

# MILLER PERFORMANCE



W.A.R. Chip <sup>LITE</sup>

Turbo Application Manual

## Table Of Contents

1. Introduction .....	4
1.1 The benefits of W.A.R. <sup>LITE</sup> .....	4
1.2 Uses of the W.A.R. Chip .....	5
1.2.1 Manual Boost Control .....	5
1.2.2 Electronic Boost control.....	5
1.2.3 Engine Safety.....	5
1.2.4 Ease of Use .....	5
2. Boost Control .....	6
2.1 Schematic of boost system .....	6
2.2 Examples of boost control function.....	7

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# 1. Introduction

## 1.1 The benefits of W.A.R. <sup>LITE</sup>

The W.A.R. Chip <sup>LITE</sup> is an extremely valuable tool for forced induction applications. This hardware only version of the W.A.R. Chip will allow you to use the W.A.R. Chip alongside your favorite programs like SharkEdit, TunerPro and other powerful tuning programs. The W.A.R. Chip <sup>LITE</sup> lets you use the W.A.R. hardware without the need of our Windows software. This is intended for users with an in-depth understanding of hex editing.

The W.A.R. Chip is a valuable asset to experienced DIY tuners. If you don't have an emulator and you make adjustments to your tune on a computer and burn a chip each time, the W.A.R. Chip will help speed the process up. You can load 4 tunes at a time so you can try 4 slightly different files in one visit to your car saving you time. It is a permanent solution to many other devices that can clutter your desk or ECU compartment. The W.A.R. Chip eliminates the need to use EPROMS, Chip reader/writers saving you time, money and hassle. As well, the W.A.R. Chip is permanent. Ostrich and other emulators are not meant to be permanent solutions for ECU tuning; they are tools that allow you to tune a vehicle with the intent of replacing the device with a chip after tuning is finished. The W.A.R. Chip is a permanent solution, once you have tuned your car you can transfer the files via USB to the W.A.R. Chip and you are done! No erasing/burning chips etc.

The W.A.R. Chip provides further value in that you can store multiple tuned files on it. Up to four tuned files can be stored on the W.A.R. Chip! You can select between them with the easy to use Tune Command Module (TCM). Unlike EPROMS and Emulators, you can select tunes quickly and easily. No more need to bring your laptop to the car just to select a different tune, no more swapping of EPROMS, the W.A.R. Chip is a headache free permanent solution to aid in ultra high performance applications.

## 1.2 Uses of the W.A.R. Chip

Because the W.A.R. Chip is a permanent solution after you have tuned your car, it has some key features that you would definitely find useful.

### 1.2.1 Manual Boost Control

The W.A.R. Chip can store up to four useable tunes. In an instant, you can select a low boost tune or a high boost tune. Integrating a manual boost controller, you can tune two boost levels with a push of a button! The W.A.R. Chip will allow you to choose between the two properly tuned files for low and high boost. This is great because you will be getting the most out of each mode! When installed following our directions, you won't have to physically change the manual boost controller. The TCM takes care of it all!

### 1.2.2 Electronic Boost control

If you are using an electronic boost controller that can store two or more boost levels and has the ability to switch through an external grounding input, you can use the W.A.R. Chip in correlation.

### 1.2.3 Engine Safety

The W.A.R. Chip offers the comfort you need when the car is not in your control. With the ability to run a valet mode or anti theft mode, you will be able to relax knowing your investment won't be damaged. With the valet mode, you can set your car's tune for zero boost and low power. If you are worried about your shop bagging on your car or a parking attendant trying to have some fun, you will be at ease that your engine is safe and won't be ruined.

As well, you can use the W.A.R. Chip as a state-of-the-art anti-theft device. Unlike kill switches that can be worked around, the W.A.R. Chip offers amazing protection. Completely disabling the ECU renders the car useless. With our easy to follow instructions, you can easily integrate the W.A.R. Chip's great anti-theft capabilities. To find out more please read the Anti-Theft Instruction manual.

### 1.2.4 Ease of Use

The W.A.R. Chip offers incredible flexibility. With no need to use EPROMS, there is no need to use a chip reader/writer. Once you have tuned your files with your favourite tuning program like SharkEdit or TunerPro, you can easily send the tuned files to the W.A.R. Chip and be ready to use your car in seconds.

Selecting between different tunes has never been easier let alone possible with a standard EPROM. The W.A.R. Chip saves you money but more importantly time. It is no longer a hassle to change between pump and race gas tunes or low boost and high boost tunes. With the TCM, you are ready to go.

## 2. Boost Control

In this section, we will set up the W.A.R. Chip for a very useful boost function – being able to change between two boost levels and their matching tunes.

With the use of a boost controller and the W.A.R. Chip, it is now faster and easier to change between a low boost mode and a high boost mode.

### 2.1 Schematic of boost system

The following diagram is a schematic of how to obtain a boost control switch from the WAR Chip.

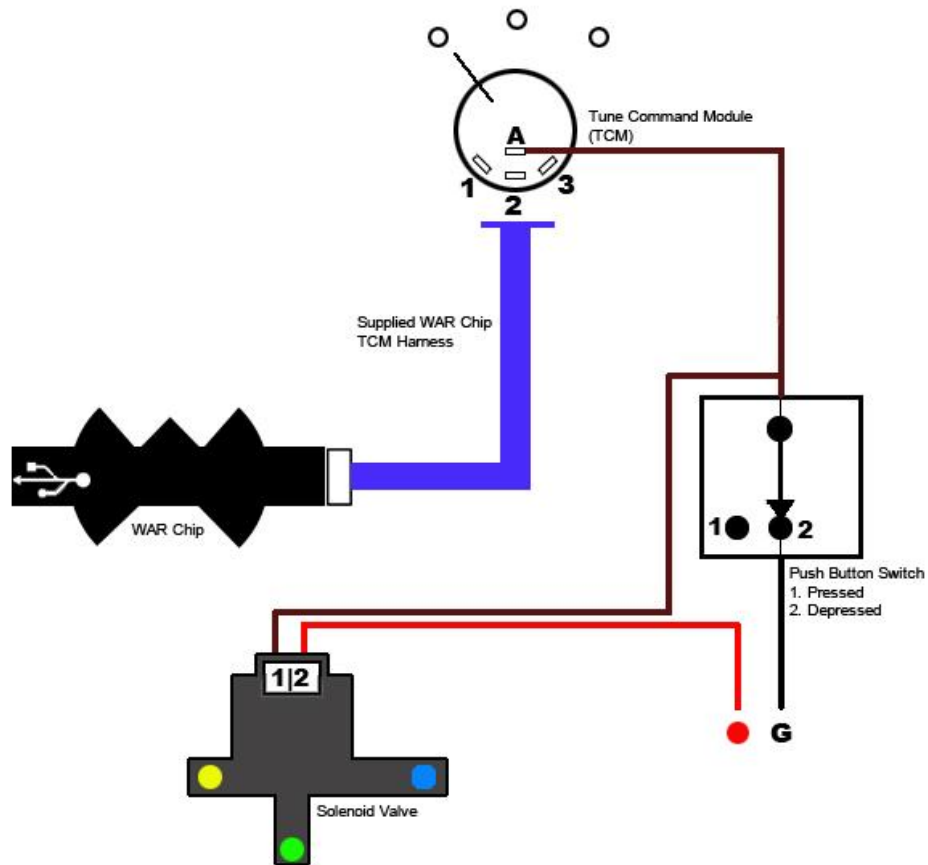
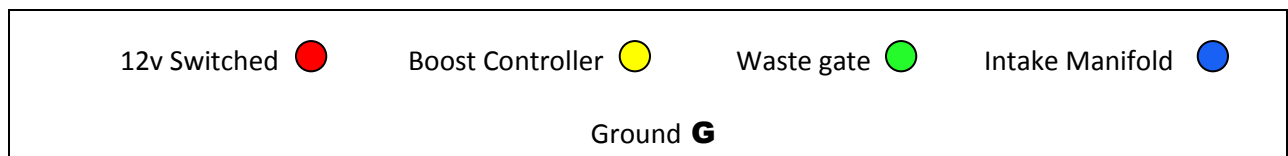


Figure 1: Boost control



## 2.2 Examples of boost control function

This boost controller configuration is ideal for low boost and high boost modes. In real time, with no hesitation, you can switch between boost modes. The following dyno graphs show the boost difference in a wide open throttle run.

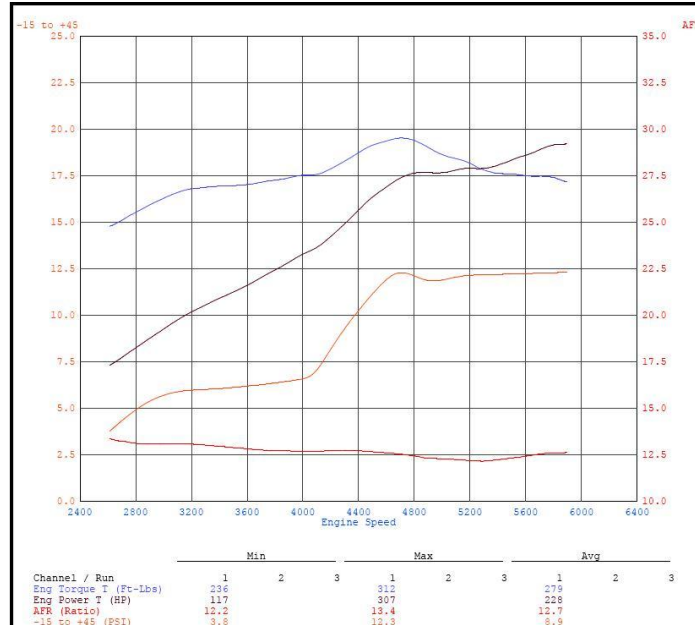


Figure 2: Low to high boost during WOT

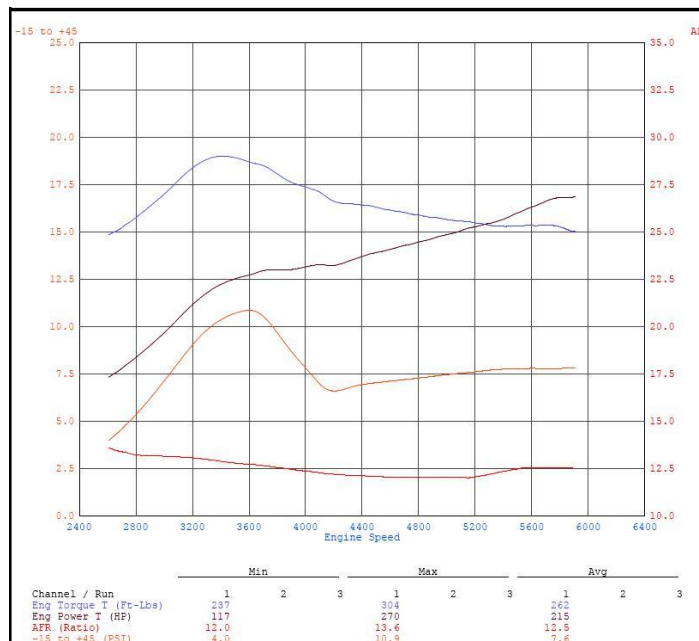


Figure 3: high to low boost during WOT

You can even watch a movie here to see and hear it in action! [WAR Chip Boost Control Movie](#)