

XJ range

DATE 01/05

XJ419-04

**SERVICE** 

# **TECHNICAL BULLETIN**

Battery Discharged After Vehicle Left
Standing – Check Module Reset Count –
Diagnosis/Repair Procedure

MODEL 2004 MY-ON XJ range

VIN

G00001-ON

#### Issue:

Some 2004 MY-ON XJ vehicles may exhibit a condition where the vehicle battery is discharged when the vehicle has been standing for a few days.

It has been found that, on some vehicles, either the Rear Electronic Module (REM) or the Front Electronic Module (FEM) is "waking up" and powering the complete vehicle electrical system. This will result in the quiescent drain increasing for a period of approximately 40 minutes after which the electrical system will reenter sleep mode.

#### Action:

In case of a customer concern, use the WDS datalogger function to first check and record the 'Module Reset Count' readings from the FEM and REM.

After a period of time, recheck and record "Module Reset Count" readings for FEM and REM using WDS datalogger.

When comparing the first and second set of readings, it can be determined if a fault is present. Follow the Service Instruction outlined below.

### BACKGROUND INFORMATION

The minimum period, for a reset, will be one hour due to the fact that, when woken up, the vehicle will take 40 minutes to return to sleep mode when the reset will be recorded. It will probably be necessary to leave the vehicle overnight or, in some cases, return the vehicle to the customer and make arrangements to recheck the vehicle in a few days.

It is imperative however, that the battery is never allowed to drain so low that low battery voltage cranking increases the count. Normal vehicle usage should not incur incremental counts.

If a module has reset itself and "woken" the car, then the number of reset counts on that module will be higher than the previously recorded number. If either the FEM or REM show an increase in the number of resets this means that it has woken up and the quiescent drain increased for a period of time. Replace the module that shows an increase in the number of resets.

NOTE: THE INFORMATION IN TECHNICAL BULLETINS IS INTENDED FOR USE BY TRAINED, PROFESSIONAL TECHNICIANS WITH THE KNOWLEDGE, TOOLS, AND EQUIPMENT TO DO THE JOB PROPERLY AND SAFELY. IT INFORMS THESE TECHNICIANS OF CONDITIONS THAT MAY OCCUR ON SOME VEHICLES, OR PROVIDES INFORMATION THAT COULD ASSIST IN PROPER VEHICLE SERVICE. THE PROCEDURES SHOULD NOT BE PERFORMED BY "DO-IT-YOURSELFERS." DO NOT ASSUME THAT A CONDITION DESCRIBED AFFECTS YOUR CAR. CONTACT A JAGUAR DEALER TO DETERMINE WHETHER THE BULLETIN APPLIES TO YOUR VEHICLE.



Other causes of increases on the reset counter are:

- battery connection,
- very low battery voltage as the modules reset during cranking
- use of WDS diagnostics.

**Note:** The battery must be fully charged before beginning this procedure.

- 1. Open the door.
- 2. Ensure the ignition is switched 'OFF', parking brake is applied and transmission selector lever is in park.

**Note:** Ensure Worldwide Diagnostic System (WDS) is loaded with software release JTP 759/35 or later.

- 3. Connect PTU to the vehicle diagnostic connector.
- 4. Enter VIN and navigate to 'Content Model' screen.
- 5. Select 501-00 body system and then select the datalogger main tab.

Note: On WDS the FEM is referred to as the GEM.

- Select the module reset counters for the GEM and the REM.
- 7. Start the datalogger, switch the ignition 'ON' when prompted.
- 8. Recorded the reset readings.
- 9. Stop the datalogger and switch the ignition 'OFF'.
- 10. Switch off, disconnect, and return WDS to docking station.

**Note:** It will be necessary to leave the vehicle overnight or, in some cases, return the vehicle to the customer and make arrangements to recheck the vehicle in a few days.

- 11. Close the door.
- 12. Repeat steps 1 to 9.

**Note:** If the FEM or the REM are not at fault, any other repairs must be carried out as a separate Warranty Claim.

13. If from the results of the two checks it can be determined there is a fault with the FEM or REM, install a new FEM or REM (see Global Technical Reference GTR Workshop Manual, section 419-10, SRO 86.80.41 or SRO 86.80.37).



**Note:** On vehicles up to VIN G12778, if replacing the REM, check the software level. If AE level or below, carry out a configuration of the FEM and DDM. If replacing the FEM, check the software level of the REM.

If AE level or below, replace the REM, as well as the FEM, and reconfigure the DDM.

To re-configure the FEM and DDM:

1. Navigate to configuration main menu.

Note: On WDS the FEM is referred to as the GEM.

- 2. Select and run 're-configure existing GEM' application, and/or select and run 're-configure existing DDM' application.
- 3. After the re-configuration of the FEM and/or DDM is complete, switch 'OFF' PTU, disconnect from vehicle and return WDS to original location.



# **Global Technical Reference (GTR) Workshop Manual Information:**

Dealer access: <a href="https://hub.franchise.jaguar.com">https://hub.franchise.jaguar.com</a>
Internet access: <a href="https://www.jaguartechinfo.com">https://www.jaguartechinfo.com</a>

## **Parts Information:**

<u>DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>	
Front Electronic Module (FEM)	C2C 22369	1	
Rear Electronic Module (REM)	C2C 22368	1	

## **Warranty Information:**

Warranty claims should be submitted quoting the information found in the table below. This will result in payment of the stated time and, where applicable parts/miscellaneous expense codes as listed.

Description	SRO	Time	Causal Part Number
Read recorded resets of FEM & REM modules using WDS data logger	86.93.53	0.3 hrs.	C2C 22369 C2C 22368
Front Electronic Module renew	86.80.41	0.6 hrs.	C2C 22369
Rear Electronic Module renew	86.80.37	0.6 hrs.	C2C 22368
Re-configure Driver Door Module (DDM) using WDS	86.99.34/01	0.3 hrs.	-
Re-configure FEM using WDS	86.99.24/01	0.2 hrs.	C2C 22369

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