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**Alfa Workshop**  
run by enthusiasts for enthusiasts

[Replacing The Cam Belt And Water Pump On The Alfa 4C Coupe \(Part 1\) \(alfaworkshop.co.uk\)](#)

[Replacing The Cam Belt And Water Pump On The Alfa 4C Coupe \(Part 2\) \(alfaworkshop.co.uk\)](#)



## Replacing The Cam Belt And Water Pump On The Alfa 4C Coupe (Part 1)

Replacing the cam belt can be done with all the body panels still in place but we've removed the rear, right side wing to make it easier to see.

**WORKSHOP TIME 6hrs**

Cam belt kit [6000629434](#), water pump [60586222](#)

Gaskets [55213959](#) and [71779194](#)

*If you would like to **BOOK** yourself in for a cam belt replacement the price of this service in our workshop is [£668.40](#) (price of water pump NOT included).*

Prop up the boot and pull off the plastic engine cover.



Undo the x3 10mm bolts to the breather pipe fixings...



...and unclip the connector at each end.



Unclip the vacuum pump hose.



Unplug the thermostat [temp sensor](#).



Undo the x4 5mm allen bolts to the vacuum pump and move the pump to one side.



The inlet camshaft [blanking plate](#) has x3 10mm bolts.



The undertray is held by x14 [T30](#) (Torx) screws.



The rear diffuser has x2 T30, x3 Phillips screws and x4 4mm allen bolts.



Unbolt the rear RIGHT side wheel and remove.



The rear RIGHT side wheel arch liner has x3 allen and x3 Phillips screws.



Where the rear wing joins the bumper there are x5 10mm nuts, remove the first x4 (the last one is in a tight corner).



The wings alloy support frame has x4 10mm bolts.



There's a T30 screw at the front of the wheel arch joining the side skirt...



...and x4 more in the 'door shut'.



In the top LEFT corner of the 'door shut' behind the weather seal is a 5mm allen bolt.



There's x2 T30 screws under the fuel filler flap to a plastic cover and one more underneath the cover.



Behind the filler above the filler neck is a 10mm bolt.



Lift the rubber weather seal around the right side of the boot and undo the T25 screw...



...and the other x4 along the edge of the black infill panel.



You can now easily access the fifth 10mm nut joining the rear wing to the bumper.



Carefully lift the wing away from the car (noting the rear end is sitting on the x5 bumper studs). The drain pipe for the fuel overspill is still connected so this will pull out with the wing.



With the wing out of the way you can now work on the engine.  
Put a spanner on the 15mm nut to the [auxiliary tensioner](#) idler and rotate clockwise to take the tension out of the [auxiliary belt](#) so that the belt can be removed.



Undo the x4 T45 bolts to the auxiliary [bottom pulley](#).



The auxiliary tensioner mounting bolt is a T47.



Using a T50 allen key with an extension bar undo the the [auxiliary idler](#).



At the bottom of the engine support (large alloy side casting) are x3 13mm bolts and x1 15mm.



Take out the oil pumps 10mm bolt and replace it with the timing tool locating pin.



Turn the crank clockwise with a 19mm spanner until it's aligned with the crank locking tool then secure with a T45 bolt.



NOW CONTINUE TO **PART 2**



## **Replacing The Cam Belt And Water Pump On The Alfa 4C Coupe (Part 2)**

**The main objective now is removing the cast alloy side support that covers the cam belt**

**RETURN TO [PART 1](#)**

Jack the engine up enough to take the weight off of the engine mounts.



Undo the 15mm nut and bolt to the right side engine mount stabiliser bar.



Then the x2 15mm bolts on top of the engine mount...



...and x3 18mm nuts.



The alternator has x2 10mm bolts to a plastic covering.



The last alternator bolt is 13mm, once unbolted just lay the [alternator](#) down.



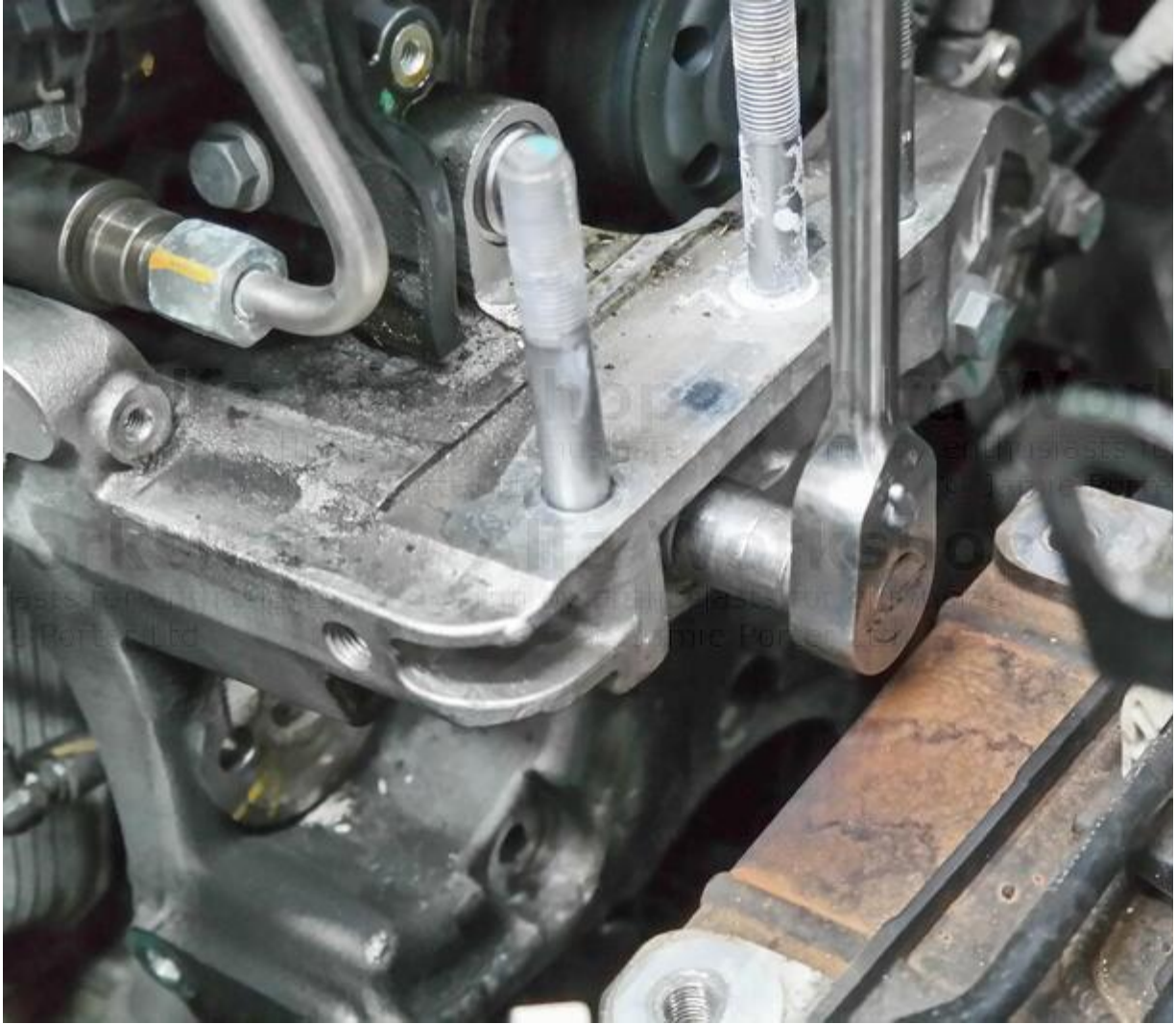
The cam belt protective plastic covering has x5 5mm allen bolts. To the right of the side cover unclip the pipe and electric trunking so that the cover can be removed.



The last bolts to the alloy side support are a 13mm...



...and x3 15mm.



You can now remove the alloy support.



If the exhaust camshaft doesn't align with the cam locking tool, release the crank shaft locking tool and rotate the crank clockwise 180° then lock it back up. You should now be able to lock up the exhaust camshaft.



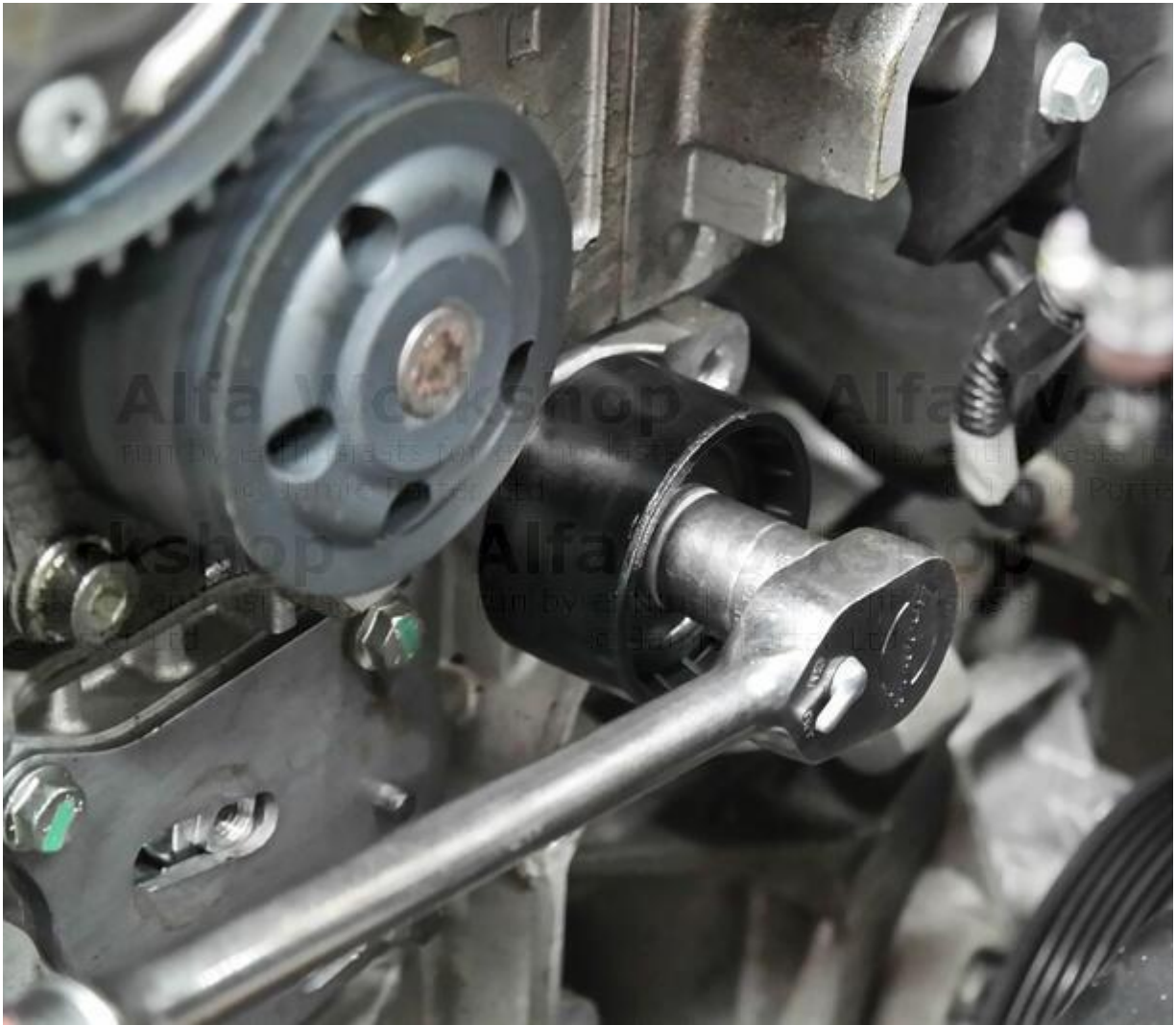
Next lock up the inlet camshaft.



Undo the 12mm bolt to the cam belt [tensioner](#) and remove. Take off the crank locking tool so you can remove the [cam belt](#).



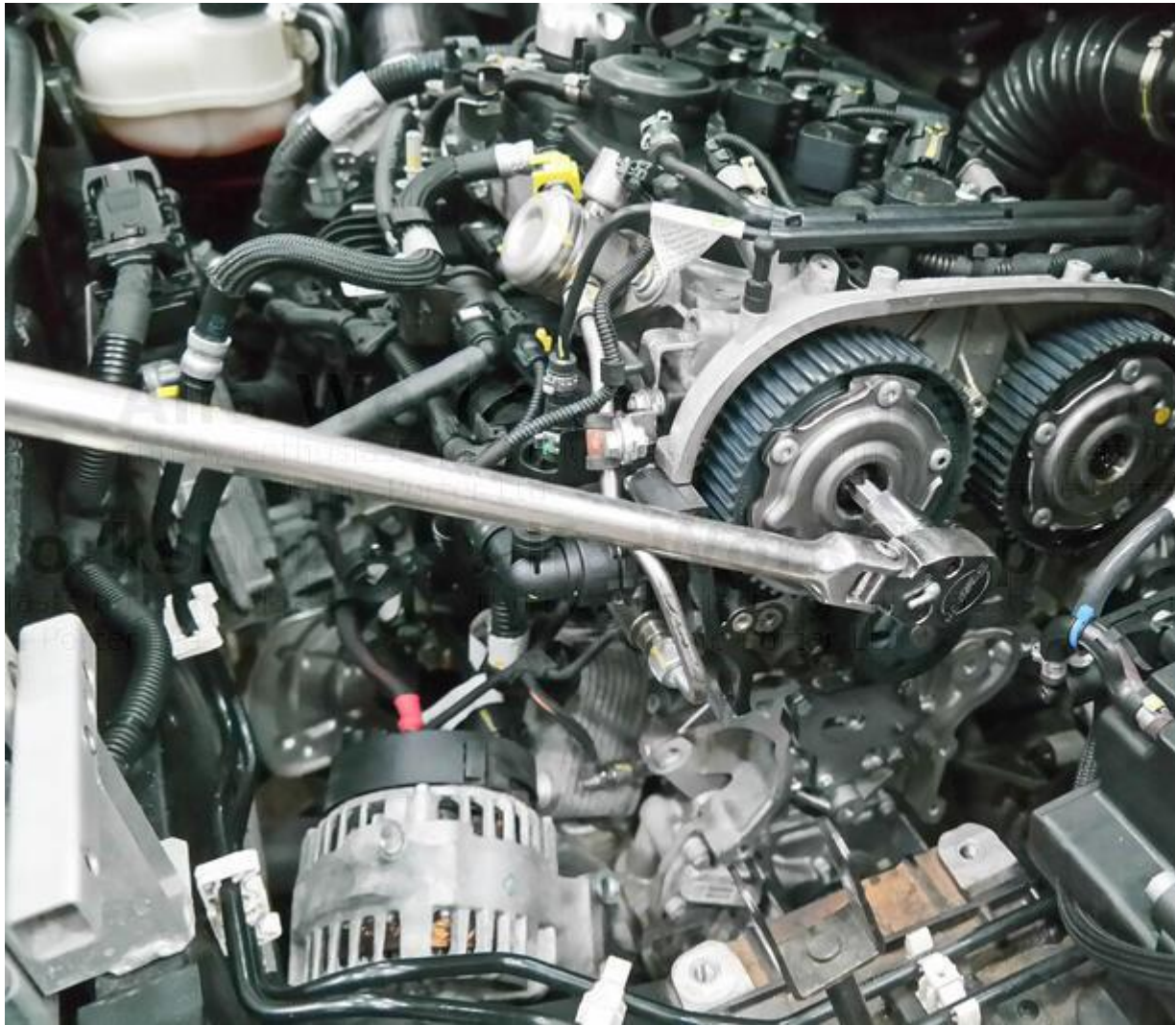
The [cam belt idler](#) has a 15mm bolt.



Undo the 30mm caps on the camshaft pulleys.



Loosen the exhaust camshaft pulley so it can turn freely ([T55 bolt](#)) but take off the inlet pulley to gain access to the [water pump](#).



The water pump has x2 6mm allen bolts.



Put a tray on the floor under the water pump to catch the [coolant](#) as you prise the pump off.



Clean any residue and dry around the contact area where the pump has been lifted.



We tend to apply a bead of gasket sealant around the 'O' ring of the new water pump. Bolt on the new water pump.



When replacing the cam belt tensioner the lug on the support plate locates between the fork on the tensioner, the fixing nut slides so just TACK the tensioner on for now. Bolt on the new cam belt idler and the inlet camshaft pulley (allowing the pulley to spin freely).



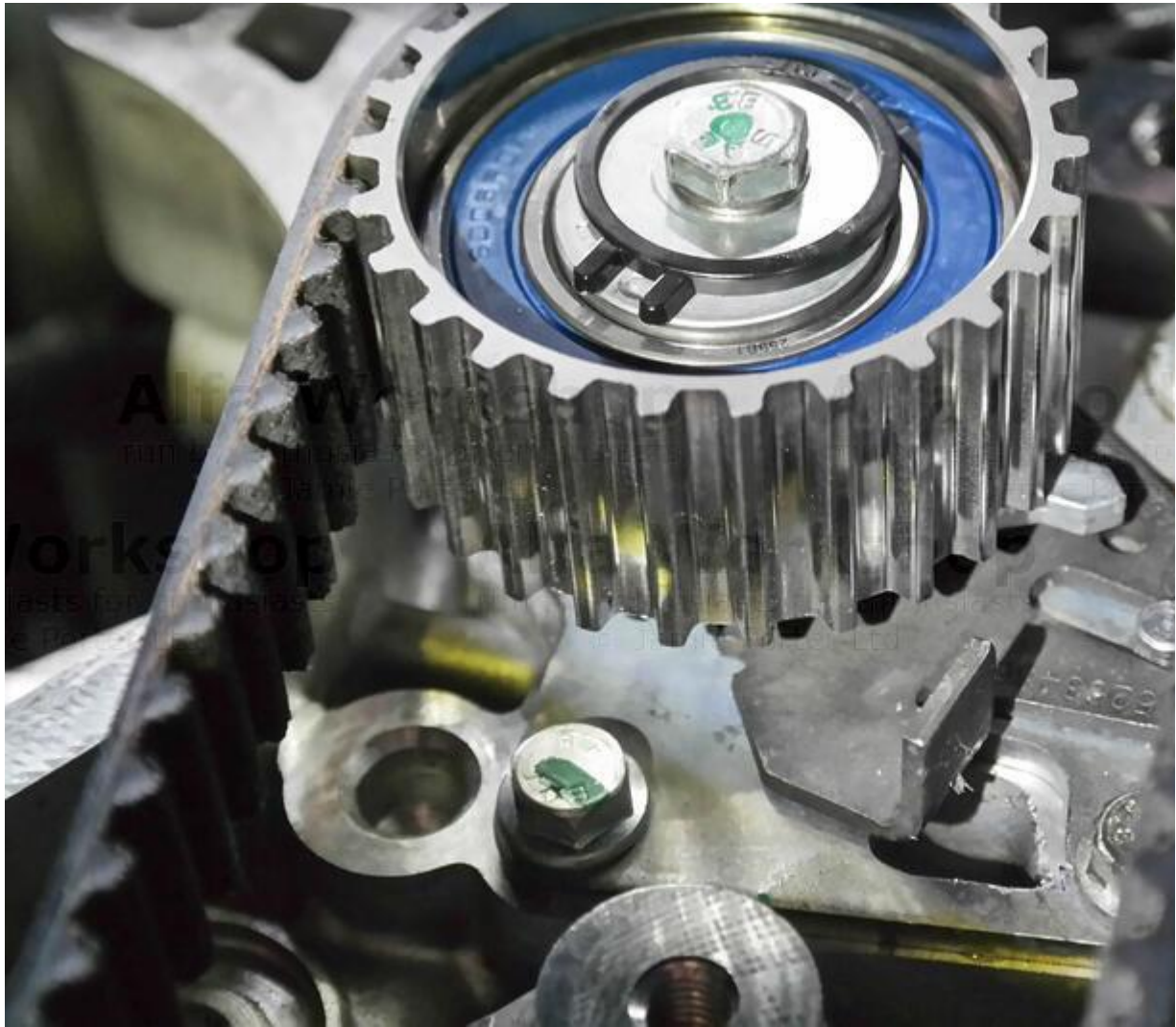
Loop on the new cam belt noting the 'DIRECTIONAL' markings.



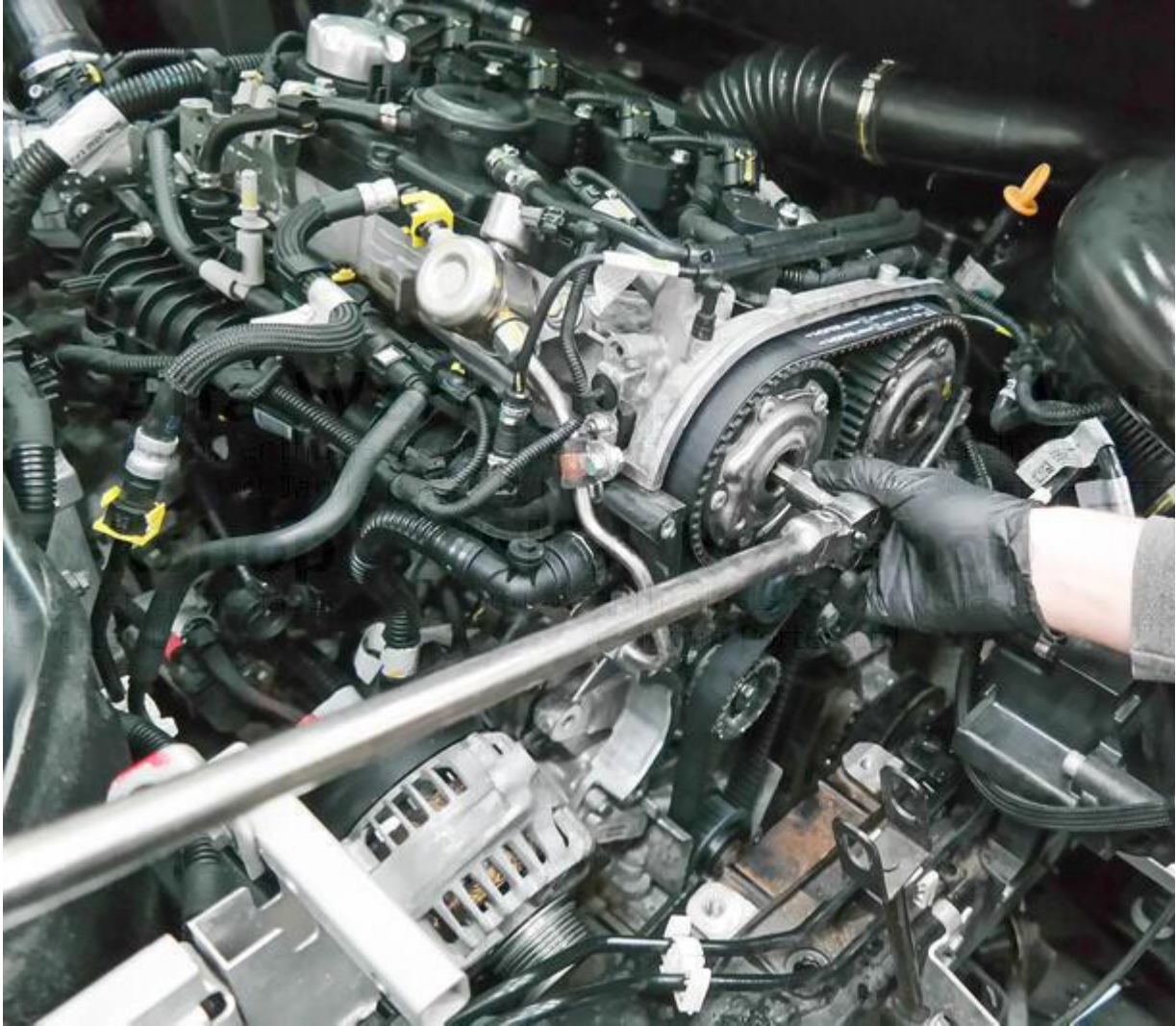
Using a long handled FLAT head screwdriver rotate the base of the tensioner so that the needle....



...points to the hole on the tensioner fork, then tighten the mounting bolt.



Tighten up both the cam shaft pulleys then take off all the [locking tools](#).  
Rotate the crank clockwise x2 full rotations (the belt and pulleys should all move together)  
then put all the locking tools back on to ensure everything is align.  
Remove all locking tools.



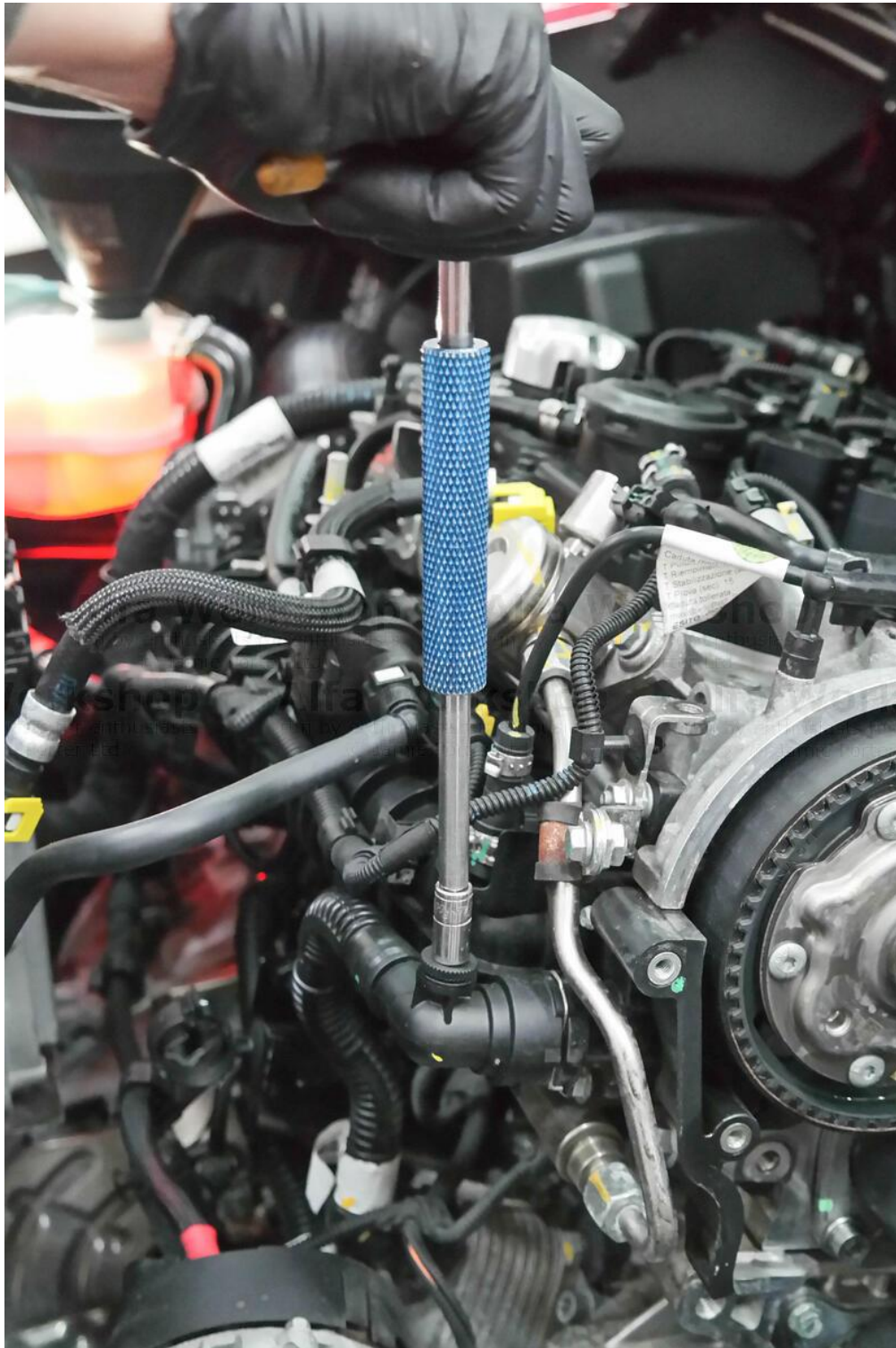
Bolt back on the blanking plate and vacuum pump using new [gaskets](#).



Top up the coolant tank to the MAXIMUM level.



You will need to bleed the system so undo the 8mm bleed screw...



...until no air but just coolant escapes.



At the Alfaworkshop we then pressure test the cooling system up to x1 BAR (14 psi) to check there's no leakage from the water pump.  
Top up the coolant to MAX and reassemble the car.

