THIS BULLETIN SUPERSEDES SERVICE BULLETIN 18-004-16, DATED JANUARY 08, 2016, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH **ASTERISKS** AND INCLUDE REMOVAL OF BUILD DATES, THE ADDITION OF A DIAGNOSTIC TROUBLE CODE (DTC) AND UPDATED LABOR OP.

THIS SERVICE BULLETIN IS ALSO BEING RELEASED AS RAPID RESPONSE TRANSMITTAL (RRT) 15-013 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.

FOR HELP WITH USING wiTECH FOR ECU FLASH REPROGRAMMING, CLICK ON THE APPLICATION'S "HELP" TAB.

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

SUBJECT:
Flash: 2.4L Powertrain Diagnostic And System Improvements

OVERVIEW:
This bulletin involves reprogramming the Powertrain Control Module (PCM) with the latest available software.

MODELS:

2014 - 2015	(KL)	Jeep Cherokee

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

NOTE: This bulletin applies to all models equipped with a 2.4L engine (Sales Code ED6) or equipped with a 2.4L engine (Sales Code ED8).

SYMPTOM/CONDITION:
Some customers may experience a Malfunction Indicator Lamp (MIL) illumination. Upon further investigation the technician may find one or more of the following DTCs:

2015 KL Only

- **P0335 - Crankshaft Position Sensor Circuit.**
- P0456 - EVAP System Small Leak.
- P0300 - Multiple Cylinder Misfire.
- P0301 - Cylinder 1 Misfire.
- P0302 - Cylinder 2 Misfire.
- P0303 - Cylinder 3 Misfire.
- P0304 - Cylinder 4 Misfire.
- P2610 - PCM Internal Engine Off Timer Performance.
- P1607 - PCM Internal Shutdown Timer Rationality.
- U0402 - Implausible Data Received From TCM (ED6).
- P0116 - Engine Coolant Temperature Sensor 1 Performance.
- P050D - Cold Start Rough Idle.
- P2172 - High Airflow/Vacuum Leak Detected.
- P219A - Air-Fuel Ratio Cylinder Imbalance Bank 1 has been set in the PCM.

2014 KL Only

- P2172 - High Airflow/Vacuum Leak Detected.
- P219A - Air-Fuel Ratio Cylinder Imbalance Bank 1 has been set in the PCM.
- P106A - Cylinder 3 Oil Supply Solenoid Valve Switch Off Time Out Of Range.
- P2251 - O2 Sensor 1/1 Negative Current Control Circuit Open.
- P0031 - O2 Sensor 1/1 Heater Circuit Low.

In addition, some customers may experience one or more of the following conditions:

- Cold Engine Startup Flare and Idle Surge (ED6).
- Intermittent elevated engine RPM at start up.
- Less than desired gear engagement in lower ambient temperatures.
- Less than desired idle performance.

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: The Transmission Control Module (TCM) must be updated to the latest available software at the conclusion of this repair procedure. Refer to all applicable published service bulletins for detailed repair procedures and labor times regarding updating the TCM software.

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.

1. Reprogram the PCM with the latest software. Detailed instructions for flashing control modules using the wiTECH Diagnostic Application are available by selecting the application's "HELP" tab.

NOTE: If the PCM already has the latest software, use LOP 18-19-06-ZH to close the RRT portion of this service action.

2. Clear any DTCs that may have been set in all modules due to reprogramming. The wiTECH application will automatically present all DTCs after the flash and allow them to be cleared.
3. Verify the Transmission Control Module (TCM) is programmed with the latest available software. Refer to all applicable published service bulletins for detailed repair procedures and labor times regarding updating the TCM software.

POLICY:
Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
**18-19-06-JU	Module, Powertrain Control (PCM) - Reprogram (0 - Introduction)	1 - Engine Repair And Performance	0.2 Hrs**
18-19-06-ZH	Module, Powertrain Control (PCM) - Inspect (0 - Introduction)	1 - Engine Repair And Performance	0.2 Hrs

NOTE: The expected completion time for the flash download portion of this procedure is approximately 4 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.

- If the customer's concern matches the SYMPTOM/CONDITION identified in the Service Bulletin, failure code CC is to be used.
- If an available flash is completed while addressing a different customer concern, failure code RF is to be used.

CC	Customer Concern
RF	Routine Flash