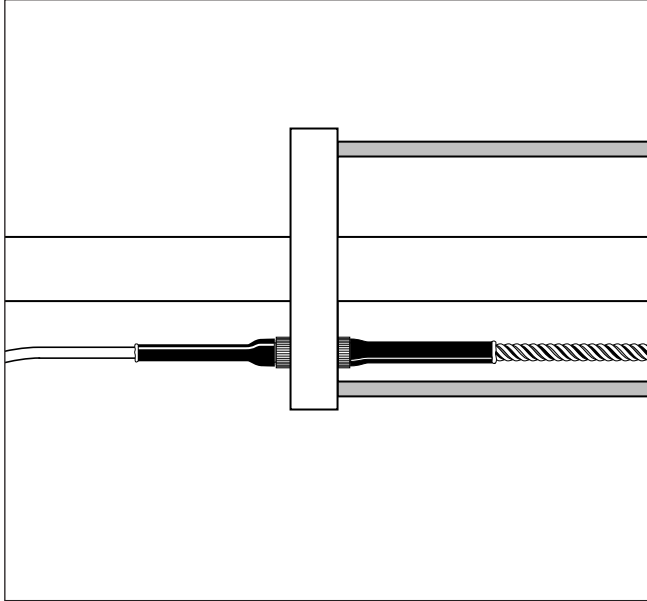


TT-JC-CK-MC-F (or) TT-JC-CK-MC-M

One Field Installed Connector
for TraceTek®-JC Bulk Jumper Cable

Installation Instructions



Description

This kit contains parts to field connect installed TT-JC Bulk Jumper Cable. The kit includes parts for 1 connection.

Tools Required

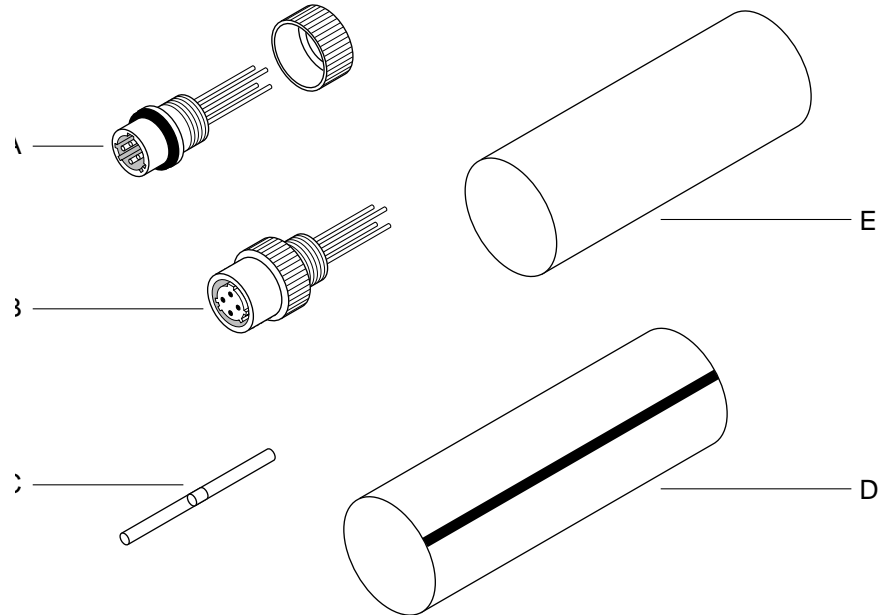
- Needle nose pliers
- Razor blade or utility knife
- Greenlee strippers (1916 or 1917)
- Flameless heating tool (Ultratorch 200)
- High impedance ohm-meter (Fluke 87 or equivalent; meter must be capable of measuring to at least 20 megohm)
- TT-CK-TOOL-KIT
- Small wire cutters
- Masking tape

Notes

- Do not use an open flame heating tool.
- The pin connector should always be installed on the cable end pointed towards the alarm and locator module.
- Use with TT-JC Bulk Jumper Cable only. This kit is not compatible with other TraceTek Cables.

Kit Contents

Item	Qty	Description
A	1	TT-CK-MC-M pin connector (or)
B	1	TT-CK-MC-F socket connector
C	9	SolderSleeve® splices (1 extra)
D	1	Striped heat-shrinkable tubing (2" x 3/4")
E	1	Heat-shrinkable tubing (2" x 3/4")



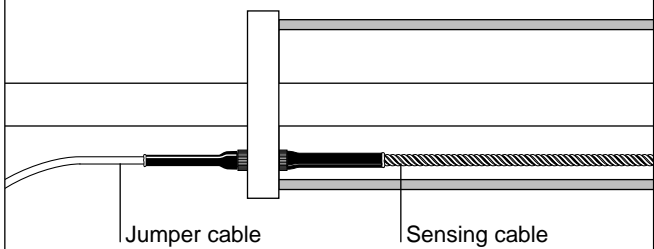
⚠ WARNING: Fire Hazard. Heat guns and flameless heating tools can cause fire or explosion in hazardous areas. Be sure there are no flammable materials or vapors in the area before using these tools. Follow all site safety guidelines when working in hazardous areas.

• Overheating heat-shrinkable tubing or solder sleeves will produce fumes that may cause irritation. Use adequate ventilation and avoid charring or burning. Consult MSDS RAY/3122 and RAY/5104 for further information.

• Component approvals and performance are based on the use of specified parts only.

**TT-JC-CK-MC-F or TT-JC-CK-MC-M Field Installed
Connectors for TT-JC Bulk Jumper Cable
Installation Instructions**

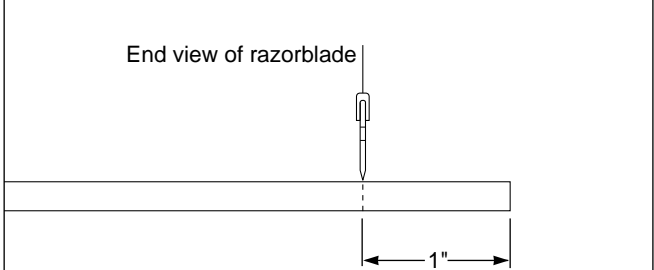
1 Prepare the cable ends:



- For most installations a jumper cable is run from the sensing cable to the alarm and locating module. A socket connector (TT-CK-MC-F) must be installed where it connects to the sensing cable.
- The pin connector should always be installed on the cable end pointed towards the alarm and locator module.

2

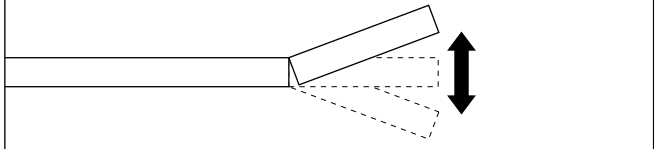
End view of razorblade



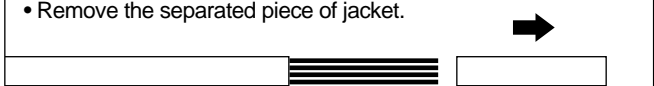
- Use the razor to lightly score the cable jacket all the way around 1" from the end.
- **Do not cut through the jacket.**

3

- Bend the jacket back and forth to break free the scored section.

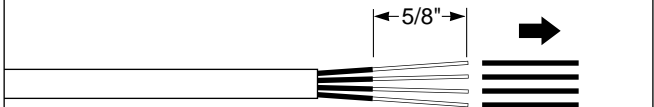


- Remove the separated piece of jacket.



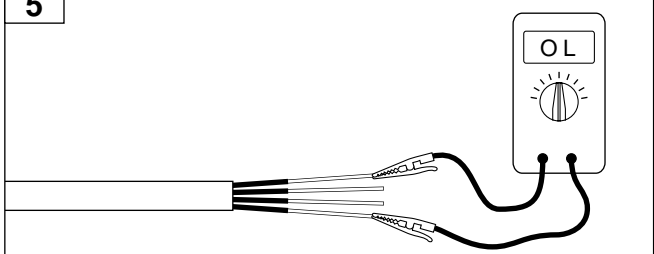
4

- Flare the 4 wires apart to accommodate the wire stripper jaws.
- Use the 18 awg slot of the wire stripper to strip 5/8" of insulation from each wire.



- For short jumper cable sections, be careful not to pull wires out of jacket.
- If any of the wire strands have separated, retwist the wires to form 4 tight bundles.

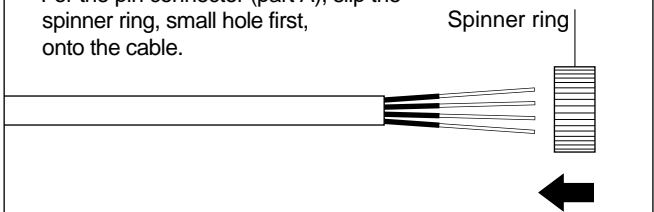
5



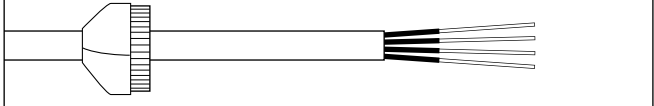
- Use the ohmmeter to measure the resistance between each combination of 2 wires.
- The resistance between any 2 wires must be greater than 20 megohm (meter may read ∞, O.L., etc.).
- If lower resistance is found, check the opposite cable end to see if the wire tips are touching.
- Replace the jumper cable if necessary.

6 Install the connector:

- For the pin connector (part A), slip the spinner ring, small hole first, onto the cable.



- Tape the spinner to the cable to avoid it sliding down the cable to an inaccessible location.



1
2
3
4
5
6
7
8
9

**TT-JC-CK-MC-F or TT-JC-CK-MC-M Field Installed
Connectors for TT-JC Bulk Jumper Cable
Installation Instructions**

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- View the cable from the end and arrange the wires as shown.

yellow
black green
red red
Pin Connector End **Socket Connector End**

8

- The 4 stranded conductors must be pretinned.
- Place a SolderSleeve® splice (part C) onto one wire.
- Heat the splice center until the solder band flows onto the wire.
- Immediately remove the splice.
- Repeat the process on each wire.

9

- Slide a SolderSleeve® splice onto each of the four pre-tinned wires.
- Push the splices as far onto the wires as they will go.
- The solder band must lie over bare conductor, not insulation.

10

Socket Connector (Part B)

Yellow (large tab)

Green Black Red

Pin Connector (Part A)

Yellow (large keyway)

Black Green Red

- Make sure the wires are arranged as in step 7.
- Once the yellow wire is aligned correctly, the other wires are aligned also.
- Orient the connector for insertion.

11

- Push the aligned connector pins into the splices.
- Check to see that the solder bands are in contact with the connector pins and the pre-tinned wires.

12

- Leave a gap between the wire tips and the connector.
- Heat the splices until they have shrunk fully and the solder bands have flowed.
- Keep the heat source moving to avoid charring.**
- Allow the assembly to cool before handling.

**TT-JC-CK-MC-F or TT-JC-CK-MC-M Field Installed
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Socket

Pin

- For pin connectors, untape the spinner to attach to the end termination.
- For either connector type, screw on the mating end termination.

14

- Slide a striped, heat-shrinkable tube over the assembly.

Align the tube with the ribbed section of the connector.

Part D

15

- Heat shrink 1/4" of the tube onto the connector. Leave a small gap between the tube and the ribbed section of the connector. For both connector types, heat just until the tube is smooth.

Leave a 1/16" gap

1/4"

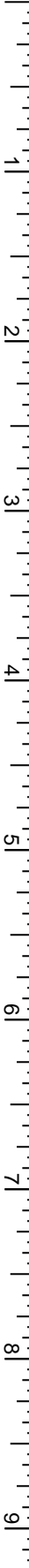
- **Do not overheat**
The tube may slip off of the connector if it is overheated.
- Allow to cool before proceeding.

16

- Heat shrink the rest of the tube, avoiding the already shrunk section.
- Proceed to the next step **before** the tube cools.

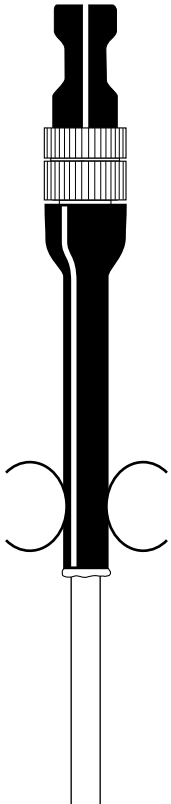
Do not reheat this area

Do not heat cable jacket



TT-JC-CK-MC-F or TT-JC-CK-MC-M Field Installed
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Installation Instructions

17



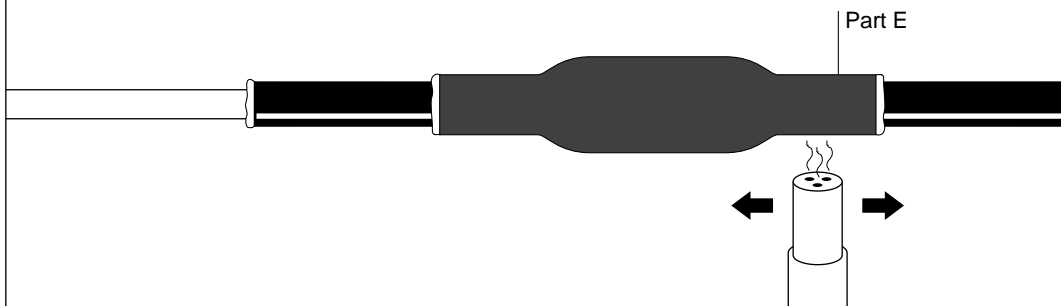
- While the tube is still hot, inspect the exposed adhesive at the tubing/cable interface.
 - If a void is visible, use a glove or rag to squeeze the tube slightly and fill the void with molten adhesive.
- Do not get hot adhesive on your bare skin.
It will Burn!**

18 Test the connector assembly:



- Attach the mating test-tool-half to the connector to be tested.
- Use an ohmmeter to measure the resistance between the test tool pins.
- The resistance between any two pins should be greater than 20 megohm.
- If the assembly fails any of the resistance tests;
 - 1) If the opposite cable end does not have a connector; check to see if the wire tips are touching.
 - 2) If necessary, cut off and discard the connector and install a new one.

19 Apply environmental seal:



- Before mating the connector assemblies, slide the non-striped tube onto one of the cables. Connect the pin and socket connectors together firmly. Center the non-striped tube over the pin/socket connection. Heat shrink the tube over the connection, beginning in the center and shrinking towards the ends until the tube fully conforms to the shape of the connection and adhesive flow from each end of the tube.
- **Let the entire connector area cool before handling the cable.**

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