

RADIO RECEIVER R-388/URR

TM 11-854  
TO 31R1-2URR-121  
CHANGES No. 3

TM 11-854/TO 31R1-2URR-121, 23 April 1952, is changed as follows:

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8.3. Differences in Models Procured on Order No. 30951-Phila-57

(Added)

- a. Capacitors C005 and C006 are 4,700  $\mu\text{f}$  each.
- b. IF GAIN potentiometer R187 (50K) and capacitor C240 (.01  $\mu\text{f}$ ) are connected between the cathode of V108 (pin 7) and ground.
- c. DIODE LOAD jack, and the AGC jack are located on the rear panel.
- d. Resistor R186 (220K) is connected between the grid of V113 (pin 7) and chassis ground.

Page 16.

20e. (Added) Use the receiver disabling relay to disconnect the receiving antenna when the transmitter is in operation; or detune the receiver from the frequency of the transmitter. This will prevent excessive RF current from warping the antenna coil.

Page 19, paragraph 30a (page 2 of C 2). Make the following changes:

Line 1. Add after "(Superseded)": Lubricate the receiver upon reassembly after repair.

Lines 1 and 2. Add after "gear train teeth,": band-changing gear trains,

Page 19, paragraph 30. Make the following changes:

b. Line 1. Add after "Gasoline": or carbon tetrachloride.

c. Line 2. Delete "carbon tetrachloride or solvent (SD)" and substitute: Cleaning Compound.

Page 38, figure 23.

Note. (Added) IN EQUIPMENT PROCURED ON ORDER NO. 30951-PHILA-57, IF GAIN POTENTIOMETER R187 (50K) WITH CAPACITOR C240 (.01 UF) IN PARALLEL, ARE CONNECTED BETWEEN PIN 7 OF V108 AND GROUND.

Page 40, figure 25. Make the following changes: Change the value of R149 to: 680.

Note. (Added) IN EQUIPMENT PROCURED ON ORDER NO. 30951-PHILA-57, RESISTOR R186 (220K) IS CONNECTED BETWEEN PIN 7 OF V113 AND GROUND.

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THE AIR FORCE

WASHINGTON 25, D. C., 24 May 1957

Page 42, figure 26.

Note. (Added) IN EQUIPMENT PROCURED ON ORDER NO. 30951-PHILA-57, RESISTOR R186 (220K) IS CONNECTED BETWEEN PIN 7 OF V113 AND GROUND.

Page 45, figure 29. Add pins 2 and 7 next to pin 4 (ground connection) on voltage regulator tube V116.

Page 56, figure 32. Make the following changes: Pins, 2, 4, and 7 of V116 are internally connected and the voltage and resistance readings are zero.

Pins 5 and 1 are internally connected and the voltage and resistance readings are +150 volts and 44K, respectively.

In equipment procured on Order No. 30951-Phila-57, the resistance at pin 7 of V113 is 220K ohms.

Place VOLTAGE directly above "REGULATOR V116."

Page 72, paragraph 84. (Introductory paragraph.) Delete the eighth sentence and substitute: Connect a vtvm to the junction of resistors R150 and R152, and ground (fig. 26). In equipment procured on Order No. 30951-Phila-57, connect the vtvm from the DIODE LOAD jack, on the rear panel, to chassis ground.

Page 73, paragraph 87a. Delete the last sentence and substitute: Connect a vtvm to the junction of resistors R150 and R152, and chassis ground (fig. 26). In equipment procured on Order No. 30951-Phila-57, connect the vtvm from the DIODE LOAD jack, on the rear panel, to chassis ground.

91.1. Intermediate Frequency Adjustment  
(Added.)

Note. The following applies to equipments procured on Order No. 30951-Phila-57.

a. Connect the signal generator to the ANTENNA jack through a dummy antenna (47-ohm resistor in series with a 100- $\mu\text{f}$  capacitor).

b. Connect a 47-ohm resistor from IF OUTPUT jack J104 to ground, and connect the vtvm across the resistor.

c. Set the AVC switch to OFF.

d. Adjust the ANT. TRIM control for maximum IF output as indicated by the vtvm.

e. Adjust the IF GAIN potentiometer (R187) for 175 mv as indicated by the vtvm. (R187 is located near the METER ZERO potentiometer (R140).)

f. Retune the secondary of transformer T103, and the primary of transformer T104. Use the procedure outlined in paragraph 84a and d.

Page 98. Make the following changes:

Change the value of R149 to: 680.

On VOLTAGE REGULATOR V116, add pins 2 and 7 next to pin 4 (ground connection); and add pin 1 beside pin 5 (plate).

Complete the connection from pin 5 of BFO V114 to the plate.

[AG 413.44 (17 May 57)]

BY ORDER OF THE SECRETARIES OF THE ARMY AND THE AIR FORCE:

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Yuma Test Sta  
Army Elct PG  
Sig Fld Maint Shops  
Sig Lab  
Mil Dist  
JBUSMC  
Units organized under following  
TOE's:  
11-7  
11-16  
11-57  
11-127  
11-128  
11-500  
11-557  
11-587  
11-592  
11-597  
32-500

NG: State AG; units—same as Active Army.

USAR: None.

For explanation of abbreviations used, see SR 320-50-1.

NOTES: (Added) (FOR EQUIPMENT PROCURED ON ORDER NO. 30951-PHILA-57.)

1. CAPACITORS C005 AND C006 HAVE A VALUE OF 4,700 MMF.
2. THE DIODE LOAD TEST POINT IS AT THE JUNCTION OF R150 AND R152.
3. THE AGC TEST POINT IS AT THE PLATE OF VIHA (PIN 1).
4. RESISTOR R186 (220K) IS CONNECTED BETWEEN PIN 7 (V113) AND CHASSIS GROUND.
5. THE CONNECTION BETWEEN PIN 7 OF V108 AND GROUND IS REMOVED. CAPACITOR C240 (.01 UF) IS CONNECTED FROM PIN 7 TO CHASSIS GROUND. POTENTIOMETER R187 (50K) IS CONNECTED TO PIN 7 WITH THE MOVABLE CONTACT CONNECTED TO CHASSIS GROUND.