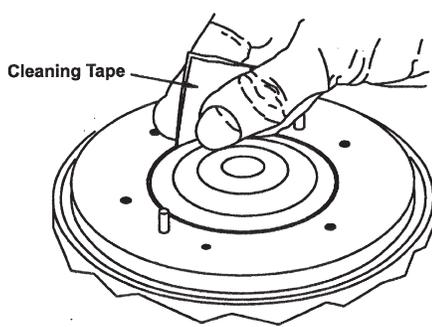
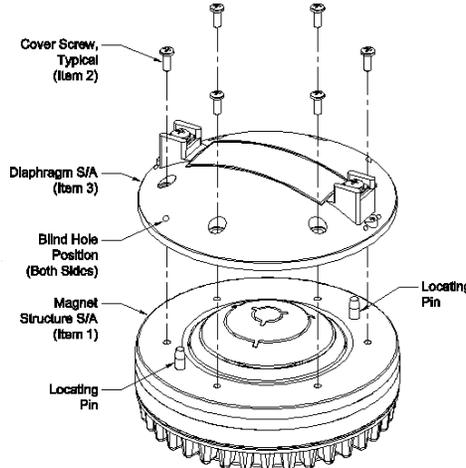


# Diaphragm Kits

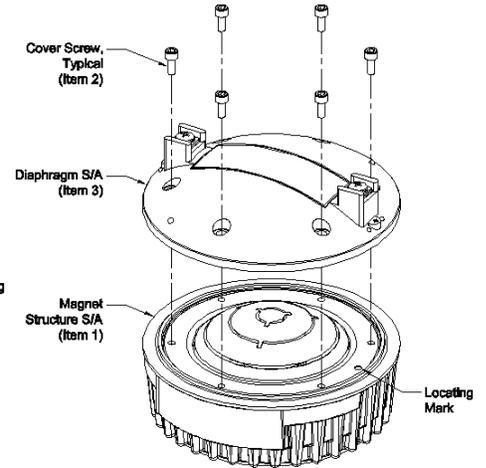
## 3-inch Diaphragm S/A Replacement Instructions



**Figure 1:**  
Cleaning magnetic gap



**Figure 2:**  
Pin-centered assembly



**Figure 3:**  
Rim-centered assembly

**Table 1:** Diaphragm replacement kit reference chart

Original Manufactured Diaphragm S/A Part Number	Diaphragm S/A Kit Number	Nominal Impedance of Driver	Diaphragm Thickness (Reference Only)	Used On
F01U188444 81256	F01U110542 81256XX	8 Ohms	1.5 mil	DH1A-8 ND6X-8 N/DYM1-8
F01U188464 81320	F01U110547 81320XX	16 Ohms	1.5 mil	DH1A-16 ND6X-16 N/DYM1-16
F01U188722 84234	F01U110650 84234XX	8 Ohms	2 mil	ND5-8 DH7-8 ND6-8
F01U188719 84233	F01U110649 84233XX	16 Ohms	2 mil	ND5-16 DH7-16 ND6-16
F01U194534 ASY000734000	F01U171894	8 Ohms	2 mil	DH7N-8
F01U194537 ASY000737000	F01U171887	16 Ohms	2 mil	DH7N-16



## **Diaphragm Kit Replacement Instructions**

Before proceeding, verify the replacement kit you have matches the product you have\*. See chart on page 1.  
Call the service department with any questions.

### **TOOLS REQUIRED**

- #1 Phillips screwdriver (or 3mm hex tool)
- Ohmmeter
- Oscillator
- Amplifier

 **NOTE:** Care **must** be exercised to avoid dust, dirt, for example, from collecting on the replacement diaphragm.

1. Clean the outside of the driver with a damp cloth to remove any dust or magnetic particles before disassembly. Make certain the immediate work area is clear of magnetic particles which might be attracted to the air gap after the driver is disassembled.
2. Remove cover screws (Item 2) secure diaphragm subassembly (Item 3) to magnet structure (Item 1) and separate the two (2) assemblies (Figure 2).
3. Inspect the magnet structure air gap with a high intensity light or flashlight. If required, clean the air gap with a folded piece of tape (masking tape) with the adhesive surface facing out (Figure 1). Repeat this step with a fresh piece of tape at least three (3) times, or until the air gap is clean. On units with burned voice coils or shattered diaphragms this procedure is doubly important.
4. Remove the new diaphragm subassembly kit from packaging and visually inspect for prior damage.
- 5a. **For models with pins in the magnet structure (Figure 2)**, notice the two (2) blind holes in the ring that surrounds the diaphragm (they do not extend through the cover). These holes are for the locating pins extending from the magnet structure (Figure 2). Either pin may be inserted into either pin hole. Carefully position the diaphragm subassembly on the magnet structure with the blind holes aligned, with the locating pins and the mating surfaces parallel. Lower the diaphragm subassembly to the magnet structure. Use minimum amount of force until diaphragm has bottomed out.
- 5b. **For models with a rim-centered magnet structure (Figure 3)**, notice a round mark on the magnet structure, located between two (2) of the screw holes. This mark is used to properly orient the diaphragm. Before installing the diaphragm subassembly, rotate it so that either power terminal will be aligned with this mark on the magnet structure. Carefully lower the diaphragm onto the magnet structure while watching the alignment of the screw holes and the outside edges. Move the diaphragm **EXTREMELY SLOWLY** into position during the installation, be very careful to not damage the coil.
6. Secure the two (2) assemblies by re-installing the cover screws until they contact the bottom of the screw holes. Tighten the screws evenly. Do not tighten any one (1) screw all the way, but alternate opposite screws until they are snug.
7. Measure voice coil DC resistance directly with an Ohm meter to check coil and solder connections. Voice coil DC resistance is 3.8 to 4.5 Ohms for 8 Ohm units or 9.8 to 10.9 Ohms for 16 Ohm units.
8. Check sound quality by applying up to 4 volts RMS to the voice coil and frequency sweep from 500Hz to 3kHz without horn load. Listen for obvious rums or buzzes.

\*Currently, on new product, labels are being applied to the diaphragm subassemblies as a replaceable part and to the magnet structure for product identification. Earlier units had the product identification (product nameplate) only on the diaphragm subassembly or model and spec only on the magnet structure. If the product is not marked with model identification other than on the diaphragm subassembly, mark this information on the loose labels supplied (part number 532699) using a ball point pen, and apply labels to the magnet structure as required. This will permit positive identification when the diaphragm subassembly is removed.

The part numbers of the service replacement diaphragm subassemblies are different than the part numbers of the original manufactured diaphragm subassemblies. In addition, the part numbers of the diaphragm assemblies have changed over time. To ensure identification and compatibility, Table 1 lists the original manufactured part numbers and the service replacement part numbers, as well as the compression driver model names.

For warranty repair, service information, or a listing of the repair facilities nearest you, contact the service repair department at 800/685-2606, email at [repair.morrilton@us.bosch.com](mailto:repair.morrilton@us.bosch.com), or visit our website at [www.electrovoice.com](http://www.electrovoice.com).

For technical assistance, contact Technical Support at 800/392-3497, M-F, 8:00 a.m. to 5:00 p.m. Central Standard Time.

## **Electro-Voice**

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[www.electrovoice.com](http://www.electrovoice.com)

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**Part Number F.01U.214.754 Rev 04**

U.S.A. and Canada only. For customer orders, contact Customer Service at  
**800/392-3497 Fax: 800/955-6831**

Europe, Africa, and Middle East only. For customer orders, contact Customer Service at:  
**+ 49 9421-706 0 Fax: + 49 9421-706 265**

Other International locations. For customer orders, Contact Customer Service at:  
**+ 1 952 884-4051 Fax: + 1 952 887-9212**

For warranty repair or service information, contact the Service Repair department at:  
**800/685-2606**

For technical assistance, contact Technical Support at: **866/78AUDIO**

Specifications subject to change without notice.