CLEANING SWITCHBOARD PLUGS USING THE NO. 497A OR 497B TOOL

1. GENERAL

1.01 This section covers procedures for cleaning switchboard plugs of the 47, 109, 110, 309, 310, and 347 types using the No. 497A or 497B tool (portable motor-driven plug cleaning machine).

1.02 This section is reissued to add precautions applicable to the cleaning of silver-tipped plugs and gold-plated coaxial-type plugs and to revise the list of tools. Since this reissue covers a general revision, the arrows ordinarily used to indicate changes have been omitted.

1.03 In general, satisfactory results in cleaning plugs are obtained by using the 497-type tool as covered in this section. However, exceptions are made to the cleaning procedures in the case of silver-tipped plugs as outlined in 1.04. As stated in 1.05, these procedures do not apply to gold-plated coaxial-type plugs.

1.04 Silver-Tipped Plugs: Procedures for cleaning these plugs are given in Section 069-380-811 covering cleaning procedures using the No. 384A tool and in Section 069-380-812 covering manual cleaning with cotton sleeving.

1.05 Gold-Plated Coaxial-Type Plugs: These plugs should not be cleaned with metal polish or other abrasives, or with manual or motor-driven plug cleaners. Procedures for cleaning these plugs are covered in Section 069-380-811 and Section 069-380-812.

2. LIST OF TOOLS AND MATERIALS

CODE OR SPEC NO.	DESCRIPTION
TOOLS	
497A or 497B	Portable Plug Cleaning Machine (See 3.01)
498A (as read)	Bushing (for No. 109, 309, and similar type plugs)

CODE OR SPEC NO.	DESCRIPTION
TOOLS	
498B (as reqd)	Bushing (for No. 110, 310, and similar type plugs)
498C (as reqd)	Bushing (for No. 47, 347, and similar type plugs)
MATERIALS	
KS-2423	Cloth

3. PREPARATION OF TOOLS

3.01 The No. 497A plug cleaner is arranged for ac and the No. 497B for dc operation. The plug cleaner, with outer cover removed, is shown in Fig. 1.

3.02 Mount in the plug cleaner the bushing required for the type of plug to be cleaned (see List of Tools and Materials). Since these bushings have left-hand threads, turn the bushing counterclockwise when mounting it and clockwise when removing it. Seat the bushing firmly, using the fingers only. Do not tighten the bushing with pliers or other tools.

- 3.03 Press the switch plunger knob downward to the OFF position. Slide the housing cover back sufficiently to expose the cleaning discs. With a plug inserted in the bushing, the edges of the cleaning discs nearest the shoulder of the plug should just touch the plug sleeve. If necessary, rotate the knurled indicator (located concentric with the plug bushing) to position the discs to meet this condition. If the discs are worn so that they do not touch the plug sleeve with the indicator rotated fully clockwise, replace the discs as covered in Section 075-125-801. Close the housing cover.
- **3.04** Empty the drawer in the plug cleaner housing if it is filled with debris.

3.05 If plugs are to be cleaned at the switchboard, place the plug cleaner on a table, operator's chair, or other convenient support



Fig. 1 – Portable Plug Cleaner (Outer Cover Removed) — No. 497A Tool Illustrated

within reach of the plugs. To avoid the possibility of debris dropping on the key contacts, do not place the plug cleaner on the keyshelf.

3.06 With the housing cover fully closed, connect the plug cleaner to the power supply.

4. CLEANING PROCEDURES

4.01 Start the motor by raising the switch plunger knob to its uppermost (ON) position.

4.02 Insert the plug to be cleaned into the bushing as far as possible and hold the plug in that position until it has been thoroughly cleaned as indicated by a bright finish on the tip, ring, and sleeve.

Caution: Take care to insert the plug very slowly to prevent the cleaning discs from gripping and twisting the plug. If considerable effort is required to keep the plug from turning in the bushing, stop the motor and decrease the pressure of the discs on the plug by rotating the knurled indicator in a counterclockwise direction as covered in 3.03.