TASK 27-80-17-720-801
FUNCTIONAL TEST OF THE SLAT POSITION MICROSWITCHES

1. OVERVIEW OF THE JOB

Operation codes:

- 27-80-17-720-801-01 LH inboard slat retracted microswitch (53D)
- 27-80-17-720-801-02 RH inboard slat retracted microswitch (54D)
- 27-80-17-720-801-03 LH outboard slat retracted microswitch (55D)
- 27-80-17-720-801-04 RH outboard slat retracted microswitch (56D)
- 27-80-17-720-801-05 LH inboard slat extended microswitch (57D)
- 27-80-17-720-801-06 RH inboard slat extended microswitch (58D)
- 27-80-17-720-801-07 LH outboard slat extended microswitch (59D)
- 27-80-17-720-801-08 RH outboard slat extended microswitch (60D)

Do this test to make sure that the slat position microswitches are operating properly.

The test consists of using a break-out box connected to the wing cut-off connector (201P) or (202P) to verify each slat microswitch signal, the slats being first in retracted position, then in extended position.

For A/C 251, the wiring diagram WD 27-80-10 must be used as a reference for the electrical tests.

The wiring diagram WD 27-82-00 must be used as a reference for the electrical tests.

2. LOGISTICS

A. References

Reference	Designation
• 24-00-00-860-801	ENERGIZATION / DE-ENERGIZATION OF THE AIRCRAFT
• 27-00-00-910-801	FLIGHT CONTROL SYSTEM MAINTENANCE AND SAFETY PRECAUTIONS
• 27-50-00-860-802	EXTENSION / RETRACTION OF THE SLATS / FLAPS FOR MAINTENANCE
• 27-80-17-960-801	REPLACEMENT / ADJUSTMENT OF THE SLAT POSITION MICROSWITCHES
• 29-00-00-860-801	PRESSURIZATION / DE-PRESSURIZATION OF THE HYDRAULIC SYSTEMS

B. Tools and Ground Support Equipment

Reference	Designation	Quantity
• TO-20-008	TOOL BOX	(SEE NOTE 1)
• AE1093-01	BREAK-OUT BOX	(SEE NOTES 2 AND 3)
• FAL1669504	ADAPTER	(SEE NOTE 3)
• FAL1915533	ADAPTER	(SEE NOTE 3)

C. Energy

- ELECTRICAL
- HYDRAULIC

D. Access

Reference	Designation
• 512A	WING INBOARD LEADING EDGE ACCESS DOOR
• 612A	WING INBOARD LEADING EDGE ACCESS DOOR
• PAX	PASSENGER DOOR

E. Miscellaneous

• BREAK-OUT BOX WITH ADAPTER FOR CONNECTOR 01C0R3020R18-32SN1 (LOCAL PROCUREMENT)
• BREAK-OUT BOX WITH ADAPTER FOR CONNECTOR 01C0R3020R20-41SN1 (LOCAL PROCUREMENT)

NOTE 1: It is mandatory to use a multimeter on ohmmeter function for the measurements, after checking it for correct operation.

NOTE 2: The logistics defined for this procedure assume that you will test separately the LH wing slat microswitches and the RH wing slat microswitches. You can also test simultaneously the LH and RH wing slat microswitches. In this case, you will need 2 break-out boxes instead of one.

NOTE 3: When a step in this procedure requests:
- the use of the break-out box (**AE1093-01**) with adapter (**FAL1669504**), you can use instead locally-procured break-out box with adapter for connector 01C0R3020R18-32SN1,
- the use of the break-out box (**AE1093-01**) with adapter (**FAL1915533**), you can use instead locally-procured break-out box with adapter for connector 01C0R3020R20-41SN1.

3. PRELIMINARY STEPS

Refer to **fig. 1**

A. Obey the Flight Control System maintenance and safety precautions (Refer to **TASK 27-00-00-910-801**).

B. Connect the electrical ground power unit (GPU) (Refer to **TASK 24-00-00-860-801**).

C. Connect the hydraulic GPU to hydraulic system 1 (Refer to **TASK 29-00-00-860-801**).

NOTE: For a short operating time, less than 60 seconds, standby pump (**15M**) may replace the hydraulic ground power unit. In this case, it is not necessary to connect the hydraulic ground power unit to hydraulic system 1 (Refer to **TASK 29-00-00-860-801**, paragraph "Pressurization of hydraulic system 1 from standby pump (**15M**)").

D. In the cockpit, on the pedestal, make sure that:
- the slats/flaps control lever (**2C**) is set to "CLEAN",
- the "EMERG SLATS" switch (**63F**) is set to the normal position (guard lowered).

E. For testing LH wing slat position microswitches, remove access panel (**512A**).

F. For testing RH wing slat position microswitches, remove access panel (**612A**).

4. FUNCTIONAL TEST OF SLAT POSITION MICROSWITCHES IN SLAT RETRACTED POSITION

Refer to **fig. 1**

A. Test of LH wing slat position microswitches

(1) Disconnect the wing cut-off connector (201P).

(2) For A/C 251, connect a break-out box (**AE1093-01**) with its adapter (**FAL1669504**) to the wing cut-off connector (201P).

Connect a break-out box (**AE1093-01**) with its adapter (**FAL1915533**) to the wing cut-off connector (201P).

(3) Using an ohmmeter connected to the wing cut-off connector (201P) of break-out box (**AE1093-01**), check for:

- electrical continuity across H and J terminals (LH inboard slat extended microswitch (**57D**)),
- electrical continuity across L and H terminals (LH outboard slat extended microswitch (**59D**)),
- no electrical continuity across H and G terminals (LH inboard slat retracted microswitch (**53D**)),
- For A/C 251, no electrical continuity across H and h terminals (LH outboard slat retracted microswitch (**55D**)),
- no electrical continuity across H and *H terminals (LH outboard slat retracted microswitch (**55D**)).

Otherwise, replace the faulty slat position microswitch (Refer to **TASK 27-80-17-960-801**).

(4) Disconnect the ohmmeter from break-out box (**AE1093-01**).

(5) Disconnect break-out box (**AE1093-01**) and its adapter from the wing cut-off connector (201P).

(6) Connect the wing cut-off connector (201P).

B. Test of RH wing slat position microswitches

(1) Disconnect the wing cut-off connector (202P).

(2) Connect a break-out box (**AE1093-01**) with its adapter (**FAL1669504**) to the wing cut-off connector (202P).

(3) Using an ohmmeter connected to the wing cut-off connector (202P) of break-out box (**AE1093-01**), check for:

- electrical continuity across H and J terminals (RH outboard slat extended microswitch (**60D**)),
- electrical continuity across H and K terminals (RH inboard slat extended microswitch (**58D**)),
- no electrical continuity across H and G terminals (RH inboard slat retracted microswitch (**54D**)),
- For A/C 251, no electrical continuity across H and h terminals (RH outboard slat retracted microswitch (**56D**)),
- no electrical continuity across H and *H terminals (RH outboard slat retracted microswitch (**56D**)).

Otherwise, replace the faulty slat position microswitch (Refer to **TASK 27-80-17-960-801**).

(4) Disconnect the ohmmeter from break-out box (**AE1093-01**).

(5) Disconnect break-out box (**AE1093-01**) and its adapter from the wing cut-off connector (202P).

(6) Connect the wing cut-off connector (202P).

5. FUNCTIONAL TEST OF SLAT POSITION MICROSWITCHES IN SLAT EXTENDED POSITION

Refer to **fig. 1**

A. Extend the slats as follows:

(1) Energize the aircraft systems with the electrical GPU (Refer to **TASK 24-00-00-860-801**).

(2) Pressurize hydraulic system 1 from hydraulic GPU (Refer to **TASK 29-00-00-860-801**).

(3) Extend the slats in normal mode (Refer to **TASK 27-50-00-860-802**).

(4) Cut off and drop the pressure in hydraulic system 1 (Refer to **TASK 29-00-00-860-801**).

(5) De-energize the aircraft systems (Refer to **TASK 24-00-00-860-801**).

(6) Inhibit slat and flap deflection (Refer to **TASK 27-50-00-860-802**, paragraph "Operation on slats or flaps extended").

B. Test of LH wing slat position microswitches

(1) Disconnect the wing cut-off connector (201P).

(2) For A/C 251, connect a break-out box (**AE1093-01**) with its adapter (**FAL1669504**) to the wing cut-off connector (201P).

Connect a break-out box (**AE1093-01**) with its adapter (**FAL1915533**) to the wing cut-off connector (201P).

(3) Using an ohmmeter connected to the wing cut-off connector (201P) of break-out box (**AE1093-01**), check for:

- electrical continuity across K and J terminals (LH inboard slat extended microswitch (**57D**)),
- electrical continuity across M and L terminals (LH outboard slat extended microswitch (**59D**)),
- electrical continuity across H and G terminals (LH inboard slat retracted microswitch (**53D**)),
- For A/C 251, electrical continuity across H and h terminals (LH outboard slat retracted microswitch (**55D**)),
- electrical continuity across H and *H terminals (LH outboard slat retracted microswitch (**55D**)).

Otherwise, replace the faulty slat position microswitch (Refer to **TASK 27-80-17-960-801**).

(4) Disconnect the ohmmeter from break-out box (**AE1093-01**).

(5) Disconnect break-out box (**AE1093-01**) and its adapter from the wing cut-off connector (201P).

(6) Connect the wing cut-off connector (201P).

C. Test of RH wing slat position microswitches

(1) Disconnect the wing cut-off connector (202P).

(2) Connect a break-out box (**AE1093-01**) with its adapter (**FAL1669504**) to the wing cut-off connector (202P).

(3) Using an ohmmeter connected to the wing cut-off connector (202P) of break-out box (**AE1093-01**), check for:

- electrical continuity across K and J terminals (RH inboard slat extended microswitch (**58D**)),
- electrical continuity across J and L terminals (RH outboard slat extended microswitch (**60D**)),
- electrical continuity across G and H terminals (RH inboard slat retracted microswitch (**54D**)),

- For A/C 251, electrical continuity across H and h terminals (RH outboard slat retracted microswitch (**56D**)),
- electrical continuity across H and *H terminals (RH outboard slat retracted microswitch (**56D**)).

Otherwise, replace the faulty slat position microswitch (Refer to **TASK 27-80-17-960-801**).

(4) Disconnect the ohmmeter from break-out box (**AE1093-01**).

(5) Disconnect break-out box (**AE1093-01**) and its adapter from the wing cut-off connector (202P).

(6) Connect the wing cut-off connector (202P).

6. FINAL STEPS

Refer to **fig. 1**

A. As applicable, install access panel (**512A**).

B. As applicable, install access panel (**612A**).

C. Retract the slats as follows:

(1) Remove the slat and flap safeties (Refer to **TASK 27-50-00-860-802**, paragraph "Operation on slats or flaps extended").

(2) Energize the aircraft systems with the electrical GPU (Refer to **TASK 24-00-00-860-801**).

(3) Pressurize hydraulic system 1 from hydraulic GPU (Refer to **TASK 29-00-00-860-801**).

(4) Fully retract the slats (Refer to **TASK 27-50-00-860-802**).

(5) Cut off and drop the pressure in hydraulic system 1 (Refer to **TASK 29-00-00-860-801**).

(6) De-energize the aircraft systems (Refer to **TASK 24-00-00-860-801**).

D. Disconnect the hydraulic GPU from hydraulic system 1 (Refer to **TASK 29-00-00-860-801**).

E. Disconnect the electrical GPU (Refer to **TASK 24-00-00-860-801**).

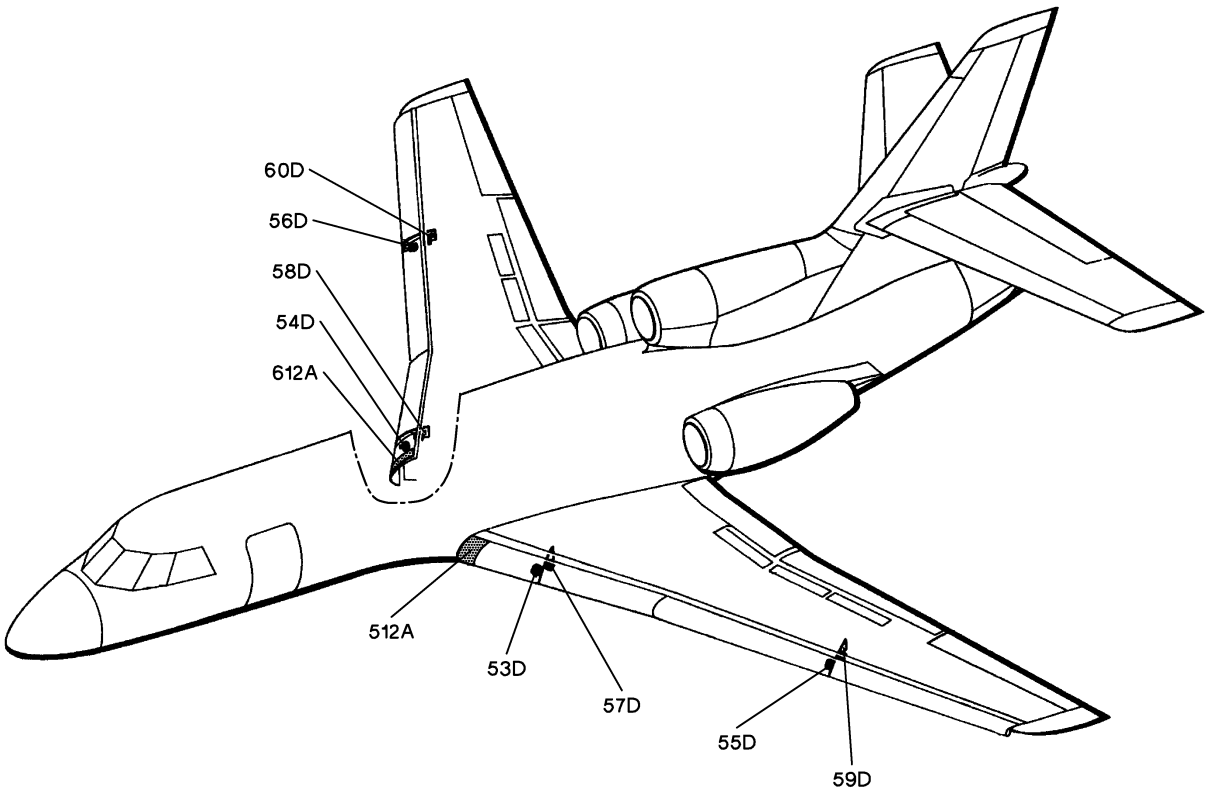

Figure 1: LOCATION OF EQUIPMENT