



# AIRCRAFT MAINTENANCE MANUAL

## RUDDER SERVO - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

### 1. General

- A. This section gives the procedures to remove and install the rudder autopilot servo of the Automatic Flight-Control System and its support.
- 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
22-11-05-000-801-A	RUDDER AUTOPILOT SERVO - REMOV- AL	ALL
22-11-05-400-801-A	RUDDER AUTOPILOT SERVO - INSTAL- LATION	ALL
22-11-05-000-802-A	SUPPORT OF THE RUDDER AUTOPILOT SERVO - REMOVAL	ALL
22-11-05-400-802-A	SUPPORT OF THE RUDDER AUTOPILOT SERVO - INSTALLATION	ALL



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TASK 22-11-05-000-801-A

EFFECTIVITY: ALL

2. RUDDER AUTOPILOT SERVO - REMOVAL

A. General

- (1) This procedure gives the instructions to remove the rudder autopilot servo of the Automatic Flight-Control System.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM MPP 06-41-02/100	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
272	272DR	Rear electronic compartment

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	Rear electronic compartment

I. Preparation

SUBTASK 841-002-A

- (1) On the Circuit Breaker Panel, open the AP 1 circuit breaker and attach a DO-NOT-CLOSE tag to it.
- (2) Remove access door 272DR (AMM MPP 06-41-01/100).
- (3) Remove floor panel 271DF (AMM MPP 06-41-02/100).

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

SUBTASK 020-002-A

- (1) Cut the lockwires.



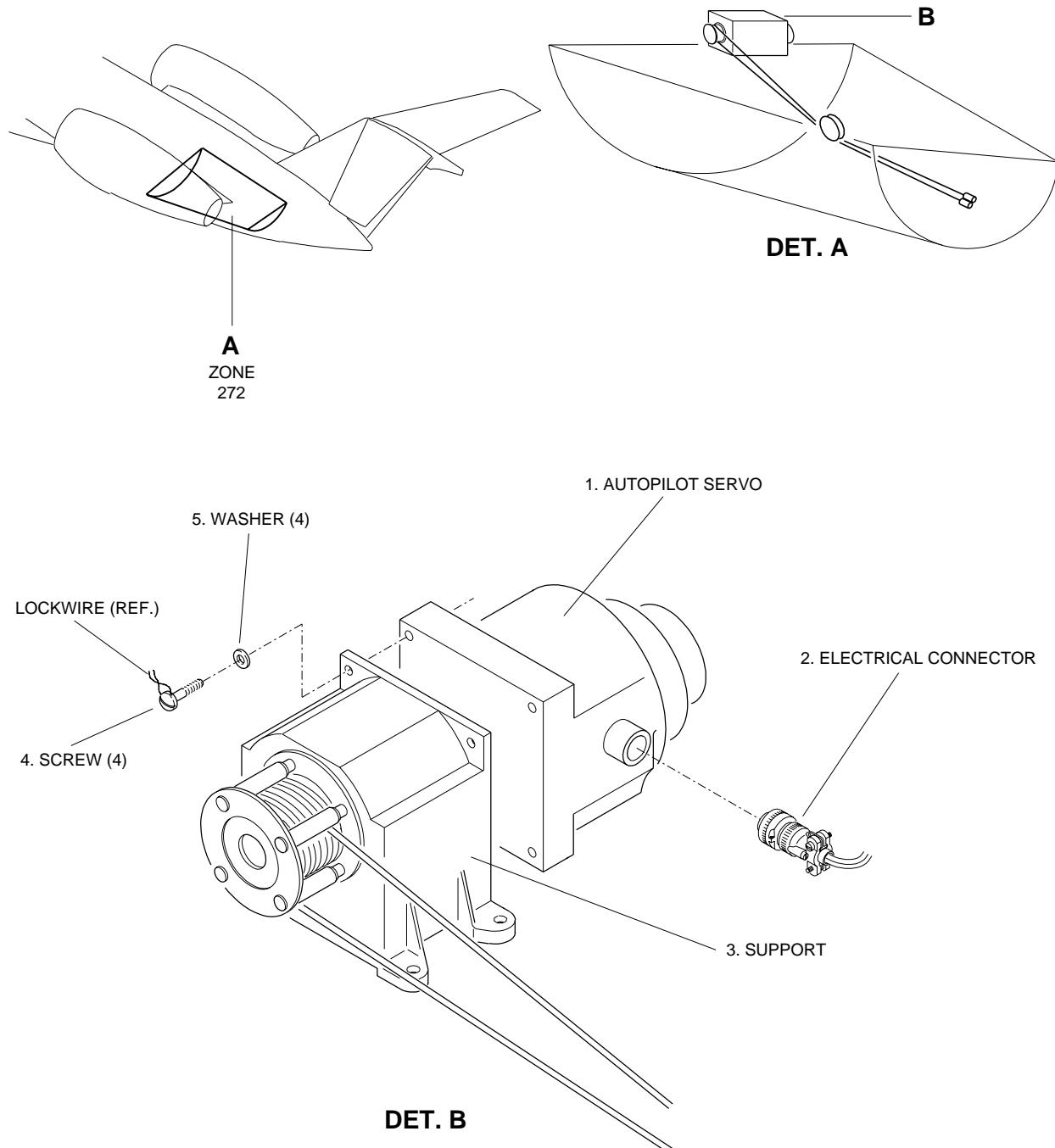
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- (2) Remove the screw (4) and washers (5) (4 positions) that attach the rudder autopilot servo (1) to the support (3).
- (3) Disconnect the electrical connector (2).
- (4) Remove the rudder autopilot servo (1).

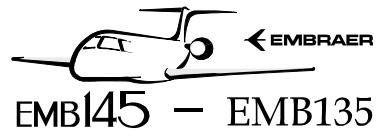
**EFFECTIVITY: ALL**

Rudder Autopilot Servo - Removal/Installation

Figure 401



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TASK 22-11-05-400-801-A

EFFECTIVITY: ALL

3. RUDDER AUTOPILOT SERVO - INSTALLATION

A. General

- (1) This procedure gives the instructions to install the rudder autopilot servo of the Automatic Flight-Control System.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM MPP 06-41-02/100	-
<b>AMM TASK 22-11-00-700-803-A/500</b>	<b>AUTOPILOT - FUNCTIONAL TEST</b>

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
272	272DR	Rear electronic compartment

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
MS20995C20	Lockwire	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Rear electronic compartment

I. Installation (Figure 401)

**SUBTASK 420-002-A**

- (1) Connect the electrical connector (2) to the rudder autopilot servo (1).
- (2) Put the rudder autopilot servo (1) on the support (3).
- (3) Install the screw (4) and washers (5) (4 positions) to attach the rudder autopilot servo (1) to the support (3).



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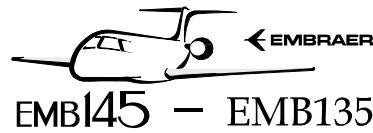
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- (4) Safety the screw (4) with lockwire.

J. Follow-on

*SUBTASK 842-002-A*

- (1) On the Circuit Breaker Panel, close the AP 1 circuit breaker and remove the DO-NOT-CLOSE tag from it.
- (2) Do the Autopilot-Functional Test ( [AMM TASK 22-11-00-700-803-A/500](#)).
- (3) Install floor panel 271DF (AMM MPP 06-41-02/100).
- (4) Install access door 272DR (AMM MPP 06-41-01/100).



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TASK 22-11-05-000-802-A

EFFECTIVITY: ALL

4. SUPPORT OF THE RUDDER AUTOPILOT SERVO - REMOVAL

## A. General

- (1) This procedure gives the instructions to remove the support of the rudder autopilot servo of the Automatic Flight-Control System.

## B. References

REFERENCE	DESIGNATION
AMM TASK 22-11-05-000-801-A/400	RUDDER AUTOPILOT SERVO - REMOVAL
IPC 27-21-00	RUDDER PRIMARY MECHANICAL CONTROL

## C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
272	272DR	Rear electronic compartment

## D. Tools and Equipment

Not Applicable

## E. Auxiliary Items

Not Applicable

## F. Consumable Materials

Not Applicable

## G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
Locking clips	IPC 27-21-00	4

## H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Rear electronic compartment

## I. Preparation

## SUBTASK 841-003-A

- (1) Remove the rudder autopilot servo (AMM TASK 22-11-05-000-801-A/400).

## J. Removal (Figure 402)

## SUBTASK 020-003-A

- (1) Remove the locking clips (5) and (7) from the turnbuckles (4) and (6) and discard them.

- (2) Loosen the turnbuckles (4) and (6) to disconnect the control cables (3) and (8).



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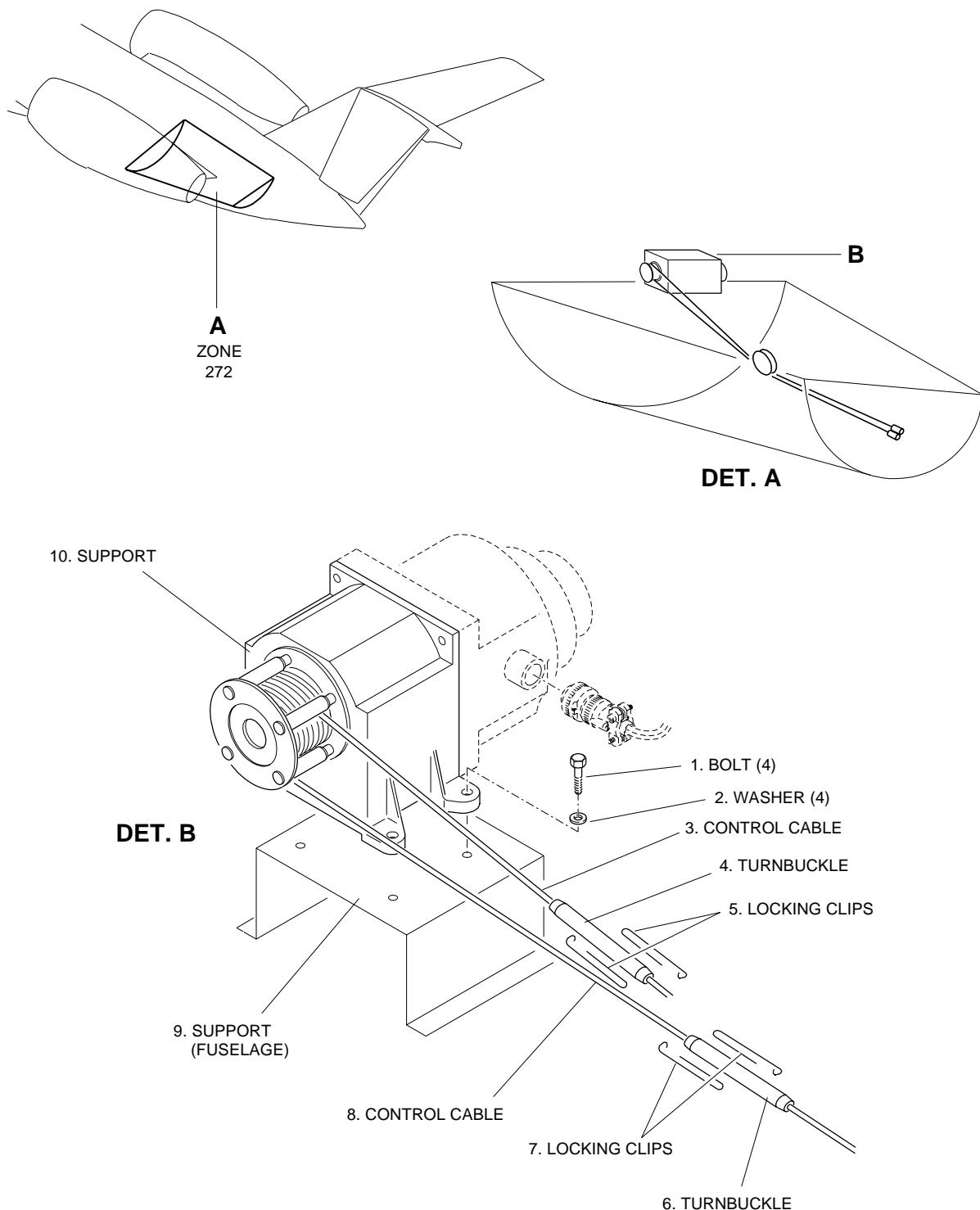
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- (3) Remove the bolts (1) and washers (2) (4 positions) that attach the support (10) of the rudder autopilot servo to the support (9) at the fuselage structure.
- (4) Remove the support (10).

**EFFECTIVITY: ALL**

Support of the Rudder Autopilot Servo - Removal/Installation

Figure 402



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**TASK 22-11-05-400-802-A**
**EFFECTIVITY: ALL**
**5. SUPPORT OF THE RUDDER AUTOPILOT SERVO - INSTALLATION**
**A. General**

- (1) This procedure gives the instructions to install the support of the rudder autopilot servo of the Automatic Flight-Control System.

**B. References**

<i>REFERENCE</i>	<i>DESIGNATION</i>
AMM TASK 22-11-05-400-801-A/400	RUDDER AUTOPILOT SERVO - INSTALLATION
AMM TASK 27-21-01-700-802-A/500	-

**C. Zones and Accesses**

<i>ZONE</i>	<i>PANEL/DOOR</i>	<i>LOCATION</i>
272	272DR	Rear electronic compartment

**D. Tools and Equipment**

Not Applicable

**E. Auxiliary Items**

Not Applicable

**F. Consumable Materials**

Not Applicable

**G. Expandable Parts**

Not Applicable

**H. Persons Recommended**

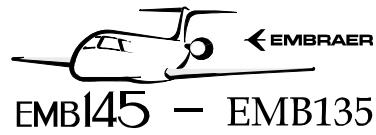
<i>QTY</i>	<i>FUNCTION</i>	<i>PLACE</i>
1	Does the task	Rear electronic compartment

**I. Installation (Figure 402)**
**SUBTASK 420-003-A**

- (1) Put the support (10) of the rudder autopilot servo on the support (9) at the fuselage structure.
- (2) Install the bolts (1) and washers (2) (4 positions) to attach the support (10) of the rudder autopilot servo to the support (9) at the fuselage structure.
- (3) Connect the control cables (3) and (8) through the turnbuckles (4) and (6).

**J. Follow-on**
**SUBTASK 842-003-A**

- (1) Install the rudder autopilot servo ([AMM TASK 22-11-05-400-801-A/400](#)).



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- (2) Apply tension to the control cables (AMM TASK 27-21-01-700-802-A/500).

