2256 VLC

WEIGHT-PLATE®

Analog Floor Scale

Installation and Service Manual

E14914100A
(1/10).01

METTLER TOLEDO

Publication Revision History

An overview of this manual's revision history is compiled below.

Publication Name: 2256 VLC WEIGHT-PLATE Analog Floor Scale Installation and Service Manual

Publication Part Number: A14914100A **Publication Date:** 8/97

Part Number	Date	Revisions
B14914100A	11/98	Added Class III acceptable readability data on page 1-1.
C14914100A	8/02	Revised manual so that it covers the new 2256 VLC design.
D14914100A	8/04	Added information about new leveling foot.
E14914100A	2/08	Added information about Revision 4 version of scale, including new leveling foot, junction box, and 745A load cell with retaining clip.
E14914100A.01	1/10	Removed warranty information. Updated hazardous area and parts information.

INTRODUCTION

This publication is provided solely as a guide for individuals who have received Technical Training in servicing the METTLER TOLEDO product.

Information about METTLER TOLEDO Technical Training can be obtained by writing, calling, or faxing:

METTLER TOLEDO
1900 Polaris Parkway
Columbus, Ohio 43240 USA
Phone: (614) 438-4511
Fax: (614) 438-4958
www.mt.com

FCC Notice

This device complies with Part 15 of the FCC Rules and the Radio Interference Requirements of the Canadian Department of Communications. Operation is subject to the following conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of 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.

METTLER TOLEDO RESERVES THE RIGHT TO MAKE REFINEMENTS OR CHANGES WITHOUT NOTICE.

DECLARATION OF CONFORMITY

Konformitätserklärung
Déclaration de conformité
Declaración de Conformidad
Conformiteitsverklaring
Dichiarazione di conformità

We/Wir/Nous/Wij/Noi: **Mettler-Toledo, Inc.**
1150 Dearborn Drive
Worthington, Ohio 43085
USA

declare under our sole responsibility that the product,
erklären, in alleiniger Verantwortung, daß dieses Produkt,
déclarons sous notre seule responsabilité que le produit,
declaramos, bajo nuestra sola responsabilidad, que el producto,
verklaren onder onze verantwoordelijkheid, dat het product,
dichiariamo sotto nostra unica responsabilitá, che il prodotto,

Type: **Analog Load Cell**
Model/Type: **744, 745 and 745A**

to which this declaration relates is in conformity with the following standard(s) or other normative document(s).
auf das sich diese Erklärung bezieht, mit der/den folgenden Norm(en) oder Richtlinie(n) übereinstimmt.
Auquel se réfère cette déclaration est conforme à la (aux) norme(s) ou au(x) document(s) normatif(s).
Al que se refiere esta declaración es conforme a la(s) norma(s) u otro(s) documento(s) normativo(s).
Waarnaar deze verklaring verwijst, aan de volende norm(en) of richtlijn(en) beantwoordt.
A cui si riferisce questa dichiarazione è conforme alla/e sequente/i norma/e o documento/i normativo/i.

in combination with a weighing terminal produced by Mettler-Toledo is in conformity with the following directives and standards.

Council directive on the harmonization of the laws of the Member states:	**standards:**	**Certificate number (if applicable)**
relating to non-automatic weighing instruments (90/384/EEC) amended by directive (93/68/EEC)	EN 45501 : 1992 Article 1.2.a	TC2154
relating to electromagnetic compatibility (89/336/EEC) amended by directive (93/68/EEC; 92/31/EEC)	EN 55022, B: 1987 EN 50082-2: 1995	
Relating to electrical equipment designed for use in potentially explosive atmospheres (76/117/EEC)	EN 50 014 : 1977 + A1…A5, General requirements EN 50 020 : 1977 + A1…A5, Intrinsic safety “i”	Model 744 and 745 Ex-95.D.2051 Model 745A Ex-98.D.0965
Relating to electrical equipment designed for use in potentially explosive atmospheres (94/9/EC) **ATEX Certification applies to Model 745A Only**	EN 50014 : 1997 EN 50020 : 2002 EN 50281-1-1 : 1998	KEMA 03ATEX1069 (Category 2 Approval)
	EN 50021 : 1999 EN 50281-1-1 : 1998	KEMA 03ATEX1070 (Category 3 Approval)

Worthington, Ohio USA, May, 2003 **Mettler-Toledo, Inc.**

Darrell Flocken, Manager - Weights & Measures
Office of Weights and Measures

Original issue: September, 1996

Revised: January, 1999 Added: model 745A, conformity to 89/336/EU – 73/23/EU – 76/117/EEC
May, 2003 added compliance to ATEX Directive 94/9/EC for both Category 2 and 3.

According to EN 45014

Precautions

READ this manual BEFORE operating or servicing this equipment.

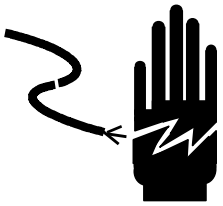
FOLLOW these instructions carefully.

SAVE this manual for future reference.

DO NOT allow untrained personnel to operate, clean, inspect, maintain, service, or tamper with this equipment.

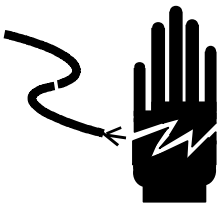
ALWAYS DISCONNECT this equipment from the power source before cleaning or performing maintenance.

CALL METTLER TOLEDO for parts, information, and service.



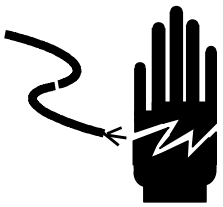
⚠ WARNING

PERMIT ONLY QUALIFIED PERSONNEL TO SERVICE THIS EQUIPMENT. EXERCISE CARE WHEN MAKING CHECKS, TESTS, AND ADJUSTMENTS THAT MUST BE MADE WITH POWER ON. FAILING TO OBSERVE THESE PRECAUTIONS CAN RESULT IN BODILY HARM.



⚠ CAUTION

FOR CONTINUED PROTECTION AGAINST SHOCK HAZARD, CONNECT TO PROPERLY GROUNDED OUTLET ONLY. DO NOT REMOVE THE GROUND PRONG.



⚠ WARNING

DISCONNECT ALL POWER TO THIS UNIT BEFORE INSTALLING, SERVICING, CLEANING, OR REMOVING THE FUSE. FAILURE TO DO SO COULD RESULT IN BODILY HARM AND/OR PROPERTY DAMAGE.

⚠ CAUTION

BEFORE CONNECTING OR DISCONNECTING ANY INTERNAL ELECTRONIC COMPONENTS OR INTERCONNECTING WIRING BETWEEN ELECTRONIC EQUIPMENT, ALWAYS REMOVE POWER AND WAIT AT LEAST THIRTY (30) SECONDS. FAILURE TO OBSERVE THESE PRECAUTIONS COULD RESULT IN BODILY HARM OR DAMAGE TO OR DESTRUCTION OF THE EQUIPMENT.

⚠ CAUTION

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES.

⚠ WARNING

USE EXTREME CAUTION WHEN LIFTING AND MOVING THE SCALE TO THE DESIRED LOCATION. DO NOT ATTEMPT TO LIFT AND MOVE THE SCALE BY YOURSELF OR INJURY COULD OCCUR.

Disposal of Electrical and Electronic Equipment

In conformance with the European Directive 2002/96 EC on Waste Electrical and Electronic Equipment (WEEE) this device may not be disposed of in domestic waste. This also applies to countries outside the EU, per their specific requirements.

Please dispose of this product in accordance with local regulations at the collecting point specified for electrical and electronic equipment.

If you have any questions, please contact the responsible authority or the distributor from which you purchased this device.

Should this device be passed on to other parties (for private or professional use), the content of this regulation must also be related.

Thank you for your contribution to environmental protection.

CONTENTS

1 Introduction

General

Model 2256 VLC WEIGHT-PLATE® floor scales are fully electronic scales for general-purpose weighing. They are designed for top-of-floor installations and can be used as portable or permanently mounted scales.

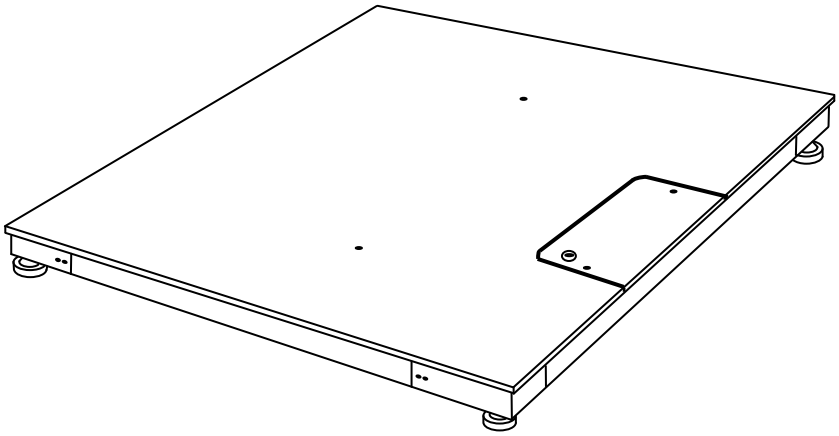


Figure 1-1: 2256 VLC Floor Scale

Model Numbers

The following table shows how standard model numbers are determined for currently available 2256 VLC floor scales.

XXXX	X	X	X	X	X	X	-X
Model	**Revision**	**Platform**	**Load Cell Metrology**	**Junction Box**	**Size**	**Scale Capacity**	**Scale Metrology**
2256	4	0 = Mild steel, tread plate 1 = Mild steel, smooth plate 2 = Stainless steel, tread plate 3 = Stainless steel, smooth plate	2 = H44	0 = Analog	1 = 3x3 feet 2 = 4x4 feet 3 = 4x5 feet 4 = 5x5 feet 5 = 4x6 feet 6 = 5x7 feet	1 = 1,000 lb 2 = 2,500 lb 3 = 5,000 lb 4 = 10,000 lb	-A = 5,000d

Load Cells

Model 2256 VLC floor scales include stainless steel, cantilever-beam load cells with integral, four-conductor, shielded cables (see note). Individual load cell capacities are listed below:

NOTE: Scales measuring 5' x 7' use cables that are 15' long. Smaller scales use cables that are 7.5' long. DO NOT mix cables of different lengths within a platform.

Scale Platform Capacity	Capacity of Each Load Cell	Minimum Approved Graduation Size
1,000 lb	500 lb	0.2 lb
2,500 lb	1,250 lb	0.5 lb
5,000 lb	2,500 lb	1.0 lb
10,000 lb	5,000 lb	2.0 lb

Load Cell Specifications

NOTE: Revision 3 versions of the 2256 floor scale (Model 22563XXXXX-A) used 3-mV/V load cells.

Model Number	745A
Rated Capacity (RC)	500 lb, 1,250 lb, 2,500 lb, 5,000 lb
Rated Output	2 mV/V
Maximum Excitation Voltage*	15 VDC or VAC rms
Recommended Excitation Voltage	15 VDC
Input Terminal Resistance	385 ohms minimum
Output Terminal Resistance	350 ± 2 ohms
Temperature Range (compensated)	+14°F to +104°F (-10°C to +40°C)
Safe Overload	150% RC
Safe Side Load	100% RC
Zero Balance	± 0.02 mV/V

*The power supply to the load cells is provided by the METTLER TOLEDO indicator.

Approvals

NTEP Certification

Model 745A load cells meet or exceed NIST Handbook-44 requirements for Class III 5,000 divisions (multiple cell). A Certificate of Conformance was issued under the National Type Evaluation Program (NTEP) of the National Conference of Weights and Measures (certificate number 92-108A3).

OIML Certification

Model 745A metric capacity load cells meet or exceed OIML requirements for R60 C3 3000 divisions (TC2154).

Entity Approval

Entity approval permits the application of individually approved components (even from various manufacturers) to be used together to build a solution that is approved. When installing equipment in hazardous areas, it is necessary to compare the entity values of the load cells, junction boxes, connecting cables, and other components. Those entity values include voltage, current, power, capacitance, and inductance.

The components must compare as follows in order for the wiring to be considered intrinsically safe:

V_{max} or U_i (Maximum voltage permitted) ≥ V_t or U_o (Total voltage output)

I_{max} or I_i (Maximum current permitted) ≥ I_t or I_o (Total current output)

P_{max} or P_i (Maximum power permitted) ≥ P_t or P_o (Total power output)

C_i (Unprotected capacitance) + C_{cable} (Cable capacitance) ≤ C_a or C_o (Allowable capacitance)

L_i (Unprotected inductance) + L_{cable} (Cable inductance) ≤ L_a or L_o (Allowable inductance)

If the above conditions are not true, then the circuit will not be intrinsically safe and must not be installed in a hazardous area. If the parameters compare favorably as shown above, then the circuit is intrinsically safe and can be installed in a hazardous area. Always refer to the electrical regulations for the country of installation for specific wiring requirements.

United States Approval

The United States safety approvals are based on entity values. Reports on the 745A load cells were submitted to Factory Mutual for compliance with FM Approval Standards Class No. 3600, 3610, and 3810. They were approved as intrinsically safe devices and issued the following certificate:

FM Original Approval Job Identification #3005885
IS/I,II,III/1/ABCDEFG/T4 Ta=40°C – 158574R/5; ENTITY; NI/I/2/ABCD/T6 Ta=40°C; S/II,III/2/FG/T6 Ta=40°C

The following chart lists the Factory Mutual entity values for the load cells.

Electrical Data	745A
V_t (Total voltage output)	25 V
I_t (Total current output)	600 mA
P_t (Total power output)	1.25 W
C_a (Allowable capacitance)	0
L_a (Allowable inductance)	29 µH

When used in hazardous areas, the load cells must be installed according to control drawing 158574R (see Figure 1-2).

European Approval

The European safety approvals are based on entity values. The 745A load cells were submitted to KEMA for compliance with EN60079-0, EN60079-11, EN60079-15, EN61241-0, and EN61241-1. They were approved as intrinsically safe devices and issued the following certificates:

KEMA 03ATEX1069
II 2 G Ex ia IIC T4
II 2 D Ex tD A21 IP6X T100°C

KEMA 03ATEX1070
II 3 G Ex nA II T4
II 3 G Ex nL IIC T4
II 3 D Ex tD A22 IP6X T100°C

The following chart lists the entity values for the load cells.

U_o (Total voltage output)	25 V
I_o (Total current output)	600 mA
P_o (Total power output)	1.25 W
C_o (Allowable capacitance)	5 nF
L_o (Allowable inductance)	30 µH

When used in hazardous areas, the load cells must be installed according to installation instructions document 16792100A (see Figure 1-3).

Junction Boxes

TA100831 junction boxes were submitted to KEMA for compliance with EN60079-0, EN60079-11, EN60079-15, EN61241-0, EN61241-1, and EN61241-11. They were approved as intrinsically safe devices and issued the following certificates:

KEMA 03ATEX1396 X
II 2 G Ex ia IIC T4
II 2 D Ex ibD 21 IP65 T70°C…T90°C

KEMA 03ATEX1397 X
II 3 G Ex nL IIC T4
II 3 G Ex nA II T4
II 3 D Ex tD A22 IP65 T70°C…T90°C

TA100831 junction boxes have been certified to IP69K ingress protection.

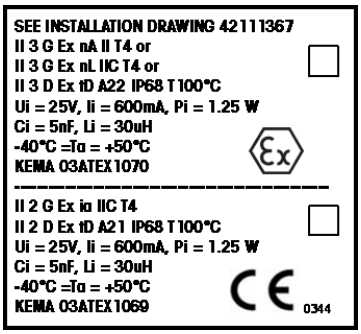
The following chart lists the entity values for the junction boxes.

U_o (Total voltage output)	30 V
I_o (Total current output)	1 A
P_o (Total power output)	0
C_o (Allowable capacitance)	0
L_o (Allowable inductance)	0

When used in hazardous areas, the junction boxes must be installed according to installation instructions document C16953600A (see Figure 1-4).

Product Markings

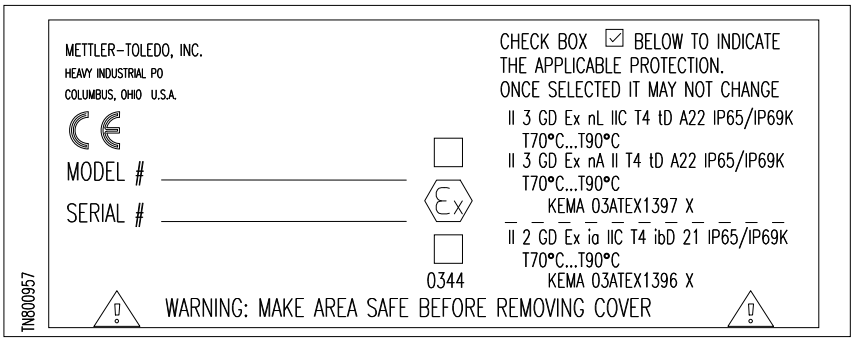
METTLER TOLEDO is not responsible for classifying hazardous areas. Each 745A load cell should have the following label attached to it:



If you install a load cell in a hazardous area, use a permanent marker to place a mark in the check box on the label that indicates the applicable protection (KEMA 03ATEX1069 or KEMA 03ATEX1070). Once the label has been marked, it may not be changed.

Junction Boxes

TA100831 junction boxes should have the following label attached:



If you install a junction box in a hazardous area, use a permanent marker to place a mark in the check box on the label that indicates the applicable protection (KEMA 03ATEX1396 X or KEMA 03ATEX1397 X). Once the label has been marked, it may not be changed.

Grounding

Make sure that all hazardous area installations are properly grounded. All grounding and equal potential bonding connections must be made according to local regulations based upon the country of installation. Refer to local codes and the control drawing provided in this manual for information about grounding.

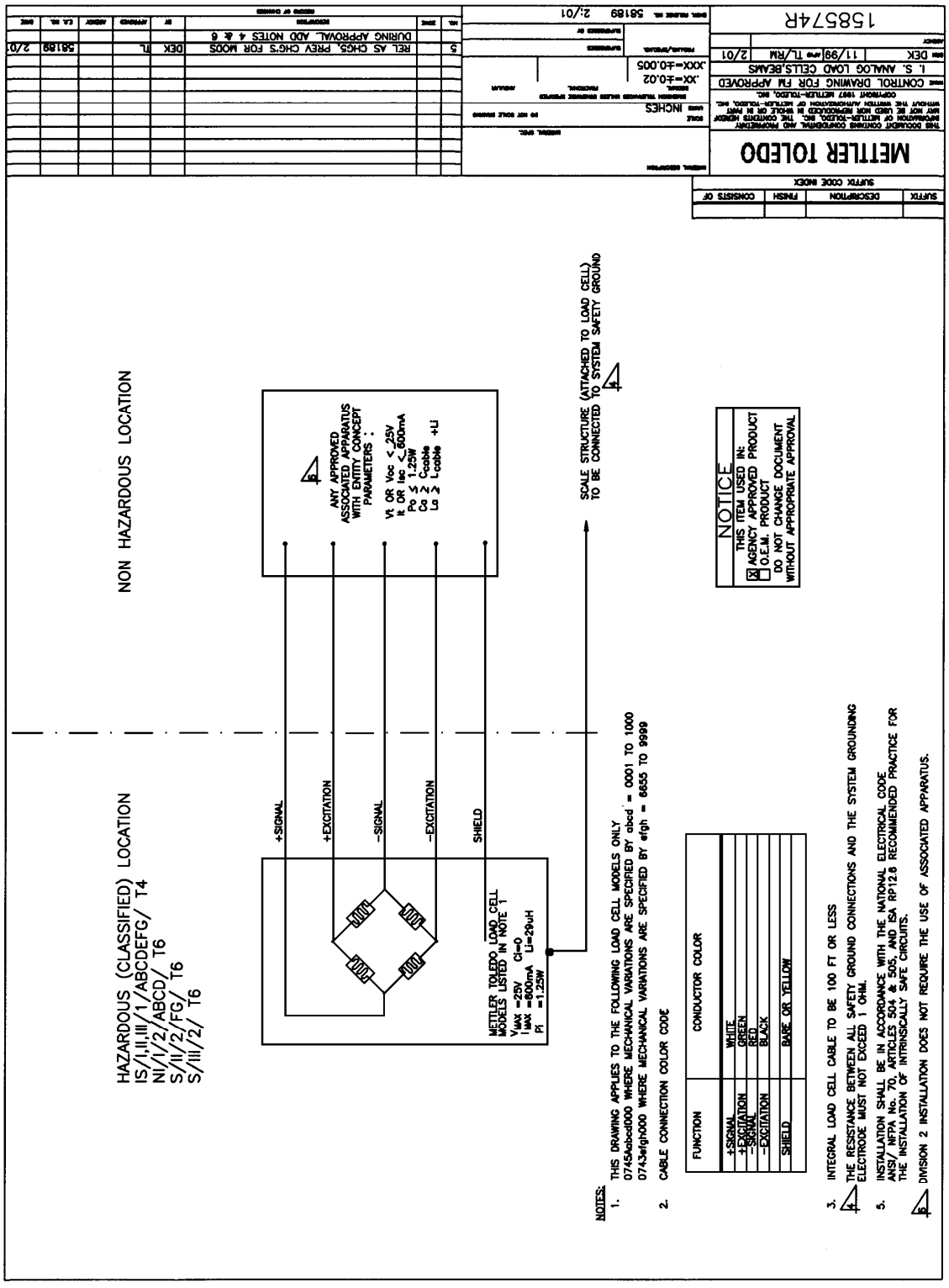


Figure 1-2: Control Drawing for 745A Load Cell

Mettler-Toledo, Inc.
1900 Polaris Pkwy
Columbus, Ohio 43240
USA

Installationsanleitung
Installation Instruction

Lastzellen Typen: **0743, 0743-SBK, 0745A**
Load cell model numbers: **0743, 0743-SBK, 0745A**

Anschlußplan bzw. Farbcodetabelle:
Wire according to the following color code:

Deutsch		**English**	
Farbe	Zustand	Colour	Function
Grün	+ Spannung	Green	+ Excitation
Schwarz	- Spannung	Black	- Excitation
Weiss	+ Signal	White	+ Signal
Rot	- Signal	Red	- Signal
Gelb	Schirm	Yellow	Shield

Installation
Installation
Installation wie in den Konformitätsbescheinigungen KEMA 03ATEX1069 oder KEMA 03ATEX1070 beschrieben.
Install according to Certificate Number KEMA 03ATEX1069 or KEMA 03ATEX1070.

When load cells are considered in type of protection non-sparking Ex nA II, they need to be fitted in an enclosure that complies with the requirements of clause 6 of EN 60079-15.
Wenn Wägezellen aus der Sicht des Schutzes als nicht-funkend EX nA II betrachted werden, müssen sie in ein Gehäuse eingebaut werden, das die Anforderungen in Artikel 6 von EN 60079-15 erfüllt.

Markieren Sie mit einem wasserfesten Stift den Einsatzbereich (KEMA 03ATEX1069 or KEMA 03ATEX1070) der Messzelle auf dem dafür vorgesehenen Feldern des Hinweisschildes. Wurde bereits eine Zuordnung vorgenommen, darf diese nicht mehr verändert werden.
With a permanent marker place a mark (✓) in the box on the load cell label to indicate the applicable protection (KEMA 03ATEX1069 or KEMA 03ATEX1070). Once selected it may not be changed.

Certifications, Markings & Standards
Zertifikationen, Zeichnungen & Normen

KEMA 03ATEX1069	KEMA 03ATEX1070
II 2 G EX ia IIC T4	II 3 G Ex nA II T4 or
II 2 D Ex tD A21 IP6X T100°C	II 3 G Ex nL IIC T4 or
	II 3 D Ex tD A22 IP6X T100°C
Ui=25V; Ii=600mA; Pi=1.25W;	Ui=25V; Ii=600mA; Pi=1.25W;
Ci=5nF; Li=30uH	Ci=5nF; Li=30uH
EN60079-0:2006, EN 60079-11:2007	EN 60079-0:2006, EN 60079-15:2005
EN 61241-0:2006, EN 61241-1:2004	EN 61241-0:2006, EN 61241-1:2004

Jahr der Herstellung:
Year of Manufacture:
Das Herstellungsjahr wird mit der letzten Stelle der Seriennummer (S/N) wie folgt gekennzeichnet:
The year of manufacture is indicated by the last character of the load cell Serial Number (S/N) as follows:

Letzter Buchstabe Last Character	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T
Jahr Year	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16

16792100A

Figure 1-3: Installation Instructions for 745A Load Cell

Mettler-Toledo, Inc.
Columbus, Ohio
USA

Installationsanleitung
Installation Instructions

Typennummer des Anschlusskastens: TB100771-X, TB100772-X, TB100777-X, TB100778-X, TA100831-SSA, TA100831-S6A
X ist die Nummer der Abschlusskastenlöcher
Junction Box Model Numbers: TB100771-X, TB100772-X, TB100777-X, TB100778-X, TA100831-SSA, TA100831-S6A
where: -X designates the number of holes in the junction box

Schließen Sie die Kabel laut Farbcodetabelle bzw Anschlussplan an:
Wire according to the following color codes:

	Farbcode der Wägezelle Load Cell Color Code		Farbcode des Kabels zum Terminal Home Run Cable Color Code
ANALOG			
Beschreibung/Description	Farbe/Color	Farbe/Color	Farbe/Color
+ Excitation	rosa/Pink	grün/Green	weiss/White
- Excitation	grau/Grey	schwarz/Black	blau/Blue
+ Signal	braun/Brown	weiss/White	grün/Green
- Signal	weiss/White	rot/Red	schwarz/Black
Shield	durchsichtig/Clear	gelb/Yellow	orange/weiss/Orange/White
+ Sense	nicht verwendet/Not Used		gelb/Yellow
- Sense	nicht verwendet/Not Used		rot/Red

POWERCELL and MTX		
Beschreibung/Description	Farbe/Color	Farbe/Color
A	gelb/Yellow	
B	blau/Blue	
N.C.	weiss/White	
+V	rot/Red	
GND	grün/Green	
CGND	orange/Orange	
A		gelb/Yellow
B		blau/Blue
GND		schwarz/Black
GND		braun/Brown
GND		grün/Green
+VC		orange/Orange
+VB		rot/Red
+VA		weiss/White

Installation/Installation

Installation wie im EG-Baumusterprüfbescheinigung KEMA03ATEX1396X oder Baumusterprüfbescheinigung KEMA 03ATEX1397X.

Install according to EC-Type Examination Certificate KEMA03ATEX1396X or Type Examination Certificate KEMA 03ATEX1397X.

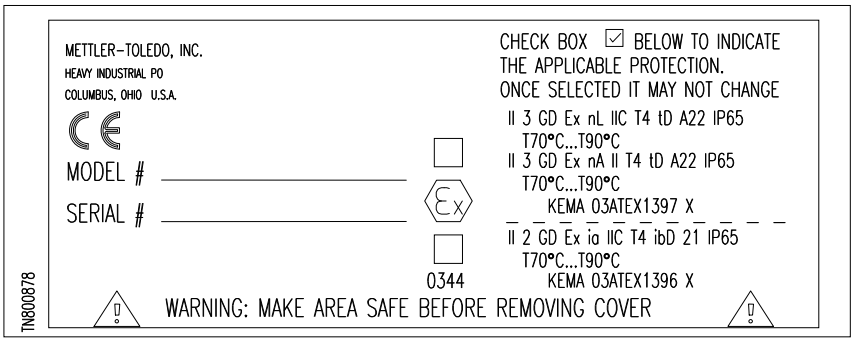
Markieren Sie mit einem wasserfesten Stift den Einsatzbereich (KEMA03ATEX1396X oder KEMA 03ATEX1397X) des Anschlusskastens auf dem dafür vorgesehenen Feldern des Hinweisschildes. Wurde bereits eine Zuordnung vorgenommen, darf diese nicht mehr verändert werden.

With a permanent marker, a mark (√) must be placed in the location on the junction box label which indicates the applicable protection (KEMA03ATEX1396X or KEMA 03ATEX1397X). Once selected it may not be changed.

C16953600A

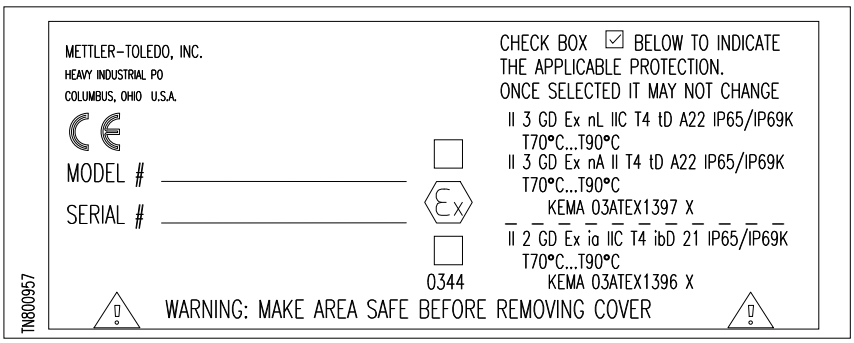
Figure 1-4: Installation Instructions for Junction Box

Typennummer des Anschlusskastens: TB100771-X, TB100772-X, TB100777-X, TB100778-X
X ist die Nummer der Abschlusskastenlöcher
Junction Box Model Numbers: TB100771-X, TB100772-X, TB100777-X, TB100778-X
where: -X designates the number of holes in the junction box



Typennummer des Anschlusskastens: TA100831-SSA, TA100831-S6A

Junction Box Model Numbers: TA100831-SSA, TA100831-S6A



Kabelverschraubungen dürfen nur mit Kabel der folgenden Größen verwendet werden:
klein/PG7 (.12-.26 inch / 3-6.5mm) gross/PG9 (.16-.31 inch / 4-8mm)
Die Schrauben periodisch anziehen um sicherzustellen, dass der Deckel fest montiert ist.

Cable glands are to be used only with cables that have the following cable diameter ranges:
small/PG7 (.12-.26in / 3-6.5mm) large/PG9 (.16-.31in / 4-8mm).
Periodically tighten cover screws to ensure cover is secured properly.

Jahr der Herstellung:
Year of manufacture:
Das Herstellungsjahr wird mit der letzten Stelle der Seriennummer (S/N) des Anschlusskastens wie folgt gekennzeichnet:
The year of manufacture is indicated by the last character on the junction box serial number (S/N) as follows:

Jahr/Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Buchstabe/Character	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T

C16953600A

Figure 1-4: Installation Instructions for Junction Box

2 Inspection and Site Selection

Inspection

When the 2256 VLC floor scale is delivered, visually inspect it for any damage that might have occurred during shipping and handling. Inspect the following:

1. Platform assembly
2. Load cells and leveling feet
3. Load cell cables
4. Load cell summing junction box

If you find any damage, contact your freight carrier immediately.

Site Selection

Many problems associated with floor scale installations are caused by improper site conditions. Before installing the scale, check the proposed location for the following conditions:

1. The area where the scale will be located should be level. The scale's leveling feet can be adjusted to compensate for floors that are slightly out of level.
2. The floor/support at each corner of the scale must be strong enough to support weight equal to the maximum weighing capacity of the scale.
3. There should be proper drainage away from the scale.
4. There should be no heavy vibrations or wind currents at or near the scale.
5. The scale should not be subjected to excessive or unusual loading due to the location or type of equipment used.

If the site is acceptable, proceed with the installation. If not, choose a new location or select another scale.

3 Installation

Leveling Feet

Set up the scale in the location where it will be used. To move the scale, install 3/4-10 eyebolts (P/N MZ0905000003) in the threaded holes in the top of the scale platform. Attach a chain to the eyebolts, and use it to lift the scale with a forklift.

1. Remove the corner guard from each corner of the scale (see Figure 3-1).
2. Install a retaining clip in the holes in the side of each load cell. Insert one end of the clip into one hole, and then stretch the clip just enough to insert the opposite end into the other hole. Be careful not to bend the clip.
3. Install a leveling foot in the loading hole in each load cell. Shift the retaining clip to one side of the load cell, and insert the rocker foot into the loading hole at an angle. Rotate the foot until it is fully installed.
4. Install a corner guard at each corner of the scale. Make sure that the corner guard is flush against the load cell mounting block.

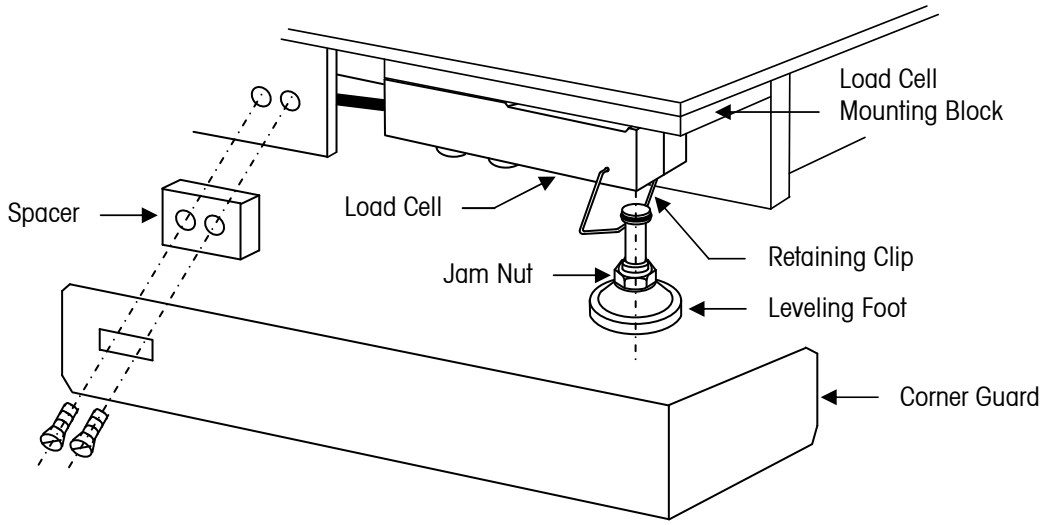


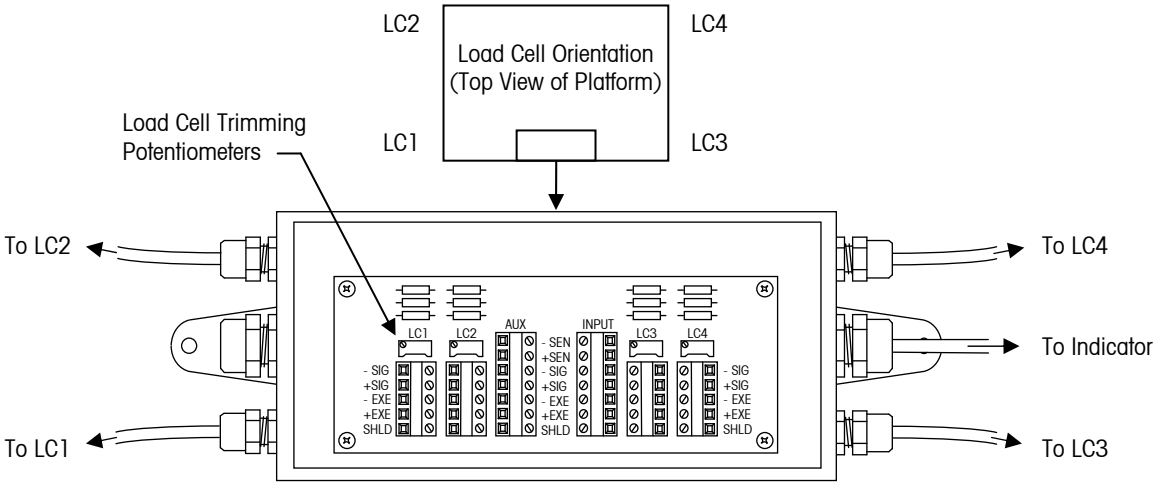
Figure 3-1: Leveling Foot Assembly

5. Make sure the scale platform is level. Adjust the leveling feet as needed to level it. All four feet should touch the floor so that the scale does not rock.

- To adjust a leveling foot upward or downward, use a 3/4-inch wrench to loosen the jam nut on the foot. Turn the foot until it is positioned correctly, and then tighten the jam nut so that it is snug against the foot.
- Check the level that is located on the scale platform's junction box cover. Adjust the leveling feet until the bubble on the level is centered.
- You must level the scale each time you move it to a new location.

Junction Box Wiring

A 2256 VLC floor scale must be used with a compatible analog indicator. The scale's load cell outputs are summed by an analog junction box. Open the junction box, and connect the home run cable from the scale indicator to the input terminals on the junction box PCB. See Figure 3-2 and Table 3-1 for the correct cable connections.



NOTE: Do not cut load cell cables. Cutting a cable will affect compensation and void the warranty.

Figure 3-2: Analog Junction Box Detail

NOTE: Turn all potentiometers fully clockwise prior to calibration.

Load Cell Wiring		Instrument Cable Wiring*	
Function	**Color**	**Function**	**Color**
-Sense	Not Used	-Sense	Red
+Sense	Not Used	+Sense	Yellow
-Signal	Red	-Signal	Black
+Signal	White	+Signal	Green
-Excitation	Black	-Excitation	Blue
+Excitation	Green	+Excitation	White
Shield	Yellow	Shield	Orange
*Instrument cable color code based on METTLER TOLEDO cable no. 510624370			

Table 3-1: Analog Junction Box Wiring Codes

Optional Locating Plates

Locating plates are available for scales that will be mounted permanently. Two locating plates installed at adjacent corners of a scale are usually sufficient.

⚠ WARNING

USE EXTREME CAUTION WHEN LIFTING AND MOVING THE SCALE TO THE DESIRED LOCATION. DO NOT ATTEMPT TO LIFT AND MOVE THE SCALE BY YOURSELF OR INJURY COULD OCCUR.

1. Remove the rubber pads from the scale's leveling feet, and position the scale in the location where it will be installed.
2. Lift the scale enough to position the locating plates under the corners of the scale.
3. Lower the scale carefully so that its leveling feet fit inside the large holes in the locating plates.
4. Drill holes in the floor for the anchor bolts (two for each locating plate). Use the bolt holes in the plates as guides (see Figure 3-3).
5. Install 1/2-inch insert-type anchor bolts through the bolt holes in the locating plates to anchor the plates to the floor.

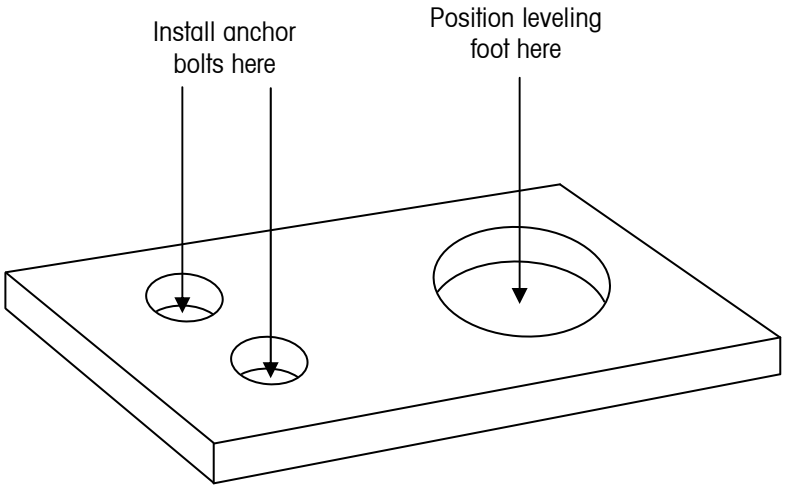


Figure 3-3: Locating Plate Installation

Optional Ramps

You can install one or more ramps with a floor scale. Standard ramps are available in widths of 36, 48, and 60 inches.

⚠ WARNING

USE EXTREME CAUTION WHEN LIFTING AND MOVING THE SCALE TO THE DESIRED LOCATION. DO NOT ATTEMPT TO LIFT AND MOVE THE SCALE BY YOURSELF OR INJURY COULD OCCUR.

1. Remove the rubber pads from the scale's leveling feet.
2. Position the ramp in the location where it will be installed. Make sure there is enough room for the scale and for any other ramps that will be installed.
3. Drill holes in the floor for the two anchor bolts. Use the bolt holes in the flanged portion of the ramp as guides (see Figure 3-4).
4. Install 1/2-inch insert-type anchor bolts through the bolt holes in the flange to anchor the ramp to the floor.
5. Lower the scale carefully so that its leveling feet fit inside the large holes in the flange.

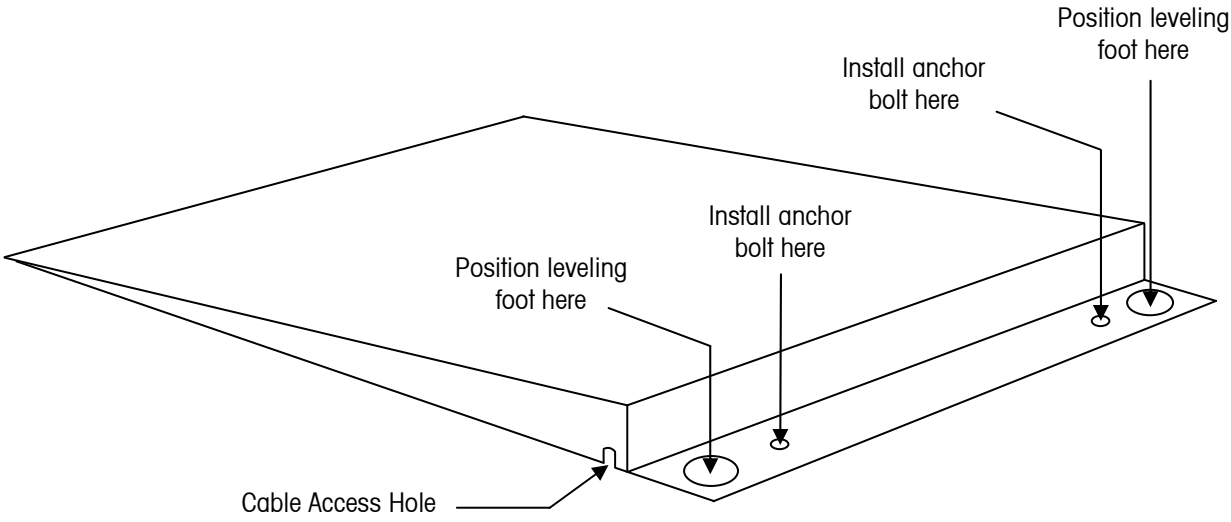
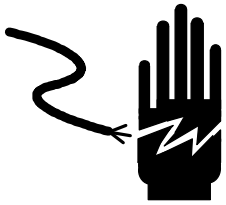


Figure 3-4: Ramp Installation

If you will be installing a second ramp, lift the scale and position the large holes in the ramp's flange under the leveling feet on the opposite side of the scale. Then move the scale out of the way. Drill bolt holes, install anchor bolts, and then lower the scale carefully so that its leveling feet fit inside the large holes in the ramp flanges.

4 Calibration

Shift Adjust



⚠ WARNING

PERMIT ONLY QUALIFIED PERSONNEL TO SERVICE THIS EQUIPMENT. EXERCISE CARE WHEN MAKING CHECKS, TESTS, AND ADJUSTMENTS THAT MUST BE MADE WITH POWER ON. FAILING TO OBSERVE THESE PRECAUTIONS CAN RESULT IN BODILY HARM.

When you shift adjust a scale, you are adjusting the output voltage (signal) of each load cell so that all load cells in the system produce a consistent signal. A correctly adjusted scale will give the same weight reading no matter where on the platform you place a test weight. Each floor scale is shift adjusted at the factory. For a new installation, the only adjustment that should be needed is minor load cell trimming.

After the scale has been installed, check all mechanical parts to make sure that they work properly. Then check the scale's repeatability by placing a test weight on the same location on the platform several times to make sure that you get the same weight reading each time. After checking for repeatability, adjust the load cell trimming potentiometers as needed.

Analog Junction Box Shift Adjustment

Use the following procedure to trim the load cells:

1. Remove the access plate from the scale platform, and open the junction box.
2. Figure 4-1 shows test weight locations (A, B, C, and D) at the center of each quadrant of the scale platform. Place a test weight equal to 1/2 of the rated scale capacity at location A and record the weight reading. Then move the test weight to location B and record the weight reading. Continue until you have taken a weight reading at each of the four locations.

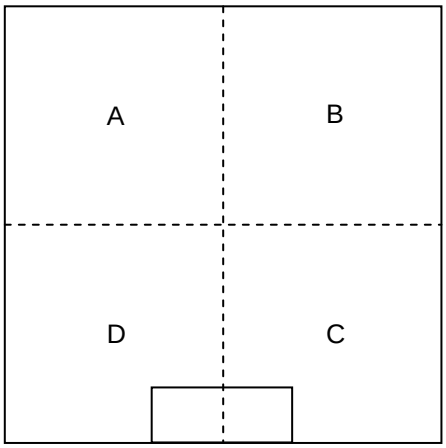


Figure 4-1: Test Weight Locations

3. Place the test weight at the location immediately clockwise from the location at which you got the lowest weight reading. Then adjust the trimming potentiometer for the load cell that corresponds to the corner of the scale where the test weight is positioned (see Figure 4-2). Make the adjustment by turning the potentiometer until the weight reading matches the lowest reading.

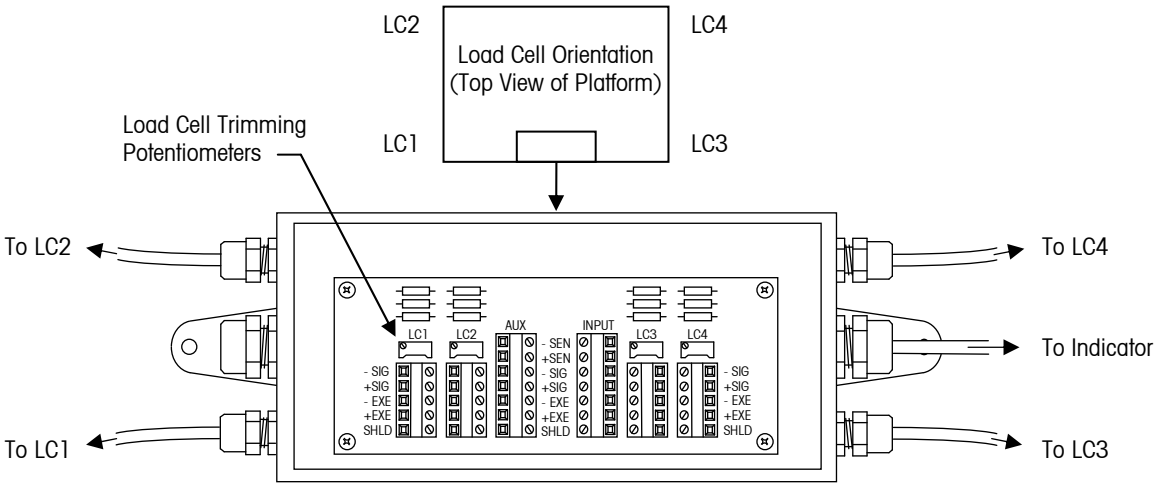


Figure 4-2: Load Cell Trimming Potentiometers

4. Proceeding clockwise, repeat the adjustment described in Step 3 for the next two test weight locations.

   NOTE: Because the trimming potentiometers interact with each other, any adjustment will affect the weight readings at all four corners of the scale.

5. Repeat Steps 2 to 4 until the weight readings at all corners of the platform are the same or are within the specified National Institute of Standards and Technology (NIST) Handbook 44 Scale Accuracy Requirements.

6. Replace the junction box lid and the access plate.

Scale Calibration

METTLER TOLEDO recommends calibrating the scale using test weights equal to the scale's capacity. Follow the calibration instructions in the manual provided with the scale indicator.

5 Routine Care and Maintenance

General

Once the scale has been installed, have an authorized METTLER TOLEDO representative inspect and calibrate it periodically. If the scale is used for legal-for-trade purposes, consult the local weights and measures authorities for minimum inspection requirements. Contact your local authorized METTLER TOLEDO service representative for information about periodic inspection and calibration services.

Site Inspection

Make sure that the scale site remains in good condition. Check for alterations in the surrounding floor, excessive vibrations, and possible overloading conditions.

Platform Inspection

During periodic inspections of the scale, check the following:

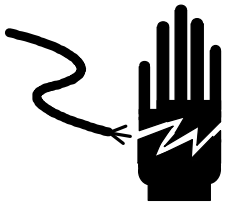
1. Are there any unusual wear points, paths, or marks on the weighing platform?
2. Is the junction box lid properly sealed and are all cable connectors tight against the enclosure?
3. Is there any moisture or foreign material around or inside the junction box assembly?
4. Is the instrument cable damaged or binding the scale?
5. Is there any debris or material build-up under or around the platform that could prevent the platform from moving freely?
6. Visually inspect the load cells and leveling feet for signs of unusual wear.
7. Check repeatability and shift of the scale.

6 Troubleshooting

General

If the scale does not operate properly, find out as much about the problem as possible. Try to determine whether the problem is constant or intermittent. Mechanical and electrical influences can cause malfunctions, so be patient and use sound logic when troubleshooting.

When troubleshooting a 2256 VLC floor scale, examine the scale's physical location. Check for the presence of water, corrosive materials, unlevel floors, high vibrations, air currents, or physical damage to the scale platform or frame. Also check the instrument cable for damage, and check all connections for loose or improper wiring.



⚠ WARNING

PERMIT ONLY QUALIFIED PERSONNEL TO SERVICE THIS EQUIPMENT. EXERCISE CARE WHEN MAKING CHECKS, TESTS, AND ADJUSTMENTS THAT MUST BE MADE WITH POWER ON. FAILING TO OBSERVE THESE PRECAUTIONS CAN RESULT IN BODILY HARM.

⚠ CAUTION

BEFORE CONNECTING/DISCONNECTING ANY INTERNAL ELECTRONIC COMPONENTS OR INTERCONNECTING WIRING BETWEEN ELECTRONIC EQUIPMENT, ALWAYS REMOVE POWER AND WAIT AT LEAST THIRTY (30) SECONDS. FAILURE TO OBSERVE THESE PRECAUTIONS COULD RESULT IN BODILY HARM OR DAMAGE TO OR DESTRUCTION OF THE EQUIPMENT.

Isolate the Problem

Determine whether the problem is in the scale or the indicator.

1. Remove power from the system, and then disconnect the indicator from the scale.
2. Connect the indicator to a load cell simulator (analog simulator available from METTLER TOLEDO).
3. Reapply power and test the indicator. If the problem persists, consult the indicator manual for further troubleshooting assistance.
4. If the problem is NOT present with the load cell simulator attached to the indicator, remove power, disconnect the simulator, and reconnect the scale. If the problem persists, continue troubleshooting the scale.

Check Wiring

1. Remove power from the system.
2. Remove the access cover plate from the scale platform.
3. Remove the lid from the junction box and check the interior for moisture and foreign material.
4. Make sure that all wiring connections are tight and that no insulation material is touching the terminal contacts.
5. Check all cable connections to make sure they are wired correctly. The wiring color codes are given in Table 6-1:

Load Cell Wiring		Instrument Cable Wiring*	
Function	**Color**	**Function**	**Color**
-Sense	Not Used	-Sense	Red
+Sense	Not Used	+Sense	Yellow
-Signal	Red	-Signal	Black
+Signal	White	+Signal	Green
-Excitation	Black	-Excitation	Blue
+Excitation	Green	+Excitation	White
Shield	Yellow	Shield	Orange
*Instrument cable color code based on METTLER TOLEDO cable no. 510624370			

Table 6-1: Load Cell Wiring Color Codes

6. Check all cable connectors and cord grip caps on the junction box.
7. Tighten any loose connectors.

Check Load Cells

1. Remove power from the system. Fully disconnect each load cell and check for proper input/output resistances (see Table 6-2).

NOTE: The information in this section is for 2-mV/V load cells.

Measuring Points	Resistance
+Exc (Green) to -Exc (Black)	385 ohms minimum
+Sig (White) to -Sig (Red)	348-352 ohms

Table 6-2: Load Cell Measuring Points

2. If resistance is within specification, perform a shorted-signal symmetry test.
   - Short the signal leads together and place one multimeter lead on the shorted signals and one lead on the +Excitation wire. Note the resistance value.
   - Remove the lead from the +Excitation wire and place it on the -Excitation wire. The two resistance values should be approximately equal.
3. If the load cells pass the shorted-signal test, reconnect them and reapply power to the scale. Confirm that the proper excitation voltage is reaching the load cells by placing multimeter leads on the excitation positions of each load cell terminal.
4. If proper excitation voltage is reaching the load cells, check the output signal from each cell by disconnecting the signal leads and measuring voltage output. If one cell has a particularly high or low dead-load output, it is suspect. The maximum output possible from any cell is 30 mV at 15 VDC excitation and loaded to gross capacity.
5. If any load cell has an unusual signal, remove all load from that cell by raising the platform.

NOTE: Remove signal leads from terminals to measure output.

   - With the power on, measure the output from the suspect load cell. The no-load zero output should be ± 1.5% of the full scale output. For example, if the excitation voltage is 15 VDC, then the full scale output would be 30 mV and the no-load zero output should be within ± 0.45 mV.
6. If a load cell fails any of the above tests, replace it.

Check Mechanical Components

Because the 2256 VLC design is so simple, there are only a few mechanical components to troubleshoot. Make sure that the platform can move freely and that there is clearance between the loading end of each load cell and the bottom of the deck. Check the following:

1. The platform should be level and should not rock.
2. Check the load cells for damage. Replace any load cells that are damaged.
3. Check the leveling feet for unusual wear. Replace any leveling feet that are unevenly worn.
4. Inspect the platform and frame for physical damage. Replace any platform or frame that is bent or has broken welds.
5. The mounting surfaces of the load cells and platform should be free of grease and other debris.
6. Verify that the load cell overload stop gap is set properly:

Load Cell Capacity	Overload Stop Gap
500 lb	0.009" to 0.015"
1,250 lb	0.012" to 0.018"
2,500 lb	0.017" to 0.023"

Load Cell Replacement

1. Remove power to the indicator and disconnect the instrument cable.
2. Remove the access plate from the platform to gain access to the junction box. Remove the junction box cover and locate the defective load cell terminal.
3. Disconnect the defective load cell cable from its terminal on the summing PCB.
4. Loosen the cable connector on the junction box and remove the cable from the enclosure.

NOTE: The instrument cable may need to be removed from the junction box to allow the platform to be moved.

5. Carefully position the platform on a stable surface that allows access to the defective load cell and cable, as well as offering protection to the other load cells during disassembly.
6. Remove the corner guard at the corner of the scale where the defective load cell is located.
7. Attach a string to the end of the defective load cell's cable. The string should be long enough and strong enough to pull the new load cell's cable through the platform structure.

NOTE: If the load cell is mounted with 1/2-13 UNC socket-head cap screws, use a 3/8" hex Allen socket wrench to remove the screws.

8. Remove the two 1/2-13 UNC screws that mount the load cell to the underside of the scale platform (see Figure 6-1). Keep the screws for installing the new load cell. Then lift the load cell from the mounting surface.

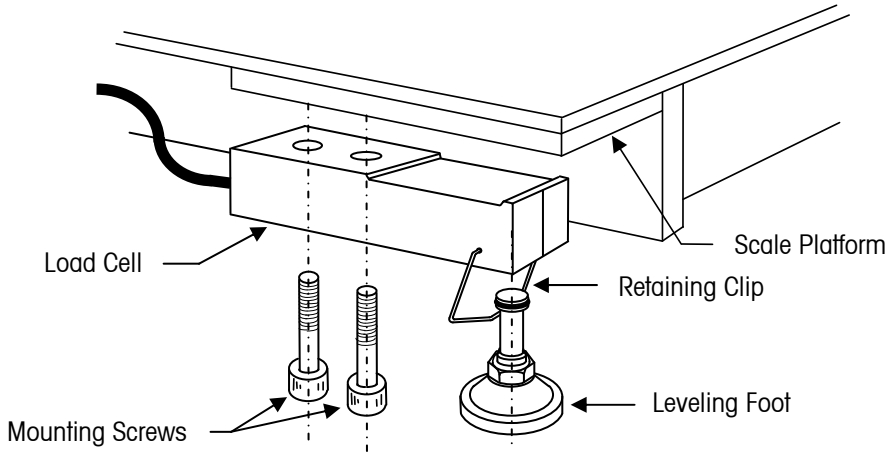


Figure 6-1: Load Cell and Leveling Foot Assembly (Corner Guard Removed)

9. Carefully pull the defective load cell's cable through the platform while feeding the string in at the junction box opening. Once the string is at the load cell location, detach it from the load cell cable.
10. Remove the leveling foot from the defective load cell. You will need to pull on one side of the retaining clip to rotate and release the foot. Install the foot in the new load cell. To install the foot, shift the retaining clip to one side of the load cell and insert the foot into the loading hole at an angle. Rotate the foot until it is fully installed.
11. Attach the new load cell's cable to the pulling string and carefully thread it through the platform into the junction box opening. Coil any excess cable and store it within the platform's side channel.

NOTE: Make sure load cell and platform mounting surfaces are free of grease and other foreign materials.

12. Secure the new load cell to the platform. Apply an anti-seize compound such as Never-Seez to the threads of the mounting screws and tighten them with a calibrated torque wrench (75 ft-lb for stainless steel hexagonal-head screws and 100 ft-lb for Grade 8 socket-head cap screws).
13. Verify that the load cell overload stop gap is set properly:

Load Cell Capacity	Overload Stop Gap
500 lb	0.009" to 0.015"
1,250 lb	0.012" to 0.018"
2,500 lb	0.017" to 0.023"

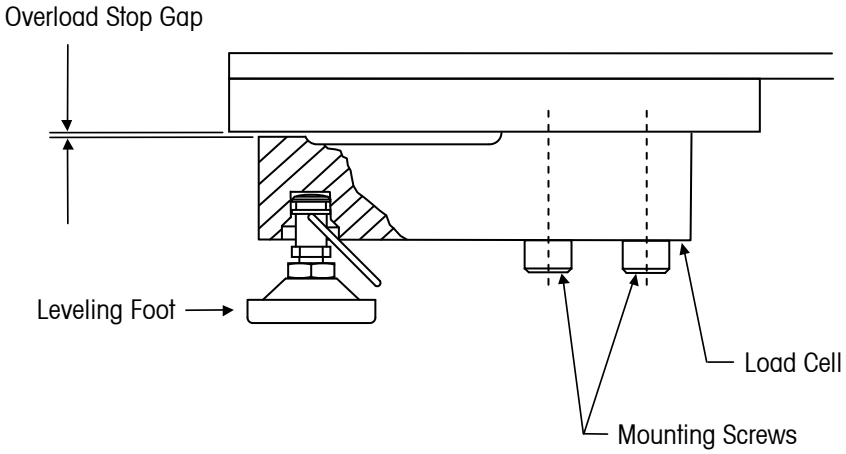


Figure 6-2: Load Cell Installation

14. Replace the corner guard.
15. Thread the load cell cable through the connector on the junction box. When enough cable is inside the box, tighten the connector.
16. Wire the new load cell cable to the proper terminal on the PCB according to the wiring codes shown in Chapter 3.
17. Reconnect the instrument cable and power-up the indicator. Perform a shift adjust and recalibrate the scale.

NOTE: It might be necessary to apply a small amount of lubricant to the cable so that it passes easily through the double-hole cord grip.

7 Service Parts

2256 VLC Floor Scale

Refer to Tables 7-1 and 7-2 when ordering parts for a current 2256 floor scale (Model 22564XXXXX-A). Refer to Tables 7-3 and 7-4 for Model 22563XXXXX-A. Model 22562XXXXX-A uses the same parts as 22563XXXXX-A, except for the leveling foot (see Table 7-5). Replacement parts for Model 22561XXXXX-A are listed in Table 7-6.

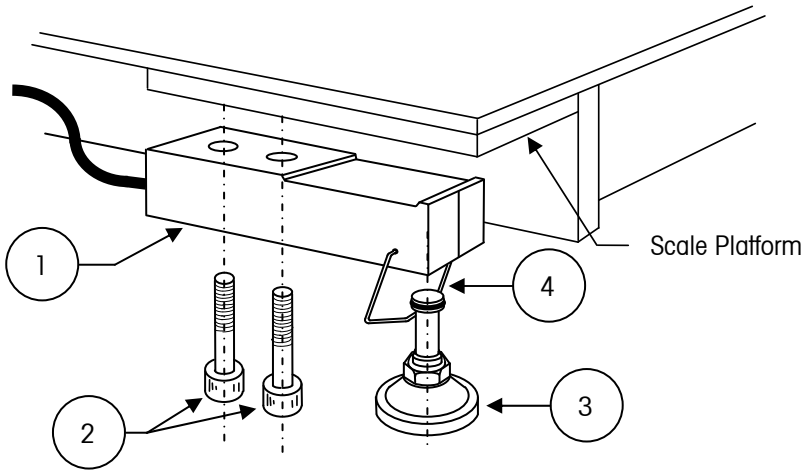


Figure 7-1: Load Cell and Leveling Foot Assembly (22564XXXXX-A)

Ref. No.	Part Number	Description	Qty.
1	TB600529-2	Model 745A Load Cell, 500 lb, 7.5-foot cable	4
	TB600363-1*	Model 745A Load Cell, 1,250 lb, 7.5-foot cable	
	TB600342-1*	Model 745A Load Cell, 2,500 lb, 7.5-foot cable	
	TB600343-1*	Model 745A Load Cell, 5,000 lb, 7.5-foot cable	
2	TN800646	1/2-13 Hex Head Cap Screw x 1.75 inches long, Stainless Steel	8
	TN800647	1/2-13 Socket Head Cap Screw x 1.75 inches long, Black Oxide	
	TN800649	1/2-13 Hex Head Cap Screw x 2 inches long, Stainless Steel (for 5K cells)	
	TN800650	1/2-13 Socket Head Cap Screw x 2 inches long, Black Oxide (for 5K cells)	
3	TN207058	Leveling Foot Assembly, Stainless Steel (includes retaining clip)	4
4	TN207061	Retaining Clip	4
--	MZ0909000005	O-Ring	4

* The -1 suffix with the part number indicates the length of the load cell cable: TB600XXX-1 = 7.5 feet (for 36x36, 48x48, 48x60, 60x60, and 48x72 scales). No suffix indicates a 15-foot cable: TB600XXX = 15 feet (for 60x84 scales).

Table 7-1: Load Cell and Leveling Foot Assembly (22564XXXXX-A)

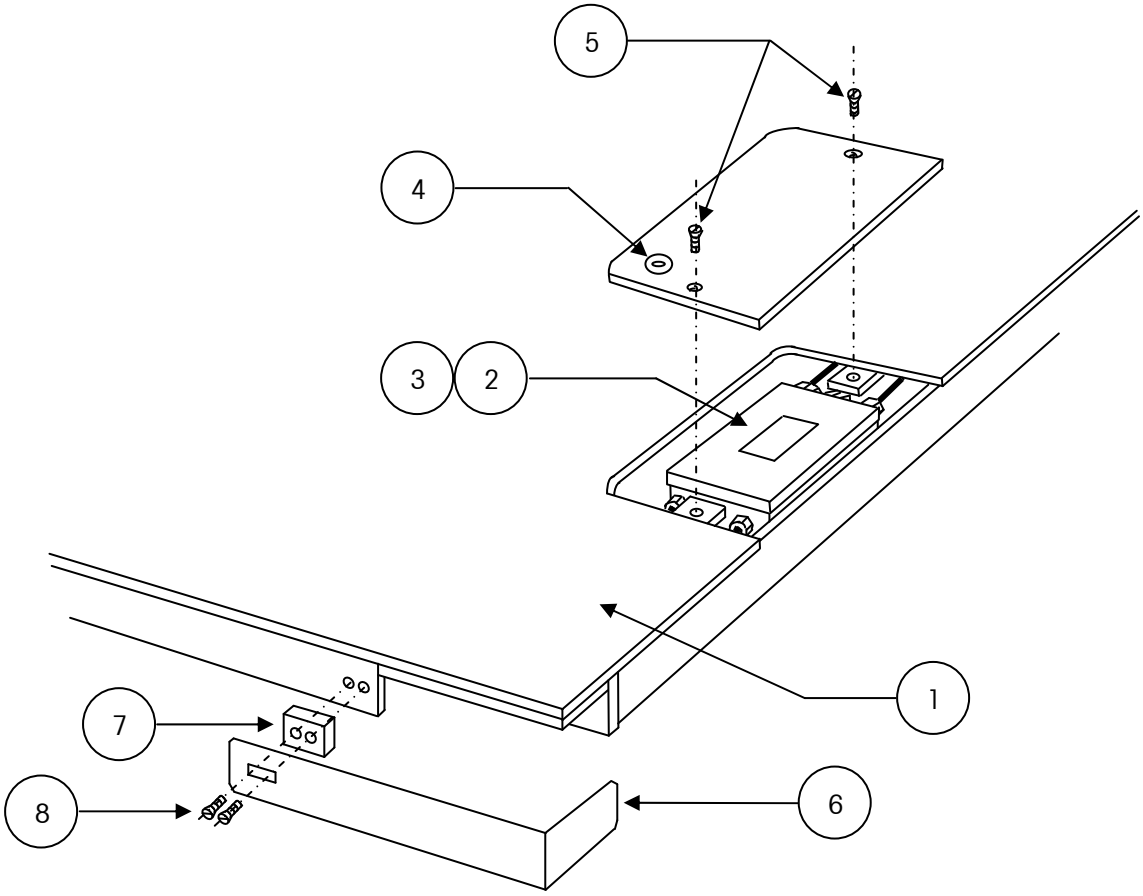


Figure 7-2: Platform and Junction Box Assembly (22564XXXXX-A)

Ref. No.	Part Number	Description	Qty.
1	TC207096-MT-56	36-inch x 36-inch Platform, Carbon Steel, Tread Plate (1K, 2.5K, 5K)	1
	TC207097-MT-56	48-inch x 48-inch Platform, Carbon Steel, Tread Plate (1K, 2.5K, 5K)	
	TC207102-MT-56	48-inch x 48-inch Platform, Carbon Steel, Tread Plate (10K)	
	TC207154-MT-56	48-inch x 60-inch Platform, Carbon Steel, Tread Plate (2.5K and 5K)	
	TC207103-MT-56	48-inch x 60-inch Platform, Carbon Steel, Tread Plate (10K)	
	TC207100-MT-56	60-inch x 60-inch Platform, Carbon Steel, Tread Plate (2.5K and 5K)	
	TC207105-MT-56	60-inch x 60-inch Platform, Carbon Steel, Tread Plate (10K)	
	TC207099-MT-56	48-inch x 72-inch Platform, Carbon Steel, Tread Plate (2.5K and 5K)	
	TC207104-MT-56	48-inch x 72-inch Platform, Carbon Steel, Tread Plate (10K)	
	TC207155-MT-56	60-inch x 84-inch Platform, Carbon Steel, Tread Plate (2.5K and 5K)	
	TC207106-MT-56	60-inch x 84-inch Platform, Carbon Steel, Tread Plate (10K)	
	TC207096-SS-56	36-inch x 36-inch Platform, Stainless Steel, Smooth Plate (1K, 2.5K, 5K)	
	TC207097-SS-56	48-inch x 48-inch Platform, Stainless Steel, Smooth Plate (1K, 2.5K, 5K)	
	TC207102-SS-56	48-inch x 48-inch Platform, Stainless Steel, Smooth Plate (10K)	
	TC207154-SS-56	48-inch x 60-inch Platform, Stainless Steel, Smooth Plate (2.5K and 5K)	
	TC207103-SS-56	48-inch x 60-inch Platform, Stainless Steel, Smooth Plate (10K)	
	TC207100-SS-56	60-inch x 60-inch Platform, Stainless Steel, Smooth Plate (2.5K and 5K)	
	TC207105-SS-56	60-inch x 60-inch Platform, Stainless Steel, Smooth Plate (10K)	
	TC207099-SS-56	48-inch x 72-inch Platform, Stainless Steel, Smooth Plate (2.5K and 5K)	
	TC207104-SS-56	48-inch x 72-inch Platform, Stainless Steel, Smooth Plate (10K)	
	TC207155-SS-56	60-inch x 84-inch Platform, Stainless Steel, Smooth Plate (2.5K and 5K)	
	TC207106-SS-56	60-inch x 84-inch Platform, Stainless Steel, Smooth Plate (10K)	
2	TA100831-SS*	Analog Junction Box Assembly Includes: TC100814 Analog PCB TA800218 Desiccant Bag	1
3	MZ0901010379	1/4-20 Phillips Head Screw x 1/4 inch long, Stainless Steel	2
4	TN206847	Circular Bubble Level	1
5	MZ0901010035	3/8-16 Flat Head Screw x 3/4 inch long, Stainless Steel	2
6	TN207225-SSE	Corner Guard	4
7	TN207223-SSE	Spacer	4
8	MZ0901010667	1/4-20 Flat Head Screw x 0.75 inches long, Stainless Steel	8

* Some scales are equipped with a TB100481 junction box, which includes a 13640300A analog PCB.

Table 7-2: Platform and Junction Box Assembly (22564XXXXX-A)

Model 22563XXXXX-A

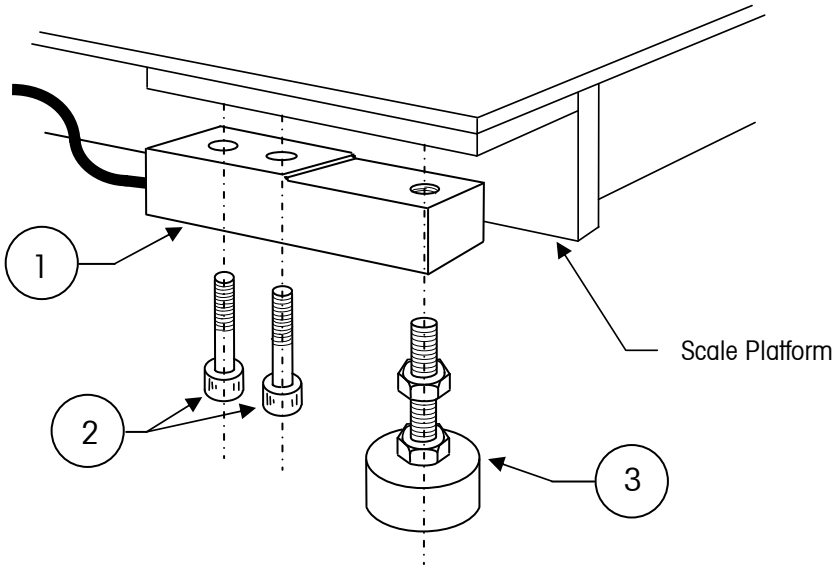


Figure 7-3: Load Cell and Leveling Foot Assembly (22563XXXXX-A)

Ref. No.	Part Number	Description	Qty.
1	TB601015-XXX* TB601016-XXX* TB601018-XXX*	Model 793 Load Cell, 1,000 lb (3 mV/V) Model 793 Load Cell, 2,500 lb (3 mV/V) Model 793 Load Cell, 5,000 lb (3 mV/V)	4
2	TN800647 TN800648	1/2-13 Socket Head Cap Screw x 1.75 inches long, Black Oxide 1/2-13 Socket Head Cap Screw x 1.75 inches long, Stainless Steel	8
3	TN206043-SS	Leveling Foot, Stainless Steel	4

* -XXX specifies the length of the load cell cable: -008 = 8 feet (for 36x36, 48x48, 48x60, 60x60, and 48x72 scales) and -020 = 20 feet (for 60x84 scales).

Table 7-3: Load Cell and Leveling Foot Assembly (22563XXXXX-A)

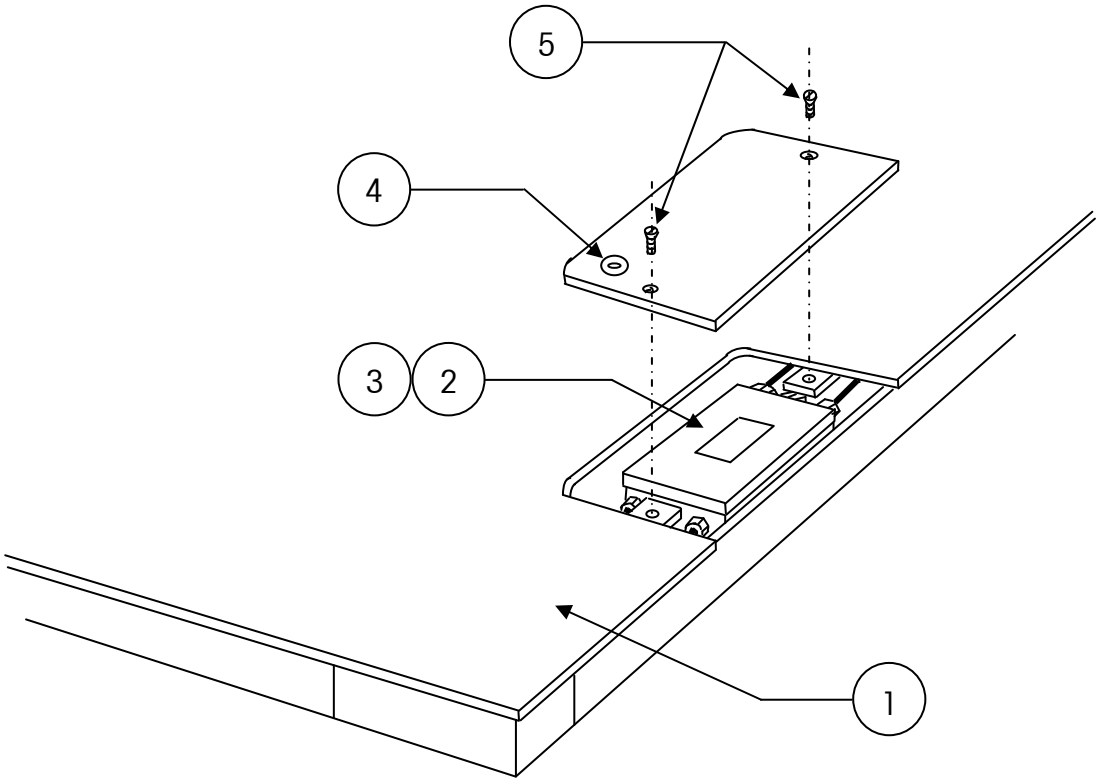


Figure 7-4: Platform and Junction Box Assembly (22563XXXXX-A)

Ref. No.	Part Number	Description	Qty.
1	TC205104-1	36-inch x 36-inch Platform, Carbon Steel (2.5K and 6K)	1
	TC205105-1	48-inch x 48-inch Platform, Carbon Steel (2.5K and 6K)	
	TC205106-1	48-inch x 48-inch Platform, Carbon Steel (10K)	
	TC205107-1	48-inch x 60-inch Platform, Carbon Steel (2.5K and 6K)	
	TC205108-1	48-inch x 60-inch Platform, Carbon Steel (10K)	
	TC205109-1	60-inch x 60-inch Platform, Carbon Steel (2.5K and 6K)	
	TC205110-1	60-inch x 60-inch Platform, Carbon Steel (10K)	
	TC205111-1	48-inch x 72-inch Platform, Carbon Steel (2.5K and 6K)	
	TC205112-1	48-inch x 72-inch Platform, Carbon Steel (10K)	
	TC205113-1	60-inch x 84-inch Platform, Carbon Steel (2.5K and 6K)	
	TC205114-1	60-inch x 84-inch Platform, Carbon Steel (10K)	
	TC205115-1	36-inch x 36-inch Platform, Stainless Steel (2.5K and 6K)	
	TC205116-1	48-inch x 48-inch Platform, Stainless Steel (2.5K and 6K)	
	TC205117-1	48-inch x 48-inch Platform, Stainless Steel (10K)	
	TC205118-1	48-inch x 60-inch Platform, Stainless Steel (2.5K and 6K)	
	TC205119-1	48-inch x 60-inch Platform, Stainless Steel (10K)	
	TC205120-1	60-inch x 60-inch Platform, Stainless Steel (2.5K and 6K)	
	TC205121-1	60-inch x 60-inch Platform, Stainless Steel (10K)	
	TC205122-1	48-inch x 72-inch Platform, Stainless Steel (2.5K and 6K)	
	TC205123-1	48-inch x 72-inch Platform, Stainless Steel (10K)	
	TC205124-1	60-inch x 84-inch Platform, Stainless Steel (2.5K and 6K)	
	TC205125-1	60-inch x 84-inch Platform, Stainless Steel (10K)	
2	TB100481	Analog Junction Box Assembly Consists of: *13640300A Analog PCB TA800218 Desiccant Bag	1
3	MZ0901010379	1/4-20 Phillips Head Screw x 1/4 inch long, Stainless Steel	4
4	TN201817	Circular Bubble Level	1
5	MZ0901010035	3/8-16 Flat Head Screw x 3/4 inch long, Stainless Steel	2

* May have a letter prefix.

Table 7-4: Platform and Junction Box Assembly (22563XXXXX-A)

Model 22562XXXXX-A

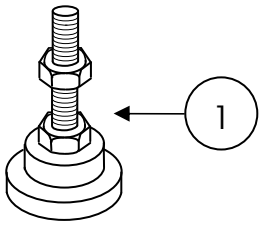


Figure 7-5: Leveling Foot (Model 22562XXXXX-A)

Ref. No.	Part Number	Description	Qty.
1	TN203980 TN203980-SS	Leveling Foot, Zinc Plated Leveling Foot, Stainless Steel	4

Table 7-5: Leveling Foot (22562XXXXX-A)

Model 22561XXXXX-A

NOTE: Reference drawing TB203366).

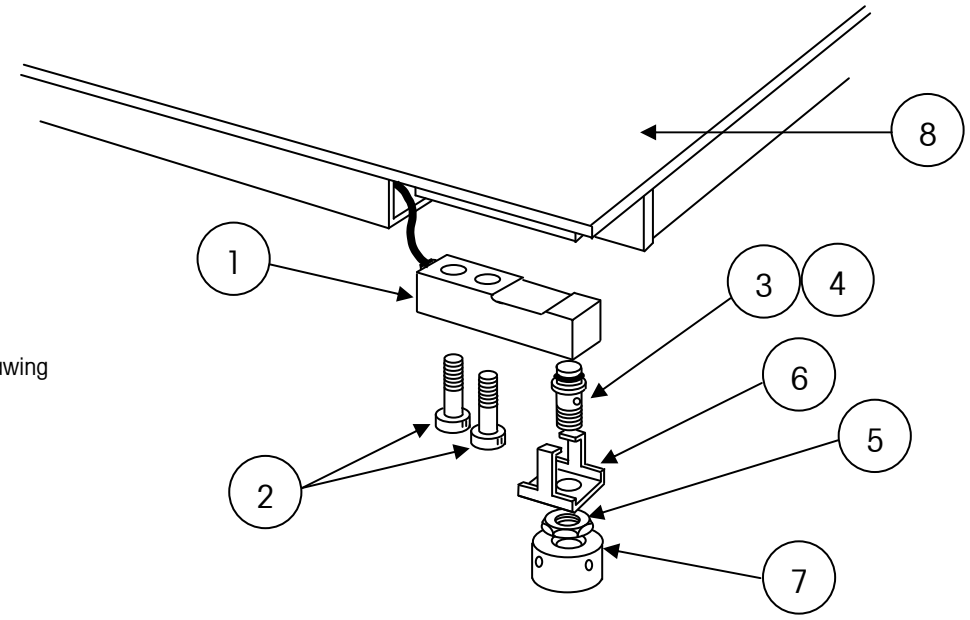


Figure 7-6: Load Cell and Leveling Foot Assembly (Model 22561XXXXX-A)

Ref. No.	Part Number	Description	Qty.
1	TB600363-1	Model 745 Load Cell, 1,250 lb (2 mV/V)	4
	TB600342-1	Model 745 Load Cell, 2,500 lb (2 mV/V)	
	TB600343-1	Model 745 Load Cell, 5,000 lb (2 mV/V)	
2	MZ0901010333	1/2-13 Socket Head Screw x 1.75 inches long	8
	MZ0901010409	1/2-13 Socket Head Screw x 2 inches long	
	MZ0901010384	1/2-13 Hex. Head Screw x 1.75 inches long, Stainless Steel	
	MZ0901010441	1/2-13 Hex. Head Screw x 2 inches long, Stainless Steel	
3	TA203345	Mounting Foot Load Pin, 3K and 6K	4
	TA203346	Mounting Foot Load Pin, 10K	
4	MZ0909000005	O-Ring	4
5	MZ0901020087	Hex. Jam Nut, 7/16-20, Stainless Steel	4
6	TA203104	Mounting Foot Retainer Clip (3K and 6K)	4
	TA203347	Mounting Foot Retainer Clip (10K)	
7	TN203103	Mounting Foot Base	4
8	TB203359-1	36-inch x 36-inch Platform, Carbon Steel (3K and 6K)	1
	TB203095	48-inch x 48-inch Platform, Carbon Steel (3K and 6K)	
	TB203417-1	48-inch x 48-inch Platform, Carbon Steel (10K)	
	TB203096	48-inch x 60-inch Platform, Carbon Steel (3K and 6K)	
	TB203418-1	48-inch x 60-inch Platform, Carbon Steel (10K)	
	TB203097	60-inch x 60-inch Platform, Carbon Steel (3K and 6K)	
	TB203331-1	60-inch x 60-inch Platform, Carbon Steel (10K)	
	TB203419-1	36-inch x 36-inch Platform, Stainless Steel (3K and 6K)	
	TB203098	48-inch x 48-inch Platform, Stainless Steel (3K and 6K)	
	TB203420-1	48-inch x 48-inch Platform, Stainless Steel (10K)	
	TB203099	48-inch x 60-inch Platform, Stainless Steel (3K and 6K)	
	TB203421-1	48-inch x 60-inch Platform, Stainless Steel (10K)	
	TB203100	60-inch x 60-inch Platform, Stainless Steel (3K and 6K)	
	TB203422-1	60-inch x 60-inch Platform, Stainless Steel (10K)	

Table 7-6: Load Cell and Leveling Foot Assembly (Model 22561XXXXX-A)

8 Reference Material

Reference Drawings

Scale Capacity	General Dimensions	Wiring Diagram
1,000 lb, 2,500 lb, 5,000 lb, 10,000 lb	TB207177	TB100505

Recommended Spare Parts

For part numbers, refer to the service parts list (Chapter 7).

Quantity	Description
1	Load cell (capacity of cell required depends on scale capacity)
1	Junction box circuit board
1	Junction box desiccant bag

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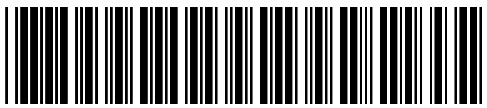

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