CHAPTER

44

CABIN SYSTEMS

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PASSENGER VIDEO SYSTEM - MAINTENANCE PRACTICES

1. **General**

   A. This procedure has these tasks:

      (1) Video Entertainment System Deactivation

      (2) Video Entertainment System Activation

      (3) Setting Flight and Entertainment Modes

      (4) Load Software

      (5) Configuration Check

      (6) Data Offload

      (7) LRU Readdress

      (8) Seat Reset

      (9) Media Load

      (10) PL1000 Operation

      (11) PL2000 Operation

      (12) Review Fault Trends

      (13) Setting Air-to-Ground Modes

      (14) Review Flight Legs

      (15) View Reboot Log

   TASK 44-21-00-440-802

2. **Video Entertainment System - Activation**

   A. **General**

      (1) This procedure provides the necessary steps to properly add electrical power and log into the entertainment system.

   B. **Location Zones**

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right
200	Upper Half of Fuselage
211	Flight Compartment - Left
212	Flight Compartment - Right

   C. **Procedure**

      SUBTASK 44-21-00-860-007

      (1) Remove the safety tags and close these circuit breakers:

      F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

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F/O Electrical System Panel, P6-12

Row	Col	Number	Name

AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

AKS ALL

SUBTASK 44-21-00-860-008

(2) Make sure the IFE/PASS SEATS switch on the pilot's overhead panel P5 is set to ON.

SUBTASK 44-21-00-860-009

(3) To initialize the entertainment system, do these steps as necessary:

(a) Do these steps at the Attendant Control Panel (ACP):

1) Select the PASSENGER SERVICES on the left hand side of the touch screen.

NOTE: When the attendant panel is not in use and airplane is on the ground, the display screen will be on the logo screen saver. To reactivate the screen, sequentially touching opposite corners of display screen within 2 seconds.

NOTE: IFE function is only available on the forward ACP.

a) Make sure that the IFE/ENTERTAINMENT field is available.

AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

b) Make sure that the PC POWER fields are available.

AKS ALL

2) Select the IFE/ENTERTAINMENT OFF button on the ACP.

a) Make sure that the button changes state to ON.

AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

3) Select the PC POWER OFF button on the ACP.

a) Make sure that the button changes state to ON.

AKS ALL

4) If necessary, select the SPECIAL FUNCTIONS on the on the left hand side of main menu display.

a) Select the CREW PANEL OFF button on the ACP.

<1> Make sure that the button changes state to ON.

(b) Wait approximately 5 minutes to allow the IFE to power up and complete the operational and database software download.

NOTE: On the very first time the in-seat video system is powered or after a headend LRU replacement, it may take up to 1/2 hour for the software to distribute and load to all applicable LRU.

(c) Make sure that these conditions exist after the boot-up is complete:

1) Make sure that the airline WELCOME/LOGO screen is shown at the Crew Panel.

AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

2) The Handsets show system default channel.

3) All Seat Display Units (SDUs) are in applicable state.

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AKS 001-006, 009, 010, 013, 015-018, 020-025, 027 (Continued)

        4)   PC Outlet LEDs are on.

AKS ALL

   (d)   To log in to the CABIN CREW screens, do the steps that follow at the Crew Terminal:

        1)   At the Cabin Crew WELCOME/LOGO screen, select the Log In or Proceed To Menu button.

           a)   Make sure the Cabin Crew MAIN MENU screen shows.

   (e)   If it is necessary to log in to the CABIN MAINTENANCE screen, do the steps that follow:

        1)   From the Cabin Crew MAIN MENU screen, select the Maintenance button.

           a)   Make sure that the PASSCODE screen shows.

        2)   From the PASSCODE screen, select the Virtual Keyboard button.

           a)   Make sure the KEYBOARD screen is shown.

        3)   From the KEYBOARD screen, enter a valid passcode.

           NOTE: A series of asterisks will appear in the Passcode entry area.

        4)   Select the ENTER key on the Virtual Keyboard to accept the passcode.

        5)   Select the Continue button.

           a)   Make sure that the CABIN MAINTENANCE screen shows.

———— **END OF TASK** ————

TASK 44-21-00-040-801

3.   <u>Video Entertainment System - Deactivation</u>

   A.   **General**

      (1)   This procedure provides the necessary steps to properly log out of the entertainment system and remove electrical power.

   B.   **Location Zones**

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right
200	Upper Half of Fuselage
211	Flight Compartment - Left
212	Flight Compartment - Right

   C.   **Procedure**

      SUBTASK 44-21-00-860-010

      (1)   To log out of the passenger entertainment system, do the steps that follow:

         (a)   For Cabin Crew MAIN MENU screen with Close Flight button, do the steps that follow:

            1)   At the Cabin Crew Terminal MAIN MENU screen, select the Close Flight button.

            2)   Select the Confirm button at the pop-up window.

            3)   Select the Screen Off button.

               a)   Make sure the screen goes blank.

         (b)   For Cabin Crew MAIN MENU screen with Open/Close Flight button, do the steps that follow:

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1) At the Cabin Crew Terminal MAIN MENU screen, select the Open/Close Flight button.

  a) Make sure that the OPEN/CLOSE FLIGHT screen is shown.

2) From the OPEN/CLOSE FLIGHT screen, select the Close Flight button.

3) Select the Confirm button at the pop-up window.

4) Select the Close button at the pop-up window.

SUBTASK 44-21-00-860-228

(2) To power off the entertainment system, do the steps that follow:

(a) Do these steps at the Attendant Control Panel (ACP):

1) Select the PASSENGER SERVICES on the on the left hand side of main menu display.

NOTE: When the attendant panel is not in use and airplane is on ground, the display screen will be on the logo screen saver. To reactivate the screen, sequentially touching opposite corners of display screen within 2 seconds.

NOTE: IFE function is only available on the forward ACP.

  a) Make sure that the IFE/ENTERTAINMENT field is available.

AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

  b) Make sure that the PC POWER field is available.

AKS ALL

2) Select the IFE/ENTERTAINMENT ON button on the ACP.

  a) Make sure that the button changes state to OFF.

AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

  b) Make sure that the PC OUTLETS field is not available.

AKS ALL

3) If necessary, select the SPECIAL FUNCTIONS on the on the left hand side of main menu display.

  a) Select the CREW PANEL ON button on the ACP.

    <1> Make sure that the button changes state to OFF.

SUBTASK 44-21-00-860-229

(3) To remove electrical power from the entertainment system, do the steps that follow:

(a) Open these circuit breakers and install safety tags:

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027			
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

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AKS ALL

D. **Video Entertainment System - Tryout**

NOTE: This tryout is to make sure the Video Entertainment system is in a zero energy state.

SUBTASK 44-21-00-200-001

(1) Do these steps at the Attendant Control Panel (ACP):

   (a) Set the IFE/ENTERTAINMENT/PC POWER (as applicable) switch to ON.

      1) Make sure the switch does not remain ON and the screen is not illuminated.

SUBTASK 44-21-00-200-002

(2) Make sure seat mounted (as applicable) passenger control units are not illuminated.

——— END OF TASK ———

TASK 44-21-00-800-842

4. **Setting Flight and Entertainment Modes**

A. **General**

(1) This task includes the steps to open and close a flight, and to set the Entertainment mode.

B. **Prepare for the Procedure**

SUBTASK 44-21-00-860-254

(1) Make sure the entertainment system is initialized and logged into the CABIN MAINTENANCE screen (Video Entertainment System - Activation, TASK 44-21-00-440-802).

C. **Procedure**

SUBTASK 44-21-00-860-255

(1) For Cabin Crew MAIN MENU screen with Open Flight button, do the steps that follow to open a flight:

   (a) Make sure that the flight is closed.

   (b) From the Cabin Crew MAIN MENU screen, select the Open Flight button.

      1) Make sure that the OPEN FLIGHT screen is shown.

   (c) From the OPEN FLIGHT screen, enter the applicable information.

   (d) Select the Save button to open the flight.

      1) Make sure that the Confirmation pop-up window is shown.

   (e) Select the Confirm button at the pop-up window.

   (f) Select the MAIN MENU icon to go to the Cabin Crew MAIN MENU screen.

SUBTASK 44-21-00-860-256

(2) For Cabin Crew MAIN MENU screen with Open/Close Flight button, do the steps that follow to open a flight:

   (a) Make sure that the flight is closed.

   (b) From the Cabin Crew MAIN MENU screen, select the Open/Close Flight button.

      1) Make sure that the OPEN/CLOSE FLIGHT screen is shown.

   (c) From the OPEN/CLOSE FLIGHT screen, enter the applicable information.

   (d) Select the Save button to open the flight.

      1) Make sure that the Confirmation pop-up window is shown.

   (e) Select the Confirm button at the pop-up window.

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(f)   Select the MAIN MENU icon to go to the Cabin Crew MAIN MENU screen.

SUBTASK 44-21-00-860-257

(3) For Cabin Crew MAIN MENU screen with Open Flight button, do the steps that follow to close a flight:

(a)   Make sure that a flight is open.

(b)   At the Cabin Crew MAIN MENU screen, select the Open Flight button.

1)   Make sure that the OPEN FLIGHT screen is shown.

(c)   From the OPEN FLIGHT screen, select the Close Flight tab.

1)   Make sure that the CLOSE FLIGHT tab screen is shown.

(d)   Select the Close Flight button to close the flight.

1)   Make sure that the Confirmation pop-up window is shown.

(e)   Select the Confirm button at the pop-up window.

(f)   Select the MAIN MENU icon to go to the Cabin Crew MAIN MENU screen.

SUBTASK 44-21-00-860-258

(4) For Cabin Crew MAIN MENU screen with Open/Close Flight button, do the steps that follow to close a flight:

(a)   Make sure that a flight is open.

(b)   At the Cabin Crew MAIN MENU screen, select the Open/Close Flight button.

1)   Make sure that the OPEN/CLOSE FLIGHT screen is shown.

(c)   From the OPEN/CLOSE FLIGHT screen, select the Close Flight tab.

1)   Make sure that the CLOSE FLIGHT tab screen is shown.

(d)   Select the Close Flight button to close the flight.

1)   Make sure that the Confirmation pop-up window is shown.

(e)   Select the Confirm button at the pop-up window.

(f)   Select the MAIN MENU icon to go to the Cabin Crew MAIN MENU screen.

SUBTASK 44-21-00-860-259

(5) To set the Entertainment mode, do the steps that follow:

(a)   From the Cabin Crew MAIN MENU screen, select the Entertainment button.

1)   Make sure that the ENTERTAINMENT screen is shown.

(b)   From the ENTERTAINMENT screen, select the Turn On or Turn Off button to toggle from Entertainment On mode and Entertainment Off mode.

NOTE: When the Entertainment mode is set to ON, the ENTERTAINMENT ON/OFF screen will show "Entertainment Is Currently: ON." When the Entertainment mode is set to OFF, the ENTERTAINMENT ON/OFF screen will show "Entertainment Is Currently: OFF."

(c)   Select the MAIN MENU icon to go to the Cabin Crew MAIN MENU screen.

D.   Put the Airplane Back to Its Usual Condition

SUBTASK 44-21-00-860-260

(1) If it is not necessary to continue to operate the system, then do this task: Video Entertainment System - Deactivation, TASK 44-21-00-040-801.

——— **END OF TASK** ———

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TASK 44-21-00-400-801

5. Load Software

A. General

(1) This task loads the software.

(2) The software can be loaded with the following devices:

(a) Portable Data Loader (PDL)

AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

(b) On-board Media Loader (OML)

AKS ALL

(c) USB Storage device

(3) Make sure to allocate a few minutes after each step for the system to stabilize. Do not push the Cancel button during the loading because it breaks the synchronization between the Loader Client and MAINT.

B. Procedure

SUBTASK 44-21-00-470-001

(1) Load software in this sequence:

NOTE: The core software loading process is approximately 10 to 25 minutes.

(a) Load the core head-end software.

(b) Load the core seat software.

(c) Load seat applications and games.

C. Load Software with Portable Media Loader

SUBTASK 44-21-00-860-011

(1) Make sure the entertainment system is initialized and logged into the CABIN MAINTENANCE screen (Video Entertainment System - Activation, TASK 44-21-00-440-802).

SUBTASK 44-21-00-470-002

(2) To load software from the PL1000 Portable Media Loader, do the steps that follow:

(a) Setup and activate the PL1000 (PL1000 Operation, TASK 44-21-00-800-805).

(b) At the Crew Panel CABIN MAINTENANCE screen, select the Software Load button.

1) Make sure that the SOFTWARE LOAD screen is shown.

(c) At the SOFTWARE LOAD screen, select the Load Software button.

1) Make sure that the LOAD SOFTWARE-SELECT SOURCE screen is shown.

(d) At the LOAD SOFTWARE-SELECT SOURCE screen, select the PL1000 button.

(e) Select the Get Software List button.

1) Make sure that a list of available software is shown on the LOAD SOFTWARE screen.

(f) At the LOAD SOFTWARE screen, select the software to be loaded.

(g) At the LOAD SOFTWARE screen, select the Load button.

1) Make sure that all files are completely loaded with no errors.

(h) Do this task: Configuration Check, TASK 44-21-00-700-801.

(i) Select the MAIN MENU icon to go to the Cabin Crew MAIN MENU screen.

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(j)   Disconnect the PL1000 (PL1000 Operation, TASK 44-21-00-800-805).

AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

    D.   **Load Software with a On-board Media Loader**

SUBTASK 44-21-00-470-034

(1)   To load software from the OML, do the steps that follow:

(a)   From the CABIN MAINTENANCE screen, select the Software Load Button.

    1)   Make sure that the SOFTWARE LOAD screen is shown.

(b)   From the SOFTWARE LOAD screen, select the Load Software button.

    1)   Make sure that the LOAD SOFTWARE-SELECT SOURCE screen is shown.

(c)   If loading software from a Removable Hard Disk Drive, do the steps that follow:

    1)   Push and pull the OML drive latch to the unlocked position and remove the existing removable Hard Disk Drive from the OML.

    2)   Place the removable Hard Disk Drive in the OML and wait for the corresponding LED to illuminate.

    3)   Push and turn the OML drive latch to the locked position.

    4)   Wait 30 seconds for the drive power ready light to go on.

(d)   If loading software from a USB stick, SD Card, or CF card, insert the USB stick, SD Card, or CF card in the OML and wait for the corresponding LED to illuminate.

(e)   From the LOAD SOFTWARE-SELECT SOURCE screen, select the applicable OML Device button.

(f)   Use the green toggle buttons to select the appropriate OML source, and select the Get Software List button.

    1)   Make sure that the LOAD SOFTWARE screen is shown with a list of the available software.

(g)   Select the software to be loaded and select the Load button.

    1)   Make sure that all files are completely loaded with no errors.

(h)   Do this task: Configuration Check, TASK 44-21-00-700-801.

(i)   Select the Main Menu icon to go to the Cabin Crew MAIN MENU screen.

(j)   Remove the USB stick, SD Card or CF card from the OML.

NOTE: If the Removable Hard Disk Drive was used to load software, do not remove it from the HDD-OML.

AKS ALL

E.   **Load Software with a USB device**

SUBTASK 44-21-00-470-003

(1)   To load software from the USB Drive, do the steps that follow:

(a)   From the CABIN MAINTENANCE screen, select the Software Load Button.

    1)   Make sure that the SOFTWARE LOAD screen is shown.

(b)   From the SOFTWARE LOAD screen, select the Load Software button.

    1)   Make sure that the LOAD SOFTWARE-SELECT SOURCE screen is shown.

(c)   Insert the USB device into the front USB port of the CP and wait one minute.

(d)   From the LOAD SOFTWARE-SELECT SOURCE screen, select the USB Drive button.

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(e) Select the Get Software button.

1) Make sure that the LOAD SOFTWARE screen is shown with a list of the available software.

(f) Select the software to be loaded and select the Load button.

1) Make sure that all files are completely loaded with no errors.

(g) Do this task: Configuration Check, TASK 44-21-00-700-801.

(h) Select the Main Menu icon to go to the Cabin Crew MAIN MENU screen.

(i) Remove the USB device from the port.

F. Put the Airplane Back to Its Usual Condition

SUBTASK 44-21-00-860-012

(1) If it is not necessary to continue to operate the system, then do this task: Video Entertainment System - Deactivation, TASK 44-21-00-040-801.

——— **END OF TASK** ———

TASK 44-21-00-700-801

6. Configuration Check

A. Procedure

SUBTASK 44-21-00-860-013

(1) Make sure the entertainment system is initialized and logged into the CABIN MAINTENANCE screen (Video Entertainment System - Activation, TASK 44-21-00-440-802).

SUBTASK 44-21-00-750-001

(2) To do the Configuration Check procedure, do the steps that follow:

(a) At the CABIN MAINTENANCE screen, select the Configuration button.

1) Make sure that the CONFIGURATION screen is shown.

(b) From the CONFIGURATION screen, select the Config Check button.

1) Make sure that the CONFIGURATION SUMMARY screen is shown.

NOTE: Choosing the Review Config Check button will also display the CONFIGURATION SUMMARY screen.

NOTE: If required, select the Content Status button from the CONFIGURATION screen to display the CONTENT STATUS screen and show a listing of all software.

(c) From the CONFIGURATION SUMMARY screen, use the Software Configuration Index document that is shipped with the software and make sure the correct number of LRUs are reported, along with the correct software part numbers and versions.

(d) If required, at the CONFIGURATION SUMMARY screen, choose a specific LRU and select the Details button to view specific details on the CONFIGURATION DETAILS screen.

NOTE: If the LRU(s) is/are not yet reporting the correct information, allow the LRU(s) time to complete the download and boot up process.

(e) If the software is not correct, then install the correct software (Load Software, TASK 44-21-00-400-801).

(f) Select the MAIN MENU icon to go to the Cabin Crew MAIN MENU screen.

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SUBTASK 44-21-00-750-002

(3)   To do a Content Status check, do the steps that follow:

    (a)   At the CABIN MAINTENANCE screen, select the Configuration button.

        1)   Make sure that the CONFIGURATION screen is shown.

    (b)   From the CONFIGURATION screen, select the Content Status button.

        1)   Make sure that the CONTENT STATUS screen is shown.

    (c)   From the CONTENT STATUS screen, review the list of applications.

        1)   Make sure that the list of applications is complete and that the software version numbers are correct.

    (d)   Select the MAIN MENU icon to go to the Cabin Crew MAIN MENU screen.

B.   Put the Airplane Back to Its Usual Condition

SUBTASK 44-21-00-860-014

(1)   If it is not necessary to continue and operate the system, then do this task: Video Entertainment System - Deactivation, TASK 44-21-00-040-801.

——— **END OF TASK** ———

TASK 44-21-00-900-801

7.   <u>Data Offload</u>

A.   Procedure

SUBTASK 44-21-00-860-015

(1)   Make sure the entertainment system is initialized and logged into the CABIN MAINTENANCE screen (Video Entertainment System - Activation, TASK 44-21-00-440-802).

SUBTASK 44-21-00-970-001

(2)   To do the BITE History Offload, do the steps that follow:

    (a)   From the CABIN MAINTENANCE screen, select the Data Offload button.

        1)   Make sure that the DATA OFFLOAD screen is shown

    (b)   From the DATA OFFLOAD screen, select the BITE History Offload button.

        1)   Make sure that the BITE HISTORY OFFLOAD screen is shown

    (c)   From the BITE HISTORY OFFLOAD screen, enter a BITE filename.

        <u>NOTE</u>: This is typically something that will identify which aircraft the offload information is being offloaded from. Typically, the aircraft tail number will be used.

    (d)   Insert the USB device into the front USB port of the Crew Panel.

        1)   Wait one minute.

    (e)   At the BITE HISTORY OFFLOAD screen, select the Continue button.

        1)   Wait for the process to complete.

        2)   When the offload is complete, a message appears showing that the data has been offloaded to the USB device.

    (f)   Remove the USB device.

    (g)   Select the MAIN MENU icon to go to the Cabin Crew MAIN MENU screen.

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      (b)   From the SYSTEM MAINTENANCE screen, select the Seat Maintenance button.

          1)   Make sure that the SEAT MAINTENANCE screen is shown.

              NOTE: From the SEAT MAINTENANCE screen, the options are different depending on whether the system is in Ground or Air mode. In Air mode, certain functions are disabled.

      (c)   From the SEAT MAINTENANCE screen, select the Seat Reset Control button.

          1)   Make sure that the SEAT RESET CONTROL screen is shown.

      (d)   From the SEAT RESET CONTROL screen, use the ROW up/down and the SEAT up/down buttons to select a row number and a seat letter.

          NOTE: All Rows or Seats can also be chosen.

      (e)   Select the Reset Seats button to reset the selected seat(s).

          NOTE: The message, "Are you sure you want to reset?" appears.

      (f)   Select the Yes button to confirm the seat reset function.

      (g)   Select the MAIN MENU icon to go to the Cabin Crew MAIN MENU screen.

B.   Put the Airplane Back to Its Usual Condition

SUBTASK 44-21-00-860-022

(1)   If it is not necessary to continue to operate the system, then do this task: Video Entertainment System - Deactivation, TASK 44-21-00-040-801.

——————— END OF TASK ———————

TASK 44-21-00-400-802

10. **Media Load**

   A.   General

     (1)   This task loads the video and audio media, including interactive applications.

     (2)   This task also activates the media.

   B.   Media Load with the Portable Media Loader

SUBTASK 44-21-00-860-023

     (1)   Make sure the entertainment system is initialized and logged into the CABIN MAINTENANCE screen (Video Entertainment System - Activation, TASK 44-21-00-440-802).

SUBTASK 44-21-00-470-004

     (2)   The core head-end, seat, seat applications, and games software must be loaded (Load Software, TASK 44-21-00-400-801).

SUBTASK 44-21-00-470-005

     (3)   To load media from a PL2000 Portable Media Loader, do the steps that follow:

        (a)   Setup and activate the PL2000 (PL2000 Operation, TASK 44-21-00-800-806).

        (b)   At the Crew Terminal CABIN MAINTENANCE screen, select the Software Load button.

           1)   Make sure that the SOFTWARE LOAD screen is shown.

        (c)   At the SOFTWARE LOAD screen, select the Load Media button.

           1)   Make sure that the LOAD MEDIA screen is shown.

        (d)   At the LOAD MEDIA screen, select the PL2000 button.

        (e)   At the LOAD MEDIA screen, select the Load button.

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    1) The media load process will start and a status/progress window will appear.

  (f) Wait until the media load is complete.

  (g) Do a Configuration Check (Configuration Check, TASK 44-21-00-700-801) to make sure that the software loaded matches the system configuration index.

  (h) Select the MAIN MENU icon to go to the Cabin Crew MAIN MENU screen.

  (i) Disconnect the PL2000 (PL2000 Operation, TASK 44-21-00-800-806).

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SUBTASK 44-21-00-470-036

(4) To load media from an On-board Media Loader, do the steps that follow:

  (a) At the Crew Terminal CABIN MAINTENANCE screen, select the Software Load button.

    1) Make sure that the SOFTWARE LOAD screen is shown.

  (b) At the SOFTWARE LOAD screen, select the Load Media button.

    1) Make sure that the LOAD MEDIA screen is shown.

  (c) If loading media from a Removable Hard Disk Drive, do the steps that follow:

    1) Push and pull the OML drive latch to the unlocked position and remove the existing removable Hard Disk Drive from the OML.

    2) Place the removable Hard Disk Drive in the OML and wait for the corresponding LED to illuminate.

    3) Push and turn the OML drive latch to the locked position.

    4) Wait 30 seconds for the drive power ready light to go on.

  (d) If loading software from a USB stick, SD Card, or CF card, insert the USB stick, SD Card, or CF card in the OML and wait for the corresponding LED to illuminate.

  (e) At the LOAD MEDIA screen, select the OML button.

  (f) At the LOAD MEDIA screen, select the Load button.

    1) The media load process will start and a status/progress window will appear.

  (g) Wait until the media load is complete.

  (h) Do a Configuration Check (Configuration Check, TASK 44-21-00-700-801) to make sure that the software loaded matches the system configuration index.

  (i) Select the MAIN MENU icon to go to the Cabin Crew MAIN MENU screen.

  (j) Remove the Removable Hard Disk Drive, USB stick, SD Card, or CF card from the OML.

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C. **Media Activation**

SUBTASK 44-21-00-860-024

(1) Make sure the entertainment system is initialized and logged into the Crew Terminal CABIN MAINTENANCE screen (Video Entertainment System - Activation, TASK 44-21-00-440-802).

SUBTASK 44-21-00-470-006

(2) The core head-end, seat, seat applications, and games software must be loaded (Load Software, TASK 44-21-00-400-801).

SUBTASK 44-21-00-860-025

(3) To activate a media for a selected month, do the steps that follow:

  (a) From the CABIN MAINTENANCE screen, select the Software Load button.

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  (b) From the SOFTWARE LOAD screen, select the Activate Media button.

  (c) From the ACTIVATE MEDIA screen, select the media day/month/year using the UP/DOWN arrow buttons.

  (d) Select the Activate button to activate the media.

  (e) Select the MAIN MENU icon to go to the Cabin Crew MAIN MENU screen.

D. Put the Airplane Back to Its Usual Condition

SUBTASK 44-21-00-860-026

(1) If it is not necessary to continue to operate the system, then do this task: (Video Entertainment System - Deactivation, TASK 44-21-00-040-801.)

——— END OF TASK ———

TASK 44-21-00-800-805

11. PL1000 Operation

A. General

(1) This procedure tells you how to connect, disconnect, activate and deactivate the PL1000.

B. Procedure

SUBTASK 44-21-00-860-027

(1) Make sure that the Passenger Entertainment System is initialized (Video Entertainment System - Activation, TASK 44-21-00-440-802).

SUBTASK 44-21-00-860-028

(2) To connect and activate the PL1000, do the steps that follow:

  (a) Connect the PL1000 power cable to the AC outlet.

  (b) Connect the Ethernet cable to the data/media loading port.

  (c) Use the PL1000 POWER switch to turn the power on.

  (d) Wait for the PL1000 to boot up (approximately two to three minutes).

    1) Make sure that the PWR and LINK LEDs are illuminated.

  (e) To load the software, do this task: Load Software, TASK 44-21-00-400-801.

SUBTASK 44-21-00-860-029

(3) To disconnect and deactivate the PL1000, do the steps that follow:

  (a) Use the PL1000 POWER switch to turn the power off.

  (b) Disconnect the PL1000 power cable from the AC outlet.

  (c) Disconnect the Ethernet cable.

  (d) Store the cables using the Velcro strap.

——— END OF TASK ———

TASK 44-21-00-800-806

12. PL2000 Operation

A. General

(1) This procedure tells you how to connect, disconnect, activate and deactivate the PL2000.

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B. **Procedure**

SUBTASK 44-21-00-860-030

(1) Make sure that the Passenger Entertainment System is initialized (Video Entertainment System - Activation, TASK 44-21-00-440-802).

SUBTASK 44-21-00-860-031

(2) To connect and activate the PL2000, do the steps that follow:

   WARNING: MAKE SURE THAT THE CONNECTORS ARE DISCONNECTED FROM THE EQUIPMENT AT THE TWO ENDS. OR SET THE EQUIPMENT TO OFF. THERE IS A RISK OF LASER RADIATION THAT YOU WILL NOT SEE. LASER RADIATION IS DANGEROUS FOR YOUR EYES.

   WARNING: DO NOT LOOK INTO THE END OF A FIBER-OPTIC CABLE. THERE IS A RISK OF LASER RADIATION, WHICH YOU WILL NOT SEE. LASER RADIATION IS DANGEROUS FOR YOUR EYES.

   WARNING: ALWAYS USE GLOVES IF YOU MUST TOUCH BROKEN FIBER-OPTIC CABLES. IF YOU TOUCH CABLES WITH YOUR BARE HANDS, FIBERS CAN GO INTO YOUR BODY THROUGH YOUR SKIN. THIS WILL CAUSE YOU INJURY.

   CAUTION: INSTALL THE PROTECTIVE CAPS IMMEDIATELY AFTER YOU DISCONNECT THE CABLE. IT IS EASY TO CAUSE DAMAGE TO THE FIBER-OPTIC CABLE.

   CAUTION: DO NOT BEND THE FIBER-OPTIC CABLE MORE THAN THE MINIMUM BEND RADIUS. THE CABLE IS EASILY DAMAGED.

   CAUTION: DO NOT PULL OR PUSH THE FIBER-OPTIC CABLE. THE CABLE IS EASILY DAMAGED.

   (a) Remove the protective dust cap from the fiber optic cable, if applicable.

   (b) Align the pin, connect the fiber optic cable to the data/media loading port, and screw the cable securely to its mounting interface.

   (c) Connect the PL2000 power cable to the AC outlet.

   (d) Put the selector switch to the LOAD position.

   (e) Use the PL2000 power switch to turn the power on.

   (f) Wait for the PL2000 to boot up (the lights will illuminate steadily).

SUBTASK 44-21-00-860-032

(3) To disconnect and deactivate the PL2000, do the steps that follow:

   (a) Use the PL2000 power switch to turn the power off.

   (b) Disconnect the PL2000 power cable from the AC outlet.

   (c) Disconnect the fiber optic cable.

      1) Align the pins and screw the protective dust cap on.

   (d) Clip the fiber optic cable securely into the PL2000 mounting housing.

   (e) Close the PL2000 lid and secure the fasteners.

——— **END OF TASK** ———

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TASK 44-21-00-800-821

13. <u>PL1000R Operation</u>

    A. **General**

       (1)   This procedure tells you how to connect, disconnect, activate and deactivate the PL1000R.

    B. **Procedure**

      SUBTASK 44-21-00-860-083

       (1)   Make sure that the Passenger Entertainment System is initialized (Video Entertainment System - Activation, TASK 44-21-00-440-802).

      SUBTASK 44-21-00-860-084

       (2)   To connect and activate the PL1000R, do the steps that follow:

          (a)   Connect the PL1000R power cable to an AC outlet.

          (b)   Open the door for the Crew Panel (CP) to gain access to the Data Loading port that is located next to the CP.

              NOTE: The Data Loading port is located to the left of the CP. The Ethernet Port located on the CP is not used for loading media from the PL1000R.

          (c)   Connect the Ethernet cable to the Data Loading port.

          (d)   Use the PL1000R POWER switch to turn the power on.

          (e)   Wait for the PL1000R to boot up (approximately two to three minutes).

              1)   Make sure the PWR and LINK LEDs are illuminated.

          (f)   To load the software, do the task. (Load Software, TASK 44-21-00-400-801)

      SUBTASK 44-21-00-860-085

       (3)   To disconnect and deactivate the PL1000R, do the steps that follow:

          (a)   Use the PL1000R POWER switch to turn the power off.

          (b)   Disconnect the PL1000R power cable from the AC outlet.

          (c)   Disconnect the Ethernet cable.

          (d)   Store the cables using the Velcro strap.

        ——————— END OF TASK ———————

TASK 44-21-00-800-807

14. <u>Review Fault Trends</u>

    A. **Procedure**

      SUBTASK 44-21-00-860-033

       (1)   Make sure the entertainment system is initialized and logged into the CABIN MAINTENANCE screen (Video Entertainment System - Activation, TASK 44-21-00-440-802).

      SUBTASK 44-21-00-860-034

       (2)   To identify the condition of the current flight (complaint has to do with the current flight), do the steps that follow:

          (a)   From the CABIN MAINTENANCE screen, select the Systems Tests button.

              1)   Make sure that the System Test screen is shown.

          (b)   At the SYSTEMS TESTS screen, select the Review Flight Legs button.

              1)   Make sure that the REVIEW FLIGHT LEGS screen is shown.

    (c)   At the REVIEW FLIGHT LEGS screen, select the Fault Trends button.

        1)   Make sure that the FAULT TRENDS screen is shown.

    (d)   At the FAULT TRENDS screen, review the information.

        1)   Choose the Details button if you wish to view the FAULT TRENDS DETAILS screen and see further details.

    (e)   Select the MAIN MENU button to go to the Cabin Crew MAIN MENU screen.

SUBTASK 44-21-00-860-035

(3)   To identify the cause of persistent complaints (usually from previous flights), do the steps that follow:

NOTE: All Tests identifies only faults that are active at the time of the test. Quick Test identifies all faults displaying intermittent behavior.

    (a)   From the FAULT HISTORY screen, select the Fault Trends button.

        1)   This will merge all fault activities from all eight flights into one report and identify problems such as intermittent, degrading, or random behavior.

    (b)   Select the Quick Test button to get a status of the current condition of the system.

        NOTE: This is not an intrusive test. It is the only test that can be done when the aircraft is in flight.

    (c)   Select the HOME icon to go to the CABIN MAINTENANCE screen.

    (d)   Select the Systems Test button to go to the SYSTEM TESTS screen.

    (e)   For problems having to do with reboot or watchdog reset, go to the View Reboot Log.

        1)   Generate the log of in-flight reboots to determine which flight leg the reboot occurred on.

        2)   Reboot/reset faults are only reported once.

        3)   Generate all the reboot logs to determine how many times the problem(s) has(have) occurred.

    (f)   A maintenance decision needs to be made at this time.

    (g)   From the SYSTEM TESTS screen, two other functions are available:

        1)   Review Flight Legs.

        2)   Toggle Fault Display.

    (h)   Do the Toggle Fault Display to show either all faults (collected from all flight legs) or all active (current) faults.

    (i)   Select the MAIN MENU button to go to the Cabin Crew MAIN MENU screen.

B. Put the Airplane Back to Its Usual Condition

SUBTASK 44-21-00-860-036

(1)   If it is not necessary to continue to operate the system, then do this task: Video Entertainment System - Deactivation, TASK 44-21-00-040-801.

——— **END OF TASK** ———

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TASK 44-21-00-800-808

15. <u>Setting Air-to-Ground Mode</u>

    A.   **Procedure**

        SUBTASK 44-21-00-860-037

        (1)   Make sure the entertainment system is initialized and logged into the CABIN MAINTENANCE screen (Video Entertainment System - Activation, TASK 44-21-00-440-802).

        SUBTASK 44-21-00-860-038

        (2)   To set the air-to-ground modes, do the steps that follow:

            (a)   From the CABIN MAINTENANCE screen, select the System Maint button.

                1)   Make sure that the SYSTEM MAINTENANCE screen is shown.

            (b)   From the SYSTEM MAINTENANCE screen, select the Seat Maintenance button.

                1)   Make sure that the SEAT MAINTENANCE screen is shown.

            (c)   At the SEAT MAINTENANCE screen, use the Flight Mode button to toggle between Air and Ground modes.

            (d)   Select the MAIN MENU button to go to the Cabin Crew MAIN MENU screen.

    B.   **Put the Airplane Back to Its Usual Condition**

        SUBTASK 44-21-00-860-039

        (1)   If it is not necessary to continue to operate the system, then do this task: Video Entertainment System - Deactivation, TASK 44-21-00-040-801.

        ——— **END OF TASK** ———

TASK 44-21-00-800-809

16. <u>Review Flight Leg</u>

    A.   **Procedure**

        SUBTASK 44-21-00-860-040

        (1)   Make sure the entertainment system is initialized and logged into the CABIN MAINTENANCE screen (Video Entertainment System - Activation, TASK 44-21-00-440-802).

        SUBTASK 44-21-00-860-041

        (2)   To Review Flight Legs, do the steps that follow:

            (a)   From the CABIN MAINTENANCE screen, select the Systems Test button.

                1)   Make sure that the SYSTEM TESTS screen is shown.

            (b)   From the SYSTEM TESTS screen, select the Review Flight Legs button.

                1)   Make sure that the REVIEW FLIGHT LEGS screen is shown.

            (c)   From the REVIEW FLIGHT LEGS screen, select a Flight Leg button.

            <u>NOTE</u>: Use the FLIGHT LEG screen to review the Flight Leg faults for the Leg selected. The Flight Leg buttons are activated based on the Flight Leg history.

                1)   Make sure that the FLIGHT LEG screen is shown.

            (d)   From the FLIGHT LEG screen, select the Details button to view the FLIGHT LEG DETAILS screen.

            (e)   Select the MAIN MENU button to go to the Cabin Crew MAIN MENU screen.

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B. **Put the Airplane Back to Its Usual Condition**

SUBTASK 44-21-00-860-042

(1) If it is not necessary to continue to operate the system, then do this task: Video Entertainment System - Deactivation, TASK 44-21-00-040-801.

———— **END OF TASK** ————

TASK 44-21-00-800-810

17. **View Reboot Log**

A. **Procedure**

SUBTASK 44-21-00-860-043

(1) Make sure the entertainment system is initialized and logged into the CABIN MAINTENANCE screen (Video Entertainment System - Activation, TASK 44-21-00-440-802).

SUBTASK 44-21-00-860-044

(2) To View Reboot Log, do the steps that follow:

(a) From the CABIN MAINTENANCE screen, select the System Tests button.

1) Make sure that the SYSTEM TESTS screen is shown.

(b) From the SYSTEM TESTS screen, select the Review Flight Legs button.

1) Make sure that the REVIEW FLIGHT LEGS screen is shown.

(c) From the REVIEW FLIGHT LEGS screen, select the View Reboot Log button to view the REBOOT LOG screen.

1) Use the REBOOT LOG screen to review summary and detailed views of the reboot log information.

NOTE: The summary combines the like-reboots and shows a quantity for how often the reboot has occurred.

2) Select the Change View button to show a list of all the reboots that have occurred including the time the reboot occurred.

NOTE: Any column may be sorted in ascending or descending order.

(d) Select the MAIN MENU button to go to the Cabin Crew MAIN MENU screen.

B. **Put the Airplane Back to Its Usual Condition**

SUBTASK 44-21-00-860-045

(1) If it is not necessary to continue to operate the system, then do this task: Video Entertainment System - Deactivation, TASK 44-21-00-040-801.

———— **END OF TASK** ————

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PASSENGER VIDEO SYSTEM - ADJUSTMENT/TEST

1. **General**

    A.   This procedure has these tasks for the Passenger Entertainment System (PES) Video:

    (1)   A Quick Test.

    (2)   An operational test

    (3)   A system test.

    TASK 44-21-00-700-802

2. **Passenger Video System - Quick Test**

    A.   **General**

    (1)   The Quick Test is a built-in-test equipment (BITE) test that causes continuous faults to be processed for display. The Quick Test is a non-intrusive test and does not affect other entertainment system functions.

    (2)   The QUICK TEST screen shows the condition of each LRU and provides a LOPA to show location of fault(s).

    (3)   The QUICK TEST DETAILS screen provides additional status about the fault(s).

    B.   **References**

Reference	Title
44-21-00-440-802	Video Entertainment System - Activation (P/B 201)

    C.   **Quick Test**

    SUBTASK 44-21-00-740-002

    (1)   To do the Quick Test, do the steps that follow:

    (a)   Make sure that the entertainment system is initialized and logged into the CABIN MAINTENANCE screen Video Entertainment System - Activation, TASK 44-21-00-440-802.

    (b)   From the CABIN MAINTENANCE screen, select the System Tests button.

    NOTE: From the SYSTEM TEST screen, the Toggle Fault Display button may be used to show either all faults, or show only the active faults and hide the inactive faults.

    (c)   From the SYSTEM TESTS screen, select the Start Quick Test button.

    (d)   Review the details from the Quick Test.

    (e)   If further details are required, select the Details button.

    1)   From the QUICK TEST DETAILS screen, review the details.

    (f)   Select the HOME icon to return to the CABIN MAINTENANCE Main Menu.

    ———— **END OF TASK** ————

    TASK 44-21-00-700-803

3. **Passenger Video System - Operational Test**

    A.   **References**

Reference	Title
44-21-00-040-801	Video Entertainment System - Deactivation (P/B 201)
44-21-00-440-802	Video Entertainment System - Activation (P/B 201)
44-21-00-800-842	Setting Flight and Entertainment Modes (P/B 201)

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B. **Procedure**

SUBTASK 44-21-00-710-007

(1) Do the Power-on task if the IFES is not initialized: Video Entertainment System - Activation, TASK 44-21-00-440-802.

<u>NOTE</u>: To access the IFE controls, "Log-on" and "Open Flight" must be completed.

SUBTASK 44-21-00-860-261

(2) Set the IFES to Open Flight mode: Setting Flight and Entertainment Modes, TASK 44-21-00-800-842.

SUBTASK 44-21-00-710-030

(3) To do the Operational Test, do the steps that follow:

    (a) Check the aircraft deferral record for errors or deficiencies and correct as configured.

    (b) To test all Handsets, do the steps that follow:

        1) Check for proper operation of all Handset cord reels by extending and re-stowing the cord reels.

        2) Check that power is available to all Handsets.

        3) Do the Interactive Test: Passenger Video System - System Test, TASK 44-21-00-700-804.

           a) Make sure that the Interactive functions are satisfactory.

        4) If applicable, push the attendant call light key on and off.

           a) Make sure that the corresponding action occurs.

        5) If applicable, push the reading light key on and off.

           a) Make sure that the corresponding action occurs.

    (c) To test all Audio Jacks, do the steps that follow:

        1) Check for proper mounting of Audio Jacks.

        2) Use a headset and check for availability of audio.

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    (d) To test all in-seat monitors, do the steps that follow:

        1) View all video channels, and check for picture quality and screen brightness.

        2) Listen to all audio channels and check for good sound quality.

        3) Check for proper operation of all stowable monitors by re-stowing the units.

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    (e) To test the Video and Audio Passenger Address (PA) System, do the steps that follow:

        1) Do the Video PA Test: Passenger Video System - System Test, TASK 44-21-00-700-804.

           a) Make sure that the Video PA is shown on all monitors.

        2) Do the Audio PA Test: Passenger Video System - System Test, TASK 44-21-00-700-804.

           a) Make sure that the sound quality is satisfactory.

        3) Do the PA Discrete/Keyline Test: Passenger Video System - System Test, TASK 44-21-00-700-804.

           a) Make sure that the PA announcements override entertainment functions.

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    (f)   To test the In-seat Power Supply System (ISPSS), do the step that follows:

        1)   Make sure that the applicable Advanced Master Control Units are on.

        2)   Make sure that the Power Outlet Unit LED is illuminated green.

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  C. **Put the Airplane Back to Its Usual Condition**

SUBTASK 44-21-00-860-047

    (1)   If it is not necessary to continue to operate the system, then do this task: Video Entertainment System - Deactivation, TASK 44-21-00-040-801.

———— **END OF TASK** ————

TASK 44-21-00-700-804

4. <u>**Passenger Video System - System Test**</u>

  A. **General**

    (1)   The PES system test contains these procedures:

        (a)   BITE test

        (b)   Operational Test

        (c)   In-Seat Audio, Video/Audio, and Interactive Test

        (d)   Boarding Music Test

        (e)   Video/Audio PA Test

        (f)   Decompression Test

        (g)   Discrete Interface Test

  B. **References**

Reference	Title
44-21-00-440-802	Video Entertainment System - Activation (P/B 201)
44-21-00-800-842	Setting Flight and Entertainment Modes (P/B 201)

  C. **BITE Test**

SUBTASK 44-21-00-740-003

    (1)   To do the BITE test, do the steps that follow:

        NOTE: When the BITE Test is performed, the IFE LRUs stop functioning in current mode, then they do a self-test analysis, report any faults, and then pick up from the point where they stopped functioning. If video has been stopped, it will resume at the beginning of the video, not at the point of stoppage.

        (a)   Make sure that the entertainment system is initialized (Video Entertainment System - Activation, TASK 44-21-00-440-802).

        (b)   From the CABIN MAINTENANCE screen, select the System Tests button.

        NOTE: From the SYSTEM TESTS screen, the Toggle Fault Display button may be used to show either all faults or show only the active faults and hide the inactive faults.

         1)   Make sure that the SYSTEM TESTS screen shows.

        (c)   From the SYSTEM TESTS screen, select the Start All Test button.

        (d)   Review the test results from the ALL TEST screen.

        (e)   If further details are required, select the Details button.

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(f)   Review the test results from the ALL TEST DETAILS screen.

(g)   From the ALL TEST DETAILS screen, select the HOME icon to return to the CABIN MAINTENANCE Main Menu.

D.   Operational Test

SUBTASK 44-21-00-710-008

(1)   Do this task: Passenger Video System - Operational Test, TASK 44-21-00-700-803.

E.   Prepare for the System Test

NOTE: To access the IFE controls, "Log-on" and "Open Flight" must be completed.

SUBTASK 44-21-00-860-262

(1)   Do the Power-on task if the IFES is not initialized:Video Entertainment System - Activation, TASK 44-21-00-440-802.

SUBTASK 44-21-00-860-263

(2)   Set the IFES to Entertainment On mode: Setting Flight and Entertainment Modes, TASK 44-21-00-800-842.

F.   In-Seat Audio, Video/Audio, and Interactive Test

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SUBTASK 44-21-00-710-031

(1)   To do the In-seat Video/Audio Test, do the steps that follow:

(a)   Go to any class seat and connect a headset to the seat.

(b)   Push the Handset Mode button to select Video.

1)   Make sure that the video is shown on the Seat Display Unit (SDU).

(c)   Use the Handset channel up/down buttons to select a video channel.

1)   Make sure that the quality of the video program is good.

(d)   Listen to the audio portion of the video program.

1)   Make sure that you hear the audio that agrees to the video source and there is volume control on the handset.

(e)   Push the Volume Up/Down buttons.

1)   Make sure that the sound corresponds accordingly.

(f)   Repeat this test for all the other applicable seat classes.

SUBTASK 44-21-00-710-032

(2)   To do the Interactive Test, do the steps that follow:

(a)   Go to any class seat and connect a headset to the seat.

(b)   Push the HOME or Enter button on the Handset.

1)   Make sure that the SDU shows the LANGUAGE SELECT screen.

(c)   From the LANGUAGE SELECT screen, select a language.

1)   Make sure that the HOME MENU screen shows.

(d)   Use the Handset and SDU to exercise the interactive functions.

1)   Make sure that the system operates as expected.

2)   Make sure that the quality of the video is good.

(e)   Use a headset and listen to the audio portion of the video program.

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        1)   Make sure that the audio is clear.

    (f)   Push to select Games.

        1)   Make sure that the games load and function as expected.

    (g)   Repeat this test for all the other applicable seat classes.

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G.   Boarding Music Test

SUBTASK 44-21-00-730-002

(1)   To do the Boarding Music Test, do the steps that follow:

    (a)   From the Cabin Crew MAIN MENU screen, select the Boarding Music button.

        1)   Make sure that the BOARDING MUSIC screen is shown.

    (b)   From the BOARDING MUSIC screen, select an available Boarding Music Title.

    (c)   Select the Play button.

        1)   Make sure that you can hear the boarding music clearly through out the cabin speakers.

    (d)   Select the Volume Up/Down buttons to increase and decrease the audio volume.

        1)   Make sure that the volume level of the audio changes accordingly.

    (e)   Select the Stop button.

    (f)   Select the Main Menu icon to go to the Cabin Crew MAIN MENU screen.

H.   Video/Audio PA Test

SUBTASK 44-21-00-710-033

(1)   To do the Video PA (VPA) Test, do the steps that follow:

    (a)   From the Cabin Crew MAIN MENU screen, select the Video PA button.

        1)   Make sure that the VIDEO PA or CABIN VIDEO screen is shown.

    (b)   From the VIDEO PA or CABIN VIDEO screen, select the Select Title button.

        1)   Make sure that the VIDEO PA TITLE selection screen is shown.

    (c)   From the VIDEO PA TITLE selection screen, select a title from the listing, then select the OK button.

        1)   Make sure that the selected video file is indicated on the screen.

    (d)   To preview the video in the preview window, select the Play button.

        NOTE: The preview only appears on the Crew Terminal.

        1)   Make sure that the VPA is shown on the preview screen.

    (e)   Select the desired cabin zones, then select the Start VPA button.

        NOTE: If the language selection pop-up is shown, select a language and then select the Confirm button.

        1)   Make sure that the VPA is shown on cabin monitors and is heard clearly through the cabin speakers.

        2)   Make sure that all Handsets show PA.

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    3)   Make sure that the interactive buttons on the handsets do not respond to button presses, except for volume up/down.

    4)   Make sure that the VPA is shown on SDU.

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(f)   Select the Volume Up/Down buttons to increase and decrease the audio volume.

    1)   Make sure that the volume level of the audio changes accordingly.

(g)   Select the Stop button to stop the VPA.

    1)   Make sure that the VPA stops playing.

(h)   Select the MENU button to go back to the MAIN MENU screen.

SUBTASK 44-21-00-710-034

(2)   To do the Audio PA Test, do the steps that follow:

(a)   From the Cabin Crew MAIN MENU screen, select the Audio Announcements button.

    1)   Make sure that the AUDIO ANNOUNCEMENT or SELECT ANNOUNCEMENTS screen is shown.

(b)   From the SELECT ANNOUNCEMENTS or SELECT ANNOUNCEMENTS screen select a audio announcement.

(c)   Select the Add button.

(d)   Select the Play button.

    1)   Make sure the audio announcement is heard clearly through the cabin speakers.

(e)   From any class seat, do the steps that follow:

    1)   Connect a headset to the seat.

    2)   Listen to the audio announcement and make sure that it is clear.

    3)   Make sure that the Handsets show PA.

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    4)   Make sure that the interactive buttons on the handsets do not respond to button presses, except for volume up/down.

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(f)   Select the Stop PA or Cancel Current button.

    1)   Make sure that the audio announcement stops.

(g)   Select the MENU button to go back to the MAIN MENU screen.

SUBTASK 44-21-00-730-003

(3)   To do the PA Override Test, do the steps that follow:

(a)   Start a general entertainment broadcast:

    1)   From the MAIN MENU screen at the Crew Panel (CP), select the Video PA button.

    2)   From the VIDEO PA screen, select a Video PA title.

    3)   Select the Confirm button.

    4)   From the VIDEO PA screen, select the Start VPA button.

       a)   Make sure that the video shows on the overhead monitors and in-seat displays.

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    b)   Make sure that the audio is heard from the PA speakers and from the headsets on any seat.

        NOTE: You may need to increase the volume to hear the audio from the headsets using the digital passenger control unit (DPCU) mounted in the seat.

    c)   Make sure that all the handsets display PA.

(b)   At the crew station Handset, initiate a PA announcement.

    1)   Make sure that the Handset display shows PA and audio pauses.

    2)   Make sure that you do not hear the audio PA in all seat headsets and on overhead speakers.

(c)   At the crew station Handset, deactivate the PA announcement.

    1)   Make sure that the previous channel shows on the Handset display.

    2)   Make sure that all audio/video programs start after the announcement is stopped.

I.   Decompression Test

SUBTASK 44-21-00-730-004

(1)   Do these steps for the decompression test:

(a)   Start a general entertainment broadcast:

    1)   From the MAIN MENU screen at the Crew Panel (CP), select the Video PA button.

    2)   From the VIDEO PA screen, select a Video PA title.

    3)   Select the Confirm button.

    4)   From the VIDEO PA screen, select the Start VPA button.

    5)   Make sure that the video shows on the overhead monitors and in-seat displays.

    6)   Make sure that the audio is heard from the PA speakers and from the headsets on any seat.

        NOTE: You may need to increase the volume to hear the audio from the headsets using the digital passenger control unit (DPCU) mounted in the seat.

    7)   Make sure that all the handsets display PA.

CAUTION: MAKE SURE THAT YOU DO THE STEPS BELOW CORRECTLY. THIS CAN PREVENT DAMAGE TO THE OXYGEN SYSTEM.

(b)   Do the steps below correctly:

CAUTION: MAKE SURE THE PSU RESTRAINTS ARE INSTALLED. THE RESTRAINTS MUST BE INSTALLED TO STOP THE PASSENGER OXYGEN MASKS FROM DROPPING. DAMAGE TO EQUIPMENT CAN OCCUR.

(c)   Install the restraints on each of the PSU oxygen doors in the main cabin and crew rests.

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CAUTION: OPEN THE "PASSENGER OXYGEN L, CTR, AND R" CIRCUIT BREAKERS BEFORE YOU SET THE "DECOMPRESSION OUT GROUND". THE PASSENGER OXYGEN MASKS WILL FALL IF YOU SET THE SWITCH TO GROUND BEFORE YOU OPEN THE CIRCUIT. DAMAGE TO EQUIPMENT CAN OCCUR.

(d) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	9	C00784	OXYGEN PASS RIGHT
F	10	C00783	OXYGEN PASS LEFT

(e) Make sure that these circuit breakers are closed:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	7	C00156	OXYGEN IND
F	8	C00785	OXYGEN MAN CONT

(f) Set the PASS OXYGEN switch on the P5 overhead panel to ON.

1) Make sure that you hear the decompression announcement on the passenger address speakers.

2) Make sure the screen of all monitors go blank.

3) Make sure the PC power outlet 110V AC green indicator lights on all seats are off.

(g) Make an announcement from an attendant's handset while you hear the decompression announcement.

1) Make sure you can hear the voice announcement on the passenger address speakers.

2) Make sure you cannot hear the decompression announcement while the voice announcement is being made.

3) Make sure you hear the decompression announcement resume when you end the voice announcement.

(h) Set the PASS OXYGEN switch on the P5 overhead panel to NORMAL.

(i) Open and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	7	C00156	OXYGEN IND
F	8	C00785	OXYGEN MAN CONT

(j) Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	9	C00784	OXYGEN PASS RIGHT
F	10	C00783	OXYGEN PASS LEFT

(k) Remove the restraints from the PSU oxygen doors in the main cabin and crew rests.

J. **Discrete Interface Test**

SUBTASK 44-21-00-730-005

(1) Do these steps to check the Air/Gnd Keyline:

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(a) Push the ON/OFF button located on the PSEU BITE Control Panel.

    1) Make sure the PSEU Display is ON and the display will read "EXISTING FAULTS?".

    2) Make sure that the WEIGHT WHEELS discrete status on the Crew Panel indicates a GROUND.

(b) Select the NO button on the PSEU BITE Control Panel.

    1) Make sure the display will read "FAULT HISTORY?".

(c) Select the NO button

    1) Make sure the display will read "GROUND TESTS?".

(d) Select the NO button.

    1) Make sure the display will read "AIR/GND OVRD?".

(e) Select the YES button.

    1) Make sure the display will read "SET SYS 1 IN THE AIR?".

(f) Select the YES button.

    1) Make sure the display will read "ARE YOU SURE?".

(g) Select the YES button.

    NOTE: The display will read "Sys 1 is in Air" for 2 seconds followed by "Set Sys 1 on Gnd?". The Air/Ground on the PSEU, labeled "Sys 1 in the Air", will be illuminated and PSEU fault light on the flight deck will also be illuminated.

    1) Make sure that the WEIGHT ON WHEELS discrete status on the Crew Panel indicates an OPEN.

(h) Select the YES button on the PSEU BITE control panel.

    1) Make sure the display will read "ARE YOU SURE?".

(i) Select the YES button.

    1) Make sure that the WEIGHT ON WHEELS discrete status on the Crew Panel indicates a GROUND.

SUBTASK 44-21-00-730-006

(2) Do these steps to check the Parking Brake Keyline:

(a) Do this step at the Crew Panel.

    1) Make sure that the PARKING BRAKE discrete status on the Crew Panel indicates a GROUND.

(b) Release the Parking Brake.

    1) Make sure the PARKING BRAKE discrete status on the Crew Panel indicates an OPEN.

(c) Set the Parking Brake.

    1) Make sure that the PARKING BRAKE discrete status on the Crew Panel indicates a GROUND.

SUBTASK 44-21-00-730-007

(3) Do these steps to check the Door Lock Keyline:

(a) Close and lock all cabin doors.

    1) Make sure that the ALL_DOORS_CLOSED discrete status on the Crew Panel indicates a GROUND.

(b) Open the LEFT FORWARD entry door.

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   1)   Make sure the ALL_DOORS_CLOSED discrete status on the Crew Panel indicates an OPEN.

       NOTE: Door discrete testing is complete, airplane doors may be placed in pre-test configuration.

SUBTASK 44-21-00-730-009

(4)   Do these steps to check the ENGINE ON/OFF Keyline:

  (a)   Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-2

Row	Col	Number	Name
A	1	C00458	ENGINE 1 IGNITION RIGHT
A	3	C00153	ENGINE 1 IGNITION LEFT

F/O Electrical System Panel, P6-2

Row	Col	Number	Name
D	4	C00459	ENGINE 2 IGNITION RIGHT
D	6	C00151	ENGINE 2 IGNITION LEFT

  (b)   Make sure that the following conditions are set:

- ENG 1 and ENG 2 START switches on P5 panel are OFF.
- ENG 1 and ENG 2 START levers are in IDLE position.
- ENG 1 and ENG 2 FIRE handles are not pulled.
- Airplane is on Ground mode.
- APU is off.

  (c)   Close these circuit breakers:

CAPT Electrical System Panel, P18-2

Row	Col	Number	Name
B	1	C01316	ENGINE 1 START LEVER CHAN A
B	3	C01312	ENGINE 1 RUN/PWR

F/O Electrical System Panel, P6-2

Row	Col	Number	Name
B	5	C01313	ENGINE 2 RUN/PWR
B	6	C01318	ENGINE 2 START LEVER CHAN A

   1)   Make sure that the ENGINE OFF discrete on the crew panel is OPEN.

       NOTE: Wait for 5 minutes for the system to update.

  (d)   PULL ENG 1 and ENG 2 START LEVERS to CUTOFF position.

  (e)   Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-2

Row	Col	Number	Name
B	1	C01316	ENGINE 1 START LEVER CHAN A
B	3	C01312	ENGINE 1 RUN/PWR

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F/O Electrical System Panel, P6-2

Row	Col	Number	Name
B	5	C01313	ENGINE 2 RUN/PWR
B	6	C01318	ENGINE 2 START LEVER CHAN A

    1)   Make sure that the ENGINE OFF discrete on the crew panel is GROUNDED.

(f)   Remove the safety tags and close these circuit breakers:

CAPT Electrical System Panel, P18-2

Row	Col	Number	Name
A	1	C00458	ENGINE 1 IGNITION RIGHT
A	3	C00153	ENGINE 1 IGNITION LEFT
B	1	C01316	ENGINE 1 START LEVER CHAN A
B	3	C01312	ENGINE 1 RUN/PWR

F/O Electrical System Panel, P6-2

Row	Col	Number	Name
B	5	C01313	ENGINE 2 RUN/PWR
B	6	C01318	ENGINE 2 START LEVER CHAN A
D	4	C00459	ENGINE 2 IGNITION RIGHT
D	6	C00151	ENGINE 2 IGNITION LEFT

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SUBTASK 44-21-00-730-010

(5)   Do these steps to check the ACARS interface:

(a)   Select the MAINTENANCE button on the Crew Panel Main Menu screen.

(b)   Select the keyboard icon on the top right hand corner.

(c)   Enter the correct password and select ENTER.

(d)   Select SYSTEM STATUS on the Maintenance screen.

(e)   Select Discrete/Comm Status on the System Status screen.

    NOTE: It may take 15 to 35 seconds before the change of state is reported at the Crew Panel. The screen will need to be refreshed to update the status reported before verifying the discrete signal change of state. To refresh, touch the REFRESH button on the screen, alternately you can touch the BACK ARROW at the top of the screen and then go back into the DISCRETE/STATUS screen.

    1)   Make sure that the status of discrete signals are displayed on the screen.

    2)   Make sure that the ACARS LINK discrete status indicates LINK UP.

(f)   Open and close this circuit breaker:

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
E	8	C01483	CMU-1 AC

    1)   Make sure that the ACARS LINK discrete status indicates LINK DOWN on the System Status screen.

(g)   Select the REFRESH button to refresh the System Status screen.

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    1)   Make sure that the ACARS status indicates a GREEN CHECK mark.

        <u>NOTE</u>: Green Check mark indicates ACARS system is linked to IFE and status is active.

  (h)   Open this circuit breaker and install safety tag:

F/O Electrical System Panel, P6-1

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	8	C01483	CMU-1 AC

<u>NOTE</u>: WAIT for approximately 15 seconds.

    1)   Make sure that the ACARS status indicates RED X mark.

        <u>NOTE</u>: A RED X indicates ACARS system is not linked to IFE and status is inactive.

  (i)   Remove the safety tag and close this circuit breaker:

F/O Electrical System Panel, P6-1

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
E	8	C01483	CMU-1 AC

——————— **END OF TASK** ———————

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MASTER CONTROL UNIT - REMOVAL/INSTALLATION

1. **General**

    A.   This procedure has these tasks:

    (1)   Removal of the Master Control Unit.

    (2)   Installation of the Master Control Unit.

    TASK 44-21-01-000-801

2. **Master Control Unit Removal**

    A.   **General**

    (1)   This task is the removal procedure for the Master Control Unit (MCU).

    (2)   The MCUs are located in the overhead above the aircraft ceiling panels.

    (3)   When you remove the MCUs, do not supply electrical power to the system.

    B.   **References**

Reference	Title
20-40-12-000-802	ESDS Handling for Metal Encased Unit Removal (P/B 201)
25-21-45-000-803-001	Main Ceiling Panel - Removal (P/B 401)
44-21-18-000-801	Configuration Module Removal (P/B 401)

    C.   **Location Zones**

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left

    D.   **Prepare for the removal**

    SUBTASK 44-21-01-860-005

    (1)   Do these steps to prepare the MCU for the removal.

    (a)   Open these circuit breakers and install safety tags:

    F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

    SUBTASK 44-21-01-410-002

    (2)   To get access to the MCU, do the task: Main Ceiling Panel - Removal,
    TASK 25-21-45-000-803-001

    SUBTASK 44-21-01-910-001

    (3)   Before you do the procedure, do this task: ESDS Handling for Metal Encased Unit Removal,
    TASK 20-40-12-000-802

    SUBTASK 44-21-01-020-001

    (4)   Do these steps to remove the MCU:

    (a)   Disconnect the cables from the MCU.

    NOTE: Tag connectors for correct installation.

    (b)   Remove and retain the four mounting screws [4] and washers [3].

    (c)   Remove the MCU [1].

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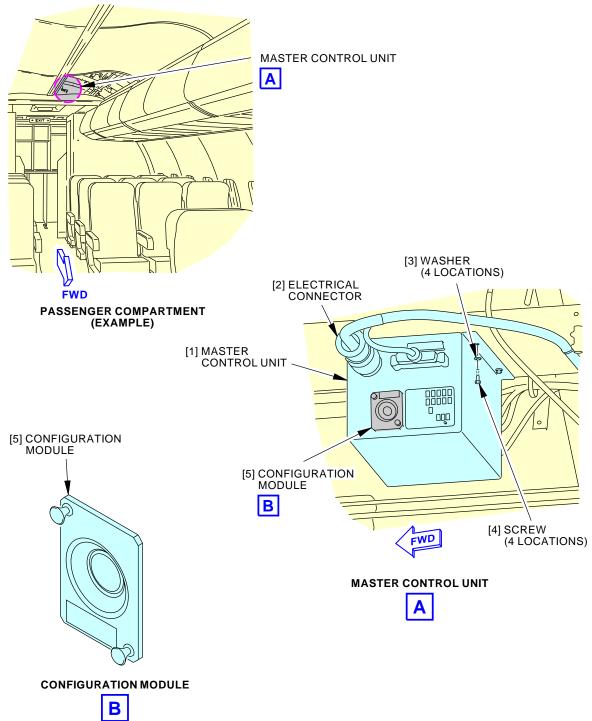
    (d)   Put protective cover on the electrical connectors [2].

SUBTASK 44-21-01-020-002

(5)   Remove the configuration module [5] from J7 on the master control unit:

    (a)   Do this task:Configuration Module Removal, TASK 44-21-18-000-801

    (b)   Keep the configuration module for the installation.

———— **END OF TASK** ————

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MASTER CONTROL UNIT

A

FWD

PASSENGER COMPARTMENT
(EXAMPLE)

[3] WASHER
(4 LOCATIONS)

[2] ELECTRICAL
CONNECTOR

[1] MASTER
CONTROL UNIT

[5] CONFIGURATION
MODULE

[5] CONFIGURATION
MODULE

B

FWD

[4] SCREW
(4 LOCATIONS)

MASTER CONTROL UNIT

A

CONFIGURATION MODULE

B

1303054 S0000225153_V2

Master Control Unit
Figure 401/44-21-01-990-801

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TASK 44-21-01-400-801

3.   Master Control Unit Installation

Figure 401

A.   General

(1)   This task is the installation procedure for the Advance Master Control Unit (MCU).

B.   References

Reference	Title
24-22-00-860-812	Remove Electrical Power (P/B 201)
25-21-45-400-803-001	Main Ceiling Panel - Installation (P/B 401)
44-21-00-040-801	Video Entertainment System - Deactivation (P/B 201)
44-21-00-440-802	Video Entertainment System - Activation (P/B 201)
44-21-00-700-801	Configuration Check (P/B 201)
44-21-00-700-802	Passenger Video System - Quick Test (P/B 501)
44-21-18-400-801	Configuration Module Installation (P/B 401)

C.   Location Zones

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left

D.   Master Control Unit Installation

SUBTASK 44-21-01-860-006

(1)   Make sure that these circuit breakers are open and have safety tags:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

SUBTASK 44-21-01-420-001

(2)   Install the configuration module [5] you kept from the removal on the master control unit:

(a)   Do this task: Configuration Module Installation, TASK 44-21-18-400-801.

SUBTASK 44-21-01-400-001

(3)   Do these steps to install the MCU:

(a)   Make sure the IFE Master Power Switch in the VCC is set to the OFF position.

(b)   Remove the protective cover from the electrical connectors [2].

(c)   Exam electrical connectors [2] for bent or broken pins, dirt, and damage.

(d)   Position the MCU [1] in its location so that the connectors match the cables, and the screw holes align.

(e)   Install the screws [4] and washers [3].

(f)   Connect the cables to the MCU [1].

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SUBTASK 44-21-01-860-002

(4)   Remove the safety tags and close these circuit breakers:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

E.   Prepare for the Installation Test

SUBTASK 44-21-01-860-007

(1)   Initialize the IFES, and log in to the CABIN MAINTENANCE screen: Video Entertainment System - Activation, TASK 44-21-00-440-802.

F.   Master Control Unit Installation Test

SUBTASK 44-21-01-740-001

(1)   Do a Configuration Check: Configuration Check, TASK 44-21-00-700-801.

   (a)   Make sure that the LRUs are reporting.

SUBTASK 44-21-01-710-001

(2)   Do a Quick Test: Passenger Video System - Quick Test, TASK 44-21-00-700-802.

   (a)   Make sure that no faults are reported.

   (b)   Make sure that the zone powers up and remains powered.

G.   Put the Airplane Back to its Usual Condition

SUBTASK 44-21-01-410-001

(1)   For the applicable MCU, do this task: Main Ceiling Panel - Installation, TASK 25-21-45-400-803-001.

SUBTASK 44-21-01-860-008

(2)   If it is not necessary to continue to operate the system, then do this task: Video Entertainment System - Deactivation, TASK 44-21-00-040-801.

SUBTASK 44-21-01-860-003

(3)   If it is necessary do this task: Remove Electrical Power, TASK 24-22-00-860-812.

——— **END OF TASK** ———

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

44-21-01

D633A101-AKS

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CREW PANEL - REMOVAL/INSTALLATION

1.   **General**

A.   This procedure has two task:

(1)   Removal of the Crew Panel.

(2)   Installation of the Crew Panel.

TASK 44-21-03-000-801

2.   **Crew Panel Removal**
Figure 401 or Figure 402

A.   **General**

(1)   This task is the removal procedure for Crew Panel (CP).

(2)   The Crew Panels are located on the aft wall of LH lavatory..

(3)   When you remove the Crew Panel, do not supply electrical power to the system.

B.   **Location Zones**

Zone	Area
200	Upper Half of Fuselage

C.   **Removal Procedure**

SUBTASK 44-21-03-860-002

(1)   Do these steps to prepare the Crew Panel for removal:

(a)   Open these circuit breakers and install safety tags:

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027			
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

AKS 009-999

SUBTASK 44-21-03-020-005

(2)   Do these steps to remove the Integrated Control Panel shroud:

(a)   Pull and remove the SPIM face plate, if installed, from the side of the Integrated shroud.

(b)   Remove the screws (4 locations) from the Integrated shroud.

(c)   Remove the Integrated shroud.

AKS ALL

SUBTASK 44-21-03-020-001

(3)   Do these steps to remove the Crew Panel:

(a)   Disengage the four fasteners around the perimeter of the CP.

(b)   Tilt the top of the CP forward and down until the connectors are accessible.

EFFECTIVITY
AKS ALL

44-21-03

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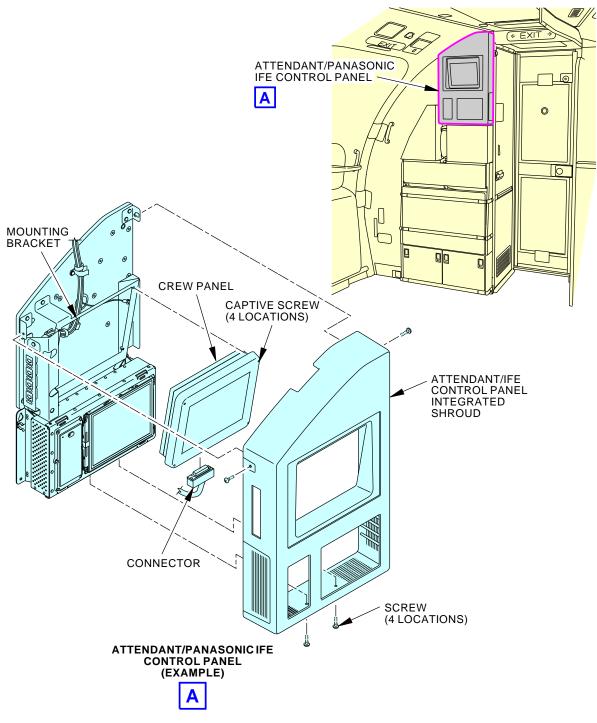
(c)   For the spring latched connector, release the spring latches.

(d)   Disconnect the cables and remove the CP.

     NOTE: Tag connectors for correct installation.

(e)   Remove the grounding strap.

(f)   Remove the CP.

(g)   Put protective covers on the electrical connectors.

———— **END OF TASK** ————

EFFECTIVITY

AKS ALL

44-21-03

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ATTENDANT/PANASONIC
IFE CONTROL PANEL

A

MOUNTING
BRACKET

CREW PANEL

CAPTIVE SCREW
(4 LOCATIONS)

ATTENDANT/IFE
CONTROL PANEL
INTEGRATED
SHROUD

CONNECTOR

SCREW
(4 LOCATIONS)

ATTENDANT/PANASONIC IFE
CONTROL PANEL
(EXAMPLE)

A

2356127 S0000536477_V2

Crew Panel Installation
Figure 401/44-21-03-990-805

EFFECTIVITY
AKS 009-999
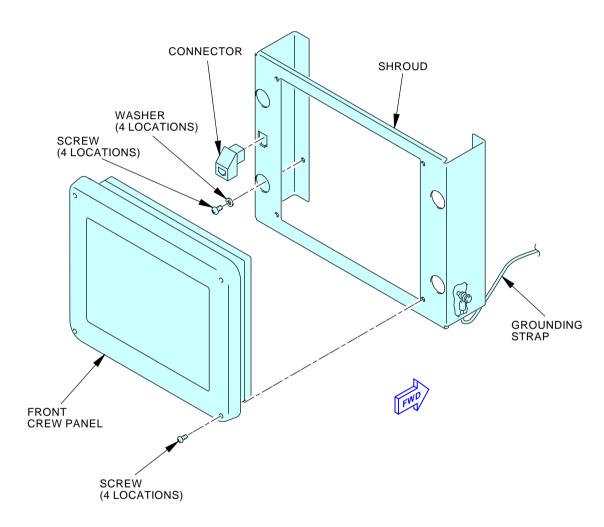
44-21-03

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CONNECTOR

SHROUD

WASHER
(4 LOCATIONS)

SCREW
(4 LOCATIONS)

FWD

GROUNDING
STRAP

FRONT
CREW PANEL

SCREW
(4 LOCATIONS)

CREW PANEL WITH SHROUD
(EXAMPLE)

U86710 S0000220948_V2

Crew Panel Installation
Figure 402/44-21-03-990-801

EFFECTIVITY
AKS 001-008

44-21-03

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AKS ALL

TASK 44-21-03-400-801

3. **Crew Panel Installation**
   Figure 401 or Figure 402

   A. **General**

   (1) This task is the installation procedure for the Crew Panel (CP).

   B. **References**

Reference	Title
24-22-00-860-812	Remove Electrical Power (P/B 201)
44-21-00-040-801	Video Entertainment System - Deactivation (P/B 201)
44-21-00-400-801	Load Software (P/B 201)
44-21-00-400-802	Media Load (P/B 201)
44-21-00-440-802	Video Entertainment System - Activation (P/B 201)
44-21-00-700-801	Configuration Check (P/B 201)
44-21-00-700-802	Passenger Video System - Quick Test (P/B 501)
44-21-00-700-803	Passenger Video System - Operational Test (P/B 501)

   C. **Location Zones**

Zone	Area
200	Upper Half of Fuselage

   D. **Crew Panel installation Procedure**

   SUBTASK 44-21-03-860-005

   (1) Make sure that these circuit breakers are open and have safety tags:

   F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

   F/O Electrical System Panel, P6-12

Row	Col	Number	Name

   AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

   AKS ALL

   SUBTASK 44-21-03-420-001

   (2) Do these steps to install the Crew Panel:

   (a) Remove the protective cover from the electrical connectors.

   (b) Connect the electrical cables to the CP.

   (c) Attach the connector with the spring latches.

   (d) Rotate the CP as required so that the connectors are on the bottom and place the CP in the opening.

   (e) Put the four fasteners around the perimeter of the CP.

EFFECTIVITY
AKS ALL

44-21-03

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AKS 009-999

SUBTASK 44-21-03-410-001

(3) Do these steps to install the Integrated Control Panel shroud:

(a) Put the Integrated shroud in position.

(b) Install the screws (4 locations) to the Integrated shroud.

(c) Push to install the SPIM face plate, if installed, to the side of the Integrated shroud.

AKS ALL

SUBTASK 44-21-03-860-001

(4) Remove the safety tags and close these circuit breakers:

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

F/O Electrical System Panel, P6-12

Row	Col	Number	Name

AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

AKS ALL

E. **Prepare for the Installation Test**

SUBTASK 44-21-03-860-020

(1) Initialize the IFES, and log in to the CABIN MAINTENANCE screen: Video Entertainment System - Activation, TASK 44-21-00-440-802.

SUBTASK 44-21-03-470-002

(2) If applicable, Load the IFE System Software: Load Software, TASK 44-21-00-400-801.

SUBTASK 44-21-03-470-003

(3) If applicable, Load the Media: Media Load, TASK 44-21-00-400-802.

F. **Crew Panel Installation Test:**

SUBTASK 44-21-03-740-001

(1) Do a Configuration Check: Configuration Check, TASK 44-21-00-700-801.

(a) Make sure that the LRUs are reporting.

SUBTASK 44-21-03-740-002

(2) Do a Quick Test: Passenger Video System - Quick Test, TASK 44-21-00-700-802.

(a) Make sure that no faults are reported.

SUBTASK 44-21-03-710-007

(3) Do an Operational Test: Passenger Video System - Operational Test, TASK 44-21-00-700-803.

G. **Put the Airplane Back to Its Initial Condition**

SUBTASK 44-21-03-860-021

(1) If it is not necessary to continue to operate the system, then do this task: Video Entertainment System - Deactivation, TASK 44-21-00-040-801.

EFFECTIVITY
AKS ALL

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SUBTASK 44-21-03-860-004

(2)   If it is necessary do this task: Remove Electrical Power, TASK 24-22-00-860-812.

─────── **END OF TASK** ───────

┌── EFFECTIVITY ──
AKS ALL

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FILE SERVER - REMOVAL/INSTALLATION

1. **General**

    A.   This procedure has two tasks:

    (1)   Removal of the File Server (FS).

    (2)   Installation of the File Server (FS).

    TASK 44-21-04-000-802

2. **File Server Removal**

    A.   **General**

    (1)   This task is the removal procedure for the File Server (FS).

    AKS 001-007, 009, 010, 013, 015-018, 020-025, 027

    (2)   The File Server is located in the E8-1 rack in the Fwd EE bay.

    AKS 001-025, 027

    (3)   When you remove the FS, do not supply electrical power to the system.

    B.   **References**

Reference	Title
20-10-07-000-801	E/E Box Removal (P/B 201)
20-40-12-000-802	ESDS Handling for Metal Encased Unit Removal (P/B 201)
20-40-12-400-804	Conductive Dust Cap and Connector Cover Installation (P/B 201)

    C.   **Location Zones**

Zone	Area
100	Lower Half of Fuselage
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right

    D.   **Prepare for the removal**

    SUBTASK 44-21-04-860-004

    (1)   Do these steps to prepare the File Server for the removal:

    (a)   Open these circuit breakers and install safety tags:

    F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

    F/O Electrical System Panel, P6-12

Row	Col	Number	Name

    AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

AKS 001-025, 027

SUBTASK 44-21-04-910-004

CAUTION: DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.
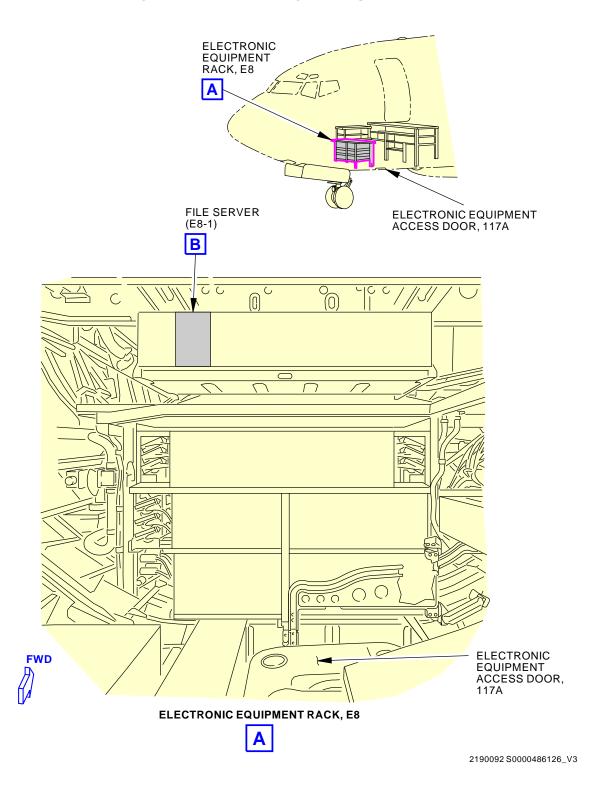
(2)   Before you touch the File Server, do the task: ESDS Handling for Metal Encased Unit Removal, TASK 20-40-12-000-802

(3)   To remove the File Server, do the task: E/E Box Removal, TASK 20-10-07-000-801

(4)   Do the task: Conductive Dust Cap and Connector Cover Installation, TASK 20-40-12-400-804

——— **END OF TASK** ———

EFFECTIVITY
AKS 001-025, 027

44-21-04

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ELECTRONIC
EQUIPMENT
RACK, E8

A

FILE SERVER
(E8-1)

B

ELECTRONIC EQUIPMENT
ACCESS DOOR, 117A

FWD

ELECTRONIC
EQUIPMENT
ACCESS DOOR,
117A

ELECTRONIC EQUIPMENT RACK, E8

A

2190092 S0000486126_V3

**File Server Installation
Figure 401/44-21-04-990-801 (Sheet 1 of 4)**

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-023

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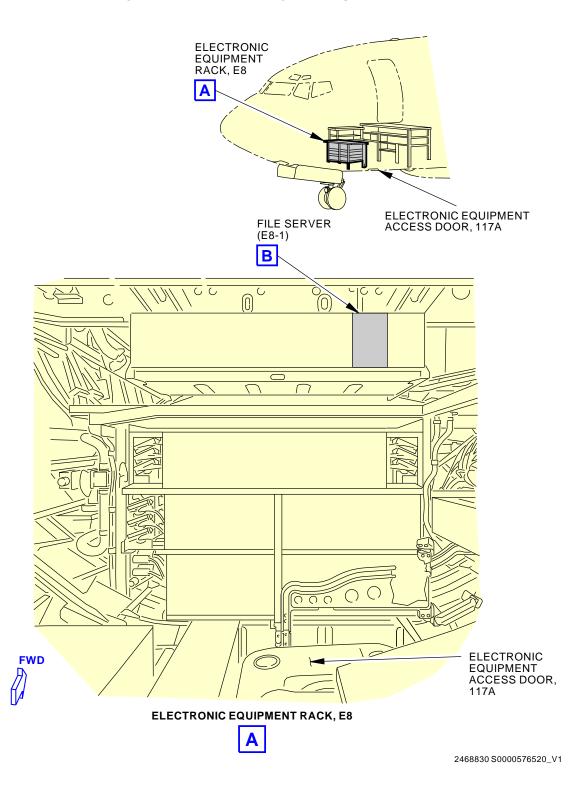
D633A101-AKS

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ELECTRONIC
EQUIPMENT
RACK, E8

A

FILE SERVER
(E8-1)

B

ELECTRONIC EQUIPMENT
ACCESS DOOR, 117A

FWD

ELECTRONIC
EQUIPMENT
ACCESS DOOR,
117A

ELECTRONIC EQUIPMENT RACK, E8

A

2468512 S0000576467_V1

**File Server Installation
Figure 401/44-21-04-990-801 (Sheet 2 of 4)**

D633A101-AKS

ELECTRONIC
EQUIPMENT
RACK, E8

A

FILE SERVER
(E8-1)

ELECTRONIC EQUIPMENT
ACCESS DOOR, 117A

B

FWD

ELECTRONIC
EQUIPMENT
ACCESS DOOR,
117A

ELECTRONIC EQUIPMENT RACK, E8

A

2468830 S0000576520_V1

File Server Installation
Figure 401/44-21-04-990-801 (Sheet 3 of 4)

EFFECTIVITY
AKS 024, 025, 027
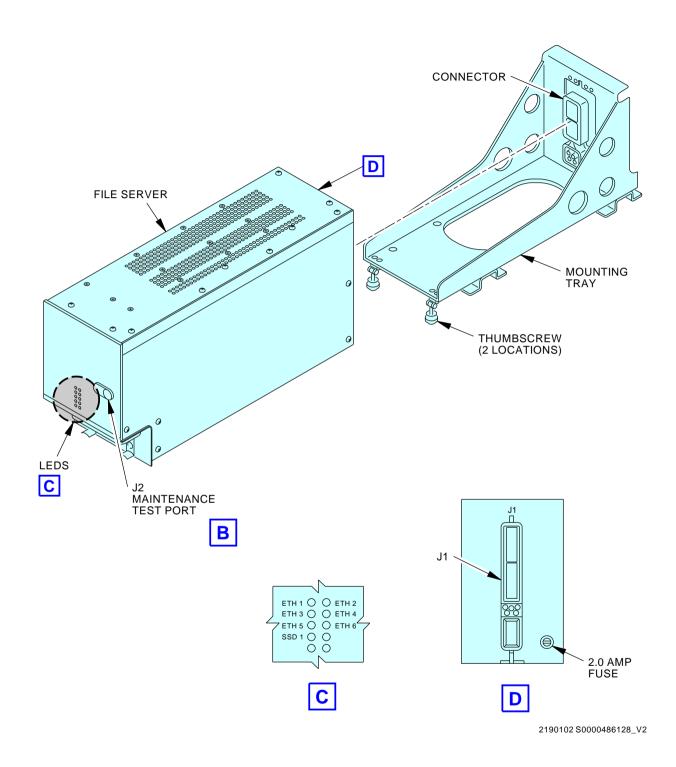
44-21-04

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D633A101-AKS

CONNECTOR

D

FILE SERVER

MOUNTING
TRAY

THUMBSCREW
(2 LOCATIONS)

LEDS

C

J2
MAINTENANCE
TEST PORT

B

ETH 1   ETH 2
ETH 3   ETH 4
ETH 5   ETH 6
SSD 1

C

J1

J1

2.0 AMP
FUSE

D

2190102 S0000486128_V2

File Server Installation
Figure 401/44-21-04-990-801 (Sheet 4 of 4)

EFFECTIVITY
AKS 001-007, 009, 010, 013, 015-018, 020-025, 027

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TASK 44-21-04-400-802

3. **File Server Installation**

    A. **General**

        (1)   This task is the installation procedure for the File Server (FS).

    B. **References**

Reference	Title
20-10-07-400-801	E/E Box Installation (P/B 201)
20-40-12-000-804	Conductive Dust Cap and Conductor Cover Removal (P/B 201)
24-22-00-860-812	Remove Electrical Power (P/B 201)
44-21-00-040-801	Video Entertainment System - Deactivation (P/B 201)
44-21-00-400-801	Load Software (P/B 201)
44-21-00-400-802	Media Load (P/B 201)
44-21-00-440-802	Video Entertainment System - Activation (P/B 201)
44-21-00-700-801	Configuration Check (P/B 201)
44-21-00-700-802	Passenger Video System - Quick Test (P/B 501)
44-21-00-700-803	Passenger Video System - Operational Test (P/B 501)

    C. **Location Zones**

Zone	Area
100	Lower Half of Fuselage

    D. **Do these steps to prepare the file server for installation:**

      SUBTASK 44-21-04-860-008

        (1)   Make sure that these circuit breakers are open:

           F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

           F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027			
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

      AKS 001-025, 027

      SUBTASK 44-21-04-860-006

        (2)   Do these steps to install the File Server:

      SUBTASK 44-21-04-910-005

        CAUTION: DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

        (3)   Before you touch the FS, do the task: E/E Box Installation, TASK 20-10-07-400-801.

      SUBTASK 44-21-04-020-003

        (4)   Do the task: Conductive Dust Cap and Conductor Cover Removal, TASK 20-40-12-000-804.

EFFECTIVITY
AKS 001-025, 027

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SUBTASK 44-21-04-420-004

(5)   To install the FS, do the task: E/E Box Installation, TASK 20-10-07-400-801.

E.   **Do these steps to make sure that power to the LRU is on:**

SUBTASK 44-21-04-860-005

(1)   Do these steps to make sure that power to the LRU is ON:

(a)   Remove the safety tags and close these circuit breakers:

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

F/O Electrical System Panel, P6-12

Row	Col	Number	Name

AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

AKS 001-025, 027

F.   **Prepare for the Installation Test**

SUBTASK 44-21-04-860-009

(1)   Initialize the IFES, and log in to the CABIN MAINTENANCE screen: Video Entertainment System - Activation, TASK 44-21-00-440-802.

SUBTASK 44-21-04-470-005

(2)   If applicable, Load the IFE System Software: Load Software, TASK 44-21-00-400-801.

SUBTASK 44-21-04-470-006

(3)   If applicable, Load the Media: Media Load, TASK 44-21-00-400-802.

G.   **File Server Installation Test**

SUBTASK 44-21-04-740-001

(1)   Do a Configuration Check: Configuration Check, TASK 44-21-00-700-801.

(a)   Make sure that the LRUs are reporting.

SUBTASK 44-21-04-740-002

(2)   Do a Content Status check: Configuration Check, TASK 44-21-00-700-801.

(a)   Make sure that all content loaded in the FS are reporting correctly.

SUBTASK 44-21-04-740-003

(3)   Do a Quick Test: Passenger Video System - Quick Test, TASK 44-21-00-700-802.

(a)   Make sure that no faults are reported.

SUBTASK 44-21-04-710-001

(4)   Do an Operational Test: Passenger Video System - Operational Test, TASK 44-21-00-700-803.

H.   **Put the Airplane Back to Its Usual Condition**

SUBTASK 44-21-04-860-010

(1)   If it is not necessary to continue to operate the system, then do this task: Video Entertainment System - Deactivation, TASK 44-21-00-040-801.

EFFECTIVITY
AKS 001-025, 027

44-21-04

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SUBTASK 44-21-04-030-001

(2)   If it is necessary do this task: Remove Electrical Power, TASK 24-22-00-860-812.

——— **END OF TASK** ———

EFFECTIVITY
AKS 001-025, 027

44-21-04

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1.   <u>General</u>

   A.   This procedure has these tasks:

      (1)   The removal of the Remote Jack Unit (RJU).

      (2)   The installation of the Remote Jack Unit (RJU).

   B.   The Audio Jacks provide connection for passenger entertainment headsets.

   TASK 44-21-06-000-801

2.   <u>Remote Jack Unit Removal</u>

(Figure 401)

   A.   **References**

Reference	Title
20-40-12-000-802	ESDS Handling for Metal Encased Unit Removal (P/B 201)
20-40-12-400-804	Conductive Dust Cap and Connector Cover Installation (P/B 201)

   B.   **Location Zones**

Zone	Area
200	Upper Half of Fuselage

   C.   **Removal Procedure**

SUBTASK 44-21-06-860-001

(1)   At the forward attendant panel, put the IFE Power switch to the OFF position.

SUBTASK 44-21-06-860-002

(2)   Open these circuit breakers and install safety tags:

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

SUBTASK 44-21-06-910-001

<u>CAUTION:</u> DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(3)   Before you touch the unit, refer to this task: ESDS Handling for Metal Encased Unit Removal, TASK 20-40-12-000-802.

SUBTASK 44-21-06-020-002

(4)   Do these steps to remove the Remote Jack Unit:

   (a)   Open the seat and get access to the mounting bracket that the RJU is secured on.

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

44-21-06

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CAUTION: DO NOT TOUCH THE CONNECTOR PINS, OR OTHER CONDUCTORS. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE COMPONENTS.
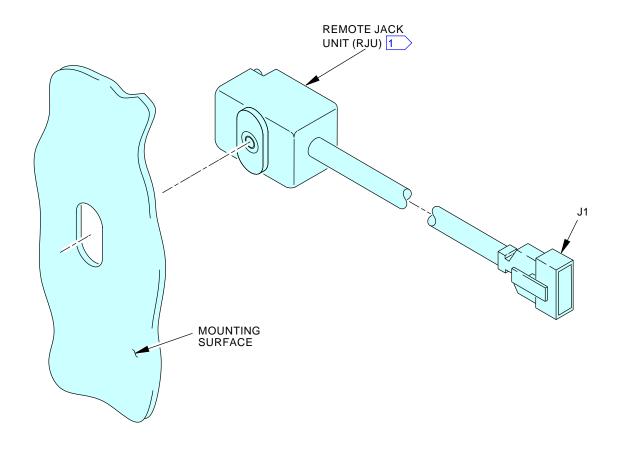
(b) Disconnect the electrical connector.

(c) Remove the screws that hold the RJU mounting bracket to its mounting surface.

(d) Remove the RJU.

SUBTASK 44-21-06-710-001

(5) Do this task: Conductive Dust Cap and Connector Cover Installation, TASK 20-40-12-400-804.
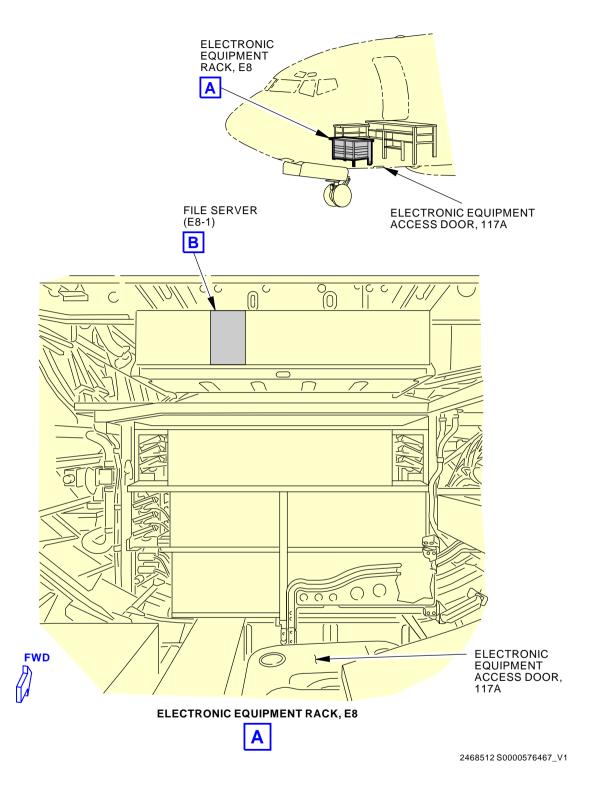
——— END OF TASK ———

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

44-21-06

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D633A101-AKS

REMOTE JACK
UNIT (RJU) 1

J1

MOUNTING
SURFACE

1 ⟩ IN SOME INSTALLATIONS, THE SCREW IS ATTACHED
FROM THE OPPOSITE SIDE.

2 ⟩ THE REMOTE JACK UNIT CAN LOOK DIFFERENT.

M7564

1971281 S0000378824_V2

Remote Jack Unit - Installation
Figure 401/44-21-06-990-801

┌─ EFFECTIVITY ─
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

44-21-06

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TASK 44-21-06-400-801

3. Remote Jack Unit Installation

(Figure 401)

A.   References

Reference	Title
20-40-12-000-804	Conductive Dust Cap and Conductor Cover Removal (P/B 201)
20-40-12-400-802	ESDS Handling for Metal Encased Unit Installation (P/B 201)
24-22-00-860-812	Remove Electrical Power (P/B 201)
44-21-00-040-801	Video Entertainment System - Deactivation (P/B 201)
44-21-00-440-802	Video Entertainment System - Activation (P/B 201)

B.   Tools/Equipment

Reference	Description
STD-6722	Passenger Headset

C.   Location Zones

Zone	Area
200	Upper Half of Fuselage

D.   Installation Procedure

SUBTASK 44-21-06-860-003

(1)   At the forward attendant panel, make sure IFE Power switch is set to the OFF position.

SUBTASK 44-21-06-860-004

(2)   Make sure that these circuit breakers are open and have safety tags:

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

SUBTASK 44-21-06-910-002

CAUTION: DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(3)   Before you touch the unit, refer to this task: ESDS Handling for Metal Encased Unit Installation, TASK 20-40-12-400-802.

SUBTASK 44-21-06-910-003

(4)   Do this task: Conductive Dust Cap and Conductor Cover Removal, TASK 20-40-12-000-804.

SUBTASK 44-21-06-400-001

CAUTION: DO NOT TOUCH THE CONNECTOR PINS, OR OTHER CONDUCTORS. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE COMPONENTS.

(5)   Do these steps to Install the Remote Jack Unit:

┌─ EFFECTIVITY ─
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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(a) Remove the protective covers from the electrical connector.

(b) Examine the electrical connector for bent or broken pins, dirt, and damage.

(c) Connect the electrical connectors for the RJU.

(d) Carefully put the RJU in its position and place it against the mounting bracket.

(e) Install the screws that hold the RJU mounting bracket to its mounting surface.

   NOTE: Make sure the RJU is secure.

SUBTASK 44-21-06-710-002

(6) Remove the safety tags and close these circuit breakers:

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

SUBTASK 44-21-06-860-005

(7) At the forward attendant panel, put the IFE Power switch to the ON position.

E. Prepare for the Installation Test

SUBTASK 44-21-06-860-006

(1) Initialize the IFES, and log in to the CABIN MAINTENANCE screen: Video Entertainment System - Activation, TASK 44-21-00-440-802.

F. Remote Jack Unit Installation Test

SUBTASK 44-21-06-710-003

(1) To do the In-Seat Audio Test, do the steps that follow:

(a) Provide an audio source to the repaired RJU.

(b) Connect a passenger headset, STD-6722 to the RJU.

(c) Make sure that audio is heard in the passenger headset, STD-6722.

G. Put the Airplane Back to Its Usual Condition

SUBTASK 44-21-06-860-007

(1) If it is not necessary to continue to operate the system, then do this task: Video Entertainment System - Deactivation, TASK 44-21-00-040-801.

SUBTASK 44-21-06-860-008

(2) If it is necessary do this task: Remove Electrical Power, TASK 24-22-00-860-812.

——— **END OF TASK** ———

EFFECTIVITY
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1. **General**

    A. This procedure has these tasks:

        (1) The removal of the Smart Display Unit (SDU).

        (2) The installation of the Smart Display Unit (SDU).

    B. The SDU is can also be referred to as the Smart Video Display Unit (SVDU).

    TASK 44-21-07-000-801

2. **Seat Back Smart Display Unit Removal**

    (Figure 401)

    A. **General**

        (1) This task is the removal procedure for the Smart Display Unit monitor.

        (2) The SDUs are located on the back of each passenger seat.

        (3) When you remove the SDU monitor, do not supply electrical power to the system.

    B. **References**

Reference	Title
20-40-12-000-802	ESDS Handling for Metal Encased Unit Removal (P/B 201)

    C. **Location Zones**

Zone	Area
200	Upper Half of Fuselage

    D. **Removal Procedure**

    SUBTASK 44-21-07-860-001

        (1) Do these steps to prepare the SDU for removal:

            (a) Open these circuit breakers and install safety tags:

            F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

            F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

            (b) Make sure that the IFE/PC power switch on P13 attendant panel is set to the OFF position.

    SUBTASK 44-21-07-910-001

    CAUTION: DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

        (2) Before you touch the SDU, do the task: ESDS Handling for Metal Encased Unit Removal, TASK 20-40-12-000-802.

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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SUBTASK 44-21-07-020-005

(3)   Do these steps to remove the SDU:

    (a)   Remove the headrest.

    (b)   Remove the seat fabric.

        NOTE: The seat fabrics are attached by a Velcro strap at the top of the backrest.

    (c)   Remove the back cushion.

    (d)   Remove the screws that hold the SDU to the mounting plate.

        NOTE: The mounting plate will remain as part of the seat tilt mechanism.

    (e)   Disconnect the SDU connector(s).

    (f)   Remove the SDU monitor.

    (g)   Put protective covers on the electrical connectors.

SUBTASK 44-21-07-020-010
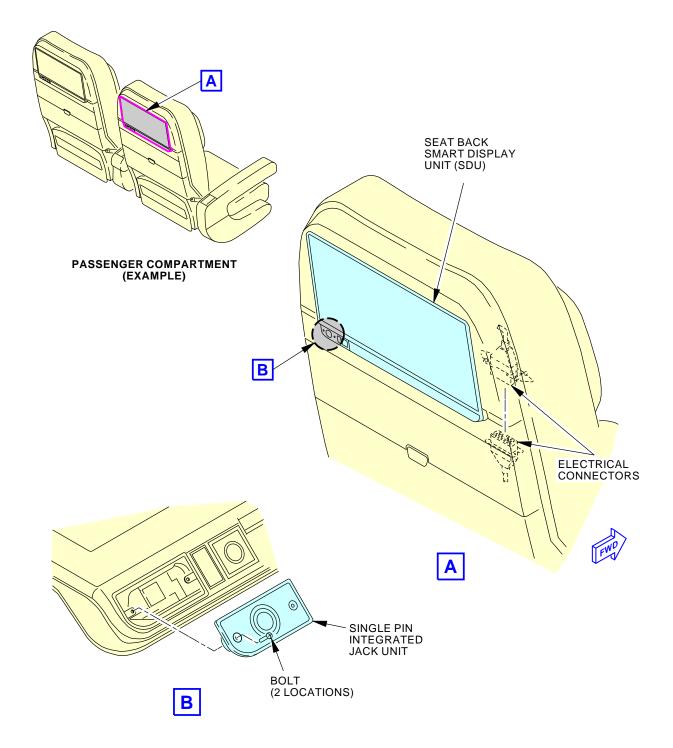
(4)   Do these steps to remove the Audio Integrated Jack Unit (AIJU):

NOTE: The in-arm seat monitor does not need to be removed to remove the AIJU.

    (a)   Use a 5/64 Allen wrench to loosen the two socket cap screws.

    (b)   Remove the AIJU from the SDU.

——— **END OF TASK** ———

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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A

**PASSENGER COMPARTMENT
(EXAMPLE)**

SEAT BACK
SMART DISPLAY
UNIT (SDU)

B

ELECTRICAL
CONNECTORS

A

FWD

SINGLE PIN
INTEGRATED
JACK UNIT

BOLT
(2 LOCATIONS)

B

2243501 S0000501943_V2

**Seat Back Smart Display Unit
Figure 401/44-21-07-990-801**

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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TASK 44-21-07-400-801

3. <u>Seat Back Smart Display Unit Installation</u>

(Figure 401)

A. **General**

(1) This task is the installation procedure for the Smart Display Unit (SDU).

(2) The SDUs are located on the back of each passenger seat.

(3) When you install the SDU do not supply electrical power to the system.

B. **References**

Reference	Title
20-40-12-400-802	ESDS Handling for Metal Encased Unit Installation (P/B 201)
24-22-00-860-812	Remove Electrical Power (P/B 201)
44-21-00-040-801	Video Entertainment System - Deactivation (P/B 201)
44-21-00-440-802	Video Entertainment System - Activation (P/B 201)
44-21-00-700-801	Configuration Check (P/B 201)
44-21-00-700-802	Passenger Video System - Quick Test (P/B 501)
44-21-00-700-803	Passenger Video System - Operational Test (P/B 501)

C. **Location Zones**

Zone	Area
200	Upper Half of Fuselage

D. **Installation Procedure**

SUBTASK 44-21-07-860-004

(1) Do these steps to prepare for installation:

(a) Make sure that the IFE/PC power switch on P13 attendant panel is set to the OFF position.

(b) Make sure that these circuit breakers are open:

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

SUBTASK 44-21-07-860-013

CAUTION: DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(2) Before you touch the SDU, refer to this task: ESDS Handling for Metal Encased Unit Installation, TASK 20-40-12-400-802.

SUBTASK 44-21-07-420-005

(3) Do these steps to install the SDU:

(a) Remove the protective cover from the electrical connectors.

── EFFECTIVITY ──
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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(b)   Examine the electrical connectors for bent or broken pins, dirt, and damage.

(c)   Connect the electrical connectors.

(d)   Tighten the screws that hold the SDU to the mounting plate.

(e)   Install the back cushion.

(f)   Install the seat fabric.

(g)   Install the headrest.

SUBTASK 44-21-07-420-010

(4)   Do these steps to install the Audio Integrated Jack Unit (AIJU):

(a)   Put the AIJU into the SDU.

(b)   Use a 5/64 Allen wrench to tighten the two socket cap screws.

NOTE: Maximum torque value is 1.5 in-lbs (0.17 N-m).

SUBTASK 44-21-07-860-002

(5)   Do these steps to make sure that power to the SDU is ON:

(a)   Remove the safety tags and close these circuit breakers:

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

(b)   Make sure that the IFE/PC power switch on P13 attendant panel is set to the ON position.

E.   Prepare for the Installation Test

SUBTASK 44-21-07-860-017

(1)   Initialize the IFES, and log in to the CABIN MAINTENANCE screen: Video Entertainment System - Activation, TASK 44-21-00-440-802.

F.   Smart Display Unit Installation Test

SUBTASK 44-21-07-740-005

(1)   Do a Configuration Check: Configuration Check, TASK 44-21-00-700-801.

(a)   Make sure that the LRUs are reporting.

SUBTASK 44-21-07-740-006

(2)   Do a Quick Test: Passenger Video System - Quick Test, TASK 44-21-00-700-802.

(a)   Make sure that no faults are reported.

SUBTASK 44-21-07-710-016

(3)   Do an Operational Test: Passenger Video System - Operational Test, TASK 44-21-00-700-803.

G.   Put the Airplane Back in Its Initial Condition

SUBTASK 44-21-07-860-018

(1)   If it is not necessary to continue to operate the system, then do this task: Video Entertainment System - Deactivation, TASK 44-21-00-040-801.

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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SUBTASK 44-21-07-860-019

(2)   If it is necessary do this task: Remove Electrical Power, TASK 24-22-00-860-812.

———— **END OF TASK** ————

—— EFFECTIVITY ——
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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MULTI-FUNCTION HANDSET - REMOVAL/INSTALLATION

1. **General**

    A. This procedure has these task:

    (1) Removal of the Multifunction Handset.

    (2) Removal of the Multifunction Handset Cradle with Cord Reel.

    (3) Installation of the Multifunction Handset.

    (4) Installation of the Multifunction Handset Cradle with Cord Reel.

    TASK 44-21-09-000-801

2. **Multi-Function Handset Removal**

    A. **General**

    (1) The Multi-Function handset is located in the arm-rest of each passenger seat in the Business Class.

    B. **Location Zones**

Zone	Area
200	Upper Half of Fuselage

    C. **Removal Procedure**

    SUBTASK 44-21-09-860-001

    (1) Do these steps to prepare the handset for removal:

    (a) Set the IFE/PC power switch on P13 attendant panel to the OFF position.

    (b) Open these circuit breakers and install safety tags:

    F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD
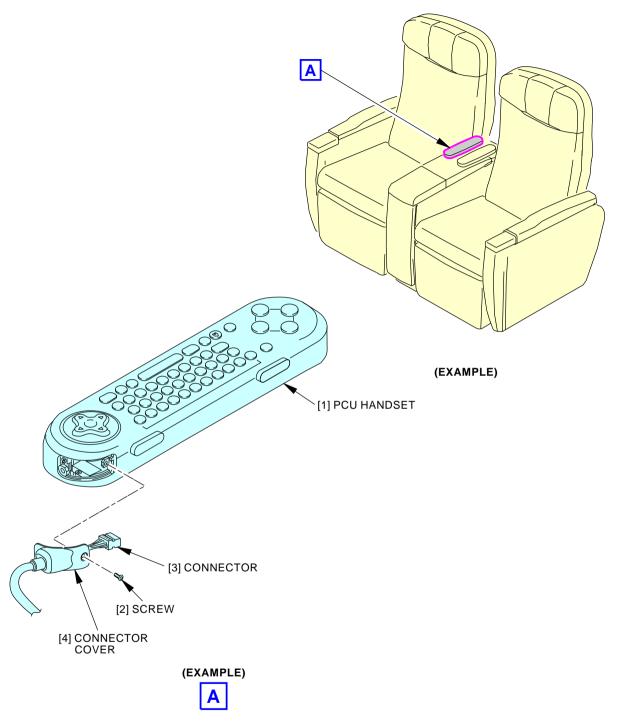
    SUBTASK 44-21-09-020-001

    (2) Do these steps to remove the Handset:

    (a) Remove the Handset from the cradle.

    (b) Loosen one screw from the connector plug (screw is retained in plug).

    (c) Disconnect the cable from the Handset.

    (d) Remove the handset.

    —————— **END OF TASK** ——————

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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A

(EXAMPLE)

[1] PCU HANDSET

[3] CONNECTOR

[2] SCREW

[4] CONNECTOR
COVER

(EXAMPLE)

A

1358617 S0000244230_V2

Multi-Function Passenger Control Unit Handset Installation
Figure 401/44-21-09-990-801

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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TASK 44-21-09-400-801

3. **Multi-Function Handset Installation**

    Figure 401

    A. **References**

Reference	Title
24-22-00-860-812	Remove Electrical Power (P/B 201)
44-21-00-040-801	Video Entertainment System - Deactivation (P/B 201)
44-21-00-440-802	Video Entertainment System - Activation (P/B 201)
44-21-00-700-801	Configuration Check (P/B 201)
44-21-00-700-802	Passenger Video System - Quick Test (P/B 501)
44-21-00-700-803	Passenger Video System - Operational Test (P/B 501)

    B. **Location Zones**

Zone	Area
200	Upper Half of Fuselage

    C. **Installation Procedure**

    SUBTASK 44-21-09-860-002

    (1) Do these steps to prepare for the installation:

        (a) Make sure the IFE/PC power switch on P13 attendant panel is set to the OFF position.

        (b) Make sure that these circuit breakers are open and have safety tags:

        F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

    SUBTASK 44-21-09-420-001

    (2) Do these steps to install the Multi-Function Handset:

        (a) Connect the electrical cable to the Handset.

        (b) Reinstall connector plug with one screw.

        (c) Put the Handset into the Cradle.

        NOTE: If the Handset does not fit into the Cradle properly, light pressure on the lower corners of the unit is sufficient to seat the connectors.

    SUBTASK 44-21-09-860-004

    (3) Close these circuit breakers:

        F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

    D. **Prepare for the Installation Test**

    SUBTASK 44-21-09-860-006

    (1) Initialize the IFES, and log in to the CABIN MAINTENANCE screen: Video Entertainment System - Activation, TASK 44-21-00-440-802.

E.   **Installation Test**

SUBTASK 44-21-09-740-001

(1)   Do a Configuration Check: Configuration Check, TASK 44-21-00-700-801.

(a)   Make sure that the LRUs are reporting.

SUBTASK 44-21-09-740-002

(2)   Do a Quick Test: Passenger Video System - Quick Test, TASK 44-21-00-700-802.

(a)   Make sure that no faults are reported.

SUBTASK 44-21-09-710-001

(3)   Do an Operational Test: Passenger Video System - Operational Test, TASK 44-21-00-700-803.

F.   **Put the airplane back to its initial condition**

SUBTASK 44-21-09-860-007

(1)   If it is not necessary to continue to operate the system, then do this task: Video Entertainment System - Deactivation, TASK 44-21-00-040-801.

SUBTASK 44-21-09-860-008

(2)   If necessary do this task: Remove Electrical Power, TASK 24-22-00-860-812.

——— **END OF TASK** ———

TASK 44-21-09-000-802

4.   **Multifunction Handset Cradle with Cord Removal**

A.   **Location Zones**

Zone	Area
200	Upper Half of Fuselage

B.   **Removal Procedure**

SUBTASK 44-21-09-020-002

(1)   Do these steps to prepare the handset cradle for removal:

(a)   Set the IFE/PC power switch on P13 attendant panel to the OFF position.

(b)   Open these circuit breakers and install safety tags:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

SUBTASK 44-21-09-020-004

(2)   Do the task: Multi-Function Handset Removal, TASK 44-21-09-000-801

SUBTASK 44-21-09-020-003
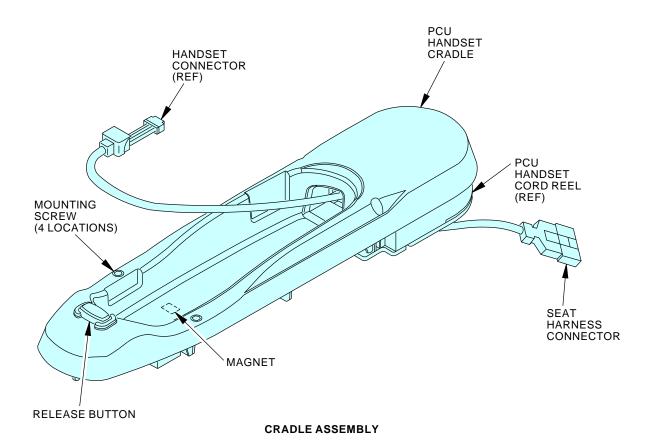
(3)   Do these steps to remove the handset cradle assembly:

(a)   Disengage the four quarter-turn fasteners that secure the Cradle to the base unit.

(b)   Remove the cradle.

SUBTASK 44-21-09-020-005

(4)   Do this step to remove the Cord Reel:

(a)   Remove the Cord Reel from the Cradle.

——— **END OF TASK** ———

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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PCU
HANDSET
CRADLE

HANDSET
CONNECTOR
(REF)

PCU
HANDSET
CORD REEL
(REF)

MOUNTING
SCREW
(4 LOCATIONS)

SEAT
HARNESS
CONNECTOR

MAGNET

RELEASE BUTTON

CRADLE ASSEMBLY

U91947 S0000223659_V3

**Multi-Function Handset Cradle Installation
Figure 402/44-21-09-990-802**

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TASK 44-21-09-400-802

5. **Multifunction Handset Cradle with Cord Reel Installation**
   Figure 402

   A. **Location Zones**

Zone	Area
200	Upper Half of Fuselage

   B. **Installation Procedure**

   SUBTASK 44-21-09-860-003

   (1) Do these steps to prepare for installation:

      (a) Make sure the IFE/PC power switch on P13 attendant panel is set to the OFF position

      (b) Make sure that these circuit breakers are open and have safety tags:

      F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

   SUBTASK 44-21-09-420-002

   (2) Do this step to install the Cord Reel:

      (a) Install the Cord Reel into the Cradle.

   SUBTASK 44-21-09-400-001

   (3) Do this step to install the Handset Cradle:

      (a) Place the Cradle into base unit and tighten the two quarter-turn fasteners to secure the Cradle to the base unit.

   SUBTASK 44-21-09-400-002

   (4) Do this task: Multi-Function Handset Installation, TASK 44-21-09-400-801

   SUBTASK 44-21-09-860-005

   (5) Remove the safety tags and close these circuit breakers:

      F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

   (6) Set the IFE/PC power switch on P13 attendant panel to the ON position.

   C. **Installation Test**

   SUBTASK 44-21-09-700-002

   (1) Do this test of the Multi-Function Handset:

      (a) Select the IFE/PC power switch on P13 attendant panel to the ON position.

         NOTE: Wait approximately 5 minutes for system power up sequence and MAIN MENU screen to appear.

         1) Make sure the handset is operational to maneuver through different screens and functionality.

─────── **END OF TASK** ───────

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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SEAT ELECTRONICS BOX - REMOVAL/INSTALLATION

1. **General**

    A. This procedure has two tasks:

        (1) Removal of the Seat Electronics Box.

        (2) Installation of the Seat Electronics Box.

    B. The Zone Terminator (ZT) is removed and installed the same as an SEB.

        (1) The ZT is an SEB without the video support.

        (2) The ZTs are usually installed in the last row of seats without seatback displays.

   TASK 44-21-11-000-801

2. **Seat Electronics Box Removal**

    (Figure 401)

    A. **General**

        (1) This task is the removal procedure for the Seat Electronics Box (SEB).

        (2) The SEB is installed in the seat pan of the passenger seat.

        (3) When you remove the SEB, do not supply the electrical power to the system.

    B. **References**

Reference	Title
20-40-12-000-802	ESDS Handling for Metal Encased Unit Removal (P/B 201)

    C. **Location Zones**

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Right
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

    D. **Removal Procedure**

    SUBTASK 44-21-11-860-001

        (1) Do these steps to prepare the SEB for removal:

            (a) Open these circuit breakers and install safety tags:

    F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

    F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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SUBTASK 44-21-11-860-006

CAUTION: DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(2)   Before you touch the SEB, do this task: ESDS Handling for Metal Encased Unit Removal, TASK 20-40-12-000-802.

SUBTASK 44-21-11-000-001

(3)   Do these steps to get access to the SEB:

NOTE: The SEB is installed under the seat.

(a)   Remove the bottom seat cushion.

(b)   Remove the seat pan.

NOTE: It may be necessary to remove other seat components like seat arms or seat belts.

SUBTASK 44-21-11-020-002
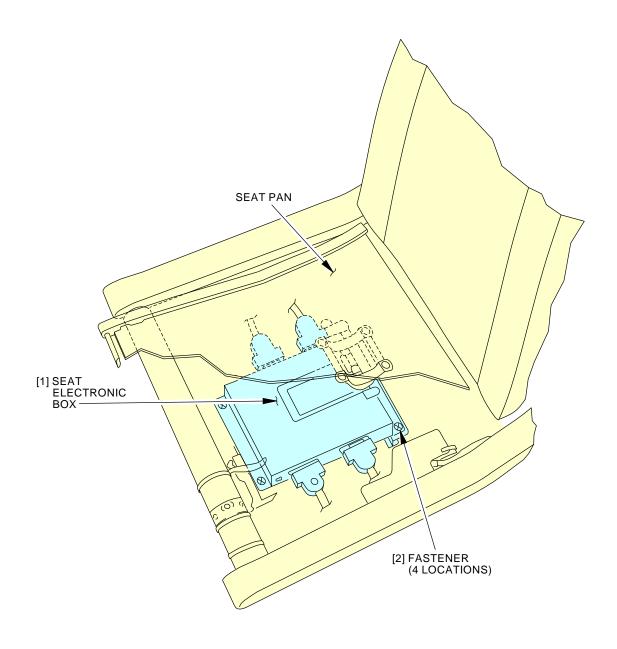
(4)   Do these steps to remove the SEB:

(a)   Remove the electrical connectors attached to the SEB.

NOTE: Do not remove the EMI filter (if applicable) from the in-seat harness when you remove the electrical connectors.

(b)   Remove the four fasteners that attach the SEB to the seat

(c)   Remove the SEB.

(d)   Place protective covers on the electrical connectors.

———— END OF TASK ————

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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SEAT PAN

[1] SEAT
ELECTRONIC
BOX

[2] FASTENER
(4 LOCATIONS)

PASSENGER SEAT
(EXAMPLE)

1870347 S0000331718_V2
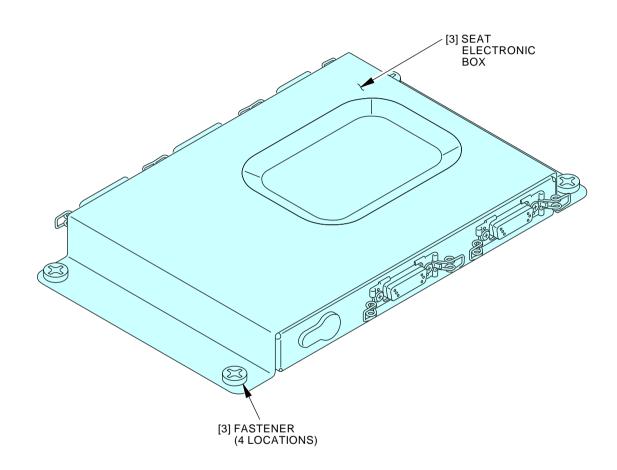
Seat Electronics Box (SEB) Installation
Figure 401/44-21-11-990-801 (Sheet 1 of 2)

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EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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[3] SEAT
ELECTRONIC
BOX

[3] FASTENER
(4 LOCATIONS)

1871826 S0000335484_V2

**Seat Electronics Box (SEB) Installation
Figure 401/44-21-11-990-801 (Sheet 2 of 2)**

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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TASK 44-21-11-400-801

3. <u>Seat Electronics Box Installation</u>

(Figure 401)

A. **General**

(1) This task is the installation procedure for the seat electronics box (SEB).

B. **References**

Reference	Title
20-40-12-400-802	ESDS Handling for Metal Encased Unit Installation (P/B 201)
24-22-00-860-812	Remove Electrical Power (P/B 201)
44-21-00-040-801	Video Entertainment System - Deactivation (P/B 201)
44-21-00-440-802	Video Entertainment System - Activation (P/B 201)
44-21-00-700-801	Configuration Check (P/B 201)
44-21-00-700-802	Passenger Video System - Quick Test (P/B 501)
44-21-00-700-803	Passenger Video System - Operational Test (P/B 501)
44-21-00-800-803	LRU Readdress (P/B 201)

C. **Location Zones**

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Right
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

D. **Installation Procedure**

SUBTASK 44-21-11-840-002

CAUTION: DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(1) Before you touch the SEB, do this task: ESDS Handling for Metal Encased Unit Installation, TASK 20-40-12-400-802.

SUBTASK 44-21-11-860-005

(2) Make sure that these circuit breakers are open and have safety tags:

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

SUBTASK 44-21-11-420-002

(3) Do these steps to install the SEB:

(a) Remove the electrical connector covers.

(b) Examine the electrical connectors for bent or broke pins, dirt, and damage.

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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    (c)   Place the SEB [1] on its mounting surface inside the seat.

    (d)   Install the fasteners [2] to secure the SEB [1].

    (e)   Connect the electrical connectors to the SEB [1].

SUBTASK 44-21-11-410-001

(4)   To return the seat to its usual condition, do these steps:

    (a)   Install the seat pan.

        <u>NOTE</u>: It may be necessary to install other seat components like seat arms or seat belts.

    (b)   Install the seat cushion.

SUBTASK 44-21-11-860-004

(5)   Remove the safety tags and close these circuit breakers:

F/O Electrical System Panel, P6-1

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
B	9	C01945	IFE AC
B	10	C01952	IFE DC

F/O Electrical System Panel, P6-12

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

E.   Prepare for the Installation Test

SUBTASK 44-21-11-860-012

(1)   Initialize the IFES, and log in to the CABIN MAINTENANCE screen: Video Entertainment System - Activation, TASK 44-21-00-440-802.

SUBTASK 44-21-11-860-009

(2)   If necessary do the task:LRU Readdress, TASK 44-21-00-800-803.

F.   Seat Electronics Box Installation Test

SUBTASK 44-21-11-740-001

(1)   Do a Quick Test: Passenger Video System - Quick Test, TASK 44-21-00-700-802.

    (a)   Make sure that no faults are reported.

SUBTASK 44-21-11-740-002

(2)   Do a Configuration Check: Configuration Check, TASK 44-21-00-700-801.

    (a)   Make sure that the LRUs are reporting.

SUBTASK 44-21-11-710-006

(3)   Do an Operational Test: Passenger Video System - Operational Test, TASK 44-21-00-700-803.

G.   Put the Airplane Back in its Usual Condition

SUBTASK 44-21-11-860-013

(1)   If it is not necessary to continue to operate the system, then do this task: Video Entertainment System - Deactivation, TASK 44-21-00-040-801.

SUBTASK 44-21-11-860-003

(2)   Do these steps at the forward attendant panel:

    (a)   Select Passenger Services, and press the Entertainment OFF button to power off the IFE system.

(3)   If necessary do this task: Remove Electrical Power, TASK 24-22-00-860-812.

——— **END OF TASK** ———

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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IN-SEAT POWER SUPPLY REMOVAL/INSTALLATION

1. **General**

   A. This procedure has these tasks:

      (1) Removal of an In-Seat Power Supply (ISPS).

      (2) Installation of an ISPS.

   TASK 44-21-14-000-801

2. **In-Seat Power Supply Removal**

   A. **General**

      (1) The task is the removal procedure for the In-Seat Power Supply (ISPS).

      (2) The ISPS's are installed below the passenger seat.

      (3) When you remove the ISPS, do not supply electrical power to the system.

   B. **Location Zones**

Zone	Area
200	Upper Half of Fuselage

   C. **Prepare for the Removal**

   SUBTASK 44-21-14-860-001

      (1) Do these steps to prepare the ISPS for removal:

         (a) Open these circuit breakers and install safety tags:

         F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

   SUBTASK 44-21-14-020-001

      (2) Do these steps to remove the ISPS:

         CAUTION: DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.
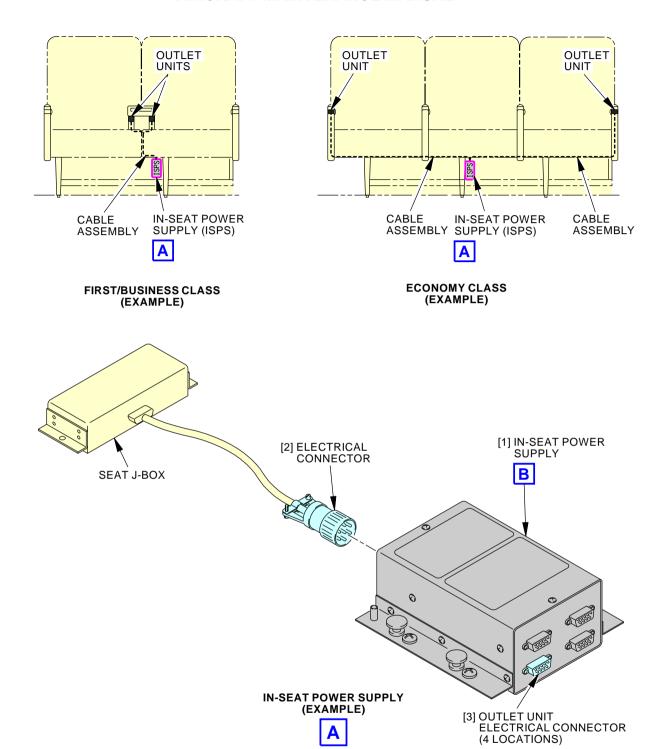
         (a) Get access to the ISPS [1] below the passenger seat.

         (b) Remove the electrical connectors.

         (c) Tag the electrical connectors for identification.

         (d) Loosen the quarter-turn fasteners that hold the ISPS to the mounting assembly.

         (e) Remove the nuts, washers, and spacers (if applicable).

         (f) Put protective covers on the electrical connectors.

—————— **END OF TASK** ——————

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

44-21-14

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OUTLET
UNITS

OUTLET
UNIT

OUTLET
UNIT

CABLE
ASSEMBLY

IN-SEAT POWER
SUPPLY (ISPS)

CABLE
ASSEMBLY

IN-SEAT POWER
SUPPLY (ISPS)

CABLE
ASSEMBLY

A

A

**FIRST/BUSINESS CLASS
(EXAMPLE)**

**ECONOMY CLASS
(EXAMPLE)**

SEAT J-BOX

[2] ELECTRICAL
CONNECTOR

[1] IN-SEAT POWER
SUPPLY

B

**IN-SEAT POWER SUPPLY
(EXAMPLE)**

A

[3] OUTLET UNIT
ELECTRICAL CONNECTOR
(4 LOCATIONS)

U86402 S0000220792_V3

**In-Seat Power Supply Installation
Figure 401/44-21-14-990-801 (Sheet 1 of 2)**

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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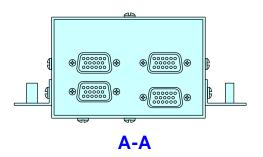
**IN-SEAT POWER SUPPLY
(TOP VIEW)**

B

A-A

U86395 S0000220793_V3

**In-Seat Power Supply Installation
Figure 401/44-21-14-990-801 (Sheet 2 of 2)**

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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TASK 44-21-14-400-801

3. **In-Seat Power Supply Installation**

Figure 401

A. **General**

(1) This task is the installation procedure for the In-Seat Power Supply (ISPS)

B. **References**

Reference	Title
24-22-00-860-812	Remove Electrical Power (P/B 201)
44-21-16-700-801	PC Power System - Operational Test (P/B 501)

C. **Location Zones**

Zone	Area
200	Upper Half of Fuselage

D. **In-Seat Power Supply Installation**

SUBTASK 44-21-14-860-003

(1) Make sure that these circuit breakers are open and have safety tags:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

SUBTASK 44-21-14-400-001

(2) Do these steps to install the ISPS:

   (a) Remove the electrical connector covers.

   (b) Examine the electrical connectors for bent or broken pins, dirt and damage.

   (c) Put the spacers in place if applicable.

   (d) Put the ISPS [1] on its mounting surface below the seat.

   (e) Put the washers and nuts in place on the bracket if applicable.

   (f) Install the quarter-turn fasteners.

   (g) Turn and tighten the quarter-turn fasteners.

   (h) Install the electrical connectors.

   (i) Make sure that the outlet unit connectors are on the correct jacks.

SUBTASK 44-21-14-860-002

(3) Remove the safety tags and close these circuit breakers:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

E. **In-Seat Power Supply Installation Test**

SUBTASK 44-21-14-700-001

(1) Do theses steps to do a test of the PC Power System:

   (a) Put the IFE switch located on(P5-13) to the ON position.

   (b) Do this task: PC Power System - Operational Test, TASK 44-21-16-700-801

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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    1)   Do a check of the seat group that has the new ISPS.

    2)   Do a check of all groups aft in the same seat column.

F.   Put the Airplane Back in Its Initial Condition

SUBTASK 44-21-14-620-001

(1)   Do these steps to put the Airplane back in its initial condition

    (a)   Remove electrical power if necessary: Remove Electrical Power, TASK 24-22-00-860-812

——— **END OF TASK** ———

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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OUTLET UNIT - REMOVAL/INSTALLATION

1.   **General**

A.   This procedure has these tasks:

(1)   Removal of the Outlet Unit

(2)   Installation of the Outlet Unit

TASK 44-21-15-000-801

2.   **Outlet Unit Removal**

A.   **General**

(1)   This task is the removal procedure for the Outlet Unit.

(2)   The Outlet Units are located in the passenger armrest or front of passenger seat (as installed).

(3)   When you remove the Outlet Unit, do not supply electrical power to the system.

B.   **Location Zones**

Zone	Area
200	Upper Half of Fuselage

C.   **Prepare for the removal**

SUBTASK 44-21-15-865-001

(1)   Do these steps to prepare the outlet unit for removal:

(a)   Open these circuit breakers and install safety tags:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD
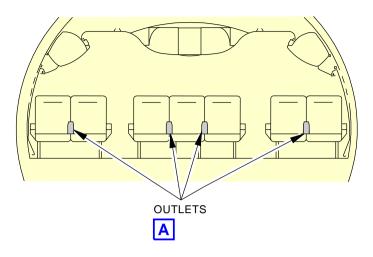
SUBTASK 44-21-15-020-001

(2)   Do these steps to remove the Outlet Unit [1]:

(a)   Get access to the outlet unit electrical connector [3] under the passenger seat.

(b)   Disconnect the electrical connector [3].

(c)   Remove the screws [2] from the outlet unit front panel.

(d)   Remove the screws from the outlet unit backing plate (if installed).

(e)   Remove the outlet unit [1] assembly.
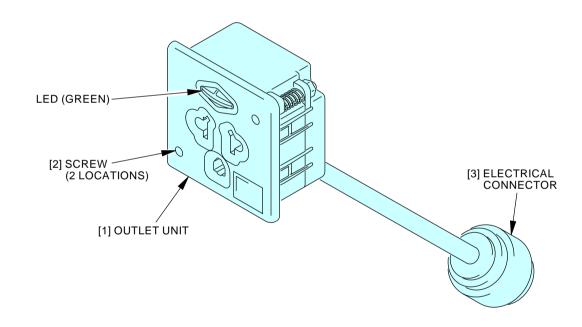
NOTE: For outlets installed in Business Class seats, make sure the electrical connector does not fall back into the seat panel.

——— **END OF TASK** ———

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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OUTLETS

A

PASSENGER COMPARTMENT
(EXAMPLE)

LED (GREEN)

[2] SCREW
(2 LOCATIONS)

[3] ELECTRICAL
CONNECTOR

[1] OUTLET UNIT

OUTLET
(EXAMPLE)

A

1375919 S0000249931_V3

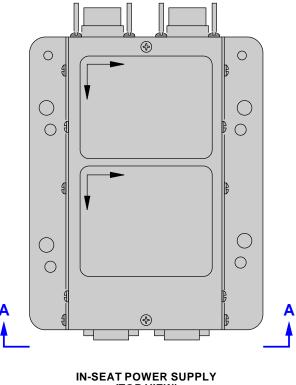**Outlet Unit Installation**
Figure 401/44-21-15-990-801 (Sheet 1 of 2)

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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OUTLET UNIT

A

BUSINESS CLASS
(EXAMPLE)

OUTLET UNIT

A

ECONOMY CLASS
(EXAMPLE)

[3] ELECTRICAL CONNECTOR

LED

[1] OUTLET UNIT

FACEPLATE

[2] SCREW
(2 LOCATIONS)

OUTLET UNIT
(EXAMPLE)

A
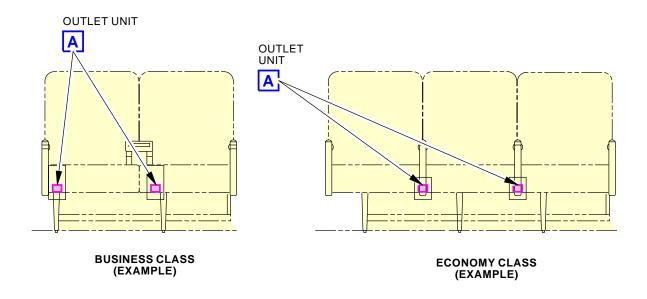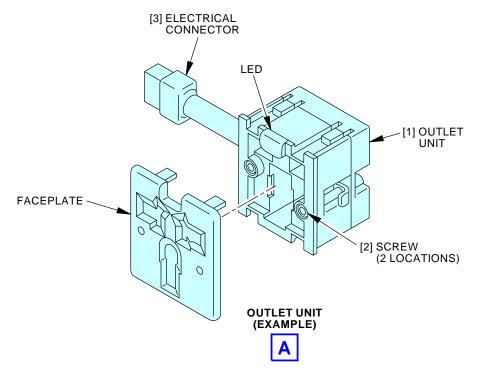
1872379 S0000335922_V2

Outlet Unit Installation
Figure 401/44-21-15-990-801 (Sheet 2 of 2)

─── EFFECTIVITY ───
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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TASK 44-21-15-400-801

3. **Outlet Unit Installation**

Figure 401

A. **References**

Reference	Title
24-22-00-860-812	Remove Electrical Power (P/B 201)

B. **Location Zones**

Zone	Area
200	Upper Half of Fuselage

C. **Installation Procedure**

SUBTASK 44-21-15-865-002

(1) Make sure that these circuit breakers are open and have safety tags:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

SUBTASK 44-21-15-420-001

(2) Install the Outlet Unit (OU):

   (a) Push the Outlet Unit [1] assembly through the seat armrest or seat panel opening (as applicable).

   (b) Install the screws in the Outlet Unit back plate (if applicable).

   (c) Install the screws [2] for the Outlet Unit front panel.

   (d) Connect the Outlet Unit electrical connector [3].

SUBTASK 44-21-15-865-003

(3) Remove the safety tags and close these circuit breakers:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

D. **Installation Test**

SUBTASK 44-21-15-860-001

(1) Make sure power is applied to the PC power system.

SUBTASK 44-21-15-710-001

(2) At the outlet unit, do this step:

   (a) Make sure that the LED on the applicable outlet unit shows green.

E. **Put the Airplane Back in Its Initial Condition**

SUBTASK 44-21-15-860-002

(1) Do these steps to put the Airplane back in its initial condition:

   (a) Remove electrical power if necessary: Remove Electrical Power, TASK 24-22-00-860-812.

————— **END OF TASK** —————

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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PC POWER SYSTEM - ADJUSTMENT/TEST

1. **General**

    A.   This section contains these tasks for the PC Power System.

    (1)   The Operational Test

    (2)   The System Test

TASK 44-21-16-700-801

2. **PC Power System - Operational Test**

    A.   **References**

Reference	Title
24-22-00-860-811	Supply Electrical Power (P/B 201)

    B.   **Location Zones**

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left

    C.   **Test Preparation**

    SUBTASK 44-21-16-840-001

    (1)   Do the task: Supply Electrical Power, TASK 24-22-00-860-811

    SUBTASK 44-21-16-860-006

    (2)   Remove the safety tags and close these circuit breakers:

    F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

    F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

    (3)   Make sure that the IFE/PASS SEATS Switch (P5-13) located in the flight compartment is in the ON position.

    SUBTASK 44-21-16-860-001

    (4)   Set the IFE/PC POWER switch on P13 attendant panel to the ON position.

    SUBTASK 44-21-16-700-001

    (5)   Look at the Seat Outlet Unit (OU) LED indicators immediately after you apply power.

    (a)   Make sure that all the Outlet Unit (OU) LEDs show green. This shows that there were no faults during the ISPS/SPM BIT test.

    SUBTASK 44-21-16-710-001

    (6)   Connect an electronic device to the AC Outlet Unit (ACOU) and switch it ON.

    (a)   Make sure that the ACOU LED is illuminated green.

    (b)   Make sure that the electronic device is powered by the ACOU.

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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(c)   Make sure that the related In-use Light on the ACOU illuminates.

SUBTASK 44-21-16-860-002

(7)   Set the IFE/PC POWER switch on P13 attendant panel to the OFF position.

(a)   Make sure the Outlet Unit (OU) LEDs are off.

——— **END OF TASK** ———

TASK 44-21-16-700-802

3.   <u>PC Power System - System Test</u>

A.   **General**

(1)   The system test includes these test:

(a)   The Operational test

(b)   The Master Control Unit (MCU) LED test.

B.   **References**

Reference	Title
24-22-00-860-811	Supply Electrical Power (P/B 201)
25-21-45-000-803-001	Main Ceiling Panel - Removal (P/B 401)
25-21-45-400-803-001	Main Ceiling Panel - Installation (P/B 401)

C.   **Location Zones**

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left

D.   **Do these steps to prepare for the Test**

SUBTASK 44-21-16-840-002

(1)   Do the task: Supply Electrical Power, TASK 24-22-00-860-811

SUBTASK 44-21-16-860-003

(2)   Make sure that these circuit breakers are closed:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

SUBTASK 44-21-16-860-004

(3)   Make sure the IFE/PC power switch in the flight compartment is set to the ON position.

SUBTASK 44-21-16-860-005

(4)   Make sure that the IFE/PC POWER/OUTLETS Switch on P13 attendant panel is set to the ON position.

E.   **Operational Test**

SUBTASK 44-21-16-700-002

(1)   Do the task:PC Power System - Operational Test, TASK 44-21-16-700-801

SUBTASK 44-21-16-700-003

(2)   MCU LED Test

SUBTASK 44-21-16-010-001

(3)   Open the ceiling panel to get access to the Master Control Unit.

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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(a)　Do the task: Main Ceiling Panel - Removal, TASK 25-21-45-000-803-001

SUBTASK 44-21-16-700-004

(4)　Apply power to the PC power system and look at the status LED on the MCU.

NOTE:　The MCU power up BIT test starts when you apply power. The test needs approximately 15 seconds to complete. Give sufficient time for the BIT test to complete.

(a)　Make sure that all the LED indicators show green. This shows that there were no faults during the MCU power up BIT test.

SUBTASK 44-21-16-940-001

(5)　Close the ceiling panel.

(a)　Do the task: Main Ceiling Panel - Installation, TASK 25-21-45-400-803-001

─────── END OF TASK ───────

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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MCU CONFIGURATION MODULE REMOVAL/INSTALLATION

1. **General**

    A.   This procedure has these tasks:

    (1)   Removal of the configuration module.

    (2)   Installation of the configuration module.

    B.   The configuration module is installed on the J7 connector of the master control unit.

    C.   You must remove the ceiling panel to get access to the master control unit.

    TASK 44-21-18-000-801

2. **Configuration Module Removal**

    A.   **General**

    (1)   This task is the removal procedure for the Configuration Module for Master Control Unit.

    (2)   The MCUs are located in the overhead bin above the aircraft ceiling panels.

    (3)   When you remove the MCUs or the Configuration Module, do not supply electrical power to the system.

    B.   **References**

Reference	Title
25-21-45-000-803-001	Main Ceiling Panel - Removal (P/B 401)

    C.   **Location Zones**

Zone	Area
200	Upper Half of Fuselage
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left

    D.   **Prepare for removal**

    SUBTASK 44-21-18-865-001

    (1)   Do these steps to prepare the configuration module for removal:

    (a)   Open these circuit breakers and install safety tags:

    F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

    SUBTASK 44-21-18-010-001

    (2)   To get access to the master control unit, do the task: Main Ceiling Panel - Removal, TASK 25-21-45-000-803-001

    SUBTASK 44-21-18-020-001
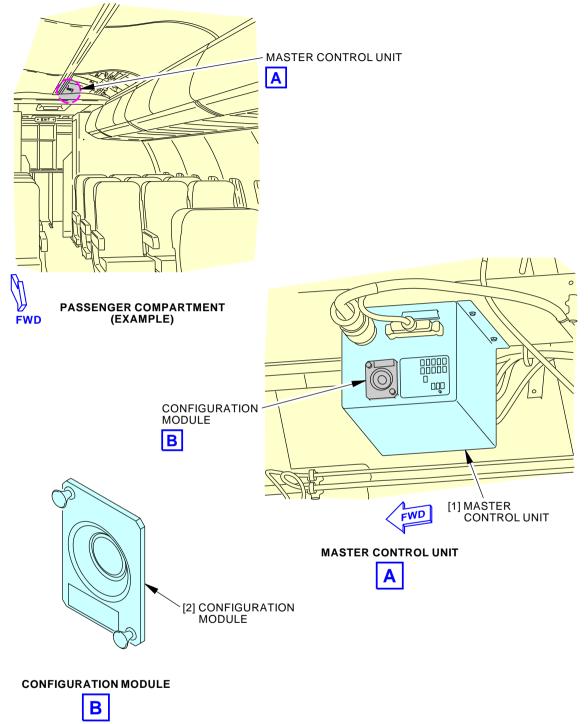
    (3)   Do these steps to remove the configuration module:

    (a)   Remove the captive fasteners that attach the configuration module [2] to the master control unit [1], connector J7.

    (b)   Remove the configuration module [2].

    (c)   Put protective covers on the electrical connectors.

    ——————— END OF TASK ———————

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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MASTER CONTROL UNIT

A

**PASSENGER COMPARTMENT
(EXAMPLE)**

FWD

CONFIGURATION
MODULE

B

[1] MASTER
CONTROL UNIT

FWD

MASTER CONTROL UNIT

A

[2] CONFIGURATION
MODULE

CONFIGURATION MODULE

B

U91977 S0000223693_V2

**Configuration Module Installation
Figure 401/44-21-18-990-801**

44-21-18

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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TASK 44-21-18-400-801

3. <u>Configuration Module Installation</u>

    Figure 401

    A. **General**

    (1) This task is the installation procedure for the Configuration Module for Master Control Unit (MCU).

    B. **References**

Reference	Title
25-21-45-400-803-001	Main Ceiling Panel - Installation (P/B 401)
44-21-16-700-802	PC Power System - System Test (P/B 501)

    C. **Location Zones**

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left

    D. **Configuration Module Installation**

    SUBTASK 44-21-18-865-002

    (1) Do these steps to prepare for installation:

    (a) Make sure that these circuit breakers are open and have safety tags:

    F/O Electrical System Panel, P6-12

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

    SUBTASK 44-21-18-420-001

    (2) Do these steps to install the configuration module:

    (a) Remove the protective covers from the electrical connectors.

    (b) Examine the electrical connectors for bent or broken pins, dirt and damage.

    (c) Connect the configuration module [2] to connector J7 of the master control unit [1].

    1) Turn the captive fasteners to attach the configuration module to the master control unit.

    <u>NOTE</u>: No tools are required to operate the fasteners.

    SUBTASK 44-21-18-860-001

    (3) Remove the safety tags and close these circuit breakers:

    F/O Electrical System Panel, P6-12

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

    SUBTASK 44-21-18-410-001

    (4) Do the task: Main Ceiling Panel - Installation, TASK 25-21-45-400-803-001

    E. **Installation Test**

    SUBTASK 44-21-18-700-001

    (1) Do a test of the PC Power System:

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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(a)   Do the task: PC Power System - System Test, TASK 44-21-16-700-802

——————— **END OF TASK** ———————

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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1. **General**

    A. The component in this procedure is referred to as the Data/Media Loader. Alternative names for the data/media loader are:

    (1) Onboard Media Loader

    B. This procedure has two task:

    (1) The removal procedure for the Onboard Media Loader.

    (2) The installation procedure for the Onboard Media Loader.

    TASK 44-21-24-000-802

2. **Onboard Media Loader - Removal**

    (Figure 401)

    A. **General**

    (1) This task is the removal procedure for the Onboard Media Loader (OML).

    (2) The OML is installed in the forward RH monument (G2 Galley or Closet).

    (3) When you remove the OML, do not supply electrical power to the system.

    B. **References**

Reference	Title
20-40-12-000-802	ESDS Handling for Metal Encased Unit Removal (P/B 201)

    C. **Location Zones**

Zone	Area
230	Subzone - Passenger Compartment - Body Station 360.00 to 663.75

    D. **Prepare for the Removal**

    SUBTASK 44-21-24-860-004

    (1) Open these circuit breakers and install safety tags:

    F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

    F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

    SUBTASK 44-21-24-860-005

    CAUTION: DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

    (2) Before you touch the unit, refer to this task: ESDS Handling for Metal Encased Unit Removal, TASK 20-40-12-000-802.

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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E.   **Onboard Media Loader Removal**

SUBTASK 44-21-24-020-002

CAUTION: DO NOT TOUCH THE CONNECTOR PINS OR OTHER CONDUCTORS ON THE UNIT. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(1)   Loosen the fasteners.

NOTE: The fasteners stay attached to the media loader.

(2)   Hold the handle of the Media Loader and carefully pull it from the rack.

NOTE: Carefully move the front of the media loader from side to side, approximately 1/8th inch, to help disconnect the media loader from the electrical connectors.

(3)   For spring-latched electrical connectors, release the spring latches.

(4)   Disconnect the electrical connectors.

(5)   Remove the Media Loader

(6)   Put protective covers on the electrical connectors.

———— **END OF TASK** ————

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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ONBOARD MEDIA
LOADER

A

FWD

OML

UNIT POWER

ETHERNET
BYPASS

ONBOARD MEDIA LOADER

A

2246046 S0000503467_V2

Media Loader Installation
Figure 401/44-21-24-990-802

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TASK 44-21-24-400-802

3. **Onboard Media Loader - Installation**

(Figure 401)

A. General

(1) This task is the installation procedure for the Onboard Media Loader (OML).

(2) When you install the OML, do not supply electrical power to the system.

B. References

Reference	Title
20-40-12-000-802	ESDS Handling for Metal Encased Unit Removal (P/B 201)
24-22-00-860-812	Remove Electrical Power (P/B 201)
44-21-00-040-801	Video Entertainment System - Deactivation (P/B 201)
44-21-00-440-802	Video Entertainment System - Activation (P/B 201)

C. Location Zones

Zone	Area
230	Subzone - Passenger Compartment - Body Station 360.00 to 663.75

D. Prepare for the Installation

SUBTASK 44-21-24-860-006

(1) Make sure that these circuit breakers are open and have safety tags:

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

SUBTASK 44-21-24-860-007

CAUTION: DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(2) Before you touch the unit, refer to this task: ESDS Handling for Metal Encased Unit Removal, TASK 20-40-12-000-802.
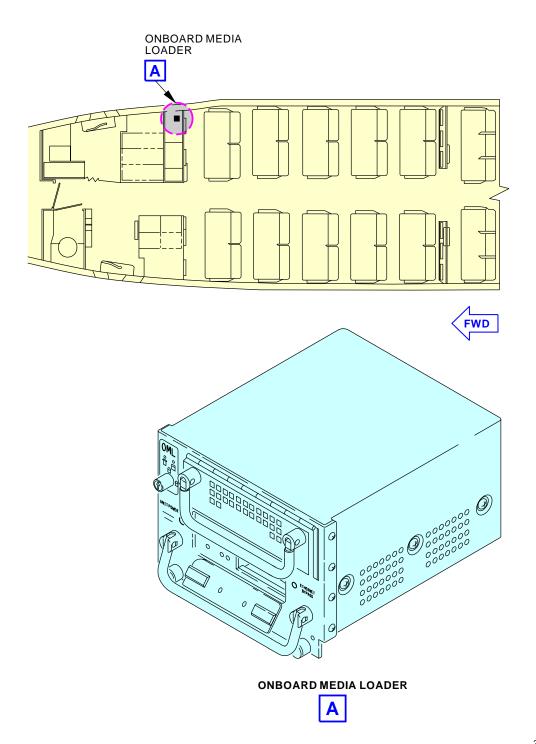
E. Onboard Media Loader Installation

CAUTION: DO NOT TOUCH THE CONNECTOR PINS OR OTHER CONDUCTORS ON THE UNIT. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

SUBTASK 44-21-24-420-002

(1) Remove the protective covers from the electrical connectors.

(2) Examine the electrical connectors for bent or broken pins, dirt, and damage.

(3) Carefully put the Media Loader in its guides.

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

44-21-24

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(4) Hold the handle of the Media Loader and push it back until the rear connectors touch.

NOTE: The media loader will engage with the electrical connectors easier if you move the front of the media loader from side to side approximately 1/8 inch. While you move the media loader, apply a light horizontal force to the front of the media loader.

CAUTION: PUSH LIGHTLY ON THE LOWER CORNERS OF THE UNIT TO PUSH IT INTO THE CONNECTORS. IF THE UNIT DOES NOT GO INTO THE CONNECTORS EASILY, IT IS INCORRECTLY ALIGNED. PULL THE UNIT OUT, AND TRY TO PUSH IT INTO THE CONNECTORS AGAIN. TOO MUCH FORCE ON THE UNIT WILL CAUSE DAMAGE TO THE CONNECTORS IF THE UNIT IS INCORRECTLY ALIGNED.

(5) Carefully push the Media Loader to engage the rear connectors.

CAUTION: MAKE SURE THAT THE SPRING LATCHES HOLD THE CONNECTORS IN THE FULLY ENGAGED POSITION. IF THE CONNECTORS MOVE, ELECTRICAL ARCING CAN OCCUR. THIS CAN CAUSE DAMAGE TO EQUIPMENT.

(6) For the spring-latched electrical connectors, install the spring latches.

(7) Move the Media Loader into its position.

(8) Align the fasteners with the holes and tighten with your fingers.

F. Onboard Media Loader Post-Installation Test

SUBTASK 44-21-24-860-008

(1) Remove the safety tags and close these circuit breakers:

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

SUBTASK 44-21-24-710-002

(2) Do these steps:

(a) Initialize the entertainment system (Video Entertainment System - Activation, TASK 44-21-00-440-802).

(b) Put a disc in the media loader.

1) Make sure that the media loader reads the disc.

(c) Remove the disc.

(d) If it is not necessary to continue to operate the system, then do this task: Video Entertainment System - Deactivation, TASK 44-21-00-040-801.

G. Put the Airplane Back to Its Usual Condition

SUBTASK 44-21-24-860-017

(1) Do this step to put the airplane back in its initial condition:

(a) Remove electrical power if necessary: Remove Electrical Power, TASK 24-22-00-860-812.

———— **END OF TASK** ————

EFFECTIVITY
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

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SEAT POWER MODULE - REMOVAL/INSTALLATION

1. **General**

    A. This procedure has these tasks:

    (1) Removal of the Seat Power Module.

    (2) Installation of the Seat Power Module.

    TASK 44-21-26-000-801

2. **Seat Power Module Removal**

    A. **General**

    (1) This is the task for the removal procedure for the Seat Power Module (SPM).

    (2) The SPMs are installed on the passenger seats.

    B. **References**

Reference	Title
20-40-12-000-802	ESDS Handling for Metal Encased Unit Removal (P/B 201)
20-40-12-400-804	Conductive Dust Cap and Connector Cover Installation (P/B 201)

    C. **Removal Procedure**

    SUBTASK 44-21-26-860-001

    (1) Open these circuit breakers and install safety tags:

    F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027			
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

    AKS ALL

    SUBTASK 44-21-26-020-002

    (2) Do these steps to get access to the SPM:

    NOTE: The SPM is installed under the seat.

    (a) Remove the bottom seat cushion.

    (b) Remove the seat pan.

    NOTE: It may be necessary to remove other seat components like seat arms or seat belts.

    SUBTASK 44-21-26-860-002

    CAUTION: DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

    (3) Before you do the removal of the SPM, do this task:ESDS Handling for Metal Encased Unit Removal, TASK 20-40-12-000-802.

EFFECTIVITY

AKS ALL

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SUBTASK 44-21-26-020-001
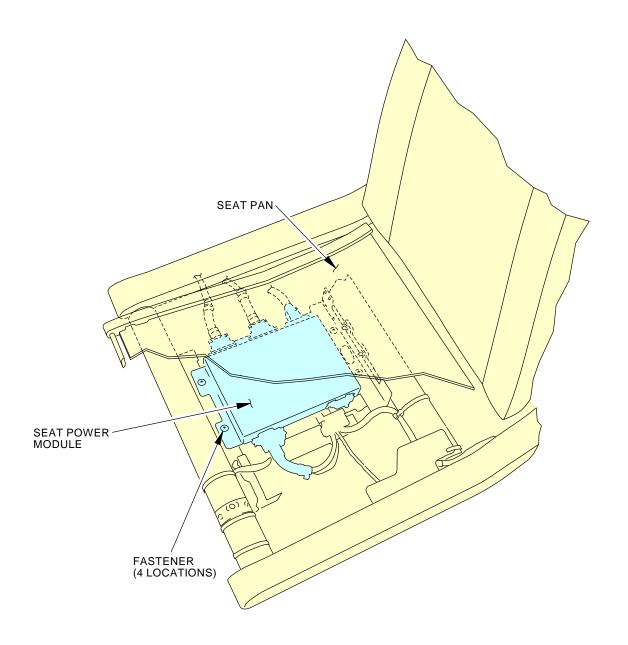
CAUTION: DO NOT TOUCH THE ELECTRICAL CONNECTOR CONTACT PINS. STATIC ELECTRICAL CHARGES THAT COLLECT ON THE SKIN CAN CAUSE DAMAGE TO THE ELECTROSTATIC SENSITIVE COMPONENTS INSTALLED IN THIS DEVICE.

(4)   Do these steps to remove the SPM.

    (a)   For the spring latch connectors, release the spring latches.

    (b)   Disconnect the electrical connectors from the SPM.

    (c)   While you hold the SPM, remove the fasteners

    (d)   Remove the SPM.

    (e)   Do the following task: Conductive Dust Cap and Connector Cover Installation, TASK 20-40-12-400-804.

———— **END OF TASK** ————

EFFECTIVITY
AKS ALL

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SEAT PAN

SEAT POWER
MODULE

FASTENER
(4 LOCATIONS)

PASSENGER SEAT (EXAMPLE)

1869706 S0000331826_V2

**Seat Power Module Installation
Figure 401/44-21-26-990-801**

──── EFFECTIVITY ────
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TASK 44-21-26-400-801

3. **Seat Power Module Installation**

    A. **General**

        (1) This is the task for the installation of the Seat Power Module.

    B. **References**

Reference	Title
20-40-12-000-804	Conductive Dust Cap and Conductor Cover Removal (P/B 201)
20-40-12-400-802	ESDS Handling for Metal Encased Unit Installation (P/B 201)
24-22-00-860-812	Remove Electrical Power (P/B 201)
44-21-00-040-801	Video Entertainment System - Deactivation (P/B 201)
44-21-00-440-802	Video Entertainment System - Activation (P/B 201)
44-21-00-700-803	Passenger Video System - Operational Test (P/B 501)

    C. **Installation Procedure**

SUBTASK 44-21-26-860-003

    (1) Make sure that these circuit breakers are open and have safety tags:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027			
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

AKS ALL

SUBTASK 44-21-26-910-001

CAUTION: DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

    (2) Before you touch the SPM, refer to this task: ESDS Handling for Metal Encased Unit Installation, TASK 20-40-12-400-802.

SUBTASK 44-21-26-420-001

    (3) Do these steps to install the SPM:

CAUTION: DO NOT TOUCH THE CONNECTOR PINS, OR OTHER CONDUCTORS. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE COMPONENTS.

        (a) Do this task: Conductive Dust Cap and Conductor Cover Removal, TASK 20-40-12-000-804.

        (b) Examine the electrical connectors for bent or broken pins, dirt, and damage.

        (c) Place the SPM on its mounting surface.

        (d) Install the fasteners to secure the SPM.

        (e) Connect the electrical connectors to the SPM.

CAUTION: MAKE SURE THAT THE SPRING LATCHES HOLD THE CONNECTORS IN THE FULLY ENGAGED POSITION. IF THE CONNECTORS MOVE, ELECTRICAL ARCING CAN OCCUR. THIS CAN CAUSE DAMAGE TO EQUIPMENT.

        (f) For spring latched connectors, secure the connectors with the spring latches.

EFFECTIVITY
AKS ALL

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SUBTASK 44-21-26-410-001

(4)   Do these steps to return the seat to its normal condition:

  (a)   Install the seat pan.

    NOTE: It may be necessary to install other seat components like seat arms and seat belts.

  (b)   Install the seat cushion.

SUBTASK 44-21-26-860-004

(5)   Remove the safety tags and close these circuit breakers:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name

AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

AKS ALL

D.   **Prepare for the Installation Test**

SUBTASK 44-21-26-860-017

(1)   Initialize the IFES, and log in to the CABIN MAINTENANCE screen: Video Entertainment System - Activation, TASK 44-21-00-440-802.

E.   **Installation Test**

SUBTASK 44-21-26-710-004

(1)   Do an Operational Test: Passenger Video System - Operational Test, TASK 44-21-00-700-803.

F.   **Put the Airplane Back to its Usual Condition**

SUBTASK 44-21-26-860-018

(1)   If it is not necessary to continue to operate the system, then do this task: Video Entertainment System - Deactivation, TASK 44-21-00-040-801.

SUBTASK 44-21-26-860-019

(2)   If it is necessary, do this task: Remove Electrical Power, TASK 24-22-00-860-812.

——— **END OF TASK** ———

EFFECTIVITY
AKS ALL

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AIRCRAFT INTERFACE - REMOVAL/INSTALLATION

1. **General**

   A. This procedure has these task:

       (1) The removal of an Aircraft Interface (AI).

       (2) The installation of an AI.

   B. The AI is installed on the E-8 shelf in the Main Equipment Center.

   TASK 44-21-30-000-801

2. **Aircraft Interface - Removal**
   Figure 401

   A. **General**

       (1) This task includes the steps to remove the Aircraft Interface.

   B. **References**

Reference	Title
20-10-07-000-801	E/E Box Removal (P/B 201)

   C. **Location Zones**

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right
211	Flight Compartment - Left
212	Flight Compartment - Right

   D. **Access Panels**

Number	Name/Location
117A	Electronic Equipment Access Door

   E. **Prepare for the Removal**

       SUBTASK 44-21-30-860-001

       (1) Open these circuit breakers and install safety tags:

       F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

       F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027			
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

       AKS ALL

       SUBTASK 44-21-30-860-002

       (2) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

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F.   **Aircraft Interface Removal**

SUBTASK 44-21-30-020-001

CAUTION: DO NOT TOUCH THE CONNECTOR PINS OR OTHER CONDUCTORS ON THE UNIT. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(1)   To remove the Aircraft Interface, do this task: E/E Box Removal, TASK 20-10-07-000-801.

——— **END OF TASK** ———

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AKS ALL

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ELECTRONIC EQUIPMENT
RACK, E8

A

ELECTRONIC EQUIPMENT
ACCESS DOOR, 117A

AIRCRAFT
INTERFACE UNIT (AIU)

ELECTRONIC
EQUIPMENT
ACCESS DOOR,
117A

FWD

ELECTRONIC EQUIPMENT RACK, E8

A

2019529 S0000400229_V2

Aircraft Interface Installation
Figure 401/44-21-30-990-801

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AKS ALL

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TASK 44-21-30-400-801

3. <u>Aircraft Interface - Installation</u>

Figure 401

   A. **General**

   (1) This task includes the steps to install the Aircraft Interface.

   B. **References**

Reference	Title
20-10-07-400-801	E/E Box Installation (P/B 201)
24-22-00-860-812	Remove Electrical Power (P/B 201)
44-21-00-040-801	Video Entertainment System - Deactivation (P/B 201)
44-21-00-400-801	Load Software (P/B 201)
44-21-00-400-802	Media Load (P/B 201)
44-21-00-440-802	Video Entertainment System - Activation (P/B 201)
44-21-00-700-801	Configuration Check (P/B 201)
44-21-00-700-802	Passenger Video System - Quick Test (P/B 501)
44-21-00-700-803	Passenger Video System - Operational Test (P/B 501)

   C. **Location Zones**

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right
211	Flight Compartment - Left
212	Flight Compartment - Right

   D. **Access Panels**

Number	Name/Location
117A	Electronic Equipment Access Door

   E. **Prepare for the Installation**

   SUBTASK 44-21-30-860-003

   (1) Make sure that these circuit breakers are closed:

   F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

   F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027			
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

   AKS ALL

   SUBTASK 44-21-30-860-004

   (2) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

── EFFECTIVITY ──
AKS ALL

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F. **Aircraft Interface Installation**

SUBTASK 44-21-30-420-001

CAUTION: DO NOT TOUCH THE CONNECTOR PINS OR OTHER CONDUCTORS ON THE UNIT. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.
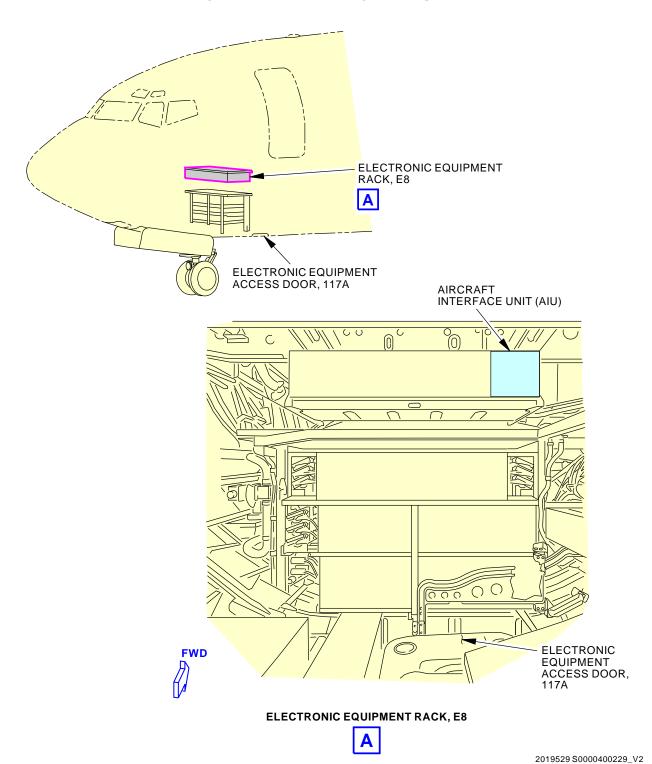
(1) To install the Aircraft Interface, do this task: E/E Box Installation, TASK 20-10-07-400-801.

G. **Aircraft Interface Post-Installation Test**

SUBTASK 44-21-30-860-006

(1) Remove the safety tags and close these circuit breakers:

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
B	9	C01945	IFE AC
B	10	C01952	IFE DC

F/O Electrical System Panel, P6-12

Row	Col	Number	Name

AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

AKS ALL

H. **Prepare for the Installation Test**

SUBTASK 44-21-30-860-007

(1) Initialize the IFES, and log in to the CABIN MAINTENANCE screen: Video Entertainment System - Activation, TASK 44-21-00-440-802.

SUBTASK 44-21-30-470-001

(2) If applicable, Load the IFE System Software: Load Software, TASK 44-21-00-400-801.

SUBTASK 44-21-30-470-002

(3) If applicable, Load the Media: Media Load, TASK 44-21-00-400-802.

I. **File Server Installation Test**

SUBTASK 44-21-30-740-001

(1) Do a Configuration Check: Configuration Check, TASK 44-21-00-700-801.

(a) Make sure that the LRUs are reporting.

SUBTASK 44-21-30-740-002

(2) Do a Quick Test: Passenger Video System - Quick Test, TASK 44-21-00-700-802.

(a) Make sure that no faults are reported.

SUBTASK 44-21-30-710-001

(3) Do an Operational Test: Passenger Video System - Operational Test, TASK 44-21-00-700-803.

J. **Put the Airplane Back to Its Usual Condition**

SUBTASK 44-21-30-860-005

(1) Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

EFFECTIVITY
AKS ALL

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SUBTASK 44-21-30-860-008

(2)   If it is not necessary to continue to operate the system, then do this task: Video Entertainment System - Deactivation, TASK 44-21-00-040-801.

SUBTASK 44-21-30-860-009

(3)   If it is necessary do this task: Remove Electrical Power, TASK 24-22-00-860-812.

——————— **END OF TASK** ———————

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CELL MODEM - MAINTENANCE PRACTICES

1.   **General**

   A.   This procedure has these tasks:

      (1)   Cell Modem Deactivation

      (2)   Cell Modem Activation

   TASK 44-30-01-040-801

2.   **Cell Modem - Deactivation**
   (Figure 44-30-01-990-801)

   A.   **General**

      (1)   This procedure removes electrical power to the Cell Modem.

   B.   **References**

Reference	Title
44-30-01-990-801	Figure: Cell Modem Installation (P/B 401)

   C.   **Location Zones**

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right
240	Subzone - Passenger Compartment - Body Station 663.75 to Body Station 1016.00

   D.   **Procedure**

   SUBTASK 44-30-01-860-006

      (1)   Open these circuit breakers and install safety tags:

      F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027			
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

   AKS ALL

   E.   **Cell Modem - Tryout**

   NOTE: This tryout is to make sure the Cell Modem is in a zero energy state.

   SUBTASK 44-30-01-860-007

      (1)   Make sure that these circuit breakers are open and have safety tags:

      F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027			
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

   AKS ALL

————— **END OF TASK** —————

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TASK 44-30-01-440-801

3. <u>Cell Modem - Activation</u>

(Figure 44-30-01-990-801)

A. General

(1) This procedure adds power to the Cell Modem.

B. References

Reference	Title
44-30-01-990-801	Figure: Cell Modem Installation (P/B 401)

C. Location Zones

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right
240	Subzone - Passenger Compartment - Body Station 663.75 to Body Station 1016.00

D. Procedure

SUBTASK 44-30-01-860-008

(1) Remove the safety tags and close these circuit breakers:

F/O Electrical System Panel, P6-12

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027			
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

——— **END OF TASK** ———

—— EFFECTIVITY ——
AKS ALL

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CELL MODEM - REMOVAL/INSTALLATION

1. **General**

    A. This procedure has these task:

    (1) Removal of the Cell Modem (CM).

    (2) Installation of the Cell Modem.

    TASK 44-30-01-000-801

2. **Cell Modem Removal**

    A. **General**

    (1) This task is the removal procedure for the GSM Cell Modem.

    (2) The Cell Modem is installed onto its equipment tray in the left overhead at station 727.

    (3) When you remove the Cell Modem, make sure no power is being supplied to the unit.

    B. **References**

Reference	Title
20-40-12-000-802	ESDS Handling for Metal Encased Unit Removal (P/B 201)
20-40-12-400-804	Conductive Dust Cap and Connector Cover Installation (P/B 201)
25-21-45-000-803-001	Main Ceiling Panel - Removal (P/B 401)

    C. **Tools/Equipment**

Reference	Description
STD-1048	Stepladder - 6 foot (1.83m)

    D. **Location Zones**

Zone	Area
240	Subzone - Passenger Compartment - Body Station 663.75 to Body Station 1016.00

    E. **Removal Procedure**

    SUBTASK 44-30-01-860-001

    (1) Do these steps to prepare the Cell Modem for removal:

    (a) Open these circuit breakers and install safety tags:

    F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027			
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

    AKS ALL

    SUBTASK 44-30-01-010-001

    (2) Use a 6 foot (1.83m) stepladder, STD-1048 to get access to the applicable ceiling panel, Figure 401.

    SUBTASK 44-30-01-010-002

    (3) Remove the aircraft ceiling panel, Main Ceiling Panel - Removal, TASK 25-21-45-000-803-001.

SUBTASK 44-30-01-910-001

CAUTION: DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(4)   Before you touch the Cell Modem, do this task: ESDS Handling for Metal Encased Unit Removal, TASK 20-40-12-000-802.

SUBTASK 44-30-01-020-001

WARNING: DO NOT REMOVE THIS UNIT WHEN POWER IS APPLIED. THIS CAN CAUSE LARGE OUTPUT VOLTAGE SPIKES WHICH CAN CAUSE DAMAGE TO THE UNIT AND ASSOCIATED EQUIPMENTS.

CAUTION: DAMAGE TO ANTENNA MAY RESULT IF REMOVED IN A SLANTED OR TWISTING MANNER.

(5)   To remove the Cell Modem preform the following steps:

NOTE: The use of cellular telephones while the aircraft is airborne is prohibited by the FCC and other rules. The use of cellular telephones while the aircraft is on the ground is subject to FCC and other regulations.

(a)   Release the spring latches on the spring latched connectors.

CAUTION: DO NOT TOUCH THE CONNECTOR PINS, OR OTHER CONDUCTORS. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE COMPONENTS.

(b)   Disconnect the electrical connectors.

(c)   Remove the four captive fasteners.

(d)   Remove and retain the termination plug if one is installed.

(e)   Remove the Cell Modem.

SUBTASK 44-30-01-910-002
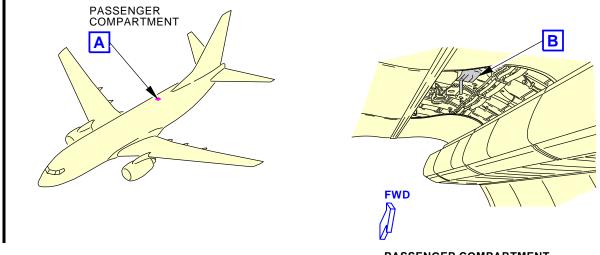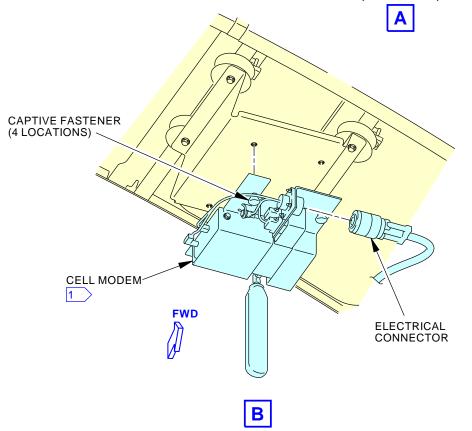
(6)   Do this task: Conductive Dust Cap and Connector Cover Installation, TASK 20-40-12-400-804.

——— **END OF TASK** ———

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PASSENGER
COMPARTMENT

A

B

FWD

PASSENGER COMPARTMENT
(STATION 727)

A

CAPTIVE FASTENER
(4 LOCATIONS)

CELL MODEM
1

FWD

ELECTRICAL
CONNECTOR

B

1 ▷   THE CELL MODEM CAN LOOK DIFFERENT

1856428 S0000332345_V4

Cell Modem Installation
Figure 401/44-30-01-990-801

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TASK 44-30-01-400-801

3. <u>Cell Modem Installation</u>

   A. **General**

   (1) This is the installation procedure for the Cell Modem.

   B. **References**

Reference	Title
20-40-12-000-804	Conductive Dust Cap and Conductor Cover Removal (P/B 201)
20-40-12-400-802	ESDS Handling for Metal Encased Unit Installation (P/B 201)
25-21-45-400-803-001	Main Ceiling Panel - Installation (P/B 401)

   C. **Tools/Equipment**

Reference	Description
STD-1048	Stepladder - 6 foot (1.83m)

   D. **Location Zones**

Zone	Area
240	Subzone - Passenger Compartment - Body Station 663.75 to Body Station 1016.00

   E. **Installation Procedure**

   SUBTASK 44-30-01-860-002

   (1) Make sure that these circuit breakers are open:

   F/O Electrical System Panel, P6-12

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>

   AKS 001-006, 009, 010, 013, 015-018, 020-025, 027

Row	Col	Number	Name
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

   AKS ALL

   SUBTASK 44-30-01-010-003

   (2) Use a 6 foot (1.83m) stepladder, STD-1048 to get access to the equipment tray.

   SUBTASK 44-30-01-910-003

   <u>CAUTION</u>: DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

   (3) Before you touch the Cell Modem, do this task: ESDS Handling for Metal Encased Unit Installation, TASK 20-40-12-400-802.

   SUBTASK 44-30-01-910-004

   (4) Do this task: Conductive Dust Cap and Conductor Cover Removal, TASK 20-40-12-000-804.

   SUBTASK 44-30-01-400-001

   <u>CAUTION</u>: DAMAGE TO ANTENNA MAY RESULT IF REMOVED IN A SLANTED OR TWISTING MANNER.

   (5) To install the Cell Modem, do the following steps:

   <u>NOTE</u>: The use of cellular telephones while the aircraft is airborne is prohibited by the FCC and other rules. The use of cellular telephones while the aircraft is on the ground is subject to the FCC and other regulations.

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(a) Position the Cell Modem onto the equipment tray.

NOTE: Make sure that the connectors match the cables and the fasteners are over their matching holes.

(b) Push each of the four captive fasteners through the holes.

(c) install the termination plug on the component if necessary.

CAUTION: DO NOT TOUCH THE CONNECTOR PINS, OR OTHER CONDUCTORS. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE COMPONENTS.

(d) Connect the electrical connector.

CAUTION: MAKE SURE THAT THE SPRING LATCHES HOLD THE CONNECTORS IN THE FULLY ENGAGED POSITION. IF THE CONNECTORS MOVE, ELECTRICAL ARCING CAN OCCUR. THIS CAN CAUSE DAMAGE TO EQUIPMENT.

(e) Secure the connectors with the spring latches.

SUBTASK 44-30-01-860-003

(6) Remove the safety tags and close these circuit breakers:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name
AKS 001-006, 009, 010, 013, 015-018, 020-025, 027			
A	5	C01645	SEAT POWER AFT
A	8	C01644	SEAT POWER FWD

AKS ALL

SUBTASK 44-30-01-860-004

CAUTION: MAKE SURE THAT THE AIR COOLING SYSTEM IS ON BEFORE THE IFE SYSTEM IS ON. IF THE IFE SYSTEM BECOMES TOO HOT, DAMAGE CAN OCCUR.

(7) Initialize the IFE system by setting the IFE switch on the forward attendant panel (P13) to the ON position.

NOTE: Do not touch the unit when power is applied.

F. Cell Modem Installation Test

SUBTASK 44-30-01-710-001

(1) Do the following steps to ensure the Cell Modem is operational:

(a) Go to the CABIN MAINTENANCE screen at the Crew Panel.

(b) Press the SYSTEM MAINTENANCE button.

(c) Press the CELL MODEM MAINTENANCE button.

(d) Make sure the modem status is ON and the Modem Mode is AUTO on the Modem Power section.

(e) Press the CELL MODEM TEST button.

(f) Press the START CELL MODEM TEST button.

NOTE: During the test a pop-up message will display "Please wait. Modem Test is being Performed".

(g) Make sure a pop-up message displaying "SUCCESS" appears once the test is complete.

(h) Press the OK button.

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(i)   Make sure the screen reads PASS for the Start Cell Modem Test.

(j)   Select the HOME icon to return to the CABIN MAINTENANCE screen.

G.   Put the airplane back to its usual condition.

SUBTASK 44-30-01-860-005

(1)   Do the following steps to put the airplane back to its usual condition.

(a)   Install the aircraft ceiling panel, Main Ceiling Panel - Installation, TASK 25-21-45-400-803-001.

(b)   Remove the 6 foot (1.83m) stepladder, STD-1048.

————— **END OF TASK** —————

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GLOBAL COMMUNICATIONS SUITE - MAINTENANCE PRACTICES

1. **General**

    A. This procedure has these tasks:

    (1) Global Communications Suite - Deactivation

    (2) Global Communications Suite - Activation

    (3) Set Maintenance Aircraft Information

    (4) Reconfigure the Wireless Access Point

    (5) Wireless Access Point Radio Control

    (6) Change Wireless Access Point Transmit Power

   TASK 44-35-00-040-801-001

2. **Global Communications Suite - Deactivation**

    A. **General**

    (1) This procedure removes electrical power to the Global Communications Suite.

    B. **Location Zones**

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Right
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

   C. **Procedure**

   SUBTASK 44-35-00-040-001-001

    (1) Do these steps to log out of the Global Communications Suite maintenance mode:

        (a) On the CABIN MAINTENANCE screen, select the Logout button.

            1) Make sure that the Cabin Crew MAIN MENU screen is shown.

   SUBTASK 44-35-00-860-027-001

    (2) At the Attendant Control Panel (ACP), select the power OFF button.

   SUBTASK 44-35-00-860-028-001

    (3) If installed, on the overhead panel P5 in the flight compartment, set the BROADBAND COM switch to OFF.

   SUBTASK 44-35-00-860-008-001

    (4) Set the P5-13 IFE/PASS SEAT switch in the flight deck to the OFF position.

   SUBTASK 44-35-00-860-005-001

    (5) Open these circuit breakers and install safety tags:

   F/O Electrical System Panel, P6-1

Row	Col	Number	Name
AKS 003-999			
A	8	C01955	ANTENNA/WAP PWR AC
A	9	C01956	ANTENNA/WAP PWR DC

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AKS 003-999 (Continued)

(Continued)

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
AKS ALL			
B	9	C01945	IFE AC
B	10	C01952	IFE DC

D. **Global Communications Suite - Tryout**

NOTE: This tryout is to make sure the Global Communication Suite is in a zero energy state.

SUBTASK 44-35-00-860-006-001

(1) Do these steps:

   (a) Make sure that the IFE/WIFI button on the forward attendant control panel (ACP) is inactive.

   (b) Make sure that the Crew Panel is off.

   (c) Make sure that the lights on the front panel of the Aircraft Interface are off.

     NOTE: Aircraft Interface is located on the E8-1 shelf.

   (d) Make sure that the lights on the front panel of the File Server are off.

     NOTE: File Server is located on the E8-1 shelf.

———— **END OF TASK** ————

TASK 44-35-00-440-801-001

3. **Global Communications Suite - Activation**

A. **General**

(1) This procedure adds electrical power to the Global Communications Suite.

B. **Location Zones**

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Right
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

C. **Procedure**

SUBTASK 44-35-00-860-007-001

(1) Do these steps:

   (a) Make sure that these circuit breakers are closed:

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
AKS 003-999			
A	8	C01955	ANTENNA/WAP PWR AC
A	9	C01956	ANTENNA/WAP PWR DC

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AKS 003-999 (Continued)

(Continued)

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
AKS ALL			
B	9	C01945	IFE AC
B	10	C01952	IFE DC

SUBTASK 44-35-00-860-009-001

(2) Make sure the IFE/PASS SEATS switch on the pilot's overhead panel P5 is set to ON.

SUBTASK 44-35-00-860-013-001

(3) If installed, make sure that the BROADBAND COM switch on the pilot's overhead panel P5 is set to ON.

SUBTASK 44-35-00-860-010-001

(4) To initialize the entertainment system, do these steps as necessary:

(a) Do these steps at the Attendant Control Panel (ACP):

1) Select the IFE/WIFI button.

NOTE: When the attendant panel is not in use and the airplane is on the ground, the display screen will be on the logo screen saver. To reactivate the screen, sequentially touch opposite corners of the display screen within 2 seconds.

NOTE: IFE function is only available on the forward ACP.

a) Make sure that the IFE/WIFI button is ON.

2) Select the WIFI button.

a) Make sure that the WIFI button is ON.

(b) Wait approximately 5 minutes to allow the IFE to power up and complete the operational and database software download.

NOTE: On the very first time the in-seat video system is powered or after a headend LRU replacement, it may take up to 1/2 hour for the software to distribute and load to all applicable LRU.

(c) Make sure that these conditions exist after the boot-up is complete:

1) Make sure that the airline WELCOME/LOGO screen is shown at the Crew Panel.

(d) To log in to the CABIN CREW screens, do the steps that follow at the Crew Terminal:

1) At the Cabin Crew WELCOME/LOGO screen, select the Log In or Proceed To Menu button.

a) Make sure the Cabin Crew MAIN MENU screen shows.

(e) If it is necessary to log in to the CABIN MAINTENANCE screen, do the steps that follow:

1) From the Cabin Crew MAIN MENU screen, select the Maintenance button.

a) Make sure that the PASSCODE screen shows.

2) From the PASSCODE screen, select the Virtual Keyboard button.

a) Make sure the KEYBOARD screen is shown.

3) From the KEYBOARD screen, enter a valid passcode.

NOTE: A series of asterisks will appear in the Passcode entry area.

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4) Select the ENTER key on the Virtual Keyboard to accept the passcode.

5) Select the Continue button.

a) Make sure that the CABIN MAINTENANCE screen shows.

——— **END OF TASK** ———

TASK 44-35-00-800-801-001

4. Set Maintenance Aircraft Information

A. General

(1) This task contains the steps to set the system date, time, aircraft tail number, registration and/or serial number.

B. Prepare to set the Aircraft Information

SUBTASK 44-35-00-440-008-001

(1) Do this task to start the Global Communication Suite (GCS): Global Communications Suite - Activation, TASK 44-35-00-440-801-001.

C. Set Maintenance Aircraft Information

SUBTASK 44-35-00-820-004-001

(1) Do these steps to set aircraft information:

(a) On the CABIN MAINTENANCE screen, open the System Status folder, then push Maint Aircraft Information.

1) Make sure that the MAINT AIRCRAFT INFORMATION screen is shown.

(b) On the MAINT AIRCRAFT INFORMATION screen, push the applicable DATE/TIME text field or AIRCRAFT INFO text field.

(c) Select the applicable date/time or enter the applicable aircraft information.

1) Make sure that you enter the correct data.

2) Push the OK button in the pop up window.

(d) Touch the Navigation button to go back to CABIN MAINTENANCE Main Menu.

(e) Push the MAIN MENU button to log out of the Cabin Maintenance screens.

D. Put the Airplane Back to Its Usual Condition

SUBTASK 44-35-00-040-009-001

(1) Do this task to stop the GCS system if it is not necessary to continue operation: Global Communications Suite - Deactivation, TASK 44-35-00-040-801-001.

——— **END OF TASK** ———

TASK 44-35-00-800-802-001

5. Reconfigure the Wireless Access Point

A. General

(1) This task contains the steps to reconfigure and check the status of each Wireless Access Point (WAP).

B. References

Reference	Title
44-21-00-800-808	Setting Air-to-Ground Mode (P/B 201)

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C. Location Zones

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left

D. Prepare for the Reconfiguration of the WAP

SUBTASK 44-35-00-440-010-001

(1) Do this task to start the Global Communication Suite (GCS): Global Communications Suite - Activation, TASK 44-35-00-440-801-001.

SUBTASK 44-35-00-860-019-001

(2) Make sure that the airplane is on ground mode. Refer to this task if necessary: Setting Air-to-Ground Mode, TASK 44-21-00-800-808.

E. Procedure

SUBTASK 44-35-00-860-020-001

(1) Do these steps to reconfigure the WAP:

    (a) On the CABIN MAINTENANCE screen, open the eXConnect Maint folder, then push Wi-Fi Status.

        1) Make sure that the WI-FI STATUS screen is shown.

    (b) On the WI-FI STATUS screen, in the SELECT column, touch the check box of the WAP to reconfigure.

        1) Make sure that the checkbox for the WAP is checked.

        2) Make sure that the status of the selected WAP(s) show as No Status.

    (c) On the WI-FI STATUS screen, push the Reconfigure button.

        1) Make sure that the pop-up screen shows RECONFIGURATION COMPLETE.

    (d) On the WAP RECONFIGURATION COMPLETE pop-screen, push the OK button.

        1) Make sure that after five minutes, the WI-FI STATUS screen auto-refreshes and shows the latest status of the WAPs.

        2) Make sure that the STATUS shows Disabled for the reconfigured WAPs.

    (e) Push the Navigation icon to return to the CABIN MAINTENANCE Main Menu.

    (f) Log out of the Cabin Maintenance screens.

F. Put the Airplane Back to Its Usual Condition

SUBTASK 44-35-00-040-012-001

(1) Do this task to stop the GCS System if it is not necessary to continue operation: Global Communications Suite - Deactivation, TASK 44-35-00-040-801-001.

——— **END OF TASK** ———

    TASK 44-35-00-800-803-001

6. **Wireless Access Point Radio Control**

    A. General

(1) This task contains the steps to check, enable, or disable the status of each Wireless Access Point (WAP) radio.

    B. Location Zones

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left

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C. **Prepare for the Status Check of the Wireless Access Point Radio**

SUBTASK 44-35-00-440-011-001

(1) Do this task to start the Global Communication Suite (GCS): Global Communications Suite - Activation, TASK 44-35-00-440-801-001.

D. **Procedure**

SUBTASK 44-35-00-860-021-001

(1) Do these steps to enable or disable WAP radio status:

(a) On the CABIN MAINTENANCE screen, open the eXConnect Maint folder, push the WAP Radio Control.

1) Make sure that the WAP RADIO CONTROL screen is shown.

(b) On the WAP RADIO CONTROL screen, push the check boxes for the WAP radio to enable or disable.

1) Make sure that the check boxes for the WAP radios is checked.

(c) Push the Enable button to enable or the or Disable button to disable.

1) Make sure that the WAP radio status shows as Enabled or Disabled (as selected).

(d) Touch the Navigation icon to return to the CABIN MAINTENANCE Main Menu.

(e) Log out of the CABIN MAINTENANCE screens.

E. **Put the Airplane Back to Its Usual Condition**

SUBTASK 44-35-00-040-013-001

(1) Do this task to stop the GCS System if it is not necessary to continue operation: Global Communications Suite - Deactivation, TASK 44-35-00-040-801-001.

——— END OF TASK ———

TASK 44-35-00-800-804-001

7. **Change Wireless Access Point Transmit Power**

A. **General**

(1) This task contains the steps to check or change the Wireless Access Point (WAP) Transmit (TX) power settings.

B. **Location Zones**

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left

C. **Prepare to Check or Change WAP Transmit Power Settings**

SUBTASK 44-35-00-440-012-001

(1) Do this task to start the Global Communication Suite (GCS): Global Communications Suite - Activation, TASK 44-35-00-440-801-001.

D. **Procedure**

SUBTASK 44-35-00-860-022-001

(1) Do these steps to Check or Change WAP Transmit Power Settings:

(a) On the CABIN MAINTENANCE screen, open the eXConnect Maint folder, push the WAP TX Power button.

1) Make sure that the WAP TX POWER screen is shown.

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(b)   On the WAP TX POWER screen, enter the new value for the WAP transmit power, then push the SAVE button.

NOTE: Out-of-range values entered will be automatically changed to the closest value within the acceptable range.

1)   Make sure a pop-up message shows that the new transmit power settings for the WAPs are saved.

(c)   On the WAP TX POWER screen, make sure that the current TX power value is the same as the transmit power entered.

(d)   Touch the Navigation icon to return to the CABIN MAINTENANCE Main Menu.

(e)   Log out of the CABIN MAINTENANCE screens.

E.   Put the Airplane Back to Its Usual Condition

SUBTASK 44-35-00-040-014-001

(1)   Do this task to stop the GCS System if it is not necessary to continue operation: Global Communications Suite - Deactivation, TASK 44-35-00-040-801-001.

─────── **END OF TASK** ───────

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GLOBAL COMMUNICATIONS SUITE - ADJUSTMENT/TEST

1. **General**

    A. This procedure has these tasks:

    (1) Global Communications Suite - Quick Test

    (2) Global Communications Suite - All Test

    (3) Global Communications Suite - Operational Test

    TASK 44-35-00-700-810-001

2. **Global Communications Suite - Quick Test**

    A. **General**

    (1) This task contains the steps for the Quick Test part of the BITE (Built-In-Test Equipment) test for the Global Communications Suite (GCS).

    (2) The Quick Test initiates a display of captured faults reported in the background during normal GCS operation.

    (3) The Quick Test is a non-intrusive test, allowing the GCS to continue operating normally.

    (4) The GCS gathers LRU BITE status on a regularly scheduled interval, compiling the results for viewing at the Crew Terminal upon initiation of a Quick Test.

    B. **References**

Reference	Title
44-35-00-040-801-001	Global Communications Suite - Deactivation (P/B 201)
44-35-00-440-801-001	Global Communications Suite - Activation (P/B 201)

    C. **Prepare for the Quick Test**

    SUBTASK 44-35-00-440-024-001

    (1) Do this task to start the GCS: Global Communications Suite - Activation, TASK 44-35-00-440-801-001.

    D. **Quick Test**

    SUBTASK 44-35-00-740-001-001

    (1) To do the Quick Test, do the steps that follow:

    NOTE: The Quick Test continuously runs in the background from power on to power off. Each GCS LRU maintains its BITE status, making available any faults encountered to its parent LRU. The parent LRU gathers LRU fault status on a regularly scheduled interval, providing the BITE server with a historic collection of LRU faults. When conducting a Quick Test, the BITE server interprets the gathered data, compiling the data into a report for viewing or off loading at the Crew Terminal.

    (a) On the CABIN MAINTENANCE screen at the Crew Terminal, open the System Tests folder, push Quick Test.

    1) Make sure that the QUICK TEST screen is shown.

    (b) On the QUICK TEST screen, push Details button.

    1) Make sure that the QUICK TEST DETAILS screen is shown.

    (c) From the QUICK TEST DETAILS screen, review the details.

    (d) Push the Navigation icon to return to the CABIN MAINTENANCE Main Menu.

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E.   **Put the Airplane Back to Its Usual Condition**

SUBTASK 44-35-00-040-023-001

(1)   Do this task if necessary, to deactivate the GCS at the end of the test sequence: Global Communications Suite - Deactivation, TASK 44-35-00-040-801-001.

——— **END OF TASK** ———

TASK 44-35-00-700-811-001

3.   **Global Communications Suite - All Test**

A.   **General**

(1)   This task contains the steps for the All Test part of the BITE (Built-In-Test Equipment) test for the Global Communications Suite (GCS).

(2)   The All Test identifies comprehensive faults of the current flight and is an intrusive test.

(3)   Do this test when comprehensive results are required.

B.   **References**

Reference	Title
44-35-00-040-801-001	Global Communications Suite - Deactivation (P/B 201)
44-35-00-440-801-001	Global Communications Suite - Activation (P/B 201)

C.   **Prepare for the All Test**

SUBTASK 44-35-00-440-025-001

(1)   Do this task to start the GCS: Global Communications Suite - Activation, TASK 44-35-00-440-801-001.

D.   **All Test**

SUBTASK 44-35-00-740-002-001

(1)   To do the All Test, do the steps that follow:

NOTE: When an All Test is done, the Broadband Communication system LRUs stop functioning in whatever mode they are in, then they do a self-test analysis, report the faults, and then pick up from whatever point they stopped functioning.

(a)   On the CABIN MAINTENANCE screen at the Crew Terminal, open the System Tests folder, push the Start All Test.

1)   Make sure that the ALL TEST screen is shown.

(b)   On the ALL TEST screen, review the details.

(c)   Push the navigation icon to return to the CABIN MAINTENANCE Main Menu.

SUBTASK 44-35-00-211-001-001

(2)   To review the All Test results, do the steps that follow:

(a)   On the CABIN MAINTENANCE screen, open the System Test folder, then push the Review All Test.

1)   Make sure that the ALL TEST screen is shown.

(b)   From the ALL TEST screen, push Details button.

1)   Make sure that the ALL TEST DETAILS screen is shown.

(c)   On the ALL TEST DETAILS screen, review the details.

(d)   Push the Navigation icon to return to the CABIN MAINTENANCE Main Menu.

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E. **Put the Airplane Back to Its Usual Condition**

SUBTASK 44-35-00-040-024-001

(1) Do this task if necessary, to deactivate the GCS at the end of the test sequence: Global Communications Suite - Deactivation, TASK 44-35-00-040-801-001.

————— **END OF TASK** —————

TASK 44-35-00-700-802

4. **Global Communications Suite - Operational Test**

A. **References**

Reference	Title
24-22-00-860-811	Supply Electrical Power (P/B 201)
24-22-00-860-812	Remove Electrical Power (P/B 201)

B. **Location Zones**

Zone	Area
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Right
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

C. **Prepare for the Test**

SUBTASK 44-35-00-860-001

(1) Do these steps to prepare for the test:

(a) Make sure the Power System is present and operational: Supply Electrical Power, TASK 24-22-00-860-811.

(b) Make sure that the Cabin Wireless switch at the FWD Attendant panel is ON.

SUBTASK 44-35-00-860-002

(2) Do these steps at the IFE control panel to turn on all eXW services:

(a) From the Cabin Crew MAIN MENU screen, select the eXWireless button.

1) Make sure that the EXWIRELESS screen is shown.

(b) From the EXWIRELESS screen, select the Turn On or Turn Off button to toggle from eXW On mode and eXW Off mode.

1) Make sure that the Status/Number for eXWireless, Public Network, Crew Network, and all WAPs are set to ON.

D. **Procedure**

SUBTASK 44-35-00-710-012

(1) To do the Operational Test, do the steps that follow:

(a) Use a Laptop (or similar device) with Wi-Fi capability and browse the available wireless networks from the connection list.

(b) Connect the laptop to the wireless network.

(c) Using the laptop, open a web browser.

1) Make sure that the portal page is shown.

(d) Using the laptop, stream media from the portal.

1) Make sure that audio is heard and video is shown.

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E. **Put the Airplane Back to Its Usual Condition**

SUBTASK 44-35-00-860-003

(1) Do these steps:

(a) Put the Cabin Wireless switch to OFF position.

SUBTASK 44-35-00-860-004

(2) If necessary do this task: Remove Electrical Power, TASK 24-22-00-860-812.

——————— END OF TASK ———————

TASK 44-35-00-700-803-001

5. **Global Communications Suite - System Test**

A. **General**

(1) The GCS system test contains these procedures:

(a) A IFE/WIFI Power and Frequency Test

(b) A WAP Radio Test

B. **References**

Reference	Title
44-35-00-440-801-001	Global Communications Suite - Activation (P/B 201)

C. **IFE/WIFI Power and Frequency Test**

SUBTASK 44-35-00-730-001-001

(1) To do the IFE/WIFI Power and Frequency test, do the steps that follow:

(a) Make sure that the entertainment system is initialized Global Communications Suite - Activation, TASK 44-35-00-440-801-001.

(b) From the CABIN MAINTENANCE screen, select the eXW Maint button.

1) Make sure that the eXW MAINT screen is displayed.

(c) From the eXW MAINT screen, select the WI-FI Status button.

1) Make sure that the Wi-Fi STATUS screen is displayed.

(d) From the Wi-Fi STATUS screen, select each checkbox from the SELECT column.

(e) From the bottom of the Wi-Fi STATUS screen, select the RECONFIGURE button.

1) Make sure that a message "Please wait WAP reconfiguration is in progress" is displayed.

NOTE: WAP reconfiguration could take approximately 5 minutes.

2) Make sure that the message "Requested WAPs configured successfully. Please wait for status to refresh" is displayed.

(f) Select the OK button.

NOTE: Wait up to 3 minutes for the WI-FI STATUS screen to update before continuing to the next step.

1) Make sure that the correctly configured WI-FI STATUS screen is displayed.

(g) Select the NAVIGATION icon at the top of the WI-FI STATUS screen.

1) Make sure that the eXW MAINT menu is displayed.

(h) From the eXW MAINT menu, select WAP TX POWER button.

1) Make sure that the correctly configured WAP TX POWER screen is displayed.

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(i) Select the NAVIGATION icon at the top of the WAP TX POWER screen.

    1) Make sure that the eXW MAINT menu is displayed.

(j) From the eXW MAINT menu, select RADIO CONTROL button.

    1) Make sure that the correctly configured WAP RADIO CONTROL screen is displayed.

(k) Select the NAVIGATION icon at the top of the WAP RADIO CONTROL screen.

    1) Make sure that the eXW MAINT menu is displayed.

D. WAP Radio Test

SUBTASK 44-35-00-730-002-001

(1) To do the WAP Radio test, do the steps that follow:

(a) Connect the USB Wi-Fi adapter in any available USB slot on the functional test laptop.

(b) From the eXW MAINT menu on the CP, select WAP RADIO CONTROL button.

    1) Make sure that the WAP RADIO CONTROL screen is displayed.

(c) From the WAP RADIO CONTROL screen, select an applicable WAP # / RADIO # check box.

NOTE: The check box is successfully selected when the check symbol is displayed.

(d) Select the ENABLE button at the bottom of the WAP RADIO CONTROL screen.

    1) Make sure that the status of the selected WAP # / RADIO # is ENABLE.

    2) Make that all other WAP Radios is DISABLED.

    3) Make sure that the applicable EXW SSID appears in the "Wireless Network Connection" list on the functional test laptop.

       NOTE: It could take up to a minute for the applicable EXW SSID to appear on the laptop.

    4) Make sure that the disabled EXW SSID is not displayed in the "Wireless Network Connection" list on the functional test laptop.

(e) Do an operational test of the Global Communication Suite: Global Communications Suite - Operational Test, TASK 44-35-00-700-802.

(f) From the WAP RADIO CONTROL screen, select the enabled WAP #/ RADIO # check box.

(g) Select the DISABLE button at the bottom of the WAP RADIO CONTROL screen.

    1) Make that all WAP Radios is DISABLED.

    2) Make sure that no EXW SSID appears in the "Wireless Network Connection" list on the functional test laptop.

       NOTE: It could take up to a minute for the applicable EXW SSID to disappear on the laptop.

(h) Select the NAVIGATION icon at the top of the WAP RADIO CONTROL screen.

    1) Make sure that the eXW MAINT menu is displayed.

(i) Repeat the test for each applicable WAP #/ RADIO # configuration.

———— END OF TASK ————

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1. **General**

    A.   This procedure has these tasks:

        (1)   A removal of the File Server (FS).

        (2)   An installation of the FS.

        TASK 44-35-08-000-801

2. **File Server Removal**

    A.   **General**

        (1)   This task is the removal procedure for the File Server (FS).

        (2)   The File Server is located in the E8-1 rack in the Fwd EE bay.

        (3)   When you remove the FS, do not supply electrical power to the system.

    B.   **References**

Reference	Title
20-10-07-000-801	E/E Box Removal (P/B 201)
20-40-12-000-802	ESDS Handling for Metal Encased Unit Removal (P/B 201)
20-40-12-400-804	Conductive Dust Cap and Connector Cover Installation (P/B 201)

    C.   **Location Zones**

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right

    D.   **Prepare for the Removal**

        SUBTASK 44-35-08-860-001

        (1)   Do these steps to prepare the File Server for the removal:

            (a)   Open these circuit breakers and install safety tags:

                F/O Electrical System Panel, P6-1

Row	Col	Number	Name
AKS 003-999			
A	8	C01955	ANTENNA/WAP PWR AC
A	9	C01956	ANTENNA/WAP PWR DC

    AKS ALL

    E.   **File Server Removal**

        SUBTASK 44-35-08-020-001

        CAUTION: DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

        (1)   Before you touch the File Server, do the task: ESDS Handling for Metal Encased Unit Removal, TASK 20-40-12-000-802.

        (2)   To remove the File Server, do the task: E/E Box Removal, TASK 20-10-07-000-801.
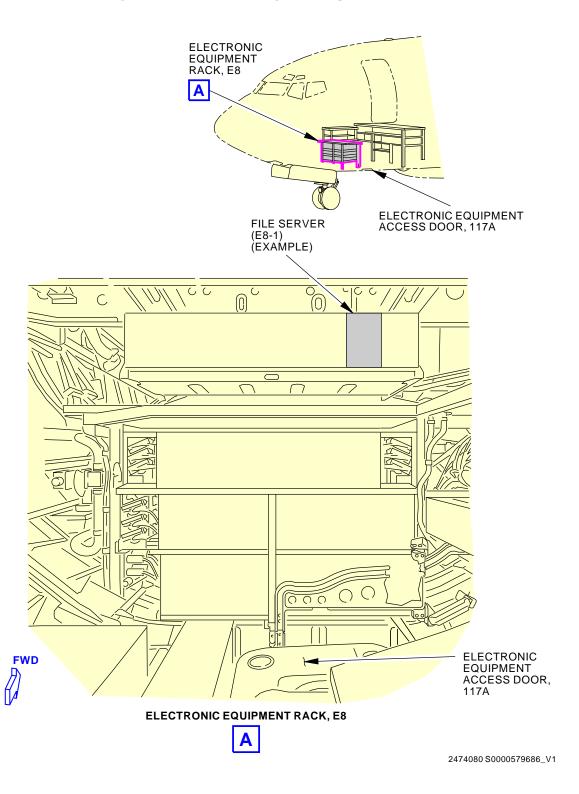
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(3)   Do the task: Conductive Dust Cap and Connector Cover Installation, TASK 20-40-12-400-804.

——————— **END OF TASK** ———————

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ELECTRONIC
EQUIPMENT
RACK, E8

A

FILE SERVER
(E8-1)
(EXAMPLE)

ELECTRONIC EQUIPMENT
ACCESS DOOR, 117A

FWD

ELECTRONIC
EQUIPMENT
ACCESS DOOR,
117A

ELECTRONIC EQUIPMENT RACK, E8

A

2474080 S0000579686_V1

LRU Installation
Figure 401/44-35-08-990-801

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TASK 44-35-08-400-801

3. **File Server Installation**

    A. **General**

      (1)   This task is the installation procedure for the File Server (FS).

    B. **References**

Reference	Title
20-10-07-400-801	E/E Box Installation (P/B 201)
20-40-12-000-804	Conductive Dust Cap and Conductor Cover Removal (P/B 201)
20-40-12-400-802	ESDS Handling for Metal Encased Unit Installation (P/B 201)
24-22-00-860-812	Remove Electrical Power (P/B 201)
44-21-00-700-801	Configuration Check (P/B 201)
44-21-00-700-802	Passenger Video System - Quick Test (P/B 501)

    C. **Location Zones**

Zone	Area
117	Electrical and Electronics Compartment - Left
118	Electrical and Electronics Compartment - Right

    D. **Prepare for the Installation**

      SUBTASK 44-35-08-860-002

      (1)   Make sure that these circuit breakers are open:

          F/O Electrical System Panel, P6-1

Row	Col	Number	Name
AKS 003-999			
A	8	C01955	ANTENNA/WAP PWR AC
A	9	C01956	ANTENNA/WAP PWR DC

      AKS ALL

    E. **File Server Installation**

      SUBTASK 44-35-08-420-001

      <u>CAUTION:</u> DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

      (1)   Before you touch the FS, do the task: ESDS Handling for Metal Encased Unit Installation, TASK 20-40-12-400-802

      (2)   Do the task: Conductive Dust Cap and Conductor Cover Removal, TASK 20-40-12-000-804

      (3)   To install the FS, do the task: E/E Box Installation, TASK 20-10-07-400-801

    F. **File Server Installation Test**

      SUBTASK 44-35-08-860-003

      (1)   Do these steps to make sure that power to the LRU is ON:

          (a)   Remove the safety tags and close these circuit breakers:

             F/O Electrical System Panel, P6-1

Row	Col	Number	Name
AKS 003-999			

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AKS 003-999 (Continued)

(Continued)

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
A	8	C01955	ANTENNA/WAP PWR AC
A	9	C01956	ANTENNA/WAP PWR DC

AKS ALL

(b) Make sure that the Cabin Wireless switch at the Fwd Attendant Panel is ON.

SUBTASK 44-35-08-720-001

(2) Do the File Server test:

(a) Do a Config Check to make sure that all FSs are reporting correctly: Configuration Check, TASK 44-21-00-700-801.

(b) Do a Quick Test to make sure that no faults are reported: Passenger Video System - Quick Test, TASK 44-21-00-700-802.

G. **Put the Airplane Back to Its Usual Condition**

SUBTASK 44-35-08-860-004

(1) Do these steps:

(a) Close and secure all the doors.

(b) Put the Cabin Wireless switch to OFF position.

SUBTASK 44-35-08-860-005

(2) If necessary do this task: Remove Electrical Power, TASK 24-22-00-860-812

——— **END OF TASK** ———

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WIRELESS ACCESS POINT (WAP) ANTENNA

1. **General**

    A. This procedure has these tasks:

    (1) A removal of the Wireless Access Point (WAP) Antenna.

    (2) An installation of the WAP Antenna.

    TASK 44-35-09-000-801

2. **Wireless Access Point (WAP) Antenna - Removal**
    (Figure 401)

    A. **General**

    (1) This task includes the steps to remove the WAP antenna(s).

    B. **References**

Reference	Title
20-40-12-400-804	Conductive Dust Cap and Connector Cover Installation (P/B 201)
25-21-45-000-803-001	Main Ceiling Panel - Removal (P/B 401)

    C. **Location Zones**

Zone	Area
200	Upper Half of Fuselage
221	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Left
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Right
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

    D. **Prepare for the Removal**

    SUBTASK 44-35-09-860-001

    (1) Open these circuit breakers and install safety tags:

    F/O Electrical System Panel, P6-1

Row	Col	Number	Name
AKS 003-999			
A	8	C01955	ANTENNA/WAP PWR AC
A	9	C01956	ANTENNA/WAP PWR DC

    AKS ALL

    SUBTASK 44-35-09-010-001

    (2) Access the WAP antenna(s) by removing the applicable ceiling panels. To remove the ceiling panels, do this task: Main Ceiling Panel - Removal, TASK 25-21-45-000-803-001.

    E. **WAP Antenna Removal**

    SUBTASK 44-35-09-020-001

    CAUTION: DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

    (1) Remove the WAP antenna(s).

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(a) Disconnect the applicable WAP antenna TNC connector from the Wireless Access point.

(b) Remove and retain the mounting screws that attach the WAP antenna to the mounting bracket.

(c) Remove the WAP antenna from the mounting bracket.

(d) Do the task: Conductive Dust Cap and Connector Cover Installation, TASK 20-40-12-400-804

––––––– END OF TASK –––––––

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SCREW
(2 LOCATIONS)

WIRELESS
ACCESS POINT
(WAP) ANTENNA

TNC
CONNECTOR

A

2268381 S0000509803_V2

**Wireless Access Point (WAP) Antenna Installation
Figure 401/44-35-09-990-801**

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TASK 44-35-09-400-801

3. Wireless Access Point (WAP) Antenna - Installation
    (Figure 401)

    A. **General**

    (1) This task includes the steps to install the WAP antenna(s).

    B. **References**

Reference	Title
20-40-12-000-804	Conductive Dust Cap and Conductor Cover Removal (P/B 201)
24-22-00-860-812	Remove Electrical Power (P/B 201)
25-21-45-400-803-001	Main Ceiling Panel - Installation (P/B 401)
44-21-00-700-802	Passenger Video System - Quick Test (P/B 501)
44-35-00-700-802	Global Communications Suite - Operational Test (P/B 501)

    C. **Location Zones**

Zone	Area
200	Upper Half of Fuselage
221	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Left
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Right
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

    D. **WAP Antenna Installation**

    SUBTASK 44-35-09-420-001

    CAUTION: DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES
    THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC
    DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.
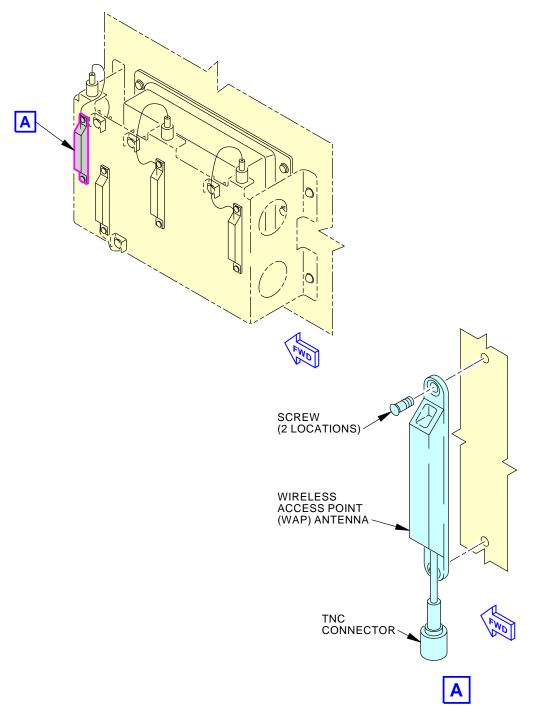
    (1) Install the WAP antenna(s).

        (a) Do a visual inspection of the component interface and/or the adjacent area.

            1) Make sure that the electrical connectors are clean and in good condition.

        (b) Do the task: Conductive Dust Cap and Conductor Cover Removal,
             TASK 20-40-12-000-804.

        (c) Put the WAP antenna in its position on the mounting bracket.

        (d) Install the mounting screws to attach the WAP antenna to the bracket.

        (e) Connect the TNC connector to the WAP antenna.

            1) Make sure that the minimum bend radius of the cable is 1 inch.

    SUBTASK 44-35-09-410-001

    (2) Install the applicable ceiling access panel(s). To install the ceiling panel, do this task: Main
         Ceiling Panel - Installation, TASK 25-21-45-400-803-001

    SUBTASK 44-35-09-860-002

    (3) Remove the safety tags and close these circuit breakers:

        F/O Electrical System Panel, P6-1

Row	Col	Number	Name

        AKS 003-999

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AKS 003-999 (Continued)

(Continued)

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
A	8	C01955	ANTENNA/WAP PWR AC
A	9	C01956	ANTENNA/WAP PWR DC

AKS ALL

SUBTASK 44-35-09-710-001

(4)　Do the WAP antenna test:

(a)　Make sure that the Cabin Wireless switch at the Fwd Attendant Panel is ON.

(b)　Do a Quick Test to make sure that no faults are reported: Passenger Video System - Quick Test, TASK 44-21-00-700-802.

(c)　Do a Global Communications Suite Operational Test to make sure that the eXW system is operational: Global Communications Suite - Operational Test, TASK 44-35-00-700-802.

E.　Put the Airplane Back to Its Usual Condition

SUBTASK 44-35-09-860-003

(1)　Do these steps:

(a)　Close and secure all the doors.

(b)　Put the Cabin Wireless switch to OFF position.

SUBTASK 44-35-09-860-004

(2)　If necessary do this task: Remove Electrical Power, TASK 24-22-00-860-812

——— **END OF TASK** ———

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WIRELESS ACCESS POINT (WAP)

1. **General**

    A. This procedure has these tasks:

        (1) A removal of the Wireless Access Point (WAP).

        (2) An installation of the WAP.

    TASK 44-35-10-000-801

2. **Wireless Access Point (WAP) - Removal**
    (Figure 401)

    A. **General**

        (1) This task includes the steps to remove the Wireless Access Point (WAP)

    B. **References**

Reference	Title
20-40-12-400-804	Conductive Dust Cap and Connector Cover Installation (P/B 201)
25-21-45-000-803-001	Main Ceiling Panel - Removal (P/B 401)

    C. **Location Zones**

Zone	Area
200	Upper Half of Fuselage
221	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Left
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Right
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

    D. **Prepare for the Removal**

        SUBTASK 44-35-10-860-001

        (1) Open these circuit breakers and install safety tags:

        F/O Electrical System Panel, P6-1

Row	Col	Number	Name
AKS 003-999			
A	8	C01955	ANTENNA/WAP PWR AC
A	9	C01956	ANTENNA/WAP PWR DC

        AKS ALL

        SUBTASK 44-35-10-010-001

        (2) Access the WAP by removing the applicable ceiling panels. To remove the ceiling panels, do this task: Main Ceiling Panel - Removal, TASK 25-21-45-000-803-001.

    E. **WAP Removal**

        SUBTASK 44-35-10-020-001

        CAUTION: DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

        (1) Remove the WAP

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(a)   Remove the screws and washers that hold the antenna mounting bracket assembly in place.

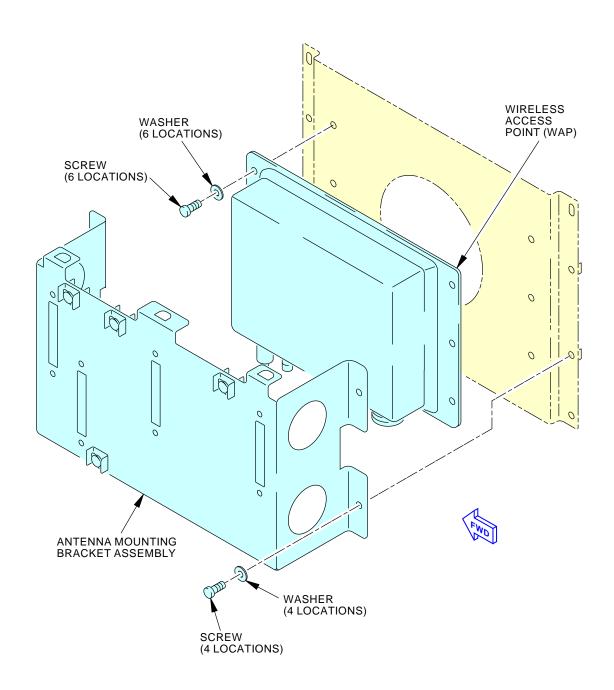(b)   Remove the antenna mounting bracket assembly.

CAUTION: DO NOT TOUCH THE CONNECTOR PINS OR OTHER CONDUCTORS ON THE UNIT. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(c)   Disconnect the cable(s).

(d)   Remove and retain the screws and washers that hold the WAP in place.

(e)   Remove the WAP from its mounting surface.

(f)   Do this task: Conductive Dust Cap and Connector Cover Installation, TASK 20-40-12-400-804.

———— **END OF TASK** ————

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WASHER
(6 LOCATIONS)

SCREW
(6 LOCATIONS)

WIRELESS
ACCESS
POINT (WAP)

ANTENNA MOUNTING
BRACKET ASSEMBLY

WASHER
(4 LOCATIONS)

SCREW
(4 LOCATIONS)

FWD

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**Wireless Access Point (WAP) Installation
Figure 401/44-35-10-990-801**

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TASK 44-35-10-400-801

3. <u>Wireless Access Point (WAP) Installation</u>

(Figure 401)

A. General

(1) This task includes the steps to install the Wireless Access Point (WAP).

B. References

Reference	Title
20-40-12-000-804	Conductive Dust Cap and Conductor Cover Removal (P/B 201)
24-22-00-860-812	Remove Electrical Power (P/B 201)
25-21-45-400-803-001	Main Ceiling Panel - Installation (P/B 401)
44-21-00-700-801	Configuration Check (P/B 201)
44-21-00-700-802	Passenger Video System - Quick Test (P/B 501)
44-35-00-700-802	Global Communications Suite - Operational Test (P/B 501)

C. Location Zones

Zone	Area
200	Upper Half of Fuselage
221	Passenger Compartment - Aft of Control Compartment to Forward Entry Door - Left
231	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Left
232	Forward Passenger Compartment - Forward Entry Door to Sta 663.75 - Right
241	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Left
242	Aft Passenger Compartment - Station 663.75 to Aft Pressure Bulkhead - Right

D. Prepare for the Installation

SUBTASK 44-35-10-860-002

(1) Make sure that these circuit breakers are open and have safety tags:

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
AKS 003-999			
A	8	C01955	ANTENNA/WAP PWR AC
A	9	C01956	ANTENNA/WAP PWR DC

AKS ALL

E. WAP Installation

SUBTASK 44-35-10-420-001

<u>CAUTION:</u> DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(1) Install the WAP.

(a) Do a visual inspection and, if necessary, clean the component interface and/or the adjacent area.

(b) Put the WAP in its position on the mounting surface.

(c) Install the screws and washers to attach the WAP to the mounting surface.

(d) Do the task: Conductive Dust Cap and Conductor Cover Removal, TASK 20-40-12-000-804.

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(e)   Connect the cable(s) to the WAP.

 (f)   Place the antenna mounting bracket assembly in position.

(g)   Install the screws and washers to attach the mounting bracket assembly.

SUBTASK 44-35-10-410-001

(2)   Install the ceiling panels. To install the panels, do this task: Main Ceiling Panel - Installation, TASK 25-21-45-400-803-001

SUBTASK 44-35-10-860-003

(3)   Remove the safety tags and close these circuit breakers:

F/O Electrical System Panel, P6-1

Row	Col	Number	Name
AKS 003-999			
A	8	C01955	ANTENNA/WAP PWR AC
A	9	C01956	ANTENNA/WAP PWR DC

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SUBTASK 44-35-10-710-001

(4)   Do the File Server test:

(a)   Make sure that the Cabin Wireless switch at the Fwd Attendant Panel is ON.

(b)   Do a Config Check to make sure that all WAPs are reporting correctly: Configuration Check, TASK 44-21-00-700-801.

(c)   Do a Quick Test to make sure that no faults are reported: Passenger Video System - Quick Test, TASK 44-21-00-700-802.

(d)   Do a Global Communications Suite Operational Test to make sure that the eXW system is operational: Global Communications Suite - Operational Test, TASK 44-35-00-700-802.

F.   Put the Airplane Back to Its Usual Condition

SUBTASK 44-35-10-860-004

(1)   Do these steps:

(a)   Close and secure all the doors.

(b)   Put the Cabin Wireless switch to OFF position.

SUBTASK 44-35-10-860-005

(2)   If necessary do this task: Remove Electrical Power, TASK 24-22-00-860-812

——— **END OF TASK** ———

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