Morris 90308

Morris 90308 Hex Head Split Bolts 3/0 Instruction Manual

Model: 90308

1. Product Overview

The Morris 90308 Hex Head Split Bolt 3/0 is designed for making secure electrical connections between copper conductors. Manufactured from high-strength, high-conductivity electrolytic copper alloy, this connector ensures maximum strength and conductivity. It is rated for copper conductors only and is reusable. This product is suitable for 600V applications and temperatures up to 194°F (90°C). It is UL486, UL486A-486B, and CSA C22.2 No. 65-13 listed, including for direct burial and grounding/bonding applications.

Image 1.1: Morris 90308 Hex Head Split Bolt 3/0. This image shows the copper alloy split bolt with a hex head for tightening electrical connections.

2. Safety Information

Always observe standard electrical safety precautions when working with electrical components. Failure to do so may result in serious injury or property damage.

- Ensure power is disconnected before installation or maintenance.
- Wear appropriate personal protective equipment (PPE), including insulated gloves and safety glasses.
- Only use this product with copper conductors. Do not use with aluminum conductors.
- Ensure connections are made by qualified personnel in accordance with local electrical codes and regulations.
- Do not exceed the rated voltage (600V) or temperature (194°F / 90°C).

3. Setup and Installation

Follow these steps for proper installation of the Morris 90308 Hex Head Split Bolt:

1. **Prepare Conductors:** Strip the insulation from the ends of the copper conductors to be joined, ensuring enough bare wire to fit securely within the bolt's channels. Clean the conductors if necessary to remove any oxidation or debris.
2. **Insert Conductors:** Loosen the hex head bolt sufficiently to allow the conductors to be inserted into the split bolt's channels. Insert one conductor into each side of the split bolt.
3. **Tighten Connection:** Using an appropriate wrench, tighten the hex head bolt. Apply firm and even pressure to ensure a secure mechanical and electrical connection. The split bolt design is intended to compress around the conductors.
4. **Verify Connection:** After tightening, gently tug on the conductors to ensure they are firmly held and cannot be easily pulled out. The connection should be tight and stable.
5. **Insulate (if necessary):** For applications requiring insulation, wrap the completed connection with appropriate electrical tape or heat shrink tubing, ensuring full coverage and protection from environmental factors.

This split bolt is reusable; however, inspect it for any damage or wear before reuse to ensure continued performance and safety.

4. Operating Instructions

Once properly installed, the Morris 90308 Hex Head Split Bolt functions as a permanent electrical connector. No further operational steps are required beyond ensuring the initial secure installation. The bolt maintains the electrical continuity between the joined copper conductors.

5. Maintenance

Periodic inspection of electrical connections is recommended to ensure long-term reliability and safety.

- **Visual Inspection:** Regularly check the split bolt and surrounding conductors for any signs of corrosion, overheating (discoloration), or physical damage.
- **Tightness Check:** If accessible and safe to do so (with power disconnected), periodically check the tightness of the hex head bolt to ensure the connection remains secure.
- **Cleaning:** If dirt or debris accumulates, clean the exterior of the connection with a dry, non-

conductive cloth.

6. Troubleshooting

If an electrical issue is suspected at a connection point, consider the following:

- **Loss of Continuity:** If there is a loss of electrical continuity, ensure the hex head bolt is sufficiently tightened. A loose connection can lead to increased resistance and potential failure.
- **Overheating/Discoloration:** Signs of overheating (e.g., melted insulation, discolored bolt) indicate a poor connection or an overloaded circuit. Immediately disconnect power and inspect the connection. Re-tighten or replace the bolt if necessary, and verify the circuit load.
- **Corrosion:** In outdoor or damp environments, corrosion can occur. Ensure proper insulation and environmental protection. If corrosion is severe, replace the bolt.

Always ensure power is off before attempting any troubleshooting or repairs.

7. Specifications

Brand	Morris
Model Number	90308
Size	3/0
Material	Copper (Electrolytic Copper Alloy)
Exterior Finish	Copper
Head Style	Hex
Fastener Type	Hexagon Bolt
Rated Voltage	600V
Rated Temperature	194°F (90°C)
UL/CSA Listing	UL486, UL486A-486B, CSA C22.2 No. 65-13
Application	Copper Conductors Only, Direct Burial, Grounding/Bonding
Reusability	Yes
Item Weight	11.2 ounces
Product Dimensions	1.1 x 1.25 x 2.09 inches

8. Warranty and Support

For warranty information and technical support regarding the Morris 90308 Hex Head Split Bolt 3/0, please refer to the official Morris Products website or contact their customer service department directly. Keep your purchase receipt for any warranty claims.