



# HEAVY DUTY WEIGH FEET KIT

Installation Instructions

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Gallagher Group Limited  
Kahikatea Drive, Private Bag 3026  
Hamilton, New Zealand

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Heavy Duty Weigh Feet Kit  
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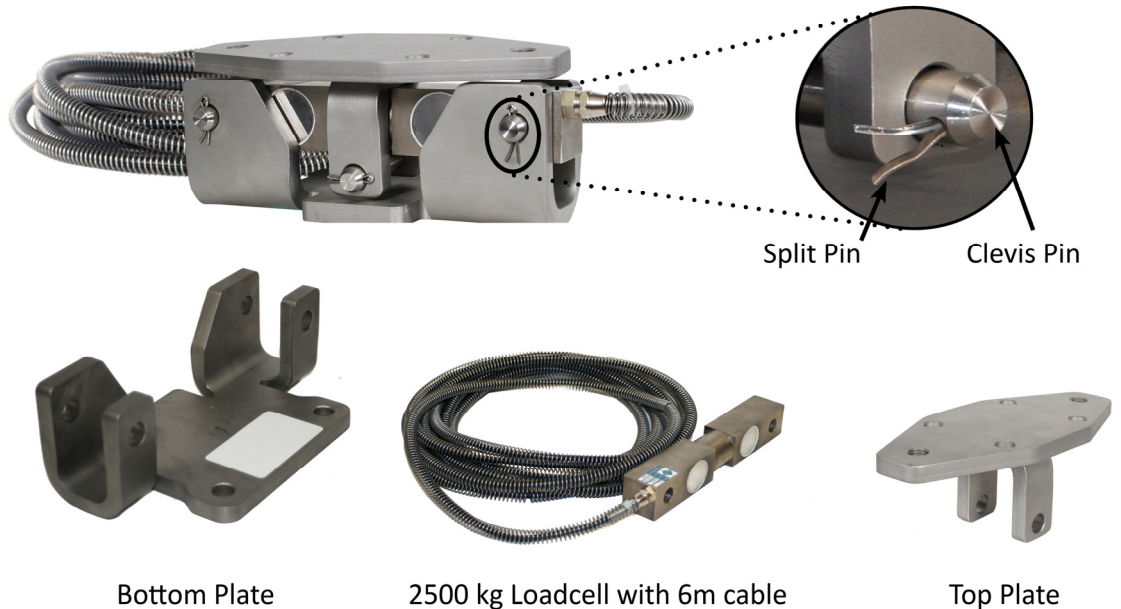
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# GETTING STARTED

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The Gallagher Heavy Duty Weigh Feet Kit is a robust, stainless steel set of four loadcells mounted in custom designed stainless steel carriers.



*Figure 1: Weigh Feet Assembly and Parts*

## Kit Contents

- Four stainless steel weigh foot assemblies consisting of top and bottom plates
- Five x 2500 kg double ended shear beam loadcells with 6m cable (one supplied as spare)
- Yellow loadbar cable for Weigh Scale
- Waterproof junction box
- Heavy duty loadbar adapter pack
  - 8 M12 mounting studs
  - 8 M12 stainless steel nuts
  - 8 M12 stainless steel washers

## Key Features

- System rated at 5000 kg capacity
- High performance double ended shear beam stainless steel loadcells
- Heavy duty stainless steel top and bottom mounting plates
- Loadcells easily replaced on farm without a major lifting job
- Fifth loadcell supplied with the kit as spare

# INSTALLING THE HEAVY DUTY WEIGH FEET KIT

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## Site Preparation

Careful preparation of the site is important to the performance of the weighing kit. The maximum distance between each weigh foot and the junction box is determined by the length of the provided cable. Factors to consider when preparing the site:

- Smooth and level concrete pad
- Consider location of junction box
- Consider location of Weigh Scale

## Rotating load cells in bottom plate for best cable orientation

Rotate two loadcells in the bottom plates to create a cable orientation that results in all four loadcell cables facing inwards. Carry out the following procedures on two of the loadcell assemblies.

1. Remove split pins and clevis pins from two bottom plates.
2. Rotate loadcells so that the cables from the loadcells point in the opposite direction (observe labels for loadcell orientation).
3. Refit the clevis pins and split pins.
4. Install the four feet in the correct orientation.

## Mounting the Weigh Feet in a new installation

Lift the cattle handler to allow enough space to install the four weigh feet assemblies to each corner of the handler.

1. Rotate loadcells for best cable orientation as per previous page.
2. While holding the weigh foot assembly up to the bottom plate of the handler, mark hole positions through the top plate for the bolts. Drill cattle handler. Attach weigh foot assembly to mounting plate on cattle handler. Repeat this, for all four weigh feet assemblies.

**Note:** Install the weigh feet assemblies so that the holes on the bottom plate face outwards (see Figure 2).

3. Lower the cattle handler back onto the concrete slab with all four weigh feet assemblies attached.

**Note:** While lowering the handler, ensure the weigh feet assemblies are aligned in parallel. Incorrect positions will cause inaccurate measurements.

**Lower with care to prevent damage to weigh feet and cables.**

4. Drill the concrete through the bottom plates. Secure weigh feet bottom plates to the concrete slab with concrete anchors.

**Note:** Ensure weigh cell assemblies do not twist or distort when the concrete anchors are tightened.

## Swapping out heavy duty loadbars for weigh feet kit

1. Screw M12 stainless steel studs into top plates. **OBSERVE CORRECT ORIENTATION OF STUDS** - short threaded end screws into top plate of weigh feet assembly.



2. Rotate loadcells for best cable orientation, see page 5.
3. Position Weigh Foot assemblies under existing mounting plates and drop handler onto studs in heavy duty weigh feet.
4. Fit M12 stainless steel washers and M12 stainless steel nuts to exposed studs and tighten.
5. Lower the cattle handler back onto the concrete slab with all four weigh feet assemblies attached.

**Note:** While lowering the handler, ensure the weigh feet assemblies are aligned in parallel. Incorrect positions will cause inaccurate measurements.  
**Lower with care to prevent damage to weigh feet and cables.**

6. Drill the concrete through the bottom plates. Secure weigh feet bottom plates to the concrete slab with concrete anchors.



**Note:** Ensure weigh cell assemblies do not twist or distort when the concrete anchors are tightened.

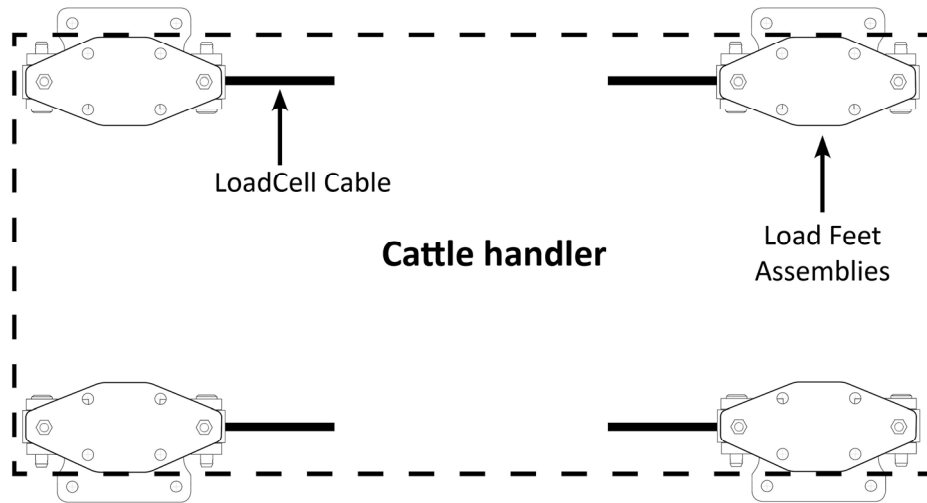


Figure 2: Four weigh feet assemblies under cattle handler

## Location of Junction Box

The junction box is supplied with cable glands, circuit board with connectors and wiring diagram inside the lid.

Install the junction box in a convenient location on the handler. Locate the junction box so that cables from the load cells can reach without interference with moving parts.

**Note:**

Use pre-drilled mounting holes in junction box to secure the junction box.

**Do not drill more holes** in junction box otherwise water sealing will be compromised

## Routing the Weigh Feet Cables

1. Secure the weigh feet cables to the handler, using cable ties or other suitable method.
2. Cut the loadcell cable and stainless steel spring to the required length.
3. Push the cable through the cable glands in the junction box.

**Note:**

- The cables have to be carefully routed along the cattle handler so that they do not move during operation.
- Route the cables so they do not touch the ground.
- Ensure cables are not exposed to damage from operator or animal.

## Connecting cables

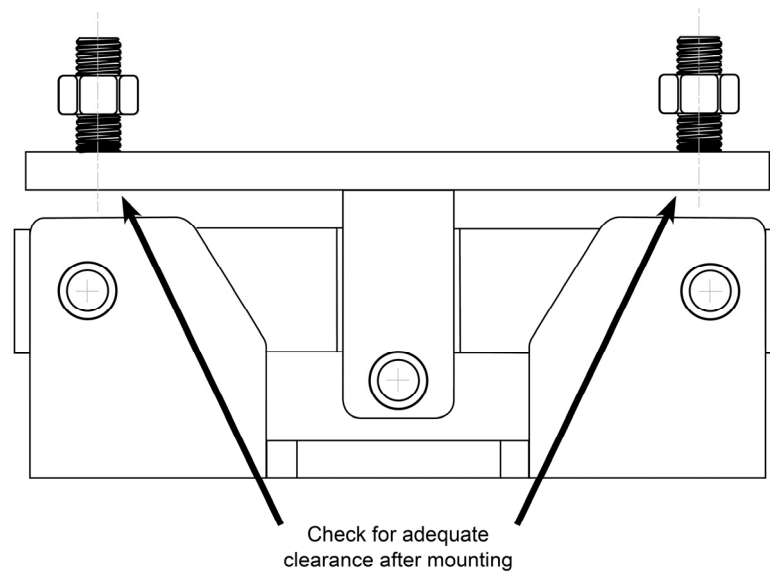
Terminate the loadcell cables as per the wiring diagram inside the lid of the junction box.

Plug the connectors into the circuit board in the correct orientation.

## Testing completed system

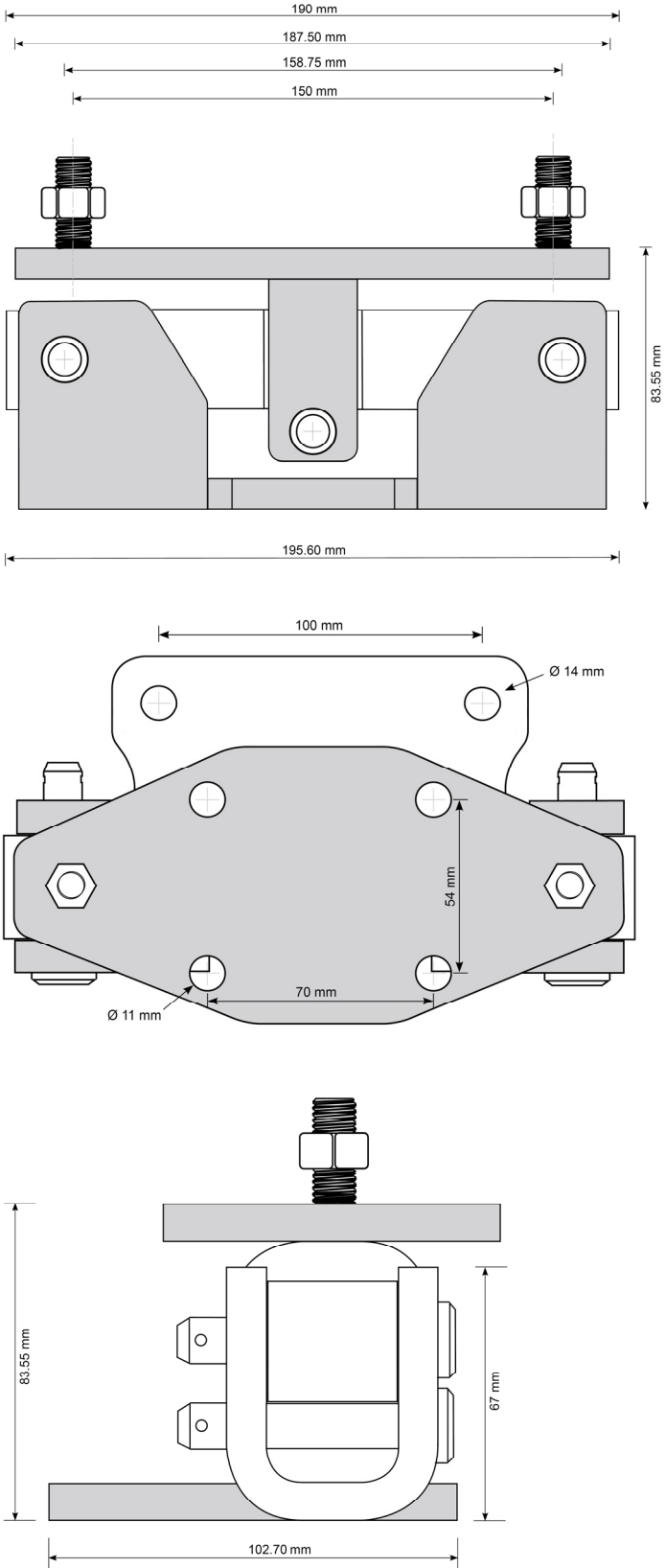
It is important to test the completed system to confirm all the loadcells are wired correctly.

1. Plug in the Weigh Scale.
2. Apply load or stand on each corner of the handler to confirm all the weigh feet are working.
3. Apply a known load to the centre of handler to confirm weighing accuracy.
4. Remove the load and confirm that the Weigh Scale returns to zero.



# SPECIFICATIONS

## Physical Dimensions



## Dimensions

### Packaged Product

	<b>Metric</b>	<b>Imperial</b>
Length	740 mm	29.15"
Width	400 mm	15.75"
Height	110 mm	4.35"
Length of Loadcell cable	6m	approx. 20 ft
Length of indicator cable	6m	approx. 20 ft
Capacity of 1 Loadcell	2,500 kg	5500 lb

## Weigh Scale Compatibility

Compatible with Gallagher W610, W810 and TSi Weigh Scales.

Also compatible with SmartScale models with an adapter - please contact your local gallagher service agent/sales representative for details.

**Note:** Gallagher Weigh Scale W210 and SmartScale 200 are not compatible.