



JEEP® WRANGLER



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Superchips

What's in the box

1. The Flashcal Device

with attached OBD-II cable (not shown)



2. The USB Cable

for easy internet updates



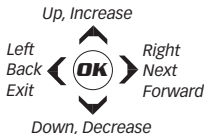
Navigating the Menus

Familiarize yourself with the menu structure below:

Main Menu

- **Diagnostics (Read & Clear DTCs)**
- **Identify Vehicle (Display critical vehicle information)**
- **Vehicle Functions (Quickly modify vehicle settings)**
- **Tuner Info & Settings (Display tuner information)**

Use the key pad buttons to navigate the menus:



The up/down buttons are used to scroll to each menu option, while the left/right buttons are used to move between menus. The OK button is used to select items within the menu options.

Helpful Hints

The "Helpful Hints" dialog boxes are used to provide you with additional information to help you better understand the product. If you have further questions, please contact our customer service team: **888.227.2447**



WARNING

Misuse of this product could lead to injury or death. Obey all traffic laws. Read and comply with all instructions in the included User Guide.

Dear Auto Enthusiast

Thank you for purchasing one of our world class products. We deliver specialized features for your vehicle. Our commitment to each customer is to deliver an extraordinary driving experience.

We haven't relied on luck the past 30 years to distinguish our brand as the industry leader. Our employees implement a "doing it the right way" approach to WOW each and every one of our customers. Superchips is simply the best-selling brand in the business. All of our products are easy to use, flexible, and easy to update when you want to.

This Getting Started Guide will walk you through using the many exciting features the Flashcal has to offer. Better yet, personalize your Superchips experience with downloadable updates, upgrades and features at

www.superchips.com.

The Flashcal delivers features you expect from Superchips, and some not found in competing products, including our exclusive off-road features.


Thank you for supporting Superchips.

Get Tuned – The Superchips Team

Step 1 - Update Your Device

NOTE: You will need to be connected to the internet and running Windows XP or later.

Download the Spark update software

1. Go to **www.superchips.com** and move your mouse icon over the **CUSTOMER SUPPORT** tab towards the top of the page. In the drop down menu click **Download Product Update Software**.
2. Click the **DOWNLOAD** button located below the  logo.
3. Click the **Run** button on the pop-up menu.
4. Read and **Accept** the License Agreement terms. Click the **Install** Button, then the **Finish** button once the download is complete.
(NOTE: The first time using Spark, you will be required to fill out a registration form).

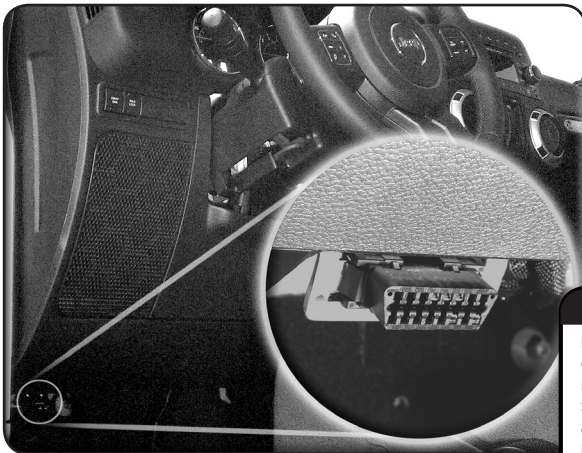
Updating your programmer

5. Double click the Spark Icon located on your computer's desktop. You will be asked to "**Connect Device**".
6. Connect your device to the computer using the supplied USB cable. Spark will automatically search for updates related to your device. If an update is found and available, click the **Update** button to proceed. **CAUTION:** Do not unplug the device while it is being updated.

Once the update is complete, you will be informed that it is safe to disconnect your device.

(NOTE: At the end of the update, you will be directed to the online store and given the option to upgrade your device from a Flashcal to a Flashpaq. After purchasing and downloading this option, you will have the ability to use your device as a Flashpaq product. This allows you to program your vehicle with the latest tunes available from Superchips. For more information go to www.superchips.com)

Step 2 - Plug Your Device into the Vehicle's OBD-II Port



Helpful Hint



Do not remove the programming cable during any programming sequence. If you do, the vehicle may not start. A Superchips programmer is designed to automatically go into Vehicle Recovery Mode and if this occurs, it will return your vehicle to factory stock.

Diagnostics

A Diagnostic Trouble Code (DTC) arises when a vehicle's computer detects a sensor failure or a parameter outside a specific range. In the case of a detected failure, most vehicles will illuminate the check engine light alerting you of a failure:



The Flashcal allows you view these codes, and gives you the option to clear them. The two Diagnostic menu options are as follows:

- **Read DTCs** - will be display the code along with a full text description.
- **Clear DTCs** - will allow you to clear the code, which will then turn off your check engine light.

If a DTC Persists...

This could indicate a vehicle malfunction. We recommend seeking a qualified professional in resolving the issue. Return the vehicle back to stock prior to service.



Identify Vehicle

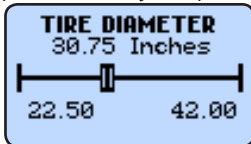
The following information is provided by this feature:

- Vehicle Engine Control Unit (ECU) - is a device used to ensure optimum running.
- Diagnostic Comm - is how your vehicle communicates with individual systems & sensors.
- Vehicle Identification Number (VIN) - is a unique serial number use to identify your vehicle.
- Engine Control Module (ECM PN) part number - identifies the specific ECM installed.

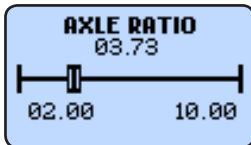
Vehicle Functions

Based on the year and model of your Jeep, you may have the option to modify various features using the Flashcal device. This section provides a brief explanation on what these functions are, and how they are used.

- **Tire Size** - may be used to improve the accuracy of the vehicle's speedometer by compensating for non-stock tire sizes.



- **Axle Ratio** - is used to improve your Jeep's 2WD shift points by modifying the axle gear ratio.



To adjust the Tire Size:

1. Click the **Tire Size** option from the **Vehicle Functions** Menu.
2. Using the left/right arrows, adjust the slide until the correct tire diameter is displayed.
3. Press **OK**.

To adjust the Axle Ratio:

1. Click the **Axle Ratio** option from the **Vehicle Functions** Menu.
2. Using the left/right arrows to adjust the slide.
3. Press **OK**.

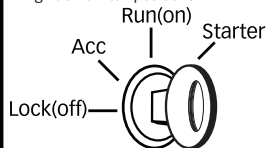
Tire Size

Measure from the ground to the top of your tire. Place a ruler or flat level item on the top of your tire to measure accurately. Measure in ¼ inch increments rounding up.



Helpful Hints

Ignition switch positions



Ignition Key Positions

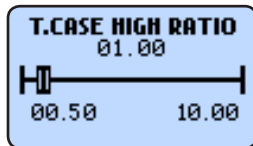


Vehicle Functions Cont'd

- **Transfer Case High (T.Case Hi)** - is used to improve your Jeep's 4 Hi shift points by modifying the transfer case gear ratio.

To adjust the Transfer Case High Gear Ratios:

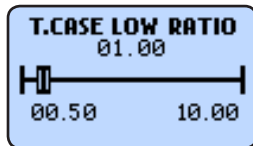
1. Choose an option from the **Vehicle Functions** Menu.
2. Use the left/right buttons to adjust the value.
3. Press **OK**.



- **Transfer Case Low (T.Case Lo)** - is used to improve your Jeep's 4 Lo shift points by modifying the transfer case gear ratio.

To adjust the Transfer Case Low Gear Ratios:

1. Choose an option from the **Vehicle Functions** Menu.
2. Use the left/right buttons to adjust the value.
3. Press **OK**.



- **Horn chirp on Lock (Horn Chirp)** - may be used to toggle ON/OFF the keyless entry horn chirp.
- **Head Lamp Flash on Lock (Lamp Flash)** - may be used to toggle ON/OFF the keyless entry head lamp flash.

Vehicle Functions

OFF
ON

• **One Touch Lane Change (One Touch)** - allows you to toggle this vehicle feature ON or OFF.

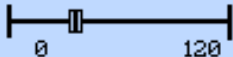
When this feature is turned OFF, your blinker will only blink once after pressing the switch.

To adjust the Once Touch Lane Change, Lamp Flash, or Horn Chirp settings:

1. Choose an option from the **Vehicle Functions** Menu.
2. Use the up/down buttons to highlight either OFF or ON.
3. Press **OK**.

HeadLamp Delay

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• **Head Lamp Delay (Lamp Delay)** - gives you the ability to adjust the time it takes for the head lamps to turn off after the engine has been turned off.

To adjust the Head Lamp Delay settings (2011-15 models only):

1. Choose an option from the **Vehicle Functions** Menu.
2. Use the left/right buttons to adjust the value.
3. Press **OK**.

Vehicle Functions Cont'd

- **Daytime Running Lights (Run Lights)** - allows you to adjust the daytime running light settings for 2007-13 vehicles (if the vehicle is equipped with this feature). The running lights are activated while the engine is running, and the transmission is in "drive".

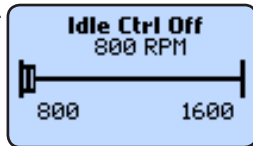
There are six available settings:

- **High Beams**
- **Turn Signals**
- **Low Beams**
- **European**
- **Fog Lights**
- **Turn Lights OFF**

- **Engine Idle** - allows you to increase the engine idle up to 1600 RPM. This is especially useful during extreme situations. (e.g. Winching, etc.)

To adjust the Engine Idle settings:

1. Start the engine
2. Choose Engine Idle from the **Vehicle Functions** Menu.
3. Use the left/right buttons to adjust the value.
4. Press **OK**.



NOTE: The device must remain connected in order for this feature to continue working.

- **Return to Stock** - allows you to quickly change your vehicle back to stock with the original settings. The vehicle cannot be running in order to use this feature.

Vehicle Functions Cont'd

- ***Axle Lock Enable (2007-15 Rubicon Only)*** - allows you to lock the front OR rear axle. This feature can be used while the transfer case is in 4-Hi or 4-Lo.

CAUTION: Do not exceed 30 MPH while using this function.

CAUTION: Do not press the Axle Lock button on the center console while using this function.

- ***Electronic Stability Program (ESP) optimization (2011-15 w/Auto Trans)*** - adjusts the ESP system for vehicles equipped with this feature. When a non-stock tire size is entered, the device re-configures and optimizes the ESP.

- ***Speedometer Corrections*** - adjusts the speedometer value according to the inputs specified:

- **Tire Size Changes (For non-stock tire sizes (22.5"-42.00"))** - Once the tire height is entered, the speedometer will be updated.

- **Gear/Axle Swaps (for ratios up to 5.38)** - Re-configures the speedometer once a modified gear or axle ratio is entered.

- ***Radio Delay (2011-15 models only)*** - allows you to adjust the time it takes for your radio to turn off, once the engine has been turned off.



Tuner Info & Settings

- **Tuner Info** - gives you the Part #, the Version (V) #, and the Serial Number (SN) of the device.
- **Vehicle Information** - gives you the current status of the Tuner, as well as the last 9 digits of the Vehicle Identification Number (VIN).
- **Vehicle Options** - gives you the current status of your Vehicle Settings (e.g, tire size, axle ratio...)
- **Display Settings** - allows you to:
 - a. Set Contrast - Adjusts the darkness of text and graphics.
 - b. Set Backlight - Adjusts the brightness of the display.
 - c. Set Scroll Speed - Adjusts how quickly the items are selected.

⚠ WARNING

- **Misuse** of this product could lead to injury or death. Read and comply with all instructions in the included User Guide.
- **Obey** all traffic and other laws.
- **Do not** exceed proper operating conditions.
- **Do not** stack Superchips tuning with another tuning product. Doing so may result in damage to your vehicle or unpredictable powertrain results.
- **Only** adjust or remove the tire pressure monitoring system during off-road use.
- **Install** and use the Superchips product in compliance with its instructions and manual.

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