MG4500

LIFTMATE™ HD Floor Scales

Installation and Service Manual

14803300A
(12/95)

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STANDARD WARRANTY: MODEL MG4500 LIFTMATE HD

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1) Initial installation and ongoing scale calibration.

2) Damage to scale components by gross abuse, fire, flooding, explosion, water, voltage surges, or civil disturbance.

3) Normal maintenance or consumable items.

This warranty covers only the Model MG4500 Liftmate HD floor scale understructure. Refer to Mettler Toledo Standard Product Warranty for coverage of other scale system components including scale instrument, printer, and or other accessories.

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Application Guides

The only warranty of Mettler Toledo is for the product it supplies under the Product Warranty Statement listed above. Weighing application guidelines pertain to Mettler Toledo products.

INTRODUCTION

This publication is provided as a guide for the trained technician for installing, calibrating, and servicing the MG4500 Liftmate HD. Repair or adjustment by unauthorized persons voids the METTLER TOLEDO™ warranty.

For information regarding your METTLER TOLEDO distributor, Sales, and Service location, please contact:

METTLER TOLEDO
6600 Huntley Road
Columbus, Ohio 43229
(614) 841-7300

WARNING!

This equipment generates, uses, an can radiate radio frequency energy and if not installed and used properly, i.e., in accordance with he 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 which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

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

PRECAUTIONS

READ this manual BEFORE operating or servicing this equipment.

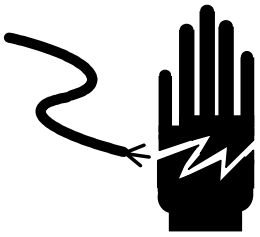
FOLLOW these instructions carefully.

SAVE this manual for future reference.

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

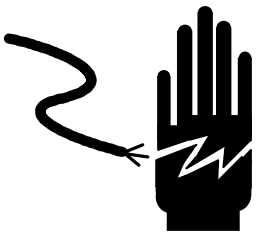
ALWAYS DISCONNECT this equipment from the power source before cleaning or performing maintenance.

CALL METTLER TOLEDO for parts, information, and service.



WARNING

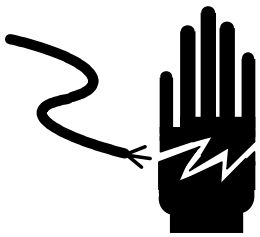
ONLY PERMIT QUALIFIED PERSONNEL TO SERVICE THIS EQUIPMENT. EXERCISE CARE WHEN MAKING CHECKS, TESTS AND ADJUSTMENTS THAT MUST BE MADE WITH POWER ON. FAILING TO OBSERVE THESE PRECAUTIONS CAN RESULT IN BODILY HARM.



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 REMOVING THE FUSE OR SERVICING.

CAUTION

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

CAUTION

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES.

CONTENTS

1 General Description

The model MG4500 HD is a fully electronic floor scale designed for heavy loading applications. The MG4500 HD is intended primarily for top-of-floor installations, but can be easily applied to pit applications, because of the channel support frame design. 40,000 and 60,000 lb capacity scale platforms are available. The 60,000 lb capacity platform can be supplied with an optional Coil Cradle for coil weighing applications.

All MG4500 HD floor scale platforms are completely factory assembled and tested prior to shipment for high quality control and ease of installation. The scale deck is smooth mild steel plate and is available in a number of standard sizes. The scale platform suspension is a rocker pin and slider design, with adjustable horizontal checking.

2 Specifications

Power Supply Requirements

Load cell power supply is provided by Mettler Toledo digital indicator.

Standard Sizes and Shipping Weight

Platform Size	Capacity (lb)	Load Cell (lb)	Scale Profile	Model Number	Shipping Weight (lb)
5 x 5	40,000 60,000	20,000 45,000	8-3/8” 10-3/4”	MG4500105565 MG4500105575	1394 2390
5 x 7	40,000 60,000	20,000 45,000	8-3/8” 10-3/4”	MG4500105765 MG4500105775	1799 3065
5 x 8	60,000	45,000	10-3/4”	MG4500105875	3365
6 x 6	40,000 60,000	20,000 45,000	8-3/8” 10-3/4”	MG4500106665 MG4500106675	1866 2925
6 x 8	40,000 60,000	20,000 45,000	8-3/8” 10-3/4”	MG4500106865 MG4500106875	2382 3755
7 x 7	60,000	45,000	10-3/4”	MG4500107775	3790
7 x 9	40,000	20,000	8-3/8”	MG4500107965	2768
8 x 8	60,000	45,000	10-3/4”	MG4500108875	4545
8 x 10	40,000	20,000	8-3/8”	MG4500108065	3233

Optional Coil Cradle and Shipping Weights

Platform Size	Capacity (lb)	Cradle Size (ft)	Scale Profile	Model Number	Shipping Weight (lb)
5 x 5	60,000	3 x 4	1’ 6-3/4”	45-025575	521
5 x 7		4 x 5		45-025775	762
5 x 8		4 x 6		45-025875	1026
6 x 6		4 x 5		45-026675	759
6 x 8		5 x 6		45-026875	1135
7 x 7		5 x 6		45-027775	1032
8 x 8		6 x 7		45-028875	1449

Coil Loading Parameters:

Maximum crane speed, 15 feet per minute

Maximum coil weight, 60,000 lb

Load Cells

Stainless steel cantilever beam load cells with integral 4-conductor (color coded), shielded cables are provided in all MG4500 HD scales.

Scale Platform Capacity (lb)	Capacity of each Load Cell (lb)
40,000	20,000
60,000	45,000

Load Cell Wiring Color Code

Function	Color
+ Excitation	Green
- Excitation	Black
+Signal	White
- Signal	Red

End Loading

The model MG4500 HD may be loaded up to 100% of the scale platform's full rated capacity or two times the individual load cell rating (whichever is less) across any end of the scale.

Platform and Frame Assembly

The platform has a smooth mild steel deck with threaded holes for inserting lifting eye bolts to aid in the installation and removal of the platform. A structural channel support frame provides side protection and support for the scale platform. For in-floor applications, the support frame may be cast into the floor to become the pit coping.

3 Inspection and Site Selection

Inspection

Upon delivery of the MG4500 HD, visually inspect the scale for any damage which may have occurred during shipment and handling. Inspect the following areas:

1. Frame assembly for any damage
2. Load cell and suspension assemblies
3. Load cell cables
4. Load cell summing junction box
5. Overall platform assembly
6. Coil cradle damage, if supplied

If any damage is noted, 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. Is the area level to within 1/4" from the highest to the lowest corner?
2. Is the floor/support at each corner of the scale area able to maintain support throughout the entire weighing capacity of the scale?
3. Is there proper drainage away from the scale area?
4. Are there any heavy vibrations or wind currents present at/or near the scale?
5. Will the scale be subjected to excessive or unusual loading due to the location or type of equipment used? If the site passes, proceed with installation. If not, choose a new location or select another scale.

4 Installation (Top-of-Floor)

Locate

Place the MG4500 HD in the desired location after inspecting the site per Chapter 3 of this manual.

Remove Platform

Remove scale platform from the frame by using lifting eye bolts in the holes provided in the deck (a quantity of two 3/4"-10 UNC eye bolts required). Ensure that the eye bolts are snug and fully threaded into the deck before lifting.

Anchor Frame

Locate the anchor holes in all four corners of the frame. There are (2) two 1”ø holes each corner for a total of 8 anchor holes. (see Figure 4-a). Drill the anchor holes using the frame as a guide.

The anchors themselves are to be provided by others or can be purchased from Mettler Toledo. Drill anchor holes to a diameter and depth per the supplier's instructions.

All corners of the frame must be in contact with the floor and be level within plus or minus 1/16". If the scale is out-of-level or gaps exist between the frame and floor, shimming is required.

Corner shims (1/16" thick) can be fabricated using Figure 4-b as a guide.

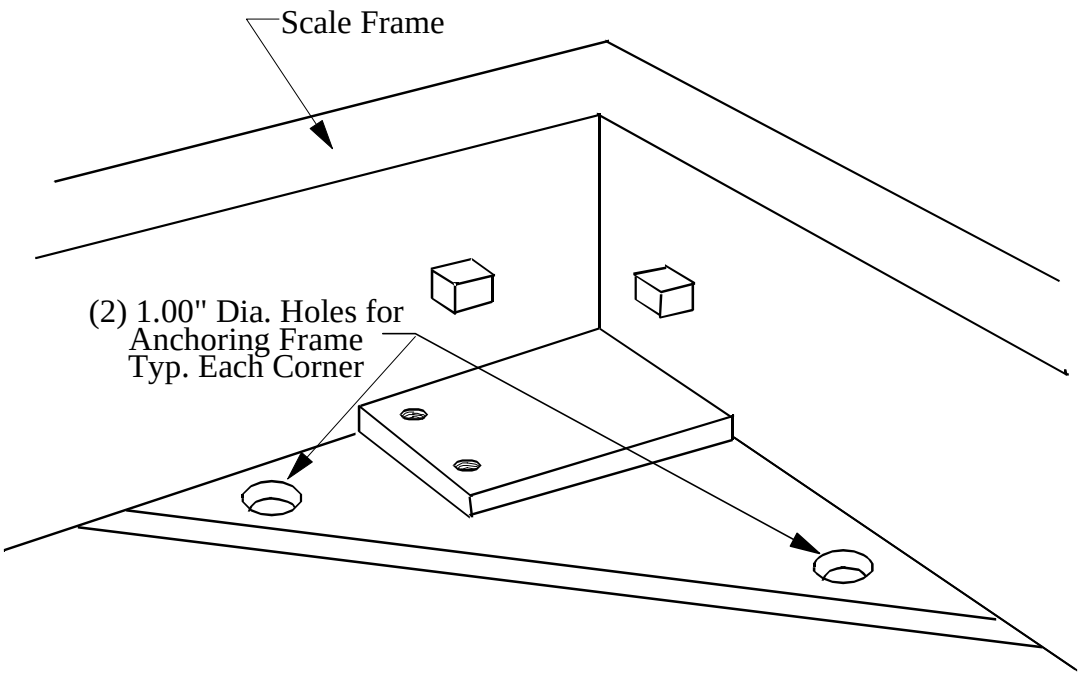


Figure 4-a Frame Corner Detail

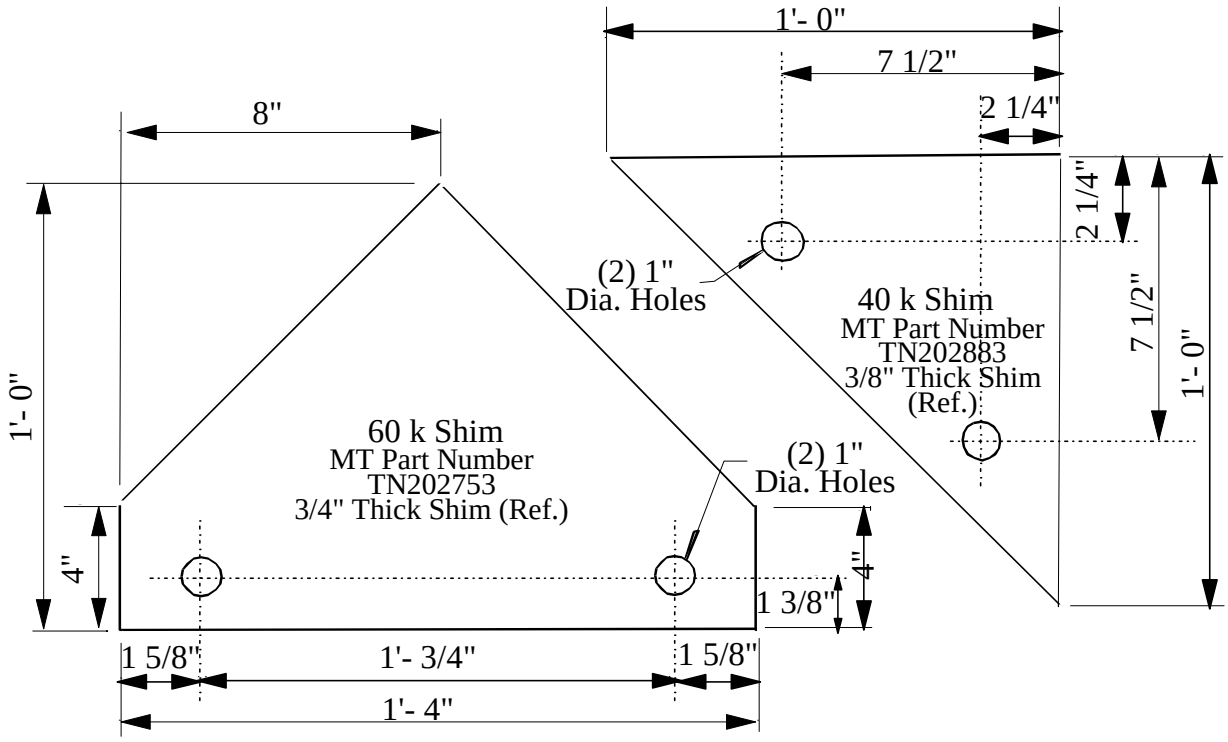


Figure 4-b Leveling Shim Details

Route/Attach Instrument Cable

Remove the junction box access cover plate from platform.

Thread the instrument cable through the hole provided in the scale frame and platform, continuing through the inside of the platform, stopping at the junction box .

Remove the junction box lid. Loosen the instrument cable connector, thread the cable through the connector (pull enough cable to reach the “input” terminal), reinstall and tighten (see Figure 4-c).

Wire the instrument cable to the terminal marked "INPUT" (see Figure 4-d).

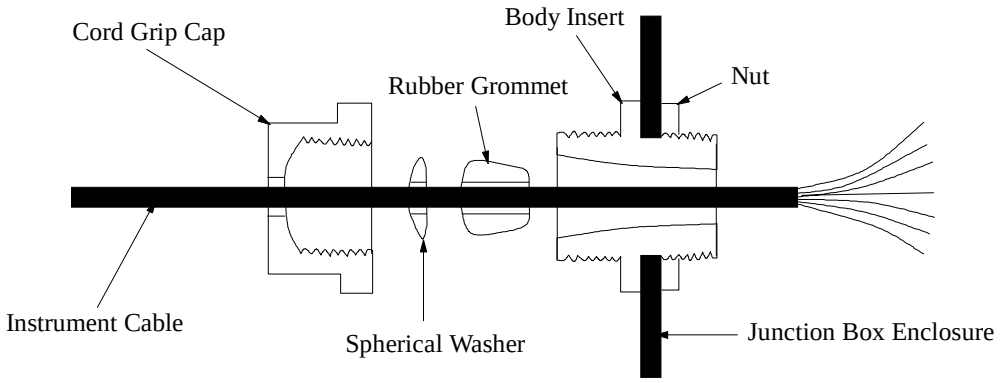


Figure 4-c Cord Connector Details

Place desiccant bag inside junction box.

Reinstall junction box lid. Make sure that the rubber gasket is clean and correctly located. Tighten all screws and check that all cord grip caps are tight.

Reinstall the platform access plate.

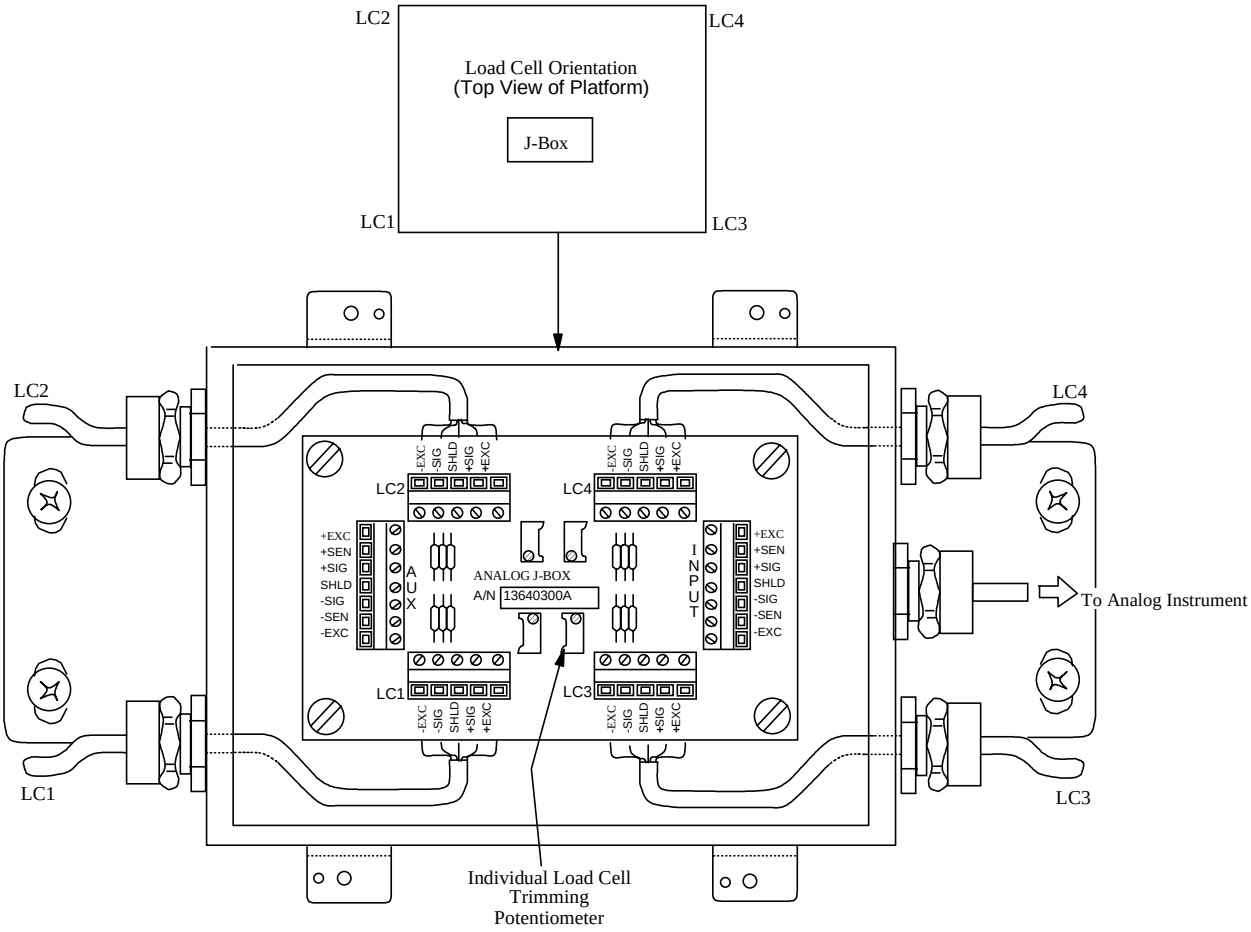
Reinstall Platform

Clear all debris from the scale area. Ensure that all four slider plates on the frame are clean and free of all foreign material.

Replace the platform into the frame. Make sure there is slack in the cable between the frame and platform and that no cable pinching occurs.

Oscillate the platform to ensure that the rocker load pins are seated in the receivers and no binding or rock exists.

Calibrate the scale per the Mettler Toledo Indicator Manual.



Note: Turn all pots fully clockwise prior to calibration.

LOAD CELL WIRING		INSTRUMENT CABLE WIRING	
Function	**Color**	**Function**	**Color**
+ EXCITATION	GREEN	+EXCITATION	WHITE
+ SENSE	NOT USED	+ SENSE	YELLOW
+ SIGNAL	WHITE	+ SIGNAL	GREEN
SHIELD	YELLOW	SHIELD	ORANGE
–SIGNAL	RED	–SIGNAL	BLACK
–SENSE	NOT USED	–SENSE	RED
–EXCITATION	BLACK	–EXCITATION	BLUE
		(BASED ON METTLER TOLEDO CABLE NUMBER 510624370)	

Figure 4-d Analog Junction Box Details and Wiring Codes

5

Pit Installation (In-Floor)

The frame provides a means of placing a standard above-floor MG4500 HD floor scale in a pit for flush mount applications. The frame can be cast into the floor prior to inserting the weighing platform to complete the installation.

Prior to pit construction, contact Mettler Toledo or an authorized Mettler Toledo Distributor to obtain the latest applicable pit construction drawings.

The frame requires an opening that allows a 3" gap around the perimeter of the frame. The pit depth will vary from 18" (40k capacity) to 23" (60k capacity). Remove the existing floor to meet the dimensional requirements or your specific frame.

Position the instrument cable conduit. Use a high grade steel conduit (3/4" EMT thin wall conduit minimum, supplied by others). Do not secure until the frame is in the correct position.

Reverse the shipping brackets on the frame so they extend outward from the frame. Remove the platform assembly at this time.

Place the frame into the pit, with the shipping brackets resting on the existing floor.

Center the frame in the pit opening. Check the frame for a level condition. If the frame is not level, shim between the shipping brackets and existing floor as required.

Secure the instrument cable conduit to the frame.

Mask-off the four corner plates and the top flange of the frame to prevent concrete from adhering to these surfaces.

Pour concrete around perimeter of frame. Work the concrete until it is level with the top frame flange and ensure the underside of all corner base plates are completely covered. Slope the floor at least 1/2" per foot to a suitable drain at the center of the pit.

USE A MINIMUM OF 3000 PSI STRENGTH CONCRETE AT 28 DAYS WITH 5 TO 7% AIR ENTRAINMENT

6 Shift Adjust

Note: The scale has been roughly shift adjusted at the facatory. Before proceeding, check the shift characteristics to determine if any shift trimming is required. In a new installation, shift adjustment to a properly shimmed scale should be minor.

This adjustment should be made only after all mechanical parts are checked, and the scale has proven repeatable. Repeatability is checked by repeatedly placing a test weight on the same position of the platform and checking for repeatable weight reading. Shift adjust is then done to make the weight reading for each corner of the platform the same for the same test weight.

The adjustment is made by load cell trimming potentiometers mounted on the junction box PCB. The amount of test weight used for the shift test should equal 1/2 of the rated scale capacity. Test weights should be concentrated at the center of each quadrant of the scale platform.

Shift Adjustment Procedure

The shift adjustment is made by adjusting load cell trim potentiometers mounted on the junction box PCB.

1. Successively place the test weight at each of the four designated locations (center of each scale quadrant). Note and record the displayed indications.
2. Determine the location with the lowest indication. The corresponding load cell is NOT trimmed.
3. Place the test weight at the location with the lowest indication. Note and record the indication.

Note: Because of the trim pots interaction with each other, any adjustment will affect all corner indications.

4. Proceeding clockwise, place the test weight at each designated location; if necessary, adjust the trimming potentiometer corresponding to that location to obtain the indication recorded in step 3.
5. Repeat this procedure until all indications at the designated locations are the same or within the specified National Institute of Standards and Technology (NIST) Handbook 44 Digital Scale Accuracy Requirements.
6. Reinstall junction box lid and platform access plate.

Scale Calibration (Span)

It is recommended to calibrate the scale using test weights equal to the scale capacity. With the proper test weight, continue with the calibration of the weighing system in accordance with the instructions provided in the manual of your digital indicator.

7 Routine Care and Maintenance

General

Once the scale is installed, it is recommended that the assembly be periodically inspected and calibrated by an authorized Mettler Toledo representative. Contact your local authorized Mettler Toledo Service representative for information on periodic inspection and calibration services.

Site Inspection

Ensure 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 assembly, check the following:

1. Is there any unusual wear points, paths, or marks on the weighing surface?
2. Is the scale frame bent or damaged?
3. Is the junction box lid properly sealed and all cable connectors tight against the enclosure?
4. Is there any moisture or foreign material present around or inside the junction box assembly?
5. Is the instrument cable free from damage or binding the scale?
6. Is there any debris or material build-up under or around the platform which could inhibit freedom of movement?
7. If a pit installation, is the floor drain clear and providing adequate drainage?
8. Visually inspect the load cells, rocker pins, and fixed bumpers for signs of unusual wear.
9. Check repeatability and shift of the scale.

8 Troubleshooting

General

If operational difficulties are encountered, obtain as much information about the problem as possible. Is the problem constant or intermittent? Malfunctions can be caused by mechanical or electrical influences so be patient and use sound logic when troubleshooting. When troubleshooting a MG4500 HD scale, examine the physical location of the scale, checking for the presence of the following: water, corrosive materials, unlevel floors, high vibrations, or air currents, physical damage to the scale platform or frame. Also check the instrument cable for damage and all connections for any loose/incorrect wiring.

CAUTION

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

Isolate the Problem

First, determine if the problem is in the scale platform or the digital indicator. After removing power from the system, disconnect the digital indicator from the MG4500 HD scale assembly and connect a load cell simulator to the indicator (analog simulator available from Mettler Toledo). Reapply power. If the problem is still present, consult the digital indicator manual for further troubleshooting assistance.

If the problem is NOT present with the load cell simulator attached to the indicator, remove power, disconnect the simulator and reconnect the MG4500 HD platform. If the problem reoccurs, further scale platform troubleshooting is required.

Check Wiring

Remove power from the system. Remove the access cover plate from the platform. Remove the lid from the junction box and check the interior for moisture or any foreign material.

Ensure that all wiring connections are tight and that no insulation material is touching the terminal contacts. Check all cable connections for correct wiring, the wiring color code are as follows:

Load Cells		Instrument Cable	
+Excitation	Green	+Excitation	White
+ Sense	Not Used	+Sense	Yellow
+Signal	White	+Signal	Green
Shield	Yellow	Shield	Orange
-Signal	Red	-Signal	Black
-Sense	Not Used	-Sense	Red
-Excitation	Black	-Excitation	Blue

(Instrument cable color code based upon Mettler Toledo cable no. 510620370)

Check all cord grip caps on the junction box. Tighten any cord grip caps found to be loose.

Check Load Cells

Check each load cell for proper bridge resistances.

Measuring Points	Resistance (20,000 lb cell)	Resistance (45,000 lb cell)
Any lead to shield or ground	Infinity	Infinity
+Exc (Green) to -Exc (Black)	350 Ohm minimum	2200 ± 100 Ohm
+Sig (White) to -Sig (Red)	348 to 352 Ohms	2200 ± 20 Ohm

If bridge resistances are within specification, perform a “shorted signal” symmetry check. 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 indicated. Next, remove the lead from the +excitatoin wire and place it on the -excitation wire. Both resistance values should be equal within 1 Ohm for 20k load cells and 7 Ohms for 45k load cells.

If the cells pass the above test, reapply power to the scale platform. Confirm that proper excitation voltage is reaching the load cells by placing multimeter leads on the excitation positions of each load cell terminal (excitation voltage can vary from 5 VDC to 15 VDC depending upon the application and digital indicator used).

If proper excitation voltage is reaching the load cells, check the output signal from each cell. 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).

Note: Remove signal leads from terminals to measure output.

If any cell has an unusual signal, remove all load from that cell by raising the platform. With the power still on, measure the output from the suspect load cell. The "no load" zero output should be $\pm$ 1.5% of the full scale output. For example, if the excitation voltage is 15 VDC then the full scale output is 30 mV. Therefore, the no load zero output should be within $\pm$ 0.45 mV. If the load cell is out of specification, replace it.

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

Check Mechanical Components

Due to the simplicity of the MG4500 HD design, there are few mechanical components to troubleshoot. Ensure that the platform has freedom of movement and that the load cells are not resting against the fixed bumpers. If the load cells are contacting the fixed bumpers with no motion in the scale platform, check the following:

1. Is the platform level or rocking? Reshimming 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 sin the frame. If the bearing surface is sunken, depressed, or unevenly worn, replace the frame.
4. If the bumpers on the frame are excessively worn or damaged, readjust the bumpers to the proper gap 1/16".
5. Inspect the platform and frame for any apparent physical damage. Replace any platform or frame that is bent or contains broken welds.

Load Cell Replacement Procedure

Remove power to the digital indicator and disconnect the instrument cable.

Remove the access plate from the platform to gain access to the load cell cable junction box. Remove the junction box cover and locate the defective load cell terminal.

Disconnect the defective load cell cable from it's terminal on the summing PCB.

Loosen the water tight 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.

Carefully remove the platform from the frame assembly using eye bolts in the holes provided. Position the platform onto a stable supporting surface that allows access to the defective cell and cable as well as offering protection to the other cells during disassembly.

Affix a string to the end of the defective load cell's cable. The string should be of sufficient strength and length to pull the new load cell's cable through the platform structure.

20k load cells are fastened to the platform using two 1"-8 UNC high strength hex head bolts. Remove the two load cell mounting bolts with a 1 1/2" socket or wrench, retaining the bolts for reinstallation. 45k load cells are mounted with 1 1/4"-7 hex head bolts requiring a 1-7/8" socket or wrench. Lift the load cell from the mounting surface .

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, unattach it from the load cell cable.

Remove the rocker pin with o-rings from the defective load cell and reinstall it in the new load cell.

Attach the new load cell's cable to the pulling string and carefully thread the new cable through the platform into the junction box opening. Coil and store any excess cable within the platform side channel.

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 with a calibrated torque wrench to 475 ft-lb (20k cell) or 1,000 ft-lb (45k cell).

Thread the load cell cable through the connector on the junction box. When the cable length inside the box is sufficient, tighten the box connector.

Wire the new load cell cable to the proper terminal on the PCB per the wiring code shown.

Reinstall the platform into the frame. Ensure the slider cups and rocker pins are properly seated and aligned.

Reattach the instrument cable and power-up the indicator. Perform shift adjust and recalibrate the scale.

9 Service Parts

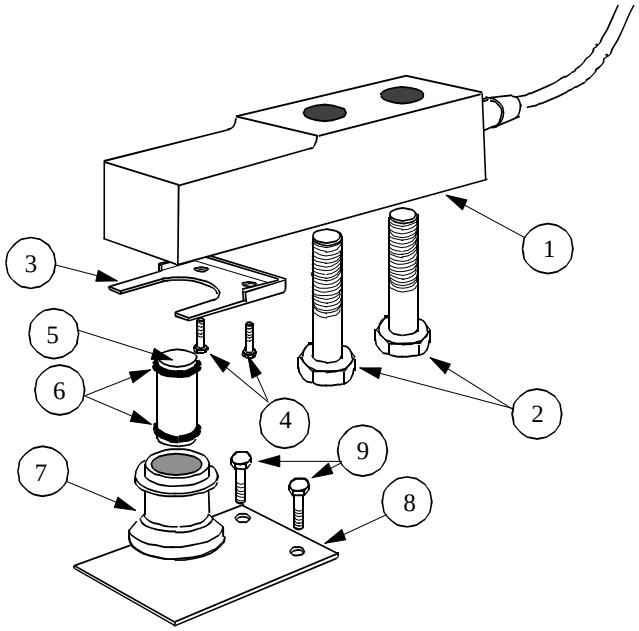


Figure 9-a Load Cell and Rocker / Slider Assembly

Ref.	Part Number	Description	Qty.
40,000 lb Capacity			
1	*13077500B	20,000 lb Shear Beam Load Cell	4
2	MZ0901010073	1-8 Hex. Hd. Bolt X 4" Lg.	8
3	MN21035	Slider Cup Retainer	4
4	MZ0901010165	10-32 Screw x 3/4" Lg.	8
5	MN21036	Rocker Pin	4
6	MZ0909000013	0-Ring	8
7	MN21035	Slider Cup	4
8	TN202941	Slider Plate	8
9	MZ0901010064	3/8-16 Hex Hd. Screw x 1/2 " Lg.	8
60,000 lb Capacity			
1	*13929400A	45,000 lb Shear Beam Load Cell	4
2	MZ0901010238	1 1/4-7 Hex. Hd. Bolt x 5 1/2" Lg.	8
3	MN31790	Slider Cup Retainer	4
4	MZ0901010165	10-32 Screw x 3/4" Lg.	8
5	MN31797	Rocker Pin	4
6	MZ0909000004	0-Ring	8
7	MN31790	Slider Cup	4
8	TN202941	Slider Plate	12
9	MZ0901010030	3/8-16 Hex Hd. Screw x 3/4" Lg.	8

* May have letter prefix

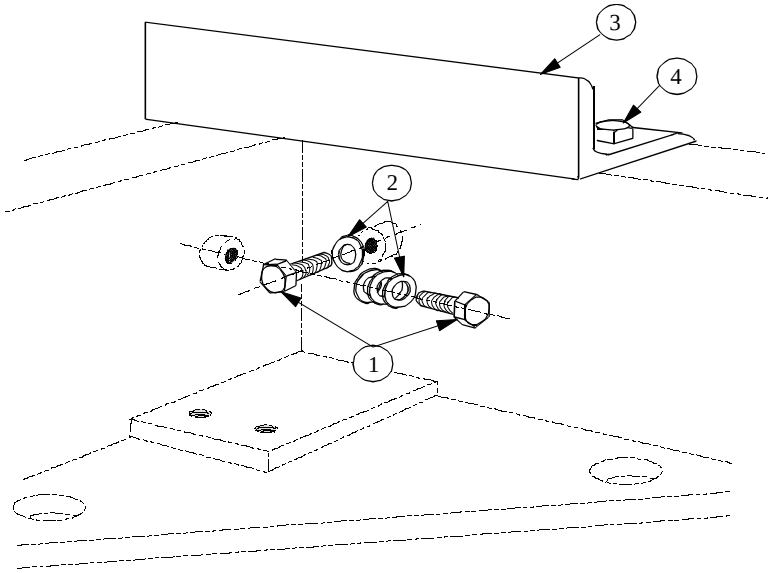


Figure 9-b Bumper Bolt Arrangement

Ref.	Part Number	Description	Qty.
1	MZ0901010030	3/8-16 Hex Head Screw x 3/4"Lg. (40,000# Cap.)	8
	MZ0901010083	5/8-11 Hex Head Screw x 1 1/4"Lg. (60,000# Cap.)	8
2	MZ0901030019	3/8" Flat Washer (40,000# Capacity)	32
	MZ0901030023	5/8" Flat Washer (60,000# Capacity)	32
3	TN202623	Shipping Angle	4
4	MZ0901010030	3/8-16 Hex. Hd. Screw x 3/4"Lg	8

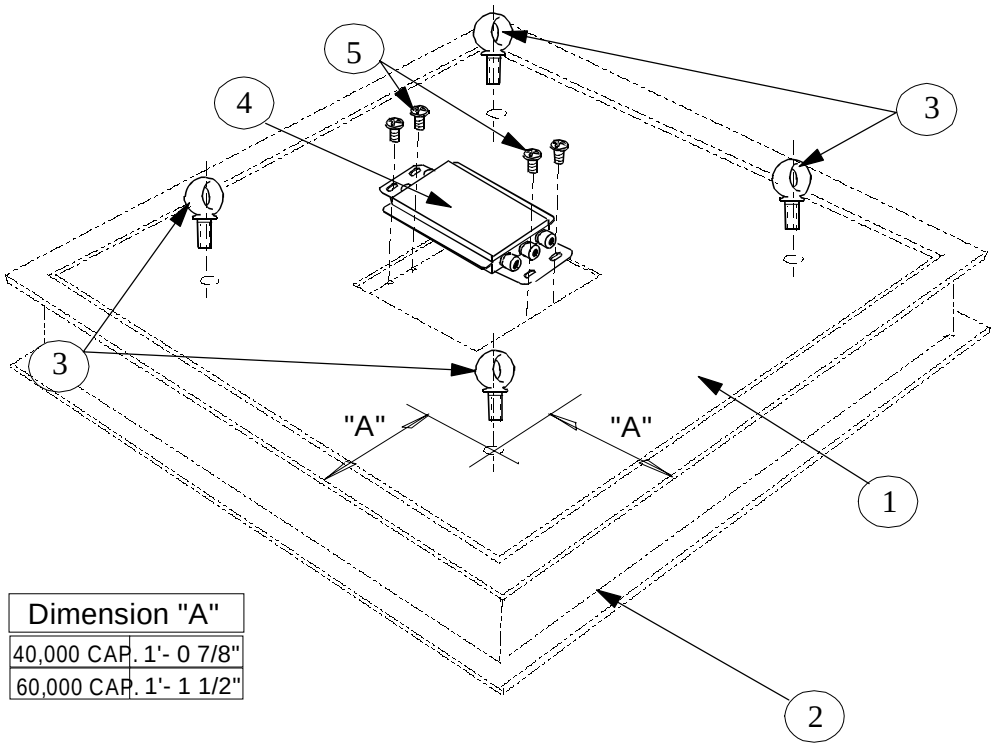


Figure 9-c Scale Platform and Junction Box Assembly

Ref.	Part Number	Description	Qty.
1	Varies	Scale Platform	1
2	Varies	Support Frame	1
3	MZ0905000003	3/4-10 Lifting Eye Bolt	4
4	TB100395	Analog Junction Box Assembly Complete with: (1) *13640300A Analog PCB (1) TA800218 Dessicant Bag (5) TN100430 3/8” Cord Grip (5) TN100432 Locknut	1
5	MZ0901010379	1/4-20 PPHD Screw S.S. x 1/4” Lg.	4

* May have letter prefix

10 Reference

Reference Drawings

Scale Capacity	General Layout	Foundation
40,000 lb	TC202893	TB202892
60,000 lb	TB202878	TB202877

Recommended Spare Parts

For part numbers refer to service parts

(1) Load Cell

(1) Junction Box Print Circuit Board

(1) Junction Box Dessicant Bag

(1) Rocker Pin

(2) Rocker Pin “O” Ring

(1) Slider Cup

(2) Slider Plates

Load Cell Data

Model Number: 743

NTEP Certificate of Conformance Number: 88-008A2

Maximum Excitation Voltage: 15 VDC

Recommended Excitation Voltage: 15 VDC

Full Scale Output: 2 mV/V

Input Terminal Resistance: 380 ± 20 Ohms (20k) or 2200 ± 100 Ohms (45k)

Output Terminal Resistance: 350 ± 2 Ohms (20k) or 2000 ± 20 Ohms (45k)

Temperature Range Compensation: -10°C to +40°C (+14°F to +104°F)

Safe Side Load: 100% of f ull load cell rating

Safe Overload: 150% of full load cell rating

METTLER TOLEDO
Scales & Systems
6600 Huntley Road
Columbus, Ohio 43229-1012

P/N: 14803300A

(12/95)

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