



# Spare Parts Catalog

16 S 181

Material number: 1316.055.197

Current date: 23.04.2018

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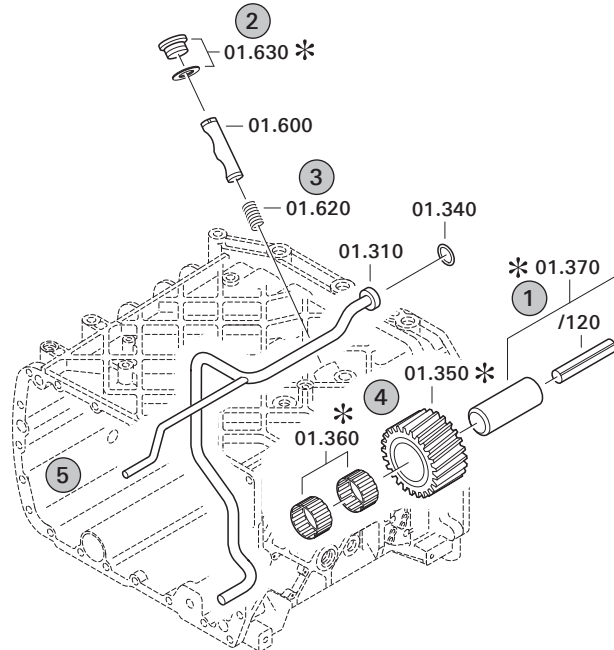
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Friedrichshafen

# Notes relating to the spare parts catalog

## Setup of the spare parts catalog

- Cover sheet
- Technical Cover (only in SDM print)
- Overview of figures
- Figure
- Associated parts list
- Next figure
- Associated parts list
- ...

## Figure and parts list



## Overview of figures

Bildtafel Figure	Sachnummer Product number	Benennung (Description)	Technische Info Technical info	Description (Benennung)	Menge Quantity	Einheit Unit
068.08.17	1316.170.001	AUSLEGER	WL	SHIFT TURRET	1	Stk
068.08.06	1316.170.031	DECKEL	WL*H-H*VM	COVER	1	Stk
068.08.14	1316.170.808	DECKEL	WL*AUSL+GEH*H-H*HF160N	COVER	1	Stk
08	1316.170.441	ANSCHLUSSTEILE	WL*NG-VORB*RG-SCHL*168N*BAJONETT	CONNECTING PARTS	1	Stk

The "gap" indicates that there is no separate graphics panel (poster) for this assembly  
The parts of this assembly are shown with the same mid-section number on the figure

### 1 Positions and subpositions

Pos.	Sachnummer Product number	Benennung (Description)	Technische Info Technical info	Description (Benennung)	Menge Quantity	Einheit Unit
0370	1315.201.054	RUECKLAUFBOLZEN	KPL.16S151*SG*L= 79	REV.IDLER SHAFT	1	Stk
/0120	0631.329.293	SPANNSTIFT		SLOT. PIN	1	Stk

Positions marked with "/" are the individual items of a completion  
For example: Position 0370 contains a centering pin with the position /0120

### 2 Combinations with standardized parts

Pos.	Sachnummer Product number	Benennung (Description)	Technische Info Technical info	Description (Benennung)	Menge Quantity	Einheit Unit
0630		VERSCHL.SCHR.		SCREW PLUG	1	Stk
	0636.302.067	VERSCHL.SCHR.		SCREW PLUG	1	Stk
	0634.801.249	DICHTRING	A 26 X 31	SEALING RING	1	Stk

The parts list shows the components included in the combination of standardized parts

### 3 Depiction of position/item number on the figure and in the parts list

01.620 - on the figure 01 relates to the assembly in which the position is included. Due to program-related reasons, it is shown on the figure.

0620 - in the parts list

Pos.	Sachnummer Product number	Benennung (Description)	Technische Info Technical info	Description (Benennung)	Menge Quantity	Einheit Unit
0620	0732.040.736	DRUCKFEDER		COMPRESSION SPRING	1	Stk

### 4 \*-Positions

Positions marked with an \* are optional i.e. inclusion in the parts list is not mandatory.  
The following note is shown on the figure

je nach Stücklistenausführung  
depending on spec. number  
\*  
suivant la nomenclature  
secondo la distinta base

### 5 Parts, dotted display

Parts with dotted display on the figure are only used for orientation of other parts



Pos.	Information	Amendment number
001	Use case -----	
002	Customer Renault Vehicules Industriels	
003	City Saint Priest Cedex	
004	DUNS 27-813-6346	
005	Vehicle / Apparatus -----	
006	Sales Name PREMIUM	
007	Manufacturer Renault Vehicules Industriels	
008	Engineering Name	
009	Product Use TRUCK	
010	Vehicle/Hardware Type ROAD TRACTOR	
011	SOP	
012	Engine	
013	Sales Designation	
014	Manufacturer Renault Vehicules Industriels	
015	Eng.Displ.	
016	Cylinder	
017	Nom. power 303 kW	
018	RPM at nom. power 1900 1/min	
019	Nom. torque 1870 Nm	
020	RPM at nom. torque 1100 1/min	
021	Classification use case -----	
022	DESIGNATION, CLUTCH 430DTE	
023	MANUFACTURER, CLUTCH VALEO	
024	TOTAL NUMBER OF WHEELS 6	
025	NUMBER OF DRIVING WHEELS 2	
026	DYNAMIC TYRE RADIUS 522 mm	
027	REAR AXLE RATIO 3.7	
031	PERMISS.GROSS VEHICLE WEIGHT 34 t	
032	PERMISS.GROSS COMBIN.WEIGHT 60 t	
033	Product description -----	
034	INSTALLATION POS TRANSMISSION HORIZONTAL LEFT	
035	TRANSMISSION ATTACHMENT FLANGE-MOUNTED	
036	RATIO, BOTTOM GEAR 16.41	



Pos.	Information	Amendment number
037	RATIO, TOP GEAR 1	
038	RATIO, 1ST GEAR 16.41	
039	RATIO, 2ND GEAR 13.8	
040	RATIO, 3RD GEAR 11.28	
041	RATIO, 4TH GEAR 9.49	
042	RATIO, 5TH GEAR 7.76	
043	RATIO, 6TH GEAR 6.53	
044	RATIO, 7TH GEAR 5.43	
045	RATIO, 8TH GEAR 4.57	
046	RATIO, 9TH GEAR 3.59	
047	RATIO, 10TH GEAR 3.02	
048	RATIO, 11TH GEAR 2.47	
049	RATIO, 12TH GEAR 2.08	
050	RATIO, 13TH GEAR 1.7	
051	RATIO, 14TH GEAR 1.43	
052	RATIO, 15TH GEAR 1.19	
053	RATIO, 16TH GEAR 1	
054	RATIO, 1ST GEAR REVERSE 15.36	
055	RATIO, 2ND GEAR REVERSE 12.92	
056	SET OF RATIOS DG	
057	RATIO RANGE BASIC DG	
058	NUMBER OF PLANETARY GEARS 5	
059	RATIO PLANETARY GEAR SET 4.565	
060	VER. SPLINE PLANETARY GEAR SET OBLIQUE TOOTHING	
061	DESIGN, SHIFT SYSTEM TURNING SHAFT	
062	POSITION, GEAR SHIFT SYSTEM HORIZONTAL LEFT	
063	DESIGN, SHIFT PATTERN H-H	
064	VERSION SHIFT SUPPORT SERVO	
065	VERSION ACTUATION SHIFT SYSTEM CONTROL CABLE	
066	VERSION TUBE R/C PLASTIC-FORM-PIPE	
068	VERSION TUBE SERVO WITHOUT PIPING	
078	DESIGN, THROTTLE, CUT-OFF VALVE D=1.55	
079	DESIGN AIR CONNECT. CUT-OFF VALVE G	



Pos.	Information	Amendment number
080	ASSEMBLY NOTE CUT-OFF VALVE CUT-OFF VALVE	
083	SELECTION PATTERN VARIANT GEAR SHIFT PATTERN 1	
086	DESIGN, SEPARATING CLUTCH FULL-SYNCHRONIZED	
087	VERSION OF SYNCHRONIZER 1 1.+2.GEAR DK-SYNCHRONIZATION	
088	VERSION OF SYNCHRONIZER 2 3.+4.GEAR BK-SYNCHRONIZATION	
089	REFERENCE LENGTH INPUT SHAFT 109 mm	
090	STANDARD TYPE INPUT SHAFT SAE	
091	NUMBER OF WEDGES INPUT SHAFT 10	
092	VERSION OF INPUT SHAFT FORM C	
093	NOMINAL DIAMETER INPUT SHAFT 2 in	
094	DIAMETER, JOURNAL, INPUT SHAFT 25 mm	
095	TYPE FIT SPIGOTS INPUT SHAFT F7	
096	VER. BEAR. SPIGOTS INPUT SHAFT TAPER ROLLER	
097	LENGTH, INPUT SHAFT 395.5 mm	
098	DIAMETER SHAFT OF INPUT SHAFT 50.3 mm	
099	LENGTH, PROFILE, INPUT SHAFT 120 mm	
100	BUSH VARIANT INPUT SHAFT WITHOUT GROOVE	
101	VERSION BEARING CONSTANT 1 GL	
102	DIAMETER BEARING INPUT SHAFT 99.916 mm	
103	TYPE FIT BEAR. INPUT SHAFT H5	
104	DESIGN,CONN., CLUTCH HOUSING SAE 1	
108	VERSION OF CLUTCH HOUSING INTEGRATED	
109	DESIGN BEARING OUTPUT STANDARD SUSPENSION	
111	POSITION MOUNT. FACE HOUSING 2 WITHOUT GROOVE	
115	REF.LENGTH,RELEASE BEAR.FLAN -7 mm	
116	DIAMETER, RELEASE FLANGE 60 mm	
117	TYPE FIT RELEASE BEARING FLA. F8	
120	ASSEMBLY POS. CLUTCH CYLINDER 6	
121	OUTER DIA. OUTPUT FLANGE RA 180 mm	
122	NO.OF BORES OUTPUT FLANGE HA1 4	
124	BORE DIA. OUTPUT FLANGE RA 15 mm	
128	CORROS.PROTECTION, OUTP.FLANGE COATED	
129	REF. LENGTH OUTPUT FLANGE RA 211.5 mm	

Pos.	Information	Amendment number
136	DIMENSION SHIFT TURRET DIST. 300 mm	
137	MEAS. LOC. SHIFT TURRET DIST. SHIFT LEVER-LOCATION	
138	RADIUS SELECTOR LEVER 42.000 mm	
139	SELECTOR LEVER POSITION B	
140	DESIGN OFFSET SELECTOR LEVER OUTSIDE	
141	LENGTH OFFSET SELECTOR LEVER 3.500 mm	
143	RADIUS 1 SHIFT LEVER 70 mm	
146	SHIFT LEVER CONNECTION HEXAGON	
147	DESIGN, OFFSET, SHIFT LEVER INSIDE	
149	LEVER POSITION SHIFTING OUTPUT A	
152	SPRING ARRANGEMENT Q1	
153	SPRING FORCE DETENT PLUNGER RG 90 N	
154	HUMP SPRING FORCE, OUTSIDE 90 N	
158	SELECTOR SPRING FORCE, OUTSIDE 35 N	
161	SPRING FORCE OUTS. DETENT NEUT 200 N	
163	ALLOCATION DETENT LEVER VER. C	
169	SWITCH, REVERSE GEAR y	
170	DESIGN, RG (REV.GEAR) SWITCH CLOSING	
171	DESIGN, CONNECTION, RG SWITCH DIN BAYONET	
172	CODE SWITCH RG A1	
173	PROT.CAP SWITCH, REVERSE GEAR y	
175	NOTE ON SWITCH, REVERSE GEAR G.SHIFT SHAFT	
176	SWITCH, NEUTRAL GEAR y	
177	DESIGN,NG(NEUTRAL GEAR)SWITCH OPENING SWITCH	
178	DESIGN, CONNECTION, NG SWITCH DIN BAYONET	
179	CODE SWITCH NG A1	
180	PROT.CAP SWITCH, NEUTRAL GEAR y	
197	FUNCTION OF R/C SWITCH GP	
198	DESIGN, GP SWITCH PREPARED	
201	PROTECTING CAP GP SWITCH n	
203	FUNCTION OF S/G SWITCH GV	
204	DESIGN, GV SWITCH PREPARED	
207	PROTECTING CAP GV SWITCH n	



Pos.	Information	Amendment number
249	ATTACHM.POS.HEAT EXCHANGER IN FRONT LEFT PREPARED	
251	VER. TRANSMISSION VENTILATION PLUG CONNECTION 90 DEGREE	
252	LENGTH, VENT TUBE 2200.000 mm	
253	POS.TRANSMISSION VENTILATION IN FRONT	
262	VERSION PULSE SENSOR SFA H68 WITHOUT GROOVE	
266	PROT.CAP PULSE SENSOR SFA H68 n	
267	NO. PULSES PULSE SENSOR SFAH68 6 IMP/U	
272	VER. PULSE SENSOR TRANSM. H70 WITH	
273	VER. CONNECT. PULSE SENSOR H70 DIN BAYONET	
274	DESIGN PULSE SENSOR H70 KITAS II	
275	INSTRUCTION SENSOR H70 ADR-EXPLOSION-PROOF	
276	PROT.CAP PULSE SENSOR TM H70 y	
277	NO PULSES PULSE SENSOR TM H70 6 IMP/U	
278	ASSEMBLY POS PULSE SENSOR H70 1	
279	NOTE ASS. POS PULSE SENSOR H70 INSTALLATION DRAWING	
294	POSITION, OIL FILLER HOUSING LEFT+RIGHT	
295	NOTE ON OIL FILL FILL IN OVERFLOW	
296	OIL CAPACITY, GEARBOX 13 dm3	
298	OIL GRADE PERMISSIBLE ACC. TO TE-ML02	
299	OIL CLASS FIRST FILLING E	
300	CODING OUTER CONSERVATION KA1	
301	SCOPE OUTER CONSERVATION T	
302	CODING INNER CONSERVATION KI1	
303	CONSERVATION SPECIFICATION ZFN 916	
305	COLOR JET BLACK	
306	COLOUR CLASSIFICATION ACC. TO RAL 9005	
307	PAINTING, ZF STANDARD 915 W	
314	Alias ID -----	
315	Renault Vehicules Industriels 5010452920	

# Assembly group overview

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Material number: 1316.055.197



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Graphics	Pos.	Material number	Name	Quantity	Amend. no.	Techn. Info.
068.01.05-1	110	1316.101.103	TRANSMISSION HOUSING	1		
068.01.52-1	120	1316.101.524	TRANSMISSION HOUSING	1		
068.02.59-1	140	1315.102.429	CONNECTION PLATE	1		
068.02.82-1	150	1315.102.811	INPUT SHAFT	1		
068.02.02-1	910	1316.102.034	INPUT SHAFT	1		
068.03.80-1	180	1316.103.803	COUNTERSHAFT	1		
068.03.01-1	920	1316.103.012	COUNTERSHAFT	1		
068.04.12-1	930	1316.104.038	MAIN SHAFT	1		
068.06.01-1	230	1316.106.008	SHIFT SYSTEM	1		
068.06.43-1	234	1315.106.422	CONNECTING PARTS	1		
068.06.80-1	238	1315.106.800	SHIFT SYSTEM	1		
068.07.27-1	292	1316.108.838	GEAR SHIFT HOUSING	1		
068.07.31-1	910	1316.108.046	GEAR SHIFT HOUSING	1		
068.07.27-1	914	1316.108.465	GEARSHIFT SHAFT	1		
068.07.56-1	924	1316.108.031	DETENT	1		
062.08.30-1	954	1316.171.403	END COVER	1		
068.08.02-1	960	1316.171.406	PNEUMATIC SERVO UNIT	1		
068.09.01-1	934	1316.109.022	CONNECTING PARTS	1		
068.09.11-1	940	1316.109.433	CONNECTING PARTS	1		
068.10.80-1	296	1316.111.802	SELECTOR LEVER	1		
068.10.16-1	932	1316.111.010	SELECTOR LEVER	1		
068.12.12-1	918	1316.149.430	SET OF SPRINGS	1		
068.40.04-1	500	1316.112.014	GV-SHIFT SYSTEM	1		
068.40.40-1	502	1315.112.402	CONNECTING PARTS	1		
068.43.21-1	10	1315.131.047	COVER	1		
068.43.06-1	20	1315.131.050	RC HOUSING	1		
068.43.40-1	30	1315.131.400	CLOSING COMPONENTS	1		
068.43.80-1	512	1315.131.805	RC HOUSING	1		
068.43.41-1	516	1315.131.436	CONNECTING PARTS	1		
068.44.07-1	40	1315.132.015	PLANETARY DRIVE	1		
068.44.47-1	50	1316.132.421	PLANETARY DRIVE	1		
068.45.04-1	70	1316.133.008	SYNCHRONIZER	1		



# Assembly group overview

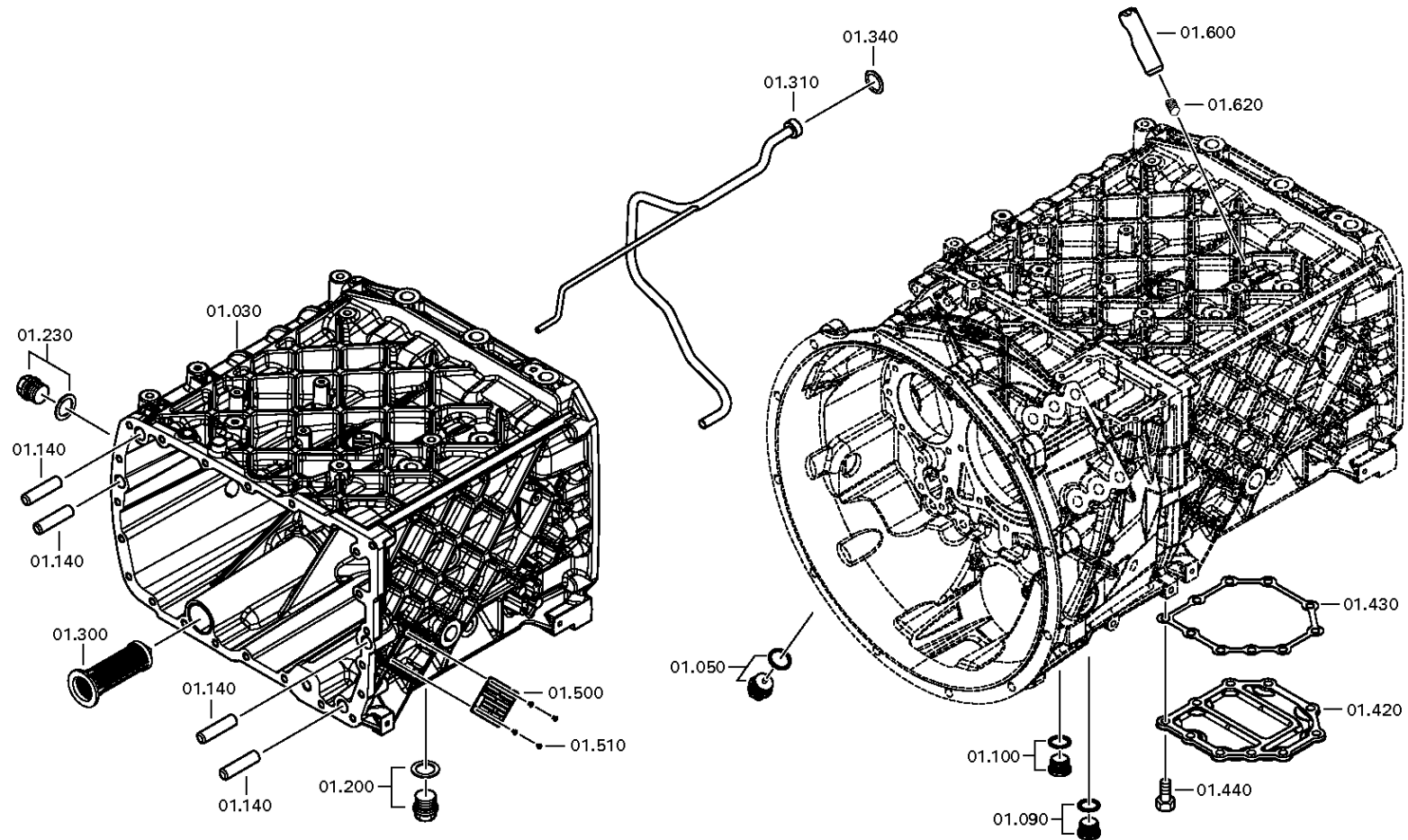
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Material number: 1316.055.197



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Graphics	Pos.	Material number	Name	Quantity	Amend. no.	Techn. Info.
068.45.40-1	80	1315.133.405	SYNCHRONIZER	1		
068.46.02-1	90	1316.134.021	GP SHIFT SYSTEM	1		
068.46.41-1	554	1315.134.409	CONNECTING PARTS	1		
068.57.04-1	390	1316.145.002	RANGE SELECTION	1		
073.R0.01-1	KIT	1272.298.934	SMALL COMP.SET	1		



# Plant

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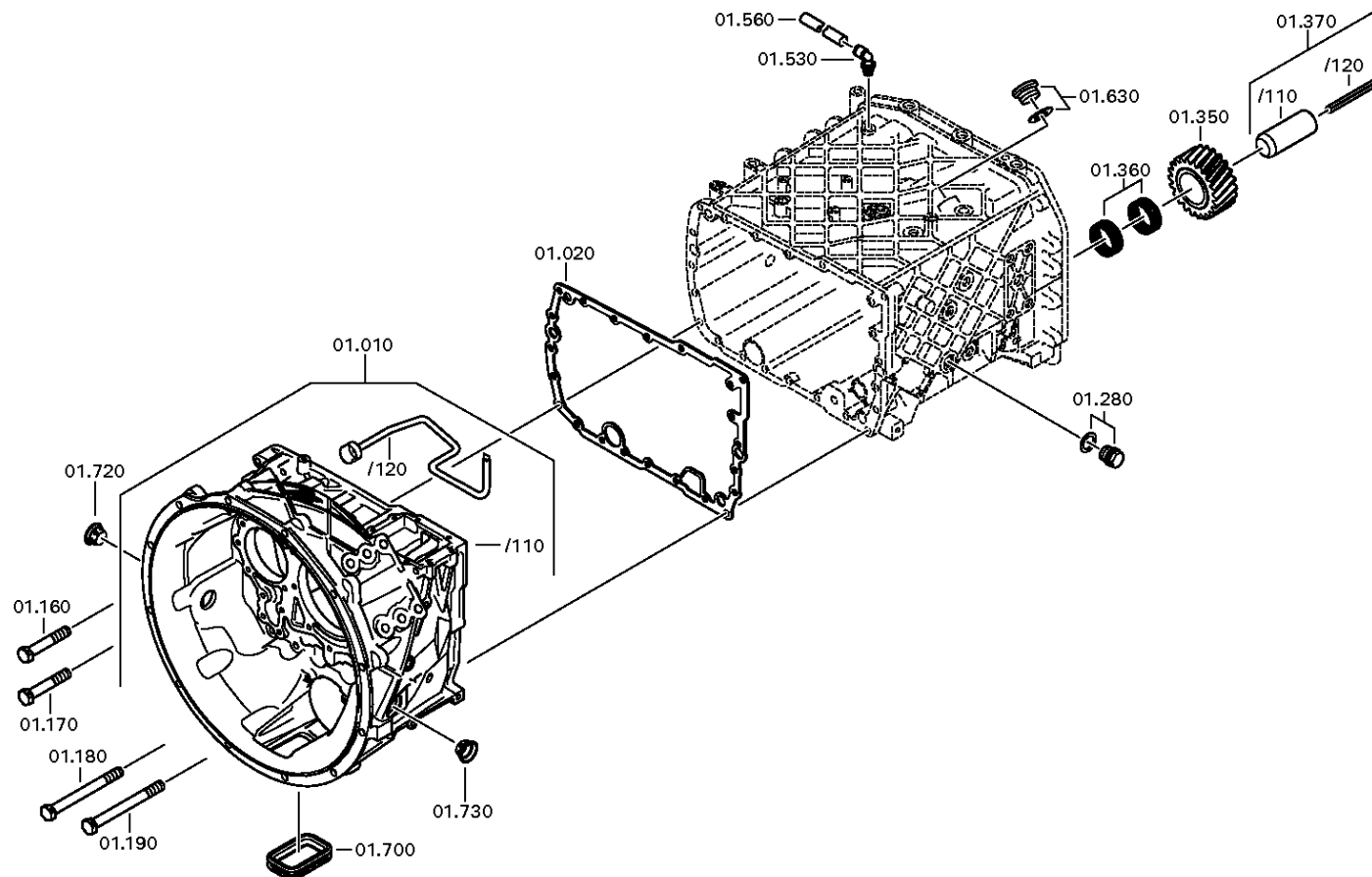
Material number: 1316.055.197

Plant: 068.01.52-1

TRANSMISSION HOUSING



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TRANSMISSION HOUSING



# Parts list

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Material number: 1316.055.197

Plant: 068.01.05-1

Material-assembly-group-no: 1316.101.103

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	1316.201.142		CLUTCH HOUSING	1			KPL.		
/110	1316.301.064		CLUTCH HOUSING	1			ENTHALT.IN 1316 301 060(0)		
/120	1315.201.097		TUBE	1			KPL.		
20	1315.301.233		GASKET	1					
30	1316.201.110		HOUSING	1		C01002290A10	KPL.DG IN 1316 201 108(0)		
50	---		SCREW PLUG	1		Z00010176111	M24X1,5		
---	0736.300.160		SCREW PLUG	1		Z00010176110	M24X1,5 M24X1,5		
---	0730.008.637		SEALING RING	1		Z00010176110	24X29		
90	---		SCREW PLUG	1		Z00010164013	50N.M*DICHTRING M22X1,5		
---	0636.100.824		SCREW PLUG	1		Z00010164019	M22X1,5		
---	0730.009.515		SEALING RING	1		Z00010164019	A22X27		
100	---		SCREW PLUG	1		Z00010164013	50N.M*DICHTRING M22X1,5		
---	0636.100.824		SCREW PLUG	1		Z00010164019	M22X1,5		
---	0730.009.515		SEALING RING	1		Z00010164019	A22X27		
140	0731.201.563		CYLINDRICAL PIN	4					
160	0736.300.123		HEXAGON SCREW	14			M10X70 M10X70		
170	---		HEXAGON SCREW	1			M10X70		
---	0736.300.123		HEXAGON SCREW	1			M10X70 M10X70		
180	0736.300.119		HEXAGON SCREW	6			M10X140 M10X140		
190	---		HEXAGON SCREW	1			M10X140		
---	0736.300.119		HEXAGON SCREW	1		Z00009403412	M10X140 M10X140		
200	---		SCREW PLUG	1		Z00010112111	60N.M*DICHTRING M24X1,5		
---	0636.304.088		SCREW PLUG	1		Z00010112110	M24X1,5		
---	0730.008.637		SEALING RING	1		Z00010112110	24X29		
230	---		SCREW PLUG	1		Z00010112111	60N.M*DICHTRING M24X1,5		
---	0636.304.088		SCREW PLUG	1		Z00010112110	M24X1,5		
---	0730.008.637		SEALING RING	1		Z00010112110	24X29		
280	---		SCREW PLUG	1			60N.M*DICHTRING M24X1,5		
---	0636.304.088		SCREW PLUG	1		Z00010112110	M24X1,5		
---	0730.008.637		SEALING RING	1		Z00010112110	24X29		
300	0501.318.802		SCREEN INSERT	1		C01000947C10			
310	1316.201.056		SPRAY TUBE	1			KPL. IN 1315 201 112(0)		
340	0634.313.198		O-RING	1			20X3		
350	---		REVERSE IDLER GEAR	1					

# Parts list

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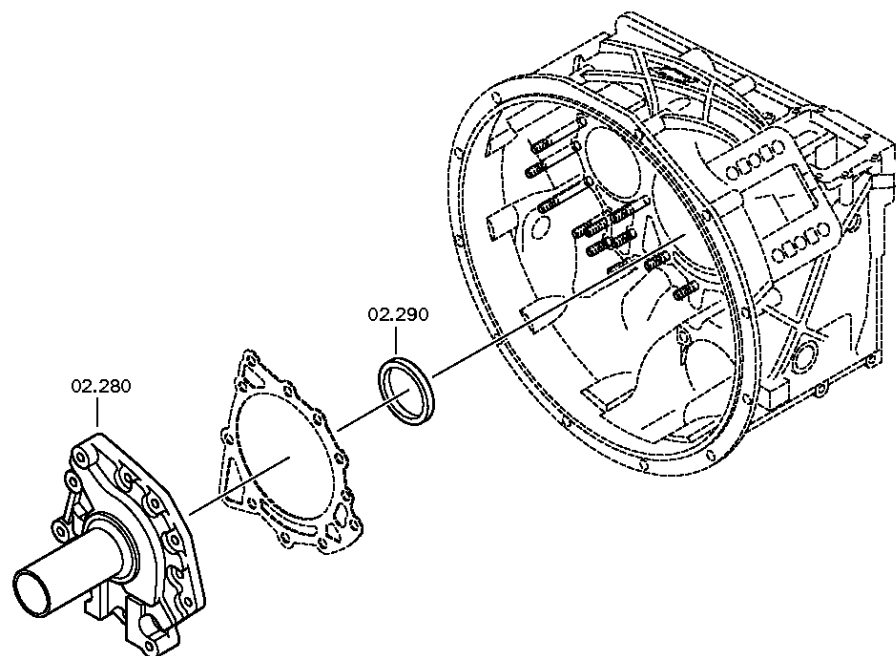
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Material number: 1316.055.197

Plant: 068.01.05-1

Material-assembly-group-no: 1316.101.103

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
---	1316.305.001		REVERSE IDLER GEAR	1			Z22 IN 1295 305 050(1)		
---	1316.305.008		REVERSE IDLER GEAR	1			Z22 IN 1295 305 050(1)		
360	0750.115.369		NEEDLE CAGE	2			45,0X57,0X25,0		
370	1316.201.029		REVERSE IDLER SHAFT	1			KPL.16S221*DG*L=107		
/120	0631.329.296		SLOTTED PIN	1			10X123		
420	1315.301.151		COVER	1					
430	0501.316.146		GASKET	1		C01002166A10			
440	0636.100.432		HEXAGON SCREW	10		Z00007349511	M10X28		
500	---		TYPE PLATE	1			KONZERN		
---	0730.365.241		TYPE PLATE	1			EINHEITSSCH. VERDREHSICHER		
510	0731.300.027		BLIND RIVET	4		Z00007904810			
530	0501.335.819		PLUG-IN COUPLING	1					
560	1315.201.214		TUBE	1			L=2200MM		
600	1313.306.013		LOCKING PIN	1					
620	0732.040.736		COMPRESSION SPRING	1					
630	---		SCREW PLUG	1			70N.M*DICHTRING M26X1,5		
---	0636.100.811		SCREW PLUG	1		Z00010164420	M26X1,5		
---	0634.801.249		SEALING RING	1		Z00010164420	26X31		
700	1315.301.230		PROTECTION CAP	1					
720	0501.321.840		PLUG	1					
730	0501.321.840		PLUG	1					



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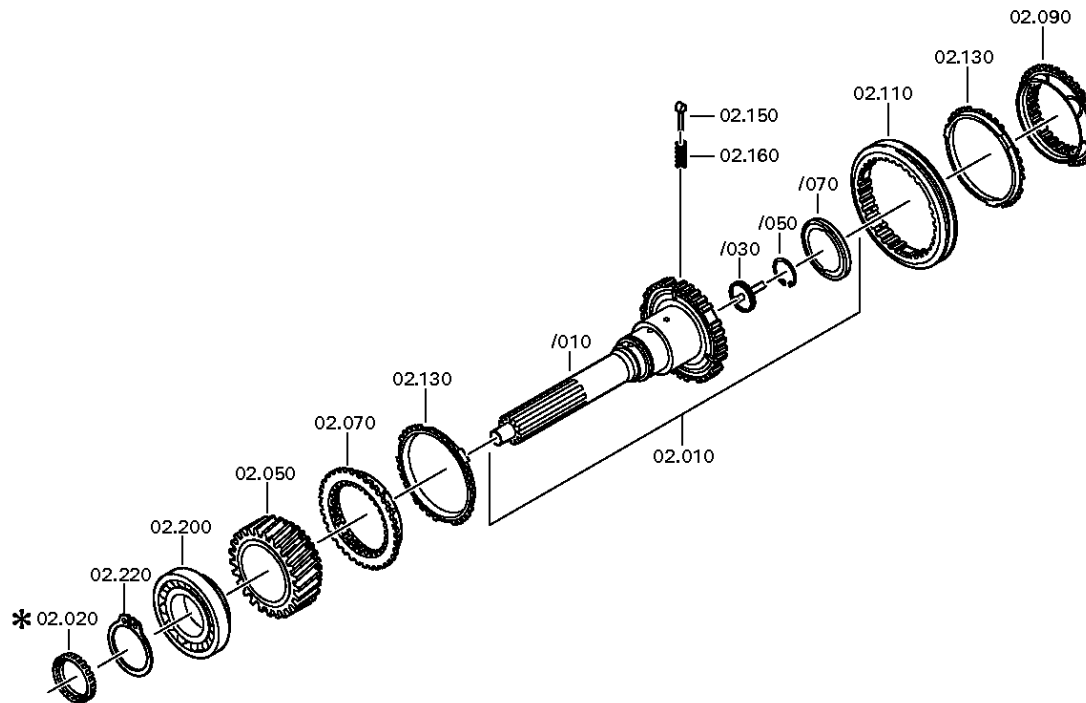
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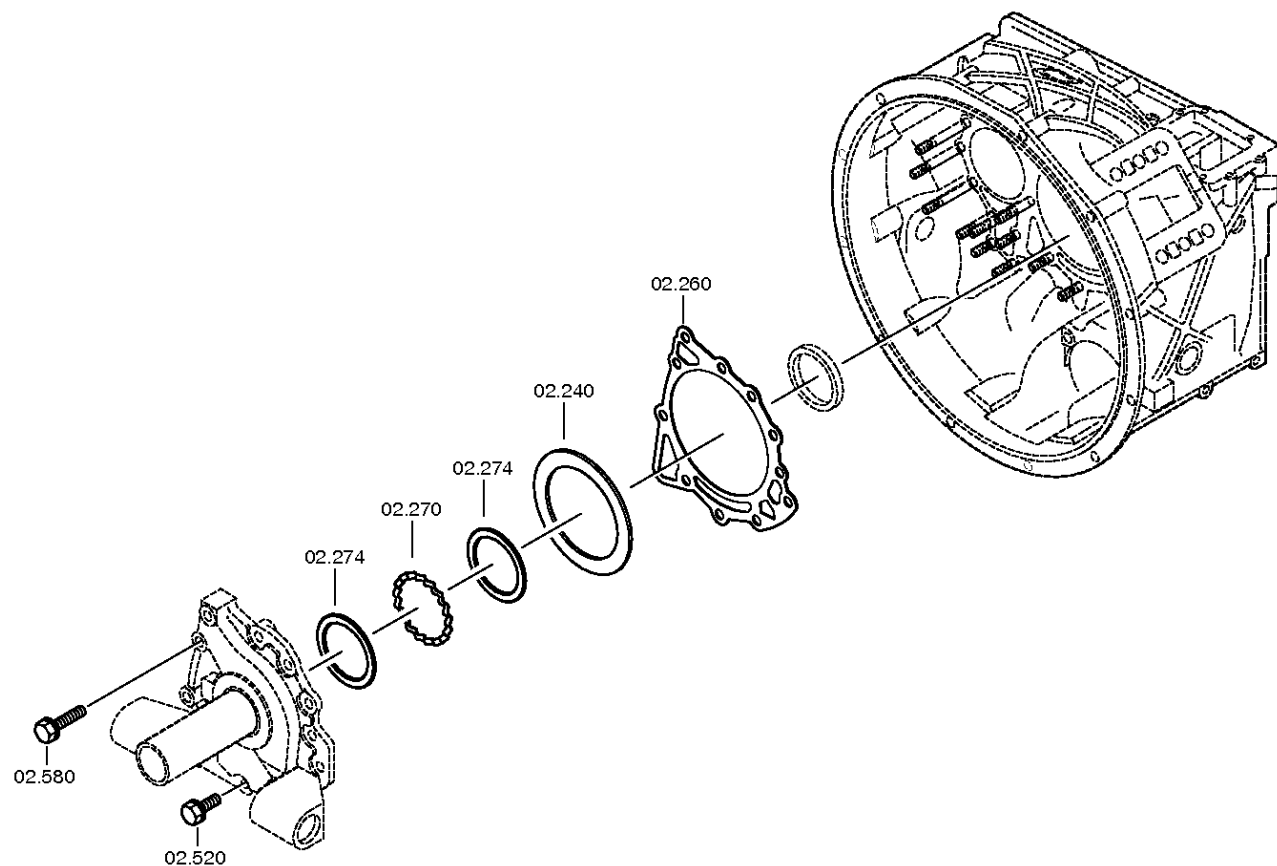
Plant: 068.02.02-1

CONNECTION PLATE



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CONNECTION PLATE







# Parts list

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Material number: 1316.055.197

Plant: 068.02.59-1

Material-assembly-group-no: 1315.102.429

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	1316.202.025		INPUT SHAFT	1			KPL.L109*GL100*ZAPF.25		
/30	1354.302.019		TUBE	1		Z00003830511			
/50	0630.502.027		RETAINING RING	1			50X2		
/70	0750.101.179		OIL DAM	1			77,0X95,5X6,0		
50	1316.302.066		HELICAL GEAR	1			ENTHALT.IN 1316 302 026(1)		
70	1312.304.027		CLUTCH BODY	1			ENTHALT.IN 1310 304 107(1)		
90	1312.304.027		CLUTCH BODY	1		C01004681D10	ENTHALT.IN 1310 304 107(1)		
110	1310.304.202		SLIDING SLEEVE	1		C01005378A10			
130	1297.304.484		SYNCHRO.RING	2					
150	1297.304.436		PRESSURE PART	3					
160	0732.040.409		COMPRESSION SPRING	3		C01007317F10			
200	0750.117.732		TAPERED ROLLER BEARING	1			85,0X150,0X30,5		
220	0730.501.598		RETAINING RING	1		C01007992110	85X4		
240	---		SHIM	1			H= 0,90- 2,40(ABSTUFUNG:0,05MM)		
---	2050.309.094		SHIM	1			A=2,2 IN 2050 309 090 C45E WW.F500 ZFN410		
---	0730.007.489		SHIM	1			A=2,15 IN 2050 309 090(2)		
---	0730.007.488		SHIM	1			A=2,10 IN 2050 309 090(2)		
---	0730.007.487		SHIM	1			A=2,05 IN 2050 309 090(2)		
---	0730.007.486		SHIM	1			A=2,00 IN 2050 309 090(2)		
---	0730.007.485		SHIM	1			A=1,95 IN 2050 309 090(2)		
---	0730.007.484		SHIM	1			A=1,90 IN 2050 309 090(2)		
---	0730.007.483		SHIM	1			A=1,85 IN 2050 309 090(2)		
---	0730.007.482		SHIM	1			A=1,80 IN 2050 309 090(2)		
---	0730.007.481		SHIM	1			A=1,75 IN 2050 309 090(2)		
---	0730.007.480		SHIM	1			A=1,70 IN 2050 309 090(2)		
---	0730.007.479		SHIM	1			A=1,65 IN 2050 309 090(2)		
---	0730.007.136		SHIM	1			A=1,60 IN 2050 309 090(2)		
---	0730.007.135		SHIM	1			A=1,55 IN 2050 309 090(2)		
---	0730.007.134		SHIM	1			A=1,50 IN 2050 309 090(2)		
---	0730.007.133		SHIM	1			A=1,45 IN 2050 309 090(2)		
---	0730.007.132		SHIM	1			A=1,40 IN 2050 309 090(2)		
---	0730.007.131		SHIM	1			A=1,35 IN 2050 309 090(2)		
---	0730.007.130		SHIM	1			A=1,30 IN 2050 309 090(2)		

# Parts list

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16 S 181 /

Material number: 1316.055.197

Plant: 068.02.59-1

Material-assembly-group-no: 1315.102.429

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
---	0730.007.129		SHIM	1			A=1,25 IN 2050 309 090(2)		
---	2050.309.034		SHIM	1			A=1,2 IN 2050 309 090 C45E WW.F500 ZFN410		
---	0730.007.128		SHIM	1			A=1,15 IN 2050 309 090(2)		
---	0730.007.127		SHIM	1			A=1,10 IN 2050 309 090(2)		
---	0730.007.126		SHIM	1			A=1,05 IN 2050 309 090(2)		
---	2050.309.065		SHIM	1			A=1,0 IN 2050 309 090 C45E WW.F500 ZFN410		
---	0730.005.749		SHIM	1			A=0,95 IN 2050 309 090(2)		
---	0730.005.748		SHIM	1			A=0,90 IN 2050 309 090(2)		
---	0730.301.503		SHIM	1			h=2,25		
---	0730.301.504		SHIM	1			h=2,30		
---	0730.301.505		SHIM	1			h=2,35		
---	0730.301.506		SHIM	1			h=2,40		
260	0501.314.587		GASKET	1					
270	1315.302.040		SPACER RING	1					
274	0730.150.766		WASHER	2					
280	1315.302.136		CONNECTION PLATE	1					
290	0734.310.387		SHAFT SEAL	1		Z00023718610	55,0X75,0X8,0/9,4		
520	0636.015.685		HEXAGON SCREW	8		Z00009177310	M10X35		
580	0636.102.270		HEXAGON SCREW	3		Z00009177410	M10X60		

# Plant

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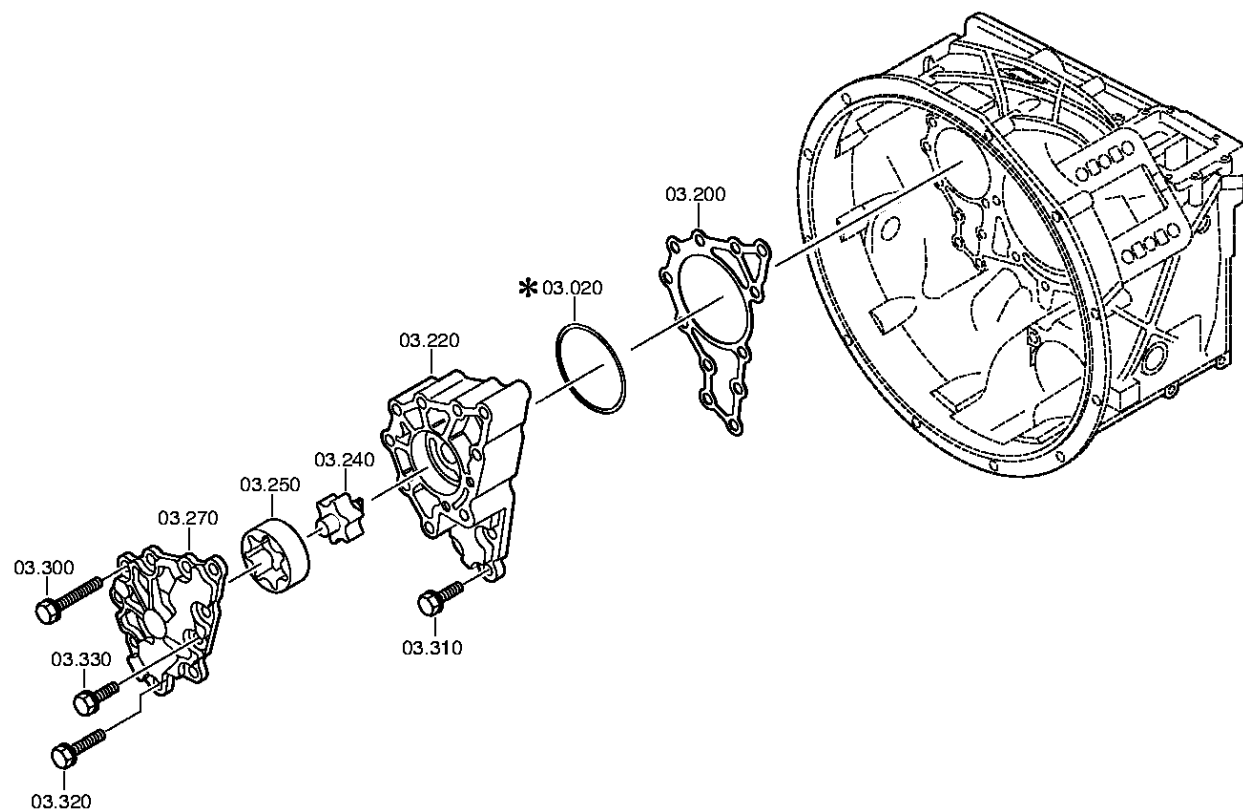
Material number: 1316.055.197

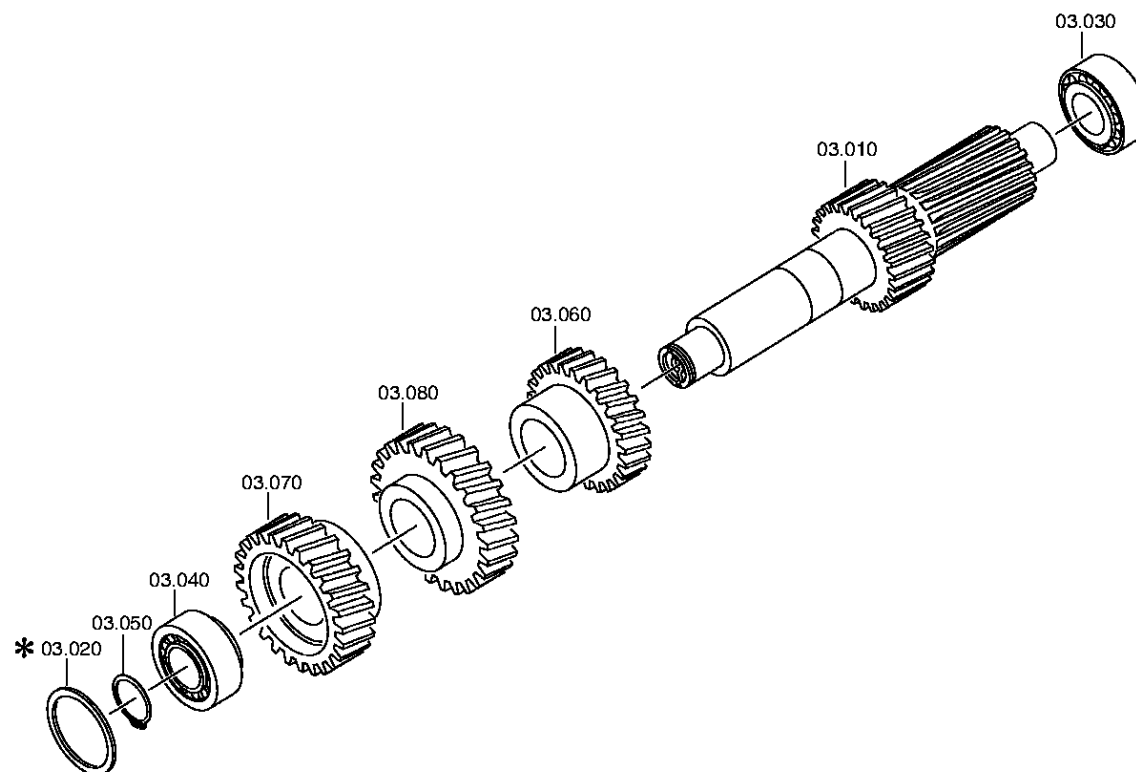
Plant: 068.03.80-1

COUNTERSHAFT



16 S 181 /  
COUNTERSHAFT





# Parts list

Page 1 from 2



16 S 181 /

Material number: 1316.055.197

Plant: 068.03.80-1

Material-assembly-group-no: 1316.103.803

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	1316.303.033		COUNTERSHAFT	1			ENTHALT.IN 1316 303 032(0)		
20	---		SHIM	1			H= 1,85- 3,25(ABSTUFUNG:0,05MM)		
---	0730.112.938		SHIM	1		C01007375C10	A=3,25		
---	0730.112.937		SHIM	1		C01007375C10	A=3,20		
---	0730.112.936		SHIM	1		C01007375C10	A=3,15		
---	0730.112.935		SHIM	1		C01007375C10	A=3,10		
---	0730.106.860		SHIM	1		C01007375C10	A=3,05 IN 0730 106 904(2)		
---	0730.106.917		SHIM	1			A=3,00 IN 0730 106 904(2)		
---	0730.106.916		SHIM	1			A=2,95 IN 0730 106 904(2)		
---	0730.106.915		SHIM	1			A=2,90 IN 0730 106 904(2)		
---	0730.106.914		SHIM	1			A=2,85 IN 0730 106 904(2)		
---	0730.106.913		SHIM	1			A=2,80 IN 0730 106 904(2)		
---	0730.106.912		SHIM	1			A=2,75 IN 0730 106 904(2)		
---	0730.106.911		SHIM	1			A=2,70 IN 0730 106 904(2)		
---	0730.106.910		SHIM	1			A=2,65 IN 0730 106 904(2)		
---	0730.106.909		SHIM	1			A=2,60 IN 0730 106 904(2)		
---	0730.106.908		SHIM	1			A=2,55 IN 0730 106 904(2)		
---	0730.100.799		SHIM	1			A=2,50 IN 0730 106 904(2)		
---	0730.100.800		SHIM	1			A=2,45 IN 0730 106 904(2)		
---	0730.100.801		SHIM	1			A=2,40 IN 0730 106 904(2)		
---	0730.100.802		SHIM	1			A=2,35 IN 0730 106 904(2)		
---	0730.100.803		SHIM	1			A=2,30 IN 0730 106 904(2)		
---	0730.101.466		SHIM	1			A=2,25 IN 0730 106 904(2)		
---	0730.101.467		SHIM	1			A=2,20 IN 0730 106 904(2)		
---	0730.101.468		SHIM	1			A=2,15 IN 0730 106 904(2)		
---	0730.101.469		SHIM	1			A=2,10 IN 0730 106 904(2)		
---	0730.101.470		SHIM	1			A=2,05 IN 0730 106 904(2)		
---	0730.101.471		SHIM	1			A=2,00 IN 0730 106 904(2)		
---	0730.106.907		SHIM	1			A=1,95 IN 0730 106 904(2)		
---	0730.106.906		SHIM	1			A=1,90 IN 0730 106 904(2)		
---	0730.106.905		SHIM	1			A=1,85 IN 0730 106 904(2)		
30	0750.117.009		TAPERED ROLLER BEARING	1			49,213x103,188x44,475		
40	0750.117.009		TAPERED ROLLER BEARING	1			49,213x103,188x44,475		
50	---		RETAINING RING	1		Z00027144136	H= 2,40- 3,00(ABSTUFUNG:0,05MM)		

# Parts list

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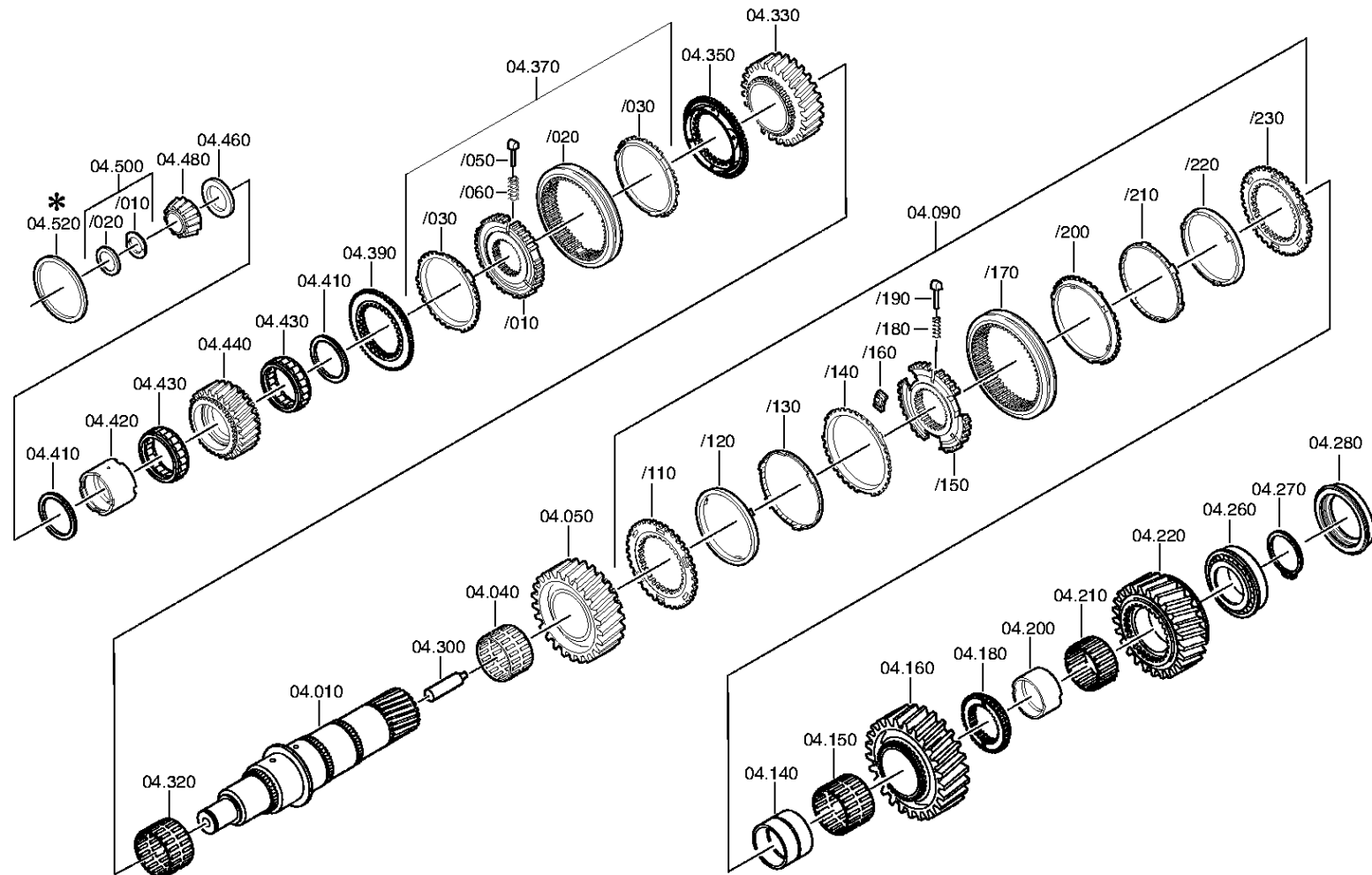
16 S 181 /

Material number: 1316.055.197

Plant: 068.03.80-1

Material-assembly-group-no: 1316.103.803

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
---	0730.303.174		RETAINING RING	1		Z00027144110	h=3,00		
---	0730.303.173		RETAINING RING	1		Z00027144110	h=2,95		
---	0730.303.172		RETAINING RING	1		Z00027144110	h=2,90		
---	0730.303.171		RETAINING RING	1		Z00027144110	h=2,85		
---	0730.303.170		RETAINING RING	1		Z00027144110	h=2,80		
---	0730.303.169		RETAINING RING	1		Z00027144110	h=2,75		
---	0730.303.168		RETAINING RING	1		Z00027144110	h=2,70		
---	0730.303.167		RETAINING RING	1		Z00027144110	h=2,65		
---	0730.303.166		RETAINING RING	1		Z00027144110	h=2,60		
---	0730.303.165		RETAINING RING	1		Z00027144110	h=2,55		
---	0730.302.599		RETAINING RING	1		Z00027144110	h=2,50		
---	0730.302.598		RETAINING RING	1		Z00027144110	h=2,45		
---	0730.302.597		RETAINING RING	1		Z00027144110	h=2,40		
60	1316.303.005		HELICAL GEAR	1			3G/Z26 IN 1312 303 018(1)		
70	1316.303.030		HELICAL GEAR	1			KON/Z39 IN 1316 303 029(1)		
80	1316.303.065		HELICAL GEAR	1			Z35 IN 1312 303 013(1)		
200	1315.303.060		GASKET	1		C01005349C10			
220	---		PUMP HOUSING	1			GD*GSLS		
---	1315.302.121		PUMP HOUSING	1					
---	1315.302.117		PUMP HOUSING	1					
240	1314.202.039		PUMP SHAFT	1			KPL.		
250	1315.303.027		ROTOR	1					
270	---		PUMP COVER	1			GD*GSLS		
---	1315.302.120		PUMP COVER	1					
---	1315.302.116		PUMP COVER	1					
300	0636.015.684		HEXAGON SCREW	8		Z00009177510	M10X85		
310	0636.015.685		HEXAGON SCREW	3		Z00009177310	M10X35		
320	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
330	0636.015.685		HEXAGON SCREW	2		Z00009177310	M10X35		



# Parts list

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16 S 181 /

Material number: 1316.055.197

Plant: 068.04.12-1

Material-assembly-group-no: 1316.104.038

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	1316.304.132		MAIN SHAFT	1					
40	0750.115.303		NEEDLE CAGE	1			92,0X100,0X63,0		
50	1316.304.002		HELICAL GEAR	1			2G/Z38 IN 1316 304 005(1)		
90	1315.204.006		SYNCHRONIZER	1			KPL.1+2G*DK		
/110	1312.304.106		CLUTCH DISC	1					
/120	1268.304.424		INNER RING	1					
/130	1268.304.494		INTERMEDIATE RING	1			ENTHALT.IN 6002 306 153(0)		
/140	1268.304.525		OUTER RING	1			ENTHALT.IN 1310 304 095(1)		
/150	1312.304.158		SYNCHRO.BODY	1			ZF-D171/164		
/160	1312.304.159		COUPLING ELEMENT	3		C01006893A10			
/170	1310.304.175		SLIDING SLEEVE	1		C01007317F10			
/180	0732.040.409		COMPRESSION SPRING	3					
/190	1297.304.436		PRESSURE PART	3					
/200	1268.304.525		OUTER RING	1			ENTHALT.IN 1310 304 095(1)		
/210	1268.304.494		INTERMEDIATE RING	1			ENTHALT.IN 6002 306 153(0)		
/220	1268.304.424		INNER RING	1					
/230	1312.304.106		CLUTCH DISC	1					
140	1312.304.084		BUSH	1			ENTHALT.IN 1312 304 007(2)		
150	0750.115.327		NEEDLE CAGE	1			96,0X104,0X72,0		
160	1316.304.010		HELICAL GEAR	1			1G/Z47 IN 1312 304 033(0)		
180	1312.304.124		CLUTCH BODY	1			ENTHALT.IN 1312 304 055(0)		
200	1316.304.133		BUSH	1			A=50,00 IN 1312 304 010(2)		
210	0750.115.326		NEEDLE CAGE	1			90,0X98,0X50,0		
220	---		HELICAL GEAR	1					
---	1316.304.012		HELICAL GEAR	1			RG*Z44		
---	1316.304.235		HELICAL GEAR	1					
260	0750.117.678		TAPERED ROLLER BEARING	1			80,000X139,992X36,512		
270	---		RETAINING RING	1		Z00027144137	H= 3,00- 3,65(ABSTUFUNG:0,05MM)		
---	0730.303.186		RETAINING RING	1		Z00027144110	h=3,50		
---	0730.303.185		RETAINING RING	1		Z00027144110	h=3,45		
---	0730.303.184		RETAINING RING	1		Z00027144110	h=3,40		
---	0730.303.183		RETAINING RING	1		Z00027144110	h=3,35		
---	0730.303.182		RETAINING RING	1		Z00027144110	h=3,30		
---	0730.303.181		RETAINING RING	1		Z00027144110	h=3,25		



# Parts list

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16 S 181 /

Material number: 1316.055.197

Plant: 068.04.12-1

Material-assembly-group-no: 1316.104.038

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
---	0730.303.180		RETAINING RING	1		Z00027144110	h=3,20		
---	0730.303.179		RETAINING RING	1		Z00027144110	h=3,15		
---	0730.303.178		RETAINING RING	1		Z00027144110	h=3,10		
---	0730.303.187		RETAINING RING	1		Z00027144110	h=3,55		
---	0730.303.188		RETAINING RING	1		Z00027144110	h=3,60		
---	0730.303.189		RETAINING RING	1		Z00027144110	h=3,65		
280	1316.332.109		PRESSURE DISK	1		C01005404C10			
300	1312.304.150		TUBE	1					
320	0750.115.303		NEEDLE CAGE	1			92,0X100,0X63,0		
330	1316.304.008		HELICAL GEAR	1			3G/Z34 IN 1312 304 135(1)		
350	1316.304.190		CLUTCH BODY	1			ZF-BK 144 O		
370	1356.204.006		SYNCHRONIZER	1			KPL.3+4G*BK144 MOLYBDAEN* ANSCHL.INTEGR VERST*ECOSPLIT 3+4		
/10	1356.304.019		SYNCHRO.BODY	1					
/20	1356.304.023		SLIDING SLEEVE	1			ZF-BK 144		
/30	1316.304.189		SYNCHRO.RING	2			ZF-BK 144		
/50	1297.304.436		PRESSURE PART	3					
/60	0732.040.409		COMPRESSION SPRING	3					
390	1316.304.190		CLUTCH BODY	1			ZF-BK 144 O		
410	0750.101.158		THRUST WASHER	2					
420	0750.119.124		INNER RING	1			67,0X77,0X66,1		
430	0750.115.531		ROLLER CAGE	2			77,0X101,0X29,0		
440	1316.304.103		HELICAL GEAR	1			Z32		
460	---		AXIAL WASHER	1			H= 7,30- 8,00(ABSTUFUNG:0,10MM)		
---	1315.304.048		AXIAL WASHER	1			A=8,00 IN 1315 304 042(2)		
---	1315.304.047		AXIAL WASHER	1			A=7,90 IN 1315 304 042(2)		
---	1315.304.046		AXIAL WASHER	1			A=7,80 IN 1315 304 042(2)		
---	1315.304.045		AXIAL WASHER	1			A=7,70 IN 1315 304 042(2)		
---	1315.304.044		AXIAL WASHER	1			A=7,60 IN 1315 304 042(2)		
---	1315.304.043		AXIAL WASHER	1			A=7,50 IN 1315 304 042(2)		
---	1315.304.085		AXIAL WASHER	1			A=7,40 IN 1315 304 042(2)		
---	1315.304.086		AXIAL WASHER	1			A=7,30 IN 1315 304 042(2)		
480	0750.117.232		TAPERED ROLLER BEARING	1			42,070X40,386		

# Parts list

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16 S 181 /

Material number: 1316.055.197

Plant: 068.04.12-1

Material-assembly-group-no: 1316.104.038

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
500	1312.204.040		SPLIT RING	1			GESTANZT		
/10	---		SPLIT RING	2			H= 4,60- 5,00(ABSTUFUNG:0,10MM)		
---	0730.107.023		SPLIT RING	1			A=5,00 IN 0730 106 207(2)		
---	0730.107.022		SPLIT RING	1			A=4,90 IN 0730 106 207(2)		
---	0730.107.021		SPLIT RING	1			A=4,80 IN 0730 106 207(2)		
---	0730.107.020		SPLIT RING	1			A=4,70 IN 0730 106 207(2)		
---	0730.107.019		SPLIT RING	1			A=4,60 IN 0730 106 207(2)		
/20	0730.062.781		RETAINING RING	1			ENTHALT.IN 0730 062 636(2)		

# Plant

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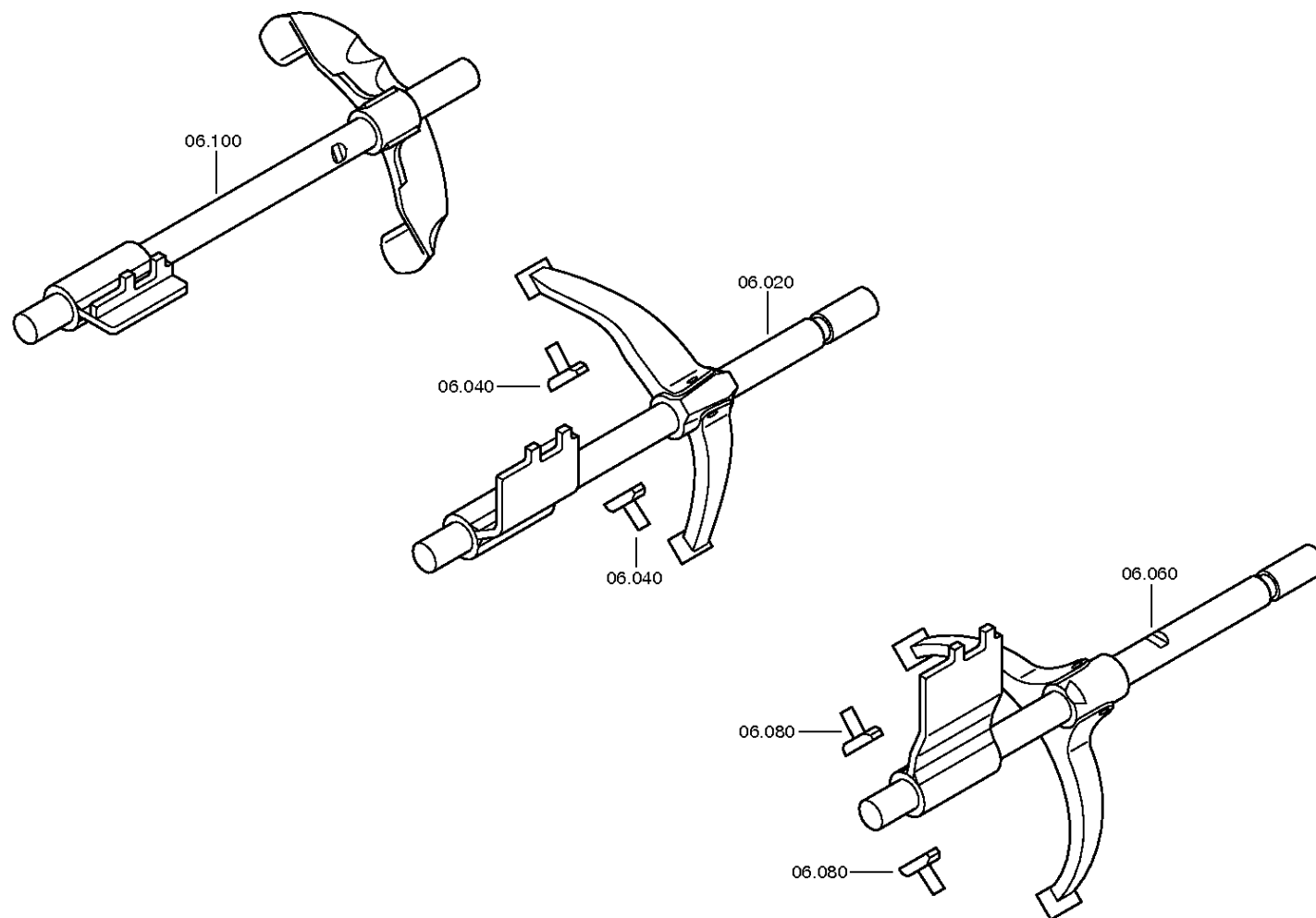
Material number: 1316.055.197

Plant: 068.06.01-1

SHIFT SYSTEM



16 S 181 /  
SHIFT SYSTEM



# Plant

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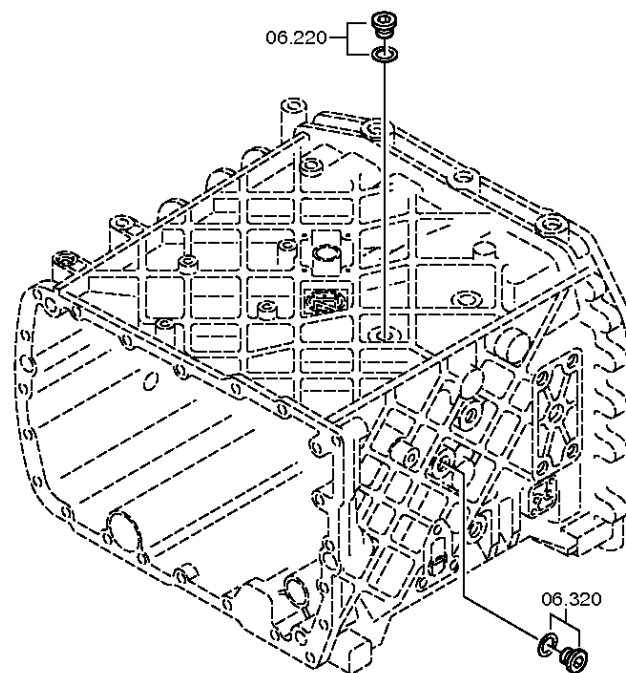
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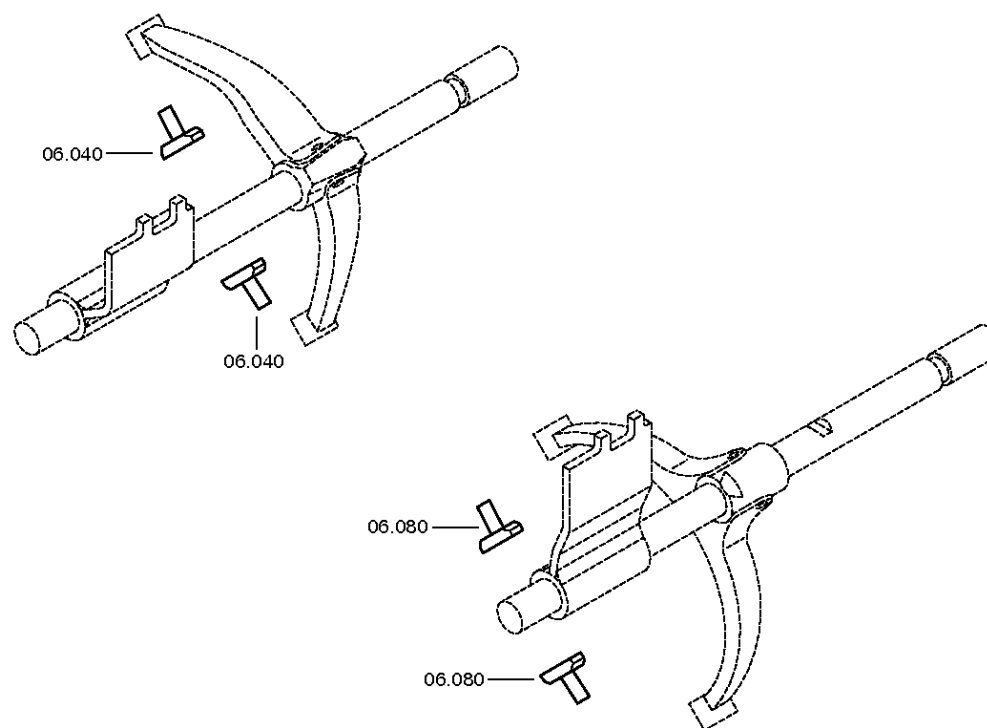
Plant: 068.06.43-1

SHIFT SYSTEM



16 S 181 /  
SHIFT SYSTEM





# Parts list

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16 S 181 /

Material number: 1316.055.197

Plant: 068.06.01-1

Material-assembly-group-no: 1316.106.008

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
20	1316.206.055		GEAR SHIFT RAIL	1			1+2GANG*LANG*WI		
40	1316.306.015		SLIDING PAD	2					
60	1316.206.058		GEAR SHIFT RAIL	1			3+4GANG*LANG*WI		
/10	1316.306.030		GEAR SHIFT RAIL	1					
/20	1325.306.028		GEAR SHIFT FORK	1			3/4G		
/50	0631.329.086		SLOTTED PIN	1			8X40		
/60	0631.329.057		SLOTTED PIN	1			5X40		
80	1316.306.015		SLIDING PAD	2					
100	1316.206.061		GEAR SHIFT RAIL	1			R-GANG*LANG*WI		
/10	1316.306.028		GEAR SHIFT RAIL	1					
/20	1355.306.003		GEAR SHIFT FORK	1			RG		
/50	0631.329.086		SLOTTED PIN	1			8X40		
/60	0631.329.057		SLOTTED PIN	1			5X40		
220	---		SCREW PLUG	1		Z00010111513	35N.M*DICHTRING M18X1,5		
---	0636.100.791		SCREW PLUG	1		Z00010111521	M18X1,5		
---	0634.801.062		SEALING RING	1		Z00010111521	18X24		
320	---		SCREW PLUG	1		Z00010111513	35N.M*DICHTRING M18X1,5		
---	0636.100.791		SCREW PLUG	1		Z00010111521	M18X1,5		
---	0634.801.062		SEALING RING	1		Z00010111521	18X24		

# Plant

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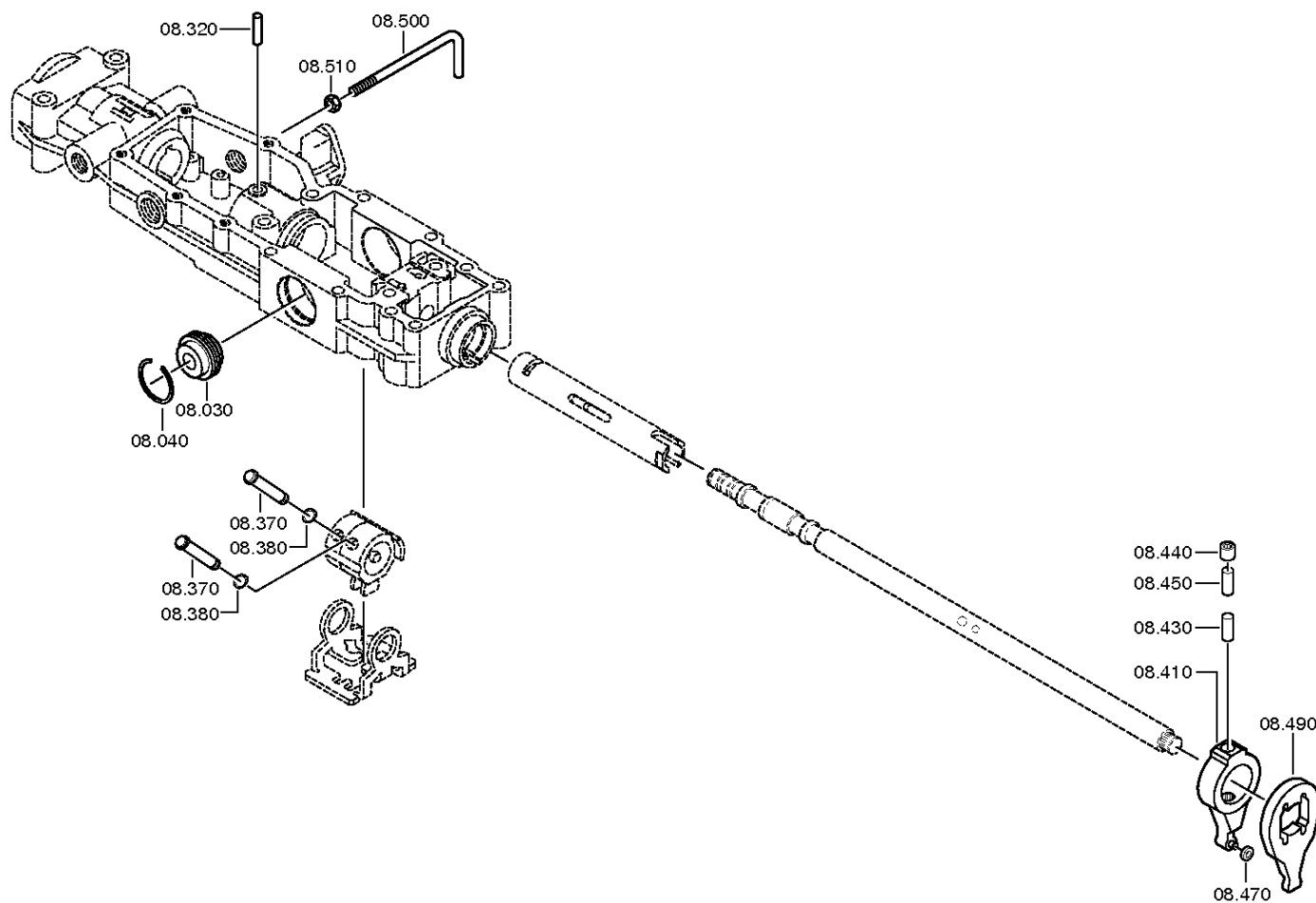
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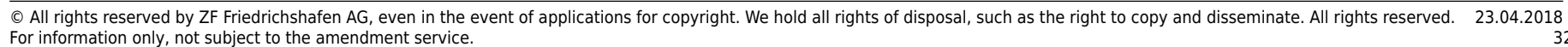
Plant: 068.07.27-1

GEAR SHIFT HOUSING



16 S 181 /  
GEAR SHIFT HOUSING







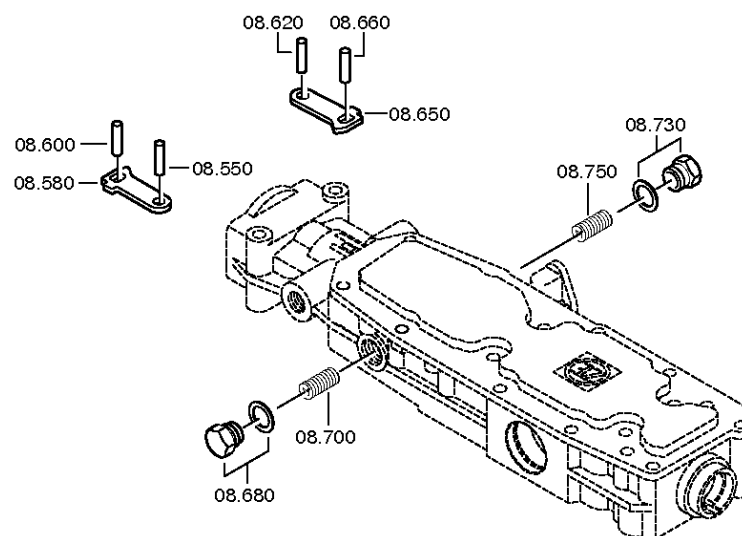
Material number: 1316.055.197

Plant: 068.07.56-1

GEAR SHIFT HOUSING



16 S 181 /  
GEAR SHIFT HOUSING



# Parts list

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16 S 181 /

Material number: 1316.055.197

Plant: 068.07.27-1

Material-assembly-group-no: 1316.108.838

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	1315.307.383		GEAR SHIFT HOUSING	1					
30	0501.209.212		DETENT	1		Z00013943010	KPL.		
40	0630.532.130		V-RING	1		Z00013943010			
80	0631.306.123		CYLINDRICAL PIN	1			8X24		
100	0750.101.191		BUSH	1			A=13,70 A=13,70		
130	0734.309.765		SHAFT SEAL	1		C01005906F10	28,0X42,0X11,0		
300	1315.307.294		QUILL SHAFT	1			ENTHALT.IN 1315.307.293(1)		
320	0731.201.702		PIN	1		Z00013943010			
350	1315.307.735		DRIVER	1		Z00011746811			
360	1315.307.218		LOCKING PIECE	1					
370	1316.208.003		PIN	2		Z00013943010	KPL.		
380	0630.501.006		RETAINING RING	2		Z00013943010	10X1		
410	1316.208.002		VALVE LEVER	1		Z00013943010	KPL.		
430	0731.201.732		PIN	1					
440	0635.303.019		NEEDLE BUSH	1		Z00013943010	10X14X15		
450	0731.201.732		PIN	1					
470	1315.307.226		ROLLER	1		Z00013943010			
490	1315.307.292		LEVER	1		Z00013943010			
500	1316.307.431		BRACKET	1		Z00009440410			
510	0637.006.280		HEXAGON NUT	1		Z00013943010	M8		
550	0631.306.832		CYLINDRICAL PIN	1			6X20		
580	1315.307.203		DETENT LEVER	1					
600	0631.306.832		CYLINDRICAL PIN	1			6X20		
620	0631.306.832		CYLINDRICAL PIN	1			6X20		
650	1315.307.203		DETENT LEVER	1					
660	0631.306.832		CYLINDRICAL PIN	1			6X20		
680	---		SCREW	1		Z00010146310	M22X1,5		
---	1315.307.736		SCREW	1		Z00010146312	M22X1,5		
---	0730.009.515		SEALING RING	1		Z00010146312	A22X27		
700	0732.041.612		COMPRESSION SPRING	1					
730	---		SCREW	1		Z00010146310	M22X1,5		
---	1315.307.736		SCREW	1		Z00010146312	M22X1,5		
---	0730.009.515		SEALING RING	1		Z00010146312	A22X27		
750	0732.041.612		COMPRESSION SPRING	1					

# Parts list

Page 2 from 2



16 S 181 /

Material number: 1316.055.197

Plant: 068.07.27-1

Material-assembly-group-no: 1316.108.838

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
870	1315.307.013		GASKET	1					
890	0736.300.137		HEXAGON SCREW	8		Z00009195410	M8X80 M8X80		
930	1341.307.104		PROTECTION CAP	1		C01007034F10			
940	1315.307.421		SHIFT LEVER	1					
950	---		BOLT+NUT	1		Z00012297710	M10X65		
---	0636.100.713		HEXAGON SCREW	1		Z00007890810	M10X65		
---	0637.100.419		HEXAGON NUT	1		Z00007892710	M10		

# Plant

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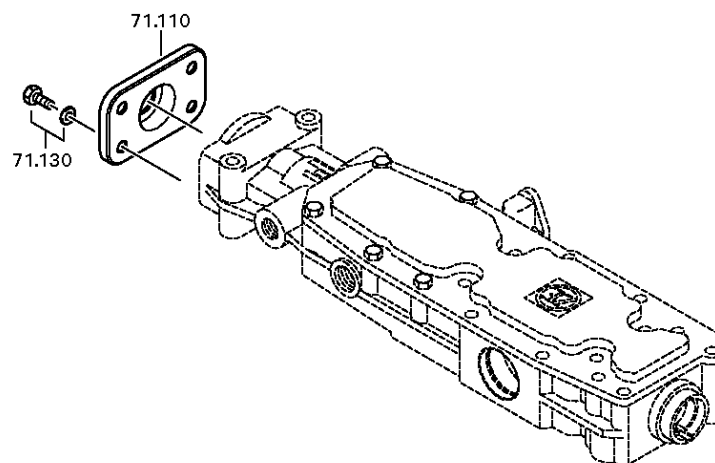
Material number: 1316.055.197

Plant: 062.08.30-1

END COVER



16 S 181 /  
END COVER



# Plant

Page 2 from 2

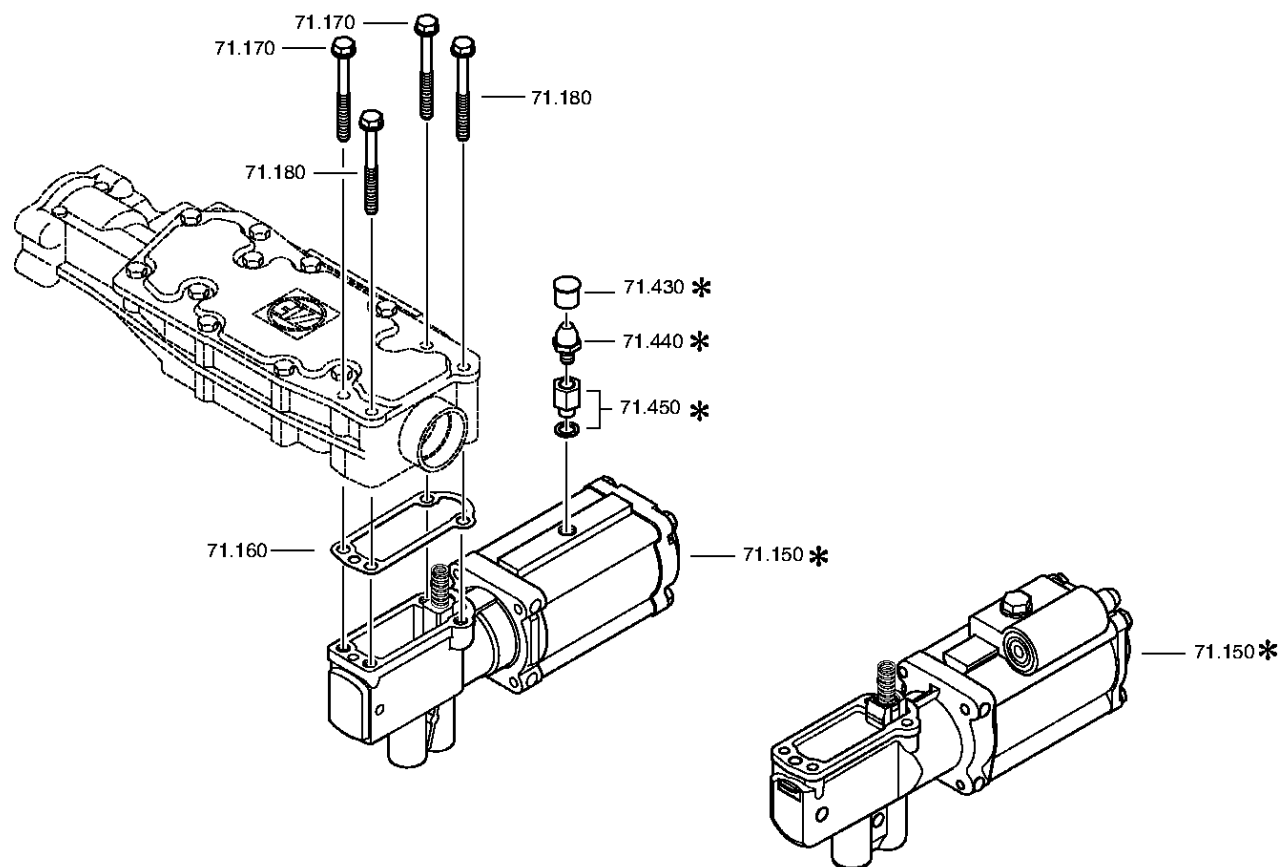
Material number: 1316.055.197

Plant: 068.08.02-1

END COVER



16 S 181 /  
END COVER



# Parts list

Page 1 from 1



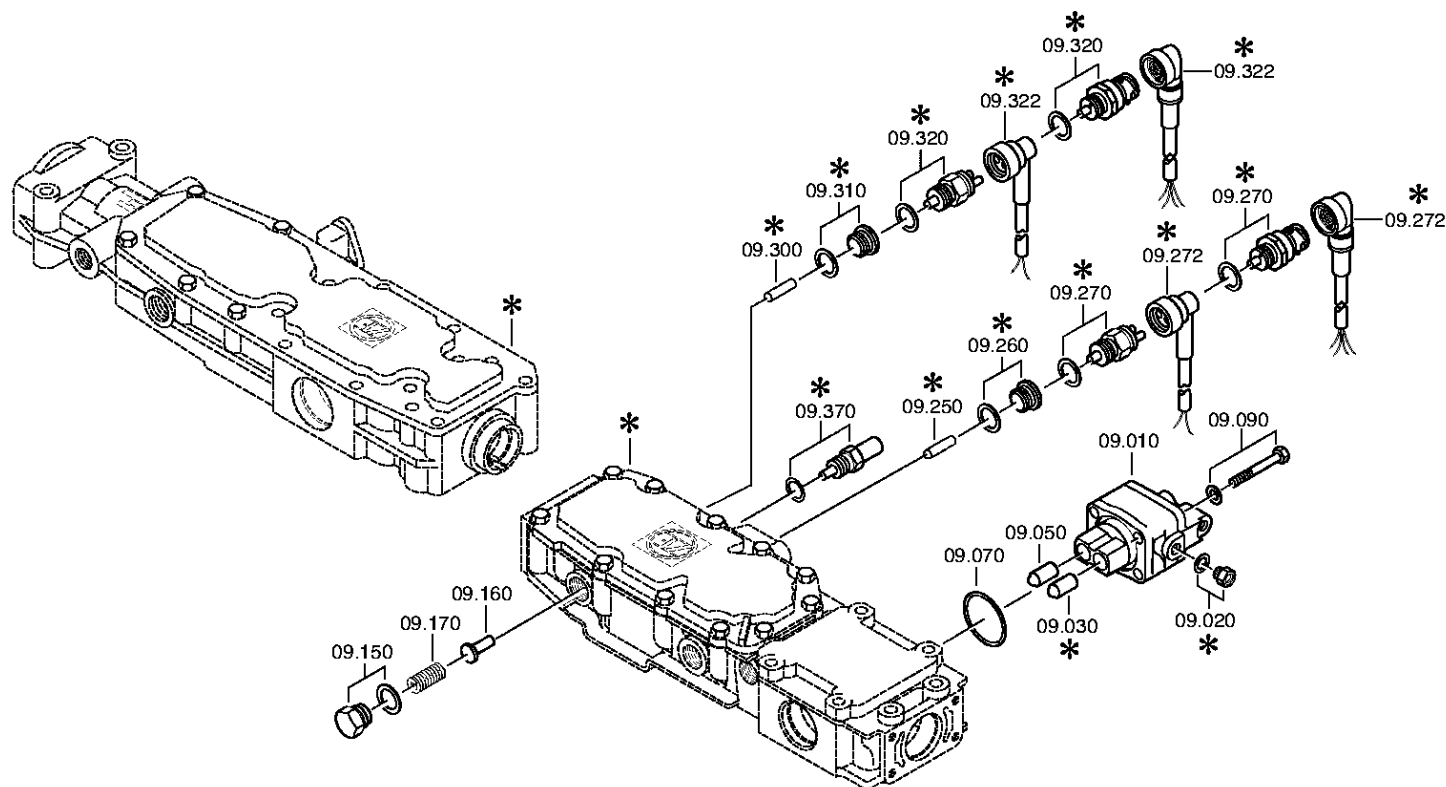
16 S 181 /

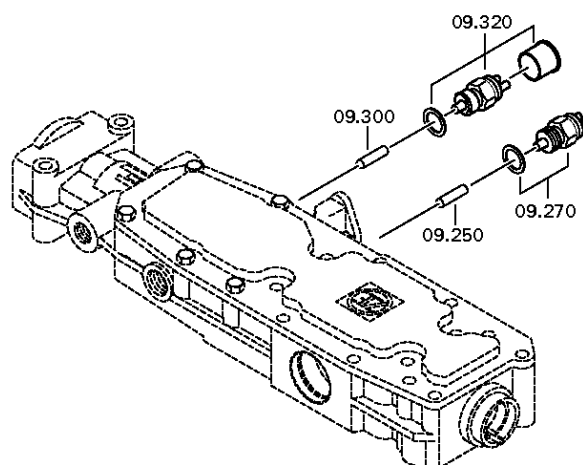
Material number: 1316.055.197

Plant: 062.08.30-1

Material-assembly-group-no: 1316.171.403

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
110	1341.307.113		COVER	1		Z00009271410			
130	---		HEXAGON SCREW	4		Z00007891111	M8X20		
---	0636.100.796		HEXAGON SCREW	1		Z00007891120	M8X20		
---	0630.100.295		WASHER	1		Z00007158414			
150	0501.211.290		PNEUMATIC SERVO UNIT	1			KPL.		
160	1315.307.242		GASKET	1					
170	0736.300.137		HEXAGON SCREW	2		Z00009195410	M8X80 M8X80		
180	---		HEXAGON SCREW	2		Z00009195410	M8X80		
---	0736.300.137		HEXAGON SCREW	1		Z00009195414	M8X80 M8X80		
---	0666.790.033		SEAL.COMPOUND	1		Z00009195414			







# Parts list

Page 1 from 1



16 S 181 /

Material number: 1316.055.197

Plant: 068.09.01-1

Material-assembly-group-no: 1316.109.022

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	6038.202.043		CUT-OFF VALVE	1		C01002143C10	KPL.H-H*ZULUFTDROSSEL 1,55		
30	0501.209.188		BALL CASTER	1			KPL.		
50	0501.209.188		BALL CASTER	1			KPL.		
70	---		O-RING	1		Z00034779511	ZFF*LOKAL HNG 42X3		
90	---		HEXAGON SCREW	4		Z00007054112	M8X65		
---	0636.100.519		HEXAGON SCREW	1		Z00007054110	M8X65		
---	0630.100.295		WASHER	1		Z00007158414			
150	---		SCREW	1		Z00010146310	M22X1,5		
---	1315.307.736		SCREW	1		Z00010146312	M22X1,5		
---	0730.009.515		SEALING RING	1		Z00010146312	A22X27		
160	1315.307.384		BOLT	1		C01003958B10	ENTHALT.IN 1250 307 589(2)		
170	0732.041.612		COMPRESSION SPRING	1					
250	0731.201.446		PIN	1			ENTHALT.IN 0731 201 445(2)		
270	---		SWITCH	1		Z00004287211	OEFF*45N.M*DICHTRING*BAJONETT* SCHUTZKAPPE		
---	0501.219.856		SWITCH	1			OEFFNER DIN BAJONETT		
---	0634.801.062		SEALING RING	1			18X24		
300	0731.208.256		PIN	1			A=30,0		
320	---		SWITCH	1		Z00025033610	SCHL*45N.M*DICHTRING*BAJONETT* SCHUTZKAPPE		
---	0501.331.660		SWITCH	1		Z00025033617			
---	0634.801.062		SEALING RING	1		Z00025033617	18X24		
---	0700.300.427		PROTECTION CAP	1		Z00025033617			

# Plant

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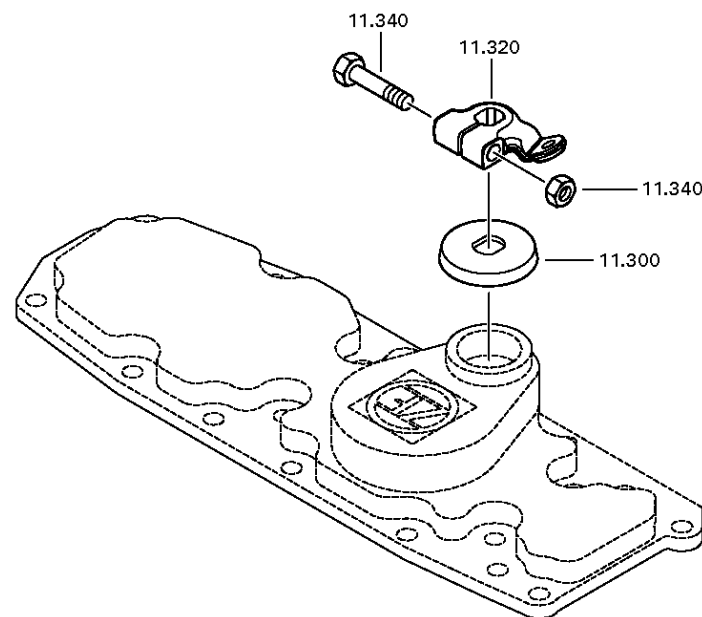
Material number: 1316.055.197

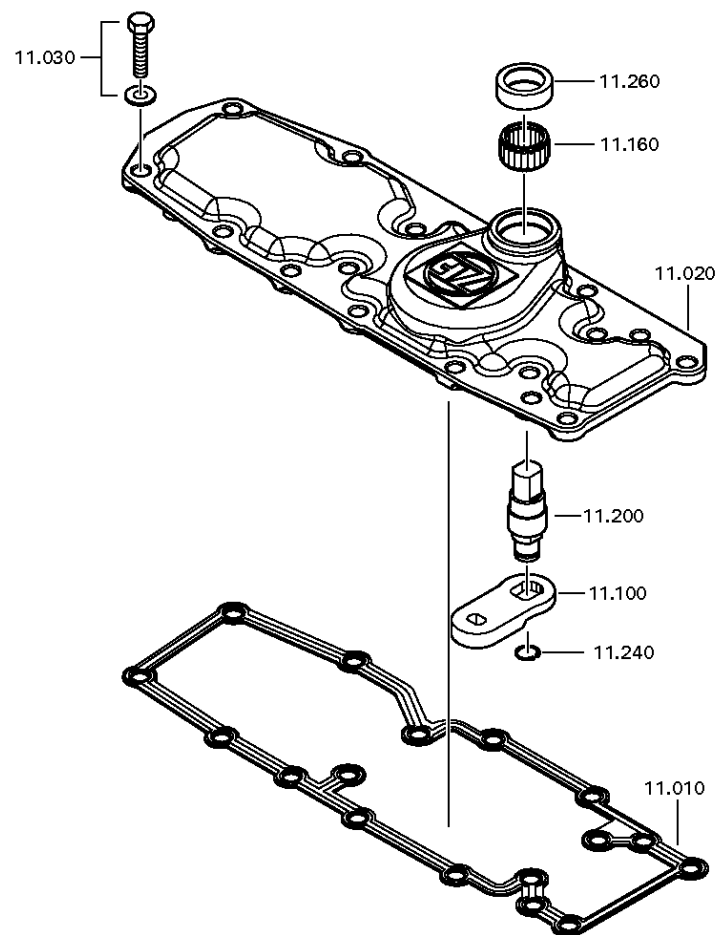
Plant: 068.10.80-1

SELECTOR LEVER



16 S 181 /  
SELECTOR LEVER





# Parts list

Page 1 from 1



16 S 181 /

Material number: 1316.055.197

Plant: 068.10.80-1

Material-assembly-group-no: 1316.111.802

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	0501.324.072		GASKET	1		Z00033959410			
20	---		COVER	1		Z00033959410	ZFF/ZFDH		
---	1315.307.336		COVER	1		Z00034298610			
30	---		HEXAGON SCREW	5		Z00033959410	M8X25		
---	0636.016.401		HEXAGON SCREW	1			M8X25		
---	0630.100.295		WASHER	1		Z00007158414			
100	1315.307.375		SELECTOR LEVER	1		Z00033959410			
160	0635.303.007		NEEDLE SLEEVE	1		Z00033959410	22X28X10		
200	---		SELECTOR SHAFT	1			ZFF*LOKAL HNG		
---	1315.307.346		SELECTOR SHAFT	1		Z00026363710			
240	0630.531.240		V-RING	1		Z00033959410			
260	---		SHAFT SEAL	1		Z00033959410	20X30X7		
---	0734.309.392		SHAFT SEAL	1			20,0X30,0X7,0		
300	---		PROTECTION CAP	1		Z00030698111			
---	0501.324.645		PROTECTION CAP	1		Z00030698110			
---	1307.307.052		PROTECTION CAP	1		Z00030698110			
---	0501.330.970		PROTECTION CAP	1		Z00030698110	46mmx7mm		
320	1316.307.428		SELECTOR LEVER	1		Z00011099010	U584		
340	---		BOLT+NUT	1			M10X50		
---	0636.011.756		HEXAGON SCREW	1			M10X50		
---	0637.100.419		HEXAGON NUT	1		Z00007892710	M10		

# Plant

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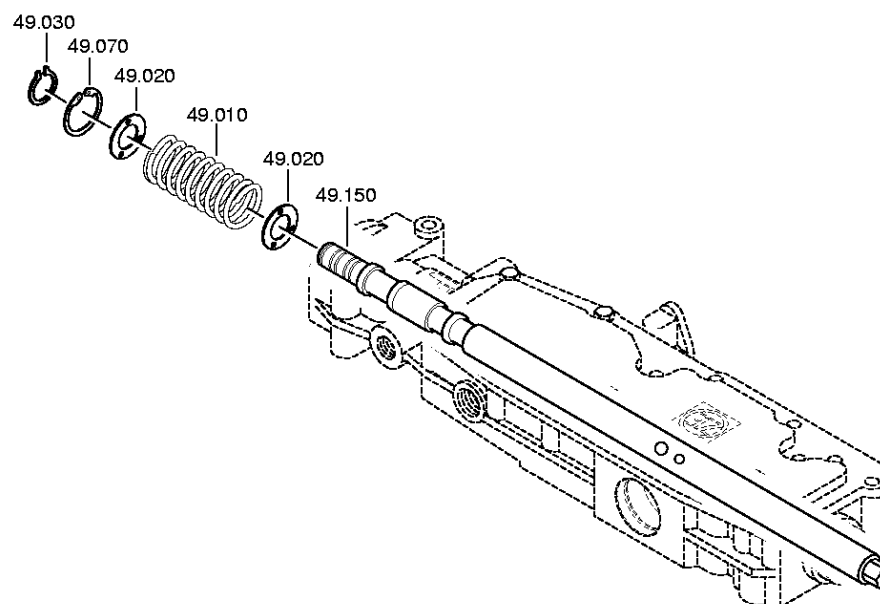
Material number: 1316.055.197

Plant: 068.12.12-1

Material-assembly-group-no: 1316.149.430



16 S 181 /  
SET OF SPRINGS



# Parts list

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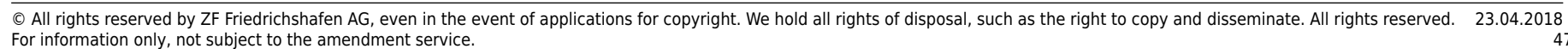
16 S 181 /

Material number: 1316.055.197

Plant: 068.12.12-1

Material-assembly-group-no: 1316.149.430

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	0732.042.684		COMPRESSION SPRING	1					
20	0730.301.376		WASHER	2		Z00008917410			
30	0630.532.138		V-RING	1					
70	0630.502.022		RETAINING RING	1			40X1,75		
150	1315.307.376		GEARSHIFT SHAFT	1			LI		



# Plant

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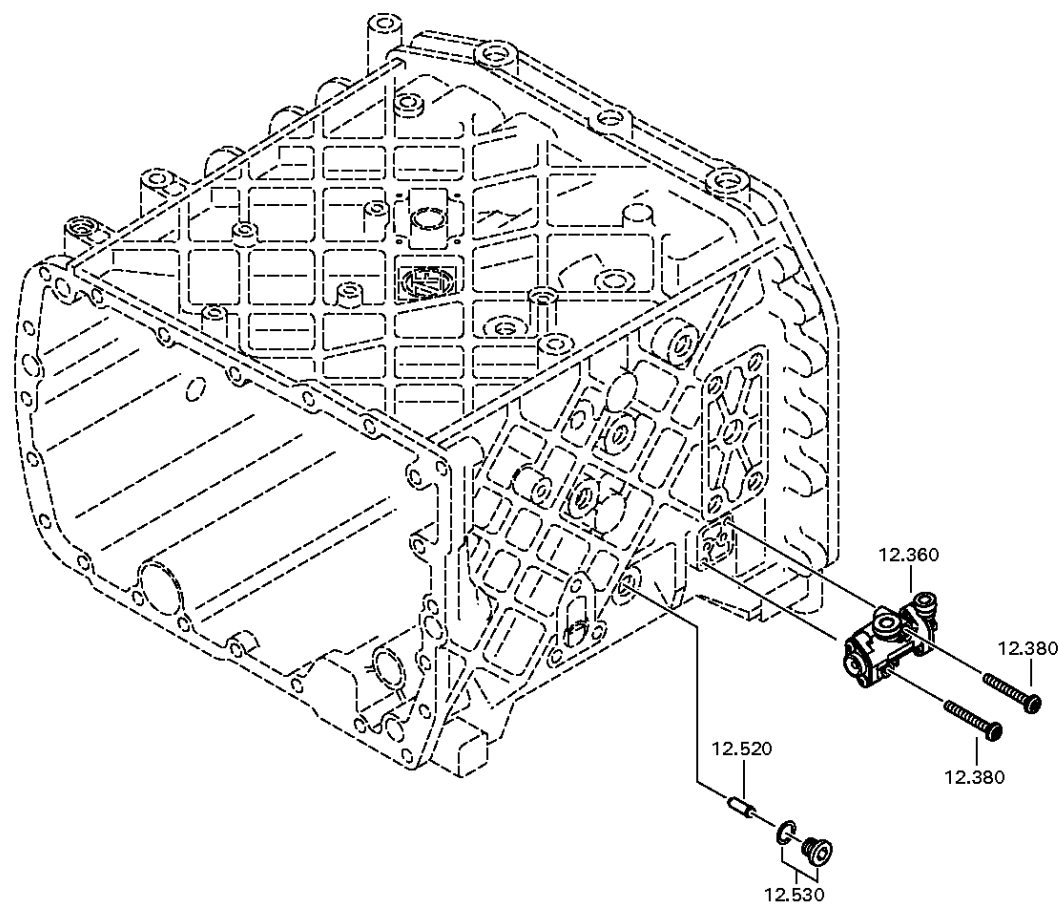
Material number: 1316.055.197

Plant: 068.40.40-1

GV-SHIFT SYSTEM



16 S 181 /  
GV-SHIFT SYSTEM





# Parts list

Page 1 from 1



16 S 181 /

Material number: 1316.055.197

Plant: 068.40.04-1

Material-assembly-group-no: 1316.112.014

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	1316.212.010		GEAR SHIFT RAIL	1			KPL.GV.LAG.GEH.1		
/110	1316.312.023		GEAR SHIFT RAIL	1					
/120	1315.312.074		GEAR SHIFT FORK	1			GV ECO 3		
/130	1315.312.047		SET SCREW	2			M12X1		
60	1316.306.015		SLIDING PAD	2		Z00012212711			
130	0750.112.131		FLANGE PACKING	1			25X40X15		
150	0501.324.670		PISTON	1		Z00012212711			
190	0737.300.037		LOCKING NUT	1			MS16X1,5		
210	1316.212.007		CYLINDER	1		Z00012212711	KPL.		
/110	1316.312.015		CYLINDER	1			ENTHALT.IN 1315 312 033(1)		
/120	---		O-RING	1		Z00034779210	ZFF*LOKAL HNG		
/130	---		O-RING	1		Z00034779311	ZFF*LOKAL HNG		
260	1315.312.034		SPRING	1		Z00012212711			
300	---		DETENT PLUNGER	1		Z00012212711	235N*50N.M		
---	1324.207.033		DETENT PLUNGER	1			KPL. *235 N		
---	0730.008.604		SEALING RING	1		C01009860C10			
360	0501.219.848		5/2 WAY VALVE	1		Z00035060611	SPLITGRUPPENVENTIL VERSION B 96,1mmx49,8mm		
380	0736.300.659		TORX SCREW	2		Z00035060611	M6X45		
520	1295.212.006		PIN	1			KPL.		
530	---		SCREW PLUG	1		Z00010111513	35N.M*DICHTRING M18X1,5		
---	0636.100.791		SCREW PLUG	1		Z00010111521	M18X1,5		
---	0634.801.062		SEALING RING	1		Z00010111521	18X24		

# Plant

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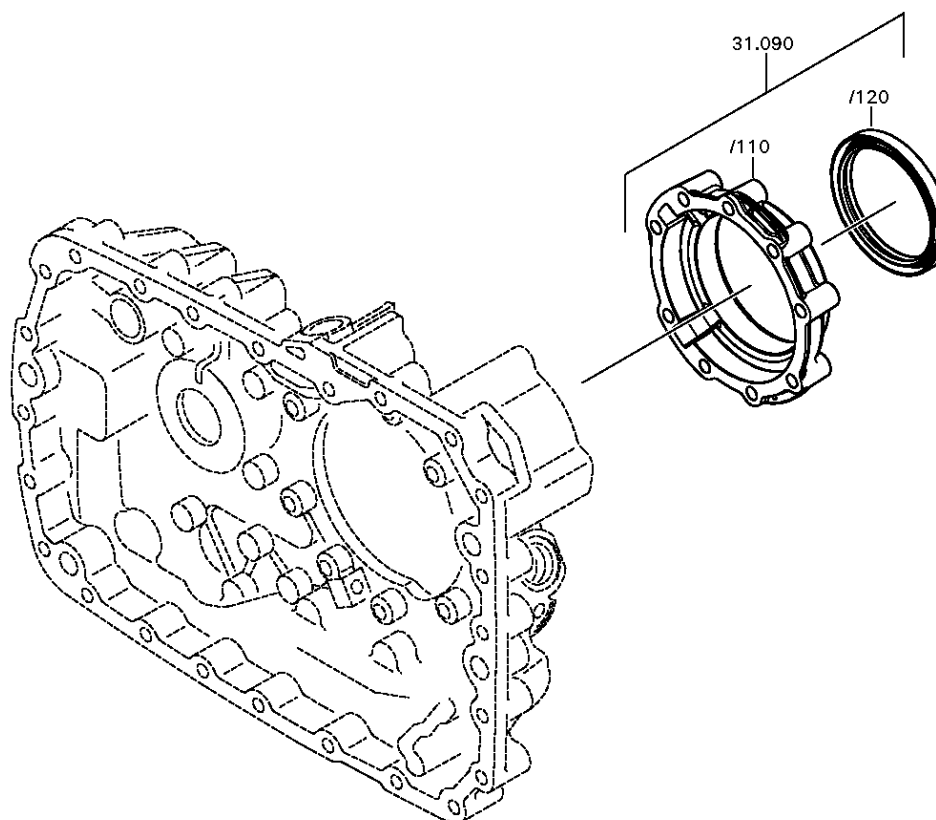
Material number: 1316.055.197

Plant: 068.43.21-1

COVER



16 S 181 /  
COVER



# Plant

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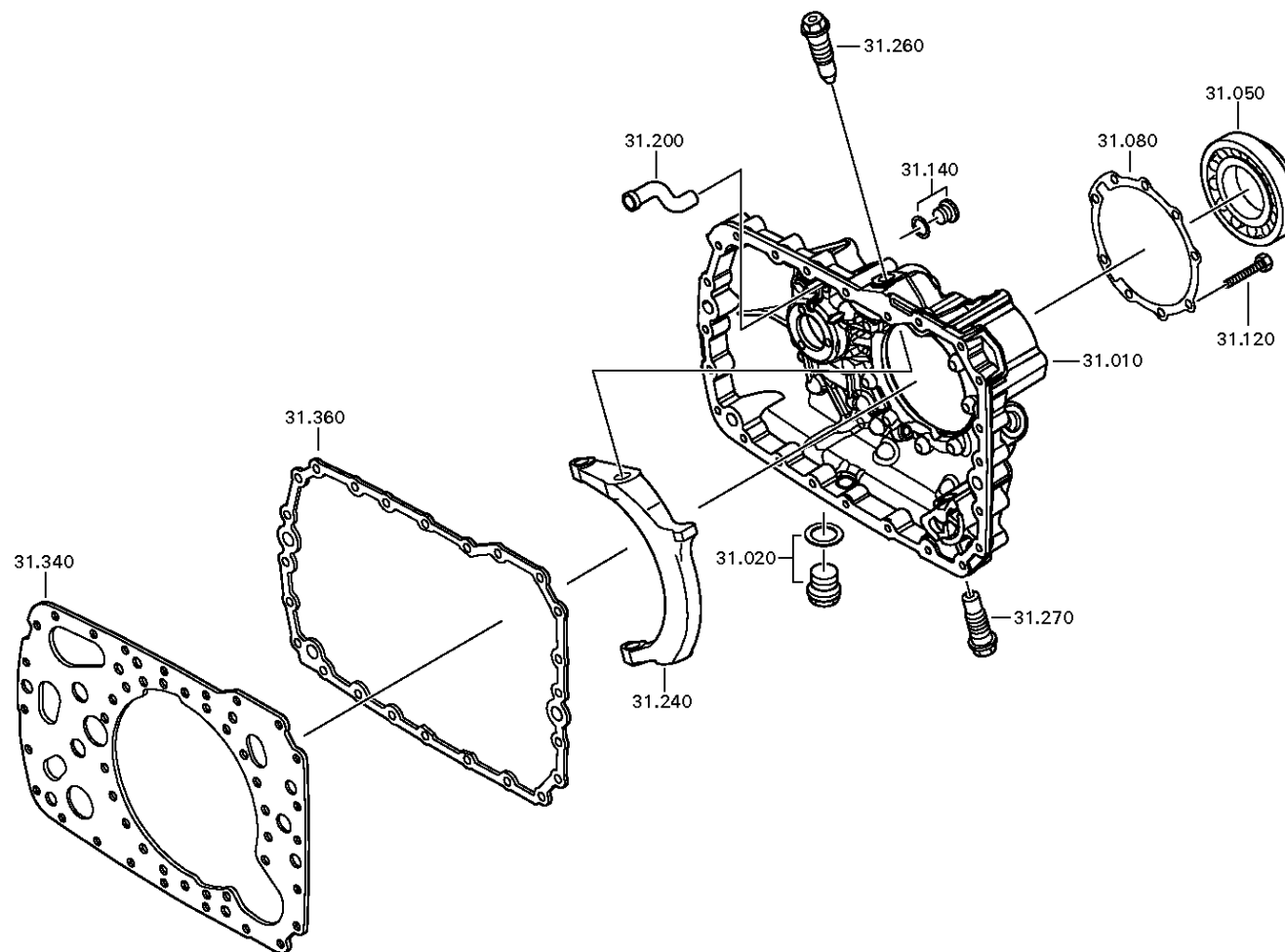
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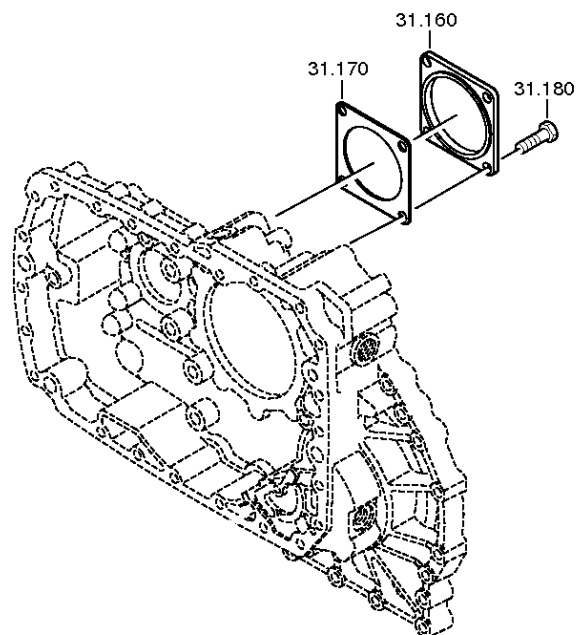
Plant: 068.43.06-1

COVER



16 S 181 /  
COVER





# Plant

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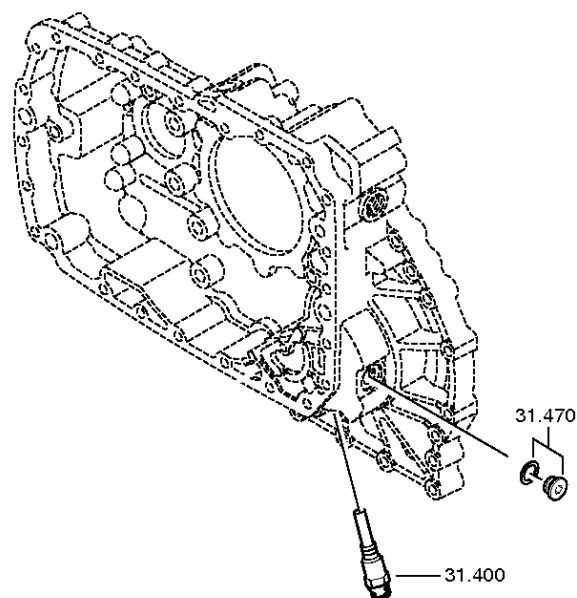
Material number: 1316.055.197

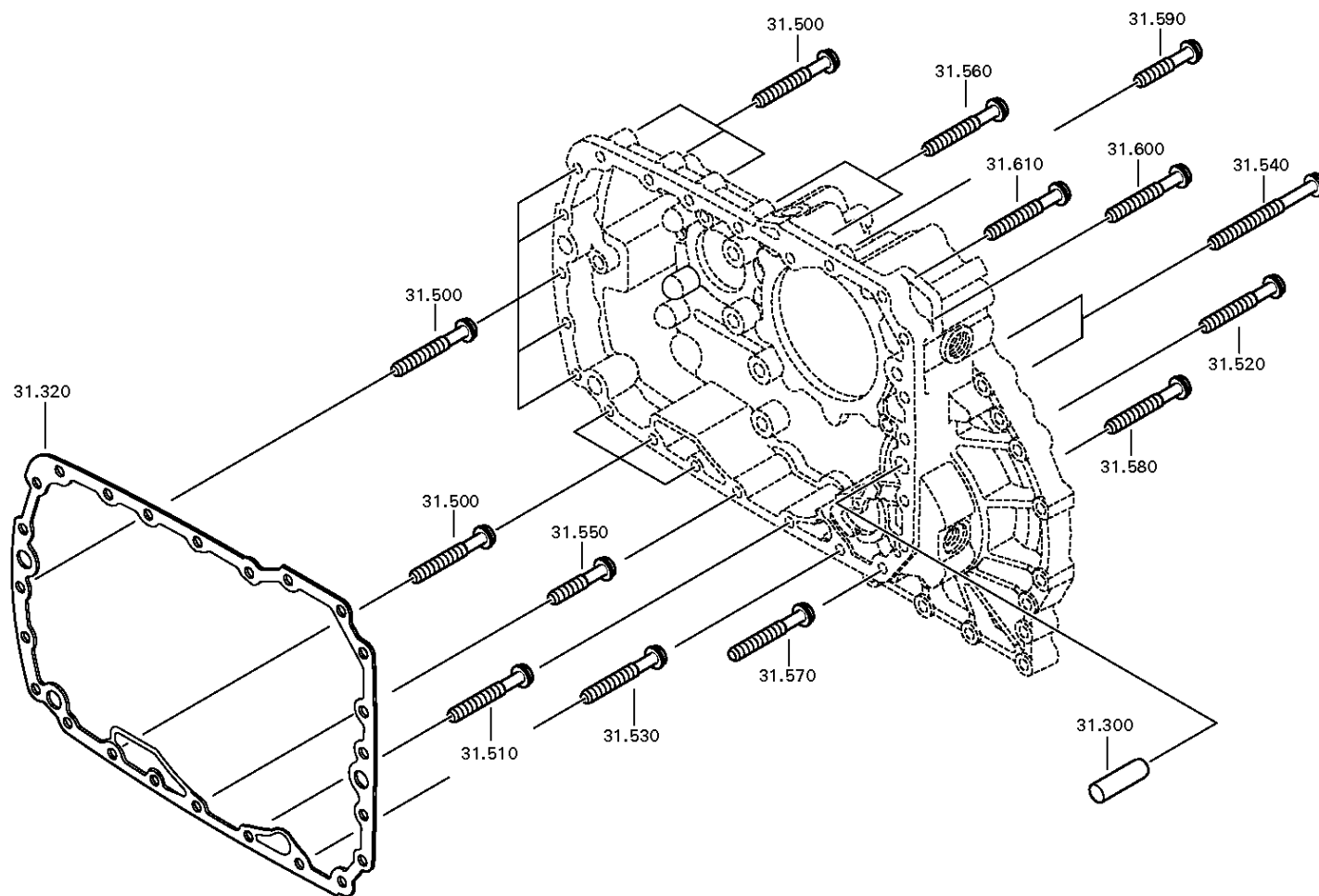
Plant: 068.43.41-1

COVER



16 S 181 /  
COVER





# Parts list

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16 S 181 /

Material number: 1316.055.197

Plant: 068.43.21-1

Material-assembly-group-no: 1315.131.047

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	1315.301.224		HOUSING	1			ENTHALT.IN 1315 301 222(0)		
20	---		SCREW PLUG	1		Z00010112111	60N.M*DICHTRING M24X1,5		
---	0636.304.088		SCREW PLUG	1		Z00010112110	M24X1,5		
---	0730.008.637		SEALING RING	1		Z00010112110	24X29		
50	0750.116.394		BALL BEARING	1		C01007214E10	90,0X160,0X30,0		
80	1315.331.001		GASKET	1		C01005350C10			
90	1315.231.004		COVER	1			KPL.		
/120	0750.111.341		SHAFT SEAL	1			105,0X130,0X12,0		
//10	0734.319.253		SHAFT SEAL	1			105,0X130,0X12,0		
//20	0734.319.551		SHAFT SEAL	1			105,0X130,0X12,0		
120	0636.016.405		HEXAGON SCREW	9		Z00007060111	M10X60		
140	---		SCREW PLUG	1		C01004359F10	15N.M*DICHTRING M10X1		
---	0636.100.793		SCREW PLUG	1		Z00010111613	M10X1		
---	0730.008.055		SEALING RING	1			10X14		
160	1328.301.170		COVER	1		Z00008068010			
170	1238.308.201		GASKET	1			ENTHALT.IN 1238 308 202(2)		
180	0636.016.406		HEXAGON SCREW	4		Z00007061014	M12X25		
200	1296.301.008		SPRAY TUBE	1					
240	1315.334.039		GEARSHIFT FORK	1					
260	---		SWIVEL SCREW	1			O.SCHEIBE*ZF KAMA		
---	---		SWIVEL SCREW	1		Z00015655010	WTB*ZF KAMA M24X1,5		
270	---		SWIVEL SCREW	1			O.SCHEIBE*ZF KAMA		
---	---		SWIVEL SCREW	1		Z00015655010	WTB*ZF KAMA M24X1,5		
300	0731.201.563		CYLINDRICAL PIN	3					
320	1316.301.042		GASKET	1					
340	1315.301.118		INTERMEDIATE PLATE	1			ENTHALT.IN 1315 301 144(0)		
360	1316.301.042		GASKET	1					
400	---		PULSE SENSOR	1		Z00004287211	35N.M*FLAE.DICHTG*BAJO*KITAS2* EXPL.GESCH*SOLO*L=90,0*SCHUKA		
---	0501.224.052		PULSE SENSOR	1		Z00043300114	KITAS 2+ RI THT LEAD FREE STANDARD		
---	0700.300.466		PROTECTION CAP	1		Z00025050911	27,1X36		
470	---		SCREW PLUG	1		Z00032040611	M18X1,5		

# Parts list

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16 S 181 /

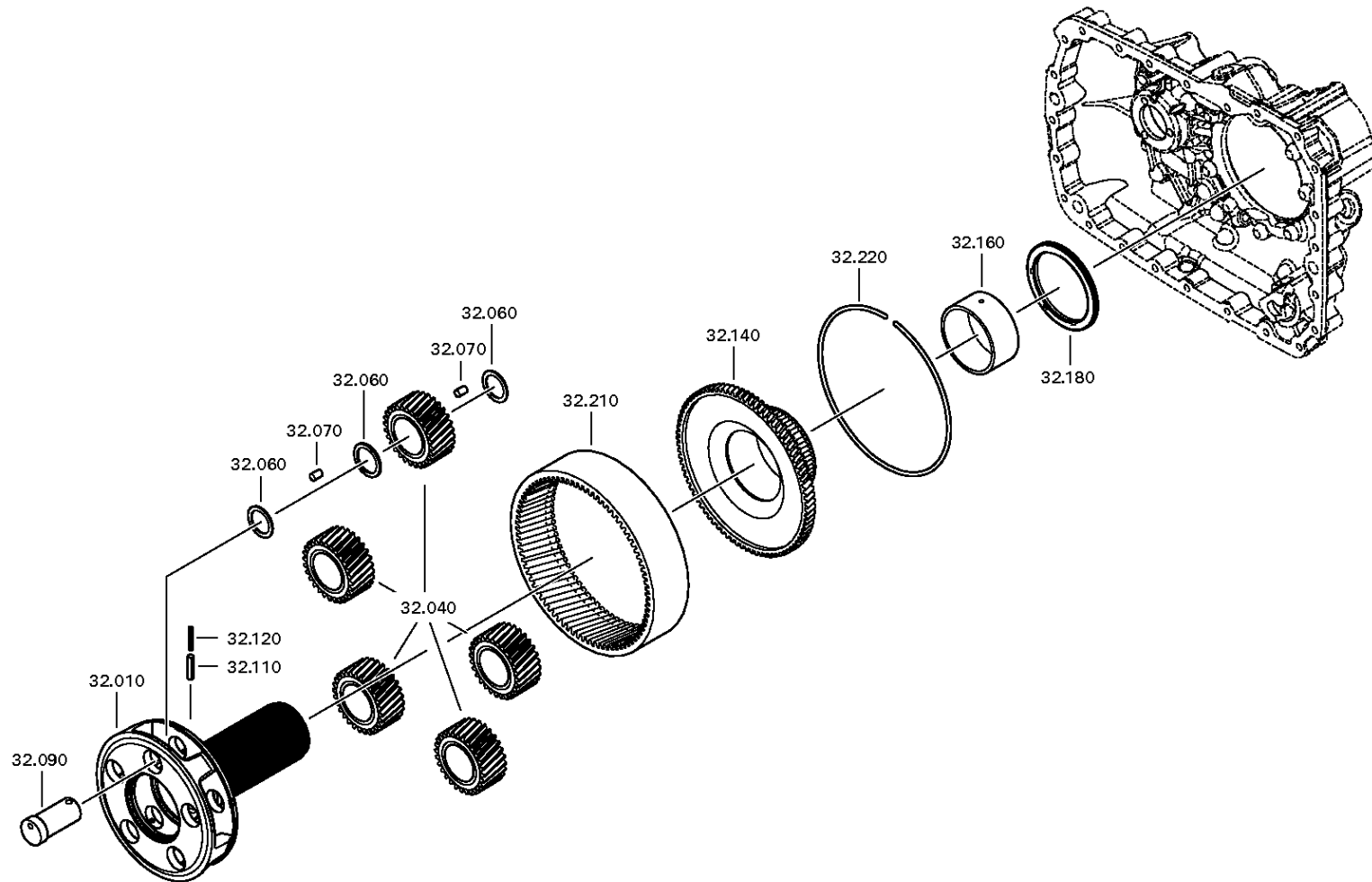
Material number: 1316.055.197

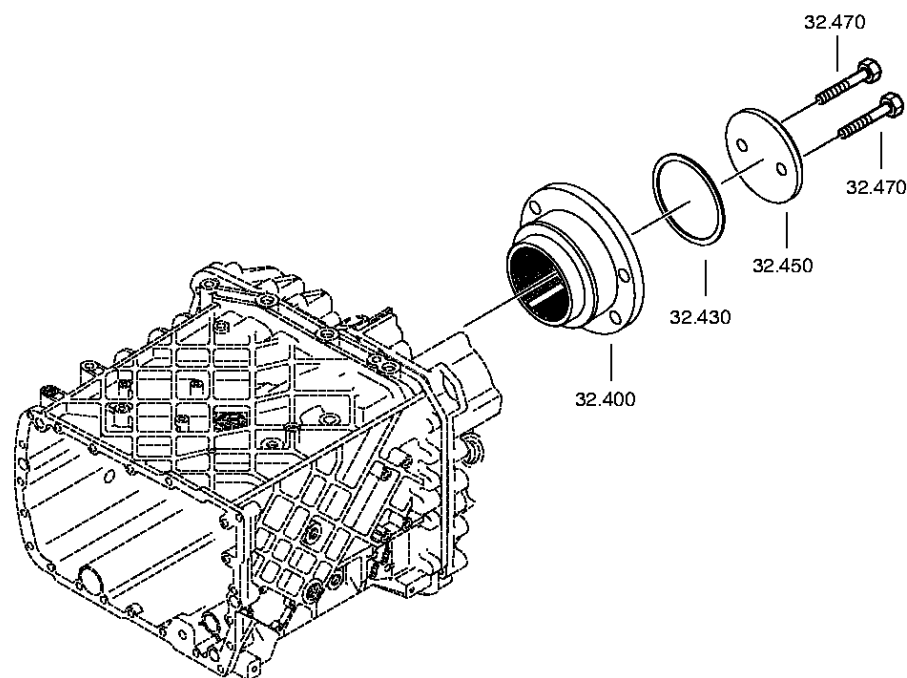
Plant: 068.43.21-1

Material-assembly-group-no: 1315.131.047

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
---	---		SCREW PLUG	1		Z00032040610	35N.M*DICHTRING*FLAECHENDICHT G. M18X1,5		
---	0636.100.791		SCREW PLUG	1		Z00010111513	M18X1,5		
---	0634.801.155		SEALING RING	1			18X24		
---	---		SCREW PLUG	1		Z00032040610	35N.M*DICHTRING M18X1,5		
---	0636.100.791		SCREW PLUG	1		Z00010111521	M18X1,5		
---	0634.801.062		SEALING RING	1		Z00010111521	18X24		
500	0736.300.123		HEXAGON SCREW	11			M10X70 M10X70		
510	0736.300.123		HEXAGON SCREW	1			M10X70 M10X70		
520	0736.300.123		HEXAGON SCREW	1			M10X70 M10X70		
530	0736.300.123		HEXAGON SCREW	1			M10X70 M10X70		
540	0736.300.122		HEXAGON SCREW	2		Z00009403110	M10X110 M10X110		
550	0736.300.134		HEXAGON SCREW	1		Z00011103210	M10X45 M10X45		
560	0736.300.123		HEXAGON SCREW	2			M10X70 M10X70		
570	0736.300.123		HEXAGON SCREW	1			M10X70 M10X70		
580	0736.300.123		HEXAGON SCREW	1			M10X70 M10X70		
590	0736.300.134		HEXAGON SCREW	1		Z00011103210	M10X45 M10X45		
600	0736.300.123		HEXAGON SCREW	1			M10X70 M10X70		
610	0736.300.123		HEXAGON SCREW	1			M10X70 M10X70		







# Parts list

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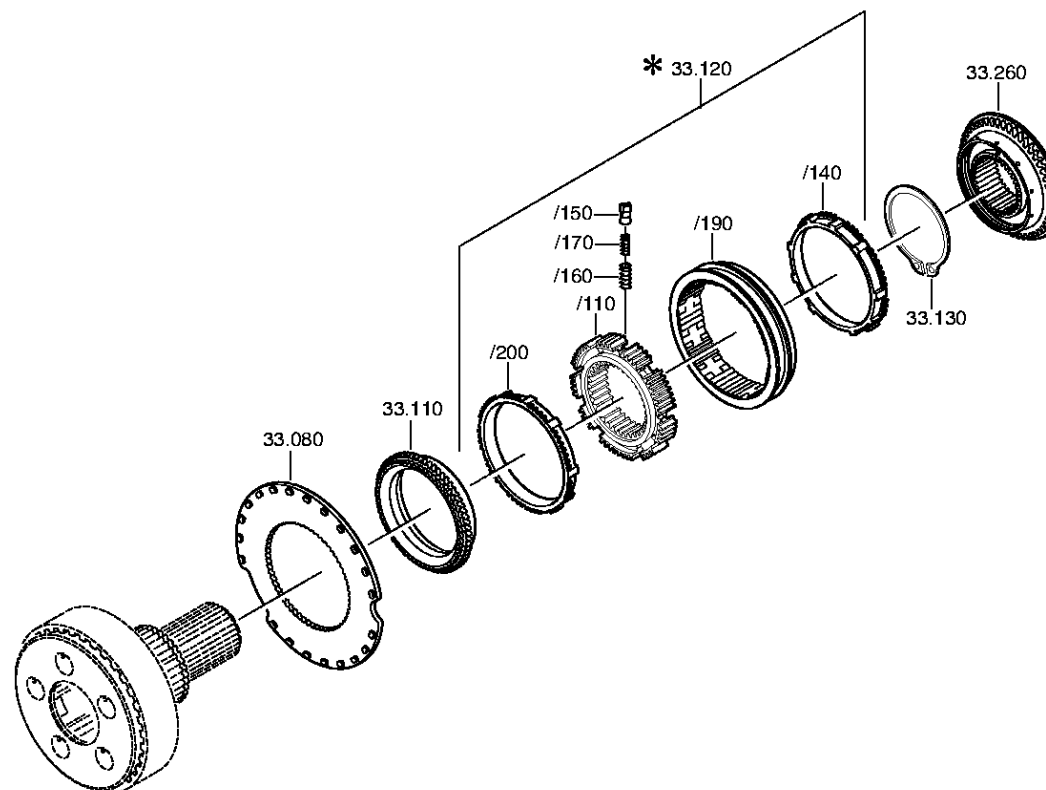
16 S 181 /

Material number: 1316.055.197

Plant: 068.44.07-1

Material-assembly-group-no: 1315.132.015

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	1315.232.027		PLANET CARRIER	1		Z00014438011			
40	1315.232.010		PLANET GEAR SET	1			KPL.		
60	0730.107.168		INTERMEDIATE WASHER	15			A=1,00 IN 0730 105 951(2)		
70	0750.119.160		ROLLER	140		Z00025484311	10,0X16,8		
90	1315.332.091		PLANET SHAFT	5		Z00014438011			
110	0631.329.147		SLOTTED PIN	5		Z00014438011	6X26		
120	0631.329.261		SLOTTED PIN	5			3,5X26		
140	1316.332.130		RING GEAR CARRIER	1		C01007305F10			
160	1316.333.014		INTERMEDIATE RING	1					
180	0735.298.169		AXIAL NEEDLE BEARING	1			103,3X128,4X10,0		
210	1315.332.041		RING GEAR	1			IN 1316 332 055(1)		
220	0730.513.583		LOCKING WIRE	1			A=3,20 IN 0730 505 052(2)		
400	1316.332.143		OUTPUT FLANGE	1			ECO3*SOLO*ZINI-BESCHICHTUNG		
430	---		O-RING	1		Z00034779410	ZFF*LOKAL HNG		
450	1312.332.028		WASHER	1					
470	0636.011.777		HEXAGON SCREW	2		Z00007292012	M12X60		



# Plant

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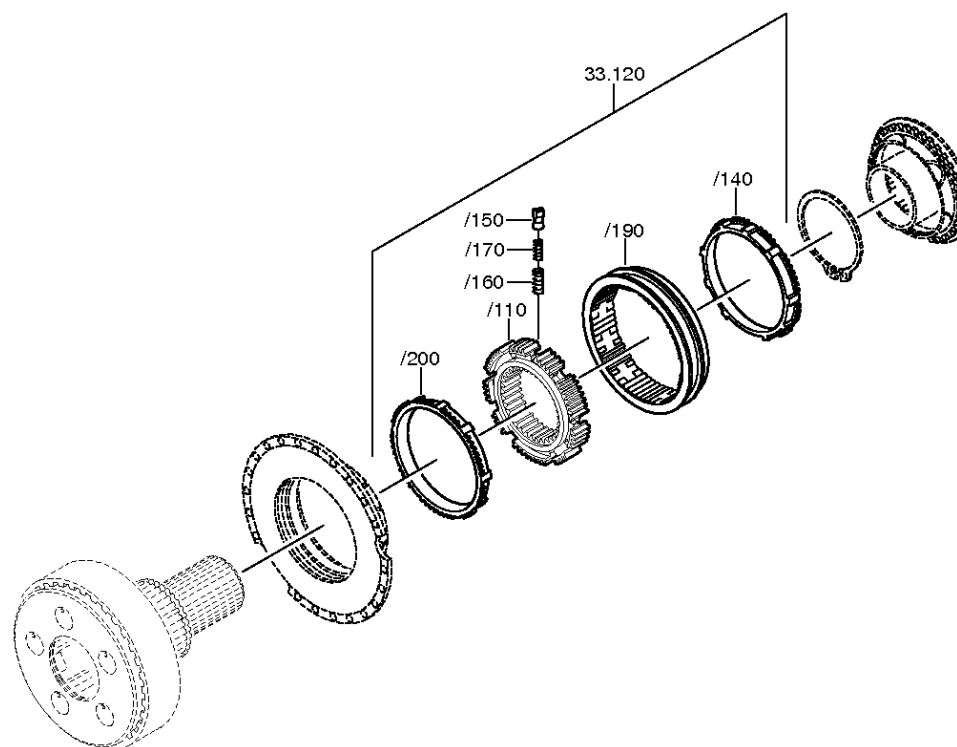
Material number: 1316.055.197

Plant: 068.45.40-1

SYNCHRONIZER



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SYNCHRONIZER



# Parts list

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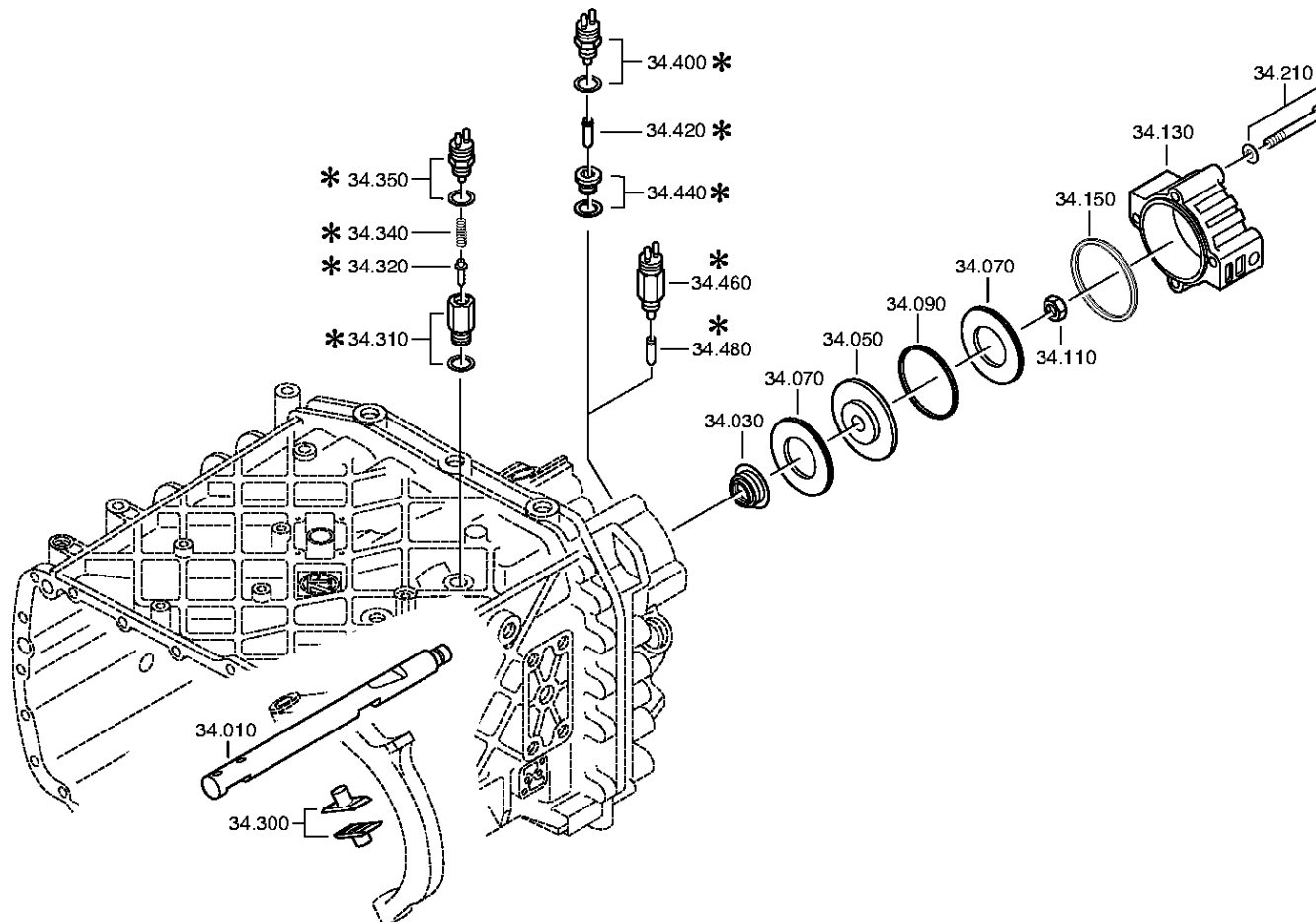
16 S 181 /

Material number: 1316.055.197

Plant: 068.45.04-1

Material-assembly-group-no: 1316.133.008

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
80	1296.333.046		CLUTCH DISC	1			ENTHALT.IN 1296 333 051(1)		
110	1296.333.050		CLUTCH BODY	1		C01002627A10	ENTHALT.IN 1296.333.053(1)		
120	1316.233.022		SYNCHRONIZER	1			KPL.PROFIL 80GV-GP 90SV-GP		
/110	1313.333.001		SYNCHRO.BODY	1			ENTHALT.IN 1296 333 014(1)		
/140	1296.333.045		SYNCHRO.RING	1					
/150	1240.304.278		PRESSURE PART	9					
/160	0732.040.385		COMPRESSION SPRING	9					
/170	0732.040.386		COMPRESSION SPRING	9					
/190	1316.333.034		SLIDING SLEEVE	1		C01007317F10	ZF-B 165/74 GP		
/200	1296.333.045		SYNCHRO.RING	1					
130	0630.501.175		RETAINING RING	1		Z00006943010	125X3,7		
260	1316.233.029		CLUTCH BODY	1		C01007305F10	KPL. ZF-B 165/74		



# Plant

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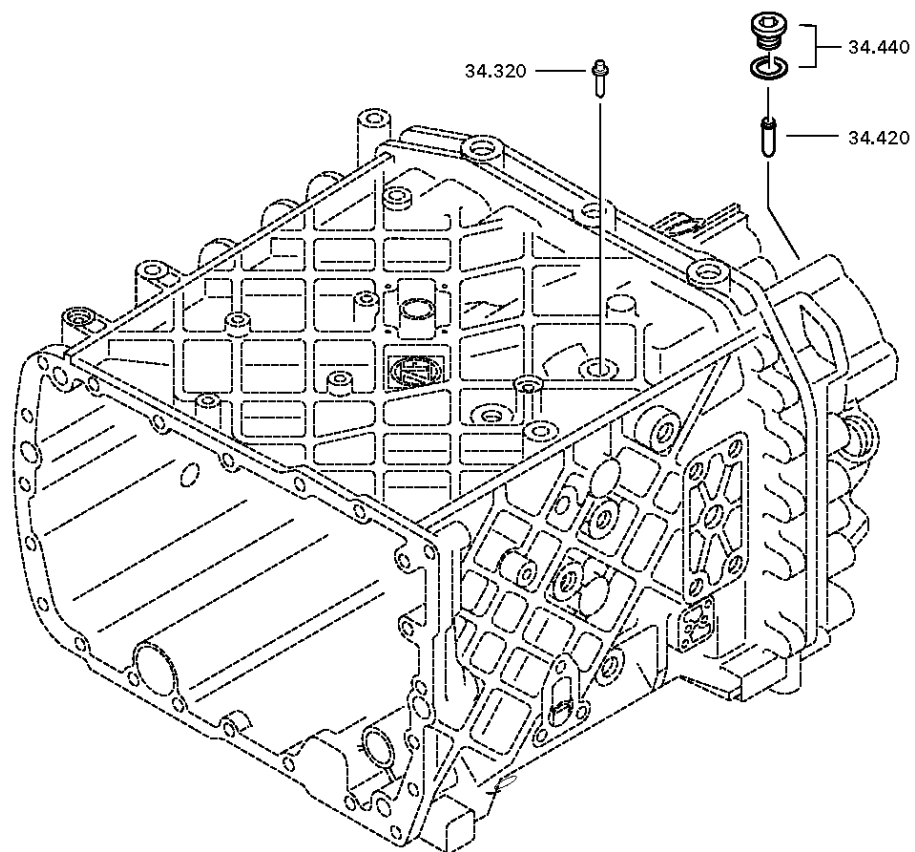
Material number: 1316.055.197

Plant: 068.46.41-1

GP SHIFT SYSTEM



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GP SHIFT SYSTEM





# Parts list

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16 S 181 /

Material number: 1316.055.197

Plant: 068.46.02-1

Material-assembly-group-no: 1316.134.021

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	1316.334.016		GEAR SHIFT RAIL	1					
30	0750.112.253		FLANGE PACKING	1			25X40X15		
50	---		PISTON	1			GP		
---	1315.334.034		PISTON	1			ENTHALT.IN 1315 334 040(2)		
---	1315.334.063		PISTON	1					
70	0734.307.294		SEALING RING	2			49X91X7,4 FA.KACO		
90	0750.112.066		GUIDE RING	1					
110	0737.300.037		LOCKING NUT	1			MS16X1,5		
130	1315.334.069		CYLINDER	1					
150	0501.317.536		PROFILE SEALING RING	1					
210	---		HEXAGON SCREW	4		Z00007349210	M10X90		
---	0636.015.688		HEXAGON SCREW	1		Z00007349212	M10X90		
---	0630.100.294		WASHER	1		Z00007158111			
300	1296.334.004		SLIDING PAD	2					
320	---		DETENT PLUNGER	1			145N*50N.M		
---	1324.207.035		DETENT PLUNGER	1			KPL. *145 N		
---	0730.008.604		SEALING RING	1					
420	1295.212.006		PIN	1			KPL.		
440	---		SCREW PLUG	1		Z00010111513	35N.M*DICHTRING M18X1,5		
---	0636.100.791		SCREW PLUG	1		Z00010111521	M18X1,5		
---	0634.801.062		SEALING RING	1		Z00010111521	18X24		

# Plant

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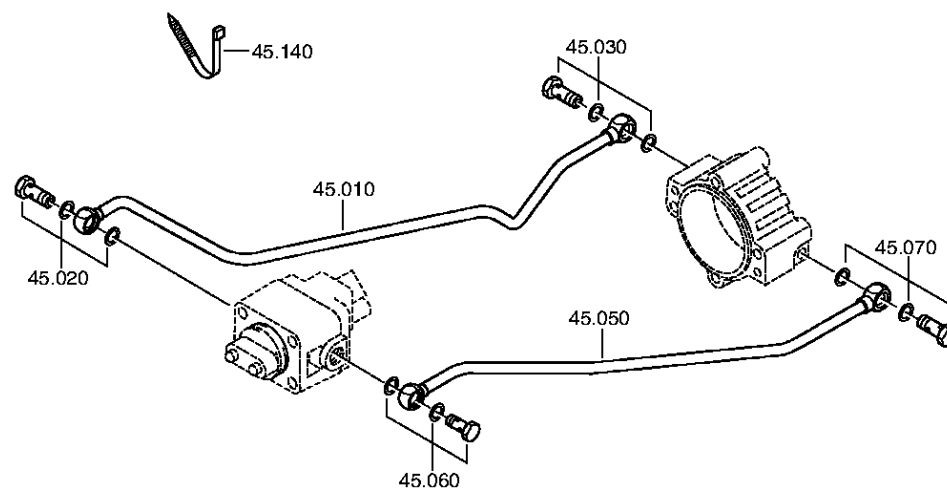
Material number: 1316.055.197

Plant: 068.57.04-1

Material-assembly-group-no: 1316.145.002



16 S 181 /  
RANGE SELECTION



# Parts list

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16 S 181 /

Material number: 1316.055.197

Plant: 068.57.04-1

Material-assembly-group-no: 1316.145.002

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	1316.245.012		TUBE	1		C01003831B10	KPL.GP RE*L=589MM*12X1,5		
/110	0737.300.040		RING PIECE	1		Z00008929310			
/120	1316.345.007		TUBE	1					
/130	0737.300.040		RING PIECE	1		Z00008929310			
20	---		UNION SCREW	1			M14X1,5		
---	0737.300.061		UNION SCREW	1		Z00012473710	M14X1,5		
---	0634.801.217		SEALING RING	2		Z00010274513	14X20		
30	---		UNION SCREW	1		Z00010274511	M14X1,5		
---	0737.300.061		UNION SCREW	1		Z00012473710	M14X1,5		
---	0634.801.217		SEALING RING	2		Z00010274513	14X20		
50	1316.245.013		TUBE	1		C01003831B10	KPL.GP LI*L=605MM*12X1,5		
60	---		UNION SCREW	1			M14X1,5		
---	0737.300.061		UNION SCREW	1		Z00012473710	M14X1,5		
---	0634.801.217		SEALING RING	2		Z00010274513	14X20		
70	---		UNION SCREW	1		Z00010274511	M14X1,5		
---	0737.300.061		UNION SCREW	1		Z00012473710	M14X1,5		
---	0634.801.217		SEALING RING	2		Z00010274513	14X20		
140	---		CABLE CLIP	1		Z00030934410			
---	0659.100.719		CABLE CLIP	1		Z00030934410	4,8X250,0		

# Plant

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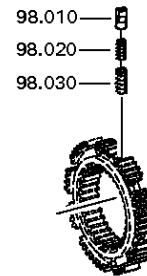
Material number: 1316.055.197

Plant: 073.R0.01-1

Material-assembly-group-no: 1272.298.934



16 S 181 /  
SMALL COMP.SET



# Parts list

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16 S 181 /

Material number: 1316.055.197

Plant: 073.R0.01-1

Material-assembly-group-no: 1272.298.934

Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	1240.304.278		PRESSURE PART	6					
20	0732.040.385		COMPRESSION SPRING	6					
30	0732.040.386		COMPRESSION SPRING	6					