

## Contents

<b>00 - Technical data</b>	<b>1</b>
<b>1 Identification</b>	<b>1</b>
1.1 Gearbox identification	1
<b>2 Safety information</b>	<b>2</b>
2.1 General safety regulations	2
2.2 Safety precautions when working on vehicles with start/stop system	3
2.3 Safety precautions when using testers and measuring instruments during a road test	3
2.4 Safety precautions when working on the subframe	3
2.5 Safety precautions when tow-starting and towing	3
<b>3 Repair instructions</b>	<b>5</b>
3.1 Rules for cleanliness	5
3.2 General notes	5
3.3 General repair instructions	6
3.4 Contact corrosion	8
3.5 Routing and attachment of pipes, hoses and wiring	9
<b>4 Technical data</b>	<b>10</b>
4.1 Capacities	10
4.2 Oil distribution	11
4.3 Clutch logic	12
<b>5 Overview - power transmission</b>	<b>14</b>
<b>32 - Torque converter</b>	<b>15</b>
<b>1 Torque converter</b>	<b>15</b>
<b>37 - Controls, housing</b>	<b>16</b>
<b>1 Selector mechanism</b>	<b>16</b>
1.1 Assembly overview - selector mechanism	16
1.2 Assembly overview - manual release mechanism for parking lock	17
1.3 Checking selector mechanism	18
1.4 Manual release from position P	22
1.5 Removing and installing selector lever handle	23
1.6 Detaching and attaching selector lever boot on selector lever handle	25
1.7 Removing and installing selector mechanism	26
1.8 Removing and installing manual release cable for parking lock	27
1.9 Renewing seal for parking lock shaft	28
<b>2 Removing and installing gearbox</b>	<b>32</b>
2.1 Removing gearbox	32
2.2 Installing gearbox	41
2.3 Tightening torques for gearbox	46
<b>3 Assembly mountings</b>	<b>48</b>
3.1 Assembly overview - assembly mountings	48
3.2 Removing and installing tunnel cross member	49
<b>4 Transporting gearbox</b>	<b>52</b>
<b>5 Securing to engine and gearbox support</b>	<b>54</b>
<b>6 ATF circuit</b>	<b>55</b>
6.1 Assembly overview - ATF circuit	55
6.2 Removing and installing ATF cooler	57
6.3 Removing and installing ATF lines	59
<b>7 ATF</b>	<b>61</b>
7.1 Checking ATF level	61
7.2 Draining and filling ATF	65



<b>38 - Gears, control</b>	<b>69</b>
<b>1 ATF system</b>	<b>69</b>
1.1 Removing and installing oil pan	69
<b>2 Mechatronic unit</b>	<b>72</b>
<b>39 - Final drive - front differential</b>	<b>73</b>
<b>1 Final drive</b>	<b>73</b>
1.1 Assembly overview - final drive	73
1.2 Removing and installing O-ring on cover for front final drive	76
<b>2 Gear oil</b>	<b>78</b>
2.1 Checking gear oil level	78
2.2 Draining and filling gear oil	86
<b>3 Oil seals</b>	<b>96</b>
3.1 Overview of fitting locations - oil seals	96
3.2 Renewing left oil seal	96
3.3 Renewing right oil seal	100
<b>4 Differential</b>	<b>102</b>
4.1 Removing and installing left flange shaft	102
4.2 Removing and installing right flange shaft	106
<b>5 Centre differential</b>	<b>110</b>
<b>6 Gearbox control system</b>	<b>111</b>
6.1 Overview of fitting locations - gearbox control system	111