

Workshop 9

Replacing water pump
Nissan Mistral 2.7TD

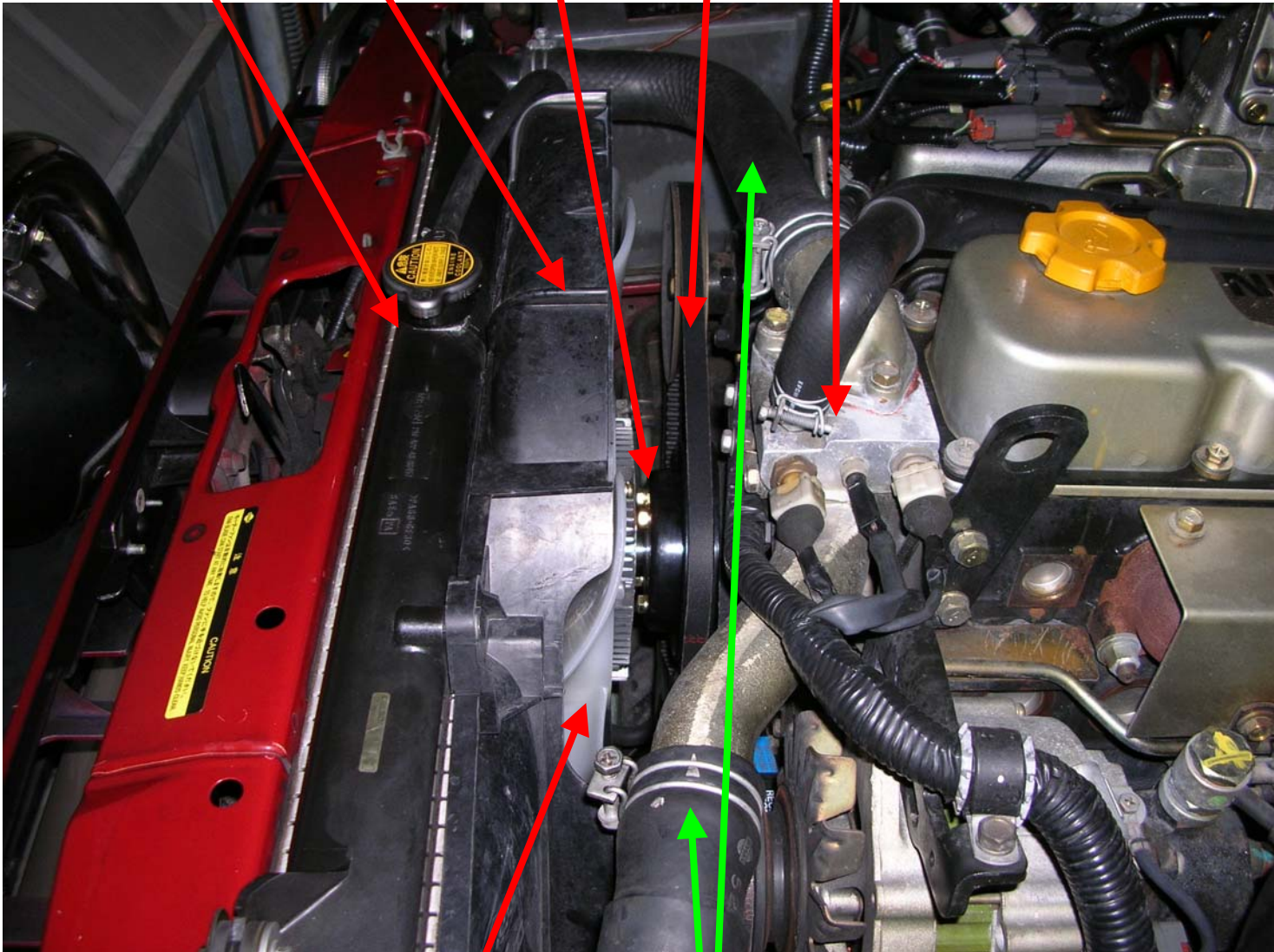
Radiator

Cowling

Water Pump

Belt

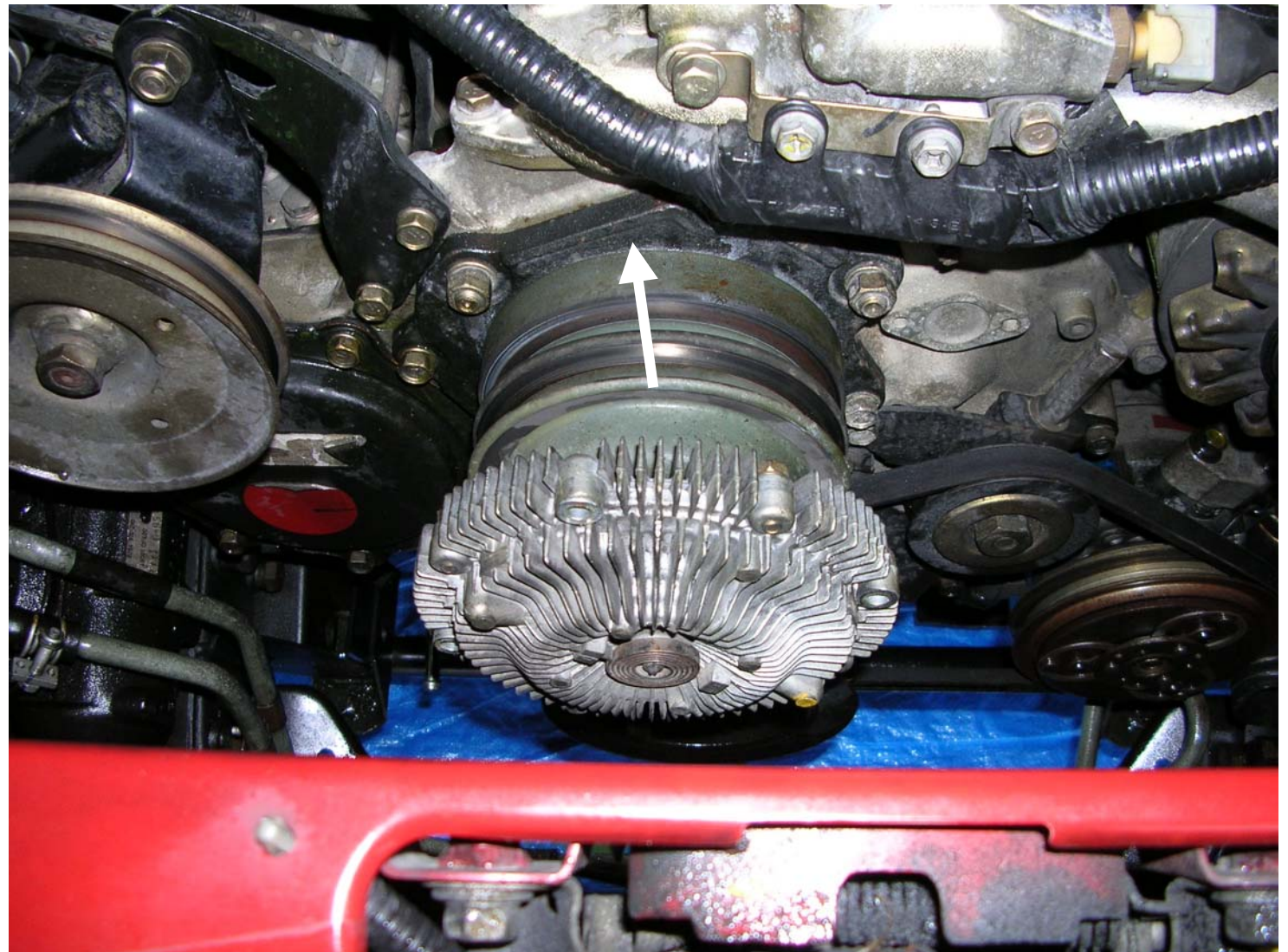
Thermostat Housing



Fan Blades

Radiator Hoses

Check that you have the correct water pump by measuring the gap from the pulley outer to the housing is the same as the one being replaced.



Once you have the correct pump you'll need the following tools:

Socket set with 10mm, 12mm, 14mm, (22mm if replacing belts)

Phillips screwdriver

Pliers

Ring spanners 10mm, 12mm, and 14mm

Anti Freeze

Optional:

New belts recommended if old belts haven't been replaced for a while.

Spare hose clips

Please Note: I have tried to be accurate but I did it the hard way so I might have missed a couple of minor things. If you have any problems doing this please contact me and I'll guide you through it.

Step 1.
Remove sump guard underneath vehicle 5 x 12 mm bolts.

Reach up or down and unclip bottom cowling.



Step 2.
Disconnect oil cooler lines from gearbox to radiator by undoing clips and tying up with cable ties stop oil running out from gearbox section.
Mark each hose and radiator plug to connect back up again to correct pipe

Gear Box End



Radiator on this side

Note: Shot taken looking up from underneath

Once the pipes have been disconnected then undo all the bottom radiator hoses and drain.
Then disconnect the top radiator hoses and the overflow pipe.

Undo the 4 screws that hold the cowling on. Need to remove battery to get to 1 screw.
Once the cowling is loose push it back onto the fan clear of the radiator

Undo the 2 screws/bolts 12mm that hold the radiator on.
Place a piece of cardboard between the radiator and the air conditioning core to avoid damaging the core on the way up as the radiator has 2 lugs on the bottom that can catch on the air con core.

Cardboard *Cowling on blades*



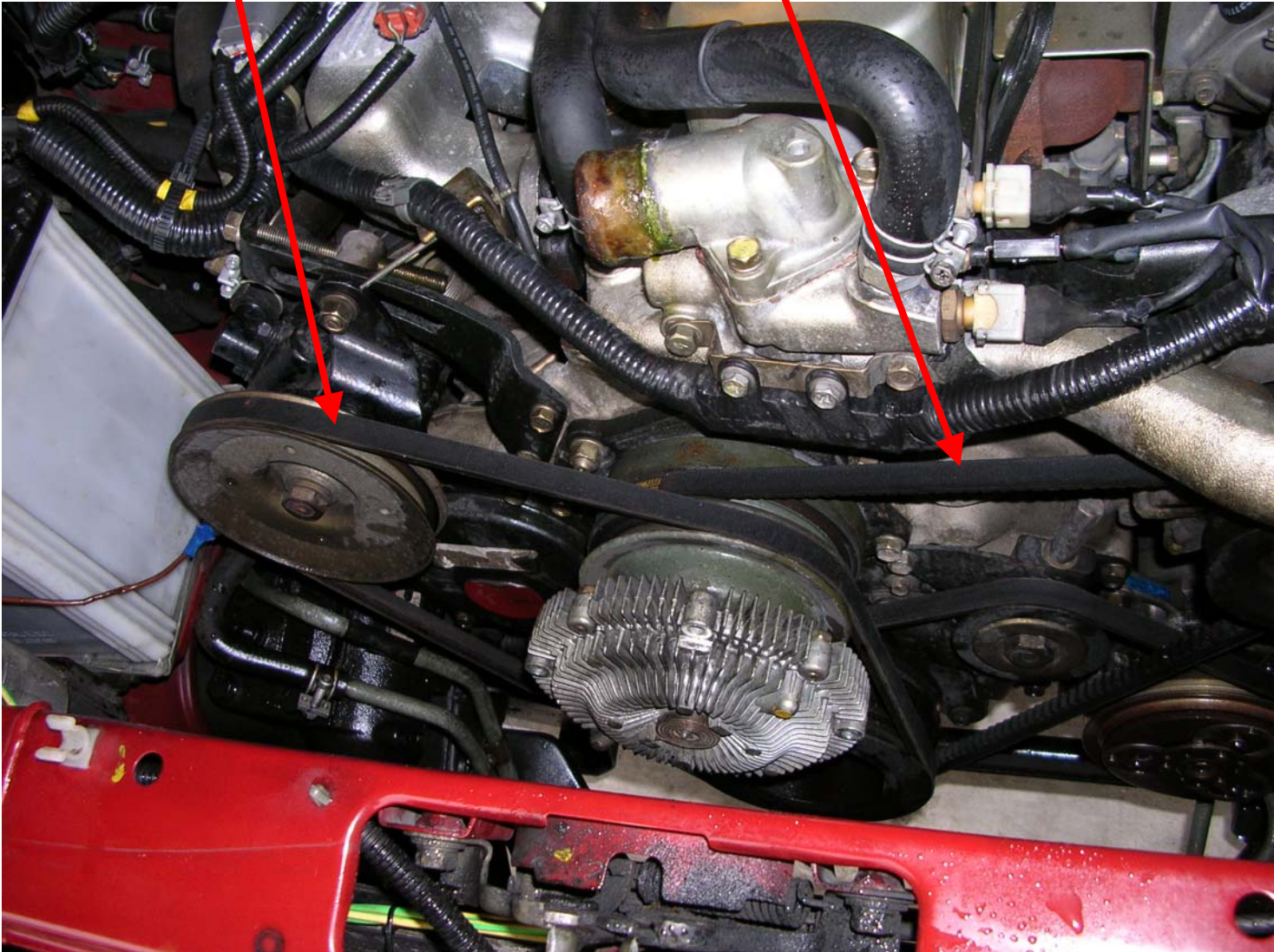
The radiator should gently slide up making sure you don't catch the A/C core behind the main radiator. The bottom of the radiator will catch on the fans but a bit of manipulation with the blades should free it.

Once the radiator is clear, remove cowling then release the fan belts, by starting with the power steering then the aircon belt.

You can remove the fan blades at this stage to make removal of belts easy.

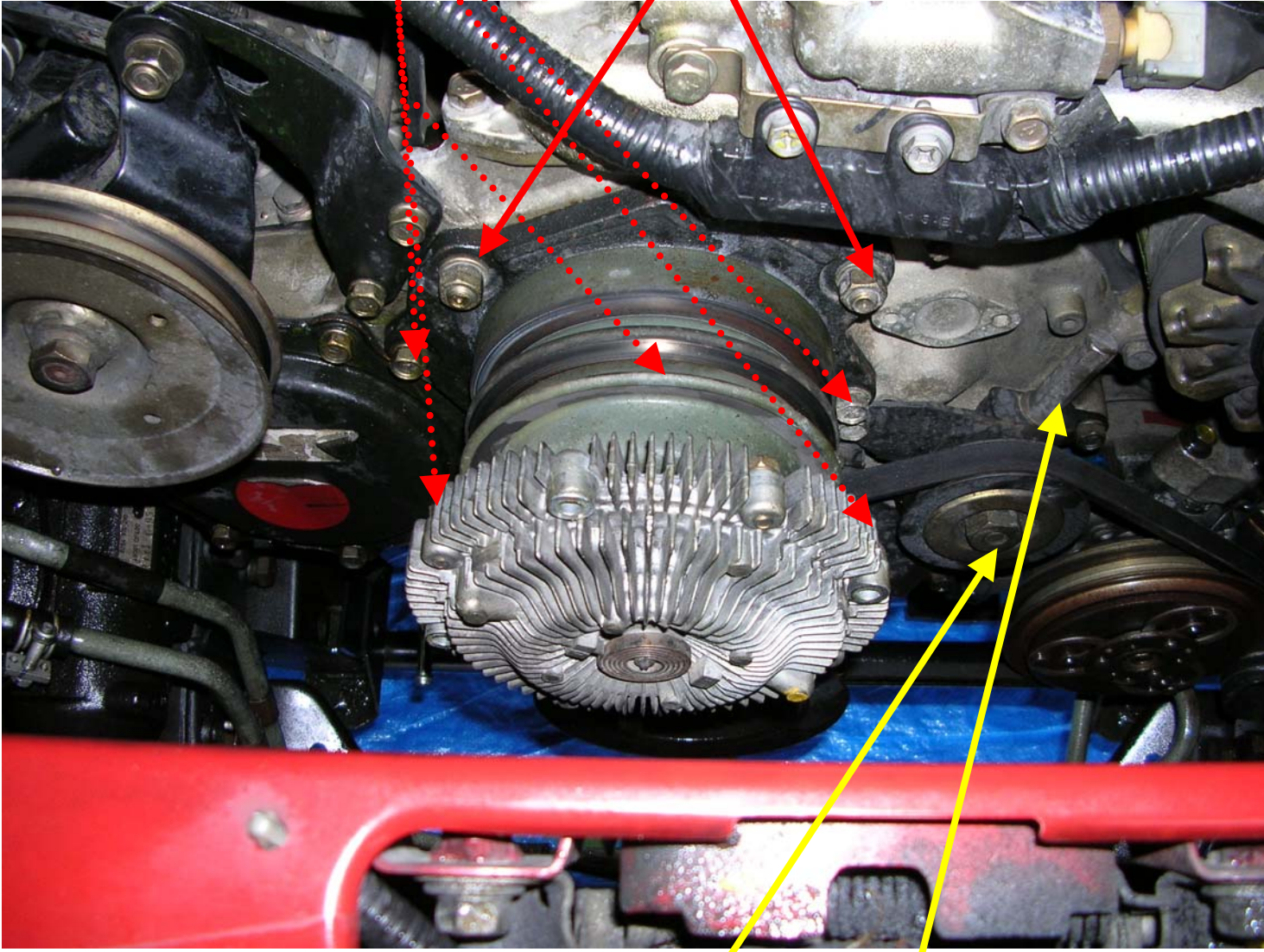
Power Steering Belt

Air con Belt



To remove pump undo the 5 x12mm bolts and the 2 x 14mm nuts. Make sure you have something to catch the water that well come out when you undo the nuts. (About 2 litres.)

12mm 14 mm



Pump should gently pull off from housing.
Once clear clean up any old gasket.
This is also good time to replace all of your fan belts.

To replace bottom belt undo the tensioner 22mm nut and then unwind hexagonal bolt and replace belt.
Do not over tighten, about 1/2 inch play when pushing belt down

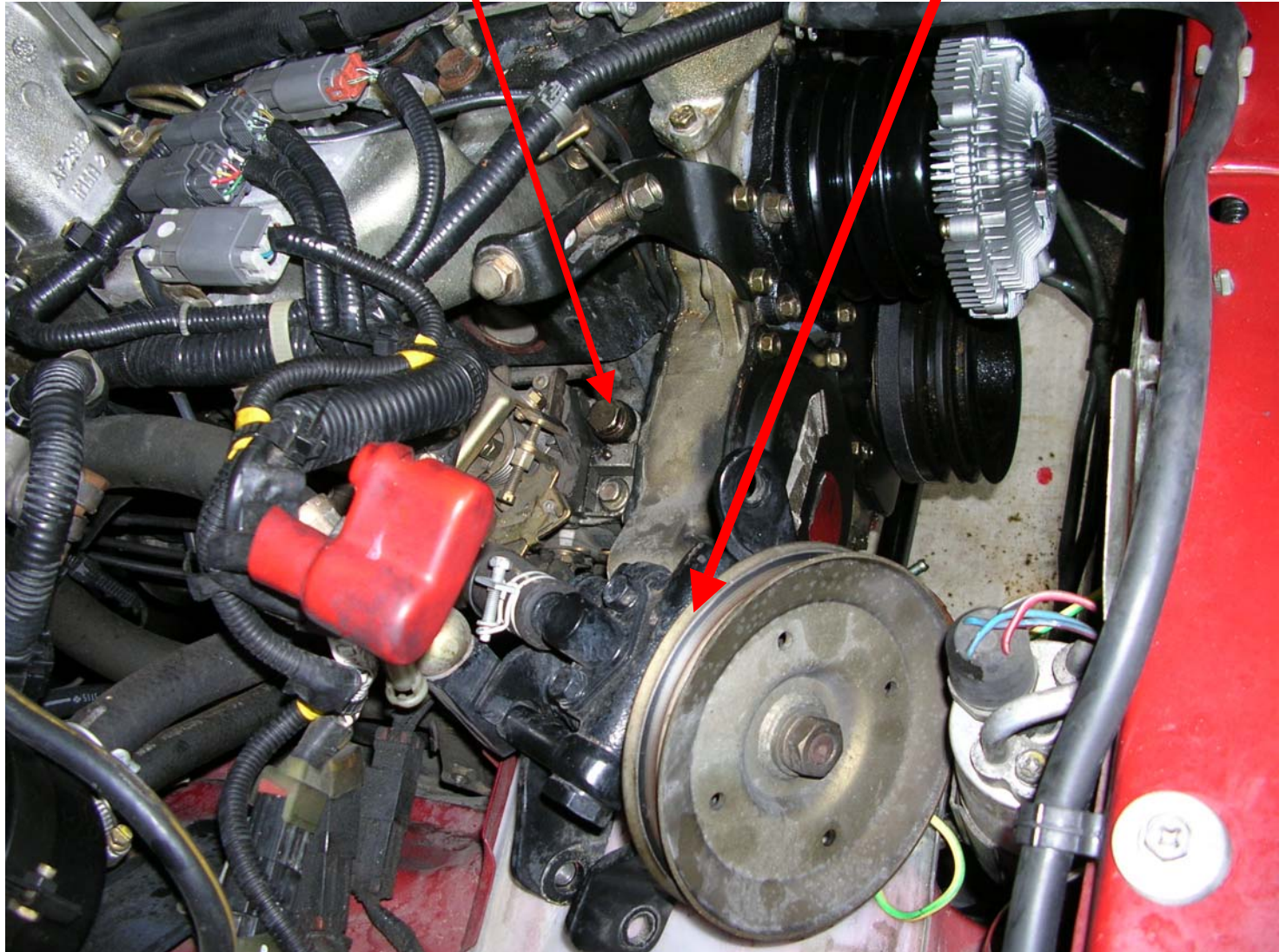
Install you new pump and reverse process to put together.



If you are interested this is also a good time to check the banjo filter by undoing the **power steering pump** mounting bolts and swing to the side. Don't disconnect any pipes.

Undo bolt and hook out spring and then hook out filter "cap" which is held in by spring

Banjo Filter in here



See other forum on removal of the elusive fuel filter.

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