#### RECORDER CONNECTOR

#### 50 TYPE

### INSTALLATION AND MAINTENANCE



#### 1.00 GENERAL

- 1.01 The 50-type recorder connector, associated wiring, and apparatus needed to connect it to the telephone line shall be provided, installed, and maintained by the telephone company.
- to connect recorder to recorder connector and the power receptacle required to operate voice recorder must be provided, installed, and maintained by the customer.
- 1.03 Recorder connectors are installed only upon issuance of service orders or other proper authorization. Report any unauthorized use of recorders on telephone lines to your supervisor immediately.

#### 2.00 INSTALLATION

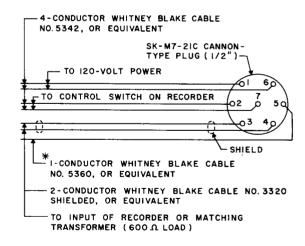
- 2.01 Although it is the customer's responsibility to provide, install, and maintain the above apparatus, information pertaining to this apparatus is included in this practice for clarity. This information may be furnished to the customer when required.
- 2.02 Fig. 1 shows the requirements for the cable and plug to be furnished by the customer for connecting voice recorder to recorder connector.



Terminals 2 and 7 shall not be strapped or otherwise permanently shorted but shall be connected to a circuit closing device which will close and open concurrently with the START and STOP of the recording drum, disc, tape, or wire. Shorting terminals 2 and 7 starts the warning tone signal and also closes the

circuit through to recording terminals 3 and 4. The tone signal, when emitted into an idle line, is of sufficient intensity to create inductive interference in other cable pairs and therefore should always be under switch control.

- When portable recorder and recorder connector are used at PBX, the customer must provide and install the following in order to ensure a ground at the recorder connector at all times:
  - A 3-conductor power cord on recorder, equipped with a 3-pronged plug. Third prong must connect to ground at power outlet.
  - A conductor between recorder and recorder connector over which the ground may be extended (see Fig. 1).
  - Conductor must be connected to grounded power cord lead at recorder and pin 5 of plug to recorder connector.



\* Required only when used with portable recorder at PBX.

Fig. 1 — Connection of Cables to SK-M7-21C Plug

2.04 Locate and fasten the 50-type recorder connector in the same manner as other types of subscriber sets. Detailed information can be found in the C Sections entitled Station Sets, Selecting Indoor Locations and Station Sets, Installation. For installation information on associated apparatus, refer to the C Section pertaining directly to each item.

2.05 When a portable recorder and recorder connector is to be used at several station locations, a jack arrangement is installed at each station location as shown in Fig. 2. The portable recorder connector, which is equipped with a twin plug, is plugged into the jack for recording.

#### 3.00 MAINTENANCE

3.01 Power for the recorder connector is furnished and controlled by the recorder to which it is connected.



For your own safety, remove power plug from recorder before removing cover from or doing any work on recorder connector.

3.02 The telephone company repairman should not perform any maintenance on the recorder, connecting cable, or plug but should refer these troubles to the customer.

**3.03** Table A provides maintenance procedure for troubles which may be encountered.

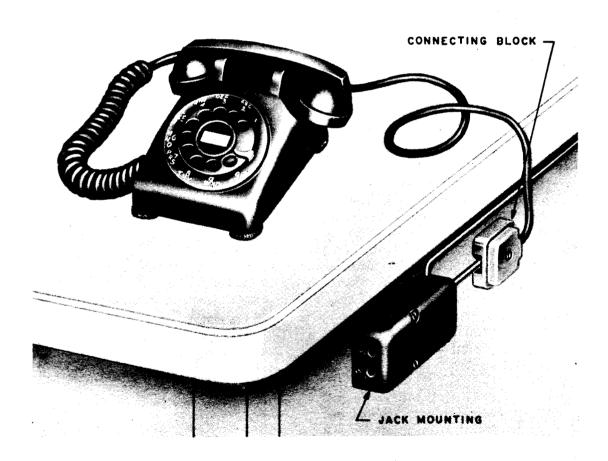


Fig. 2 — Typical Installation for Portable Recorder Connector

TABLE A

MAINTENANCE PROCEDURE

Trouble	Probable Causes	Corrective Measures
Recorder will not run.	Loose plug.	Make certain power supply cord is plugged in securely to both recorder connector and power supply outlet.
	No commercial power supply.	Make certain proper voltage is present at service outlet. If not, ask customer to arrange for restoration.
Recorder runs but will not re- cord. Telephone working.	No commercial power to re- corder connector (furnished through recorder and con- necting cord).	Remove plug from recorder. Check continuity of leads furnishing power to recorder connector (terminals 1 and 6 of cannon plug).
	Defective electron tube.	Replace defective electron tube.
Recorder runs but will not record. Telephone not working.	Open telephone circuit.	Turn recorder off. Check continuity of telephone circuit. If open, remove cover of recorder connector and check incoming T and R and outgoing T1 and R1 connections. Make necessary corrections.
Excessive 60-cycle hum on recording.	Recorder power cord plug reversed (if ac operated).	Reverse power cord plug at power receptacle.
	Defective electron tube.	Replace defective electron tube.
	Loose or missing ground.	Check ground at G terminal of recorder connector.
	Trouble in recorder.	Disconnect recorder from re- corder connector. If hum is still present, trouble is in recorder.

## TABLE A (Cont)

# MAINTENANCE PROCEDURE

Trouble	Probable Causes	Corrective Measures
Noise other than 60-cycle hum.	Early models of 50A and 50AA recorder connectors being used.	Check to see that the white transformer shield wire has been moved from G to R1 terminal on TS1.
	Bent pins on electron tubes.	Straighten all bent pins or replace electron tubes.
	Poor contact at tube sockets or loose connections.	Check tube sockets for good contact with pins of electron tube.  See that all connections are good at tube sockets.
	Defective electron tube.	Replace defective electron tube.
. Warning tone too loud or duration too long.	Unmodified model of recorder connector being used.	Replace recorder connector with a modified set of the same code. Modified recorder connectors are identified by the letter M stamped in aluminum ink on fiber plate left of terminal block.