



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	9
1.8 Read measured value block and basic settings	14
1.9 Display group overview	14
24 - Mixture preparation, Injection	18
1 Servicing injection system	18
1.1 Servicing injection system	18
1.2 Fitting locations overview	18
1.3 General notes on injection	21
1.4 Removing and installing parts of the injection system	22
1.5 Dismantling and assembling fuel manifold with injectors	28
1.6 Dismantling and assembling intake manifold	30
1.7 Dismantling and assembling air cleaner	33
1.8 Safety precautions	36
1.9 Rules for cleanliness	36
1.10 Technical data	36
1.11 Performing basic setting	37
1.12 Checking Lambda probe and Lambda control	38
1.13 Checking Lambda probe heating	40
1.14 Checking engine operating mode	41
1.15 Checking throttle valve control part	43
1.16 Checking intake manifold pressure sender	49
1.17 Checking speed signal	51
1.18 Checking coolant temperature sender	53
1.19 Checking intake air temperature sender	56
1.20 Checking control unit voltage supply	58
1.21 Matching engine control unit to electronic immobilizer	60
1.22 Checking air conditioner and air conditioner compressor signals	61
1.23 Checking injectors	62
1.24 Checking fuel pressure regulator and holding pressure	64
1.25 Checking intake air system for leaks (unmetered air)	66
1.26 Checking intake air preheating	67
1.27 Wire routing engine wiring loom	68
28 - Ignition system	70
1 Servicing ignition system	70
1.1 Servicing ignition system	70
1.2 General notes to ignition system	70
1.3 Removing and installing parts of the ignition system	71
1.4 Dismantling and assembling distributor	74
1.5 Safety precautions	75
1.6 Adjustment data, Spark plugs	75
1.7 Checking and adjusting ignition timing	75
1.8 Checking Hall sender	76
1.9 Checking ignition transformer and output stage	77
1.10 Checking knock sensor	80