



TECHNICAL BULLETIN

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CONCRETE MIXER LOAD CELL

PART NO. 58-10644-001, 58-10644-002

CONCEPT:

The Vulcan Concrete Mixer Load Cell is designed for McNeilus and Oshkosh concrete mixer trucks. It is a single load cell that bolts directly to a factory supplied pedestal for seamless integration into the vehicle structure. The scale does not affect vehicle height or weight. It can be included on new vehicles from McNeilus and Oshkosh or retrofitted in the field.

APPLICATION:

The Vulcan Concrete Mixer Load Cell can be connected to Vulcan scale electronics as well as the Trimble® on-board GPS system or other data management devices. Contact McNeilus or Oshkosh for information concerning options.

SPECIFICATIONS:

- **CAPACITY:** Vulcan Concrete Mixer Load Cell is designed for truck capacities of 4 -14 yards.
- **OUTPUT:** 58-10644-001: .50mV/V @ 12 yards (48,000 lb) truck payload
58-10644-002: .43mV/V @ 12 yards (48,000 lb) truck payload

CALIBRATION NUMBER: Using Vulcan electronics, starting calibration numbers are 11500 for 58-10644-001, 13200 for 58-10644-002.

- **MATERIAL:** High strength alloy steel
- **PLATING:** Vulcan load cells are plated for increased rust protection.
- **MOUNTING FASTENERS:**
*All fasteners supplied by McNeilus or Oshkosh

Fastening load cell to pedestal: 6 places
1-12 x 3.5" Grade 8, hex cap screw, zinc plated or oil finished
1-12 prevailing torque hex nut, cadwax finish,
Torque to 430 ft lb.

Fastening gear box to load cell: 6 places
7/8-14 x 4.5" Grade 9, hex cap screw, zinc plated
7/8-14 prevailing torque hex nut, cadwax finish
Torque to 400 ft lb.

INSPECTION AND PREPARATION OF MOUNTING SURFACES



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McNeilus and Oshkosh manufacture a special shortened pedestal designed to precisely integrate the Vulcan Concrete Mixer Load Cell onto the truck frame and gearbox. The mounting surfaces of the gearbox and pedestal that come into contact with the load cell must be clean and flat. If mounting surfaces have a build up of paint or debris, scrape clean to the bare surface using a knife or wire brush.

Vulcan load cells are plated for increased rust protection. Certain minimum maintenance is necessary to keep your load cells under warranty. Apply a high quality paint to the load cell. For environments where high concentrations of salts are used on road surfaces, undercoating is recommended (3M part number: 8883). Spray undercoating when load cell is fully fastened to the truck and the electronic connection is made. Check bolt torques during routine preventative maintenance.

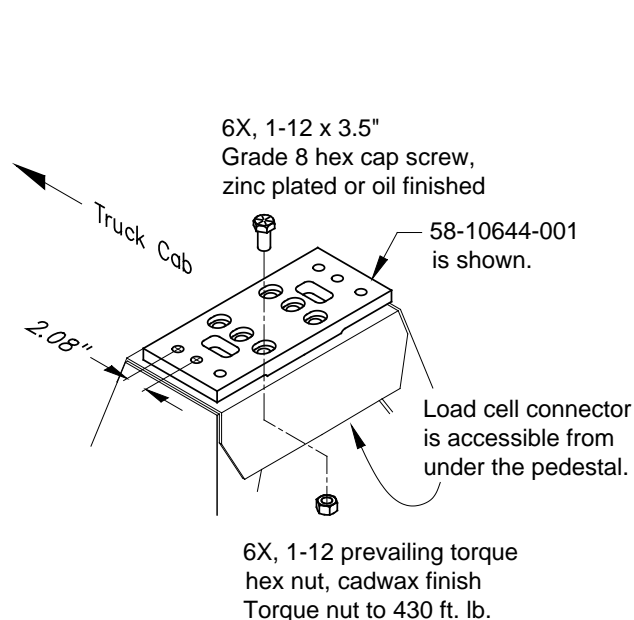


Figure 145-A
Step 1

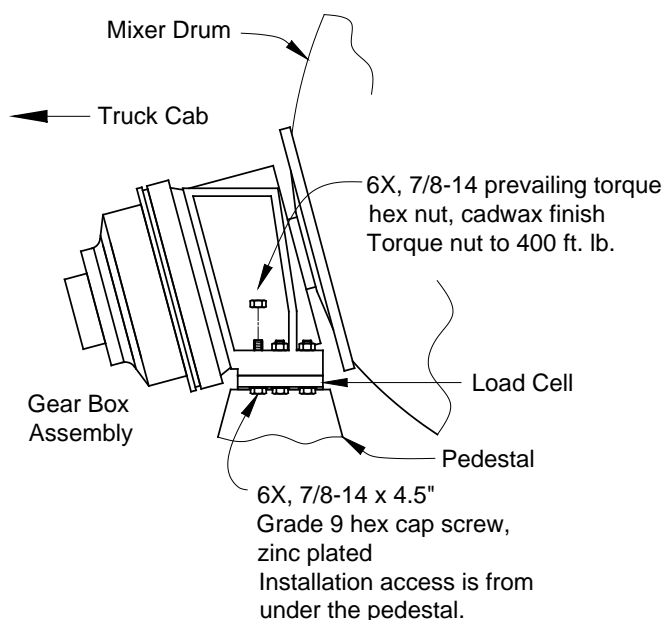


Figure 145-B
Step 2

ELECTRONICS

Do not grease or lubricate the Vulcan load cell connector. The connector is highly sensitive to foreign substances and inaccurate readings will occur if contaminated. Contact McNeilus or Oshkosh for information concerning the installation of your particular electronics.