



Contents

00 - Technical data	1
1 Safety instructions	1
1.1 Safety precautions for working on vehicles with auxiliary/supplementary heater	1
1.2 Safety measures for when working on vehicles with a start/stop system	2
1.3 Safety precautions when working on the fuel system	2
1.4 Safety precautions when working on cooling system	3
1.5 Safety precautions when using testers and measuring instruments during a road test	3
1.6 Safety precautions when working on high-voltage system	3
1.7 Safety precautions when working in vicinity of high-voltage components	4
2 General notes	5
2.1 Starting conditions for auxiliary/supplementary heater	5
2.2 Notes for vehicles with a start/stop system	6
2.3 Rules for cleanliness for working on the auxiliary/supplementary heater and the fuel system	6
2.4 Identification plates	6
3 Repair notes	8
3.1 General repair instructions	8
82 - Supplementary heating	9
1 Fittings location overview - auxiliary/supplementary heater	9
1.1 Fittings location overview - auxiliary/supplementary heater components	9
2 Auxiliary/supplementary heater	12
2.1 Fittings location overview - auxiliary/supplementary heater	12
2.2 Assembly overview - auxiliary/supplementary heater attachments	14
2.3 Assembly overview - auxiliary/supplementary heater, internal	15
2.4 Removing and installing auxiliary/supplementary heater	16
2.5 Dismantling and assembling auxiliary/supplementary heater	21
2.6 Removing and installing air intake silencer	23
2.7 Removing and installing circulation pump V55	23
2.8 Removing and installing exhaust system	26
2.9 Removing and installing auxiliary/supplementary heater bracket	26
2.10 Removing and installing covers for auxiliary heater control unit J364	27
2.11 Removing and installing glow plug with flame monitoring Q8	28
2.12 Removing and installing temperature sensor G18 and overheating sensor G189	28
2.13 Connector pin assignment for supplementary heater	29
2.14 Dismantling and assembling burner unit	29
2.15 Removing and installing auxiliary heater control unit J364 with combustion air blower V6	30
3 Coolant circuit with auxiliary/supplementary heater	32
3.1 Schematic diagram - coolant hoses	32
3.2 Bleeding coolant circuit of auxiliary/supplementary heater	39
3.3 Removing and installing coolant pipes for auxiliary/supplementary heater	40
4 Fuel supply	43
4.1 Fittings location overview - fuel supply	43
4.2 Testing quantity of fuel delivered	46
4.3 Removing and installing metering pump V54	47
4.4 Checking metering pump V54 with end sealing valve	51
4.5 Bleeding fuel line to metering pump V54 (filling with fuel)	52
5 Regulation of auxiliary/supplementary heater	54
5.1 Functional description	54
5.2 Supplementary heating mode	55
5.3 Auxiliary heater mode	55



5.4	Switching off auxiliary/supplementary heater	55
6	Other control components	57
6.1	Removing and installing ambient temperature sensor G17	57
6.2	Removing and installing remote control receiver for auxiliary coolant heater R149	57
6.3	Functional description of remote control for auxiliary/supplementary heater	60