Special PIDs for Torque Pro App Jaguar and Land Rover

Version 1.1
2nd February 2019

FOR FREE DISTRIBUTION / ENTHUSIAST INFORMATION

© COPYRIGHT, OLD JAGUAR GROUP
OLDJAGUAR.COM

Contents

1. Why do I want this?

It's typical of modern vehicles to be somewhat short of (accurate) information displayed to the driver. In older vehicles it was common to see voltmeters, oil-pressure gauges, oil-temperature gauges, and so on, also engine temperature gauges that provided an accurate display of the actual temperature, not just generic "ok" indicators. All of this information is available through the modern cars Engine Management System, but very little is actually passed on to the driver. Some enthusiasts wish to have this additional information available, so additional "gauges" are required.

2. What is Torque Pro App?

The Torque Pro App is an app for Android Devices developed by Ian Hawkins. It allows you to access the many sensors within your vehicles Engine Management System, as well as allow you to view and clear trouble codes. Torque Pro is the paid version of the App, which can be purchased via the Google Play Store. In order to use the App you will require an OBD2 interface to connect the Android Device to the vehicle.

Torque website: https://torque-bhp.com/
In Google Play Store: https://play.google.com/store/apps/details?id=org.prowl.torque

There are numerous online resources explaining how the App works, and how you can use it, a good place to start is the Torque Wiki page https://torque-bhp.com/wiki/Main_Page

3. What are PIDs?

OBD2 PIDs (On-board diagnostics Parameter IDs) are codes used to request data from a vehicle, used as a diagnostic tool. A great number of PIDs are standardised, legally mandated and considered generic, not manufacturer-specific. So any simple or generic scan tool can read this information from the vehicle.

Vehicle manufacturers (and OEMs providing hardware and software to those manufacturers) often have manufacturer-specific PIDs for additional sensors and measurements in these vehicles, typically these can only be read by the manufacturers own diagnostic tool. Some of these manufacturer-specific PIDs can actually be read by a generic tool, if the PIDs are known, in this case a custom list of PID data has been prepared to work with the Torque Pro App.

4. Which PIDs are added? and which vehicles are these PID's compatible with?

The additional PIDs provided include;
  - Engine Oil Temperature
  - Engine Oil Level
  - Engine Oil Volume (calculated)
  - Intake Air Temperature 2 (charge temperature post intercooler)
  - Transmission Fluid Temperature
  - Rear Differential Fluid Temperature (vehicles with E-Diff only)

These PIDs are intended for and have been tested on;
  - AJ133 5.0L V8 naturally aspirated
  - AJ133S 5.0L V8 supercharged
  - AJ126S 3.0L V6 supercharged
  - Both Denso and Bosch PCM's

These PIDs should also work with;
  - AJD-V6 3.0L TT V6 diesel
  - AJD-V8 4.4L TT V8 diesel

Other JLR engines with electronic oil level sensor could also work, but are untested at the time of publication.

Should be working with all post-2010MY Jaguar and Land Rover vehicles without a dipstick; the ones where you have to check the oil level in the instrument cluster.
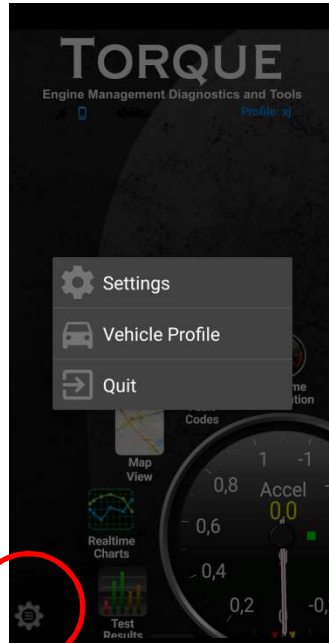

5. Where to get the custom PID parameter file?

Download the .csv file here ➔ https://www.dropbox.com/s/kmdtvb80g53ybe8/x351_x150_pids.csv?dl=0
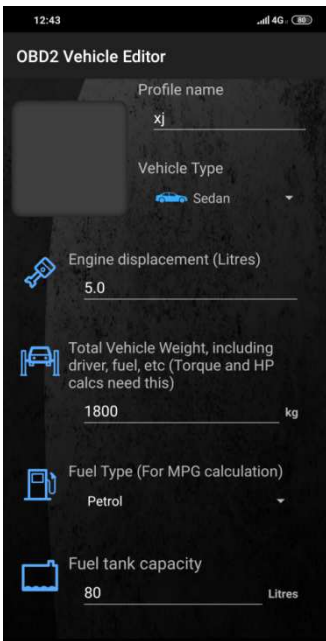
If you are unable to download email us info@oldjaguar.com requesting the file.

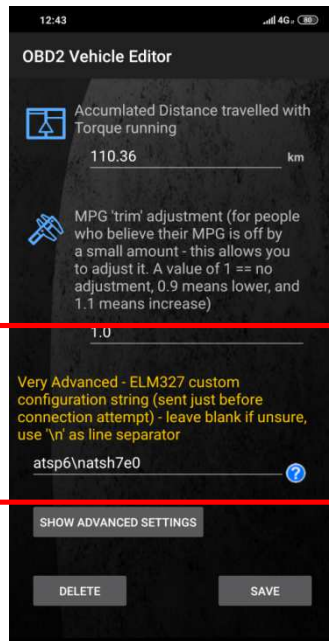**6. How to setup / install the custom PID parameter file?**

1. Install and setup the Torque Pro App on your Android Device

2. Using any file manager application, transfer the .csv file into the ".torque/extendedpids" folder on the a device (this folder may be hidden, check the file manager for a setting to show hidden files/folders)

3. Launch the Torque Pro App

4. Click on the Settings icon (gear in bottom left)
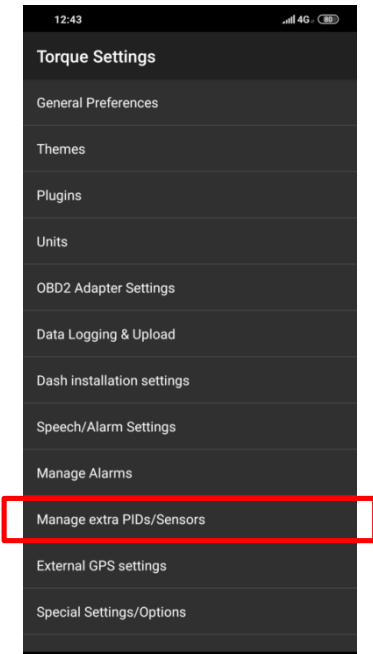

5. Add a vehicle profile

6. Scroll down to Advanced Settings and enter that menu.

Under the Very Advanced section there should be a config string.

It <u>should</u> be atsp6\natsh7e0

If not – just type it and save the settings.

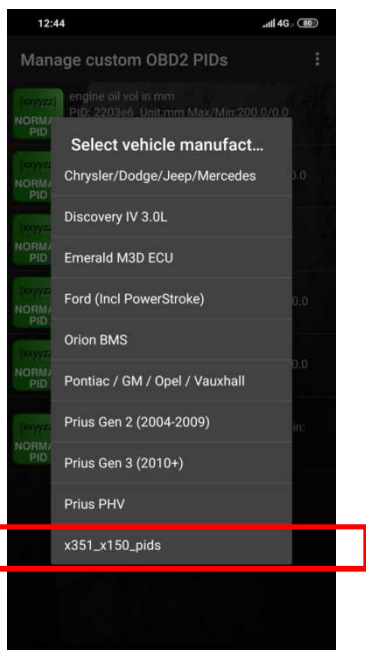7. Go back to the home screen of the Torque Pro App

8. Press the gear in the bottom left corner again and go into Settings

9. Select Manage extra PIDs/Sensors, (first use this list would be blank). Press "three dots" top right and "Add a predefined set"

10. Select the file x351_x150_pids

With the custom PIDs now installed, you can add the dials to your Torque screen in the same process as the existing available dials.

The custom PIDs have AJ133 at the start of their names.

7. Information about each PID and its measurements.

Engine Oil Level

This is the actual real time level of the oil in the engine oil pan. You should note this measurement compared to the oil level check in the instrument cluster to get an indication of what the typical oil level is when the cluster says "oil level OK" or "add 0.5L".

WITH THE ENGINE RUNNING THE MEASURMENT IN MM WILL BE MUCH LOWER

Engine Oil Volume

This is a calculation of the actual real time volume/quantity of oil in the sump. As different models have different sump capacities (AWD vs RWD, etc) you may need to alter the values of the gauge to suit. Check your owner's manual for the actual volume to compare with the instrument cluster. It is set as default for RWD AJ133 & AJ126 Jaguar sump.

WITH THE ENGINE RUNNING THE MEASURMENT IN LITRES WILL BE MUCH LOWER

Engine Oil Temperature

This is the actual real time temperature of the engine oil in the sump.

Goes without saying that this is very useful to ensure that the engine is sufficiently warmed up before you beat the hell out of it…

IAT2 , Air Intake Temperature 2

This is the temperature of the charge air, post-intercooler. It's a somewhat critical measurement in that higher IAT2 temps will lead to knock/detonation, and loss of engine performance.
Extremely high IAT2 temperatures on supercharged engines are an indication of intercooler pump failure or air trapped in the intercooler circuit.

Gearbox Oil Temperature   (automatic transmission only)

This is the real time measurement from the Transmission Control Module, of the transmission fluid temperature.
Again it goes without saying that this is very useful to ensure that the transmission is sufficiently warmed up before you beat the hell out of it…

Rear Differential Oil Temperature   (E-Diff vehicles only)

This is the real time measurement from the Rear Differential Control Module, of the E-Diff fluid temperature.

As the E-Diffs have been known to overheat during heavy track use, this is useful to see.

8. Copyright Statement

© Copyright, Old Jaguar Group

The contents of this document are protected by copyright law. Copyright (and any other intellectual property rights) in material published in this document is owned by the Old Jaguar Group / oldjaguar.com or various other rights holders, as indicated.

Apart from any fair dealing or other statutory use permitted under the Australian Copyright Act 1968, as an individual without commercial interest you are free to use the information provided in this document, and to distribute this document to other individuals. Any reproduction of copyright material, including fair dealing, must acknowledge the relevant rights owner as the source of any such material reproduced, and reference the copyright or licence conditions under which the material is provided on this site.

Any commercial entity found to be misrepresenting the information provided here as his or their own work, shall be pursued for breach of copyright, as this information is provided for "fair use by enthusiasts" not for commercial enterprise.

9. Contact details for feedback

We'd love to hear from you. Please send your feedback and enquiries to info@oldjaguar.com

Old Jaguar Group
www.oldjaguar.com   www.facebook.com/OldJaguarLive   www.instagram.com/oldjaguarlive
www.facebook.com/oldjaguarau   https://twitter.com/OldJaguarLive   www.instagram.com/noswarehouse