

Published: 11-May-2011

2021.0 Range Rover Sport (LW), 303-00

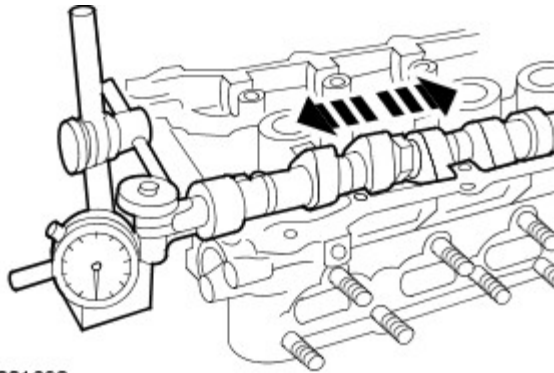
Engine System - General Information

Camshaft End Play (G61236)

GENERAL PROCEDURES

1. NOTE:

Make sure that the camshaft is to specification.



VUJ0001698

Using the special tool, measure the end play.

- Slide the camshaft in both directions. Read and note the maximum and minimum values on the dial indicator gauge.
 - End play = maximum value minus minimum value.
- If the measurement is out of specification, install new components.

Published: 11-Apr-2019

2021.0 Range Rover Sport (LW), 100-00

General Information

Diesel Fuel System Health and Safety Precautions (G548997)

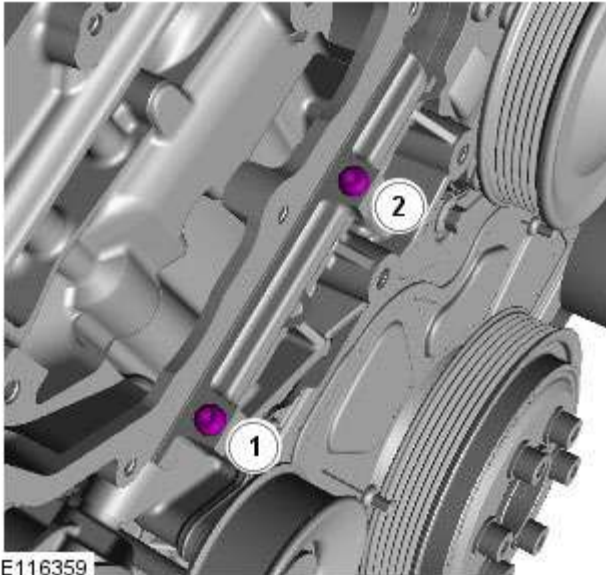
DESCRIPTION AND OPERATION

WARNINGS:

- Fuel may not give adequate warning before toxic or harmful effects arise.
- Exposure to fuel can be harmful and can cause severe health damage or death.
- Provide adequate ventilation when working on fuel systems.
- Extreme care must be exercised when handling hot fluids. Always wash off spilled fluids from affected areas of skin immediately.
- Fuel must not be used as a cleaning agent.
- Keep fuel containers tightly closed, out of direct sunlight and in a cool area. Keep away from heat sources, ignition sources and oxidizing agents.
- SKIN CONTACT: Fuel is mildly irritating to the skin and may cause dermatitis due to defatting effect. Remove contaminated clothing. Wash affected areas of skin with soap and water. Seek medical attention for any persistent skin irritation or abnormality. Wash contaminated clothing before reuse.
- SKIN CONTACT: Excessive or prolonged skin contact with diesel fuel may cause serious skin disorders including skin cancer.
- EYE CONTACT: Fuel is mildly irritating to the eyes. Flush with plenty of running water, blinking as often as possible. Do not force the eyelid open. Seek medical attention for any persistent eye irritation or abnormality.
- SWALLOWED: Fuel is moderately toxic and tends to foam on vomiting. If drawn into the lungs, inflammation may develop. Do not induce vomiting. If spontaneous vomiting occurs place the victim in a forward position to reduce the risk of fuel being drawn into the lungs. Give nothing by mouth. If breathing but unconscious, place in the recovery position. If breathing has stopped, apply artificial respiration. Seek immediate medical attention.
- INHALED: Fuel is toxic to the respiratory and other body systems. Exposure may result in various symptoms including drowsiness, unconsciousness or severe health damage. Move a victim to fresh air. Keep a victim warm and at rest. If unconscious, place in the recovery position. If not breathing, apply artificial respiration. Give cardiac massage if necessary. Seek immediate medical attention.

CAUTIONS:

- Fuel injection equipment is manufactured to very precise tolerances and fine clearances. It is essential that absolute cleanliness is observed when working with these components.
- Make sure that the workshop area in which the vehicle is being worked on is as clean and as dust free as possible.

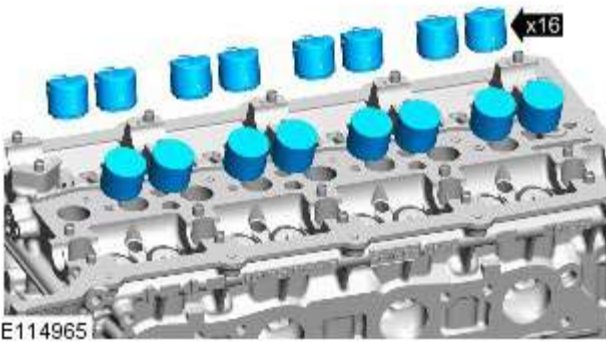


9.

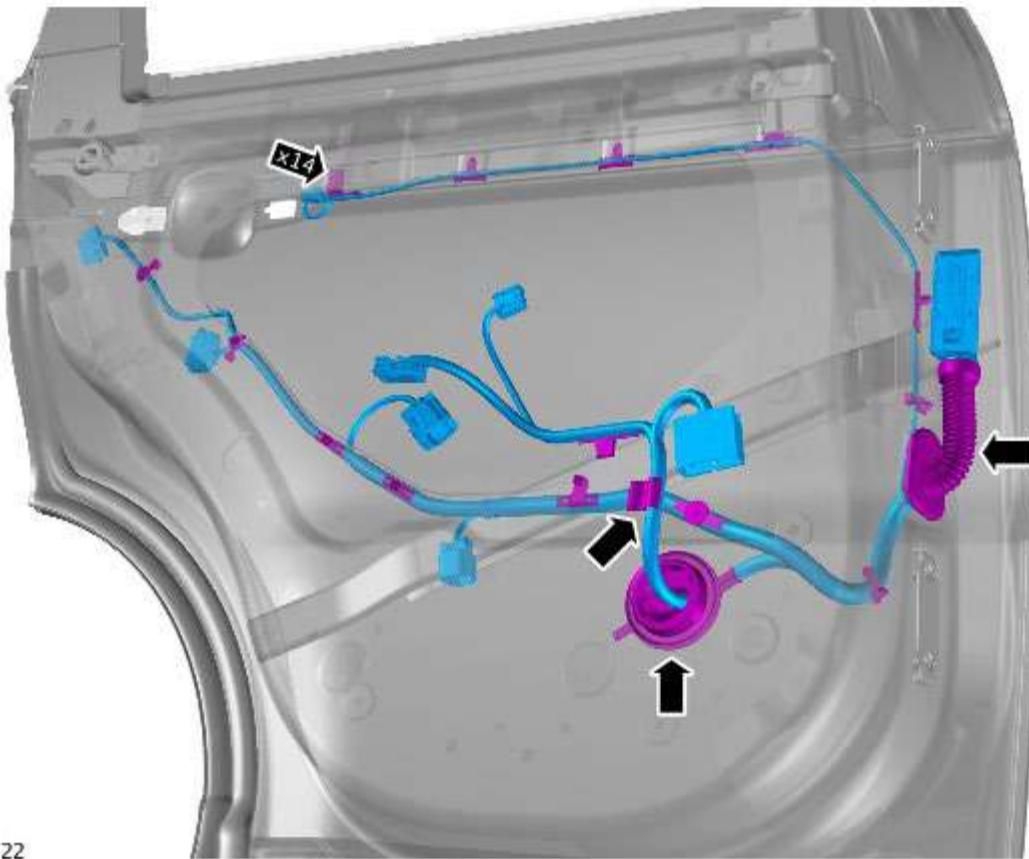
Torque: 12Nm

10. CAUTIONS:

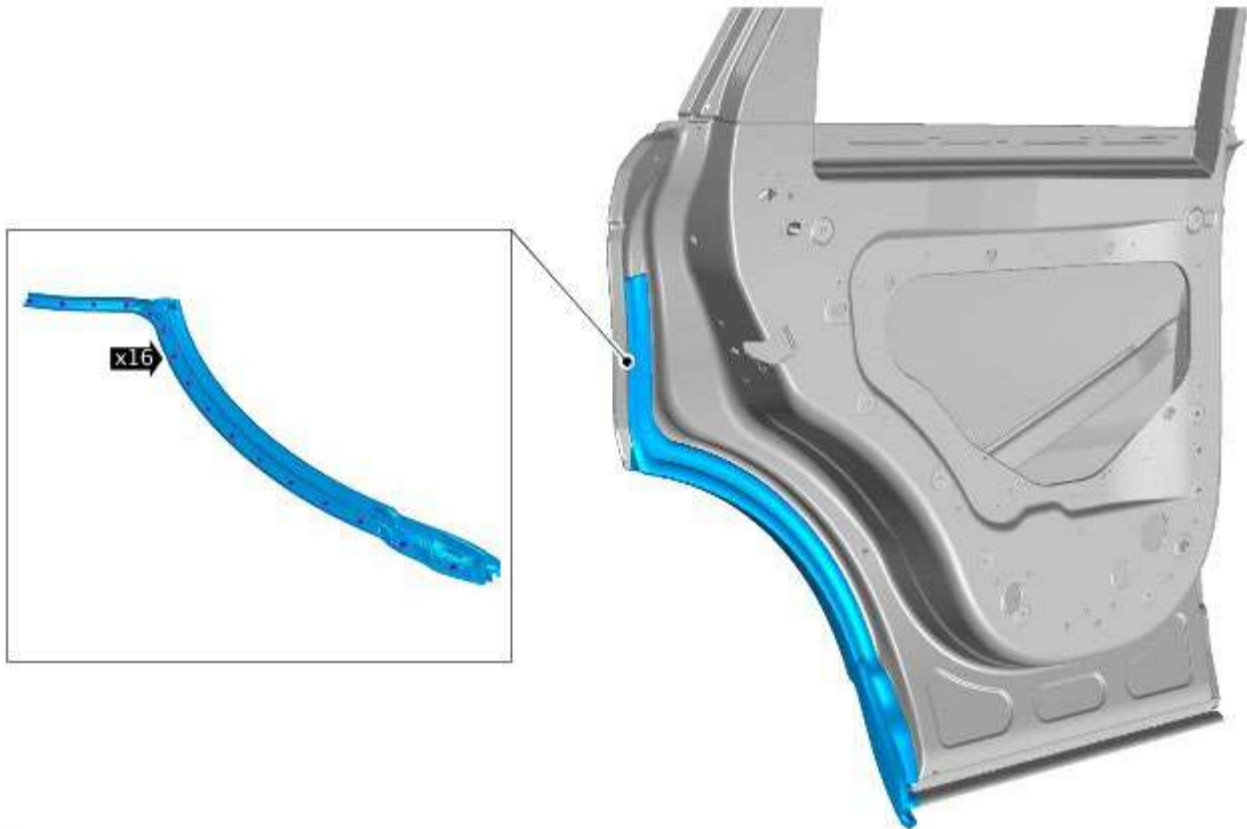
- If a new cylinder head has been installed then new tappets must be installed.
- If the cylinder head is being removed without a new component being installed, the tappets must be installed in their original positions.



Lubricate the valve tappets with clean engine oil.



9. E156722



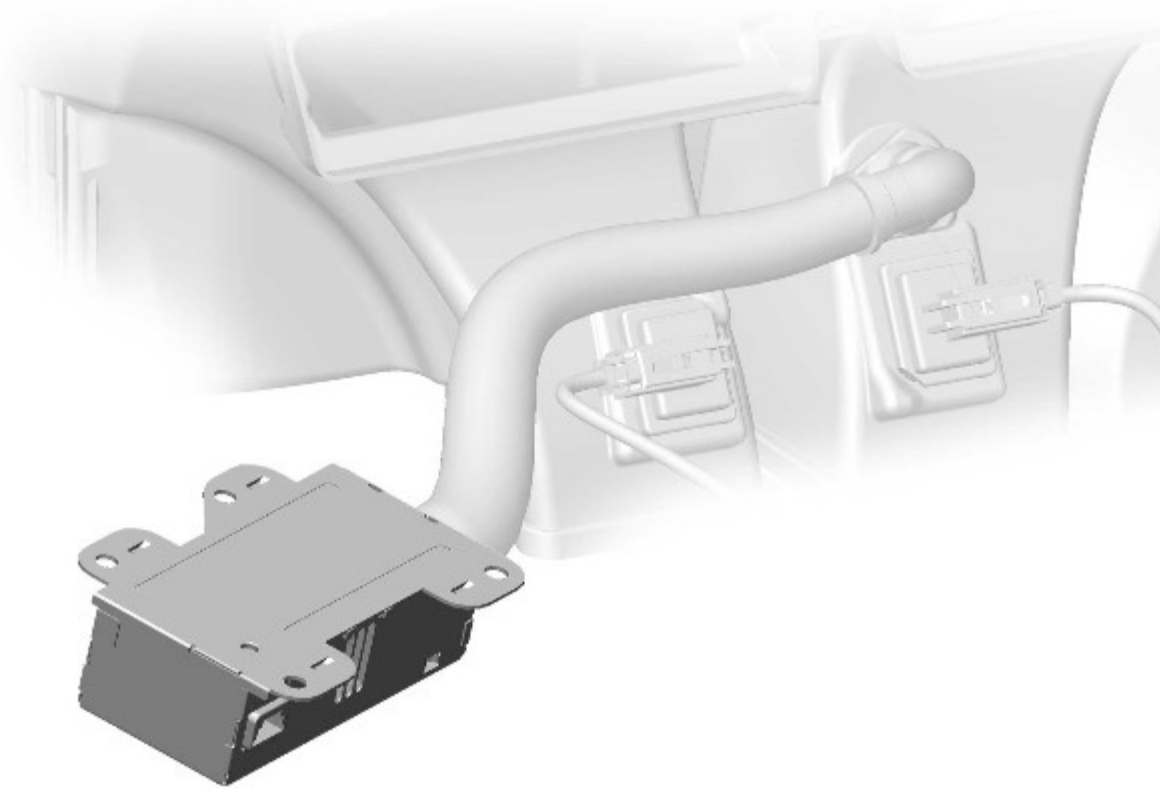
10. E156723

The air filter is installed in the air inlet duct, over the blower inlet.

Air Ionizer

NOTE:

Right Hand Drive (RHD) illustration shown, Left Hand Drive (LHD) illustration is similar.



E204978

The air ionizer creates positive and negative ions that seek out and surround harmful airborne substances. This attracts the smaller airborne particles together to form larger particles which can then be trapped in the air filter. This purifies the air in the vehicle by reducing airborne mould spores, microbes, fungi, odors, germs and bacteria.

The air ionizer is only connected to the right center face vent in the instrument panel.

The air ionizer is connected to a power supply and a ground connection. The air ionizer operates when an electrical signal is received from the Automatic Temperature Control Module (ATCM).

OPERATION

The Automatic Temperature Control Module (ATCM) controls the distribution of the air flow through the ducts.

For additional information, refer to: Control Components - INGENIUM I4 2.0L Petrol/TDV6 3.0L Diesel /TDV8 4.4L Diesel/V8 S/C 5.0L Petrol (412-01, Description and Operation) / Control Components - INGENIUM I4 2.0L Petrol - PHEV (412-01, Description and Operation).

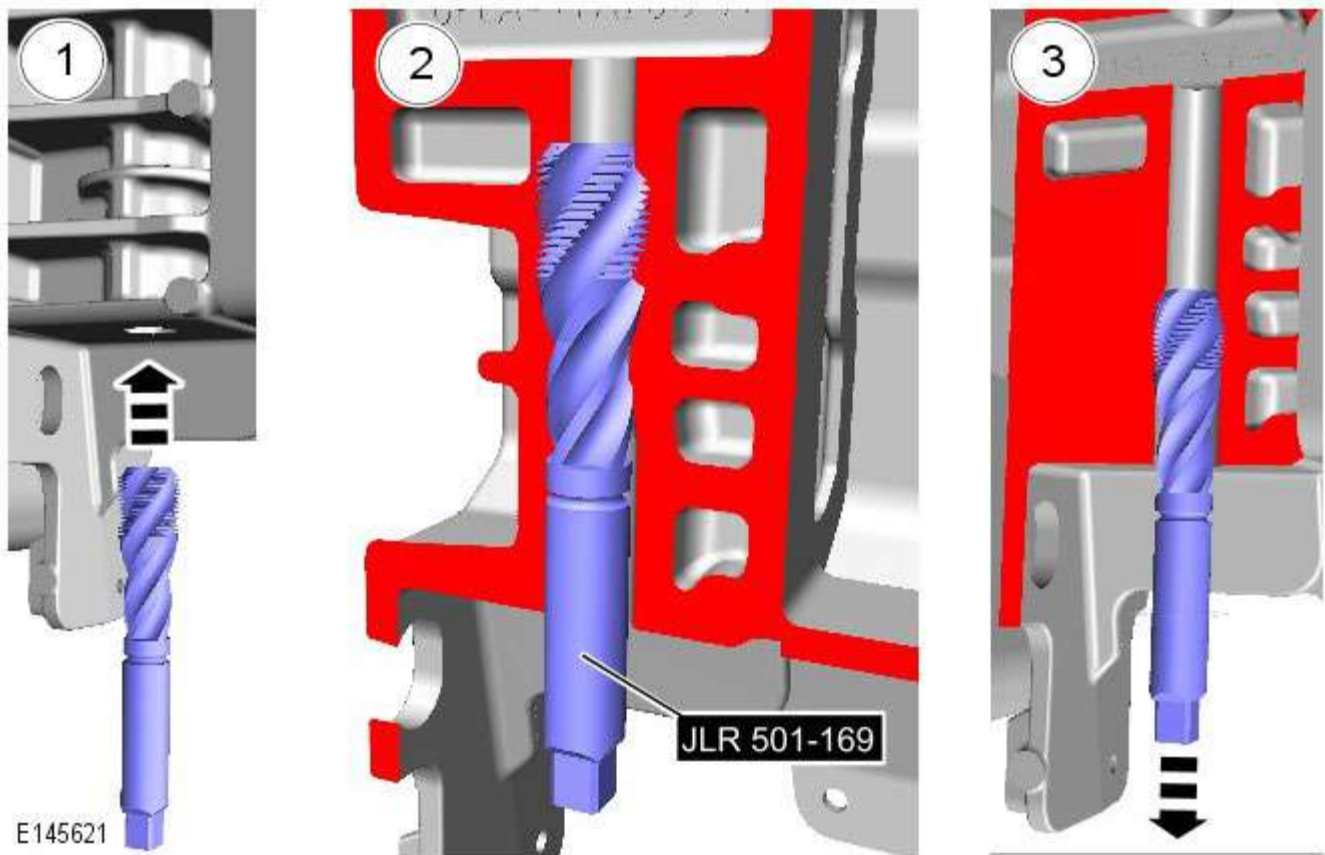
For additional information, refer to: Heating and Ventilation - INGENIUM I4 2.0L Petrol/TDV6 3.0L Diesel /TDV8 4.4L Diesel/V6 S/C 3.0L Petrol /V8 S/C 5.0L Petrol/INGENIUM I4 2.0L Diesel (412-01, Description and Operation) / Heating and Ventilation - INGENIUM I4 2.0L Petrol - PHEV (412-01, Description and Operation).

in the rejection of any warranty claim made.

- If a control module or a component is at fault and the vehicle remains under manufacturer warranty, refer to the Warranty Policy and Procedures manual, or determine if any prior approval program is in operation, prior to the installation of a new module/component.
- Generic scan tools may not read the codes listed, or may read only 5-digit codes. Match the 5 digits from the scan tool to the first 5 digits of the 7-digit code listed to identify the fault (the last 2 digits give extra information read by the Jaguar Land Rover approved diagnostic equipment).
- When performing voltage or resistance tests, always use a digital multimeter that has the resolution ability to view 3 decimal places. For example, on the 2 volts range can measure 1mV or 2 K Ohm range can measure 1 Ohm. When testing resistance always take the resistance of the digital multimeter leads into account.
- Check and rectify basic faults before beginning diagnostic routines involving pinpoint tests.
- Inspect connectors for signs of water ingress, and pins for damage and/or corrosion.
- If Diagnostic Trouble Code(s) are recorded and, after performing the pinpoint tests, a fault is not present, an intermittent concern may be the cause. Always check for loose connections and corroded terminals.
- Check JLR claims submission system for open campaigns. Refer to the corresponding bulletins and SSMs which may be valid for the specific customer complaint and complete the recommendations as required.

The table below lists all Diagnostic Trouble Code(s) that could be set in the Parking Assist Control Module (PAM). For additional diagnosis and testing information, refer to the relevant Diagnosis and Testing section in the workshop manual. Please refer to 413-13 Parking Aid Diagnosis and Testing

DTC	Description	Possible Causes	Action
B129C-08	Left Front Side Sensor - Bus signal/message failures	• Front left side park assist sensor signal circuit short circuit to ground, short circuit to power, open circuit, high resistance • Front left side park assist sensor failure	• Refer to the electrical circuit diagrams and check the front left side park assist sensor signal circuit for short circuit to ground, short circuit to power, open circuit, high resistance. Repair or install a new wiring harness as necessary • Check the connector for integrity and damage, then reconnect sensor to confirm connection • Using the Jaguar Land Rover approved diagnostic equipment, clear the Diagnostic Trouble Code(s) and perform routine - On Demand Self Test (0x0202) and read the Diagnostic Trouble Code(s) • If the problem persists remove the sensor at fault from the bumper. Inspect the sensor connector for signs of water ingress/corrosion. Swap the position of the sensor at fault into the position of a fault-free sensor. Clear the Diagnostic Trouble Code(s) and perform routine - On Demand Self Test (0x0202). If a DTC is set for the new position of the sensor at fault, install a new sensor. Clear the Diagnostic Trouble Code(s) and retest
B129C-16	Left Front Side Sensor - Circuit voltage below threshold	• Front left side park assist sensor power or ground	• Refer to the electrical circuit diagrams and check the front left side park assist sensor power and ground circuits for open circuit, high resistance. Repair or install a new



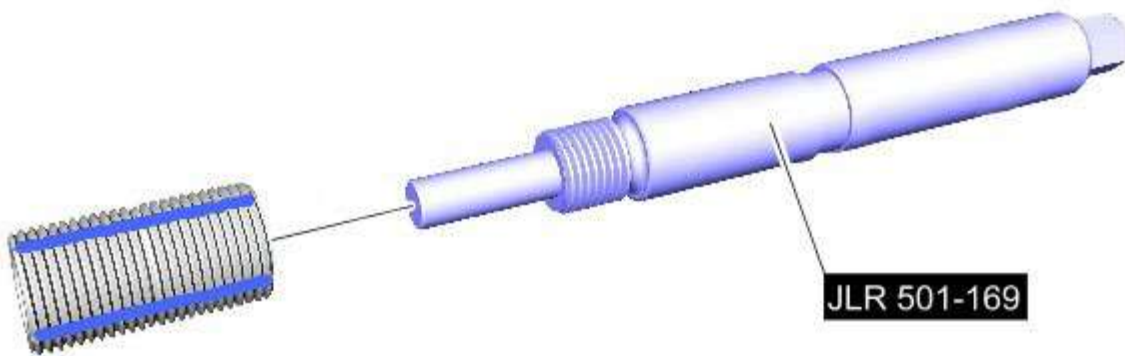
Tap the hole using a M18 x 1.5 flute tap.

Special Tool(s): [JLR-501-169](#)

10. CAUTION:

Make sure that the inside of the drilled hole is clean and free of oil residue.

Using compressed air and suitable cleaning solution, make sure the hole is clean and free of debris.



11. E149222

Thread the steel insert on to the special tool.

Special Tool(s): [JLR-501-169](#)

12. CAUTION:

Make sure that the threaded steel insert is clean and free of oil residue before applying Loctite.

		circuit to ground, short circuit to power, open circuit, high resistance	resistance. Repair the wiring harness as necessary Refer to the electrical circuit diagrams and check the clock LIN bus circuit for short circuit to ground, short circuit to power, open circuit, high resistance. Repair the wiring harness as necessary
B1316-19	Boot/Trunk Latch Power Close Unit - Circuit current above threshold	- Tailgate soft close mechanism alignment incorrect - Tailgate soft close mechanism incorrect operation - Tailgate soft close actuator circuit short circuit to ground	NOTE: To validate the repair firstly run the engine for 30 seconds and check the tailgate soft close function, then use the Jaguar Land Rover approved diagnostic equipment to check this DTC is no longer set within the body control module - Check the alignment of the tailgate soft close mechanism, rectify as necessary - Check the operation of the tailgate soft close mechanism, rectify as necessary - Refer to the electrical circuit diagrams and check the tailgate soft close actuator circuit for short circuit to ground. Repair the wiring harness or install a new tailgate soft close actuator as necessary
B1323-23	Horn Switch - Signal stuck low	NOTE: This DTC may be induced by the driver operating the horn switch for longer than 60 seconds - Horn switch stuck active - Horn switch circuit short circuit to ground	NOTE: To validate the repair firstly run the engine for 30 seconds and check the horn switch function, then use the Jaguar Land Rover approved diagnostic equipment to check this DTC is no longer set within the body control module - Check the operation of the horn switch. Free the stuck switch or install a new horn switch as necessary - Refer to the electrical circuit diagrams and check the horn switch circuit for short circuit to ground. Repair the wiring harness as necessary
B134E-14	Switch Illumination Adjustment Control - Circuit short to ground or open	Dimmer switch circuit short circuit to ground, open circuit, high resistance	NOTE: To validate the repair firstly run the engine for 30 seconds and check the dimmer switch function, then use the Jaguar Land Rover approved diagnostic equipment to check this DTC is no longer set within the body control module Refer to the electrical circuit diagrams and check the dimmer switch circuit for short circuit to ground, open circuit, high resistance. Repair the wiring harness as necessary
B136A-11	Heated Washer Jet/Nozzle Output Control - Circuit short to ground	Heated washer jet circuit short circuit to ground	NOTES: After ensuring any faults have been repaired, inspect if DTC U1000-00 is stored in the BCM. If yes,

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JLR批量激活

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批量导入结果统计

车架号	引擎版本	是否有效	描述

下载文件列表

☐	产品名称	数据版本	上传者	上传日期	激活包下载	车架号下载
1	☐ 捷豹路虎	29	0970012	2015-12-01 10...	ReLoginCode...	Vins20151201...
2	☐ 捷豹路虎	29	0970012	2015-11-30 11...	ReLoginCode...	Vins20151130...

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显示 1 - 2, 共 2 条

E187805

- Click Choose File to select that prepared .txt file
- Click Submit to submit VINs to backend.

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JLR批量激活

请选择导入文件: [Choose File](#) TEST.txt

地图下载链接: [地图下载](#)

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批量导入结果统计

车架号	引擎版本	是否有效	描述
010X351CHGBV24v5M	7.2	有效	
019X260CHASV16v3M	7.2	有效	
SAJCB2BQ8HA045028	7.2	有效	

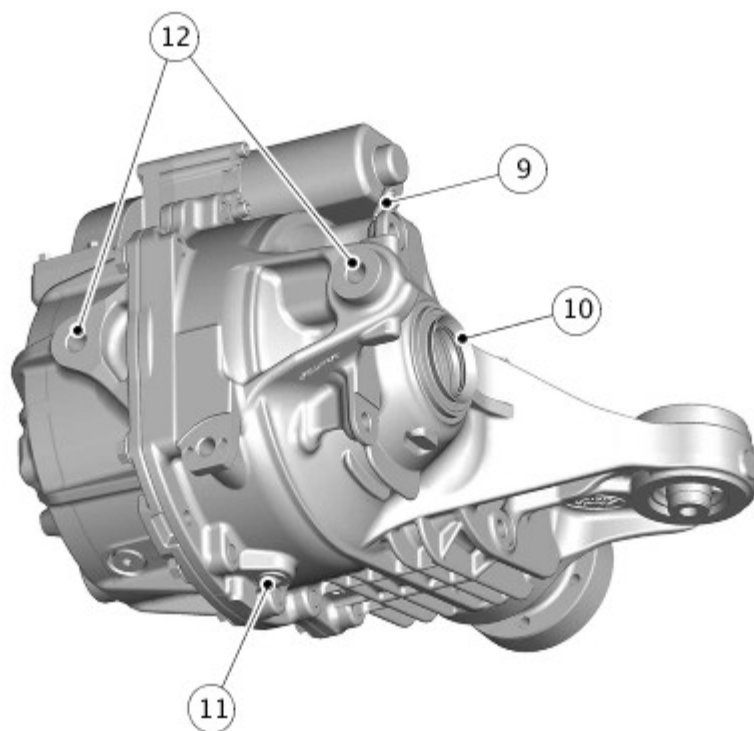
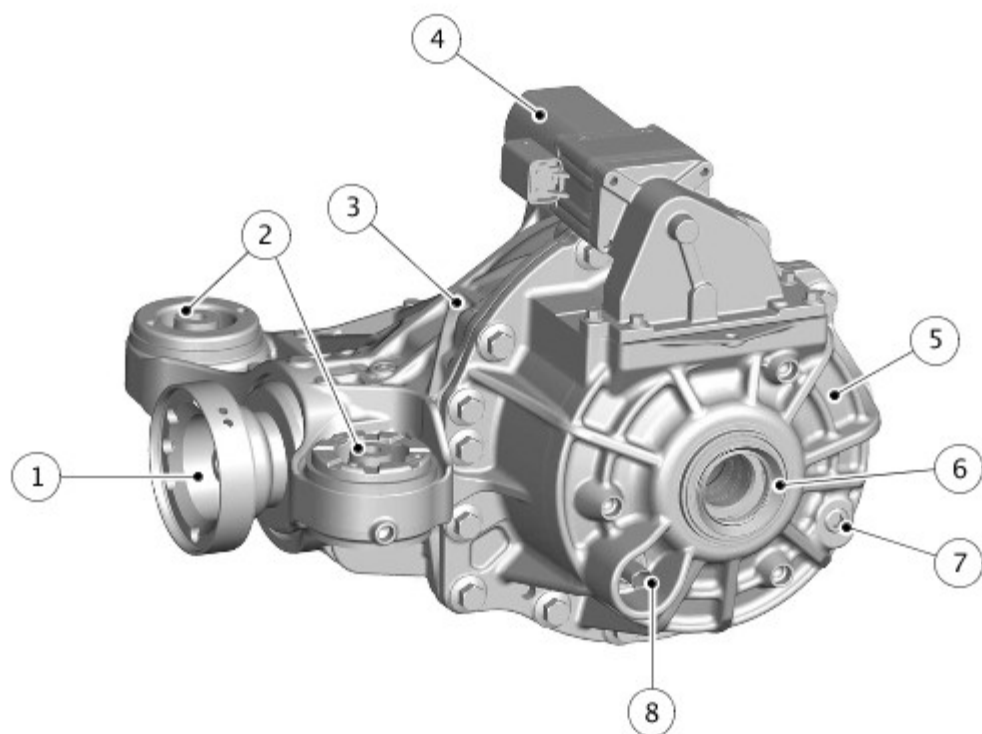
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2	☐ 捷豹路虎	29	0970012	2015-11-30 11...	ReLoginCode...	Vins20151130...

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E187806



E194076

Item	Description
1	Input flange
2	Front mounting points with insulators
3	Carrier
4	Differential locking motor



E189446

8. Damage to Tie Rod Ball Joint Seat Material

Visually check the tie rod ball joint seat material for signs of damage

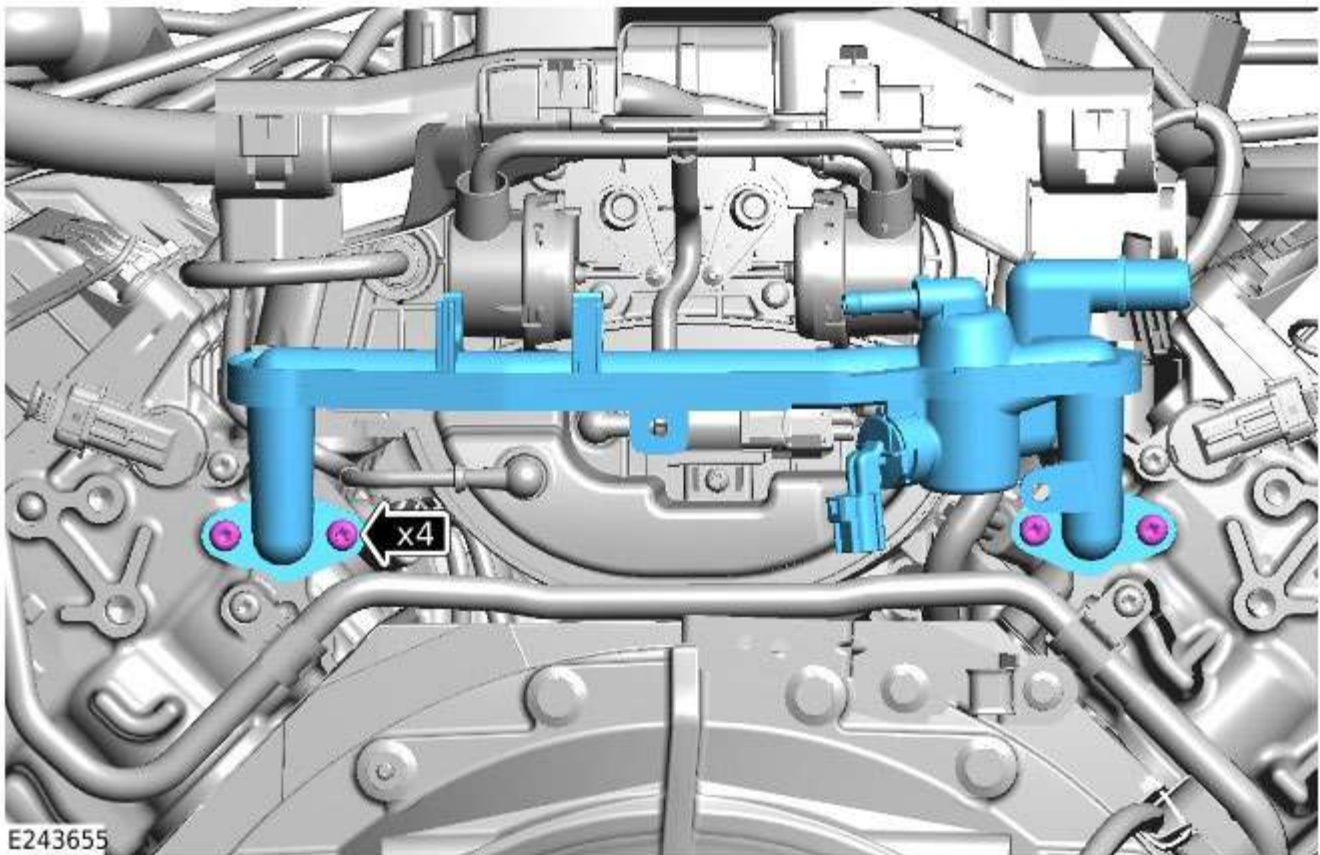
- Tie rod ball joint seat material damage.
Example image shows good and bad seat material. Refer to image E189448.
Tie rod ball joint damage. Refer to image E263224.
Tie rod ball joint damage. Refer to image E263225.



E189448



E263224



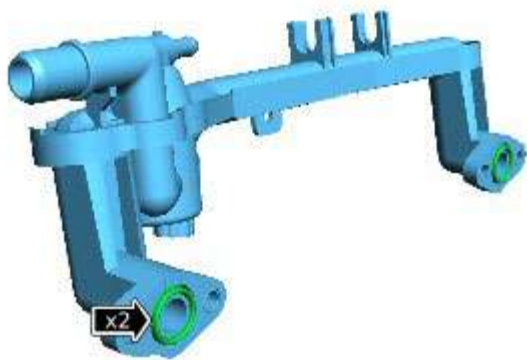
E243655

9.

- Remove the 4 bolts.
- Remove the rear coolant manifold.

10. NOTE:

This step is only required if new components are not installed.



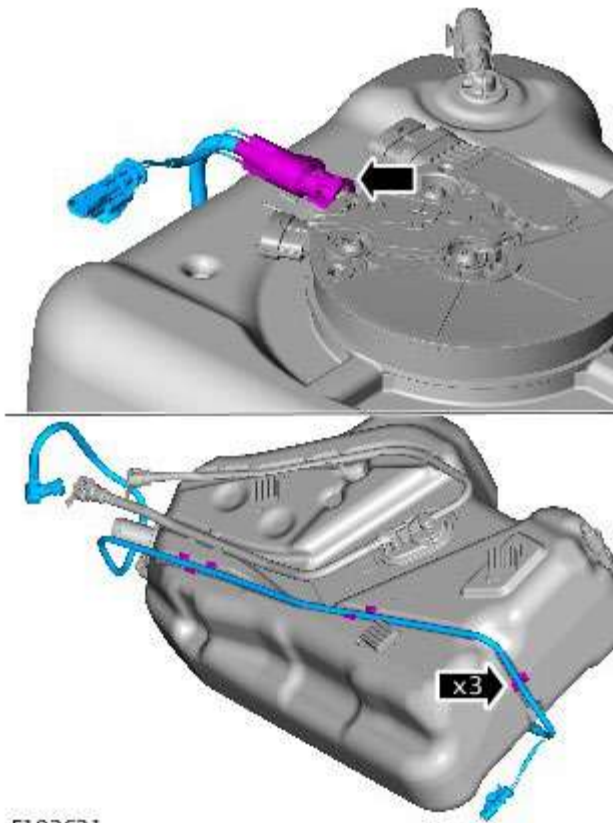
E243656

Remove and discard the 2 O-ring seals.

Installation

1. NOTE:

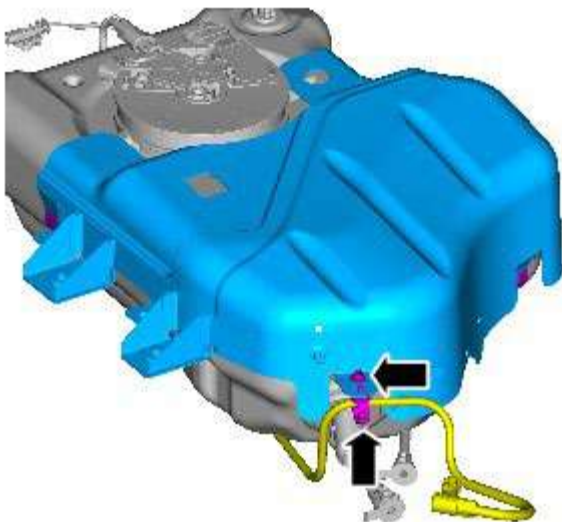
This step is only required if previously removed.



E192621

2. NOTE:

This step is only required if previously removed.



E192620

Torque: 10Nm

Step 6 Driveshaft to front output flange bolts 1

CAUTIONS:

- New transfer cases may be supplied with untapped bolt holes, reuse the original bolts when self tapping the new threads.
- Re-manufactured transfer cases have tapped holes, bolts must be installed finger tight before applying Torque.

NOTES:

- Some variation in the illustrations may occur, but the essential information is always correct.
- Component shown removed for clarity.

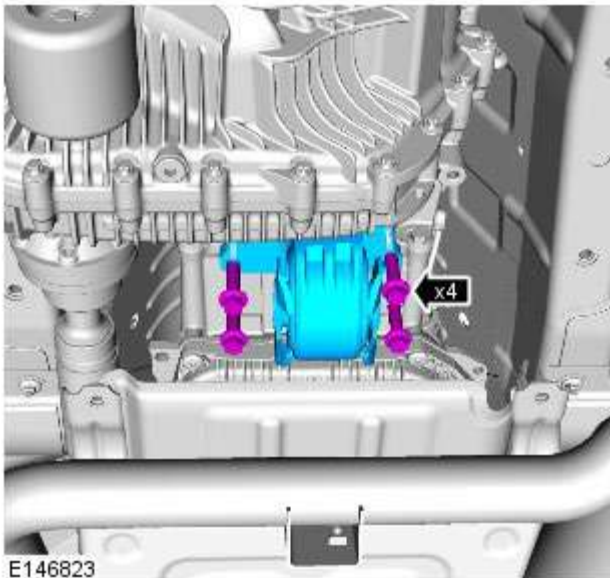
1. Disconnect the battery ground cable.
Refer to: [Specifications](#) (414-00 Battery and Charging System - General Information, Specifications).
2. WARNING:

Make sure to support the vehicle with axle stands.

Raise and support the vehicle.

3. Refer to: [Transmission Support Crossmember - TDV8 4.4L Diesel](#) (502-02 Full Frame and Body Mounting, Removal and Installation).
4. Refer to: [Rear Driveshaft - TDV6 3.0L Diesel /TDV6 3.0L Diesel - Gen 1.5/TDV6 3.0L Diesel - Gen 2](#) (205-01 Driveshaft, Removal and Installation).
5. CAUTION:

Air tools must not be used.



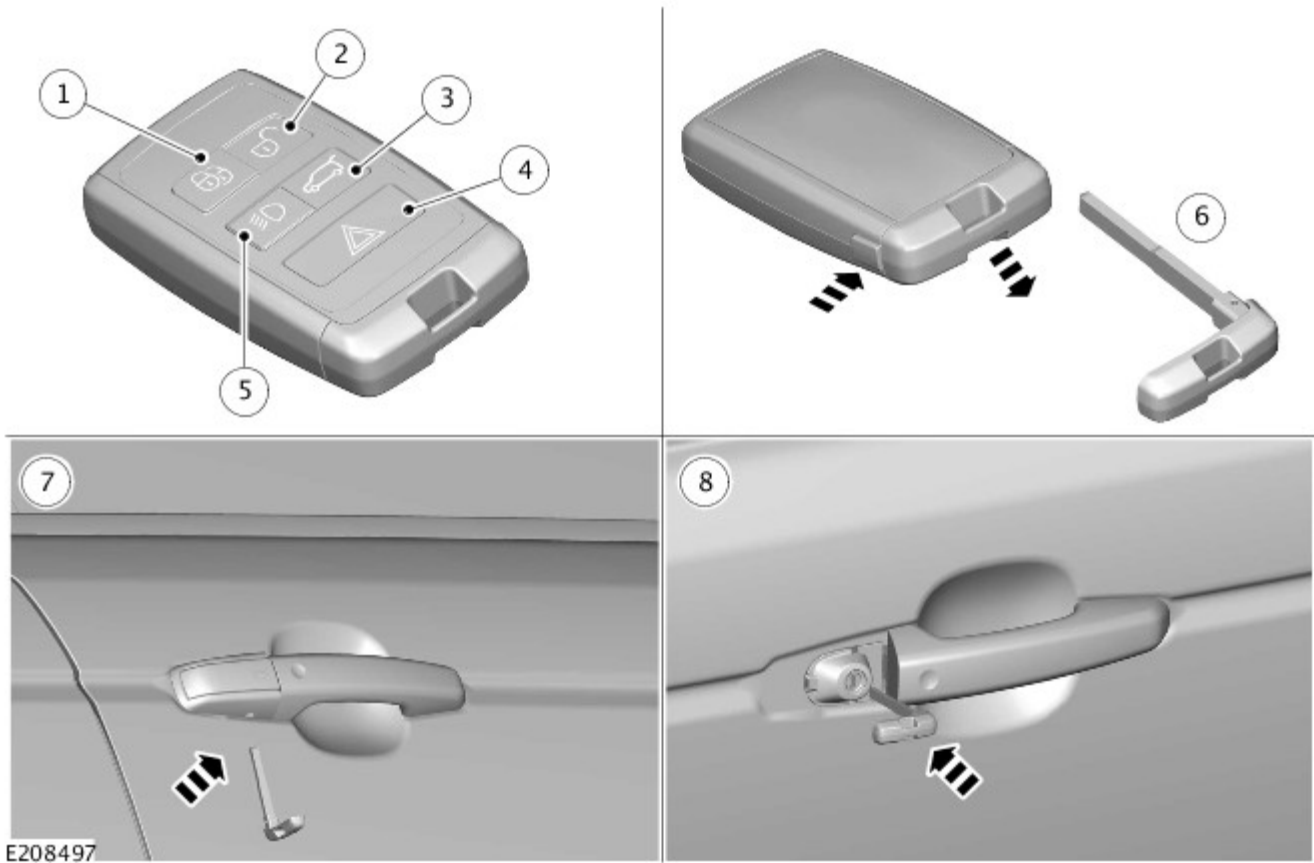
6. CAUTIONS:

- Mark the position of the driveshaft flange in relation to the drive pinion flange.
- To avoid damage to the joint or gaiter, do not allow the driveshaft to hang.

entry points. The user can operate the CDL system from inside or outside the vehicle. Manual operation of the CDL system is achieved using the following:

- Smart key and Remote Function Actuator (RFA).
- When a front door CDL lock/unlock switch is operated, all the vehicle doors will centrally lock/unlock. When a rear door CDL lock/unlock switch is operated, the CDL lock/unlock switch will only lock/unlock the activated rear door.

Smart Key and Emergency Mechanical Door Lock



Item	Description
1	Vehicle lock switch
2	Vehicle unlock switch
3	Tailgate open/close switch
4	Panic alarm switch
5	Headlamp delay switch
6	Emergency key
7	Emergency key barrel cover
8	Emergency key barrel operation with emergency key

The smart key contains an emergency key, concealed in the smart key housing. To remove the emergency key, push the button on the smart key.

The driver door exterior handle incorporates a mechanical operated door lock that is concealed behind a removable plastic cover.