# TECHNICAL BULLETIN LTB00492NAS2 14 FEB 2014



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NOTE: The information in Technical Bulletins is intended for use by trained, professional Technicians with the knowledge, tools, and equipment required 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'. If you are not a Retailer, do not assume that a condition described affects your vehicle. Contact an authorized Land Rover service facility to determine whether this bulletin applies to a specific vehicle.

This reissue replaces all previous versions. Please destroy all previous versions. Only refer to the electronic version of this Technical Bulletin in TOPIx.

Changes are highlighted in gray

#### <u>SECTION: 418-00</u>

Vehicle Will Not Unlock With Remote Key Fob / Engine Will Not Start

# **AFFECTED VEHICLE RANGE:**

LR4 (LA)

**Model Year:** 2010-2012

**VIN:** AA528840-CA623748

Range Rover Evoque (LV)
Model Year: 2012

**VIN:** CH616803-CH663101

Range Rover Sport (LS)
Model Year: 2010-2012

**VIN:** AA233855-CA749082

Range Rover (LM)

**Model Year:** 2010-2012

**VIN:** AA317628-CA381305

## MARKETS:

NAS

#### **CONDITION SUMMARY:**

#### Situation:

The vehicle may not unlock with the remote key fob and / or the engine may not start when attempting to start the engine using the Stop/Start button. When this occurs, the 'Smart key not found' message is not displayed and the engine will not start with the remote key fob in the failsafe starting position.

**Cause:** This may be caused by component tolerances within the Central Junction Box (CJB) preventing correct functionality during engine start attempts.

NOTE: All vehicle keys must be present before continuing with the Repair Procedure.

Action: Should a customer express this concern, refer to the Service Instruction outlined below.

#### PARTS:

NOTE: The Central Junction Box (CJB) may also be referred to as the Body Control Module (BCM).

LR023520	Central Junction Box (CJB) - Manual column tilt - 2010- 2011MY LR4 / Range Rover Sport	Quantity: 1
LR023679	Central Junction Box (CJB) - Range Rover	Quantity: 1
LR032733	Central Junction Box (CJB) - Electric column tilt - 2010- 2011MY LR4 / Range Rover Sport	Quantity: 1
LR053223	Central Junction Box (CJB) - Electric column tilt - 2012MY LR4 / Range Rover Sport	Quantity: 1
LR053224	Central Junction Box (CJB) - Manual column tilt - 2012MY LR4 / Range Rover Sport	Quantity: 1
LR055939	Central Junction Box (CJB) - Range Rover Evoque	Quantity: 1

# TOOLS:

SDD with latest DVD and Calibration File; first available on DVD131.09 v.120 Jaguar Land Rover-approved Midtronics Vehicle Power Supply Refer to Workshop Manual / Service Instruction for any required special tools

## **WARRANTY:**

NOTE: Repair procedures are under constant review, and therefore times are subject to change; those quoted here must be taken as guidance only. Always refer to TOPIx to obtain the latest repair time.

NOTE: DDW requires the use of causal part numbers. Labor only claims must show the causal part

number with a quantity of zero.

DESCRIPTION	SRO	TIME (HOURS)	CONDITION CODE	CAUSAL PART
Central Junction Box (CJB) - Renew - Manual column tilt - LR4 (L319) 2010-2011MY	86.70.04	0.60	42	LR023520
Central Junction Box (CJB) - Renew - Electric column tilt - LR4 (L319) 2012MY	86.70.04	0.60	42	LR037233
Central Junction Box (CJB) - Renew - Manual column tilt - LR4 (L319) 2012MY	86.70.04	0.60	42	LR053224
Central Junction Box (CJB) - Renew - Electric column tilt - LR4 (L319) 2010-2011MY	86.70.04	0.60	42	LR053223
Central Junction Box (CJB) - Renew - Range Rover Evoque (L538)	86.70.04	0.90	42	LR055939
Central Junction Box (CJB) - Renew - Manual column tilt - Range Rover Sport (L320) 2010-2011MY	86.70.04	0.60	42	LR023520
Central Junction Box (CJB) - Renew - Electric column tilt - Range Rover Sport (L320) 2012MY	86.70.04	0.60	42	LR037233
Central Junction Box (CJB) - Renew - Manual column tilt - Range Rover Sport (L320) 2012MY	86.70.04	0.60	42	LR053224
Central Junction Box (CJB) - Renew - Electric column tilt - Range Rover Sport (L320) 2010-2011MY	86.70.04	0.60	42	LR053223
Central Junction Box (CJB) - Renew - Range Rover (L322)	86.70.01	0.80	42	LR023679
Central Junction Box (CJB) - Configure new - Range Rover Evoque (L538)	86.90.96	0.20	42	LR028902
Central Junction Box (CJB) - Configure new - LR4 (L319), Range Rover Sport (L320), Range Rover (L322)	86.90.96	0.30	42	LR028902

NOTE: Normal Warranty policies and procedures apply.

#### **SERVICE INSTRUCTION:**



NOTE: All vehicle keys must be present before continuing with this Repair Procedure.

 Check that the battery is correctly charged (see Battery Care Manual), has good connections to the vehicle, and that the transit relay has been removed.



CAUTION: SDD must be loaded with DVD131.09 v.120 later.

Connect the Jaquar Land Rover-approved Midtronics Battery Power Supply to the vehicle battery.

- 3. Connect the Symptom Driven Diagnostics (SDD) system to the vehicle and begin a new session.
- 4. Follow the on-screen prompts, allowing SDD to read the VIN and identify the vehicle.
- 5. From the Session Type selection screen, choose 'Diagnosis'.
- **6.** Select the 'Selected Symptoms' tab, and then select one of the following:
  - Body > Security and locking > Handles locks and latches or
  - Powertrain > Engine system > Starting system > Will not start > Will not crank
- 7. Identify fault codes related to the starting system and diagnose as required.
- 8. Does the Central Junction Box (CJB) have correct power and ground connections?
  - Record readings at:
    - LR4, Range Rover Sport, Range Rover only: Connector C0583: pin numbers 16, 20, 21, 22 (12V)
    - LR4, Range Rover Sport, Range Rover only: Connector C0585: pin numbers 05, 25 (< 1 Ohm)
    - Range Rover Evoque only: Connector C1BP02D: 16, 20, 21, 22 (12V)
    - Range Rover Evoque only: Connector C1BP02F: pin numbers 05, 25 (< 1 Ohm)
  - If any of the readings are incorrect, investigate and rectify if necessary before proceeding to step 9.
- 9. Check the operation of the hazard lamps:
  - If the hazard lamps do not operate outside the vehicle, continue to step 10.
  - If the hazard lamps do operate outside the vehicle, do NOT continue; further diagnosis will be required to identify the failure mode.
- 10. NOTE: The Central Junction Box (CJB) may also be referred to as the Body Control Module (BCM).

NOTE: Prior to performing the following instructions, ensure a new Central Junction Box for the vehicle (CJB) is available if necessary.



NOTE: All vehicle keys must be present before continuing.

Replace the Central Junction Box (CJB) (see TOPIx Workshop Manual, Section 418-00).

11. CAUTION: If the SDD and battery power supply have been removed, the previous SDD session must be resumed; do not start a new SDD session.

From the Session Type selection screen, choose 'Diagnosis'.

- **12.** Select the 'Selected Symptoms' tab, and then select one of the following:
  - Body > Security and locking > Handles locks and latches or
  - Powertrain > Engine system > Starting system > Will not start > Will not crank
- 13. Select the 'Recommendations' tab.
- 14. Read one of the SSMs listed to expose the 'Extras' tab.
- 15. NOTE: The Central Junction Box (CJB) may also be referred to as the Body Control Module (BCM).

NOTE: NOTE: When asked if a new CJB has been installed, select the 'X' and then continue with the SDD procedure. SDD will now attempt to communicate with the new CJB to extract data; this is an expected result.

Select 'Run' to perform the 'Configure new modules - Body control module' application.

16. NOTE: During the routine, the Central Junction Box (CJB) will have several applications performed: immobilization routine to enable security; software download to load the latest level of software; CCF download to store the vehicle's data to the new module; key programming routine; key validation routine; fault code clear. Ensure all of the above applications complete successfully. If at any time a failure is encountered, you will be required to start the process over in entirety from step 15.

Continue with the SDD routine by following all on-screen prompts, including performing the software download. Do **not** skip the software download routine.

- 17. Select the Recommendations tab.
- 18. Select 'Run' to perform the 'Body System Variable assist power steering curves' application.
- 19. Follow all on screen prompts to complete this task.
- 20. NOTE: Steps 20-23 required for vehicles fitted with Powered Steering Column Movement

Select the Service Function tab.

- **21.** Select 'Run' to perform the 'Body system Steering column calibration' application.
- **22.** Follow all on-screen prompts to complete this task.
- **23.** When all tasks are complete, exit the current session by selecting the Session tab and then select the Close Session option.
- **24.** Disconnect the SDD and battery power supply.
- 25. Ensure correct operation of all vehicle systems before delivery back to the customer.