# LINEAR FIELD TRANSDUCER
# DIAPHRAGM REMOVAL & REPLACEMENT

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WARNING

CONDITIONS EXIST WHEN PERFORMING THIS PROCEDURE THAT MAY CAUSE PERSONAL INJURY. LFT DRIVERS ARE HELD IN A STATE OF MAGNETIC REPULSION, BUT ONLY A SLIGHT SIDEWAYS MOVEMENT WILL CAUSE EXTREME MAGNETIC ATTRACTION BETWEEN FRONT & BACK MAGNET CHANNEL SUB-ASSEMBLIES. THE MAGNETS WILL SLAM TOGETHER! THIS CAN RESULT IN PINCHED FINGERS AND A TORN DRIVER DIAPHRAGM. CARE SHOULD BE TAKEN TO MAINTAIN POSITIVE CONTROL OF ALL MAGNETIC PARTS WHILE DRIVER IS DISASSEMBLED.

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## REMOVAL

1. Remove driver from LFT and place face down on a soft, firm surface that is free of debris (or ferrous material).

2. Remove five allen head Capscrews (#'s 1, 2, 6, 7, and 8) as shown on diagram with a 5/32" allen wrench. Remove corresponding black Spacers FROM TOP SIDE ONLY. Magnet Channel Back will begin to curve away from Magnet Channel Front due to magnetic repulsion. However, do not be deceived as Magnet Channels (Front & Back) will SLAM into each other with great force with a slight sideways movement. At this point it is important to maintain positive control of both Magnet Channel Sub-assemblies until they are perpendicular to each other.

3. Grasp Magnet Channel Back at one end and press down with knuckles against Diaphragm Frame and Magnet Channel Front. Be careful not to touch the Mylar area of the Diaphragm with fingers. You are now ready to remove two more Capscrews (#'s 3 & 4) and Spacers indicated on diagram. Also loosen the last Capscrew (#5) one turn.

4. At this point there is danger of damaging the Diaphragm and pinching fingers if positive control is not maintained. Lift gently, straight up on free end of Magnet Channel Back until met with slight resistance. Also tilt it toward you so the corner will not drag across the Diaphragm.

5. Carefully rotate the Magnet Channel Back 90 degrees to the Diaphragm and Magnet Channel Front by moving it toward you, and pivoting on the last Capscrew. Rest the Magnet Channel Back on Diaphragm Frame, and remove the last Capscrew and Spacer.

6. Remove Diaphragm and remaining spacers. Note! It is always best to return spacers to their original positions.

REPLACEMENT

1. Ensure that the Magnet Channel Sub-assemblies are free of debris, and any ferrous particles or chips.

2. Position Magnet Channel Front (magnets up) on work surface. Position eight black Spacers over tapped screwholes.

Note: Proper orientation of Tweeter/Mid-range magnets and corresponding Tweeter/Mid-range elements in Diaphragm should be observed at this time if applicable.

3. Place diaphragm (silver traces down) on black Spacers, and place one Spacer over the hole in the closest corner.

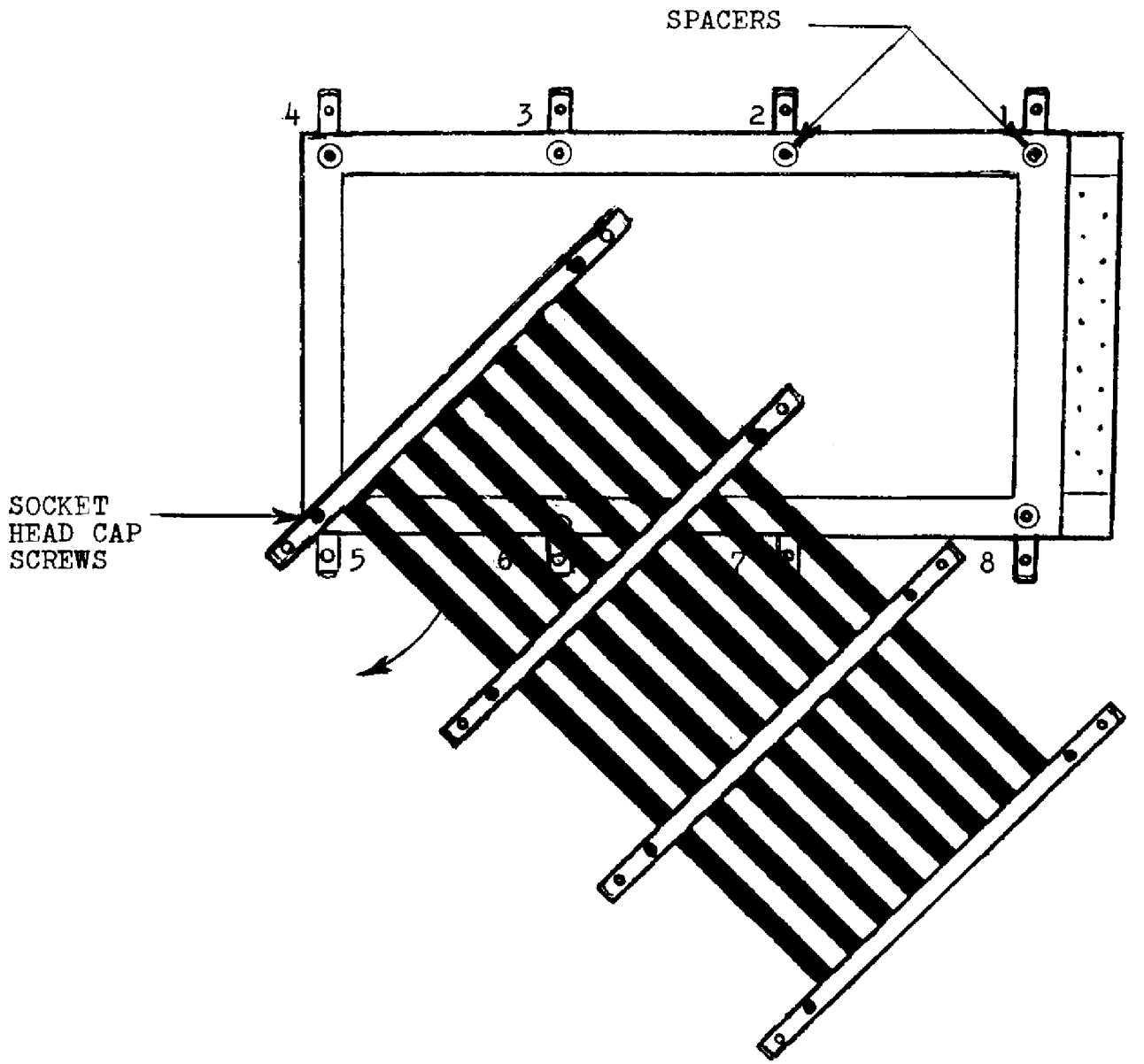
4. Place Magnet Channel Back at 90 degrees to Diaphragm and Magnet Channel Front and rest on Diaphragm frame. Orient Tweeter/Mid-range magnets so they will match appropriately if applicable.

5. Insert Capscrew (#5) in the corner hole while aligning Spacers and Diaphragm. Hand tighten and then loosen 1/2 turn.

6. Rotate Magnet Channel Back to align remaining Capscrew holes while keeping it elevated. Hold Diaphragm and Magnet Channel Front pinned with knuckles of hand on Magnet Channel Back. With free hand install second Capscrew (#4) and Spacer in the corner closest to the first one. Install third Capscrew (#3) and Spacer in next closest hole. Hand tighten Capscrews (#'s 3, 4, & 5) and relax grip on Magnet Channel Back.

7. Install remaining Capscrews (#'s 1, 2, 6, 7, & 8) and Spacers hand tight. Note: Magnets on the edge of Tweeter Drivers must clear Diaphragm Frame. Do not allow magnets to chip on this edge.

8. Tighten all Capscrews with a 5/32" allen wrench until snug. Do not overtighten or crush black Spacers. Install driver in LFT.


SPACERS
4
3
2
1
SOCKET
HEAD CAP
SCREWS
5
8