

TELEDIALER (T.M.) 32  
INSTALLATION & MAINTENANCE

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1. General

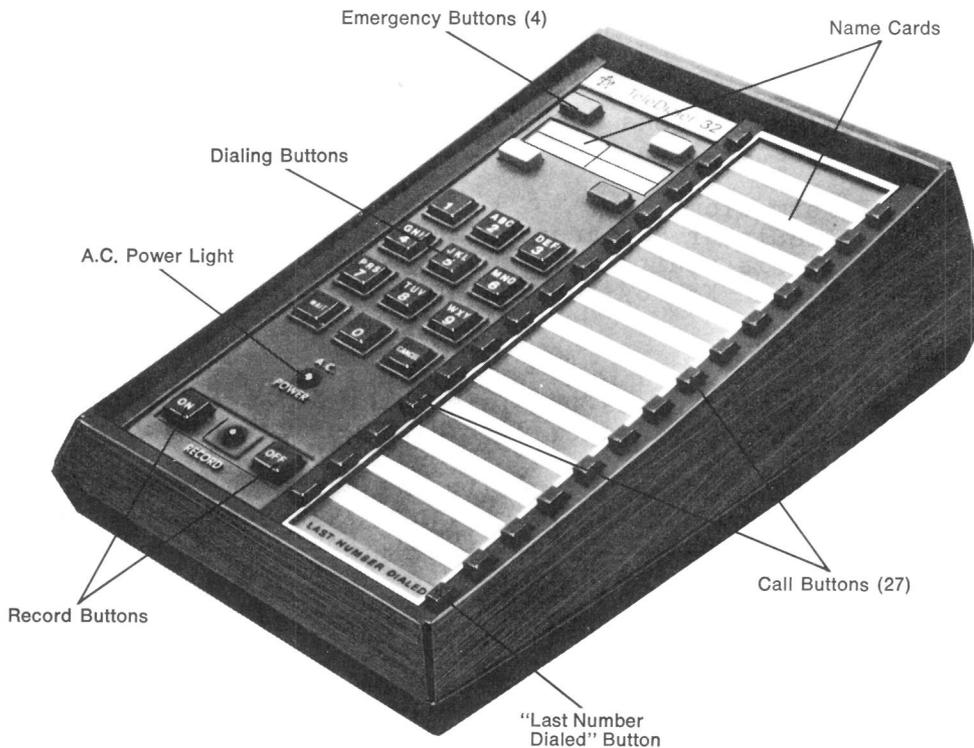
- 1.01 This section introduces the TeleDialer 32, a solid state 32 number repertory dialer with dial pulse output.
- 1.02 It is installed as an adjunct to any new or previously installed rotary dial or Touch-Tone (®) telephone set. This unit has only dc dial pulse capability, although it may be associated with a Touch-Tone (®) station.
- 1.03 A maximum number of 16 digits may be stored.

*Note: The information in this section is based on the manufacturer's manuals. Permission to use copyrighted material was granted by A.T.C.*

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Figure 1  
TeleDialer 32  
Identification of Controls



## 2. Description

2.01 The TeleDialer is rectangular in shape and has a slightly sloped face. It is 8½ inches long, 5-5/8 inches wide and about 3 inches deep.

2.02 The face of the TeleDialer 32 (Figure 1) includes 31 buttons for automatic dialing of stored telephone numbers and one button ("Last Number Dialed") for automatic repeat calling of any number last manually dialed.

- (a) Twenty-eight of these 32 buttons are on the right face of the unit and arranged in two rows of 14 buttons each. The last button in the right hand column is the "Last Number Dialed" button.
- (b) The remaining 4 buttons are located on the upper left face and are intended for storage of emergency or frequently called numbers.

2.03 The units left face also includes a push-button dial, record-on, record-off, wait and cancel keys, as well as record and ac power indicator lights.

2.04 PBX compatibility where "wait for second dial tone" is required.

2.05 A rechargeable battery provides standby power for memory retention for 24 hours to prevent loss of memory during short interruptions of Commercial power. All repertory and manual dialing functions will be inoperative during a power outage, but operation of the associated set will be unaffected.

2.06 The TeleDialer 32 required connection to an ac power source: 105 - 130VAC, 60Hz.

*Notes: (1) Failure to maintain ac power over an extended period of time can result in loss of memory contents; therefore, the ac power source should not be controlled by a switch.*

*(2) Do not install battery pack in TeleDialer until it is ready for use and plugged into the ac power source otherwise battery will gradually discharge.*

*(3) The maximum distance of plug-in transformer from the TeleDialer is 150 ft. with 24 gauge wire.*

### 3. Installation/Connections

*Caution: The TeleDialer may not be compatible with some types of subscriber carriers, particularly those using low voltage battery feed to the instrument.*

3.01 The telephone set should be installed prior to the TeleDialer 32 and all standard instrument installation procedures completed before installing the dialer. Do not apply power or install battery until all connections are complete.

3.02 Normally, the Teledialer line cord is connected, as shown on Figure 2, to any single line telephone set that does not have A or A1 lead control. Multiline set connections should be made at the appropriate terminals within the telephone instead of at the connecting block (see Table B on Pages 18-21).

3.03 Using Figures 2 or 4 and Table B on Pages 18-21, make the necessary connections between the telephone and the TeleDialer.

3.04 When all connections are completed, install battery module. Make sure the contact strips of the battery module mate with contact strips of the enclosure.

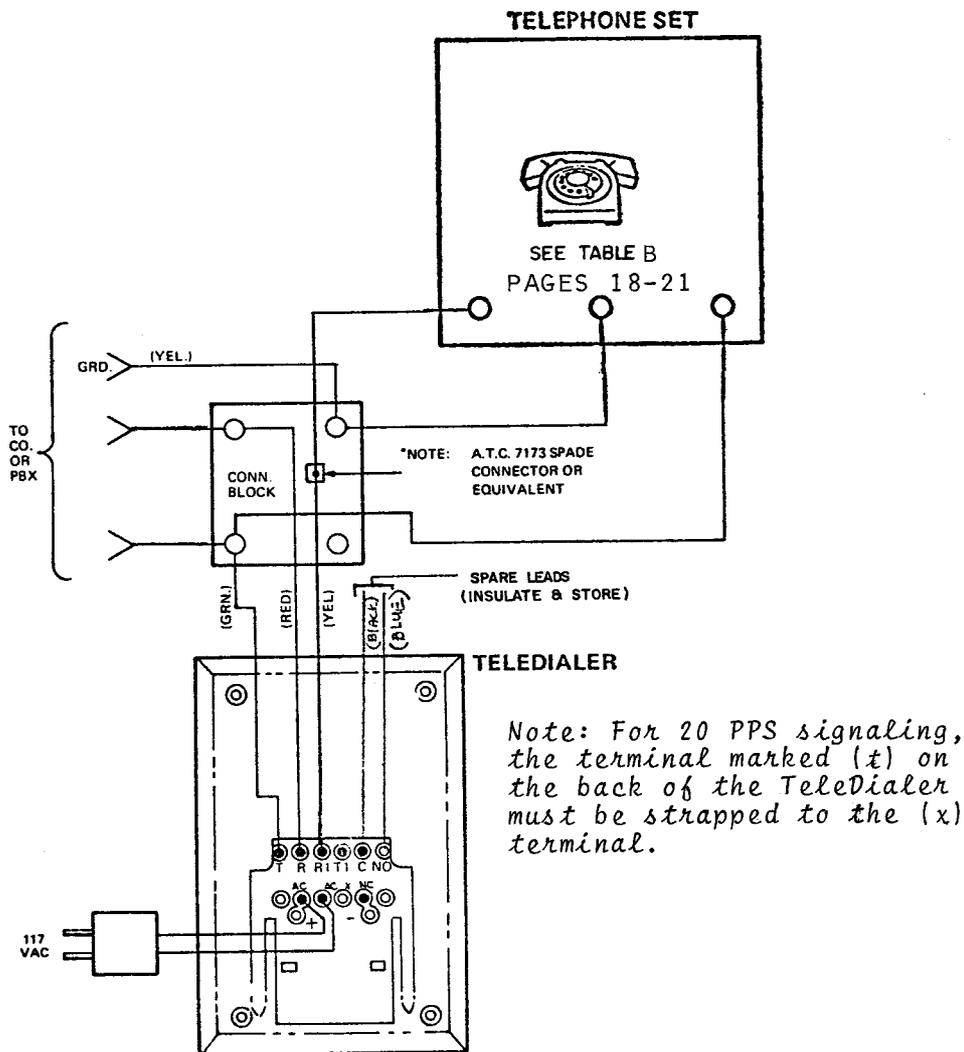
#### AUTOMATIC NUMBER IDENTIFICATION (ANI)

3.05 The TeleDialer is compatible with 2-party lines equipped for ANI service, where the tip party is identified by a 2650  $\sim$  or 3000  $\sim$  inductive resistance to ground at the telephone instrument. The TeleDialer is not compatible with older type sets using a resistive ground.

#### CONNECTION WITH SPEAKERPHONE

3.06 For TeleDialer connections to instruments equipped with speakerphones, refer to Table B, Pages 18-21.

3.07 If audible dial pulses over the speakerphone are found objectionable, connect the spare blue and black leads, in line cord, to terminals P3 and P4 of the speakerphone (Figure 4).



**FIGURE 2 (TYPICAL)**  
**TELEDIALER CONNECTING BLOCK CONNECTIONS**  
 (RESIDENTIAL USE)

*Note: The T, R, R1 and T1 designations on TeleDialer are not associated with Tel. Co. (Bell System) tip and ring, they are just terminal markings. Figure 3 shows a simplified connection; the red and yellow leads of the TeleDialer are in series with the tip side of the line with the yellow lead on the telephone side; the green lead of the TeleDialer bridges the ring side of the line.*

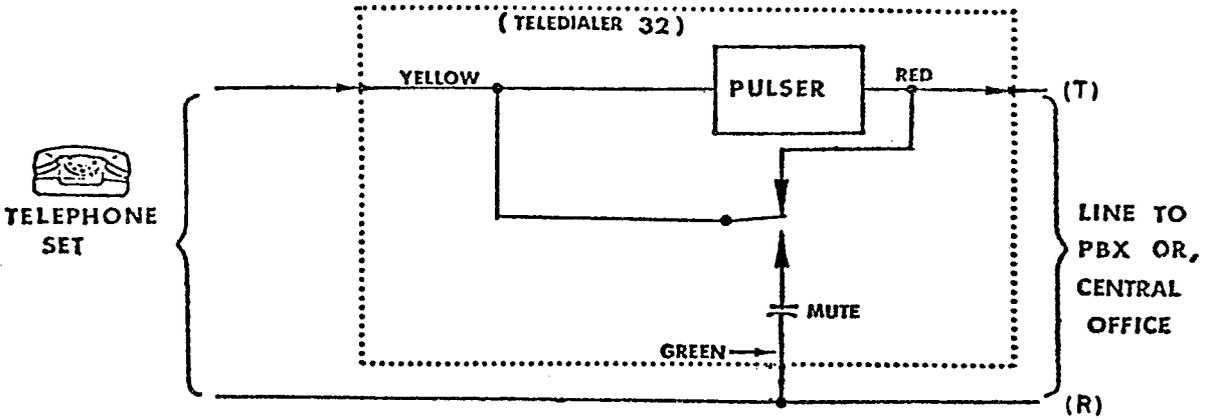


Figure 3 Simplified Hook-Up Diagram of TeleDialer 32 Pulser,

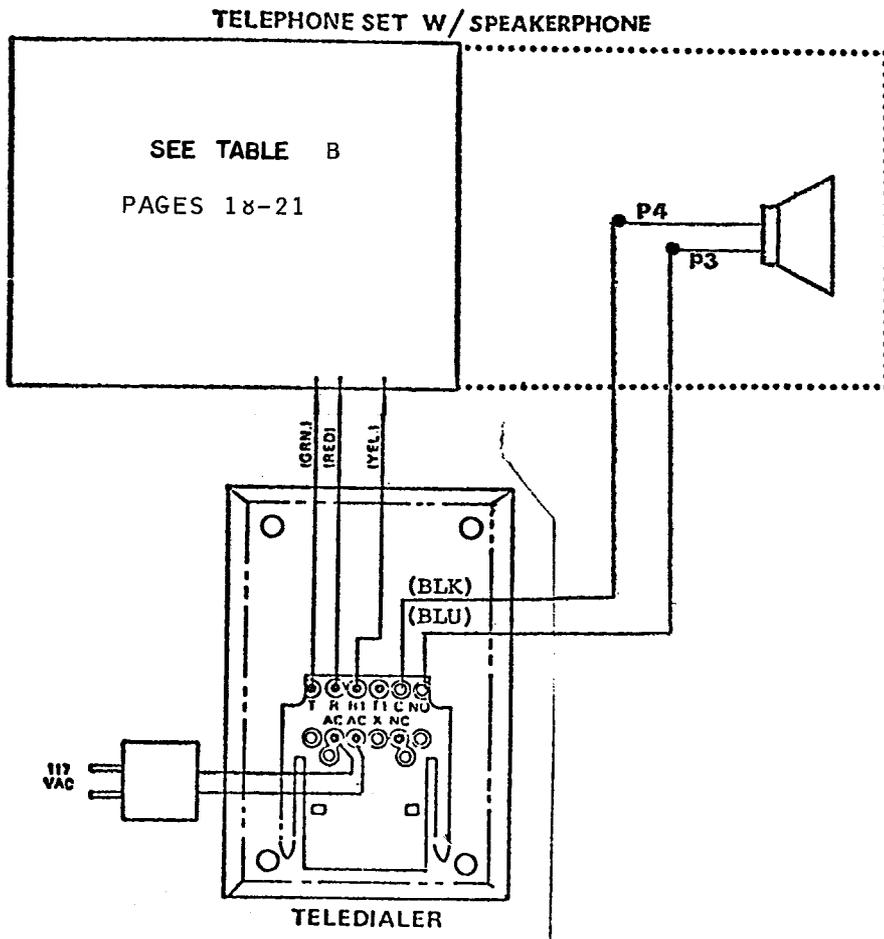


Figure 4 TELEDIALER SPEAKER PHONE CONNECTIONS (TYPICAL)

## WALL MOUNT INSTALLATION

3.08 The 110114 Wall Mounting Bracket allows the TeleDialer to be stationed on a wall location. To provide this feature, obtain two No. 8x1 inch round head screws or depending wall construction, other suitable hardware and proceed as follows:

- (a) Observing the wall bracket orientation as shown in Figure 5, mount it to the wall placing the No. 8x1 inch screws through the two mounting holes on the bracket. Do not overtighten the screws.
- (b) Holding the TeleDialer, flush against the face of the wall bracket, push in and then down, the body of the TeleDialer should move downward about 1/8" and lock in place. Pull out on the unit to assure that it has locked in.

## TO REMOVE FROM WALL MOUNT

3.09 When necessary, the TeleDialer can be removed from its wall mounting by inserting a screwdriver or other suitable tool up through the hole (Figure 5) at the lower edge of the TeleDialer. The tool used should come to rest against a plastic tab located therein. Now, with one hand applying an upward lifting force on the TeleDialer, pull the handle of the tool used outward toward you, so that the tip of the tool will move the inner plastic tab back toward the wall  $\frac{1}{4}$  inch or less. While the plastic tab is being held back, the TeleDialer should slide upward and free of the bracket.

## OPTIONS

3.10 The TeleDialer has two signaling options, 10 PPS (factory-wired) and 20 PPS. The 10 PPS signaling must be used behind any step-by-step (SXS) equipment. The 20 PPS signaling option may be used for all other types of PBX or Central Office (CO) equipment. See Figure 2 for strapping.

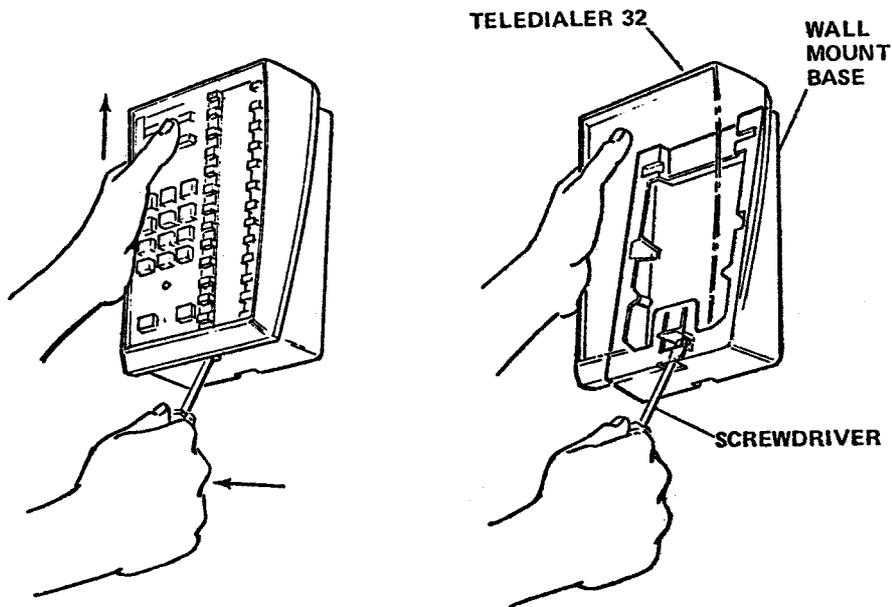


FIGURE 5

REMOVAL OF TELEDIALER FROM WALL-MOUNT

INSTALLATION CHECK PROCEDURE

HOOKSWITCH SENSING CHECK

3.11 First, insure that the connections are in accordance with Table of Contents. A Hookswitch sensing check should be made by doing the following:

- (a) Press and release the RECORD ON button and note that the RECORD light goes ON.
- (b) Lift the handset off-hook and note that the RECORD light goes out.

MANUAL DIALING CHECK

3.12 Check the manual dialing feature as follows:

*Note: Regardless of how an initial call may have been placed, an on-hook condition must be maintained for at least one second before placing a second call.*

- (a) Lift the handset off-hook and wait for dial tone.
- (b) Dial the desired number using the dialing buttons on the TeleDialer.
- (c) Verify that the number dialed was reached.

## LAST-NUMBER-DIALED CHECK

- 3.13 Check the last-number-dialed feature as follows: (This test assumes the test of Paragraph 3.12 was previously made).
- (a) Lift the handset off-hook and wait for dial tone.
  - (b) Press and release the LAST NUMBER DIALED button.
  - (c) Verify that the same number dialed in Paragraph 3.12 is reached.

## MEMORY CHECKS

- 3.14 Check the store and automatic dial feature as follows:
- (a) With the handset on-hook, press and release the RECORD ON button.
  - (b) Press and release one of the 32 call buttons.
  - (c) Store a number in memory by dialing it on the dialing buttons.
  - (d) Press and release the RECORD OFF button.
  - (e) Lift the handset off-hook and wait for the dial tone.
  - (f) Press and release the same call button used in (b).
  - (g) Verify that the proper number was called.

## ERASE FUNCTION CHECK

- 3.15 Check the erase function of the TeleDialer by erasing the number stored during the check in Paragraph 3.14 as follows:
- (a) Press and release the RECORD ON button.
  - (b) Press and release the call button selected in Paragraph 3.14 (b).
  - (c) Press and release the WAIT button.
  - (d) Press and release the RECORD OFF button.
  - (e) Lift the handset off-hook and wait for dial tone.
  - (f) Press and release the call button used in (b).
  - (g) Verify that no dialing sound is heard in the receiver and that no call is placed.

3.16 This completes the TeleDialer installation check. Make any remaining functional checks on the installation in accordance with standard telephone operating procedures.

*Caution: Do not attempt any field repair of the electronics associated with the TeleDialer 32. Field repair should be limited to replacement of battery, transformer or complete unit (see Paragraph 5.01).*

*It is suggested that any numbers stored in the TeleDialer memory during testing be erased before turning the unit over to the subscriber. Use the procedure in Paragraph 3.15 for erasure.*

#### 4. Operational Description

4.01 Controls on the face of the TeleDialer, Figure 1, consists of the following:

- (a) 32 Call Buttons for addressing telephone number memory locations.
  - (1) Four of these are separately located for emergency of special calling.
  - (2) Another one of these allows automatic recalling of any number last manually dialed.
- (b) 2 Push buttons (RECORD ON and RECORD OFF), for initiating or terminating a recording operation.
- (c) 10 Dialing buttons for manually dialing and/or recording the digits 0 through 9.
- (d) 1 Push button (WAIT), used in connection with calls requiring a wait for second dial tone. The WAIT button is also used to erase numbers from memory.
- (e) 1 Push button (CANCEL), used to cancel a number storing operation.

4.02 To use the TeleDialer for any of its intended functions, proceed as in the appropriate procedure as follows.

## USING THE TELEPHONE WITHOUT THE TELEDIALER

- (a) The telephone set connected to the TeleDialer can be used, normally, without any restrictions.

## USING THE TELEDIALER FOR MANUAL CALLING

- (a) Lift the telephone handset and wait for dial tone.
- (b) Dial the desired number using the 10 dialing buttons of the TeleDialer.

## RECORDING A NUMBER IN THE TELEDIALER MEMORY WITH THE HANDSET ON-HOOK

- (a) Select one of the 32 number locations on the TeleDialer name panel.
- (b) Press and release the RECORD ON button. The RECORD ON lamp should light.
- (c) Press and release the calling button at the panel location chosen.
- (d) \*Dial the number using the dialing buttons on TeleDialer.
- (e) Press and release the RECORD OFF button.

*\*Note: When recording a number that uses an access code digit, use the following sequence in dialing:*

- (1) *Dial the access code digit.*
- (2) *Press and release the WAIT button.*
- (3) *Dial the remaining telephone number.*

## RECORDING A NUMBER WITH THE HANDSET OFF-HOOK (WHILE PLACING A CALL)

- (a) Lift the handset off-hook and wait for dial tone.
- (b) Follow the steps (a) through (d) of the above procedure.

## TO CANCEL A NUMBER WHILE RECORDING

- (a) If, for any reason, it is necessary to cancel a number storing operation, follow one of the two procedures.

*Note: The CANCEL button cannot be used in place of the telephone hookswitch to "hang up" after a call.*

TO CANCEL WHILE PLACING A CALL

- (a) Press and release the CANCEL button or momentarily hang up.

*Note: The canceling operation takes the unit out of the RECORD mode and the RECORD ON light will thus go out. To re-record, it is necessary to again depress the RECORD ON button before redialing.*

TO CANCEL WHILE RECORDING ON-HOOK

- (a) Press and release (again) the call button used at the first of the recording operation.
- (b) Redial the number if desired.

TO AUTOMATICALLY CALL A RECORDED NUMBER

- (a) Lift the handset off-hook and wait for dial tone.
- (b) Press and release the desired call button.
- (c) Wait for the called party to answer.

*Note: If an access number was recorded, the automatic dialing will stop. Listen for a second dial tone then momentarily depress the selected call button again to complete dialing.*

TO CALL AGAIN AUTOMATICALLY THE LAST NUMBER MANUALLY DIALED

- (a) Even though not purposely recorded, the last number dialed manually from the TeleDialer has been automatically recorded or stored in the LAST NUMBER DIALED register (lower right of panel). To have the number recalled automatically, proceed as follows:
  - (1) Lift the handset (if replaced) and wait for dial tone.
  - (2) Press and release the LAST NUMBER DIALED button.
  - (3) Wait for the called party to answer.

*Note: If an access number was used the automatic dialing will stop. Listen for dial tone, then momentarily depress and release the LAST NUMBER DIALED button again to complete dialing.*

## TO REPLACE A NUMBER WITH ANOTHER

- (a) Using the new number, enter it as described in Paragraph 4.02 RECORDING A NUMBER IN THE TELEDIALER MEMORY WITH THE HANDSET ON-HOOK. The new number will automatically replace the previous one in memory.

## TO DELETE OR ERASE A NUMBER

- (a) To Completely delete or erase a number from memory, proceed as follows:
- (1) Press and release the RECORD ON button.
  - (2) Press and release the calling button of the memory to be erased.
  - (3) Press and release the WAIT button.
  - (4) Press and release the RECORD OFF button.

## TO WRITE A NUMBER ON THE NAME PANEL

- (a) Two name-writing areas are provided on the face of the TeleDialer, a 4 address and a 27 address area. Each area is covered by a clear plastic shield, Under the larger shield are to be found:
- (1) A name card.
  - (2) A second (spare card.
  - (3) A condensed instruction card.
- (b) To lift the larger shield, place a suitable instrument (fingernail may be used) under the upper edge of the shield and gently pry up and out. To remove the small shield, pry out using a pin or open paper clip in the small hole at the upper edge of the shield.
- (c) Since you may want to reuse any writing space, it is suggested that pencil or typewriter be used rather than felt tip or ballpoint pen for easier erasing of the old number.

5. Maintenance

5.01 If the unit fails to function properly, refer to the Trouble Analysis Chart on Page 17. If this procedure fails to correct the trouble, return the unit for repair.

5.02 For purposes of physical or cosmetic repair, refer to Table A for replaceable parts. The panel or surface of the unit may be cleaned if needed by using a soft cloth dampened with a diluted mild detergent.

#### BATTERY

5.03 The internal battery has an expected life of from 2 to 4 years.

5.04 The battery functions as an emergency power supply only, however; total degradation of the battery may cause it to short out the system. If the unit fails to operate properly, remove the battery and test the unit. If it still does not function properly; replace the battery.

5.05 If battery replacement is deemed necessary, proceed as follows:

- (a) First, remove the battery cover on the back of the TeleDialer by placing a finger against the housing, directly below the work REMOVE.
- (b) Now, press upward against the edge of the cover while at the same time, pressing down against the housing of the TeleDialer. The cover should snap free.
- (c) Remove the old battery by gently prying it up and out of the battery compartment.
- (d) Snap the new battery in place, with its two metal strips facing in and against the two mating strips of the battery compartment.

#### 6. Ordering Information

6.01 This equipment shall be ordered from and returned to W.E.

6.02 Order wording is as follows:

- (Qty) TeleDialer 32-011 (White) (Egg Shell) E/W 5 conductor  
MTG Cord
- (Qty) TeleDialer 32-012 (Black) (Wood Grain) E/W 5 conductor  
MTG Cord
- (Qty) Bracket, Wall Mounting 110114 (Designate black or white)

TABLE A  
TeleDialer Replaceable and Related Parts

ITEM	A.T.C. PART NO.	DESCRIPTION	NO. PER UNIT
1	110109	Window, Plastic (Small)	1
2	110108	Window, Plastic (Large)	1
3	110118	Name Card (Small)	1
4	110117	Name Card (Large)	2
5	110218	Mounting Cord (White) or 110218-1 (Black)	1
6	110138	Battery Pack	1
7	719012-01	Transformer w/cord (White) pr 719012-02 (Black)	1
8	110120	Insulator, Terminal (White) or 110120-1 (Black)	1
9	110110	Cover, Battery (White) or 110110-1 Black	1
10	110114B	Bracket, Wall mounting (Black) or 110114W (White)	1
	7173	Spade Connector	1

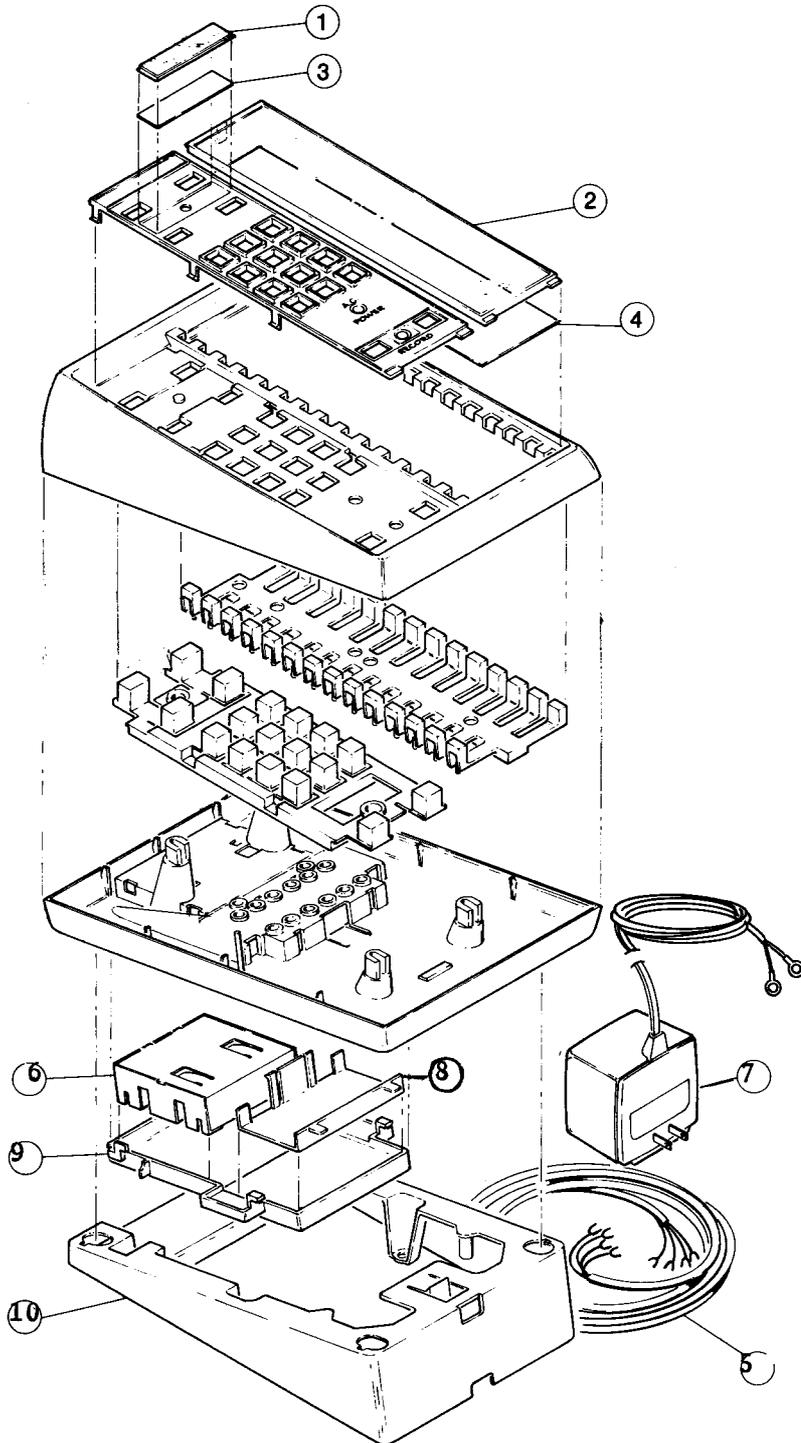


FIGURE 6  
TELEDIALER 32 REPLACEABLE PARTS ASSEMBLY



TABLE B

## PBX and Key-System Installations

*Note: This Table lists phones that may or may not employ a speakerphone.*

TELEPHONE TYPE & MODEL NO.	PAGE NO.	TELEPHONE TYPE	PAGE NO.
500	19	830 (See 500)	20
501 (See 500)	19	832 (See 500)	19
502 (See 500)	19	1500	19
503 (See 500)	19	1500M	20
507 (See 500)	19	1500S	20
509 (See 507)	19	1500Y (See 1500)	20
510 (See 500)	19	1502 (See 1500)	20
511 (See 500)	19	1510 (See 1500)	20
513 (See 500)	19	1511	20
514 (See 500)	19	1511D	20
516 (See 532)	19	1511F/H	20
532 (See 532)	19	1514	20
533 (See 532)	19	1515 (See 1500)	20
535 (See 532)	19	1554 (See 1500)	20
536 (See 532)	19	1555	20
554 (See 500)	19	1558D See 1511)	20
555 (See 500)	19	1563 (See 1511)	20
556 (See 500)	19	1565 (See 2565)	20
557 (See 507)	19	2500M	19
558 (See 500)	19	2500D/DM	20
559 (See 507)	19	2500Y (See 1500)	20
563 (See 500)	19	2502 (See 1500)	20
564	19	2510 (See 1500)	20
565 (See 564)	19	2511 (See 1510)	20
566 (See 500)	19	2515D (See 1511)	20
568 (See 500)	19	2554 (See 1511)	20
608 (See 500)	19	2558 (See 1500)	20
618 (See 500)	19	2564 (See 1511)	20
630 (See 500)	19	2565	20
631 (See 500)	19	2630	20
634 (See 500)	19	2631 (See 2631)	20
635 (See 500)	19	2832 (See 500)	19
701 (See 500)	19	2833 (See 500&2832)	20
702 (See 500)	19	881 A100 (See 1500)	20

TELEPHONE TYPE AND MODEL NUMBER	TELEDIALER LEAD COLORS AND CORRESPONDING TELEPHONE CONNECTION POINTS		
	GREEN	YELLOW	RED
2500M	C Terminal of network	F Terminal of network	Disconnect (G) lead from F ter- minal and connect to RED TeleDialer lead using a 7173 spade connector.
2500S	C Terminal of network	terminal #1 of terminal strip	Disconnect (G) lead from termi- nal #1 and connect to RED TeleDialer lead using a 7173 spade connector.
2514	C Terminal of network	terminal #2 of terminal strip	Disconnect (G) lead from termi- nal #2 and connect to RED TeleDialer lead using a 7173 spade connector.
500,501,502,510, 511,554,515,556, 555,558,503,514, 516,563,566,568, 630,631,608,618, 513,940,634,635, 701,702,830,832, 2832,2833	C Terminal of network	Disconnect (BL) lead from termi- nal F of Net- work and connect to YEL Tele- Dialer lead using a 7173 spade connector	F Terminal of Network.
564,565	Splice into (S-BR) LS lead or C terminal of network and connect to GRN Tele- Dialer lead.	Disconnect (BL) lead from ter- minal F of Net- work and conect to YEL Tele- Dialer lead using a 7173 spade connector.	F Terminal of Net- work.
507,509,557,559	Terminal #4 of 419A Diode.	Disconnect (BL) lead from ter- minal F of Net- work and connect to YEL Tele- Dialer lead using a 7173 spade connector.	F Terminal of Net- work.
532,533,535,536	Terminal #2 of 419A Diode.	Disconnect (BL) lead from ter- minal F of Network and connect to YEL TeleDialer lead using a 7173 spade connector.	F Terminal of Net- work.

TELEPHONE TYPE AND MODEL NUMBER	TELEDIALER LEAD COLORS AND CORRESPONDING TELEPHONE CONNECTION POINTS		
	GREEN	YELLOW	RED
2565,1565	C Terminal of network	L2 of network	Disconnect (G) lead from L2 and connect to RED TeleDialer lead using a 7173 spade con- nector.
2630,2631	C Terminal of network	Disconnect (G) lead from 12 on Terminal strip and connect to YEL Tele- Dialer lead using a 7173 spade con- nector.	Connect RED TeleDialer lead to 12 on Termi- nal Strip.
Touch Calling 2832,2833	C Terminal of network	F Terminal of Network	Disconnect (O) lead from F Terminal and connect to RED TeleDialer lead using a 7173 spade connector.
2851	C Terminal of network	Terminal 20 of terminal strip	Disconnect (G) lead from Ter- minal 20 and connect to RED TeleDialer lead using a 7173 spade con- nector.
1500,1554,1502,1510, 1515,1500Y,2500Y,2554, 2502,2510,2511,2558, 2500D/DM,1702,881A100	C Terminal of Network	F Terminal of Network	Disconnect (W) or (G) or (G- BK) lead from terminal E of Network and connect E/W speakerphone.

AND MODEL NUMBER	TELEPHONE CONNECTION POINTS		
	GREEN	YELLOW	RED
1511,D-F/H 1558D,2515B 1563,2563,2564,1564	C Terminal of network	L1 of Network	Disconnect (G-BK) or (G) or (G-R) lead from L1 and connect to RED TeleDialer lead using a 7173 spade connector.
1555,2555	C Terminal of network	F Terminal of network	Disconnect (BR) lead and connect to RED TeleDialer lead using a 7173 spade connector.
1500M	C Terminal of network	Terminal 1 of terminal strip	Disconnect (G) lead on terminal 1 of terminal strip and connect to RED Tele- Dialer lead using a 7173 spade connec- tor.
1500S,2830	C Terminal of network	Terminal 8 of terminal strip	Disconnect (G) lead from terminal 8 and connect to RED Tele- Dialer lead using a 7173 spade connec- tor.
1514	C Terminal of network	Terminal 2 of terminal strip	Disconnect (G) lead on Terminal #2 and connect to RED Tele- Dialer lead using a 7173 spade connec- tor.