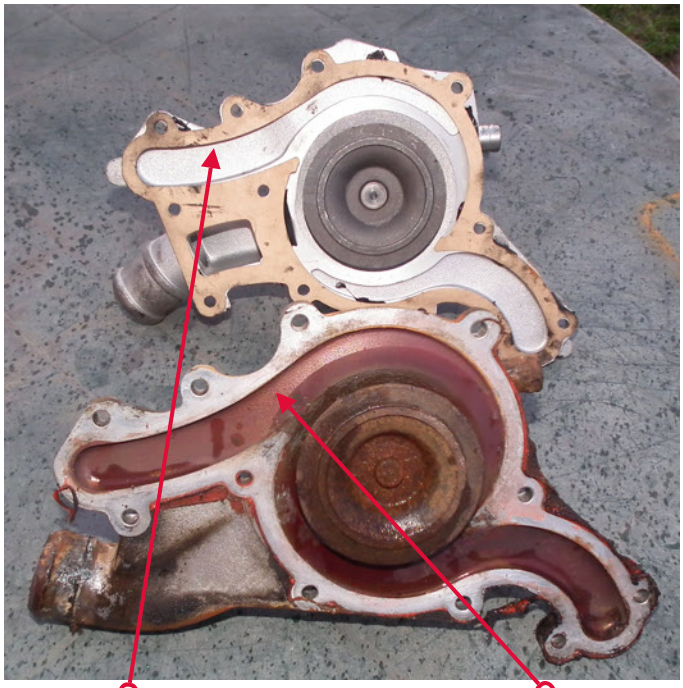
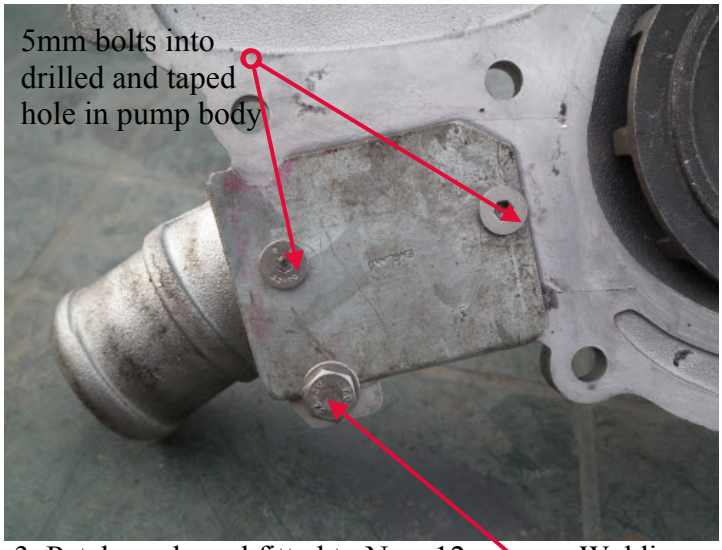
How to convert a 12v scorpio water pump into a 24v water pump and save £200 in the process.
Unipart price for 12v pump £46
Ford price for a 24v pump £240 !!!!!!!!!!!!!!!!!!!!

1. Here is what we start with. This is external Thermostat

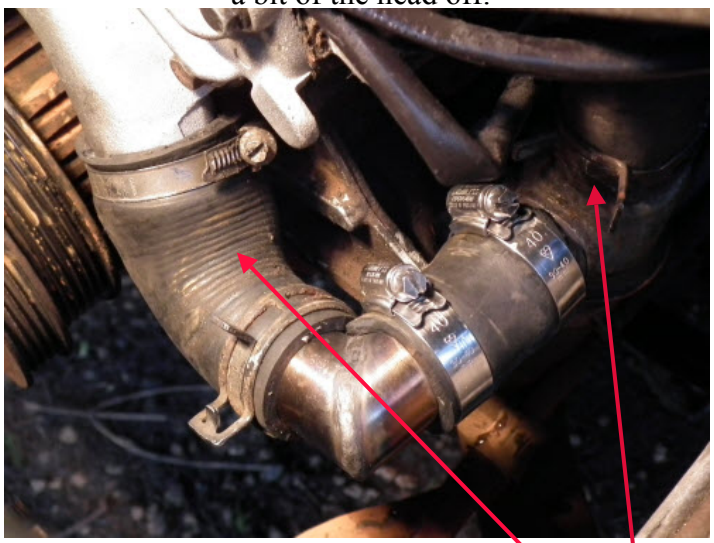


2. New 12v pump behind and original 24v pump front

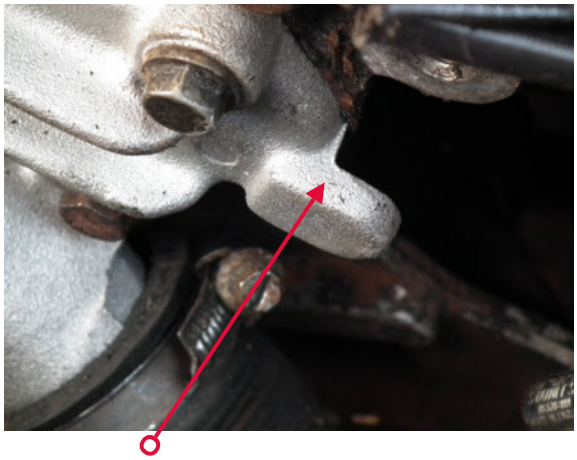


3. Patch made and fitted to New 12v pump. Welding a patch in would be an alternative if Ali welder available but more risk of distortion. Watch out that this bolt (6mm nut & bolt) does not foul the web on the front of engine. Grind a bit of the head off.

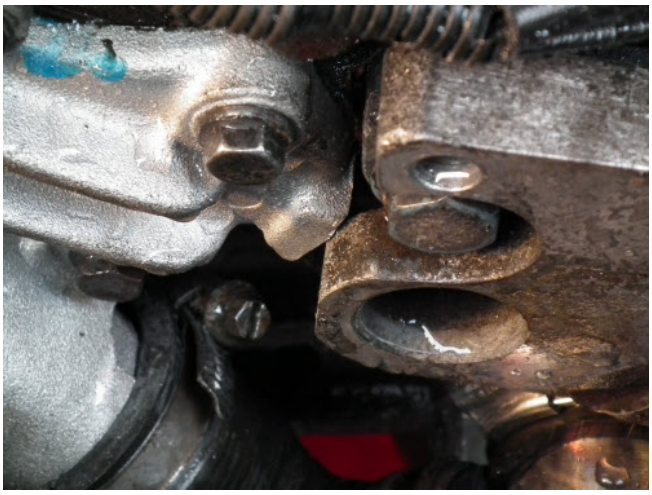
4. Original hose on left. Piece of hose from scrappy and a made up elbow. Approx 30mm dia. Copper elbow may be available from plumbers. Worth checking



5. This is how it all fits together. Push this hose as far up the pump inlet pipe as possible. Thermostat



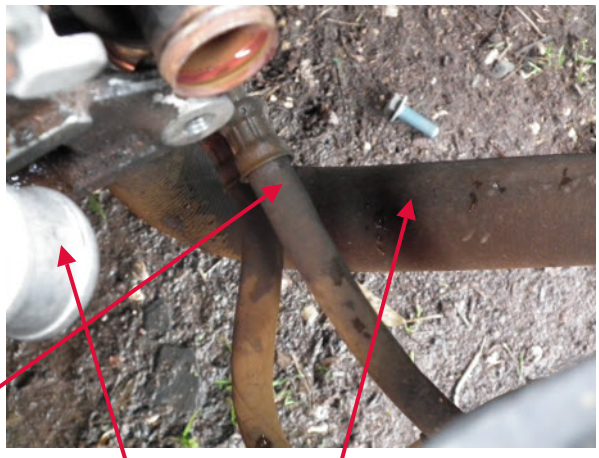
6. This lug needs to be cut off. Easier on bench before you fit pump.



7. Lug cut off

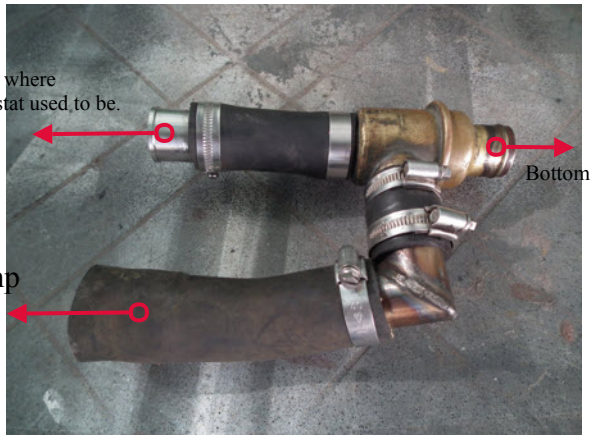
8. AC pump bracket goes back on - bottom pivot first

9. Bracket and pump back on. Just belts etc to put back on. Make sure these pipes are not rubbing on the radiator hose



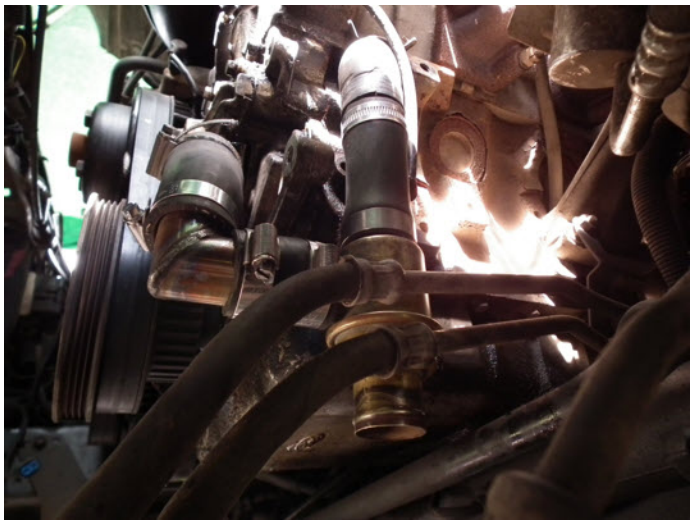
10. An **alternative** way if you cannot get or make a tee piece, is to move the thermostat down to the hose as it comes out of the bottom of the radiator (approx here) and then connect to the new pump with a hose from a scrappy. You will need a straight piece of pipe to reconnect the radiator hose to the piece of hose that goes into the engine block where the thermostat used to be

Update Feb 2015
I was never happy with the arrangement of the pipework, so I have modified it by extending the thermostat down by about 6" and doing a bit of re-plumbing. This brings it below the AC compressor bracket. Happy now.



The modified pipe arrangement

Fitted in place, bottom hose yet to be fitted after replacing radiator.



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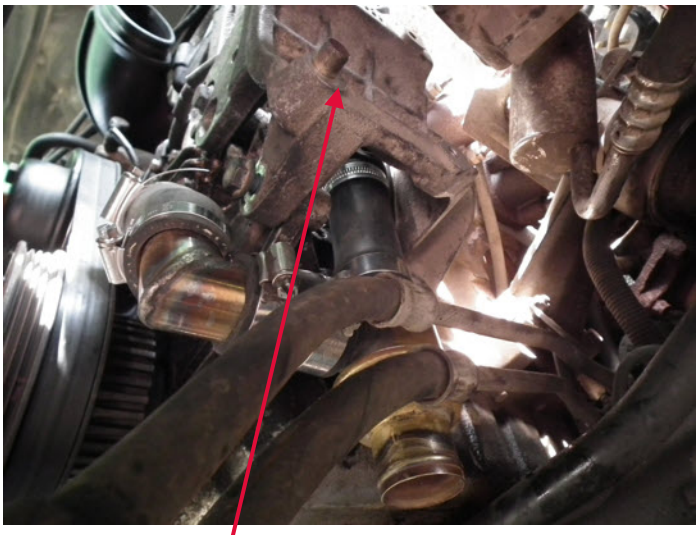

With AC Compressor bracket in place.
Much tidier, accessible and less stressed.