



Contents

00 - Technical data	1
1 Safety information	1
1.1 Safety precautions during work on fuel system	1
1.2 Safety regulations for working on fuel supply system	2
1.3 Safety measures when working on vehicles with a start/stop system	3
1.4 Safety precautions when using testers and measuring instruments during a road test	3
1.5 Safety precautions when working on the cooling system	3
1.6 Safety precautions when working on vehicles with auxiliary/supplementary heater	3
1.7 Safety precautions when working on SCR system	4
2 General information	6
2.1 Type plates	6
2.2 Starting conditions for auxiliary/supplementary heater	6
2.3 Rules for cleanliness when working on auxiliary/supplementary heater and fuel system	7
3 Repair notes	8
3.1 Rules for cleanliness	8
3.2 General information	8
3.3 General repair instructions	8
3.4 Contact corrosion	9
3.5 Nuts and bolts	9
3.6 Routing and attachment of lines	9
82 - Supplementary heating	10
1 Overview of fitting locations - auxiliary/supplementary heater	10
1.1 Overview of fitting locations - components not located in passenger compartment	10
1.2 Overview of fitting locations - auxiliary air heater located in passenger compartment	11
2 Auxiliary/supplementary heater	12
2.1 Overview of fitting locations - auxiliary/supplementary heater	12
2.2 Assembly overview - auxiliary heater	14
2.3 Removing and installing auxiliary/supplementary heater	17
2.4 Dismantling and assembling auxiliary/supplementary heater	21
2.5 Removing and installing air intake silencer	29
2.6 Removing and installing circulation pump V55	30
2.7 Removing and installing exhaust system	32
2.8 Removing and installing auxiliary/supplementary heater bracket	33
2.9 Removing and installing cover	37
2.10 Dismantling and assembling heater unit	38
2.11 Removing and installing glow plug with flame monitor Q8	39
2.12 Removing and installing temperature sensor G18 / overheating sensor G189	40
2.13 Removing and installing auxiliary heater control unit J364	41
2.14 Removing and installing combustion air blower V6	41
2.15 Removing and installing distribution box, auxiliary air heater	41
2.16 Removing and installing bottom vents, auxiliary air heater	43
2.17 Removing and installing vent duct for auxiliary air heater	43
2.18 Removing and installing intake port for auxiliary air heater	44
2.19 Removing and installing stone deflector for auxiliary air heater	46
2.20 Removing and installing bracket for vent duct of auxiliary air heater	46
3 Coolant circuit with auxiliary/supplementary heater	48
3.1 Connection diagram - coolant hoses	48
3.2 Bleeding coolant circuit of auxiliary/supplementary heater	49
3.3 Removing and installing heater coolant shut-off valve	50
4 Fuel supply system	53
4.1 Overview of fitting locations - fuel supply system	53



4.2	Checking fuel delivery rate	54
4.3	Removing and installing metering pump V54	55
4.4	Removing and installing fuel pump	56
4.5	Removing and installing fuel line leading to metering pump V54	57
4.6	Fuel line to fuel pump - heater unit for auxiliary air heater, removing and installing	59
4.7	Removing and installing bracket for metering pump V54 /fuel pump	60
4.8	Removing and installing intermediate bracket for metering pump V54 /fuel pump	61
5	Regulation of auxiliary/supplementary heater	63
5.1	Functional description	63
5.2	Supplementary heater mode	66
5.3	Auxiliary heater mode	67
5.4	Switching off auxiliary/supplementary heater	67
6	Other controlling and regulating components	68
6.1	Removing and installing ambient temperature sensor G17	68
6.2	Removing and installing remote control receiver for auxiliary coolant heater R149	68
6.3	Functional description of remote control for auxiliary/supplementary heater	69
6.4	Removing and installing temperature sensor on roof for air inlet on auxiliary air heater G967	71
6.5	Removing and installing remote control receiver for auxiliary heater R64	72
6.6	Removing and installing air distribution flap control motor 2 V667	72