

BARNETT, D. G. 5  
 BELL SYSTEM PRACTICES  
 AT&T Co. ~~Sturley~~, D. J. 6  
 KLAISS, M. J. 0  
 MOORE, H. T. 3  
 MUELLER, A. 0  
 MURPHY, E. 6  
 SHARFF, H. C. 0  
 THOMAS, P. 0

## KS-19594 DIALER MAINTENANCE

### 1. GENERAL

1.01 This section is reissued to:

- Change Table A
- Add information for replacing tape cartridge

Changes or additions in the body of the tables will be indicated by shaded areas.

1.02 Make a visual inspection of the system for obvious defects such as loose, displaced, or broken parts, blown fuses or tripped circuit breakers.

1.03 Maintenance of the dialer is limited to replacement of worn cords and defective units. Housings may be cleaned by using a damp KS-2423 cloth.

1.04 Maintenance of associated station equipment such as telephone sets, bells and buzzers, dials, is covered in the appropriate sections.

### 2. MAINTENANCE



*Disconnect power cord before removing dialer or power supply housings. Power should remain disconnected when not required for immediate maintenance operation.*

**Note:** Power must be applied to dialer (List 1) when testing dial-in (List 2) unit. Failure to do so may result in dial-in unit dialing slow or sticking when low digits are dialed.

2.01 The more common defects, confirmation tests, and corrective action to be taken in maintaining the KS-19594 dialer are listed in Table A.

#### *KS-19594, List 1 Dialer Unit*

2.02 Should the directory tape fail to rotate to a new number when the selector wheel is turned or when the tape drive key is operated,

the tape cartridge has failed. Remove the tape cartridge and replace with a new cartridge.

#### (a) Remove tape cartridge as follows:

- (1) Raise the access cover on the front of the dialer.
- (2) Raise the front end of the dialer.
- (3) Press firmly on the release bar which rests on the top of the tape to cause the cartridge to snap out of the bottom of the dialer.
- (4) Pull the tape cartridge forward to clear the hinges.

#### (b) To replace new tape cartridge:

- (1) Raise the front end of the dialer.
- (2) Mate the hinge halves on the rear of the tape cartridges with the hinge halves at the rear of the opening in the bottom of the dialer.
- (3) Push upward on the tape cartridge to lock it into place.

2.03 It is not possible to change tapes from one cartridge to another in the field. If the subscriber requests the tape from a faulty cartridge be returned in a new cartridge, this can be specified on the order when the cartridge is returned for repairs. If subscriber requests to keep old tape, which may be the only record of the telephone numbers listed, remove the tape by pulling it out of the cartridge and cutting each end from the tape spools.

2.04 Should the dialer fail to operate upon pressing the CALL button, remove the dialer housing in order to check voltages at the terminals shown in Fig. 1. Do not adjust the level of the 18-volt dc supply. If the 18 volts dc differs by more than 2 volts from its normal value, the power supply

## SECTION 512-125-300

is probably faulty. In this case, replace both dialer and power supply units.

**2.05** Should the voltages checked in 2.04 appear satisfactory, and the dialer operates but fails to reach the desired number, proceed as follows:

- (1) Select a blank space on the tape and record a known telephone number.
- (2) Connect a 1013A or 1011B (MD) test set across the *R* and *G* leads of the dialer telephone cord. Place the test set button in the monitoring position.
- (3) Initiate call, listen for pulsing clicks; if pulsing clicks are not heard or if heard and the wrong number is reached (and the associated telephone set operation is normal), replace the dialer, power supply, and dial-in units. The tape cartridge may be used in the replacement dialer.

**2.06** Should the dialer unit require replacement due to mechanical or electrical failure, proceed as follows:

- (1) Replace the defective dialer with a new unit.
- (2) Remove the tape cartridge from the defective dialer and place it in the new unit.
- (3) Return dialer unit through normal channels for repair.

### *KS-19594, List 2 Dial-In Unit*

**2.07** Field maintenance of the KS-19594, List 2 dial-in unit is limited to replacement of

GE-1819 lamp in the WAIT lamp position. To replace the lamp proceed as follows:

- (1) Remove four cover retaining screws from the bottom of the unit.
- (2) Carefully remove the cover.
- (3) Remove and replace the defective GE-1819 lamp.
- (4) Replace the cover and retaining screws.

**2.08** If the dial-in unit is obviously defective, replace with a new unit.

### *KS-19594, List 3 Power Supply*

**2.09** No field maintenance is authorized for the KS-19594, List 3 power supply.

### *Cords and Cables*

**2.10** Field replacement of cords and cables associated with the various components of the dialer is limited to the 4-conductor cord between the power supply and dialer unit (KS-19594, List 8) and the 6-conductor cord between the dialer unit and the associated telephone set (KS-19594, List 9).

**2.11** If cords, other than those listed in 2.10, or the power supply cable require replacement, replace the associated components (ie dialing unit, power supply).

### *Schematic*

**2.12** Fig. 2 shows a partial schematic of a typical dialer installation. SD-99436-01 contains a complete schematic of the various dialer components and CD-99436-01 gives a description of the circuits.

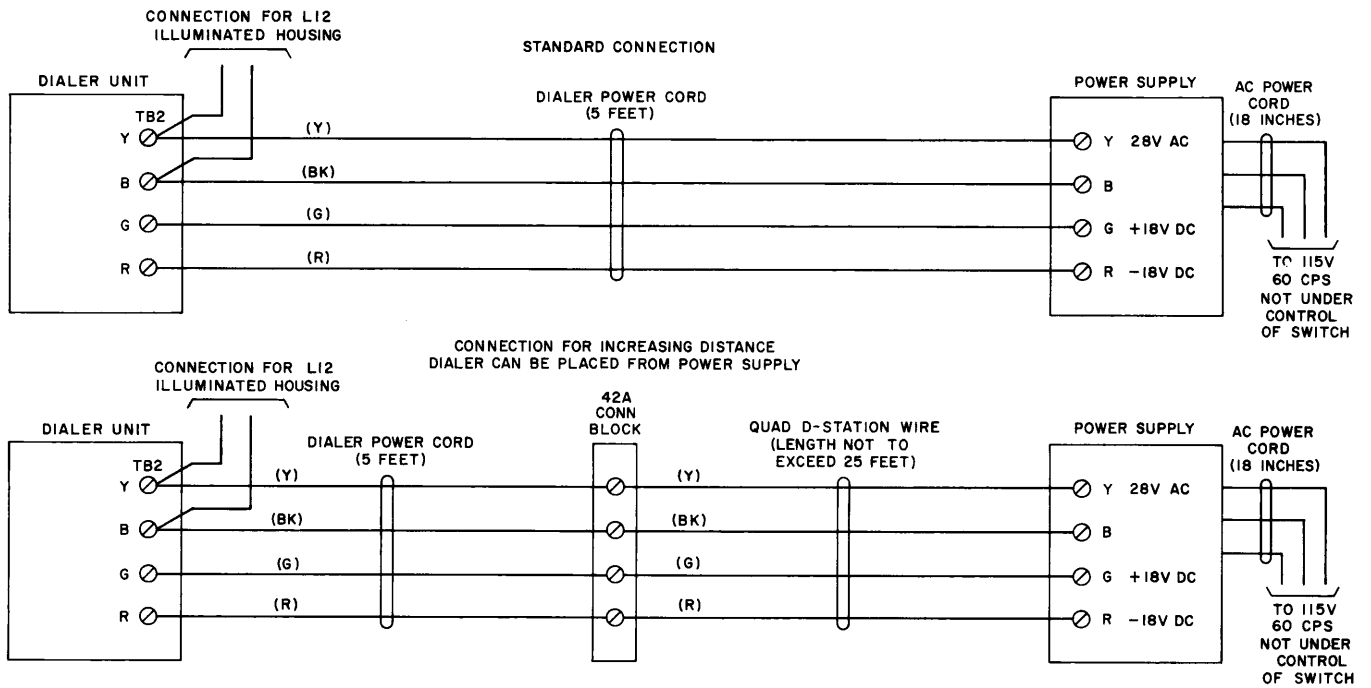


Fig. 1—Power Supply Connections

**TABLE A**  
**COMMON TROUBLES AND CORRECTIVE ACTION**

TROUBLE	PROBABLE CAUSE	CONFIRMATION TESTS	CORRECTIVE ACTION
<b>DIALER UNIT:</b>			
Tape will not advance manually or automatically.	Faulty tape cartridge	Try to advance or reverse tape using selector wheel and tape drive key.	Replace tape cartridge.
Tape operates manually but not automatically and dialer does not dial.	Faulty power supply	Using voltmeter, check voltages at dialer unit terminal board TB2 (Fig. 1).	Replace dialer and/or power supply units.
Tape operates, but dialer fails to reach desired number.	Faulty dialer unit, power supply, or dial-in unit	Check voltages (Fig. 1). Place 1013A or 1011B (MD) test set across <i>R</i> and <i>G</i> leads of dialer telephone cord. Record known number and initiate call.	If pulsing clicks are not heard; replace dialer unit. If pulsing clicks are heard and wrong number is reached: replace dialer, power supply, and dial-in units.
<b>DIAL-IN UNIT:</b>			
<b>(Note)</b>			
Wait lamp will not light.	Faulty GE-1819 lamp	Plug dial-in unit into jack on back of dialer, lamp should light, then extinguish.	Replace GE-1819 lamp.
Wrong numbers being recorded.	Faulty dial-in unit	Record and initiate call to known telephone number.	Replace dial-in unit.
<b>POWER SUPPLY</b>			
No output, low voltage, or higher than normal voltage.	Defect in power supply circuitry.	Use voltmeter to check power supply voltages (see Fig. 1).	Replace power supply.

◆Note: Power must be applied to dialer (List 1) when testing dial-in (List 2) unit. Failure to do so may result in dial-in unit dialing slow or sticking when low digits are dialed.◆

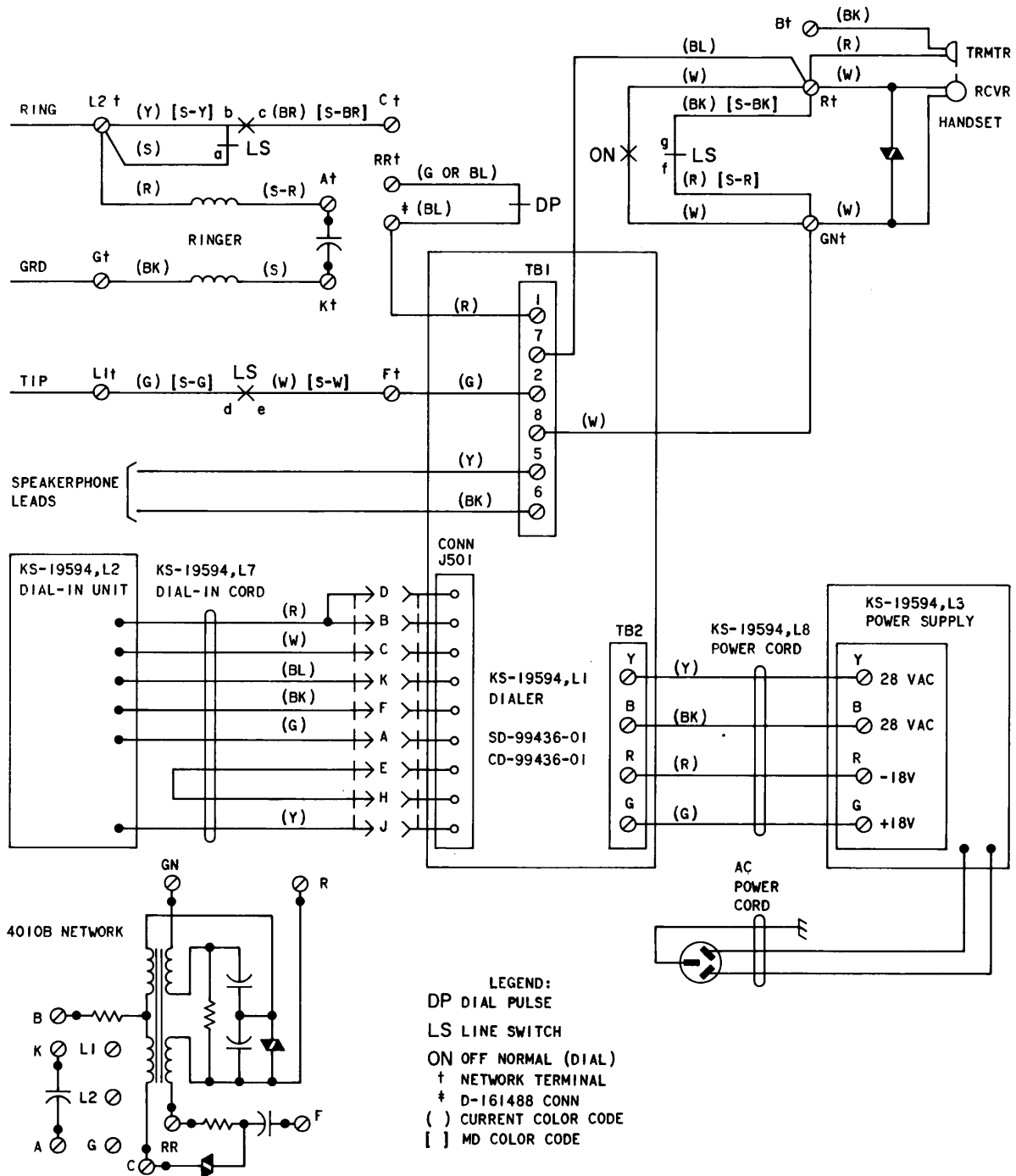


Fig. 2—Typical Installation Layout, KS-19594 Dialer

