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An Introduction to the AMS E-Flash with the Cobb AccessPort for R35 GTR

There are many important things to be aware of during the E-Flash process. Please read them carefully as failure to do so could result in engine damage and other costly repairs!

- If you have recently installed new performance parts on your vehicle, it is possible the car cannot be started unless an initial tuning file is loaded to the car's ECU first. If you are unsure which modifications would warrant this, please ask your account rep at AMS.
- Regardless of new performance parts, it is suggested that the vehicle not be driven in positive boost pressure (approximately 50% or more throttle), unless expressly requested to do so.
- The E-Flash process can be completed over the period of a few days. Unfortunately due to time constraints with other vehicles and customers, delays in sending updated maps, or replying to emails may occur.
- Generally speaking, you will not be put into a position where the vehicle is unsafe to drive or driving poorly. However, if you notice something out of the ordinary please bring it to our attention.
- Be sure your battery is in good working order. If the battery dies during the flashing process, it can potentially negatively impact the tuning process.

E-Flash Procedure:

1. Download and Install the Cobb Accessport Map Manager to your home computer.

Windows: <http://acesseecu.com/support/accessport/apmanager/APManagerSetup.exe>

Apple OSX: <http://acesseecu.com/support/accessport/apmanager/APManager.dmg>

2. If you have not updated your Accessport Firmware recently, please do so before starting the E-Flash. If you have just purchased your E-Flash and Cobb Accessport at the same time from us, it should have the most up to date firmware but we always suggest double checking. (NOTE: AMS uses the Alpha firmware available from Cobb. This is necessary to tune your vehicle!)



The above picture shows the options you must check off to update the firmware properly. Where it says “Use alternate update location”, make sure you check the box and enter this URL:

<http://www.accessecu.com/support/accessport/alpha/>

3. Load the AMS map to your engine ECU. (Note: If you received your map through email, you will need to upload it to the Accessport through your Accessport Map Manager first.)

<http://www.cobb tuning.com/AccessPORT-Support-s/40200.htm#/v/accessport/support-tutorials-installation>

(The installation instruction for this is BMW specific. Disregard the door closing procedure.)

4. Datalog vehicle.

Datalogging is a crucial step in ECU calibration when our tuner Chris Black cannot be in the same location as the vehicle. It is a somewhat time consuming and involved process, so if you do not feel up to it yourself, we suggest having the vehicle taken to one of our many supporting vendors to perform the datalogging on your behalf.

<http://www.cobb tuning.com/AccessPORT-Support-s/40200.htm#/v/accessport/data-logging>

When datalogging, the car will need to be driven in a certain manner in order for us to effectively interpret the data. This depends on the amount of modification done to the car.

- For all cars, the first datalog should be thirty (30) seconds of the car fully warmed up running at idle. This file, as well as all subsequent logs, can be sent to your AMS account rep's e-mail. (NOTE: If the vehicle cannot stay running, log the car starting up, or attempting to start up)
- For the second datalog, drive the car as you normally would WITHOUT going into positive boost pressure. Two (2) minutes of stop and go driving will suffice.

After these two logs, you may be able to move on to the next step (full throttle) while also still be doing idle and cruising logging. Do not attempt this log until your AMS contact asks for it.

When told to do so, we would need full throttle pulls from 2k to redline in 3rd or 4th gear to start.

We may ask for multiple gear pulls when wrapping up the tune, or if there is a specific intention of racing the car in a certain way.

For ALL logs, there are specific items which we must have logged to properly monitor the engine. You will need to manually set these items to record. Below is a list of these items which must be included in the datalogs sent to us.

A/F Corr. B1 (%)
 A/F Corr. B2 (%)
 Air Fuel B1 (new) (AFR)
 Air Fuel B2 (new) (AFR)
 Boost Left
 Boost Right
 Coolant Temp (F)
 Engine Oil Temp (F)
 Gear (Gear)
 Ign Advance ()
 Inj. Duty Cycle (%)
 Int. Cam Adv B1 ()
 Int. Cam Adv B2 ()
 Intake Air Temp (F)
 Knock Sums (raw) -----[CBA cars only] 2009-2011 usdm cars
 Dynamic Timing Advance -----[DBA cars only] 2012+ cars
 Maf V b1 -----
 Maf V b2 ----- only for running a non-speed density tune (usually stock or near stock cars)
 MAP (PSI)
 RPM (RPM)
 Theo. Pulse Width (ms)
 Throttle Pos. B1 (%)
 Vehicle Speed (mph)
 Wastegate Duty (%)

5. Repeat steps 3 & 4 until tuning is complete. On average 3-4 revisions are necessary to complete the tuning process.