SALTER Brecknell

Pegasus Floor Scale Installation Guide

For Shear Beam, Mild and Stainless Steel Scales and Poly Top Floor Scales

Installation

Proper scale installation provides accurate and reliable system operation. It is essential to mount the scale on a flat, level, and solid surface. The load-bearing surface areas should be within ±1/16 inch of the same level plane. Minor irregularities in the floor may be compensated for with the feet adjustments. The scale should not rock on the load-bearing surface areas and these areas should not give under loads.

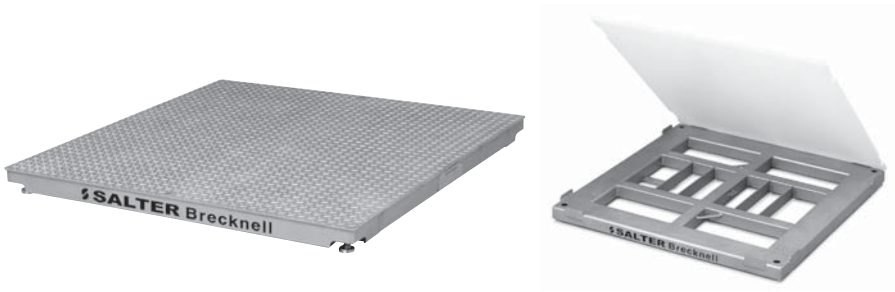


Figure 1
Pegasus scales

This scale is precalibrated and is ready for installation and use.

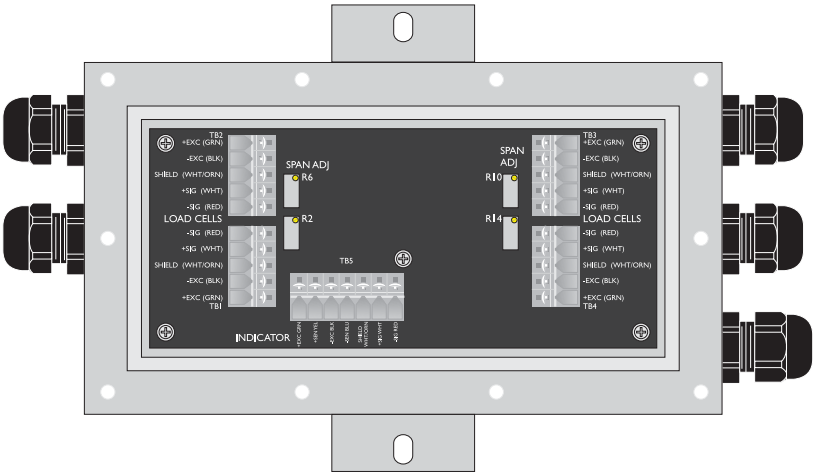
- Place the Pegasus deck on a solid, level surface. Use the leveling feet to eliminate any rocking of the deck.
- Mount the indicator using the bracket provided. This will accommodate desk or wall mounting.
- Uncoil the cable from under the scale and route it to the indicator. The cable should be protected from traffic to avoid damage. Connect the cable to the indicator. See note at left.
- Apply power to the indicator and verify proper scale performance.

Washdown systems will need to have the cable connected to the junction box. Use the indicator manual to insure proper wiring.

Interface Connections

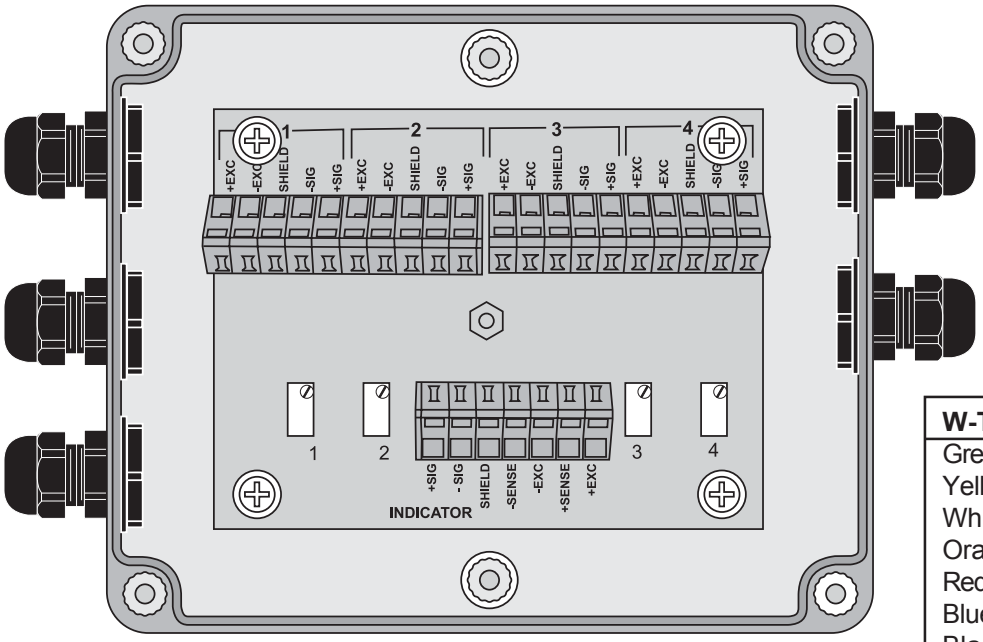
R2 is the corner balance for TB1.
R6 is the corner balance for TB2.
R10 is the corner balance for TB3.
R14 is the corner balance for TB4.

Remove the access plate and the junction box cover plate. Attach the leads of the indicator interface cable to TB5 in the junction box per Figure 2. On precalibrated systems, this cable is preinstalled and this step is not necessary.



W-T Wire Color	Signal
Green	+Excitation
Yellow	+Sense
White	+Signal
Orange/White	Shield
Red	-Signal
Blue	-Sense
Black	-Excitation

Figure 2
Junction box and wiring table - stainless steel scales



W-T Wire Color	Signal
Green	+Excitation
Yellow	+Sense
White	+Signal
Orange/White	Shield
Red	-Signal
Blue	-Sense
Black	-Excitation

Figure 3
Junction box and wiring table - mild steel scales

Calibration

Corner Balancing the Scale

Corner balancing is not required on precalibrated systems.

For the indicator to function properly, the signals reaching the indicator must be identical no matter where a weight is placed on the scale. Getting these signals to match is called corner balancing the scale.

Your goal is to get the readings from the weight sensors to match. You do not have to get the correct weight reading at this point. That is taken care of when you calibrate your indicator.

This scale was corner balanced at the factory, but in a new installation it is required that corner balancing and calibration be checked to ensure installation accuracy.

One potentiometer affects one weight sensor. You balance the weight sensors by adjusting the corresponding potentiometer in the junction box according to the steps listed on the next page.

1. Remove the junction box cover to access the potentiometers.
2. To capture the value of internal zero for your particular indicator, refer to your indicator's Service Manual.
3. Use test weights equal to 20-25% of full capacity and obtain a displayed weight value for the test weight applied to each of the four weight sensors, like this:

   3a. Disable AZT on indicator.

   3b. Place certified test weight directly above first weight sensor.

   3c. Record displayed weight value.

   3d. Repeat steps 3b and 3c for each weight sensor.
4. If displayed weight values for all weight sensors equal each other, within +/- 1 division, proceed now to *Final Span Calibration* instructions.
5. If displayed weight value for any weight sensor varies from the others by more than +/- 1 division, adjust the appropriate junction box potentiometer by turning it the number of 360 degree turns indicated by this formula:

$$\frac{\text{Certified Test Weight Value - Displayed Weight Value}}{\text{Certified Test Weight Value x .0028}} = \text{Number of Turns}$$

   If the **Number Of Turns** is a positive value, turn the potentiometer clockwise. If **Number Of Turns** is a negative value, turn the potentiometer counterclockwise.
6. Repeat steps 3b and 3c followed by step 4 or step 5.

Final Span Calibration

Span calibration is not required on precalibrated systems.

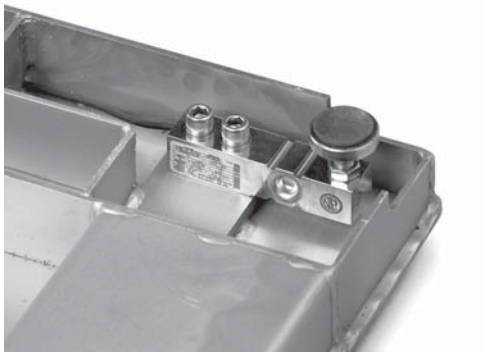
1. Make sure deck is empty and indicator is zeroed.
2. Load deck with as much evenly distributed test weight as available (not to exceed scale capacity).
3. Unload deck and check for zero shift.
4. Rezero indicator if necessary and reload deck.
5. If necessary, trim the FINE SPAN control in the indicator for an indication precisely equal to the calibrated test weights applied to the deck. See your indicator's Service Manual for details on this procedure.
6. Enable AZT on indicator.

Your scale is now corner balanced and the system is calibrated.

Weight Sensor Replacement

To replace one or more weight sensor follow this procedure:

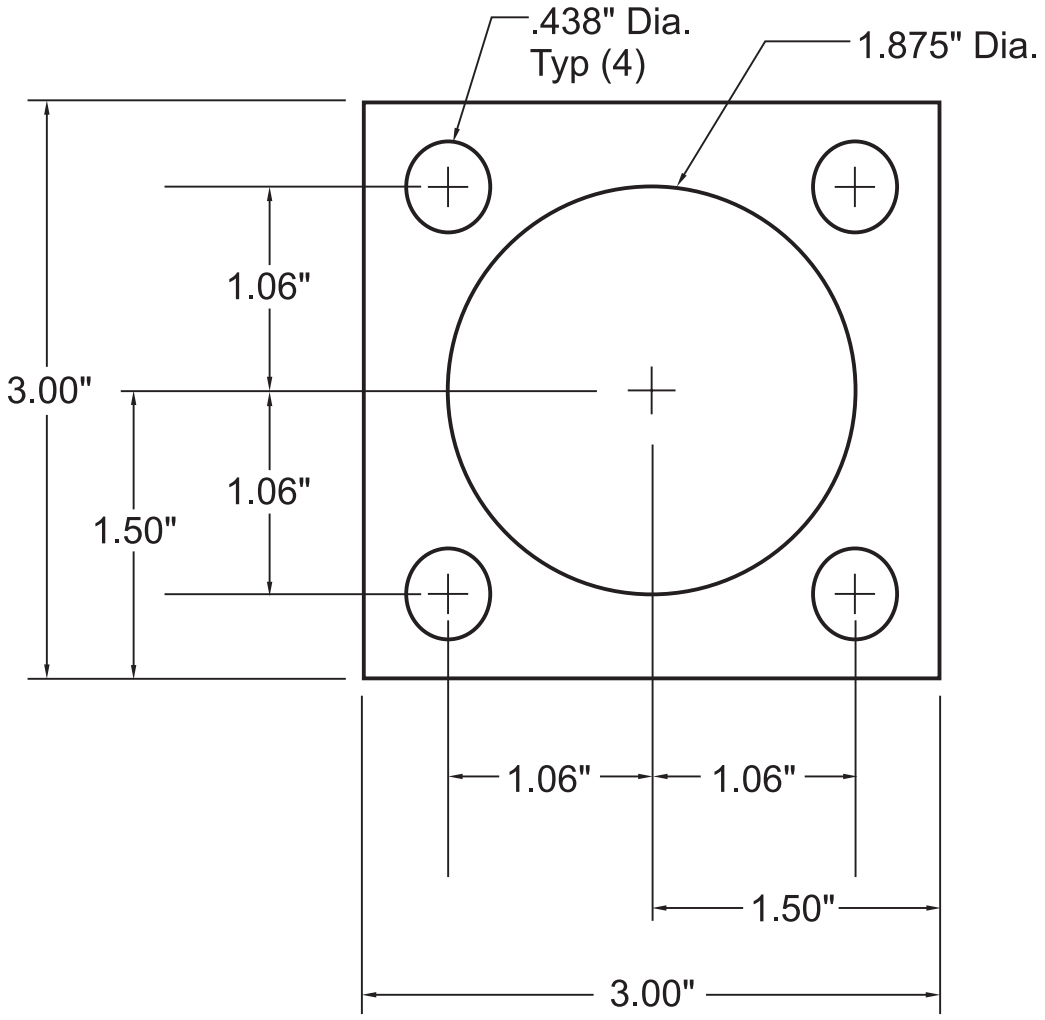
1. Obtain access to junction box and the junction box cover.
2. Disconnect weight sensor cable from junction box terminal bar.
3. Set scale on blocks so feet are clear of the ground.
4. Unscrew foot from weight sensor(s) to be replaced.
5. Remove weight sensor mounting bolts and hardware.
6. Remove weight sensor.
7. Install new weight sensor.
8. Reinstall mounting hardware for weight sensor. Torque to 85 ft/lbs.
9. Replace foot.
10. Re-route weight sensor cable to junction box and connect.
11. Lower scale to floor and level.
12. Check corner balancing and calibration of the scale. Adjust if necessary.
13. Replace J-box cover.



Floor Plates

Following are the illustrations of the floor plates for 2 and 5K capacity, 10K capacity scales. You can use shim stock under these floor plates to obtain a level mounting surface. Drill the four corner holes through the shim stock but leave the center intact. These drawings are to scale. You can photocopy them and use them as templates.

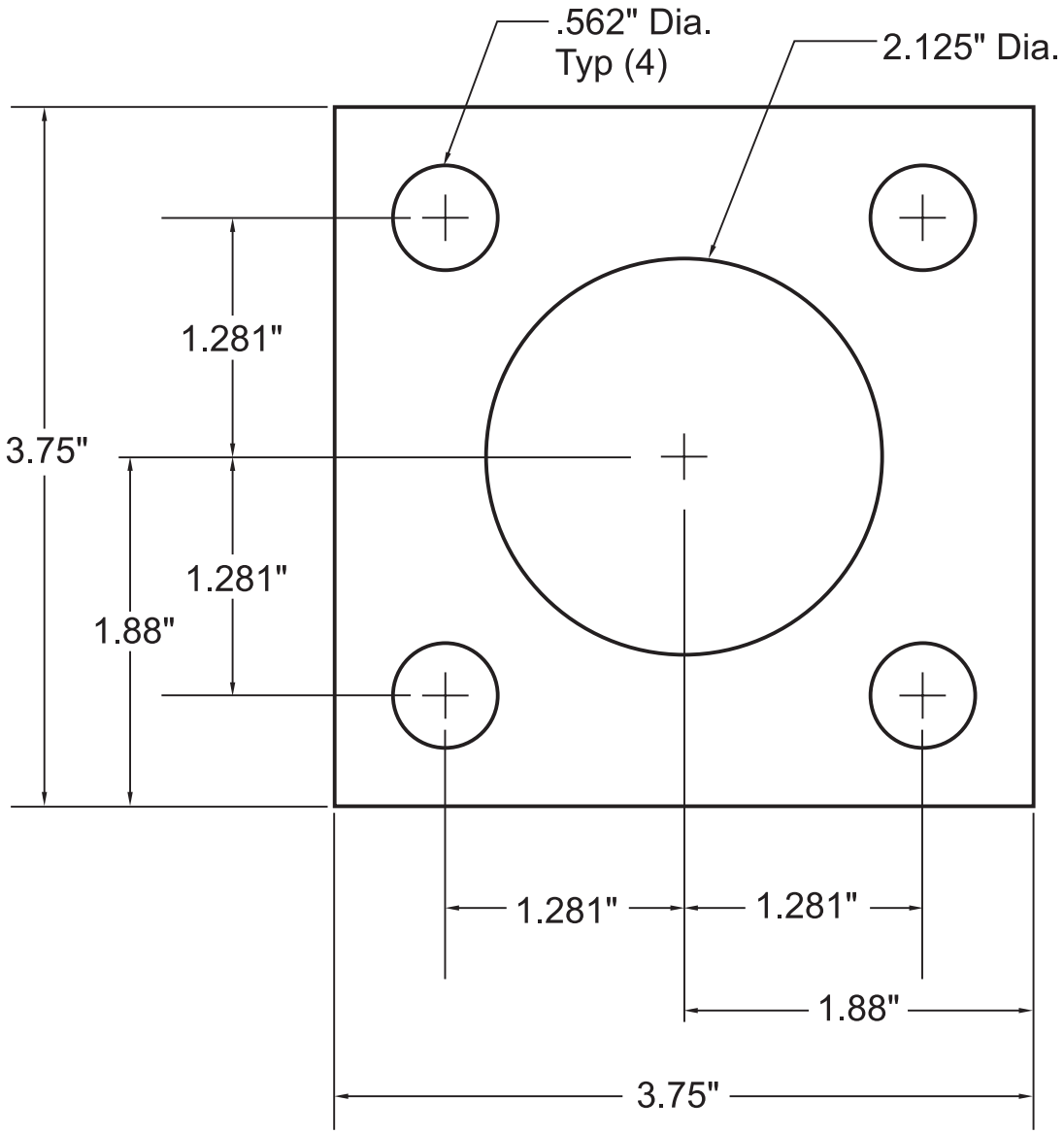
2 and 5K scales



Floor Plate Part Numbers

SST	28209-0018	3/16" thick
SST	28209-0026	3/8" thick

10K Scales



Floor Plate Part Numbers

SST	28273-0012	1/4" thick
SST	28273-0020	1/2" thick

Replacement Parts List

Pegasus Decks		Poly Top & Stainless Steel Decks		Mild Steel Decks	
Part Number	**Description**	**2/5k**	**10k**	**2/5k**	**10k**
53627-0010	2.5k Weight Sensor	4	-	4	-
53627-0044	5.0k Weight Sensor	-	4	-	4
50063-0066	Junction Box, SSTL	1	1		
53774-0011	Junction Box, ABS plastic			1	1
41244-0018	Foot Assy.	4	-	-	-
41244-0026	Foot Assy.	-	4	-	-
53455-0017	Foot Assy.	-	-	4	-
53455-0033	Foot Assy.	-	-	-	4
52655-1064	Bolts, Hex Cap-20 ½"x2"	8	8	-	-
22408-1034	Bolts, 20 ½"x1.75"	-	-	8	-
22408-1042	Bolts, 20 ½"x2"	-	-	-	8
14474-0230	Washer, Lock ½"	8	8	8	8

2 and 5K Scale Floor Plate Part Numbers

SST 28209-0018 3/16" thick

SST 28209-0026 3/8" thick

10K Scale Floor Plate Part Numbers

SST 28273-0012 1/4" thick

SST 28273-0020 1/2" thick

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