

WILD BOAR AUDIO

By **HOGTUNES**



REDUCED ELECTRO MAGNETIC
INTERFERENCE TECHNOLOGY



WBA RETRO 800.4SG

**IMPORTANT! A Radio "Re-Flash" Is Strongly Encouraged
Before Proceeding. Please Read Manual For More Information**

FOR USE ON 2014-2023 STREET GLIDES

INSTALLATION MANUAL



Thank you for your purchase of Wild Boar Audio's WBA Retro 800.4SG for 2014-2023 Street Glide Models. We want your kit to work as well as it was designed to, so if you have any questions or concerns, please email: techsupport@hogtunes.com or call us during regular business hours (EST) at: 705-719-6361. If you still need help, please consider a professional installation by your dealer.

IMPORTANT

In order for your new amps to work properly, your radio **MUST HAVE THE CORRECT "FLASH" INSTALLED**. Different radio flashes are used by the "MoCo" based on the factory audio system that comes on different model bikes. We strongly suggest using a "Techno Research" dealer which you can find by visiting: <https://technoresearch.info/dealer-map>. Put your zip code or postal code in to find a dealer in your area.

Ask the Techno Research dealer to install the "Wild Boar Audio" flash as that's what is suggested for this system. This flash (which is same as a stock Ultra/Ultra Limited) gives the sound from the radio needed to make this system work great.

This manual is written in 3 major sections:

Section 1: Front Speaker Installation

Section 2: Amplifier Installation

Section 3: Cut in kit/ lid speaker installation

IMPORTANT: Read the next page before installing!

Wild Boar Audio Contact Information

Email: techsupport@hogtunes.com

Canada Tel: 705-719-6361 / USA Tel: 608-554-7631

BEFORE GETTING STARTED

We strongly suggest following the order of this manual. Wire harnesses need to be run from the front of the bike to the back, and from the back to the front. Following the manual as its written will help keep installation time to a minimum.

The WBA 400.2R's are a Class D design. It should be understood that ALL Class D amplifiers, REGARDLESS OF BRAND, cause a reduction in FM reception. The WBA 400.2R's feature 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. If you add additional amplifiers to your system, reduction of FM reception is increased and 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 riding experience, we strongly advise against the use of any in fairing type antenna!

GETTING STARTED

Remove the bike's seat, and undo the main (+ and -) connectors from the battery. Remove the outer fairing/headlamp assembly and set aside. Refer to a service manual if you need help with this. NOTE: Placing a towel on the front fender can help prevent scratches or "dings" from dropped tools or fasteners, etc.

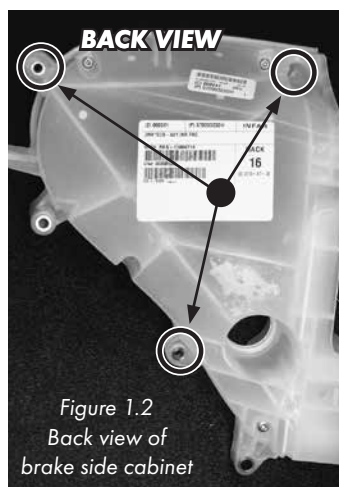
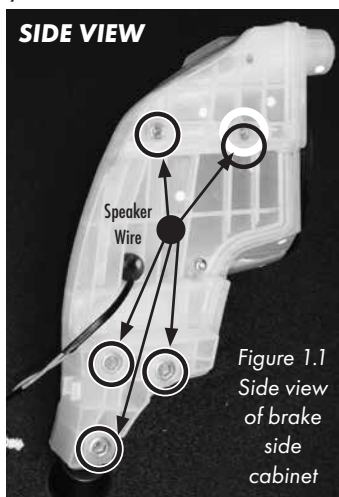
SECTION 1

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). You will see wire harnesses that are attached to the speaker cabinet with "Christmas Tree Fasteners". These need to be separated from the speaker cabinet for when the cabinets will come out of the bike.

Step #2: **Removing the Factory Cabinets:**

It is **STRONGLY** suggested to complete the speaker swap on one side before moving to the other side! Figure 1.1 and 1.2 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, 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!



Step #3: **Installing the Wild Boar Audio WBC 1654 Speaker**

With the cabinet removed from the bike, remove the factory speaker grill. 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 Wild Boar Audio speaker and attach the speaker wires noting the factory speaker wire connectors will lock into place on the speaker. Sit the Wild Boar Audio 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. Repeat Step #3 for the second cabinet.

Step #4: Plug the factory speaker wires back into the cabinet's speaker wires. Make sure to plug the power cable back into the power port/cigarette lighter assembly on the brake side. If the bike has the CB module, make sure to re-install the antenna cable and main harness.

NOTE: The speaker's crossovers have a light bulb in line with the tweeter that acts as a current sensitive resistor. If the speaker is played at high volume, the light bulb will start to illuminate which reduces power to the tweeter. This has been very carefully designed to help prevent tweeter failure.

SECTION 2

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. If the bike has factory GPS, the small square antenna will need to be relocated just behind the voltmeter as shown in Fig 1.1. Remove the four factory T-20 "Torx" screws that go through the top of the black plate and into the top of the radio.

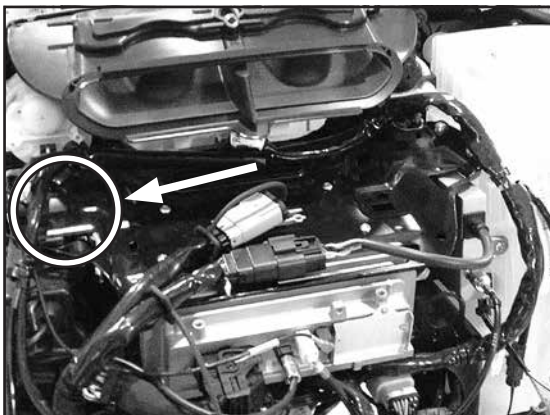


Figure 1.1 - The white circle shows the new location for GPS Antenna if your bike came factory equipped with this feature.

Step #2: As the amplifiers come in their boxes, each one is "stuck" to a mounting plate for use in FLH model bikes. "Peel" the amps off the plate. Take one of the plates 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). Locate and install one of the supplied "star" washers on each factory screw and re-install the screw/washer through the new plate, through the factory black plate and into the top of the radio.

IMPORTANT

In this install we refer to one amplifier as the "Primary" and the other amplifier as the "Secondary." The Primary always has the main input harness go into it, and is always the amplifier that powers the front fairing speakers. When installed, the amp on the left (brake side) of the bike is the Primary amplifier.

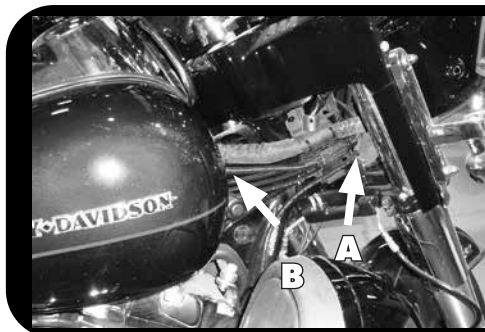
- Step #3: Take one amp, and in the same orientation as it came out of the box, "stick" the amp to the left half of the plate so the power harness is closest to the back of the radio. The "amplified output pigtail" will sit closest to your inner fairing. Have this pig tail so the 4 pin black plug is easy to get to. This first amp goes on the left (brake side) and from here on out is referred to as the PRIMARY amplifier. The second amp is referred to as the SECONDARY amp and is what will power the 6x9's in the lids. Take the "Secondary" amp and "stick it" on your right (clutch) side so its oriented the same way as the "Primary" amp.
- Step #4: Locate the "splitter" power harness included in the kit. Plug one of the "splits" into the power connector on each amplifier. Let the balance of the power harness hang for now.
- Step #5: On each front speaker's cabinet, there is a 2 pin plug that has pink and pink with black stripe wires. The plugs attach the speaker's wiring to the bike's wiring and need to be separated. Locate the "main input" harness and plug its 8 pin plug into the "audio input" on the PRIMARY amplifier. On this input harness, take the plug with the green heat shrink on the end and install it into the mating plug on the brake side of the bike. Take the plug with the yellow heat shrink on the end and install it into the mating plug on the clutch side of the bike.
- Step #6: Locate a bag with a harness in it that says "Audio Out" and plug it into the amplified out "pigtail" on the PRIMARY (left side) amplifier. Take the 2 pin plug with the blue heat shrink on one end and install it into the plug going into the brake side speaker cabinet. Take the 2 pin plug with the brown heat shrink and install it into the plug going into the clutch side speaker cabinet.
- Step #7: Locate the RR PLUG-RM The "square" 4 pin plug will plug into the mating factory plug inside the fairing with 4 light blue wires going into it. This one of the harnesses on the "Christmas Tree" fastener removed before the amp plate was installed. The 8 pin connector on the same harness will plug into the "Audio In" on the Secondary Amp. There will be a left over 4 pin blue plug which is there for future system expansion (adding a 3rd amp if needed).

Step #8: Locate the long harness that came in the "Retro Lid-RM" box that has a white 4 pin connector on one end, and two—2 pin black connectors on the other. Take the 4 pin plug on this harness and plug it into the amplified output "pigtail" on the Secondary (right side) amplifier. The balance of the harness for the lids and power harness will pass under the fairing where the main factory wire harnesses exit the fairing on the brake side of the bike.

If you have removed your fuel tank: the lids speaker harness and power harness can work their way towards the back of the bike inside the factory wire "chase". Note: The factory antenna wire also runs through this "chase." Keeping the amps power harness away from the factory antenna wire **WILL** help FM reception!

If you have left your fuel tank on: Loosen the tanks chrome console and run the 2 harnesses up and over the tank, but under the console. There is a provision on the front of the tank console for the wires to pass.

With or without the fuel tank on, when correctly installed, the power harness's "ring terminals" will be at the battery and easily attached to the battery. **Do not attach the power wires to the battery yet!**



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.

At the "rear end" of the lid harness, you will see where it "splits" into 2 separate shorter harnesses. These 2 shorter harnesses need to be removed and put aside as they are not used in this installation.

SECTION 3

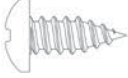
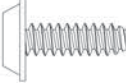
INSTALLING THE CUT-IN SPEAKER ADAPTORS

Remove the saddlebag from the bike, and put on a stable working surface. For obvious reasons, blankets etc. on your work surface will help protect the paint. The white circle in the image below is an approximation of where a 3/4" (19mm) hole will be drilled. This hole is where the supplied Hogtunes rubber grommet will go (later in this install) to allow the speaker wire to pass in/out of the saddlebag. We strongly suggest putting masking tape over the painted area to be drilled. We also suggest starting with a small bit, and gradually working your way up to the 3/4" (19mm) hole. Drilling the hole with the lid still on is recommended! The black squares (also in image below) are an approximation of where supplied zip tie peel and stick "anchors" will be placed. Note: Before applying the anchors, you need to clean the plastic **WELL** using 99% isopropyl alcohol, or similar cleaner. **DO NOT use Acetone (It will eat plastic)**. Do not apply pads until cleaner has completely evaporated.



IDENTIFYING THE SCREWS

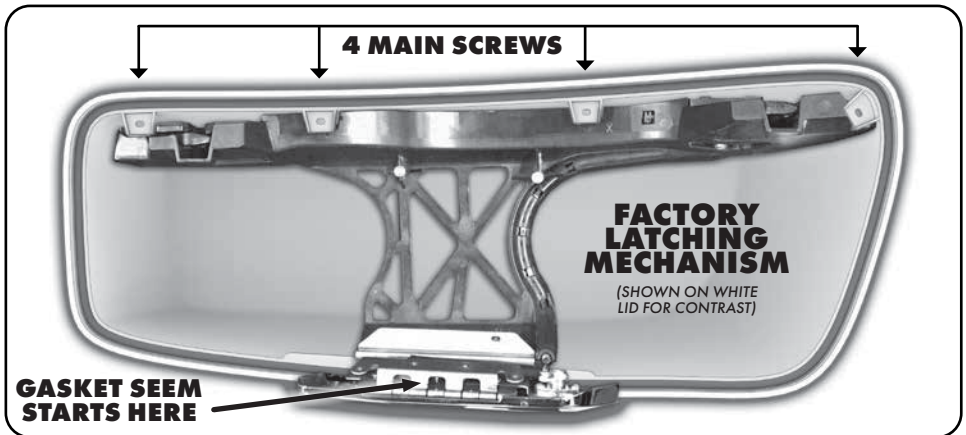
The Retro Lid Kit Box comes with 2 types of screws:

- 6 (each) Phillips head screws with a pointy end 
- 16 (each) Phillips "Thread Forming" screws with a "flat" end 

For proper installation of this kit, you will need to use the correct screws throughout the process.

DISASSEMBLING THE FACTORY LID

As you disassemble your factory lid, please make note of what screws came from where as they will be re-used. Open the factory lid and you will see 2 "T15" torx screws on the "bag side" of the cloth tether that holds the lid to the bag. Remove these 2 screws, move the cloth tether out of the way, and you will see 2 more of the same screws which also need to be removed. The lid is now free from the bag. Remove the 2 screws that hold the "key lock" to the factory lid. The chrome panel with the reflector built in comes off the factory lid by removing the 3 screws right next to the key lock. At its seam, the factory foam gasket needs to be peeled up enough to allow the rest of the hinge mechanism to be removed from the factory lid. There are 2x "T20" torx screws that hold the balance of the hinge mechanism to the plastic of the lid. Remove these screws and put hinge mechanism aside.



Remove the T15 screw that holds the opening handle in place and pull the handle away from the factory lid. Remove the last 4x T15 screws securing the large latching mechanism to the underside of the factory lid. This entire mechanism is now removed.

MOUNTING THE TEMPLATES

- Step #1: Locate the cutting templates noting that they are clearly marked "Clutch side" and "Brake side". As shown in Fig 1.4, apply masking tape to the underside of the template to avoid unnecessary scratches to the lids paint.
- Step #2: Using Fig 1.3, put the correct template on the correct lid and drill through the 3 holes in the template using a 1/8" (3mm) drill bit. Locate 3 of the supplied "pointy" ended screws and using hand tools, secure the template to the lid. You will also see "keyhole" shapes in each template where you will start to cut when its time. Drill a 1/8" (3mm) "starter hole" in each of these key holes and then enlarge these holes to 5/16" (8mm)
- Step #3: Using a scratch awl or a pick tool (or something similar), scratch the factory paint all the way around the outer most area of the "cut line". This gives you a line you can use "just in case" you need to trim your lid once your cutting is complete.

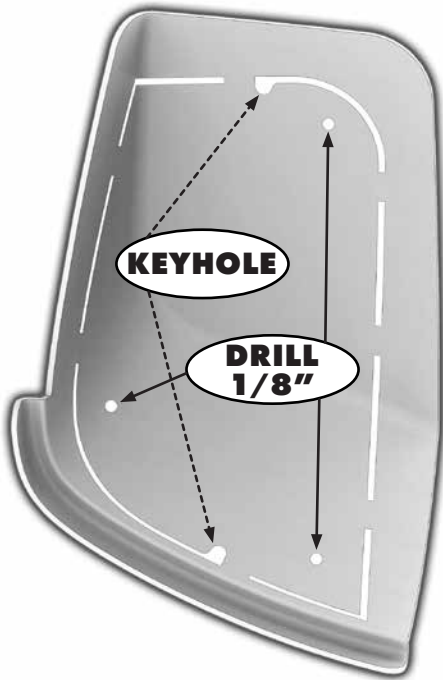


Figure 1.3

Underside of Template
No Masking Tape



Figure 1.4

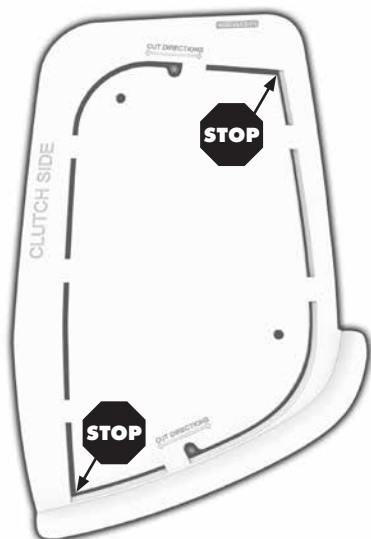
Underside of Template With Masking
Tape Applied Around Perimeter

PRO TIP

We **STRONGLY** suggest using a blade
SPECIFICALLY MADE FOR PLASTICS!

When cutting your lid with a correct blade, there should be ZERO smell of burning plastic! Incorrect blades will do more melting than cutting and your friends may laugh at you hysterically.

CUT GRILL OPENING



Its time to start cutting. We suggest a standard jigsaw or an air "body" saw. In all cases, you will **start at one of the "keyholes"** in the template, and **stop at the "hard corners"** as shown. Make sure to cut through all the tabs in the template. We suggest starting at the keyhole closest to the middle of the lid first. Once the template is free from the lid, it can be discarded. You will now see the line you scribed in case you need to do any trimming before proceeding.

TEST FIT GRILL

You can now test fit the grill to see if it fits nicely in the opening. Trim as needed being careful not to damage your painted surface. Once you are satisfied the grill fits nicely in the opening, you can start to re-install the latching mechanism. See the passive crossover information on the next page before completing re-installation of the latching mechanism.



INSTALLING PASSIVE CROSSOVERS

In the box with the 6"x9" speakers locate the passive crossovers mounted on metal plates. As you are re-installing the latching mechanisms, the 4 screws highlighted by white circles in Figure 1.2 will be used to secure a passive crossover in each lid. There is a dedicated clutch side and brake side and they will only go in one way. The factory cloth tether will also be re-installed at this time.

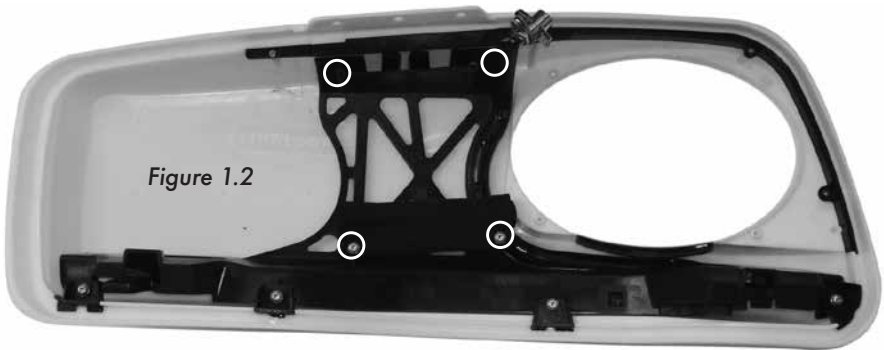
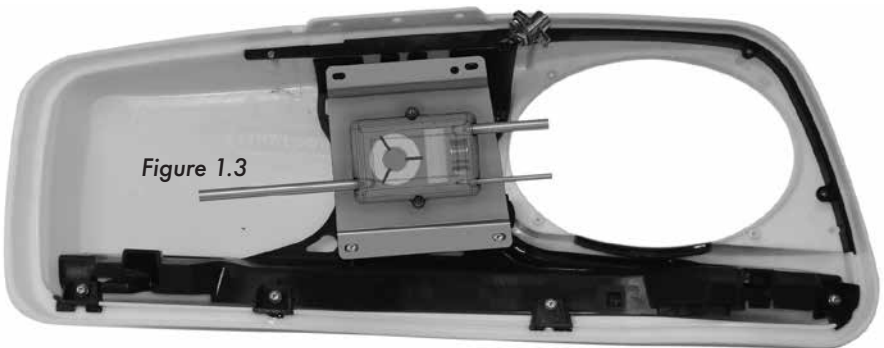


Figure 1.3 below shows the crossover correctly oriented.



CLUTCH SIDE LID



Locate the speaker adaptor marked "Clutch" noting you will see it only fits one way. In the order shown, you will put "thread forming" screws through the adaptor and into the grill so the pieces "sandwich" the opening.

MAKE SURE to put a supplied rubber washer on screw #4!

Using **hand tools**, get each screw started. Once started, tighten each one down till they "stop". They don't need to be any tighter than that and will damage the rubber washer and cause leaking.

BRAKE SIDE LID



Locate the speaker adaptor marked "Brake" noting you will see it only fits one way. In the order shown, you will put "thread forming" screws through the adaptor and into the grill so the pieces "sandwich" the opening.

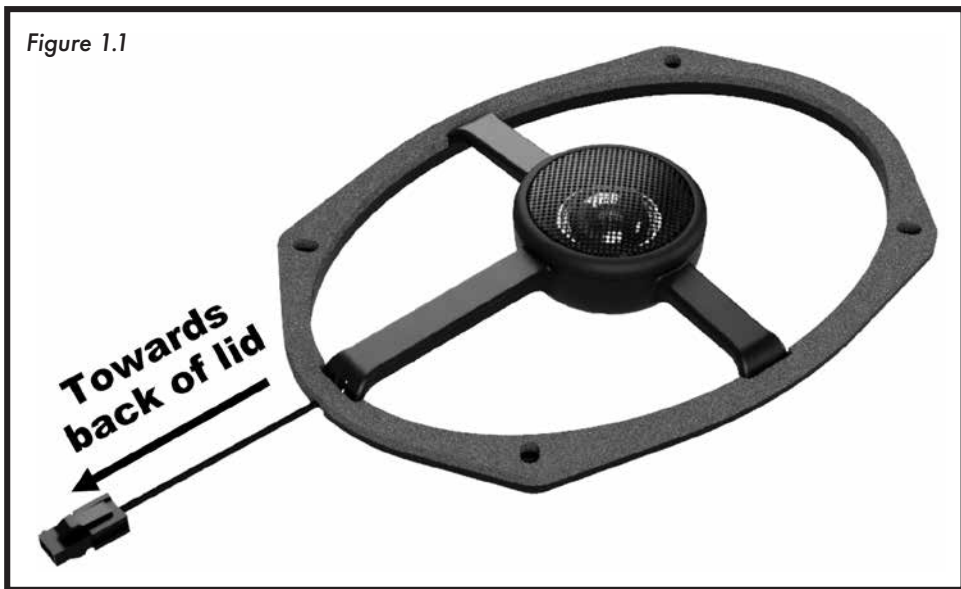
MAKE SURE to put a supplied rubber washer on screw #4!

Using **hand tools**, get each screw started. Once started, tighten each one down till they "stop". They don't need to be any tighter than that and will damage the rubber washer and cause leaking.

INSTALLING GX9'S

Locate one of the "tweeter bridges" and place in speaker opening so the tweeter is pointing to outside of lid. **IMPORTANT:** The wires coming off the tweeter bridge must be oriented so they point towards the back of the lid!

Figure 1.1



Locate one of the 6" x 9" woofers and place it on top of the tweeter bridge. The speaker wire connector on the woofer must also be oriented so when it is installed, it is closest to the back of the lid. The supplied 3/4" screws (19mm) screws will be used in the 4 "corners" to go through the woofer, through the tweeter bridge and into the speaker adaptor. Get each screw snug, and then tighten in an "X" pattern.

A HAND TOOL IS STRONGLY SUGGESTED FOR THIS STEP!

The short wires from the crossovers will now plug into the woofer and tweeter of the 6"x9". They will only go together one way. The lids can now be re-installed onto the saddlebags.

With the lids mounted to the bags, take the last wire on the crossover and run it through the 3/4" hole drilled in the saddlebag earlier. Leave enough wire out side the bag so its long enough to plug into the lid harness in the battery area run from the amplifier earlier. Make sure to leave enough slack in the bag so the lid can open and close without undue stress on the wires!

There are rubber grommets in the 6"x9" box that will be used to go around the wires and cover the holes. **Note:** we tooled in a "plug" in the center of the grommet that can be easily pulled out in case you have other wires going into the saddlebags for

lighting etc. Use supplied zip ties to secure the wire on the outside of the bag to the anchors applied earlier.

The bags can now be mounted back to the bike and the wire for the crossover that is out side the bag can now plug directly into the lid harness run from the amp earlier install. Any left over slack in the speaker wires to the lids will stay under the seat area Use the "anchors" supplied in the cut in lid kit box to secure the wires inside your saddlebags using supplied zip ties. **Note:** Before applying the anchors, you need to clean the plastic **WELL** using 99% isopropyl alcohol, or similar cleaner. **DO NOT use Acetone (It will eat plastic).** Do not apply pads until cleaner has completely evaporated.

Attach the amp's red wire to the positive (+) battery terminal and the amp's black wire to the negative (-) battery terminal. The factory battery wires are also re-installed at this point. When attaching the power and ground wires, it is always a good practice to do the negative first. When the positive connector touches the battery, some sparking is normal. This is a function of the capacitors in the amplifier charging up.

Turn the stereo on and, at low volume, test to make sure all amplified speakers are working. Now is also a good time to make sure you can fade between the front and rear speakers using the "fader" control on the radio. NOTE: If one or both amps do not turn on, start the bike and the amp(s) should turn on. Wild Boar Amps have a feature built in where they will not turn on if the battery is "soft". This is to make sure that the bike has all the power it needs to start!

Re-install the seat making sure the amplifier's "+" and "-" connectors are positioned in such away so they will not bend or break when the rider's weight is on the seat. This is the best time to take a few minutes to "clean up" the wiring and secure using supplied zip-ties.

IMPORTANT: Any slack in the speaker wires between the bike and the bags **MUST** be secured under the seat to eliminate the chance that the wires could become tangled in the bikes moving parts when riding!

***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!***

FINAL SYSTEM ADJUSTMENT

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!

Inside the WBA 2694 box, there are 2 Wild Boar Audio metal badges that are meant to replace the Hogtunes badges that come on the Retro Lid-RM grills. Use a pick tool or something similar to carefully pry the 2 way tape on the Hogtunes badges off. The Wild Boar badges come with die cut adhesive already installed. Carefully peel off the backing and stick the Wild Boar badge to the grills.



Re-install the fairing and the system is now ready to enjoy!

WARRANTY INFORMATION

Wild Boar Audio branded speakers are warranted for a period of 5 years to the original purchaser. Wild Boar Audio branded amplifiers are warranted for a period of 3 years to the original purchaser. Proof of purchase is required for all warranty claims. Please contact Hogtunes head office 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 Hogtunes sole discretion. Hogtunes/Wild Boar Audio's complete warranty policy is available on our website at www.hogtunes.com

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.hogtunes.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!

**PRACTICE
SAFE
SOUND!**

Hogtunes 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.**

You are a valued customer so please:

**Ride Alert
Arrive Alive!**

HOGTUNES

HOGTUNES INC. FAMILY OF BRANDS

HOGTUNES
Audio Solutions For The Great American Cruiser


WILD BOAR
AUDIO


NEXT LEVEL SPEAKER
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