WEIGH-TRONIX

Truck Scale Pre-Fab Foundation Installation Guide

This guide should answer any questions you have on installing a Weigh-Tronix pre-fab truck scale foundation.

Site Preperation

The installation site must have a minimum soil bearing capacity of at least 2,000 PSF (pounds per square foot). Verification of the soil capacity is the responsibility of the customer. If the soil capacity is not good enough, a new site should be selected or the site must be excavated and back filled with materials capable of supporting the scale and vehicles on the scale.

The area where the scale is to be located must be graded flat and be at least 13' wide and 10' longer than the scale. If fill is added to the site, it must be compacted to the above mentioned soil capacity.

Adequate drainage is important to the stability of the foundation. If water is not drained from the site, the foundation can become unstable and cause excessive errors in the weighing process.

Foundation Installation

Once the site is properly prepared the pre-fab foundation can be installed. See Figure 1. Position one of the end piers (with bulkhead beam) at the end of the prepared site. Check that the pier is level in both directions.

If the scale is a single module scale, the other end pier is then positioned. Use the spacer angles to position the piers at the correct spacing. Check the second end pier for levelness. Check the elevation of both piers. The elevations must be equal within ¼". Measure the diagonal distances between the locating pins to determine if the piers are correctly positioned. If the diagonal distances are not equal within ¼", adjust the pier locations.

If the scale has more than one module, the second pier to be installed is a center pier without bulkhead beam. Once the second pier is installed, the elevation, levelness, and diagonal distances between locating pins must be checked. If these measurements are not correct within ¼", the pier(s) need to be adjusted.

Continue to install the remainder of the piers until the last pier with the bulkhead is installed. As each pier is installed, check elevations, levelness, and diagonal distances. When all of the piers are installed properly, double check elevations, levelness, and diagonal distances to save problems when the scale is installed. During the installation process the earlier installed piers could have been moved.

Install the shim plates and adapter plates on the piers using the bolts, washer plates, and lock washers provided. See Figure 2. Do not tighten the bolts until after the scale is installed. Check the elevations of the top of the adapter plates. The shim plates can be removed or moved to obtain a uniform elevation of each plate. Use a never seize grease on all fasteners to assure easy removal of the bolts when the scale and foundation are to be moved.

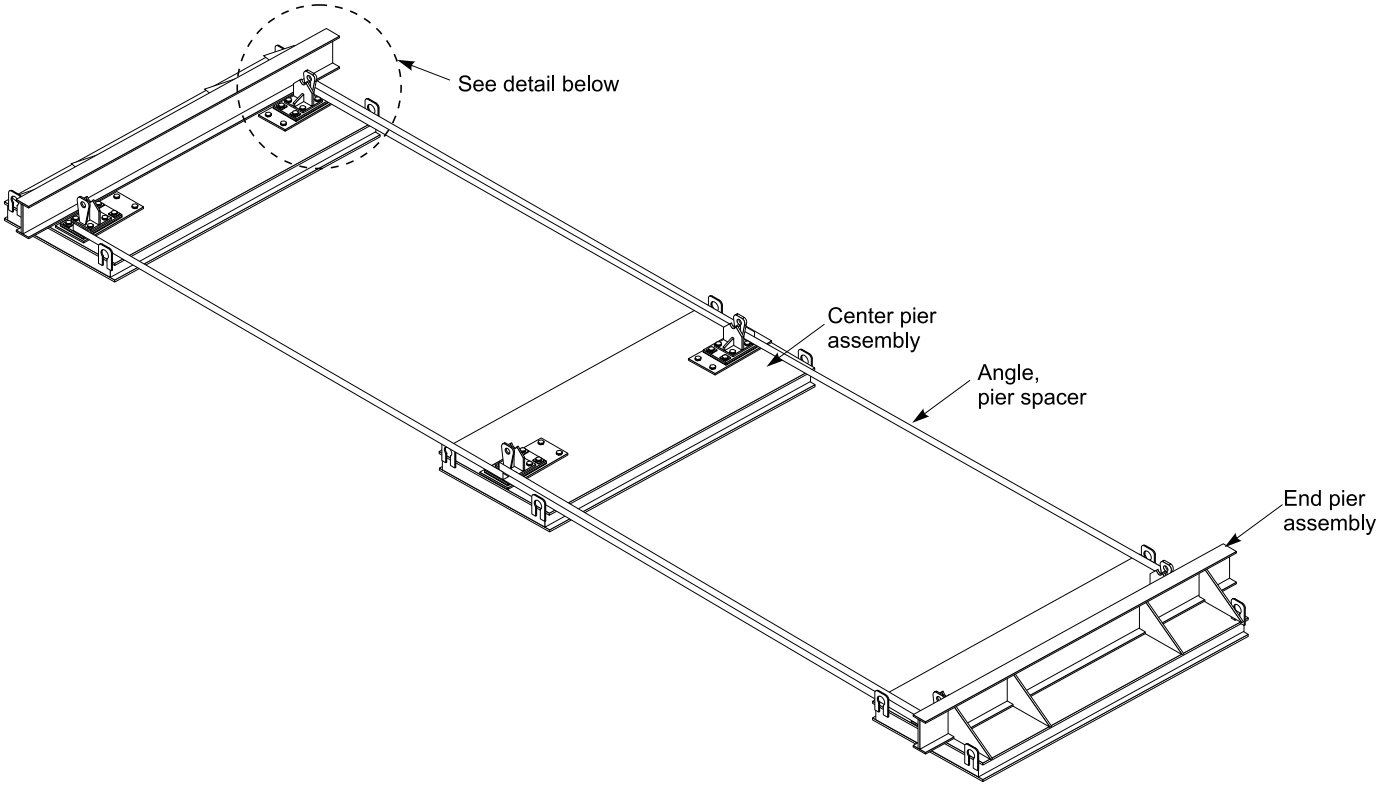

Figure 1
Piers and spacers on a typical two-deck scale

Installing the Scale

The foundation is now ready for the installation of the BRIDGEMONT Truck Scale. The pin stands can be bolted to the adapter plates. If the scale is 10' wide, use the center set of holes on all adapter plates. The outer set of holes is for an 11' wide scale. Use a never seize grease on all fasteners to assure easy removal of the bolts when the scale and foundation are to be moved. Tighten the pin stand bolts at this time.

With the pins, keeper plates, and links distributed to each pier, the scale modules can be installed per instructions supplied with the scale. Once all scale modules are installed, check each deck for proper clearances of the pin stands and that the links are seated on the pins and Weigh Bars. Adjust the adapter plates as necessary to obtain the proper checking clearances. Shims can be added under the pin stands as necessary to make any minor adjustments in elevation. All links are to share the deadload of the scale platform(s). When all these adjustments are finished, tighten all the bolts.

Finish the scale installation, scale indicator, printer, etc per the instructions supplied with the scale and equipment. Corner balance and calibrate the scale system using the instructions provided.

Back fill the approaches against the beam bulkheads with gravel, crushed rock, or similar materials. Compact the approach sufficiently for the traffic anticipated. Additional materials and further grading of the approaches may be necessary as the scale is used.

Disassembly of the scale system and PREFAB Foundation is to be done in the reverse order. Be careful not to damage the cables and electronics.

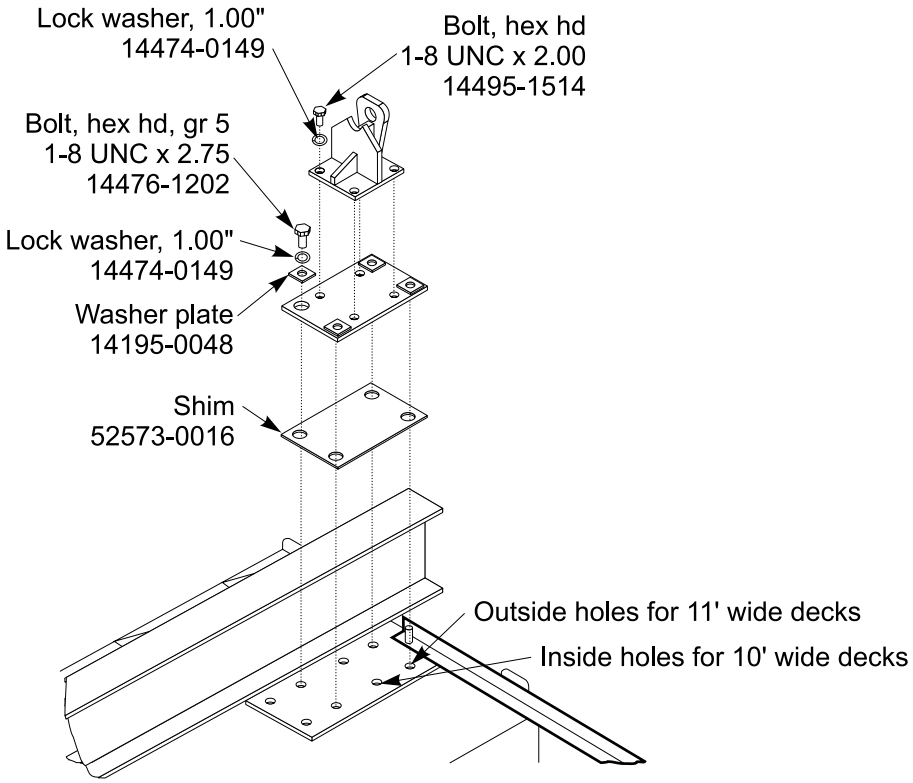

Figure 2
Pin stand assembly

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