

# COBB™ TUNING

## ACCESSPORT™

Calibration Notes for 2006-2009 Honda Civic Si  
AccessPORT Calibration Stage2+AEM2CAI v103



### COMPATIBLE

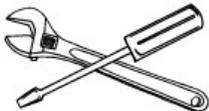
#### Compatible with AccessPORT

Calibration Name: Stage2+AEM2CAI v103

Latest Calibration Rev: 1.03

**Calibration and Calibration Notes Updated: 10/30/09**

**Description:** Stage2+AEM2CAI v103 is intended for 2006-2009 USDM/CDM Honda Civic Si vehicles with a AEM 2-PIECE COLD-AIR INTAKE (CAI) SYSTEM W/ AIR STRAIGHTENERS ONLY, headers, and high-flow exhaust. Ignition advance, fueling, camshaft phasing, and VTEC window has been optimized. VTEC is set to 4700 RPM and the Rev Limiter is set to 8500 RPM. Minimum 91 Octane fuel.



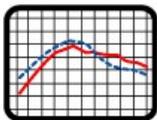
### HARDWARE

**Hardware Requirements:** Stock vehicle with a AEM 2-PIECE CAI SYSTEM W/ AIR STRAIGHTENERS, headers, and high-flow exhaust and STOCK FUEL INJECTORS ONLY. We've found that these vehicles performed inconsistently with a defouler present and the ECU also targets a slightly richer AFR under closed-loop conditions. This leads to inconsistent performance and worse fuel economy. It appears that all AP users will need to have the secondary O2 sensor located in the proper location of the exhaust stream in order for our OTS maps to perform properly and consistently. Caution: 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 [here](#).



### FUEL REQUIREMENTS

**Fuel Requirement:** Minimum 91 octane.



### POWER OUTPUT

**Power Output:** +14.6% HP / +10.5% 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 - high VTEC engagement set to 4700 RPM, improved throttle mapping, and defeated MIL code (see below).

**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.

**<<<<CRITICAL INFORMATION!!! CRITICAL INFORMATION!!! CRITICAL INFORMATION!!!>>>>**

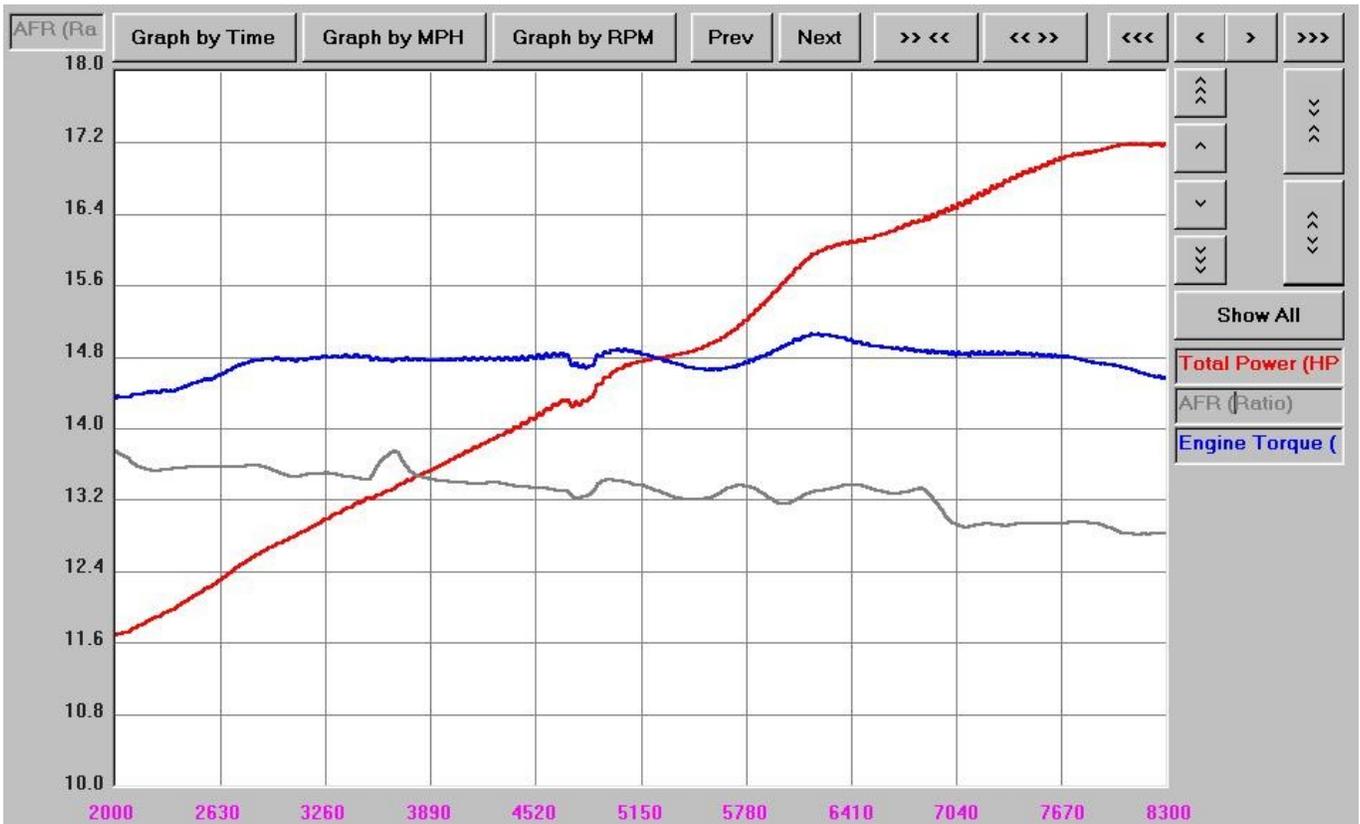
We have noticed that comparing the below dyno graphs to other dyno graphs that we have recorded on the same chassis dyno is difficult to do. Several factors must be taken into account including gearing (both the ratio of the gear these tests were performed in and the final drive ratio), aerodynamics, 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 4<sup>th</sup> 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.

**<<<<CRITICAL INFORMATION!!! CRITICAL INFORMATION!!! CRITICAL INFORMATION!!!>>>>**

**Additional Notes:**

For use with a modified normally aspirated 2006-2009 USDM/CDM Honda Civic Si with a AEM 2-PIECE CAI SYSTEM W/ AIR STRAIGHTENERS ONLY, headers, and high-flow exhaust. Additional modifications such as an underdrive pulley, high-flow catalysts, heat insulating intake manifold gasket, etc. are still within the acceptable parameters of this calibration. THIS MAP IS INTENDED TO BE USED WITH THE AEM 2-PIECE CAI SYSTEM W/ AIR STRAIGHTENERS ONLY. NO OTHER AFTER MARKET INTAKES ARE CERTIFIED COMPATIBLE WITH THIS CALIBRATION. Running ANY OTHER after market intake system has the ability to compromise the performance of our calibration and possibly compromise the engine. 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 = Stage2+AEM2CAI 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 Stage2+AEM2CAI 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 other intake systems, throttle body spacers, 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 **AEM 2-piece CAI system w/ air straighteners only.**

**CEL Codes Defeated [WHEN USING AS REFLASH MAP] (\*\* means new to latest revision):**  
P0420 - Catalyst System Efficiency Below Threshold