



**WBA "WHOLE HOG"  
INSTALLATION MANUAL**

*For Use On 2014 and Newer Liquid  
Cooled Ultras and Trikes*

**IMPORTANT!**

*This Kit Is Not For Use On CVO Model Bikes and  
Cannot Be Used On Bikes With Air Cooled Motors*

Thank you for your purchase of Wild Boar Audio's WBA WHOLE HOG KIT. We want your new system to work as well as it was designed to, so if you have any questions or concerns, please email: [tech@hogtunes.com](mailto:tech@hogtunes.com) or call us during regular business hours at 705-719-6361 (EST). If you still need help, please consider a professional installation by your dealer.

## **Important—Please Read Before Proceeding!**

- A) In order for the supplied amps to work properly, your radio must have the proper "flash" installed. It should be noted that non CVO Ultra models and Ultra Trike models come from the factory with the required "4 speaker no amp flash. If your bike has never had other amplifiers installed, you will not require the radio to be flashed. Please see the "System Adjustment" section for more information.
- B) There is 1 set of FRONT speakers, and 2 sets of REAR speakers in this kit. The front speakers are specifically designed to work in the very small factory front speaker cabinets, and the rears are designed to work in more "open" environments like the lower fairings and rear pods that "vent" into the tour pack.
- C) The amplifiers have built in protection and will turn off to protect your charging system if your charging system/battery goes below 10.5 volts.
- D) In very high heat situations the amplifiers will shut off to avoid damage. Once cooled down to safe operating temperatures, each amp will turn itself back on.

*The WBA 300.2 amplifier is a Class D design. It should be understood that ALL Class D amplifiers, regardless of brand, cause a reduction in FM reception. The WBA 300.2 features a proprietary circuit design called R.E.M.I.T. (Reduced Electro Magnetic Interference Technology) that Wild Boar Audio believes gives the BEST FM reception available for any Class D Amplifier designed for a motorcycle.*

*Reduction of FM reception is considered normal.*

*Wild Boar Audio understands that some riders prefer the cosmetics of in fairing antennas, however it should be noted that NOTHING works as well as the factory antenna. If FM is an important part of your listening, we strongly advise against the use of any in fairing type antenna!*

## **Getting Started**

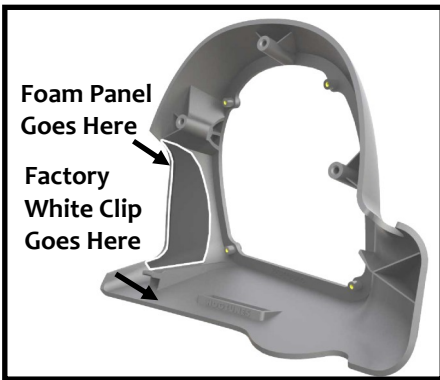
**Step #1:** Remove the seat, and both wires (+ and -) from the battery.

**Step #2:** Remove the outer fairing/headlamp assembly. Refer to a service manual if you need help with this. Note: A towel on the front fender can help prevent scratches or "dings" from dropped tools or fasteners etc. High volume expletives will also be kept to a minimum.

## Installing Speakers In Lower Fairings:

**Step #1:** Starting on the brake side lower fairing, use a coin or something similar to carefully pry off the front access cover. With the cover removed, look inside the opening, and at the very back, you will see a 7/16" nut that is to be removed. This nut allows the painted fairing lower "cap" on the front to come off. With the painted cap off, you will see a "bar" that secures the top half of the lower to the crash bar. Remove the 2 nuts and the bar and put aside for now. At the bottom of the lower is a clamp that holds the bottom half of the lower to the crash bar. Remove the bolt that secures the clamp.

**Step #2:** Gently push the top of the lower towards the back of the bike just enough so you can remove the 3 torx screws (normally hidden by the painted cap) that hold the lowers front panel in place. Gently pull on the front panel to release 2 clips which will allow the front panel to come away, but not completely free from the bike yet. There is a small arm for the vent mechanism still attached that is removed by squeezing the top of the pivot pin and lifting up on the arm. You can now bring the factory lower front panel to a work bench and remove the torx screw that holds the vent adjuster and arm to the factory panel. Using the same screw, install the vent adjuster and arm into your new speaker adaptor.



**Step #3:** The kit comes with die cut foam panels. Find the one for the side of the bike you are working on and apply as shown noting you should clean the area with isopropyl alcohol first. On your factory front panel, you will see 2 white clips. One of these clips will come off and be installed onto the new speaker adaptor.

**Step #4:** Moving to the front side of the lower, in the area normally hidden by the painted cap, you will see a hole where the bolt passes through that secures the painted cap. Just above that hole and approximately 2" back from the bolt hole, you will need to drill a 3/8" hole for the wires to pass. When this install is finished, the painted cap will hide the wire nicely. It's a good idea to start with a pilot hole and then drill the final size. Use care to make sure your drill bit does not pierce the coolant tank inside the lower on the brake side!

**Step #5:** Locate the supplied wire harness marked "LC LOWER". On the harness you will see a main 4 wire harness with blue/black, and brown/black wires covered in a black sheath. You will also see two-2 wire harnesses (wires are all black) that each need to be unplugged from the main harness.

**Step #6:** Locate the 2 wire harness marked “brake side” and plug it into the main harness connector noting it will only go in one way. The other side of the same harness will go into the lower. Pass the larger connector first. You can tear off the sticker if that makes it easier. Once the wires are in the lower, take up the slack along the crash bar keeping the main harness (with blue/black, and brown/black wires) as close to the center of the crash bar as possible.

**Step #7:** The kit comes with strips of black gummy material. Take one of the strips and use it to seal the hole around the wire on the outside of the lower.

**Step #8:** Snap the arm for the vent back into place on the pivot pin. Re install the 3 factory torx head screws (by hand just until they are snug) to secure the panel to the lower. The “bar” and 2 nuts removed earlier that secure the top of the lower to the crash bar will now be reinstalled. The bolt removed earlier that secures the lower to the bottom of the crash bar is also re installed.

**Step #9:** Using some of the supplied zip ties , secure the speaker wire to the crash bar keeping the main harness as close to the center of the crash bar as you can. It’s a good idea to trim the excess of the zip ties as close to flush as possible so there are no sharp edges. When done, install and secure the painted fairing lower cap with the 7/16” nut removed earlier.

**Step #10:** Take one of the Wild Boar WBC 1654 REAR speakers that came in the kit and attach the speaker wires just installed into the fairing lower on to the speaker, noting the wires will only go on one way. Sit the speaker and its trim ring into the lower, and BY HAND, get the supplied machine screws “started” into the brass threads. Get all 4 machine screws “snug” and then tighten in an “X” pattern.

**Step #11:** Repeat the previous steps to install the lower speaker adaptor for the clutch side of the bike. The left over portion of the lower speaker wire harness will get routed and plugged in later on in the install.

## **Rear Speaker Installation:**

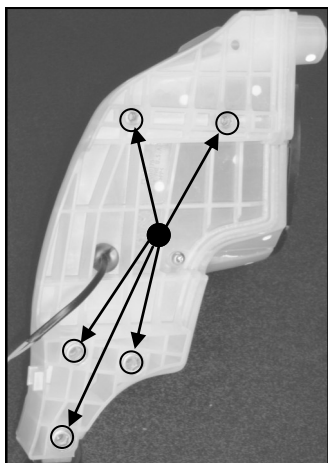
**Step #1:** Doing one side at a time, remove the 4 screws that secure the rear speaker to the speaker “pod”. Lift the speaker out and carefully remove each speaker wire from the speaker.

**Step #2:** Take a WBC 1654 REAR speaker and attach the factory speaker wires noting they will only go on one way. For the speaker going in the brake side pod, the connectors must be oriented so they are in the “3 o’clock” position or it will not fit. For the speaker going in the clutch side pod, the connectors must be oriented so they are in the “9 o’clock” position or it will not fit. With each new speaker and grill trim ring in place, secure the speaker/trim rings to the pods using the factory screws. Like the lower speakers, we suggest getting the machine screws “started” BY HAND. Get all 4 machine screws “snug” and then tighten in an “X” pattern.

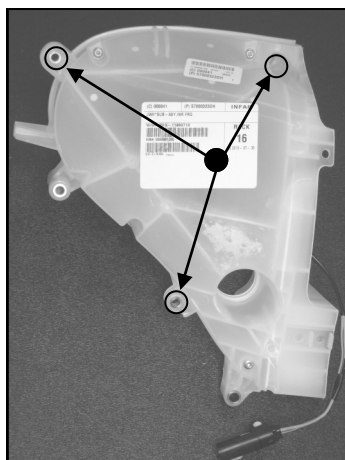
## Front Speaker/Installation:

**Step #1:** On the brake side speaker cabinet, carefully remove the cable going into the power port/cigarette lighter assembly. If your bike has the CB module (mounted “sideways” on the clutch side cabinet) undo the antenna cable and main harness. The CB Module will stay attached to the clutch side cabinet when removed. Undo the speaker wire plugs going into each cabinet (pink & pink with black stripe wires).

**Step #2:** Removing the Factory Cabinets: It is **STRONGLY** suggested to **COMPLETE** the brake side speaker swap before moving to the clutch side! Figure 1.1 and 1.2 (below) have arrows that point to all 8 factory fasteners (per side) that will be removed to allow each cabinet to come out of the bike. Although the brake side is shown below, all 8 fastener locations are common for both brake and clutch side cabinets. In Fig 1.1 you will see where the speaker wire exits the cabinets. The 3 cabinet fasteners below the speaker wire are 7/16” heads that will also accept a 3/16” allen head. A “ratcheting box end” or “ball end” allen wrench will make removing these 3 fasteners much easier!



**Fig1.1 Side View of cabinet**

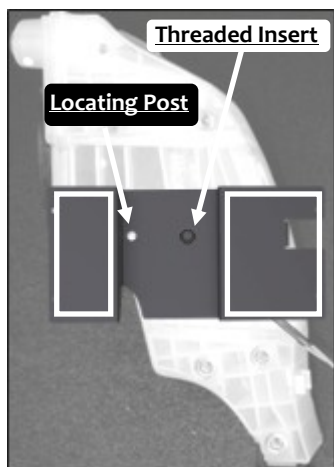


**Fig1.2 Back View of cabinet**

**Step #3** With the cabinet removed from the bike, undo the 4 screws that hold the factory speaker to the cabinet and put these screws aside. Pull the factory speaker away from the cabinet and carefully take off each speaker wire by un-doing one at a time. Take a WBC 1654 **FRONT** speaker, and attach the speaker wires noting the factory speaker wire connectors will lock into place on the speaker. Sit the speaker into the cabinet noting the speaker **MUST be oriented so that the wires are in the bottom (6 o'clock) position** so the speaker frame will not touch the small locator peg that sticks out from the face of the cabinet. If the speaker is not placed correctly, the speaker may not “seal” correctly to the cabinet and the bass response will be terrible! Using the supplied screws (which are longer than the factory screws), attach the new speaker to the cabinet. Re-install the front speaker/cabinet assembly back into the brake side of the bike.

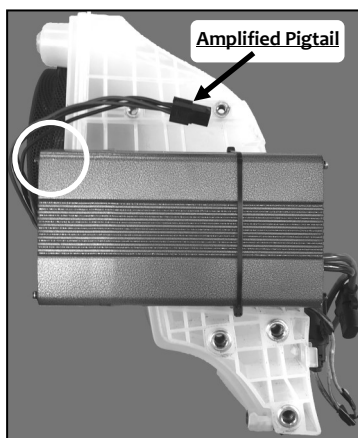
**Step#4:** Remove the clutch side cabinet and install a FRONT speaker in the cabinet.

**Step#5:** If your bike had the CB Module, remove its mounting plate from the speaker cabinet. Locate the “FLH Side Plate” that came in inside the WBA 300.2 amplifiers box. On the side of the cabinet, you will see a threaded insert and a locating post as seen in Fig 1.3. Put the FLH side plate on the cabinet so one of the holes in the plate goes over the locating post, and the other sits over the threaded insert. If you removed a CB module from an Ultra you can use the screw that secured that module to the speaker pod. If your bike did not have a CB Module, use the machine screw that came in the kit to secure the side plate to the speaker cabinet. Fig 1.3 shows the plate correctly placed on the speaker cabinet.



**Step #6:** Locate the “hook and loop” material in the box the mounting FLH Side plate was shipped in. Separate this so you have 2 pieces. One of the pieces will be applied to the underside of the amp. Refer to Fig 1.3, and cut the remaining piece of hook and loop material so you have 2 smaller pieces close to the size of the metal areas highlighted by white rectangles. Apply the pieces just cut to the correct sections on the plate.

**Fig1.3 Plate Correctly Placed**



**Step #7:** The WBA 300.2 amp will “stick” to the plate as shown. See the white circle in Fig 1.4. The “top” and left “end” of the amp must be flush to the “top” and left “end” of the plate, or the amp/factory speaker cabinet assembly will not fit! NOTE: It is CRITICAL that the “amplified pigtail” of the amp be on the speaker side of the cabinet as shown in Fig 1.4. Locate the 14” long “zip tie” (also in FLH Side Plate box) which will wrap around the plate and around the amp. Tighten the “zip tie” so its snug only. The zip tie is on there as a back up in the unlikely event the hook and loop adhesive fails.

**Fig1.4 Amp On Cabinet**

**Step #8:** As shown in Fig 1.4, the “amplified pigtail” on the amp needs to be positioned over top of the amp. If you do not do this now, you will not have access to this plug when wiring the amp! The cabinet/amplifier assembly will now go in the bike as one unit. Some “finesse” is needed, but it will go without forcing anything. With the cabinet assembly in place, re-install all 8 fasteners and secure the speaker cabinet to the bike.

## 600.4 Amplifier Installation:

**Step #1:** Over top of the radio, pull up to release each wire harness from the black plate via the factory “Christmas Tree” fasteners. The small square GPS antenna will need to be relocated just behind the voltmeter as shown in Fig 1.5 . Remove the four factory T-20“Torx” screws that go through the top of the black plate and into the top of the radio. Set these screws aside for now.

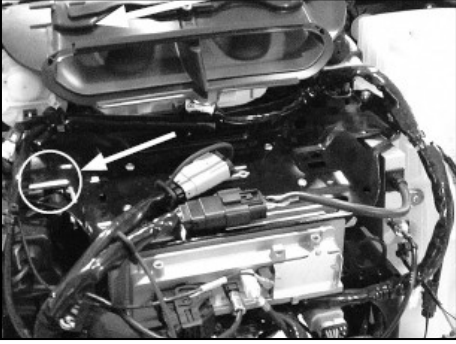


Figure 1.5 - The white circle shows the new location for GPS Antenna

**Step #2:** The amplifiers in the WBA 600.4 box, are “stuck” to a mounting plate for use in FLH model bikes. “Peel” the amps off the plate. Take the plate and place it on top of the radio oriented so the tab with the hole in it is closest to the back of the radio (closest to you). Re-install the screws through the new plate, through the factory black plate and into the top of the radio. Make sure each amp “Radio Flash Selector Switch” is set to position “A”.

### **IMPORTANT**

*For the WBA 600.4 portion of the install we refer to one amp as the “Master” and the other amp as the “Slave”. The Master always has the main input harness go into it, and is always the amp that powers the front fairing speakers. When installed, the amp on the left (brake side) of the bike is the Master amplifier.*

**Step #3:** “Stick” one amp to the left half of the plate so the power harness is closest to the back of the radio (closest to you), and the “amplified output pigtail” is closest to your inner fairing. Have this pig tail so the 4 pin black plug is easy to get to. This first amp goes on the left (brake side) and from here on out is referred to as the MASTER amplifier. Take the second amp and “stick it” on your right (clutch) side oriented the same way as the first amp. From here on out, the second amp you stick in place is referred to as the SLAVE amplifier. In this install, the Master amp powers the front speakers, the Slave amp powers the rears, and the amp on the clutch side speaker cabinet powers the lowers.

**Step #4:** Locate the “splitter” power harness included in WBA 600.4 box. Plug one of its “splits” into the power connector on each amplifier. Let the balance of the power harness hang for now.

**Step #5:** From the WBA 600.4 box, locate the “main input” harness and insert its 8 pin plug into the “audio input” on the MASTER (left side) amplifier. On this input harness, take the plug with the green heat shrink on the end and install it into the mating plug near the brake side speaker cabinet that was separated when you removed the cabinet from the bike. Take the plug with the yellow heat shrink on the end and install it into the same mating plug on the clutch side of the bike.

**Step #6:** Also from the WBA 600.4 box, locate a bag with a harness in it that says “Audio Out” and plug it into the amplified out “pigtail” on the Master (left side) amplifier. Take the 2 pin plug with the blue heat shrink on one end and install it into the plug going directly into the brake side speaker cabinet. Take the 2 pin plug with the brown heat shrink and install it into the plug going directly into the clutch side speaker cabinet.

**Step #7:** In the 600.4 box, locate the harness in the bag labeled “input link”. Take the 8 pin plug on the input link and plug it into “audio input” on the “Slave” (right side) amplifier. Locate the harness labeled “Ultra Rear Harness”. On that rear harness, you will see two 4 pin plugs. The black one will plug into the “amplified output” on the slave (right side) amplifier. On the input link now plugged into the Slave (right side) amplifier, there are 2 empty blue 4 pin plugs. The white 4 pin plug on the rear harness will plug into the mating blue plug on the input link. The leftover blue plug on this input link may be used later to send music to additional amplifiers if they become available. Let the balance of the rear harness hang for now.

**Step #8:** Locate the “input link” in the WBA 300.2 box. Its 8 pin black plug will plug into the 8 pin socket on the amp mounted to the clutch side speaker cabinet. On the MASTER amplifiers input harness, you will see an empty blue, 4 pin plug. On the amp mounted to the clutch side speaker cabinet, take one of the blue plugs on its input link harness, and plug it into the empty blue plug on the MASTER amps input harness.

**Step #9:** Locate the power harness in the WBA 300.2 box and plug its 2 pin connector into the power harness on the amp mounted to the clutch side speaker cabinet. Let the balance of that power harness hang for now.

**Step #10:** The balance of the main wire harness installed into the lowers will pass through on the brake side of the fairing where the main factory wires pass. Plug this into the amplified output “pigtail” on the amp mounted to the clutch side speaker cabinet.

**Step #11:** The balance of the 2 power/ground harnesses and rear harness will pass through the inner fairing where the main wire harness passes through on the brake side of the bike. If your comfortable removing and re-installing the fuel tank, the wires can go in the factory wire “chase”. Alternatively, you can loosen the tank’s “chrome console” and run wires up and over the gas tank, but under the tank’s chrome console. There is a provision on the front of the tank console for wires to pass. NOTE: If using the wire “chase” under the tank, please use caution to make sure no wires get pinched when you clip the wire chase cover back in place.



Do Not (repeat **DO NOT**) splice into the WBA 600.4 “splitter” power harness to supply power to the amp on the clutch side speaker cabinet. The “splitter” wire gauge is not adequate to **PROPERLY** supply power to the additional amp!

When installed and run correctly, the rear harness is the right length so that its two large ends can sit on the middle of the back fender, just behind the threaded insert for the bolt that holds the back of the seat in place. The power harnesses are the right length so the “ring connectors” are in the immediate vicinity of the terminals on the bikes battery.



*Stock Harness and Amplifier's Harnesses Passing From Fairing To Just In Front Of Tank (Arrow A). Cable Tying the Harnesses To The Main Bike Harness Just In Front Of The Tank (Arrow B) Allows The Amp Harnesses To Go Up Towards The Tank's Chrome Console Easier And Makes For a Cleaner Install.*

**Step #12:** Just behind the threaded insert that holds the seat bolt on the back fender, you will see a large factory wire plug. One side of the plug has wires that go to each rear speaker pod. Separate this large factory plug. One plug from the amplifiers rear harness will plug into each side of the factory plug just separated. They will only go together one way.

At this point, all audio connections for this system are made!

**Step #13:** In this order, Attach both amp's brown wire to the negative (-) battery terminal and red wires to the positive (+) battery terminal. The factory battery wires are also re-installed at this point. When the positive connector touches the battery, some sparking is normal as a function of the capacitors in the amplifier charging up.

**Step #14:** Turn the stereo on and make sure you see an illuminated blue LED on each of the 3 amps. At low volume, test to make sure all speakers are working.

**Step #15:** Re-install the seat. Before you start to “clean up” the wiring, please **MAKE SURE** to route the amplifiers wires (blue/silver) that go to the brake side of the bike on top of the amp, but as close to the inner fairing as you can. Under **NO CIRCUMSTANCES** should any of the blue/silver wires be zip tied to any factory antenna cables anywhere on the bike. Failure to follow this important note has potential to negatively effect FM reception.

**Please proceed to next page for final system adjustment**

## **Final System Adjustment:**

A) This kit has been designed to give great sound with the radio bass and treble controls in the middle position. Adjusting the bass and treble up or down no more than 3 bars from center will give excellent and reliable performance for most kinds of music. If you choose to exceed this suggestion and play at high volume levels, you may damage your system!

B) The Wild Boar Audio 300.2 amplifier is a HIGH POWER amplifier specifically designed to work on the small charging system of a motorcycle. You have THREE of these amps on this bike. DO NOT start your motorcycle with the radio past half on the volume dial! When the start button is hit, all available current goes to your bike's starter which "starves" the amplifier and may cause damage to your speakers!

C) As mentioned at the beginning of this manual, the correct "flash" must be in the radio for the system to work correctly. If the bike this kit was installed on has had NO previous audio installed, the "4 speaker-no amp flash" which is the required flash is already in the radio and nothing more needs to be done. If you are not sure, any MoCo dealer or "Techno Research" dealer can do the flash for you. If you have questions, please call us!

***Before re-installing outer fairing, turn front wheel to each extreme side making sure any wiring is not impeding the steering of the motorcycle.***

***Failure to do so can result in serious injury or death!***

**You did it! Re-install the fairing and the system is now ready to enjoy!**

## Warranty Information:

Wild Boar Audio branded amplifiers are warranted for a period of 3 years to the original purchaser. Wild Boar Audio speakers are warranted for a period of 5 years to the original purchaser. Proof of purchase is required for all warranty claims. Products found to be defective during the warranty period will be repaired or replaced (with a product deemed to be equivalent) at Wild Boar Audio's sole discretion. Wild Boar Audio's complete warranty policy is available on the website at [www.wildboaraudio.com](http://www.wildboaraudio.com) Note: In the event of an amplifier failure, only the failed amplifier will be replaced.

## What Is Not Covered:

- 1) Any expense related to the removal or re-installation of products.
- 2) Repairs to these products performed by anyone other than Hogtunes, Inc.
- 3) Subsequent damage to any other components.
- 4) Any product purchased from a non-authorized Wild Boar Audio dealer.
- 5) Damage to products from an accident or collision.
- 6) Damage from incorrect installation, improper use, abuse or modifications.
- 7) Reduction of FM reception.
- 8) Damage caused by incorrect factory radio "re-flash" and amp combination
- 9) Damage to inbound warranty product due to improper packing.

**IMPORTANT:** In the event of a warranty claim, please fill out the form in the Warranty section of our website [www.wildboaraudio.com](http://www.wildboaraudio.com). Valid claims will have a Return Authorization Number (RA#) generated which **MUST** appear on the outside of the box when it arrives to our offices.

**Goods Arriving Without An RA# Will Be Refused!**

*Wild Boar Audio is owned by Powersports Audio Inc.*

***Powersports***  
***AUDIO INC.***



*Wild Boar Audio products will play much louder than the Original Equipment, which can be a distraction to the rider and/or passenger. Please use caution when adjusting or playing your stereo at high volume*

**ESPECIALLY IN TRAFFIC!**