

300-TYPE CONNECTORS AND ASSOCIATED PROTECTOR UNITS DESCRIPTION

1. GENERAL

1.01 This section describes the 300-type connector and the associated protector units (replaced 121-type protector).

1.02 This section contains information previously covered in Sections 201-203-301 and 201-206-301 which are cancelled.

1.03 C-, E-, and similar type protector mountings and the 444-type jack (301-type connector) are covered in Section 201-206-101. 302- and 303-type connectors and associated protector units are covered in Section 201-208-101.

1.04 The 300-type connector supersedes a similar arrangement, coded the 121-type protector. All references in this section to the 300-type connector shall be considered to apply to the 121-type protector.

Note 1: When the 121-type protector units are removed, the cable conductors may be automatically grounded. Therefore, before removing these protector units from circuits serving telegraph loops or other types of special circuits which have potential on the cable side, the associated equipment should be taken out of service. It may be necessary to remove connections to the cable pair to prevent equipment damage.

Note 2: The term **connector** is applied to distinguish the newer cable terminating devices (300-, 301-, 302-, 303-type connectors) from the term **protector** which has been applied to cable terminating mounting assemblies such as the C50, E50 etc.

1.05 The 300-type connector is used to terminate exposed outside cable conductors on main distributing frames.

1.06 On B-type main distributing frames the connectors are mounted on the vertical side of the frame. On separate protector frames the connectors are mounted on the verticals on both sides of the frame.

1.07 The classes of conductors entering a central office and the protection required are covered in Section 201-202-101 which describes the types of protection.

2. DESCRIPTION

2.01 The basic component of the 300-type connector is the 50-pair connector unit with an attached fanning strip as shown in Fig. 1 and 2.

2.02 300-type connectors are also supplied in 100-pair size.

MARKING PAIR TERMINATIONS

2.03 Normally only the first and last pair on each side of the 100-pair connector will require marking in the field with E-5293-type pair designation cards since the intermediate pairs are factory stenciled at 5-pair intervals.

2.04 Adhesive number plates are installed on the 300-type connector after removal from the paper backing by pressing the plate until it adheres to the rib. Touching the adhesive should be avoided as this affects its sticking quality.

2.05 The marking of a prestenciled 300-type connector with adhesive number plates is illustrated in Fig. 3.

2.06 If pair numbers are assigned that differ from those factory stenciled on the 300-type connector, adhesive number plates may be placed over the prestenciled numbers.

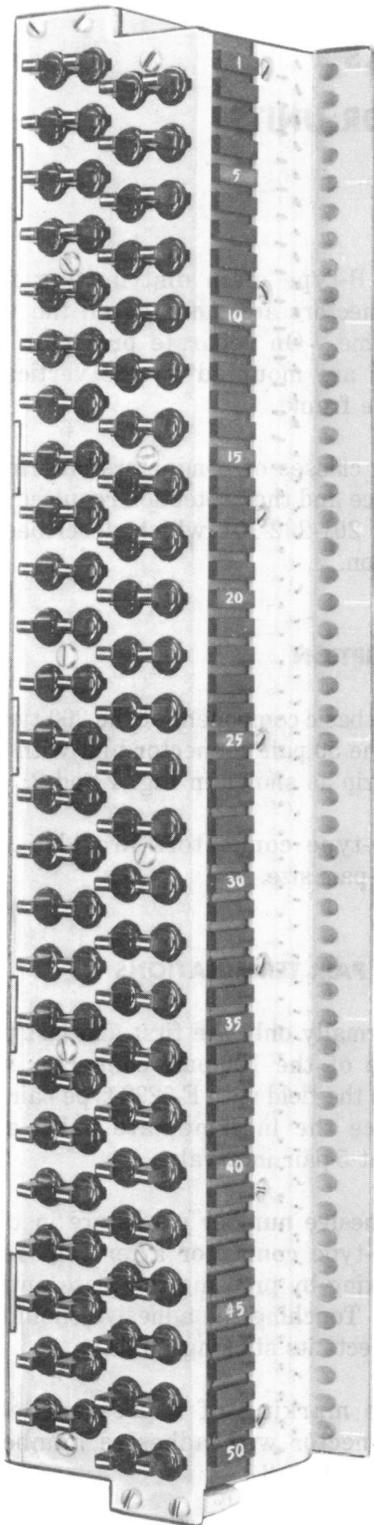
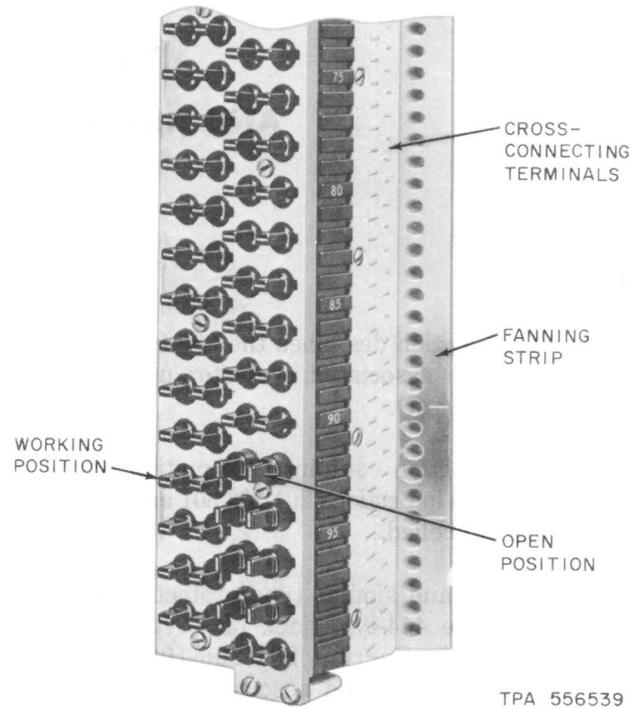


Fig. 1—300-Type Connector Block



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Fig. 2—Open and Working Positions of Protector Units

2.07 Blank plates may be used to cover a prestenciled number if renumbered pairs do not coincide with the prestenciled numbers.

2.08 The superseded 300-type connector (Fig. 4) with aluminum fingers requires the use of adhesive number plates for marking the first and last pair and all intermediate pairs ending in 0 or 5.

MARKING CABLE NUMBERS

2.09 Cable numbers are marked on 300-type connectors with adhesive backed number plates E-5293-G cable designation card (red numerals on aluminum background). The cable number is marked by selecting the required numbers and assembling them in the proper sequence on the raised rib of the connector.

2.10 Cable numbers shall be placed on the raised rib below the first numbered pair of each cable and also on the rib below the numbered pair at the top of each vertical. If colored circuit designation plates are required on the rib specified

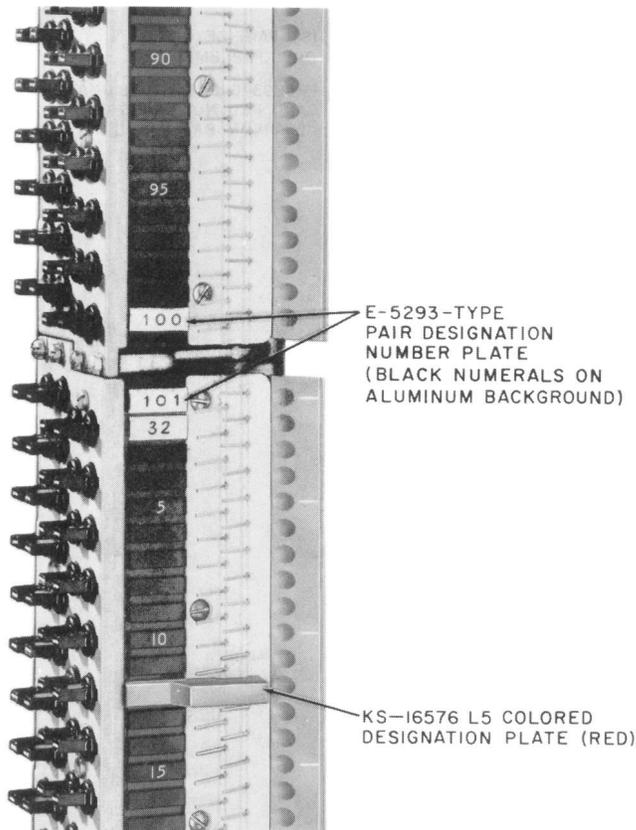


Fig. 3—Marking Prestenciled 300-Type Connector

for the cable number, the circuit number is placed on the next available rib below that point. The marking of a cable number is shown in Fig. 5.

PROTECTOR UNITS

2.11 Connectors are equipped with protector units as shown in Fig. 6. The type of protection provided by various units is shown in Table A.

2.12 When the white or blue line on the cap of the protector unit is in a vertical position, protection is applied to the outside plant cable pair but the circuit is open to the central office side of the connector (Fig. 2).

2.13 A connection is made between the outside plant cable pair and the central office side of the connector by depressing the protector unit and turning it clockwise until it locks in position with the white or blue line on the cap in a horizontal position (Fig. 2).

2.14 When the protector unit is removed, the central office equipment is disconnected from the outside plant cable pair and no protection is provided.

2.15 In either the working or open position, the ground feeder of the protector unit rests against the inside surface of the grounded aluminum faceplate. This ground is fed through the ground feeder to the carbon insert of the 33B protector block.

2.16 When the heat coil operates, the tip of the coil passes through the hole in the 32B carbon block and makes contact with the grounded insert of the 33B protector block (Fig. 7).

2.17 Colored caps used for circuit identification after installation are listed in Table B.

2.18 Sensitive circuits terminated on 300-type connectors are designated and protected by using blank adhesive number plates stamped with the required color designation.

2.19 The protector units are inserted into the connector with a KS-16567 tool (protector unit wrench) as shown in Fig. 8.

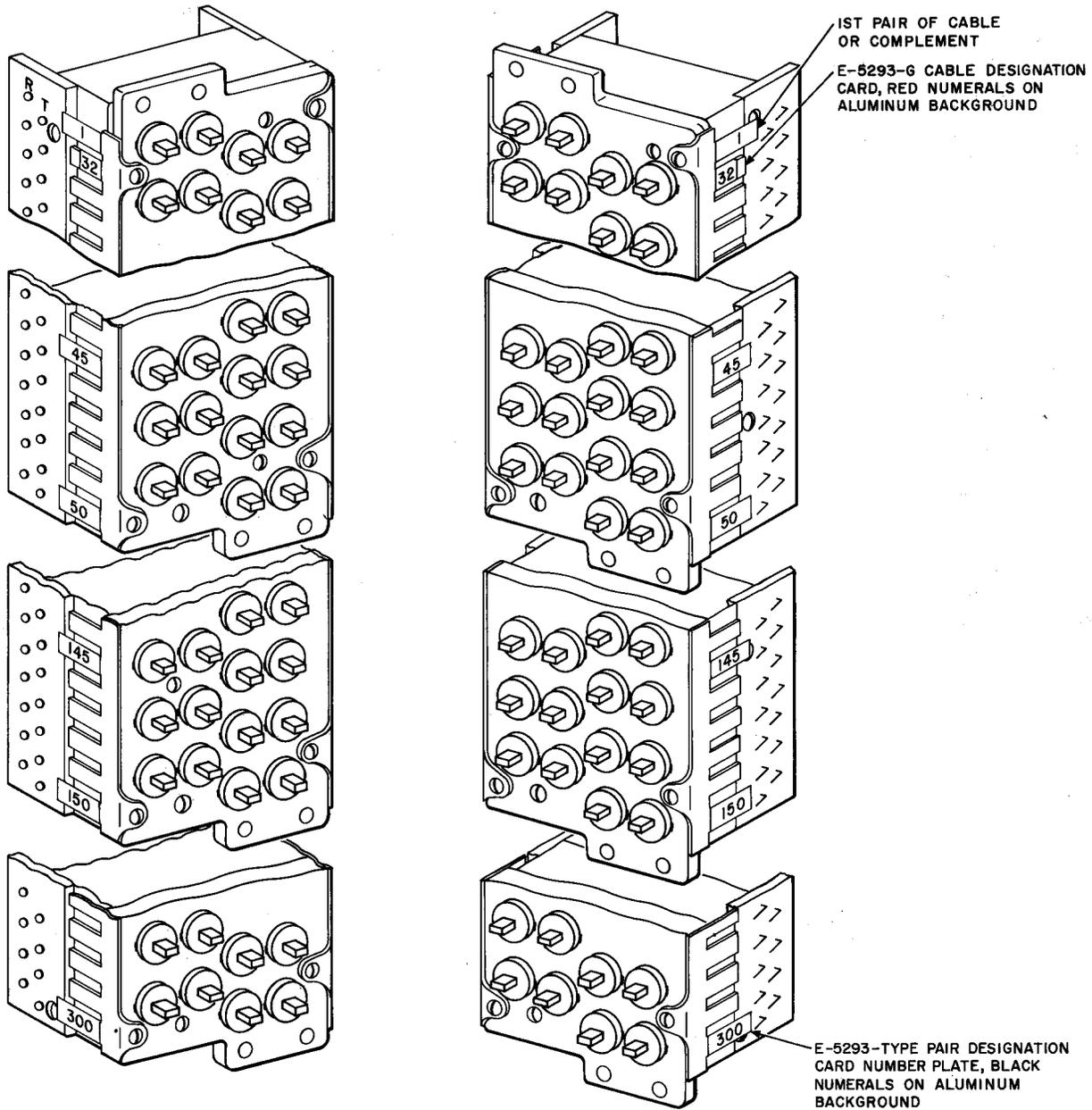


Fig. 4—Number Plates on Aluminum Fingers of 300-Type Connector

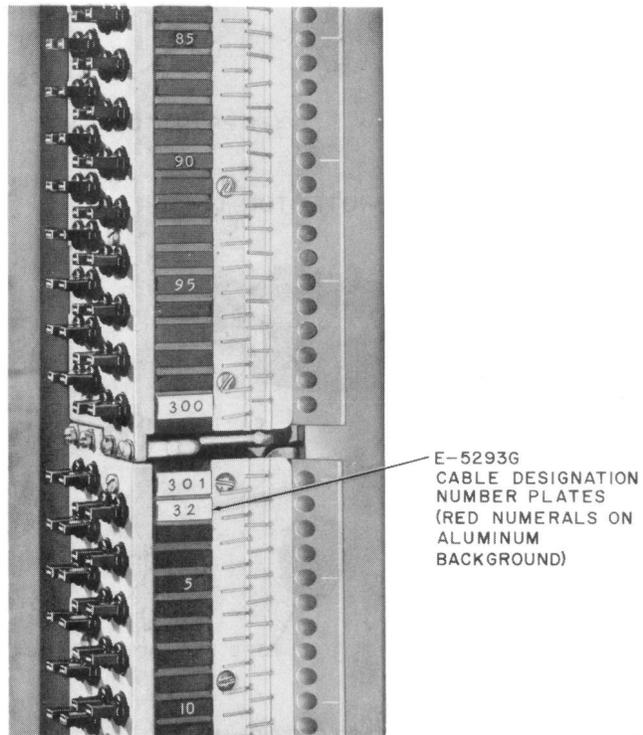


Fig. 5—Cable Designation Number Plate on 300-Type Connector

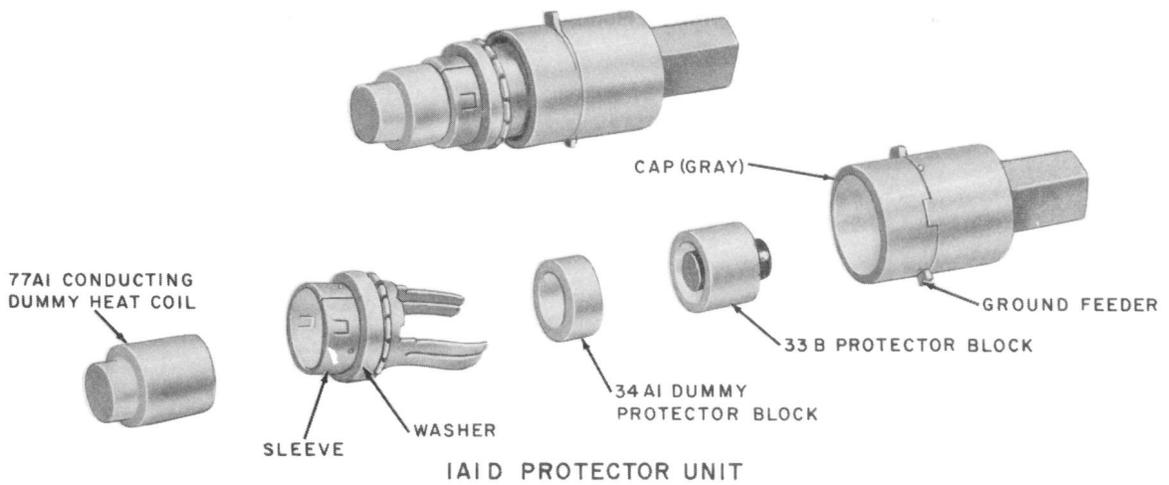
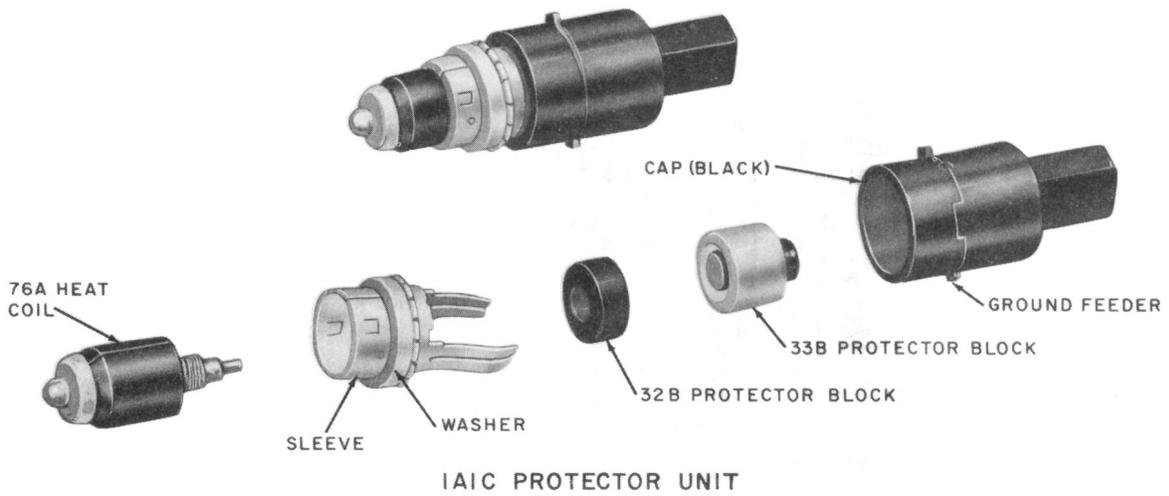
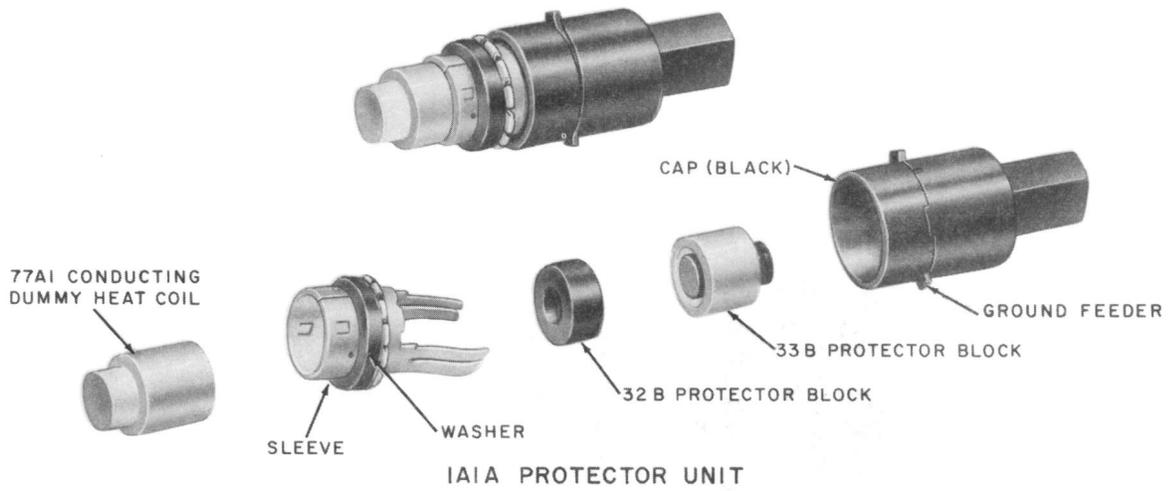


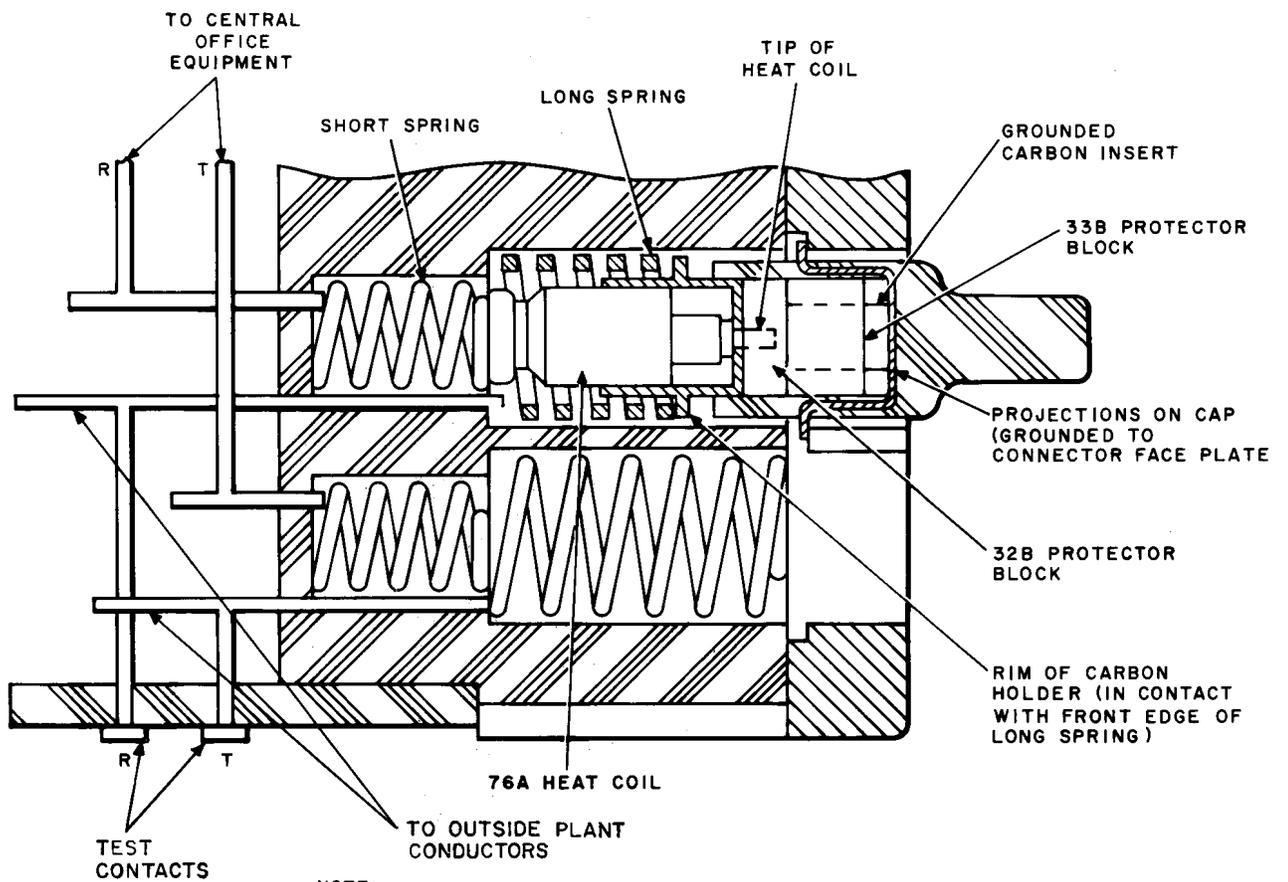
Fig. 6—IA1A, IA1C, IA1D Protector Unit Assemblies

TABLE A

PROTECTOR UNIT ASSEMBLIES

PROTECTOR UNIT	PROTECTOR BLOCKS	HEAT COIL	TYPE OF PROTECTION	CAP
1A1A	32B and 33B	*77A1	Voltage	Black (Blue Line)
1A1C	32B and 33B	76A	Voltage and current	Black (White Line)
1A1D	*34A1 and 33B	*77A1	None	Gray

*Dummy unit



NOTE: FOR CLARITY, ONLY ONE SIDE OF THE LINE IS SHOWN EQUIPPED WITH PROTECTION.

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Fig. 7—Operation of Protector Unit

TABLE B
CIRCUIT DESIGNATIONS

COLOR OF CAP	TYPE OF CIRCUIT
Red	Special circuit
Yellow	PBX battery
Green	Denied service

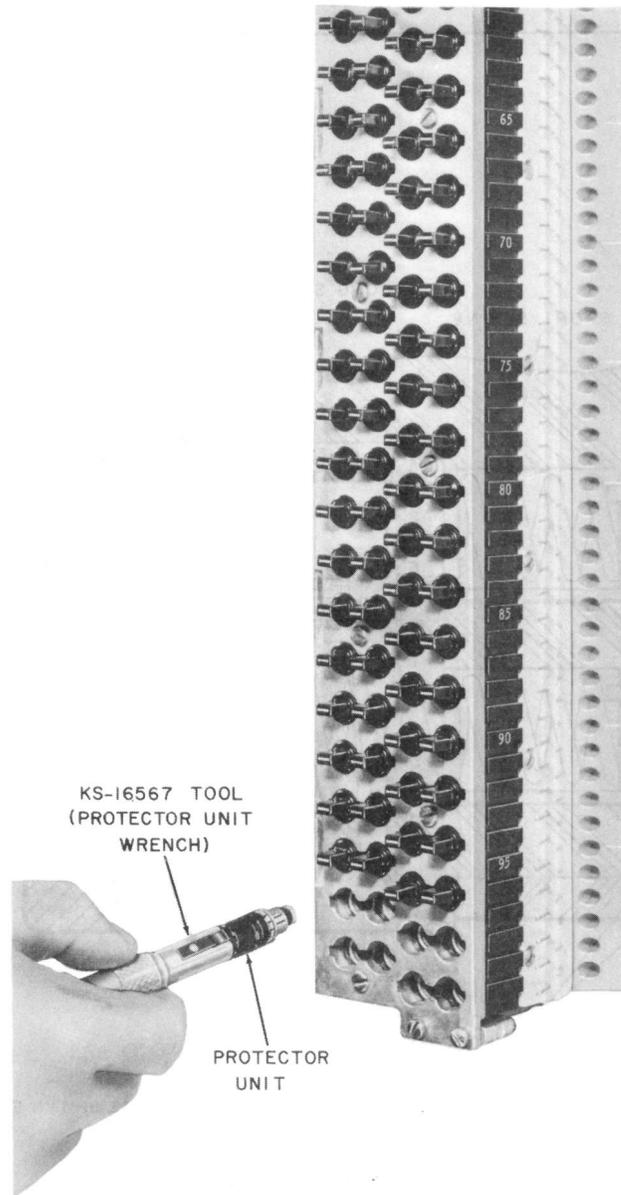


Fig. 8—Installing Protector Units Into Connector Block