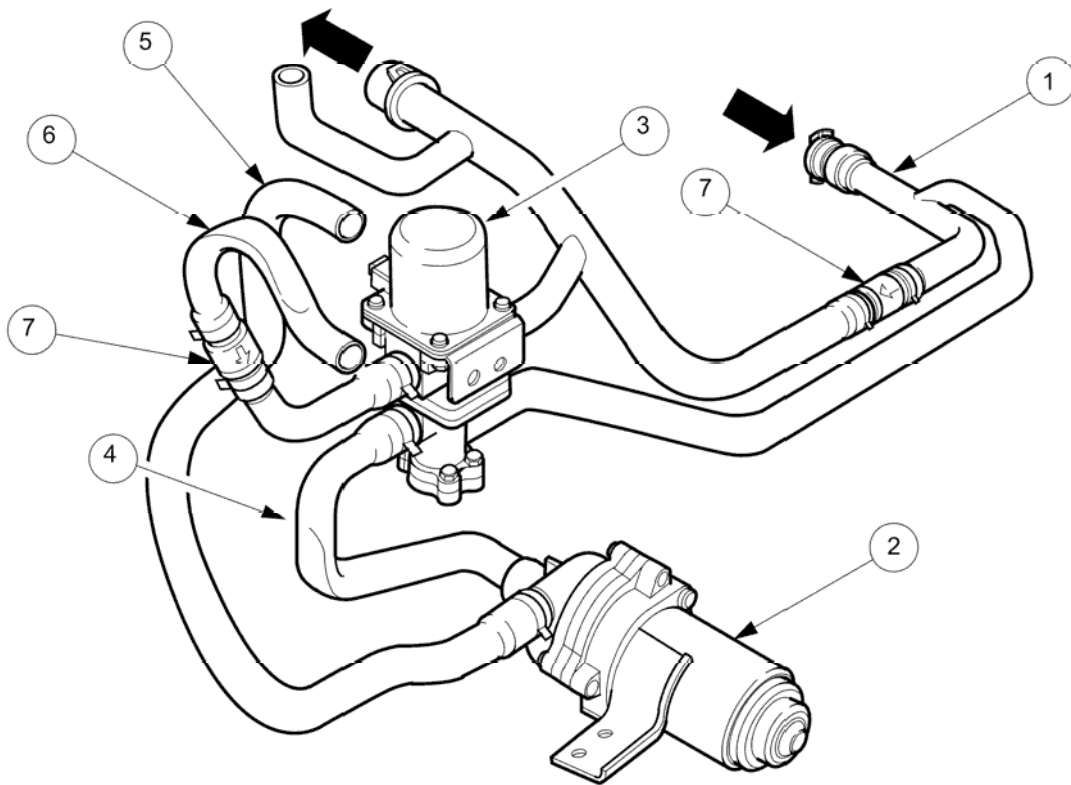


1999 XK RANGE - Heating and Ventilation - 412-02

Heater System Components



E34318

Parts List

| Item | Description |
|------|--|
| 1 | Hose - heater (from engine) |
| 2 | Assembly pump - water |
| 3 | Assembly valve - water |
| 4* | Hose - water valve to water pump |
| 5 | Hose - water pump to heater (feed) |
| 6* | Assembly hose - heater to water valve (return) |
| 7 | Valve - non return |

NOTE:

* These hoses are flattened at the bends by design and NOT by incorrect installation.

The heater circuit 'scavenges' coolant from the engine cooling system by means of an electric water pump. The water pump has a protection circuit to inhibit operation when the coolant temperature is $< 16^{\circ}\text{C}$; this is to prevent possible damage to the impeller due to the presence of coolant borne ice particles. Coolant is drawn from the engine system through the water valve inlet port into the heater matrix. The coolant passes through the bottom section of the heater matrix from left to right filling the end tank of the matrix before returning through the top half of the matrix and through the outlet ports of the water valve and back into the engine cooling system.

Non return valves are located in the heater bypass hose and the hose between heater outlet and water valve. These valves are required to prevent coolant flowing in the wrong direction at low engine speeds and restrict convected flow through the heater after the engine is switched off.

When the exterior ambient temperature is $> 3^{\circ}\text{C}$ the refrigeration system automatically operates cooling and dehumidifying incoming air before it is re-heated by the heater matrix.