



# Table of Contents

#### 3 Read Me

- 3 Safety Warning & Caution
- 4 Safety Guidelines
- 5 Update Software
- 5 Downloading Update Agent
- 6 Product Updates

### 7 Installation L84 Pulsar LT

- 7 Materials
- 7 Required Tools
- 8 Pulsar Installation

#### 10 Programmable Features

- 10 Programming Menu
- 11 Speed Limiter
- 11 TPMS
- 11 Tire Size
- 12 Axle Ratio
- 13 Clear DTC's
- 13 Auto Start/Stop Disable
- 13 DFM (Dynamic Fuel Management) Disable
- 14 Responsiveness Level Adjustment
- 15 FAQs



Scan the QR code for install/ feature overview for the L84 Pulsar LT.

# Read Me

# 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.

### NOTE

A NOTE is a step or reminder that is important to remember when installing or using the product.

The 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.

**WARNING:** Prior to use, read the User Manual. Misuse of the device could result in traffic accidents, death or serious injury, and/or damage to your vehicle. POWERTEQ IS NOT RESPONSIBLE FOR AND SHALL HAVE NO LIABILITY TO YOU FOR ANY CLAIMS ARISING OUT OF OR RELATING TO ANY MISAPPLICATION OF THE DEVICE, CUSTOM TUNES, IMPROPER USE OF CALIBRATIONS, MALFUNCTION OR LACK OF LEGAL COMPLIANCE FOR CUSTOM PROGRAMS CREATED BY THIRD PARTIES.

## Safety Guidelines

# 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 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.

# **NOTE:** The stickers included in some products apply to products that have recieved CARB exemption for emissions compliance.

This product may meet the emissions compliance requirements of the California Air Resources Board and Federal Environment Protection Agency. If so, it is legal for sale and use on pollution-controlled vehicles operated on public streets and highways. The device must be installed and operated according to the instruction provided in this user manual. Included with these compliant products is a sticker for you to keep in your vehicle. You can either adhere it somewhere on the vehicle (e.g., the inside end of driver's door) or simply store it in your glove box. The purpose of these stickers is to inform anyone who may have questions regarding the use of this product and how it affects emissions. For example, it would be something to show an emissions technician if questioned when taking your vehicle in for an emissions check to let him/her know the product is CARB emissions compliant.

4

# Update Software

# Downloading Update Agent 1.0

The Update Agent may be used to update the device via the USB connection. The software can be downloaded through the internet. This process currently can only be done on a Windows computer, **Mac devices are not supported**.

**NOTE:** It is recommended to install Update Agent 1.0 on a laptop computer for best accessibility (you will need to connect the computer to the vehicle's OBDII port to perform updates).

**STEP 1** - Go to a computer with internet access, and go to one of the following websites: *superchips.com* - *diablosport.com* - *edgeproducts.com* 

**STEP 2** - Go to the website's Updates/Downloads tab and click the link "Download Update Agent 1.0" and save the .exe file to a findable location on the computer.

**STEP 3** - Run the .exe installation program that you downloaded, and read through the license terms and conditions, check the agreement box and click Install. Continue through installation until it says Installation Successfully Completed. Click Close to finish the process.

**NOTE:** If given a Security Warning pop-up upon install, click run to proceed. Also, if asked, install **Holley USBCAN Driver** as well as Update Agent 1.0. This driver is required to connect to the device.



## Product Updates

This device has the ability to update via a USB connection. A USB to OBDII update cable is required to perform the update. The cable is sold separately. It is recommended that a battery charger is attached and turned on during the update process.

**NOTE:** The Pulsar LT must be installed into a vehicle before updating. When updating, you CANNOT use your vehicles Wi-Fi. It will be disabled during the update process. Use an external source such as your home Wi-Fi.

**STEP 1** - Take computer with Update Agent 1.0 installed to the location of the vehicle with the Pulsar device.

**STEP 2** - Turn the vehicle's ignition to the RUN position (**do not start the engine**) then open Update Agent 1.0 on the computer, plug in USB to OBDII cable into both the vehicle's OBDII port and a USB port on the computer.

**STEP 3** - Update Agent 1.0 should automatically detect the Pulsar LT device, follow onscreen instructions until it checks for an update. If an update is available, click yes.

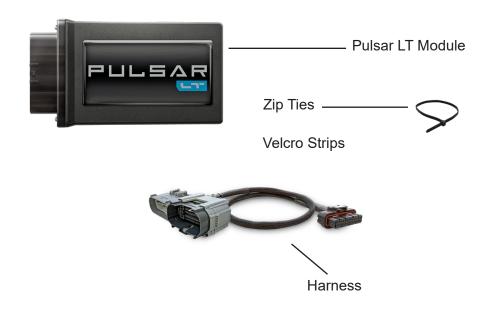
**NOTE:** If you have not yet registered for an account and/or signed in, you will be prompted to do so before you can proceed with the update.

**STEP 4** - Follow update steps as is shown onscreen. Do not power down the vehicle during the entire process unless prompted by the Update Agent. Once Update Agent 1.0 says "Your device is <u>up-to-date</u>," click ok and disconnect the USB to OBDII cable.



# Installation L84 Pulsar LT

## Materials



## **Required Tools**

### Small Flat Head Screwdriver

## **Pulsar LT Installation**

**STEP 1** - Before installation, remove the negative side battery terminal.

**STEP 2** - Release the locking tab in the back of the connector with a pick or small flathead screw driver as shown below.



**STEP 3** - Release red locking tab by pushing the red tab up as shown in the right.

**STEP 4** - Press the bottom right tab on the connector inward to release. Then the connector can slide upwards toward the red tab to take it apart as shown below.



**NOTE:** The connector is located under the hood drivers side by the air intake as shown in the above image.





**STEP 5** - Remove the zip tie tree from the bracket as seen below.



## Pulsar LT Installation Cont'd



STEP 6 - Install the zip tie as shown on the left. It is located behind the driver side headlight.



**STEP 7** - Install the harness onto the factory mounting tab and then route the harness.

**STEP 8** - Install the module and Velcro to the top of the air box. It is a good idea to clean the back of the module and the top of the air box with an alcohol wipe before installing the Velcro.

**STEP 9** - Reinstall the negative side battery terminal.



# Programmable Features

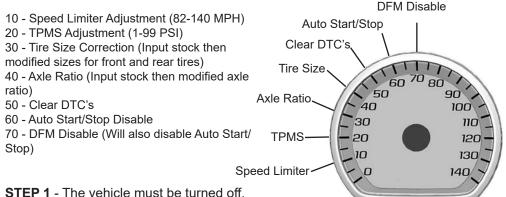
## Programming Menu

**NOTE:** To access the programming menu of the device, cruise control must be turned off.

The vehicle has to be running to turn off cruise control.

## Access the Programming Menu

Seven modes can be accessed through the programming menu. The speedometer (MPH) gauge is used to display the modes and programming inputs. The cruise control switches will be used to navigate the programming menu.



**STEP 2** - Without putting your foot on the brake pedal hold the Start Engine button until the truck gauges turn on and green light is seen on the start button. (approx. 5 seconds)

STEP 3 - Adjust the vehicles screen cluster to the digital speedometer

**STEP 4** - Hold the cancel cruise control button until the speedometer sweeps to 140. (Approx. 5 seconds)

STEP 5 - Use the +RES or -SET wheel to navigate to the desired programming mode.

STEP 6 - Press the cancel cruise control button to select the mode.

**STEP 7** -The speedometer gauge will sweep and then stop at the current programmed condition. (The stock input will be displayed if not previously adjusted.)

NOTE: During programming, the seatbelt warning light may activate.

## **Speed Limiter**

After accessing speed limiter programming mode, adjustment between 82 and 140 MPH can be input.

**STEP 1** - Access the Programming Menu.

STEP 2 - Using +RES or -SET, select mode 10 (MPH).

STEP 3 - Use +RES or -SET wheel to adjust to the desired value.

**STEP 4** - Press the cancel cruise control button to save the input value.

**STEP 5** - The speedometer will sweep to 140 MPH indicating the function is complete.

### **TPMS - Tire Pressure Monitor System**

After adjusting the TPMS inflate to number, the min amd max values automatically adjust. This mode reprograms the vehicle ECM.

**STEP 1** - Access the Programming Menu.

STEP 2 - Using +RES or -SET, select mode 20 (MPH)

**STEP 3** - Use the +RES or –SET wheel to adjust to the desired value between 1 and 99 (PSI).

STEP 4 - Press cancel cruise to select.

**STEP 5** - Speedometer sweeps to 140 MPH for 3 seconds indicating TPMS has been selected.

### **Tire Size**

Input Stock and Modified Tire Size.

**STEP 1** - Access the Programming Menu.

STEP 2 - Using +RES or -SET, select mode 30 (MPH)

### Tire Size Cont'd

#### STEP 3 - Enter Stock Tire Size

- Example: 33.5" Tire- Whole Number = 35, Decimal = 5
  - a. Using +RES or -SET, adjust to the Stock Tire Whole number.
  - b. Press cancel cruise to save the input.
  - c. Using +RES or -SET, adjust the Stock Tire Decimal number.
  - d. Press cancel cruise to save the input.

#### STEP 4 - Enter Modified Tire Size

- a. Using the +RES or -SET wheel to adjust to the Modified Tire Whole number.
- b. Press cancel cruise to save the input.
- c. Use the +RES or -SET wheel to adjust the Modified Tire Decimal number.
- d. Press cancel cruise to save the input.

**STEP 5** - The speedometer will sweep to140 MPH, indicating the function is complete.

**NOTE:** Adjusting Tire Size will modify the vehicles displayed speed, corrected to the size of the modified tire.

### Axle Ratio

Input Stock and Modified Axle Ratio.

**STEP 1** - Access the Programming Menu.

STEP 2 - Using the +RES or -SET, select mode 40 (MPH)

STEP 3 - Press cancel cruise to select.

#### STEP 4 - Enter Stock Axle Ratio.

Example: 3.73 Axle- Whole Number = 3, Decimal = 73

- a. Using +RES or -SET, adjust to the Stock Axle Whole number.
- b. Press cancel cruise to save the input.
- c. Using +RES or -SET, adjust the Stock Axle Decimal number.
- d. Press cancel cruise to save the input.

#### STEP 5 - Enter Modifed Axle Ratio.

- a. Using +RES or -SET, adjust to the Modified Axle Whole number.
- b. Press cancel cruise to save the input.
- c. Using +RES or -SET, adjust the Modified Axle Decimal number.
- d. Press cancel cruise to save the input.

## Axle Ratio Cont'd

**STEP 6** - The speedometer will sweep to 140 MPH, indicating the function is complete.

### **Clear DTC's**

**STEP 1** - Access the programming menu.

STEP 2 - Using +RES or -SET, select mode 50 (MPH)

STEP 3 - Press cancel cruise to select.

**STEP 4** - The speedometer will sweep to 140 MPH, indicating the function is complete.

## Auto Start/Stop Disable

**STEP 1** - Access the Programming Menu.

STEP 2 - Using +RES or -SET, select mode 60 (MPH)

STEP 3 - Use the +RES or –SET wheel to adjust to the desired value.
a. 0 = Auto Start/Stop is active
b. 10 = Auto Start/Stop is disabled

STEP 4 - Press the cancel cruise control button to save the input value.

**STEP 5** -The speedometer will sweep 0 to 140 MPH indicating the function is complete.

### **DFM (Dynamic Fuel Management) Disable**

Disabling DFM will automatically disable Auto Start/Stop **STEP 1** - Access the programming menu.

STEP 2 - Using +RES or -SET, select mode 70 (MPH)

STEP 3 - 3. Use the +RES or –SET wheel to adjust to the desired value. a.0 = DFM is active b.10 = DFM is disabled

**STEP 4** - Press the cancel cruise control button to save the input value.

**STEP 5** - The speedometer will sweep 0 to 140 MPH indicating the function is complete.

### **Responsiveness Level Adjustment**

When the vehicle is running and cruise control is turned off, the vehicle throttle responsiveness can be adjusted. The responsiveness level is indicated using the vehicle's speedometer.

STEP 1 - Using the +RES or -SET, adjust to the desired value.

Level 0 = Stock Level 1 = Reduced responsiveness (up to 15% less than stock) Level 2 = Increased responsiveness (up to 15% over stock) Level 3 = Increased responsiveness (up to 30% over stock) Level 4 = Increased responsiveness (up to 48% over stock) Level 5 = Increased responsiveness (up to 65% over stock)

**STEP 2** - To recall the vehicle's performance level, press the cancel cruise control button.

# FA<u>Qs</u>

## Frequently Asked Questions

**Question:** Can I adjust power levels when cruise control is on? **Answer:** No, only when cruise control is off.

**NOTE:** Cruise control can be used as normal, you just can't change power levels when cruise control is on.

**Question:** Should I remove the Pulsar LT prior to going to the dealer?

**Answer:** Yes, please remove the Pulsar LT as to eliminate it from the system so they can perform any updates or services.

**Question:** How do I check what level I am on when cruise control is off?

Answer: Simply press Cancel on power steering keypad.

**Question:** Can I "stack" or use other tuners with this device? **Answer:** No, please do not use any other tuners when the Pulsar LT is in use or installed. Stacking tuners with the Pulsar LT may cause serious damage to the vehicle.

**Question:** What is the best way to accurately measure tire size? **Answer:** Mark a line on the ground where the center of the tire rests, then drive the vehicle for two full rotations of the tire and mark the spot where it comes to a rest with another line. Measure the length between the two lines and divide by two. Then divide that number by Pi  $\pi$  (3.14159265359). Copyright© 2020 D10024100 Rev00 10/30/2020

For additional questions not found in the user guide call: **Powerteq Technical Support: (801)-476-3343** 6:00 am - 5:00 pm MST To expedite your support call, please have your Vehicle Information, Part Number, and Serial Number ready prior to calling Technical Support.