

V-Stack Tank Spacer Improvement

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The following is an additional step I performed after installing V-Stacks on my 1997 Valkyrie Standard. V-stack installation instructions call for adding a ½ inch spacer between the tanks front mounting point and the frame to lift the tank and gain clearance between the V-Stacks and the tank. (I have also heard it theorized that raising the front also helps the Valk to breathe better and increase the performance but I and have seen no documentation to support this.)

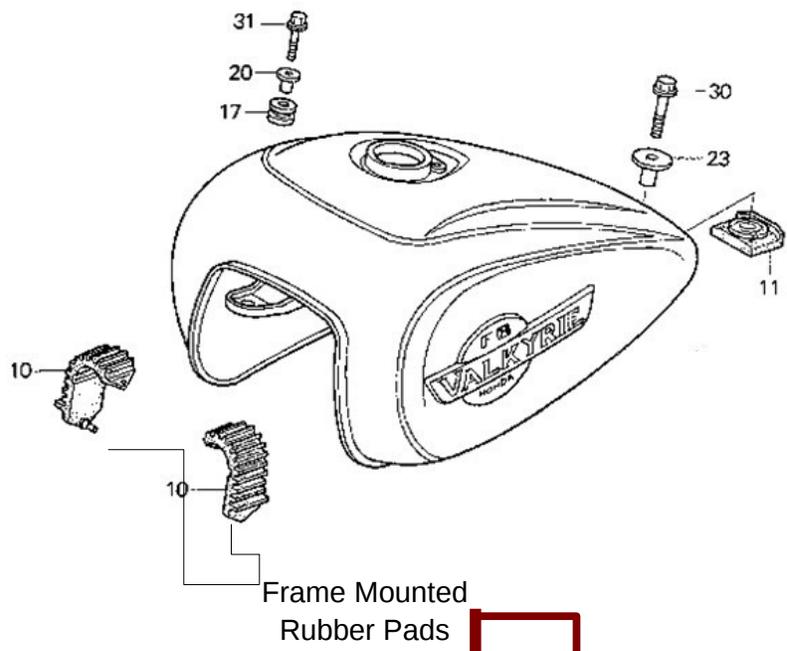


Picture shows the minimal clearance with a ½ inch spacer installed.

Raising the tank is a necessary requirement to accommodate the stacks but a problem this causes is that the original Honda design provides four points of contact between the tank and the motorcycle frame and now you have two.

The four points are:

- Front (where the spacer is) that is bolted with 6mm x 40mm long screw (original is 25mm long)
- Rear that is bolted with 8mm x 35mm long screw
- Left and right rubber rest/support details on frame members

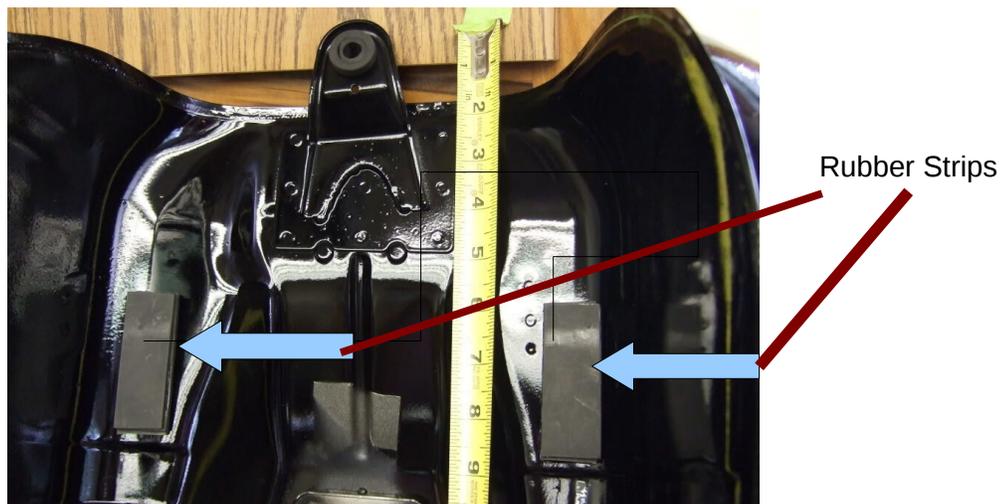


When the front of the tank is raised the recommended $\frac{1}{2}$ inch, contact with the two frame mounted rubber details is lost. This puts the full load of the tank (Approximately 60 pounds for a full IS tank) on just the front and rear points which will stress the tabs that are welded on the tank more than was intended. It also allows the tank to rock left and right on the front and rear rubber mounts because the sides are no longer supported. This rocking motion actually allowed the stacks to contact my tank and left a small dent in it. When I had my tins repainted last winter and the dent fixed, I did not want this to happen again so I implemented the following solution.

I found some rubber/neoprene sheet material and stacked it up and glued it. I then tested by trial and error for the correct thickness. It turned out $\frac{1}{4}$ thick was perfect. I cut two strips 1 inch wide by 3 inches long.



I then super-glued these strips to the bottom of the tank in the locations shown on the picture below.



No more rocking and the tank is now supported as it was intended to be.