



## Contents

<b>00 - Technical data</b>	<b>1</b>
<b>1 Safety instructions</b>	<b>1</b>
1.1 Safety precautions when working on the fuel system	1
1.2 Safety precautions for working on vehicles with start/stop system	1
1.3 Safety precautions when using testers and measuring instruments during a road test	2
1.4 Safety precautions when working on the cooling system	2
1.5 Safety precautions for working on vehicles with auxiliary/supplementary heater	2
<b>2 General notes</b>	<b>4</b>
2.1 Identification plates	4
2.2 Starting conditions for auxiliary/supplementary heater	5
2.3 Rules for cleanliness for working on the auxiliary/supplementary heater and the fuel system	6
<b>3 Repair notes</b>	<b>7</b>
3.1 Notes on general repairs	7
<b>82 - Supplementary heating</b>	<b>8</b>
<b>1 Overview of fitting locations - auxiliary/supplementary heater</b>	<b>8</b>
1.1 Fittings locations overview - components not located in passenger compartment	8
<b>2 Auxiliary heater/supplementary heater</b>	<b>10</b>
2.1 Overview of fitting locations - auxiliary/supplementary heater	10
2.2 Assembly overview - auxiliary heater, internal	12
2.3 Assembly overview - auxiliary/supplementary heater attachments	13
2.4 Removing and installing auxiliary/supplementary heater	14
2.5 Dismantling and assembling auxiliary/supplementary heater	17
2.6 Removing and installing air intake silencer	17
2.7 Removing and installing circulation pump V55	17
2.8 Removing and installing exhaust system	19
2.9 Removing and installing auxiliary/supplementary heater bracket	19
2.10 Removing and installing cover	20
2.11 Removing and installing covers for auxiliary heater control unit J364	20
2.12 Removing and installing auxiliary heater control unit J364	21
2.13 Removing and installing glow plug with flame monitoring Q8	22
2.14 Removing and installing temperature sensor G18 and overheating sensor G189	22
2.15 Dismantling and assembling burner unit	22
<b>3 Coolant circuit with auxiliary/supplementary heater</b>	<b>24</b>
3.1 Schematic diagram - coolant hoses	24
3.2 Bleeding coolant circuit of auxiliary/supplementary heater	25
3.3 Removing and installing heater coolant shut-off valve N279	26
<b>4 Fuel supply</b>	<b>28</b>
4.1 Overview of fitting locations - fuel supply	28
4.2 Testing quantity of fuel delivered	29
4.3 Removing and installing metering pump V54	31
<b>5 Regulation of auxiliary/supplementary heater</b>	<b>33</b>
5.1 Functional description	33
5.2 Supplementary heating mode	34
5.3 Auxiliary heating mode	35
5.4 Switching off auxiliary/supplementary heater	35
<b>6 Other controlling and regulating components</b>	<b>37</b>
6.1 Removing and installing ambient temperature sensor	37
6.2 Removing and installing remote control receiver for auxiliary coolant heater R149	37
6.3 Functional description of remote control for auxiliary heater	38