# DSE Dodge Viper SRT-10 Gen V Intake Manifold Compression Limiters:

The Gen V composite intake manifold is a great way to add power, reduce weight, and reduce intake air temps on the Gen IV Viper. As it is manufactured from a composite material the factory includes "compression limiters" that prevent the intake from crushing under the torque load of the bolts. Unfortunately, the limiters cannot be directly used with the Gen IV heads as they extend beyond the manifold (the Gen V heads are machined to accept them).

The DSE compression limiters allow the Gen V composite intake manifold to be bolted directly to the Gen IV heads without modification of the supplied Gen V compression limiters or heads.



Gen V manifold installed using DSE Compression Limiters

### Features:

- Saves time or expense machining the Gen V compression limiters.
- Flats on the limiters provide a visual confirmation of alignment
- Increased clamping surface area.
- Prevents the manifold from being over compressed or damaged.

### **Specifications:**

Composition:	6061-T6 Aluminum
Finish:	Black anodize, type III hardcoat

# **Package Contents:**

20 x compression limiters

# **Ordering Information:**

http://dougshelbyengineering.com/Viper.html SRT-10 Gen V Intake Manifold Compression Limiters P/N: DSE-VP-CL-001



Compression Limiters (shown without anodized finish)



OEM Compression Limiter (Left) vs DSE Limiter (right)

# 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!

# **Installation Guide:**

Note: This is an abbreviated guide for Gen V intake manifold installation on a Gen IV. For complete removal and installation instructions for your specific vehicle, please reference the relevant Dodge Service Manual.

## Preparation

- Carefully remove the OEM compression limiters from the GEN V intake manifold using a hammer and appropriate non-marring punch or similar tool. Take care not to damage the intake manifold.
- Install the DSE compression limiters.
  - Insert angled in from the top of the intake.
  - Adjust insertion angle such that the pointed end is angled toward the middle of the hole. This will reduce the chance of it digging into the side of the composite manifold and make the insertion process easier.
  - Use a hammer and appropriate non-marring punch or similar tool to carefully press fit the compression limiters into the intake holes. Take care not to damage the manifold or compression limiters.
  - Ensure proper alignment. A 15mm wrench can be used to align the limiters. The flats should be in line with the raised feature on the intake manifold.
  - Insert the OEM bolts into the holes on the limiters.

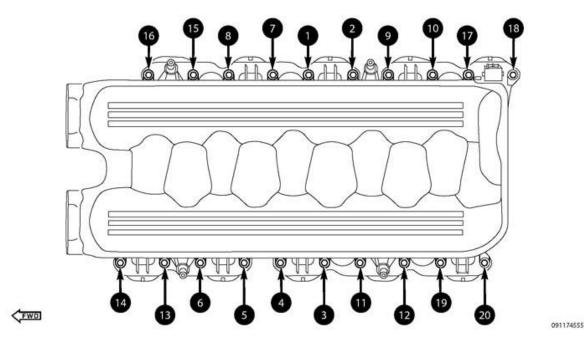




Proper alignment of Compression Limiters

### **Installation of Manifold:**

- Apply Loctite to the bolts if they are not already pre-treated.
- Care should be taken to <u>align all 20 bolts</u> in the holes on the heads before tightening. The composite manifold is not manufactured with tight tolerances. Some initial misalignment is to be expected until the bolts are tightened.
- If some bolts are not aligning easily, remove the bolt and use a light to look down into the threaded hole on the head. This will help to determine which direction force should be applied to allow the bolt to be installed.
- Lateral force on the bolt head (with a socket) or entire intake manifold (by hand) may be necessary for alignment.
- Double check alignment of compression limiter flats to ensure they are parallel to the manifold raised feature.
- Once aligned, torque the bolts to the specification of 71 in-lbs using the recommended tightening pattern (below).
- Once all bolts have been tightened, revisit each bolt and torgue again to 106 in-lbs.
- Complete the installation of the other engine components that were removed for the installation.
- *Note:* The vacuum tubes near the front of the intake are larger than required; use ty-wraps to create a tight seal.
- After the first few times running the engine, wait for the engine to cool and tighten the bolts again as necessary. 1/4 turn +/- may be necessary on some bolts after the first heat cycle, and less after subsequent cycles.



Recommended Tightening Pattern (Per 2017 Service Manual)

# 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.

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Email: dshelby1@hotmail.com

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