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NOTE: To improve engine accessibility it is advantageous to place both front wheels on blocks of wood and disconnect bonnet stay; this allows bonnet to hinge further forward. The blocks should be approximately 30.5 cm (12 in) long, 25.4 cm (10 in) wide and 15 cm (6 in) high. Ensure bonnet is adequately supported after disconnecting stay.

COOLANT

Drain and refill

26.10.01

Draining

1. Remove header tank cap.
2. Open drain tap and allow coolant to drain. In countries where anti-freeze is in use, coolant may be conserved providing anti-freeze has not been in use for more than 12 months.

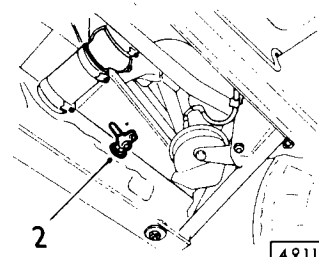
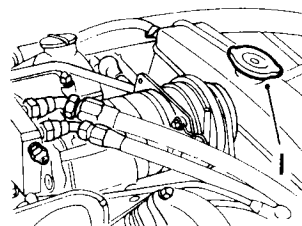
Refilling

3. Close drain tap.
4. Pour contents of two sachets of Bar's Leaks into header tank.

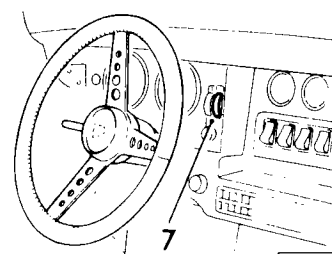
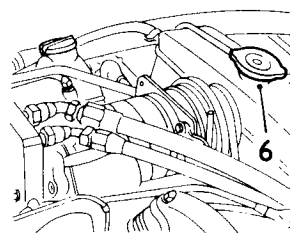
CAUTION: **A 40% solution by volume (55% U.S.A./Canada) of all antifreeze must be used at all times, either when topping up or replenishing the cooling system. For maximum corrosion protection, the concentration should never be allowed to fall below 25%. Always top-up with recommended strength of antifreeze, NEVER WITH WATER ONLY.

In countries where it is unnecessary to use antifreeze, Marston SQ.36 Corrosion Inhibitor must be used in the cooling system in the proportion of 3 fluid ounces to one gallon of water. CHANGE COOLANT ANNUALLY.**

5. Fill cooling system to bottom of header tank filler neck.
6. Refit header tank cap.
7. Place heater control in 'hot' position and run engine at a fast idle speed for approximately five minutes.
8. Remove header tank filler cap and if necessary, top up coolant to correct level.



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HEADER TANK

Remove and refit

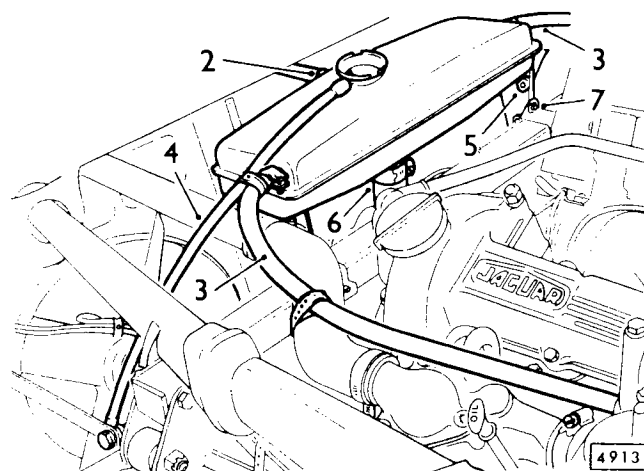
26.15.01

Removing

1. Drain cooling system – 26.10.01.
2. Disconnect header tank to radiator hose.
3. Disconnect header tank to induction housing hoses.
4. Disconnect overflow hose from neck of header tank.
5. Remove nuts and bolts securing each water rail strap to header tank stays.
6. Disconnect hose from underside of header tank.
7. Remove set screws securing header tank stays to fixing brackets; lift off header tank.

Refitting

Reverse operations 1 to 7.



4913



COOLING SYSTEM

COOLING FAN AND MOTOR

Remove and refit

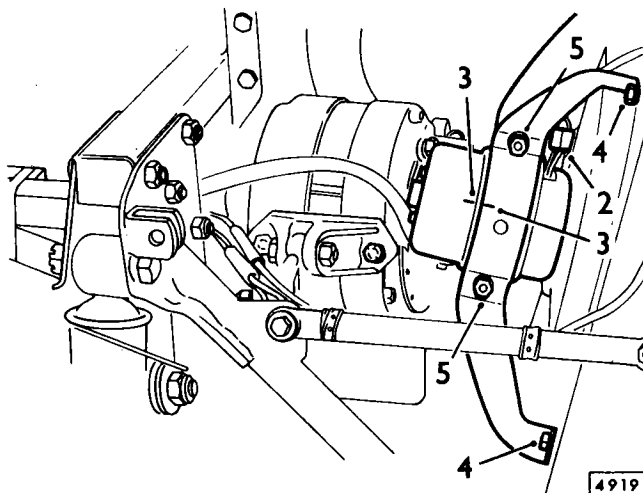
Left or right hand — 26.25.23

Removing

1. Disconnect battery earth lead — 86.15.19.
2. Disconnect fan harness at snap connectors.
3. Mark relative position of fan motor body to mounting strap.
4. Remove bolts securing outer half of mounting strap to radiator.
5. Remove nuts and bolts securing outer and inner halves of mounting strap; lift out fan and motor.

Refitting

Reverse operations 1 and 2; 4 and 5; ensure locating marks on fan motor body and mounting strap are in alignment.



FAN MOTOR RELAY

Remove and refit

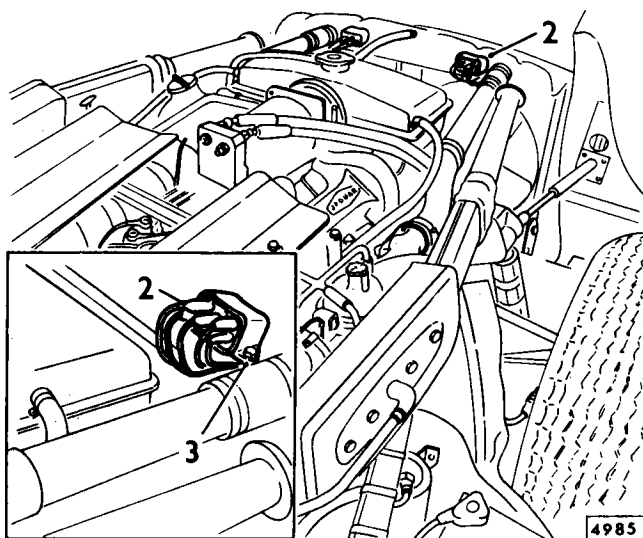
26.25.31

Removing

1. Remove radiator cowl — 26.40.07.
2. Note relative location of wires and terminals; disconnect wires.
3. Remove nuts and bolts retaining relay to radiator surround.

Refitting

Reverse operations 1 to 3.



THERMOSTATIC SWITCH

Remove and refit

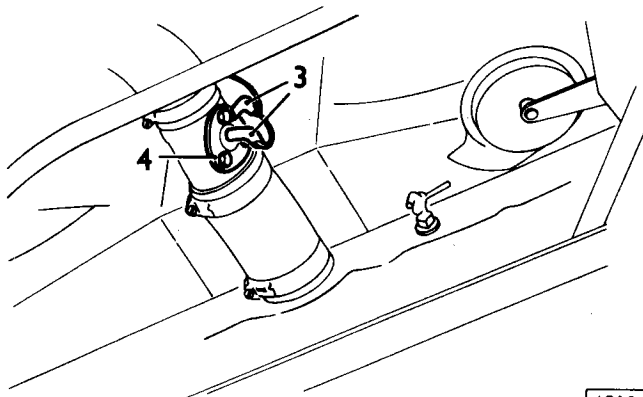
26.25.35

Removing

1. Drain cooling system — 26.10.01.
2. Disconnect battery earth lead — 86.15.19.
3. Disconnect Lucar connectors.
4. Remove bolts, lift out switch.

Refitting

Reverse operations 1 to 4; use a new gasket.



26.25.23
26.25.35

RADIATOR**Remove and refit****26.40.01****Removing**

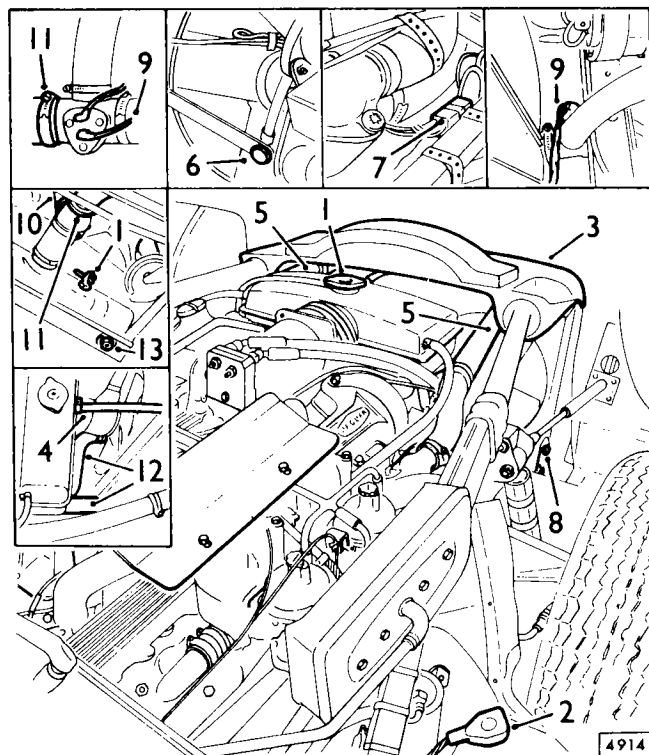
1. Drain cooling system – 26.10.01.
2. Disconnect battery earth lead – 86.15.19.
3. Remove radiator cowl – 26.40.07.
4. Disconnect header tank hose.
5. Disconnect top hoses from radiator.
6. Remove bolt securing each radiator stay to radiator.
7. Disconnect radiator harness at plug.
8. Cars fitted with air conditioning only: Remove bolts securing condenser to radiator: support condenser in frame to avoid possible damage.

WARNING: ON NO ACCOUNT MUST ANY PORTION OF THE AIR CONDITIONING SYSTEM BE DISCONNECTED BY ANYONE OTHER THAN A QUALIFIED REFRIGERATION ENGINEER; BLINDNESS CAN RESULT IF THE GAS CONTAINED WITHIN THE SYSTEM COMES INTO CONTACT WITH THE EYES.

9. Disconnect Lucar connectors from thermostatic switch.
10. Disconnect header tank hose from thermostatic switch housing.
11. Disconnect bottom hose from thermostatic switch housing.
12. Cars fitted with automatic transmission only: Disconnect oil cooler hoses from radiator.
13. Remove radiator securing nuts, rubbers and spacers; lift radiator out of frame.

Refitting

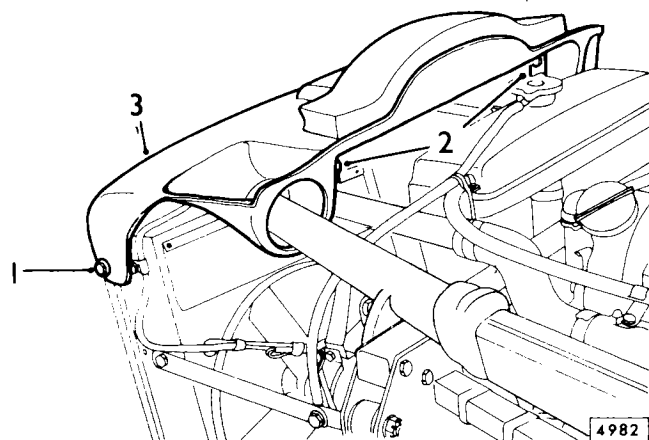
Reverse operations 1 to 13.

**RADIATOR COWL****Remove and refit****26.40.07****Removing**

1. Remove bolts and washers securing cowl to either side of radiator.
2. Remove self-tapping screws and washers securing top of cowl to support brackets.
3. Manoeuvre cowl clear of air intake trumpets and withdraw.

Refitting

Reverse operations 1 to 3.



THERMOSTAT

Remove and refit

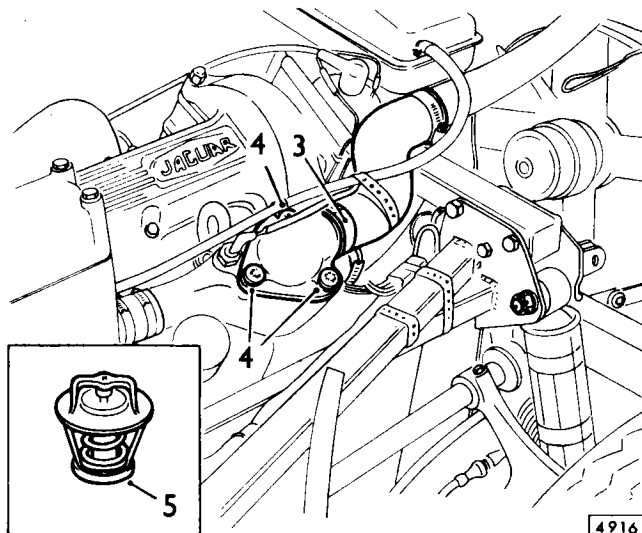
Left hand – 26.45.01
Right hand – 26.45.04

Removing

1. Drain cooling system – 26.10.01.
2. Remove air cleaner – 19.10.01.
3. Disconnect hose from thermostat cover.
4. Remove thermostat cover retaining screws, lift off cover.
5. Lift out thermostat.

Refitting

Reverse operations 1 to 5; use a new gasket; tighten screws by diagonal selection to avoid distorting cover.

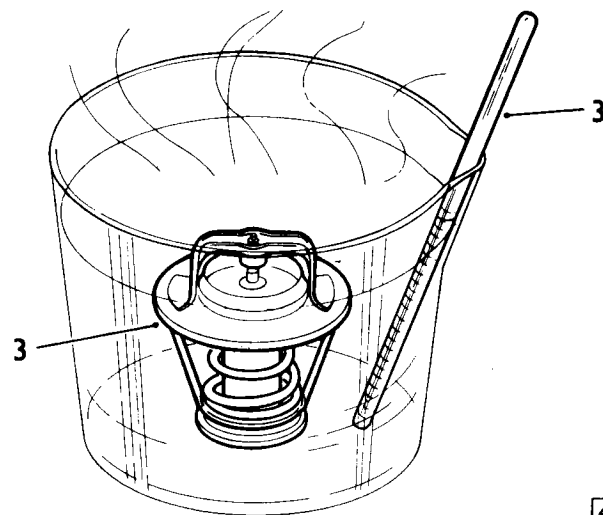


THERMOSTAT

Test

26.45.09

1. Remove thermostat – Left hand 26.45.01.
– Right hand 26.45.04.
2. Thoroughly clean thermostat.
3. Place thermostat in a container of water together with a thermometer.
4. Heat water and observe if thermostat operates in accordance with data given in Group 04.



THERMOSTAT HOUSING

Remove and refit

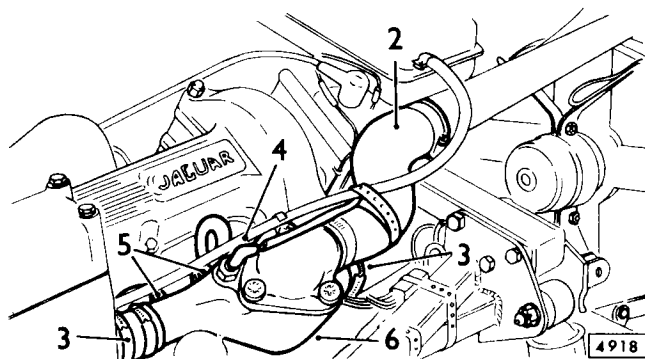
Left or right hand – 26.45.10

Removing

1. Drain cooling system – 26.10.01.
2. Disconnect radiator hose from cover.
3. Disconnect hoses from front and rear of housing.
4. Disconnect wire from water temperature transmitter – Right hand housing only.
5. Remove bolts securing housing to cylinder head.
6. Lift off housing together with engine lifting eye.
7. Remove and discard gaskets.

Refitting

Reverse operations 1 to 7; use new gaskets.



WATER PUMP**Remove and refit****26.50.01****Removing**

1. Drain cooling system – 26.10.01.
 2. Remove radiator cowl – 26.40.07.
 3. Disconnect hose from underside of header tank.
 4. Disconnect bottom hose from elbow.
 5. Remove bolts securing elbow to water pump cover; swing elbow away from pump.
 6. Remove alternator drive belts – 86.10.03.
- Operations 7 and 8 are only applicable to cars fitted with air conditioning.

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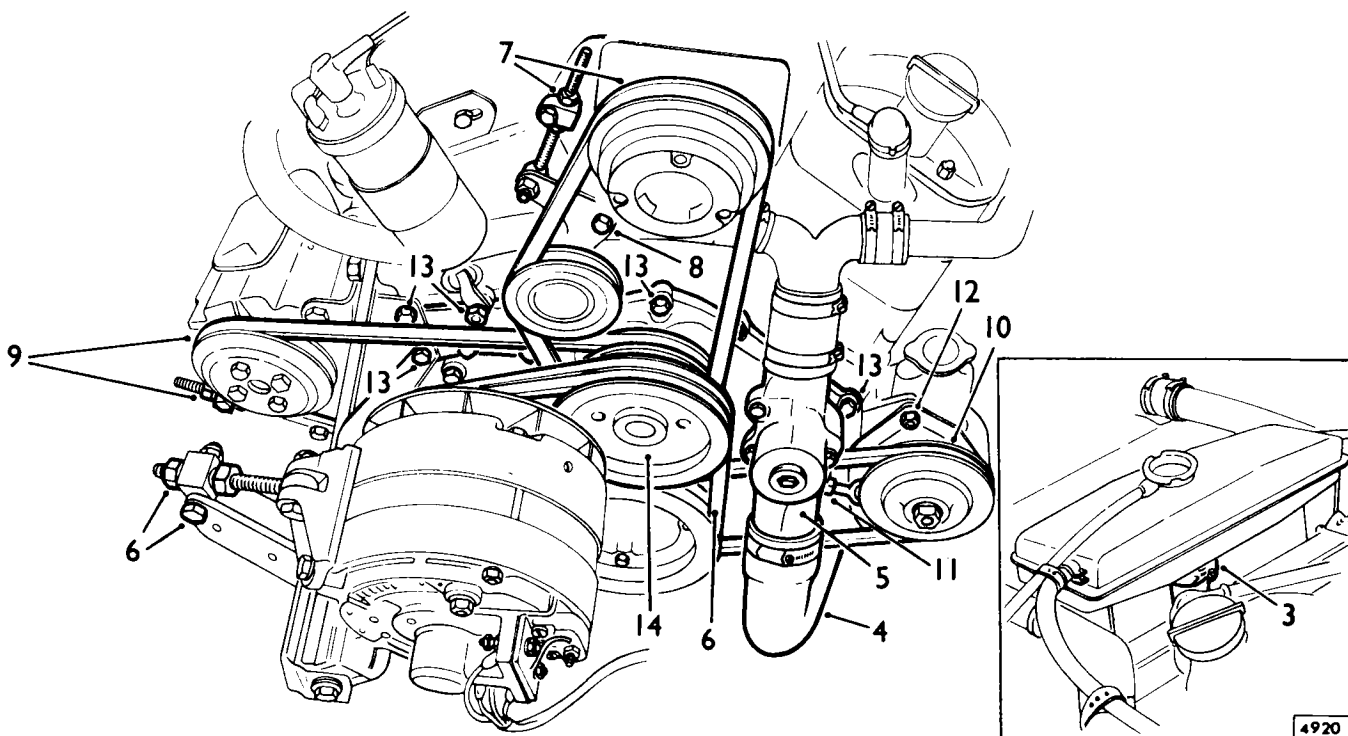
7. Remove compressor drive belt – 82.10.02.
8. Remove bolt securing jockey pulley arm to compressor mounting bracket.

9. Remove air pump drive belt – 17.25.15 – Cars fitted with exhaust emission control only.
10. Remove power assisted steering pump drive belt – 57.20.02.
11. Remove bolt securing power assisted steering pump trunnion to mounting bracket.
12. Slacken power assisted steering pump mounting bolts and swing pump away from engine.
13. Remove bolts securing water pump to timing cover noting relative positions of long and short bolts.
14. Withdraw water pump assembly.

Refitting

Reverse operations 1 to 14, use new gaskets between water pump and timing cover; also between elbow and water pump.

NOTE: The water pump assembly is a sealed unit and no overhaul is possible. Replacement pumps are available on an exchange basis but before returning the defective pump, it will be necessary to remove the pulley, see operation 26.50.05. The pulley must then be pressed on to the replacement pump **before** it is fitted to the engine.



WATER PUMP PULLEY

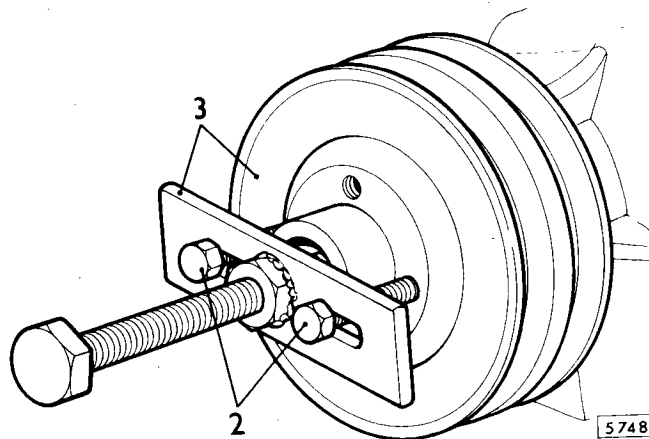
Remove and refit

26.50.05

Removing

CAUTION: Irreparable damage to the impeller and water pump body will result if an attempt is made to carry out this operation without removing water pump from engine.

1. Remove water pump – 26.50.01.
2. Screw two ****5/16 in.**** U.N.F. x 2 in. long bolts into tapped holes in pulley.
- **3.** Using a puller acting between bolts and end of shaft, draw off pulley.******



Refitting

4. Position pump on bed of hand press.
5. Locate pulley on impeller shaft.
6. Position block of wood between press mandrel and pulley.
7. Press pulley on shaft until recessed face of pulley is flush with end of shaft.
8. Refit water pump to engine.

