

# OPERATING, MAINTENANCE & PARTS MANUAL SUPPLEMENT

## LODESTAR® VS INTELLI-CONNECT™ INSTALLATION INSTRUCTIONS



## **CM HOIST PARTS AND SERVICES ARE AVAILABLE IN THE UNITED STATES AND IN CANADA**

As a CM Hoist and Trolley user you are assured of reliable repair and parts services through a network of Master Parts Depots and Service Centers that are strategically located in the United States and Canada. These facilities have been selected on the basis of their demonstrated ability to handle all parts and repair requirements promptly and efficiently. To quickly obtain the name of the Master Parts Depot or Service Center located nearest you, call (800) 888-0985, fax (716) 689-5644, or visit [www.columbusmckinnon.com](http://www.columbusmckinnon.com).

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Como usuario de un polipasto y carro de CM le aseguramos cualquier reparación o la disponibilidad de cualquier pieza de repuesto a través de una red de almacenes de piezas de repuesto y centros de servicio situados estratégicamente en Estados Unidos y Canadá. Estas instalaciones se han seleccionado en base a su capacidad demostrada en la reparación de equipos y suministro de piezas de repuesto de forma rápida y eficaz. Para obtener la dirección del almacén de piezas de repuesto o del centro de servicio más cercano, llame al teléfono (800) 888-0985, fax (716) 689-5644, o visita [www.columbusmckinnon.com](http://www.columbusmckinnon.com) (sólo en Estados Unidos y Canadá).

### **LE SERVICE DE RÉPARATION ET DE PIÈCES POUR PALANS CM EST DISPONIBLE AUX ÉTATS-UNIS ET AU CANADA**

Soyez assurés qu'en temps d'utilisateur de palan et treuil CM, d'un service de réparation et de pièces fiable par l'entremise d'un réseau de Centres de service et de Dépôts de pièces maîtresses qui sont stratégiquement situés aux États-Unis et au Canada. Ces établissements ont été sélectionnés sur une base de leur habileté démontrée à s'occuper promptement et efficacement des besoins de réparation de pièces. Appelez le (800) 888-0985, fax (716) 689-5644, ou visitez [www.columbusmckinnon.com](http://www.columbusmckinnon.com) pour obtenir rapidement le nom du dépôt de pièces maîtresses ou du centre de service situé le plus près.

This instruction sheet covers the assembly and installation of both the V1 and V2 Lodestar Intelli-Connect Kit.

The kit accompanying this instruction sheet includes all the necessary parts to convert from the existing Lodestar® V1 or V2 hoist with a hardline data port to the wireless data Intelli-Connect. The Intelli-Connect™ Mobile Application is available as a free download on Google Play or the Apple® App Store®\*.

For more information on downloading or using the Intelli-Connect Mobile/Mobile+ app, visit [www.columbusmckinnon.com/intelli-connect](http://www.columbusmckinnon.com/intelli-connect).

## WARNING

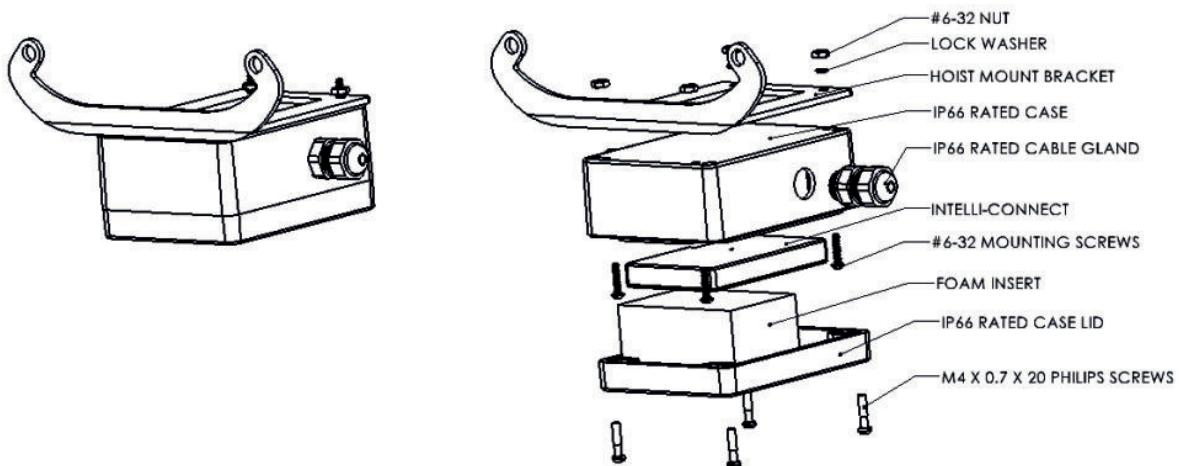
Failure to disconnect the hoist from the power supply may result in injury from exposure to high electrical potential.

**NOTE:** You will need the following tools (not provided):

- 17 mm wrench to remove the M12 data port connector
- Small flathead screwdriver to remove M12 data port connector wires from variable frequency drive (VFD)
- 3/16" Allen wrench to remove end cover bolts
- 20 mm wrench to install cable gland and tighten cord grip

## V1 INTELLI-CONNECT HARDWARE KIT

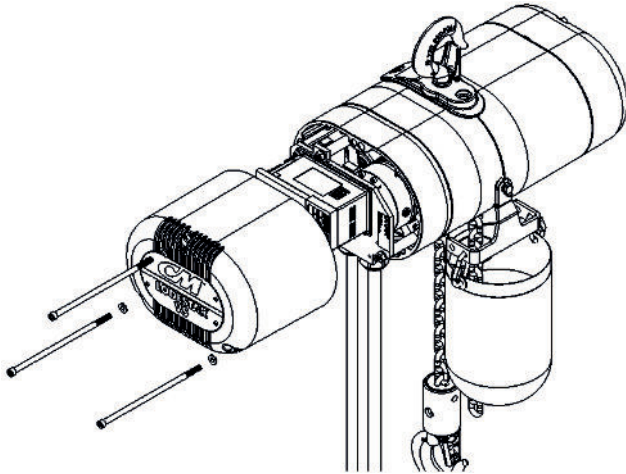
**Figure 1** shows the V1 pre-assembled contents of the Intelli-Connect hardware kit (ethernet cord assembly and 2 replacement end cover bolts with O-ring and washer replacement as well not shown).



**Figure 1: Pre-assembled Intelli-Connect Kit**

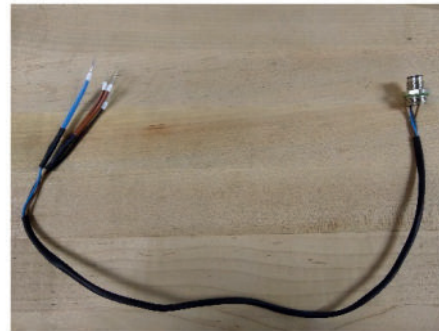
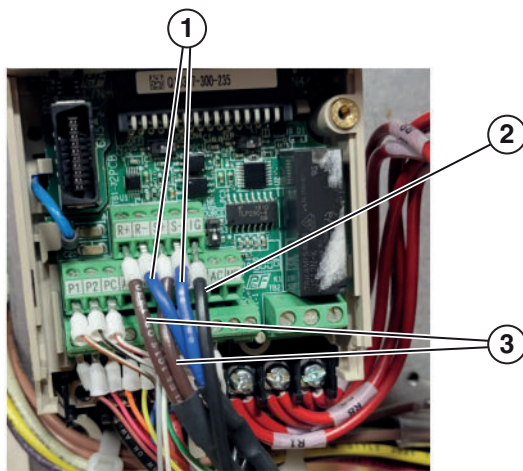
\* Google Play is a trademark of Google LLC. Apple and App Store are registered trademarks of Apple Inc., registered in the U.S. and other countries.

1. Remove the hoist VFD end cap to access the VFD location connecting the M12 data port wires.



**Figure 2: V1 End Cover Removal**

2. Disconnect the M12 data port cable (**Figure 3**) from the VFD using a small flathead screwdriver and tighten the loose screws back down.
3. Using the 17 mm wrench, loosen and remove the M12 data port from the hoist. Take care to prevent excessive twisting of the wires.

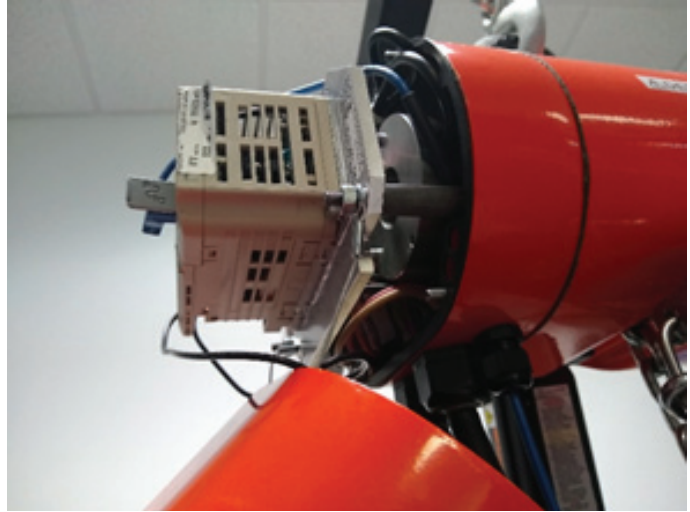
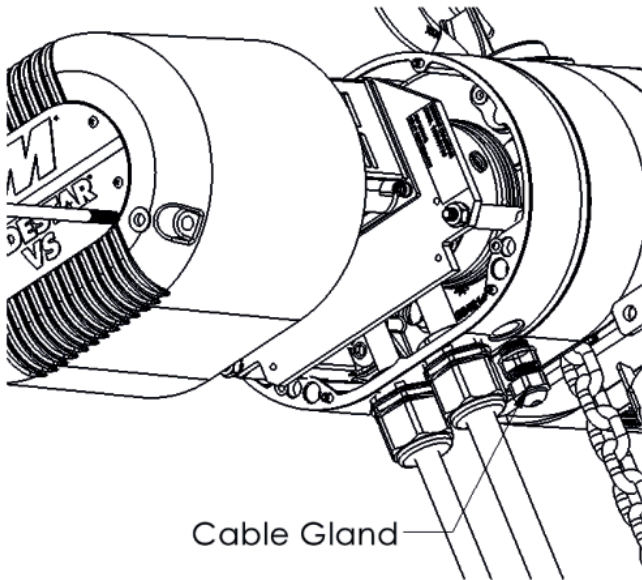


**Figure 3: M12 Data Port Cable and Connection**

- 1 - Two Blue Wires
- 2 - One Black Wire

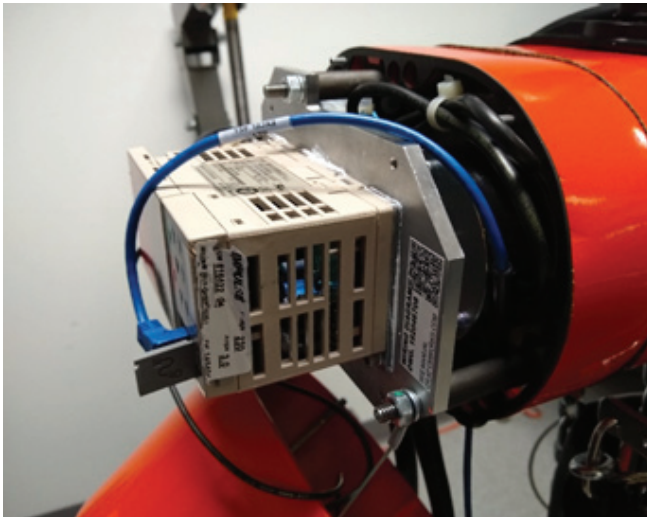
- 3 - Two Brown Wires

4. Install the free end RJ45 of the ethernet cable and gland into the now open M16 threaded hole in the hoist from the outside (shown in **Figure 4**) and tighten base of gland (not gland dome nut) finger-tight plus 1/4 to 1/3 turn. **Make sure the O-ring does not twist.** The angled RJ45 connector will be a tight fit through the threaded hole and will scar the RJ45 molding.



**Figure 4: Cable Gland Installation**

5. Bring the assembled Intelli-Connect kit box/bracket from **Figure 1** close enough to the hoist to plug the ethernet cord into the VFD and follow **Figure 4** and **Figure 5** for the optimal cable routing inside the hoist. A small amount of cable slack should exist between both cable glands, as shown in **Figure 6**.



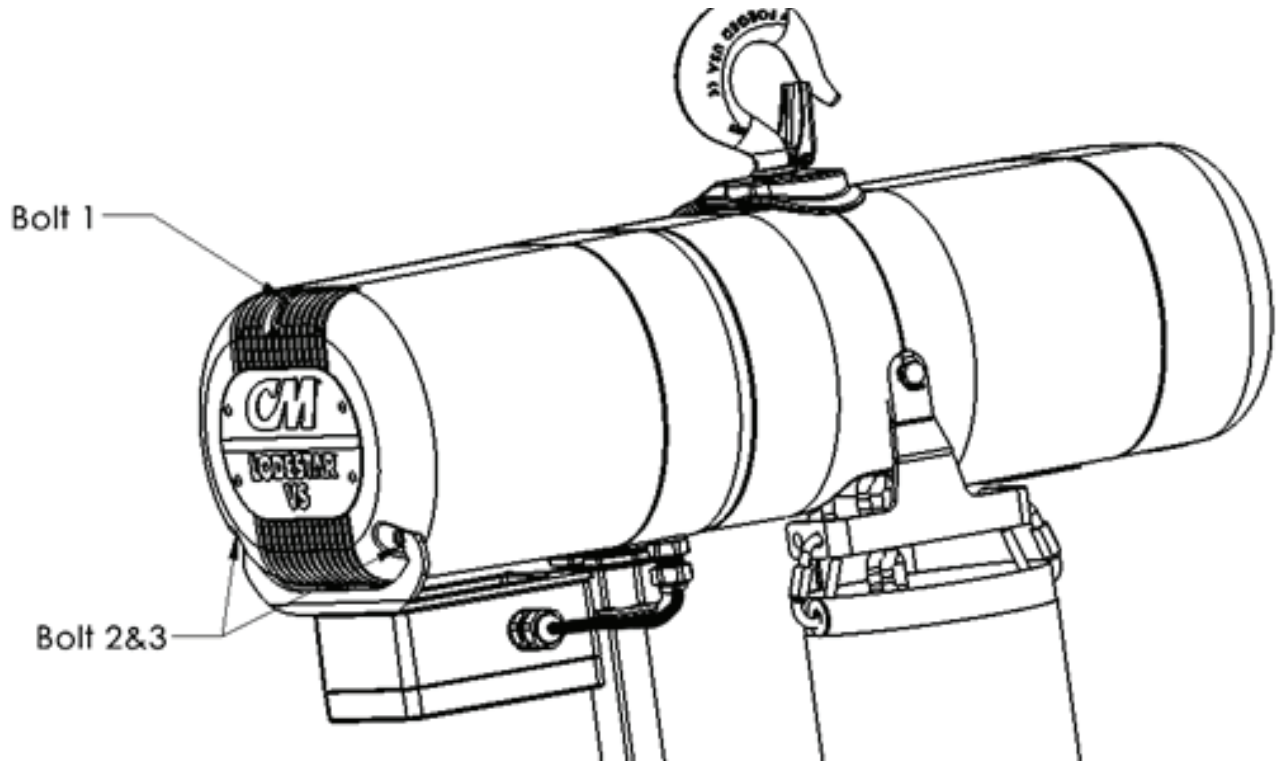
**Figure 5: Cable Routing**



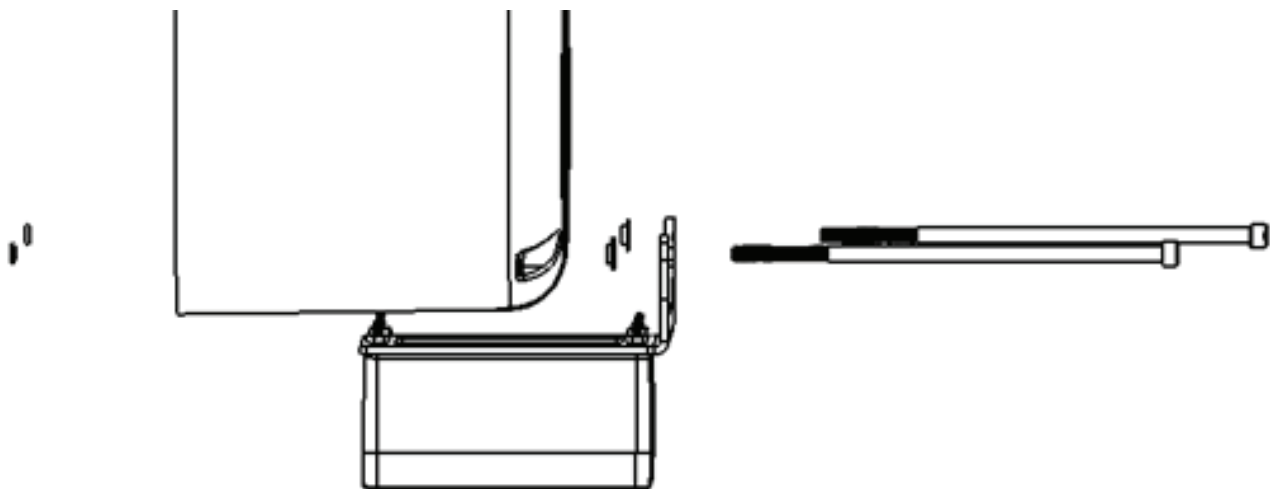
**Figure 6: Cable Installed Between Both Glands**

6. Tighten the hoist cable gland dome nut to clamp down on the ethernet cable, sealing it from the environmental elements. The cable should not slide if the hoist cable gland dome nut has undergone proper tightening.

7. With the ethernet now plugged into the VFD, use the 2 longer replacement end cover bolts (2 & 3) (shown with the replacement O-ring and washer in **Figure 7** and **Figure 8**). Place the hoist VFD end cover back on and torque the bolts to (50-60 in-lbs). Bolt 1 on the top of the hoist for the end cover does not require replacement unless it suffers damage, since it does not need to be longer to accommodate the bracket. Place the bolt retaining O-rings on the inside of the cover while the washer is between the cover and the bracket.



**Figure 7: Replacement End Cover Bolts 2 & 3**



**Figure 8: End Cover Assembly Order**

## V2 INTELLI-CONNECT HARDWARE KIT

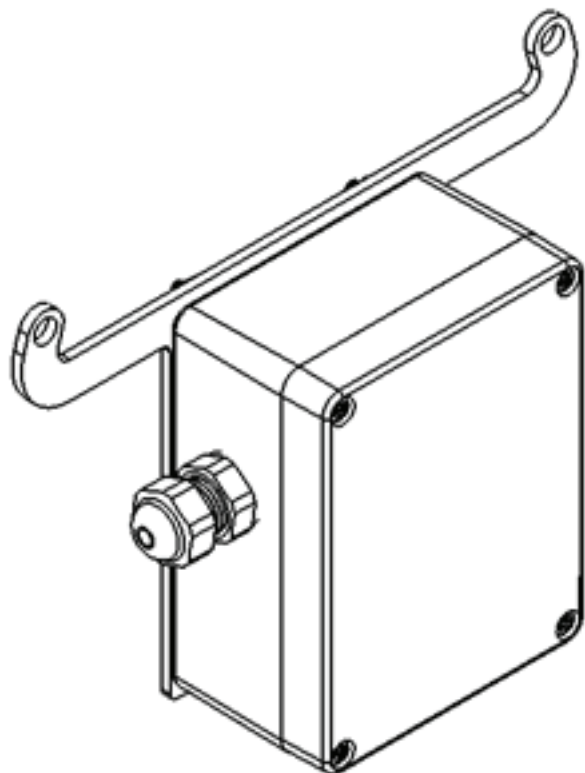


Figure 9: Pre-assembled V2 Intelli-Connect Kit

*Figure 9* shows the V2 pre-assembled contents of the Intelli-Connect hardware kit (same as the V1 kit but with a different mounting bracket).

1. Remove the hoist VFD end cover to access the VFD location connecting the M12 data port wires (shown in *Figure 10*).

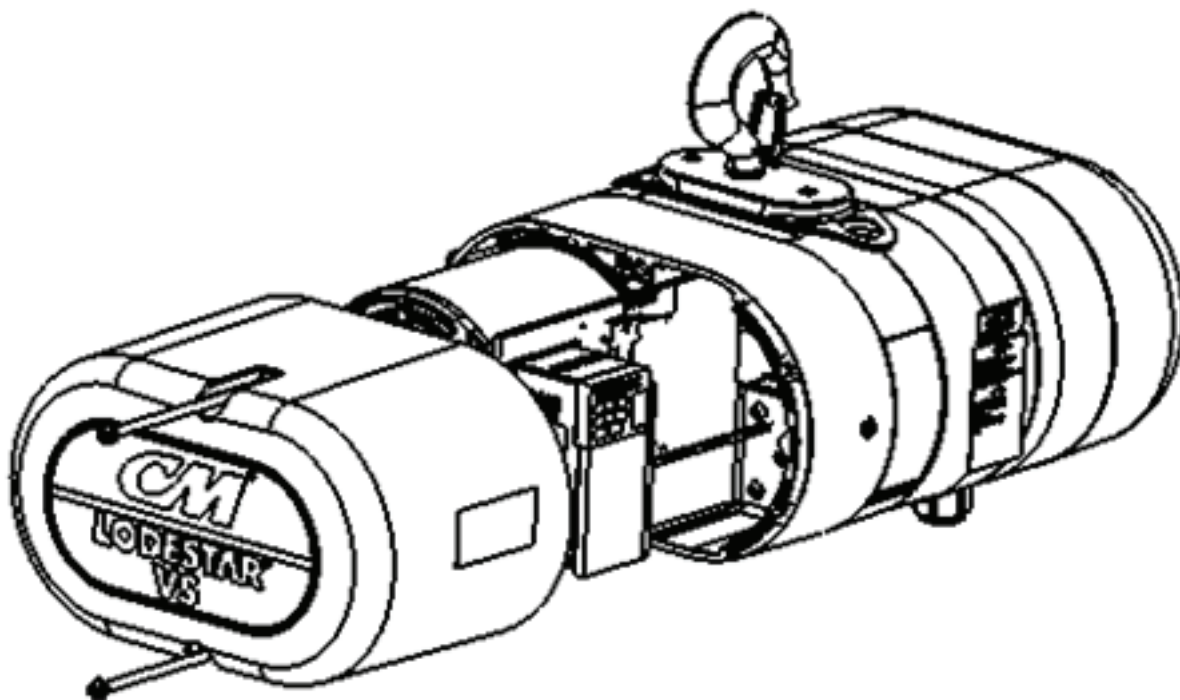
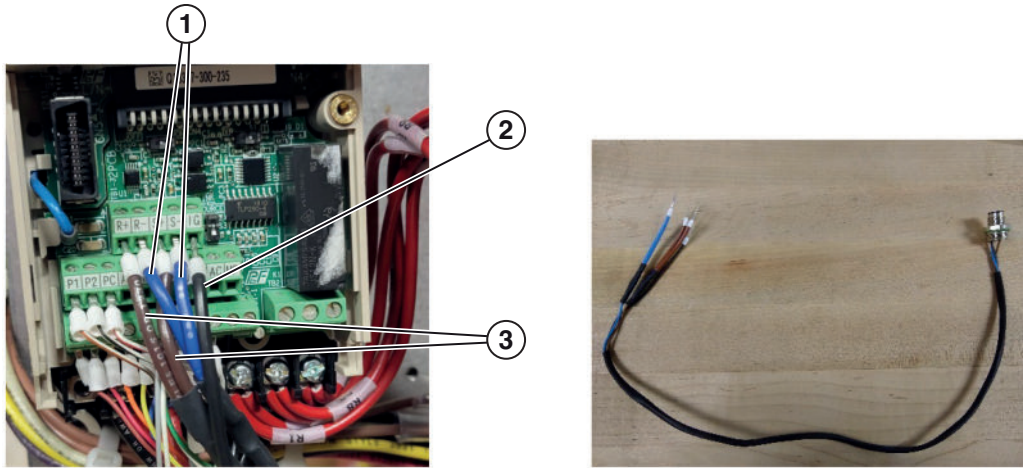


Figure 10: VFD End Cover Removal

2. Disconnect the M12 data port cable (**Figure 11**) from the VFD using a small flathead screwdriver and tighten the loose screws back down.

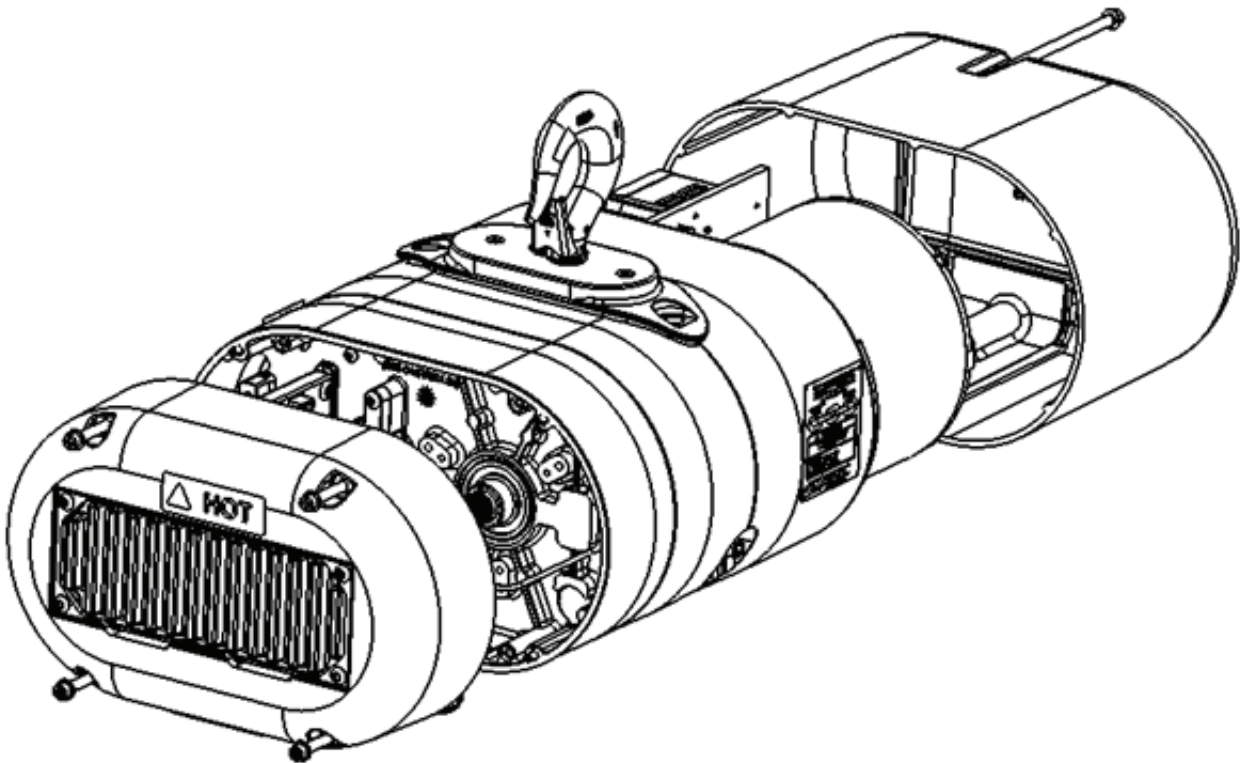


**Figure 11: M12 Data Port Cable and Connection**

- 1 - Two Blue Wires
- 2 - One Black Wire

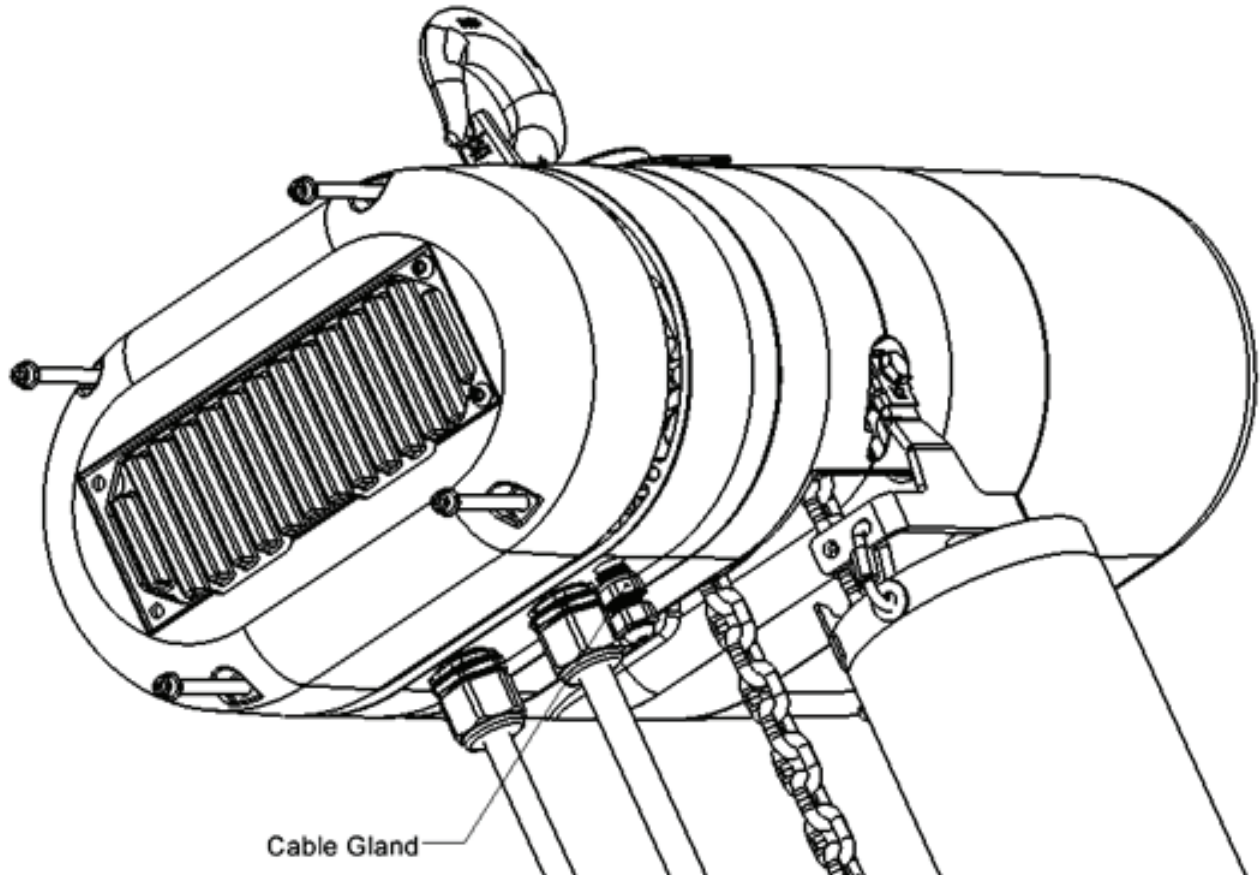
- 3 - Two Brown Wires

3. Remove the brake end cover shown in **Figure 12** to access the M12 data port. Using the 17 mm wrench, loosen and remove the M12 data port from the hoist. Take care to prevent excessive twisting of the wires.



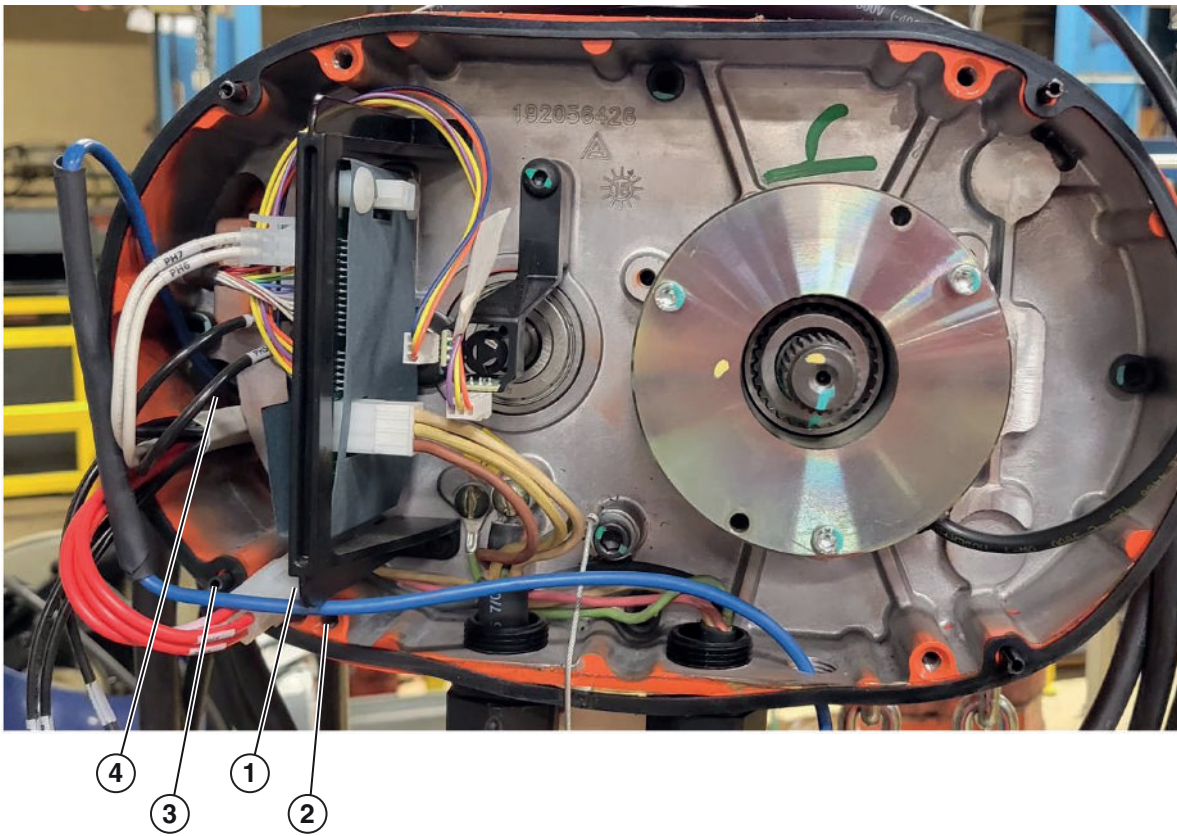
**Figure 12: Brake End Cover**

4. Install the free end RJ45 of the ethernet cable and gland into the now open M16 threaded hole in the hoist from the outside (shown in **Figure 13**). Tighten base of gland (not gland dome nut) finger-tight plus 1/4 to 1/3 turn. **Make sure the O-ring does not twist.** The angled RJ45 connector will be a tight fit through the threaded hole and will scar the RJ45 molding.



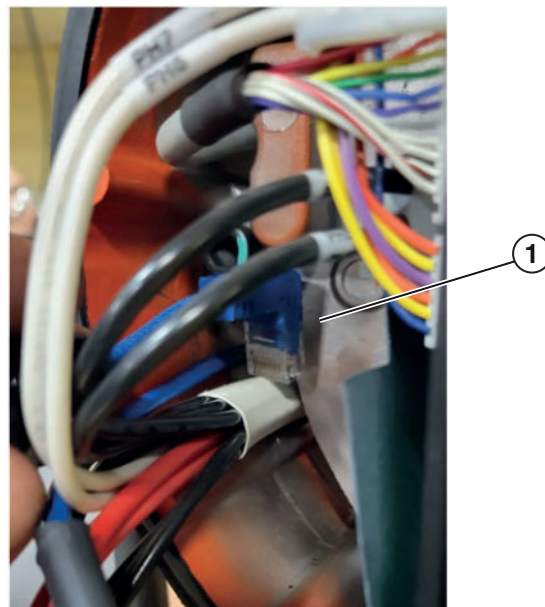
**Figure 13: Cable Gland Installation**

5. Run the ethernet cable down the side of the hoist, alongside the existing wiring harness, to plug the ethernet cable into the VFD ethernet port. Bring the assembled Intelli-Connect kit box/bracket from **Figure 9** close enough to the hoist to plug the ethernet cord into the VFD. Follow **Figure 14** for the cable routing inside the hoist as well as the optimal position of the RJ45 to guide it through the wireway as shown in **Figure 15**.



**Figure 14: Cable Routing**

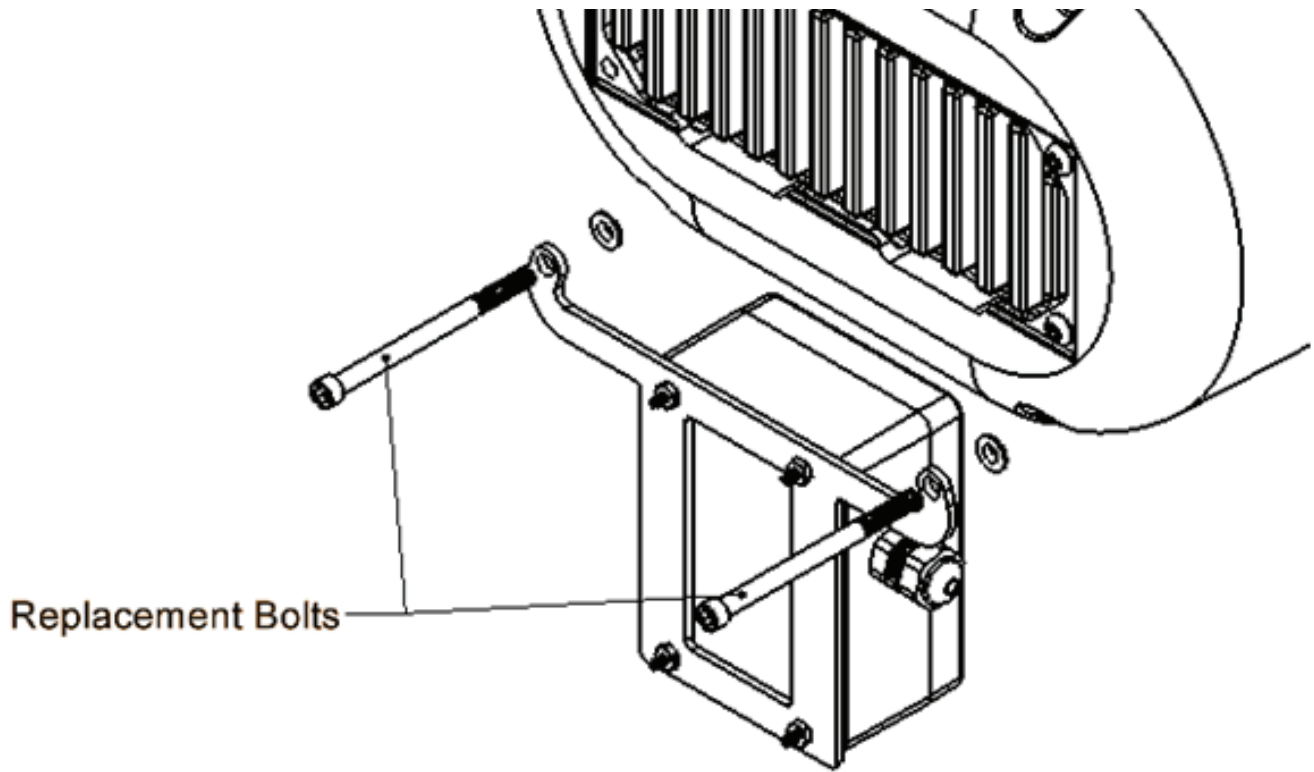
- |                             |                                     |
|-----------------------------|-------------------------------------|
| 1 - Under the Bracket       | 3 - Clear of the Dowel Pin          |
| 2 - Clear of the Cover Hole | 4 - Through the Bottom Wireway Slot |



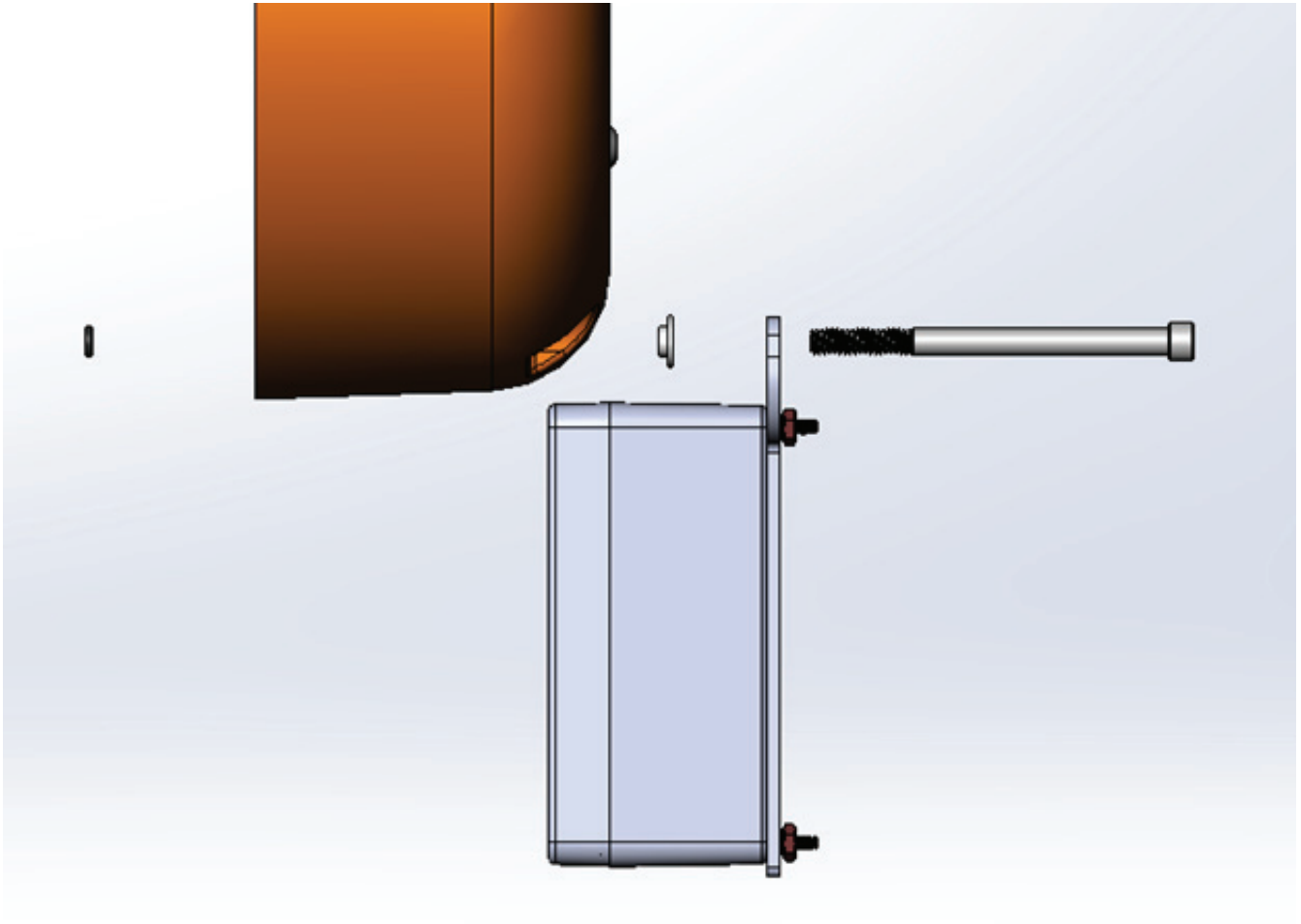
**Figure 15: RJ45 Orientation to Route Through Bottom Wireway**

- 1 - Facing down for connector to slide along existing harness

6. Tighten the hoist cable gland dome nut to clamp down on the ethernet cable, sealing it from the environmental elements. The cable should not slide if the hoist cable gland dome nut has undergone proper tightening. Then re-install the VFD end cover.
7. Use the 2 longer replacement end cover bolts (shown with the replacement O-ring and washer in **Figure 16** and **Figure 17**). Place the hoist brake end cover back on and torque the bolts to (50-60 in-lbs). The bolts on the top of the hoist for the end cover do not require replacement unless they suffer damage, since they do not need to be longer to accommodate the bracket. Place the bolt retaining O-rings on the inside of the cover while the washer is between the cover and the bracket.



**Figure 16: Replacement End Cover Bolts**



**Figure 17: End Cover Assembly Order**

## INSTALLATION VIDEOS

Watch an installation video on V1 Lodestar Units

Visit <https://youtube/Xb9C6rfZ6Rc> or scan QR code below.



Watch an installation video on V2 Lodestar Units

Visit <https://www.youtube.com/watch?v=c20pPpQA5Gw&t=9s> or scan QR code below.



CM<sup>®</sup> Lodestar<sup>®</sup> VS Intelli-Connect Operating, Maintenance & Parts Manual Supplement

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