

Mid-February 2018, Volume 20, No. 4

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# New Tire Fill Alert System Pumps Up 30 Tire Inflation

Checking for the correct tire air pressure on a vehicle requires a tire air pressure gauge, right? Not on GM models equipped with the new Tire Fill Alert system. It's included on many new 2018 models, including the 2018 Silverado, Tahoe, Suburban, Traverse, Sierra, Yukon, Acadia, Escalade, Enclave and others. Also look for the system to be available on many 2019 models.

The Tire Fill Alert works with the Tire Pressure Monitoring System (TPMS) to provide visual and audible alerts outside the vehicle when inflating a tire to the recommended cold tire pressure. Check the Driver Information Center (DIC) for the current tire pressures when the vehicle tires are low.

### **Filling a Tire**

The Tire Fill Alert begins when the tire pressure warning lamp is illuminated for a low tire. When the driver starts to fill the low tire, the vehicle will flash the turn signal lamp of the corner that is being filled to provide feedback that a tire fill event is occurring. When the placard tire pressure (based on the Tire and Loading Information label located below the driver's door latch) is achieved, the vehicle will notify the driver with a single, short, horn chirp, similar to the one heard when locking the vehicle. The turn signal lamp of that corner will stop flashing and become solid for a short period of time when the tire is at the correct pressure.

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# New Tire Fill Alert System Pumps Up Tire Inflation

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If the tire filling continues and a tire is overinflated by more than 5 psi (35 kPa), the vehicle will notify the driver by sounding three short horn chirps. To release and correct the pressure, while the turn signal lamp is still flashing. briefly press the center of the



DIC tire pressure readings

valve stem. When the recommended pressure is reached, the horn will chirp once.

**TIP:** If the hazard warning flashers are on, the Tire Fill Alert visual feedback will not work properly.

# **Operating Conditions**

The TPMS will not activate the Tire Fill Alert properly under the following conditions:

- There is interference from an external device or transmitter. It may help to move the vehicle about 3 ft. (1 m) and try again.
- The air pressure from the inflation device is not sufficient to inflate the tire.

- There is a malfunction in the TPMS.
- There is a malfunction in the horn or turn signal lamps.
- The identification code of the TPMS sensor is not registered to the system.
- The battery of the TPMS sensor is low. The sensor battery condition can be verified in the scan tool Body Control Module (BCM) data list.

### **System Diagnostics**

If the Tire Fill Alert system is not working properly, check these systems:

- The Tire Fill Alert system uses unique TPM sensors. Inspect each TPM sensor to ensure it is the correct sensor for the application.
- TPM sensors must be transmitting. If any of the sensors are not reporting properly, follow the TPM sensor service procedure for DTCs C0750, C0755, C0760, or C0765 (Tire Pressure Sensors).
- When inflating a tire, monitor the Tire Fill Alert Current State parameter: Non-Monitor, Monitor, Active, or Achieved. The initial state should be in Monitor mode and change to Active and Achieved once the tire is inflated to the proper tire pressure.
- If the parameter states are changing while the tire is being inflated, but there isn't any lights or horn feedback, refer to Lighting diagnostics.
- If the parameter states are not changing while the tire is being inflated, and there also isn't any lights or horn feedback, refer to Body Control Module diagnostics.
- S Thanks to Bob Wittmann

# Download the Latest AFIT Software Update

The latest software update for the CH-47976 Active Fuel Injector Tester (AFIT) is now available for download.

The software release — free of charge to GM dealerships updates several aspects of the AFIT diagnostic tool:

- · 20 new vehicles and two vehicle updates
- Database support for new vehicles that use existing cables
- Database support for new vehicles that use in-line adapters
- Database support for new vehicles that are now using SENT
- Database support for new vehicles that now feature an automatic engine Stop/Start system (KL9)
- Firmware update to support new G6 Cable and special crank procedure for certain applications covered in the Service Information

In addition, the software release continues to support the SIDI and Duramax diesel engine applications that use essential SIDI adapter harnesses and available Duramax adapter harnesses.

#### Software Download

The AFIT software update (CH-47976-240) is available from the GM Dealer Equipment website. Download the software through the Service Workbench selection of "Essential Tools - Software Updates" in GM GlobalConnect (U.S. only). Open the file and follow the instructions.

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AFIT download link

Application selection of GM Special Tools & Equipment - Software Updates in GM GlobalConnect.

For questions regarding the software release, contact Bosch Automotive Service Solutions Technical Support at 1-800-GM-TOOLS (1-800-468-6657).

#### Thanks to Chuck Berecz

# Camaro Convertible Folding Top Front Latch Rebalance



Camaro convertible

2016-2018 Camaro convertible models may have a "Top Not Secure" message display on the Driver Information Center and the rear compartment lid may not open. During diagnosis, it may be found that the folding top latch actuator is latching, but the magnet is not aligned with the position sensor. These conditions may be caused by the amount of time the folding top control module drives the latches, possibly causing them to bounce back past the sensor.

To correct the condition, reprogram the K23 Folding Top Control Module with the latest calibrations, and complete the rebalance procedure for the folding top front latch actuator motor and the front latching mechanism (based on build date).

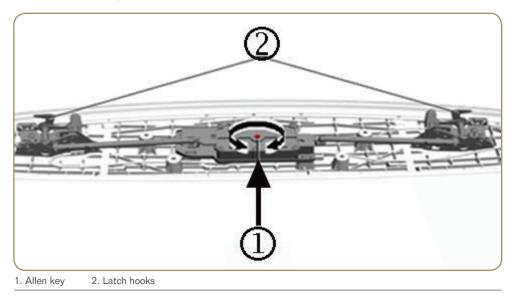
#### Vehicles built October 1, 2016 and prior

- Rebalance the folding top front latch actuator motor and the front latching mechanism
- Reprogram the folding top control module

#### Vehicles built after October 1, 2016

Reprogram the folding top control module

The rebalancing procedure involves loosening the three bolts that retain the folding top front latch actuator motor so that the motor can be moved freely side-toside, turning the Allen key until the latch hooks are completely open, and then turning the Allen key until the latch hooks are completely closed. Refer to Bulletin #16-NA-257 for complete instructions.



TIP: Rebalancing the folding top front latch actuator motor must be done every time the front top front latch actuator motor is loosened or removed for any reason. If not performed, failure of the folding top front latch release rods may occur.

#### Thanks to Ann Briedis

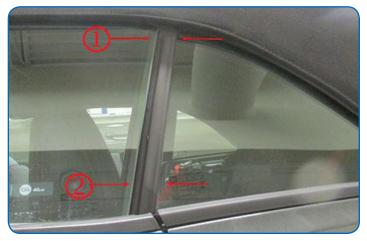
# Camaro Convertible Rear Quarter Glass Wind Noise

Some 2016-2017 Camaro convertible models may have a noticeable wind noise condition at the rear quarter window area. The wind noise may be due to a misalignment between the front side window and the rear quarter window on either side of the vehicle.

Confirm the location of the noise by taping off the gap between the front side window and the rear quarter window and drive the vehicle. If the noise is eliminated, the gap between the rear quarter glass and the front side window should be adjusted.

There are three measurements to check and adjust to correctly set the gap — two adjustments to the vertical gap between the two windows and one adjustment to the height of the rear quarter glass.

### **Vertical Gap Adjustment**



Even 10 mm gap between the two windows

The first two measurements are related to the vertical gap between the front side window and the rear quarter window. This gap is V-shaped by design. When the folding top is lowered, the gap between the two windows is 12 mm wide at the top and 10 mm wide at the bottom.

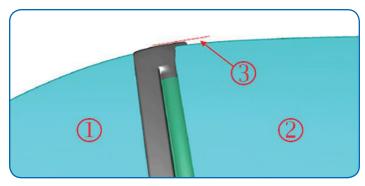
When adjusting the vertical gap, the folding top must be in the stowed or lowered position. After adjustment, when the top is closed and latched, the rear quarter glass window will be pushed forward slightly. The result will be an even 10 mm gap between the two windows from top to bottom.

# **Glass Height Adjustment**

The third adjustment to the height of the rear quarter glass will change the location of the glass so that it sits 4 mm higher than the front side window glass.

Once the quarter window is adjusted, compare the two panes of glass at the base. They should be flush with each other (inboard vs. outboard). If the difference between the front and rear windows is more than 1.5 mm, or if there is a visible gap that can be seen between the seals, the rear quarter glass will need to be adjusted further.

First, loosen the forward nut by the rear quarter glass (as shown in the graphic). Gently push out on the base of the quarter glass to decrease the noticeable gap. Once the gap is within 1.5 mm of the front side glass, tighten the nut to 80 inch pounds (9Nm) of torque. Do not push the glass out too far.



- 1. Rear quarter glass
- 2. Front side glass
- 3. 4 mm difference in height

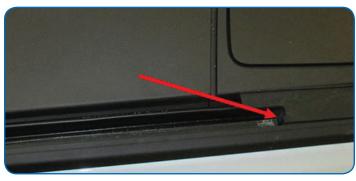
Test drive the vehicle to determine if the noise has been eliminated or if more adjustment is needed.



Loosen the forward nut to push out the base of the rear quarter glass.

#### **Window Channel**

If the glass adjustments have been made and wind noise is still present, inspect for the presence of a foam piece in the rear of the window channel. If the foam is missing, insert a foam piece into the window channel. If the foam is in the window channel, installing a slightly larger foam piece will put more outward tension on the window seal, helping to reduce any lingering wind noise.



Foam in the rear of the window channel

S Thanks to Ann Briedis

# Using the Correct AFIT Power Adapter

When testing an engine using the Active Fuel Injector Tester (AFIT) kit on most GM vehicles, the tools must be connected to power correctly in order for proper communication. The AFIT kit includes a 12V power cord that plugs into an accessory power outlet, a battery power adapter, and a 12V power adapter that plugs into a wall outlet to power the Main Control Unit (MCU).



AFIT kit with power adapters

The AFIT MCU can be used in

the engine compartment or placed in the vehicle cab with the 12V power cord plugged into the vehicle's accessory power outlet. For vehicles that do not power the accessory power outlet unless the key is on, the included battery power adapter cable can be used instead of the 12V power cord.

The DMU (Drive & Measurement Unit) can be placed in the engine compartment and the power clips connected to the vehicle's 12-volt battery or the remote battery terminals on vehicles that do not have the battery located under the hood.

With the DMU connected to the AFIT MCU, press the On/Off button to power on the MCU. The MCU will perform a self-test to check the vehicle's battery voltage. If there is a lower amount of voltage in the battery, the tester will flash a Low Battery message. To avoid losing power while testing, the vehicle's battery should be properly charged.

The 12V power adapter that plugs into a wall outlet only should be used to supply power to the MCU when connected to a computer when it's necessary to update the tool or upload test records.

The wall adapter will power up the MCU but does not provide sufficient power to test the fuel

**Power Adapter** 

Power adapters for the accessory power outlet, vehicle battery, and wall outlet.

injection system. This applies if the wall adapter is plugged into a vehicle's 110V power outlet, if equipped, as well.

If the correct power connections are not made, an error message may be

displayed that the MCU is not communicating with the DMU.

12V Power Cord

### **Software Downloads and User Guides**

Before using the AFIT, always be sure it is updated with the latest software. Software updates are available from the GM Dealer Equipment website. Download the software through the Service Workbench selection of "Essential Tools – Software Updates" in GM GlobalConnect (U.S. only). Open the file and follow the instructions.

In Canada, the software is available for download through the Service Application selection of GM Special Tools & Equipment – Software Updates in GM GlobalConnect.

The software downloads page on the website also includes links to a number of AFIT user guides.

S Thanks to Chuck Berecz

 UEH INTERFACE CHECK

 The SIDI/Diesel Drive

 Massurement Unit(DMU)

 is not connected to

 the AFIT Main Control

 Unit(MCU)

 • connect the DMU to

 the AFIT Meaturement

 UNIT(MCU)

 • connect the DMU to

 the VEH Battery

 CANCEL - BACK

12 V Power Cord

Error message



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