Quiet Front Cross Connect Terminals

Instruction Sheet
408–3312
17 APR 01 Rev C

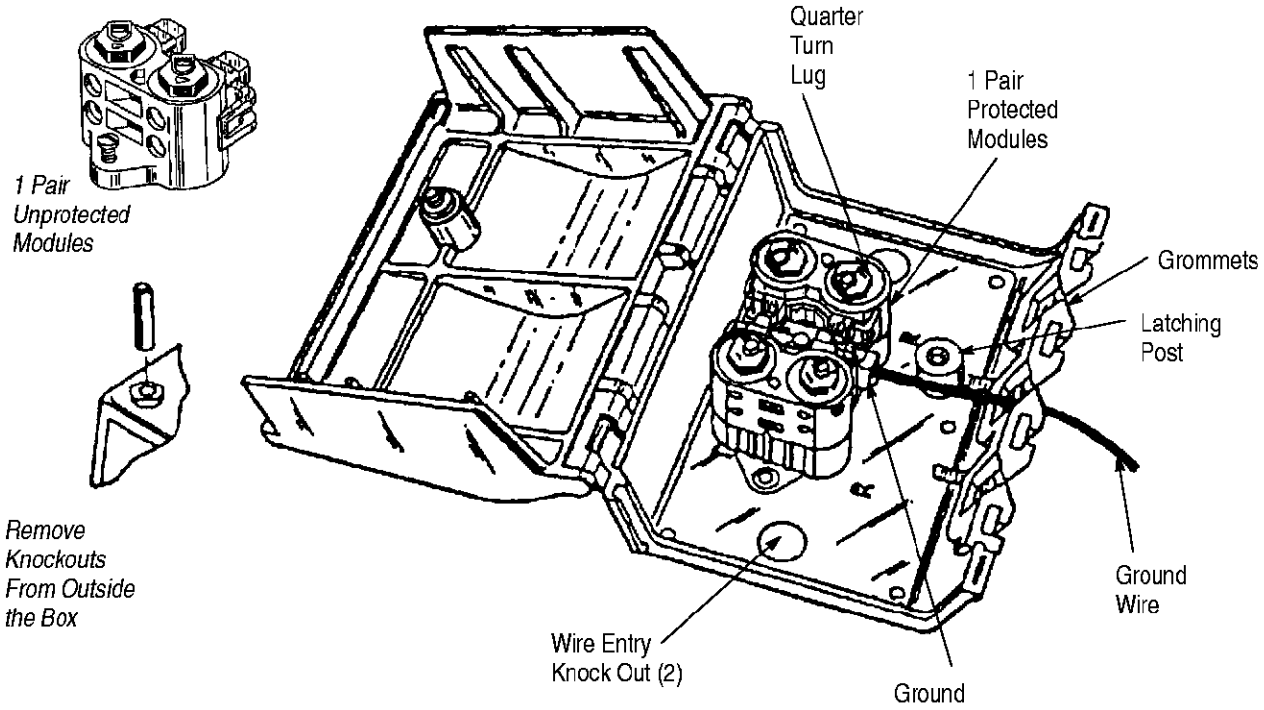

Figure 1

1. INTRODUCTION

AMP Quiet Front Terminals are designed for pole–, wall–, or aerial–mounting. The terminals may house one or two 1–Pair Quiet Front protected or unprotected cross connect modules. See Figure 1.

For specific information on cross connect modules, see instruction sheet 408–3311. For ordering information, refer to Tyco Electronics Catalog 65689.

NOTE *Dimensions are in millimeters [with inches in brackets]. Figures are for identification only and are not drawn to scale.*

Reasons for reissue are provided in Section 10, REVISION SUMMARY.

2. DESCRIPTION

Modules, with SILENT SLOT* contacts, are designed to cross connect telephone distribution lines with individual drop wires. Modules are used in grease– and gel–sealed applications. The protectors are designed to shield against lightning surges, power–cross conditions, and ground potential rises.

3. TERMINAL INSTALLATION

3.1. Pole Mounting

1. Using a 216C (3/8–in.) wrench, open the terminal by rotating the captive screw fastener COUNTERCLOCKWISE. Pull open the terminal cover. See Figure 2.

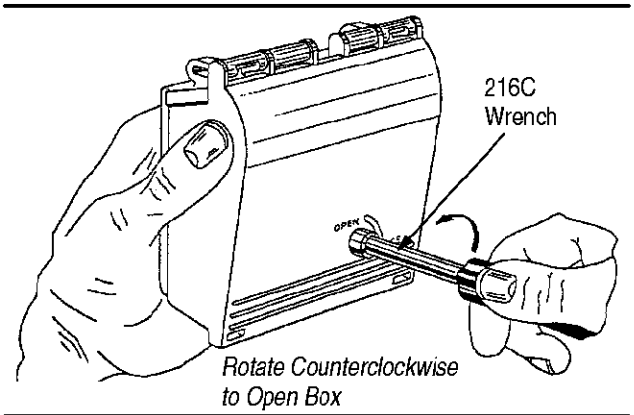

Figure 2

2. If desired, remove the terminal cover:

   a. Open the cover to the vertical position.

   b. Press and hold the tabs down, then slide the cover back, as shown in Figure 3.

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For latest revision call the AMP FAX* number.

TOOLING ASSISTANCE CENTER 1–800–722–1111
AMP FAX/PRODUCT INFO 1–800–522–6752
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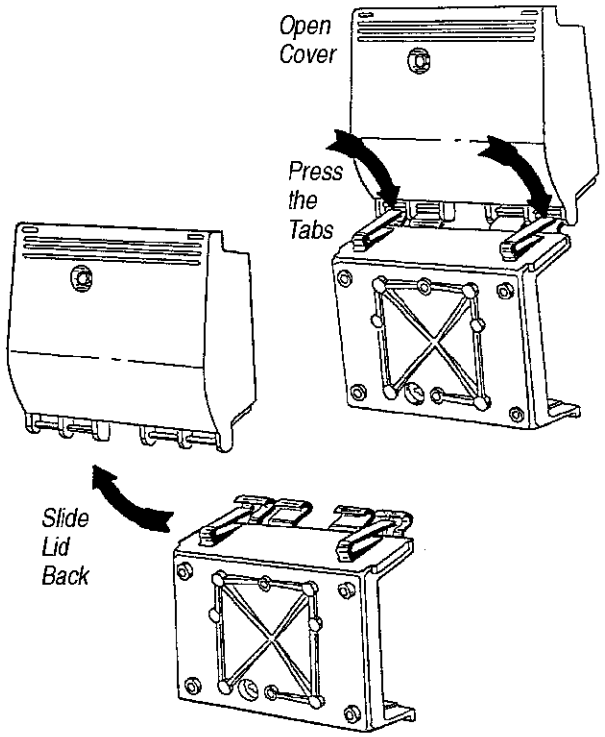


Figure 3

3. Place terminal "face down" on a solid flat surface. Using a small punch or screwdriver, remove pole mounting knockouts from outside terminal. See Figure 4.

4. Place two screws through the mounting holes in the base of the terminal. Align the terminal with the pole and secure with mounting screws. As shown in Figure 4.

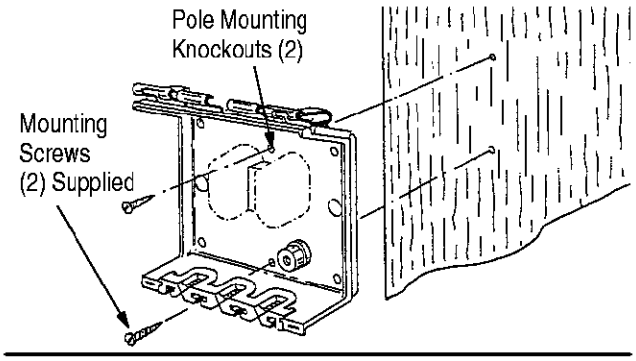


Figure 4

3.2. Wall Mounting

Open terminal and remove cover (if desired) according to Paragraph 3.1., Steps 1 and 2.

1. Place terminal "face down" on a solid flat surface. Using a small punch or screwdriver, remove wall mounting knockouts from outside terminal. See Figure 5.

2. Align terminal to wall and secure with approved hardware. See Figure 5.

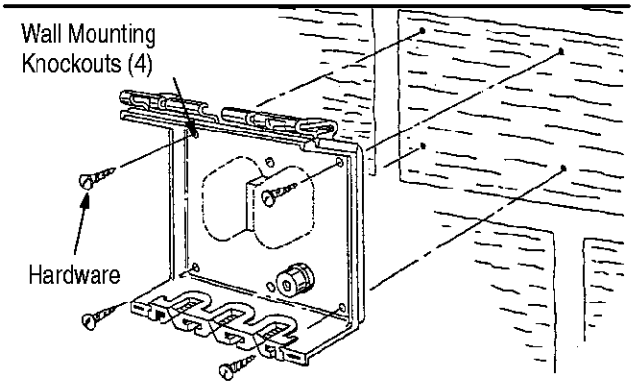


Figure 5

3.3. Aerial Mounting

Aerial Mounting Kit 775219-1 is available for mounting to a terminal, or already installed on a terminal. It is designed to make an insulation displacement connection through the jacket of an aerial strand with an outside diameter of 2.03 to 2.41 mm [.080 to .095 in.] or clamp onto a strand without a jacket up to 9.7 mm [.38 in.] outside diameter. If the mounting kit is already installed on a terminal, proceed to B. Application Procedures.

A. Aerial Kit Installation

1. Place the closed terminal on its lid on a horizontal flat surface.

2. Use a screwdriver to punch out the 6.4 mm [1/4 in.] knockouts in the left and right corners of the terminal base (closest to the hinge). See Figure 6.

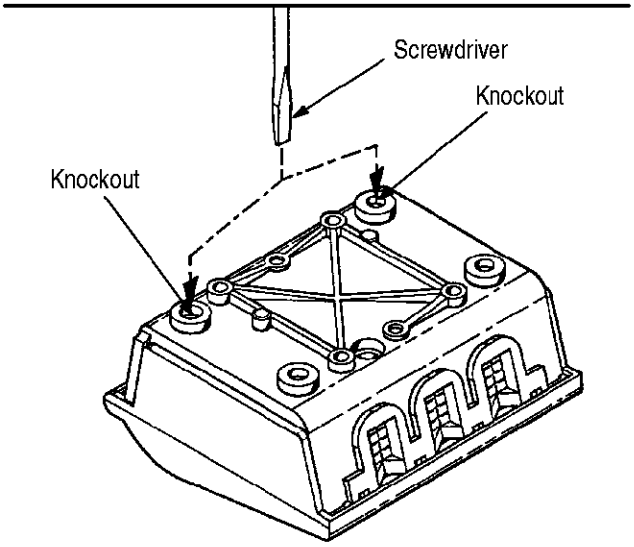


Figure 6

CAUTION *Be careful to punch out the knockouts only.*

3. Place the mounting brackets on the back of the terminal as shown in Figure 7.

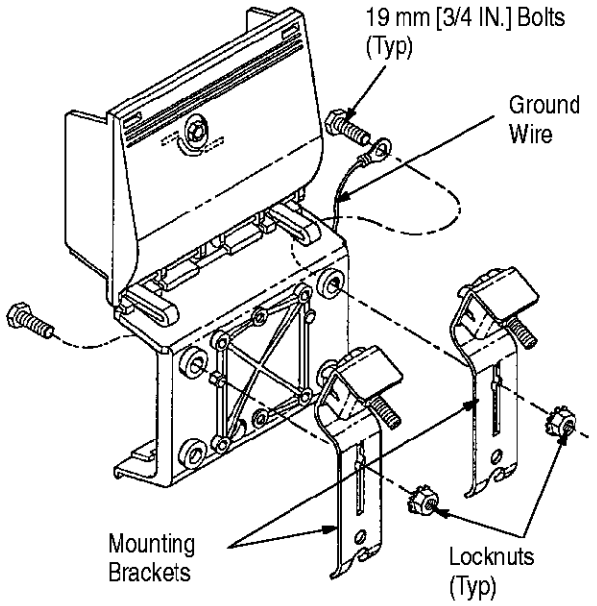


Figure 7

4. Holding brackets in place, open the terminal. Insert the 19 mm [3/4 in.] bolts through the front of the terminal. See Figure 8.

5. Install locknuts and tighten securely using a 216C wrench.

NOTE *Ground wire [10 AWG] should be installed between aerial mounting bracket and ground stud in terminal.*

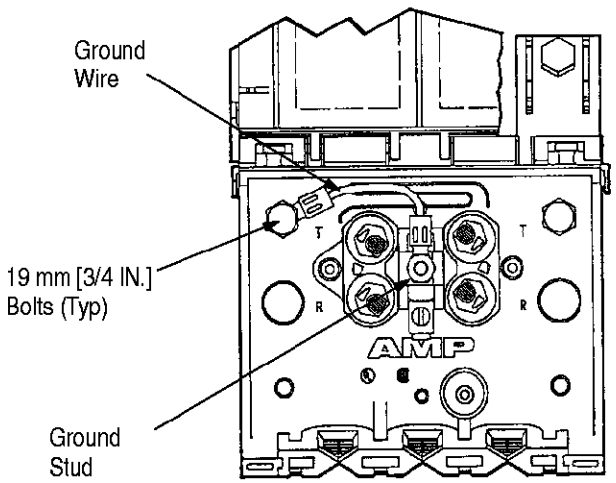


Figure 8

B. Application Procedures

Prepare the self supporting cable per your locally approved practices. It is not necessary to strip the jacket if the strand outside diameter is 2.03 to 2.41 mm [.080 to .095 in.]. The aerial terminal can also be used on standard messenger strands up to 9.7 mm [.38 in.] outside diameter.

1. Hang the aerial terminal over the strand as shown in Figure 9. Make sure the terminal is vertical.

2. Securely tighten the aerial terminal bolts using a 216C (7/16) wrench.

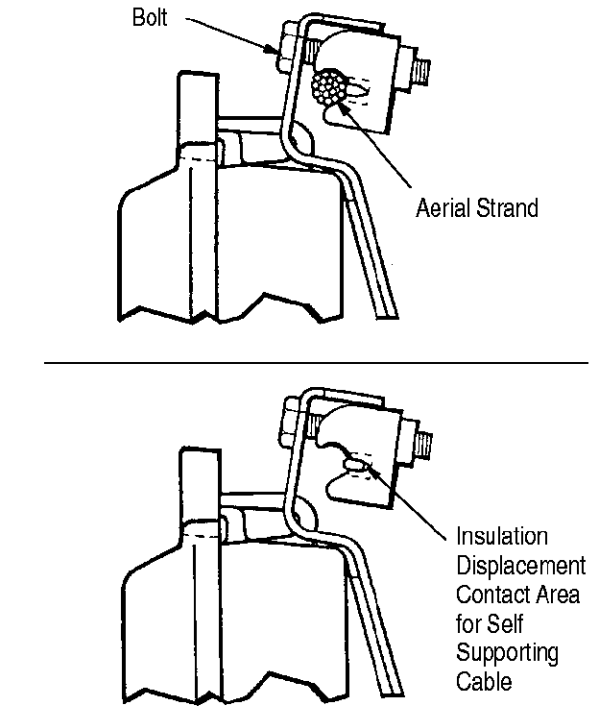


Figure 9

4. WIRE PREPARATION

Each Quiet Front Module wire entry hole will accept one unstripped drop wire; either 18 1/2 AWG copper/steel drop wire (4.57 [.180] maximum insulation outer diameter), 22–24 AWG solid copper conductor drop wire (.76 [.030] minimum insulation outer diameter), or 20–26 AWG wire (2.5 [.10] maximum outer insulation diameter). For other wire types, contact the Product Information Center at the number listed at the bottom of page 1.

CAUTION *If the input wires to the protected module are physically larger than 22 AWG, a fusing conductor of 20 AWG copper clad steel (bridle wire), or 22 AWG copper with thermoplastic insulation must be used.*

Split the ends of the drop wire lead approximately 50.8 [2.00]. Do NOT strip insulation. See Figure 10.

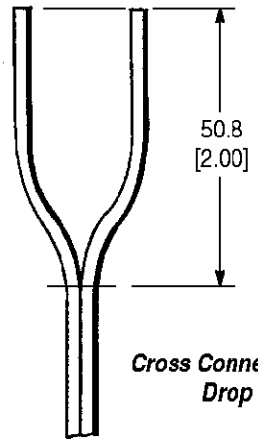


Figure 10

5. TERMINATION PROCEDURE

1. Make sure lug is in the open position by turning lug COUNTERCLOCKWISE with a 216C (7/16–in.) wrench.

NOTE *Lugs are shipped in open position.*

2. Dress wire into terminal through the grommets. Dress the wires around the fastener so they will not interfere with closing the cover. See Figure 1.

NOTE *If rubber grommet is not open, use a knife to cut along the scored lines for desired wire excess.*

3. Insert one conductor straight into either wire entry hole in one lug and the second conductor straight into either wire entry hole in the other lug until they completely bottom (drop wire), or until they are visibly bottomed in hole extender (insulation diameter up to 2.5 [.10].

4. Holding wires firmly in place, rotate each lug a quarter–turn CLOCKWISE. Yellow stripes will be fully aligned when lug is closed and termination is completed. See Figure 11.

CAUTION *Turn the lug a quarter–turn CLOCKWISE only. Do NOT overtorque.*

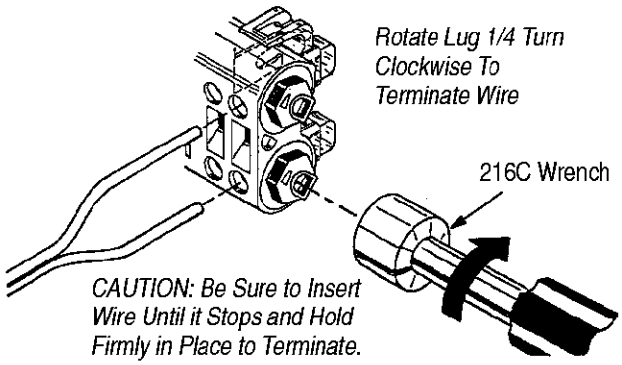
5. An additional wire can be inserted in each lug by rotating the lug a quarter–turn COUNTER–CLOCKWISE (to the open position) and inserting the wire into the empty wire entry hole and then turning the lug CLOCKWISE.

NOTE *A previously terminated wire should have 6.4 [.25] cut off to provide a new end for re–termination.*

CAUTION *Be sure both wires are inserted completely before rotating lug.*

NOTE *Modules occasionally lose sealant due to a high level of connect/disconnect activity. If additional sealant is needed, follow sealant replacement procedures described in Section 8, MAINTENANCE.*

6. Use supplied grounding lug to ground protected products per approved practice.



Wires 26 to 20 AWG with outer insulation diameters up to 2.5 [.10] will be visible in window when properly inserted.

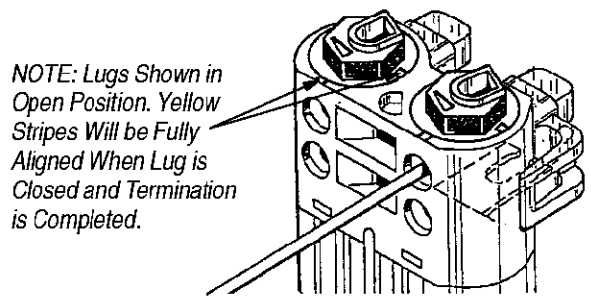


Figure 11

7. Close the terminal by snapping cover in place.

8. Finally, using the 216C (3/8–in.) wrench, secure terminal cover by rotating fastener CLOCKWISE.

6. SPLICING PROCEDURE

The following procedures are for splicing a fuse link to the central office line and connecting the fuse link and subscriber service wire to the terminal assembly.

NOTE *Do NOT strip insulation.*

1. Splice the two fuse link 24 AWG wires (included with assembly) to the central office line pairs. Use Tel–Splice Connectors (included) or PICABOND* Connectors (not included). See Figure 12.

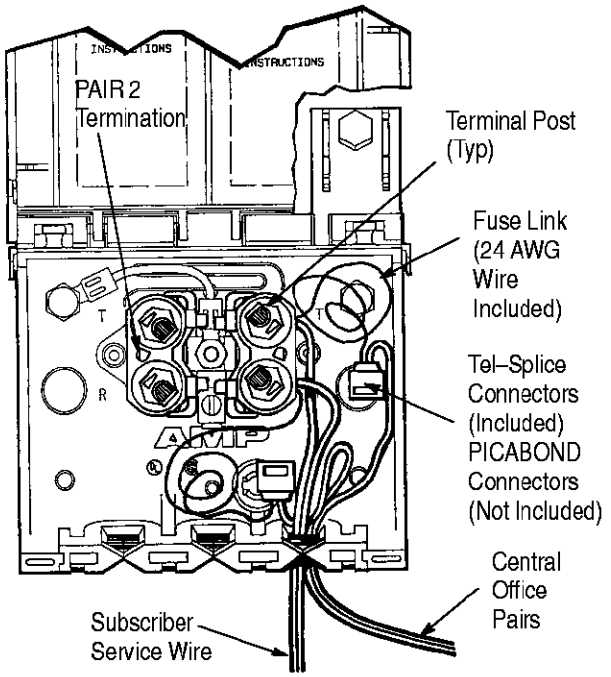


Figure 12

2. Insert fuse link tip wire and subscriber service tip wire into holes on tip (T) terminal post until they bottom. Terminate wires by rotating lug CLOCKWISE 90° [1/4 turn] with a 216C wrench.

3. Insert fuse link ring wire and subscriber service ring wire into holes on ring (R) terminal post until they bottom. Terminate wires by rotating lug CLOCKWISE (90°) [1/4 turn] with a 216C wrench.

4. Terminate second central office pair and subscriber service wire into appropriate tip and ring terminal posts according to Steps 2 and 3 above.

7. TERMINAL TESTING

Test circuit by inserting the test probe into the test port located on top of the lug; then proceed with standard testing function. See Figure 13.

8. MAINTENANCE

In order to maximize circuit integrity, every connect, disconnect, and test activity should include the replacement of lost sealant to the module. Use Quiet Front Sealant 769141–1.

DANGER *Consideration must be given to toxicity and other safety requirements of sealants. Refer to Material Safety Data Sheet (MSDS) 125–6345 for sealant.*

1. Remove cap from sealant replacement tube and snip off tip of tube.

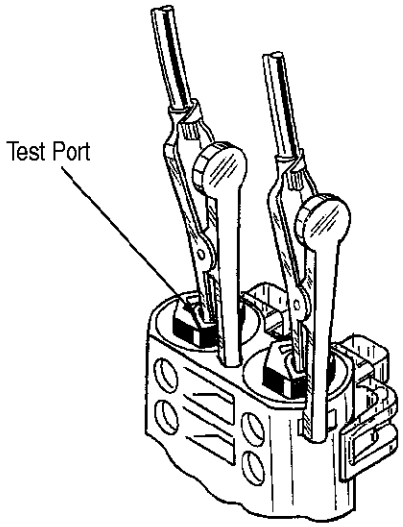


Figure 13

2. Completely fill any void created by wire removal by squeezing sealant into the wire entry hole(s).

3. If sealant has been removed from the test port in the top of the lug during testing, refill the test port with sealant.

9. REPLACEMENT

9.1. Module Addition Or Replacement

1. Open the terminal according to Paragraph 3.1., Step 2.

2. When replacing a module, turn the lugs a quarter–turn COUNTERCLOCKWISE using a 216C (7/16–in.) wrench and remove wires. Remove module by loosening the module mounting screw or nut.

3. Align new module in terminal and secure module with supplied screw or nut. See Figure 14.

CAUTION *Do NOT overtorque the screw or nut.*

4. Re–terminate wires as described in Section 5, TERMINATION PROCEDURE.

9.2. Lug Assembly Replacement

1. To replace a lug for special service designation or overtorque breakage, apply inward pressure to the lug with the 216C (7/16–in.) wrench and turn the lug a quarter–turn COUNTERCLOCKWISE.

2. Remove any wires.

3. Use needle–nose pliers to grasp the lug assembly through the test port. Grasp only the lug assembly (plastic lug and metal test tab). See Figure 15.

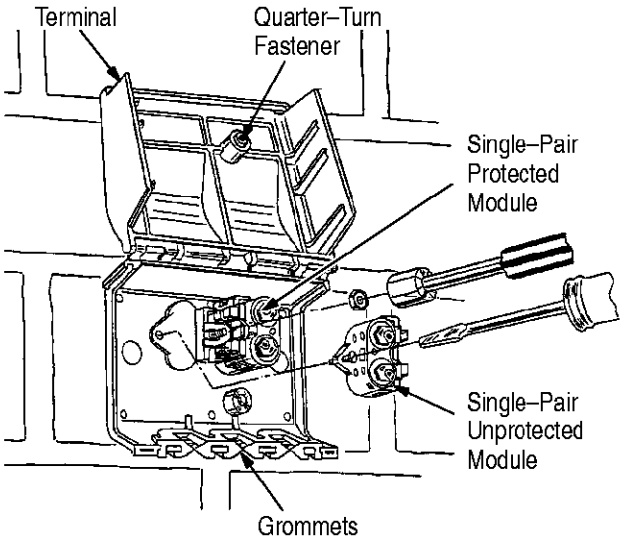


Figure 14

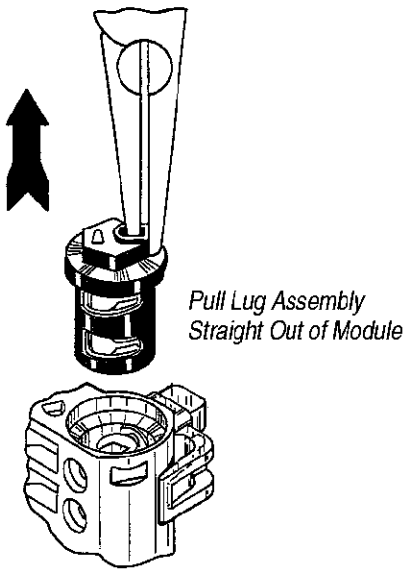
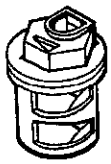


Figure 15

4. Pull the lug assembly straight out of the module.

5. Select the black or red replacement lug assembly and place the lug in the module. The lug must be in the open position. See Figure 16.



REPLACEMENT LUG ASSEMBLY (PACK OF 5)

BLACK	RED
769127–2	769127–4

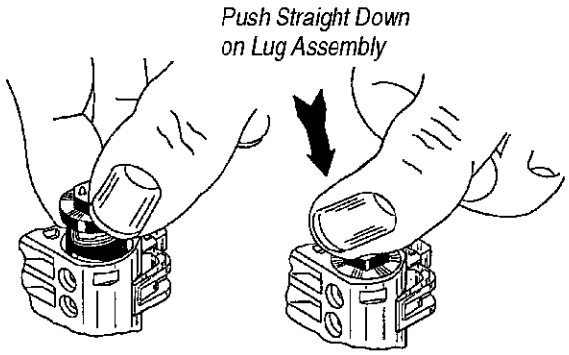


Figure 16

6. Press down on the top of the lug to seat the lug in the module.

7. Re–terminate the drop wires as described in Section 5, TERMINATION PROCEDURE.

10. REVISION SUMMARY

Revisions to this document include:

Per EC 0990–0415–01:

- Updated document to corporate requirements