

Fitting Sunny/Pulsar Intercooler To Coupe Guide!

Here's what I used to install the intercooler. Hopefully this could be used in the FAQ section as a sticky on installing the intercooler.

I found there were plenty of photos of the intercoolers installed but not so many of the actual installation.

My installation isn't perfect but you get the picture of what needs to be done to install the intercooler.

I obviously got an intercooler from a sunny, I had one of the end tanks rotated and re-welded see pics:





Here are the hoses that I needed as well (I didn't need two of the 90 degree bends). I used 1 x 45 degree bend 63mm hose, 2 x 90 degree bend 63mm hose and one 70-60mm straight reducer for the throttle body.



I had some pipes made up one was a straight length of o/d 63mm pipe with a 32mm take-off welded on for the dump valve. And the other piece was just a straight piece of o/d 63mm pipe for joining the turbo hose to the intercooler hose.

I also got a 10" Davies Craig slimline fan from Grant/GBE.



Right that's what I used for the intercooler. Obviously I needed hose clips tie wraps etc.

Firstly I removed the bumper. From memory there are 4 bolts behind the strips on the bumper, 3 underneath. Then there are 2 screws in either wheel arch and one screw near the wheel arch on either side the bumper, they are under the bumper strips too. Then there are screws that screw through the corner splitters to some plastic guards on each corner under the bumper.



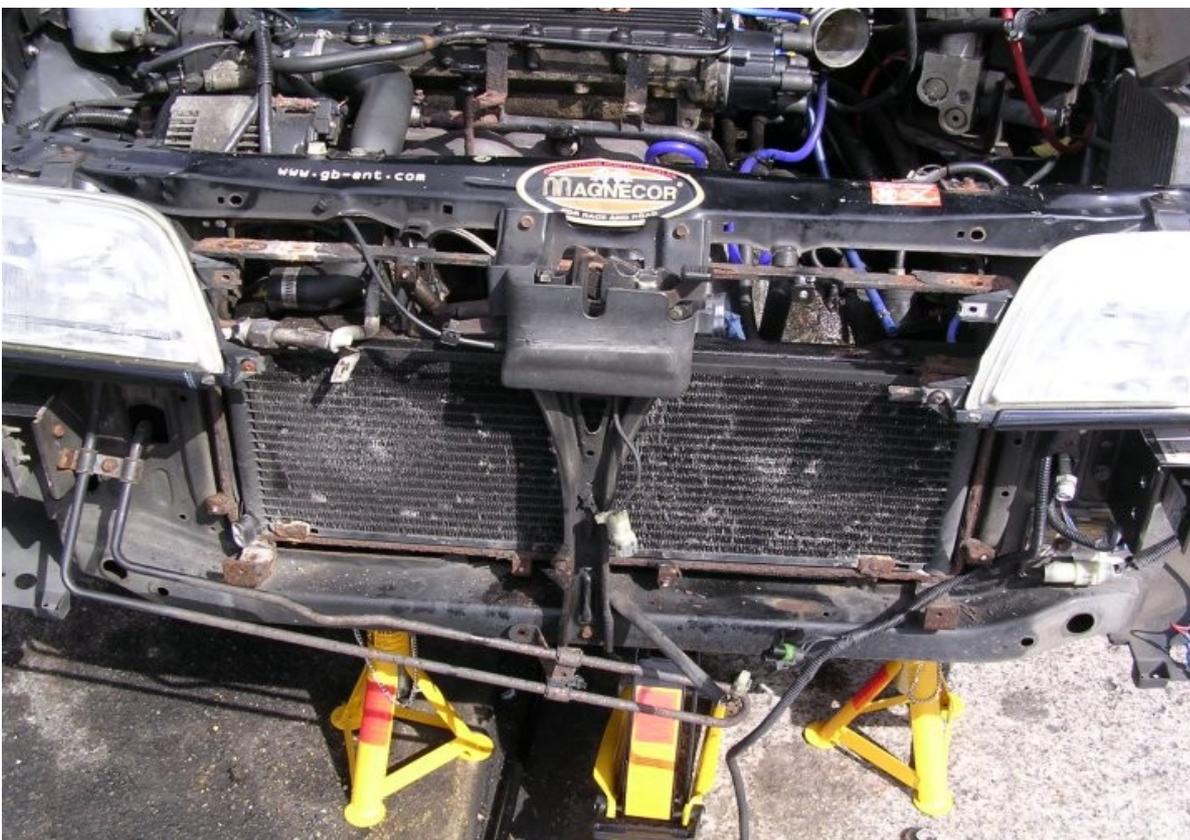
crashbar needs removing. There's two bolts on either side at the back of the bar securing it to the shell.



Then unbolt the PAS cooler from the centre section (1 bolt) and undo the fan harnesses and remove the fans (3 bolts each). I also chopped all the air-con pipes away as I have got rid of it.



The I removed the o/e intercooler and undid any pipes running to the air-con rad



Then I removed the air-con radiator/condenser and the frame which holds it.



Then the slimline fan needed fitting. I tested it by connecting it to the o/e fan wire. Then start the engine and remove the coolant temp sensor plug. This should make them come on if they are wired correctly. Once I was happy that it was right I soldered the wires together and put some heatshrink over them. I then tie-wrapped the fan to the radiator frame and to the bottom cross-member. And tie-wrapped any excess wire to the cross member too.



Then I installed the intercooler between the bonnet catch support and the PAS cooler. It was quite a tight fit but it fit. I supported the i/c on jacks in the desired position. I have been told that I could have had the intercooler mounted higher if I had of cut the Inlet and outlet of the intercooler down a bit. When the bumper went back on mine it sits right against the base of the bumper. So I didn't fasten the intercooler in with brackets. A lot of people seem to just use the hoses as the support for the intercooler. I was always a bit dubious about this, but when I actually put the crashbar on I was amazed at how firm the intercooler is. So instead of putting brackets on I put bolts in the mounting holes on the i/c and tie-wrapped them back to the cross-member. The intercooler is also supported by the base of the bumper and the hoses.



then came the tricky bit which was getting all the hoses onto the i/c. It was a bit of a ball-ache but with some patience and luck I got there. lol





In this picture you can see just how close a fit it is



Then everything needs re-assembling to the car.

I found that the grill between bumper and bonnet was fouling so I trimmed it to suit.



And here is the car once everything was re-assembled.



I hope this will help some people. I really hadn't really done anything like this before. So I was a bit worried about doing it. And something like this would have helped me. So I hope somebody can benefit from it.

I am sure there are some people who went about it different ways but I would have thought that the principal steps are still the same.

If anyone wants to add to it, please feel free to do so.

Just found a few extra photo's.

Here's the old intercooler alongside the new intercooler:



Here is a picture of the parts that were removed:

