

INSTALLATION

505B, 505C, 506A AND 506B PBX

1. GENERAL

1.01 This section covers the general requirements and methods for installing the 505B, 505C, 506A 506B PBX.

1.02 This section is reissued to convert it to letter size and to incorporate material from the addendum in its proper location. In the process of this conversion, marginal arrows have been omitted.

1.03 Both the metallic return and ground return feeder arrangements are covered herein. To minimize noise effects on PBX stations and to prevent possible electrolysis damage to lead sheath cables or underground pipes, the ground return feeder arrangement should not be used when additions or changes in the PBX facilities are involved unless authorized by specific local instructions.

1.04 In connection with the installation work, reference should be made to the practices covering forming, fanning, connecting, etc. when performing work of this nature.

2. TOOLS AND MATERIALS

2.01 Certain tools and materials are specified in the practices covering specific installation methods. In addition a test receiver (No. 528 or equivalent) equipped with cords and clips will be required.

3. REQUIREMENTS AND METHODS

Preparation

3.01 Select a location for the PBX that meets the customer's approval and is satisfactory from the following standpoints:

- (a) A dry location should be selected. Do not select a place under a window where rain might enter. Avoid a location adjacent to or under steam or water pipes where moisture from sweating might penetrate the board.
- (b) Dusty places or locations where corrosive fumes are likely to be present should be avoided.
- (c) Excessive vibration due to machinery or any other cause should be investigated to determine that it is not severe enough to affect the operation of the equipment.

3.02 When installing a 505 type PBX loosen the four lock screws at the top of the front panel and remove the top of the switchboard and lower the front panel.

3.03 When installing a 506 type PBX loosen the three lock screws, two at the top of the front panel and one in the bottom rail of the rear panel, and remove the cover.

Installing Cross-Connecting Terminal Box

Installation of Terminal Box

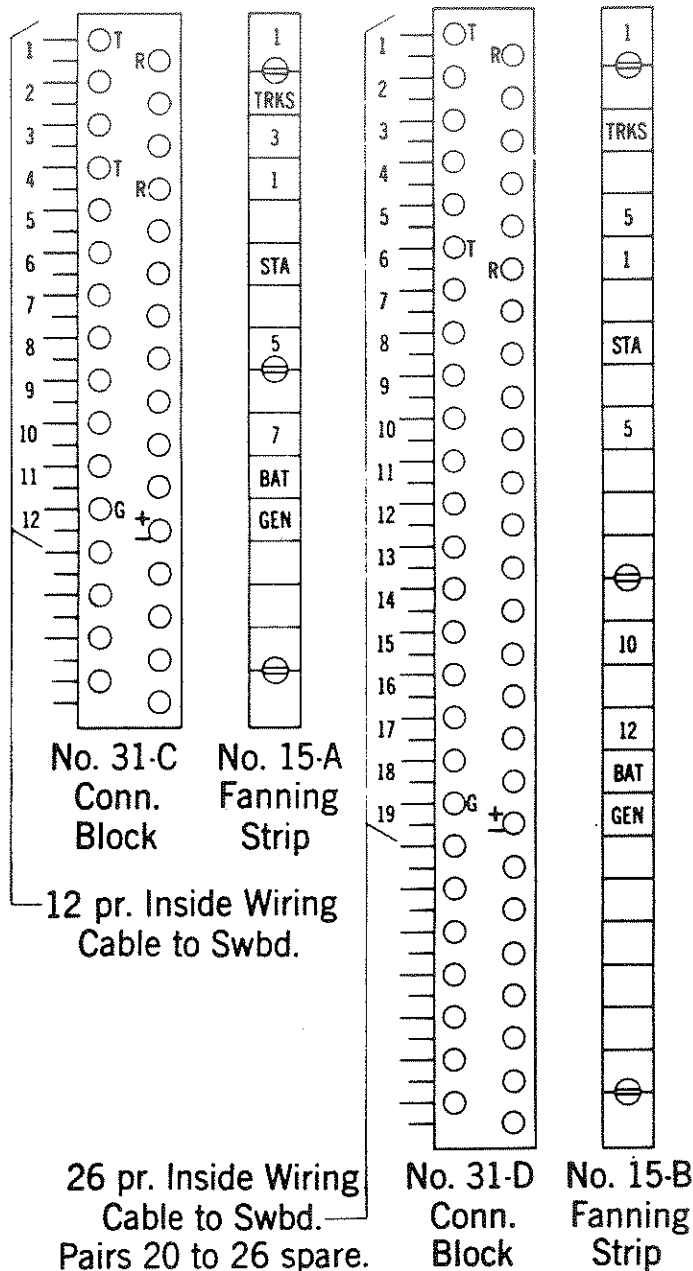
3.04 Locate the terminal box at a point where it will be convenient to the wire center of the installation and fasten to the wall as covered in the section on installation of inside cross-connecting terminals of the Practices.

Installation of Connecting Blocks and Fanning Strips

3.05 Place as indicated by Fig. 1. If available space in an existing terminal box is to be used, place the connecting blocks and fanning strips as covered in the section on installation of inside cross-connecting terminals of the Practices.

Lettering and Numbering

3.06 Letter and number fanning strips and connecting blocks according to Fig. 1, using 3/16-inch rubber stamps and in conformity with the Practices.



These arrangements will also apply in using No. 30 type connecting blocks or No. 102 type adapters.

Fig. 1—Typical Arrangement at Cross-Connecting Terminal Box.

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Running Cable Between Cross-Connecting Terminal and PBX

3.07 Run cable in accordance with the instructions covered in the sections of the Practices on placing and fastening wire and cable in buildings leaving sufficient length at the ends for terminating. See Figs. 2 and 3 for method of entering cable into PBX sections.

3.08 When the PBX is to be placed on a desk, table or some movable object, reference should be made to the sections of the Practices on placing and fastening wire and cable at desks and tables. Sufficient slack should be left in the cable to allow for moving desks, tables, etc., for maintenance purposes. This slack should be coiled up at a point where it will be out of sight and the coil fastened with friction tape.

3.09 In cases where, due to a moisture condition, lead covered cable is required instead of inside wiring cable as indicated by Fig. 1, it will be necessary to remove the cable sheathing between the PBX and a point where the cable enters a floor outlet, standpipe or similar fitting or where it first fastens to the baseboard, etc. Cover the conductors thus exposed with two layers of friction tape starting at a point on the sheathing approximately one inch beyond the butt and extending to a point on the cable form as shown in Figs. 2 and 3.

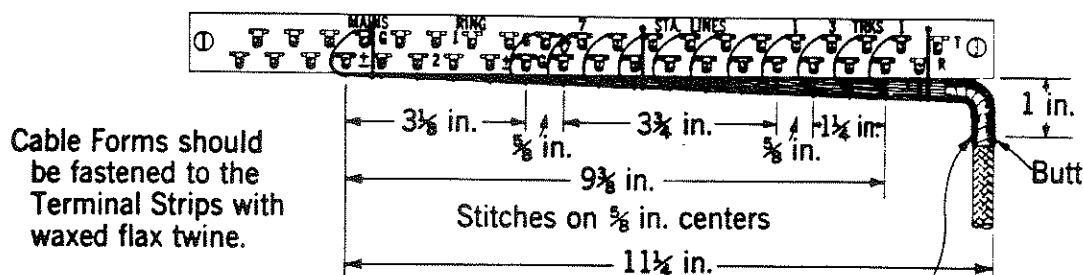
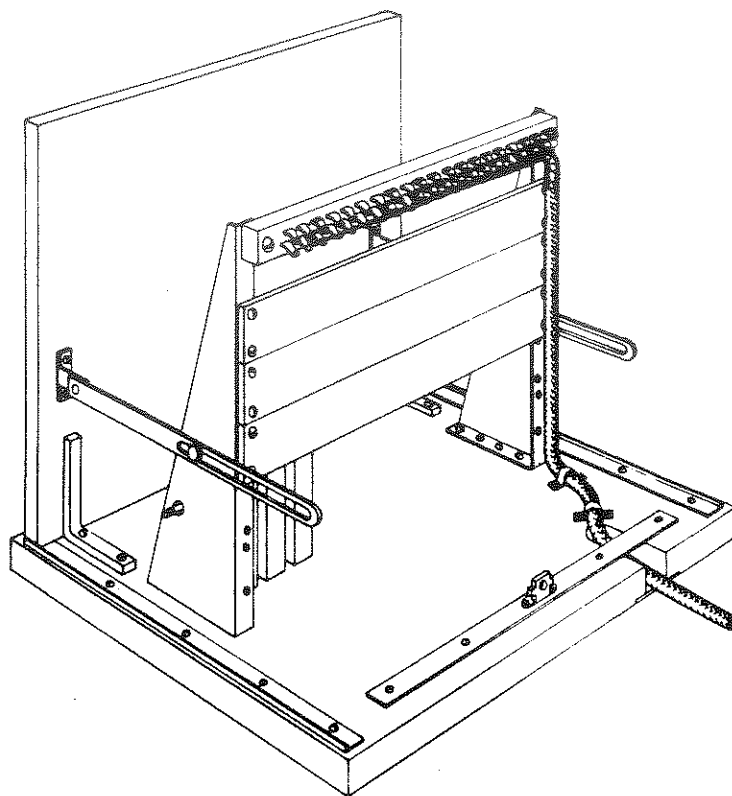
3.10 Form, fan and sew the end of the cable for connection at the PBX as shown in Figs. 2 and 3.

3.11 Place formed cable into position in the PBX in accordance with Fig. 2 or 3, leaving enough slack so that there will be no strain on the skimmers after they are connected.

3.12 Skin and connect cable to terminals in accordance with the designations indicated on the terminal strip.

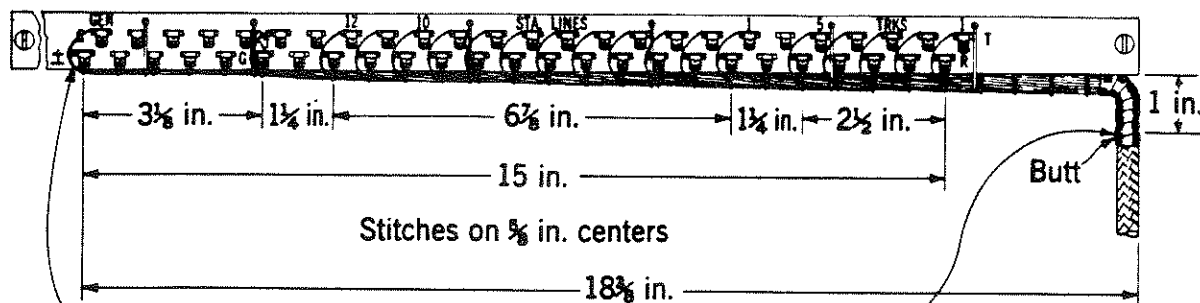
3.13 Form, fan and sew the end of the cable for connection at the cross-connecting terminal according to Fig. 1.

3.14 Place formed cable into position in terminal box, skin and connect to terminals. (Do not connect battery feeders until after making check covered in paragraph 3.17)



Allow approx. 15 in. from butt to end of longest skimmer

506-A P B X CABLE FORM

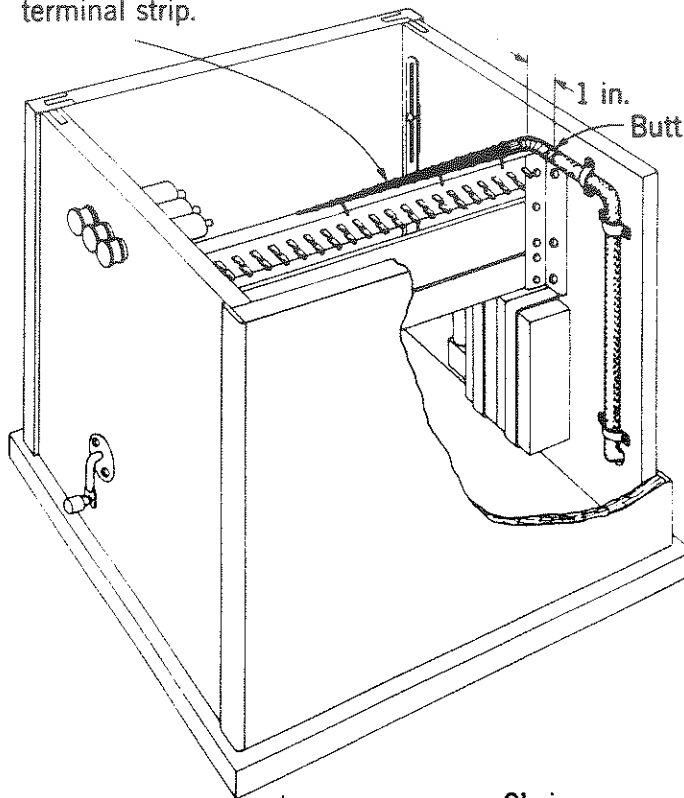


Allow approx. 22 in. from butt to end of longest skimmer

506-B P B X CABLE FORM

Fig. 2—Typical Cabling Arrangement for 506 Type PBX

Cable connects to the front side of the terminal strip.



Strapping of Battery Feeders at Cross-Connecting Terminal Box

3.15 Usually only one cable pair is used for battery supply between the cross-connecting terminal box and the P B X. However, in cases where more than one cable pair is required, strap all tip sides of the same group together for ground and all ring sides of the same group together for battery at the terminal box. (This strapping, when required, will be the same for either metallic or grounded circuits as applied to the switchboard cable.)

Installing Ground Connection

3.16 When a ground return central office battery feeder or grounded building battery feeder is installed, run a No. 14 ground wire from the ground terminals in the cross-connecting terminal box to a ground clamp on a cold water pipe on the street side of the water meter or cut-off valve or the house cable sheath where it has been grounded.

Caution: Do not run this ground connection when a metallic battery feeder is used.

Checking Battery Feeders

3.17 Before connecting the battery feeders through to the P B X test them for proper condition as follows:

- See that the feeders from the central office or building battery have been properly terminated at the cross-connecting terminal box. When feeders come from a building battery see that the proper fusing has been provided at the fuse panel associated with the building battery.
- Connect one clip of the test receiver to ground and then touch the other clip alternately to the tip and ring terminals in the cross-connecting box marked "BAT." A loud click should be obtained on the ring terminal.
- If a loud click is obtained on the tip terminal instead of the ring terminal, this is an indication that the polarity is reversed and should be corrected.

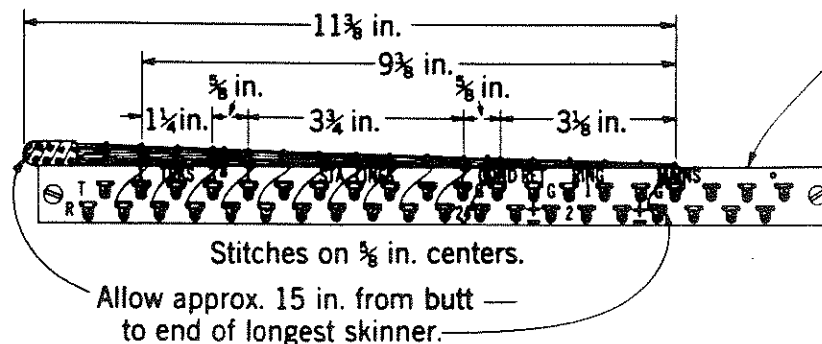
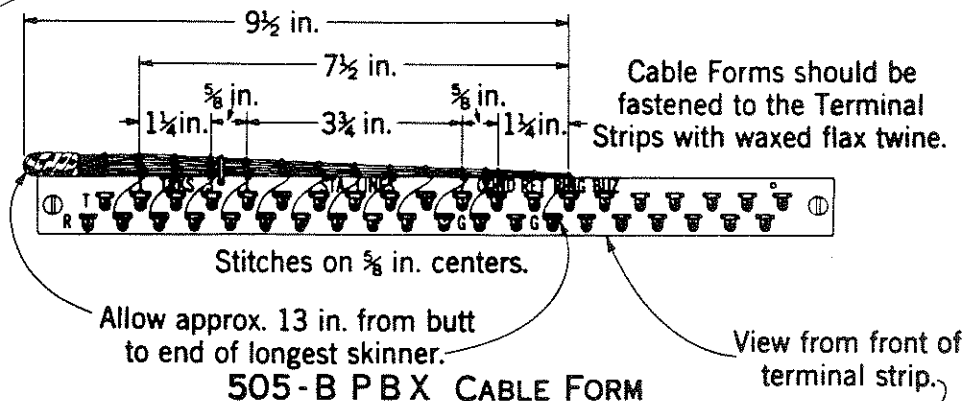


Fig. 3—Typical Cabling Arrangement for 505 Type P B X

3.18 Disconnect the test receiver and connect the battery feeders through to the P B X at the cross-connecting terminal box.

Miscellaneous Work Items

Modification of Buzzer Circuit

3.19 When necessary for the installer to change the buzzer circuit from a.c. to d.c. operation or from d.c. to a.c. operation, the work should be done in accordance with the circuit drawing.

Installation of Attendant's Telephone Instrument

3.20 Run the cord from the attendant's telephone instrument through the cord hole, located in the upper part of the left end panel on the 505 type boards or in the lower left side of the front panel on the 506 type boards, and connect to the cord fasteners as indicated by the designations. Also fasten the tie string or stay hook.

Modification of P B X When Hand Generator is not Furnished

3.21 When a hand generator is not furnished with the P B X the contacts on the ringing transfer key (G) or (RINGING) should be strapped together so that, regardless of the position of the key button, ringing current will be connected to the station line ringing keys.

3.22 The hole drilled in the end panel for the generator handle should be covered by an escutcheon plate on 506 type boards or have an apparatus blank inserted into it on 505 type boards.

4. INSTALLATION TESTS

4.01 The tests and inspections required in connection with the installation work as covered by Section 536-050-230 should be made before turning over the equipment to the customer for use.

TESTS AND INSPECTIONS AT TIME OF INSTALLATION 505B, 505C, 506A AND 506B PBX

1. GENERAL

1.01 This section covers tests and inspections that are required when No. 505-B, No. 505-C, No. 506-A and No. 506-B P B X's are installed.

1.02 The completed installation should be checked in accordance with the verification requirements forming a part of the general installation practices for those sections which apply to the installation work.

1.03 The assistance of a test deskman or a central office operator is required in making tests under (C).

2. TOOLS

2.01 All tools required for the tests in this section are specified in the practices covering tests of No. 505-B, No. 505-C, No. 506-A and No. 506-B P B X's.

3. INSPECTION OF CROSS-CONNECTING TERMINAL

3.01 The box should be firmly mounted.

3.02 Connecting blocks and fanning strips should be firmly mounted and properly lettered and numbered.

3.03 Cable extending to the P B X should be properly terminated.

3.04 Cross-connections and wires to stations should be neatly dressed and firmly fastened to the connecting block terminals.

4. INSPECTION OF CABLE BETWEEN CROSS-CONNECTING TERMINAL AND P B X

4.01 The cable should be in place in accordance with the requirements covered in the sections on placing and fastening wire and cable in buildings and on desks and tables of the Practices.

5. INSPECTION OF P B X

5.01 The interior of the P B X should be clean and free from wire clippings, etc., and the exterior should present a neat appearance without scratches or other defects.

5.02 Sufficient slack should have been left in the entering cable so that there is no strain on the skinners. The cable and cable form should be securely fastened by means of cable clamps and waxed flax twine.

5.03 On 506 type P B X's the cable should be fastened so as not to interfere with the opening and closing of the front panel.

5.04 The individual cable conductors for each row of terminal punchings should be properly terminated. The punchings should be free from wire clippings and loose bits of solder.

5.05 All relay covers should be in place.

5.06 See that the attendant's telephone instrument is properly connected and equipped with a dial when required.

5.07 If a hand generator is furnished see that the generator resistance lamp and the hand generator handle are in place.

5.08 If a hand generator is not furnished with the P B X see that the generator ringing key has been strapped so that regardless of the position of the key, ringing current will be connected to the station line ringing keys. The hole drilled in the end panel for the generator handle should be

covered by an escutcheon plate on 506 type boards or have an apparatus blank inserted into it on 505 type boards.

5.09 See that a copy of the circuit label is in the cabinet.

5.10 See that the cover is in place and securely fastened by the lock screws. Where a 506 type P B X is installed in a location which does not permit easy access to the rear of the board, the lock screw in the bottom rail of the rear panel may be left loose.

6. RELAY TESTS

6.01 The relays, drops and signals should not require the application of a current flow test at the time of installation, except when a P B X is moved from one subscriber's premises to another without passing through the shop or store-room for reconditioning. The testing and readjustment of individual relays, when necessary, should be conducted in accordance with the requirements for the particular type of relay involved.

7. CIRCUIT OPERATION TESTS

(A) Miscellaneous Circuit Tests

7.01 Make the following tests in accordance with Section 536-050-511.

(a) Generator Feeder.

(b) Battery Feeder.

(c) Test of break contacts of extension and trunk keys.

(d) Supervisory relay test.

(e) Attendant's telephone set and dial circuit.

(f) Battery cut-off and auxiliary signal circuit.

(B) Extension Line Circuit Operation Tests

7.02 Make the following tests in accordance with Section 536-050-511.

(a) Operation test of the supervisory signal in connection with each extension connecting key.

(b) Test of extension line signal and the continuity of the circuit through the extension connection key.

(c) Test of extension ringing keys.

(C) Trunk Circuit Tests

7.03 Make the following tests in accordance with Section 536-050-511.

(a) Trunk polarity test.

(b) Test of trunk drop and trunk drop buzzer contacts.

(c) Trunk holding and talking test.

(D) Dial Tone Tests

7.04 When the P B X is connected to a dial central office, test for dial tone by operating a trunk connecting key and then operating an attendant's telephone key to the corresponding position and note the presence of dial tone in the attendant's receiver. Repeat this test on each trunk.

(E) Test of Dial Central Office P B X Hunting Feature

7.05 Operate the first trunk key and associated talking key. When dial tone is heard, dial the number of the first trunk. Ringing induction should be heard and the call should come in on the second trunk operating the trunk drop.

7.06 Restore the first trunk key and then the second trunk drop and after several seconds, operate the second trunk key associated with the same talking key used in 7.05. When

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dial tone is heard on the second trunk, dial the number of the second trunk. Ringing induction should be heard and the call should come in on the third trunk operating the trunk drop.

7.07 Restore the second trunk key and then the third trunk drop and after several seconds, operate the third trunk key associated with the same talking key used in 7.05. When dial tone is heard on the third trunk, dial the number of the third trunk and if the P B X is equipped with more than three trunks the call will come in on the next higher trunk otherwise the busy signal should be heard in the receiver.

Note: The restoring of the trunk key associated with the trunk over which the call is dialed and the short delay before operating the trunk key associated with the trunk upon which the call has appeared is neces-

sary to permit the central office equipment to restore to normal so that registration of calls will not take place.

7.08 Proceed as outlined in 7.07 until all trunks have been tested and the busy signal is received on the highest numbered trunk.

7.09 Restore all keys and drops to normal.

7.10 Operate any one of the trunk keys except the first and the associated talking key. When dial tone is heard, dial the number of the first trunk. Ringing induction should be heard and the call should come in on the first trunk operating the trunk drop.

7.11 Restore all keys and drops to normal.

CIRCUIT TESTS
505B, 505C, 506A AND 506B PBX

I. GENERAL:

1.1 This section describes a method of testing the operating features of the 505-B, 505-C, 506-A and 506-B P B X switchboards. The tests covered are:

- (a) Generator Feeder.
- (b) Battery Feeder.
- (c) Operation Test of the Supervisory Signal in Connection with Each Extension Connecting Key.
- (d) Test of Extension Line Signal and the Continuity of the Circuit Through the Extension Connecting Keys.
- (e) Test of Extension Ringing Keys.
- (f) Test of Break Contacts of Extension and Trunk Keys.
- (g) Supervisory Relay Test.
- (h) Attendant's Telephone Set and Dial Circuit.
- (i) Test of Trunk Drop and Trunk Drop Buzzer Contacts.
- (j) Trunk Polarity Test.
- (k) Trunk Holding and Talking Test.
- (l) Battery Cut-off and Auxiliary Signal Circuit.

2. APPARATUS:

2.1 Hand Test Set or Test Receiver (No. 528 or equivalent) equipped with Cords and Clips.

3. METHOD:

(a) Generator Feeder:

3.1 Test for Presence of Ringing Current by ringing the bell of a nearby extension.

3.2 Test for Proper Operation of Hand Generator and Hand Generator Key. Push in the G key or operate the RINGING key to the HAND position. Operate the ringing key associated with the nearby extension and operate the hand generator. The bell at the extension should ring. Pull out the G key or restore the RINGING key to the KEY position.

3.3 Test for Reversed Generator Feeder. Connect one clip of the test receiver to the ground terminal of the battery feeder and the other clip to the terminal connected to the P B X side of the generator resistance lamp. This terminal is located on the terminal strip and is designated \pm under RING. If the generator feeder is correctly connected, ringing current will be heard in the receiver and the resistance lamp will light.

(b) Battery Feeder:

3.4 Test for the Presence of Battery. With the NIGHT SERVICE KEY or N key in the normal position, momentarily operate an idle or spare extension key to an idle position. Observe that the supervisory signal operates.

3.5 Test for Reversed Battery Feeder. First determine that the generator feeder is properly connected. With all the extension connecting keys normal connect one clip of the test receiver to the ground terminal of the generator feeder and touch the other test clip to the ring terminal of an extension

line. The extension line signal will operate if the battery feeder is properly connected.

Note: If no generator feeder is provided, use a local ground in place of the generator feeder ground in making the test.

(c) Operation Test of the Supervisory Signal in Connection with Each Extension Connecting Key:

3.6 Operate the extension connecting keys of the extension line under test to each position. The supervisory signal associated with each position should operate when the key is operated and should restore when the key is restored.

(d) Test of Extension Line Signal and the Continuity of the Circuit Through the Extension Connecting Keys:

3.7 Connect the test receiver across the extension line terminals at the terminal strip. The line signal should operate. Operate the extension connecting keys of the extension line to each position. The line signal should restore when each key is operated and the associated supervisory signal should not operate.

(e) Test of Extension Ringing Keys:

3.8 With the test receiver still connected across the extension line terminals, operate the extension ringing key. Note that ringing current is heard in the test receiver. Disconnect the test receiver.

Note: When making the above test, the bell at the extension may ring. If the subscriber answers, advise him that the line is being tested and request him to disconnect.

(f) Test of Break Contacts of Extension and Trunk Keys

3.9 Operate the lowest lever of the attendant's telephone key upward and remove the attendant's receiver from the switch hook. Connect one clip of the test receiver to the Y cord fastener of the attendant's telephone set. Tap the other clip of the test receiver to the ring terminal of the extension line under test while slowly operating the top lever of the extension connecting key to its upward position. As the key is slowly operated, a point should be reached where the ring terminal will test clear as indicated by no clicks in the test receiver. Repeat the test on the tip terminal of the extension line under test. This indicates that battery and ground from the extension line circuit are disconnected from the extension line as the key is operated.

3.10 Fully operate the top lever of the extension connecting key to its upward position and in continuation of the preceding test, slowly operate in succession the top lever of each trunk key to its upward position while tapping the terminals of the extension line under test. As each trunk key is slowly operated, a point should be reached where the tip and ring terminals will again test clear as indicated by no clicks in the test receiver. This indicates that local battery and ground are disconnected as the trunk key is operated. Similarly test the other positions of the trunk and extension connecting keys.

Note: When testing the upward position of the lower key levers, the attendant's telephone key associated with this position should be restored and another lever of the attendant's telephone key operated.

3.11 The test of the trunk keys, paragraph 3.10, need only be conducted from the terminals of one extension line and need not be repeated while testing the extension connecting keys associated with other extension lines.

(g) Supervisory Relay Test:

3.12 Operate an extension connecting key of a spare or idle extension line to the position associated with the supervisory relay under test. The supervisory signal should operate. Operate the attendant's telephone key to the same position as the operated extension connecting key and remove the receiver from the switch hook at the attendant's telephone set. Operate the switch hook several times and observe that the supervisory signal flashes. Restore all keys to normal.

(h) Attendant's Telephone Set and Dial Circuit:

3.13 Operate an attendant's telephone key and remove the attendant's receiver from the switch hook. Note the side tone in the receiver. Shake and slightly twist the desk stand and receiver cords to test for cut-out or noise.

3.14 If the attendant's telephone set is equipped with a dial, make the following tests:

Connect the attendant's telephone set to a trunk and operate the dial to call the central office operator or a test number. Note that the trunk drop does not operate and that excessive clicks are not heard in the receiver while dialing. If it is observed that the dial does not operate properly, the dial should be tested in the regular manner.

(i) Test of Trunk Drop and Trunk Drop Buzzer Contacts:

3.15 Obtain a ring on the trunk from the central office. The trunk drop should operate on the incoming call. Push in the line buzzer LB key or operate the BUZZER key to the ON position and note that the buzzer operates. Restore the drop shutter. The buzzer should stop.

(j) Trunk Polarity Test:

3.16 Connect one clip of the test receiver to the ground terminal of the battery feeder and touch the other clip alternately to the line terminals of each working trunk. If a louder click is received on the ring terminal of the trunk than on the tip terminal, the trunk is properly connected.

(k) Trunk Holding and Talking Test:

3.17 With one clip of the test receiver still connected to ground, connect the other clip to the tip terminal of the

trunk under test. Operate and release the trunk holding key and note that a click is heard in the test receiver. Restore the equipment to normal and make a talking test with the central office operator or test desk from each position of the trunk key.

Note: Care should be exercised in placing calls over trunks in dial system message rate areas to see that only non-registering code numbers are called.

(l) Battery Cut-off and Auxiliary Signal Circuit:

3.18 Push in the line buzzer LB key or operate the BUZZER key to the ON position. With the NIGHT SERVICE KEY or N key in its normal position, operate a trunk drop manually. The buzzer should operate. Operate the NIGHT SERVICE KEY or N key to its "down" position. The buzzer should stop. Restore the NIGHT SERVICE KEY or N key. The buzzer should operate. Operate an attendant's telephone key and remove the attendant's receiver from the switch hook. The buzzer should stop. Replace the receiver and restore the attendant's telephone key. The buzzer should operate. Pull out the line buzzer LB key or operate the BUZZER key to the OFF position. The buzzer should stop. Restore the trunk drop.

3.19 With all the extension connecting keys normal and the line buzzer LB key pushed in or the BUZZER key operated to the ON position, connect the test receiver across the terminals of an extension line. The buzzer should operate. Pull out the line buzzer LB key or operate the BUZZER key to the OFF position. The buzzer should stop.

3.20 Push in the supervisory buzzer SB key or operate the BUZZER key to the ON position. With the NIGHT SERVICE KEY or N key in its normal position, operate an extension connecting key. The supervisory signal and the buzzer should operate. Operate the NIGHT SERVICE KEY or N key to its "down" position. The buzzer should stop and the supervisory signal should restore. Restore the NIGHT SERVICE KEY or N key to normal. The buzzer and signal should operate. Pull out the supervisory buzzer SB key or operate the BUZZER key to the OFF position. The buzzer should stop. Restore the extension connecting key to normal.

4. REPORTS:

4.1 The required record of this routine should be entered on the proper form.

MODIFICATION FOR ANTI-SIDETONE CONNECTIONS 505B, 505C, 506A AND 506B PBX

1. GENERAL

1.01 This section covers the general requirements and methods for modifying the attendant's telephone circuit in 505 and 506 type PBX's to provide anti-sidetone connections.

1.02 This section is reissued to provide for the use of existing wiring on 506 type PBX's where it will reach added equipment and to cover the use of the No. 101A induction coil in place of the No. 146B induction coil.

1.03 If desirable a No. 584C or No. 684C subscriber set or equivalent can be used temporarily to provide service while the modification work is in progress. To do this remove the wire from terminal No. 1 of the induction coil and connect it to the L1 terminal of the subscriber set and run a new wire from the L2Y terminal of the subscriber set to the (IN) winding of the (TEL) relay.

2. TOOLS AND MATERIAL

2.01 The tools and installing material required are those specified in the practices covering specific installation methods.

2.02 The following apparatus and material are required for the modification:

One No. 9 Cord Fastener

One Standard Anti-Sidetone Desk Stand or Hand Telephone Set as required

One No. 101A Induction Coil

Two Feet of No. 22 D.S.C.C. Single Orange Wire (For Figs. 1, 2 and 3)

Two Feet of No. 22 D.S.C.C. Single Orange-White Wire (For Fig. 2)

Two Feet of No. 22 D.S.C.C. Single Red Wire (For Figs. 1 and 3)

Supplementary Circuit Label P-411463

One mounting detail P-236668 (for mounting No. 101A Induction Coil on mounting plate in No. 506B PBX's only)

3. REQUIREMENTS AND METHODS

Modification of 505 Type PBX's

3.01 Disconnect the desk stand or hand telephone set cord from the cord fasteners. (Connect this desk stand or hand telephone set to the No. 584C or No. 684C subscriber set when required for temporary service as provided by paragraph 1.03.)

3.02 Disconnect all wiring from the No. 46 induction coil. This wiring should be unsoldered carefully so that it will not be broken or have the insulation burned or badly frayed as it is to be reconnected to the No. 101A induction coil.

3.03 Disconnect the red-green wire which runs between the (IN) winding of the B2 (TEL) relay and the 2 M.F. (TEL) condenser. Also disconnect the yellow-green wire which runs between the 21-E (TEL) condenser and the (Y) cord fastener.

3.04 When a board is equipped with four cord fasteners, one of which is designated (C), disconnect in addition to the wires mentioned in paragraph 3.03, the red wire which runs between this (C) cord fastener and the No. 3 terminal of the induction coil.

Note: The local cable form should not be opened up to remove the wires mentioned in 3.03 and 3.04. Cut them off close to the cable form and leave them dead in the form.

3.05 Remove the No. 46 induction coil and replace it with the No. 101A induction coil. The No. 101A coil is most readily mounted by first installing one of the mounting screws so that the slotted mounting lug of the coil will slide snugly under the screw head. Then install the other mounting screw.

3.06 Locate the new No. 9 cord fastener in line with the existing cord fasteners and designate it (BK) except on boards equipped with a cord fastener designated (C) in which case redesignate it (BK) instead of adding a new cord fastener.

3.07 Run a single No. 22 D.S.C.C. orange wire between the (IN) winding of the B2 (TEL) relay and the (Y) cord fastener.

3.08 On boards where the (BK) cord fastener has been added run a single No. 22 D.S.C.C. red wire between the 2 M.F. (TEL) condenser and the (BK) cord fastener.

3.09 On boards where the (C) cord fastener has been redesignated (BK) and no new cord fastener has been added, run a single No. 22 D.S.C.C. orange-white wire between the (TEL) condenser and the (C) terminal of the induction coil.

3.10 These new leads may be superimposed on the existing local cable form.

3.11 Connect the wiring to the induction coil, relay, condenser and cord fasteners in accordance with Fig. 1 or 2.

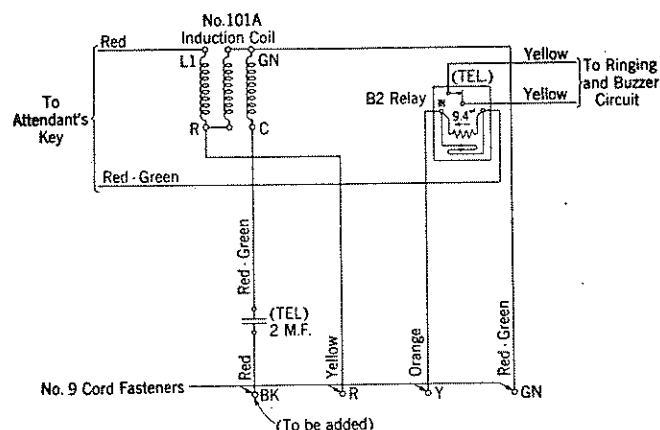


Fig. 1—Wiring of Telephone Circuit for Anti-Sidetone Connections 505 Type PBX's. (For Boards Where (BK) Cord Fastener Has to Be Added.)

3.12 Dress up the wiring of the entire cable form where it may have been disturbed by the modification work.

3.13 Connect the anti-sidetone desk stand or hand set cord to the No. 9 cord fasteners as indicated by the designations, also fasten the tie string or stay hook.

3.14 Place a copy of the supplementary circuit label P-411463 in the board and if the existing wiring which has been reused does not agree with the colors shown on the label, the label should be marked to show the color of the wires used.

Modification of 506 Type PBX's

3.15 Disconnect the desk stand or hand telephone set cord from the cord fasteners. (Connect this desk stand or

hand telephone set to the No. 584C or No. 684C subscriber set when required for temporary service as provided by paragraph 1.03.)

3.16 Disconnect all wiring from the No. 46 induction coil. This wiring should be unsoldered carefully so that it will not be broken or have the insulation burned or badly frayed as it is to be reconnected to the No. 101A induction coil.

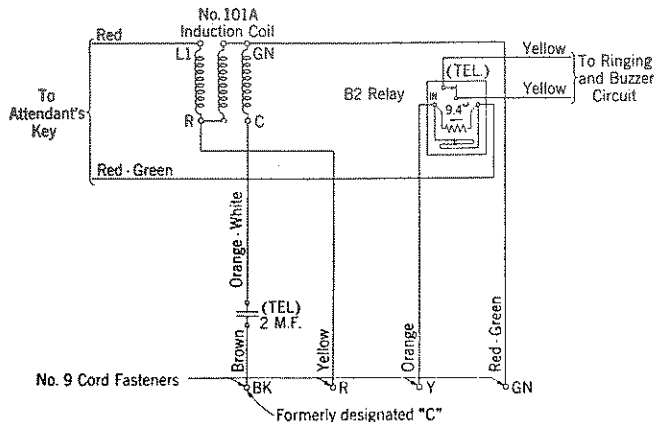


Fig. 2—Wiring of Telephone Circuit for Anti-Sidetone Connections 505 Type PBX's. (For Boards Where (BK) Cord Fastener Was Formerly Designated (C).)

3.17 Disconnect the orange-white wire which runs between the (IN) winding of the B2 (S) relay and the 2 M.F. (B) condenser.

3.18 If the red wire which runs between the 2 M.F. (B) condenser and the (Y) cord fastener is not long enough to reach the location of the new (BK) cord fastener as covered by 3.21, disconnect this wire at both the (Y) cord fastener and the 2 M.F. (B) condenser.

Note: The local cable form should not be opened up to remove the wires mentioned in 3.17 and 3.18. Cut them off close to the cable form and leave them dead in the form.

3.19 If the red wire which runs between the 2 M.F. (B) condenser and the (Y) cord fastener is long enough to reach the location of the new (BK) cord fastener as covered in 3.21, disconnect this wire only at the (Y) cord fastener.

3.20 Remove the No. 46 induction coil and replace it with the No. 101A induction coil as covered in 3.05.

Note: In the No. 506B PBX's install one mounting detail P-236668 on the drillings for the No. 46 induction coil and mount the No. 101A induction coil on this detail.

3.21 Locate the new No. 9 cord fastener in line with the existing cord fasteners and designate it (BK).

3.22 Run a single No. 22 D.S.C.C. orange wire between the (IN) winding of the B2 (S) relay and the (Y) cord fastener.

3.23 Run a single No. 22 D.S.C.C. red wire between the 2 M.F. (B) condenser and the (BK) cord fastener if the wire mentioned in the note following 3.18 has been cut off at the cable form. These new leads may be superimposed on the existing local cable form.

3.24 Connect the wiring to the induction coil, relay, condenser and cord fasteners in accordance with Fig. 3.

3.25 Dress up the wiring of the entire cable form where it may have been disturbed by the modification work.

3.26 Connect the anti-sidetone desk stand or hand set cord to the No. 9 cord fasteners as indicated by the designations, also fasten the tie string or stay hook.

3.27 Place a copy of the supplementary circuit label P-411463 in the board and if the existing wiring which has been reused does not agree with the colors shown on the label, the label should be marked to show the color of the wires used.

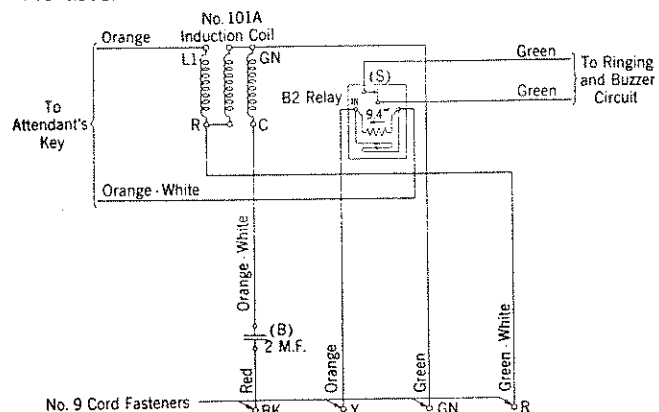


Fig. 3—Wiring of Telephone Circuit for Anti-Sidetone Connections 506 Type PBX's

4. INSPECTION

4.01 The interior of the PBX should be clean and free from wire clippings, etc.

4.02 Inspect all wiring and check to see that the connections have been made in accordance with either Fig. 1, 2 or 3.

4.03 See that a new supplementary circuit label showing these changes has been placed in the PBX

5. TESTS

5.01 Call the central office operator or test deskman and observe that the talking connection is satisfactory.