

# COBB™ TUNING

## ACCESSPORT™

Calibration Notes for 2008/2010 Mitsubishi EVO X GSR & MR/MRT  
2009 Mitsubishi EVO X World Market  
AccessPORT Calibration Stage2+AMS 91 v107



### COMPATIBLE

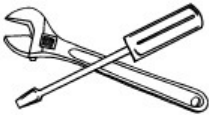
#### Compatible with AccessPORT

Calibration Name: Stage2+AMS 91 v107

Latest Calibration Rev: 1.07

Calibration and Map Notes Updated: 07/28/10

**Description:** Stage2+AMS 91 v107 - Intended for an otherwise stock 2008/2010 Mitsubishi EVO X GSR & MR/MRT and the 2009 Mitsubishi EVO X World Market vehicle with full turbo back exhaust system and an AMS intake system. 91 or 92 octane fuel. Boost Targets: ~24 psi peak boost pressure tapering down to ~18 psi by the 7500 RPM redline, +/- 0.8psi. TOP WASTEGATE SOLENOID RESTRICTOR PILL REMOVED.



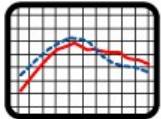
### HARDWARE

**Hardware Requirements:** Otherwise stock vehicle with a full turbo-back exhaust system and an AMS intake system. The addition of any other hardware may make the vehicle perform poorly.



### FUEL REQUIREMENTS

**Fuel Requirement:** 91 octane. If detonation is present, you should add octane booster or switch to a calibration designed for lower quality 91 octane fuel such as that found in California, Nevada, or Arizona, Stage2+AMS ACN91 v107.



### POWER OUTPUT

**Power Output:** +24% HP / +17% lb-ft. Results may vary.



### BOOST

**Boost Targets:** Boost Targets: ~23psi peak boost pressure tapering down to ~17psi by the 7500 RPM redline, +/- 0.8psi. TOP WASTEGATE SOLENOID RESTRICTOR PILL REMOVED - see [instructions](#) for details.

#### Revision Notes:

**1.07** - This calibration was updated to match the latest performance map revisions and includes corrections made to stabilize idle.

**1.06** - This calibration was updated to match the latest performance map revisions and includes Cranking Enrichment table settings from the newer 2010 models.

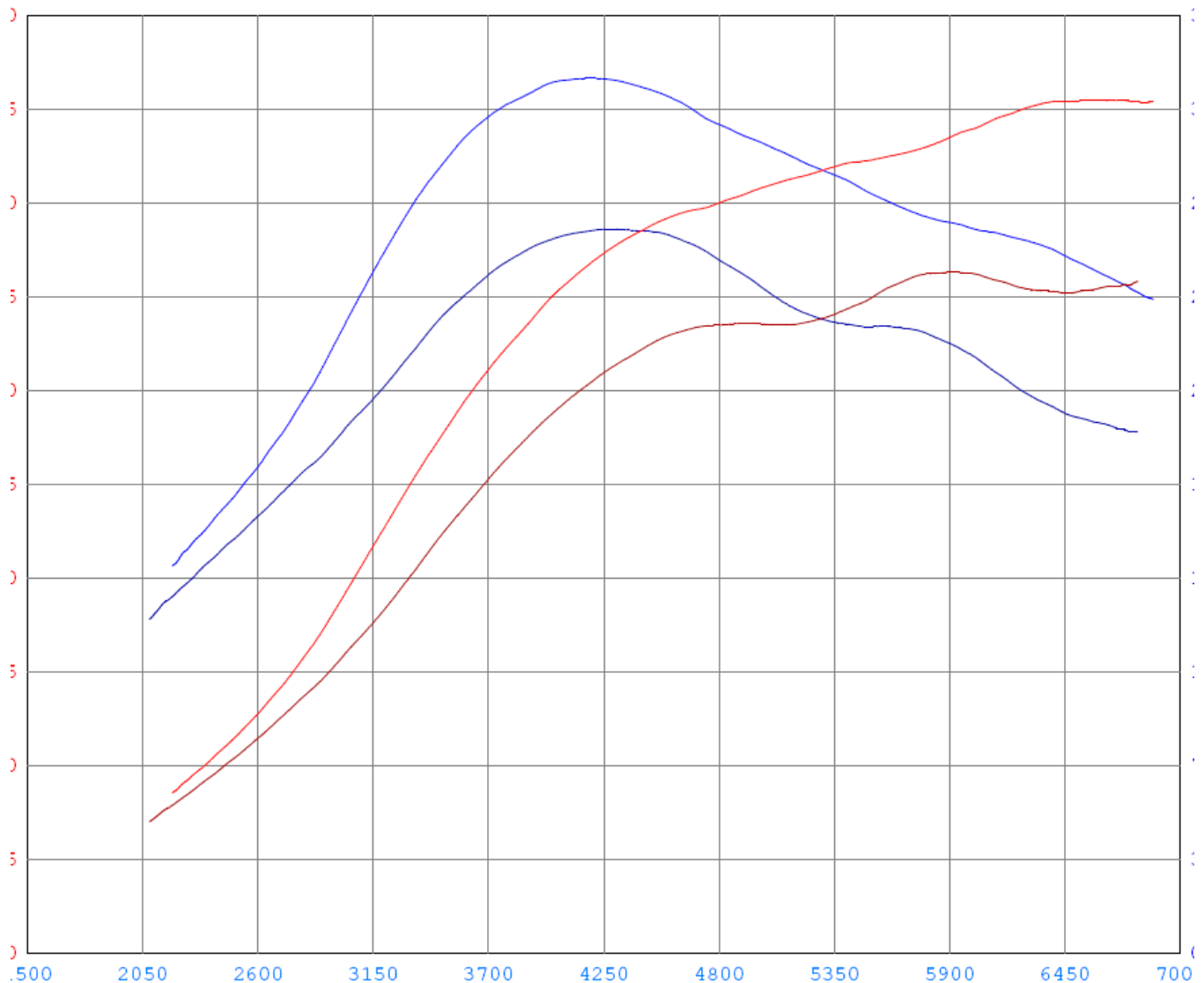
1.05 - This calibration was updated to match the latest performance map revisions.

1.04 - The Torque Monitor function has been defeated.

1.02 - Map was updated to allow AP to display relative pressure (boost) value appropriately.

1.01 - Map was updated to match latest performance maps. Defeated MIL, see below.

1.00 - Original Calibration. Adjusted boost, fuel, ignition, camshaft phasing and base programming logic to improve driving quality and performance. Revised Closed Loop management for improved driving quality. Smoothed out boost related values, improved boost response at lower RPM. Altered intake camshaft phasing parameters in an effort to improve low and midrange torque and boost response. Smoothed ignition advance mapping for low and mid RPM response.



Dyno Graph = Stage2+SF 93 GSRv100 vs. Stock on 2008/2010 EVO X GSR

As measured on COBB Tuning's in-house Mustang AWD Dyno

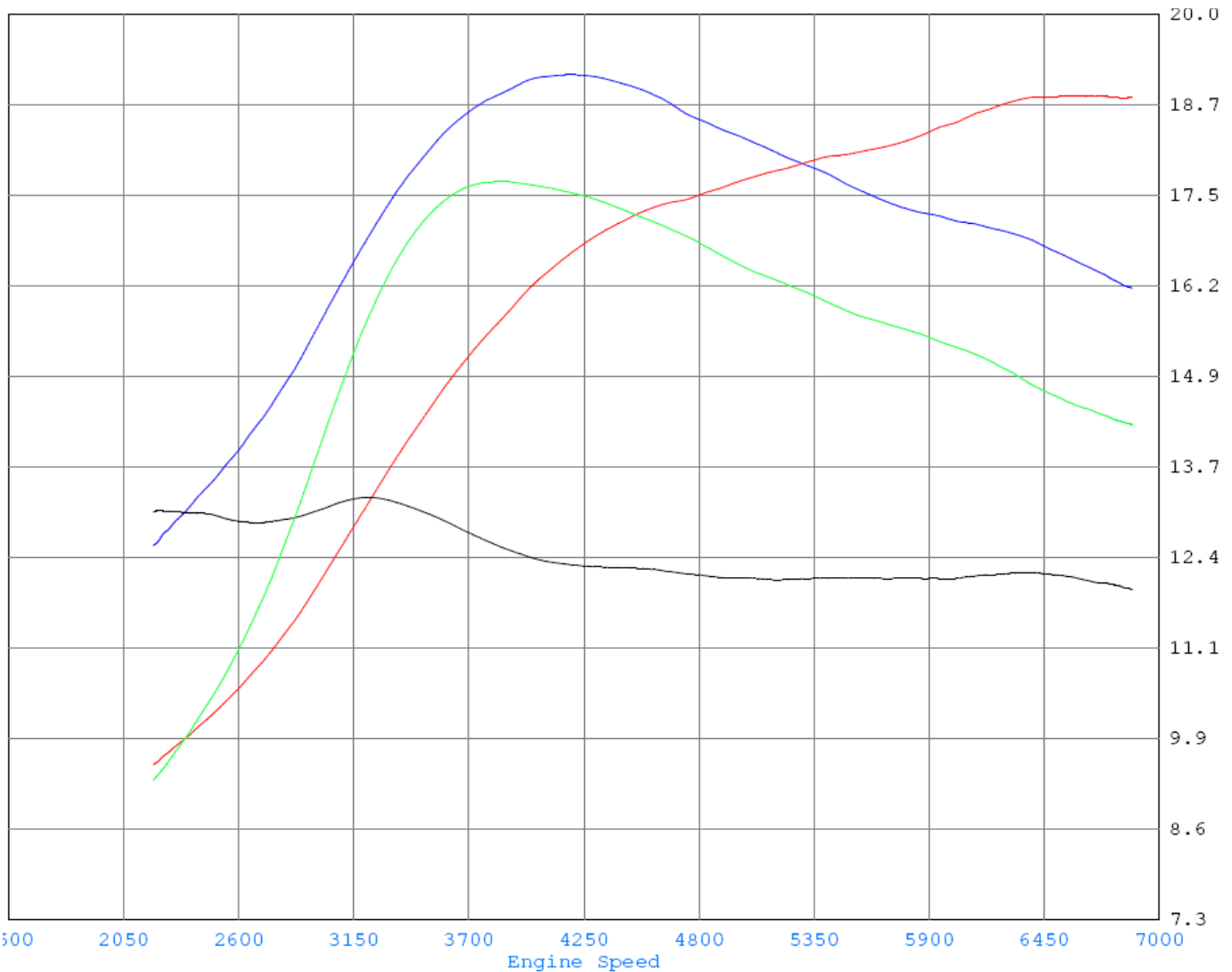
(All power figures are measured at the wheels, NOT corrected for drivetrain losses)

Our declaration of the obvious, we too have noticed that the power numbers we have recorded on our chassis dyno are different than the factory has rated for this vehicle and different from what other dyno facilities have measured. This is due to several factors, including the fact that these other facilities may use different

chassis dynamometers, testing standards, different testing scenarios such as gearing, aerodynamic simulations, parasitic drive train losses, etc. We have tried to make our testing as consistent as possible by testing all EVOs in 4<sup>th</sup> gear so that one can more easily compare dyno graphs from different year EVOs. 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 calibrations 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 an 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.

**Additional Notes:**

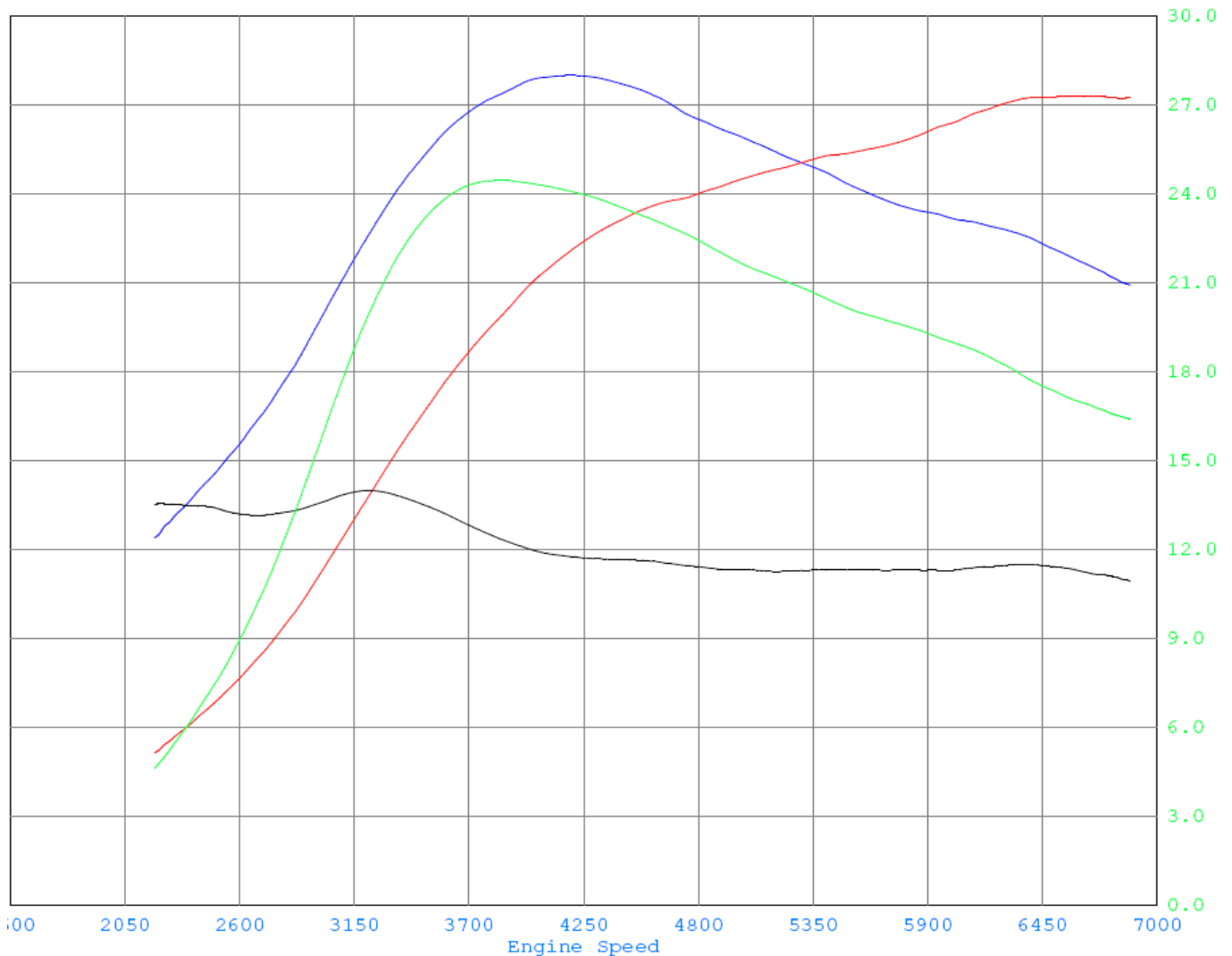
Additional modifications such as an under drive pulley or panel filter are still within the acceptable modifications for this calibration. YOU MUST USE THE AMS INTAKE SYSTEM, NO OTHER AFTER MARKET INTAKES ARE CERTIFIED COMPATIBLE WITH THIS CALIBRATION.



Measured Wheel Torque = blue, calculated wheel HP = red, measured relative pressure (boost) = green, grey = measured AFR  
**Dyno Graph = Stage2 93 GSRv100**

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 blue numbers; the A/F Ratio reference can be found on the Y-axis in black numbers. If your fuel curve is not within +/- .4 A/F from this calibration, while running the Stage2+AMS 91 v107 calibration on your 2008/2010 Mitsubishi EVO X GSR & MR/MRT and the 2009 Mitsubishi EVO X World Market, then you may need to have the vehicle analyzed by a

professional tuning facility. Hardware such as drop-in panel filters, intakes, & exhaust systems with catalytic converters can skew the MAF sensor signal and/or create a dangerously lean fuel curve. This calibration has been established to run with the **AMS intake system only**.



Measured Wheel Torque = blue, calculated wheel HP = red, measured relative pressure (boost) = green, grey = measured AFR  
**Dyno Graph = Stage2 93 GSRv100**

The above dyno graph demonstrates the relative pressure (boost) curve that should be measured from the intake manifold. The RPM reference can be found on the X-axis in blue numbers; the Relative Pressure (Boost) reference can be found on the Y-axis in green numbers. If your boost curve is not within +/- 0.8psi from this calibration, while running the Stage2+AMS 91 v107 calibration on your 2008/2010 Mitsubishi EVO X GSR & MR/MRT and the 2009 Mitsubishi EVO X World Market, then you may need to have the vehicle analyzed by a professional tuning facility. Target peak boost pressure is ~23psi +/- 0.8psi depending on the vehicle's hardware and testing conditions. Boost will likely taper to ~17psi by 7500 RPM redline to increase reliability & longevity. Boost cut at sea level is increased to ~26psi.

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

P0420 - Catalyst System Efficiency Below Threshold