

**NUMBER:** 21-013-15

**GROUP:** Transmission and

Transfer Case

**DATE:** March 03, 2015

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THIS BULLETIN SUPERSEDES SERVICE BULLETIN 21-005-14, DATED FEBRUARY 15, 2014, AND 21-015-14 DATED APRIL 17, 2014 WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\* AND INCLUDE ADDITIONAL SOFTWARE ENHANCEMENTS AND NEW LABOR OPS

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 LEVEL MUST BE AT 15.03 OR HIGHER TO PERFORM THIS PROCEDURE.

### SUBJECT:

Flash: AS69RC/AS66RC Transmission Shift And Diagnostic Enhancements

#### **OVERVIEW:**

This bulletin involves reprogramming the Transmission Control Module (TCM) with the latest available software.

### **MODELS:**

2013-2014	(D2)	Ram 3500 Pickup
2013-2014	(DD)	Ram 3500 Cab Chassis
2013-2014	(DP)	Ram 4500/5500 Cab Chassis

NOTE: This bulletin applies to vehicles equipped with the following:

- 6.7L Cummins Diesel engine (sales code ETK) and an Aisin AS69RC automatic transmission (sales code DF2).
- 6.4L gas engine (sales code ESB) and an AS66RC Aisin automatic transmission (sales code DF3).

#### SYMPTOM/CONDITION:

A small number of customers may experience one or more of the following conditions.

# Vehicles equipped with an AS69RC automatic transmission (sales code DF2)

- \*\* Less than desired towing performance while using cruise control.
- Harsh engagement while shifting from neutral to drive, neutral to reverse, or park to reverse with vehicle still in motion (rolling garage shift).
- Transmission Oil Temperature light illumination during high engine and tow loads.

- Engine flare during 2-1 tip in downshift.
- Less than desired shift quality during 6-5, 5-4 coasting downshifts.
- Delayed downshifts in Tow/Haul mode while driving down grades.
- Less than desired transmission shift performance when transitioning from low traction surface to high traction surfaces. (i.e. ice covered road to clear pavement).
- Harsh 2-1 downshift.
- Less than desired shift points during light pedal and Wide Open Throttle (WOT) operation or while in Tow/Haul and engine brake modes.\*\*
- Delayed engagement when shifting from neutral to drive, neutral to reverse, or park to reverse (garage shifts).
- Audible squawk noise on 4-3 downshift.
- Poor vehicle acceleration in first gear with vehicle fully loaded.
- Malfunction Indicator Lamp (MIL) illumination with no defect found for Diagnostic Trouble Code (DTC) P253D - PTO Sense Circuit High.

## \*\*AS66RC automatic transmission (sales code DF3)

- Transmission Oil Temperature light illumination during high engine and tow loads.
- Less than desired towing performance while using cruise control.
- Harsh engagement while shifting from neutral to drive, neutral to reverse, or park to reverse with vehicle still in motion (rolling garage shift)
- Engine flare during 2-1 tip in downshift.
- Less than desired shift quality during 6-5, 5-4 coasting downshifts.
- Delayed downshifts in Tow/Haul mode while driving down grades.
- Less than desired transmission shift performance when transitioning from a low traction to high traction surfaces. (i.e. ice covered road to clear pavement).
- Less than desired shift points during light pedal and Wide Open Throttle (WOT) operation or while in Tow/Haul and engine brake modes.\*\*

#### **DIAGNOSIS:**

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

If the customer describes the symptom/condition listed above or if the technician finds the DTC 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 TCM with the latest available calibration. 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.
- 2. Once programming is complete, perform the "Quick Learn" procedure using the wiTECH diagnostic scan tool.

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3. Clear any DTCs that may have been set in any module due to reprogramming. The wiTECH application will automatically present all DTCs after the flash and allow the tech to clear them.

### **POLICY:**

Reimbursable within the provisions of the warranty.

### TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
**18-19-05-B1**	Module, Transmission Control (TCM) - Reprogram (0 - Introduction)	2 - Automatic Transmission	0.3 Hrs.

NOTE: The expected completion time for the flash download portion of this procedure is approximately 3 minutes. Actual flash download times may be affected by vehicle connection and network capabilities.

# **FAILURE CODE:**

FM	Flash Module