

Aircraft Appearance

Station Services



LAVATORY PROCEDURES Workbook

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INTRODUCTION

Lavatory servicing is performed in all locations, which are designated for servicing by the Aircraft Appearance Division. To ensure a comfortable onboard experience for our passengers, it is imperative that all servicing schedules are followed. In addition, proper training and hands-on practice will help to ensure our potable water-servicing program remains successful in achieving our goals.

The procedures highlighted in this workbook apply to the EMB-135/145 aircraft. For further information, please refer to the Aircraft Appearance Manual located online at www.insidexjet.com.

In protecting the traveling public, the U.S.FDA, as well as the Aircraft Appearance Department, performs random audits in our system. Stations should perform monthly audits and review any negative findings.

Stations providing potable water service outside of the U.S. and Canada must have prior approval before servicing an aircraft.

To ensure a comfortable, onboard environment for our customers, it is imperative that Lavatory Service is provided in all stations scheduled for servicing by Continental Express.

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SAFETY

When performing lavatory service on an aircraft, a high level of awareness is mandatory. Equipment, gate congestion and adverse weather conditions can create potential dangers or obstructive view of the aircraft. A safe operation can be assured with proper precautions:

1. The driver of the lavatory vehicle is responsible for checking their vehicle to ensure that it is in safe operation condition before commencing service to any aircraft.
2. A guide person is required when backing any piece of equipment to any aircraft that does not have proper safety equipment. This proper equipment is defined as service trucks containing six-foot fiberglass poles with a safety flag attached to each corner of the rear bumper. Fiberglass must be rubber coated and flags are to be non-abrasive material.
3. When approaching each aircraft (using a motorized vehicle) the driver must test the braking system while permitting safe stopping distance should the brakes fail.
4. When backing up, as soon as the gearshift lever is placed in reverse, the driver must test the braking system while permitting safe stopping distance should the brakes fail.
5. When backing (unguided) to an aircraft, lavatory service personnel must stop three feet from the aircraft and most certainly stop when the flagpole touches the aircraft.

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LAVATORY SERVICING SCHEDULE

1. All arrival at the HUBS.
2. All RON aircraft.
3. All flights with 2+ hours of flight time.
4. On request

ENVIRONMENTAL HAZARDS

The Environmental Protection Agency (EPA) has strict guidelines for storage, disposal, and cleaning of materials with the potential of being environmentally hazardous.

Cleaning of lavatory carts, disposal of lavatory waste and the refilling of the lavatory cart have the potential for spillage. Please make sure that ALL lavatory functions are not performed near any storm water drains to avoid possible contamination of ground water supplies.

Remember: The EPA imposes fines on the individual, not the company or station.

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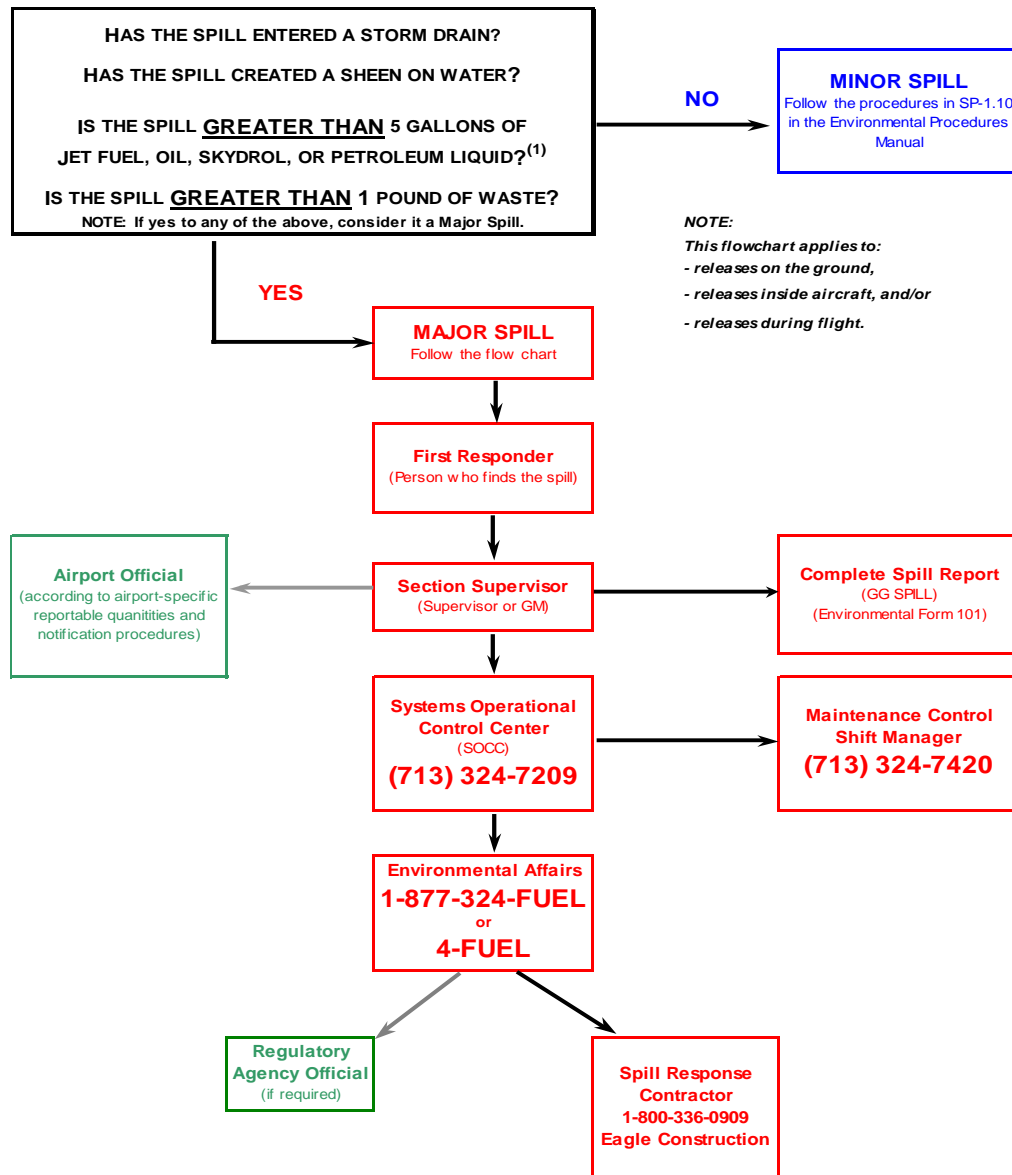


CHEMICAL SPILL RESPONSE

All chemical spills of 3 feet or greater, including lavatory blue water, must be reported within 24 hours of the spill by using the Spill Notification flowchart.

Notify the Environmental Affairs Department immediately if any chemical, lavatory blue water or any other liquid besides water is spilt into Storm Water Drains.

SPILL NOTIFICATION FLOW CHART



⁽¹⁾ 40 square feet (5' x 8') on dry concrete = Quart
140 square feet (10' x 14') on dry concrete = Gallon
700 to 800 square feet (20' x 40') on dry concrete = Five Gallons

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PERSONAL PROTECTIVE EQUIPMENT (PPE)

Personal protective equipment, or PPE, is designed to protect employees from serious workplace injuries or illnesses resulting from contact with chemical, radiological, physical, electrical, mechanical, or other workplace hazards.

PPE RULES TO REMEMBER:

1. Always check PPE for defects or tears before using.
2. If PPE becomes torn or defective remove and get new.
3. Remove PPE promptly after use.
4. Do not reuse disposable equipment.

BLOODBORNE PATHOGENS (BBP)

Bloodborne Pathogens (BBP) are pathogenic microorganisms that are present in human blood and may cause disease in humans.

Common BBP: Malaria
 Hepatitis B
 Brucellosis

One may possibly come into contact with BBP during lavatory servicing, thereby making the following PPE available at all Continental Express stations for lavatory servicing.

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LAVATORY SERVICE PERSONAL PROTECTIVE EQUIPMENT (PPE)

When engaging in lavatory servicing, it is necessary that PPE be utilized to protect against unwanted exposure to BBP.

The three mandatory PPE items are:

1. Face Shield
2. Rubber Gloves
3. Protective Apron

POST-EXPOSURE HEPATITIS "B" VACCINATION

If an exposure incident does occur, it is Continental Express Airlines' commitment to all of its employees that a Hepatitis "B" vaccination series be offered free of charge to that employee upon reporting of the potential exposure.

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LAVATORY SERVICING

1. Ensure the aircraft engines have been shut down, and the wheels are chocked before approaching the aircraft.
2. Using a guide person or other Continental Express designated safety procedure, prior to backing to the service panel, stop the vehicle at least three (3) feet from the aircraft.
3. Place the vehicle in park and set the emergency brake. Immediately place chocks behind and in front of the vehicle's left rear tires.
4. Place the twenty (20) gallon catch bucket on the ramp below the servicing panel door. Catch bucket must be secured while being transported on the vehicle and when placed on the ground.
5. Open the service access door and then slowly open the drain chute cover door. Any leakage should drain into the twenty (20) gallon bucket.
6. Should any leakage or service panel damage be present, immediately report this observation to Continental Express Maintenance or a Continental Express Representative.

A/C TYPE	FLUSH/FILL QUANTITY
EMB 145	4 gallons/2 gallons
EMB 135	4 gallons/2 gallons
EMB145 –XRJ	4 gallons/2gallons

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SERVICING PROCEDURE

1. Position the “Waste Catch Bucket” under the lavatory service panel. Catch bucket must be secured while being transported on the vehicle and when placed on the ground.
2. Open lavatory service panel.
3. Remove the fill cap (#1) from the fill service port (#2). If fill cap is missing, notify proper Continental Express personnel.
4. Release the handle (#3) and open the drain protective cap (#4).
5. Connect dump hose unit (#6) of the waste drain valve (#5).
6. Connect fill hose (#7) to fill port (#2).
7. Push the lever (#8) of the waste drain-valve actuator to open its internal flapper valve.
8. Pull and lock the control handle (#10) to open the holding tank-valve and continue tank drainage until the waste flow stops.
9. Release the control handle #10).
10. Verify waste has actually drained from the aircraft by a visual check through the drain hose or by feeling the vibration through the hose during the draining process. If proper draining is accomplished, you may continue to the next step. If you are still uncertain as to whether proper draining was accomplished, a visual check of the lavatory tank from topside must be conducted by flushing the lavatory or by visually inspecting the tank by lowering the lavatory flapper. If verified that water is still in the tank, DO NOT INITIATE THE SERVICING PROCESS, contact Maintenance or Station Management.
11. Flush the waste tank by filling with four (4) gallons of designated approved de-germ water mix. Refer to chart.
12. Pull and lock the drain control handle (#10) to open the holding tank drain valve. Continue until the waste flow stops.
13. Release control handle (#10) after drainage has been completed.

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14. Verify waste has actually drained from the aircraft by a visual check through the drain hose or by feeling the vibration through the hose during the draining process. If proper draining is accomplished, you may continue to the next step. If you are still uncertain as to whether proper draining was accomplished, a visual check of the lavatory tank from topside must be conducted by flushing the lavatory or by visually inspecting the tank by lowering the lavatory flapper.. If verified that water is still in the tank, DO NOT INITIATE THE SERVICING PROCESS, contact maintenance or station management.
15. Fill with two (2) gallons of approved degerm. Refer to chart.
16. Disconnect the dump hose unit (#6) and fill hose (#7) from the aircraft. Wipe up all fluid present.
17. Close drain valve protective cap (#4) and the latch handle (#3) of the drain waste valve. Flapper valve will close automatically when cap is closed.
18. Install fill cap (#1) on fill port (#2). Ensure cap is properly sealed and not leaking. If leakage is observed, IMMEDIATELY contact Maintenance or Station Personnel.
19. Close lavatory service panel. Panel door will close only if the waste drain valve is properly closed. Close lavatory service panel.
20. Clean interior and exterior of lavatory service door.

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#4 Drain Valve Protective Cap

#3 Handle

#8 Valve Actuator

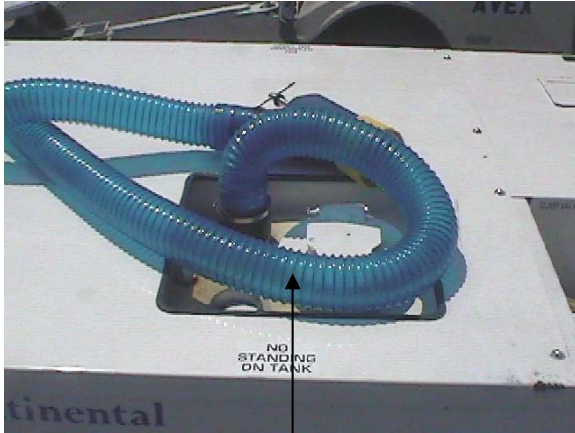
#10 Control Handle

#1 Fill Cap
#2 Fill Port



#9 Coupling Handle

#7 Fill Hose



#6 Dump Hose Unit

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GENERAL SAFETY RULES FOR THE LVC 123/250LP LAV CART

1. The cart is designed for aircraft ramp use only, it is not intended for highway or off road use.
2. Towing speed should not exceed 15mph. When traveling over rough surfaces or turning, speeds should be reduced.
3. Always stow hoses and close all access doors prior to moving unit.
4. Never attempt to move the unit while hose(s) are connected to the aircraft.
5. When the cart unit is in the parked position the tow bar should be latched in the upright and vertical position to engage the parking brake.
6. Do not triple link the lavatory cart, tug and aircraft.
7. When servicing the aircraft the cart unit is to be disconnected from the tow vehicle.



LAVATORY WASTE DISPOSAL & CLEANING PROCEDURES

TRITURATOR USE

When the lavatory truck/cart is full, the contents must be removed. This process is accomplished with the use of a triturator. A triturator is a facility where contents of the lavatory truck are drained. The two different types of tritulators are the gravity drain system (open system) and the closed system. Procedures for each system are as follows.

- A. Gravity Drain System (Open System)
 1. Drive cart to the facility and position the vehicle over the open pit called the hopper.
 2. To drain the contents, open the tank drain valve. Ensure the hopper does not overflow.
 3. After cart has been emptied, close the drain valve and rinse the interior of the tank with clean water. Open drain valve and drain. Repeat this process as needed to ensure that the tank is clear of all waste.
 4. Fill the fresh water tank with water and de-germ water mix. Fill tank to three-quarters (3/4) full.
 5. Wash off the truck/cart in an approved area to remove spillage that may have occurred.
 6. Drive out of the triturator, and rinse down the floor and hopper to remove any solid matter, which may have been left after the draining process.
 7. Plug the cart unit back into the power source and check the indicator lamp (on the right rear of the unit) to ensure that power is being received.

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Note: Degerm chemical in quart bottles (liquid form). Mixture is ½ quart of liquid per tank (100gals.) of water.

B. Closed System

1. Drive the cart to the facility and position the vehicle into the center of the triturator room facility.
2. To drain the contents, connect drain hose from floor to the drain valve on the cart. To drain the contents, open the tank drain valve.
3. After cart has been emptied, close the drain valve and rinse the interior of the tank with clean water. Open the drain valve and drain the contents. Repeat the draining process as needed to ensure that the tank is clear of all waste.
4. Fill the fresh water tank with water and de-germ water mix. Fill tank to three-quarter (3/4) full.
5. Wash off the truck/cart in an approved area to remove spillage that may have occurred.
6. Drive out of the triturator, and rinse down the floor and hopper to remove any solid matter, which may have been left after the draining process.
7. Plug the cart unit back into the power source and check the indicator lamp (on the right rear of the unit) to ensure that power is being received.

Note: Degerm chemical in quart bottles (liquid form). Mixture is ½ quart of liquid per tank (100gals.) of water.



LAVATORY SERVICING ASSESSMENT

1. The Internal Flapper valve should be opened after the _____ is attached.
 - a. Drain Hose
 - b. Flapper Gage
2. The Regional Jet flush quantity is _____ gallons.
 - a. 1
 - b. 2
 - c. 4
3. The Regional Jet final charge quantity is _____ quantity.
 - a. 1
 - b. 2
 - c. 4
4. How many drain verification is required in the servicing process?
 - a. 1
 - b. 2
 - c. 4
5. The lavatory is required to be serviced during _____.
 - a. RON
 - b. Turn
6. During a Turn, the lavatory is serviced upon request.
 - a. True
 - b. False

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7. It is ExpressJet Airlines' commitment to all of its employees the Hepatitis B vaccination series be offered free of charge to that employee upon reporting of the potential exposure.
 - a. True
 - b. False
8. The Personal Protective Equipments are _____.
 - a. Face Shield
 - b. Rubber Gloves
 - c. Apron
 - d. All of the above
9. Any Lavatory water/waste spill of _____ or greater must be reported within 24 hours of the spill by using the spill Notification Flowchart.
 - a. 3 feet
 - b. 10 gallons
10. When the lavatory vehicle is full, the contents must be removed into a
 - a. Triturator
 - b. Drain