STATION PROTECTORS
IDENTIFICATION AND SELECTION

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1. GENERAL

1.01 This section covers the description and use of station protectors.

1.02 This section replaces Section 638-215-100 which is canceled.

1.03 The station protectors covered in this section are the fuseless and fused type. The fuseless protector contains protector units having three mil air gaps.

2. DESCRIPTION OF STATION PROTECTORS

2.01 Table A lists the various types of protectors and their use.

2.02 The 123A1A Protector consists of a base of insulating material containing three binding posts and two 2B1A Protector Units (Fig. 1).

2.03 the 123A1A Protector provides protection against high voltage and abnormal current for one pair of wires at subscriber's premises.

TABLE A — PROTECTORS — FUSELESS AND FUSED

TYPE	PROTECTOR	USE	
		INDOOR	OUTDOOR
Fuseless	123A1A	x	[1]
	128A1A-2	x	[1]
	98AA	x[2]	
	106CA	x[2]	
	116C		x
	117B	x	
Fused	106C	x	
	1293C		x
	1293CA		x

Note 1: For outdoor installation, a 150A Cover or 305A2 Protector Mounting is required.

Note 2: Fuse type converted to fuseless operation.

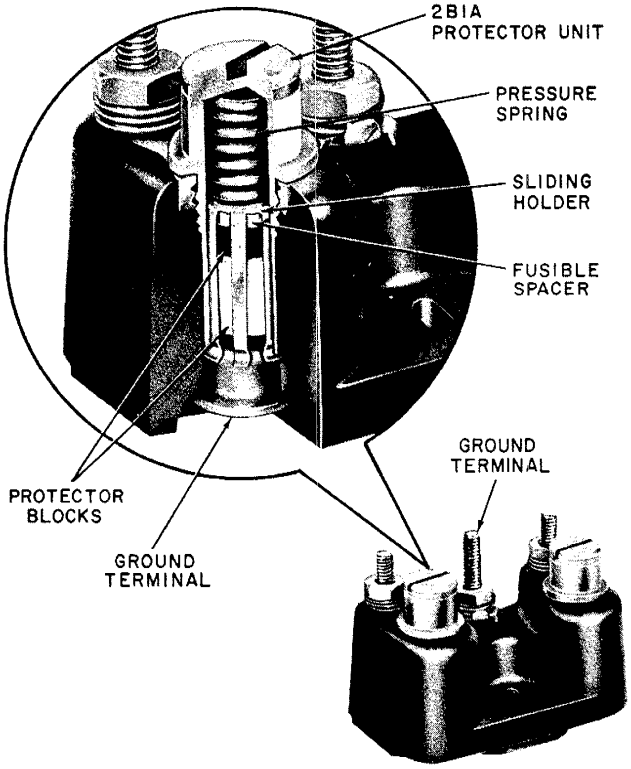

Fig. 1—123A1A Protector

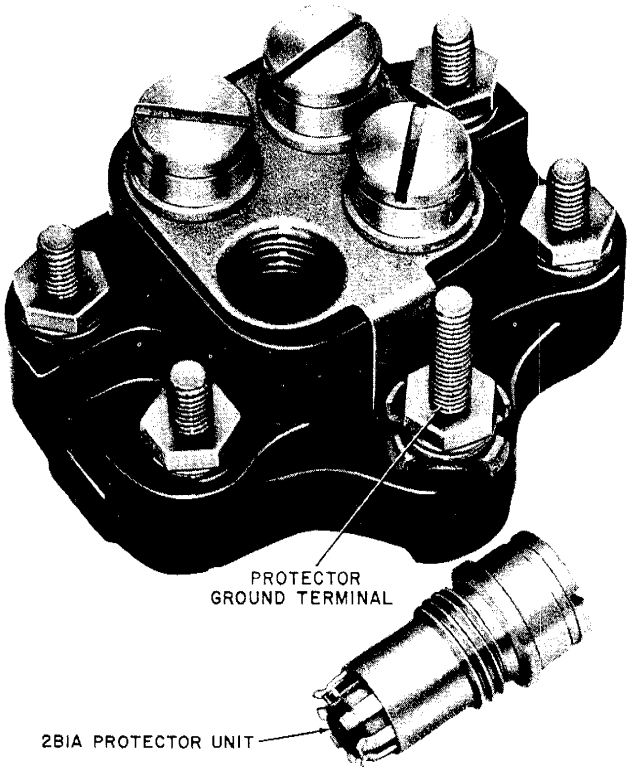

Fig. 2—128A1A-2 Protector

2.04 The 128A1A-2 Protector consists of a base of insulating material containing five binding posts and four 2B1A Protector Units (Fig. 2).

2.05 The 128A1A-2 Protector provides protection against voltage and abnormal current for two pairs of wires at subscriber's premises.

2.06 The 116C Protector is a molded terminal block containing twelve binding posts, twelve 2A1A Protector Units, and two binding posts for signaling ground connections. The terminal is housed in a metal container with a hinged metal cover. The metal housing is equipped with a clamp for connecting the station ground wire (Fig. 3).

2.07 The 116C Protector provides protection for six-pair multiple drop wire at the subscriber's premises. The 116C Protector is used only with six-pair multiple drop wire extended from metal sheath cables.

2.08 The 117B Protector is a molded terminal block containing twelve binding posts, twelve 2A1A Protector Units, and two binding posts for

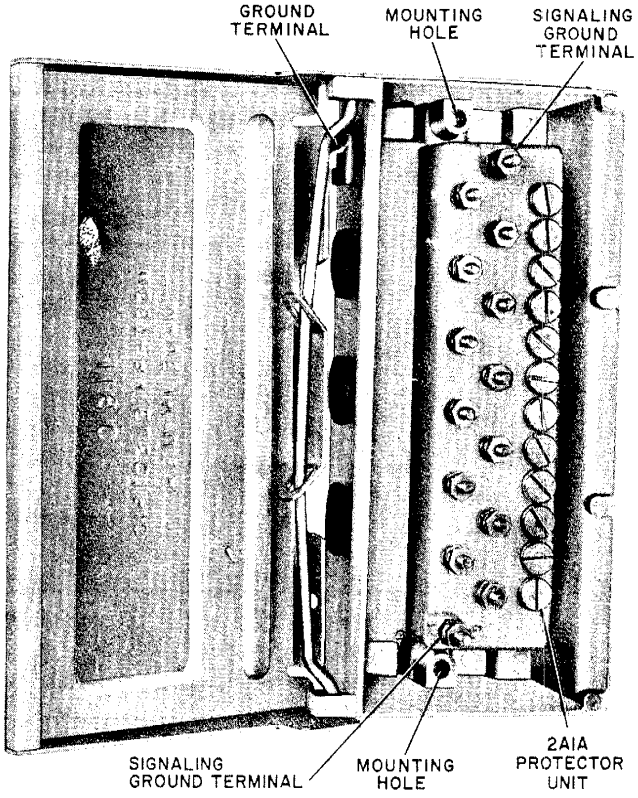

Fig. 3—116C Protector

signaling grounds (Fig. 4). The binding post with a pronged washer is for connecting No. 10 station ground wire to the protector. It is provided with wood screws for mounting on wood and self-tapping screws for mounting on metal surfaces.

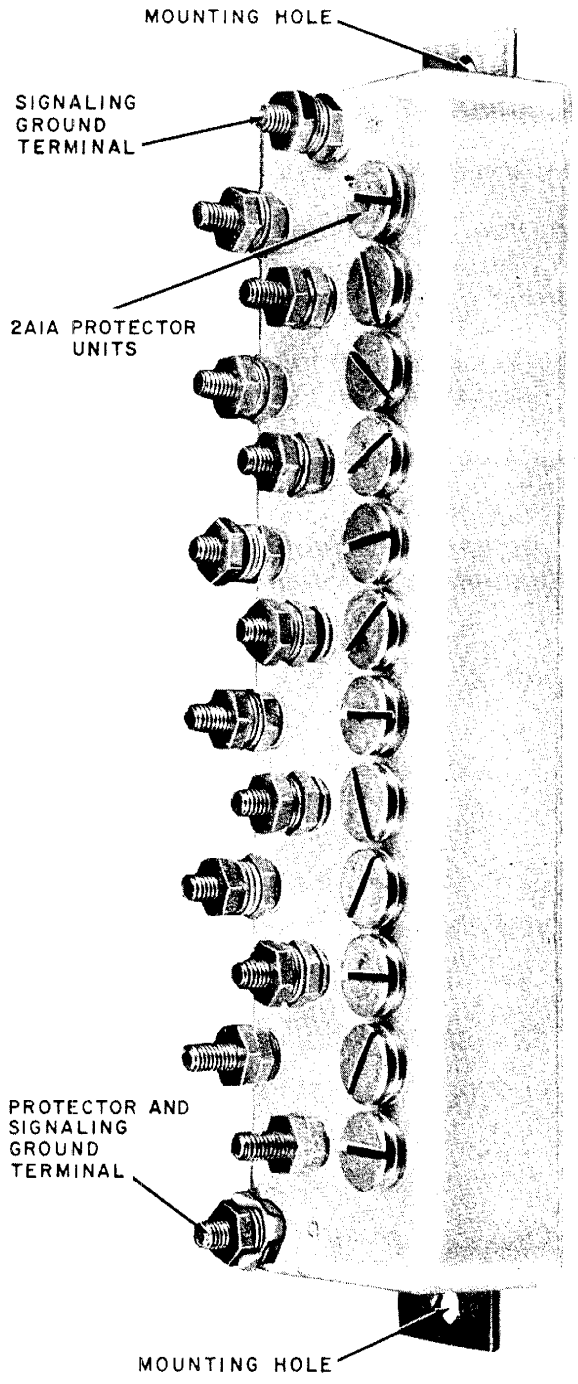

Fig. 4—117B Protector

2.09 The 117B Protector is for indoor mounting and provides protection for six-pair multiple drop wire at the subscriber's premises. Use only with six-pair multiple drop wire extended from metal sheath cables.

2.10 The 98AA Protector consists of a base of insulating material containing five binding posts, two 11CBB Fuses, two 213A Connectors inserted over the fuses with the pilot holes toward the station end of the protector, two 121A Adapters inserted in the bottom of the protector well under the carbon blocks, and two each No. 26 and 27 Protector Blocks (Fig. 5).

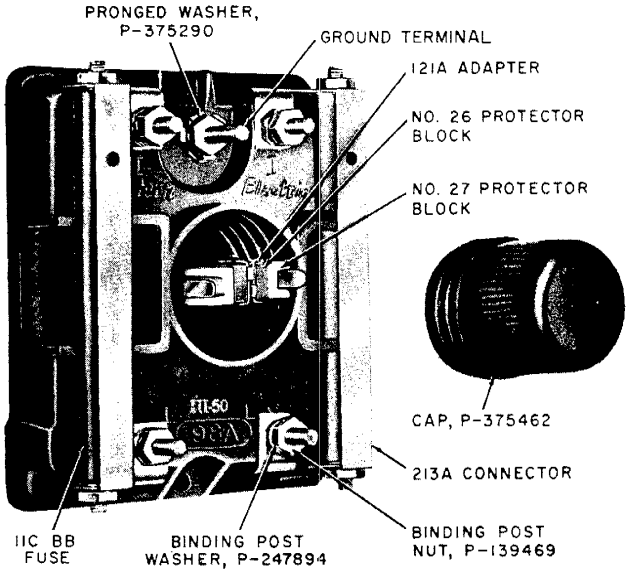

Fig. 5—98AA Protector

2.11 The 98AA Protector provides protection against abnormal voltage and current for one pair of wires served from grounded metal sheath cables. It is not to be used at stations served by open wire.

2.12 The 106C Protector consists of a base of insulating material containing five binding posts, two 11CBB Fuses, and two 2A1A Protector Units (Fig 6).

2.13 The 106C Protector provides protection against high voltage and abnormal current for one pair of wires at subscriber's premises.

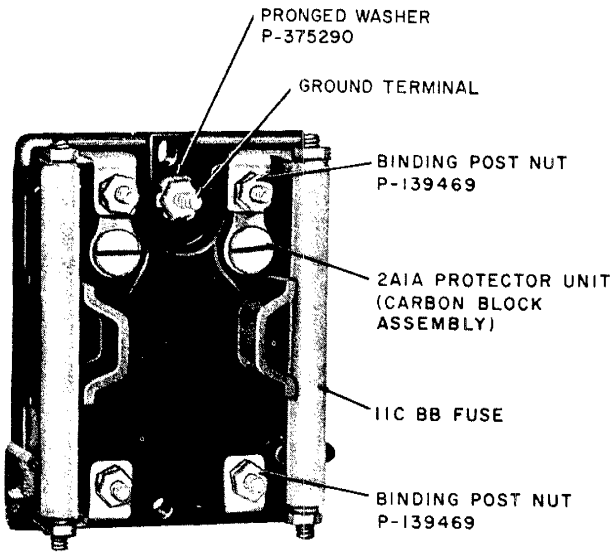

Fig. 6—106C Protector

2.14 The 106CA Protector is a 106C Protector converted for fuseless operation by strapping out the 11CBB Fuses with No. 213A Connectors (Fig. 7). The 213A Connector is placed with the pilot hole toward the station end of the protector.

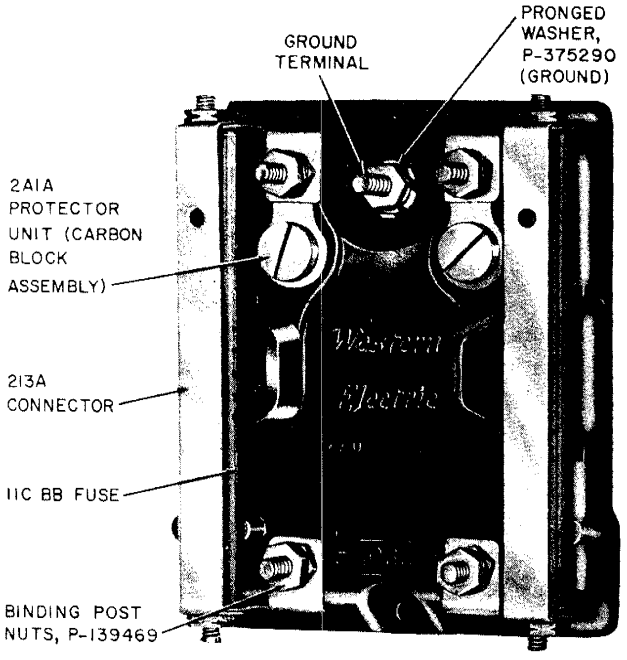

Fig. 7—106CA Protector

2.15 The 106CA Protector provides protection against high voltage and abnormal current for one pair of wires served from grounded metal sheath cables. It is not to be used at stations served by open wire.

2.16 The 1293C Protector consists of a 106C Protector mounted in a 93C Protector Mounting.

2.17 The 1293C Protector is used where fused protection for one pair of wires is required and it is necessary to install the protector outdoors.

2.18 The 1293CA Protector consists of a 106CA Protector mounted in a 93C Protector Mounting.

2.19 The 1293CA Protector is used for protection against high voltage and abnormal current for one pair of wires served from grounded sheath cables when it is necessary to install the protector outdoors.

3. DESCRIPTION OF PROTECTOR MOUNTINGS AND ASSOCIATED EQUIPMENT

3.01 The 72A Bracket is a formed metal bracket (Fig. 8).

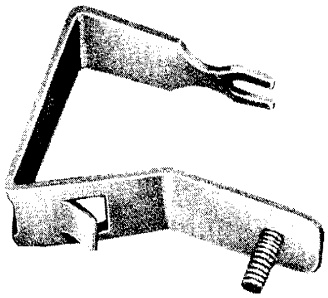

Fig. 8—72A Bracket

3.02 The 72A Bracket is used to mount a 123A1A Protector on an acceptable metallic cold water pipe by means of a station ground clamp.

3.03 The 90A Bracket is a formed metal bracket (Fig. 9).

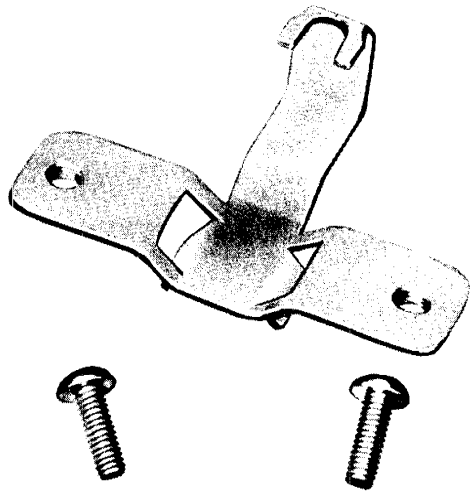

Fig. 9—90A Bracket

3.04 The 90A Bracket is used to mount a 128A1A-2 Protector on an acceptable metallic cold water pipe by means of a station ground clamp.

3.05 The 150A Cover consists of gray semiflexible insulating material (Fig. 10).

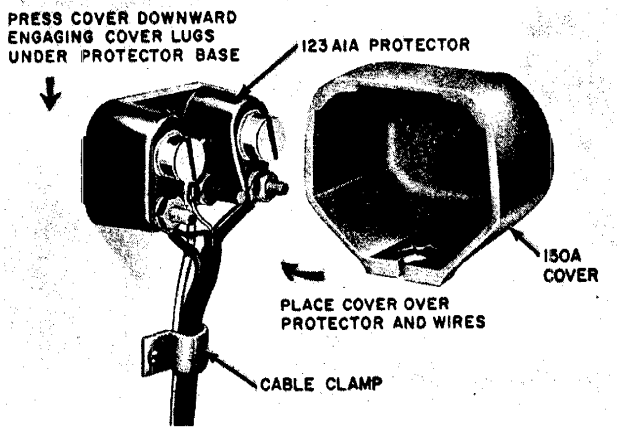

Fig. 10—150A Cover

3.06 The 150A Cover snaps over a 123A1A or 128A1A-2 Protector. It is intended as a protective covering for outdoor installation, or indoor installation when a protective covering is required.

3.07 The 305A2 Protector Mounting consists of a metal base and a removable metal cover. It is provided with two screws for fastening the protector to the metal base (Fig. 11).

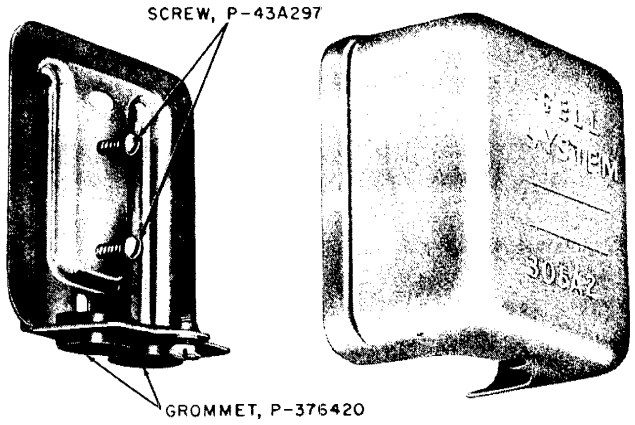

Fig. 11—305A2 Protector Mounting

3.08 The 305A2 Protector Mounting is intended to house the 123A1A or 128A1A-2 Protector for outdoor installation.

3.09 The 93C Protector Mounting consists of a metal base and removable metal cover. It is provided with two screws for fastening the protector to the metal base (Fig. 12).

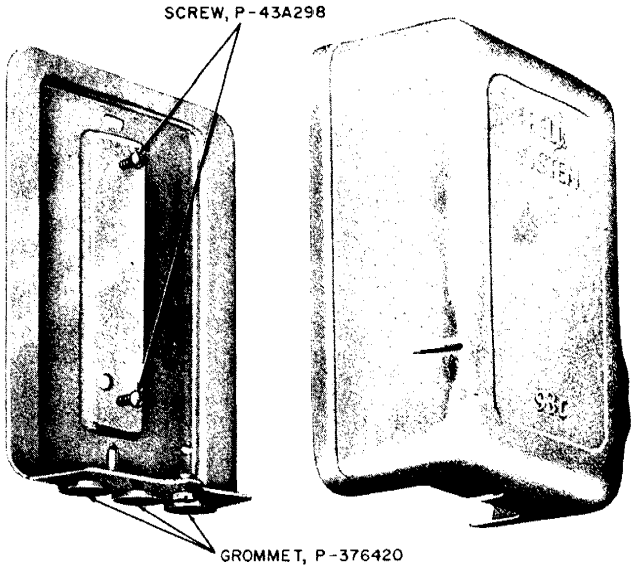

Fig. 12—93C Protector Mounting

3.10 The 93C Protector Mounting is intended to house the 98AA, 106C, and 106CA Protector for outdoor installation.

3.11 The 46A Shield consists of a shield of insulating material containing two captive screws and a metal mounting strap (Fig. 13).

3.12 The 46A Shield is used with the 106C Protector when mounted in commercial boxes. When the fuses blow, the shield prevents hot gases from short-circuiting or grounding the terminals of the protector.

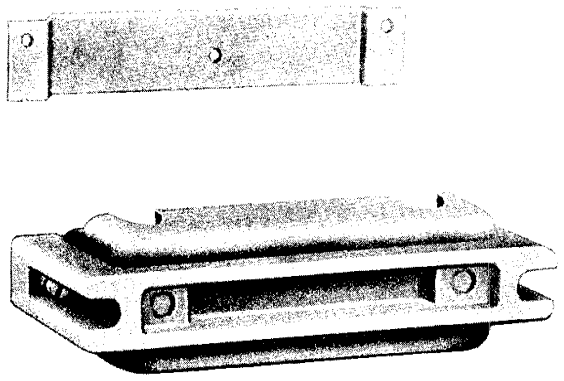

Fig. 13—46A Shield

4. MANUFACTURE DISCONTINUED

4.01 The following protectors are no longer manufactured: 98A, 109A, 111A, 116A, 116B, 117A, 1093A, and 1093C.