



T1 Race Development Remote Mount IAC Kit

This kit is intended for use in applications where a remote mounted idle air control motor is necessary, and an ecu with the ability to control a Honda idle air control motor is being used. These instructions will specifically go over the ecu setup for an AEM EMS, though it can also be used with other systems such as Motec or Haltech.

Parts List

- 1 - IAC mounting plate
- 2 - 8mm IAC mounting bolts
- 2 - 3/8" NPT to 3/8" barb fittings
- 1 - 6mm nylock nut
- 1 - 6mm washer
- 1 - wire harness
- 1 - used Honda IAC motor



Installation Instructions for Scion TC

1. Assemble IAC mount assembly. Bolt IAC motor to mount using supplied 8mm bolts. There are dual bolt patterns on the mount to accept 2 different style Honda IAC motors, use the bolt holes that match up with your IAC motor.
2. Thread brass fittings into the rear of the mount. These are NPT (pipe thread) fittings. NPT fittings seal with Teflon tape and they are tapered threads, tighten them until they are tight and that's it, they will not thread all the way in like a normal bolt. Wrap Teflon tape around the threads on the brass fitting before installation. Teflon tape can be purchased at any hardware store or plumbing store. (note, Teflon tape not installed in this picture)

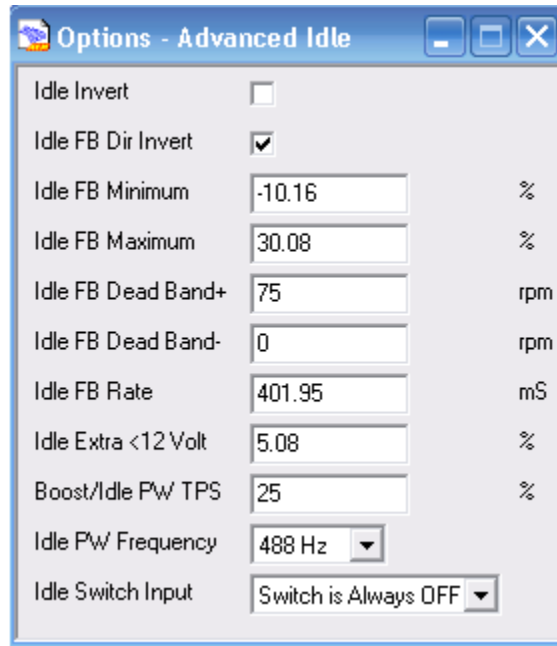


- 3. The brass fittings are the inlet and outlet for the IAC. The inlet has a screen on the IAC and will generally be fine left open. If left open, you will hear a hissing noise coming from the IAC when it's bypassing air. If you want to eliminate that, you can run the inlet of the IAC to a 3/8" NPT barb fitting on the charge pipe before the throttle body. The outlet of the IAC needs to be tee'd into the 3/8" vacuum line on the pass side corner of the intake manifold. It is very important that there is never anything smaller than a 3/8" vacuum line used, as it will not allow the motor to bypass the correct amount of air. Looking at the picture above, the fitting on the left is the inlet and the fitting on the right is the outlet. The small black vacuum fitting in this picture is where the outlet of the IAC needs to be tee'd into.**



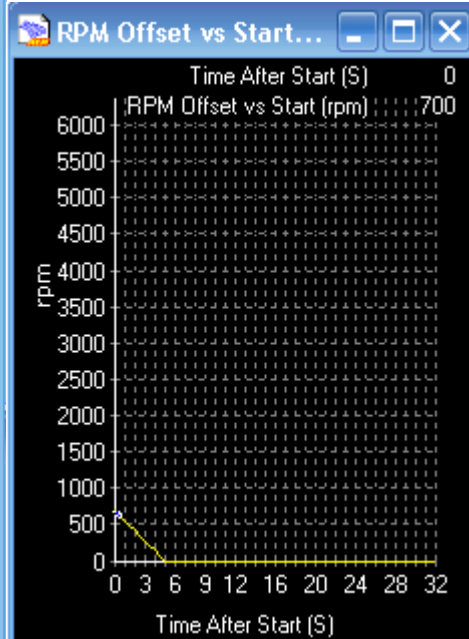
- 4. Plug the wire harness into the IAC and run the wires inside to the ecu area. There is a black and a white wire on the harness, since this is a solenoid, polarity does not matter. One wire will go to a switched 12v power source, and one to the PW1 output on the AEM.**

5. Next is configuring the AEM software for the Honda IAC. Open the EMS software and go to Idle // Advanced Idle // T Advanced Idle. This will open up the advanced idle template. You will need to configure this screen to match the screen on the Honda 1050 base calibration. Here are the screen shots of how it needs to be.



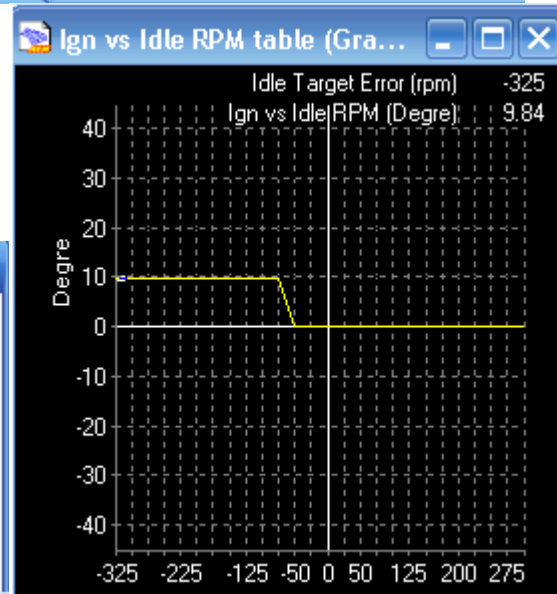
Options - Setup

- Idle Stepper Clock
- Idle Low Amp Step
- Idle 1/2 Stepper
- Idle 3/4 Stepper
- Idle 7/8 Stepper/DC
- Idle 5/6 Stepper/DC
- Idle 1/2 Max Curren Amp
- Idle 3/4 Max Curren Amp
- Idle 5/6 Max Curren Amp
- Idle 7/8 Max Curren Amp
- Idle Step #1/#2
- Idle Step #3/#4
- Idle Step #5/#6
- Idle Step #7/#8
- Idle Max Step
- Idle Brown Out Trig Volts

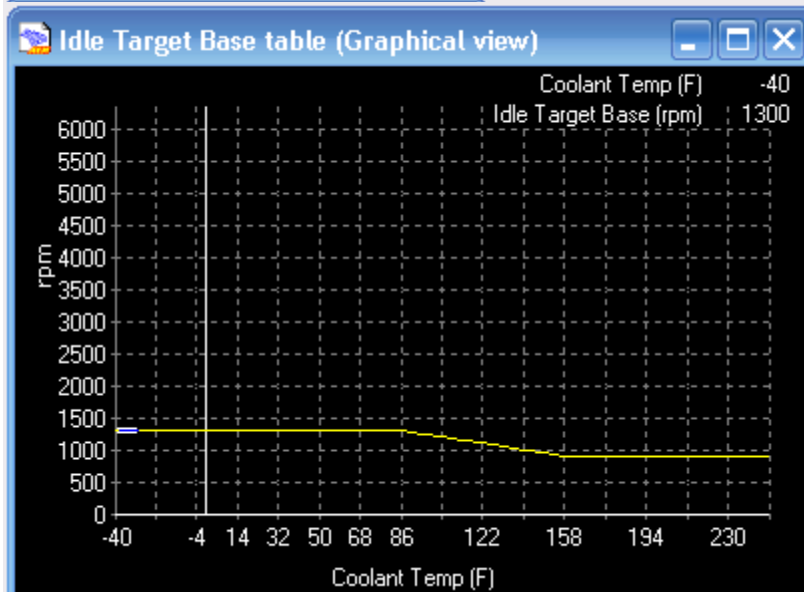
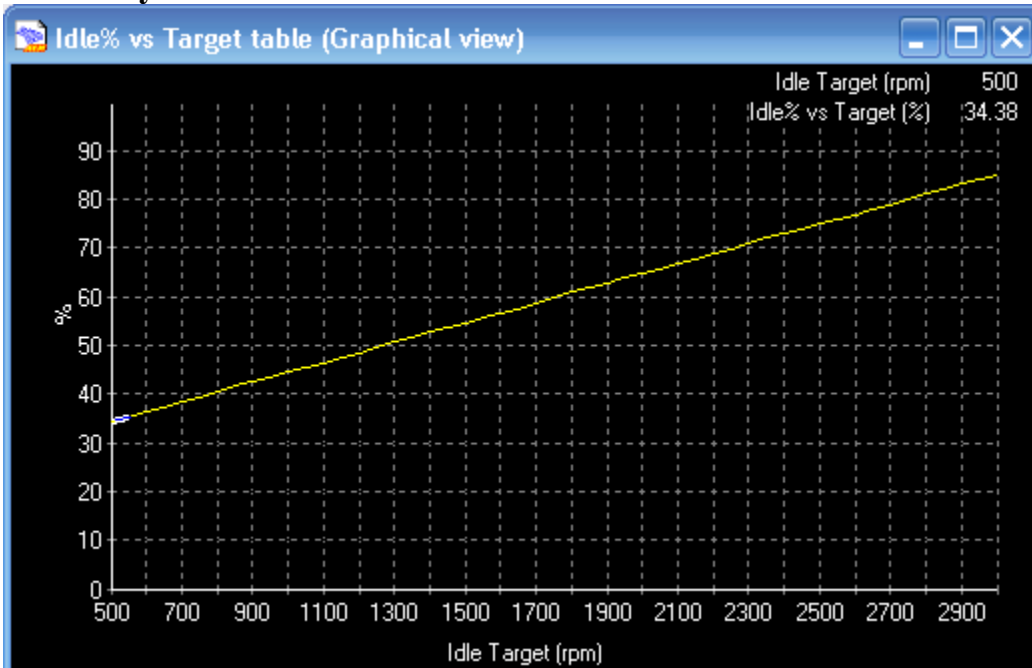


Options - Park/R...

- Idle Park Key Off
- Idle RS At Key Off
- Idle RS At Key On
- Idle RS Step Rate mS
- Idle Motor Rate mS
- Idle Park Target %



6. Next you need to setup the basic idle parameters. Click the tach icon across the top of the screen in the EMS. This will pull up these windows. These maps will give you a starting point, your tuner will have to dial these in to your specific application. Now that you have control over the IAC motor, you can make it do what you want.





7. That should conclude the installation. One thing to note, there are water lines on the bottom of the IAC motor. These are to prevent the IAC motor from freezing in cold climates. If you live in an area where this could be an issue, you should run water lines through the IAC, doesn't matter which way is in or out, just find a water line that size and run it through the IAC.

If you have any questions about the installation or setup of the IAC, please feel free to call or email us, we're happy to help.

Thanks

T1 Race Development Inc.

Tony@T1racedevelopment.com

214-607-9022