| Technical Service Bulletin | GROUP <br> CAMPAIGN | NUMBER 13-01-002 |
| :---: | :---: | :---: |
|  | DATE <br> JANUARY 2013 | MODEL(S) <br> SANTA FE (AN) |
| SUBJECT SANTA FE MDP (SERVICE CAMPA | S UPDATE IGN TN8) |  |

## * IMPORTANT

*****DEALER STOCK ONLY*****
Dealers must perform this Service Campaign on all affected vehicles prior to customer retail delivery.

When a vehicle arrives at the Service Department, access Hyundai Motor America's "Warranty Vehicle Information" screen via WEBDCS to identify open Campaigns.

Description: This bulletin describes the procedure to update the MDPS (motor driven power steering) software on some 2013MY Santa Fe (AN) vehicles.


Applicable Vehicles: Santa Fe (AN) vehicles produced from June 28, 2012 through December 13, 2012

GDS Information:

| EVENT \# | DESCRIPTION |
| :---: | :---: |
| 301 | DMA EPS ECU UPDATE |

ROM ID Information Table:

| Model | System | EPS ECU P/N | ROM ID |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | New |  |
| SANTA FE <br> (AN) | EPS(MDPS) | $56300-4 Z 000$ | $56300-4 Z 0001.05$ | $56300-4 Z 0001.06$ |

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Warranty Information:

| OP CODE | OPERATION | OP TIME |
| :---: | :---: | :---: |
| 20 CG | a6R0 | EPS ECU UPGRADE |

NOTE: Submit Claim on Campaign Claim Entry Screen

## Service Procedure:

## Cautions during ECM update

1) 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.
2) 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.) so that the battery will not be discharged during update.
3) Perform update with the ignition switch in the ON position.
4) Connect the USB cable between the VCI and the GDS when performing the update.
5) Be careful not to disconnect any cables connected to the vehicle or scan tool during update.
6) Do not start the engine during update.
7) Do not turn off the ignition switch during update.

## 1. GDS INSTALLATION PROCEDURE



1. Connect the power supply cable to the diagnostic terminal.

## * NOTE

If attempting to perform the update with the power supply cable disconnected from the diagnostic terminal, make certain that the diagnostic terminal is charged enough for the update. If not, the update may fail in progress. Therefore, it is strongly recommended to connect the power supply cable to the diagnostic terminal during the update procedure.
2. Connect the USB cable between the VCI and the diagnostic terminal.

## * NOTE

When performing the update using the GDS, wireless communication between the VCl and the diagnostic terminal is NOT available. Therefore, be sure to connect the USB cable between the VCl and the diagnostic terminal.
3. Connect the 16-pin DLC cable from the VCI into the vehicle's 16 -pin connector under the driver side instrument panel.
4. Set the ignition to the ON position.

* NOTE

For push-button start vehicles, without depressing the brake pedal push the start button twice.

For standard start vehicles, insert the key into the ignition and turn to the ON position.
For all vehicles, do not start the engine.
Turn the VCl and diagnostic terminal ON .

## 2. AUTOMATIC UPDATE PROCEDURE USING THE GDS

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 EPS (MDPS, Motor Driven Power Steering) as the system and then click OK.

3. Select ECU Upgrade on the initial screen after entering the vehicle information.

4. Select Auto Mode then click Next.

5. Select EPS, then read the Preparation and click OK.

6. The GDS will read the vehicle's ROM ID.
7. After the Current ROM ID is displayed, select the upgrade event, "301.DMA EPS ECU UPDATE."

Click Upgrade.

8. 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.
9. Cycle the ignition OFF, then ON again to begin the update.


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

11. Update will occur until $100 \%$ is reached on the bar graph. Turn the ignition OFF for 10 seconds, and then back ON again. Click OK to continue.

Turn IG off for 10 seconds and then back on. Click the OK button to continue.

## OK

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

The ECU Upgrade is successfully finished.
ROM ID : 56300 - 4 Z 0001.06

## OK

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13. Check if any incidental Diagnostic Trouble Codes (DTC) has been created by the update and clear the DTC (s) present.
14. Start the engine to confirm proper operation of the vehicle.

## 3. MANUAL UPDATE PROCEDURE USING THE GDS

## CAUTION

- Manual update should be performed only when automatic update fails.
- If automatic update fails, cycle the ignition OFF for 10 seconds, then back ON again to reset the control unit before performing manual update.

1. Within the ECU Upgrade screen, select Manual Mode, and then click Next.


## Next

2. Select EPS, then read the Preparation and click Next.

3. Select the upgrade event, "301.DMA EPS ECU UPDATE" and click Next.

4. Latest ROM ID will be displayed as "56300-4Z0001.06." Click Upgrade to continue.

5. Enter the appropriate password from the below table then click OK.

| MENU | PASSWORD |
| :---: | :---: |
| DMA EPS : 56300-4Z000 | 4000 |

6. 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.
7. Cycle the ignition OFF, then ON again to begin the update.
Check the GDS connection
and turn OFF and ON the ignition key.
Cancel
8. Update will begin and the progress of the update will appear on the bar graph.

9. Update will occur until $100 \%$ is reached on the bar graph. Turn the ignition OFF for 10 seconds, and then back ON again. Click OK to continue.

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

11. Check if any incidental Diagnostic Trouble Codes (DTC) has been created by the update and clear the DTC (s) present.
12. Start the engine to confirm proper operation of the vehicle.

