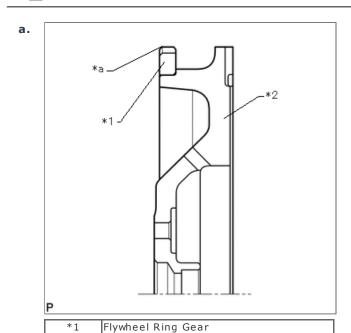
1GR-FE ENGINE MECHANICAL ENGINE UNIT INSTALLATION

PROCEDURE

■ 1.INSTALL FLYWHEEL RING GEAR

13453



Using a torch, heat the flywheel ring gear evenly to approximately 200°C (392°F).

NOTICE:

*2

*a

Be careful not to overheat the flywheel ring gear.

Flywheel Sub-assembly

Chamfer

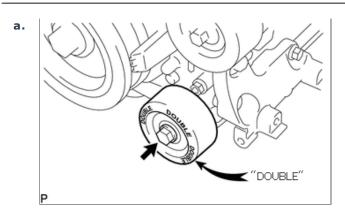
b. Using a brass bar, tap the flywheel ring gear onto the flywheel sub-assembly with its chamfered gear teeth facing the cylinder block sub-assembly.

NOTICE:

After installing, allow the flywheel ring gear to cool before handling.

2.INSTALL NO. 1 IDLER PULLEY SUB-ASSEMBLY

16603



Install the No. 1 idler pulley sub-assembly with the bolt.

Torque:

54 N*m (551 kgf*cm, 40 ft.*lbf)

NOTICE:

- Do not mistakenly install the No. 2 idler pulley sub-assembly instead of the No. 1 idler pulley sub-assembly.
- The No. 1 idler pulley sub-assembly has a "DOUBLE" mark.

3.INSTALL NO. 2 IDLER PULLEY SUB-ASSEMBLY

16604

a. for Cover Separate Type:

Install the 2 idler pulley cover plates, 2 No. 2 idler pulley cover plates and 2 No. 2 idler pulley sub-assemblies with the 2 bolts.

Torque:

54 N*m (551 kgf*cm, 40 ft.*lbf)

b. for Cover Integrated Type:

Install the 2 No. 2 idler pulley sub-assemblies with the 2 bolts.

Torque:

54 N*m (551 kgf*cm, 40 ft.*lbf)

4.INSTALL FRONT NO. 1 ENGINE MOUNTING BRACKET LH

12315

a. Install the front No. 1 engine mounting bracket LH with the 3 bolts.

Torque:

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

5.INSTALL FRONT NO. 1 ENGINE MOUNTING BRACKET RH

12311

a. Install the front No. 1 engine mounting bracket RH with the 4 bolts.

Torque:

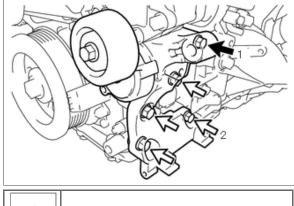
43 N*m (438 kgf*cm, 32 ft.*lbf)

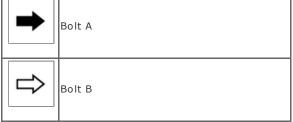
6.INSTALL V-RIBBED BELT TENSIONER ASSEMBLY

16620

a. Temporarily install the V-ribbed belt tensioner assembly with the 5 bolts.

b.





Tighten bolts 1 and 2 in numerical order.

Torque:

36 N*m (367 kgf*cm, 27 ft.*lbf)

c. Tighten the other bolts.

Torque:

36 N*m (367 kgf*cm, 27 ft.*lbf)

Standard Bolt Length:

Item	Specified Condition
Bolt A	70 mm (2.76 in.)
Bolt B	33 mm (1.30 in.)

7.INSTALL IGNITION COIL ASSEMBLY 19500 Click hereEngine / Hybrid System>1GR-FE ENGINE CONTROL>IGNITION COIL AND SPARK PLUG>INSTALLATION **8.INSTALL ENGINE WIRE** a. Install the engine wire. 9.INSTALL INTAKE MANIFOLD 17111 Click hereEngine / Hybrid System>1GR-FE INTAKE / EXHAUST>INTAKE MANIFOLD>INSTALLATION 23250 **■ 10.INSTALL FUEL INJECTOR ASSEMBLY** Click hereEngine / Hybrid System>1GR-FE FUEL>FUEL INJECTOR>INSTALLATION 11.INSTALL FUEL DELIVERY PIPE SUB-ASSEMBLY 23807 Click hereEngine / Hybrid System>1GR-FE FUEL>FUEL INJECTOR>INSTALLATION 12.INSTALL NO. 1 FUEL PIPE SUB-ASSEMBLY AND NO. 2 FUEL PIPE SUB-ASSEMBLY 23801P Click hereEngine / Hybrid System>1GR-FE LUBRICATION>OIL PUMP>INSTALLATION

87246A

87209

a. Install the water hose sub-assembly with the nut.

14.INSTALL WATER HOSE SUB-ASSEMBLY

■ 13.INSTALL OUTLET HEATER WATER HOSE

Torque:

5.0 N*m (51 kgf*cm, 44 in.*lbf)

b. Slide the hose clamp to secure the water hose sub-assembly.

a. Install the outlet heater water hose, and slide the hose clamp to secure the hose.

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