

## Contents

<b>00 - Technical data</b> .....	<b>1</b>
<b>1 Repair instructions</b> .....	<b>1</b>
1.1 General repair instructions .....	1
1.2 Special tools .....	3
<b>2 Rules for cleanliness when working on the automatic gearbox</b> .....	<b>12</b>
<b>3 Frequently occurring faults</b> .....	<b>13</b>
3.1 No power transmitted in any gear .....	13
3.2 Gearshift jolts; individual gears slipping; gearshifts take too long .....	14
3.3 Gearshift jolts, power transmission problems in 4th and 5th gear .....	15
3.4 ATF leaks between engine and gearbox .....	15
3.5 Noise while driving (changes with road speed) .....	16
<b>32 - Torque converter</b> .....	<b>17</b>
<b>1 Torque converter</b> .....	<b>17</b>
1.1 Checking torque converter lock-up clutch .....	17
1.2 Draining torque converter .....	19
1.3 Checking torque converter .....	19
<b>37 - Controls, housing</b> .....	<b>21</b>
<b>1 Securing gearbox to assembly stand</b> .....	<b>21</b>
<b>2 Dismantling and assembling planetary gearbox</b> .....	<b>22</b>
2.1 Planetary gearbox - exploded view of components .....	22
2.2 Dismantling and assembling planetary gearbox .....	24
<b>3 Dismantling and assembling body "I"</b> .....	<b>55</b>
3.1 Body "I" - exploded view of components .....	55
3.2 Dismantling body "I" .....	56
3.3 Clutch "F" - exploded view of components .....	57
3.4 Dismantling and assembling clutch "F" .....	58
3.5 Clutch "D/G" with freewheel - exploded view of components .....	61
3.6 Dismantling and assembling clutch "D/G" with freewheel .....	63
3.7 Planetary drive "III" - exploded view of components .....	72
3.8 Dismantling and assembling planetary drive "III" .....	74
3.9 Assembling body "I" .....	74
<b>4 Dismantling and assembling body "II"</b> .....	<b>76</b>
4.1 Body "II" - exploded view of components .....	76
4.2 Dismantling body "II" .....	77
4.3 Clutch "B" - exploded view of components .....	78
4.4 Dismantling and assembling clutch "B" .....	79
4.5 Clutch "A" - exploded view of components .....	83
4.6 Dismantling and assembling clutch "A" .....	84
4.7 Clutch "E" - exploded view of components .....	89
4.8 Dismantling and assembling clutch "E" .....	90
4.9 Assembling body "II" .....	95
<b>5 Dismantling and assembling clutch "C"</b> .....	<b>97</b>
5.1 Clutch "C" - exploded view of components .....	97
5.2 Dismantling and assembling clutch "C" .....	98
<b>38 - Gears, control</b> .....	<b>103</b>
<b>1 Dismantling and assembling ATF supply unit</b> .....	<b>103</b>
1.1 ATF supply unit - exploded view of components .....	103
1.2 Removing and installing complete ATF supply unit (gearbox not dismantled) .....	104
1.3 Removing and installing ATF pump in housing of ATF supply unit .....	119



1.4	Removing and installing housing for ATF supply unit and stator shaft	123
1.5	Removing and installing stator shaft	127
1.6	Renewing oil seal for ATF pump	128
<b>2</b>	<b>Performing servicing work with gearbox installed</b>	<b>129</b>
2.1	Removing and installing valve body	129
2.2	Removing and installing internal oil pipe	132
2.3	Removing and installing gearbox speed sender G38 / gearbox output speed sender G195	133
2.4	Removing and installing gearbox input speed sender G182 - gearbox with hydraulic control type "E17"	134
2.5	Removing and installing gearbox input speed sender G182 - gearbox with hydraulic control type "E18/2"	135
2.6	Removing and installing wiring harness in gearbox	136
<b>3</b>	<b>Assessment of wear on gearbox components</b>	<b>138</b>
3.1	Assessment of wear by checking ATF for colour and contamination	138
3.2	Clutch "F"	138
3.3	Clutch "D/G" with freewheel	140
3.4	Planetary drive "III"	143
3.5	Clutch "B"	145
3.6	Clutch "A"	147
3.7	Clutch "E"	149
3.8	Clutch "C"	152
3.9	ATF supply unit	154
<b>39</b>	<b>Final drive - front differential</b>	<b>158</b>
<b>1</b>	<b>Servicing front axle drive and transfer box</b>	<b>158</b>
1.1	Removing and installing transfer box with Torsen differential	158
1.2	Front axle drive and transfer box - exploded view of components	158
1.3	Renewing oil seal for output flange for propshaft	162
1.4	Renewing oil seal in intermediate flange for front axle drive	162
1.5	Renewing oil seal in input pinion	163
1.6	Renewing needle bearing for spur gear 2	164