



Contents

01 - Self-diagnosis	1
1 Self-diagnosis	1
1.1 Self-diagnosis	1
1.2 Features of self-diagnosis	1
1.3 Technical data of self-diagnosis	1
1.4 Connecting fault reader V.A.G 1551 and selecting engine control unit	2
1.5 Interrogating and erasing fault memory	3
1.6 Fault table	5
1.7 Final control diagnosis	10
1.8 Read measured value block and basic settings	12
1.9 Display group overview	12
24 - Mixture preparation, Injection	16
1 Servicing injection system	16
1.1 Servicing injection system	16
1.2 Fitting locations overview	16
1.3 General notes on injection	19
1.4 Removing and installing parts of the injection system	20
1.5 Dismantling and assembling fuel rail with injectors	26
1.6 Dismantling and assembling intake manifold	27
1.7 Dismantling and assembling air cleaner	29
1.8 Safety precautions	31
1.9 Rules for cleanliness	32
1.10 Technical data	32
1.11 Performing basic setting	32
1.12 Checking Lambda probe and Lambda control	33
1.13 Checking Lambda probe heating	35
1.14 Checking engine operating mode	37
1.15 Checking throttle valve control part	38
1.16 Checking intake manifold pressure sender	44
1.17 Testing speed signal	45
1.18 Checking coolant temperature sender	47
1.19 Checking intake air temperature sender	49
1.20 Checking control unit voltage supply	52
1.21 Matching engine control unit to electronic immobilizer	53
1.22 Checking injectors	54
1.23 Checking fuel pressure regulator and holding pressure	57
1.24 Checking intake air system for leaks (unmetered air)	59
1.25 Checking intake air preheating	60
1.26 Wire routing engine wiring loom	61
28 - Ignition system	63
1 Servicing ignition system	63
1.1 Servicing ignition system	63
1.2 General notes to ignition system	63
1.3 Removing and installing parts of the ignition system	64
1.4 Dismantling and assembling distributor	67
1.5 Safety precautions	68
1.6 Adjustment data, Spark plugs	68
1.7 Checking and adjusting ignition timing	68
1.8 Checking Hall sender	70
1.9 Checking ignition transformer	71
1.10 Checking ignition transformer output stage	71
1.11 Checking knock sensor	73