

EQUIPMENT CHANGES.

This temporary correction covers the following changes which were made on Radio Receiving Sets AN/FRR-21 (bearing serial numbers 107 to 220 inclusive and 335 and up), AN/FRR-22 (bearing serial numbers 236 and up), and AN/FRR-23 (bearing serial numbers 343 to 492 inclusive and 643 and up).

1. Five of the type 5647 tubes (one in the second i-f assembly and four in the audio assembly) have been replaced with type 1N458 crystal diodes. The specific tube symbols affected, the Z numbers of the associated sub-assembly, and the corresponding assembly are given in the table which follows.

TUBE SYMBOL	ASSEMBLY WHERE FOUND	ASSOCIATED SUB-ASSEMBLY	TUBE FUNCTION
V1005	2nd IF	Z1012	Detector
V1101	Audio	Z1101	Noise Limiter
V1103	Audio	Z1103	Silencer Diode
V1106	Audio	Z1106	Limiter
V1107	Audio	Z1107	Limiter

The crystal diodes bear the same V-symbol numbers as the electron tubes they replace. Plug-in units having electron tubes are interchangeable with plug-in units having crystal diodes, both electrically and mechanically.

These modifications will not reflect any changes in the characteristics of the sets involved.

1. On page 1-6, below table 1-5, add the following note.

On equipments bearing serial numbers 107 through 220 and 335 and up:

In 2nd I-F circuit, one type 5647 electron tube is replaced with type 1N458 crystal diode.

In Audio Amp. circuit the four type 5647 electron tubes are replaced by type 1N458 crystal diode.

The total type 5647 tubes is one and the total type 1N458 crystal diodes is five.

RADIO CORPORATION OF AMERICA
 RCA VICTOR DIVISION
 Camden, New Jersey, U.S.A.

Contracts: NObsr-52623
 NObsr-57135

IB-39580-b

2. On page 1-6, below table 1-6, add the following note.

On Radio Receiving Sets type AN/FRR-22 bearing serial numbers 236 and up and type AN/FRR-23 bearing serial numbers 343 through 492 and 643 and up:

In 2nd I-F circuit, one type 5647 electron tube is replaced with type 1N458 crystal diode.

In Audio Amp. circuit the four type 5647 electron tubes are replaced by type 1N458 crystal diodes.

The total type 5647 tubes is one and the total type 1N458 crystal diodes is five.

3. On page 2-13, add the following note to figure 2-3.

V1005, type 5647 electron tube, is replaced by a crystal diode, type 1N458, in AN/FRR-21 equipments bearing serial numbers 107 to 220 inclusive and 335 and above, in AN/FRR-22 equipments bearing serial numbers 236 and above, and in AN/FRR-23 equipments bearing serial numbers 343 to 492 inclusive and 643 and above.

4. On page 2-15, add the following note to figure 2-4.

V1101, type 5647 electron tube, is replaced by a crystal diode, type 1N458, in AN/FRR-21 equipments bearing serial numbers 107 to 220 inclusive and 335 and above, in AN/FRR-22 equipments bearing serial numbers 236 and above, and in AN/FRR-23 equipments bearing serial numbers 343 to 492 inclusive and 643 and above.

5. On page 2-13, add the following note to figure 2-5.

V1103, type 5647 electron tube, is replaced by a crystal diode, type 1N458, in AN/FRR-21 equipments bearing serial numbers 107 to 220 inclusive and 335 and above, in AN/FRR-22 equipments bearing serial numbers 236 and above, and in AN/FRR-23 equipments bearing serial numbers 343 to 492 inclusive and 643 and above.

6. On page 2-21, 2-22; add the following note to figure 2-8.

Type 5647 electron tubes V1005, V1101, V1103, V1106, and V1107 are replaced by type 1N458 crystal diodes in type AN/FRR-21 equipments bearing serial numbers 107 through 220 and 335 and subsequent.

7. On page 2-23, 2-24; add the following note to figure 2-9.

Type 5647 electron tubes V1005, V1101, V1103, V1106, and V1107 are replaced by type 1N458 crystal diodes in type AN/FRR-22 equipments bearing serial numbers 236 and subsequent.

8. On page 2-25, 2-26; add the following note to figure 2-10.

Type 5647 electron tubes V1005, V1101, V1103, V1106, and V1107 are replaced by type 1N458 crystal diodes in type AN/FRR-23 equipments bearing serial numbers 343 through 492 and 643 and subsequent.

9. On page 7-51, 7-52; add the following note at bottom of illustration.

NOTE 3. - Type 5647 electron tubes V1005, V1101, V1103, V1106, and V1107 are replaced by type 1N458 crystal diodes in type AN/FRR-21 equipments bearing serial numbers 107 through 220 and 335 and up, in type AN/FRR-22 equipments bearing serial numbers 236 and up, and in type AN/FRR-23 equipments bearing serial numbers 343 through 492 and 643 and up.

10. On page 7-53, add the following note to bottom of table 7-5.

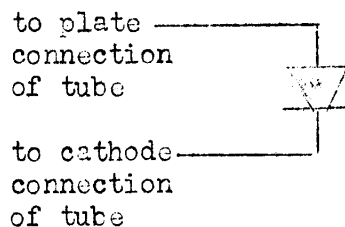
Type 5647 electron tubes V1005, V1101, V1103, V1106, and V1107 are replaced by type 1N458 crystal diodes in type AN/FRR-21 equipments bearing serial numbers 107 through 220 and 335 and up, in type AN/FRR-22 equipments bearing serial numbers 236 and up, and in type AN/FRR-23 equipments bearing serial numbers 343 through 492 and 643 and up.

11. On page 7-89, 7-90; make the following revisions to figure 7-20 (sheet 2).

a. Add "See note 4" to the following stages; V1005, V1101, V1103, V1106, and V1107.

b. Add the following to note column:

4. Substitute the following sketch for tubes with symbol numbers V1005, V1101, V1103, V1106, and V1107 on type AN/FRR-21 equipments bearing serial numbers 107 through 220 and 335 and above.

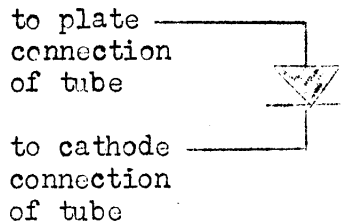


12. On page 7-93, 7-94; make the following revisions to figure 7-2 (sheet 2).

a. Add "See note 4" to the following stages; V1005, V1101, V1103, V1106 and V1107.

b. Add the following to note column:

4. Substitute the following sketch for tubes with symbol numbers V1005, V1101, V1103, V1106, and V1107 on type AN/FRR-22 equipments bearing serial numbers 236 and above.

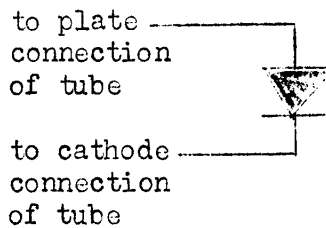


13. On page 7-97, 7-98: make the following revisions to figure 7-22 (sheet 2).

a. Add "See note 5" to the following stages; V1005, V1101, V1103, V1106, and V1107.

b. Add the following to note column:

5. Substitute the following sketch for tubes with symbols V1005, V1101, V1103, V1107 on type AN/FRR-23 equipments bearing serial numbers 343 through 492 and 643 and above.



14. On page 7-187, 7-188; add the following note to the bottom view of figure 7-69.

In type AN/FRR-21 equipments bearing serial numbers 107 through 220 and 335 and up, in type AN/FRR-22 equipments bearing serial numbers 236 and up, and in type AN/FRR-23 equipments bearing serial numbers 343 through 492 and 643 and up, connections between V1005 and pins 1 and 2 of the socket will not appear since V1005 represents a type 1N458 crystal diode in these units.

15. On page 7-193, 7-194; add the following note below insert of the bottom view in figure 7-72.

In type AN/FRR-21 equipments bearing serial numbers 107 through 220 and 335 and up, in type AN/FRR-22 equipments bearing serial numbers 236 and up, and in type AN/FRR-23 equipments bearing serial numbers 343 through 492 and 643 and up, connections between V1101 and pins 1 and 2 of the socket will not appear since V1101 represents a type 1N458 crystal diode in these units.

16. On page 7-197, 7-198; add the following note below insert of the bottom view in figure 7-74.

In type AN/FRR-21 equipments bearing serial numbers 107 through 220 and 335 and up, in type AN/FRR-22 equipments bearing serial numbers 236 and up, and in type AN/FRR-23 equipments bearing serial numbers 343 through 492 and 643 and up, connections between V1103 and pins 1 and 2 of the socket will not appear since V1103 represents a type 1N458 crystal diode in these units.

17. On page 7-203, 7-204; add the following note below insert of the bottom view in figure 7-77.

In type AN/FRR-21 equipments bearing serial numbers 107 through 220 and 335 and up, in type AN/FRR-22 equipments bearing serial numbers 236 and up, and in type AN/FRR-23 equipments bearing serial numbers 343 through 492 and 643 and up, connections between V1106 and pins 1 and 2 of the socket will not appear since V1106 represents a type 1N458 crystal diode in these units.

18. On page 7-205, 7-206; add the following note below insert of the bottom view in figure 7-78.

In type AN/FRR-21 equipments bearing serial numbers 107 through 220 and 335 and up, in type AN/FRR-22 equipments bearing serial numbers 236 and up, and in type AN/FRR-23 equipments bearing serial numbers 343 through 492 and 643 and up, connections between V1107 and pins 1 and 2 of the socket will not appear since V1107 represents a type 1N458 crystal diode in these units.

TABLE 8-4. TABLE OF REPLACEABLE PARTS

Page 8-89

V-1005 - Add at end of description. -

Used on AN/FRR-21 equipments with serial numbers 1 through 106 and 221 through 334, on AN/FRR-22 equipments with serial numbers 1 through 235, and on AN/FRR-23 equipments with serial numbers 1 through 342 and 493 through 642.

Add alternate item as follows:

V-1005 - Description - CRYSTAL UNIT, RECTIFYING: RETMA Type 1N458; diode detector; one piece; fusion sealed glass envelope; black finish; saturation voltage 150 v min; forward current at 1 v 7 ma min; reverse current at 25° C, 0.25 microamp at 125 v; reverse current at 150° C, 0.005 ma at 125 v; forward steady state DC 80 ma max; forward average rect current 55 ma max; surge current for 1 sec 500 ma max; ambient temp range -80° C to +200° C; 0.265 in. lg less terminal by 0.105 in. dia; terminal mounted; tinned domet wire terminal; Hughes Aircraft Co. Code 82577 type HD6007. Used on AN/FRR-21 equipments bearing serial numbers 107 through 220 and 335 and above, on AN/FRR-22 equipments bearing serial numbers 236 and above, and on AN/FRR-23 equipments bearing serial numbers 343 through 492 and 643 and above.

Function - Detector

V-1101 - Add at end of description. -
Used on AN/FRR-21 equipments with serial numbers 1 through 106 and 221
thro through 334, on AN/FRR-22 equipments with serial numbers 1 through
235, and on AN/FRR-23 equipments with serial numbers 1 through 342
and 493 through 642.

Add alternate item as follows:

V-1101 - Description - Same as alternate V1005
Function - Audio Noise Limiting

V-1103 - Add at end of description. -
Used on AN/FRR-21 equipments with serial numbers 1 through 106 and 221
through 334, on AN/FRR-22 equipments with serial numbers 1 through
235, and on AN/FRR-23 equipments with serial numbers 1 through 342
and 493 through 642.

Add alternate item as follows:

V-1103 - Description - Same as alternate V1005
Function - Silencer Diode

V-1106 - Add at end of description.
Used on AN/FRR-21 equipments with serial numbers 1 through 106 and 221
through 334, on AN/FRR-22 equipments with serial numbers 1 through
235, and on AN/FRR-23 equipments with serial numbers 1 through 342
and 493 through 642.

Add alternate item as follows:

V-1106 - Description - Same as alternate V1005
Function - Audio Noise Limiting

V-1107 - Add at end of description. -
Used on AN/FRR-21 equipments with serial numbers 1 through 106 and 221
through 334, on AN/FRR-22 equipments with serial numbers 1 through
235, and on AN/FRR-23 equipments with serial numbers 1 through 342
and 493 through 642.

Add alternate item as follows:

V-1107 - Description - Same as alternate V1005
Function - Audio Noise Limiting

TABLE 8-4. LIST OF MANUFACTURERS

Page 8-113

Add after Ludwig Honold Mfg.

Hughes Aircraft Co.	Culver City, Calif.
---------------------	---------------------