

N6 Bridge Control Box Assembly Instructions For Single Girder Cranes

General: The bridge control box and control wiring is supplied by Harrington as a pre-assembled and wired unit. The end truck motor wiring is pulled through the conduit and fittings prior to shipment from the factory. It is packaged so that the bridge control box, wire and conduit sections can be removed from the box, unfolded, connected and assembled to the bridge beam as shown on Harrington Drawing 178 Rev A (attached) and as detailed in these instructions.

Instructions:

NOTICE

Read through all of these instructions prior to installing the bridge control box and conduit.

1. Unpack the bridge control box, wiring and conduit from the packaging box. Do not unfold the conduit yet. Use care to avoid pinching, cutting or otherwise damaging the wiring, particularly at the ends of the conduits.
2. Inspect the liquid tight and EMT conduit for damage such as dents or cuts. If the conduit is damaged contact Harrington for a replacement.

▲WARNING

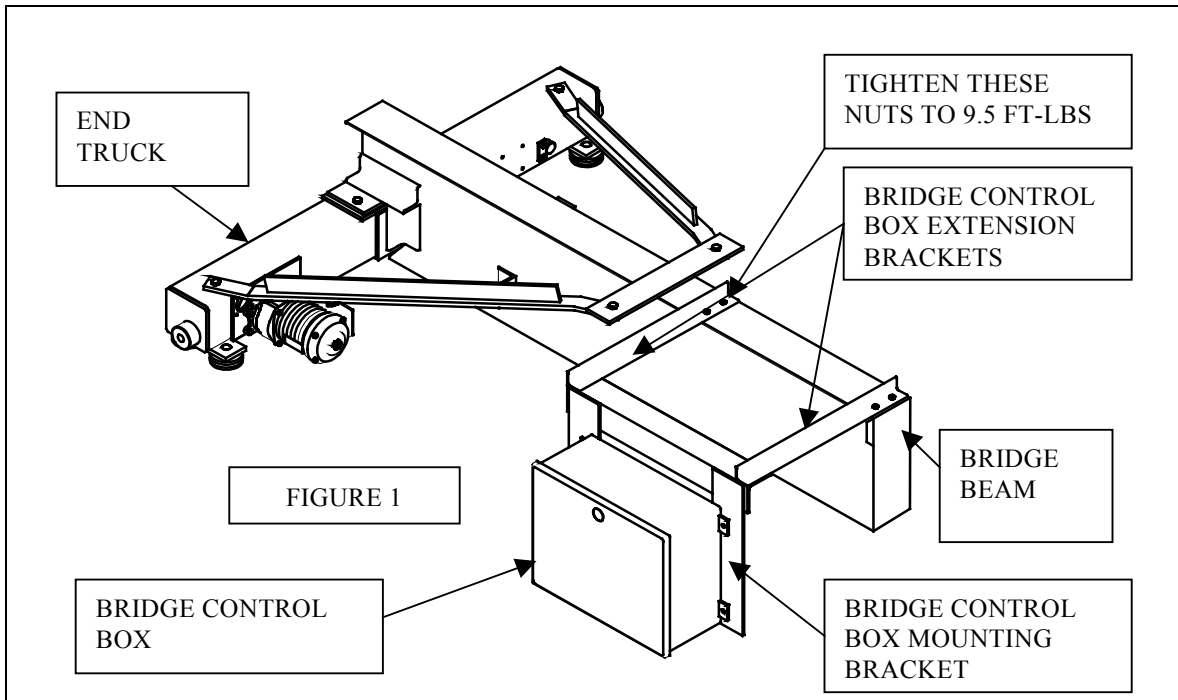
Do not install damaged conduit. Use of damaged conduit can create an electrocution or fire hazard, which if not avoided, could result in death or serious injury, and property damage.

3. Inspect wire for damage. Pay particular attention to the wire located between the folded portion of the conduit sections. Make sure the insulation is not cracked, frayed, or damaged in any way. Do not install bridge control box and associated wiring if any wire is damaged. Contact factory for replacement wire.

▲WARNING

Do not install damaged wire. Use of damaged wire can create an electrocution or fire hazard, which if not avoided, could result in death or serious injury, and property damage.

4. Inspect components inside bridge control box. Make sure all components are securely fastened to mounting panel and DIN rail. If any components are loose, tighten as required.
5. Mount the bridge control box extension brackets to the beam as shown on the crane assembly drawing supplied by Harrington with your order. Tighten the locknuts to a minimum of 9.5 ft-lb. See figure 1 below.



6. Attach the bridge control box mounting bracket to the extension brackets. Tighten the locknuts to 9.5 Ft Lbs. See Figure 1 above.
7. Attach the bridge control box to the mounting bracket using the 4 bolts, washers and locknuts provided. Tighten the locknuts to a minimum of 60 in-lbs.

NOTICE

Be careful not to damage wiring exiting the bridge control box during installation and mounting of the box.

8. Carefully unfold the EMT conduit sections. Avoid pinching, cutting, or otherwise damaging wires, particularly at the conduit ends. Carefully assemble the two ends of the conduit with the coupling. Make sure not to pinch or damage the wire when assembling the ends of the conduit. Tighten the ferrule nut of each coupling and torque to the values shown below. Mount the conduit and couplings to the beam using the hardware provided. **Make sure to include the conduit spacer for NEMA 3R applications.** Each of the nuts used to clamp the conduit to the beam should be tightened to 60 in-lbs. Holes are located at 8' spacing intervals on the beam. If the bridge beam is not supplied by Harrington, drill the conduit mounting holes per the bridge beam assembly print provided with order.

Conduit Size	Tightening Torque
1/2"	300 in-lb
3/4"	500 in-lb
1"	700 in-lb

9. After bridge control box, conduit and wiring are in place, the wiring can now be connected to the motor connections per wiring diagram supplied with your order.