



FORD FALCON FG 6CYL
4.0L BARRA (2008-2014)

**VORTECH ENGINE BELT DRIVE
SUPERCHARGER & INTERCOOLER KIT
INSTALLATION MANUALS**

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INTRODUCTION

Congratulations on selecting the best performing and best backed automotive supercharger available today. Before beginning this installation please read this instruction booklet thoroughly.

CAPA Supercharger Systems are a performance improving device. This product is intended for use on healthy and well maintained engines. Installation on a worn-out or damaged engine is not recommended and may result in failure of the engine and or the supercharger. CAPA IS NOT RESPONSIBLE FOR ANY DAMAGES RESULTING FROM THE USE OF THIS KIT.

For best performance and durability please take note of the following key points:

1. Use minimum of 96-98 RON unleaded fuel
2. The engine must have stock compression ratio.
3. If the motor has been modified in any way, check with CAPA prior to installation.
4. Change your oil and oil filter. Refill with the best synthetic oil available.
5. Check that all components of the ignition system are in top condition.
6. Cold Starts - never race your engine when your engine is cold. Allow water temperature to rise up to operating range before driving above 2500 r.p.m. Engine damage may result in high r.p.m. and boost conditions when cold.
7. Always listen for signs of deterioration (pinging) and discontinue hard use (no boost) until the problem is resolved.
8. Change oil and oil filter every 5,000km. **OVER FILL OIL BY 1 LITRE WHEN KIT IS FITTED.**
9. Always use an air-filter.
10. Never strike the supercharger pulley with a hammer or other tools. (Evidence of such force will void warranty).
11. Retention belt after 500-600km, if not sooner, because the belt will stretch during initial brake in period. Tighten belt only enough to stop slippage (the belt must still have some flex), over tension of the belt is the cause of input bearing failure
12. Never over-rev supercharger. Internal step up on a Vortech V-3 Supercharger is 1.0 to 3.60. Impeller speed must not exceed 50,000r.p.m (**Sealed Vortech**).

Impeller speed calculated as below:

Vortech V-2 / V-3 Supercharger

$$\frac{\text{Crank Pulley Diameter}}{\text{Supercharger Pulley Diameter}} \times 3.60 \times \text{Engine RPM} = \text{Impeller Speed}$$

NOTE: The reason for grooved belts to move over one or more grooves or come off completely is always due to an alignment problem. Misalignment, can also be caused by over-tightening of the belt - which may damage the drive system.

GLOSSARY

COMPRESSOR HOUSING

The housing, which makes up the enclosure portion of the compressor. Also referred to as the volute, scroll or snail.

COMPRESSOR SURGE

The phenomenon that occurs when the pressure ratio is too high for a given flow, or impeller speed. All centrifugal compressors can experience it. In automotive use it is most often found during decelerations when the engine speed is still high and the throttle is closed.

DETONATION

The uncontrolled rapid expansion or explosion of the air/fuel mixture in the combustion chamber.

GAUGE PRESSURE

The measure of pressure above atmospheric pressure.

IMPELLER

The bladed wheel inside the compressor housing that accelerates the air.

INDUCER

The air inlet portion of the compressor.

NATURALLY ASPIRATED

An engine without a supercharger.

PRESSURE, BOOST

The difference in pressure between barometric and intake manifold absolute pressure on a supercharged engine (read as gauge pressure).

PRESSURE, ABSOLUTE

The sum of gauge pressure and atmospheric pressure. One standard atmosphere = 29.92 in. of mercury (Hg) = 14.696 lbs./in.² (psi)

PRESSURE RATIO

Manifold absolute pressure divided by standard barometric pressure.

$$P.R. = \frac{\text{gauge pressure} + \text{atmospheric pressure}}{\text{absolute pressure}}$$

STOICHIOMETRIC

The correct chemical mixture of air and fuel to yield complete combustion.

KITS PARTS LIST

	Quantity	Checked
VORTECH SUPERCHARGER ASSEMBLY:		
Vortech Supercharger Unit	1	—
Supercharger Pulley, 3/8 UNF Bolt, Flat and Spring Washer	1	—
Sealed Supercharger Only		
Sealed Supercharger Reservoir Bottle and Clamp	1	—
Sealed Supercharger Reservoir Bottle Mount	1	—
1/4" UNC x 4" Bolts	2	—
Oil Top Up Bottle	1	—
Oil Feed and Drain Only		
Vortech Oil Feed Line Kit (incl. 'Y' Piece)	1	—
Replacement Dipstick tube assy	1	—
500mm x 1/2" Oil Drain hose	1	—
500mm x 20mm Conduit	1	—
8-22mm Hose clamps	2	—
Vortech Air Assist kit (Fitted to Supercharger)	1	—
SUPERCHARGER BRACKET:		
FG 6cyl Supercharger Bracket	1	—
Supercharger Bracket Front Plate	1	—
Pedestal 56mm Length, 25mm OD, 8.5mm ID	2	—
M8 x 1.25" x 80mm Countersunk Bolts	4	—
Lower Bracket Mount	1	—
M12 x 1.75" x 90mm Bolt and Shim	1	—
M8 x 1.25" x 35mm Bolt, Spring and Flat Washer	2	—
3/8" UNC x 1 1/4" Cap Head Bolts, Spring and Flat Washer	5	—
SUPERCHARGER BELT SYSTEM:		
6PK2910 Engine Belt (3.33" Supercharger Pulley)	1	—
89mm Large Plastic Winged Idler	1	—
77mm Small Plastic Winged Idler, Trimmed One Side	1	—
10mm Spacer	1	—
M8 x 40mm x 1.5 Bolt and Flat Washer	1	—
M10 x 40mm x 1.5 Bolt, Flat and Spring Washer	1	—
2.5mm Spacer, OD 25mm, ID 11mm	1	—
MP Aluminium Idler Bearing Spacer, Machined	1	—

Parts List continued on Next Page...

KITS PARTS LIST (CONTINUED)

	Quantity	Checked
AIR INTAKE (AIR FILTER TO SUPERCHARGER):		
3 1/2" Pod Filter	1	—
3 1/2" Kalor Tube	1	—
3 1/2" FG 6cyl Pod Mount w/ 10mm PCV Barb	1	—
Self Tapping Screw	1	—
45-60 Clamps	3	—
1200mm PCV Hose	1	—
Ford One Way Valve	1	—
AIR DISCHARGE (SUPERCHARGER TO THROTTLE BODY):		
3" x 90° Silicone Bends	2	—
3" x 10mm Joiner with BOV Grommet	1	—
100mm Joiner	1	—
65-89 Hose Clamps	4	—
Plastic Bypass Valve	1	—
Bypass Valve Sock and Cable Tie	1	—
VACUUM SYSTEM:		
700mm x 4mm Vacuum Hose	1	—
4mm Brass T Piece	1	—
40mm x 4mm ID Conduit	1	—
400mm x 8mm ID Conduit	1	—
RADIATOR HOSE MODIFICATION:		
50mm x 40mm OD Radiator Hose Joiner	1	—
Special Cut Upper Radiator Hoses, 90° (Mackay Hose 38EE9K)	2	—
27-51mm Hose Clamps	4	—
Modified Thermostat Housing and Gasket	1	—
Loktite 515	1	—
FUEL SYSTEM SETUP (OPTIONAL)		
T-Rex Fuel Pump	1	—
Fuel Pump mount plate	1	—
1000mm x 5/16" EFI hose and protective Conduit	1	—
Fuel Hose Clamps 10-12mm	4	—
M5 x 15mm Bolts, nut spring and flat washer	4	—
Factory replacement Fuel Pressure Reg (Replaces factory item)	1	—
52lb 3/4 Length Injectors with loom adaptors	1	—

Parts List continued on Next Page...

KITS PARTS LIST (CONTINUED)

	Quantity	Checked
INTERCOOLER KIT (OPTIONAL)		
FG 6cyl Maxflow Water to Air Intercooler	1	___
Setrab Cooler Part Number 50-919-4400 (358 x 140 x 46)	1	___
90° Brass Fittings, 5/8" Barb x 1/2" BSP	3	___
Vortech Reservoir Bottle, 8N056-060	1	___
Brass Barb Fitting, 5/8" Barb x 1/2" BSP	1	___
1/2" BSP Male x 1/2" BSP Male Fitting	1	___
Brass 45° 1/2" Male to 1/2" BSP Female Fitting	1	___
5/8" Hose x 80cm	1	___
5/8" Hose x 90cm	1	___
5/8" Hose x 47cm	1	___
13-25mm HS5712 Hose Clamps	6	___
3" x 50mm Straight Silicone Joiner	1	___
3" x 60mm Straight Silicone Joiner	1	___
64-89mm HS5748 Hose Clamps	4	___
Modified Billet Pump Mount w/ 5/16 UNC Thread	1	___
5/16 Rubber Insulator	1	___
5/16 Nut and Spring Washer	1	___
Panel Washers, 30mm OD, 10mm ID	2	___
Horn Relocation Bolt M6 x 40, Nut and Spring Washer	1	___
6mm Flat Washers	2	___
Universal Washer Bottle	1	___
FG 6cyl Washer Bottle Bracket	1	___
M6 x 16 Bolts, Nuts, Spring and Flat Washers	4	___
Drivers Side Upper Radiator Mount Bracket	1	___
Drivers Side Lower Radiator Mount Bracket	1	___
Passenger Side Upper Radiator Mount Bracket	1	___
Passenger Side Lower Radiator Mount Bracket	1	___
Ford Plastic Coarse Thread Screws (Same as Horn)	2	___
Spacers 16mm OD x 9mm ID x 6mm Thick	2	___
M6 x 16mm Bolts	4	___
M6 Spring Washers	4	___
M6 Flat Washers	12	___
Redline Water Wetter (Not Included in Kit)	1	___
2.5 Litres of Demineralised Water (Not Included in Kit)	1	___
M6 x 16 Countersunk Bolt w/ Nut, Flat and Spring Washer	2	___
M6 x 15 Bolt w/ Nut, Flat and Spring Washer	2	___
Washer Bottle Bracket	1	___
Washer Bottle Kit Inc. Wire & Hose	1	___
Plastic Bypass Valve	1	___
Bypass Valve Filter	1	___
1" x 45mm Hose	1	___
1" Hose Clamps	2	___

Parts List continued on Next Page...

KITS PARTS LIST (CONTINUED)

	Quantity	Checked
INTERCOOLER KIT ELECTRICAL SYSTEM (OPTIONAL)		
Bosch Water Pump 0392022002	1	—
Bosch 2 Pin Connector Suit Water Pump, Blue	1	—
Heat Shrink x 40mm	2	—
Bosch Relay Assembly	1	—
Single Fusible Link Wire, Modified	1	—
Push On Spade Connectors	4	—
Twin Wire Scotch Lock Joiner	1	—
M8 Nut, Relay Mount	1	—
M8 Yellow Hole Connector	1	—
Small Plastic Zip Ties	10	—
2220mm 2 Core Wire	1	—
800mm 2 Core Wire	1	—
300mm Black 3mm Wire with Conduit	1	—

Important before beginning installation, verify that all parts are included in the kit - report any shortages or damaged parts immediately.

PREPARATION & PART REMOVAL



1. Remove OTR intake from air box
2. Remove intake air filter box and discharge pipe to throttle body
3. Drain and discard radiator fluid
4. Remove upper radiator hose to engine
5. Remove thermostat outlet and set bolts aside
6. Remove factory engine drive belt
7. Remove rubber 90° PCV joiner from PCV line (see photo)

SPECIAL TOOLS

- dyno or use of
- accurate air fuel ratio meter
- boost gauge
- fuel pressure gauge
- fuel return gauge
- long straight edge

FUEL SYSTEM ENHANCEMENT

Option - Ford Flash Tuner 2 (Up to 2008 Models)

NOTE: Ford X3 for 2009 Onwards (Custom Tune Required)

Option - 52lb 3/4 Length Injectors / Loom Adaptors

Option - 2 Bar Map Sensor

Option - Rising Rate Fuel Regulator

Option - T-Rex Inline Fuel Pump

INSTALLATION



1. Locate air conditioner pump bracket mount on passenger side of engine bay. Locate the thread and mount position shown in picture below.



2. Fit lower bracket mount to previously located thread with 1x M8x35+S+FW fitted to outside hole, using M12 x 1.75 x 90 bolt (use Loctite 515 on thread)



3. Check that bracket mount is square to engine vertically as shown. Use a ruler and ensure gap is as parallel as possible and tighten the M12x1.75x90 bolt now as it cannot be adjusted later.



4. Using second M8x35+S+FW mount main Supercharger bracket to previously installed mount and tighten in place.



5. Locate bolts on front engine cover, shown in picture below and remove



6. Fit front supercharger bracket using M8x80mm CS head bolts to front engine cover and tighten in place.



7. Fit bracket pedestals between brackets and tighten M8x80mm CS head bolts. Ensure brackets are square to the engine.

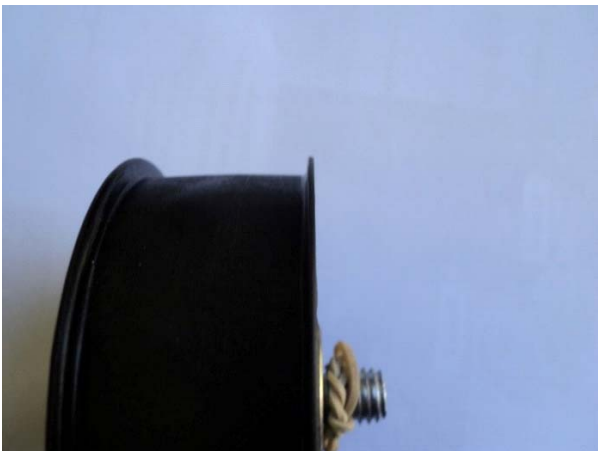




8. Remove top idler pulley on front engine cover and replace with 90mm idler supplied in kit and re use factory bolt and dust washer and tighten in place. Picture shows new idler installed in position

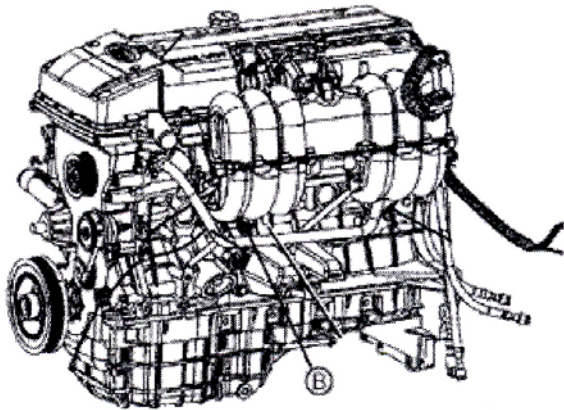


9. Fit the 77mm idler to the front supercharger bracket plate using M10x35mm bolt + F+SW and 2.5mm spacer, making sure the thin edge of idler is towards the supercharger bracket. Make sure the idler spins freely when tightened. If not, place a shim between idler and spacer to add clearance and re check.

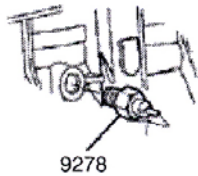


NOTE: One edge of idler is thinner than the other. The thinner edge is to be placed on the bracket side.

THIS SUPPLIMENT PAGE APPLIES TO SUPERCHARGERS WITH AN OIL FEED AND DRAIN SETUP ONLY (SUPERCHARGER USES OIL FROM THE ENGINE)



OIL PRESSURE SWITCH
ⓑ



10. OIL FEED AND DRAIN ONLY - With oil light switch removed, fit 'Y' adaptor at oil light switch, route hose towards, where supercharger will be situated.

*Fit Dipstick tube provided, use clamps to secure hose

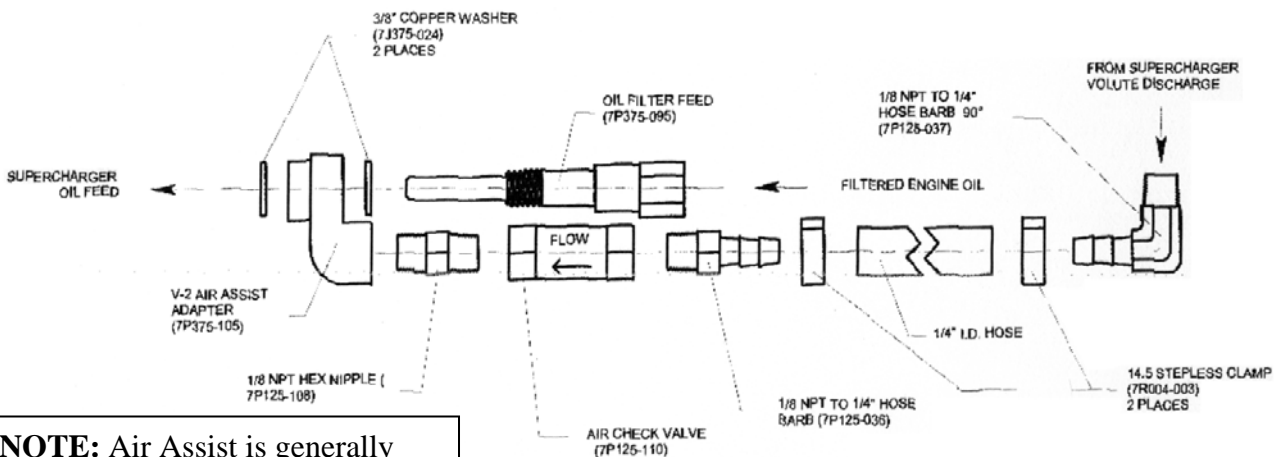
*Fit Drain Hose to Supercharger first before fitting supercharger into bracket.

*Supercharger should have inlet pipe also fitted to supercharger when installing to bracket.

*Relocate ABS wire to front of left hand inner guard and down along chassis rail.

*Relocate main wiring loom, now clips behind and through headlight hole to new position through headlight hole alongside air-conditioning pipe above chassis rail. Ensure air assist is fitted to supercharger, use drawing to ensure correct installation. Fit the supercharger to the mounting bracket using 5x3/8 UNC Cap head bolts +F+SW and tighten in place.

AIR ASSIST FITMENT DIAGRAM



NOTE: Air Assist is generally fitted at supercharger assembly time, however if fitment is required follow this schematic.

V-2 AIR ASSIST ASSEMBLY 2E100-010



11. Fit the supercharger to the mounting bracket using 5x3/8 UNC Cap head bolts +F+SW and tighten in place.

SEALED SUPERCHARGER ONLY STEPS 12-15



12. Lay the oil hose along the inner guard and place the hose into the corner of the engine bay as low as you can get it. Measure from the edge of the inner guard down the hose 130mm and cut here. This will allow for a nice even curve in the hose when reservoir bottle is mounted. See picture for guidance on how to measure accurately. It is important to get the hose as low as possible to allow for air intake fitment.



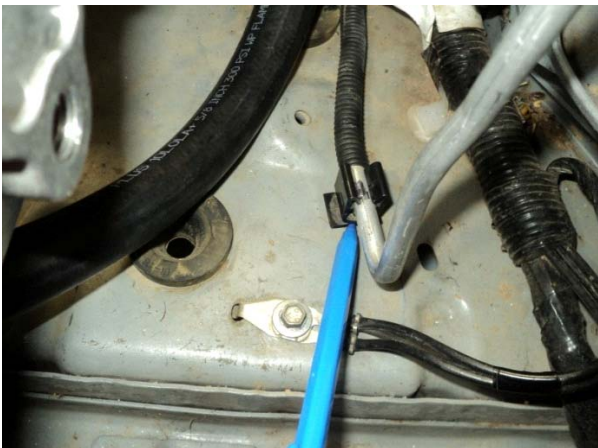
13. Fit the reservoir mount bracket to bottle as shown using 2x 1/4"UNC x3/4"bolts and tighten.
14. Fit the 5/8" hose clamp to oil hose and push in the oil bottle. Face the mount towards the passenger side of the car and gently tighten the clamp.



15. Remove the front bolt from the front passenger side guard and insert the reservoir bottle mount under the edge of the guard and replace bolt.

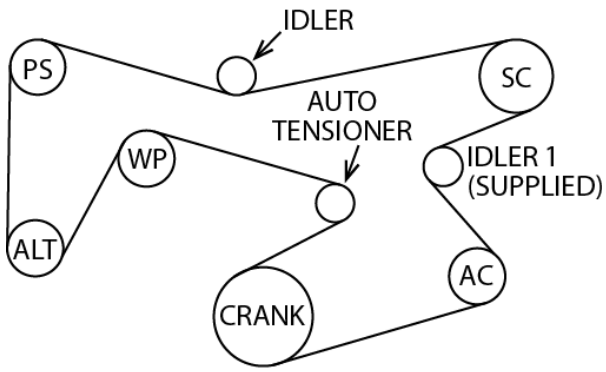


NOTE: Ensure the reservoir bottle hose is not kinked and is routed as shown.



16. Gently bend air conditioner line into position shown in picture below, this will allow room for the intake duct later. **NOTE:** Pictures show line before and after. This is for **non-intercooled** vehicles only. On intercooled systems, bend further out to ensure clearance to intercooler's water pump.





BELT CONFIGURATION DIAGRAM

17. Install belt as shown in diagram. Hold Auto Tensioner at maximum adjustment and force belt onto supercharger pulley taking time to work the belt over the ribs on the supercharger pulley.

INTERCOOLED VEHICLES

Refer to steps 1-16 of the intercooled supplement at the end of this manual (after step 35). Once this has been done, continue with step 18.



18. Place the air filter element in position shown in picture.



19. Remove and replace earth lead bolt with pod mount placed underneath earth lead as shown in picture below.



20. Fit self-tapping screw to pod filter mount in position shown in picture. Take time to align the pod mount to the same position shown in picture. This will ensure pod filter has clearance to radiator fan shroud.



21. Route 10mm hose under supercharger bracket and push over plastic PCV line. Trim hose if required.



22. Route 10mm hose under supercharger bracket and push over plastic PCV line. Trim hose if required. This hose attaches to pod filter ring in next step.



23. Attach the 10mm hose to the fitting installed to the pod ring taking time to make sure the fitting is facing with the direction of air flow as shown in picture below.



24. Fit the pod filter to the pod mount and tighten the clamp at this time.



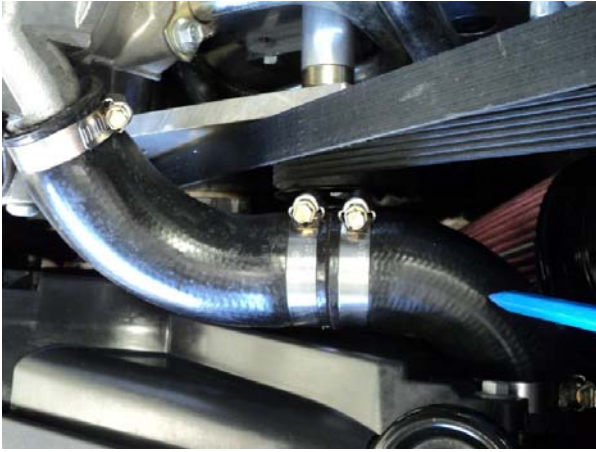
25. Trim the flexible intake tube to 75-80 cm in length. Attach the duct to supercharger intake and secure in place with HS60 Clamp provided.



26. Run the duct around the side of the supercharger and connect to the pod mount with HS60 clamp provided.



27. Fit modified thermostat housing to engine as shown in picture below. Use LOCTITE 515 on the gasket supplied. (Outlet may be different from picture shown)



28. Fit upper radiator hose as shown in pictures below. Adjust clamps as required to get hose to look as shown in picture. Ensure there is clearance between belt and clamps of at least 15mm.

INTERCOOLED VEHICLES

Refer to steps 17-23 of the intercooled supplement at the end of this manual. Once this has been done, continue with step 29.

29. Refill cooling system as per Ford Dealer instructions (ensure air is purged from system) at this time. Also, remember to top up cooling system after car is run for first time.



30. Fit the discharge assembly as shown in picture and adjust clamps as required. The straight section of the discharge should be parallel to the engine when correctly adjusted. Rotate clamps underneath intake and tighten in place.



31. Push the Blow off valve into the grommet in the intake tube. Fit the blow off valve filter and clamp in place.



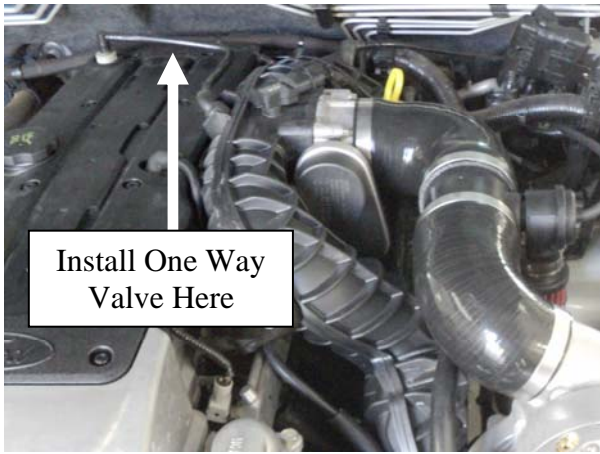
32. Attach the 4mm hose provided to the blow of valve.



33. Cut Vacuum line where shown and fit 4mm brass T-piece provided as a joiner with the barb facing the front of the car.



34. Attach the 4mm vacuum line from blow off valve to t-piece. Trim the vacuum line if required leaving some slack.



35. Fit one way valve to rocker breather as shown in picture below. Ensure valve is installed in the correct orientation to prevent the boost from pressurizing the rocker cover.



36. Check supercharger oil level (sealed unit only) and belt system after initial start up. Follow remaining procedure at the end of the fitment manual.



Above: FG 6cyl Non-Intercooled



Above: FG 6cyl Intercooled

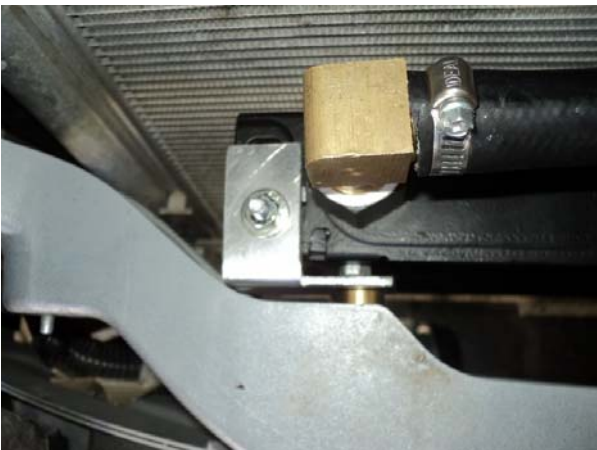
INTERCOOLER SUPPLIMENT



1. With clip removed, locate hole where air conditioner line retaining clip was mounted inside passenger side inner guard.
2. Using the billet water pump mount with the pre installed rubber mount, place a panel washer above the hole and the second one underneath and secure in place using 5/16" Nut S&FW.



3. Slide the Bosch water pump into the bracket and place in position shown in the picture below. Tighten the clamp. Arrows show flow discharge and inlet of pump.
4. Remove the horn from its current location and unclip from loom and set aside. Horn will be replaced at a later step.



5. Locate the factory mount holes located on the inner side of the intrusion bar. Mount the upper condenser brackets to these holes using the 6mm spacer and the self-tapping plastic screws provided. Mount the condenser to the brackets using M6x16mm bolt S&FW.





6. Remove the two factory bolts shown in the picture below and mount the lower driver's side mount bracket to the radiator support panel. Using 1x M6x16mm Bolt S&FW attach the bracket to the condenser as shown

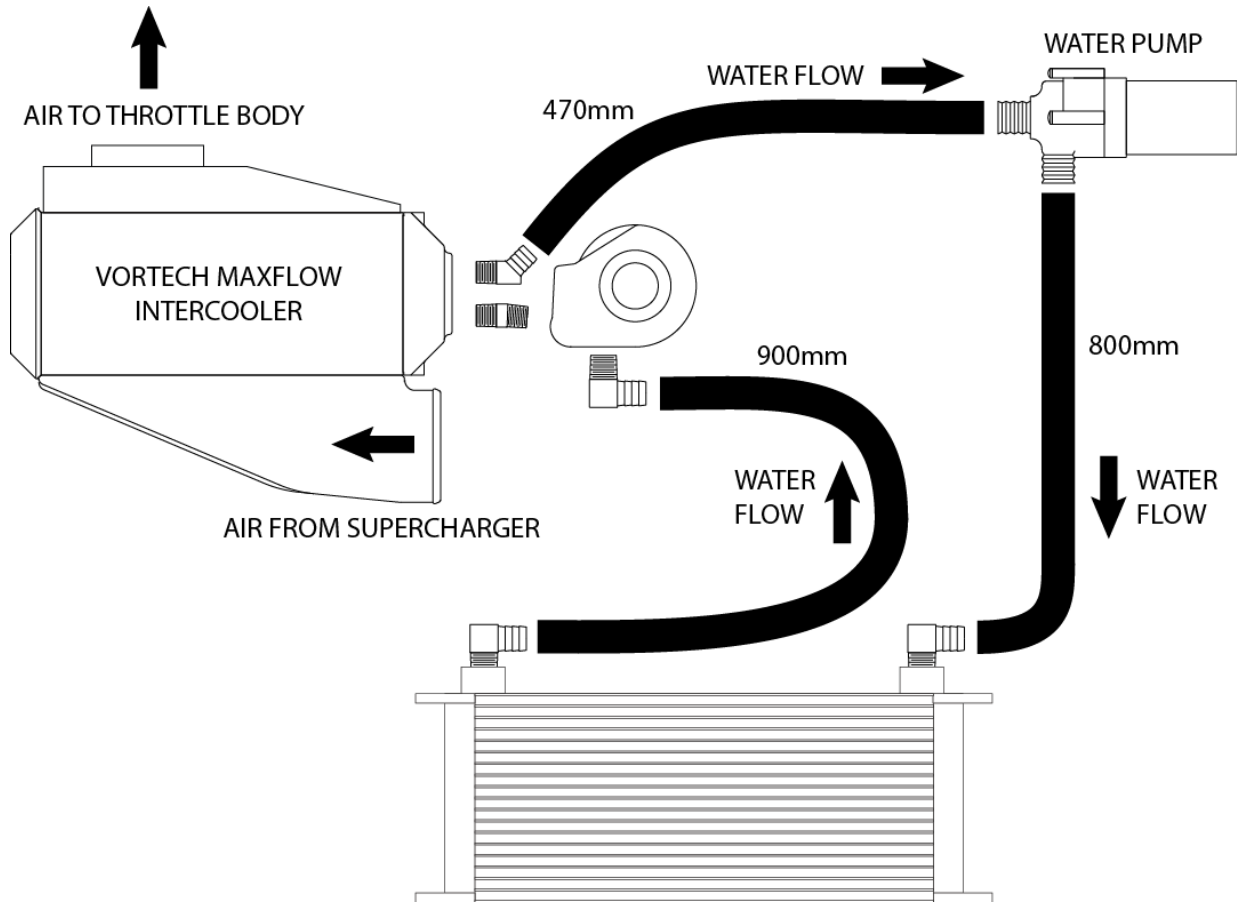


7. Remove the two factory bolts shown in the picture below and mount the lower Passenger side mount bracket to the radiator support panel using the factory bolts. Using 1x M6x16mm Bolt S&FW attach the bracket to the condenser as shown.



8. Relocate the horn to the new position shown in pic below. Use 1x 40mm bolt nut S&FW and tighten in place. Re-connect the wiring loom to the horn at this time.

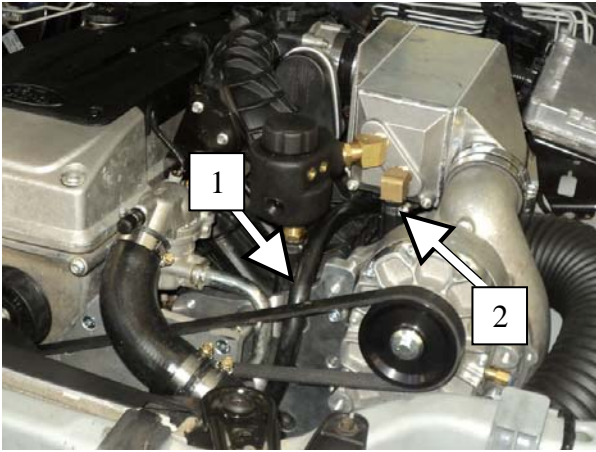
Water to Air Intercooler Schematic



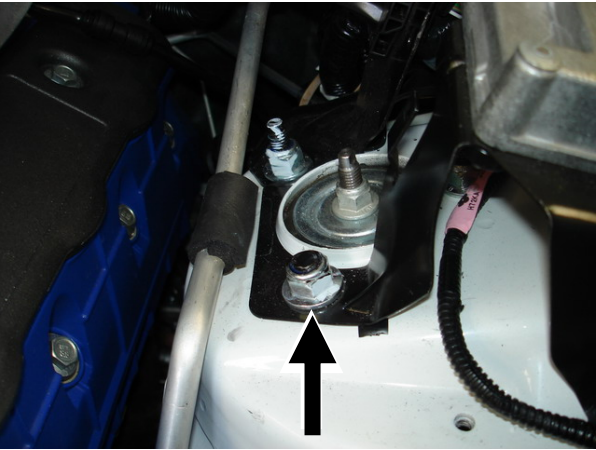
9. Fit 80cm length of 5/8" hose to the outlet of the Bosch Water pump and thread under headlight around the passenger side of the radiator and air conditioner condenser, and attach to the passenger side of the intercooler condenser. Clamp in place using 2x32mm Hose clamps provided.



10. Fit the 90cm length of 5/8" hose to the driver side of the Intercooler condenser as shown. Route hose alongside previous hose for neatness and clamp in place using 1x 32mm hose clamp. The other end of the hose is to be connected to the bottom of the reservoir bottle fitted to the intercooler core. Route the hose along the chassis rail and underneath the supercharger bracket and aim it straight at the bonnet.



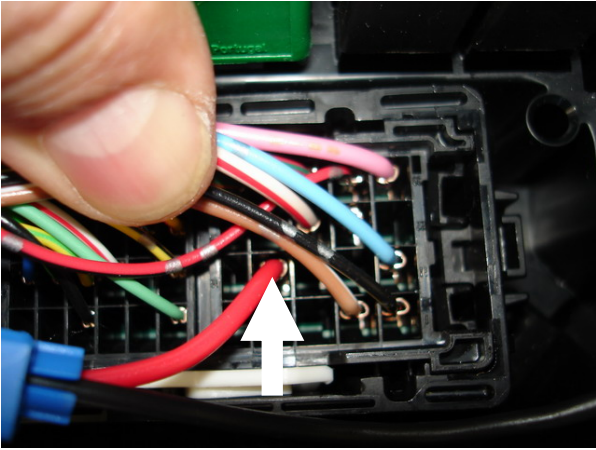
11. Using the 47cm piece of 5/8" hose attach to the inlet of the water pump and clamp in place. Route the hose under the bracket also making sure hose is as low as possible, and aim at the bonnet ready to be attached to intercooler core. Hose 1 is from driver's side condenser outlet. 2. Is from pump inlet.



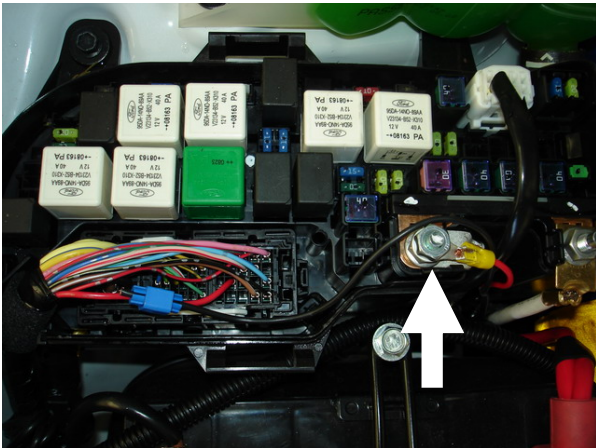
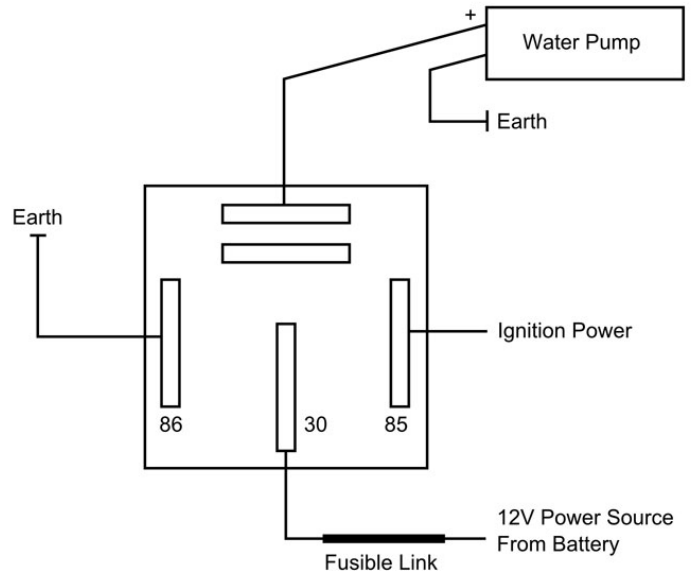
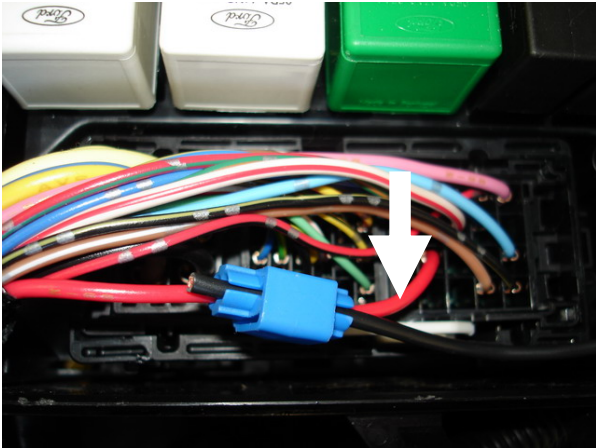
12. Trim stud as shown in Photo to ensure enough clearance for intercooler core.



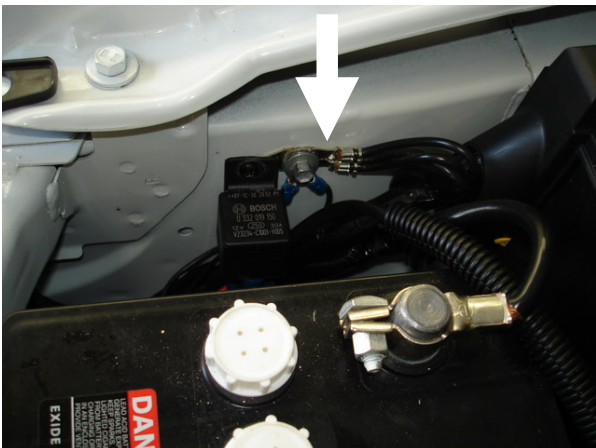
13. Wire plug and fit to water pump, then route wiring along top radiator to fuse box near battery



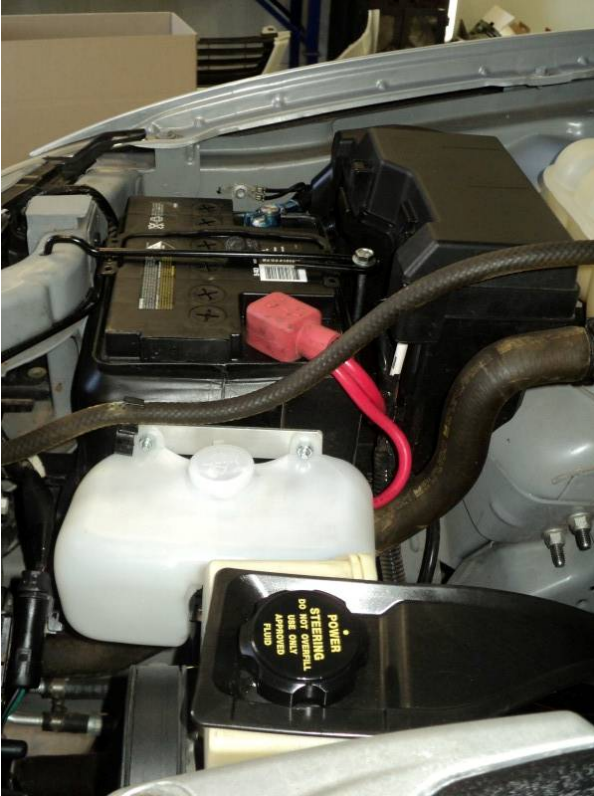
14. Water pump ignition relay is sourced from the Scotch lock or solder wire



15. Use M8 nut supplied to mount power wire for water pump. See position indicated by arrow. Ensure this wire has the fuse wire soldered into the wire to protect the circuit. (Intercooled Only).



16. Wire water pump relay and locate next to battery as per photo using wire provided. Earth water pump and relay to earth strap. See photo (Intercooled Only).

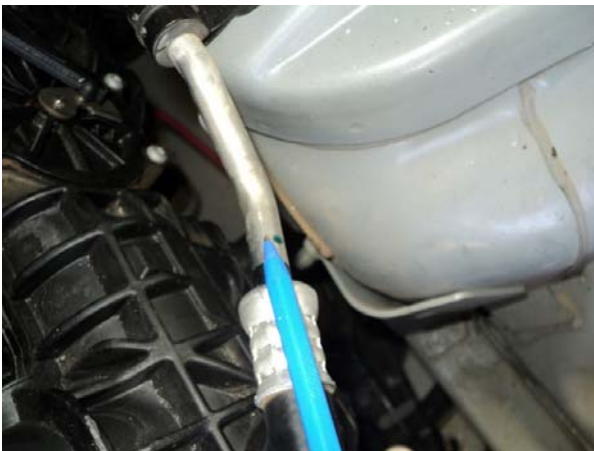


Washer bottle mounting procedure

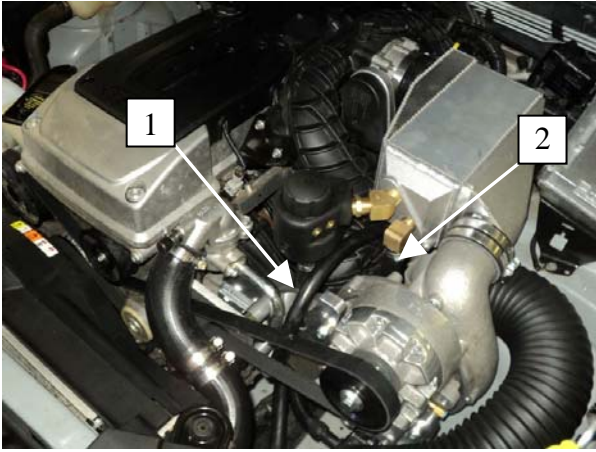
Bolt washer bottle bracket to washer bottle, using 2 x countersunk bolts, Nut flat and spring washers. The bolts and are to be assembled as shown in photo. Place the bottle & Bracket in the position shown in the photo, and mark the holes in the battery tub with a marker or scribe.

Remove the leads from the battery and remove the battery from its tub. Drill Two 6.5mm holes in the battery tub where marked. Using two 6mmx 15mm bolts, mount the bracket to the tub with the bolts coming from the inside and secure with Nut, flat & Spring Washer

Replace battery and re connect battery leads. Connect the hose from the disconnected washer bottle to the new pump (lengthen with hose & fittings provided in kit). The pump wiring needs to be extended to reach the new pump. There are wire extensions in the pump kit also to achieve this. Ensure new wiring and hose is secured properly, fill with water and test pump for flow.



17. Gently bend air conditioner line as shown to help gain clearance for intercooler assembly.



18. Fit 3" x 50mm silicone joiner and 2x 89mm clamps to the supercharger discharge. Fit 3" x 60mm silicone to throttle body. Slide the intercooler core into position and slide over the silicone joiners over the inlet and discharge of the end tanks. It is easier to undo and thread the throttle body clamps around the silicone joiner after intercooler is fitted.
19. Connect the condenser hoses to the fittings on the intercooler core and clamp in place. Check that the orientation is correct. Hose number 1. Drivers side of the condenser to the bottom of the reservoir bottle. Hose number 2. Connect the passenger side of the condenser to the bottom fitting in the intercooler core.
20. Empty one complete bottle of redline water wetter into water reservoir bottle. Slowly fill reservoir with demineralised water, letting the air bubble out. When the water settles, start pump and run for 20 seconds and top up. Do this process 4 times. Water level should be just below half way down the reservoir bottle. Water capacity is approx. 2.5 Litres
21. Recheck this process after the car has been driven for 10 to 15 minutes. Remember to check the level when the unit is cold.
22. Ensure that when water is cold that the water level is low in the bottle to give expansion space for when water gets hot. Never fill tank to the top when cold or damage will occur.
23. Fit the BOV to the supercharger compressor. Attach to the welded tube with 1" x 40mm rubber hose and clamp in place ready for vacuum line installation at a later step.

Return to step 28 of the fitment manual to complete installation.

BREAKING IN

Run motor at idle and fast idle for 5 to 10 minutes, do not rev up motor, then stop motor allow blower to cool for 10 minutes, then drive at no boost for approximately 10 minutes, not exceeding 3,000rpm, then allow blower to cool. Drive vehicle not exceeding 3,500rpm at no boost for approximately 100 to 150kms. This will ensure that the bearings and drive belt are run in before loading up the system by boosting. Always warm the motor - blower, before using boost. This will help in the life longevity of both the motor and blower. **Before driving, review the Final Check List. This procedure is very important and must be carried out to the letter.** Dyno tuning may only be done after this procedure is completed.

Do not dyno run car until the 100-150km has been driven.

GENERAL NOTES

It is the installer's responsibility to dyno the car to check that all systems are working correctly, especially maximum fuel delivery and to check for any presence of detonation.

Check boost on dyno and that advertised boost is not exceeded and rpm occurs at designated rpm.

Have injectors cleaned and flowed. A must on used injectors, peace of mind on new injectors.

Make sure that all fuel hoses are in excellent condition, or replace. Check that all clamps are tight and that there are no fuel leaks.

The blower will have a sweet high-pitched whirring noise from the belt drive. As the blower goes through its running in time, the noise will slowly dissipate.

ENSURE ENGINE OIL IS OVER-FILLED BY 1 LITRE MORE THAN OE SPECS..

PRECAUTION: If the blower ever gets louder or starts to make an erratic noise or a noise through the intake tube, such as a air hissing noise, disconnect the blower belt and call CAPA for assistance and advice. It may be sensible to have the original engine belt available to fit back on the engine if this was ever to happen.

FINAL CHECKLIST

1. Carefully review the entire installation. Check oil and fuel lines near moving parts and the exhaust system to ensure that these lines are safe, secure and not twisted or kinked. All wires and hoses should be firmly secured with clamps or wire ties.
2. Check all fluid levels. Your vehicle should be filled with premium fuel before any driving. It is important that you performed an oil and filter change. If you did not do so before, it should be performed now before proceeding further.
3. Start engine and idle for a few minutes. Check your timing. You want to run as much timing as possible while avoiding detonation. It is better to lean on the side of less timing and no detonation!
4. Shut off your engine and check for fluid leakage, signs of rubbing parts, and other potential problems. Pay particular attention to fuel leaks, check by using CRC spray any vacuum leaks at base of injector.
5. Check nothing is near any hot spots.
6. Your vehicle should display a significant increase in performance when you step into the throttle, with no detonation, yet should maintain its previous driveability during daily driving. If this is not so, review your installation, then contact CAPA assistance.
7. For best performance and reliability, **always use premium or higher-grade fuel** and listen for signs of detonation. Back off throttle should detonation occur. With a properly installed supercharger and appropriate timing, detonation should not be an issue.
8. Never race your engine when your engine is cold. Allow the water temperature to climb into operating range for several minutes before driving above 2,500r.p.m. to ensure adequate oil lubrication.
9. Please review the maintenance and warranty sections within this owner's manual.
10. Please take special note; operation of vehicle without all sub assemblies completed and properly installed may cause failure of major components.
11. After road test or first hard drive, check belts are okay and running properly in their grooves. Check the tension of belt and retension if necessary.
12. **Re dyno after 2,000km's.**

WARNING

1. DO NOT ATTEMPT TO OPERATE VEHICLE UNTIL ALL COMPONENTS ARE INSTALLED AND COMPLETE. SUPERCHARGER KITS EXTRUDE A HUGE AMOUNT OF HORSEPOWER FROM A STOCK ENGINE THEY ARE NOT INTENDED FOR CONTINUOUS OR EXTREME PERIODS OF MAXIMUM POWER OUTPUT. IT IS NOT OUR INTENTION TO CREATE RACE PROVEN HORSEPOWER BUT LEISURE ENDURING SYSTEMS.
2. WARRANTY POLICY FOR 12 MONTHS, UNLIMITED KILOMETRES COVERS FAULTY COMPONENTS PROVIDED IN SUPERCHARGER KIT. POLICY DOES NOT INCLUDE LABOUR TO REPLACE FAULTY PARTS.
3. THE RESPONSIBILITY OF ADR COMPLIANCE AND INSURANCE FOR THIS KIT FITTED TO A VEHICLE THAT IS ROAD REGISTERED AND DRIVEN IS THE RESPONSIBILITY OF THE VEHICLE OWNER.
4. RESPONSIBILITY FOR CORRECT FITMENT OF THE KIT IS THE REPONSABILITY OF THE FITTER.
5. DAMAGES TO VEHICLE OR SURROUNDS IS THE RESPONSIBILITY OF THE VEHICLE OWNER. PROVIDED THE KIT FITMENT IS CORRECT, ACCORDING TO THIS MANUAL.

GET OUT THERE & ENJOY...

