HYDRAULIC SYSTEM RESERVOIR - SERVICING

EFFECTIVITY: ALL

1. General

A. This section gives the procedures to check the level of the fluid in the hydraulic system reservoir. It also gives the procedures to fill the reservoir.

B. The fluids used to service the hydraulic system must be referred in AMM MPP 20-30-01/200.

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*
12-13-01-600-801-A ♦	HYDRAULIC SYSTEM RESERVOIR - FLUID LEVEL CHECK	ALL
12-13-01-600-802-A	HYDRAULIC SYSTEM RESERVOIR - REPLENISHMENT	ALL

TASK 12-13-01-600-801-A
EFFECTIVITY: ALL

2. HYDRAULIC SYSTEM RESERVOIR - FLUID LEVEL CHECK

A. General

(1) This task gives the procedures to check the level of fluid in the hydraulic system reservoir.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 06-41-01/100	-
AMM TASK 12-13-01-600-802-A/300	HYDRAULIC SYSTEM RESERVOIR - REPLENISHMENT
AMM TASK 29-10-00-860-802-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH EMDP

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
193	193EL	Aft lower fairing - LH
193	193HR	Aft lower fairing - RH
193	193BL	Aft lower fairing - LH
193	193CR	Aft lower fairing - RH

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	Hydraulic compartment

I. Preparation

SUBTASK 841-002-A

(1) Fully release the pressure of the hydraulic systems (AMM TASK 29-10-00-860-802-A/200).

(2) Open system 1 door 193EL (AMM MPP 06-41-01/100).

NOTE: Make sure that the landing gear accumulator has a precharge of nitrogen only.

Make sure that the landing gear is down and locked.

(3) Open system 2 door 193HR (AMM MPP 06-41-01/100).

NOTE: Make sure that the emergency/parking brake accumulator has a precharge of nitrogen only.

J. Hydraulic System Reservoir Fluid Level Check (Figure 301)

SUBTASK 610-002-A

(1) On the hydraulic fluid level indicator, make sure that the pointer is between the 4.5 and 5.5 liter marks (normal range).

NOTE: The shaded region corresponds to the dispatchability range.
If the pointer is below the refill mark, fill the reservoir up to the correct full level mark.
Low oil level in the reservoir may be a sign that there is a leak in the system.

K. Check of Fluid Level (If the level indicator does not operate) (Figure 302)

SUBTASK 610-003-A

(1) Open related hydraulic fluid reservoir access panel 193BL or 193CR (AMM MPP 06-41-01/100).

(2) Remove the vent filter (1).

(a) Cut the lockwire (2).

(b) Remove the two screws (3).

(3) Insert a small rod in the vent filter hole until the piston head is touched (to measure the piston displacement).

(4) Make sure that the piston displacement is of 30 mm or less.

(5) If the piston displacement is of more than 30 mm, replenish the hydraulic fluid reservoir (AMM TASK 12-13-01-600-802-A/300).

(6) Install the vent filter (1).

(a) Install the two screws (3).

(b) Install the lockwire (2).

(7) Close related hydraulic fluid reservoir access panel 193BL or 193CR (AMM MPP 06-41-01/100).

L. Follow-on

SUBTASK 842-002-A

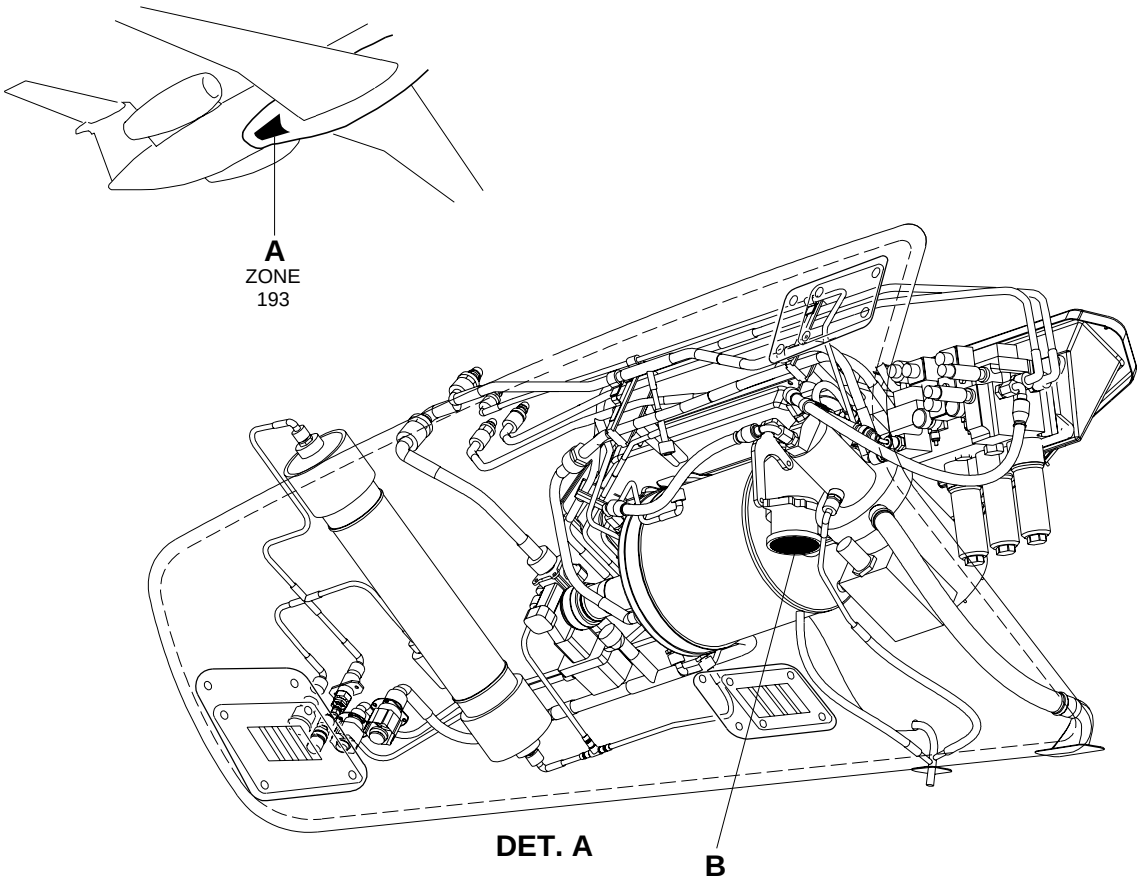
(1) Close system 1 door 193EL (AMM MPP 06-41-01/100).

(2) Close system 2 door 193HR (AMM MPP 06-41-01/100).

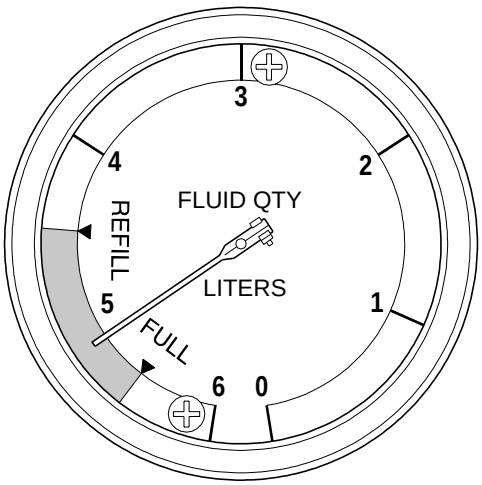
(3) Pressurize the hydraulic systems (AMM TASK 29-10-00-860-802-A/200).

EFFECTIVITY: ALL

Hydraulic System Reservoir Fluid Level Check
Figure 301



DET. A



DET. B

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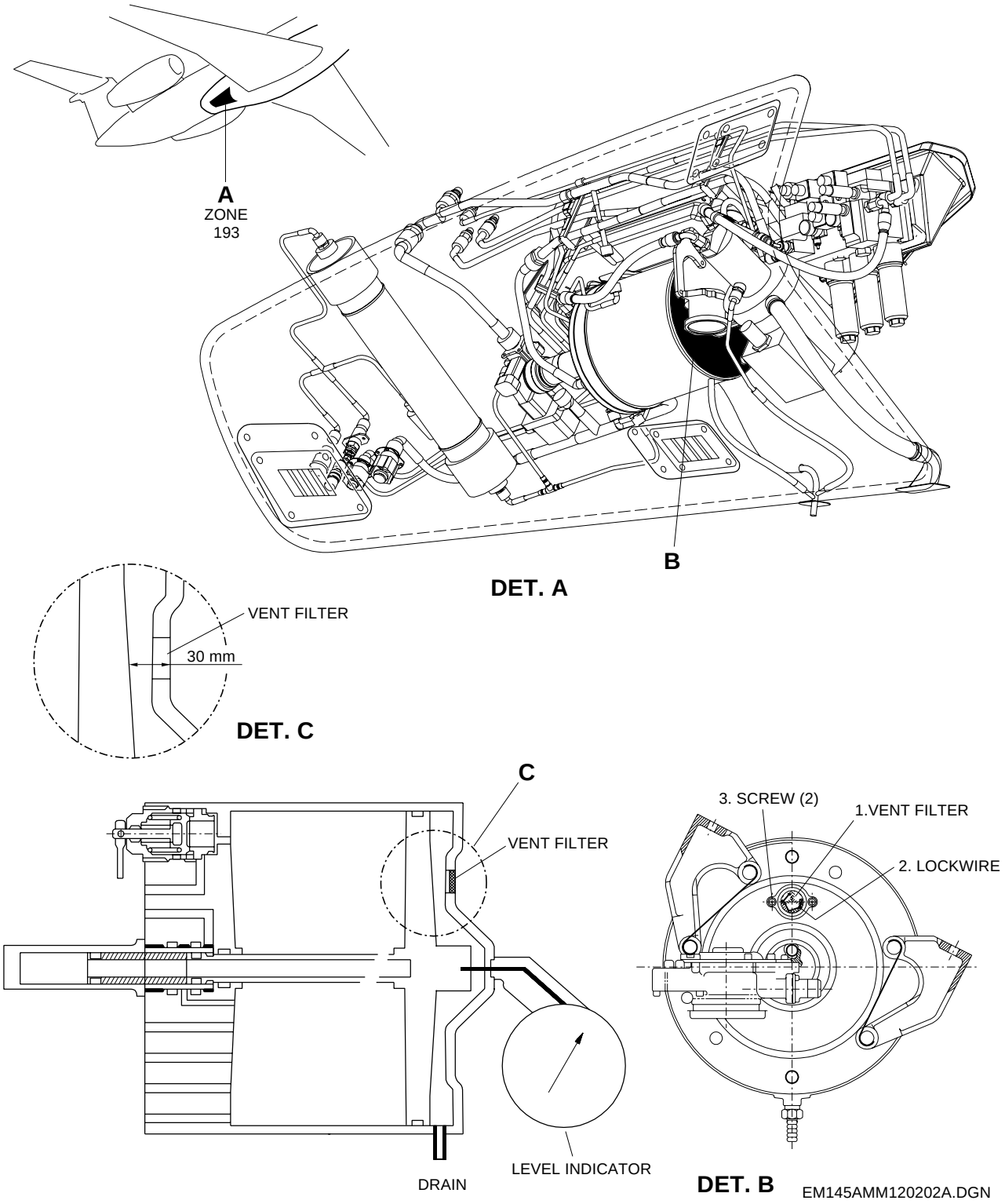
EFFECTIVITY: ALL

Check of Fluid Level (If the level indicator does not operate)

Figure 302



TASK 12-13-01-600-802-A
EFFECTIVITY: ALL

3. HYDRAULIC SYSTEM RESERVOIR - REPLENISHMENT

A. General

(1) This task gives the procedures to fill the hydraulic system reservoirs.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 06-41-01/100	-
AMM TASK 12-13-01-600-801-A/300	HYDRAULIC SYSTEM RESERVOIR - FLUID LEVEL CHECK
AMM TASK 29-10-00-860-802-A/200	HYDRAULIC SYSTEM - PRESSURIZATION WITH EMDP
AMM TASK 29-10-06-700-801-A/500	RESERVOIR RELIEF/BLEED VALVE - OPERATIONAL CHECK

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
193	193FL	Aft lower fairing - LH
193	193JR	Aft lower fairing - RH

D. Tools and Equipment

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
GSE 020	Hydraulic reservoir service unit	To fill the hydraulic reservoirs	

E. Auxiliary Items

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Rubber Gloves, Phosphate Ester-Base, Fluid-Resistant	Protection for hands	1
Commercially available	Rubber Goggles, Phosphate Ester-Base, Fluid-Resistant	Protection for eyes	1
Commercially available	Drip Pan	To collect the hydraulic fluid when you disconnect a hydraulic hose	1

F. Consumable Materials

SPECIFICATION (BRAND)	*DESCRIPTION*	*QTY*
SAE AS 1241A Type IV	Phosphate ester-base hydraulic fluid	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	Hydraulic compartment

I. Preparation

SUBTASK 841-003-A

(1) Fully release the pressure of the hydraulic systems (AMM TASK 29-10-00-860-802-A/200).

(2) Open system 1 door 193FL (AMM MPP 06-41-01/100).

(3) Open system 2 door 193JR (AMM MPP 06-41-01/100).

J. Replenishment (Figure 303)

SUBTASK 610-004-A

WARNING: THE HYDRAULIC SYSTEM CONTAINS PHOSPHATE-ESTER HYDRAULIC FLUID. THE FLUID CAN CAUSE IRRITATION IN YOUR SKIN OR INJURY TO YOUR EYES. USE 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.

NOTE: Make sure that the hydraulic reservoir service unit (GSE 020) is filled with sufficient hydraulic fluid to replenish the aircraft hydraulic fluid reservoirs. Otherwise, air could go into the hydraulic system.

(1) Remove the cap of the line of the replenishing set.

(2) Install the auxiliary hose of the hydraulic reservoir service unit to the fitting of the inlet line, but keep the connection loose.

(3) Put a drip pan at the connection between the auxiliary hose of the hydraulic reservoir service unit and the fitting of the inlet line.

(4) Operate the hand pump until a small amount of air-free hydraulic fluid is drained through the connection into the drip pan. This will make sure that the air in the auxiliary hose is eliminated.

(5) Tighten the connection between the auxiliary hose of the hydraulic reservoir service unit and the fitting of the inlet line.

(6) Operate the hand pump until the reservoir is full.

(7) Remove the hose from the inlet line fitting and the hand pump.

(8) Install the cap on the inlet line fitting of the reservoir.

(9) Bleed the air from the reservoir through the bleed/relief valve (AMM TASK 29-10-06-700-801-A/500).

K. Follow-on

SUBTASK 842-003-A

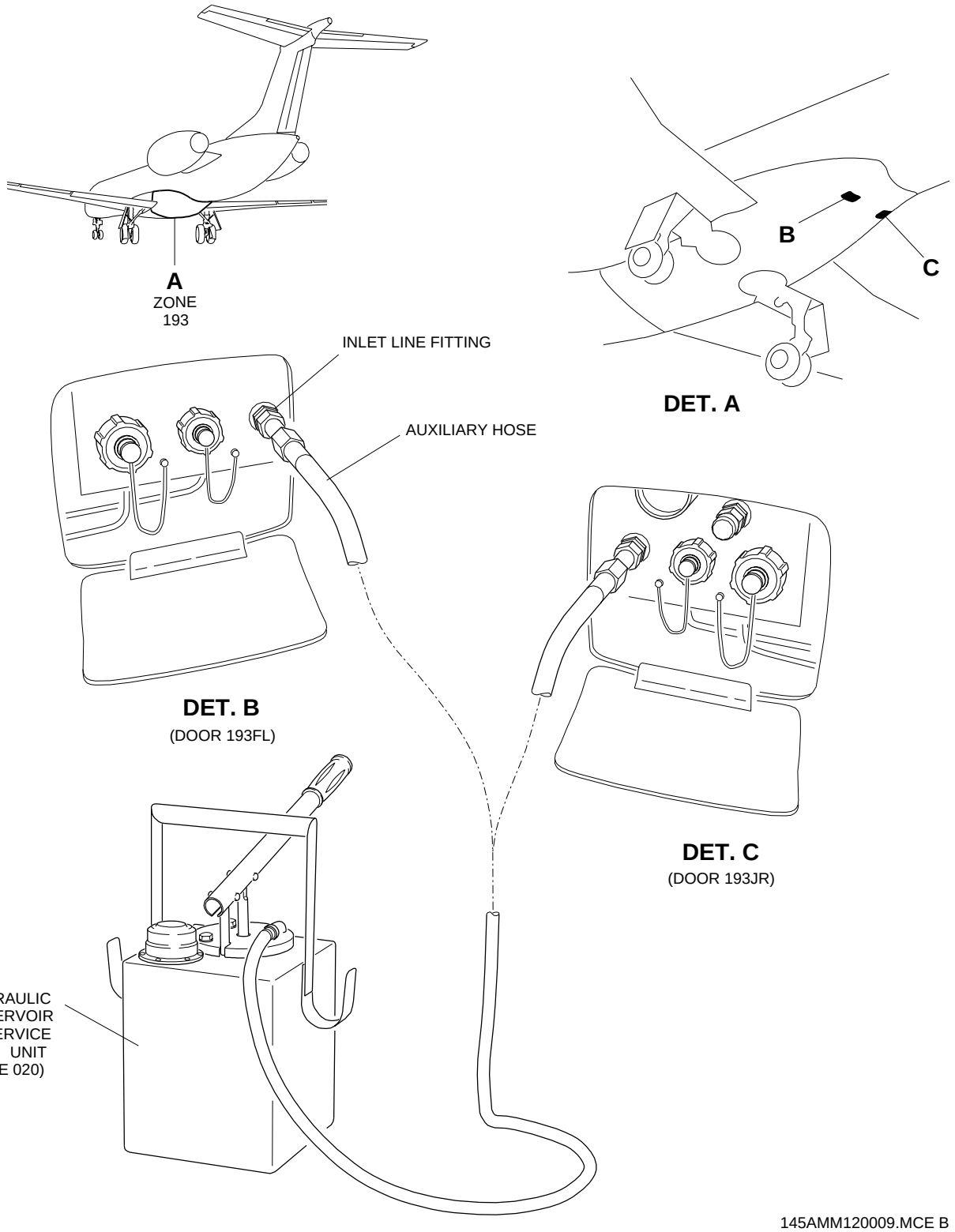
(1) Make sure that the hydraulic fluid level in the reservoirs is correct (AMM TASK 12-13-01-600-801-A/300).

(2) Close system 1 door 193FL (AMM MPP 06-41-01/100).

(3) Close system 2 door 193JR (AMM MPP 06-41-01/100).

EFFECTIVITY: ALL

Hydraulic System Reservoir - Replenishment
Figure 303



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