

TELEPHONE SET DIAL FINGERWHEELS
REMOVAL AND INSTALLATION

| | CONTENTS | PAGE |
|----|--|------|
| 1. | GENERAL | 1 |
| 2. | REMOVAL AND INSTALLATION OF A.E.CO. DIAL FINGERWHEELS | 1 |
| | A.E.Co. Metal Fingerwheels | 1 |
| | A.E.Co. Acrylic and Polycarbonate Fingerwheels | 3 |
| | A.E.Co. Miniature Polycarbonate Finger- wheel | 6 |
| 3. | REMOVAL AND INSTALLATION OF W.E. CO. DIAL FINGERWHEELS. | 8 |
| | W.E.Co. Metal Fingerwheels | 8 |
| | W.E.Co. Acrylic and Polycarbonate Fingerwheels | 10 |
| 4. | REMOVAL AND INSTALLATION OF STROMBERG-CARLSON DIAL FINGERWHEEL | 11 |
| | Polycarbonate Fingerwheel | 11 |

1. **GENERAL**

1.01 This section covers the removal and installation of telephone set dial fingerwheels and number cards on various dials commonly used on

telephone instruments, data sets, teletypewriters, testboards and tollboards. The fingerwheels in this section are manufactured by A.E.Co., W.E.Co., and Stromberg-Carlson out of metal, acrylic or polycarbonate materials. These dials are described and identified in this same series of General System Practices.

1.02 This section is reissued to update existing material and to include the removal and installation instructions for the miniature dials. Due to extensive changes, marginal arrows have been omitted.

2. **REMOVAL AND INSTALLATION OF
A.E.CO. DIAL FINGERWHEELS**

A.E.Co. Metal Fingerwheels

2.01 To remove an A.E.Co. metal fingerwheel from a dial, the escutcheon assembly must be removed first. Using the standard escutcheon tool or a small pocket screwdriver:

- (1) Insert the tip, holding the tool parallel to the fingerwheel, between the escutcheon ring and the acetate disc which covers the number card. Pass under the edge of the ring at a point even with the 5/JKL hole (see Figure 1).

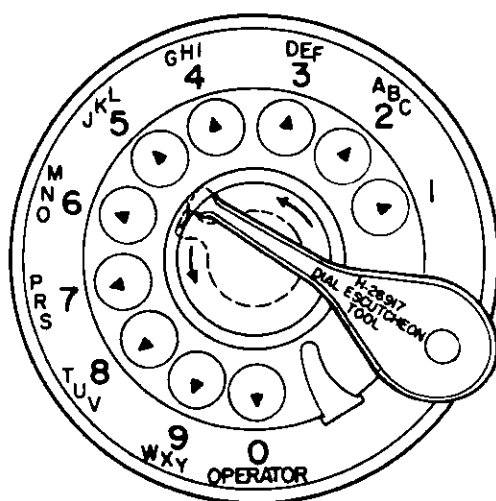


Figure 1a. Removal

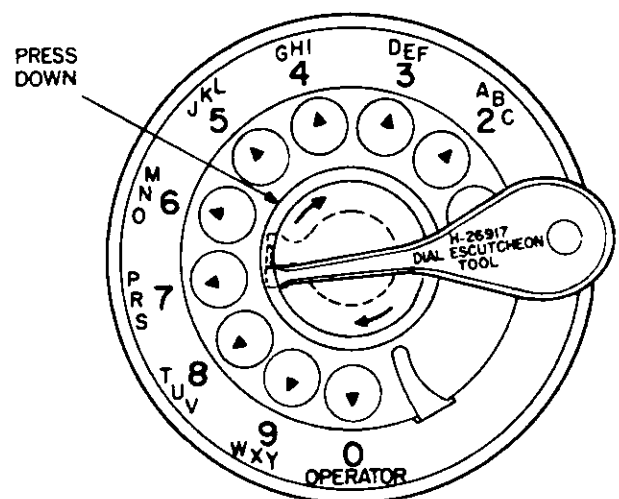


Figure 1b. Installation

Figure 1. Escutcheon Installation and Removal, A.E. Co. Metal Fingerwheel.

- (2) Taking care not to scratch the acetate disc, press the tip of the tool downward slightly and move it counter-clockwise toward the 6/MNO hole. It should engage the tab of the escutcheon lock.
- (3) Further movement of the tool toward the 7/PRS hole will then force the escutcheon lock counter-clockwise so that it no longer holds down the tab of the escutcheon ring.
- (4) Lifting the tip of the tool when it reaches the 7/PRS hole should raise the entire escutcheon assembly out of the depression in the center of fingerwheel.

2.02 Once the escutcheon assembly is removed, the metal fingerwheel is removable by:

- (1) Using a screwdriver with a wide, thin blade.
- (2) Remove the screw and the escutcheon lock.
- (3) Lift the fingerwheel off the hub of the shaft.

NOTE: For a short period, Type 24A36 dials were assembled using a D-17574 zinc retaining washer and a 5-40 flat head machine screw to hold the fingerwheel and escutcheon lock. This requires a narrow-blade screwdriver for removal. If a broad-head screw is available, set it aside for use

in reassembly of the dial, and return the zinc washer to the store room for use on dial blanks.

2.03 To disassemble the metal escutcheon assembly:

- (1) Hold the assembly rear side up with the fingers of both hands and press on the clamping plate with the thumbs adjacent to the semicircular indentations on its edge (see Figure 2a).
- (2) Rotate the plate counter-clockwise until the indentations clear the ridges formed in the edge of the escutcheon ring, at which time the locking tongue will also clear the channel similarly formed for it to engage.
- (3) Push against the acetate disc with a finger to force the disc, number card and clamping plate out of the escutcheon ring, and slide these parts out from under the locking lug.

2.04 Installation of a new number card in an A.E. Co. metal escutcheon assembly:

- (1) Wipe the acetate disc to remove dirt and finger marks. Replacements should be made for a scratched or discolored disc.
- (2) Hold the escutcheon ring with its rear side up and insert the edge of the acetate disc under the locking lug of

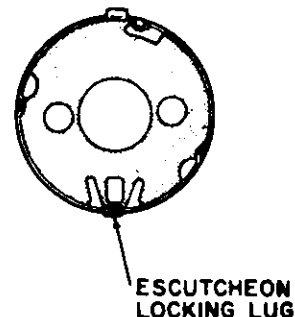
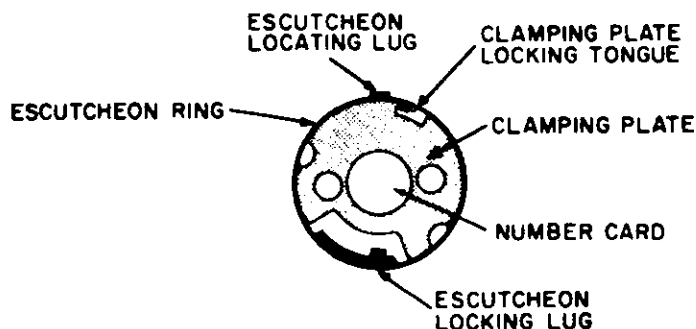


Figure 2. Escutcheon Disassembly, A.E. Co. Fingerwheels.

the ring at the point where the edge of the disc has a long indentation. Lay the narrow indentation or slot in the opposite edge of the disc over the channel formed inside the edge of the ring.

- (3) With a blunt-ended object, such as an eraser end of a pencil, snap the disc over the two ridges formed in the edge of the ring so the disc seats.
- (4) Insert the number card in the same manner. Its edge has two simicircular indentations which allow it to clear the ridges in the ring.
- (5) Insert the clamping plate with its concave side up, and push down its edges with a thumb to flatten it.
- (6) Once flat, rotate the plate clockwise until its edges are caught beneath the ridges in the wall of the escutcheon ring, and its locking tongue seated in the channel formed inside the wall.

2.05 To install an A.E. Co. metal fingerwheel on the dial shaft:

- (1) Position the center hole of fingerwheel over the shaft hub, aligning the finger holes with the designations on the number plate.
- (2) Lay the escutcheon lock over the hub so that it sits between the two detents located at the 5/JKL and 7/PRS positions.
- (3) Insert the screw in the hole in the hub and drive it part way.
- (4) Center the circular portion of the escutcheon lock so that it rides free of the lip on the under surface of the screw head.
- (5) Tighten the screw.

2.06 To install the escutcheon assembly on the A.E. Co. metal fingerwheel:

- (1) Move the escutcheon lock

counter-clockwise until it strikes the detent.

- (2) Insert the tab on the escutcheon ring into the slot in the wall of the depression in the fingerwheel at a point just above the finger stop.
- (3) Press the opposite edge of the escutcheon ring into the depression and insert a blade such as described in Paragraph 2.01 between the ring and the acetate disc.
- (4) Keeping the tool parallel with the fingerwheel and taking care not to scratch the disc, insert the tip under the edge of the ring at a point even with the 7/PRS hole.
- (5) Press the tip of the tool downward slightly and move it clockwise toward the 6/MNO hole. It should engage the tab of the escutcheon lock, and further movement of the tool toward the 5/JKL hole will then force the escutcheon lock clockwise so that it holds down the tab of the escutcheon ring.

A.E. Co. Acrylic and Polycarbonate
Fingerwheels

2.07 To remove the chrome escutcheon assembly from an A.E. Co. D-780697-A acrylic fingerwheel:

- (1) Using a small pocket screwdriver, hold the blade parallel to the fingerwheel and insert the tip of the screwdriver between the escutcheon ring and the acetate disc which covers the number card.
- (2) Pass the screwdriver tip under the edge of the ring at a point midway between the 5/JKL and 6/MNO holes (see Figure 3).
- (3) With the tip of the blade seated against the outer wall of the escutcheon ring, gently apply force upward and outward until the latch releases with a click. Lift the escutcheon assembly clear of the fingerwheel.

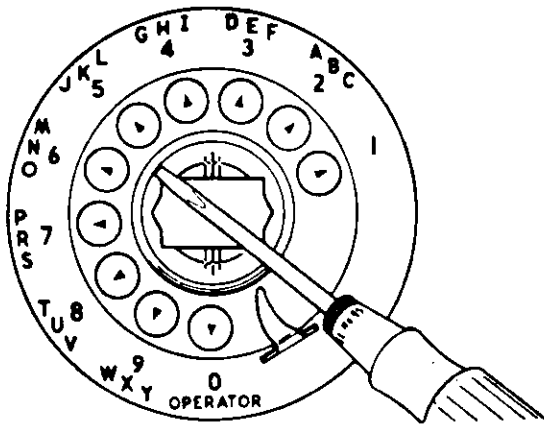


Figure 3. Escutcheon Removal, A.E. Co.
D-780697-A Acrylic Fingerwheel.

2.08 To remove the A.E. Co. D-780697-A acrylic fingerwheel:

- (1) Select a screwdriver with a blade that is both wide and thin.
- (2) Remove the screw, washer and lift off the fingerwheel toward the upper left, away from the finger stop.

2.09 To disassemble the chrome escutcheon assembly from an A.E. Co. D-780697-A acrylic fingerwheel, follow the same procedure as specified in Paragraph 2.03. This is simplified somewhat, since the escutcheon locking lug is not in the way on the escutcheon ring, but protrudes from the clamping plate and makes the latter easier to rotate.

2.10 To install a new number card in the chrome escutcheon assembly from an A.E. Co. D-780697-A acrylic fingerwheel, follow the same procedure as specified in Paragraph 2.04. The escutcheon ring has no locking lug, and the long indentation in the edge of the acetate disc and number card serves no purpose in this assembly.

2.11 To install an A.E. Co. D-780697-A acrylic fingerwheel on the dial shaft:

- (1) Insert the escutcheon locking plate into the openings in the rear of the fingerwheel.
- (2) Holding the locking plate and fingerwheel together, slide the assembly over the pawl plate and under the finger stop.

- (3) Align the finger hole with the designations on the number plate and position the center opening in the locking plate over the hub of the dial shaft.
- (4) Install the washer (with the stamped circle, denoting the slightly convex surface, away from the fingerwheel) and screw into the hub of the dial shaft. Care should be taken so as not to crack the fingerwheel.

2.12 To install the chrome escutcheon assembly on an A.E. Co. D-780697-A acrylic fingerwheel:

- (1) Insert the index tab on the escutcheon ring into the slot in the formed ear of the locking plate which protrudes through the fingerwheel adjacent to the finger stop.
- (2) Press down firmly, with a thumb, between the 5/JKL and 6/MNO finger holes against the acetate disc and number card. Listen for a click for proper engagement. (It may be necessary to use a small screwdriver to apply the proper force to engage the latch).
- (3) Wipe the acetate disc free of finger marks.

2.13 To remove an A.E. Co. D-780896-A acrylic or polycarbonate fingerwheel from the dial shaft:

- (1) Using a standard fingerplate removal tool, H-886316-1, insert the end into the small hole located in the ribbed area of the fingerwheel surrounding the number card just adjacent to the 6/MNO finger hole.
- (2) The end of the tool must enter at a slight angle aimed toward the 6/MNO finger hole. Once the end is seated against the latching lug (see Figure 4a), push gently downward on the tool until the lug is down and out of its latching detent (see Figure 4b).

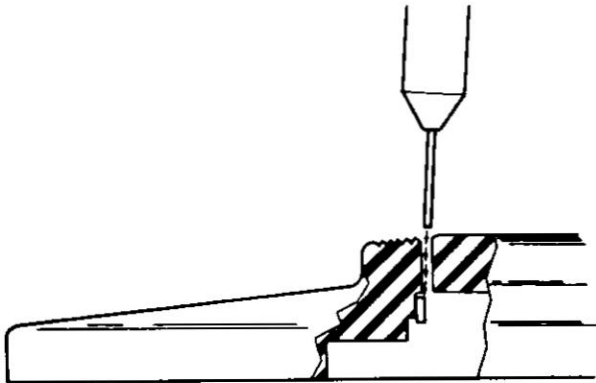


Figure 4a. Insertion. End of Standard Escutcheon Tool Engages Edge of Latching Tab and Forces it Downward.

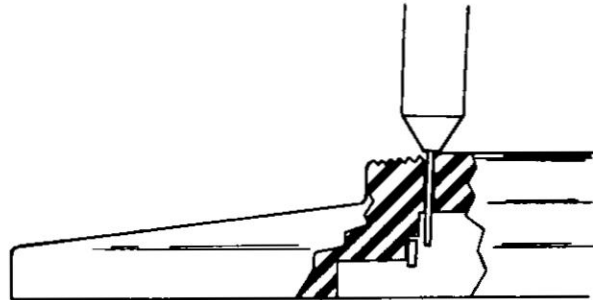


Figure 4b. Withdrawal. Latching Tab has Snapped into Recess Molded in Fingerwheel out of Reach of Tool.

Figure 4. Use of Standard Escutcheon Tool, H-886316-1, to Unlatch A.E. Co. D-780896-A Acrylic or Polycarbonate Fingerwheel.

- (3) Rotate the dial clockwise past zero until the clamping disc releases.
- (4) Release the fingerwheel and allow it to return to rest (zero hole between 8/TUV and 9/WXY on the number plate).
- (5) Lift the fingerwheel toward the upper left away from the finger stop.

NOTE: If the latching lug on the clamping disc fails to spring out of its detent when pushed down by the escutcheon tool, the zero finger hole will not pass beyond the finger stop when the dial is wound. In this case, hold the fingerwheel in the fully-wound position, insert the tool, and press against lug, while turning the fingerwheel farther in clockwise direction.

2.14 To remove the clamping disc from an older A.E. Co. dial which has been equipped with a D-780896-A acrylic or polycarbonate fingerwheel, use a screwdriver with a blade that is both wide and thin to loosen the broadhead screw which fastens the clamping disc to the hub on the dial shaft. On some dials manufactured after May, 1964, the clamping disc is spot welded in place to accommodate the acrylic or polycarbonate fingerwheel. This type does not have a tapped hole in the hub. If such a disc has been damaged, the

entire pawl plate assembly must be replaced. There is no way to replace the defective clamping disc for a removable disc or a metal fingerwheel. The later model dials are equipped with a clamping disc that is also spot welded on the hub but these type of dials also have a tapped hole in the hub for mounting a removable disc. The damaged clamping disc must be pried off the hub using a screwdriver. Then the clamping disc can be replaced by the Dial Fingerwheel Kit (H-885503-1) which contains a clamping disc, broad-head screw and an acrylic or polycarbonate fingerwheel. The clamping disc can then be replaced on the hub and secured to the hub by means of the broad-head screw.

2.15 Before installing a new number card in an A.E. Co. D-780896-A acrylic or polycarbonate fingerwheel, wipe the window area in the center to remove dirt and fingermarks. If this area has been scratched or defaced, the entire fingerwheel must be replaced.

2.16 To install a clamping disc on an older A.E. Co. dial to adapt the D-780896-A acrylic or polycarbonate fingerwheel:

- (1) Position the center hole of the disc over the hub of the dial shaft so the latching tab lies in the upper left quadrant adjacent to the 5/JKL and 6/MNO designations on the number plate (see Figure 5).

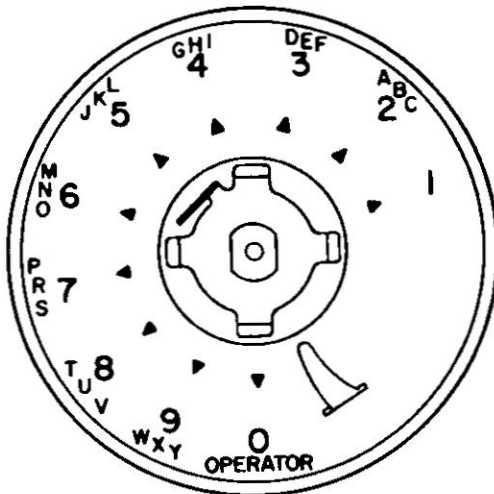


Figure 5. Proper Position of Clamping Disc When Installing A.E. Co. D-780896-A.

- (2) Use a broad-bladed screwdriver with a thin edge to fasten the D-76312-A screw through the clamping plate and into the shaft.

2.17 To install an A.E. Co. D-780896-A acrylic or polycarbonate fingerwheel on a dial equipped with the accompanying clamping disc:

- (1) Hold the fingerwheel parallel to the number plate. The zero hole positioned between the 8/TUV and 9/WXY designations.
- (2) Move the fingerwheel to the upper left, then lower the lower right side under the finger stop.
- (3) Center the dial on the clamping disc and rotate the fingerwheel counterclockwise. As the zero passes the 9/WXY position, the latching lug should engage with a click.

Dial Clamping Plate Adapter

See Addendum 2.18 The Dial Plate Adapter, (PP-4108), shown in Figure 6 is used to prevent the D-780896-A acrylic or polycarbonate fingerwheel from unintentionally snapping off the dial clamping plate due to sprung or ill fitting clamps. The adapter reinforces the clamping plate and prevents the removal of the fingerwheel without the use of the fingerplate removal tool H-886316-1 or equivalent.

2.19 To install the Dial Clamping Plate Adapter on the A.E. Co. dials equipped with acrylic or a polycarbonate fingerwheel, remove the fingerwheel from the dial assembly per the instructions given in paragraph 2.13. Place the adapter within the dial clamping plate as shown on Figure 6. Replace the fingerwheel per the instructions given in paragraph 2.17.

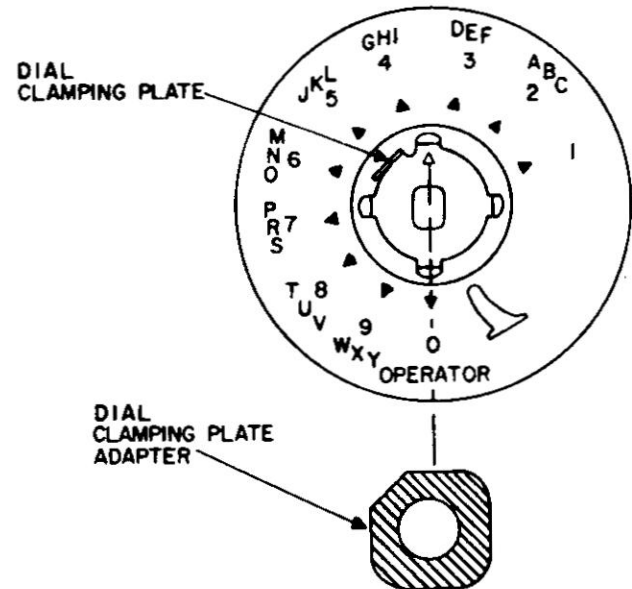


Figure 6. Dial Clamping Plate Adapter Location on A.E. Co. Dial Assembly.

A.E. Co. Miniature Polycarbonate Fingerwheel

2.20 To remove the polycarbonate fingerwheel from the Type 154A miniature dial:

- (1) Remove the white fingerwheel cover from the center of the dial assembly with a small pocket screwdriver.
- (2) Holding the screwdriver in your right hand, parallel to the fingerwheel, insert the screwdriver tip into the small slot across from the finger stop and carefully pry the fingerwheel cover up (see Figure 7a).
- (3) Using the same small pocket screwdriver, being careful not to scratch the fingerwheel or handset housing, push against the top right hand leg of the 3-point retainer in a counterclockwise direction until it lines up with the slots in the fingerwheel (see Figure 7b).

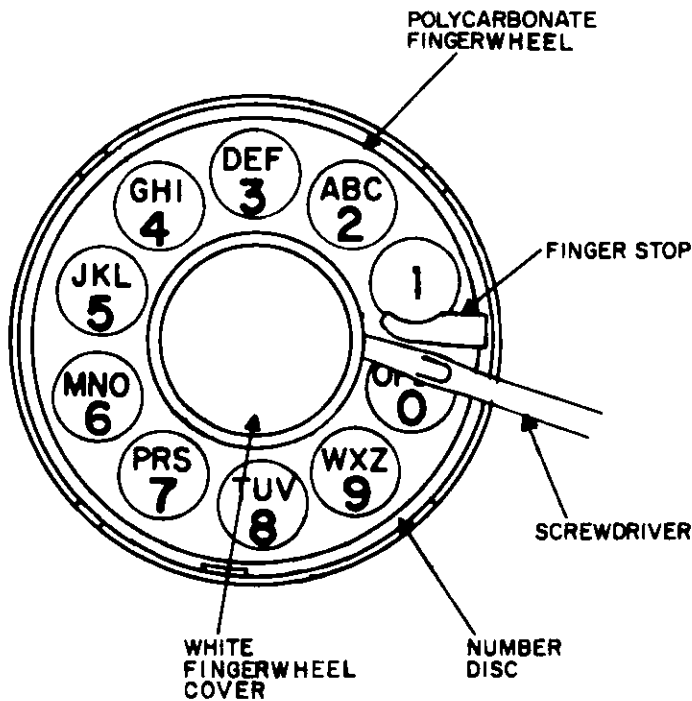


Figure 7a. Fingerwheel Cover Removal.

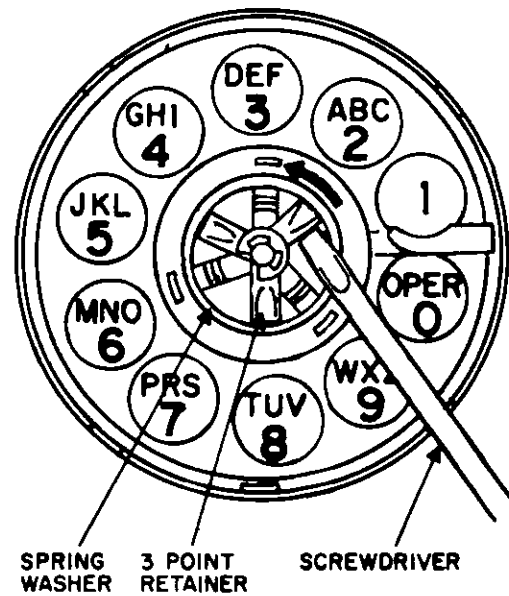


Figure 7b. Fingerwheel Removal.

Figure 7. Fingerwheel Cover and Fingerwheel Removal for A.E. Co. Miniature Dial.

- (4) Depress the left side of the fingerwheel gently with your left thumb.
- (5) With your right hand thumb and forefinger, remove the fingerwheel, spring washer and finger stop together.

2.21 The Type 154A miniature dial does not contain a number card in the fingerwheel. The telephone number is to be located on a designation strip, beneath the designation strip cover, directly above the dial in the front housing of the handset. To remove the designation strip cover to install a number card:

- (1) Insert the tip of the fingerplate removal tool (H-886316-1) or equivalent into the right hole in the designation strip cover.
- (2) Bow the cover upward as little as necessary by applying pressure toward the center.
- (3) Pull the cover up and out.

- (4) Remove the designation strip.

2.22 To install a polycarbonate fingerwheel on the Type 154A miniature dial:

- (1) Replace the finger stop with the projection of the finger stop between the 1 and 0/OPER position.
- (2) Replace the spring washer over the finger stop.
- (3) Hold the fingerwheel between the thumb and forefinger of your left hand with (AE) Trademark reading backward in the upper right hand corner.
- (4) Insert the right side of the fingerwheel under the finger stop and position the fingerwheel down over the 3-point retainer so that the three legs of the retainer fit into their respective slots in the fingerwheel.
- (5) Depress the fingerwheel down with slight pressure and check the

movement of the finger stop to be sure it is located securely between its stops.

- (6) Remain holding the fingerwheel with slight pressure. Using a small pocket screwdriver, push against one leg of the retainer clockwise $1/6$ of a turn so all three legs rest in their locating depressions in the fingerwheel.
- (7) Replace the white fingerwheel cover with the small slot even the finger stop. Press down until the cover snaps into the locked position in the fingerwheel.

2.23 To install the designation strip cover over the designation strip:

- (1) Insert the left end into the housing.
- (2) Bow the cover upward as little as necessary by applying pressure toward the center.
- (3) Insert the right end into the housing.

3. REMOVAL AND INSTALLATION OF W.E. CO. DIAL FINGERWHEELS

W.E. Co. Metal Fingerwheels

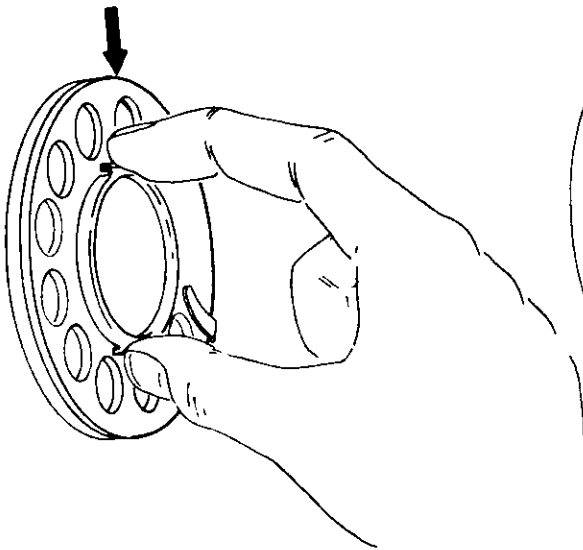


Figure 8a. Depressing Upper Locking Tab.

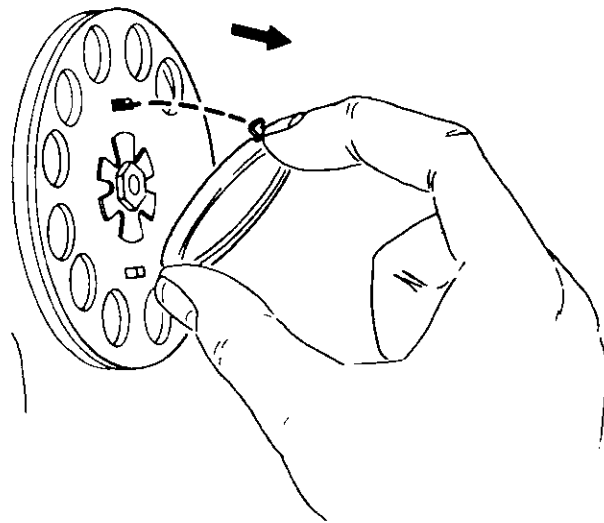


Figure 8b. Tilting Card Holder Forward and Out.

Figure 8. Removal of Card Holder Assembly from W. E. Co. Metal Fingerwheel.

3.01 To remove a W.E. Co. metal fingerwheel from a dial, the card holder frame must be removed first.

- (1) Press down against the upper edge of the card holder frame, between the 2/ABC and 3/DEF finger holes, with a forefinger, while stabilizing the lower edge of the frame with a thumb (see Figure 8a).
- (2) Clear the upper locking tab, tilt the card holder forward and disengage the lower locking tab from its slot.

NOTE: Except in unusually stubborn cases, avoid using a screwdriver or knife blade to pry off the card holder, since the finishes on both it and the fingerwheel is very easily scratched.

3.02 To remove a W.E. Co. metal fingerwheel from the dial shaft:

- (1) Loosen the fingerwheel clamping nut with a $7/16$ -inch nut driver.
- (2) Remove the nut and lock washer from the shaft stud and lift off the fingerwheel.

3.03 To disassemble the card holder frame assembly from a W.E. Co. metal fingerwheel

in order to install or change the number card:

- (1) Grasp the two protruding prongs of the card retainer spring between the thumb and forefinger. Pinch them together and withdraw the spring from the frame.
- (2) Push against the acetate window with a finger and force the window, number card and card retainer out of the card holder frame.

3.04 On more recent assemblies which lack the card retainer and spring, a card support with a serrated edge is used, and is considerably more difficult to remove.

- (1) Insert the tips of a pair of long nose pliers in the serrations which lie second from the top on each side.
- (2) Gently compress the card support while drawing it out of the card holder frame (see Figure 9).



Figure 9. Removal of Card Support From W.E. Co. Card Holder Frame.

3.05 To install a new number card in W.E. Co. card holder assembly:

- (1) Wipe the acetate window to remove

dirt and finger marks. If the window is scratched or discolored, replace it.

- (2) Hold the card holder frame with its rear side up, replace the acetate window with the notch over the locating tab in the frame.
- (3) Replace the number card, card retainer and card retainer spring over the locating tab.

3.06 On more recent assemblies which lack the card retainer and spring:

- (1) Press the serrated edge of the card support into the frame until the lip on the edge is flush with or below the edge of the frame.

3.06 To install a W.E. Co. metal fingerwheel on the dial shaft:

- (1) Position the center hole on the shaft hub so that the chamfered or beveled side of the finger holes is facing away from the number plate, aligned with their respective designations.
- (2) Place the lock washer over the stud of the dial shaft.
- (3) Start the fingerwheel clamping nut on the stud by hand.
- (4) Tighten it with a 7/16-inch nut driver.

3.08 To install the card holder assembly on a W.E. Co. metal fingerwheel:

- (1) Engage the lower locking tab of the card holder frame into the fingerwheel between the 8/TUV and 9/WXY position.
- (2) Stabilize the lower edge with a thumb and press against the upper locking tab with a forefinger so the frame is pinched slightly out of round.
- (3) Insert the upper locking tab into the slot in the fingerwheel.

SECTION 473-820-200
ISSUE 3

W.E. Co. Acrylic or Polycarbonate Finger-
wheels

3.09 To remove a W.E. Co. acrylic or polycarbonate fingerwheel from the dial shaft, either for replacement or to install the number card, use the standard escutcheon H-886316-1 and:

- (1) Insert the escutcheon tool into the small hole in the raised rim around the number card between the 9/WXY and zero finger holes.
- (2) Rotate the dial clockwise, trying to dial a number greater than zero.
- (3) Remain holding the turned dial and press downward on the escutcheon tool (see Figure 10) until the clamping plate releases.

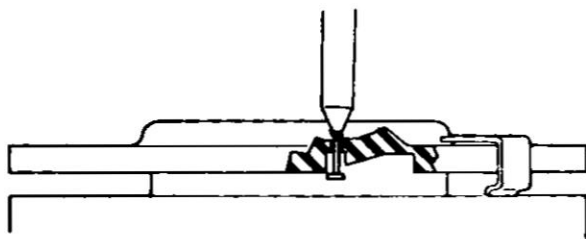


Figure 10. Use of Standard Escutcheon Tool H-886316-1 to Unlatch W.E. Co. Polycarbonate Fingerwheel.

- (4) Remove the escutcheon tool and allow the dial to return. (The zero hole should be located about the 9/WXY position on the number plate).
- (5) Lift the fingerwheel slightly and rotate it clockwise until the zero hole is above the 8/TUV position.
- (6) Slide the fingerwheel toward the upper left, away from the finger stop.

3.10 To remove the clamp plate from a W.E. Co. Number 5, 6 or 7 dial:

- (1) Loosen the fingerwheel clamping nut with a 7/16-inch nut driver.

- (2) Remove the nut and lock washer from the shaft stud.

- (3) Lift the clamp plate off the hub of the shaft.

3.11 To remove the number card from a W.E. Co. P-19B524 fingerwheel or a P-11E007 fingerwheel used on a Number 6L dial:

- (1) Hold the assembly rear side up and rotate the card support about 60° in a clockwise direction to clear projections.
- (2) Remove the number card by:
 - (a) For the P-19B524, push against the acetate window with a finger to force the window, number card and card support out of the depression.
 - (b) For the P-11E007, turn the assembly upside down and shake it to remove the number card and card support.

3.12 Before installing a new number card in a W.E. Co. fingerwheel, wipe the window to remove dirt and finger marks. If an acetate window is scratched or discolored, replace it. If the window area on a P-11E007 fingerwheel has been scratched or defaced, replace the entire fingerwheel.

3.13 The number card used in the W.E. Co. P-19B524 fingerwheel must have a notch (for use with metal card holder assemblies) as well as a nick in the edge adjacent to the 5/JKL finger hole (for locating purposes). The number card used the W.E. Co. P-11E007 fingerwheel must have the nick but no notch.

3.14 To install a new number card in a W.E. Co. card holder:

- (1) For the P-19B524 fingerwheel:
 - (a) Insert the acetate window and number card from the rear, followed by the card support with its projections facing away from the window.
 - (b) Rotate the card support about

60° in a counterclockwise direction until its projections are seated in the grooves in the inner wall of the window retaining portion of the fingerwheel.

(2) For the P-11E007 fingerwheel:

- (a) Insert the number card from the rear followed by the card support with its projections facing away from the window when the fingerwheel is mounted on Number 6 L dials. When the fingerwheel is to be mounted on Number 8 dial, omit the card support.
- (b) Rotate the card support about 60° in a counterclockwise direction until its projections are engaged in the short groove to the right (as viewed from the rear) of the cut out portion. This enables the two wider projections to reach the ends of their longer grooves.

3.15 To install the clamp plate on a W.E. Co. Number 5, 6 or 7 dial in order to adapt the latter to a fingerwheel:

- (1) Position its center hole on the shaft hub so that the locking tab lies between the 9/WXY and zero positions on the number plate.
- (2) Place the lockwasher over the stud of the dial shaft.
- (3) Start the fingerwheel clamping nut on the stud, first by hand and then tightening with a 7/16-inch nut driver.

3.16 To install a W.E. Co. fingerwheel on a dial equipped with accompanying clamp:

- (1) Hold the fingerwheel parallel to the number plate, with the zero hole positioned above the 8/TUV designation.
- (2) Move the fingerwheel toward the upper left, then tip the lower right

edge so it slides under the finger stop.

- (3) Center the fingerwheel on the serrations of the clamp plate and rotate the fingerwheel counterclockwise, parallel to the number plate so the zero hole moves beyond the 9/WXY position.
- (4) When the zero position is reached, the latching lug on the clamp plate should engage in the fingerwheel indentations with a click.

4. **REMOVAL AND INSTALLATION OF STROMBERG-CARLSON DIAL FINGERWHEEL**

Polycarbonate Fingerwheel

4.01 To remove the polycarbonate fingerwheel from the Stromberg-Carlson, S-C Number 10A dial:

- (1) Remove the colored dial insert from the center of the dial assembly with a fingerplate removal tool (H-886316-1) inserted into the hole in the fingerwheel, located just below the lower right hand quadrant of the 5/JKL finger hole.
- (2) Pry the colored dial insert upward gently till the dial insert releases from the fingerwheel.
- (3) Hold a small pocket screwdriver in your right hand.
- (4) Being careful not to scratch the fingerwheel or handset housing, push against the top leg of the 3-point retainer in a counterclockwise direction until it lines up with the slots in the fingerwheel (similar to the A.E. Co. miniature fingerwheel in Figure 7b).
- (5) Depress the left side of the fingerwheel gently with your left thumb.
- (6) With your right hand thumb and forefinger, remove the fingerwheel and finger stop together.

NOTE: Do not attempt to remove the stop washer from under the finger stop. However, make certain that the stop washer tab, located at the number 1 position, rests against the bottom side of the plastic stop and not on top of the plastic stop. The spring tension exerted by the dial spring tends to lift the stop washer tab to the top of the plastic stop. This prevents the proper insertion of a new fingerwheel and may dislodge the stop washer from its mounting.

4.02 The Stromberg-Carlson, S-C Number 10A dial does not contain a number card in the fingerwheel. The telephone number is to be located on a station number card, beneath the station number card cover, directly above the dial in the deck of the handset. To remove the station number card cover to install a station number card:

- (1) Insert the tip of a fingerplate removal tool (H-886316-1) or equivalent into the right hole in the station number card cover.
- (2) Bow the cover upward as little as necessary by applying pressure toward the center.
- (3) Pull the cover up and out.
- (4) Remove the designation strip.

4.03 To install a new fingerwheel on the Stromberg-Carlson Number 10A dial:

- (1) Replace the finger stop around its mounting base in the center of the dial, locating the extension of the finger stop approximately in the center of the space between the 1 and 0/OPER on the number plate. The downward tab on the left side of the finger stop base must be located in the space provided approximately

opposite the 6/MNO on the number plate.

- (2) Holding the fingerwheel in your left hand between the thumb and forefinger, make certain that the area with the wider space between the finger holes is in the lower right hand quadrant of the fingerwheel.
- (3) Insert the right side of the fingerwheel under the finger stop and position the fingerwheel down over the 3-point retainer so that the three legs of the retainer fit into their respective slots in the fingerwheel.
- (4) Depress the fingerwheel down with slight pressure and check that the finger stop is still in its correct location.
- (5) Remain holding the fingerwheel with slight pressure. Use a small pocket screwdriver, being careful not to scratch the fingerwheel or handset housing and push against the top right hand leg of the 3-point retainer in a counterclockwise direction until all three legs rest in their locating depressions in the fingerwheel.
- (6) Replace the colored dial insert in the appropriate slots in the fingerwheel. Press down until the cover snaps into the locked position in the fingerwheel.

4.04 To install the station number cover over the station number card:

- (1) Insert the left end into the deck.
- (2) Bow the cover upward as little as necessary by applying pressure toward the center.
- (3) Insert the right end into the deck.

**TELEPHONE SET DIAL FINGERWHEELS
REMOVAL AND INSTALLATION**

1. GENERAL

1.01 This addendum provides removal and installation procedures for the GTE Automatic Electric HD-780059-A fingerwheel and Dracon 12000-type fingerwheel. Installation and removal is the same for both fingerwheels.

1.02 In ink or red pencil, make the changes indicated in Part 2. Write "See Addendum" in the margin adjacent to the changes. Place this addendum in the practices binder ahead of Section 473-820-200, Issue 3.

2. CHANGES

2.01 Renumber Paragraphs 2.18 through 2.23 to 2.21 through 2.26.

2.02 Insert the following paragraphs:

2.18 To remove the HD-780059-A fingerwheel, proceed as follows:

- (1)** Remove the overlay disc (if used) and number card with a small pocket screwdriver.
- (2)** Remove the Phillips head screw from the center of the fingerwheel.
- (3)** Lift the fingerwheel up and away from the finger stop.

2.19 To install the HD-780059-A fingerwheel on dials manufactured before 1973, it is necessary to remove the dial clamping plate (and dial clamping plate adapter) from the pawl plate (Paragraph 2.14). In some cases, it may be necessary to remove spotweld residues with a file.

2.20 To install the HD-780059-A fingerwheel, proceed as follows:

- (1)** Slide the fingerwheel under the finger stop.
- (2)** Place the fingerwheel over the hub of the dial with the finger holes aligned with the designations.
- (3)** Secure the dial in place with the 5-40 x 5/16 inch flat head machine screw.
- (4)** Place the adhesive-backed number card (Lord Label P/N 7200 or equal) in the depressed area in the center of the dial.
- (5)** On coin telephones and other high usage telephones, place the acetate overlay (Lord Label P/N 7300 or equal) over the number card.