

BELL SYSTEM PRACTICES
Private Branch Exchange
Inst. and Mtce.

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AT&TCo Standard

PROCEDURES FOR CORDING
OPERATORS' DIALS
AND ASSOCIATED DIAL MOUNTINGS

1. GENERAL

1.01 This section describes the method of cording operators' dials and their associated dial mountings.

1.02 After gaining access to the dials and dial mountings and removing the old cords as covered in Part 3, cord the dial and dial mountings, and reassemble them, as covered in the procedures listed in the table on Page 3.

2. LIST OF TOOLS

Code No.

Description

-

3" Cabinet Screwdriver

3. METHOD OF REMOVING CORDS

3.01 In order to gain access to the terminals of a dial or a dial mounting remove the dial mounting locking screw (where provided) using the screwdriver and then remove the dial mounting from the connecting block. When a dial is associated with a No. 31A

or similar dial mounting, access can be gained to the terminals of the dial without removing the dial from the dial mounting. When a dial is associated with a 34 or 44 type (Part of the 6000 type) or similar dial mounting proceed as follows:

3.02 When a dial is associated with a dial mounting having a slotted frame loosen the screws holding the dial to the mounting with the screwdriver and lift the dial out of place. Otherwise remove the screws to remove the dial.

3.03 When a dial is removed from its mounting, exercise extreme care in order to prevent injury to the mechanism or to the contact springs on the rear. Exercise care to avoid placing an excessive strain on the contact leads, since any shifting of the spring assembly may cause a change in the dial adjustment.

3.04 After gaining access to the terminals as outlined in 3.01 and 3.02 remove the old cord by loosening the cord tip mounting screws using the screwdriver.

4. PROCEDURE FOR CORDING DIALS AND DIAL MOUNTINGS USING D5AD CORDS

(A) All Types of Dial Mountings Except 34G and 34H Dial Mountings Used with Dials Having a "W" Terminal Mounted Directly on the Dial Casing

Method of Cording the Dial Mounting

4.01 Connect the short ends of the cord to the terminals on the dial mounting in order, starting with the red lead, matching

Type of Cord	Type of Dial Mounting	Position of "W" Terminal on Dial	Cord Procedures (See Paragraphs)
D5AD Cord	31A (or Similar), 34 and †44	On Spring Assembly	4.01, 4.02 and 4.04
	31A (or Similar), 44 and 34 (Except 34G and 34H)	On Dial Casing	4.01-4.04 inclusive
	34G and 34H		4.06, 4.07 and 4.08
‡All Other Cords	31A (or Similar) and 34	On Spring Assembly	5.01, and 5.03-5.06 inclusive
		On Dial Casing	5.02-5.06 inclusive

† Only the D5AD cord should be used to cord 44 type dial mountings since it is impossible on these mountings to determine visually whether or not the leads of the cord interfere with the dial contacts.

‡ When it is necessary to replace a cord on any of the operators' dial mountings, record the dial using a D5AD cord as outlined in Part 4.

the color of the leads with the lettered abbreviations on the dial mounting; that is R indicating red, G indicating green, B indicating blue and so forth. Take care that the leads are in their proper positions and not tangled. Fasten the cord mounting screws securely.

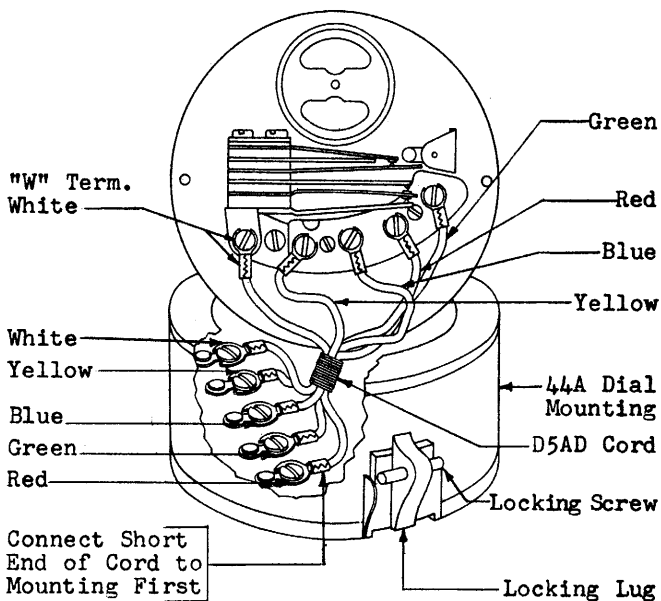


Fig. 1 - Method of Cording Dial Mountings and Dial Using D5AD Cord (All but 34G and 34H Dial Mountings Used with Dials Having a "W" Terminal Mounted Directly on the Dial Casing)

Method of Cording the Dial

4.02 When the dial mounting has been corded hold the dial above the mounting and at right angles to it as shown in Fig. 1. Connect the leads to their proper terminals in order, starting with the green lead, matching the color of the leads with the lettered abbreviations on the dial or dial adapter. The cord terminals should be angled approximately as shown in Fig. 1 to avoid interference with the dial mounting. Dress the leads as shown in Fig. 1 and securely fasten the leads to the terminals on the dial.

4.03 Where a dial has a "W" terminal mounted directly on the dial casing connect the white lead to this terminal with the shank of the cord tip bent upward at an angle of about 75° so as to clear the contact springs.

Method of Assembling Dial and Dial Mounting

4.04 Press any slack against the base of the dial mounting and carefully fold the dial into the dial mounting making sure that the rubber gasket (where provided) is properly in place. Securely fasten the screws which mount the dial mounting to the dial or dial adapter. On all but 44A type dial mountings it will be possible to inspect to make sure that the cord has not snagged on the contact springs of the dial and that the cord tips do not touch each other. Insert the dial mounting in the connecting block and screw the locking screw, (where provided) into the locking lug. Check the dial for circuit operation.

(B) 34G and 34H Dial Mountings Used with
Dials Having the "W" Terminal Mounted
Directly on the Dial Casing (See Fig. 4)

4.05 The 34G and 34H dial mountings are too deep to permit cording the dial and mounting as covered in 4.01 through 4.04 where the dial has the "W" terminal mounted directly on the dial casing. To cord this combination of dial and mounting proceed as follows.

Method of Cording the Dial

4.06 After gaining access to the terminals of the dial and dial mountings as outlined in 3.01 and 3.02 remove the old cord by loosening the cord tip mounting screws using the screwdriver. Connect the longer ends of the cord to the terminals on the dial starting with the green lead and matching the color of the leads with the lettered abbreviations on the dial or dial adapter. Connect the white lead to the "W" terminal of the dial with the shank of the cord tip bent upward at an angle of 75 degrees so as to clear the contact springs. Securely tighten the terminal screws.

Method of Cording the Dial Mounting and Assembling Dial and Mounting

4.07 Mount the dial in the dial mounting and fasten the mounting screws securely. Detach the contact spring assembly and dust shield, (where provided) from the dial mounting using the screwdriver. Pass the cord tips through the opening in the dust shield, (where provided) and connect the cord tips to the terminals of the contact spring assembly, again matching the color of the leads with the abbreviations on the contact spring assembly. Remount the contact spring assembly and dust

shield (where provided) on the dial mounting and fasten the mounting screws securely.

4.08 Insert the dial mounting in the connecting block. Screw the locking screw, (where provided) into the locking lug. Check the dial for circuit operation.

5. PROCEDURE FOR CORDING DIAL AND DIAL MOUNTING USING OTHER THAN D5AD CORDS

Method of Cording the Dial

5.01 Dials Having the "W" Terminal As Part of the Contact Spring Assembly (See Fig. 2): After gaining access to the terminals as outlined in 3.01 and 3.02 remove the old cord by loosening the cord tip mounting screws using the screwdriver. The dial end of the cord is that end not having insulating sleeves. Working from the green terminal connect the leads to their proper terminals matching the color of the leads (or the tracers in the leads in certain type cords) with the lettered abbreviations on the dial adapter; Y indicating yellow or yellow tracer; B, blue or blue tracer and so forth. Run the white lead or the lead with the white tracer under the other leads to prevent snagging the lead on the contact springs of the dial. Where the No. 765 cord is used run the white lead inside of the V-shaped embossing in the dial adapter as shown in Fig. 3. Angle the leads about as shown in Fig. 2 or 3 depending on the type of dial cord used. Set the cord tips so that the leads are approximately parallel and do not cross each other. Tighten the cord tip mounting screws firmly.

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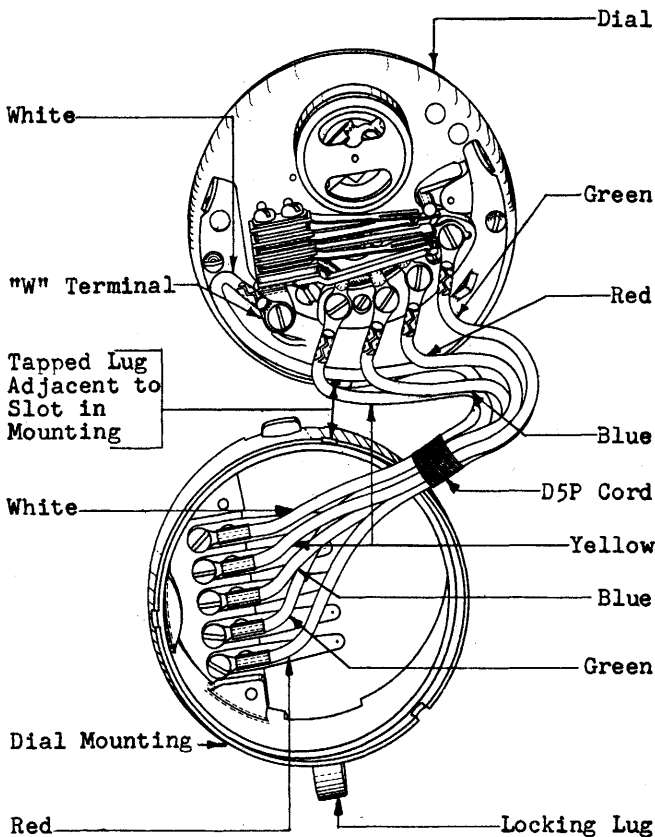


Fig. 2 - Method of Cording Dial Mountings and Dials Having Their "W" Terminal as Part of the Contact Spring Assembly Using D5P Cords

5.02 Dials Having a Separate "W" Terminal Mounted Directly on the Dial Casing
(See Fig. 4): The procedure is the same as that outlined in 5.01 except that the white lead or the lead with the white tracer should be run to the left of the contact spring assembly as viewed from the terminal side of the dial with the governor uppermost.

Method of Cording Dial Mounting

5.03 Place the dial mounting in front of the dial as shown in Fig. 2 so that the tapped lug in the dial adapter nearest the "Y" terminal is adjacent to the slot or hole in the dial mounting which is about opposite the locking lug. Cord the dial mounting as shown in Fig. 2 connecting the leads to their proper terminals, matching the leads with the lettered abbreviations on the dial mountings, as indicated in 5.01. Cord the dial mounting working from left to right taking care that the leads are in their proper positions and not tangled. Fasten the cord tip mounting screws securely.

Method of Assembling Dial and Dial Mounting

5.04 Dials Having D5P Cords: After the cord has been firmly connected to the dial and dial mounting and with the dial and dial mounting placed adjacent to each other as described in 5.03 and illustrated in Fig. 2, fold the dial mounting over the dial using the tapped lug in the adapter nearest the "Y" terminal of the dial as a pivot. While doing this, position the coiled part of the leads (particularly the white and yellow leads) so that they will not be clamped against the dial by the dial mounting. When the dial and dial

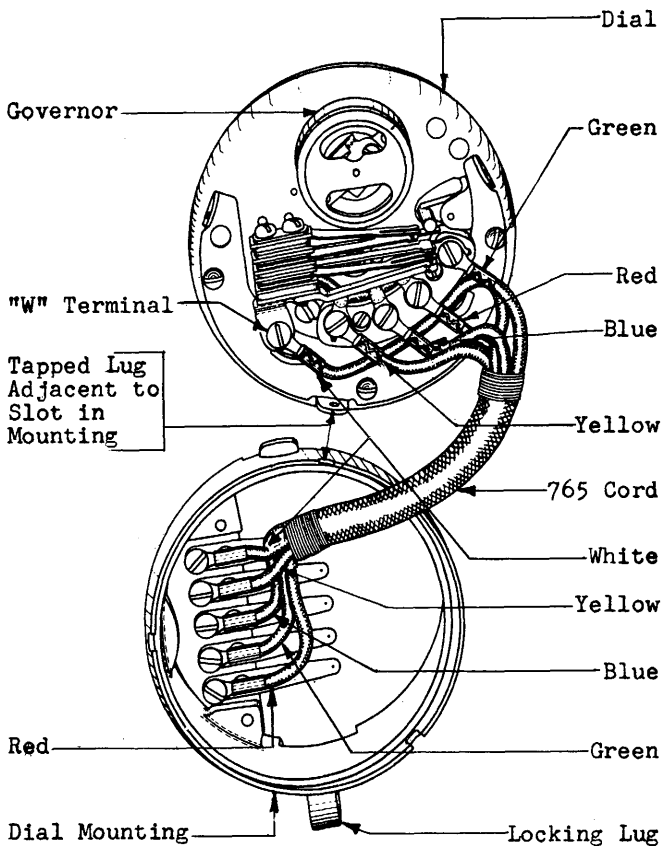


Fig. 3 - Method of Cording Dial Mountings and Dials Having the "W" Terminal as Part of the Contact Spring Assembly Using No. 765 and Similar Type Cords

mounting are assembled in this way the individual leads of the cord should form a spiral which clears the contact springs of the dial. Be sure that the cord tips do not touch each other or the dial and dial mounting.

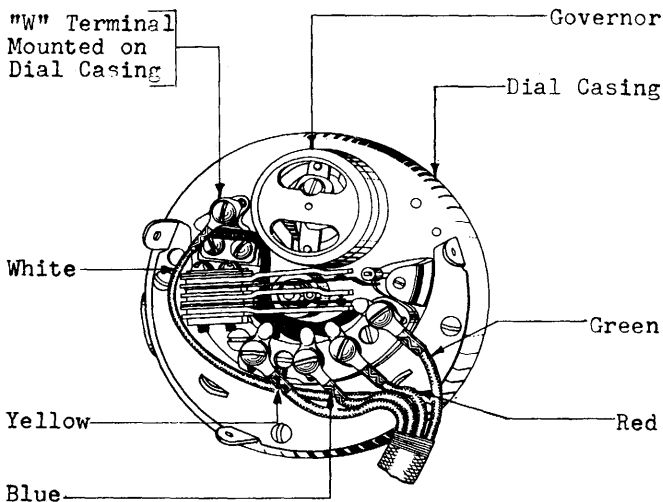


Fig. 4 - Method of Cording Dials Having a Separate "W" Terminal Mounted Directly on the Dial Casing, Using D5P or 765 Cords

5.05 Dials Having No. 765 and Similar Cords:

After the cord has been firmly attached to the dial and dial mounting, hold the dial mounting with the locking lug at the top so that the dial dangles by the cord. Turn the dial so that the terminals face you, (if the dial has not already assumed that position) and then raise the dial to a horizontal position with the terminals to the rear. Then raise the dial so that the dial adapter lug nearest the Y terminal on the dial is adjacent to that slot or hole in the dial mounting which is opposite the locking lug on the mounting as shown in Fig. 3. Then fold the dial into the dial mounting using the tapped lug in the dial adapter as a pivot, taking care that the dial mounting does not clamp the leads of the cord. The cord will double back over the leads on the dial with the cord taking a position against the frame of the dial mounting away from the contact springs. Be sure that the cord has not snagged on the contact springs of the dial and that the cord tips do not touch each other or the dial and the dial mounting.

5.06 Fasten the dial mounting screws securely and mount the dial mounting in the connecting block. Screw the locking screw where provided, into the locking lug. Check the dial for circuit operation.

Bell Telephone Laboratories, Inc.,