

IMPORTANT

CLS-M

Cargo Lift Scale

Scale Installation Requirements On Con-way Forklifts

Introduction

The CLS-M Cargo Lift Scale is designed to fit on most forklifts. However when a forklift has been in use for a while some of the basic components may become worn or damaged through everyday use and may inhibit the installation process.

In some cases, if the wear or damage is excessive, the forklift may not be able to accept the scale and your local Con-way manager should be contacted for review of corrections required for scale installation.

This document will assist you with installation to worn and damaged forklifts and how to determine if the forklift will require repairs or updates prior to installation.



Warning

Take all necessary safety precautions when installing the scale carriage, including wearing safety shoes and protective eyewear, and keep clear of pinching or crushing points.

Two people are recommended to perform the scale installation.

Before Installation

Before installing the CLS-M on a forklift, the forklift should be in good operating condition in order to get the optimal amount of weighing accuracy. The following items are things to look for prior to installing the CLS-M onto a forklift:

- Inspect the forks for any damage.
- Check the locking pin on the forks for proper function.
- Check and adjust the lift chain so the heel of the forks have 1/2" to 1" of clearance from the floor when the carriage is down and the mast is vertical.
- The slot for the center pin should be clear of grease and debris.
- The top cleats of the forklift rest on the top of the scale and should remain clear of grease and debris that could alter the scales' performance.

Installation Preparation

To install the CLS-M Cargo Lift Scale to your existing forklift, follow the guidelines below to prepare the forklift:

Remove existing weld-on components.

Bar welded to scale mast to prevent shift.

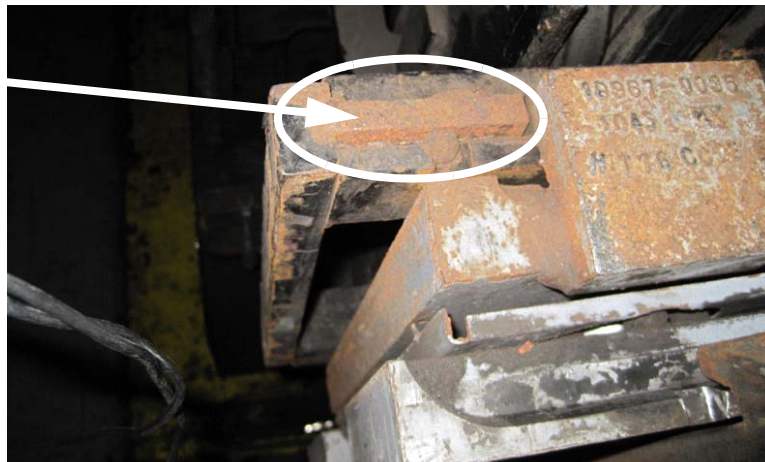


Figure 1. Remove Existing Welded Bar

Remove any components that have been welded to the mast to reduce side shift of previously installed scale to allow for proper fit of top cleats using CLS-M forklift scale.

Side Shift Components

It is important to provide coverage against side shifting of the scale when it is attached to the forklift mast. Coverage should extend past the scale enough to stop any shifting.

Check the existing components, if any, to make sure the provide adequate coverage.

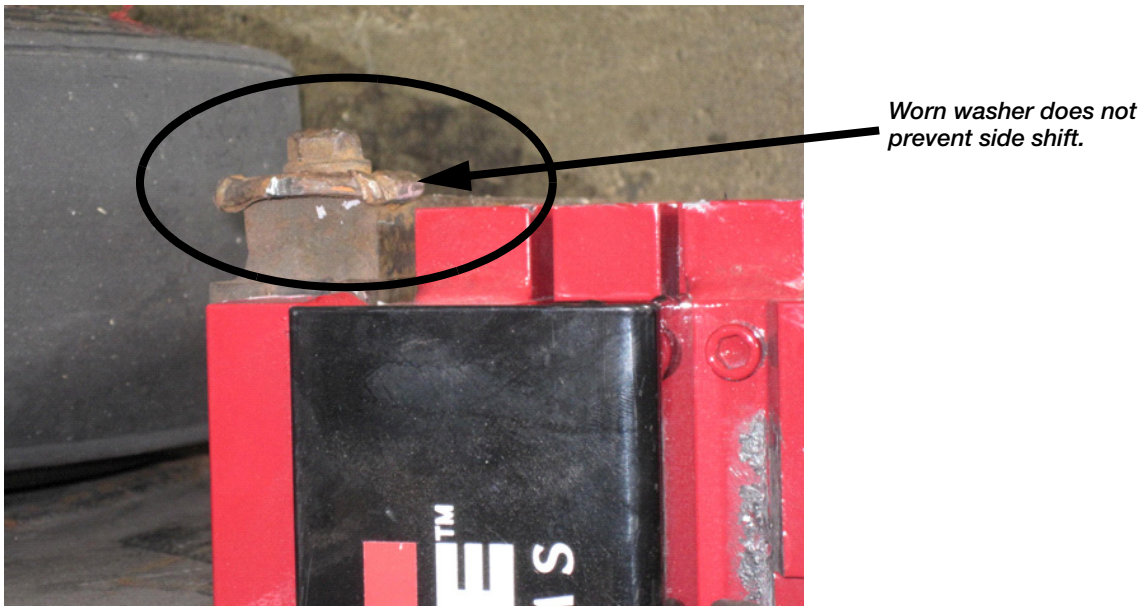


Figure 2. Worn forklift side shift bolt and washer



Note The side shift bolt and washer that are attached to forklift mast (Figure 2), appears to be worn and does not have a large enough washer to provide protection from shifting of unit.

- Replace existing components with new components that will provide the appropriate cover to keep it from side shifting.
- If none currently exist, install appropriate components.

More coverage of the scale would be preferable.

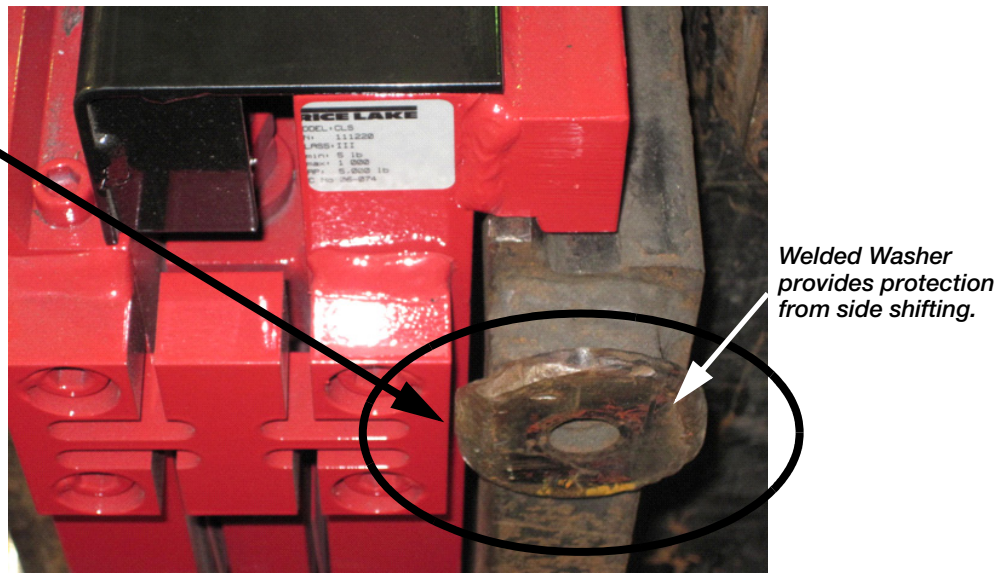


Figure 3. Welded Washer to Prevent Side Shifting



Note A washer has been welded to the mast of the forklift (Figure 3) to provide protection from side shifting of unit. More coverage of the scale would be preferred.

Centering Pin

The centering pin is used to align correct placement in the center of the forklift scale. Centering Pin should not touch the forklift carriage. It is used only as a safety mechanism to reduce side to side shifting of forklift scale.

Grind the centering pin and/or forklift carriage slightly for more clearance.

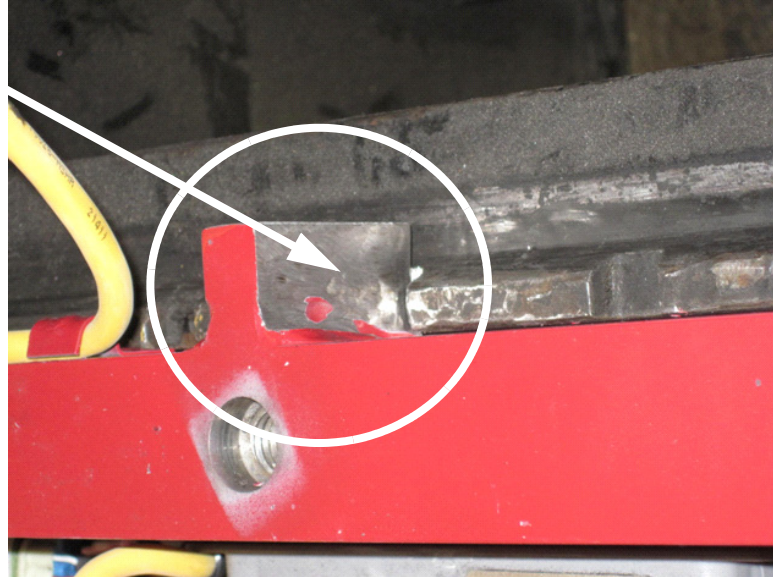


Figure 4. CSL-M Cargo Lift Scale Centering Pin

- If the forklift carriage does not have enough clearance, slightly grind the scales centering pin and/or clean up the forklift carriage center slot using a grinder to allow proper installation.



Note *Not all forklift carriages have the same gaps for the centering pin, based on year/model, service work performed or years of wear from usage.*

Top Cleats

Designed to securely hold the CLS-M Cargo Lift Scale on the mast of a Class II forklift with a 16" carriage.



Figure 5. Top View of Rice Lake Weighing Scale Installed

- Check that the installation location of the cleats on the forklift carriage mast is smooth and clear of any excess material or debris.



Figure 6. Top Cleat Installation

- It is important that the top cleat fits securely onto the mast of the forklift carriage.



Note While the top cleat appears to fit correctly in Figure 6, the side shift protection is not in place.

Bottom Cleats

The bottom cleat gap should not be more than 1/8" as shown in Figure 7.

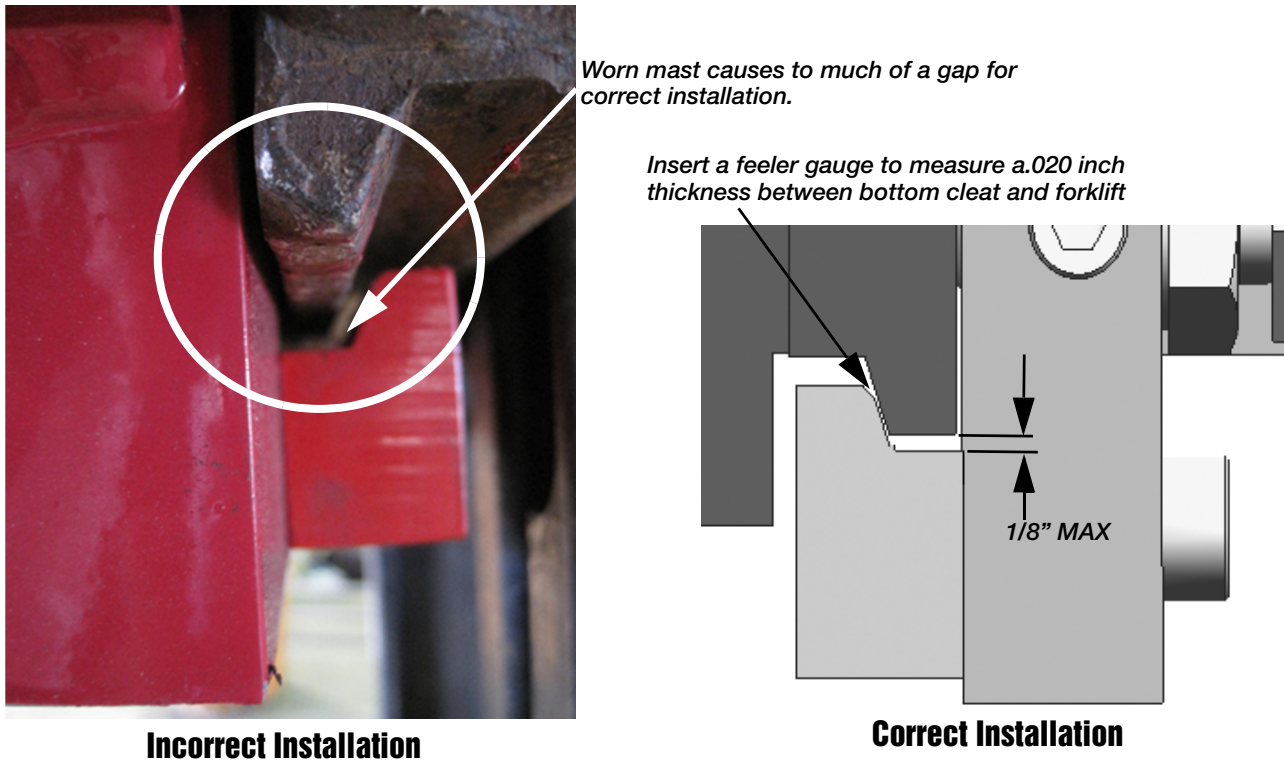


Figure 7. Bottom Cleat Installation



Note The forklift carriage in Figure 7 appears to be worn over years of use and may need repair for proper installation.

Check for proper seating of top scale cleats onto forklift carriage as indicated in Figure 6. Interference of material around the scale cleats may cause this gap to be larger.

Bottom cleat gap, should be 0.020", using the feeler gauge included with every unit (Figure 7). Adjust the shim bolts on the scale carriage.

- If forklift carriage is not flat, may cause increased gap and improper installation.
- If bottom cleat and forklift carriage rub, it may cause mechanical interference and inaccurate weighing.

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PN 126696 10/2011