



AIRCRAFT MAINTENANCE MANUAL

7-DEGREE PROXIMITY SWITCH - ADJUSTMENT/TEST

EFFECTIVITY: ALL

1. General

- A. This section gives the procedure to do the check of the 7-Degree Proximity Switch of nose wheels steering system.
- 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
32-50-06-700-801-A ♦	7-DEGREE PROXIMITY SWITCH - FUNCTIONAL CHECK	ALL
32-50-06-700-802-A	7-DEGREE PROXIMITY SWITCH - ADJUSTMENT	ALL



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TASK 32-50-06-700-801-A

EFFECTIVITY: ALL

2. 7-DEGREE PROXIMITY SWITCH - FUNCTIONAL CHECK

A. General

- (1) This task gives the procedures to do the adjustment/test of the 7-Degree Proximity Switch.

B. References

REFERENCE	DESIGNATION
AMM TASK 07-10-00-500-803-A/200	-
AMM TASK 07-10-00-500-804-A/200	-
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 29-10-00-860-802-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH EMDP
AMM TASK 32-00-01-910-801-A/200	LG SAFETY PIN - INSTALLATION AND REMOVAL
AMM TASK 32-00-02-910-801-A/200	SAFETY PIN OF THE NLG DOORS SOLENOID VALVE - INSTALLATION AND REMOVAL
S.B.145-32-0036	-

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 008	Tow bar	To turn the NLG wheels	

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	NLG
1	Helps the other technician	NLG and cockpit

I. Preparation

SUBTASK 841-002-A

- (1) For aircraft PRE-MOD. S.B.145-32-0036, make sure that the pressure in hydraulic system No. 1 is fully released (AMM TASK 29-10-00-860-802-A/200).

- (2) For aircraft POST-MOD. S.B.145-32-0036, install the safety pin of the NLG door solenoid valve ([AMM TASK 32-00-02-910-801-A/200](#)).
- (3) Make sure that the nose landing gear safety pin is installed ([AMM TASK 32-00-01-910-801-A/200](#)).
- (4) Make sure that the emergency/parking brake handle is pulled.
NOTE: Before you install the jack, apply grease on its end to decrease the friction when you turn the NLG wheels.
- (5) Lift the NLG wheels with the jack until they are off the ground (AMM TASK 07-10-00-500-803-A/200).
- (6) Open the ELEC PUMP (hydr sys 1) circuit breaker.
- (7) Energize the aircraft ([AMM TASK 20-40-01-860-801-A/200](#)).
- (8) Make sure that the NLG wheels are in the neutral position.

J. Functional Check of the 7-Degree Proximity Switch ([Figure 501](#))

SUBTASK 720-002-A

WARNING: DO NOT PRESSURIZE HYDRAULIC SYSTEM 1 BECAUSE THIS CAN CAUSE ACCIDENTAL OPERATION OF THE NLG STEERING SYSTEM.

- (1) Do this check:
 - (a) Push the steering disengage button (STEER DISC) on the pilot's yoke.
 Result:
 1 On the EICAS display, the STEER INOP caution message comes into view.
 - (b) Manually or with GSE 008, turn the NLG wheels to the left side up to the 6-degree (+0.0-degree / -0.5-degree) position.
NOTE: Turn the wheels slowly. If too much force is applied, the wheels can become stuck.
 - (c) Push the steering handle wheel to engage the nose wheel steering system.
 Result:
 1 On the EICAS display, the STEER INOP caution message goes out of view.
 - (d) Release the steering handle wheel and make sure that the nose wheel steering system stays engaged.
 - (e) Push the steering disengage button (STEER DISC) on the pilot's yoke
 Result:
 1 On the EICAS display, the STEER INOP caution message comes into view.
 - (f) Manually or with GSE 008, turn the NLG wheels to the left side up to the 7.5-degree (+0.5-degree / -0.0-degree) position.
NOTE: Turn the wheels slowly. If too much force is applied, the wheels can become stuck.
 - (g) Push the steering handle wheel to engage the nose wheel steering system and keep it pushed.

Result:

- 1 On the EICAS display, the STEER INOP caution message goes out of view.

- (h) Release the steering handle wheel and make sure that nose wheel steering system is disengaged.

Result:

- 1 On the EICAS display, the STEER INOP caution message comes into view.

- (i) Move the NLG wheels back to the center position and push the steering handle wheel to reset the nose wheel steering system.

Result:

- 1 On the EICAS display, the STEER INOP caution message goes out of view.

- (j) Do steps (a) and (i) again for the right side.

K. Follow-on

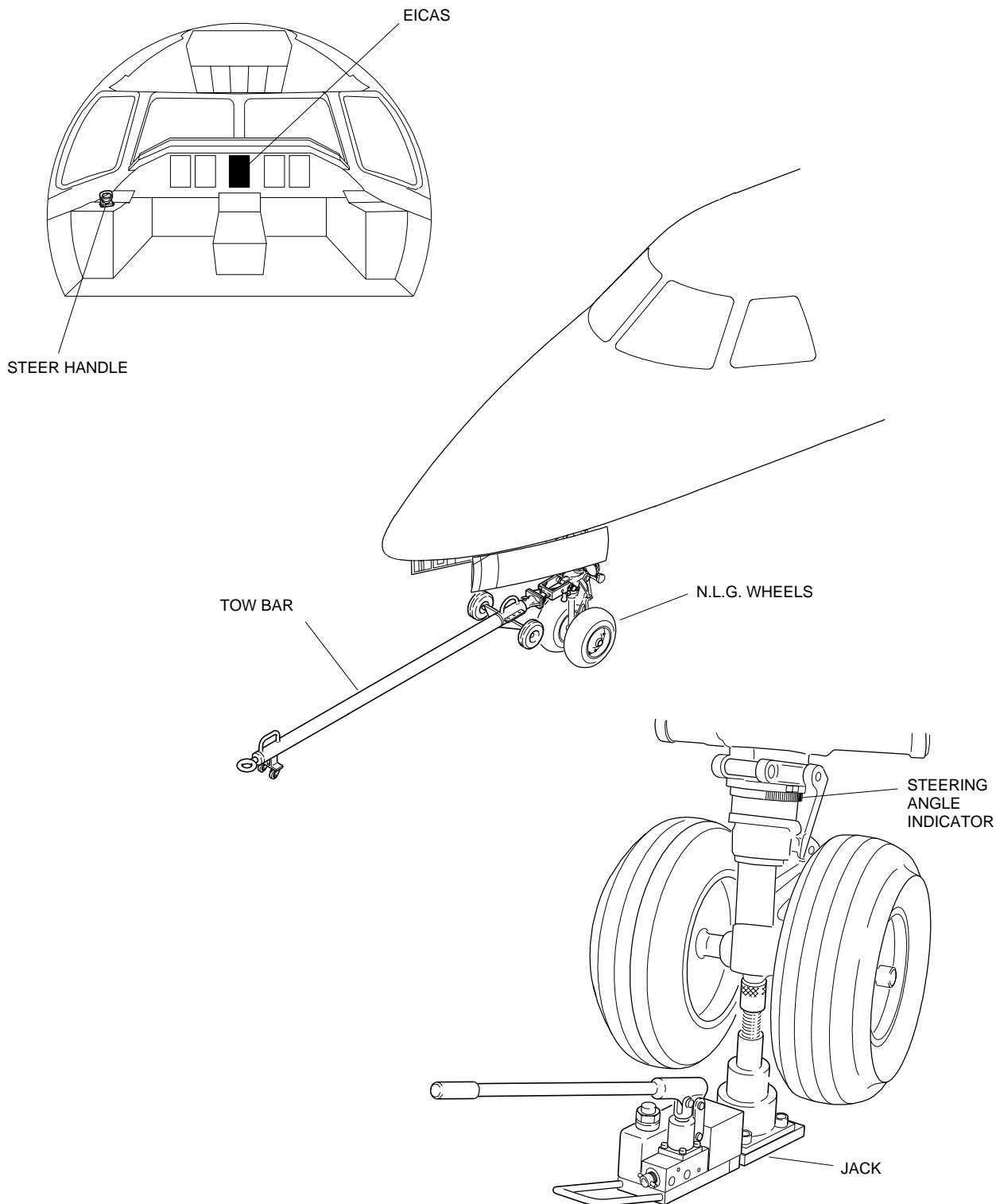
SUBTASK 842-002-A

- (1) Lower the NLG wheels (AMM TASK 07-10-00-500-804-A/200).
- (2) Deenergize the aircraft ([AMM TASK 20-40-01-860-801-A/200](#)).
- (3) Close the ELEC PUMP (hydr sys 1) circuit breaker.
- (4) For aircraft POST-MOD. S.B.145-32-0036, remove the safety pin of the NLG door solenoid valve ([AMM TASK 32-00-02-910-801-A/200](#)).

EFFECTIVITY: ALL

7-Degree Proximity Switch - Functional Check

Figure 501



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TASK 32-50-06-700-802-A

EFFECTIVITY: ALL

3. 7-DEGREE PROXIMITY SWITCH - ADJUSTMENT

A. General

(1) This task gives the procedures to do the adjustment of the 7-Degree Proximity Switch.

B. References

REFERENCE	DESIGNATION
AMM MPP 20-30-03/200	- MAINTENANCE PRACTICES
AMM TASK 29-10-00-860-802-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH EMDP
AMM TASK 32-00-01-910-801-A/200	LG SAFETY PIN - INSTALLATION AND REMOVAL
AMM TASK 32-00-02-910-801-A/200	SAFETY PIN OF THE NLG DOORS SOLENOID VALVE - INSTALLATION AND REMOVAL
AMM TASK 32-50-06-000-801-A/400	7-DEGREE PROXIMITY SWITCH - REMOVAL
AMM TASK 32-50-06-400-801-A/400	7-DEGREE PROXIMITY SWITCH - INSTALLATION
AMM TASK 32-50-06-700-801-A/500	7-DEGREE PROXIMITY SWITCH - FUNCTIONAL CHECK
S.B.145-32-0036	-
SRM 51-20-01	-

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 110	Feedback unit tool-adjust	To adjust the target ring in the 7-degree proximity switch	

E. Auxiliary Items

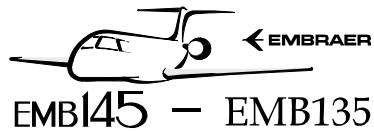
ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Acrylic spatula	To remove the sealant	1

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
MS20995-C32	Lockwire	AR
PR1440B2	Sealant (MIL-S-8802, Type II, Class A2)	AR

G. Expandable Parts

Not Applicable



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H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	NLG

I. Preparation

SUBTASK 841-003-A

- (1) On the circuit breaker panel, open the STEER circuit breaker and attach a DO-NOT-CLOSE tag to it.
- (2) For aircraft PRE-MOD. [S.B.145-32-0036](#), make sure that the pressure in hydraulic system No. 1 is fully released ([AMM TASK 29-10-00-860-802-A/200](#)).
- (3) For aircraft POST-MOD. [S.B.145-32-0036](#), install the safety pin of the NLG door solenoid valve ([AMM TASK 32-00-02-910-801-A/200](#)).
- (4) Make sure that the NLG safety pins are installed ([AMM TASK 32-00-01-910-801-A/200](#)).
- (5) Remove the 7-Degree proximity Switch ([AMM TASK 32-50-06-000-801-A/400](#)).

J. 7-Degree Proximity Switch - Adjustment ([Figure 502](#))

SUBTASK 720-003-A

- (1) With an acrylic spatula, remove the sealant from the cover plate (5) and bolts (3).
- (2) Cut the lockwire (4).
- (3) Remove the bolts (3) and washers (2) that attach the cover plate (5) to the 7-degree proximity switch (feedback unit) (1).
- (4) Remove the cover plate (5).
- (5) Unbend the lock washer (6) to release the nut (7). With the aid of a screwdriver, do not let the shaft (8) turn together.
- (6) Put the feedback unit adjustment tool (GSE 110) into the hole of the left bolt (3) (near to the proximity sensor) and manually or with a screwdriver, turn the shaft (8) slowly to the left or to the right until the target is found and then attach the GSE 110 to the target to keep the feedback unit adjusted.
- (7) Tighten the shaft (8) with the nut (7). Use a screwdriver not to let the shaft turn together.
- (8) Lock the nut (7) with the lock washer (6). Bend one side up and the other down.
- (9) Remove the feedback unit adjustment tool (GSE 110)
- (10) Install the cover plate (5) with the bolts (3) and washers (2).
- (11) Lock the bolts (3) with the lockwire (4).



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K. Follow-on

SUBTASK 842-003-A

- (1) Install the 7-Degree proximity Switch ([AMM TASK 32-50-06-400-801-A/400](#)).
- (2) On the circuit breaker panel, close the STEER circuit breaker and remove the DO-NOT-CLOSE tag from it.
- (3) Do the functional check of the 7-Degree Proximity Switch ([AMM TASK 32-50-06-700-801-A/500](#)).
- (4) Apply sealant (PR1440B2) along the contour of the cover plate (5) and on the bolts (3). Refer to SRM 51-20-01. For alternative sealants, refer to [AMM MPP 20-30-03/200](#).
- (5) For aircraft POST-MOD. S.B.145-32-0036, remove the safety pin of the NLG door solenoid valve ([AMM TASK 32-00-02-910-801-A/200](#)).

EFFECTIVITY: ALL

7-Degree Proximity Switch - Adjustment

Figure 502

