

# Valkyrie 1500 Desmog Kit

This kit is based on the Shoptalk article found on the Valkyrie Riders Cruisers Club (VRCC) entitled “(De) -Smog Your Valkyrie.” The article was submitted by QueXpress (Normand in Quebec).

<http://www.valkyrieriders.com/shoptalk/desmog.htm>

I suggest you review the above link as you do your install.

A wealth of other information and recommendations is available by searching the VRCC site for “desmog.” Use this kit in conjunction with the above-mentioned Shoptalk article, and recommendations from others on the forum.

## The Legal Statement:

I assume no liability for any damages, direct or otherwise, resulting from the use of this information. If you choose to use these parts, you do so AT YOUR OWN RISK.

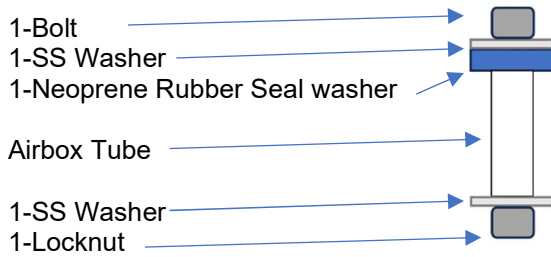
NOTE: If you have a California bike, additional actions are needed for smog equipment on your bike. **This kit does NOT provide everything you need for a California bike desmog.** Refer to the VRCC 1500 Tech Forum for discussions on performing desmog of California models.

## Desmog Kit contents



# Valkyrie 1500 Desmog Kit

## Air Box Seal Secondary Air Intake Port for the PAIR Control Valve (A tube on the Airbox)



### Notes:

Tighten the hardware just tight enough for the Neoprene washer to seal against a few inches of vacuum. Overtightening could crack the Airbox tube.

## Top of Heads Air Pipe Hole

- 4- Specially sized Brass Freeze Plugs
- 4-Nickel Plated Metal Snap-in Panel Plugs



### Notes:

- Clean the surface with some brake cleaner or alcohol and wipe dry.
- Permatex Form-A-Gasket #1 sealant is designed for freeze plugs and other press-fit applications, as well as gaskets.
- Apply Permatex Form-A-Gasket #1 to the inside of the tube in the head, and the outside of the freeze plug.
- Tap in the freeze plugs using a 6 or 7 mm socket and a ¼ inch drive extension. **An 8mm socket will get stuck in the freeze plug when it shrinks.**
- Seat the freeze plugs far enough in to allow room for the prongs of the chrome cap.
- The chrome caps are designed to plug a hole in a thin metal panel. In that application the prongs would spread out on the inside of the hole. In our application they cannot spread out. To keep them from popping out, apply some of the Permatex to the inside lip of the hole where the prongs sit.

## Intake Manifold Seal to replace Vacuum Nipple

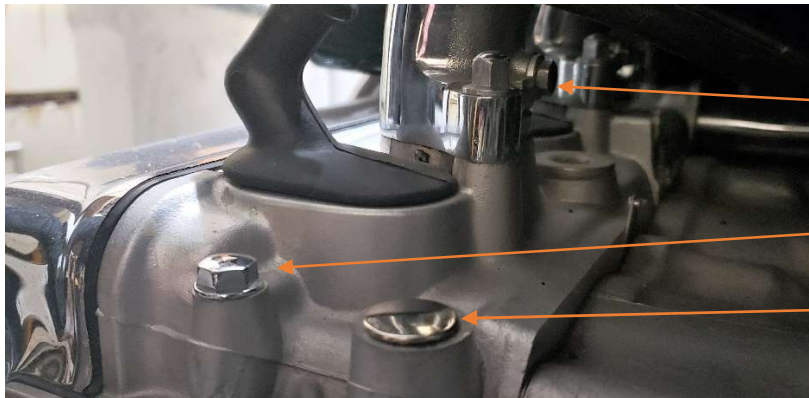
- 6-Bolts
- 6-Copper seal (crush) washers



### Notes:

Bolts and washers instead of rubber caps are supplied to seal all 6 intake ports. All 6 are supplied for those who do not use a vacuum operated petcock. If you have a stock petcock, leave one nipple to supply the vacuum operated petcock. Store the removed nipples for when a carb sync is needed. I use the back slot of the battery box to store them.

# Valkyrie 1500 Desmog Kit



Bolt and washer

Original bolt from airpipe bracket

Chrome Cap

This is # 6 on my bike. I do not use a vacuum operated petcock, so #6 vacuum nipple is plugged with a bolt and crush washer.

## Bottom of Heads Air Pipe Hole Seal

- 2-Bottom Plate Gaskets
- 2-Bottom Plates
- 4-Bottom Plate Screws



### Notes:

Once again there are many options for sealing off the Air Feed Pipes. I made aluminum plates with metal reinforced graphite gaskets for this kit. New Allen head screws are supplied. You can use your original ones, but I find it easier to install the Allen head screws using a ball head Allen wrench, especially if you are doing so without removing the exhaust.

David Morgan

email [mooskee@valkyriecarbsandcustom.com](mailto:mooskee@valkyriecarbsandcustom.com)

Valkyrie Carbs and Custom website [www.valkyriecarbsandcustom.com](http://www.valkyriecarbsandcustom.com)