

Electro-Voice® SERVICE DATA

CONVERTIBLE DRIVERS 1829 & 1829T

SERVICING

Electro-Voice public address drivers have been carefully designed to assure maximum trouble-free service, keeping in mind greatest ease of repair if required.

WARRANTY

Electro-Voice public address products are guaranteed for the life of the product against malfunction due to defects in workmanship and materials. If malfunction from this cause occurs, the product will be repaired or replaced (at our option) without charge for materials or labor, if delivered to Electro-Voice or its service agency. The unit will be returned prepaid. Warranty does not cover finishes or malfunction due to abuse or operation at other than specified ratings. Repair by other than Electro-Voice or its authorized service agencies will void this guarantee.

FACTORY REPAIR CHARGE IS \$10.50 FOR REPLACEMENT OF VOICE COIL AND DIAPHRAGM. ADDITIONAL PARTS EXTRA. ALL PRICES SUBJECT TO CHANGE WITHOUT PRIOR NOTICE. ALL PRICES QUOTED UPON REQUEST. SEND ALL PRICE REQUESTS, PARTS ORDERS AND DRIVERS REQUIRING FACTORY SERVICE TO:

ELECTRO-VOICE, INC.
600 Cecil Street
Buchanan, Michigan 49107
Attention: Repair Department

In Western States, units requiring factory service may be sent to:

Electro-Voice West
P. O. Box 3297
7473 Avenue 304
Visalia, California 93277
Attention: Repair Department

Units requiring service may also be referred to any one of the authorized Electro-Voice speaker repair stations. For further information, contact the Electro-Voice repair department.

VOICE COIL DC RESISTANCE

Model 1829 driver may be tested directly with an ohm meter. Model 1829T requires that the back cover (19) and wire spade lugs (25) T1 and T2 be removed. Voice coil DC resistance is 6.0 to 7.0 ohms.

ACOUSTIC QUALITY CHECK

The acoustic quality of the 1829 or 1829T may be checked by using the correct type of amplifier (standard or 70 volt) and an audio sweep generator. Use a 4 volt RMS sweep level fed to the voice coil. Selected wattage on 1829T — 60 watts. Frequency sweep driver 20 — 20,000 Hz and check for rums, buzzes, rattles, or spurious noise except for one buzz, which is confined to a frequency range of 30 Hz or less, located between 450 Hz and 550 Hz. Use of a horn eliminates this buzz.

DIAPHRAGM & VOICE COIL REPLACEMENT

TOOLS REQUIRED:

5/16 nut driver
Solder Iron

For field repair it is suggested that the Front Cover & Diaphragm assembly replacement kit be used. The diaphragm & voice coil assembly is also replaceable independently.

84432-XX	Front Cover Kit (1829)
84431-XX	Front Cover Kit (1829T)

1. Position the driver assembly face down on work bench. Using a 5/16" nut driver, loosen the three Hex Head Screws (16) from rear cover. Gently lift away backcover with screws.
2. On Model 1829T disconnect four wire leads from back cover by slipping off "push-on" terminals. (Three from transformer (24), one from terminal board (21).)
3. Lift away Pot Structure assembly (8). Inspect the voice coil gap to be certain it is free of dirt or magnetic particles. To clean air gap, fold a piece of tape so that the adhesive surface is facing out. Insert folded edge into air gap and wipe around the gap. The adhesive surface will collect any particles. This should be repeated with a fresh piece of tape until air gap is clean.
4. Diaphragm & Voice Coil Assembly Replacement Only.

Carefully remove Fiberboard gasket (5).

On Model 1829, unsolder voice coil leads from terminal screws (33). Reuse wire tubing (4) on new diaphragm voice coil leads.

Remove diaphragm & voice coil assembly to be replaced from the front cover. On Model 1829T, electrical tape isolates the voice coil leads from the front cover. Properly replace tape. The diaphragm may be secured to the front cover by a very small amount of a good grade of rubber cement. Solder voice coil wire leads on Model 1829. Rubber cement voice coil wire leads to the diaphragm.

NOTE: Diaphragm & Voice Coil assembly A84034 may be used on Model 1829. Shorten wire leads.

Replace Fiberboard gasket (6). Dress wire tubing clear of gasket.

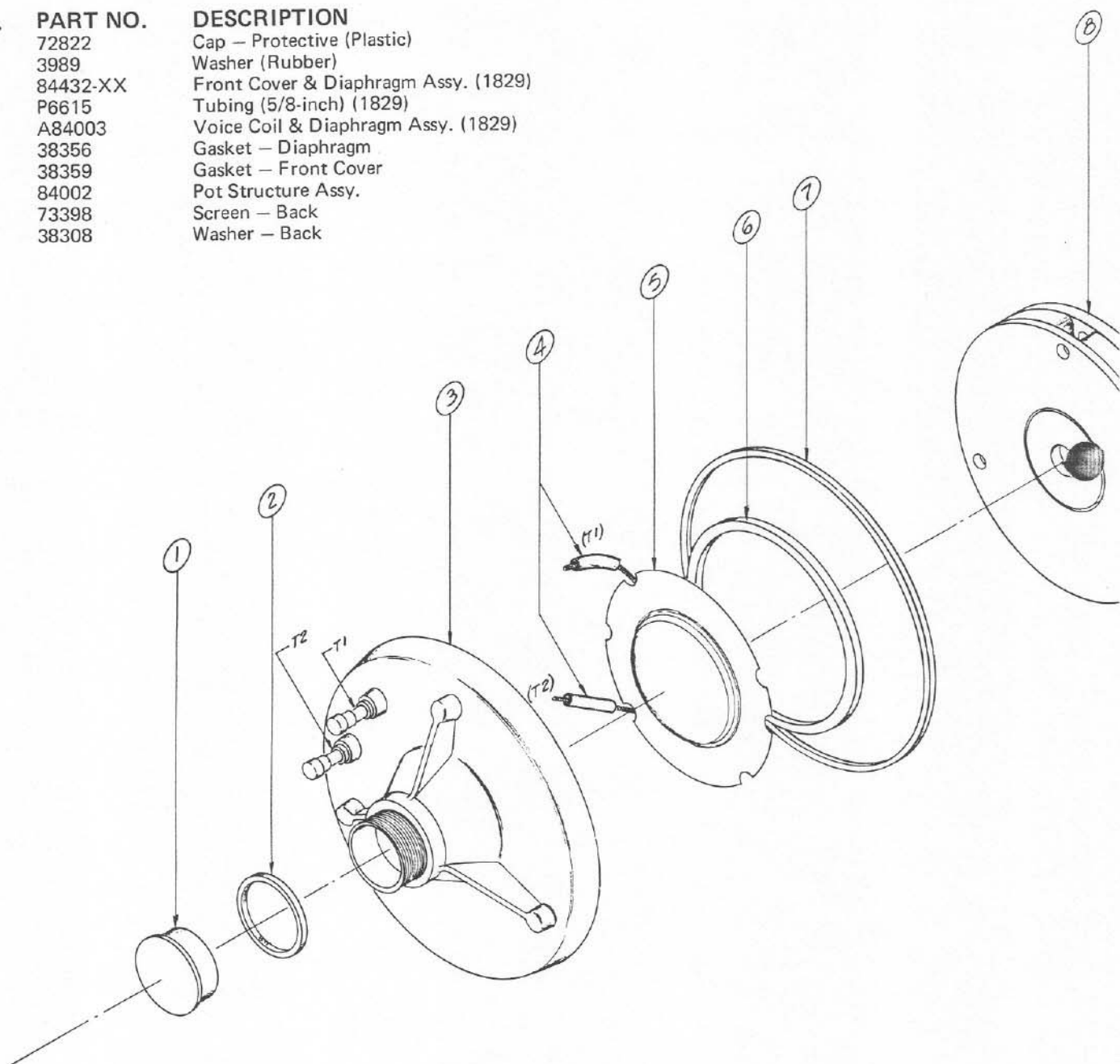
5. Hold new or repaired Front Cover and Diaphragm assembly in left hand and note location of back cover screw (16) threaded taps. Very carefully work Pot Structure assembly onto front cover and diaphragm seating it properly. On Model 1829T, carefully locate the four wire leads into proper slots on front cover casting. Connect wire leads to proper terminals.

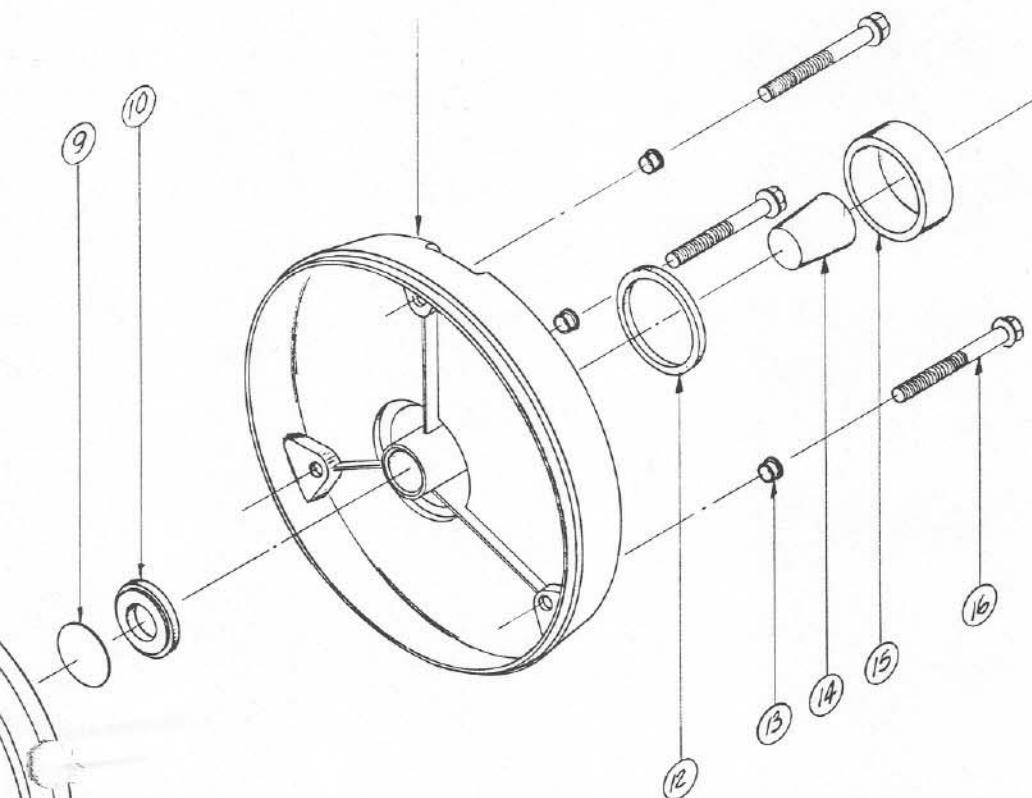
6. Remove the three back cover screws (16) from the back cover. Check seating of the Front & Back Cover Gasket (6). Replace Back Cover. On Model 1829T, carefully route wire leads around back cover rear sound exit. Properly seat back cover and secure with hex head screws (16).

PARTS LIST

MODEL 1829 & 1829T

REF NO.	PART NO.	DESCRIPTION
1	72822	Cap - Protective (Plastic)
2	3989	Washer (Rubber)
3	84432-XX	Front Cover & Diaphragm Assy. (1829)
4	P6615	Tubing (5/8-inch) (1829)
5	A84003	Voice Coil & Diaphragm Assy. (1829)
6	38356	Gasket - Diaphragm
7	38359	Gasket - Front Cover
8	84002	Pot Structure Assy.
9	73398	Screen - Back
10	38308	Washer - Back





REF NO.	PART NO.	DESCRIPTION
11	A76423-FU	Back Cover (1829)
12	3989	Washer (Rubber)
13	38355	Washer (No. 12 Nyltite)
14	76453	Plug — Rear
15	73689	Cap — Protective (Plastic)
16	62671-AD	Screw — Hex Washer (12-24 x 1½)
17	84431-XX	Front Cover & Diaphragm Assy. (1829T)
18	A84034	Voice Coil & Diaphragm Assy. (1829T)
19	A76425-FU	Back Cover (1829T)
20	20595	Pin — Terminal
21	76291	Board — Switch
22	27149	Lug (Pin)
23	62670-AY	Screw — Transformer (8-32 x 5/16)
24	15250	Transformer (70 volt)
25	27267	Lug — Spade
26	38327	Gasket — Switch Cover
27	76295-UD	Cover — Switch
28	62652-AY	Screw — Cover (4-40 x ½)
29	62758-BK	Screw — Switch Board
30	27243	Push Terminal
31	76513-TV	Pad — Terminal
32	38307	Washer — Terminal
33	62628-AD	Screw — Terminal (6-32 x 5/16)

MISCELLANEOUS

96654	Carton & Fillers (1829)
96655	Carton & Fillers (1829T)
531455	Instruction Sheet

