

# BA-2010-00 Page: 1 STEALTH - BIG AIR KIT - Yamaha V-Star 650 Classic & Custom

CAUTION: We strongly recommend a qualified Yamaha technician install this kit. Please read ALL of the instructions BEFORE installation.

Revision: 2.7 - 03/29/2010 Install Time: 90 Minutes

### **INCLUDED IN THE KIT:**

(2) K&N High Flow Reusable Air Filter	(1) BA-2410-00 Needle/Jet Kit
(1) Reusable Uni-Crankcase Filter	

### **TOOLS REQUIRED:**

10 & 12 MM Wrenches and Sockets	Assorted Allen Wrenches
Phillips & Standard Screwdriver	Factory Service Manual

#### **INSTRUCTIONS:**

Note: Always perform internal carburetor work in a clean area.

INSTALLER NOTE: The round air cleaner on the right-hand side of the engine may remain in place, but the balance of the OEM airbox must be removed.

## To install Big Air Kit:

See instructions in factory service manual and:

- Remove the fuel tank and place it out of your way.
- Remove the airbox and set it aside
- See instructions for Needle/Jet Kit installation included with the supplied Needle/Jet Kit, install as specified and then proceed to next steps. Install the supplied crankcase breather filter in the following way:
  - 1. Locate the crankcase breather hose that was disconnected from the rear of OEM airbox.
  - 2. Cut approximately one inch off the open end of this hose.
  - 3. Install the crankcase breather filter and supplied hose clamp hose onto this hose. The new crankcase breather filter will remain in this area.

Make a note to check and clean this filter apprx. every 3000 miles. This could vary if you maintain a higher than recommended oil level in your crankcase.

• Install the new Big Air" filters and tighten the base clamps until they are snug, over tightening can cause the filters to draw off the neck of the carburetor or can damage/cut the rubber which can cause an air leak that can effect tuning.

CAUTION: Do not oil these filters excessively. Apply two (2) drops of oil per pleat and allow the oil to soak-in for 10 minutes.

- Check all vent lines, fuel lines, and throttle linkage for any obstructions or blockage. Be sure to twist and release your throttle to be sure you have full throttle and that your throttle returns when released.
- When you are satisfied that everything is adjusted, aligned and tightened properly you can reinstall your fuel tank. If you have a remote fuel source you can fine tune with the fuel tank off if you wish. *CAUTION:* The tuning/adjusting procedure is critical. Correct carbon monoxide settings are key to maximum

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performance. Do not overlook the next step!

CHECK: Listen to engine at idle speed for any popping or back firing. If popping is occurring at idle: Verify the air/fuel adjustment screw has been set to the recommended starting position as described in above step, then fine tune + or from there until popping stops or improves. (See Tuning note)

TUNING NOTE: Proper carburetor adjusting would include balancing which does requires the use of carburetor sticks or a set of vacuum gauges. The carburetors must be synchronized in order to achieve optimum performance. This procedure should be performed by a qualified Yamaha repair technician.

For best results, we recommend the engine be adjusted on an Exhaust Gas Analyzer (EGA) to a CO reading between 3% and 4%. Please bear in mind this percentage depends on various factors including: Altitude, Humidity, Temperature, Air Pressure, etc. Contact us if you have any questions regarding this installation.

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