

## Contents

<b>00 - Technical data</b> .....	<b>1</b>
<b>1 Safety briefing/employee qualification</b> .....	<b>1</b>
1.1 Qualification .....	1
<b>2 Safety precautions</b> .....	<b>2</b>
2.1 Safety precautions .....	2
2.2 Safety precautions when working on the cooling system .....	4
2.3 Safety precautions when using testers and measuring instruments during a road test .....	4
<b>3 Repair instructions</b> .....	<b>5</b>
3.1 Important notes .....	5
3.2 General notes .....	5
3.3 Information on handling fine dust, aluminium dust and steel dust .....	6
3.4 Routing and attachment of pipes, hoses and wiring .....	7
3.5 Contact corrosion .....	7
3.6 Bonding surfaces for adhesive strips .....	7
3.7 Self-locking bolts .....	7
3.8 Identification plates .....	7
3.9 Impact wrenches .....	7
3.10 Dent removal .....	8
3.11 Surface treatment .....	9
3.12 Repairing joints with flow-drill screws .....	9
3.13 Matching the surface contour .....	11
3.14 Moulded foam inserts .....	11
<b>4 Vehicle identification data</b> .....	<b>13</b>
4.1 Vehicle identification number .....	13
4.2 Type plate .....	13
4.3 Vehicle data sticker .....	13
<b>5 Extraction systems for steel/aluminium body repair station ("multi-material-mix" workplace)</b> .....	<b>14</b>
<b>6 Processing body structure adhesive D 180 004 M2</b> .....	<b>16</b>
6.1 Preparing bonding surfaces .....	17
<b>7 Body dimensions</b> .....	<b>31</b>
7.1 Floor group, front .....	31
7.2 Floor group, centre .....	31
7.3 Floor group, rear .....	32
7.4 Body - front .....	33
7.5 Body - centre .....	35
7.6 Body - rear .....	37
<b>8 Body panel gaps/shut lines</b> .....	<b>39</b>
8.1 Body - front .....	39
8.2 Body - centre .....	39
8.3 Body - rear .....	40
<b>9 Overview of attachment pairings</b> .....	<b>42</b>
<b>10 Overview of rivets and tools</b> .....	<b>43</b>
10.1 Overview of rivets used for repair measures .....	48
10.2 Inserting pop rivet bolts WHT 005 180 .....	49
10.3 Thread repair for M6 pop rivet nut .....	49
<b>11 Tools</b> .....	<b>50</b>
11.1 Using edge milling unit -VAS 882 005- .....	54
<b>12 Straightening jig</b> .....	<b>86</b>
12.1 Portal gauge .....	103



<b>50 - Body - front</b>	<b>107</b>
1 Safety precautions	107
2 Wing mounting flange - Renewal	108
2.1 Tools	108
2.2 Procedure	108
3 Wing mounting flange - Partial renewal	111
3.1 Tools	111
3.2 Procedure	111
4 Front wheel housing - Renewal	114
4.1 Procedure	114
5 Front longitudinal member - Renewal	117
5.1 Tools	117
5.2 Procedure	117
6 Longitudinal member (front section) - Renewal	120
6.1 Procedure	120
<b>51 - Body - centre</b>	<b>122</b>
1 Safety precautions	122
2 Roof - Renewal	123
2.1 Tools	123
2.2 Procedure	123
3 Roof side member - Renewal	126
3.1 Tools	126
3.2 Procedure	127
4 Roof side member - Renewal (long version)	135
4.1 Tools	135
4.2 Procedure	136
5 A-pillar - Renewal	144
5.1 Tools	144
5.2 Procedure	144
6 Outer B-pillar - Renewal	148
6.1 Tools	148
6.2 Procedure	148
7 Outer side member - Renewal	151
7.1 Tools	151
7.2 Procedure	152
8 Inner B-pillar - Renewal	158
8.1 Tools	158
8.2 Procedure	158
<b>53 - Body - rear</b>	<b>161</b>
1 Safety precautions	161
2 Rear cross panel - Renewal	162
2.1 Tools	162
2.2 Procedure	162
3 Rear cross member - Renewal	165
3.1 Tools	165
3.2 Procedure	165
4 Rear longitudinal member - Partial renewal	168
4.1 Tools	168
4.2 Procedure	168
5 Side panel - Renewal	171

5.1	Tools .....	171
5.2	Procedure .....	172
5.3	Rear wheel housing - Renewal .....	181
5.4	Tools .....	182
5.5	Procedure .....	182
<b>6</b>	<b>Spare wheel well - Renewal .....</b>	<b>187</b>
6.1	Tools .....	187
6.2	Procedure .....	188