

CHECK VALVE - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove and install the check valve of the accumulator or the check valve of the return line of the Emergency/Parking Brake System.
- B. The check valve of the accumulator is installed in the hydraulic-system- 2 compartment.
- C. The check valve of the return line is installed on the wing stub.
- D. The procedures in this section are given in the sequence below. The tasks identified with (♦) are part of the Scheduled Maintenance Requirements Document (SMRD).

<i>TASK NUMBER</i>	<i>DESCRIPTION</i>	<i>EFFECTIVITY</i>
32-44-08-000-801-A	CHECK VALVE - REMOVAL	ALL
32-44-08-400-801-A	CHECK VALVE - INSTALLATION	ALL

TASK 32-44-08-000-801-A

EFFECTIVITY: ALL

2. CHECK VALVE - REMOVAL

A. General

(1) This task gives the procedures to remove the check valve (accumulator or return line).

B. References

REFERENCE	DESIGNATION
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, 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	Hydraulic compartment or wing stub

I. Preparation

SUBTASK 841-002-A

- (1) On the Circuit Breaker Panel, open the ELEC PUMP 2 circuit breaker and attach a DO-NOT-CLOSE tag to it.
- (2) Control the rudder to the left and to the right until the pressure of the hydraulic system shows zero PSI on the EICAS.

- (3) Fully release the pressure from the fluid chamber of the emergency/parking brake system hydraulic accumulator ([AMM TASK 32-44-02-910-801-A/200](#)).
- (4) Slowly open the charging valve of the nitrogen chamber of the hydraulic accumulator to let all pressure in it go out.

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

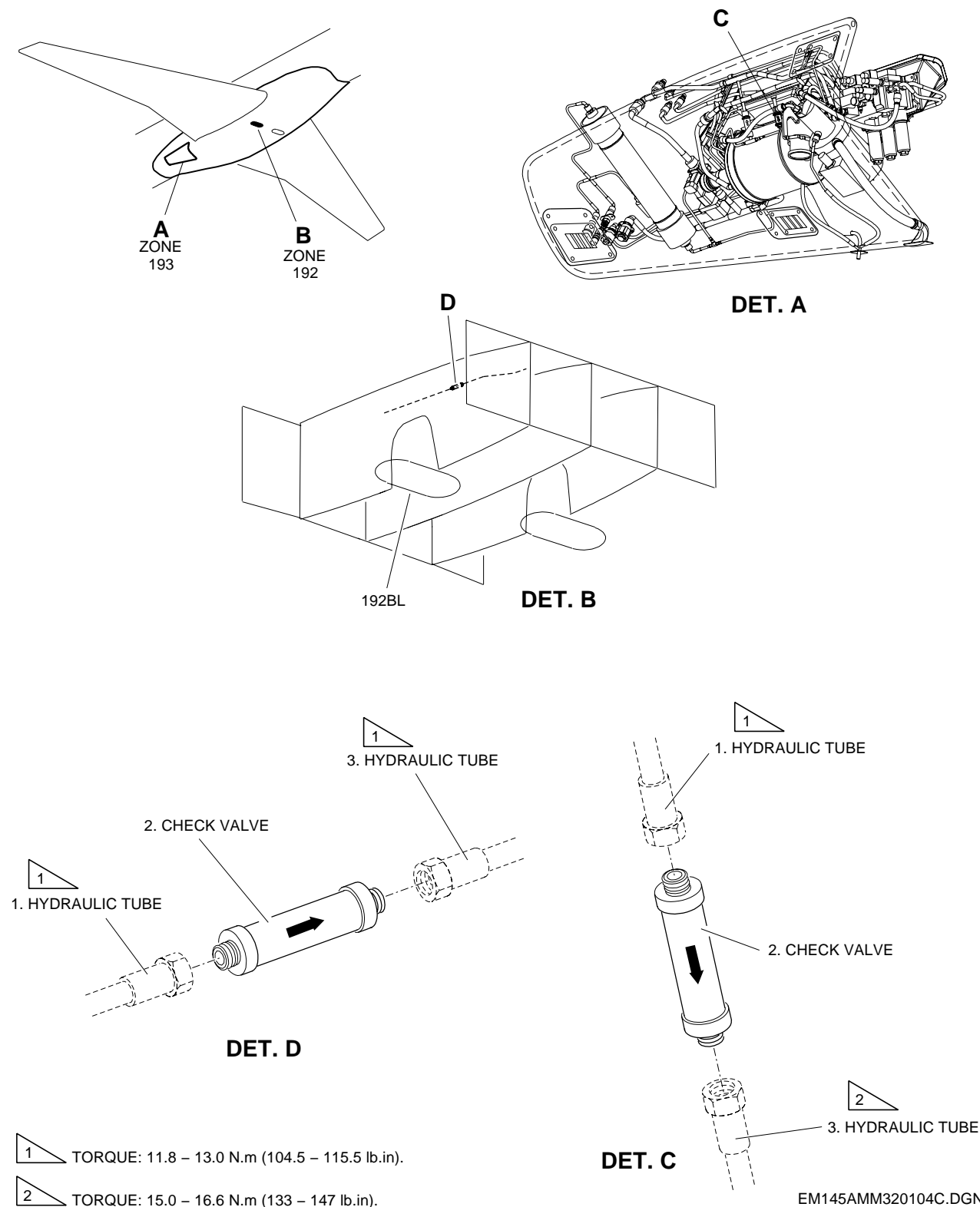
SUBTASK 020-002-A

- (1) Disconnect the hydraulic tubes (1) and (3).
- (2) Remove the check valve (2).

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

Check Valve - Removal/Installation

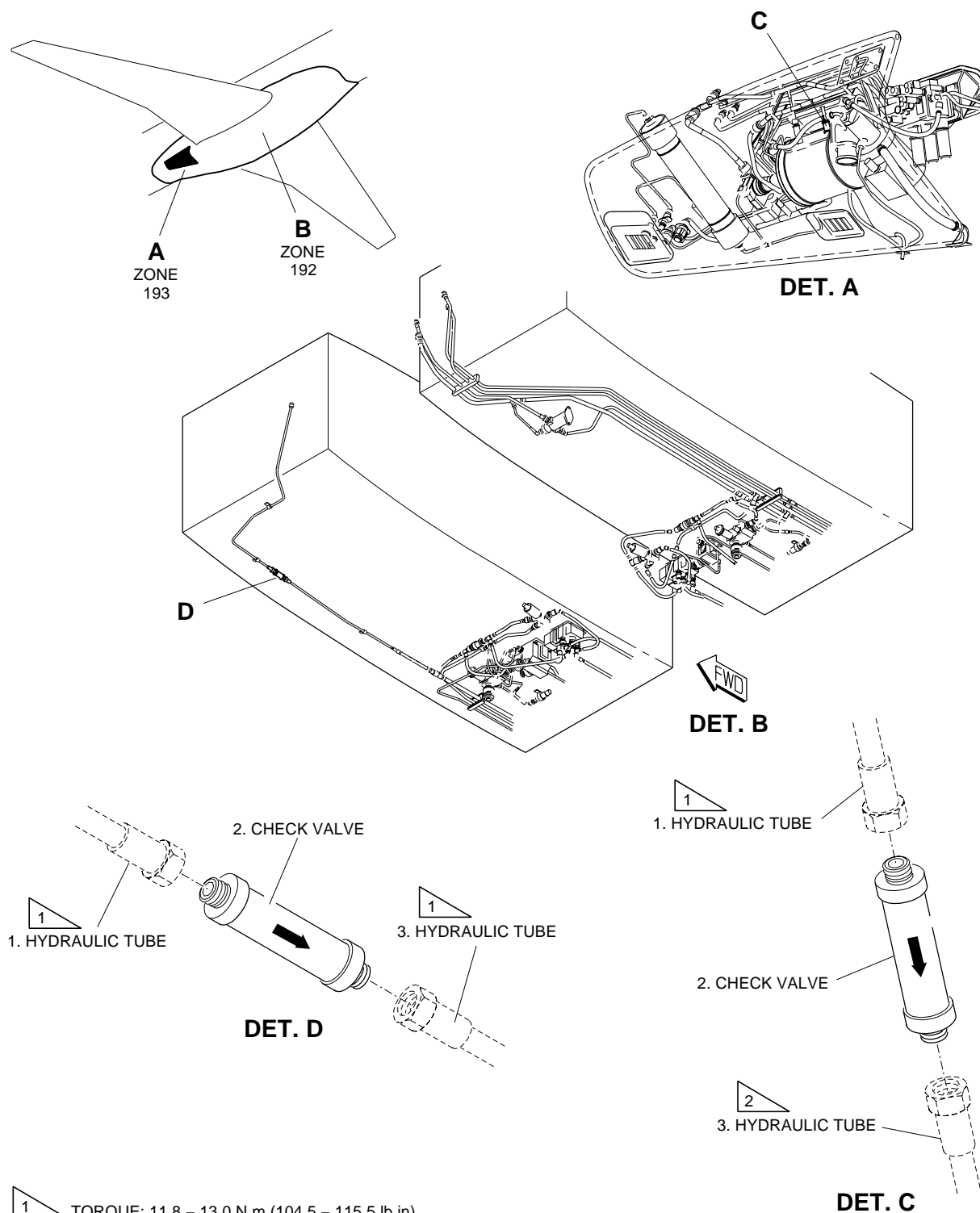
Figure 401



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

Check Valve - Removal/Installation

Figure 402



1 TORQUE: 11.8 – 13.0 N.m (104.5 – 115.5 lb.in).

2 TORQUE: 15.0 – 16.6 N.m (133 – 147 lb.in).

EM145AMM320295D.DGN

TASK 32-44-08-400-801-A

EFFECTIVITY: ALL

3. CHECK VALVE - INSTALLATION

A. General

(1) This task gives the procedures to install the check valve (accumulator or wing stub).

B. References

REFERENCE	DESIGNATION
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
AMM TASK 32-44-02-600-801-A/300	EMERGENCY/PARKING BRAKE ACCUMULATOR - CHARGE

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, 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	Hydraulic compartment or wing stub

I. Installation (Figure 401) (Figure 402)

SUBTASK 420-002-A

(1) Install the check valve (2).

- (2) Connect the hydraulic tubes (1) and (3), and torque them as given in the related figure. Refer to (Figure 401) or (Figure 402).

J. Follow-on

SUBTASK 842-002-A

- (1) On the Circuit Breaker Panel, close the ELEC PUMP 2 circuit breaker and remove the DO-NOT-CLOSE tag from it.
- (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) Pressurize the Emergency/Parking brake accumulator ([AMM TASK 32-44-02-600-801-A/300](#)).
- (4) Pressurize hydraulic system 2 ([AMM TASK 29-10-00-860-801-A/200](#)).
- (5) Do a check of the check valve for leakage.
- (6) Bleed the hydraulic line ([AMM TASK 29-10-00-860-803-A/200](#)).

