

Titanium 12d elite

Field Replacement Manual

WARNING!

PLEASE READ ALL INSTRUCTIONS & REVIEW
"UNDERSTANDING YOUR WOOFER'S ANATOMY"
BEFORE DISASSEMBLY TO AVOID WOOFER DAMAGE

Part One

DISASSEMBLY: Removing Your Diaphragm

Remember class "righty tighty left loosey."

1. Place the woofer (aka Fat Bastard) facing right side up on a table. Remove the 9 black screws from the bottom side of the mounting flange with a #2 Philips head screwdriver (figure #1A).
2. Remove the trim ring from the frame (figure #1B).
3. Next, locate and remove all 9 silver-colored Allen head screws located near the speaker terminals (figure #1C).
→ * Use a 7/64 allen wrench on these screws. One should have been included in the kit.
4. Find the speaker and LED terminals and remove all 6 of the 7mm nuts from the posts. Now remove the 6 wire leads from the posts (figure #2A).
5. Find the edge of the surround sitting on the topside of the mounting flange. Peel off the surround from the flange all the way around the basket (figure #2B).
6. Carefully remove the entire cone assembly (diaphragm) out of the basket (figure #2C).
→ * Do this by pushing upwards on the left and right bottom sides of the cone simultaneously. Do not be alarmed at what comes out. This assembly includes the voice coil, two spiders, spider spacer, the cone with the surround and an all you can eat salad bar!

Figure #1:

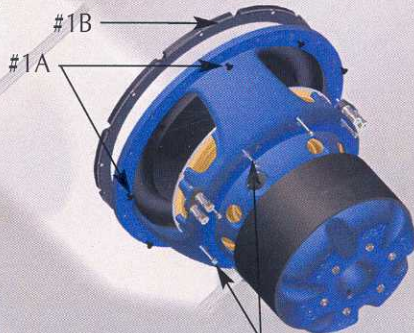
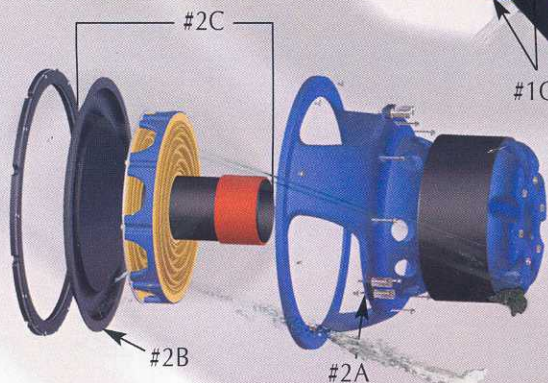


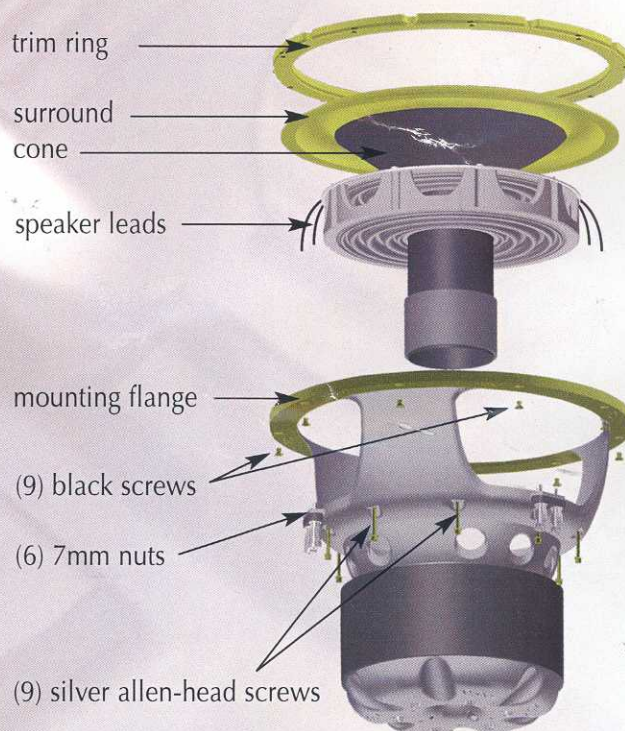
Figure #2:



Phoenix Gold '02



Understanding Your Woofer's Anatomy:



on-line support

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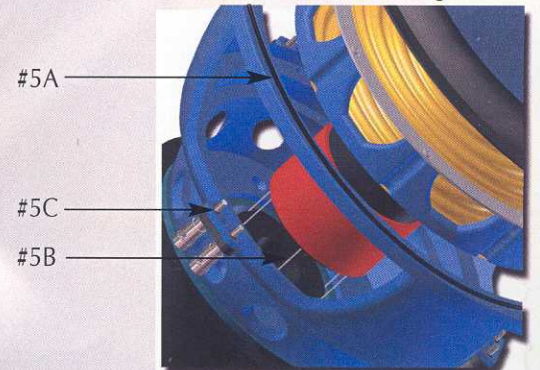
Figure 4:



Figure 3:



Figure 5:



Part Two

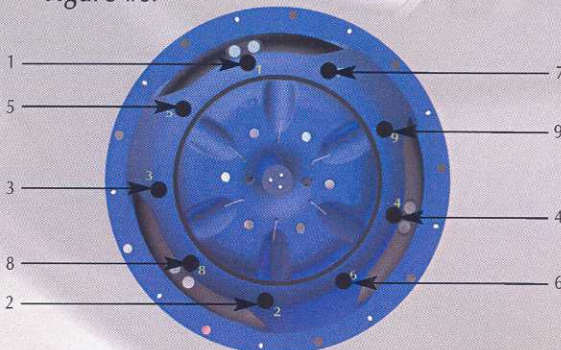
REASSEMBLY: Replacing Your Diaphragm

- Place the woofer on its side and insert six of the .039" L shaped alignment pins into the 6 alignment pin holes located on the bottom side of the cast aluminum heat sink (figure #3).
 - * The six-inch portion of the rod should be inserted all the way into the hole. These will remain there until the REASSEMBLY is complete.
- Now using 100 mph tape (aka duct tape) – that's right! Duct tape! I know you have some, so go ahead and use it. No really, use it! – tape the 1 inch portion of the rod to the cast aluminum heat sink in order to hold it in place.
- Set the woofer right side up and find the rods on the inside of the woofer basket where they should be sticking out. One at a time, bend the protruding ends of the 6 rods slightly inward so that the voice coil will easily slide over the rods.
 - * Note: Do not worry if the rods look a little crooked in the gap, the voice coil will line them up in step #5.
- Press a thin, smooth, even bead of black butyl sealing gasket material, aka "gorilla snot," around the surround flange (figure #5A).
 - * Note: You may want to wash your hands after handling the gorilla snot so you don't get any on "Fat Bastard."
- Now, with the surround inverted upward, (figure #4) carefully slide the replacement diaphragm down into the basket making sure all of the rods are directed to the inside of the voice coil (figure #5B).
 - * Note: Also be sure that the terminal leads on the spider are aligned with the terminal posts.
- Next, insert and loosely seat all nine silver-colored Allen head screws.
 - * Use a 7/64 allen wrench on these screws. One should have been included in the kit.

WOOFER MUST REMAIN UPRIGHT AT ALL TIMES DURING STEPS 7 & 8 TO ENSURE PROPER ALIGNMENT!

- IMPORTANT STEP!** Now that you have the replacement diaphragm in place, it is important that the diaphragm be lined up properly. To do this, with the woofer upright, push slowly, gently and straight down on the center of the cone so that the cone moves about 3/4 of the way down and then release slowly. Do this three to four times to assure that the diaphragm is set properly.
- IMPORTANT:** In the order of the numbers as shown below, (figure #6) tighten all nine silver-colored 7/64" Allen head screws (the ones you just LOOSELY seated in step 6). Be very careful not to over compress to avoid deforming the steel spider retainer.

Figure #6:



- Now place the trim ring and surround clamp assembly on to the frame (figure #1A). For correct placement, make sure that the threaded inserts are placed over the holes that have the bevel on them for the Phillips head screws.
- To attach the trim ring and surround clamp, place the nine black #2 Philips head screws into the corresponding beveled holes located on the bottom side of the mounting flange and tighten (figure #1A).
 - * Note: Be careful not to over tighten the screws as they can strip out.
- Now place the 3 pairs of wire leads onto their corresponding posts (figure #5C). On these terminals place all 6 of the 7mm nuts on the posts and secure them with a 7mm wrench.
 - * Note: Remember, you guessed it! Do NOT over-tighten.
- Now for the hardest thing you will ever do in you life, remove the tape and the L-shape alignment pins from the backside of the cast aluminum heat sink.

The End.

PHOENIX GOLD