



Contents

1	Safety instructions	1
1.1	Part removal	1
1.2	Battery and welding operation	1
1.3	Electronic control unit	1
1.4	Paint, glass, soft pad and trim	2
1.5	Fuel tank or fuel delivery pipeline	2
1.6	Air conditioner	2
1.7	Airbag System	3
1.8	Check the seat belts	3
1.9	Safety specifications for the seat belt tensioner	6
1.10	Body repair on a vehicle equipped with the seat belt tensioners	7
1.11	Perform cutting off, correcting and/or leveling on a vehicle equipped with airbags	8
1.12	Remove the front seats with a side airbag	8
2	Basic instruction	9
2.1	Diagnosis of the accident vehicle	9
2.2	Condition of the body and/or the parts for delivery to the painting workshop	9
2.3	Correction	9
2.4	Cutting	9
2.5	Body-cut part and part section	9
2.6	Original connection	10
2.7	Galvanized body parts	10
2.8	Remove the rest part	10
2.9	New parts	10
2.10	Parts	10
2.11	Molded foam plastic pads	11
3	Symbolic interpretation	12
3.1	Symbolic interpretation for welding	12
3.2	Symbolic interpretation for the operation method	12
4	Body repair tools	16
4.1	Flaring tool V.A.G 1317	16
4.2	Punching pliers V.A.G 1329	16
4.3	Basic equipment V.A.G 1366/3	16
4.4	Bottom protection layer spray gun V.A.G 1379	17
4.5	Electric blower V.A.G 1416	17
4.6	Door tensioner V.A.G 1438	17
4.7	Body equipment component V.A.G 1439	18
4.8	Pneumatic cutting knife V.A.G 1523 A	18
4.9	Air chisel V.A.G 1577	18
4.10	Edge closing iron block V.A.G 1585	19
4.11	Welding fume ventilator V.A.G 1586	19
4.12	Welding spot releasing device V.A.G 1731	19
4.13	Pneumatic spray gun V.A.G 1761/1	20
4.14	Pneumatic punching and thinning pliers VAS 1996	20
4.15	Pneumatic adhesive spray gun V.A.G 2005	20
4.16	Door hinge correction tool	21
4.17	Hose kit 5023 for the inert gas protection welding	21
4.18	Angle grinder VAS 5174	21
4.19	Angle grinder VAS 5175	22
4.20	Wire brush VAS 5182	22
5	Body bonding	23
5.1	Transporter 1991 →	23
5.2	Bonding types	23
5.3	Repair method for replacing the parts	24



6	Corrosion protection measures	26
6.1	Corrosion protection	26
7	Waste disposal instructions	27
7.1	Waste disposal	27
7.2	Air pressure tappet exhaust	27
7.3	Airbag	28
8	Contact corrosion protection	29
8.1	Connection of aluminum alloy/magnesium alloy with steel	29
9	Steel plate repair	30
9.1	High-strength body plate	30
9.2	Galvanized body parts	30
9.3	Welding on the galvanized body steel plate	31
9.4	Tearing test	32
10	Aluminum repair	33
10.1	Painting	33
10.2	Surface treatment	33
10.3	Leveling	34
10.4	Temperature control for heating	34
11	Plastic repair method	35
11.1	Material	35
11.2	Repairing the pit	36
11.3	Repairing the scratch	37
11.4	Repair the crack	39
11.5	Repairing the small hole (the diameter is more than 30 mm)	40
11.6	Plastic repair (glass fibre material)	41
11.7	Repair process	42
12	Glass repair	45
12.1	Repairing the windshield	45