



## Contents

<b>00 - Technical data</b>	<b>1</b>
<b>1 Safety instructions</b>	<b>1</b>
1.1 Safety precautions 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>4</b>
3.1 Allocation gearbox - engine	4
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>9</b>
6.1 General repair notes	9
<b>30 - Clutch</b>	<b>13</b>
<b>1 Clutch operation</b>	<b>13</b>
1.1 Overview of fitting locations – clutch mechanism	13
1.2 Assembly overview - pedal cluster	14
1.3 Assembly overview - clutch hydraulics	16
1.4 Assembly overview - clutch release mechanism	21
1.5 Removing and installing bearing bush	22
1.6 Checking clutch master cylinder and clutch slave cylinder	23
1.7 Removing and installing clutch position sender G476	23
1.8 Removing and installing over-centre spring	25
1.9 Removing and installing extension spring	27
1.10 Removing and installing clutch pedal	27
1.11 Removing and installing mounting bracket	29
1.12 Removing and installing clutch master cylinder	35
1.13 Removing and installing clutch slave cylinder	36
1.14 Removing and installing lines for clutch mechanism	38
1.15 Bleeding clutch mechanism	41
1.16 Repairing clutch release mechanism	42
<b>2 Clutch</b>	<b>45</b>
2.1 Assembly overview - clutch	45
2.2 Removing and installing clutch	45
<b>34 - Controls, housing</b>	<b>51</b>
<b>1 Selector mechanism</b>	<b>51</b>
1.1 Installation position - selector mechanism	51
1.2 Assembly overview - gear knob and cover	52
1.3 Assembly overview - selector mechanism	53
1.4 Removing and installing gear knob	55
1.5 Removing and installing selector mechanism	57
1.6 Repairing selector mechanism	62
1.7 Adjusting selector mechanism	65
1.8 Checking selector mechanism	68
<b>2 Removing and installing gearbox</b>	<b>69</b>
2.1 Removing gearbox	69
2.2 Installing gearbox	80
2.3 Specified torques for gearbox	86
<b>3 Assembly mountings</b>	<b>87</b>



3.1	Assembly overview - assembly mountings	87
<b>4</b>	<b>Transporting gearbox</b>	<b>90</b>
<b>5</b>	<b>Gear oil</b>	<b>91</b>
5.1	Checking gear oil level	91
<b>6</b>	<b>Installing to engine and gearbox support</b>	<b>93</b>
<b>7</b>	<b>Dismantling and assembling gearbox</b>	<b>95</b>
7.1	Schematic overview - gearbox	95
7.2	Assembly overview - gearbox	96
7.3	Assembly overview - cover for gearbox housing and 5th/6th gear	96
7.4	Assembly overview - clutch housing	98
7.5	Assembly overview - shafts, differential, selector mechanism	98
7.6	Assembly overview - selector unit	100
7.7	Assembly overview - selector forks	101
7.8	Repairing selector forks	102
7.9	Repairing selector unit	107
7.10	Renewing oil seal for selector shaft	110
7.11	Dismantling and assembling gearbox	111
<b>8</b>	<b>Gearbox housing, clutch housing</b>	<b>131</b>
8.1	Assembly overview - gearbox housing and clutch housing	131
8.2	Assembly overview - gearbox housing cover	133
8.3	Repairing gearbox housing cover	134
8.4	Repairing clutch housing	135
<b>35</b>	<b>Gears, shafts</b>	<b>138</b>
<b>1</b>	<b>Input shaft</b>	<b>138</b>
1.1	Assembly overview - input shaft	138
1.2	Dismantling and assembling input shaft	141
1.3	Renewing input shaft seal	152
<b>2</b>	<b>Output shaft</b>	<b>154</b>
2.1	Assembly overview - output shaft	154
2.2	Dismantling and assembling output shaft	157
<b>39</b>	<b>Final drive - differential</b>	<b>165</b>
<b>1</b>	<b>Oil seals</b>	<b>165</b>
1.1	Overview of fitting locations - seals	165
1.2	Renewing left oil seal	165
1.3	Renewing right oil seal	169
<b>2</b>	<b>Differential</b>	<b>172</b>
2.1	Assembly overview - differential	172
2.2	Dismantling and assembling differential	174
2.3	Adjusting differential	182