

Here's some quick directions to completely removing your pair valve:

Here's what you do:

1. Physically remove the pair valve from the bike
2. Remove the funky "F" connector going to the petcock on the gas tank. You only need the 1 line (1/4") from the carb to the petcock, without the pair valve. You'll still have the bigger hose from the rear connector on the petcock. So total, 2 hoses, 1 small 1 big
3. There are now 3 big hoses left from the pair valve. Remove the one going to the airbox. If you're keeping the airbox, you'll need to cap the nipple that this hoses connects too.
4. The two remaining hoses go to chrome tubes, one on each of the jugs. These need to be plugged. You have 4 options:
 - a. Easiest - plug each one and stuff them away somewhere.
 - b. harder - Remove 1 hose. On the tube left open, insert a golf tee into the tube opening and using the 1 hose still connected connect it to that open tube, over the golf tee. Make sure to secure this end well, as it has a tendency to pop off.
 - c. remove both hoses, then remove the chrome tubes. Take each tube assembly and remove most of the tube from the mounting plate, leaving maybe a 1/4" or so of the tube. Now thread a short bolt through the remaining tube into the plate, plugging it. Re-install the now plugged plates.
 - d. Buy mocc's kit (www.moccsplace.com), it comes with gaskets and plug plates for where these tubes go.
5. use some 6mm .8 pitch bolts (preferably chrome!) to fill the two holes left where the pair valve used to be.

Moccasin Mike's Full "How To" is included below.

Pair Valve Removal Made Easy

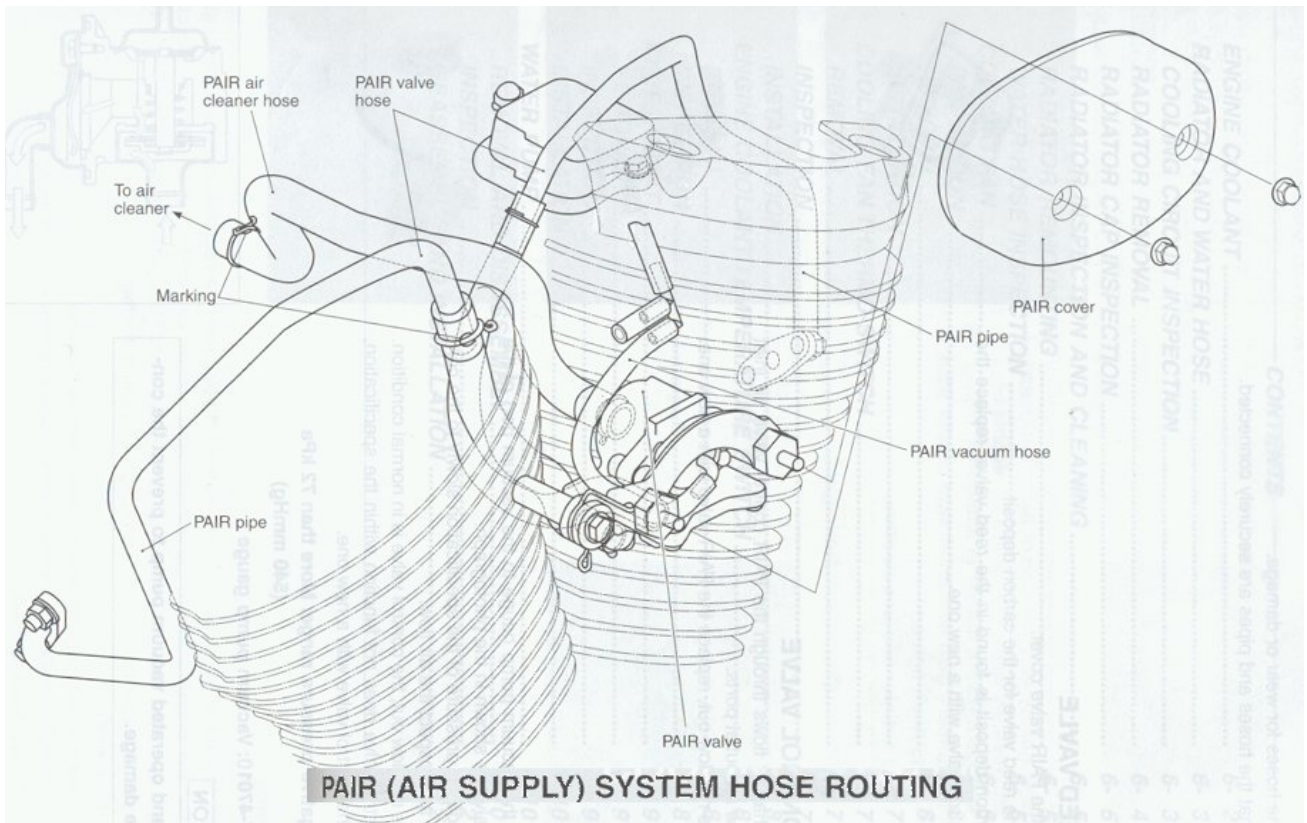
by "Moccasin" Mike

For the Volusia 800



Recommended Tools

8mm Box Wrench (the longer the better) / 10 mm Socket and Wrench / 12 mm Combination Wrench
Long #2 Phillips Head Screwdriver / Gasket Sealer / Lots of Patience



NOTE** If you are using a removal kit by "Moccasin" Mike, be aware that these kits are packaged to be used universally on the LC, Marauder and Volusia. **YOU WILL HAVE KIT COMPONENTS LEFT OVER!**

All metal components of the removal kits have been "Blackened" with satin finish engine paint, and baked at

400 degrees to match your engine block. Some damage to paint may occur during shipping and/or installation.

YOU HAVE OPTIONS!!

There are three viable options for disabling and/or removing the Volusia Pair Valve System, graduating from a simple disable without removal of components (best if you are concerned about warranty issues) to valve only removal, to the complete removal of the entire system.

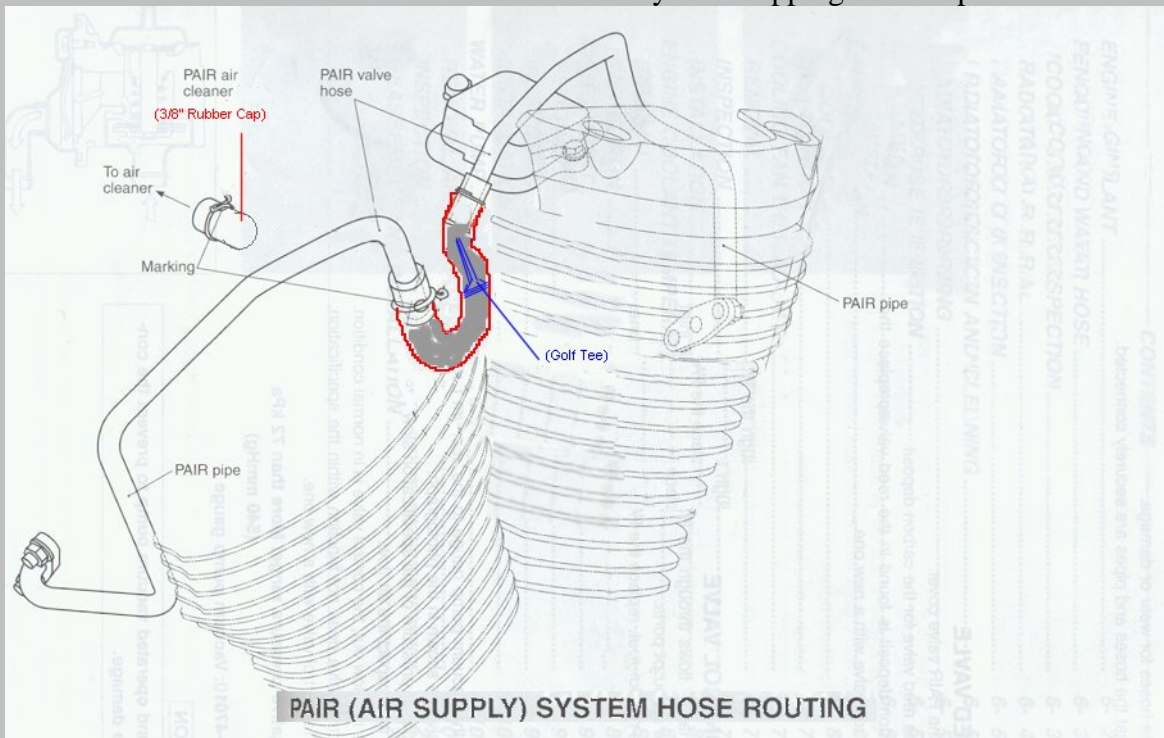
OPTION 1: Simple Disable

Read and follow Step 1 of the Complete Removal instructions below, except that you do not need to remove or eliminate the three-way vacuum connector. Just leave it as is.

OPTION 2: Partial Removal (Valve assembly and housing only)

Read and follow Steps 1 and 2 of the Complete removal instructions below.

Then remove the rubber connecting hose from the rear metal air delivery tube (pair tube). Plug the remaining (front) rubber connecting hose with a golf tee or small round head bolt, then connect it to the rear metal air tube and secure it with the hose clamp. then re-install the air breather assembly after capping the rear port.



This option requires only a golf tee (or small round head bolt), a 3/8" rubber vacuum cap, and a pair of short 6mm bolts to fill the pair assembly mounting holes left in the cylinder walls (for better appearance). The vacuum cap and screws are available at your local auto store. (No kit purchase is necessary)

OPTION 3: Complete System Removal (Instructions Below)

This option will allow you to completely remove the valve assembly and air delivery tubes for an even cleaner appearance, but requires building or purchasing a set of blocking plates and gaskets for the air tube flanges at the exhaust ports.

If you would like to purchase a complete removal kit from "Moccasin" Mike, the kits are \$20.00 U.S. and include continental ground shipping costs. E-mail me ("Snake Mail" link at bottom of the page) for purchase instructions.

STEP 1. REMOVE THE COVER AND PAIR VALVE ASSEMBLY

Remove the two 8mm hex nuts from the pair valve cover.

Take out the two 10 mm bolts from valve body that hold it to the jugs.

Pull the vacuum tubes off the three-way connector and connect the one from the engine to the fuel valve on bottom of tank, eliminating the three-way connector.

Slide the 3 ring clamps up the hoses on the back of the valve, and remove the valve assembly, then the ring clamps.

Install any two of the black painted stainless steel bolts from the kit into the holes that are on the side of the jugs if you are not keeping the cover there for looks.



If you only wish to disable the pair valve, but not remove any of it's components, insert a golf tee head first into each of the two lower rubber tubing pieces. leave a small portion of the pointed end of the tee sticking out of the end of the rubber tube (for easy removal later if necessary), and re-install the rubber tubing pieces to the pair valve, re-attach the valve and replace the cover.

STEP 2. REMOVE THE AIR BREATHER ASSEMBLY.

Remove the two Allen screws on the air breather cover.

Remove air filter.

Remove two Allen screws from the case on the top.

Loosen the hose clamp on the top of the air breather body with the #2 screwdriver.

Pull out and down on the body and the hose will come with it. (be careful with it, it is tight, but it will come out)

Remove hose from back of air breather body and put the large cap from the kit on the port . Then use the clamp from the original hose to secure it to the port.

LEAVE THE AIR BREATHER OFF FOR NOW, AS YOU WILL NEED THE ROOM

STEP 3. REMOVE THE REAR AIR DELIVERY TUBE

Loosen the two chrome bolts with 8mm box wrench and remove the bolts.

The chrome air delivery tube and flange will feed out the side you are working on. It does not come out straight so turn it and twist it as it comes out . It takes some firmness , but not brute force.

Apply small amount gasket sealer around hole.

Apply small amount of gasket sealer to gasket and adhere to cover plate (from the kit).

Apply small amount of gasket sealer to chrome bolt threads and start the bolts in the holes.

Tighten as far as possible with fingers and use box wrench to finish up.

STEP 4. MAKE ROOM FOR REMOVAL OF THE FRONT TUBE

The next steps are recommended to get the room needed to work, especially for people with average to large hands.

Remove the two Allen head bolts that hold the exhaust to the head and move the pipe out of the way.

Remove the 12 mm bolt that holds the horn bracket to the frame.

Remove the radiator cover by pulling out from the bottom and lifting off the tabs at top

Remove the three 10 mm bolts that hold it on. Two at top, one at bottom.

Remove the three 10 mm bolts from the cooling fan and push it down a little.

STEP 5. REMOVE THE FRONT AIR DELIVERY TUBE

With the box wrench loosen the two 8mm chrome bolts as far as possible

Now squeeze your hand between the frame and the radiator and put the 8mm nut driver tip on the chrome bolts and take them out.

Remove the air delivery tube (same twisting and turning as the rear).

Repeat the gasket sealer steps for the back flange.

Put the chrome bolts back in and tighten them by hand as far as you can and use the box wrench to finish it up.

Put the 12 mm bolt back in for the horn and tighten up.

Put the two 10 mm bolts back in the cooling fan and tighten up.

Put the three 10 mm bolts back in the radiator and tighten up.

Put the radiator cover back on (top first).

STEP 6. RE-INSTALL THE AIR BREATHER

Simply reverse the procedure outlined above.

STEP 7. TAKE PICTURES AND SHOW ALL YOUR FRIENDS!!