



SUBARU

Part Number: A091SCC011

Installation Instructions

Description: Engine Block Heater, BRZ

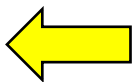
(Kit Contents)



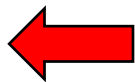
Tools Required

- 3/8" & 1/2" Drive rachets
- Socket extension 1/2" drive (6" long)
- 3/8" Drive extension (3" long)
- 1/2" Breaker bar
- 14mm socket- shallow (1/2" drive)
- 14mm wrench
- 12mm wrench
- Adjustable pliers (large) / 12 Point Crows Foot 1 7/16" inch
- Screwdriver (flat blade)
- Coolant drain pan
- Coolant (mixed to OE specifications)
- High temperature gasket compound
- **NOTE: It is required that the exhaust flange gaskets and rear donut gasket be replaced . These items are sold separately.**

Icon Legends / Cautions



: Remove/Disconnect



: Install



: Critical Location

- 1) Read all instructions before proceeding with installation. If uncomfortable performing any procedures, have installation performed by a Subaru dealer technician.
- 2) Take care not to damage vehicle components during removal and installation.
- 3) Route wiring so that it does not rub against any sharp edges.

Description

Engine Block Heater, BRZ

Issue

1

Date

9/13/2021

Subaru of America

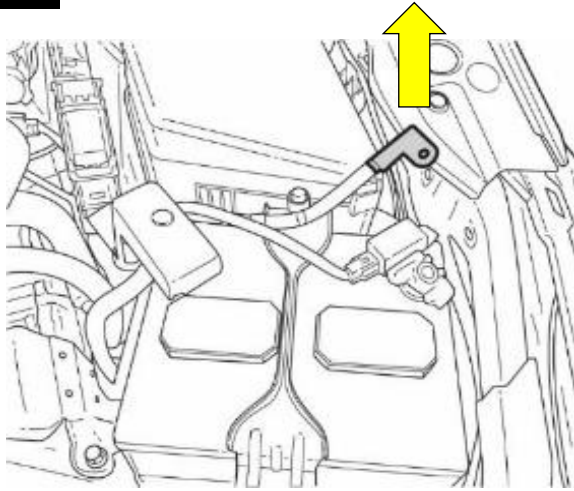
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Installation

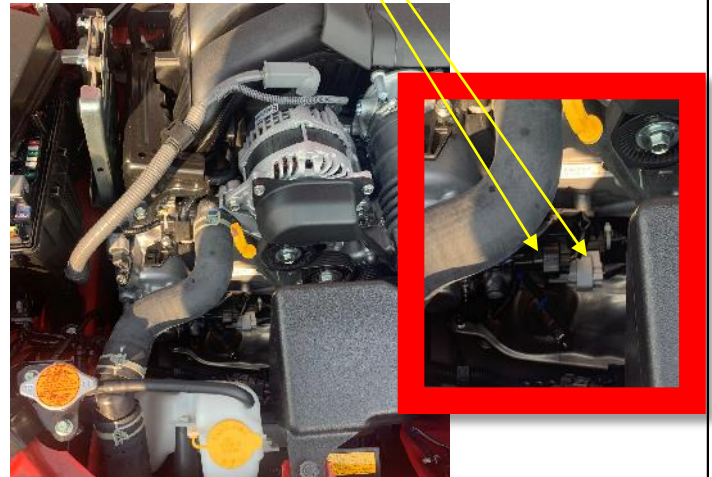
1-1



Disconnect Negative (-) battery cable from the battery sensor terminal. Hold the battery sensor carefully when removing the 10mm nut. **Remove engine under covers (if equipped) and drain the cooling system**

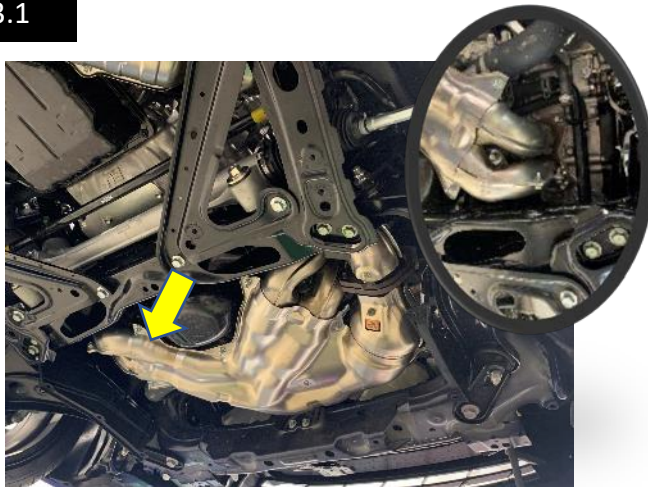
1-2

O2 Sensor Plug Locations



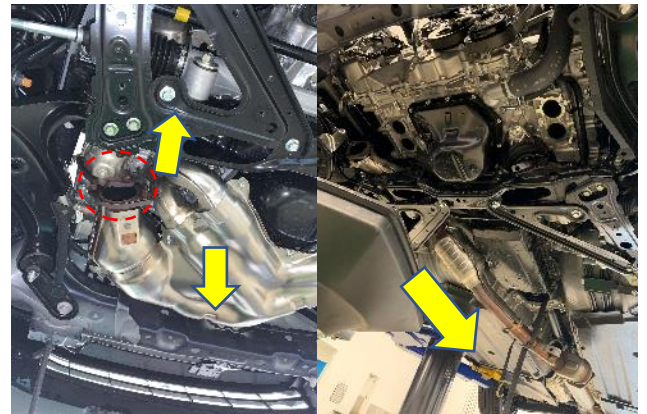
Disconnect both oxygen sensor wires at the front of the engine underneath the radiator hose.

1-3.1



Remove exhaust manifold per shop manual.

1-3.2

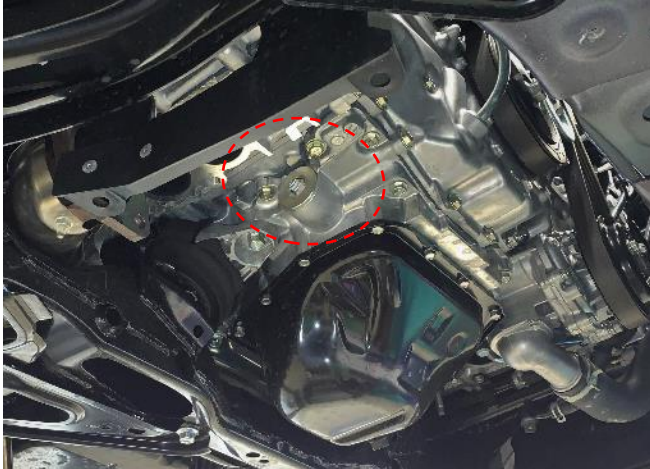


Remove exhaust system bolts 1-14mm support bolt at the center and 2-14mm spring bolts. Disconnect resonator flange from exhaust extension pipe to allow clearance for removing headers.



Installation

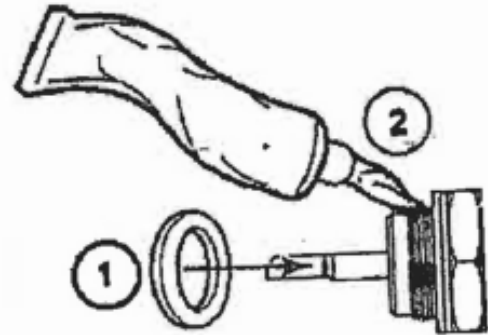
1-4



Locate threaded and remove core plug on RH side of engine. Remove core plug and drain remaining coolant.

NOTE: Be careful when removing plug as coolant may be hot and clearance is tight.

1-5



Install gasket (1) and coat threads of heater body with high temperature gasket compound (2).

1-6



Install engine block heater into core plug opening and tighten with adjustable pliers or 12 Point Crows foot (1 7/16") until gasket is seated completely to engine block. Tighten the heater an additional 60 +/- 10 degrees to acquire a torque of 90 +/- 0.5 [N·m] or 66 +/- 0.5 [ft·lbs].

CAUTION: Failure to follow proper tightening procedures may allow coolant to leak onto the hot exhaust pipe and cause a fire, resulting in serious personal injury and property damage.

1-7



Plug harness into heater element. Orient orange connector towards the front by twisting the orange connector inside the heater. Inside of heater can be rotated relative to the outer body.



Installation

1-8



Route block heater harness forward towards the oil filler tube. With a heat resistant wire tie, attach the block heater harness to the bottom cam position sensor harness.

Note: Ensure that the block heater harness does not make contact with the engine casting or the exhaust manifold.

1-9



Attach engine block heater harness to the cam solenoid harness that is under the engine block identification sticker using heat resistant wire tie

1-10



Route engine heater harness between the engine block and the upper radiator hose. Attach the third heat resistant wire tie to the engine block heater harness where the tape mark meets the main engine ECU harness towards the passenger side chassis of the vehicle.

1-11



Direct the engine block heater harness around radiator and down towards the radiator plastic plug and through the trim hole for the ambient temperature sensor harness.



Installation

1-12



Tie down the heat resistant wire tie to the ambient temperature harness that is fed through the slot in the radiator trim.

1-13



Route the engine heater harness to the passenger side of the lower air intake opening. Using the male plug protector attach the male plug to the grille work.

1-14

Re-install exhaust system and engine covers (if equipped).
Refill coolant.

1-15