

## D-97807 DIAL

### 1. GENERAL

1.01 This section gives general information pertaining to the Dial per Specification D-97807 such as description and use, installation, maintenance, connections and cording.

### 2. DESCRIPTION AND USE

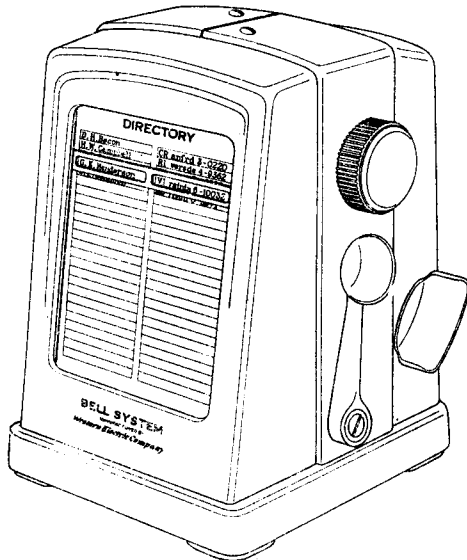


Fig. 1—D-97807 Dial

2.01 When fully equipped, the D-97807 Dial shown in Fig. 1 may be employed to call any one of a selected group of twenty-five telephone numbers of eight or less digits each.

2.02 The directory card (Form E-2515) under the front cover has twenty-five spaces for typing in the names and telephone numbers of the subscribers who may be called with this dial. The names to be placed on the directory card are to be selected by the customer and arranged in accordance with his wishes. It is suggested, however, that the list be arranged alphabetically unless otherwise specified.

2.03 The party to be called is selected by rotating the knob on the upper right-hand side of the dial until the name of the party desired appears in the left-hand window of the indicator that moves up or down in front of the directory card under the control of this knob.

2.04 Having selected the party to be called the calling party should listen in the telephone receiver for dial tone. After hearing the dial tone he should move the thumb lever on the right-hand side of the dial as far as it will go toward the rear of the dial by grasping the thumb lever with the thumb and the finger grip at the lower rear right-hand side of the dial with the index and middle fingers of the right hand. The thumb lever should then be released. When operated in this manner the D-97807 Dial will automatically produce all of the dial pulses required to call the party whose name has been selected.

2.05 Any party whose name does not appear on the directory card of this dial must be dialed with the regular station dial in the usual manner.

2.06 When calling a central office number from an extension station on a dial P.B.X. it is necessary in all cases to listen for the first dial tone, then dial a predetermined digit with the regular station dial to obtain connection to a central office trunk and then wait for the second dial tone before operating the D-97807 Dial to obtain the central office number.

2.07 The D-97807 Dial may be used at any common battery dial telephone station. Conversation may be started as soon as the called party answers, even though the D-97807 Dial has not completed its operating cycle.

### 3. INSTALLATION AND MAINTENANCE

3.01 The D-97807 Dial should be installed in the same manner as a desk stand or a hand telephone set. The mounting cord should be connected to the subscriber set and the associated desk stand or hand telephone set by means of connecting blocks as shown later in Fig. 3. These connecting blocks should be placed at one of the locations specified for the connecting blocks normally used with desk stands or hand telephone sets.

3.02 To place the directory card remove the front cover assembly of the dial by loosening the front screw on top of the dial and pulling the top part of the cover away from the dial. Then slide directory card down in the card holder. The bracket toward the center of the card holder should be passed through the slot in the center of the card, and the card should seat in the lower part of the card holder.

3.03 The names on the card may be centered in the windows in the indicator that moves up and down in front of the directory card by loosening the screws at the extreme right and left ends of the indicator and moving it slightly upward or downward as required. In retightening these screws be careful not to strip their threads.

3.04 The rear cover assembly may be removed in a manner similar to that described for the front cover assembly.

3.05 In the rear of the dial there are spaces for twenty-five discs. The discs for use in these spaces are cut before delivery on the job and require no adjustments other than to see that they are placed in the proper spaces. Each disc is stamped with the telephone number it will cause the dial to call. The top disc should bear the telephone number of the subscriber whose name appears in the first box on the directory card. The second disc corresponds to the second name on the directory card, etc.

3.06 Fig. 2 (A) shows a partial view of the discs in the rear of the dial. To remove a disc rotate the knob on the right-hand side of the dial until the window in the indicator is over the position desired. This will place the slot in the forked bracket at the left of the discs in a position where the edge of the disc to be removed can be viewed directly through the slot. Pull forked bracket outward. This will cause the disc to come part way out of its mounting space. It can then be completely removed by hand.

3.07 The rotor shaft and a reference bar at the outer edge of the rotor are used for locating the discs. Each disc is held against the shaft and bar by a spring which engages one edge of the mounting slot in the disc. To install a disc it is grasped between the thumb and forefinger at a point opposite the mounting slot and inserted over the shaft in the desired position without force until it strikes the inner edge of the reference bar, when it is pulled about 1/4 inch toward the side of the dial on which the operating lever is located. This deflects the spring and allows the corner of the mounting slot to slide into position against the side of the bar, while the semi-circular notch at the center of the disc snaps over the shaft. See Fig. 2 (A).

3.08 Fig. 2 (C) shows a disc cut to dial 38-2547. This disc shows six spaces between digits which is the spacing used in step-by-step areas. In panel areas four spaces are provided between digits.

3.09 The details given in Fig. 2 (B) and (C) are shown as a matter of information only as the discs are cut in the shop and are ordered cut to call particular telephone numbers.

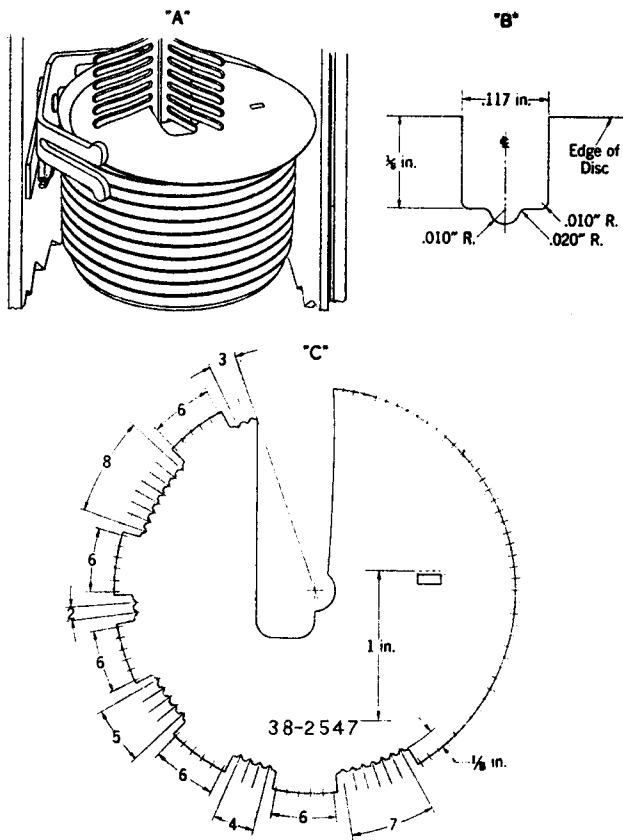


Fig. 2—Details of Discs for D-97807 Dial

3.10 No field maintenance requirements such as dial speed tests and adjustments are specified for the D-97807 Dial as the entire dial should be replaced in case it does not operate properly. When one of these dials is replaced be sure to retain the code discs and directory card for use in the new dial. The following table, however, lists a number of parts that may if necessary be replaced.

Name of Part	Ordering Information	
	Drawing	Detail
Base Mounting Screws	A-163963	9
Cover Mounting Screws	A-163963	7
Filter Mounting Screws	A-163963	3
Glass for Front Cover	A-163966	—
Indicator Mounting Screws	A-163963	3
Filter	61A	
Mounting Cord	D6H-9	

4. CONNECTIONS

4.01 The connections for the D-97807 Dial are shown in Fig. 3. This figure shows anti-sidetone equipment. The subscriber set may be either sidetone or anti-sidetone but the desk stand or hand telephone set must be of the anti-sidetone type. For a limited time it will be necessary to make special arrangements if a D-97807 Dial must be installed with a Combined Hand Telephone Set or with a Local Battery Talking Set.

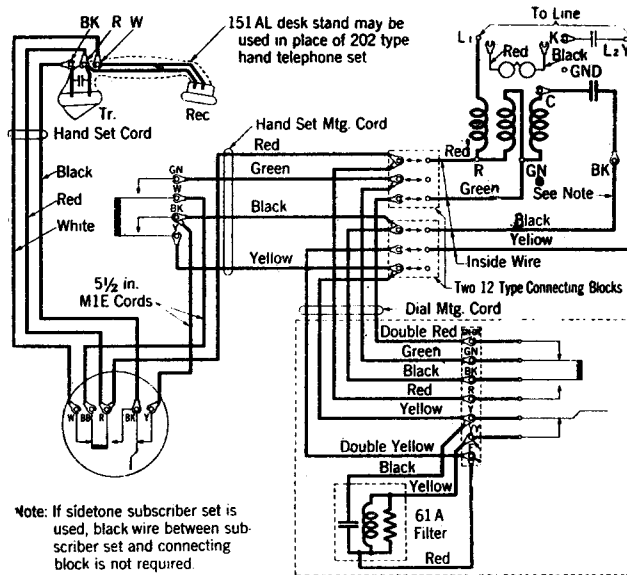


Fig. 3—Connections for D-97807 Dial

5. CORDING

5.01 The cording of the D-97807 Dial is shown in Fig. 4. The excess length of free conductors in the mounting cord should be folded over into the base before the base plate is put on the dial.

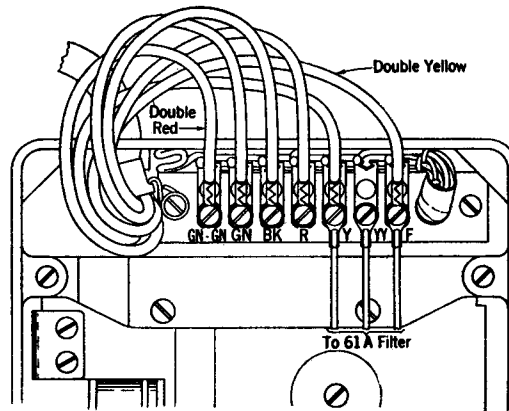


Fig. 4—Cording of D-97807 Dial