

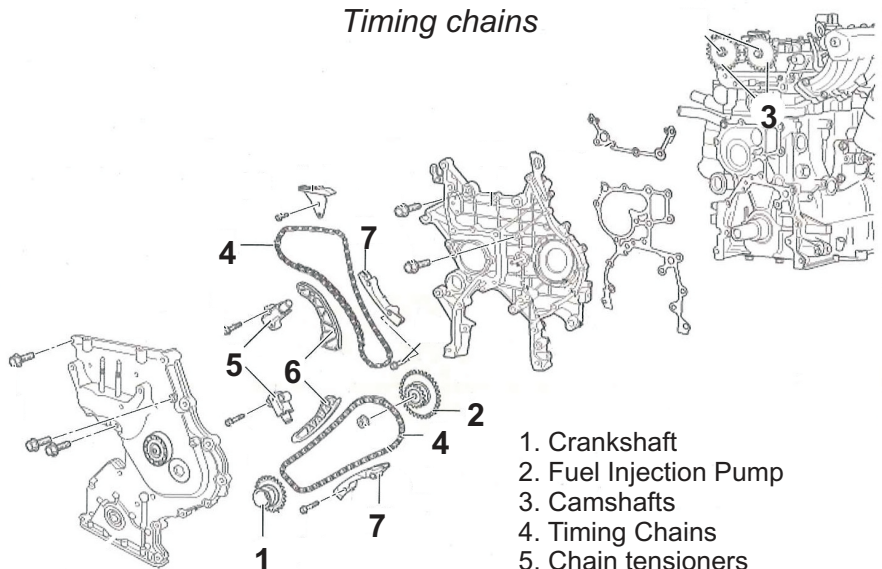
## TECHNICAL INFORMATION

Part Number: **1977**

### Kia Sportage - 1.7 CRDi engine (D4FD)



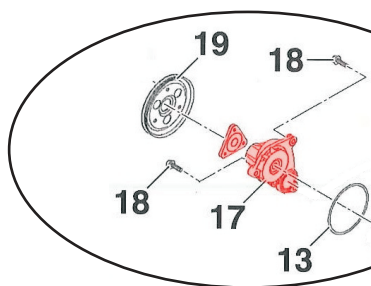
1.7 CRDi engine  
(without AC)



Timing chains

1. Crankshaft
2. Fuel Injection Pump
3. Camshafts
4. Timing Chains
5. Chain tensioners
6. Skids
7. Side Guides

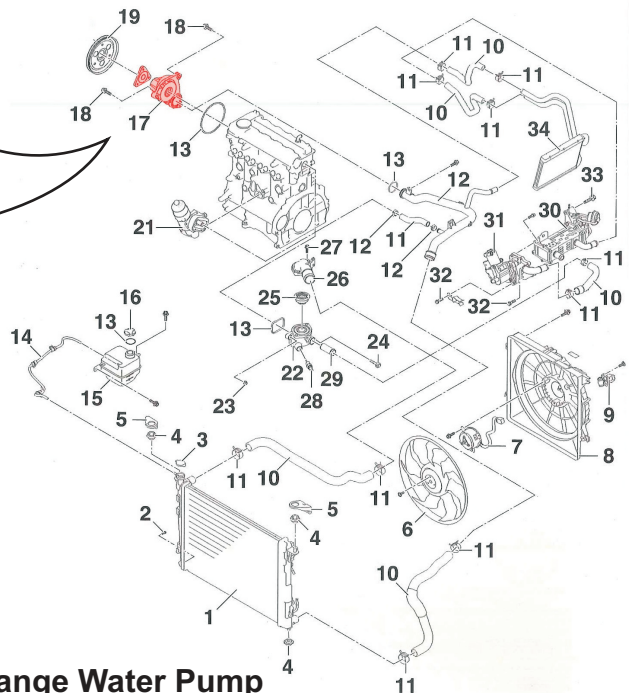
Cooling circuit



17. Water Pump
18. Water Pump Bolts
19. Water Pump Pulley
13. 'O'Ring

**Tightening Torque**

Water Pump: 1,96 a 2,65 Nm
Water Pump Pulley: 0,98 a 1,18 Nm



### How to Remove the Auxiliary Belt and Change Water Pump

**Specific tools:**

- They are not necessary.

**Maintenandce intervals:**

- Check Cooling Circuit: every 60.000 km or 4 years.
- Check Auxiliary Belt: to 90.000 km or 4 years, and then every 30.000 km or 2 years.

## TECHNICAL INFORMATION

### Disassembly

For the most common for vehicles, the initials steps are to disconnect the battery and remove all necessary components to gain access to auxiliary belt; for example, the right front wheel, wheel arch, motor bracket, plastic covers and so on.

Each vehicle may have, more or less, the same components to remove which are specified on the manufacturer's repair manual.

- 1 The next step is to drain the cooling circuit.
- 2 Turn the tensioner (7) [FIG. 1] to remove the auxiliary belt (1) [FIG. 1].
- 3 Remove the water pump pulley (2) [FIG. 2] and then, remove the water pump (4) [FIG. 3].

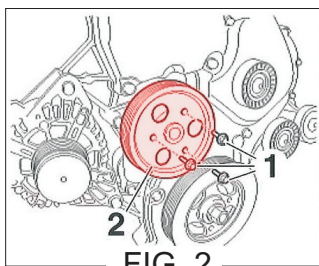


FIG. 2

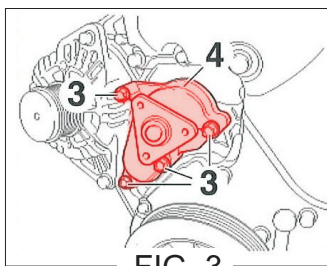
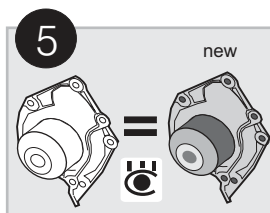


FIG. 3

### AIRTEX RECOMMENDS:

- 4 Clean the cooling circuit and replace all belt drive components if necessary.



### Assembly

- 1 Fit the water pump pulley and then the water pump.
- 2 Turn the tensioner to fit the auxiliary belt then release the tensioner for the belt to be tensioned.
- 3 Proceed with the rest of the assembly.

### AIRTEX RECOMMENDS:



**Please Note:** Fill up the cooling circuit with a suitable coolant and antifreeze before switching the engine.

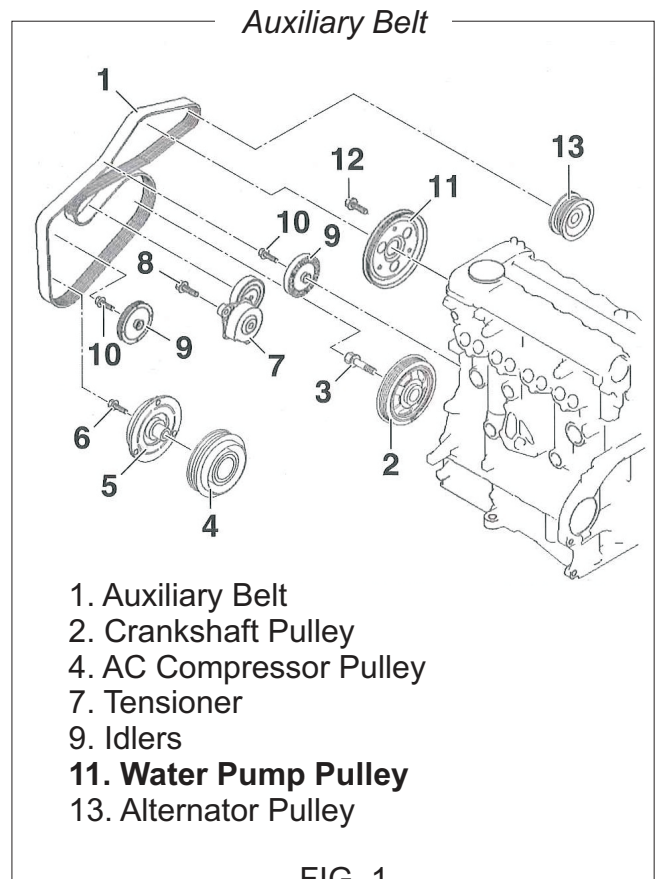


FIG. 1

