

# Electro<sup>-</sup>Voice<sup>®</sup>

a MARK IV company

# Model 205C Carbon Microphone

## SPECIFICATIONS

Type:

Differential single button carbon Frequency Response: 100 to 4000 cps (at 1/4") Impedance: Approximately 100 ohms Polar Pattern: Bidirectional, pressure gradient Output Level: -50 dB (0 dB = 1 volt/dyne/cm<sup>2</sup>) 0.031 volt (into 100 ohms) developed by normal speech. 10-50 mA button current Temperature Range: -40° C (-40° F) to +85° C (+185° F) On/Off Switch: Leaf contacts open circuit microphone in "off" position Cable: 3-conductor, coiled cord 1.52 m (5 ft) long, extended Dimensions: 99.9 mm (3-15/16") high, 60.3 mm (2-3/8") wide, 50.8 mm (2") deep Case Material: High-impact ABS Finish: Black leatherette Net Weight: 283.5 g (10 oz), with cable

### DESCRIPTION

The Electro-Voice Model 205C is a close-talking, noise-cancelling microphone of the differential carbon type. It provides highly intelligible speech transmission, even under high ambient noise conditions. Ambient noise is received by dual apertures in correct phase relationship to provide excellent cancellation. Speech which originates close to one of the apertures is fully reproduced. Articulation is 97% under quiet conditions and 88% under 115 dB of ambient noise. The blast proof, waterproof, and shock resistant head makes it an ideal choice for use under adverse physical conditions. Its case, of tough, high-impact ABS is shaped to fit the hand comfortably. Essentially flat response is provided over the entire speech range of 100 to 4,000 cps for best intelligibility. Carries TSO certificate C-58 Category B.

#### OVERHAUL INSTRUCTIONS

- 1. Special tools required. None.
- Disassembly. (See Figure 1)

   Disassembly is in the same order as the key index number assigned to the exploded view illustration, except as noted below.
  - b. Do not disassemble the head and capacitor subassembly (2) to (6) unless capacitor or head must be replaced. If this is necessary proceed as indicated in steps c. and d.

- Remove head by first removing screws (Items 6 & 8) and switch bracket (Item 5), See Figure 1.
- d. When head assembly is removed, unsolder all leads and replace capacitor or head, as may be required.
- Do not unsolder leads to switch unless it is necessary to replace switch assembly or cable (10).
- Cleaning. Thoroughly clean dust and dirt from microphone by using dry compressed air to dislodge dirt from corners. Clean each part with a lintfree cloth or brush.

#### 4. Inspection.

- Inspect switch contacts for signs of any excessive wear.
- b. Check for proper switch travel. When the switch button is fully depressed, both sets of switch contacts should close with just enough overtravel to insure a slight wiping action of the contacts. (See step 5).
- c. Check cable for signs of damage, such as cuts or cracks.
- Repair and Replacement. Replace any damaged part. Check resistance across the head with an ohmmeter. It should read from 100 to 2000 ohms. If it does not, replace with new head, following directions in reassembly procedure. If the reading

|                                    | and the second second second |                   | Number   |                                                      |  |
|------------------------------------|------------------------------|-------------------|----------|------------------------------------------------------|--|
|                                    | Item                         | Part No.          | Required | Description                                          |  |
|                                    |                              | 70070 101         |          |                                                      |  |
|                                    | 1 2                          | 79679-NV<br>8010  | 1        | Case, Front (Black)<br>Head Subassembly              |  |
|                                    | 3                            | 79722             | 1        | Foam Pad                                             |  |
|                                    | 4                            | 42346             | 1        | Capacitor, .05 mfd, 200 W. V.D.C.                    |  |
|                                    | 5                            | A74942            | 1        | Bracket Switch                                       |  |
|                                    | 6<br>7                       | 62438<br>74941    | 1<br>1   | Screw, #4-24 x 1/2<br>Spacer                         |  |
|                                    | 8                            | 62534             | 1        | Screw, # 6 x 7/8                                     |  |
|                                    | 9                            | 56063             | 1        | Switch                                               |  |
|                                    | 10                           | 28039-81          | 1        | Tesamol, 1/4 x 1-1/8                                 |  |
|                                    | 11<br>12                     | 74943-NV<br>20632 | 1        | Actuator, Switch (Black)<br>Eyelet                   |  |
|                                    | 13                           | 19006             | 1        | Spring, Actuator                                     |  |
|                                    | 14                           | 79677-NV          | 1        | Case, Back (Black)                                   |  |
|                                    | 15                           | B4810             | 1        | Nameplate                                            |  |
|                                    | 16<br>17                     | 660023<br>62437   | 4        | Screw, # 2-56 × 3/16<br>Screw, # 4-24 × 1            |  |
|                                    | 18                           | 8474              | 1        | Mounting Bracket Subassembly                         |  |
|                                    | 19                           | 62489             | 2        | Screw, #4 x 3/4                                      |  |
|                                    | 20                           | B60328            | 2        | Screw, # 4-32 x 1/2                                  |  |
|                                    | 21<br>22                     | 1608-09<br>88140  | 2<br>1   | Leadwire, 4" long<br>Straight Plug Cable Subassembly |  |
|                                    | 23                           | 19070             | 1        | Spring, Flex Relief                                  |  |
|                                    | 24                           | 2668              | 1        | Grille Cloth                                         |  |
|                                    |                              |                   |          |                                                      |  |
| لما<br>FIGURE 1 – Assembly Drawing |                              |                   |          |                                                      |  |
|                                    |                              |                   |          |                                                      |  |