

# ENGINE ACCESSORIES

## MOUNT DEVICES

<b>Overview .....</b>	<b>02-4</b>
<b>Structural diagram .....</b>	<b>02-4</b>
Engine mount (GW4C20 vehicle model).....	02-4
Engine mount (GW4C20A vehicle model) .....	02-5
Engine mount (GW4D20T vehicle model) .....	02-6
<b>Repair procedure .....</b>	<b>02-7</b>
Left Engine Mount Assembly .....	02-7
Right engine mount assembly (GW4C20 vehicle model).....	02-8
Right engine mount assembly (GW4C20A vehicle model).....	02-9
Right engine mount assembly (GW4D20T vehicle model).....	02-11
Transmission Mount Assembly (GW4C20 vehicle model).....	02-12
Transmission suspension assembly (GW4C20A/GW4D20T vehicle model) .....	02-13

## FUEL SYSTEM

<b>Overview .....</b>	<b>02-15</b>
<b>Structural diagram .....</b>	<b>02-15</b>
Fuel Tank and Fuel Pump (GW4C20/GW4C20A vehicle model).....	02-15
Fuel Tank and Fuel Pump (GW4D20T vehicle model).....	02-16
Fuel pipeline and fuel evaporative emission control sys- tem(GW4C20/GW4C20A vehicle model).....	02-17
Fuel pipeline(GW4D20T vehicle model) .....	02-18
Accelerator control mechanism.....	02-19
<b>Repair procedure .....</b>	<b>02-20</b>
Fuel tank assembly .....	02-20
Fuel filter assembly (GW4C20/GW4C20A vehicle model).....	02-23
Coarse fuel filter assembly (GW4D20T vehicle model).....	02-24

Thin fuel filter assembly (GW4D20T vehicle model).....	02-26
Fuel pump with bracket assembly.....	02-28
Accelerator pedal assembly.....	02-30

## INTAKE SYSTEM

<b>Structural diagram .....</b>	<b>02-31</b>
Air Filter(GW4C20 vehicle model) .....	02-31
Air filter (GW4C20A vehicle model) .....	02-32
Air filter (GW4D20T vehicle model) .....	02-33
Intercooler(GW4C20 vehicle model).....	02-34
Intercooler(GW4C20A model).....	02-35
Intercooler (GW4D20T model).....	02-36
<b>Repair procedure .....</b>	<b>02-37</b>
Air filter assembly(GW4C20 vehicle model) .....	02-37
Removal.....	02-37
Air filter assembly (GW4C20A/GW4D20T vehicle model) .....	02-38
Air filter element assembly.....	02-39
Air mass flow meter (GW4C20A/GW4D20T vehicle model) .....	02-40
Intercooler assembly.....	02-41
Pressurization pressure sensor (GW4C20 vehicle model).....	02-44
Air intake temperature and pressure sensor (GW4C20A vehicle model).....	02-45

## EXHAUST SYSTEM

<b>Structural diagram .....</b>	<b>02-46</b>
Muffler and catalytic converter (GW4C20 vehicle model).....	02-46
Muffler and catalytic converter (GW4C20A vehicle model).....	02-47
Muffler and catalytic converter (GW4D20T vehicle model).....	02-48
<b>Specified torque .....</b>	<b>02-49</b>
<b>Repair procedure .....</b>	<b>02-51</b>
Silencer .....	02-51

Three-way catalytic converter assembly (GW4C20 vehicle model).....	02-54
Three-way catalytic converter assembly (GW4C20A vehicle model).....	02-56
Catalytic converter assembly (GW4D20T vehicle model).....	02-58

## COOLING SYSTEM

<b>Overview</b> .....	<b>02-61</b>
<b>Structural diagram</b> .....	<b>02-61</b>
Radiator and fan(GW4C20 vehicle model) .....	02-61
Radiator and fan(GW4C20A vehicle model) .....	02-62
Radiator and fan(GW4D20T vehicle model) .....	02-63
<b>Specified torque</b> .....	<b>02-64</b>
<b>Troubleshooting and detection</b> .....	<b>02-65</b>
On-board inspection.....	02-65
Troubleshooting .....	02-66
<b>Repair procedure</b> .....	<b>02-68</b>
Engine Coolant .....	02-68
Radiator fan assembly .....	02-70
Radiator assembly .....	02-72
Overflow tank assembly.....	02-75

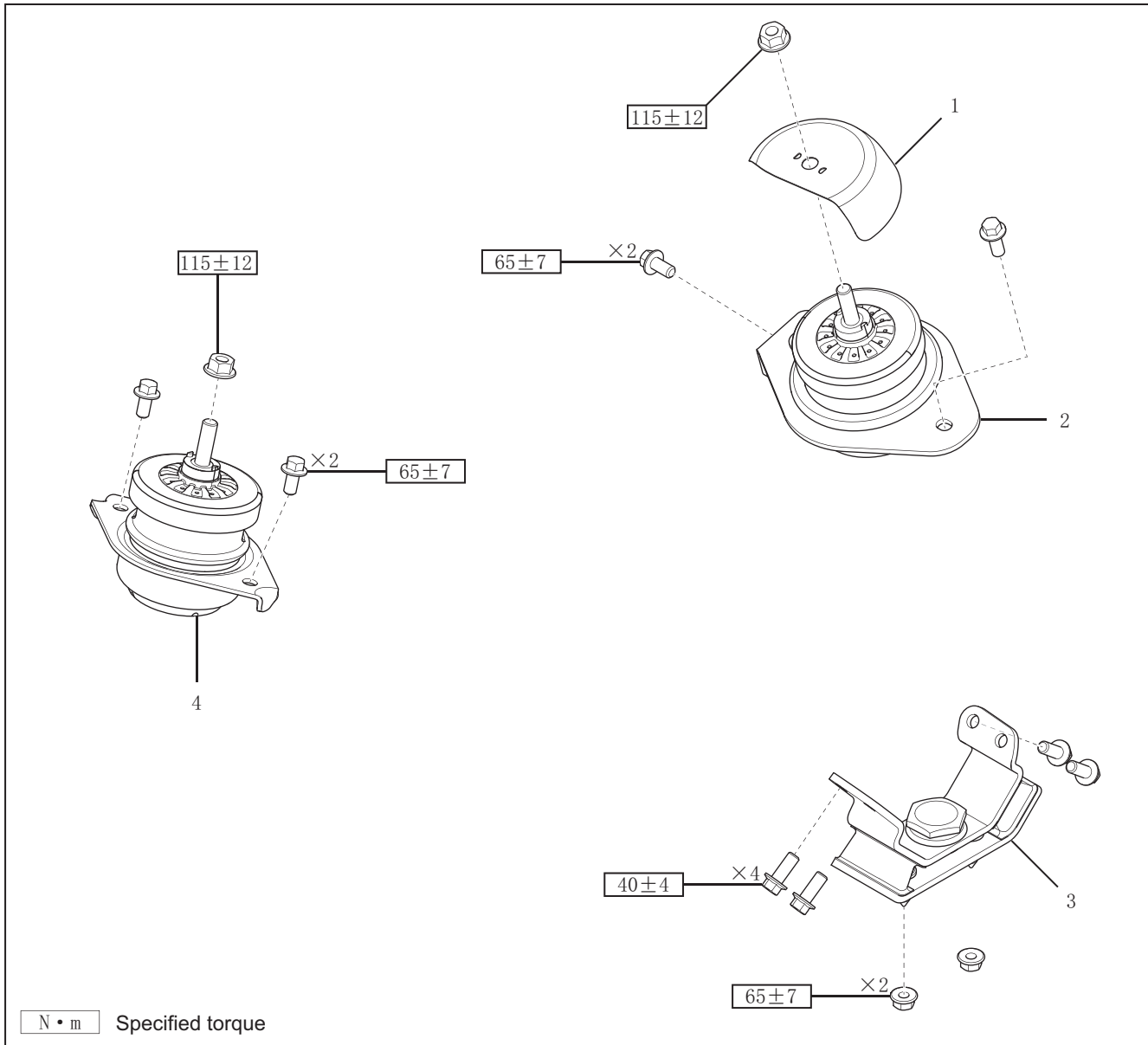
## MOUNT DEVICES

### OVERVIEW

The power assembly is mounted on the frame, supported by the triple-point type mount. The left and right mounts are hydraulic mounts while the rear mount is a rubber mount.

### STRUCTURAL DIAGRAM

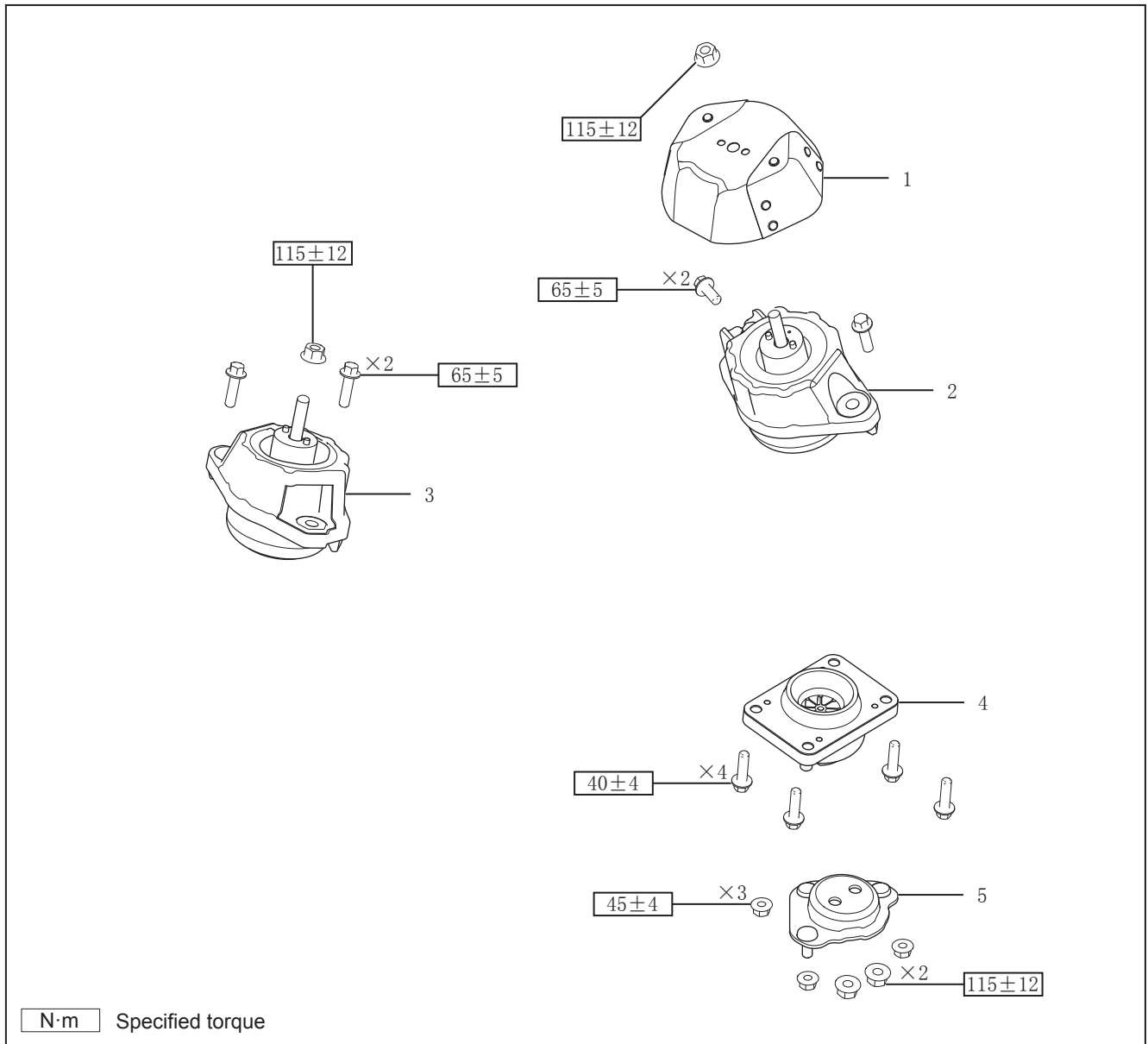
#### ENGINE MOUNT (GW4C20 VEHICLE MODEL)



1. Right Engine Mount Thermal shroud
2. Right Engine Mount Assembly
3. Transmission Mount Assembly

4. Left Engine Mount Assembly

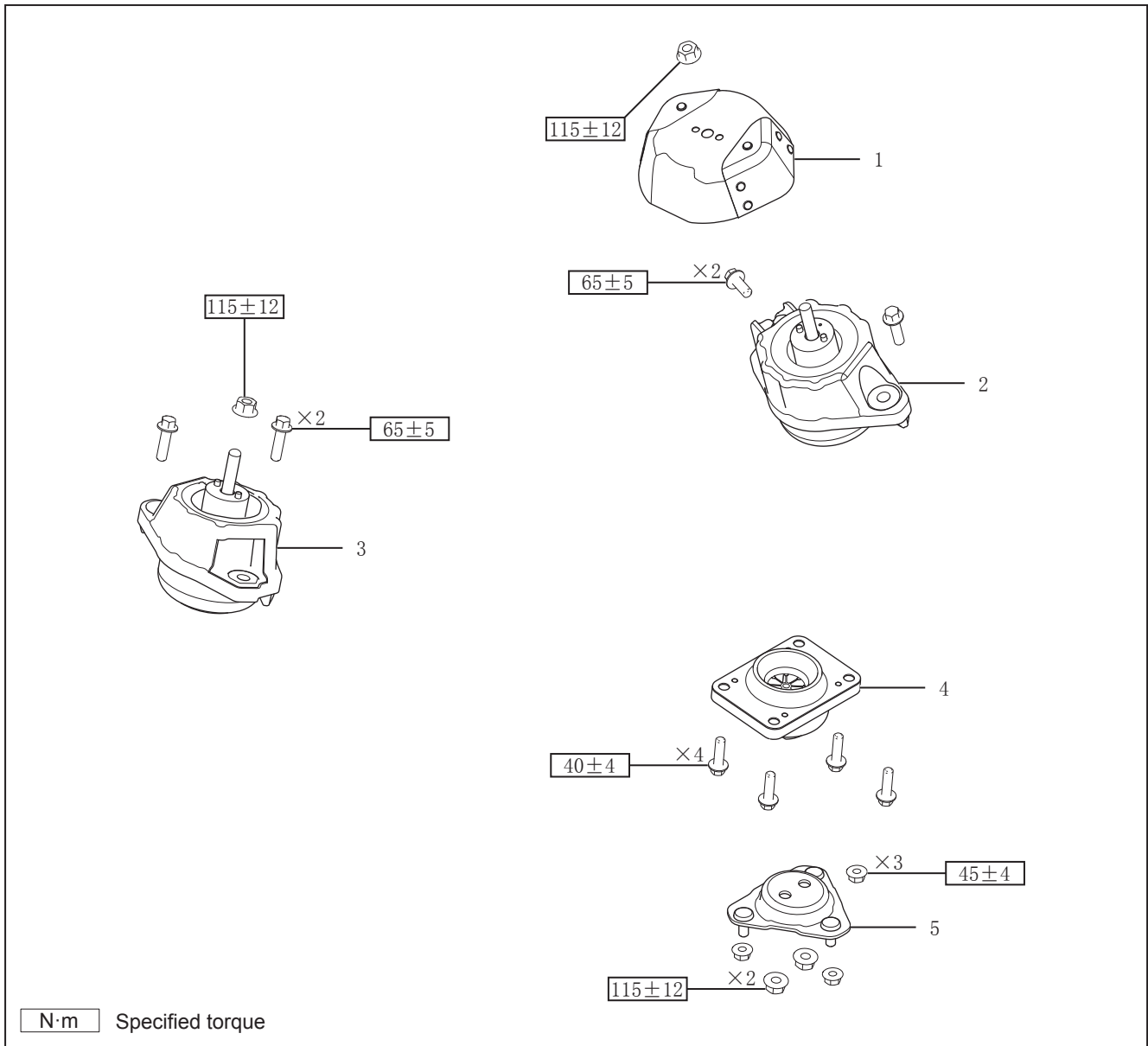
**ENGINE MOUNT (GW4C20A VEHICLE MODEL)**



- 1. Right engine mount thermal shroud
- 2. Right engine mount assembly
- 3. Left engine mount assembly

- 4. Transmission mount assembly
- 5. Transmission mount bracket

**ENGINE MOUNT (GW4D20T VEHICLE MODEL)**



- 1. Right engine mount thermal shroud
- 2. Right engine mount assembly
- 3. Left engine mount assembly

- 4. Transmission mount assembly
- 5. Transmission mount bracket

## REPAIR PROCEDURE

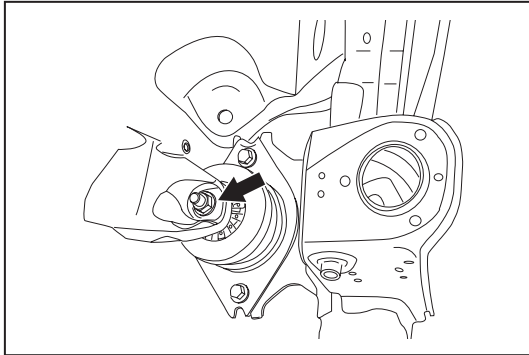
### LEFT ENGINE MOUNT ASSEMBLY REMOVAL

1. **Open the engine hood and support power assembly properly**

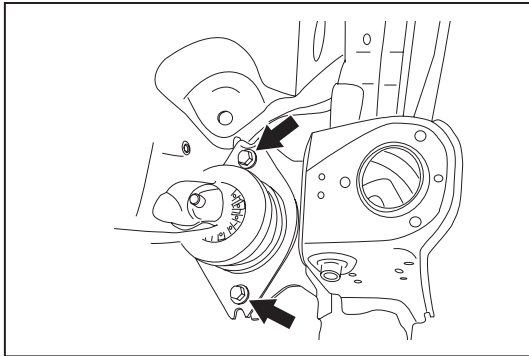
Suspend the power assembly using a crane, or support the it using a jack to place it in an appropriate position. At the same time, make sure that the power assembly is stable.

2. **Remove the left engine mount assembly**

- (a) Remove 1 nut.



- (b) Remove 2 bolts.



- (c) Remove the left engine mount assembly.

### INSTALLATION

Installation is in the reverse order of removal.

## RIGHT ENGINE MOUNT ASSEMBLY- (GW4C20 VEHICLE MODEL) REMOVAL

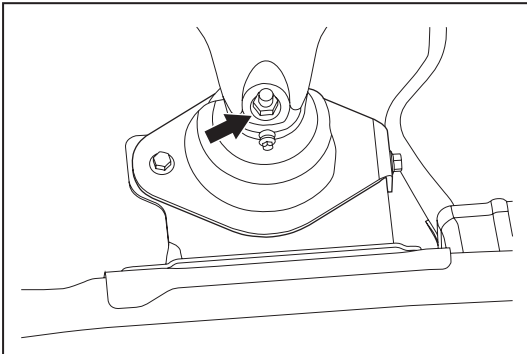
1. **Open the engine hood and support power assembly properly**  
Suspend the power assembly using a crane, or support the it using a jack to place it in an appropriate position. At the same time, make sure that the power assembly is stable.
2. **Remove the air filter assembly**
3. **Remove the exhaust manifold thermal shroud**
4. **Remove the exhaust manifold, charger, three-way pre-catalytic converter**

**Notice:**

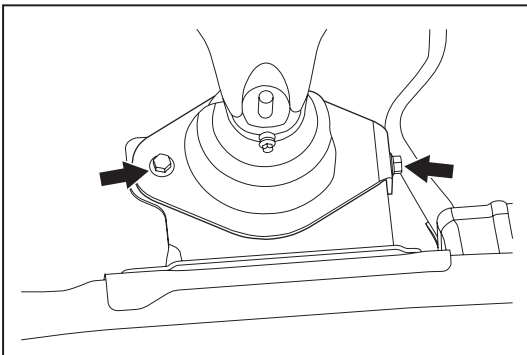
- Prevent the foreign matter dropping into the charger.
- The coolant will be discharged during the removal of water bolt, and received with a container.
- Pay attention to the cleanness of each component and make the dust control.
- Never missing the pressurization oil return tube gasket.

5. **Remove right engine mount assembly**

- (a) Remove 1 nut.



- (b) Remove 2 bolts, right engine mount thermal shroud and right engine mount assembly.



## INSTALLATION

Installation is in the reverse order of removal.



## RIGHT ENGINE MOUNT ASSEMBLY(GW-4C20A VEHICLE MODEL)

### *Attention:*

- Do not remove any parts of the mount system 30 minutes before engine is turned off to avoid personal injury caused by hot parts.

### REMOVAL

1. Lift up the engine hood while providing adequate support to the power assembly

### *Attention:*

- Suspend the power assembly using a crane, or support the power assembly using a jack to place it in an appropriate position. At the same time, make sure that the power assembly is in a stable position.

2. Remove air filter assembly

3. Remove the exhaust manifold thermal shroud

4. Remove the exhaust manifold, charger and three-way pre-catalytic converter assembly

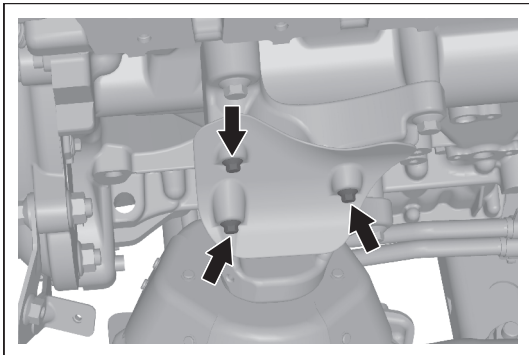
### *Attention:*

- Prevent the foreign matter dropping into the charger.
- The coolant will be discharged during the removal of water bolt, and received with a container.
- Pay attention to the cleanness of each component and make the dust control.

5. Remove the thermal shroud of the right engine mount bracket

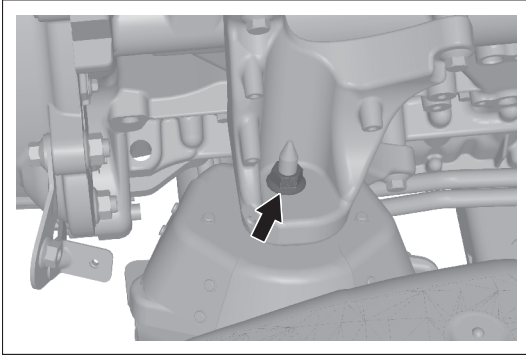
- (a) Remove 3 bolts.

- (b) Remove the thermal shroud of the right engine mount bracket.

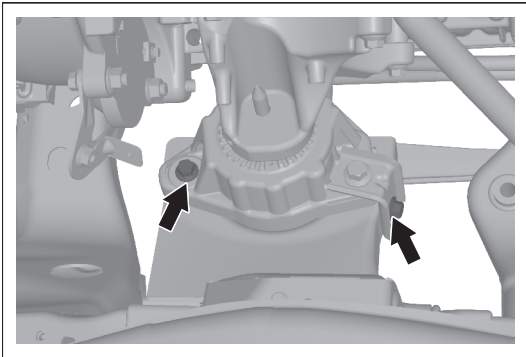


**6. Remove the right engine mount assembly**

- (a) Remove 1 nut.
- (b) Remove the right engine mount thermal shroud.



- (c) Remove 2 bolts.
- (d) Remove right engine mount assembly.

**INSTALLATION**

Installation follows the reverse order of removal.

## RIGHT ENGINE MOUNT ASSEMBLY- (GW4D20T VEHICLE MODEL)

*Attention:*

- Do not remove any parts of the mount system 30 minutes before engine is turned off to avoid personal injury caused by hot parts.

### REMOVAL

1. Lift up the engine hood while providing adequate support to the power assembly

*Attention:*

- Suspend the power assembly using a crane, or support the power assembly using a jack to place it in an appropriate position. At the same time, make sure that the power assembly is in a stable position.

2. Remove air filter assembly

3. Remove the exhaust manifold thermal shroud

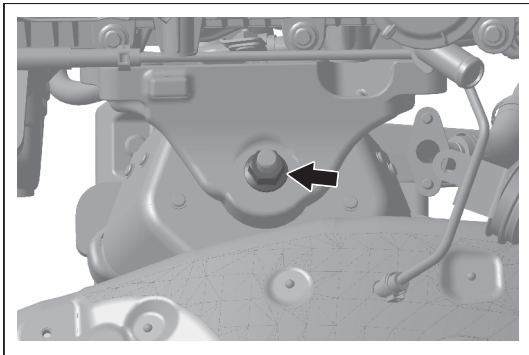
4. Remove the exhaust manifold, charger and catalytic converter assembly

*Attention:*

- Prevent the foreign matter dropping into the charger.
- The coolant will be discharged during the removal of water bolt, and received with a container.
- Pay attention to the cleanness of each component and make the dust control.

5. Remove the right engine mount assembly

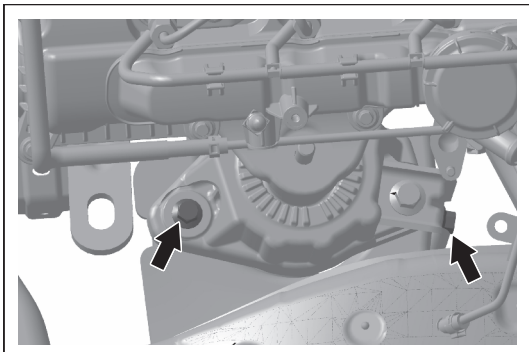
- (a) Remove 1 nut.



- (b) Remove the right engine mount thermal shroud.

- (c) Remove 2 bolts.

- (d) Remove right engine mount assembly.



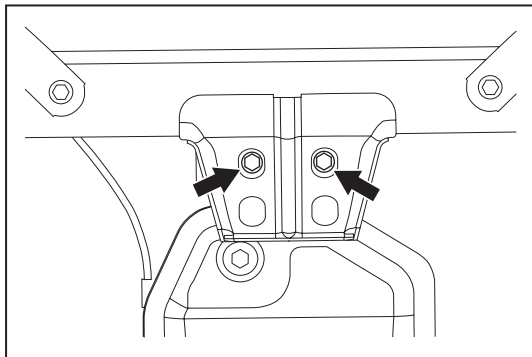
### INSTALLATION

Installation follows the reverse order of removal.

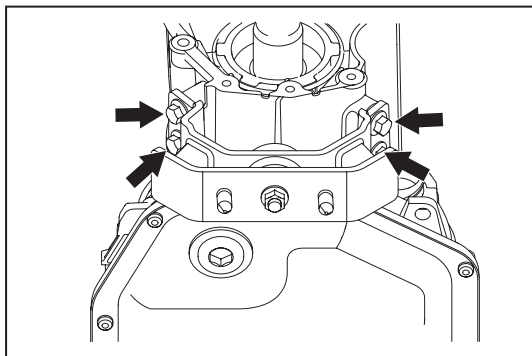
## TRANSMISSION MOUNT ASSEMBLY- (GW4C20 VEHICLE MODEL)

### REMOVAL

1. Lift up the vehicle to an appropriate position
2. Support the power assembly properly
3. Remove the transmission mount assembly
  - (a) Remove the 2 nuts connecting the transmission mount and frame.



- (b) Remove the 4 bolts connecting the transmission mount and transmission.



- (c) Remove the transmission mount assembly.

### INSTALLATION

Installation is in the reverse order of removal.

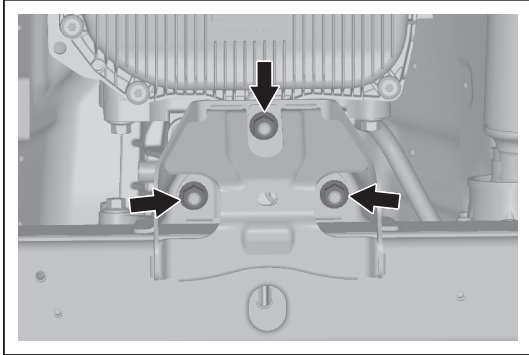
## TRANSMISSION SUSPENSION ASSEMBLY(GW4C20A/GW4D20T VEHICLE MODEL)

### Attention:

- Do not remove any parts of the suspension system 30 minutes before engine is turned off to avoid personal injury caused by hot parts.

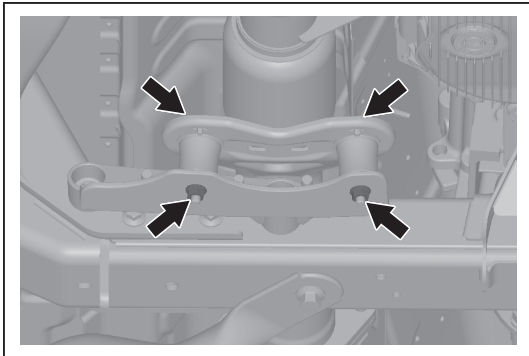
### REMOVAL

- Lift the vehicle to a proper position
- Properly support the transmission assembly
- Remove 3 nuts connecting the transmission suspension bracket and the frame.



- Remove the rubber support assembly of the post-catalytic converter

- Remove 4 nuts.
- Remove the rubber support assembly of the post-catalytic converter.

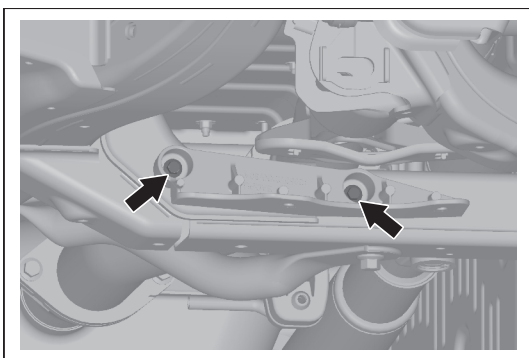


- Remove three-way post-catalytic converter mounting bracket[GW4C20A vehicle model]

- Remove 2 bolts.
- Remove three-way post-catalytic converter mounting bracket.

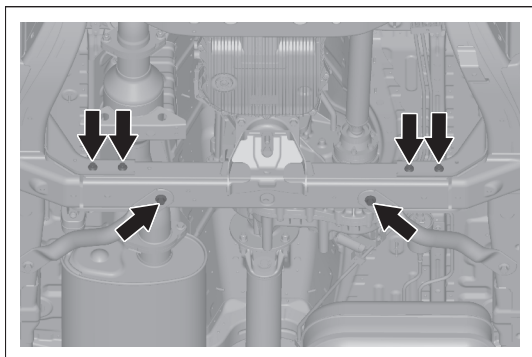
- Remove catalytic converter mounting bracket 2[GW4D20T vehicle model]

- Remove 2 bolts.
- Remove catalytic converter mounting bracket 2.

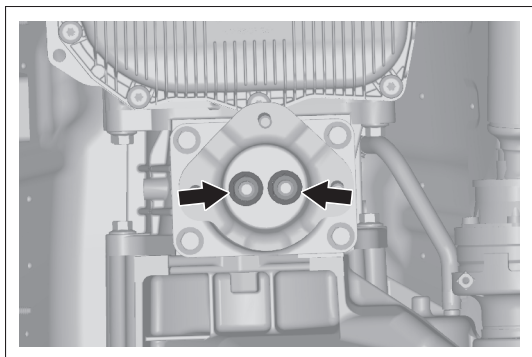


**6. Properly support the transmission assembly and No.4 beam main body welding assembly****7. Remove No.4 beam main body welding assembly**

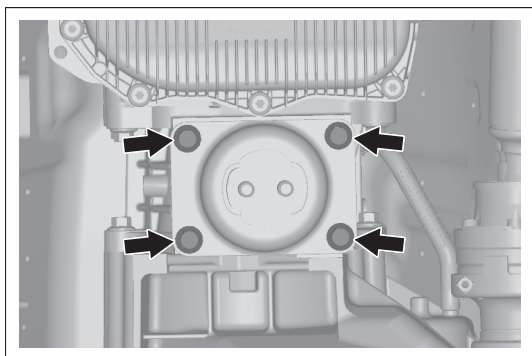
- (a) Remove 6 bolts.
- (b) Remove No.4 beam main body welding assembly.

**8. Remove the transmission suspension assembly.**

- (a) Remove 2 nuts connecting the transmission suspension and the transmission mount bracket.
- (b) Remove transmission suspension bracket.



- (c) Remove 4 bolts connecting the transmission mount and transfer case connection-housing.
- (d) Remove the transmission suspension assembly.

**INSTALLATION**

Installation follows the reverse order of removal.