

Contents

00 - Technical data	1
1 General notes	1
1.1 Type plates	1
1.2 Notes on operation of auxiliary/supplementary heater on vehicles with diesel engine	2
1.3 Starting conditions for auxiliary/supplementary heater	2
1.4 Notes on auxiliary/supplementary heater	3
1.5 Operating sequence for auxiliary/supplementary heater	11
1.6 Operation of heater coolant shut-off valve N279	15
1.7 Rules for cleanliness when working on the auxiliary/supplementary heater and fuel system	16
1.8 Overview of components for auxiliary/supplementary heater in vehicle	18
2 Safety precautions	19
2.1 Safety precautions when working on the fuel system	19
2.2 Safety precautions when working on vehicles with start/stop system	19
2.3 Safety precautions when using testers and measuring instruments during a road test	20
2.4 Safety precautions when working on the cooling system	20
2.5 Safety precautions when working on vehicles with auxiliary/supplementary heater	20
3 Repair instructions	22
3.1 Rules for cleanliness	22
3.2 General notes	22
3.3 General repair instructions	23
3.4 Contact corrosion	24
3.5 Checking heating output	24
3.6 Routing and attaching pipes, hoses and wiring	24
3.7 Notes on general repairs	24
82 - Auxiliary heating	26
1 Overview of fitting locations - auxiliary/supplementary heater	26
1.1 Overview of fitting locations - components not located in passenger compartment	26
1.2 Overview of fitting locations - components in passenger compartment (front)	33
2 Auxiliary/supplementary heater	39
2.1 General notes	39
2.2 Overview of fitting locations - auxiliary/supplementary heater	40
2.3 Exploded view - components inside auxiliary/supplementary heater	48
2.4 Removing and installing auxiliary/supplementary heater	51
2.5 Dismantling and assembling auxiliary/supplementary heater	62
2.6 Removing and installing air intake silencer	70
2.7 Removing and installing circulation pump V55	71
2.8 Removing and installing exhaust system for auxiliary/supplementary heater	74
2.9 Removing and installing temperature sensor G18 and temperature sensor 2 for supplementary and auxiliary heating G587	77
2.10 Pin assignment for auxiliary/supplementary heater	79
2.11 Checking electrical components on auxiliary/supplementary heater	80
3 Coolant circuit with auxiliary/supplementary heater	88
3.1 Connection diagram - coolant hoses	88
3.2 Removing and installing heater coolant shut-off valve, operation	95
3.3 Bleeding coolant circuit	104
3.4 Removing and installing non-return valve for coolant	106
4 Fuel supply system	115
4.1 Overview of fitting locations - fuel supply system	115
4.2 Fuel take-off from fuel tank	122
4.3 Releasing quick-release coupling at fuel line for auxiliary/supplementary heater	128
4.4 Routing of fuel line to auxiliary/supplementary heater	129



4.5	Checking CO2 content in exhaust gas of auxiliary/supplementary heater	130
4.6	Checking fuel delivery rate	134
4.7	Removing and installing metering pump V54	138
5	Auxiliary/supplementary heater control	142
5.1	Functional description	142
5.2	Switching auxiliary/supplementary heater and auxiliary ventilation on and off	143
6	Further control components	148
6.1	Removing and installing ambient temperature sensor	148
6.2	Removing and installing remote control receiver for auxiliary heater R64	148
6.3	Functional description of remote control for auxiliary/supplementary heater	149