

# HOGTUNES

*Audio Solutions For The Great American Cruiser*



## **NCA 450U KIT-AA**

*High Performance Front & Rear Speaker Kit with 200 Watt Amplifier*

**FOR USE ON 2000-2013 ULTRA CLASSIC & TRI-GLIDE MODELS**

**INSTALLATION MANUAL**

*Thank you for choosing the Hogtunes® NCA 450U KIT-AA. Since positive word of mouth is the best way to grow our business, we want your new system to work as well as it was designed to. If you have any questions or concerns, we are here to help.*

*Email: [info@hogtunes.com](mailto:info@hogtunes.com)*

*Tel: 705-719-6361*

*If you still need help, please consider a professional installation by your motorcycle dealer.*

**IMPORTANT: The NCA 450-AA amplifier can not be used if any factory amplifier is already on the bike. Please call us if you have any questions! We will most likely have a simple solution for you!**

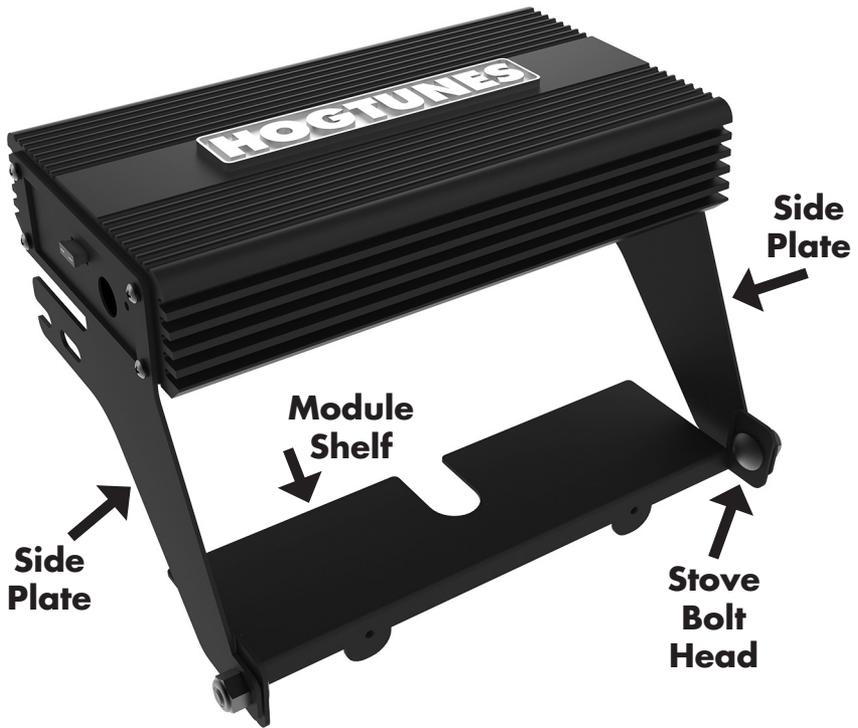
## **GETTING STARTED**

- Step #1: Remove the seat and both wires (+ and —) from the battery.  
[Negative being removed first is a good practice]
- Step #2: Remove the outer fairing/headlamp assembly. 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.
- Step #3: Take the 2 wires off each front speaker by gently pulling one at a time. Undo the screws that attach each speaker/grill assembly to the inner fairing and remove. Gently pull the stock speaker out of each grill assembly.
- Step #4: “Clip” the Hogtunes front speakers (Model 352F-AA) into each grill assembly. Position your new speaker/grill assembly onto the inner fairing and re-attach each one using the OE screws. Although a hand screwdriver is recommended for this step, make sure these screws are tight! Let the factory speaker wires hang for now.
- Step #5: Remove each rear speaker grill by undoing the 4 screws on the front of the grills. Carefully lift up on each speaker and take the 2 wires off by pulling one at a time from the stock speaker. Put the grills, fasteners and speakers aside.

- Step #6: Locate the “Fader/No Fader” switch on the side of the amplifier, and make sure it is in the “Fader” position. In this position, the amplifiers front and rear channels are controlled independently by the Ultra radios built in fader. **If the switch is in the “No Fader” position, all 4 channels are driven equally and although all 4 channels will play, the radio’s fader will not work.**
- Step #7: Since Ultra radios come with a fader, you can use the fader control to adjust front/rear balance. If you were to run this amp off a 2 channel radio (no fader) the switch would go to the “No Fader” position and the 3 position gain switch would be used to adjust the volume of whatever is plugged into the rear channels.
- Step #8: The power harness ends in a black plug with 1 larger (10awg) red wire, 1 larger (10awg) black wire and 1 smaller orange wire. Locate this and plug it into the matching black “pigtail” on the amplifier. The input harness has a smaller black 8 pin plug with smaller gauge wire. Plug this into the socket on the amplifier marked “hi level input”. Locate the 4 pin black plug with black/brown and black/blue wires and plug into the “front out” on the amp.

***Note: There is a blue socket labeled “bypass out”. This carries the radios built in power (front channels only) and although not used in this kit, it is there for plug and play future system expansion.***

For ‘00-’05 Bikes, the supplied hook/loop is used to secure the amp to the top of the radio. Position the amplifier as far back as it will go so the outer fairing can go back on. For 06-13 bikes, the amplifier mounts inside the fairing “over” the radio using the side plates shown below. Before proceeding, make sure you have all the required harnesses plugged in before mounting the amp. The side plates are attached to the side of the amplifier by removing 4 screws on each side of the amp, positioning the plates as shown below and re-installing the screws into the amp. Factory CB, XM, and other similar modules are mounted on top of the radio and secured with a screw that goes into the back of the radio. Remove the screw and let the module(s) hang for now. **Do not install the module shelf yet!** Each side of the radio has 2 large allen head bolts that secure the radio into the fairing. You will loosen the bolts on each side that are farthest away from you (closest to the inner fairing) and remove the bolts closest to you. The amp will “clip in” to the back bolts and the bolts removed will go back in over the plates to secure the amp. Re-tighten all 4 bolts to factory specs. Install the module shelf as shown, noting that the “stove bolt” heads must be positioned as shown. Your module(s) will screw into the shelf using the factory screw(s) you removed from the back of the radio.

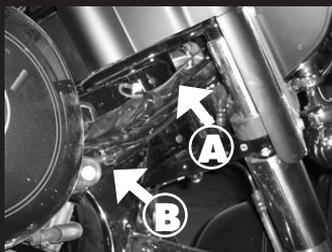


## **WIRING THE AMPLIFIER**

- Step #1: With amplifier in place, take the yellow/black wires on the input connector of the amplifier and plug them into the front factory speaker wires on the clutch side of the bike. They will only go in one way. Take the brown/black wires on the "front out" connector and plug them into the front clutch side speaker. They will only go in one way.
- Step #2: Take the green/black wires on the input connector and plug them into the front factory speaker wires on the brake side of the bike. Take the blue/black on the front out plug and plug them into the brake side front speaker. Again, these will only go on one way. The orange wire is the "remote turn on lead" and tells the amp to turn on whenever it sees +12v (.5 amp min.). Unplug the center wire (+) on the cigarette lighter. Plug the orange lead from the amplifier directly onto the lighter using the female connector. Plug the factory lighter wire to the male "take off" connector which is part of the amps orange turn on lead.

# **ROUTING THE MAIN WIRE HARNESS**

Step #1: The power/ground harness and rear harness will pass together under the inner fairing where the main wire harness passes through on the brake side of the bike. 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.



*Stock Harness and Amplifiers 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 Tanks Chrome Console Easier And Makes For a Cleaner Install.*

When correctly installed, the power and ground wires are the right length to connect to the battery and if used, the rear wire 8 pin harness is the right length to be zip-tied to the brake side fender strut. Be sure to run the 8 pin harness **UNDER** the air line for the brake side rear shock.

***Please run the power harness as per the manual. Sometimes people assume they know more than us and wire amplifier power to the headlight wires or other places. Not only will your friends laugh at you, but you will be calling us for technical support. Please save us all from the grief and phone call!***

Step #2: On the 8 pin rear harness "end" you will see 2 pairs of black shorter wires in a sheath and 2 pairs of black longer wires in a second sheath. Put the ends of the shorter wires into the brake side rear speaker box. These wires will enter where the factory wires enter the rear speaker box. Plug the factory rear speaker wires into the male wires of the amp harness noting they will only go on one way.

***Note: The factory female rear speaker connectors are non-insulated. Once the factory female rear speaker connectors are plugged into the Hogtunes male connectors, wrap each connection with electrical tape to prevent the positive and negatives from touching each other.***

Take a Hogtunes rear speaker (model 352R-AA) and plug the female connectors of the amp harness into the speaker. They will only go one way. Repeat this step using the longer wires on the clutch side of the bike.

Step #3: Once you are confident the wires are correctly attached to the rear speakers, sit them in place, put the grills back on and secure the speakers by reinstalling the 4 screws on each grill. Attach the amps red wire to the positive (+) battery terminal and the amps 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 positive first.

Step #4: Turn the stereo on, and at low volume, test to make sure all 4 speakers are working. Make sure the radios fader control is adjusting the volume between front and rear speakers. If not, double check the "Fader/ No Fader" switch.

Re-install the seat making sure the amplifiers "+" and "-" connectors are positioned in such away so they will not bend or break when the riders 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.

*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!*

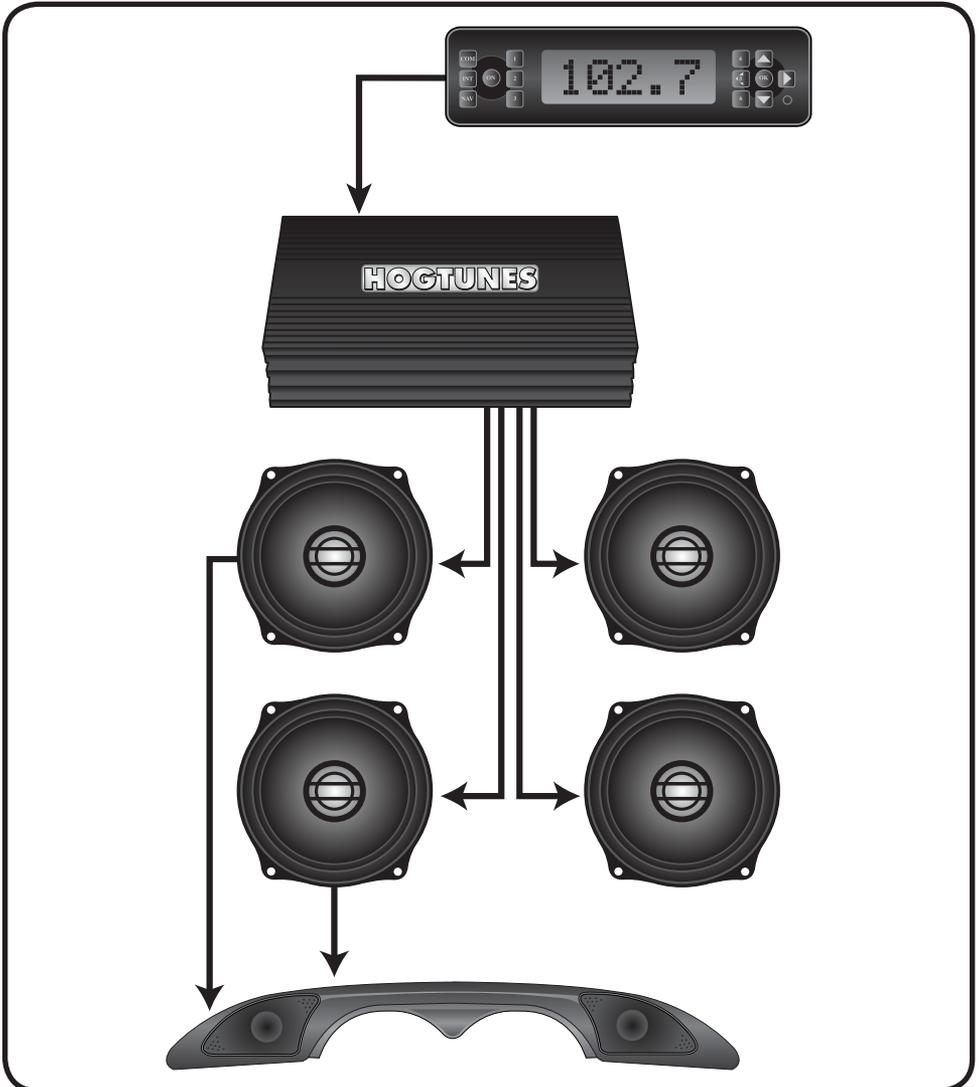
**Adjusting the Bass and Treble:** The way the system sounds sitting still or at a stop light will be **RADICALLY** different from how it sounds "at speed". Your able to use the radios controls to adjust the sound, but please do so carefully when riding.

**If using LED Brake Light and/or Turn Signal Modules on your bike, Hogtunes recommends the "Spread Spectrum" Signal Stabilizers from Custom Dynamics® for noise free performance with any audio system.**

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

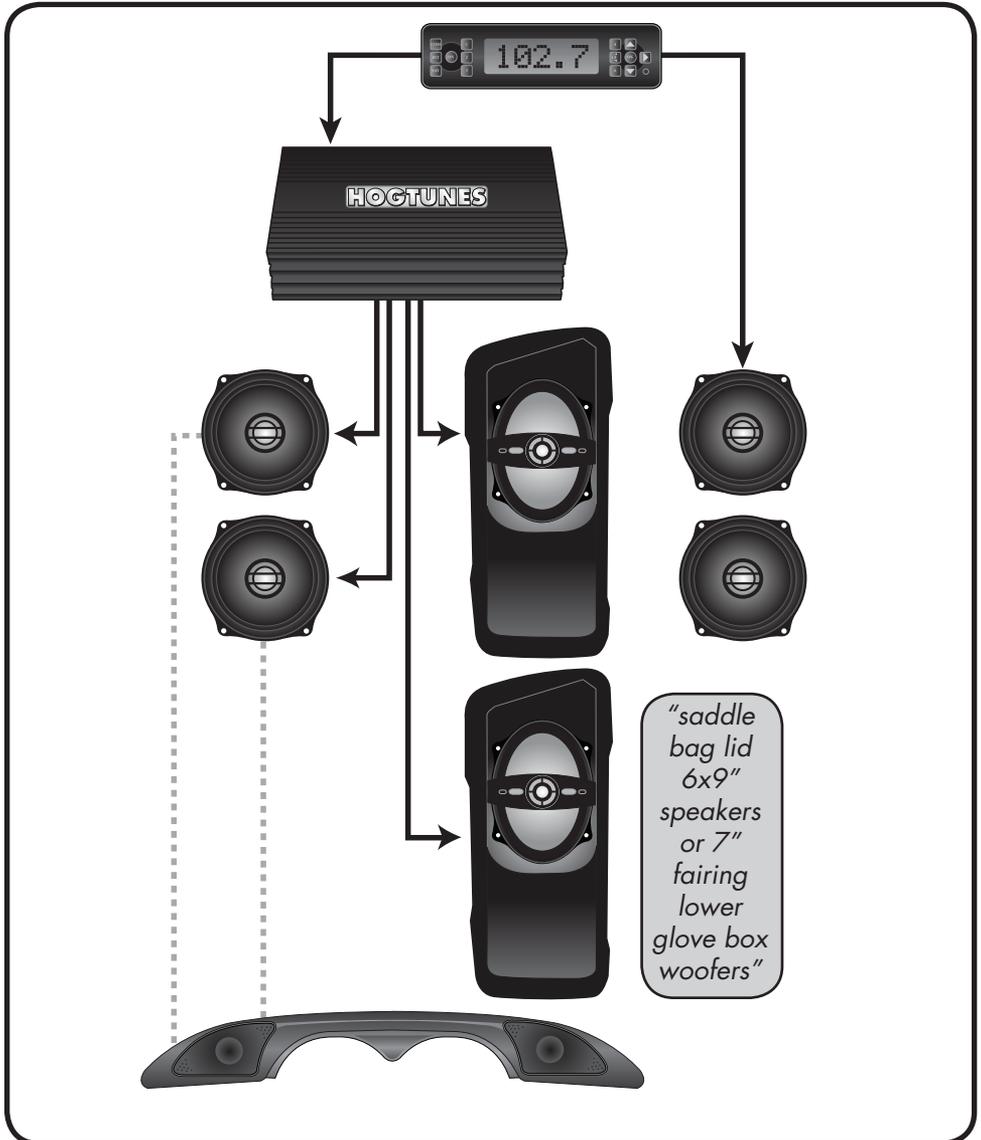
## SYSTEM UPGRADE #1

The Hogtunes HF-1 tweeter pod not only looks great, it's easy to install and brings ANY audio system to the next level! Adding these tweeters to any system "fixes" the inherent audio issues created by the stock speaker locations and will give much better clarity, especially at speed. Out of the box, HF-1 matches the factory "satin black" perfectly, but also comes apart easily and can be painted to match any custom inner fairings. HF-1 comes with plug and play wiring and everything needed to complete the job. You can learn more by visiting <http://www.hogtunes.com/products/tweeters/hf-1.html>



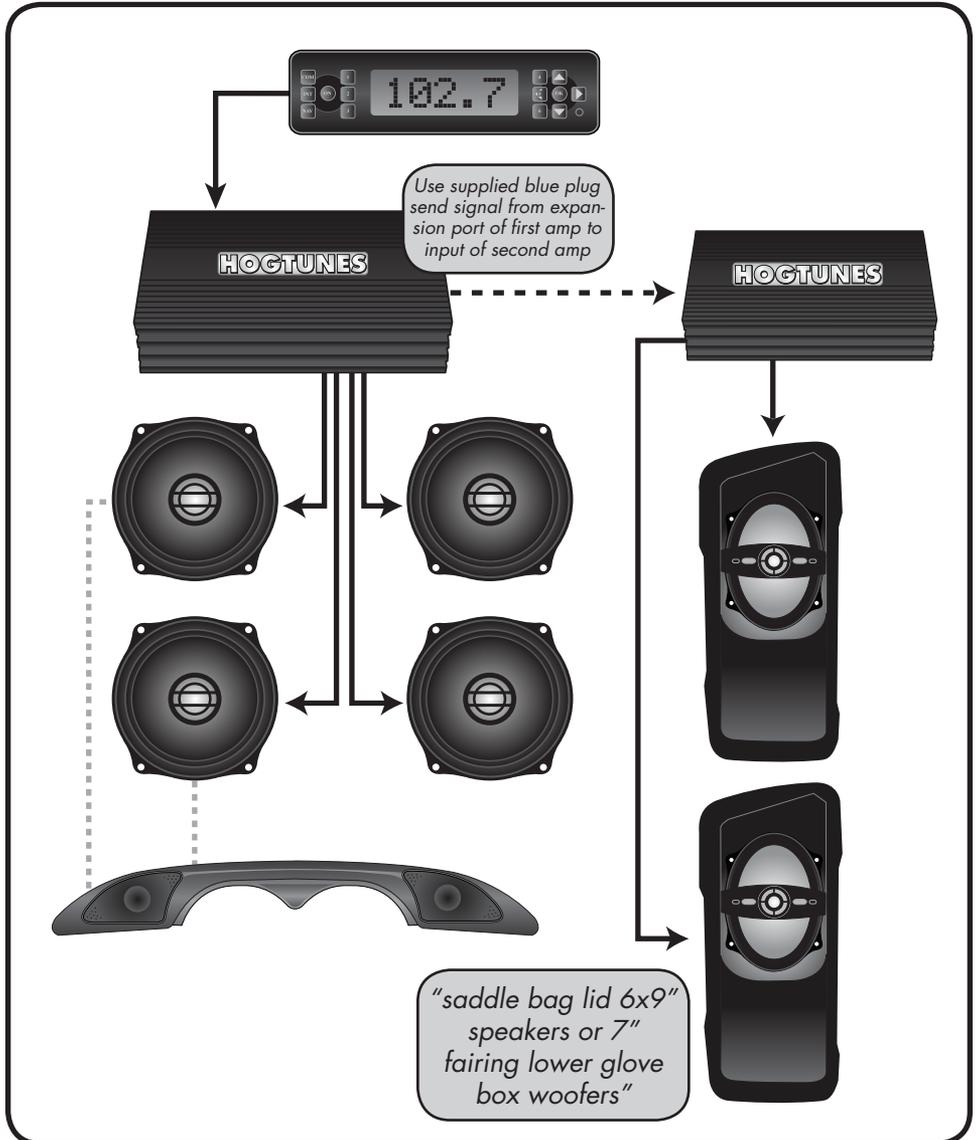
## SYSTEM UPGRADE #2

As per the manual, the amp powers the front speakers (and tweeter pod if present) and rear speakers. In this upgrade, the rear speakers will be run off the radios built in power. The front channels of the amp will power the front speakers and the rear channels of the amp will be used to power 6x9.2/Lid 6x9 lid speakers or FL-7W 7" woofers for your fairing lower glove boxes. All bolt in, all plug and play! If you want to add a second amp later on, we make it easy by offering the parts you need a la carte.



## SYSTEM UPGRADE #3

This system has the supplied 4 channel amp continue to power the fronts and rears (and tweeter pod if present) but adds a Hogtunes REV 200-AA amplifier to power a set of Hogtunes 692.2/Lid saddlebag lid speakers or a set of FL-7W 7" woofers for the fairing lower glove boxes. This can be done at any time, all bolt in & all plug and play! Hogtunes 2CHSP mounting plate is required to bolt the REV 200-AA into your fairing.



## **WARRANTY INFORMATION**

### **Please Record Your Amplifier's Serial # Here** \_\_\_\_\_

Hogtunes speakers are warranted for a period of 20 years. The NCA 450-AA Amplifier is warranted for 3 years from original purchase date. Proof of purchase is required for all warranty claims. The warranty applies to the original retail customer and is not transferable. Please contact Hogtunes 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 complete warranty policy is available on our website at:

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

### **What Is Not Covered:**

- 1) Any expense related to the removal or re-installation of Hogtunes products.
- 2) Repairs to these products performed by anyone other than Hogtunes.
- 3) Subsequent damage to any other components.
- 4) Any product purchased from a non-authorized Hogtunes dealer.
- 5) Damage to Hogtunes products due to an accident or collision.
- 6) Hogtunes Amplifiers with broken or removed "warranty void" stickers.
- 7) Damage due to water from custom installations.
- 8) Damage from incorrect installation, improper use, abuse or modifications.
- 9) Damage to inbound 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, or contact us by email or by phone. Valid claims will have an Return Authorization Number (RA#) generated which MUST appear on the outside of the box when it arrives to our office.**

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

**Note: The NCA 450-AA amplifier has “low level input” that is not used in this install assuming the bike has a factory radio. The low level in “can” be used if an aftermarket car stereo is on the bike. The amp’s low level input is NOT an extra Auxiliary Input. Please call or email us for more information.**

## ***TECHNICAL SPECIFICATIONS***

### **Hogtunes NCA 450-AA Amplifier**

Actual RMS Power at 2 Ohms: .....50 watts x 4  
Freq. Response: .....30hz-25khz  
Fuse at Amp: .....20 amp

### **Hogtunes 352F-AA Front Speakers**

Power Handling: .....100 RMS-150 Peak  
Frequency Response: .....55hz-25Khz  
Sensitivity: .....92 db 1watt/1meter  
Nominal Impedance: .....2.0 Ohms  
Cool Factor: .....EXTREME

### **Hogtunes 352R-AA Rear Speakers**

Power Handling: .....100 RMS-150 Peak  
Frequency Response: .....55hz-25Khz  
Sensitivity: .....91 dB 1watt/1meter  
Nominal Impedance: .....2.0 Ohms  
Cool Factor: .....Oh Baby!

*Harley-Davidson, Electra Glide, Road Glide, Street Glide, Ultra Classic, Tri Glide CVO, Screamin Eagle and Tour-Pak® are Trademarks, and/or Registered Trademarks of Harley-Davidson, Inc., Milwaukee, Wisconsin, USA, and if Used or Implied are for Reference Only. There is No Affiliation Between Harley-Davidson, Inc., and Hogtunes Inc.*

**PRACTICE  
SAFE  
SOUND!**

**Any audio system can be a  
distraction to the rider  
and/or passenger. Please  
use caution when  
playing your stereo,  
ESPECIALLY IN TRAFFIC.**

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