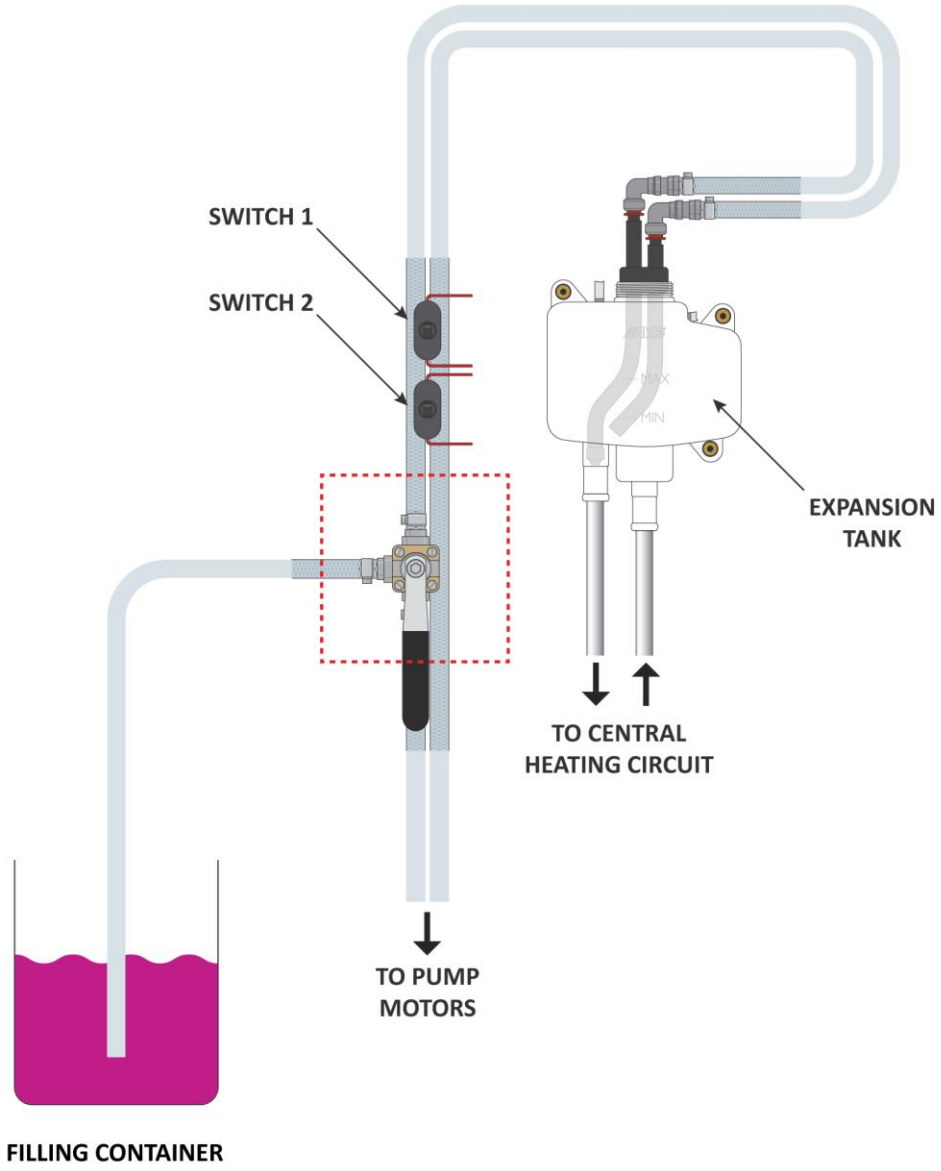
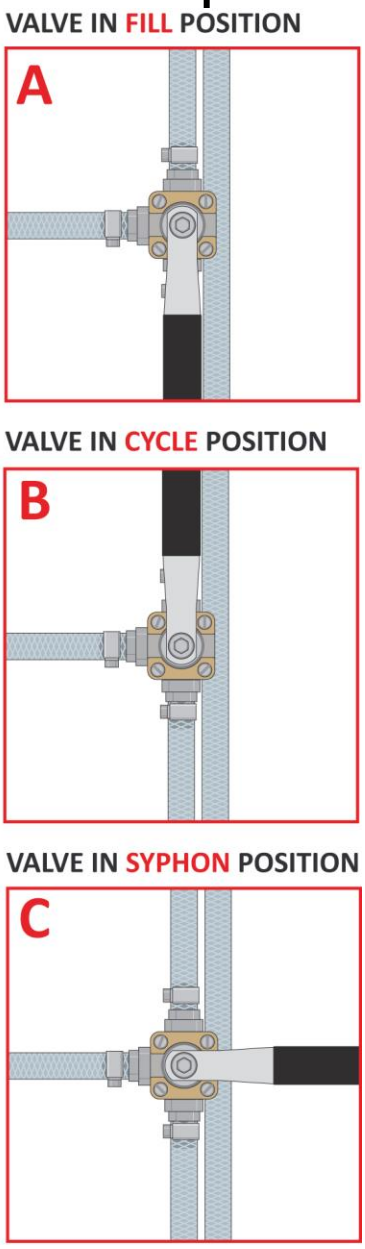
Instructions for 1900 811 Service Pump





Heat Transfer Fluid (HTF)

- If replacing the fluid, Alde recommend Volkswagen Automotive Group (VAG) G12++ or G13 spec antifreeze. This is ethylene glycol antifreeze with silicated OAT, 5 year corrosion protection. Purple/magenta in colour.
- If using concentrated antifreeze it should be mixed 50:50 with clean water. The clean water should never exceed 200 mg/L hardness. Alde recommend using deionised water.

Setting up the pump

1. Remove cap (and circulation pump if applicable) from expansion tank.
2. Insert pump head into expansion tank. NB: The nozzle should be firmly seated in the out port of the expansion tank.
3. Place feed pipe into a pre-prepared filling container. This should contain the HTF (see above).
4. Connect 12 V supply to the service pump.

Filling

1. Turn the valve handle so it is pointing along the braided hoses to the pump motors. This is the fill position (Fig A).
2. Switch 1 and Switch 2 operate Pump Motor 1 and 2 respectively. Using one of the switches, activate one of the pump motors. The system will be filled with the HTF from the container. Fill until fluid level is 30 mm above *MAX* mark on the expansion tank. **NB: Be careful to switch off the first pump motor and not switch on the second.**
3. Wait for 2 mins. If the fluid level drops in the expansion tank, top up to 30 mm above *MAX* mark again. NB: Bubbling and gurgling noises are normal at this point.
4. Repeat above steps until satisfied the fluid level is stable. You are now ready to bleed the system of air.

Bleeding

1. Turn the valve handle so it is pointing along the braided hose to the expansion tank. This is the cycle position (Fig B).
2. Using one of the switches, activate one of the pump motors. Count to 3. Now activate the second pump motor with the second switch. The fluid is cycled around the system at high flow rate, trapped air is forced out of the expansion tank and automatic air bleed valve on the boiler. NB: Bubbling and gurgling noises are normal at this point. Rumbling can occur if a lot of air is trapped in the system.
3. The pump should be attended at all times. Do not allow the fluid level to drop below *MIN* mark.
4. If the fluid level drops in the expansion tank, top up to 30 mm above *MAX* mark again.
5. Continue to cycle for 10 mins. There should be no large bubbles in the fluid, visible through the clear plastic braided hoses.
6. Switch off both pump motors.
7. To assist the end user, from the expansion tank, follow the pipework around the system, bleeding air from any bleed points as per *Operating and Installation Instructions* for the boiler. This is especially helpful to the end user if the system is fitted with towel rails or panel radiators.
8. Once the system is bled, lower the fluid level to 10 mm above MIN mark (see below).

Lowering fluid level

1. With the service pump still setup. Ensure both pump motors are switched off.
2. Turn the valve handle at a right angle to the hoses. This is the syphon position (Fig C).
3. The fluid level will drop slowly. Once the fluid level is 10 mm above MIN mark, turn the valve handle back to either fill or cycle position and this will halt the syphon effect.
4. The system is now filled, bled, and at the correct fluid level for use.
5. Disconnect 12 V supply to the service pump, remove the pump head. **NB: The hoses are still filled with HTF. Be careful not to drip fluid from the pump head. Have a towel on hand.**
6. Replace the expansion tank cap (and circulation pump if applicable).