

Contents

00 - Technical data	1
1 Identification	1
1.1 Gearbox identification	1
2 Technical data	3
2.1 Allocation of gearbox to engine	3
2.2 Capacities	4
2.3 Calculating gear ratios	4
3 Overview - power transmission	5
3.1 Overview - power transmission, front-wheel drive	5
4 Safety information	6
4.1 Safety precautions when working on vehicles with start/stop system	6
5 Repair instructions	7
5.1 General repair instructions	7
30 - Clutch	13
1 Clutch mechanism	13
1.1 Overview - clutch mechanism	13
1.2 Assembly overview - pedal cluster	14
1.3 Assembly overview - clutch hydraulics	17
1.4 Assembly overview - clutch release mechanism	22
1.5 Checking clutch master cylinder and clutch slave cylinder	25
1.6 Removing and installing over-centre spring	26
1.7 Removing and installing clutch pedal	29
1.8 Removing and installing mounting bracket	32
1.9 Removing and installing clutch position sender G476	38
1.10 Removing and installing clutch master cylinder	39
1.11 Removing and installing clutch slave cylinder	41
1.12 Removing and installing lines for clutch mechanism	44
1.13 Bleeding clutch mechanism	47
2 Clutch	49
2.1 Assembly overview - clutch	49
2.2 Identifying different makes of clutch	56
2.3 Removing and installing clutch	58
34 - Controls, housing	65
1 Selector mechanism	65
1.1 Installation position - selector mechanism	65
1.2 Assembly overview - gear knob and cover	66
1.3 Assembly overview - gear lever and selector housing	67
1.4 Assembly overview - selector cables	69
1.5 Removing and installing gear knob	78
1.6 Removing and installing selector mechanism	79
1.7 Dismantling and assembling selector mechanism	85
1.8 Removing and installing selector cable	92
1.9 Adjusting selector mechanism	94
1.10 Checking selector mechanism	99
1.11 Renewing selector shaft oil seal	99
2 Removing and installing gearbox	102
2.1 Removing gearbox	102
2.2 Installing gearbox	115
2.3 Tightening torques for gearbox	125
3 Assembly mountings	127



3.1	Assembly overview - assembly mountings	127
3.2	Removing and installing gearbox mounting	129
3.3	Removing and installing pendulum support	133
4	Transporting gearbox	135
5	Gear oil	137
5.1	Checking gear oil level	137
5.2	Draining and filling gear oil	137
6	Dismantling and assembling gearbox	141
6.1	Schematic overview - gearbox	141
6.2	Assembly overview - gearbox	142
6.3	Assembly overview - gearbox housing cover and 5th/6th gear	143
6.4	Assembly overview - gearbox housing and selector mechanism	147
6.5	Assembly overview - selector unit	149
6.6	Assembly overview - input shaft, output shafts, differential and selector rods	149
6.7	Assembly overview - selector forks	151
6.8	Removing and installing gearbox housing cover and 5th/6th gear	154
6.9	Dismantling and assembling gearbox	163
6.10	Servicing selector forks	188
6.11	Servicing selector unit	193
7	Gearbox housing, clutch housing	196
7.1	Assembly overview - gearbox housing and clutch housing	196
7.2	Assembly overview - gearbox housing cover	199
7.3	Servicing gearbox housing and clutch housing	200
7.4	Servicing gearbox housing cover	205
35 - Gears, shafts		209
1	Input shaft	209
1.1	Assembly overview - input shaft	209
1.2	Dismantling and assembling input shaft	212
1.3	Adjusting input shaft	219
2	Output shaft	225
2.1	Assembly overview - output shaft	225
2.2	Dismantling and assembling output shaft	228
2.3	Adjusting output shaft	242
3	Reverse shaft	245
3.1	Assembly overview - reverse shaft	245
3.2	Dismantling and assembling reverse shaft	247
39 - Final drive - differential		251
1	Oil seals	251
1.1	Renewing left oil seal	251
1.2	Renewing right oil seal	254
2	Differential	260
2.1	Assembly overview - differential	260
2.2	Dismantling and assembling differential	262
2.3	Adjusting differential	270
3	Table of adjustments	274