## CONTROL PEDESTAL - REMOVAL/INSTALLATION

*EFFECTIVITY: ALL*

1. General

A. This section gives the procedures to remove and install the control pedestal.

B. The procedures in this section are given in the sequence below. The tasks identified with (♦) are part of the Scheduled Maintenance Requirements Document (SMRD).

| *TASK NUMBER* | *DESCRIPTION* | *EFFECTIVITY* |
|---|---|---|
| 31-14-01-000-801-A | CONTROL PEDESTAL - REMOVAL | AIRCRAFT WITH RMU INSTALLED ON THE CONTROL PEDESTAL |
| 31-14-01-400-801-A | CONTROL PEDESTAL - INSTALLATION | AIRCRAFT WITH RMU INSTALLED ON THE CONTROL PEDESTAL |
| 31-14-01-000-803-A | CONTROL PEDESTAL - REMOVAL | AIRCRAFT WITH RMU INSTALLED ON THE MAIN INSTRUMENT PANEL |
| 31-14-01-400-803-A | CONTROL PEDESTAL - INSTALLATION | AIRCRAFT WITH RMU INSTALLED ON THE MAIN INSTRUMENT PANEL |

TASK 31-14-01-000-801-A
*EFFECTIVITY: AIRCRAFT WITH RMU INSTALLED ON THE CONTROL PEDESTAL*

2. CONTROL PEDESTAL - REMOVAL

A. General

(1) This procedure gives the instructions to remove the control pedestal.

B. References

| *REFERENCE* | *DESIGNATION* |
|---|---|
| AMM MPP 06-41-01/100 | - |
| AMM TASK 20-13-10-000-801-A/400 | CONTROL PANELS - REMOVAL (TYPICAL) |
| AMM TASK 21-31-01-000-801-A/400 | DIGITAL CONTROLLER - REMOVAL |
| AMM TASK 21-31-02-000-801-A/400 | MANUAL CONTROLLER - REMOVAL |
| AMM TASK 22-11-02-000-801-A/400 | AUTOPILOT CONTROLLER (PC-400) - REMOVAL |
| AMM TASK 23-11-01-000-801-A/400 | HF CONTROL PANEL - REMOVAL |
| AMM TASK 23-11-01-000-802-A/400 | HF CONTROL PANEL - REMOVAL |
| AMM TASK 23-22-02-000-801-A/400 | ACARS PRINTER - REMOVAL |
| AMM TASK 23-24-02-000-801-A/400 | CMU PRINTER - REMOVAL |
| AMM TASK 23-81-01-000-801-A/400 | RADIO MANAGEMENT UNIT - REMOVAL |
| AMM TASK 23-81-02-000-801-A/400 | TUNING BACKUP UNIT - REMOVAL |
| AMM TASK 27-15-00-000-801-A/400 | AILERON DISCONNECT DEVICE - REMOVAL |
| AMM TASK 27-35-00-000-801-A/400 | ELEVATOR DISCONNECT DEVICE - REMOVAL |
| AMM TASK 27-36-05-000-801-A/400 | STALL PROTECTION PANEL - REMOVAL |
| AMM TASK 27-53-03-000-801-A/400 | FLAP SELECTOR LEVER - REMOVAL |
| AMM TASK 27-63-03-000-801-A/400 | SPEED BRAKE COMMAND LEVER - REMOVAL |
| AMM TASK 27-70-00-000-801-A/400 | GUST LOCK - REMOVAL |
| AMM TASK 31-41-03-000-801-A/400 | EICAS REVERSION PANEL - REMOVAL |
| AMM TASK 32-32-01-000-801-A/400 | LGEU - REMOVAL |
| AMM TASK 33-15-02-000-801-A/400 | FLOOD/STORM LIGHT INVERTER - REMOVAL |
| AMM TASK 34-23-02-000-801-A/400 | HGS CONTROL PANEL - REMOVAL |
| AMM TASK 34-27-02-000-801-A/400 | MSU - REMOVAL |
| AMM TASK 34-42-02-000-801-A/400 | WEATHER RADAR CONTROLLER - REMOVAL |
| AMM TASK 34-61-02-000-801-A/400 | CONTROL DISPLAY UNIT (CDU) - REMOVAL |
| AMM TASK 34-62-02-000-801-A/400 | - |
| AMM TASK 34-62-02-000-802-A/400 | SINGLE FMS CONTROL DISPLAY UNIT (CDU) - REMOVAL |
| AMM TASK 76-11-01-000-801-A/400 | CONTROL STAND ASSEMBLY - REMOVAL |
| AMM TASK 76-12-02-000-801-A/400 | THRUST-RATING MODULE SWITCH BOX - REMOVAL |
| SRM 51-40-02 | - |

C. Zones and Accesses

| *ZONE* | *PANEL/DOOR* | *LOCATION* |
|---|---|---|
| 113 | 113DL | Battery compartment |
| 223 | 223IZ | Control pedestal |

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

| *QTY* | *FUNCTION* | *PLACE* |
|---|---|---|
| 1 | Does the task | In the cockpit |

I. Preparation

*SUBTASK 841-002-A*

(1) Make sure that the aircraft is deenergized.

(2) Open access panel 113DL (AMM MPP 06-41-01/100).

(3) Cut the lockwire from the power connectors of the main batteries.

(4) Disconnect the power connectors from main battery 1 and main battery 2.

(5) Remove the RMUs ( AMM TASK 23-81-01-000-801-A/400).

(6) Remove the EICAS reversion panel ( AMM TASK 31-41-03-000-801-A/400).

(7) Remove the tuning backup unit ( AMM TASK 23-81-02-000-801-A/400).

(8) Remove the elevator disconnect device (AMM TASK 27-35-00-000-801-A/400).

(9) Remove the aileron disconnect device (AMM TASK 27-15-00-000-801-A/400).

(10) Remove the aileron and elevator disconnection warning lights (AMM TASK 20-13-10-000-801-A/400).

(11) Remove the gust lock (AMM TASK 27-70-00-000-801-A/400).

(12) Remove the control stand assembly ( AMM TASK 76-11-01-000-801-A/400).

(13) (Aircraft with LG WRN cutout panel on the control pedestal) Remove the LG WRN cutout panel (AMM TASK 20-13-10-000-801-A/400).

(14) Remove the speed brake command lever (AMM TASK 27-63-03-000-801-A/400).

(15) Remove the thrust rating module (AMM TASK 76-12-02-000-801-A/400).

(16) (Aircraft with weather radar controller installed on the control pedestal) Remove the weather radar controller ( AMM TASK 34-42-02-000-801-A/400).

(17) Remove the parking brake handle with the cable.

(18) Remove the TO Configuration panel (AMM TASK 20-13-10-000-801-A/400).

(19) Remove the autopilot controller (PC-400) ( AMM TASK 22-11-02-000-801-A/400).

(20) Remove the FMS CDUs ( AMM TASK 34-61-02-000-801-A/400 or AMM TASK 34-62-02-000-801-A/400 or AMM TASK 34-62-02-000-802-A/400, as applicable).

(21) Remove the flap selector lever (AMM TASK 27-53-03-000-801-A/400).

(22) Remove the trim control panel (AMM TASK 20-13-10-000-801-A/400).

(23) (Aircraft under CAT III configuration) Remove the HGS Control Panel (AMM TASK 34-23-02-000-801-A/400).

(24) (Aircraft with dual IRS) Remove the mode select units on the pilot's and copilot's sides (AMM TASK 34-27-02-000-801-A/400).

(25) Remove the pressurization digital controller ( AMM TASK 21-31-01-000-801-A/400).

(26) Remove the pressurization manual controller ( AMM TASK 21-31-02-000-801-A/400).

(27) Remove the stall protection panel ( AMM TASK 27-36-05-000-801-A/400).

(28) (Aircraft with ACARS) Remove the ACARS printer ( AMM TASK 23-22-02-000-801-A/400).

(29) (Aircraft with CMU) Remove the CMU printer ( AMM TASK 23-24-02-000-801-A/400).

(30) (Aircraft with HF System) Remove the HF control panel ( AMM TASK 23-11-01-000-801-A/400 or AMM TASK 23-11-01-000-802-A/400, as applicable).

(31) Release the electrical connectors from the LGEU (AMM TASK 32-32-01-000-801-A/400).

(32) Release the electrical connectors from the flood/storm light inverters (AMM TASK 33-15-02-000-801-A/400).

(33) Identify and remove the connectors, the grounding studs (GSs) and the clamps.

(34) If the main instrument panel is installed, remove the ten rivets (7) that attach the supports (6) for the conditioned air duct (DU cooling) to the control pedestal (3) (SRM 51-40-02).

J. Removal (Figure 401)

*SUBTASK 020-002-A*

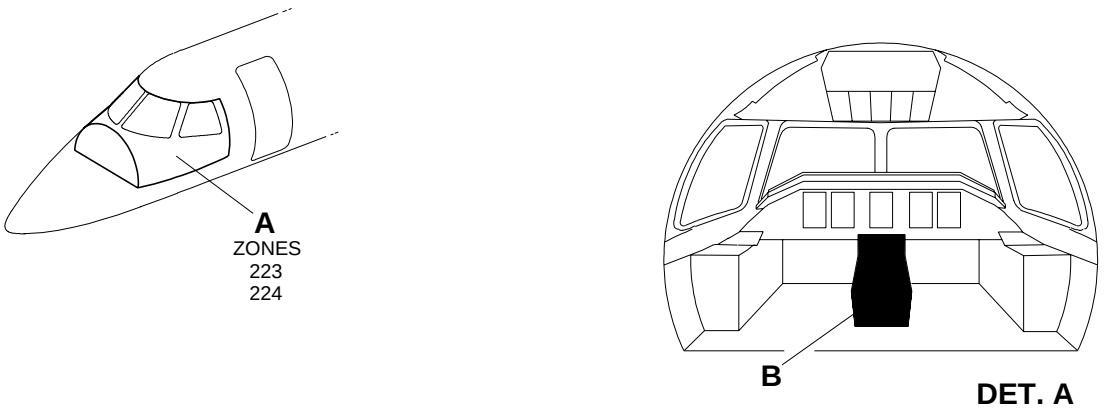
(1) Release the four screws (4) and washers (5) that attach the control pedestal to the main instrument panel.

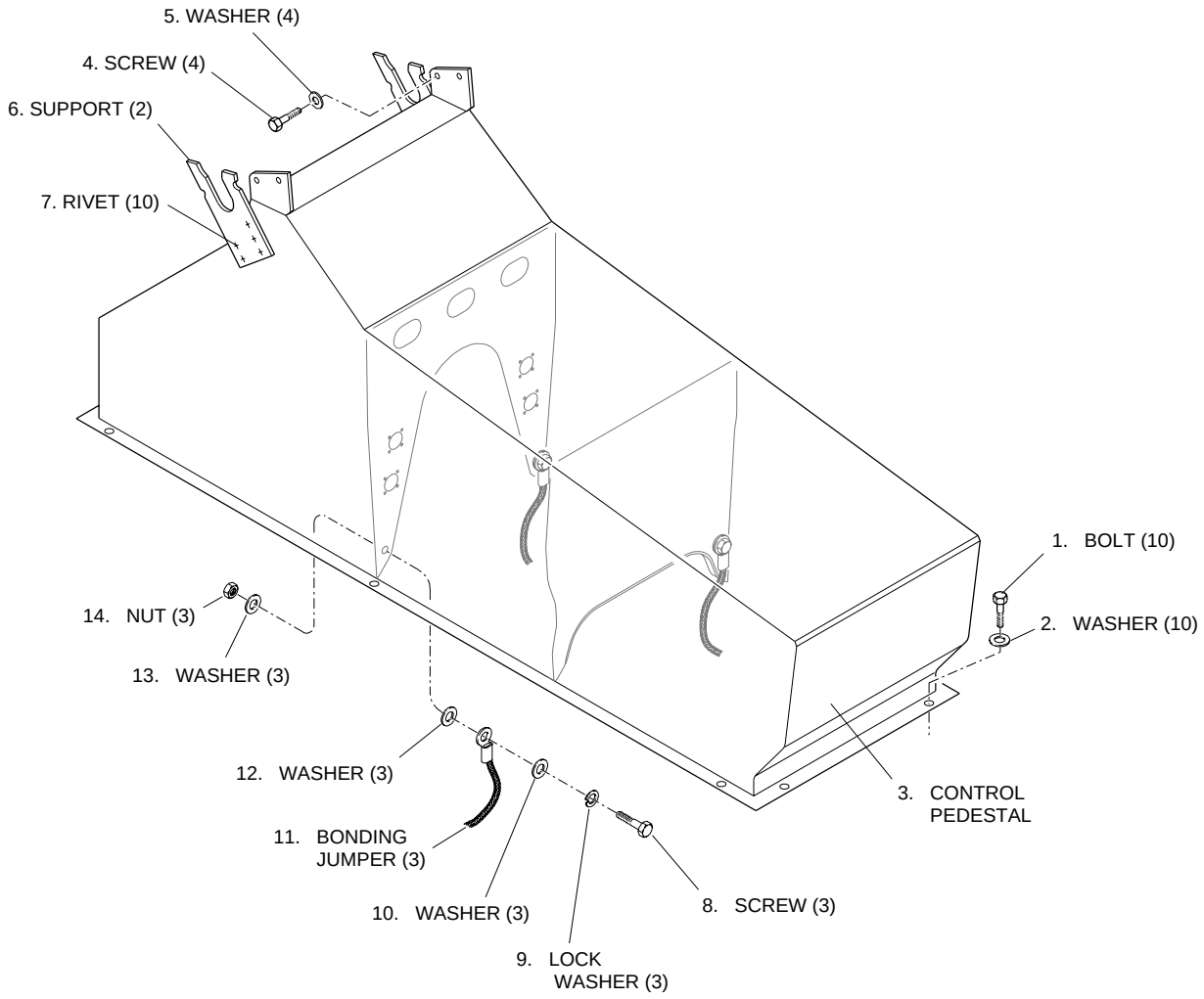
(2) Remove the three bonding jumpers (11) that ground the control pedestal. To do this, remove the related screw (8), lock washer (9), washers (10, 12 and 13) and nut (14).

(3) Release the ten bolts (1) and washers (2).

(4) Remove the control pedestal (3).

*EFFECTIVITY: AIRCRAFT WITH RMU INSTALLED ON THE CONTROL PEDESTAL*
Control Pedestal - Removal/Installation
Figure 401




**DET. B**

145AMM310069.MCE C

TASK 31-14-01-400-801-A
*EFFECTIVITY: AIRCRAFT WITH RMU INSTALLED ON THE CONTROL PEDESTAL*

3. CONTROL PEDESTAL - INSTALLATION

A. General

(1) This procedure gives the instructions to install the control pedestal.

B. References

| *REFERENCE* | *DESIGNATION* |
|---|---|
| AMM MPP 06-41-01/100 | - |
| AMM MPP 20-30-05/200 | - MAINTENANCE PRACTICES |
| AMM TASK 20-13-10-400-801-A/400 | CONTROL PANELS - INSTALLATION (TYPICAL) |
| AMM TASK 21-31-01-400-801-A/400 | DIGITAL CONTROLLER - INSTALLATION |
| AMM TASK 21-31-02-400-801-A/400 | MANUAL CONTROLLER - INSTALLATION |
| AMM TASK 22-11-02-400-801-A/400 | AUTOPILOT CONTROLLER (PC-400) - INSTALLATION |
| AMM TASK 23-11-01-400-801-A/400 | HF CONTROL PANEL - INSTALLATION |
| AMM TASK 23-11-01-400-802-A/400 | HF CONTROL PANEL - INSTALLATION |
| AMM TASK 23-22-02-400-801-A/400 | ACARS PRINTER - INSTALLATION |
| AMM TASK 23-24-02-400-801-A/400 | CMU PRINTER - INSTALLATION |
| AMM TASK 23-81-01-400-801-A/200 | RMU - CONFIGURATION |
| AMM TASK 23-81-02-400-801-A/400 | TUNING BACKUP UNIT - INSTALLATION |
| AMM TASK 27-15-00-400-801-A/400 | AILERON DISCONNECT DEVICE - INSTALLATION |
| AMM TASK 27-35-00-400-801-A/400 | ELEVATOR DISCONNECT DEVICE - INSTALLATION |
| AMM TASK 27-36-05-400-801-A/400 | STALL PROTECTION PANEL - INSTALLATION |
| AMM TASK 27-53-03-400-801-A/400 | FLAP SELECTOR LEVER - INSTALLATION |
| AMM TASK 27-63-03-400-801-A/400 | SPEED BRAKE COMMAND LEVER - INSTALLATION |
| AMM TASK 27-70-00-400-801-A/400 | GUST LOCK - INSTALLATION |
| AMM TASK 31-41-03-400-801-A/400 | EICAS REVERSION PANEL - INSTALLATION |
| AMM TASK 32-32-01-400-801-A/400 | LGEU - INSTALLATION |
| AMM TASK 33-15-02-400-801-A/400 | FLOOD/STORM LIGHT INVERTER - INSTALLATION |
| AMM TASK 34-23-02-400-801-A/400 | HGS CONTROL PANEL - INSTALLATION |
| AMM TASK 34-27-02-400-801-A/400 | MSU - INSTALLATION |
| AMM TASK 34-42-02-400-801-A/400 | WEATHER RADAR CONTROLLER - INSTALLATION |
| AMM TASK 34-61-02-400-801-A/400 | CONTROL DISPLAY UNIT (CDU) - INSTALLATION |
| AMM TASK 34-62-02-400-801-A/400 | - |
| AMM TASK 34-62-02-400-802-A/400 | SINGLE FMS CONTROL DISPLAY UNIT (CDU) - INSTALLATION |
| AMM TASK 76-11-01-400-801-A/400 | CONTROL STAND ASSEMBLY - INSTALLATION |
| AMM TASK 76-12-02-400-801-A/400 | THRUST-RATING MODULE SWITCH BOX - INSTALLATION |

(Continued)

| *REFERENCE* | *DESIGNATION* |
|---|---|
| SRM 51-40-02 | - |

C. Zones and Accesses

| *ZONE* | *PANEL/DOOR* | *LOCATION* |
|---|---|---|
| 113 | 113DL | Battery compartment |
| 223 | 223IZ | Control pedestal |

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

| *ITEM* | *DESCRIPTION* | *PURPOSE* | *QTY* |
|---|---|---|---|
| Commercially available | 400-grit sandpaper | To remove Alodine residues | AR |
| Commercially available | Clean dry cloth | To clean surfaces | AR |
| Commercially available | Soft bristled brush | To apply Alodine 1200S | 1 |

F. Consumable Materials

| *SPECIFICATION (BRAND)* | *DESCRIPTION* | *QTY* |
|---|---|---|
| MIL-R-7885/2 (P/N M7885/2-4-02) | Rivet | 10 |
| P/N MS20995C20 | Lockwire | 400 (mm) |
| ASTM-D740 | Methyl Ethyl Ketone (MEK) | AR |
| MIL-C-5541 | Alodine 1200S | AR |
| MEP 10-057 | Fluid-Resistant Nylon NYCOTE 7-11-DARK BLUE Varnish | AR |

G. Expandable Parts

Not Applicable

H. Persons Recommended

| *QTY* | *FUNCTION* | *PLACE* |
|---|---|---|
| 1 | Does the task | In the cockpit |

I. Installation (Figure 401)

*SUBTASK 420-002-A*

(1) Clean the aircraft areas where the three bonding jumpers (11) will be installed and the areas where the ten bolts (1) and washers (2) will be installed, as follows:

(a) With a clean cloth soaked in Methyl Ethyl Ketone (MEK), clean aircraft areas where the control pedestal will be installed. Before MEK evaporates, wipe those areas with a clean, dry cloth.

(b) With the 400-grit sandpaper, remove the old Alodine from those areas, then repeat step (a).

NOTE: Do not touch the clean surfaces.

(c) With a soft bristle brush, apply Alodine 1200S solution to the aircraft structure where the control pedestal will be installed, leaving surfaces wet for two to three minutes. The surfaces will turn yellowish.

NOTE: The Alodine 1200S solution has a pot life of 24 hours. Use a new Alodine solution if it was not prepared on the last 24 hours.

(d) With a clean cloth soaked in water, wipe the alodized area at least three times, taking care so that Alodine film is not damaged.

(e) Allow surfaces to air-dry.

(f) With a clean cloth soaked in Methyl Ethyl Ketone (MEK), clean the surfaces of the control pedestal that will be in contact with the aircraft structure. Before MEK evaporates, wipe those surfaces with a clean, dry cloth.

NOTE: Do not touch the clean surfaces.

(2) Install the control pedestal (3).

(3) Install and tighten the ten bolts (1) and washers (2). Then, apply a thin coat of Fluid-Resistant Nylon NYCOTE 7-11-DARK BLUE Varnish on the bonding areas.

NOTE: For more information about the varnish, refer to AMM MPP 20-30-05/200.

(4) Install the three bonding jumpers (11) that ground the control pedestal. To do this, install and tighten the related screw (8), lock washer (9), washers (10, 12 and 13) and nut (14). Then, apply a thin coat of Fluid-Resistant Nylon NYCOTE 7-11-DARK BLUE Varnish on the bonding areas.

NOTE: For more information about the varnish, refer to AMM MPP 20-30-05/200.

(5) Install and tighten the four washers (5) and screws (4) that attach the control pedestal to the main instrument panel.

J. Follow-on

*SUBTASK 842-002-A*

(1) If the supports (6) for the conditioned air duct (DU cooling) are not installed, install the ten rivets (7) that attach the supports (6) to the control pedestal (3) (SRM 51-40-02).

(2) Clean the aircraft areas where the grounding studs (GSs) are to be installed, as follows:

(a) With a clean cloth soaked in Methyl Ethyl Ketone (MEK), clean aircraft areas where the grounding studs will be installed. Before MEK evaporates, wipe those areas with a clean, dry cloth.

(b) With the 400-grit sandpaper, remove the old Alodine from those areas, then repeat step (a).

NOTE: Do not touch the clean surfaces.

(c) With a soft bristle brush, apply Alodine 1200S solution to the aircraft structure where the grounding studs will be installed, leaving surfaces wet for two to three minutes. The surfaces will turn yellowish.

NOTE: The Alodine 1200S solution has a pot life of 24 hours. Use a new Alodine solution if it was not prepared on the last 24 hours.

(d) With a clean cloth soaked in water, wipe the alodized area at least three times, taking care so that Alodine film is not damaged.

(e) Allow surfaces to air-dry.

(f) With a clean cloth soaked in Methyl Ethyl Ketone (MEK), clean the terminals of the grounding studs. Before MEK evaporates, wipe the terminals with a clean, dry cloth.

NOTE: Do not touch the clean surfaces.

(3) Install the connectors, the grounding studs (GSs) and the clamps. Apply a thin coat of Fluid-Resistant Nylon NYCOTE 7-11-DARK BLUE Varnish on the bonding areas of the grounding studs.

NOTE: For more information about the varnish, refer to AMM MPP 20-30-05/200.

CAUTION: ALL THE TESTS REFERENCED TO IN EACH OF THE INSTALLATION TASKS MUST BE PERFORMED ONLY AFTER THE INSTALLATION OF ALL RELATED EQUIPMENT.

(4) Connect the electrical connectors of the LGEU (AMM TASK 32-32-01-400-801-A/400).

(5) Connect the electrical connectors to the flood/storm light inverters (AMM TASK 33-15-02-400-801-A/400).

(6) Install the RMUs ( AMM TASK 23-81-01-400-801-A/200).

(7) Install the EICAS reversion panel ( AMM TASK 31-41-03-400-801-A/400).

(8) Install the tuning backup unit ( AMM TASK 23-81-02-400-801-A/400).

(9) Install the elevator disconnect device ( AMM TASK 27-35-00-400-801-A/400).

(10) Install the aileron disconnect device ( AMM TASK 27-15-00-400-801-A/400).

(11) Install the aileron and elevator disconnection warning lights (AMM TASK 20-13-10-400-801-A/400).

(12) Install the control stand assembly ( AMM TASK 76-11-01-400-801-A/400).

(13) Install the gust lock (AMM TASK 27-70-00-400-801-A/400).

(14) (Aircraft with LG WRN cutout panel on the control pedestal) Install the LG WRN cutout panel (AMM TASK 20-13-10-400-801-A/400).

(15) Install the speed brake command lever (AMM TASK 27-63-03-400-801-A/400).

(16) Install the parking brake handle with the cable.

(17) Install the thrust rating module (AMM TASK 76-12-02-400-801-A/400).

(18) Install the TO configuration panel (AMM TASK 20-13-10-400-801-A/400).

(19) (Aircraft with weather radar controller installed on the control pedestal) Install the weather radar controller ( AMM TASK 34-42-02-400-801-A/400).

(20) Install the stall protection panel ( AMM TASK 27-36-05-400-801-A/400).

(21) Install the trim control panel (AMM TASK 20-13-10-400-801-A/400).

(22) (Aircraft under CAT III configuration) Install the HGS Control Panel (AMM TASK 34-23-02-400-801-A/400).

(23) (Aircraft with dual IRS) Install the mode select units on the pilot's and copilot's sides (AMM TASK 34-27-02-400-801-A/400).

(24) Install the autopilot controller (PC-400) ( AMM TASK 22-11-02-400-801-A/400).

(25) Install the FMS CDUs ( AMM TASK 34-61-02-400-801-A/400 or AMM TASK 34-62-02-400-801-A/400 or AMM TASK 34-62-02-400-802-A/400, as applicable).

(26) Install the pressurization digital controller ( AMM TASK 21-31-01-400-801-A/400).

(27) Install the pressurization manual controller ( AMM TASK 21-31-02-400-801-A/400).

(28) (Aircraft with ACARS) Install the ACARS printer ( AMM TASK 23-22-02-400-801-A/400).

(29) (Aircraft with CMU) Install the CMU printer ( AMM TASK 23-24-02-400-801-A/400).

(30) Install the flap selector lever (AMM TASK 27-53-03-400-801-A/400).

(31) (Aircraft with HF System) Install the HF control panel ( AMM TASK 23-11-01-400-801-A/400 or AMM TASK 23-11-01-400-802-A/400, as applicable).

(32) Connect the power connectors to main battery 1 and main battery 2.

(33) Use the lockwire to lock the power connectors of the main batteries.

(34) Close access panel 113DL (AMM MPP 06-41-01/100).

TASK 31-14-01-000-803-A
*EFFECTIVITY: AIRCRAFT WITH RMU INSTALLED ON THE MAIN INSTRUMENT PANEL*

4. CONTROL PEDESTAL - REMOVAL

A. General

(1) This procedure gives the instructions to remove the control pedestal.

B. References

| *REFERENCE* | *DESIGNATION* |
|---|---|
| AMM MPP 06-41-01/100 | - |
| AMM TASK 20-13-10-000-801-A/400 | CONTROL PANELS - REMOVAL (TYPICAL) |
| AMM TASK 21-31-01-000-801-A/400 | DIGITAL CONTROLLER - REMOVAL |
| AMM TASK 21-31-02-000-801-A/400 | MANUAL CONTROLLER - REMOVAL |
| AMM TASK 22-11-02-000-801-A/400 | AUTOPILOT CONTROLLER (PC-400) - REMOVAL |
| AMM TASK 23-11-01-000-801-A/400 | HF CONTROL PANEL - REMOVAL |
| AMM TASK 23-11-01-000-802-A/400 | HF CONTROL PANEL - REMOVAL |
| AMM TASK 23-22-02-000-801-A/400 | ACARS PRINTER - REMOVAL |
| AMM TASK 23-24-02-000-801-A/400 | CMU PRINTER - REMOVAL |
| AMM TASK 23-81-02-000-801-A/400 | TUNING BACKUP UNIT - REMOVAL |
| AMM TASK 27-15-00-000-801-A/400 | AILERON DISCONNECT DEVICE - REMOVAL |
| AMM TASK 27-35-00-000-801-A/400 | ELEVATOR DISCONNECT DEVICE - REMOVAL |
| AMM TASK 27-36-05-000-801-A/400 | STALL PROTECTION PANEL - REMOVAL |
| AMM TASK 27-53-03-000-801-A/400 | FLAP SELECTOR LEVER - REMOVAL |
| AMM TASK 27-63-03-000-801-A/400 | SPEED BRAKE COMMAND LEVER - REMOVAL |
| AMM TASK 27-70-00-000-801-A/400 | GUST LOCK - REMOVAL |
| AMM TASK 31-41-03-000-802-A/400 | EICAS REVERSION PANEL - REMOVAL |
| AMM TASK 32-32-01-000-801-A/400 | LGEU - REMOVAL |
| AMM TASK 33-15-02-000-801-A/400 | FLOOD/STORM LIGHT INVERTER - REMOVAL |
| AMM TASK 34-23-02-000-801-A/400 | HGS CONTROL PANEL - REMOVAL |
| AMM TASK 34-61-02-000-801-A/400 | CONTROL DISPLAY UNIT (CDU) - REMOVAL |
| AMM TASK 34-62-02-000-801-A/400 | - |
| AMM TASK 34-62-02-000-802-A/400 | SINGLE FMS CONTROL DISPLAY UNIT (CDU) - REMOVAL |
| AMM TASK 76-11-01-000-801-A/400 | CONTROL STAND ASSEMBLY - REMOVAL |
| AMM TASK 76-12-02-000-801-A/400 | THRUST-RATING MODULE SWITCH BOX - REMOVAL |

C. Zones and Accesses

| *ZONE* | *PANEL/DOOR* | *LOCATION* |
|---|---|---|
| 113 | 113DL | Battery compartment |
| 223 | 223IZ | Control pedestal |

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

| *QTY* | *FUNCTION* | *PLACE* |
|---|---|---|
| 1 | Does the task | In the cockpit |

I. Preparation

*SUBTASK 841-003-A*

(1) Make sure that the aircraft is deenergized.

(2) Open access panel 113DL (AMM MPP 06-41-01/100).

(3) Cut the lockwire from the power connectors of the main batteries.

(4) Disconnect the power connectors from main battery 1 and main battery 2.

(5) Remove the FMS CDUs ( AMM TASK 34-61-02-000-801-A/400 or AMM TASK 34-62-02-000-801-A/400 or AMM TASK 34-62-02-000-802-A/400, as applicable).

(6) Remove the TO Configuration panel (AMM TASK 20-13-10-000-801-A/400).

(7) Remove the elevator disconnect device (AMM TASK 27-35-00-000-801-A/400).

(8) Remove the aileron disconnect device (AMM TASK 27-15-00-000-801-A/400).

(9) Remove the aileron and elevator disconnection warning lights (AMM TASK 20-13-10-000-801-A/400).

(10) Remove the gust lock (AMM TASK 27-70-00-000-801-A/400).

(11) Remove the control stand assembly ( AMM TASK 76-11-01-000-801-A/400).

(12) Remove the speed brake command lever (AMM TASK 27-63-03-000-801-A/400).

(13) Remove the parking brake handle with the cable.

(14) Remove the flap selector lever (AMM TASK 27-53-03-000-801-A/400).

(15) Remove the thrust rating module (AMM TASK 76-12-02-000-801-A/400).

(16) Remove the stall protection panel ( AMM TASK 27-36-05-000-801-A/400).

(17) Remove the tuning backup unit ( AMM TASK 23-81-02-000-801-A/400).

(18) Remove the trim control panel (AMM TASK 20-13-10-000-801-A/400).

(19) (Aircraft under CAT III configuration) Remove the HGS Control Panel (AMM TASK 34-23-02-000-801-A/400).

(20) Remove the EICAS reversion panel ( AMM TASK 31-41-03-000-802-A/400).

(21) Remove the autopilot controller (PC-400) ( AMM TASK 22-11-02-000-801-A/400).

(22) Remove the digital controller ( AMM TASK 21-31-01-000-801-A/400).

(23) Remove the manual controller ( AMM TASK 21-31-02-000-801-A/400).

(24) (Aircraft with ACARS) Remove the ACARS printer ( AMM TASK 23-22-02-000-801-A/400).

(25) (Aircraft with CMU) Remove the CMU printer ( AMM TASK 23-24-02-000-801-A/400).

(26) (Aircraft with HF System) Remove the HF control panel ( AMM TASK 23-11-01-000-801-A/400 or AMM TASK 23-11-01-000-802-A/400, as applicable).

(27) Release the electrical connectors from the LGEU (AMM TASK 32-32-01-000-801-A/400).

(28) Release the electrical connectors from the flood/storm light inverters (AMM TASK 33-15-02-000-801-A/400).

(29) Remove the four screws and washers that attach the air conditioning duct (DUs cooling) to the pedestal.

(30) Identify and remove the connectors, the grounding studs (GSs) and the clamps.

J. Removal (Figure 401)

*SUBTASK 020-003-A*

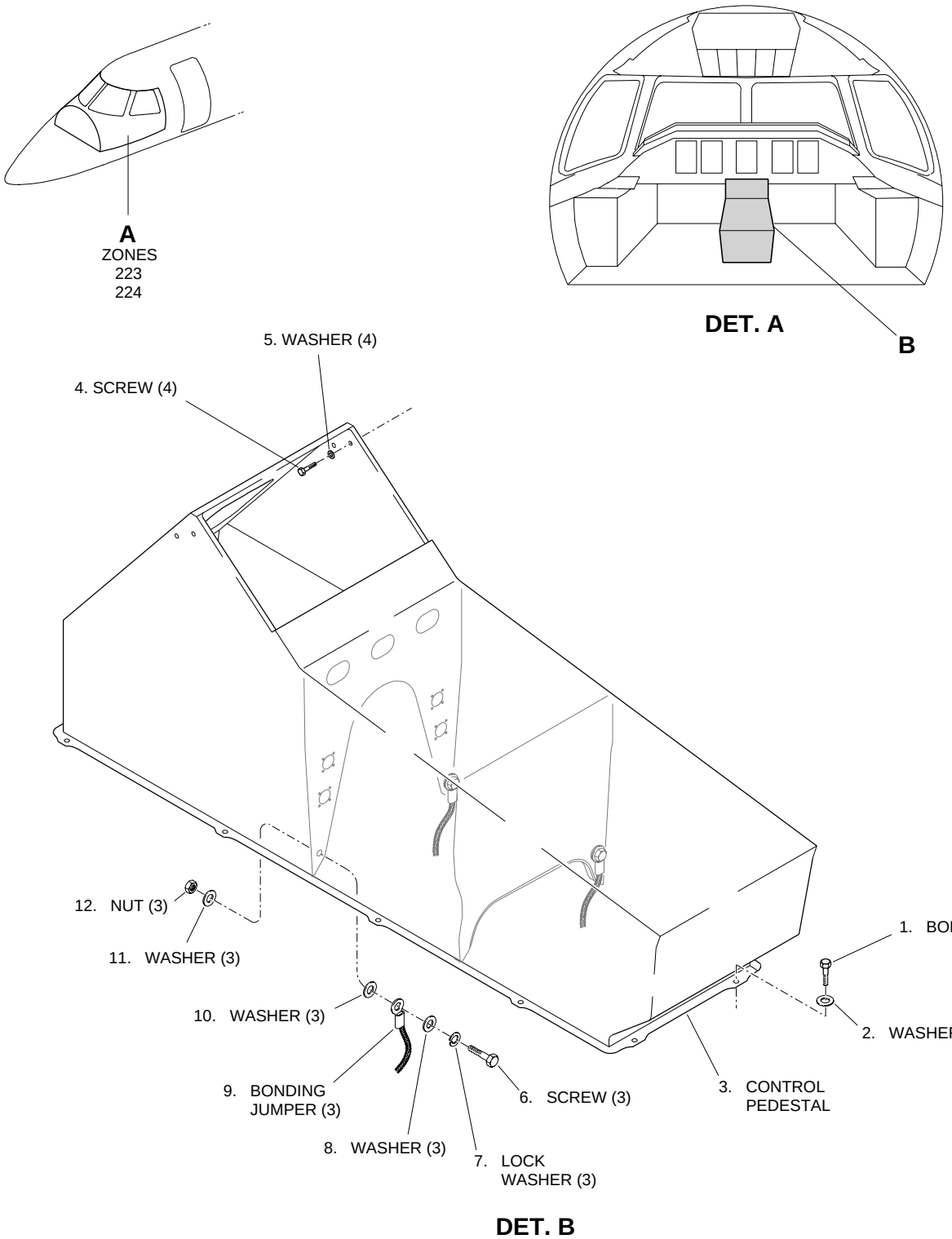
(1) Release the four screws (4) and washers (5) that attach the control pedestal to the main instrument panel.

(2) Remove the three bonding jumpers (9) that ground the control pedestal. To do this, remove the related screw (6), lock washer (7), washers (8, 10 and 11) and nut (12).

(3) Release the ten bolts (1) and washers (2).

(4) Remove the control pedestal (3).

*EFFECTIVITY: AIRCRAFT WITH RMU INSTALLED ON THE MAIN INSTRUMENT PANEL*
Control Pedestal - Removal/Installation
Figure 402




145AMM310137.MCE A

TASK 31-14-01-400-803-A
*EFFECTIVITY: AIRCRAFT WITH RMU INSTALLED ON THE MAIN INSTRUMENT PANEL*

5. CONTROL PEDESTAL - INSTALLATION

A. General

(1) This procedure gives the instructions to install the control pedestal.

B. References

| *REFERENCE* | *DESIGNATION* |
|---|---|
| AMM MPP 06-41-01/100 | - |
| AMM MPP 20-30-05/200 | - MAINTENANCE PRACTICES |
| AMM TASK 20-13-10-400-801-A/400 | CONTROL PANELS - INSTALLATION (TYPICAL) |
| AMM TASK 21-31-01-400-801-A/400 | DIGITAL CONTROLLER - INSTALLATION |
| AMM TASK 21-31-02-400-801-A/400 | MANUAL CONTROLLER - INSTALLATION |
| AMM TASK 22-11-02-400-801-A/400 | AUTOPILOT CONTROLLER (PC-400) - INSTALLATION |
| AMM TASK 23-11-01-400-801-A/400 | HF CONTROL PANEL - INSTALLATION |
| AMM TASK 23-11-01-400-802-A/400 | HF CONTROL PANEL - INSTALLATION |
| AMM TASK 23-22-02-400-801-A/400 | ACARS PRINTER - INSTALLATION |
| AMM TASK 23-24-02-400-801-A/400 | CMU PRINTER - INSTALLATION |
| AMM TASK 23-81-02-400-801-A/400 | TUNING BACKUP UNIT - INSTALLATION |
| AMM TASK 27-15-00-400-801-A/400 | AILERON DISCONNECT DEVICE - INSTALLATION |
| AMM TASK 27-35-00-400-801-A/400 | ELEVATOR DISCONNECT DEVICE - INSTALLATION |
| AMM TASK 27-36-05-400-801-A/400 | STALL PROTECTION PANEL - INSTALLATION |
| AMM TASK 27-53-03-400-801-A/400 | FLAP SELECTOR LEVER - INSTALLATION |
| AMM TASK 27-63-03-400-801-A/400 | SPEED BRAKE COMMAND LEVER - INSTALLATION |
| AMM TASK 27-70-00-400-801-A/400 | GUST LOCK - INSTALLATION |
| AMM TASK 31-41-03-400-802-A/400 | EICAS REVERSION PANEL - INSTALLATION |
| AMM TASK 32-32-01-400-801-A/400 | LGEU - INSTALLATION |
| AMM TASK 33-15-02-400-801-A/400 | FLOOD/STORM LIGHT INVERTER - INSTALLATION |
| AMM TASK 34-23-02-400-801-A/400 | HGS CONTROL PANEL - INSTALLATION |
| AMM TASK 34-61-02-400-801-A/400 | CONTROL DISPLAY UNIT (CDU) - INSTALLATION |
| AMM TASK 34-62-02-400-801-A/400 | - |
| AMM TASK 34-62-02-400-802-A/400 | SINGLE FMS CONTROL DISPLAY UNIT (CDU) - INSTALLATION |
| AMM TASK 76-11-01-400-801-A/400 | CONTROL STAND ASSEMBLY - INSTALLATION |
| AMM TASK 76-12-02-400-801-A/400 | THRUST-RATING MODULE SWITCH BOX - INSTALLATION |

C. Zones and Accesses

| *ZONE* | *PANEL/DOOR* | *LOCATION* |
|---|---|---|
| 113 | 113DL | Battery compartment |
| 223 | 223IZ | Control pedestal |

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

| *ITEM* | *DESCRIPTION* | *PURPOSE* | *QTY* |
|---|---|---|---|
| Commercially available | 400-grit sandpaper | To remove Alodine residues | AR |
| Commercially available | Clean dry cloth | To clean surfaces | AR |
| Commercially available | Soft bristled brush | To apply Alodine 1200S | 1 |

F. Consumable Materials

| *SPECIFICATION (BRAND)* | *DESCRIPTION* | *QTY* |
|---|---|---|
| P/N MS20995C20 | Lockwire | 400 (mm) |
| ASTM-D740 | Methyl Ethyl Ketone (MEK) | AR |
| MIL-C-5541 | Alodine 1200S | AR |
| MEP 10-057 | Fluid-Resistant Nylon NYCOTE 7-11-DARK BLUE Varnish | AR |

G. Expandable Parts

Not Applicable

H. Persons Recommended

| *QTY* | *FUNCTION* | *PLACE* |
|---|---|---|
| 1 | Does the task | In the cockpit |

I. Installation (Figure 401)

*SUBTASK 420-003-A*

(1) Clean the aircraft areas where the three bonding jumpers (9) will be installed and the areas where the ten bolts (1) and washers (2) will be installed, as follows:

(a) With a clean cloth soaked in Methyl Ethyl Ketone (MEK), clean aircraft areas where the control pedestal will be installed. Before MEK evaporates, wipe those areas with a clean, dry cloth.

(b) With the 400-grit sandpaper, remove the old Alodine from those areas, then repeat step (a).

NOTE: Do not touch the clean surfaces.

(c) With a soft bristle brush, apply Alodine 1200S solution to the aircraft structure where the control pedestal will be installed, leaving surfaces wet for two to three minutes. The surfaces will turn yellowish.

NOTE: The Alodine 1200S solution has a pot life of 24 hours. Use a new Alodine solution if it was not prepared on the last 24 hours.

(d) With a clean cloth soaked in water, wipe the alodized area at least three times, taking care so that Alodine film is not damaged.

(e) Allow surfaces to air-dry.

(f) With a clean cloth soaked in Methyl Ethyl Ketone (MEK), clean the surfaces of the control pedestal that will be in contact with the aircraft structure. Before MEK evaporates, wipe those surfaces with a clean, dry cloth.

NOTE: Do not touch the clean surfaces.

(2) Install the control pedestal (3).

(3) Install and tighten the ten bolts (1) and washers (2). Then, apply a thin coat of Fluid-Resistant Nylon NYCOTE 7-11-DARK BLUE Varnish on the bonding areas.

NOTE: For more information about the varnish, refer to AMM MPP 20-30-05/200.

(4) Install the three bonding jumpers (9) that ground the control pedestal. To do this, install and tighten the related screw (6), lock washer (7), washers (8, 10 and 11) and nut (12). Then, apply a thin coat of Fluid-Resistant Nylon NYCOTE 7-11-DARK BLUE Varnish on the bonding areas.

NOTE: For more information about the varnish, refer to AMM MPP 20-30-05/200.

(5) Install and tighten the four washers (5) and screws (4) that attach the control pedestal to the main instrument panel.

J. Follow-on

*SUBTASK 842-003-A*

(1) Clean the aircraft areas where the grounding studs (GSs) are to be installed, as follows:

(a) With a clean cloth soaked in Methyl Ethyl Ketone (MEK), clean aircraft areas where the grounding studs will be installed. Before MEK evaporates, wipe those areas with a clean, dry cloth.

(b) With the 400-grit sandpaper, remove the old Alodine from those areas, then repeat step (a).

NOTE: Do not touch the clean surfaces.

(c) With a soft bristle brush, apply Alodine 1200S solution to the aircraft structure where the grounding studs will be installed, leaving surfaces wet for two to three minutes. The surfaces will turn yellowish.

NOTE: The Alodine 1200S solution has a pot life of 24 hours. Use a new Alodine solution if it was not prepared on the last 24 hours.

(d) With a clean cloth soaked in water, wipe the alodized area at least three times, taking care so that Alodine film is not damaged.

(e) Allow surfaces to air-dry.

(f) With a clean cloth soaked in Methyl Ethyl Ketone (MEK), clean the terminals of the grounding studs. Before MEK evaporates, wipe the terminals with a clean, dry cloth.

NOTE: Do not touch the clean surfaces.

(2) Install the connectors, the grounding studs (GSs) and the clamps. Apply a thin coat of Fluid-Resistant Nylon NYCOTE 7-11-DARK BLUE Varnish on the bonding areas of the grounding studs.

NOTE: For more information about the varnish, refer to AMM MPP 20-30-05/200.

(3) Install and tighten the four screws and washers that attach the air conditioning duct (DUs cooling) to the pedestal.

CAUTION: ALL THE TESTS REFERENCED TO IN EACH OF THE INSTALLATION TASKS MUST BE PERFORMED ONLY AFTER THE INSTALLATION OF ALL RELATED EQUIPMENT.

(4) Connect the electrical connectors of the LGEU (AMM TASK 32-32-01-400-801-A/400).

(5) Connect the electrical connectors to the flood/storm light inverters (AMM TASK 33-15-02-400-801-A/400).

(6) Install the FMS CDUs ( AMM TASK 34-61-02-400-801-A/400 or AMM TASK 34-62-02-400-801-A/400 or AMM TASK 34-62-02-400-802-A/400, as applicable).

(7) Install the TO configuration panel (AMM TASK 20-13-10-400-801-A/400).

(8) Install the elevator disconnect device ( AMM TASK 27-35-00-400-801-A/400).

(9) Install the aileron disconnect device ( AMM TASK 27-15-00-400-801-A/400).

(10) Install the aileron and elevator disconnection warning lights (AMM TASK 20-13-10-400-801-A/400).

(11) Install the control stand assembly ( AMM TASK 76-11-01-400-801-A/400).

(12) Install the gust lock (AMM TASK 27-70-00-400-801-A/400).

(13) Install the speed brake command lever (AMM TASK 27-63-03-400-801-A/400).

(14) Install the parking brake handle with the cable.

(15) Install the flap selector lever (AMM TASK 27-53-03-400-801-A/400).

(16) Install the thrust rating module (AMM TASK 76-12-02-400-801-A/400).

(17) Install the stall protection panel ( AMM TASK 27-36-05-400-801-A/400).

(18) Install the tuning backup unit ( AMM TASK 23-81-02-400-801-A/400).

(19) Install the trim control panel (AMM TASK 20-13-10-400-801-A/400).

(20) (Aircraft under CAT III configuration) Install the HGS Control Panel (AMM TASK 34-23-02-400-801-A/400).

(21) Install the EICAS reversion panel ( AMM TASK 31-41-03-400-802-A/400).

(22) Install the autopilot controller (PC-400) ( AMM TASK 22-11-02-400-801-A/400).

(23) Install the digital controller ( AMM TASK 21-31-01-400-801-A/400).

(24) Install the manual controller ( AMM TASK 21-31-02-400-801-A/400).

(25) (Aircraft with ACARS) Install the ACARS printer ( AMM TASK 23-22-02-400-801-A/400).

(26) (Aircraft with CMU) Install the CMU printer ( AMM TASK 23-24-02-400-801-A/400).

(27) (Aircraft with HF System) Install the HF control panel ( AMM TASK 23-11-01-400-801-A/400 or AMM TASK 23-11-01-400-802-A/400, as applicable).

(28) Connect the power connectors to main battery 1 and main battery 2.

(29) Use the lockwire to lock the power connectors of the main batteries.

(30) Close access panel 113DL (AMM MPP 06-41-01/100).