

Reefer claims loss prevention

A loss prevention America Focus publication

Phase 2 - The empty release

After the shipping line has accepted the booking, preparations need to be made for the empty release of the refrigerated container and the genset.



The operations staff at the shipping line must check to ensure the refrigerated equipment requested in the booking is available at the load port. If the equipment type is not available, the operations team should confirm to the booking representative that they can or cannot reposition the type and amount of equipment from another location by the date the shipper indicated they will pick up the empty container.

Prior to the empty release, the refrigeration unit, the refrigerated container and genset must go through a pre-trip inspection (PTI). Such inspections are crucial to ensure the unit will perform as desired.

The following is a general but not all inclusive list of items that should be checked and documented during a standard PTI:

Refrigerated Container box

- Steam clean the interior of the container and check for any visible damages
- Interior must be cleaned and free of any undesirable odours
- Damage must be repaired and damaged rear door seals must be repaired or replaced
- Floor drains & missing/damaged kazoos (rubber boots) must be clear of debris, clean and replaced, if necessary.

Refrigeration Unit

- Unit mounting bolts must be present and tight
- Condenser fins and grille must be clean and unclogged
- Electrical compartments must be clean, corrosion free and have effective door seals
- All decals, wiring diagrams and instruction plates must be present and legible
- Electrical connectors, air change vents and gas ports must be free of corrosion and be capped as required
- There must not be excessive corrosion on lower steel parts, which are at risk of contact with seawater, such as compressor and receiver tank mounting brackets
- The main power cord and plug must be in good condition and free from cuts, damage and corrosion
- Run the temperature of the container down to -18C for a period of three hours
- A primary main power supply should be used instead of connecting to a generator set for the machinery inspection. When performing the visual check, ensure that each of the following machinery sections is examined carefully:
 - Main Frame
 - Compressor section
 - Temperature recorder and/or controller compartment
 - Fresh air exchange ports are clean
 - Condenser section
 - Electrical compartment
 - TXV (thermostatic expansion) valve compartment
 - Evaporator section
 - Diesel section (applies to reefer truck only)
 - Diesel drive (applies to reefer truck only)
 - Main power cable compartments
 - Electrical cables, wiring and refrigerant piping
 - Interior panels, plenums and screens.

If any deficiencies are noted, the cause of the defect and the defect itself must be repaired or replaced.

The pre-trip inspection should be repeated if the unit is not used for a booking within 31 days.

Upon completion of the pre-trip, but prior to release of the empty unit to the trucker, the thermostat and fresh air exchange ports (vents) must be set in accordance with the booking instructions. Special care must be taken to ensure that Celsius & Fahrenheit are not confused. Confusion and misapplication of Celsius & Fahrenheit thermostat settings are the leading causes of cargo claims.

As mentioned in our previous article, which covered the booking phase, fresh air exchange should always be set as a flow rate (cmh or cbf) and never in percent (%) or partial openings (such as ¼ open). Improper vent settings are among the leading causes of cargo claims.

Under no circumstances is the terminal to assume that the trucker or the shipper or the receiving terminal will set the thermostat or fresh air exchange correctly after the cargo is loaded.

New Part low charts must be properly installed on the reefer unit and filled-in with the bill of lading specific thermostat setting (degrees C or F), vessel voyage number, container number, load port, discharge port, initial of person filling out the chart and date/local start up time of the chart. The part low mechanism must be adequately wound up and operational.

The genset must be pre-tripped and filled with adequate fuel to make the entire journey to the designated destination. The genset should be checked to ensure the unit is running properly just prior to empty release to the trucker.

For Intermodal shipments moving via rail:

For shipments moving from the Mid-West to either the East or West coast of North America, shipping lines should not dispatch refrigerated containers that are older than two years. This is because older equipment frequently breaks down on the rail and requires repairs that are difficult to accomplish on the rail.



The leading cause of claims on the railroad is the failure of the genset to power the refrigerated container's all electric refrigeration units. Only gensets with tank capacities adequate to operate for the intended transit time should be deployed. To illustrate, the fuel tank capacity trans-continental shipments across North America are characteristically 100 gallons or more. In any event, gensets should always be checked to ensure the tanks are filled with adequate fuel to make the trip without refuelling prior to the train departure. Although the amount of fuel varies, it is suggested that the genset will consume about one gallon of fuel per hour. If the reefer unit arrives at the rail yard one or two days prior to the train departure, the shipping line must ensure the genset is "topped off" with fuel prior to the train departure.

If the shipment is moving via "unprotected service" (rail operator is not using a powerpack and will treat the reefer unit as a dry box) then the shipping line must hire a private contractor (inspector) to check and report the operation of the reefer unit and genset at various agreed-upon points along the rail line. If there is insufficient time to correct a problem prior to the train departure, the contractor should alert the

shipping line and the down-line inspector at the next stop so that they can take corrective action.

Contractors must have a contract with the shipping line detailing what services will be performed at each location, and notifications made to the shipping line of any units that cannot be repaired prior to the train departure. The contract should be written so as to hold the contractor liable for failure to perform specific tasks such as fuelling the genset, checking the thermostat setting, re-starting the reefer unit and/or genset and/or making minor repairs.



Acknowledgement:

Dr. Pat Brecht, PEB Commodities, Inc.

George Radu, Thomas Miller Insurance Services (San Francisco)

Email: George.radu@thomasmiller.com

Brendan Kruse, Thomas Miller (Americas) Inc. (New Jersey)

Email: Brendan.kruse@thomasmiller.com