



AIRCRAFT
MAINTENANCE MANUAL

FEEDBACK UNIT (POTENTIOMETER) - ADJUSTMENT/TEST

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to do the adjustment/test of the feedback unit (potentiometer).
- 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).

<i>TASK NUMBER</i>	<i>DESCRIPTION</i>	<i>EFFECTIVITY</i>
32-50-07-700-801-A	FEEDBACK UNIT (POTENTIOMETER) - FUNCTIONAL CHECK/ADJUSTMENT	ALL



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TASK 32-50-07-700-801-A

EFFECTIVITY: ALL

2. FEEDBACK UNIT (POTENTIOMETER) - FUNCTIONAL CHECK/ADJUSTMENT

A. General

(1) This task gives the procedure to do the adjustment/test of the feedback unit (potentiometer).

B. References

REFERENCE	DESIGNATION
AMM MPP 06-42-00/100	-
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 29-10-00-860-801-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH HTS
AMM TASK 32-00-01-910-801-A/200	LG SAFETY PIN - INSTALLATION AND REMOVAL
AMM TASK 32-50-00-700-803-A/500	NOSE WHEEL STEERING SYSTEM ACTUATION - OPERATIONAL CHECK

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 050	Digital multimeter	To measure the resistance	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
SAE AMS 3277	PR 1826 A2 ALO	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	NLG
1	Helps the other technician	Cockpit



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I. Preparation

SUBTASK 841-002-A

- (1) Make sure that the safety pins of the landing gears are installed ([AMM TASK 32-00-01-910-801-A/200](#)).

J. Feedback Unit (Potentiometer) - Adjustment ([Figure 501](#)) ([Figure 502](#))

SUBTASK 720-002-A

- (1) Disconnect electrical connector P0051 and measure the resistance difference of the potentiometer (4) between pins A and B and pins B and C. Refer to [Figure 501](#) and [Figure 502](#).

- (a) The connector P0051 is connected to the Nose Wheel Steering Control Module. Refer to [Figure 502](#).
 - (b) Write down the measured values.
 - (c) The difference must be (rBC - rBA) less than or equal to 30 Ohms.

- (2) To adjust feedback potentiometer R7001, if the difference is more than 30 Ohms, do the steps below:

- (a) Remove the sealant of the bolts (1) and along the contour of the cover (3).
 - (b) Untighten the bolts (1), unlocking and remove the locking washers (2).
 - (c) Lift the cover (3) and loosen 1/4 turn the four locking screw (5) of the potentiometer (5) until the potentiometer turn freely.

NOTE: Be careful, do not cause damage to the potentiometer wire when lifting the potentiometer cover.

- (d) Manually turn the potentiometer (4) in the CW or in the CCW to adjust the resistance difference. Let the potentiometer (4) stay in a position at which the difference is less than or equal 30 Ohms.

K. Follow-on

SUBTASK 842-002-A

- (1) Connect the connector P0051.

- (2) Make sure that the STEER circuit breaker is closed, on the circuit breaker panel.

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

- (4) Pressurize hydraulic systems 1 ([AMM TASK 29-10-00-860-801-A/200](#)).

- (5) Push the handle wheel in its neutral position and keep it pushed.

NOTE: Make sure that the nose wheels are centered/aligned with the zero mark on the graduated scale (in degree) of the NLG.

- (6) If the nose wheels are not centered, turn carefully the potentiometer (4) until get the required value.

- (7) Tighten the locking screws (5).

NOTE: Make sure that the potentiometer does not move when you tighten.

- (8) Release the handle wheel and check if the nose wheels are precisely centered with the zero mark on the graduate scale (in degree).

- (9) Identify the load potentiometer (6) (Figure 504) through the access door 223LZ (AMM MPP 06-42-00/100).

- (10) Release the lock nut (1).

- (11) Adjust the adjusting bolt (7) until the nose landing gear is centered/aligned with the zero mark on the graduated scale of the NLG.

- (12) Tighten the lock nut (1) of the adjust bolt (7).

NOTE: Make sure that the nose wheels alignment remains when you tighten the locking bolts.

- (13) Release all the pressure of hydraulic system No. 1 ([AMM TASK 29-10-00-860-801-A/200](#)).

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

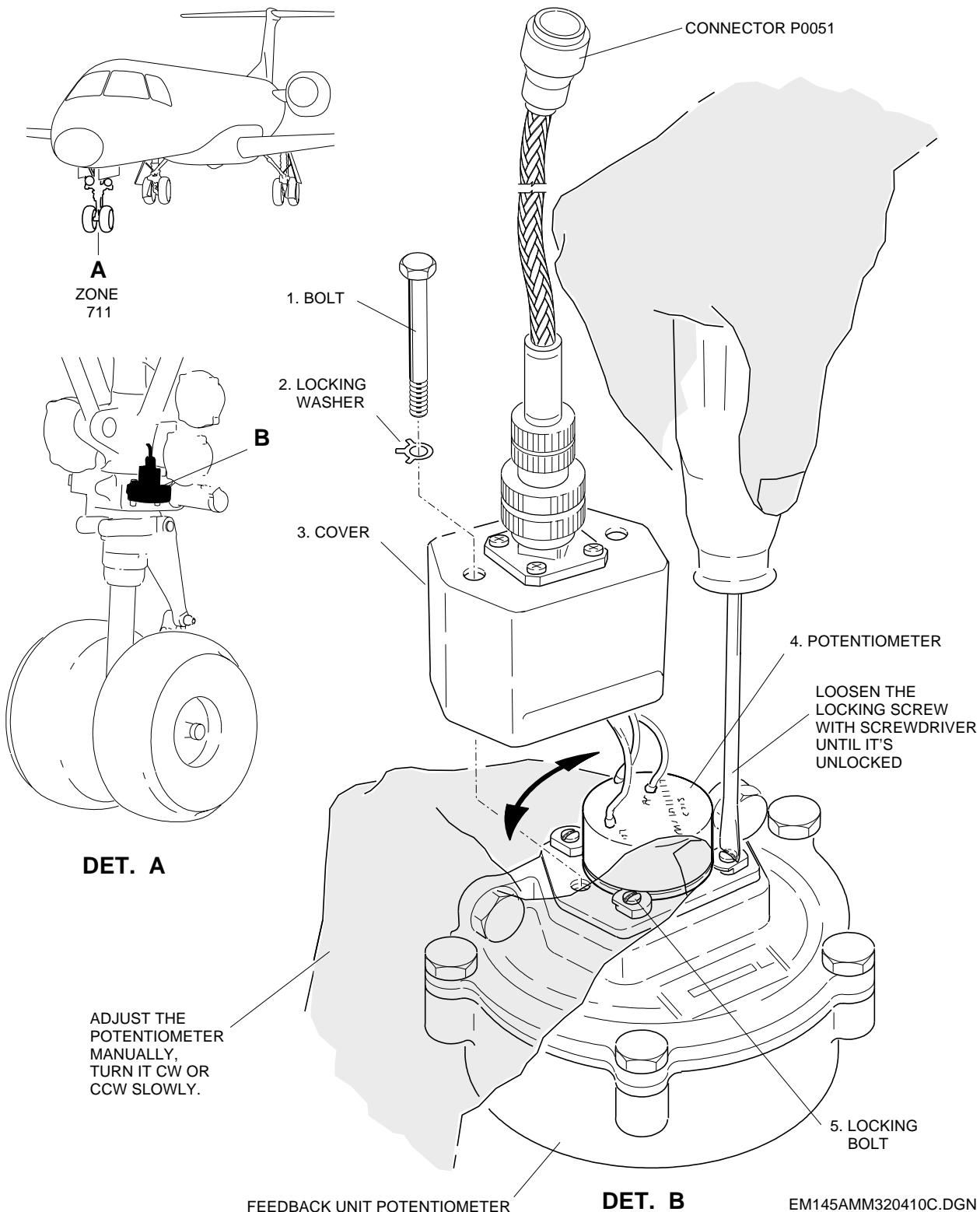
- (15) Lower the cover (3) and put the locking washers (2) and tighten the bolts (1) and apply the sealant on the bolts (1).

- (16) Apply the sealant along the contour of the cover (3).

- (17) Do the nose wheel steering system operational test ([AMM TASK 32-50-00-700-803-A/500](#)).

EFFECTIVITY: ALL

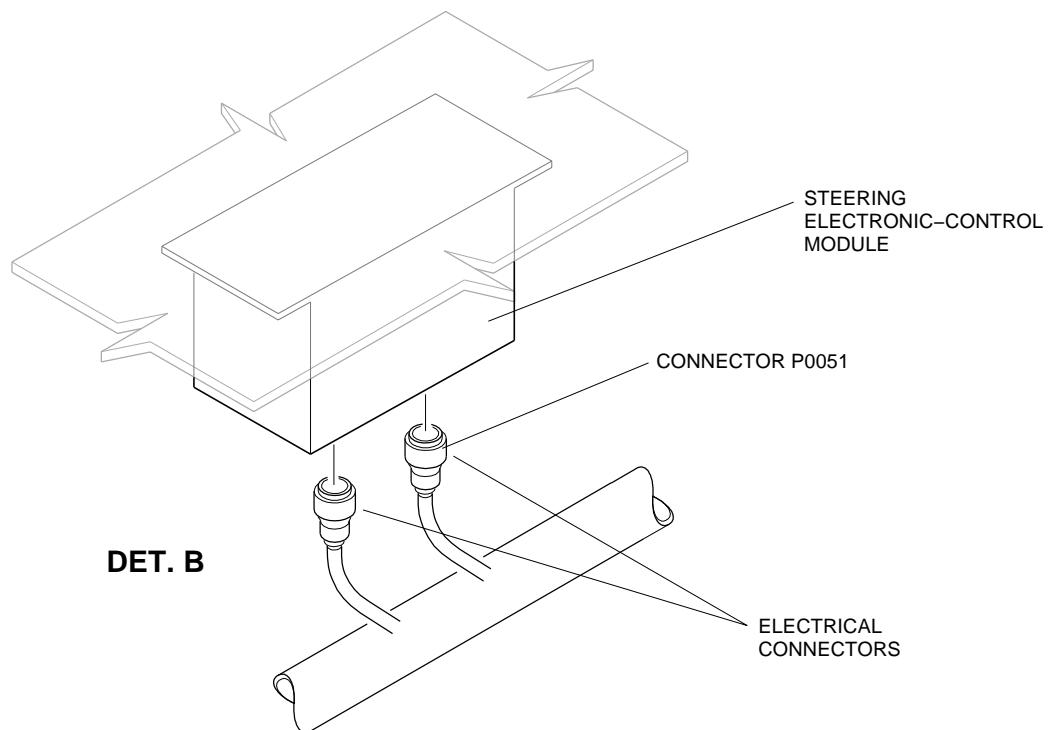
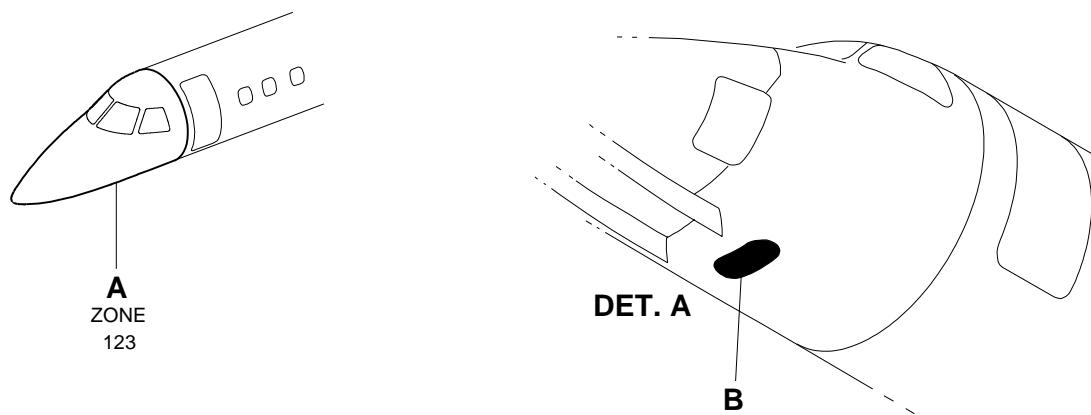
Feedback Unit (Potentiometer) - Adjustment
Figure 501



EFFECTIVITY: ALL

Feedback Unit (Potentiometer) - Adjustment

Figure 502



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