The Shure Model R103 is a direct replacement cartridge for the Shure Model 514B Omnidirectional Dynamic Paging Microphone. Note that the R103 and included parts may differ somewhat from those in the 514B Microphone. The R103 will provide performance equal to or better than that of the original cartridge.

**Installation and Connections**

To install the R103, proceed as follows:

1. Remove three No. 4-4 screws holding case back to case front. hold the two halves of the microphone case firmly together. The microphone cartridge is spring-loaded and care must be taken to hold the two halves of the microphone case firmly together.
2. Gently separate two halves of case, watching for loose cartridge-shield retaining springs.
3. Remove parts from case front: shield, rear adapter, cartridge and gasket assembly, front adapter and pad (previous production), or shield, cartridge and washer assembly, and screen (later production).
4. Unsolder YELLOW and WHITE leads from cartridge terminals.
5. Install new washer on new cartridge and solder YELLOW and WHITE leads to cartridge terminals.
6. Insert screen and cartridge and washer assembly in case front as shown in illustration.
7. Replace shield with gag directly adjacent to cable entry, making sure that retaining springs will engage properly in notches in shield.
8. Close case halves, taking care that leads are not pinched and will not touch blades of switch and bracket assembly.
9. Holding case halves firmly together, fasten them with three No. 4-40 screws previously removed.