

AMERICAN TELECOMMUNICATIONS CORPORATION  
SPECIALTY MODEL TELEPHONE SETS  
DESCRIPTION, INSTALLATION AND FIELD MAINTENANCE

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1. GENERAL

1.01 This section provides the description, installation and field maintenance procedure for the DECO-TEL line of specialty telephone sets manufactured by American Telecommunications Corporation. These specialty telephone sets are owned by the telephone company, and can be identified by the base being stamped as property of telephone company.

1.02 This section is reissued to add information on the Chestphone with Touch Calling unit, and the Candlestick Telephone. Information proper for a shop procedure has been deleted and can be found in Section 997-153-800. Due to the extent of the revision, marginal arrows are not used to indicate the changes. Remove Issue 1 from the practices binder and replace with this issue.

1.03 A kit is available to convert a customer-owned Candlestick telephone shell into a working telephone set. Information on the kit can be found in Section 473-425-201.

2. DESCRIPTION

2.01 The specialty telephone sets are available in Cradlephone, Chestphone and Candlestick telephone models.

Cradlephone

2.02 The Cradlephone (Figure 1) measures approximately 9-1/2 inches high, 8-1/2 inches wide and 6-3/4 inches deep. The seven models are approximately the same size and differ only in the trim and color. The models are as follows:

- (1) Model No. DAG-1111-W (320110): Grecian Cameo base, white figures on a blue background; white handset with gold plate trim and white handset and line cord, and gold dial fingerwheel.
- (2) Model No. DAG-1310-B (320120): Maple wood base; black handset with gold plated trim and black handset and line cord, and gold dial fingerwheel.

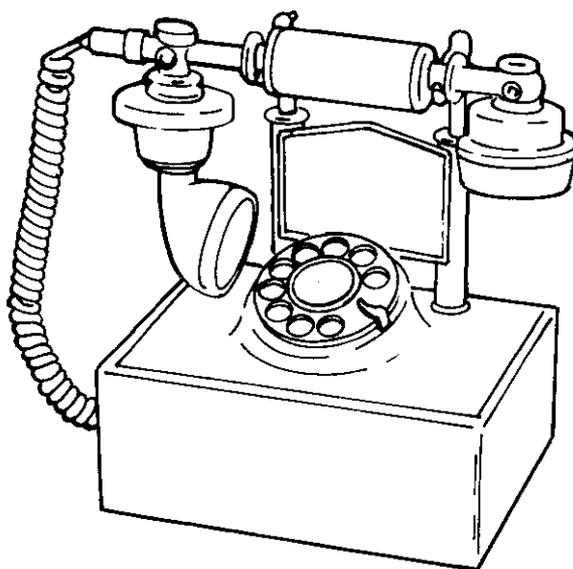


Figure 1. Cradlephone.

- (3) Model No. DAG-1320-W (320111): Antique white wood base; white handset with gold plate trim and white handset and line cord, and gold dial fingerwheel.
- (4) Model No. DAG-1330-B (320112): Mediterranean pickled-finished wood base; black handset with gold plated trim and black handset and line cord, and gold dial fingerwheel.
- (5) Model No. DAG-1440-W (320113): White dial shell with a red brocade panel insert on a gold frame; white handset with gold plate trim and a white handset and line cord, and gold dial fingerwheel.
- (6) Model No. DAG-1441-W (320114): White dial shell with green brocade panel insert on a gold frame; white handset with a gold plate trim and a white handset and line cord, and gold dial fingerwheel.
- (7) Model No. DAG-1442-W (320115): White dial shell with gold brocade panel insert on a gold frame; white handset with gold plate trim and a white handset and line cord, and gold dial fingerwheel.

2.03 The components of the Cradlephone are installed at the factory and consist of:

- (a) Type T1 or 75555 transmitter and Type U1 or U3 receiver capsule.
- (b) GTE Automatic Electric Type 51A rotary dial.
- (c) GTE Automatic Electric WA-1154-A transmission unit.
- (d) Hookswitch from a STYLELINE<sup>®</sup> telephone set.
- (e) GTE Automatic Electric Type 46 ringer.
- (f) Standard 5-1/2-foot line cord and 4-foot retractile handset cord.

### Chestphone

2.04 The Chestphone (Figure 2) is a self-contained telephone set housed in a wooden chest measuring approximately 5-1/4 inches high, 10-3/4 inches wide and 8 inches deep.

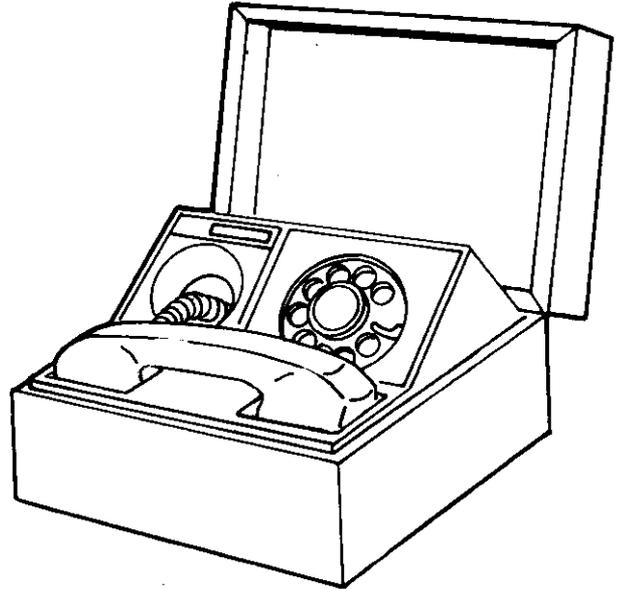


Figure 2. Chestphone.

2.05 Six models of the Chestphone are available. Three models have a rotary dial, and three models have a Touch Calling unit. The other differences are in the chest and color of the handset. The models are as follows:

- (1) Model No. DAG-2131-B (320117): Black leather panels inset on a walnut chest; black handset, shell and cords, with a chrome dial fingerwheel.
- (2) Model No. DAG-2110-T (320116): Brown carved walnut chest; beige handset, shell and cords, with a chrome dial fingerwheel.
- (3) Model No. DAG-2150-T (320118): Brown walnut chest with a hunt scene of incolay sardonyx stone inset on the lid; beige handset, shell and cords, with a chrome dial fingerwheel.
- (4) Model No. TAG-2131-B (320127): Black leather panels inset on a walnut chest; black handset, shell and cords, with a Touch Calling unit.

- (5) Model No. TAG-2110-T (320126): Brown carved walnut chest; beige handset, shell and cords, with a Touch Calling unit.
- (6) Model No. TAG-2150-T (320128): Brown walnut chest with a hunt scene of incolay sardonyx stone inset on the lid; beige handset, shell and cords, with a Touch Calling unit.

2.06 The telephone set components in the rotary dial models of the Chestphone are the same as in the Cradlephone (Paragraph 2.03). The Touch Calling models have the same components with the exceptions that the rotary dial is replaced with a Type 12C Touch Calling unit, and the transmission unit is a WA-1155-A or a WA-1154-A with the D-68849-A capacitor removed.

#### Candlestick Telephone

2.07 The Candlestick telephone set (Figure 3) resembles the old upright telephone set. The base is approximately six inches in diameter, and the overall height is approximately 12 inches. The housing is of molded plastic and the trim is brass plated molded plastic. Three models are available and differ only in color of the housing:

- (1) Model No. 4101-B (320122): Black housing.
- (2) Model No. 4101-R (320123): Red housing.
- (3) Model No. 4101-W (320124): White housing.

2.08 The components of the Candlestick telephone are the same as in the Cradlephone with the exceptions that the transmission unit is from the STYLELINE telephone set, and the hookswitch is from the STARLITE<sup>®</sup> telephone set.

2.09 The early model Cradlephone and Chestphone sets may have a Stromberg-Carlson transmission unit and hookswitch, and GTE Automatic Electric dial and ringer.

### 3. PRECAUTIONS

3.01 The installation and maintenance man should exercise care when transporting,

installing or repairing the specialty telephone set. Extreme care should be exercised so as not to damage the exterior case and decorator shell. Package and protect as necessary all parts to preserve their finish.

3.02 To give maximum protection when transporting the specialty telephone sets that have been removed from service, package the sets in containers similar to those in which the sets were delivered.

NOTE: Under no condition shall connecting blocks, screws or other miscellaneous items be placed in the packing carton with the set.

3.03 Carry and store these packaged sets in such a manner that they cannot be bumped or dropped.

### 4. INSTALLATION

4.01 In locating the telephone set, the installer should be guided by the customer's wishes, insofar as installation requirements and other provisions outlined in this section. If the customer's wishes cannot be followed, explain the reason to the customer.

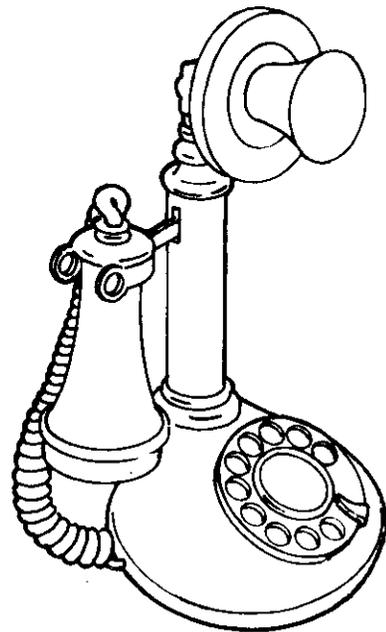


Figure 3. Candlestick Telephone.

4.02 All models of the specialty telephone sets are installed in the same manner; however, depending upon the type of service (i.e., PBX key telephone systems), the proper choice of features for the installation may necessitate changes as outlined in this section.

4.03 The telephone sets are factory wired making them suitable for bridged ringing. By making the minor wiring changes as shown in Table 1, the telephone set equipped with a GTE Automatic Electric transmission unit can be adapted for either tip party, ring party, tip party with ANI service, or can be easily returned back to bridged ringing if previously used as a tip party ANI station.

4.04 The ringer can be silenced if desired by:

Divided ring - Move the YEL line cord lead to terminal 3 of the connecting block, or remove the GRN ringer lead.

Bridged ring - (Without ANI) - Move the YEL line cord lead to terminal 3 of the connecting block, or remove the RED ringer lead.

Tip party (With ANI) - Disconnect the GRN ringer lead. DO NOT move the YEL line cord lead. It must remain on terminal 4G of the connecting block.

4.05 Wiring diagrams of the sets with GTE Automatic Electric transmission units are shown in Figures 4, 5, and 6. Figure 7 is a wiring diagram of the sets with Stromberg-Carlson transmission unit.

## 5. KEY TELEPHONE SYSTEM MODIFICATIONS

5.01 The Cradlephone and Chestphone may be modified for "A" lead control in 10A1, 10A2 and 16A key telephone systems. The modified set may be used in conjunction with an external key or key adapter, or connected permanently to one of the key telephone system lines.

5.02 Proceed as follows to modify a dial version of a Cradlephone or Chestphone with GTE Automatic Electric components (Figure 8).

- (1) Remove the three-conductor line cord and replace with a four- or six-conductor line cord.

- (2) Connect the line cord to the transmission unit as follows:

- (a) GRN (Tip) to terminal 2.
- (b) RED (Ring) to terminal 10.
- (c) BLK (A) to terminal 8.
- (d) YEL (A1) to terminal 9.
- (e) Tape and store the unused leads.

- (3) Move ringer capacitor lead from terminal 9 to terminal 2.

- (4) Move RED hookswitch lead from terminal 2 to terminal 9.

5.03 Proceed as follows to modify a Chestphone with Touch Calling for key telephone system use (Figure 9):

- (1) Remove the three-conductor line cord and replace with a four- or six-conductor line cord.

- (2) Connect the line cord to the transmission unit as follows:

- (a) RED (Ring) to terminal 10.
- (b) GRN (Tip) to terminal strip terminal C.
- (c) BLK (A) to terminal 8.
- (d) YEL (A1) to terminal 9.
- (e) Tape and store the unused leads.

- (3) Move the ringer capacitor lead from transmission unit terminal 9 to terminal strip terminal C.

- (4) Move the RED hookswitch lead from terminal strip terminal C to transmission unit terminal 8.

- (5) Move the WHT hookswitch lead from transmission unit terminal 8 to terminal 9.

Table 1. Connections.

	TRANSMISSION UNIT TERMINALS						CONNECTING BLOCK TERMINALS		
	RINGER				CAPACITOR		LINE CORD LEADS		
	RED	BLU	BLK	GRN			RED	GRN	YEL
Bridged	15 (10)	*	*	16	16	9	L1	L2	L2
Ring Party	15 (10)	*	*	16	16	9	L1	L2	4G
Tip Party	15 (10)	*	*	16	16	9	L2	L1	4G
Tip w/ANI	9	* (#)	21 (* )	16	16	6	L1	L2	4G

\*Tape and Store.

#Splice to BLU Transmission Unit lead on Candlestick Telephone.

( ) Candlestick Telephone only.

5.04 Proceed as follows to modify a set with Stromberg-Carlson components (Figure 10):

- (1) Remove the three-conductor line cord and replace with a four- or six-conductor line cord.
- (2) Connect the line cord to the transmission unit as follows:
  - (a) RED (Ring) to terminal L1.
  - (b) GRN (Tip) to terminal A.
  - (c) BLK (A) to terminal L2.
  - (d) YEL (A1) to terminal G.
  - (e) Tape and store the unused leads.
- (3) Disconnect the SL hookswitch lead from transmission unit terminal A, and tape and store.
- (4) Untape the ORN hookswitch lead and connect to transmission unit terminal A.

(5) Move BRN hookswitch lead from transmission unit terminal C to terminal G.

(6) Untape BLU hookswitch lead and connect to transmission unit terminal C.

5.05 The Type 46 ringer, supplied with each Chestphone or Cradlephone telephone set, may be connected across any single line or could be wired as a common audible signal for all lines.

5.06 The ringer may be removed and a Type FD-1068-AF buzzer mounted in its place. This buzzer is NOT a replacement for the ringer but is for low voltage common buzzer signaling.

## 6. FIELD MAINTENANCE

6.01 Field maintenance of the specialty telephone sets is limited to wiring connections, ringer, and handset components. Any further maintenance is to be performed in the local repair shop.

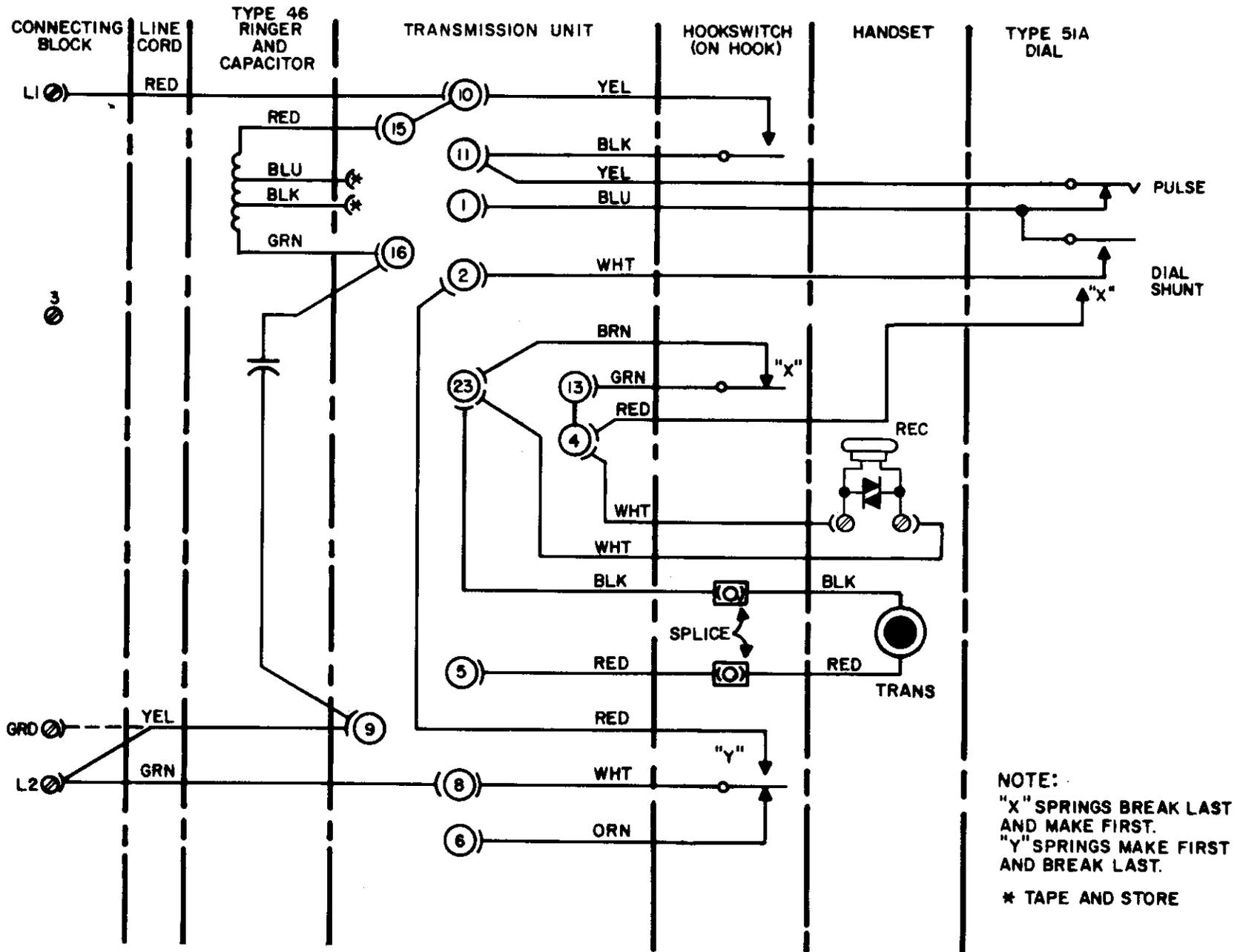
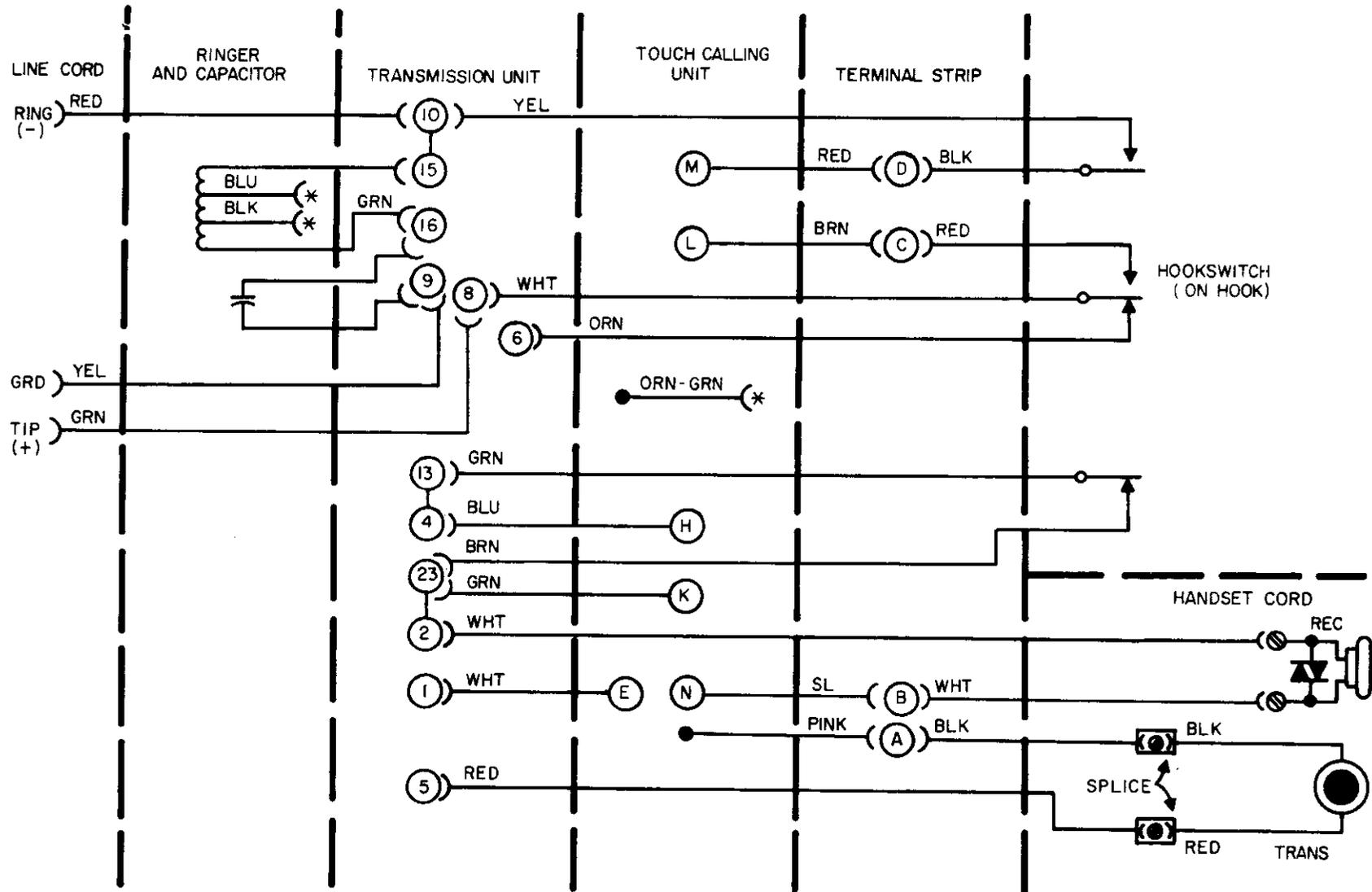


Figure 4. Typical Wiring Diagram of Specialty Telephone Set Equipped with GTE Automatic Electric Components.



NOTE:  
\* TAPE AND STORE

Figure 5. Wiring Diagram of Touch Calling Chestphone.

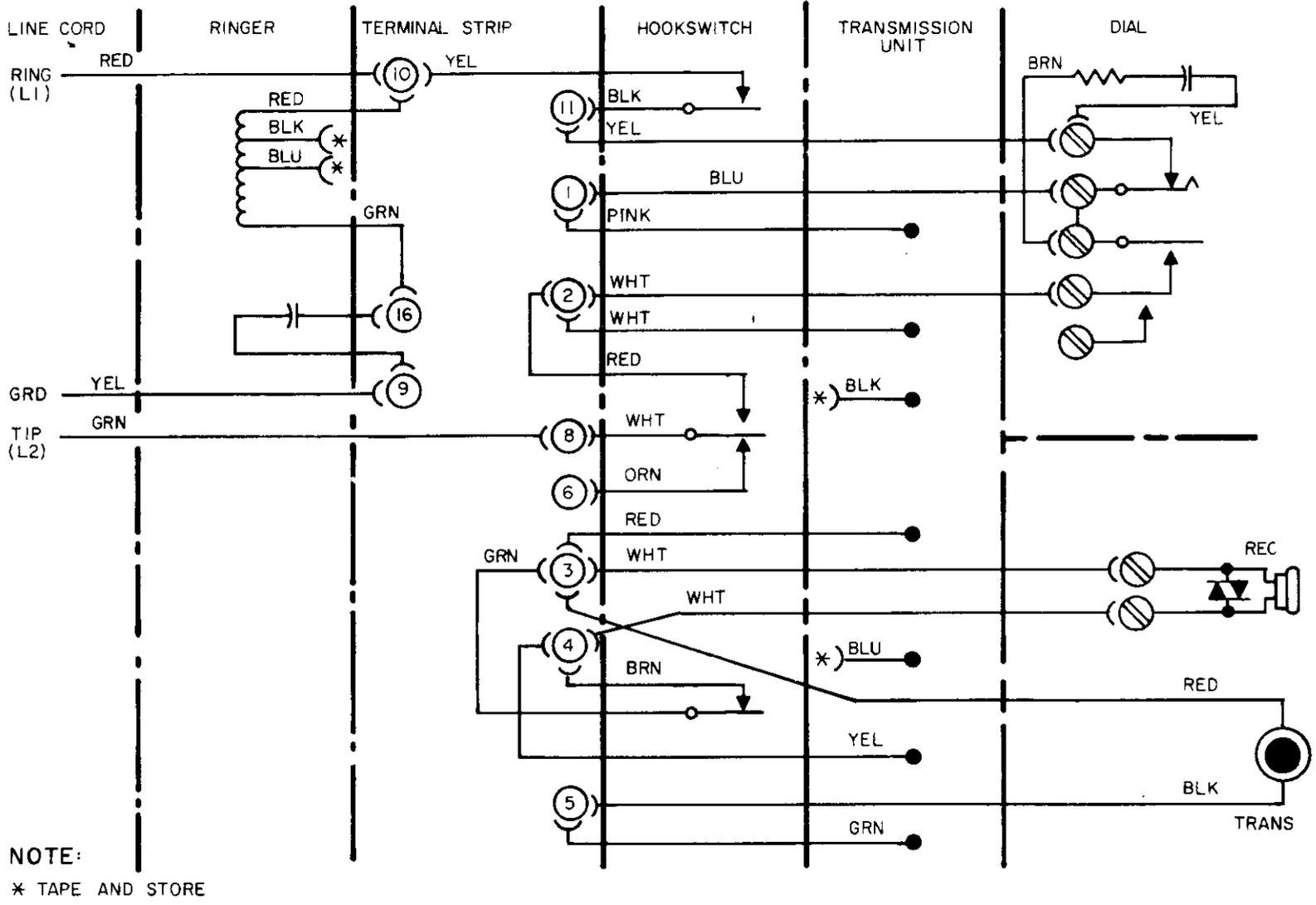


Figure 6. Wiring Diagram of Candlestick Telephone.

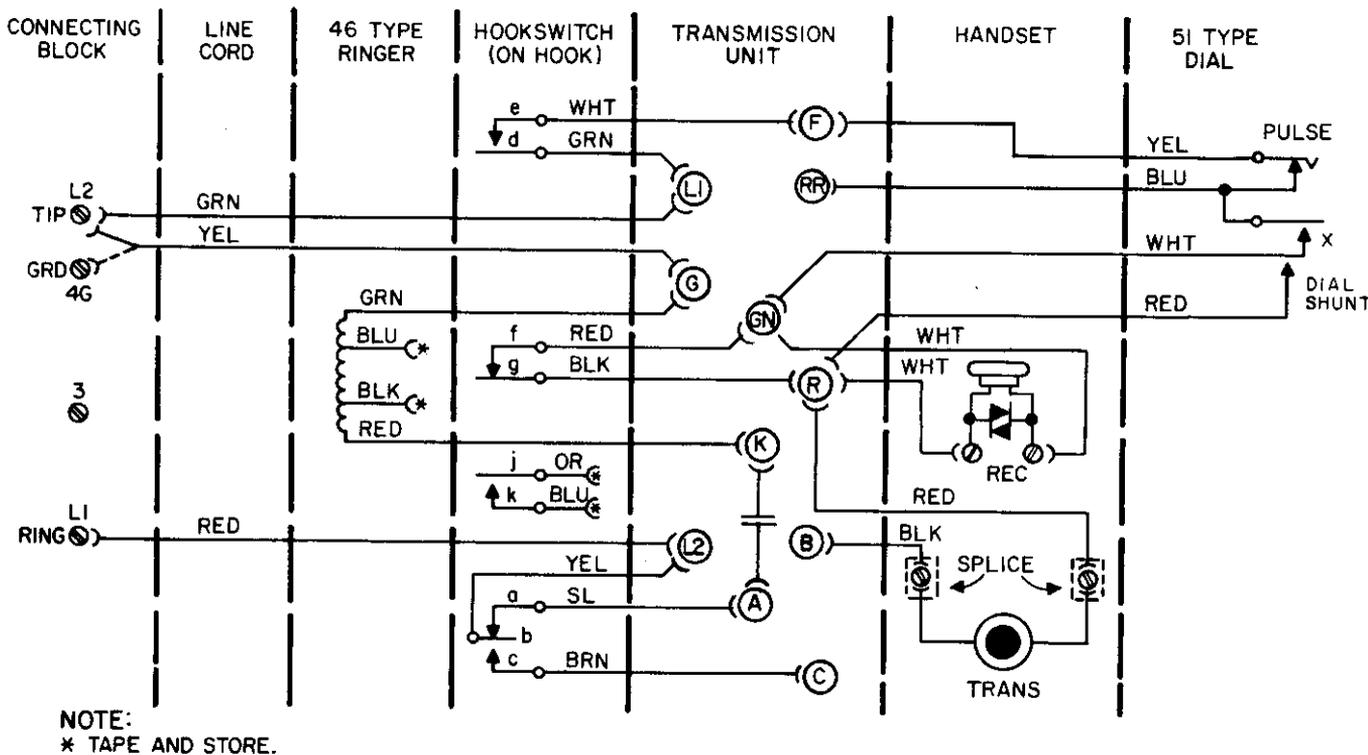


Figure 7. Typical Wiring Diagram of Specialty Telephone Set Equipped with Stromberg-Carlson Components.

Ringer

6.02 If the ringer fails to operate, check that:

- (a) Ringer coil is not open.
- (b) All wire connections are tight and properly connected.
- (c) Bias spring is correctly positioned.
- (d) Gong is free of all obstructions such as loose wires or foreign material.

If the ringer is defective or damaged, replace the ringer.

Cradlephone

6.03 To gain access to the apparatus assembly proceed as follows:

- (1) Remove the four hex-head screws holding the bottom cover and lift off the bottom cover.
- (2) Remove the four screws in the apparatus assembly and carefully lift the assembly out of the base.

6.04 Proceed as follows to replace the handset cord (Figure 11):

- (1) Remove the receiver cap (2), lift out the receiver unit (3), and disconnect the leads.
- (2) Remove the three screws (7) holding the lower transmitter shell (6) to the upper transmitter shell (13).
- (3) Slide the insulators (9) off the connectors (8) and disconnect the cord leads.
- (4) Remove the cord holding screw (10) and pull out the cord (1).
- (5) Remove the two decorative nuts (20).
- (6) Feed the two WHT leads of the new handset cord through the handle (14,22,16) and down through the receiver shell (15).
- (7) Connect the leads to the receiver unit (3) and screw on the receiver cap (2).

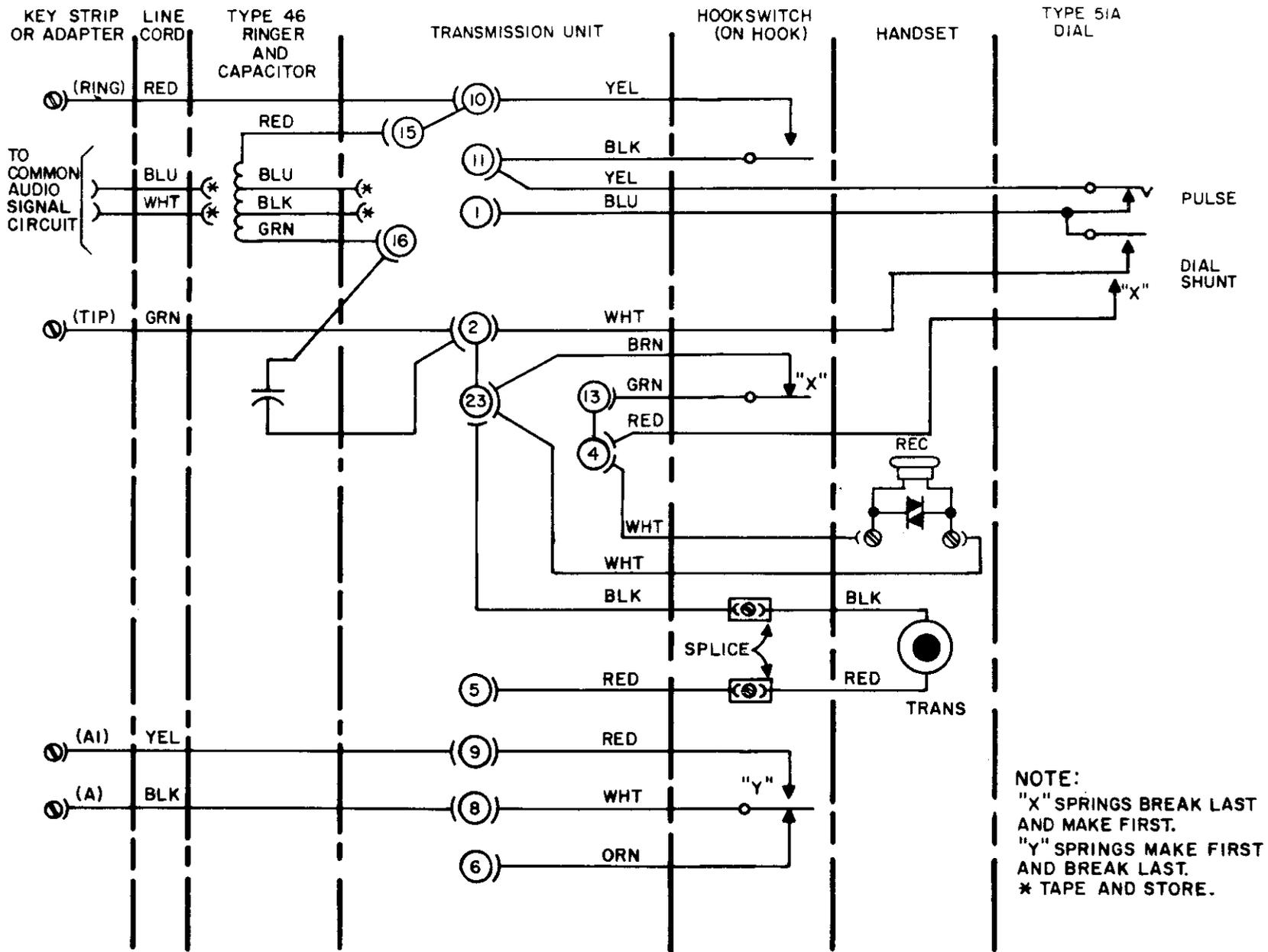
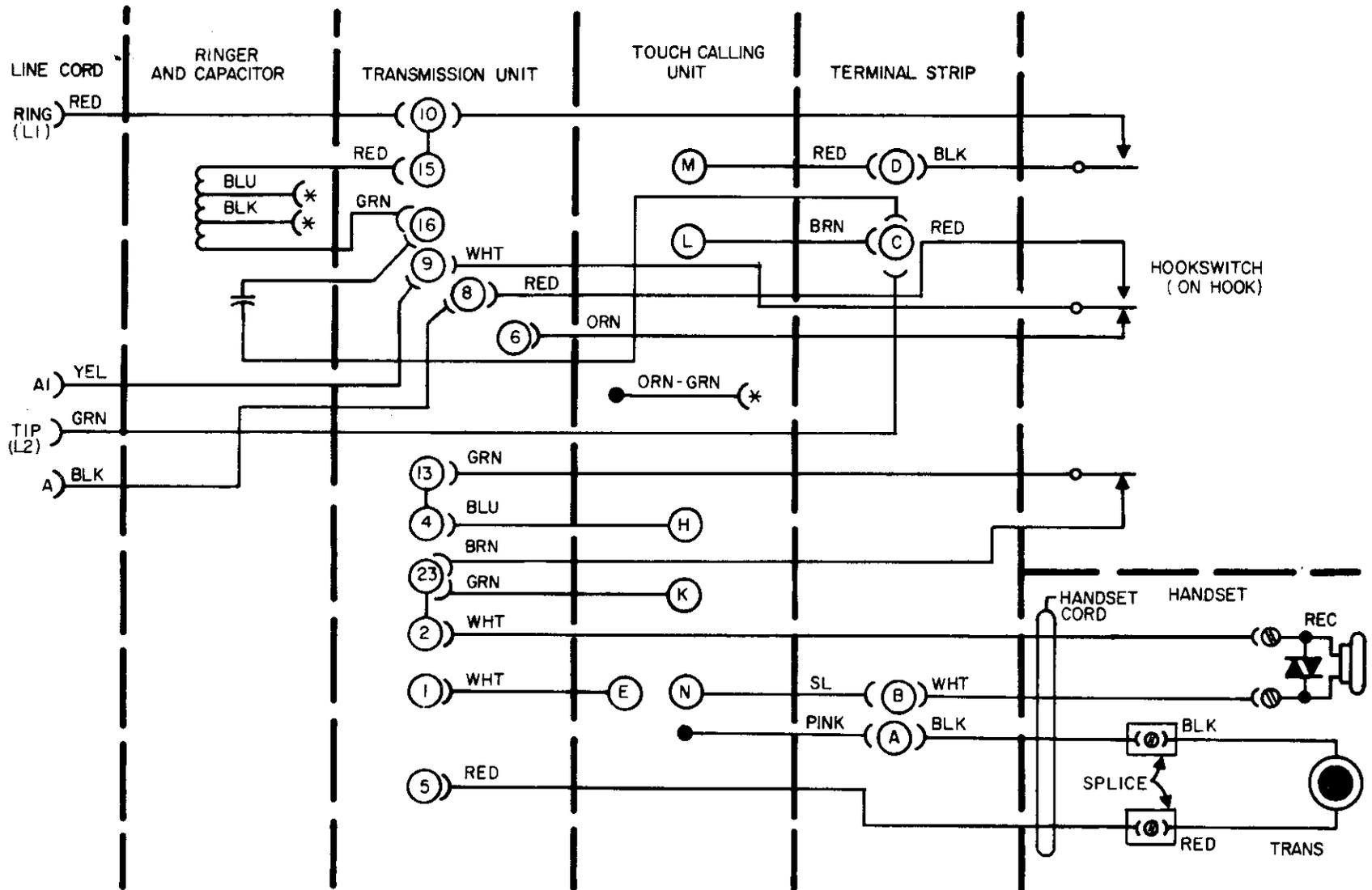


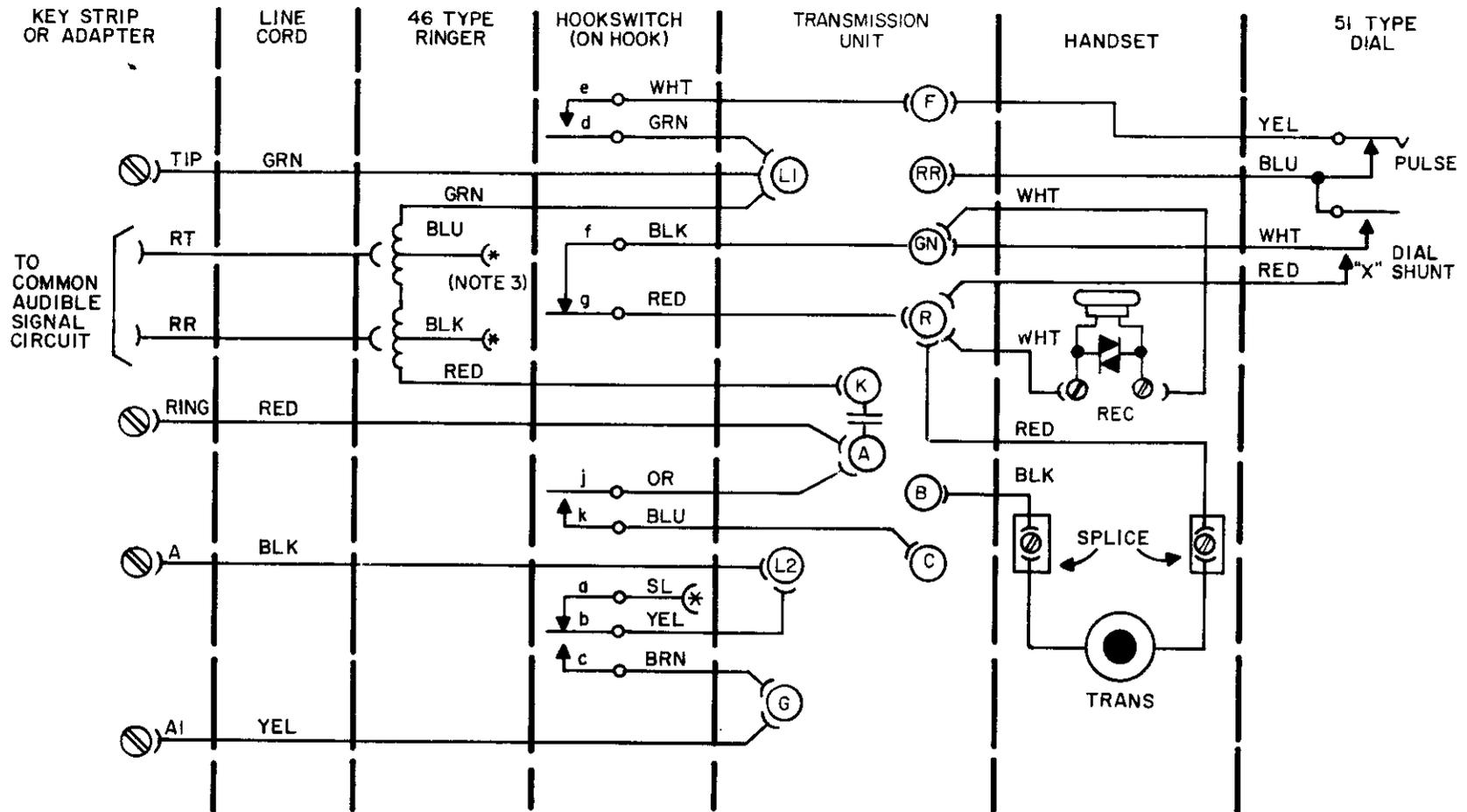
Figure 8. Typical Wiring Diagram of Specialty Telephone Set Equipped with GTE Automatic Electric Components and Wired for Use in a Key Telephone System.



NOTE :

\* TAPE AND STORE

Figure 9. Typical Wiring Diagram of Touch Calling Chestphone Wired for Use in Key Telephone System.



**NOTES:**

1. TO PREVENT FALSE HOLD CONDITION WHEN HANDSET IS RESTORED, HOOKSWITCH CONTACTS D AND E MUST BREAK BEFORE B AND C BREAKS.
2. FOR COMMON AUDIBLE WITH 10A1 AND 10A2 KTS. DISCONNECT RINGER FROM NETWORK AND RECONNECT TO RT AND RR LEADS.
3. \* TAPE AND STORE.

Figure 10. Typical Wiring Diagram for Using Stromberg-Carlson Transmission Unit Telephone Set In Key Telephone System.

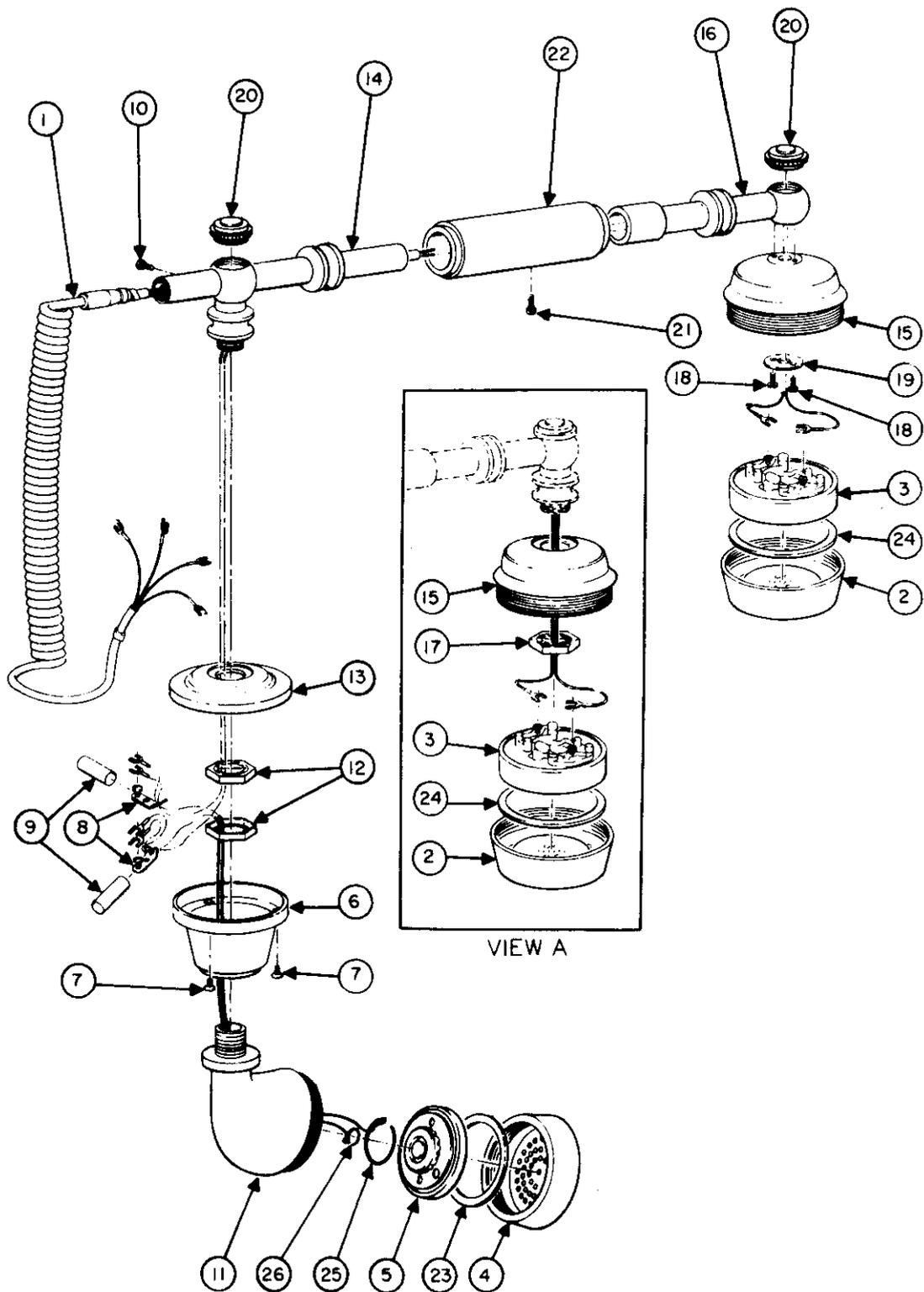


Figure 11. Cradlephone Handset.

- (8) Feed the RED and BLK leads down through the upper transmitter shell (13).
- (9) Slip the insulators (9) over the leads, make the connections to the transmitter leads, red to red and black to black, and slide the insulators over the connectors (8).
- (10) Secure the handset cord to the handle (14) with the screw (10) and secure the lower transmitter shell (6) to the upper transmitter shell (13) with three screws (7).
- (11) Replace the decorative nuts (20).

#### Chestphone

6.05 To gain access to the apparatus assembly, remove the four screws which hold the baseplate to the base frame and carefully lift out the apparatus assembly.

6.06 To replace the handset cord, proceed as follows (Figure 12):

- (1) Remove the two screws (2) to release the cover (1).
- (2) Remove the three screws (4) and the receiver cover (3).
- (3) Disconnect the leads from the receiver (5).
- (4) Disconnect the red and black handset cord leads from the connectors (6) and pull the cord out of the notch in the transmitter cover (7).
- (5) Insert the new handset cord leads through notch in transmitter cover.
- (6) Connect the red and black cord leads to the connectors (6), red to red and black to black.
- (7) Connect the white leads to the receiver (5).
- (8) Position the receiver and install the receiver cover (3) and screws (4).

- (9) Place the receiver leads in their channel, place the cover (1) on the base and secure with two screws (2).
- (10) Pass the cord through the hole in the base cover and route through the channel in the base. Connect the leads to the transmission unit using the appropriate figure.

#### Candlestick Telephone

6.07 To gain access to the components in the base of the Candlestick telephone set, remove the four screws around the perimeter of the base. Carefully lift the housing up off the base.

6.08 To get to the terminals, the platform holding the dial and hookswitch must be lifted off. The platform is held by a screw from the bottom of the base and a second screw from the top of the platform.

6.09 To replace the earpiece (handset) cord, proceed as follows:

- (1) Unscrew the earpiece cap and disconnect the leads from the receiver.
- (2) Unscrew the hook fitting from the earpiece housing and pull the cord out of the earpiece housing.
- (3) Remove the strain relief from the cord and pull the cord out of the hook fitting.
- (4) Insert the new cord through the hook fitting and place the strain relief on the cord.
- (5) Pass the leads into the earpiece housing and screw on the hook fitting.
- (6) Tape and store the red and black leads, and connect the white leads to the terminals on the receiver.
- (7) Place the receiver into the earpiece housing and screw on the earpiece cap.
- (8) Tape and store the other end of the red and black leads and connect the

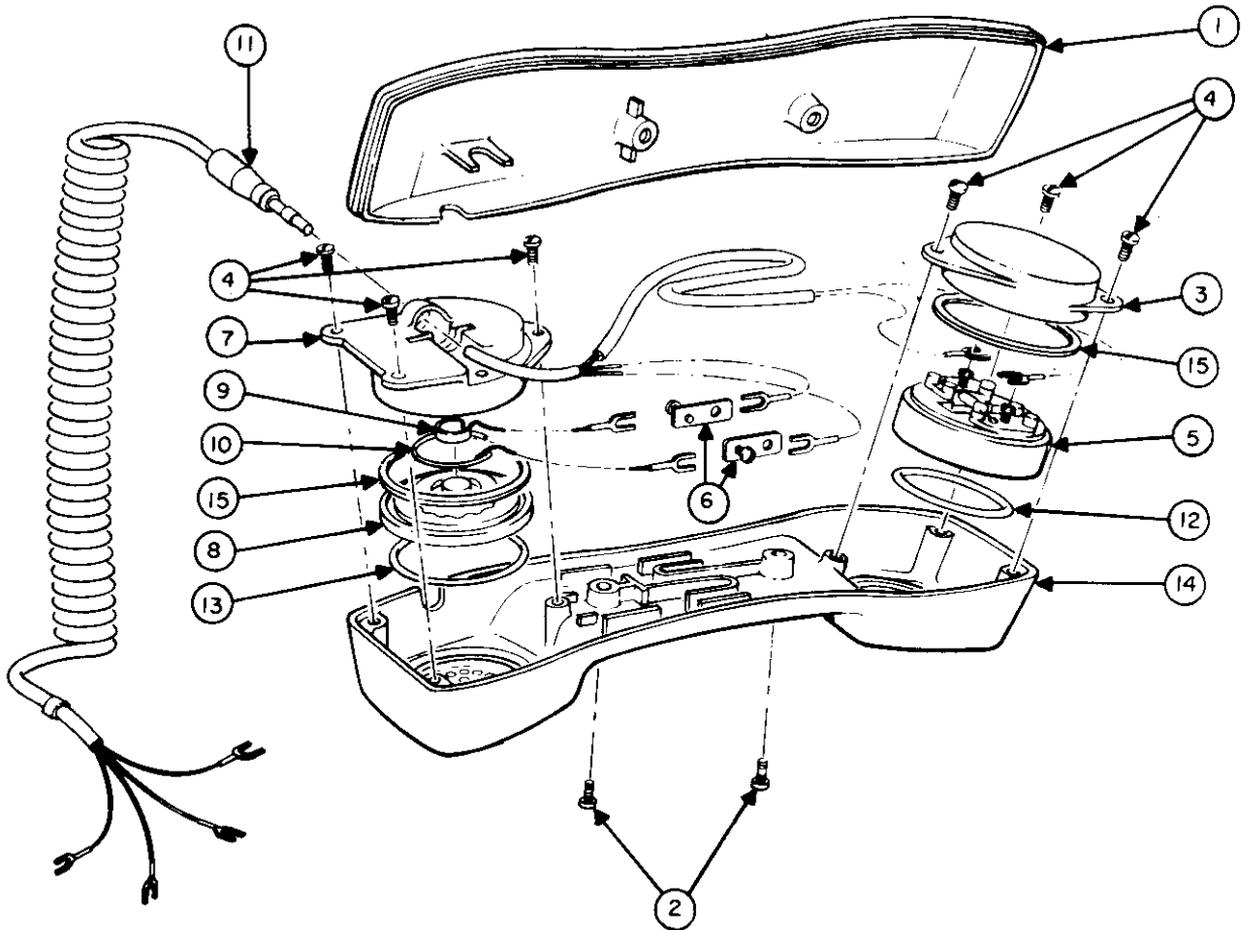


Figure 12. Chestphone Handset.

white leads to terminals 3 and 4 in the base.

6.10 To replace the transmitter:

- (1) Unscrew the transmitter cap from the transmitter housing.

NOTE: Do not attempt to unscrew the transmitter cap by grasping the horn.

- (2) Lift out the transmitter and release the snap and ring terminals from the transmitter.
- (3) Place the snap and ring terminals on the new transmitter.
- (4) Insert the transmitter into the transmitter housing and screw on the transmitter cap.