INSTALLATION AND FIELD MAINTENANCE
A. E. CO. TYPE 80 TELEPHONE

1. GENERAL

1.01 This addendum is reissued to furnish a wiring diagram, schematic diagram, and connection information for the NC series Type 80 telephone set equipped with a dial. The information pertaining to radio interference suppression which appeared in Addendum Issue 1 is repeated in this issue. The information on handset components which appeared in Issue 1 is repeated here with additional information concerning the receiver units to be used with the NC series telephone sets.

1.02 The NC series telephone set (NC-802) contains an improved printed wiring card transmission unit WA-1154-A. Use of the new transmission unit affects installation procedures because some of the terminal designations have been changed and some terminals have been relocated. The wiring diagrams provided in Figures 1 and 2 of this addendum show the new terminal numbers and locations. Tables 1 and 2 of this addendum provide connection information for the various ringing schemes.

1.03 Changes pertaining to the NC series sets are covered in Part 4 of this addendum. Paragraphs 2.01 and 3.01 through 3.06 of Addendum Issue 1 are repeated in this issue for record purposes only. Paragraph 3.07 of this issue provides information in addition to that which appeared in the same paragraph in Addendum Issue 1. In ink or red pencil, make the changes described in Part 4 of this addendum. Remove Addendum 473-215-200, Issue 1 and file this addendum in its place ahead of Section 473-215-200, Issue 2.

2. DESCRIPTION, RADIO INTERFERENCE SUPPRESSION

2.01 When located within approximately one mile of a radio transmitter, A.E.Co. Type 80 telephone sets equipped with self-compensating networks are subject to radio interference. Radio transmitters emitting frequencies of 700kHz-1.5MHz have varying effects on the telephone, depending on the power of the transmitter. Those transmitters operating at 50,000 watts have caused the greatest problem.

3. CHANGES, RFI SUPPRESSION AND HANDSET COMPONENTS

Radio Interference Suppression

3.01 The source of RFI may be within the telephone set, in a component or in a line connection external to the set. Refer to the test procedures in Section 471-150-200 of the General System Practices to determine if the source of RFI is external or internal to the telephone set.

3.02 If the results of the test show that the source of RFI is external to the telephone set, then take corrective measures as indicated in Section 471-150-200.

NOTE: The order number for induction coil SE1452A, mentioned in Section 471-150-200, is available from Automatic Electric Co. as supply sales No. S-425150.

3.03 If the source of RFI is found to be internal to the telephone set, then install drainage capacitors within the telephone set according to the procedure provided in the following paragraph.

3.04 The radio interference can be suppressed by the addition of three .03 μF, 500-volt d-c capacitors in the telephone circuit. Refer to Figures 6, 7, 8, or 9 of Section 473-215-200 (Issue 2) when making the following connections:

(1) Connect one .03 μF capacitor between terminals 3 and 4 of the self-compensating network.

(2) Connect one .03 μF capacitor between terminals 3 and 5 of the self-compensating network.

(3) Connect one .03 μF capacitor between terminals 1 and 5 of the self-compensating network.

The capacitor leads should be covered with .042 inch I.D. sleeving.

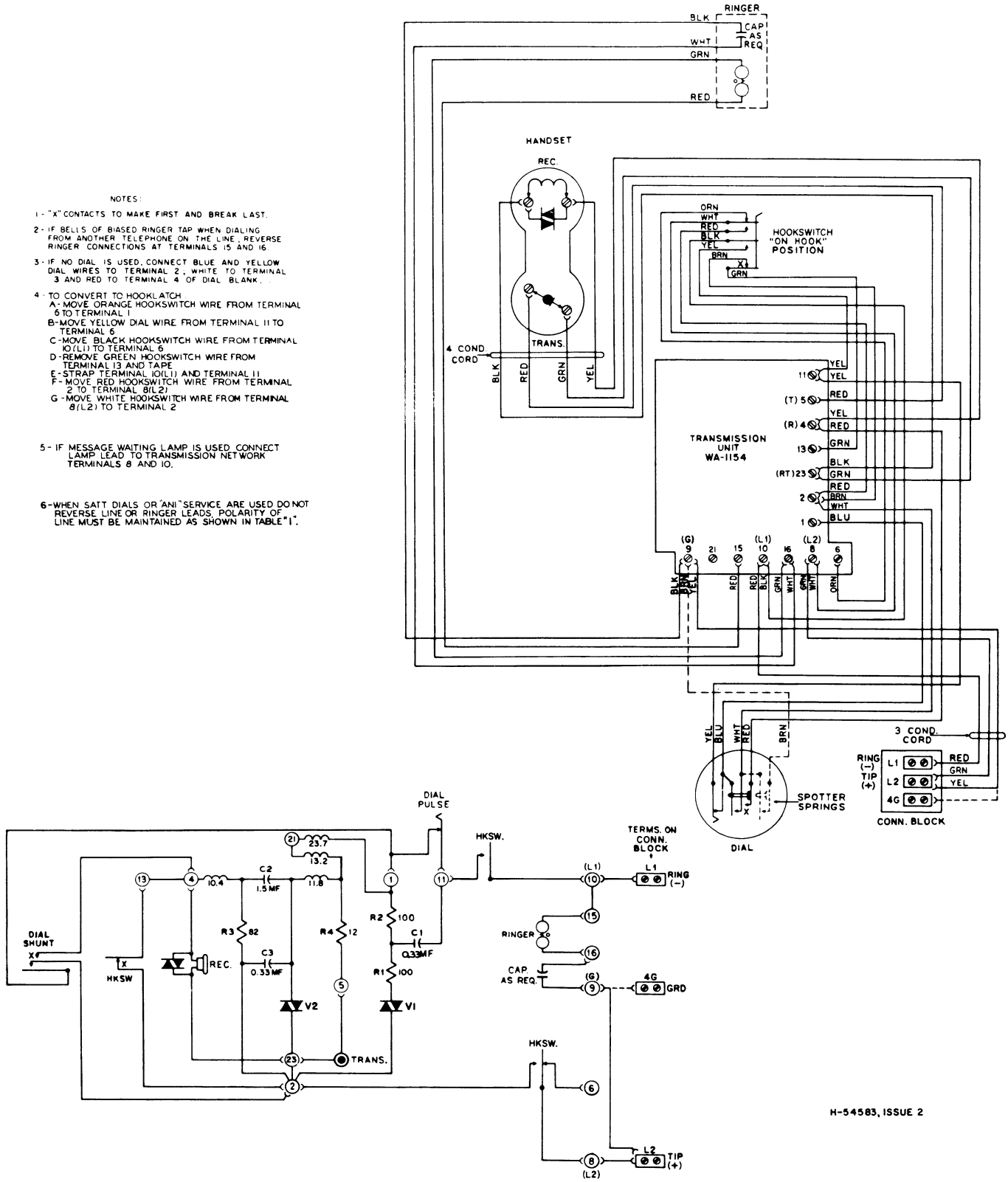

Figure 1. Schematic and Wiring Diagram, Type 80 Self-Compensating Telephone Set NC-802.

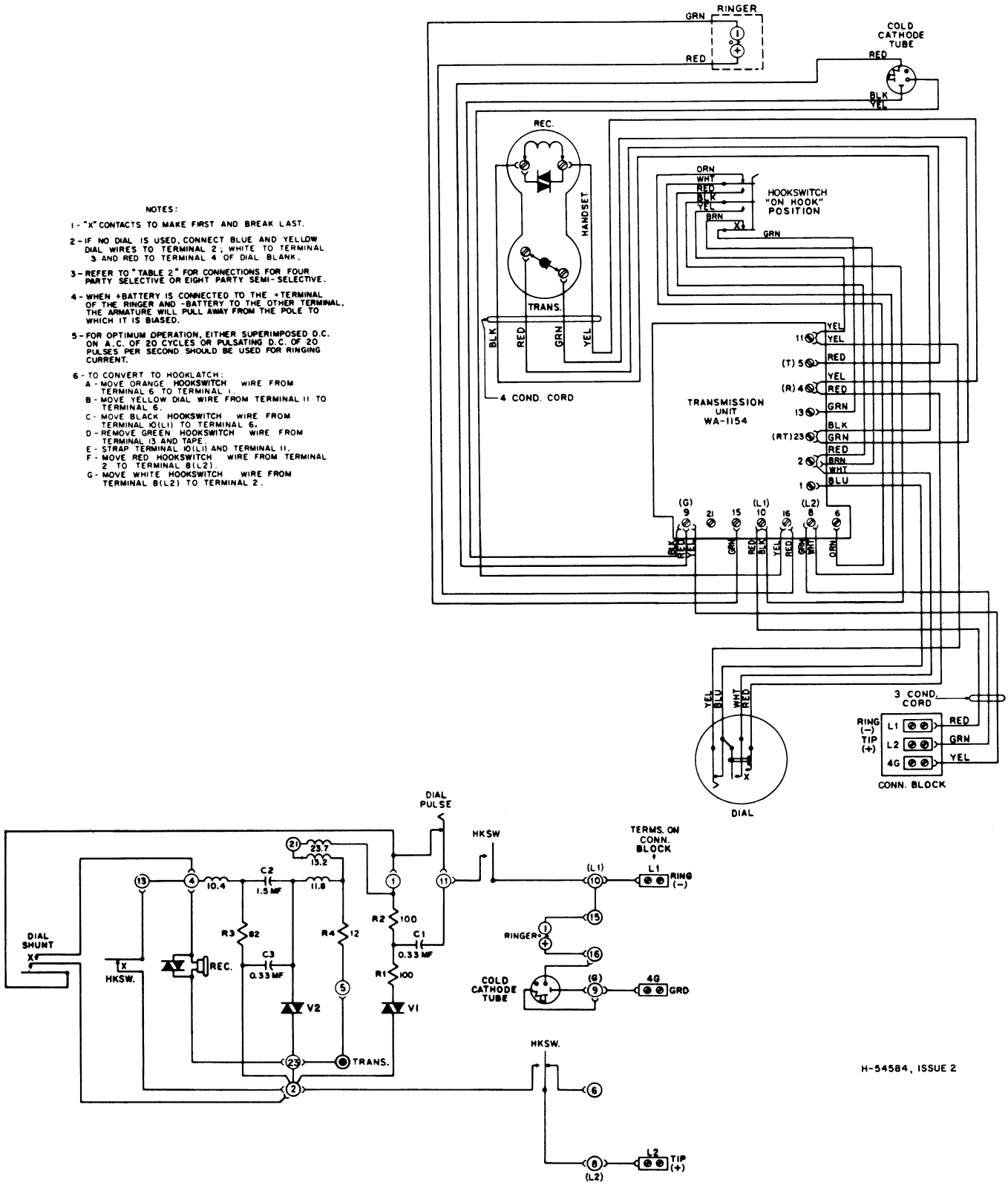

Figure 2. Schematic and Wiring Diagram, Type 80 Self-Compensating Telephone Set NC-802 with Superimposed Ringing.

Table 1. Lead Terminations for Standard Type 80 Telephone Set (NC Series, Figure 1 of Addendum).

	Transmission Unit				Terminal Block					
	Ringer Leads		Capacitor Leads		Line Cord			Interior Wires		
	RED	GRN	BLK	WHT	RED	GRN	YEL	RED (RING)	GRN (TIP)	YEL (GRD)
Bridged Ringing	15	16	9(G)	16	L1	L2	L2	L1	L2	Not Req.
Divided Ringing L1(-) to Ground	15	16	9(G)	16	L1	L2	4G	L1	L2	4G
Divided Ringing L2(+) to Ground	15	16	9(G)	16	L1	L2	4G	L2	L1	4G
Bridged Ringing (SATT Dial)	15	16	8	16	L1	L2	4G	L1	L2	4G
Divided Ringing L1(-) to Ground (SATT Dial)	15	16	9(G)	16	L1	L2	4G	L1	L2	4G
Divided Ringing L2(+) to Ground (SATT Dial)	8	16	9(G)	16	L1	L2	4G	L1	L2	4G

3.05 The order number for the .03 μF, 500 volt d-c capacitors is D-68820-AE. The order number for the sleeving is D-542410-A. The sleeving (approximately 3 inches per capacitor) should be ordered as required.

Transmitter and Receiver Units

3.06 In the margin adjacent to Paragraph 4.07, write "See Addendum."

3.07 Type 80 telephone sets with manually adjusted series rheostats (N series) use Type 81 transmitter and receiver units. Type 80 telephone sets with potted or WA-1120 self-compensating networks (NB series) use Type 810 transmitter and receiver units. Type 80 telephone sets with WA-1154 self-compensating networks (NC series) use Type 810 transmitter units and Type 811 receiver units.

4. CHANGES, NC SERIES TELEPHONE SETS

4.01 In Figure 2, change title to:

"Figure 2. Terminal Location, Printed Wiring Card Transmission Unit WA-1120 (See Addendum Wiring Diagram for Terminal Locations on WA-1154, NC Series Sets)."

4.02 In Figure 6, change title to:

"Figure 6. Schematic and Wiring Diagram, Type 80 Self-Compensating Telephone with Printed Wiring Card Transmission Unit WA-1120 (See Addendum Figure 1 for NC Series Diagrams)."

4.03 In Figure 6 in the wiring diagram portion under TRANSMISSION UNIT, write:

"WA-1120"

4.04 In Figure 8, change the title to:

"Figure 8. Schematic and Wiring Diagram, Type 80 Self-Compensating Telephone NB Series for Superimposed Ringing with Printed Wiring Card Transmission Unit WA-1120 (See Addendum Figure 2 for NC Series Diagrams)."

Table 2. Lead Terminations for Type 80 Telephone Set with Superimposed Ringing (NC Series, Figure 2 of Addendum).

Station	Ringer Leads		Tube Leads		
	GRN	RED	YEL	BLK	RED
No. 1 or No. 5: - Station On - (Ring) Line	15	16	16	9(G)	9(G)
No. 2 or No. 6: - Station On + (Tip) Line	8	16	16	9(G)	9(G)
No. 3 or No. 7: + Station On - (Ring) Line	16	15	9(G)	16	16
No. 4 or No. 8: + Station On + (Tip) Line	16	8	9(G)	16	16

4.05 In Figure 8 in the wiring diagram portion under TRANSMISSION UNIT, write:

"WA-1120"

4.06 In Table 1, change title to:

"Table 1. Lead Terminations, Type 80 Self-Compensating Telephone (NB Series, Figures 6 and 7) (See Addendum Table 1 for NC Series Terminations)."

4.07 In Table 2, change title to:

"Table 2. Lead Terminations for Superimposed Ringing Type 80 Self-Compensating Telephone (NB Series, Figures 8 and 9) (See Addendum Table 2 for NC Series Terminations)."

4.08 At the end of Paragraph 3.07, write:

"See Addendum Para. 4.08."

To provide ANI tip party identification on NC-802 series sets, inductor assembly D-284686-C is required for the 2650-ohm inductive mark. The assembly mounts on the right side of the baseplate (as viewed from the front top) in front of the ringer volume control opening and beneath the right side of the hookswitch bracket. Fasten the inductor assembly by installing the screw (furnished with the inductor assembly) through the baseplate hole (nearest the ringer volume control opening) into the threaded hole in the inductor assembly bracket. Connect the black inductor wire to transmission unit terminal 21 and the gray wire to terminal 9. Tape and store the red wire.