

Neutral Screw Installation Instructions

Neutral Screw Installation Instructions

(Kit no. 40567-874-50)

For 100Amp through 225Amp QO Load Centres with CSA Marking and OEM Circuit Breaker Mounting Bases. (Date codes 01432X through 02031X)

Please completely read through all of these instructions before beginning any work on the load centre. This procedure must be performed by qualified electrical personnel.

Introduction

This bulletin contains instructions for the installation of replacement neutral bar mounting screws in Square D 100Amp through 225Amp QO main breaker and main lug load centres with CSA marking manufactured by Schneider Electric between October 23, 2001 and January 14, 2002. Only Square D QO Loadcenters with date codes 01432X through 02031X are affected.

The date code can be found at the bottom of the label located on the inside of the enclosure as shown in Figure 1, or in the utility compartment (Figure 2) on the load centre mains base as shown in Figure 3. Only the first 5 digits of the date code should be considered to determine if the load centre requires neutral screw replacement. Four (4) replacement neutral bar mounting screws are provided in this kit. On an installed load centre, see "Disassemble the Load Centre" section of this instruction to locate the date code.



Figure 1: Date Code Location



Figure 2: Utility Compartment



Figure 3: Date Code Location

Tools Required:

- Properly rated voltage sensing device
- Magnetic Phillips screwdriver
- Straight blade screwdriver (size 5/16")
- Torque wrench capable of accurately measuring 30 lb-in torque with Phillips screwdriver tip.

Precautions:

! DANGER

Hazard of Electric Shock, Burn, or Explosion

- This equipment must be installed and serviced only by qualified electrical personnel.
- Turn off the power supplying this equipment before working on or inside equipment.
- Always use a properly rated voltage sensing device to confirm the power is off.
- Replace all devices, doors and covers before turning on power to this equipment.

Failure to follow these instructions will result in death or serious injury.

Neutral Screw Installation Instructions

February 2002



Figure 4: Typical QO Main Breaker Load Centre – Catalog Number CQOxxxxxx

Disassemble the Load Centre

1. **Thoroughly read this entire instruction bulletin before beginning work.**
2. Turn off power supplying the load centre.
3. Remove screws securing the load centre cover and retain for re-assembly. See Figure 4. Remove load centre cover.
4. Verify that the power is off, using a properly rated voltage sensing device.
5. Verify that the date code is between 01432X through 02031X . See Figure 5 .
6. Remove the screws retaining the utility compartment cover and retain for re-assembly. See Figure 6. Remove the utility compartment cover.



Figure 5: Date Code location



Figure 6: Utility Cover screw location

Neutral Screw Installation Instructions

7. Locate the screws that connect the neutral bars to the neutral plate on the mains end base of the loadcentre. Mains end bases will have either (2) or (4) neutral bar mounting screws. These screws are silver-coloured, Phillips head screws fastened to the silver coloured neutral plate. See Figure 7.

Remove the screws using a magnetic Phillips screwdriver. See Figure 8.

If any of the neutral bar mounting screws have loose or missing heads, then the complete interior assembly must be replaced. In this case, contact Schneider Electric's Customer Information Centre at 1-800-565-6699 for a complete interior assembly.

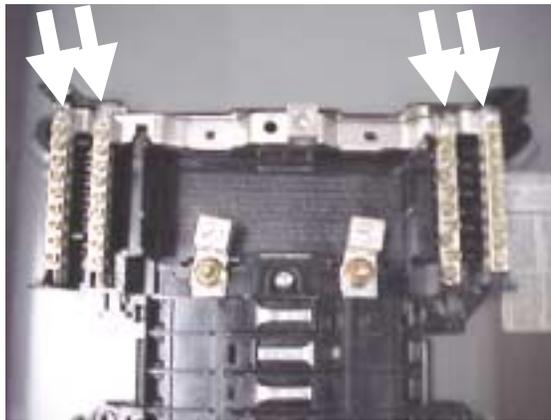


Figure 7: Locate neutral plate screws

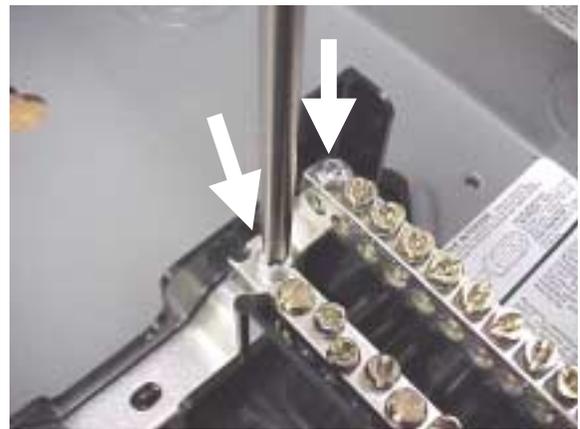


Figure 8: Remove neutral plate screws



DANGER

HAZARD OF EQUIPMENT DAMAGE

- Do not perform this screw change on an energized load centre. Severe equipment damage will result.
- Use a magnetic screwdriver to prevent screws from falling into the load centre and becoming lodged on the bus bars or the branch circuit wiring.
- Do not over-torque the neutral bar mounting screws in Step 9.

Failure to follow these instructions will result in equipment damage.

Neutral Screw Installation Instructions

Reassemble the Load Centre

8. Install the neutral bar mounting screws provided in this kit. See Figure 9. If any of the neutral bar mounting screws strip out of the neutral plate, then the complete interior assembly must be replaced. In this case, contact Schneider Electric's Customer Information Centre at 1-800-565-6699 for a complete interior assembly.
9. Torque the new neutral bar mounting screws to 20 to 30 lb-in using a torque wrench. See Figure 10. If any of the neutral bar mounting screws can not be tightened to at least 20 lb-in torque, then the complete interior assembly must be replaced. In this case, contact Schneider Electric's Customer Information Centre at 1-800-565-6699 for a complete interior assembly.



Figure 9: Install new neutral plate screws.



Figure 10: Torque new neutral plate screws

10. Re-install the utility compartment cover using screws removed in Step 6. Re-install the load centre cover using screws removed in Step 3.
11. Affix the orange sticker to the outside of the cover near the main breaker, or at the end of the branch circuit area to indicate that the repair is complete, and to avoid unnecessary repeat repair calls.

Re-energize the Load Centre

12. Turn on the power supplying the load centre.
13. Turn on the main breaker, then turn on branch circuit breakers.
14. Close load centre door.

This completes the procedure.

Questions ? Contact Schneider Electric's Customer Information Centre at 1-800-565-6699.