

SATT DETECTION OF SECOND PARTY
INDUCTOR GROUND AND RINGER TAP METHODS

1. GENERAL

1.01 This section provides instructions for modifying telephones to provide a 2,650-ohm inductive mark to be used by SATT detection equipment to identify the tip party of a two-party line.

1.02 This practice covers the provision of an inductive mark for Automatic Number Identification (ANI) in telephones with GTE Automatic Electric (GTE AE) ringer assemblies by wiring changes to provide a ringer coil tap. If the telephone set does not contain a suitably tapped ringer, an inductor must be added.

1.03 This section is reissued to include modification information for Type 85, 85E, 182B, 192B, 981B, and 982B telephones. Due to the nature of the changes involved, change indicators are omitted. Remove the previous issue of this section from the binder or microfiche file and replace it with this issue.

1.04 GTE AE practices are used by GTE employees for operating and maintaining the equipment it manufactures and sells. These practices may change or may not be suitable in a specific situation and so are recommended as suggested guidelines only. GTE AE hereby disclaims any responsibility and/or liability for any consequential or inconsequential damages that may result from the use of such practices. GTE AE acknowledges that the customer's special requirements policy/practices may take precedence over those supplied by GTE AE if conflicts develop during installation and ongoing operation.

2. RINGER COIL TAP

2.01 All GTE AE telephones equipped with a Type 45, 46, 46A, or 48 ringer can be wired by the installer to provide tip-party SATT detection (2,650-ohm inductive mark) by using the ringer tap (if so provided) if divided ringing is used.

2.02 The Type 80, 80E, 85, 85E, 90M, 95, 182A, 182B, 192A, and 192B telephones can be arranged for second-party identification by connecting ringer leads to various terminals of the transmission network if divided ringing is used.

2.03 The Type 80, 85, 90M, and 95 telephones, when equipped with a Type 45 tapped harmonic ringer (30, 33.3, 40, 42, 50, and 54 Hz), can be arranged for second-party identification by adding a capacitor and connecting the ringer leads to the transmission network as follows (if divided ringing is used):

- (a) BRN lead to terminal 21.

- (b) RED lead to terminal 9.
(c) GRN lead to terminal 16.
(d) BLU lead — tape and store.
(e) Ringer capacitor between terminals 16 and 6.

2.04 Type 80E telephones, which can use both the Type 45 and 48 ringers (because they are interchangeable), can be arranged for second-party identification by adding a capacitor and connecting the ringer leads to the transmission network as follows (if divided ringing is used):

TYPE 45 RINGER

TYPE 48 RINGER

- | | |
|--|--|
| BRN lead to terminal 21. | BLK lead to terminal 21. |
| RED lead to terminal 9. | RED lead to terminal 16. |
| GRN lead to terminal 16. | GRN lead to terminal 9. |
| BLU lead — tape and store. | BLU lead — tape and store. |
| Ringer capacitor between terminals 16 and 6. | Ringer capacitor between terminals 6 and 16. |

2.05 The Type 182A, 182B, 192A, and 192B telephones, which use the Type 46 or 46A ringer, can be arranged for second-party identification by adding a ringer capacitor and connecting the ringer leads to the transmission network as follows (if divided ringing is used):

- (a) BLK lead to terminal 21.
(b) RED lead to terminal 16.
(c) GRN lead to terminal 9.
(d) BLU lead — tape and store.
(e) Ringer capacitor between terminals 16 and 6.

NOTE: Wire the RED and GRN leads of Type 46A ringers manufactured on or before October 1, 1976, as follows:

- (1) RED lead to terminal 9.
(2) GRN lead to terminal 16.

2.06 To arrange a Type 980 STYLELINE® telephone to provide second-party identification, connect the Type 46 or 46A ringer leads to the terminal board as follows (if divided ringing is used):

- (a) BLK lead to terminal 17.
(b) RED lead to terminal 16.
(c) GRN lead to terminal 9.
(d) BLU lead to terminal 21.
(e) Ringer capacitor leads between terminals 16 and 15.

NOTE: Wire the RED and GRN leads of Type 46A ringers manufactured on or before October 1, 1976, as follows:

- (1) RED lead to terminal 9.
- (2) GRN lead to terminal 16.

3. INDUCTOR MOUNTING

3.01 When ANI service is required and the ringer is either removed or does not have a suitable 2,650-ohm tap, or bridged ringing is used, the telephone must be equipped with an inductor and restricted to use as the second-party telephone on two-party lines. The second telephone (including extensions) must be equipped to provide an identifying ground without introducing significant circuit unbalance.

Type 80 Telephones

3.02 To mount the inductor and bracket assembly (D-284686-C) in a Type 80 telephone to provide a 2,650-ohm inductive mark, refer to Figure 1 and proceed as follows:

- (a) Attach the inductor to the right side of the base (as viewed from the front and top) in front of the ringer volume control and beneath the hookswitch spring pileup.
- (b) Insert the inductor screw from the bottom of the base and tighten.
- (c) Connect the inductor as follows:
 - (1) BLK lead to transmission network terminal 21.
 - (2) RED lead — tape and store.
 - (3) SL lead to transmission network terminal 9.

NOTE: A good local ground must be provided to terminal 9.

Type 80E Telephones

3.03 To mount the inductor assembly kit (D-284686-C) in a Type 80E telephone, refer to Figure 2 and proceed as follows:

- (a) Mount the inductor assembly on the ANI mounting base and fasten it with an HD-765619-PP04 thread-forming screw.
- (b) Connect the inductor leads to the transmission network as follows:
 - (1) BLK lead to terminal 21.
 - (2) RED lead — tape and store.
 - (3) SL lead to terminal 9.

NOTE: A good local ground must be provided to terminal 9.

Type 85E Telephones

3.04 The inductor assembly kit (D-284686-C) can be assembled to Type 85E telephones equipped with a Type

48 ringer or with no ringer, or when bridged ringing is used. To mount the inductor, proceed as follows:

- (a) Mount the inductor assembly as shown in Figure 3. Secure it to the telephone base with an HD-765619-PP04 thread-forming screw.
- (b) Connect the inductor leads to the terminal network as follows:
 - (1) BLK lead to terminal 21.
 - (2) RED lead — tape and store.
 - (3) SL lead to terminal 9.

NOTE: A good local ground must be provided to terminal 9.

Type 182A and 192A Telephones

3.05 To mount the inductor assembly (D-284686-A) in a Type 182A or 192A telephone, refer to Figure-4 and proceed as follows:

- (a) Mount the inductor and bracket assembly in the slot that normally accepts the slide switch on lighted rotary dials.
- (b) Fasten the assembly in place by using the screw provided.
- (c) Connect the inductor leads to the transmission network as follows:
 - (1) BLK lead to terminal 21.
 - (2) RED lead — tape and store.
 - (3) SL lead to terminal 9.

NOTE: A good local ground must be provided to terminal 9.

Type 182B and 192B Telephones

3.06 To mount the inductor assembly (D-284686-A) in a Type 182B or 192B telephone, refer to Figure 4 and proceed as follows:

- (a) Mount the inductor and bracket assembly in the slot normally accepting the slide switch on lighted rotary dials.
- (b) Connect the inductor leads to the transmission network as follows:
 - (1) BLK to terminal 21.
 - (2) RED lead — tape and store.
 - (3) SL lead to terminal 9.

NOTE: A good local ground must be provided to terminal 9.

Type 90M Telephones

3.07 To mount the inductor assembly (D-284686-C) in a Type 90M telephone, proceed as follows:

- (a) Remove the lower screw in the cast-iron handset hanger mounting bracket.
- (b) Place the inductor assembly in position so that the larger untapped hole in the inductor assembly mounting bracket is aligned with the lower screw hole in the handset hanger mounting bracket.
- (c) Secure the inductor assembly to the handset hanger mounting bracket by using the screw removed in (a).
- (d) Connect the inductor leads to the transmission network as follows:
 - (1) BLK lead to terminal 21.
 - (2) RED lead — tape and store.
 - (3) SL lead to terminal 9.

NOTE: A good local ground must be provided to terminal 9.

Type 981A and 982A STYLELINE Bases

3.08 To mount the inductor assembly kit (D-284686-C) in a Type 981A or 982A STYLELINE base, refer to Figure 5 and proceed as follows:

- (a) Attach the inductor and bracket assembly to the ringer mounting hole by using the 6-40 x 3/16-inch screw. The screw goes through an unthreaded hole in the bracket into a tapped hole in the base.
- (b) Tighten the screw securely.
- (c) Connect the inductor leads to the transmission network as follows:
 - (1) BLK lead to terminal 21.
 - (2) RED lead to terminal 9.
 - (3) SL lead — tape and store.

NOTE: A good local ground must be provided to terminal 9.

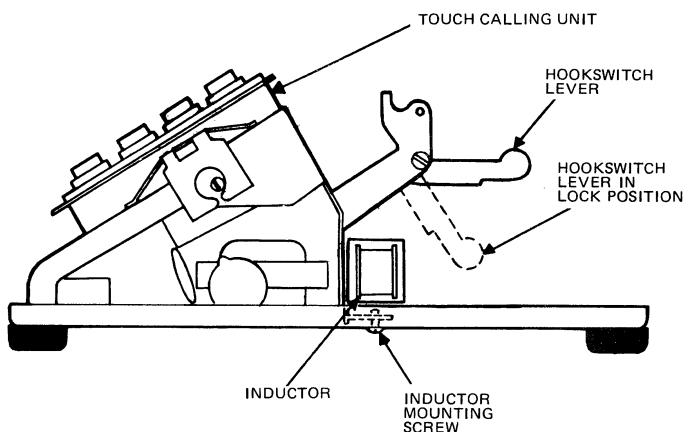


Figure 1. Mounting Inductor in Type 80 Telephone.

Type 981B and 982B STYLELINE Bases

3.09 To mount the inductor assembly kit (D-284686-C) in a Type 981B or 982B STYLELINE base, refer to Figure 6 and proceed as follows:

- (a) Mount the inductor and bracket assembly in the mounting hole using an HD-765640-PT04 screw.
- (b) Tighten the screw securely.
- (c) Connect the inductor leads to the terminal network as follows:
 - (1) BLK lead to terminal 21.
 - (2) RED lead to terminal 9.
 - (3) SL lead — tape and store.

NOTE: A good local ground must be provided to terminal 9.

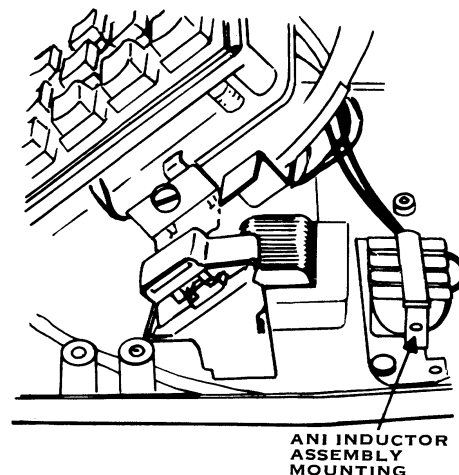
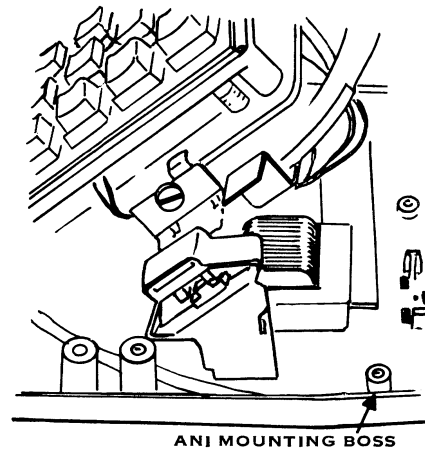


Figure 2. Mounting Inductor in Type 80E Telephone.

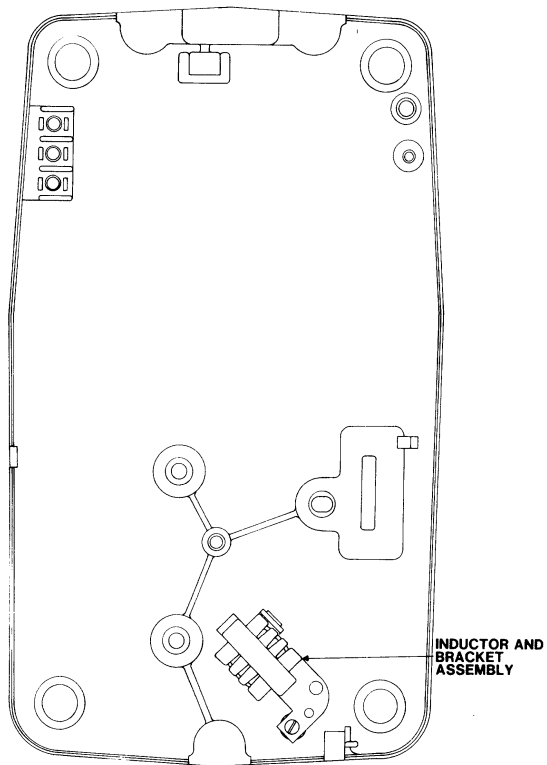


Figure 3. Mounting Inductor in Type 85E Telephone.

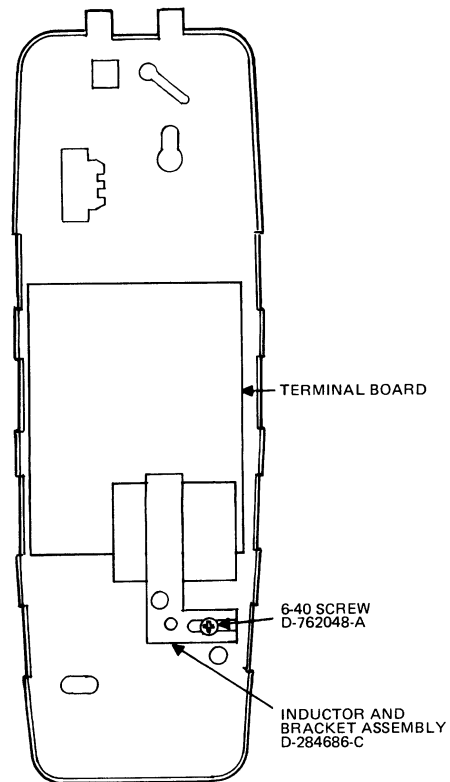


Figure 5. Mounting Inductor in Type 981A and 982A STYLELINE Bases.

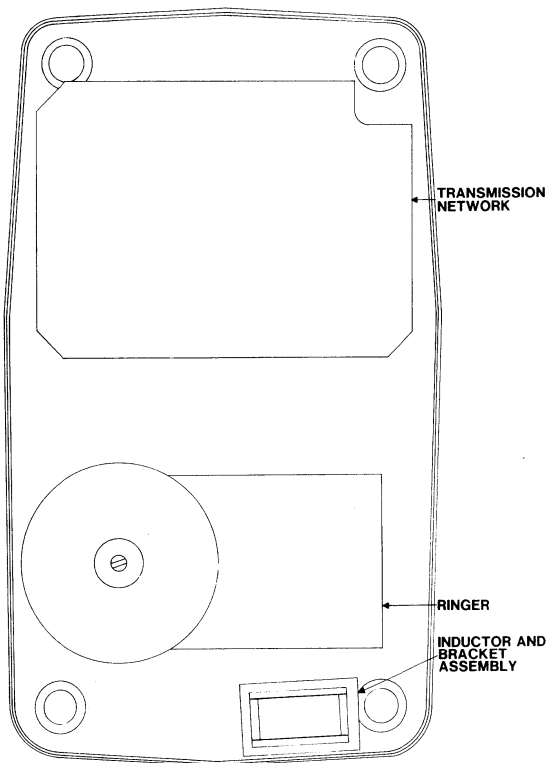


Figure 4. Mounting Inductor in Type 182A, 182B, 192A, and 192B Telephones.

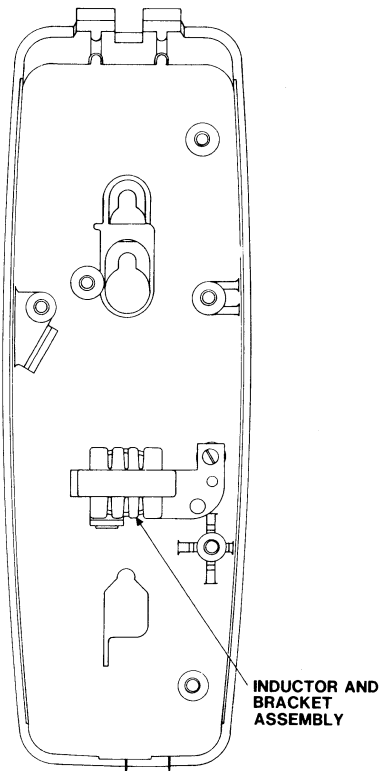


Figure 6. Mounting Inductor in Type 981B and 982B STYLELINE Bases.