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1. Maintenance & Usage of Reefer Containers

- 1.1 Clean condenser coil and drain pipe monthly, see (Picture A).



Picture A

- 1.2 Container must be placed on the level ground to prevent the unit from twisting. This will prevent ice from forming at the machinery and will allow easy door opening/closing.
- 1.3 Prior to loading, cargo temperature must be at reefer unit set temperature.
- 1.4 The reefer unit must turn off before door opening to prevent ice blocking and must defrost after door closing.
- 1.5 Loading cargo must not be above the red line, see (Picture B).



Picture B

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- 1.6 30cm air space must be kept at each end of the container (between reefer unit and cargo; between door and cargo).
- 1.7 Space below the T-floor must be clean to allow uninterrupted airflow, see (Picture C). It is recommended that cargo should be put on pallets.



Picture C

- 1.8 Reefer machine should be pre-cool to 'set-point' (desired temperature) prior to loading cargo.
- 1.9 Cargo temperature must be at set-point prior to loading to prevent ice blocks to machinery. Higher cargo temperature than set-point will also affect the cooling performance of reefer unit.
- 1.10 Should freeze a cargo in temperature you want before packing for protect freeze block by the way it could hardly to take the temperature to low.

2. Setting Temperature

- Press the arrow up-down to the desired temperature then press Enter, see (Picture D).



Picture D

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3. Basic Container Monitoring

- <u>3.1 Refrigerant:</u> observe the storage tank. Floating balls in top and bottom sight glass means full refrigerant, See Picture E1 for location.
- 3.2 Hot air from condenser indicates normal unit operation, see Picture E2.
- 3.3 Pre-trip inspection (PTI) can be used to check the unit working condition.



Picture E



Picture F

3.3.1 Press the button **PRE TRIP** (F1) then press arrow up-down until the monitor on the right hand side show **Auto1** (F2) then press **ENTER**. The unit will perform check automatically.

3.3.2 See F3, the unit displays **PASS** indicating that the unit is fully functional.

3.3.3 See F4, the unit displays FAIL indicating some faults. It is recommended Thaireefer technician be contacted.

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4. System Faults

* If the unit experiences any of these conditions, contact Thaireefer technician immediately *

4.1 When alarm light appears on display and when ALXX is flashing on display,

(Picture G).



Picture G

4.2 When ice appears on the compressor (Picture H)



Picture H

- 4.3 When the set-temperature is not achieved after unit running for a reasonable time.
- 4.4 When the breaker frequently trips (breaker off).

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5. Equipment Location and Functions



Picture I

- 5.1 Condenser fan motor: Dissipates heat from condenser coil which cools refrigerant, see I1
- 5.2 Compresses refrigerant from gas to liquid, see I2.
- 5.3 Display: Shows set temperature and actual-temperature inside the unit, see I3 and picture J.



Picture J

- 5.4 Receiver tank: Function as refrigerant reservoir, see I4.
- 5.5 Function codes/alarm codes: Description of short codes and faults of the unit, see I5 &Picture K.



Picture K

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5.6 Keypad: used for selecting unit functions and commands, see I6 and Picture L.



Picture K

5.7 On/Off Switch: two types (single switch and dual switch)



<u>Single switch type:</u> Manual defrosts will be a button as show in Picture M. <u>Dual switch type:</u> Manual defrosts will be a switch on the left side of the on/off switch.

Reefer Container Department

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