



NISSAN PATROL V8 BRUNSWICK CONVERSION ULTIMATE INTERCOOLER KIT FITTING INSTRUCTIONS

WARNING

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

START YOUR ULTIMATE INTERCOOLER INSTALL BY REMOVING THE UNDER BONNET INSULATION, SCOOP SEAL AND BONNET SCOOP. REMOVE CURRENT INTERCOOLER AND ALL PIPEWORK.

IF ROUND MANIFOLD REMOVE THE ROUND INLET ADAPTOR

USE THE SUPPLIED M/S 90 DEGREE BEND AND CUT AND WELD SO THAT THE BEND IS ORIENTED TO THE PASSANGER SIDE OF THE VEHICLE AND HAS CLEARANCE TO THE INTERCOOLER. PLEASE NOTE THERE ARE MULTIPLE VARIATIONS OF THE ROUND MANIFOLD AND THEY WILL DIFFER BETWEEN VEHICLES. THE HEIGHT OF THE INTAKE MANIFOLD ALSO VARIES BETWEEN MOTORS.

BELOW IS AN EXAMPLE OF THE MODIFICATION WE DID IN HOUSE.



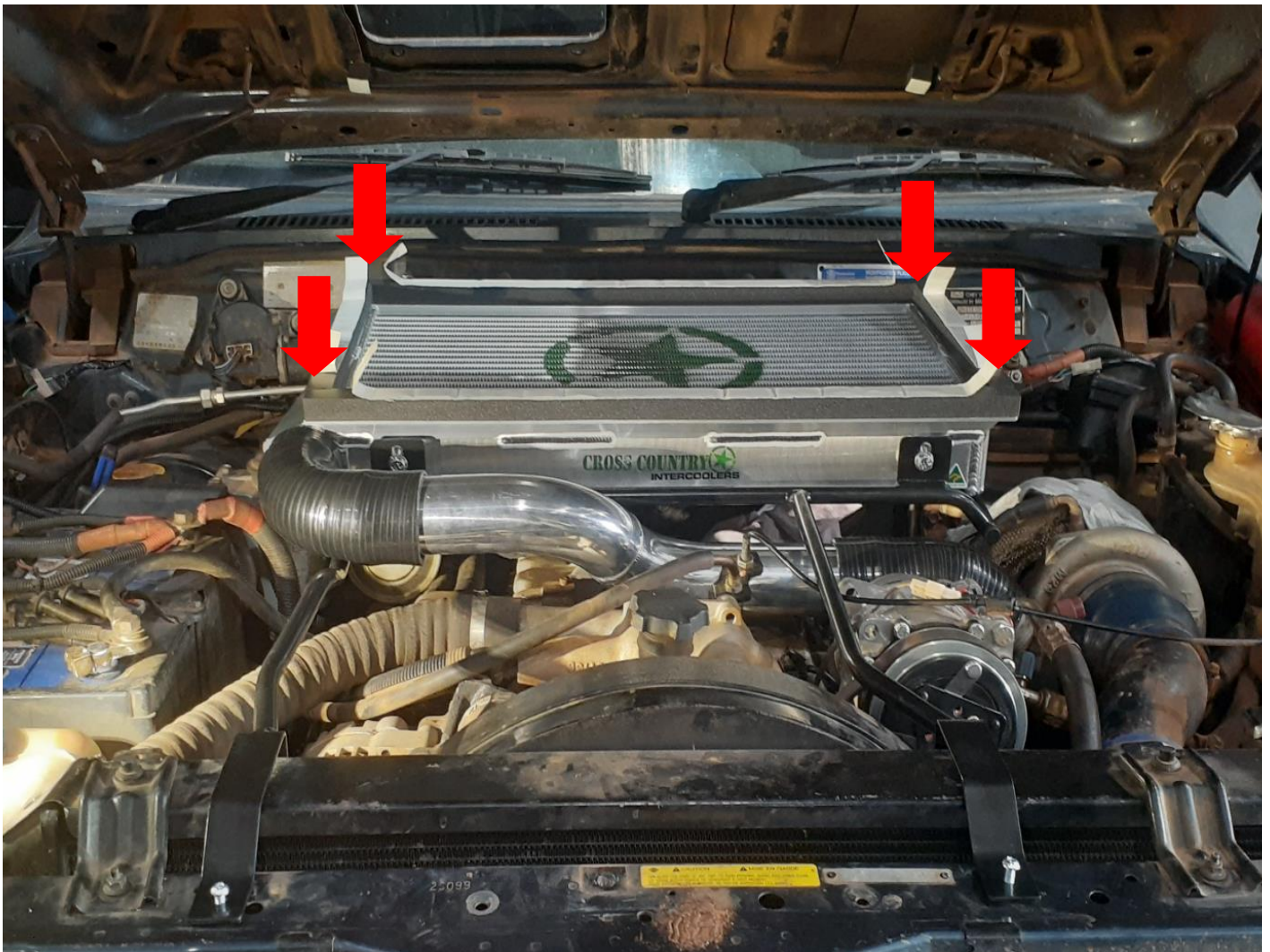
J STYLE MANIFOLD.

USING TWO RULERS LIKE SHOWN MEASURE 15MM DOWN FROM THE TOP OF THE MANIFOLD AND MARK. REMOVE THE MANIFOLD AND CUT. WELD ON SUPPLIED HOSE END. RE ISNTALL MANIFOLD.



INSTALL THE INTERCOOLER AS SHOWN (THE INTERCOOLER WILL BE REMOVED AGAIN AFTER THE FOLLOWING STEPS). TIGHTEN THE TWO REAR MOUNTING NUTS. MARK THE FRONT MOUNTING HOLES OF THE FRAME TO BE DRILLED. PLACE SUPPLIED FOAM SQUARES STICKY SIDE UP ON THE OUTSIDE EDGES OF THE INTERCOOLER FOAM. GENTLY CLOSE BONNET AND PUSH DOWN. OPEN THE BONNET AND THE FOAM SQUARES WILL HAVE TRANSFERRED TO THE UNDERSIDE OF THE BONNET SHOWING THE LOCATION OF THE INTERCOOLER.

REMOVE INTERCOOLER. DRILL THE FRONT MOUNTING HOLES BEING CAREFULL NOT TO DRILL THROUGH WIRES OR AC CONDENSOR.



INSTALL PIPE WORK AS SHOWN. THE SILICONES WILL NEED TO BE TRIMMED TO SIZE.

PLEASE NOTE THE KIT HAS BEEN UPDATED TO SUIT CARS WITH ABS. THE 180 DEGREE SILICONE HOSE AS BEEN REPLACED WITH A 90 DEGREE SILICONE HOSE.

IF NEEDED RUN BOOST LINE FROM PROVISION ON THE 45 DEGREE PIPE.

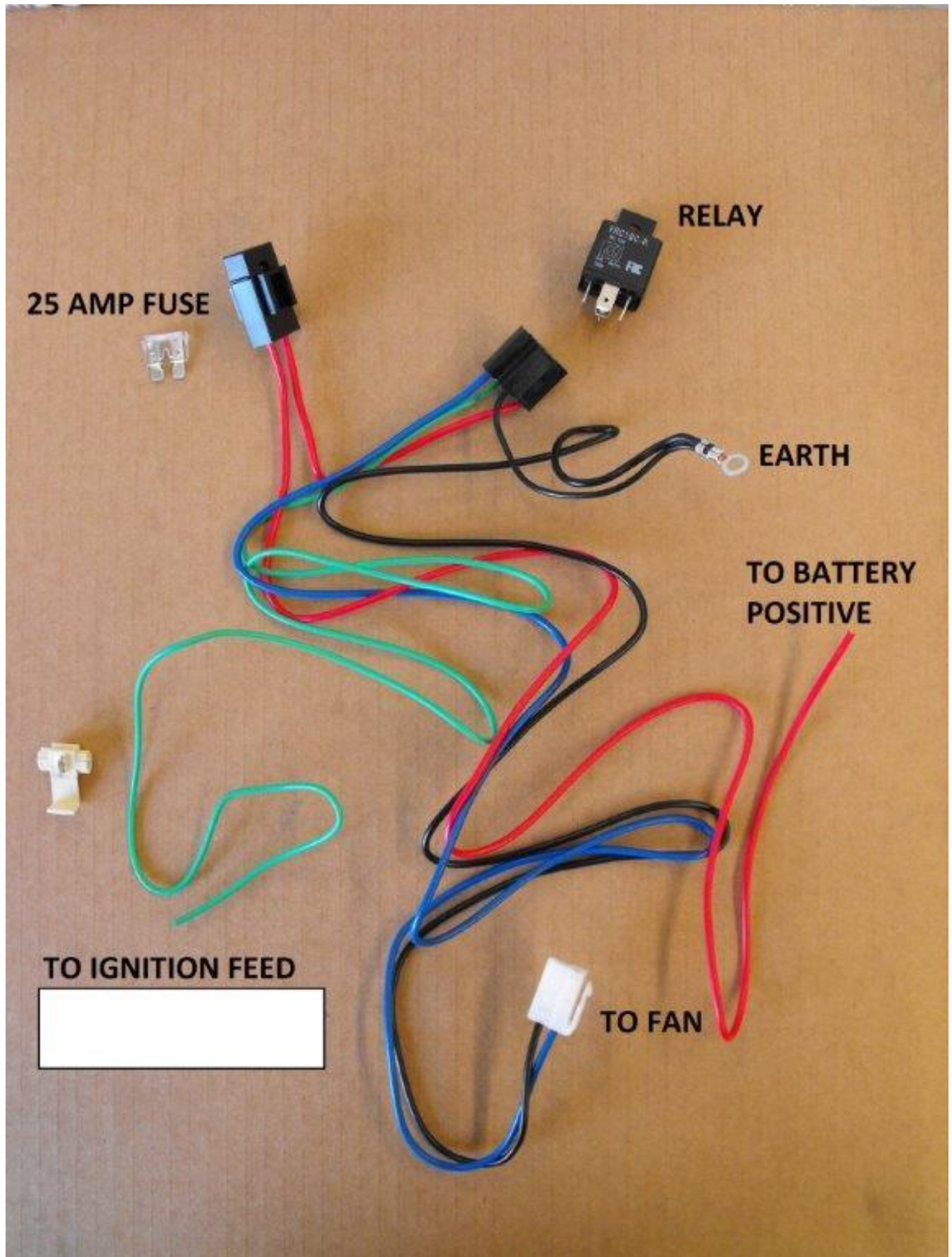
TEST FIT INTERCOOLER TO CONFIRM SILICONE LENGTHS AND POSITIONS. ONCE DONE INSTALL HOSE CLAMPS AND THEN INSTALL INTERCOOLER.



CLEAN THE OUTLET OF THE TURBO SO THERE IS NO OIL PRESENT. TRIM AND INSTALL FRONT SILICONES AND PIPEWORK WITH THE LONG SIDE OF THE ALUMINIUM PIPE GOING TO THE TURBO.



INSTALL WIRING LOOM 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 LANDCRUSIER 80 mm

75/79 LANDCRUISER 140 mm

80 LANDCRUSIER 45 mm

100/105 LANDCRUSIER just in front of washer jets

200 LANDCRUSIER 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.

TRIM BONNET WEBBING AS SHOWN BELOW AND INSTALL BONNET INFILL AS SHOWN. THE BONNET INFILL MAY NEED TO BE TRIMMED TO SIZE DEPENDING ON WHAT MODEL AND IF THE CAR WAS ORIGINALLY A ZD30. WITH THE BONNET SCOOP FITTED THE LINING CAN BE TRIMMED AND REINSTALLED AS SHOWN.





REINSTALL THE BONNET 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 100KM 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