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CHAMP II SCALE with CD11

Operating and Installation Instructions

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Declaration of Conformity We, Ohaus Corporation, declare under our sole responsibility that the instrument models listed below marked with “CE” - are in conformity with the directives and standards mentioned.

Konformitätserkärung Wir, die Ohaus Corporation, erklären in alleiniger Verantwortung, dass die untenstehenden Waagentypen, instrument mit “CE” - mit den genannten Richtlinien und Normen übereinstimmen.

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Declaración de Conformidad Nosotros, Ohaus Corporation, declaramos bajo responsabilidad exclusiva que los modelos de instrumento indicados a continuación - con el distintivo ‚CE’ - están conformes con las directivas y normas citadas.

Dichiarazione di conformità Noi, Ohaus Corporation, U.S.A, dichiariamo sotto nostra unica responsabilità, che i tipi di strumento specificati di seguito - contrassegnati con la marcatura “CE” - sono conformi alle direttive e norme citate.

Instrument Type/Waagentyp/Type de instrument/Modelo de instrumento/Tipo di strumento **CHAMP II SCALE**

Marked with: Gekennzeichnet mit: Munis de la mention: Con el distintivo: Contrassegnati con la Marcatura:	Directive Richtlinie Directive Directiva Direttiva	Standard Norm Norme Norma Norma
CE	EU 73/23 Low Voltage EU 73/23 Niederspannung EU 73/23 Basse tension EU 73/23 Baja tensión EU 73/23 Bassa tensione EU 89/336, 92/31, 93/68 Electromagnetic compatibility EU 89/336, 92/31, 93/68 Elektromagnetische Verträglichkeit EU 89/336, 92/31, 93/68 Compatibilité électromagnétique EU 89/336, 92/31, 93/68 Compatibilidad electromagnética EU 89/336, 92/31, 93/68 Compatibilità elettromagnetica	EC1010-1 & EN60950:1992 Safety Regulations IEC1010-1 & EN60950:1992 Sicherheitsbestimmungen IEC1010-1 & EN60950:1992 Consignes de sécurité IEC1010-1 & EN60950:1992 Disposiciones sobre seguridad IEC1010-1 & EN60950:1992 Prescrizioni . di sicurezza EN55022:1987 Emissions EN50082-1:1992 Immunity NOTE: The displayed value may be adversely affected under extreme electromagnetic influences, eg. when using a radio unit in the immediate vicinity of the device. Once the interference has been rectified, the product can once again be used for its intended purpose. EN55022:1987 Funkstörungen EN50082-1:1992 Immunität Hinweis: Unter extremen elektromagnetischen Einflüssen z.B. bei Betreiben eines Funkgerätes in unmittelbarer Nähe des Gerätes kann eine Beeinflussung des Anzeigewertes verusacht werden. Nach Ende des Störeinflusses ist das Produkt wieder bestimmungsgemäss benutzbar. EN55022:Emissions parasites EN50082-1:1992 Immunité Remarque: Dans des conditions d'influences électromagnètiques extrêmes, par exemple en cas d'exploitation d'un appareil radio à proximité immédiate de l'appareil la valeur d'affichage risque d'être influencée. Une fois que l'influence parasite est terminée, le produit peut être de nouveau utilisé de manière conforme aux prescriptions. EN55022:1987 Radiointerferencias EN50082-1:1992 Inmunidad Nota: Bajo influencias electromagnèticas extremas, p.ej. cuando funciona una radio en las inmediaciones del aparato, se pueden alterar los valores del display. Cuando concluye el efecto perturbador, el producto puede ser utilizado de nuevo, de acuerdo con lo estipulado. EN55022:1987 Radiointerferenze EN50082-1:1992 Immunità Nota: Il valore visualizzato può essere influenzato negativamente dalla presenza di forti interferenze elettromagnetiche, per esempio quando viene usata una radio in prossimità della bilancia. Eliminata la fonte dell'interferenza, il prodotto può essere nuovamente utilizzato per le funzioni cui è preposto.

James Ohaus
President

NOTE:

THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS. FOR **A CLASS** A DIGITAL DEVICE, PURSUANT TO PART 15 OF THE **FCC RULES.**

THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE WHEN THE EQUIPMENT IS OPERATED IN A COMMERCIAL ENVIRONMENT. THIS EQUIPMENT GENERATES, USES, AND CAN RADIATE RADIO FREQUENCY ENERGY AND, IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTION MANUAL, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS. OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE HARMFUL INTERFERENCE IN WHICH CASE THE USER WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT HIS OWN EXPENSE.

THIS DIGITAL APPARATUS DOES NOT EXCEED THE CLASS A LIMITS FOR RADIO NOISE EMISSIONS FROM DIGITAL APPARATUS AS SET OUT IN THE INTERFERENCE-CAUSING EQUIPMENT STANDARD ENTITLED “DIGITAL APPARATUS”, ICES-003 OF THE DEPARTMENT OF COMMUNICATIONS.

CET APPAREIL NUMERIQUE RESPECTE LES LIMITES DE BRUITS RADIOELECTRIQUES APPLICABLES AUX APPAREILS NUMERIQUES DE CLASSE A PRESCRITES DANS LA NORME SUR LE MATERIEL BROUILLEUR : “APPAREILS NUMERIQUES”, NMB-003 EDICTEE PAR LE MINISTRE DES COMMUNICATIONS.

Unauthorized changes or modifications to this equipment are not permitted.

Before plugging in the Indicator, make sure that the voltage of the power adapter and plug match.

CHAMP II BENCH SCALE

1. Overview

CHAMP II is a single load cell bench scale connected to CD-11 Industrial Indicator.

2. Physical Descriptions

Construction

Platform - Fabricated stainless steel
Scale Base - Formed and welded mild steel, painted black.

Overloading

Corner Loading - 100% of Full Capacity
Safe Overload - 150% of Full Capacity
Ultimate Overload - 300% of Full Capacity

Operation Environment

Champ II is designed to meet NTEP 3000d requirements to operate in a temperature range from -10°C to 40°C, 0 to 95% relative humidity.

Models Available/Factory Set-up

MODEL	PLATFORM	CAPACITY
CH15R	305 X 355 / 12" x 14"	15 KG x 0.002
CH30R	305 X 355 / 12" x 14"	30KG x 0.005
CH60R	305 X 355 / 12" x 14"	60KG x 0.01
CH60L	400 X 500 / 16" x 20"	60KG x 0.01
CH100R	400 X 500 / 16" x 20"	100KG x 0.02
CH150R	420 X 550 / 17" x 22"	150KG x 0.02
CH300R	420 X 500 / 17" x 22"	300KG x 0.05

3. Installation Procedures

Assembly and Installation

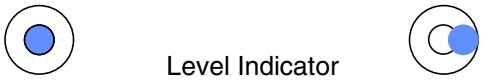
Examine the shipping box for any signs of damage. If DAMAGE is found, make a claim with the carrier immediately.

Open the box and remove the scale assembly. Place the scale assembly on a stable flat surface.

Follow the “Champ II Scale Assembly Instructions”.

Level the scale, apply power and weigh.

Good Wrong



Level Indicator

BEFORE CALIBRATION OR USE, REMOVE THE RED PLASTIC SHIPPING TABS IN THE CORNERS OF THE SCALE BASE.

Troubleshooting

If operational difficulties are encountered, first obtain as much information as possible regarding the problem. Failures and malfunctions often may be traced to simple causes such as loose connections to the indicator, low battery power, improper setup, etc. If simple causes cannot be found, additional troubleshooting is best performed by substitution. A PCB or LOAD CELL believed to be defective may be checked by replacing the suspect part with known good part and then observing whether the problem is corrected.

Load Cell Replacement

Remove the scale platform and disconnect the indicator battery and AC power source.

IMPORTANT NOTE
Wait 30 seconds after removing power to the indicator before unplugging the load cell cable.

Remove the top load cell mounting bolts that secure the top frame to the load cell. Set the top frame and load cell spacer aside. Remove the bottom load cell mounting bolts. The load cell assembly can be removed from the lower base.

When reinstalling a load cell, reverse the preceding steps. Lubricate the threads and under the head of the hex bolts before reinstalling. Using a torque wrench, tighten the hex bolts to the following torque specifications:

Model	Torque
CH15R	20 N.m (15 Ft/lb)
CH30R	20 N.m (15 Ft/lb)
CH60R	20 N.m (15 Ft/lb)
CH60L	20 N.m (15 Ft/lb)
CH100R	30 N.m (22 Ft/lb)
CH150R	40 N.m (30 Ft/lb)
CH300R	50 N.m (37 Ft/lb)

Overload Stop Adjustments

The overload stop gaps must be checked and reset if the top or bottom frame, or load cell is replaced. To set the gaps, remove the platform, loosen the jam nuts (refer to Figure 1-1), then use the proper size feeder gauge in the gap, turn the set screws until a slight drag on the feeder is felt. Tighten the jam nut and recheck the gap. Re-adjust if necessary, cover the platform and check for full capacity. Refer to Figure 1-2 for the location of the overload stops and Table A for the gap settings per Order Number.

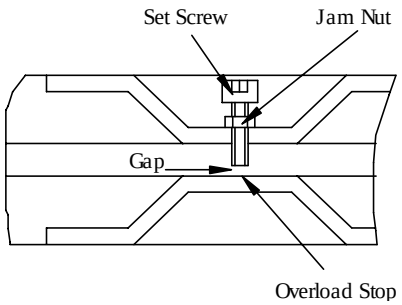


Figure 1-1

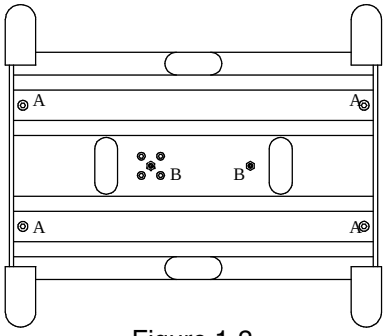


Figure 1-2

Position	CH15R CH30R	CH60R	CH60L CH100R	CH150R	CH300R
A	2mm (0.078")	2mm (0.078")	4mm (0.157")	4mm (0.157")	4 mm (0.157")
B	0.5mm (0.02")	0.5mm (0.02")	0.75mm (0.03")	0.75mm (0.03")	1mm (0.04")

Table No. 1 Overload Gap Settings

Shift Test

A shift test verifies that all sections of the scale platform weigh within tolerance. If the scale does not pass the shift test, verify the overload stop gaps before replacing the load cell. No adjustment for the shift is possible. If the shift test cannot be passed, the load cell must be replaced.

Place test weights equal to one third scale capacity sequentially at each of the positions A, B, C, D, as shown in Figure 1-3. Note the indicator reading at each position.

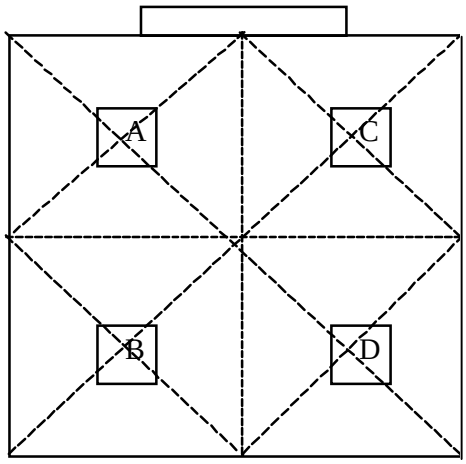


Figure 1-3 Shift Test

Positions A, B, C, and D are centered at the each quarter of the scale platform. The following table shows the tolerance in “d” (division) for the shift test.

Scale Capacity	Test Weight	Acceptable Tolerance (New Scale)	Maintenance Tolerance (In Service)
3,000d	1,000d	±1.0d	±2.0d

Table No. 2 Tolerance Table for Shift Test

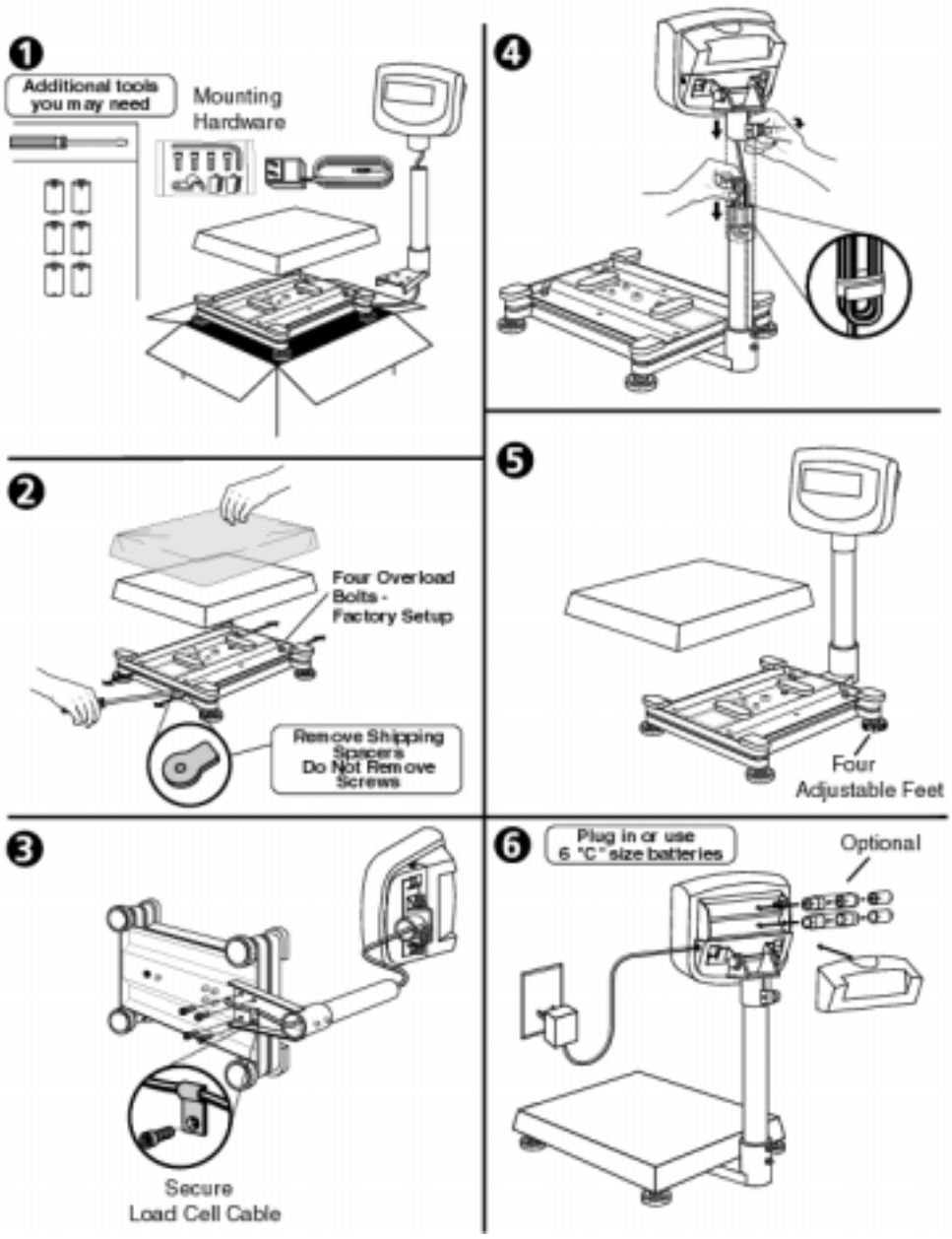
Factory Setup

When Champ II bench scales are connected to indicators in the factory, a full span calibration is conducted during the configuration. Because of transportation, local environment and variation in the earth's gravitation field, the original factory settings must be verified and checked in the field before use.

Parts list

OHAUS PART NO.	DESCRIPTION
71129642	Indicator Bracket Assembly
71125105	Stainless Steel Column, 350 mm high
71125103	Stainless Steel Column, 680 mm high
71129064	Column Bracket
71123975	Load Cell, MT1241-50kg CH15R
71123976	Load Cell, MT1241-100kg CH30R, CH60R, CH60L
71123979	Load Cell, MT1241-250kg CH100R
71124310	Load Cell, MT1260-500kg CH150R, CH300R
71102504	Load Cell Mounting Bolts, M6 x 25
71102512	Load Cell Mounting Bolts, M8 x 230
71129104	Stainless Steel Platform, 305 x 355
71129105	Stainless Steel Platform, 400 x 500
71129106	Stainless Steel Platform, 420 x 550
71125079	Platter Rubber Supporter
71125924	Corner Rubber Supporter, 305 x 355
71125006	Corner Rubber Supporter, 400 x 500 & 420 x 550
71127181	Cover for M6 Screw
71128342	Cover for M8 Screw
71125009	Adjustable Foot (All)

Champ*II* Scale Assembly Instructions



CHAMP II BENCH SCALE

Specifications

Model	CH15R11	CH30R11	CH60R11	CH60L11	CH100R11	CH150R11	CH300R11
Capacity x Readibility (kg)*	15 x 0.002	30 x 0.005	60 x 0.01	60 x 0.01	100 x 0.02	150 x 0.02	300 x 0.05
(lb)	30 x 0.005	60 x 0.01	120 x 0.02	120 x 0.02	200 x 0.05	300 x 0.05	600 x 0.1
Factory Set Resolution	1 : 7500	1 : 6000	1 : 6000	1 : 6000	1 : 5000	1 : 7500	1 : 6000
Max. Resolution	1 : 15000	1 : 15000	1 : 12000	1 : 12000	1 : 10000	1 : 15000	1 : 15000
NTEP Resolution	1 : 3000	1: 3000	1 : 3000	1 : 3000	1 : 2500	1 : 3000	1 : 3000
Load Cell - rated IP 65	50 kg	100 kg			250 kg	500 kg	
Base size (in/cm)	12 x 14 / 30.5 x 35.5			16 x 20 / 40 x 50		17 x 22 / 42 x 55	
Platter Construction	Stainless steel 304						
Base Structure	Black polyurethane painted steel						
Column height (in/cm) Stainless Steel	14 / 35			28 / 70			
Scale Weight (lb/kg)	24 / 11			49 / 22		55 / 25	
Shipping Weight	30 / 14			57 / 26		70 / 31	
Display ((in/cm)	LCD 1/ 2.54 cm						
Keyboard	4 function membrane switches						
Power	9 VDC / 150 mA AC adapter or six alkaline C - type batteries						
Typical battery life	250 hours / 100 hours continues use						
Weighing units	g, kg, lb						
Modes	Weighing & parts counting						
Zeroing Range	2%, 18% or 100% capacity						
Span Calibration	10% to 100 %						
Repeatability	+/- 0.0 1% of the rated load						
Linearity	+/ - 0.02 % of the rated load						
Safe Overload	150 %						
Relative Humidity	10% - 95%						
Operating Temperature	- 10° C to 40° C						
Storage Temperature	- 20° C to 60° C						
Item Ordering Number	**CH15R11**	**CH30R11**	**CH60R11**	**CH60L11**	**CH100R11**	**CH150R11**	**CH300R11**

* Factory set resolution.
** Model CH100R11 is factory calibrated for 100kg. Max. capacity is 150 kg .
User selectable calibration is 150kg x 0.002

Meets Requirements of Approval Agencies: UL, FCC, CE Safety EN60950, Emissions EN55022, Immunity EN50082-1
IP Rating: Equivalent to IP 54.

NTEP CERTIFIED : CD-11 INDICATOR NTEP NO. 99-100, CHAMP II BASE NTEP NO. 99-203

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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