# AMP NETCONNECT\* Undercarpet Power Cabling System Splice Connector 553454-1 and Tap Connector 553455-2

02 MAY 11 Rev C





Figure 1

# 1. INTRODUCTION

Undercarpet Power Splice Connector 553454-1 and Power Tap Connector 553455-2 are designed to electrically and mechanically connect two pieces of undercarpet power cable. These connectors can be used with cable sizes 12 AWG having 3 or 5 conductors.



Dimensions in this instruction sheet are in metric units [with U.S. customary units in brackets]. Figures are not drawn to scale.

To obtain information on AMP NETCONNECT products, call PRODUCT INFORMATION at the number at the bottom of this page, or visit the AMP NETCONNECT website at www.ampnetconnect.com.

Reasons for reissue of this instruction sheet are provided in Section 5, REVISION SUMMARY.

#### 2. DESCRIPTION

The splice connector connects one conductor at the end of a cable to one conductor at the beginning of another cable.

The tap connector connects one conductor of a tap cable to one conductor of a main run cable.

# 3. INSTALLATION PROCEDURE

**IMPORTANT:** It is recommended that a qualified electrician install undercarpet power splice and power tap connectors.



To avoid personal injury, ALWAYS DISCONNECT the electrical power before beginning work on any circuit.

AMP NETCONNECT logo is a trademark of TE Connectivity.



At each splice and tap connector location, use 3 power connectors for 3-conductor power cable and 5 power connectors for 5-conductor power cable.

# 3.1. Splice Connector

- 1. Align one cable end with the other cable end. Trim both cables evenly across the ends allowing a 3.18-mm [.125-in.] gap between them. Fold back the top blue vinyl shield. See Figure 2.
- 2. Carefully separate the cable conductors along the perforations for a length of 50.8 mm [2.0 in.].
- 3. Maintaining the gap between the two cables (specified in Step 1), tape the cable ends with standard electrical tape.



The electrical tape is used to keep the cable ends from shifting during installation.

# Installing Splice Connector to Undercarpet Power Cable

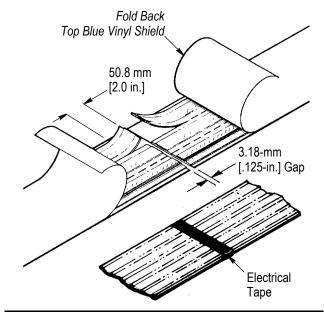


Figure 2

- 4. Ensure that the cable is clean by wiping it with a dry, clean, soft cloth. DO NOT remove the electrical tape.
- 5. Position a splice connector around the appropriate conductor on each cable starting with position 1 of the crimping order shown in Figure 3. Then using Hand Tool 91392-1, crimp each connector as follows.





Refer to 408-10267, included with the tool, for instructions on how to use the tool. It is recommended not to use any other crimping method.

- a. Crimp one end of the splice connector onto one end of the cable.
- b. Crimp the other end of the splice connector onto the other end of the cable.
- c. Position and crimp the remaining splice connectors following the crimping order shown in Figure 3.
- 6. After crimping all of the splice connectors, install Cable Insulator 556411-1 over all of the splice connectors. Refer to 408-3218.



Cable Insulator 556411-1 (available separately) is required for all splice connectors.

# **Crimping Order for Splice Connectors**

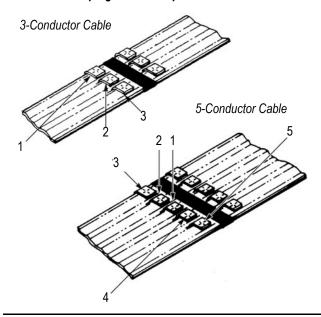


Figure 3

# 3.2. Tap Connector

- 1. Align the tap cable perpendicular to the main run cable with a 3.18-mm [.125-in.] gap between the cables. Fold back the top blue vinyl shield of the tap cable. Cut and separate the top blue vinyl only (approximately 457.2 mm [18 in.]). See Figure 4. DO NOT cut the bottom blue vinyl shield.
- 2. Carefully separate the main conductors and tap conductors along the perforations for a length of 152.4 mm [6.0 in.].
- 3. Ensure that the cable is clean by wiping it with a dry, clean, soft cloth.

# Installing Tap Connector to Undercarpet Power Cable

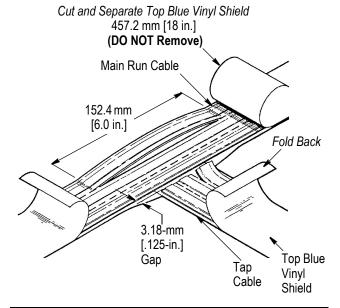


Figure 4

4. Position a tap connector around the appropriate conductor on each cable starting with position 1 of the crimping order shown in Figure 5. Then, using Hand Tool 91392-1, crimp the connectors as follows.



Refer to 408-10267, included with the tool, for instructions on how to use the tool. It is recommended not to use any other crimping method.

- a. Remove the cover paper from the tap connector to expose the adhesive film.
- b. Slide the tap connector around the appropriate conductors.
- c. With both cables lying flat on the floor, press the tap connector firmly against the cable to affix the adhesive.
- d. Crimp one end of the tap connector onto one end of the cable.
- e. Crimp the other end of the tap connector onto the other end of the cable.
- f. Position and crimp the remaining tap connectors following the crimping order shown in Figure 5.
- 5. After crimping all of the tap connectors, install Cable Insulator 556411-1 over all of the tap connectors. Refer to 408-3218.



Cable Insulator 556411-1 (available separately) is required for all tap connectors.

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# **Crimping Order for Tap Connectors**

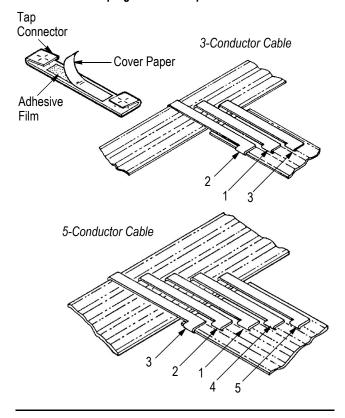


Figure 5

# 4. REPLACEMENT AND REPAIR

The splice connector and tap connector are not repairable. DO NOT use any defective or damaged connectors.

# 5. REVISION SUMMARY

Revisions to this instruction sheet include:

- Changed company logo
- Removed cable size 10 AWG
- Modified Section 2
- Added Important, DANGER, and NOTE to Section 3
- Removed CAUTION from Paragraph 3.1
- Added blue and shield to Step 1, added carefully to Step 2, removed NOTE from Step 2, added NOTE to Step 3, modified Step 3, combined Steps 5 and 6, and modified Step 5 of Paragraph 3.1
- Replaced hand tool and referenced instruction sheet in Step 5, removed CAUTION and NOTE from previous Step 6, and removed NOTE and added CAUTION to Step 5, removed reference to instruction sheet from and added cable insulator patch and NOTE to Step 6 of Paragraph 3.1
- Removed CAUTION from Paragraph 3.2
- Added blue and shield to Step 1, added carefully to Step 2, removed NOTE from Step 2, modified Step 3, and combined Steps 3 and 4 of Paragraph 3.2
- Replaced hand tool and referenced instruction sheet, removed NOTE from Step 4 of Paragraph 3.2
- Removed all instruction for VERSA-TRAK cabling system
- Added Section 4

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