

TECHNET TIMES

NEW THINKING.
NEW POSSIBILITIES.

VOL. 23, ISSUE 02

PUBLISHED BY THE NATIONAL SERVICE TRAINING & SUPPORT DEPARTMENT

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Most Dependable in its Class!



The 2010 Sonata earned top honors in the Midsize Car segment of the J.D. Power Vehicle Dependability Study. The J.D. Power and Associates Vehicle Dependability Study measures problems experienced during the past 12 months by original owners of three-year-old (2010 model year) vehicles includes 202 specific problem symptoms grouped into eight major vehicle systems. Overall dependability is determined by the level of “problems experienced per 100 vehicles (PP100)”, with a lower score reflecting higher quality

“In one of the most competitive segments within the industry, Sonata places highest in its class,”

said Erwin Raphael, director of engineering and quality, Hyundai Motor America. “Hyundai is committed to providing customers with high-value vehicles that withstand the test of time. The quality and dependability of our models is important to reassuring owners that we care about their Hyundai experience beyond their initial purchase at the dealership.”

The 2010 Accent placed third in the Sub Compact Car segment. These honors come on the heels of the 2009 Genesis garnering the award in 2012 as the best in the Midsize Premium segment. We look forward to improving on our VDS results in the coming years.



San Jose Training Center Reopens After Remodel

Capacity at the San Jose Training Center has been expanded by adding a classroom and enlarging our shop space. The shop received two additional lifts and the resources required to actually create a classroom in the shop itself. Classes resumed at the facility in late February.



2013 Santa Fe Named Best Car for the Money

The all-new 2013 Santa Fe was named Best 3-Row Mid-size SUV by U.S. News and World Report in its 2013 Best Cars for the Money Awards. U.S. News & World Report's annual award combines quality and value data to determine the top-ranked vehicles within their respective categories. The 2013 Santa Fe took top honors within the 3-row midsize SUV segment for its outstanding value and critical acclaim.

"The 2013 Hyundai Santa Fe wins praise from the automotive press for its long list of standard features, upscale cabin and easy-to-live-with performance," said Jamie Deaton, U.S. News & World Report. "When you combine that with excellent safety ratings and low ownership costs, the Santa Fe provides a combination of value and ownership experience that's tough to beat."

U.S. News & World Report measured vehicle quality and value data within 21 categories. Quality is scored by a combination of safety, reliability and a consensus of

industry expert opinions. Value is measured by combining a vehicle's five-year total cost of ownership with the average price paid for the vehicle at the time of the awards. The vehicles with the highest score within each category receive the Best Cars for the Money Award.

"Hyundai strives to create vehicles that embody quality and bold design without sacrificing value, and this award from U.S. News & World Report is proof that our recipe is a success," said John Shon, Product Manager, Hyundai Motor America. "Offered in two wheelbase variants, the third generation Santa Fe continues to lead the pack in redefining the CUV/SUV market."

The three-row Santa Fe is a progressively designed and highly capable crossover built for today's family, with flexible space, upscale amenities, outstanding performance and advanced safety. The larger Santa Fe joins the all-new two-row Santa Fe Sport launched last year. The Santa Fe is equipped with a standard V6 powertrain and features everything found on the Santa Fe Sport plus additional premium amenities such as power liftgate and 115V power outlet. The larger Santa Fe also features standard rear-passenger HVAC controls and vents for additional family comfort.

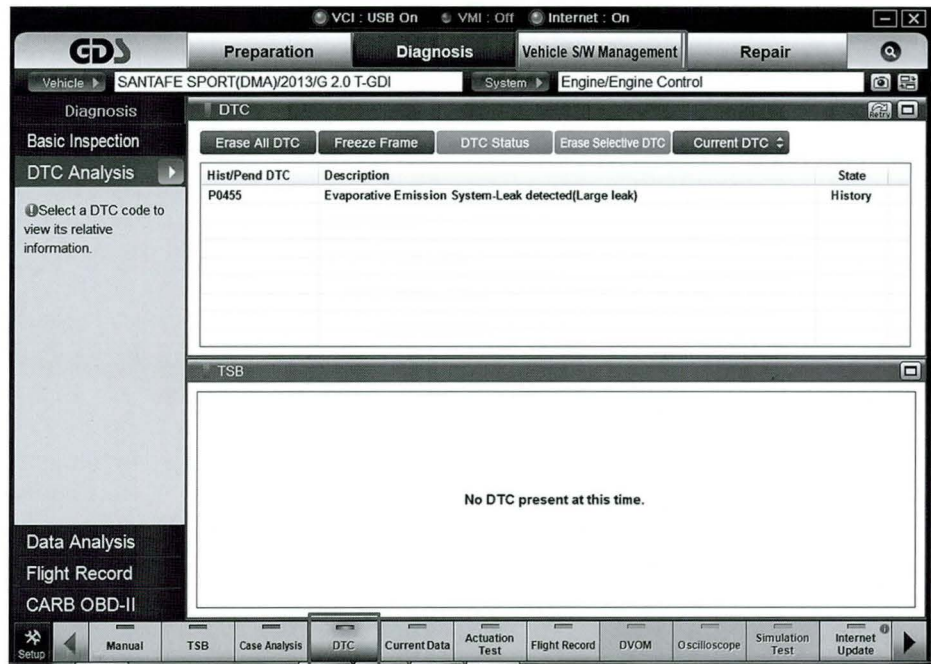


Running the EVAP Leakage Test Using GDS

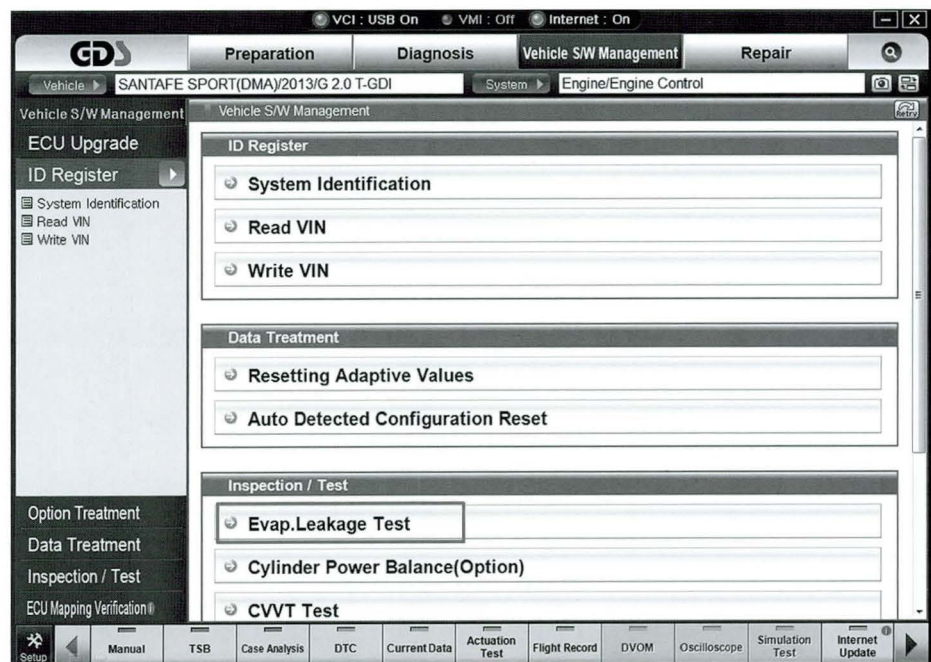
When you need to run an EVAP System leakage test, you can initiate one right on your GDS. It is likely that you have detected an EVAP DTC. After your code search, just follow these steps.

Note: The procedure illustrated below was taken using the 2013 Santa Fe Sport. Actual screens may differ based on the model being tested.

1. From the GDS DTC screen, click on the Vehicle S/W Management tab.

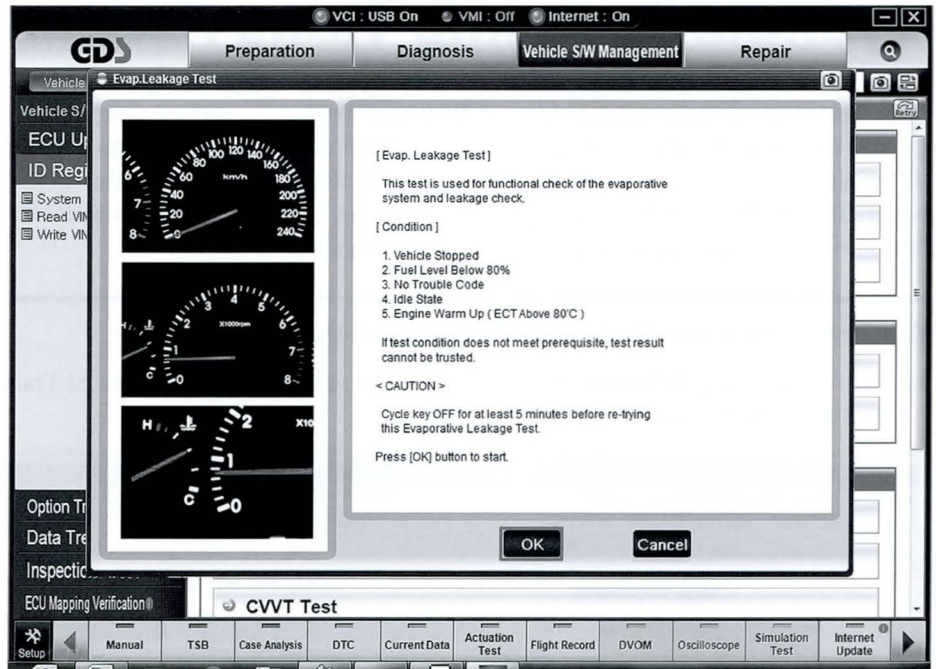


2. The next screen will display the “Inspection/Test” section. In that section, select, “Evap. Leakage Test.”

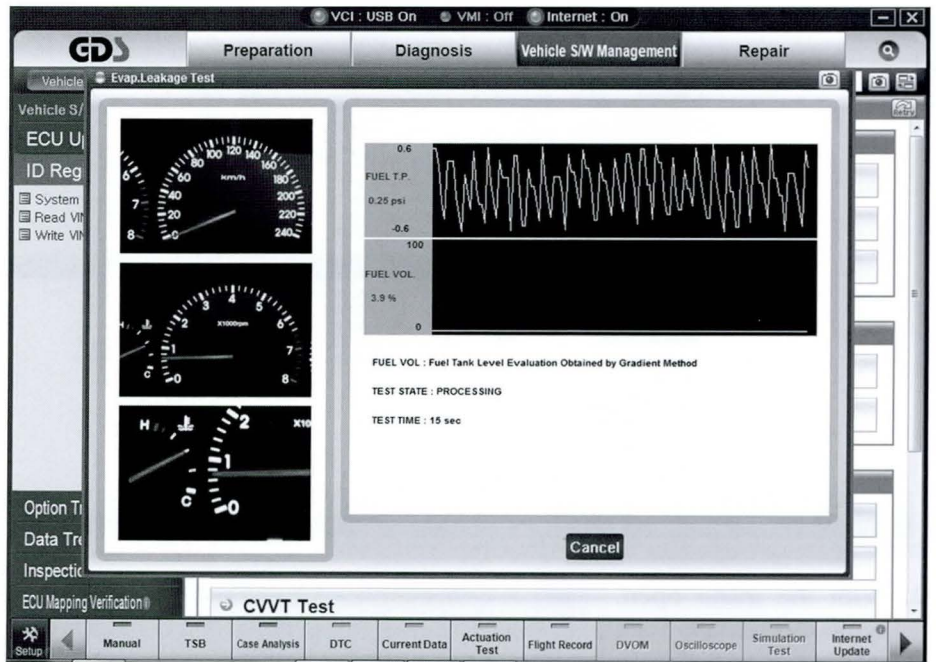


- When the Instruction window pops up, carefully read the instructions and click "OK."

Note: Instructions differ from model to model. It is important to follow instructions that display at this stage of the process for your specific model.

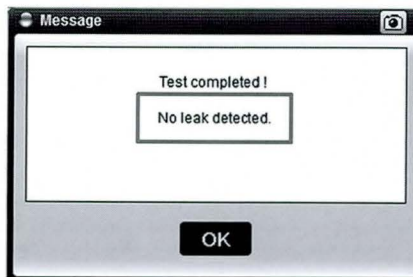


- When the test begins, the Evap. Leakage Test status window pops up. Normal test duration is 5-30 seconds depending on the model and conditions.

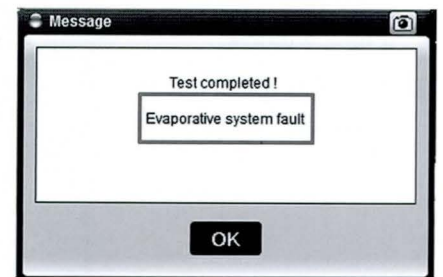


- Once the test has been completed one of two results will display.

Note: If a leak is detected—please refer to the appropriate shop manual for diagnosis and repair.



OR



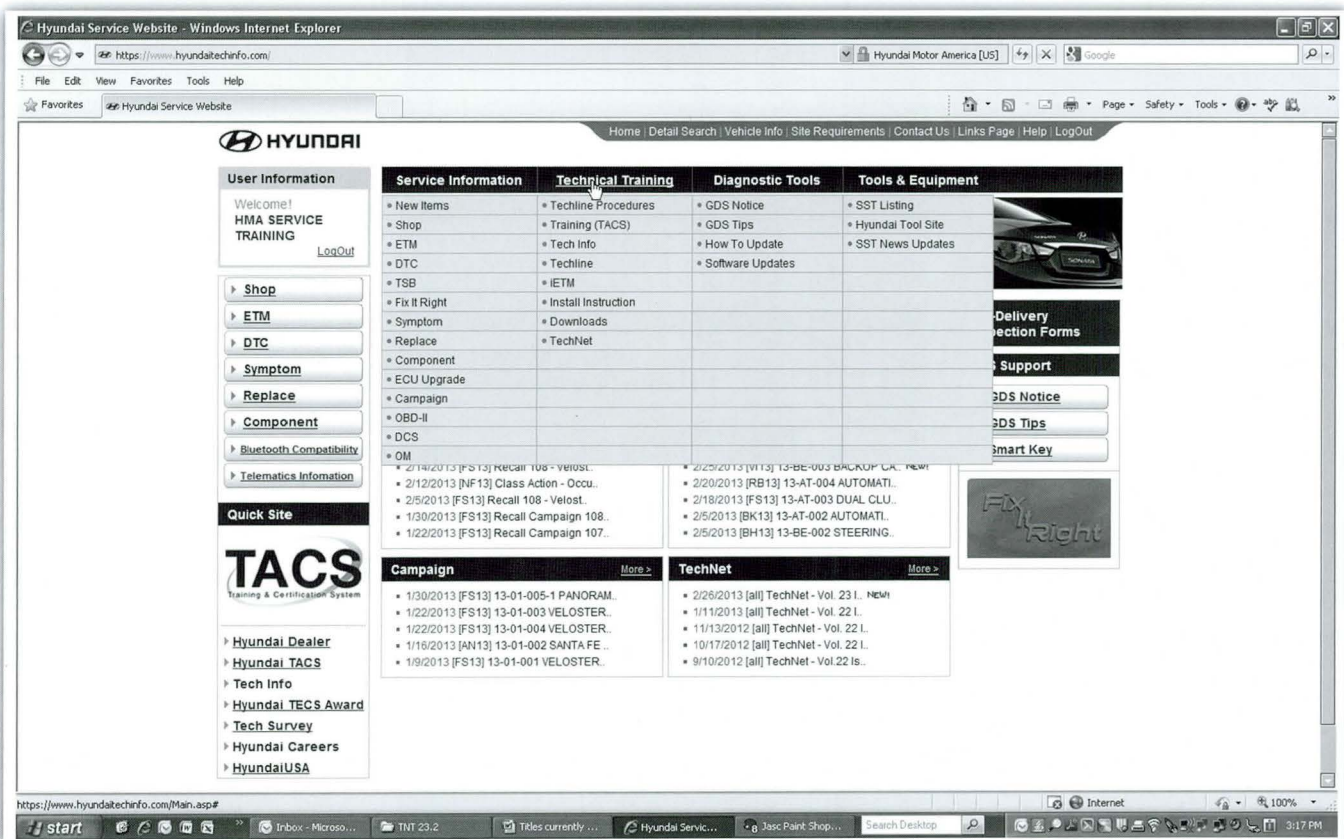
Hyundai Tech Info Titles Available

The Tech Info section found under the “Technical Training” tab at HMAService.com contains several past web training courses no longer located on the TACS dashboard. In addition, there are informative “Tips for the Road” videos developed to enhance driver understanding

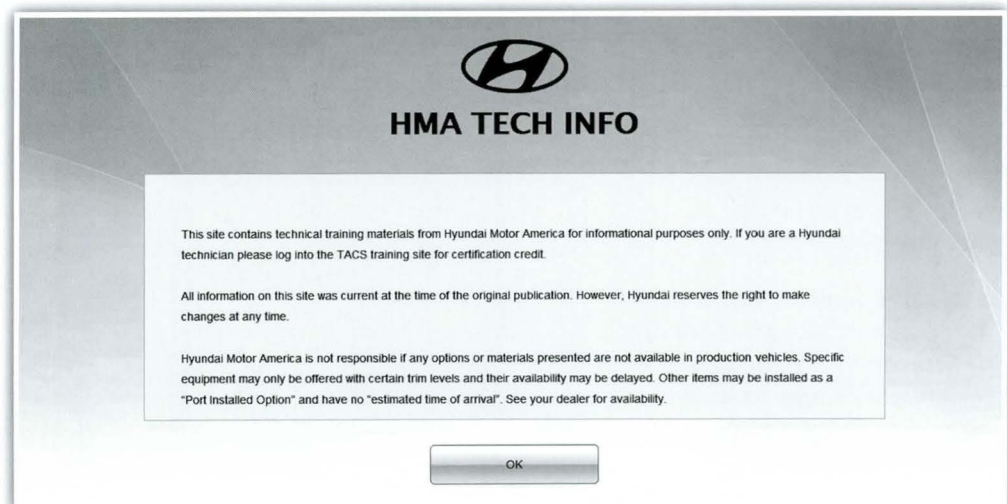
and enjoyment of Hyundai model features. The catalog of web courses includes past New Model and New Technology titles that offer introduction to systems that debuted with their respective models.

To reach the Hyundai Tech Info library, follow these simple steps:

1. After logging into HMAService.com, roll your cursor over the “Technical Training” tab at the top of the home page. A dropdown menu will appear.



2. With the menu open, scroll down to the Tech Info button and click on it and the Tech Info welcome page will open in a new window.
3. Next, Click OK and the Tech Info catalog will display.





Latest News

Welcome to the new updated "HMA Tech Info" Site.... It will be populated with Hyundai Motor America legacy training n



2012 Azera New Model



2011 Elantra New Model



2011 Sonata New Model



Tire Pressure Monitoring ...



Tire Pressure Monitoring ...

Video Window Fogging Ti ...

2013 Genesis Coupe
Techno ...

2012 Genesis Sedan
Techno ...

Video VR and Bluetooth Ti ...

Video - ECO Features - Ti ...

Video - TPMS - Tips for t ...

2007 Veracruz New Model

2010 Tucson New Model

- The most popular courses are prominently displayed. Click in the corresponding picture to open the course or video.
- For the balance of titles, scroll through the navigation bar on the right side of the screen.

Additional titles are continuously added to Tech Info so check in often to remain up to date on Hyundai's body of training materials

Titles currently available at Tech Info:

- Tire Pressure Monitoring System
- 2013 Genesis Coupe Technology
- 2012 Genesis Sedan Technology
- 2012 Azera New Model
- 2011 Sonata New Model
- 2011 Sonata Turbo New Model
- 2011 Sonata Hybrid New Model
- 2010 Genesis Coupe New Model
- 2010 Tucson New Model
- 2007 Veracruz New Model
- ECO Features Tips for the Road
- TPMS Tips for the Road
- VR Buttons Tips for the Road
- Window Fogging Tips for the Road

Why Should I...

...make sure my GDS unit has the correct Dealer Code registered?

When a dealership changes hands, a new Dealer Code is assigned and the previous Dealer Code is discontinued. HTSS cross-references the Dealer Code in your GDS unit with the dealership database. If the code is not found, you will not have access to the search shortcuts that HTSS provides.

...always review the links offered in HTSS?

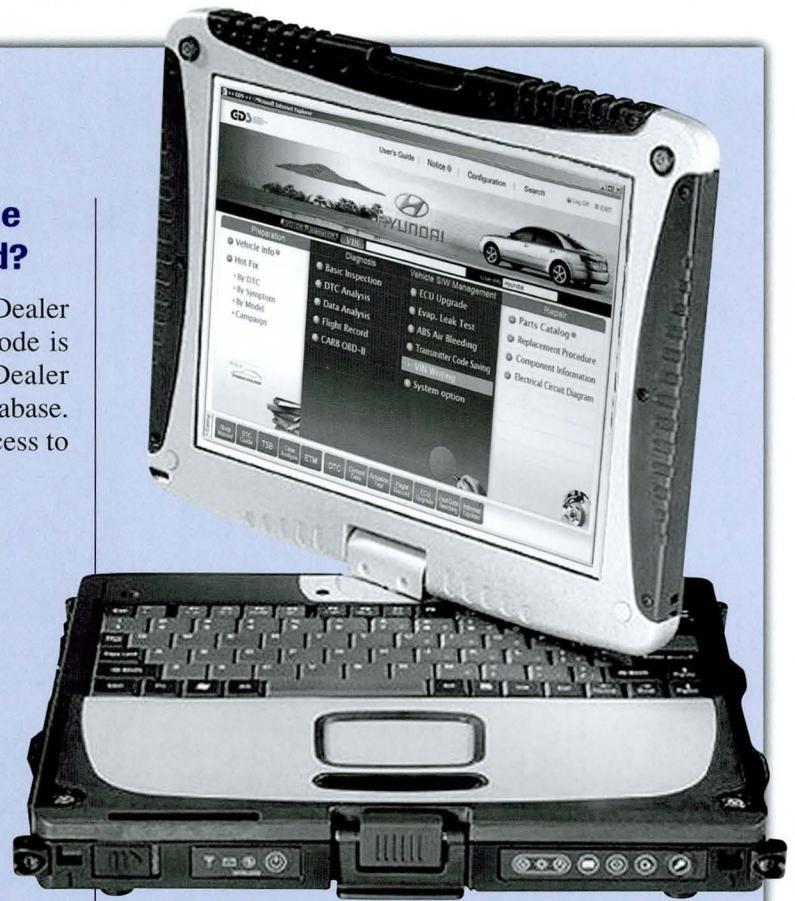
Even if you are familiar with a repair procedure, occasionally recommended procedures change. Technical Service Bulletins are revised and reissued. HTSS catalogs the latest updated information. Perhaps a detected DTC did not generate any links this week. Material is continuously being added to the HTSS database; so new information for the same condition may appear at its next occurrence.

...enter an active and accurate email address in my TACS information?

HMA uses your TACS email address to alert you of ways you can periodically earn Star Awards points by completing recommended online training. Also, if you leave feedback after your HTSS session, your TACS email is the only way we can reply to your feedback. In some cases, technicians have received gifts for their suggestions that resulted in additional information added to the HTSS database. Make sure we can find and communicate with you.

...double-check my internet connection and popup blocker settings in my shop network?

The HTSS GDS application requires internet connectivity to function. We have heard from technicians that could not access the content when clicking



on an HTSS link. This may be caused by popup blocking software or other firewall settings in your network. See your dealership's IT manager if you have questions about the functionality of HTSS over your network.

...keep the HTSS window open as I continue my diagnosis?

You don't have to close HTSS to view your GDS DTC page again. You only need to learn the toggling between windows procedure available on your computer by using the ALT+TAB keys. When HTSS launches, it is in a new window. Your GDS DTC page is actually still on your desktop, but behind the HTSS screen. ALT+TAB allows you to select which open window you want to view.

Fix-It-Right

ECM UPDATE - MIL ON WITH DTC P0441

This article provides the procedure to update the Engine Control Module (ECM) of some 2010-2011MY SANTA FE (CM) 2.4L vehicles which may experience malfunction indicator lamp illuminated with the ECM (Electronic Control Module) system-related DTC P0441.

- DTC P0441: Evaporative Emissions System Incorrect Purge Flow

NOTE: There are no vehicle performance issues associated with this condition.

APPLICABLE VEHICLE:

2010-2011 SANTA FE (CM) vehicles equipped with 2.4L engines

NOTE: To verify the vehicle is affected, be sure to check the version of the vehicle's control unit ROM ID with reference to the ROM ID Information Table below before attempting to update the control unit software.

EVENT #218 – ROM ID INFORMATION TABLE

MODEL	MODEL YEAR	ECU PIN		ROM ID	
		A/T	M/T	PREVIOUS	NEW
Santa Fe (CM) 2.4L	2010	39104-2G340	39114-2G340	FAC4MK4A FAC4MK5A FAC4ML0A	FAC4ML0B
	2011	39104-2G341	39114-2G341	FBC4MM2A	FBC4MM2B

SERVICE PROCEDURE:

GDS SYSTEM AND ECM UPDATE PRECAUTIONS:



CAUTION: Please ensure the following items for the ECM update:

- Make sure the vehicle's battery has reasonable charge. If the vehicle has been in storage for days, run the engine to ensure an adequate battery charge state for reliable update results. The ECM Update procedure contains a check to ensure that battery voltage is above 12 volts to allow the procedure to occur.

- The USB cable must be used for ECM Update between the GDS and VCI the procedure will not work in VCI wireless mode.
- Make sure the GDS laptop battery indicator in the lower right tray icons has 50% or more charge remaining. Charge the laptop battery with the AC adaptor cable if lower.
- Turn off all lamps (do not leave head lamp switch in auto mode) and all accessories (including heater, A/C, blower, radio, seat warmer, defroster, etc.) to prevent battery discharge during the update.
- Perform update with the ignition switch in the ON position.
- Be careful not to disconnect any cables connected to the vehicle or scan tool during the update.
- Do not start the engine during update.
- Do not turn off the ignition switch during update.
- Make sure the GDS system has the latest internet update.

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Fix-It-Right

ECM Update - MIL on with DTC P0441

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1.0-GDS AUTOMATIC UPDATE PROCEDURE: (EVENT #218)

1. Choose **VIN** or **ECU Upgrade** on the initial screen.
2. Enter the vehicle information by pressing the **VIN Auto Detect** button, entering the vehicle's VIN or selecting the vehicle model, **model year**, engine/fuel type and **ENGINE** as the system and then click **OK**. See the screen example below.
3. Select **ECU Upgrade** on the initial screen after entering the vehicle information.
4. Select **Auto Mode** then **ENGINE** in the left **ECU Upgrade** column.
5. Read **Preparation** and click **OK**.
6. The GDS will read the vehicle's ROM ID.
7. After the **Current ROM ID** is displayed, select the **Update Event "218.CMA 2.4 P0441 DTC LOGIC IMPROVEMENT."**

8. After clicking the **Upgrade** button, read the information then click **OK**.

9. The vehicle battery voltage is checked to make sure it is at least 12 volts to ensure reliable update results. Click **OK** if the results indicate **Voltage is OK**.

NOTE: If voltage is below 12 volts, click Cancel and then run the engine at idle at least 10 minutes to ensure an adequate battery charge state for reliable update results.

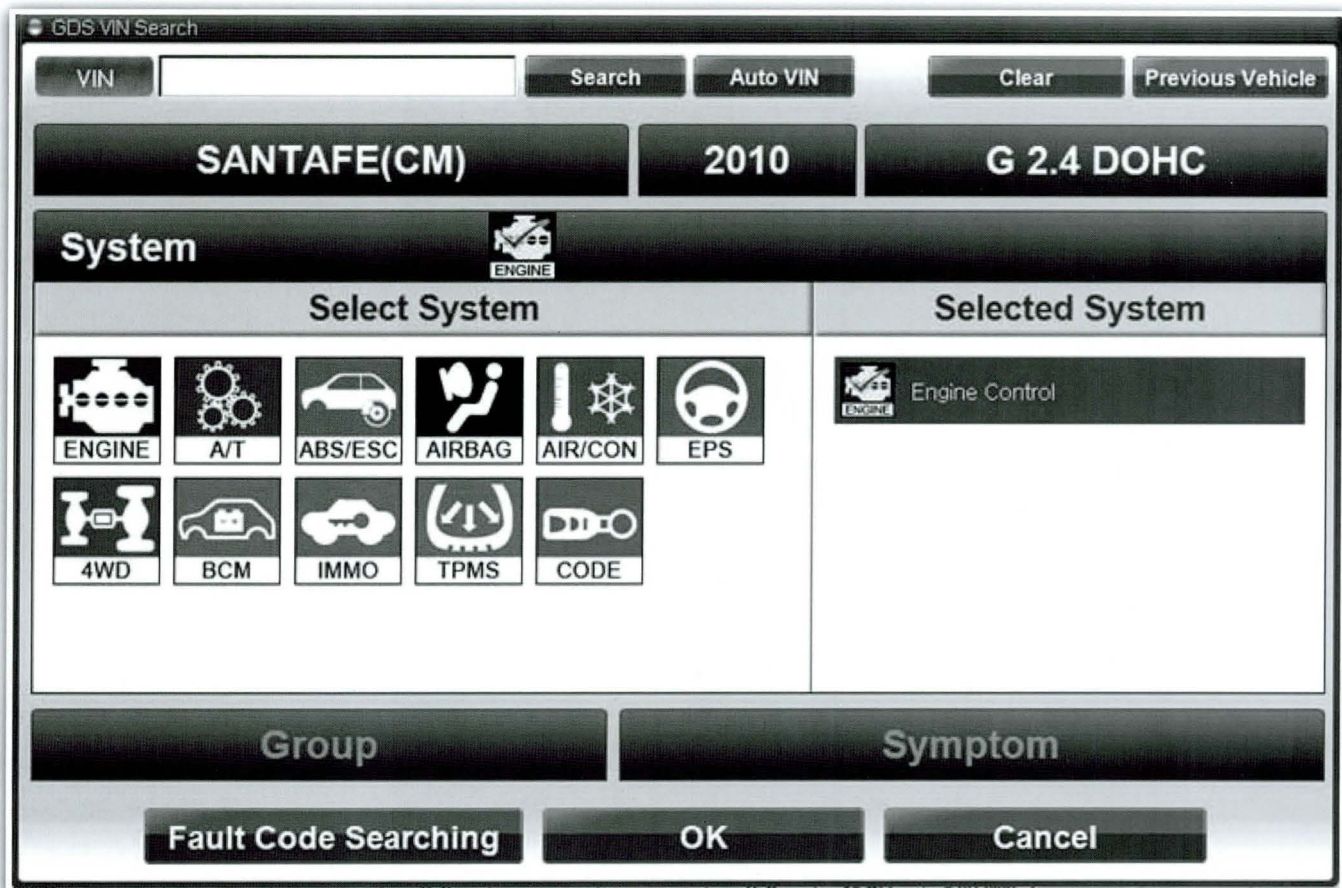
10. Update will begin and the progress of the update will appear on the bar graph.

11. Updating will occur until 100% is reached on the bar graph. Turn the ignition key OFF for 10 seconds, place it back in the ON position and then click **OK** to continue according to **Information** displayed on the screen.

12. Click **OK** on the final screen, which indicates update is complete.

13. Check if any incidental Diagnostic Trouble Codes (DTC) have been created by the update and clear the DTC (s) present.

14. Start the engine to confirm proper operation of the vehicle.



2.0-GDS MANUAL UPDATE PROCEDURE: (EVENT #218)

NOTE: Manual Mode is intended to be used only if Event #218 Auto Mode Update had failed after the progress bar began during the update.

IMPORTANT:

- Pull out the ECM fuse from the engine compartment junction box or disconnect the battery negative cable to reset the ECM before performing manual update.
- If the ECM Update still is not successful, then disconnect the ECM connectors for 10 minutes and retry the ECM Update.

1. Turn the ignition key back to the ON position.
2. Within the ECU Upgrade screen, select **Manual Mode** in the left column, then select **Update Event #218**. Select the appropriate control unit part number with reference to the ROM ID Information Table and click **OK**.



NOTE: Do not select the "+IMMO" part numbers. Santa Fe vehicles for U.S.A. do not have an immobilizer.

3. Enter the appropriate Event #218 password from table below and then click OK.

MENU	PASSWORD
CMA 2.4 ULEV -IMMO: 39104/39114-2G340	2340
CMA 2.4 ULEV -IMMO: 39104/39114-2G341	2341

4. The vehicle battery voltage is checked to make sure it is at least 12 volts to ensure reliable update results. Click **OK** if the results indicate **Voltage is OK**.

NOTE: If voltage is below 12 volts, click **Cancel** and then run the engine to ensure an adequate battery charge state for reliable update results.

5. Update will begin and the progress of the update will appear on the bar graph.
6. Updating will occur until 100% is reached on the bar graph. Turn the ignition key OFF for 10 seconds, place it back in the ON position and then click **OK** to continue according to **Information** displayed on the screen.
7. Click **OK** on the final screen, which indicates update is complete.
8. Check if any incidental Diagnostic Trouble Codes (DTC) have been created by the update and clear the DTC(s) present.
9. Start the engine to confirm proper operation of the vehicle.

WARRANTY CLAIM INFORMATION:

OP CODE	OP NAME	OP TIME	CAUSAL P/N	NATURE	CAUSE
39110F4E	ECM Upgrade (2010 MY Santa Fe)	0.3 M/H	39104-2G340 (A/T) 39114-2G340 (M/T)	N69	C40
	ECM Upgrade (2011 MY Santa Fe)	0.3 M/H	39104-2G341 (A/T) 39114-2G341 (M/T)	N69	C40

CORRECTION

On page 11 in Volume 23, Issue 1 of TechNet Times, the graphic showing the caster adjustments was reversed. The image below has the correct graphic.

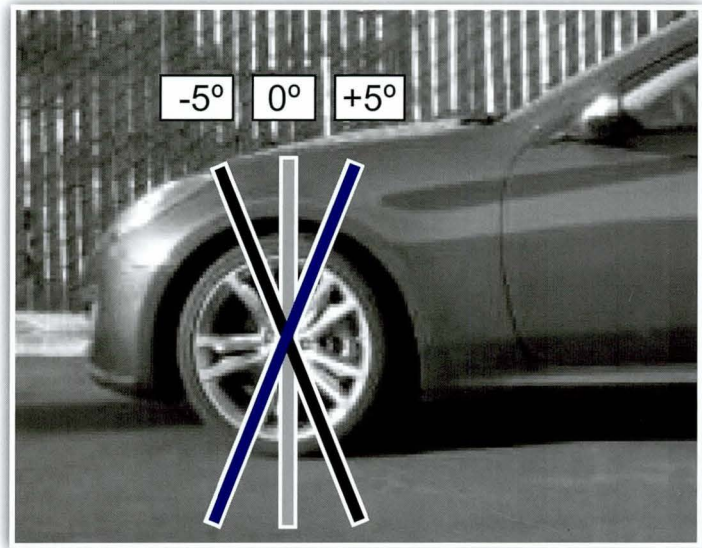
Fix-It-Right

Vehicle Drift/Pull Test Procedure

Caster

When viewing a car from the side, the angle of the vehicle's steering axis is defined by drawing a line through the upper and lower ball joints (for a double wishbone front suspension), or through the strut tower mount and the lower ball joint (for a MacPherson strut front suspension).

- Positive (blue line): The line leans towards the rear of the car.
- Negative (black line): The line leans towards the front of the car.



TECHNET TIDBIT

Hyundai Motor America held its first Technician Orientation Instructor Led course specifically for veterans and active military personnel soon to separate from their commitments. The training is HMA's effort to assist our veterans' transition from military service to civilian employment.

TechNet Times

Volume 23 Issue 2

March 2013

TechNet Times is published monthly by Hyundai Motor America's National Service Training & Support Department for Hyundai Dealership Technicians. The subjects covered in this publication are often one of a kind items, but they may help you to solve similar incidents. In all cases, the diagnostic procedures recommended in the Shop Manuals should always be performed first.

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