

EMERGENCY TELEPHONE SET  
SHOP PROCEDURE

1. GENERAL

1.01 This section contains instructions for disassembly, assembly, and wiring for the GTE Automatic Electric L-8505 AO, BO, CO, and DO\* emergency telephone sets.

1.02 For disassembly, assembly, wiring, and testing of the 90M telephone set (part of the L-8505 DO), refer to Section 997-110-800.

1.03 All item numbers listed in parts 2 and 3, are shown as circled numbers in Figure 1. Item numbers shown in the stock list of Figure 1 are used to order replacement parts. The box assembly is usually replaced in its entirety; however, the various components of the box assembly are shown in Figure 2.

2. DISASSEMBLY

Cover Assembly Removal

2.01 The cover assembly must be removed to gain access to components. To remove the cover assembly (item 5 of Figure 1), proceed as follows:

NOTE: Other item references in the following paragraphs are items in Figure 1.

- (1) Loosen the cover assembly screws (item 15).
- (2) Lift the cover assembly upward to separate it from the telephone set baseplate (item 17).

Handset Removal

2.02 To remove the handset (item 19), proceed as follows:

- (1) Disconnect the following handset leads from the transmission unit:
  - (a) YEL from terminal 4.
  - (b) RED from terminal 5.
  - (c) GRN from terminal 2.
  - (d) BLK from terminal 2.
- (2) Unhook the handset cord clamp (item 7), from the telephone set baseplate, and pull out the handset cord (item 26).

Hookswitch Removal

2.03 To remove the hookswitch (item 10), proceed as follows:

- (1) Disconnect the following hookswitch leads from the transmission unit:

- (a) ORN from terminal 4.
- (b) WHT from terminal 6.
- (c) VIO from terminal 2.
- (d) YEL from terminal 1.

- (2) Disconnect the following hookswitch leads from the terminal board:

- (a) BLK from terminal L1.
- (b) GRN from terminal 3.

- (3) Remove the hookswitch screw (item 14).
- (4) Lift the hookswitch upward to separate it from the telephone set baseplate.

Terminal Block Removal

2.04 To remove the terminal block (item 1), proceed as follows:

- (1) Disconnect the following terminal block leads from the transmission unit:
  - (a) RED from terminal 6.
  - (b) When pushbutton is used, remove the BRN and SL pushbutton lead from terminals 3 and 4.
- (2) Remove terminal block screws (item 12).
- (3) Lift the terminal block out of the telephone set baseplate.

Transmission Unit Removal

2.05 To remove the transmission unit (item 3), proceed as follows:

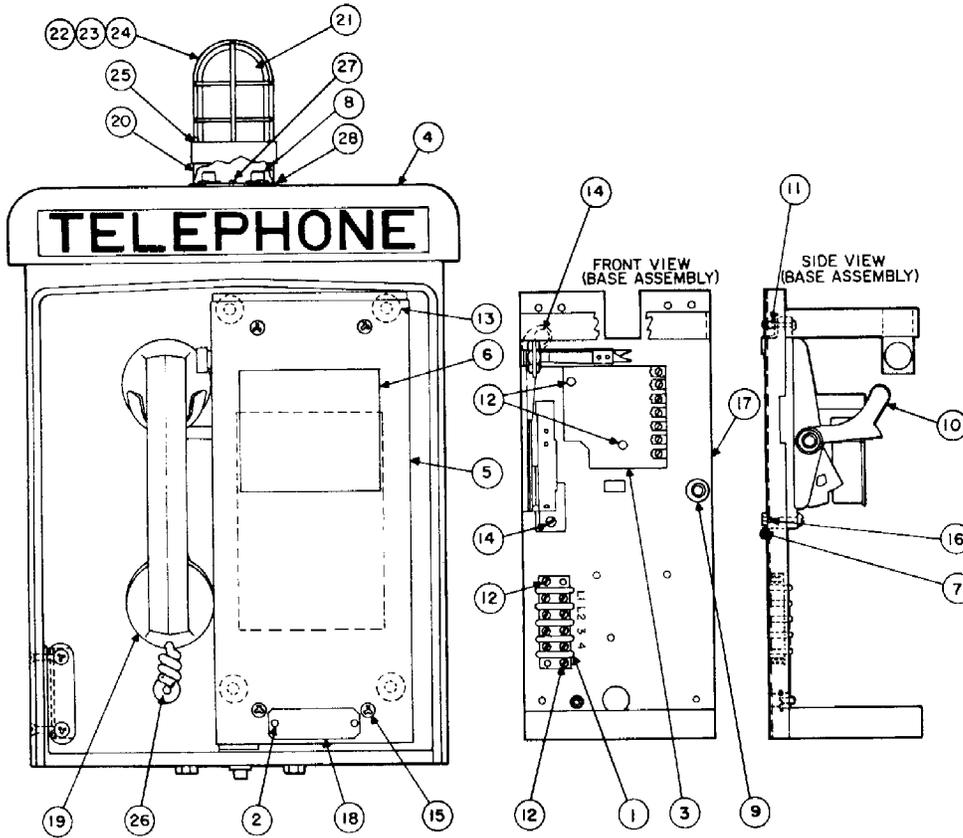
- (1) Make sure all leads have been disconnected from the transmission unit.
- (2) Remove the transmission unit screws (item 12).
- (3) Lift the transmission unit out of the telephone set baseplate.

Lamp Bulb Removal

2.06 Use the following procedure to replace the lamp bulb if the telephone is equipped with a lamp:

- (1) Loosen the two screws (item 27) of the lens guard that secures the lens (item 23) and lens guard (item 24) to the lamp, and remove the lens and lens guard.
- (2) Replace the lamp lens and lens guard and secure it with the lens guard screws.

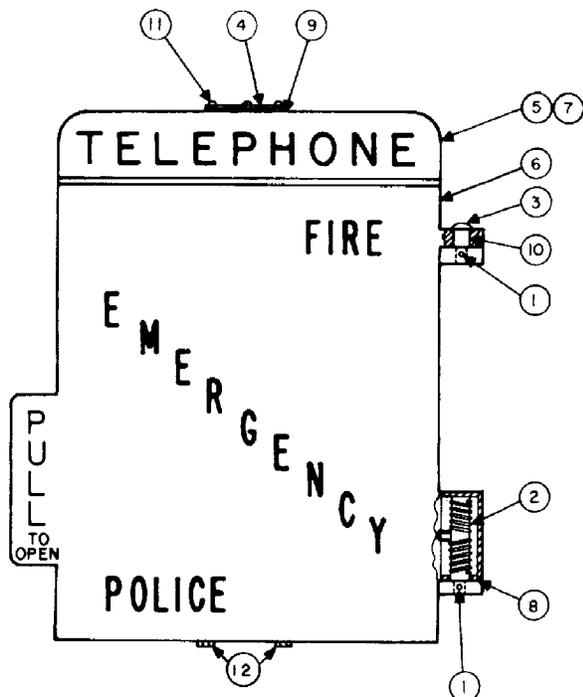
\*The L-8505 DO designation represents only the housing for mounting a Type 90M telephone set.



DO	CO	BO	AO	STOCKLIST		
AMT	AMT	AMT	AMT	DRAWING NO.	DESCRIPTION	ITEM
	1	1	1	D-150024-A2	TERMINAL BLOCK	1
	2	2	2	D-37440-A	RIVET	2
	1	1	1	WA-1148-A	TRANSMISSION UNIT	3
	1	1	1	D-48365-A	BOX ASSEMBLY	4
	1	1	1	D-400145-A	COVER ASSEMBLY	5
	1	1	1	D-530330-A	MYLAR INSTRUCTION CARD	6
	1	1	1	D-542637-B	CORD CLAMP	7
		S14	S14	HD-655000-B	1/2" PIPE PLUG	8
1	1	1	1	D-67431-A20	RUBBER GROMMET	9
	1	1	1	D-735394-A	HOOK SWITCH ASSY	10
	1	1	1	D-75204-E	BUSHING	11
	4	4	4	D-760734-A	SCREW	12
3	4	4	4	D-760735-A	SCREW	13
	2	2	2	D-760775-A	SCREW	14
	4	4	4	D-760935-A	SCREW	15
	1	1	1	D-77452-A	NUT	16
	1	1	1	D-780842-A	BASE PLATE ASSY	17
	1	1	1	D-78621-A	NAME PLATE	18
	1	1	1	L-9053-DA	HANDSET	19
1	1	1	1	FD-1020CP	GAASKET	20
1	1	1	1	FD-1023BA	LAMP BULB	21
1	1	1	1	FD-1023B8	LAMP ASSEMBLY	22
1	1	1	1	*	LENS	23
1	1	1	1	*	LENS GUARD	24
1	1	1	1	D-65576-AB	ADAPTER	25
1	1	1	1	D-543534-A	HANDSET CORD	26
				**	SCREWS	27
				**	ROUND PLATE	28

NOTE:  
 \* THESE ITEMS ARE PART OF LAMP ASSEMBLY ITEM 22.  
 \*\* THESE ITEMS ARE PART OF BOX ASSEMBLY, ITEM 4.

Figure 1. Item and Parts List for L-8505 Emergency Telephone Set.



QTY	STOCKLIST		
AMT	DRAWING NO.	DESCRIPTION	ITEM
2	D-37705-A	GROOVE PIN	1
1	D-37724-A	HINGE PIN AND SPRING ASSEMBLY	2
1	D-37725-A	UPPER HINGE PIN	3
1	D-490089-A	COVER (LIGHT HOLE)	4
1	D-490138-A	HOUSING	5
1	D-490140-A	COVER	6
	D-490141-A	HOUSING	7
1	D-70326-A	LOWER HINGE BEARING	8
1	FD-1020-CP	GASKET (TOP COVER)	9
1	FD-1020-EN	BUSHING (FLANGED NYLINER)	10
3		6-32 X $\frac{3}{8}$ " RHIMS	11
4		$\frac{1}{4}$ "-20 X $\frac{3}{8}$ " H H I CAP SCREW	12

Figure 2. Various Component Parts of Box Assembly.

### 3. ASSEMBLY

#### Transmission Unit Assembly

3.01 To mount the transmission unit (item 3), proceed as follows:

- (1) Place the transmission unit into position on the telephone set baseplate and secure it with screws (item 12).

#### Terminal Block Assembly

3.02 To mount the terminal block (item 1), proceed as follows:

- (1) Place the terminal block into position on the telephone set baseplate and secure it with screws (item 12).
- (2) Connect the RED cord between transmission unit terminals L2 and 6 (Figure 2).

#### Hookswitch Assembly

3.03 To mount the hookswitch (item 10), proceed as follows:

- (1) Place the hookswitch into position on the telephone set baseplate and secure it with screws (item 14). [See paragraph 3.04(1).]
- (2) Connect the hookswitch leads to the transmission unit terminals and terminal block terminal (part 4).

#### Handset Assembly

3.04 To mount the handset (item 19), proceed as follows:

- (1) Insert the handset cord (item 26), placing it under the telephone set baseplate and clamping it in position with the cord clamp (item 7) and cord clamp screw (item 14).
- (2) Connect the handset cord conductors to the transmission unit terminal (part 4).

3.05 To assemble the handset cord at the handset, refer to the 473-802 subdivision of GTE Practices.

#### Cover Assembly

3.06 To mount the cover assembly (item 5), proceed as follows:

- (1) Place the cover assembly into position in the telephone set baseplate and secure with screws (item 15).

#### Lamp Assembly

3.07 Use the following procedure to install the lamp on top of the box assembly.

- (1) Remove the three screws and round plate (items 27 and 28) from the top of the box assembly. The gasket (item 20) should remain in place.
- (2) Place the adapter (item 25) over the gasket that remained on top of the box assembly, and fasten the adapter to the housing with the three screws previously removed. The adapter has provisions for attaching 1/2-inch conduit for running power wires to the lamp. Remove the lamp lens (item 23) and lens guard (item 24) from the lamp base. Place gasket on the top surface of the adapter and the lamp base on the gasket. Fasten the lamp base to the adapter with three 6-32 by 1-1/2-inch (RHIMS) screws.
- (3) Insert the lamp bulb (item 21) into the lamp socket and replace the lamp lens and lens guard.

NOTE: It may be more convenient to connect the 110-volt a-c wires to the lamp before its installation.

4. WIRING

4.01 For the L-8505 AO, BO, CO, and DO emergency telephone sets make the following electrical connections (Figure 3):

- (1) Connect the following hookswitch leads to the transmission unit terminals:
  - (a) ORN to terminal 4.
  - (b) WHT to terminal 6.
  - (c) VIO to terminal 2.

- (d) YEL to terminal 1.
- (2) Connect the following hookswitch leads to the terminal block terminal:
    - (a) BLK to L1.
    - (b) GRN to 3.
  - (3) Connect the following handset cord conductors to the transmission unit terminals:
    - (a) GRN to terminal 2.
    - (b) RED to terminal 5.
    - (c) YEL to terminal 4.
    - (d) BLK to terminal 2.

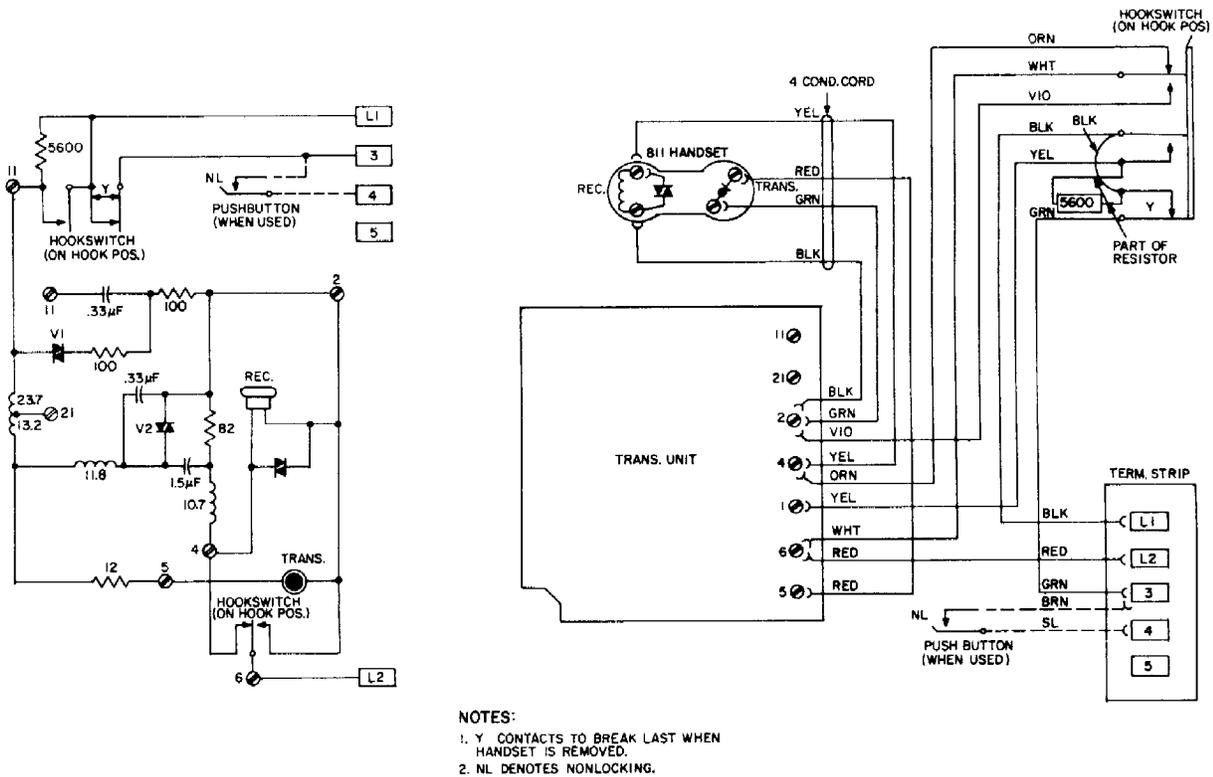


Figure 3. Schematic Wiring Diagram, Emergency Telephone Set.