

## **Engine Air Pump Instructions:**

### **Single Cylinder, Two Cylinder, and Two-Stroke Engines**

1. Turn off fuel line if you are able. Run Engine until it stops to drain carburetor.  
If your bike is fuel injected with no fuel petcock just move on to the next step.
2. Disconnect the wire and remove a spark plug. Next, re-insert that plug back into it's wire and rest the electrode of that plug against the metal of the engine.  
This will effectively ground your electrical system and prevent any damage to the coil or other parts.
3. If your bike has two cylinders but four spark plug wires, leave one cylinder alone. Remove both wires from the other cylinder but unscrew only one spark plug. Re-insert that plug back into it's wire and rest the electrode of that plug against the metal of the engine as described in step two.
4. Now attach the hose to the Fresh Air Valve (the largest adapter). Add the 10mm, 12mm, or 14mm adapter as needed to fit your spark plug opening. Screw pump unit into spark plug opening by hand, firmly but not too tight. Attach the other end of the hose to the valve of the tire.
5. Turn on key and crank starter until desired pressure is achieved. However, if your engine will not run on one cylinder (most do not), you should operate the starter in 15 second increments to avoid overheating or excessive wear on the starter or battery. It

generally takes about one minute of crank time to fully inflate most tires

6. When desired pressure is reached, disconnect the hose from the tire valve and unscrew the Fresh Air Valve and hose from the spark plug opening. Re-install the spark plug and wire/s as you are now done re-inflating your tire.

### **Three and Greater Cylinder Four-Stroke Engines**

1. Follow steps (1), (2), and (4) from above. Since you have multiple cylinders your bikes engine will run on one less cylinder. Therefore, just let it idle (DO NOT REV THE ENGINE). As the engine idles, the cylinder that is attached to the hose is using the vacuum and compression of the engine to suck outside air thru the side ports and into the hose. A two way check valve prevents the air from circulating thru the cylinder. The air is only entering the hose and then into the tire. It generally takes about one minute to fully inflate your tire.
2. When the desired pressure is reached, disconnect the hose from the tire valve and unscrew the Fresh Air Valve and hose from the spark plug opening. Re-install the spark plug and wire as you are now done re-inflating your tire.