WEIGH-TRONIX

# Bench Scale Bases

## Installation/Service Manual

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# Introduction

Weigh-Tronix bench scales are divided into three types:

- Diamond series bench scale analog bases
- Torsion series bench scale analog bases
- 3600 series bench scale Quartzell bases
- 3700 series bench scale analog bases

This manual is divided into major sections dealing with each of these bench scale base types. There is some information which applies to all of the bases. This information is given below.

Weigh-Tronix bench scale bases are available in stainless steel for use in sanitary or hostile environments and in painted carbon steel for use at less demanding sites. The Weigh-Tronix weight sensor is potted to provide corrosion resistance and to permit cleaning. A built-in bubble level and adjustable feet provide convenience in leveling the scale.

Place the scale on a flat, rigid, vibration-free surface. For the diamond series or torsion series bench scales, lift the scale platform straight up, removing it from the frame. Figure 1 shows the diamond series scale. Figure 2 shows the torsion series bench scale. See Figure 3 for the 3600 series and Figure 4 for the 3700 series. Loosen each leveling-foot lock nut, as required. Adjust the leveling feet until the bubble level shows that the frame is level. All leveling feet must be in firm contact with the mounting surface. Make sure that the weight sensor signal cable is routed properly and will not interfere with platform movement. Tighten each leveling foot lock nut as required.

## Diamond Base Specs

**Table 1**
Diamond Base Specifications

| Platform Dimensions | | Capacity | | Weigh Bar |
|---|---|---|---|---|
| Inches | Centimeters | lb | kg | Output (mV/V) |
| 14 x 14 | 35.56 x 35.56 | 30 | 13.61 | 0.6 |
| 18 x 18 | 45.72 x 45.72 | 50 | 22.68 | 1.0 |
| 18 x 24 | 45.72 x 60.96 | 100/200 | 50/100 | 1.0 |
| 20 x 20 | 50.80 x 50.80 | 100 | 45.35 | 1.0 |
| 24 x 24 | 60.96 x 60.96 | 200 | 90.70 | 1.0 |
| Torque spec is 55 ft lbs for the mounting bolts | | | | |

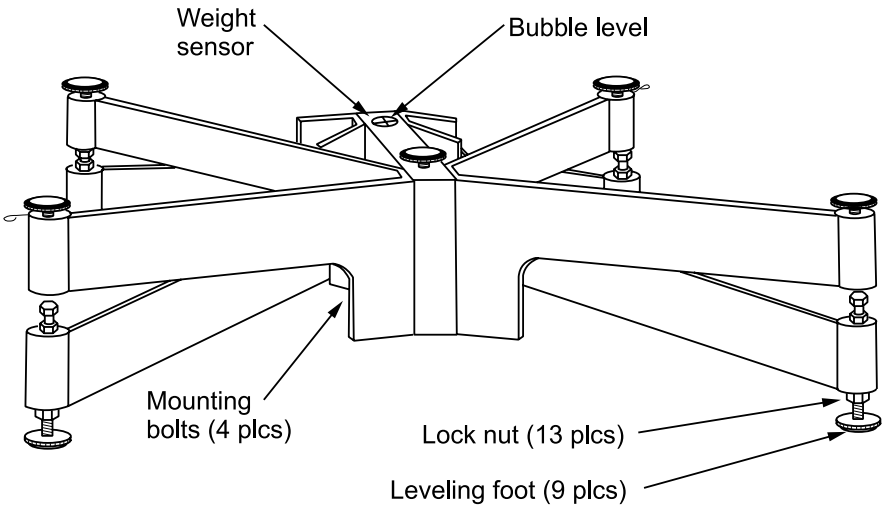


**Figure 1**
Platform Leveling Adjustments

## Signal Cable Connections

**Table 2: Signal Cable Connections**

| Terminal (NEMA IV) | Wire Color | Description | Desktop Connections |
|---|---|---|---|
| 1 | GRN | +Excitation | B |
| 2 | YEL* | +Sense | F |
| 3 | WHT | +Output | C |
| 4 | WHT/ORN | Shield (Gnd) | G |
| 5 | RED | -Output | A |
| 6 | BLU* | -Sense | E |
| 7 | BLK | -Excitation | D |

*Note

Pins 1 and 2, and 6 and 7 are jumpered together when connected to a single cell analog base.

## Scale Setup

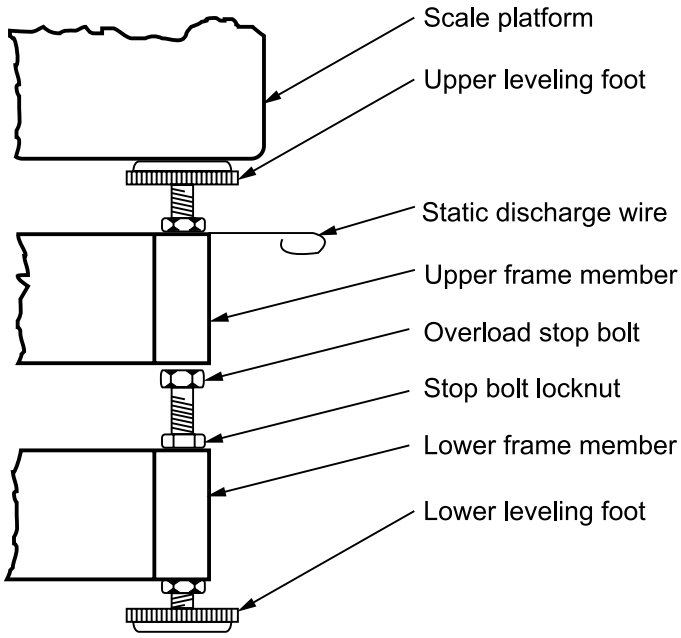


**Figure 2**
Overload stop adjustments

## Overload stop adjustment

The overload stop bolts must be readjusted if either the weight sensor or any of the frame members are replaced. To adjust the overload stop bolts, refer to Figure 2 and proceed as follows:

I. Lift the scale platform straight up off the frame, then replace it upside down on the five upper leveling feet. Adjust the height of the outer four to evenly support the platform. Adjust the center foot so there is a small gap (about the thickness of a sheet of paper) between it and the platform. Tighten all five lock nuts when adjustments are complete

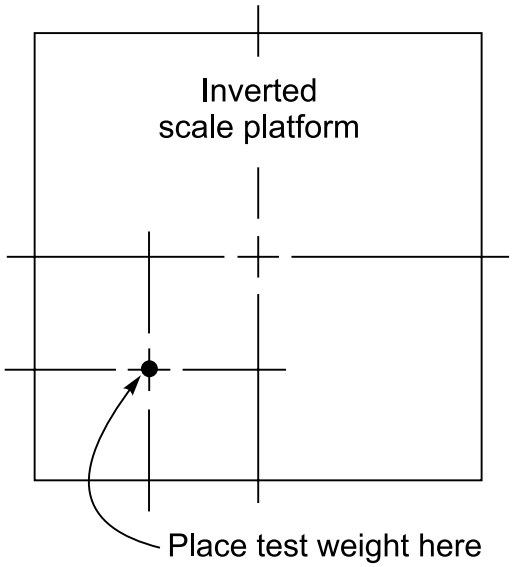


**Figure 3**
Test weight placement for overload stop bolt adjustment

2. Refer to Figure 3 and place a test weight 102% of capacity in the center of one quadrant of the inverted platform. The weight indicator should display a reading above capacity.
3. Refer to Figure 2 and loosen the stop bolt lock nut corresponding to the quadrant supporting the test weight. Adjust the overload stop bolt so that it contacts the upper frame member and the weight indicator reads less than the applied test weight. Tighten the stop bolt lock nut.
4. Repeat steps 2 and 3 for each of the remaining corners of the scale.
5. Remove the test weight and place the scale platform upright on the upper leveling feet. Be sure that the two static discharge wires extend straight out from the upper frame members. These static discharge wires must contact the inside corners of the platform when it is in place.
6. Place 100% of capacity on the scale to verify correct operation in each corner and center of the platform.

## Cleaning Instructions

Lift the platform straight up off the frame. Thoroughly clean the frame but do NOT apply steam or high-pressure hot water directly to the Weigh Bar. Ensure no debris remains in the overload stop gaps. Thoroughly clean the platform and then place it back onto the frame.

## Torque Specification

The torque specification for the weight sensor mounting bolts is 55 ft lbs.

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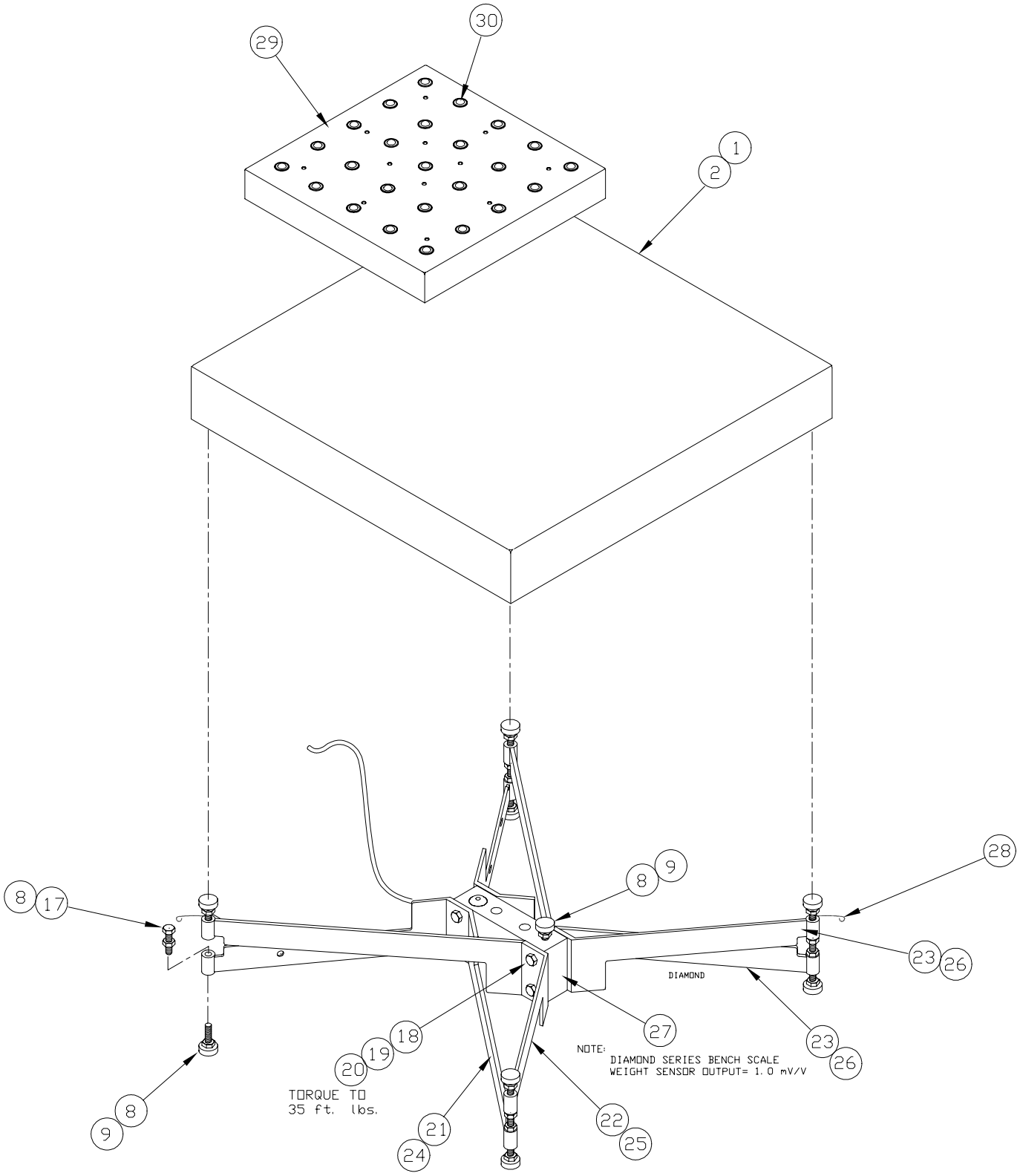
# DIAMOND SERIES BASES

**MODEL** 2020-100 (stainless) , 100 lb / 45 kg cap. , 20 “x 20” Deck
**MODEL** 2424-200 (stainless) , 200 lb / 90 kg cap. , 24 “x 24” Deck
**ASSEMBLY**



# DIAMOND SERIES BASES
## PARTS LIST

| ITEM NO. | DESCRIPTION | W-T P/N | QTY |
|---|---|---|---|
| 1 | Deck, Standard 20" X 20" (stainless) | 21325-0038 | 1 |
| 2 | Deck, Standard 24" X 24" (stainless) | 21325-0046 | 1 |
| 8 | Jam Nut, .31" - 18 | 14497-0217 | 13 |
| 9 | Foot | 17796-0028 | 9 |
| 17 | Bolt, .31" X 1.00" L | 14527-0187 | 4 |
| 18 | Bolt, .44" X 2.75" L | 17889-0448 | 4 |
| 19 | Lock Washer, .44" | 14474-0222 | 4 |
| 20 | Nut, .44" | 14471-0233 | 4 |
| 21 | Spider(stainless)Left, 20 X 20 Deck w/ Cable Mounting Studs | 21332-0039 | 1 |
| 22 | Spider(stainless)Left, 20 x 20 Deck w/o Cable Mounting Studs | 21332-0013 | 1 |
| 23 | Spider(stainless)Right (20 x 20 Deck) | 21332-0021 | 2 |
| 24 | Spider(stainless)Left (24 x 24 Deck) w/ Cable Mounting Studs | 21333-0038 | 1 |
| 25 | Spider(stainless)Left (24 x 24 Deck) w/o Cable Mounting Studs | 21333-0012 | 1 |
| 26 | Spider(stainless)Right (24 x 24 Deck) | 21333-0020 | 2 |
| 27 | Weight Sensor Assy, 30 lb.14 x 14 Deck (10' cable w/tinned end) | 49098-0067 | 1 |
| | Weight Sensor Assy, 30 lb.14 x 14 Deck (10' cable w/connector) | 49099-0025 | 1 |
| | Weight Sensor Assy, 50 lb,18 x 18 Deck (10' cable w/tinned end) | 49698-0067 | 1 |
| | Weight Sensor Assy, 50 lb,18 x 18 Deck (10' cable w/connector) | 49699-0025 | 1 |
| | Weight Sensor Assy, 100 lb,20 x 20 Deck (10' cable w/tinned end) | 49098-0075 | 1 |
| | Weight Sensor Assy, 100 lb,20 x 20 Deck (10' cable w/connector) | 49099-0033 | 1 |
| | Weight Sensor Assy, 200 lb,20 x 20 Deck (10' cable w/tinned end) | 49098-0083 | 1 |
| | Weight Sensor Assy, 200 lb,20 x 20 Deck (10' cable w/connector) | 49099-0041 | 1 |
| | Weight Sensor Assy, 100 lb,18 x 24 Deck (10' cable w/tinned end) | 49098-0075 | 1 |
| | Weight Sensor Assy, 100 lb,18 x 24 Deck (10' cable w/connector) | 49099-0033 | 1 |
| | Weight Sensor Assy, 200 lb,18 x 24 Deck (10' cable w/tinned end) | 49098-0083 | 1 |
| | Weight Sensor Assy, 200 lb,18 x 24 Deck (10' cable w/connector) | 49099-0041 | 1 |
| | Weight Sensor Assy, 100 lb,24 x 24 Deck (10' cable w/tinned end) | 49098-0075 | 1 |
| | Weight Sensor Assy, 100 lb,24 x 24 Deck (10' cable w/connector) | 49099-0033 | 1 |
| | Weight Sensor Assy, 200 lb,24 x 24 Deck (10' cable w/tinned end) | 49098-0083 | 1 |
| | Weight Sensor Assy, 200 lb,24 x 24 Deck (10' cable w/connector) | 49099-0041 | 1 |
| 28 | Ground Spring | 20850-0025 | 2 |
| 29 | Ball Top Shroud Ass'y 20 x20 Stainless (optional) | 50695-0062 | 1 |
| | Ball Top Shroud Ass'y 24 x24 Stainless (optional) | 50695-0088 | 1 |
| 30 | Ball Units, Stainless (Qty of 25 for all, except 14 x14 base which is 16) | 48594-0027 | |

Note:
**The above list reflects the "most commomly requested" parts for** *stainless* **version Bases only.**
Parts needed for Diamond Bench Scale Bases other than those listed,
Call Weigh-Tronix Service 800-458-7062

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# Torsion Bases

## Torsion Base Specs

**Table 3**
Torsion Base Specifications

| Platform Dimensions inches(cm) | Capacity | |
|---|---|---|
| | lb | kg |
| 8.75 x 8.75 (22.23 x 22.23) | 6 | 3 |
| 8.75 x 8.75 (22.23 x 22.23) | 12 | 6 |
| 12 x 14 (30.5 x 35.6) | 30 | 15 |
| 12 x 14 (30.5 x 35.6) | 60 | 30 |
| 12 x 14 (30.5 x 35.6) | 100 | 45 |
| Torque spec is 80 in. lbs for the loadcell mounting bolts | | |

## Leveling the scale

Use the leveling feet and the level bubble to level the scale platform. When the scale is level, tighten the jam nuts up against the scale base.

## Signal Cable Connections

**Table 4: Signal Cable Connections**

| Terminal | Wire Color | Description |
|---|---|---|
| 1 | Red | +Excitation |
| 2 | Red/White | +Sense |
| 3 | Green | +Output |
| 4 | Green/Yellow | Shield (Gnd) |
| 5 | White | -Output |
| 6 | Black/White | -Sense |
| 7 | Black | -Excitation |

## Overload Stop Adjustment

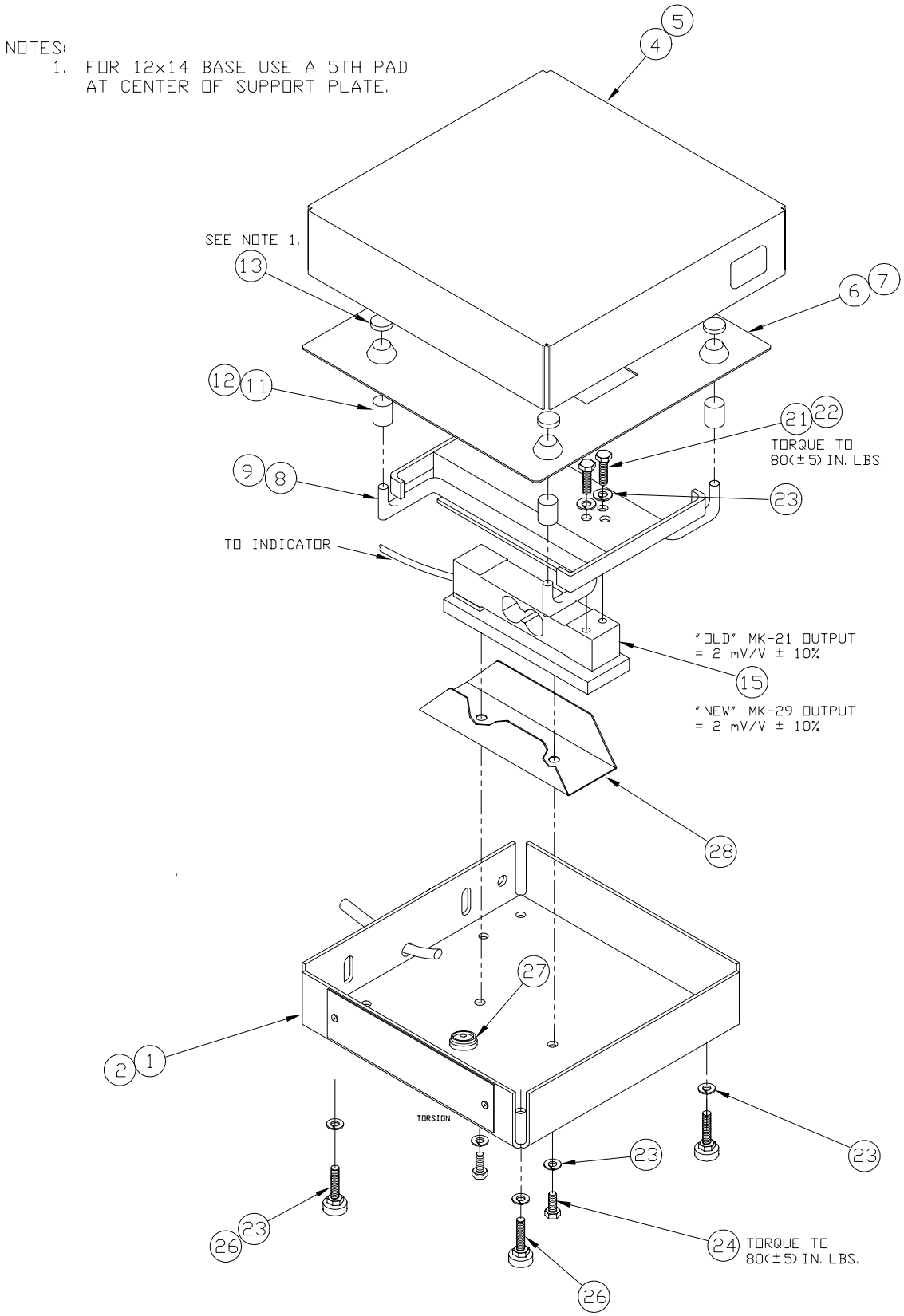
The overload stop adjustment comes preset from the factory. No field adjustment is required.

## Torque Specs

Weigh-Tronix specifies a torque of 80 (±5) in. lbs. on the loadcell mounting bolts.

# **TORSION BASES** *STAINLESS*

6 lb, 12 lb / 9" x 9" BASE
30 lb, 60 lb, 100 lb / 12" x 14" BASE
**ASSEMBLY**



# **TORSION BASES** *STAINLESS*
## PARTS LIST

| ITEM NO. | DESCRIPTION | W-T P/N | QTY |
|---|---|---|---|
| 1 | Base, 9" X 9" | 1071-08063 | 1 |
| 2 | Base, 12" X 14" | 1071-08356 | 1 |
| 4 | Shroud, 9" X 9" | 1076-09428 | 1 |
| 5 | Shroud, 12" X 14" | 1076-08357 | 1 |
| 6 | Support Plate (9" X 9" Base) | 1069-08070 | 1 |
| 7 | Support Plate (12" X 14" Base) | 1069-01899 | 1 |
| 8 | Load Bridge Assy (9" X 9" Base) | 7066-08064 | 1 |
| 9 | Load Bridge Assy (12" X 14" Base) | 7066-08353 | 1 |
| 11 | Bumper Support (9" X 9" Base) | 1075-00243 | 4 |
| 12 | Bumper Support (12" X 14" Base) | 7075-00027 | 4 |
| 13 | Pad | 1075-00262 | 5 |
| * 15 | MK-29 Load Cell Assy w/ 10’ cable, 15 lb (7 Kg), 9 x 9 Base | 53239-0010 | 1 |
| | MK-29 Load Cell Assy w/ 10’ cable, 30 lb (15 Kg), 12 x14 Base | 53239-0028 | 1 |
| | MK-29 Load Cell Assy w/ 10’ cable, 60 lb (30 Kg), 12 x14 Base | 53239-0036 | 1 |
| | MK-29 Load Cell Assy w/ 10’ cable, 100 lb (60 Kg), 12” x 14” Base | 53239-0044 | 1 |
| 21 | Capscrew, .25"-20 X .75" L | 14527-0039 | 2 |
| 22 | Capscrew, .25"-20 X 1.00" L | 14527-0034 | 2 |
| 23 | Lockwasher, .25" | 14474-0198 | 6 |
| 24 | Capscrew, .25"-28 X .50" L | 1007-02668 | 2 |
| 26 | Foot Assy W/ Jamnut | 7029-00150 | 4 |
| 27 | Level Bubble | 1083-00095 | 1 |
| 28 | Splash Guard (MK-29) | 53238-0010 | 1 |

* Cable ends come w/ tinned wire ends.

## 3600 Base Specs

**Table 5**
3600 Base Specifications

| Platform Dimensions | | Capacity | |
|---|---|---|---|
| Inches | Centimeters | lb | kg |
| 12 x 14* | 30.5 x 35.6 | 10 | 5 |
| 12 x 14* | 30.5 x 35.6 | 50 | 25 |
| 12 x 14* | 30.5 x 35.6 | 100 | 50 |
| 12 x 14* | 30.5 x 35.6 | 150 | 80 |
| 18 x 18 | 45.7 x 45.7 | 200 | 110 |
| 18 x 18 | 45.7 x 45.7 | 300 | 160 |

*Torque spec is 90 in. lbs for the Quartzell® mounting bolts. All others are 40 ft. lbs.

## Leveling the scale

Use the leveling feet to level the scale platform. When the scale is level, tighten the jam nuts up against the scale base.

## Signal Cable Connections

**Table 6: Signal Cable Connections**

| Terminal (NEMA IV) | W-T Wire Color | Description |
|---|---|---|
| 1 | Red | 7.5 volts |
| 2 | Blue | REC B |
| 3 | Yellow | XMT B |
| 4 | — | NOT USED |
| 5 | Black | GRND |
| 6 | — | NOT USED |
| 7 | Green | XMT A |
| 8 | White | REC A |
| Shell | Drain wire | SHIELD |

## Replacing the Quartzell®

1. Remove the scale shroud and load bridge pad.
2. Place your hand on the load bridge, near the two flat head screws or 9/16” bolts that hold the load bridge to the Quartzell®. Gently loosen the two screws or bolts with a torque wrench. **DO NOT USE A “T” HANDLE ALLEN WRENCH.** Doing so may cause damage to the crystals in the Quartzell®. This damage is not covered by warranty. Remove the screws or bolts, remove the load bridge and the Quartzell® spacer.

3. Set the scale on its side and remove the screws or bolts holding the Quartzell® to the scale base.
4. Unplug the Quartzell® and reinstall the new Quartzell®.
5. Install the bottom bolts or screws and torque them to 90 in. lbs. (±5) for the screws and 40 ft. lbs for the bolts. Set the scale on its feet. Reassemble the spacer and the load bridge. Torque the screws to 90 in. lbs. (±5) and the bolts to 40 ft. lbs.
6. Put the load bridge pad and shroud back on the scale.

## Overload Stop Adjustments

1. Place 102% of full scale capacity over each of the corners of the scale, one at a time.
2. Adjust each screw until the displayed weight starts to go down. Do this for all corners. The center stop is normally preset at the factory. No field adjustment is required.
3. Recalibrate the scale. Refer to the indicator Service Manual.

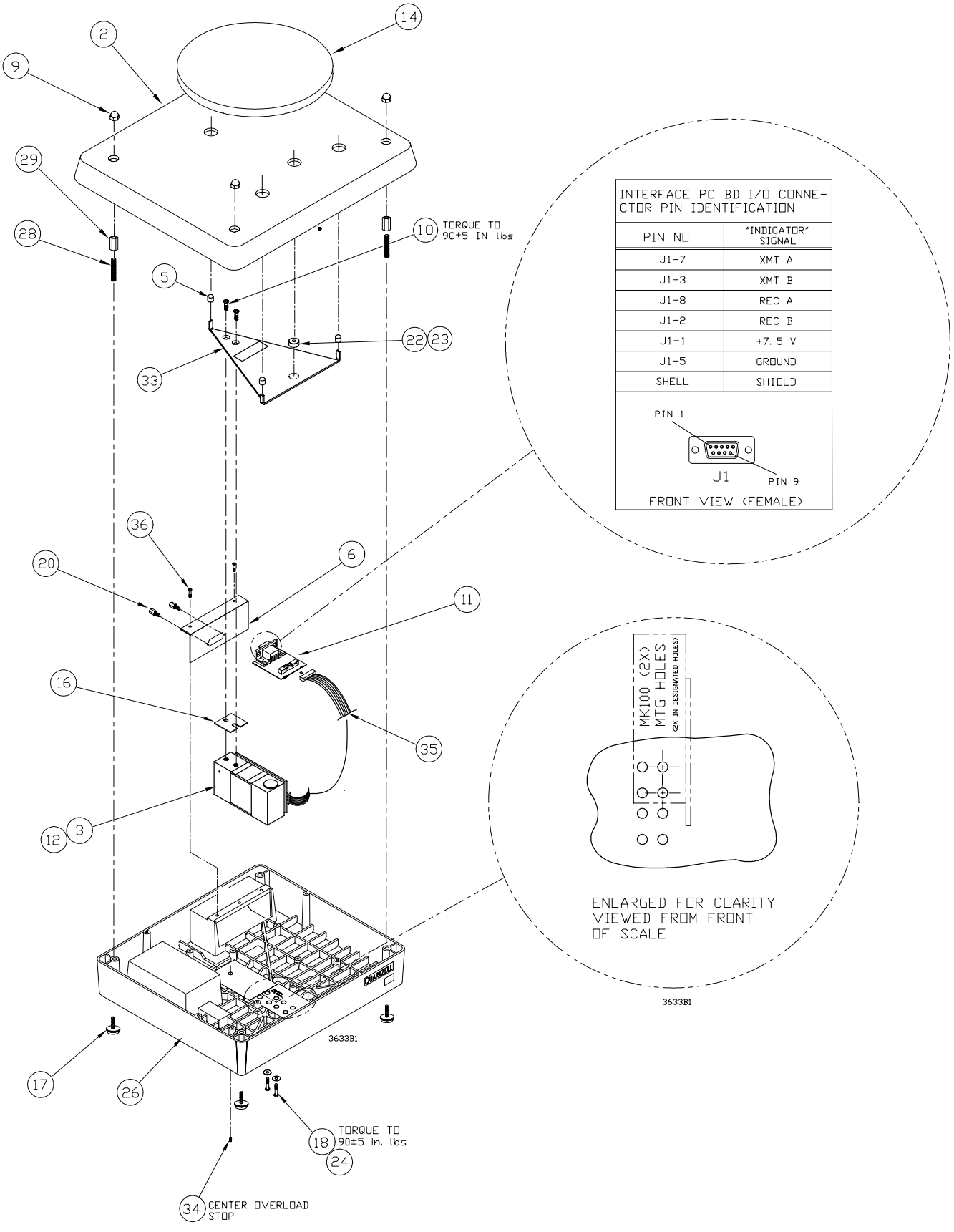
## Torque Specs

Weigh-Tronix specifies a torque of 90 (±5) in. lbs. on the Quartzell mounting bolts of the 10 lb capacity base and 40 ft. lbs. on the other capacities.

# 3633T QDT BENCH BASE

10 lb/5 kg cap. , *12" x 14" BASE*

**ASSEMBLY**



# 3633T QDT BENCH BASE

10 lb/5 kg cap. , *12" x 14" BASE*

## PARTS LIST

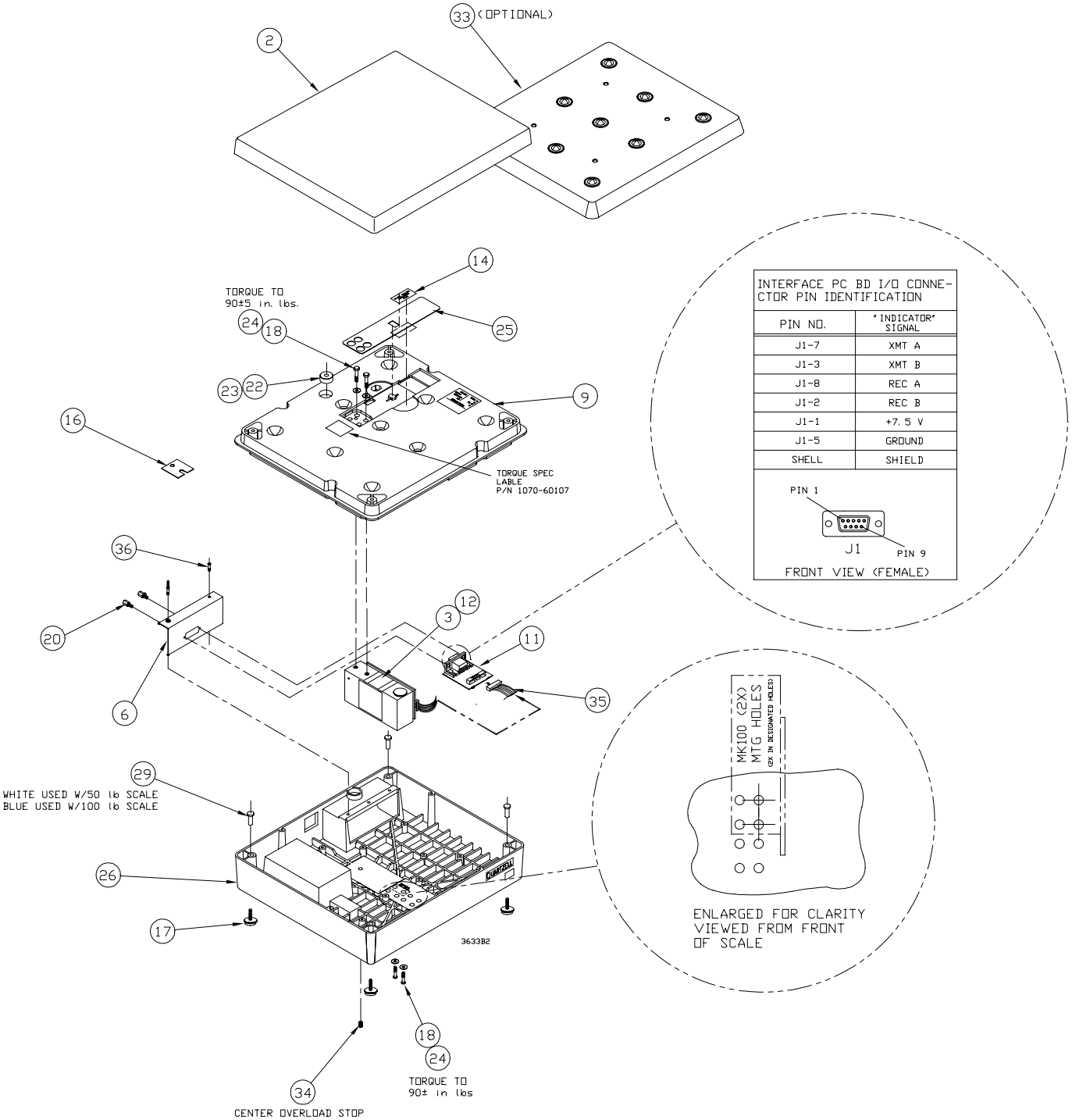
| ITEM NO. | DESCRIPTION | W-T P/N | QTY |
|---|---|---|---|
| 1 | **Remote Indicator I/O Intfc Cable Assy** *(not shown)* | | |
| | ( call W-T sales / service for length options) | ———- | —- |
| | Quartzell Base to WI-130 cable assy | 49385-xxxx | 1 |
| | Quartzell Base to PC-810 cable assy | 49386-xxxx | 1 |
| 2 | Shroud (10 lb.) | 1076-14894 | 1 |
| 3 | Quartzell Assy, Smart II | 7153-15497 | 1 |
| | Quartzell Assy, Smart III | 7153-14750 | 1 |
| 5 | Vinyl Cap | 1051-13968 | 3 |
| 6 | I/O Connector Mtg Bracket | 1067-14635-04 | 1 |
| 9 | Acorn Nut, # 10 | 1028-16157 | 4 |
| 10 | Screw, Flat Head, Hex Soc, 1/4-20 x 1.00"L | 1018-11594 | 2 |
| 11 | Interface Pc Board | 7405-15686 | 1 |
| 12 | Eprom (Quartzell pc bd) Smart III | 1150-15211 | 1 |
| | Eprom (Quartzell pc bd) Smart II | 1150-12657 | 1 |
| 14 | Platter | 1076-14738 | 1 |
| 16 | Aluminum Spacer | 1043-13977 | 1 |
| 17 | Foot | 7075-16213 | 4 |
| 18 | Capscrew, 1/4 x .1.00"L | 1007-15463 | 2 |
| 20 | Standoff,m/f #4 x 3/16 HEX x .19"L | 1044-01085 | 2 |
| 22 | Level Bubble | 1083-00095 | 1 |
| 23 | Adhesive Tape for Bubble | 1045-13049 | 1 |
| 24 | Flat Washer, 1/4" | 1029-00099 | 2 |
| 26 | Base | 7069-16183-02 | 1 |
| 28 | Slotted Stud, 1/4-20 x 2.00"L | 1015-14427 | 4 |
| 29 | Shroud Spacer | 1043-14426 | 4 |
| 33 | Loadbridge | 1066-16179 | 1 |
| *34 | Screw, Hex Socket (overload stop) | 1011-04367 | 1 |
| 35 | Cable Assy (Quartzell-to-intfc pc bd) | 7140-14118 | 1 |
| 36 | Screw,#6-32 x .25"L | 1009-10039 | 2 |

* Center overload stops only. Stops are preset at factory and require no adjustments.

# 3633T QDT BENCH BASE

50 lb/25kg, 100 lb/50kg, 150 lb/80kg cap , *12" x 14" BASE*

**ASSEMBLY**



# 3633T QDT BENCH BASE

50 lb/25kg, 100 lb/50kg, 150 lb/80kg cap , *12" x 14" BASE*

## PARTS LIST

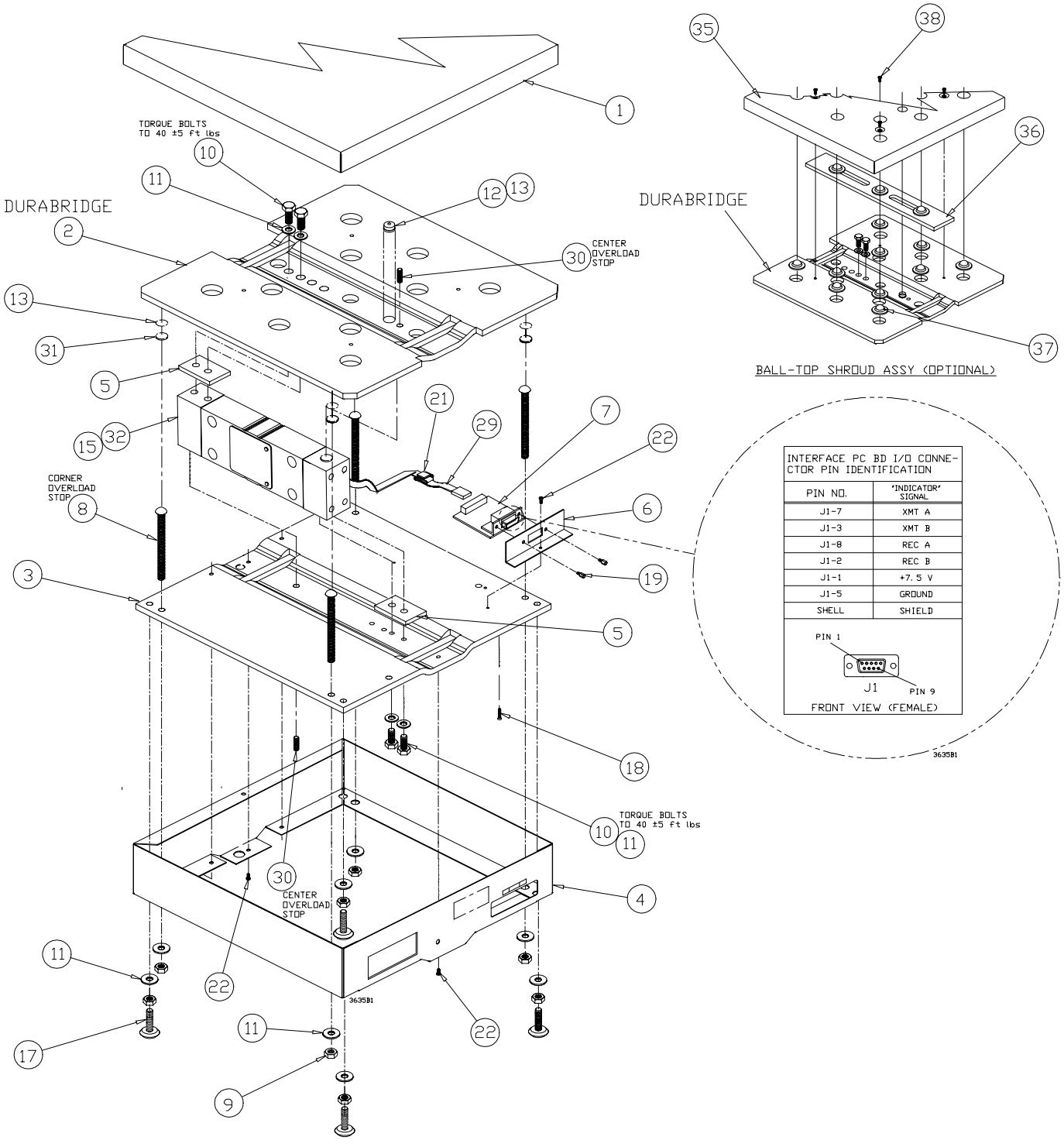
| ITEM NO. | DESCRIPTION | W-T P/N | QTY |
|---|---|---|---|
| 1 | **Remote Indicator I/O Intfc Cable Assy** *(not shown)* | | |
| | ( call W-T sales / service for length options) | ———- | —- |
| | Quartzell Base to WI-130 cable assy | 49385-xxxx | 1 |
| | Quartzell Base to PC-810 cable assy | 49386-xxxx | 1 |
| 2 | Shroud (flat top) | 1076-14742 | 1 |
| 3 | Quartzell Assy (50 lb/25kg cap.) Smart III | 7153-14749 | 1 |
| | Quartzell Assy (100 lb/50kg cap.) Smart II | 7153-15343 | 1 |
| | Quartzell Assy (100 lb/50kg cap.) Smart III | 7153-14753 | 1 |
| | Quartzell Assy (150lb/80kg cap.) Smart III | 7153-14616 | 1 |
| 6 | I/O Connector Mtg Bracket | 1067-14635-04 | 1 |
| 9 | Loadbridge | 1066-15993 | 1 |
| 11 | Interface Pc Board | 7405-15686 | 1 |
| 12 | Eprom (Quartzell pc bd) Smart III | 1150-15211 | 1 |
| | Eprom (Quartzell pc bd) Smart II | 1150-12657 | 1 |
| 14 | Sealing Cover Label | 1070-60103 | 1 |
| 15 | SCREW, #6 x .38"L | 1009-05758 | 4 |
| 17 | Foot | 7075-16213 | 4 |
| 18 | Capscrew, 1/4 x .1.00"L | 1007-02617 | 4 |
| 20 | Standoff,m/f #4 x 3/16HEX x .19"L | 1044-01085 | 2 |
| 22 | Level Bubble | 1083-00095 | 1 |
| 23 | Adhesive Tape (for bubble) | 1045-13049 | 1 |
| 24 | Flat Washer, 1/4" | 1029-80008 | 4 |
| 25 | Access/Security Cover | 1069-15766 | 1 |
| 26 | Base | 7069-15278 | 1 |
| 29 | Load Stop Pin *(* 50 lb./25 kg) | 1090-16074-32 | 4 |
| | Load Stop Pin (100 lb./50 kg) | 1090-16074-50 | 4 |
| 33 | Ball Top Shroud (optional) | 7076-15118 | 1 |
| *34 | Screw, Locking Hex Socket (overload stop) | 1011-04367 | 1 |
| 35 | Cable Assy (Quartzell-to-Intfc pc bd) | 7140-14118 | 1 |
| 36 | Screw,#6-32 x .25"L | 1009-10039 | 2 |

* Item 34 is preset at factory. No field adjustment required.

# 3635T QDT BENCH BASE

100 / 250 lb cap. , 18" x 18" BASE

**ASSEMBLY**



# 3635T QDT BENCH BASE

100 / 250 lb cap. , 18" x 18" BASE

## PARTS LIST

| ITEM NO. | DESCRIPTION | W-T P/N | QTY |
|---|---|---|---|
| 1 | Shroud | 1076-15050 | 1 |
| 2 | Durabridge | 7066-15056 | 1 |
| 3 | Durabridge Base | 7071-15057 | 1 |
| 4 | ScaleEnclosure | 7069-15165 | 1 |
| 5 | Spacer | 1043-15054 | 2 |
| 6 | I/O Connector Mounting Bracket | 1067-15725 | 1 |
| 7 | Interface Pc Board | 7405-15686 | 1 |
| 8 | Carriage Bolt, 3/8" x 3.50"L (overload stop) | 1019-15195 | 4 |
| 9 | Jam Nut, 3/8" | 1022-00241 | 4 |
| 10 | Cap Screw, 3/8" x 1.00"L (GR8) | 1007-02308 | 4 |
| 11 | Flat Washer, 3/8" | 1029-00093 | 12 |
| 12 | Level Bubble | 1083-00095 | 1 |
| 13 | Adhesive Tape (used for bubble & spacer pads) | 1045-13049 | 5 |
| 15 | Eprom (Quartzell pc. bd.) | 1150-15211 | 1 |
| 16 | **Remote Indicator I/O Intfc Cable Assy** *(not shown)* | | |
| | ( call W-T sales / service for length options) | ———- | —- |
| | Quartzell Base to WI-130 cable assy | 49385-xxxx | 1 |
| | Quartzell Base to PC-810 cable assy | 49386-xxxx | 1 |
| 17 | Foot Assy w/ Jam Nut | 7075-13082 | 4 |
| 18 | Sealing Screw, #6 x .50"L | 1001-02162 | 1 |
| 19 | Standoff,m/f #4 x 3/16HEX x .19"L | 1044-01085 | 2 |
| 21 | Cable Clamp | 1074-00205 | 1 |
| 22 | Screw,#6-32 x .38"L | 1009-05758 | 2 |
| 29 | Cable Assy (Quartzell-to-Intfc. pc. bd.) | 7140-14118 | 1 |
| *30 | Set Screw, 1/4 x .38"L (overload stop) | 1011-04367 | 2 |
| 31 | Spacer | 1043-12751 | 4 |
| 32 | Quartzell Assy (200 lb / 110 kg) | 7153-14617 | 1 |
| | Quartzell Assy (300 lb / 160 kg) | 7153-14618 | 1 |
| 35 | Ball Top Shroud (optional) | 1076-15066 | 1 |
| 36 | Ball Retainer | 1069-15068 | 1 |
| 37 | Transfer Ball | 1049-15072 | 13 |
| 38 | Screw, #10-32 x .50"L | 1006-03193 | 4 |

* Preset at factory, no adjustment required.

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## 3700 Base Specs

**Table 7**
3700 Base Specifications

| Platform Dimensions | | Capacity | |
|---|---|---|---|
| Inches | Centimeters | lb | kg |
| 10 x 10* | 25.4 x 25.4 | 10 | 5 |
| 12 x 14 | 30.5 x 35.6 | 25 | 12 |
| 12 x 14 | 30.5 x 35.6 | 50 | 25 |
| 12 x 14 | 30.5 x 35.6 | 100 | 50 |
| 18 x 18** | 45.7 x 45.7 | 300 | 160 |

* Torque spec is 90 in. lbs for the loadcell mounting bolts.
** Torque spec is 40 ft. lbs.
All others are 95 in. lbs.

## Leveling the scale

Use the leveling feet to level the scale platform. When the scale is level, tighten the jam nuts up against the scale base.

## Signal Cable Connections

**Table 8: Signal Cable Connections**

| Terminal (NEMA IV) | Wire Color | Description |
|---|---|---|
| 1 | Green | +Excitation |
| 2 | — | +Sense |
| 3 | White | +Output |
| 4 | Drain wire | Shield (Gnd) |
| 5 | Red | -Output |
| 6 | — | -Sense |
| 7 | Black | -Excitation |

## Overload Stop Adjustments

1. Place 102% of full scale capacity over one of the corners of the scale.
2. Adjust each screw until the displayed weight starts to go down. Do this for all for corners and the center stop.
3. Recalibrate the scale. Refer to the indicator Service Manual.

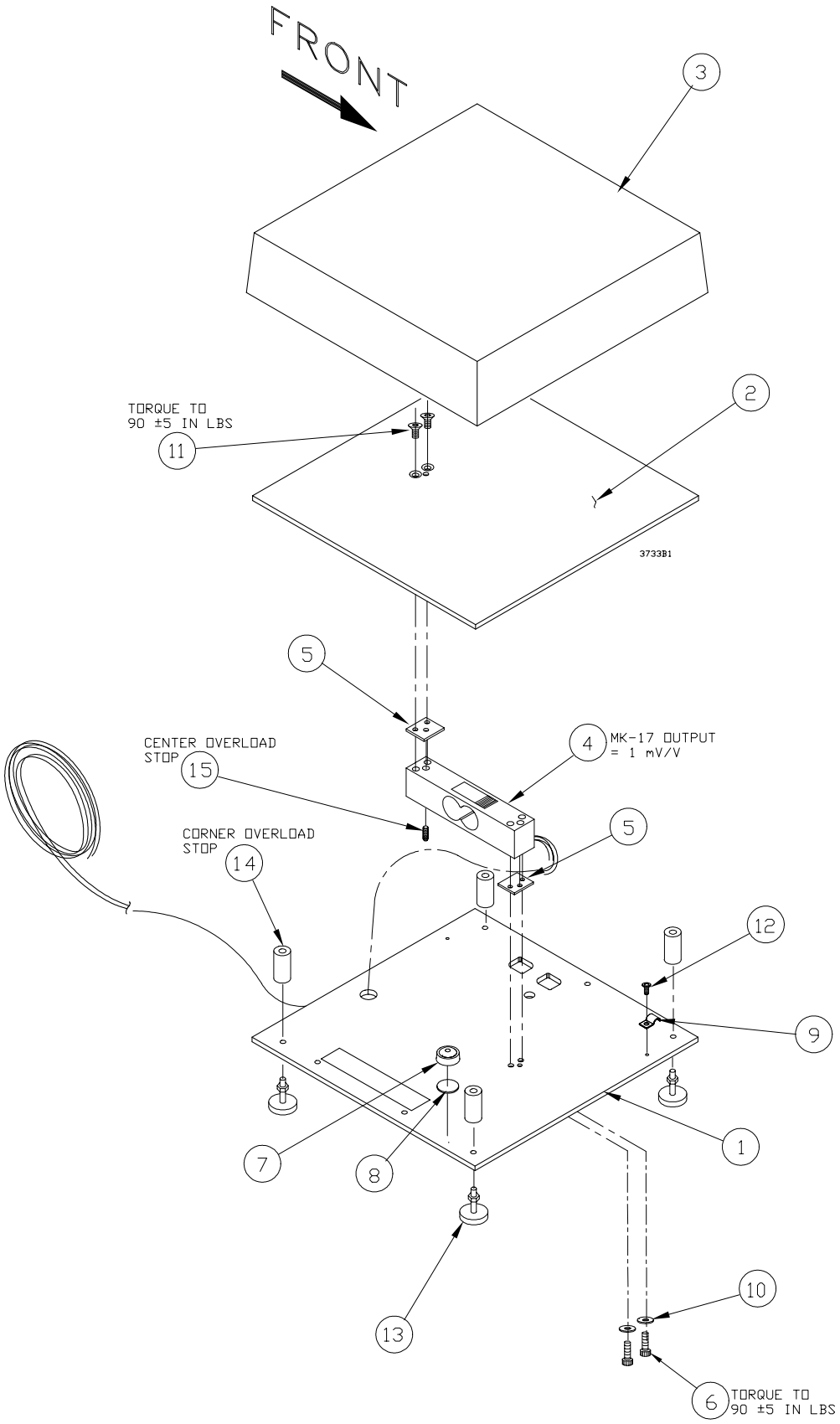
## Torque Specs

Weigh-Tronix specifies a torque of 90 (±5) in. lbs. on the loadcell mounting bolts.

# 3733 BENCH BASE

10 lb/5 kg cap. , *10" x 10" BASE*

**ASSEMBLY**



# 3733 BENCH BASE

10 lb/5 kg cap. , *10" x 10" BASE*

## PARTS LIST

| ITEM NO. | DESCRIPTION | W-T P/N | QTY |
|---|---|---|---|
| 1 | Base, 10” x 10” | 1069-14676 | 1 |
| 2 | Loadbridge | 1066-08889 | 1 |
| 3 | Shroud, 10” x 10” | 1076-08887 | 1 |
| 4 | Weight Sensor, 10 lb / 7½ kg (MK27) | 7154-16355-07 | 1 |
| 5 | Spacer | 1043-08890 | 2 |
| 6 | Capscrew, 1/4 x .5/8"L | 1007-00128 | 2 |
| 7 | Level Bubble | 1083-00095 | 1 |
| 8 | Adhesive Tape for Bubble | 1045-13049 | 1 |
| 9 | Cable Clamp 1/4” | 1074-00392 | 1‘ |
| 10 | Flat Washer, 1/4" | 1029-80008 | 2 |
| 11 | Flat Head, HX SOC Screw, 1/4-20 x 5/8"L | 1007-00813 | 2 |
| 12 | Screw,#6-32 x .25"L | 1009-10039 | 1 |
| 13 | Leveling Foot | 7075-15475-02 | 4 |
| 14 | Nylon Spacer | 1043-10409 | 4 |
| *15 | Setscrew, 1/4 x 5/8L (overload stop) | 1011-02412 | 1 |

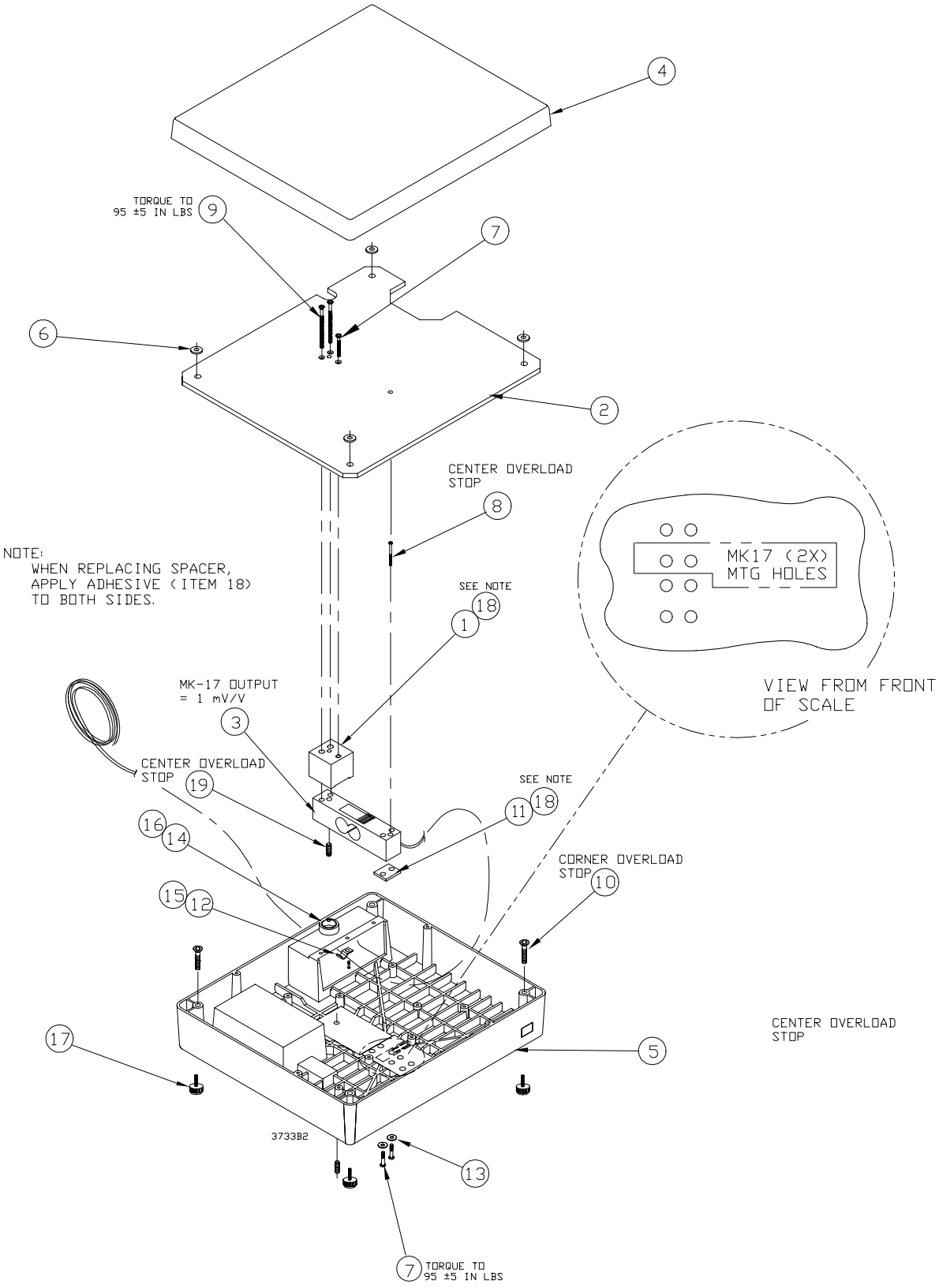
* Preset at factory, no adjustment required.

# 3733 BENCH BASE

25 lb/12 kg, 50 lb/25 kg, 100 lb/50 kg cap.

*12" x 14" BASE*

**ASSEMBLY**



# 3733 BENCH BASE

25 lb/12 kg, 50 lb/25 kg, 100 lb/50 kg cap.

*12" x 14" BASE*

## PARTS LIST

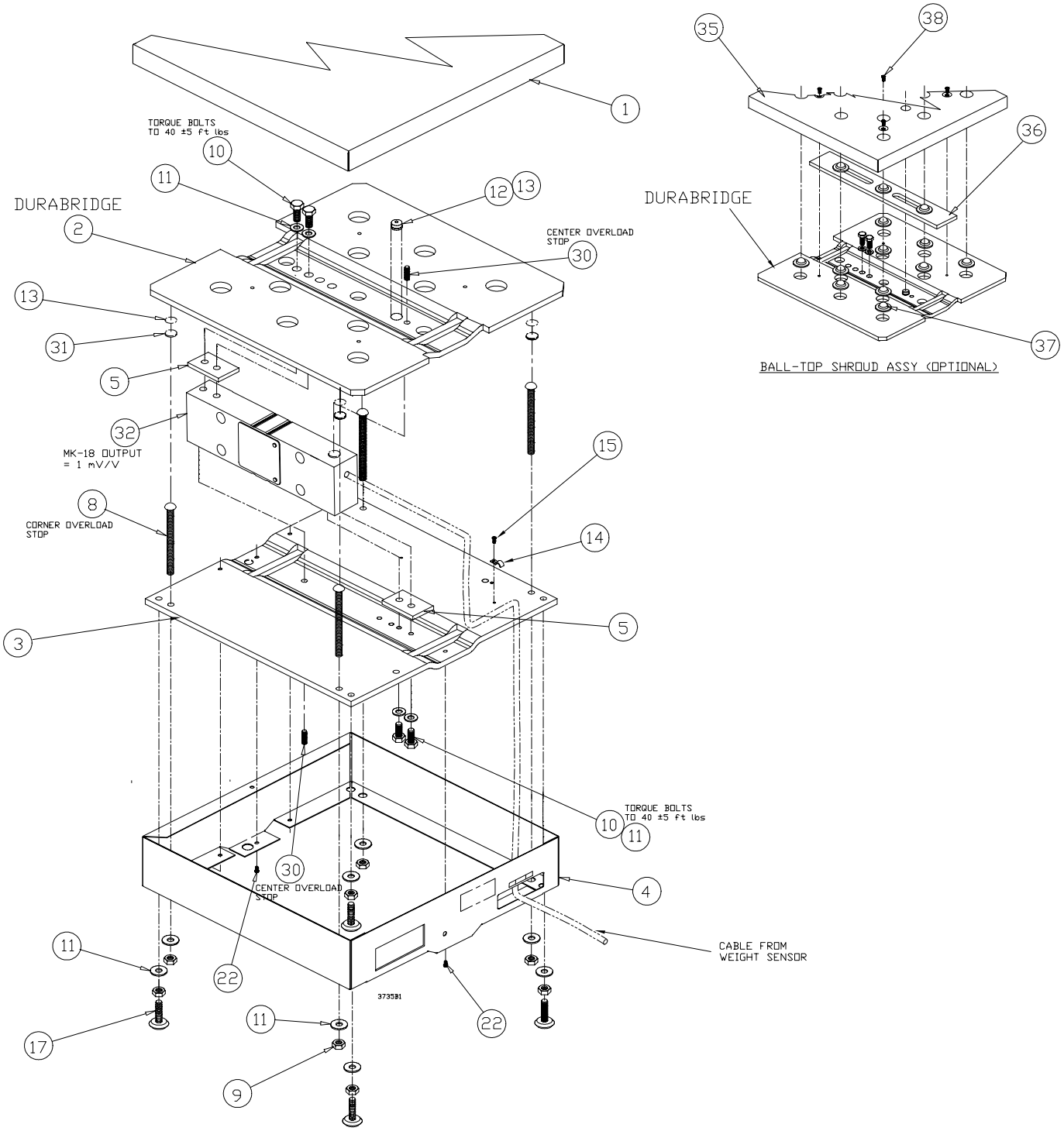
| ITEM NO. | DESCRIPTION | W-T P/N | QTY |
|---|---|---|---|
| 1 | Top Spacer | 1043-14714 | 1 |
| 2 | Loadbridge | 1066-14713 | 1 |
| 3 | Weight Sensor, 25 lb / 15 kg (MK27) | 7154-16355-15 | 1 |
| | Weight Sensor, 50 lb / 30 kg (MK27) | 7154-16355-30 | 1 |
| | Weight Sensor, 100 lb / 50 kg (MK28) | 7154-16355-50 | 1 |
| 4 | Shroud, 12” x 14” | 1076-14742 | 1 |
| 5 | Base, 12” x 14” | 1069-15278-02 | 1 |
| 6 | Dampener Pad | 1075-14716 | 4 |
| 7 | Capscrew, 1/4 -20 x 1.00"L | 1007-15463 | 2 |
| *8 | Flat Head Screw, 1/4 x 1 3/4"L (center stop) | 1018-15132 | 1 |
| 9 | Flat Head HxSoc Screw, 1/4-20 x 2.00"L | 1007-15147 | 2 |
| 10 | Flat Head Screw, 1/4 x 1.00"L (corner stop) | 1018-11594 | 4 |
| 11 | Bottom Spacer | 1043-09522 | 1 |
| 12 | Screw,#6-32 x 3/8"L | 1009-05758 | 1 |
| 13 | Flat Washer, 1/4” | 1029-00099 | 2 |
| 14 | Adhesive Tape for Bubble | 1045-13049 | 1 |
| 15 | Cable Clamp 1/4” | 1074-00392 | 1 |
| 16 | Level Bubble | 1083-00095 | 1 |
| 17 | Leveling Foot | 7075-15475-02 | 4 |
| 18 | Adhesive , (cyanoacrylate) | 1045-09103 | 4 ml |
| *19 | Setscrew, 1/4 x5/8L (center stop) | 1011-02412 | 1 |

* Preset at factory, no adjustment required.

# 3735 BENCH BASE

300 lb / 160 kg cap. , *18" x 18" BASE*

**ASSEMBLY**



# 3735 BENCH BASE

300 lb / 160 kg cap. , *18" x 18" BASE*

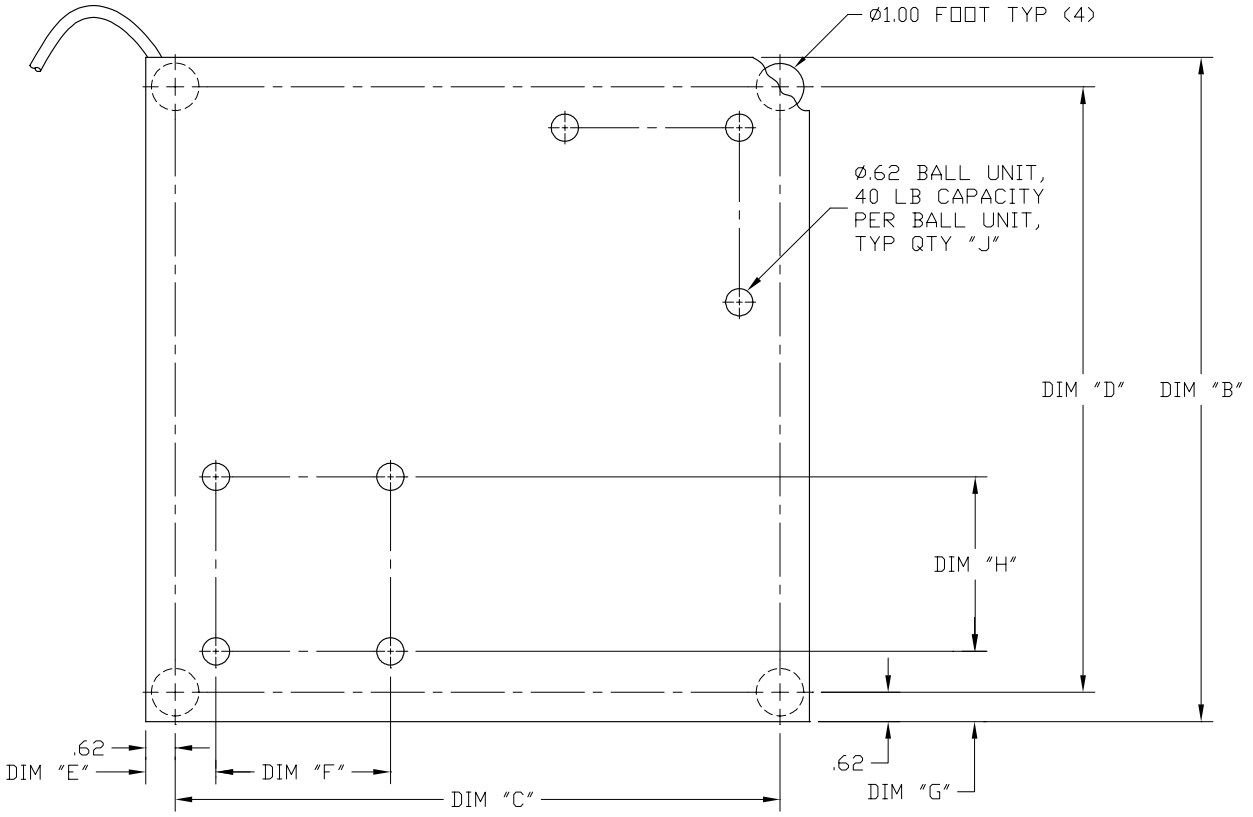
## PARTS LIST

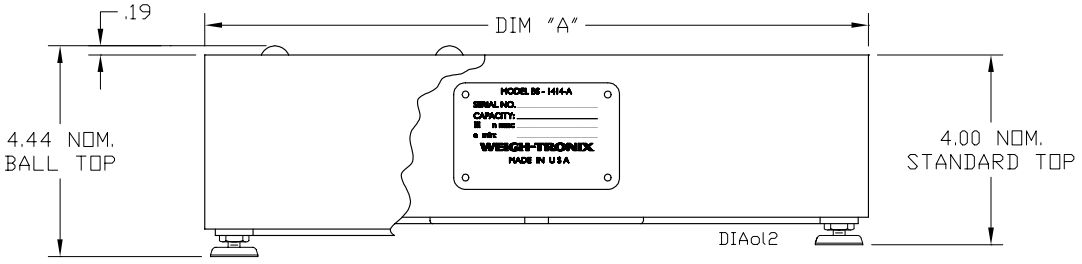
| ITEM NO. | DESCRIPTION | W-T P/N | QTY |
|---|---|---|---|
| 1 | Shroud | 1076-15050 | 1 |
| 2 | Durabridge | 7066-15056 | 1 |
| 3 | Durabridge Base | 7071-15057 | 1 |
| 4 | ScaleEnclosure | 7069-15165 | 1 |
| 5 | Spacer | 1043-15054 | 2 |
| 8 | Carriage Bolt, 3/8" x 3 1/2"L (corner overload stop) | 1019-15195 | 4 |
| 9 | Jam Nut, 3/8" | 1022-00241 | 4 |
| 10 | Cap Screw, 3/8" x 1.00"L (GR8) | 1007-02308 | 4 |
| 11 | Flat Washer, 3/8" | 1029-00093 | 12 |
| 12 | Level Bubble | 1083-00095 | 1 |
| 13 | Adhesive Tape (used for bubble & spacer pads) | 1045-13049 | 5 |
| 14 | Cable Clamp | 1074-00392 | 1 |
| 15 | Screw, #6-32 x 1/4” L | 1009-10039 | 1 |
| 17 | Foot Assy w/ Jam Nut | 7075-13082 | 4 |
| 22 | Screw,#6-32 x 3/8"L | 1009-05758 | 2 |
| *30 | Set Screw, 1/4 x 3/8"L (center overload stop) | 1011-04367 | 2 |
| 31 | Spacer | 1043-12751 | 4 |
| 32 | Weight Sensor , MK 28 (300 lb / 160 kg) | 7154-16355-160 | 1 |
| 35 | Ball Top Shroud (optional) | 1076-15066 | 1 |
| 36 | Ball Retainer | 1069-15068 | 1 |
| 37 | Transfer Ball | 1049-15072 | 13 |
| 38 | Screw, #10-32 x 1/2"L | 1006-03193 | 4 |

* Preset at factory, no adjustment required.

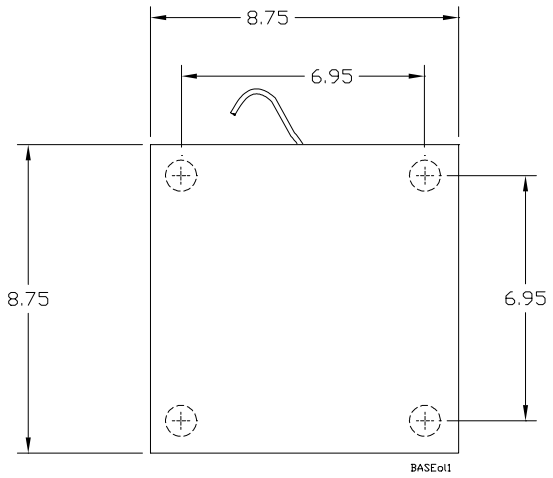
# Diamond Series Outline Dimension Drawing

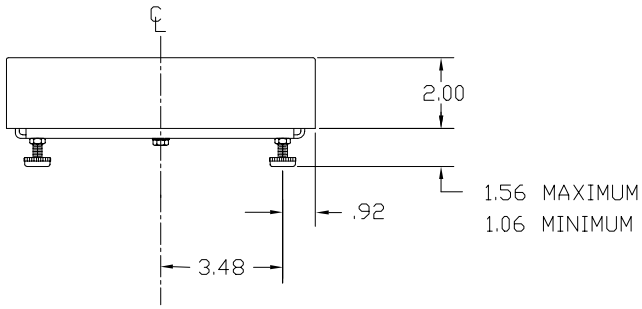
| DIAMOND SERIES-- "BENCH BASES" DATA CHART | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | BALL PATTERN DIM'S (OPTIONAL) | | | | |
| NOMINAL SIZE | DIM "A" | DIM "B" | DIM "C" | DIM "D" | DIM "E | DIM "F" (TYP.) | DIM "G" | DIM "H" (TYP.) | QTY "J" |
| 14 X 14 | 14.00 | 14.00 | 12.75 | 12.75 | 1.48 | 3.68 | 1.48 | 3.68 | 16 |
| 18 X 18 | 18.00 | 18.00 | 16.75 | 16.75 | 1.50 | 3.75 | 1.50 | 3.75 | 25 |
| 18 X 24 | 18.00 | 24.00 | 16.75 | 22.75 | 1.50 | 3.75 | 2.00 | 5.00 | 25 |
| 20 X 20 | 20.00 | 20.00 | 18.75 | 18.75 | 2.00 | 4.00 | 2.00 | 4.00 | 25 |
| 24 X 24 | 24.00 | 24.00 | 22.75 | 22.75 | 2.00 | 5.00 | 2.00 | 5.00 | 25 |



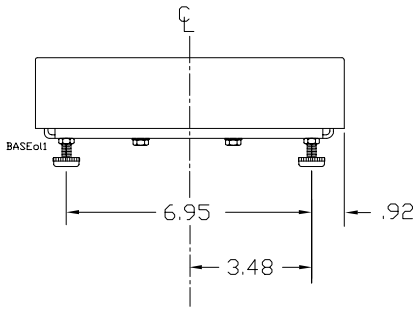



# Torsion Base Outline Dimension Drawing

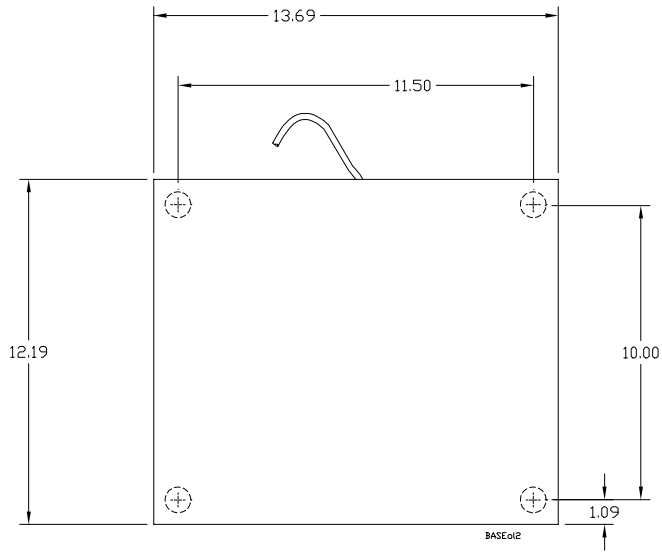


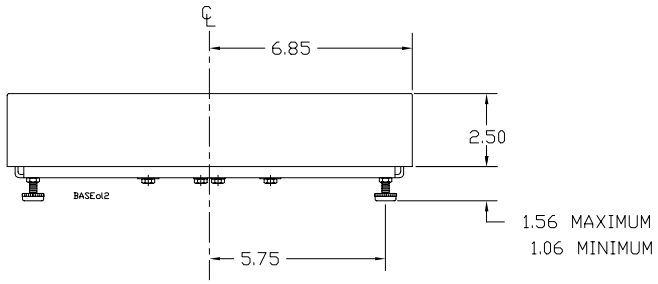




TORSION BASE, 9" x 9"
(FRONT VIEW)

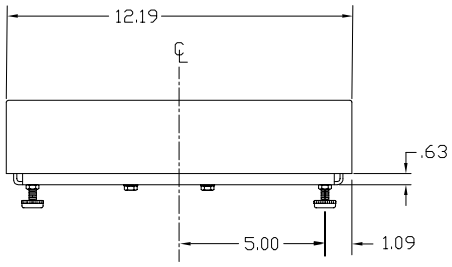



TORSION BASE, 9" x 9"
(SIDE VIEW)



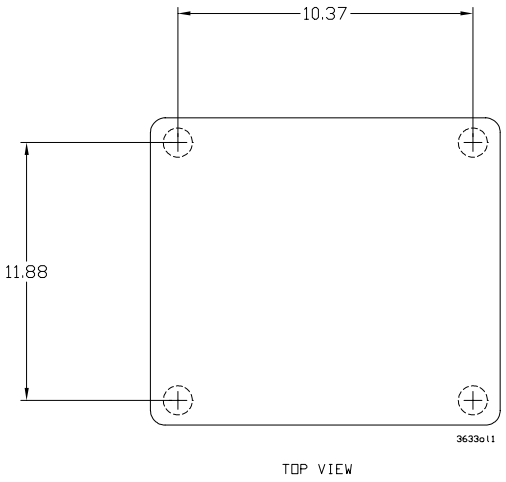




TORSION BASE, 12″ × 14″
(FRONT VIEW)

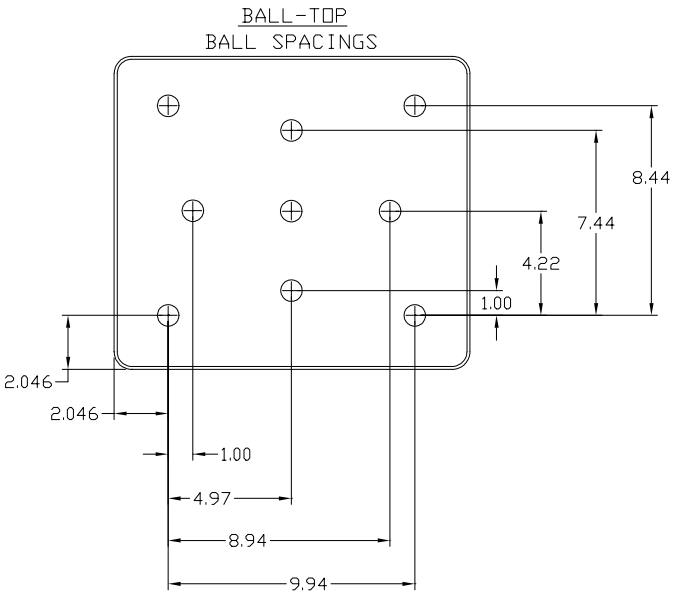


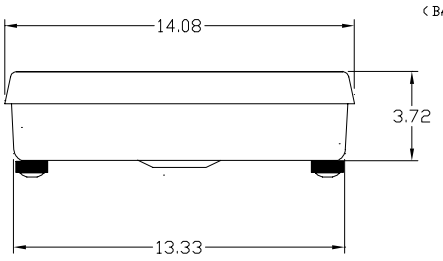

TORSION BASE, 12″ × 14″
(SIDE VIEW)

# 3633T QDT Series Outiline Dimension Drawing

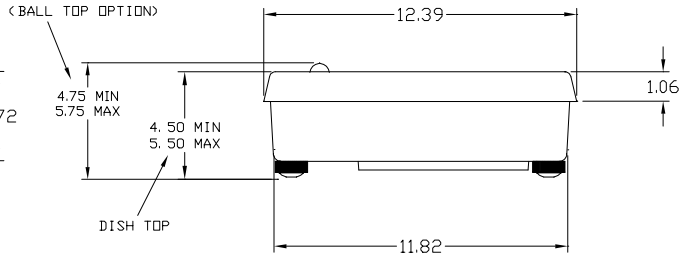



TOP VIEW



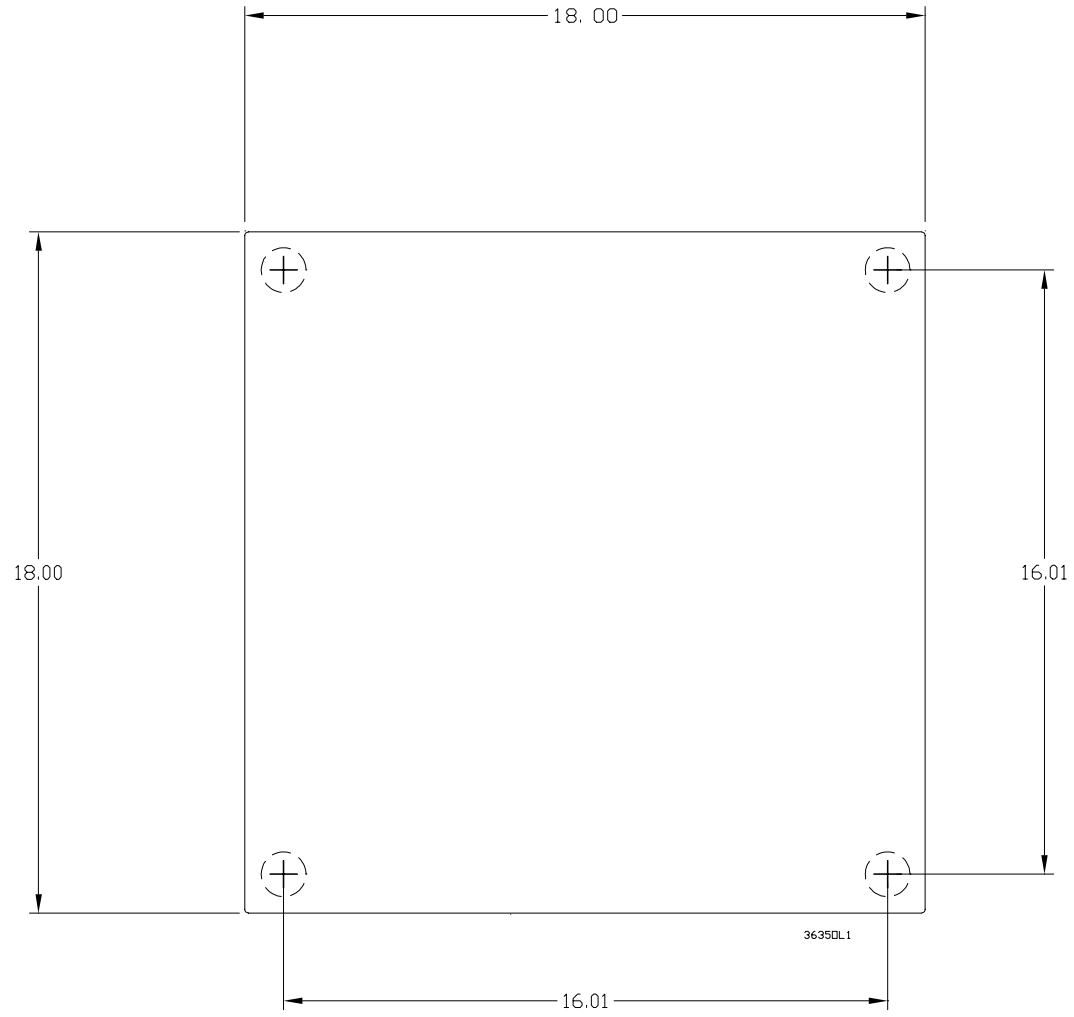




FRONT VIEW

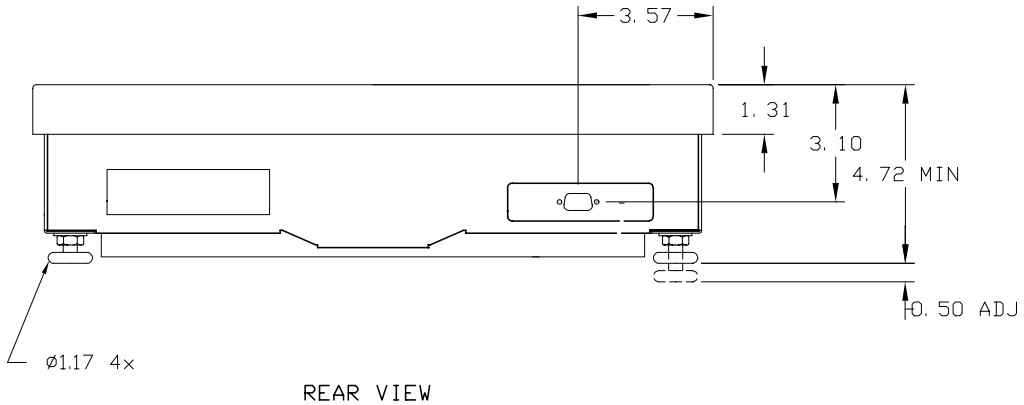



SIDE VIEW

# 3635 QDT and 3735 Outiline Dimension Drawing




TOP VIEW




REAR VIEW

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