

M's RAM AIR SYSTEM

CARBON DUCT INTAKE KIT

Installation Instructions

FR-0419

TOYOTA GT86 (ZN6) / SCION FR-S / SUBARU BRZ (ZC6)

EG : FA20 (2.0 L)

Thank you for buying the M's Ram Air System.

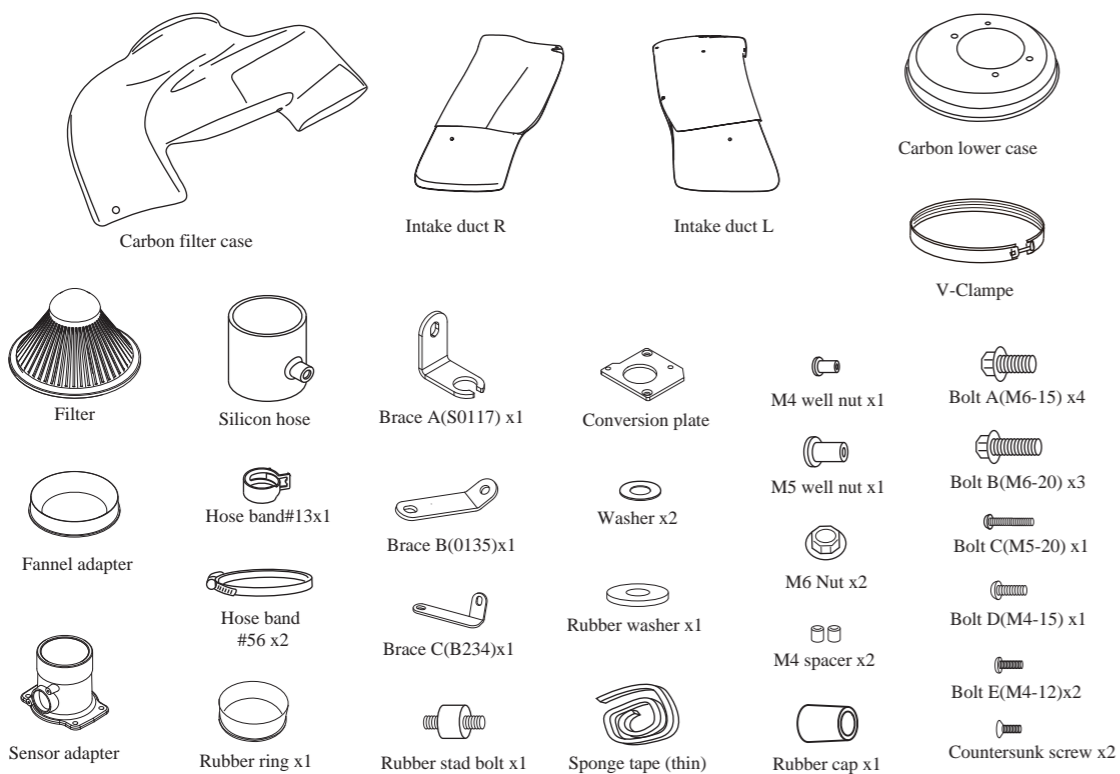
Before installation, verify that you have all of the parts in the Parts List on the right.



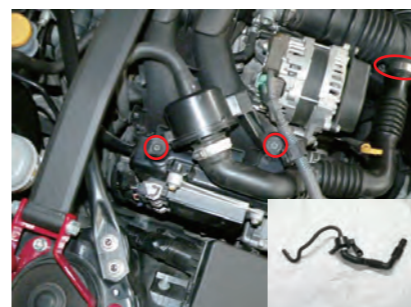
CAUTION

- Do not install on a road or other place that could interfere with automobile or pedestrian traffic.
- Park on flat, horizontal ground with the emergency brake on, to prevent the vehicle from rolling. Remove the key from the ignition and let the engine cool down completely before beginning installation.
- Wear work clothes suitable for the job. When necessary, wear protective gloves and glasses.
- After installation, regular maintenance is necessary. Periodically check for realignment, clearance, and tightening of all components.
- GruppeM Inc. will not be held responsible for installations to any motor vehicle model other than the one specified.
- Keep these instructions in a safe place after using them.
- Speeding and reckless driving are completely unacceptable. Please use this product with care, following all traffic regulations.

PARTS LIST



Installation of ram air system



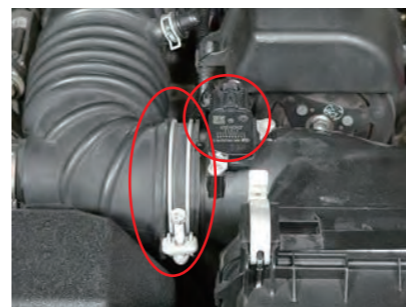
1. Remove two bolts circled in red and loosen the hose band. Disconnect the nipple as shown and remove the sound generator.



2. Attach the rubber cap to the nipple that was connected the sound generator.



3. Remove the wire coupler clip from the mass sensor.



4. Disconnect the air mass sensor wiring coupler & loosen the hose band.



5. Take out the air filter and remove the rear portion of filter box.



6. Remove the 3 bolts circled in red and remove the front portion of the air box.



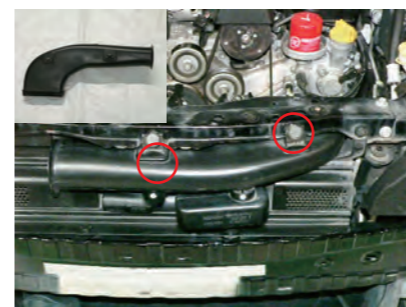
7. Disconnect the suction hose from the nipple circled in red and remove the suction hose.



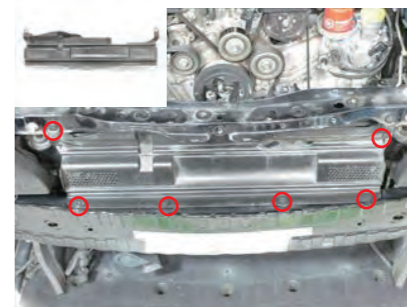
8. Mask off the headlights & fenders where bumper makes contact as shown with masking tape before continuing bumper removal to prevent scratching.



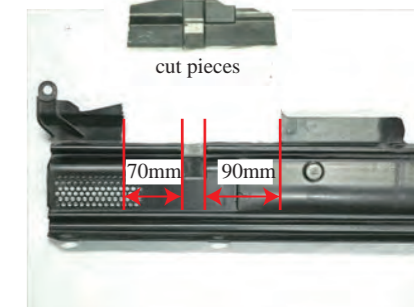
9. Remove the bumper cushion (Styrofoam).



10. Remove the 2 bolts circled in red and remove the air duct.



11. Remove the clips and take out the panel shown.



12. Cut the removed panel as shown prescribed.



13. Fold the sponge attached on top of the radiator forward.



14. Install the panel with the OEM clips by sandwiching the bent sponge.



15. Install the M5 well nut and M4 well nut to the front member as shown in red.



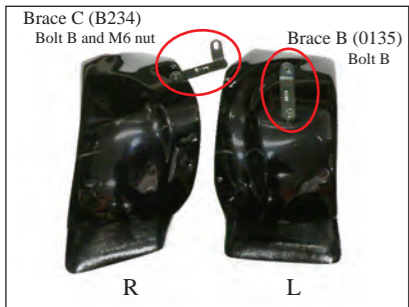
25. Remove the OEM hose band of the blow-by hose and replace it with the supplied hose band. Secure the nipple with an insert band.



26. Attach the adapter ASSY to the silicone hose. Loosely attach the hose band. DO NOT Tighten.



27. Put 2 washers on the top and bottom of the rubber stud bolt shown in red and attach it to the body.



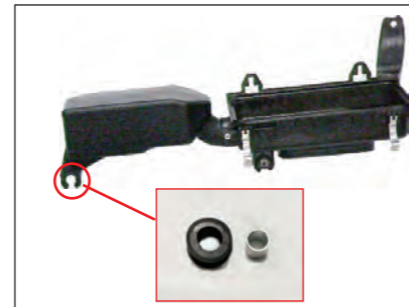
16. Fix brace B (0135) and brace C (B234) to the intake duct. (Bolt Bx2 and M6 nut x1)



17. Attach the conversion plate to the sensor adapter with flat screws x2.



18. Insert an M4 spacer between the sensor adapter and the sensor, and attach with bolt E.



28. Remove the rubber bushing and collar from the original air filter box.



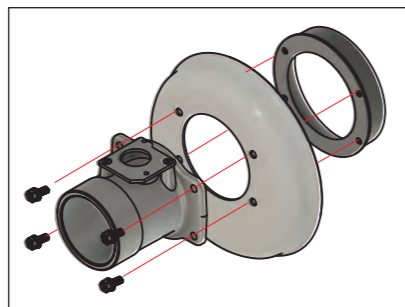
29. Attach the rubber bushing and collar to brace A (S0117).



30. Install the rubber washer between the brace A (S0117) and the carbon case. Use bolt B.



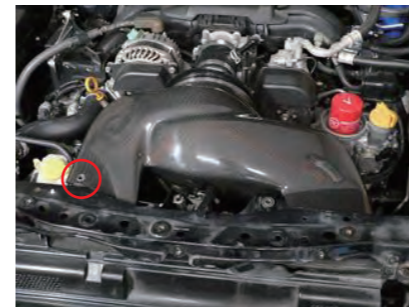
19. Affix the sponge tape to the carbon lower case.



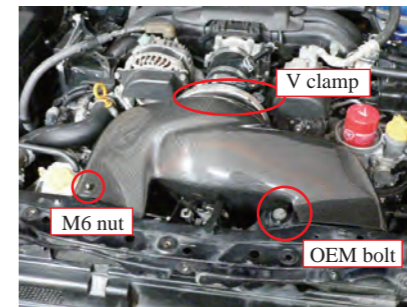
20. Secure with bolt Ax4.



21. Assemble the sensor adapter and funnel adapter. *See step20"



31. Loosely install the carbon case and filter while adjusting so that the rubber stud bolt enters the hole in the carbon case.



32. Fasten the carbon case to the filter, and lower case with a V clamp. Secure the carbon case with M6 nuts and OEM bolts.



33. Reconnect wiring to mass air flow sensor. Tighten the hose band on the sensor adapter side. (Be careful not to let the wiring interfere with the pulley.)



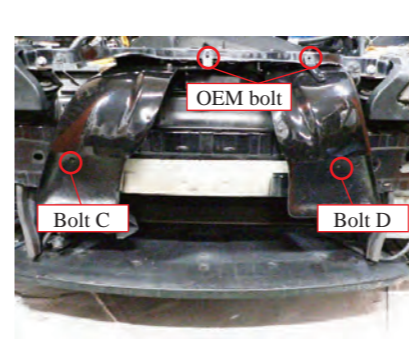
22. Put a rubber ring inside the long side of the silicone hose as soon.



23. Reinstall the nipple in step 1 in reverse.



24. Insert the nipple in the silicone hose as shown and secure it with a hose band.



34. Secure the air duct using the original bolts and bolts C and D. (Be sure the left is firmly secure make sure it fits in the case.)



35. Put the front bumper back on. Peel off the protective tape and you are done.