Power Lock Connectors (Series I) (Accept Contact 53892)

Instruction Sheet 408–2624

01 MAY 12 Rev B

"NOT FOR INTERRUPTING CURRENT" "NE PAS EMPLOYER POUR LA RUPTURE DU COURANT"

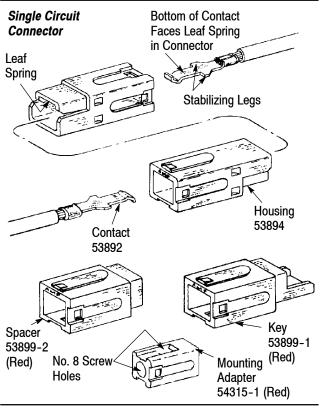


Figure 1

1. INTRODUCTION

Power Lock connectors provide a choice of circuit configurations from single connectors to multiple position connectors. The connectors are listed by Underwriters' Laboratories, Inc. (UL) in UL File Number E28476, and certified by Canadian Standards Association (CSA) in CSA File Number LR7189.



All dimensions are in millimeters [with inch equivalents in brackets]. Illustrations are not drawn to scale.

Reasons for reissue of this sheet are provided in Section 7, REVISION SUMMARY.

2. DESCRIPTION

2.1. Single Circuit Connector (Figure 1)

Single circuit connectors can be polarized, spaced, and mounted as desired with the aid of keys, spacers, and mounting adapters. Connectors may be used in free hanging applications.

Each connector may be joined (stacked) with other connectors on all four sides. A built-in positive locking feature ensures that the stacked connectors have maximum resistance to shock and vibration. Refer to Section 5 for connector installation and Section 6 for stacking and mounting connectors.

2.2. Multiple Position Connector (Figure 2)

Multiple position connectors are available in 2 through 6 positions with or without mounting flanges. The connectors can be mated with suitable arranged (stacked) single circuit connectors. Refer to Section 5 for connector installation.

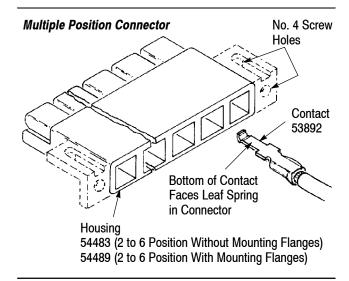


Figure 2

3. CONTACT INSTALLATION (All Connectors)



Avoid personal injury; disconnect electrical supply when performing assembly or removal procedures.



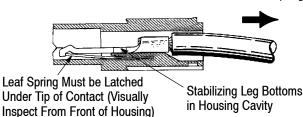
Avoid connector failures; do not use bent or improperly crimped contacts. Refer to instruction material packaged with crimp tooling for crimped contact inspection procedure.

1. Orient crimped contact with housing so bottom of contact will face leaf spring inside housing (see Figure 1 or 3A).



Detail A Contact Insertion

Pull Rearward on Wire to be Sure Contact is Latched over Leaf Spring



Detail B Contact Removal

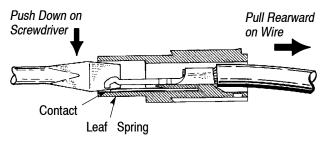


Figure 3

2. Insert contact until it bottoms in housing (stabilizing legs bottom inside housing). Leaf spring must latch under tip of contact as shown in Figure 3, Detail A. Be sure contact is in straight alignment with circuit cavity.



Avoid bending contact during insertion procedure.

4. CONTACT REMOVAL (All Connectors)



Avoid personal injury; disconnect electrical supply when removing contacts.

The contact is retained in the housing by a leaf spring (see Figure 3A). Depress this spring away from the underside of the contact to release the contact.

- 1. Insert screwdriver between sides of contact and housing cavity. Push down on screwdriver.
- 2. With leaf spring depressed, remove contact by pulling rearward on wire (see Figure 3B).

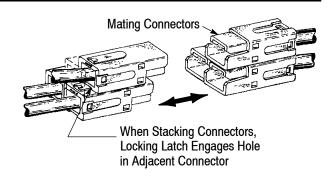


Figure 4

5. STACK/MOUNT SINGLE CIRCUIT CONNECTORS

Stack and mount connectors as needed, being sure that locking latches are properly engaged with holes in adjacent connectors (see Figure 4). Use spacers and polarizing key as needed.



Separation of stacked connectors damages locking latches. If connectors must be separated, replace old connectors with new ones.

Figure 5 illustrates typical mounting configurations possible with single or stacked connectors.

- 1. Secure mounting adapters to panel with No. 8 screws or equivalent fastening device.
- 2. Assemble mating connectors (see Figure 4).
- 3. Mate connectors to complete installation.

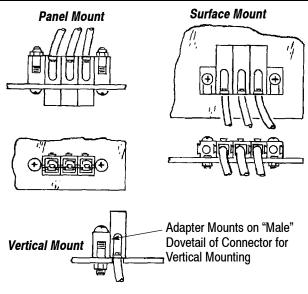


Figure 5

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6. CONNECTOR INSTALLATION INSPECTION

Inspect for the following conditions when installing connectors in panel or structure:

- Do not restrict movement of contacts that would affect their performance.
- Do not restrict heat dissipation from connectors.
- Do not expose connectors to excessive heat.
- When bending or forming wires, hold wires at least 6.35 mm [.250 in.] beyond rear of connector before bending them in desired direction.



Do not bend unsupported wires. This may put strain on the contacts inside the connectors.

 Provide strain relief for wires approximately 25.4 mm [1 in.] from rear of housing if the installation is to be subjected to bending forces.

7. REVISION SUMMARY

Since the previous version of this document, the following changes were made:

• Updated document to corporate requirements.

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