COBB TUNING ACCESSPORT

Calibration Notes for 2006-2009 Honda Civic Si

**AccessPORT* Calibration Stage1 v103



Compatible with AccessPORT

Calibration Name: <u>Stage1 v103</u> Latest Calibration Rev: 1.03

Calibration and Calibration Notes Updated: 10/30/09

Description: Stage1 v103 is intended for a totally stock 2006-2009 USDM/CDM Honda Civic Si vehicles with STOCK INTAKE SYSTEM ONLY. Ignition advance, fueling, camshaft phasing, and VTEC window has been optimized. VTEC is set to 5600 RPM and the Rev Limiter is set to 8500 RPM. Minimum 91 Octane fuel.



Hardware Requirements: Stock vehicle with a STOCK INTAKE SYSTEM and STOCK FUEL INJECTORS ONLY. <u>Caution</u>: By-passing the coolant lines from your throttle body assembly will likely cause fuel trims to be excessive (+8 to +11%), more information can be found <u>here</u>.



Fuel Requirement: Minimum 91 octane.



Power Output: +5% HP / +4.4% lb-ft. Results may vary.

Revision Notes:

- 1.03 Removed variable camshaft phasing (VTC) upper limit, improved VTC transitions at higher loads, and revised VTC setting in High VTEC.
- 1.02 Improved variable camshaft phasing for smoother high VTEC engagement, optimized VTEC window functionality, and improved throttle mapping.
- 1.01 2007-2009 Civic Si calibrations updated to effectively remove speed limiter. The speed limiter does not exist on the 2006 Civic Si.
- 1.00 Original calibration. Modifications to ignition advance, fueling, variable camshaft phasing, VTEC and base programming logic were made to optimize performance and fuel economy.

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We have noticed that comparing the below dyno graphs to other dyno graphs that we have recorded on the same chassis dyno is difficult to do. Several factors must be taken into account including gearing (both the ratio of the gear these tests were performed in and the final drive ratio), aerodynamics, testing conditions, parasitic drivetrain losses, effectiveness of cooling fans, etc. We have published these graphs because we want to do what we can to educate our end users. Several qualitative improvements have been made to the calibration for this vehicle which cannot be graphically represented. Please take these dyno graphs for what they are, a graphical representation of measured torque and calculated horsepower across the below RPM range during a wide open throttle pull in 4th gear. We hope that you enjoy the improvements we have made to the calibration for this vehicle.

Much of the power output of these engines depends on what hardware has been installed on the vehicle. Some intake and exhaust systems perform better than others, thus allowing the engine to make greater horsepower on the same ECU mapping. We have optimized ignition advance, fueling, camshaft phasing, MAF calibrations, and VTEC windows for specific hardware combination, but the power output of a map may be greater when higher quality, properly designed hardware is installed on the vehicle. A Stagel map, designed for a totally stock vehicle, may not make any additional power due to the restriction of the stock intake and exhaust systems. If a vehicle is in proper mechanical order and has been maintained properly, the Stagel map may simply improve the driving quality and improve fuel economy without any increase in power output.

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Additional Notes:

For use with a stock or very mildly modified normally aspirated 2006-2009 USDM/CDM Honda Civic Si only. Additional modifications such an drop-in replacement filter, underdrive pulley, and cat-back exhaust system are still within the acceptable parameters of this calibration. YOU MUST USE THE FACTORY INTAKE SYSTEM ONLY. NO OTHER AFTER MARKET INTAKES ARE CERTIFIED COMPATIBLE WITH THIS CALIBRATION. THE INSTALLATION OF ANY OTHER HARDWARE SUCH AS HIGH-FLOW CATALYSTS, STRAIGHT PIPES, HEADERS OR FULL CATLESS EXHAUST MAY ALLOW THE VEHICLE TO RUN LEANER THAN DESIRED, WHICH CAN CAUSE ENGINE DAMAGE. Running ANY after market intake system has the ability to compromise the performance of our calibration and possibly compromise the engine. The stock intake system promotes a laminar air flow across the MAF sensor. Best if used with a minimum of 91 octane. If any detonation is present even when using 91 octane, try using octane booster. Rev Limit set at 8500 RPM.



Measured Wheel Torque = blue, calculated wheel HP = red, measured relative pressure (boost) = green, grey = measured AFR

Dyno Graph = Stage1+AEMSRI v100 with A/F Tracing

The above dyno graph demonstrates the fuel curve that should be measured from a sealed exhaust stream. The RPM reference can be found on the X-axis in pink numbers; the A/F Ratio reference can be found on the Y-axis in black numbers. If your fuel curve is not within +/- .5 A/F from this calibration, while running the Stage1 v103 calibration on your USDM/CDM 2006-2009 Honda Civic Si, then you may need to have the vehicle analyzed by a professional tuning facility. Hardware such as intake systems, headers, and catless race pipes can skew the MAF sensor signal and/or create a dangerously lean fuel curve. This calibration has been established to run with the **stock intake system only**.

CEL Codes Defeated [WHEN USING AS REFLASH MAP] (** means new to latest revision):