

HOGTUNES

Audio Solutions For The Great American Cruiser



REV 200-AA

200 Watt 2-Channel Amplifier

FOR USE ON 1998-2013 MODEL BIKES

INSTALLATION MANUAL (V1.1)

Thank you for choosing the Hogtunes REV 200-AA Amplifier for 1998-2013 Model Bikes. 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.

The REV 200-AA Amplifier is a Class D design. We chose this design because it yields plenty of power, is easy on the bike's charging system and produces little heat. It should be understood that ALL Class D amplifiers may cause a reduction in FM reception. Nothing is affected when playing CD, MP3, Satellite radio or any other music device. FM reception will differ and depend on the condition and type of antenna that you are using and, although every effort has been made to minimize any loss, we strongly advise against the use of in-fairing or hidden antennas with Class D amplifiers for best FM reception.

To help protect your bike's electrical system and battery, the amp has a built in feature where it will turn itself off if it sees less than 10.5 volts whether the bike is running or not. If you're listening to your stereo while not riding, this feature can help protect your battery so the bike can still start. If you're riding and the amp shuts off, this could be showing a potential issue with your charging system. If this feature is activated and the amp shuts off, it will turn the amp back on again if the voltage exceeds the 10.5 volt threshold.

The REV 200-AA is rated for 100 watts per channel using 2 ohm speakers at 14.4volts at 1% Total Harmonic Distortion (THD). Although this amplifier makes its highest power with 2 ohm speakers, if Hogtunes 5.75 ohm speakers or 4 ohm car speakers are used there will still be a noticeable improvement in volume and sound quality.

If you are not using Hogtunes speakers, chances are the speaker connectors are not the same as stock. If you need to change connectors, please note that on all Hogtunes products, the smaller connector (black wire) is positive (+).



*A video version of this manual is available at **www.hogtunes.com** If you still need assistance, please consider a professional installation by your motorcycle dealer.*

Hogtunes Contact Information

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MOUNTING CONSIDERATIONS/ REQUIRED ADAPTOR KITS

Depending on your model of bike or what you have for an existing system, you may need a Hogtunes Amplifier Adaptor Kit.

If you have a Standard, EG Classic, Street Glide or Ultra and this is the only Hogtunes amp in the system, the amp will adhere to the top of the radio using the supplied "hook and loop" adhesive. No adaptor needed.

If you have a Standard, EG Classic, Street Glide, or Ultra and this will be the 2nd amp in the system, Hogtunes "2CHSP" (Drag Specialties Part # 4405-0234) is required. This kit bolts into your fairing and locates the REV 200-AA between the radio and brake side speaker. Please do not continue the install until you have the required parts. 2CHSP can also be used if you prefer not having an amplifier sit on top of the radio.

If you have a Road Glide or Road Glide Ultra, Hogtunes has 2 different RG Adaptor kits and you will need one of them. If you don't not have the adaptor you need, please do not continue the install until you have the required parts.

- 1) If this is the only amp in the system or if you already have a Hogtunes NCA 450-AA or NCA 40.4 and are adding to the system, you will need Hogtunes RG Adaptor Kit (Drag Specialties Part # 4405-0096) which bolts the amp to the main studs that attach the inner fairing to the frame of your bike.
- 2) If you already have a REV 200-AA in the bike, it should be mounted to a plate attached to the main studs that hold the inner fairing to the frame of your bike. The second amp will bolt in using Hogtunes RG 40.4 Adaptor kit (Drag Specialties Part # 4405-0232). This will locate the second amp off to the extreme brake side of the inner fairing.

If required, please have the amplifier mounted to the appropriate adaptor (but not to the bike yet) before continuing with the install. If you do not have the required adaptor, please consult your retail dealer.



Figure 2.2

In most cases, REV 200-AA will be mounted on Hogtunes RG Adaptor kit (Drag #4405-0096) as shown in Figure 2.2



Figure 2.3

For bikes with dual REV 200-AA's, 2nd amp will be mounted on Hogtunes RG40.4 Adaptor kit (Drag #4405-0232) as shown in Figure 2.3

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. Expletives will also be kept to a minimum!
- Step #: 3 Locate the main power harness and plug it into the matching connector on the amplifier. Locate the 8 pin harness and plug it into "Audio Input" on the side of the amp. If you are using this amplifier to power front speakers (and tweeter pod if present) locate the 4 pin harness ending in a black plug and plug it into the black 4 pin connector on the amp. Make sure to plug this into the black plug and NOT the blue plug on the 8 pin input connector. NOTE: If using this amplifier to power Hogtunes 692.2/Lids 6x9" speaker lid kit, FL-7W 7" Fairing lower woofer kit or speakers as part of Hogtunes Rear Speaker pod kit, the speaker wire harness that comes in those kits will now plug into the 4 pin black plug on the side of the amp.
- Step #4a: Mounting the amp For Standards, Street Glide, EG Classic and Ultra Classic- If this is the only amp in the system, the amplifier gets mounted to the top of the factory radio using the supplied "hook and loop" adhesive and must sit so you can read the badge on top of the amplifier as in Diagram 1.1. The amplifier needs to mount as far back on the radio as possible so the fairing can go back on. The minimum distance from the back of the radio to the most forward edge of the amplifier is 5/8" (15mm). On 1998-2005 model bikes, it is a tight fit-but will go. 2006-2013 (Advanced Audio) radios have a "bump" on top of the radio that runs from front to back down the center of the radio. Cut the adhesive in half and apply one piece on either side of this bump. The amp will then mount flush. Most adhesives work best at room temperature or higher. NOTE: 2006-2013 Ultras have the CB module on top of the radio. The amp will adhere on top of the CB module so it is "half on/half off" this module as shown in Diagram 1.2. The supplied adhesive is plenty strong for this! The amp can adhere on top of CB and XM modules without issue.



Diagram 1.1
No CB/XM Module Present



Diagram 1.2 - Shown
mounted on top of CB Module

If this is the 2nd amp in the system, mount the amp to the Hochtunes 2CHSP plate and install in your bike.

Step #4b: Mounting the amp For Road Glide or Road Glide Ultra – The amp will mount to the plate and the plate will mount to the bike as per the plates instructions. NOTE: Use the harnesses that comes in this kit and NOT the harnesses that came as part of your RG adaptor kit.

WIRING THE AMPLIFIER

Step #1a: Follow this step if this is the only amp in the bike. On the audio input harness, locate the wire with the yellow heat shrink on one end. Unplug the factory speaker wires on the clutch side of the bike and plug the male connectors close to the yellow heat shrink into those. They will only go in one way. Also on the audio input harness, locate the wire with the green heat shrink on one end. Unplug the factory speaker wires on the brake side of the bike and plug the male connectors close to the green heat shrink in to those. There is a black wire on the input harness with a “ring terminal” on one end which must attach to the radio using one of the screws as shown in Diagram 1.3 **NOTE:** The blue 4 pin plug with black wires on the input harness is an “expansion port” which is used to send music to a second amp or is used to send radio power to run other speakers on the bike. You can see how the expansion port can be used further on in this manual.

Step #1b: Follow this step if this is the second amp in the bike and the first amp is a Hochtunes NCA 450-AA or a NCA 40.4. Locate the blue plug with red/black and white/black wires on it and plug this into the “bypass out” (also a blue plug) on the side of the NCA 450-AA or NCA 40.4. Take the white/black wires on the bypass plug and plug them into the male connectors closest to the yellow heat shrink on the input harness of the REV 200-AA. Take the red/black wires on the bypass plug and plug them into male connectors closest to the green heat shrink on the input harness of the REV 200-AA. There is a black wire on the input harness with a “ring terminal” on one end which must attach to the radio using one of the screws as shown in Diagram 1.3.

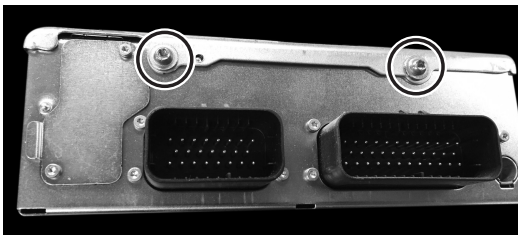
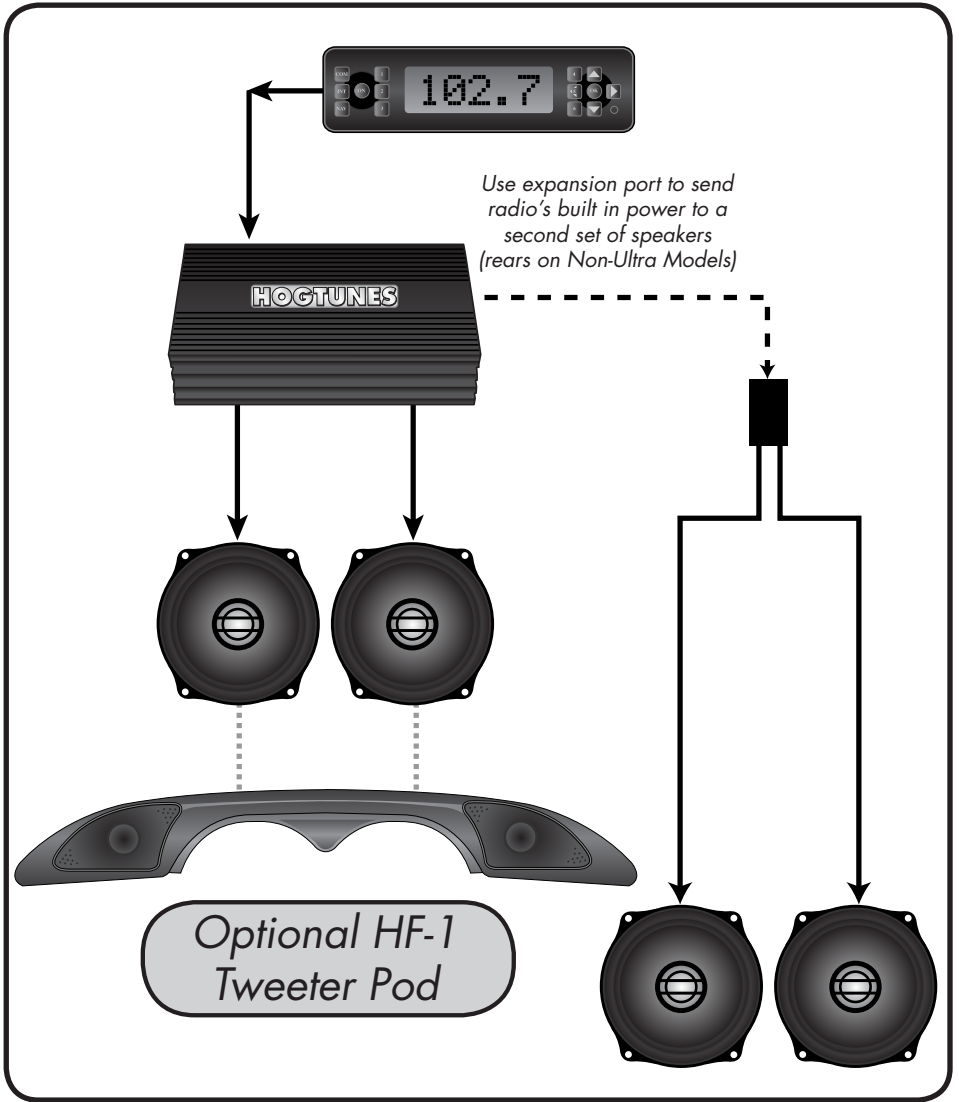


Diagram 1.3

- Step #1c: Follow this step if this is the second amp in the bike and the first amp is also a Hogtunes REV 200-AA or a NCA 70.2. Locate the blue plug with red/black and white/black wires on it and plug this into the expansion port (also a blue plug) located on the input harness of the "First" REV 200-AA. Take the white/black wires on the bypass plug and plug them into the male connectors closest to the yellow heat shrink on the input harness of the REV 200-AA you are now installing. Take the red/black wires on the bypass plug and plug them into the male connectors closest to the green heat shrink on the input harness of the REV 200-AA you are now installing. There is a black wire on the input harness with a "ring terminal" on one end which must attach to the radio using one of the screws as shown in Diagram 1.3
- Step #2: Earlier in the install, you located the black 4 pin plug with the blue/black and brown/black wires on it and plugged it into the "amplified output" on the amp. The blue/black wires will plug directly to the speaker on the brake side of the bike. The brown/black wires will plug directly to the speaker on the clutch side of the bike. Please double check that this harness is plugged into the **BLACK** plug on the amp and not the blue 4 pin plug on the input harness
- Step #3: 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 factory 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. **IMPORTANT:** If you do not attach the orange wire from the amp to the center wire at the cigarette lighter, the amplifier will not turn on. If the factory fuse for your cigarette lighter is blown and your cigarette lighter does not work, your amplifier will not turn on.
- Step #4: **Routing the power harness - For Standards, Street Glide, EG Classic, and Ultra Classic** - For 98-06 bikes, the power harness will pass under the inner fairing where the throttle and idle cables pass through on the brake side of the bike. The harness is designed to be routed between the frame backbone and gas tank on the brake side of the bike and come out just behind the gas tank. You **MAY** need to undo the back bolt of the gas tank and pivot the tank up to allow the harness to pass through at the back of the gas tank. Be sure to re-install this bolt and torque to factory specs! For 2007-2013 bikes, the balance of the main wire harness will pass under the inner fairing where the main wire harness passes through on the brake side of the bike. Loosen the tank console and run wires up and over the gas tank, but under the tank console. There is a provision on the front of the tank console for wires to pass. Secure the amplifiers harness to the bike's factory harness using zip ties. When correctly installed, the power and ground wires are the right length to connect onto the battery.

SYSTEM UPGRADE #1

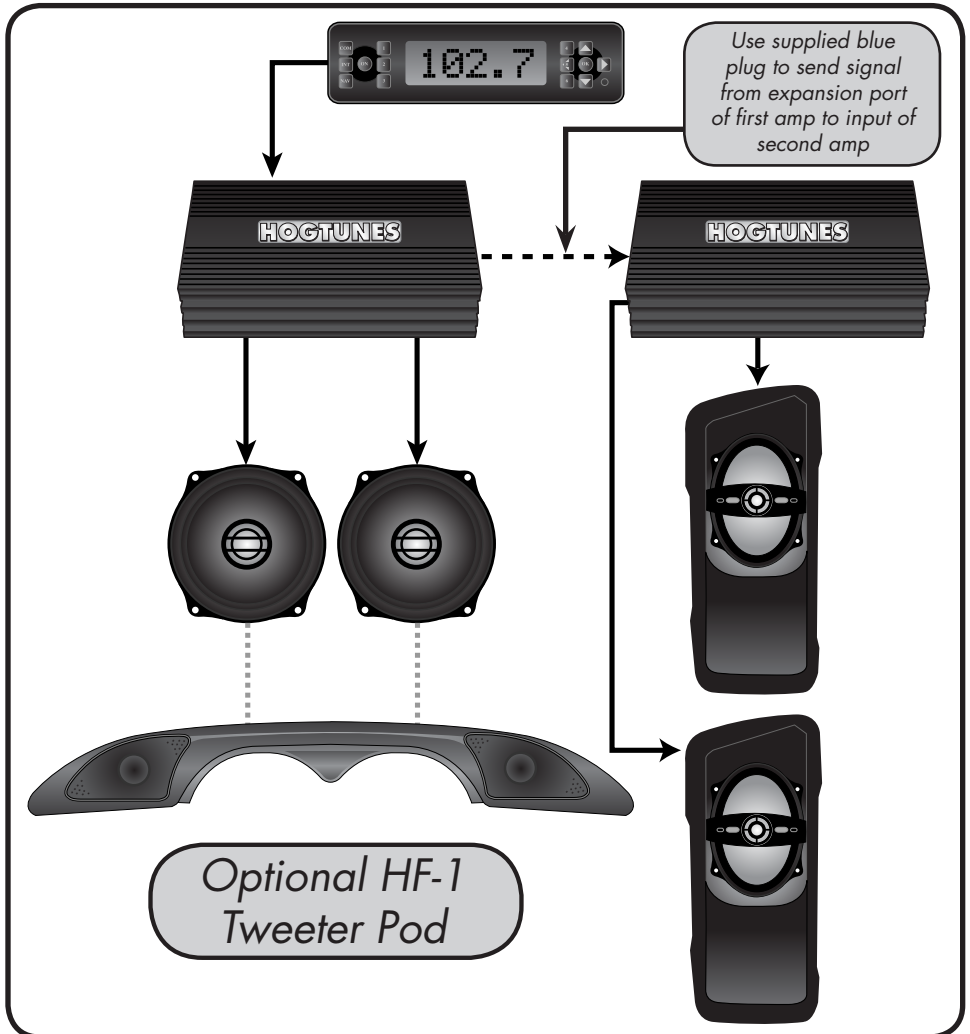
This system is an easy way to add rear speakers to your bike if you've added a King Tour-Pak®. Hogtunes rear speaker pods come with a wire harness set up for quick detach tour paks that will plug right into the expansion port on the amp. **IMPORTANT:** Since the RADIO power will be used to power the rear speakers, you must use rear speakers specific to your year of bike!



SYSTEM UPGRADE #2

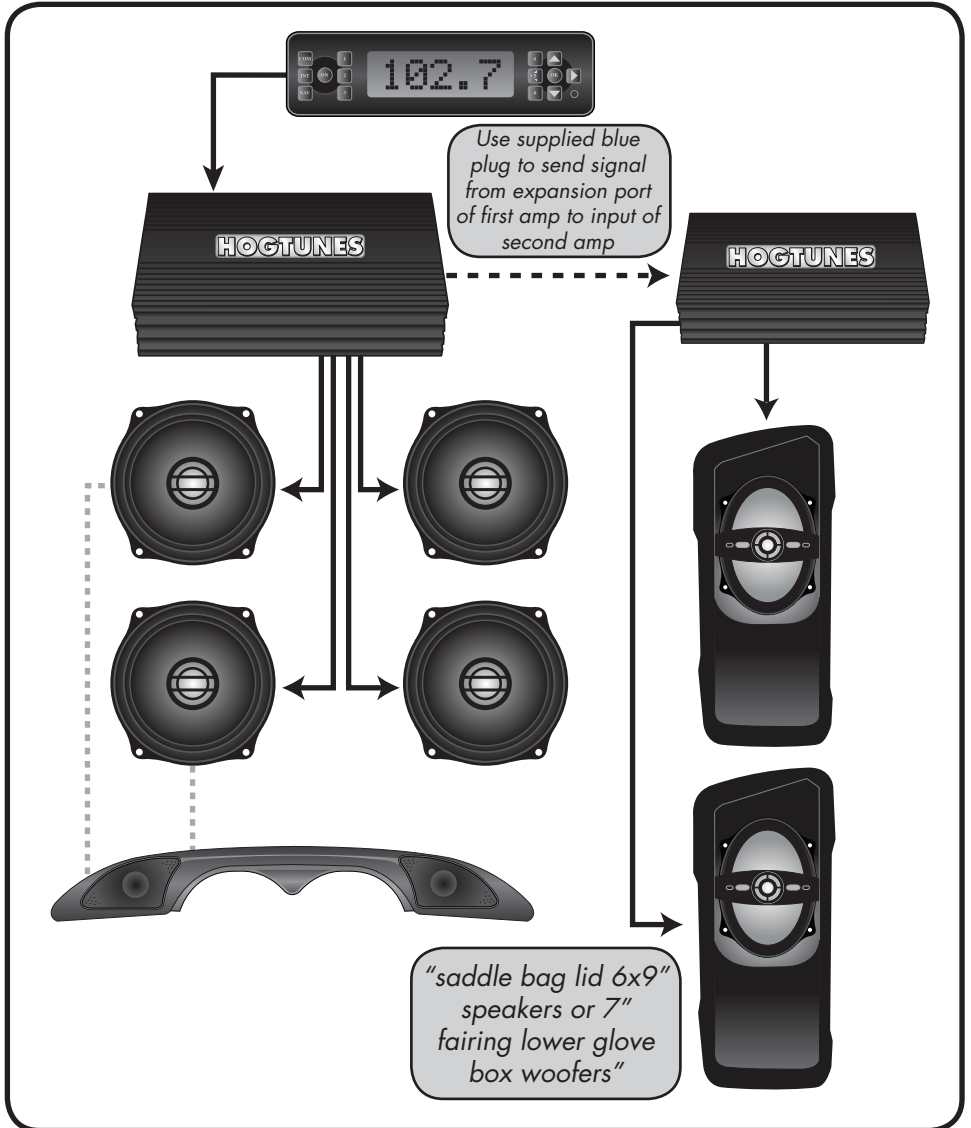
This system has the incredible power of 2 REV 200-AA Amplifiers to your bike! The first amp will run the 5.25" fairing speakers and HF-1 Tweeter Pod (if present). The second amplifier is used to power a set of 692.2/Lids, FL-7W Fairing lower woofers or rear Tour pak speakers.

For all Standard/Classic/Ultra/Street Glide models, the purchase of Hogtunes 2CHSP adaptor kit is required! The metal plate in that kit is used to bolt the second amplifier into your fairing



SYSTEM UPGRADE #3

This system adds a Hogtunes 4-channel amp; 2 of its channels would power the front speakers (and tweeter pod if present) and the other 2 channels would power rear speakers or fairing lower woofers. The original 2-channel amp would power 692.2/lids or lower speakers. You can literally build the system the way you want based on the body work you have on your bike. 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.



ADJUSTING YOUR SYSTEM-PLEASE READ!

In order to make your new system perform as good as it was designed, please take a minute to understand and follow these tips:

- 1) Set your "Automatic Volume Control" (AVC) to 3 bars. After extensive on-road testing, we found that this AVC position works and sounds best. Your new amplifier has been specifically set-up for this radio setting.
- 2) Your Hogtunes system is designed specifically for a motorcycle at speed. Exhaust noise and wind noise have been taken into careful consideration in how your system performs. How your new system sounds in a driveway or garage is radically different from how it will sound at highway speeds. Although your system was set-up with a factory radio, with its bass and treble controls in the middle position, if you feel the need to make adjustments please do so (carefully) at your normal cruising speed.
- 3) If you have an aftermarket car radio on your bike, everything will work fine. Please remember that car radios are designed to work in an environment with little or no exhaust or wind noise. Many car radios have features such as equalizers, loudness contours, surround effects, etc., all designed for a quiet environment and all of which will hurt your ability to hear your motorcycle system at speed if left on. Please take a minute and turn as much of these "features" off. With a car radio in your bike, the only adjustments you should be able to access for best performance are volume, bass, treble, balance and fader.
- 4) If you're using an external device to supply music through the radios AUX port, we have an article on our website that can help make your peripheral audio device sound as good as it can. The article is at: http://www.hogtunes.com/techzone_files/Level_matching.pdf

TECHNICAL SPECIFICATIONS

Hogtunes REV 200-AA Amplifier

Rated Power at 2 Ohms:	100 Watts/Channel (@1% THD)
Actual Power at 4 Ohms:	> 65 Watts/Channel (@1% THD)
Efficiency:	>70%
Fuse:	15 amp

WARRANTY INFORMATION

Please Record Your Amplifier's Serial # Here _____

The REV 200-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

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.

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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!**

www.hogtunes.com