TECHNICAL BULLETIN LTB00540NAS4 21 MAY 2015



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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.

Changes are highlighted in gray

SECTION: 501-00

Engine Will Not Crank / 'Smart Key Not Found' Message Displayed

AFFECTED VEHICLE RANGE:

LR4 (LA)

Model Year: 2010-2016 VIN: AA510742-GA756278

LR2 (LF) Model Year: 2012-2015 VIN: CH281016-FH419920

Range Rover Evoque (LV)Model Year: 2012 OnwardsVIN:CH000447 Onwards

Range Rover Sport (LW)Model Year: 2014 OnwardsVIN:EA000002 Onwards

Range Rover (LG) Model Year: 2013 Onwards VIN: DA001204 Onwards

 Range Rover Sport (LS)

 Model Year: 2010-2013

 VIN:
 AA212147-DA814822

Model Year: 2010-2012 VIN: AA304426-CA393639

<u>MARKETS:</u>

NAS

CONDITION SUMMARY:

Situation: One or more fo the following issues may be evident when using the Smart Key:

- 'Smart key not found' message displayed in the Instrument Cluster;
- Engine fails to crank;
- Vehicle may not unlock / lock when using passive entry or when pressing a Smart Key button.

Cause: This may be caused by a 'lock up' of the Keyless Vehicle Module (KVM).

Action: Should a customer express this concern, follow the appropriate Service Instruction [A or B] outlined below.

<u>PARTS:</u>

NOTE: the Keyless Vehicle Module (KVM) may also be referred to as Remote Function Actuator (RFA) and Remote Keyless Entry (RKE) Module.

| LR059763 | Keyless Vehicle Module - without Keyless Entry | Quantity: 1 (only if required by SDD) |
|----------|--|---------------------------------------|
| LR059765 | Keyless Vehicle Module - with Keyless Entry | Quantity: 1 (only if required by SDD) |

<u> TOOLS:</u>

NOTE: this document is an 'Active Bulletin' that will display a functional programming shortcut if accessed within a diagnostic session using SDD.

SDD with latest DVD and Calibration File Jaguar Land Rover-approved Midtronics battery power supply

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.

CNOTE: 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 | |
|--|-------------|-----------------|-------------------|----------------|--|
| Read and clear DTCs | 12.90.16 | 0.2 | 42 | LR031379 | |
| Module - Keyless Vehicle Module - Renew - LR2 (L359) | 86.80.08 | 0.6 | 42 | LR031379 | |
| Module - Keyless Vehicle Module - Renew - LR4 (L319) | 86.26.03 | 0.3 | 42 | LR031379 | |
| Module - Keyless Vehicle Module - Renew - Range Rover Evoque (L538) | 86.80.08 | 0.9 | 42 | LR031379 | |
| Module - Keyless Vehicle Module - Renew - Range Rover Sport (L320), Range Rover (L322) | 86.26.03 | 0.4 | 42 | LR031379 | |
| Module - Keyless control module - Renew - Range Rover Sport (L494), Range Rover (L405) | 86.80.08 | 0.7 | 42 | LR042874 | |
| Keyless Vehicle Module - Configure - With SDD connected | 86.90.84.01 | 0.1 | 42 | LR031379 | |
| △NOTE: Normal Warranty procedures apply. | | | | | |

<u>SERVICE INSTRUCTION 'A' - LR4 (L319), Range Rover Sport (L320), and</u> <u>Range Rover (L322) Vehicles Only</u>

Service Instruction changes are extensive and therefore not highlighted.

CAUTION: a Jaguar Land Rover-approved Midtronics battery power supply must be connected to the vehicle battery during SDD diagnosis / module programming.

CAUTION: ensure all ignition 'ON' / ignition 'OFF' requests are carried out; failure to perform these steps may cause damage to control modules in the vehicle.

NOTE: SDD must be loaded with DVD141.01 v.194 or later.

- 1. Connect the Jaguar Land Rover-approved Midtronics battery power supply to the vehicle battery.
- 2. Turn ignition 'ON' (engine not running).
- **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 and initiating the data collect sequence.
- **5.** Select 'Diagnosis' from the Session Type screen.
- 6. Select the 'Selected Symptoms' tab, and then select one of the following:
 - Powertrain > Engine system > Starting system > Will not start or
 - Electrical > Instruments > Information and message centre > message display area > Powertrain
- 7. Select 'continue'.
- 8. Select the 'Recommendations' tab.
- **9.** From the Recommendations tab, select '**Run**' to perform the 'Security Smart key not found' option.
- **10.** Follow all on-screen instructions to complete this task.

11. NOTE: the Keyless Vehicle Module (KVM) may also be referred to as Remote Function Actuator (RFA) and Remote Keyless Entry (RKE) Module.

NOTE: the application will check the hardware level and may instruct to replace the Keyless Vehicle Module (if necessary) and run the 'Configure new modules - Keyless vehicle module' option from the 'Service Functions' menu. If the hardware fitted to the vehicle is at the latest level, the application will check the software level and prompt to update the software (if necessary).

NOTE: if a new Keyless Vehicle Module (KVM) is required but is not currently available, abort the SDD routine and follow the 'Run Security- Smart Key Not Found' routine when a new KVM is available.

Run the 'Security - Smart key not found' option.

12. If Keyless Vehicle Module (KVM) replacement is required, see:

• TOPIx Workshop Manual, section 501-14: Handles, Locks, Latches and Entry Systems - Remote Keyless Entry (RKE) Module (LR4, Range Rover Sport) **or**

• TOPIx Workshop Manual, section 501-05: Loadspace Trim Panel LH (Range Rover) to access the KVM

13. Exit the current session.

14. Disconnect the SDD and the battery power supply from the vehicle.

<u>SERVICE INSTRUCTION 'B' - LR2 (L359), Range Rover Evoque (L538),</u> <u>Range Rover Sport (L494), and Range Rover (L405) Vehicles Only</u>

Changes are extensive and therefore not highlighted.

CAUTION: a Jaguar Land Rover-approved Midtronics battery power supply must be connected to the vehicle battery during SDD diagnosis / module programming.

CAUTION: ensure all ignition 'ON' / ignition 'OFF' requests are carried out; failure to perform these steps may cause damage to control modules in the vehicle.

NOTE: SDD must be loaded with DVD141.01 v.194 or later.

- 1. Connect the Jaguar Land Rover-approved Midtronics battery power supply to the vehicle battery.
- 2. **ONOTE:** the Keyless Vehicle Module (KVM) may also be referred to as Remote Function Actuator (RFA) and/or Remote Keyless Entry (RKE) Module.

Turn ignition 'ON' (engine not running).

- **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 and initiating the data collect sequence.
- **5.** Select 'Diagnosis' from the Session Type screen.
- 6. Select the 'Selected Symptoms' tab, and then select:
 - Body > Security and locking > Handles locks and latches
- 7. Select 'continue'.
- Select the 'Recommendations' tab, and then select 'Run' to perform the 'Configure existing module -Keyless vehicle module' option.

9. NOTE: the application will check the hardware level and may instruct to replace the Keyless Vehicle Module (if necessary) and run the 'Configure new modules - Keyless vehicle module' option from the 'Service Functions' menu. If the hardware fitted to the vehicle is at the latest level, the application will check the software level and prompt to update the software (if necessary). **NOTE:** if a new Keyless Vehicle Module (KVM) is required but is not currently available, abort the SDD routine and follow the 'Run Security- Smart Key Not Found' routine when a new KVM is available.

Follow all on-screen instructions to complete this task, ensuring all DTCs are cleared.

10. Exit the current session.

11. Disconnect the SDD and the battery power supply from the vehicle.