extender box: 16 x 13 x 7 inches (406 x 330 x 178 mm)

NOTE: A34016 replaces A34011 for future procurement.





NOTE: THE CONTACTS ON THE FRONT PANEL OF THE A34016 EXTENDER BOXES ARE THE SAME PATTERN AS THE AIRPLANE PLUG CONNECTOR.

M27244 S0006831935_V2

ARINC 600 Breakout Box Location and Usage
Figure 1

PART NUMBER: B34002-1, -2, -3, -4, -5, -9, -10, -11, -12, -13, -14, -15, -26, -27, -28, -29, -30, -31, -32, -33, -35, -41, -42, -44, -45, -46, -47, -63, -66, -80, -91

NAME: BREAKOUT BOX EQUIPMENT - ARINC 404, LINE MAINTENANCE

AIRPLANE MAINTENANCE: YES

COMPONENT MAINTENANCE: NO

OTHER MANUALS: YES

B34002 Drawing

USAGE & DESCRIPTION: The B34002 breakout box equipment is used on all 737 airplanes.

B34002 is used for signal and continuity checks. The B34002 uses multiple extender boxes and a few cables to analyze the various airplane system wiring from the electronic equipment centers fitted with ARINC 404 connectors.

To use the B34002 extender boxes, the applicable line replaceable unit (LRU) is removed from the electrical/electronics rack connector and replaced with the applicable extender box and cable for pin access. The B34002 extender boxes are built in accordance with ARINC 404. ARINC 404 units of width are noted in Air Transport Rack (ATR) units. B34002-92 thru -95, -104 and -105 spacers (found in the B34002-91 cable assembly/ spacer equipment) are required when installing the extender boxes to make a complete ATR unit. Two equal width spacer blocks are required for the extender box installation.

Applicable connectors, airplane maintenance manuals, fault isolation manuals or airplane schematic and wire diagrams are to be determined by the user. Extender box applications are as follows:

B34002-1 (with a storage box) or B34002-9 (the same extender box assembly only without a storage box). B34002-1 is typically used on M29 units. Airplane connector equipment is DPXBM () -45-33S-XXXX. B34002-1 is used on 737-100 thru -500 airplanes.

B34002-2 (with a storage box) or B34002-10 (the same extender box assembly only without a storage box). B34002-2 is typically used on M652 units. Airplane connector equipment is DPXBM () -40-33S-XXXX. B34002-2 is used on 737-100 thru -500 airplanes.

B34002-3 (with a storage box) or B34002-11 (the same extender box assembly only without a storage box). B34002-3 is typically used on M237 units. Airplane connector equipment is DPXBM () -67-33S-XXXX or DSX1H-21S-XXXX. B34002-3 is used on 737-100 thru -900 airplanes.

B34002-4 (with a storage box) or B34002-12 (the same extender box assembly only without a storage box). B34002-4 is typically used on M2100 units. Airplane connector equipment is DPXBM () -10-33P-XXXX. B34002-4 is used on 737-600 thru -900 airplanes.

B34002-5 (with a storage box) or B34002-13 (the same extender box assembly only without a storage box). B34002-5 is typically used on M1955 units. Airplane connector equipment is DPXBM () -67-33S-XXXX.

B34002-5 is used on 737-100 thru -900 airplanes.

B34002-26 (with a storage box) or B34002-14 (the same extender box assembly only without a storage box). B34002-26 is typically used on M320, M321, M322 and M323 units. Airplane connector equipment is DPX2M () -26S8S-33B-XXXX. B34002-26 is used on 737-100 thru -900 airplanes.

B34002-41 (with storage box) or B34002-15 (the same extender box assembly only without a storage box). B34002-41 is typically used on M1710 units. Airplane connector equipment is DPX3MA66565-252. B34002-41 is used on 737-600 thru -900 airplanes.

B34002-28 (with a storage box) or B34002-33 (the same extender box assembly only without a storage box). B34002-28 is typically used on M23080 units. Airplane connector equipment is RM3P32C2S67S32C2S-XXXX. B34002-28 is used on 737-600 thru -900 airplanes.

B34002-27 (with a storage box) or B34002-42 (the same extender box assembly only without a storage box). B34002-27 is typically used on M980 units. Airplane connector equipment is DPX2M () -57S57S-33B-XXXX. B34002-27 is used on 737-100 thru -900 airplanes.

B34002-29 (with a storage box) or B34002-44 (the same extender box assembly only without a storage box). B34002-29 is typically used on M1499 units. Airplane connector equipment is DPX2M () -67S () -32 () 2S-33B-XXXX and CPX2M () -67S () -32 () 2S-33B-XXXX. B34002-29 is used on 737-600 thru -900 airplanes.

B34002-30 (with a storage box) or B34002-45 (the same extender box assembly only without a storage box). B34002-30 is typically used on G14/G15/M324/M1455 units. Airplane connector equipment is DPX2M () -67S67S-33B-XXXX. B34002-30 is used on 737-100 thru -900 airplanes.

B34002-31 (with a storage box) or B34002-46 (the same extender box assembly only without a storage box). B34002-31 is typically used on M1747 units. Airplane connector equipment is DPX2M () - () -106P-33B-XXXX. B34002-31 is used on 737-100 thru -900 airplanes.

B34002-32 (with a storage box) or B34002-47 (the same extender box assembly only without a storage box). B34002-32 is typically used on B12/B15/B18 units. Airplane connector equipment is DPX2M () - () 40 ()-1S-33B-XXXX. B34002-32 is used on 737-100 thru -600 airplanes.

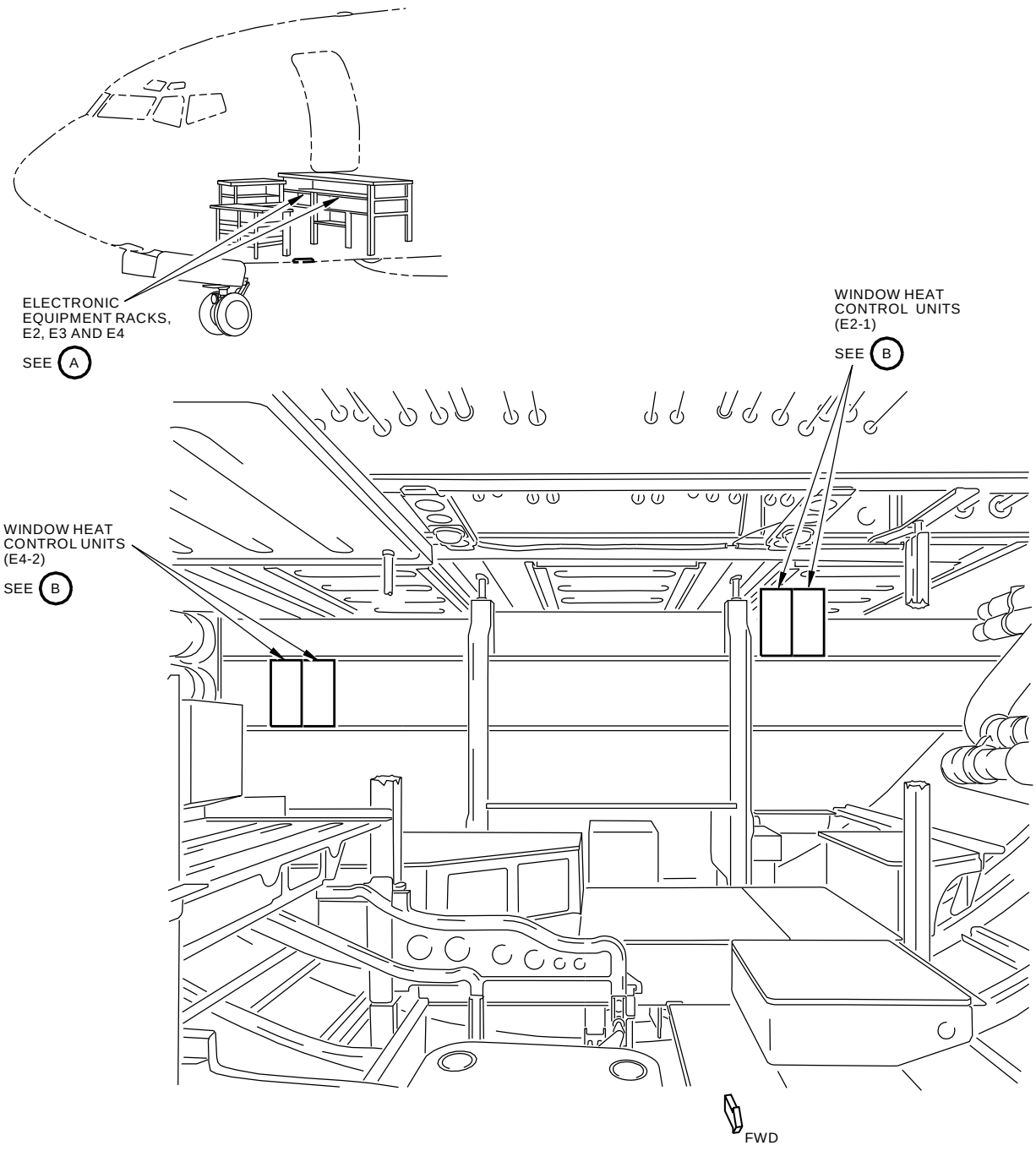
B34002-63 (with a storage box) or B34002-66 (the same extender box assembly only without a storage box). B34002-63 is typically used on M23079 units. Airplane connector equipment is DPX3M () -B96-33S-XXXX. B34002-63 is used on 737-100 thru -900 airplanes.

B34002-35 (with a storage box) or B34002-80 (the same extender box assembly only without a storage box). B34002-35 is typically used on M1850 units. Airplane connector equipment is DPX2M() -67SD8S-33B-XXXX. B34002-35 is used on 737-600 thru -900 airplanes.

B34002-91 cable assemblies/spacer equipment are required for all troubleshooting using B34002 extender boxes.

B34002-91 consists of:

B34002-91		
QUANTITY	**NOMENCLATURE**	**PART NUMBER**
2	SPACER BLOCK	B34002-92
2	SPACER BLOCK	B34002-93
2	SPACER BLOCK	B34002-94
2	SPACER BLOCK	B34002-95
2	CORD ASSEMBLY	B34002-96
2	BNC ADAPTER	B34002-97
4	PLUG/JACK CORD (BLACK)	B34002-98B
4	PLUG/JACK CORD (RED)	B34002-98R
4	ADAPTER (0.040 PIN) (BLACK)	B34002-99B
4	ADAPTER (0.040 PIN) (RED)	B34002-99R
4	ADAPTER (0.030 SOCKET) (BLACK)	B34002-103B
4	ADAPTER (0.030 SOCKET) (RED)	B34002-103R
2	SPACER BLOCK	B34002-104
2	SPACER BLOCK	B34002-105
1	STORAGE BOX	

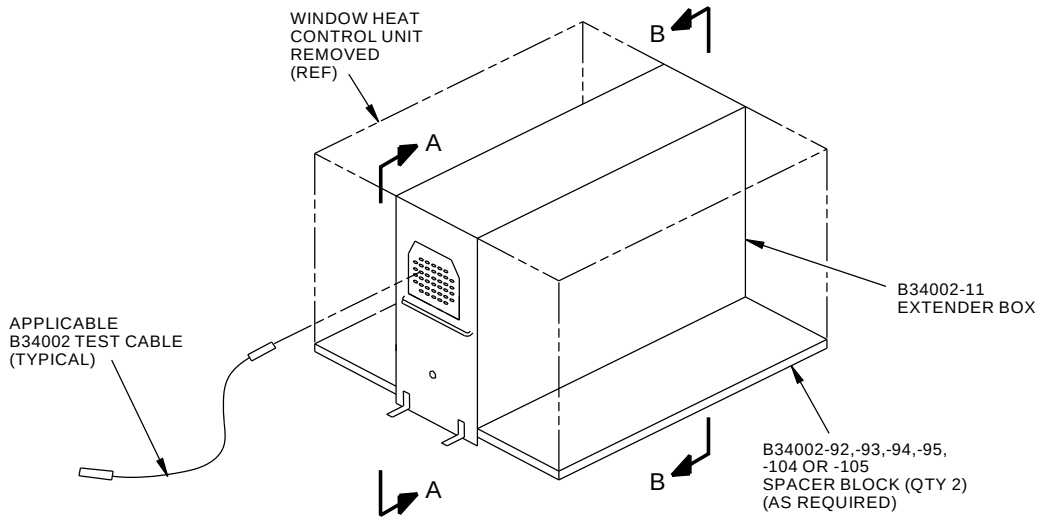


ELECTRONIC EQUIPMENT RACKS, E2, E3 AND E4

A

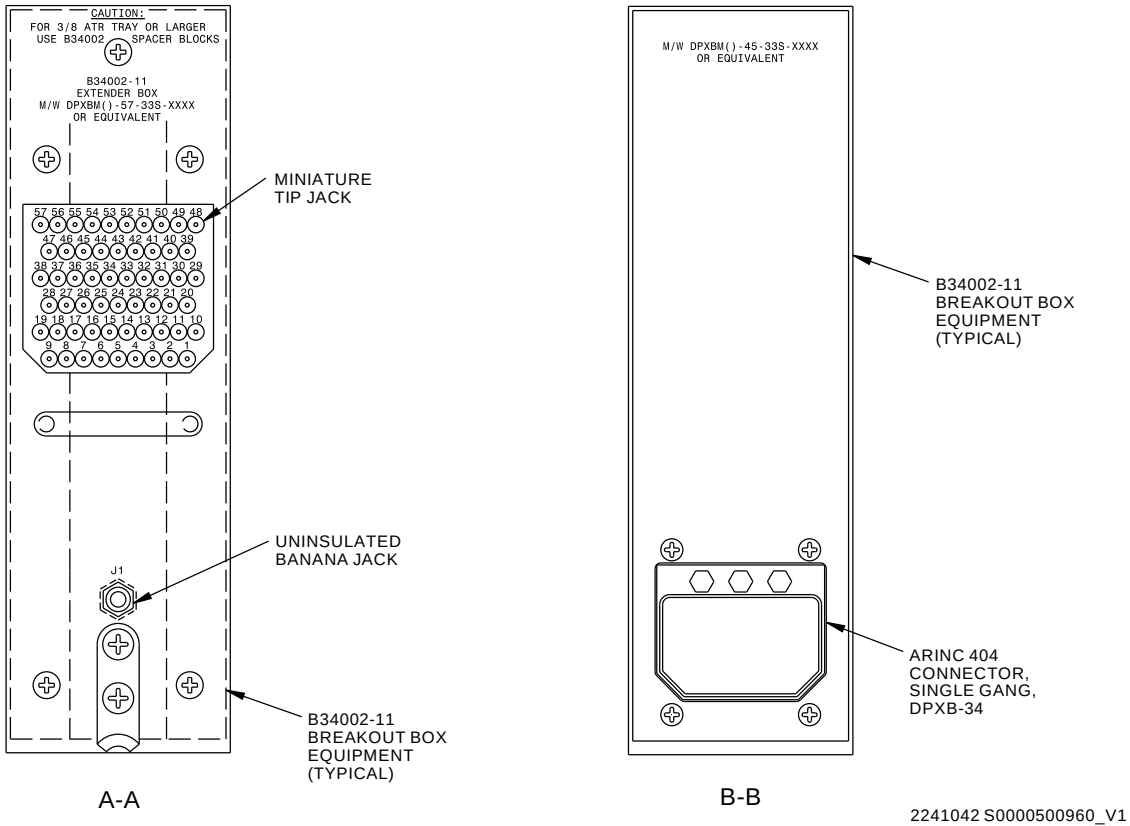
2240994 S0000500959_V1

Line Maintenance ARINC 404 Breakout Box Equipment
Figure 1 (Sheet 1 of 2)



WINDOW HEAT CONTROL UNIT

B



Line Maintenance ARINC 404 Breakout Box Equipment
Figure 1 (Sheet 2 of 2)

PART NUMBER: J34004-1, -9

NAME: BREAKOUT BOX EQUIPMENT - CONNECTORS (S280W551), LINE MAINTENANCE

AIRPLANE MAINTENANCE: NO

COMPONENT MAINTENANCE: NO

OTHER MANUALS: YES

J34004 Drawing

USAGE & DESCRIPTION: The J34004-1 breakout box equipment and J34004-9 cable assembly equipment are used on all 737 airplanes, except 737-100 thru -500 airplanes.

J34004 is used for troubleshooting airplane system wiring with terminals using Boeing Specification S280W551 connectors. Troubleshooting may include continuity, voltage, signal and load testing.

J34004-1 is an extender box assembly that replaces and connects to the line replaceable unit (LRU) circuitry. The J34004-9 cable assembly equipment is a set of test cable and connector assemblies for troubleshooting and diagnostics.

Refer to the current J34004 drawing for applicable 737 LRU usage references and complete usage instructions. Applicable airplane maintenance manual, fault isolation manuals, airplane schematic, electrical equipment lists and wire diagrams are determined by the user.

J34004-1 and -9 consist of:

J34004-1		
QUANTITY	**NOMENCLATURE**	**PART NUMBER**
1	EXTENDER BOX ASSEMBLY	J34004-10
1	STORAGE BOX	

J34004-9		
QUANTITY	**NOMENCLATURE**	**PART NUMBER**
2	CABLE ASSEMBLY (SIZE 8 PIN)	J34004-30
1	CABLE ASSEMBLY (SIZE 8 TWINAX)	J34004-31
1	CABLE ASSEMBLY (SIZE 8 COAX)	J34004-32
1	CABLE ASSEMBLY (GROUNDING)	J34004-33
4	ADAPTER (0.030 SOCKET)	J34004-34 RED
4	ADAPTER (0.030 SOCKET)	J34004-34 BLACK
3	ADAPTER (0.040 PIN)	J34004-35 RED
3	ADAPTER (0.040 PIN)	J34004-35 BLACK
3	ADAPTER (0.062 PIN)	J34004-36 RED
3	ADAPTER (0.062 PIN)	J34004-36 BLACK

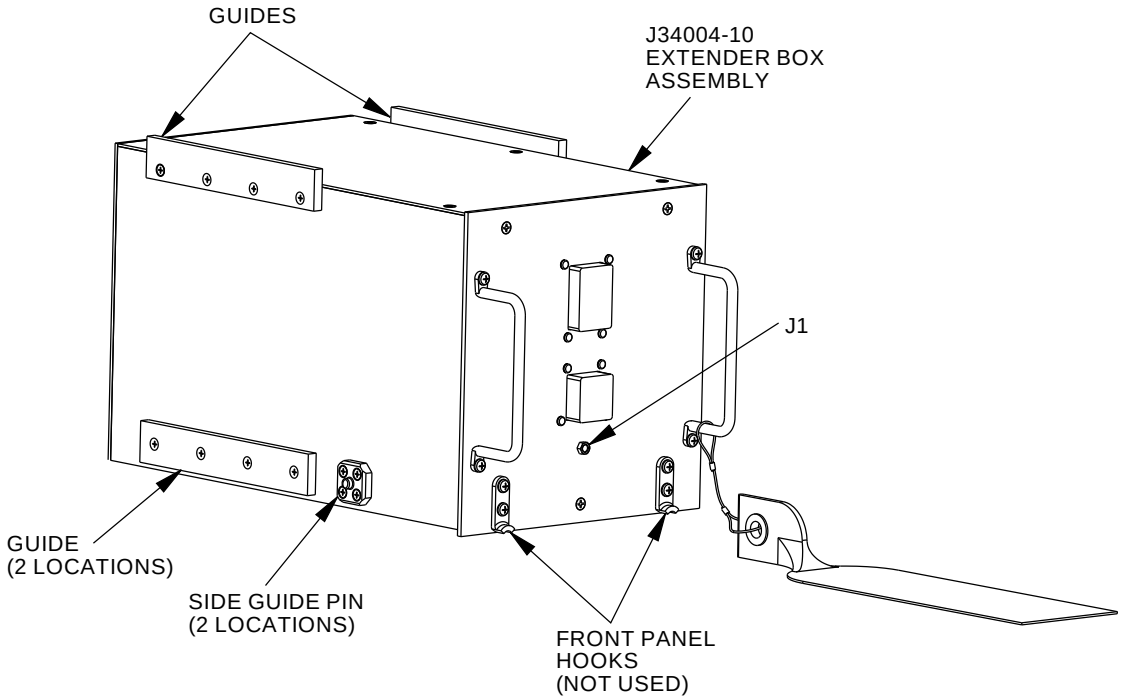
(Continued)

J34004-9		
QUANTITY	**NOMENCLATURE**	**PART NUMBER**
3	ADAPTER (0.094 PIN)	J34004-37 RED
3	ADAPTER (0.094 PIN)	J34004-37 BLACK
4	PLUG/JACK CORD	J34004-38 RED
4	PLUG/JACK CORD	J34004-38 BLACK
1	BNC ADAPTER	J34004-39
1	COMPARTMENTED BOX	J34004-124 *[1]
1	STORAGE BOX ASSEMBLY	J34004-29 *[1]

*[1] THE J34004-124 COMPARTMENTED BOX FITS INTO THE J34004-29 STORAGE CASE ASSEMBLY.

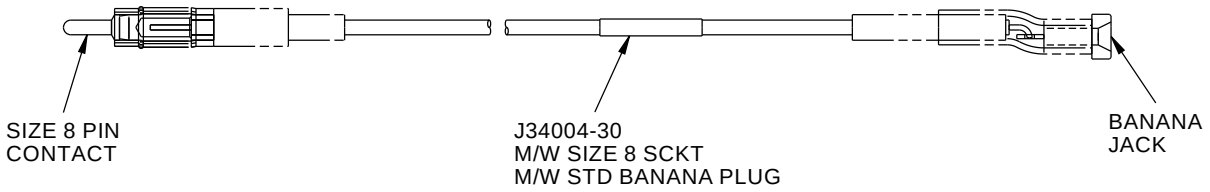
WEIGHT: J34004-1 - 26 lbs (12 kg)
J34004-9 - 9 lbs (4 kg)

DIMENSIONS: J34004-1 - 11 x 18 x 23 inches (279 x 457 x 584 mm)
J34004-9 - 7 x 13 x 16 inches (178 x 330 x 406 mm)

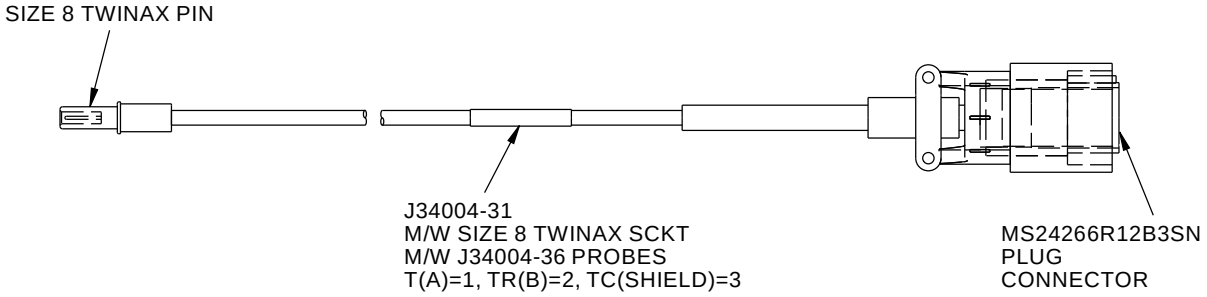


2428408 S0000561756_V1

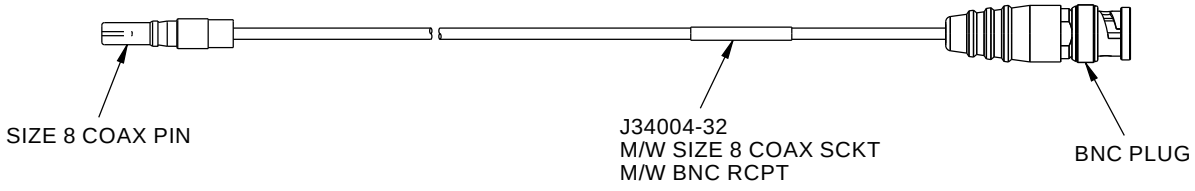
Line Maintenance S280W551 Connectors Breakout Box Equipment
Figure 1 (Sheet 1 of 4)



J34004-30 CABLE ASSEMBLY (SIZE 8 PIN)



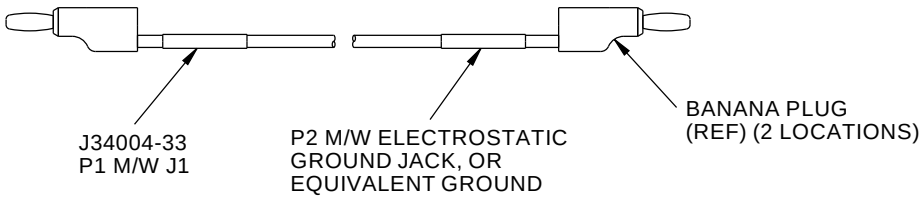
J34004-31 CABLE ASSEMBLY (SIZE 8 TWINAX)



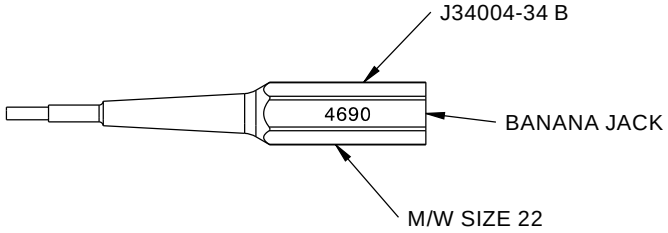
J34004-32 CABLE ASSEMBLY (SIZE 8 COAX)

2428409 S0000561757_V1

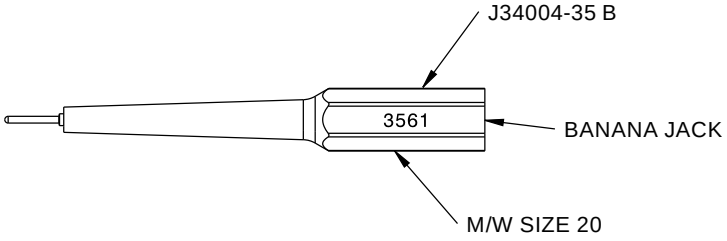
Line Maintenance S280W551 Connectors Breakout Box Equipment
Figure 1 (Sheet 2 of 4)



J34004-33 CABLE ASSEMBLY (GROUNDING)



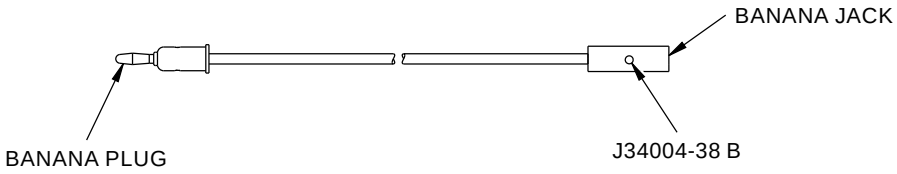
J34004-34 BLACK ADAPTER (0.030 SOCKET) SHOWN
J34004-34 RED SIMILAR



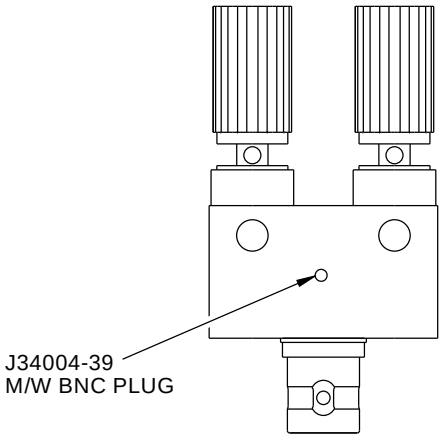
J34004-35 BLACK ADAPTER (0.040 PIN) SHOWN
J34004-35 RED SIMILAR
J34004-36 BLACK AND -36 RED SIMILAR
J34004-37 BLACK AND -37 RED SIMILAR

2428410 S0000561758_V1

Line Maintenance S280W551 Connectors Breakout Box Equipment
Figure 1 (Sheet 3 of 4)



J34004-38 BLACK PLUG/JACK CORD SHOWN
J34004-38 RED SIMILAR



J34004-39 BNC ADAPTER

2428411 S0000561759_V1

Line Maintenance S280W551 Connectors Breakout Box Equipment
Figure 1 (Sheet 4 of 4)

PART NUMBER: J34002-18, -19

NAME: TEST FIXTURE - ANGLE OF ATTACK

AIRPLANE MAINTENANCE: YES

AMM 22-11-00, AMM 31-31-00, AMM 34-11-00, AMM 34-21-05

COMPONENT MAINTENANCE: NO

USAGE & DESCRIPTION: The J34002-18 or -19 (preferred) test fixture is used on all 737-600 thru -900 airplanes equipped with an S235T913, Rosemount angle-of-attack indicator.

J34002 is used to accurately measure the Rosemount angle-of-attack (AOA) sensor deflection and is also used for the sensor's periodic alignment.

Refer to the current J34002 drawing, AMM 22-11-00, AMM 31-31-00, AMM 34-11-00 and AMM 34-21-05 for complete usage instructions.

J34002-18 and -19 consist of:

J34002-18		
QUANTITY	**NOMENCLATURE**	**PART NUMBER**
2	FIXTURE ASSEMBLY	J34002-20
1	STORAGE BOX	

J34002-18		
QUANTITY	**NOMENCLATURE**	**PART NUMBER**
2	FIXTURE ASSEMBLY	J34002-21
1	STORAGE BOX	

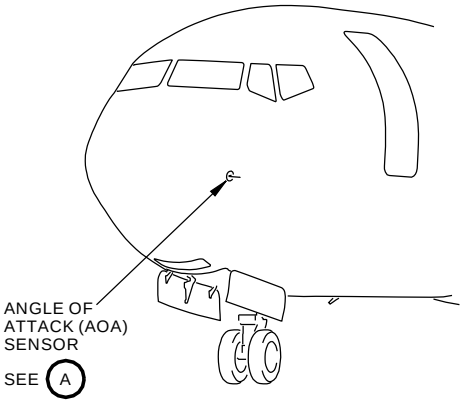
WEIGHT: 5 lbs (2.3 kg)

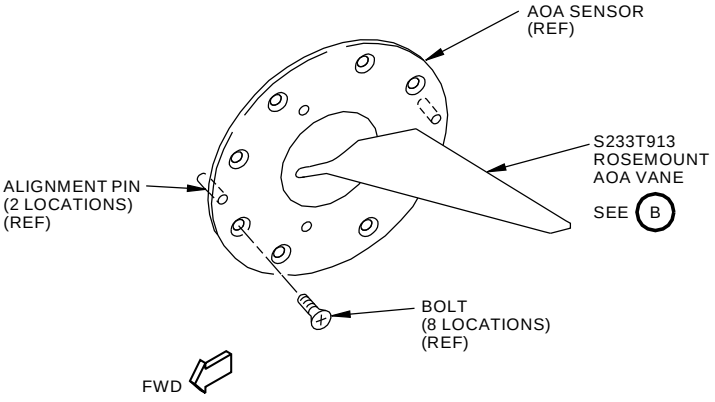
DIMENSIONS: 15 x 20 x 3 inches (381 x 508 x 76 mm)

NOTE: J34002-19 replaces J34002-18 for future procurement.

J34002-18 supersedes J34002-1.

J34002 replaces A34012 for future procurement.

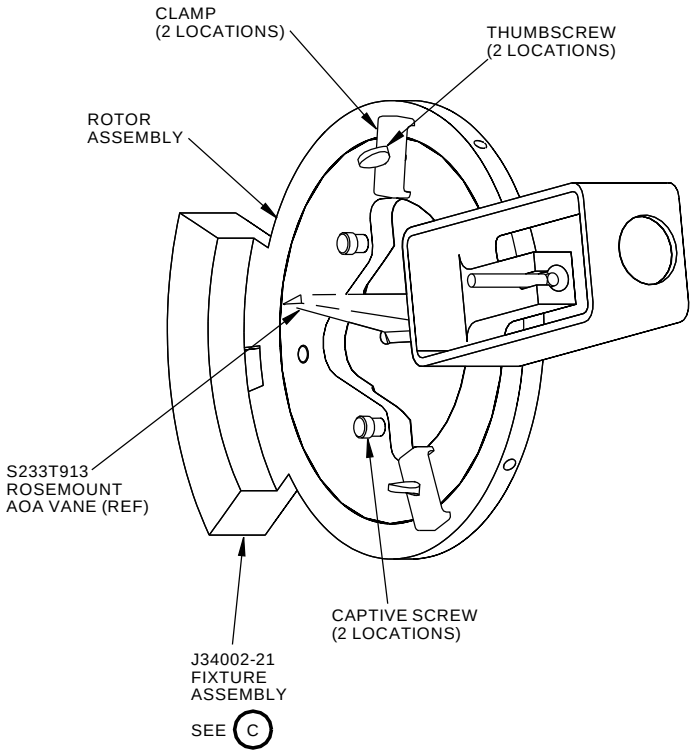




ANGLE OF ATTACK (AOA) SENSOR
A

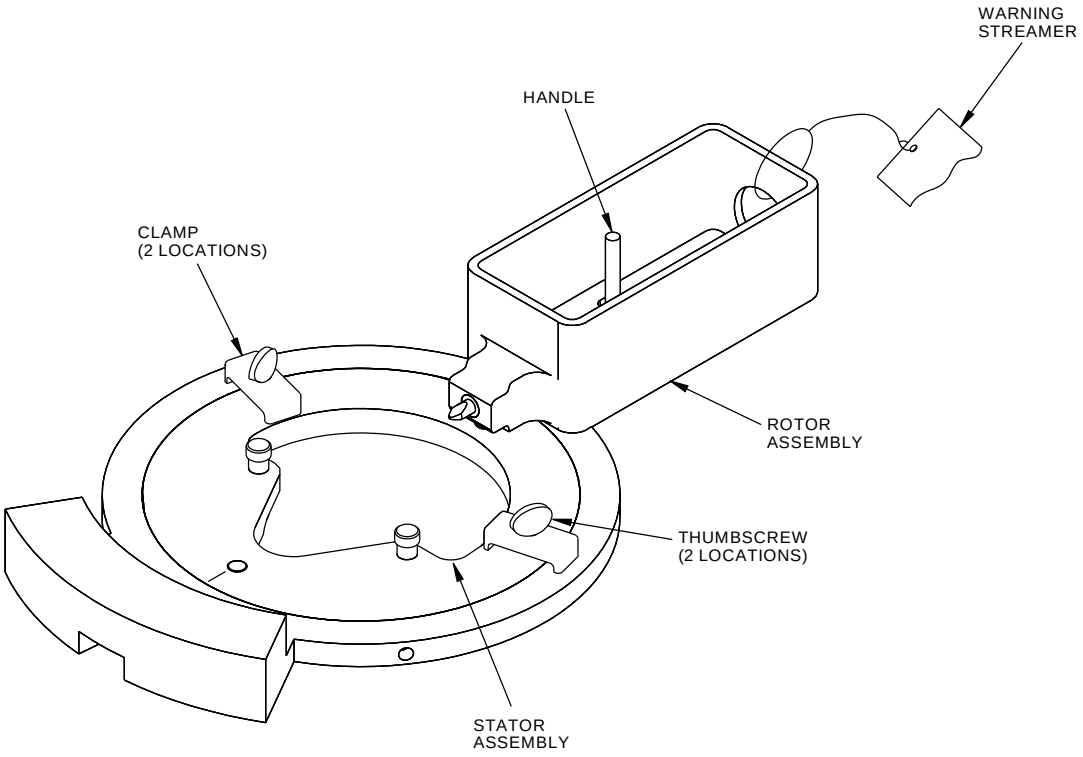
1382341 S0006756241_V2

Angle of Attack Test Fixture
Figure 1 (Sheet 1 of 3)



1564778 S0000290115_V1

Angle of Attack Test Fixture
Figure 1 (Sheet 2 of 3)



J34002-21
FIXTURE ASSEMBLY SHOWN
J34002-20 SIMILAR

C

1564780 S0000290119_V2

Angle of Attack Test Fixture
Figure 1 (Sheet 3 of 3)

PART NUMBER: A34012-19, -24

NAME: TEST FIXTURE - ANGLE OF ATTACK

AIRPLANE MAINTENANCE: YES

AMM 22-11-00, AMM 31-31-00, AMM 34-11-00, AMM 34-21-05

COMPONENT MAINTENANCE: NO

USAGE & DESCRIPTION: The A34012-24 test fixture is used on 737-600 thru -800 airplanes.

A34012-24 is used to accurately measure the angle of attack sensor deflection on the airplane.

The A34012-19 checking fixture is required to calibrate the A34012-24 test fixture. The A34012-19 is used to for initial setting and periodic alignment of the A34012-24 test fixture. When using the A34012-19 checking fixture, the allowable difference between A34012-24 and A34012-19 is 5 minutes of angle.

Refer to the current A34012 drawing and AMM 22-11-00, AMM 31-31-00, AMM 34-11-00 and AMM 34-21-05 for complete usage instructions.

A34012-19 and -24 consist of:

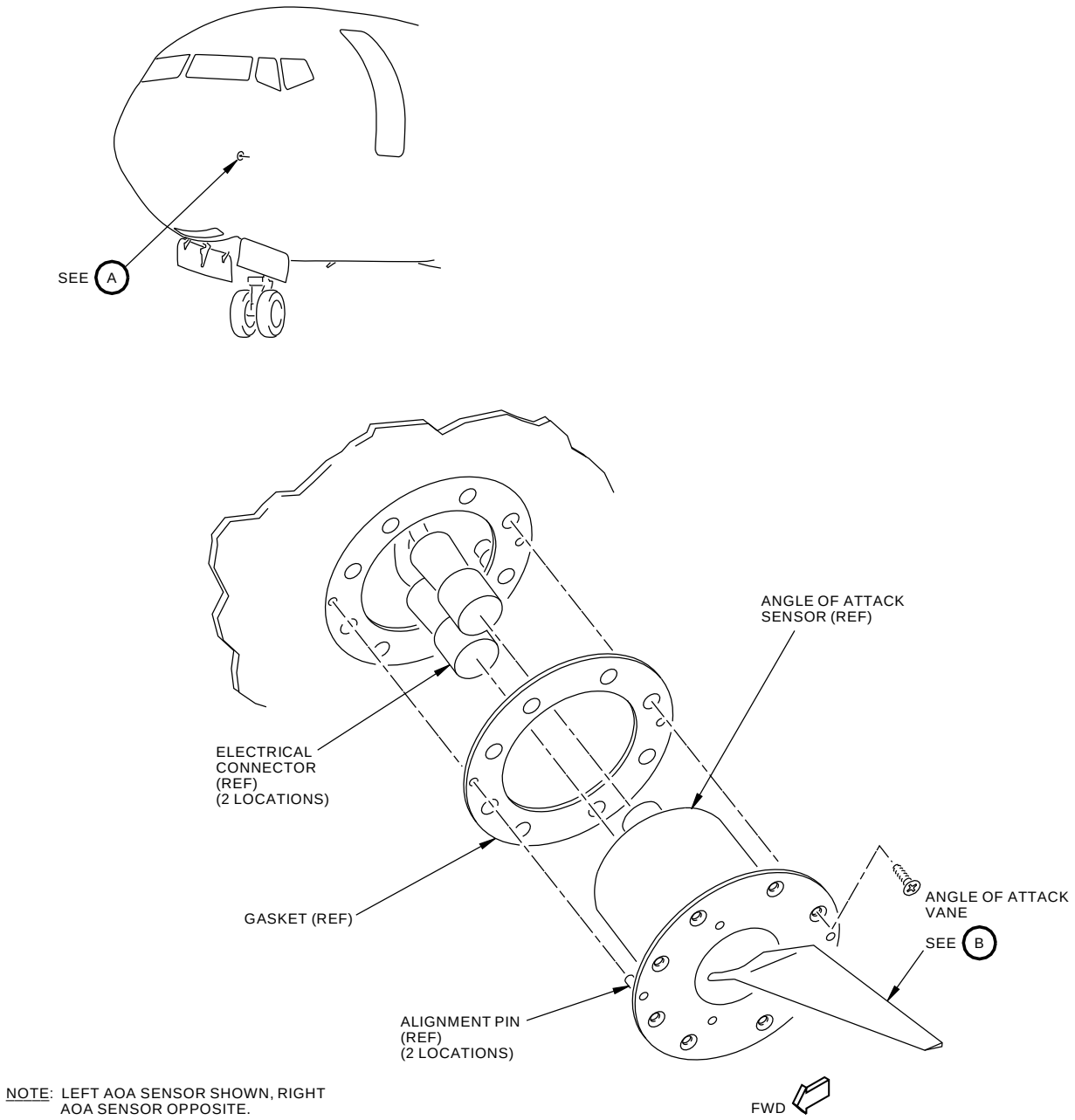
A34012-19		
QUANTITY	**NOMENCLATURE**	**PART NUMBER**
1	FIXTURE ASSEMBLY	A34012-36
1	STORAGE BOX	

A34012-24		
QUANTITY	**NOMENCLATURE**	**PART NUMBER**
1	FIXTURE ASSEMBLY	A34012-25
1	STORAGE BOX	

WEIGHT: A34012-24 - 3 lbs (1.4 kg)

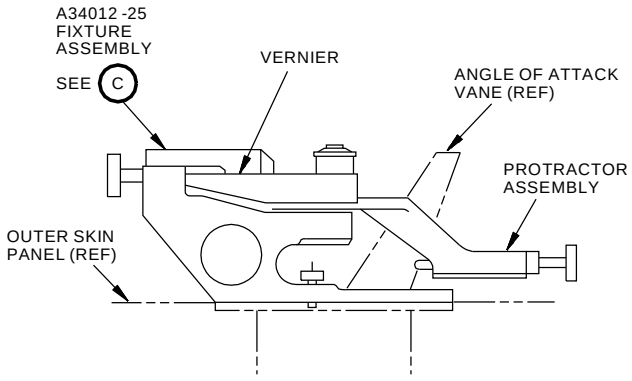
DIMENSIONS: A34012-19 - 2 x 3 x 5 inches (51 x 76 x 127 mm)

NOTE: J34002 replaces A34012 for future procurement.



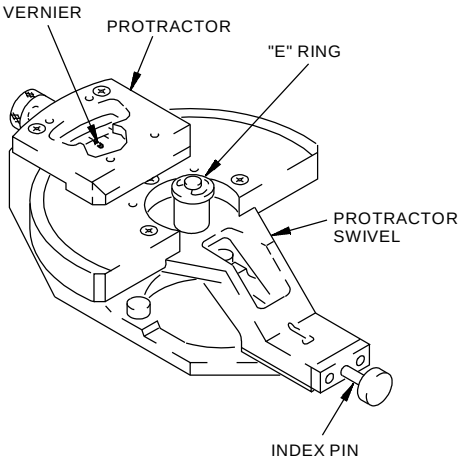
1570404 S0000291966_V1

Angle Of Attack Test Fixture
Figure 1 (Sheet 1 of 2)



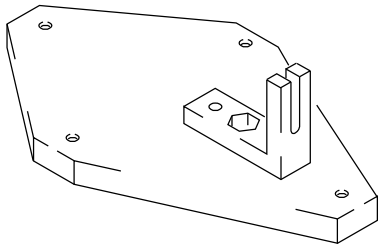
ANGLE OF ATTACK VANE

B



A34012-25
FIXTURE ASSEMBLY

C



A34012-36
CHECKING FIXTURE ASSEMBLY

1570406 S0000291968_V1

Angle Of Attack Test Fixture
Figure 1 (Sheet 2 of 2)

PART NUMBER: C34005-1, -16

NAME: EXTENDER BOX - RADIO ALTIMETER RECEIVER TRANSMITTER

AIRPLANE MAINTENANCE: YES

AMM 34-33-00

COMPONENT MAINTENANCE: NO

USAGE & DESCRIPTION: The C34005-1 (option) or -16 (preferred) extender boxes are used on 737 airplanes, excluding 737-100 thru -500 airplanes. C34005-1 or -16 is primarily applicable to those airplanes equipped with Honeywell (formerly AlliedSignal) Model ALA-52B radio altimeters, which do not have front panel connectors for interfacing with customer-furnished radio altimeter test sets.

C34005 is used in place of a radio altimeter receiver/transmitter (primarily Honeywell Model ALA-52B, Series RA RT) such as part number 066-50007-0101, for testing. C34005 permits an external radio altitude signal input on ARINC429 bus 1 and/or bus 2 during warning system, electronic flight instrument system (EFIS), radio altimeter (RA) system, traffic alert and collision avoidance system (TCAS), or ground proximity warning system (GPWS) maintenance tests.

Refer to AMM 34-33-00 and the current C34005 drawing for complete usage instructions.

C34005-1 and -16 consist of:

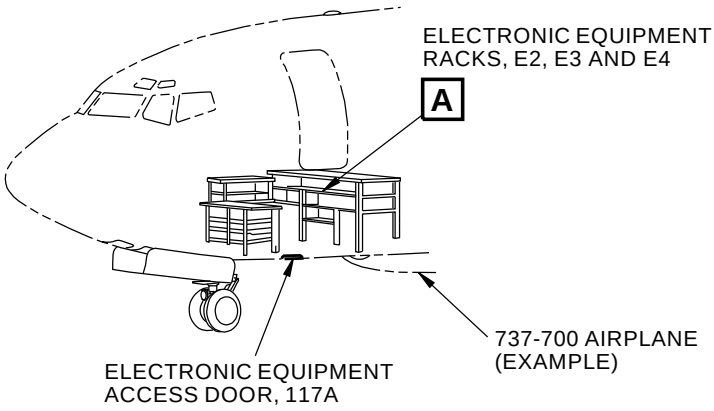
C34005-1		
QUANTITY	**NOMENCLATURE**	**PART NUMBER**
1	EXTENDER BOX ASSEMBLY	C34005-2
1	STORAGE BOX	

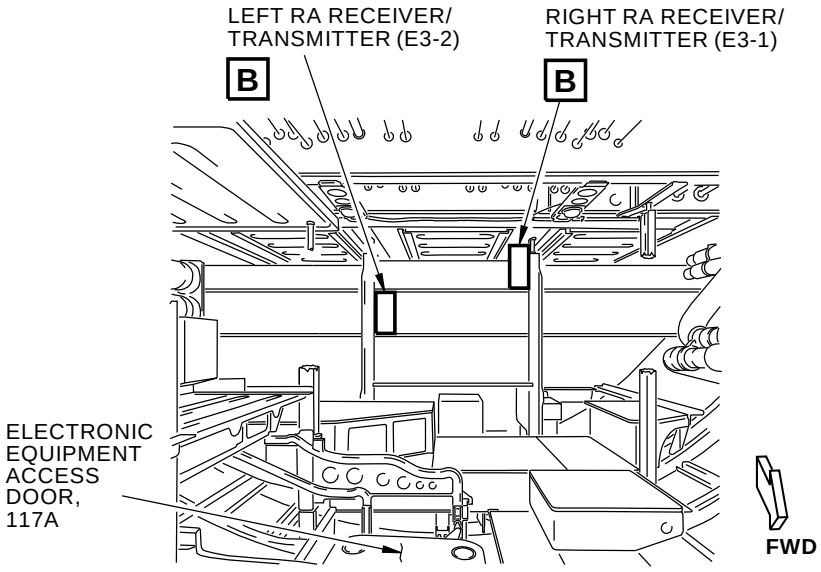
C34005-16		
QUANTITY	**NOMENCLATURE**	**PART NUMBER**
1	EXTENDER BOX ASSEMBLY	C34005-17
1	STORAGE BOX	

WEIGHT: 9 lbs (4 kg)

DIMENSIONS: 7 x 15 x 19 inches (178 x 381 x 483 mm)

NOTE: C34005-16 replaces C34005-1 for future procurement.



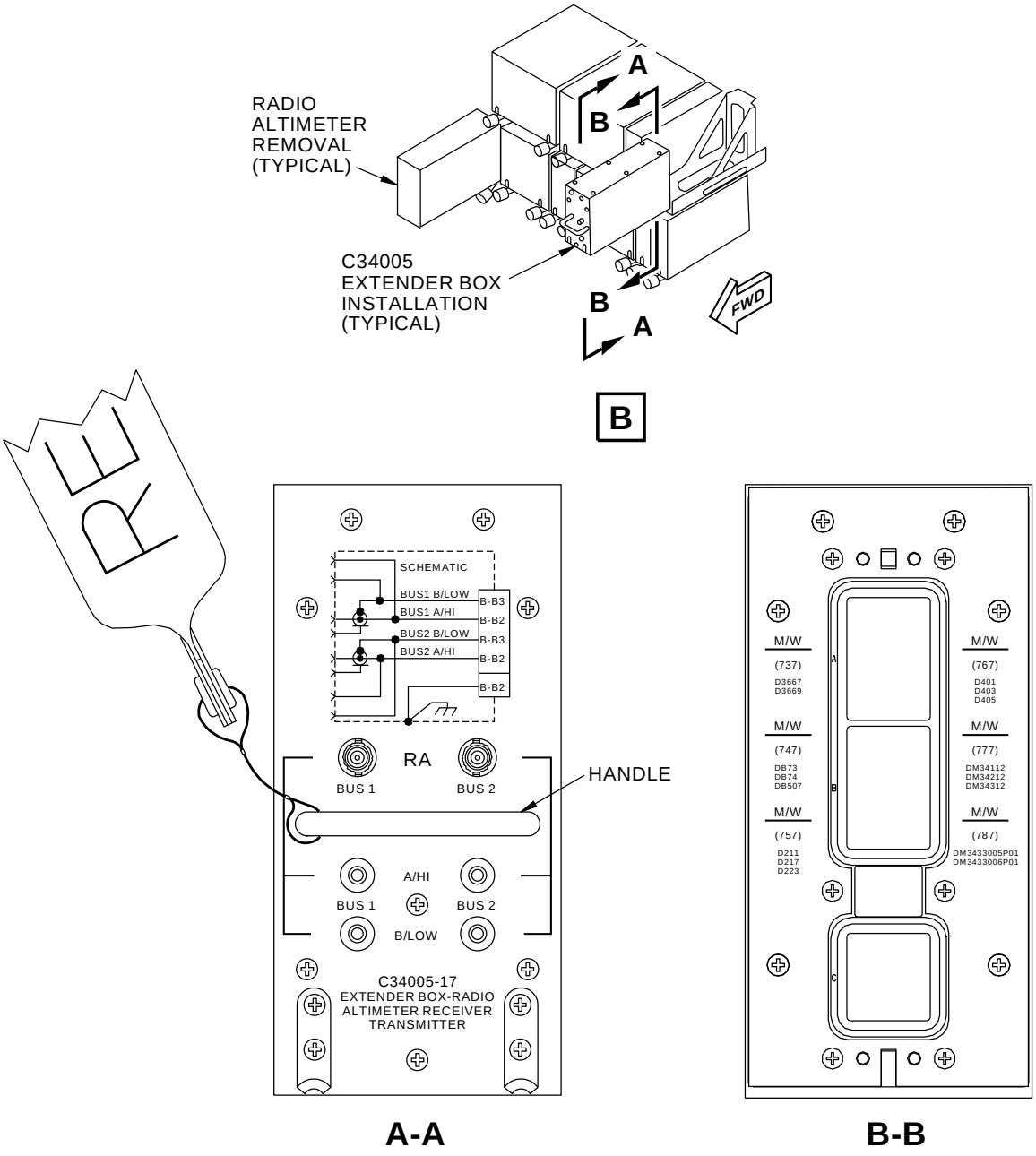


ELECTRONIC EQUIPMENT RACKS, E2, E3 AND E4
LOW RANGE RADIO ALTIMETER (LRRA)
RECEIVER/TRANSMITTER LOCATION

A

H84068 S0006831938_V3

Radio Altimeter Receiver/Transmitter Location
Figure 1



C34005-17 EXTENDER BOX-ASSEMBLY SHOWN
C34005-2 SIMILAR

H84088 S0006831939_V4

Extender Box Usage and Components
Figure 2