



## Contents

<b>00 - Technical data</b>	<b>1</b>
<b>1 Safety information</b>	<b>1</b>
1.1 General safety provisions	1
1.2 Safety measures when working on vehicles with a start/stop system	2
1.3 Notes on tow-starting/towing	2
1.4 Safety precautions when using testers and measuring instruments during a road test	2
<b>2 Identification</b>	<b>4</b>
2.1 Gearbox identification	4
<b>3 Repair instructions</b>	<b>5</b>
3.1 General information	5
3.2 Rules for cleanliness	6
3.3 General repair instructions	6
3.4 Gaskets and seals	7
3.5 Nuts and bolts	8
<b>4 Technical data</b>	<b>9</b>
4.1 Allocation gearbox - engine	9
4.2 Capacities	9
<b>5 Electrical components</b>	<b>11</b>
5.1 Overview of fitting locations - electrical components	11
<b>30 - Clutch</b>	<b>12</b>
<b>1 Clutch</b>	<b>12</b>
1.1 Assembly overview - dual clutch	12
1.2 Removing and installing clutch end cover	13
1.3 Removing dual clutch	18
1.4 Installing dual clutch	21
<b>34 - Controls, housing</b>	<b>32</b>
<b>1 Mechatronic unit</b>	<b>32</b>
1.1 Removing and installing mechatronic unit for dual clutch gearbox J743 (gearbox installed)	32
1.2 Removing and installing gearbox input speed sender G182 and oil temperature sender in multi-plate clutch G509 up to gearbox date 05/15	40
<b>2 Bevel box</b>	<b>42</b>
2.1 Distinguishing between different types of bevel boxes	42
2.2 Removing and installing bevel box	43
2.3 Detaching bevel box from gearbox - gearbox removed	72
<b>3 Selector mechanism</b>	<b>77</b>
3.1 Assembly overview - selector mechanism	77
3.2 Emergency release from position P	79
3.3 Removing and installing selector lever handle	81
3.4 Moving push-button in the handle to installation position	89
3.5 Removing and installing selector mechanism	91
3.6 Removing and installing gear selector cable	100
3.7 Checking selector mechanism	105
3.8 Checking and adjusting selector lever cable	106
3.9 Renewing selector shaft seal	108
<b>4 Removing and installing gearbox</b>	<b>111</b>
4.1 Specified torques for gearbox	111
4.2 Removing gearbox	113
4.3 Installing gearbox	184
<b>5 Assembly mountings</b>	<b>186</b>
5.1 Assembly overview - assembly mountings	186



<b>6</b>	<b>Transporting gearbox</b> .....	<b>190</b>
<b>7</b>	<b>Dismantling and assembling gearbox</b> .....	<b>191</b>
7.1	Assembly overview - gearbox .....	191
<b>8</b>	<b>Securing to engine and gearbox support</b> .....	<b>197</b>
<b>9</b>	<b>Gear oil circuit</b> .....	<b>198</b>
9.1	Removing and installing gear oil cooler .....	198
9.2	Removing and installing gear oil filter .....	200
<b>10</b>	<b>Gear oil</b> .....	<b>203</b>
10.1	Checking gear oil level .....	203
10.2	Draining and filling gear oil .....	205
<b>35 - Gears, shafts</b> .....		<b>211</b>
1	Currently, no repairs can be made to gears and shafts .....	211
<b>39 - Final drive - differential</b> .....		<b>212</b>
<b>1</b>	<b>Gear oil</b> .....	<b>212</b>
1.1	Checking gear oil level .....	212
1.2	Draining and filling gear oil .....	214
<b>2</b>	<b>Oil seals</b> .....	<b>221</b>
2.1	Overview of fitting locations - seals .....	221
2.2	Renewing left seal .....	221
2.3	Renewing right seal .....	225
<b>3</b>	<b>Components of bevel box</b> .....	<b>229</b>
3.1	Assembly overview - components of bevel box .....	229
3.2	Renewing bevel box seals .....	233
3.3	Renewing needle bearing (polygon bearing) for stub shaft .....	254