



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

CONTROL YOKE - ADJUSTMENT/TEST

EFFECTIVITY: ALL

1. General

- A. This section gives the procedure to adjust the aileron secondary backstops.
- 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
27-11-08-700-801-A	ADJUSTMENT OF THE AILERON SECON- ALL DARY BACKSTOPS	



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 27-11-08-700-801-A

EFFECTIVITY: ALL

2. ADJUSTMENT OF THE AILERON SECONDARY BACKSTOPS

A. General

- (1) This task gives the procedure to adjust the aileron secondary backstops.

B. References

REFERENCE	DESIGNATION
AMM TASK 29-10-00-860-801-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH HTS

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 070	Digital Protractor	To measure the deflections of the pilot/copilot control yoke	
GSE 058	Kit, rig pin, flight controls	To lock the aileron control system in the neutral position	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
Commercially available	Double-Face Adhesive Tape	As necessary

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Cockpit

I. Preparation

SUBTASK 720-002-A

- (1) Make sure that the aircraft is safe for maintenance.
- (2) Do not do other tasks on the aileron system.
- (3) Pressurize the hydraulic system [AMM TASK 29-10-00-860-801-A/200](#).

J. Control Yoke Adjustment and Check ([Figure 501](#))

SUBTASK 720-002-B

WARNING: MAKE SURE THAT THERE ARE NO PERSON OR EQUIPMENT IN THE AILERON TRAVEL AREA.

NOTE: Do the check below for the pilot and copilot control yoke.

- (1) Install the rig pin to the control yoke in the neutral position ([Figure 502](#)).
- (2) Install GSE 070 on the pilot control yoke; use a paper masking tape.
- (3) Set the dial protactor to zero.
- (4) Remove the rig pin from the control yoke.
- (5) Deflect the control yoke clockwise and anti-clockwise until the primary backstop is reached and keep the control yoke in this movement until the secondary backstops are reached.
- (6) Do a check of the control yoke for deflection angle with the aid of the protactor.

Table 501 - CONTROL YOKE DEFLECTION

CONTROL YOKE	
Clockwise deflection	Anti-clockwise deflection
$47 \pm 1^\circ$	$47 \pm 1^\circ$

- (7) If necessary, adjust the secondary backstop:

- (a) Cut and remove the tiedown straps (3) (4 positions) to release the electrical harness from the control column.
- (b) Remove the cover (2). For this, remove the screws (1) (3 positions) and (4).
- (c) Cut and remove the secondary backstop lockwires (6).
- (d) Deflect the control yoke clockwise and anti clockwise until the primary backstop is reached and keep the control yoke in this movement until the secondary backstops is reached. Keep the control yoke in this position and adjust the secondary backstop height (5). Refer to the deflection angle on the protactor.
- (e) Deflect the control yoke to the neutral position.
- (f) Safety the secondary backstop.

K. Follow-on

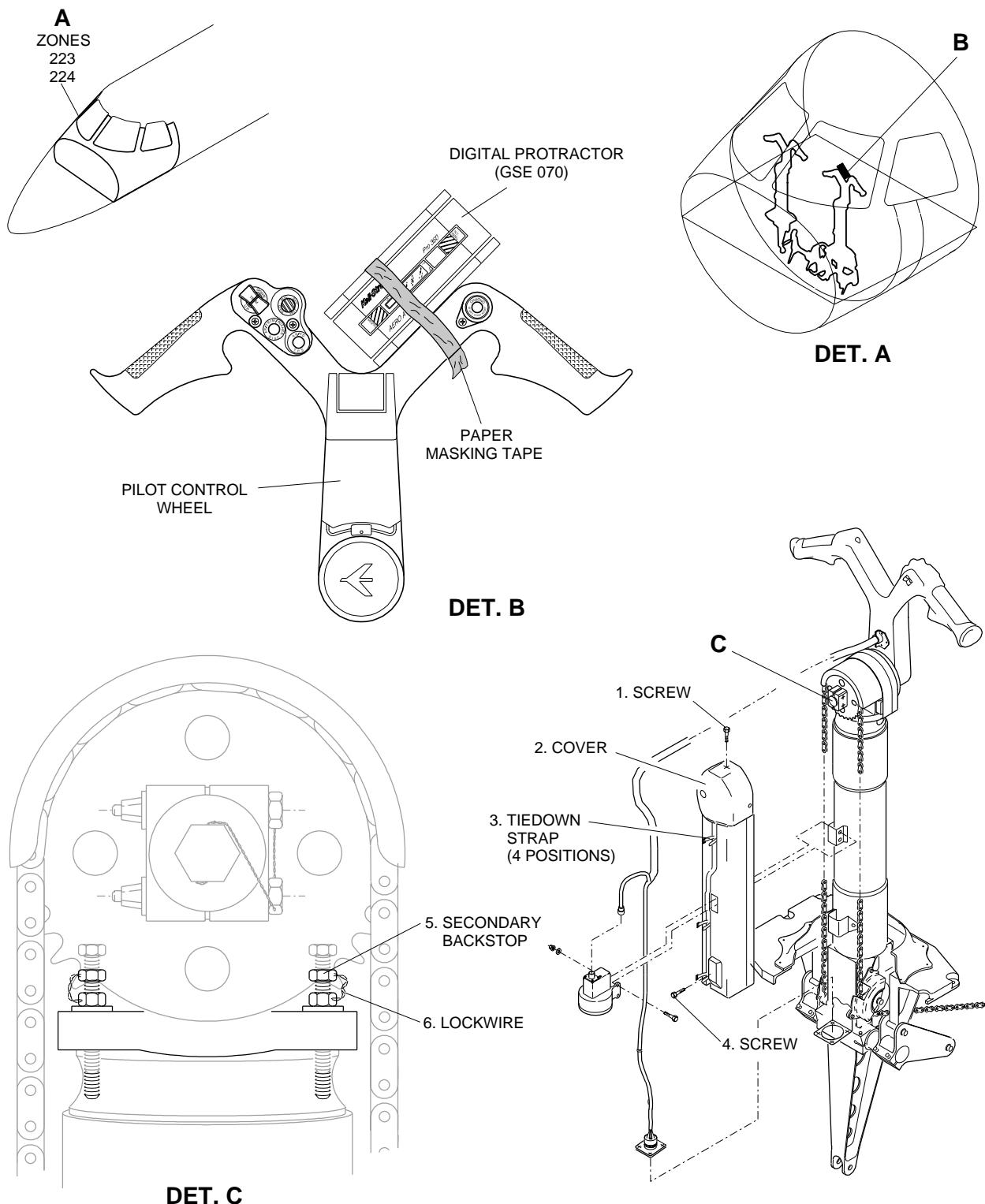
SUBTASK 842-002-A

- (1) Set the control yoke to the neutral position.
- (2) Release the pressure from the hydraulic system [AMM TASK 29-10-00-860-801-A/200](#).

EFFECTIVITY: ALL

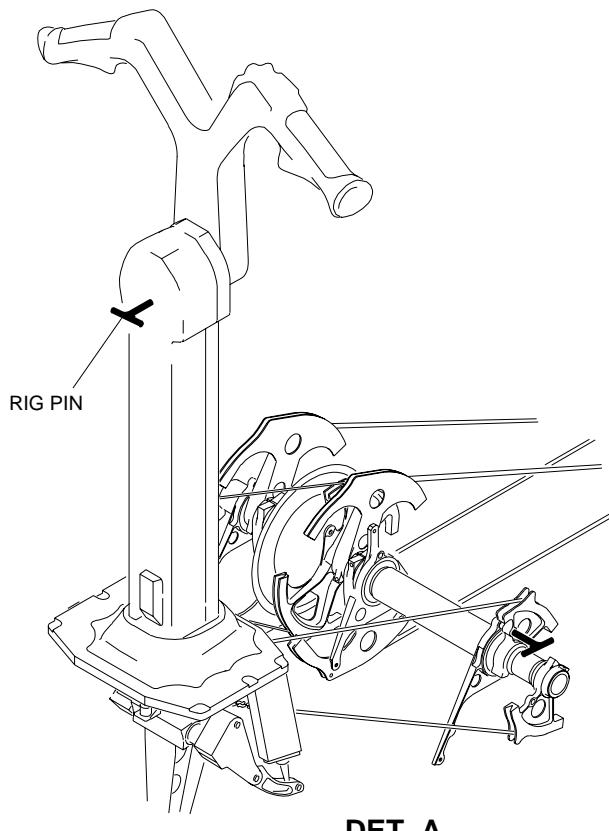
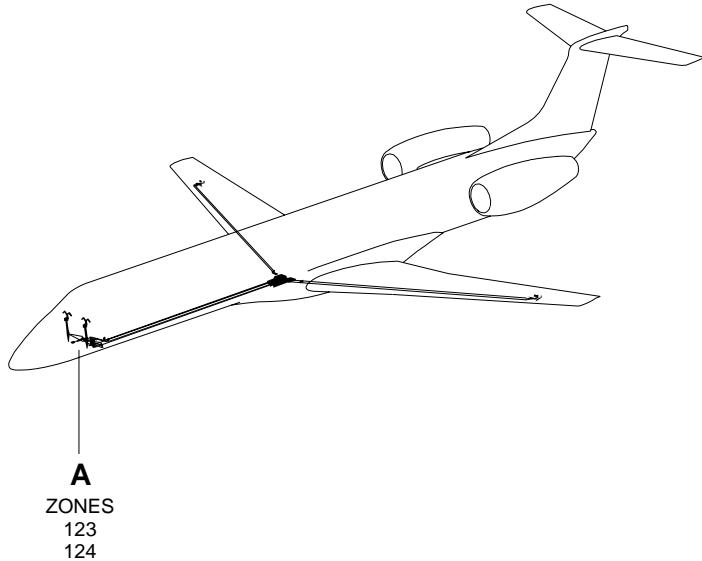
Control Yoke Adjustment and Check

Figure 501



145AMM270530.MCE

EFFECTIVITY: ALL
Control Yoke Rigid Pin
Figure 502



DET. A

145AMM270474.MCE

