



## Contents

<b>00 - Technical data</b>	<b>1</b>
<b>1 Safety information</b>	<b>1</b>
1.1 Safety measures when working on vehicles with a start/stop system	1
<b>2 Identification</b>	<b>2</b>
2.1 Gearbox identification	2
<b>3 Technical data</b>	<b>3</b>
3.1 Allocation gearbox - engine	3
3.2 Capacities	4
3.3 Calculation of gear ratios	4
<b>4 Overview - power transmission</b>	<b>5</b>
<b>5 Electrical components</b>	<b>7</b>
5.1 Overview of fitting locations - electrical components	7
<b>6 Repair instructions</b>	<b>8</b>
6.1 General repair instructions	8
<b>30 - Clutch</b>	<b>11</b>
<b>1 Clutch operation</b>	<b>11</b>
1.1 Overview of fitting locations – clutch mechanism	11
1.2 Assembly overview - pedal cluster	13
1.3 Assembly overview - clutch hydraulics	15
1.4 Assembly overview - clutch release mechanism	18
1.5 Removing and installing bearing bush	19
1.6 Checking clutch master cylinder and clutch slave cylinder	19
1.7 Removing and installing clutch position sender G476	20
1.8 Removing and installing over-centre spring	21
1.9 Removing and installing extension spring	23
1.10 Removing and installing clutch pedal	23
1.11 Removing and installing mounting bracket	25
1.12 Removing and installing clutch master cylinder	29
1.13 Removing and installing clutch slave cylinder	30
1.14 Removing and installing lines for clutch mechanism	33
1.15 Bleeding clutch mechanism	35
1.16 Repairing clutch release mechanism	36
<b>2 Clutch</b>	<b>38</b>
2.1 Assembly overview - clutch	38
2.2 Removing and installing clutch	41
<b>34 - Controls, housing</b>	<b>53</b>
<b>1 Selector mechanism</b>	<b>53</b>
1.1 Installation position - selector mechanism	53
1.2 Assembly overview - gear knob and cover	55
1.3 Assembly overview - selector mechanism	56
1.4 Removing and installing gear knob	57
1.5 Removing and installing selector mechanism	59
1.6 Repairing selector mechanism	62
1.7 Adjusting selector mechanism	64
1.8 Checking selector mechanism	67
<b>2 Removing and installing gearbox</b>	<b>68</b>
2.1 Removing gearbox	68
2.2 Install gearbox	78
2.3 Specified torques for gearbox	84
<b>3 Assembly mountings</b>	<b>85</b>



3.1	Assembly overview - assembly mountings	85
<b>4</b>	<b>Transporting gearbox</b>	<b>87</b>
<b>5</b>	<b>Gear oil</b>	<b>88</b>
5.1	Checking gear oil level	88
5.2	Draining and filling gear oil	88
<b>6</b>	<b>Installing to engine and gearbox support</b>	<b>91</b>
<b>7</b>	<b>Dismantling and assembling gearbox</b>	<b>92</b>
7.1	Schematic overview - gearbox	92
7.2	Assembly overview - gearbox	94
7.3	Assembly overview - cover for gearbox housing and 5th gear	95
7.4	Assembly overview - gearbox housing and selector mechanism	97
7.5	Assembly overview - selector unit	98
7.6	Assembly overview - shafts, differential, selector mechanism	99
7.7	Assembly overview - selector forks	100
7.8	Removing and installing selector unit with gearbox installed	101
7.9	Repairing selector unit	103
7.10	Renewing oil seal for selector shaft	104
7.11	Repairing selector forks	105
7.12	Removing cover for gearbox housing and 5th gear	109
7.13	Dismantling and assembling gearbox	115
7.14	Installing cover for gearbox housing and 5th gear	126
<b>8</b>	<b>Gearbox housing, clutch housing</b>	<b>130</b>
8.1	Assembly overview - gearbox housing and clutch housing	130
8.2	Repairing gearbox housing	132
8.3	Repairing clutch housing	137
<b>35 - Gears, shafts</b>		<b>139</b>
<b>1</b>	<b>Input shaft</b>	<b>139</b>
1.1	Assembly overview - input shaft	139
1.2	Dismantling and assembling input shaft	141
1.3	Adjusting input shaft	146
1.4	Renewing input shaft seal	151
<b>2</b>	<b>Output shaft</b>	<b>153</b>
2.1	Assembly overview - output shaft	153
2.2	Dismantling and assembling output shaft	156
2.3	Adjusting output shaft	166
<b>3</b>	<b>Reverse shaft</b>	<b>170</b>
3.1	Assembly overview - reverse shaft	170
3.2	Dismantling and assembling reverse shaft	171
<b>39 - Final drive - differential</b>		<b>174</b>
<b>1</b>	<b>Oil seals</b>	<b>174</b>
1.1	Overview of fitting locations - seals	174
1.2	Renewing left oil seal	175
1.3	Renewing right oil seal	177
<b>2</b>	<b>Differential</b>	<b>181</b>
2.1	Assembly overview - differential	181
2.2	Dismantling and assembling differential	182
2.3	Adjusting differential	187
<b>3</b>	<b>Adjustment overview</b>	<b>191</b>