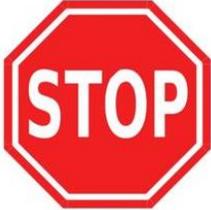


# Tune Equipment Setup

	<p><b><u>READ ALL INSTRUCTIONS BEFORE PROCEEDING!</u></b></p>
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## Process

1. Create data log
2. Read current tune file
3. Email tune file and data log to us
4. Flash the tune we send you
5. Repeat until finished

## WARNING

Flashing your ECU is dangerous and may result in a bricked ECU. If that ends up happening, we, nor the tuner, cannot be held responsible. If you end up in the situation, we can help but it will require shipping your ECU to us to get fixed. We cannot fix any BTR tuned ECUs if the BDM port has been modified.

## Precautions

Failure to follow these precautions may result in a bricked ECU

1. Be sure the laptop is fully charged AND plugged in before reading or writing the ECU. If the laptop loses power at any point during a flash, you will brick your ECU.
2. Be sure you turn off all electronics on the car before reading or writing the ECU.
3. Be sure your car battery is fully charged before attempting to read or write the ECU. It's suggested that you drive the car and get it up to operating temperature before doing any data logging or flashing.

## Laptop Setup

Before starting, be sure the laptop is fully charged and that it's always plugged in when you are attempting to read or write the ECU.

### Login to Windows

**User:** 3point8 Performance

**Password:** 12345

Everything else is ready to go, please do not install or uninstall software, or change anything on the laptop.

## Data Logging Setup

1. Plug the Tactrix cable into the OBDII port on your car (under the dash)
2. Plug the Tactrix USB cable into your laptop
3. Open EvoScan.
4. Change the settings to match the following
  - a. **Device Setup** – OpenPort 2.0 (BaudRate and Timeout should change to 500000 and 1000 respectively by themselves)
  - b. **Select ECU** - CAN OBDII (The checkbox CAN 2006+ (EvoX) should get checked automatically)
5. **Diagnostic Trouble Code / Check Engine Light** – CAN OBDII EFI (ALL 2006+i.e. EvoX)

The screenshot shows the EvoScan v2.9.0100 software interface. The window title is "EvoScan v2.9.0100 - CAN/OBDII/MUTII/MUTIII/OBD1/ALDL/SSMI/SSMII DataLogger - www.evoscanner.com". The interface includes a menu bar (File, Logging, Alarms, Graphs & MapTracer, Gauges & Layouts, Reflash ECU, Video & GPS, WideBand (WDB), Hot Keys, Help) and a main workspace with several panels.

**Device Setup - Choose Cable:** BaudRate is set to 500000 and Timeout ms is set to 1000. The "OpenPort 2.0 (J2534/CAN/EvoX)" option is selected.

**Select ECU:** The dropdown menu is set to "CAN OBDII". The "CAN 2006+ (EvoX)" checkbox is checked.

**Items to Data Log:** A table with columns for Request, Function, Reading, and Units. The following items are checked for logging:

Request	Function	Reading	Units	
<input checked="" type="checkbox"/>	Control module voltage	8D	x	V
<input checked="" type="checkbox"/>	Engine RPM	11	x	rpm
<input checked="" type="checkbox"/>	Vehicle Speed	12	x	km/h
<input type="checkbox"/>	Engine Load	01	x	%
<input type="checkbox"/>	Absolute Throttle Position	16	x	%
<input type="checkbox"/>	Engine Coolant Temperature	02	x	degC
<input type="checkbox"/>	Short Term Fuel Trim	03	x	%
<input type="checkbox"/>	Short Term Fuel Trim 2	04	x	%
<input type="checkbox"/>	Long Term Fuel Trim	05	x	%
<input type="checkbox"/>	Long Term Fuel Trim 2	06	x	%
<input type="checkbox"/>	Short Term Fuel Trim Bank 1	07	x	%
<input type="checkbox"/>	Short Term Fuel Trim Bank 2	08	x	%
<input type="checkbox"/>	Short Term Fuel Trim Bank 3	09	x	%
<input type="checkbox"/>	Short Term Fuel Trim Bank 4	0A	x	%
<input type="checkbox"/>	Long Term Fuel Trim Bank 1	0B	x	%
<input type="checkbox"/>	Long Term Fuel Trim Bank 2	0C	x	%
<input type="checkbox"/>	Long Term Fuel Trim Bank 3	0D	x	%
<input type="checkbox"/>	Long Term Fuel Trim Bank 4	0E	x	%
<input type="checkbox"/>	Fuel Rail Pressure	0F	x	kPa
<input type="checkbox"/>	Intake Manifold Absolute Pressure	10	x	kPa

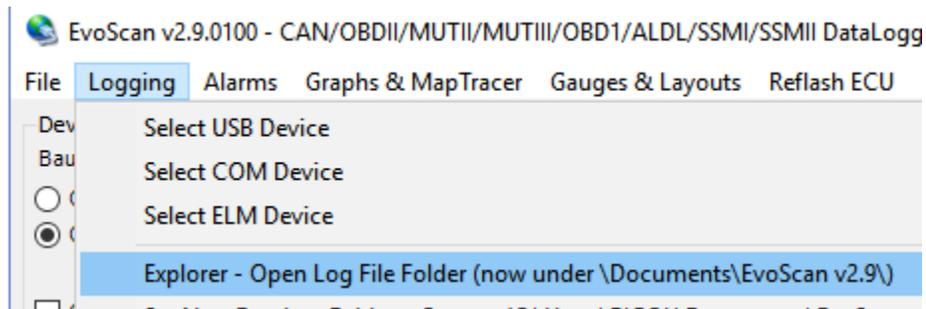
**Diagnostic Trouble Code / Check Engine Light:** The dropdown menu is set to "CAN OBDII EFI (ALL 2006+i.e. EvoX)".

## Data Logging

You will need to do a 3<sup>rd</sup> gear pull while data logging. You will need a long stretch of open road where you can reach speeds of 80mph safely.

1. Select the following PIDs from the list
  - **Engine RPM**
  - **Vehicle Speed**
  - **Engine Load**
  - **Absolute Throttle Position**
  - **Engine Coolant Temperature**
  - **Short Term Fuel Trim**
  - **Long term Fuel Trim**
  - **Ignition Advance**
  - **Intake Manifold Absolute Pressure**
2. Click the **“Start DataLogger”** button in EvoScan. The Event Log box will turn yellow. When it turns green, you can start to drive.
3. You will want to get the RPMs to 3000 RPM in 3<sup>rd</sup> gear and then do a WOT (Wide Open Throttle) pull until redline. For stock tunes, it will be 6800. If you’re already tuned, you can take it to the rev limiter set by the tuner, usually 7200.
4. After your pull, click on the **“Stop DataLogger”** button to stop logging. You will need to send the log you just created to us.

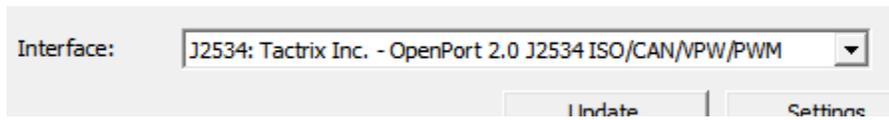
To find the log, open the **LOGS** folder on the desktop. You can also find it by click on the **“Logging”** menu and then click on **“Explorer – Open Log File Folder”**.



## Reading Stock Tune

You'll need to pull your current tune from the ECU, both for safe keeping and also to send us along with the data file. This is what the tuner will modify when doing your tune. You'll do this using PCMFlash.

1. Turn off anything electrical on the car (e.g. stereo, fans, lights)
2. Attach the Tactrix USB cable to the laptop.
3. Open PCMFlash. If it asks you to update, click **No**. Do not attempt to update PCMFlash!
4. Make sure the Interface is J2534: Tactrix

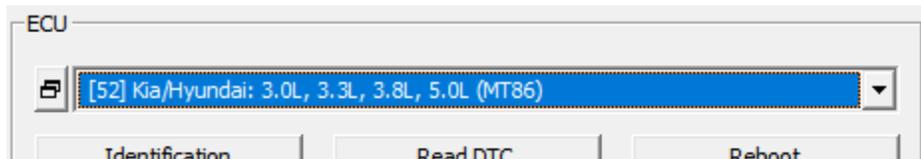


5. Make sure the Tactrix cable is plugged into the OBDII port on your car.
6. Turn the car to the "On" position, but **DO NOT START THE CAR!** Make sure you turn off any unnecessary electronics, like stereos, fans, AC, heater, lights etc.
7. Select the appropriate ECU type from the drop down list.

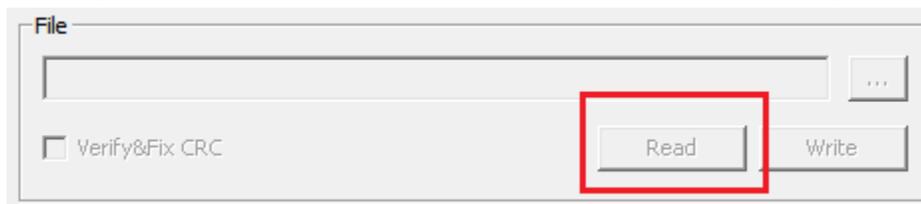
**3.8 = MT86**

**BK1 2.0T = SIM2K-141/142/341**

**BK2 2.0T = SIM2K-141.1**



8. Click on the "Identification" button. This will generate some info in the bottom window. This is a test to ensure you have a valid and working connection to the ECU. If it says failure, please contact us!
9. Click the "Read" button and follow the onscreen instructions. Save the .bin file somewhere safe.



## Send us the Data

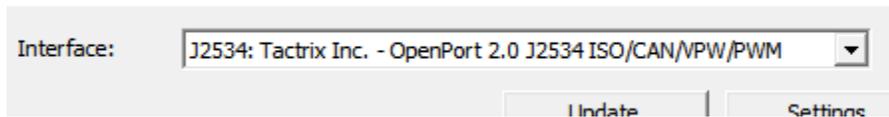
Send the .bin file from earlier and your newest data log to [3point8Performance@gmail.com](mailto:3point8Performance@gmail.com) with your name and your order number. Then wait for us to get back to you.

## Flashing the Tune

After we get your logs, we will send you back a tune file. You will need to use PCMFlash to flash the tune to your ECU.

1. Turn off anything electrical on the car (e.g. stereo, fans, lights)

2. Attach the Tactrix USB cable to the laptop.
3. Open PCMFlash. If it asks you to update, click **No**. Do not attempt to update PCMFlash!
4. Make sure the Interface is J2534: Tactrix



5. Make sure the Tactrix cable is plugged into the OBDII port on your car.
6. Turn the car to the "On" position, but **DO NOT START THE CAR!** Make sure you turn off any unnecessary electronics, like stereos, fans, AC, heater, lights etc.
7. Click on the "**Identification**" button. This will generate some info in the bottom window. This is a test to ensure you have a valid and working connection to the ECU. If it says failure, please contact us!
8. Click on the "... " button and locate the .bin file you got from us.
9. Click "Write" and follow the onscreen instructions.



## Repeat

Once your tune is flashed, you will need to start the car and let it sit for a few seconds. Make sure everything is running as expected. If everything is ok, go for a test drive. Start out easy and pay attention to anything that might be wrong. If everything is ok, then try a quick WOT pull and pay attention to anything being wrong.

If everything is ok, you'll need to do another data log and send it in. You will repeat the process of data logging and flashing a new tune until we're satisfied that everything is good to go.

## Send Back the Equipment

Now that you're done tuning your car, you need to send back the equipment that was sent to you. Once we get everything back, we will issue a refund on your deposit. Please check the website for the deposit refund policy.

**3point8 Performance**  
**13312 Ranchero Rd**  
**STE 18 PMB 333**  
**Oak Hills, CA 92344**

**It is highly recommended that you get insurance of at least \$300!**