



AIRCRAFT MAINTENANCE MANUAL

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 outboard and inboard main brake systems.
- 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
32-41-09-700-801-A ♦	RETURN-LINE CHECK VALVE - OPERATIONAL CHECK	ALL



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TASK 32-41-09-700-801-A

EFFECTIVITY: ALL

2. RETURN-LINE CHECK VALVE - OPERATIONAL CHECK

A. General

- (1) You must pressurize hydraulic systems 1 or 2, to pressurize the related 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

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
192	192AL	Center lower fairing - LH
192	192BR	Center lower fairing - RH

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Rubber Gloves, Resistant to Phosphate Ester-Base Fluid	As a protection for the hands	1
Commercially available	Rubber Goggles, Resistant to Phosphate Ester-Base Fluid	As a protection for the eyes	1
MS21913J6	Plug, Flarelles Tube 3/8 in	To seal the disconnected tubes	1
Commercially available	Drip Pan	To collect the hydraulic fluid when you disconnect the line	1

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	LH or RH MLG



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QTY	FUNCTION	PLACE
1	Helps the other technician	Cockpit and MLG

I. Preparation ([Figure 501](#))

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 ELEC PUMP 1 (outboard) and ELEC PUMP 2 (inboard) circuit breakers and attach a DO-NOT-CLOSE tag to them.
- (3) Control the rudder to the left and to the right, until the pressure of the hydraulic system shows zero PSI on the EICAS.
- (4) Remove access panel 192AL (related to the outboard brake system) or 192BR (related to the inboard brake system). Refer to AMM MPP 06-41-01/100.

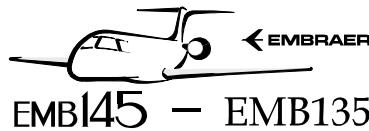
J. Operational Check of Return-Line Check Valve of Main Brake System ([Figure 501](#)) ([Figure 502](#))

SUBTASK 710-002-A

- (1) Do the check of the return-line check valve of the main brake system as follows:
 - (a) Identify the check valve that you will examine.

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 INTO YOUR EYES, FLUSH THEM WITH WATER AND GET MEDICAL HELP

- (b) Disconnect the hydraulic tube (1) from check valve (2).
- (c) Connect the hex head plug (4) to the end of the hydraulic tube (1).
- (d) Clean the threads of the open end of the check valve.
- (e) On the Circuit Breaker Panel, close the ELEC PUMP 1 (related to the outboard brake system) or the ELEC PUMP 2 (related to the inboard brake system) circuit breakers.
- (f) Pressurize hydraulic system 1 (related to the outboard brake system) or hydraulic system 2 (related to the inboard brake system). Refer to [AMM TASK 29-10-00-860-802-A/200](#).
- (g) Do a check for leakage on the open end of the check valve.
NOTE: Wait 5 minutes and, if you find more than 80 drops on the open end of the check valve, you must replace the return-line check valve.
- (h) On the Circuit Breaker Panel, open the ELEC PUMP 1 (outboard) and the ELEC PUMP 2 (inboard) circuit breakers and attach a DO-NOT-CLOSE tag to them.



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- (i) Depressurize the related hydraulic system. Refer to [AMM TASK 29-10-00-860-802-A/200](#).
- (j) Remove the hex head plug (4) from the hydraulic tube (1).
- (k) Connect the hydraulic tube (1) to the check valve (2) and apply a torque of 17.2 to 19.0 N.m (152.0 to 168.0 lbf.in).

K. Follow-on

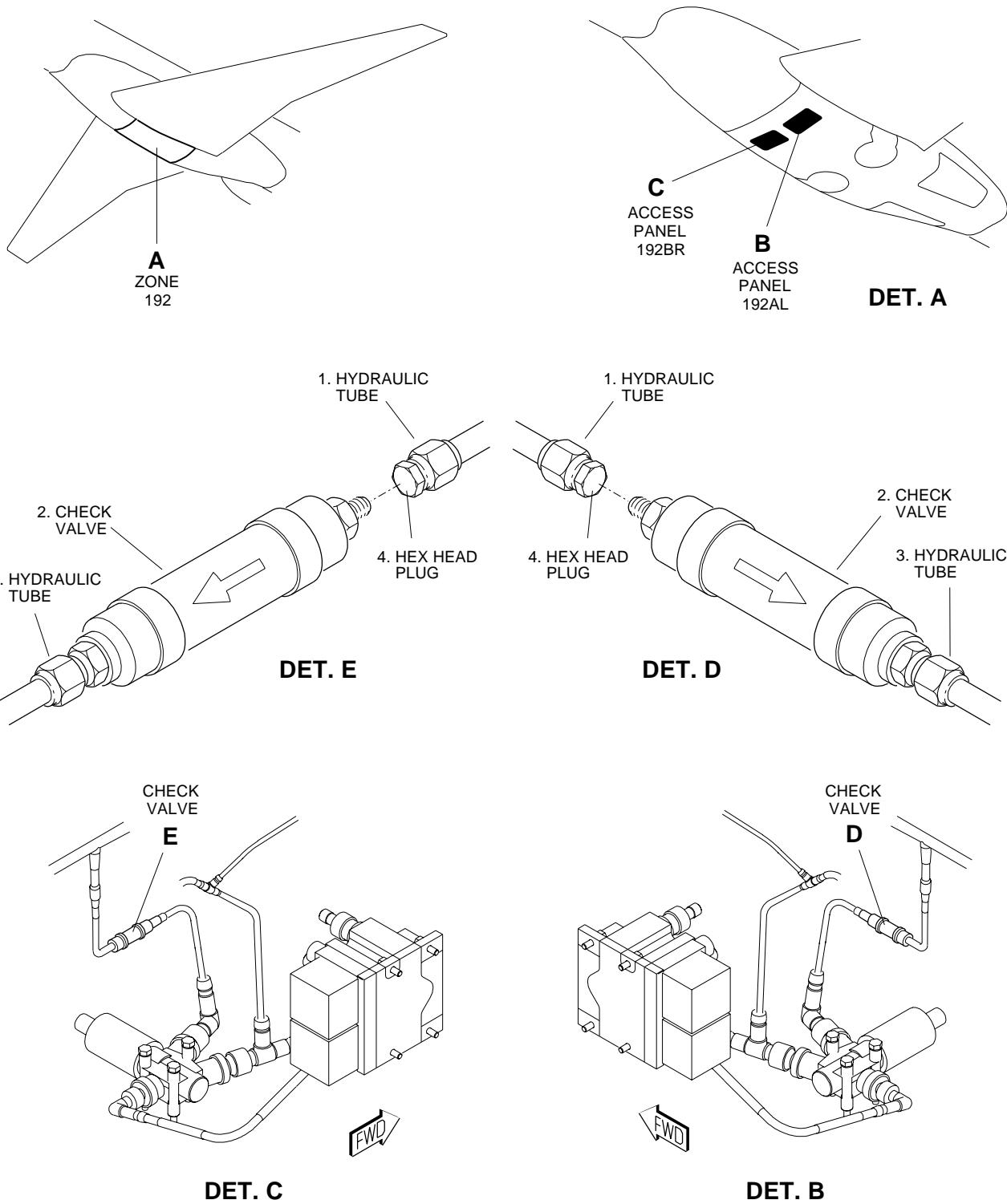
SUBTASK 842-002-A

- (1) On the Circuit Breaker Panel, close the ELEC PUMP 1 (outboard) and the ELEC PUMP 2 (inboard) circuit breakers.
- (2) Pressurize hydraulic system 1 (related to the outboard brake system) or hydraulic system 2 (related to the inboard brake system). 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 192AL (related to the outboard brake system) or 192BR (related to the inboard brake system). Refer to AMM MPP 06-41-01/100.
- (5) Bleed the hydraulic line. Refer to [AMM TASK 29-10-00-860-803-A/200](#).

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

Return-Line Check Valve - Operational Check

Figure 501

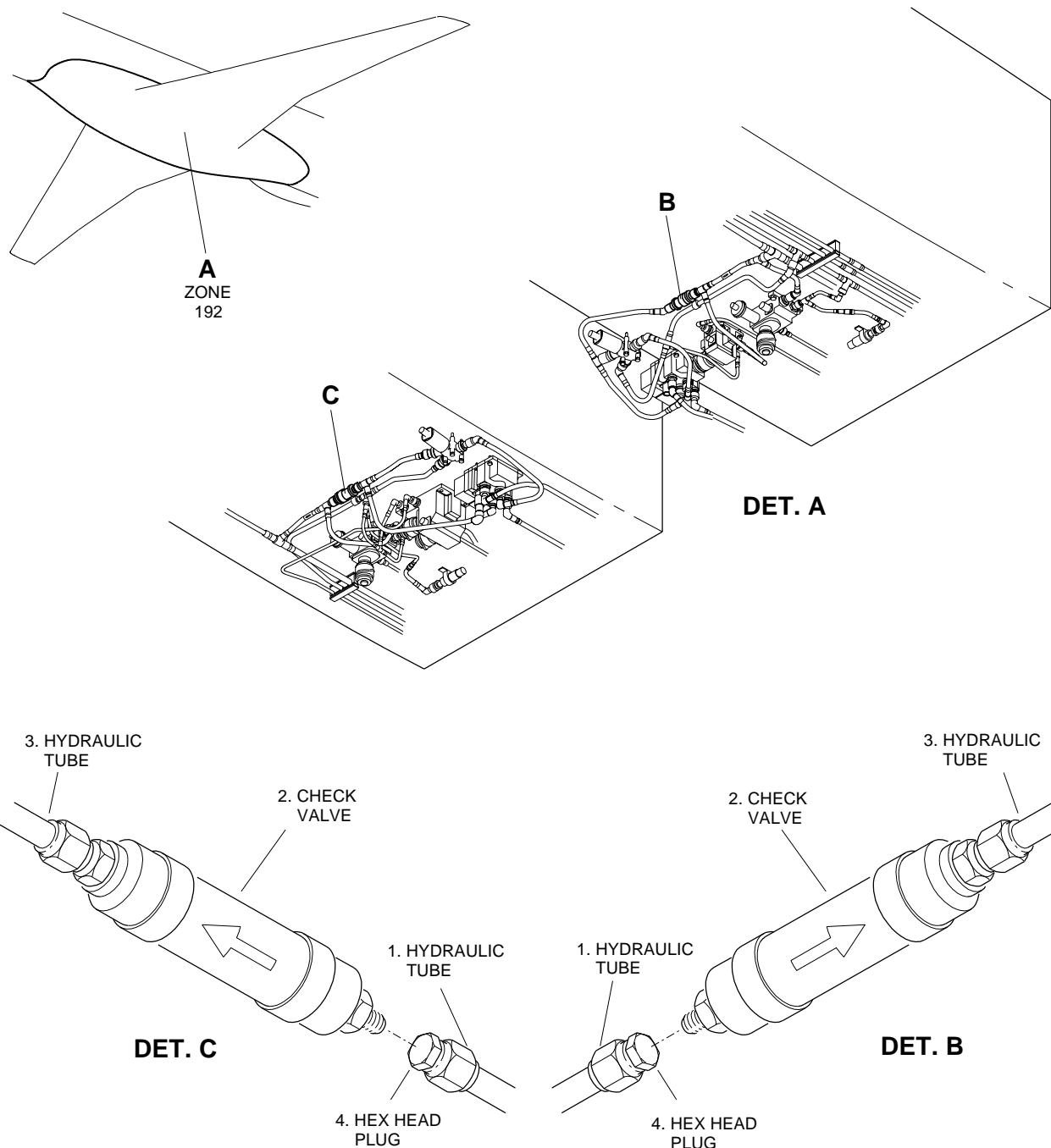


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EFFECTIVITY: EMB-145LR/LU/MP AND EMB-135LR MODELS

Return-Line Check Valve - Operational Check

Figure 502



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