

## CTL Load Centers

Retain for future use.

### SAFETY PRECAUTIONS

#### **⚠ DANGER**

##### **HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH**

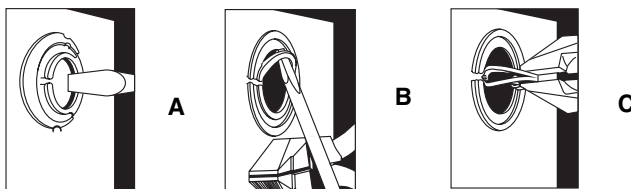
- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E.
- This equipment must only be installed and serviced by qualified electrical personnel.
- Turn off all power supplying this equipment before working on or inside equipment.
- Always use a properly rated voltage sensing device to confirm 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.**

### REMOVING KNOCKOUTS

Square D<sup>®</sup> knockouts are designed to simplify the installation when joining devices of different ratings. Conduit is a constant distance from the wall—thus eliminating the need for offsets.

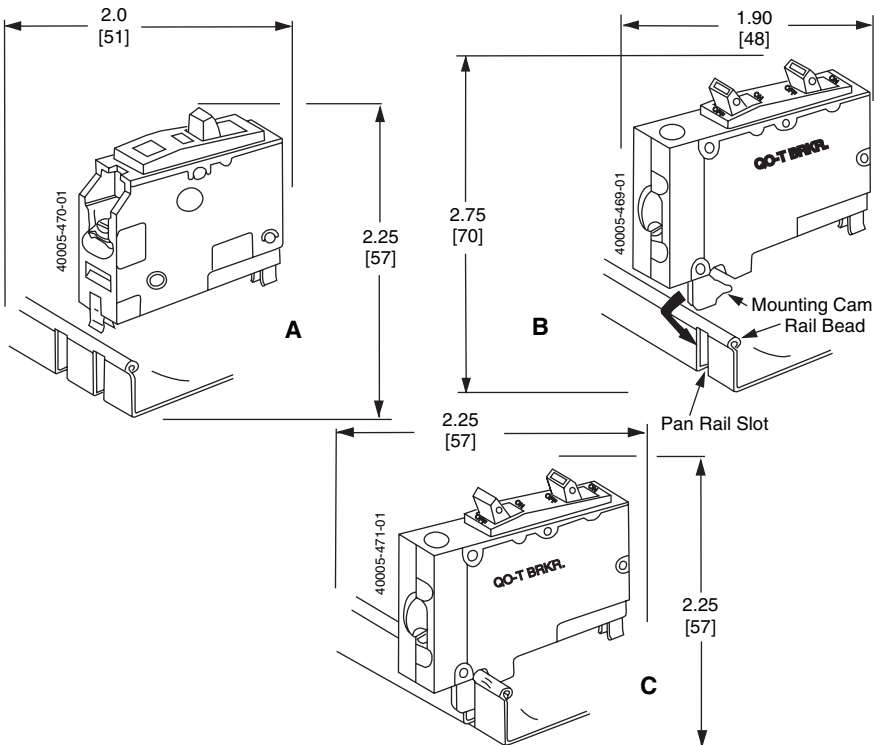
1. Remove knockouts one at a time, alternating inward and outward.
2. Remove the center knockout inward.
  - Place screwdriver blade against point farthest from tie and strike inward (A). Send back and forth to break tie.
3. Remove rings one at a time without straining remaining rings.
  - Pry first ring outward with screwdriver midway between ties, using pliers flat against box under screwdriver (B).
  - Bend ring sections outward with pliers, then back and forth to break ties (C).
  - Remove second ring inward by striking screwdriver (with blade against point midway between ties), then bending ring sections inward and back and forth to break ties.



## INSTALLATION—TANDEM-TYPE CIRCUIT BREAKERS

Square D<sup>®</sup> Class CTL load centers are designed to restrict the installation of more than that number for which each specific device was designed, rated and approved. To accomplish this restriction required by NEC Par. 384-15, on certain load centers, the mounting means for tandem type QOT circuit breakers is different from QO<sup>®</sup> and Q1<sup>®</sup> circuit breakers.

1. Turn off all power supplying this equipment before working on or inside equipment.
2. Turn circuit breakers OFF (O) before installing on load center or removing from load center.
3. Any QO or Q1 circuit breaker (A) may be installed without restriction at any location where there is enough space open.
4. Tandem type QOT circuit breaker (B) may be installed only in certain load centers, where the pan mounting rail has a slot at the center line of the desired pole space.
5. The pan mounting rail slot accommodates the mounting cam of the tandem type QOT circuit breakers (C).



## INSTALLATION—QOT CIRCUIT BREAKERS

### CAUTION

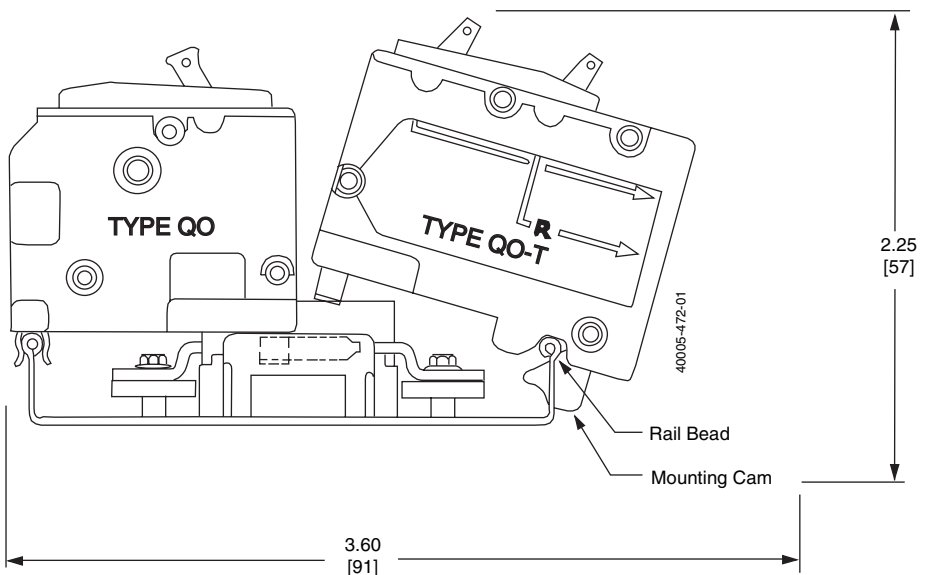
#### HAZARD OF EQUIPMENT DAMAGE

- The QOT mounting cam is thick, hardened steel. Excessive force upon it to improperly install a tandem unit where no pan mounting slot is provided will destroy the circuit breaker case.
- Do not modify the mounting rail or circuit breakers.

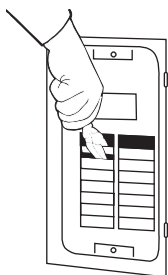
**Failure to follow this instruction will result in equipment damage.**

1. Turn off all power supplying this equipment before working on or inside equipment.
2. To install tandem type QOT circuit breakers, hold circuit breaker at 30–45° angle.
3. Insert nose of mounting cam into pan mounting rail slot as far as possible (until bottom of circuit breaker case hits rail bead).
4. Rotate circuit breaker until plug-on jaws fully engage on bus bar connectors.

*NOTE: Bottom of circuit breaker case should remain against rail bead.*



## Removal of Twistouts



1. Remove only those twistouts to match circuit breakers by twisting out with pliers at center of twistout.

*NOTE: Remove only one side when installing Q1 circuit breakers.*

2. Close all unused open spaces in trim by ordering one of the following filler plates:
  - Catalog No. QOFP for spaces measuring 0.75 x 2.31 inches.
  - Catalog No. QO1FP for spaces measuring 0.75 x 2.44 inches.
3. Remove only the twistouts necessary to match circuit breakers, by rapping sharply with screwdriver at extreme corner away from tie.
4. For 2- and 3-pole circuit breakers, remove divider between twistouts with pliers.

*NOTE: Remove only one side when using Q1 circuit breakers.*

5. Close all unused open spaces in trim by ordering filler plate Catalog No. QOFP.

### Schneider Electric USA

1601 Mercer Road  
Lexington, KY 40511 USA  
1-888-SquareD (1-888-778-2733)  
www.us.SquareD.com

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

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