

Ignition Tips

I tried the CB Performance Black Box 2013 because it is a good idea. However, it does not work right and You will never be able to get it to work well. I guarantee it. I am writing this because after spending about 40 or more hours of time and close to \$500 trying to make it work, its just not a good product.

I needed to write this to offset some small amount of my loss trying to use the product by ensuring my Mopar brethren keeps these Dollars and hours in the bank to be used for something worthwhile.

Main problem is that the Black box for some reason cannot read the RPM's smoothly. There is a readout on the laptop. Above like 1800 or 1900 rpms the signal becomes erratic causing the rpms to jump from like anywhere above 2,000 to like 18,000 due to noise. This changes the rpm dependant timing electrically and causes all kinds of backfire and terrible engine performance. It worked better for the first 3 or 4 miles, but then never worked good again even with the addition of a MSD Magnetic signal Stabilizer.

So if You have a Mopar and You are having trouble with the ignition and want to put in a solid system, this is what I would recommend:

#1: Jeg's has an American made ECU called the HiREV 7500 for about \$100 delivered. On the Jegs website, there are about 3 or 4 little tests you can do with a multimeter to make sure the voltages are correct. Do those.

(For example, the instructions said I needed 7-9 volts between the coil + and - when key is in Run position. I only had 5.30 volts, so I added a second ballast resistor in parallel with the existing ballast resistor stop resistor, and it brought the coil to about 7.5 volts. Ran extremely well.

#2: Coil: Get a stock replacement or just check your stock or aftermarket unit to make sure it has the resistance specified in the ok instructions with the Jegs HIREV 7500 ECU. I ended up using my stock coil because the MSD blaster 2 was out of the specified range of resistance between the + and - of the coil.

#3: if you have a electronic ignition distributor of the OEM type, you can try it. Make sure the gap is between about 0.008inch and 0.0010inch.

It might take 10 tries or more to get the reluctor gap just right. You might try tightening down the screw with a 0.016inch feeler gauge in the gap, then take that feeler gauge out and measure where the gap really settled.

It needs to really settle at 0.008 to 0.0010.

#4: You should order one of the Limiter Disks you've heard of. Put it to like 18 and then put your initial timing to 18 and try that. (This is while there is no vacuum advance connected)

Get the Car running good at like 14-18 initial with like 16 or 18 from the mechanical advance in the distributor for a total of around 34.

I finally got my car to run very well at 18 initial and 18 mechanical. And You should get your car to run real well in this manner as well.

Then, you can include the vacuum canister in the loop if you wish. There is no easier way to do it that this, just like all the old timers on FABO say.

If you can't do that, then You either need annewn\$100 distributor from your local parts store, a new HiREV ECU from Jegs, a new stock ignition coil, or your ballast resistor is burned out, or you are not getting 12 volts to the Ignition Coil +, or your ECU is not connected well to the - terminal of the battery.

It's not a bad system. (Beware of damaging the vacuum advance mechanism in the distributor which is a little flimsy). I'm just saying you don't need any other ignition system to get your Mopar engine to run great. If it isn't running great, something is wrong with one of these basic 4 or 5 components, all of which can be readily purchased new without breaking the bank.

In no case should you try to implement a CB performance Black box 2013. Even if you are an electronics wizard and think you can make it work good, it's just not a reliable device and in fact you probably won't be able to get it to work well enough to drive 10 miles or above 2500rpms. Even if You want to be the one that does it right and gets that sick tuning map capability for just \$200- it's a trick. If you simply must invest \$200 in your Mopar ignition right now, get a new OEM Electronic Distributor and a Jeg's HIREV 7500 ECU.

Unrelated note. All that is needed to upgrade is a HEI module [\$25? or \$5 from the junk yard] & a 0.5 ohm bal res. If upgrading to an E core coil for more spark, res is not needed. Wiring diagram is on the net, very easy to do.

Another unrelated fact

And a common mistake is to run the Numbers 5 and 7 wires too close to each other, causing induction crossfires, and then the engine gets two fires on those two plugs but 90 degrees apart. Not good if one of them is on the intake stroke.
Good luck

Another

Does it have to do with only four pin modules available now?

Yes. That is what I was getting at.

If RhinoDart's car has the original ECU, then it needs 5 ohm resistor and all 5 pins connected properly.

If the car has a newer ECU, then that extra power connection can be eliminated and just the 0.5 ohm resistor is needed like your diagram shows.

Separate note:

On our Mopar ignition switches there are 3 separate terminals for starting and running.

IGN 1 is the run cir

IGN 2 is the ballast bypass cir

START is the cir that triggered the starter relay.

IGN 1 feed 12v to the ballast resister when the engine is running.

IGN 2 feeds 12v to the coil side of the ballast resister during starting

START feeds 12v to the starter relay

If you remove the ballast resister IGN 1 and IGN 2 need to be tied together.

For a test.

Disconnect the yellow (on a 67) wire from the starter relay.

With the key in the run position you should have 12v to the ignition switch side of the ballast resister or the wire that was attached to the ballast resister.

With the key in the start position you should have 12v at the coil side of the ballast resister or the wire that was on the coil side of the ballast resister.

The yellow START wire should not be used for anything else that the starter relay.

Hope this makes sense.

Just trying to rule out incorrect wiring.