



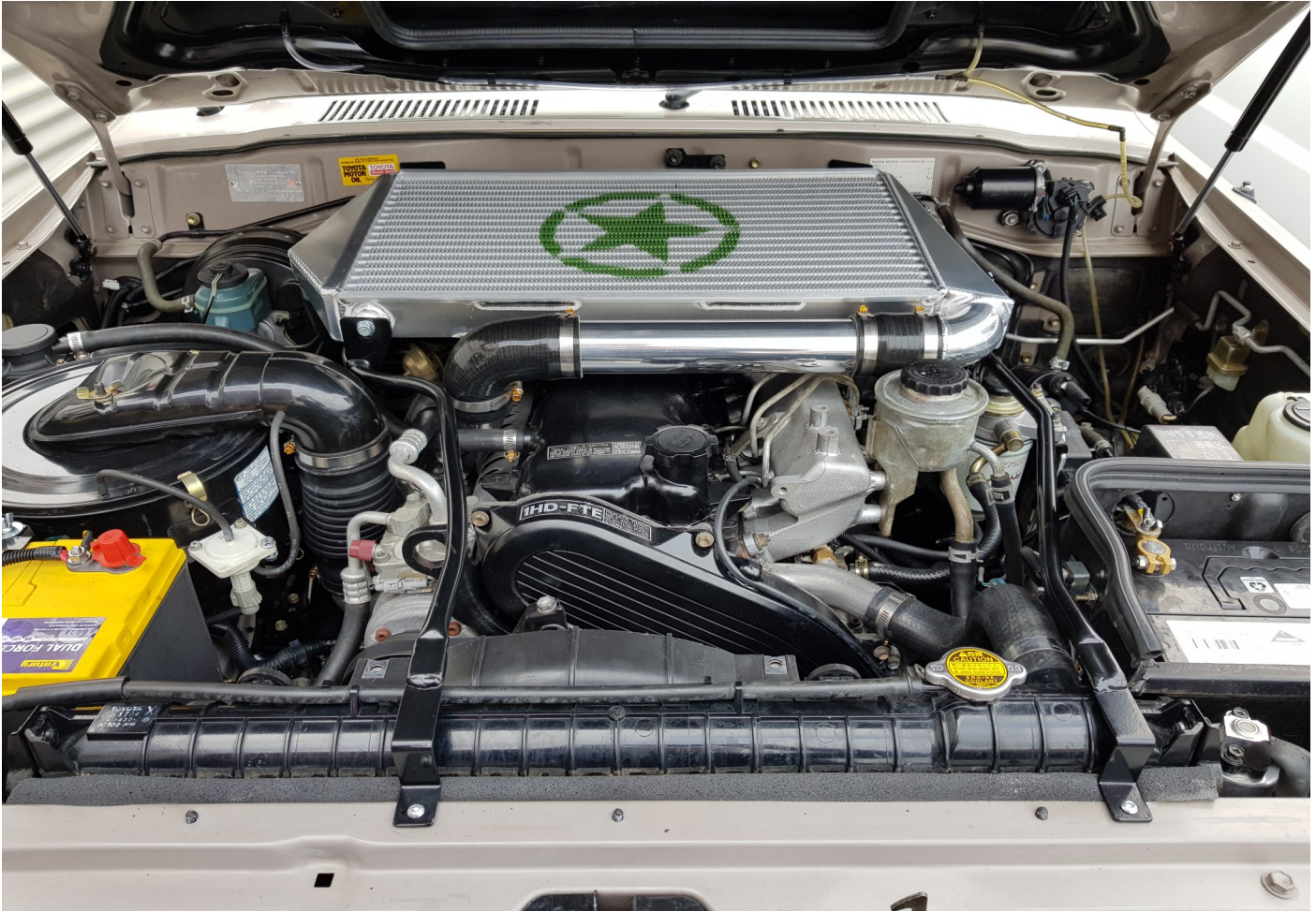
80 SERIES 1HDFTE CONVERSION ULTIMATE INTERCOOLER

W A R N I N G

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

DEPENDING ON WHAT SERIES MOTOR YOU ARE RUNNING IN YOUR CONVERSION WILL DETERMINE WHAT KIT WE SUPPLY. THERE ARE A FEW VARIATIONS BETWEEN A 100 SERIES MOTOR AND A 79 SERIES MOTOR KIT. PLEASE MAKE SURE THE CORRECT KIT HAS BEEN SUPPLIED WITH THE INTERCOOLER. IF THIS WASN'T DISCUSSED WHEN PURCHASING YOUR INTERCOOLER PLEASE CALL US ON 08 8357 5993 BEFORE STARTING THE INSTALL.



START WITH THE REMOVAL OF THE FACTORY UNDER BONNET SOUND DEADENING FOLLOWED BY THE CROSS OVER PIPE, SILICONE AND TURBO PIPE. REMOVE EGR PIPE. REMOVE THE STEEL ROCKER COVER COVER.

UNBOLT WIRING LOOM OFF CROSSOVER PIPE AND INTAKE HEATER ETC AND REMOVE LOOM MOUNTING BRACKET OFF THE INTAKE MANIFOLD. INSULATE WIRE PREVIOUSLY RUNNING TO INTAKE HEATER. PUT LOOM ASIDE FOR NOW.

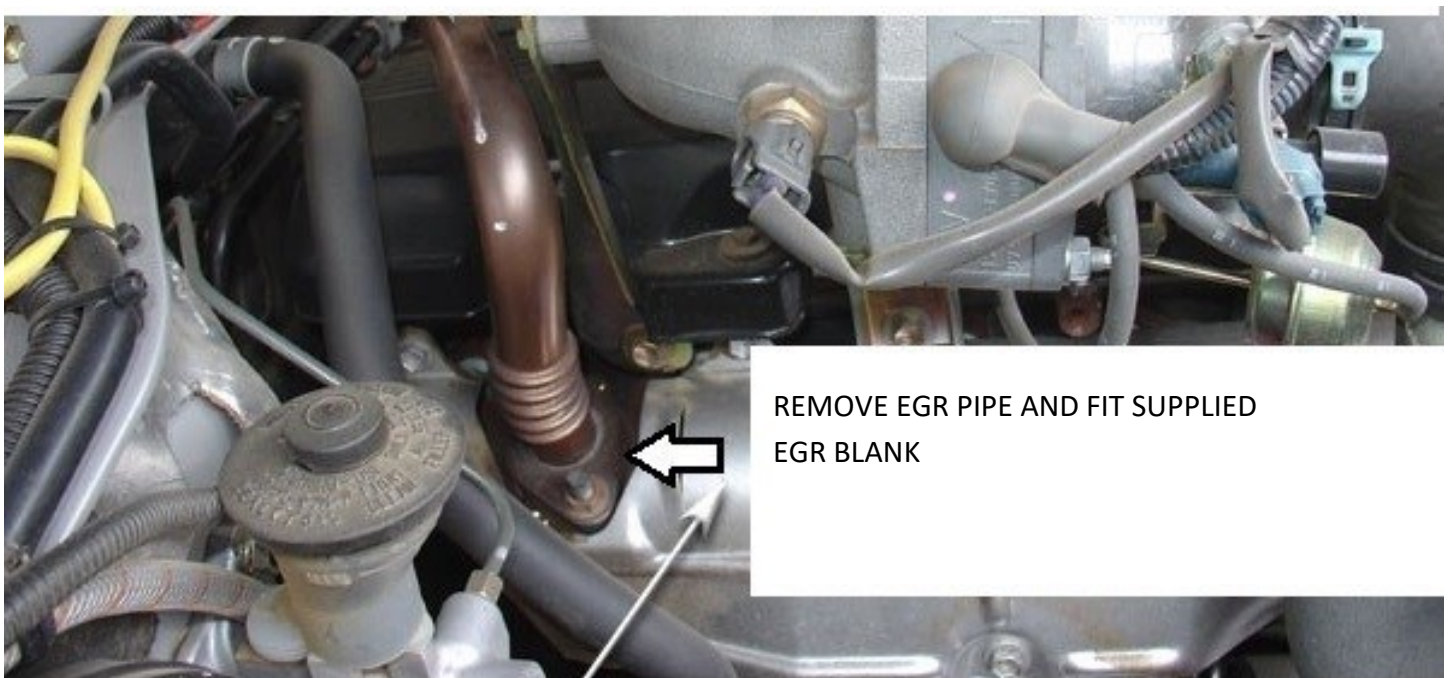
REMOVE ALL EGR RELATED SOLENOIDS. KEEP MAP SENSOR AND THE BLUE SOLENOID. DO NOT REMOVE THE BLUE SOLENOID FROM THE SOFT SHUT OFF VALVE (79 SERIES MOTOR). REMOVE TEMP SENSOR FROM INTAKE PIPE.

WITH THE CROSSOVER PIPE OFF, SEPERATE THE SOFT SHUTDOWN BUTTERFLY . WITH SILICONE SEALER BOLT TO THE NEW SOFT SHUTDOWN BUTTERFLY PLATE USING SUPPLIED M8X30 BOLTS.

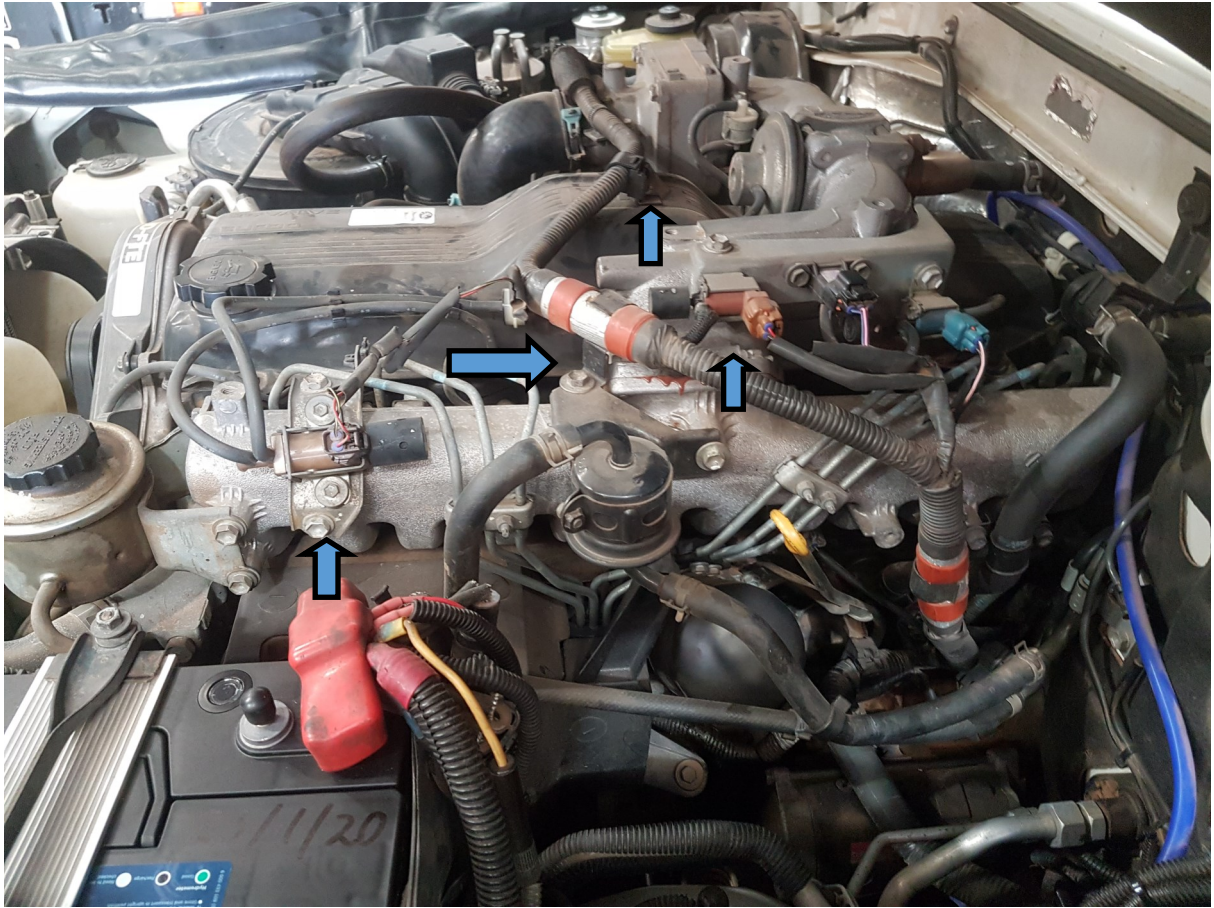
IF THE MOTOR HAS BEEN CONVERTED TO MECHANICAL PUMP THE SOFT SHUTDOWN BUTTERFLY WILL BE DELETED. IN PLACE THERE WILL BE A 45 DEG SILICONE AND 90 DEGREE SILICONE REDUCER THAT WILL NEED TO BE TRIMMED AND JOINED WITH THE SUPPLIED ALUMINIUM JOINER.



NOTE 100 SERIES ELECTRIC SHUT OFF VALVE SHOWN.



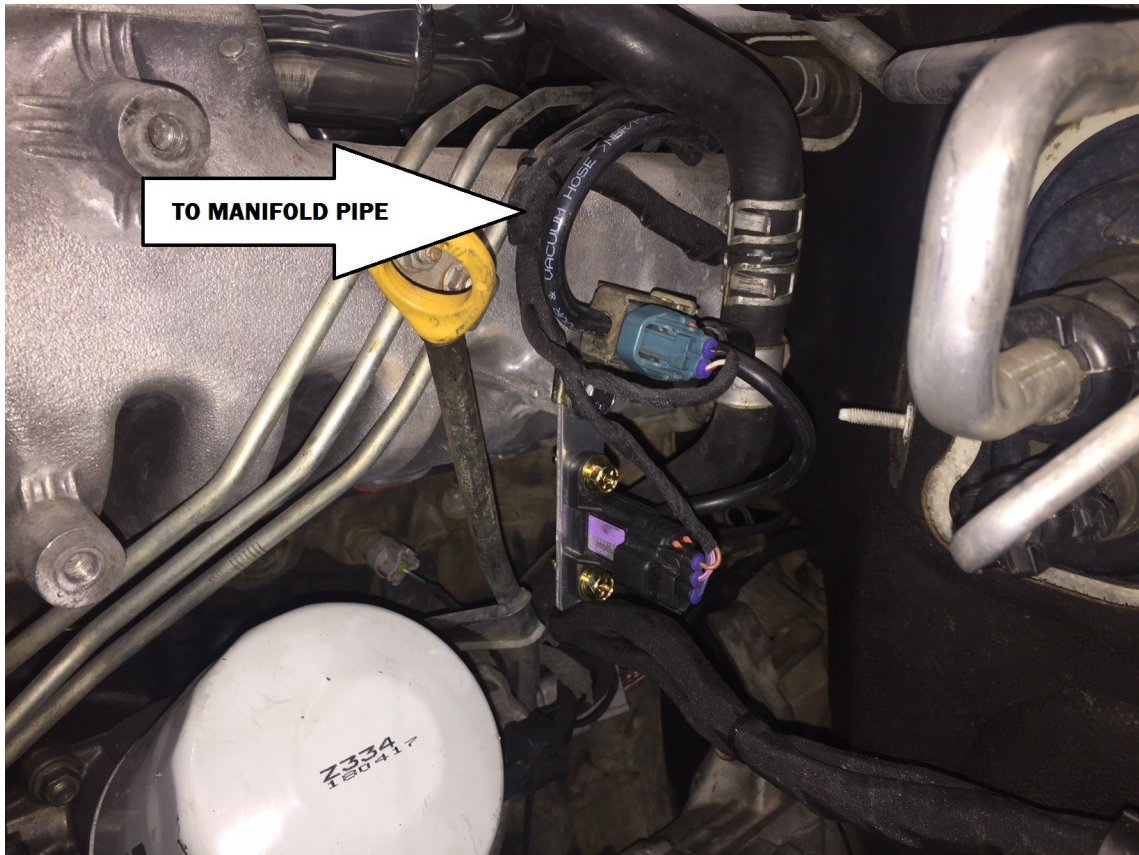
Exhaust Manifold & Heat Shield



REMOVE ABOVE SOLENOIDS AND BRACKETS AND DISREGARD.

REMOVE MAP SENSOR AND BLUE SOLENOID AND MOVE DOWN WITH SUPPLIED BRACKET AS SHOWN BELOW NOTE 79 SERIES SHOWN





LOOP VAC HOSE FROM MAP SENSOR TO THE SOLENOID AND FROM THE SOLENOID TO THE BARB ON THE NEW CROSSOVER PIPE WHEN FITTED. THERE IS A SPARE PORT ON THE CROSSOVER PIPE FOR A BOOST GUAGE IF NEEDED.

FIT TEMP SENSOR TO TURBO PIPE. (79)

FIT TURBO PIPE USING HIGH TEMP SILICONE SEALANT USING FACTORY BOLTS.

NOTE OLD STYLE PIPE SHOWN.

IF AFTERMARKET TURBO FITTED USE

SILICONES SUPPLIED TO FIT.



Insure the terminal is insulated as it is no longer needed

Fit air temperature into the new pipe supplied

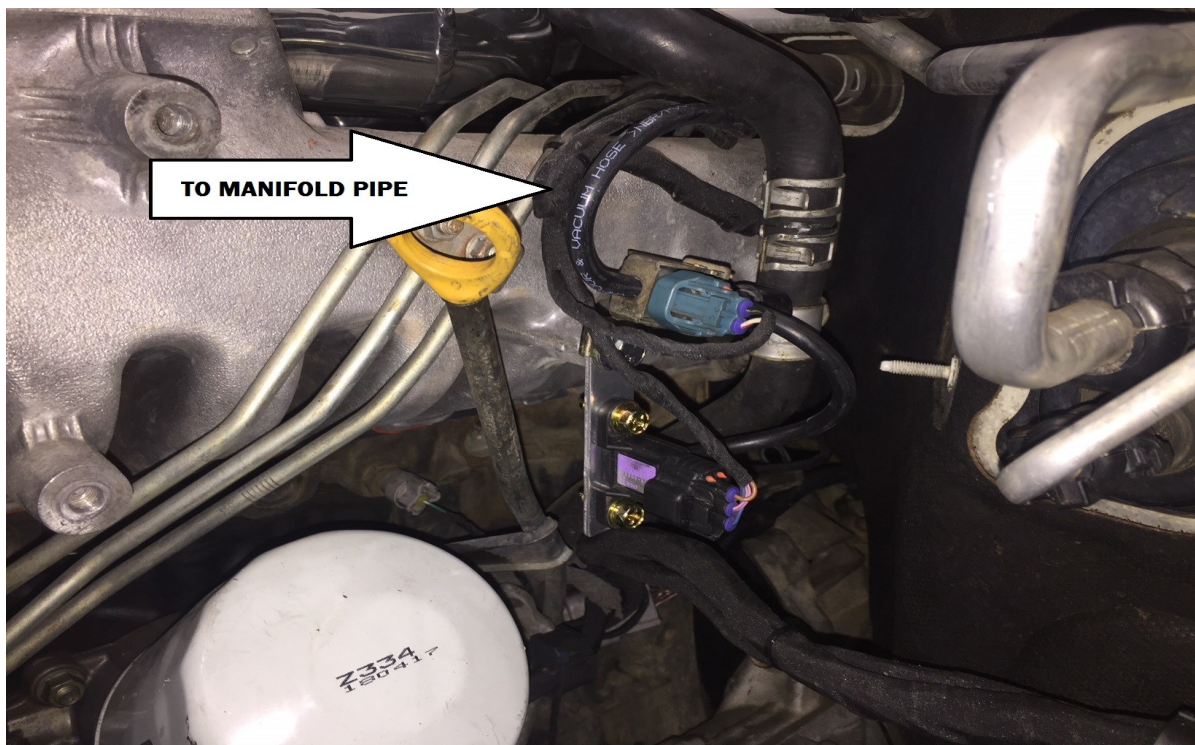
IF A 79 SERIES MOTOR IS FITTED CUT FUEL DAMPER BRACKET AS SHOWN AND ROTATE 180 DEGREES AND FIT AS SHOWN TO THE FUEL RAIL MOUNTING BRACKET BOLT.



IF 100 SERIES FIT TEMP SENSOR TO MANIFOLD PIPE. IF 79 FIT TO TURBO PIPE. RUN VAC LINE FROM FITTING ON CROSSOVER PIPE TO SOLENOID AND MAP SENSOR AS SHOWN. RUN EXTENSION LOOM TO SHUT DOWN VALVE. INSTALL MANIFOLD USING SILICONE SEALANT. ASSEMBLE SILICONES AND PIPES AS SHOWN BELOW.



IF A 79 SERIES MOTOR THERE WILL NOT BE AN EXTENSION LOOM IF IT IS A 100 SERIES MOTOR IF ELECTRIC WILL BE 6 PIN AND 2 PIN EXTENSION LOOM IF A VACUUM 100 SERIES IT WILL BE A SINGLE 2 PIN LOOM.



IF A 79 SERIES 1HDFTE OR EARLY 100 SERIES RUN THE LONG VACUUM HOSE SUPPLIED FROM THE SOLE-NOID ON THE SOFT SHUT OFF VALVE TO THE VACUUM PUMP AS SHOWN .



IF A 100 SERIES 1HDFTE MOTOR IS FITTED THE POWER STEERING BRACKET WILL NEED TO BE MODIFIED AS SHOWN TO ALLOW CLEARANCE TO THE INTERCOOLER PIPE WORK.





ASSEMBLE THE TWO FRAME RAILS TO THE INTERCOOLER USING THE 4X M8X16 BOLTS SUPPLIED. LIGHTLY TIGHTEN MOUNTING BOLTS IN THE BOTTOM OF THE SLOTS ON THE FRAME (END CLOSEST TO FRAME RAIL).

UNDO THE TWO BOLTS SHOWN ON THE FIREWALL AND INSTALL INTERCOOLER USING M8X20 BOLTS SUPPLIED TO THE FIREWALL. LEAVE LOOSE.

ADJUST FRAME SO TAGS ARE VERTICAL AND TIGHTEN FIREWALL BOLTS. CHECK INTERCOOLER IS LEVEL AND TIGHTEN INTERCOOLER MOUNTING BOLTS. MAKE ANY SIDE TO SIDE ADJUSTMENT. BY LOOSENING FIREWALL BOLTS. WHEN IN POSITION MARK THE FRONT MOUNTING BRACKET HOLES.

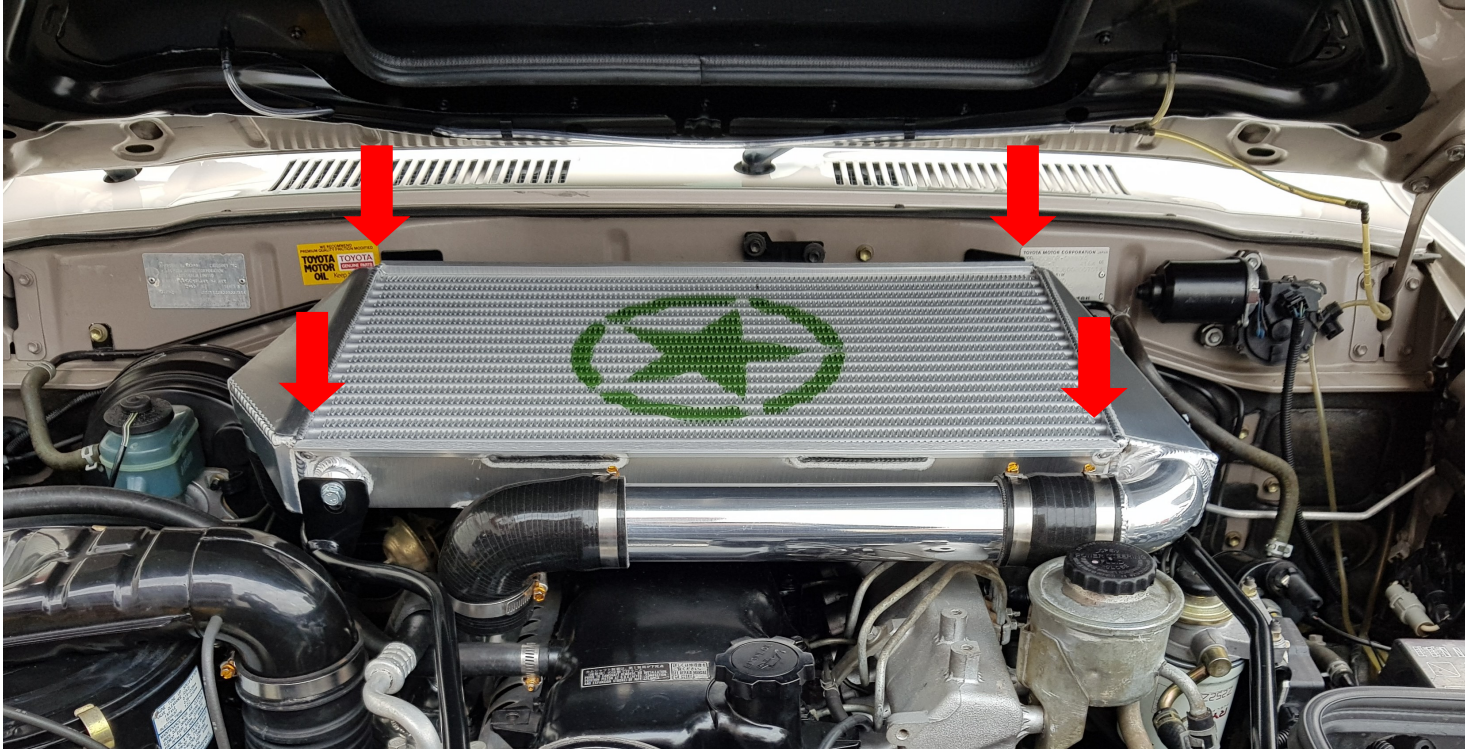
REMOVE INTERCOOLER AND DRILL FRONT MOUNTING HOLES INTO RADIATOR SUPPORT PANEL. BEING CAREFUL OF WIRES UNDERNEATH.

REINSTALL THE INTERCOOLER AND TIGHTEN MOUNTING BOLTS

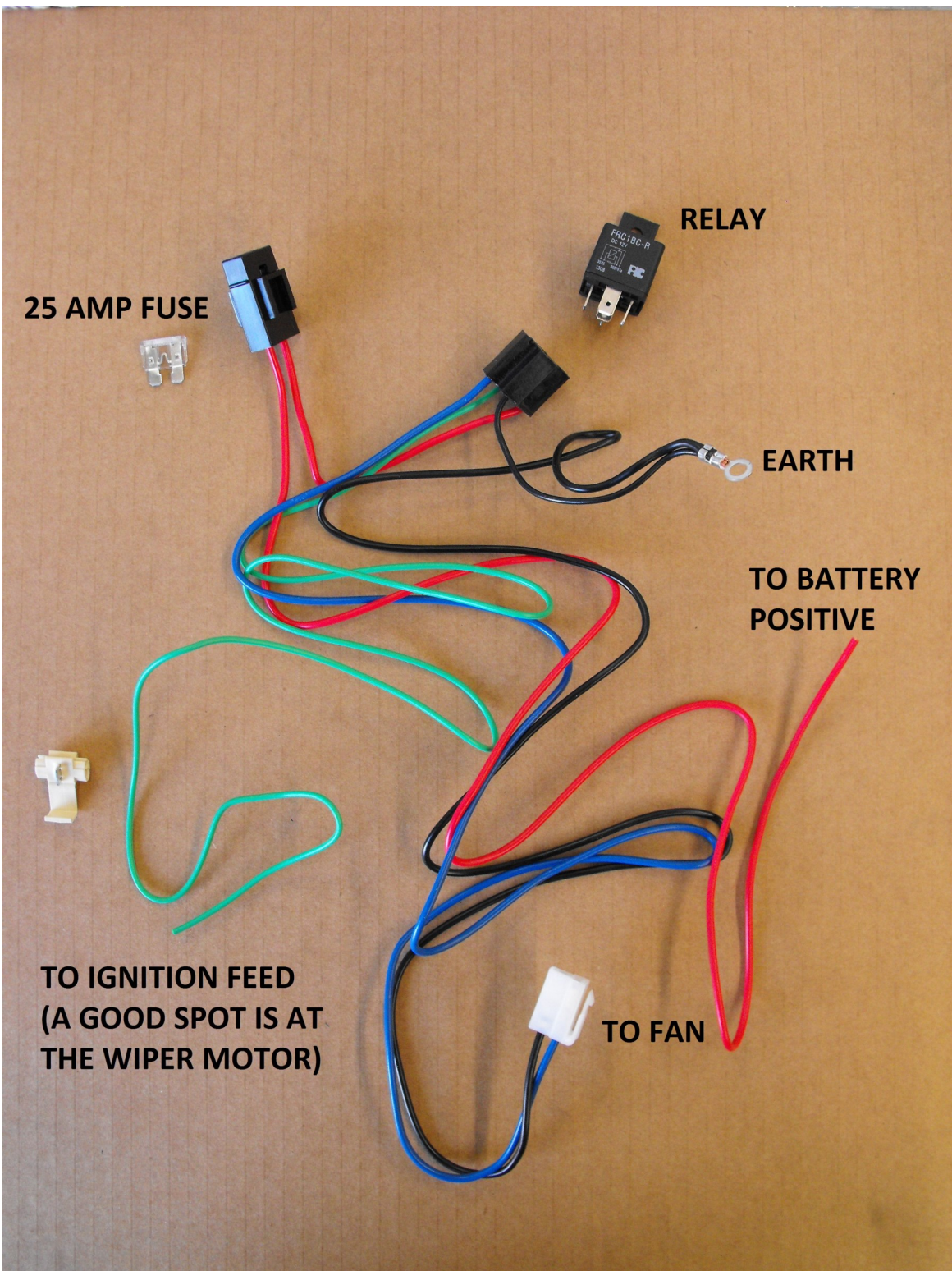
INSTALL FRONT SILICONES AND ALUMINIUM PIPE AND TIGHTEN ALL HOSE CLAMPS.

ONCE THE INTERCOOLER IS FITTED PLACE THE 4 FOAM SQUARES SUPPLIED ON THE OUTSIDE EDGES OF THE INTERCOOLER STICKY SIDE UP.

CAREFULLY LOWER THE BONNET DOWN SO THE FOAM SQUARES TRANSFER TO THE BONNET. LIFT UP AND REMOVE THE BONNET. PLACE ON STANDS READY FOR CUTTING.

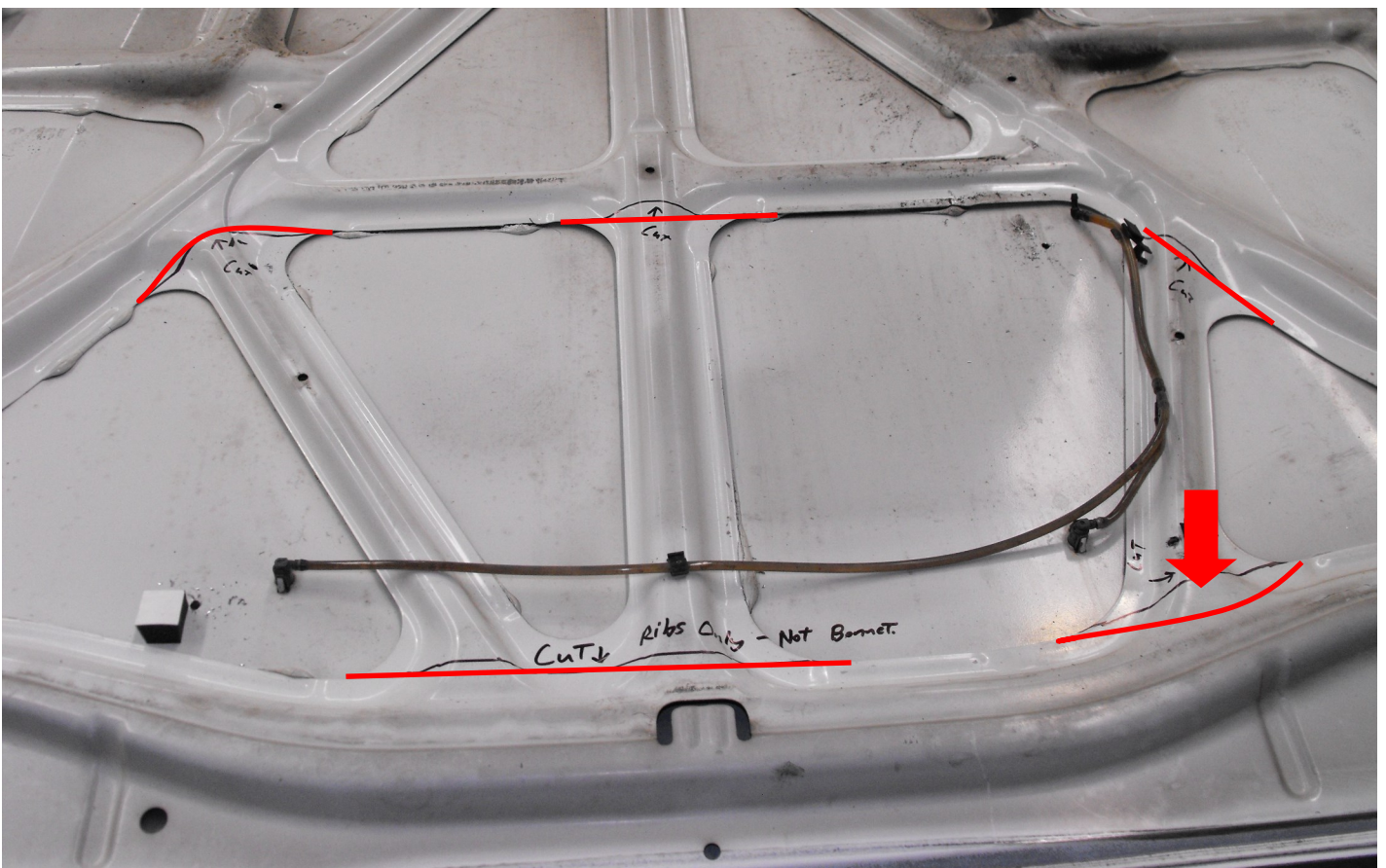


AFTER THE BONNET IS REMOVED WIRE THE FAN AS SHOWN. AN IGNITION FEED CAN BE FOUND AT THE WIPER MOTOR OR THE BREAKOUT BOX ON THE DRIVERS SIDE OF THE ENGINE BAY.



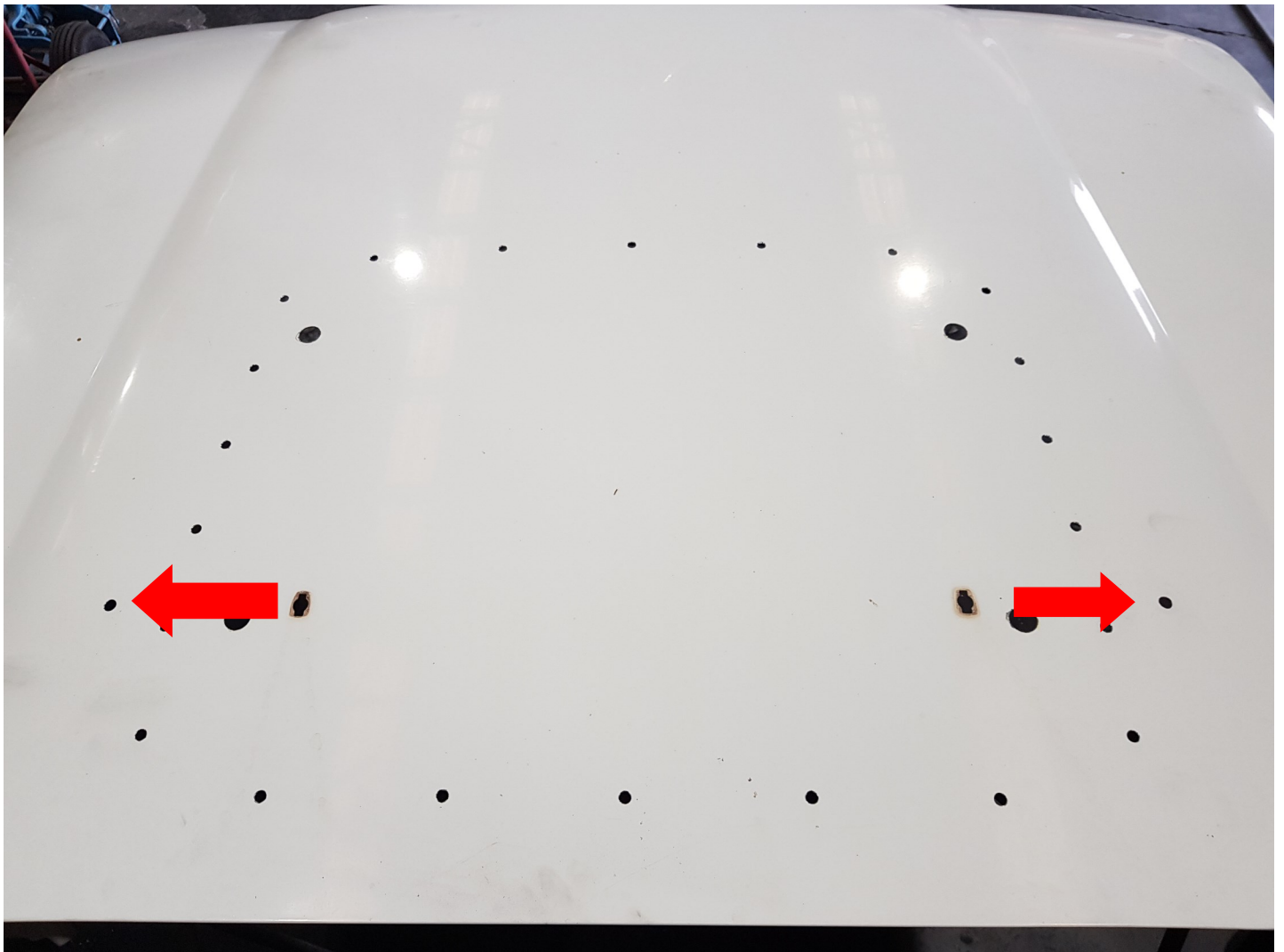
FOLLOW THE SCOOP FITTING INSTRUCTIONS SUPPLIED WITH THE SCOOP.

CUT WEBBING AS SHOWN BELOW. TAKING INTO ACCOUNT PART SHOWN BY ARROW.





THE WASHER JETS NEED TO BE MOVED OUTWARDS 50MM FROM THE SCOOP BOLT HOLES IN LINE WITH ORIGINAL WASHER JETS



AFTER PAINTING AND INSTALLING THE SCOOP INSTALL THE WASHER JETS AND HOSE SUPPLIED.

INSTALL PINCHWELD AS SHOWN.

REINSTALL BONNET

DOUBLE CHECK ALL HOSE CLAMPS ARE TIGHT AND FAN OPERATION AND TEST DRIVE VEHICLE.

AFTER A WEEK OF DRIVING RE-TENSION HOSE CLAMPS AND CHECK AT REGULAR SERVICE INTERVALS.

