

## Contents

<b>24 - Mixture preparation - injection</b>	<b>1</b>
<b>1 Safety precautions and rules for cleanliness</b>	<b>1</b>
1.1 General notes on self-diagnosis	1
1.2 Safety precautions	1
1.3 Rules for cleanliness when working on the injection system	2
1.4 Important: Required procedure prior to opening high-pressure injection system	3
<b>2 Injection system</b>	<b>5</b>
2.1 Technical data	5
2.2 Overview of fitting locations	5
2.3 Air cleaner - exploded view	15
2.4 Removing and installing air filter element	16
2.5 Removing air cleaner (bottom section)	17
2.6 Intake manifold (top section) - exploded view	20
2.7 Intake manifold (bottom section) with fuel rail - exploded view	22
2.8 Removing and installing intake manifold (top section)	23
2.9 Removing and installing intake manifold (bottom section) with fuel rail	25
2.10 Removing and installing fuel pressure sender G247	27
2.11 Checking fuel pressure and residual pressure (up to high-pressure pump)	27
2.12 High-pressure pump - exploded view	32
2.13 Removing and installing high-pressure pump	33
2.14 Removing and installing injectors	37
2.15 Removing and installing high-pressure pipes	41
2.16 Lambda probes - overview	42
2.17 Removing and installing Lambda probe G39 before catalytic converter - bank 1 (right-side)	43
2.18 Removing and installing Lambda probe after catalytic converter G130 - bank 1 (right-side)	45
2.19 Removing and installing Lambda probe 2 G108 before catalytic converter - bank 2 (left-side)	47
2.20 Removing and installing Lambda probe 2 after catalytic converter G131 - bank 2 (left-side)	49
<b>3 Engine control unit</b>	<b>52</b>
3.1 Wiring and component check with test box V.A.G 1598/42	52
3.2 Removing and installing engine control unit J623	54
<b>28 - Ignition system</b>	<b>58</b>
<b>1 General notes and safety precautions</b>	<b>58</b>
1.1 General notes on ignition system	58
1.2 Safety precautions	58
<b>2 Servicing ignition system</b>	<b>59</b>
2.1 Test data	59
2.2 Ignition system - exploded view	59
2.3 Removing and installing ignition coils	60
2.4 Removing and installing knock sensors	62
2.5 Removing and installing Hall senders	63
2.6 Removing and installing engine speed sender G28	64