



EMB145 - EMB135

AIRCRAFT  
MAINTENANCE MANUAL

**GROUND SPOILER VALVE - REMOVAL/INSTALLATION**

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove and install the Ground Spoiler valve.
- 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
27-62-03-000-801-A	GROUND SPOILER VALVE - REMOVAL	ALL
27-62-03-400-801-A	GROUND SPOILER VALVE - INSTALLA- TION	ALL



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TASK 27-62-03-000-801-A

EFFECTIVITY: ALL

2. GROUND SPOILER VALVE - REMOVAL

A. General

- (1) This task gives the procedures to remove the Ground Spoiler valve.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 29-10-00-860-801-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH HTS

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
192	192AL	Wing-to-fuselage fairing

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Rubber Gloves, Phosphate Ester-Base, Fluid-Resistant	Protection for the hands	1
Commercially available	Rubber Goggles, Phosphate Ester-Base, Fluid-Resistant	Protection for the eyes	1

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Wing stub

I. Preparation

SUBTASK 841-002-A

- WARNING:** • OBEY ALL SAFETY INSTRUCTIONS RELATED TO PHOSPHATE ESTER-BASE FLUID.  
• MAKE SURE THAT THE HYDRAULIC SYSTEM IS NOT PRESSURIZED.

- (1) Make sure that the aircraft is safe for maintenance.
- (2) Release the pressure of the hydraulic system ([AMM TASK 29-10-00-860-801-A/200](#)).
- (3) Do not do other tasks on the Ground Spoiler system.
- (4) On the Circuit Breaker Panel, open the SPEED BRAKE, GND SPLR INBD/OUTBD, ELEC PUMP 1 and ELEC PUMP 2 circuit breakers and attach a DO-NOT-CLOSE tag to them.
- (5) Remove access panel 192AL (AMM MPP 06-41-01/100).

J. Removal ([Figure 401](#)) ([Figure 402](#))

SUBTASK 020-002-A

**WARNING:** • **MAKE SURE THAT THE HYDRAULIC SYSTEM IS NOT PRESSURIZED** ([AMM TASK 29-10-00-860-801-A/200](#)).

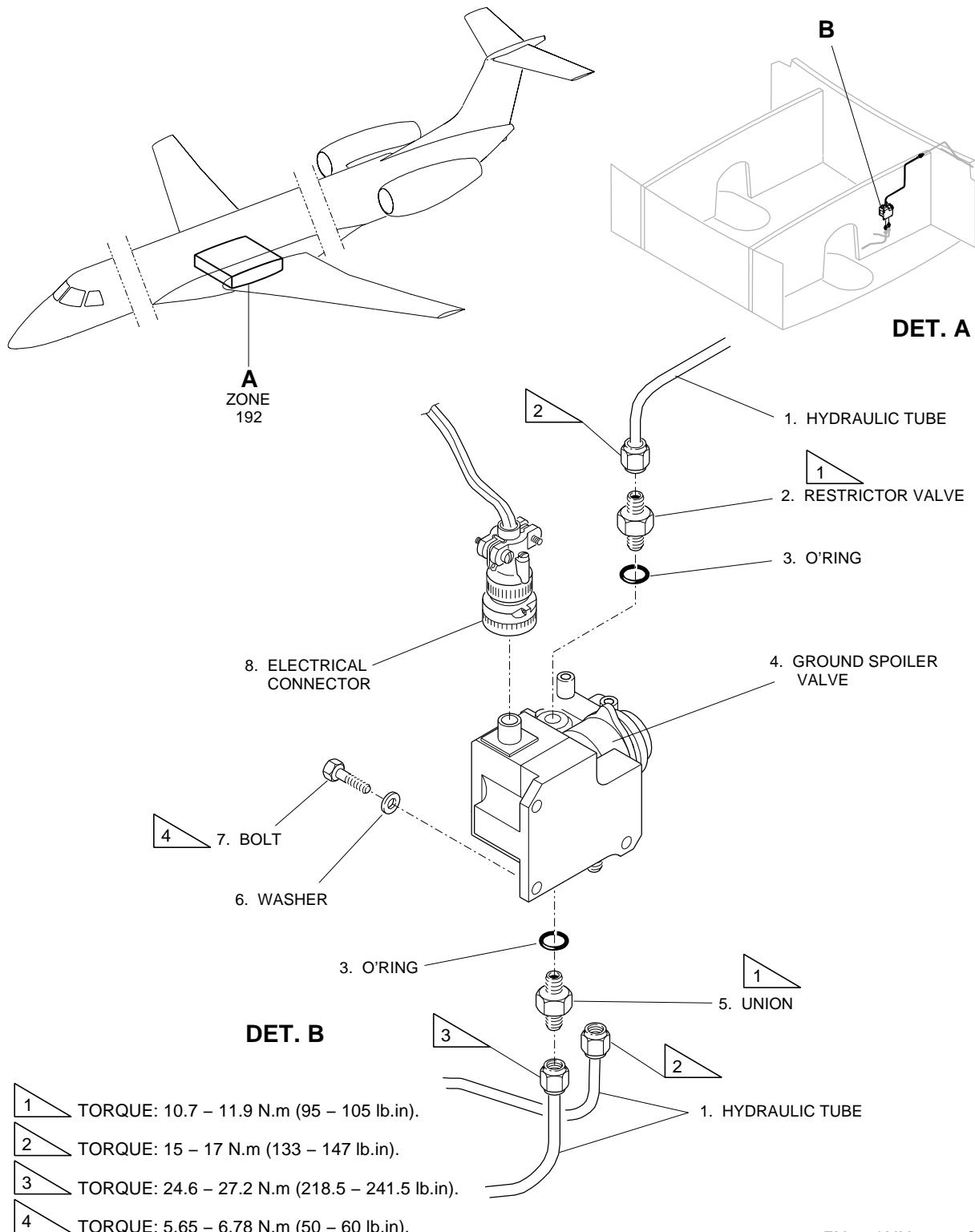
• **THE HYDRAULIC SYSTEM CONTAINS PHOSPHATE-ESTER HYDRAULIC FLUID. THE FLUID CAN CAUSE IRRITATION IN YOUR SKIN OR INJURY TO YOUR EYES. USE THE APPLICABLE RUBBER GOGGLES AND GLOVES. IF THE FLUID TOUCHES YOU, FLUSH YOUR SKIN WITH WATER. IF IT GETS IN YOUR EYES, FLUSH THEM WITH WATER AND GET MEDICAL HELP.**

- (1) Remove the hydraulic tubes (1) from the Ground Spoiler Valve (4). Put the plugs on the tube ends and the valve.
- (2) Disconnect the electrical connector (8) from the Ground Spoiler valve (4).
- (3) Remove the unions (5) from the Ground Spoiler Valve (4).
- (4) Remove the restrictor valve (2) from the Ground Spoiler valve (4).
- (5) Remove and discard the O-ring (3) from the unions (5) and restrictor valve (2).
- (6) Loosen the bolts (7) and washer (6) to remove the Ground Spoiler valve.
- (7) Remove the Ground Spoiler Valve (4).

**EFFECTIVITY: EMB-145ER/EP/EU AND EMB-135ER MODELS**

Ground Spoiler Valve - Removal/Installation

Figure 401

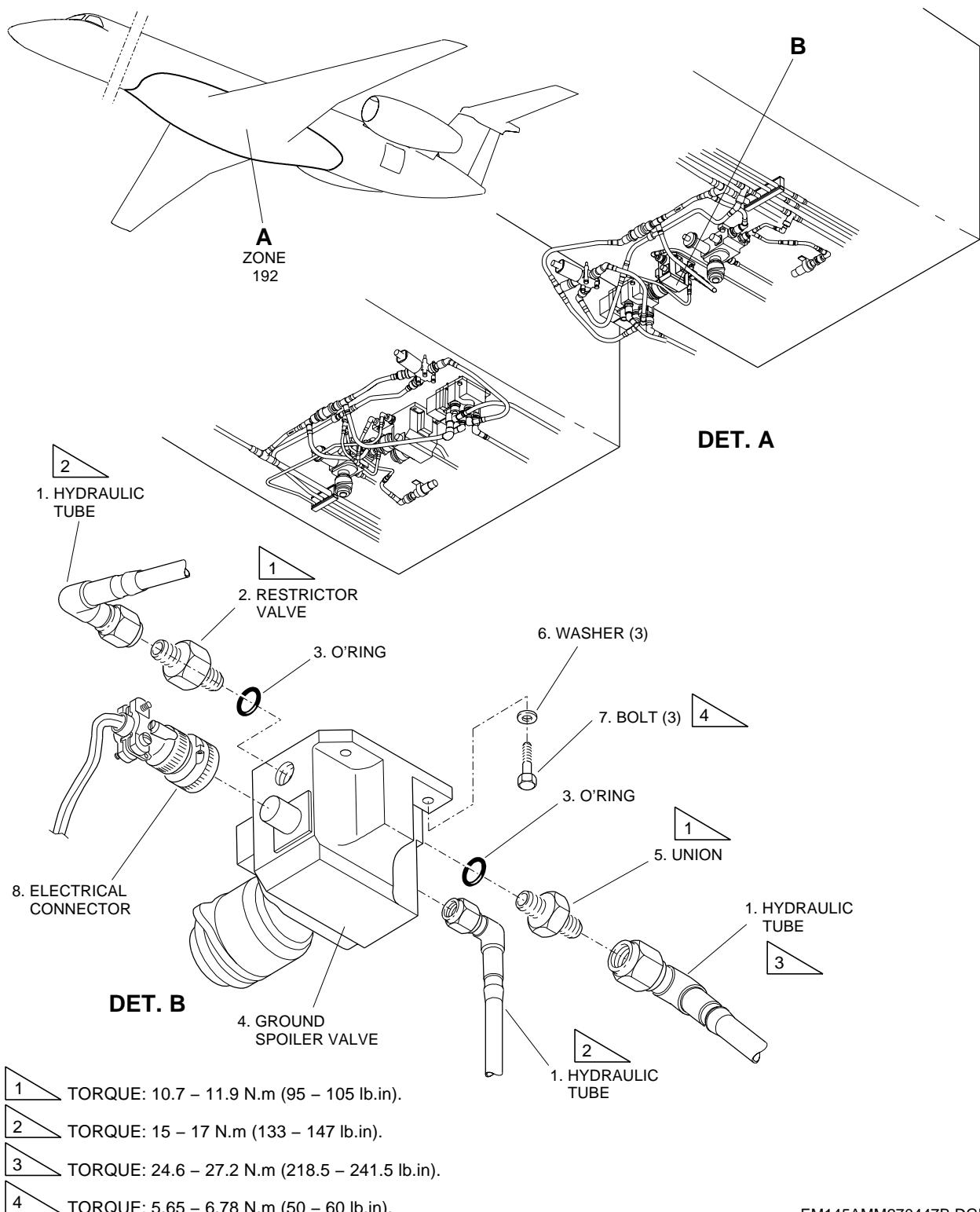


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**EFFECTIVITY: EMB-145LR/LU/MP AND EMB-135LR MODELS**

Ground Spoiler Valve - Removal/Installation

Figure 402



EM145AMM270447B.DGN



EMB145 - EMB135

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MAINTENANCE MANUAL

TASK 27-62-03-400-801-A

EFFECTIVITY: ALL

3. GROUND SPOILER VALVE - INSTALLATION

A. General

(1) This task gives the procedures to install the Ground Spoiler valve.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 27-63-01-700-801-A/500	SPOILER SYSTEM - OPERATIONAL CHECK
AMM TASK 28-41-00-200-801-A/600	-
AMM TASK 29-10-00-860-801-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH HTS
AMM TASK 29-10-00-860-803-A/200	HYDRAULIC SYSTEM - BLEED OF AIR
IPC 27-62-01	GROUND SPOILER ACTUATOR

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
192	192AL	Wing-to-fuselage fairing

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Torque wrench	To apply the torques	

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Rubber Gloves, Phosphate Ester-Base, Fluid-Resistant	Protection for the hands	1
Commercially available	Rubber Goggles, Phosphate Ester-Base, Fluid-Resistant	Protection for the eyes	1

F. Consumable Materials

Not Applicable

G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
O-ring	IPC 27-62-01	3

**H. Persons Recommended**

QTY	FUNCTION	PLACE
1	Does the task	Wing stub

**I. Installation (Figure 401) (Figure 402)**
**SUBTASK 420-002-A**

**WARNING:** • **MAKE SURE THAT THE HYDRAULIC SYSTEM IS NOT PRESSURIZED ( [AMM TASK 29-10-00-860-801-A/200](#)).**

- **THE HYDRAULIC SYSTEM CONTAINS PHOSPHATE-ESTER HYDRAULIC FLUID. THE FLUID CAN CAUSE IRRITATION IN YOUR SKIN OR INJURY TO YOUR EYES. USE THE APPLICABLE RUBBER GOGGLES AND GLOVES. IF THE FLUID TOUCHES YOU, FLUSH YOUR SKIN WITH WATER. IF IT GETS IN YOUR EYES, FLUSH THEM WITH WATER AND GET MEDICAL HELP.**

- (1) Install the Ground Spoiler valve (4) in the wing stub structure. Use the bolts (7) and washers (6). Torque as shown in (Figure 401) or (Figure 402) as applicable.
- (2) Install the union (5) in the Ground Spoiler valve (4). Use the O-ring (3). Torque as shown in (Figure 401) or (Figure 402) as applicable.
- (3) Install the restrictor valve (2) in the Ground Spoiler valve (4). Use the O-ring (3). Torque as shown in (Figure 401) or (Figure 402) as applicable.
- (4) Install the hydraulic tubes (1) in the Ground Spoiler valve (4). Torque as shown in (Figure 401) or (Figure 402) as applicable.
- (5) Connect the electrical connector (8) to the Ground Spoiler valve (4).

**J. Follow-on**
**SUBTASK 842-002-A**

- (1) On the Circuit Breaker Panel, close the SPEED BRAKE, GND SPLR INBD/OUTBD, ELEC PUMP 1 and ELEC PUMP 2 circuit breakers and remove the DO-NOT-CLOSE tag from them.
- (2) Do an inspection on the fuel quantity indication harness (AMM TASK 28-41-00-200-801-A/600).

**NOTE:** The inspection of fuel quantity indication harness is a part of Critical Design Configuration Control Limitations (CDCCL) in the Airworthiness Limitations (Section 6) of the Maintenance Review Board Report (MRB).

- (3) Install access panel 192AL (AMM MPP 06-41-01/100).
- (4) Make sure that there are no leaks in the ground spoiler valve.
- (5) Bleed the air from the hydraulic system lines ( [AMM TASK 29-10-00-860-803-A/200](#)).
- (6) Do the operational check of the spoiler system ( [AMM TASK 27-63-01-700-801-A/500](#)).

