

Contents

24 - Mixture preparation - injection	1
1 Safety precautions and rules for cleanliness	1
1.1 General notes on self-diagnosis	1
1.2 Safety precautions	1
1.3 Rules for cleanliness and instructions for working on fuel system	2
1.4 Procedure before opening high-pressure section of injection system	3
1.5 Checking for leaks in the fuel system	4
1.6 Checking vacuum system	4
1.7 Contact corrosion!	5
1.8 Routing and attachment of pipes, hoses and wiring	5
2 Injection system	6
2.1 Test data	6
2.2 Overview of fitting locations	6
2.3 Exploded view - air cleaner	16
2.4 Removing and installing air filter element	18
2.5 Intake manifold (bottom section) - exploded view	20
2.6 Removing and installing intake manifold (bottom section) with fuel rail	23
2.7 Removing and installing throttle valve module J338	26
2.8 Removing and installing regulating flap control unit J808	28
2.9 Cleaning throttle valve module	28
2.10 Removing and installing injectors	29
2.11 Cleaning injectors	33
2.12 Checking fuel pressure and residual pressure (up to high-pressure pump)	34
2.13 Exploded view - high-pressure pump	38
2.14 Removing and installing high-pressure pipe	39
2.15 Removing and installing high-pressure pump	41
2.16 Overview - Lambda probes	44
2.17 Removing and installing Lambda probe G39	45
2.18 Removing and installing Lambda probe after catalytic converter G130	47
2.19 Removing and installing Lambda probe 2 G108	49
2.20 Removing and installing Lambda probe 2 after catalytic converter G131	51
3 Engine control unit	54
3.1 Wiring and component check with test box V.A.G 1598/42	54
3.2 Removing and installing engine control unit	56
28 - Ignition system	61
1 General notes and safety precautions	61
1.1 General notes on ignition system	61
1.2 Safety precautions	61
2 Servicing ignition system	63
2.1 Test data	63
2.2 Exploded view - ignition system	63
2.3 Removing and installing ignition coils	64
2.4 Removing and installing knock sensors G61 / G66	66
2.5 Removing and installing Hall senders G40 / G163	67
2.6 Removing and installing engine speed sender G28	68