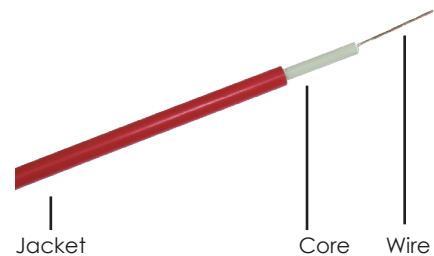




Detectable conduit rodder features highly visible, non-conductive fiberglass rod with fiberglass core and 18 AWG solid copper wire.

1/4" OD Rod

Part Number	Diameter & Length	Bend Radius	Conduit Size
16-14-300M	1/4" X 300'	4"	1-1/2" - 3"
16-14-400M	1/4" X 400'	4"	1-1/2" - 3"
16-14-500M	1/4" X 500'	4"	1-1/2" - 3"
16-14-600M	1/4" X 600'	4"	1-1/2" - 3"



WARNING

- Wear safety glasses and gloves.
- Keep rod inside reel when not in use. Out-of-control rod can harm personnel or property.
- Keep rod clean. Some contaminants (including water) can conduct electricity.
- Keep secure footing. Protect yourself from falling should pulling eye move suddenly or separate from rod.
- Check for rod damage prior to use. Cracks, gouges, nicks, or white stress marks on jacket or sharp bends will weaken rod. Injury could result if rod breaks while pulling.
- Do not use slip joint pliers, locking pliers or powered pulling equipment on rod.
- Do not force a pull that is stuck. Check for kinks or obstructions.
- Avoid pulling rod over sharp edges.
- Do not bend rod beyond 4" radius.



WARNING - ADHESIVE

Read manufacturer's instructions before using adhesive. In case of eye contact, flush with water and seek medical attention. If skin contact occurs, apply solvent (such as nail polish remover) to area and gently remove adhesive. Wash solvent off with water. Solvents should not be used in case of contact with eyes or open wounds. Always wear safety goggles (ANSI Std. Z87.1) and gloves when working with adhesive and/or unprotected fiberglass rod. See adhesive product label for Safety Data Sheet (SDS).

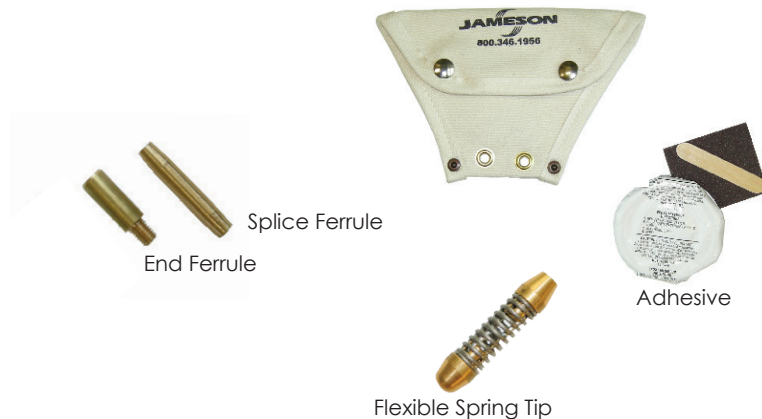
Warranty

Jameson products carry a warranty against any defect in material and workmanship for a period of one year from date of shipment unless failure is due to misuse or improper application. Jameson shall in no event be responsible or liable for modifications, alterations, misapplications or repairs made to its products by purchaser or others. This warranty is limited to repair or replacement of the product and does not include reimbursement for shipping or other expenses incurred. Jameson disclaims any other express or implied warranty.



Duct Hunter Accessories

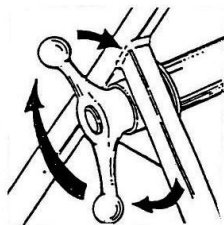
Part Number	Accessories for 1/4" Duct Hunter	
16-14-AK	Accessory Kit	Spring Tip, End Ferrule, Splice Ferrule, 2 Adhesive, 2 Emery Cloth, Canvas Pouch (INCLUDED WITH DUCT HUNTER)
Additional Accessories Sold Separately		
16-169	Flexible Spring Tip	Heavy duty spring attached to ball nose helps push rod past difficult bends or debris in pipe
16-160	Swivel Eye	Attaches pull line to rod
16-146	End Ferrule Kit	End Ferrule, Adhesive, Emery Cloth
16-140	Splice Kit	Splice Ferrule, Adhesive, Emery Cloth



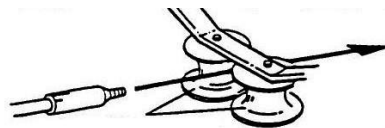
DUCT HUNTER OPERATION

1. Operates in upright or horizontal position. If used in horizontal position, safety roller guides and brake control handle should be on top side.
2. Set drag brake to highest amount of drag.
3. Insert end of fiberglass rod between the upper and lower nylon safety roller guides. This ensures duct rod will be safely contained while working with it.
4. Release pressure on drag brake handle so rod will begin to slowly payout from reel.
5. Brake may be set for constant drag on payout of rod. The constant drag makes one-man operation possible. Fully tightening brake handle stops payout of rod. For constant drag and controlled payout, set brake handle where reel turns only as you pull out rod.
6. Pay out rod into underground facility. Lock brake handle.
7. Attach signal output lead from your transmitter to end ferrule on reel. Attach ground lead to desired ground mechanism.
8. Follow your transmitter's operating instructions to apply the desired signal frequency to the rod.*
9. Use your receiver to trace the path of the rod following the instructions of your receiver.
10. If further rod payout is required, detach transmitter output lead, loosen drag brake and pay out more rod. Lock brake handle and re-attach transmitter output lead.
11. When recoiling rod, detach transmitter lead, loosen drag brake and **push rod back onto reel**. Allow reel to spin only when pushing rod. Do not manually spin reel in an attempt to reel up rod.

* Always follow the manufacturer's instructions and precautions when using your transmitter and receiver. Jameson is not responsible for damage or injury as a result of improper use of your transmitter or receiver.



Drag Brake



Roller Guides

Attaching New End Ferrule Or Splicing Rod

End Ferrule Repair

1. Cut away damaged section(s) of rod with a fine-tooth hacksaw, cable cutter or sharp knife. With pipe cutter and/or sharp knife, strip red protective jacket back from fiberglass core approximately 1-1/4". Do not cut fiberglass core when stripping jacket. Do not crush fiberglass core.
2. Copper wire is embedded fiberglass core. Use knife to pick loose end of copper wire from fiberglass core. Peel wire away from fiberglass core with needle nose pliers.
3. Use knife to carefully scrape away enamel coating on outer surface of wire. Re-seat wire into fiberglass core, allowing it to remain free from surface of fiberglass core. This will enable contact with inside of new end ferrule.
4. Attempt a test fit of replacement end ferrule over exposed fiberglass core. It should be firm and snug with little or no play to assure wire contacts inside of ferrule. If too loose, cut away rod end and repeat Steps 1-4.
5. Once proper fit is established, install end ferrule without adhesive and check for continuity of the internal copper wire using a digital multimeter. Touch a probe to end ferrule at each end of coiled rod. Any resistance reading (generally between 2-12 ohms) indicates proper continuity.
6. Remove end ferrule. Clean rod end and end ferrule with cleaning solvent or alcohol to remove debris and glass fibers. Allow solvent to completely evaporate. Step 6 is extremely important.
7. Mix and apply adhesive to entire surface of fiberglass core and wire. Insert rod into end ferrule as far as possible, enclosing end of red jacket in counterbore of ferrule. Wipe away excess adhesive.
8. Check rod again for continuity using digital multimeter. The adhesive remains workable for 20 minutes. If no continuity, remove ferrule, clean off adhesive and repeat steps 1-7.

Splicing Rod

Follow steps 1-8 for both ends of rod being spliced. Use splice ferrule instead of end ferrule. Before inserting prepared rod ends into splice ferrule, slide piece of heat shrink tubing over one rod end and move it along rod out of way.

Once a proper splice is obtained, wait at least 20 minutes for adhesive to set. Move heat shrink tubing over splice ferrule so it is completely covered. Use heat gun or blow torch to carefully shrink tubing, starting in center and working toward each end. Wipe away any adhesive that oozes from the heat shrink tubing.

Note: Repaired rod should be allowed to cure 24 hours prior to use.

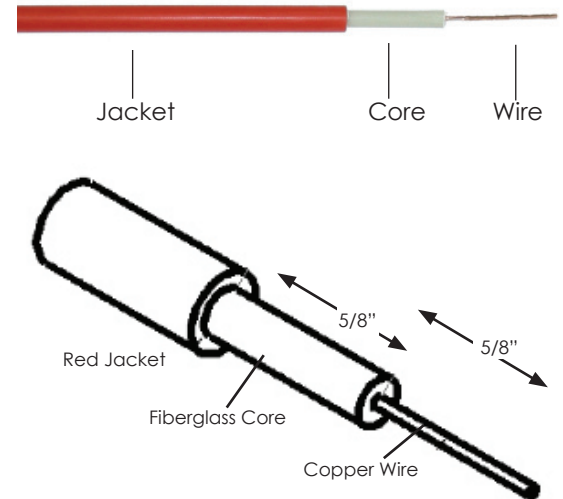


Fig. 1

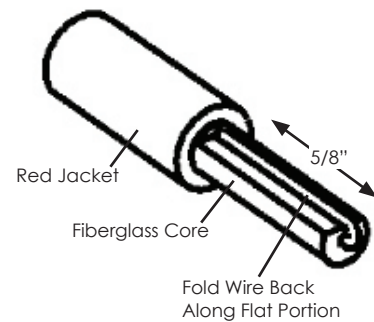
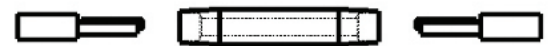


Fig. 2



End Ferrule Repair



Splice Repair



Video Demo Of Duct Hunter Repair

