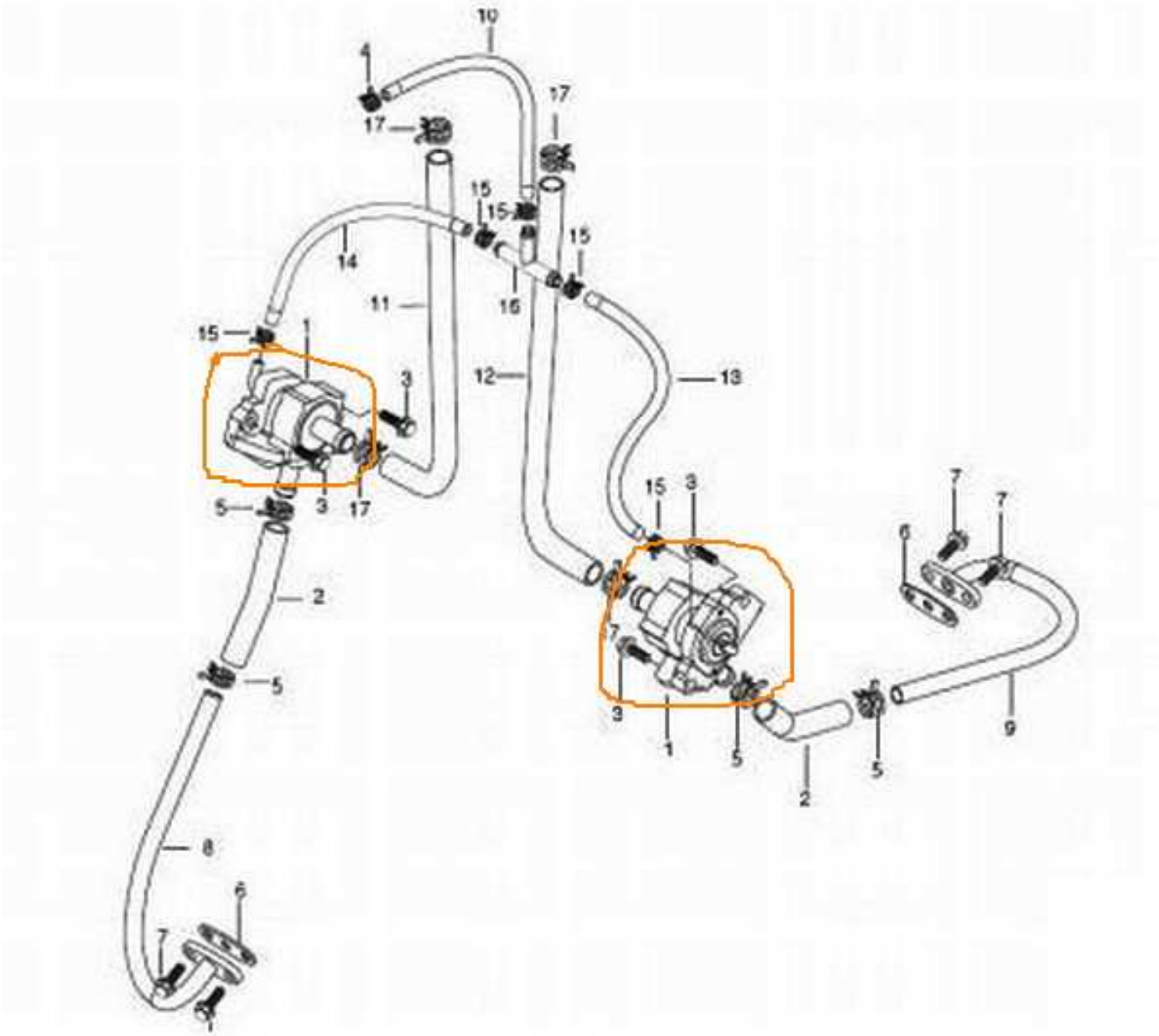
Manual removal of AIS with GV 650 FI and GT 650 FI



View of the elements constituting the system of AIS. Selected elements of the air pump.

The version of jets pump is on the right side of the engine, the fuel tank, and exactly the right air intake just behind the starter solenoid relay. It is not screwed on, and only the wheels slid his arms through the rubber mount. Before you unplug the cable, disconnect the rubber - two coming on steel pipes running the engine and a forced upward to the airbox where it enters the connector.

View of the dismantled parts - air pump and two pipes from the cylinders.

Location of individual components:

The arrangement of the AIS - the tube around the front and rear of the cylinder to be removed.

The factory bolts are screwed M6 hexagon with the ability to use a Phillips screwdriver. Screws are not too hard, so I recommend using a wrench to the 10 dimension.

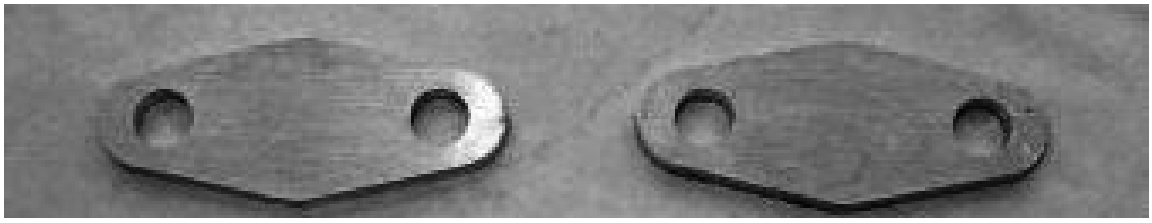
View of the air pump with cables - two lower steel tubes going to the cylinders and the upper to the airbox.

Comments on the dismantling of elements:

Biggest problem is removing the bolts securing the tube to the cylinder block. In the case of the front cylinder simply unscrew the radiator, and then go into the motorcycle and remove the two screws.
In the case of the rear cylinder, the situation is more complicated because of poor access. Screw on the right side, you can dial without much problem, I used a fairly short spanner M10. On the other hand removing the bolts, is a challenge. We must show great patience, that at approximately ¼ turn twist the screw, which is about 30 mm. Here are just a short wrench will help us. If I did it today, then I turned the exhaust manifold from the rear cylinder, because as it turned out, screwing the bolt is even harder. After removing the screws, gently pull the tube from the cylinder mount and try to save the factory pad. In my case, pad, the one on the front cylinder was glued (baked into the socket and I had to gently use a knife). In the case of the rear cylinder pad that was loose and fell out yourself by removing the two screws.

Notes on the implementation of caps on cylinders:

Saved me a pad factory served as a template for the implementation of plaques blanking. Given that the aluminum engine block is aluminum, I decided to do the proper pads, ie those which will come into direct contact with the surface of the cylinder. Done while the upper pads of galvanized steel. When you cut the appropriate shapes and drilling holes acc. factory set of dimensions that is done. 2 +2 plugs. It is very important that the surface of the aluminum cap, which will be adjacent to the socket on the cylinder was very smooth. I used sandpaper with thicknesses 240, 500, 800 and 1200. This gave a very cool visual effect, almost a mirror. Blanking the outer plaque on matt black painted to compose all the fun with a black motor. Returning to the factory washers rescued from dismantling - I used it only for the purpose of the template, not assembled them back because they are in the middle of the hole corresponding to the flow of air into the cylinder of AIS.



Picture cut from aluminum caps

Installation of caps:

Knowing the quality of the screws I decided to use the factory screws holding the same length, that were I to remove the factory exhaust. They are made of much better quality steel, plus I was hoping for a stronger tightening them. I do not want to while driving either of the screws come loose causing a leak to the cylinder. Traditionally, assembly plugs on the front cylinder is a fabulously simple, while the rear cylinder is a problem. If someone like me will not be dismantled exhaust manifold, you must first pre-tighten the screw on the right side, as pictured below. Then, after arming themselves with patience we take up the left side. I am also opting for the allen screws hindered the task. Spanner easier still operate in these conditions. After about an hour of work totally into the rear bolt and I could deal with blindness airbox.

AIS slot sealed rear cylinder (viewed from the right) after removal of the tube blinds aluminum profile with a washer on the two screws.

View blocked the AIS on the front cylinder (the view from the left)

Hole in airbox decided to protect in terms of leakage and mechanical vibration of the whole cabinet. To this end, I used quite a long bolt with a diameter of 8 mm and 60 mm long. Before inserting it covered the entire length of the silicone, and countered from the bottom nut.

View the airboxie stub. Please note that in our case the air filter is removed a few such connections.

After assembling all the elements of the engine ran. The first thing striking, the darker the color of the exhaust when the engine is cold. After a minute, two things get back to normal. In addition, the engine sound is not responsible for the intake of air through the pump to the AIS. Even on a cold engine by removing the throttle up quickly, and letting her shots from the pipe did not occur. According to the familiar topic of AIS removal does not adversely affect either the engine or on its life. Gain, among other things, that the gases in the exhaust manifolds will not be as dry and the temperature drops a bit, which will lead to milder staining tube collector. In addition, if the bike is said to exhaust a full flight, the exhaust valve will have more favorable conditions of work - will not be getting cold air from the AIS. In some models of motorcycles to remove the AIS system can affect the slight increase in engine power. For version with fuel injection, ignition management computer maps should be within 200-300 km to adjust the engine to the new conditions. For me after driving 300 km everything is stabilized and the engine runs more smoothly, it seems that the better speeds. I am concurrently with blocking AIS mentioned on the sports air filter. Today I drove about 1200 km, and everything is fine.
In these films you can see how the engine works with the AIS system and after its removal.
AIS enabled: http://www.youtube.com/watch?v=mUdznuTmwOY
AIS removed: http://www.youtube.com/watch?v=0BcIYHVLbl8
Any comments and questions sent to the e-mail: **tom740509@wp.pl**