

flashcal

FOR JEEP

CALIBRATION TOOL



Superchips

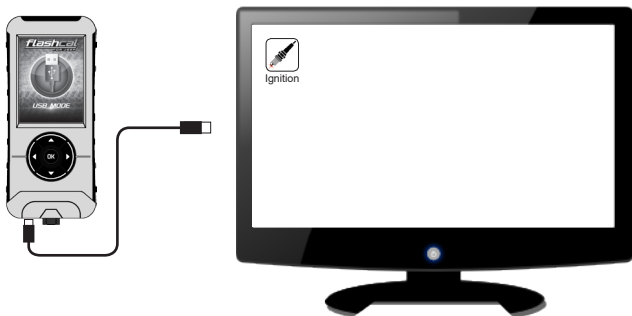
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NOTICE

It is NOT recommended to store your programmer in your vehicle in extreme heat, direct sunlight or extreme cold (temperatures near or below freezing). These conditions can cause malfunction or damage to the programmer.

TIP: Prior to using your device after a long period of non-use, use Ignition to update. This will ensure that your device is up-to-date and contains all of the latest files and functionality.



LIST OF COMPONENTS

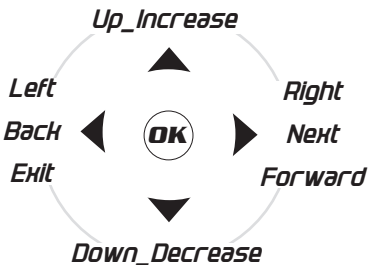
DISPLAY DEVICE



USB CABLE



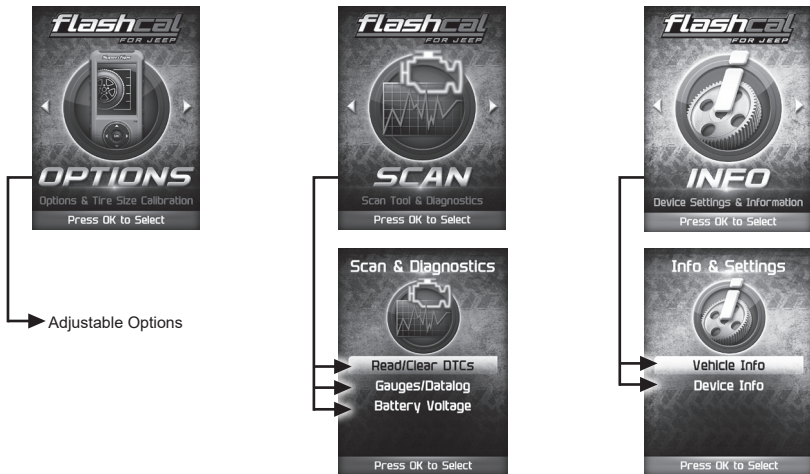
BUTTON FUNCTIONALITY



NAVIGATING TIPS:

- To move back to the previous menu, press the ◀ button.
- To move forward to the next menu, you can press either **OK** or ▶ button to enter the highlighted option.
- The ▲ & ▼ buttons are used to select menu options, as well as adjust values for certain features.

Some of the menu options or features displayed in this manual are vehicle specific, and may not be available for your make and model.



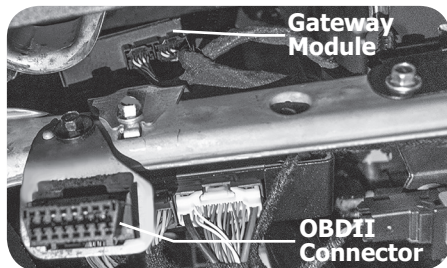
⚠ WARNING

Misapplication or misuse of this product could lead to a serious or fatal accident. Comply with all safety information in this manual, and your vehicle owners manual. Follow safety, installation and operating instructions in this User Manual to assure proper use.

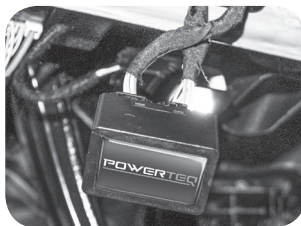
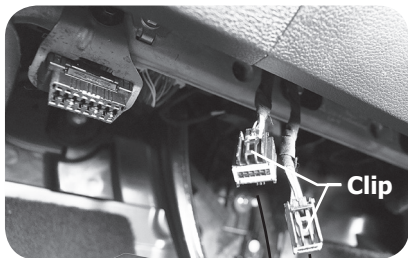
2018 JL - GATEWAY BYPASS INSTALLATION

For 2018 JL Wranglers, a bypass module is required for the display device to function. Follow these step-by-step instructions prior to using the device.

- ① Make sure the ignition is in the OFF position.
- ② With the use of a flashlight, locate the Gateway module as shown.
- ③ While gently pulling on the wire harness, release the clip on each connector and disengage from the module.



- ④ Locate the supplied bypass module.
- ⑤ Insert the two gateway connectors into the bypass module as shown.



- ⑥ Next, secure the bypass module out of site using zipties or other methods to ensure the safety of the module and connections.
- ⑦ Plug the display device into the OBDII connector as shown. To learn more about how to use the display device, refer to the following sections of this manual.



DOWNLOAD IGNITION UPDATER TOOL

- ① Go to: www.superchips.com
- ② Click the **UPDATES** tab located at the top of the page.
- ③ Click the **Download** button to download **Ignition**.
- ④ Click the **Run** button on the pop-up menu.
- ⑤ Read and click the box to accept the license agreement terms.
- ⑥ Click the **Install** Button, then the **Close** button once the download is complete.
- ⑦ Double-click the Ignition desktop icon.
- ⑧ Fill out the registration form.
- ⑨ Refer to the next section for performing product update.

TIP: Use a wired internet connection vs. wireless, air CARD, or satellite connections. This will minimize potential connection issues that may affect the update process.

1

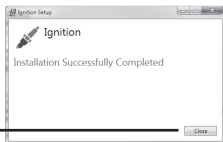
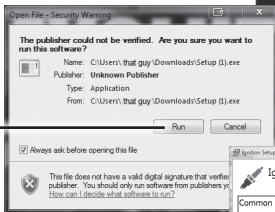
2

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6



PRODUCT UPDATES USING IGNITION

① Double-click the **Ignition Icon** located on your computer's desktop.

② Connect your device to the computer using the supplied USB cable.

(Ignition will automatically search for updates related to your device.)

③ Click the **Update** button.

(The update process will start and finish automatically. Once the update is complete, you may be directed to the **Online Store**. To further update your device using the online store, refer to the following steps.)

④ Click on any or all of the available options.

(A check mark will appear in the upper right corner.)

⑤ Click the **Purchase** button.

⑥ If required, read and **Accept** the disclaimer.

⑦ Fill in the required information and click **Go to Review**.

(Here you can check the information you filled in before submitting the order.)

⑧ Click the **Place Order** button to complete your order.

⑨ If a purchase was made, follow steps 1-3 above to complete the update.



1

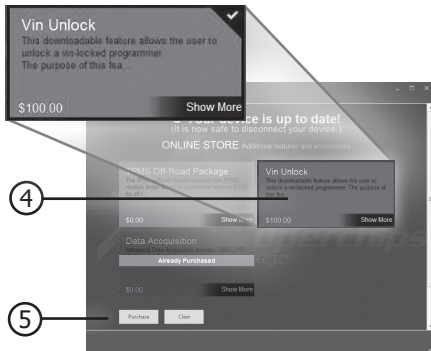
2

3



NOTICE

Do not unplug the USB while the device is being updated. Once the update is complete, you will be informed that it is safe to disconnect.



4

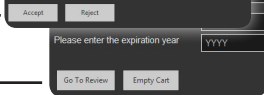
5

AFFECTED HIS SETTLEMENT WITH THE DEBTOR.

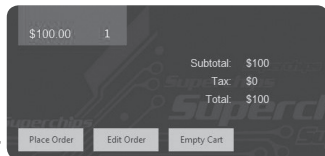
Installation or other use of the Product constitutes the User's acknowledgment and understanding of the warnings, cautions, terms and conditions and that the User agrees and consents to the terms and conditions of the license agreement. OTHERWISE DO NOT INSTALL OR USE THE PRODUCT.

6

7



8



OPTIONS

These options allow to you quickly adjust the settings for the available features.

NOTE: *Not all features are available on every make, model, and engine.*

⚠ CAUTION

Do not remove or bump the OBD-II connector while changing Quick option settings. If you do, the vehicle may not start.

⚠ WARNING

Do not make adjustments to your vehicle while parked in unsafe locations including heavy traffic or places without cell phone service.

STEP 1 - Enter the Options Menu by pressing ok.



STEP 2 - Follow the on-screen instructions.



STEP 3 - Select an option from the list provided.



STEP 4 - Modify each setting according to your specific needs.



Tire Size: This feature allows you modify the programmed Tire Height.

Axle Ratio: This feature allows you to adjust the calculated output shaft speed.

Engine Idle: This feature allows the user to increase the engine Idle RPM momentarily.

Run Lights: This feature allows you to change the Daytime Running lights configuration.

Engine Timing: This feature gives the option to Retard the Timing down a total of 6 degrees.

Tire Pressure: Adjust the tire pressure at which the TPMS warning light will illuminate for a low tire-pressure condition.

Accessory Delay Adjustment: Adjust the length of time your radio stays on after key Off.

Automatic Door Lock Toggle: Allows you to turn ON or OFF the vehicle feature that automatically locks your doors once the vehicle is in motion.

Horn Chirp: Allows you to turn ON or OFF the horn “chirp” when locking the vehicle.

Lamp Flash: Allows you to turn ON or OFF the vehicle lamp flash when locking the vehicle.

One Touch Lane Change: Allows you to toggle this vehicle feature ON or OFF. When this feature is turned OFF, your blinker will only blink once after pressing the switch.

Transfer Case Ratio Adjustment: This feature allows you to adjust the ratio based on your Jeeps specific transfer case.

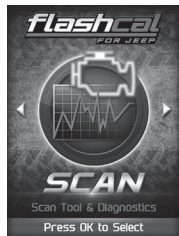
Transfer Case HI Adjustment: Allows you to adjust the transfer case settings while in 4-HI.

Transfer Case LO Adjustment: Allows you to adjust the transfer case settings while in 4-LO.

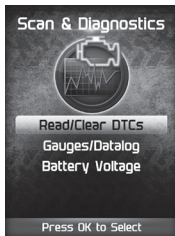
READ DTC

This feature allows you to troubleshoot issues that your vehicle may be experiencing. Most vehicles will illuminate the in-dash check engine light. A Diagnostic Trouble Code (DTC) arises when a vehicle's computer detects a sensor failure or a parameter outside of specific range.

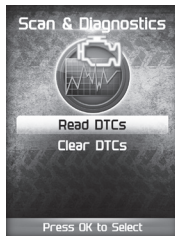
STEP 1 - Enter the Scan Menu.



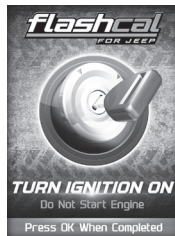
STEP 2 - Select Read/Clear DTCs.



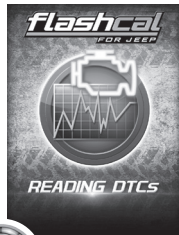
STEP 3 - Select Read DTCs.



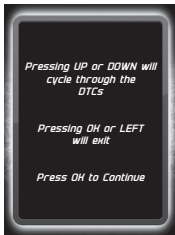
STEP 4 - If asked, turn ignition on, but do not start.



STEP 5 - Allow the device to search for DTCs.



STEP 6 - Read and follow the on-screen instructions.



STEP 7 - Push the ▲/▼ arrows to view each DTC.



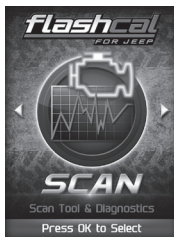
STEP 8 - Press OK to return to the DTC menu.



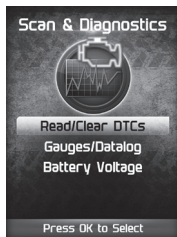
This feature allows you to clear the DTC and turns off the check engine light.

NOTE: If a DTC persists, this could indicate a vehicle malfunction. We recommend seeking a qualified professional in resolving the issue. Program the vehicle back to stock prior to service.

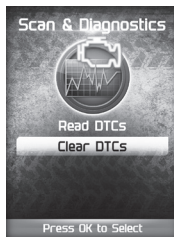
STEP 1 - Enter the Scan Menu.



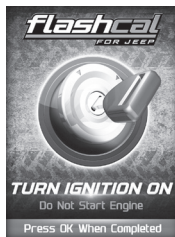
STEP 2 - Select Read/Clear DTCs.



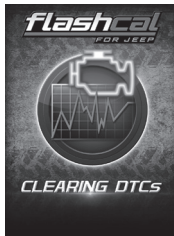
STEP 3 - Select Clear DTCs.



STEP 4 - If asked, turn ignition on, but do not start.



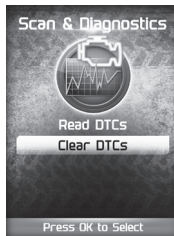
STEP 5 - Allow the device to search for DTCs to clear.



STEP 6 - Read and follow the on-screen instructions.



STEP 8 - Press **OK** to return to the DTC menu.

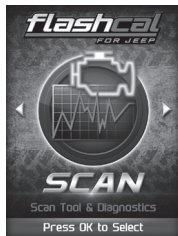


VIEWING GAUGES

If you would like to view Parameter IDs (PIDs) specific to your vehicle, following these instructions to learn how to view them using your Flashcal device.

⚠ WARNING *Do not exceed legal speed limits on public roadways.*

STEP 1 - Enter the Scan Menu.



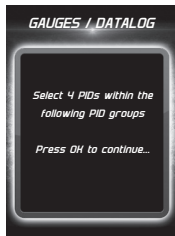
STEP 2 - Select Gauges/Datalog.



STEP 3 - If asked, turn ignition on, but do not start.



STEP 4 - Follow the on-screen instructions.



STEP 5 - Select a PID Group, then select a total of 4 PIDs. Use the ◀ / ▶ arrows to switch between screens. OK to select.

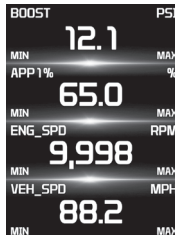
PID Groups

- Engine Misc
- Fuel Trim/Press
- Time/Distance
- Oxygen Sensors
- Misc Non-Engine
- Egr/Evap
- Catalyst Temp
- Throttle Detail

Engine Misc

- Calc Eng Load
- Engine Coolant Temp
- Manifold Abs Pressure
- Engine RPM
- Spark Advance
- Intake Air Temperature
- Mass Air Flow
- Abs Throttle Position

STEP 6 - Follow the on-screen instructions. Note the RED highlights. See DataLogging for more information.

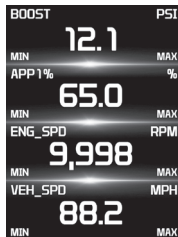


DATA LOGGING

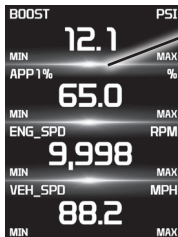
Data logging allows you to record specific vehicle information while driving. Follow these instructions to find out how to datalog, and how it may be helpful to your particular needs.

⚠ WARNING Do not exceed legal speed limits on public roadways.

STEP 1 - Refer to the previous section and follow the steps.

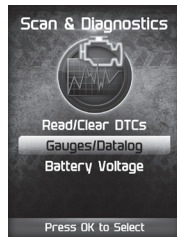


STEP 2 - Press the OK button to begin recording the PID data. Press the OK button again, to stop the recording.



The separator lines will change from Red to **Green**, which indicates that the device is actively **recording** (datalogging).

STEP 3 - Press the left arrow to return to the menu.



The information will be stored on the device and may be retrieved using a computer. For more information continue to the next section.



TIME (ms)	Load	ECT	EngRPM	ABS Thrft
0	15	147	622	14
126	15	149	603	14
241	14	149	613	14
359	15	149	615	14
478	14	149	604	14
600	15	149	618	14
715	14	149	604	14
834	15	149	607	14
953	17	149	634	16
1075	22	149	672	17
1201	23	149	701	17

DATA LOGGING RETRIEVAL

To learn more about how Data Logging results can be extracted from the device, please follow these instructions:

STEP 1 - Remove the device from the vehicle OBDII port.

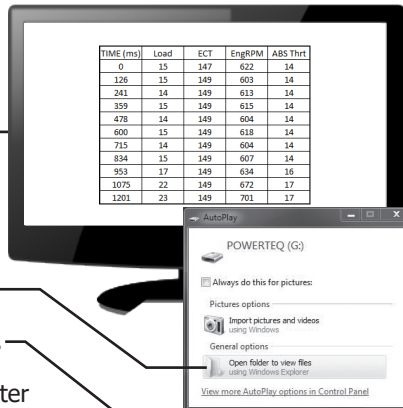
STEP 2 - Using the USB cable provided, connect the device to your computer.

STEP 3 - The device will enter USB Mode, and allow your computer to open it's files.

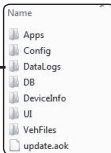
STEP 4 - Open the folder to view files.

STEP 5 - Open the folder named DataLogs.

STEP 6 - Copy the Excel file to your computer desktop, then open it. A file will open that looks similar to the following:



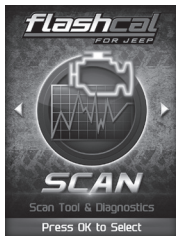
TIME (ms)	Load	ECT	EngRPM	ABS Thr
0	15	147	622	14
126	15	149	603	14
241	14	149	613	14
359	15	149	615	14
478	14	149	604	14
600	15	149	618	14
715	14	149	604	14
834	15	149	607	14
953	17	149	634	16
1075	22	149	672	17
1201	23	149	701	17



STEP 1 - Plug the device into the OBDII port.



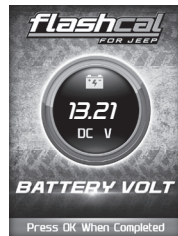
STEP 2 - Enter the Scan Menu.



STEP 3 - Select the Battery Voltage option.



STEP 4 - Press OK to return to the previous screen.

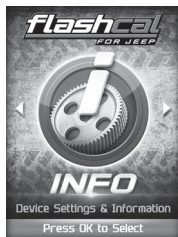


VEHICLE INFO

STEP 1 - Plug the device into the OBDII port.



STEP 2 - Enter the Info Menu.



STEP 3 - Select the ID Vehicle option.



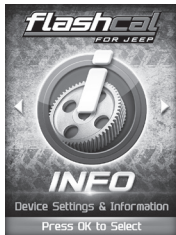
STEP 4 - Press OK to return to the previous screen.



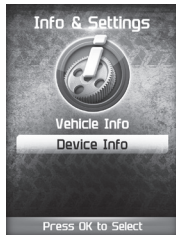
STEP 1 - Plug the device into the OBDII port.



STEP 2 - Enter the Info Menu.



STEP 3 - Select the Device Info option.



STEP 4 - Press OK to return to the previous screen.



SAFETY WARNING & CAUTION

Throughout this User Manual you will see important messages regarding your safety or the protection of your vehicle. These messages are designated by the words WARNING, CAUTION, or NOTICE.

WARNING

A **WARNING** indicates a hazardous situation which, if not avoided, will result in death or serious injury.

CAUTION


A **CAUTION** indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

A **NOTICE** indicates a condition that could cause damage to the product or your vehicle.

The Superchips product you have purchased is a high-performance product. As such, it does present some risks of which you should be fully aware. Do not use this product until you have carefully read the following safety information and the Owner Agreement.

NOTE: *After the display has been installed, a warning screen will appear (3) different times.*

 **WARNING:** *Misuse of this device could lead to a serious accident. Do not use to break legal speed limits. Before installing, read and comply with all information in the User Guide. Do you agree?*

If you agree with the agreement, select Yes to continue.



WARNING

Before using device, read and understand the user manual, including these additional safety instructions. Failure to do so could result in DEATH or SERIOUS INJURY.

- Do not exceed legal speed limits on public roadways. Violating traffic laws is dangerous and could result in injury or vehicle damage or both.
- Use any enhanced speed capabilities of this product only in closed circuit, legally sanctioned racing environments expressly for this purpose. Violating traffic laws is dangerous and could result in injury or vehicle damage or both.
- Do not operate the device while driving. Distracted driving could result in traffic accidents, death or serious injury, and/or damage to your vehicle. Always perform all adjustments or changes while stopped. Changing a setting while driving can interfere with your attention to roadway conditions and could result in injury or vehicle damage or both.
- Do not stack products. “Stacking” performance-enhancing devices or other improper installation can cause power train failure on the road. Other products may have features incompatible with your Superchips device. Follow all installation and operating instructions.
- Some modifications may affect other parts of your vehicle. For example, if you remove/adjust the speed limiter in your vehicle, be sure your tires and other components are rated for the increased speeds they will have to withstand. Not doing so can lead to loss of vehicle control. Modify the speed limiter only for use in closed circuit, legally sanctioned racing environments, not for use on public roadways.

LIMITED 1 YEAR WARRANTY

Powerteq, LLC, (hereafter "SELLER"), subject to the conditions and limitations set forth herein, warrants to the original consumer purchaser only that each Flashcal product sold by SELLER (the "Product") through an authorized dealer will be free from defects in material and workmanship under normal operating conditions for one (1) year after the date of purchase. SELLER will repair or replace, at SELLER's option, any Product that is found to be defective in material or workmanship under normal operating conditions during the one-year period after the date of purchase by the original consumer purchaser.

What Is Not Covered by This Warranty?

This warranty does not apply to any of the following:

1. Loss, damage, repairs, or maintenance required as a result of accident, abuse, negligence, or misuse.
2. Loss, damage, repairs, or maintenance required as a result of any third-party tuning software.
3. Loss, damage, repairs, or maintenance required as a result of fire, water, hail, theft, earthquake, wind, ice, lightening, acts of god, accident, animals, corrosive atmosphere, or other external causes beyond the control of SELLER.
4. Any special, indirect, incidental, consequential, or punitive damages, including property damage, arising out of or related to the use or loss of use of the Product under this Limited Warranty.
5. Any Products purchased through auction websites.

Limitation of Liability

The terms of this Limited Warranty constitute the entire agreement between the parties with respect to the Product. The original consumer purchaser's exclusive remedy shall be limited to the repair or replacement of the defective product.

EXCLUDING THE LIMITED WARRANTY PROVIDED ABOVE, SELLER, TO THE MAXIMUM EXTENT PERMITTED BY LAW, MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, AND DISCLAIMS ALL WARRANTIES, DUEITES AND CONDITIONS, WHETHER EXPRESS, IMPLIED, OR STATUTORY, WITH RESPECT TO THE WORK, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ANY REMEDY IS LIMITED TO THE PURCHASE PRICE OF THE PRODUCT.

How to Make a Warranty Claim

Contact Powerteq Customer Service. BUYER will be required to submit proof of purchase from an authorized dealer within 5 days of the warranty claim.

THE INSTALLATION OF THIS PRODUCT INDICATES THAT THE BUYER HAS READ AND UNDERSTANDS THIS AGREEMENT AND ACCEPTS ITS TERMS AND CONDITIONS. IN THE EVENT THAT THE BUYER DOES NOT AGREE WITH THIS AGREEMENT, THE BUYER MAY PROMPTLY RETURN THIS PRODUCT, IN A NEW AND UNUSED CONDITION, WITH A DATED PROOF OF PURCHASE, TO THE PLACE OF PURCHASE WITHIN THIRTY (30) DAYS FROM DATE OF PURCHASE FOR A FULL REFUND.



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