307-TYPE CONNECTORS

DESCRIPTION

CONTENTS PAGE

1. GENERAL

1.01 This section covers the description of the 307-type connector, and the connecting block, stub cable, and the protector unit used with the 307-type connector. The connector assembly consists of two main components: ***the protector panel and the connecting block.*** The protector panel has a capacity of 100 pairs and is interconnected to either one 100-pair connecting block or two 50-pair connecting blocks. An 11-type (preconnectorized) stub cable is provided to interconnect the 307-type connector to the feeder cables. The 307-type connectors are used only on the Common Systems Main Interconnecting (COSMIC II*) Distributing Frame Hardware System (ED-6C115-10).

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1.02 When this section is reissued, the reasons for reissuing will be listed in this paragraph.

1.03 The COSMIC II System has been designed to accomodate the 307-type connector. The system features a modular frame work with provision for mounting protection, thus eliminating the need for a separate protector frame.

1.04 The 4C-type protector units are used with 307-type connectors to provide electrical protection and test access.

1.05 The protector panel and the connecting block are factory interconnected with a 26-gauge, 100 pair wiring harness.

1.06 Replacement parts and repair procedures for the 307-type connector are included in Section 201-208-810.

2. 307-TYPE CONNECTOR

2.01 Two basic 307-TYPE connector configurations are the 307A1-100 and the 307 B1-100. The 307A1-100 (Fig. 1 and 2) has a protector panel interconnected to one 100-pair connecting block. The connecting block is stenciled 01-100 and represents any 100-pair complement in an outside plant cable. The 307A1-100 is mounted on shelves 2 through 10 of the COSMIC II framework. The 307B1-100 connector (Fig. 3 and 4) has a protector

panel interconnected to two 50-pair, connecting blocks. One block is stenciled 01-50 and the other is stenciled 51-100. The combination of these two 50-pair connecting blocks represents any 100-pair complement in an outside plant cable. The 307B1-100 is mounted on shelves 1 and 11 of the COSMIC II framework.

2.02 The 307A1-100 and 307B1-100 both have additional backplane wiring which interconnects the protector panel to four 710-fire-retardent connectors (Fig. 5). The four 710-connectors are rigidly held in a plastic bracket which is attached to the rear of the protector panel. These connectors provide for rapid connectorized 11C or 11D cable stubs equipped with mating 710-bridge modules (Fig. 6).

3. STUB CABLE

3.01 Stub cables, 11C or 11D, are used with 307-type connectors; the codes, identification, and lengths are given in Table A. These stubs are made up with 22- or 24-gauge tinned copper and insulated with color-coded PVC. One end of the stub is terminated with four 710-bridge modules (Fig. 6) in 25 pair groups. Each connector is protected by an individual plastic cover. These covers should not be removed until the cable has been installed in the framework and connection of the stub cable to the 307 connector has been started.

4. PROTECTOR UNIT

4.01 The 4C protector units (Fig. 7) are used on the 307 connector. They provide either voltage and current protection or no protection. Seven protector codes are available for specific service applications. Each code is identified by color. The protectors and their application are identified in Table B.

4.02 The 4C protector uses the same basic internal components as the 4B-type protector units (carbons, heat coils). All the housings for 4C protector family are the same physical length and height to enable mounting a 100 pair test shoe over the protector field. For short term test or service denial, the 4C protector may be partially withdrawn to the detent position in the longer (outside plant side) contact pins. This will disconnect the central office equipment, but will continue to provide voltage protection to the Outside Plant (OSP) cable. For longer test or service denial, the 4C2C protectors(green) also provide voltage protection to the OSP conductors.

TABLE A

CONNECTORIZED STUB CABLES

22-GAUGE		24-GAUGE	
STUB CODE	LENGTH (FEET)	STUB CODE	LENGTH (FEET)
11CA-20	20	11DA-20	20
11CA-40	40	11DA-40	40
11CA-60	60	11DA-60	60
11CA-80	80	11DA-80	80
11CA-100	100	11DA-100	100
11CA-150	150	11DA-150	150
11CA-200	200	11DA-200	200

TABLE B

4C PROTECTOR APPLICATIONS

PROTECTOR CODE	TYPE OF SERVICE	IDENTIFICATION (HOUSING COLOR)
4C1C	Standard	Black
4C2C	Denied	Green
4C3C	Special (no test points)	Red
4C4C	PBX Battery	Yellow
4C9C	Reverse Tip/Ring	White
4C11C	Mini-Bridge Lifter	Orange
4C12C	No protection (Dummy)	Gray

5. REFERENCES

5.01 The following Bell System Practices contain related information.

SECTION	TITLE
201-208-810	307-Type Connectors Repair Procedures
201-222-110	Cosmic II Frame Description

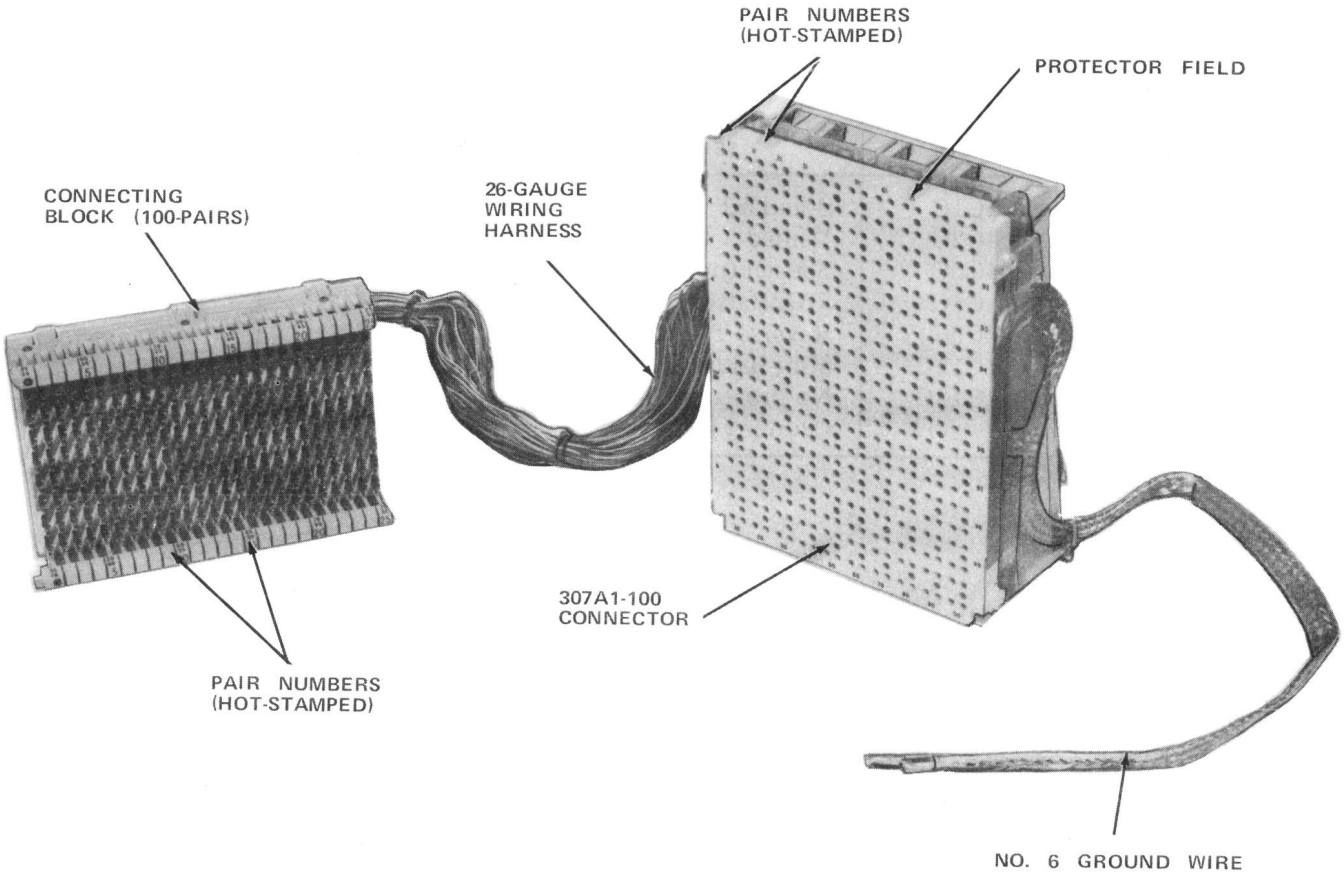


Fig. 1—Front View of 307A1-100 Connector

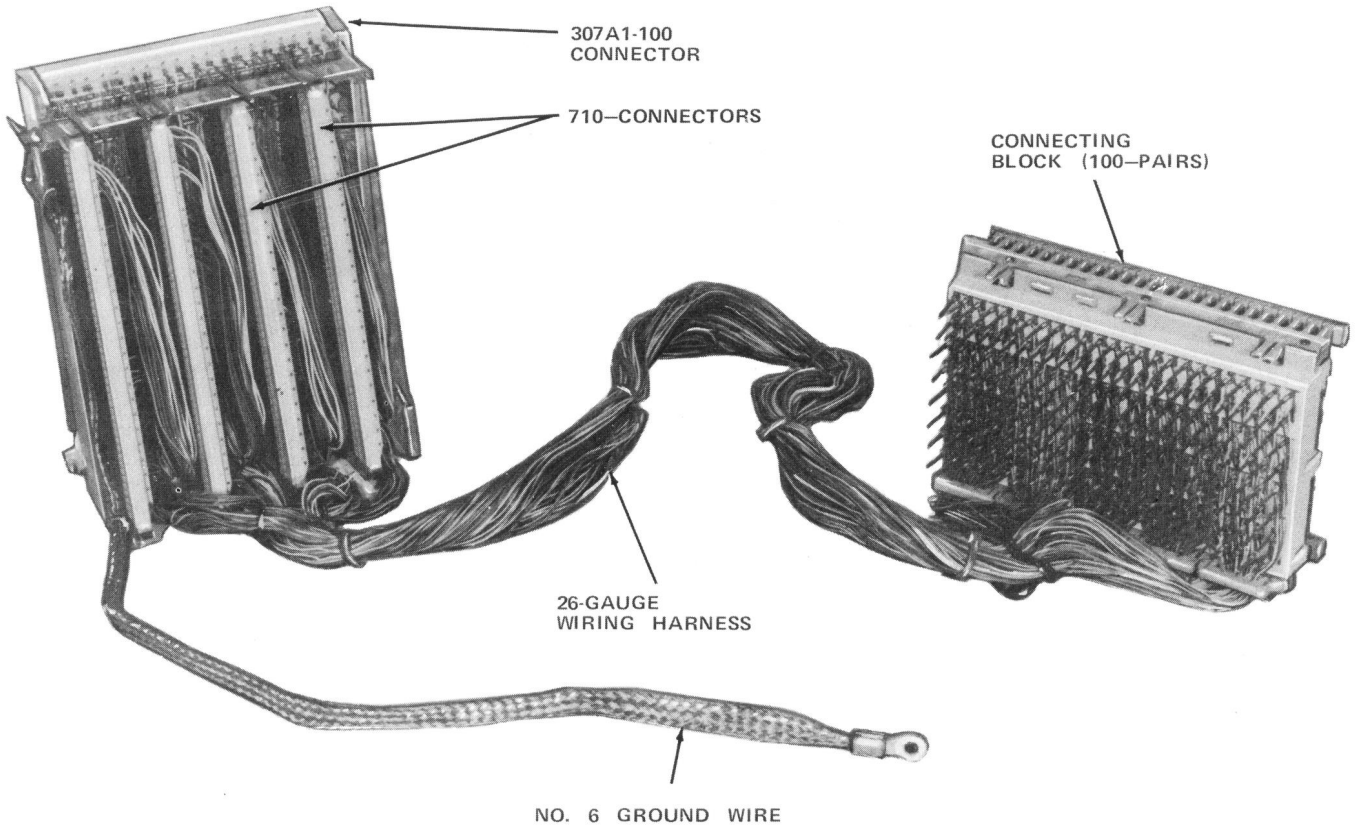
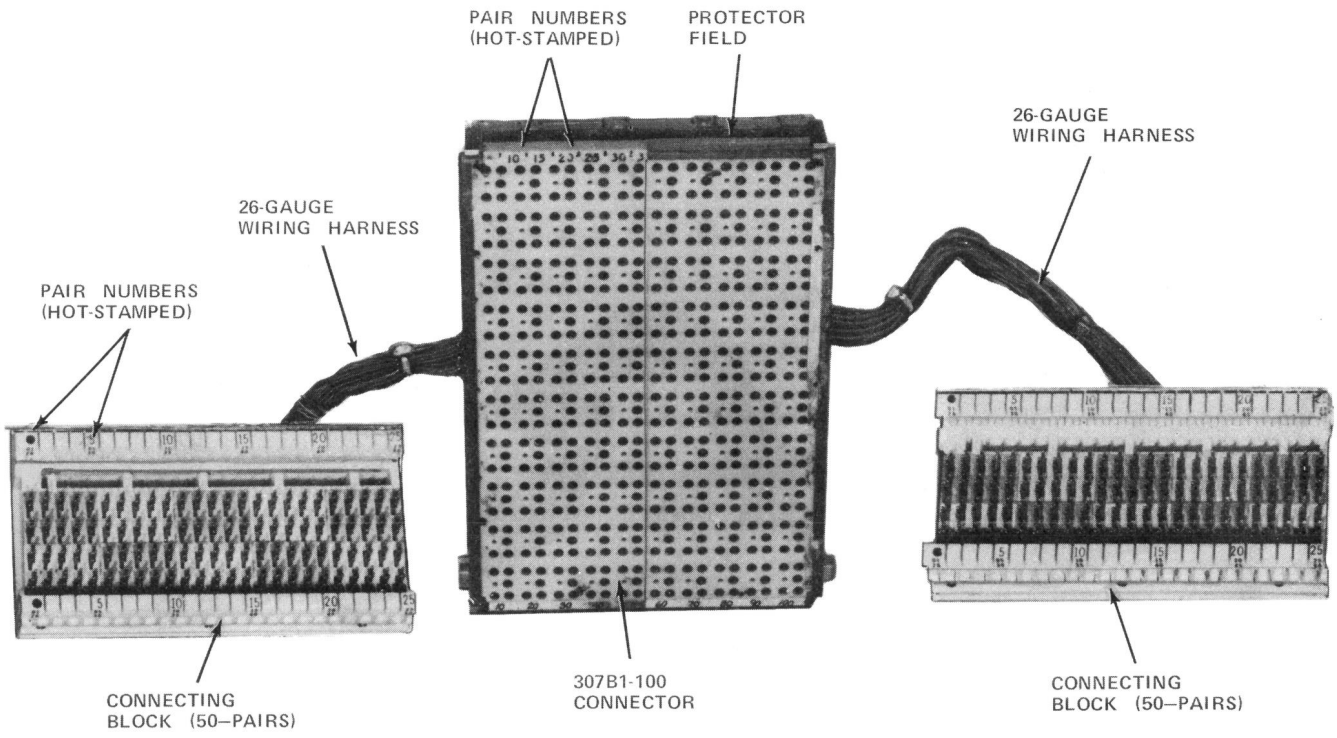


Fig. 2—Back View of 307A1-100 Connector



NOTE:
GROUND WIRE IS NOT SHOWN.

Fig. 3—Front View of 307 B1-100 Connector

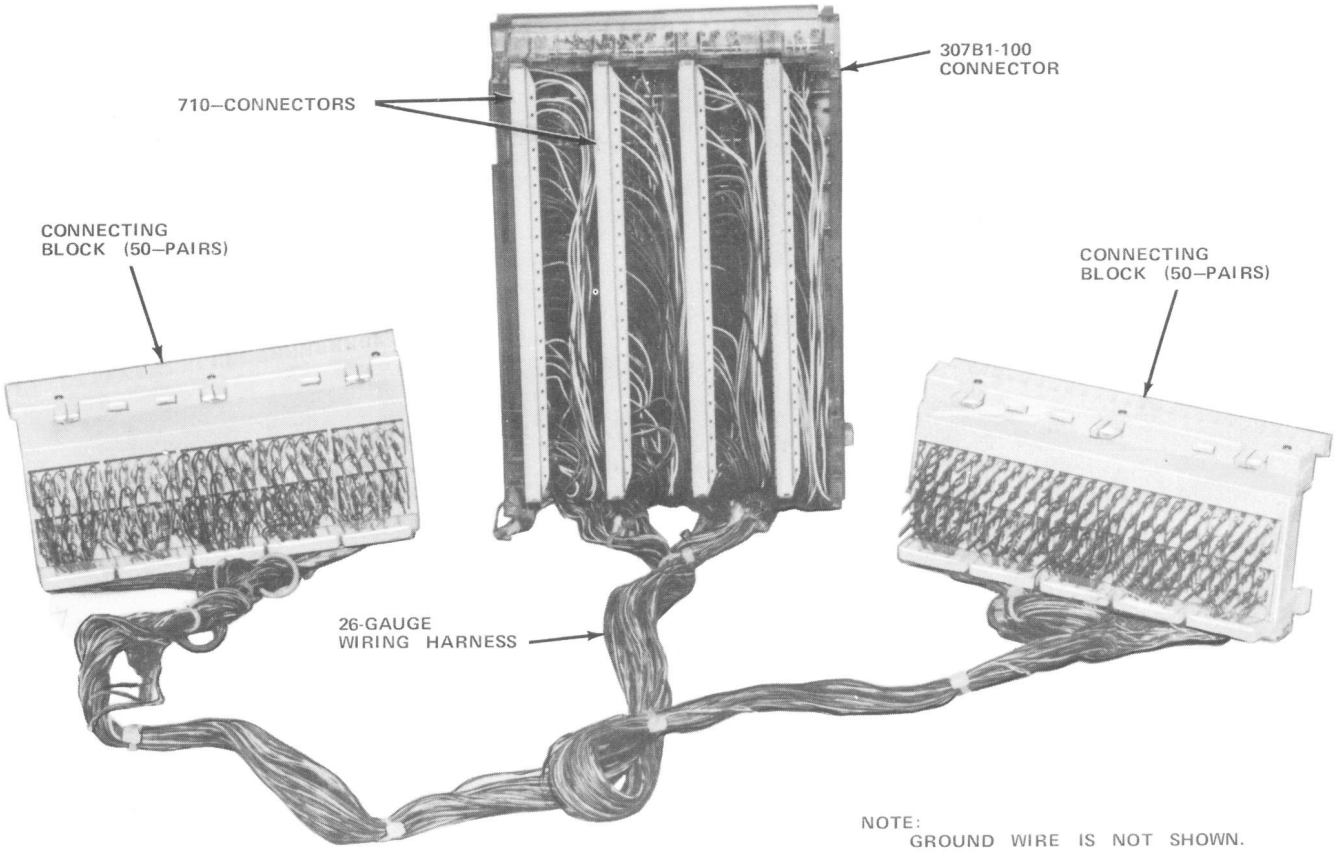


Fig. 4—Back View of B1-100 Connector

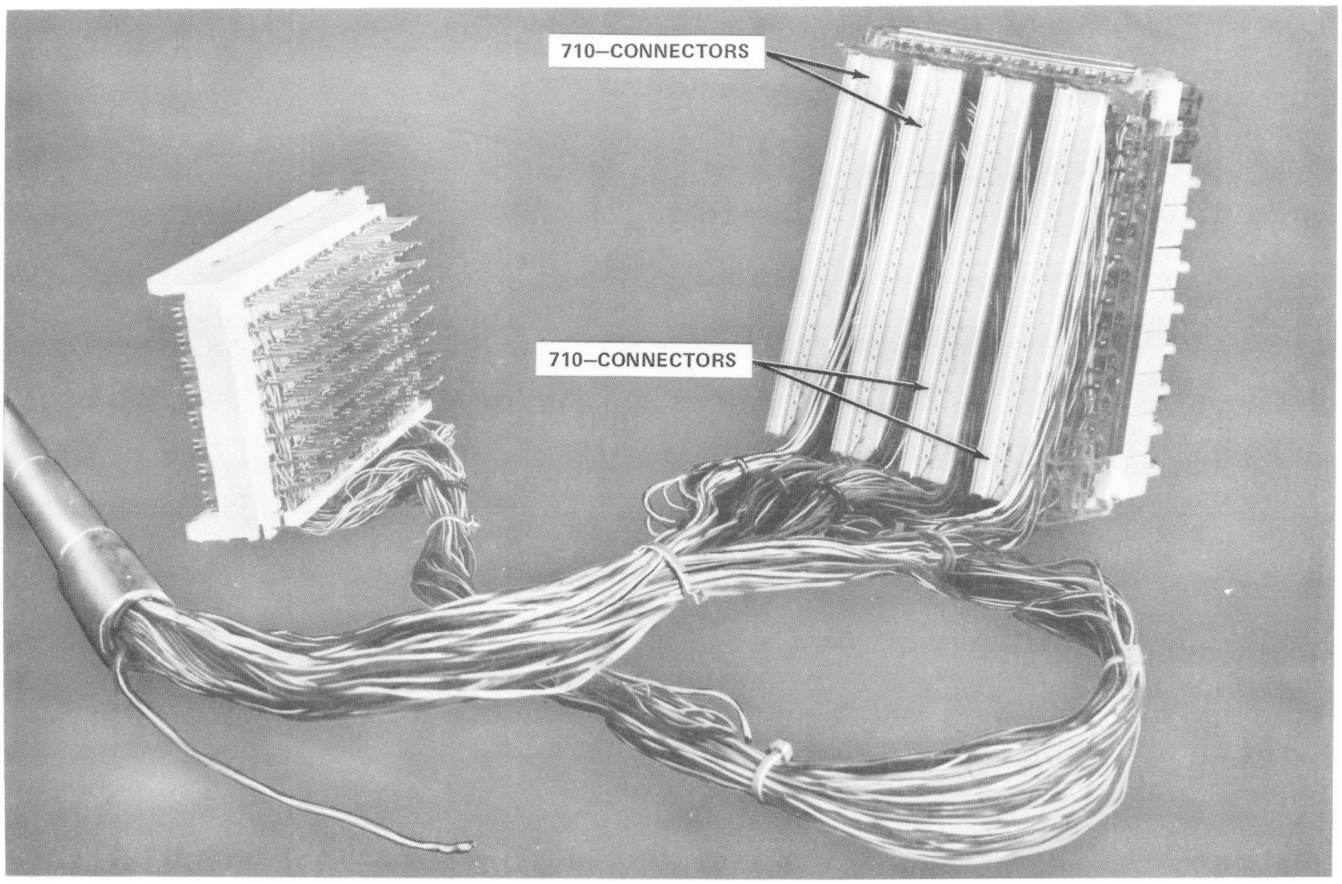


Fig. 5—710-SD25 Connector

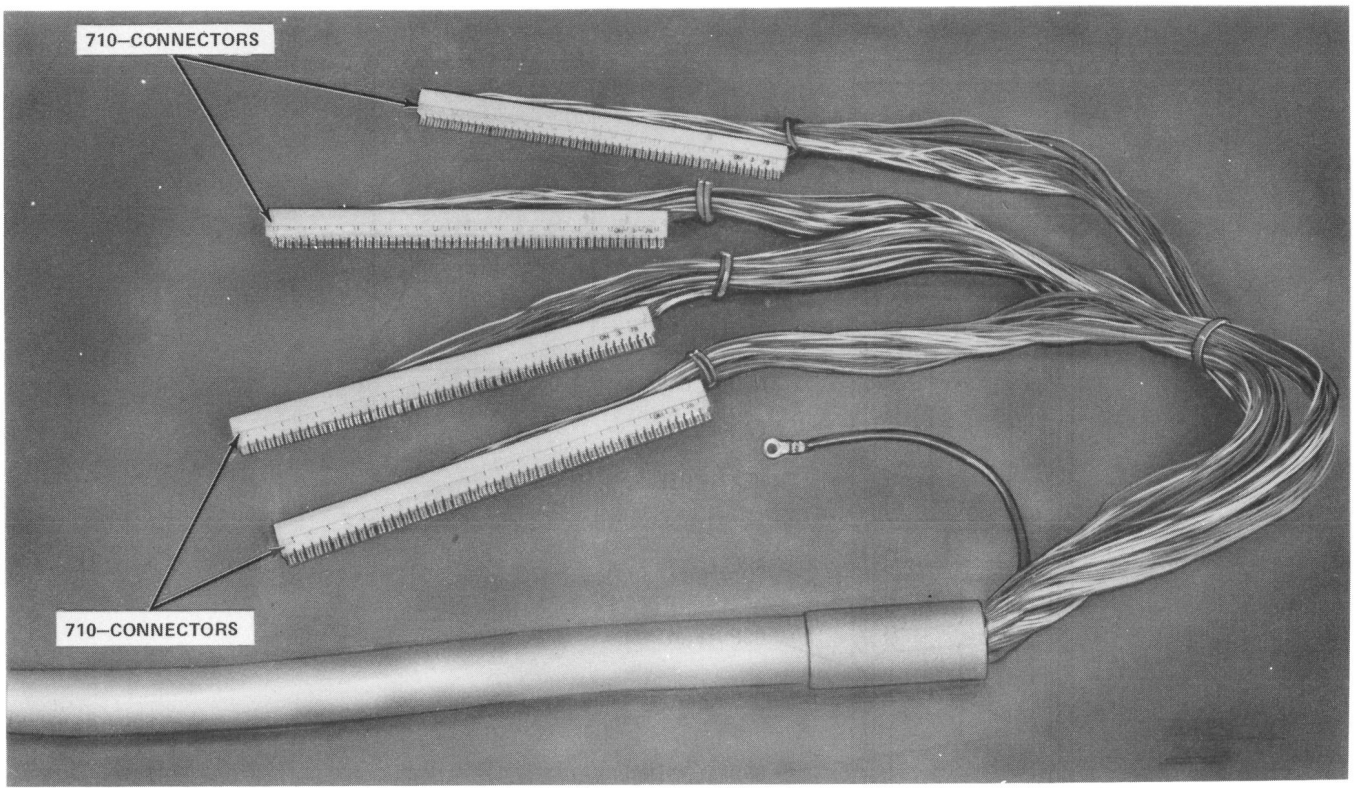


Fig. 6—11CA and 11DA Stub Cables

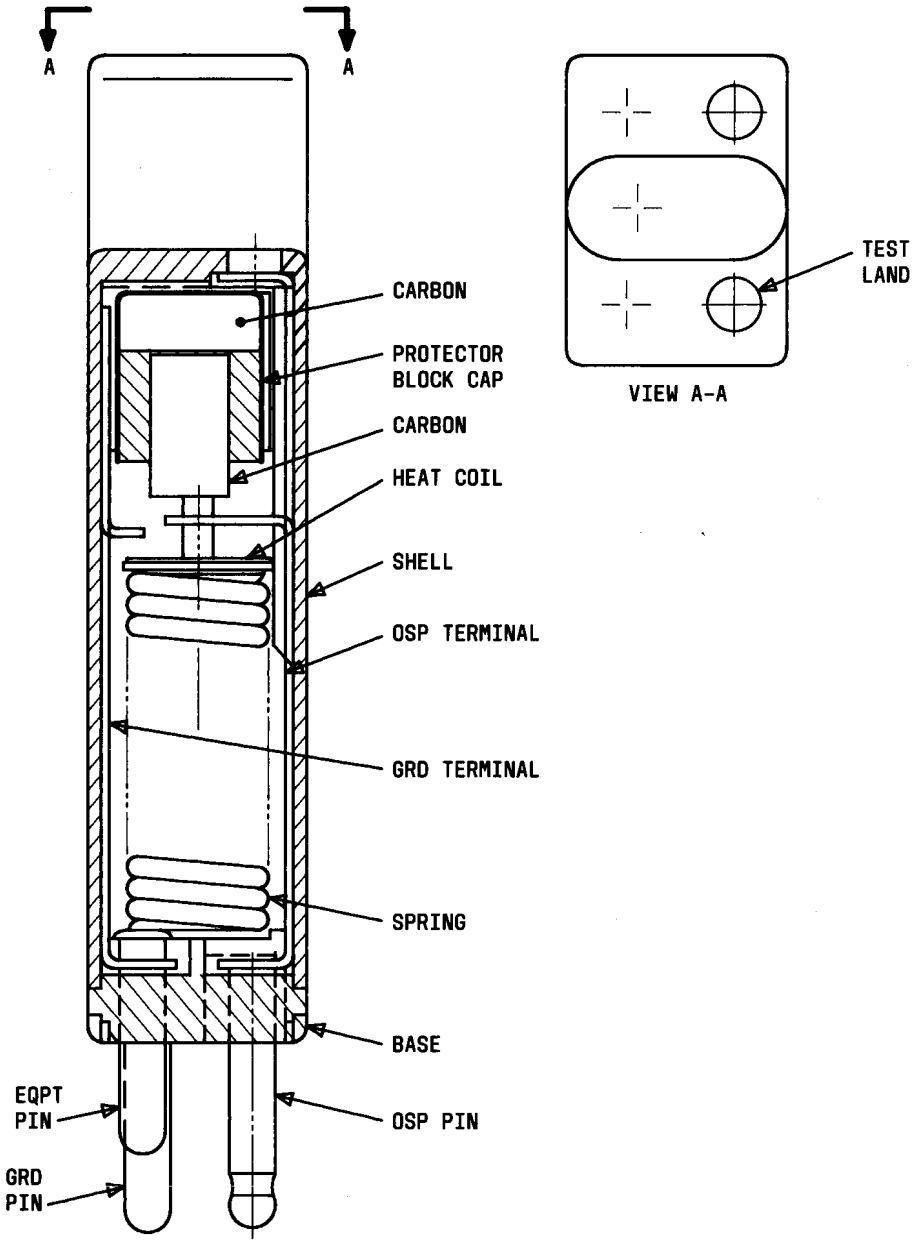


Fig. 7—4c-Type Protector Unit