



AIRCRAFT
MAINTENANCE MANUAL

WATER RESERVOIR - SERVICING

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to sterilize the water 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
12-15-02-600-801-A ♦	WATER RESERVOIR - STERILIZATION	ALL



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TASK 12-15-02-600-801-A

EFFECTIVITY: ALL

2. WATER RESERVOIR - STERILIZATION

A. General

- (1) The water tank contains clean, but non-drinkable (for hygiene purposes only) water.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 12-15-01-600-801-A/300	WATER TANK - FILLING
AMM TASK 38-10-01-100-801-A/700	WATER TANK - CLEANING
AMM TASK 38-10-03-000-801-A/400	FAUCET ASSEMBLY - REMOVAL
AMM TASK 38-10-03-400-801-A/400	FAUCET ASSEMBLY - INSTALLATION

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
193	193MR	Aft lower fairing
193	193NR	Aft lower fairing

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
Commercially available	Liquid Sodium Hypochlorite (10%)	AR
Commercially available	Elsil (alternative for Liquid Sodium Hypochlorite)	AR
Commercially available	Purogene	AR
Commercially available	Citric Acid Crystals	AR
Commercially available	Acetic Acid (Vinegar)	AR
Commercially available	Alcohol	AR
Commercially available	Chlorine Test Paper	AR

G. Expandable Parts

Not Applicable



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H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Water reservoir

I. Preparation

SUBTASK 841-002-A

CAUTION: OPEN THE WATER SERVICING DOOR CAREFULLY NOT TO DAMAGE IT.

- (1) Open access door 193MR or 193NR, as applicable (AMM MPP 06-41-01/100).

J. Sterilize Water Reservoir ([Figure 301](#)) ([Figure 302](#))

SUBTASK 610-002-A

- (1) Fully drain the water system.
- (2) Examine the water tank for unwanted materials and sediment.
- (3) If you find mineral deposits and stains in the tank do the Water Tank Cleaning ([AMM TASK 38-10-01-100-801-A/700](#)).
- (4) Clean out and flush the tank with clean potable water.
- (5) Do the procedure below to sterilize the water tank:
 - (a) (AIRCRAFT WITH 20 LITERS TANK) Mix 20 ml (0.7 fluid ounces) of liquid sodium hypochlorite (10%) with 20 l (5.3 US gallons) of clean water.
NOTE: If you use Elsil instead of sodium hypochlorite, mix Elsil with clean water in the same proportion as if you used sodium hypochlorite.
 - (b) (AIRCRAFT WITH 36 LITERS TANK) Mix 36 ml (1.3 fluid ounces) of liquid sodium hypochlorite (10%) with 36 l (9.5 US gallons) of clean water.
NOTE: If you use Elsil instead of sodium hypochlorite, mix Elsil with clean water in the same proportion as if you used sodium hypochlorite.
- (c) Add the solution to the water reservoir through the filling fitting.
- (d) Let the solution stay in the system for 1 hour.
- (e) Open the faucet in the lavatory (for a minimum of three minutes).
- (f) Drain the water system.
- (g) Fully fill the water reservoir with potable water ([AMM TASK 12-15-01-600-801-A/300](#)).
- (h) Let the water flow through the faucet and check its odor and color. If the water is not satisfactory, do steps (d), (e), and (f) again.
- (i) If the quality of the water is satisfactory, fully fill the water reservoir with potable water ([AMM TASK 12-15-01-600-801-A/300](#)).

- (6) After the previous procedure, if the water purity level is not satisfactory according to the requirements of local authorities, do the alternative procedure below to sterilize the water tank:
- Measure out and mix in a clean plastic container, for each 189.3 l (50 US gallons) of storage tank capacity, 473.2 ml (16 fluid ounces) of Purogene with 1/4 cup or 59.2 ml (2 fluid ounces) of Citric Acid Crystals or powder, to prepare Purogene active solution.

NOTE: After you mix the components it takes about five minutes for the activation to occur.
 - Mix the activated concentrate with 7.6 l (2 US gallons) of clean potable water.

NOTE: If stored potable water is to be treated as well, set aside 739.4 ml (25 fluid ounces) of the resulting solution for each 189.3 l (50 US gallons) of water and add it directly to the water after tank disinfection is complete.
 - Put the remaining solution into the storage tank and fill it with water.
 - Open for a short time all the water discharge ports in the system, just long enough to allow flow of the treatment solution through the ports.
 - Close drains and allow the treatment solution to stand for one hour.
 - Drain the treatment solution from the water tank.

NOTE: Do not flush the tank after you drain the solution from the tank.
 - Close drain ports and fill the tank with fresh water.
 - If treatment of water is necessary, add the solution prepared and set aside before.
 - Use a Chlorine Test Paper to make sure that the concentration does not exceed 5.0 ppm.
- (7) If the water system does not get approval on coliform tests after the tank sterilization procedure, do the shock procedure as follows:
- Fully drain the water system.
 - Examine the water tank for unwanted materials and sediment.
 - Clean out and flush the tank with clean potable water.
 - Measure out and mix in a clean plastic container, for each 189.3 l (50 US gallons) of storage tank capacity, 1.9 l (64 fluid ounces) of Purogene with 1 cup or 236.6 ml (8 fluid ounces) of Citric Acid Crystals or powder, to prepare Purogene active solution.

NOTE: After you mix the components it takes about five minutes for the activation to occur.
 - Mix the activated concentrate with 7.6 l (2 US gallons) of clean potable water.

NOTE: If stored potable water is to be treated as well, set aside 739.4 ml (25 fluid ounces) of the resulting solution for each 189.3 l (50 US gallons) of water and add it directly to the water after tank disinfection is complete.

- (f) Put the remaining solution into the storage tank and fill it with water.
- (g) Open for a short time all the water discharge ports in the system, just long enough to allow flow of the treatment solution through the ports.

NOTE: The solution drained from the ports should measure 200 ppm concentration with Chlorine Test Paper.

- (h) Close drains and allow the treatment solution to stand for 4 hours.
- (i) Drain the treatment solution from the water tank.
- (j) Close drain ports and fill the tank with fresh water.
- (k) Open for a short time all the water discharge ports in the system, just long enough to allow flow of the fresh water through the ports.
- (l) If treatment of water is necessary, add the solution prepared and set aside before.
- (m) The concentration of the water that flows from the ports should measure no more than 5.0 ppm with a Chlorine Test Paper.

K. Follow-on

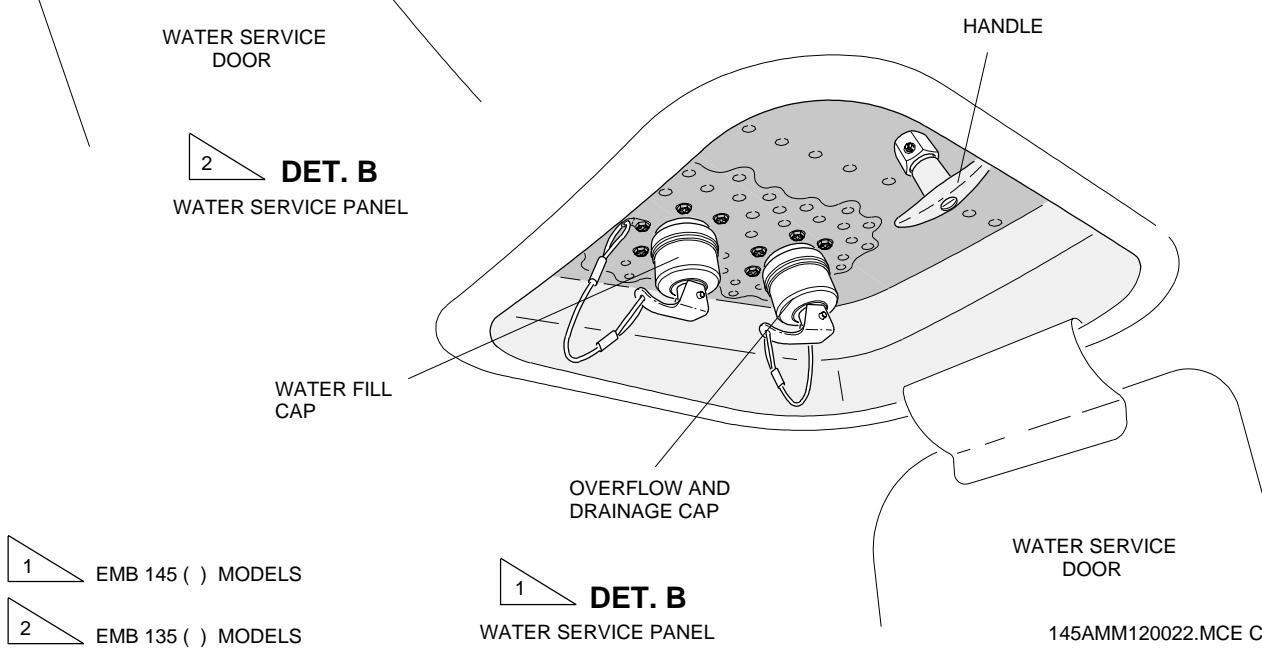
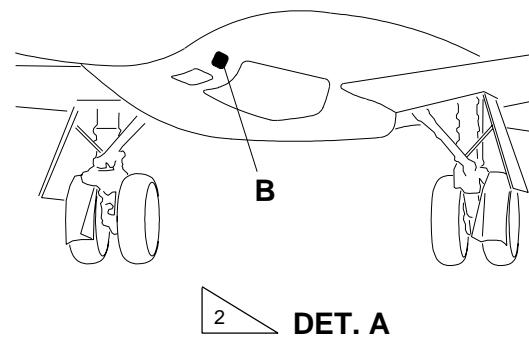
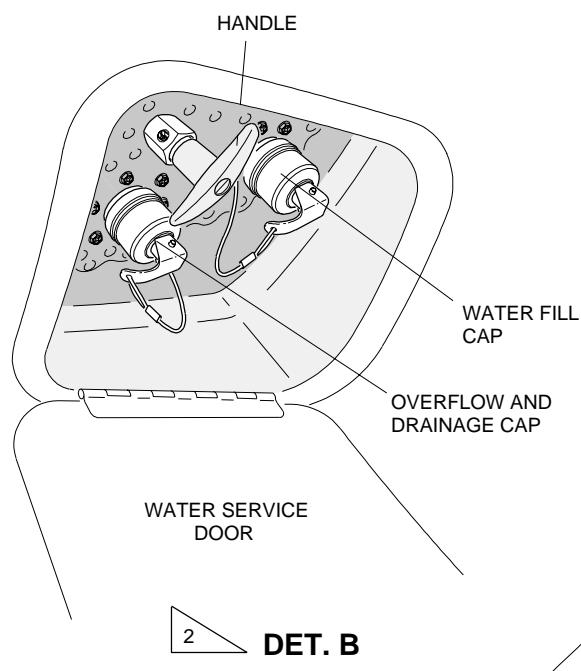
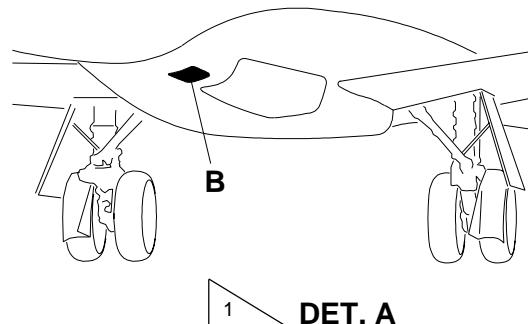
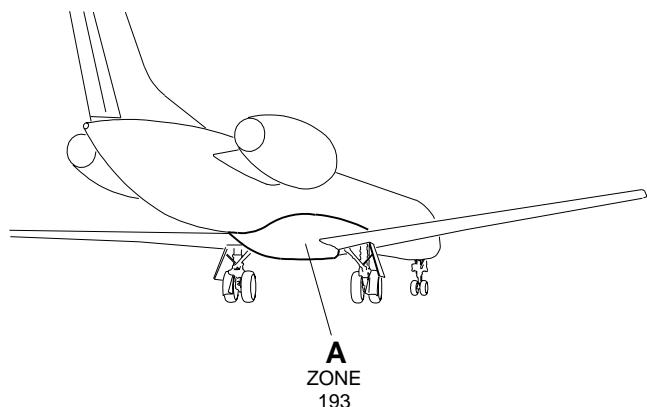
SUBTASK 842-002-A

- (1) If the faucet flow is slow or there is the suspicion that the faucet is clogged, do the next procedures:
 - (a) Drain the water system through the faucet.
 - (b) Remove the faucet assembly ([AMM TASK 38-10-03-000-801-A/400](#)).
 - (c) Put the faucet in vinegar to remove unwanted deposits. If necessary, use a nonmetallic stiff-bristle brush to remove the deposits.
 - (d) Dry the faucet and disinfect it in alcohol (min. 70%).
 - (e) Install the faucet assembly ([AMM TASK 38-10-03-400-801-A/400](#)).
 - (f) Fully fill the water reservoir with potable water ([AMM TASK 12-15-01-600-801-A/300](#)).
- (2) Close access door 193MR or 193NR, as applicable (AMM MPP 06-41-01/100).

EFFECTIVITY: PRE-MOD. SB 145-38-0002

Water Reservoir - Sterilization

Figure 301



1 EMB 145 () MODELS

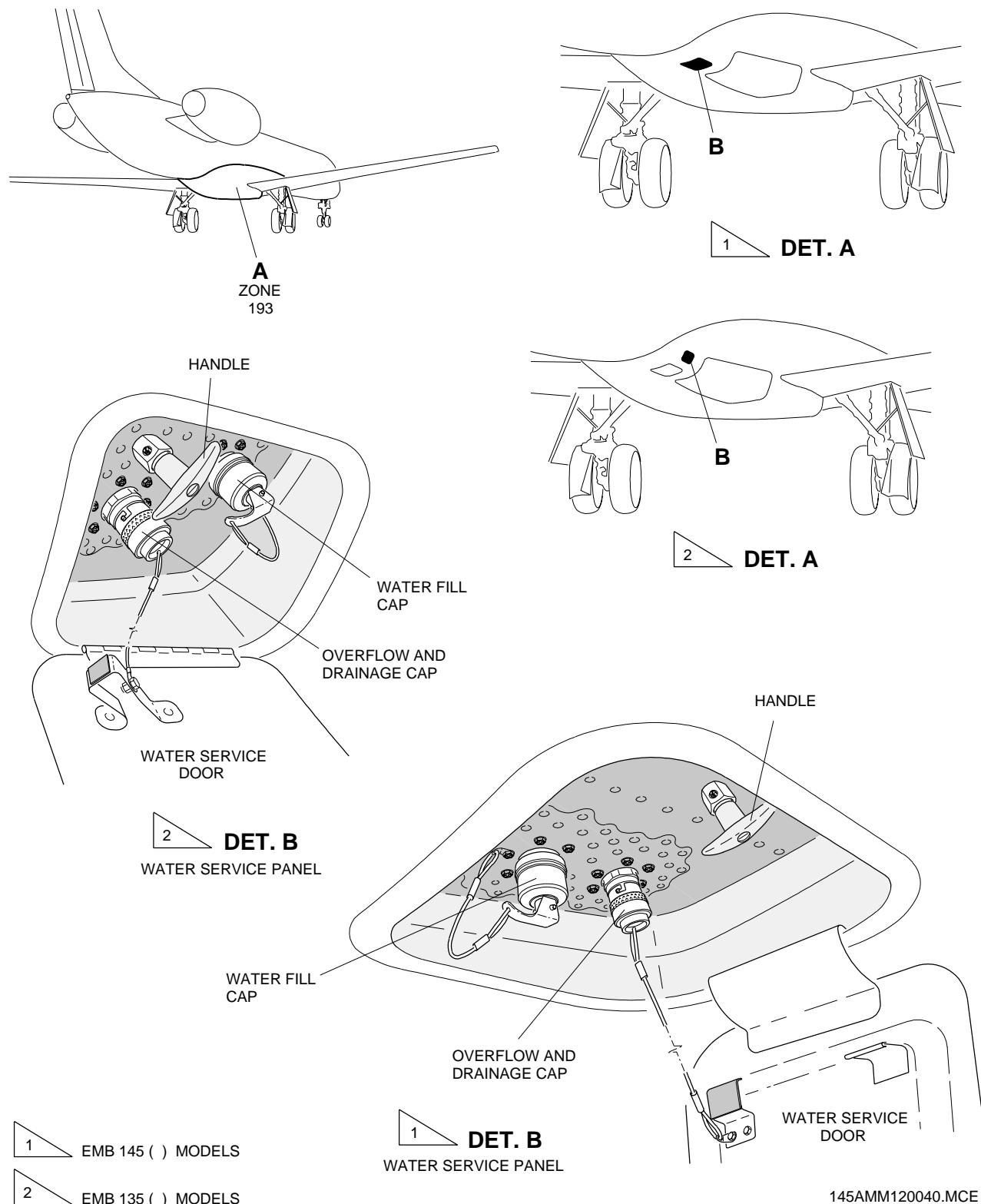
2 EMB 135 () MODELS

145AMM120022.MCE C

EFFECTIVITY: POST-MOD. SB 145-38-0002

Water Reservoir - Sterilization

Figure 302



145AMM120040.MCE

