

## CHECK VALVE - REMOVAL/INSTALLATION

*EFFECTIVITY: ALL*

1. General

- A. This section gives the procedures to remove and install the check valves.
- B. The procedure is applicable to the check valves of the nose landing gear (NLG), nose landing gear (NLG) doors, and free-fall system.
- C. 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
<a href="#">32-33-11-000-801-A</a>	CHECK VALVE - REMOVAL	ALL
<a href="#">32-33-11-400-801-A</a>	CHECK VALVE - INSTALLATION	ALL

TASK 32-33-11-000-801-A

EFFECTIVITY: ALL

## 2. CHECK VALVE - REMOVAL

### A. General

(1) This procedure gives the instructions to remove the check valve.

### B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
<a href="#">AMM TASK 29-10-00-860-802-A/200</a>	HYDRAULIC SYSTEM - PRESSURIZATION WITH EMDP
<a href="#">AMM TASK 32-00-01-910-801-A/200</a>	LG SAFETY PIN - INSTALLATION AND REMOVAL

### C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
114	114CR	Nose hydraulic compartment

### 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	Nose hydraulic compartment

### I. Preparation

**SUBTASK 841-002-A**

(1) Make sure that the safety pins of the landing gears are installed ( [AMM TASK 32-00-01-910-801-A/200](#) ).

- (2) On the circuit breaker panel, open the ELEC PUMP 1 and the CMD circuit breakers and attach a DO-NOT-CLOSE tag to them.
- (3) Make sure that the pressure in hydraulic system No. 1 is fully released ( [AMM TASK 29-10-00-860-802-A/200](#)).
- (4) Control the ailerons up and down, or the rudder to the left and to the right, until the pressure of the hydraulic system shows zero PSI on the EICAS.
- (5) Open access door 114CR of the nose hydraulic compartment (AMM MPP 06-41-01/100).
- (6) Release the pressure from the pax door/landing gear accumulator, installed in the nose hydraulic compartment. For this, open the discharge valve and monitor the pressure gage until it shows the nitrogen precharge.
- (7) Identify the check valve to be removed.

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

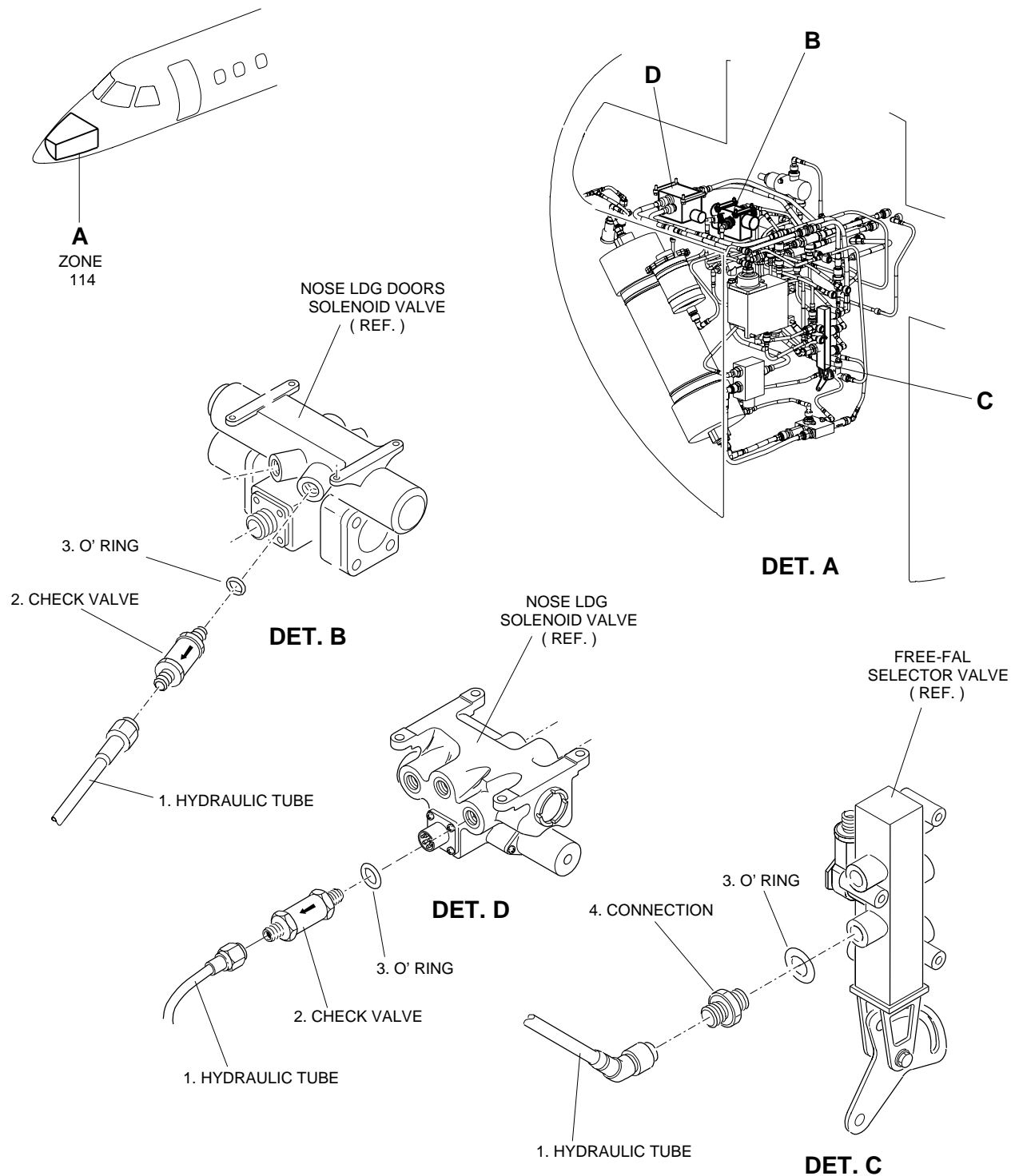
*SUBTASK 020-002-A*

- (1) Disconnect the hydraulic tube (1).
- (2) Remove the check valve (2).
- (3) Remove and discard the O-ring (3).

EFFECTIVITY: ALL

Check Valve - Removal/Installation

Figure 401



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TASK 32-33-11-400-801-A  
EFFECTIVITY: ALL

### 3. CHECK VALVE - INSTALLATION

#### A. General

(1) This procedure gives the instructions to install the check valve.

#### B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
<a href="#">AMM TASK 29-10-00-860-803-A/200</a>	HYDRAULIC SYSTEM - BLEED OF AIR
<a href="#">AMM TASK 32-30-00-700-801-A/500</a>	EXTENSION AND RETRACTION SYSTEM - OPERATIONAL CHECK
IPC 32-33-11	CHECK VALVE

#### C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
114	114CR	Nose hydraulic compartment

#### 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. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
O-ring	IPC 32-33-11	1 (Applicable to the NLG doors)
O-ring	IPC 32-33-11	1 (Applicable to the free-fall system)

(Continued)

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
O-ring	IPC 32-33-11	1 (Ap- plicable to the NLG)

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Nose hydraulic compartment

I. Preparation

**SUBTASK 841-003-A**

- (1) Identify the check valve to be installed.

J. Installation (Figure 401)

**SUBTASK 420-002-A**

- (1) Install a new O-ring (3) on the check valve (2).
- (2) Install the check valve (2).
- (3) Connect the hydraulic tube (1).

K. Follow-on

**SUBTASK 842-002-A**

- (1) On the circuit breaker panel, close the ELEC PUMP 1 and the CMD circuit breakers and remove the DO-NOT-CLOSE tag from them.
- (2) Do the bleed of air from the hydraulic system lines ( [AMM TASK 29-10-00-860-803-A/200](#)).
- (3) Do the operational check of the landing gear system ( [AMM TASK 32-30-00-700-801-A/500](#)).
- (4) Do a check on the check valve for leaks.
- (5) Close the nose-hydraulic-compartment access-door 114CR (AMM MPP 06-41-01/100).