
SUBJECT: Service information for Master Control Units, part numbers MC01-2A and MC01-3A

PURPOSE: To provide instructions for the installation of CB RETROFIT KIT P52-0006 or P52-0007.

EFFECTIVITY: This service information letter is applicable to all Master Control Units Part Numbers MC01-2, -2A, -3, -3A IC1 thru IC6.

- A. **REASON:** To improve the reliability of the MCU circuit protection features.
- B. **COMPLIANCE:** This change is non-mandatory but recommended and may be accomplished at the owners discretion.
- C. **DESCRIPTION:** The following instructions detail the procedure for installation of the circuit breaker kit P52-0006 or P52-0007. Note: Kit P52-0006 is for use on the MC01-2, -2A and P52-0007 is for use on MC01-3, -3A.

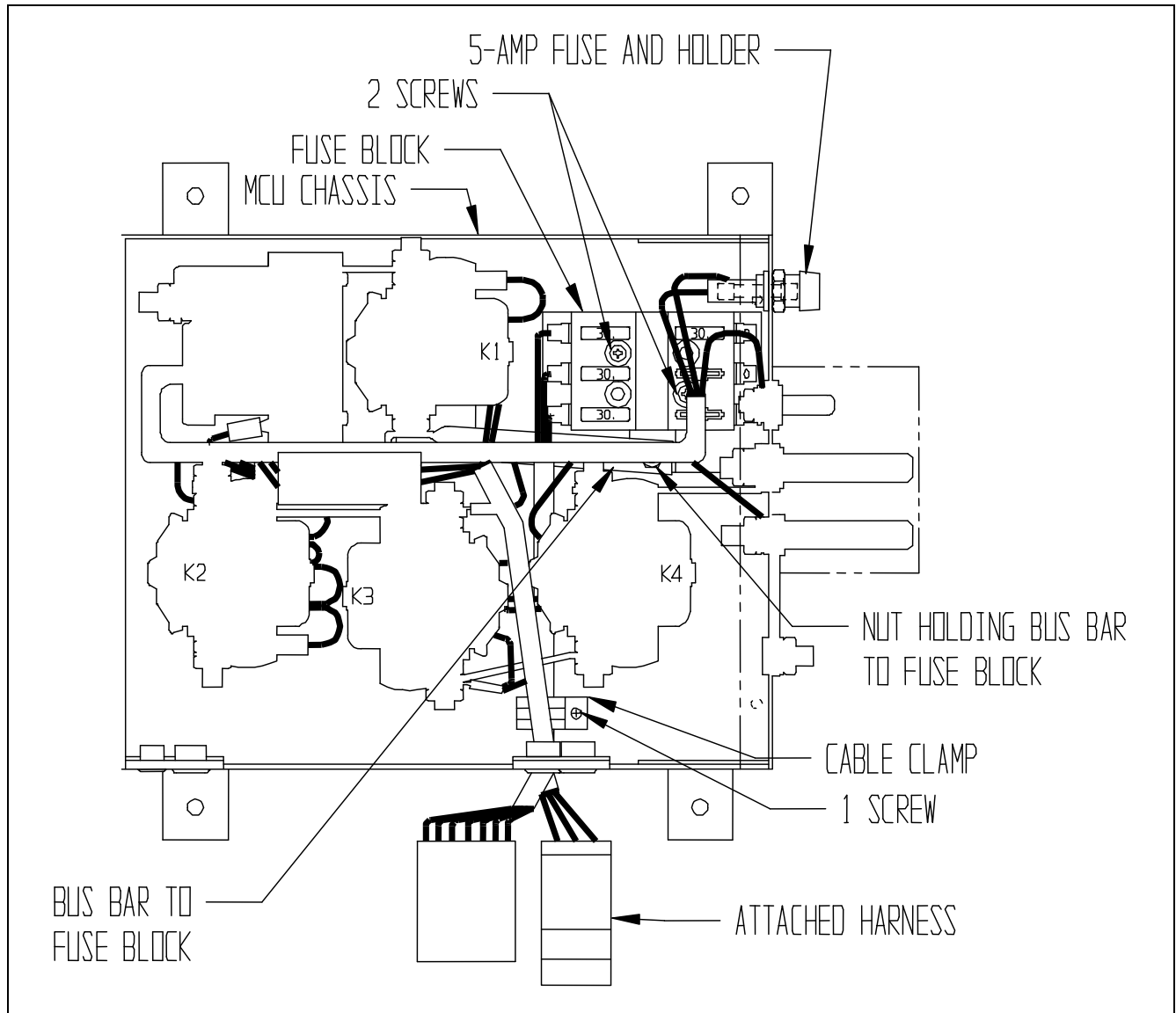


FIGURE 1: MCU with cover removed.

- 1) Remove MCU cover and retain the 4 screws for reinstallation in step 17. (Cover not shown)
- 2) Remove 5-AMP FUSE AND HOLDER from MCU CHASSIS (See Figure 1). Do not remove wires from fuse holder. (See Figure 2)
- 3) Remove nut and lock washer and wire terminal from positive coil terminal of K1. This is the terminal that has the two red wires attached to it. Retain hardware for reinstallation in step 13. (See Figure 5 for details) Also, disconnect the current sensor connector.
- 4) Remove nut and lock washer from fuse block side of K1 and retain for installation in step 13. (See Figure 5 for details)
- 5) Remove nut that holds bus bar to fuse block then remove bus bar.
- 6) Remove attached harness from fuse block (pull off or cut).
- 7) Remove 2 SCREWS from FUSE BLOCK and then remove fuse block. Discard removed parts.
- 8) Remove 1 SCREW from CABLE CLAMP if one is installed. Retain hardware for reinstallation in step 4.
- 9) Remove HARNESS, grommet, and connector that was connected to fuse block.

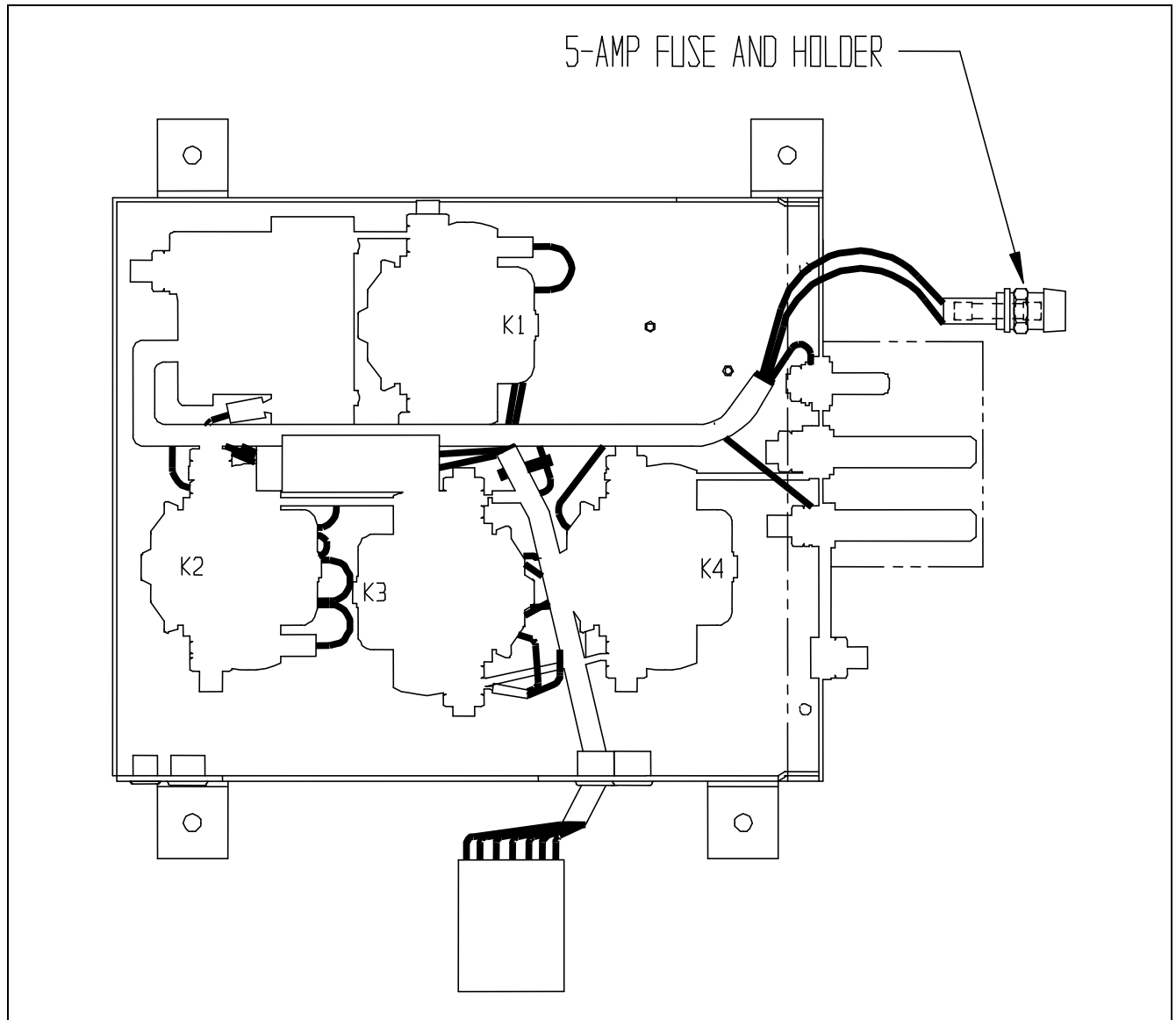


FIGURE 2: MCU with fuse block assembly removed.

- 10) Figure 2 shows how the MCU should look with the 5-AMP FUSE AND HOLDER, and FUSE BLOCK with ATTACHED HARNESS removed from the MCU CHASSIS.

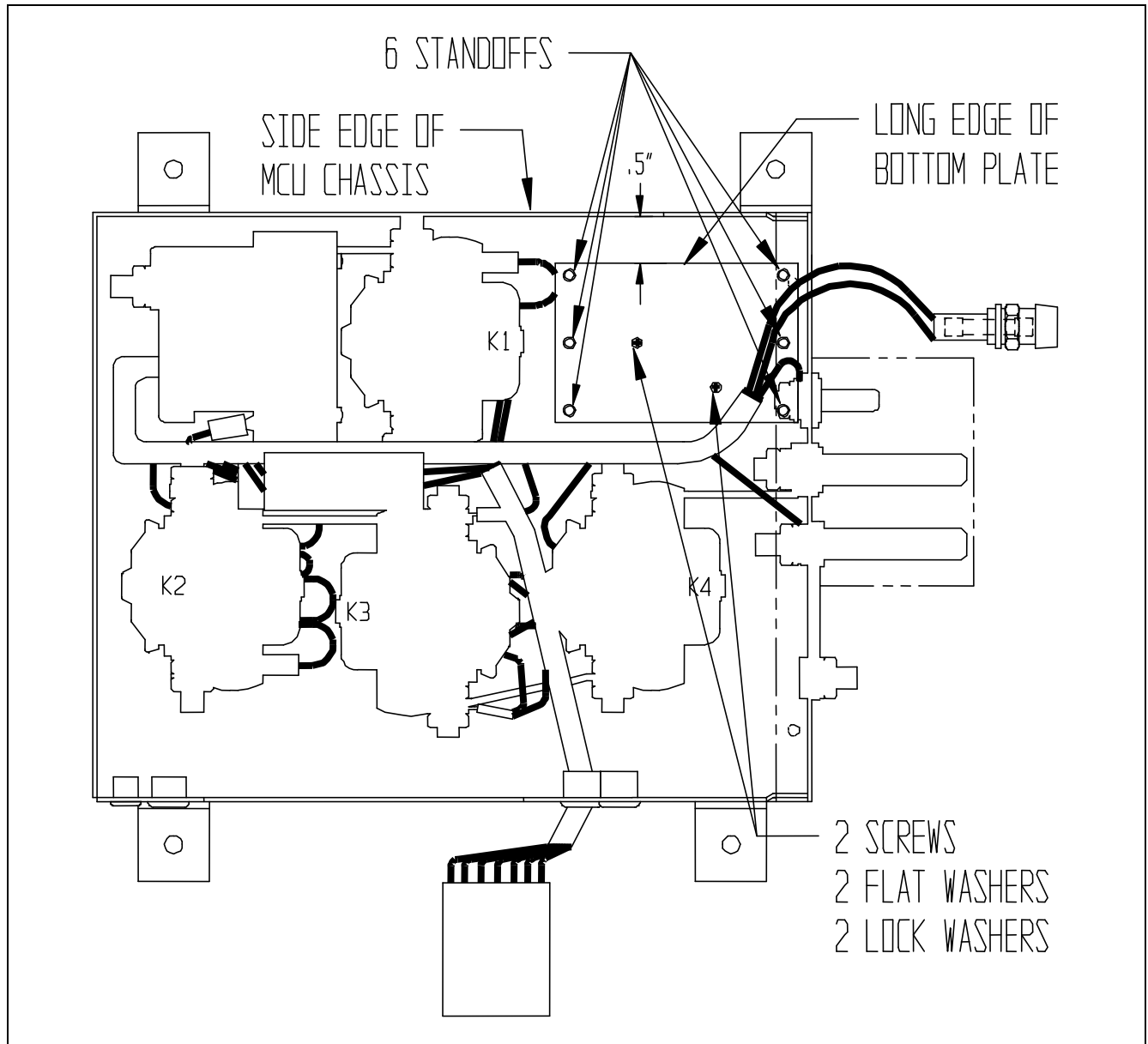


FIGURE 3: MCU with bottom plate of circuit breaker assembly installed.

11) Install the BOTTOM PLATE of the circuit breaker retrofit kit in the MCU CHASSIS and secure with 2 SCREWS, 2 FLAT WASHERS, AND 2 LOCK WASHERS provided. (See Figure 3)

NOTE: The 6 STANDOFFS mounted in the BOTTOM PLATE must be on top and the long edge of the plate will be about $\frac{1}{2}$ inch from the side edge of the MCU chassis.

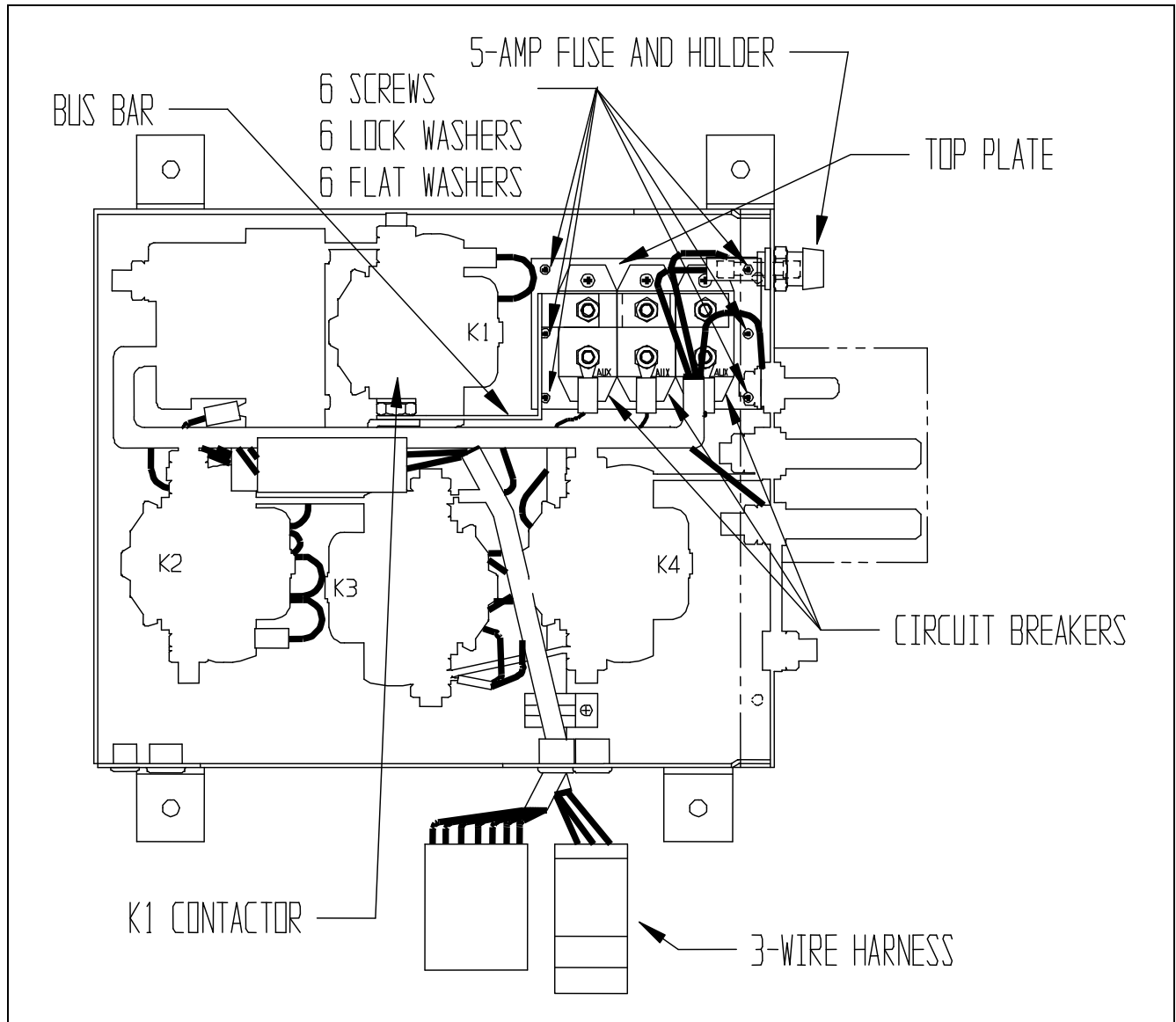


FIGURE 4: MCU with circuit breaker assembly kit installed.

- 12) Attach the TOP PLATE with attached circuit breakers to the BOTTOM PLATE 6 STANDOFFS using 6 SCREWS, 6 LOCK WASHERS, and 6 FLAT WASHERS provided. NOTE: The 6 LOCK WASHERS must be flat after installation and the plate is installed so that the AUX terminal sides of the CB's are closest to K4.
- 13) Install the provided bus bar from the circuit breaker assembly to K1 contactor as shown in Figure 4. Torque the nut on K1 contactor 35 to 45 inch pounds. (See Figure 5 for details) Use hardware retained in step 4.
- 14) Install the 3-wire harness (provided) to the AUX side of the circuit breakers as shown in Figure 4. Torque AUX and BATT terminal nuts 20 to 25 inch pounds. (See Figure 5 for details) NOTE: If the cable clamp and screw are not installed as part of the MCU then install the originally supplied strain relief with new harness.
- 15) Re-install 5-amp fuse holder and 5-amp fuse removed in step 2.

- 16) Reconnect the wire and terminal that was removed from the positive coil terminal of K1 back to the same terminal using the same hardware and torque to 10 to 15 inch pounds. Also, reconnect the current sensor disconnected in step 3.
- 17) Re-install MCU cover with the same screws removed in step 1.
- 18) Place the enclosed label (that reads LSI-0004) on the MCU next to the existing metal identification tag. This will identify the MCU has had the CB Kit upgrade installed

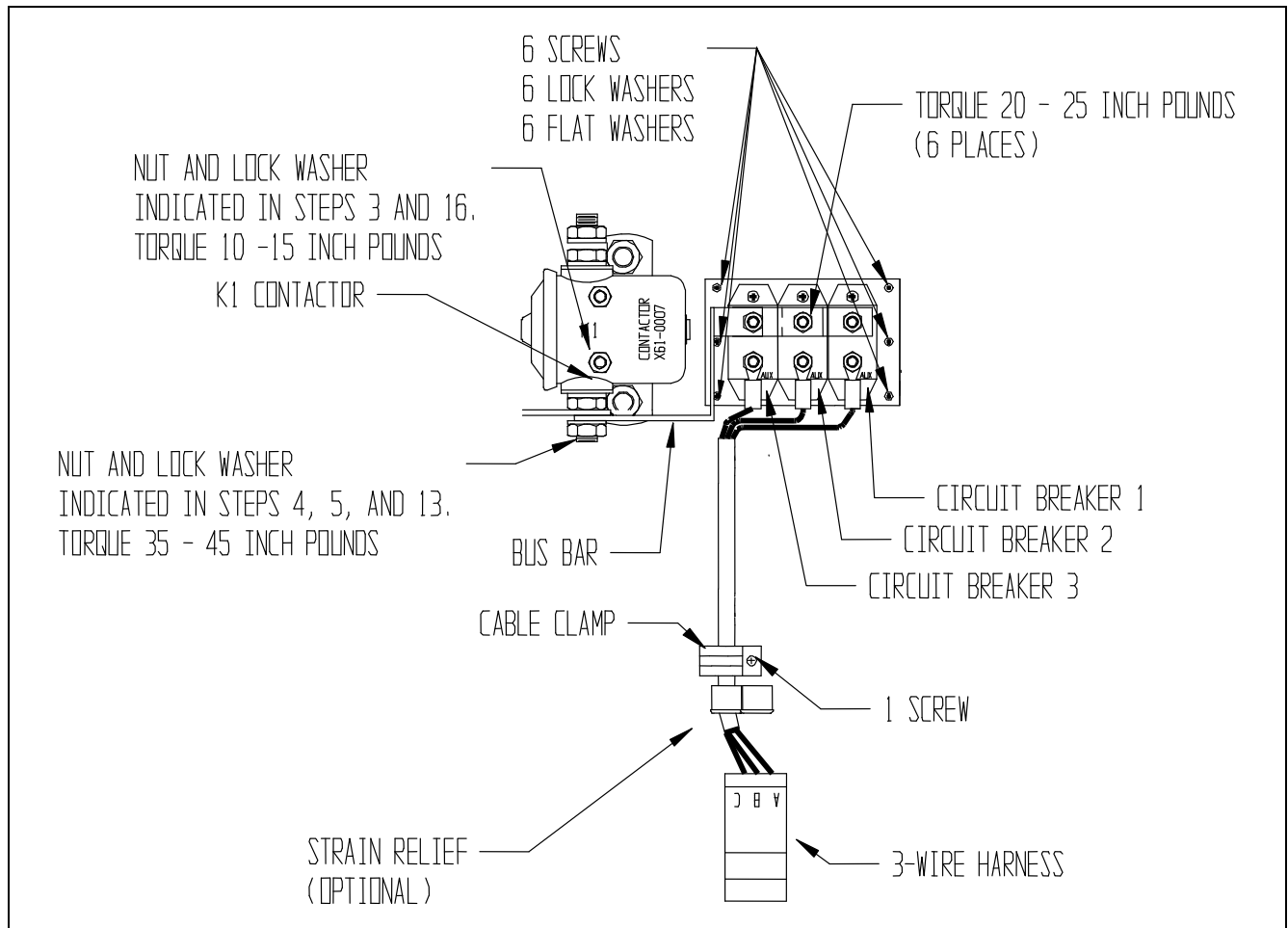


FIGURE 5:

- 14a) Enlarge hole that the wire harness removed in step 9 went through to 5/8" and install split bushing. See FIGURE 6
 - 14b) The short wire (C) connects to **CIRCUIT BREAKER 3 AUX** terminal.
 - 14c) The medium length wire (B) connects to **CIRCUIT BREAKER 2 AUX** terminal.
 - 14d) The long wire (A) connects to **CIRCUIT BREAKER 1 AUX** terminal.
 - 14e) The **CABLE CLAMP** and **1 SCREW** or a strain relief hold the **3-WIRE HARNESS** in place.
- NOTE: If cable clamp is not installed on the MCU then install the strain relief originally supplied with the MCU with the new harness.**

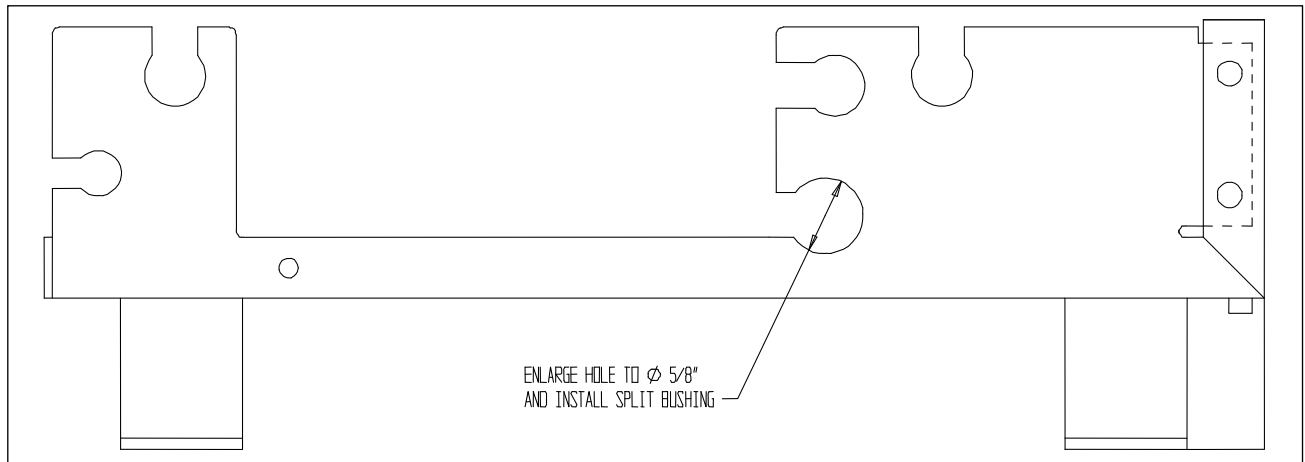


FIGURE 6 :

Note: Enlarge indicated hole and install split bushing.