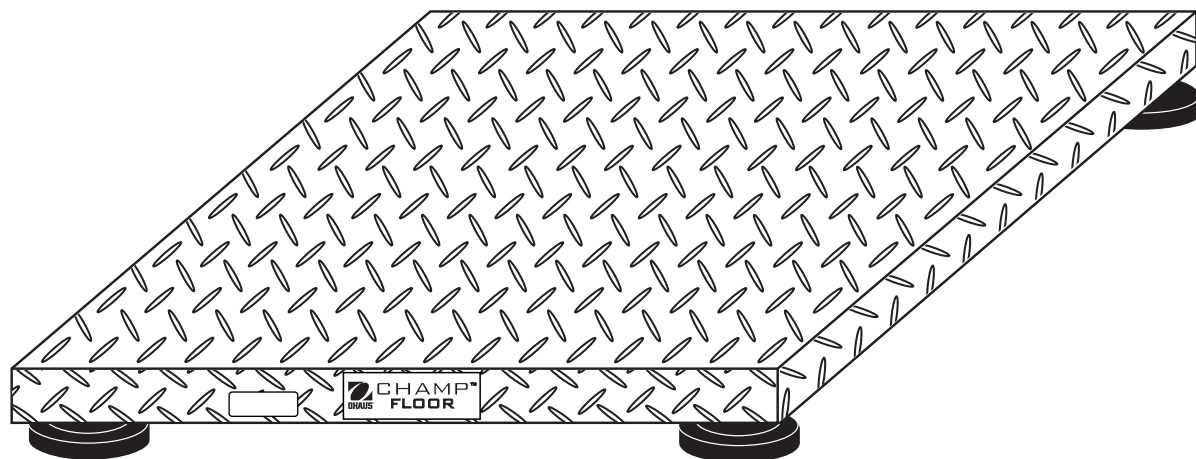




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07058-2033

# Instruction Manual

## Champ Floor Scale





## 1. INTRODUCTION

Thank you for your purchase of the Champ Floor Scale from Ohaus Corporation. Behind your instrument stands OHAUS, a leading manufacturer of Precision Scales, Moisture Analyzers, Balances and Indicators. An After-market Department with trained instrument technicians is dedicated to provide you with the fastest service possible in the event your instrument requires servicing. OHAUS also has a Customer Service Department to answer any inquiries regarding applications and accessories.

This manual covers installation, maintenance, replacement parts and service information for the Ohaus Champ Floor Scale. A separate instruction manual for the indicator is included if ordering the Champ Floor Scale as a complete system, packaged with an Ohaus indicator. Please read this manual completely before installation and operation.

## 2. GENERAL DESCRIPTION

The Champ Floor Scale is available either as a separate scale platform or as a complete weighing system with Ohaus indicator. If you ordered the scale platform only, a suitable weighing indicator will also be needed.

The Champ Floor Scale features a low-profile rugged design that provides an affordable light industrial weighing and counting solution with available Ohaus indicators and scales. Basic features include:

- Convenient side-entry stainless steel junction box with integrated quick-plug DB-9 female connector
- Low profile design to ease loading effort
- Rugged mild steel construction with two-part epoxy-painted treaded plate for a safer non-slip surface
- Four stainless steel 350 ohm load cells
- Easily adjustable scale leveling feet and leveling bubble
- Weighing capacities: 1,000lbs/500kg, 2,500lbs/1,000kg, 5,000lbs/2,500kg
- 3ft x 3ft and 4ft x 4ft platform sizes
- 1:5,000 resolution
- Factory calibration when ordering the complete weighing system with available Ohaus indicator
- Available 4ft x 4ft ramp as accessory
- Manufactured and tested under ISO 9001 standards
- *Caution:* The Champ Floor Scale is not designed for lift truck traffic over the scale platform. Scale access ramps must be used for rolling hand trucks on the scale platform.

## 3. UNPACKING AND CHECKING

Upon receiving the Champ Floor Scale, unpack and inspect the product to make sure that all items have been included and the product was not damaged during shipping. The Champ Floor Scale package should contain the following:

- Champ Floor Scale base
- Instruction Manual
- Warranty Card

If ordered as a complete system with available Ohaus indicator, also the following (depending on indicator model—refer to indicator manual):

- Indicator
- Wall mount bracket
- AC Adapter
- Capacity Label
- Screwdriver (small)
- Indicator Instruction Manual

## 4. FLOOR SCALE INSTALLATION

1. After placing the scale platform in its desired location, use a screwdriver to adjust each leveling foot so that all four feet touch the floor.
2. Check the leveling bubble on the top of the scale platform and adjust the feet accordingly until the bubble is centered within the circle.
3. When the scale platform is level, tighten the hex nut on each foot to lock the feet in place.

## 5. INDICATOR INSTALLATION

If the Champ Floor Scale is ordered as a complete system, the available Ohaus indicator comes pre-calibrated from the factory. Proceed to the following Step 2.

If the scale platform and indicator were purchased separately, a cable connection between the components must be prepared (Ohaus also offers a 12' cable with connector – please refer to spare parts and accessory list):

1. Using a 6-conductor shielded cable, connect one end of the cable to the indicator according to the indicator manufacturer's instructions. Wire the other end of the cable to a DB-9 male connector according to the Table 1 and Figure 1 below. Figure 1 illustrates the male end of a DB-9 cable connector.

TABLE 1. DB-9 PIN FUNCTIONS.

FUNCTION	DB-9 PIN
+ Excitation	1
+ Sense	2
- Excitation	3
- Sense	4
Shield	5
Not used	6
+ Signal	7
- Signal	8
Not used	9

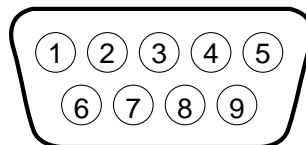


Figure 1. DB-9 Connector Pin Positions.

2. Unfasten the two screws holding the junction box access cover on the Champ Floor base and remove the cover.
3. Feed the cable under the platform and back through the opening for the junction box.
4. Connect the cable from the indicator to the DB-9 female connector at the junction box, then reinstall the junction box access cover.
5. Situate the indicator in the desired location according to placement guidelines in the indicator's user instruction manual and connect power.
6. Verify and perform calibration as required and check proper operations of the scale.

## 6. CALIBRATION

1. To check calibration, place a known load or test weight on the center of the platform.
2. If the scale indicator reads incorrectly, perform the calibration procedure according to the indicator's user instruction manual.
3. Check shift adjustment (refer following section). If a shift adjustment is required, repeat calibration procedures after performing shift adjustment.

## 7. SHIFT ADJUSTMENT

A Shift Adjustment is performed to adjust the output voltage (signal) of each load cell so that all load cells in the system produce a consistent signal.

1. Before checking shift adjustment, first check the scale's repeatability by placing a test weight on the same location on the platform several times. If the readings are not repeatable within specification, check for any obstructions or interference.
2. To check shift adjustment, place a test weight equal to half the scale's rated capacity sequentially at the center of each of the quadrants A, B, C, D (Figure 2). Record the reading taken at each position. The weight readings at all corners of the platform should be the same within one count.

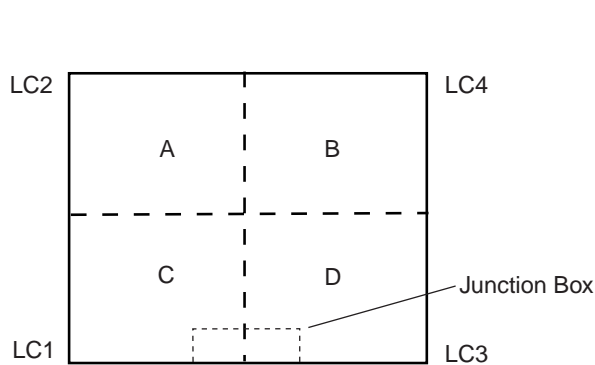


Figure 2. Top View of Scale.

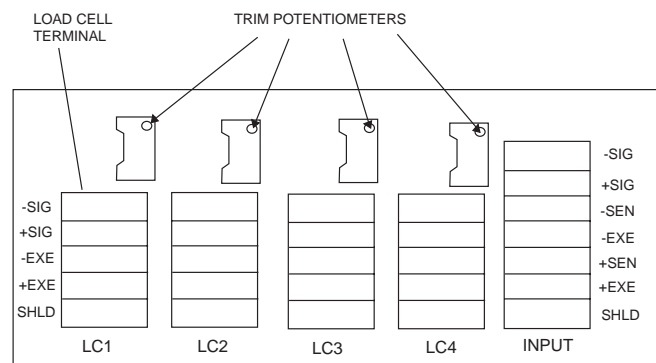


Figure 3. Junction Box PCB Layout.

3. If the readings are not within tolerances, a shift adjustment is required. Proceed by placing the test weight at the location immediately clockwise from the location at which the lowest reading was recorded. Then adjust the trimming potentiometer (Figure 3) for the load cell that corresponds to the corner of the scale where the test weight is positioned. Remove the junction box access cover and make the adjustment by turning the potentiometer until the weight reading matches the lowest reading.
4. Proceeding clockwise, repeat the adjustment described in step 3 for the next two test weight locations.
5. Trimming potentiometers may interact with each other. Repeat steps 2 to 4 until the weight readings at all corners of the platform are the same.
6. Reinstall the junction box access cover.

## 8. WEIGHTS AND MEASURES / LEGAL FOR TRADE SEALING

To prevent access to the shift adjustment potentiometers, secure the junction box by feeding a wire seal through the holes in the screws that hold the junction box to the platform. For the indicator, refer to the indicator's user instruction manual for sealing procedures.

## 9. SPARE PARTS AND ACCESSORIES

Part Number	Description
80250935	Junction box assembly
80250937	Leveling foot
80250938	Spacer load cell
80250940	Load cell 500 lb
80250941	Load cell 1,000 lb
80250942	Load cell 2,500 lb
71141391	Wall Mount Bracket CD11
80250633	Wall mount bracket CD11, adjustable
80500565	Load cell cable 12ft with connector
80500526	Cable Ranger to Floor Scale (for second scale counting system)
CFR4848	Ramp 4ft x 4ft

## 10. SPECIFICATIONS

Base Models	CF1000R	CF2500R	CF2500L	CF5000L
Capacity (max) x Readability (d)	1,000 lb x 0.2 lb 500 kg x 0.1 kg	2,500 lb x 0.5 lb 1,000 kg x 0.2 kg	2,500 lb x 0.5 lb 1,000 kg x 0.2 kg	5,000 lb x 1 lb 2,500 kg x 0.5kg
Maximum Resolution (n max)	1:5,000			
Repeatability (standard deviation)	0.2 lb / 0.1 kg	0.5 lb / 0.2 kg	0.5 lb / 0.2 kg	1 lb / 0.5 kg
Platform Construction	Mild Steel with two-part epoxy painted gray safety tread surface			
Platform Dimensions (w x d x h)	36" x 36" x 3.5" 91.4 cm x 91.4 cm x 8.9 cm		48" x 48" x 3.5" 122 cm x 122 cm x 8.9 cm	
Junction Box	Side access stainless steel with integrated quick plug DB-9 female connector			
Load Cell Type (350 ohm)	Four 500 lb	Four 1,000 lb	Four 1,000 lb	Four 2,500 lb
Shipping Weight (platform with skid)	227 lb / 103 kg		347 lb / 158 kg	
Operating Temperature	50°F to 104°F / 10°C to 40°C			
Approvals	NTEP and Measurement Canada approvals pending			

Base with CD11 Indicator (pre-calibrated)	CF1000R11	CF2500R11	CF2500L11	CF5000L11
Base Model	CF1000R	CF2500R	CF2500L	CF5000L
Indicator Model	CD11			
Weighing Units	Lb or kg			
Additional Functions	Parts Counting			
Over Range Capacity	Maximum capacity +9d			
Auto-Zero Tracking	Off, 0.5, 1 or 3 divisions			
Span Calibration	20% to 100% of capacity			
Display	1" / 2.5 cm digit height, 1.5" / 3.8 cm high x 4.9" / 12.5 cm wide LCD			
Keyboard	4 function membrane switches			
Power	AC adapter or 6 alkaline "C" batteries			
Indicator Approvals	UL, FCC, CSA, NTEP 99-100A1, AM5340/rev1			

# **WARRANTY**

Ohaus products are warranted against defects in materials and workmanship from the date of delivery through the duration of the warranty period. During the warranty period Ohaus will repair, or, at its option, replace any component(s) that proves to be defective at no charge, provided that the product is returned, freight prepaid, to Ohaus.

This warranty does not apply if the product has been damaged by accident or misuse, exposed to radioactive or corrosive materials, has foreign material penetrating to the inside of the product, or as a result of service or modification by other than Ohaus. In lieu of a properly returned warranty registration card, the warranty period shall begin on the date of shipment to the authorized dealer. No other express or implied warranty is given by Ohaus Corporation. Ohaus Corporation shall not be liable for any consequential damages.

As warranty legislation differs from state to state and country to country, please contact Ohaus or your local Ohaus dealer for further details.



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