



VF-ENGINEERING PRODUCT LIMITED WARRANTY: SUBJECT TO ALL THE TERMS, CONDITIONS AND EXCLUSIONS SET FORTH IN THIS DOCUMENT, VF-ENGINEERING, INC. PROVIDES THE FOLLOWING WARRANTIES TO THE ORIGINAL PURCHASER OF CERTAIN VF-ENGINEERING PRODUCTS. FOR REFERENCE PURPOSES, "you" AND "your" MEAN ONLY THE ORIGINAL PURCHASER OF THE WARRANTED VF-ENGINEERING PRODUCT. YOU MUST ALSO READ OWNERS MANUAL & PRODUCT INVOICE.

1. Software, Supercharger Unit, Supercharger Kit, Performance Packages are Products. Hex Flash refers to the software tuning Product manufactured by VF-Engineering, Inc. Supercharger Unit refers to the Vortech Supercharger V-Series unit Product manufactured by Vortech Engineering Inc and the Magnuson TVS-series Supercharger unit manufactured by Magnuson Products LLC. Each manufacturer is the ultimate manufacturer of each Supercharger Unit.
2. The warranty for the Supercharger Unit is underwritten by the ultimate manufacturer and VF-Engineering forwards Product warranty queries directly to the respective Product manufacturer or representative. VF-Engineering does not open or repair either brand of Supercharger Unit. All manufacturer's terms are available upon request from them directly or from VF-Engineering.
3. If you complete and return the Warranty Registration Form for the Supercharger along with a copy of Your original receipt within thirty days of Your purchase of a VF-Engineering Supercharger Kit, the Supercharger Unit manufacturer warrants to you that the Supercharger Unit in the Supercharger Kit will be free from defects in materials and/or workmanship in accordance with the Vortech Engineering, Inc. Warranties Program effective March 1, 2000 or Magnuson Products LLC Warranties Program effective March 18, 2022. The balance of the kit will be free from defects in materials and/or workmanship for one year/90 days as specified in sections (5), (6), (7) from the date of your purchase of the kit. If you do not return the Warranty Registration Form and proof of purchase within thirty days, then VF-Engineering warrants that the supercharger in the kit will be free from defects in materials and/or workmanship for a maximum of one year from the date of purchase of your kit.
4. **REQUIREMENTS AND EXCLUSIONS:**
 - i. You must be the original purchaser of the new Product.
 - ii. The supercharger must NOT be modified, disassembled, tampered in any way.
 - iii. The supercharger drive pulley must not be changed, and the original pulley seal must remain intact.
 - iv. The original Vortech/Magnuson serial number tag must not be removed, altered, or replaced.
 - v. You must change the engine oil and oil filter at least every 3-5000 miles using an SH rated oil or synthetic lubricant, regardless of the vehicle, filter, or oil manufacturers recommendations of oil change intervals.
 - vi. You must replace supercharger oil (Vortech V3 unit) at 2500 from new and then every 7500 miles. Check oil level through inspection cover on the nose of the Magnuson supercharger unit every 50,000 miles.
 - vii. The conversion must be allowed to 'break in' for a period of 100-300 miles and inspected as per maintenance instructions.
 - viii. The main serpentine belt (supercharger) must not be excessively tensioned see belt tensioning instructions.
 - ix. The Supercharger must be maintained according to the minimum service requirements as listed under the maintenance schedule.
 - x. Acts of God, normal wear and tear, rust damage, damage to vehicle or engine caused by backfire, engine failure, accident collision.
 - xi. Improper installation, not following installation instructions provided, or installation by an unskilled person.
 - xii. Over-speeding the supercharger by any method including under-drive accessory pulleys or larger crank pulley or tampering with the wastegate signal line.
 - xiii. Damage resulting from entry of foreign particles.
 - xiv. If the supercharged car is driven after an uncorrected fault has been detected.
 - xv. Any faults/irregularities are not advised to your vendor.
5. **ONE YEAR LIMITED WARRANTY ON PERFORMANCE SOFTWARE**
 - i. Liability is limited to the original purchase price of the merchandise to the original purchaser only.
 - ii. All performance software including performance software from Hex Flash is for "OFF ROAD USE ONLY". Software has not been tested or approved by any federal or local governing agency and are not approved or recommended for street use unless officially stated. Understanding the legal requirements or legal limitations regarding the use of this product is the sole responsibility of the user.
 - iii. It is the user's responsibility to ensure their vehicle is operating in good condition before installing Hex Flash and not to install it if they have any doubt.
 - iv. Pre-existing functional issues will not be resolved by installing Hex Tuning software.
 - v. Improving the performance of an engine by altering the engine's computer software may cause the engine to "work harder" and could result in premature wear of ignition components and or cause damage to the car. The user assumes these risks. VF-Engineering, Hex Tuning is not responsible for damage to a car of this kind.
 - vi. Hex Flash performance tuning software and supercharger calibration software is designed and tested on stock vehicles. It is not tested to work in compatibility with other modifications or products. Any changes to the OEM design of major air flow components not limited to exhaust header, downpipe, catalytic converter, air flow sensor, changes the calibration of the engine and likely will require custom tuning to avoid potential engine damage. VF-Engineering does not offer custom tuning.
 - vii. All performance data quoted was obtained by testing a group of test cars in specific conditions on specific measuring equipment. No guarantee is given that all cars will produce the same results.
 - viii. Performance software is dependent upon the use of a minimum 91 octane rated fuel. Use of inferior fuels will cause detonation and possible engine damage or failure. Vehicles should not be driven with the occurrence of a check engine light or other issues. The use of ethanol blends is not tested unless specifically stated on your invoice and can cause fuel starvation leading to engine failure.
 - ix. It is not the responsibility of Hex Tuning or VF-Engineering to correct compatibility or operational issues arising from the use of Hex Flash performance software or to validate performance of your vehicle or resolve diagnostic issues, conflicts, or performance conditions on tuning applications, new or pre-owned Supercharger Kits
 - x. Users of performance software are strongly recommended to perform a full read of their ECU before programming with the Hex Flash performance file. This enables the user to return their ECU to its original condition. VF-Engineering is not responsible for maintaining a copy the original read of the ECU.



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- xi. 3rd party electronics plugged/wired into a vehicles' CAN system will likely prevent/interfere with Hex Tuning software tools from reading and writing the ECU through the OBD2 port correctly and can cause the ECU(s) to lock up and incurring a cost to recover (if possible). VF-Engineering is not responsible for ECU recovery.
- xii. When reading and writing the ECU through the OBD2 port with Hex Tuning software tools it is critical that the vehicle is connected to a clean 30A 14V power source.
- xiii. Software versions may change (updated) if you have your vehicle serviced at an OEM dealer and this process overwrites your VF-Engineering Hex Tuning software calibration. We recommend you either advise dealers not to update your ECU in order to leave the VF-Engineering software in place or read out your ECU and submit a new file request from VF-Engineering to verify if your original tuning file can be re-written back into your ECU or whether a new software calibration will be required. Trying to program your original tuning software into an ECU that has been updated can lock it up and incur cost to recover it (where possible).
- xiv. VF-Engineering is not responsible for any losses or damages occurring as a result of the use of performance software.

6. ONE YEAR LIMITED WARRANTY ON VF-ENGINEERING SUPERCHARGER KIT ANCILLARIES AS BELOW:

- i. Mounting brackets and hardware
- ii. Supercharger drive pulleys and components.
- iii. Idler pulleys.
- iv. Air inlet and discharge systems.
- v. Air valves
- vi. Hex Tuning software

7. NINETY DAY LIMITED WARRANTY ON VF-ENGINEERING SUPERCHARGER KIT ANCILLARIES AS BELOW:

- i. Air filters.
- ii. Oil feed and oil drain components.
- iii. Serpentine belts.
- iv. Injectors, regulators, and fuel components

WARRANTY COVER FOR THE SUPERCHARGER KIT IS EXCLUDED BUT NOT LIMITED TO THE FOLLOWING CONDITIONS.

- 8. VF-Engineering does not provide any warranty to You for damages to and/or failure of any non-VF-Engineering component or equipment on a vehicle, including but not limited to the engine, electrical systems, transmission, and differentials.
- 9. The warranties do not protect You from Acts of God, normal wear and tear, or damage to a vehicle or engine caused by backfire, collision and or engine failure.
- 10. These warranties do not cover any costs incurred for towing, downtime or depreciation of the vehicle, any labor costs to diagnose problems, to remove or replace the VF-Engineering products, or any damage caused by the use of another company's fittings or pulleys.
- 11. The following non-VF-Engineering occurrences, uses and modifications are considered misuse of the VF-Engineering product and invalidate all Your VF-Engineering Warranties, including but not limited to:
 - i. Any disassembly or attempted disassembly of any VF-Engineering assembled parts.
 - ii. Any disassembly or attempted disassembly of the supercharger, volute, gearcase or other components.
 - iii. Damage resulting from ingestion of debris by the supercharger.
 - iv. Improper supercharger installation.
 - v. Improper drive pulley/belt combination on supercharger.
 - vi. Excess belt tension on the supercharger belt drive.
 - vii. Over-speeding the supercharger by any method including under-drive accessory pulleys or larger crank pulley or tampering with the wastegate signal line or use of electronic or mechanical boost controller.
 - viii. Restricted or blocked supercharger air intake resulting in excessive negative pressure at the air inlet.
 - ix. Free revving of the engine with the drive belt driving the supercharger in place.
 - x. Incomplete fitment of all the parts supplied in the VF-Engineering kit.
 - xi. Lack of oil supply in the supercharger.
 - xii. Dirty or contaminated fuel injectors DFI and PI.
 - xiii. Excessive engine crankcase pressures.
 - xiv. Dirty or contaminated engine oil.
 - xv. Removing or defacing the original Vortech/Magnuson serial number tag.
 - xvi. Improper installation, not following installation instructions provided, or installation by an unskilled person.
 - xvii. If the supercharged car is driven after an uncorrected fault has been detected; or
 - xviii. Any faults/irregular noises are not advised to your vendor.
 - xix. Use of non-VF-Engineering calibration software or alteration of the VF-Engineering software calibration.
 - xx. Use of ethanol and high-octane blends unless you have purchased VF-Engineering software specifically for ethanol/blends.
- 12. Power increases with VF-Engineering, Inc. Supercharger Kits are based on unmodified engines and quoted from results obtained from dynamometer tests using the Dynojet 248C and Mustang MD-500AWD and no guarantee is given that every car will achieve the same results as pre-existing conditions may affect results.

EXTENT OF WARRANTY- ADDITIONAL EXCLUSIONS AND LIMITATIONS

- 13. The duration of any, and all warranties is limited to the duration of this express warranty. All incidental and consequential damages are hereby excluded. Some US states do not allow limitations on how long an implied warranty lasts, or exclusion or limitations of incidental or consequential damages, so the above limitations or exclusions may not apply to You. This warranty gives You specific legal rights, and You may have other rights that vary from state to state (USA) only.



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- 14. No warranties of merchantability of fitness for particular purpose, or affirmation of fact, of the warranty, expressed or implied, other than any available manufacturer's warranties are extended or granted by VF-Engineering.
- 15. Installation and use of VF-Engineering products may void a manufacturer's original product warranty. This limited warranty does not supersede or replace any manufacturer's original product warranty that has been voided, and VF-Engineering expressly excludes from this limited warranty any and all rights or services subject to any such voided manufacturer's original product warranty. The user assumes all risks and losses related to any manufacturer original product warranty that has been voided as a result of the installation and use of any VF-Engineering product.

DISCLAIMER

- 16. Motor racing is extremely hazardous, and death may occur. VF-Engineering products have no warranty or representations made with ability to protect against injury or death. Motor racing, aggressive driving, including driving for any period of time at full throttle, and car modifications of any kind that facilitate aggressive driving may reduce the useful life of the car and or any of its wearable parts. Improving the performance of an engine by altering the engine's computer software may cause the engine to "work harder" and could result in damage to the car. The user assumes these risks.

REMEDIES

- 17. Your sole remedy for the above warranties is the repair or replacement of the defective product only, at VF-Engineering's discretion.

18. WARRANTY CLAIM PROCEDURE

- i. If a VF-Engineering product is within the warranty period and You wish to make a claim, please follow the procedure as follows:
 - ii. Contact VF-Engineering on (+1)714-528-0066 asking for the customer service department or fill in a technical support request ticket on www.vfengineering.com and have the following information available:
 - iii. Supercharger serial number
 - iv. Copy of original invoice on which the product was purchased (must be dated and show retail store name).
 - v. Year, make, model, vehicle mileage, and engine specifications of the vehicle.
 - vi. Number of miles on the VF-Engineering product; and
 - vii. Perceived problem
- 19. VF-Engineering will then offer suggestions to help you in troubleshooting or will issue a return authorization (R.A.) number to return the product parts for warranty evaluation.
 - 20. If you have been issued an R.A. number, you must "safety package" each product, which means you must place the product(s) within a shipping box strong enough to hold the weight of the product(s) and to maintain its shape during shipping with adequate packing material so that the product(s) will not hit other product(s), component(s), or the side of the box during shipping. You want to use a professional company. Clearly mark the R.A. number in large (approximately 2") alphanumeric characters in two locations on the outside of the box with a bold marker. Returned items in transit remain the responsibility until signed for by a member of VF-Engineering shipping dept.

21. INCLUDE IN THE SHIPPING BOX THE FOLLOWING ITEMS:

- i. Serial number if applicable.
 - ii. Copy of original invoice on which the product was purchased (must be dated and show retail store name).
 - iii. Year, make, model, vehicle mileage, and engine specifications of the vehicle.
 - iv. Number of miles on the VF-Engineering product; and
 - v. Perceived problem
 - vi. A copy of the original Warranty Registration, if applicable.
 - vii. Return authorization number; and
 - viii. Address to which the product is to be shipped after inspection.
- 22. Ship the properly safety packaged and marked box via UPS or other carrier, prepaid and insured for the retail value of the product being returned to:

VF-Engineering
Service Department
1191 N Knollwood Circle
Anaheim, California 92801
USA
R.A.# _____

- 23. If a VF-Engineering warranty applies, your product will be repaired or replaced at VF-Engineering's option and returned to you, freight prepaid excluding any international shipping, taxes, tariffs, customs and/or duties, etc which must be paid by You), via UPS/FedEx/DHL ground service. If a VF-Engineering Limited Warranty does not apply, we will advise you of the specific reason for denial and explain to You the costs involved in repair or replacement of your product. After relaying this information, we will, at your option, either proceed with the repairs as quoted or return Your products(s) to you in the condition it/they are in at the time of inspection of the warranty evaluation by VF-Engineering. Timing is not of the essence in delivery or turn around. If the warranty does not apply and you do not want VF-Engineering to repair or replace your product, you will be charged the disassembly and inspection charges for the product and return shipping with insurance by means of UPS COD.
- 24. This warranty cannot be amended orally or in writing by any VF-Engineering employee, representative or agent, and any promises inconsistent with this warranty are void and unenforceable against VF-Engineering.



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MAINTENANCE INSTRUCTIONS FOR THE SUPERCHARGER KIT and SUPERCHARGER UNIT

Caring for your kit (mandatory procedures)

- 25. After fitting, the new supercharger kit should be allowed to bed in for a run-in period of 100-300 miles during which the engine should not be driven over 4500 rpm. All Audi R8, Gallardo 5.2 and Huracan vehicles must be data logged and logs submitted to VF-Engineering for approval. Details in the kit installation manuals.
- 26. The supercharger kit should be routinely inspected and maintained as below:
 - i. Air filters – Use the air filter system provided in your VF-Engineering system.
 - ii. Air Intake / Air Discharge – Must be in good condition and properly secured. If equipped with flex hose, this must be free of damage / leaks.
 - iii. Belt Tension – Excessive belt tension can lead to supercharger or crankshaft bearing failure. Do not use a non-slipping or cog-type belt on a supercharger designed to be driven with a serpentine belt. Replacement belts for your application are available from VF-Engineering.
- 27. Computer Chips – Use the computer software provided in your VF-Engineering supercharger kit. The use of an aftermarket chip /pedal enhancer is not recommended as they would not be calibrated for use with a supercharger and can cause unpredictable results. VF-Engineering supplies a computer chip/flash software with each kit which is specifically developed and calibrated to maximize performance to VF-Engineering’s specifications and hardware specifications.
- 28. Crankcase Ventilation System – You must use the system provided in your VF-Engineering kit to prevent excessive crank case pressures and possible engine damage. We recommend you clean or replace every 6-10,000 miles.
- 29. Pulleys – If your supercharger drive belt comes off it may be due to misalignment of the supercharger pulley cause by installation issues or movement of the mounting plate. Misalignment can also be caused by over-tightening (and failure) of the supercharger belt. Supercharger belt failure can also occur as a result of contact with unsecured engine parts or foreign debris. For years of trouble-free operation when used for street applications, we recommend the drive ratios not be changed from the standard specification.
- 30. In case of recurring miss-firing or detonation / pinging, you should contact your vendor. By following these procedures, you will ensure long term durability and reliability from your conversion.
- 31. Vortech V3 supercharger – use the supplied oil drain line to drain the oil and refill from the top with Vortech blend gear oil only. Perform first oil change at 2500 and then every 7500 miles. Magnuson supercharger unit – check oil level at inspection port on front nose cover at 50,000 miles.

MAINTENANCE OF YOUR SUPERCHARGED VEHICLE

- 32. Before supercharging your vehicle, we recommend you service and inspect your vehicle. Ideally the fault codes should be checked / rectified / reset. This would highlight any existing conditions that may need attention. The condition of consumables, such as oil, filters, spark plugs, HT (plug wires) leads, ignition coil, and air mass sensor should be inspected and replaced where needed.
- 33. Collecting a pre-install data log at full throttle will allow you to take a snapshot of the engine/vehicle performance metrics such as fuel pressure, ignition correction, exhaust gas temp (and more) at peak load/performance/duty cycle. This is a requirement for all Audi R8, Gallardo 5.2 and Huracan systems.
- 34. All Audi R8, Gallardo 5.2 and Huracan vehicles, are highly recommended to have all DFI and PI fuel injectors ultrasonically cleaned prior to supercharger installation.
- 35. Never operate your engine at full throttle when the engine is cold. When starting the engine each day, always allow plenty of time for the oil to reach full operating temperature before running above 2500 RPM. Full operating temperature is generally achieved only after the engine water temperature has reached the ‘normal’ indicated operating range for 2-3 minutes.
- 36. Always utilize the highest octane super (premium) unleaded fuel available in your area. Where possible try to use the same brand of fuel. Where possible do not use fuels sold at low-cost service stations and preferably use national brands whenever possible.
- 37. After filling up with fuel from a source other than the one you use regularly, carefully listen for engine detonation. If any detonation is audible, you may have a fuel problem. Cease utilizing heavy-throttle and drive with greater care until the fuel is consumed. If detonation is still evident, inspect for other causes such as:
 - i. Faulty fuel pump(s). Check fuel pressure when detonation is occurring.
 - ii. Dirty injector(s), clogged fuel filter or pinched fuel line.
 - iii. Faulty spark plug(s) or spark plug wires/coils with too much resistance. Consult your factory vehicle service manual.
 - iv. Faulty ignition coil.
 - v. Cooling system not functioning properly. Check for a faulty thermostat, faulty or improper calibration of the thermostatic fan switch, water pump belt slippage, a plugged radiator or bad fan clutch.
 - vi. Dirty air filter / cleaner.
- 38. Ensure the spark plug gap is correct for a supercharged application.
- 39. We recommend using manufacturer recommended service components or taking the advice from our dealers specializing in the different makes of cars.
- 40. Spark Plugs need to be changed at intervals of 8-10,000 miles or sooner. This is especially critical on vehicles such as E9X M3 which employ ion knock detection systems and utilize the spark plug to detect knock.
- 41. Spark plug leads (wires) must be checked for condition. When reaching the end of their life, they become hard and must be replaced as a complete set.
- 42. Engine oil should be changed every 3-5,000 miles. We recommend OE oil. Do not mix different grades of oil qualities.
- 43. Please review www.vfengineering.com technical FAQ page for the most up to date maintenance notes for your supercharged vehicle.



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PRODUCT REGISTRATION FOR WARRANTY ON KITS ONLY
THIS DOCUMENT MUST BE RETURNED COMPLETED TO VALIDATE WARRANTY.
Please retain a copy for your records.

() 1 YEAR WARRANTY

Complete and mail form to:
VF-ENGINEERING
1191 N Knollwood Circle
Anaheim, CA 92801
USA

SUPERCHARGER SERIAL# (see tag on supercharger unit): _____

PRODUCT PURCHASE DATE (also warranty start date): _____

CUSTOMER NAME: _____

CUSTOMER ADDRESS: _____

CUSTOMER TEL#: _____

Name of dealer / outlet where you purchased your VF-Eng product: _____

Did you install the supercharger system yourself? Yes / No _____

VEHICLE KIT FITTED TO: _____
MAKE / MODEL / YEAR

MILEAGE OF VEHICLE: _____

CUSTOMER COMMENTS: _____