

Contents

00 - Technical data	1
1 General notes	1
1.1 Type plates	1
1.2 Notes on operation of auxiliary/supplementary heater - vehicles with diesel engine	2
1.3 Starting conditions for auxiliary/supplementary heater	2
1.4 Notes on auxiliary heater	3
1.5 Operating sequence for auxiliary heater	10
1.6 Checking function of coolant shut-off valve	15
1.7 Rules for cleanliness when working on the auxiliary/supplementary heater and fuel system	16
1.8 Overview of components for auxiliary heater in vehicle	17
2 Safety precautions	18
2.1 Safety precautions when working on the fuel system	18
2.2 Safety precautions when working on vehicles with start/stop system	18
2.3 Safety precautions when using testers and measuring instruments during a road test	19
2.4 Safety precautions when working on the cooling system	19
2.5 Safety precautions when working on vehicles with auxiliary/supplementary heater	19
3 Repair notes	21
3.1 Rules for cleanliness	21
3.2 General notes	21
3.3 General repair instructions	22
3.4 Contact corrosion	23
3.5 Checking heating output	23
3.6 Pipe/wire routing and attachment	23
3.7 Notes on general repairs	23
82 - Auxiliary heating	24
1 Overview of fitting locations - auxiliary/supplementary heater	24
1.1 Exploded view of fitting locations - components not located in passenger compartment	24
1.2 Exploded view of fitting locations - components in passenger compartment at front	28
1.3 Overview of fitting locations - components in rear passenger compartment	34
2 Auxiliary/supplementary heater	37
2.1 Overview of fitting locations - auxiliary/supplementary heater	37
2.2 Exploded view - internal auxiliary/supplementary heater	42
2.3 Removing and installing auxiliary/supplementary heater	47
2.4 Dismantling and assembling auxiliary/additional heater	52
2.5 Removing and installing air intake silencer	62
2.6 Removing and installing circulation pump V55	63
2.7 Removing and installing silencer with bracket	66
2.8 Removing and installing flame monitor G64	68
2.9 Removing and installing temperature sensor G18	70
2.10 Removing and installing temperature sensor 2 for supplementary and auxiliary heating G587	71
2.11 Pin assignment for auxiliary/supplementary heater	73
2.12 Checking electrical components of auxiliary heater	74
3 Coolant circuit with auxiliary/supplementary heater	82
3.1 Connection diagram - coolant hoses	82
3.2 Removing and installing heater coolant shut-off valve	86
3.3 Bleeding coolant circuit	89
4 Fuel supply system	92
4.1 Overview of fitting locations - fuel supply system	92
4.2 Fuel take-off from fuel tank	95
4.3 Releasing quick-release coupling at fuel line for auxiliary heater	99

4.4	Routing of fuel pipe to auxiliary heater	100
4.5	Checking CO2 content in auxiliary heater exhaust gas	101
4.6	Checking fuel delivery rate	105
4.7	Removing and installing metering pump V54	108
5	Auxiliary/supplementary heater control	111
5.1	Functional description	111
5.2	Switching auxiliary heating/auxiliary ventilation on and off	112
6	Further control components	116
6.1	Removing and installing ambient temperature sensor	116
6.2	Removing and installing remote control receiver for auxiliary heater R64	116
6.3	Functional description of remote control for auxiliary/supplementary heater	117