



User Manual

Thank you for buying Turner Performance Software for your BMW! This guide will assist you in flashing your car with our performance software. We strongly suggest you review this guide in detail before beginning the flash. If there are any questions please contact us now.

Setup:

You should already have the following on hand and ready to use:

- O SharkInjector OBD flash tool and USB cable
- **O** Turner USB memory stick, containing:
 - **O** SharkInjector updated Base file
 - **O** SharkInjector Tune file
 - O SharkInjector Windows program setup file
 - O SharkInjector User Manual PDF
 - O SharkInjector Setup Guide PDF
- **O** SharkInjector software installed on your laptop (refer to separate Setup Guide)
- O Battery charger for the flash install

Pre-Install Notes:

- The SharkInjector will only install over stock BMW software. If your ECU was previously tuned by someone else please stop here and contact us.
- The 6-ft USB cable should be long enough if you leave the laptop outside the car (on the roof, a table, tool cart, etc). If necessary you can leave the laptop on the driver's seat and reach in through the open window.
- A battery charger is very strongly recommended.
- Step 8 is very important! The ECU must be updated with a new base version of stock software.
- The flash software must be installed without any interruption! During the reading and programming steps do not sit in the car, open the doors or windows, change any settings in the car, use the radio or iDrive, move the seat, change the A/C settings, etc.etc.



Connection to the Vehicle:



 CheckFlash for BMW__Version 1.0.0, Build 0680...EXP - 31/12/2015

 Operating system & Computer information :

 System State

 Operating State

 Operating State</t

Open the SharkInjector.exe program. Please read the license and user agreement and click "I Agree" to continue.

First time users do not need to check for software updates. If you just received the software from us you already have the latest version.

Click the [Next >] button.

The SharkInjector program will now scan your computer and check its compatibility and settings.

All four lines under "System status" should be green, indicating your computer meets the requirements for software use.

If any red text is shown, check your system against the requirements.

The most-often overlooked requirement is the laptop's battery condition. You must have 60 minutes of battery life or have the laptop plugged in and charging.



Check the condition of your car's battery. Do not continue if the battery is old, does not hold a charge, or the "**Increased battery discharge!**" warning is shown on the iDrive. Turn off all electrical loads – air conditioning, interior lights, headlights, radio, etc.

A battery charger is very strongly recommended.

Plug the SharkInjector tool directly into your computer. Then connect the SharkInjector tool to the OBD socket on your car.

Turn the ignition on (but do not start the engine). The Service Engine Soon (SES) or Check Engine light should be shown in the cluster.

SharkInjector will go through a series of communication checks with the car.

Click the [Next >] button.





The next screen will display the information from your car: ECU type, VIN, and the SharkInjector device info. All of this info should match your car.

Click the [Next >] button.

	SharkFlash	×	
?	Are you sure you like to code your hardware device with the followin information :	9	
	ECU Type : Siemens DME MSS60 Identification number : WBA18310007215446		
	Yes No		

First time users only:

A window will pop up asking for confirmation of the information shown in the previous screen. This is a one-time pop-up on the first install only. The SharkInjector tool is now permanently linked to this VIN.

Click [Yes] to continue.



5.

This is the main SharkInjector functions menu. At the top is the specific info for your car's ECU. At the bottom are the buttons for running the various SharkInjector functions –

Read ECU Memory: Read and save a copy of the software currently installed. Program ECU Memory: Write a new version of software into the ECU. Recover ECU Memory: Contact us before clicking this.

Diagnostics: Fault code reading and clearing, Adaptation clearing. Data Logging: Used for R&D. Not currently activated for end-user.

Software options: Contact us before clicking this.



Check for Existing Fault Codes

		110300 2000, Daily Coto II Chi - 52,22,2015	
	TRNE	Identification details : ECU Type : Siemens DME MSS60	
_		Vehicle Manufacturer Fou Hardware Number : 7854317	
Oui	Race-Winn	ing Vehicle Manufacturer Ecu Software Number : 7848136	
So	ftware Now	In Hardware Reference Number : 05690T07240FFKIIV0	
	Your Hands.	Vahida Identification Number : MRA19210007215446	
		Equiliare indication Date : 02.06.2009	
		• •••	
		Calibration options : Diagnostic options	
		Read ECU Memory Diagnosti	cs
R		Program ECU Memory Data Logg	ing
RHE	-	Extra options :	
	SONO ONE	Recover ECU Memory Software op	tions
_			_
		8 Diagnostic Trouble Codes found !	
	DTC Code	8 Diagnostic Trouble Codes found ! DTC Description	
# 1	DTC Code 2789	8 Diagnostic Trouble Codes found ! DTC Description Catalytic converter conversion bank 1	
# 1 2	DTC Code 2789 278A	8 Diagnostic Trouble Codes found ! DTC Description Catalytic converter conversion bark 1 Catalytic converter conversion bark 2	
# 1 2 3	DTC Code 2789 278A CDB8	8 Diagnostic Trouble Codes found ! DTC Description Catalytic converter conversion bark 1 Catalytic converter conversion bark 2 No Fault Code description found 1	
# 1 2 3 4	DTC Code 2789 278A CDB8 CD90	8 Diagnostic Trouble Codes found ! DTC Description Catalytic conventer conversion bank 1 Catalytic conventer conversion bank 2 No Faul Code description found 1 No Faul Code description found 1	
# 1 2 3 4 5 c	DTC Code 2789 278A CDB8 CD90 CD84 CD90	8 Diagnostic Trouble Codes found ! DTC Description Catalytic converter conversion bark 1 Catalytic converter conversion bark 2 No Fault Code description found 1 No Fault Code description found 1 No Fault Code description found 1 No Fault Code description found 1	
# 1 2 3 4 5 6 7	DTC Code 2789 278A CD88 CD90 CD84 CD9E CD9E	Biagnostic Trouble Codes found ! DTC Description Catabilic converter conversion bark. 1 Catabilic converter conversion bark. 2 No Fault Code description found 1	
# 1 2 3 4 5 6 7 8	DTC Code 2789 278A CD88 CD90 CD84 CD96 CD80 27FB	Biagnostic Trouble Codes found I DTC Description Catalytic converter conversion bank 1 Catalytic converter conversion bank 2 No Fault Code description found 1	
# 1 2 3 4 5 6 7 8	DTC Code 2789 2784 CD98 CD90 CD90 CD94 CD95 CD90 27E8	B Diagnostic Trouble Codes found ! DTC Description Catalytic conventer conversion bark. 1 Catalytic conventer conversion bark. 2 No Fault Code description found 1 No Faul	
# 1 2 3 4 5 6 7 8	DTC Code 2789 2784 CD88 CD90 CD84 CD94 CD94 CD96 27E8	B Diagnostic Trouble Codes found ! DTC Description Code/dic conventer conversion bark 1 Code/dic conventer conversion bark 2 No Fault Code description found 1 No Fault Co	
# 1 2 3 4 5 6 7 8 8	DTC Code 2789 2784 CD88 CD90 CD84 CD84 CD86 CD80 27E8	B Diagnostic Trouble Codes found ! DTC Description Catablic conventer conversion bark 1 Catablic conventer conversion bark 2 No Faul Code description found 1 N	
# 1 2 3 4 5 6 7 8 8 8 Re Cle	DTC Code 2789 2789 2784 CD98 CD90 CD84 CD96 CD84 CD90 27E8 27E8 27E8 27E8 27E8 27E8 27E8 27E8	B Diagnostic Trouble Codes found ! DTC Description Catablic conventer conversion bark.1 Catablic conventer conversion bark.2 No Fault Code description found 1 Clear Adaption Date	

The first action is to check for existing fault codes in your ECU. This is also a communications test between your car and the SharkInjector tool.

Click the [Diagnostics] button on the right.

In the new screen, click [Read Trouble Codes].

If no codes are present then click [Close] and continue to Step 7.

If there are any unexpected codes you may want to stop the software upgrade now and address these issues first.

There is an option to save the fault codes (.txt file) if you want to refer back to them later. You will be checking and clearing codes again after the software is installed.

When done checking codes click [Close].



Read and Save Your Original Software

7.	🔊 SharkFlash for BMW Version 1.0.0, Build 0680 EXP - 31/12/2015
7.	Sheukflach for BMW - Version 10.0; Build 0680 - EXP - 31/12/2013 Werfloction details : ECU Type : Samena DME MSS60 Uur Race-Winning Software Now In Your Hands. Evide Mandacture Eou Schwen Number : 784317 Verice Mandacture Eou Schwen Number : 784517 Verice Mandacture Eou Mandacture Eou Schwen Number : 784517 Verice Mandacture Eou
	Cosox (Vest.) Uose (Pep++
	ECU Reading options
	Please select the type of data you like to process. If you are not sure, please consult the software vendor. Data options : Calibration data only Full program + calibration data
	OK Cancel
	Reading ECU memory
	Image: Strank
	SharkFlash
	ECU has been successfully read. Read file has been saved as : C:\Users\Files\SiemensDMEMS560 7854317 7848136_0569QT0Z240EEKUV0_ WBSP
	ECU details file has been saved as : C\Users\Files\SiemensDMEMS560 7854317 7848136_0569QT0Z240EEKUV0_ WBSP full.bmw.bt
	Would you like to open the read folder ?
	Yes No

Next we want to save a copy of your stock software. From the SharkInjector menu screen click the [Read ECU Memory] button.

In the Read Options window select the "Full Program + calibration data" option and then click [OK].

Select a folder to save your files. Two files are created: the full copy of your stock file and a text summary of your ECU details.

A new window will open with a green progress bar displaying the progress of the Read. It will take about 35 minutes. Do not interrupt this process! Do not open/close doors or touch anything inside the car or on the laptop or cable.

ECU Read is complete.

Click [No] to continue.

Clicking [Yes] will open the folder where your files are stored (optional).



Install the Turner Base File



We require you to install an updated Turner version of stock software before the tuned file can be loaded. This is a new Base file similar to the factory "240E" file. This is mandatory and you must ensure the Turner 240E base software is installed before continuing with the tuned software install.

Click [Program ECU Memory]. Navigate to the folder containing the software files. This should be the Turner USB drive that should still be plugged into your laptop.

Select the "SharkInjector Base" file and click [Open].

The Base file will now install.

	Programming ECU memory
SHARK C	SHE
rogramming memory ad	dress 0x00071EC4
Time elap	osed : 00:04:43 - 92% - 8% - Time remaining : 00:00:23

Toggle ignition	
Please switch the ignition to the OFF position	
	Ignition is OFF

A new window will open with a red status bar displaying the progress of the Base file update. The update takes about 5 minutes to install.

Do not interrupt this process! Do not open/close doors or touch anything inside the car or on the laptop or cable. It is normal for systems in the car to cycle on/off and error messages to appear in iDrive as the engine ECU is taken offline to be programmed.

After the update is complete turn off the ignition via the Start/Stop button. Click the **[Ignition is OFF]** button on the screen. When the green status bar is done counting down your ECU is now ready for the Performance Software install.

You can turn the ignition back on but do not start the vehicle.



Installing the Turner Performance Software



Back in the SharkInjector menu screen click [Program ECU Memory].

Navigate to the folder containing the software files. This should be the Turner USB drive that should still be plugged into your laptop.

Select the "SharkInjector Stage "X" Tune" file and click [Open]. This is the actual Turner Motorsport Performance Software file.

	Programming ECU memory
/SHA	RKSTAST
grammir	ig memory address 0x00071EC4
	Time elapsed : 00:04:43 - 92% - 8% - Time remaining : 00:00:23
> Con	munication in progress >>>>> Please DD NDT interrupt this process III <<<<<

Toggle ignition	
Please switch the ignition to the OFF position	
	Ignition is OFF

A new window will open with a red status bar displaying the progress of the software upgrade. This takes about 5 minutes to install.

Do not interrupt this process! Do not open/close doors or touch anything inside the car or on the laptop or cable. It is normal for systems in the car to cycle on/off and error messages to appear in iDrive as the engine ECU is taken offline to be programmed.

After the flash is complete turn off the ignition via the Start/Stop button. Click the **[Ignition is OFF]** button on the screen. When the green status bar is done counting down your ECU is now tuned!

10.



Start the engine and let it idle. As long as the car starts and idles normally you can now turn it off. You can ignore any error messages in the iDrive screen (you will clear fault codes and adaptions in the next step).



Clear Fault Codes and Adaptation

TURNER	Identification details : ECU Type : Siemens DME MSS60	
	Vehicle Manufacturer Ecu Hardware Numb	er: 7854317
our Race-Winning	Vehicle Manufacturer Ecu Software Numbe	er : 7848136
Software Now In	Hardware Reference Number : 0569QT0Z2	240EEKUV0
Your Hands.	Vehicle Identification Number : WBA18310	0007215446
*	Ecu Manufacturing Date : 02.06.2009	
	-	
	Calibration options : Diagn	nostic options :
	Read ECU Memory	Diagnostics
	Program ECU Memory	Data Logging
•	Edra -	options :
Carlo Carlo	Necover ECO Memory	Software options
	<back ned=""> C SharkFlash</back>	Dose H
0	Cack Ned > C SharkFlash Diagnostic Trouble Codes found !	Dose H
0 I # DTC Code 0	Celeark Need > C Shark Flash Diagnostic Trouble Codes found !	Jose H
0 I	Centre Codes found I Diagnostic Trouble Codes found I DTC Description	Dose H
0 I	Ceack Ned > C SharkFlash Diagnostic Trouble Codes found I DTC Description	Dose H
0 H DTCCode D	Ceack Ned > C SharkFlash Diagnostic Trouble Codes found I DTC Description	Dose
0 H	Ceack Ned > C SharkFlash Diagnostic Trouble Codes found I DTC Description	Dose
0 H DTCCode G	Ceack Ned > C SharkFlash Diagnostic Trouble Codes found I DTC Description	Close H
0 H DTC Code G	Ceack Ned > C SharkFlash Diagnostic Trouble Codes found I DTC Description	3000 H
0 I	CeBack Ned > C SharkFlash Diagnostic Trouble Codes found ! DTC Descripton	3000 H
0 I # DTC Code 0	Center Codes found 1 Codes fo	Jose H
0 I # DTC Code (Read Trouble Codes Clear Trouble Codes	Cee Adaption Data Cee Adaption Data	Jose H

Turn the ignition back on (but do not start the engine).

Back in the Shark Injector menu screen click the [Diagnostics] button again.

Click [Read Trouble Codes]. There may be some harmless codes here after flashing the ECU. These are typically message errors from programming.

Click [Clear Trouble Codes] to erase them.

Then re-click [Read Trouble Codes] again. Unless you had pre-existing faults this screen should now be empty.

You must also click the [Clear Adaptation Data] button to clear ECU adaptations.

Remember, you can use this tool again to check fault codes or restore the ECU back to stock.

Close the program and disconnect the SharkInjector tool from your OBD port.

Congratulations on flashing your ECU! You're now ready to enjoy the extra power, torque, smoothness, and response of a Turner-tuned BMW!



Post-install notes

OBD Readiness. Clearing fault codes and adaptation settings will also reset the OBD Readiness monitors. These will need to be set before taking the car for an inspection. Drive normally and the Readiness monitors will set one-by-one. For track or race cars, note that not all Readiness monitors will set.

Octane. Your Performance Software is set to either 91 or 93 minimum octane. Plan ahead if 93 is not available and reinstall your stock software. Additional performance software files can be purchased separately if you want to have multiple software versions.

Dealer Updates: Make sure your BMW dealer does not install any new software updates to your ECU. Installing a new version of BMW software will overwrite your Turner Performance Software. The new Base software that we use is already the best version available so there should be no need to update to a newer version. If BMW does update your ECU contact us for further instructions. We cannot guarantee compatibility with all BMW software versions, including updates. In some cases an update fee may apply.

Shark Injector Updates. Occasionally a newer version of Shark Injector will be released. Your older version may no longer open or have limited functions. You can download a new version of Shark Injector from our website here: http://www.turnermotorsport.com/t-SharkInjector.aspx.