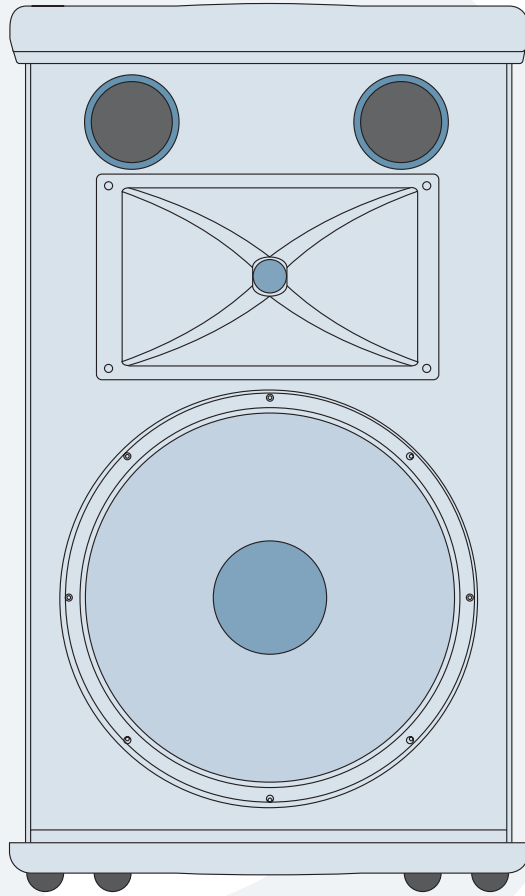




S215 REPAIR MANUAL





These instructions are intended to help restore any ailing S215 Passive Loudspeaker back to factory working conditions. They show how to remove and replace the drivers.

Please contact Mackie Technical Support (1-800-898-3211) to receive a Service Request Number and Order Number for parts needed for this restoration. They will also help you determine the nature of the problem and what parts will repair the unit.

Tools needed:

NOTE: not all tools listed below will be needed for your repair

- Phillips head screwdriver.
- 3mm and 5mm allen wrench.
- 8mm open end wrench.
- Solid workbench.

Parts needed:

NOTE: not all parts listed below will be needed for your repair

- | | | |
|-------------------------|-------------------|------------|
| • 15" Woofer | Part #0010658 | pages 3-4 |
| • High Frequency Driver | Part #0008093 | pages 5-8 |
| • Diaphragm | Part #coming soon | pages 9-10 |

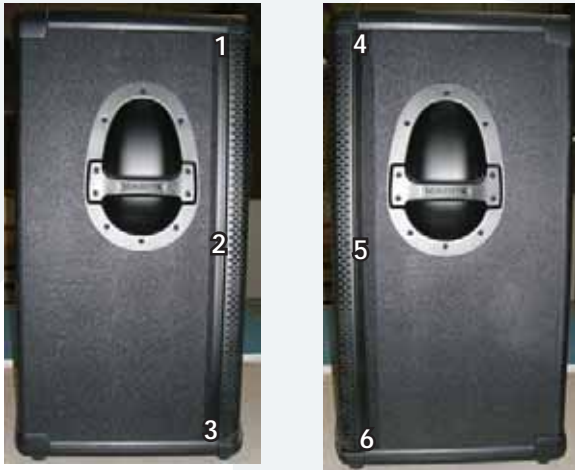
Safety Warnings:

- Make sure that you disconnect all cords before you begin these procedures.
- Always use safety glasses!
- Please try NOT to touch any of the pcb circuitry, capacitors, resistors, etc.
- Take care to read and follow these instructions. It may help to read the instructions prior to the repair to get an idea of what it entails.

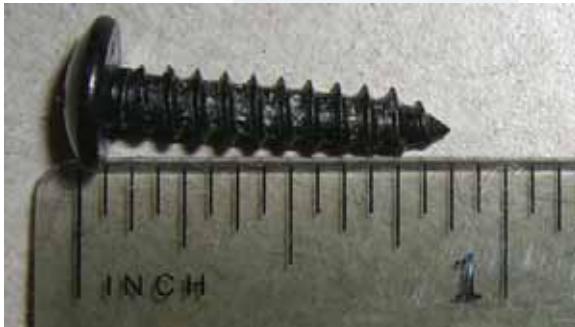




Woofer replacement:



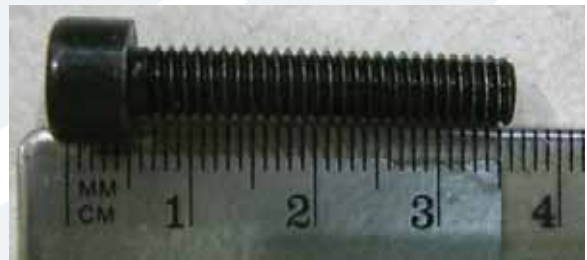
1 Three screws need to be removed from each side of the grill (six screws total) using the phillips head screwdriver. A flat head screwdriver may aid in loosening the grill if it is sticking.



2 Keep the six screws in a safe place.



3 Four screws need to be removed from the woofer using the 5mm allen wrench.



4 Keep these four screws in a safe place, too.





Woofer replacement continued:

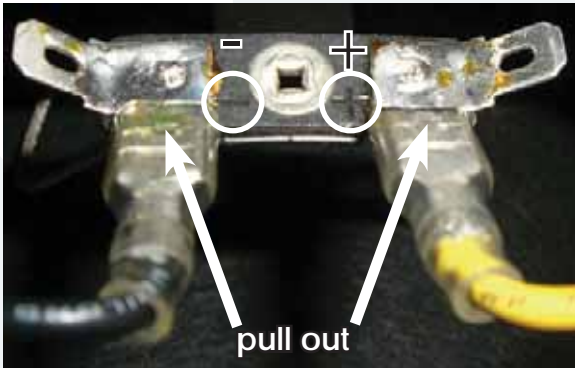


5 Carefully begin to remove the woofer. This woofer has a tendency to want to pop out, so please be sure to hold the woofer in place with your free hand while removing the screws with the other hand.

Caution: The woofer is approximately 10 pounds with the weight unevenly distributed.



7 The picture above shows what the S215 looks like with the grill and woofer removed. Place the new woofer (part #0010658) where the old one was. Follow the same steps as above, but backwards 6 to 1. Power up the S215 and the new woofer should now be pumping out glorious lows. Awesome, you just replaced a 15" woofer!



6 The positive (solid yellow) and negative (solid black) cables are still attached to the woofer terminals. Notice the positive (+) and negative (-) indents located next to each terminal (circled above). Do not force cable removal or connection, although needle-nose pliers may aid in loosening the crimped cables.

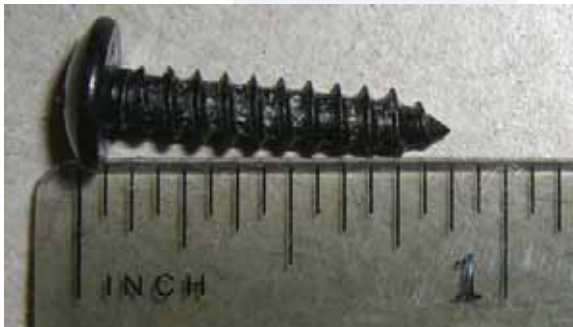




High Frequency Driver replacement:

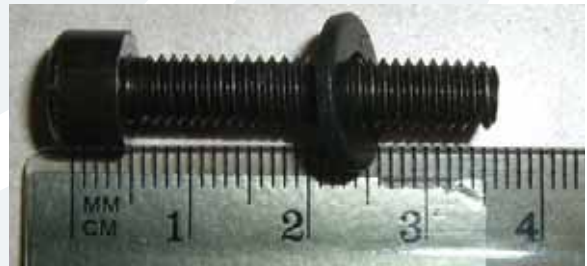


1 Three screws need to be removed from each side of the grill (six screws total) using the phillips head screwdriver. A flat head screwdriver may aid in loosening the grill if it is sticking.



2 Keep the six screws in a safe place.

3 Four screws and flat washers need to be removed from the horn assembly using the 5mm allen wrench.



4 Keep the four screws and flat washers in a safe place.





High Frequency Driver replacement continued:



5 Carefully begin to remove the entire horn assembly (with the high frequency driver still attached). A flat head screwdriver may aid in loosening the horn assembly by prying between it and the cabinet. Hold the horn assembly in place with one hand while prying around the edge with your free hand.

Caution: The horn weighs about 5 pounds, and the weight is unevenly distributed.



7 This is what it looks like with the grill and horn assembly removed. See the next page for further instructions and additional pictures on how to remove and replace the high frequency driver.



6 The positive (solid blue) and negative (solid black) cables are still attached to the high frequency driver terminals. Remove the cables from their terminals simply by pushing down on the terminal and pulling out the cable.



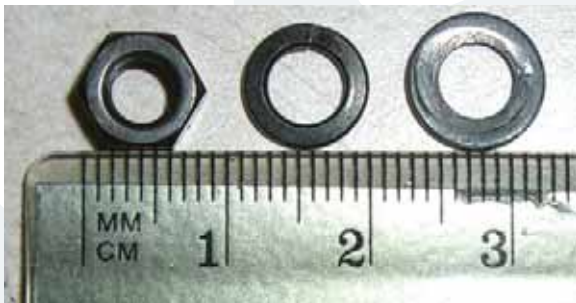


High Frequency Driver replacement continued:



8 Four nuts and eight washers may be removed from the driver using the 8mm open end wrench. Turn counter-clockwise to loosen and remove, clockwise to tighten. The other three are located around the horn assembly. Lift the horn up as the nuts are loosened. It cannot be removed otherwise. Notice that the flat washer is on the bottom, followed by the locking washer, and finally the nut.

10 The horn assembly should easily lift right off of the high frequency driver.

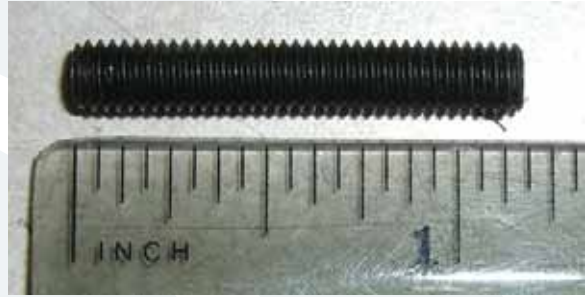


9 Keep the four nuts, four locking washers, and four flat washers in a safe place.





High Frequency Driver replacement continued:



12 Keep the four headless screws in a safe place. Place the new high frequency driver (part #0008093) where the old one was by following the same steps as above, but backwards 11 to 1. Power up the S215 and the new driver should now be pumping out those highs again. Fantastic, you just replaced a high frequency driver!

11 This is what the high frequency driver looks like removed from the horn assembly. Four headless screws need to be removed from the driver. Pliers could help if the screws are too tight. Turn counter-clockwise to loosen and remove, clockwise to tighten.





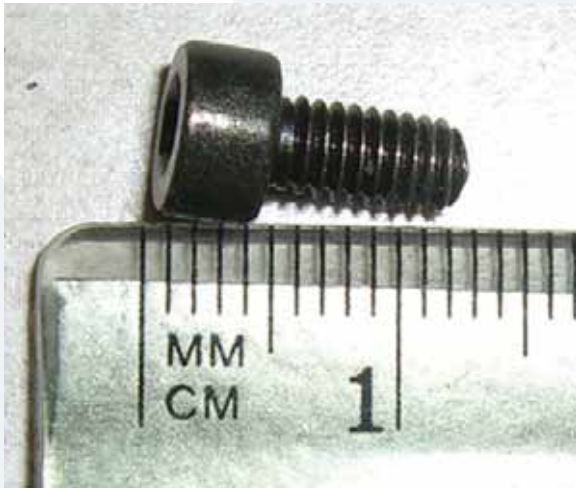
Diaphragm replacement:

1 At the present time (January 2007), diaphragms are not currently available, so you will have to replace the complete driver following the previous section (pages 5-8). If you have received a diaphragm, please follow the steps below.

2 Follow steps 1-6 of the high frequency driver replacement instructions, as the horn will need to be removed in order to access the diaphragm.



3 The horn assembly is shown above with the high frequency driver circled. Four screws need to be removed from the driver using the 3mm allen wrench.



4 Keep the four screws in a safe place.



5 The diaphragm and plate adapter are easily removed from the horn assembly. Notice the terminal locations in relation to the indents of the high frequency driver (circled above).



6 This is what the plate adapter and diaphragm look like after they have been removed from the horn assembly. The diaphragm is separated from the plate adapter simply by pushing down on the terminals.

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Diaphragm replacement continued:



7 This is what the plate adapter (left) and diaphragm (right) both look like. Place the new diaphragm (part # coming soon) where the old one was. Follow the same steps as above, but backwards 6 to 1. Power up the S215 and the new diaphragm should now be pumping out those highs again. Sweet, you just replaced a diaphragm!



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