

August 7, 2014

To:

Area General Managers

From:

Don Fordiani, National Field and Dealer Operations Manager

Subject:

Extension of Limited Service Campaign (LSC) 9LH

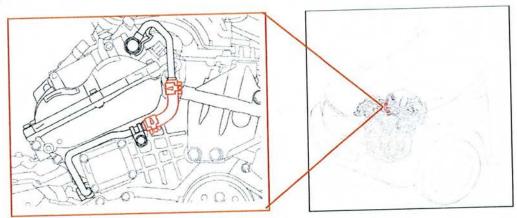
2007 - 2009 RX 350 and 2007 - 2008 ÉS 350 Vehicles

2GR-FE (V6) Engine VVT-i Oil Hose Replacement

In our continuing efforts to ensure the best in customer satisfaction, Lexus is extending Limited Service Campaign (LSC) 9LH on certain 2007 - 2009 RX 350 and 2007 - 2008 ES 350 vehicles. There were approximately 30,000 vehicles that were not completed prior to the expiration of the original LSC that will be covered by this LSC extension.

Background

On certain vehicles equipped with a 2GR-FE (V6) engine, the rubber portion of the oil supply hose for the VVT-I actuator may degrade over time. This condition may cause oil to leak from the VVT-I oil hose producing abnormal engine noise and the oil pressure light to illuminate.



The following vital information is provided to inform you and your staff of the dealer and owner notification phase of the campaign and your degree of involvement. Additional information may be found in the attached Lexus Q&A and customer notification letter.

Limited Service Campaign (LSC) Remedy

Authorized Lexus dealers are requested to replace the VVT-i hose at NO CHARGE to the vehicle's owner.

This LSC extension will be available until December 31, 2021, and will only be available at an authorized Lexus dealer.

Dealer and Owner Notification Dates

The attached dealer communication will be e-mailed to all Lexus dealers on August 8, 2014.

The owner notification will begin in early August, 2014, approximately one week after the dealer notification.

Please note that only owners of covered vehicles will be notified. If your dealers are contacted by owners who have not yet received a notification, please remind them to *verify eligibility by confirming through TIS prior to performing repairs*. Dealers should perform the repair as outlined in the Technical Instructions found on TIS.

Used Vehicles in Dealership Inventory (In-stock Vehicles)

To ensure customer satisfaction, Lexus requests that dealers conduct the LSC remedy on any used vehicles currently in dealer inventory that are covered by this LSC prior to customer delivery.

Number and Identification of Affected Vehicles

There are approximately 30,000 vehicles covered by this LSC extension.

Parts Availability and Ordering

The kit for this remedy has been placed on Dealer Ordering Solutions. Please refer to the dealer letter for additional details.

Media Contacts

It is imperative that all media contacts (local and national) receive a consistent message. In this regard, all media contacts must be directed to Cindy Knight (310) 468-2170 in Toyota Corporate Communications. (Please do not provide this number to customers. Please provide this contact to only media associates.)

Customer Handling

A O&A is attached to assist you in responding to any dealer questions or customer concerns. If a customer has any further questions they are requested to contact the Lexus Customer Assistance Center at 1-800-255-3987 Monday through Friday, 5:00 am to 6:00 pm PST, or Saturday, 7:00 am to 4:00 pm PST.

Thank you for your understanding and cooperation.

Attachment

CC: Assistant Area General Managers
Customer Satisfaction Managers
Customer Services Field Managers
Customer Services Operations Manager s
District Service and Parts Managers
District Technical Managers
Field Product Engineers
Pre-Owned Manager
Vehicle Field Sales Managers



August 8, 2014

Subject: Extension of Limited Service Campaign (LSC) 9LH

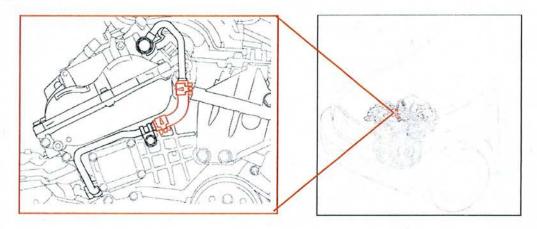
2007 - 2009 RX 350 and 2007 - 2008 ES 350 Vehicles 2GR-FE (V6) Engine VVT-i Oil Hose Replacement

Dear Dealer Principal:

In our continuing efforts to ensure the best in customer satisfaction, Lexus is extending Limited Service Campaign (LSC) 9LH on certain $2007 - 2009 \, RX \, 350$ and $2007 - 2008 \, ES \, 350$ vehicles. There were approximately 30,000 vehicles that were not completed prior to the expiration of the original LSC that will be covered by this LSC extension.

Background

On certain vehicles equipped with a 2GR-FE (V6) engine, the rubber portion of the oil supply hose for the VVT-I actuator may degrade over time. This condition may cause oil to leak from the VVT-I oil hose producing abnormal engine noise and the oil pressure light to illuminate.



The following information is provided to inform you and your staff of the owner notification phase of the campaign and your degree of involvement. Additional information may be found in the attached Lexus Q&A and customer notification letter.

Limited Service Campaign (LSC) Remedy

Authorized Lexus dealers are requested to replace the VVT-i hose at NO CHARGE to the vehicle's owner.

This LSC extension will be available until December 31, 2021, and will only be available at an authorized Lexus dealer.

Owner Notification Date

The owner notification will begin in early August, 2014, approximately one week after the dealer notification.

Lexus makes significant effort to obtain current customer name and address information from each state through industry resources when mailing owner letters. In the event your dealership receives a notice for a vehicle that was sold prior to the

LSC extension announcement, it is the dealership's responsibility to forward the owner letter to the customer who purchased the vehicle.

Please note that only owners of covered vehicles will be notified. If you are contacted by an owner who has not yet received a notification, please *verify eligibility by confirming through TIS prior to performing repairs*. Dealers should perform the repair as outlined in the Technical Instructions found on TIS.

Used Vehicles in Dealership Inventory (In-stock Vehicles)

To ensure customer satisfaction, Lexus requests that dealers conduct the LSC remedy on any used vehicles currently in dealer inventory that are covered by this LSC prior to customer delivery.

Number and Identification of Affected Vehicles

There are approximately 30,000 vehicles covered by this LSC extension.

MILL	VAVNAL	MILLY	VIN Range	
Model	WMI	Model Year	VDS	Range
		0007	GK31U	C001025 - C026795
		2007	HK31U	C001025 - C047067
DV 2F0	OTO	2000	GK31U	C026817 - C056931
RX 350	2T2	2008	HK31U	C047115 - C096520
		2000	GK31U	C056936 - C073676
		2009	HK31U	C096531 - C122713
		2007	GK31U	0001013 - 0010307
			HK31U	2000449 - 2027597
			GK31U	0010330 - 0015559
DV 2EO	350 JTJ 20	2008	2008 GK310	9850000 - 9852145
RX 350	111		HK31U	2027233 - 2854795
		CV21LL	0015565 - 0016006	
		2009	GK31U	9852148 - 9852763
			HK31U	2051144 - 2857443
CC DEO	ITL.	2007	DIA6C	2000161 - 2154811
ES 350	JTH	2008	BJ46G	2154866 - 2241848

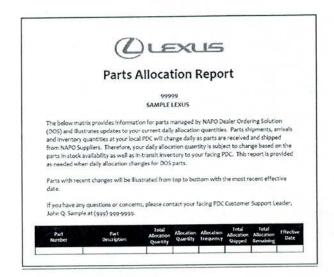
Please note that only owners of the covered vehicles will be notified. If a dealer is contacted by an owner who has not yet received the notification, please *verify coverage by confirming through TIS*. Dealers should perform the procedure as outlined in the Technical Instructions located on TIS. Not all vehicles in the VIN range are covered by this LSC extension.

Parts Availability and Ordering

Orders can be placed through your facing PDC. The VVT-i hose kit has been placed on Dealer Ordering Solutions (DOS) and will be systematically released daily based on dealer ordering criteria.

Part Description	Part Number	Quantity per Vehicle
No. 1 Oil Hose Kit	04009-33131	1

Each dealership will receive specific dealer ordering criteria in an e-mail from their facing PDC manager. Therefore, it is vital that your dealership's parts and service departments coordinate appointments for the replacement. A sample of the



Required Special Service Tools

An angled needle nose plier will be required to complete the repair. One of these tools was previously provided free of charge at the launch of the original LSC 9LH. Technicians may also utilize the following commercially available tools:

Snap-On: 411BCPMatco: PNG111BMac: P301733



Technician Training Requirements

The repair quality of covered vehicles is extremely important to Lexus. All dealership associates involved in the recall process are required to successfully complete E-Learning course LSC13A. To ensure that all vehicles have the repair performed correctly; technicians performing this recall repair are required to currently hold at least one of the following certification levels:

- Senior or Master Technician
- Senior or Master Diagnostic Technician

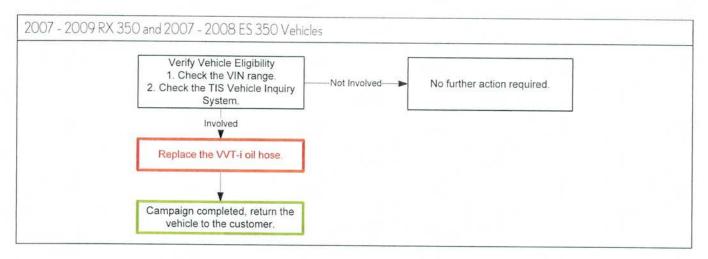
It is the dealership's responsibility to select technicians with the above certification level or greater to perform this Safety Recall repair. Carefully review your resources, the technician skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure there are properly trained technicians available to perform this repair at all times.

Remedy Procedures

Please refer to TIS for technical instructions.

Conduct all applicable, non-completed Safety Recall and Service Campaigns on the vehicle during the time of appointment.

Warranty Reimbursement Procedures



Dealers are required to submit LSC claims using the information described below.

LSC	Model	Opcode	Description	Labor Hours*
0111	RX	9609KB	5	000 acc. 40 acc. 40 acc.
9LH -	ES	9609KC	Replace the oil cooler hose	0.8 hr/vehicle

^{*}NOTE: The flat rate time includes 0.1 hour for campaign administrative cost per unit for the dealership.

Lexus' usual customer care amenities of car wash and fuel fill-up apply to this LSC. Additionally, one day of rental vehicle expense (to a maximum of \$45) or the cost of pick-up and delivery of the customer's car may be claimed if required and subject to the guidelines published in the Special Service Campaign and Limited Service Campaign General Procedures document on TIS.

Repair Quality Confirmation

The repair quality of covered vehicles is extremely important to Lexus. To help ensure that all vehicles have the repair performed correctly, please designate at least one associate (someone other than the individual who performed the repair) to verify the repair quality of every vehicle prior to customer delivery.

Media Contacts

It is imperative that all media contacts (local and national) receive a consistent message. In this regard, all media contacts must be directed to Cindy Knight (310) 468-2170 in Toyota Corporate Communications. (Please do not provide this number to customers. Please provide this contact to only media associates.)

Customer Handling

A Q&A is attached to assist you in responding to any questions or customer concerns. If the customer has any further questions they are requested to contact the Lexus Customer Assistance Center at 1-800-255-3987 Monday through Friday, 5:00 am to 6:00 pm PST, or Saturday, 7:00 am to 4:00 pm PST.

Please review this information with your Service and Parts staff to familiarize them with the proper step-by-step procedures required to implement this Limited Service Campaign.

Thank you for your on-going support.

Lexus, a Division of Toyota Motor Sales, USA, Inc.

Attachments

CC: Customer Satisfaction Manager General Manager Parts Manager Pre-owned Manager Service Manager Warranty Administrator

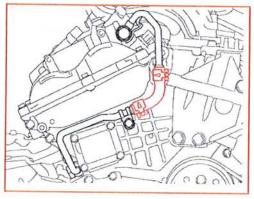


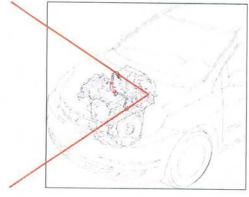
Extension of Limited Service Campaign (LSC) 9LH Certain 2007-2009 Model Year RX 350 Certain 2007-2008 Model Year ES 250 2GR-FE (V6) Engine VVT-i Oil Hose Replacement

In our continuing efforts to ensure the best in customer satisfaction, Lexus is extending Limited Service Campaign (LSC) 9LG for vehicles that were not repaired prior to the expiration of the original LSC. Approximately 30,000 vehicles will be covered by this LSC extension.

Q1: What is the condition?

On certain vehicles equipped with a 2GR-FE (V6) engine, the rubber portion of the oil supply hose for the VVT-i actuator may degrade over time. This condition may cause oil to leak from the VVT-i oil hose producing abnormal engine noise and the oil pressure light to illuminate.





Ola: What is the cause of this condition?

A1a: The rubber portion of the engine oil supply hose for the VVT-i actuator may develop a pinhole. Over time, exposure to small amounts of corrosive gases from the positive crankcase ventilation (PCV) may cause this pinhole in the hose to expand. As a result, oil may leak from the hose.

O1b: Are there any warnings that this condition exists?

A1b: Yes, this condition may cause abnormal engine noise and/or the oil pressure light to illuminate

Q2: What is Lexus going to do?

Owners of vehicles covered by this LSC will receive a notification letter by first class mail starting in early August, 2014.

Any authorized Lexus dealer will replace the VVT-i Oil Hose at NO CHARGE to the vehicle owner. Please see your local authorized Lexus dealer for additional details.

Q2a: How does Lexus obtain my mailing information?

A2a: Lexus uses an industry provider who works with each state's Department of Motor Vehicles (DMV) to receive registration or title information based upon the DMV records. Please make sure your registration or title information is correct.

Q2b: Do I need my owner letter to have the remedy performed?

A2b: No, you do not need an owner letter to have this LSC completed; however, to assist the dealer in confirming vehicle eligibility, we request that you present the owner notification at the time of your service appointment.

Q4: Which and how many vehicles are covered by this Limited Service Campaign?

A4: There are approximately 30,000 vehicles covered by this Limited Service Campaign extension in the U.S.

Model Name	Model Year	Production Period	Appx. UIO
ES350	Certain 2007-2008	Early March, 2006 through Mid-April 2008	11.500
RX350	Certain 2007-2009	Mid-January, 2006 through Mid-August, 2008	18,500

Q4a: Are there any other Toyota, Lexus, or Scion vehicles covered by this Limited Service Campaign Extension in the

A4a: Yes, this condition also affects the following Toyota vehicles.

Model Name	Model Year	Production Period	Appx. UIO
Highlander	Certain 2008	Late May, 2007 through Late April, 2008	14,600
RAV4	Certain 2006-2009	Early January, 2006 through Early February, 2009	10,400
Camry	Certain 2007-2010	Late December, 2005 through Mid-June, 2009	19,500
Avalon	Certain 2005-2009	Late December, 2004 through Mid-May, 2009	18,800
Sienna	Certain 2007-2010	Early December, 2006 through Late June, 2009	54,300

Toyota vehicles will be identified under Limited Service Campaign extension 90K.

Q5: When will this Limited Service Campaign Expire?

A5: This Limited Service Campaign will be available until December 31, 2021.

Q6: How long will the repair take?

A6: The repair will take approximately one hour. However, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.

Q7: What if you have previously paid for repairs to your vehicle for this specific condition?

A7: Owners who have previously paid for repairs to address this specific condition should refer to the owner letter for instructions regarding reimbursement consideration.

Please note the dealer will need to perform this LSC before reimbursement consideration requests can be processed.

Q8: What if an owner has additional questions?

A8: Owners with questions or concerns are asked to please contact the Lexus Customer Assistance Center at 1-800-255-3987 Monday through Friday, 5:00 am to 6:00 pm, or Saturday 7:00 am through 4:00 pm Pacific Time.

Certain 2007-2009 Model Year RX 350 Certain 2007-2008 Model Year ES 350 2GE-FE (V6) Engine VVT-i Oil Hose Replacement LIMITED TIME OFFER

[VIN]

Dear Lexus Owner:

At Lexus, we are dedicated to providing vehicles of outstanding quality and value. In our continuing efforts to ensure the best in customer satisfaction, Lexus is extending Limited Service Campaign (LSC) 9LH for vehicles that were not repaired prior to the expiration of the original LSC; this extension includes your vehicle.

What is the condition?

On certain vehicles equipped with a 2GR-FE (V6) engine, the rubber portion of the oil supply hose for the VVT-i actuator may degrade over time. This condition may cause oil to leak from the VVT-i oil hose producing abnormal engine noise and the oil pressure light to illuminate.

What is included in the Limited Service Campaign?

Before you are inconvenienced by this condition, any authorized Lexus dealer will replace the VVT-i Oil Hose at NO CHARGE to you for a limited time. *This Limited Service Campaign will remain available until December 31, 2021*, and will only be available at an authorized Lexus dealer.

This offer is limited to your specific vehicle whose Vehicle Identification Number (VIN) is printed at the beginning of this letter and is subject to the same conditions set forth in the New Vehicle Limited Warranty section of your Owner's Manual Supplement or Owner's Warranty Information booklet. For additional information, please refer to the booklet.

How do you take advantage of this Limited Service Campaign?

Please contact your authorized Lexus dealer to make an appointment to have the VVT-I oil hose replaced before *December 31, 2021.* The repair will take approximately 1 hour. However, depending upon the dealer's work schedule, it may be necessary to make your vehicle available for a longer period of time.

If your vehicle is covered by this Limited Service Campaign, you do not need this owner letter to have the campaign completed; however, to assist the dealer in confirming vehicle eligibility, we request that you present this notice at the time of your service appointment.

What if you have other questions?

- Your local Lexus dealer will be more than happy to answer any of your questions and set up an appointment to perform the repair.
- If you would like to update your vehicle ownership or contact information, please go to <u>www.lexus.com/ownersupdate</u>. You will need your full 17-digit Vehicle Identification Number (VIN) to input the new information.
- If you require further assistance, you may contact the Lexus Customer Assistance Center at 1-800-255-3987 Monday through Friday, 5:00 am to 6:00 pm, Saturday 7:00 am through 4:00 pm Pacific Standard Time.

What if you have previously paid for repairs to your vehicle for this specific condition?

If you have previously paid for repair to your vehicle for this specific condition prior to receiving this letter, please mail a copy of your repair order and proof-of-payment to the following address for reimbursement consideration:

Lexus, a Division of Toyota Motor Sales, U.S.A., Inc Lexus Customer Assistance Center L201 19001 South Western Avenue Torrance, CA 90509 Include your name, address, and telephone number(s) in your request. Please allow us 6-8 weeks to process your request.

Please note the dealership will need to complete the Safety Recall remedy before reimbursement consideration requests can be processed.

If you are a vehicle lessor, please assist us by forwarding this notice to the lessee.

We have sent this notice in the interest of your continued satisfaction with our products, and we sincerely regret any inconvenience this condition may have caused you.

Thank you for driving a Lexus.

Sincerely,

Lexus, a Division of Toyota Motor Sales, USA, INC.

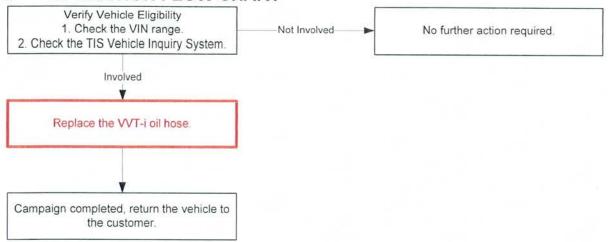
FOR LIMITED SERVICE CAMPAIGN 9LH VVT-i OIL HOSE REPLACEMENT

2007 - 2008 ES350

The repair quality of covered vehicles is extremely important to Lexus. All dealership associates involved in the recall process are required to successfully complete E-Learning course LSC13A. To ensure that all vehicles have the repair performed correctly; technicians performing this recall repair are required to currently hold <u>at least one</u> of the following certification levels:

- Senior or Master Technician
- Senior or Master Diagnostic Technician

I. OPERATION FLOW CHART



II. IDENTIFICATION OF AFFECTED VEHICLES

A. AFFECTED VIN RANGE

Model W	WMI	Voor	VIN Range	
louei	VVIVII	Year	VDS Range	
ES350 JTH	2007	D 1400	2000161 - 2154811	
	2008	BJ46G	2154866 - 2241848	

- Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this LSC and that the campaign has not already been completed prior to dealer shipment or by another dealer.
- TMS warranty will not reimburse dealers for repairs conducted on vehicles that are not affected or were completed by another dealer.

III. PREPARATION

A. PARTS

B. TOOLS & EQUIPMENT

- Standard hand tools
- Torque wrench
- Angled long nose pliers*

- · Paper or shop towels
- Mirror
- * NOTE: One angled long nose pliers will be included in the dealer package.

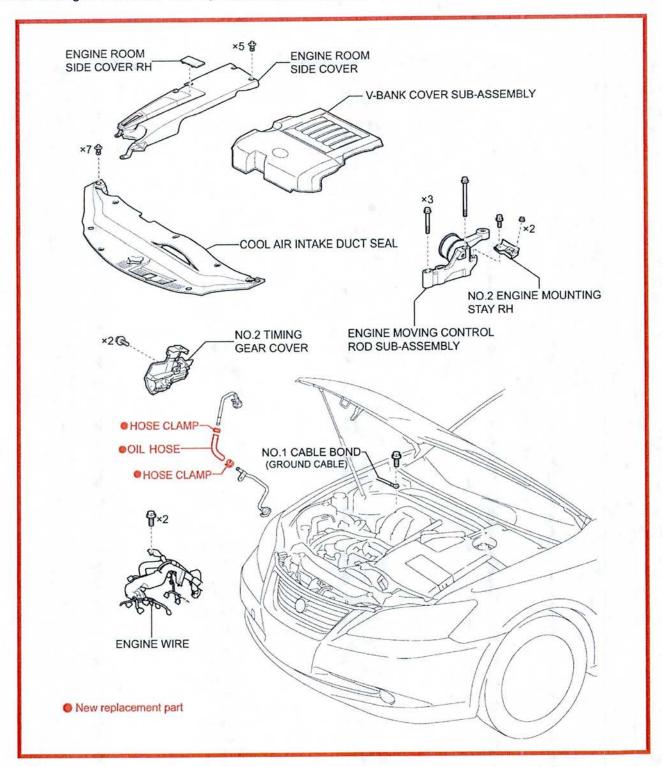
 Technicians may also utilize one of the following commercially available tools:

1. Snap-On: 411BCP 2. Matco: PNG111B 3. Mac: P301733



IV. BACKGROUND

On certain vehicles equipped with a 2GR-FE engine, the rubber portion of the oil supply hose for the VVT-i actuator may degrade over time. This condition may cause oil to leak from the VVT-i oil hose producing abnormal engine noise and the oil pressure light to illuminate.

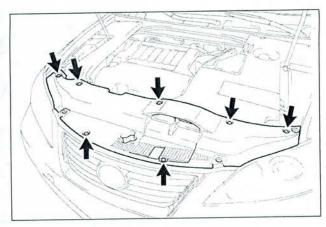


V. WORK PROCEDURE

- A. REMOVE OIL HOSE
 - CONFIRM IGNITION IS OFF
 - a) Clearly indicate that the engine must not be started during repairs.

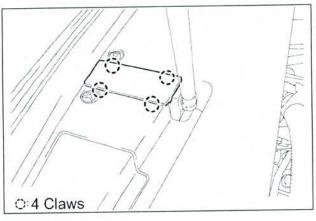
WORKING ON MUGNE O NOT STAR Supervisor: ENGIN

Copy and place in a visible location when working



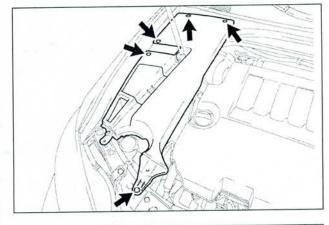
2. REMOVE THE COOL AIR INTAKE DUCT SEAL

a) Remove the 7 clips and cool air intake duct seal.

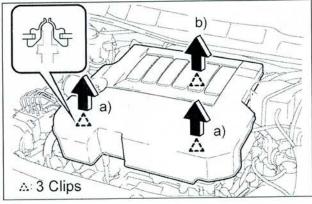


3. REMOVE THE ENGINE ROOM SIDE COVER

 Disengage the 4 claws and remove the engine room side cover RH.



b) Remove the 5 clips and engine room side cover.

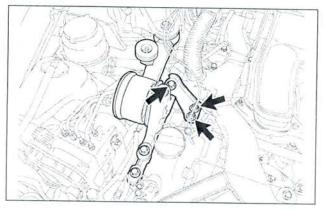


4. REMOVE THE V-BANK COVER SUB-ASSEMBLY

- Place both hands on the front side of the cover and lift up to disengage the 2 clips.
- Place both hands on the back side of the cover and lift up to disengage the rear clip.
- c) Remove the v-bank cover sub-assembly.

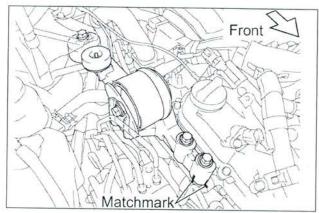
NOTE:

Do not lift the cover's front and back end together; this may damage the clips.



5. REMOVE THE NO. 2 ENGINE MOUNTING STAY RH

 Remove the bolt, 2 nuts and No.2 engine mounting stay RH.

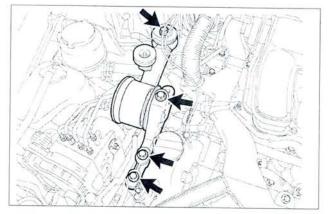


REMOVE THE ENGINE MOVING CONTROL ROD SUB-ASSEMBLY

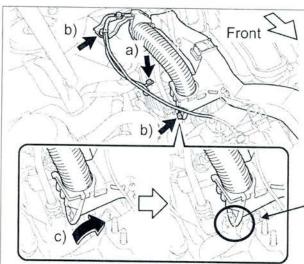
a) Mark the sub-assembly as illustrated for reference during re-installation.

NOTE:

Failure to reinstall the engine moving control rod in the same position from which it was removed may result in additional engine vibration.



 Remove the 4 bolts and engine moving control rod sub-assembly.

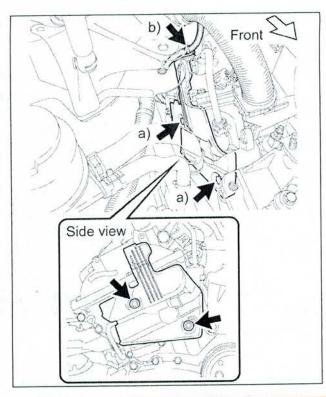


7. SEPARATE THE WIRE HARNESS

- a) Remove the bolt and separate the No.1 cable bond (ground cable).
- b) Remove the 2 wire harness protector hold-down bolts illustrated.
- c) Temporarily reposition the wire harness protector to the opposite side of the <u>mounting tab.</u>

NOTE:

Avoid damage to wire harness, harness clips and/or wiring. Use care when repositioning the harness for service.



8. REMOVE THE NO. 2 TIMING GEAR COVER

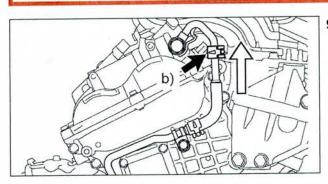
- a) Remove the 2 bolts.
- b) Pull the No. 2 timing gear cover slightly away from the engine and disconnect the wire harness clip.
- c) Remove the No. 2 timing gear cover.

NOTE:

Don't forget to remove the small wire harness clip from the rear of the No. 2 timing gear cover.

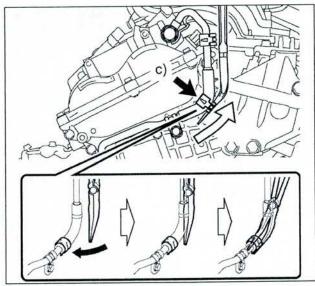


Use care to avoid damage to the Power Steering hoses and VVT-i oil pipe when removing the oil hose.



9. REMOVE THE OIL HOSE

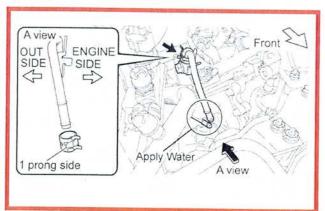
- Place paper towels below the hose before removal to prevent engine oil from dripping onto vehicle components.
- b) Move the upper hose clamp to the upper section of the oil pipe.

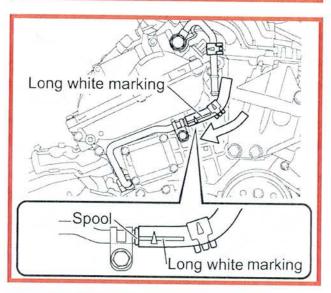


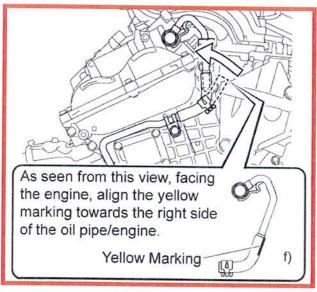
- Move the lower hose clamp to the center of the hose.
- d) Remove and dispose the oil hose and the two clamps in a manner by which they cannot be reused.



Proper positioning of the oil hose is critical to ensure adequate oil flow to the VVT-i actuator and to prevent leakage. Follow instructions carefully!







1. INSTALL THE OIL HOSE

- Place a NEW hose clamp on the upper oil pipe as shown.
- Clean both edges of the oil pipe with a shop towel and apply water as a lubricant to the oil pipe to assist with the oil hose attachment

NOTE:

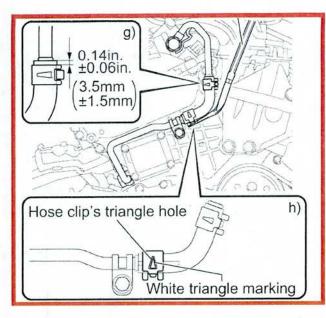
Use only water as a lubricant. Do not apply oil or other lubricants to the oil pipe, this may cause oil leaks.

- c) Attach a **NEW** hose clamp on the **NEW** oil hose with the clamp's 2 prong side positioned on the same side as the hose's <u>long white marking</u>.
- d) Install the oil hose's <u>long white marking (lower)</u> side onto the lower pipe until it touches the spool.
- e) Position the <u>long white marking</u> facing away from the engine as illustrated.

NOTE:

The long white marking should face away from the engine.

 f) Install the oil hose's <u>vellow marking (upper) side</u> onto the upper oil pipe until it touches the spool. Align the <u>vellow marking</u> as illustrated.



- Position the upper hose clamp on the hose as illustrated.
- h) Position and align the lower hose clamp's triangle hole to the white triangle marking on the lower portion of the hose.

NOTE:

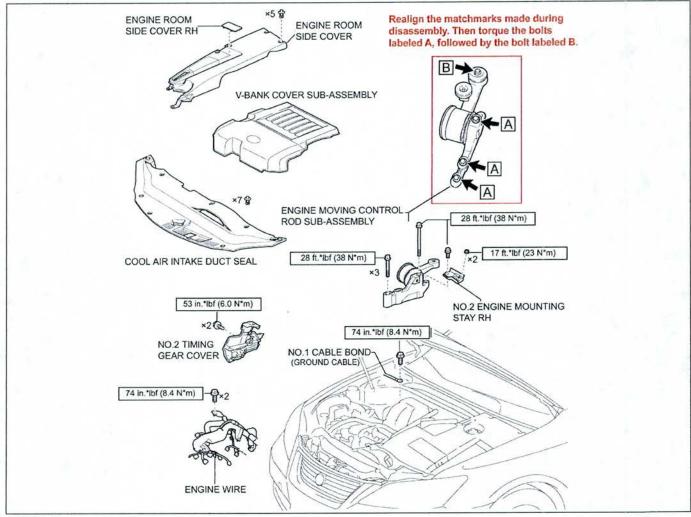
- Position both upper and lower hose clamps 0.14 in. ± 0.06 in. (3.5mm ± 1.5mm) from the edge of the hose ends.
- . Ensure there are no twists in the oil hose.

Important:

Avoid comebacks, visually verify correct installation!

 After verifying correct installation, remove the paper towels from the engine compartment.

2. REASSEMBLE ENGINE COMPONENTS BY REVERSING DISASSEMBLY INSTRUCTIONS



NOTE:

- All necessary torque specifications are located in the illustration above.
- Verify the coolant reservoir hose is correctly positioned below the engine room side cover.

- 3. VERIFY THE CORRECT ENGINE OIL LEVEL
- 4. TEMPORARILY RUN THE ENGINE AT 3,000 RPM's, CONFIRM NO OIL LEAKS ARE PRESENT

VI. APPENDIX

A. PARTS KIT CONTENTS

Part Number	Part Name		
04009-33131	Kit ,Oil Hose, No.1		
The kit liste	ed above includes the following parts:		
Part Number	Part Name	Q'ty	
15777-31020	Hose, Oil (Cooler)	1	
90466-16003	Clip, Hose (Clamp)	2	

B. CAMPAIGN PARTS DISPOSAL

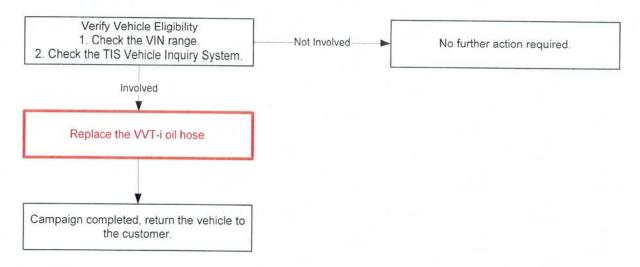
As required by Federal Regulations, please make sure all campaign parts (original parts) removed from the vehicle are disposed of in a manner in which they will not be reused.

FOR LIMITED SERVICE CAMPAIGN 9LH VVT-i OIL HOSE REPLACEMENT 2007 - 2009 RX350

The repair quality of covered vehicles is extremely important to Lexus. All dealership associates involved in the recall process are required to successfully complete E-Learning course LSC13A. To ensure that all vehicles have the repair performed correctly; technicians performing this recall repair are required to currently hold <u>at least one</u> of the following certification levels:

- Senior or Master Technician
- Senior or Master Diagnostic Technician

I. OPERATION FLOW CHART



II. IDENTIFICATION OF AFFECTED VEHICLES

A. AFFECTED VIN RANGE

Model	WMI	Model	VIN Range	
model	44.1411	Year	VDS	Range
		2007	GK31U	C001006 - C026808
		2007	HK31U	C001008 - C047097
RX 350	2T2	2008	GK31U	C026736 - C056935
1000	212	2000	HK31U	C045940 - C096527
		2009	GK31U	C056369 - C075694
		2009	HK31U	C095540 - C122713
		2007 -	GK31U	0001007 - 0010317
			HK31U	2000449 - 2027626
			GK31U	0005795 - 0015562
RX 350	JTJ		OKOTO	9850000 - 9852147
101000	010		HK31U	2019599 - 2854875
			GK31U	0015563 - 0016006
		2009	GROTO	9852148 - 9852846
			HK31U	2051144 - 2857651
ES 350	JTH	2007	BJ46G	2000129 - 2154865
	0111	2008	D040G	2124795 - 2243446

- Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this LSC and that the campaign has not already been completed prior to dealer shipment or by another dealer.
- TMS warranty will not reimburse dealers for repairs conducted on vehicles that are not affected or were completed by another dealer.

III. PREPARATION

A. PARTS

Part Number	Part Description	Quantity
04009-33131	No.1 Oil Hose Kit	1

B. TOOLS & EQUIPMENT

Standard hand tools

Torque wrench

Angled long nose pliers*

Paper or shop towels

Mirror

*NOTE: One angled long nose pliers will be included in the dealer package.

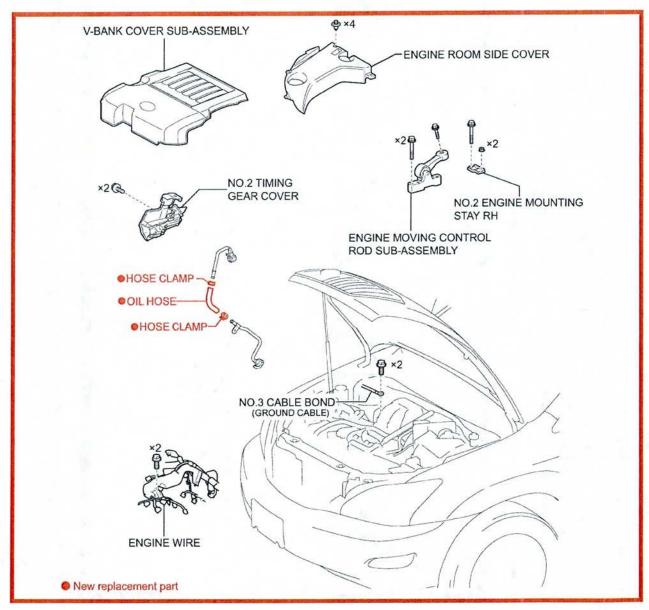
Technicians may also utilize one of the following commercially available tools:

1. Snap-On: 411BCP 2. Matco: PNG111B 3. Mac: P301733



IV. BACKGROUND

On certain vehicles equipped with a 2GR-FE engine, the rubber portion of the oil supply hose for the VVT-i actuator may degrade over time. This condition may cause oil to leak from the VVT-i oil hose producing abnormal engine noise and the oil pressure light to illuminate.

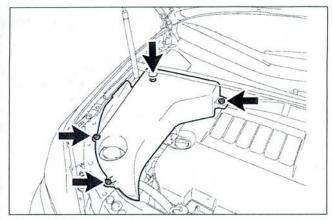


V. WORK PROCEDURE

- A. REMOVE OIL HOSE
 - CONFIRM IGNITION IS OFF
 - a) Clearly indicate that the engine must not be started during repairs.

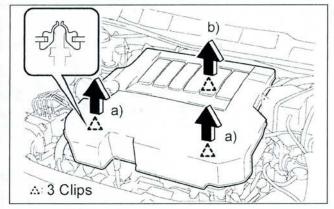
DO NOT START WORKING ON ENGINE Supervisor: MUGINE

Copy and place in a visible location when working.



2. REMOVE THE ENGINE ROOM SIDE COVER

a) Remove the 4 clips and engine room side cover.

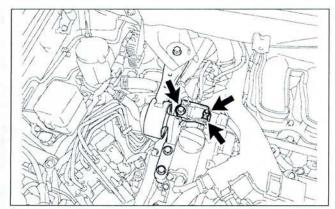


3. REMOVE THE V-BANK COVER SUB-ASSEMBLY

- a) Place both hands on the front side of the cover and lift up to disengage the 2 clips.
- b) Place both hands on the back side of the cover and lift up to disengage the rear clip.
- c) Remove the v-bank cover sub-assembly.

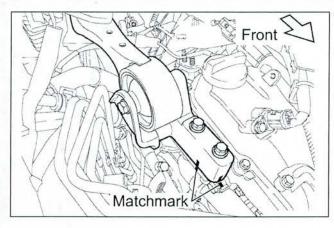
NOTE:

Do not lift the cover's front and back end together; this may damage the clips.



4. REMOVE THE NO. 2 ENGINE MOUNTING STAY RH

 Remove the bolt, 2 nuts and No. 2 engine mounting stay RH.

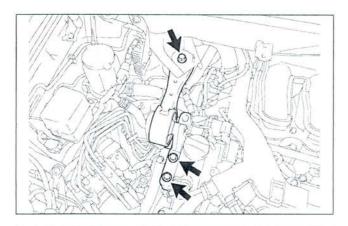


5. REMOVE THE ENGINE MOVING CONTROL ROD SUB-ASSEMBLY

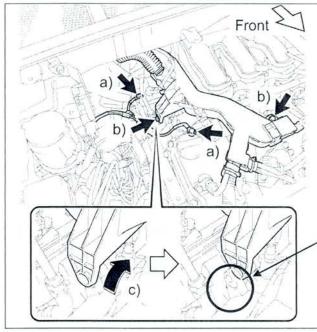
 Mark the sub-assembly as illustrated for reference during re-installation.

NOTE:

Failure to reinstall the engine moving control rod in the same position from which it was removed may result in additional engine vibration.



b) Remove the 3 bolts and engine moving control rod sub-assembly.



6. SEPARATE THE WIRE HARNESS

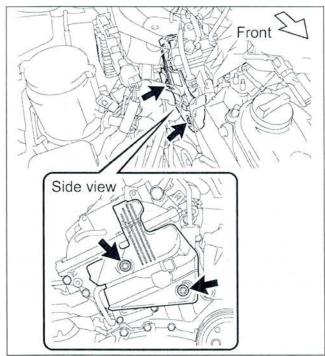
- a) Remove the 2 bolts and separate the No. 3 cable bond (ground cable).
- b) Remove the 2 bolts and separate the wire harness.
- c) Temporarily reposition the wire harness protector to the opposite side of the mounting tab.



In order to prevent damage to the wire harness, do not lift the wire harness protector more than necessary.

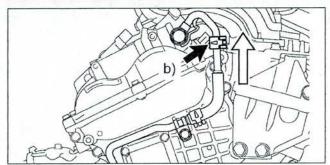


a) Remove the 2 bolts and the No. 2 timing gear cover.



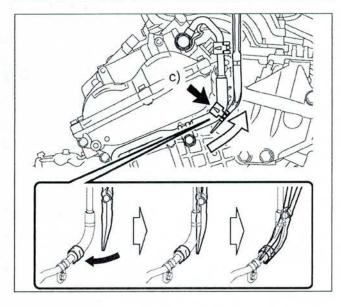


Use care to avoid damage to the Power Steering hoses and VVT-i oil pipe when removing the oil hose.



8. REMOVE THE OIL HOSE

- a) Place paper towels below the hose before removal to prevent engine oil from dripping onto vehicle components.
- b) Move the upper hose clamp to the upper section of the oil pipe.

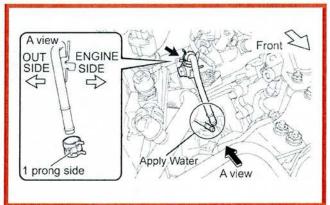


- c) Move the lower hose clamp to the center of the hose.
- d) Remove and dispose the oil hose and the two clamps in a manner by which they cannot be reused.

B. INSTALL THE OIL HOSE



Proper positioning of the oil hose is critical to ensure adequate oil flow to the VVT-i actuator and to prevent leakage. Follow instructions carefully!

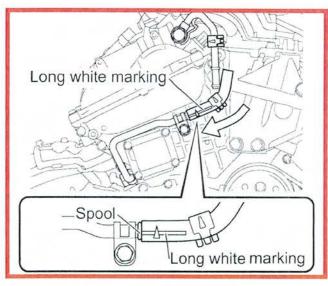


1. INSTALL THE OIL HOSE

- Place a NEW hose clamp on the upper oil pipe as shown.
- b) Clean both edges of the oil pipe with a shop towel and apply water as a lubricant to the oil pipe to assist with the oil hose attachment.

NOTE:

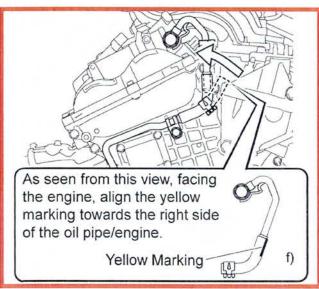
Use only water as a lubricant. Do not apply oil or other lubricants to the oil pipe, this may cause oil leaks.



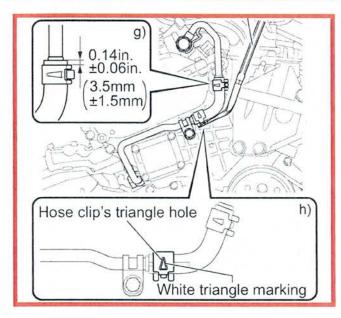
- c) Attach a **NEW** hose clamp on the **NEW** oil hose with the clamp's 2 prong side positioned on the same side as the hose's <u>long white marking</u>.
- Install the oil hose's <u>long white marking (lower)</u> <u>side</u> onto the lower pipe until it touches the spool.
- e) Position the <u>long white marking</u> facing away from the engine as illustrated.

NOTE:

The long white marking should face away from the engine.



f) Install the oil hose's <u>yellow marking (upper) side</u> onto the upper oil pipe until it touches the spool. Align the <u>yellow marking</u> as illustrated.



- g) Position the upper hose clamp on the hose as illustrated.
- h) Position and align the lower hose clamp's triangle hole to the white triangle marking on the lower portion of the hose.

NOTE:

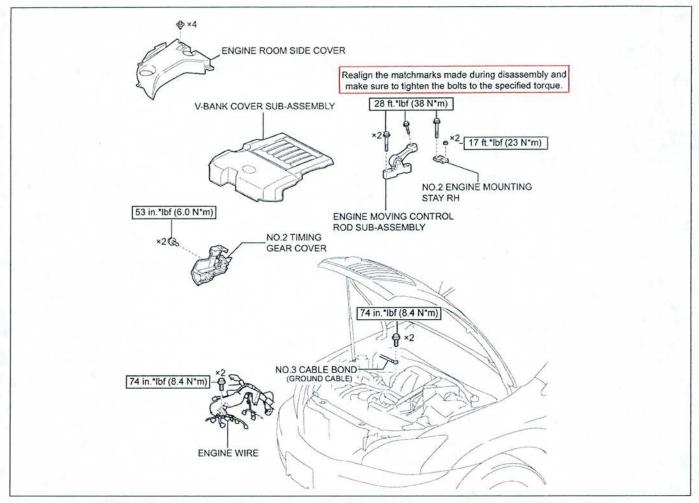
- Position both upper and lower hose clamps 0.14 in. ± 0.06 in. (3.5mm ± 1.5mm) from the edge of the hose ends.
- · Ensure there are no twists in the oil hose.

Important:

Avoid comebacks, visually verify correct installation!

 After verifying correct installation, remove the paper towels from the engine compartment.

2. REASSEMBLE ENGINE COMPONENTS BY REVERSING DISASSEMBLY INSTRUCTIONS



NOTE: All necessary torque specifications are located in the illustration above.

- 3. VERIFY THE CORRECT ENGINE OIL LEVEL
- 4. TEMPORARILY RUN THE ENGINE AT 3,000 RPM's, CONFIRM NO OIL LEAKS ARE PRESENT

VI. APPENDIX

A. PARTS KIT CONTENTS

Part Number	Part Name	
04009-33131	Kit ,Oil Hose, No.1	
The kit liste	d above includes the following parts:	
Part Number	Part Name	
15777-31020	Hose, Oil (Cooler)	1
90466-16003	Clip, Hose (Clamp)	2

B. CAMPAIGN PARTS DISPOSAL

As required by Federal Regulations, please make sure all campaign parts (original parts) removed from the vehicle are disposed of in a manner in which they will not be reused.