



## 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	3
3.3 Calculation of gear ratios	3
<b>4 Overview - power transmission</b>	<b>4</b>
<b>5 Electrical components</b>	<b>6</b>
5.1 Overview of fitting locations - electrical components	6
<b>6 Repair instructions</b>	<b>8</b>
6.1 General repair instructions	8
<b>30 - Clutch</b>	<b>12</b>
<b>1 Clutch mechanism</b>	<b>12</b>
1.1 Overview of fitting locations – clutch mechanism	12
1.2 Assembly overview - pedal cluster	13
1.3 Assembly overview - clutch hydraulics	15
1.4 Assembly overview - clutch release mechanism	17
1.5 Removing and installing bearing bush	18
1.6 Checking clutch master cylinder and clutch slave cylinder	20
1.7 Removing and installing clutch position sender G476	21
1.8 Removing and installing return spring	22
1.9 Removing and installing over-centre spring	25
1.10 Removing and installing clutch pedal	28
1.11 Removing and installing mounting bracket	30
1.12 Removing and installing clutch master cylinder	36
1.13 Removing and installing clutch slave cylinder	36
1.14 Removing and installing lines for clutch mechanism	40
1.15 Bleeding clutch mechanism	43
1.16 Repairing clutch release mechanism	46
<b>2 Clutch</b>	<b>48</b>
2.1 Assembly overview - clutch	48
2.2 Removing and installing clutch	48
<b>34 - Controls, housing</b>	<b>54</b>
<b>1 Selector mechanism</b>	<b>54</b>
1.1 Installation position - selector mechanism	54
1.2 Assembly overview – gear knob and cover	55
1.3 Assembly overview - selector mechanism	56
1.4 Removing and installing gear knob	58
1.5 Removing and installing selector mechanism	60
1.6 Repairing selector mechanism	64
1.7 Adjusting selector mechanism	69
1.8 Checking selector mechanism	72
<b>2 Removing and installing gearbox</b>	<b>73</b>
2.1 Removing gearbox	73
2.2 Installing gearbox	86
2.3 Specified torques for gearbox	94
<b>3 Assembly mountings</b>	<b>95</b>



3.1	Assembly overview - assembly mountings	95
<b>4</b>	<b>Transporting gearbox</b>	<b>98</b>
<b>5</b>	<b>Gear oil</b>	<b>99</b>
5.1	Checking gear oil level	99
<b>6</b>	<b>Dismantling and assembling gearbox</b>	<b>101</b>
6.1	Schematic overview - gearbox	101
6.2	Assembly overview - gearbox	102
6.3	Assembly overview - cover for gearbox housing and 5th gear	102
6.4	Assembly overview - clutch housing	104
6.5	Assembly overview - shafts, differential, selector mechanism	104
6.6	Assembly overview - selector unit	106
6.7	Assembly overview - selector forks	107
6.8	Repairing selector forks	108
6.9	Repairing selector unit	113
6.10	Renewing selector shaft seal	114
6.11	Dismantling and assembling gearbox	116
<b>7</b>	<b>Gearbox housing, clutch housing</b>	<b>128</b>
7.1	Assembly overview - gearbox housing and clutch housing	128
7.2	Repairing gearbox housing	130
<b>35 - Gears, shafts</b>		<b>132</b>
<b>1</b>	<b>Input shaft</b>	<b>132</b>
1.1	Assembly overview - input shaft	132
1.2	Dismantling and assembling input shaft	134
1.3	Renewing input shaft seal	147
<b>2</b>	<b>Output shaft</b>	<b>150</b>
2.1	Assembly overview - output shaft	150
2.2	Dismantling and assembling output shaft	152
<b>39 - Final drive - differential</b>		<b>160</b>
<b>1</b>	<b>Oil seals</b>	<b>160</b>
1.1	Overview of fitting locations - seals	160
1.2	Renewing left seal	160
1.3	Renewing right seal	163
<b>2</b>	<b>Differential</b>	<b>167</b>
2.1	Assembly overview - differential	167
2.2	Dismantling and assembling differential	169
2.3	Adjusting differential	176