

COMMUNICATIONS EQUIPMENT

16 March 1945

# REDUCTION OF PRECIPITATION STATIC—SCR-183 SERIES, SCR-283 SERIES, SCR-274-N, BC-348-J, BC-348-N AND BC-348-Q

This Technical Order replaces T. O. No. 08-40-2, dated 21 December 1944, revised to change NOTE, and resistor identification and connection.

**NOTE** As prescribed in T. O. No. 00-20A, appropriate reference to the work prescribed in paragraph 2. will be entered on the AAF Forms 60-A for the aircraft affected. The work directed in paragraph 2. will be accomplished as soon as practicable by service activities with the aid of base maintenance facilities, if necessary. Affected items in stock will be modified prior to issue in accordance with the instructions contained in paragraph 2.

1. To reduce the effects of precipitation static which interferes with the reception of radio communication signals, all Antenna Relay Units BC-442-A and BC-442-AM, part of Radio Set SCR-274-N, Antenna Relay Units BC-AE-198, BC-AG-198, BC-AH-198, BC-AL-198, BC-AN-198, BC-AO-198, BC-AP-198, BC-AR-198, and BC-AS-198, part of SCR-183 series, Antenna Relay Units BC-AL-408, BC-AN-408, BC-AO-408, BC-AQ-408, BC-AR-408, part of SCR-283 series, and Radio Receivers BC-348-J, BC-348-N, and BC-348-Q will be inspected for the presence of the modification symbol "M-1" near the name plate.

a. All the afore-mentioned items which do not bear the modification symbol will be modified in accordance with the instructions contained in paragraph 2.

b. If the items bear the modification symbol, further compliance with this Technical Order is not required.

## 2. MODIFICATION AND MARKING.

### a. ANTENNA RELAY UNITS BC-442-A AND BC-442-AM.

(1) Disconnect antenna lead-in and plug connections from relay unit.

(2) Open snap slides and remove relay unit from mounting.

(3) Remove the eight No. 4 screws which secure the base to the relay case and remove base. Retain screws.

(4) Locate the ground terminal lug inside case bolted to chassis immediately above the meter and locate the lead connecting "REC" binding post to the lower antenna relay contact.

**NOTE** If a 1-megohm resistor is connected between ground and "REC" binding post, it will

not be disturbed, and paragraphs 2.a.(5), (6), and (7) herein will be disregarded.

(5) Mechanically secure and electrically solder a 1-megohm, 1/2-watt resistor, stock No. 3RC20AE105K, between the ground terminal and the "REC" binding post lead located in the preceding step.

**NOTE** Any locally available 1/4-watt, 1-megohm, or 1/2-watt, 1-megohm resistor of suitable dimensions may be substituted for the foregoing resistor.

(6) Remove any bits of wire or solder from the case to prevent danger of a short circuit.

(7) Bend leads so resistor is clear of existing wiring.

(8) Reinstall base using retained screws.

(9) Using orange paint and a half-inch letter size stencil, place the modification symbol "M-1" near the name plate.

(10) Reinstall antenna relay unit on mounting, lock snap slides and secure with safety wire.

(11) Reconnect antenna lead-in and plug connections.

### b. ANTENNA RELAY UNITS BC-198 SERIES, AND BC-408 SERIES.

(1) Disconnect antenna lead-in and plug connections, open snap slides and remove relay unit from mounting.

(2) Remove the four No. 6 screws which fasten base to case and remove base.

(3) Locate the relay ground terminal lug inside case near the "TR" binding post and locate the lead

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connecting the two stationary relay contacts to the "REC" binding post.

**NOTE** Use care in ascertaining the correct terminal of the relay. Otherwise the resistor installed in the succeeding paragraph will have no effect. If a 1-megohm, 1/4-watt resistor is connected between ground and "REC" binding post, it will not be disturbed, and paragraphs 2.b.(4), (5), and (6) herein will be disregarded.

(4) Mechanically connect a 1-megohm, 1/2-watt resistor, stock No. 3RC20AE105K, between the ground terminal lug and the "REC" binding post lead located in the preceding step.

(5) Carefully solder the two joints and remove any bits of wire or solder from the relay case to prevent danger of a short circuit.

(6) Bend resistor leads to clear existing wiring.

(7) Attach base using the retained screws.

(8) Using orange paint and a half-inch letter size stencil, place the modification symbol "M-1" near the name plate.

(9) Reinstall antenna relay unit on mounting, lock snap slides and secure with safety wire.

(10) Reconnect antenna lead-in and plug connections.

**c. RADIO RECEIVERS BC-348-J,  
BC-348-Q, AND BC-348-N.**

(1) Disconnect antenna, ground, and plug connections.

(2) Open snap slides and remove receiver from mounting.

(3) Remove chassis from case and place bottom side up on a repair bench.

**NOTE** If a 1-megohm resistor is connected between antenna post mounting screw and

ground post mounting screw, it will not be disturbed, and paragraphs 2.c.(4), (5), (6), and (7) herein will be disregarded.

(4) Wrap and secure a complete turn of one lead of a 1-megohm, 1/2-watt resistor, stock No. 3RC20AE105K, around the mounting screw of the antenna post and secure the remaining resistor lead on the mounting screw of the ground post.

**NOTE** Any locally available 1/4-watt, 1-megohm or 1/2-watt, 1-megohm resistor of suitable dimensions may be substituted for the foregoing resistor.

(5) Carefully solder the two connections just made and remove any bits of wire or solder from the chassis to prevent danger of a short circuit.

(6) Examine the lead from the antenna post to the first antenna stage to insure that it is still firmly attached and well soldered.

(7) Bend leads so resistor is parallel with inside face of front panel making certain resistor and lead which connects to antenna post cannot short against chassis.

(8) Replace receiver chassis in case and secure.

(9) Using orange paint and a half-inch letter size stencil, place the modification symbol "M-1" near the receiver name plate.

(10) Reinstall receiver on mounting. Lock snap slides and secure with safety wire.

(11) Reconnect antenna, ground, and plug connections.

**3. SUPPLY INFORMATION.**

a. The following compliance parts are required for each antenna relay unit or receiver modified and will be obtained, when required, by requisition submitted through normal channels.

QTY	STOCK NO.	NOMENCLATURE	CLASS	SOURCE
1	3RC20AE105K	**3RC20AE - Resistor AWS fixed composition 1/2-watt insulated 1-megohm	16-A	AF Stock
As req	6G1510	*Paint - Ready mixed, orange, lead base	16-A	AF Stock

\*Any available orange paint may be substituted for this item. Only a small amount is required for each modification.

\*\*If 1/4-watt, 1-megohm resistor of suitable dimensions is available, it may be used in place of the 1/2-watt, 1-megohm resistor specified.

b. No parts are removed and not reinstalled.

BY COMMAND OF GENERAL ARNOLD:

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