

<b>Last Modified:</b> 12-04-2024	6.11:8.1.0	<b>Doc ID:</b> RM1000000029ZX3
<b>Model Year Start:</b> 2023	<b>Model:</b> Prius Prime	<b>Prod Date Range:</b> [12/2022 - ]
<b>Title:</b> M20A-FXS (FUEL): FUEL INJECTOR (for Port Injection): INSPECTION; 2023 - 2024 MY Prius Prius Prime [12/2022 - ]		

## INSPECTION

## PROCEDURE

### 1. INSPECT PORT FUEL INJECTOR ASSEMBLY

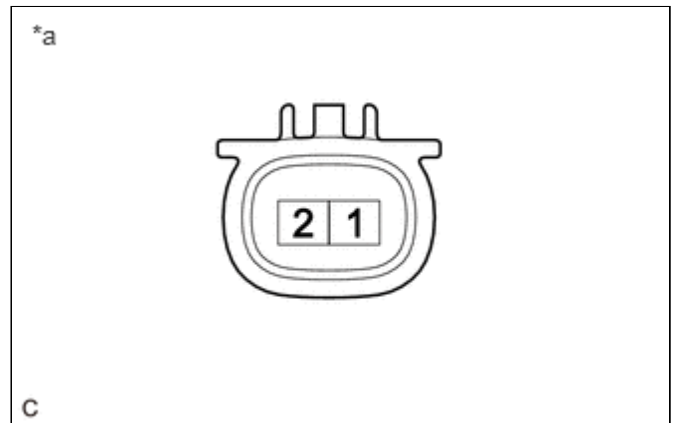
(a) Check the resistance.

(1) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
1 - 2	20°C (68°F)	11.6 to 12.4 Ω	Ω

If the result is not as specified, replace the port fuel injector assembly.



*a	Component without harness connected (Port Fuel Injector Assembly)
----	---

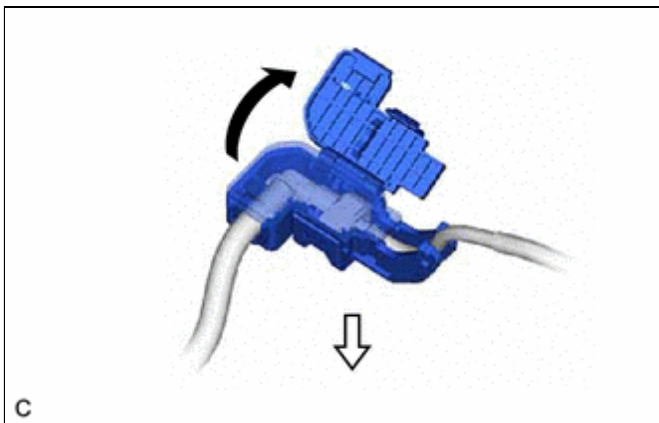
(b) Check the operation.



**CAUTION:**

Perform the inspection in a well-ventilated area.

Do not perform the inspection near an open flame.

(1) Open the cover of the EFI fuel pipe clamp and remove the EFI fuel pipe clamp from the fuel tube connector.

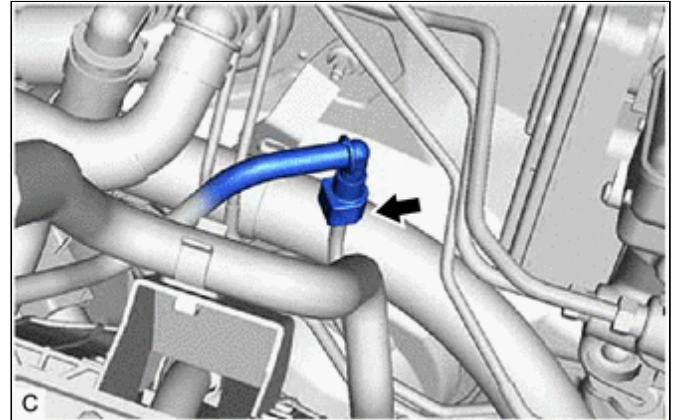


	Open
	Pull

(2) Disconnect the fuel tube sub-assembly.

**HINT:**

Click here 



(3) Connect SST (fuel tube connector) to SST (hose) with SST (hose band), and then connect them to the fuel pipe (vehicle side).

**SST: 09268-31015**

09268-41700

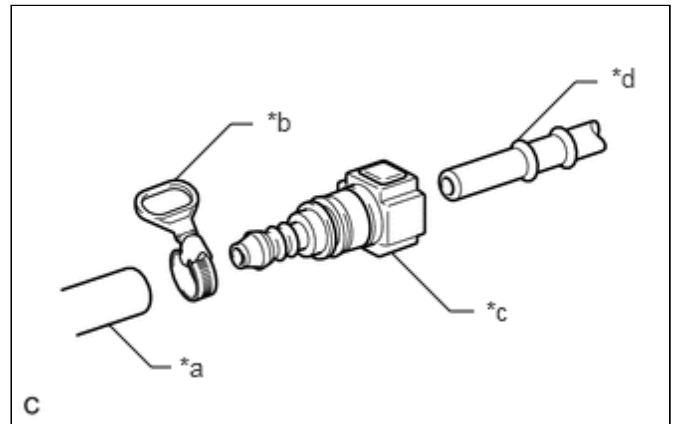
95336-08070

**SST: 09268-00010**

09268-00030

**NOTICE:**

Make sure the SST (fuel tube connector) O-rings are not damaged and are free of foreign matter as they are used to seal the connections between the fuel tube connector and fuel pipe.



*a	SST (Hose)
*b	SST (Hose Band)
*c	SST (Fuel Tube Connector)
*d	Fuel Pipe (Vehicle Side)

(4) Apply a light coat of gasoline to a new O-ring, and then install the O-ring to the port fuel injector assembly.

(5) Connect SST (adapter) and SST (hose) to the port fuel injector assembly, and hold the port fuel injector assembly and union with SST (clamp).

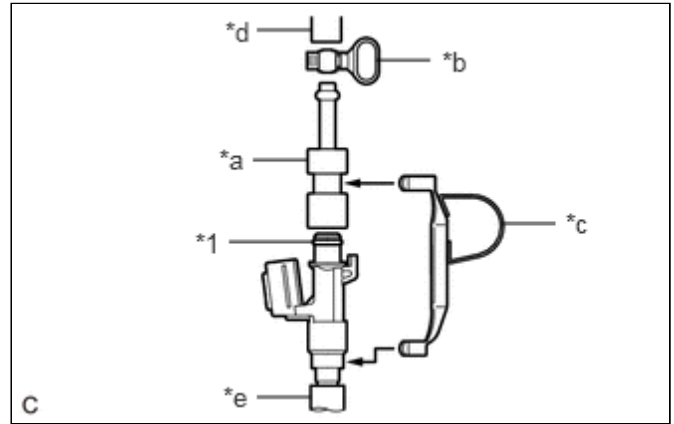
**SST: 09268-31015**

09268-41410

09268-41600

09268-41700

95336-08070



*1	O-ring
*a	SST (Adapter)
*b	SST (Hose Band)
*c	SST (Clamp)
*d	SST (Hose)
*e	Vinyl Tube

(6) Install a vinyl tube to the port fuel injector assembly.

**CAUTION:**

Install a suitable vinyl tube to the port fuel injector assembly to prevent fuel from spraying.

(7) Tie SST (clamp) and SST (adapter) together with SST (tie band) as shown in the illustration.

**SST: 09268-31015**

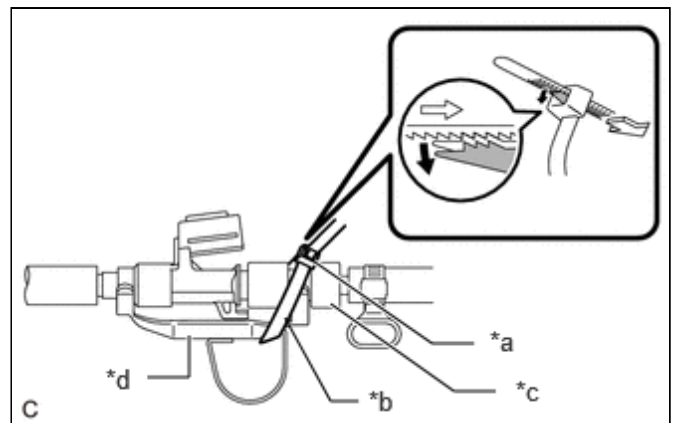
09268-41800

**NOTICE:**

- As SST (tie band) does not completely prevent SST (clamp) from becoming loose, do not subject the parts to any impacts while using them.
- Before using SST (tie band), make sure that there is no wear, damage or cracks. If there are any abnormalities, replace SST (tie band).

**HINT:**

When removing SST (tie band), disengage the lock.



*a	Lock
*b	SST (Tie Band)
*c	SST (Adapter)
*d	SST (Clamp)

(8) Check that SST (clamp) and SST (adapter) cannot be easily separated.

(9) Set the port fuel injector assembly into a graduated cylinder.

**NOTICE:**

Do not start the engine.

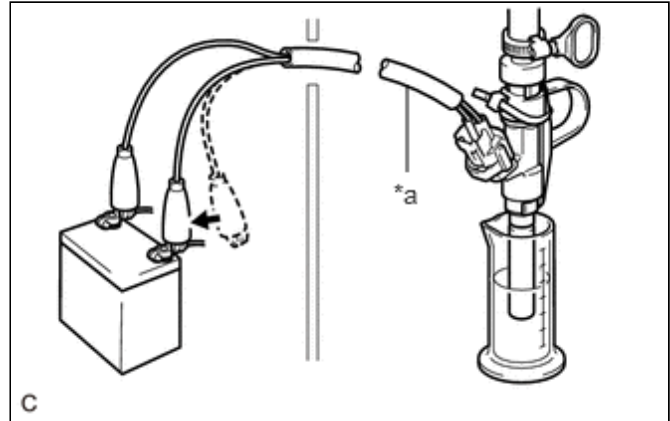
**Powertrain > Engine > Active Test**

TESTER DISPLAY
Activate the Circuit Relay (Brushless)

(10) Connect SST (EFI inspection wire K) to the port fuel injector assembly and auxiliary battery for 15 seconds, and measure the injection volume with the graduated cylinder. Test each port fuel injector assembly 2 or 3 times.

**SST: 09842-30110**

Standard Injection Volume:



*a	SST (EFI Inspection Wire K)
----	-----------------------------

ITEM	AUXILIARY BATTERY CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
No. 1 Port Fuel Injector Assembly	Positive (+) auxiliary battery terminal - Negative (-) auxiliary battery terminal	Per 15 seconds	67 to 81 cc 4.1 to 4.9 cu.in.	cc cu.in.
No. 2 Port Fuel Injector Assembly	Positive (+) auxiliary battery terminal - Negative (-) auxiliary battery terminal	Per 15 seconds	67 to 81 cc 4.1 to 4.9 cu.in.	cc cu.in.
No. 3 Port Fuel Injector Assembly	Positive (+) auxiliary battery terminal - Negative (-) auxiliary battery terminal	Per 15 seconds	67 to 81 cc 4.1 to 4.9 cu.in.	cc cu.in.
No. 4 Port Fuel Injector Assembly	Positive (+) auxiliary battery terminal - Negative (-) auxiliary battery terminal	Per 15 seconds	67 to 81 cc 4.1 to 4.9 cu.in.	cc cu.in.

ITEM	AUXILIARY BATTERY CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
Difference between Each Port Fuel Injector Assembly	-	-	14 cc or less 0.9 cu.in. or less	cc cu.in.

**NOTICE:**

- Make sure that SST (EFI inspection wire K) is securely connected.
- Always switch the voltage on and off at the auxiliary battery side, not the port fuel injector assembly side.

If the result is not as specified, replace the port fuel injector assembly.

(c) Check for leaks.

- (1) Disconnect SST (EFI inspection wire K) from the auxiliary battery and check for fuel leaks from the port fuel injector assembly.

Standard Fuel Drop:

1 drop or less per 20 minutes

If the result is not as specified, replace the port fuel injector assembly.

- (2) Connect the fuel tube sub-assembly.

**HINT:**

[Click here](#) 

- (3) Install the EFI fuel pipe clamp to the fuel tube connector and close the cover of the EFI fuel pipe clamp.

