# TECHNICAL BULLETIN LTB00540NAS5 05 JUL 2016



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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:

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LR2 (LF)	
Model Year:	2012-2015
VIN:	281016-439912
Assembly	Na per ono so en a
Plant:	Halewood
LR4 (LA)	
Model Year:	2010-2015
VIN:	510742-777506
Assembly	Solibull
Plant:	Solinuli
Range Rover Eve	oque (LV)
Model Year:	2012-2015
VIN:	000447-077911
Assembly	
Plant:	Halewood
Range Rover Sp	ort (LW)
Model Year:	2014-2015
VIN:	001154-542164
Assembly	Solihull
Plant:	Connan
Range Rover (LC	G)
Model Year:	2013-2015
VIN:	001204-243370
Assembly	
Plant:	Solinuli
Range Rover Sp	ort (LS)
Model Year:	2010-2013
VIN:	212147-814822
Assembly	Solihull
Plant:	
Range Rover (LI	M)
Model Year:	2010-2012
VIN:	304426-393639
Assembly	Calibul
Plant:	Solinuli

MARKETS:

#### NAS

#### **CONDITION SUMMARY:**

Situation: One or more of 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 Remote Function Actuator (RFA).

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

## PARTS:

**NOTE:** The Remote Function Actuator (RFA) may also be referred to as Keyless Vehicle Module (KVM) and/or Remote Keyless Entry (RKE) module.

LR071651	Keyless Vehicle Module - without Keyless Entry	1 (only if required by SDD)
LR071386	Keyless Vehicle Module - with Keyless Entry	1 (only if required by SDD)

### TOOLS:

NOTE: This Active Bulletin will display a functional programming shortcut if accessed within a diagnostic session.

Jaguar Land Rover-approved diagnostic tool with latest DVD and Calibration File

Jaguar Land Rover-approved Midtronics battery power supply

## WARRANTY:

**WOTE:** The Remote Function Actuator (RFA) may also be referred to as Keyless Vehicle Module (KVM) and/or Remote Keyless Entry (RKE) module.

**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.

ANOTE: 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
	86.80.08	0.7	42	LR042874

Module - Keyless control module - Renew - Range Rover Sport (L494), Range Rover (L405)				
Keyless Vehicle Module - Configure - With SDD connected	86.90.84.01	0.1	42	LR031379

NOTE: Normal Warranty procedures apply.

#### SERVICE INSTRUCTION 'A' - LR4 (L319), Range Rover Sport (L320), and Range Rover (L322) Vehicles Only

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

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

NOTE: The Jaguar Land Rover-approved diagnostic tool must be loaded with DVD145.08 v.240 or later.

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

- 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 Jaguar Land Rover-approved diagnostic tool to the vehicle and begin a new session.
- **4.** Follow the on-screen prompts, allowing the diagnostic tool to read the VIN, 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:
  - 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. Select Run to perform the Security Smart key not found option.
- 10. Follow all on-screen instructions to complete this task.

11. 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 'Configure new modules - Keyless vehicle module' 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.** Follow all on-screen instructions to complete this task, ensuring all Diagnostic Trouble Codes (DTC) are cleared.
- 14. When all tasks are complete, select the Session tab and then select the Close Session option.
- **15.** Disconnect the diagnostic tool and 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>

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

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

NOTE: The Jaguar Land Rover-approved diagnostic tool must be loaded with DVD145.08 v.240 or later.

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

- 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 Jaguar Land Rover-approved diagnostic tool to the vehicle and begin a new session.
- **4.** Follow the on-screen prompts, allowing the diagnostic tool to read the VIN, 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:
  - 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. Select Run to perform the Configure existing module Keyless vehicle module option.

10. 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 'Configure existing module - Keyless vehicle module' routine when a new KVM is available.

Follow all on-screen instructions to complete this task, ensuring all Diagnostic Trouble Codes (DTC) are cleared.

- 11. When all tasks are complete, select the Session tab and then select the Close Session option.
- **12.** Disconnect the diagnostic tool and battery power supply from the vehicle.