The following summary highlights the start-to-finish install of an Audiovox cruise control on stellarpod's (Steve) ST1300. Fred D (Fred) and ChucksKLRST (Chuck) primarily performed the install (Steve did tighten a few screws toward the end – LOL). Pics by okmurdog (Mark). Installation instructions by Ray Antasek were used as a guideline.

Steve removed all of the Tupperware before starting the installation, and placed the upper gas tank in the service position using bungee straps from the rear hand rail. The ground wire was also removed from the gas tank to allow the extra clearance.

Total installation time for the cruise control was approximately 8 hours.

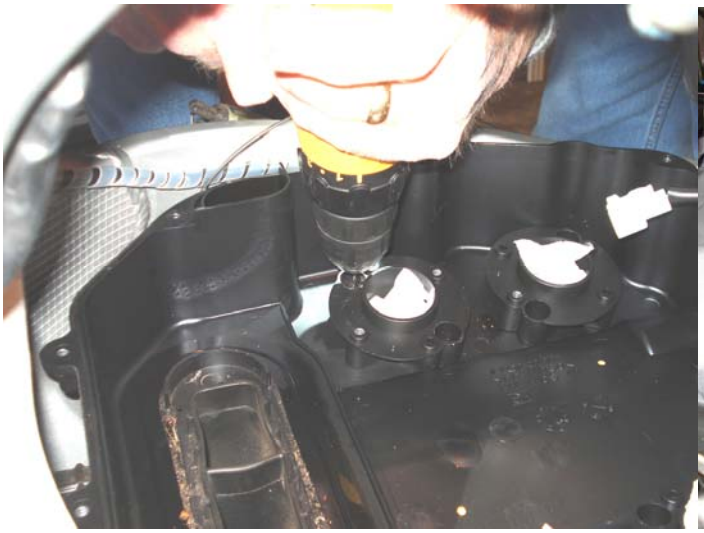
1. The top portion of the air box is removed to gain access to the air filter and 'snorkels'. Remove the white connector attached to the IAT sensor near the rear of the top air box. A small screwdriver placed under the front of the connector, just under the little tab will allow the connector to easy slide off.

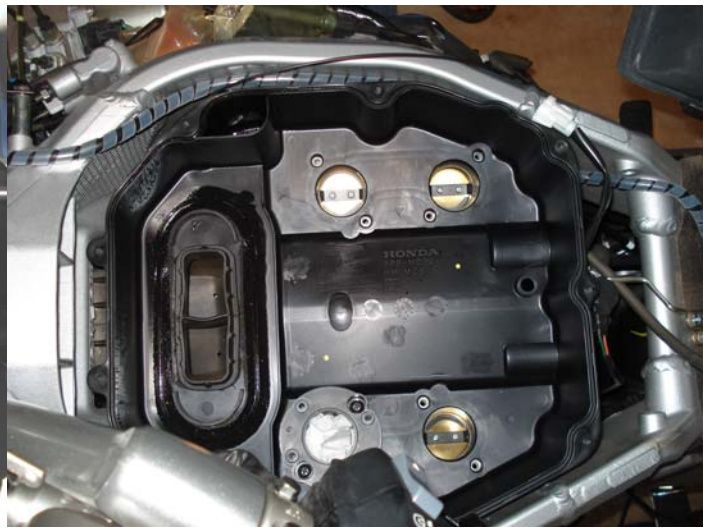

2. The air filter and snorkels are removed. Each one of the 'snorkel' screws has a tab covering the head. Carefully bend the tab up to expose the screw head and remove the screws. The snorkels have stamped index marks – for proper orientation, these marks must be aligned when re-installing. The index marks are circled in red. Once the snorkels are removed, place something in the throttle body intakes to prevent accidentally dropping something in there (white rags were used here).


3. The lower portion of the air box is removed. The eight (8) screws attach thru the round snorkel bases, lower portion of the air box, and into the throttle bodies. The round snorkel bases are identical; however, it is good to take note of the orientation of the bases so that the same screw holes for the snorkels can be utilized when re-installing on the bases.

The lower air box screws are SOFT. One of the eight screws was frozen in place and would not budge with the JIS Phillips screwdriver. A manual impact type screwdriver was also tried on the screw to no avail. The second picture shows the offending screw.

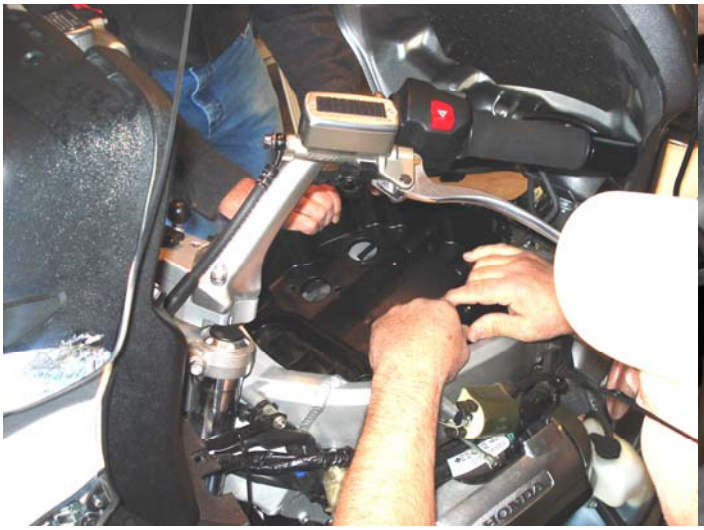

4. The offending air box screw had to be extracted with a drill bit and easy-out. After all the screws are removed, it is a good idea to vacuum the bottom of the air box to rid of bug residue, etc. before removing.



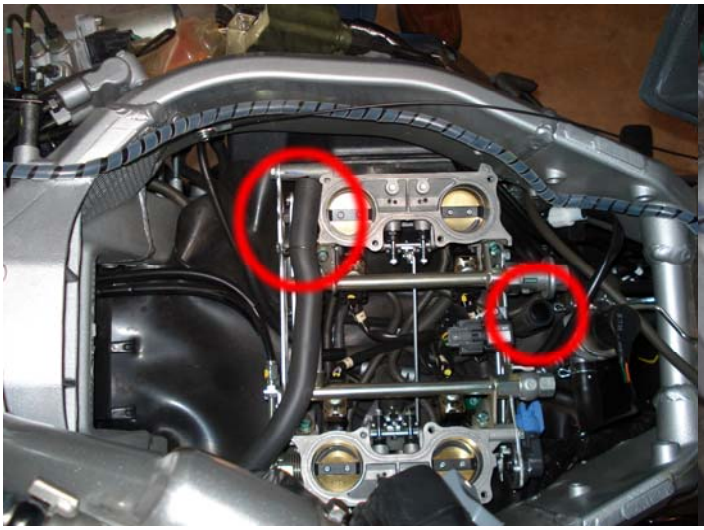
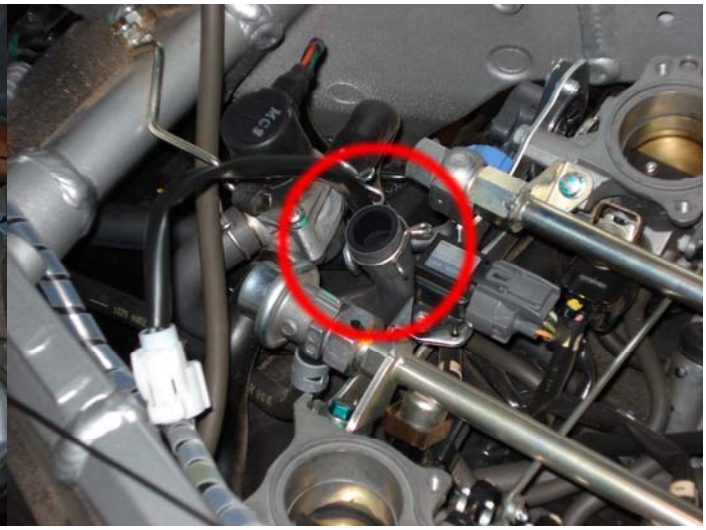


5. A check of the extracted screw shows signs of galvanic corrosion (white powdery appearance). A comparison between the extracted screw and an adjacent screw shows the difference. As you can see, there is ample room to drill and use an extractor if you find yourself in this situation. Luckily, Fred had a brand new replacement screw handy.

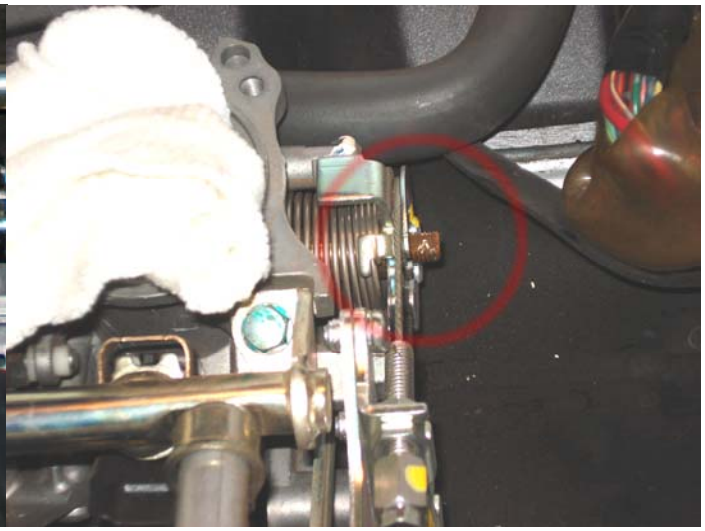
6. Remove the bottom of the air box, and the attached hoses. Raise the bottom portion of the air box a few inches while looking in from the side of the bike. Detach the two hoses that are attached to the bottom of the air box (PAIR hose and Crankcase breather hose). Note the crankcase breather hose is routed through a slot on the underneath of the air box.




7. Keep track of the small cable clamps on the hoses. It might be a good idea to remove the clamps completely and set aside. The cable clamp on the rear hose initially slipped and fell down on the hose. Later, it must have fallen off completely as it could not be located – another clamp had to be located during the re-install.

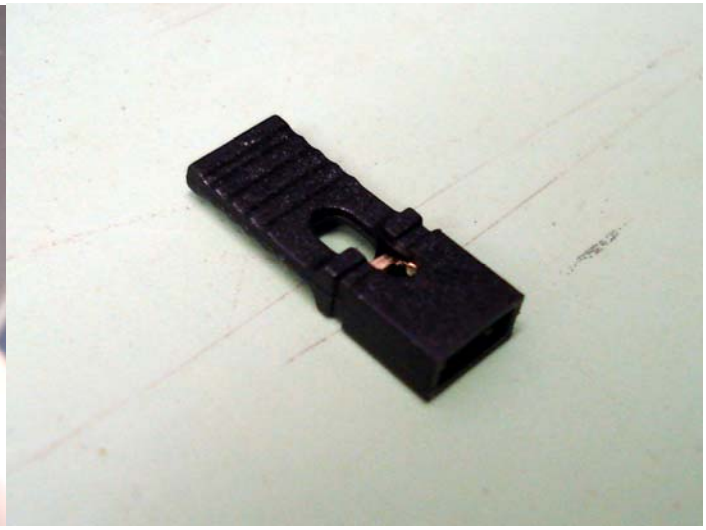
8. The lever for the Audiovox cruise control is installed on the throttle drum, which is attached to the throttle body. The throttle drum is somewhat masked by the crankcase breather hose in the first picture. The second picture is a close up of the throttle drum with the nut removed. Page 5-65 of the service manual also shows a picture of the throttle drum.



9. Install the lever and washer for the cruise control on the throttle drum. You may want to radius the top corners of the bracket for piece of mind. Later, during the re-install we thought the bracket was chaffing against the crankcase breather hose. The bracket was removed and the corners were rounded off. We later discovered the corners probably did not need to be rounded off, but it was a good piece of mind anyway.

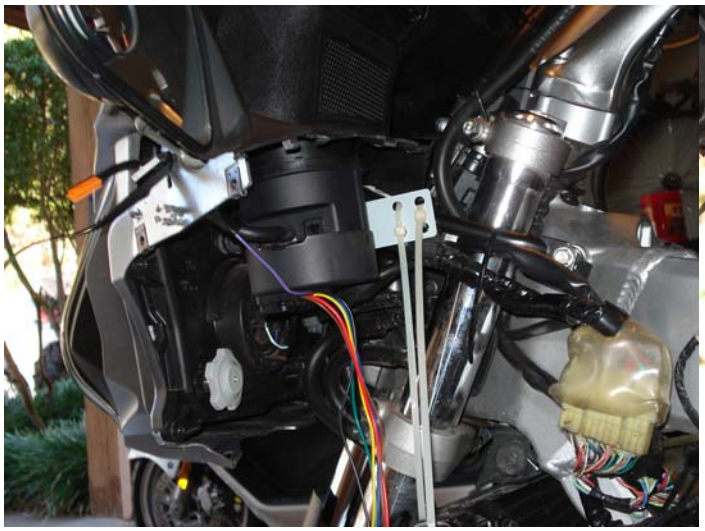
10. Install the opposing Audiovox bracket on the throttle body. One screw will need to be removed and re-installed thru the bracket.

11. Set the DIP switches and remove the jumper as necessary according the instructions. The DIP switches were set as follows: 1, 4, 7 = ON; 2, 3, 5, 6 = OFF; Jumper removed.

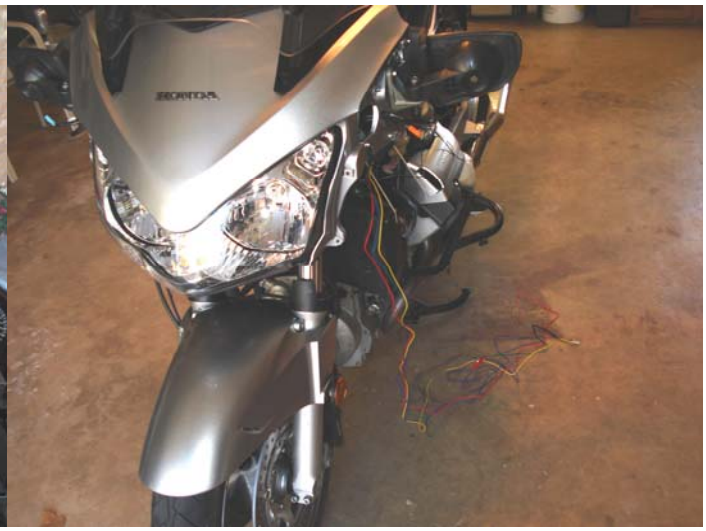


12. The main control box of the Audiovox unit is placed in the front left side fairing with cabling routing through to the right side. Route the vacuum and control cable so that there are no sharp bends or kinks to the right side. If you have a Quartet harness, make sure the control box does not impair accessibility to the harness.

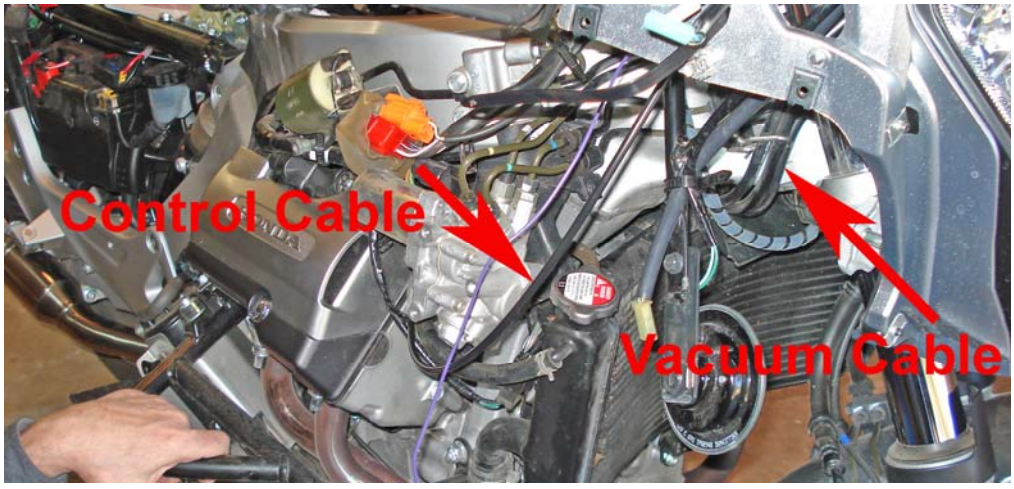
13. Zip ties were used to attach the control box the bike. Dry fit the panels to ensure there are not clearance issues.



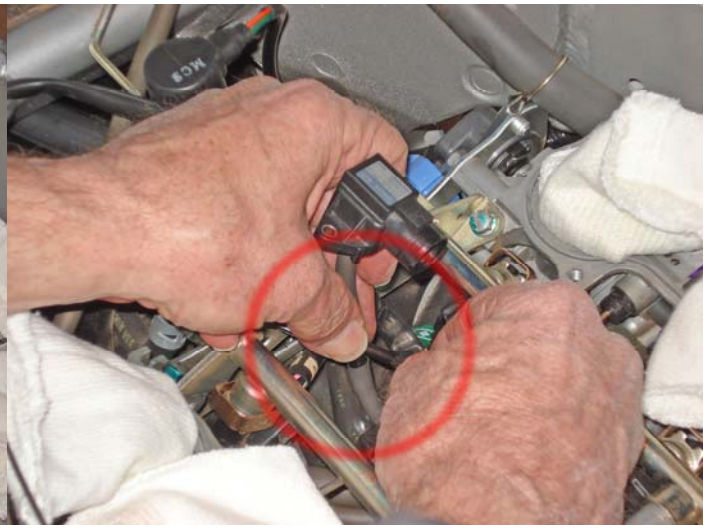


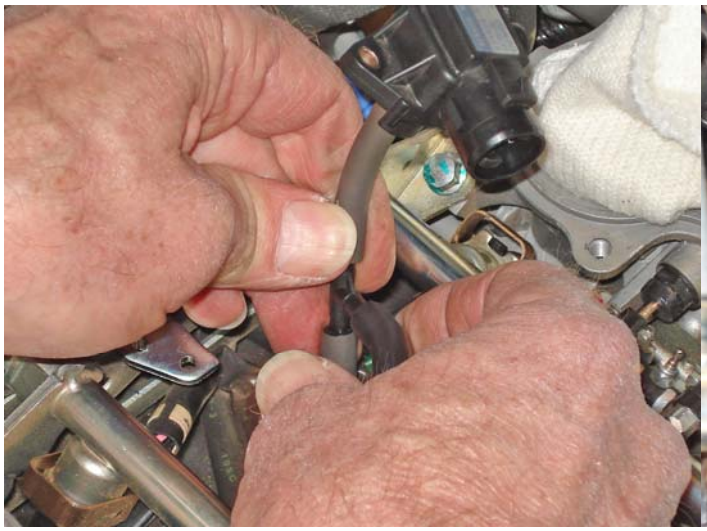



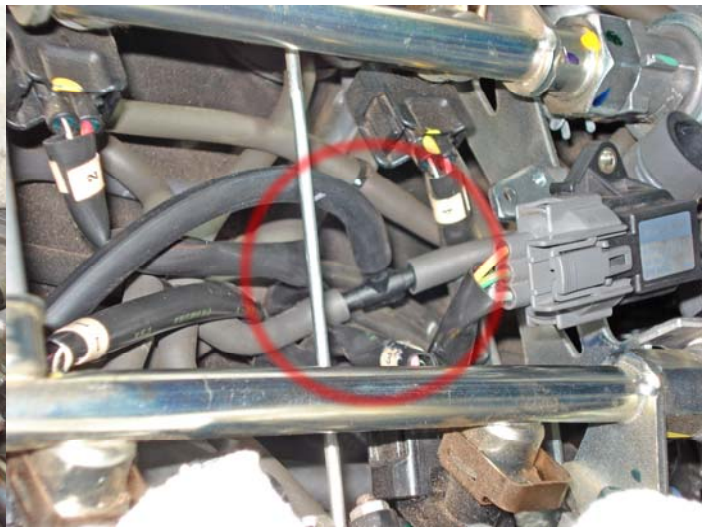
14. Route the vacuum and control lines to the throttle body. This step may take some time to find the optimal locations where no kinking or binding will occur. A nice sweeping radius is needed for the control cable.



15. The Audiovox vacuum line needs to be tied into the vacuum on the ST1300. There are several places the vacuum could be obtained. During this install, the vacuum line to the MAP sensor was cut and a Tee was installed for the Audiovox vacuum.



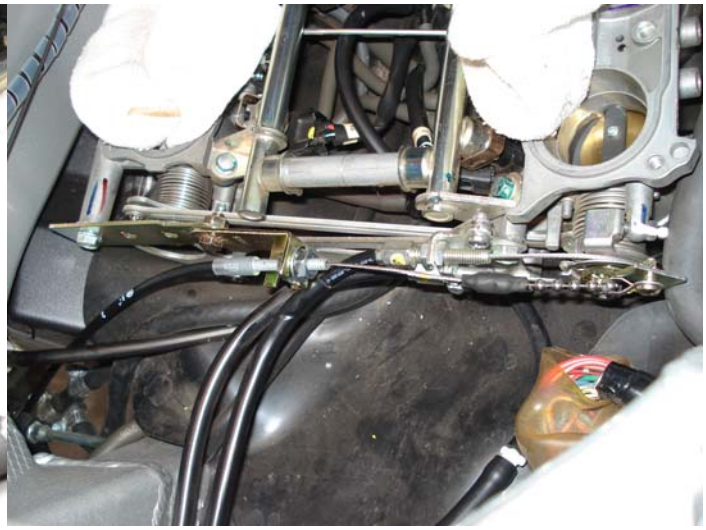




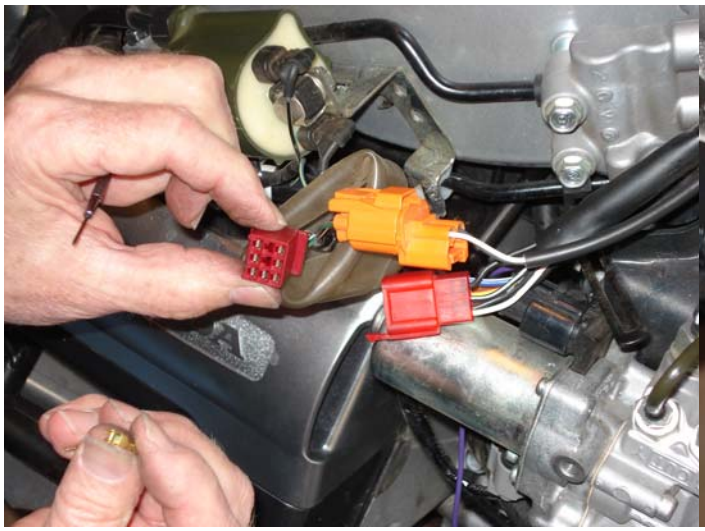
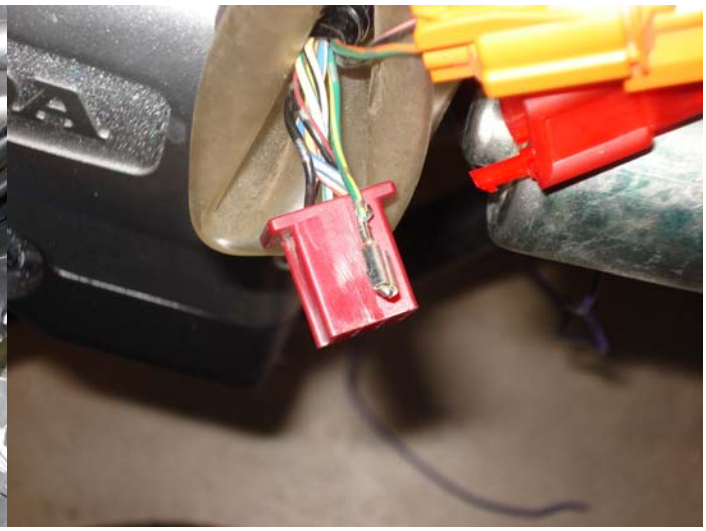
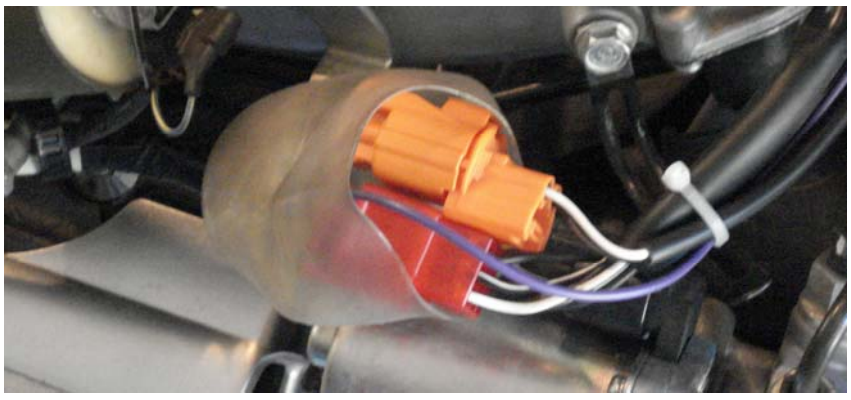
16. A check valve is installed on the Audiovox vacuum line. The diameters on the stems of the check valve were different than the vacuum hose, so an additional coupling and hose was added along with a dab of RTV silicone.


17. The control cable is connected to the bracket, and then connected to the lever via the chain. Shrink tubing is added over the coupling between the ball at the end of the cable and the chain.

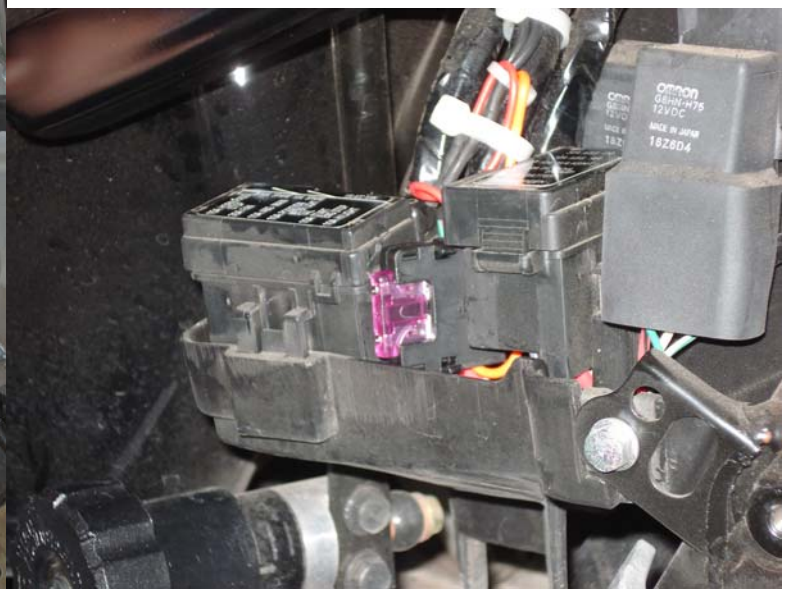


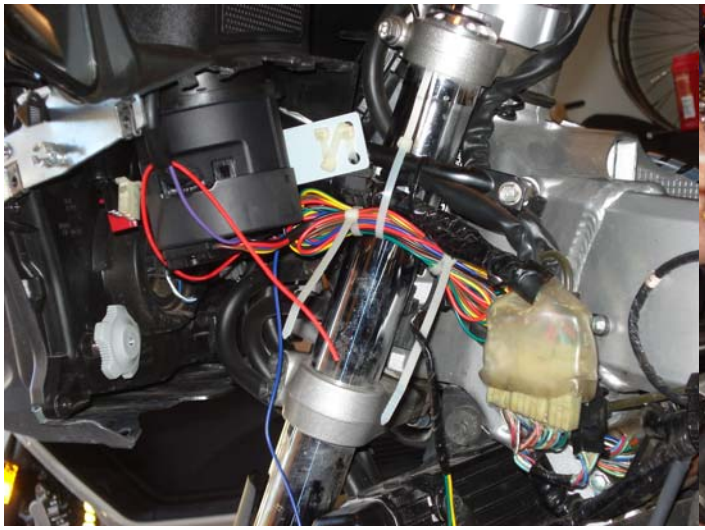


18. The Violet wire from the Audiovox cruise control is connected the Green/Yellow wire from the Red connector on the front right side of the bike. The Green/Yellow wire is on the rear (left) half of the Red connector. The wire was extracted from the connector and the Violet wire was soldered to it, and covered with shrink wrap.

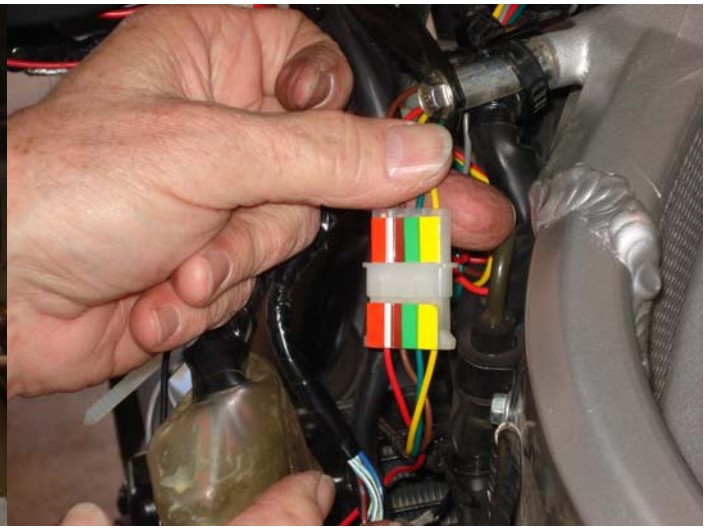




19. Power wires on the Audiovox cruise control were wired up. Power was tapped from the Quartet harness, with the in-line fuse routed to the proximity of the main fuse box for easy access. Slack in the wires was taken up with tie wraps. The pins were placed in the appropriate color coded connector housing.

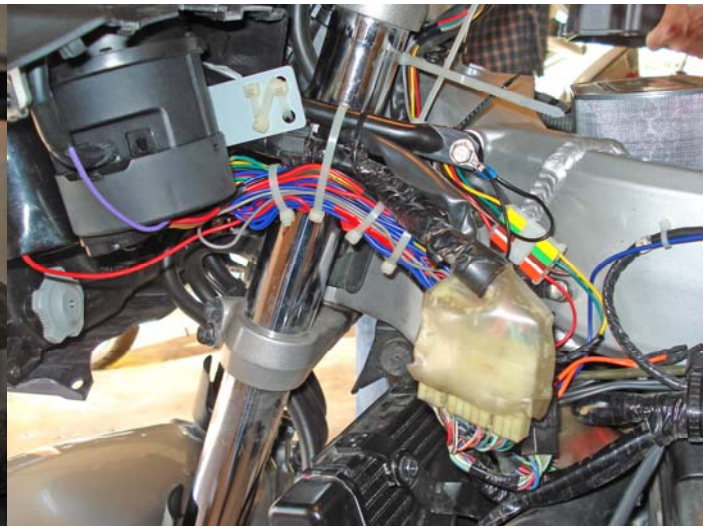




20. The control head was mounted on the handlebars, with the wires routed down to the mating connector. The control head wires were placed in the connector housing, and the connectors were mated.



21. The blue wire was connected to the ignition coil, and the ground wires were connected to the frame.



22. The two bottom hoses, the bottom portion of the air box, snorkels, and air filter is re-installed. During this time, it's a good idea to dry fit the box and operate the throttle to ensure there are no interference issues. When you dry fit the air box, be sure to route the crankcase breather hose back thru the slot on the bottom side of the air box.

Take note to place the round snorkel bases back to the original positions, as well as the snorkels.

Place anti-seize compound on the threads of the bottom air box screws.




23. The top portion of the air box, IAT sensor cable, and tank ground cable is re-installed. The tank is re-installed.

24. The bike is fired up & taken for a test ride. Steve came back with a big grin and two thumbs up!