



#### **VF-ENGINEERING SUPERCHARGER KIT LIMITED WARRANTY**

Subject to all the terms, conditions and exclusions set forth in this document, Zurich Engineering, Inc. ("VF-Engineering") 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.

1. The supercharger unit refers to the Vortech Supercharger V-Series unit manufactured by Vortech Engineering Inc.
2. If you complete and return the Warranty Registration Form along with a copy of Your original receipt within thirty days of Your purchase of a VF-Engineering supercharger kit, VF-Engineering warrants to you that the V-1, V-2, V-5 and V-9 supercharger in the kit will be free from defects in materials and/or workmanship in accordance with the Vortech Engineering, Inc. Warranties Program effective March 1, 2000. The balance of the kit will be free from defects in materials and/or workmanship for one year/90 days as specified in sections (4),(5) 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.
3. **REQUIREMENTS AND EXCLUSIONS:**
  - i. You must be the original purchaser.
  - 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 serial number tag must not be removed, altered or replaced.
  - v. You must change the engine oil and oil filter at least every 3000 miles using a SH rated oil or synthetic lubricant, regardless of the vehicle, filter or oil manufacturers recommendations of oil change intervals.
  - vi. You must remove, inspect, and clean the oil inlet fitting (oil feed nozzle) to the supercharger every 3000 miles.
  - vii. The conversion must be allowed to 'break in' for a period of 300 miles and inspected as per maintenance instructions.
  - viii. The main serpentine belt must not be excessively tensioned see belt tensioning instructions.
  - ix. The Supercharger Kit 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.
  - 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.
4. **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. GIAC software
5. **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.**

6. 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;
7. 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;
8. These warranties do not cover any costs incurred for towing or downtime of the vehicle, any labour 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.;
9. 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.
  - 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. Restricted or lack of oil supply to the supercharger;
  - xii. Improper installation of, or blocked or restricted oil drain line;
  - xiii. Excessive engine crankcase pressures;

- xiv. Dirty or contaminated engine oil;
  - xv. Removing or defacing the original Vortech 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.
10. Power increases with Zurich Engineering, Inc. Supercharger Kits are based on unmodified engines and quoted from results obtained from dynamometer tests using the Dynojet 248C 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**

- 11. 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.
- 12. 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.

#### **DISCLAIMER**

- 13. 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**

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

#### **15. 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 service department 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
16. VF-Engineering will then offer suggestions to help you in troubleshooting or will issue a return authorization (R.A.) number to return the product for warranty evaluation;
17. 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.

#### **18. 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 Three Year Warranty Registration, if applicable;
  - vii. Return authorization number; and
  - viii. Address to which the product is to be shipped after inspection.
19. 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  
 1365 North Dynamics Street, Suite E.  
 Anaheim, CA 92806 USA  
 R.A. number\_\_\_\_\_

- 20. 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.
- 21. 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.



### **VF-ENGINEERING SUPERCHARGER KIT OWNERS MANUAL**

The following information and recommendations are designed to promote years of trouble free service for your supercharger. Care recommendations have also been outlined for your vehicle and maintenance of your supercharger kit.

### **MAINTENANCE INSTRUCTIONS FOR THE SUPERCHARGER KIT and SUPERCHARGER UNIT**

Caring for your kit (mandatory procedures)

22. After fitting, the new supercharger kit should be allowed to bed in for a run-in period of 300 miles during which the engine should not be driven over 4500 rpm.
23. 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.
  - iv. Air Assist – The air assist system on certain Vortech superchargers must be kept free from kinks and leaks. Spare parts are available from VF-Engineering.
24. Computer Chips – Use the computer chip provided in your VF-Engineering system. The use of an aftermarket chip is not recommended as they would not be calibrated for use with a supercharger and can cause detonation. VF-Engineering supplies a computer chip with each kit which is specifically developed, and calibrated to maximize performance.
25. 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 this every 6000 miles.
26. 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. For years of trouble free operation when used for street applications, we recommend the drive ratios not be changed from the standard specification.
27. 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.
28. Clean the supercharger oil inlet fitting every 3-6000 miles. When the vehicle is cold, remove the oil inlet fitting at the supercharger and clean it thoroughly utilizing high pressure air to blow the orifice clean before reinstallation. Do not attempt to remove the screen/filter inside the oil feed fitting. This oil inlet fitting is designed with a very small orifice, which provides a mist of oil directly onto the gears. Never use Teflon tape or other sealants on any oil feed line fitting. Do not over-tighten fittings.
29. Do not use engine oil additives as they may contain solid particulates which can clog the supercharger feed line.

### **MAINTENANCE OF YOUR SUPERCHARGED VEHICLE**

30. Before supercharging your vehicle we recommend you service and inspect your vehicle. Ideally the fault codes should be 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.
31. 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.
32. 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.
33. 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 with too much resistance. Consult your factory vehicle service manual. Most wires should not exceed 10 Ohms of resistance.
  - iv. Faulty ignition coil / distributor. Ask VF-Engineering for diagnostic info specific to your vehicle.
  - 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.
34. Ensure the spark plug gap is correct for a supercharged application.
35. We recommend using manufacturer recommended service components or taking the advice from our dealers specializing in the different makes of cars.
36. Spark Plugs need to be changed at intervals of 8-10,000 miles or sooner. Eg. for Volkswagen models, in hot countries we recommend Bosch F6DTC copper electrode plugs.
37. 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. Check the condition of your coil pack and test for resistance according to OE spec. Check the condition of the distributor cap (where applicable) and replace if worn or heavily corroded. Replace rotor every 15,000 miles and cap every 50,000 or as condition warrant.
38. Engine oil should be changed every 3-5,000 miles. We recommend OE oil. Do not mix different grades of oil qualities.

**PRODUCT REGISTRATION FOR WARRANTY.**

**THIS DOCUMENT MUST BE RETURNED COMPLETED TO VALIDATE WARRANTY.**

*Please retain a copy for your records.*

**( ) 1 YEAR WARRANTY**

**( ) 3 YEAR WARRANTY** \$150 additional cost paid at time of product purchase

please check one of the above.

**Complete and mail form to:**

VF-ENGINEERING

1365 N DYNAMICS STREET, SUITE (E),  
ANAHEIM, CA 92806 USA.

[www.vf-engineering.com](http://www.vf-engineering.com)

SUPERCHARGER SERIAL# (see blue 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 :