1GR-FE INTAKE / EXHAUST EXHAUST PIPE(for Model Code #J71, #J76 Series) INSTALLATION

# **PROCEDURE**



#### 1.INSTALL FRONT EXHAUST PIPE ASSEMBLY

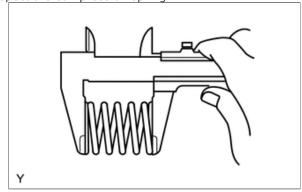
17410

#### HINT:

Be sure to install the gasket so that it is flush with the installation surface and not at an angle.

a. Inspect the compression spring.





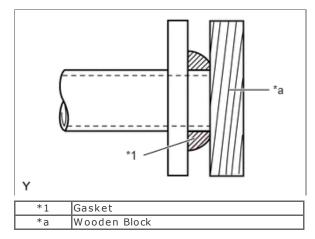
Using a vernier caliper, measure the free length of the compression spring.

Minimum free length:

38.9 mm (1.53 in.)

If the free length is less than the minimum, replace the compression spring.





Using a plastic-faced hammer and wooden block, tap a new gasket onto the exhaust manifold sub-assembly RH so that the gasket is flush with the exhaust manifold sub-assembly RH ends.

# NOTICE:

- · Install the gasket in the correct direction.
- Do not damage the outer surface of the gasket.
- · Do not reuse the gasket.
- $\cdot$  Do not push in the gasket with the front exhaust pipe assembly when connecting it.
- c. Install the exhaust pipe damper to the front exhaust pipe assembly with 2 new nuts and 2 new bolts.

### Torque:

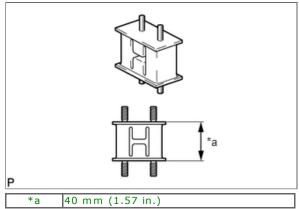
19 N\*m (194 kgf\*cm, 14 ft.\*lbf)

d. Install the exhaust pipe support cushion to the front exhaust pipe assembly with the 2 nuts.

### **Torque:**

### 5.5 N\*m (56 kgf\*cm, 49 in.\*lbf)

# HINT:



Be sure to install the exhaust pipe support cushion with a height of 40 mm (1.57 in.).

**e.** Install the front exhaust pipe assembly to the exhaust manifold sub-assembly RH with the 2 compression springs and 2 bolts.

### **Torque:**

43 N\*m (438 kgf\*cm, 32 ft.\*lbf)

f. Connect the exhaust pipe support cushion with the 2 nuts.

#### **Torque:**

5.5 N\*m (56 kgf\*cm, 49 in.\*lbf)

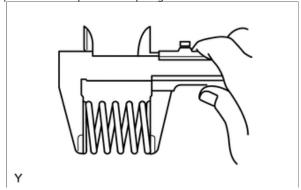
2.INSTALL NO. 2 FRONT EXHAUST PIPE ASSEMBLY

17450

### HINT:

Be sure to install the gasket so that it is flush with the installation surface and not at an angle.

a. Inspect the compression spring.

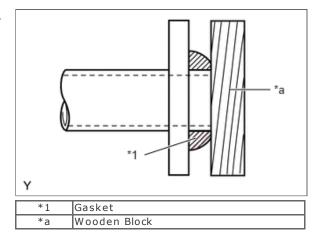


Using a vernier caliper, measure the free length of the compression spring.

Minimum free length: 38.9 mm (1.53 in.)

If the free length is less than the minimum, replace the compression spring.





Using a plastic-faced hammer and wooden block, tap new gasket onto the exhaust manifold sub-assembly LH so that the gasket is flush with the exhaust manifold sub-assembly LH ends.

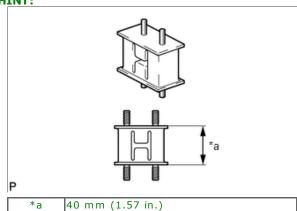
#### **NOTICE:**

- · Install the gasket in the correct direction.
- $\cdot$   $\,$  Do not damage the outer surface of the gasket.
- Do not reuse the gasket.
- · Do not push in the gasket with the No. 2 front exhaust pipe assembly when connecting it.
- c. Install the exhaust pipe support cushion to the No. 2 front exhaust pipe assembly with the 2 nuts.

#### Torque

5.5 N\*m (56 kgf\*cm, 49 in.\*lbf)





Be sure to install an exhaust pipe support cushion with a height of 40 mm (1.57 in.).

**d.** Install the No. 2 front exhaust pipe assembly to the exhaust manifold sub-assembly LH with the 2 compression springs and 2 bolts.

### **Torque:**

43 N\*m (438 kgf\*cm, 32 ft.\*lbf)

e. Connect the exhaust pipe support cushion with the 2 nuts.

## **Torque:**

5.5 N\*m (56 kgf\*cm, 49 in.\*lbf)

# **3.INSTALL CENTER EXHAUST PIPE ASSEMBLY**

17403

#### HINT:

Be sure to install the gasket so that it is flush with the installation surface and not at an angle.

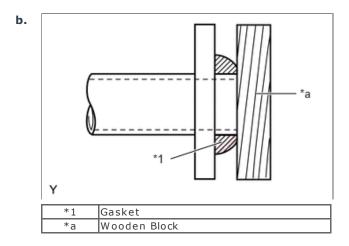
a. Inspect the compression spring.

i.

Using a vernier caliper, measure the free length of the compression spring.

Minimum free length:
38.9 mm (1.53 in.)

If the free length is less than the minimum, replace the compression spring.



Using a plastic-faced hammer and wooden block, tap 2 new gaskets onto the front exhaust pipe assembly and No. 2 front exhaust pipe assembly so that the gaskets are flush with the pipe ends.

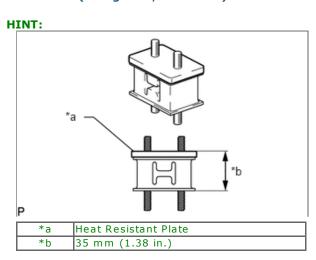
# **NOTICE:**

Υ

- · Install the gasket in the correct direction.
- · Do not damage the outer surface of the gasket.
- Do not reuse the gasket.
- Do not push in the gasket with the center exhaust pipe assembly when connecting it.
- c. Install the exhaust pipe support cushion to the center exhaust pipe assembly with the 2 nuts.

### **Torque:**

5.5 N\*m (56 kgf\*cm, 49 in.\*lbf)



Be sure to install an exhaust pipe support cushion with a height of 35 mm (1.38 in.) and heat resistant plate.

d. Install the center exhaust pipe assembly with the 4 compression springs and 4 bolts.

**Torque:** 

43 N\*m (438 kgf\*cm, 32 ft.\*lbf)

e. Connect the exhaust pipe support cushion with the 2 nuts.

**Torque:** 

5.5 N\*m (56 kgf\*cm, 49 in.\*lbf)

4.INSTALL TAILPIPE ASSEMBLY

17430

a. Install the No. 2 exhaust pipe support stay and exhaust pipe clamp to the tailpipe assembly with the 2 nuts.

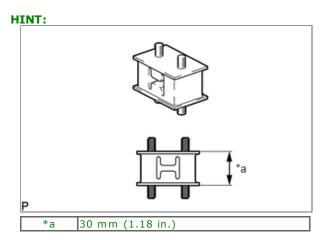
Torque:

10 N\*m (102 kgf\*cm, 7 ft.\*lbf)

b. Install the exhaust pipe support cushion to the No. 2 exhaust pipe support stay with the 2 nuts.

**Torque:** 

5.5 N\*m (56 kgf\*cm, 49 in.\*lbf)



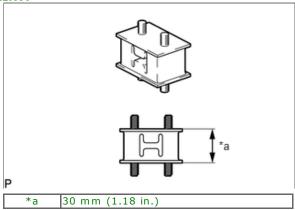
Be sure to install an exhaust pipe support cushion with a height of 30 mm (1.18 in.).

**c.** Install the exhaust pipe support cushion to the tailpipe assembly with the 2 nuts.

Torque:

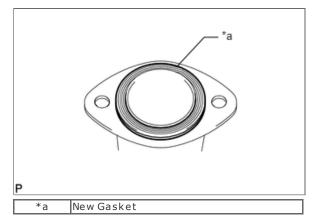
5.5 N\*m (56 kgf\*cm, 49 in.\*lbf)





Be sure to install an exhaust pipe support cushion with a height of 30 mm (1.18 in.).

d.



Install a new gasket to the center exhaust pipe assembly.

e. Install the tailpipe assembly with 2 new bolts and 2 new nuts.

Torque:

48 N\*m (489 kgf\*cm, 35 ft.\*lbf)

**f.** Connect the 2 exhaust pipe support cushions with the 4 nuts.

Torque:

5.5 N\*m (56 kgf\*cm, 49 in.\*lbf)

**■** 5.INSPECT FOR EXHAUST GAS LEAK

Click hereEngine / Hybrid System>1GR-FE INTAKE / EXHAUST>EXHAUST MANIFOLD>INSTALLATION

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