CHECK VALVE - ADJUSTMENT/TEST

EFFECTIVITY: ALL

1. General

   A. This section gives the procedure to do the check of the return-line check-valve of the emergency/parking brake 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*
32-44-08-700-801-A ♦	RETURN-LINE CHECK VALVE - OPERATIONAL CHECK	ALL

TASK 32-44-08-700-801-A
EFFECTIVITY: ALL

2. RETURN-LINE CHECK VALVE - OPERATIONAL CHECK

A. General

(1) You must pressurize hydraulic system 2 to pressurize the reservoir. When you do this, the return line is also pressurized with approximately 40 psi.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 06-41-01/100	-
AMM TASK 10-10-01-500-801-A/200	AIRCRAFT NORMAL PARKING
AMM TASK 29-10-00-860-802-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH EMDP
AMM TASK 29-10-00-860-803-A/200	HYDRAULIC SYSTEM - BLEED OF AIR
AMM TASK 32-44-02-910-801-A/200	HYDRAULIC ACCUMULATOR EMERGENCY/PARKING BRAKE - RELEASE

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
193	193CR	Aft lower wing-to-fuselage fairing
192	192BR	Center lower wing-to-fuselage fairing

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Rubber Gloves, Resistant to Phosphate Ester-Base Fluid	Protection for the Hands	1
Commercially available	Rubber Gloves, Resistant to Phosphate Ester-Base Fluid	Protection for the Eyes	1
MS21913J4	Plug, Flarelles Tube -1/4 in	To seal the disconnected tubes	1
Commercially available	Drip Pan	To collect the hydraulic fluid when you disconnect the tubes	1

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	Hydraulic compartment or wing stub
1	Helps the other technician	Cockpit and MLG

I. Preparation

SUBTASK 841-002-A

(1) Put the chocks against the landing gear wheels. Refer to AMM TASK 10-10-01-500-801-A/200.

(2) On the circuit breaker panel, open the ELEC PUMP 2 circuit breaker and attach a DO-NOT-CLOSE tag to it.

(3) Control the rudder to the left and right until the pressure of the Hydraulic System 2 shows zero PSI in the EICAS.

(4) Fully release the pressure from the fluid chamber of the Hydraulic Accumulator of the Emergency/ Parking Brake AMM TASK 32-44-02-910-801-A/200

(5) Remove access panel 192BR. Refer to AMM MPP 06-41-01/100.

J. Operational Check of the Return Line Check Valve of the Emergency/Parking Brake System (Figure 501) (Figure 502)

SUBTASK 710-002-A

WARNING: THE HYDRAULIC SYSTEM CONTAINS PHOSPHATE-ESTER HYDRAULIC FLUID. THE FLUID CAN CAUSE IRRITATION IN YOUR SKIN OR INJURY TO YOUR EYES. USE THE APPLICABLE GOGGLES AND RUBBER 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) Disconnect the hydraulic tube (1) from the check valve (2).

(2) Install the hex head plug (4) on the hydraulic tube (1). Refer to (Figure 501) or (Figure 502), as applicable.

(3) Clean the threads of the open end of the check valve.

(4) On the circuit breaker panel, remove the DO-NOT-CLOSE tag from ELEC PUMP 2 circuit breaker related to the Emergency/ Parking Brake system and close it.

(5) Pressurize the hydraulic system 2. Refer to AMM TASK 29-10-00-860-802-A/200

(6) Do a check for leakage on the open end of the check valve.

NOTE: Wait 5 minutes and if you find any leakage on the check valve, you must replace it.

(7) On the circuit breaker panel, open the ELEC PUMP 2 circuit breaker and attach a DO-NOT-CLOSE tag to it.

(8) Release the pressure of the hydraulic system 2. Refer to AMM TASK 29-10-00-860-802-A/200

(9) Remove the hex head plug (4) on the hydraulic tube (1).

(10) Connect the hydraulic tube (1) to the check valve and apply a torque of 11.8 to 13.0 N.m (104.5 to 115.5 lbf.in).

K. Follow-on

SUBTASK 842-002-A

(1) On the circuit breaker panel, remove the DO-NOT-CLOSE tag from ELEC PUMP 2 circuit breaker related to the Emergency/ Parking Brake system and close it.

(2) Pressurize hydraulic system 2. Refer to AMM TASK 29-10-00-860-802-A/200.

(3) Do a check on the hydraulic fittings of the check valve for leaks.

(4) Install access panel 192BR. Refer to AMM MPP 06-41-01/100.

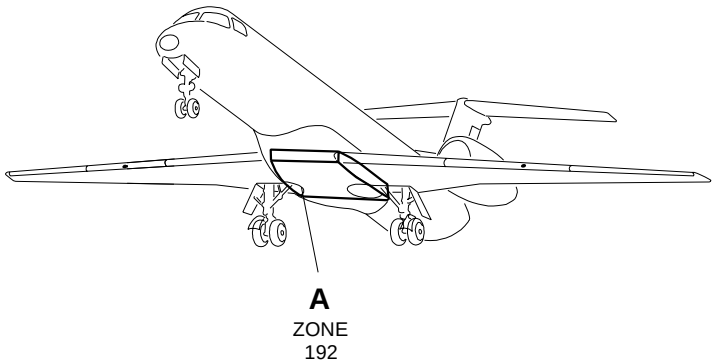
(5) Bleed the air from the hydraulic system line 2. Refer to AMM TASK 29-10-00-860-803-A/200.

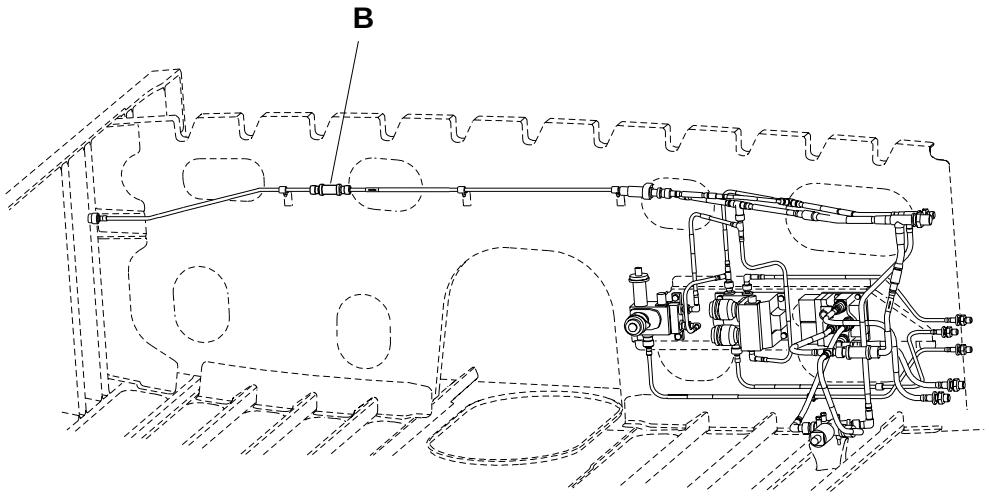
(6) Pull the emergency/parking brake handle.

NOTE: To prevent hydraulic fluid movement from system 1 to system 2 or vice versa, first apply brakes with the pedals and then pull or release the emergency/ parking brake handle.

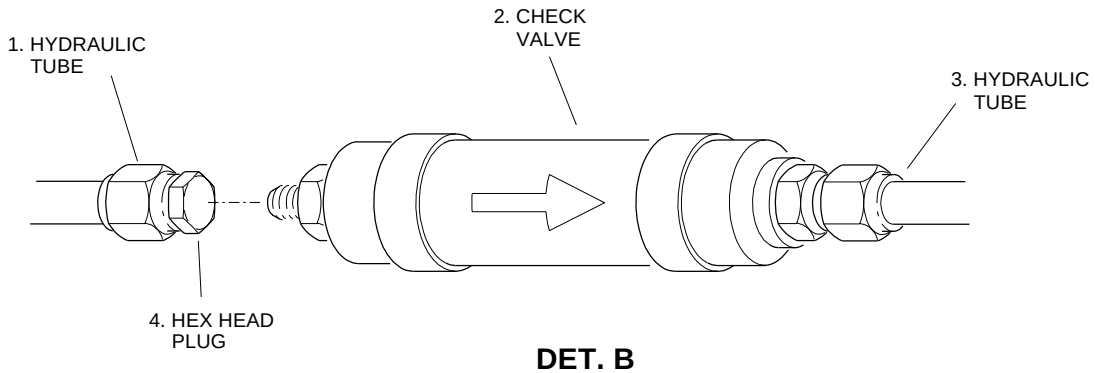
(7) Restore the aircraft to normal condition.

EFFECTIVITY: EMB-145ER/EP/EU/MP AND EMB-135ER MODELS
Return-Line Check-Valve - Operational Check
Figure 501





DET. A



DET. B

EM145AMM320066C.DGN

EFFECTIVITY: EMB-145LR/LU AND EMB-135LR MODELS
Return-Line Check-Valve - Operational Check
Figure 502