

ARCS PROCEDURE	DIESEL FUEL TRANSFER AT MANUS AND NAURU SITES	PRO(GEN)-014.000 8 April 2004 Page 1 of 3
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Diesel Fuel Transfer at Manus and Nauru Sites

I. Purpose:

This procedure outlines the steps for transferring diesel fuel using a trolley-mounted electrical pump at the Manus (ARCS-1) and Nauru (ARCS-2) sites.

II. Cautions and Hazards:

General Safety

- Do not run the fuel pump dry.
- Do not smoke or turn on naked (uncontained) light bulbs within 6 meters (approx. 20 feet) of the fuel tanks.
- Clean up any diesel fuel spills by washing the affected area with detergent.

Battery-related Safety

- When charging the battery, remove it from the pump trolley.
- If the battery does not use sealed acid, check the electrolyte levels before and after charging.
- When removing the battery from the pump trolley, move the trolley near a wall, and then set it with its handles facing the wall.
- Pay close attention to battery connection:
 - Red clip – positive
 - Black clip – negative
- Store unused batteries with clips down, excess cables inside the battery box.

III. Requirements:

- Safety glasses
- Leather or rubber gloves

IV. Procedure:

A. Priming Transfer System

Prior to initial operation, the pump needs to be “primed” to help the pump draw fuel from the tank; to lubricate the pump bearing; and to help dissipate the heat buildup in the pump.

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1. Unscrew the top of the filter attached to the outlet hose, and then fill the hose with fuel.
2. When fuel starts to flow down the outlet hose, keep filling until air is expelled from the system.
3. On the inlet hose, remove the wire strainer and fill the hose with fuel.
4. Lift the hose inlet hose above the pump to let air out, and then top up.
5. Put the filter top back on its original position.

B. Checking Hose Coupling (Nauru)

The fuel tank and the pump trolley at ARCS-1 are fitted with a self scaling hose coupling.

1. Connecting two hoses:
 - a) Pull back the spring-loaded collar on the trolley.
 - b) Push the tank-end coupling into the trolley coupling to release the spring-loaded collar.
2. Releasing the coupling:
 - a) Push the trolley coupling and tank-end coupling together.
 - b) Pull the spring-loaded collar back to separate the two couplings.
 - c) Release the spring-loaded collar to allow the two coupling to seal by themselves.

C. Checking Wire Screen

1. Manus

The wire screen filter on the inlet hose protects the pump from large objects that occasionally get picked up from fuel drums. Check the filter for any objects prior to pump operation.

2. Nauru

The wire screen filter is an inline, Y-type, fitted between the tank outlet and the house coupling. This type of filter is cleaned by undoing the side nut. Check the filter if necessary.

D. Operating Pump

1. Dip the inlet hose into the tank so that the wire strainer is near the bottom of the tank.
2. Turn on the switch located on the front of the trolley, near the red handle on the pump.
3. Keep an eye on the fuel level in the tank.
4. When the desired level is reached, turn off the switch.

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E. Checking Water Filter

Water separated by the Racor filter is collected on the bottom of the pump and should be drained after each operation.

1. Locate the drain under the pump, and then hold a container underneath it.
2. Using your hand with a glove on, turn the knurled ring around the drain.
3. After finish draining water, tighten the ring by hand. **Note: Don not use a pliers, or it may damage the valve.**

F. Storing Trolley

1. Drain any excess fuel in the hoses.
2. Wipe all connectors with a rag or paper towels.
3. After cleaning, cover each connector with a plastic bag.
4. Set the trolley in a storage space with a cover to protect it from sunlight.

V. References:

None.

VI. Attachments:

None.