

INSTALLATION AND SERVICE DIVISION

RCA MANUFACTURING CO., INC.

CAMDEN, N. J.

CLASSIFICATION: Technical - Photophone - Loudspeakers DATE April 27, 1937

SUBJECT: MI-1432A LOW FREQUENCY LOUDSPEAKER NUMBER 2C2-2.4

TO: B-1, B-2, B-3, C-7, D-7, G-1, G-2, H-7

MI-1432A LOW FREQUENCY LOUDSPEAKER

ELECTRICAL SPECIFICATIONS

	MI-1432A	MI-1444
Field voltage	13 volts	115 volts
Field current (hot)	1.7 amps.	170 ma
Field coil d-c resistance (hot)	8.4 ohms	678 ohms
Voice coil impedance	30 ohms	30 ohms
Voice coil d-c resistance	13.5 ohms	13.5 ohms

MECHANICAL SPECIFICATIONS

MI-1432A & MI-1444

Height	15-1/2 inches
Depth	9-5/8 inches
Width	15-1/2 inches
Weight	30-1/2 pounds
Cone diameter	13 inches

NOTE: MI-1432A and MI-1444 are identical excepting field coils.

USE

Used in pairs for driver on MI-1456 low frequency horn.

REPLACING CONE

1. Remove the eight 8-32" x 3/8" gun-metal finish machine screws holding the side covers in place and remove the side covers.
2. Disconnect the black and yellow voice coil leads from the polarized voice coil connector.
3. Remove the four 8-32" x 1/4" round-head machine screws and washers which secure the voice coil centering spider.
4. Remove the eight 10-32 x 1/2" round head machine screws and nuts which secure the cone clamping ring and remove the clamping ring.
5. Now, remove the cone by twisting it slightly so that the voice coil centering spider clears the four support brackets and lift out the cone.

NOTE: At this point the air gap should be inspected and cleaned of any foreign matter.

6. Place the new cone into the loudspeaker with the leads in position to be threaded through the hole in cone housing.
7. Rotate the cone, carefully guiding the spider into position.
8. Replace the clamping ring and machine bolts and nuts and the spider clamping screws and washers.
9. If the core cap is properly centered in the throat, place a single thickness of 35 mm motion picture film (0.006" thick) in the air gap completely around the inside voice coil form. It should be possible to slide the film around the air gap more or less freely. When the cone has been centered, tighten the eight machine screws in the clamping ring and also tighten the cone centering screw.
10. Move the cone back and forth by hand to check for any rubbing of the voice coil in the air gap.
11. Connect the voice coil leads to the polarized male voice coil connector with the yellow lead connected to the narrow prong and the black lead connected to the wide prong. At the same time see that the field coil leads are connected with the red lead to the narrow prong and the black lead to the narrow prong.
12. If the core cap is not properly centered in the yoke plate, proceed as outlined above, except loosen the screw in the center of the core cap.
13. Cut four strips of paper about 1/8 inch x 2 inches from a calling card and insert the ends of these into the gap formed between the voice coil and the yoke plate at four equi-distant points. Then insert the motion picture film as explained in paragraph 9 and after the cone has been centered properly tighten the clamping ring bolts and the screw in the center of the core cap.
14. Reconnect as per paragraph 11.

POLARIZING INSTRUCTIONS

1. With a positive polarity applied to the narrow prongs of both the voice coil and field connectors, the voice coil should move away from the magnet.

REPLACEMENT PARTS

MI-1432A & MI-1444

DESCRIPTION	STOCK NO.
CONE - 13 inch diameter	27751
COIL - 13-volt field coil (MI-1432A)	27752
COIL - 115-volt field coil (MI-1444)	23950
CONNECTOR - Male (For field)	26415
CONNECTOR - Female (For field)	20757
CONNECTOR - Male (For voice coil)	22991
CONNECTOR - Female (For voice coil)	21699