

1 Prepare for flashing

- a. Make sure the scan tool is connected to the dealership's network and is running the newest software version.
- b. Open the vehicle's hood and **install a battery charger**.
Make sure the charger provides a charge of approximately 13 volts.
- c. **Connect the scan tool** to the vehicle's data link connector (located under the steering column) and turn the ignition to ON. Do not start the engine.
- d. If using StarMOBILE, **open the StarMOBILE Desktop Client** on your PC and select your StarMOBILE device.

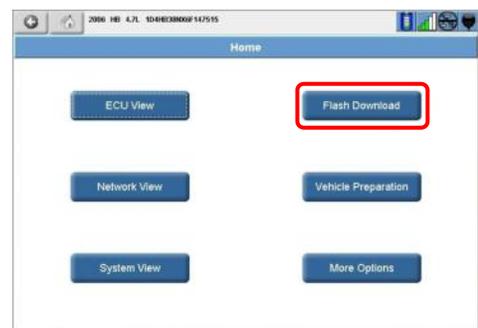
2 Find the latest flash file

If you **replaced a PCM or TCM**, follow the steps below to **search using VIN**.

Otherwise, skip to **Page 3** to **browse by ECU**.

Search using VIN:

- a. From the Home screen, select **Flash Download**.

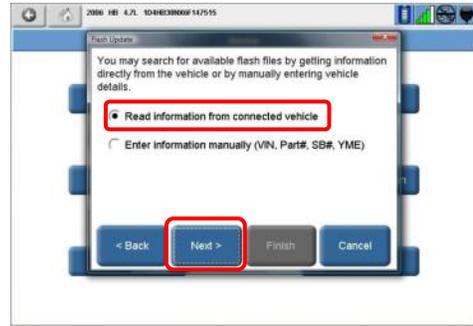


- b. Select **Download files from DealerCONNECT**.

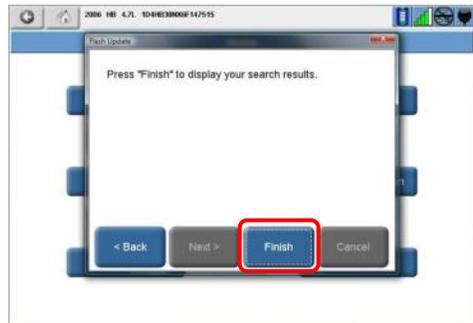
Enter your login information and select **OK**.



c. Select **Read information from connected vehicle**, then **Next**.



d. Select **Next**, then **Finish** to see available flash files for the vehicle.



e. Select the flash file with the appropriate part number.

New P/N	Type	Calibration	Local	Download to Client
05094342AH	PCM	AUTOMATIC FULL TIME 4X4 50 STATE 22 GALLON TANK	⊗	⊗
56028932AG	PCM	AUTOMATIC 50 STATE 2WD 22 GALLON TANK	⊗	⊗
56028933AG	PCM	AUTOMATIC 50 STATE 4WD 22 GALLON TANK	⊗	⊗
56028934AI	PCM	AUTOMATIC 50 STATE 22 GALLON TANK	⊗	⊗
56028935AI	PCM	AUTOMATIC PART TIME 4X4 50 STATE 22 GALLON TANK	⊗	⊗
56028936AI	PCM	AUTOMATIC BLUX	⊗	⊗
56028946AF	PCM	45 STATE 2 WHEEL DRIVE	⊗	⊗
56028947AG	PCM	5 STATE 2 WHEEL DRIVE	⊗	⊗

f. Select **Download to Client**.

When the file has finished downloading, select **Close**.

New P/N	Type	Calibration	Local	Download to Client
05094342AH	PCM	AUTOMATIC FULL TIME 4X4 50 STATE 22 GALLON TANK	⊗	⊗
56028932AG	PCM	AUTOMATIC 50 STATE 2WD 22 GALLON TANK	⊗	⊗
56028933AG	PCM	AUTOMATIC 50 STATE 4WD 22 GALLON TANK	⊗	⊗
56028934AI	PCM	AUTOMATIC 50 STATE 22 GALLON TANK	⊗	⊗
56028935AI	PCM	AUTOMATIC PART TIME 4X4 50 STATE 22 GALLON TANK	⊗	⊗
56028936AI	PCM	AUTOMATIC BLUX	⊗	⊗
56028946AF	PCM	45 STATE 2 WHEEL DRIVE	⊗	⊗
56028947AG	PCM	5 STATE 2 WHEEL DRIVE	⊗	⊗



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Browse by ECU:

- a. From the Home screen, select **ECU View**.

Select the ECU that needs to be flashed.



- b. Select **More Options**.



- c. Select **ECU Flash**.



- d. Select **Browse for New File**.

If you are asked to login to DealerCONNECT, enter your information and select **OK**.



- e. Select the flash file with the appropriate part number and select **Download to Client**.

When the file has finished downloading, select **Close**.



3 Program the ECU

To program the ECU using **StarSCAN** or the **StarMOBILE Dekstop Client**, follow the steps below.



To program the ECU using **StarMOBILE's Standalone Diagnostic Mode**, skip to **Page 6**.



Using StarScan or the StarMobile Desktop Client:

a. Return to the Home screen and Select **ECU View**.



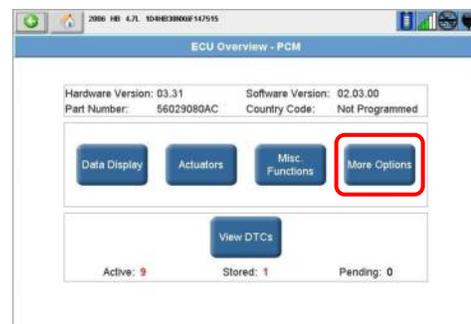
If you previously browsed by ECU, skip to **step e** on **Page 5**.



b. Select the ECU that needs to be flashed.

Controller Name	Active	DTCs	Bus
PCM Powertrain Control Module	<input checked="" type="checkbox"/>	10	CAN C
TCM Transmission Control Module	<input checked="" type="checkbox"/>	4	CAN C
ABS Anti Lock Brakes	<input checked="" type="checkbox"/>	1	CAN C
AMP	<input type="checkbox"/>	---	CAN B
CCN Instrument Cluster/Cabin Compartment Node	<input checked="" type="checkbox"/>	---	CAN B
DDM Driver Door Module	<input checked="" type="checkbox"/>	3	CAN B
EOM Electronic Overhead	<input checked="" type="checkbox"/>	6	CAN B
FCMCGW Central Gateway	<input checked="" type="checkbox"/>	16	DIAG CAN C
HFM	<input checked="" type="checkbox"/>	0	CAN B

c. Select **More Options**



d. Select **ECU Flash**e. Select the downloaded flash file, then **Update Controller**.f. Select **OK** when the ECU update is complete and check that the new part number is shown at the top of the screen.

4 Complete the flash process

- If you **replaced a PCM or TCM** you must perform additional steps. See Appendix A and follow steps for the updated ECU.
- Check the associated **Technical Service Bulletin (TSB)** for additional instructions related to the flash update.
- Type the necessary information on the "**Authorized Modification Label**" (p/n 04275086AB) and attach near the VECI label.



FINISHED

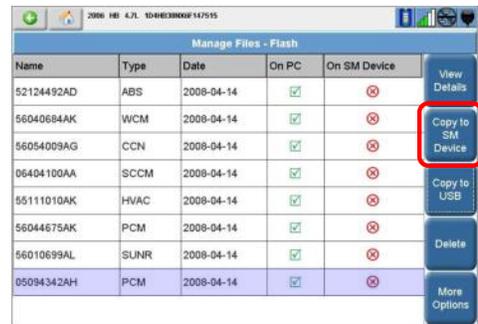
Using StarMOBILE in Standalone Diagnostic Mode

NOTE: You will first use the StarMOBILE Desktop Client to copy the downloaded flash file to your StarMOBILE device. You will then use your StarMOBILE device to perform the flash.

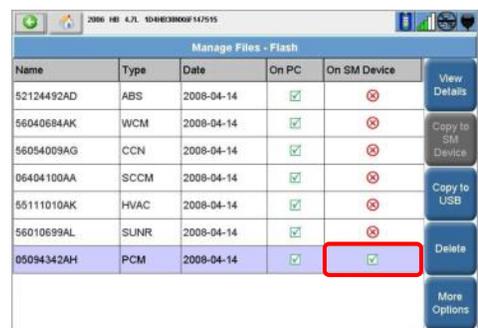
a. Select **Manage Files**.



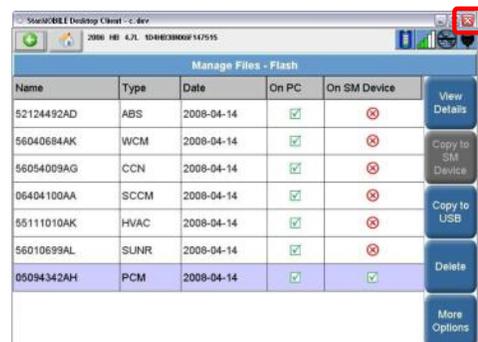
b. Select the downloaded flash file (with appropriate part number) and select **Copy to SM Device**. When the file is done copying, select **Close**.



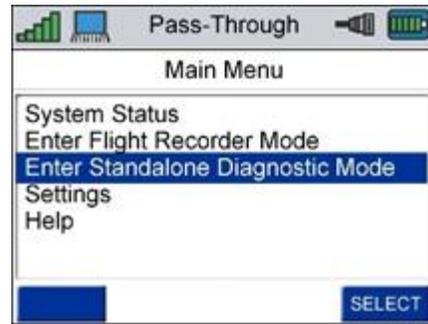
A green check mark should appear in the On SM Device Column.



c. Exit the StarMOBILE Desktop Client by clicking on the **red X** in the upper right hand corner.

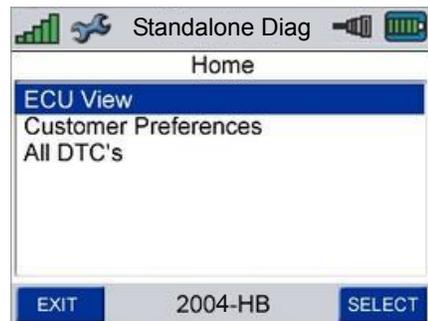


- d. On the **StarMOBILE Device**, use the up and down arrows to highlight **Enter Standalone Diagnostic Mode** and press the **Enter** key.

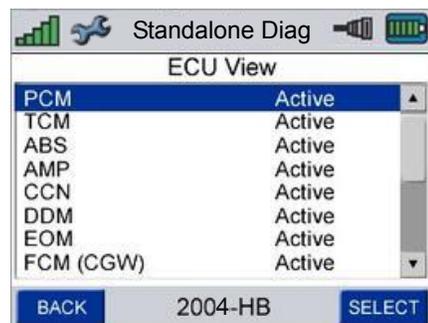


NOTE: If you receive the following error: “Your StarMOBILE Device is currently locked by a PC named ‘xxxxxxx’ on your network”, exit the Desktop Client or restart the StarMOBILE scan tool.

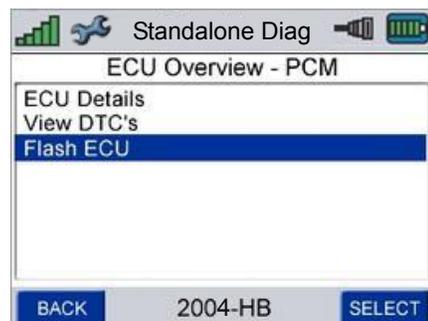
- e. Select **ECU View** from the Home screen.



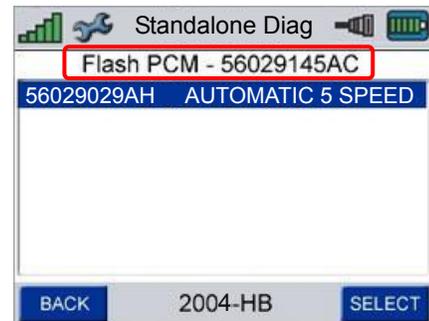
- f. Select the ECU that needs to be flashed.



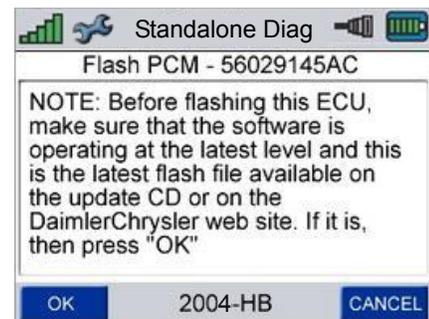
- g. Select **Flash ECU**.



- h. Write down the part number at the top of the screen.



- i. Select the flash file you want to use and follow the on-screen instructions.



4 Complete the flash process

- a. If you **replaced a PCM or TCM** you must perform additional steps. See Appendix A and follow steps for the updated ECU.
- b. Check the associated **Technical Service Bulletin (TSB)** for additional instructions related to the flash update.
- c. Type the necessary information on the **"Authorized Modification Label"** (p/n 04275086AB) and attach near the VECI label.



FINISHED

Appendix A: Additional Procedures for NGC3 / NGC4 PCM

1 Obtain the vehicle's PIN (Personal Identification Number). You can find the PIN on the original selling invoice, on DealerCONNECT (under the "Parts > Key Codes" section), or by contacting the District Manager.

2 If the vehicle is **WCM equipped**:

- From the scan tool's home screen select **ECU View**
- Select **WCM**
- Select **Misc. Functions**
- Select **PCM Replaced** and follow the instructions
- When the process is completed, select **Finish**

3 Perform the **Check PCM Odometer** function:

- From the scan tool's home screen select **ECU View**
- Select **PCM**
- Select **Misc. Functions**
- Select **Check PCM Odometer** and follow the instructions
- When the process is completed, select **Finish**

4 If the vehicle is **ETC equipped**:

- Select **Learn ETC** and follow the instructions
- When the process is completed, select **Finish**

5 If the vehicle is **EATX equipped**:

- From the scan tool's home screen select **ECU View**
- Select **TCM**
- Select **Misc. Functions**
- Select **Quicklearn** and follow the instructions
- When the process is completed, select **Finish**

6 If the vehicle is **not WCM equipped**:

- Select **PCM VIN** and follow the instructions
- When the process is completed, select **Finish**

Appendix A: Additional Procedures for GPEC PCM

1 If the vehicle is **equipped with a CVT**, ensure that the TCM has the latest software calibration available. If the vehicle is **not equipped with a CVT**, skip to **step 3**.

2 If the vehicle is **WCM equipped**:

- From the scan tool's home screen select **ECU View**
- Select **WCM**
- Select **Misc. Functions**
- Select **PCM Replaced** and follow the instructions
- When the process is completed, select **Finish**

3 Perform the **Learn ETC** function:

- From the scan tool's home screen select **ECU View**
- Select **PCM**
- Select **Misc. Functions**
- Select **Learn ETC** and follow the instructions
- When the process is completed, select **Finish**

4 Perform the **Check PCM Odometer** function:

- Select **Check PCM Odometer** and follow the instructions
- When the process is completed, select **Finish**

5 If the vehicle is **not WCM equipped**, perform the **PCM VIN** function:

- Select **PCM VIN** and follow the instructions
- When the process is completed, select **Finish**

6 If the vehicle is **EATX equipped**, perform the **Quicklearn** function:

- From the scan tool's home screen select **ECU View**
- Select **TCM**
- Select **Misc. Functions**
- Select **Quicklearn** and follow the instructions
- When the process is completed, select **Finish**

Appendix A: Additional Procedures for CVT / EGS TCM

If you replaced a **CVT TCM** follow the steps below.

- 1** Perform the **Initialize CVT** function:
 - a. From the scan tool's home screen select **ECU View**
 - b. Select **TCM**
 - c. Select **Misc. Functions**
 - d. Select **Initialize CVT** and follow the instructions
 - e. When the process is completed, select **Finish**

If you replaced an **EGS TCM** follow the steps below.

- 1** Perform the **Initialize EGS** function:
 - a. From the scan tool's home screen select **ECU View**
 - b. Select **TCM**
 - c. Select **Misc. Functions**
 - d. Select **Initialize EGS** and follow the instructions
 - e. When the process is completed, select **Finish**