

## ENCAPSULATION AND PLUGGING COMPOUNDS—DESCRIPTION

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**1. GENERAL**

**1.01** This section describes the various materials used in making pressure plugs, moisture plugs, sealing around grommets, and encapsulating splices.

**1.02** This section is reissued to:

- Add safety precautions to ensure safe handling of compound
- Include new kit sizes of D encapsulant.

Revision arrows are used to emphasize the more significant changes.

**1.03** The E encapsulant AT-8613 is a direct replacement for the C encapsulant.

**2. SAFETY PRECAUTIONS**

**2.01** Polyurethane compounds utilize a small amount of isocyanate to cause the two-part mixture to react, or cure. Unreacted isocyanates can

cause allergic reactions in some individuals due to skin or eye contact or as a result of inhaling vapors.

**2.02** B, D, and E encapsulant, as well as J plug compound, are formulated to minimize the possibility of allergic reactions from unreacted isocyanate; however, a relatively small number of people are unusually sensitive to this material. Care should be exercised when mixing these materials to prevent contact with skin or clothing. Even though the amount of isocyanate vapor released is extremely small, encapsulants and plugging compounds should not be used in confined areas that have no ventilation.

**2.03** As a precaution against skin contact, B disposable gloves, AT-8982, (Section 081-856-101), should be worn when mixing, pouring, or injecting polyurethane compounds. Subsequent contact with reacted polyurethane, such as reentering an encapsulated splice, does not require the use of gloves. Standard safety glasses are to be worn when mixing and pouring the encapsulants. Splash-proof goggles should be worn when mixing and injecting J plug compound due to the method of mixing and injecting the compound.

**2.04** Skin that has come in contact with unreacted polyurethane should be washed with soap and water. In case of eye contact, flush thoroughly with running water or KS 21527 eyewash, and then get medical attention.

**3. DESCRIPTION**

**B ENCAPSULANT**

**3.01** The B encapsulant is a nonreenterable encapsulant used to construct moisture barriers in pedestals as outlined in Section 631-600-305. B encapsulant is also used in other jobs requiring a nonexpanding, quick curing compound. It has a gel time of 10 to 15 minutes at 70°F.

**3.02** B encapsulant is a nonexpanding, two part polyurethane compound furnished in a 180

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gram size clear plastic bag with a separator to isolate the parts until mixing. This two-part bag is furnished in a sealed can or in a chipboard box with a sealed foil moistureproof bag.

**B SEALANT**

**3.03** B sealant is a clear premixed formulation of silicone rubber contained in a metal tube used to form a seal around stub cable grommets used in conjunction with 2-type closure and N-type terminals.

**E ENCAPSULANT**

**3.04** E encapsulant AT-8613 consists of two liquid components which when mixed together in the quantities provided by the packages form an elastomeric, **nonreenterable** splice encapsulant.

**3.05** It is intended for use where large volumes of encapsulating compounds are required to encapsulate splices in air core or waterproof cables. It has a gel time of 27 to 33 minutes at 75°F.

**3.06** This material is furnished in 700 and 2200 gram size kits. Parts I and II are furnished in friction top cans. Each part, together with a mixing paddle, is furnished with each kit.

**3.07** E encapsulant, manufactured by different suppliers, is compatible and may be intermixed.

**D ENCAPSULANT**

**3.08** The D encapsulant is intended for use as a **reenterable** encapsulant for encapsulating buried splices in waterproof cable.

**3.09** The material consists of two parts, both liquid, and packaged in 750, 1900, 5000, and 8000 gram kits.

**3.10** The two liquid components when mixed together will form a soft pliable urethane moisture barrier. Gel time for D encapsulant is listed below.

TEMPERATURE(°F)	GEL TIME (MIN.)
20	180
43	105

TEMPERATURE(°F)	GEL TIME (MIN.)
58	50
73	30
88	20
106	10

**3.11** Instruction sheets covering use of D encapsulant are packaged with encapsulant.

**J PLUG COMPOUND**

**3.12** The J plug compound is packaged as a universal air core cable plugging system which includes most of the materials necessary to construct a pressure plug using the sheath injection method. The components included in this package are as follows (Fig. 1):

QUANTITY	DESCRIPTION
24	6 oz cartridge of compound
12	Pressure flange and caps
100	Channeling pins or wedges
1	Instruction Sheet

**Note:** The special gun necessary to inject the compound must be ordered separately.

**3.13** The J plug compound can be used for constructing pressure plugs in both polyethylene and lead sheath air core PIC and pulp cables of any size and type except those cables containing coaxials, video pairs, disc-insulated spiral-four quads expanded PIC insulated (LOCAP), or waterproof cable.

**3.14** Step-by-step procedures for constructing a pressure plug using J plug compound are contained in the instruction sheets furnished with the product.

**3.15** Allow the J plug compound to cure as listed below before applying pressure to cables.

TEMPERATURE (°F)	CURE TIME (HOURS)
20-32	20
33-39	12
40-49	10
50-59	8
60-69	3
70-79	1
80 and above	1/2

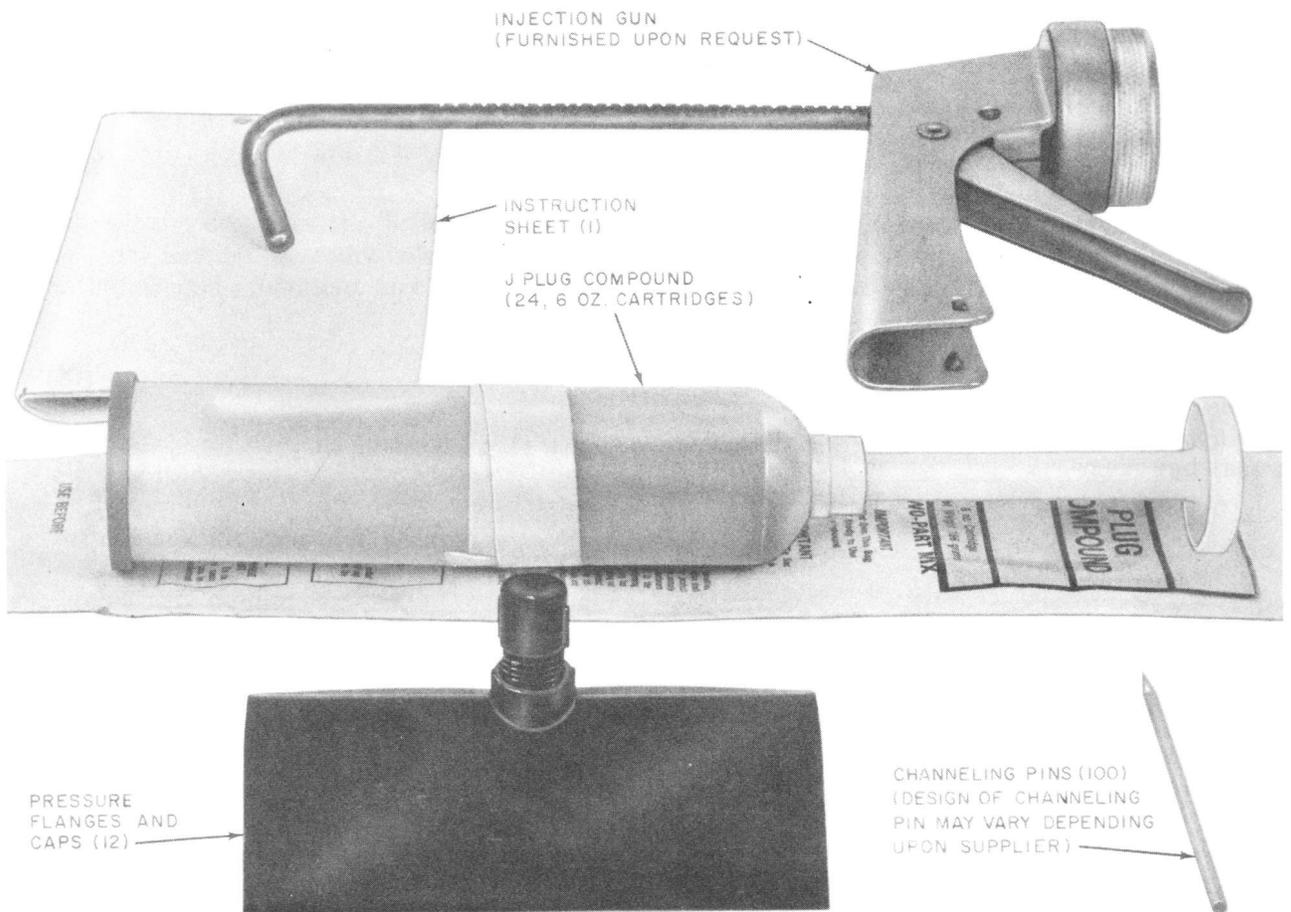


Fig. 1—J Plug Compound