

### TECHNICAL INSTRUCTIONS

#### DIAPHRAGM AND VOICE COIL ASSEMBLY REPLACEMENT FOR DRIVERS

The Diaphragm Conversion Kit for 900 to 800 Series Drivers consists of a 900-type diaphragm and voice coil assembly, two replacement leads and a gasket. The kit is designed to accommodate the new diaphragm and voice coil assembly to the Models 604, 802, 806, 807 and 808 type drivers.

The diaphragm and voice coil assembly in HF drivers is extremely delicate and must be handled with care. Prior to starting the replacement procedure, select a work area that is clean and free from iron dust or chips. Cover the surface with a few layers of clean paper. The area must be free from drafts to prevent iron dust particles in the air from being magnetically attracted to and lodged in the voice coil gap of the HF driver. Replace the diaphragm and voice coil assembly in accordance with the following procedures.

1. Remove leads from external binding posts. Note electrical phasing (polarity) as leads are removed.
2. As appropriate to the installation, remove driver loudspeaker and/or horn from enclosure or mounting and take removed assembly to prepared work area.

#### NOTE

Where easy access to the driver is available, the replacement procedure may be completed without removing the driver loudspeaker and/or horn.

3. Remove screws securing driver cover.
4. Lift cover from driver and remove two leads from external binding posts. Remove existing wires from cover and install red and black leads from kit. Note that the 802 type driver is provided with an acoustical absorbent felt disc in the cover, and the 808 type driver is provided with an acoustical loading cap over the diaphragm.

#### CAUTION

The diaphragm is extremely delicate. Use care to prevent damage. Avoid physical contact with diaphragm. Keep screwdriver away, as strong magnetic field may attract screwdriver into diaphragm.

5. Remove three screws securing acoustical loading cap and/or diaphragm assembly. For 808 type drivers, set aside loading cap.
6. Carefully work diaphragm and voice coil assembly free, and remove assembly.
7. Clean foreign material from voice coil gap with a short strip of masking tape one-inch wide. Fold tape back to form a strip with adhesive exposed on both sides. Insert edges of folded tape into voice coil gap to full depth, and wipe clean completely around perimeter of phasing plug. Repeat cleaning procedure several times with fresh tape until tape is clean when withdrawn.
8. Carefully place new diaphragm and voice coil assembly from kit in proper position on driver to align screw holes. Use care to avoid damaging edge and sides of voice coil while positioning it in voice coil gap. Be sure diaphragm and voice coil assembly is fully seated.

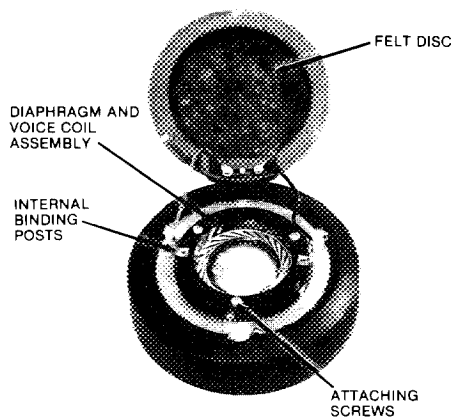


Figure 1. 900 Type Diaphragm in Place.

9. For 802 type drivers, install screws removed in Step 5. Tighten screws securely.

For 808 type drivers install loading cap with gasket from kit. Install screws removed in Step 5. Tighten screws securely.

10. Connect two leads of driver cover to binding posts, pressing the connectors fully on posts. Connect black lead to post designated (-) and red lead to (+) post.
11. Install cover of driver, securing with screws removed in Step 3.

#### NOTE

If necessary, carefully bend binding posts inward about 45° to prevent the posts short-circuiting to cover.

12. Return driver to service; connect external leads to binding posts. Take care to maintain electrical phasing (polarity) as originally wired.

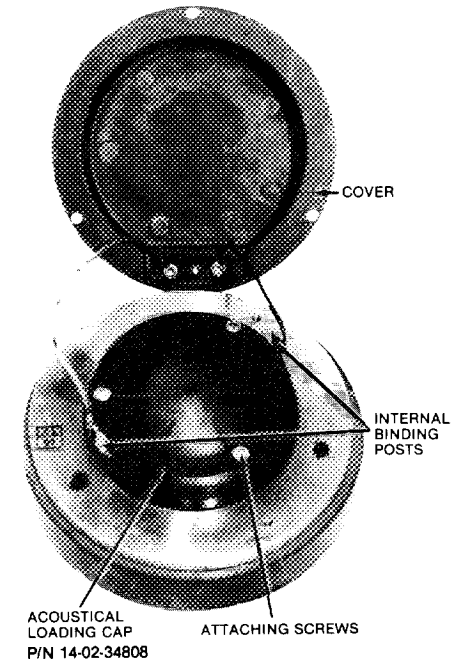


Figure 2. 900 Type Diaphragm in Place, with Loading Cap