



For Marine Services

Service Report

Report no.: 344
 Report date: Sep 02, 2025
 Location: PORTSAID ANCHORAGE AREA OPL
 Vessel Name: DAKAR
 IMO no.: 9251743

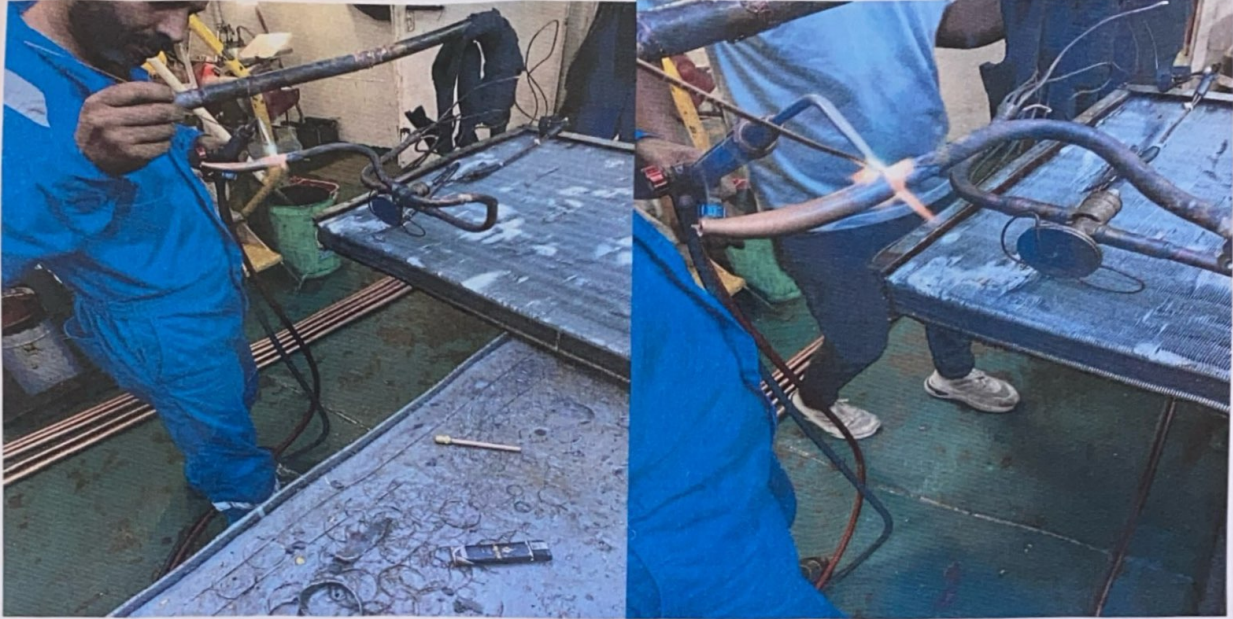
❖ Evaporator No.2 for Control Engine Room AC

1. We cutting the welding of the connection to make the evaporator free so we can test him in workshop shown below



2. We removed evaporator and made a special flange from the two connections to make test as shown below





3. We pressurized a freon gas to detect the leakage in evaporator and it shows 2 cracks
There are two methods used to detect the crack: gas leakage detector and soap as shown below (there are videos will be send to you shown the cracks)



4. After detecting the leakage we start gas welding using silver sticks to weld the cracks as shown



5. Finally, we put the evaporator back and test it with pressurized freon and the result satisfactory so vacuum the system using vacuum pump then charge the system with freon as shown below



❖ Evaporator No. 1

1. We start dismantling the connection using gas welding and get the evaporator to the workshop to start testing as shown



2. Then we pressurized Freon gas into the evaporator and find 5 cracks and welded using gas welding and silver sticks like previous (videos will be send to you showing the cracks)



3. Then we get the evaporator back, weld the connection again using gas welding and sliver sticks, pressurized the system with freon to make there is no leakage then vaccume the system finally charges the system with freon gas



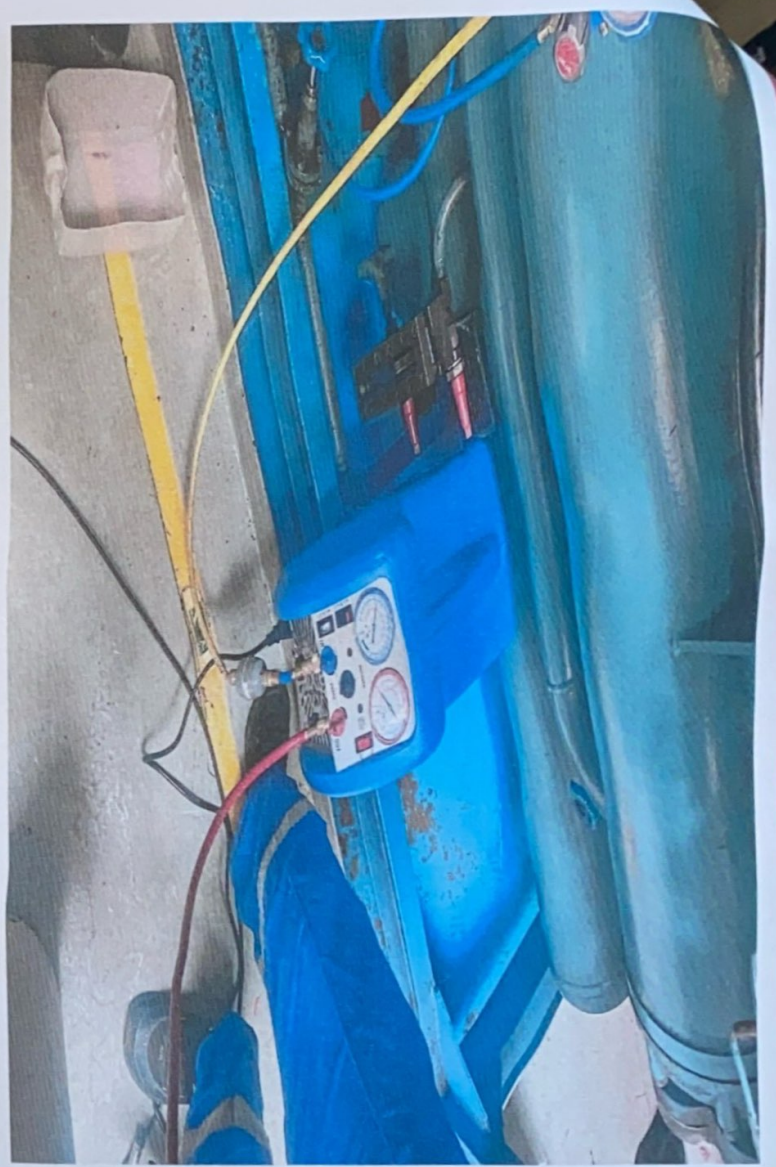
❖ Additional work out of our scope have been done

1. Chief engineer asked us he want to change compressor No.1 with No.2 because after we finish when the ETO try to operate the system, we find out the No.1 compressor is burned
2. On 2nd Engineer demand, we fabricate a special connection to make a high-pressure gauge for the system No.2



❖ Accommodation AC

1. We start to do recovery for all Freon using recovery unit in the recovery cylinders as shown below



2. We clean the system using Nitrogen cylinder



3. After we clean the dryer and before inlet filters
4. Then, we vacuumed the remaining gas from the system using vacuum pump
5. Finally, we charge the system with freon and the condition is satisfactory

❖ Additional work out of our scope

1. The dryer filter found with no dryers inside and dirty so we clean it but we can't put dryer because connections not available onboard as shown below






2. Based on the request of chief engineer, the expansion valve of the second Evaporator was stick so it was replaced with a new one

This Report Prepared by:

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Chief Engineer Sign and Stamp


DAKAR
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FLAG: PANAMA
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Ship's Master Sign and stamp



