





5. Bolt side frames to rear frame with m8x35 socket cap screws and spring washers but leave front mounts loose.
6. Bolt intercooler to sub frame using 4 x m8x16 bolts and washers.



7. Fit 2x 63mm 90deg silicone hoses between inlet manifold and intercooler using alloy joiner pipe and 4x 60-80 clamps, you may have to trim the silicone hoses to get the correct fit.



8. Fit 50mm silicone hoses and alloy pipe to turbo side using 4x 40-60 hose clamps.



9. Bolt the front driver's side intercooler frame to radiator support panel with m8x25 bolt and washer



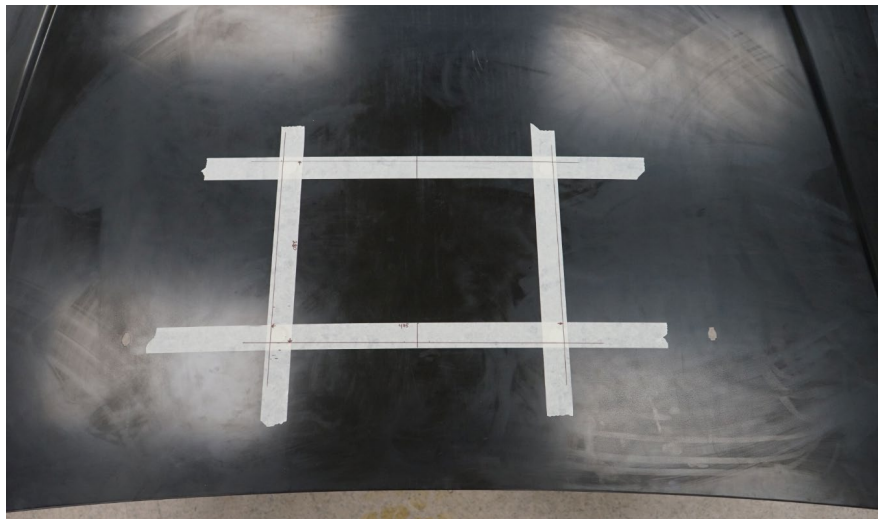
**10.** Mark and drill a 9mm hole through radiator support panel to mount the passenger side frame. Bolt the frame to radiator support panel with a m8x25 bolt, nut and washers.



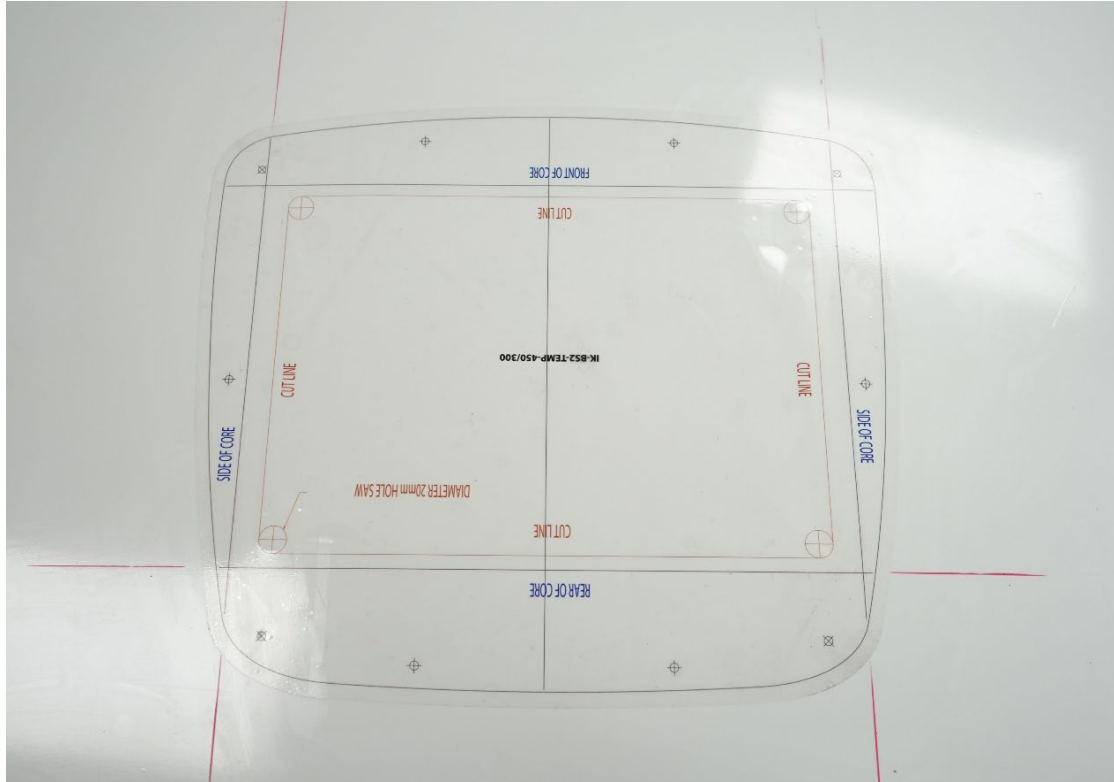
**11.** Fit the 4mm boost hose removed from standard cross over pipe to hose tail on inlet manifold adaptor. This hose is connected to the boost compensator on the top of the injector pump.



- 12.** Remove the bonnet from the vehicle and place it on a table or trestles. Use masking tape to cover the bonnet approximately where the hole will be cut. This will allow you to draw measurements on the bonnet where the hole will be cut without permanently marking the paint work.



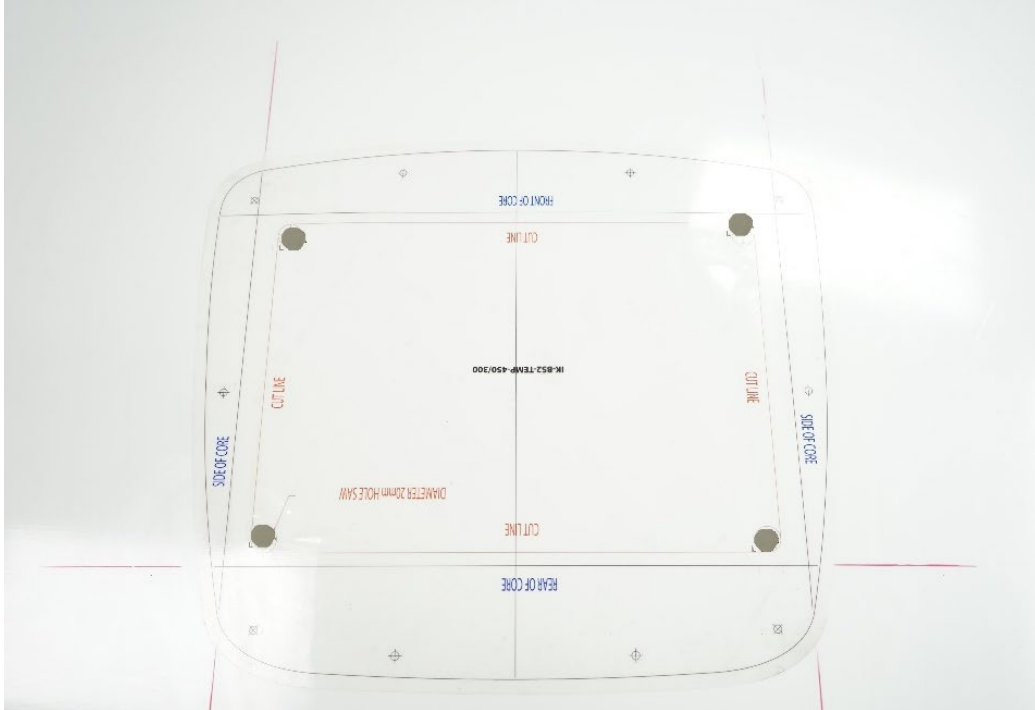
- 13.** Take a measurement from the intercooler core back to the bonnet recess on all 3 sides (driver's side inner guard, passenger side inner guard and below the windscreen) of the intercooler. These marks are your outer core measurements. Your cutting line is 10mm inside the edge of the core. Your overall hole size will be 415 wide x 280mm deep.



- 14.** Using the marks, you made as a guide, draw out a rectangle where the bonnet will be cut for the intercooler core. We cannot stress enough to measure 2 or 3 times and make sure your location is correct before attempting any drilling or cutting of your bonnet.
- 15.** Once the measurements are correct, Measure from the bonnet edges again remembering to allow for the gap between the bonnet and the bonnet recess. Once you're happy with the fit and location, you can drill a 20mm hole on each corner as shown below. We suggest starting with a smaller pilot hole then increasing the size with a step drill or work through larger drill bits until the correct hole is reached as shown in the next image.



When cutting out your bonnet you can use a 1mm thick cutting blade on a grinder or air body saw. We prefer to use a pilot hole and step drill for the corners and a 1mm cutting disc on a 5 Inch grinder to get a nice straight cut on the edges.



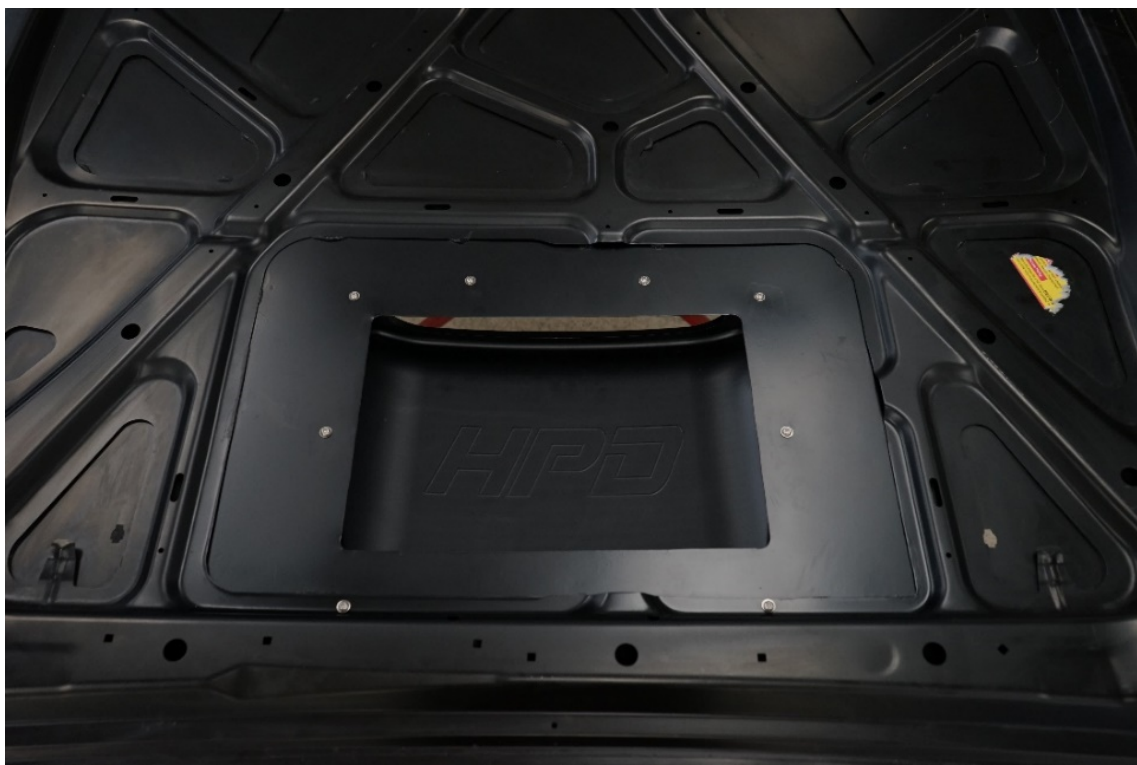
- 16.** Align the template supplied with the 2<sup>nd</sup> line from the front edge (the cut line) and then centralize the template on the bonnet by measuring a centre line on the bonnet.
- 17.** Once the template is square and you're happy with the fitment, you can drill the mounting holes for the scoop



18. On the underside of the bonnet where the holes for the mounting hardware have been drilled, use a die grinder to clean up any burrs or edges and paint any raw steel to protect against corrosion. Here you will need to remove any under bonnet reinforcement as shown in the image.



**NOTE: This bonnet scoop will need to be sanded to the individual profile of the bonnet as every vehicle can be slightly different. This will ensure a professional finish and give the best durability. Failure to do so will leave a gap between the bonnet and the scoop.**







**19.** Hold your new HPD bonnet scoop under the bonnet and use the supplied mounting hardware (M6 button head bolts and flat washer) to fasten the scoop into position.  
We recommend a small amount of thread sealant on each fixing to prevent the fixings from working loose.

**20.** Once your new HPD bonnet scoop has been installed, use the supplied pinch weld to form a seal between the bonnet and intercooler.



**21.** Fit bonnet back onto vehicle.

**22.** Wire up thermo fan using wiring harness and relay supplied. The fan needs to be sucking air through the intercooler core and you may need to reverse the polarity of the wiring to achieve this.



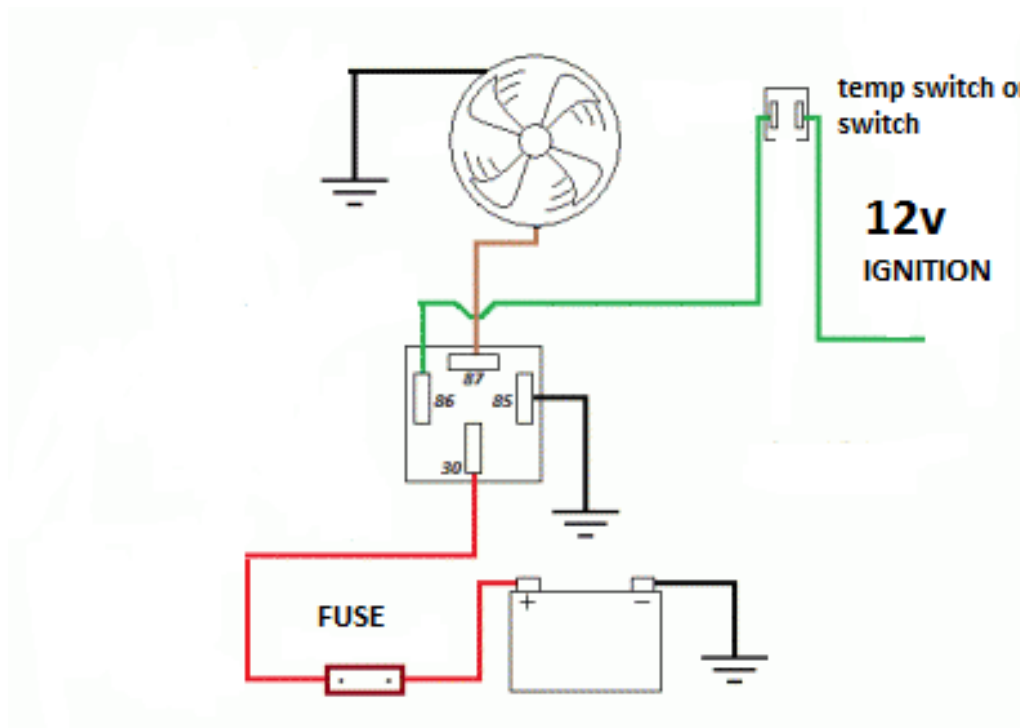
#### Fitting Tips

- Leave all clamps loose until all pipes and silicone is fitted. This allows the pipes to be moved around to fit properly and clear everything.
- Spray the inside of the silicone elbows and joiners with CRC. This helps to make the pipes slip into the silicone easily making it really easy to rotate and adjust pipes to get the best fit.
- Sometimes it is necessary to trim the length of silicone elbows. To do this fit a clamp to the silicone and tighten so that one edge of the clamp is where the silicone needs to be cut. Using a sharp blade cut along the edge of the clamp. This allows you make a straight square cut.



## THERMO FAN WIRING DIAGRAM

Wiring diagram for thermo fan, you can either use a manual in cabin switch to control fan or a 50deg bimetal temperature switch. Continuously running fan will result in premature fan failure.





<u>QUANTITY</u>	<u>PART</u>	<u>DESCRIPTION</u>	<u>PACKED</u>
1	INT-GU42X-T	450X300X76 INTERCOOLER	
2	IB-GU42X-T-1	INTERCOOLER FRAME REAR SECTION 600mm	
2	IB-GU42X-T-2	INTERCOOLER FRAME DRIVER SIDE	
1	IB-GU42X-T-3	INTERCOOLER FRAME PASSENGER SIDE	
1	P-GUX-1	ø51 ALLOY PIPE 80° 100X100	
1	P-GUX-2	ø63 ALLOY PIPE 75mm LONG	
4	8X16M88ZPB	M8X16 BOLT	
4	8X20M88ZPB	M8X20 BOLT	
2	8X25M88ZPB	M8X25 BOLT	
2	8X35MZPSCS	M8X35 SOCKET CAP SCREW	
3	6X25MZPBSS	M6X25 BUTTON HEAD SCREW	



10	8MZPW	M8 FLAT WASHER	
10	8X3X2MSW	M8 SPRING WASHER	
3	8M8ZPN	M8 ZINC PLATED NUT	
2	S-90-63	Ø63 SILICONE 90° ELBOW (CUT 110X110)	
10	6X10G304BSS	M6 BUTTON HEAD SCREW	
10	6MG304W	M6 FLAT WASHER STAINLESS STEEL	
1	BS-2-PL	BS-2 BONNET SCOOP (PLASTIC)	
1	BS2-TEMPLATE	BS-2 BONNET SCOOP TEMPLATE	
1.6	RS-PW18	PINCH WELD SEAL 18MM	
1	S-45-51	Ø51 45° SILICONE ELBOW	
1	SC-51	Ø51 SILICONE JOINER	
4	CL-40-60	CLAMPS Ø40-60	
4	CL-60-80	CLAMPS Ø60-80	
1	0524	FAN WIRING LOOM, FUSE AND RELAY	
1	FL-NPGQ-I	TD42 INLET ADAPTOR	
1	FL-GT28-CO	GT28 TURBO COMPRESSOR OUTLET ADAPTOR	
1	SB-6	Ø6 SILICONE BOOST HOSE	
1	PLUG-1/8	1/8 BSP PLUG	
1	HTT-6-1/8	6MM HOSE TAIL 1/8 BSP	