

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 when working on the injection system	2
1.4	Important: Required procedure prior to opening high-pressure injection system	3
1.5	Checking vacuum system	4
2	Injection system	6
2.1	Technical data	6
2.2	Fitting locations - overview	6
2.3	Air cleaner - exploded view	16
2.4	Removing and installing engine cover panel	18
2.5	Removing and installing air filter element	19
2.6	Removing air cleaner (bottom section)	20
2.7	Removing and installing air mass meter G70	24
2.8	Intake manifold (magnesium) - exploded view	24
2.9	Intake manifold (plastic - gradual introduction in model year 2009) - exploded view	38
2.10	Removing and installing fuel pressure sender G247	55
2.11	Checking fuel pressure and residual pressure (up to high-pressure pump)	56
2.12	High-pressure pump - exploded view	60
2.13	Removing and installing high-pressure pump	63
2.14	Installing high-pressure pipes	65
2.15	Lambda probes - overview	67
2.16	Removing and installing Lambda probe before catalytic converter G39 and Lambda probe after catalytic converter G130 (cylinder bank 1)	68
2.17	Removing and installing Lambda probe 2 before catalytic converter G108 and Lambda probe after catalytic converter G131 (cylinder bank 2)	70
3	Engine control unit	72
3.1	Wiring and component check with test box V.A.G 1598/42	72
3.2	Removing and installing engine control unit J623	73
28	Ignition system	77
1	General notes and safety precautions	77
1.1	General notes on ignition system	77
1.2	Safety precautions	77
2	Servicing ignition system	78
2.1	Test data	78
2.2	Ignition system - exploded view	78
2.3	Removing and installing ignition coils	79
2.4	Removing and installing knock sensors	81
2.5	Removing and installing Hall sender	81
2.6	Removing and installing engine speed sender G28	82