



## Contents

<b>00</b>	<b>Technical data</b> .....	<b>1</b>
1	<b>Safety precautions</b> .....	<b>1</b>
1.1	Safety precautions when working on vehicles with high-voltage system .....	1
1.2	Safety precautions when working in the vicinity of high-voltage components .....	2
1.3	Safety precautions when working on the fuel system .....	2
1.4	Safety precautions when working on vehicles with start/stop system .....	3
1.5	Safety precautions when using testers and measuring instruments during a road test .....	3
1.6	Safety precautions when working on the cooling system .....	3
1.7	Safety precautions when working on vehicles with auxiliary/supplementary heater .....	3
2	<b>General notes</b> .....	<b>5</b>
2.1	Type plates .....	5
2.2	Notes on operation of auxiliary/supplementary heater on vehicles with diesel engine .....	6
2.3	Notes on operation of auxiliary/supplementary heater with biofuel .....	6
2.4	Starting conditions for auxiliary/supplementary heater .....	6
2.5	Rules for cleanliness when working on the auxiliary/supplementary heater and fuel system .....	7
3	<b>Repair instructions</b> .....	<b>8</b>
3.1	Rules for cleanliness .....	8
3.2	General notes .....	8
3.3	Contact corrosion .....	9
3.4	Checking heating output .....	9
3.5	Routing and attachment of pipes, hoses and wiring .....	10
3.6	Use of impact wrenches .....	10
3.7	Identification plates .....	10
<b>82</b>	<b>Auxiliary heating</b> .....	<b>11</b>
1	<b>Safety precautions</b> .....	<b>11</b>
2	<b>Overview of fitting locations - auxiliary/supplementary heater</b> .....	<b>12</b>
3	<b>Auxiliary/supplementary heater</b> .....	<b>14</b>
3.1	Overview of fitting locations - auxiliary/supplementary heater .....	14
3.2	Exploded view - components inside auxiliary/supplementary heater .....	16
3.3	Exploded view - attachments for auxiliary/supplementary heater .....	17
3.4	Removing and installing auxiliary/supplementary heater .....	18
3.5	Dismantling and assembling auxiliary/supplementary heater .....	26
3.6	Removing and installing air intake silencer .....	27
3.7	Removing and installing circulation pump V55 .....	28
3.8	Removing and installing exhaust system .....	34
3.9	Removing and installing bracket for auxiliary/supplementary heater .....	34
3.10	Removing and installing covers for auxiliary heater control unit J364 .....	35
3.11	Dismantling and assembling burner unit .....	36
3.12	Removing and installing glow plug with flame monitor Q8 .....	37
3.13	Removing and installing temperature sensor G18 and overheating sensor G189 .....	37
3.14	Pin assignment for auxiliary/supplementary heater .....	38
4	<b>Coolant circuit with auxiliary/supplementary heater</b> .....	<b>40</b>
4.1	Connection diagram for coolant hoses (vehicles with auxiliary/supplementary heating) ..	40
5	<b>Fuel supply system</b> .....	<b>43</b>
5.1	Overview of fitting locations - fuel supply system .....	43
5.2	Exploded view - fuel delivery unit .....	44
5.3	Installing riser in fuel delivery unit .....	45
5.4	Bleeding fuel line to metering pump V54 (filling with fuel) .....	46
5.5	Checking CO <sub>2</sub> content in exhaust gas of auxiliary/supplementary heater .....	49
5.6	Checking fuel delivery rate .....	50



5.7	Removing and installing metering pump V54	51
5.8	Checking metering pump V54 with end sealing valve	60
<b>6</b>	<b>Auxiliary/supplementary heater control</b>	<b>61</b>
6.1	Switching auxiliary/supplementary heater on and off	61
<b>7</b>	<b>Further control components</b>	<b>62</b>
7.1	Removing and installing ambient temperature sensor G17	62
7.2	Removing and installing remote control receiver for auxiliary heater R64	62
7.3	Adapting remote control for auxiliary heater	64
7.4	Functional description of remote control for auxiliary/supplementary heater	65
7.5	Renewing battery in remote control for auxiliary/supplementary heater	65