

ZF S5-31



Manual Transmission Spare Parts Catalog



Warranty Information

Warranty coverage for ZF passenger car transmission spare parts and kits covers the first 12 months after installation in the vehicle, or 24 months after purchase from ZF Industries, Inc.

Warranty of the product is limited to replacement or repair, if found to be defective in ZF material or workmanship, and specifically does not cover removal, reinstallation, or any costs incidental to the repair of the vehicle, or any kind of consequential damages.

All warranty and/or non-warranty returns must be approved.

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S5-31 Transmissions (North American Applications)

Make	Model	Style	Model Year	From – Up to	Code	BMW Part #	ZF Part #
BMW	325xi	E46 Sedan	2000 –		HCG	23 00 1 434 653	1053 030 139
BMW	325xi	E46 Touring	2000 –		HCG	23 00 1 434 653	1053 030 139
BMW	328Ci	E46 Coupe	1998 – 2000		HMW	23 00 1 434 408	1053 030 130
BMW	328i	E36 Convertible	1996 – 1999	06/96 –	HMW	23 00 1 434 408	1053 030 130
			1996 – 1997	06/96 – 09/97	HMU	23 00 1 434 304	1053 030 107
			1994 – 1996	– 06/96	HDU	23 00 1 222 982	1053 030 086
BMW	328i	E36 Coupe	1996 – 1999	06/96 –	HMW	23 00 1 434 408	1053 030 130
			1996 – 1997	06/96 – 09/97	HMU	23 00 1 434 304	1053 030 107
			1994 – 1996	– 06/96	HDU	23 00 1 222 982	1053 030 086
BMW	328i	E36 Sedan	1996 – 1998	06/96 –	HMW	23 00 1 434 408	1053 030 130
			1996 – 1997	06/96 – 09/97	HMU	23 00 1 434 304	1053 030 107
			1995 – 1996	– 06/96	HDU	23 00 1 222 982	1053 030 086
BMW	328i	E46 Sedan	1997 – 2000		HMW	23 00 1 434 408	1053 030 130
BMW	330Ci	E46 Convertible	1999 –		HCH	23 00 7 502 749	1053 030 147
BMW	330Ci	E46 Coupe	1999 –		HCH	23 00 7 502 749	1053 030 147
BMW	330i	E46 Sedan	1999 –		HCH	23 00 7 502 749	1053 030 147
BMW	330xi	E46 Sedan	1999 –		HCG	23 00 1 434 653	1053 030 139
BMW	525i	E34 Sedan (M50)	1990 – 1992	– 07/92	HDU	23 00 1 222 982	1053 030 086
			1990 – 1992	– 07/92	HDM	23 00 1 222 262	1053 030 045
			1990 – 1992	– 01/92	HDL	23 00 1 221 658	1053 030 041
			1990 – 1992	– 11/91	HDJ	23 00 1 222 060	1053 030 035
BMW	525i	E39 Touring (M52)	2000 –		HCH	23 00 7 502 749	1053 030 147
BMW	528i	E39 Sedan (M52)	1996 – 2000	06/96 –	HMW	23 00 1 434 408	1053 030 130
			1996 – 1997	06/96 – 09/97	HMU	23 00 1 434 304	1053 030 107
			1995 – 1996	– 06/96	HDU	23 00 1 222 982	1053 030 086
BMW	528i	E39 Touring (M52)	1998 – 2000		HMW	23 00 1 434 408	1053 030 130
BMW	530i	E34 Sedan (M60)	1992 – 1995		HDY	23 00 1 222 995	1053 030 090
			1992 – 1995	– 09/95	HDG	23 00 1 221 646	1053 030 037
BMW	530i	E39 Sedan (M52)	2000 –		HCH	23 00 7 502 749	1053 030 147
BMW	M3	E36 Coupe	1993 – 1996		HMW	23 00 1 434 408	1053 030 130
BMW	M3 3.2	E36 Convertible	1997 – 1999		HMW	23 00 1 434 408	1053 030 130
BMW	M3 3.2	E36 Coupe	1995 – 1999		HMW	23 00 1 434 408	1053 030 130
BMW	M3 3.2	E36 Sedan	1996 – 1998		HMW	23 00 1 434 408	1053 030 130
			1996 – 1997	– 09/97	HOR	23 00 1 222 683	1053 030 056
BMW	X5 3.0xi	E53 SAV	1999 –		HCA	23 00 1 434 521	1053 030 138
BMW	Z3 2.8	Z3 Coupe	1998 – 1999		HMW	23 00 1 434 408	1053 030 130
BMW	Z3 2.8	Z3 Roadster	1996 – 2000		HMW	23 00 1 434 408	1053 030 130
			1996 – 1997	– 09/97	HMU	23 00 1 434 304	1053 030 107
BMW	Z3 3.0i	Z3 Coupe	1999 –		HCH	23 00 7 502 749	1053 030 147
BMW	Z3 3.0i	Z3 Roadster	1999 –		HCH	23 00 7 502 749	1053 030 147
BMW	Z3 M3.2	Z3 Coupe (S52)	1997 – 2000		HMW	23 00 1 434 408	1053 030 130
BMW	Z3 M3.2	Z3 Coupe (S54)	2000 –		HCH	23 00 7 502 749	1053 030 147
BMW	Z3 M3.2	Z3 Roadster (S52)	1997 – 2000		HMW	23 00 1 434 408	1053 030 130
BMW	Z3 M3.2	Z3 Roadster (S54)	2000 –		HCH	23 00 7 502 749	1053 030 147

Note: This spare parts catalog includes only transmission part numbers 1053 030 086, 1053 030 107, 1053 030 130, and 1053 030 147. For all other S5-31 transmission part numbers, please contact your preferred S5-31 manual transmission distributor for more information about available spare parts and kits.

S5-31 transmissions do not have type plates. For identification please use the stamped three-letter code.



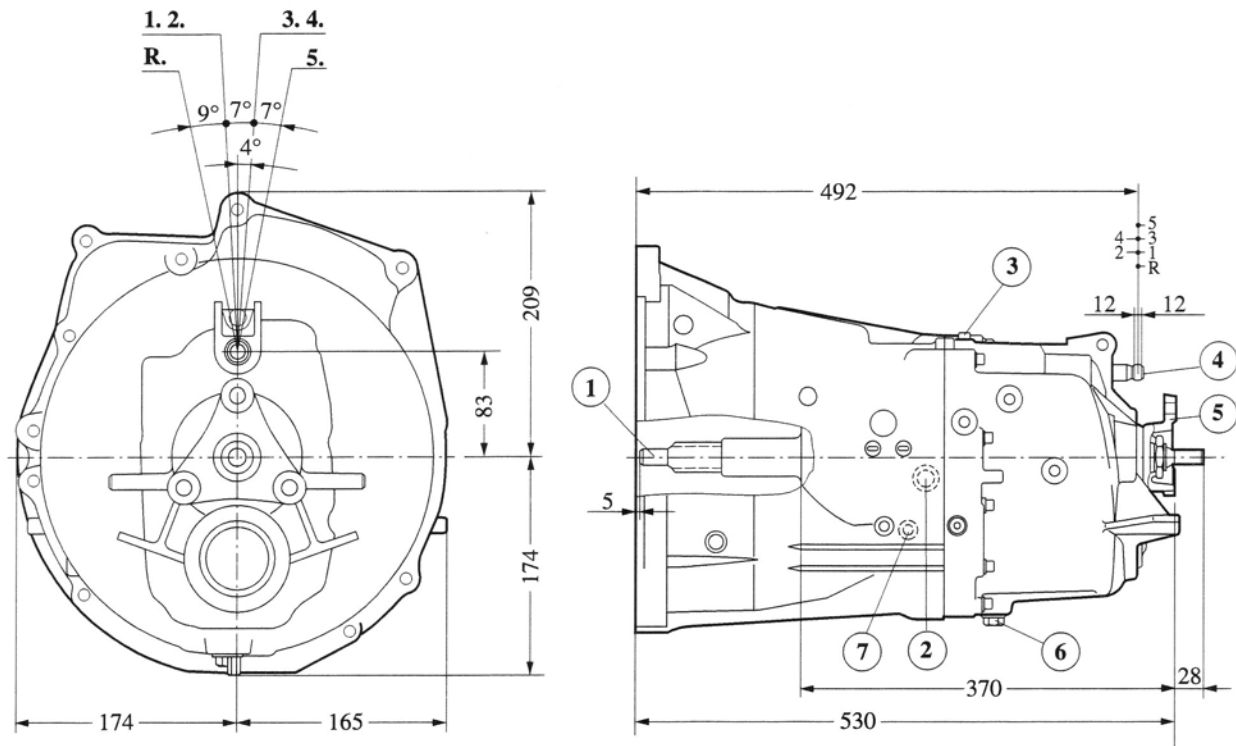
S5-31 Technical Information

Gear Ratios

Input Torque	1 st Gear	2 nd Gear	3 rd Gear	4 th Gear	5 th Gear	Rev Gear	Mass	Oil Capacity
280 Nm	5.09	2.80	1.76	1.25	1.00	4.71	~39 Kg (86 lbs.)	1.30 Liter (1.38 quart)
280 Nm	4.21	2.49	1.67	1.24	1.00	3.85	~35 Kg (77 lbs.)	1.30 Liter (1.38 quart)
340 Nm	4.21	2.49	1.67	1.24	1.00	3.85	~35 Kg (77 lbs.)	1.30 Liter (1.38 quart)

The recommended **long-life** oil for S5-31 transmissions is ESSO MTF LT1 (BMW Part # 83 22 9 408 942). Dexron III can also be used, but is not recommended as long-life oil (see also ZF lubrication list TE-ML 11).

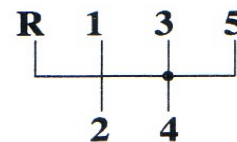
Installation Drawing



Description

- ① Input shaft (Pos. 02.010)
- ② Backup Switch (BMW Part)
- ③ Breather (Pos. 01.200/120)
- ④ Shifter Connection (Pos. 06.300)
- ⑤ Output Flange (Pos. 04.200)
- ⑥ Drain Plug (Pos. 01.250)
- ⑦ Fill Plug (Pos. 01.070)

Shift Pattern

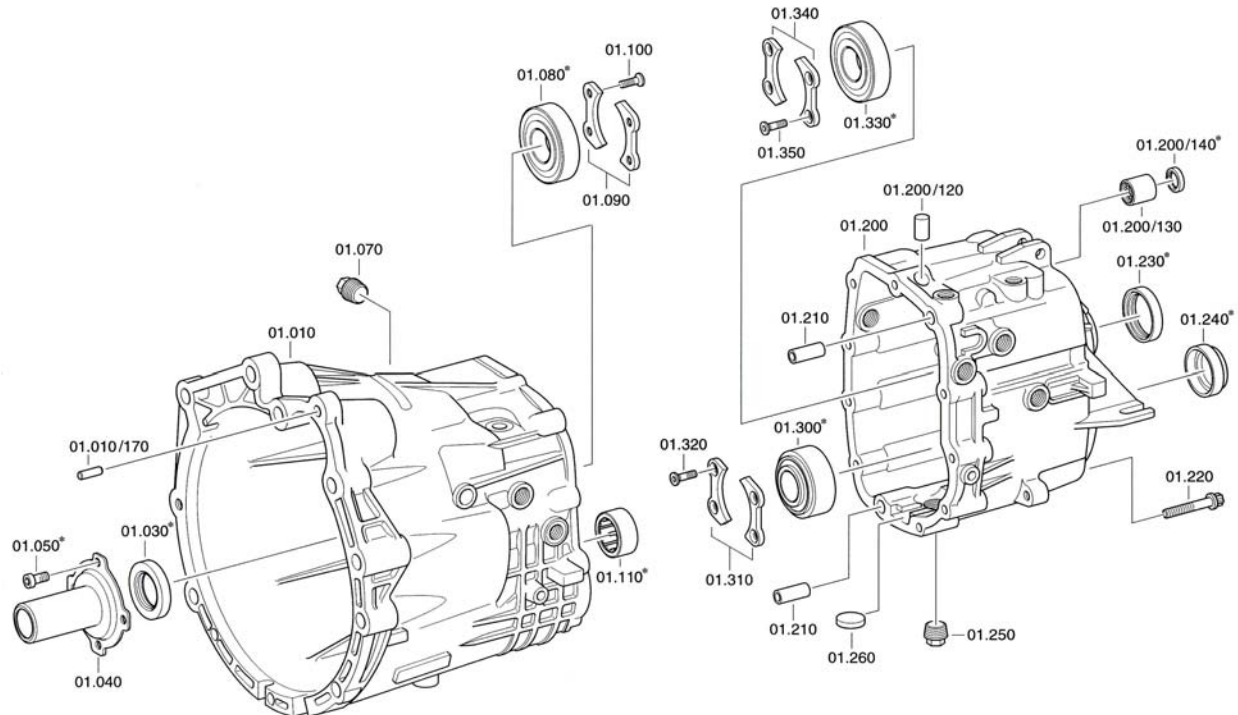


Note: Measurements in mm.



S5-31 Spare Parts - Gearbox Housing Group

Pos #	ZF Part #	Description	Qty	Where used (1053 030 ___)	Notes
01.010	1053 201 014	Main Housing	1	086	
	1053 201 061	Main Housing	1	107/130	
	1053 201 065	Main Housing	1	147	
01.010/170	0631 306 123	Cylindrical Pin M6x24	1	086/107/130/147	
01.030	0770 198 157	Shaft Seal 35x64x9	1	086/107/130/147	* Available in kit 1053 298 001
01.040	1053 301 080	Guide Tube	1	086/107/130/147	
01.050	0736 101 384	Cap Screw M6x12	4	086/107/130/147	* Available in kit 1053 298 001
01.070	0770 001 019	Screw Plug M24x1.5	1	086/107/130/147	
01.080	0770 197 024	Ball Bearing 35x80x20	1	086/107/130/147	* Available in kit 1053 298 003
					* Available in kit 1053 298 004
01.090	1053 301 071	Segment	2	086/107/130/147	
01.100	0636 900 256	Torx Screw M6x16	4	086/107/130/147	
01.110	0735 298 157	Roller Bush 27x44x23.2	1	147	* Available in kit 1053 298 004
	0770 197 025	Roller Bush 25x44x20.7	1	086/107/130	* Available in kit 1053 298 003
01.200	1053 201 064	Rear Housing	1	086/107/130/147	
01.200/120	1053 301 160	Sleeve	1	086/107/130/147	

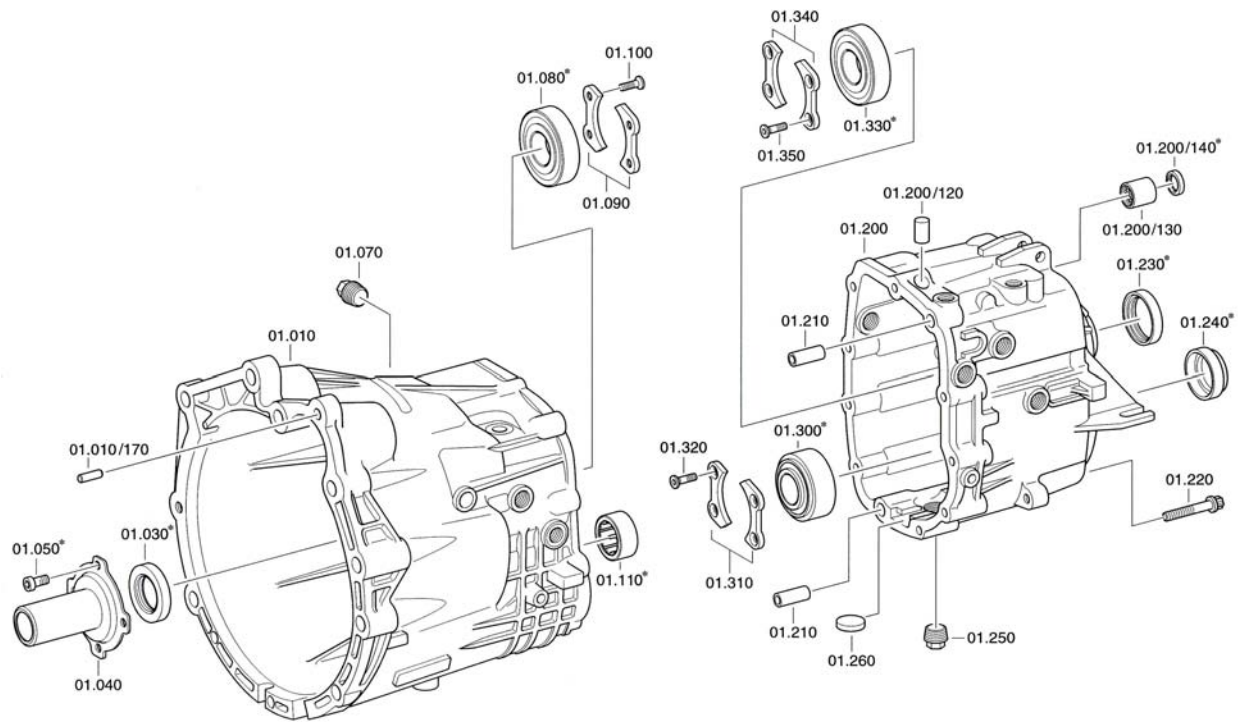


Note: Parts marked with * are only available in kits.



S5-31 Spare Parts - Gearbox Housing Group (continued)

Pos #	ZF Part #	Description	Qty	Where used (1053 030 ___)	Notes
01.200/130	0750 115 551	Ball Sleeve 15x21x27	1	086/107/130/147	
01.200/140	0770 198 159	Shaft Seal 15x21x7	1	086/107/130/147	* Available in kit 1053 298 001
01.210	0770 035 359	Bush 8.5x12x32	2	086/107/130/147	
01.220	0770 002 066	Screw M8x55	11	086/107/130/147	
01.230	0770 198 158	Shaft Seal 40x52x9	1	086/107/130/147	* Available in kit 1053 298 001
01.240	0770 196 093	Cover	1	086/107/130/147	* Available in kit 1053 298 001
01.250	0770 001 019	Screw Plug M24x1.5	1	086/107/130/147	
01.260	1048 301 010	Magnet	1	086/107/130/147	
01.300	0770 197 030	Ball Bearing 30x67x31	1	086/107/130/147	* Available in kit 1053 298 003 * Available in kit 1053 298 004
01.310	1053 301 071	Segment	2	086/107/130/147	
01.320	0636 900 256	Torx Screw M6x16	4	086/107/130/147	
01.330	0770 197 029	Ball Bearing 30x80x20	1	086/107/130/147	* Available in kit 1053 298 003 * Available in kit 1053 298 004
01.340	1053 301 071	Segment	2	086/107/130/147	
01.350	0636 900 256	Torx Screw M6x16	4	086/107/130/147	

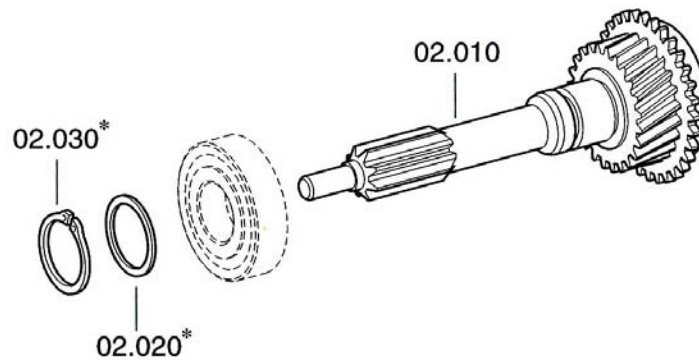


Note: Parts marked with * are only available in kits.



S5-31 Spare Parts – Input Shaft Group

Pos #	ZF Part #	Description	Qty	Where used (1053 030 ___)	Notes
02.010	1053 202 027	Input Shaft	1	086/107/130/147	
02.020	0770 035 451	Shim 35x45x1.70	1	086/107/130/147	* Available in kit 1053 298 007
	0770 035 453	Shim 35x45x1.80	1	086/107/130/147	* Available in kit 1053 298 007
	0770 035 455	Shim 35x45x1.90	1	086/107/130/147	* Available in kit 1053 298 007
	0770 035 457	Shim 35x45x2.00	1	086/107/130/147	* Available in kit 1053 298 007
02.030	0770 069 679	Retaining Ring 35x2.5	1	086/107/130/147	* Available in kit 1053 298 001

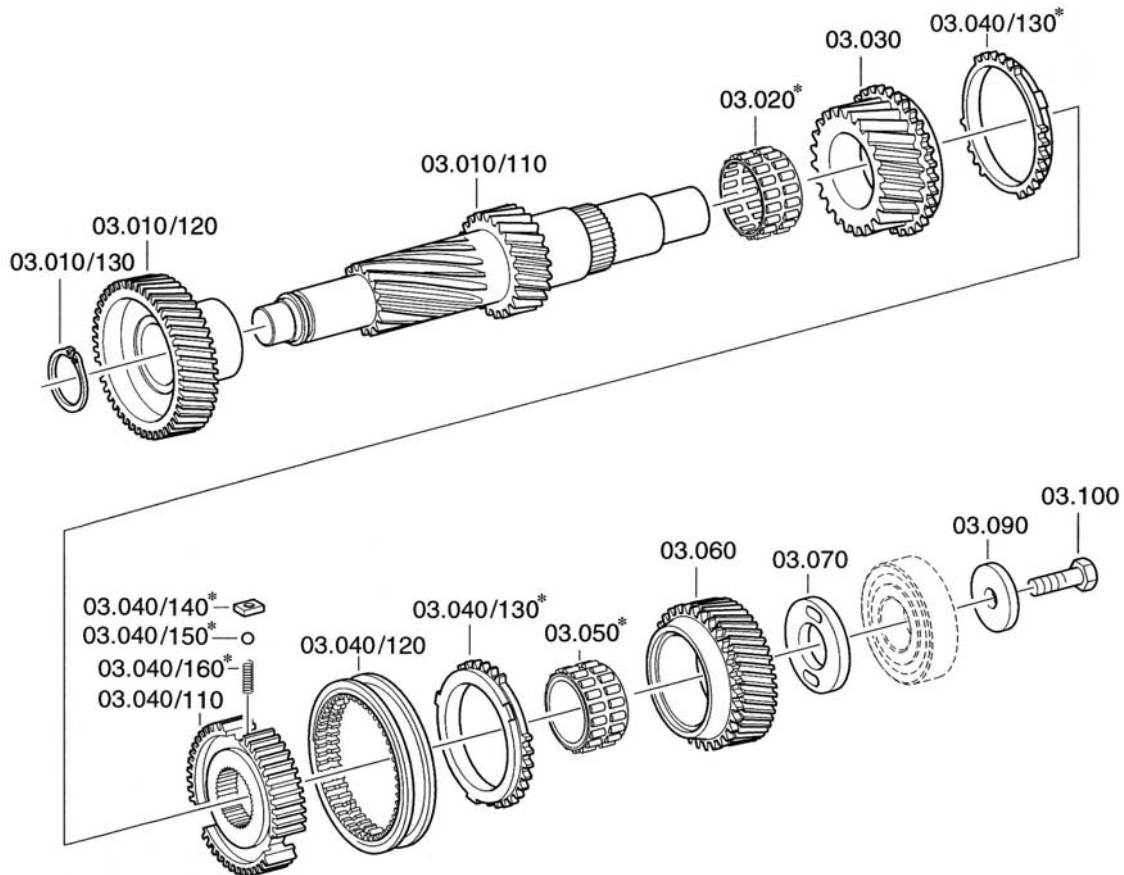


Note: Parts marked with * are only available in kits.



S5-31 Spare Parts – Countershaft Group

Pos #	ZF Part #	Description	Qty	Where used (1053 030 ___)	Notes
03.010/110	1053 303 189	1/2/Rev Countershaft	1	086/107/130	
	1053 303 190	1/2/Rev Countershaft	1	147	
03.010/120	1053 303 145	5th Counter Gear	1	086/107/130/147	
03.010/130	0630 531 251	V-Ring	1	086/107/130/147	
03.020	0770 197 032	Needle Cage 46x51x34	1	086/107/130/147	* Available in kit 1053 298 005
03.030	1053 203 063	3rd Speed Gear (CS)	1	086/107/130/147	
03.040/110	0750 142 004	3/4 Synchronizer Body	1	086/107/130/147	
03.040/120	1053 303 175	3/4 Sliding Sleeve	1	086/107/130/147	
03.040/130	1053 303 139	3/4/5 Synchronizer Ring	2	086/107/130/147	* Available in kit 1053 298 002
03.040/140	1053 303 127	Pressure Piece	3	086/107/130/147	* Available in kit 1053 298 006
03.040/150	0635 460 006	Ball 5mm	3	086/107/130/147	* Available in kit 1053 298 006
03.040/160	0770 060 784	Compression Spring	3	086/107/130/147	* Available in kit 1053 298 006
03.050	0770 197 031	Needle Cage 38x51x34	1	086/107/130/147	* Available in kit 1053 298 005
03.060	1053 203 064	4th Speed Gear (CS)	1	086/107/130/147	
03.070	0730 106 994	Washer 30.3x61x5.05	1	086/107/130/147	
03.090	0730 106 999	Washer 10.5x42x5	1	086/107/130/147	
03.100	0736 020 125	Screw M10x1.25	1	086/107/130/147	

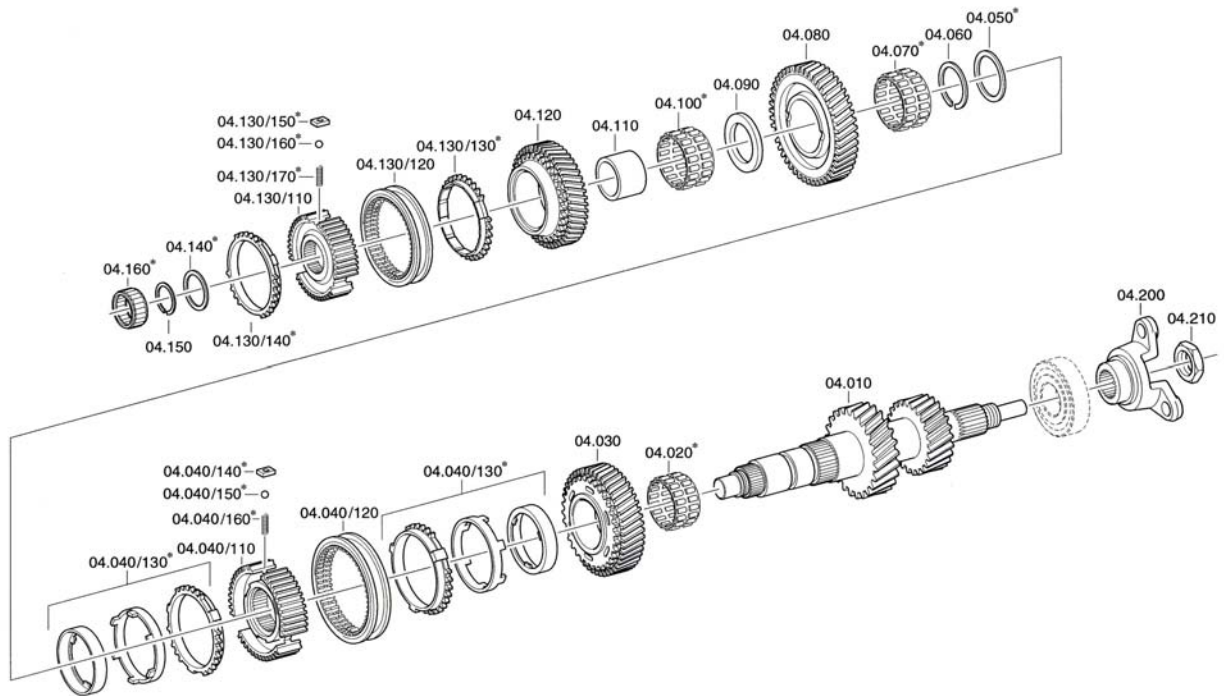


Note: Parts marked with * are only available in kits.



S5-31 Spare Parts – Main Shaft Group

Pos #	ZF Part #	Description	Qty	Where used (1053 030 ___)	Notes
04.010	1053 304 229	Main Shaft	1	086/107/130/147	
04.020	0770 197 028	Needle Cage 50x55x32	1	086/107/130/147	* Available in kit 1053 298 005
04.030	1053 204 085	2nd Speed Gear	1	086/107/130/147	
04.040/110	0750 142 003	1/2 Synchronizer Body	1	086/107/130/147	
04.040/120	1053 304 262	1/2 Sliding Sleeve	1	086/107/130/147	
04.040/130	1053 204 114	1/2 Synchronizer Set	2	086/107/130/147	* Available in kit 1053 298 002
04.040/140	1053 303 127	Pressure Piece	3	086/107/130/147	* Available in kit 1053 298 006
04.040/150	0635 460 006	Ball 5mm	3	086/107/130/147	* Available in kit 1053 298 006
04.040/160	0770 060 784	Compression Spring	3	086/107/130/147	* Available in kit 1053 298 006
04.050	0730 002 121	Shim 45x53x2.20	1	086/107/130/147	* Available in kit 1053 298 007
	0730 002 122	Shim 45x53x2.00	1	086/107/130/147	* Available in kit 1053 298 007
	0730 004 201	Shim 45x53x1.60	1	086/107/130/147	* Available in kit 1053 298 007
	0730 004 203	Shim 45x53x1.70	1	086/107/130/147	* Available in kit 1053 298 007
	0730 004 205	Shim 45x53x1.80	1	086/107/130/147	* Available in kit 1053 298 007
	0730 004 207	Shim 45x53x1.90	1	086/107/130/147	* Available in kit 1053 298 007
	0730 004 210	Shim 45x53x2.10	1	086/107/130/147	* Available in kit 1053 298 007
04.060	0730 513 406	Snap Ring 41.5x49.5x2.4	1	086/107/130/147	
04.070	0750 115 453	Needle Cage 45x53x30	1	086/107/130/147	* Available in kit 1053 298 005
04.080	1053 204 105	1st Speed Gear	1	086/107/130/147	
04.090	0770 035 200	Washer 41x63x4.5	1	086/107/130/147	
04.100	0770 197 027	Needle Cage 45x53x30	1	086/107/130/147	* Available in kit 1053 298 005

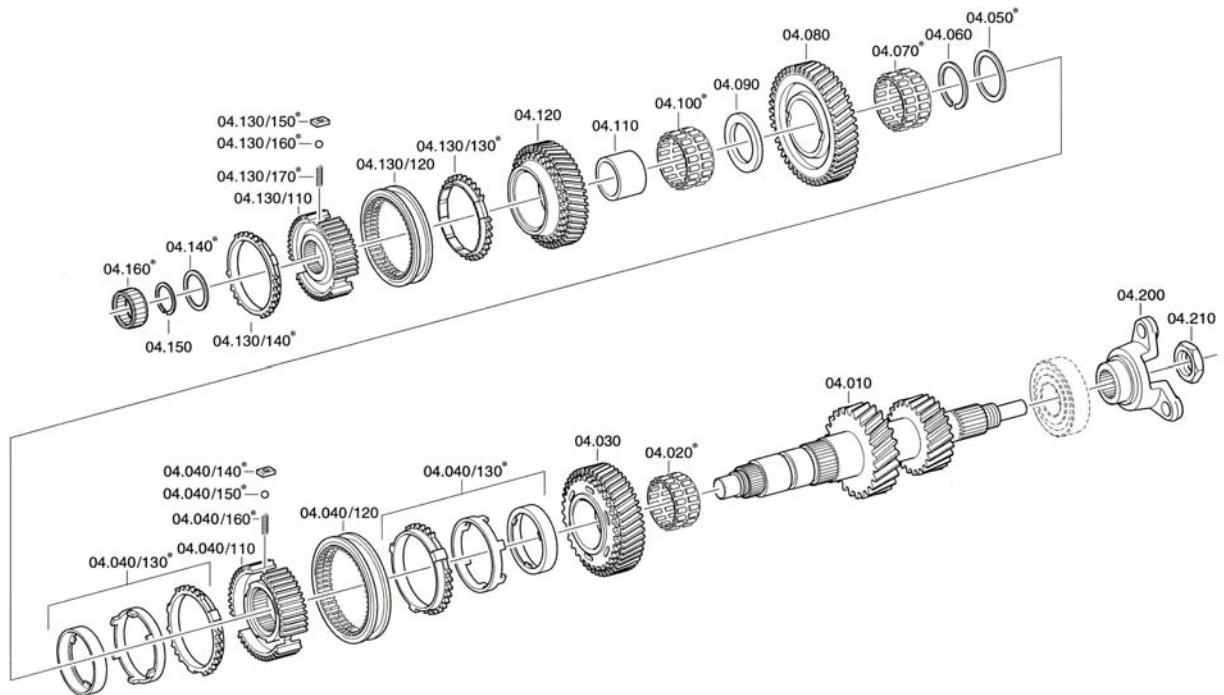


Note: Parts marked with * are only available in kits.



S5-31 Spare Parts – Main Shaft Group (continued)

Pos #	ZF Part #	Description	Qty	Where used (1053 030)	Notes
04.110	0770 029 089	Internal Ring 40.7X45X30.05	1	086/107/130/147	
04.120	1053 204 106	Reverse Gear, MS	1	086/107/130/147	
04.130/110	0750 142 005	5/R Synchronizer Body	1	086/107/130/147	
04.130/120	1053 304 263	5/R Sliding Sleeve	1	086/107/130/147	
04.130/130	1053 304 222	Rev Synchronizer Ring	1	086/107/130/147	* Available in kit 1053 298 002
04.130/140	1053 303 139	3/4/5 Synchronizer Ring	1	086/107/130/147	* Available in kit 1053 298 002
04.130/150	1053 303 127	Pressure Piece	3	086/107/130/147	* Available in kit 1053 298 006
04.130/160	0635 460 006	Ball 5mm	3	086/107/130/147	* Available in kit 1053 298 006
04.130/170	0770 060 784	Compression Spring	3	086/107/130/147	* Available in kit 1053 298 006
04.140	0770 034 951	Shim 27.5x43.6x3.70	1	086/107/130/147	* Available in kit 1053 298 007
	0770 034 953	Shim 27.5x43.6x3.80	1	086/107/130/147	* Available in kit 1053 298 007
	0770 034 955	Shim 27.5x43.6x3.90	1	086/107/130/147	* Available in kit 1053 298 007
	0770 034 957	Shim 27.5x43.6x4.00	1	086/107/130/147	* Available in kit 1053 298 007
	0770 035 377	Shim 27.5x43.6x3.60	1	086/107/130/147	* Available in kit 1053 298 007
	0770 035 379	Shim 27.5x43.6x3.50	1	086/107/130/147	* Available in kit 1053 298 007
	0770 035 478	Shim 27.5x43.6x4.10	1	086/107/130/147	* Available in kit 1053 298 007
	0770 035 480	Shim 27.5x43.6x4.20	1	086/107/130/147	* Available in kit 1053 298 007
04.150	0730 513 405	Snap Ring 25.5x32.9x2.4	1	086/107/130/147	
04.160	0770 197 023	Roller Cage 23x38x20	1	086/107/130/147	* Available in kit 1053 298 003 * Available in kit 1053 298 004
04.200	1053 304 269	Output Flange	1	086/107/130/147	
04.210	1047 304 038	Collar Nut	1	086/107/130/147	

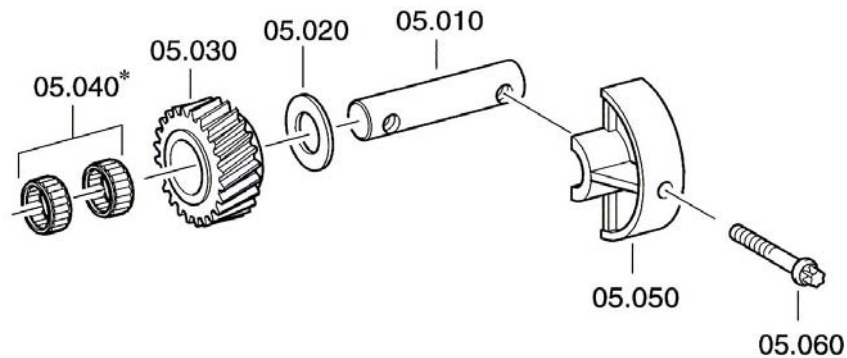


Note: Parts marked with * are only available in kits.



S5-31 Spare Parts – Reverse Idler Group

Pos #	ZF Part #	Description	Qty	Where used (1053 030 ___)	Notes
05.010	1053 305 014	Reverse Idler Shaft	1	086/107/130/147	
05.020	0770 035 421	Washer 22.05x42x2.5	1	086/107/130/147	
05.030	1053 305 026	Idler Gear	1	086/107/130/147	
05.040	0770 197 038	Needle Cage 22x30x15	2	086/107/130/147	* Available in kit 1053 298 005
05.050	1053 305 016	Half Shell	1	086/107/130/147	
05.060	0770 002 066	Screw M8x55	2	086/107/130/147	

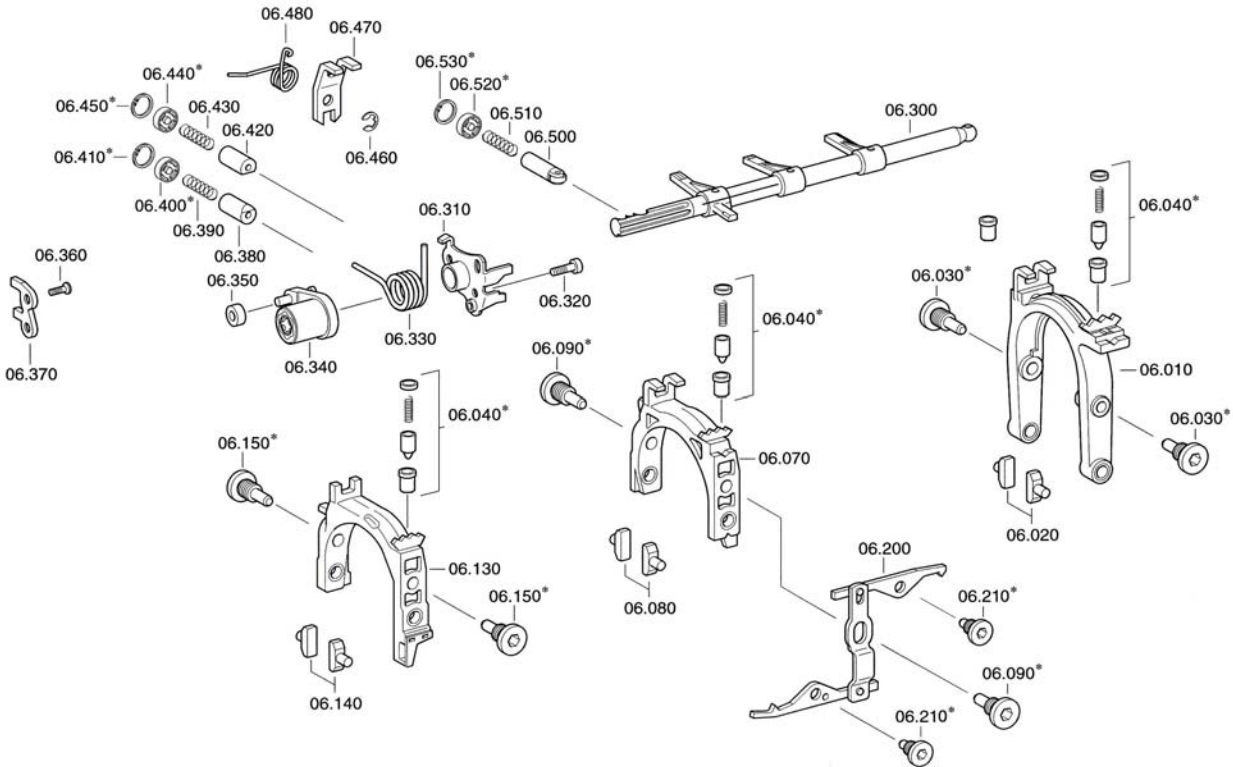


Note: Parts marked with * are only available in kits.



S5-31 Spare Parts – Gear Shift System Group

Pos #	ZF Part #	Description	Qty	Where used (1053 030 ___)	Notes
06.010	0750 142 007	3/4 Gear Shift Fork	1	086/107/130/147	
06.020	1053 306 085	Sliding Pad	2	086/107/130/147	
06.030	1053 306 262	Bearing Pin	2	086/107/130/147	* Available in kit 1053 298 001
06.040	n/a	Shift Detent Set	3	086/107/130/147	* Available in kit 1053 298 008
06.070	0750 142 006	1/2 Gear Shift Fork	1	086/107/130/147	
06.080	1053 306 085	Sliding Pad	2	086/107/130/147	
06.090	1053 306 262	Bearing Pin	2	086/107/130/147	* Available in kit 1053 298 001
06.130	0750 142 008	5/R Gear Shift Fork	1	086/107/130/147	
06.140	1053 306 085	Sliding Pad	2	086/107/130/147	
06.150	1053 306 262	Bearing Pin	2	086/107/130/147	* Available in kit 1053 298 001
06.200	1053 206 087	Locking Lever	1	086/107/130/147	
06.210	1053 306 166	Flange Bolt	2	086/107/130/147	* Available in kit 1053 298 001
06.300	1053 206 120	Gear Shift Shaft	1	086/107/130/147	
06.310	1053 306 241	Shifting Plate	1	086/107/130/147	
06.320	0636 900 278	Torx Screw M6x20	2	086/107/130/147	
06.330	0770 068 006	Leg Spring	1	086/107/130/147	
06.340	1053 206 085	Selector Swing Fork	1	086/107/130/147	
06.350	0770 054 029	Roller 8x20x8	1	086/107/130/147	

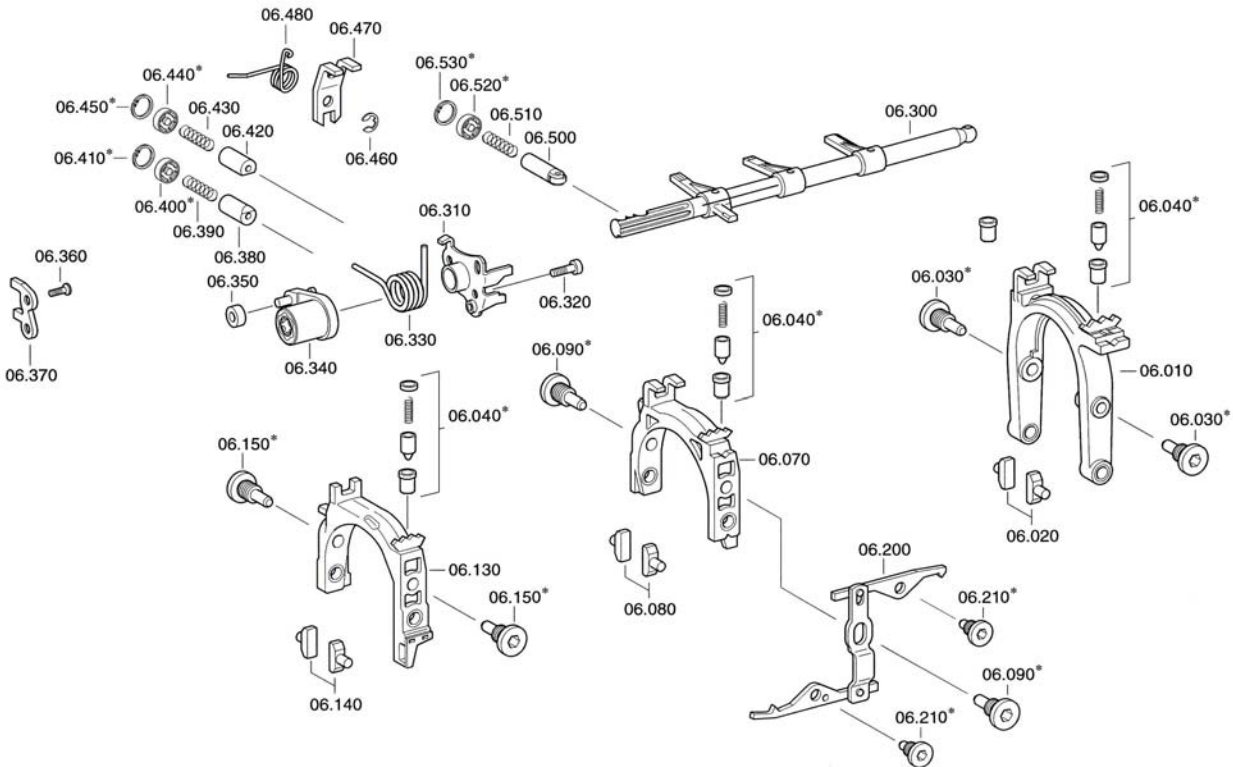


Note: Parts marked with * are only available in kits.



S5-31 Spare Parts – Gear Shift System Group (continued)

Pos #	ZF Part #	Description	Qty	Where used (1053 030 ___)	Notes
06.360	0636 900 256	Torx Screw M6x16	2	086/107/130/147	
06.370	1065 306 023	Stop Plate	1	086/107/130/147	
06.380	1065 306 022	Locking Pin	1	086/107/130/147	
06.390	0770 060 852	Compression Spring	1	086/107/130/147	
06.400	0770 196 098	Sealing Cap 20x4	1	086/107/130/147	* Available in kit 1053 298 001
06.410	0630 502 228	Retaining Ring 20x1	1	086/107/130/147	* Available in kit 1053 298 001
06.420	1053 306 147	Locking Pin	1	086/107/130/147	
06.430	0770 060 807	Compression Spring	1	086/107/130/147	
06.440	0770 196 098	Sealing Cap 20x4	1	086/107/130/147	* Available in kit 1053 298 001
06.450	0630 502 228	Retaining Ring 20x1	1	086/107/130/147	* Available in kit 1053 298 001
06.460	0630 531 210	Crescent Ring	1	086/107/130/147	
06.470	1053 306 168	Relay Lever	1	086/107/130/147	
06.480	0770 068 007	Leg Spring	1	086/107/130/147	
06.500	1053 206 079	Detent Pin	1	086/107/130/147	
06.510	0770 060 819	Compression Spring	1	086/107/130/147	
06.520	0770 196 098	Sealing Cap 20x4	1	086/107/130/147	* Available in kit 1053 298 001
06.530	0630 502 228	Retaining Ring 20x1	1	086/107/130/147	* Available in kit 1053 298 001



Note: Parts marked with * are only available in kits.



S5-31 Kits – Kit Overview

Pos #	ZF Part #	Description	Qty	Where used (1053 030 ___)
S5-31 Kit	1053 298 001	Rebuild Kit	1	086/107/130/147
S5-31 Kit	1053 298 002	Synchronizer Ring Kit	1	086/107/130/147
S5-31 Kit	1053 298 003	Bearing Kit (086/130)	1	086/107/130
S5-31 Kit	1053 298 004	Bearing Kit (147)	1	147
S5-31 Kit	1053 298 005	Needle Bearing Kit	1	086/107/130/147
S5-31 Kit	1053 298 006	Pressure Piece Kit	1	086/107/130/147
S5-31 Kit	1053 298 007	Shim Kit	1	086/107/130/147
S5-31 Kit	1053 298 008	Repair Kit	1	086/107/130/147

1053 298 001 Rebuild Kit

Pos #	ZF Part #	Description	Qty
01.200/140	0770 198 159	Shaft Seal 15x21x7	1
01.030	0770 198 157	Shaft Seal 35x64x9	1
01.050	0736 101 384	Cap Screw M6x12	4
01.230	0770 198 158	Shaft Seal 40x52x9	1
01.240	0770 196 093	Cover	1
02.030	0770 069 679	Retaining Ring 35x2.5	1
06.030	1053 306 262	Bearing Pin	2
06.040	0630 361 099	Sealing Cap	3
06.090	1053 306 262	Bearing Pin	2
06.150	1053 306 262	Bearing Pin	2
06.210	1053 306 166	Flange Bolt	2
06.400	0770 196 098	Sealing Cap 20x4	1
06.410	0630 502 228	Retaining Ring 20x1	1
06.440	0770 196 098	Sealing Cap 20x4	1
06.450	0630 502 228	Retaining Ring 20x1	1
06.520	0770 196 098	Sealing Cap 20x4	1
06.530	0630 502 228	Retaining Ring 20x1	1

1053 298 003 Bearing Kit (086/130)

Pos #	ZF Part #	Description	Qty
01.080	0770 197 024	Ball Bearing 35x80x20	1
01.110	0770 197 025	Roller Bush 25x44x20.7	1
01.300	0770 197 030	Ball Bearing 30x67x31	1
01.330	0770 197 029	Ball Bearing 30x80x20	1
04.160	0770 197 023	Roller Cage 23x38x20	1

1053 298 004 Bearing Kit (147)

Pos #	ZF Part #	Description	Qty
01.080	0770 197 024	Ball Bearing 35x80x20	1
01.110	0735 298 157	Roller Bush 27x44x23.2	1
01.300	0770 197 030	Ball Bearing 30x67x31	1
01.330	0770 197 029	Ball Bearing 30x80x20	1
04.160	0770 197 023	Roller Cage 23x38x20	1

Note: Above listed parts are not sold individually.



S5-31 Kits – Kit Overview (continued)

1053 298 002 Synchronizer Ring Kit

Pos #	ZF Part #	Description	Qty
03.040/130	1053 303 139	3/4/5 Synchronizer Ring	2
04.040/130	1053 204 114	1/2 Synchronizer Set	2
04.130/130	1053 304 222	Rev Synchronizer Ring	1
04.130/140	1053 303 139	3/4/5 Synchronizer Ring	1

1053 298 005 Needle Bearing Kit

Pos #	ZF Part #	Description	Qty
03.020	0770 197 032	Needle Cage 46x51x34	1
03.050	0770 197 031	Needle Cage 38x51x34	1
04.020	0770 197 028	Needle Cage 50x55x32	1
04.070	0750 115 453	Needle Cage 45x53x30	1
04.100	0770 197 027	Needle Cage 45x53x30	1
05.040	0770 197 038	Needle Cage 22x30x15	2

1053 298 006 Pressure Piece Kit

Pos #	ZF Part #	Description	Qty
03.040/140	1053 303 127	Pressure Piece	3
03.040/150	0635 460 006	Ball 5mm	3
03.040/160	0770 060 784	Compression Spring	3
04.040/140	1053 303 127	Pressure Piece	3
04.040/150	0635 460 006	Ball 5mm	3
04.040/160	0770 060 784	Compression Spring	3
04.130/150	1053 303 127	Pressure Piece	3
04.130/160	0635 460 006	Ball 5mm	3
04.130/170	0770 060 784	Compression Spring	3

1053 298 007 Shim Kit

Pos #	ZF Part #	Description	Qty
02.020	0770 035 451	Shim 35x45x1.70	1
02.020	0770 035 453	Shim 35x45x1.80	1
02.020	0770 035 455	Shim 35x45x1.90	1
02.020	0770 035 457	Shim 35x45x2.00	1
04.050	0730 002 121	Shim 45x53x2.20	1
04.050	0730 002 122	Shim 45x53x2.00	1
04.050	0730 004 201	Shim 45x53x1.60	1
04.050	0730 004 203	Shim 45x53x1.70	1
04.050	0730 004 205	Shim 45x53x1.80	1
04.050	0730 004 207	Shim 45x53x1.90	1
04.050	0730 004 210	Shim 45x53x2.10	1
04.140	0770 034 951	Shim 27.5x43.6x3.70	1
04.140	0770 034 953	Shim 27.5x43.6x3.80	1
04.140	0770 034 955	Shim 27.5x43.6x3.90	1
04.140	0770 034 957	Shim 27.5x43.6x4.00	1
04.140	0770 035 377	Shim 27.5x43.6x3.60	1
04.140	0770 035 379	Shim 27.5x43.6x3.50	1
04.140	0770 035 478	Shim 27.5x43.6x4.10	1
04.140	0770 035 480	Shim 27.5x43.6x4.20	1

Note: Above listed parts are not sold individually.



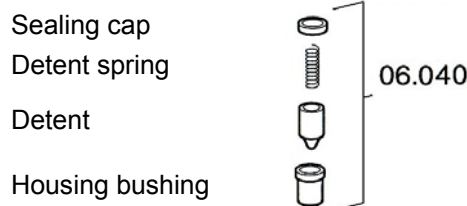
S5-31 Kits – Repair Kit

1053 298 008 Repair Kit

Pos #	ZF Part #	Description	Qty
06.040	n/a	Shift Detent Set	3

This repair kit restores the shift quality on high-mileage transmissions, where the shift detent has worn into the housing. It is highly recommended to install this kit with the transmission removed from the vehicle.

The repair kit consists of the following items



for the 1/2, 3/4, and 5/R detents.

Note: This kit can only be used on transmission specifications 1053 030 086 and higher.

Installation Instructions:

- Carefully remove sealing cap with hammer and small screwdriver. Use caution to avoid damaging the sealing surface of the housing.
- Remove the old spring and detent from the bore with a magnet or a small screwdriver.
- Using a suitable driver and a plastic hammer, carefully install the bushing in the housing such that the seam of the bushing faces either to the left or right side of the transmission (not to the front or rear!). Use care not to damage or bend the bushing during the installation.
- Install the new detent and spring. Make sure the detent moves freely in the bushing. If the detent binds in the bushing, the bushing must be replaced. Do not use the old parts as the detent diameter is different and the new spring has a different spring rate.
- Using a suitable punch, install the new sealing cap.
- To secure the detent caps,peen the detent cap bores in four (4) places (90° degrees apart) with a small chisel.

Note: Above listed parts are not sold individually.

5-Speed Manual Transmission Spare Parts Catalog



Cross Reference BMW Part # - ZF Part

BMW Part #	ZF Part #
07 11 9 986 250	0635 460 006
23 11 1 224 503	1048 301 010
23 11 1 224 799	0770 198 158
23 11 1 224 806	0770 197 024
23 11 1 224 807	0770 197 029
23 11 1 224 808	0770 197 030
23 11 1 224 813	0770 035 359
23 11 1 224 821	0770 197 025
23 11 1 224 824	0770 196 093
23 11 1 224 830	0770 002 066
23 11 1 224 844	1053 301 071
23 11 1 224 845	1053 301 080
23 11 1 224 882	0636 900 256
23 11 1 224 927	1053 201 014
23 11 7 500 932	0735 298 157
23 11 7 502 273	1053 301 160
23 11 7 503 949	1053 201 064
23 11 7 504 102	1053 201 061
23 11 7 511 684	1053 201 065
23 11 7 516 307	0750 115 551
23 12 1 282 394	0770 198 159
23 12 7 511 523	0736 101 384
23 21 1 222 775	0750 115 453
23 21 1 224 798	0730 513 406
23 21 1 224 802	0770 197 023
23 21 1 224 803	0770 197 027
23 21 1 224 804	0770 197 028
23 21 1 224 805	0770 197 032
23 21 1 224 809	0770 197 031
23 21 1 224 810	0736 020 125
23 21 1 224 812	0770 035 200
23 21 1 224 816	0770 060 784
23 21 1 224 820	0770 198 157
23 21 1 224 822	1047 304 038
23 21 1 224 828	0730 106 994
23 21 1 224 843	1053 206 087
23 21 1 224 846	1053 303 127
23 21 1 224 868	1053 303 139
23 21 1 224 873	1053 304 222
23 21 1 224 884	0770 035 451
23 21 1 224 886	0770 035 453
23 21 1 224 888	0770 035 455
23 21 1 224 890	0770 035 457
23 21 1 224 892	0630 531 251
23 21 1 224 897	0770 034 951
23 21 1 224 899	0770 034 953
23 21 1 224 901	0770 034 955
23 21 1 224 903	0770 034 957
23 21 1 224 904	0770 035 377
23 21 1 224 906	0770 035 379
23 21 1 224 909	0770 029 089
23 21 1 224 910	0730 002 122

BMW Part #	ZF Part #
23 21 1 224 911	0730 004 201
23 21 1 224 913	0730 004 203
23 21 1 224 915	0730 004 205
23 21 1 224 917	0730 004 207
23 21 1 224 920	0730 004 210
23 21 1 224 926	0770 069 679
23 21 1 224 942	0770 035 478
23 21 1 224 944	0770 035 480
23 21 1 224 946	0730 002 121
23 21 1 224 970	1053 304 269
23 21 1 282 553	1053 204 114
23 21 1 282 579	0750 142 003
23 21 1 282 580	0750 142 004
23 21 1 282 581	0750 142 005
23 22 1 224 794	0730 513 405
23 22 1 224 796	0730 106 999
23 22 1 224 811	0770 197 038
23 22 1 224 826	0770 035 421
23 22 1 224 847	1053 305 016
23 22 1 224 862	1053 305 014
23 22 1 282 453	1053 204 106
23 22 1 282 455	1053 305 026
23 31 1 222 992	1053 298 008
23 31 1 224 815	0770 054 029
23 31 1 224 817	0770 060 807
23 31 1 224 819	0770 060 819
23 31 1 224 823	1053 206 079
23 31 1 224 825	0770 196 098
23 31 1 224 832	0770 068 006
23 31 1 224 833	0770 068 007
23 31 1 224 848	1053 306 085
23 31 1 224 849	1053 306 147
23 31 1 224 850	1053 306 166
23 31 1 224 863	1053 306 168
23 31 1 224 922	0636 900 278
23 31 1 224 923	0630 531 210
23 31 1 224 935	0770 060 852
23 31 1 224 937	1053 306 241
23 31 1 224 960	0630 502 228
23 31 1 224 964	1053 304 262
23 31 1 224 965	1053 303 175
23 31 1 224 966	1053 304 263
23 31 1 224 974	1053 306 262
23 31 1 282 556	1053 206 085
23 31 1 282 582	0750 142 006
23 31 1 282 584	0750 142 007
23 31 1 282 585	0750 142 008
23 31 7 501 036	1053 206 120
23 31 7 502 164	1065 306 023
23 31 7 502 165	1065 306 022
24 41 1 218 031	0631 306 123
27 11 1 226 798	0770 001 019

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