ConveyWeigh Belt Scale Quick Setup Guide

Step One

Picking a good location for Belt Scale

In order of Importance:

1. The Scale should be located at least two Idlers away from: the Head pulley, the Tail pulley and the loading point.

2. The Scale should be in a flat area when the conveyor's structure does not change angle.

3. A covered area away from wind or rain is preferable.

4. An area with less loose material buildup is preferable.

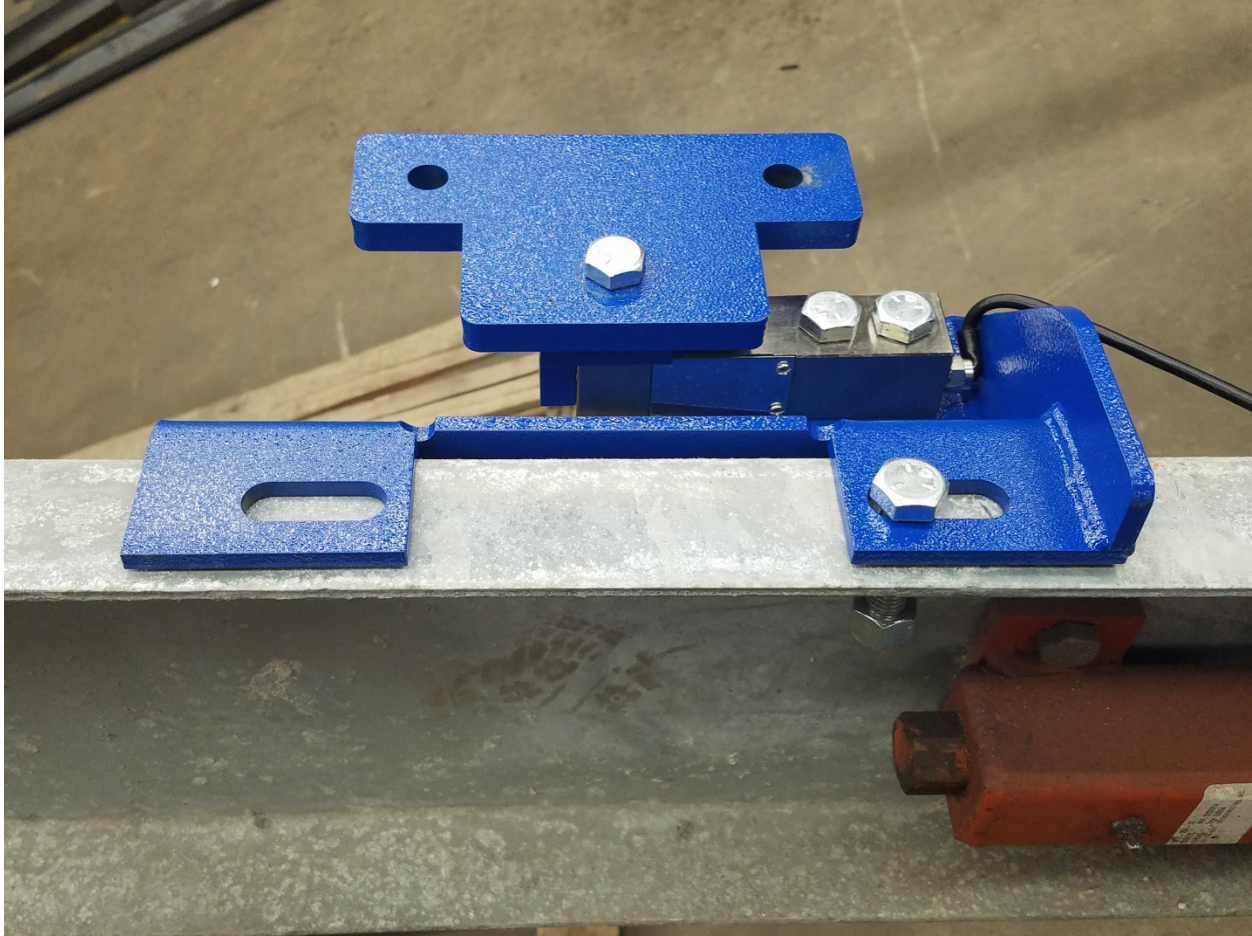5. An area with easy access for routine maintenance.

Step Two

Installation

Remove the Idler(s) you will be using as a scale.

Cut the footpads off the Idler as shown:

Mount Load Cell Assembly to structure where the Idler(s) use to be as shown:

Note: Make sure that both the load cell assembly pieces are square with each other.

As in the distance from the load cell assembly to the next idler past the scale should be the same distance on both sides of the structure.

Important Note: If you decide to weld make sure the ground is located near the weld location. Welding current crossing the loadcells will cause damage.

Attach Test weight brackets to the Idler(s) you are using as a scale as shown:

Note that if you are only using one test weight per Idler this will be mounted to the center of the Idler.

If you are using multiple test weights per Idler mount the test weight bracket on either side equal distances from the center.
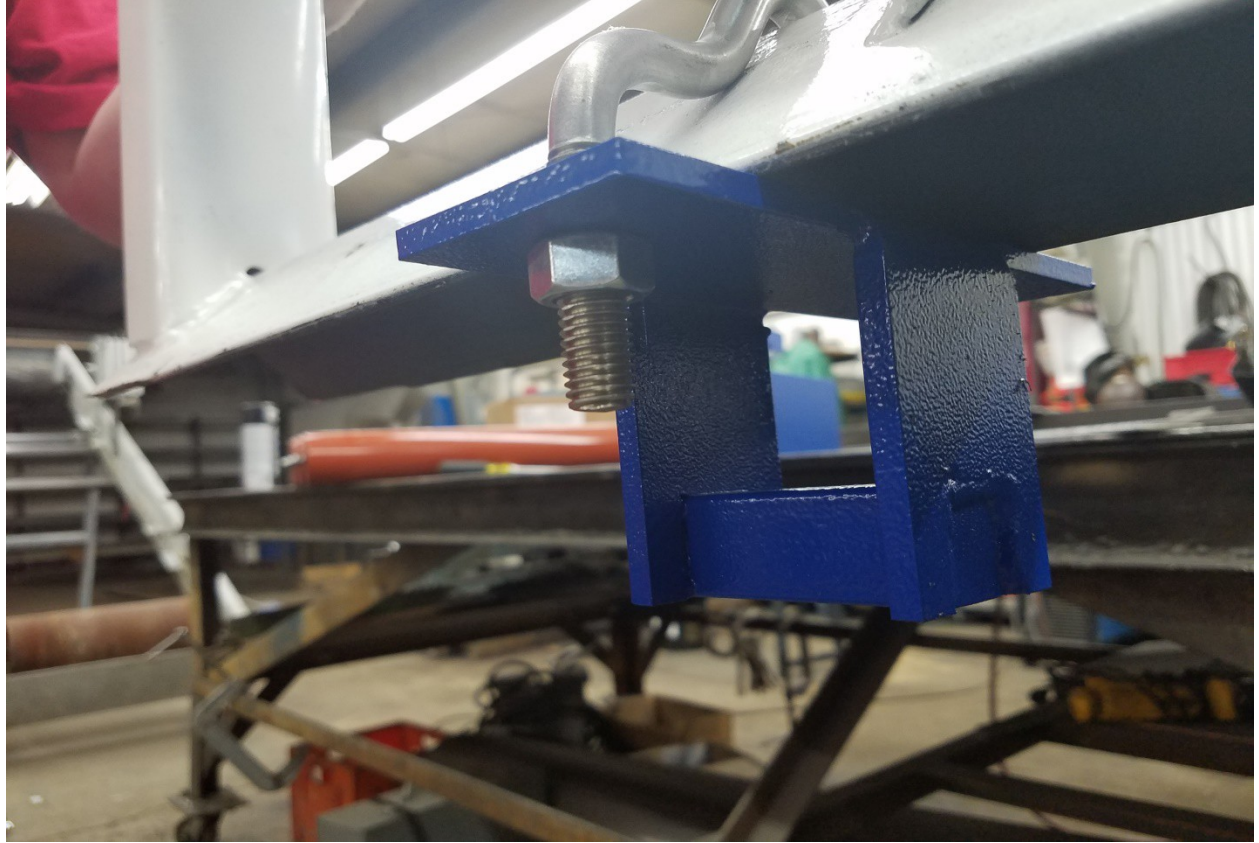
Next you will attach the modified Idler to the load cell assembly and mount with supplied U-Bolts:

Note that the Idler should not be touching the structure. As in the idler should only be touching the belt and the loadcell assembly above the silver loadcell.

If the idler is not free floating on the loadcell you will need to either shim or cut more of the Idler to achieve this.

Once the Idler is re-installed use a string to ensure that the scale's Idler(s) are the same height as the Idler before and after the scale. If they are not the same height you will need to shim to make them the same height.

Attach the speed sensor mount in the center of the Idler before or after the Scale.

Note: Do NOT attach this mount to the Idler(s) being used as the scale.

Attach the speed sensor to the mount and plug into the junction box.

Note that the speed sensor rolls with the return belt. Ensuring that there is enough clearance so that the speed sensor does not bounce up and strike solid structure will prolong the life of the speed sensor.

Final steps of the install are:

1. Mount the junction box

2. Plug Speed Sensor into junction box

3. Mount the Integrator

4. Cable tie or otherwise secure cables so that they don't get caught on belt.

5. Wire in power to Integrator. *Note that Integrator will either be setup to accept 85-265V AC or   8-36V DC depending on the power supply installed. The type of power it will accept can be determined by which terminal is installed. Example: The picture below will only accept 8-36V DC.
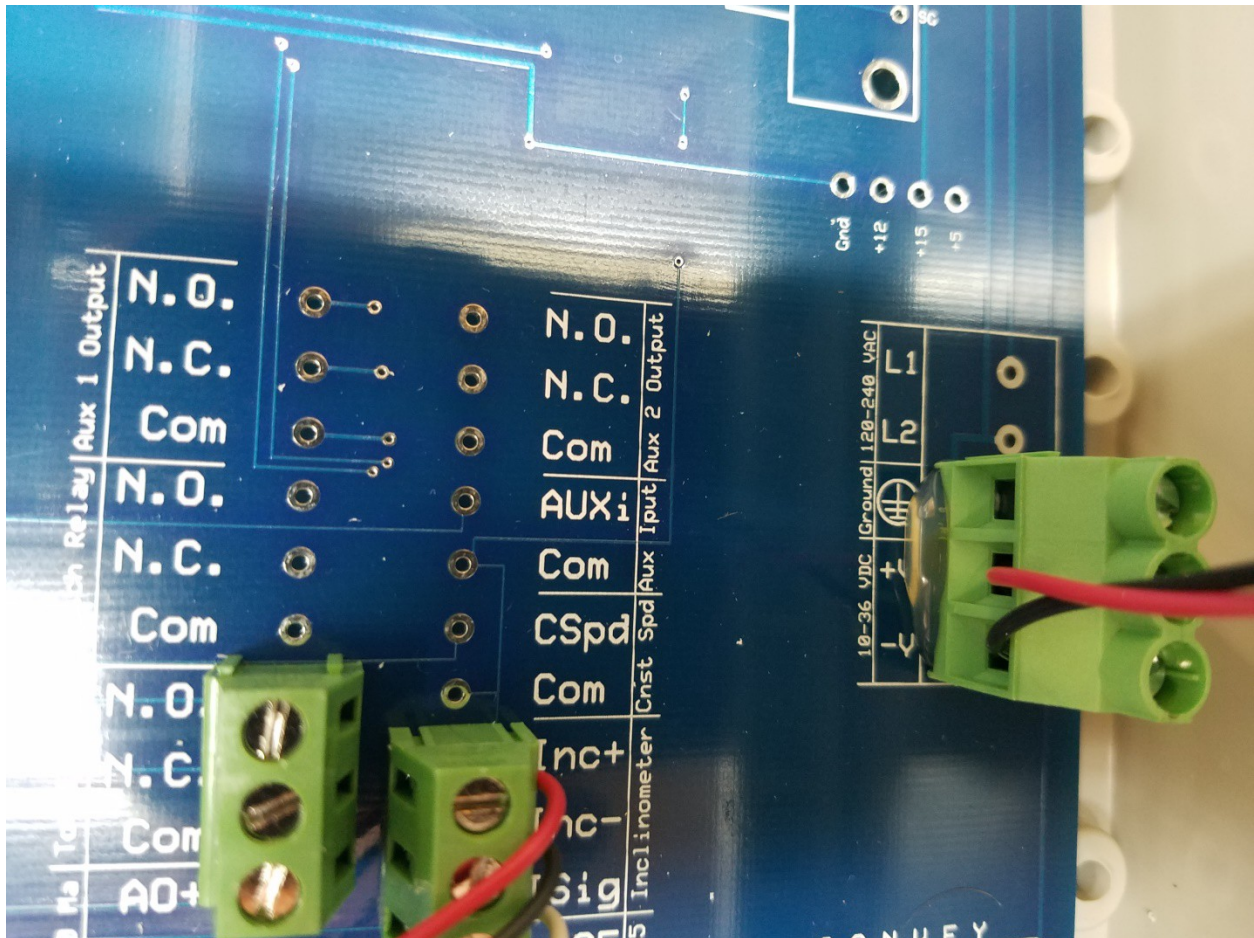
Step Three

Calibration

For the purposes of this quick-guide we will assume your kit scale came with a tail dragging speed sensor (the type with a wheel that runs on the return belt) and test weights.

Zero Test:

1.   Run the belt unloaded at normal speed.

2.   Press the Big button to go into menus

3.   Press the down arrow button to highlight "Calibrate"

4.   Press the Big button to go into "Calibrate"

5.   Press the Big button to go into "Zero Test"

6.   Press the Top Center button under "Start" to start

7.   Once the test is complete press the button under "Accept"

Span Test:

1.   Go to the "Span Test" screen: >Big button

                                        >Calibrate

                                          >Span Test

    2. Press the button under "Data"

    3. Change "Calibration Mode" from Chain to Weights by pressing the big button

4. Enter the total value of your test weights into "Test Load"

   *Note: This value is KG if set to metric, LBS if set to imperial

5. Enter the distance between the Idlers into "Weigh Area"

   *Note: This value is meters if set to metric, feet if set to imperial

   *Note: If you are using a two Idler scale this distance is times two. Example: 4 feet between Idlers would need a value of 8 entered for "Weigh Area" if you are using two Idler scale

6. Exit Data Screen

7. Attach your test weights as shown below:
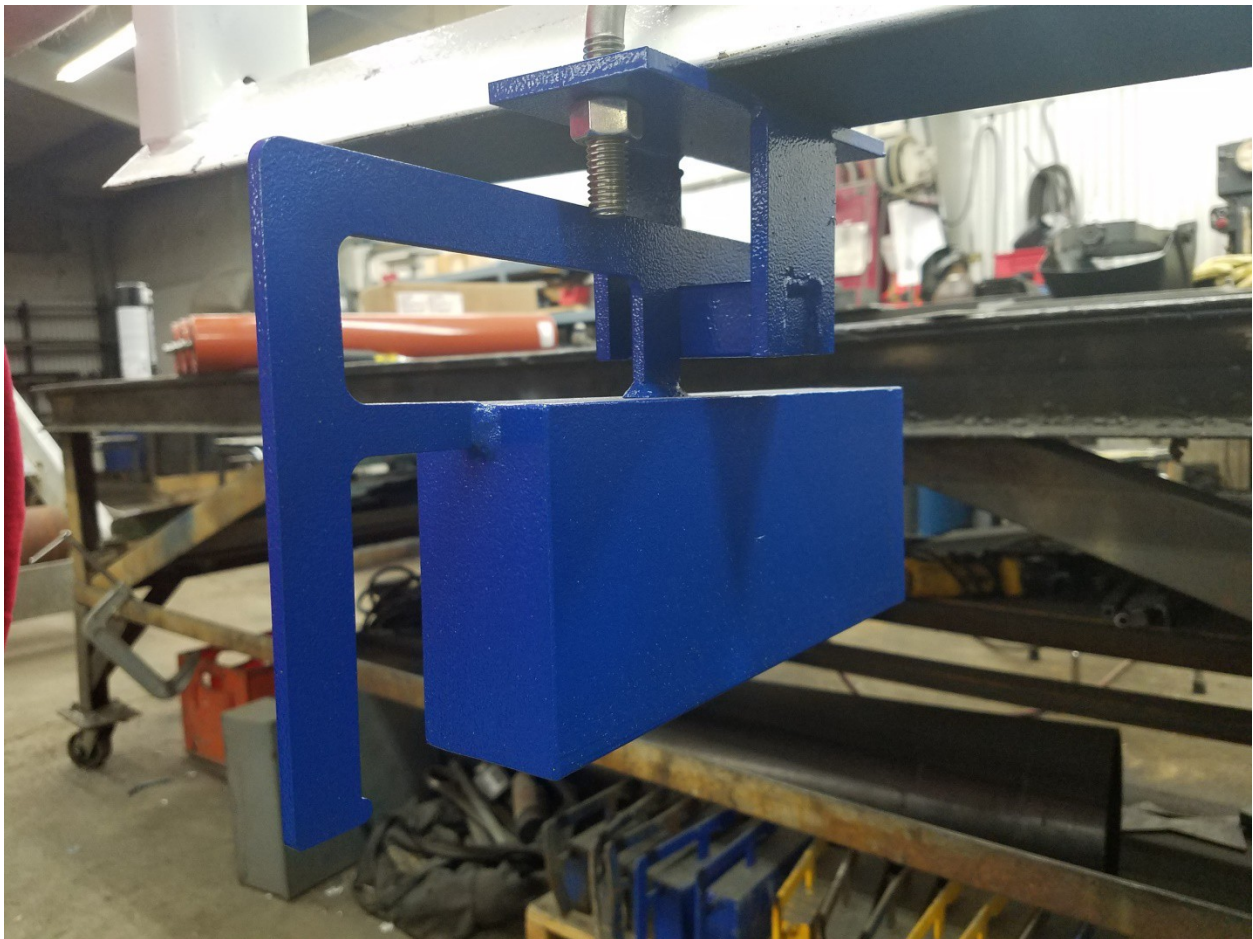
8. Run the belt unloaded at normal speed.

9. Press the Top Center button under "Start"

10. Once the test is complete press the button under "Accept"

11. Remove test weights

12. Exit all menus to return to normal operations