SERVICE PROCEDURE - NARROW GAP TOP PLATES

Early production models of a few JBL transducers with Alnico magnet assemblies were manufactured with top plates that have a narrower gap size than is standard for that model of transducer. Consequently, current cone kits will not fit these units. All such units must be returned to the factory for modification in order to install a current cone kit. This page is designed to give you some assistance in determining whether the transducer in question has a normal or narrow gap top plate.

The only sure way to determine whether a transducer has a narrow gap is to cut out the cone assembly and measure the gap with a gauge (see Gap Gauge Chart). However, there are certain things to look for that may indicate a narrow gap. The first sign is if the top plate has turned a gold color (due to age and oxidation). Many old JBL speakers have gold top plates and most of them may be reconed with current kits. These include LE8's, LE10's, LE14's, LE15's, D120F's, 2215's and most D208's, D216's, D280's, and D123's. Current cone kit assemblies will fit these speakers.

The transducers that are most likely to have narrow gaps are D130's, D140's, D131's, D15S's, 150-4's, 130A's, and very old D208's, D216's, D280's, D123's, LE5-2's, and some very old 2205's and 2220's. When any of these units have a gold top plate, there is about a fifty percent chance that it will have a narrow gap.

Any speaker that has a two piece pot/magnet assembly made of rolled steel welded into a cylinder instead of a one piece cast iron assembly is very old and will have a narrow gap. Such transducers usually have a gold "James B. Lansing" signature style decal and a typed paper label instead of the newer metal foilcal. Another sign of old age is any cone transducer in which the gasket is made of real cork and not the cork/latex rubber composition that is currently used. Any transducer with a real cork gasket, notably the D208's, D216's, and D280's, may be considered suspect of having a narrow gap top plate. The older model D130's and D140's have large binding posts mounted directly on one of the frame rails, whereas the newer models have smaller binding posts (as used on our present hi-fi models) mounted on a separate plate next to the pot assembly. The older models are much more likely to have a narrow gap.

Older compression drivers may also be found to have narrow gap top plates and current diaphragms will not fit these units properly. These units must also be returned to the factory for modification.

In conclusion, there are no hard and fast rules as to which speakers will have narrow gaps. Happily, the number of these units is quite small; the vast majority of JBL transducers remain reconable as is, with current JBL kits.

GAP GAUGE USAGE GUIDE

.025	075(All), 076, 077, 2402/H, 2403/H, 2405/H
.029	LE25(All), LE20(All), LE26, 401-132
.031	LE85, LE175, 033, 034, 044, 066, 2410, 2420, 2421, 2425H/J, 2426H/J 2427H/J, 2460, 2461, 2470
.033	2415,
.036	375, 376, 2440, 2441, 2445J
.037	2416H
.038	A15G, A30G
.040	LE5(All), 2105, 2105H, T420, T425
.043	375AB, 375FH, 2480, 2482, T205
.044	D123, D208, D216, D280, 116A/H, 123A-1, 125A, 126A, 127A/H, 2110A/H 2212
.048	K110, LE8(All), LE10A, 123A-3, 2108A/H, 2115A/H, 2120, 2121/H, 2213/H 043109A/H
.051	LT-1
.053	122A, 112A/H, LE10H, LE111A/H
.057	E110, 128H-1, ALL LOW FREQUENCY TRANDUCERS WITH 4-INCH VOICE COILS, T540, T545, MI-SERIES

For Longest Gauge Life

1. Handle gauges only by aluminum handle.
2. When not in use, keep gauge pin coated with either a light machine oil or commercially available rust inhibitor.