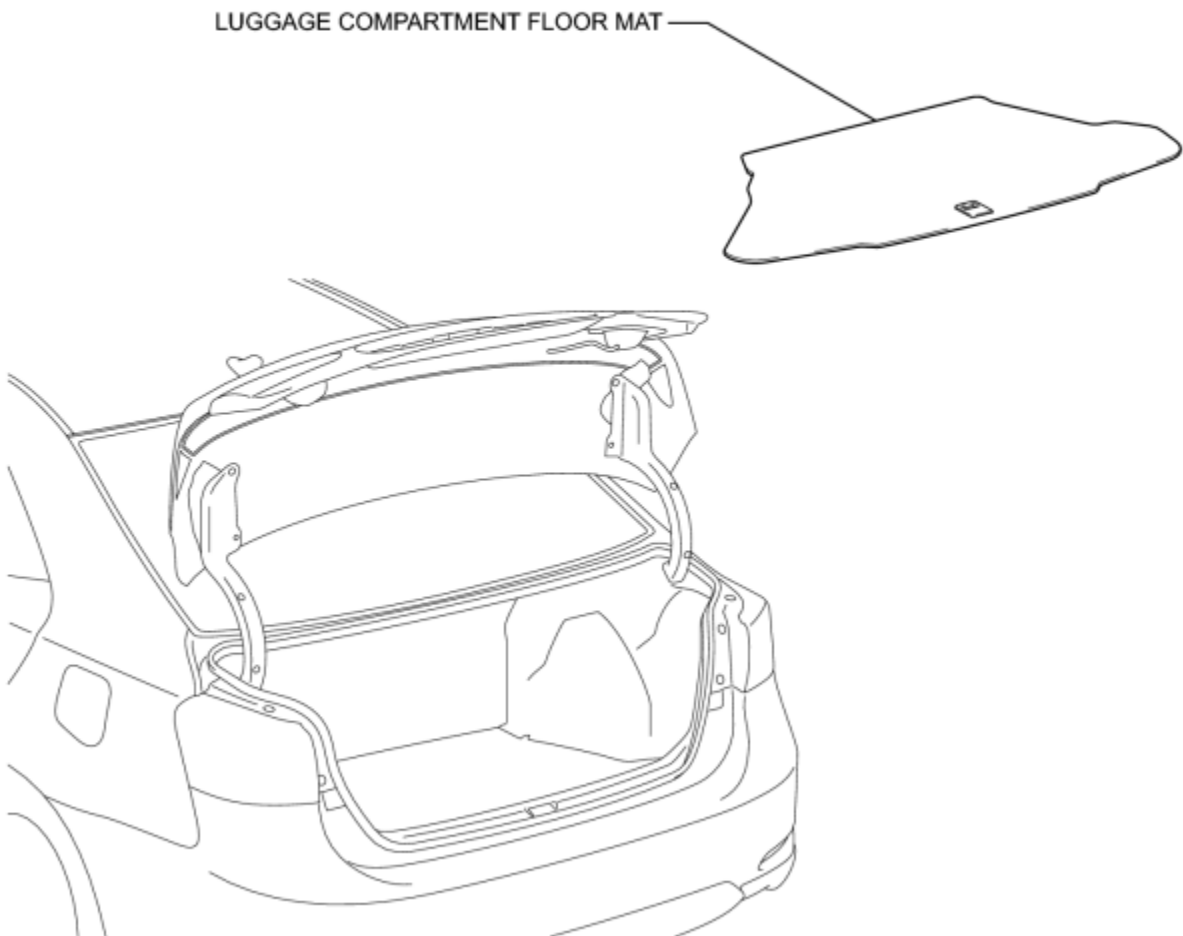


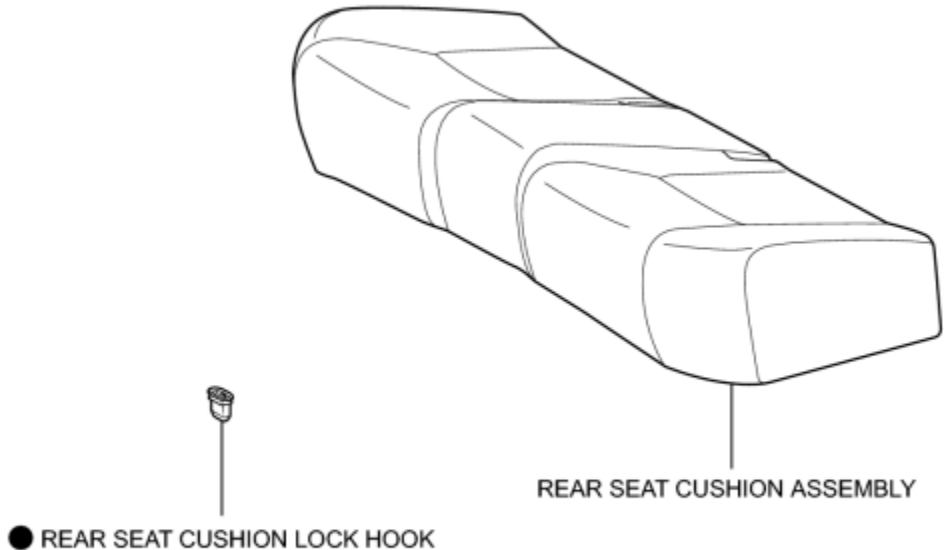
<b>Last Modified:</b> 5-25-2010	6.4 K	<b>From:</b> 200907
<b>Model Year:</b> 2010	<b>Model:</b> HS250H	<b>Doc ID:</b> RM000003VWL005X
<b>Title:</b> 2AZ-FXE FUEL: FUEL PUMP: COMPONENTS (2010 HS250H)		

## COMPONENTS

## ILLUSTRATION

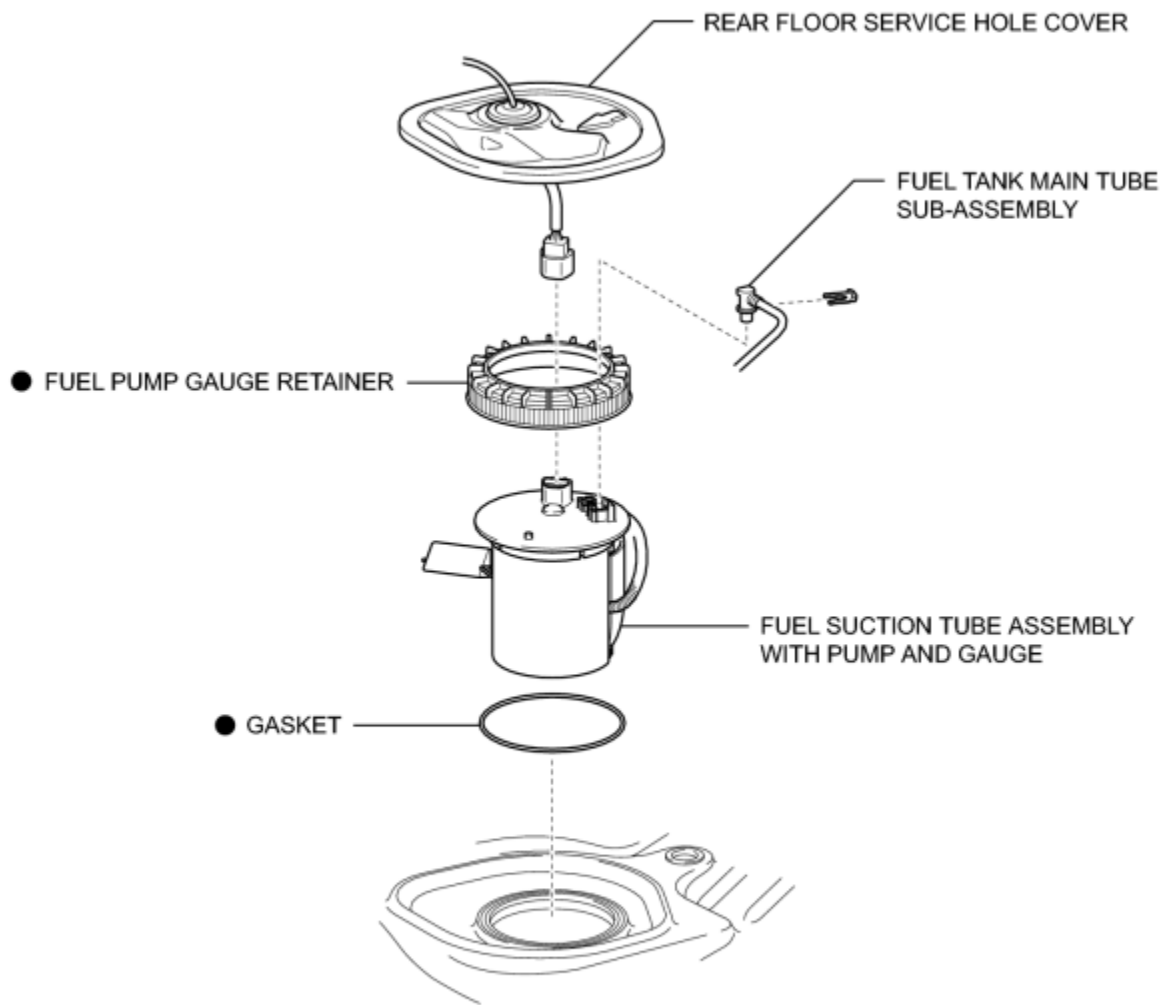


# ILLUSTRATION



● Non-reusable part

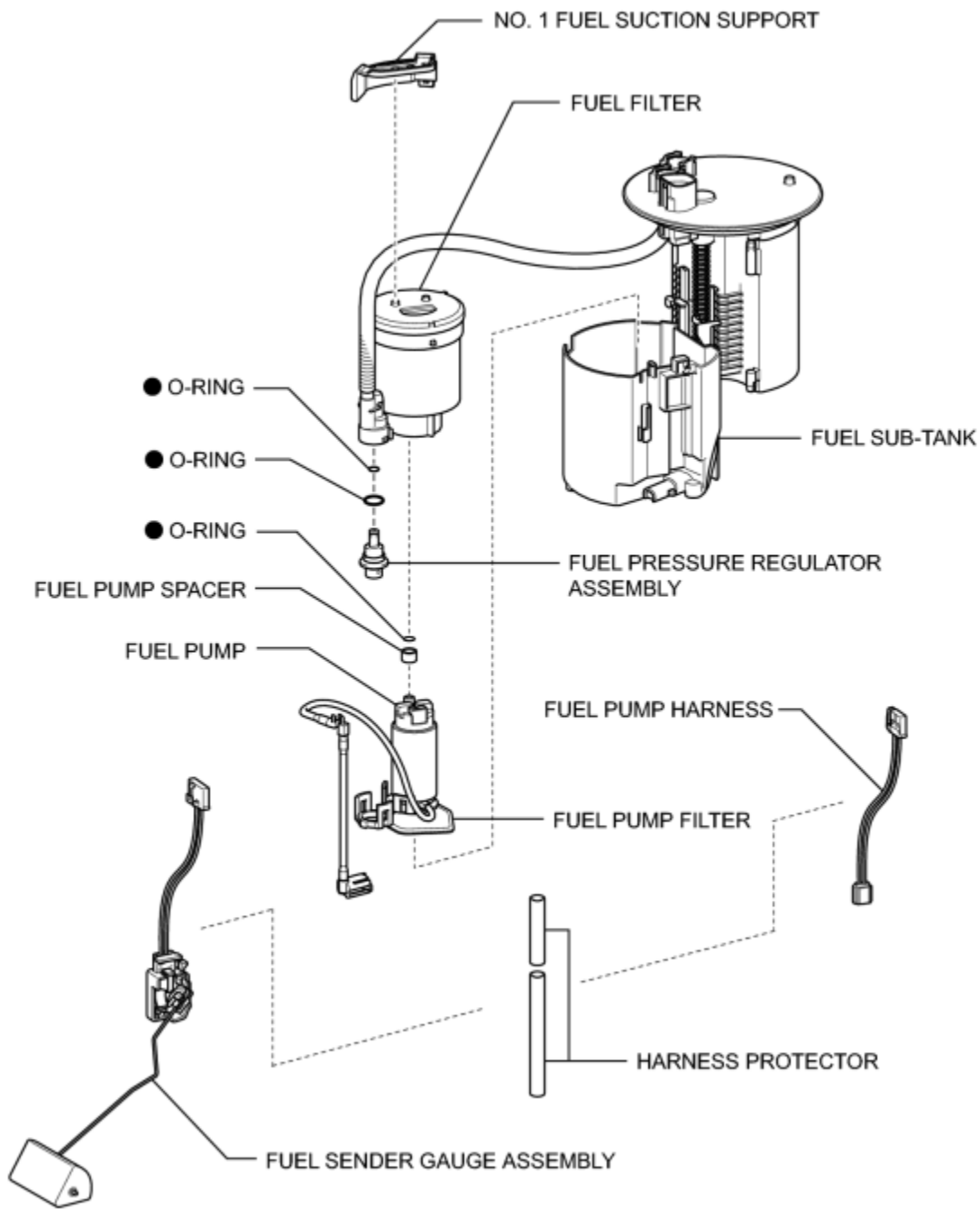
# ILLUSTRATION



● Non-reusable part

c

## ILLUSTRATION



● Non-reusable part

c



<b>Last Modified:</b> 5-25-2010	6.4 A	<b>From:</b> 200907
<b>Model Year:</b> 2010	<b>Model:</b> HS250H	<b>Doc ID:</b> RM0000022XX02BX
<b>Title:</b> 2AZ-FXE FUEL: FUEL PUMP: REMOVAL (2010 HS250H)		

# REMOVAL

## 1. PRECAUTION (w/ Navigation System)

### NOTICE:

After the power switch is turned off, the navigation receiver assembly (HDD navigation system) records various types of memory and settings. As a result, after turning the power switch off, make sure to wait at least 60 seconds before disconnecting the cable from the negative (-) battery terminal.

## 2. DISCHARGE FUEL SYSTEM PRESSURE

HINT: [INFO](#).

## 3. REMOVE LUGGAGE COMPARTMENT FLOOR MAT

## 4. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL [INFO](#)

## 5. REMOVE REAR SEAT CUSHION ASSEMBLY [INFO](#)

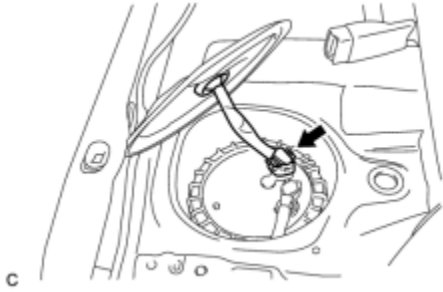
## 6. REMOVE REAR SEAT CUSHION LOCK HOOK [INFO](#)

## 7. REMOVE REAR FLOOR SERVICE HOLE COVER



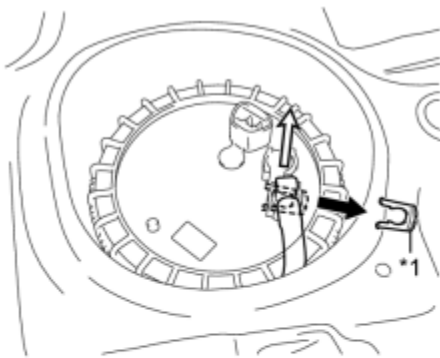
(a) Remove the rear floor service hole cover.

(b) Disconnect the connector from the fuel suction tube assembly.



## 8. DISCONNECT FUEL TANK MAIN TUBE SUB-ASSEMBLY

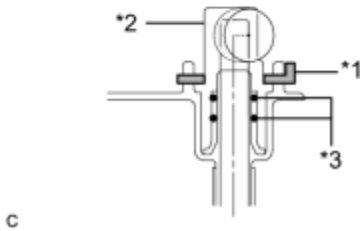
(a) Remove the tube joint clip, then pull the fuel tube joint out of the plug of the fuel suction tube assembly.



<b>Text in Illustration</b>	
*1	Tube Joint Clip
*2	Fuel Tube Joint
*3	O-ring

NOTICE:

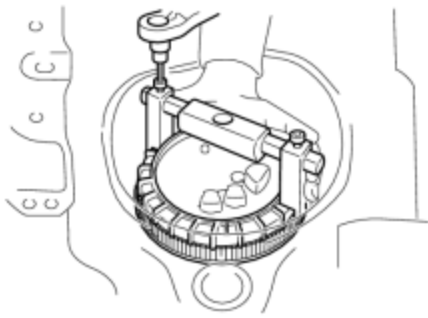
- Check that there is no dirt or other foreign objects around the fuel tube joint before disconnecting it. Clean the joint if necessary.
- It is necessary to prevent mud or dirt from entering the joint. If mud or dirt gets in the joint, the O-rings may not seal properly.
- Only disconnect the joint by hand.
- Do not bend, kink or twist the nylon tube.
- Protect the contact surfaces by covering it with a plastic bag.



## 9. REMOVE FUEL PUMP GAUGE RETAINER

(a) Using a 6 mm socket hexagon wrench, set SST to the fuel pump gauge retainer.

<b>Text in Illustration</b>	
*1	SST



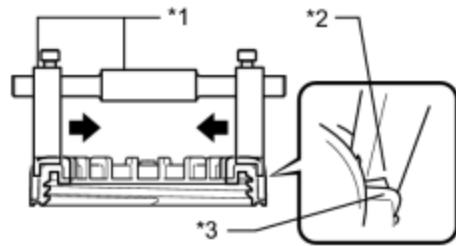
*2	Claw
*3	Rib

SST: 09808-14020

09808-01410

09808-01420

09808-01430



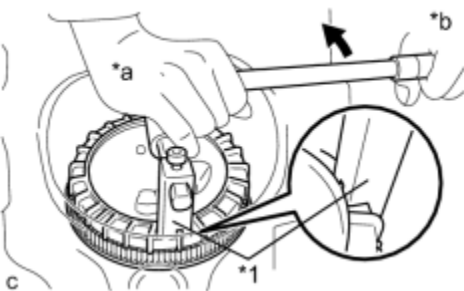
HINT:

- Engage the SST claws securely with the fuel pump gauge retainer ribs to secure SST.
- Install SST while pressing the SST claws toward the fuel pump gauge retainer (toward the center of SST).

c

(b) Using SST, loosen the fuel pump gauge retainer.

<b>Text in Illustration</b>		SST
*1		
*a		Hold
*b		Turn



SST: 09808-14020

09808-01410

09808-01420

09808-01430

NOTICE:

- Do not use any tools other than specified in this operation. Damage to the fuel pump gauge retainer or the fuel tank may result.
- Loosen the retainer by turning it counterclockwise while holding SST down. Do not allow the claw of the tank suction tube support to slip out of its

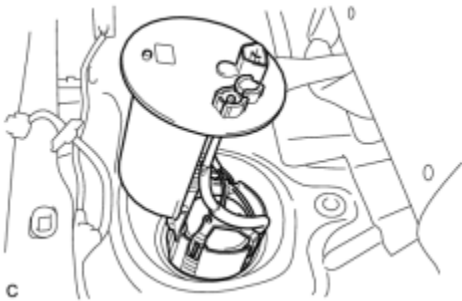
groove on the fuel tank.

**HINT:**

The ribs on the fuel pump gauge retainer can be fitted into the tips of SST.

(c) Remove the fuel pump gauge retainer while holding the fuel suction tube assembly by hand.

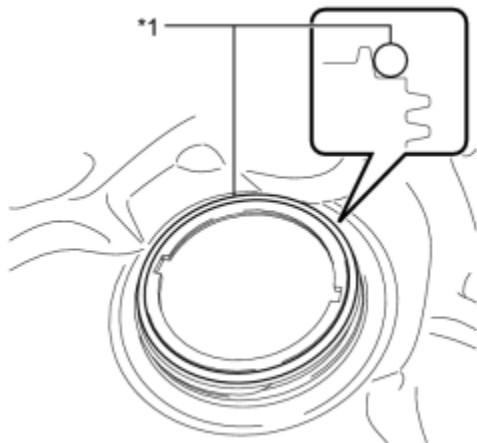
**10. REMOVE FUEL SUCTION TUBE ASSEMBLY WITH PUMP AND GAUGE**



(a) Remove the fuel suction tube assembly with pump and gauge from the fuel tank.

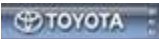
**NOTICE:**

Make sure that the fuel sender gauge arm does not bend.



(b) Remove the gasket from the fuel tank.

<b>Text in Illustration</b>	Gasket
*1	



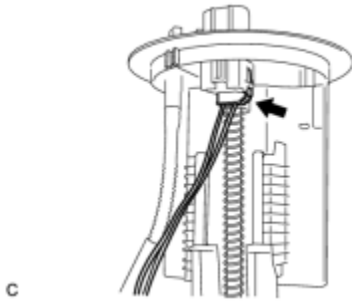
<b>Last Modified:</b> 5-25-2010	6.4 A	<b>From:</b> 200907
<b>Model Year:</b> 2010	<b>Model:</b> HS250H	<b>Doc ID:</b> RM000000SL903BX
<b>Title:</b> 2AZ-FXE FUEL: FUEL PUMP: DISASSEMBLY (2010 HS250H)		

## DISASSEMBLY

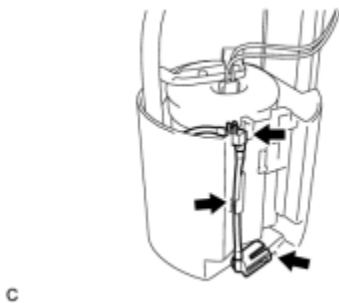
### 1. REMOVE FUEL SENDER GAUGE ASSEMBLY\_



## 2. REMOVE FUEL PUMP

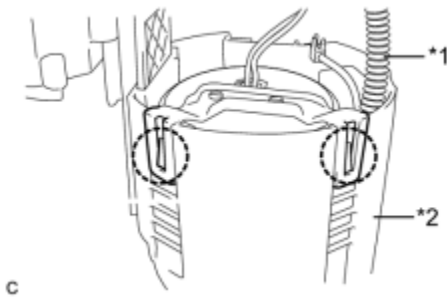


(a) Disconnect the connector of the fuel pump harness.



(b) Disconnect the fuel pump filter hose.

(c) Using a screwdriver with its tip wrapped in protective tape, disengage the 2 claws, and remove the fuel filter and fuel pump from the fuel sub-tank.



### Text in Illustration

*1	Fuel Tube
*2	Fuel Sub-tank

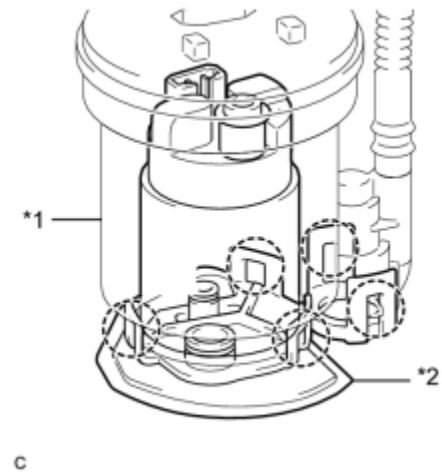
### NOTICE:

Do not do anything which may separate the fuel tube from either the fuel suction plate or fuel filter, such as applying excessive force to the tube INFO.

(d) Using a screwdriver with its tip wrapped in protective tape, disengage the 2 claws and remove the No. 1 fuel suction support.



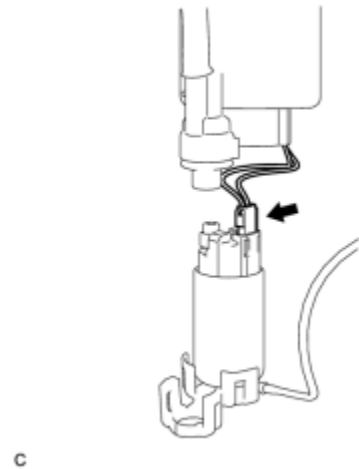
(e) Using a screwdriver with its tip wrapped in protective tape, disengage the 5 claws, and remove the fuel pump filter and fuel pump from the fuel filter.



<b>Text in Illustration</b>	
*1	Fuel Filter
*2	Fuel Pump Filter

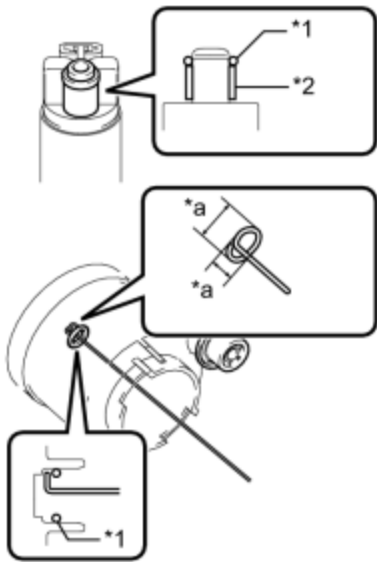
NOTICE:

- Do not damage the fuel pump filter.
- Do not remove the fuel pump filter.
- Do not use either the fuel pump or the fuel pump filter if the fuel pump filter is removed from the fuel pump.



(f) Disconnect the fuel pump harness connector.

(g) Remove the O-ring and spacer from the fuel pump.



## Text in Illustration

*1	O-ring
*2	Spacer
*a	5.0 mm (0.197 in.)

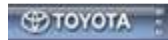
### NOTICE:

Be careful not to damage the sealing surface.

### HINT:

If the O-ring still remains in the fuel filter, remove it using a wire tip (1 mm diameter) that is formed as shown in the illustration.

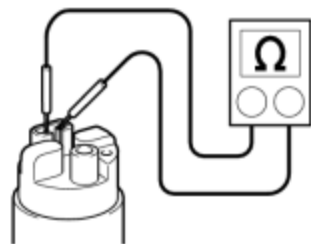
c



<b>Last Modified:</b> 5-25-2010	6.4 G	<b>From:</b> 200907
<b>Model Year:</b> 2010	<b>Model:</b> HS250H	<b>Doc ID:</b> RM0000022XV01FX
<b>Title:</b> 2AZ-FXE FUEL: FUEL PUMP: INSPECTION (2010 HS250H)		

## INSPECTION

### 1. INSPECT FUEL PUMP



c

(a) Check the resistance.

(1) Using an ohmmeter, measure the resistance according to the value(s) in the table below.

Standard Resistance:

Tester Connection	Condition	Specified Condition
1 - 2	20°C (68°F)	0.2 to 3.0 Ω

If the result is not as specified, replace the fuel pump.

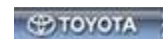
(b) Check fuel pump operation.

(1) Apply battery voltage to terminals 1 and 2. Check that the pump operates.

**NOTICE:**

- These tests must be done quickly (within 10 seconds) to prevent the coil from burning out.
- Keep the fuel pump as far away from the battery as possible.
- Always switch the voltage on and off on the battery side, not the fuel pump side. If the pump does not operate, replace the fuel pump.

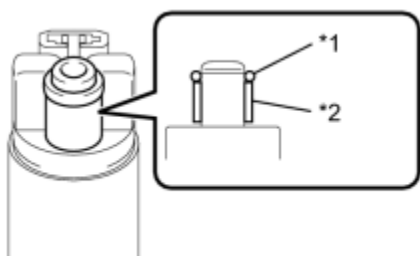
If the pump does not operate, replace the fuel pump.



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<b>Model Year:</b> 2010	<b>Model:</b> HS250H	<b>Doc ID:</b> RM000000SLA039X
<b>Title:</b> 2AZ-FXE FUEL: FUEL PUMP: REASSEMBLY (2010 HS250H)		

## REASSEMBLY

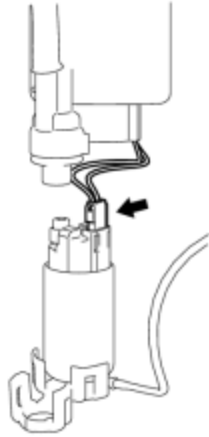
### 1. INSTALL FUEL PUMP



(a) Apply gasoline to a new O-ring. Then install the O-ring and spacer to the fuel pump.

<b>Text in Illustration</b>	
*1	O-ring
*2	Spacer

(b) Connect the fuel pump harness connector.

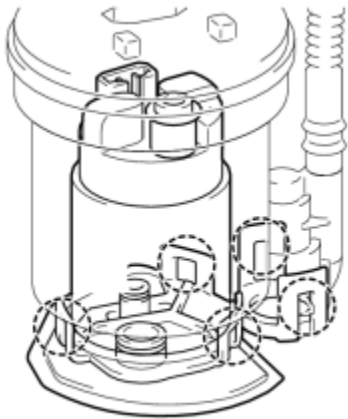


c

(c) Engage the 5 claws of the fuel pump.

NOTICE:

- Make sure that the O-ring is not cut or pinched during the installation.
- Engage the claws securely.
- Do not remove the fuel pump filter.



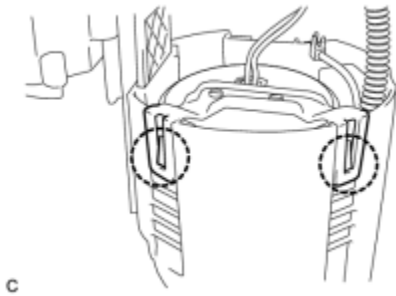
c



P

(d) Engage the 2 claws of the No. 1 fuel suction support.

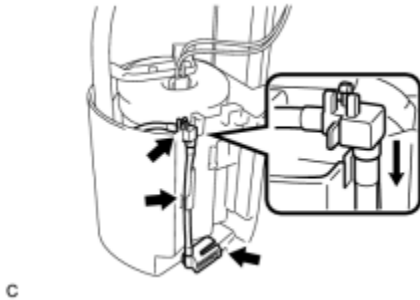
(e) Engage the 2 claws of the fuel suction support, and install the fuel filter and the fuel pump onto the fuel sub-tank.



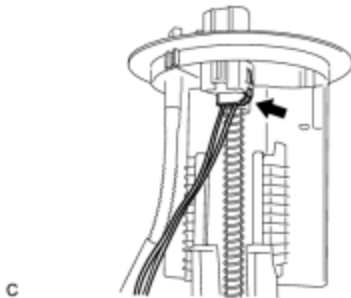
(f) Align the groove of the fuel pump filter hose with the cutout of the fuel sub-tank and install the hose.

**NOTICE:**

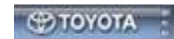
Do not apply excessive force to the fuel tube or the suction support.



(g) Connect the connector of the fuel pump harness.



2. INSTALL FUEL SENDER GAUGE ASSEMBLY [INFO](#)

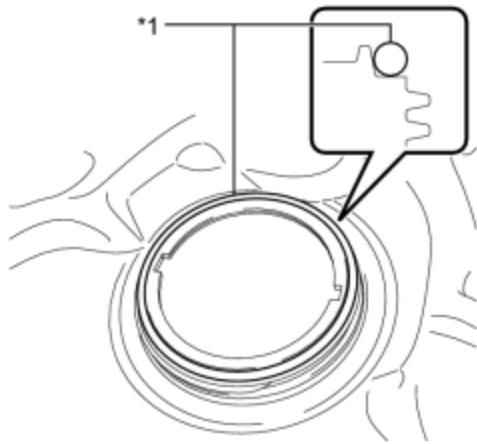


<b>Last Modified:</b> 5-25-2010	6.4 A	<b>From:</b> 200907
<b>Model Year:</b> 2010	<b>Model:</b> HS250H	<b>Doc ID:</b> RM0000022XU02BX
<b>Title:</b> 2AZ-FXE FUEL: FUEL PUMP: INSTALLATION (2010 HS250H)		

## INSTALLATION

### 1. INSTALL FUEL SUCTION TUBE ASSEMBLY WITH PUMP AND GAUGE

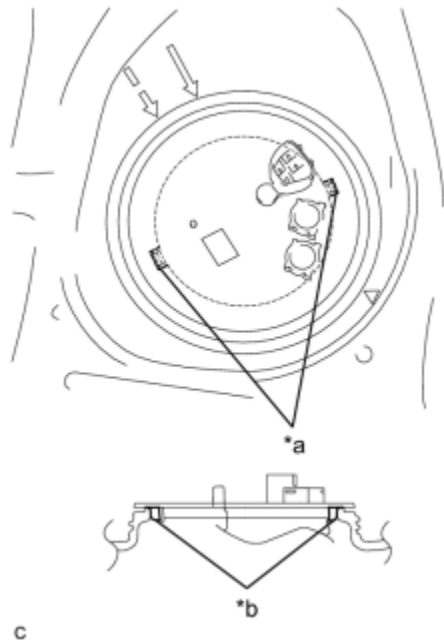
(a) Install a new gasket onto the fuel tank.



**Text in Illustration**

Gasket

\*1



(b) Set the fuel suction tube assembly with pump and gauge to the fuel tank.

**Text in Illustration**

Notch

\*a

Protrusion

\*b

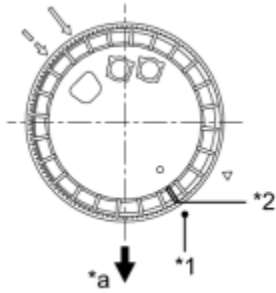
NOTICE:

Make sure that the fuel sender gauge arm does not bend.

(c) Align the protrusions of the fuel suction tube assembly with pump and gauge with the notches of the fuel tank.

**2. INSTALL FUEL PUMP GAUGE RETAINER**

(a) While holding the fuel suction tube assembly with pump and gauge by hand to prevent it from tilting, align the mark on a new fuel pump gauge retainer with the start mark on the fuel tank and tighten the fuel pump gauge retainer 180° by hand.

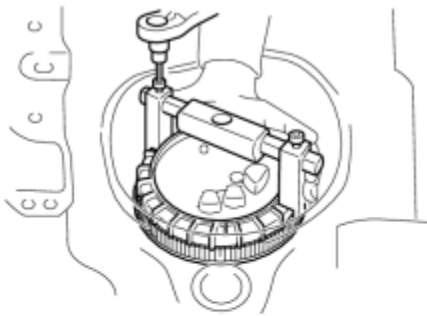


Text in Illustration	Start Mark
*1	
*2	Mark
*a	Front Side

HINT:

- Check that there is no damage, dent, foreign matter, or other defect on the threads of the fuel tank.

(b) Using a 6 mm socket hexagon wrench, set SST to the fuel pump gauge retainer.



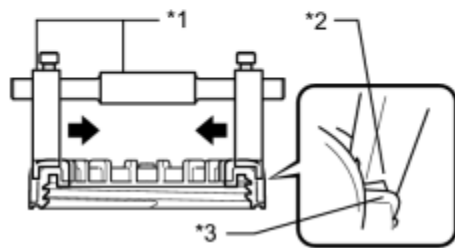
Text in Illustration	SST
*1	
*2	Claw
*3	Rib

SST: 09808-14020

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09808-01430



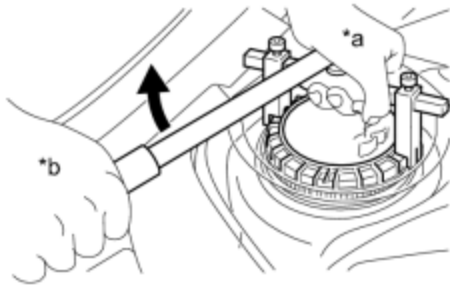
c

HINT:

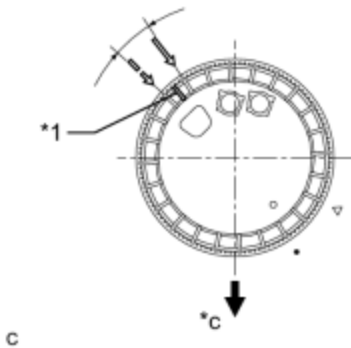
- Engage the SST claws securely with the fuel pump gauge retainer ribs to secure SST.
- Install SST while pressing the SST claws toward the fuel pump gauge retainer (toward the center of SST).

(c) Tighten the fuel pump gauge retainer approximately 360° so that the mark on the retainer comes within the range shown in the illustration.





Text in Illustration	Mark
*1	
*a	Hold
*b	Turn
*c	Front Side



SST: 09808-14020

09808-01410

09808-01420

09808-01430

**NOTICE:**

- Do not use any tools other than specified in this operation. Damage to the fuel pump gauge retainer or the fuel tank may result.
- Tighten the retainer by turning it clockwise while holding SST down.

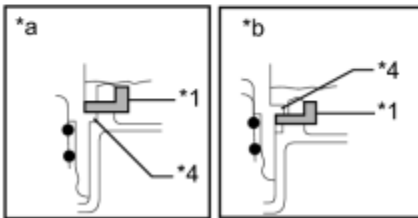
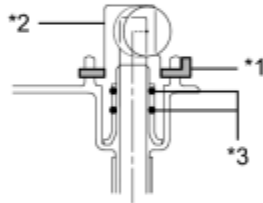
**HINT:**

The ribs on the fuel pump gauge retainer can be fitted into the tips of SST.

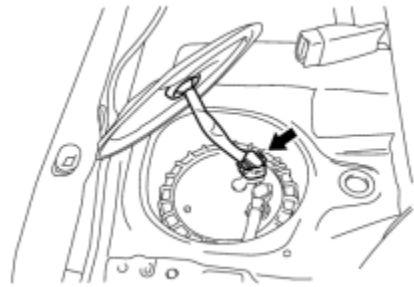
**3. CONNECT FUEL TANK MAIN TUBE SUB-ASSEMBLY**

(a) Push the fuel tube joint in the plug of the fuel suction plate, then install the tube joint clip.

Text in Illustration	Mark
*1	Tube Joint Clip
*2	Fuel Tube Joint
*3	O-ring
*4	Collar
*a	CORRECT



c



c

*b	INCORRECT
----	-----------

**NOTICE:**

- Check that there are no scratches or foreign objects around the connected part of the fuel tube joint and plug before performing this work.
- Check that the fuel tube joint is securely inserted to the end.
- Check that the tube joint clip is on the collar of the fuel tube joint.
- After installing the tube joint clip, check that the fuel tank main tube cannot be pushed out.

(b) Connect the fuel pump connector.

4. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL INFO

5. INSTALL LUGGAGE COMPARTMENT FLOOR MAT

6. INSPECT FOR FUEL LEAK INFO

7. INSTALL REAR FLOOR SERVICE HOLE COVER

(a) Install the rear floor service hole cover with new butyl tape.



8. INSTALL REAR SEAT CUSHION LOCK HOOK [INFO](#)

9. INSTALL REAR SEAT CUSHION ASSEMBLY [INFO](#)

