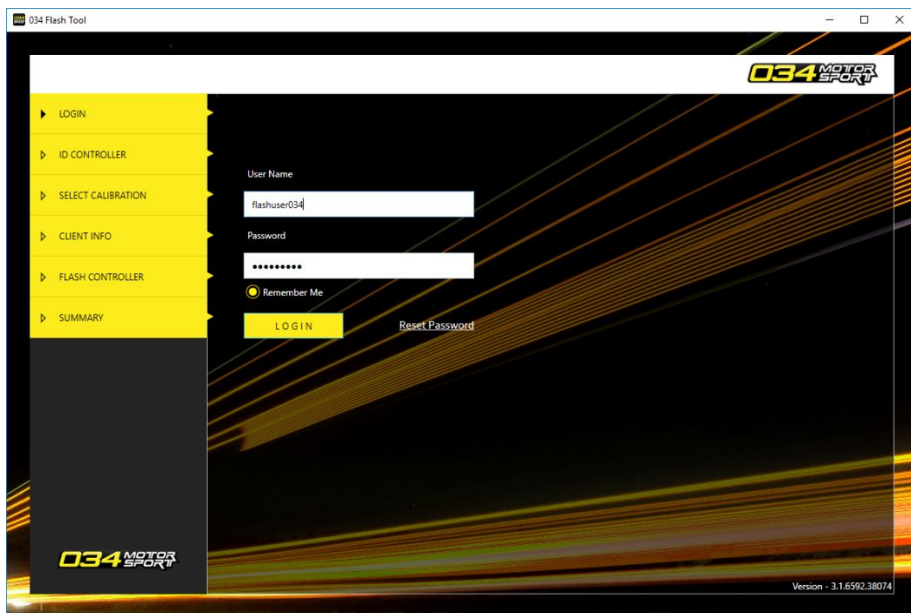## What is 034Motorsport End User Flashing?

034Motorsport End User Flashing allows 034Motorsport Performance Software customers to install their performance software on their ECU without visiting a 034Motorsport Performance Facility or 034Motorsport Dealer. In addition, End User Flashing allows 034Motorsport Performance Software customers to receive and install software updates and revisions, flash back to stock, or upgrade to the next stage of performance software for their vehicle

Spiciness Rating

(Mild)

The 034Motorsport Dynamic+ Tuning Suite is designed to be easy to use and features intuitive prompts and steps. Please read the entirety of this guide before using the software!

Dynamic+ Tuning Kit Includes:

- 034Motorsport OBD-II Adapter
- USB-A to USB-B Cable
- User Credentials

Requirements for Flashing:

- Computer running Windows 10
- Dynamic+ Tuning Kit
- Secure & Very Stable High-Speed Wireless Internet Connection
- Quality Battery Charger (CTEK or Similar, ~15-20 Amps)
- Available Electrical Outlets

Before You Begin

Please read the *entire* guide before attempting to flash ECUs and/or TCUs. While we strive to make the process as intuitive as possible, it is important to understand the entire flashing procedure before getting started.

Contents

Getting Started

- Ensure you have all cables and tools required for installing Dynamic+ Performance Software.
- Park the vehicle in a secure area where it can be connected to a battery charger and to a laptop with a stable high-speed internet connection.

Installing the Software

1. **Important:** Disable any third-party antivirus or firewall programs while installing or using the Dynamic+ Tuning Suite.

2. Follow the link provided in your Dynamic+ Tuning Suite Credentials email to download the 034Motorsport Flashing Client Installer.

3. Run/Double Click the installer application

4. Once the installation is complete connect the 034Motorsport OBD-II Adapter to your laptop with the supplied USB-A to USB-B Cable.

5. Run the 034 Flash Tool to ensure that the installation was successful, and that the 034Motorsport OBD-II Adapter is recognized by the software.
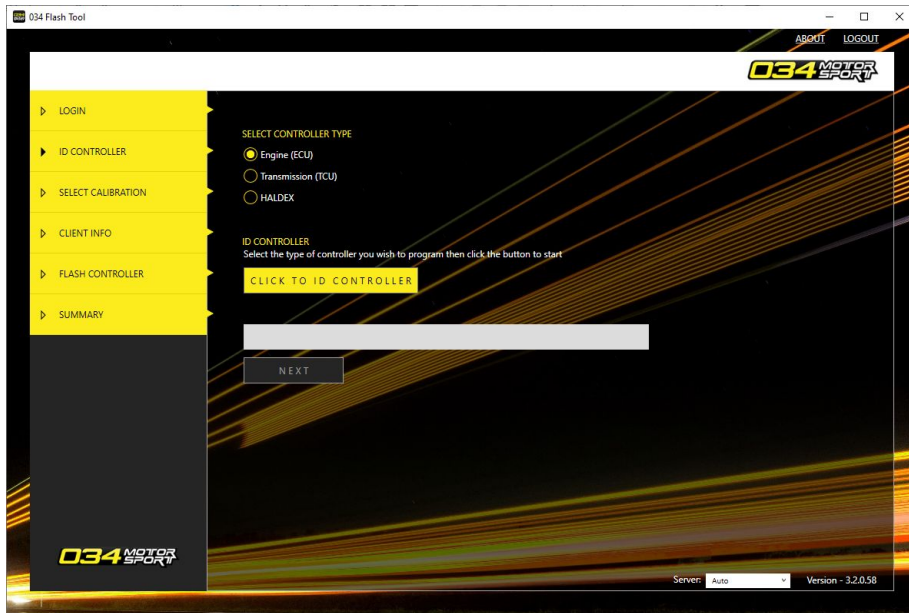
Preparing for Flashing

1. **Important:** Park the vehicle in an area (preferably a covered garage) with easy access to a Secure Wired (or very stable WiFi) High-Speed Internet Connection and Electrical Outlets.

2. Turn off any accessories that draw power from the battery. (ie: Headlights, Auto Headlights, Stereo, Climate Control)

3. Turn the Key/Ignition to Off.

4. Connect a trickle charger to an available outlet and the vehicle's battery.

Performing the Initial Flash

1. **Important:** Disable any third-party antivirus or firewall programs while using the Dynamic+ Tuning Suite.

2. Connect the laptop to a power supply and stable internet connection.

3. With the 034Motorsport OBD-II Adapter connected to the laptop, connect the 034Motorsport OBD-II Adapter to the vehicle's OBD-II port.

4. Turn the Key/Ignition to On. Do not start the engine (Engine Off!)

5. Run the 034 Flash Tool on your laptop.

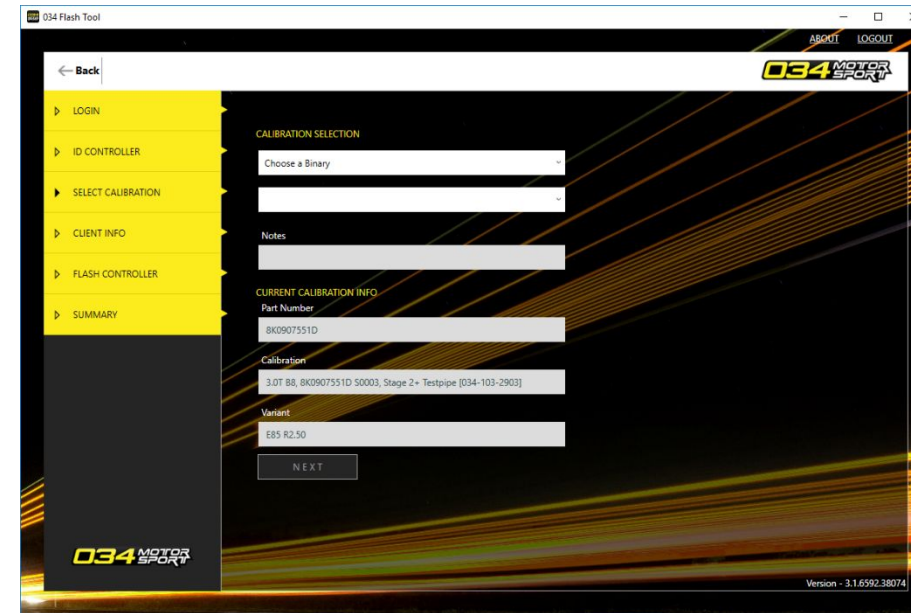6. Log in using the User Credentials you received from 034Motorsport.

Performing the Initial Flash (Continued)

7. Select the controller you wish to program, then click the **Click to Id Controller** to retrieve the vehicle's ECU Box Code and Software Version. Click "Next" to proceed.
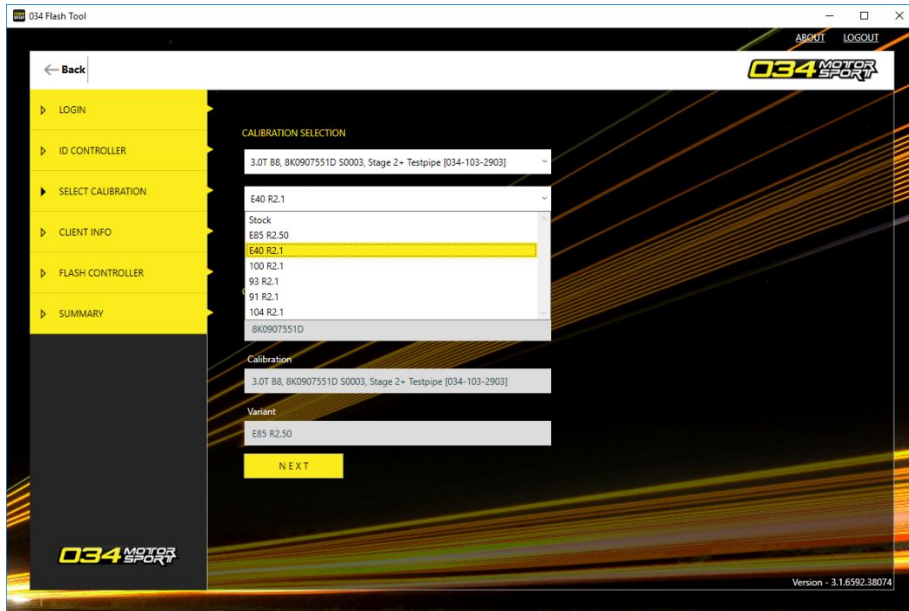

Performing the Initial Flash (Continued)

8. When prompted, select the desired calibration in the top Calibration Selection drop down.
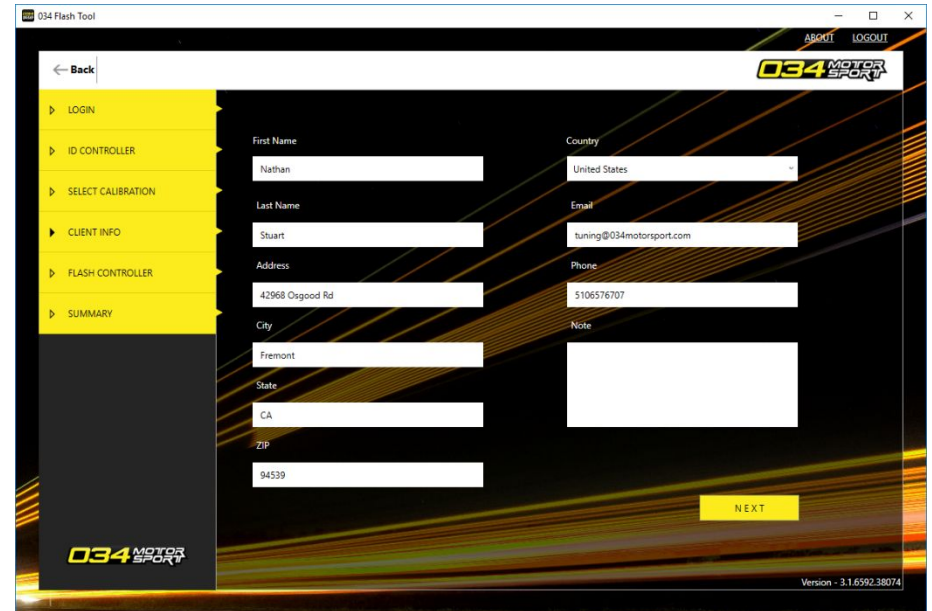
Performing the Initial Flash (Continued)

9.   Using the next dropdown menu, select the desired octane. Click "Next" to proceed.

10.   **Important:** Do not flash software that the vehicle does not meet the specific hardware requirements for. Do not run a lower octane fuel than what is required for the file selected.

Performing the Initial Flash (Continued)

11.   Enter your information on the next screen. Click "Next" to proceed.

Performing the Initial Flash (Continued)

12. Verify that the correct Calibration and Octane are selected, and that the required customer information is entered correctly. Click "Flash It" to start the Flashing Process.

Performing the Initial Flash (Continued)

13. Follow the prompts on the following screen, noting the necessary key/ignition cycles. **Do Not Start Vehicle, Turn Key Off, or Disconnect Cable During the Flashing Process**!
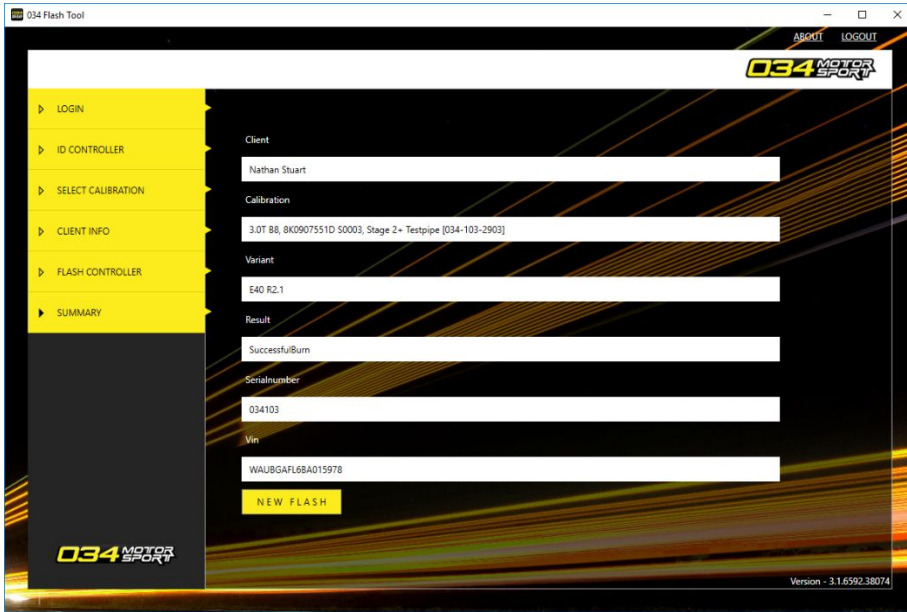

14. **Please Note:** During the flashing process, you will encounter multiple warnings/lights on the dash from various systems. This is completely normal and will be resolved at the end of the flash.

Performing the Initial Flash (Continued)

15. Once flashing is complete, close software and Key Off. Wait 5 seconds before starting car.

16. Disconnect the 034Motorsport OBD-II Adapter.

17. Disconnect the Trickle Charger.

Performing the Initial Flash (Continued)

18. Any fault codes or DTCs from the flashing process can be cleared with a VCDS cable or by driving the car for a few minutes after the initial flash.

19. If you encounter any issues during the flashing process, please email tuning@034motorsport.com

20. If you are flashing Dynamic+ Performance Software for the first time, there should be an immediately noticeable performance improvement over the factory calibration. Please keep in mind that there is a "learning" period for the tune, as the ECU will adapt slightly to the car and driving conditions.

Flashing Q&A

Q: I Identified my ECU/TCU and the only file I see says "OEM Update", what is that?

A: At times the OEM's will release new software for given control units. Depending on the application we may require that you update to the 'current' release of software before programming the performance calibrations. **You will need to flash the OEM update first, then start the flash process again to select your performance file.**

Q: Should I flash my car for the very first time right before I have to leave for work?

A: No, wait until you have some stress free time to familiarize yourself with the process and the time involved.

Flashing Q&A (continued)

Q: Is a McDonalds parking lot with free wi-fi a good place to flash my car?

A: No, do it at home or somewhere with good wifi/internet, and the required resources (battery charger, a place to sleep, etc) should something go awry.

Q: I flashed my car and now "XXX" is happening, should I spam every social media outlet to get a cloud sourced opinion?

A: Sure, but you'll get a much faster and more helpful response by emailing tuning@034motorsport.com first.

Flashing Q&A (continued)

Q: I have access to 94 octane, is it safe to use that with a 93 octane map?

A: Yes, you can run gasoline with octane ratings that meet or exceed the calibration you have flashed (be aware some race fuel is leaded, stay away from that unless you know what you are doing).

Q: I identified my ECU/TCU and then the program said "*A program for this control unit was not found*", why?

A: This indicates that either we have not yet loaded that exact software to the server, or we simply need to change some setting on your account so you can access it. Email tuning@034motorsport.com and we will address is ASAP. In some rare instances we may need to perform an 'extraction' and read the calibration from your vehicle, you will be contacted with the information on what that entails if that is the case.

Flashing Q&A (continued)

Q: I already have some other tune on my car (or I don't know if I have another tune on my car), what should I do?

A: To ensure the smoothest process flash the calibrations variant listed as "Stock" first. Then start the flashing process again to select your performance file. This will ensure that we are starting from a good known/OEM state.