

Installation Manual

Product

**EJ Motor
Engine Mounts**



Fitment

2004 - 2021 **STI**
2002-2014 **WRX**

BEFORE YOU START

Suggested Tools

- Factory Service Manual
- 3/8" Drive Ratchet Handle
- 3" and 6" Extensions
- 17mm Socket
- 14mm Socket
- 12mm Socket
- 12mm Wrench
- 14mm Wrench
- 3/8" Torque Wrench
- Pliers
- Flat Head Screwdriver
- Pick or Pry Bar
- Floor Jack or Lift
- Engine Hoist or Transmission Jack
- Threaded Jack Stand
(if using lift)
- Jack Stands
(if working on the ground)

What's Included

- 2x Engine Mount
- 2x FA Motor Adapter Block



CAUTION: NOTES BEFORE STARTING

This document uses a 2020 STI for the installation process.
Your experience may differ slightly depending on year and model.

Make sure you have all necessary tools before beginning installation. We recommend taking your vehicle to an appropriate shop for the installation of this part if anything in this process is outside of your experience.

Take care on vehicles with aftermarket headers. To avoid damage, the Urethane bushings in these mounts should be shielded from excessive heat generated from aftermarket headers.

Please reference your **Factory Service Manual** for specific part removal instructions on your specific vehicle.

Factory Service Manuals can be purchased at:

<https://techinfo.subaru.com/>

SAFETY CHECK

Always make sure the vehicle is adequately supported on ramps, jack stands, or a lift.

Warning: Never work under a vehicle supported only by a floor jack!

PART 01

Preparing Engine to Lift

1. Remove air intake inlet
2. Disconnect air intake (*this step may vary with aftermarket air intakes*)
3. Remove top mounted intercooler (*this step may vary with aftermarket intercoolers*)
4. Remove pitch stop mount
5. Lift car off the ground and secure appropriately
6. Remove splash guard
7. Remove (1) LH 14mm Engine Mount Nut and (1) RH 14mm Engine Mount Nut from crossmember
8. Disconnect downpipe from the catback exhaust
9. Removal of front mounted sway bar may be necessary depending on the model
10. The engine is now free to lift

PART 02

Lifting the Engine

1. Lift engine up by pushing up on the bottom of the transmission case
2. Make sure to place a piece of wood on the jack to protect the transmission
3. Lift the engine approximately 3"
4. Use of an engine crane will be required if working on jack stands
5. Support engine with threaded jack stand or place a piece of wood between the engine case and the crossmember – this step is for your safety

PART 03

Engine Mount Removal and Installation

1. Find the engine mounts and remove the (2) 14mm bolts securing each mount to the block
 - remove factory mounts
2. Take note of the positioning of each mount
3. Match the VSC Performance Engine Mount to the corresponding side
 - this will be noted on the bottom surface of the mount

Engine Mount Removal and Installation

4. Position the VSC Performance Engine Mount onto the block and ensure that mounting points sit flush against the block (PIC)
5. Carefully thread the bolts back into the block – be careful not to cross-thread or over tighten these bolts
– this may cause substantial damage to your block
6. Torque bolts to 35 ft/lbs.
7. Repeat process for the second mount
8. Remove wooden support brace between engine and crossmember
9. Slowly lower engine watching that the studs on the engine mounts find the slots in the crossmember
 - Some manipulation of the stud end of the engine mount may be necessary to ensure proper installation
 - Stud can be pivoted with some force, but do not hit or pry threaded stud, this may cause damage to the threads preventing proper installation
10. Once studs align to slots in the crossmember finish lowering the engine
11. Secure Engine Mounts with OEM flanged 14mm nuts and torque to 45 ft/lbs.

PART 04

Reassembly

1. Attach downpipe to catback and torque to 25 ft/lbs
2. Reinstall lower splash guard
3. Lower vehicle to access engine bay
4. Reinstall pitch stop mount – secure rear bolt to 43 ft/lbs. and front bolt & nut to 37 ft/lbs.
5. Reinstall intercooler
6. Reinstall air intake system

Finished

1. Start and run the engine and observe for anything unusual – take the car out for a test drive and you'll notice an increase in NVH (noise, vibration, harshness), which is normal
2. For bigger builds, check the condition of the engine mounts during regular services to ensure bushings have not been damaged from excessive heat. Some vehicles with aftermarket headers may require a heat shield to protect the bushings.

If you have questions or need help with your install or parts questions, please reach out to us:

Email: support@vtcar.com | **Phone:** 802.655.3533

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Failure to read, and strictly adhere to both the installation instructions and this Warning and Safety Rules may result in damage to personal property, serious personal injury, and/or death.

Keep all products out of the reach of children, and if children are around the products, always have an adult present.

Follow all instructions regarding the installation and use of all products.

Do not disassemble, modify, or attempt to repair any products for any reason. If damaged or in need of service, please contact VSC at the phone number or email address below.

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