

CHAPTER

23

COMMUNICATIONS



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ILLUSTRATED TOOL AND EQUIPMENT MANUAL

CHAPTER 23
COMMUNICATIONS

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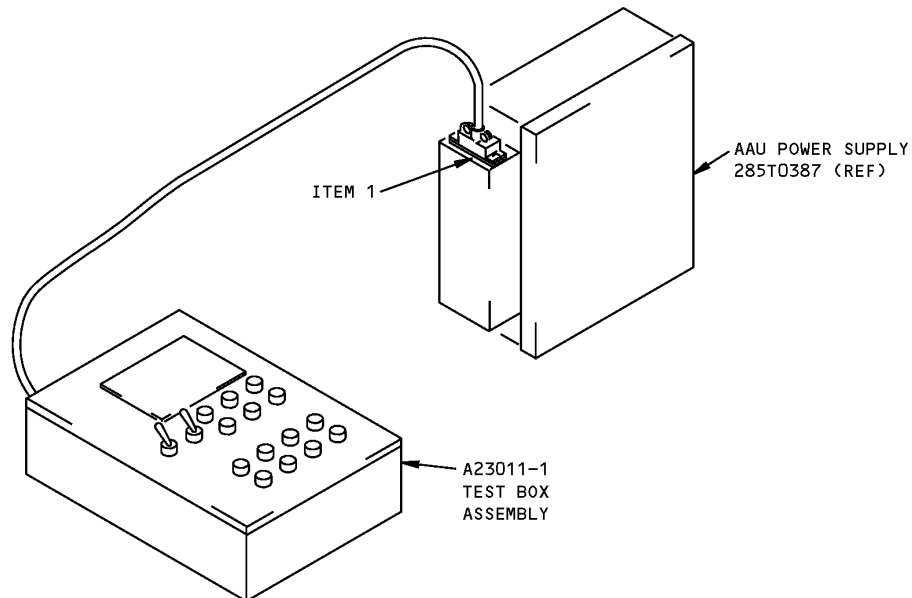
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PART NUMBER: A23011-1**NAME:** TEST BOX - POWER SUPPLY, AUDIO ACCESSORY UNIT**AIRPLANE MAINTENANCE:** NO**COMPONENT MAINTENANCE:** YES**USAGE & DESCRIPTION:** The A23011 drawing has been transferred to BAE Systems and will no longer be revised by Boeing. The A23011 inclusion in the 757 ITEM is for information and historical purposes only.

The A23011-1 test box is used during component maintenance on 757 passenger airplanes equipped with the 285T0001-XX audio accessory unit (AAU) but not the 285T0001-2XX and on series AAU. Typically, A23011 is used up to line number 928, except freighters, 757-300 airplanes and airplanes incorporating production revision record (PRR) 54835. A23011 is used to test 285T0387 power supply assembly. Refer to CMM 23-42-60 for complete usage instructions. A23011-1 consists of banana jacks, switches, a connector and electrical circuitry mounted on a panel and chassis assembly.

WEIGHT: 2 lbs (0.9 kg)**DIMENSIONS:** 2 x 7 x 9 inches (51 x 178 x 229 mm)

**Audio Accessory Unit Power Supply Test Box
Figure 1**



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REPAIRABLE/REPLACEABLE PARTS			
ITEM NO.	PART NO.	NOMENCLATURE	VENDOR CODE
1	DE-9P	CONNECTOR	V71468



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PART NUMBER: G23001-37, -41

NAME: TEST BOX - RADIO COMMUNICATIONS PANEL (RCP) PROCESSOR CARD

AIRPLANE MAINTENANCE: NO

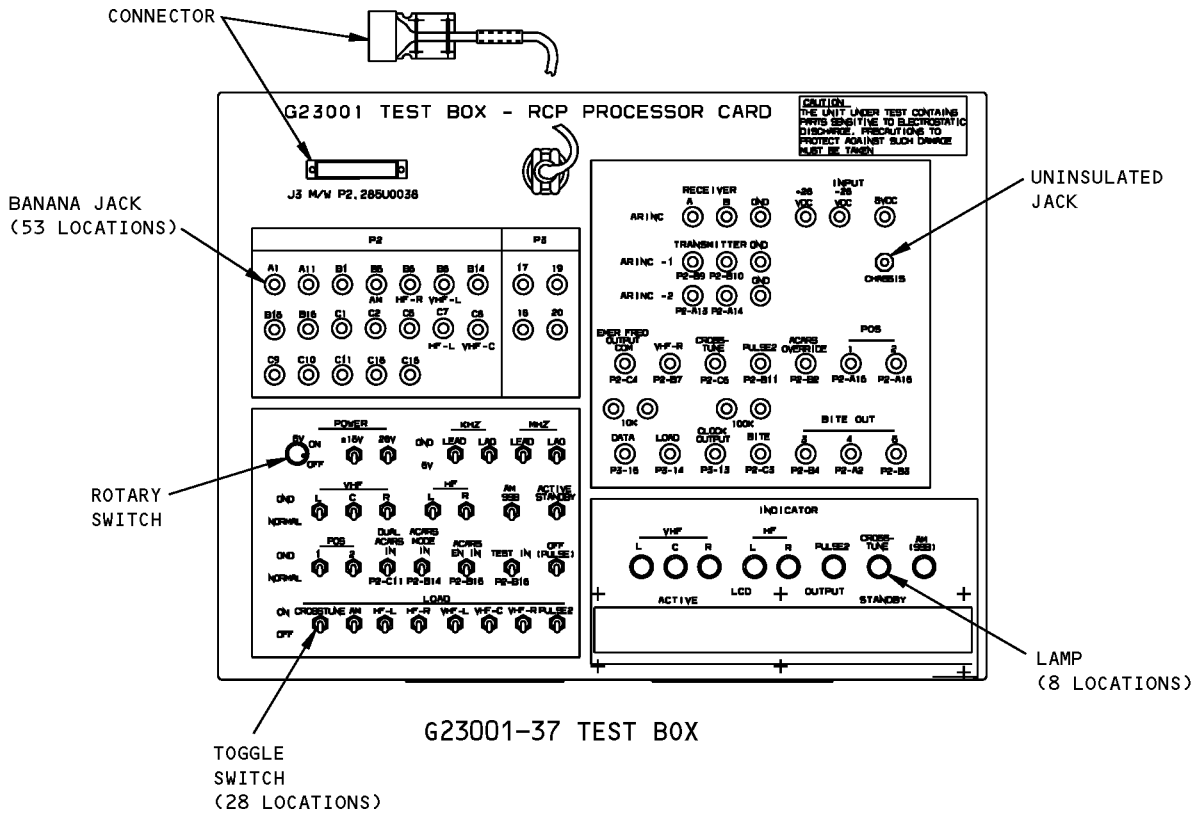
COMPONENT MAINTENANCE: YES

USAGE & DESCRIPTION: The G23001 drawing has been transferred to BAE Systems and will no longer be revised by Boeing. The G23001 inclusion in the 757 ITEM is for information and historical purposes only. G23001-37 or -41 is used during component maintenance on all 757 airplanes. G23001-37 is used on airplanes equipped with an RCP processor card of 285U0038-33 or below. G23001-41 is used on airplanes equipped with an RCP processor card of 285U0038-38 or -39 only. Both G23001-37 and -41 are breakout boxes used to troubleshoot and test the radio panel communication processor. G23001 is used in conjunction with a Simpson 260 multimeter; a digital oscilloscope; an Interface Technology Model 429/2 ARINC Bus Analyzer; an HS3182 ARINC Driver; A PN 900-12376 LCD Module; 0-30 VDC, +/- 0.5V, 1A power supply; 5 VDC, +/-0.25V, 1A, power supply; 15 VDC, +/-0.5V, 1A power supply; -15 VDC, +/-0.5V, 1A, power supply and (for 285U0038-38, -39 only) 49-80 VDC, +/-0.5 V, 1A power supply. Refer to CMM 23-11-21 for complete usage instructions. G23001-37 or -41 consists of connectors, switches, resistors, voltage regulators, banana jacks, lamps and electrical circuitry mounted on a panel and chassis assembly.

WEIGHT: G23001-37 – 5 lbs (2.3 kg)
G23001-41 – 8 lbs (3.6 kg)

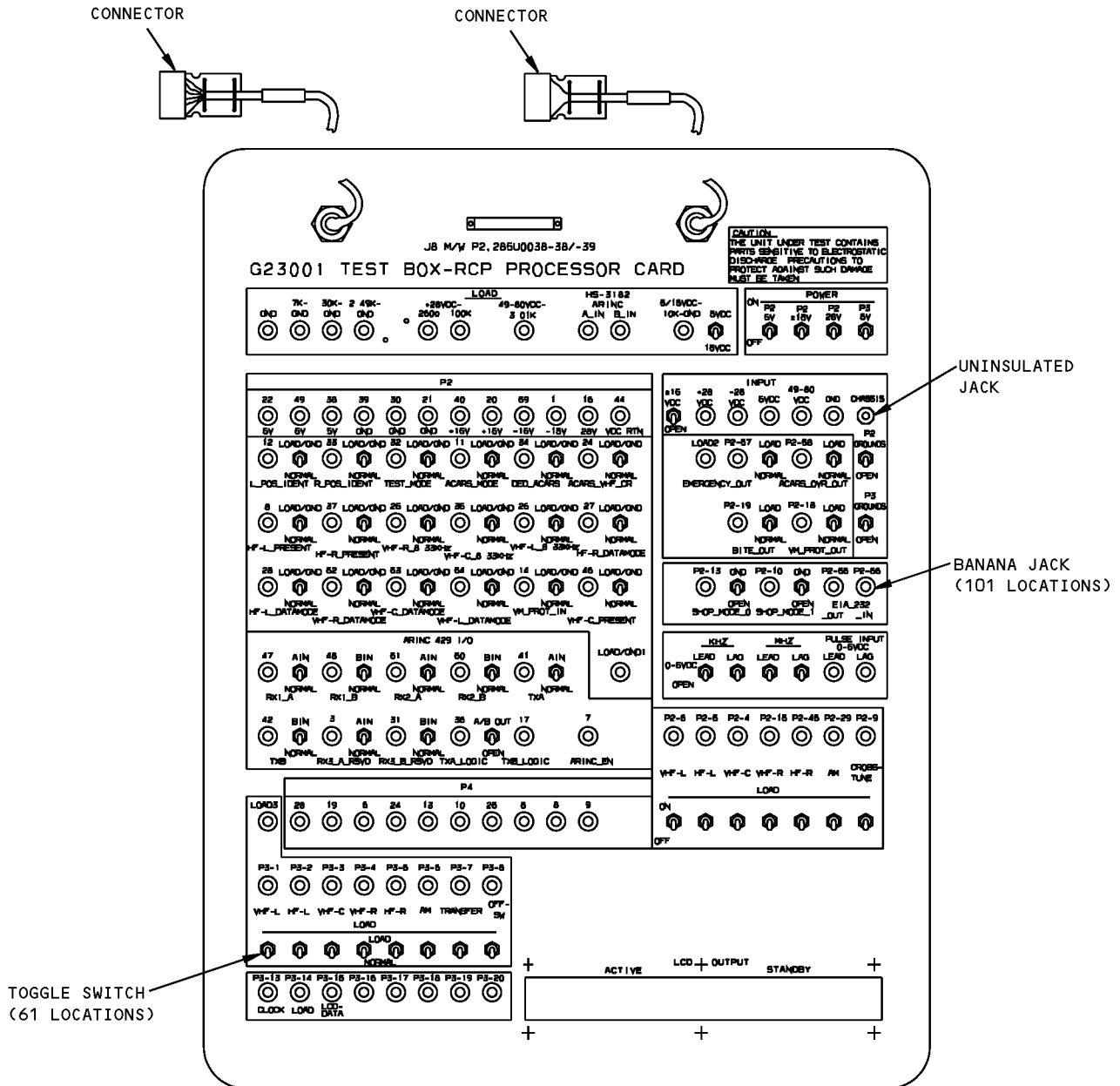
DIMENSIONS: G23001-37 – 5 x 13 x 17 inches (127 x 330 x 432 mm)
G23001-41 – 5 x 17 x 22 inches (127 x 432 x 559 mm)

NOTE: G23001-37 supersedes G23001-32.



**RCP Processor Card Test Box
Figure 1 (Sheet 1 of 2)**

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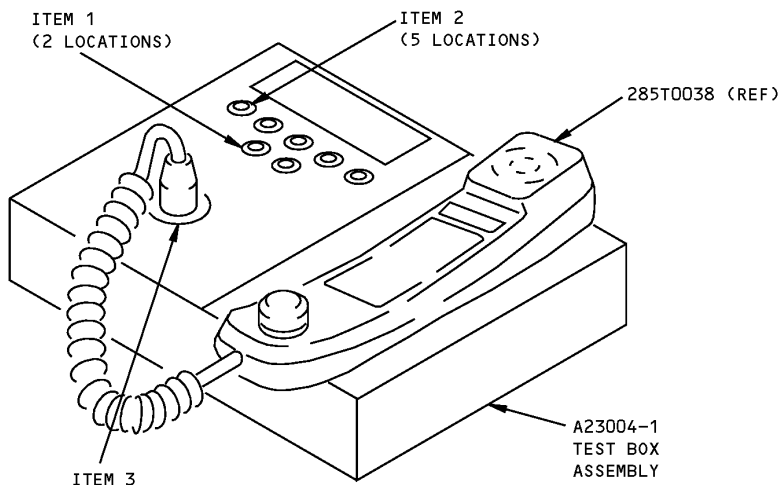
G23001-41 TEST BOX

RCP Processor Card Test Box
Figure 1 (Sheet 2 of 2)

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PART NUMBER: A23004-1**NAME:** TEST BOX - INTERPHONE, FLIGHT ATTENDANT**AIRPLANE MAINTENANCE:** NO**COMPONENT MAINTENANCE:** YES**USAGE & DESCRIPTION:** The A23004 drawing has been transferred to BAE Systems and will no longer be revised by Boeing. The A23004 inclusion in the 757 ITEM is for information and historical purposes only.

The A23004-1 acoustic coupler is used during component maintenance on all 757 passenger airplanes (not freighters) equipped with the 285T0038 flight attendant interphone assembly. A23004 is used to test the flight attendant interphone handset assembly. Refer to CMM 23-42-51 and CMM 23-42-64 for complete usage instructions. A23004-1 consists of banana jacks, a connector and electrical circuitry mounted on a panel and chassis assembly.

WEIGHT: 5 lbs (2.3 kg)**DIMENSIONS:** 2 x 7 x 9 inches (51 x 178 x 229 mm)

**Flight Attendant Interphone Test Box
Figure 1**



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REPAIRABLE/REPLACEABLE PARTS			
ITEM NO.	PART NO.	NOMENCLATURE	VENDOR CODE
1	108-0912-001	BANANA JACK	V74970
2	108-0906-001	BANANA JACK	V74970
3	C5F	CONNECTOR	V74970



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PART NUMBER: A23003-29, -30, -41, -42

NAME: TEST BOX - PRINTED CIRCUIT CARD (PCA), AUDIO ACCESSORY UNIT

AIRPLANE MAINTENANCE: NO

COMPONENT MAINTENANCE: YES

USAGE & DESCRIPTION: The A23003 drawing has been transferred to BAE Systems and will no longer be revised by Boeing. The A23003 inclusion in the 757 ITEM is for information and historical purposes only.

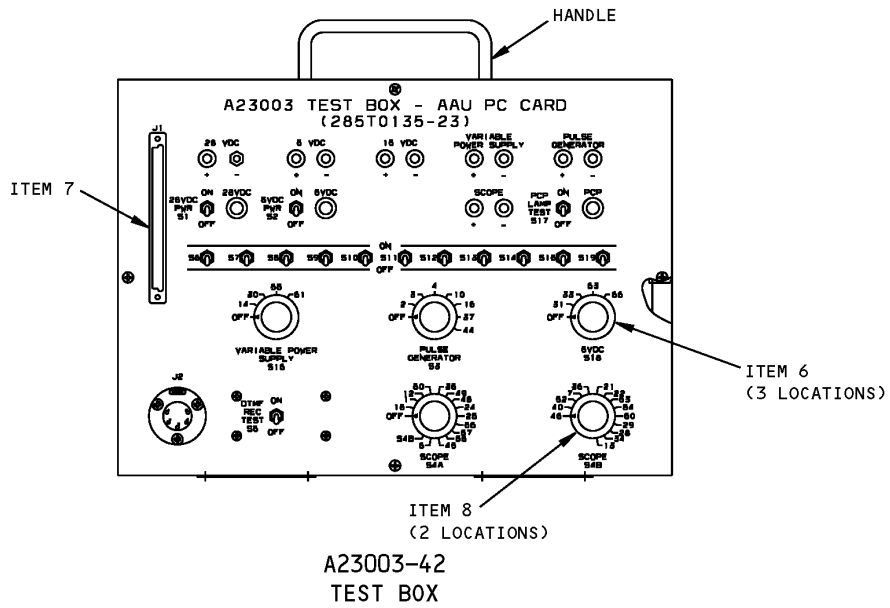
The A23003-41 or -42 test box is used during component maintenance on all 757 passenger airplanes (not freighters) after line number 926. The A23003-42 test box is smaller and lighter than the optional A23003-41 test box; either is preferred over the A23003-29 or -30 test box. The A23003 test box is used to perform functional tests on the interphone amplifier, main logic input/output, dual handset interface and call interface printed circuit cards in the 285T0001 audio accessory unit. Refer to CMM 22-42-53, CMM 22-42-54, CMM 22-42-56, CMM 22-42-57 and CMM 22-42-58 for complete usage instructions. The A23003 test boxes consist of switches, connectors, banana jacks and electrical circuitry mounted on a panel and chassis assembly.

WEIGHT: A23003-29, -30, -41 - 10 lbs (5.4 kg)
A23003-42 - 4 lbs (1.8 kg)

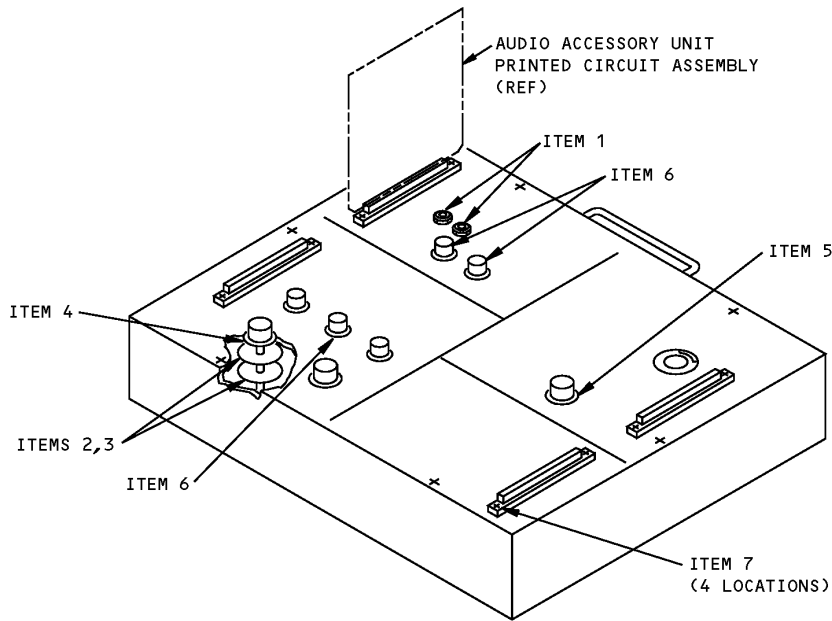
DIMENSIONS: A23003-29, -30, -41 – 4 x 16 x 18 inches (102 x 406 x 457 mm)
A23003-42 – 4 x 12 x 14 inches (102 x 305 x 356 mm)

NOTE: A23003-41 replaces A23003-29,-30 for future procurement.
A23003-41 supersedes A23003-34.

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**Test Box Audio Accessory Unit PCA Test Box
Figure 1 (Sheet 1 of 2)**



**Test Box Audio Accessory Unit PCA Test Box
Figure 1 (Sheet 2 of 2)**



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REPAIRABLE/REPLACEABLE PARTS			
ITEM NO.	PART NO.	NOMENCLATURE	VENDOR CODE
1	389N-100K-S	POTENTIOMETER	V12697
2	399174-AM	ROTARY SWITCH SECTION	V76854
2	D10-0107	ROTARY SWITCH SECTION (OPTION)	V8T045
3	399117-AM	ROTARY SWITCH SECTION	V76854
3	D10-0106	ROTARY SWITCH SECTION (OPTION)	V8T045
4	399257-A	ROTARY SWITCH INDEX ASSEMBLY	V76854
4	D10-0108	ROTARY SWITCH INDEX ASSEMBLY (OPTION)	V8T045
5	D9G0223N	ROTARY SWITCH	V8T045
5	PA-4003	ROTARY SWITCH (OPTION)	V79692
6	D3C0111N	ROTARY SWITCH	V8T045
6	PA-6001	ROTARY SWITCH (OPTION)	V79692
7	300052-001	CONNECTOR	V03877
8	D8G0117N	ROTARY SWITCH	V8T045



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PART NUMBER: A23006-45, -47

NAME: TEST BOX - AUDIO ACCESSORY UNIT

AIRPLANE MAINTENANCE: NO

COMPONENT MAINTENANCE: YES

USAGE & DESCRIPTION: The A23006 drawing has been transferred to BAE Systems and will no longer be revised by Boeing. The A23006 inclusion in the 757 ITEM is for information and historical purposes only.

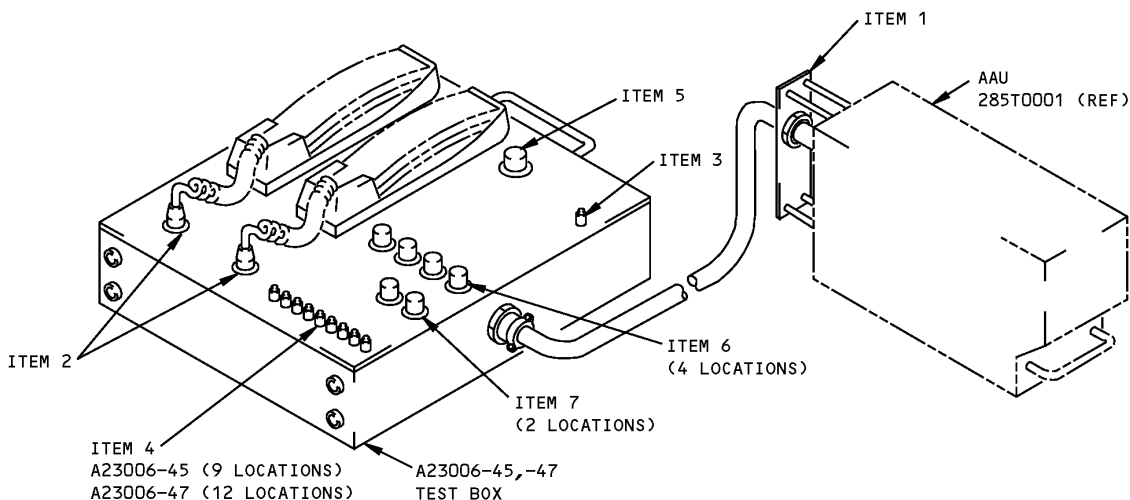
The A23006-45 or -47 test box is used during component maintenance on 757 passenger airplanes equipped with the 285T0001-XX audio accessory unit (AAU) but not the 285T0001-2XX and on series AAU. Typically, A23006 is used up to line number 928, except freighters, 757-300 airplanes and airplanes incorporating production revision record (PRR) 54836. A23006 is used to test 285T0001 AAU. Refer to CMM 23-42-52 and CMM 23-42-61 for complete usage instructions. A23006-1 consists of banana jacks, lamps, switches, connectors and electrical circuitry mounted on a panel and chassis assembly.

WEIGHT: 10 lbs (4.5 kg)

DIMENSIONS: 6 x 17 x 20 inches (51 x 431 x 508 mm)

NOTE: A23006-47 replaces A23006-45 for future procurement.
A23006-47 supersedes A23006-39.

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Audio Accessory Unit Test Box
Figure 1

REPAIRABLE/REPLACEABLE PARTS			
ITEM NO.	PART NO.	NOMENCLATURE	VENDOR CODE
1	BKAD1-125-30001	CONNECTOR	V71468
2	C5F	AUDIO RECEPTACLE	V82389
3	507-3918-1471-600	28V RED LAMP	V83330
4	507-3918-1473-600	28V AMBER LAMP	V83330
5	PA-4001	ROTARY SWITCH	V82121
6	PSA-201	ROTARY SWITCH	V82121
7	PSA-211	ROTARY SWITCH	V82121



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PART NUMBER: A23009-20, -31

NAME: TEST BOX - AUDIO SELECTOR PANEL

AIRPLANE MAINTENANCE: NO

COMPONENT MAINTENANCE: YES

USAGE & DESCRIPTION: The A23009 drawing has been transferred to BAE Systems and will no longer be revised by Boeing. The A23009 inclusion in the 757 ITEM is for information and historical purposes only.

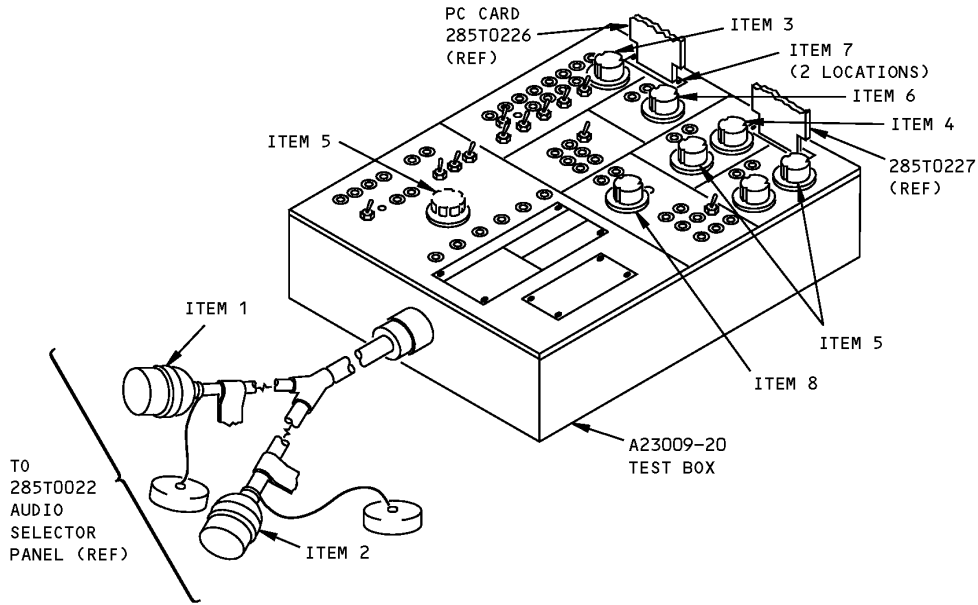
A23009-20 or -31 is used during component maintenance on all 757 airplanes equipped with the 285T0022 audio selector panel. A23009-31 is a newer, simplified, smaller and lighter test box that is preferred for future procurement. A23009-20 has the same functionality. The A23009 tools are used to functionally test the 285T0022 audio selector panel and printed circuit assemblies 285T0226 and 285T0227. Refer to CMM 23-51-51, CMM 23-51-54 and 285T0226 printed circuit card per CMM 23-51-52 for complete usage instructions. A23009-20 or -31 consists of banana jacks, connectors, resistors, lamps and electrical circuitry mounted on a panel and chassis assembly.

WEIGHT: A23009-20 - 10 lbs (4.5 kg)
A23009-31 - 8 lbs (3.6 kg)

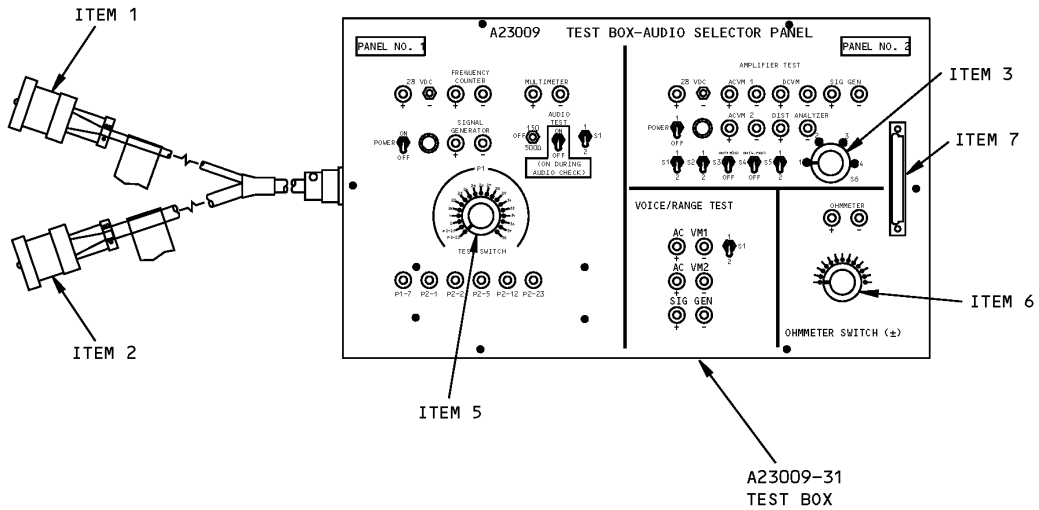
DIMENSIONS: A23009-20 - 6 x 15 x 18 inches (152 x 381 x 457 mm)
A23009-31 - 4 x 10 x 17 inches (102 x 254 x 432 mm)

NOTE: A23009-31 supersedes A23009-25.
A23009-31 replaces A23009-20 for future procurement.

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Audio Selector Panel Test Box
Figure 1 (Sheet 1 of 2)



Audio Selector Panel Test Box
Figure 1 (Sheet 2 of 2)



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REPAIRABLE/REPLACEABLE PARTS			
ITEM NO.	PART NO.	NOMENCLATURE	VENDOR CODE
1	MS24266R18B31SN	CONNECTOR	
2	MS24266R20B41SN	CONNECTOR	
3	2550	SWITCH	V71950
4	PA-1001	SWITCH	V71950
5	PA-4001	SWITCH	V71950
6	PA-4003	SWITCH	V71950
7	300055-003	CONNECTOR	
8	PA-6019	SWITCH	V71950



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PART NUMBER: B23001-1, -6

NAME: EXTENDER BOARD - AUDIO ACCESSORY UNIT ASSEMBLY

AIRPLANE MAINTENANCE: NO

COMPONENT MAINTENANCE: YES

USAGE & DESCRIPTION: The B23001 drawing has been transferred to BAE Systems and will no longer be revised by Boeing. The B23001 inclusion in the 757 ITEM is for information and historical purposes only.

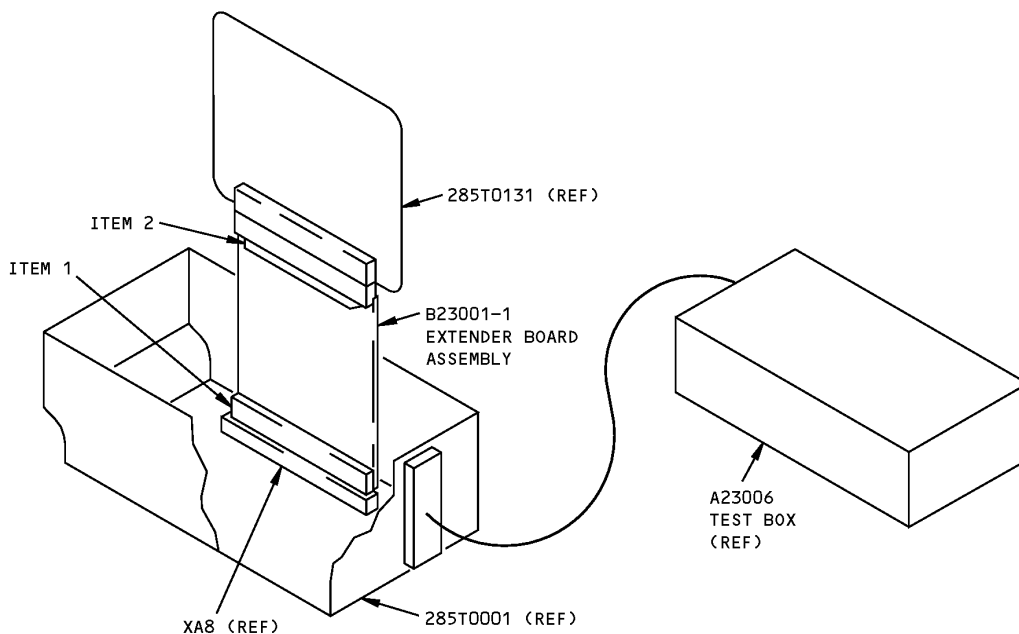
The B23001-1 or -6 extender board is used during component maintenance on all 757 passenger airplanes equipped with the 285T0001-XX series audio accessory unit (AAU) but not 285T0001-2XX and on series. B23001 is used with the A23006 test box to test the 285T0001-XX AAU and may be used for troubleshooting 66 pin BACC65K/L66 connectors. Refer to CMM 23-42-52 and CMM 23-42-61 for complete usage instructions. B23001-1 consists of wire wrap and two connectors. B23001-6 consists of a B23001-1 extender board assembly contained in a storage box.

WEIGHT: 1 lb (0.45 kg)

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

NOTE: B23001-6 replaces B23001-1 for future procurement.

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Audio Accessory Unit Assembly Extender Board
Figure 1

REPAIRABLE/REPLACEABLE PARTS			
ITEM NO.	PART NO.	NOMENCLATURE	VENDOR CODE
1	300044-001	CONNECTOR	V03877
1	191-366-0006 (OPTION)	CONNECTOR	V26742
2	300052-004	CONNECTOR	V03877
2	192-366-0010 (OPTION)	CONNECTOR	V26742



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PART NUMBER: A23001-1, -4, -8, -9

NAME: ACOUSTIC COUPLER - ATTENDANT'S HANDSET

AIRPLANE MAINTENANCE: NO

COMPONENT MAINTENANCE: YES

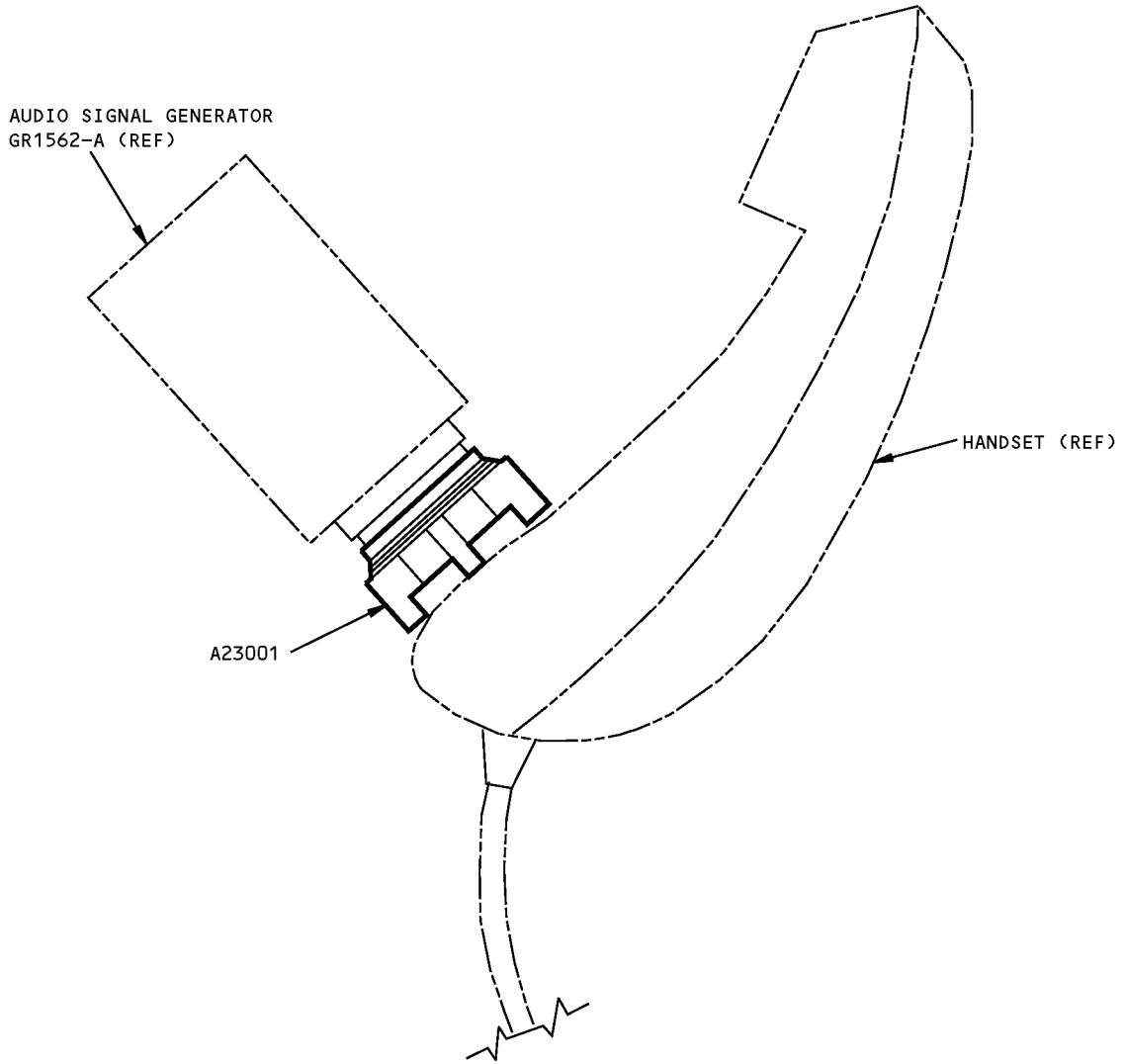
USAGE & DESCRIPTION: The A23001 drawing has been transferred to BAE Systems and will no longer be revised by Boeing. The A23001 inclusion in the 757 ITEM is for information and historical purposes only.

The A23001-1 acoustic coupler is used during component maintenance on 757-200 airplanes equipped with the 285T0038 interphone assembly and GenRad 1562-A audio signal generators. The A23001-4 acoustic coupler is used during component maintenance on 757-200 airplanes equipped with the 285T0412 handsets and GenRad 1562-A audio signal generators. The A23001-8 acoustic coupler is used during component maintenance on 757-200 airplanes equipped with the 285T0412 handsets and Cirrus CRL-511E audio signal generators. The A23001-9 acoustic coupler is used during component maintenance on 757-200 airplanes equipped with the 285T0412 handsets and GenRad 1562-A audio signal generators. A23001 acoustic couplers are not used on 757 freighters. A23001 is used in conjunction with the A23004 flight attendant interphone test box to test interphone assemblies. Refer to CMM 23-42-51 and CMM 23-42-64 for complete usage instructions.

A23001-1 consists of an A23001-2 coupler contained in a storage box. A23001-4 consists of an A23001-5 coupler contained in a storage box. A23001-8 consists of an A23001-10 coupler contained in a storage box. A23001-9 consists of an A23001-11 coupler contained in a storage box.

WEIGHT: 1 lb (0.45 kg)

DIMENSIONS: 2 x 2 x 4 inches (51 x 51 x 102 mm)



**Attendant's Handset Acoustic Coupler
Figure 1**