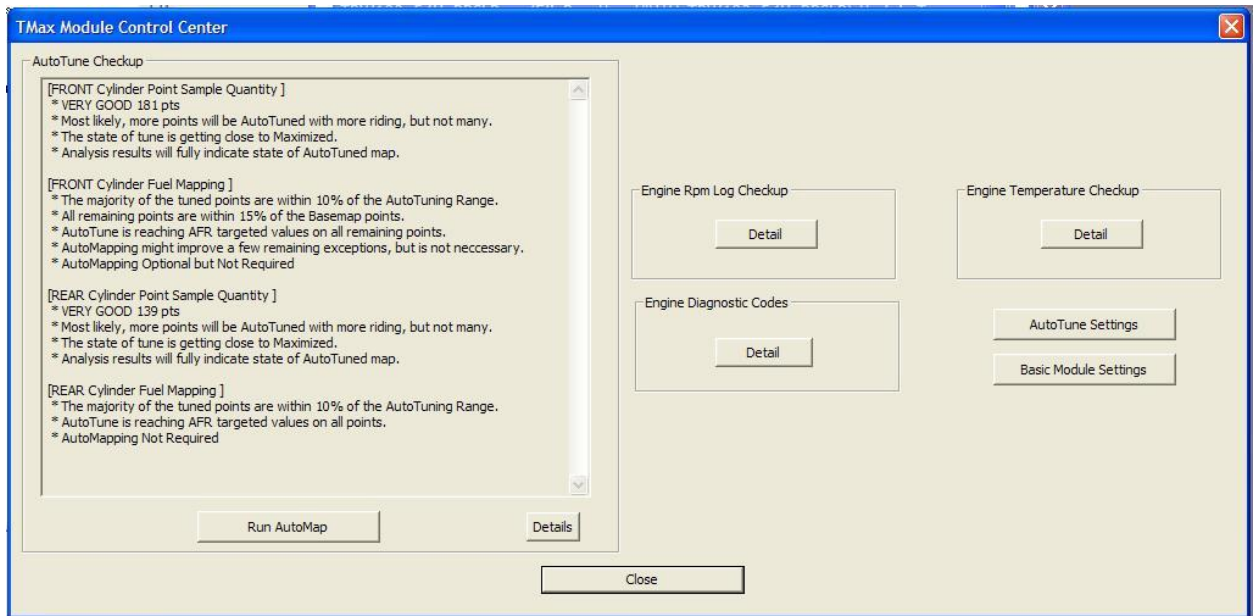


# TMAX MODULE CONTROL CENTER

## New Features with the TMax Control Center



The TMax Control Center is a one stop source for direct feedback-information on the tune of your engine and other system functions. A unique element of this feature is the feedback provided on the state of your tune via the Auto Tune Checkup. After logging at least a tank of fuel while using a wide variety of throttle positions and RPM's, this feature will list a progress report and advice on performing the steps needed to optimize performance. If fuel adjustments are approaching the maximum learning limit, there is detection to quickly review the condition of the tune of each engine. Information and advice are provided on the following critical system functions:

- Progress of the Auto-Tune system fuel adjustments.
- Engine RPM and Temperature Logs. (N/A in TBW models)
- Engine Diagnostic Codes.
- Auto-Tune Settings.
- Basic Module Settings.

The **AutoMap (Map Editing)** function can now be executed within the TMax Control Center by selecting the **Run AutoMap** button. When Using the **AutoMap** function, all fuel base map points are reset and smoothed to the learned offset values. The AutoMap feature refines the base map fuel calibration based on "Learned Parameters" established during engine run cycles. Applying learned map refinements allows the system to continue making further refinements as the engine is operated in varying ambient conditions.

# Fuel Adjustment Offset Summary

**Fuel Adjustment (Offset) Summary**

Front Cylinder Fueling Adjustments		Rear Cylinder Fueling Adjustments	
Fuel Adjustments	181 pts.	Fuel Adjustments	139 pts.
Fuel Increased	115 pts.	Fuel Increased	51 pts.
Fuel Decreased	66 pts.	Fuel Decreased	88 pts.
Average Increase	2.18%	Average Increase	1.41%
Average Decrease	-1.76%	Average Decrease	-2.05%
Adjusted 0% - 2% (Perfect!)	120pts (66%)	Adjusted 0% - 2% (Perfect!)	99pts (71%)
Adjusted 2% - 5% (Excellent)	40pts (22%)	Adjusted 2% - 5% (Excellent)	30pts (22%)
Adjusted 5% - 10% (Very Good)	20pts (11%)	Adjusted 5% - 10% (Very Good)	10pts (7%)
Adjusted 10% - 15% (Acceptable)	1pts (1%)	Adjusted 10% - 15% (Acceptable)	0pts (0%)
Adjusted 15% - 20% (OK - In Range)	0pts (0%)	Adjusted 15% - 20% (Ok - In Range)	0pts (0%)
Adjusted 20% - 30% (Run AutoMap)	0pts (0%)	Adjusted 20% - 30% (Run AutoMap)	0pts (0%)
WARNING! Over 30%	0pts (0%)	WARNING! Over 30%	0pts (0%)

\* Total Fuel Points = All FUEL map points (0 - 7936 rpm)  
\* Fuel Adjustments = Total fuel points which have been adjusted (Offset).  
\* Fuel Increased/Decreased = Total fuel points which had fuel ADDED/REMOVED  
\* Average Fuel Increase/Decrease = Average fuel percent change for all points which had fuel ADDED/REMOVED  
\* Adjusted 5% - 10% = Number of points adjusted between 5% and 10%

WARNING Adjustment Over 30% = BaseMap Modification Highly recommended.

What does it mean?

1. Only fuel map points which were analyzed and REQUIRED adjustment are in the summary.
2. 250 - 350 adjusted points is VERY NORMAL
3. A heavy balance of adjusted points in the 0% - 10% range is optimal.
4. A small number of points (10 - 20 pts.) at 15% - 20% adjustment is NORMAL.
5. \*\*User CHANGES to AFR vs TPS @ RPM maps WILL CAUSE MOVEMENT in all adjusted points.

Close

The Fuel Adjustment Offset Summary window appears when the **Details** button is selected under the Auto-Tune Checkup section. Here you'll find details of the number of adjusted points, averages, increased, decreased, percentage ranges, and descriptions of the meaning of these values. Fuel adjustments in the 15-20% range are approaching the maximum offset which could influence fuel mileage or limit the engines power output. AutoMap will quickly correct these conditions.

The AutoMap feature will likely improve the performance of most any ThunderMax system in use. We strongly encourage feedback from all to report their experience with this new feature and any other products or software.

The Product Support team stands ready to assist our customers with any questions or concerns and we welcome comments and suggestions on how to improve your experience. [productsupport@zippersperformance.com](mailto:productsupport@zippersperformance.com)

## Using the TMax Control Center (TMCC) **AutoMapping**

### For model # 309-362 (TBW)

1. Make sure that you have the latest software update with most current maps. With an internet connection, select **Configure > TMax Software Update** and follow the prompts.
2. Link to your module and select “**READ Module Maps and Settings**” from the “**File**” menu.
3. Learned Fuel Adjustments will automatically be read when the map is read.
4. Select **TMax Control Center** to view the **Auto Tune Checkup** window. Here you'll find advice on the state of your tune. You may be advised that **AutoMapping** is Recommended or Highly Recommended revealing that the learning percentage has exceeded 10% for a number of fuel points. At this time you will select **Run AutoMap**.
5. ALL **Learned Fuel Adjustments** will then be written to the map and smoothed automatically becoming the new base fuel flow points. Further correction is now enabled to dial in the fuel curves.
6. Save the adjusted map. A “**Map Notes**” notepad, found in the “**EFI Maps**” menu, can be used to record changes to your map. Once you're finished, from the “**File**” menu, select “**Save As**” and save to a convenient place (such as Desktop). Changing the last 6 digits (date code) is the simplest way of identifying a map and retaining the original 10 digit file name. Unlink and disconnect; you're finished. Time for a test ride!

## **For model #s 309-360, 365, 366, 370, 373 (Cable Throttle)**

1. Make sure that you have the latest software update. With an internet connection, select **Configure > SmartLink Update** and follow the prompts.
2. Link to your module and select “**READ Module Maps and Settings**” from the “**File**” menu. **Learned Fuel Adjustments** will automatically be read when using software version 2009.0.5 and later.
3. Select **TMax Control Center** to view the **Auto Tune Checkup** window. Here you’ll find advice on the state of your tune. You may be advised that **AutoMapping** is Recommended or Highly Recommended revealing that the learning percentage has exceeded 10% for a number of fuel points. At this time you will select **Run AutoMap**. When the **Auto Mapping** window appears, there will be an option to select to help eliminate **Frequent Deceleration Pop**. If decel popping exists, click on this option now and select **OK**.
4. ALL **Learned Fuel Adjustments** will then be written to the map and smoothed automatically becoming the new base fuel flow points. Further correction is now enabled to dial in the fuel curves.
5. The **TMCC** can also recognize that **IAC-Auto Calibrate** needs to be run. The right hand side of the **TMCC** window shows the Idle Air Control Checkup (IAC). Due to variations of tolerances in machined components, running **IAC-Auto Calibrate** may be necessary to dial in this calibration. At this time you will select **Run IAC-Auto Calibrate** from a cold start to operating temp. The process is self guiding and details are found in the **SmartLink Tuning Manual** under **Help**.

NOTE: **The IAC-Auto Calibrate** process should not be run where an unstable Air/Fuel Ratio is present. Wait until the system has corrected the fuel flow using the **AutoMap** process before using **IAC-Auto Calibrate**.

6. Save the adjusted map. A “**Map Notes**” notepad, found in the “**EFI Maps**” menu, can be used to record changes to your map. Once you’re finished, from the “**File**” menu, select “**Save As**” and save to a convenient place (such as Desktop). Changing the last 6 digits (date code) is the simplest way of identifying a map and retaining the original 10 digit file name. Unlink and disconnect; you’re finished. Time for a test ride!