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GROUP:	Vehicle Performance
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#### THIS BULLETIN SUPERSEDES TECHNICAL SERVICE BULLETIN 18-009-15 REV. E, DATED SEPTEMBER 01, 2015, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\* AND INCLUDE AN ADDITIONAL MODEL YEAR AND LABOR OPERATION.

THIS SERVICE BULLETIN IS ALSO BEING RELEASED AS RAPID RESPONSE TRANSMITTAL (RRT) 15-009. ALL APPLICABLE SOLD AND UN-SOLD RRT VIN'S HAVE BEEN LOADED. TO VERIFY THAT THIS RRT SERVICE ACTION IS APPLICABLE TO THE VEHICLE, USE VIP OR PERFORM A VIN SEARCH IN TECHCONNECT. ALL REPAIRS ARE REIMBURSABLE WITHIN THE PROVISIONS OF WARRANTY.

HELP USING THE WITECH DIAGNOSTIC APPLICATION FOR FLASHING AN ECU IS AVAILABLE BY SELECTING "HELP" THEN "HELP CONTENTS" AT THE TOP OF THE WITECH DIAGNOSTIC APPLICATION WINDOW.

THE wITECH SOFTWARE IS REQUIRED TO BE AT THE LATEST RELEASE BEFORE PERFORMING THIS PROCEDURE.

#### SUBJECT:

Flash: 1.4L Drivability Improvements

#### OVERVIEW:

This bulletin involves selectively erasing and reprogramming the Powertrain Control Module (PCM) with new software.

#### MODELS:

\*\*2014 - 2016\*\*

(PF)

Dodge Dart

NOTE: This bulletin applies to vehicles within the following markets/countries: NAFTA, LATAM, EMEA, APAC.

NOTE: \*\*This bulletin applies to 2016 vehicles built on or after July 28, 2015 (MDH 0728XX) and on or before August 21, 2015 (MDH 0821XX) with a 1.4L Engine (Sales Code EAF).\*\*

#### SYMPTOM/CONDITION:

A small number of customers may experience one or more of the following symptoms and/or a Malfunction Indicator Lamp (MIL) illumination. Upon further investigation the technician may find one or more of the Diagnostic Trouble Codes (DTCs) listed below:

#### \*\*2016 Dart

- Engine cranks as if it has no compression.
- Engine sounds like it is knocking at idle, noise goes away when off idle.
- P0141 O2 Sensor 1/2 Heater Performance.\*\*

#### 2015 Dart

- Engine cranks as if it has no compression.
- Engine sounds like it is knocking at idle, noise goes away when off idle.
- P0141 O2 Sensor 1/2 Heater Performance.
- P1046 Cylinder 1 Oil Supply Solenoid Valve Overcurrent.
- P1048 Cylinder 2 Oil Supply Solenoid Valve Overcurrent.
- P104A Cylinder 3 Oil Supply Solenoid Valve Overcurrent.
- P104C Cylinder 4 Oil Supply Solenoid Valve Overcurrent.
- P1D73 Active Grill Shutter (AGS) Performance.
- P113D O2 Sensor 1/1 Slow Response.
- Engine bump sensation felt during moderate to heavy acceleration over 3500 RPM.
- P061A Level 2 torque performance set.
- Engine difficult to restart after cold or warm soak periods.
- Intermittent high coolant temp warning lamp illumination when using cruise control. Condition occurs in conjunction with the P061A DTC listed above.
- Poor A/C performance primarily during extended hot idle and/or low speed driving conditions. Applies to vehicles built with 1234YF refrigerant sales code XFC.
- Cold start difficulty below -10C (14F) ambient temperatures. Engine cranks fast and possibly does not start due to loss of crankshaft synchronization until key cycle is performed. (Vehicles built on or after August 23, 2014 (MDH 0823XX) and on or before June 16, 2015 (MDH 0615XX)).

#### 2014 Dart

- P1128 Closed Loop Fueling Not Achieved Bank 1 Upstream.
- Engine cranks as if it has no compression.
- Engine sounds like it is knocking at idle, noise goes away when off idle.
- P0141 O2 Sensor 1/2 Heater Performance.
- P1D73 Active Grill Shutter (AGS) Performance.
- Engine bump sensation felt during moderate to heavy acceleration over 3500 RPM.
- DTC P061A Level 2 torque performance set.
- Engine difficult to restart after cold or warm soak periods.
- Intermittent high coolant temp warning lamp illumination when using cruise control. Condition occurs in conjunction with the P061A DTC listed above.
- Poor A/C performance primarily during extended hot idle and/or low speed driving conditions. Applies to vehicles built with 1234YF refrigerant sales code XFC.
- Black smoke from tail pipe on initial start up during cold ambient temperatures.
- Cold start difficulty below -10C (14F) ambient temperatures. Engine cranks fast and possibly does not start due to loss of crankshaft synchronization until key cycle is performed. (Vehicles built on or after August 23, 2014 (MDH 0823XX) and on or before June 16, 2015 (MDH 0616XX)).

#### **DIAGNOSIS:**

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in TechCONNECT, verify all engine systems are functioning as designed. If DTCs other than the ones listed above are present, record them on the repair order and repair as necessary before proceeding further with this bulletin.

If a customer's VIN is listed in VIP or your RRT VIN list, perform the repair. For all other customers that describe the symptom/condition, or if the technician finds any of the DTCs listed above perform the Repair Procedure.

### REPAIR PROCEDURE:

# NOTE: Install a battery charger to ensure battery voltage does not drop below 13.2 volts. Do not allow the charging voltage to climb above 13.5 volts during the flash process.

#### NOTE: If this flash process is interrupted/aborted, the flash should be restarted.

 Reprogram the PCM with the latest available software. Detailed instructions for flashing control modules using the wiTECH Diagnostic Application are available by selecting the "HELP" tab on the upper portion of the wiTECH window, then "HELP CONTENTS." This will open the Welcome to wiTECH Help screen where help topics can be selected.

## NOTE: If the PCM already has the latest software, use inspection LOP 18-19-06-EC to close the action RRT.

- 2. Perform Cruise Control Learn Procedure.
  - a. Turn the Ignition Key to the OFF/LOCK position for 10 seconds to allow the module to power down.
  - b. Turn the Ignition Key to the ON/RUN position.
  - c. Press, then release the Cruise ON/OFF button on the steering wheel.
  - d. Start the engine.
  - e. Press the Cruise ON/OFF button to verify that the Cruise indicator illuminates on the cluster.
- 3. Is vehicle equipped with a manual transmission?
  - a. Yes >>> DTC P1302 Transmission Self Learning will be present. **Depress clutch** pedal fully, to allow the DTC to switch from active to store, proceed to Step #4.
  - b. No >>> DTC P1302 Transmission Self Learning will be stored, proceed to Step #4.
- 4. After PCM reprogramming, the following must be performed: Clear any DTCs that may have been set in other modules due to reprogramming. The wiTECH application will automatically present all DTCs after the flash and allow them to be cleared.

#### POLICY:

Reimbursable within the provisions of the warranty.

#### TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
18-19-06-EC	Module, Powertrain Control (PCM) - Inspection (0 - Introduction)	8 - Engine Performance	0.2 Hrs
**18-09-06-EK**	Module, Powertrain Control (PCM) - Reprogram (0 - Introduction)	8 - Engine Performance	0.3 Hrs

NOTE: The expected completion time for the flash download portion of this procedure is approximately 5 minutes. Actual flash download times may be affected by vehicle connection and network capabilities.

#### FAILURE CODE:

The dealer must choose which failure code to use. If the customer came in with an issue and the dealer found updated software to correct that issue, use failure code CC, for all other use failure code RF.

- CC Customer Concern (Ex. Customer comes in with a concern and updated (flash) software is found pertaining to the concern).
- RF Routine Flash (Ex. Customer comes in with no concern but updated (flash) software is found in VIP, wiTECH or wiADVISOR).

CC	Customer Concern
RF	Routine Flash