



## Contents

<b>00 - Technical data</b>	<b>1</b>
<b>1 Safety information</b>	<b>1</b>
1.1 Safety precautions when using testers and measuring instruments during a road test	1
1.2 Safety measures when working on vehicles with a start/stop system	2
<b>2 Identification</b>	<b>3</b>
2.1 Gearbox identification	3
<b>3 Technical data</b>	<b>5</b>
3.1 Allocation gearbox - engine	5
3.2 Capacities	5
3.3 Calculation of gear ratios	6
<b>4 Overview - power transmission</b>	<b>7</b>
<b>5 Electrical components</b>	<b>9</b>
5.1 Overview of fitting locations - electrical components	9
<b>6 Repair instructions</b>	<b>11</b>
6.1 General repair instructions	11
<b>30 - Clutch</b>	<b>14</b>
<b>1 Clutch mechanism</b>	<b>14</b>
1.1 Overview of fitting locations – clutch mechanism	14
1.2 Assembly overview - pedal cluster	15
1.3 Assembly overview - clutch hydraulics	17
1.4 Removing and installing bearing bush	21
1.5 Checking clutch master cylinder and clutch slave cylinder	22
1.6 Removing and installing clutch position sender G476	23
1.7 Removing and installing return spring	24
1.8 Removing and installing over-centre spring	27
1.9 Removing and installing clutch pedal	31
1.10 Removing and installing mounting bracket	32
1.11 Removing and installing clutch master cylinder	38
1.12 Removing and installing bleeder	39
1.13 Removing and installing lines for clutch mechanism	41
1.14 Bleeding clutch mechanism	46
<b>2 Clutch</b>	<b>48</b>
2.1 Determining make of clutch	48
<b>34 - Controls, housing</b>	<b>50</b>
<b>1 Selector mechanism</b>	<b>50</b>
1.1 Installation position - selector mechanism	50
1.2 Assembly overview – gear knob and cover	51
1.3 Assembly overview - selector mechanism	52
1.4 Removing and installing gear knob	54
1.5 Removing and installing selector mechanism	56
1.6 Repairing selector mechanism	60
1.7 Adjusting selector mechanism	65
1.8 Checking selector mechanism	69
<b>2 Removing and installing gearbox</b>	<b>70</b>
2.1 Removing gearbox	70
2.2 Installing gearbox	82
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>99</b>
<b>5</b>	<b>Gear oil</b> .....	<b>100</b>
5.1	Distinguishing between different manual gearbox types when filling oil .....	100
5.2	Checking gear oil level .....	100
<b>6</b>	<b>Dismantling and assembling gearbox</b> .....	<b>104</b>
6.1	Assembly overview - selector unit .....	104
6.2	Removing and installing selector unit with gearbox installed .....	105
6.3	Renewing selector shaft seal .....	109
<b>7</b>	<b>Gearbox housing, clutch housing</b> .....	<b>111</b>
<b>35 - Gears, shafts</b> .....		<b>112</b>
<b>1</b>	<b>Input shaft</b> .....	<b>112</b>
<b>2</b>	<b>Output shaft</b> .....	<b>113</b>
<b>39 - Final drive - differential</b> .....		<b>114</b>
<b>1</b>	<b>Oil seals</b> .....	<b>114</b>
1.1	Overview of fitting locations - seals .....	114
1.2	Renewing left seal .....	114
1.3	Renewing right oil seal .....	118
<b>2</b>	<b>Differential</b> .....	<b>122</b>