



## 2013-2017 Gen V Viper Carbon Fiber Front Engine Brace

### Overview:

The carbon fiber / aluminum front engine brace replaces the OEM steel brace with the intent to reduce weight, reduce corrosion over time, and cosmetically improve the engine compartment.

### Compatibility:

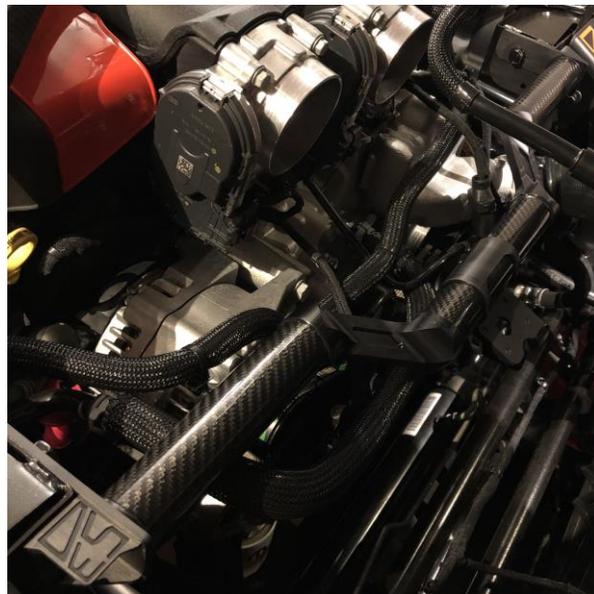
These parts will fit any 2013-2017 Viper.

### Construction:

The brace is constructed from hard anodized aluminum pieces bonded to high strength carbon fiber tubing and stainless steel hardware. High strength mounting bolts are included with the kit.

### Weight:

The engine brace itself saves about 2 lbs from the steel front of the engine bay.



***Front Carbon Fiber Engine Brace Installed***

### Ordering Information:

<http://dougshelbyengineering.com/Viper.html>

DSE-VP-EB-001: Gen V Viper Carbon Fiber Front Engine Brace

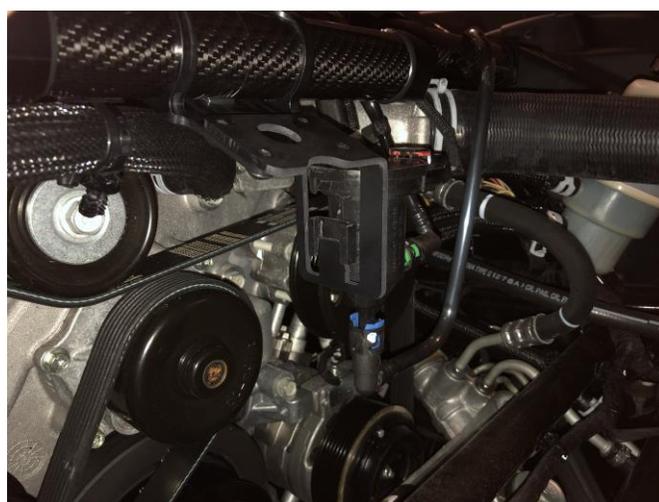
### Installation Guide:

#### *Engine Brace Removal -*

- Ensure the vehicle is on flat level ground or support via the frame (lift or jackstands).  
(Removal and installation are easier if the chassis is not unevenly stressed.)
- Remove the airbox assembly.
- Remove the 5 hose mounts from the holes in the engine brace by prying them loose from the holes using a trim tool.
- Remove the 2 bolts that secure the driver side power steering fluid brace to the frame and set the assembly aside.
- Remove the center purge control valve/solenoid from the brace by pulling the assembly upward.
- Remove the 4 bolts connecting the crossmember to the frame (2 each passenger and driver side).
- The brace should slide out of position by moving it upwards and forward.
- Transfer the rubber grommet that locates the airbox to the new brace.



***Power Steering Reservoir Removed***



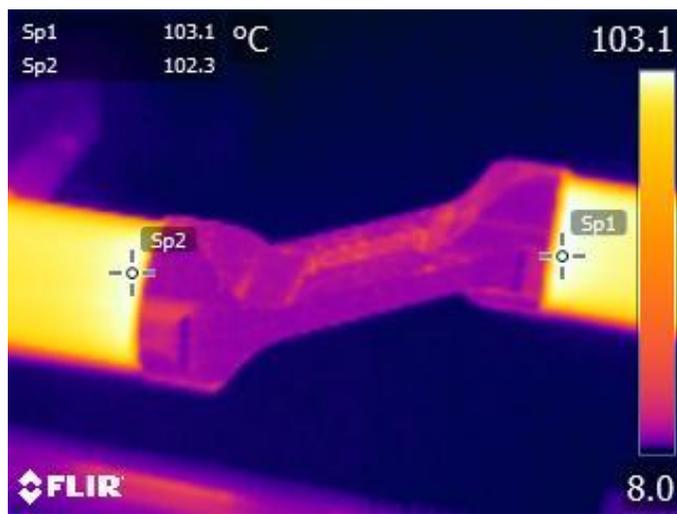
***Close-up of the Purge Valve/Solenoid***

### *Engine Brace Installation –*

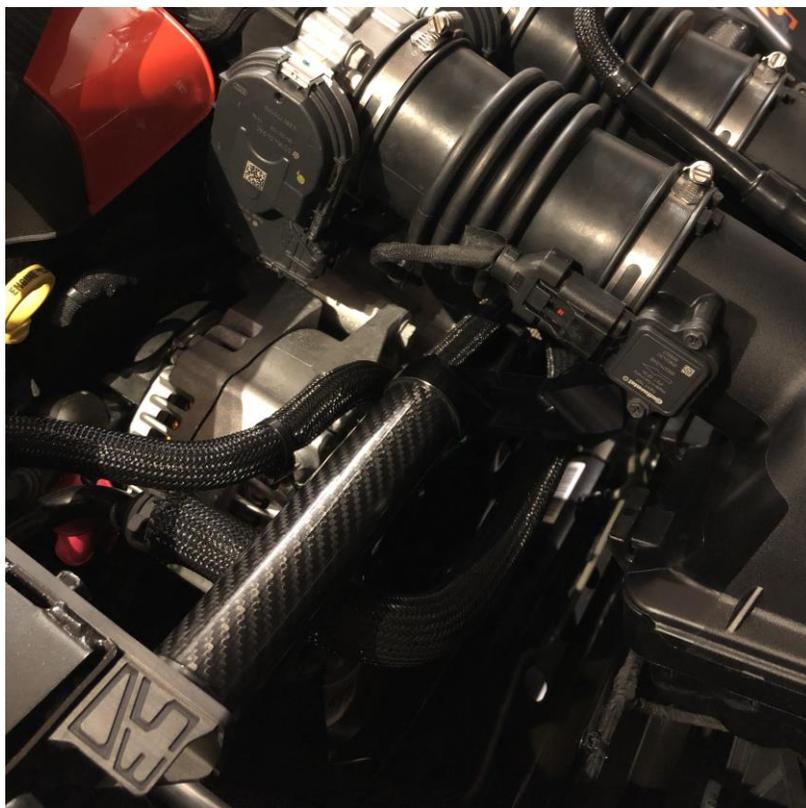
- Take note of the 5 tywrap blocks on the brace which will be used to secure the hoses and lines.
- Fit the new brace in place (grommet that locates airbox should have been transferred).
- Install the provided 4 bolts that secure the brace to the frame.
- Tighten the forward facing bolts on each side before tightening the inward facing bolts (61Nm (45 Ft-lbs).
- Reinstall the purge control valve/solenoid by sliding it downward on the mount.
- The old hose “fir tree” mounts will not be used, instead use the provided tywraps to secure the hoses to the brace. The existing “fir tree” mounts can be rotated for clearance and left in place or cut and removed as desired.
- When securing the hoses and lines ensure they are clear of all moving parts and interference with other pieces.
- Reinstall the power steering reservoir, tighten the bolts to 10 Nm (7.5 ft-lbs)
- Reinstall the airbox assembly.

### **Inspection and Maintenance:**

- Periodically inspect the brace to ensure everything is in place as installed including hoses and lines secured to the brace.



**Thermal Image of Brace Load Testing at Temperature**



**Brace with Airbox Installed**

### **Thank you for your purchase!**

*Your business is appreciated and customer satisfaction is our top priority! Don't hesitate to contact us via email with any questions or feedback. Word of mouth is the best form of advertising so if you are satisfied please spread the word!*

### **Disclaimer of Liability:**

*Doug Shelby Engineering assumes no liability expressed or implied for the improper installation or use of this product or its components. Doug Shelby Engineering is NOT responsible for any damage, consequential or otherwise for equipment failure after installation.*

### **Vehicle Modification:**

*Modification of your vehicle with the parts identified above may alter its stock performance; the buyer hereby expressly assumes all risks associated with any such modification.*

### **Disclaimer of Warranty:**

*Seller disclaims any warranty express or implied with respect to the parts sold hereby whether as to merchantability, fitness for particular purpose, or any other matter.*