



IICL RTB 002, March 2011

Title: Downward Bowed Criterion for Reefer Undercarriages

Reference: This new criteria will address the downward bow of a steel construction reefer undercarriage.

Clarification:

Welded steel reefer designs have replaced traditional crossmembers and other understructure components with a corrugated structure that combines the functions of the subfloor and structural members into one welded assembly. As the location of the corrugated base structure relative to the corner castings varies over its length with some locations being as much as 65mm (2 ½ inch) above the lower faces of the corner castings, using a single downward bow limit equal to the plane of the bottom faces of the corner castings allows excessive deformation in certain locations of the base structure. To prevent this, the IICL has revised the downward bow criterion for corrugated base structure to be 1) 25mm (1 inch) OR 2) beyond the lower faces of the bottom corner castings. Repair is required when the damage exceeds either one of these two criteria.

This revision will supersede “Subfloor (underfloor panel)” listed in the IICL General Guide for Refrigerated Container Inspection and Repair (Third Edition) – Table 4.7 Under-structure Inspection Criteria

Criteria:

Component

Subfloor and corrugated
Base structure (all
Corrugated base structure
Components including the
Gooseneck tunnel rails,
Tunnel bolster, load transfer
Members, and corrugated
Base panels)

Condition

bend, bow or
dent

Action Required

If more than 35mm (1 3/8 inch) upward dent OR 25mm (1 in)
downward bow or any deformation below the plane of the bottom faces
of the lower corner casting, REPAIR

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