
















change to	 ECE (A)	Year	77 - 79	76 - 79	77 - 86	79 - 86	76 - 82	79 - 86	
	 US Models	Version	ECE - Models with Mechanical transmission						
	 Japanese Models	Model	728	730	728 i	732 i	733 i	735 i	
Technical Data - Manual Transmission		Unit							
Transmission Survey			Getrag 262 - 4 Speed	x	x			x	
			Getrag 265 - 5 Speed / Overdrive			x	x	x	x
			Getrag 265 - 5 Speed / Sport			x	x	x	x
			Getrag 260/5 - 5 Speed / Overdrive > 9.82			x	x		
			Getrag 260/6 - 5 Speed / Overdrive > 9.85				x		x
23 00 ... Transmission in General			262 4 Speed	265 5 Speed Overdrive	265 5 Speed Sport	260 5 Speed Overdrive	260 5 Speed Sport		
Oil Grade			see Operating Manual Specifications						
Oil Volume			l	1,1	1,6		1,25		
			- after filling or repairing transmission	-	-		1,35		
Ratio			i =	3,855	3,83	3,72	3,83	3,35	
1st gear				<u>38 x 35</u>	<u>34 x 38</u>	<u>38 x 36</u>	<u>34 x 41</u>	<u>32 x 41</u>	
Number of teeth				23 x 15	26 x 13	23 x 16	26 x 14	28 x 14	
			i =	2,203	2,2	2,4	2,2	2,03	
2nd gear				<u>38 x 28</u>	<u>34 x 32</u>	<u>38 x 32</u>	<u>34 x 37</u>	<u>32 x 39</u>	
Number of teeth				23 x 21	26 x 19	23 x 22	26 x 22	28 x 22	
			i =	1,402	1,4	1,77	1,4	1,36	
3rd gear				<u>38 x 28</u>	<u>34 x 31</u>	<u>38 x 31</u>	<u>34 x 30</u>	<u>32 x 31</u>	
Number of teeth				23 x 33	26 x 29	23 x 29	26 x 28	28 x 26	
			i =	1	1	1,26	1	1	
4th gear				-	-	<u>38 x 26</u>	-	-	
Number of teeth						23 x 24			
			i =	-	0,81	1	0,81	0,81	
5th gear				-	<u>34 x 23</u>	-	<u>34 x 26</u>	<u>32 x 27</u>	
Number of teeth					26 x 37		26 x 42	28 x 38	
			i =	4,3	3,46	4,23	3,46	3,02	
Reverse gear				<u>38 x 16 x 39</u>	<u>34 x 19 x 34</u>	<u>38 x 16 x 41</u>	<u>34 x 21 x 37</u>	<u>32 x 21 x 37</u>	
Number of teeth				23 x 15 x 16	26 x 12 x 19	23 x 16 x 16	23 x 14 x 21	28 x 14 x 21	
			i =	2,5			-		
Speedometer drive				<u>10</u>			-		
Number of teeth				4					




change to	 ECE (A)	Year	77 - 79	76 - 79	77 - 86	79 - 86	76 - 82	79 - 86
	 US Models	Version	ECE - Models with Mechanical transmission					
	 Japanese Models	Model	728	730	728 i	732 i	733 i	735 i
Technical Data	- Manual Transmission	Unit						
Transmission Survey	Getrag 262 - 4 Speed		x	x			x	
	Getrag 265 - 5 Speed / Overdrive				x	x	x	x
	Getrag 265 - 5 Speed / Sport				x	x	x	x
	Getrag 260/5 - 5 Speed / Overdrive > 9.82				x	x		
	Getrag 260/6 - 5 Speed / Overdrive > 9.85					x		x
23 00 ... Transmission in General			262 4 Speed	265 5 Speed Overdrive	265 5 Speed Sport	260 5 Speed Overdrive	260 5 Speed Sport	
23 11...Case and Cover								
Temperature for installation of bearings	°C		80					
23 21... Transmission Shafts								
Axial play (axial bearing clearance) of:								
Output shaft	mm		0 ... 0,09					
Input shaft	mm		0 ... 0,09					
Layshaft			0,1 ... 0,2			0,13 ... 0,23		
Output shaft drive pinion								
- radial runout	mm		0,07					
Output flange								
- radial runout	mm		0,07					
- axial runout	mm		0,1					
23 22...Gears (Layshaft)								
Pressing off force	3rd gear	kN	98,1	49 ... 69		-		
	at temperature	°C	20					
	4th gear	kN	98,1	49 ... 69		-		
	at temperature	°C	20					
	5th gear	kN	-	88 ... 98		54 ... 67		
	at temperature	°C	-	20		120		
Pressing on force	3rd gear	kN	57 ... 69	49 ... 54		-		
	at temperature	°C	120,0	180		-		
	4th gear	kN	57 ... 69	49 ... 54		-		
	at temperature	°C	120,0	180		-		
	5th gear	kN	-	49 ... 57		48 ... 67		
	at temperature	°C	-	180		120		




change to	 ECE (A)	Year	77 - 79	76 - 79	77 - 86	79 - 86	76 - 82	79 - 86	
	 US Models	Version	ECE - Models with Mechanical transmission						
	 Japanese Models	Model	728	730	728 i	732 i	733 i	735 i	
Technical Data - Manual Transmission		Unit							
Transmission Survey	Getrag 262 - 4 Speed		x	x				x	
	Getrag 265 - 5 Speed / Overdrive				x	x	x	x	
	Getrag 265 - 5 Speed / Sport				x	x	x	x	
	Getrag 260/5 - 5 Speed / Overdrive > 9.82				x	x			
	Getrag 260/6 - 5 Speed / Overdrive > 9.85						x		x
23 00 ... Transmission in General			262 4 Speed	265 5 Speed Overdrive	265 5 Speed Sport	260 5 Speed Overdrive	260 5 Speed Sport		
23 23...Synchronization									
Distance between synchromesh ring an clutch body			1,0 ... 1,3						
	New condition	mm							
	Max. wear limit	mm	0,8						
Reverse gear	New condition	mm	-	0,5 ... 0,6					
	Max. wear limit	mm	-	0,4					
23 23...Guide Sleeves									
Pressing off force	1st / 2nd and 5th / Reverse. gear	kN	-			36			
	3rd / 4th gear	kN	-			29,5			
Pressing on force	1st / 2nd and 5th / Reverse. gear	kN	-			24,5			
	3rd / 4th gear	kN	-			20,6			
23 31...Interior Shift Parts									
Shift fork guide width	1st ÷ 5th gear	mm	4,8						




change to		ECE	Year	77 - 79	76 - 79	77 - 86	79 - 86	76 - 82	79 - 86	79 - 86
		US Models	Version	ECE - Models with Automatic transmission						
		Japanese Models	Model	728 A	730 A	728 i A	732 i A	733 i A	735 i A	745 i A
Technical Data	- Manual Transmission		Unit							

no mechanical transmission

change to		ECE	Year	77 - 84	84 - 86			
		ECE (A)	Version	US - Models				
		Japanese Models	Model	733 i	735 i			
Technical Data - Manual Transmission		Unit						
Transmission Survey		Getrag 262 - 4 Speed		x				
		Getrag 265 - 5 Speed / Overdrive		x	x			
		Getrag 265 - 5 Speed / Sport		x	x			
		Getrag 260/6 - 5 Speed / Overdrive > 9.85			x			
23 00 ... Transmission in General				262 4 Speed	265 5 Speed Overdrive	265 5 Speed Sport	260 5 Speed Overdrive	
Oil Grade			see Operating Manual Specifications					
Oil Volume		l	1,1	1,6		1,25		
		- after filling or repairing transmission	-	-		1,35		
Ratio		i =	3,855	3,83	3,72	3,83		
1st gear			<u>38 x 35</u>	<u>34 x 38</u>	<u>38 x 36</u>	<u>34 x 41</u>		
Number of teeth			23 x 15	26 x 13	23 x 16	26 x 14		
2nd gear		i =	2,203	2,2	2,4	2,2		
Number of teeth			<u>38 x 28</u>	<u>34 x 32</u>	<u>38 x 32</u>	<u>34 x 37</u>		
			23 x 21	26 x 19	23 x 22	26 x 22		
3rd gear		i =	1,402	1,4	1,77	1,4		
Number of teeth			<u>38 x 28</u>	<u>34 x 31</u>	<u>38 x 31</u>	<u>34 x 30</u>		
			23 x 33	26 x 29	23 x 29	26 x 28		
4th gear		i =	1	1	1,26	1		
Number of teeth			-	-	<u>38 x 26</u>	-		
					23 x 24			
5th gear		i =	-	0,81	1	0,81		
Number of teeth			-	<u>34 x 23</u>	-	<u>34 x 26</u>		
				26 x 37		26 x 42		
Reverse gear		i =	4,3	3,46	4,23	3,46		
Number of teeth			<u>38 x 16 x 39</u>	<u>34 x 19 x 34</u>	<u>38 x 16 x 41</u>	<u>34 x 21 x 37</u>		
			23 x 15 x 16	26 x 12 x 19	23 x 16 x 16	23 x 14 x 21		
Speedometer drive		i =		2,5		-		
Number of teeth				<u>10</u>		-		
				4				

change to	 ECE	Year	77 - 84	84 - 86		
	 ECE (A)	Version	US - Models			
	 Japanese Models	Model	733 i	735 i		
Technical Data - Manual Transmission		Unit				
Transmission Survey	Getrag 262 - 4 Speed		x			
	Getrag 265 - 5 Speed / Overdrive		x	x		
	Getrag 265 - 5 Speed / Sport		x	x		
	Getrag 260/6 - 5 Speed / Overdrive > 9.85			x		
23 00 ... Transmission in General			262 4 Speed	265 5 Speed Overdrive	265 5 Speed Sport	260 5 Speed Overdrive
23 11...Case and Cover						
Temperature for installation of bearings		°C	80			
23 21... Transmission Shafts						
Axial play (axial bearing clearance) of:						
Output shaft		mm	0 ... 0,09			
Input shaft		mm	0 ... 0,09			
Layshaft			0,1 ... 0,2		0,13 ... 0,23	
Output shaft drive pinion						
- radial runout		mm	0,07			
Output flange						
- radial runout		mm	0,07			
- axial runout		mm	0,1			
23 22...Gears (Layshaft)						
Pressing off force	3rd gear	kN	98,1	49 ... 69	-	
	at temperature	°C	20			
	4th gear	kN	98,1	49 ... 69	-	
	at temperature	°C	20			
	5th gear	kN	-	88 ... 98	54 ... 67	
	at temperature	°C	-	20	120	
Pressing on force	3rd gear	kN	57 ... 69	49 ... 54	-	
	at temperature	°C	120,0	180	-	
	4th gear	kN	57 ... 69	49 ... 54	-	
	at temperature	°C	120,0	180	-	
	5th gear	kN	-	49 ... 57	48 ... 67	
	at temperature	°C	-	180	120	

change to	 ECE	Year	77 - 84	84 - 86		
	 ECE (A)	Version	US - Models			
	 Japanese Models	Model	733 i	735 i		
Technical Data	- Manual Transmission		Unit			
Transmission Survey	Getrag 262 - 4 Speed		x			
	Getrag 265 - 5 Speed / Overdrive		x	x		
	Getrag 265 - 5 Speed / Sport		x	x		
	Getrag 260/6 - 5 Speed / Overdrive > 9.85			x		
23 00 ... Transmission in General			262 4 Speed	265 5 Speed Overdrive	265 5 Speed Sport	260 5 Speed Overdrive
23 23...Synchronization						
Distance between synchromesh ring and clutch body						
	New condition	mm	1,0 ... 1,3			
	Max. wear limit	mm	0,8			
Reverse gear	New condition	mm	-	0,5 ... 0,6		
	Max. wear limit	mm	-	0,4		
23 23...Guide Sleeves						
Pressing off force	1st / 2nd and 5th / Reverse. gear	kN	-			36
	3rd / 4th gear	kN	-			29,5
Pressing on force	1st / 2nd and 5th / Reverse. gear	kN	-			24,5
	3rd / 4th gear	kN	-			20,6
23 31...Interior Shift Parts						
Shift fork guide width	1st ÷ 5th gear	mm	4,8			

change to		ECE	Year	78 - 84	84 - 86	84 - 86
		ECE (A)	Version	Japanese Models		
		US Models	Model	733 i A	735 i A	745 i A
Technical Data	- Manual Transmission		Unit			

no mechanical transmission



Service-Information BMW Automobile



Service-Information BMW Automobile



Service-Information BMW Automobile

All Service Informations are saved in german language, please find them in the german manual.

Tightening Torques		Nm		mkp	
		from	to	from	to
Manual Transmission					
23 00 ... Transmission Assembly					
Transmission to engine			25		2,5
Hexagon head bolts	M 10		49		4,9
	M 12		74		7,4
Torx bolts	M 8		22		2,2
	M 10		43		4,3
	M 12		72		7,2
Transmission to clutch housing	M 12		76		7,6
Reinforcement plate to transmission	M 8		23		2,3
Oil drain plug/ Filler plug			50		5
23 11 ... Case and Covers					
Transmission case rear/ front sections			22		2,2
Cover with guide tube / transmission case	M 8 x 22		18		1,8
	M 8 x 30		25		2,5
	M 6		10		1
Bearing cap/ sealing flange			10,5		1,05
Reverse gear shaft to transfer case			49		4,9
Reverse gear shaft holder to transfer case			25		2,5
Reverse gear shaft to case	M 8		25		2,5
	M 10		45		4,5
Support for reverse gear shaft (260)			25		2,5
Mount bracket to rear case section (260 / 265 / 280)			10		1
Mounting tabs for sealing cover (280)	M 6		10		1
Mount to layshaft(installed with bolt cement (280)	M 10		60		6
	M 20		60		6
Plug on rear case section	M 22		60		6
	M 6		10		1
Sealing caps on rear case section			10		1
Reversing bolt to reversing lever		ZF-S5-16	43		4,3
Clamping claws to rear case section		ZF-S5-16	33		3,3
Locking plate screws		ZF-S5-16	9		0,9
Holder to transfer case (265/Sport)	M6		9		0,9

Tightening Torques		Nm		mkp	
		from	to	from	to
Manual Transmission					
23 21 ... Transmission Shafts					
Output flange (Collar nut installed with bolt cement)		1st 170 (17) Initial torque / 2nd loosen 3rd 120 (12) final torque			
Gear wheel to layshaft	(265/Sport) 10	60		6	
23 71 ... Transmission Suspension					
Transmission mounts (rubber) to cross member	M 10	42		4,2	
Transmission cross member to body	M 10	42		4,2	
	M 8	21		2,1	
Mount bracket to transmission	M 8	21		2,1	