



Contents

00 - Technical data	1
1 Repair instructions	1
1.1 General repair instructions	1
1.2 Contact corrosion	2
2 Rules for cleanliness when working on the gearbox	4
3 Common faults	5
37 - Controls, housing	6
1 ATF purging procedure	6
1.1 Draining ATF (for ATF purging procedure)	8
1.2 Filling up with ATF (for ATF purging procedure)	9
2 Transporting gearbox	13
3 Securing gearbox to engine and gearbox support	14
4 Renewing oil seal for selector shaft	16
5 Removing and installing ATF breather pipe	19
6 ATF leakage in area of gearbox housing, input shaft	21
38 - Gears, control	22
1 Dismantling and assembling gearbox	22
1.1 Gearbox bearings and their designation - overview	22
1.2 Removing and installing end cover (gearbox removed)	23
1.3 Removing and installing automatic gearbox control unit J217	26
1.4 Cleaning selector shaft	30
1.5 Removing and installing hydraulic control unit	31
1.6 Renewing oil seal for input shaft	37
1.7 Removing and installing input shaft	38
1.8 Removing and installing input shaft cover	42
1.9 Renewing bearing "A" in input shaft cover	48
2 Servicing reverse gear clutch	51
2.1 Removing and installing reverse gear clutch	52
2.2 Adjusting reverse gear clutch	53
3 Servicing input shaft with 7 friction plates	63
3.1 Exploded view - input shaft with 7 friction plates	63
3.2 Dismantling and assembling input shaft with 7 friction plates	64
3.3 Adjusting input shaft with 7 friction plates and determining clearance	72
4 Servicing input shaft with 6 friction plates	79
4.1 Exploded view - input shaft with 6 friction plates	79
4.2 Dismantling and assembling input shaft with 6 friction plates	80
4.3 Adjusting input shaft with 6 friction plates and determining clearance	88
5 Exploded view - chain and pulley set "I"	94
5.1 Removing and installing chain and pulley set "I"	96
5.2 Renewing pulley set "I"	107
5.3 Removing and installing bearing "C" for pulley set "I"	111
5.4 Renewing bearings "D" and "E" for pulley set "I"	115
5.5 Removing and installing ATF filter	118
5.6 Removing and installing suction-jet pump	125
39 - Final drive - differential	126
1 Servicing front final drive	126
1.1 Renewing oil seal for flange shaft (left-side)	126
1.2 Renewing oil seal for flange shaft (right-side) and bearing "J"	127



1.3	Renewing oil seal for pinion shaft	131
1.4	Removing and installing flange shaft (left-side)	135
1.5	Removing and installing cover for front final drive	138
1.6	Removing and installing differential	141
2	Assessing wear on gearbox components	142
2.1	Assessing wear on input shaft	142
2.2	Assessing wear on bearings “D”, “E” and “G”	145
2.3	Assessing wear on chain, pulley sets “I” and “II”, bearing “C” and suction-jet pump	147
2.4	Assessing pinion shaft wear	150