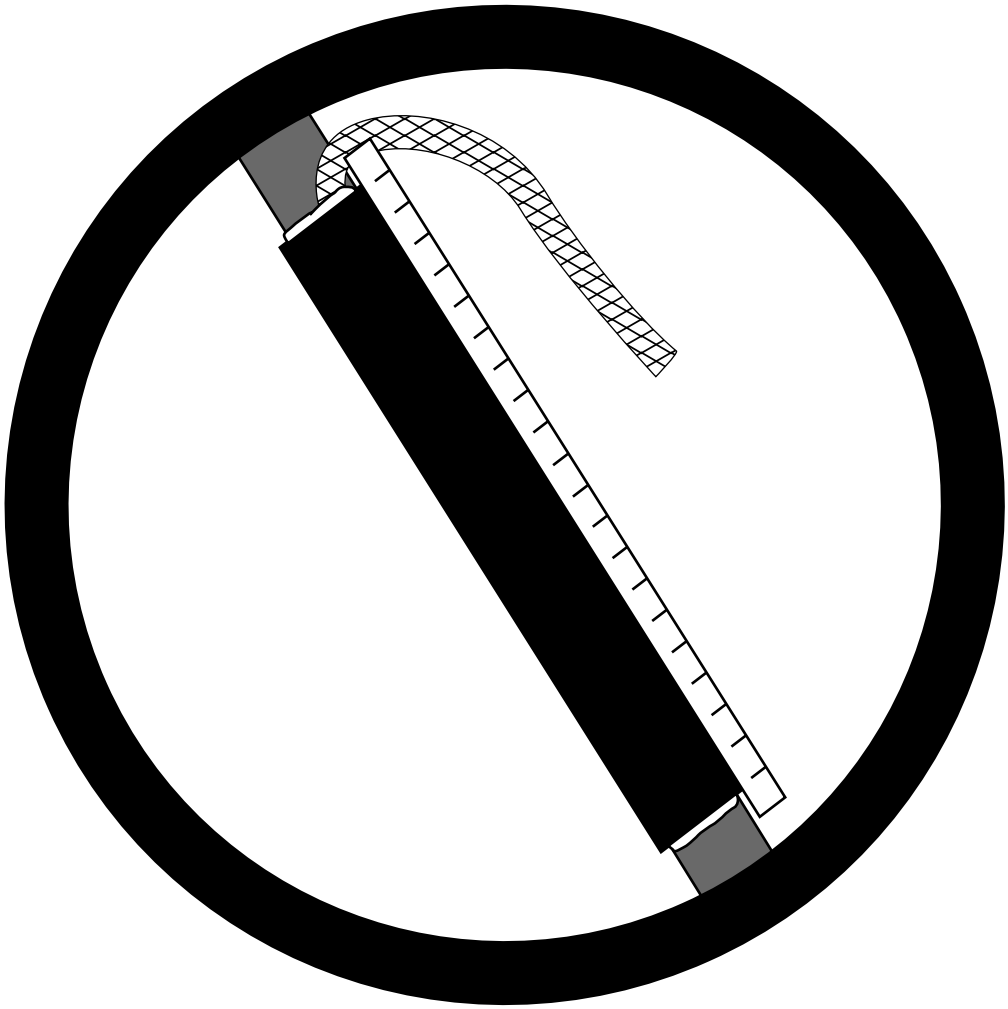
Raychem

Product Installation Instructions

JGK-MS-2/3

Jacketed Concentric Neutral Cable Mid-Span Grounding Kit



Raychem Corporation
Electrical Products Division
220 Lake Drive
Newark, DE 19702

PII-54814, Rev AC
DCR C26547
PCN 537775-000
Effective Date: August 1994

Suggested Installation Equipment (not supplied with kit)

- Cable preparation tools
- Raychem P63 cable preparation kit or cable manufacturer approved solvent
- Clean, lint-free cloths
- Non-conducting abrasive cloth, 120 grit or finer
- Electrician's tape
- Connector(s) and installation tools
- Raychem recommended torch

Recommended Raychem Torches

Install heat-shrinkable cable accessories with a "clean burning" torch, i.e., a propane torch that does not deposit conductive contaminants on the product.

Clean burning torches include the Raychem FH-2609, FH-2629 (uses refillable propane cylinders) and FH-2616A1 (uses disposable cylinder).

Safety Instructions

Warning: When installing electrical power system accessories, failure to follow applicable personal safety requirements and written installation instructions could result in fire or explosion and serious or fatal injuries.

To avoid risk of accidental fire or explosion when using gas torches, always check all connections for leaks before igniting the torch and follow the torch manufacturer's safety instructions.

To minimize any effect of fumes produced during installation, always provide good ventilation of confined work spaces.

As Raychem has no control over field conditions which influence product installation, it is understood that the user must take this into account and apply his own experience and expertise when installing product.

Adjusting the Torch

Adjust regulator and torch as required to provide an overall 12- inch bushy flame. The FH-2629 will be all blue, the other torches will have a 3- to 4-inch yellow tip. Use the yellow tip for shrinking.

Regulator Pressure

FH-2616A1	Full pressure
FH-2609	5 psig
FH-2629	15 psig

Cleaning the Cable

Use an approved solvent, such as the one supplied in the P63 Cable Prep Kit, to clean the cable. Be sure to follow the manufacturer's instructions. Failure to follow these instructions could lead to product failure.

Some newer solvents do not evaporate quickly and need to be removed with a clean, lint-free cloth. Failure to do so could change the volume resistivity of the substrate or leave a residue on the surface.

Please follow the manufacturer's instructions carefully.

General Shrinking Instructions

- Apply outer 3- to 4-inch tip of the flame to heat-shrinkable material with a rapid brushing motion.
- Keep flame moving to avoid scorching.
- Unless otherwise instructed, start shrinking tube at center, working flame around all sides of the tube to apply uniform heat.

To determine if a tube has completely recovered, look for the following, especially on the back and underside of the tube:

1. Uniform wall thickness.
2. Conformance to substrate.
3. No flat spots or chill marks.
4. Visible sealant flow if the tube is coated.

Note: When installing multiple tubes, make sure that the surface of the last tube is still warm before positioning and shrinking the next tube. If installed tube has cooled, re-heat the entire surface.

1. Product selection.

Check kit selection with the insulation O.D. dimensions and fault current rating per Table 1.

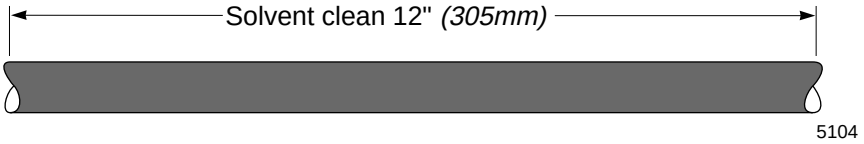
Table 1

Kit	Nominal Use Range (AWG/kcmil) 15 kV	25 kV	35 kV	Rated Fault Current
JGK-MS-2	250-1000	1/0-750	1/0-500	15kA, 15 cycles
JGK-MS-3	1000-2000	750-1750	500-1500	15kA, 15 cycles

The JGK-MS kit is intended to permit mid-span grounding of jacketed concentric neutral power cable to minimize standing voltage and provide a return path for line-to-ground faults.

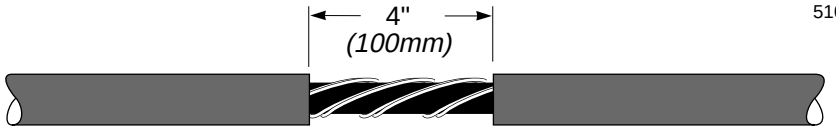
1. Clean cable.

Solvent clean cable jacket for 12” *(305mm).*



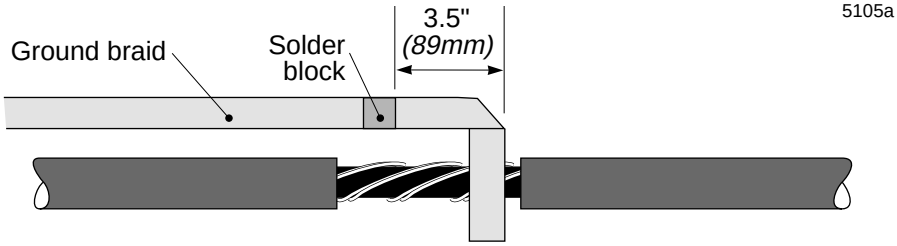
2. Remove jacket.

Remove 4” *(100mm)* of jacket and bedding tapes. Do not cut or nick neutral wires.



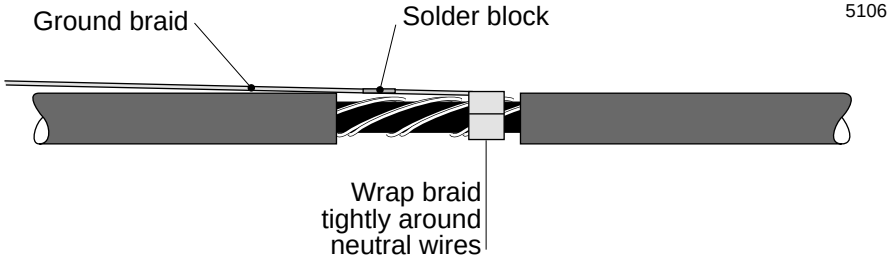
3. Position 1st braid.

Fold and position the grounding braid so that the moisture block will extend over the cable jacket when turned over the spring clamp. (See drawing for positioning).



4. Wrap braid.

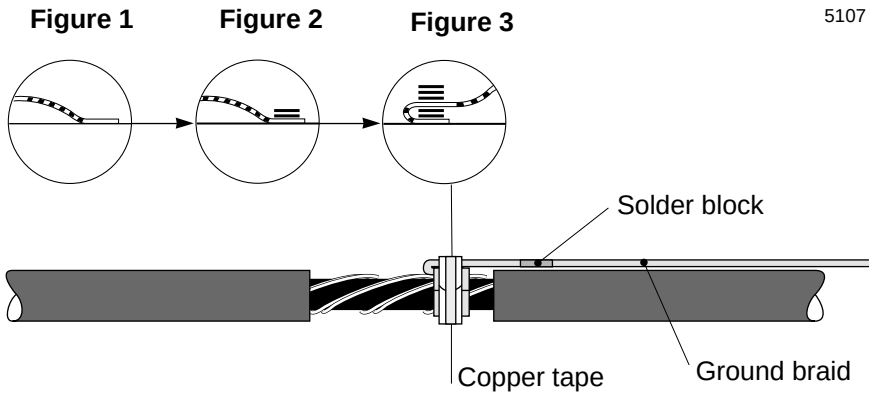
Wrap the braid tightly around the neutral wires as shown.



5. Attach braid.

Unwind the spring clamp 1/4 turn and place over the wrapped ground braid. Make two complete wraps with the springs around the cable and braid as shown in Figure 2.

Fold the braid back over the spring clamp and completely wrap the remaining spring coils over the braid and cable as shown in Figure 3. Cinch and tighten spring clamp. Secure with copper tape. Be sure the solder block extends over the cable jacket.



6. Position 2nd braid.

Fold and position the grounding braid as shown so that the moisture block will extend over the cable jacket when turned over the spring clamp.
(See drawing for positioning).

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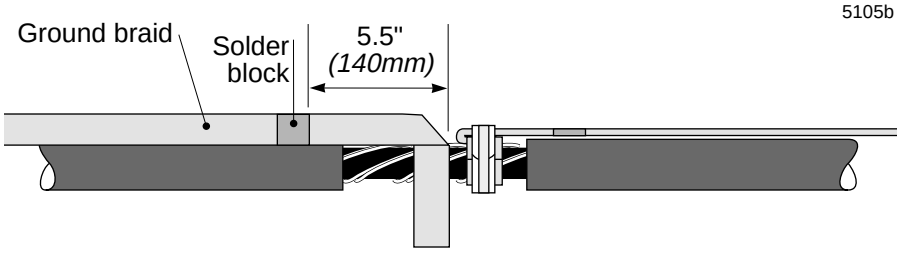

7. Wrap braid.

Wrap the braid tightly around the neutral wires as shown.

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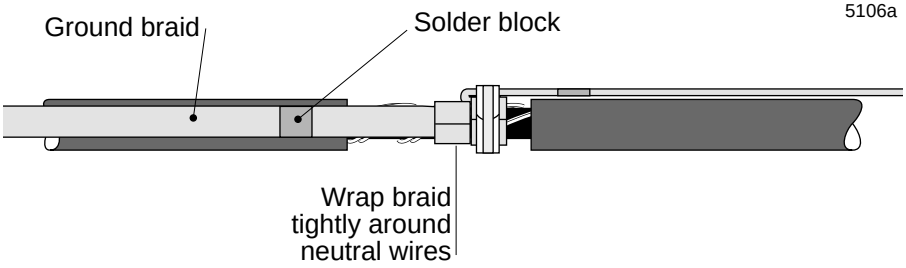

8. Attach braid.

Unwind the spring clamp 1/4 turn and place over the wrapped ground braid. Make two complete wraps with the springs around the cable and braid as shown in Figure 2.

Fold the braid back over the spring clamp and completely wrap the remaining spring coils over the braid and cable as shown in Figure 3. Cinch and tighten spring clamp. Secure with copper tape. Be sure the solder block extends over the cable jacket.

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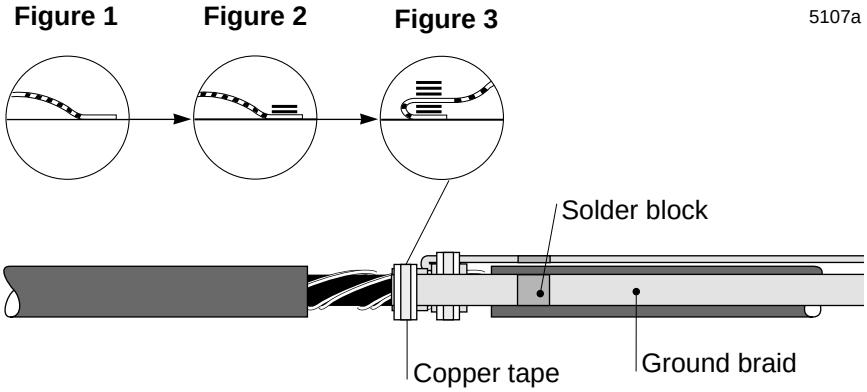
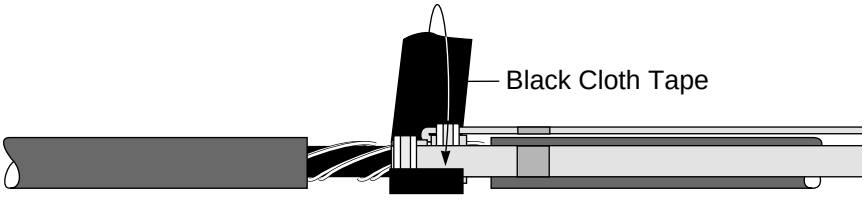


9. Wrap spring clamps with black cloth tape.

Wrap the black cloth tape over the spring clamps, overlapping the edges as shown. Be sure to cover any sharp edges or points.

Note: Do not overlap the tape onto the cable jacket.



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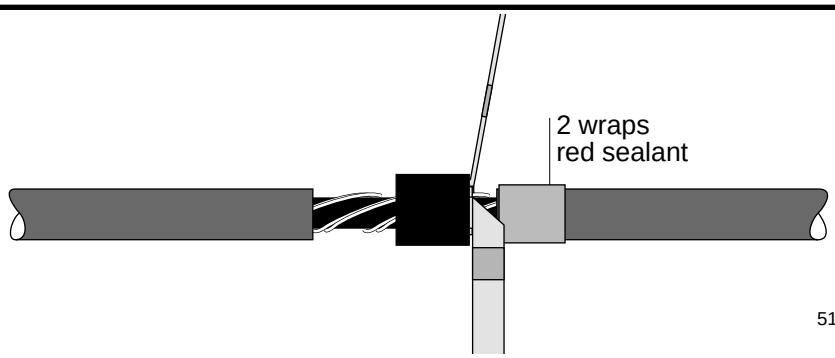
10. Apply sealant.

Lift up the braids, and apply two wraps of red sealant on the cable jacket, at the jacket edge.



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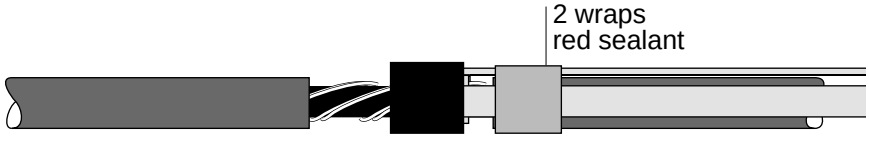
Press braids down into sealant, and apply two more wraps on top of braids directly over previously applied sealant as shown.



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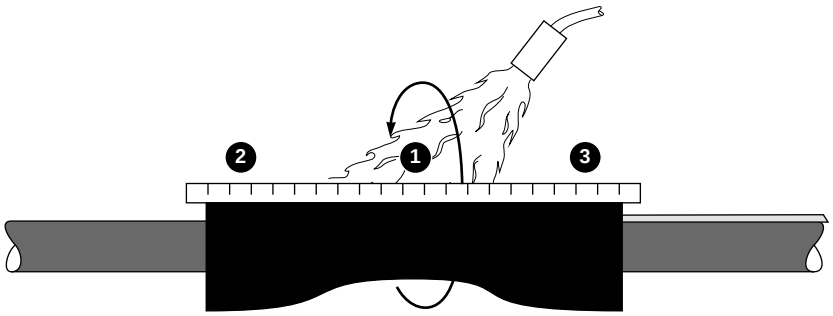
11. Shrink sleeve.

Take the wraparound sleeve, fold together around cable so the rails meet. Place the metal channel on the rails. Center the sleeve over the window. Start shrinking at the middle and shrink one half completely. Return to middle and shrink the other half.



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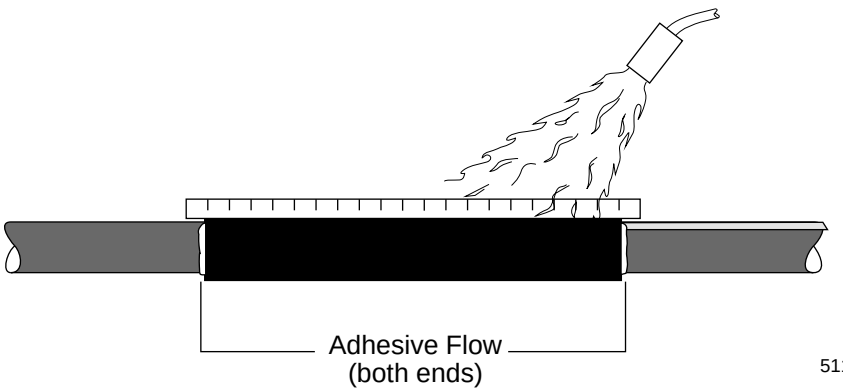
12. Post-heat sleeve.

Post-heat the metal channel for 1 minute to insure flap sealing. Adhesive should be visible at the sleeve ends.

This completes the installation.

Note: Allow to cool before moving or placing in service.



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