# **CHAPTER**

## **ELECTRICAL POWER**



#### CHAPTER 24 ELECTRICAL POWER

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#### **24-CONTENTS**



PART NUMBER: B24001-91, -93, -119, -120

NAME: HOIST EQUIPMENT - MAIN BATTERY

**AIRPLANE MAINTENANCE:** YES

**COMPONENT MAINTENANCE: NO** 

**USAGE & DESCRIPTION:** B24001-91, -93, -119 or -120 hoist equipment is used on all 757 airplanes.

B24001 hoist equipment is used to install or remove the 96 pound main battery, located in the forward electrical compartment. Refer to AMM 24-31-01 for complete usage instructions. All B24001 hoist equipment is designed to fold into a compact storage unit. B24001-91 and -93 have been replaced for future procurement by the B24001-119 and -120 hoist equipment respectively. B24001-119 and -120 supersede B24001-109 and -110 respectively. Both B24001-109 and -110 may be reworked into B24001-119 and -120. B24001-93 contains the B24001-91 hoist equipment and B24001-120 contains the B24001-119 hoist equipment. Both B2400-93 and B24001-120 contain a B24001-94 stowage adapter assembly, allowing B24001-93 or -120 to be used as "flyaway" equipment. B24001-94 mounts to the airplane structure per airplane drawing 284N1652, Support Installation - Main Battery Stowage Tool.

**WEIGHT:** 14 lbs (6.3 kg)

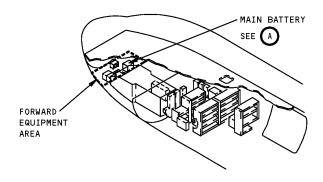
**DIMENSIONS:** 10 x 10 x 30 inches (254 x 254 x 762 mm)

**NOTE**: B24001-120 replaces B24001-93 for future procurement.

B24001-119 replaces B24001-91 for future procurement.

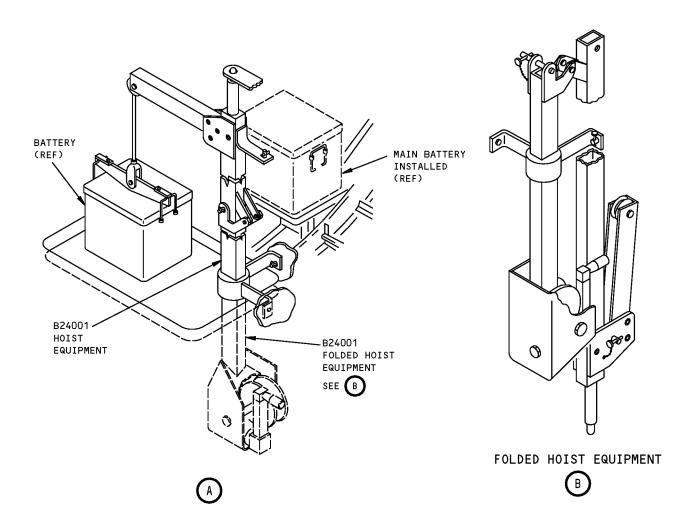
B24001-120 supersedes B24001-110. B24001-119 supersedes B24001-109. B24001-93 supersedes B24001-51. B24001-91 supersedes B24001-1.





Forward Electrical Equipment Compartment Figure 1



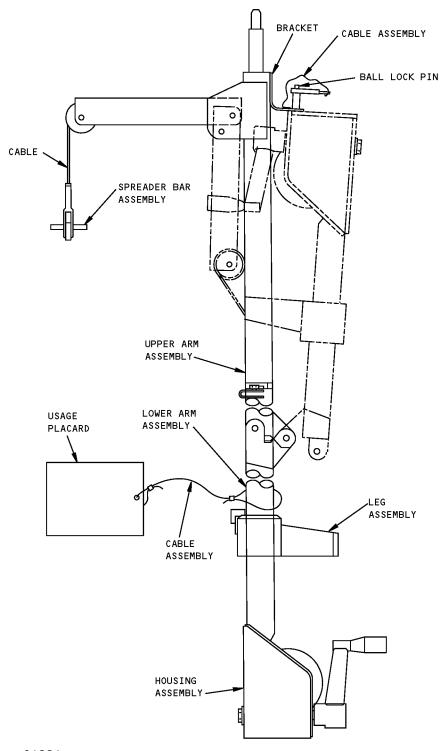


Main Battery Hoist Equipment Figure 2 (Sheet 1 of 2)

24-00-01



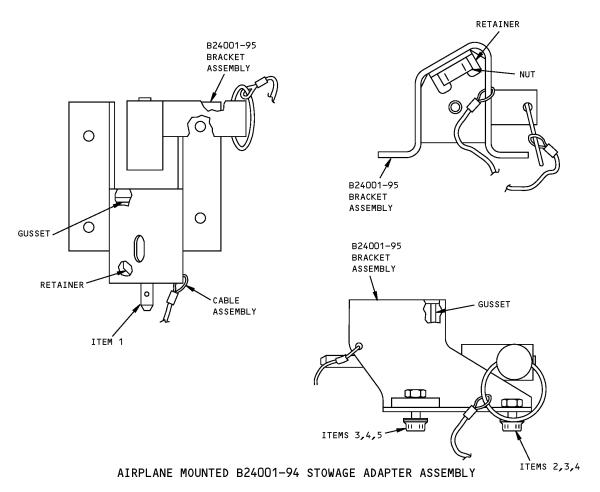
757
ILLUSTRATED TOOL AND EQUIPMENT MANUAL



B24001 HOIST EQUIPMENT, WORKING AND FOLDED POSITIONS

Main Battery Hoist Equipment Figure 2 (Sheet 2 of 2)





Airplane Mounted Stowage Adapter Assembly Figure 3

REPAIRABLE/REPLACEABLE PARTS				
ITEM NO.	PART NO.	NOMENCLATURE	VENDOR CODE	
1	NAS1334C5C2.6D	BALL LOCK PIN		
2	NAS6603-3	BOLT		
3	NAS1804-3	NUT		
4	AN960-D10	FLAT WASHER		
5	NAS6603-6	BOLT		



#### PART NUMBER: B24002-1

NAME: TEST BOX - TIME DELAY RELAY 10 SECOND DROPOUT

AIRPLANE MAINTENANCE: NO

**COMPONENT MAINTENANCE: YES** 

**USAGE & DESCRIPTION:** The B24002 drawing has been transferred to BAE Systems and will no longer

be revised by Boeing. The B24002 inclusion in the 757 ITEM is for information

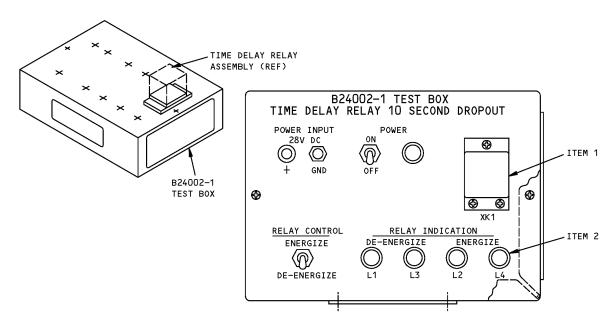
and historical purposes only.

The B24002-1 test box is used during component maintenance on all 757 airplanes. B24002 is used with a 0–35 VDC power supply. Refer to CMM 24-09-87 for complete usage instructions. B24002-1 consists of switches, banana jacks, lamps and electrical circuitry mounted on a panel and chassis

assembly.

**WEIGHT:** 2 lb (0.9 kg)

**DIMENSIONS:** 2 x 5 x 7 inches (51 x 127 x 178 mm)



Time Delay Relay 10 Second Dropout Test Box Figure 1



REPAIRABLE/REPLACEABLE PARTS				
ITEM NO.	PART NO.	NOMENCLATURE	VENDOR CODE	
1	102-009-1	RELAY SOCKET		
2	507-4761-3331-50	LAMP		

**PART NUMBER: 900-24999** 

NAME: INSPECTION PLATE - QUICK ATTACH DETACH (QAD)

**AIRPLANE MAINTENANCE:** YES

**COMPONENT MAINTENANCE: NO** 

**USAGE & DESCRIPTION:** This tool simulates the Integrated Drive Generator (IDG) input flange and is

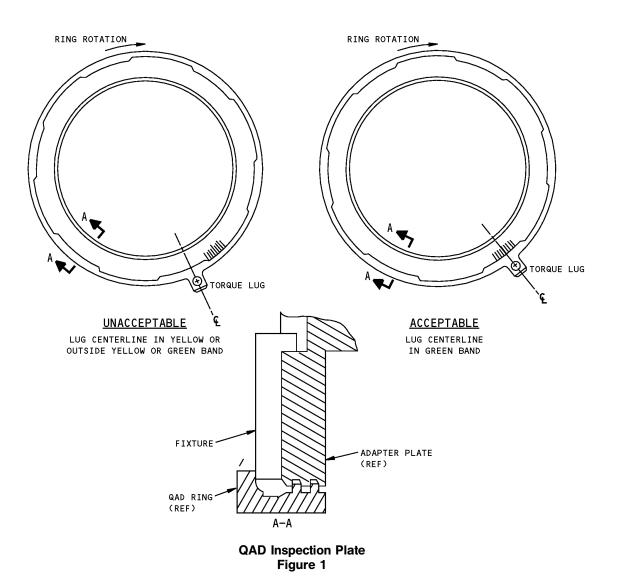
used to check the Quick Attach Detach (QAD) adapter torque input.

NOTE: This tool is a supplier proprietary item and can only be obtained

from Sundstrand Aviation Operation, 4747 Harrison Ave, P.O. Box

7002, Rockford, Illinois 61125.





PART NUMBER: A24004-2

NAME: TEST RELAY - ISOLATION REQUEST, POWER DISTRIBUTION SYSTEM

AIRPLANE MAINTENANCE: NO

**COMPONENT MAINTENANCE: YES** 

**USAGE & DESCRIPTION:** The A24004-2 is used to test AC power system switching in the autoland

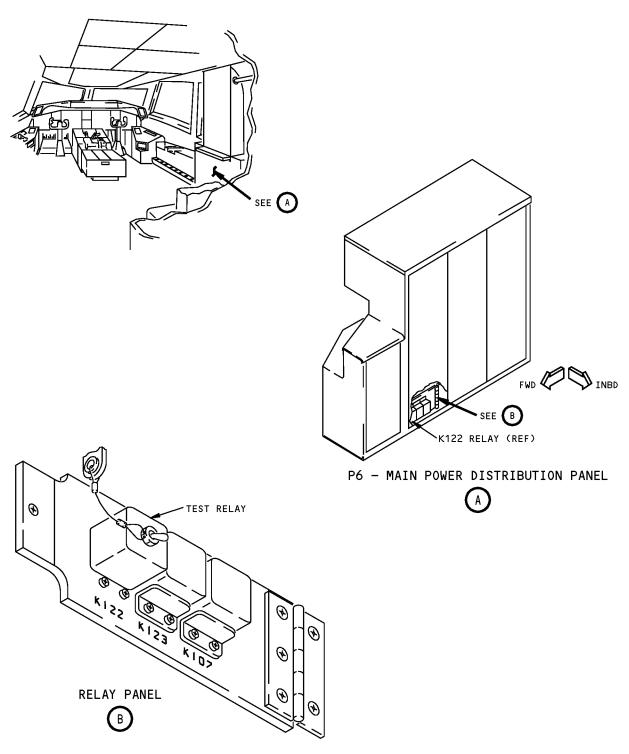
mode. Refer to CMM 24-22-00 for complete usage instructions. The tool

consists of a plug-in test relay assembly and a box.

**WEIGHT:** 1 lb (0.45 kg)

**DIMENSIONS:** 3 x 5 x 6 inches (76 x 127 x 152 mm)





Power Distribution System Isolation Request Test Relay Figure 1

PART NUMBER: A24008-19, -27, -37

NAME: TEST BOX - HYDRAULIC MOTOR GENERATOR, GENERATOR CONTROL

UNIT

**AIRPLANE MAINTENANCE:** YES

**COMPONENT MAINTENANCE: NO** 

**USAGE & DESCRIPTION:** The A24008-19, -27 or -37 test boxes are used on 757 airplanes that are

equipped with ABEX (part numbers 21428 or 214280-01) generator control units (GCU) used for controlling the ABEX 5KVA hydraulic motor driven generators (HMG). The B24008 is used to simulate hydraulic motor driven generator control unit operation. Refer to AMM 24-25-00 for complete usage instructions. The A24008-19 consists of an A24008-20 test box assembly contained in a storage box. The A24008-27 consists of an A24008-28 test box assembly contained in a storage box. The A24008-37 consists of an A24008-

38 test box assembly contained in a storage box.

**WEIGHT:** A24008-37 - 12 lbs

A24008-19, -27 - 5 lbs

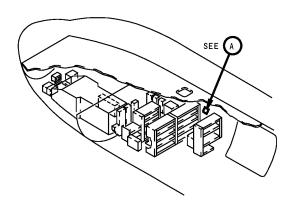
**DIMENSIONS:** A24008-37 - 4 x 10 x 17 inches

A24008-19, -27 - 3 x 5 x 7 inches

NOTE: A24008-37 replaces A24008-19, -27 for future procurement.

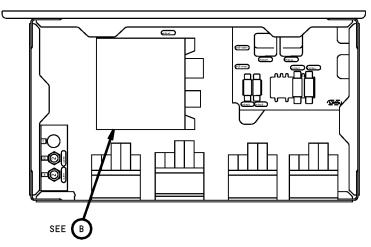
A24008-19 supersedes A24008-1.





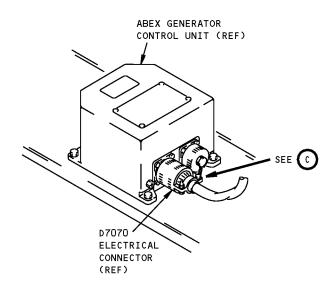
P71 Hydraulic Generator Power Control Panel - Locator Figure 1





HYDRAULIC GENERATOR POWER CONTROL PANEL, P71



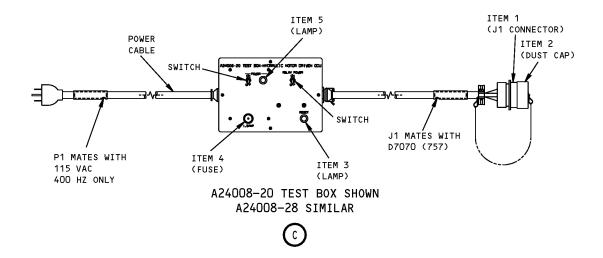


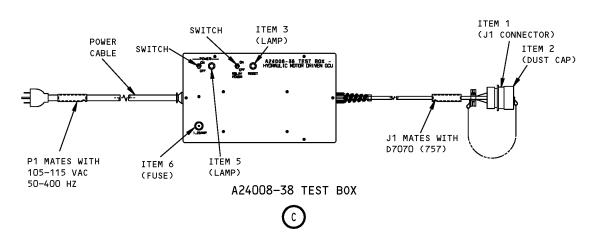
HYDRAULIC MOTOR DRIVEN GENERATOR CONTROL UNIT



Hydraulic Motor Generator GCU Test Box Figure 2 (Sheet 1 of 2)







Hydraulic Motor Generator GCU Test Box Figure 2 (Sheet 2 of 2)

REPAIRABLE/REPLACEABLE PARTS				
ITEM NO.	PART NO.	NOMENCLATURE	VENDOR CODE	
1	M83723/83R1624	CONNECTOR		
2	M83723/60-116AC	CAP, DUST		
3	507-4761-3331-500	LAMP, 28V DC	V83330	
4	31201-5	FUSE	V75915	
5	507-5337-0931-670	LAMP	V83330	
6	3121.25	FUSE	V83330	

PART NUMBER: A49002-1, -2

I NAME: LIFTING EYE - APU GENERATORS AND STARTERS

**AIRPLANE MAINTENANCE:** YES

**COMPONENT MAINTENANCE: NO** 

USAGE & DESCRIPTION: A49002-1 or -2 lifting eye are used on all 757 airplanes. The A49002 provides

a lift point for removal/installation of the APU generator or starter. The

A49002-1 configuration is used for APU's with helicoil inserts. The A49002-2 configuration is used for stainless steel armored inserts. Refer to AMM 24-21-

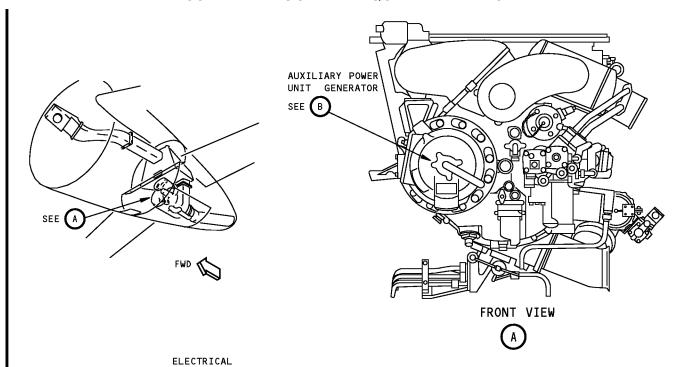
01 for complete usage instructions. A49002-1 consists of a single A49002-1

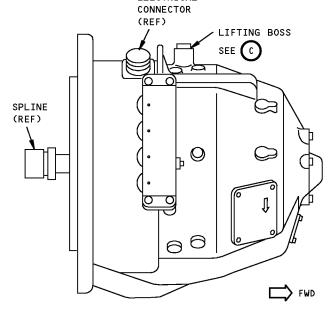
lifting eye. A49002-2 consists of a single A49002-2 lifting eye.

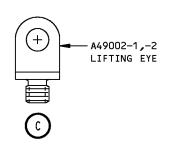
**WEIGHT:** 0.1 lb (0.05 kg)

**DIMENSIONS:** 0.75-inch diameter x 1.35 inch (19 mm diameter x 34 mm)









AUXILIARY POWER UNIT GENERATOR

B

1597535 S0000299167\_V1

APU Generator Lifting Eye Figure 1

PART NUMBER: A24005-1

NAME: LOAD BANK - DC GENERATION SYSTEM

**AIRPLANE MAINTENANCE:** YES

**COMPONENT MAINTENANCE: NO** 

USAGE & DESCRIPTION: This tool is used to load the Transformer Rectifier Unit (TRU) during test of

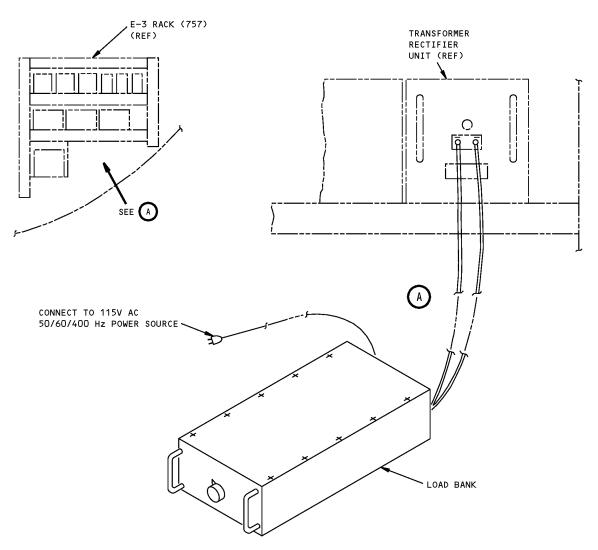
the DC generation system. Refer to AMM 24-30-00 for further usage instructions. This tool consists of a -2 load bank box assembly and a -3

storage box assembly.

WEIGHT: 15 lbs (7 kg)

**DIMENSIONS:** 8 x 14 x 27 inches (203 x 356 x 686 mm)





DC Generation System Load Bank Figure 1

PART NUMBER: F70284-1

NAME: WEAR GAGE SET - PLUG AND RECEPTACLE, GROUND POWER

**AIRPLANE MAINTENANCE:** YES

**COMPONENT MAINTENANCE: NO** 

**USAGE & DESCRIPTION:** This gage set is used to check for excessive wear on the pins and sockets of

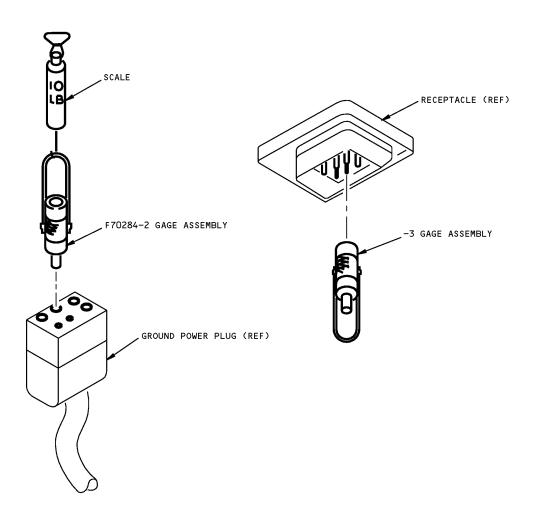
the ground power plug and receptacle. The tool is basically a go/no-go test which measures disengaging force of 10 lbs for each large pin and 5 lbs for each small pin. Refer to AMM 24-41-02 for complete usage instructions. The tool consists of two gage assemblies, a scale, a cable assembly bale and a

storage box.

**DIMENSIONS:** 4 x 7 x 13 inches (102 x 178 x 330 mm)

**NOTE**: F70284-1 supercedes SE24-4001





Ground Power Plug and Receptacle Wear Gage Set Figure 1