

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 when working on the fuel system	2
1.3 Safety precautions when working on the injection and ignition 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 Rules for cleanliness and instructions for working on fuel system	3
1.7 Reducing pressure in high-pressure section of injection system	4
1.8 Checking for leaks in the fuel system	5
1.9 Checking vacuum system	5
2 Injection system	7
2.1 Technical data	7
2.2 Overview of fitting locations - injection system	7
2.3 Exploded view - vacuum system	14
3 Air cleaner	16
3.1 Exploded view - air cleaner housing	16
3.2 Removing and installing engine cover panel	17
3.3 Removing and installing air filter element	18
3.4 Removing and installing air cleaner housing	19
4 Intake manifold	20
4.1 Exploded view - intake manifold (top section)	20
4.2 Removing and installing throttle valve module J338 / J544	21
4.3 Removing and installing intake manifold (top section)	22
4.4 Exploded view - intake manifold (bottom section), fuel rail and injectors	24
4.5 Removing and installing intake manifold (bottom section) with fuel rail	27
5 High-pressure pump	31
5.1 Exploded view - high-pressure pump	31
5.2 Removing and installing high-pressure pump	32
5.3 Removing and installing high-pressure pipe	34
6 Injectors	38
6.1 Removing and installing injectors	38
6.2 Cleaning injectors	42
7 Senders and sensors	44
7.1 Removing and installing fuel pressure sender G247 / G624	44
7.2 Checking fuel pressure and residual pressure (up to high-pressure pump)	44
8 Lambda probes	49
8.1 Overview - Lambda probes	49
8.2 Removing and installing Lambda probes	49
9 Engine control unit	52
9.1 Wiring and component check with isolator boxes VAS 6606	52
9.2 Removing and installing engine control unit J623	53
28 - Ignition system	57
1 General notes and safety precautions	57
1.1 General notes on ignition system	57
1.2 Safety precautions	57
2 Ignition system	59
2.1 Test data	59
2.2 Exploded view - ignition system	59
2.3 Removing and installing ignition coils	61



2.4	Removing and installing knock sensors G61 / G66 / G198 / G199	62
2.5	Removing and installing Hall senders G40 / G163	63
2.6	Removing and installing Hall senders G300 / G301	64
2.7	Removing and installing engine speed sender G28	65