## **TECHNICAL INSTRUCTIONS**

## **FOR**

## **SAFETY RECALL 20LA01**

## VEHICLE MAY STALL DURING DRIVING AT HIGHER SPEED

2018 - 2019 GS 300	2017 IS 200t	2017 RC 200t
2013 - 2015 GS 350	2018 - 2019 IS 300	2018 - 2019 RC 300
2018 - 2019 GS 350	2014 - 2015 IS 350	2015 RC 350
2018 - 2019 LC 500	2018 - 2019 IS 350	2018 - 2019 RC 350
2018 - 2019 LC 500h	2018 - 2019 ES 350	2018 - 2019 LS 500
2017 - 2019 RX 350	2014 - 2015 GX 460	2018 - 2019 LS 500h
2017 - 2019 RX 350L	2013 - 2015 LS 460	2015 NX 200t
2014 - 2015 LX 570		

The remedy for this campaign is being launched in phases. Confirm remedy eligibility on each VIN in TIS before starting any repairs.

Update 10/22/2020: LX 570 has been added

Update 6/26/2020: NX 200t, 2013-2015 GS 350, 2014-2015 IS 350, 2015 RC 350,

2013-2015 LS 460 models have been added

Update 6/16/2020: GX, ES (US built), RX models have been added

Update 5/22/2020: LS, LC & IS-F models have been added

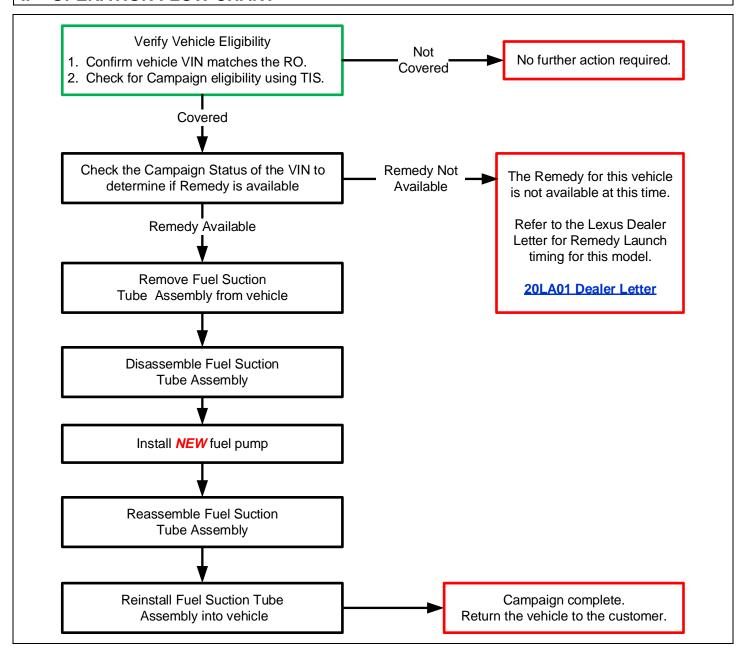
Update 5/6/2020: Details of the NEW Cam Lock style campaign tool have been added

The repair quality of covered vehicles is extremely important to Lexus. All dealership technicians performing this recall are required to successfully complete the most current version of the E-Learning course "Safety Recall and Service Campaign Essentials". 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:

- Certified
- Senior
- Master

It is the dealership's responsibility to select technicians with the above certification level or greater to perform this 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.

# I. OPERATION FLOW CHART



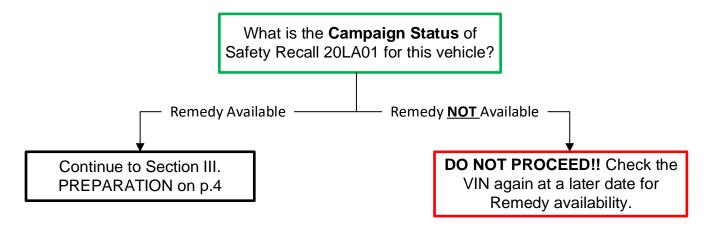
## II. IDENTIFICATION OF AFFECTED VEHICLES

## 1. CHECK VEHICLE FOR CAMPAIGN ELIGIBILITY

- a. Compare the vehicle's VIN to the VIN listed on the Repair Order to ensure they match.
- b. Check the TIS Vehicle Inquiry System or Service Lane to verify this vehicle is eligible for Safety Recall 20LA01.
- c. Determine the Campaign Status for Safety Recall 20LA01.

Campaign Description: Safety Recall 20LA01 (Remedy Notice), Multiple
Campaign Status: ????????

Completion Status: Not Completed





DO NOT PROCEED with these instructions if the Campaign Status shows Remedy Not Available!

The remedy for this campaign is being launched in phases. Confirm remedy eligibility on each VIN in TIS before starting any repairs.

Launch timing specific to each model is available in the **20LA01 Dealer Letter**.

Note: Warranty will not reimburse dealers for repairs completed on vehicles that are not affected or were previously completed, even by another dealer. In addition, warranty claims will not be processed for vehicles that are not yet eligible for the remedy.

#### III. PREPARATION

#### A. PARTS

Because of the extensive list of parts for the numerous models affected by this Safety Recall, a website has been created to detail the required parts for each vehicle. Reference the following website for a detailed parts list for **each specific VIN**:

# https://20la01.imagespm.info

Note: Warranty will only reimburse dealers for the part numbers listed on the website. Any other part numbers will not be accepted on the campaign claim.

#### **B. TOOLS & EQUIPMENT**

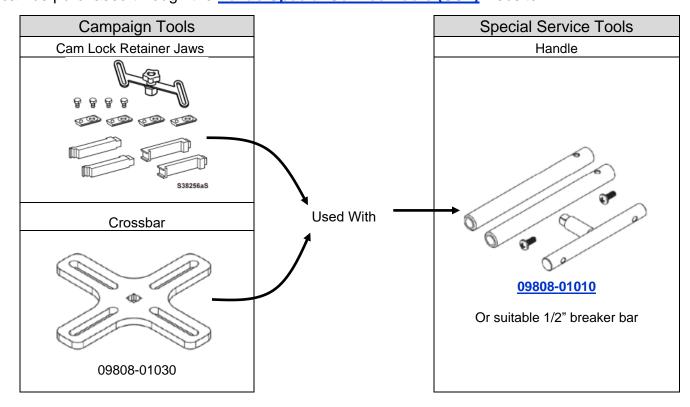
- Standard Hand Tools
- Torque Wrench
- Air Blow gun
- Gas Caddy (minimum 25-gallon capacity)

#### C. MATERIALS

Brake Cleaner

#### D. CAMPAIGN TOOLS

Each dealership will be provided a Crossbar and a set of Cam Lock Retainer Jaws for removing the Cam Lock type retainer rings. These jaws will be used with the dealerships existing Handle set from the Fuel Sender Lock Nut Wrench Set (09808-14031). A 1/2" breaker bar can also be used. This set of tools will supplement the SST kit that each dealership currently has. Additional SST's can be purchased through the Lexus Special Service Tools (SST) website.



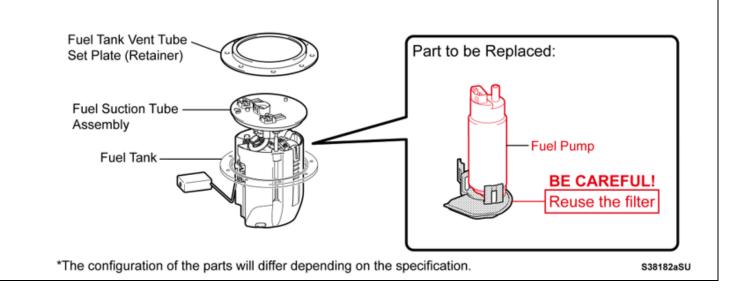
# C. Special Service Tools

In the affected models, there are four different types of Fuel Pump Retainer Rings. Reference the following chart to determine the proper tool for removal.

		RET	AINER TYPE	
Туре:	Bolt In	Cam Lock	Plastic Ring	Plastic Ring w/ Holding Tool
SST:	No SST Required	Fuel Sender Lock Nut Wrench Kit (09808-14031) Claw: 105mm Jaw Set (09808-01070) Crossbar (09808-01030)	Fuel Sender Lock Nut Wrench Kit (09808-14031) Option 1: Claw: 50mm Jaw Set (09808-01040) Option 2: Claw: Sliding jaw (09808-01080) Crossbar (09808-01030)	Fuel Pump Retainer Tool (*e) (09808-14040) Fuel Pump Holding Tool (*d) (09808-14050)
Special Notes:		Campaign Tool: Cam Lock Retainer Jaws  Requires use of the Handle from the Fuel Sender Lock Nut Wrench Kit, or a 1/2" breaker bar.	Aftermarket alternative: CTA Tools 1044 Fuel Tank Lid Wrench  This tool is available from Autopart.com  Or contact CTA Tools at info@ctatools.com for purchasing inquiries	Additional SST's can be purchased from the Lexus Special Service Tools (SST) website
Models:	ES 350 (2018) LC 500/500h LS 500/500h LS 460 IS-F NX 200t	ES 350 (2019) GS 300/350 IS 200t/300/350 RC 200t/300/350	GX 460 LX 570	RX 350/350L

## IV. BACKGROUND

The subject vehicles are equipped with a low-pressure fuel pump which may stop operating. If this were to occur, warning lights and messages may be displayed on the instrument panel, and the engine may run rough. This may result in a vehicle stall, and the vehicle may be unable to be restarted. If a vehicle stall occurs while driving at higher speeds, this could increase the risk of a crash.



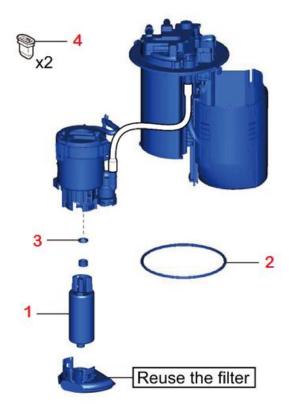
# V. SAFETY PRECAUTIONS

#### **CAUTION:**

- When installing/uninstalling the fuel system components, keep safety first in mind and carefully observe the following instructions to avoid accidents:
- a. When working on the fuel system, display a Flammable Keep Fire Away sign.
- **b.** Smoking is prohibited nearby.
- **c.** Perform this work in an area where there are no sparks nearby from the operation of welders, grinders, drills, electric motors, stoves, etc.
- **d. DO NOT** use electrical devices nearby because they can become hot and the operation of power switches can generate sparks.
- **e. DO NOT** use iron or steel hammers while working, because they may generate sparks.
- **f. DO NOT** start engines even in adjacent stalls.
- **g.** Prepare fire extinguishers before starting any work.
- **h.** Perform this work in a well-ventilated area (natural ventilation). **DO NOT** use exhaust fans or electric fans, because their motors might generate sparks.
- i. Since it is possible for fuel vapor to build up, **DO NOT** work in or near a pit.
- **j.** If fuel is spilled, use shop towels or similar material to quickly wipe it up and then use compressed air to diffuse the fuel vapor.
- **k.** Shop towels and other materials that have come into contact with fuel should be dried in a well-ventilated area and then disposed of as appropriate.

# VI. COMPONENTS

ES 350 2019 (VINs starting JTH)



Replacement Items in red

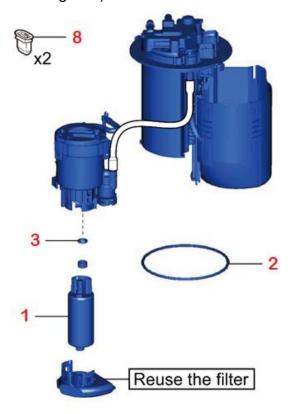
No.	Contents of Part Kit's	Quantity	Tape Color	Remarks
1	FUEL PUMP	1		
2	FUEL SUCTION TUBE SET GASKET	1		
3	O-RING	2*	GOLD	15.2mm
4	REAR SEAT CUSHION LOCK HOOK	2		
5	O-RING	1	RED	Not used
6	O-RING	1	GREEN	Not used
7	FUEL TANK PIPE SETTING HOLDER	1	WHITE	Not used

<sup>\*</sup>only 1 O-Ring will be used. Discard the 2nd O-Ring.

**DO NOT** order the individual parts listed here. It is provided as a reference to assist in the correct installation. Order the parts kit's specific to each VIN, as detailed in the parts lookup website (p. 4). Warranty will only reimburse dealers for the part numbers listed on the website. Any other part numbers will not be accepted on the campaign claim.

Parts K	(it items i	not used
5	6	7>

ES 350 2019 (VINs starting 58A)

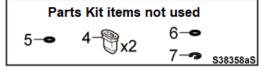


## Replacement items in red

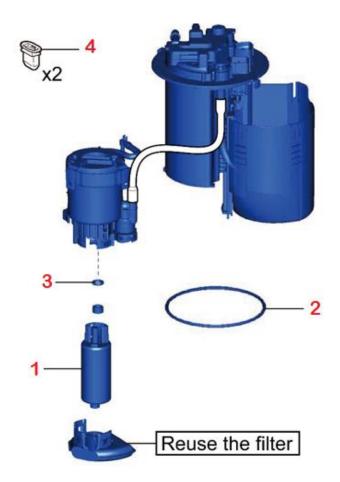
No.	Contents of Part Kit's	Quantity	Tape Color	Remarks
1	FUEL PUMP	1		
2	FUEL SUCTION TUBE SET GASKET	1		
3	O-RING	2*	Gold	15.2mm
4	REAR SEAT CUSHION LOCK HOOK	2		Not used
5	O-RING	1	Red	Not used
6	O-RING	1	Green	Not used
7	FUEL TANK PIPE SETTING HOLDER	1	White	Not used
8	REAR SEAT CUSHION LOCK HOOK	2		

\*only 1 O-Ring will be used. Discard the 2<sup>nd</sup> O-Ring.

DO NOT order the individual parts listed here. It is provided as a reference to assist in the correct installation. Order the parts kit's specific to each VIN, as detailed in the parts lookup website (p. 4). Warranty will only reimburse dealers for the part numbers listed on the website. Any other part numbers will not be accepted on the campaign claim.



# ES 350 **2018**



## Replacement items in red

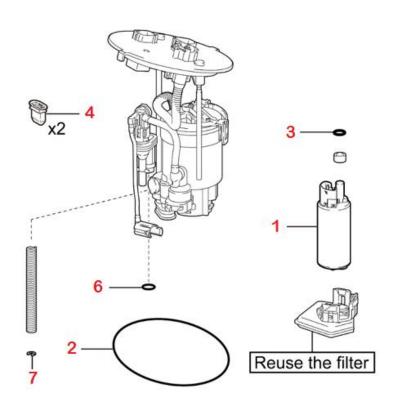
No.	Contents of Part Kit's	Quantity	Tape Color	Remarks
1	FUEL PUMP	1		
2	FUEL SUCTION TUBE SET GASKET	1		
3	O-RING	2*	YELLOW	15.2mm
4	REAR SEAT CUSHION LOCK HOOK	2		
5	O-RING	1	RED	Not used
6	O-RING	1	GREEN	Not used
7	FUEL TANK PIPE SETTING HOLDER	1	WHITE	Not used

\*only 1 O-Ring will be used. Discard the 2<sup>nd</sup> O-Ring.

DO NOT order the individual parts listed here. It is provided as a reference to assist in the correct installation. Order the parts kit's specific to each VIN, as detailed in the parts lookup website (p. 4). Warranty will only reimburse dealers for the part numbers listed on the website. Any other part numbers will not be accepted on the campaign claim.

Parts	Kit items	not used
5-	6-	7⊸•

# GS 300 / GS 350



## Replacement items in red

No.	Contents of Part Kit's	Quantity	Tape Color	Remarks
1	FUEL PUMP	1		
2	FUEL SUCTION TUBE SET GASKET	1		
3	O-RING	2*	GOLD	15.2mm
4	REAR SEAT CUSHION LOCK HOOK	2		
5	O-RING	1	RED	Not used
6	O-RING	1	GREEN	16.4mm
7	FUEL TANK PIPE SETTING HOLDER	1	WHITE	

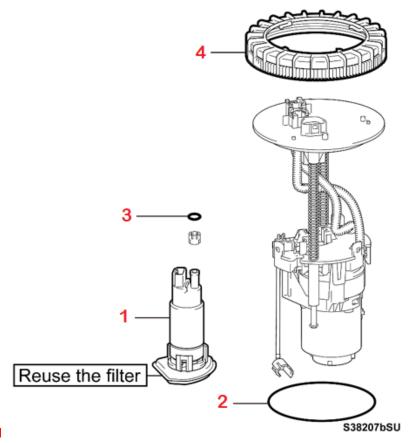
<sup>\*</sup>only 1 O-Ring will be used. Discard the 2<sup>nd</sup> O-Ring.

DO NOT order the individual parts listed here. It is provided as a reference to assist in the correct installation. Order the parts kit's specific to each VIN, as detailed in the parts lookup website (p. 4). Warranty will only reimburse dealers for the part numbers listed on the website. Any other part numbers will not be accepted on the campaign claim.

Note: Some items in the Fuel Pump Replacement Kit will not be used.

Parts Kit items not used

# GX 460

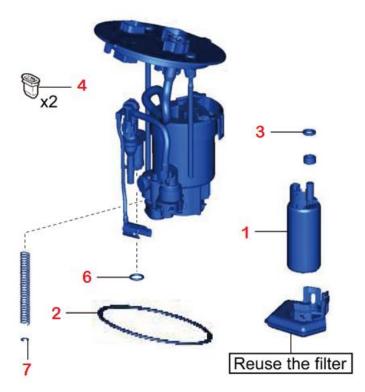


## Replacement items in red

No.	Contents of Part Kit's	Quantity	Tape Color	Remarks
1	FUEL PUMP	1		
2	FUEL SUCTION TUBE SET GASKET	1		
3	O-RING	1	Yellow	15.2mm
4	Fuel Pump Gauge Retainer	1		

DO NOT order the individual parts listed here. It is provided as a reference to assist in the correct installation. Order the parts kit's specific to each VIN, as detailed in the parts lookup website (p. 4). Warranty will only reimburse dealers for the part numbers listed on the website. Any other part numbers will not be accepted on the campaign claim.

# IS 200t / IS 300 / IS 350



## Replacement items in red

No.	Contents of Part Kit's	Quantity	Tape Color	Remarks
1	FUEL PUMP	1		
2	FUEL SUCTION TUBE SET GASKET	1		
3	O-RING	2*	GOLD	15.2mm
4	REAR SEAT CUSHION LOCK HOOK	2		
5	O-RING	1	RED	Not used
6	O-RING	1	GREEN	16.4mm
7	FUEL TANK PIPE SETTING HOLDER	1	WHITE	

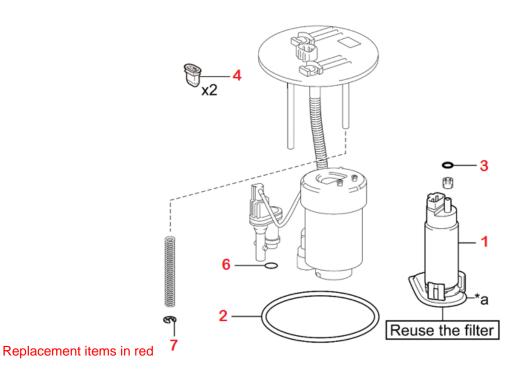
<sup>\*</sup>only 1 O-Ring will be used. Discard the 2<sup>nd</sup> O-Ring.

DO NOT order the individual parts listed here. It is provided as a reference to assist in the correct installation. Order the parts kit's specific to each VIN, as detailed in the parts lookup website (p. 4). Warranty will only reimburse dealers for the part numbers listed on the website. Any other part numbers will not be accepted on the campaign claim.

Note: Some items in the Fuel Pump Replacement Kit will not be used.

Parts Kit items not used





No.	Contents of Part Kit's	Quantity	Tape Color	Remarks
1	FUEL PUMP	1		
2	FUEL SUCTION TUBE SET GASKET	1		
3	O-RING	2*	Gold	15.2mm
4	REAR SEAT CUSHION LOCK HOOK	4**		2 needed
5	O-RING	1	Red	Not used
6	O-RING	1	Green	16.4mm
7	FUEL TANK PIPE SETTING HOLDER	1	White	

<sup>\*</sup>only 1 O-Ring will be used. Discard the 2<sup>nd</sup> O-Ring.

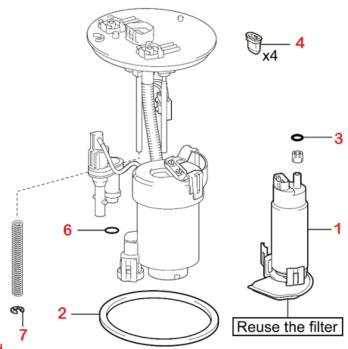
DO NOT order the individual parts listed here. It is provided as a reference to assist in the correct installation. Order the parts kit's specific to each VIN, as detailed in the parts lookup website (p. 4). Warranty will only reimburse dealers for the part numbers listed on the website. Any other part numbers will not be accepted on the campaign claim.

Note: Some items in the Fuel Pump Replacement Kit will not be used.

Parts Kit items not used 5—●

<sup>\*\*</sup>only 2 rear seat lock hooks are needed. Discard the other 2.

# LS 460 / LS 460L



## Replacement items in red

No.	Contents of Part Kit's	Quantity	Tape Color	Remarks
1	FUEL PUMP	1		
2	FUEL SUCTION TUBE SET GASKET	1		
3	O-RING	2*	Gold	15.2mm
4	REAR SEAT CUSHION LOCK HOOK	4**		varies
5	O-RING	1	Red	Not used
6	O-RING	1	Green	16.4mm
7	FUEL TANK PIPE SETTING HOLDER	1	White	

<sup>\*</sup>only 1 O-Ring will be used. Discard the 2<sup>nd</sup> O-Ring.

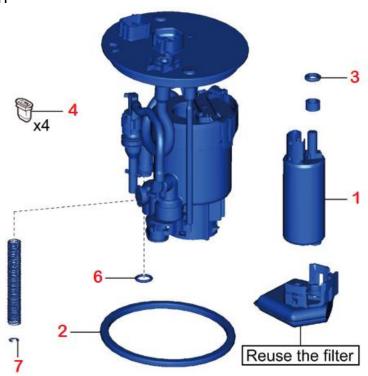
DO NOT order the individual parts listed here. It is provided as a reference to assist in the correct installation. Order the parts kit's specific to each VIN, as detailed in the parts lookup website (p. 4). Warranty will only reimburse dealers for the part numbers listed on the website. Any other part numbers will not be accepted on the campaign claim.

Note: Some items in the Fuel Pump Replacement Kit will not be used.

Parts Kit items not used 5—●

<sup>\*\*</sup>Fixed rear seat will use 3 pieces. Power rear seat will use 4 pieces.

# LC 500 / LC 500h LS 500 / LS 500h



Replacement items in red

No.	Contents of Part Kit's	Quantity	Tape Color	Remarks
1	FUEL PUMP	1		
2	FUEL SUCTION TUBE SET GASKET	1		
3	O-RING	2*	Gold	15.2mm
4	REAR SEAT CUSHION LOCK HOOK	4**		varies
5	O-RING	1	Red	Not used
6	O-RING	1	Green	16.4mm
7	FUEL TANK PIPE SETTING HOLDER	1	White	

<sup>\*</sup>only 1 O-Ring will be used. Discard the 2<sup>nd</sup> O-Ring.

DO NOT order the individual parts listed here. It is provided as a reference to assist in the correct installation. Order the parts kit's specific to each VIN, as detailed in the parts lookup website (p. 4). Warranty will only reimburse dealers for the part numbers listed on the website. Any other part numbers will not be accepted on the campaign claim.

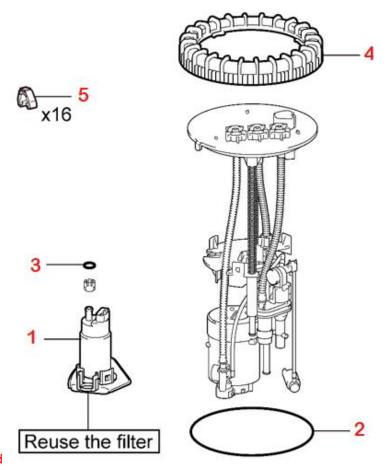
Note: Some items in the Fuel Pump Replacement Kit will not be used.

Parts Kit items not used 5—

<sup>\*\*</sup> LS 500/500h: Fixed rear seat will use 3 pieces. Power rear seat will use 2 pieces.

<sup>\*\*</sup> LC 500/500h: Only 2 rear seat lock hooks are needed. Discard the other 2.





# Replacement items in red

No.	Contents of Part Kit's	Quantity	Tape Color	Remarks
1	FUEL PUMP	1		
2	FUEL SUCTION TUBE SET GASKET	1		
3	O-RING	1	Yellow	15.2mm
4	FUEL PUMP GAUGE RETAINER	1		
5	TUBE JOINT CLIP	16		

DO NOT order the individual parts listed here. It is provided as a reference to assist in the correct installation. Order the parts kit's specific to each VIN, as detailed in the parts lookup website (p. 4). Warranty will only reimburse dealers for the part numbers listed on the website. Any other part numbers will not be accepted on the campaign claim.

# NX 200t



## Replacement items in red

No.	Contents of Part Kit's	Quantity	Tape Color	Remarks
1	FUEL PUMP	1		
2	FUEL SUCTION TUBE SET GASKET	1		
3	O-RING	1	Yellow	15.2mm
4	O-RING	1	Red	Not used
5	O-RING	1	Sky Blue	Not used
6	O-RING	1	Green	16.4mm
7	FUEL TANK PIPE SETTING HOLDER	1	White	

DO NOT order the individual parts listed here. It is provided as a reference to assist in the correct installation. Order the parts kit's specific to each VIN, as detailed in the parts lookup website (p. 4). Warranty will only reimburse dealers for the part numbers listed on the website. Any other part numbers will not be accepted on the campaign claim.

Note: Some items in the Fuel Pump Replacement Kit will not be used.

Parts Kit items not used

# RC 200t / RC 300 / RC 350



Replacement items in red

No.	Contents of Part Kit's	Quantity	Tape Color	Remarks
1	FUEL PUMP	1		
2	FUEL SUCTION TUBE SET GASKET	1		
3	O-RING	2*	GOLD	15.2mm
4	REAR SEAT CUSHION LOCK HOOK	2		
5	O-RING	1	RED	Not used
6	O-RING	1	GREEN	16.4mm
7	FUEL TANK PIPE SETTING HOLDER	1	WHITE	

<sup>\*</sup>only 1 O-Ring will be used. Discard the 2nd O-Ring.

DO NOT order the individual parts listed here. It is provided as a reference to assist in the correct installation. Order the parts kit's specific to each VIN, as detailed in the parts lookup website (p. 4). Warranty will only reimburse dealers for the part numbers listed on the website. Any other part numbers will not be accepted on the campaign claim.

Parts Kit items not used	
5⊸	





# Replacement items in red

No.	Contents of Part Kit's	Quantity	Tape Color	Remarks
1	FUEL PUMP	1		
2	FUEL SUCTION TUBE SET GASKET	1		
3	FUEL PUMP GAUGE RETAINER	1		
4	FUEL TANK PIPE SETTING HOLDER	1		
5	O-RING	1		15.2mm

DO NOT order the individual parts listed here. It is provided as a reference to assist in the correct installation. Order the parts kit's specific to each VIN, as detailed in the parts lookup website (p. 4). Warranty will only reimburse dealers for the part numbers listed on the website. Any other part numbers will not be accepted on the campaign claim.

## VII. REMOVE FUEL TUBE ASSEMBLY



Use TIS to confirm that this vehicle is eligible for the campaign before proceeding (p. 3). Warranty will not pay claims on ineligible vehicles.



#### 1. CHECK FOR DTC'S

a. Using a Techstream, perform a Health Check to check for Diagnostic Trouble Codes.

Note: This Safety Recall covers only the replacement of the fuel pump and associated parts. It does not cover the diagnosis or replacement of any other parts on the vehicle.

# **REMOVAL TIP: FUEL LEVEL**

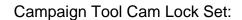
If the fuel level inside the fuel tank is above the specified level, fuel may overflow from the fuel tank during the removal of the fuel suction tube assembly. Confirm the fuel level in the vehicle is below the specified level before proceeding. If necessary, drain fuel from the tank.

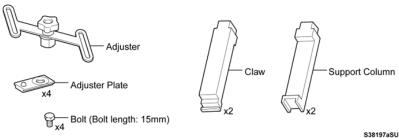
	FUEL LEVEL RECO	MMENDATIONS
Model	Less than full	1/3 or less
ES 350 GX 460 RX 350/350L LX 570		
GS 200t/300/350 IS 200t/300/350 IS-F LC 500/500h LS 500/500h LS 460 NX 200t RC200t/300/350		

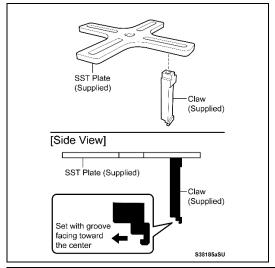
Note: If fuel needs to be removed from the tank, be sure to recover it into an approved fuel recovery system. Suitable systems are available from the <u>Lexus Approved Dealer Equipment</u> website.

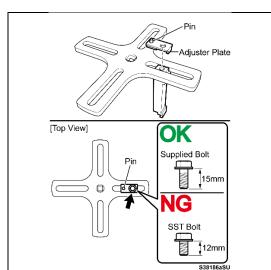
# **REMOVAL TIP: CAM LOCK RETAINER**

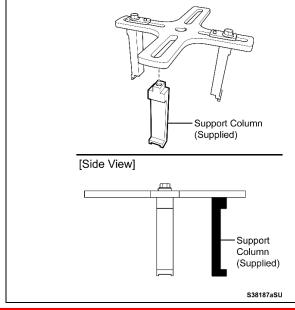
An updated set of Cam Lock Claws and Support Columns are being supplied to each dealership for this campaign. The configuration of the retainer engagement sections of the claws have been modified from the SST that is referenced in the repair manual. The **NEW** claws have an improved design that enables a firm attachment to the retainer. In addition, 2 support columns are provided which will support the retainer more securely during installation and removal. Be sure to assemble and use the tools using the following procedures:

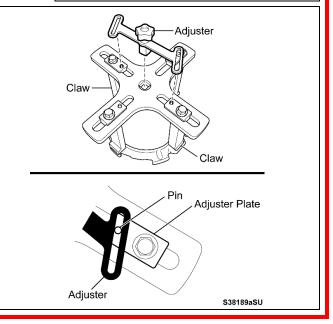




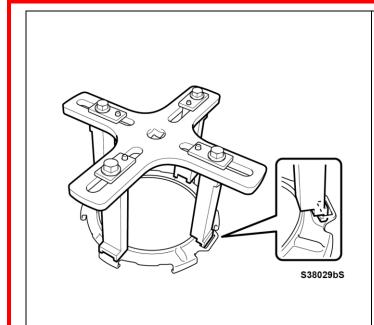


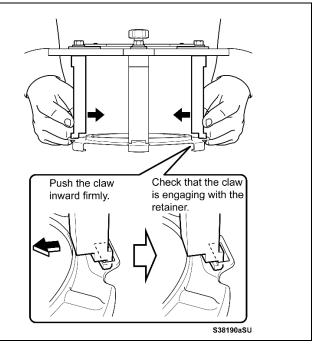


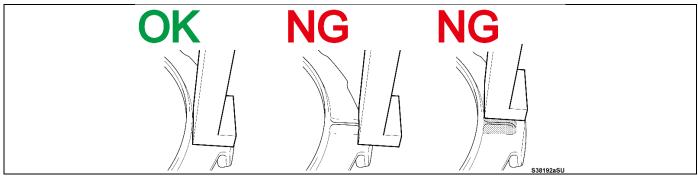


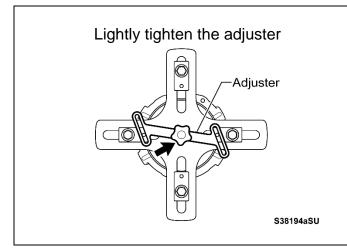


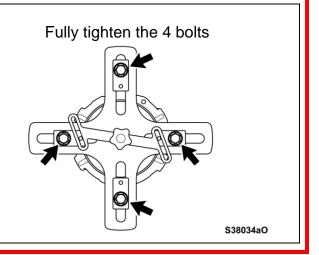
# **REMOVAL TIP: CAM LOCK RETAINER (cont.)**





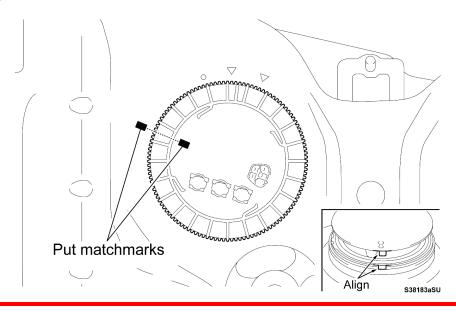






# **REMOVAL TIP: TUBE ASSY ALIGNMENT**

For vehicles with the plastic retainer rings, place matchmarks on both the Fuel Tube Assembly and the fuel tank. During disassembly, confirm that the Fuel Tube Assembly does not rotate. **Damage to the fuel level float arm could occur** if the Fuel Tube Assembly is allowed to rotate during disassembly or reassembly. During reassembly, this will aid in aligning the locating tabs for proper installation.



## 2. REMOVE FUEL TUBE ASSEMBLY FROM VEHICLE

a. Follow the Repair Manual instructions to remove the Fuel Tube Assembly from the vehicle.

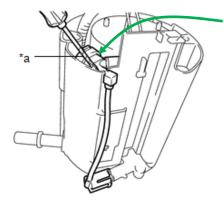
REMOVE FUEL TUBE ASSY.									
GS 350	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2018</u>	<u>2019</u>		GX 460	<u>2014</u>	<u>2015</u>
IS 350	<u>2014</u>	<u>2015</u>	<u>2018</u>	<u>2019</u>			IS 300	<u>2018</u>	<u>2019</u>
RX 350 (VIN JTJ)	<u>2017</u>	<u>2018</u>	<u>2019</u>		_		LS 500	<u>2018</u>	<u>2019</u>
RX 350 (VIN 2T2)	<u>2017</u>	<u>2018</u>	<u>2019</u>				LS 500h	<u>2018</u>	<u>2019</u>
RC 350	<u>2015</u>	<u>2018</u>	<u>2019</u>				GS 300	<u>2018</u>	<u>2019</u>
LS 460	<u>2013</u>	<u>2014</u>	<u>2015</u>				LX 570	<u>2014</u>	<u>2015</u>
ES 350	<u>2018</u>	<u>2019</u>					IS 200t	<u>2017</u>	
LC 500	<u>2018</u>	<u>2019</u>					IS-F	<u>2014</u>	
LC 500h	<u>2018</u>	<u>2019</u>					RC 200t	<u>2017</u>	
RC 300	2018	2019					NX 200t	<u>2015</u>	

# VIII. DISASSEMBLE FUEL TUBE ASSEMBLY

# **DISASSEMBLY TIP: FOLLOW THE REPAIR MANUAL**

The Part's Kit contains the necessary O-Rings for reassembly, if the Repair Manual procedure is followed. If the pump components are disassembled in a manor other than as detailed in the Repair Manual, the Parts Kit may not contain the necessary O-Rings for proper reassembly. Please follow the procedures in the Repair Manual to ensure the correct O-Rings are available.

# **Example of Proper Disassembly:**

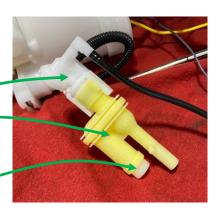


Repair Manual: Using a screwdriver (\*a) with its tip wrapped in protective tape, remove the jet pump from the No. 1 fuel sub-tank.

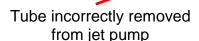
Tube still attached

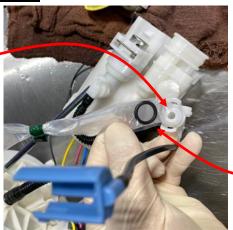
Jet pump properly removed from the No.1 fuel sub-tank.

Replacement O-Ring will be installed in this location



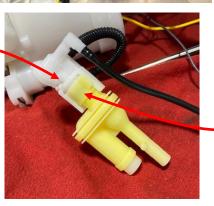
# **Example of Incorrect Disassembly:**





Replacement O-ring is the incorrect size

DO NOT disconnect the tube from the jet pump

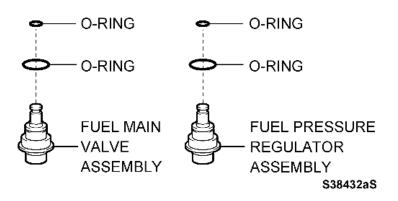


Replacement O-Ring is NOT provided for this location

# **DISASSEMBLY TIP: MAIN VALVE AND REGULATOR**

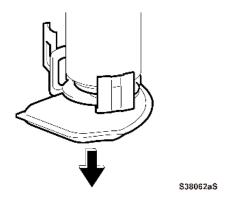
When replacing the fuel pump, it is not necessary to remove the Fuel Main Valve or Fuel Pressure Regulator. These O-Rings are NOT included in the parts kit.

# **DO NOT** remove



# **DISASSEMBLY TIPS: FUEL FILTER**

Many of the models will require the fuel filter to be reused. Be careful with the tabs when removing the filter from the original fuel pump as to not overextend them. When installing the filter on the **NEW** Fuel Pump, be sure that the clips have engaged properly.



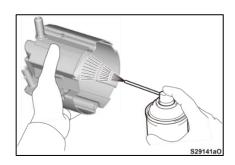
# 1. DISASSEMBLE FUEL SUCTION TUBE ASSEMBLY

a. Follow the Repair Manual instructions to disassemble the Fuel Suction Tube Assembly.

	DISASSEMBLE									
GS 350	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2018</u>	<u>2019</u>		GX 460	<u>2014</u>	<u>2015</u>	
IS 350	<u>2014</u>	<u>2015</u>	<u>2018</u>	<u>2019</u>			IS 300	<u>2018</u>	<u>2019</u>	
RX 350 (VIN JTJ)	<u>2017</u>	<u>2018</u>	<u>2019</u>		_		LS 500	<u>2018</u>	<u>2019</u>	
RX 350 (VIN 2T2)	<u>2017</u>	<u>2018</u>	<u>2019</u>				LS 500h	<u>2018</u>	<u>2019</u>	
RC 350	<u>2015</u>	<u>2018</u>	<u>2019</u>				GS 300	<u>2018</u>	<u>2019</u>	
LS 460	<u>2013</u>	<u>2014</u>	<u>2015</u>				LX 570	<u>2014</u>	<u>2015</u>	
ES 350	<u>2018</u>	<u>2019</u>					IS 200t	<u>2017</u>		
LC 500	<u>2018</u>	<u>2019</u>					IS-F	<u>2014</u>		
LC 500h	<u>2018</u>	<u>2019</u>					RC 200t	<u>2017</u>		
RC 300	<u>2018</u>	<u>2019</u>					NX 200t	<u>2015</u>		

# 2. CLEAN SUB TANK ASSEMBLY

a. Using brake cleaner, clean the sub-tank assembly.

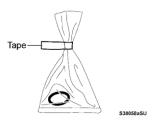


## IX. REASSEMBLE FUEL TUBE ASSEMBLY

# **REASSEMBLY TIPS: O-RINGS**

The part kits may come with O-Rings of different sizes. They are very difficult to tell apart visually. To identify the different size O-Rings, they will be wrapped in individual plastic bags with a piece of COLORED TAPE sealing it. The COLOR OF THE TAPE will identify the O-Ring size.

REFER TO THE COMPONENT DIAGRAMS TO DETERMINE TO CORRECT O-RING.



#### 1. CONFIRM PARTS

a. Using the part lookup website, input the VIN number to confirm that you have the proper parts for this vehicle:

https://20la01.imagespm.info

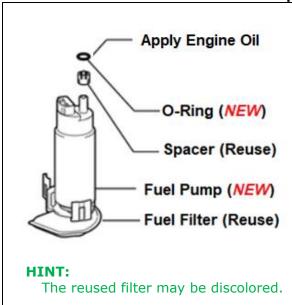
#### 2. REASSEMBLE FUEL SUCTION TUBE ASSEMBLY WITH NEW FUEL PUMP

 a. Follow the Repair Manual instructions to reassemble the Fuel Suction Tube Assembly with a NEW Fuel Pump.



Refer to the Component diagrams at the beginning of these Technical Instructions to confirm the location of each replacement part.

# **Example Procedure:**



- Remove the original O-Ring, Spacer and Fuel Filter from the original Fuel Pump.
- Discard the original O-Ring and Fuel Pump, saving the Spacer and Fuel Filter.
- Install the original Spacer onto the NEW Fuel Pump.
- Install the NEW O-Ring onto the NEW Fuel Pump. Refer to the Component Diagram to determine to proper O-Ring, as identified by the colored tape on the bag.
- Apply a small amount of engine oil to the NEW
   O-Ring to assure correct installation into the
   Tube Assembly.
- Install the original Fuel Filter onto the NEW Fuel Pump.
- Refer to the <u>Components diagrams</u> to review the other <u>NEW</u> parts to install.
- Apply engine oil to the NEW O-ring before assembly to assure correct installation into the Fuel Suction Tube.

# 3. REASSEMBLE FUEL SUCTION TUBE ASSEMBLY

b. Follow the Repair Manual instructions to reassemble the Fuel Suction Tube Assembly.

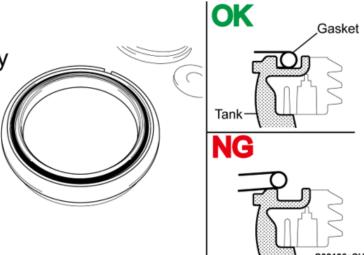
	REASSEMBLE										
GS 350	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2018</u>	<u>2019</u>		GX 460	<u>2014</u>	<u>2015</u>		
IS 350	<u>2014</u>	<u>2015</u>	<u>2018</u>	<u>2019</u>			IS 300	<u>2018</u>	<u>2019</u>		
RX 350 (VIN JTJ)	<u>2017</u>	<u>2018</u>	<u>2019</u>				LS 500	<u>2018</u>	<u>2019</u>		
RX 350 (VIN 2T2)	<u>2017</u>	<u>2018</u>	<u>2019</u>				LS 500h	<u>2018</u>	<u>2019</u>		
RC 350	<u>2015</u>	<u>2018</u>	<u>2019</u>				GS 300	<u>2018</u>	<u>2019</u>		
LS 460	<u>2013</u>	<u>2014</u>	<u>2015</u>				LX 570	<u>2014</u>	<u>2015</u>		
ES 350	<u>2018</u>	<u>2019</u>					IS 200t	<u>2017</u>			
LC 500	<u>2018</u>	<u>2019</u>					IS-F	<u>2014</u>			
LC 500h	<u>2018</u>	<u>2019</u>					RC 200t	<u>2017</u>			
RC 300	<u>2018</u>	<u>2019</u>					NX 200t	<u>2015</u>			

# X. INSTALL FUEL TUBE ASSEMBLY

# **INSTALLATION TIP: PLASTIC RETAINER**

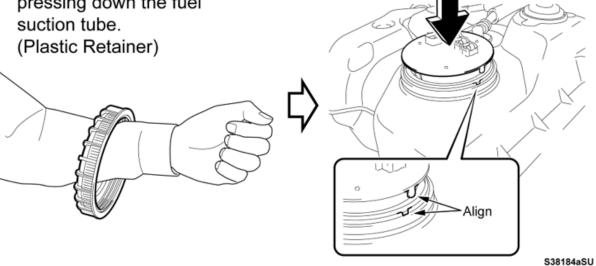
Set **NEW** gasket properly

**DO NOT** apply silicon grease



Put the retainer around the arm so that it is not necessary to change hands to keep pressing down the fuel suction tube.
(Plastic Retainer)

Keep pressing down the fuel suction tube while installing the retainer.



## 1. INSTALL THE FUEL SUCTION TUBE ASSEMBLY INTO VEHICLE

a. Follow the Repair Manual instructions to reinstall the Fuel Suction Tube into the vehicle.



Refer to the Component diagrams at the beginning of these Technical Instructions to confirm the location of each replacement part.

	INSTALLATION										
GS 350	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2018</u>	<u>2019</u>		GX 460	<u>2014</u>	<u>2015</u>		
IS 350	<u>2014</u>	<u>2015</u>	<u>2018</u>	<u>2019</u>			IS 300	<u>2018</u>	<u>2019</u>		
RX 350 (VIN JTJ)	<u>2017</u>	<u>2018</u>	<u>2019</u>		_		LS 500	<u>2018</u>	<u>2019</u>		
RX 350 (VIN 2T2)	<u>2017</u>	<u>2018</u>	<u>2019</u>				LS 500h	<u>2018</u>	<u>2019</u>		
RC 350	<u>2015</u>	<u>2018</u>	<u>2019</u>				GS 300	<u>2018</u>	<u>2019</u>		
LS 460	<u>2013</u>	<u>2014</u>	<u>2015</u>				LX 570	<u>2014</u>	<u>2015</u>		
ES 350	<u>2018</u>	<u>2019</u>					IS 200t	<u>2017</u>			
LC 500	<u>2018</u>	<u>2019</u>					IS-F	<u>2014</u>			
LC 500h	<u>2018</u>	<u>2019</u>					RC 200t	<u>2017</u>			
RC 300	<u>2018</u>	<u>2019</u>					NX 200t	<u>2015</u>			

## 2. REMOVED FUEL

a. If fuel was removed from the tank prior to disassembly, reinstall the originally recovered fuel into the tank.



# 3. CHECK FOR DTC'S

a. Using a Techstream, perform a Health Check to check for Diagnostic Trouble Codes.

Note: This Safety Recall covers only the replacement of the fuel pump and associated parts. It does not cover the diagnosis or replacement of any other parts on the vehicle.

# **◄ VERIFY REPAIR QUALITY** ▶

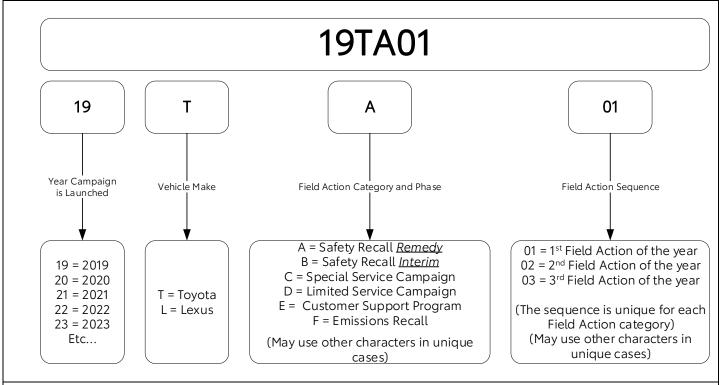
- Confirm no fuel leaks from vehicle
- Confirm any fuel drained from the vehicle has been reinstalled
- Test drive to confirm normal operation while under load
- Confirm no DTC's are present
- Confirm that all parts listed in the Components Diagrams have been properly installed on the vehicle.

## XI. APPENDIX

#### A. PARTS DISPOSAL

In accordance with Federal law, please make sure all recalled parts (original parts) removed from the vehicle are disposed of in a manner in which they will not be reused, unless requested for parts recovery return.

## **B. CAMPAIGN DESIGNATION DECORDER**



#### **Examples:**

19TA01 = Launched in 2019, Toyota, Safety Recall Remedy Phase, 1<sup>st</sup> Safety Recall Launched in 2019 20TC02 = Launched in 2020, Special Service Campaign, 2<sup>nd</sup> Special Service Campaign Launched in 2020

21TE05 = Launched in 2021, Customer Support Program, 5<sup>th</sup> Customer Support Program Launched in 2021