

## Carbon Intake Duct – Toyota Supra

Install Manual



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**Document Revisions** 

Rev	Date	Author	Description	
01	2023/4/20	T. Lang	Initial release of install manual	

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- 1. Introduction
  - **1.1. Overview:** Detailed instructions on installing the Verus Engineering Carbon Intake Duct for the Mk5 Toyota Supra.
  - **1.2. Difficulty:** Moderate
  - 1.3. Time Required: 3 4 hours

#### 1.4. Tools Needed:

- 1.4.1. Ratchet
- 1.4.2. 5mm Allen Key or Socket
- **1.4.3.** T30 Torx Socket
- 1.4.4. 8mm Socket
- 1.4.5. 10mm Socket
- 1.4.6. Cut-off wheel or Air Saw
- 1.4.7. Tape
- 1.4.8. Scissors
- 1.4.9. Clip Removal Tool or Flat tip screwdriver
- 1.4.10. 50/50 mix of isopropyl alcohol / water
- 1.4.11. Clean microfiber towel



#### **1.5.** Carbon Intake Duct Components

- **1.5.1.** (1) Carbon Fiber Intake Duct
- **1.5.2.** (1) Silicone Coupler
- 1.5.3. (1) Bumper Duct Cover
- 1.5.4. Hardware Bag



- **1.5.4.1.** (1) Pre-Cut 3M VHB double-sided tape
- **1.5.4.2.** (2) 3/4" Rubber Plug
- **1.5.4.3.** (1) 25" Foam Sealing tape

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#### 2. Toyota Supra Carbon Intake Duct Install

- **2.1.** Verus Engineering is not responsible for damage to you or your vehicle by following this manual and/or installing Verus Engineering products.
- **2.2.** We begin by gaining access to underneath the hood. Pop the hood and open it.
- **2.3.** Jack the car up, and support it safely.
- **2.4.** Remove the front bumper. **NOTE:** What is detailed in this section may be slightly different from your personal vehicle due to the fact that a splitter is currently installed on our vehicle.
- **2.4.1.** Remove the four under panel screws attached to the bumper.





**2.4.2.** Peel up the weatherstrip, and remove the top bolts.



- **2.4.3.** Remove the tow hook if you have one installed.
- **2.4.4.** Remove the fender liner bolts on the driver side.





**2.4.5.** Remove the front half of the passenger side fender liner.

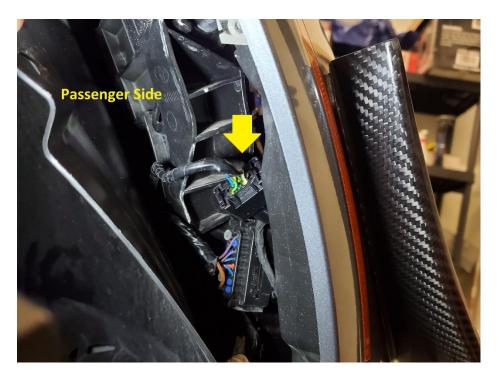




**2.4.6.** Remove the upper corner bolts of the front bumper. It is a good idea to trace an outline around the bolts so that you can ensure the bumper goes back in the same spot during reassembly.



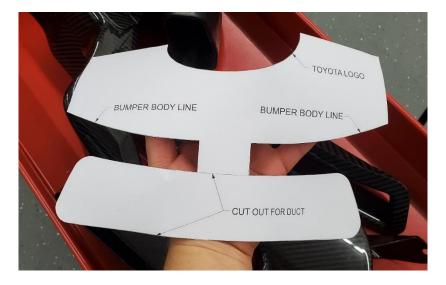
**2.4.7.** Disconnect the connectors on each side of the bumper, and unclip them from the chassis.







- **2.4.8.** Remove the front bumper. Taping the fender, and headlight can help prevent scratches on your paint.
- **2.5.** Locate, and cut out the template for the intake duct inlet.



**2.6.** Install the template on the bumper using painters' tape.



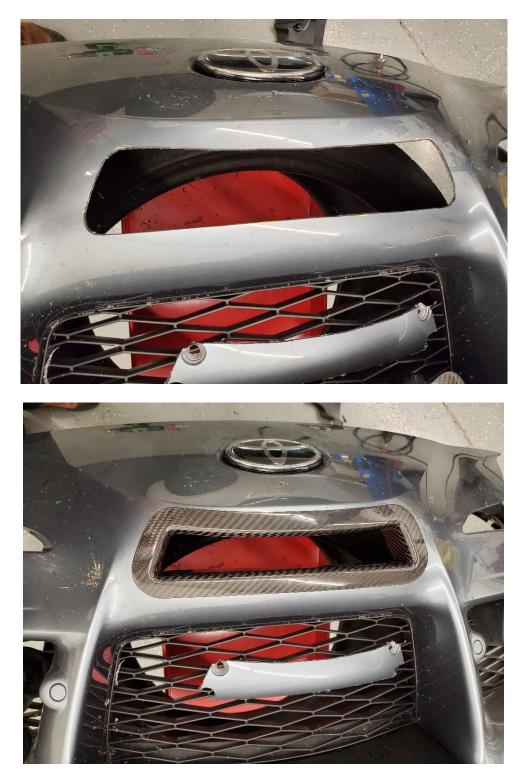


**2.7.** Drill four 3/4" holes at each corner as shown below.



- **2.8.** Using your cutoff wheel or air saw, cut out the hole for the Carbon Intake Inlet.
- 2.9. Clean up the edges, and test fit the inlet cover. It is normal to be able to move the inlet cover around. This is so that we can adjust the position of the cover to best fit the intake duct when fully installed. \*Do not install the bumper duct with the 3m tape on the bumper at this time.\*







- **2.10.** Moving back to the car side of things, remove the passenger side headlight.
- **2.10.1.** Remove the headlight/fender cover panel. It is held in by several clips.



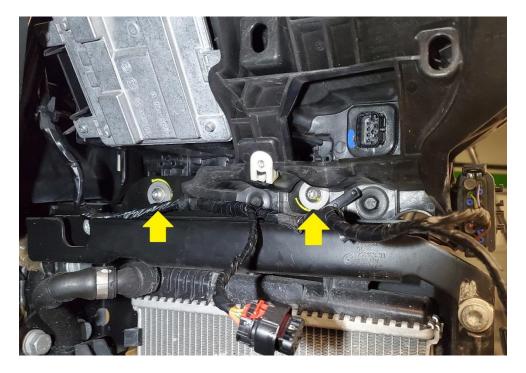
**2.10.2.** Remove the top two bolts. When removing the headlight bolts make sure to hold back the washer above the pink retainer. Again, marking the head of the bolts to ensure it is reinstalled in the same spot is a good idea.







**2.10.3.** Remove the two bolts from the wheel well side.

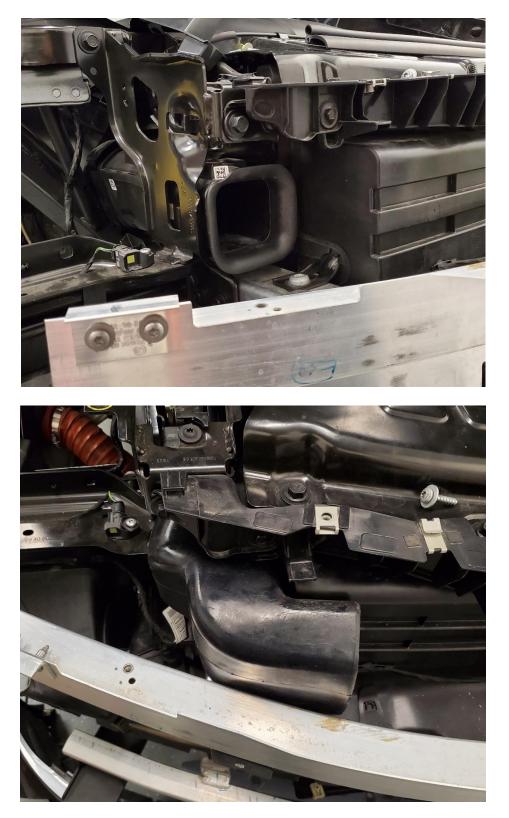


**2.10.4.** Disconnect the connector by first sliding the red tab back, and then releasing the connector tang.



- **2.10.5.** Remove the headlight assembly
- **2.11.** Install the Carbon Intake Duct Silicone Coupler onto the OEM air duct.







**2.12.** Remove the plastic piece at the center of the radiator support. Two bolts are on the "ears" and two are underneath attached to the crash bar.



- **2.13.** Install the Carbon Intake Duct into the silicone coupler.
- **2.14.** The plastic piece just removed will be installed over the Carbon Intake Duct, but first it will need some trimming in order to fit. You should have something resembling the picture below.





**2.15.** Once the plastic piece is trimmed it should easily be installed over the Carbon Intake Duct. The top two holes for the Carbon Intake and the plastic piece will be installed in the same spot. For the bottom mounting holes of the plastic piece, install the screws going through the holes in the Carbon Intake Duct.





**2.16.** At this point, we recommend temporarily installing the bumper cover back onto the car and test fitting the inlet cover to make sure everything fits together correctly. Because these



are hand-made components, and every car is a little different, some modifying may be necessary for perfect fitment. First, make sure the Inlet Cover can be installed correctly without any obstruction. Then pull the bumper off and adjust the Intake Duct if needed. In some cases, you may need to also elongate the mounting holes to move the Intake Duct around.



**2.17.** Once you have the Intake Duct in the ideal spot that matches with the Inlet Cover, tighten the screws for the Intake Duct. The upper screws (fine threads) should be torqued to 6 ft-lbs, and the bottom screws (coarse thread) should be tightened only a quarter turn past bottom.





**2.18.** Install the rubber plugs into the holes in the Intake Duct.



**2.19.** At this point, you may choose to reinstall the Styrofoam piece. It will require removing the middle portion as shown below. Note that it may not stay attached to the crash bar, and could fall off during the bumper install. We chose not to reinstall it.





- **2.20.** Reinstall the bumper in the reverse order as described earlier in these instructions.
- **2.21.** Clean the bumper surface, and the entire back surface of the inlet cover for the double-sided tape application. Use a 50 / 50 mix of isopropyl alcohol, and water to clean both surfaces.
- **2.22.** Apply the foam tape to the part of the Inlet cover that fits inside of the Intake Duct. This will create a seal to keep air from escaping.



**2.23.** Apply the precut double-sided tape to the back of the Inlet Cover. The red backing should be facing you.



- **2.24.** Peel the red backing off and install the Inlet Cover using the guidelines below.
- Minimal temperature for install should be 50 degrees Fahrenheit.
- Thoroughly clean the section that the product will be installed on with a 50 / 50 isopropyl alcohol / water mix.
- Firmly press the product into the car body, and ensure proper adhesion occurs.
- At room temperature, approximately 50% of ultimate bond strength will be achieved after 20 minutes, 90% after 24 hours, and 100% after 72 hours.





- **2.25.** Congratulations on installing the Verus Engineering intake duct kit for the Mk5 Toyota Supra.
- **2.26.** Please send any questions, comments, concerns, or photos to Verus Engineering via e-mail; sales@verus-engineering.com.

