

# SERVICE BULLETIN

75A-4

2A

5-31-57

Page 1 of 2

## SUBJECT: "S" METER SENSITIVITY POTENTIOMETER AND ZERO POTENTIOMETER REPLACEMENT

Subject A of 75A-4 Service Bulletin No. 2 dated 10-15-56 discussed replacement of the "S" Meter Sensitivity Potentiometer, R41. Subsequent research has proved a more effective improvement of the "S" meter functions can be obtained by replacing both the Sensitivity (R41) and Zero (R43) potentiometers and modifying the related circuits as outlined below. Modification kits 542 0849 00 now include the parts listed below instead of the parts listed in Bulletin No. 2.

Replacement of R41 and R43 involves the following procedure:

1. Remove Meter Sensitivity and Meter Zero potentiometers.
2. Mount 6-32 x 1¼ spacers (540 9225 003) in holes formerly used for mounting zero set and sensitivity potentiometers.
3. Mount potentiometers (750 8081 00) to plate (542 3150 002) and mount this assembly to the spacers.
4. Remove resistor R42.
5. Move resistor R39 as illustrated on installation drawing 542 4452 002.
6. Delete resistor R40 which shunts the meter.
7. Remove from the cable the short wire with orange and green tracers which connects the meter zero potentiometer to the meter sensitivity potentiometer.
8. Connect the wire with orange, green, and blue tracers which formerly went to the hot terminal of the meter sensitivity potentiometer to the clockwise terminal of the new meter sensitivity potentiometer.
9. The meter should be wired as shown in the top view of the front panel on installation drawing 542 4452 002.
10. Rewire the terminal strip adjacent to tube V8 as shown in installation drawing 542 4452 002.

## ADDITIONAL PARTS REQUIRED

Modification Kit 542 0849 00, consisting of the following items — Price \$6.32.

QTY.	DESCRIPTION	CIRCUIT SYMBOL	COLLINS PART NUMBER
1	Plate-Pot Mtg.		542 3150 002
2	Post-1¼ Lg.		540 9225 003
2	Resistor-Variable, 500 ohm	R41, R43	750 8081 00
4	Screw-6-32 x ¾ PBH		343 0169 00
4	Washer-Ext. Lock No. 6		373 8026 00
1	Lug-Solder		304 0318 00
1	Drawing-Installation		542 4452 002
2.0'	DA 9256 wire		439 7060 00
2.0'	DA 95 wire		439 7036 00
1.0'	#20 bus		421 2020 00
0.5'	#20 sleeving		152 1347 00

## SERIAL NUMBER EFFECTIVITY:

All production 75A-4 Receivers above serial number 3423 contain the above described modification. A few units below #3423 were also modified before shipment from the factory. Inspection below the chassis will disclose whether a receiver has been modified. If the sensitivity and zero potentiometers are mounted on a small metal plate suspended beneath the chassis, the receiver has been modified.

## TO OBTAIN PARTS

Registered owners of receivers which have not been modified, and those whose receivers were modified in accordance with SUBJECT A of 75A-4 Service Bulletin No. 2 dated 10-15-56, may obtain the kit described in this bulletin by ordering Modification Kit 542 0849 00 from Collins Radio Company, Service Parts Department, Cedar Rapids, Iowa, and will be available after July 1, 1957, at no charge for a period of six (6) months from the date of this bulletin. All orders for these parts should make reference to 75A-4 Service Bulletin No. 2A, and mention the serial number of the 75A-4 receiver for which the kit is ordered.

542 4452 002

QUAN-  
TITY

ITEM  
NO.

QUANTITIES ARE FOR ONE ASSEMBLY

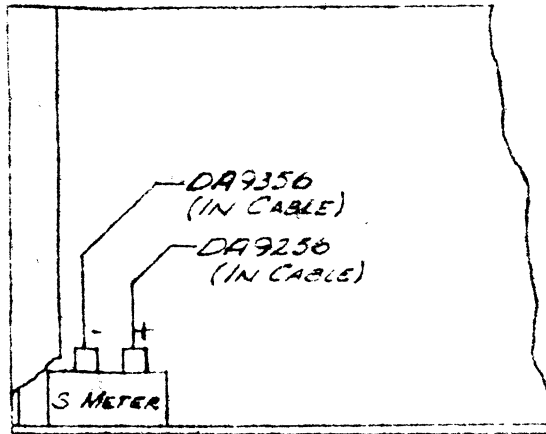
542 4452 002

COLLINS PART NO.

MFG PART NO.

GOVT PART NO.

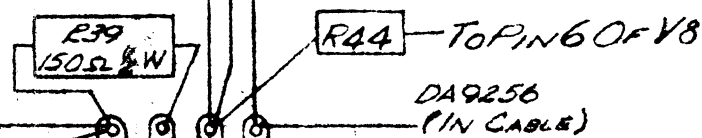
PART NAME



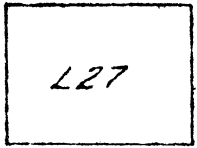
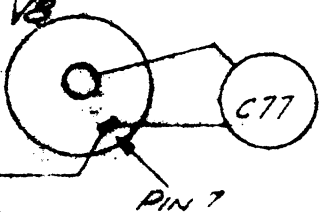
FRONT PANEL

TOP VIEW OF FRONT PANEL

ADD THIS  
DA9256 WIRE  
TO CABLE



IT WILL BE NECESSARY TO DISCONNECT  
DA9256 WIRE ON TERMINAL #3- & CONNECT  
TO TERMINAL #4. (THIS WILL PUT 2  
DA9256 WIRES ON TERMINAL #4.)



NO.	DESCRIPTION	AUTHORITY	DATE	REVISION NO.
1	ADD NOTE 10 RESTATE NOTES 3&5 DA9356 WAS DA935 ADD R44 TO PIN 6 OF V8 542 0849 00 QTY WAS 1	EAA	5/22/57	R54089

GOVT NO.	COLLINS NO.	QTY	TYPE
	542 0849 00	1	
USED ON ASSEMBLY			
WEIGHT		HEAT TREAT	
LBS.			

ALTERATIONS  
**COLLINS RADIO COMPANY**  
CEDAR RAPIDS, IOWA

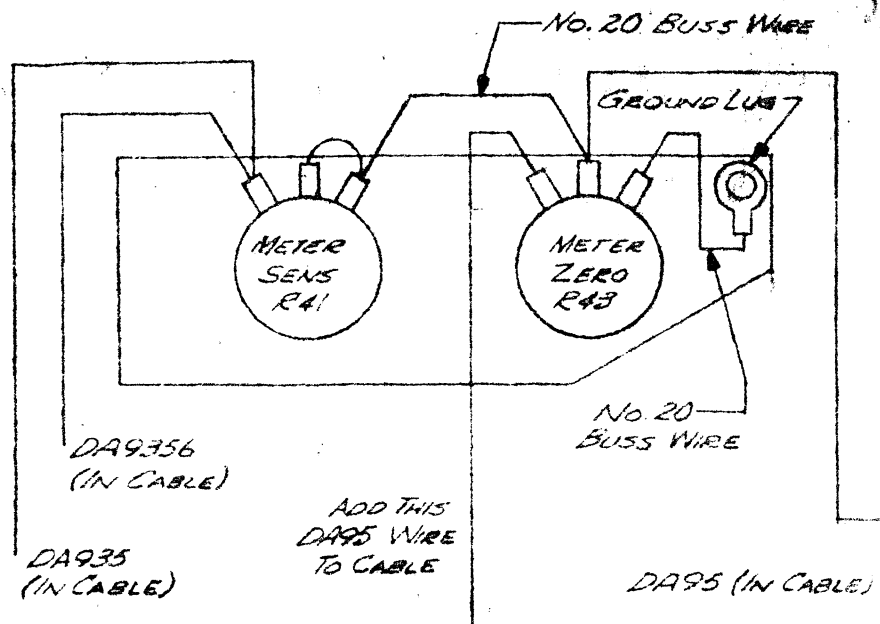
MATERIAL:  
APPLIED FINISH:  
SCALE

DRAWN BY S.M.S.	APPROVED BY P.O.O.	CHECKED BY L.P.O.P.	DATE 1-24-57
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TITLE  
**DRAWING-INSTALLATION  
5 METER-POT**

GOVT PART NO.	COLLINS PART NO. <b>542 4452 002</b>
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UNLESS OTHERWISE SPECIFIED:  
 DECIMAL DIMENSIONS INCLUDING HOLE SIZES MAY VARY ±.008  
 FRACTIONAL DIMENSIONS INCLUDING HOLE SIZES MAY VARY ±1/64  
 MACHINED ANGLES MAY VARY ±.1°  
 SHEARD ANGLES MAY VARY ±.25°  
 BROKEN ANGLES MAY VARY ±.1°  
 ECCENTRICITY BETWEEN ANY DIAMETERS ON THE SAME CENTERLINE SHALL NOT EXCEED .018 TOTAL INDICATOR READING.  
 ALL DIMENSIONS ARE FINISH DIMENSIONS INCLUDING APPLIED FINISH AND ARE GIVEN IN INCHES.



UNDER CHASSIS  
VIEW

DA935  
(IN CABLE)

ADD NO. 20  
BUSS WIRE  
FROM TERMINAL  
1 TO PIN 7  
OF V8

#### 10. REWIRE TERMINAL STRIP AS SHOWN.

9. METER SHOULD BE WIRED AS SHOWN IN TOP VIEW OF FRONT PANEL.
8. CONNECT DA9356 WIRE WHICH FORMERLY WENT TO HOT TERMINAL OF METER SENSITIVITY POT TO CLOCKWISE TERMINAL OF NEW METER SENSITIVITY POT.
7. REMOVE SHORT DA935 WIRE FROM CABLE WHICH CONNECTS METER ZERO POT TO METER SENSITIVITY POT.
6. DELETE R40 WHICH IS ACROSS METER.
5. MOVE R39.
4. REMOVE R42.
3. MOUNT POTS P/N 750 8071 00 TO PLATE P/N 542 3150 002 AND MOUNT ASSEMBLY TO SPACERS.
2. MOUNT 6-32 X 1-1/4 SPACERS (P/N 540 9225 003) IN HOLES FORMERLY USED FOR MOUNTING ZERO SET SENSITIVITY POTS.
1. REMOVE METER SENSITIVITY & METER ZERO POTS.

#### NOTES: