



W A R N I N G

NISSAN PATROL GU 4.2 EXTREME INTERCOOLER KIT FITTING INSTRUCTIONS

WARNING: Failure to follow this procedure will void your warranty.

- Do not use this product in any other motor vehicle for which it is not designed.
- Do not use any other mounting location / method other than described in this instruction.
- It is advisable to seek assistance of another person when installing this product.
- Do not repair or modify this product and / or its mounting bracket in any way - repair or modification may affect proper operation of the vehicle or cause destruction of property.
- Be sure to clean and remove any loose debris before removing pipe work as debris entering the engine could be detrimental to the engine and or components

IF YOU HAVE ANY QUESTIONS PLEASE CONTACT US ON 08 8357 5993 BEFORE STARTING THE INSTALL.

PLEASE NOTE THE KITS DO NOT COME WITH GASKETS FOR THE TURBO ADAPTOR/EGR BLANK. YOU WILL NEED TO SUPPLY YOUR OWN GASKETS OR USE SILICONE SEALER.

REMOVE SOUND DEADENING FROM THE UNDERSIDE OF BONNET USING A TRIM REMOVAL TOOL. KEEP CLIPS. DISCONNECT WASHER JET HOSE. REMOVE FACTORY SCOOP.

REMOVE CROSS OVER PIPE IF NON INTERCOOLED. IF INTERCOOLED REMOVE FACTORY INTERCOOLER AND FRAME, PIPE WORK, CAST PIPE FROM TURBO OUTLET AND EGR DIAPHRAGM PIPE. REMOVE EGR COOLER AND PIPE RUNNING FROM EGR COOLER TO EXHAUST MANIFOLD. ONCE PIPE WORK IS REMOVED INSTALL TURBO ADAPTOR OF APPLICABLE USING FACTORY BOLTS AND SILICONE SEALANT.

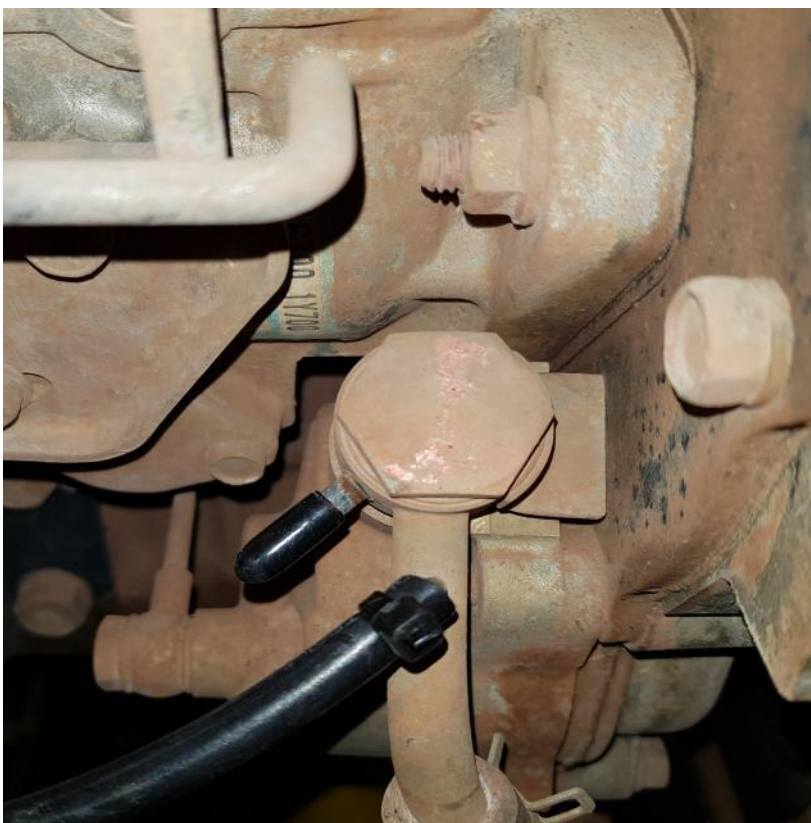




INSTALL EGR BLANK ON MANIFOLD USING HIGH TEMP SEALANT.



IF FACTORY COOLED USE SUPPLIED HOSE BLANK TO BLANK THE LINE COMING OFF THE VACUUM PUMP THAT WAS PREVIOUSLY RUNNING TO THE EGR/ SOFT SHUT OFF SOLENOIDS.

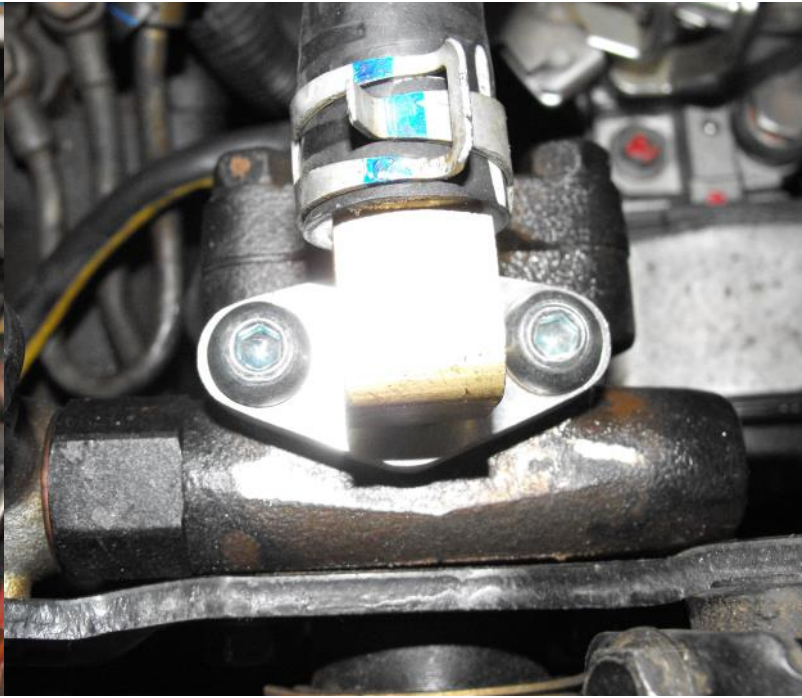


REMOVE THE POWER STEERING PUMP FROM THE VEHICLE. SET IN VICE. REMOVE PULLEY. GENTLY PRY OF DUST SEAL. REMOVE LARGE BRACKET BEHIND THE PULLY. REMOVE REAR BOLT AND INTERNAL BOLT BY REMOVING INTERNAL FILTER. REMOVE RESERVOIR FROM PUMP. REINSTALL LARGE BRACKET, DUST COVER AND PULLEY.



INSTALL SUPPLIED FITTING AS SHOWN USING THE O RING AND TWO M8 NUTS SUPPLIED. RE INSTALL THE POWER STEERING PUMP TO THE CAR. IF MORE CLEARANCE IS NEEDED TO CLEAR THE PIPEWORK FOR THE PLENUM A LONGER BELT CAN BE USED.

INSTALL SUPPLIED MOUNTING BRACKET AS SHOWN.

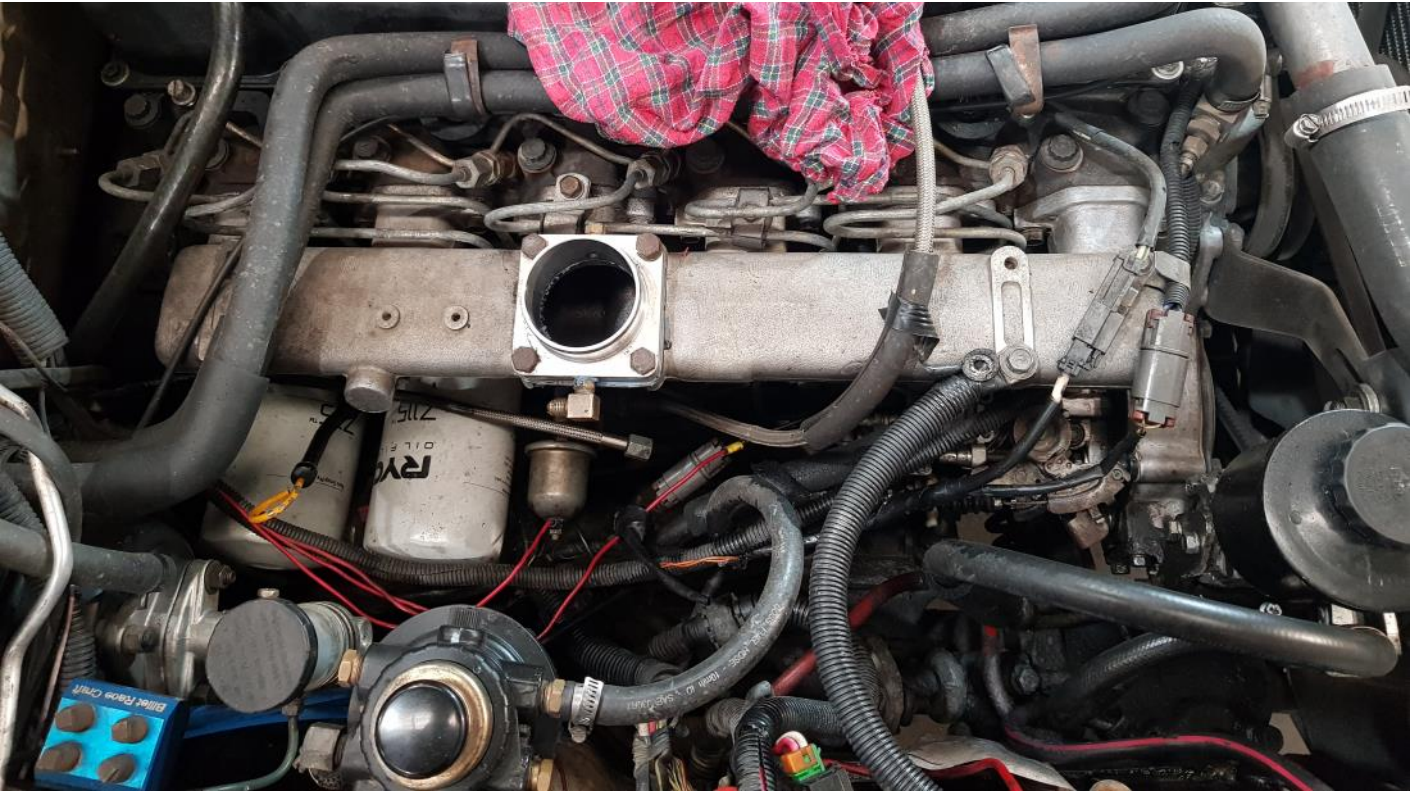


BOLT SUPPLIED POWER STEERING RESERVOIR TO NEW BRACKET. CONNECT SMALL LINE AND USE SUPPLIED 5/8 HOSE TO CONNECT RESERVOIR TO POWER STEERING PUMP.

TOP UP WITH FLUID AND BLEED AFTER THE INTERCOOLER IS FITTED.



UNDO THE EARTH CABLES AND ALL ELECTRICAL CONNECTORS ATTACHED TO THE MANIFOLD. UNBOLT DIPSTICK.



REMOVE THE THREE FUEL LINE MOUNTING BRACKETS AND REMOVE.

UNDO THE MANIFOLD MOUNTING NUTS.

REMOVE THE FACTORY MANIFOLD.

REMOVE ANY OLD GASKET WITH A RAZOR BLADE AND CLEAN THE MATING SURFACE.

INSTALL MANIFOLD GASKET SUPPLIED.

INSTALL THE FORWARD FACING PLENUM AND RE TIGHTEN MOUNTING BOLTS.

REINSTALL THE FUEL LINE MOUNTING BRACKETS.

INSTALL EARTH CABLE TO BOSS ON THE FRONT OF THE PLENUM.

GU PLENUMS COME WITH A BRACKET FOR THE DIPSTICK. INSTALL DIPSTICK IF APPLICABLE

CABLE TIE ANY LOOSE WIRES.

RUN SUPPLIED VACUUM HOSE FROM THE FITTING ON THE PLENUM TO THE BOOST

COMPENSATOR ON THE FUEL PUMP.



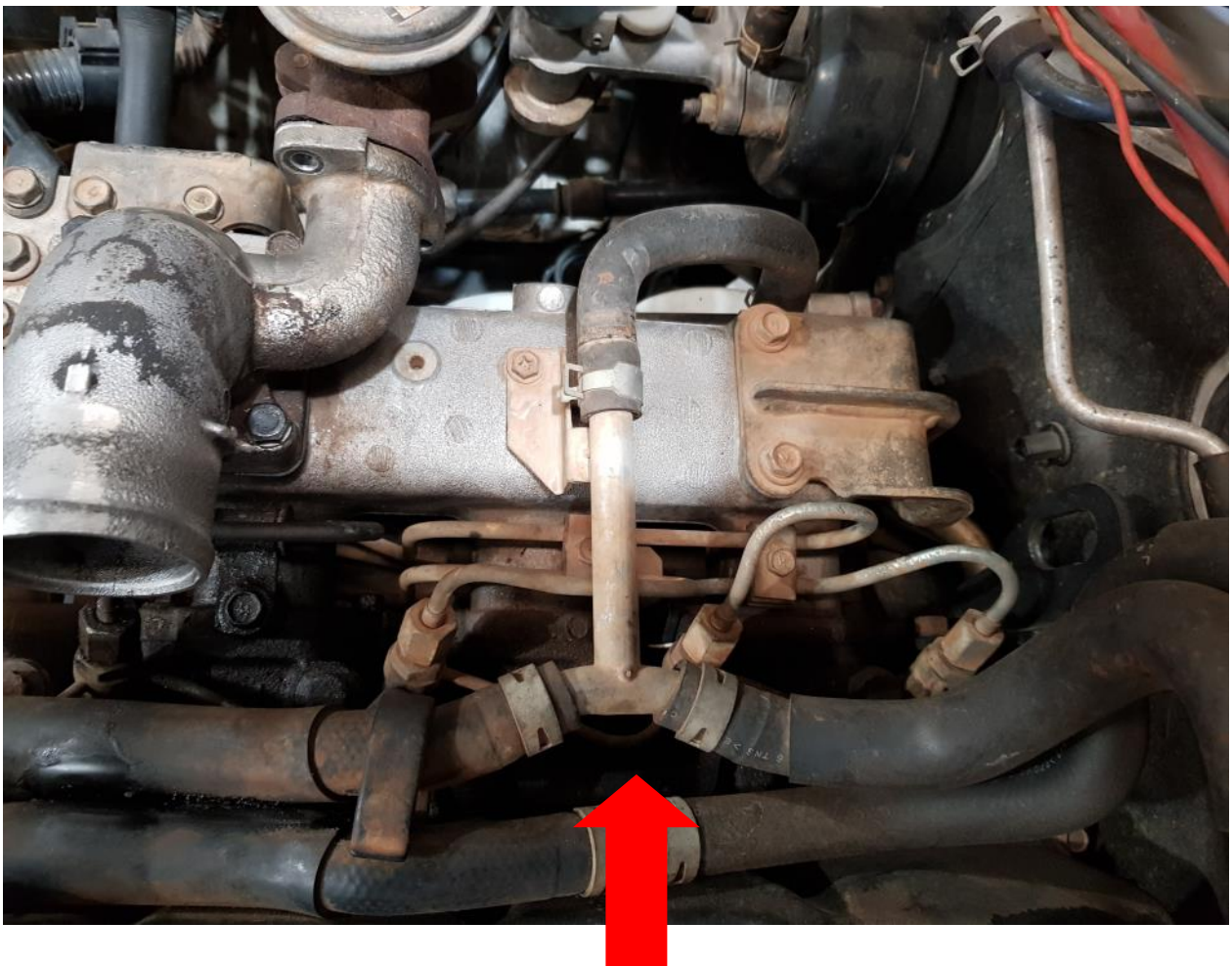


IF CAR IS FITTED WITH AN EGR

REMOVE COOLANT LINES, EGR AND PIPE RUNNING ACROSS TO THE EXHAUST MANIFOLD.
INSTALL SUPPLIED BLANKING PLATE TO EXHAUST MANIFOLD WITH HIGH TEMP SEALANT
REMOVE T PIECE FROM COOLANT LINE ON TOP OF THE MANIFOLD AND INSTALL BARBED JOINER.

INSTALL HOSE BLANK WITH SUPPLIED HOSE CLAMP ON THE COOLANT FITTING COMING OUT OF THE BLOCK PREVIOUSLY GOING INTO THE EGR COOLER. (SEE LAST PIC)

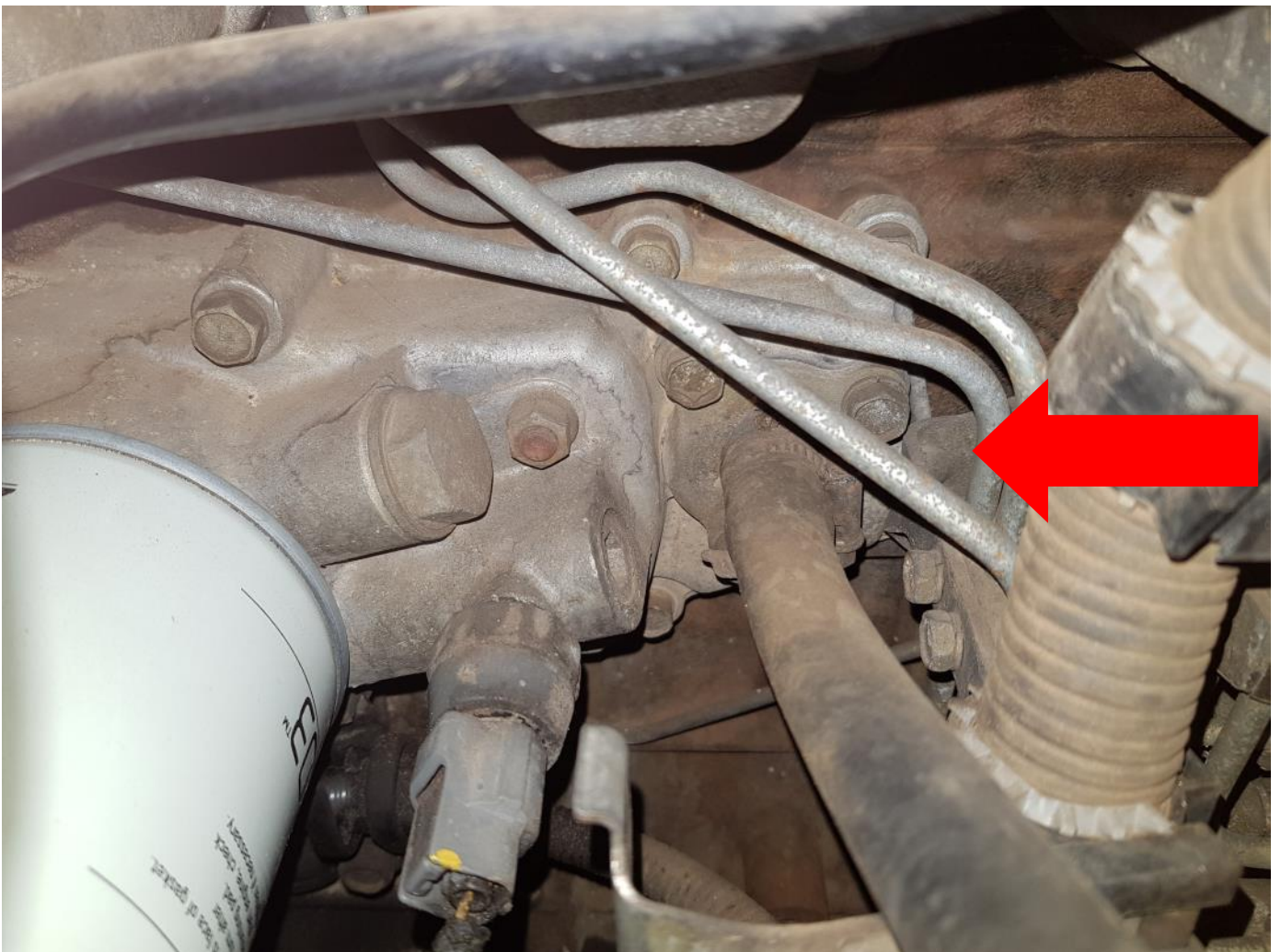
INSTALL BARBED JOINER HERE



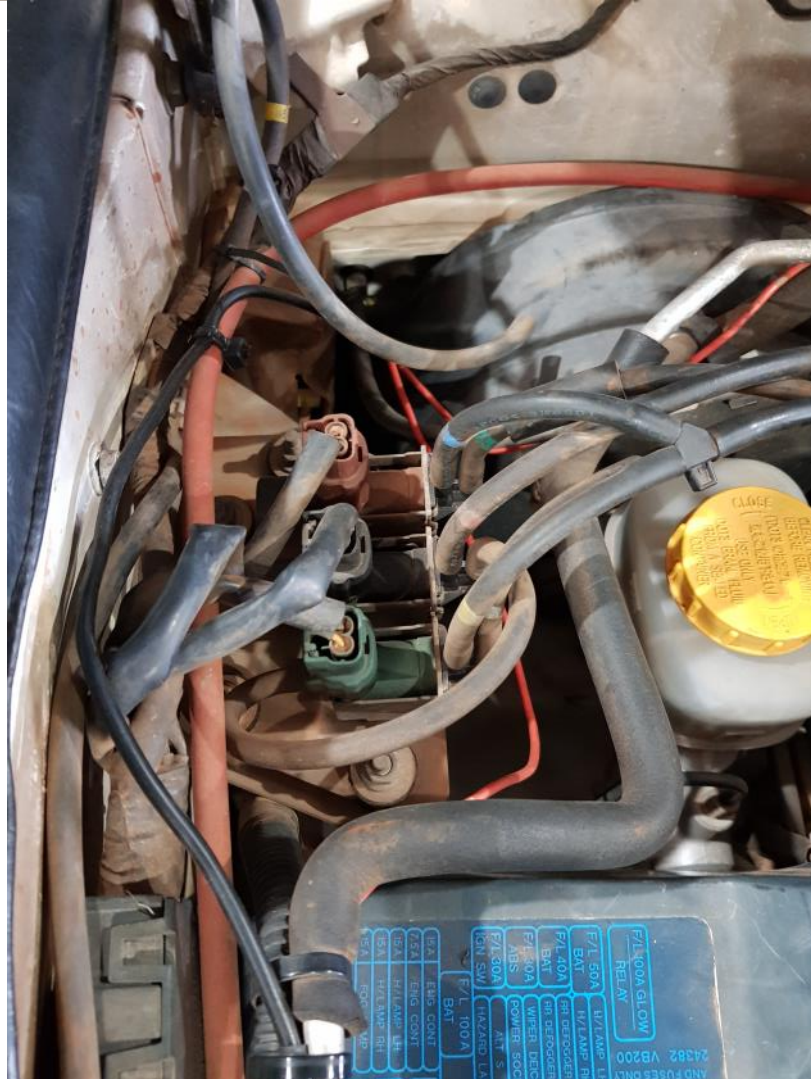
EGR BLANK



COOLANT LINE BLANK



INSTALL SUPPLIED VACUUM HOSE FROM THE FITTING ON THE PLENUM TO THE BOOST COMPENSATOR ON TOP OF THE FUEL PUMP. IF FACTORY INTERCOOLED THE SOLENOIDS SHOWN CAN BE DISCONNECTED AND REMOVED.





USING A PRY BAR LIKE SHOWN SUPPORT THE AC LINE AT THE FIREWALL (NOT ON THE PIPE ITSELF BUT THE CONNECTING BLOCK). CAREFULLY PULL THE AC PIPE TO THE PASSANGER SIDE OF THE VEHICLE UNTIL SUFFICIENT CLEARANCE IS ACHIEVED. THE AC LINES VARY BETWEEN VEHICLES AND MAY BE DIFFERENT TO ONES SHOWN.



AFTER ADJUSTING AC LINES FIT INTERCOOLER TO REAR STUDS ON THE FIREWALL. TIGHTEN WITH NUTS SUPPLIED. MARK THE TWO FRONT MOUNTING HOLES.

MARK THE BONNET FOR THE INTERCOOLER CUT OUT BY PLACING THE 4 FOAM SQUARES STICKY SIDE UP ON THE OUTSIDE EDGES OF THE INTERCOOLER. SEE BELOW PICTURES. ONCE THE BONNET IS MARKED REMOVE THE INTERCOOLER FROM CAR.

DRILL THE TWO FRONT MOUNTING HOLES MAKING SURE NOT TO DRILL THROUGH ANY WIRES OR THE AC CONDENSOR. APPLY RUST PREVENTION.

REMOVE BONNET WITH FOAM SQUARES ATTACHED. SET UP ON TRESTLES READY FOR CUTTING.

RETURN TO ENGINE BAY AND FIT 2"-2 1/2" 45 DEGREE SILICONE TO THE TURBO ADAPTOR (IF APPLICABLE) WITH 2 HOSE CLAMPS READY FOR THE INTERCOOLER. SILICONE MAY NEED TO BE TRIMMED.



Place one square piece of foam supplied on all four corners of the intercooler and carefully close bonnet until all pieces have stuck to the underside of the bonnet



LEAVE WHITE TAPE ON THE FOAM FOR 1-2 WEEKS UNTIL THE PAINT HAS DRIED COMPLETELY.

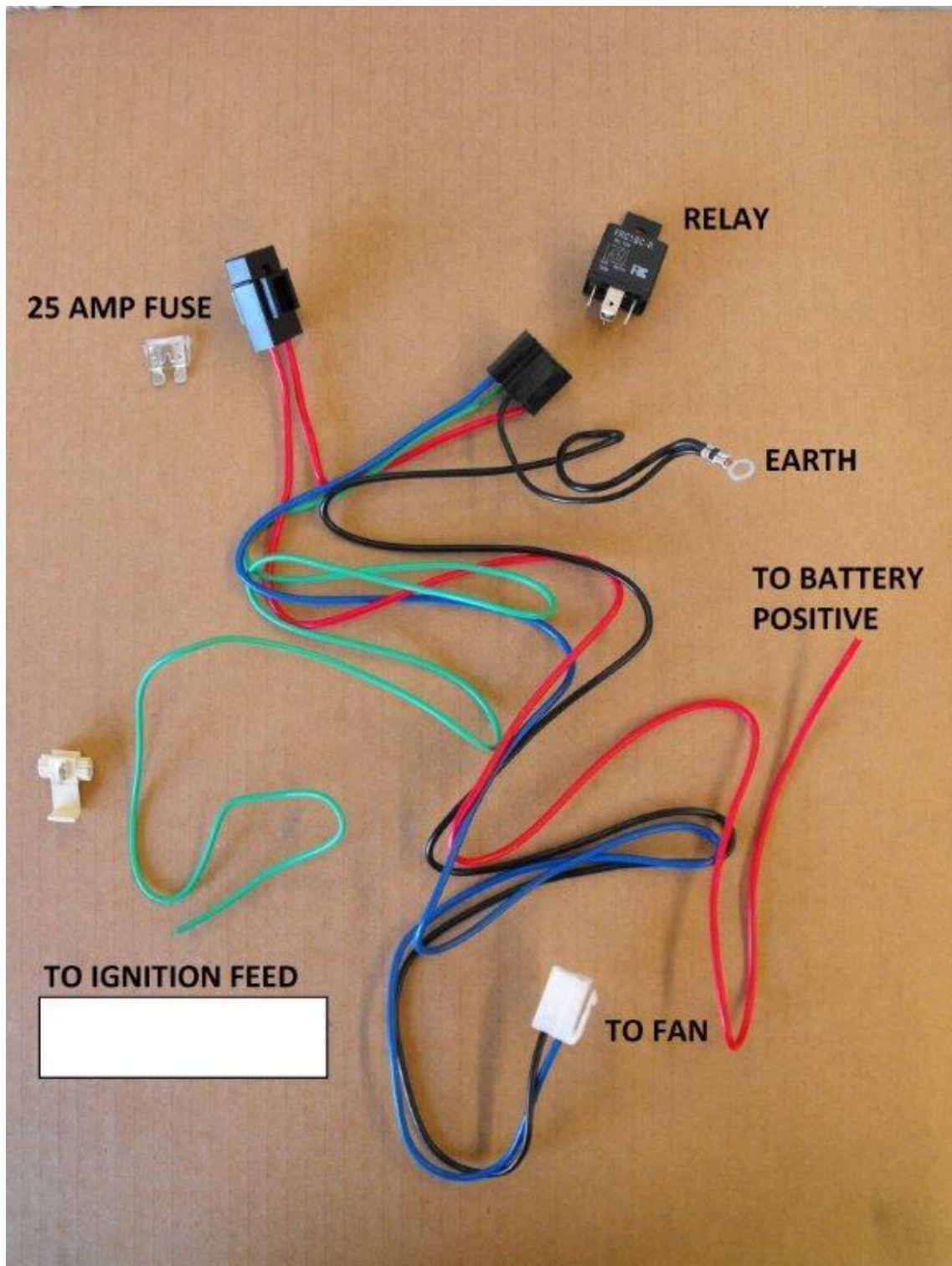
RE-FIT THE INTERCOOLER TO THE VEHICLE.

CHECK IF THE INTERCOOLER IS LEVEL WITH THE FIREWALL OF THE VEHICLE. THE 45 DEGREE SILICONE CAN HOLD THAT SIDE OF THE INTERCOOLER UP. SIMPLY PUSH DOWN UNTILL THE INTERCOOLER SITS LEVEL. TIGHTEN REAR BOLTS TO FIREWALL AND INSTALL FRONT MOUNTING BOLTS.

TRIM AND INSTALL THE SILICONES AS SHOWN. TIGHTEN ALL HOSE CLAMPS.



THE FANS CAN BE WIRED USING THE WIPER MOTOR AS A SOURCE FOR IGNITION.
WIRE FANS AS BELOW.



BONNET SCOOP FITTING INSTRUCTIONS

After fitting the intercooler, use the supplied foam squares to transfer the intercooler hole location to the bonnet. Depending on what intercooler you have place the foam squares sticky side up on the outside corners of the foam or if your intercooler has small angle place them on the outside corners of the core itself. Some packers may be needed.

Remove the bonnet from the vehicle. Double check the measurements of the foam squares against where the intercooler sits. THE HOLE FOR THE INTERCOOLER IS ONLY TO BE THE SIZE OF THE CORE ITSELF. Confirm which side of the foam squares need to be marked by measuring the intercooler core size and comparing the measurement to the foam squares on the bonnet. After confirming the position drill a 3mm pilot hole in each corner. DO NOT cut the hole out for the intercooler yet.

Cut out the appropriate under bonnet webbing as shown in pictures and deburr all edges. Once finished turn the bonnet over (top of bonnet facing up) and place paper template on the bonnet.

Take measurements from the back edge of the scoop to the rear lip of the bonnet. This location varies on what vehicle you have. Please see below list for the approximate fitting position.

GQ patrol just in front of washer jets (excluding Extreme)

GU PATROL 5-10 mm

60 LANDCRUISER 80 mm

75/79 LANDCRUISER 140 mm

80 LANDCRUISER 45 mm

100/105 LANDCRUISER just in front of washer jets

200 LANDCRUISER 50mm

Confirm the scoop will not interfere with the intercooler hole cut out by using previously drilled pilot holes and compare to scoop template. When in correct position tape down the edges of the template making sure there are no creases. Drill 3mm pilot holes through the mounting points marked on the scoop template. Going through the bonnet skin and any webbing underneath.

Turn the bonnet over and if applicable drill the holes going through the under-bonnet webbing NOT THE BONNET SKIN to 20mm to allow clearance for the washers. Once the clearance holes are drilled, drill the holes going through the bonnet skin to 8mm. Deburr all holes.

Mark out the hole for the intercooler using the 4 pilot holes as reference points and cut out with a grinder with a 1mm disc, making multiple shallow cuts reduces the likelihood of the paint blistering. Once cut clean up any burrs.

Test fit scoop before painting to make sure all mounting holes are correct. Prime and paint all bare metal.

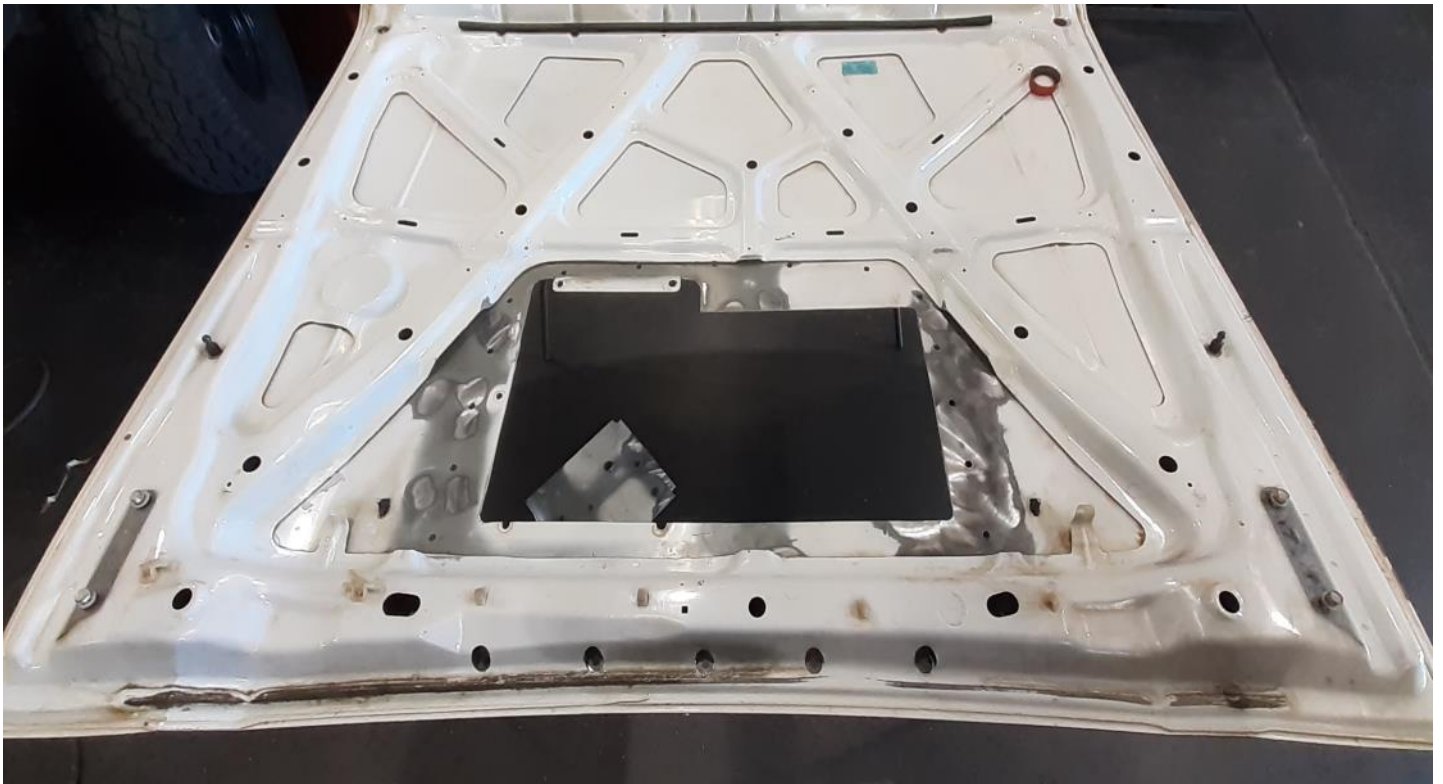
Attach foam tape supplied to the underside outside edge of the scoop and fit bonnet scoop to bonnet using supplied bolts and nuts. If applicable refit trimmed sound deadening.

Fit bonnet back to car.

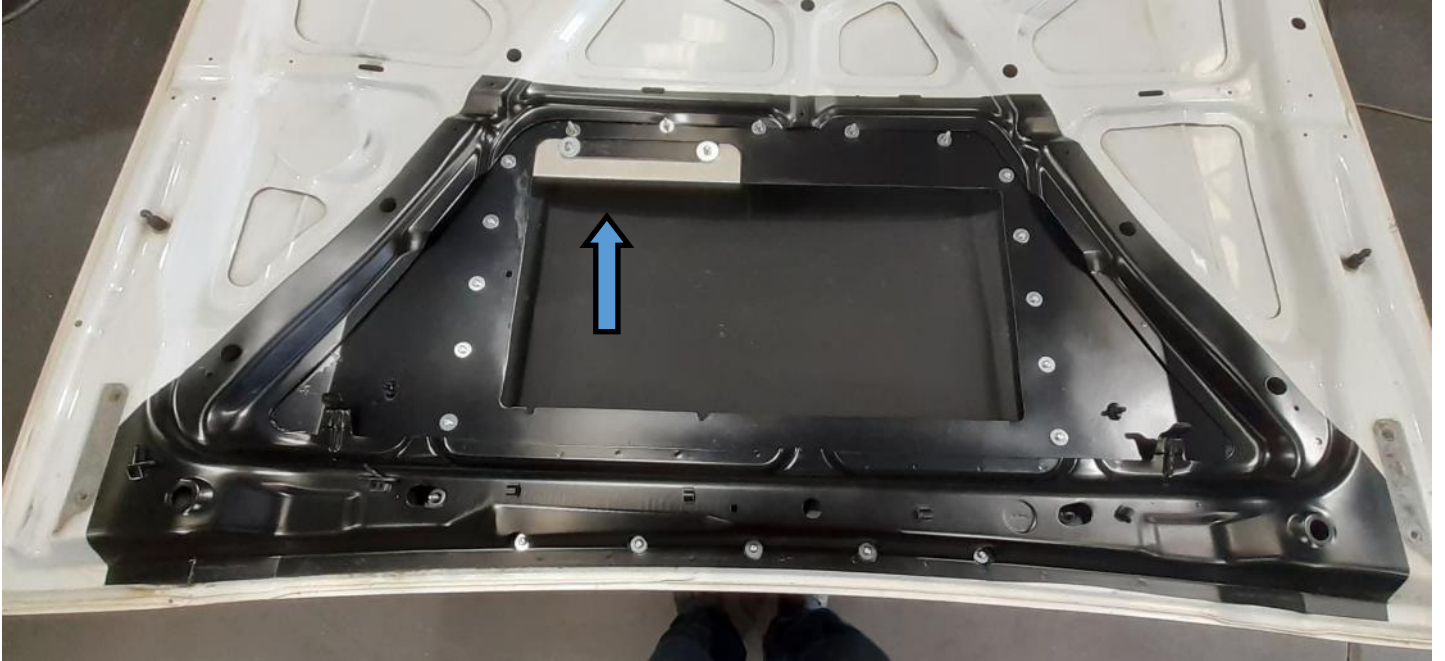
BELOW PICTURES SHOWING WEBBING AND INTERCOOLER HOLE CUT OUT. ANY CLEARNCE HOLES NEEDED THROUGH THE WEBBING USE A 20MM HOLESAW. AT THE REAR OF THE BONNET THERE ARE 2 LAYERS OF WEBBING. DRILL THROUGH BOTH LAYERS. DO NOT DRILL THROUGH THE TOP SKIN OF THE BONNET. WHEN INSERTING BOLTS, A SMALL TELESCOPIC MAGNETIC TOOL WORKS WELL.

ONCE ALL CUTTING IS DONE PRIME AND PAINT.

IF THE SOUND DEADENING IS IN GOOD CONDITION IT CAN BE TRIMMED AND REFITTED. SOME NEW HOLES MAY NEED TO BE ADDED TO FIX THE SOUND DEADENING TO THE BONNET.



ONCE ALL CUTTING AND PAINTING IS FINISHED INSTALL THE INFILL PLATE SUPPLIED AS SHOWN. AFTER THE INFILL PLATE IS INSTALLED FIT THE BONNET SCOOP.



REFIT THE BONNET TO THE CAR AND RE ATTACH WASHER HOSE. MAKE SURE ALL BOLTS AND HOSE CLAMPS ARE TIGHT. CHECK FAN OPERATION AND TEST DRIVE VEHICLE AND CHECK FOR ANY LEAKS.

RE TENSION HOSE CLAMPS AFTER A FEW DAYS OF DRIVING AND CHECK AT REGULAR SERVICE INTERVALS.

IF INTERCOOLER IS REMOVED CLEAN THE PIPE OUTLETS AND INSIDE THE ENDS OF THE SILCONES WITH A SOLVENT SO NO OIL IS PRESENT AT TIME OF INSTALLATION