# Electro-Voice SERVICE DATA

1828 SERIES OF PUBLIC ADDRESS DRIVERS

MODEL 1828C CONVERTIBLE DRIVER MODEL 1828R REENTRANT DRIVER MODEL 1828T CONVERTIBLE DRIVER

#### 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 \$8.50 FOR REPLACEMENT OF VOICE COIL AND DIAPHRAGM ASSEMBLY. ADDITIONAL PARTS EXTRA. ALL PRICES SUBJECT TO CHANGE WITHOUT PRIOR NOTICE. ALL PRICES QUOTED UPON REQUEST. SEND ALL PRICE REQUESTS, PARTS ORDERS, AND DRIVER ASSEMBLIES 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 futher information contact the Electro-Voice repair department.

## VOICE COIL DC RESISTANCE

Voice coils on Models 1828C and 1828R drivers may be tested directly with an ohm meter. Model 1828T requires that the back cover (19) and voice coil wire leads (8 ohm and SEC COM) be removed. Voice coil DC resistance is 5.5 to 6.5 ohms.

### ACOUSTIC QUALITY CHECK

The acoustic quality of the 1828C, 1828R or 1828T may be checked by using an amplifier and audio sweep generator. Use a 4 volt RMS sweep level. Selected wattage on 1828T — 30 watts. Frequency sweep driver 20 — 20,000 Hz and check for rubs, buzzes, rattles or spurious noises.

# DIAPHRAGM & VOICE COIL REPLACEMENT

#### **TOOLS REQUIRED**

"" nut driver
No. 1 Phillips Screwdriver
Solder Iron

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

84434-XX Front Cover Kit (1828C & R) 84433-XX Front Cover Kit (1828T)

- Position the driver assembly face down on a work bench. Using a ¼" nutdriver, remove the three Hex Head Screws (14) from rear cover. Gently lift away backcover with screws.
- On Model 1828T only, use a ½" nutdriver and remove two transformer mounting screws (20). Using a No. 1 Phillips screwdriver, remove the two screws (29) securing terminal board. Lift away transformer (21) and terminal board (28).
- 3. Lift away Pot Structure assembly (7). Inspect pot structure voice coil gap to be certain it is free of dirt and 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.
- Diaphragm & Voice Coil Assembly Replacement only.

Carefully remove Fiberboard Gasket (5).

On Models 1828C and 1828R unsolder voice coil leads from terminal screws (33). On model 1828T unsolder voice coil leads from transformer (21) secondary terminals. Remove tubing (34) from voice coil leads and reuse on new voice coil.

Remove the old Diaphragm & Voice Coil assembly from the front cover and replace with new assembly. The diaphragm may be secured to the front cover by a very small amount of a good grade rubber cement. Resolder voice coil leads.

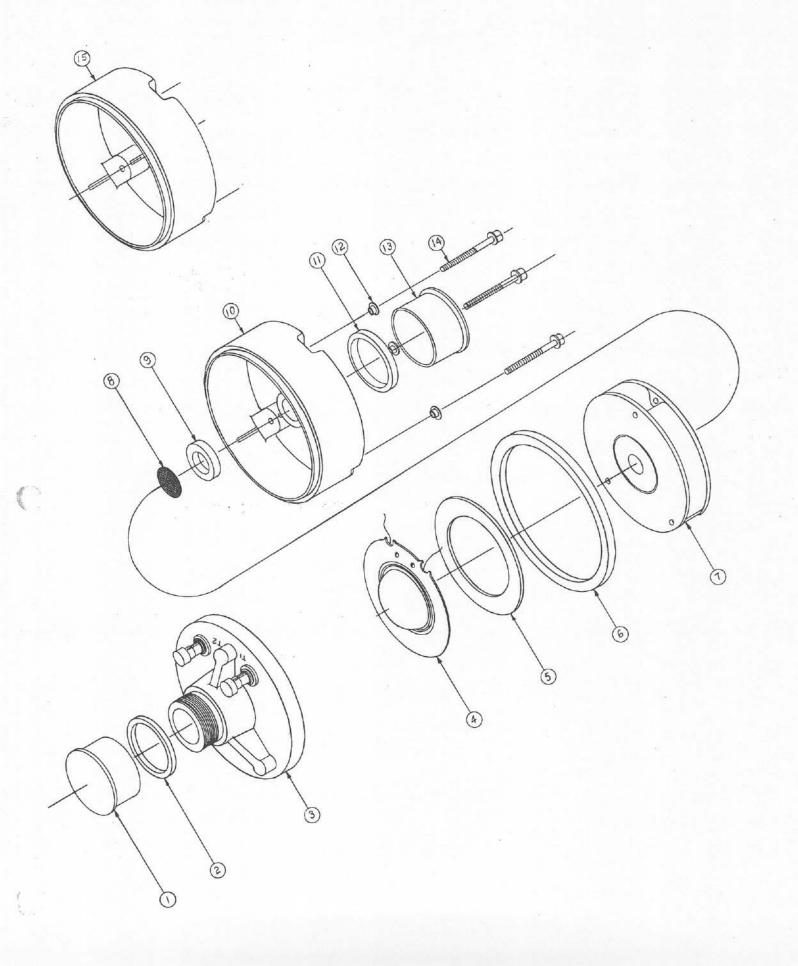
NOTE: Diaphragm & Voice Coil assembly 85145 may be used on all models. (Shorten wire leads 1" for 1828C and 1828R).

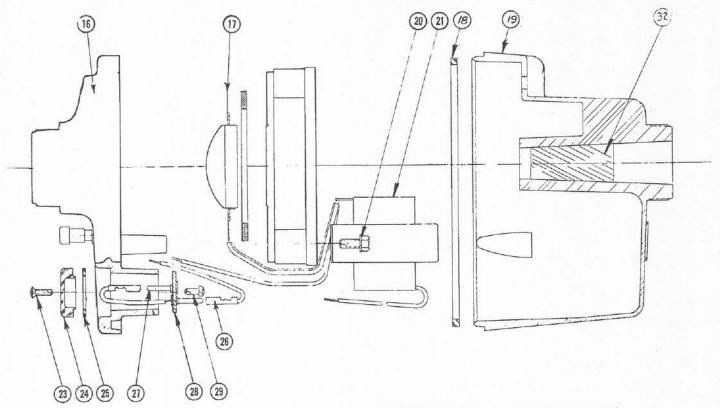
Replace Fiberboard Gasket (5).

- Hold new or repaired Front Cover and Diaphragm Assembly in left hand and note location of back cover screw threaded taps (14). Very carefully work Pot Structure assembly onto front cover and diaphragm seating it properly.
- On Model 1828T, replace transformer (21) and terminal board (28). Properly secure with hardware.
- Remove the three back cover screws (14) from back cover. Check seating of the Front & Back Cover Gasket (6). Replace Back Cover, properly seat and secure with screws (14).

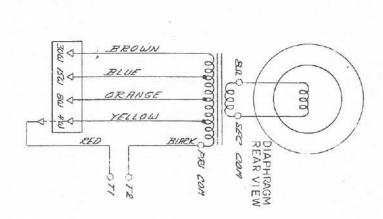
# PARTS LIST

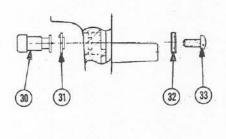
REF NO.	PART NO.	DESCRIPTION
1	72822	Cap — Protective Front
2	3989	Washer (Rubber)
3	84434-XX	Front Cover & Diaphragm Assy, Kit (1828C & 1828R)
4	A83487	Voice Coil & Diaphragm Assy. (1828C & 1828R)
5	38371	Washer - Diaphragm
6	38281	Gasket - Front & Back Cover (1828C & 1828R)
7	83786	Pot Structure Assy.
8	73398	Screen - Back (1828C & 1828T)
9	38308	Washer - Back (1828C & 1828T)
10	A76227-FU	Back Cover (1828C)
11	3989	Washer (Rubber) (1828C & 1828T)
12	38275	Washer (No. 8 Nyltite)
13	73689	Cap - Protective Back (1828C & 1828T)
14	62627	Screw - Hex Washer (8-32 x 1-3/8)
15	76230-FU	Back Cover (1828R)
16	84433-XX	Front Cover & Diaphragm Assy. Kit (1828T)
17	85145	Voice Coil & Diaphragm Assy. (1828T)
18	38326	Gasket - Front/Back Cover (1828T)
19	A78064-FU	Back Cover (1828T)
20	62334-AY	Screw - Transformer (8-32 x 3/8)(1828T)
21	15170	Transformer (1828T)
22	73486	Plug - Rear
23	62652-AY	Screw (4-40 x ½)(1828T)
24	76295-UD	Switch Cover
25	38327	Gasket - Switch Cover
26	27149	Lug - Pin
27	20595	Base Pin
28	76291	Board - Switch
29	62758-BK	Screw - Board (4-40 x 5/16)
30	27243	Push Terminal
31	76513-TV	Pad - Terminal
32	38307	Washer - Terminal
33	62628-AD	Screw - Terminal (6-32 x 5/16)
34	6635	Tubing — 3-inch (No. 20)
	MISCELLANEOUS	
	96818	Carton & Fillers (1828C & 1828R)
	96819	Carton & Fillers (1828T)
	532810	Instruction Sheet (1828C)
	532811	Instruction Sheet (1828R)
	531434	Instruction Sheet (1828T)





1828T (DIFFERENT & ADDITIONAL PARTS)





WIRING DIAGRAM