

AIRCRAFT MAINTENANCE MANUAL

MAIN PANEL - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove and install the main instrument panel.
- 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
31-11-01-000-801-A	MAIN INSTRUMENT PANEL - REMOVAL	AIRCRAFT WITH RMU INSTALLED ON THE CONTROL PEDESTAL
31-11-01-400-801-A	MAIN INSTRUMENT PANEL - INSTALLATION	AIRCRAFT WITH RMU INSTALLED ON THE CONTROL PEDESTAL
31-11-01-000-802-A	MAIN INSTRUMENT PANEL - REMOVAL	AIRCRAFT WITH RMU INSTALLED ON THE MAIN INSTRUMENT PANEL
31-11-01-400-802-A	MAIN INSTRUMENT PANEL - INSTALLATION	AIRCRAFT WITH RMU INSTALLED ON THE MAIN INSTRUMENT PANEL



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TASK 31-11-01-000-801-A

EFFECTIVITY: AIRCRAFT WITH RMU INSTALLED ON THE CONTROL PEDESTAL

2. MAIN INSTRUMENT PANEL - REMOVAL

A. General

(1) This procedure gives the instructions to remove the main instrument panel.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 20-13-03-000-801-A/400	SWITCHES AND POTENTIOMETERS - REMOVAL (TYPICAL)
AMM TASK 20-13-04-000-801-A/400	LIGHTED PUSHBUTTONS - REMOVAL (TYPICAL)
AMM TASK 20-13-10-000-801-A/400	CONTROL PANELS - REMOVAL (TYPICAL)
AMM TASK 23-12-01-000-801-A/400	VHF-3 CONTROL PANEL - REMOVAL
AMM TASK 23-21-02-000-801-A/400	SELCAL ANNUNCIATOR PANEL - REMOVAL
AMM TASK 23-51-01-000-801-A/400	DIGITAL AUDIO PANEL - REMOVAL
AMM TASK 23-81-01-000-801-A/400	RADIO MANAGEMENT UNIT - REMOVAL
AMM TASK 25-61-02-000-801-A/400	ELT REMOTE SWITCH PANEL (ELT ARTEX) - REMOVAL
AMM TASK 25-61-02-000-802-A/400	ELT REMOTE SWITCH PANEL (ELT SATORI) - REMOVAL
AMM TASK 31-21-01-000-801-A/400	DIGITAL CLOCK - REMOVAL
AMM TASK 32-32-02-000-801-A/400	LANDING GEAR CONTROL LEVER - REMOVAL
AMM TASK 34-11-01-000-801-A/400	-
AMM TASK 34-12-01-000-801-A/400	-
AMM TASK 34-22-01-000-801-A/400	DISPLAY UNIT - REMOVAL
AMM TASK 34-22-03-000-801-A/400	REVERSIONARY PANEL - REMOVAL
AMM TASK 34-24-01-000-801-A/400	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
113	113DL	Battery compartment
223	223BZ	Main instrument panel

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable



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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 ELT remote switch panel ([AMM TASK 25-61-02-000-801-A/400](#) or [AMM TASK 25-61-02-000-802-A/400](#), as applicable).
- (6) Remove the pilot's and the copilot's clock ([AMM TASK 31-21-01-000-801-A/400](#)).
- (7) Remove the feet air panels on the pilot's and copilot's sides, as follows:
 - (a) Unscrew the feet air handle and remove it.
 - (b) Remove the two screws that attach the panel acrylic mask to the main instrument panel.
 - (c) Remove the two screws that attach the feet air cable to the main instrument panel.
- (8) Remove the AHRS control panel on the pilot's and copilot's sides ([AMM TASK 20-13-10-000-801-A/400](#)).
- (9) Remove the digital audio panels on the pilot's and copilot's sides ([AMM TASK 23-51-01-000-801-A/400](#)).
- (10) Remove the reversionary panels on the pilot's and copilot's sides ([AMM TASK 34-22-03-000-801-A/400](#)).
- (11) Remove the PFDs and the MFDs on the pilot's and copilot's sides and the EICAS Display ([AMM TASK 34-22-01-000-801-A/400](#)).
- (12) Remove the pedal adjust switch on the pilot's and copilot's sides ([AMM TASK 20-13-03-000-801-A/400](#)).
- (13) Remove the standby altitude indicator ([AMM TASK 34-11-01-000-801-A/400](#)).
- (14) Remove the standby airspeed indicator ([AMM TASK 34-12-01-000-801-A/400](#)).
- (15) Remove the standby attitude indicator ([AMM TASK 34-24-01-000-801-A/400](#)).

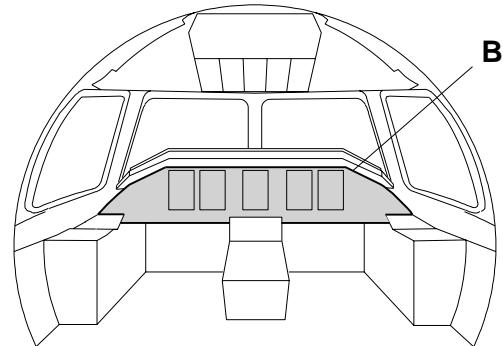
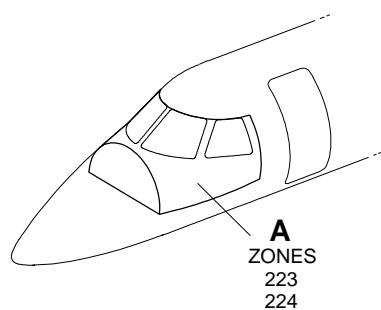
- (16) (Aircraft with SELCAL) Remove the SELCAL annunciator panel ([AMM TASK 23-21-02-000-801-A/400](#)).
- (17) (Aircraft with VHF-3) Remove the VHF-3 control panel ([AMM TASK 23-12-01-000-801-A/400](#)).
- (18) (Aircraft with EGPWS terrain sys ovrд panel) Remove the EGPWS terrain sys ovrд panel ([AMM TASK 20-13-10-000-801-A/400](#)).
- (19) Remove the landing gear control lever ([AMM TASK 32-32-02-000-801-A/400](#)).
- (20) Remove the parking brake light ([AMM TASK 20-13-04-000-801-A/400](#)).
- (21) Remove the tiedown straps that attach the ventilation hoses to the main panel, on the pilot's and copilot's sides.
- (22) Identify and remove the grounding studs (GSs) that are attached to the main panel.
- (23) Identify and remove the electrical connectors that are attached to the main instrument panel.
- (24) Identify and remove the clamps that attach the harness to the main instrument panel.
- (25) Remove the RMUs ([AMM TASK 23-81-01-000-801-A/400](#)) from the control pedestal, to get access to the four screws (7) and washers (8).

J. Removal ([Figure 401](#))

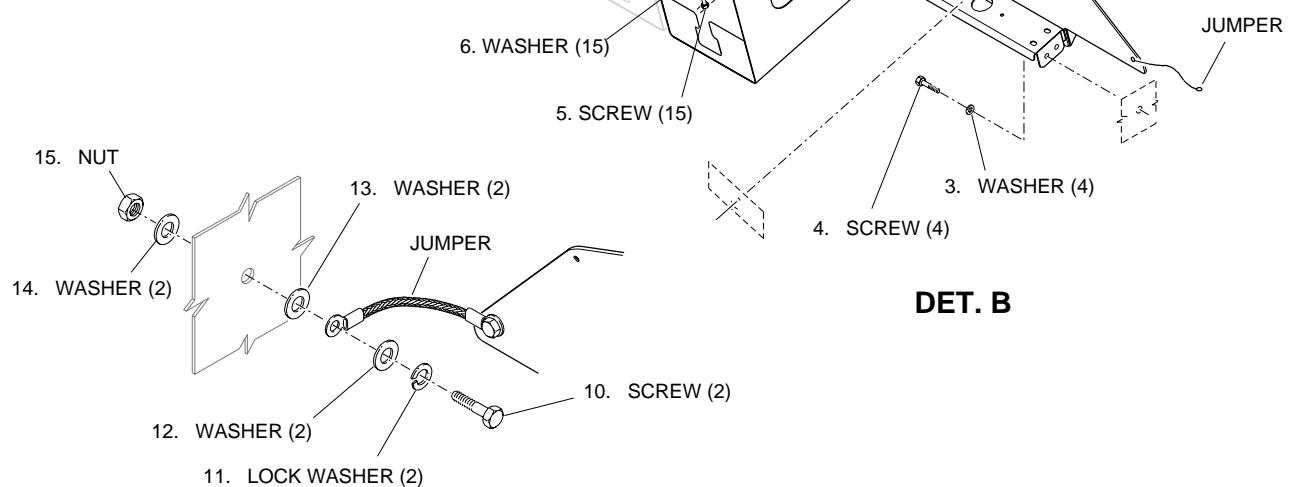
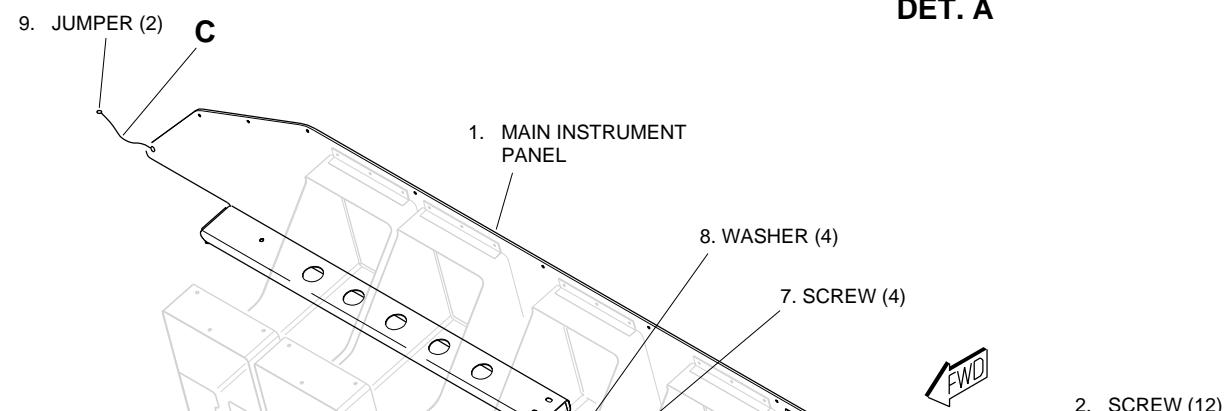
SUBTASK 020-002-A

- (1) Release the twelve screws (2).
- (2) Remove the three screws (5) and washers (6) that attach each of the five display unit trays to the glareshield panel.
- (3) Remove the four screws (4) and washers (3).
- (4) Remove the two bonding jumpers (9). To do this, loosen the corresponding nut (15), washers (14, 13 and 12), lock washer (11) and screw (10).
- (5) Remove the four screws (7) and washers (8) that attach the main instrument panel to the control pedestal.
- (6) Remove the main instrument panel (1).

EFFECTIVITY: AIRCRAFT WITH RMU INSTALLED ON THE CONTROL PEDESTAL
Main Instrument Panel - Removal/Installation
Figure 401



DET. A



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TASK 31-11-01-400-801-A

EFFECTIVITY: AIRCRAFT WITH RMU INSTALLED ON THE CONTROL PEDESTAL

3. MAIN INSTRUMENT PANEL - INSTALLATION

A. General

(1) This procedure gives the instructions to install the main instrument panel.

B. References

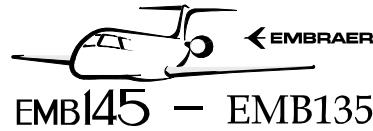
REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM MPP 20-30-05/200	- MAINTENANCE PRACTICES
AMM TASK 20-13-03-400-801-A/400	SWITCHES AND POTENTIOMETERS - INSTALLATION (TYPICAL)
AMM TASK 20-13-04-400-801-A/400	LIGHTED PUSHBUTTONS - INSTALLATION (TYPICAL)
AMM TASK 20-13-10-400-801-A/400	CONTROL PANELS - INSTALLATION (TYPICAL)
AMM TASK 23-12-01-400-801-A/400	VHF-3 CONTROL PANEL - INSTALLATION
AMM TASK 23-21-02-400-801-A/400	SELCAL ANNUNCIATOR PANEL - INSTALLATION
AMM TASK 23-51-01-400-801-A/400	DIGITAL AUDIO PANEL - INSTALLATION
AMM TASK 23-81-01-400-801-A/200	RMU - CONFIGURATION
AMM TASK 25-61-02-400-801-A/400	ELT REMOTE SWITCH PANEL (ELT ARTEX) - INSTALLATION
AMM TASK 25-61-02-400-802-A/400	ELT REMOTE SWITCH PANEL (ELT SATORI) - INSTALLATION
AMM TASK 31-21-01-400-801-A/400	DIGITAL CLOCK - INSTALLATION
AMM TASK 32-32-02-400-801-A/400	LANDING GEAR CONTROL LEVER - INSTALLATION
AMM TASK 34-11-01-400-801-A/400	-
AMM TASK 34-12-01-400-801-A/400	-
AMM TASK 34-22-01-400-801-A/400	DISPLAY UNIT - INSTALLATION
AMM TASK 34-22-03-400-801-A/400	REVERSIONARY PANEL - INSTALLATION
AMM TASK 34-24-01-400-801-A/400	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
113	113DL	Battery compartment
223	223BZ	Main instrument panel

D. Tools and Equipment

Not Applicable



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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 420-002-A

- (1) Clean the aircraft areas where the two jumpers (9) are to be installed, as follows:
 - (a) With a clean cloth soaked in Methyl Ethyl Ketone (MEK), clean aircraft areas where the jumpers 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 jumpers 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.



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- (e) Allow surfaces to air-dry.
 - (f) With a clean cloth soaked in Methyl Ethyl Ketone (MEK), clean the terminals of the jumpers. Before MEK evaporates, wipe the terminals with a clean, dry cloth.
NOTE: Do not touch the clean surfaces.
- (2) Install the main instrument panel (1).
 - (3) Install and tighten the four washers (8) and screws (7) that attach the main instrument panel to the control pedestal.
 - (4) Install the two bonding jumpers (9). To do this, tighten the corresponding nut (15), washers (14, 13 and 12), lock washer (11) and screw (10). 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 (3) and screws (4).
 - (6) Install and tighten the three screws (5) and washers (6) that attach each of the five display unit trays to the glareshield panel.
 - (7) Install and tighten the twelve screws (2).

J. Follow-on

SUBTASK 842-002-A

- (1) Install the RMUs ([AMM TASK 23-81-01-400-801-A/200](#)) on the control pedestal.
- (2) Install the clamps that attach the harness to the main instrument panel.
- (3) Install the electrical connectors that were attached to the main panel.
- (4) 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.
NOTE: Do not touch the clean surfaces.
 - (b) With the 400-grit sandpaper, remove the old Alodine from those areas, then repeat step (a).
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.
 - (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.
- (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.

- (5) Install the grounding studs (GSs) that were released from the main panel, 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](#).

- (6) Install the ventilation hoses on the pilot's and copilot's sides with tiedown straps.

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

- (7) Install the parking brake light ([AMM TASK 20-13-04-400-801-A/400](#)).

- (8) Install the standby altitude indicator ([AMM TASK 34-11-01-400-801-A/400](#)).

- (9) Install the standby airspeed indicator ([AMM TASK 34-12-01-400-801-A/400](#)).

- (10) Install the standby attitude indicator ([AMM TASK 34-24-01-400-801-A/400](#)).

- (11) (Aircraft with SELCAL) Install the SELCAL annunciator panel ([AMM TASK 23-21-02-400-801-A/400](#)).

- (12) (Aircraft with VHF-3) Install the VHF-3 control panel ([AMM TASK 23-12-01-400-801-A/400](#)).

- (13) (Aircraft with EGPWS terrain sys ovrd panel) Install the EGPWS terrain sys ovrd panel ([AMM TASK 20-13-10-400-801-A/400](#)).

- (14) Install the ELT remote switch panel ([AMM TASK 25-61-02-400-801-A/400](#) or [AMM TASK 25-61-02-400-802-A/400](#), as applicable).

- (15) Install the pilot's and the copilot's clock ([AMM TASK 31-21-01-400-801-A/400](#)).

- (16) Install the feet air panels on the pilot's and copilot's sides, as follows:

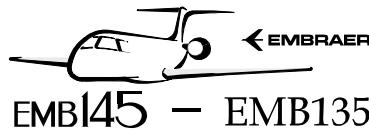
- (a) Install the two screws that attach the feet air cable to the main instrument panel.

- (b) Install the two screws that attach the panel acrylic mask to the main instrument panel.

- (c) Screw the feet air handle.

- (17) Install the AHRS control panel on the pilot's and copilot's sides ([AMM TASK 20-13-10-400-801-A/400](#)).

- (18) Install the digital audio panels on the pilot's and copilot's sides ([AMM TASK 23-51-01-400-801-A/400](#)).



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- (19) Install the reversionary panels on the pilot's and copilot's sides ([AMM TASK 34-22-03-400-801-A/400](#)).
- (20) Install the PFDs and the MFDs on the pilot's and copilot's sides and the EICAS Display ([AMM TASK 34-22-01-400-801-A/400](#)).
- (21) Install the pedal adjust switch on the pilot's and copilot's sides ([AMM TASK 20-13-03-400-801-A/400](#)).
- (22) Install the landing gear control lever ([AMM TASK 32-32-02-400-801-A/400](#)).
- (23) Connect the power connectors to main battery 1 and main battery 2.
- (24) Use the lockwire to lock the power connector of the main batteries.
- (25) Close access panel 113DL (AMM MPP 06-41-01/100).

TASK 31-11-01-000-802-A
EFFECTIVITY: AIRCRAFT WITH RMU INSTALLED ON THE MAIN INSTRUMENT PANEL
4. MAIN INSTRUMENT PANEL - REMOVAL
A. General

- (1) This procedure gives the instructions to remove the main instrument panel.

B. References

<i>REFERENCE</i>	<i>DESIGNATION</i>
AMM MPP 06-41-01/100	-
AMM TASK 20-13-03-000-801-A/400	SWITCHES AND POTENTIOMETERS - REMOVAL (TYPICAL)
AMM TASK 20-13-04-000-801-A/400	LIGHTED PUSHBUTTONS - REMOVAL (TYPICAL)
AMM TASK 20-13-10-000-801-A/400	CONTROL PANELS - REMOVAL (TYPICAL)
AMM TASK 23-21-02-000-801-A/400	SELCAL ANNUNCIATOR PANEL - REMOVAL
AMM TASK 23-51-01-000-801-A/400	DIGITAL AUDIO PANEL - REMOVAL
AMM TASK 23-81-01-000-801-A/400	RADIO MANAGEMENT UNIT - REMOVAL
AMM TASK 25-61-02-000-801-A/400	ELT REMOTE SWITCH PANEL (ELT ARTEX) - REMOVAL
AMM TASK 25-61-02-000-802-A/400	ELT REMOTE SWITCH PANEL (ELT SATORI) - REMOVAL
AMM TASK 31-21-01-000-801-A/400	DIGITAL CLOCK - REMOVAL
AMM TASK 32-32-02-000-801-A/400	LANDING GEAR CONTROL LEVER - REMOVAL
AMM TASK 34-01-01-000-801-A/400	ISIS - REMOVAL
AMM TASK 34-22-01-000-801-A/400	DISPLAY UNIT - REMOVAL
AMM TASK 34-22-03-000-801-A/400	REVERSIONARY PANEL - REMOVAL
AMM TASK 34-27-02-000-801-A/400	MSU - 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

C. Zones and Accesses

<i>ZONE</i>	<i>PANEL/DOOR</i>	<i>LOCATION</i>
113	113DL	Battery compartment
223	223BZ	Main instrument panel

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable



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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 ELT remote switch panel ([AMM TASK 25-61-02-000-801-A/400](#) or [AMM TASK 25-61-02-000-802-A/400](#), as applicable).
- (6) Remove the pilot's and the copilot's clock ([AMM TASK 31-21-01-000-801-A/400](#)).
- (7) Remove the feet air panels on the pilot's and copilot's sides, as follows:
 - (a) Unscrew the feet air handle and remove it.
 - (b) Remove the two screws that attach the panel acrylic mask to the main instrument panel.
 - (c) Remove the two screws that attach the feet air cable to the main instrument panel.
- (8) (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](#)).
- (9) (Aircraft with AH-800 AHRS) Remove the AHRS control panel on the pilot's and copilot's sides ([AMM TASK 20-13-10-000-801-A/400](#)).
- (10) Remove the digital audio panels on the pilot's and copilot's sides ([AMM TASK 23-51-01-000-801-A/400](#)).
- (11) Remove the reversionary panels on the pilot's and copilot's sides ([AMM TASK 34-22-03-000-801-A/400](#)).
- (12) Remove the PFDs and the MFDs on the pilot's and copilot's sides and the EICAS Display ([AMM TASK 34-22-01-000-801-A/400](#)).
- (13) Remove the pedal adjust switch on the pilot's and copilot's sides ([AMM TASK 20-13-03-000-801-A/400](#)).



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- (14) Remove the integrated standby instrument system ([AMM TASK 34-01-01-000-801-A/400](#)).
- (15) (Aircraft with SELCAL) Remove the SELCAL annunciator panel ([AMM TASK 23-21-02-000-801-A/400](#)).
- (16) Remove the RMUs ([AMM TASK 23-81-01-000-801-A/400](#)).
- (17) Remove the landing gear control lever ([AMM TASK 32-32-02-000-801-A/400](#)).
- (18) Remove the parking brake light ([AMM TASK 20-13-04-000-801-A/400](#)).
- (19) Remove the tiedown straps that attach the ventilation hoses to the main panel, on the pilot's and copilot's sides.
- (20) Identify and remove the grounding studs (GSs) that are attached to the main panel.
- (21) Identify and remove the electrical connectors that are attached to the main instrument panel.
- (22) Identify and remove the clamps that attach the harness to the main instrument panel.
- (23) 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) from the control pedestal, to get access to the four screws (5) and washers (6).

J. Removal

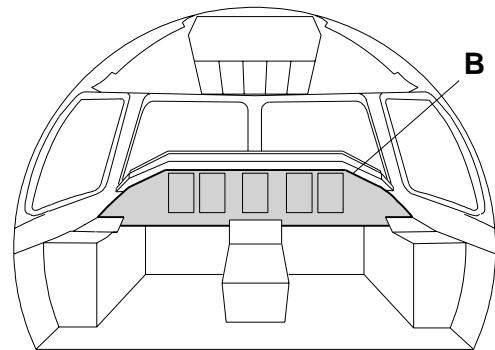
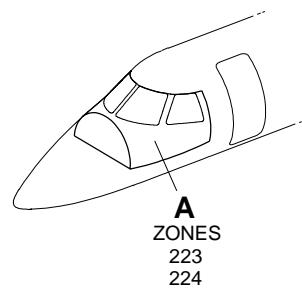
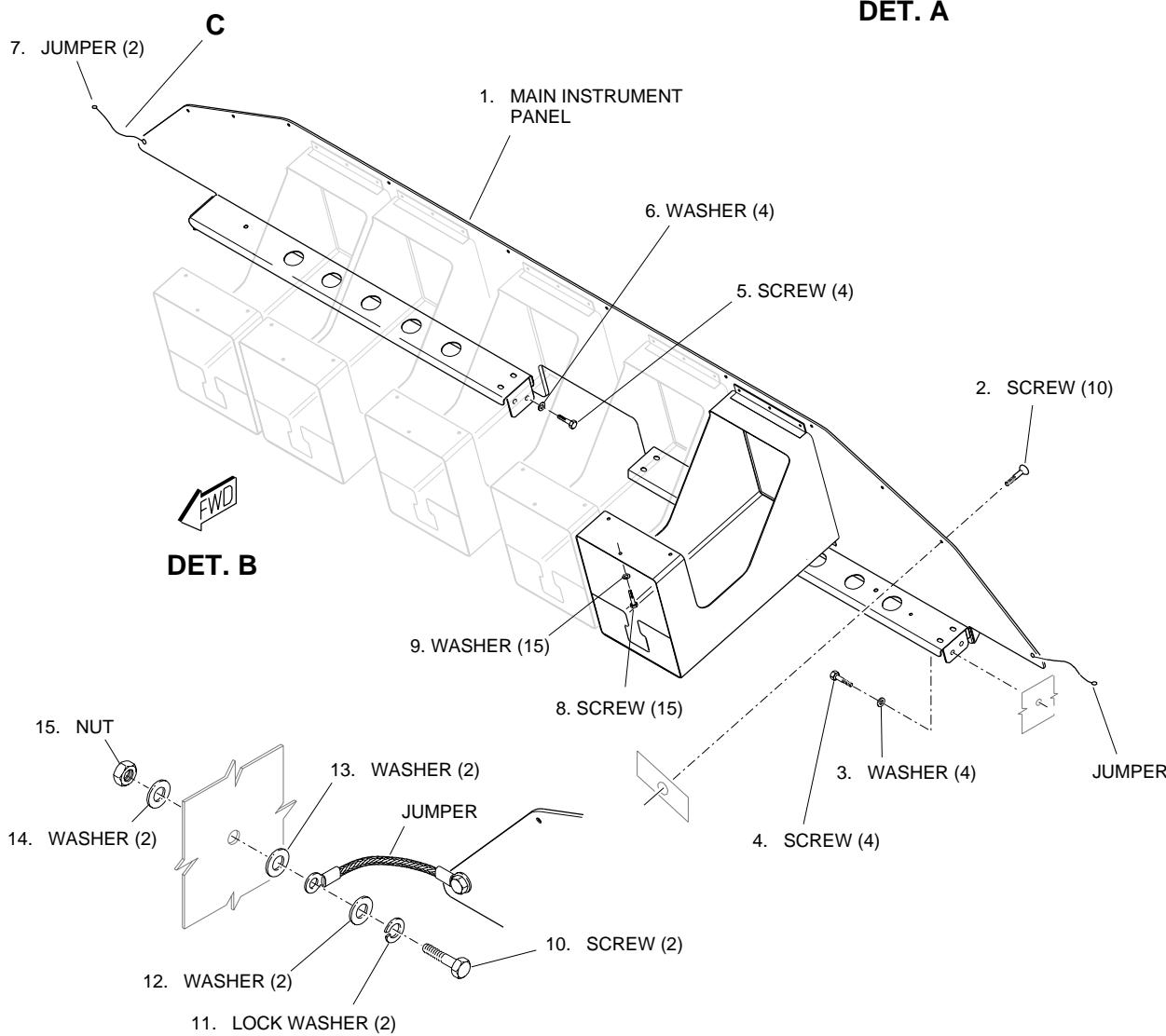
SUBTASK 020-003-A

- (1) Release the ten screws (2).
- (2) Remove the three screws (8) and washers (9) that attach each one of the five display unit trays to the glareshield panel.
- (3) Remove the four screws (4) and washers (3).
- (4) Remove the two bonding jumpers (7). To do this, loosen the corresponding nut (15), washers (14, 13 and 12), lock washer (11) and screw (10).
- (5) Remove the four screws (5) and washers (6) that attach the main instrument panel to the control pedestal.
- (6) Remove the main instrument panel (1).

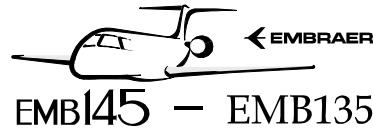
EFFECTIVITY: AIRCRAFT WITH RMU INSTALLED ON THE MAIN INSTRUMENT PANEL

Main Instrument Panel - Removal/Installation

Figure 402


DET. A


145AMM310148.MCE A



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TASK 31-11-01-400-802-A

EFFECTIVITY: AIRCRAFT WITH RMU INSTALLED ON THE MAIN INSTRUMENT PANEL

5. MAIN INSTRUMENT PANEL - INSTALLATION

A. General

(1) This procedure gives the instructions to install the main instrument panel.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM MPP 20-30-05/200	- MAINTENANCE PRACTICES
AMM TASK 20-13-03-400-801-A/400	SWITCHES AND POTENTIOMETERS - INSTALLATION (TYPICAL)
AMM TASK 20-13-04-400-801-A/400	LIGHTED PUSHBUTTONS - INSTALLATION (TYPICAL)
AMM TASK 20-13-10-400-801-A/400	CONTROL PANELS - INSTALLATION (TYPICAL)
AMM TASK 23-21-02-400-801-A/400	SELCAL ANNUNCIATOR PANEL - INSTALLATION
AMM TASK 23-51-01-400-801-A/400	DIGITAL AUDIO PANEL - INSTALLATION
AMM TASK 23-81-01-400-801-A/200	RMU - CONFIGURATION
AMM TASK 25-61-02-400-801-A/400	ELT REMOTE SWITCH PANEL (ELT ARTEX) - INSTALLATION
AMM TASK 25-61-02-400-802-A/400	ELT REMOTE SWITCH PANEL (ELT SATORI) - INSTALLATION
AMM TASK 31-21-01-400-801-A/400	DIGITAL CLOCK - INSTALLATION
AMM TASK 32-32-02-400-801-A/400	LANDING GEAR CONTROL LEVER - INSTALLATION
AMM TASK 34-01-01-400-801-A/400	ISIS - INSTALLATION
AMM TASK 34-22-01-400-801-A/400	DISPLAY UNIT - INSTALLATION
AMM TASK 34-22-03-400-801-A/400	REVERSIONARY PANEL - INSTALLATION
AMM TASK 34-27-02-400-801-A/400	MSU - 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

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
113	113DL	Battery compartment
223	223BZ	Main instrument panel

D. Tools and Equipment

Not Applicable



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

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

SUBTASK 420-003-A

- (1) Clean the aircraft areas where the two jumpers (7) are to be installed, as follows:
 - (a) With a clean cloth soaked in Methyl Ethyl Ketone (MEK), clean aircraft areas where the jumpers 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 jumpers 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 jumpers. Before MEK evaporates, wipe the terminals with a clean, dry cloth.

NOTE: Do not touch the clean surfaces.

- (2) Install the main instrument panel (1).
- (3) Install and tighten the four washers (6) and screws (5) that attach the main instrument panel to the control pedestal.
- (4) Install the two bonding jumpers (7). To do this, tighten the corresponding nut (15), washers (14, 13 and 12), lock washer (11) and screw (10). 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 (3) and screws (4).
- (6) Install and tighten the three screws (8) and washers (9) that attach each of the five display unit trays to the glareshield panel.
- (7) Install and tighten the ten screws (2).

J. Follow-on

SUBTASK 842-003-A

- (1) 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) on the control pedestal.
- (2) Install the clamps that attach the harness to the main instrument panel.
- (3) Install the electrical connectors that were attached to the main panel.
- (4) 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.
NOTE: Do not touch the clean surfaces.
 - (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.

- (5) Install the grounding studs (GSs) that were released from the main panel, 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](#).

- (6) Install the ventilation hoses on the pilot's and copilot's sides with tiedown straps.

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

- (7) Install the parking brake light ([AMM TASK 20-13-04-400-801-A/400](#)).
- (8) Install the ELT remote switch panel ([AMM TASK 25-61-02-400-801-A/400](#) or [AMM TASK 25-61-02-400-802-A/400](#), as applicable).
- (9) Install the pilot's and the copilot's clock ([AMM TASK 31-21-01-400-801-A/400](#)).
- (10) Install the feet air panels on the pilot's and copilot's sides, as follows:
 - (a) Install the two screws that attach the feet air cable to the main instrument panel.
 - (b) Install the two screws that attach the panel acrylic mask to the main instrument panel.
 - (c) Screw the feet air handle.
- (11) (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](#)).
- (12) (Aircraft with AH-800 AHRS) Install the AHRS control panel on the pilot's and copilot's sides ([AMM TASK 20-13-10-400-801-A/400](#)).
- (13) Install the digital audio panels on the pilot's and copilot's sides ([AMM TASK 23-51-01-400-801-A/400](#)).
- (14) Install the reversionary panels on the pilot's and copilot's sides ([AMM TASK 34-22-03-400-801-A/400](#)).
- (15) Install the integrated standby instrument system ([AMM TASK 34-01-01-400-801-A/400](#)).
- (16) (Aircraft with SELCAL) Install the SELCAL annunciator panel ([AMM TASK 23-21-02-400-801-A/400](#)).

- (17) Install the PFDs and the MFDs on the pilot's and copilot's sides and the EICAS Display ([AMM TASK 34-22-01-400-801-A/400](#)).
- (18) Install the pedal adjust switch on the pilot's and copilot's sides ([AMM TASK 20-13-03-400-801-A/400](#)).
- (19) Install the RMUs ([AMM TASK 23-81-01-400-801-A/200](#)).
- (20) Install the landing gear control lever ([AMM TASK 32-32-02-400-801-A/400](#)).
- (21) Connect the power connectors to main battery 1 and main battery 2.
- (22) Use the lockwire to lock the power connector of the main batteries.
- (23) Close access panel 113DL ([AMM MPP 06-41-01/100](#)).

