

BoostedNW Honda OBD1 Standalone/PnP ECU

FIRST START

- 1) Gather info for things such as injectors(dead times), Map sensor(scalar if not STOCK), size of engine in (L).
- 2) Get familiar with Tuner Studio, load it, create a project, connect to your ecu. You can do this while it's not in the car, Just open the top cover, plug into usb type-C to PC and connect.
- 3) Go to "BASE ENGINE> Base Engine and set number of cylinders and displacement in L. Put engine make, engine code, vehicle name (will make it easier to identify if sharing online. Set if forced induction(true/false).
- 4) Go to "FUEL>Injection Configuration" and set your injector flow rate and injector reference (fuel base pressure) and then set the injector dead times per your injector specs
- 5) You can set your MAP sensor in "SENSORS> MAP Sensor" if not stock. If stock just leave it DENSO183 for "Map Type"
- 6) Calibrate your TPS. Go to SENSORS>Accelerator Pedal>(with the pedal not pressed)PRESS GRAB UP. Then with the pedal pressed all the way to the floor, Press GRAB DOWN. That should have changed the values to the exact voltage values for 0% throttle, and 100% throttle.

Now you are ready to have the ecu in the car, and ready to start cranking. We don't want it to start quite yet so follow the next steps. You will need your timing light hooked up and ready

- 7) Go to FUEL> Injection Configuration and set "ENABLED" to FALSE. This will disable your injectors when cranking.
- 8) Go to IGNITION> Ignition Settings and set "TIMING MODE" to FIXED, and for most hondas set to 16 degrees for the normal 16 degree "Base timing". If your engine differs please set it to the proper base timing for your engine.
- 9) Then go to BASE ENGINE> TRIGGER and you will be adjusting the "TRIGGER ANGLE ADVANCE (Deg btdc) to something that will be specific to your engine/sensors and will make the ECU timing "MATCH" your physical mechanical timing of your engine.
<https://github.com/rusefi/rusefi/wiki/How-Do-I-Set-My-Trigger-Offset>
- 10) Now turn the key over while watching the timing light, say if your engine is 16 degrees base timing look for the 16 degree mark on the crank pulley (NOT THE TDC MARK) and watch for it to line up with the marks on the engine side cover. If it does not line up while cranking then you MUST adjust the "TRIGGER ANGLE OFFSET" one way or another, over and over, until you move the mark until it lines up perfectly! If your 16 degree mark lines up with the mark on the side cover your TRIGGER ANGLE OFFSET is set properly and now your engine timing matches your ECU timing.
- 11) With all that set and done, now you can go back and enable your fuel injectors again and should be able to start the vehicle

Once your car is started you can utilize the wideband and make sure your AFR's are in the proper region

If you need assistance please feel free to contact us on Facebook, Instagram, Our website, Email or by phone in that order(we don't have people sitting by phones all day, but will get back to you asap on any contact method).