

Pressure Plugging Components Product Descriptions

Mfg. by 3M Company

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4530 CLOSURE

2.03 The 4530 Blocking Closure, when used in conjunction with 4407 Compound (Sizes A, D & E), provides all necessary materials to construct cable pressure plugs using the OPEN SHEATH method.

Note: This Closure should be used in lieu of Lead Sleeves.

The 4530 Closure allows for complete, effective core penetration of pressure plugs and is applicable for aerial or underground, vertical or horizontal cable sections.

2.04 The 4530 Closure includes a molded injection sleeve, one empty filling cartridge, channeling wedges, spacer web, shield connectors, bonding braid, stainless steel clamps and other accessory parts.

1. GENERAL

1.01 This section describes the various materials used in making airtight pressure plugs (for open sheath and window injection methods).

2. DESCRIPTION

4407 COMPOUND

2.01 The 4407 Compound is a two part polyurethane compound that is universal in application [works equally well on all types of cable (PIC, Paper or Pulp, Depic Screened Cable, MUP Air Core Cable—with any sheath construction)].

2.02 The 4407 Compound is packaged in a two part clear plastic bag with a separator to isolate the parts (A & B) until mixing. Plastic bags are then protected from moisture in sealed foil moisture-proof guard bags—and are available in the following sizes:

4407 A Size 3.3 oz.

4407 D Size 23.8 oz.

4407 E Size 10.6 oz.

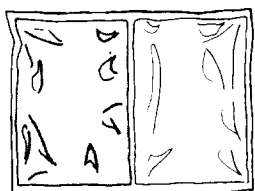


Fig. 1. 4407 Compound

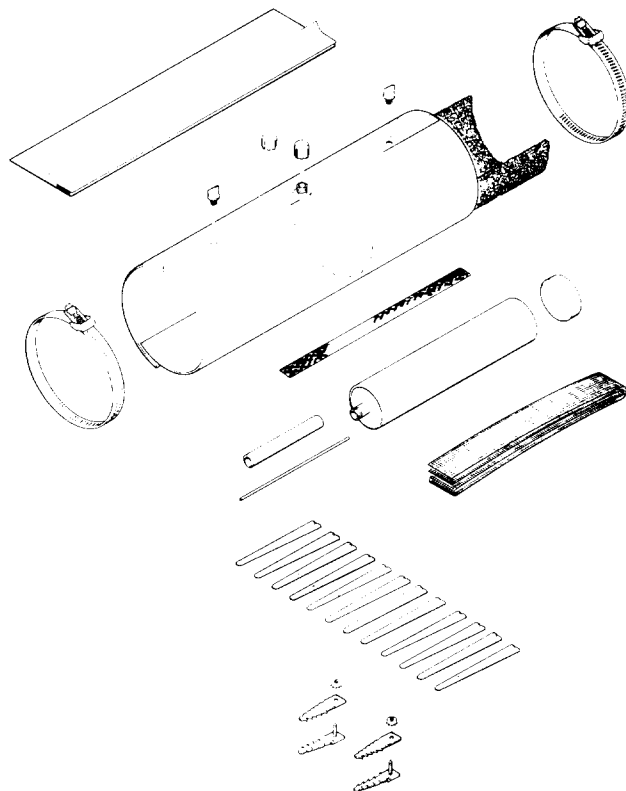


Fig. 2. 4530 Closure

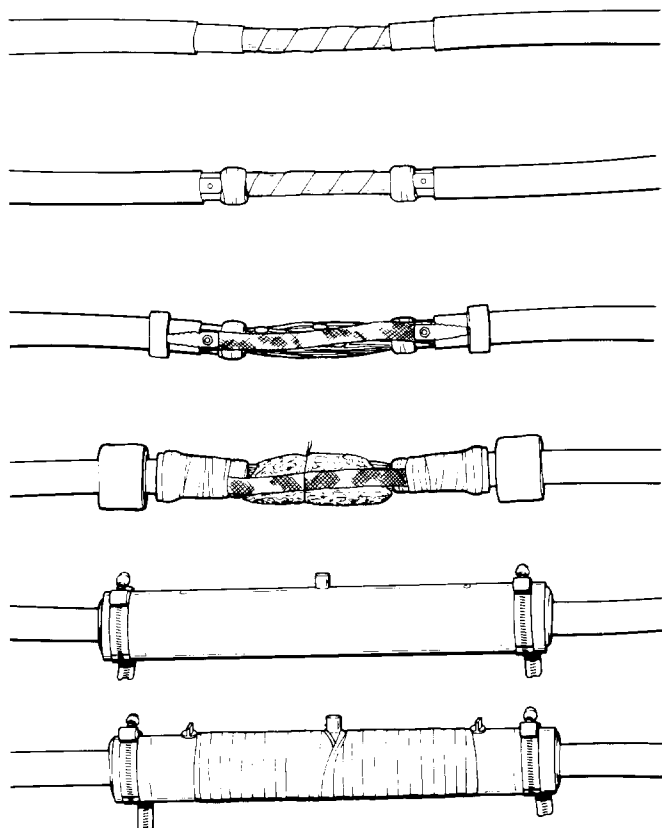


Fig. 3. 4530 Closure Installation

4477-R PETCOCK

2.05 The 4477-R Petcock is a replenishment valve for the PUP Kit. (It is included in with 4407 / SCS-D for window injection method).

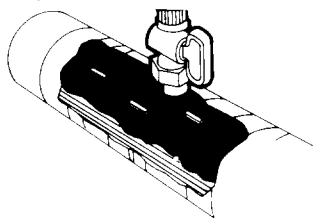


Fig. 4. 4477-R Petcock

88T VINYL TAPE—1½" X 44'

2.06 88T Vinyl Tape—1½" X 44' is used for wrapping the 4530 closure to add physical strength when making gas tight pressure plugs.

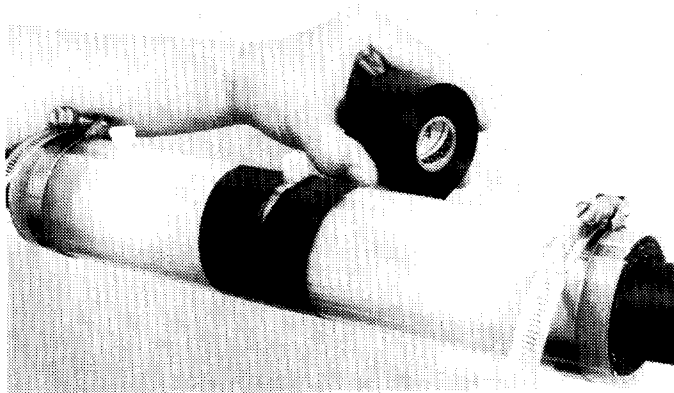


Fig. 5. Wrapping 4530 Closure with 88T Tape 1½" X 44'

4477 PUP KIT (Plugging Under Pressure)

2.07 The PUP Kit—4477 includes a pressure release valve, bypass tubing, petcock and a brass plug—that allows the user to plug under pressure when using the OPEN SHEATH Method as previously shown.

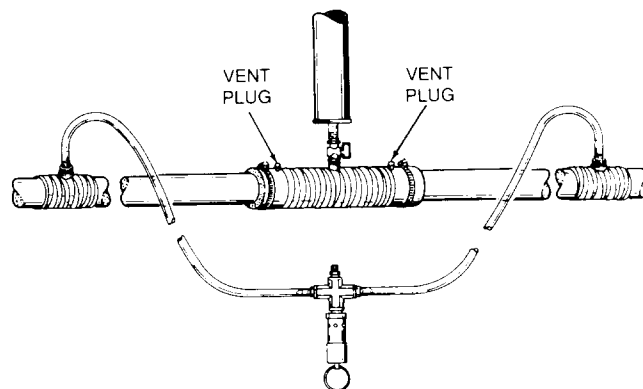


Fig. 6. PUP Kit 4477 Installed

4470 INJECTION GUN

2.08 The 4470 Injection Gun is a ratchet action gun with a plunger release feature, which makes it possible to release pressure if necessary.

For use with both the 4530 Closure and 4407 / SCS-D.

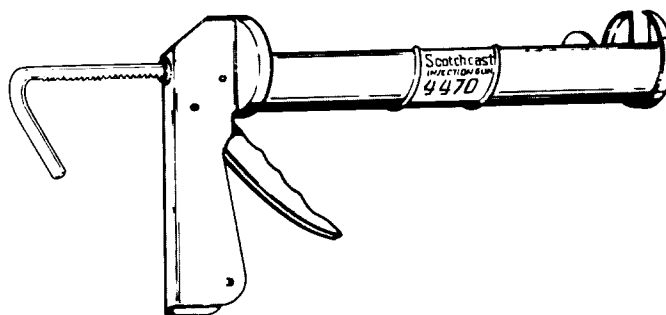


Fig. 7. 4470 Injection Gun

4407/SCS-D

2.09 The 4407/SCS-D consists of one bag of 4407 Compound—Size D, one filling cartridge, one pet-cock and two plunger discs—for use in making window injection or direct sheath pressure plugs.

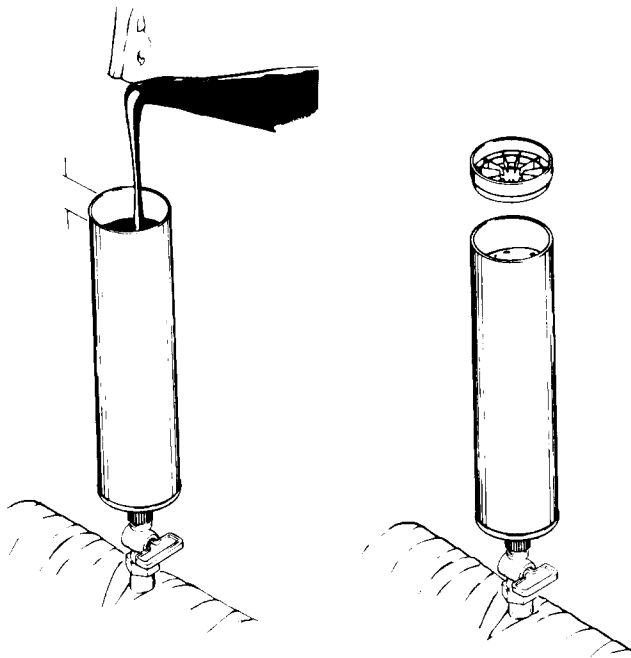


Fig. 8. 4407/SCS-D Installation

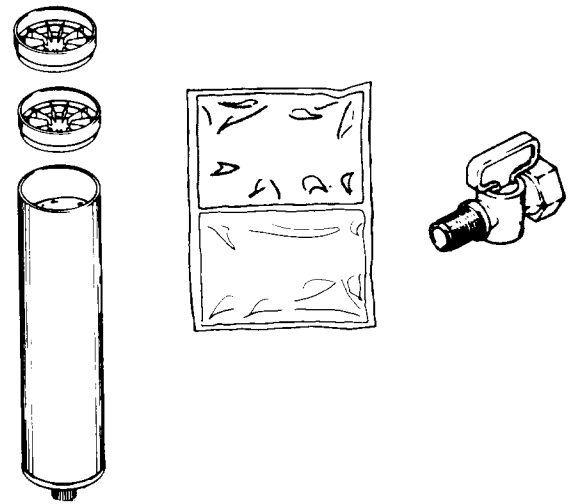
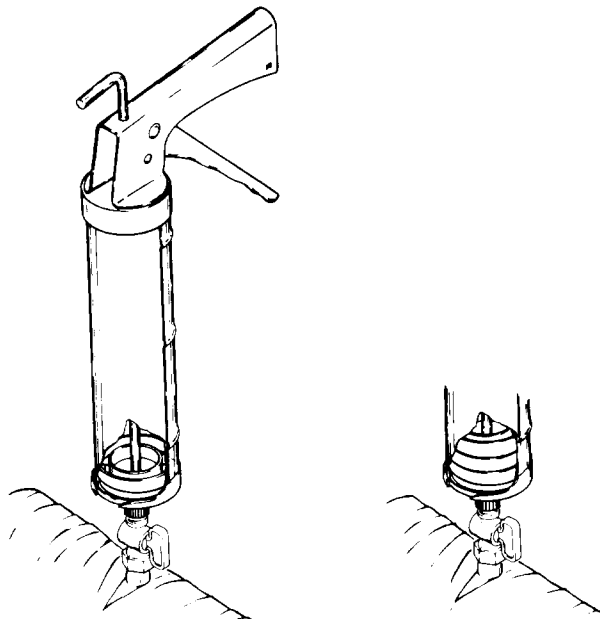


Fig. 9. 4407/SCS-D

INJECTION FLANGES

2.10 The 4475 & 4478 Injection flanges are plastic saddles fitted with an injection port for compound injection when using the direct sheath or window injection plugging methods. 4475 is for cables up to 1" OD and the 4478 will handle all cable OD Sizes.

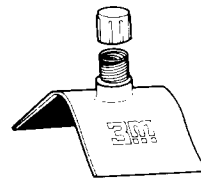


Fig. 10. 4475 Flange

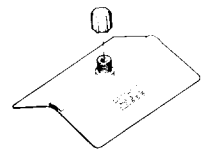


Fig. 11. 4478 Flange

W-9 CHANNELING WEDGES

2.11 The W-9 Channeling Wedges are flexible plastic, tapered at one end and grooved—for use in separating bundles of conductors when plugging cable—direct sheath or window injection method.



Fig. 12. W-9 Wedge

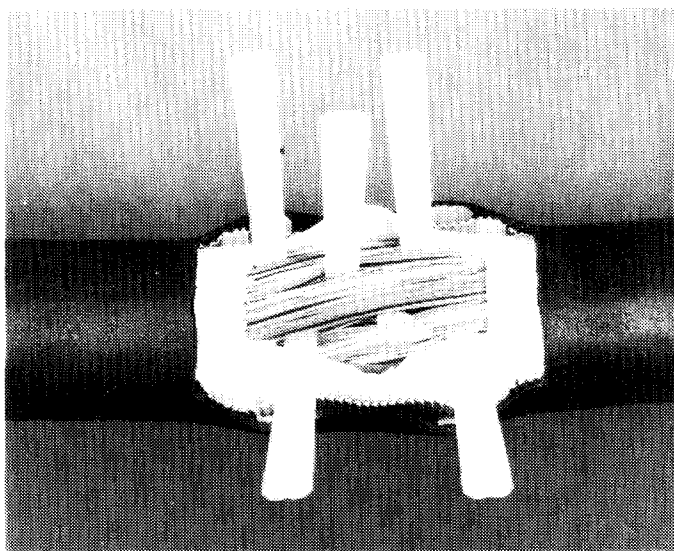


Fig. 13. W-9 Wedges in Place Prior to Trimming