

## De-smog

De-smogged bikes have no performance gains or fuel economy gains, just eliminates a lot of unnecessary parts and future problems with vacuum leaks and Part failures. Many do this and many are against this for different reasons. I don't care if you do it or not, it's your bike but if you decide you want to do it maybe this will help you.

There are many different versions on how to do it and even a kit made by Red Eye called Shiny De-smog. It's an easy kit to install that uses caps with o rings and teflon washers to cap off the holes in the head and block off plates on the bottom. There is another method on the VRCC using freeze plugs to plug the holes. The method I'm going to do is some of that and some of other things I've seen and a couple ideas of my own. I've done a few different ways and I can tell you one way not to do. Using rubber caps slid over the chrome tubes and that's it. Over time the rubber dry rots and cracks, you'll swear you broke a lifter in the valve train. It will scare the heck out of you when it lets go.



So I do this version now using a lot of techniques and double safety standards. I don't think this one will come loose or leak or ever have to be repaired.



All this area is what we are working to clean up.



(left) This is all the removable parts to throw away. However we are gonna save the chrome tubes and use the vacuum pump bracket to hold our Dan-Marc fuel solenoid.

(right) On the bottom of the air box this port needs to be capped off. Some fill it with silicone and run a bolt thru it with a fat washer on both ends.



(left) I used a piece of 3/8" fuel line a 12mm bolt and 2 hose clamps.

(right) This comes out and I will use the bracket for my fuel solenoid.



(Left) The pair valves come out

(right) One on each side, disconnect the hoses from the chrome tubes.



(left) More garbage to scrap



(right) Remove the engine crash bars, I had a picture of all the bolts to remove but am limited to 40 pics per post so had to delete them to make room for other pics. Follow the bars around you'll find the bolts.



(left) Pull the chrome tubes up out of the head.

(right) We are using 14 mm cup style freeze plugs. Closest I could find was 14.3 mm so I had to run them loosely spinning on the grinder to take a fine amount off the diameter.



(Left) Freeze plug in place.

(right) I used a 7mm deep socket and short extension and hit it with a hammer to drive the plugs down into the head. They go in pretty tight but drive em all the way down till they stop.



(left) This is all the way down

(right) I'm reusing the chrome tubes, hard to throw away good chrome, and Honda chrome at that. 😂😁  
In order for it to fit back down in the hole it has to be ground off some. You can see the gap.



(left) Grind the bottom off here until it's about 1/8" thick from the o ring. Might want to remove the o ring while grinding, it gets hot and might melt it.

(right) After grinding it off it fits nicely over the freeze plug. Once we put the intake runners back on the original brackets that hold them in place will be reinstalled.



(left) The front right tube is a little harder to get out. Remove the bolt.

(right) Take a screwdriver and bend the tab up.



(left) Bend it all the way out of the way so the tube can be removed

(right) This is where our next freeze plug will go.



(left) Drive the plug to the bottom



(right) Fold the tab back down over the cap after grinding the cap to fit in tight.



(left) Tab bent down and bolt reinstalled



(right) Left front side is next.



(left) After the tube is removed

(right) Grind the bottom of to 1/8" from o ring on all 4 top mounted tubes.



(Left) Drive the plug to the bottom, grind off the tube bottom and reinstall the tube.

(right) Left rear, remove the tube.



(left) Back left side pull the tube out and drive the next freeze plug in.

(right) Drive the freeze plug in to the bottom and reinstall the chrome tube.



(left) On the kits you buy they have a block off plate that replaces this fitting on the end of the chrome tube. We are keeping the chrome so not doing that.

(right) The rear left side tube that comes up from the bottom we are going to crush the tube behind where the intake runner will hide it. It crushes pretty easy with channel locks or vise grips.



(Left) The front right side tube that comes up from the bottom we are going to crush the tube behind where the intake runner will hide it

(right) This is what a crushed tube should look like. Doesn't have to be sealed, just a blockage to keep anything from sliding down the tube.



(left) This is what I'm using to fill the ends of the 2 tubes with and the crushed part will keep it from moving down the tube past it if it were to come loose?

(right) Might as well finish off the ole ladies turkey injector I borrowed to flush the brakes with. 😂😁  
 I put equal parts of both tubes on the end of the plunger and inserted it back in the syringe and pushed it into the ends of the 2 tubes I crushed. Took a few trips but got it all in before the syringe welded. 😂😁  
 Put a rag under the tube your working on cause when the tube gets full it can make a mess.



(Left) Measuring for a plate and holes. Gonna make a plate 5 1/2"X 1" wide and drill 3 holes to match each tube.

(right) Gonna use the other smooth side against the tubes and rough side out. Hey I have to use what's available here. 🤔🙄

Gonna look good if you could only see it after the carbs and intakes are in.



Finished product used the existing rubber tubes that were hooked to the pair valves and stick a bolt thru the plate and into each hose and put a clamp on it. Could probably almost just use the bolts and plates to do the de-smog? One of the guys on here has done it that way and it looks really good.

Anyway, a lot less clutter on the engine, less problems down the road, no worries of popping on de-cell. Choice is y'all's if you do it or not?

