

**NUMBER:** 21-024-15 REV. C

**GROUP:** Transmission and

**Transfer Case** 

**DATE:** December 05, 2015

This bulletin is supplied as technical information only and is not an authorization for repair. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise, without written permission of FCA US LLC.

THIS BULLETIN SUPERSEDES SERVICE BULLETIN 21-024-15 REV. B, DATED SEPTEMBER 23, 2015, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\* AND INCLUDE UPDATED SYMPTOM/CONDITIONS, CLEAN DATE AND NEW LABOR OPERATION.

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: Transmission Shift And Drivability Enhancements

#### **OVERVIEW:**

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

### **MODELS:**

2016 (FB) Fiat 500X

NOTE: This bulletin applies to vehicles built on or before \*\*October 24, 2015 (MDH 1024XX)\*\* equipped with a 2.4L Engine (Sales Code ED6), 948TE Automatic Transmission (Sales Code DFH) and \*\*3.734 Final Drive Ratio (Sales Code DME).\*\*

# SYMPTOM/CONDITION:

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

- P0711 Transmission Fluid Temperature Sensor A Circuit Range-Performance.
- P1CC9 Unable to Engage Gear.
- P1D98 Incorrect Gear Ratio Clutch B or D Defective.
- P1DAD Input Shaft-Output Shaft Direction Correlation.
- U1424 Implausible Engine Torque Signal Received.

In addition, the customer may also experience one or more of the following transmission related conditions:

- Garage Shifts (Shifting from Park or Neutral into Drive or Reverse).
- Harsh 1-2 upshifts.
- Less than desired accelerator pedal response in Sport and TractionPlus modes.
- RPM flare at engine start.
- Less than desired idle performance when shifting into DRIVE or REVERSE following a cold start.

\*\*The following enhancements are included in the software update:

- Improved paddle shifter operation.
- Improve transmission shift enhancements for sand and snow mode.\*\*

#### **DIAGNOSIS:**

Using a Scan Tool (wiTECH) with the appropriate Diagnostic Procedures available in TechCONNECT, verify all engine 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, perform the Repair Procedure.

#### REPAIR PROCEDURE:

CAUTION: The Engine Control Module (ECM) 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 ECM 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.

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

### **POLICY:**

Reimbursable within the provisions of the warranty.

# TIME ALLOWANCE:

Labor Operation No:	Description	Skill Category	Amount
	Module, Transmission Control (TCM) - Reprogram (1 - Semi-Skilled)	21 - Automatic Transmission	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