METTLER TOLEDO

2888

DECKMATE®

Floor Scale

Installation and Service Manual

61070028
(4/18).06

METTLER TOLEDO

Publication Revision History

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

Publication Name: 2888 DECKMATE Floor Scale Installation and Service Manual

Part Number: 14859700A **Publication Date: 10/96**

Part Number	Date	Revisions
A14859700A	2/01	Reformatted manual. Added new scale sizes/capacities and new ramps. Added swivel caster replacement instructions.
B14859700A	11/04	Revised manual to include new portable scale design.
C14859700A	11/05	Added information about 24x24 sizes. Revised hazardous area information.
C14859700A.01	6/07	Revised DOC, hazardous area drawings, and part numbers.
C14859700A.02	1/10	Revised manual to include new B revision design for static and portable scales. Removed warranty information.
C14859700A.03	2/11	Added information about 48x48 and 48x60 sizes. Revised portable frame design.
C14859700A.04	9/11	Removed 744 and 745 load cells.
61070028.05	2/15	Changed part number of manual. Changed to advanced load cells and precision junction box.
61070028.06	4/18	Added new Declarations of Conformity. Revised hazardous area 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

WARNING!

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used properly, i.e., in accordance with the instructions manual, may cause harmful interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference to radio communications in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

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30314021A

Model/Type: 0745A...

Mettler-Toledo GmbH
Im Langacher 44, 8606 Greifensee, Switzerland

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METTLER TOLEDO

30319415A

Model/Type: AJB..., AJB...X

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CE		EN 60079-0: 2012 EN 60079-11: 2012 EN 60079-15: 2010 EN 60079-31: 2009	DEKRA 03ATEX1397 X II 3 G Ex nA IIC T4 Gc II 3 G Ex ic IIC T4 Gc II 3 D Ex tc IIIC T70°C...T90°C Dc

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Mettler-Toledo GmbH
Issued on: 2016-04-20

Zhu Dan
General Manager

Ralph Werren
Head of SBU

Precautions

READ this manual BEFORE operating or servicing this equipment.

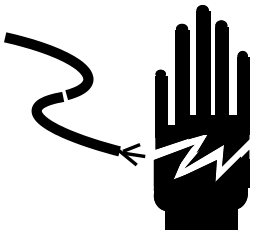
FOLLOW these instructions carefully.

SAVE this manual for future reference.

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

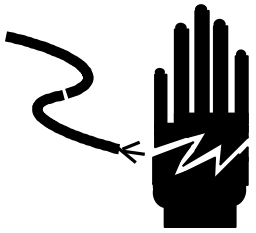
ALWAYS DISCONNECT this equipment from the power source before cleaning or performing maintenance.

CALL METTLER TOLEDO for parts, information, and service.



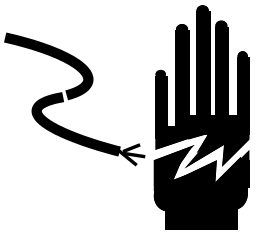
⚠ WARNING

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.



⚠ WARNING

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/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

IF USED IN A HAZARDOUS AREA, THE HAZARDOUS AREA MUST BE MADE SAFE PRIOR TO INSTALLATION, REPLACEMENT, OR TROUBLESHOOTING. FAILURE TO COMPLY COULD RESULT IN PERSONAL INJURY, DEATH, AND/OR PROPERTY DAMAGE.

⚠ 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

The Model 2888 DECKMATE® floor scale is a fully electronic scale for top-of-floor weighing applications. It is available as a static scale or as a portable scale equipped with wheels. The load cell power supply is provided by the METTLER TOLEDO digital indicator.

Model 2888 Portable Floor Scale

Load Cells

Each DECKMATE floor scale includes four stainless steel load cells. They allow 100% end loading across any end of the scale. Each load cell is complete with an integral four-conductor, shielded, color-coded cable attached to a stainless steel junction box. The suspension system consists of a stainless steel rocker pin positioned between the load cell and a receiver mounted to the frame (see Figure 1-1).

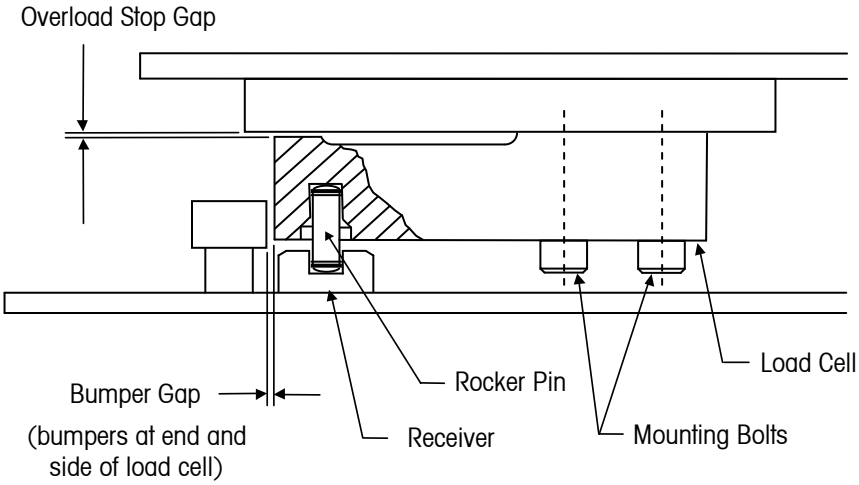


Figure 1-1: Load Cell Suspension Detail

Load Cell Specifications

Model Number	0745A
Rated Capacity (RC)	500 lb, 1,250 lb, 2,500 lb
Rated Output	2 mV/V
Maximum Excitation Voltage*	15 VDC or VAC rms
Recommended Excitation Voltage	15 VDC
Input Terminal Resistance	384 ± 10 ohms
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 terminal.

Platform Assembly

DECKMATE floor scales have a channel-reinforced deck with "live" side rails that are part of the weighing platform. This platform provides mounting for the four load cells, protection for the load cell cables, and mounting for the junction box (see Figure 1-2). For portable scales, the junction box is mounted on the instrument column.

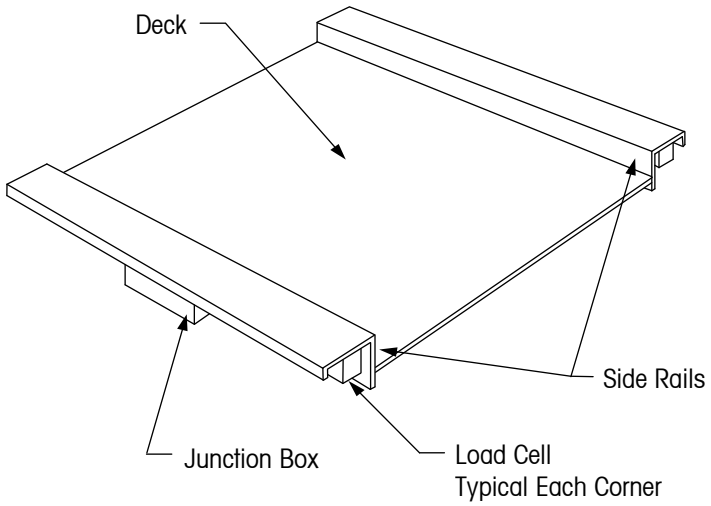


Figure 1-2: Platform Assembly

Support Frame for Static Scale

Each static scale has a support frame under the platform (see Figure 1-3). At each end of the scale, a section of the frame is turned up to provide a support for mounting and positioning a ramp.

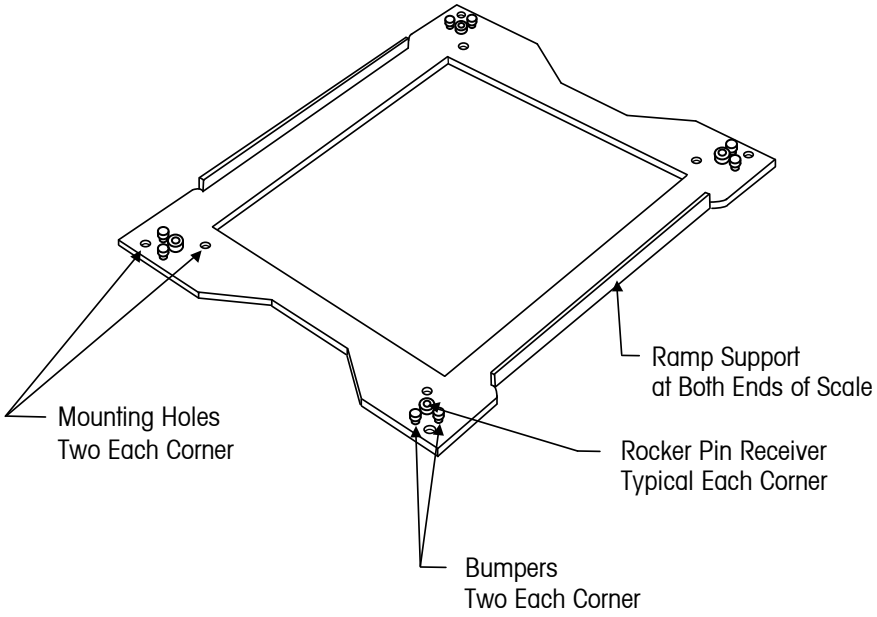
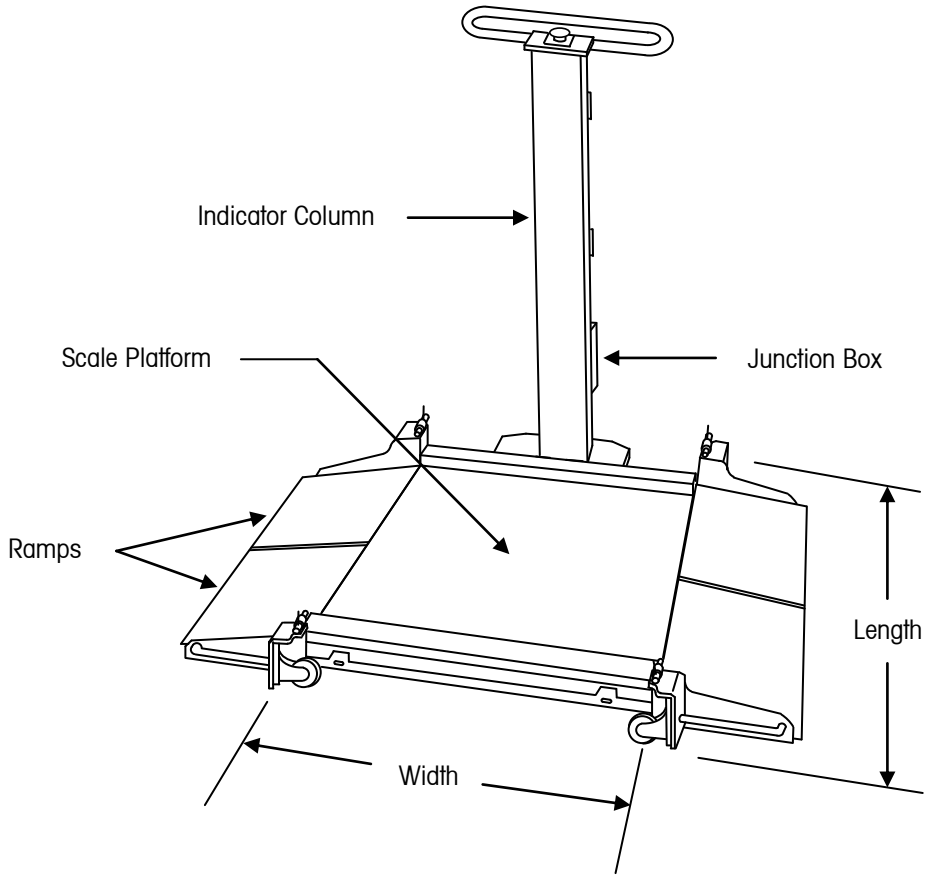


Figure 1-3: Support Frame for Static Scale

Portable Assembly

The support frame for the portable assembly is designed to make the scale easy to move from one weighing location to another (see Figure 1-4).



NOTE: Do not move the scale when there is a load on the platform.

Figure 1-4: Portable Scale Assembly

Scale Deck	Length	Width (in portable mode)	Weighing Height (to top of deck)
24" x 24" (61.0 x 61.0 cm)	43.625" (110.8 cm)	27.5" (69.9 cm)	1.625" (4.1 cm)
30" x 30" (76.2 x 76.2 cm)	49.625" (126.0 cm)	33.5" (85.1 cm)	1.625" (4.1 cm)
36" x 36" (91.4 x 91.4 cm)	57.0" (144.8 cm)	39.5" (100.3 cm)	1.875" (4.8 cm)
42" x 42" (106.7 x 106.7 cm)	63.0" (160.0 cm)	45.5" (115.6 cm)	1.875" (4.8 cm)
48" x 48" (121.9 x 121.9 cm)	69.0" (175.3 cm)	51.5" (130.8 cm)	1.875" (4.8 cm)

Approvals

NTEP Certification

Model 0745A load cells meet or exceed NIST Handbook-44 requirements for Class III 5,000 divisions (multiple cell). Certificates of Conformance were issued under the National Type Evaluation Program (NTEP) of the National Conference of Weights and Measures (certificate number 92-108A5).

OIML Certification

Model 0745A metric capacity load cells meet or exceed OIML requirements for R60 C3 3000 divisions (TC2154).

Measurement Canada

Model 2888 DECKMATE floor scales are approved for 5,000 divisions by Measurement Canada (AM-5175).

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 0745A load cells were submitted to Factory Mutual for compliance with FM Approval Standards Class No. 3600, 3610, 3611, 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, 42111392; 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	0745A
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 42111392B (see Figure 1-5) or control drawing 30062229A for Canada (see Figure 1-6).

European Approval

The European safety approvals are based on entity values. The 0745A load cells were submitted to DEKRA for compliance with EN60079-0, EN60079-11, EN60079-15, and EN60079-31. They were approved as intrinsically safe devices and issued the following certificates:

KEMA 03ATEX1069
II 2 G Ex ia IIC T4 Gb
II 2 D Ex ia IIIC T100°C Db

KEMA 03ATEX1070
II 3 G Ex ic IIC T4 Gc or
II 3 G Ex nA IIC T4 Gc or
II 3 D Ex tc IIIC T100°C Dc

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

Electrical Data	0745A
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 drawing 42111367E (see Figure 1-7).

Junction Boxes

AJB641SX junction boxes were submitted to DEKRA for compliance with EN60079-0, EN60079-11, EN60079-15, and EN60079-31. They were approved as intrinsically safe devices and issued the following certificates:

DEKRA 03ATEX1396 X
II 2 G Ex ia IIC T4 Gb
II 2 D Ex ib IIIC T70°C…T90°C Db

DEKRA 03ATEX1397 X
II 3 G Ex ic IIC T4 Gc
II 3 G Ex nA IIC T4 Gc
II 3 D Ex tc IIIC T70°C…T90°C Dc

AJB641SX junction boxes have been certified to IP69K ingress protection.

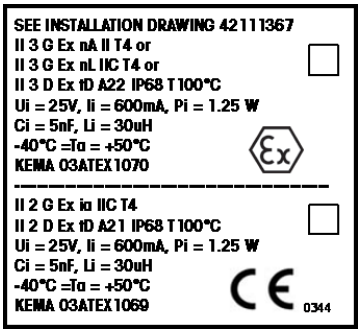
The following chart lists the entity values for the junction boxes.

Electrical Data	15V ISB Barrier	5V ISB Barrier
U_o (Total voltage output)	17.3 V	8.6 V
I_o (Total current output)	302 mA	300 mA
P_o (Total power output)	1 W	340 mW
C_o (Allowable capacitance)	0	0
L_o (Allowable inductance)	0	0

When used in hazardous areas, the junction boxes must be installed according to installation instructions document 30097779 (see Figure 1-8).

Product Markings

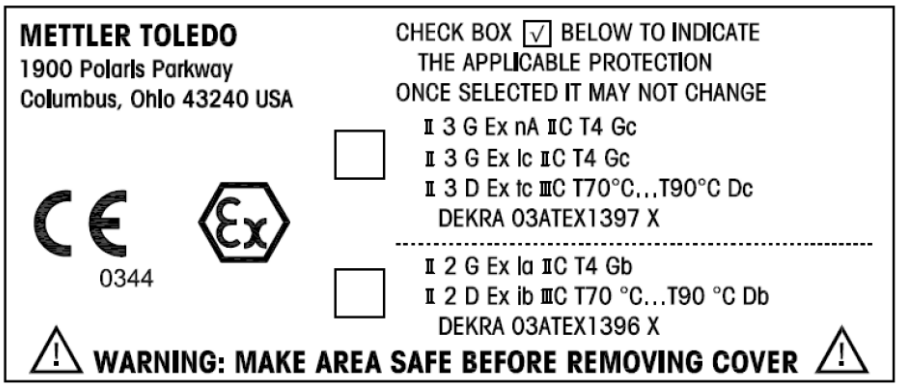
METTLER TOLEDO is not responsible for classifying hazardous areas. Each 0745A load cell should have the following label attached to it:



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 (DEKRA 03ATEX1069 or DEKRA 03ATEX1070). Once the label has been marked, it may not be changed.

Junction Boxes

AJB641SX 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 (DEKRA 03ATEX1396 X or DEKRA 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.

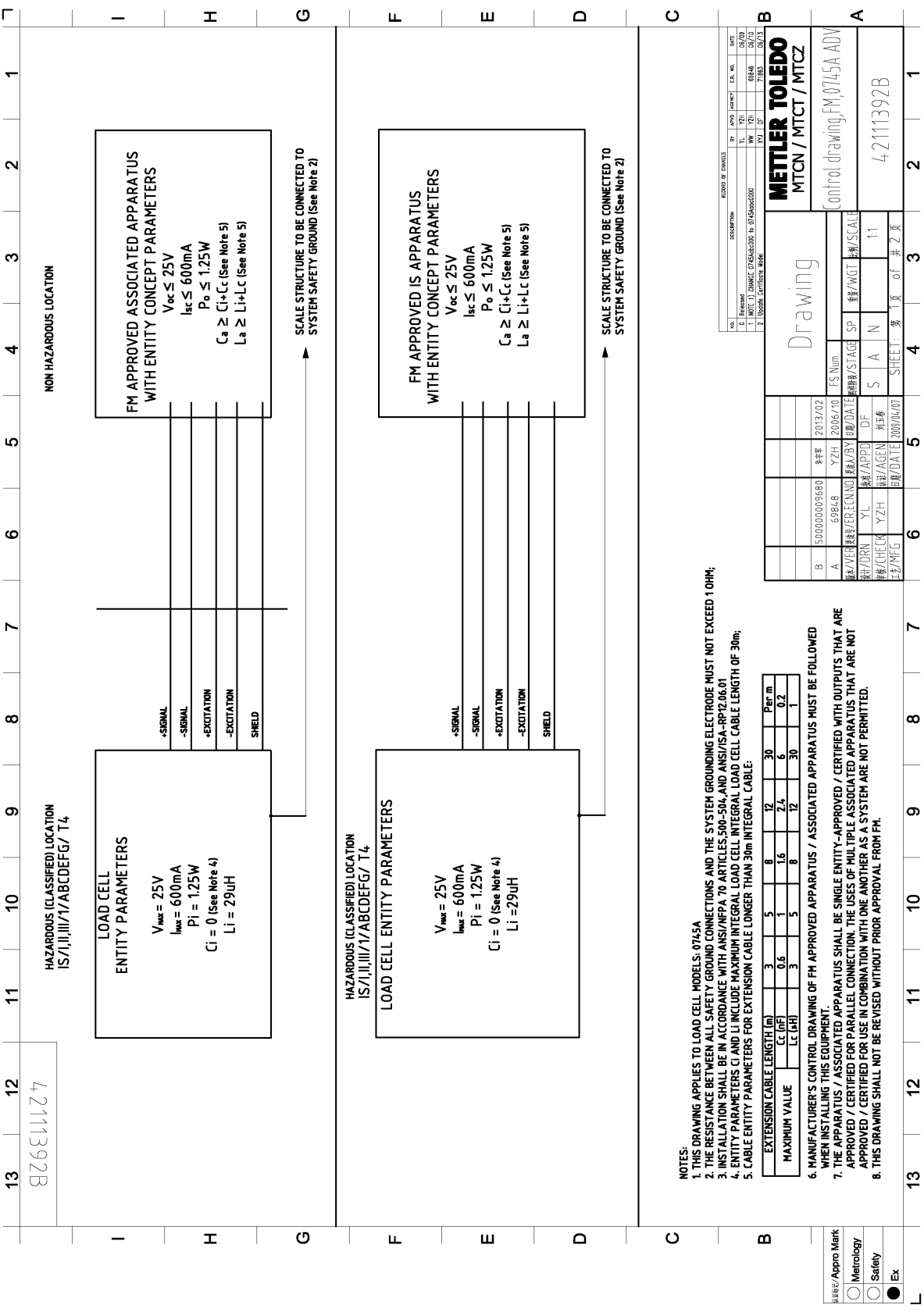


Figure 1-5: Control Drawing for 0745A Load Cell (Page 1 of 2)

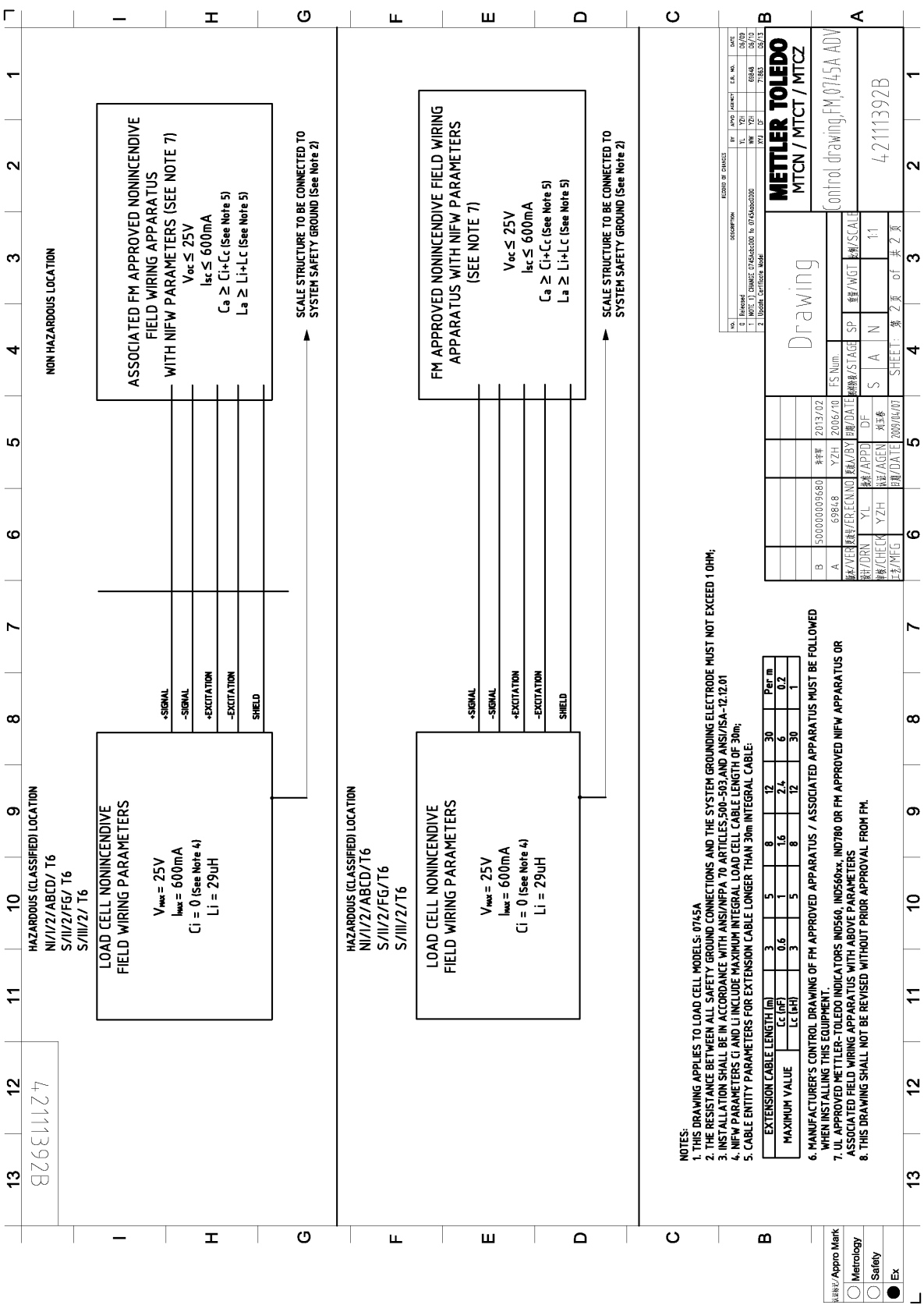


Figure 1-5: Control Drawing for 0745A Load Cell (Page 2 of 2)

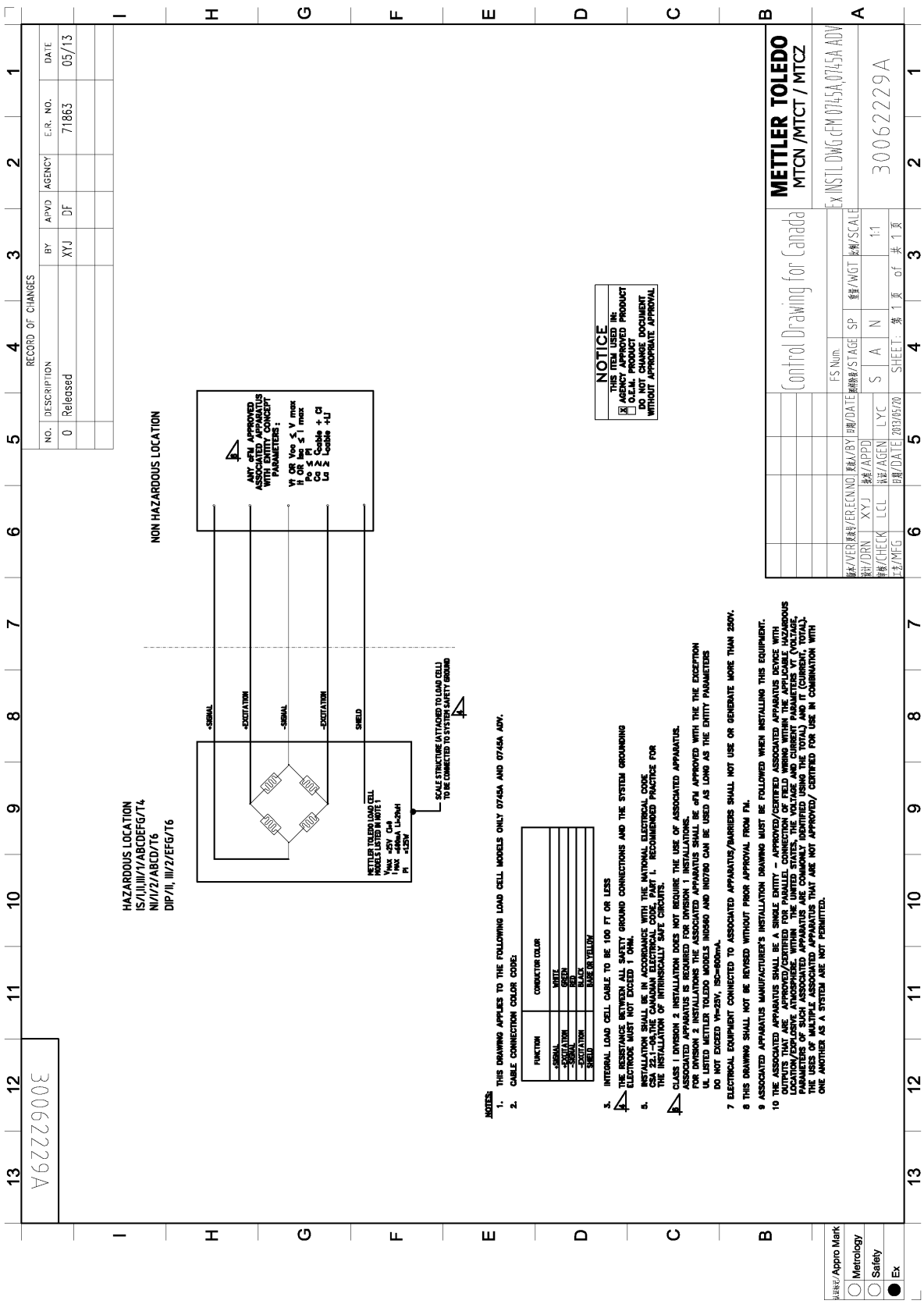


Figure 1-6: Control Drawing for 0745A Load Cell (Canada)

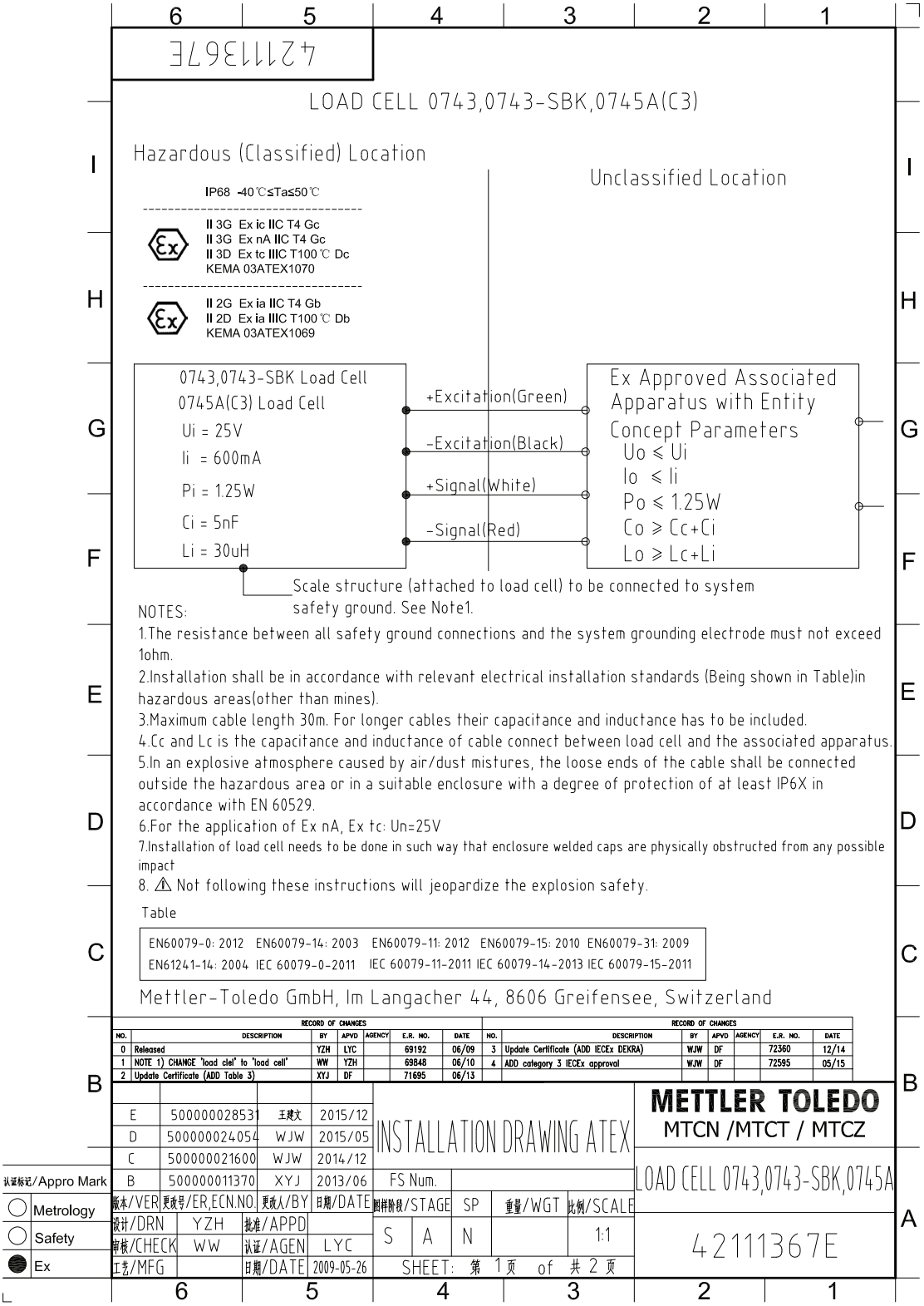


Figure 1-7: Installation Drawing for 0745A Load Cell

Precision Junction Boxes – Manual for Hazardous Area

⚠ CAUTION

BEFORE WORKING IN HAZARDOUS AREA MAKE SURE THE LOCATION IS SAFE. FAILURE TO OBSERVE THESE PRECAUTIONS COULD RESULT IN BODILY HARM OR DAMAGE TO OR DESTRUCTION OF THE EQUIPMENT.

Scope

Precision Junction Boxes AJB641SX, AJB841SX

Use

These products are capable for use in hazardous area Zone 1/21 and Zone 2/22.

Entity parameters for Cat 2 installation:

Ui = 17.3V, Ii = 302mA, Pi = 1W, Ci = Li = 0 (Matches 15V ISB Barrier)

Ui = 8.6V, Ii = 300mA, Pi = 340mW, Ci = Li = 0 (Matches 5V ISB Barrier)

Entity parameters for Cat 3 (Ex ic) installation:

Ui = 17.3V, Ii = 302mA, Pi = 1W, Ci = Li = 0 (Matches 15V ISB Barrier)

For Cat 3 (Ex nA or Ex tc): Ui = 30V, Ii = 1A.

Special Conditions for Safe Use

The Junction Boxes shall be installed in such a way that the risk of mechanical danger is low, ambient temperature range -20°C to +60°C. The specified temperature T70°C to T90°C for application in explosive atmospheres caused by air/dust mixtures, is based upon an ambient temperature of 40°C or 60°C respectively.

For applications in explosive atmospheres caused by dust, electrostatic charges of the marking label on the enclosure shall be avoided.

For intrinsically safe operation, the use of a resistively-limited Intrinsically Safe Load Cell Barrier with appropriate entity parameters, such as METTLER TOLEDO ISB05000 or ISB150000, must be used.

Sealing

For unused conduits only use supplied blind plugs with hazardous marking.

Marking

Check respective box with permanent marker or similar means. See sample below.

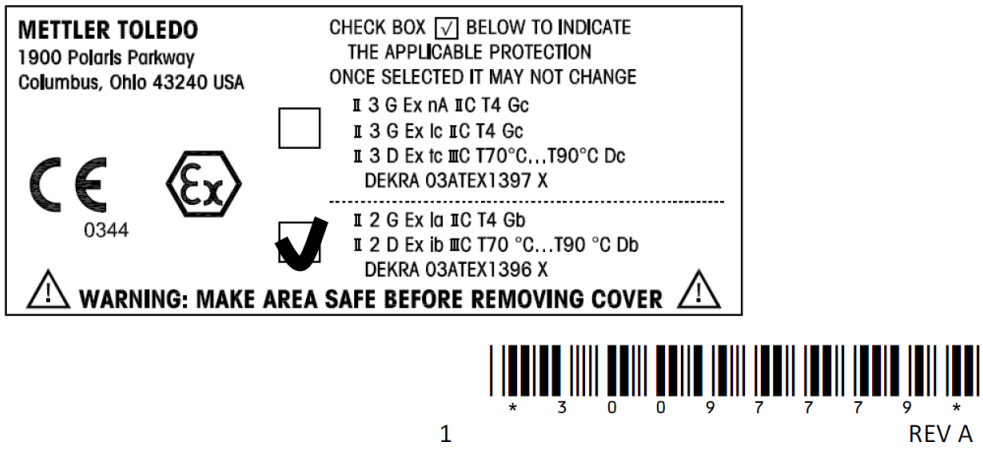


Figure 1-8: Installation Instructions for Junction Box

2 Inspection and Site Selection

Inspection

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

1. Platform and frame assembly
2. Load cells and rocker pins
3. Load cell cables
4. Junction box

If the scale is damaged, 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 to make sure that it meets the following requirements:

1. The floor where the scale will be positioned should be level.
2. The floor/support at each corner of the scale should be strong enough to support the scale when it is loaded to full weighing capacity.
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.

⚠ WARNING

IF THE SCALE IS USED IN A HAZARDOUS AREA, THE HAZARDOUS AREA MUST BE MADE SAFE PRIOR TO INSTALLATION, REPLACEMENT, OR TROUBLESHOOTING. FAILURE TO COMPLY COULD RESULT IN PERSONAL INJURY, DEATH, AND/OR PROPERTY DAMAGE.

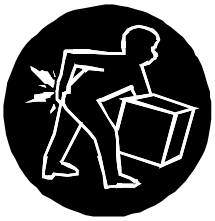
3 Installation

Portable Scale

Installation procedure for a Model 2888 DECKMATE portable scale:

1. Bolt the indicator mounting column to the scale frame.
2. Attach the indicator and mounting bracket at the top of the column.
3. Connect the indicator cable to the scale's junction box (see Figure 3-3 and Table 3-1 for wiring information).
4. Attach the adhesive-backed level to the scale frame (on the mounting plate where the instrument column is installed).

Static Scale



⚠ 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.

Installation procedure for a Model 2888 DECKMATE static scale:

1. Position the DECKMATE floor scale in the desired location.
2. Remove the platform from the scale frame by lifting the platform straight up.
3. Locate the anchor holes in all four corners of the frame. There are a total of eight anchor holes, two holes per corner (see Figure 3-1).
4. Drill anchor holes into the floor, using the frame as a guide. Eight flat head socket cap screws (1/2-13 UNC x 1.5" long) are required to secure the frame to the floor. The 1/2" anchors and 1/2-13 flat head screws are to be provided by others or can be purchased from METTLER TOLEDO. Drill anchor holes to the diameter and depth specified by the anchor supplier.
5. All corners of the frame must be in contact with the floor and must be level within ±1/16". If the scale is out of level or if gaps exist between the frame and floor, shimming is required. Corner shims (1/16" thick) can be purchased from METTLER TOLEDO (part number TN202913 / 68004314) or fabricated using Figure 3-2 as a guide.
6. Secure the frame to the floor using the eight flat head anchor screws.
7. Connect the indicator cable to the scale's junction box (see Figure 3-3 and Table 3-1 for wiring information).

8. Clear all debris from the scale area. Make sure that all four load pin receivers in the frame are clean and free of foreign material.
9. Position the platform on the scale frame. Make sure that there is slack in the cable between the frame and platform and that the cables are not being pinched.
10. Move the platform back and forth in both directions to make sure that the rocker pins are seated in the receivers and there is no binding.

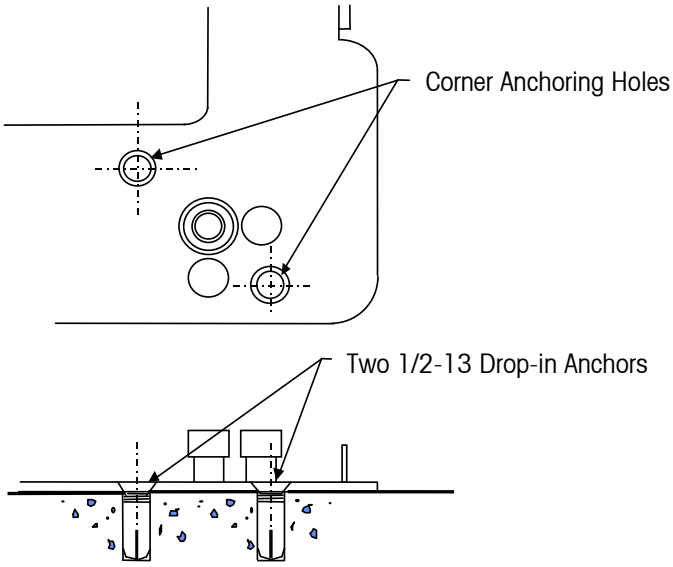


Figure 3-1: Frame Anchoring (Typical Each Corner)

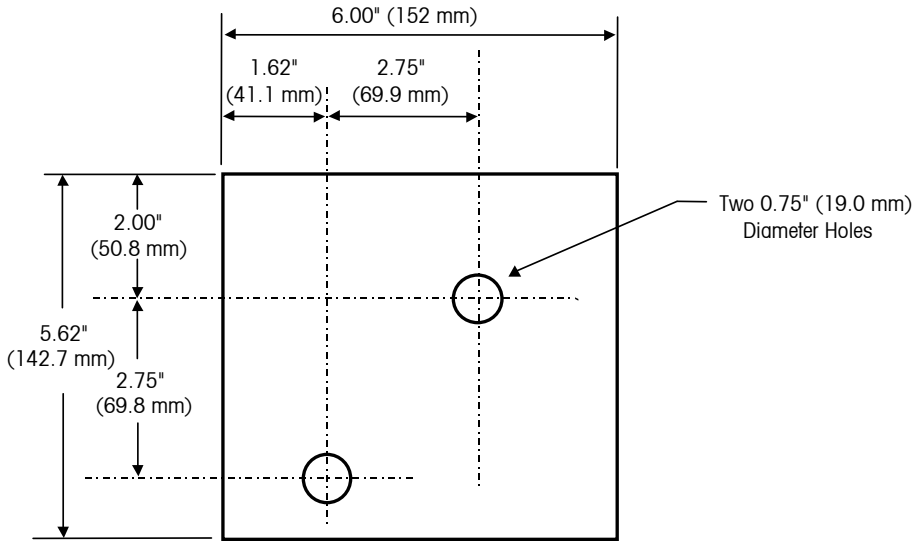


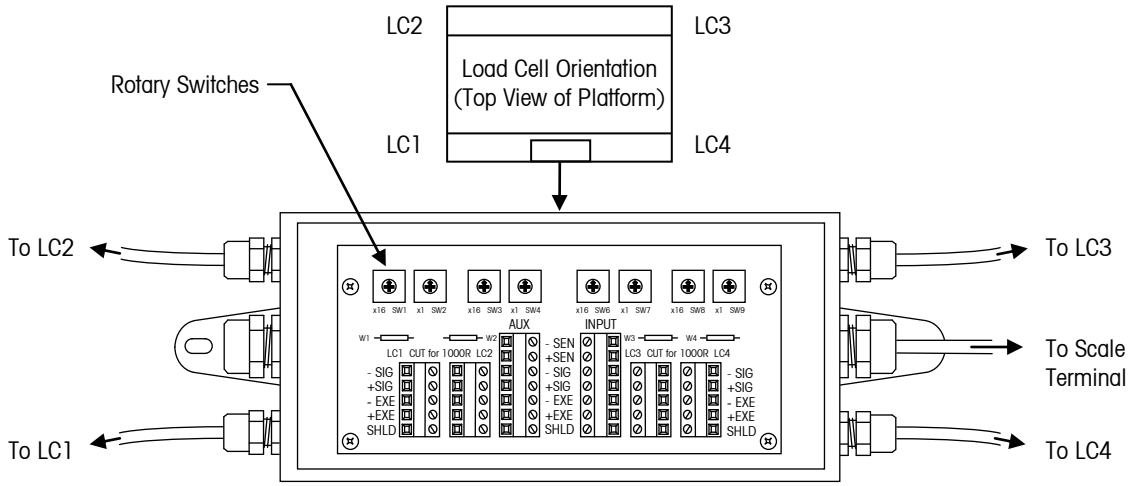
Figure 3-2: Leveling Shim Detail (Part Number TN202913)

Junction Box Wiring

The DECKMATE floor scale uses an analog junction box for summing the load cell outputs. Only analog-compatible indicators will work with the scale.

NOTE: 24" x 24" scales use a remote junction box (not built into the side rail of the platform).

1. Remove the junction box cover.
2. Thread the instrument cable through the connector at the end of the junction box. Wire the cable to the seven-position terminal strip (see Figure 3-3 and Table 3-1).
3. Check all connections and place a desiccant bag inside the junction box.
4. Reinstall the junction box cover. Make sure the rubber gasket is clean and positioned correctly.
5. Tighten all screws and make sure all cord grip caps are tight.



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

Figure 3-3: Analog Junction Box Detail

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
*Based on METTLER TOLEDO cable number 510624370 (61006641)			

Table 3-1: Analog Junction Box Wiring Codes

4 Optional Ramp Installation

Static Scale

Ramps can be used to provide access from one or both ends of a static scale. Use the following procedure to install a ramp:

1. Anchor the support frame to the floor before installing ramps on a static platform.
2. To install a ramp, place the mating end of the ramp over the ramp support (see figure 4-1).
3. Make sure that the ramp is stable. Shim under the corners of the ramp if required.

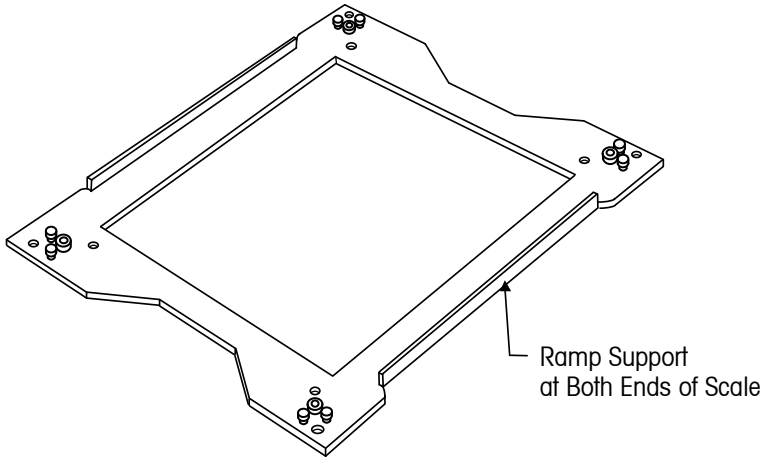


Figure 4-1: Support Frame

Portable Scale

The ramps for portable scales are hinged to the support frame. This allows you to fold the ramps perpendicular to the deck when moving the scale from one location to another. If you need to install a replacement ramp, use the following procedure:

1. Position the ramp so that its hinges line up with the hinges on the support frame.
2. Apply Loctite 262 threadlocker to the threads of the shoulder screws. Install a shoulder screw in each hinge (see Figure 4-2).
3. Install the plunger in the ramp's mounting block as shown in Figure 4-3, and secure it with the set screw. Install the caster as shown in Figure 7-2.

NOTE: The ramp on each end of a portable scale consists of two separate sections (right and left) that operate independently.

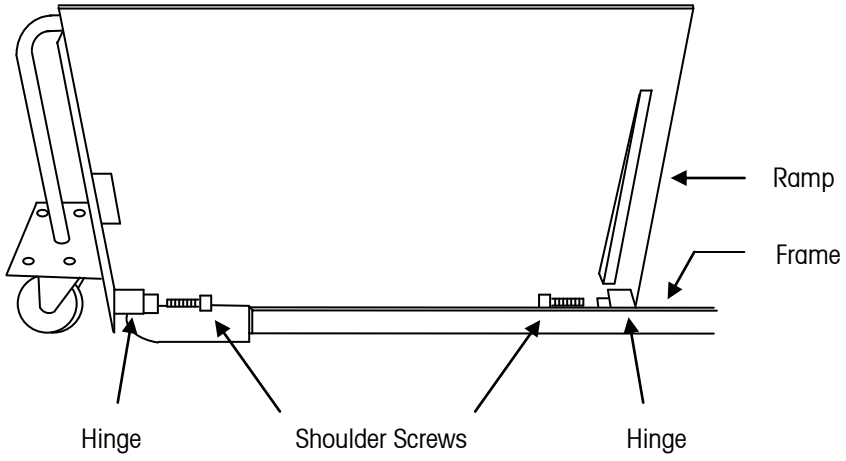


Figure 4-2: Portable Ramp Installation (Left Side)

The plunger on each ramp is used to lock the ramp into position. To change the position of a ramp, pull out the plunger until the ramp can move freely (see Figure 4-3). Use the handle on the side of the ramp to reposition the ramp, and then release the plunger. When the ramp is in the raised position, the plunger will fit into a slot located in the support frame to lock the ramp in place.

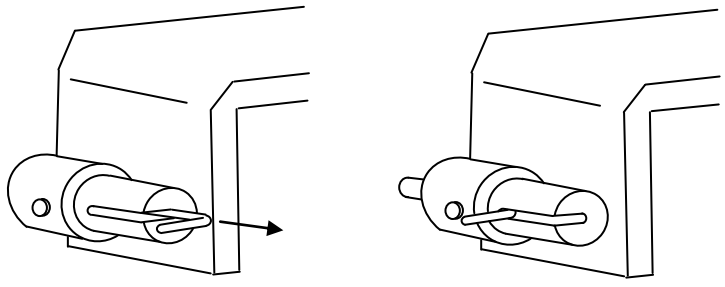
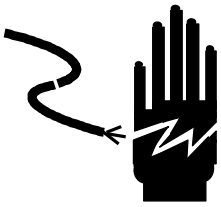


Figure 4-3: Portable Scale Plunger

5 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. The platform should be level, and the scale should not rock. 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.

Analog Junction Box Shift Adjustment

After verifying the scale's repeatability, check the scale to make sure that it is shift adjusted properly:

1. Remove all weight from the scale platform, and zero the scale.
2. Place a test weight at the center of the platform and record the weight reading (we recommend using a test weight equal to 1/4 of the scale's rated capacity).
3. Figure 5-1 shows the locations (A, B, C, and D) for positioning test weights equal to 1/4 of the scale's rated capacity. Place the test weight 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.

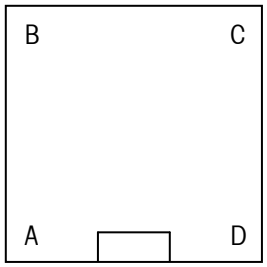


Figure 5-1: Test Weight Locations

4. If all weight readings are within the specified National Institute of Standards and Technology (NIST) Handbook 44 Scale Accuracy Requirements, there is no need to shift adjust the scale. If weight readings are out of tolerance, shift adjust the scale using either the on-load procedure or the off-load procedure.

Rotary Switches for Precision Junction Boxes

Load cell signals are adjusted using the rotary switches on the printed circuit board (PCB) inside the precision analog junction box (see Figure 5-2). There are two rotary switches for each load cell: the x16 switch is for coarse adjustments and the x1 switch is for fine adjustments. To make adjustments, use a 2-mm flat-blade screwdriver to turn a rotary switch so that the arrow points to the desired setting. Switch settings range from "0" (the lowest signal) to "F" (the highest signal).

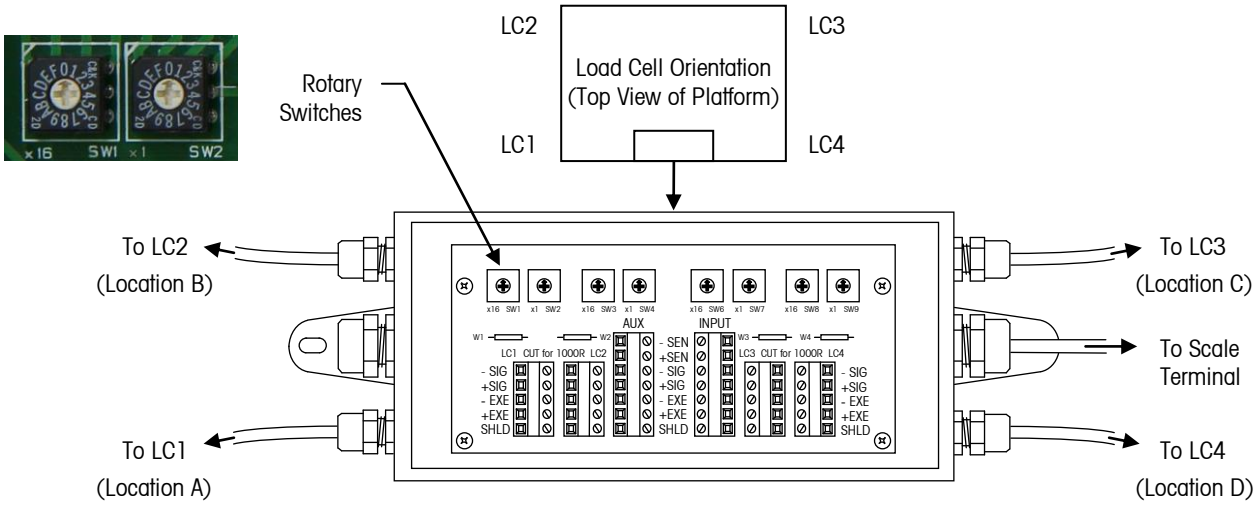


Figure 5-2: Precision Analog Junction Box

On-Load Procedure for Shift Adjustment

If you are replacing one or more load cells, refer to the Precision Junction Boxes Installation and Service Manual for complete instructions about on-load shift adjustment and the initial switch settings.

1. Remove all weight from the platform, and zero the scale.
2. Open the junction box. For portable scales, the junction box is mounted on the instrument column. For static scales, the junction box is located under the scale's side rail or mounted remotely. If the junction box is located under the side rail, remove the junction box and set it on the side rail.
3. Place a test weight at the center of the platform and record the weight reading (we recommend using a test weight equal to 1/4 of the scale's rated capacity).
4. Place the test weight at location A. Adjust the rotary switches that correspond to that corner so that the weight reading is as close as possible to the weight reading for the center of the platform (from step 3).
5. Repeat step 4 for each of the remaining test weight locations, and adjust the rotary switches for those corners.
6. Repeat steps 3 to 5 until no further adjustments are needed.
7. Replace the junction box cover, and attach the junction box to the mounting tabs under the side rail.

Off-Load Procedure for Shift Adjustment

This procedure requires access to a computer that is equipped with the InSite® configuration tool. Refer to the Precision Junction Boxes Installation and Service Manual for complete instructions about off-load shift adjustment and the values that need to be entered on the InSite® software screens.

Scale Calibration

Calibrate the scale according to the instructions provided in the manual for the scale terminal. METTLER TOLEDO recommends calibrating the scale using test weights equal to the scale's capacity.

6 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:

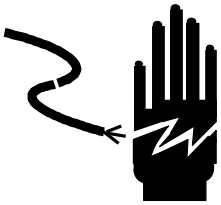
1. Make sure there are no unusual wear points, paths, or marks on the weighing platform.
2. Make sure the scale frame is not bent or damaged.
3. Make sure the junction box cover is properly sealed and all cable connectors are tight against the enclosure.
4. Make sure there is no moisture or foreign material around or inside the junction box assembly.
5. Make sure the instrument cable is not damaged or binding the scale.
6. Make sure there is no debris or material built up under or around the platform that could prevent the platform from moving freely.
7. Visually inspect the load cells, rocker pins, and fixed bumpers for signs of unusual wear.
8. Check repeatability and shift of the scale.

7 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 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 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 junction box cover and check inside the junction box for moisture or foreign material.
3. Make sure that all wiring connections are tight and that no insulation material is touching the terminal contacts.
4. Check all cable connections to make sure they are wired correctly. The wiring color codes are given in Table 7-1:

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
*Based on METTLER TOLEDO cable number 510624370 (61006641)			

Table 7-1: Load Cell Wiring Color Codes

5. Check all cable connectors and cord grip caps on the junction box.
6. 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 7-2).

Measuring Points	Resistance
+Exc (Green) to -Exc (Black)	374-394 ohms
+Sig (White) to -Sig (Red)	348-352 ohms

Table 7-2: 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.
   - 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.

NOTE: Remove signal leads from terminals to measure output.

6. If a load cell fails any of the above tests, replace it.

Check Mechanical Components

Because the DECKMATE design is so simple, there are only a few mechanical components to troubleshoot. Make sure that the platform can move freely and that the load cells are not resting against the fixed bumpers. If the load cells touch the fixed bumpers when there is no motion in the scale platform, check the following:

1. The platform should be level and should not rock. Otherwise, shimming may be required.
2. Check the rocker pins for unusual wear. Replace any rocker pins that are unevenly worn or have flattened bearing surfaces.
3. Examine the rocker pin receivers in the frame. If the bearing surface is sunken, depressed, or unevenly worn, replace the frame.
4. Inspect the platform and frame for physical damage. Replace any platform or frame that is bent or has broken welds.
5. Verify that the load cell overload stop gap is set properly:

Load Cell Capacity	Overload Stop Gap
250 lb (110 kg)	0.009" to 0.012"
500 lb (220 kg)	0.012" to 0.016"
1,250 lb (550 kg)	0.014" to 0.018"
2,500 lb (1,100 kg)	0.018" to 0.023"

Load Cell Replacement

1. Remove power to the indicator and disconnect the instrument cable.
2. 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 removed.

5. Carefully remove the deck from the support frame. Position the deck upside down 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. 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.
7. Remove the two load cell mounting screws and keep them for reinstalling the new load cell. Then lift the load cell from the mounting surface.
8. 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.

9. Remove the rocker pin with O-rings from the defective load cell. Reinstall it in the new load cell.
10. 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 side channel.
11. Mount 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 with a calibrated torque wrench to 100 ft-lb (carbon steel scales) or 75 ft-lb (stainless steel scales).

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

12. Verify that the load cell overload stop gap is set properly:

Load Cell Capacity	Overload Stop Gap
250 lb (110 kg)	0.009" to 0.012"
500 lb (220 kg)	0.012" to 0.016"
1,250 lb (550 kg)	0.014" to 0.018"
2,500 lb (1,100 kg)	0.018" to 0.023"

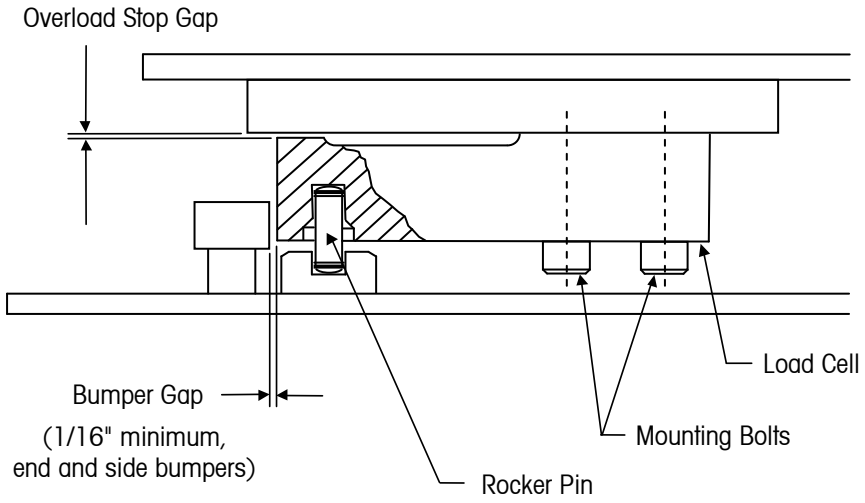


Figure 7-1: Load Cell Installation

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.

13. Thread the load cell cable through the connector on the junction box. When enough cable is inside the box, tighten the connector.
14. Wire the new load cell cable to the proper terminal on the PCB according to the wiring codes shown in Chapter 3.
15. Reinstall the deck in the frame. Make sure that the rocker pins are properly seated and aligned with the receivers in the frame.
16. Reconnect the instrument cable and power-up the indicator. Perform a shift adjust and recalibrate the scale.

Swivel Caster Replacement

1. Remove the defective caster by removing the four flathead screws that secure it to the ramp assembly.
2. Position the new caster as shown in Figure 7-2, so that the bolt holes line up with the holes in the ramp assembly. Shims are provided to allow you to adjust the amount of clearance between the casters and floor when the ramps are raised.
3. Secure the caster to the ramp assembly, using the screws, washers, and nuts from the original caster.

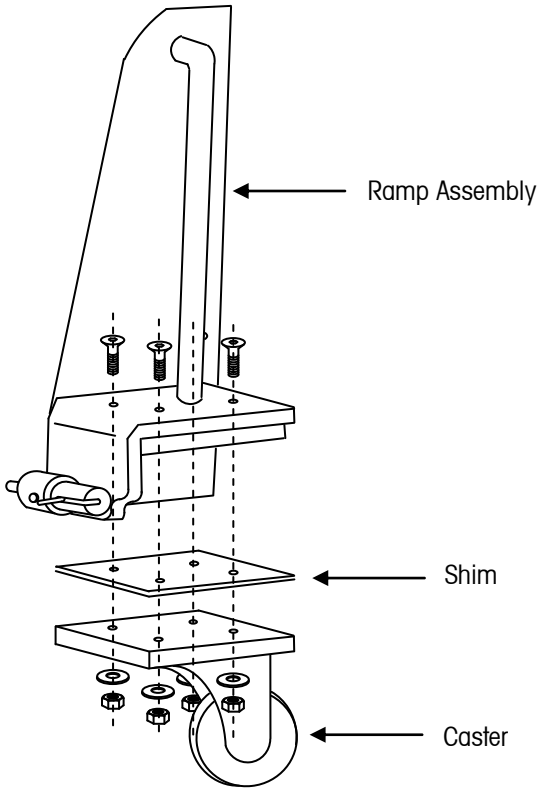


Figure 7-2: Swivel Caster Installation

8 Service Parts

Load Cell and Suspension Parts

NOTE: Proper overload gap:
250-lb cell - 0.009" to 0.012"
500-lb cell - 0.012" to 0.016"
1,250-lb cell - 0.014" to 0.018"
2,500-lb cell - 0.018" to 0.023"

NOTE: Torque load cell bolts to 100 ft-lb for carbon steel and 75 ft-lb for stainless steel.

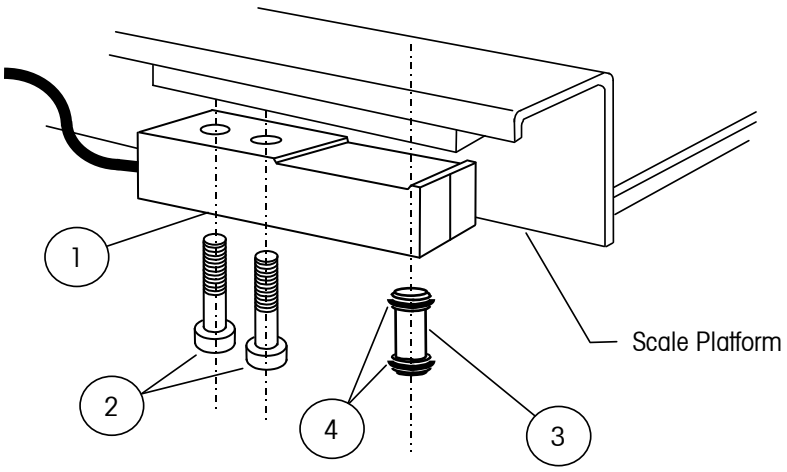


Figure 8-1: Load Cell Assembly

Ref. No.	Trade Name	Item Number	Description	Qty.
1	--	30091034	0745A Load Cell, 500 lb / 220 kg, 2-meter cable	4
	--	30129604	0745A Load Cell, 500 lb / 220 kg, 3-meter cable	
	--	30091046	0745A Load Cell, 500 lb / 220 kg, 5-meter cable	
	--	30091038	0745A Load Cell, 1,250 lb / 550 kg, 2-meter cable	
	--	30129606	0745A Load Cell, 1,250 lb / 550 kg, 3-meter cable	
	--	30129608	0745A Load Cell, 2,500 lb / 1.1t, 3-meter cable	
2	TN800646	68002150	1/2-13 Bolt x 1.75 inches long, Stainless Steel	8
	TN800647	68002018	1/2-13 Bolt x 1.75 inches long, Black Oxide	
3	MN21018	69033610	Rocker Pin (48x60 static scales, 24x24 / 30x30 portable scales)	4
	TN200050	68001102	Rocker Pin (all other static scales, 36x36 / 42x42 portable scales)	
4	MZ0909000005	68000587	O-ring	8

Load Cells (Obsolete)

Ref. No.	Trade Name	Item Number	Description	Qty.
1	TB600488	64052899	250-lb Load Cell (5,000d) with 7.5-foot cable	4

Table 8-1: Load Cell Assembly

Static Scale Parts

NOTE: 24" x 24" scales use a remote junction box (not built into the side rail of the platform).

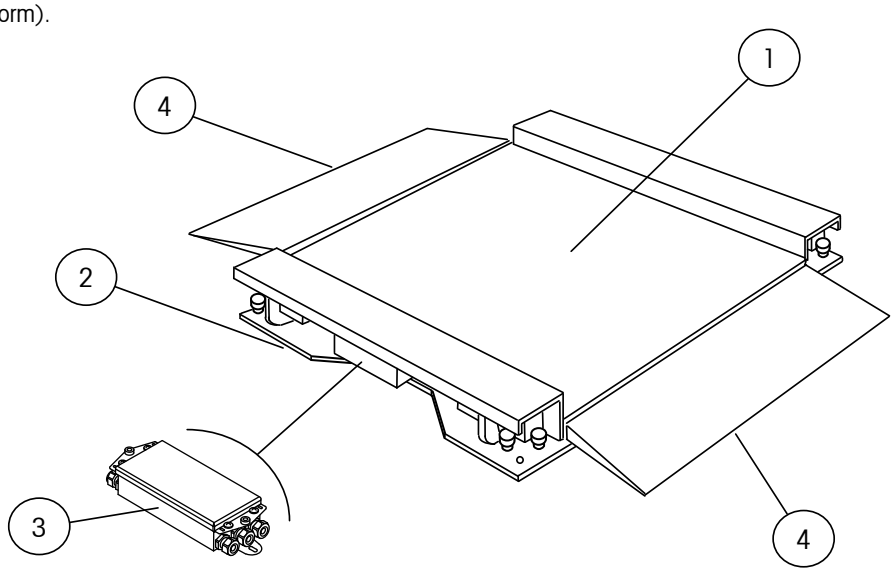


Figure 8-2: Static Scale Assembly

Ref. No.	Trade Name	Item Number	Description	Qty.
1	207120124002400	61070157	Platform, 24" x 24", Carbon Steel Tread Plate	1
	207120224002400	61070158	Platform, 24" x 24", Carbon Steel Smooth Plate	
	207120324002400	61070159	Platform, 24" x 24", 304 Stainless Steel Tread Plate	
	207120424002400	61070160	Platform, 24" x 24", 304 Stainless Steel Smooth Plate	
	207120624002400	61070161	Platform, 24" x 24", 316 Stainless Steel Smooth Plate	
	207121130003000	61070162	Platform, 30" x 30", Carbon Steel Tread Plate	
	207121230003000	61070163	Platform, 30" x 30", Carbon Steel Smooth Plate	
	207121330003000	61070164	Platform, 30" x 30", 304 Stainless Steel Tread Plate	
	207121430003000	61070166	Platform, 30" x 30", 304 Stainless Steel Smooth Plate	
	207121630003000	61070168	Platform, 30" x 30", 316 Stainless Steel Smooth Plate	
	207122136003600	61070171	Platform, 36" x 36", Carbon Steel Tread Plate	
	207122236003600	61070173	Platform, 36" x 36", Carbon Steel Smooth Plate	
	207122336003600	61070175	Platform, 36" x 36", 304 Stainless Steel Tread Plate	
	207122436003600	61070177	Platform, 36" x 36", 304 Stainless Steel Smooth Plate	
	207122636003600	61070179	Platform, 36" x 36", 316 Stainless Steel Smooth Plate	
	207122142004200	61070172	Platform, 42" x 42", Carbon Steel Tread Plate	
	207122242004200	61070174	Platform, 42" x 42", Carbon Steel Smooth Plate	
	207122342004200	61070176	Platform, 42" x 42", 304 Stainless Steel Tread Plate	
	207122442004200	61070178	Platform, 42" x 42", 304 Stainless Steel Smooth Plate	
	207122642004200	61070180	Platform, 42" x 42", 316 Stainless Steel Smooth Plate	
	315072148004800	61070372	Platform, 48" x 48", Carbon Steel Tread Plate	
	315072248004800	61070373	Platform, 48" x 48", Carbon Steel Smooth Plate	
	315072348004800	61092930	Platform, 48" x 48", 304 Stainless Steel Tread Plate	
	315072448004800	61070374	Platform, 48" x 48", 304 Stainless Steel Smooth Plate	

Ref. No.	Trade Name	Item Number	Description	Qty.
	TC208780-MT	61092385	Platform, 48" x 60", Carbon Steel Tread Plate	
	TC208780-MS	61093760	Platform, 48" x 60", Carbon Steel Smooth Plate	
	TC208780-ST	61093761	Platform, 48" x 60", 304 Stainless Steel Tread Plate	
	TC208780-SS	61090031	Platform, 48" x 60", 304 Stainless Steel Smooth Plate	
2	TB312786-CS	61043958	Frame, 24" x 24", Carbon Steel	1
	TB312786-SS	61080129	Frame, 24" x 24", 304 Stainless Steel	
	TB312786-S6	61080128	Frame, 24" x 24", 316 Stainless Steel	
	TB207293-CS	61044624	Frame, 30" x 30", Carbon Steel	
	TB207293-SS	61044091	Frame, 30" x 30", 304 Stainless Steel	
	TB207293-S6	61079539	Frame, 30" x 30", 316 Stainless Steel	
	TB207305-CS	61079547	Frame, 36" x 36", Carbon Steel	
	TB207305-SS	61079549	Frame, 36" x 36", 304 Stainless Steel	
	TB207305-S6	61079548	Frame, 36" x 36", 316 Stainless Steel	
	TB207307-CS	61079553	Frame, 42" x 42", Carbon Steel	
	TB207307-SS	61079555	Frame, 42" x 42", 304 Stainless Steel	
	TB207307-S6	61079554	Frame, 42" x 42", 316 Stainless Steel	
	TB315074-CS	61080302	Frame, 48" x 48", Carbon Steel	
	TB315074-SS	61080303	Frame, 48" x 48", 304 Stainless Steel	
	T209042-CS	61092117	Frame, 48" x 60", Carbon Steel	
	T209042-SS	61092118	Frame, 48" x 60", 304 Stainless Steel	
3	--	30206108	Precision Analog Junction Box Assembly: Includes: Analog PCB (30206064) TA800218 Desiccant Pack (68004199)	1
	--	30070226	Precision Analog Junction Box Assembly, 316 SS	
--	MZ0901010646	61043464	M6x1 Phillips Head Screw x 6 mm long, SS	2
--	T207415-SSL	61043465	Junction Box Mounting Tab, Left, SS (not for 24x24 scales)	1
--	T207415-SSR	61043466	Junction Box Mounting Tab, Right, SS (not for 24x24 scales)	1
--	MZ0901010379	61024581	1/4-20 Phillips Head Screw x 0.25" long, SS (not for 24x24 scales)	4
--	MZ0901030081	61043994	1/4 Lock Washer, SS (not for 24x24 scales)	4
--	--	68004045	1/2-13 Flat-Head Screw x 1.5 inches long, SS	8
	--	68004035	1/2-13 Flat-Head Screw x 1.5 inches long, ZN	
4	TA312785-MT	61078219	Ramp, 24" x 6", Carbon Steel Tread Plate (Optional)	Varies
	TA312574-SS	61078175	Ramp, 24" x 6", Stainless Steel Smooth Plate (Optional)	
	TA313633-MT	61078287	Ramp, 24" x 12", Carbon Steel Tread Plate (Optional)	
	TA310355-SS	61077922	Ramp, 24" x 12", Stainless Steel Smooth Plate (Optional)	
	TA204424-MT	61045777	Ramp, 30" x 6", Carbon Steel Tread Plate (Optional)	
	TA204427-SS	61076667	Ramp, 30" x 6", Stainless Steel Smooth Plate (Optional)	
	TA204425-MT	61076664	Ramp, 30" x 12", Carbon Steel Tread Plate (Optional)	
	TA204428-SS	61076669	Ramp, 30" x 12", Stainless Steel Smooth Plate (Optional)	
	TA204357-MT	61076598	Ramp, 36" x 12", Carbon Steel Tread Plate (Optional)	
	TA204356-SS	61076595	Ramp, 36" x 12", Stainless Steel Smooth Plate (Optional)	
	TA204355-MT	61076594	Ramp, 36" x 18", Carbon Steel Tread Plate (Optional)	
	TA204354-SS	61076591	Ramp, 36" x 18", Stainless Steel Smooth Plate (Optional)	
	TA204392-MT	61076626	Ramp, 42" x 12", Carbon Steel Tread Plate (Optional)	
	TA204391-SS	61076623	Ramp, 42" x 12", Stainless Steel Smooth Plate (Optional)	
	TA204390-MT	61076622	Ramp, 42" x 18", Carbon Steel Tread Plate (Optional)	
	TA204389-SS	61076619	Ramp, 42" x 18", Stainless Steel Smooth Plate (Optional)	
	T208652-MT	--	Ramp, 48" x 18", Carbon Steel Tread Plate (48x48 scale)	
	T208652-SS	--	Ramp, 48" x 18", Stainless Steel Smooth Plate (48x48 scale)	
	T208653-MT	--	Ramp, 48" x 18", Carbon Steel Tread Plate (48x60 scale)	
	T208653-SS	--	Ramp, 48" x 18", Stainless Steel Smooth Plate (48x60 scale)	

Table 8-2: Static Scale Assembly

Portable Scale Parts

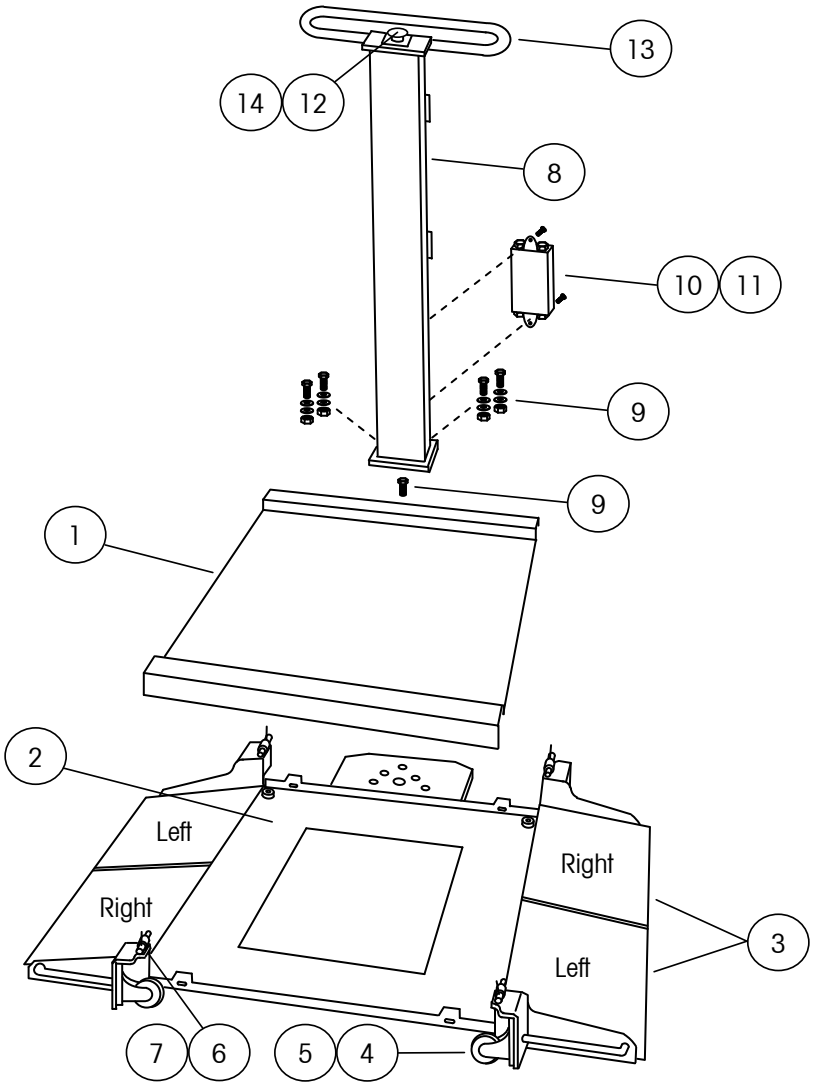


Figure 8-3: Portable Scale Assembly

Ref. No.	Trade Name	Item Number	Description	Qty.
1	207120124002400	61070157	Platform, 24" x 24", Carbon Steel Tread Plate	1
	207120224002400	61070158	Platform, 24" x 24", Carbon Steel Smooth Plate	
	207120324002400	61070159	Platform, 24" x 24", 304 Stainless Steel Tread Plate	
	207120424002400	61070160	Platform, 24" x 24", 304 Stainless Steel Smooth Plate	
	207120624002400	61070161	Platform, 24" x 24", 316 Stainless Steel Smooth Plate	
	207121130003000	61070162	Platform, 30" x 30", Carbon Steel Tread Plate	
	207121230003000	61070163	Platform, 30" x 30", Carbon Steel Smooth Plate	
	207121330003000	61070164	Platform, 30" x 30", 304 Stainless Steel Tread Plate	
	207121430003000	61070166	Platform, 30" x 30", 304 Stainless Steel Smooth Plate	
	207121630003000	61070168	Platform, 30" x 30", 316 Stainless Steel Smooth Plate	

Ref. No.	Trade Name	Item Number	Description	Qty.
	207122136003600	61070171	Platform, 36" x 36", Carbon Steel Tread Plate	
	207122236003600	61070173	Platform, 36" x 36", Carbon Steel Smooth Plate	
	207122336003600	61070175	Platform, 36" x 36", 304 Stainless Steel Tread Plate	
	207122436003600	61070177	Platform, 36" x 36", 304 Stainless Steel Smooth Plate	
	207122636003600	61070179	Platform, 36" x 36", 316 Stainless Steel Smooth Plate	
	207122142004200	61070172	Platform, 42" x 42", Carbon Steel Tread Plate	
	207122242004200	61070174	Platform, 42" x 42", Carbon Steel Smooth Plate	
	207122342004200	61070176	Platform, 42" x 42", 304 Stainless Steel Tread Plate	
	207122442004200	61070178	Platform, 42" x 42", 304 Stainless Steel Smooth Plate	
	207122642004200	61070180	Platform, 42" x 42", 316 Stainless Steel Smooth Plate	
2	TB208226-CS*	61079696*	Portable Frame, 24" x 24", Carbon Steel	1
	TB208226-SS*	61079698*	Portable Frame, 24" x 24", 304 Stainless Steel	
	TB208225-CS*	61079693*	Portable Frame, 30" x 30", Carbon Steel	
	TB208225-SS*	61079695*	Portable Frame, 30" x 30", 304 Stainless Steel	
	TB208227-CS*	61079699*	Portable Frame, 36" x 36", Carbon Steel	
	TB208227-SS*	61079701*	Portable Frame, 36" x 36", 304 Stainless Steel	
	TB208228-CS*	61079702*	Portable Frame, 42" x 42", Carbon Steel	
	TB208228-SS*	61079704*	Portable Frame, 42" x 42", 304 Stainless Steel	
3	----------	----------	Ramps (see Table 8-4)	Varies
4	MZ1002000042	61040062	Swivel Caster, Carbon Steel	4
	MZ1002000041	61041143	Swivel Caster, Stainless Steel	
5	----------	----------	Swivel Caster Mounting Hardware:	
	MZ0901010616	61072706	5/16-18 Flat Head Screw x 1.25" long, SS	16
	MZ0901030127	61072808	5/16 Lock Washer, SS	16
	MZ0901020063	61072753	5/16-18 Hex Nut, SS	16
	TN207016-3125	61041568	Shim, 5/16 inch thick, SS	4
6	TN206755	61039901	Plunger, 5/8-11, SS	4
7	MZ0901010624	61042499	10-32 Hex Head Cap Screw x 0.25" long, SS	4
8	T313812-CS	61076004	Instrument Column, Carbon Steel	1
	T313812-SS	61076005	Instrument Column, 304 Stainless Steel	
	T313812-S6	30093117	Instrument Column, 316 Stainless Steel	
9	----------	----------	Instrument Column Mounting Hardware:	
	MZ0901010076	61040311	3/8-16 Hex Head Cap Screw x 1.25" long, SS	4
	MZ0901030019	68000293	3/8 Plain Washer, SS	8
	MZ0901030076	61024587	3/8 Lock Washer, SS	4
	MZ0901020016	61036040	3/8-16 Hex Nut, SS	4
	MZ0901010228	68001408	1/2-13 Hex Head Cap Screw x 1" long, SS	1
10	--	30206108	Precision Analog Junction Box Assembly (Includes): Analog PCB (30206064) TA800218 Desiccant Pack (68004199)	1
	--	30070226	Precision Analog Junction Box Assembly, 316 SS	
11	MZ0901010646	61043464	M6x1 Phillips Head Screw x 6 mm long, SS	2
12	MZ0904000089	61042321	Knob	1
13	TN207050-CS	61085863	Instrument Column Handle, Carbon Steel	1
	TN207050-SS	61085864	Instrument Column Handle, 304 Stainless Steel	1
	TN207050-S6	30085933	Instrument Column Handle, 316 Stainless Steel	1
14	MZ0901030105	61072795	M8 Lock Washer, SS	1
--	MZ0901010427	69033670	3/8-16 Shoulder Screw x 0.62" long, SS	8
--	MZ0901010633	61072714	M8x1.25 Hex Head Screw x 12 mm long	2
--	TN206847	61045886	Bubble Level	1

* TN800904 (61086545) Safety Label must be attached to portable frames.

Table 8-3: Portable Scale Assembly

Ref. No.	Trade Name	Item Number	Description	Qty.
3	TB206852-MTL	61079460	Ramp, 24" x 4.5", Carbon Steel Tread Plate, Left	Varies
	TB206852-MTR	61079461	Ramp, 24" x 4.5", Carbon Steel Tread Plate, Right	
	TB206852-MSL	61079458	Ramp, 24" x 4.5", Carbon Steel Smooth Plate, Left	
	TB206852-MSR	61079459	Ramp, 24" x 4.5", Carbon Steel Smooth Plate, Right	
	TB206852-STL	61093667	Ramp, 24" x 4.5", 304 Stainless Steel Tread Plate, Left	
	TB206852-STR	61093668	Ramp, 24" x 4.5", 304 Stainless Steel Tread Plate, Right	
	TB206852-SSL	61040320	Ramp, 24" x 4.5", 304 Stainless Steel Smooth Plate, Left	
	TB206852-SSR	61040321	Ramp, 24" x 4.5", 304 Stainless Steel Smooth Plate, Right	
	TB206852-6SL	61079456	Ramp, 24" x 4.5", 316 Stainless Steel Smooth Plate, Left	
	TB206852-6SR	61079457	Ramp, 24" x 4.5", 316 Stainless Steel Smooth Plate, Right	
	T209219-MTL	61093104	Ramp, 24" x 12", Carbon Steel Tread Plate, Left	
	T209219-MTR	61093105	Ramp, 24" x 12", Carbon Steel Tread Plate, Right	
	T209219-MSL	61094351	Ramp, 24" x 12", Carbon Steel Smooth Plate, Left	
	T209219-MSR	61094352	Ramp, 24" x 12", Carbon Steel Smooth Plate, Right	
	T209219-STL	61093108	Ramp, 24" x 12", 304 Stainless Steel Tread Plate, Left	
	T209219-STR	61093109	Ramp, 24" x 12", 304 Stainless Steel Tread Plate, Right	
	T209219-SSL	61093106	Ramp, 24" x 12", 304 Stainless Steel Smooth Plate, Left	
	T209219-SSR	61093107	Ramp, 24" x 12", 304 Stainless Steel Smooth Plate, Right	
	T209219-6SL	61093102	Ramp, 24" x 12", 316 Stainless Steel Smooth Plate, Left	
	T209219-6SR	61093103	Ramp, 24" x 12", 316 Stainless Steel Smooth Plate, Right	
	T209220-MTL	61094355	Ramp, 24" x 18", Carbon Steel Tread Plate, Left	
	T209220-MTR	61094356	Ramp, 24" x 18", Carbon Steel Tread Plate, Right	
	T209220-MSL	61094353	Ramp, 24" x 18", Carbon Steel Smooth Plate, Left	
	T209220-MSR	61094354	Ramp, 24" x 18", Carbon Steel Smooth Plate, Right	
	T209220-STL	61093112	Ramp, 24" x 18", 304 Stainless Steel Tread Plate, Left	
	T209220-STR	61093113	Ramp, 24" x 18", 304 Stainless Steel Tread Plate, Right	
	T209220-SSL	61093110	Ramp, 24" x 18", 304 Stainless Steel Smooth Plate, Left	
	T209220-SSR	61093111	Ramp, 24" x 18", 304 Stainless Steel Smooth Plate, Right	
	TB206782-MTL	61039928	Ramp, 30" x 4.5", Carbon Steel Tread Plate, Left	
	TB206782-MTR	61039929	Ramp, 30" x 4.5", Carbon Steel Tread Plate, Right	
	TB206782-MSL	61039997	Ramp, 30" x 4.5", Carbon Steel Smooth Plate, Left	
	TB206782-MSR	61039996	Ramp, 30" x 4.5", Carbon Steel Smooth Plate, Right	
	TB206782-STL	61040001	Ramp, 30" x 4.5", 304 Stainless Steel Tread Plate, Left	
	TB206782-STR	61040000	Ramp, 30" x 4.5", 304 Stainless Steel Tread Plate, Right	
	TB206782-SSL	61039999	Ramp, 30" x 4.5", 304 Stainless Steel Smooth Plate, Left	
	TB206782-SSR	61039998	Ramp, 30" x 4.5", 304 Stainless Steel Smooth Plate, Right	
	TB206782-6SL	61079422	Ramp, 30" x 4.5", 316 Stainless Steel Smooth Plate, Left	
	TB206782-6SR	61079423	Ramp, 30" x 4.5", 316 Stainless Steel Smooth Plate, Right	
	T209218-MTL	61093092	Ramp, 30" x 12", Carbon Steel Tread Plate, Left	
	T209218-MTR	61093093	Ramp, 30" x 12", Carbon Steel Tread Plate, Right	
	T209218-MSL	61093090	Ramp, 30" x 12", Carbon Steel Smooth Plate, Left	
	T209218-MSR	61093091	Ramp, 30" x 12", Carbon Steel Smooth Plate, Right	
	T209218-STL	61093100	Ramp, 30" x 12", 304 Stainless Steel Tread Plate, Left	
	T209218-STR	61093101	Ramp, 30" x 12", 304 Stainless Steel Tread Plate, Right	
	T209218-SSL	61046911	Ramp, 30" x 12", 304 Stainless Steel Smooth Plate, Left	
	T209218-SSR	61046912	Ramp, 30" x 12", 304 Stainless Steel Smooth Plate, Right	
	T209218-6SL	61093084	Ramp, 30" x 12", 316 Stainless Steel Smooth Plate, Left	
	T209218-6SR	61093086	Ramp, 30" x 12", 316 Stainless Steel Smooth Plate, Right	
	T209217-MTL	61093078	Ramp, 30" x 18", Carbon Steel Tread Plate, Left	
	T209217-MTR	61093079	Ramp, 30" x 18", Carbon Steel Tread Plate, Right	
	T209217-MSL	61093076	Ramp, 30" x 18", Carbon Steel Smooth Plate, Left	
	T209217-MSR	61093077	Ramp, 30" x 18", Carbon Steel Smooth Plate, Right	
	T209217-STL	61093082	Ramp, 30" x 18", 304 Stainless Steel Tread Plate, Left	
	T209217-STR	61093083	Ramp, 30" x 18", 304 Stainless Steel Tread Plate, Right	
	T209217-SSL	61093080	Ramp, 30" x 18", 304 Stainless Steel Smooth Plate, Left	
	T209217-SSR	61093081	Ramp, 30" x 18", 304 Stainless Steel Smooth Plate, Right	
	T209217-6SL	61092627	Ramp, 30" x 18", 316 Stainless Steel Smooth Plate, Left	
	T209217-6SR	61093073	Ramp, 30" x 18", 316 Stainless Steel Smooth Plate, Right	
	TB206783-MTL	61040019	Ramp, 36" x 4.5", Carbon Steel Tread Plate, Left	
	TB206783-MTR	61040018	Ramp, 36" x 4.5", Carbon Steel Tread Plate, Right	

Ref. No.	Trade Name	Item Number	Description	Qty.
	TB206783-MSL	61040021	Ramp, 36" x 4.5", Carbon Steel Smooth Plate, Left	
	TB206783-MSR	61040020	Ramp, 36" x 4.5", Carbon Steel Smooth Plate, Right	
	TB206783-STL	61040025	Ramp, 36" x 4.5", 304 Stainless Steel Tread Plate, Left	
	TB206783-STR	61040024	Ramp, 36" x 4.5", 304 Stainless Steel Tread Plate, Right	
	TB206783-SSL	61040023	Ramp, 36" x 4.5", 304 Stainless Steel Smooth Plate, Left	
	TB206783-SSR	61040022	Ramp, 36" x 4.5", 304 Stainless Steel Smooth Plate, Right	
	TB206783-6SL	61079426	Ramp, 36" x 4.5", 316 Stainless Steel Smooth Plate, Left	
	TB206783-6SR	61079427	Ramp, 36" x 4.5", 316 Stainless Steel Smooth Plate, Right	
	T209331-MTL	61094404	Ramp, 36" x 12", Carbon Steel Tread Plate, Left	
	T209331-MTR	61094405	Ramp, 36" x 12", Carbon Steel Tread Plate, Right	
	T209331-MSL	61094402	Ramp, 36" x 12", Carbon Steel Smooth Plate, Left	
	T209331-MSR	61094403	Ramp, 36" x 12", Carbon Steel Smooth Plate, Right	
	T209331-STL	61094408	Ramp, 36" x 12", 304 Stainless Steel Tread Plate, Left	
	T209331-STR	61094409	Ramp, 36" x 12", 304 Stainless Steel Tread Plate, Right	
	T209331-SSL	61094406	Ramp, 36" x 12", 304 Stainless Steel Smooth Plate, Left	
	T209331-SSR	61094407	Ramp, 36" x 12", 304 Stainless Steel Smooth Plate, Right	
	T209331-6SL	61094398	Ramp, 36" x 12", 316 Stainless Steel Smooth Plate, Left	
	T209331-6SR	61094399	Ramp, 36" x 12", 316 Stainless Steel Smooth Plate, Right	
	T209333-MTL	61094430	Ramp, 36" x 18", Carbon Steel Tread Plate, Left	
	T209333-MTR	61094431	Ramp, 36" x 18", Carbon Steel Tread Plate, Right	
	T209333-MSL	61094428	Ramp, 36" x 18", Carbon Steel Smooth Plate, Left	
	T209333-MSR	61094429	Ramp, 36" x 18", Carbon Steel Smooth Plate, Right	
	T209333-STL	61094434	Ramp, 36" x 18", 304 Stainless Steel Tread Plate, Left	
	T209333-STR	61094435	Ramp, 36" x 18", 304 Stainless Steel Tread Plate, Right	
	T209333-SSL	61094432	Ramp, 36" x 18", 304 Stainless Steel Smooth Plate, Left	
	T209333-SSR	61094433	Ramp, 36" x 18", 304 Stainless Steel Smooth Plate, Right	
	T209333-6SL	61094424	Ramp, 36" x 18", 316 Stainless Steel Smooth Plate, Left	
	T209333-6SR	61094425	Ramp, 36" x 18", 316 Stainless Steel Smooth Plate, Right	
	TB206784-MTL	61040043	Ramp, 42" x 4.5", Carbon Steel Tread Plate, Left	
	TB206784-MTR	61040042	Ramp, 42" x 4.5", Carbon Steel Tread Plate, Right	
	TB206784-MSL	61040045	Ramp, 42" x 4.5", Carbon Steel Smooth Plate, Left	
	TB206784-MSR	61040044	Ramp, 42" x 4.5", Carbon Steel Smooth Plate, Right	
	TB206784-STL	61040047	Ramp, 42" x 4.5", 304 Stainless Steel Tread Plate, Left	
	TB206784-STR	61040046	Ramp, 42" x 4.5", 304 Stainless Steel Tread Plate, Right	
	TB206784-SSL	61039841	Ramp, 42" x 4.5", 304 Stainless Steel Smooth Plate, Left	
	TB206784-SSR	61039842	Ramp, 42" x 4.5", 304 Stainless Steel Smooth Plate, Right	
	TB206784-6SL	61040371	Ramp, 42" x 4.5", 316 Stainless Steel Smooth Plate, Left	
	TB206784-6SR	61040372	Ramp, 42" x 4.5", 316 Stainless Steel Smooth Plate, Right	
	T209332-MTL	61094418	Ramp, 42" x 12", Carbon Steel Tread Plate, Left	
	T209332-MTR	61094419	Ramp, 42" x 12", Carbon Steel Tread Plate, Right	
	T209332-MSL	61094416	Ramp, 42" x 12", Carbon Steel Smooth Plate, Left	
	T209332-MSR	61094417	Ramp, 42" x 12", Carbon Steel Smooth Plate, Right	
	T209332-STL	61094422	Ramp, 42" x 12", 304 Stainless Steel Tread Plate, Left	
	T209332-STR	61094423	Ramp, 42" x 12", 304 Stainless Steel Tread Plate, Right	
	T209332-SSL	61046909	Ramp, 42" x 12", 304 Stainless Steel Smooth Plate, Left	
	T209332-SSR	61046910	Ramp, 42" x 12", 304 Stainless Steel Smooth Plate, Right	
	T209332-6SL	61094410	Ramp, 42" x 12", 316 Stainless Steel Smooth Plate, Left	
	T209332-6SR	61094412	Ramp, 42" x 12", 316 Stainless Steel Smooth Plate, Right	
	T209334-MTL	61094442	Ramp, 42" x 18", Carbon Steel Tread Plate, Left	
	T209334-MTR	61094443	Ramp, 42" x 18", Carbon Steel Tread Plate, Right	
	T209334-MSL	61094440	Ramp, 42" x 18", Carbon Steel Smooth Plate, Left	
	T209334-MSR	61094441	Ramp, 42" x 18", Carbon Steel Smooth Plate, Right	
	T209334-STL	61094446	Ramp, 42" x 18", 304 Stainless Steel Tread Plate, Left	
	T209334-STR	61094447	Ramp, 42" x 18", 304 Stainless Steel Tread Plate, Right	
	T209334-SSL	61094444	Ramp, 42" x 18", 304 Stainless Steel Smooth Plate, Left	
	T209334-SSR	61094445	Ramp, 42" x 18", 304 Stainless Steel Smooth Plate, Right	
	T209334-6SL	61094436	Ramp, 42" x 18", 316 Stainless Steel Smooth Plate, Left	
	T209334-6SR	61094437	Ramp, 42" x 18", 316 Stainless Steel Smooth Plate, Right	

Table 8-4: Ramps for Portable Scale

Parts for Obsolete Model 2888OXXXXX

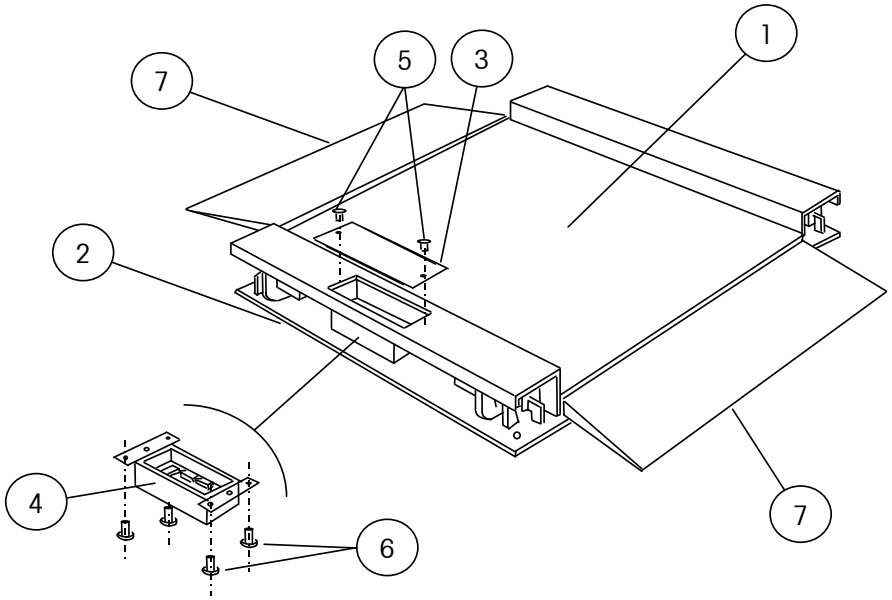


Figure 8-4: Parts for Obsolete Static Scale 2888OXXXXX

Ref. No.	Trade Name	Item Number	Description	Qty.
1	TB311352-1	--	Platform, 24" x 24", Carbon Steel Tread Plate	1
	TB311352-2	--	Platform, 24" x 24", Carbon Steel Smooth Plate	
	TB310348-1	--	Platform, 24" x 24", Stainless Steel Smooth Plate	
	TB310348-2	--	Platform, 24" x 24", Stainless Steel Tread Plate	
	TC202770-1	--	Platform, 30" x 30", Carbon Steel Tread Plate	
	TC202770-2	--	Platform, 30" x 30", Carbon Steel Smooth Plate	
	TC202780-1	69034018	Platform, 30" x 30", Stainless Steel Tread Plate	
	TC202780-2	61038612	Platform, 30" x 30", Stainless Steel Smooth Plate	
	TB204328-1	--	Platform, 36" x 36", Carbon Steel Tread Plate	
	TB204328-2	--	Platform, 36" x 36", Carbon Steel Smooth Plate	
	TB204327-1	--	Platform, 36" x 36", Stainless Steel Tread Plate	
	TB204327-2	61037663	Platform, 36" x 36", Stainless Steel Smooth Plate	
	TB203677-1	--	Platform, 42" x 42", Carbon Steel Tread Plate	
	TB203677-2	--	Platform, 42" x 42", Carbon Steel Smooth Plate	
	TB203809-1	--	Platform, 42" x 42", Stainless Steel Tread Plate	
	TB203809	61037525	Platform, 42" x 42", Stainless Steel Smooth Plate	
2	TB312786-CS	61043958	Frame, 24" x 24", Carbon Steel	1
	TB312786-SS	61080129	Frame, 24" x 24", Stainless Steel	
	TB202771	68004262	Frame, 30" x 30", Carbon Steel	
	TB202781	68004263	Frame, 30" x 30", Stainless Steel	
	TB204340-CS	61039061	Frame, 36" x 36", Carbon Steel	
	TB204340-SS	61041691	Frame, 36" x 36", Stainless Steel	
	TB203595-CS	--	Frame, 42" x 42", Carbon Steel	
	TB203595-SS	--	Frame, 42" x 42", Stainless Steel	
3	TN203054	69034100	Junction Box Lid, Carbon Steel Scale (30" x 30")	1
	TN203055	68004319	Junction Box Lid, Stainless Steel Scale (30" x 30")	
	TN203588-CS	--	Junction Box Lid, Carbon Steel Scale (36" x 36", 42" x 42")	
	TN203588-SS	--	Junction Box Lid, Stainless Steel Scale (36" x 36", 42" x 42")	
4	TB100520	68004230	Junction Box Assembly: *14378800A Analog PCB TA800218 Desiccant Pack (68004199)	1
	TB100481	--	Junction Box Assembly for 24" x 24" Scales	
5	TN100524	69034082	10-32 Flat Head Screw x 5/8" long, SS	2
6	MZ0901010407	68004043	10-32 Phillips Head Screw x 3/16" long, SS	4
7	--	--	Ramps (see Table 8-2)	Varies

Table 8-5: Parts for Obsolete Static Scale 2888OXXXXX

Parts for Obsolete Model 2888PXXXXXAXX

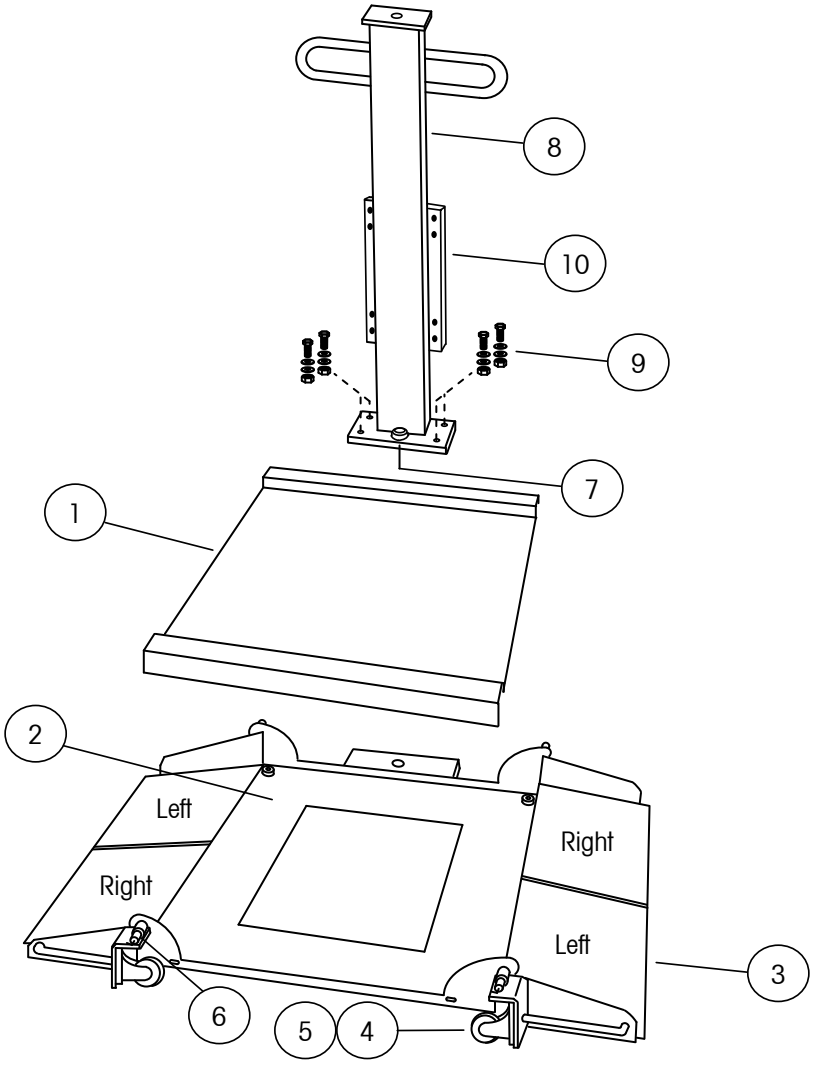


Figure 8-5: Parts for Obsolete Portable Scale 2888PXXXXXAXX

Ref. No.	Trade Name	Item Number	Description	Qty.
1	TB311352-1	--	Platform, 24" x 24", Carbon Steel Tread Plate	1
	TB311352-2	--	Platform, 24" x 24", Carbon Steel Smooth Plate	
	TB310348-1	--	Platform, 24" x 24", Stainless Steel Smooth Plate	
	TB310348-2	--	Platform, 24" x 24", Stainless Steel Tread Plate	
	TC202770-1	--	Platform, 30" x 30", Carbon Steel Tread Plate	
	TC202770-2	--	Platform, 30" x 30", Carbon Steel Smooth Plate	
	TC202780-1	69034018	Platform, 30" x 30", Stainless Steel Tread Plate	
	TC202780-2	61038612	Platform, 30" x 30", Stainless Steel Smooth Plate	
	TB204328-1	--	Platform, 36" x 36", Carbon Steel Tread Plate	
	TB204328-2	--	Platform, 36" x 36", Carbon Steel Smooth Plate	
	TB204327-1	--	Platform, 36" x 36", Stainless Steel Tread Plate	
	TB204327-2	61037663	Platform, 36" x 36", Stainless Steel Smooth Plate	
	TB203677-1	--	Platform, 42" x 42", Carbon Steel Tread Plate	
	TB203677-2	--	Platform, 42" x 42", Carbon Steel Smooth Plate	
	TB203809-1	--	Platform, 42" x 42", Stainless Steel Tread Plate	
	TB203809	61037525	Platform, 42" x 42", Stainless Steel Smooth Plate	
2	TB206850-CS*	--	Portable Frame, 24" x 24", Carbon Steel	1
	TB206850-SS*	--	Portable Frame, 24" x 24", 304 Stainless Steel	
	TB206850-S6*	--	Portable Frame, 24" x 24", 316 Stainless Steel	
	TB206734-CS*	61039989*	Portable Frame, 30" x 30", Carbon Steel	
	TB206734-SS*	61039988*	Portable Frame, 30" x 30", 304 Stainless Steel	
	TB206734-S6*	--	Portable Frame, 30" x 30", 316 Stainless Steel	
	TB206778-CS*	61039990*	Portable Frame, 36" x 36", Carbon Steel	
	TB206778-SS*	61039991*	Portable Frame, 36" x 36", 304 Stainless Steel	
	TB206778-S6*	--	Portable Frame, 36" x 36", 316 Stainless Steel	
	TB206779-CS*	61039992*	Portable Frame, 42" x 42", Carbon Steel	
	TB206779-SS*	61039993*	Portable Frame, 42" x 42", 304 Stainless Steel	
	TB206779-S6*	--	Portable Frame, 42" x 42", 316 Stainless Steel	
3	----------	----------	Ramps (see Table 8-4)	Varies
4	MZ1002000042	61040062	Swivel Caster, Carbon Steel	4
	MZ1002000041	61041143	Swivel Caster, Stainless Steel	
5	----------	----------	Swivel Caster Mounting Hardware:	
	MZ0901010616	61072706	5/16-18 Flat Head Screw x 1.25" long, SS	16
	MZ0901030127	61072808	5/16 Lock Washer, SS	16
	MZ0901020063	61072753	5/16-18 Hex Nut, SS	16
	TN206760	61040064	Shim, 7 gauge	4
6	TN206755	61039901	Plunger, 5/8-11, SS	4
7	TN206847	61045886	Bubble Level	1
8	TB206785-CS	61040063	Instrument Column, Carbon Steel	1
	TB206785-SS	61040065	Instrument Column, 304 Stainless Steel	
	TB206785-S6	--	Instrument Column, 316 Stainless Steel	
9	----------	----------	Instrument Column Mounting Hardware:	
	MZ0901010076	61040311	3/8-16 Hex Head Screw x 1.25" long, SS	4
	MZ0901030060	69033684	3/8 Flat Washer, SS	8
	MZ0901030076	61024587	3/8 Lock Washer, SS	4
	MZ0901020016	61036040	3/8-16 Hex Nut, SS	4
10	----------	----------	Battery Pack Mounting Hardware:	
	TA203681	61042412	Mounting Plate	1
	MZ0901010250	--	1/4-20 Hex Head Screw x 0.38" long, SS	4
	MZ0901030069	61072788	1/4 Lock Washer, SS	4

* TN800904 (61086545) Safety Label must be attached to portable frames.

Table 8-6: Parts for Obsolete Portable Scale 2888PXXXXXAXX

Parts for Obsolete Model 2888PXXXXX

Ref. No.	Trade Name	Item Number	Description	Qty.
--	----------	----------	Platform (Same as Static Platform)	
--	TC202772*	68004281*	Portable Frame, 30" x 30", Carbon Steel	1
	TC202782*	--	Portable Frame, 30" x 30", Stainless Steel	
	TB204336*	--	Portable Frame, 36" x 36", Carbon Steel	
	TB204335*	--	Portable Frame, 36" x 36", Stainless Steel	
	TC204110*	--	Portable Frame, 42" x 42", Carbon Steel	
	TC203911*	--	Portable Frame, 42" x 42", Stainless Steel	
--	TN202939	68001011	Swivel Caster	4
--	TN202579	68001156	Straight-Line Action Clamp	4
	TN202630	68004311	Straight-Line Action Clamp, SS	
--	TA204415-MT	--	Ramp, 30" x 12", Carbon Steel Tread Plate (Optional)	Varies
	TA204415-MS	--	Ramp, 30" x 12", Carbon Steel Smooth Plate (Optional)	
	TA204414-ST	--	Ramp, 30" x 12", Stainless Steel Tread Plate (Optional)	
	TA204414-SS	--	Ramp, 30" x 12", Stainless Steel Smooth Plate (Optional)	
	TA204413-MT	--	Ramp, 30" x 18", Carbon Steel Tread Plate (Optional)	
	TA204413-MS	--	Ramp, 30" x 18", Carbon Steel Smooth Plate (Optional)	
	TA204412-ST	--	Ramp, 30" x 18", Stainless Steel Tread Plate (Optional)	
	TA204412-SS	61043566	Ramp, 30" x 18", Stainless Steel Smooth Plate (Optional)	
	TA204348-MT	--	Ramp, 36" x 12", Carbon Steel Tread Plate (Optional)	
	TA204348-MS	--	Ramp, 36" x 12", Carbon Steel Smooth Plate (Optional)	
	TA204347-ST	--	Ramp, 36" x 12", Stainless Steel Tread Plate (Optional)	
	TA204347-SS	--	Ramp, 36" x 12", Stainless Steel Smooth Plate (Optional)	
	TA204344-MT	--	Ramp, 36" x 18", Carbon Steel Tread Plate (Optional)	
	TA204344-MS	--	Ramp, 36" x 18", Carbon Steel Smooth Plate (Optional)	
	TA204343-ST	--	Ramp, 36" x 18", Stainless Steel Tread Plate (Optional)	
	TA204343-SS	--	Ramp, 36" x 18", Stainless Steel Smooth Plate (Optional)	
	TA204399-MT	--	Ramp, 42" x 12", Carbon Steel Tread Plate (Optional)	
	TA204399-MS	--	Ramp, 42" x 12", Carbon Steel Smooth Plate (Optional)	
	TA204400-ST	--	Ramp, 42" x 12", Stainless Steel Tread Plate (Optional)	
	TA204400-SS	--	Ramp, 42" x 12", Stainless Steel Smooth Plate (Optional)	
	TA204397-MT	--	Ramp, 42" x 18", Carbon Steel Tread Plate (Optional)	
	TA204397-MS	--	Ramp, 42" x 18", Carbon Steel Smooth Plate (Optional)	
	TA204398-ST	--	Ramp, 42" x 18", Stainless Steel Tread Plate (Optional)	
	TA204398-SS	61043441	Ramp, 42" x 18", Stainless Steel Smooth Plate (Optional)	
--	TA202918-1	68004153	Ramp Mounting Kit (per Ramp)	1
--	TN201817	68004299	Bubble Level	1
--	TB202616	61024659	Instrument Column, Carbon Steel	1
	TB202618	68001517	Instrument Column, Stainless Steel	
--	----------	----------	Column Mounting Hardware (Same as New Portable Scale)	
--	----------	----------	Battery Pack Mounting Hardware (Same as New Portable Scale)	
--	TN202610	68004310	Black Thermoplastic Knob (for Instrument Bracket)	1

* TN800569 (61006838) Safety Label must be attached to portable frames.

Table 8-7: Parts for Obsolete Portable Scale 2888PXXXXX

9 Reference Material

Reference Drawings

Scale Capacity	Static Scale	Portable Scale
500, 1,000, 2,500, and 5,000 lb (300, 600, 1,500, and 3,000 kg)	TB207295	61806704

Recommended Spare Parts

For part numbers refer to Chapter 8.

Quantity	Description
1	Load cell (capacity of load cell depends on scale capacity)
1	Junction box circuit board
1	Junction box desiccant bag
1	Rocker pin
2	Rocker pin O-ring
1	Swivel caster

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