

Reference	SSM71870
Models	LR4 / L319 LR2 / L359 Range Rover / L405 Range Rover Sport / L494 Range Rover Evoque / L538 Range Rover Sport / L320
Title	BCM and RFA related vehicle non-start issues
Category	Electrical
Last modified	03-Jul-2014 00:00:00
Symptom	203000 Basic Electrical
Attachments	1Instructions to record a CAN trace.pdf, 1Non start RFA BCM full SSM flowchart.pdf
Content	<u>Models affected</u> Discovery 4 / L319 -13 and 14MY Range Rover (All New) / L405 – 13 and 14MY Range Rover Evoque / L538 – 13 and 14MY Range Rover Sport / L320 – 13MY Range Rover Sport L494 (All new) – 14MY Freelander 2 L359 – 13 and 14MY <u>Issue</u> Land Rover are currently investigating Body Control Modules (BCM) and Remote Function Actuators (RFA) replaced for a non-start condition. Following supplier analysis the modules have been categorized as "No Fault Found". <u>Cause</u> Currently under analysis. <u>Action</u> If a vehicle is presented with the following symptoms please follow the test procedure outlined below before consideration is given to component replacement: Vehicle does not lock or unlock using the key fob, or passive entry exit is not functioning. After gaining entry to the car using key blade it does not start. Even if entry is possible to the car, the car does not start when start button is pressed. The vehicle has not had a software download immediately prior to the failure. Test procedure: Please follow the test procedure as detailed in the flowchart attached. Please note details at all important decision points and record them on a TA raised (if any) Also attached is the process for obtaining a can trace. Please Note: 1. Do not disconnect the battery or perform a hard reset on the vehicle at least until this flow chart has been followed. 2. Do not disconnect or move any connectors on the BCM 3. If entry is gained in the vehicle with the key blade the alarm may sound, do not press the ignition switch to shut the alarm off instead muffle the alarm sounder first then follow the test process in the flowchart.

Instructions to record a CAN trace

Pre-requisites

To carry out a CAN link monitor recording you must ensure you have the appropriate SW version and Firmware version ***for the device under use*** is updated as per the following procedure

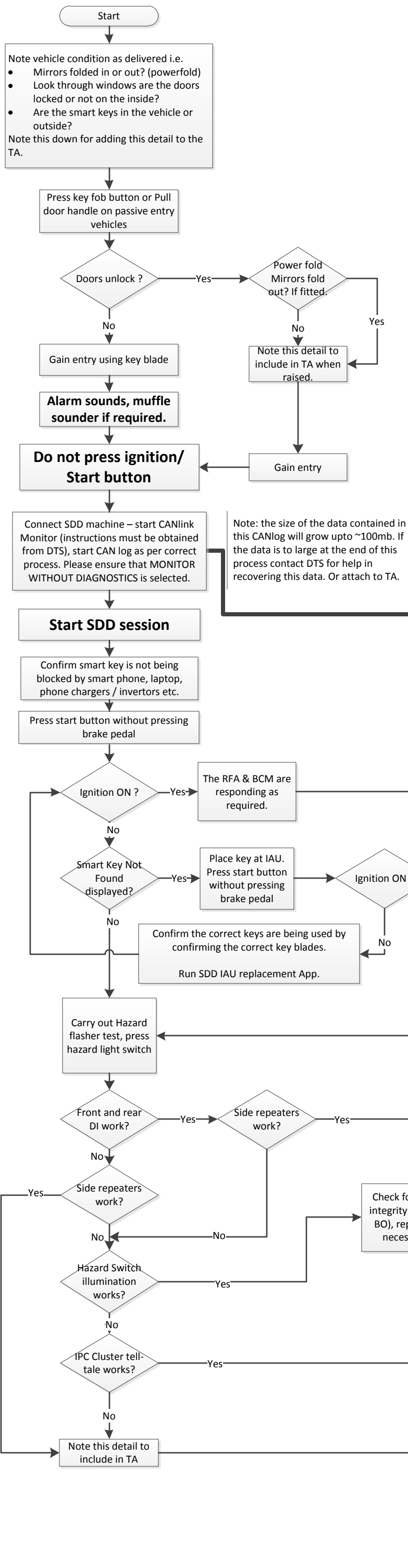
SW= Software installed on tester (updated through Windows Start > All Programs > JLR > SDD > VCI Device Drivers)

FW= Firmware installed on device (updated through DA App Hub for DA devices & I-View Device Manager for I-View)

1. VCM - N/A (automatically updated but DVD137+ recommended)
- 2a. DA-Dongle - SW: V4.0 / FW: V57
- 2b. DA-Davina - SW: V4.0 / FW: V57
- 2c. DA-ST512 - SW: V4.0 / FW: V57
3. I-View - SW: V1.4.0 / FW: V5.1.0
4. MongoosePro JLR - SW: V1.1.12 / FW: N/A (automatically updates)

To run the CAN Link Monitor without diagnostics in Symptom Driven Diagnostics (SDD):

1. Select 'START' (Windows 7) or the Windows icon (Windows XP) from bottom tool bar.
2. Select 'All Programs'.
3. Select 'JLR'.
4. Select 'SDD'.
5. Select 'CAN Link Monitor'. A pop-up box will show.
6. Select 'Capture'.
7. Select 'Configure'.
8. Select the vehicle from the Platform drop-down menu.
9. Make sure both the Low Speed and High Speed CAN Networks are selected.#
10. Select "MONITOR WITHOUT RUNNING DIAGNOSTICS" from the Filter range box
11. Insert USB Flash Drive into a USB port on the SDD machine.
12. Select the drive location for the USB Flash Drive from the Log File box.
13. Enter in the vehicle VIN as the File Name.
14. Select 'OK'.
15. Select 'CAPTURE'
16. Select 'START LOGGING'. A pop-up box will show 'Logging started successfully'.
17. Minimise the CAN Link Monitor window to the tool bar.
18. Start the vehicle function that needs to be monitored.
19. When the vehicle function has completed, select CAN Link Monitor tab from the tool bar.
20. Select 'CAPTURE'.
21. Select 'STOP LOGGING'. A pop-up window will display 'Logging stopped successfully'.
22. Locate the CAN Link Monitor file on the USB Flash Drive.
23. Open file and make sure the data has recorded correctly.
24. Close the file.
25. Remove the USB flash drive from SDD machine.



To run the CAN Link Monitor without diagnostics in Symptom Driven Diagnostics (SDD):

1. Select 'START' (Windows 7) or the Windows icon (Windows XP) from bottom tool bar.
2. Select 'All Programs'.
3. Select 'JLR'.
4. Select 'SDD'.
5. Select 'CAN Link Monitor'. A pop-up box will show.
6. Select 'Capture'.
7. Select 'Configure'.
8. Select the vehicle from the Platform drop-down menu.
9. Make sure both the Low Speed and High Speed CAN Networks are selected.
10. Select 'MONITOR WITHOUT RUNNING DIAGNOSTICS' from the Filter range box
11. Insert USB Flash Drive into a USB port on the SDD machine.
12. Select the drive location for the USB Flash Drive from the Log File box.
13. Enter in the vehicle VIN as the File Name.
14. Select 'OK'.
15. Select 'CAPTURE'
16. Select 'START LOGGING'. A pop-up box will show 'Logging started successfully'.
17. Minimise the CAN Link Monitor window to the tool bar.
18. Start the vehicle function that needs to be monitored.
19. When the vehicle function has completed, select CAN Link Monitor tab from the tool bar.
20. Select 'CAPTURE'.
21. Select 'STOP LOGGING'. A pop-up window will display 'Logging stopped successfully'.
22. Locate the CAN Link Monitor file on the USB Flash Drive.
23. Open file and make sure the data has recorded correctly.
24. Close the file.
25. Remove the USB flash drive from SDD machine.