



EMB145 - EMB135

AIRCRAFT  
MAINTENANCE MANUAL

PASSENGER SEATS - ADJUSTMENT/TEST

EFFECTIVITY: ACFT MODEL(S) EMB-145

1. General

- A. This section gives the procedures to do the adjustment/test of the passenger seats.
- 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
25-21-01-800-802-A	PASSENGER SEAT BACK RECLINE - ADJUSTING	ACFT MODEL(S) EMB-145
25-21-01-800-803-A	PASSENGER SEAT FOODTRAY TABLE - ADJUSTMENT	ACFT MODEL(S) EMB-145
25-21-01-800-804-A	PASSENGER SEATS RECLINE CABLE - ADJUSTMENT	ACFT MODEL(S) EMB-145



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TASK 25-21-01-800-802-A

EFFECTIVITY: ACFT MODEL(S) EMB-145

2. PASSENGER SEAT BACK RECLINE - ADJUSTING

A. General

- (1) This task gives the procedures to adjust the passenger seat back recline.
- (2) A mechanical actuator permits the seat back recline adjustment. The button for operation of the actuator is on the seat.

B. Zones and Accesses

Not Applicable

C. Tools and Equipment

Not Applicable

D. Auxiliary Items

Not Applicable

E. Consumable Materials

Not Applicable

F. Expandable Parts

Not Applicable

G. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the operational test	Passenger cabin

H. Adjusting ([Figure 501](#))

SUBTASK 820-010-B

**WARNING:** • FOR THE SEAT ROW IMMEDIATELY FORWARD OF THE OVERWING EMERGENCY EXIT DOOR (FIGURE 501), MAKE SURE THAT THE SEAT BACKS CAN NOT RECLINE INTO THE PATHWAY OF THE EMERGENCY EXIT DOOR.

• THE LAST ROW OF DOUBLE SEATS, ON THE RIGHT-HAND AFT PORTION, MUST BE RESTRICTED, SO THAT THE SEAT BACK DOES NOT COME IN CONTACT WITH THE OPTIONAL ATTENDANT SEAT.

- (1) Bring the seat back to the full upright position.
- (2) Remove the bottom cushion (5) from the seat to gain access to the hydraulic lock (3).
- (3) Locate the stop ring (1) on the hydraulic lock (3) and find the setscrew (2).

**WARNING:** • FOR PASSENGER SEATS LOCATED NEAR OF THE EMERGENCY EXIT, THE DISTANCE BETWEEN THEM MUST BE NOT LESS THAN 277.62 MM (10.93 IN) ON FULLY RECLINED POSITION.

• MAKE SURE THAT, WHEN THE PASSENGER SEATS INSTALLED NEAR THE EMERGENCY EXIT ARE IN THEIR FULLY RECLINED POSITION, THEY DO NOT BLOCK THE ACCESS TO OPEN THE HATCH.

(4) Loosen the setscrew (2) and rotate the stop ring (forward or aft) to obtain the amount of recline.

**NOTE:** • Make sure that the setscrew (2) is facing the flat spot on the hydraulic lock (3) before tightening. Refer DET. B, Figure 501.  
• The full upright position angle is 11 degrees.  
• The full recline position angle is 19 degrees, except as restricted by emergency exit or Aft flight attendant seat.

(5) Replace the bottom cushion (5).

(6) Test the recline feature by pressing the control button and applying pressure to the passenger seat back.

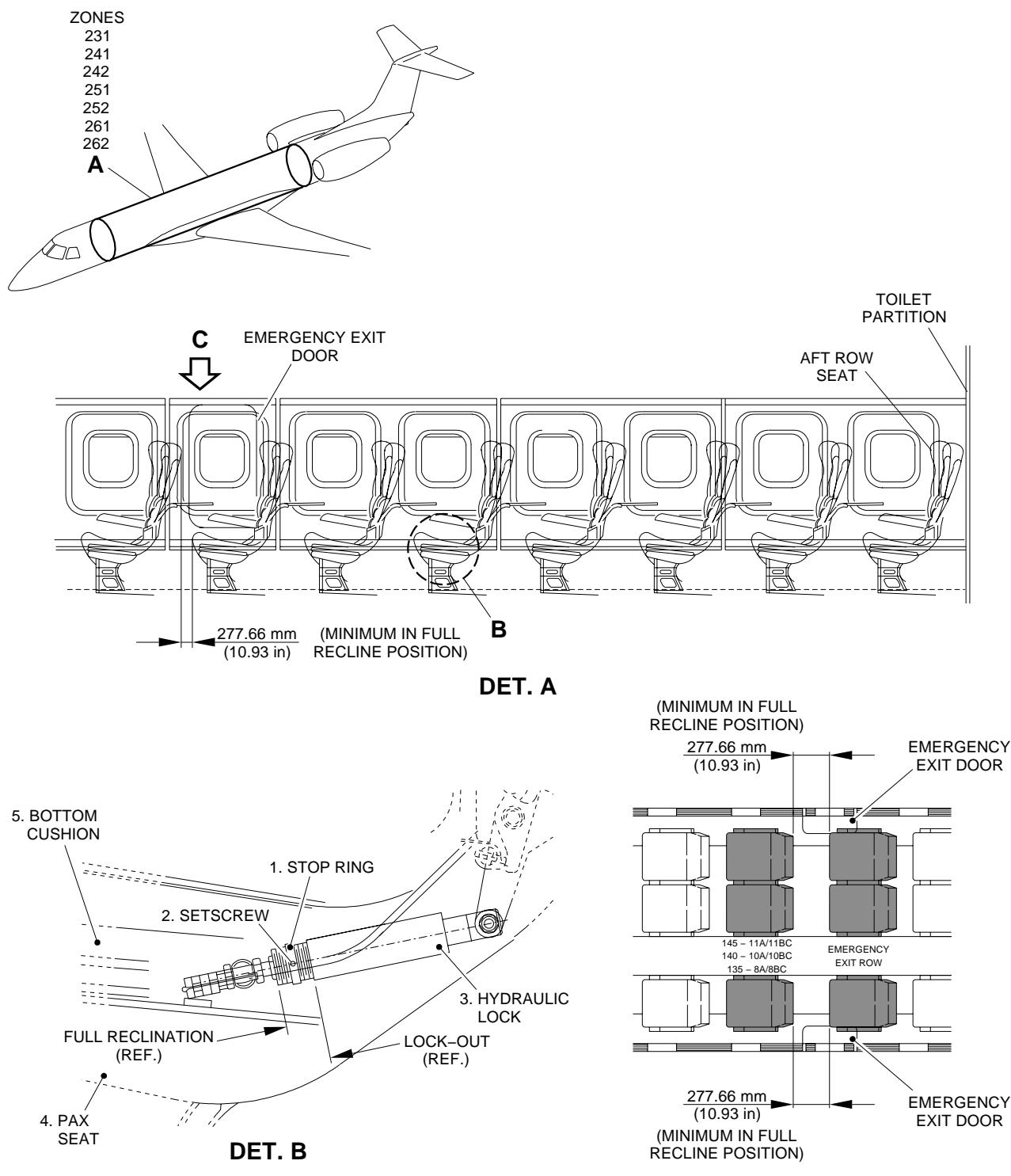
**NOTE:** The movement should be smooth with no binding.

(7) Push the recline control button and move the passenger seat (4) to the full upright position.

**EFFECTIVITY: ACFT MODEL(S) EMB-145**

Passenger Seats Back Recline

Figure 501



### **VIEW C**

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TASK 25-21-01-800-803-A

EFFECTIVITY: ACFT MODEL(S) EMB-145

3. PASSENGER SEAT FOODTRAY TABLE - ADJUSTMENT

A. General

- (1) This task gives the procedure to do the adjustment of the passenger seats food tray table.
- (2) There are two different adjustment procedures, one applicable to the standard food tray table and one to the in-arm food tray table.
- (3) The in-arm food tray table is installed in the first row passenger seats.

B. Zones and Accesses

Not Applicable

C. Tools and Equipment

Not Applicable

D. Auxiliary Items

Not Applicable

E. Consumable Materials

Not Applicable

F. Expandable Parts

Not Applicable

G. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the operational test	Passenger cabin

H. Passenger Seats Standard Foodtray Table - Adjustment

SUBTASK 820-008-A ([Figure 502](#))

- (1) Adjust the food tray table (3) as follows:

- (a) Remove the bottom cushion assembly (1) and back cushion assembly (2) to get access to the food tray stop (7) assemblies. Refer to [Figure 502, Sheet 1](#) and [Figure 502, Sheet 2](#).
- (b) Deploy the food tray table (3). Refer to [Figure 502, Sheet 2](#).
- (c) Measure the horizontal angle of the food tray table arms (4). Use the seat track plane to get a horizontal reference. Refer to [Figure 502, Sheet 2](#).
- (d) Make sure that the food tray table arms (4) touch the adjustment screws (8) in the food tray table arm stops (7). Refer to [Figure 502, Sheet 2](#).
- (e) Turn the adjustment screws (8) in the food tray table arm stops (7) until the top of the food tray table arms (4) are parallel to the bottom of the seat legs. Refer to [Figure 502, Sheet 2](#).



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NOTE: The two ends of the adjustment screws (8) are slotted, so the adjustment can be done either from the front or rear of the back cushion assembly (2). Refer to [Figure 502, Sheet 1](#) and [Figure 502, Sheet 2](#).

- (f) Stow the food tray table (3) and turn the setscrews (6) until the food tray table (3) is parallel to the bottom surface of the food tray table arms (4). Refer to [Figure 502, Sheet 2](#).

NOTE: The food tray table (3) must be flat against the back cushion assembly (2) to make sure that it is attached and not protruding when stowed. Refer to [Figure 502, Sheet 1](#) and [Figure 502, Sheet 2](#).

- (g) Deploy the food tray table (3) and turn the setscrews (6) until the food tray table (3) goes to a 2.0 degrees rise above the horizontal plan, that is, above the upper surface of the food tray table arms (4). Refer to [Figure 502, Sheet 2](#).

NOTE: The 2.0 degrees rise above the horizontal plane levels the food tray table (3) during flight.

- (h) Stow the food tray table (3).

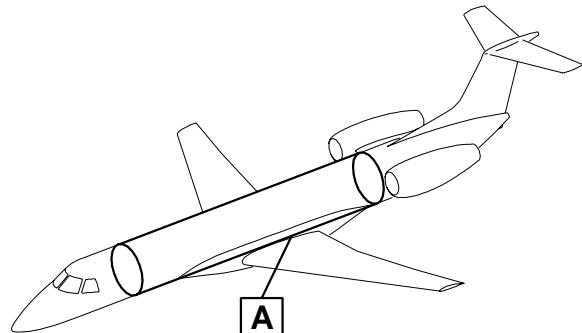
- (i) Install the bottom cushion assembly (1) and back cushion assemblies (2). Refer to [Figure 502, Sheet 1](#).

I. First Row Passenger Seats In-Arm Foodtray Table - Adjustment

SUBTASK 820-007-A ([Figure 502](#))

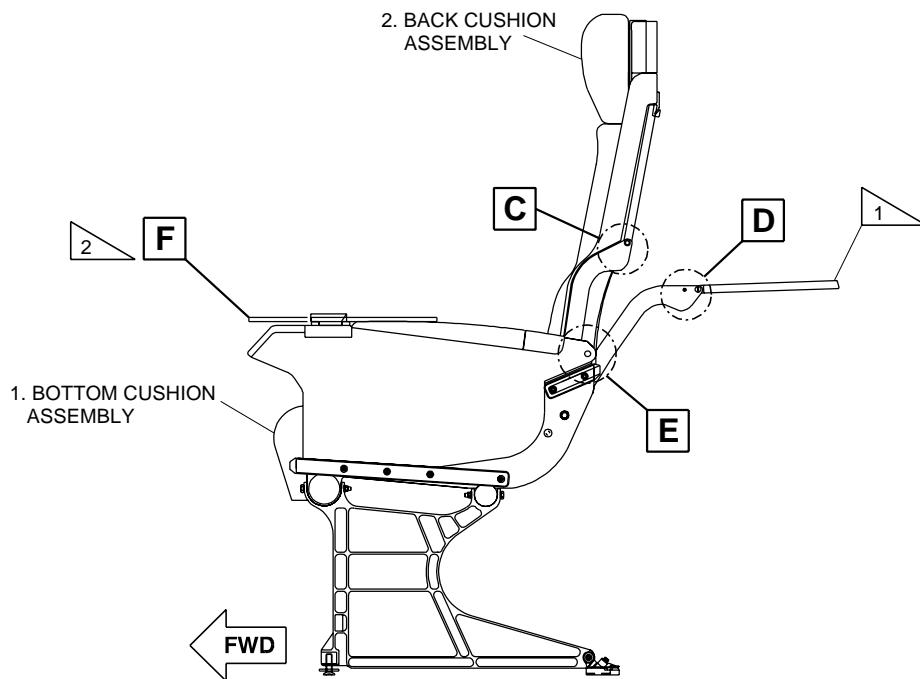
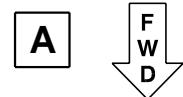
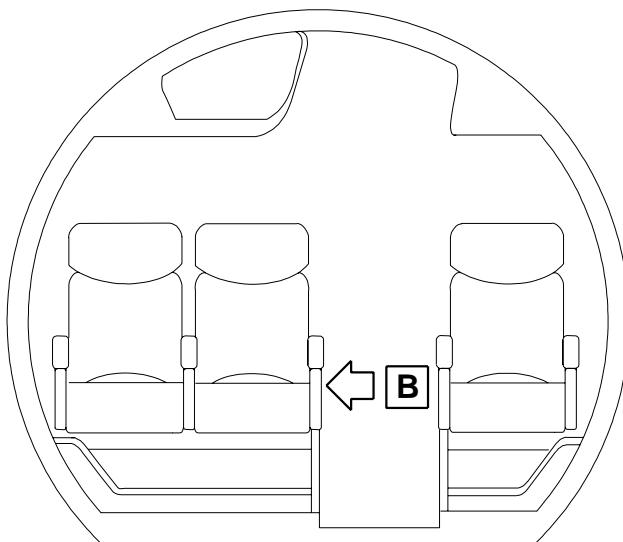
- (1) Adjust the food tray table (3) as follows:
  - (a) Lift the aisle or outboard arm cap assembly.
  - (b) Turn the food tray table (9) 90 degrees from the aisle or outboard in-arm module.
  - (c) Deploy the food tray table (9) and unfold the leaves.
  - (d) Check if the leaves of the food tray table (9) are aligned.
  - (e) Unfold the leaves of the food tray table (9).
  - (f) Check the distance between the free end of the food tray table (9) and the top of the center armrest. The distance must be between 0.97 cm (0.38 in) and 1.27 cm (0.50 in).
  - (g) If the distance is out of range, adjust the setscrew (11) on the hinge as necessary to get the specified value.
  - (h) Fold and stow the food tray table (9) in the aisle or outboard in-arm module.
  - (i) Put the aisle or outboard arm cap assembly down.

**EFFECTIVITY: ACFT MODEL(S) EMB-145**  
 Passenger Seats Foodtray Table - Adjustment  
 Figure 502 - Sheet 1



**ZONES**

- 231
- 241
- 242
- 251
- 252
- 261
- 262



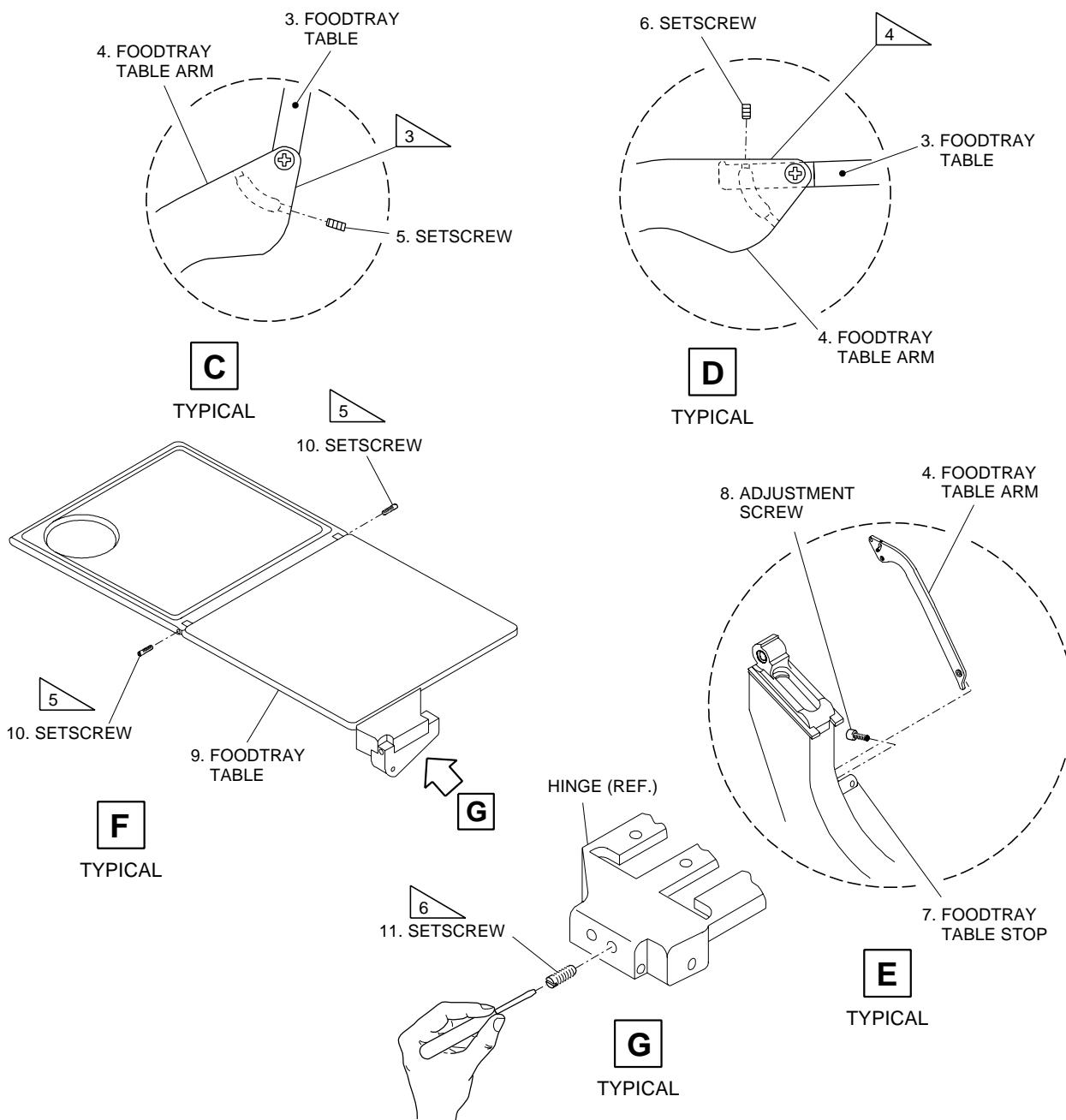
**TYPICAL**

 **1** APPLICABLE FOR ALL PASSENGER SEATS

 **2** APPLICABLE ONLY FOR FIRST ROW PASSENGER SEATS

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**EFFECTIVITY: ACFT MODEL(S) EMB-145**  
 Passenger Seats Foodtray Table - Adjustment  
 Figure 502 - Sheet 2



 3 FOODTRAY TABLE ARM BOTTOM SURFACE (ADJUSTMENT OF FOODTRAY TABLE TO THIS SURFACE WHEN STOWED)

 4 FOODTRAY TABLE ARM UPPER SURFACE (ADJUSTMENT OF FOODTRAY TABLE TO THIS SURFACE WITH 2.0 DEGREES RISE ABOVE HORIZONTAL PLAN WHEN DEPLOYED)

 5 ADJUSTMENT OF FOODTRAY TABLE LEAVES ALIGNMENT

 6 ADJUSTMENT OF FOODTRAY TABLE DISTANCE FROM CENTER ARMREST WHEN DEPLOYED

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TASK 25-21-01-800-804-A

EFFECTIVITY: ACFT MODEL(S) EMB-145

4. PASSENGER SEATS RECLINE CABLE - ADJUSTMENT

A. General

- (1) This task gives the procedure to do the adjustment of the passenger seats recline.
- (2) This procedure is the same for all passenger seats.

B. Zones and Accesses

Not Applicable

C. Tools and Equipment

Not Applicable

D. Auxiliary Items

Not Applicable

E. Consumable Materials

Not Applicable

F. Expandable Parts

Not Applicable

G. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the operational test	Passenger cabin

H. PASSENGER SEATS RECLINE CABLE - ADJUSTMENT

SUBTASK 820-009-B (Figure 503)

- (1) With the back seat (1) assembly in full upright position, adjust the cable so there is no gap between the hydraulic lock (9) end and output lever (8) adjust as follows:
  - (a) Loosen the jam nut (6).
  - (b) Turn  $\frac{3}{8}$  hex nut (7) until the output lever (8) and hydraulic lock (9) touch each other with no gap.
  - (c) Tighten the jam nut (6) against  $\frac{3}{8}$  hex nut (7) to make sure that the  $\frac{3}{8}$  hex nut (7) will not move during the next steps.
- (2) Push and hold the recline control button (4) and recline the back seat (1) to the full recline position. Make sure that the back will recline smoothly without binding.
- (3) Release the recline control button (4) and make sure that the back seat (1) locks firmly in the desired position.
- (4) If the back seat (1) does not release to recline range or does not lock firmly in the full recline position, do the SUBTASK 820-009-B again.



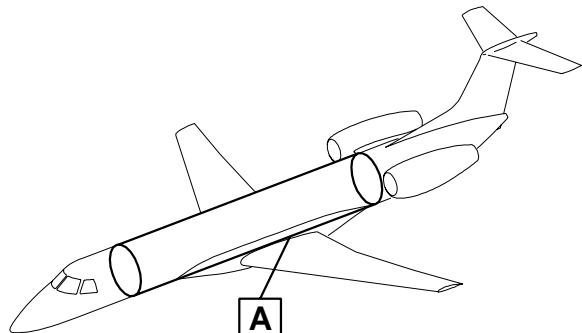
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- (5) From the full recline position, push and hold the recline control button (4), then move the back seat (1) assembly to the full upright position. Make sure that the back will get to the upright position smoothly without binding.
- (6) Release the recline control button (4) and make sure that the back seat (1) locks firmly in position.
- (7) If the back seat (1) does not release to go back to the full upright position or does not lock firmly in the full upright position, do the **SUBTASK 820-009-B** again.
- (8) When the correct adjustment is completed, loose the jam nut (6) carefully not to move  $\frac{3}{8}$  hex nut (7).
- (9) Firmly tighten the jam nut (6) against  $\frac{3}{8}$  hex nut (7).

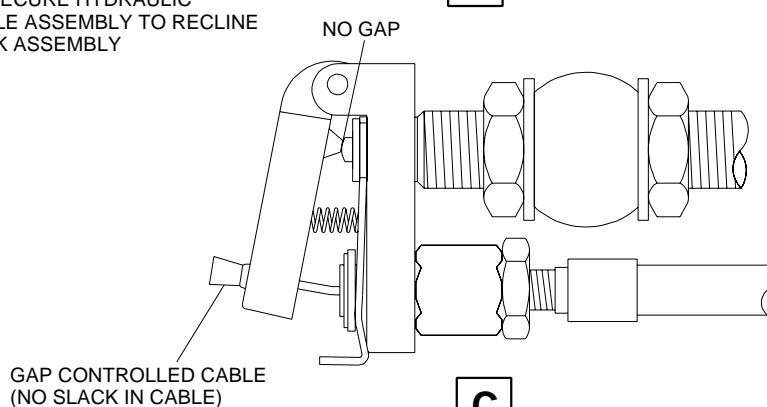
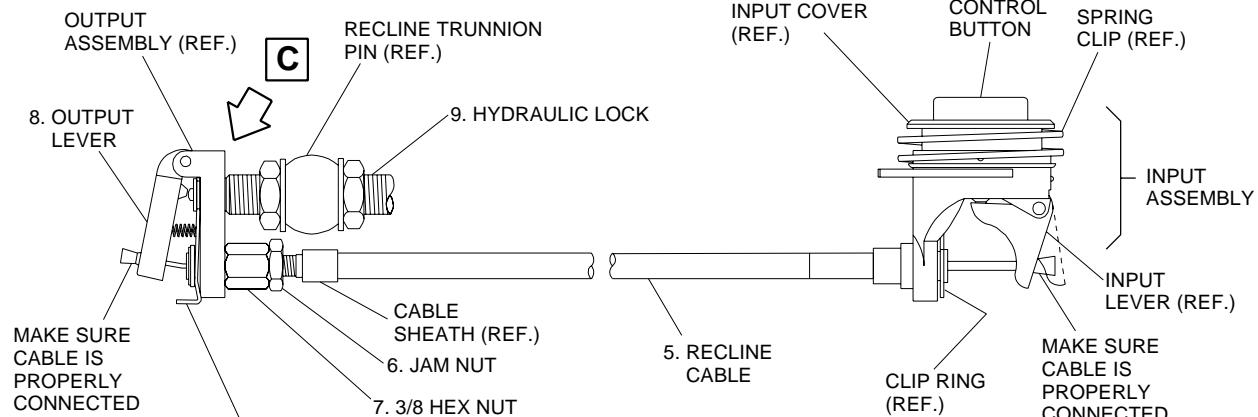
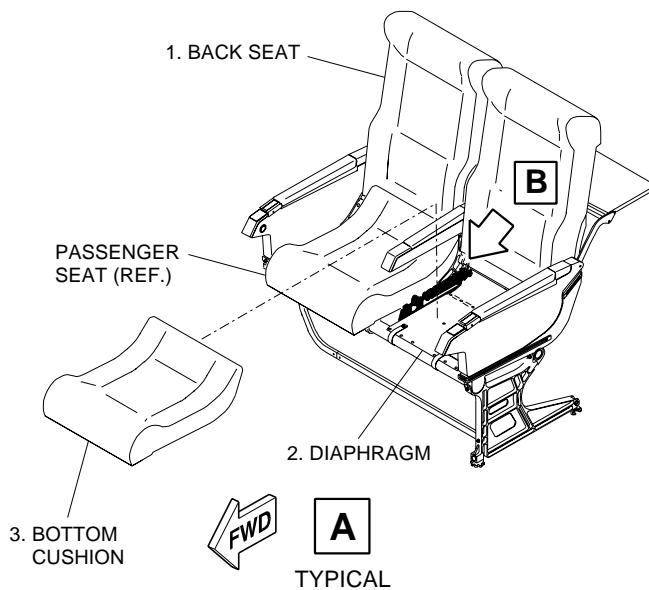
**NOTE:** Be careful not to move  $\frac{3}{8}$  hex nut (7).

**EFFECTIVITY: ACFT MODEL(S) EMB-145**  
**PASSENGER SEATS RECLINE CABLE - ADJUSTMENT**  
 Figure 503



**ZONES**

231  
241  
242  
251  
252  
261  
262



**C**

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