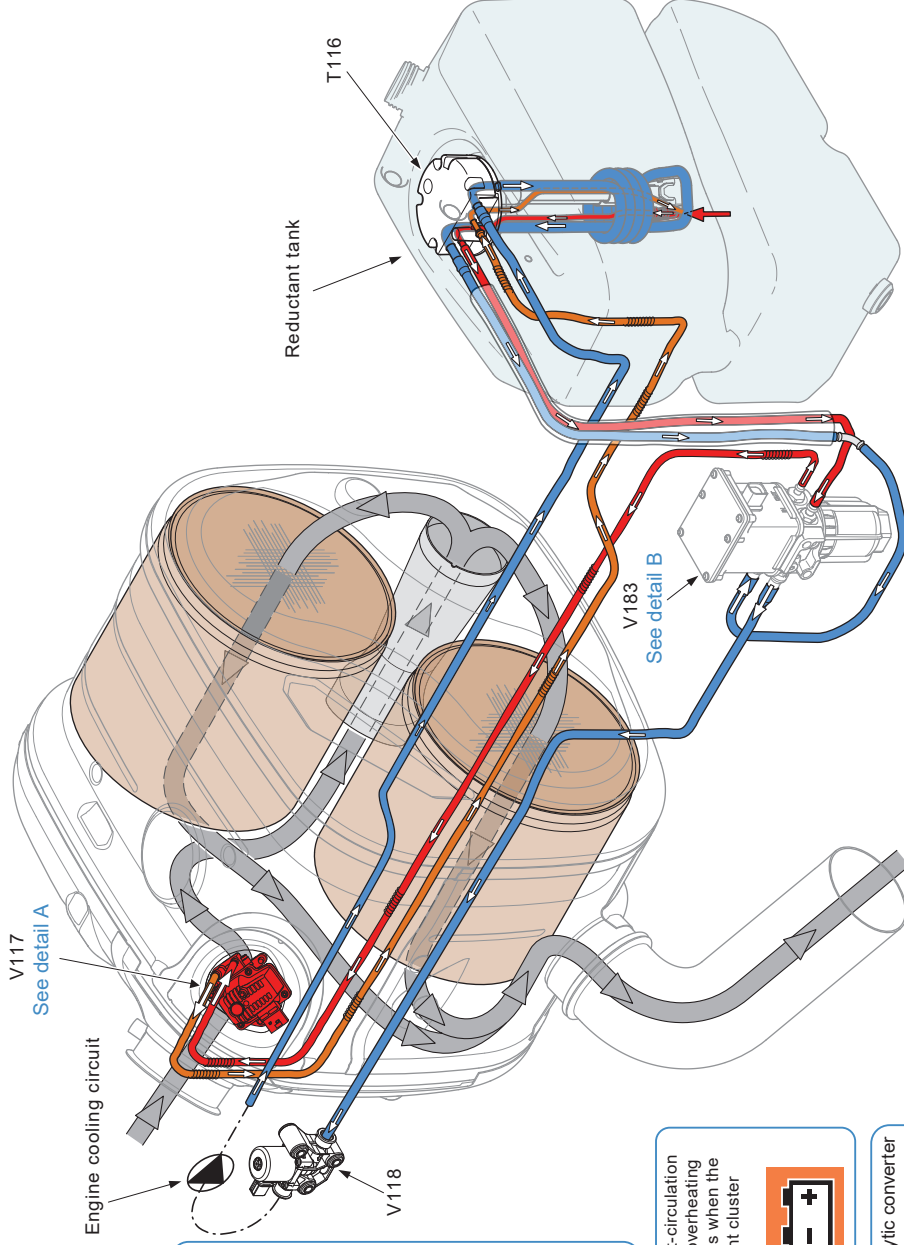


EXHAUST GAS AFTERTREATMENT EU4, EU5, EEV



Explanation


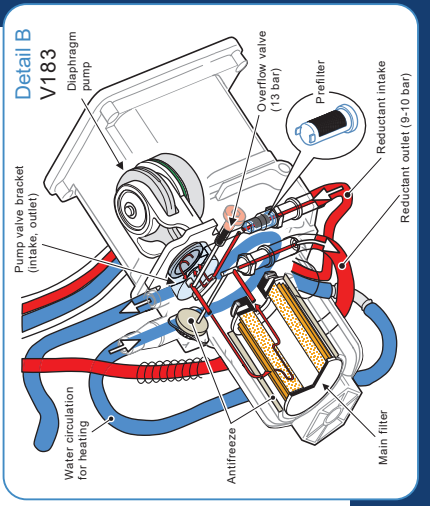
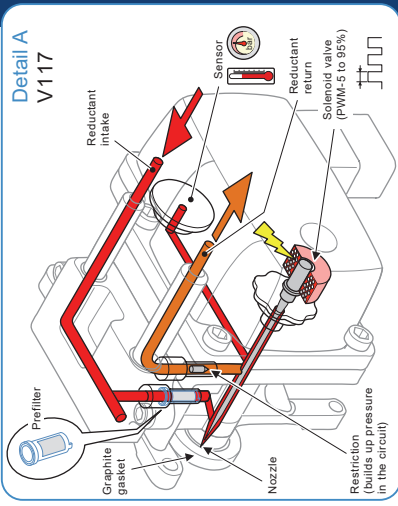
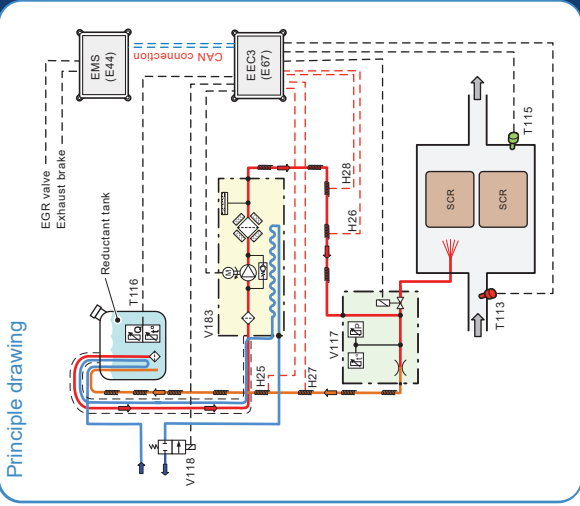
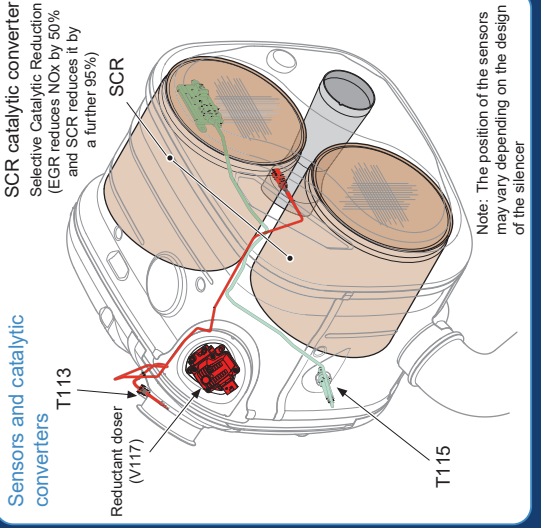
- H25 to H28: Electrically heated reductant hoses
- T113: Temperature sensor
- T115: NOx sensor downstream of exhaust gas aftertreatment
- T116: Reductant pick-up unit
- V117: Reductant doser
- V118: Coolant valve
- V183: Reductant pump

Key to symbols

- Buffer (against frozen reductant)
- Electrically heated reductant hose
- Engine cooling circuit
- Reductant (intake and circuit pressurised)
- Reductant (return circuit)
- NOx sensor
- Temperature sensor

When the engine is switched off, there may be post-circulation of reductant through the reductant circuit to avoid overheating of the metering system. This occurs in certain cases when the silencer is extremely hot. A symbol in the instrument cluster indicates whether the post-circulation is active. During this period the voltage must not be interrupted using the battery master switch.

See the symbol to the right.

Chemical reactions

Reductant: Urea (NH₂CO-NH₂) + H₂O → 2 NH₃ + CO₂

Water: H₂O → 2 H₂ + O₂ (Catalytic converter + temperature 200° to 600°)

Ammonia: 2 NH₃ + O₂ → 2 NH₂OH + H₂O

Nitrogen oxide (NOx): 4 NO + 4 NH₃ → 4 N₂ + 6 H₂O

Water: 6 H₂O

Nitrogen: 4 N₂

Legend: C = Carbon, O = Oxygen, N = Nitrogen, H = Hydrogen

