

ROSSIER ENGINEERING 1340 Okray Avenue, Plover, WI 54467 715-341-9919 info@rossiereng.com

## Can Am DS450 Pink Wire Mod

The Can Am DS450 has a built-in auxiliary fuel/timing map. This was put in place before the production units went on sale to provide the owners with the ability to make modifications to the engine without suffering from excessive leanness, which is a sure recipe for disaster. Whenever any modest performance mods are made, such as removing the air box lid, adding a freer breathing air filter set-up, or installing a performance exhaust system, this wire must be cut. Our dyno testing of the DS450 found that with the stock map, the engine went scary lean as soon as we bumped up the power output.

We used a very expensive custom controller we developed to allow us to modify the fuel and timing maps to stay in perfect tune with the enhanced engine output. We sent BRP a copy of our final map that was tuned for our free-air kit and full exhaust system. This added 6 horsepower and required significantly more fuel. When the production unit came out we found that the auxiliary map that was installed into the stock ECU was very close to what we had sent them. Their version was slightly richer than ours and had slightly more ignition timing than ours, but for all intents and purposes the map was nearly identical. This bodes well for customers installing our air and pipe kits as this saves the cost of an expensive aftermarket controller and the dyno testing it would take to dial it all in.

This is not a perfect world we live in and this map is no exception. While nearly perfect for our air kit/pipe combo, it is not perfect for applications that you will still want to use it for. As an example, if you only remove the air box lid you would be slightly leaner than optimum, but not lean enough for the richer map to be ideal. The solution would be to cut the wire and live with the slightly rich condition to assure the safe operation of your engine. Add a free breathing air filter and adapter like ours and you will find the fuel mixture much closer to ideal. Add the pipe and you will be right on the money. Add wild cams, porting, or mongo compression ratios and you might have moved out of the ballpark of the wire mod. To be safe, a controller may be called for at this point, although we have sold a number of 14:1 pistons that seem to work well with just the wire mod.

## Activating the auxiliary map

First you must remove the plastic covering the fuel tank. You will find a large bundle of wires running from lower rear to upper front along the left side (see photo). In the area of your left knee (if you were sitting on the quad), you will notice a small loop of pink wire with a black trace coming out of the bundle. That has been conveniently placed there so you can easily access it. Simply cut the wire, seal the ends, reinstall the plastic and you are ready to go. Should you return the bike to stock at a later date, simply splice the cut back together and you will return to the original program.

