

# QUICK INSTALLATION GUIDE

## Mechanical Installation

### Installing the HI 3300 Tension Controller in a Panel

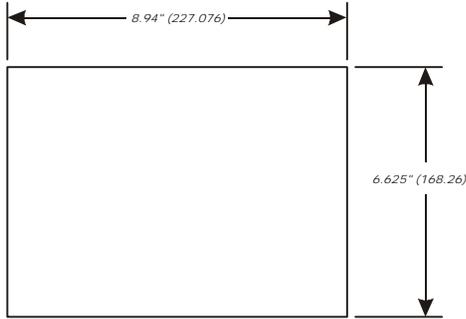


FIG. 1 PANEL CUTOUT DIMENSIONS

- Step 1. Make sure that all Electrostatic Discharge (ESD) precautions are taken before and during installation.
- Step 2. Slide the gasket over the rear of the instrument until the gasket is flush with the back side of the front panel. (See Fig.2)

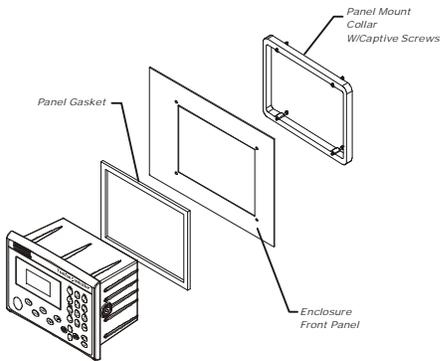


FIG. 2 PANEL MOUNT INSTALLATION

- Step 3. Gently slide the Tension Controller with the gasket into the cutout in the enclosure front panel or door until the gasket is flush with the enclosure front panel. Be sure to secure the instrument with both hands when installing.
- Step 4. Gently slide the Panel Mount Collar over the rear of the instrument. (See Fig. 2)
- Step 5. Push the captive screws through the holes in the Enclosure Front Panel and install the screws into the tapped holes on the instrument until the screws are finger tight.
- Step 6. Use a slotted head screwdriver and tighten each screw until the instrument is snug and the compression gasket is tight against the panel. Use a torque screw driver and torque each screw to 10 inch/pounds. DO NOT OVERTIGHTEN!

### Installing the HI 3300 Tension Controller in a Swivel/Wall Mount

**NOTE:** When wall mounted, the unit should support a 14 pound weight for one minute without coming loose or damaging the equipment.

- Step 1. Use four (4) 1/4 x 20 fasteners to fasten the swivel mount to a horizontal surface. (See Fig. 3)

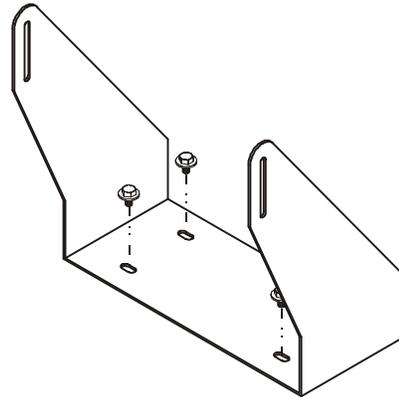


FIG. 3 INSTALLING THE SWIVEL MOUNT TO A HORIZONTAL SURFACE

- Step 2. Place the Tension Controller between the Swivel Mount brackets so that the threaded holes in the instrument are aligned with the slots in the Swivel bracket. (See Fig.4)

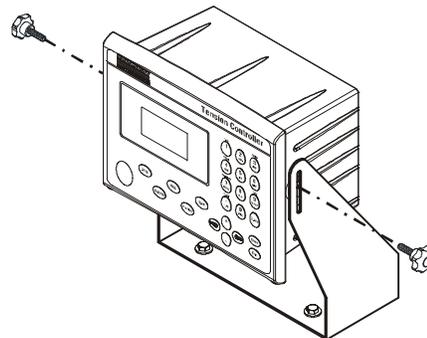


FIG. 4 TENSION CONTROLLER/INSTALLING IN A SWIVEL MOUNT

- Step 3. Screw the two fastener knobs into the threaded holes on each side of the Tension Controller until the brackets are snug against the instrument.

### Load Point Installation

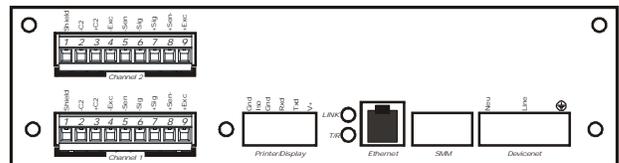
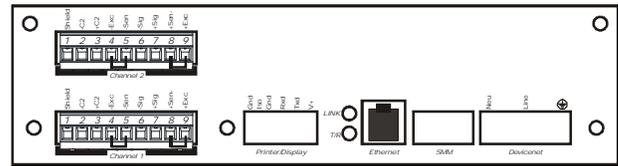


FIG. 5 REAR PANEL/LOAD POINT CONNECTIONS

### C2® Load Point Connection

Cable color Code for C2 Load Points (left to right facing the rear panel):

- Shield Ground Wire
- C2- Violet
- C2+ Grey
- EXC- Black
- SEN- Brown
- SIG- White
- SIG+ Green
- SEN+ Blue
- EXC+ Red



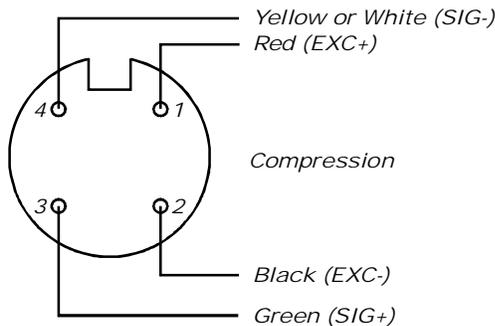
**FIG. 8 LVDT CONNECTIONS/HI 3300 REAR PANEL**

- Step 1. Remove the factory installed jumper from the terminal block if you are connecting an 8 wire cable from the junction box.
- Step 2. Connect the cable (Recommended load cell cable: Hardy Instruments Prt. # 6020-0001) wires to the terminal block according to the cable color chart.
- Step 3. Plug the terminal block into the Channel 1 or Channel 2 connector on the rear panel.
- Step 4. For more information concerning C2 Load Point connection, consult the HI 3000 Series Installation and Service Manual.

**LVDT Tension Sensor - MB Series Connection**

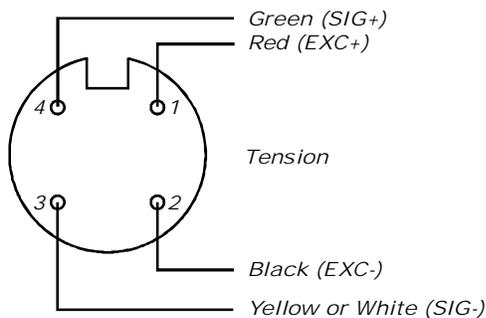
Cable Color Code for MB Series LVDT load sensor connection:

- Red EXC+
- Black EXC-
- Yellow SIG-
- Green SIG+



FRONT VIEW OF CONNECTOR

**FIG. 6 LVDT CONNECTIONS/COMPRESSION**



FRONT VIEW OF CONNECTOR

**FIG. 7 LVDT CONNECTIONS/TENSION (REVERSE WRAP)**

- Place jumpers in positions 4-5 and 8-9 (See Fig. 3-8)

**Non-C2 Load Point Connection**

*NOTE: Cable Color Codes vary between vendors, check with your supplier for the Color Code for your Non-C2 load point.*

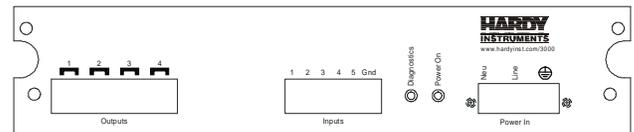
- Step 1. Remove the factory installed jumper from the terminal block if you have a 6 wire load cell cable that includes sense wires from the load cell or junction box.
- Step 2. Connect the cable (Recommended load cell cable: Hardy Instruments Prt. # 6020-0001) wires to the Channel 1 terminal block according to the Non-C2 cable color chart, or per manufacturers specification.
- Step 3. Plug the terminal block into the Channel 1 or Channel 2 connector on the rear panel.

**AC Input Power Wiring**

**WARNING: DO NOT OPERATE WITH INCORRECT LINE VOLTAGE. TO DO SO WILL RESULT IN PROPERTY DAMAGE AND/OR PERSONAL INJURY. MAKE SURE THAT THE POWER SOURCE DOES NOT EXCEED 240 VAC.**

*NOTE: For DC Input Power Wiring See the HI 3300 Service Manual.*

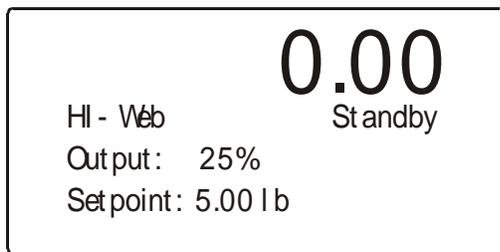
- The AC power should be supplied by a “clean” primary line, directly from the power panel. This line should not supply any other equipment, including the feeding unit, and should be supplied with a minimum 10 amp breaker. (See Fig. 9)



**FIG. 9 POWER WIRING DIAGRAM**

- Power Input J1
  - J1-1 Neu (Low)
  - J1-2 Line (HI)
  - J1-3 Ground

- Step 1. The HI 3000 Series instruments are configured with a universal power supply rated from 120 to 240 VAC.
- Step 2. Install a 3-wire, minimum 14 AWG power line to the 3-pin terminal block connector.
- Step 3. The Instrument boots up to an operating display. (See fig. 10)



**FIG. 10 OPERATING DISPLAY**



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