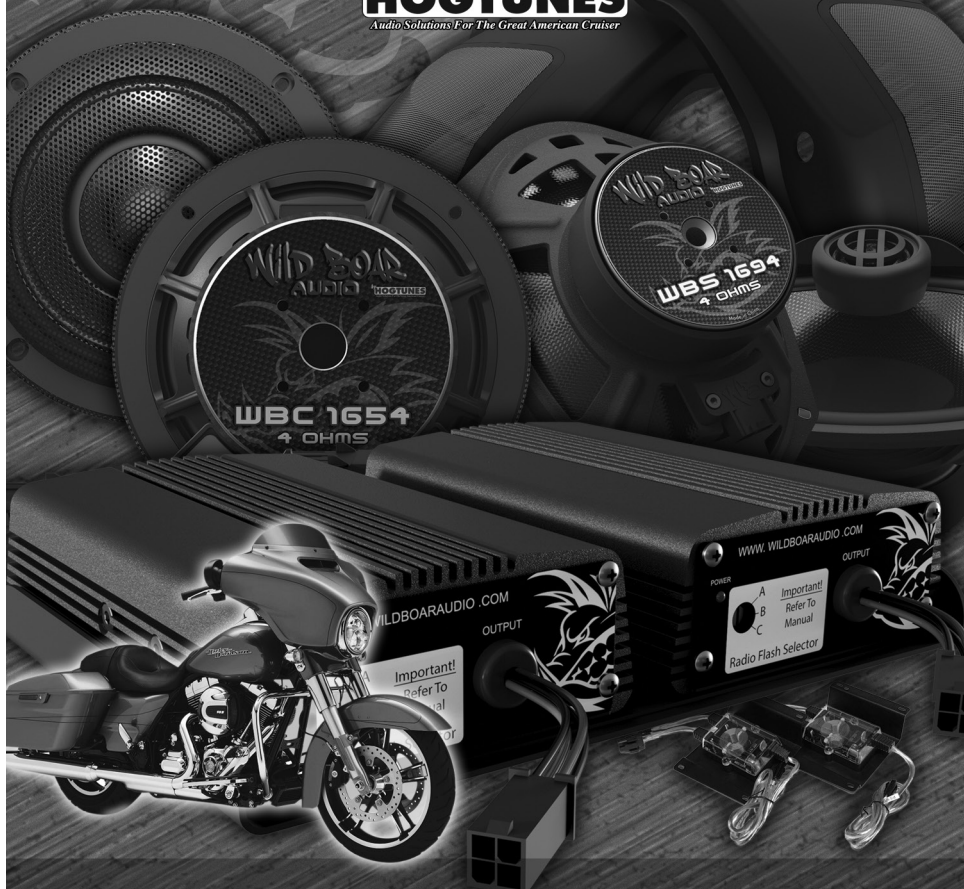


# WILD BOAR AUDIO

by **HOGTUNES**  
*Audio Solutions For The Great American Cruiser*



## BIG PIG SG INSTALLATION MANUAL

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



Thanks you for your purchase of Wild Boar Audio's "BIG PIG SG" Kit for 14+ 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: [tech@hogtunes.com](mailto:tech@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:**

- 1) In order for your new amp to work properly, your radio must have the proper "flash" installed. Different radio flashes are used by the "MoCo" based on the factory audio system that comes on different model bikes. Re-flashes can be done at any OEM dealer, or a "Techno Research" dealer. You can find the nearest Techno Research dealer by visiting:  
<http://technoresearch.com/index.php/tuning-centers>  
The required flash to make this amp work best is called "4 speaker no amp" and will give highest quality sound and best reliability. 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."

**DO NOT PAINT THE 6"x9" TWEETER ASSEMBLY HOUSING!**

*The tweeter is permanently attached to the tweeter assembly to make sure nothing, such as paint, obstructs the BUILT IN DRAINAGE. In the event of warranty, Hogtunes replaces the tweeter assembly as one piece, and therefore assumes zero responsibility for paint!*

**This manual is written in 3 major sections:**

**Section 1:** Front Speaker Installation

**Section 2:** Speaker Lids/6x9's

**Section 2:** Amplifier Installation

**IMPORTANT: Read the next page before installing!**

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**Wild Boar Audio Contact Information**

Email: [tech@hogtunes.com](mailto:tech@hogtunes.com)

Tel: 705-719-6361

# 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 supplied WBA 600.4 is a powerful amplifier and made to work with 4  $\Omega$  (ohm) speakers only (same as supplied in this kit).

***The WBA 600.4 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 600.4 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. 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!***

The amplifier has built in protection and will turn itself off if your charging system/ battery goes below 10.5 volts.

In very high heat situations the 600.4 amplifier will shut itself off before it damages itself. Once cooled down to safe operating temperatures, it will turn itself back on.

# 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!

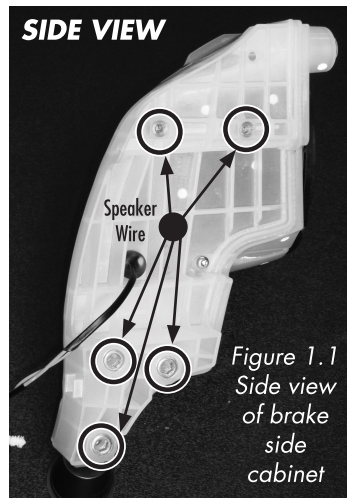


Figure 1.1  
Side view  
of brake  
side  
cabinet

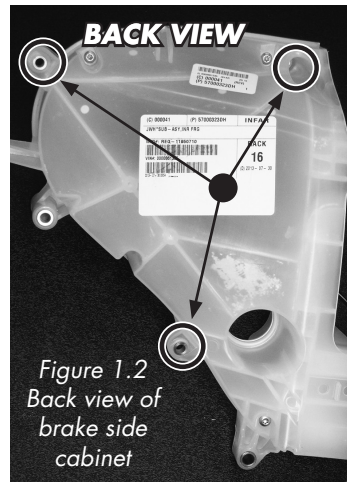


Figure 1.2  
Back view of  
brake side  
cabinet

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 speakers crossovers have a heat and current sensitive (PTC) switch built in which will turn the tweeter off to protect it from failing which should only happen in extreme volume conditions. The tweeter will turn back on once the poly switch cools down to safe operating levels.***

# SECTION 2

## SPEAKER LID INSTALLATION



*Do Not Use "Thread Lock" or "Screw Glue" of Any Kind As It Destroys Plastic And Will Cause Part Failure NOT Covered By Warranty!*

This manual assumes you have already removed the woofer, tweeter and grill, had the lids painted, and you are now installing the new lids on your bike.

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.



Figure 1.1



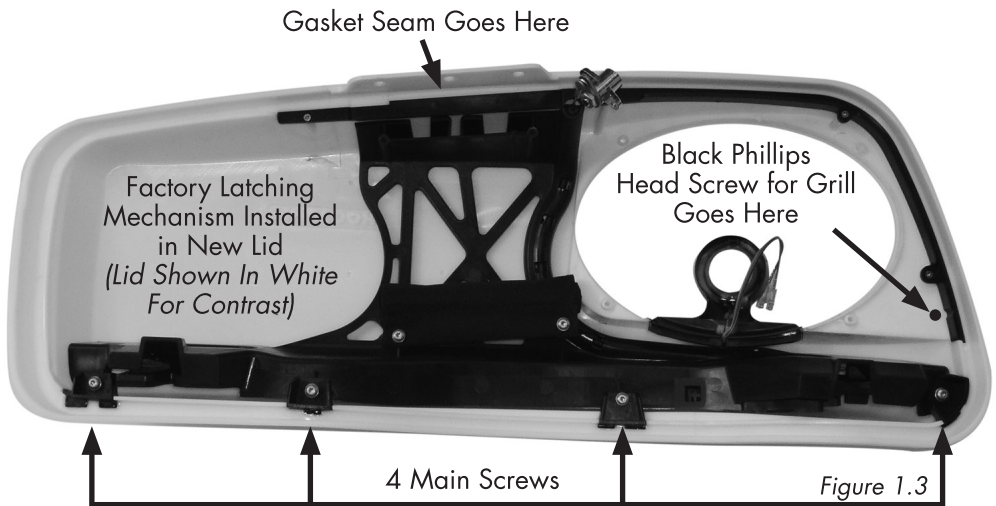
Figure 1.2

- Step #1: The white circle in Fig 1.1 above is where a 3/4" (19mm) hole will be drilled. This hole is where the supplied Hogtunes rubber grommet will go to allow the lids speaker wire to pass from 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!
- Step #2: The supplied grommet in Fig 1.2 is "split" to make the install much easier once the wire is in the bag. The white circle in the picture shows a "plug" that can easily be removed. If the only wire you have going into your saddlebag is the speaker wire, leave the plug in place. If you have a second wire for such things as lighting etc., removing the plug from the grommet will allow the second wire to also pass without having to drill additional holes in your saddlebag.

### Step #3: **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.

Step #4: 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. Put your factory lid aside.



Step #5: The large latching mechanism just removed will now be installed into the Hogtunes lid using the factory screws just removed. You will need to jostle the mechanism gently to get it in place. As shown above (Fig 1.3), the 4 main screws on the mechanism are the ones to do first. Install the factory handle to the new lid using the factory screw. Next, the 2 screws will go back in on the hinge side followed by 3 screws that secure the chrome cover with reflector. Do not put in the 2 screws that hold the lock in place just yet.

Step #6: Before applying the supplied rubber gasket you will need to clean the area the gasket will stick to. Use a mild cleaner such as 99% Isopropyl alcohol, but nothing aggressive like acetone as acetone will destroy the lid.

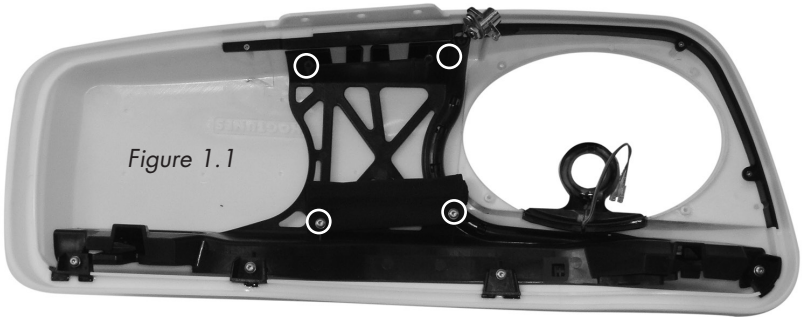


See gasket profile. The gasket needs to be applied so the flat side is adjacent to the outside of the lid!

Step #7: Once the cleaner is completely dry, start applying the gasket so the seam will be at the same point the factory gasket was as shown in Fig 1.3 on previous page. Don't over stretch the gasket as you're applying it along straight passes, but at the same time, don't allow it to "bunch up" in the corners or the lids will not close properly. Make sure the adhesive portion of the gasket is stuck to the bottom portion of the trough all the way around. When you have the gasket all the way around, you can expect to have some left over that can be carefully cut off using a sharp knife or scissors. The lids may be harder to close the first few times until the gasket "breaks in". Once the gasket is applied and cut to size, re install the 2 factory screws that hold the key lock in place.

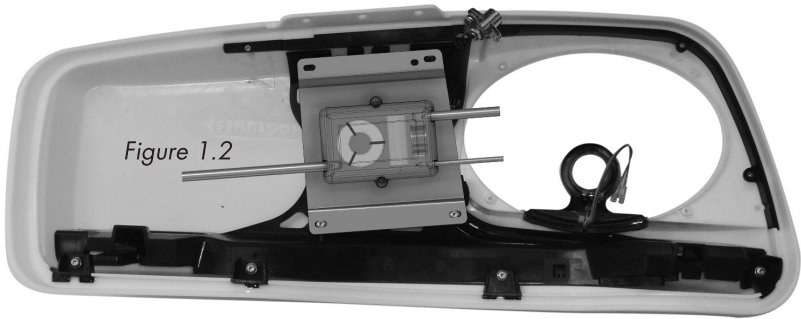
Step #8: With the lid painted side up, sit the metal mesh grill into place using the tongue on the grill and the groove on the lid. Install black Phillips screw as shown in Fig 1.3 on previous page.

Step #9: Remove the 4 screws shown by the white circles in Fig 1.1 noting the cloth tether will also come off at this time.



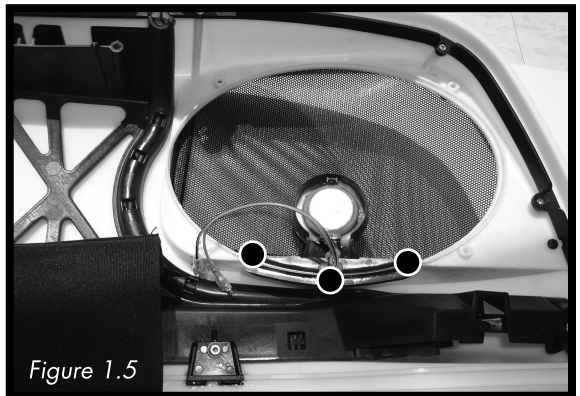


Step #10: Locate the metal plate with the passive crossover installed and sit it in place so it is oriented as shown in Fig 1.2. There is a specific brake side and clutch side, so put the one in so all 4 holes in the plate line up to the holes in the lid. Re-install the 4 screws noting that the tether will sit on top of the crossovers mounting plate.



Step #11: Locate one of the tweeter assemblies (they are the same for brake and clutch side) You will see a groove on the tweeter assembly that mates to the lid. Locate the black gummy material that came in the kit and take one strip, roll it in your fingers so its close to uniform thickness and apply across entire groove highlighted by arrows in Fig 1.4 on the bottom of this page.

Step #12: Press the tweeter assembly into the lid as shown in Fig 1.5. Take another black gummy strip and tear it into approximately 3 equal strips and roll each piece so you have 3 "balls". Squish each ball into the locations shown by the 3 black "dots" shown in Fig 1.5. The outside ones are to help seal between the tweeter assembly and the lid itself. The middle one helps make sure no water passes around the tweeter wires. Adding the gummy material is an added failsafe to keep water out and will be hidden once the 6"x9" woofer is installed.



Step #13: Take one of the 6x9" woofers (they are the same for brake and clutch side) and sit it in the lid so the connector "end" of the speaker is closest to the passive cross-over. Using the silver torx screws that held the woofers in place when you got this kit, attach the woofer to the lid. Please note that the 2 woofer screws opposite to where the tweeter sits also secure the grill to the lid. DO NOT Over tighten these! The 2 wires with connectors that come out the one end of the passive crossover will now plug into the connector on the 6x9" woofer, and the connector on the tweeter and will only go on one way. Take the lid to the saddle bag, and using the factory screws, secure the hinge on your lid to the bag. When done, the other half of the cloth tether will attach to the saddlebag using the factory screws.

Step #14: Included in the kit are adhesive "pads" that when attached, have a provision to secure the wires in place using the supplied zip-ties. Split the adhesive pads into 2 equal groups—one group per bag. You will need to do a "ghost run" of how you want to get the long wire to the hole you drilled in the bag. In most cases, you will have the wire go straight to the bottom of the saddle bag, go across the bottom and then go straight back up towards the hole. When done, you want the 2 pin black plug to hang outside the saddle bag a minimum of 4" (10cm).

Once satisfied with the ghost run of wires, you will want to plan where the adhesive pads will go, so that zip ties can secure the wires inside the bag. Note: Before applying the pads, clean the plastic well using 99% isopropyl alcohol, or similar cleaner. DO NOT use Acetone (It will eat plastic).

With the 2 pin black plug hanging approximately 4" (10cm) out of the bag, install the completed saddlebags onto the bike.

# SECTION 3

## AMPLIFIER INSTALLATION

### **IMPORTANT NOTE BEFORE PROCEEDING**

**The power harness and rear speaker harness for the lids will travel from inner fairing area towards the back of the bike. You can run wires in the factory wire "chase" which is under the fuel tank along the frame, or run wires up and over fuel tank, but under the chrome console. If you are comfortable removing and re-installing your bikes fuel tank, doing it now can make running the wires much easier.**

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 a factory GPS, the small square antenna will need to be relocated just behind the voltmeter as shown in Fig 1.1 (right). 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 1.1 - 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 the box, they 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). 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 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 BACK SIDE of the plate is the MASTER AMPLIFIER.*

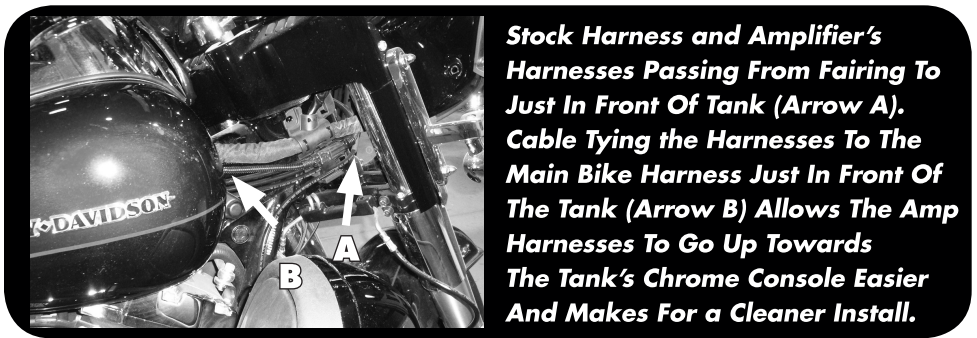
- Step #3: Take one amp, and make sure its "Radio Flash Selector Switch" on the side of the amp is set to position "A". In the same orientation as it came out of the box, "stick" the amp to the left half of the plate so the power harness is closest to the back of the radio. The "amplified output pigtail" will sit closest to your inner fairing. Have this pigtail so the 4 pin black plug is easy to get to. From here on out the amp on your left is referred to as the MASTER amplifier. The second amp will power the lid speakers and needs to have its "Radio Flash Selector Switch" set to Position "A". With the switch set, 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.
- 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 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 on the brake side speaker cabinet. Take the plug with the yellow heat shrink on the end and install it into the mating plug on the clutch side speaker cabinet.
- Step #6: 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 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 bag labeled "input link." The input link has 2 blue plugs on it, one of which mates to the empty blue plug on the master (left side) amps main input harness. Plug these together. The 8 pin plug on the input link plugs into the "audio in" on the slave (right) amp. This is how we get music from the master amplifier into the slave amplifier. There will be 1 blue plug that stays empty which is there for possible future system expansion.

Step #8: Locate the long harness that came in the lids box that has a 4 pin connector on one end, and two—2 pin connectors on the other. Take the 4 pin of this harness and plug it into the amplified output “pigtail” on the Slave (right side) amplifier. The balance of the lids speaker harness 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.***

The lid speaker harness will continue towards the back of the bike, and when correctly installed, the 2-2pin plugs will be behind the center of the seat. Secure the harness to the bikes factory harness' using zip ties wherever possible. Plug the 2 pin connectors into each saddlebag noting they will only go on one way.

Now you can attach the splitter harness' brown wire to the negative (-) battery terminal and the amp's red wire to the positive (+) 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 the 4 speakers are working. With everything working, re-install the seat making sure the amplifier's “+” and “-” connectors are positioned in such a way that they will not bend or break when the rider's weight is on the seat.

## SYSTEM ADJUSTMENT

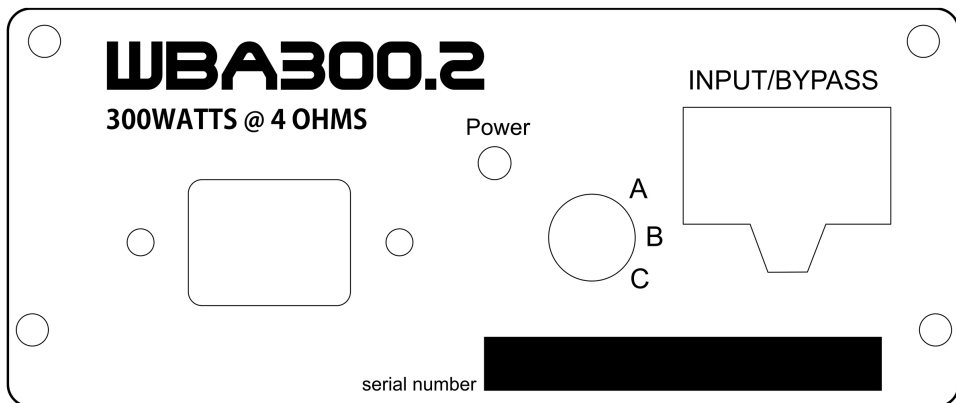
**Please Note: Having your radio re-flashed to "4 Speakers No Amplifier" in all cases is the preferred condition.**

As explained at the beginning of this manual, in order for the system to work properly you will need to have the correct "flash" in your radio. Visit an HD dealer, or link:

<http://technoresearch.com/index.php/tuning-centers>.

Any dealer on that web page should be able to help. You either want to have the correct flash installed, or verify that the correct flash is installed if you are not sure. There is a 3 position switch "Radio Flash Selector" on the side of the amp marked A, B, and C. Understanding the correct position for your application is VITAL in the proper performance of this system.

If you are installing this amplifier on a Ultra Classic model, the factory flash that came with your bike is the preferred "4 speaker no amp" flash. If your bike has had no previous audio installed, you will not need a re-flash. If you have questions, please call our tech support team before proceeding!



- The “Radio Flash Selector” switch positions have been carefully tailored to “work around” the radio flashes, assuming you have the 4 speaker no amp flash, and assuming the speakers you are using can handle the power of this amp. For clarity, all Wild Boar Audio speakers were tested thoroughly with this amp.
- If you have your radio flashed to “4 speaker no amp” set the master and slave amps to “A”.
- If you have installed the system on a Street Glide or Road Glide but cannot get the radio reflashed, set the Master and Slave amps to “B”. In ALL cases, having the radio flashed to “4 speakers no amp” and amps set to “A” is preferred! If you are not using Wild Boar Audio speakers, and your speakers sound like they “can’t take the power”, putting both amps to the B position should make things work better.
- **In extreme cases only**, depending on how the music you have on your USB source was originally recorded, you may have distortion at around 60-70% of the volume on your radio. If this is a common issue for you, and you want to have “full swing” of the radios volume controls, setting the amps to C will fix the issue.

### Final Installation Notes:

- 1) The Wild Boar Audio 600.4 amp 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!
- 2) The Wild Boar Audio 600.4 amplifier is a HIGH POWER amplifier specifically designed to work on the small charging system of a motorcycle. **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 bikes starter which “starves” the amplifier and may cause damage to your system!

*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!*

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

**Warranty information is at the back of this manual**

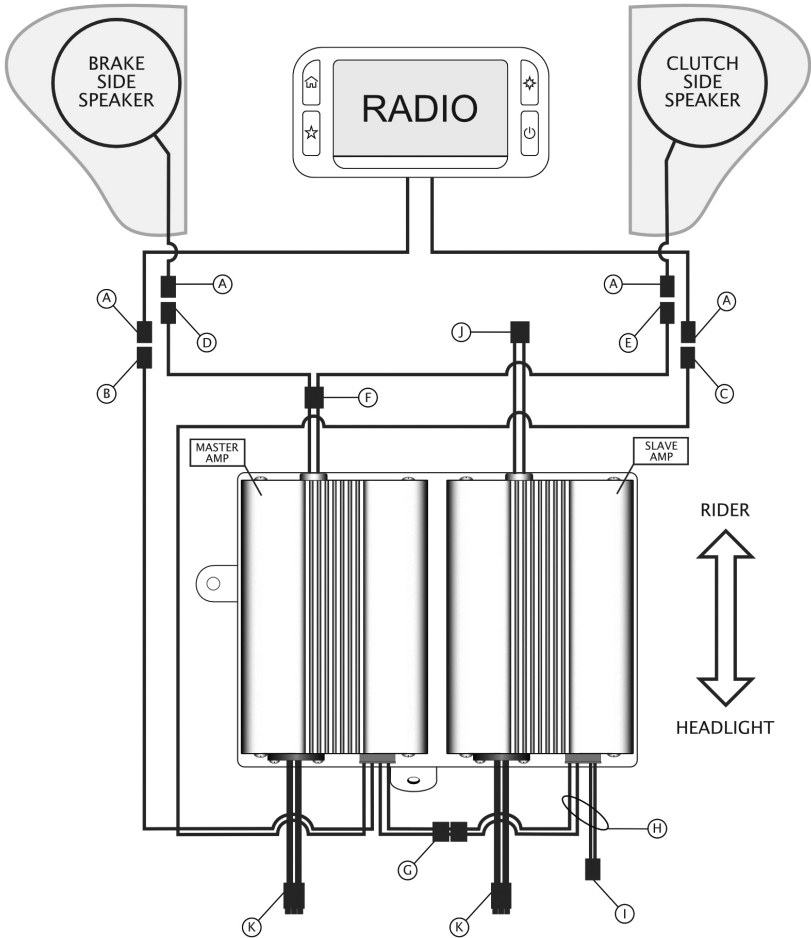
***Please go to page 17 and record your amplifier's serial numbers***





# WBA 600.4 Quick Reference Wiring Diagram

- A) Factory Connectors Between Radio and Speaker Cabinets (pink/pink with black stripe)
- B) Master Amp Brake Side Input (Green Heatshrink)
- C) Master Amp Clutch Side Input (Yellow Heatshrink)
- D) Master Amp Brake Side Output (Blue Heatshrink)
- E) Master Amp Clutch Side Output (Brown Heatshrink)
- F) Master Amp Amplified Output "Pigtail"
- G) Master Amp Bypass Out
- H) Input Link From Master Amp to Slave Amp
- I) Slave Amp Bypass Out For Possible Future System Expansion
- J) Slave Amp Amplified Output Pigtail for Lids Or "ACC" Harness
- K) Amplifier Main Power/Ground



**This Page Is For Quick Reference Only.  
To Avoid Damage To Your System, Please Read Entire Manual!**



# 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. 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)

Please note: in the event of a warranty claim, if one of the 2 amplifiers that make up WBA 600.4 fails, we will replace the defective amplifier ONLY!

## **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 Hochtunes, 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.***

**Please record your amplifier's serial #'s here:**

**"MASTER AMP"**

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**"SLAVE AMP"**

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**PRACTICE  
SAFE  
SOUND!**



**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.**

***You are a valued customer so please:***

**Ride Alert  
Arrive Alive!**

**[www.wildboaraudio.com](http://www.wildboaraudio.com)  
[www.hogtunes.com](http://www.hogtunes.com)**