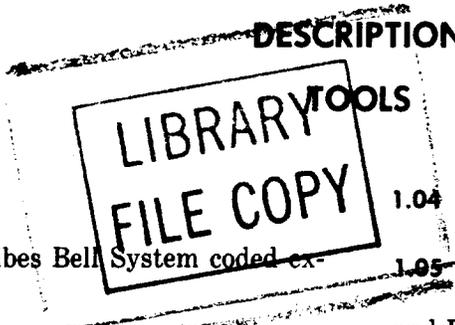


EXTRACTORS I

DESCRIPTION



1. GENERAL

1.01 This section describes Bell System coded extractor tools.

1.02 Revision arrows are used to emphasize significant changes. The reasons for reissuing this section are listed below:

- (a) Add a warning to the 553A lamp extractor tool description
- (b) Update the practice to standard format.

1.03 Replacement tools are indicated adjacent the following tools that have been rated Mfr Disc.

MFR DISC TOOLS	REPLACEMENT TOOLS
116	553A
602C	602D
680A	—
685A	—
685B	725A
723A	723B
752A	—
754A	—

1.04 See Section 074-214-140 for other extractors.

1.05 For similar types of tools, see Pullers, Section 074-247-137; Removers I, Section 074-253-123; and Removers II, Section 074-253-124.

2. DESCRIPTION OF TOOLS

2.01 **274:** The 274 signal plug extractor tool (Fig. 1) is used in extracting signal plugs from multiple jacks and 350A make-busy plugs at outgoing trunk test frames.

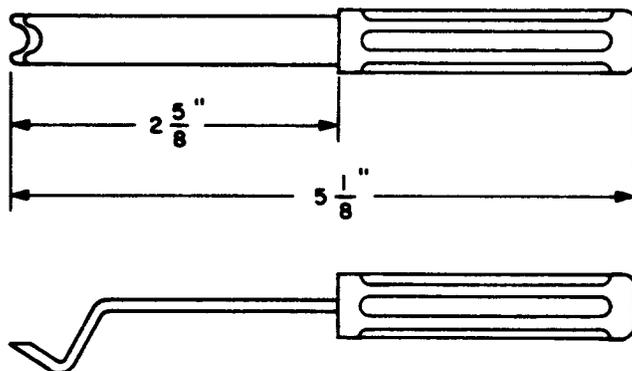


Fig. 1—274 Signal Plug Extractor Tool

2.02 **319B:** The 319B lamp cap and number plate extractor tool (Fig. 2) is used in removing 2-, 4-, and 8-type lamp caps and 59-, 60-, and similar-type number plates.

NOTICE

Not for use or disclosure outside the Bell System except under written agreement

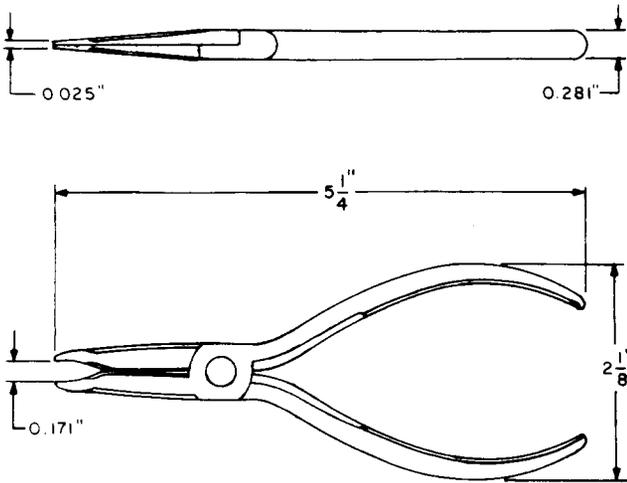


Fig. 2—319B Lamp Cap and Number Plate Extractor Tool

2.03 **453A:** The 453A oil sight ring extractor tool (Fig. 3) is used in removing and replacing the oil sight rings of drives and bearings used in dial systems.

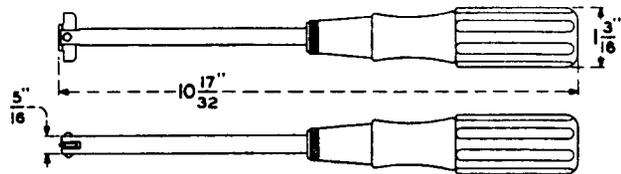


Fig. 3—453A Oil Sight Ring Extractor Tool

2.04 **553A:** ♦Warning: Do not use any other type lamp extractor in ESS\* switching equipment or equipment damage could occur.♦ The 553A lamp extractor tool (Fig. 4) is used in removing switchboard lamps. The 553A tool has a plastic detail to prevent the bulb from inserting far enough into the lamp puller to allow shorting out the lamp holder. The 553A replaces the 116 extractor.

\*Trademark of Western Electric.

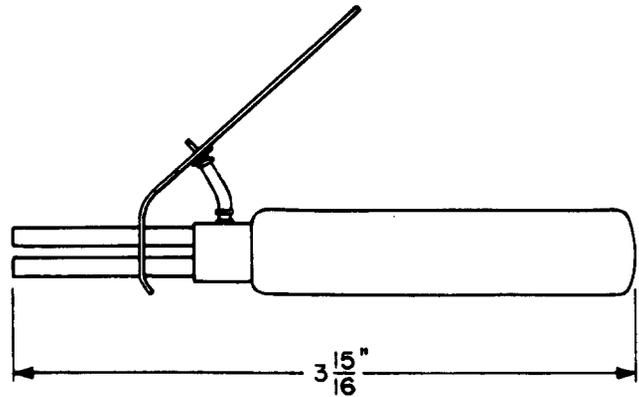


Fig. 4—553A Lamp Extractor Tool

2.05 **553C:** The 553C lamp extractor tool (Fig. 5) is used in removing No. 2 telegraph service board lamps.

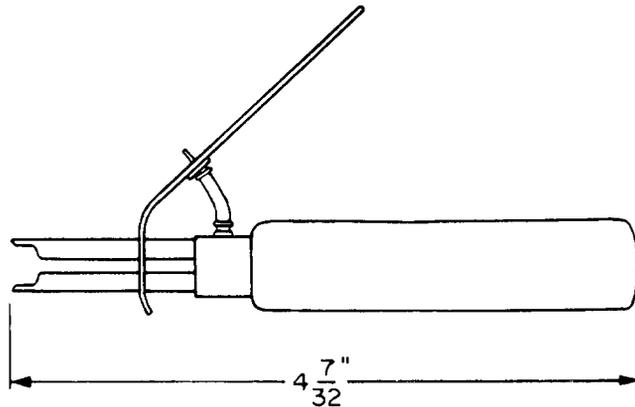


Fig. 5—553C Lamp Extractor Tool

2.06 **553D:** The 553D lamp extractor tool (Fig. 6) is used in removing switchboard lamps from the recessed lamp strips of the Automatic Number Identification Type D (ANI-D) basic frame.

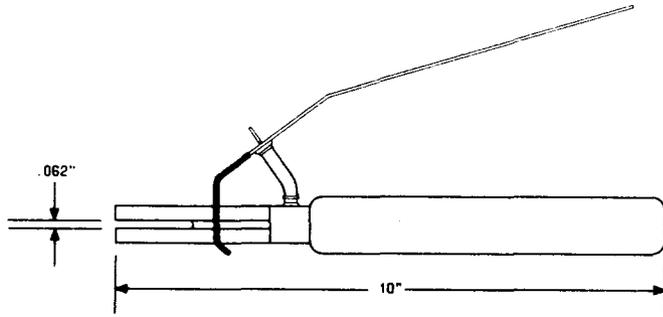


Fig. 6—553D Lamp Extractor Tool

**2.07 602D:** The 602D amplifier extractor tool (Fig. 7) is used in removing the plug-in amplifiers associated with V3 and V4 repeaters from their shelf mountings. The tool consists of a bar having two swivel hooks which are intended for insertion into the holes provided in the lugs of amplifiers. The ends of the bar are notched to provide a brace against the repeater shelf when removing the amplifier. The 602D replaces the 602C extractor.

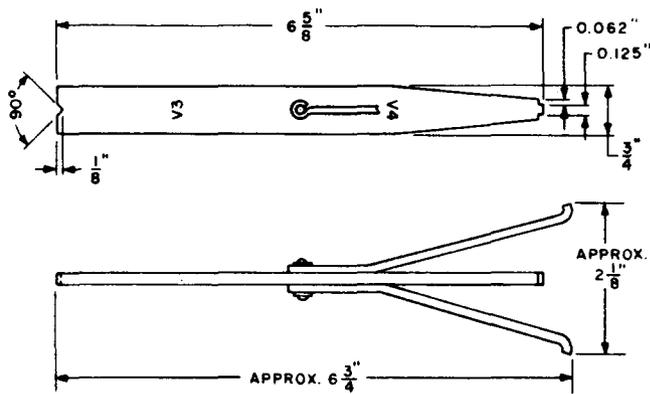


Fig. 7—602D Amplifier Extractor Tool

**2.08 602E:** The 602E amplifier extractor tool (Fig. 8) consists of a bar having two swivel hooks which are intended for insertion into the holes provided in the lugs of the KS-20378, L1, amplifier. The ends of the bar are notched so as to provide a brace against the repeater shelf when removing the amplifier. A plate is attached to the bar by means of a chain approximately 3 inches long to extend the reach of the tool for removing the amplifiers from their shelf mountings.

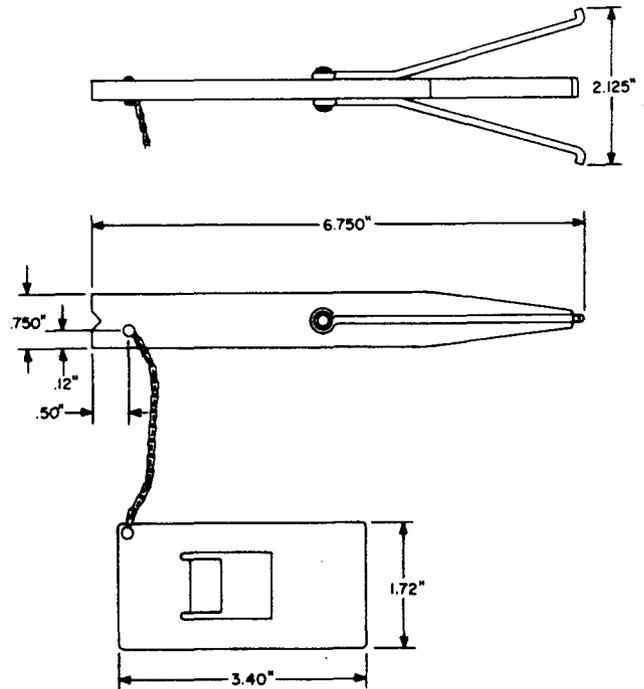


Fig. 8—602E Amplifier Extractor Tool

**2.09 603A:** The 603A relay extractor tool (Fig. 9) is used as a lever in removing 275-, 276-, 291-, and 303-type relays from their sockets. Wedge projections at one end are inserted between the base of the relay and socket.

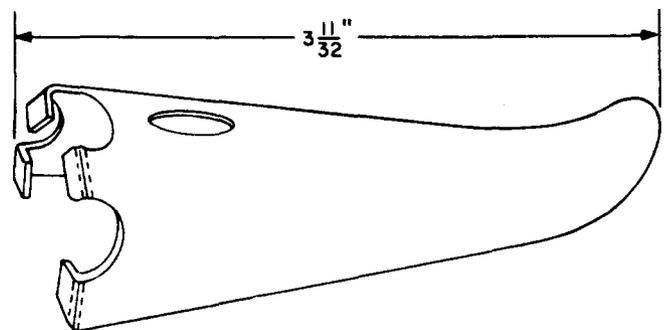


Fig. 9—603A Relay Extractor Tool

**2.10 658B:** The 658B terminal extractor tool (Fig. 10) is used for removing and replacing broken terminals on cast resin-type terminal strips having terminals arranged for soldered connections and for removing terminals arranged for mechanically wrapped connections.

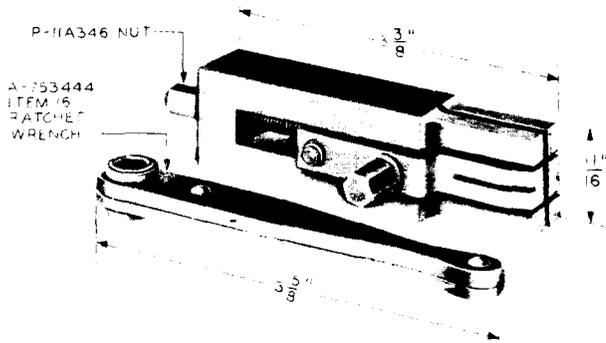


Fig. 10—658B Terminal Extractor Tool

**2.11 710A:** The 710A switchhook extractor tool (Fig. 11) is used in removing damaged switchhooks from corner-mounted coin collectors. The extractor consists of a hardened steel bar with a slot at each end.

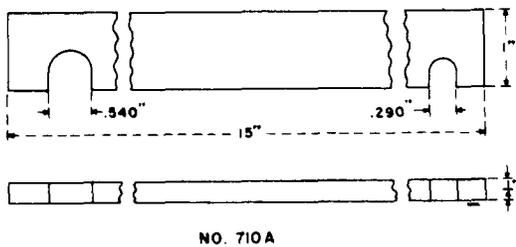


Fig. 11—710A Switchhook Extractor

**2.12 723B:** The 723B printed wiring board extractor tool (Fig. 12) is used to extract the printed wiring boards from 36A and 38A apparatus mountings in No. 1 and No. 2 ESS switching equipment.

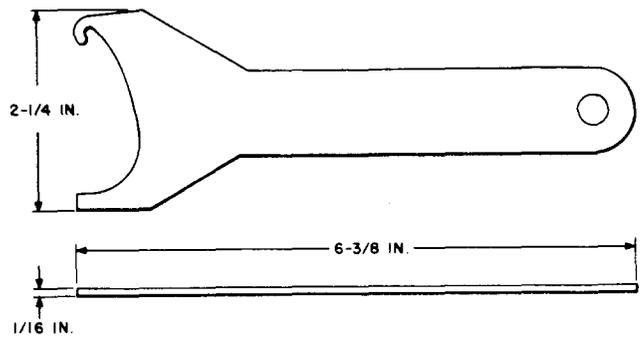


Fig. 12—723B Printed Wiring Board Extractor Tool

**2.13 725A:** The 725A signaling unit extractor tool (Fig. 13) is used in extracting E-type signaling units from their frame connectors. This extractor consists of a metal lever with an offset hook at one end. The 725A replaces the 685B extractor.

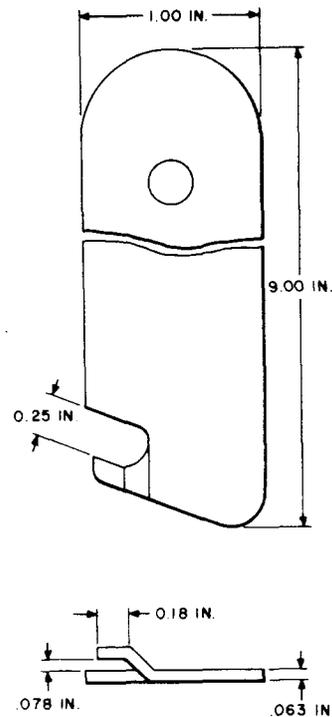
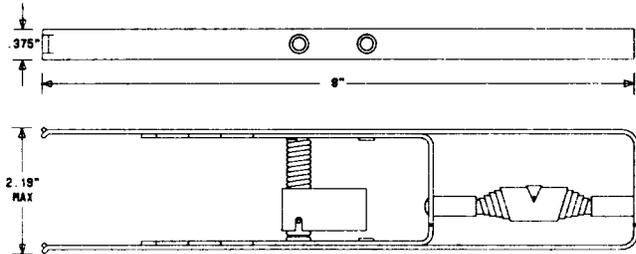


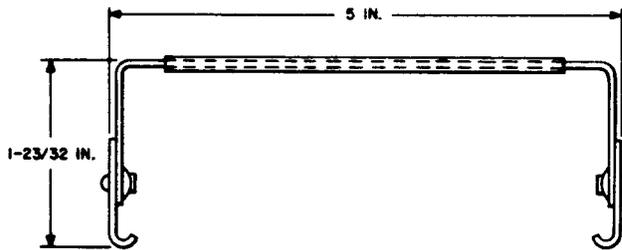
Fig. 13—725A Signal Unit Extractor Tool

**2.14 732A:** The 732A circuit pack extractor tool (Fig. 14) is used in extracting Apparatus Mounted In Plastic (AMPLAS) circuit packages from frame mounted KS-19437 connectors. The extractor consists of two nesting U-shaped metal brackets connected with a spring and arranged to slide one within the other.



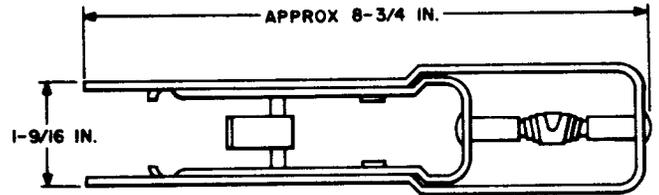
**Fig. 14—732A Circuit Pack Extractor Tool**

**2.15 748A:** The 748A circuit pack extractor tool (Fig. 15) is used in extracting printed wiring board circuit packs of a data set in No. 1 ESS switching equipment. The extractor consists of a U-shaped metal bar with insulating tubing and a pivot hook at each end.



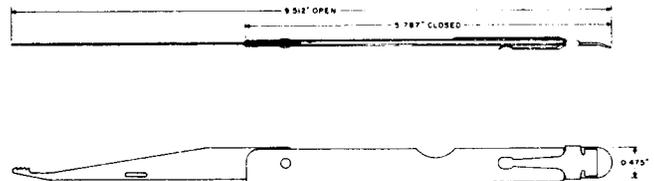
**Fig. 15—748A Circuit Pack Extractor Tool**

**2.16 755A:** The 755A resistor extractor tool (Fig. 16) is used in removing 89-type resistors from 1-type terminating sets. The extractor consists of two nesting U-shaped metal brackets connected with a spring and arranged to slide one within the other.



**Fig. 16—755A Resistor Extractor Tool**

**2.17 787A:** The 787A jammed dime extractor tool (Fig. 17) is used to free dimes jammed in the lower half of the coin chute of a single-slot coin telephone. The extractor consists of a blade, a casing, and a pocket clip.



**Fig. 17—787A Jammed Dime Extractor Tool**