

STARTER REMOVAL/INSTALLATION [SKYACTIV-D 2.2]

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Operation After Replacing Starter

Note

- If the number of times the starter can operate exceeds the limit, or there is any malfunction of the i-stop system-related parts, the i-stop warning light (amber) flashes. In addition, DTCs are stored simultaneously.
- To ensure reliability of the i-stop system, replace the starter with a new one if the number of times the starter can operate has exceeded the upper limit.
- When replacing the starter, perform the following procedure: When replacing the PCM simultaneously, perform the PCM configuration first. (See PCM REMOVAL/INSTALLATION [SKYACTIV-D 2.2].) (See PCM CONFIGURATION (USING READ/WRITE FUNCTION) [SKYACTIV-D 2.2].) (See PCM CONFIGURATION (USING AS-BUILT DATA) [SKYACTIV-D 2.2].)

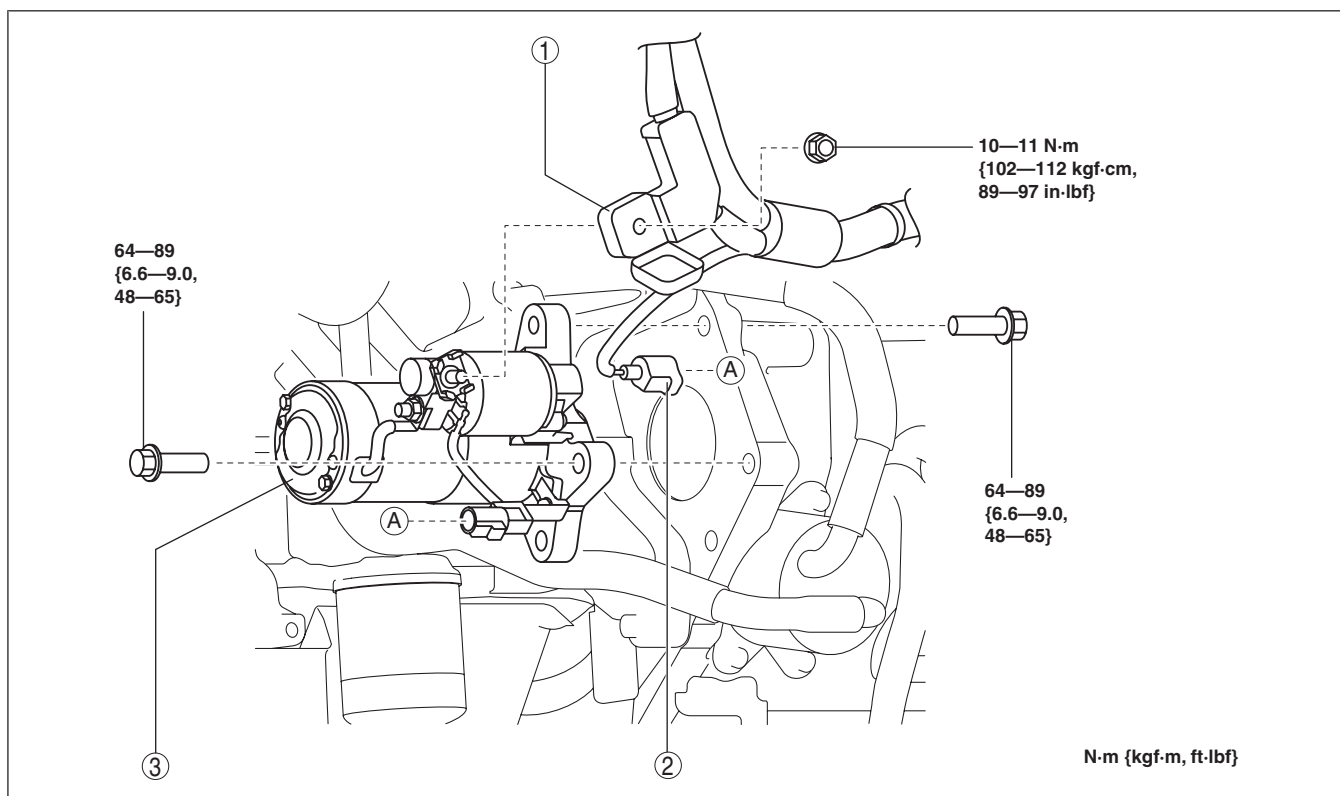
Step	Action
1	Note <ul style="list-style-type: none">• Perform the procedures from Step 1 to 5 within 2 min.<ul style="list-style-type: none">— If the operation exceeds 2 min, switch the ignition off and repeat the procedures from Step 1. Switch the ignition ON (engine off).
2	Apply the parking brake firmly.
3	Shift the selector lever to the N position.
4	Perform the following work with the brake pedal depressed. <ol style="list-style-type: none">1. Depress and release the accelerator pedal 6 times.2. Verify that the i-stop indicator light (green) flashes.<ul style="list-style-type: none">• If the light does not flash, switch the ignition off and repeat the procedure from Step 1.3. Depress and release the accelerator pedal 6 times.4. Verify that the i-stop indicator light (green) changes from flashing to illumination.<ul style="list-style-type: none">• If the light does not change to illumination, switch the ignition off and repeat the procedure from Step 1.
5	Long-press the i-stop OFF switch. Wait until the i-stop indicator light (green) turns off (for 5 s or more). <ul style="list-style-type: none">• If the light does not turn off, switch the ignition off and repeat the procedure from Step 1.
6	Switch the ignition off.
7	Start the engine.
8	Verify that the i-stop warning light (amber) turns off. <ul style="list-style-type: none">• If the light does not turn off, switch the ignition off and repeat the procedure from Step 1.
9	Switch the ignition off and disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)
10	Verifying battery condition initialization setting (i-stop setting). (See BATTERY CONDITION INITIALIZATION SETTING (i-stop SETTING) [SKYACTIV-D 2.2].)

Starter Removal/Installation

Warning

- **Remove and install all parts when the engine is cold, otherwise they can cause severe burns or serious injury.**
- **When the battery cables are connected, touching the vehicle body with starter terminal B will generate sparks. This can cause personal injury, fire, and damage to the electrical components. Always disconnect the negative battery cable before performing the following operation.**

1. Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)
2. Remove the front under cover No.1 and No.2. (See FRONT UNDER COVER No.1 REMOVAL/INSTALLATION.) (See FRONT UNDER COVER No.2 REMOVAL/INSTALLATION.)
3. Remove the air cleaner and fresh-air duct component. (See INTAKE-AIR SYSTEM REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
4. Disconnect the charge air cooler outlet hose from the Intake shutter valve, and set the hose out of the way. (See INTAKE-AIR SYSTEM REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
5. Remove in the order indicated in the table.
6. Install in the reverse order of removal.



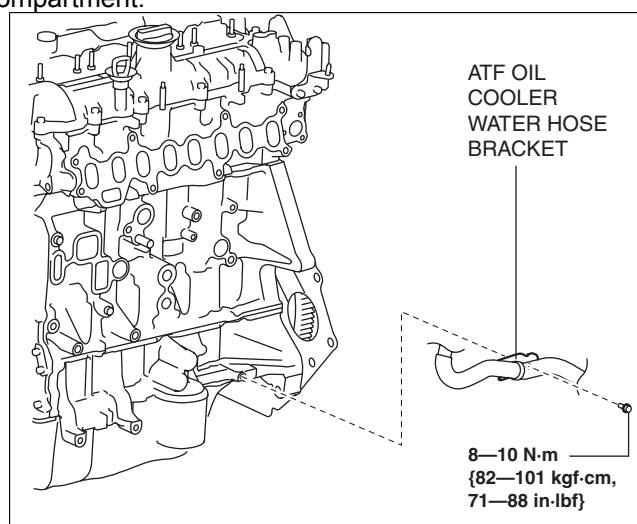
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1	Terminal B cable
2	Terminal S connector

3	Starter (See Starter removal note.)
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Starter removal note

1. Remove the starter upper bolt from above the engine compartment.
2. Remove the ATF oil cooler water hose bracket installation bolt shown in the figure, and set the water hose out of the way. (ATX)
3. Remove the two starter lower bolts and the starter from below the engine compartment.



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