

# Safety Recall JO28 (NHTSA# 12V571): Fuel Starvation

SERVICE BULLETIN

20-DEC-12 No.: 7-071USA Section: RECALL Market: USA

## THIS SERVICE BULLETIN UPDATES 7-069USA

Jaguar Land Rover North America, LLC has informed the National Highway Traffic Safety Administration (NHTSA) of its intent to perform a voluntary Safety Recall on certain 2013 model year Jaguar XF vehicles imported into the United States market. Information relating to the proposed Recall will be posted on the NHTSA website.

United States Federal regulations require that retailers must be advised of this Recall notification within three working days after government notification.

United States Federal law requires retailers to complete any outstanding safety Recall service before a new vehicle is delivered to the buyer or lessee. Violation of this requirement by a retailer could result in a civil penalty of up to \$6,000.00 per vehicle.

This Recall Service Bulletin serves as notification to all Jaguar retailers in the United States and Federalized Territories that any affected new vehicles may not be sold and delivered for customer use until the Recall repair is completed.

## **AFFECTED VEHICLES**

A total of nine (9) 2013 model year XF vehicles within the listed VIN range are affected in the USA market.

• XF (X250): S62664-S63295

See the list of specific affected VINs on page 3.

#### **DESCRIPTION OF DEFECT**

The in-tank fuel pump is controlled by the Engine Control Module (ECM) via a Fuel Pump Driver Module (FPDM). The FPDM sources its power supply from an intelligent rear fuse box known as the Body Control Module - Back (BCMB). The BCMB supplies power to the FPDM through a power Field Effect Transistor (FET). Investigation has shown that the in rush current drawn by the FPDM can on occasions reach 185 amps as opposed to a design specification of 30 amps. The FET has a 150 amps in rush current limit and should this limit be reached, the FET will shut off to prevent it from becoming damaged. The FET will reactivate over a number of cycles until the temperature of the FET eventually rises to a level that causes thermal shut down. Shutting down of the FET will cause the FPDM to shut down and the in-tank fuel pump will stop, causing fuel starvation to the engine.

## **AFFECT ON VEHICLE OPERATION**

If the vehicle experiences fuel starvation, it will cut out with minimal warning signs. Once the vehicle has cut out, the brake vacuum reservoir will be depleted and the vehicle will lose brake power assistance, however foundation brakes continue to operate. Power Assisted Steering (PAS) will also be lost once the vehicle speed drops below the torque converter speed threshold; however the vehicle steering will remain functional with increased steering effort required. The vehicle may take up to 20 minutes before the engine can be re-started. Fuel starvation to the engine leads to engine cut out with minimal warning and could potentially cause a crash.

## **ACTION TO BE TAKEN**

Retailers must use the DDW system vehicle inquiry screen to check for all affected vehicles within the VIN range that are in their control for 'J028' eligibility and refrain from releasing these vehicles for new or used vehicle sale pending completion of the rework action detailed in Technical Bulletin J028. Sold vehicles will be subject to the standard Recall notification and Recall bulletin process detailing the action required for vehicles in the hands of owners. Owner notification is expected to commence in early-January 2013.

NOTE: Retailers are advised that the use of vehicles within the affected VIN list as <u>Sales</u>

<u>Demonstrator or Service Loaner vehicles</u> may be considered a violation of Federal legislation. Jaguar Land Rover recommends against using affected vehicles for demonstrator or loaner purposes. Please consult your own legal counsel if you have questions in this regard.

## STATUS CHECKING / VEHICLE IDENTIFICATION

In order to prevent repair duplication, always verify the status of a Recall using the DDW system vehicle inquiry screen prior to carrying out any repair.

## SERVICE PROGRAM

Retailers should refer to Technical Bulletin J028, Safety Recall: Fuel Starvation, for complete repair details.

## **PARTS SUPPLY**

Part No.	DESCRIPTION	QTY	% OF VEHICLES REQUIRING PART*
C2Z26797	Link lead harness kit	1	100

<sup>\*</sup> when ordering parts, order the expected percentage failure rate of parts identified only

## **WARRANTY**



NOTE: Repair procedures are under constant review, and therefore times / prices are subject to change; those quoted here must be taken as guidance only. Always refer to DDW to obtain the latest repair time. Check DDW to ensure that the vehicle is affected by this program prior to undertaking any rework action. At the time of confirming a booking for vehicle repair, ensure that all outstanding Service Actions are identified to ensure the correct parts are available and adequate workshop time is allocated for repairs to be completed at one visit.

Warranty claims must be submitted quoting Program Code 'J028' together with the relevant Option Code from the table. The SRO and part information listed have been included for information only. The Option Code(s) that allows for the drive in / drive out allowance can only be claimed if the vehicle is brought back into the workshop for this action alone to be undertaken.

PROGRAM CODE	OPTION CODE	DESCRIPTION	SRO	TIME (HOURS)	Part No.	QTY. / VALUE
J028	В	Install overlay harness	86.94.78	0.40	C2Z26797	1
J028	С	Install overlay harness Drive in/drive out	86.94.78 10.10.10	0.40 0.10	C2Z26797 -	1

Normal Warranty policies and procedures apply

## **CUSTOMER RE-IMBURSEMENT PROCESS**

If a customer has indicated that they have already paid for this concern as a normal retail repair (vehicle outside warranty period), a copy of the repair invoice must be produced as proof of the repair. Retailers must directly reimburse the customer and a claim for recovery of this cost should be made using the Related Damage procedure. Supplementary claims for related damages can only be made once the Field Service Action claim has been paid/accepted.

Claims should be submitted quoting Program Code '**J028**" and by clicking the 'Related Damage' radio button on the claim submission screen. The warranty claim should be submitted using Option Code '**X**' and entering the cost to be reimbursed against the sundry code of 'ZZZ999'. All costs should be entered in local currency.

A copy of the invoice must be appended to the repair order for Warranty Audit purposes. A brief comment should be entered in the 'Technician Comments' field on the claim to itemize and explain the charges. Only vehicles eligible for Service Action J028 are included in this process. Only one claim per vehicle for related damages will be accepted.

## Safety Recall J028: Affected VIN List

RETAILER CODE / NAME	VIN
0517 British Motor Car Distributors, Ltd.	S63284
0617 Jaguar Minneapolis	S62664
5302 Jaguar Paramus	S63137
5395 Jaguar West Ashley	S63082
5429 Jaguar Roanoke	S63127
5533 Jaguar Hilton Head	S62870
5662 Leith Jaguar	S63175
5703 Galpin Jaguar	S63295
5799 Jaguar Schererville	S63262

## Safety Recall J028: Sample Owner Letter

## December 2012

RE: Safety Recall J028 - Fuel Starvation

Vehicle Affected: Jaguar XF

Model Year: 2013

National Highway Traffic Safety Administration Recall Number: 12V571

## Dear Jaguar XF Owner,

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Jaguar has decided that a defect which relates to motor vehicle safety exists in some 2013 model year Jaguar XF vehicles. Your vehicle is included in this Recall action.

## What is the concern?

A concern has been identified whereby the in-tank electric fuel pump may not be correctly activated following a vehicle start up cycle. It is possible your vehicle may not start however, should it start, it may subsequently cut-out whilst driving and re-start may not be immediate. Fuel starvation to the engine leads to engine cut out with minimal warning and could potentially cause a crash.

An engine stall without warning while driving may lead to a loss of motive power, a loss of power-assisted braking and a loss of power-assisted steering. Each of these conditions may increase the risk of a vehicle crash.

## What will Jaguar and your Jaguar Retailer do?

Jaguar is carrying out a voluntary recall of the vehicles mentioned above. An authorized Jaguar retailer will install an overlay harness which incorporates a relay that will ensue robust operation of the in tank fuel pump. There will be no charge for this repair.

## What should you do?

Please contact your authorized Jaguar retailer at your earliest convenience to schedule an appointment to have Recall Action J028 completed on your vehicle.

## How long will it take?

The work will be carried out as quickly and efficiently as possible in order to minimize inconvenience to customers and is expected to take approximately one (1) hour, although your retailer may need your vehicle for a longer time due to service scheduling requirements.

<u>Attention Leasing Agencies</u>: Federal regulations require that you forward this recall notification to the lessee within TEN days.

## Moved or no longer own a Jaguar?

If you are no longer the owner of this vehicle, Jaguar would greatly appreciate the name and address of the new owner, using the Information Change Form enclosed.

## What should you do if you have previously paid to repair this issue?

If you have already paid for this issue to be repaired for this concern prior to the date of this letter, Jaguar is offering a refund. In order to qualify for a refund, please provide your authorized Jaguar retailer with the original paid receipt.

To avoid delays, please do not send the receipt to Jaguar Land Rover North America, LLC.

## What should you do if you have further questions?

Should you have any questions regarding this Recall Action or need assistance in locating your nearest authorized Jaguar retailer, please contact the Jaguar Customer Relationship Center at 800-4JAGUAR (800-452-4827).

You can also contact Jaguar by e-mail: Visit the web site <a href="http://www.jaguarusa.com">http://www.jaguarusa.com</a> and send an email from the 'Contact Jaguar' section.

## If you have the need to contact Jaguar by mail, please use the following address:

Jaguar Land Rover North America, LLC ATTN: Customer Relationship Center 555 MacArthur Boulevard Mahwah, NJ 07430-2327

# If you are having difficulty getting your vehicle repaired in a reasonable time or without charge, you may write:

Administrator, National Highway Traffic Safety Administration 1200 New Jersey Avenue, SE Washington, D.C. 20590

Or you may call the toll-free Vehicle Safety Hotline at 888-327-4236 (TTY: 800-424-9153), or log on to <a href="http://www.safercar.gov">http://www.safercar.gov</a> to submit a complaint electronically.

We appreciate your confidence in our product and wish to do everything we can to retain that confidence. Jaguar, in cooperation with your authorized retailer, will strive to minimize any inconvenience to you caused by this campaign.

Sincerely,

Peter Pochapsky

Customer Experience Manager

## Safety Recall J028: Technical Q & A

## Main Message:

A concern has been identified with the electrical power supply to the in tank fuel pump on certain gasoline engine 2013 model year XF vehicles, where the engine of the vehicle can be started and continue to operate as normal for a variable period of time until the engine fuel demand exceeds the ability for the high pressure fuel pump to supply fuel. The vehicle will experience fuel starvation and can then cut out without any detectable warning signs.

## Q1 Why is Jaguar recalling certain XF models?

A Jaguar Cars is conducting a voluntary safety recall for selected 2013MY gasoline XF vehicles to introduce an overlay harness to ensure that the power feed to the in tank fuel pump operates correctly.

## Q2 Can you tell me more about what is wrong with the vehicles?

A The in tank fuel pump is controlled by the Engine Control Module (ECM) via a Fuel Pump Driver Module (FPDM). The FPDM sources its power supply from an intelligent rear fuse box known as the Body Control Module - Back (BCMB). The BCMB supplies power to the FPDM through a power Field Effect Transistor (FET). Investigation has shown that the current drawn by the FPDM can exceed the design specification. When the current exceeds the design specification the FET will shut off to prevent it from becoming damaged. The FET will re-activate over a number of cycles until the temperature of the FET eventually rises to a level that causes thermal shut down. Shutting down of the FET will cause the FPDM to shut down and the in tank fuel pump will stop, causing fuel starvation to the engine.

## Q3 How would the customer become aware of potentially having this concern?

A If the vehicle experiences fuel starvation, it will cut out without any detectable warning signs. Once the vehicle has cut out, the brake vacuum reservoir will be depleted and the vehicle will lose brake power assistance, however foundation brakes continue to operate. Power Steering will also be lost once the vehicle speed drops below the torque converter speed threshold; however the vehicle steering will remain functional with increased steering effort required. The vehicle may take up to 20 minutes before the engine can be re-started.

## Q4 Does this concern affect vehicle safety?

A Jaguar has determined that engine cut out at variable speed without any prior warning signs, could pose a risk to vehicle safety.

## Q5 Has Jaguar received many complaints?

A Jaguar Cars has identified one (1) retailer field report for this issue.

## Q6 Have there been any accidents or injuries?

A There have been no reports of accidents or injuries relating to this concern of which Jaguar is aware.

## Q7 How was the condition discovered?

A The condition was identified when newly manufactured vehicles exhibited engine cut out whilst being operated at the vehicle assembly plant.

## Q8 How long has Jaguar known about this problem?

A The first report of this issue was received on 16 October 2012.

# Q9 Is the defect leading you to any concerns regarding the reliability of a system, which is supposed to be designed and engineered for the vehicle occupant's safety? What type of measures are you planning to take?

A Jaguar has no concerns with the overall reliability of the vehicles. Jaguar carefully monitors vehicle quality data to ensure that any matters relating to safety and compliance are rigorously investigated.

## Q10 What has Jaguar done in production?

A Jaguar has introduced a revised electrical architecture to remove this issue for vehicles built post vehicle identification number (VIN) SAJAA05N4DPS63550.

## Q11 What will Authorised Repairers do to the vehicles?

A Authorised Repairers will install an overlay harness that incorporates a relay to supply the power to the FPDM.

## Q12 Which vehicles are affected by this recall?

A All gasoline engine 2013MY XF vehicles within the VIN range SAJWA0ES7DPS55273 to SAJAA05N4DPS63550.

## Q13 Are other Jaguar models affected by these actions?

A No other models are known to be affected.

## Q14 Are parts available to rework vehicles?

A Parts are available for authorised repairers to conduct this Recall Action.

## Q15 How much will the recall cost Jaguar?

A Cost was not a factor in deciding to recall these vehicles.

## Q16 How do I know if my XF vehicle is affected?

A All owners of potentially affected vehicles will shortly receive a letter inviting them to contact a Jaguar Authorised Repairer for the work to be carried out.

## Q17 How long does it take for the car to be inspected and repaired?

A The work will be carried out as quickly and efficiently as possible in order to minimise inconvenience to customers and is expected to take no longer than one (1) hour to complete. Naturally, due to retailer schedules, vehicles may be required for longer.

## Q18 Can I continue to drive my XF safely until it has been recalled?

A Customers are advised to contact a Jaguar Authorized Repairer should they have any concerns over the starting and running of their vehicle.

Note: Please ensure that any Press enquiries are referred to the Jaguar Land Rover North America Public Relationship office.