

## MAIN DOOR ACTUATOR - ADJUSTMENT/TEST

*EFFECTIVITY: AIRCRAFT WITH AIRSTAIRS DOOR*

### 1. General

- A. This section gives the procedures to adjust the main-door actuator rod-end and to do an operational check of the actuators.
- B. These procedures are applicable to the two actuators of the main door.
- C. The actuators are installed in center fuselage I, below the floor.
- D. 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
52-12-08-700-801-A	MAIN DOOR ACTUATOR - OPERATIONAL TEST	AIRCRAFT WITH AIR-STAIRS DOOR
52-12-08-820-801-A	MAIN DOOR ACTUATOR - ADJUSTMENT	AIRCRAFT WITH AIR-STAIRS DOOR

TASK 52-12-08-700-801-A

EFFECTIVITY: AIRCRAFT WITH AIRSTAIRS DOOR

## 2. MAIN DOOR ACTUATOR - OPERATIONAL TEST

### A. General

(1) This procedure gives the instructions to do an operational check of the main door actuators.

### B. References

REFERENCE	DESIGNATION
<a href="#">AMM TASK 20-40-01-860-801-A/200</a>	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE

### C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
811		Main door
223		Cockpit
224		Cockpit

### 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	Main door
1	Helps the other technician	In the cockpit

### I. Preparation

SUBTASK 841-002-A

(1) Energize the aircraft ( [AMM TASK 20-40-01-860-801-A/200](#) ).

### J. Main Door Actuator - Operational Test

SUBTASK 710-002-A

(1) Start the hydraulic electrical pump to load the hydraulic accumulator.

(2) Make sure that the hydraulic accumulator is loaded, and turn off the hydraulic electrical pump.

- (3) Open the door and make sure that it goes down until its travel is stopped by the handrail.
- (4) Operate the button of the main-door internal control panel to close the door.
- (5) Make sure that the door completes its closing travel and the actuator does not come to its internal backstop.

K. Follow-on

*SUBTASK 842-002-A*

- (1) Deenergize the aircraft ( [AMM TASK 20-40-01-860-801-A/200](#)).

TASK 52-12-08-820-801-A

*EFFECTIVITY: AIRCRAFT WITH AIRSTAIRS DOOR*

### 3. MAIN DOOR ACTUATOR - ADJUSTMENT

#### A. General

(1) This procedure gives the instructions to adjust the actuator of the main door.

#### B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM MPP 06-41-02/100	-
AMM TASK 28-41-00-200-801-A/600	-
<a href="#">AMM TASK 29-10-00-860-802-A/200</a>	HYDRAULIC SYSTEM - PRESSURIZATION WITH EMDP

#### C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
811		Main door

#### D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Torque Wrench - 10 to 30 N.m (160 to 200 lb.in)	To apply the correct torque to the castellated nut	

#### 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	On the main door

#### I. Preparation

##### *SUBTASK 841-003-A*

- (1) On the circuit breaker panel, open the ELEC PUMP 1 circuit breaker and attach a DO-NOT-CLOSE tag to it.
- (2) Open access door 114CR of the nose hydraulic compartment (AMM MPP 06-41-01/100).

- (3) Depressurize the hydraulic system ( [AMM TASK 29-10-00-860-802-A/200](#)).
- (4) Fully release the pressure in the fluid chamber of the hydraulic accumulator of the main-door actuation system. For this, open the discharge valve and monitor the pressure gage until it shows the nitrogen precharge.
- (5) Release the pressure in the spring accumulator. For this, do the steps below:
  - (a) Open the main-door emergency valve in the cockpit.
  - (b) Manually open and close the main door for two or three times.
- (6) Remove floor panels 231BF and 231CF (AMM MPP 06-41-02/100).

J. Adjustment ([Figure 501](#))

*SUBTASK 820-002-A*

**WARNING: THE HYDRAULIC SYSTEM CONTAINS PHOSPHATE-ESTER HYDRAULIC FLUID. THE FLUID CAN CAUSE IRRITATION IN YOUR SKIN OR INJURY TO YOUR EYES. USE THE APPLICABLE RUBBER GOGGLES AND GLOVES. IF IT GETS IN YOUR EYES, FLUSH THEM WITH WATER AND GET MEDICAL HELP.**

- (1) Remove the cotter pin, castellated nut, washers, and bolt to disconnect the rod end of the actuator from the rotating arm.
- (2) Extend the actuator rod to its maximum travel.

**CAUTION: AS A CHECK OF THE ROD ENDS FOR SECURITY, PUT A PIN OF THE APPLICABLE DIAMETER INTO THE INSPECTION HOLE OF THE ROD END. THE PIN MUST NOT GO THROUGH THE ROD END.**

- (3) Adjust the actuator rod end to let the center of the actuator rod lug stay  $0.12 \pm 0.02$  in ( $3.0 \pm 0.5$  mm) forward of the center of the main-door rotation arm attachment hole.
- (4) Put the actuator rod at the door rotation arm.
- (5) Install the bolt, washers, castellated nut and cotter pin to attach the actuator rod to the main-door rotating arm.
- (6) Do the actuator operational test.

K. Follow-on

*SUBTASK 842-003-A*

- (1) On the circuit breaker panel, close the ELEC PUMP 1 circuit breaker and remove the DO-NOT-CLOSE tag from it.
- (2) Pressurize hydraulic system 1 ( [AMM TASK 29-10-00-860-802-A/200](#)).
- (3) Do an inspection on the fuel quantity indication harness (AMM TASK 28-41-00-200-801-A/600).

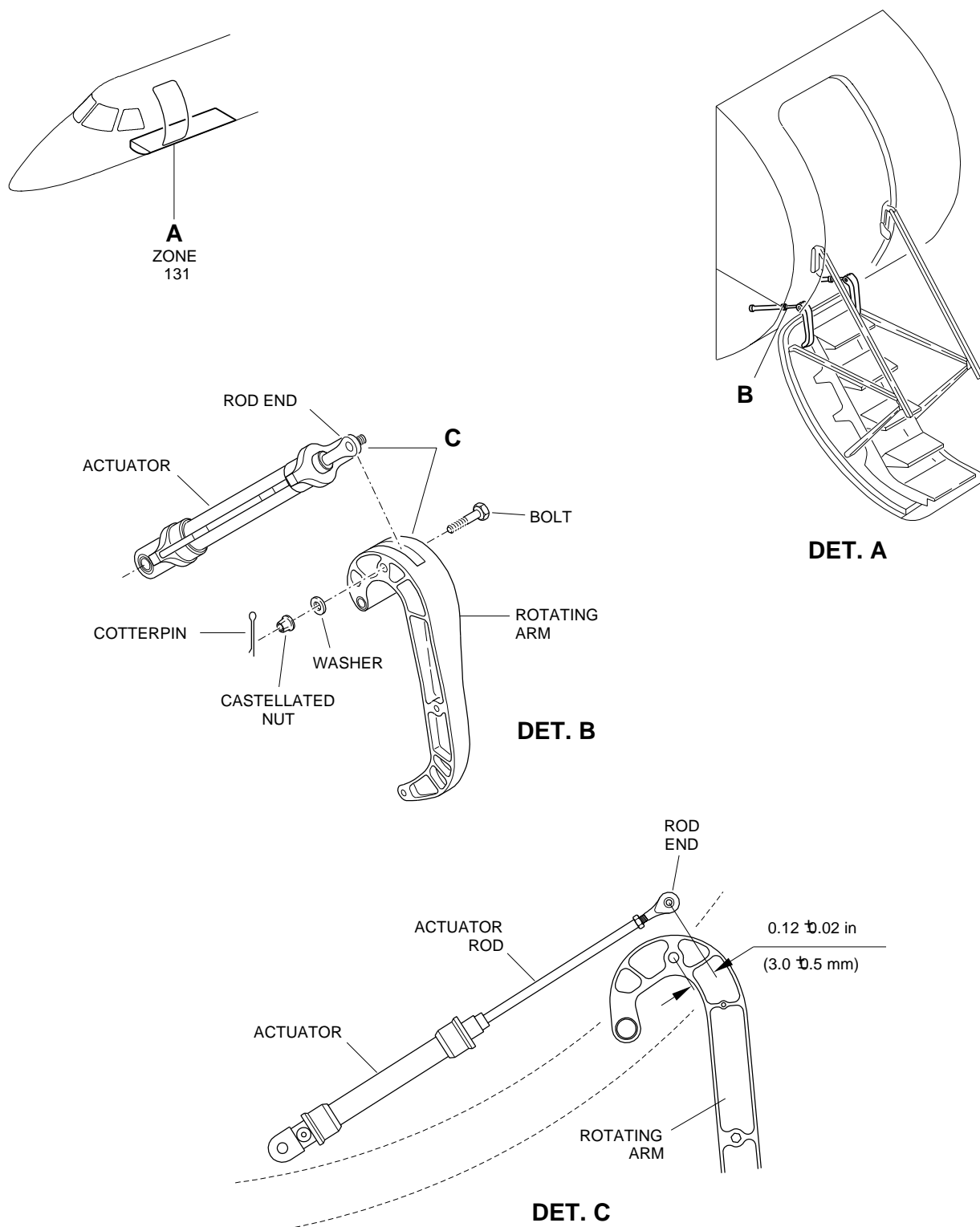
**NOTE: The inspection of fuel quantity indication harness is part of Critical Design Configuration Control Limitations (CDCCL) in the Airworthiness Limitations of the Aircraft Maintenance Program.**

- (4) Install floor panels 231BF and 231CF (AMM MPP 06-41-01/100).

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Adjustment of Main Door Actuator

Figure 501



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