

Advanced Audio System Information

Since the introduction of the Advanced Audio System on 2006 Touring Models, there have been several Service, Warranty and P&A Bulletins and multiple Tech Tips. Some of the previous information provided is outdated or may no longer apply. This Tech Tip provides the most current information as of this date.

Advanced Audio System - AAS

On May 22, 2006, the Initial Care Program (M-1173B) ended for the Advanced Audio System. Dealers no longer need to call Tech Service for Authorization to replace AAS components. Technical assistance will still be available via 414-343-4887.

We would like to share with you information that will help in the diagnostics, repair and replacement of AAS components, and to remind dealer staff of information that has already been provided.

Radio Self-Diagnostics – (fig.1) A quick check to see if there are currently detected issues or any DTC's recorded and the ability to check for proper operation of AAS handlebar & passenger switches.

>> Access by holding any two preset buttons (1-6) in while powering up the radio, wait for the diagnostics screen to appear. Perform switch functions and observe results on radio display.

NOTE: Radio Self Diagnostics will only show one DTC. Use Digital Technician to determine if there are multiple DTC's



FIG. 1

ROM Default Reset – (fig.2) Returns the radio to base settings, to eliminate possibility of user-induced issues. (i.e.: low volume, low or no display visibility, etc.) Always perform this reset before ordering a replacement radio to eliminate possible user-induced issues.

>> With radio ON, press soft keys **1, 3 & OK** at the same time and release. Then press the **UP** arrow **Two times**. Then press soft key **#2** (once) and turn ignition off for 30 seconds.

NOTE: If the issue was a blank screen and the problem is not corrected, perform this reset a second time to insure the proper steps were done. If the display recovers, immediately check the software version and if it is an earlier version number, perform the software update process.



FIG.2

Software Update – (fig.3)

>> Access by holding any two preset buttons in while powering up the radio, wait for diagnostics screen to appear. Press button 4 to see the current software version (8.09, 8.11, etc) in the radio. Both ST10 & TMS320 lines should be the same software version.

If a software update is needed, press button 5 (Update) and insert the software update CD when prompted. The rest of the process is automatic and may take up to 10 minutes. After completion, always check the software version again to make sure the installation was successful. If both ST10 and TMS320 are not the same, you can update them individually by pressing the 1, 3 and O.K. soft keys at the same time after radio is powered up and on FM. Then press down arrow once, and select the area you want to update, insert CD and press Flash.

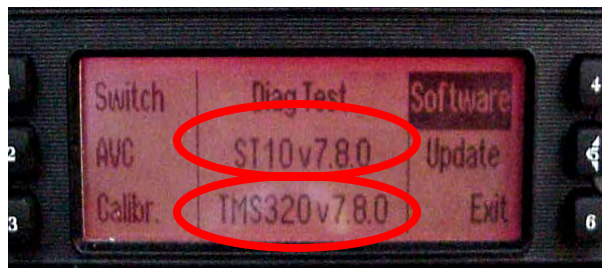


FIG.3

Software Update – (fig.3) Continued.

The latest software update is always available to dealers and customers on <http://www.harley-davidson.com>. Dealers can access this thru **h-dnet**, on the **Service Page**, under **Service Contents** (and on the **new h-dnet** under **Service Documents** and then choose **Product Information**) on both sites choose **H-D Advanced Audio System**, this will take you to the AAS mini-site at harley-davidson.com, then select **Software Download**, and then **Software Update .Zip** and “save” this to your computer.

If you make a folder on your desktop (or other location you choose), called “AAS Software” you will always have a place to save this and future software updates.

On this web page <http://www.harley-davidson.com/cp/moar/en/software.asp> you will find step-by-step instructions for checking and installing software in these radios. There is also a link to a “printer friendly” version of the instructions to print out for a Technician to use when an internet computer is not available.

The intent is for dealership service personnel to check the current software in any 2006 and later radio-equipped motorcycle when it is in for normal service. It only takes about 10 seconds to check, and if there is a newer version available, pressing the “update” button and inserting the disc is all that should be needed. The update will be completed automatically with no further attention, allowing the Technician to continue with the service work.

The latest version of the software will update all previous versions; there is no need to incrementally “step up” the software versions.

NOTE: Future software updates will be available on www.Harley-Davidson.com or via h-dnet.com.

Remember to remove CD after the update is complete.

Preventing Physical Damage Rejects

- Do not attempt to physically retrieve customer disc if disc will not eject or if power is removed from unit.
- Do not, under any circumstances, remove the faceplate.
- Do not return a unit if it looks like the customer has done any of the above.
- Do not return units involved in an accident.

Preventing NTF Returns

Do not submit a unit without a customer complaint. Although the unit will go through the same vigorous test program as all other units, it is very helpful to have a direction to focus on. Defects should be as specific as possible. “Radio Inop” and similarly vague statements are not useful. A completely filled out warranty return tag should be attached with a full description of the verified issue.

Skipping:

- Be sure technician verifies skipping complaint with test drive. Do not return radios for skipping complaint unless issue has been verified.
- Be aware of any other issues that might cause excessive vibration, like aftermarket exhaust or loose motor mounts. Refer to 2007 electrical Diagnostic Manual, section 5 page 109 for skipping symptoms diagnostics.
- Be sure customer disc is in reasonable condition. No excessive scratches or fingerprints. No hazy appearance or dirty discs. If disc is customer recorded, verify defect with commercially recorded disc.

Will not eject:

- Be sure customer is not using a disc with adhesive label applied to disc surface, lens-cleaning brushes, or is dual sided. These discs can jam eject mechanism.
- If disc will not eject, remove maxi-fuse and let bike sit overnight.

Display issues:

- Be sure that the display contrast is not adjusted to either high or low extreme.
- Certain chemicals, including gasoline, when spilled or splashed on the display will cause the appearance of tiny spots or bubbles. This is not a warrantable situation. Testing has shown that a product H-D sells Novus 2 removes the outer anti glare coating and restores the appearance of the display. The display is coated on both sides, so glare should not be an issue.

Switches to WB on its own:

- Be sure the WB **Alert** feature is not activated. WB Alert will only function if CB module is installed. See Owners manual for more information.

Unit will not power up:

Be sure all connections are properly seated and all grounds are good. Often a radio with no power is replaced, and since the new unit powers up, it is assumed that the old radio was faulty, when in fact poor connections or intermittent opens in the harness are far more likely at fault. A truly faulty radio that will not power up can be plugged into another motorcycle and will still show a loss of power.

A similar method of powering up a radio would be to attach the breakout box to the radio chassis only, leaving the harness disconnected and then to run 12 volt power and ground to the radio via the breakout box, thereby eliminating any possible motorcycle wire harness/switch issues. Pins 10 / 12 / 20 are **(+) positive** and pins 11 / 19 are **(-) negative**. These are the only wires that need be attached to power the unit and use the faceplate buttons; of course, no sound will be heard unless speakers are also attached.

General radio issues

Disconnecting all input switches, rider and passenger, will eliminate the possibility of a shorted switch causing issues with the radio. Remember since the Volume and Mode switches share common wires, a short on one switch can affect the function of the other (a pinched *left* switch housing wire can cause the radio to scroll from AM/FM/WB/CD Modes).

A variety of issues have been attributed to poor grounds, and a good way to eliminate the grounds as a possible cause is to remove the ground wires and clean the terminals and retighten the fasteners, this method is preferred in addition to measuring the resistance of the ground circuit .

The best practice to avoid a NTF return is simply to verify the customer's complaint first hand, correctly diagnose the root cause of the issue while the issue is presently occurring. Once it has been determined that the radio chassis is at fault, it is recommended to install the radio in another vehicle to verify the issue follows the radio to the new bike.

If you have received a radio core return indicating there was No Trouble Found, please attempt to verify the condition of the radio prior to calling Tech Services.

Warranty Replacement Radios & Modules – Please be sure to order the appropriate '**REFURB**' part number. Failure to do so, results in the dealer having to PAY for the component it receives. Order & receive a replacement radio prior to removing the old one from the motorcycle. Refer to Warranty Bulletin '**W-132B**' for replacement part numbers and detailed procedures.

NOTE: You must include a copy of the approved warranty claim with the properly tagged component, and return the failed core component within 30 days. Failure to do this will result in rejection of your claim and being billed for the core unit.

Advanced Audio System Radio Returns

When you receive a "REFURB" radio for a warranty situation, please submit the warranty claim immediately after the repair is made. You could receive an Approved Warranty Claim within 48 hours (if the claim is filed correctly). When that is received, please print a copy of the approved claims and include it in the box when returning the radio. It is very important that we receive the warranty radios so we can keep a supply in stock for these situations.

The Radio Core Return Process per Bulletin W-132B:

1. When you receive your REFURB radio order, you will also receive a prepaid DHL shipping label in that box to send the old radio back to our supplier. If you lost the label, please send the radio directly to:
Harley-Davidson Motor Company
C/O United Radio Inc, Automotive Division
5705 Enterprise Pkwy
East Syracuse NY 13057
2. The radio must have a warranty tag with all six areas filled out completely.
3. Print a copy of the APPROVED warranty claim and include it in with the radio core in the return carton.
4. Utilize the same packaging and materials to avoid additional shipping damage.
5. Do not send radios to Harley-Davidson Juneau Ave.
6. The serial # of each unit is located on a small square decal on the back of the radio. It is advised to record the serial # on the repair order prior to removing the radio from the motorcycle to eliminate any confusion as to which radio was removed from which motorcycle.

Setting Region Code ('Calibrating' Radio) – (fig.4) P&A and Replacement radios will 'BEEP' repeatedly and have a message displayed that says "Radio not Calibrated" until the Region Code has been set. You will need use DTII to Reflash the Radio. The proper way to reflash a 2006 and later radio is to enter the correct VIN in DTII and select Reflash > Radio.

When the correct VIN is used in DTII and the Calibrated Radio Download is selected the "Options" feature may become un-selectable, because the Intercom and 4 Speakers are standard features for some models and are configured with the radio download. When the "Options" section is un-selectable, it is NOT a chargeable download.

The issue that causes the Intercom to be a chargeable download occurs only when the Technician selects Intercom as an Option.

The only time you would need to select the intercom option is when you have installed a P&A Advanced Audio Intercom Kit on a motorcycle that did not come factory equipped with an intercom.

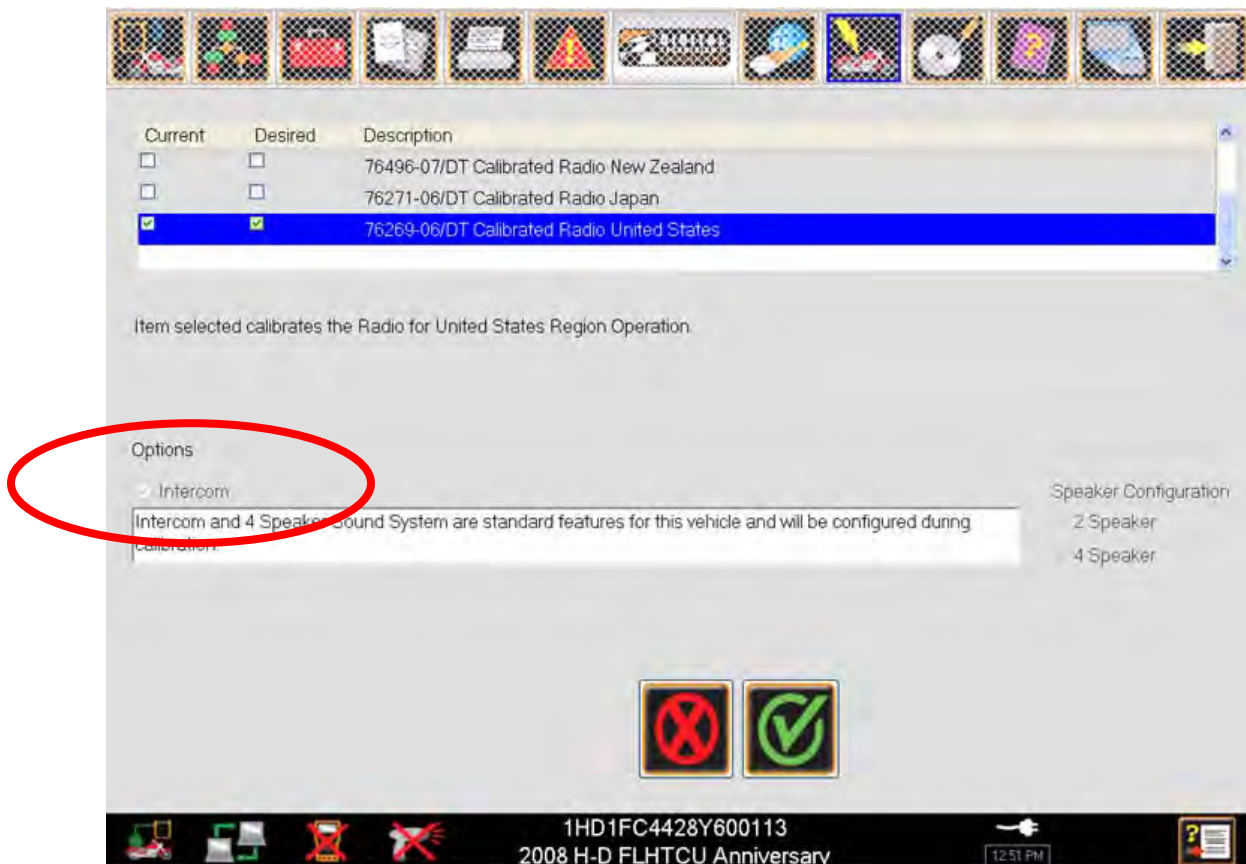


Fig.4

Out of Warranty / Physical Damage Radios Process

If you have a radio that needs repaired, but is out of warranty period, has physical damage or is otherwise not a warrantable event, see **P&A Bulletin 912**.

ESP/COOP

The COOP guidelines state that radios are not covered.

ESP procedures dictate that you first verify the issue and determine radio is at fault. You will then contact ESP for an authorization for repairs. You will need to reference P&A 912 for repair prices, **DO NOT ORDER A REFURB** radio. Reference Job/Time code manual for labor codes. Once approved you will need to follow P&A bulletin 912 and send in the customer's radio, with payment for repair. If you order a refurb radio, for a bike that is out of factory warranty, one will be shipped and you will be billed \$787.77, and ESP will not cover that amount. You need to follow **P&A Bulletin 912**.

AAS Bluetooth Compatible Phones – a listing of Bluetooth compatible cell phones is maintained at: www.harley-davidson.com > touring > Choose a model > Advanced Audio System > Bluetooth. Also located on h-dnet.com > Service Documents > Product Information > H-D Advanced Audio System

Newfoundland Time Zone

If you encounter a clock display that reads Newfoundland, removing the Maxi-Fuse for 10 minutes should correct this issue. Additionally, if the AAS Navigation kit is installed, setting of the clock is not user controllable, it is set via satellite.