

Hard to start when warm is often a sign that the system has lost fuel pressure. This could be from the following problems.

1. The one way valve on the fuel pump is not holding pressure and so fuel leaks back into the fuel tank.
2. The system pressure valve in the Fuel Distributor (FD) is leaking allowing fuel to run out into the return line.
3. the diaphragm in the accumulator has a hole and fuel is leaking back to the tank.
4. The Warm-Up regulator is not holding pressure.
5. Injectors dribbling. Can be due to worn injectors or the mixture is set too rich and so fuel is still going to the injectors even though the engine is off. Normally this isn't a problem as the injectors shouldn't open until 3 bar pressure is reached. But, if the injectors are not holding pressure and dribbling they will lose fuel into the cylinders. The system loses pressure and the car is hard to start because the engine is 'flooded' with fuel and the injector lines are empty.

To test these symptoms you really need to have a fuel pressure gauge in the centre of the Fuel Distributor in the Warm-Up regulator system (see attached picture).

1. Start the engine or bridge the fuel pump relay to get fuel pressure up. Switch off engine/pump.

How quickly does the fuel pressure drop? It should hold pressure for at least 30 minutes. If it loses pressure too quickly...

Run the fuel pump to get pressure up again, then, as soon as you switch off the pump put a clamp on the fuel return hose to stop fuel returning to the fuel tank. If it holds pressure, the system pressure valve in the fuel distributor is leaking, replace the seals. If the pressure still drops too quickly...

Run the fuel pump to get pressure up again, then, as soon as you switch off the pump put a clamp on the fuel supply inlet hose. If it holds pressure, the one way valve in the fuel pump is faulty. On some pumps you can replace the valve, on other pumps it is in the pump and the pump has to be replaced. If the pressure still drops too quickly...

Run the fuel pump to get pressure up again, then loosen the fuel injector pipes at the fuel distributor. Is fuel coming out? If yes, then the mixture screw is set too rich and needs to be turned anticlockwise to lean the mixture out. No fuel should flow to the injectors when the engine is not running.

Pull the injectors out but leave them connected to their fuel lines. Run the fuel pump to get pressure up again, then, as soon as you switch off the pump watch the injectors. Do they dribble fuel out of the nozzle? If they dribble, either the injectors are faulty or the CO Allen key is too rich. Try cleaning the injectors in an ultrasonic bath. If they still dribble, turn the Allen key mixture screw anti-clockwise 90degrees (1/4 turn). If the injectors still dribble, replace them. If the dribbling stops now you had the CO too rich and you will need to reset the mixture when hot.

