

ScotchcastTM Multi-Mold Power Cable Splice Kits 85 Series

Instructions

1.0 Applications

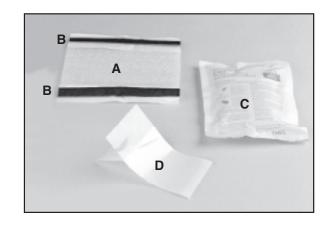
Designed for insulating and sealing cables rated up to a maximum of 1000 volts. These kits will accommodate the following connectors and conductor sizes:

Kit No.	Connector Type	Maximum Conductor Size*	Max. Connector Size (height plus width)	Max. Sheath Opening	Max. Cable O.D.* Wye or 4-Way
85-10	Split Bolt H & C Tap Compression	#8 Stranded AWG #4 Stranded AWG	1 3/4" 1 3/4"	3 1/2"	Run &Tap - 7/16"
85-12	Split Bolt H & C Tap Compression	#1 Stranded AWG 2/0 Stranded AWG	2 3/4" 2 3/4"	3 1/2"	Run &Tap – 3/4"
85-14	Split Bolt H & C Tap Compression	2/0 Stranded AWG 4/0 Stranded AWG	3 1/4"	6 1/2"	Run &Tap – 7/8"
85-16	Inline Compression Split Bolt	750 kcmil 250 kcmil (Run) 2/0 Stranded AWG (Tap)	N/A 3 3/4"	9"	Inline – 1 1/2" Run & Tap – 7/8"
	H & C Tap	500 kcmil (Run) 4/0 Stranded AWG (Tap)	6"	<u> </u>	

^{*} Assuming wye or 4-way connection using same cable sizes. For other informations and configurations, see back of instruction sheet.

2.0 Kit Contents

Mold Body A	
Sealing Mastic	
(attached to mold body) B	•
3M [™] Scotchcast [™] Resin 4C	1
Adhesive Film Strip D)



ACAUTION

Working around energized electrical systems may cause serious injury or death. Installation should be performed by personnel familiar with good safety practice in handling electrical equipment. De-energize and ground all electrical systems before installing product.

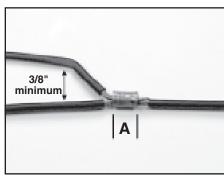
3.0 Cable Connection for Horizontal Run

- **3.1 Prepare Cable.** Scrape each cable exterior clean for a distance of 5" (8" for 85-16) from connector. If cable is sheathed, pencil insulation 3/4".
- **Make Connection.** Make connection according to connector manufacturer's instructions. Crimped connector length should not be more than dimension "A".

Table for dimension "A"

85-10	85-12	85-14	85-16
1 1/2"	1 1/2"	4 1/2"	6"

- **3.3 Train Cables.** Place cables in a horizontal position. Spread legs of cable so there will be 3/8" space between cables to allow for sealing around each cable with mastic sealing strips.
- **3.4 Prepare Mold Body.** Remove liners from sealing mastic on mold body.

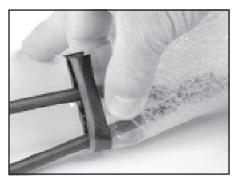




3.5 Position Mold Body Around Splice. Center mold body along connector. Wrap mold body around connection.



3.6 Seal Film. Seal film together between spacer pad and mastic.



3.7 Seal Mold. Starting at bottom of mold, seal and compress sealing mastic around and between each cable to form a resin tight seal.

Note: Compress the sealing mastic around and between each cable with thumbs as shown.





- **3.8 Level Splice.** Ensure that top of mold is level. If support is needed, support the cable outside of the splice area.
- **3.9 Pour Splice.** Mix resin per instructions on resin package. Pour into mold.







3.11 Starting at top of looped film strip and proceeding downward, seal the loop together until top of mold is closed and the resin fills the mold completely.

NOTE: DO NOT MOVE CABLES OR SPLICE UNTIL RESIN HAS COMPLETELY HARDENED.

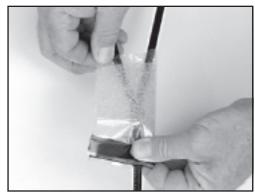


4.0 Cable Connection for Vertical Run

- **4.1** Prepare cables in the same manner as steps 3.1 and 3.2.
- **4.2** Cut off one sealing mastic strip.
- **4.3** Remove liner from sealing mastic strip on mold. Center mold on connector, extending mold 2" above connector.
- **4.4** Wrap mold around connector and seal mold. Form and compress sealing mastic strip around and between each cable to make a resin tight seal.

Note: Compress the sealing mastic strip around the cables with the thumb as shown in step 3.7.





- **4.5** Remove liner from adhesive film strip supplied with kit.
- **4.6** Seal the open side of mold. Bring the mold's edges together, fold over and compress the adhesive film strip. Be sure the seal is complete.



4.7 Mix the resin per instructions on resin package. Pour into mold.

NOTE: DO NOT MOVE CABLES OR SPLICE UNTIL RESIN HAS COMPLETELY HARDENED.



5.0 Other Installation Hints

- 5.1 The 3M[™] Scotchcast[™] Multi-mold Kits can insulate many more splice configurations. These instructions show only a typical tap splice. Some general rules for insulating multiple splice configurations follow.
- **5.2 For Multiple Tap Connections.** Follow the same procedures in these instructions. The number of taps the multi-mode kit can handle will depend on the connector and the size of the cables being spliced. The following guidelines should be used:
 - a) In making horizontal splices, cables should be brought out of the splice from the sides (through the sealing mastic) and not out of the top of the splice. This will ensure the proper length of cable to be sealed in resin.
 - b) Resin coverage along cable sheath or jacket must be a minimum of 1" for a proper moisture seal.
 - c) The sealing mastic must surround each cable to ensure a resin tight seal.
 - d) In making vertical splices, cables can be brought out the top of the mold.

3M and Scotchcast are trademarks of 3M Company.

Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for a period of one (1) year from the time of purchase. 3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.



Electrical Markets Division

6801 River Place Blvd. Austin, TX 78726-9000 800-626-8381 Fax 800-828-9329 www.3M.com/electrical



Recycled paper 40% Pre-consumer waste paper 10% Post-consumer waste paper

Litho in USA © 3M 2005 78-8124-4519-1-B