



Spare Parts Catalog

16 S 221

Material number: 1316.051.933

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zuständiges Werk:

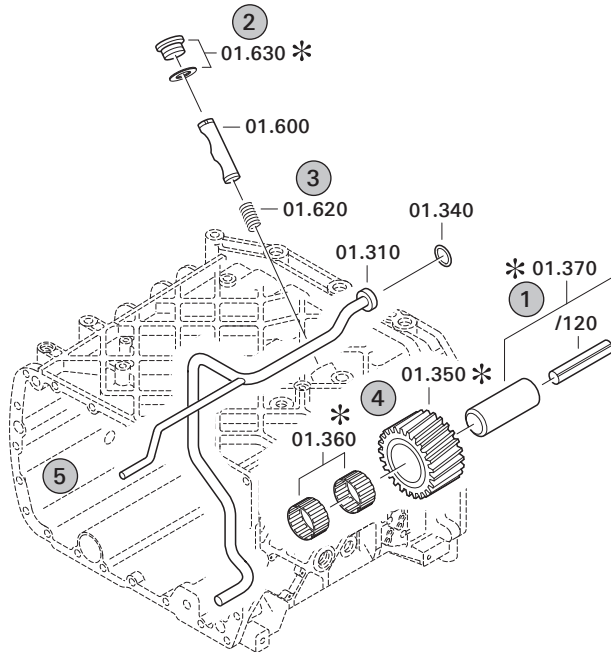
Friedrichshafen

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 OAO - MINSKER AUTOMOBILWERK - (MAZ)	
003	City Minsk	
004	DUNS 53-515-8505	
005	Vehicle / Apparatus -----	
006	Sales Name	
007	Manufacturer OAO - MINSKER AUTOMOBILWERK - (MAZ)	
008	Engineering Name	
009	Product Use TRUCK	
010	Vehicle/Hardware Type ROAD TRACTOR	
011	SOP	
012	Engine	
013	Sales Designation BF6M1015C	
014	Manufacturer Deutz AG	
015	Eng.Displ.	
016	Cylinder	
017	Nom. power 315 kW	
018	RPM at nom. power 2100 1/min	
019	Nom. torque 2050 Nm	
020	RPM at nom. torque 1200 1/min	
021	Classification use case -----	
022	DESIGNATION, CLUTCH MFZ430	
023	MANUFACTURER, CLUTCH ZF-SACHS	
024	TOTAL NUMBER OF WHEELS 6	
025	NUMBER OF DRIVING WHEELS 4	
026	DYNAMIC TYRE RADIUS 546 mm	
027	REAR AXLE RATIO 4.84	
031	PERMISS.GROSS VEHICLE WEIGHT 26 t	
032	PERMISS.GROSS COMBIN.WEIGHT 52 t	
033	APPLICATION OF THE PRODUCT OSTEUROPA	
035	Use case -----	
036	Customer OAO - MINSKER AUTOMOBILWERK - (MAZ)	



Pos.	Information	Amendment number
037	City Minsk	
038	DUNS 53-515-8505	
039	Vehicle / Apparatus -----	
040	Sales Name	
041	Manufacturer OAO - MINSKER AUTOMOBILWERK - (MAZ)	
042	Engineering Name	
043	Product Use TRUCK	
044	Vehicle/Hardware Type ROAD TRACTOR	
045	SOP	
046	Engine	
047	Sales Designation	
048	Manufacturer Daimler AG	
049	Eng.Displ.	
050	Cylinder	
051	Nom. power 315 kW	
052	RPM at nom. power 1800 1/min	
053	Nom. torque 2000 Nm	
054	RPM at nom. torque 1080 1/min	
055	Classification use case -----	
056	DESIGNATION, CLUTCH MFZ430	
057	MANUFACTURER, CLUTCH ZF-SACHS	
058	TOTAL NUMBER OF WHEELS 6	
059	NUMBER OF DRIVING WHEELS 4	
060	DYNAMIC TYRE RADIUS 546 mm	
061	REAR AXLE RATIO 4.84	
065	PERMISS.GROSS VEHICLE WEIGHT 26 t	
066	PERMISS.GROSS COMBIN.WEIGHT 52 t	
067	APPLICATION OF THE PRODUCT OSTEUROPA	
069	Product description -----	
070	INSTALLATION POS TRANSMISSION HORIZONTAL LEFT	
071	TRANSMISSION ATTACHMENT FLANGE-MOUNTED	
073	RATIO, BOTTOM GEAR 13.8	



Pos.	Information	Amendment number
074	RATIO, TOP GEAR .84	
075	RATIO, 1ST GEAR 13.8	
076	RATIO, 2ND GEAR 11.54	
077	RATIO, 3RD GEAR 9.49	
078	RATIO, 4TH GEAR 7.93	
079	RATIO, 5TH GEAR 6.53	
080	RATIO, 6TH GEAR 5.46	
081	RATIO, 7TH GEAR 4.57	
082	RATIO, 8TH GEAR 3.82	
083	RATIO, 9TH GEAR 3.02	
084	RATIO, 10TH GEAR 2.53	
085	RATIO, 11TH GEAR 2.08	
086	RATIO, 12TH GEAR 1.74	
087	RATIO, 13TH GEAR 1.43	
088	RATIO, 14TH GEAR 1.2	
089	RATIO, 15TH GEAR 1	
090	RATIO, 16TH GEAR .84	
091	RATIO, 1ST GEAR REVERSE 12.92	
092	RATIO, 2ND GEAR REVERSE 10.8	
093	SET OF RATIOS SG	
094	UEBERSETZUNGSREIHE BASIS DG	
095	NUMBER OF PLANETARY GEARS 5	
096	UEBERSETZUNG PLANETENSATZ 4.565	
097	AUSF VERZAHNUNG PLANETENSATZ OBLIQUE TOOTHING	
098	DESIGN, SHIFT SYSTEM TURNING SHAFT	
099	POSITION, GEAR SHIFT SYSTEM HORIZONTAL LEFT	
100	DESIGN, SHIFT PATTERN H-H	
101	VERSION SHIFT SUPPORT WITHOUT GROOVE	
102	VERSION ACTUATION SHIFT SYSTEM MECHANICAL	
105	VERSION TUBE R/C PLASTIC-FORM-PIPE	
107	VERSION TUBE SERVO WITHOUT PIPING	
109	AUSF RUECKSCHALTG GASSENSPERRE WITHOUT GROOVE	



Pos.	Information	Amendment number
110	VERSION TUBE GATE INTERLOCK WITHOUT PIPING	
112	1ST CUSTOMER SPEC SHIFT SYSTEM WITHOUT GROOVE	
113	2ND CUSTOMER SPEC SHIFT SYSTEM WITHOUT GROOVE	
114	DIA THROTTLE MAIN CUTOFF VALVE 1.55 mm	
115	NO. TAPPETS MAIN CUTOFF VALVE 2	
116	POS. AIR CON MAIN CUTOFF VALVE F	
122	SELECTION PATTERN VARIANT GEAR SHIFT PATTERN 1	
126	DESIGN, SEPARATING CLUTCH FULL-SYNCHRONIZED	
127	VERSION OF SYNCHRONIZER 1 1.+2.GEAR DK-SYNCHRONIZATION	
128	VERSION OF SYNCHRONIZER 2 3.+4.GEAR BK-SYNCHRONIZATION	
129	REFERENCE LENGTH INPUT SHAFT 109 mm	
130	STANDARD TYPE INPUT SHAFT SAE	
132	NUMBER OF WEDGES INPUT SHAFT 10	
135	VERSION OF INPUT SHAFT FORM C	
136	NOMINAL DIAMETER INPUT SHAFT 2 in	
138	DIAMETER, JOURNAL, INPUT SHAFT 25 mm	
139	TYPE FIT SPIGOTS INPUT SHAFT F7	
140	VER. BEAR. SPIGOTS INPUT SHAFT TAPER ROLLER	
141	LENGTH, INPUT SHAFT 395.5 mm	
142	DIAMETER SHAFT OF INPUT SHAFT 50.3 mm	
143	LENGTH, PROFILE, INPUT SHAFT 120 mm	
144	BUSH VARIANT INPUT SHAFT WITHOUT GROOVE	
145	VERSION BEARING CONSTANT 1 GL	
146	DIAMETER BEARING INPUT SHAFT 99.916 mm	
147	TYPE FIT BEAR. INPUT SHAFT H5	
149	DESIGN,CONN., CLUTCH HOUSING SAE 1	
150	CENTR.DIA,HSG/ENGINE CONNECT. 511.175 mm	
151	NUMBER OF BORES,ENGINE CONN. 12	
152	BORE DIA, ENGINE CONNECTION 11 mm	
154	VERSION OF CLUTCH HOUSING INTEGRATED	
156	VERSION ENGINE CONNECTION NOT FORDABLE	
157	POSITION MOUNT. FACE HOUSING 2 WITHOUT GROOVE	



Pos.	Information	Amendment number
158	LAENGE SPANNLAPPEN RE MOTANSCH 292 mm	
164	TYPE OF RELEASE MECHANISM WITH	
165	REF.LENGTH,RELEASE BEAR.FLAN -7 mm	
166	DIAMETER, RELEASE FLANGE 60 mm	
167	TYPE FIT RELEASE BEARING FLA. F8	
168	D-LAGERBUCHSE AUSRUECKUNG LI 35 mm	
170	VERSION OF CLUTCH CYLINDER WITH	
171	ASSEMBLY POS. CLUTCH CYLINDER 6	
172	OUTER DIA. OUTPUT FLANGE RA 180 mm	
173	NO.OF BORES OUTPUT FLANGE HA1 4	
175	BORE DIA. OUTPUT FLANGE RA 15 mm	
180	REF. LENGTH OUTPUT FLANGE RA 211.5 mm	
187	DIMENSION SHIFT TURRET DIST. 288 mm	
188	MEAS. LOC. SHIFT TURRET DIST. SHIFT LEVER-LOCATION	
195	RADIUS 1 SHIFT LEVER 75 mm	
197	SHIFT LEVER CONNECTION KNURLING	
198	DESIGN, OFFSET, SHIFT LEVER OUTSIDE	
199	LOCATION GEAR SHIFT LEVER TAPER OUTSIDE	
200	LEVER POSITION SHIFTING OUTPUT C	
204	G.SHIFT LEVER ANGL.EPSILON MIN 15 GRAD	
205	G.SHIFT LEVER ANGL.EPSILON MAX 20 GRAD	
211	SPRING ARRANGEMENT Q1	
212	SPRING FORCE DETENT PLUNGER RG 120 N	
215	HUMP SPRING FORCE, OUTSIDE 160 N	
219	SELECTOR SPRING FORCE, OUTSIDE 117 N	
221	SPRING FORCE,GEAR DETENT NG+GG 168 N	
222	SPRING FORCE OUTS. DETENT NEUT 200 N	
231	SWITCH, REVERSE GEAR y	
232	DESIGN, RG (REV.GEAR) SWITCH CLOSING	
233	DESIGN, CONNECTION, RG SWITCH DIN BAYONET	
234	CODE SWITCH RG A1	
235	PROT. CAP SWITCH, REVERSE GEAR y	



Pos.	Information	Amendment number
237	NOTE ON SWITCH, REVERSE GEAR G.SHIFT SHAFT	
238	SWITCH, NEUTRAL GEAR y	
239	DESIGN,NG(NEUTRAL GEAR)SWITCH OPENING SWITCH	
240	DESIGN, CONNECTION, NG SWITCH DIN BAYONET	
241	CODE SWITCH NG A1	
242	PROT.CAP SWITCH, NEUTRAL GEAR y	
264	FUNCTION OF R/C SWITCH GP	
265	DESIGN, GP SWITCH OPENING SWITCH	
266	DESIGN, CONNECTION, GP SWITCH DIN BAYONET	
268	PROTECTING CAP GP SWITCH y	
275	FUNCTION OF S/G SWITCH GV	
276	DESIGN, GV SWITCH CLOSING	
277	DESIGN, CONNECTION, GV SWITCH DIN BAYONET	
279	PROTECTING CAP GV SWITCH y	
354	ATTACHM.POS.HEAT EXCHANGER IN FRONT LEFT PREPARED	
356	VER. TRANSMISSION VENTILATION BREATHER	
379	VERSION PULSE SENSOR SFA H68	
383	PROT. CAP PULSE SENSOR SFA H68 n	
384	NO. PULSES PULSE SENSOR SFAH68 IMP/U	
385	DESIGN PULSE SENSOR SFI H68 WITH	
386	DESIG,CONN,PULSE SENS. SFI H68 DIN BAYONET	
387	PROT.CAP PULSE SENSOR SFI H68 y	
388	NO.OF PULSES PULSE SENSOR SFI H68 6.000 IMP/U	
389	VER. PULSE SENSOR TRANSM. H70 WITHOUT GROOVE	
393	PROT. CAP PULSE SENSOR TM H70 n	
394	NO PULSES PULSE SENSOR TM H70 6 IMP/U	
395	ASSEMBLY POS PULSE SENSOR H70 1	
396	NOTE ASS. POS PULSE SENSOR H70 INSTALLATION DRAWING	
411	POSITION, OIL FILLER HOUSING LEFT+RIGHT	
412	NOTE ON OIL FILL FILL IN OVERFLOW	
413	OIL CAPACITY, GEARBOX 13 dm3	
415	OIL GRADE PERMISSIBLE ACC. TO TE-ML02	



Pos.	Information	Amendment number
416	OIL CLASS FIRST FILLING H	
417	CODING OUTER CONSERVATION KA1	
418	SCOPE OUTER CONSERVATION T	
419	CODING INNER CONSERVATION KI1	
420	CONSERVATION SPECIFICATION ZFN 916	
422	COLOR JET BLACK	
423	COLOUR CLASSIFICATION ACC. TO RAL 9005	
424	PAINTING, ZF STANDARD 915 W	
426	Documents -----	
427	Drawing 1316.051.550	
428	Drawing 1316.101.035	
429	TURN.SHAFT CONT Drawing 1316.172.003	
430	16-SPEED GEARBOX Drawing 1316.651.214	
431	16-SPEED GEARBOX Assembly 1316.651.214	
432	Technical cover sheet (archived) for 1316.051.933 Text-document 000000248530	
433	1315.051.200 Drawing 1315.051.200	

Assembly group overview

Material number: 1316.051.933

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Graphics	Pos.	Material number	Name	Quantity	Amend. no.	Techn. Info.
068.01.05-1	110	1316.101.103	GEARBOX HOUSING	1		
068.01.51-1	120	1316.101.955	GEARBOX HOUSING	1		
068.02.55-1	140	1315.102.439	CONNPLATE	1		
068.02.82-1	150	1315.102.811	INPUT SHAFT	1		
068.02.02-1	910	1316.102.033	INPUT SHAFT	1		
068.03.80-1	180	1316.103.803	LAYSHAFT	1		
068.03.01-1	920	1316.103.013	LAYSHAFT	1		
068.04.12-1	930	1316.104.040	MAIN SHAFT	1		
068.06.01-1	230	1316.106.008	GEAR SHIFT SYSTEM	1		
068.06.43-1	234	1315.106.422	CONNECTING PARTS	1		
068.06.80-1	238	1315.106.800	GEAR SHIFT SYSTEM	1		
068.07.71-1	282	1315.107.833	GEAR SHIFT HOUSING	1		
068.07.12-1	910	1316.107.035	GEAR SHIFT HOUSING	1		
068.07.16-1	914	1316.107.433	GEAR SHIFT SHAFT	1		
068.07.09-1	920	1316.107.005	CONNECTING PARTS	1		
068.08.17-1	926	1316.170.001	SHIFT TURRET	1		
068.08.06-1	930	1316.170.031	COVER	1		
068.08.14-1	934	1316.170.808	COVER	1		
068.08.15-1	938	1316.170.442	CONNECTING PARTS	1		
068.12.01-1	922	1316.149.025	SET OF SPRINGS	1		
068.40.04-1	500	1316.112.012	GV-SHIFT SYSTEM	1		
068.40.41-1	502	1315.112.410	CONNECTING PARTS	1		
068.43.21-1	10	1315.131.047	COVER	1		
068.43.06-1	20	1315.131.050	GP HOUSING	1		
068.43.40-1	30	1315.131.400	CLOSING COMPONENTS	1		
068.43.80-1	512	1315.131.805	GP HOUSING	1		
068.43.43-1	516	1315.131.412	CONNECTING PARTS	1		
068.44.07-1	40	1316.132.015	PLANETARY DRIVE	1		
068.44.41-1	50	1316.132.400	PLANETARY DRIVE	1		
068.45.04-1	70	1316.133.008	SYNCHRONIZER	1		
068.45.40-1	80	1315.133.405	SYNCHRONIZER	1		

Assembly group overview

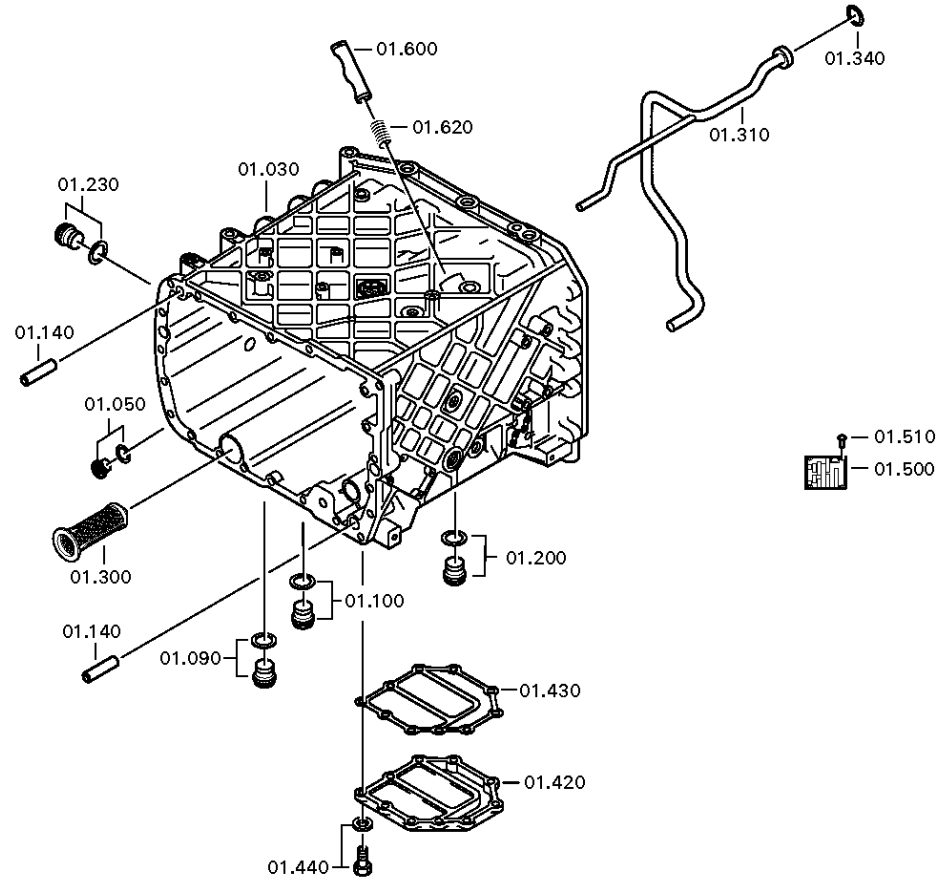
Material number: 1316.051.933

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Graphics	Pos.	Material number	Name	Quantity	Amend. no.	Techn. Info.
068.46.02-1	90	1316.134.021	GP SHIFT SYSTEM	1		
068.46.40-1	554	1315.134.412	CONNECTING PARTS	1		
068.57.04-1	390	1316.145.002	RANGE SELECTION	1		
068.93.13-1	130	1315.168.030	CLUTCH RELEASE DEVICE	1		
068.93.63-1	132	1315.168.412	CLUTCH RELEASE DEVICE	1		

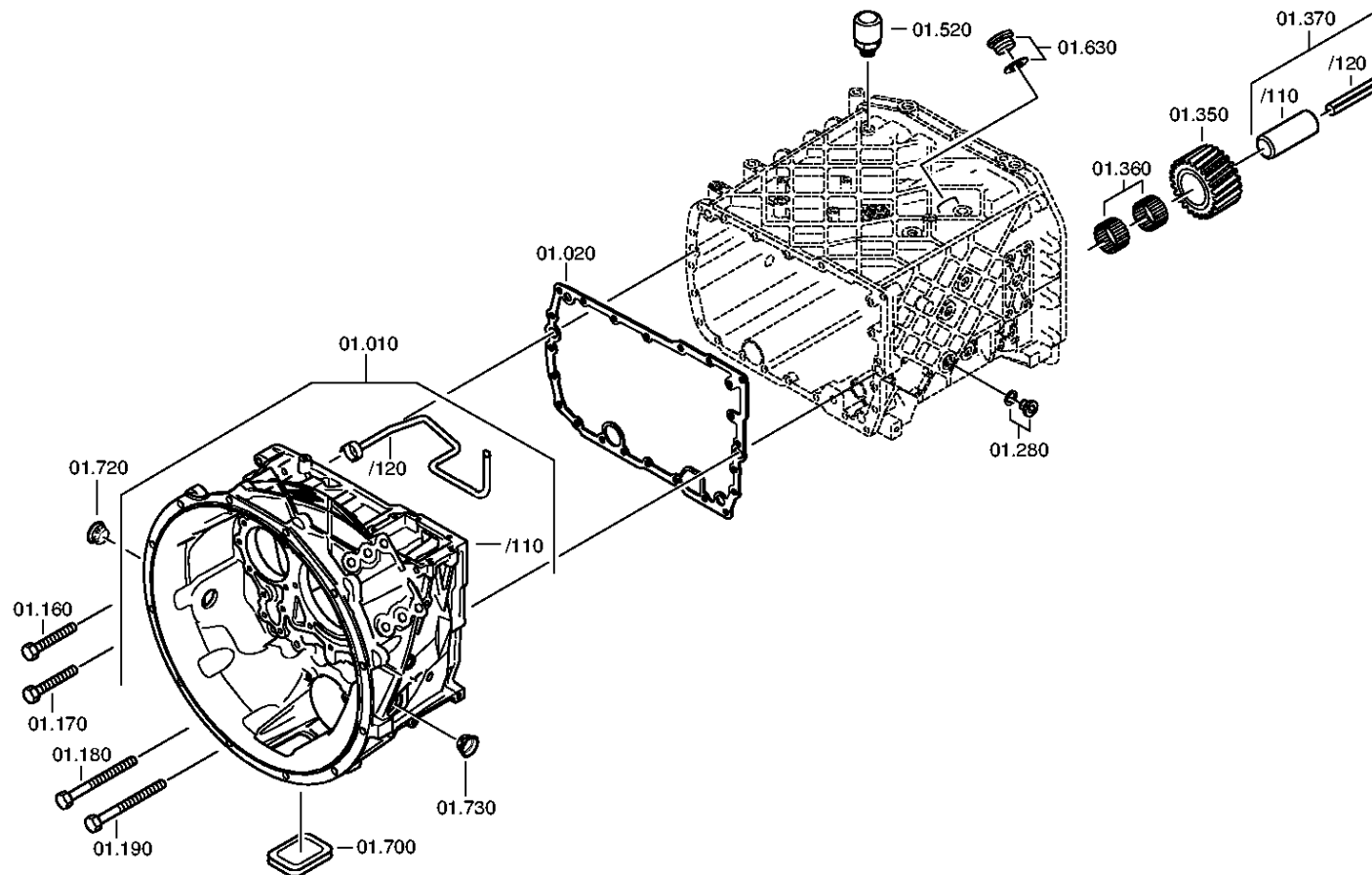


Plant

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Material number: 1316.051.933
Plant: 068.01.51-1
GEARBOX HOUSING

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GEARBOX HOUSING



Parts list

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Material number: 1316.051.933

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Plant: 068.01.05-1

Material-assembly-group-no: 1316.101.103



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
10	1316.201.142		CLUTCH HOUSING	1			KPL.	0,000		
/110	1316.301.064		CLUTCH HOUSING	1			ENTHALT.IN 1316 301 060(0)	0,000		
/120	1315.201.097		PIPE	1			KPL.	0,000		
20	1315.301.233		GASKET	1		C01005348C10		0,000		
30	1316.201.110		HOUSING	1		C01002290A10	KPL.DG IN 1316 201 108(0)	0,000		
50	---		SCREW PLUG	1		Z00010176111	M24X1,5	0,000		
---	0736.300.160		SCREW PLUG	1		Z00010176110	M24X1,5 M24X1,5	0,000		
---	0730.008.637		SEALING RING	1		Z00010176110	A24X29	0,000		
90	---		SCREW PLUG	1		Z00010164013	50N.M*DICHTRING M22X1,5	0,000		
---	0636.100.824		SCREW PLUG	1		Z00010164019	M22X1,5	0,000		
---	0730.009.515		SEALING RING	1		Z00010164019	A22X27	0,000		
100	---		SCREW PLUG	1		Z00010164013	50N.M*DICHTRING M22X1,5	0,000		
---	0636.100.824		SCREW PLUG	1		Z00010164019	M22X1,5	0,000		
---	0730.009.515		SEALING RING	1		Z00010164019	A22X27	0,000		
140	0731.201.563		CYLINDRICAL PIN	4				0,000		
160	0736.300.123	1880233	HEXAGON BOLT	14			M10X70 M10X70	0,000		
170	---		HEXAGON BOLT	1			M10X70	0,000		
---	0736.300.123	1880233	HEXAGON BOLT	1			M10X70 M10X70	0,000		
---	0666.790.033		SEALCOMPOUND	1				0,310		
180	0736.300.119		HEXAGON BOLT	6		Z00009403410	M10X140 M10X140	0,000		
190	---		HEXAGON BOLT	1		Z00009403410	M10X140	0,000		
---	0736.300.119		HEXAGON BOLT	1		Z00009403412	M10X140 M10X140	0,000		
---	0666.790.033		SEALCOMPOUND	1		Z00009403412		0,310		
200	---		SCREW PLUG	1		Z00010112111	60N.M*DICHTRING M24X1,5	0,000		
---	0636.304.088		SCREW PLUG	1		Z00010112110	M24X1,5	0,000		
---	0730.008.637		SEALING RING	1		Z00010112110	A24X29	0,000		

Parts list

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Material number: 1316.051.933

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Plant: 068.01.05-1

Material-assembly-group-no: 1316.101.103



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
230	---		SCREW PLUG	1		Z00010112111	60N.M*DICHTRING M24X1,5	0,000		
---	0636.304.088		SCREW PLUG	1		Z00010112110	M24X1,5	0,000		
---	0730.008.637		SEALING RING	1		Z00010112110	A24X29	0,000		
280	---		SCREW PLUG	1		Z00010112111	60N.M*DICHTRING M24X1,5	0,000		
---	0636.304.088		SCREW PLUG	1		Z00010112110	M24X1,5	0,000		
---	0730.008.637		SEALING RING	1		Z00010112110	A24X29	0,000		
300	0501.318.802	5718 742 08	SCREEN INSERT	1		C01000947C10		0,000		
310	1316.201.056		SPRAY TUBE	1			KPL. IN 1315 201 112(0)	0,000		
340	0634.313.198	1000004936	O-RING	1			20X3	1		
350	---		REVERSE IDLER GEAR	1		C01006413F10		0,000		
---	1316.305.001		REVERSE IDLER GEAR	1			Z22 IN 1295 305 050(1)	0,000		
---	1316.305.008	1882761	REVERSE IDLER GEAR	1			Z22 IN 1295 305 050(1)	0,000		
360	0750.115.369	820-400-2290	NEEDLE CAGE	2			45,0X57,0X25,0	0,000		
370	1316.201.029		REVERSE IDLER SHAFT	1			KPL.16S221*DG*L=107	0,000		
/120	0631.329.296		SLOTPIN	1			10X123	0,000		
420	1315.301.151		COVER	1				0,000		
430	0501.316.146	133-198-1940	GASKET	1		C01002166A10		0,000		
440	0636.100.432		HEXAGON BOLT	10		Z00007349511	M10X28	0,000		
500	---		TYPE PLATE	1			KONZERN	0,000		
---	0730.365.241		TYPE PLATE	1			EINHEITSSCH. VERDREHSICHER	0,000		
---	0730.365.259		TYPE PLATE	1			EINHEITSSCH. VERDREHSICHER	0,000		
---	0730.365.267		TYPE PLATE	1			CHINA	0,000		
---	0730.300.258		TYPE PLATE	1			EINHEITSSCH. VERDREHSICHER	0,000		
---	0730.365.271		TYPE PLATE	1			RUSSLAND/ KYRILLISCH	0,000		
---	0730.365.257		TYPE PLATE	1			S.S.CH IRAN	0,000		

Parts list

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Material number: 1316.051.933

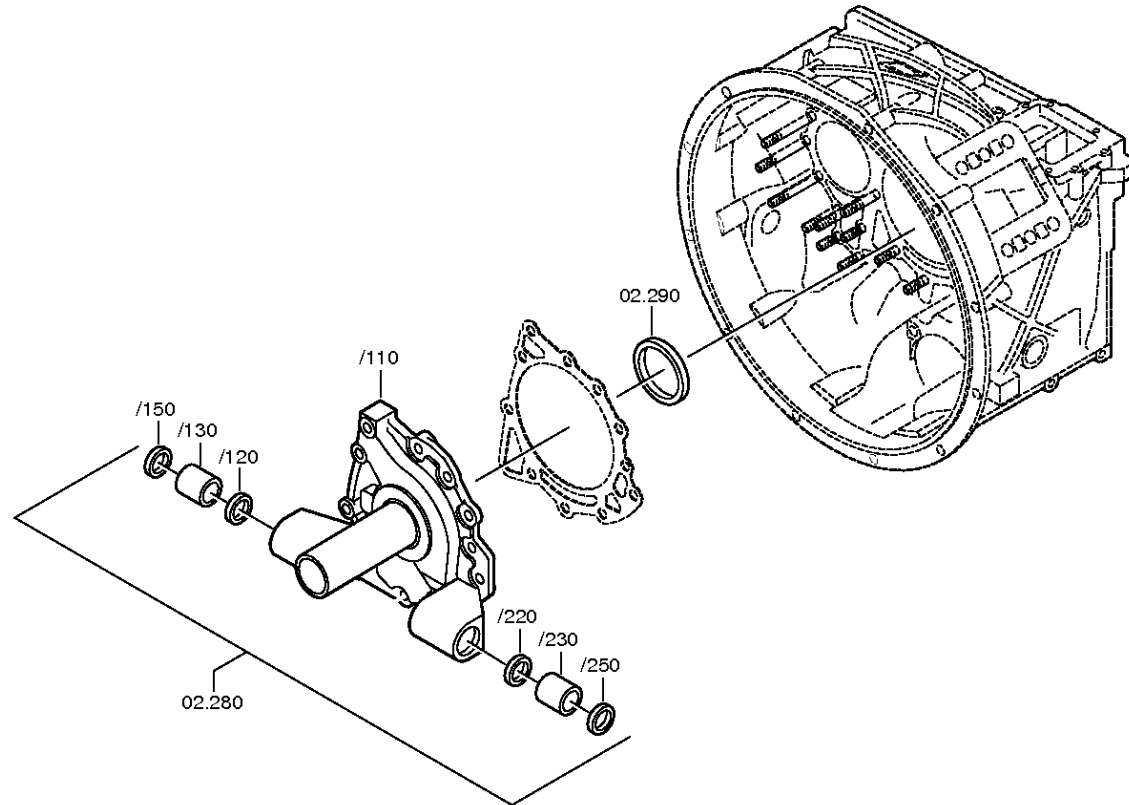
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Plant: 068.01.05-1

Material-assembly-group-no: 1316.101.103



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
510	0731.300.027		BLIND RIVET	4		Z00007904810		0,000		
520	---		BREATHER	1			M10X1KEG	0,000		
---	0501.218.540		BREATHER	1				0,000		
600	1313.306.013		LOCKING PIN	1				0,000		
620	0732.040.736	2150041300	COMPRSPRING	1				5,200		
630	---		SCREW PLUG	1		Z00010164412	70N.M*DICHTRING M26X1,5	0,000		
---	0636.100.811		SCREW PLUG	1		Z00010164420	M26X1,5	0,000		
---	0634.801.249		SEALING RING	1		Z00010164420	26X31	0,010		
700	1315.301.230		PROTECTION CAP	1				0,000		
720	0501.321.840		PLUG	1				0,000		
730	0501.321.840		PLUG	1				0,000		

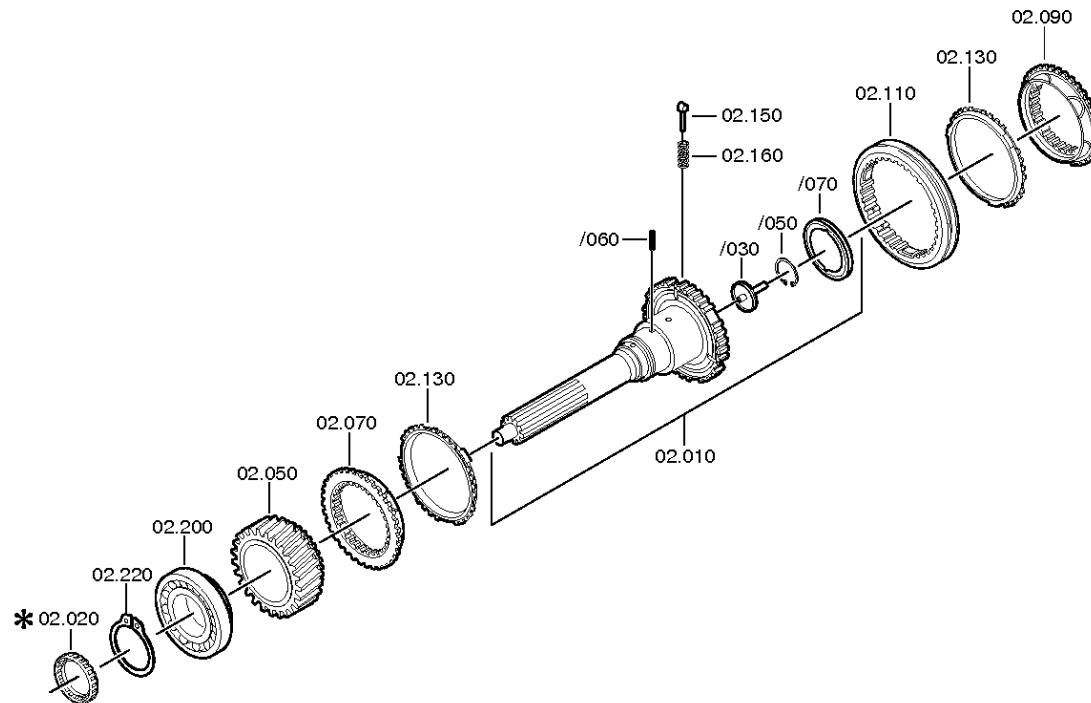


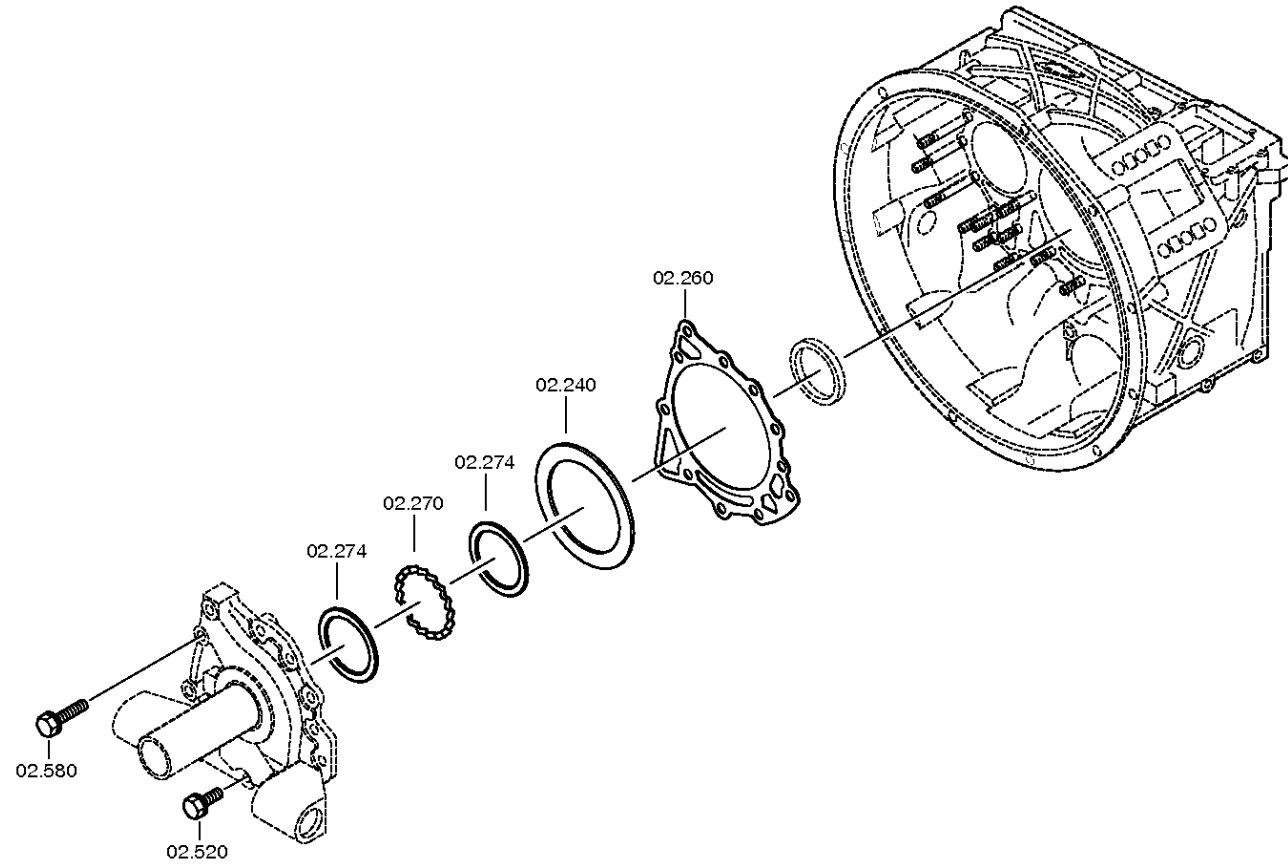
Plant

Page 2 from 3

Material number: 1316.051.933
Plant: 068.02.02-1
INPUT SHAFT

16 S 221 /
CONNPLATE





Parts list

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Material number: 1316.051.933

16 S 221 /

Plant: 068.02.55-1

Material-assembly-group-no: 1315.102.439



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
10	1316.202.025	5 5337 0	INPUT SHAFT	1			KPL.L109*GL100*ZAPF.25	0,000		
/30	1354.302.019		PIPE	1		Z00003830511		0,000		
/50	0630.502.027		RETAINING RING	1			50X2	8		
/70	0750.101.179		OIL DAM	1		Z00007187910	88,0X95,5X6,0	0,000		
50	1316.302.067		HELICAL GEAR	1			Z35 IN 1316 302 026(1)	0,000		
70	1312.304.027	133-461-3080	CLUTCH BODY	1			ENTHALT.IN 1310 304 107(1)	0,000		
90	1312.304.027	133-461-3080	CLUTCH BODY	1		C01004681D10	ENTHALT.IN 1310 304 107(1)	0,000		
110	1310.304.202	133-421-3670	SLIDING SLEEVE	1		C01005378A10		0,000		
130	1297.304.484	5 5304 0	SYNCHRORING	2				0,000		
150	1297.304.436		PRESSURE PIECE	3				0,004		
160	0732.040.409		COMPRSPRING	3		C01007317F10		0,002		
200	0750.117.732	820-400-2350	TAROLLBEARING	1			85,0X150,0X30,5	0,000		
220	0730.501.598		RETAINING RING	1		C01007992110	85X4	0,000		
240	---		SHIM	1			H= 0,90- 2,20(ABSTUFUNG:0,05MM)	0,000		
---	2050.309.094		SHIM	1			A=2,2 IN 2050 309 090 C45E WW.F500 ZFN410	0,000		
---	0730.007.489		SHIM	1			A=2,15 IN 2050 309 090(2)	0,000		
---	0730.007.488		SHIM	1			A=2,10 IN 2050 309 090(2)	0,000		
---	0730.007.487		SHIM	1			A=2,05 IN 2050 309 090(2)	0,000		
---	0730.007.486		SHIM	1			A=2,00 IN 2050 309 090(2)	0,000		
---	0730.007.485		SHIM	1			A=1,95 IN 2050 309 090(2)	0,000		
---	0730.007.484		SHIM	1			A=1,90 IN 2050 309 090(2)	0,000		

Parts list

Page 2 from 3

Material number: 1316.051.933

16 S 221 /

Plant: 068.02.55-1

Material-assembly-group-no: 1315.102.439



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
---	0730.007.483		SHIM	1			A=1,85 IN 2050 309 090(2)	0,000		
---	0730.007.482		SHIM	1			A=1,80 IN 2050 309 090(2)	0,000		
---	0730.007.481		SHIM	1			A=1,75 IN 2050 309 090(2)	0,000		
---	0730.007.480	1833896	SHIM	1			A=1,70 IN 2050 309 090(2)	0,000		
---	0730.007.479		SHIM	1			A=1,65 IN 2050 309 090(2)	0,000		
---	0730.007.136		SHIM	1			A=1,60 IN 2050 309 090(2)	0,000		
---	0730.007.135		SHIM	1			A=1,55 IN 2050 309 090(2)	0,000		
---	0730.007.134		SHIM	1			A=1,50 IN 2050 309 090(2)	0,000		
---	0730.007.133		SHIM	1			A=1,45 IN 2050 309 090(2)	0,000		
---	0730.007.132		SHIM	1			A=1,40 IN 2050 309 090(2)	0,000		
---	0730.007.131		SHIM	1			A=1,35 IN 2050 309 090(2)	0,000		
---	0730.007.130		SHIM	1			A=1,30 IN 2050 309 090(2)	0,000		
---	0730.007.129		SHIM	1			A=1,25 IN 2050 309 090(2)	0,000		
---	2050.309.034		SHIM	1			A=1,2 IN 2050 309 090 C45E WW.F500 ZFN410	0,000		
---	0730.007.128		SHIM	1			A=1,15 IN 2050 309 090(2)	0,000		
---	0730.007.127		SHIM	1			A=1,10 IN 2050 309 090(2)	0,000		

Parts list

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Material number: 1316.051.933

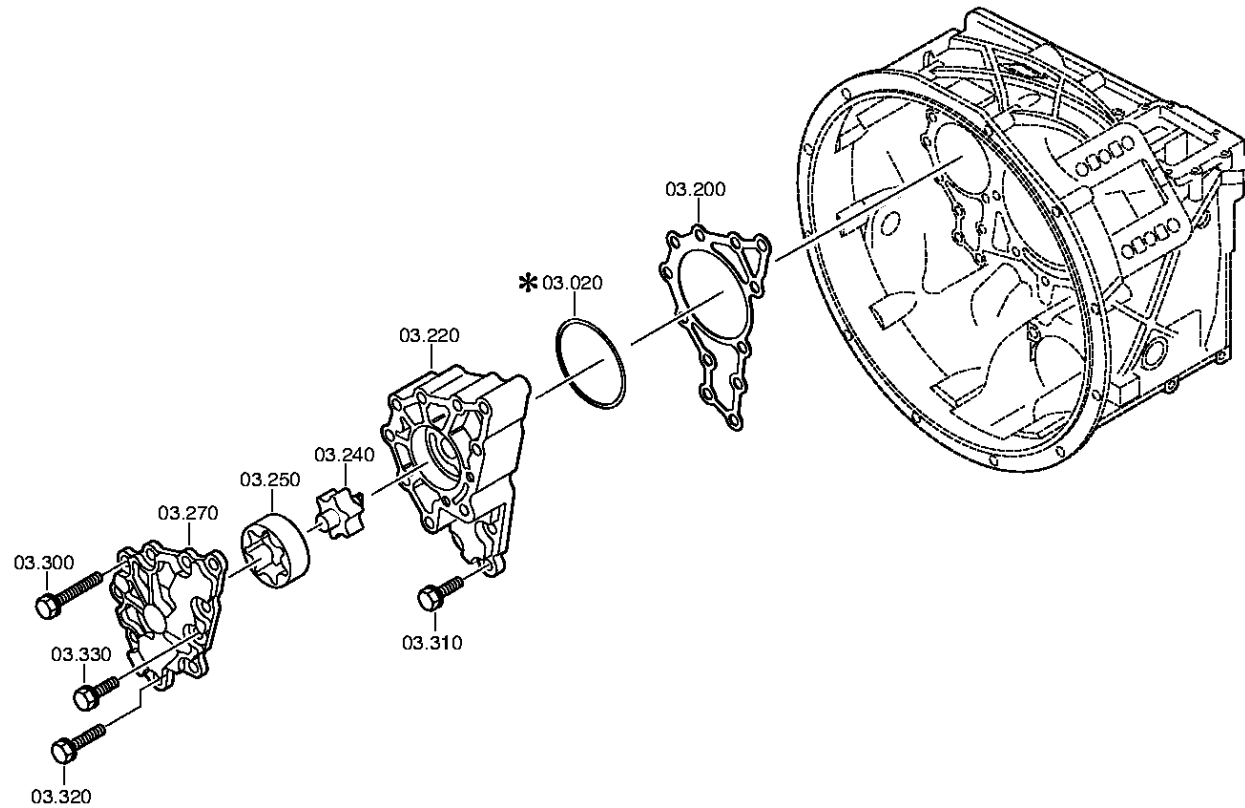
16 S 221 /

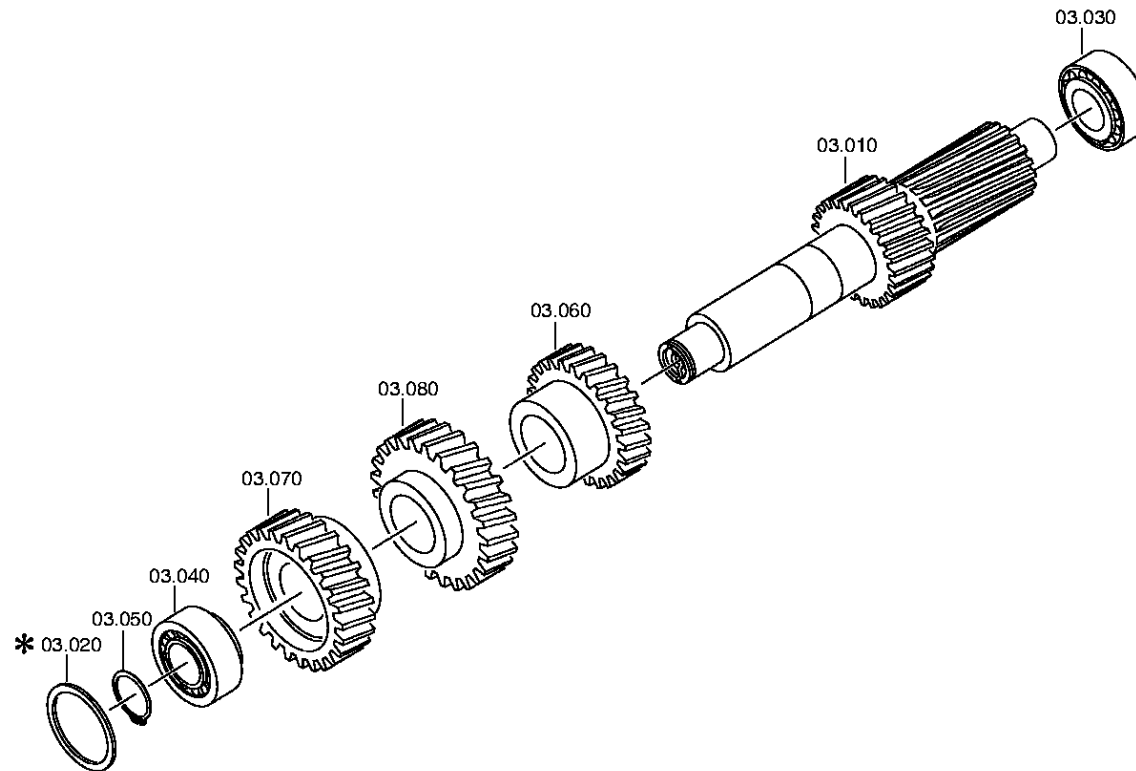
Plant: 068.02.55-1

Material-assembly-group-no: 1315.102.439



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
---	0730.007.126		SHIM	1			A=1,05 IN 2050 309 090(2)	0,000		
---	2050.309.065		SHIM	1			A=1,0 IN 2050 309 090 C45E WW.F500 ZFN410	0,000		
---	0730.005.749		SHIM	1			A=0,95 IN 2050 309 090(2)	0,000		
---	0730.005.748	5 5258 0	SHIM	1			A=0,90 IN 2050 309 090(2)	0,000		
260	0501.314.587	133-188-2550	GASKET	1				0,000		
270	1315.302.040		SPACER RING	1				0,000		
274	0730.150.766		WASHER	2				0,000		
280	1315.202.068		CONNPLATE	1			KPL.	0,000		
/130	0730.260.398		BUSH	1			A=25,00	0,000		
/230	0730.260.398		BUSH	1			A=25,00	0,000		
290	---		SHAFT SEAL	1		C01002111D10	75X55X8	0,000		
---	0734.310.387	5 8002 0	SHAFT SEAL	1			55X75X8/9,2 FA.CFW	0,000		
520	0636.015.685		HEXAGON BOLT	8		Z00009177310	M10X35	0,000		
580	0636.102.270	1877892	HEXAGON BOLT	3		Z00009177410	M10X60	0,000		





Parts list

Page 1 from 3

Material number: 1316.051.933

16 S 221 /

Plant: 068.03.80-1

Material-assembly-group-no: 1316.103.803



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
10	1316.303.033	5 5340 0	LAYSHAFT	1			ENTHALT.IN 1316 303 032(0)	0,000		
20	---		SHIM	1			H= 1,85- 3,25(ABSTUFUNG:0,05MM)	0,000		
---	0730.112.938		SHIM	1		C01007375C10	A=3,25	0,000		
---	0730.112.937		SHIM	1		C01007375C10	A=3,20	0,000		
---	0730.112.936		SHIM	1		C01007375C10	A=3,15	0,000		
---	0730.112.935		SHIM	1		C01007375C10	A=3,10	0,000		
---	0730.106.860		SHIM	1		C01007375C10	A=3,05 IN 0730 106 904(2)	0,000		
---	0730.106.917		SHIM	1			A=3,00 IN 0730 106 904(2)	0,000		
---	0730.106.916	1833921	SHIM	1			A=2,95 IN 0730 106 904(2)	0,000		
---	0730.106.915	1833920	SHIM	1			A=2,90 IN 0730 106 904(2)	0,000		
---	0730.106.914	1833919	SHIM	1			A=2,85 IN 0730 106 904(2)	0,000		
---	0730.106.913	1833918	SHIM	1			A=2,80 IN 0730 106 904(2)	0,000		
---	0730.106.912		SHIM	1			A=2,75 IN 0730 106 904(2)	0,000		
---	0730.106.911	1833917	SHIM	1			A=2,70 IN 0730 106 904(2)	0,000		
---	0730.106.910	1833916	SHIM	1			A=2,65 IN 0730 106 904(2)	0,000		
---	0730.106.909	1833915	SHIM	1			A=2,60 IN 0730 106 904(2)	0,000		
---	0730.106.908	1833914	SHIM	1			A=2,55 IN 0730 106 904(2)	0,000		
---	0730.100.799		SHIM	1			A=2,50 IN 0730 106 904(2)	0,000		

Parts list

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Material number: 1316.051.933

16 S 221 /

Plant: 068.03.80-1

Material-assembly-group-no: 1316.103.803



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
---	0730.100.800	1833898	SHIM	1			A=2,45 IN 0730 106 904(2)	0,000		
---	0730.100.801		SHIM	1			A=2,40 IN 0730 106 904(2)	0,000		
---	0730.100.802	1833900	SHIM	1			A=2,35 IN 0730 106 904(2)	0,000		
---	0730.100.803	1833905	SHIM	1			A=2,30 IN 0730 106 904(2)	0,000		
---	0730.101.466		SHIM	1			A=2,25 IN 0730 106 904(2)	0,000		
---	0730.101.467	1833906	SHIM	1			A=2,20 IN 0730 106 904(2)	0,000		
---	0730.101.468	1833907	SHIM	1			A=2,15 IN 0730 106 904(2)	0,000		
---	0730.101.469	1833909	SHIM	1			A=2,10 IN 0730 106 904(2)	0,000		
---	0730.101.470	1833910	SHIM	1			A=2,05 IN 0730 106 904(2)	0,000		
---	0730.101.471		SHIM	1			A=2,00 IN 0730 106 904(2)	0,000		
---	0730.106.907	1833912	SHIM	1			A=1,95 IN 0730 106 904(2)	0,000		
---	0730.106.906	1833911	SHIM	1			A=1,90 IN 0730 106 904(2)	0,000		
---	0730.106.905		SHIM	1			A=1,85 IN 0730 106 904(2)	0,000		
30	0750.117.009	820-400-2480	TAROLLBEARING	1			49,2X103,1X43,6	0,000		
40	0750.117.009	820-400-2480	TAROLLBEARING	1			49,2X103,1X43,6	0,000		
50	---		RETAINING RING	1		C01002877A10	S= 2,40- 3,00(ABSTUFUNG:0,05MM)	0,000		
---	0630.531.065	VOE12743111	RETAINING RING	1			50X3	16		
---	0630.501.111		RETAINING RING	1			50X2,95	0,000		

Parts list

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Material number: 1316.051.933

16 S 221 /

Plant: 068.03.80-1

Material-assembly-group-no: 1316.103.803



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
---	0630.501.112	0002640551	RETAINING RING	1			50X2,9	0,000		
---	0630.501.113		RETAINING RING	1			50X2,85	0,000		
---	0630.501.114	5004853	RETAINING RING	1			50X2,8	0,000		
---	0630.501.115		RETAINING RING	1			50X2,75	0,000		
---	0630.501.116	5004854	RETAINING RING	1			50X2,7	0,000		
---	0630.501.117		RETAINING RING	1			50X2,65	0,000		
---	0630.501.118	0002641251	RETAINING RING	1			50X2,6	0,000		
---	0630.501.160		RETAINING RING	1			50X2,55	0,000		
---	0630.531.064	1663657	RETAINING RING	1			50X2,5	0,100		
---	0630.501.159		RETAINING RING	1			50X2,45	0,000		
---	0630.501.148	0002641051	RETAINING RING	1			50X2,4	0,000		
60	1316.303.005		HELICAL GEAR	1			3G/Z26 IN 1312 303 018(1)	0,000		
70	1316.303.071		HELICAL GEAR	1			KON 1	0,000		
80	1316.303.065		HELICAL GEAR	1			Z35 IN 1312 303 013(1)	0,000		
200	1315.303.060		GASKET	1		C01005349C10		0,000		
220	---		PUMP HOUSING	1			GD*GSLS	0,000		
---	1315.302.121	5 5355 0	PUMP HOUSING	1				0,000		
---	1315.302.117		PUMP HOUSING	1				0,000		
240	1314.202.039	169-831-0020	PUMP SHAFT	1			KPL.	0,000		
250	1315.303.027	169-833-0010	ROTOR	1				0,000		
270	---		PUMP COVER	1			GD*GSLS	0,000		
---	1315.302.120	5 5855 0	PUMP COVER	1				0,000		
---	1315.302.116		PUMP COVER	1				0,000		
300	0636.015.684		HEXAGON BOLT	8		Z00009177510	M10X85	0,000		
310	0636.015.685		HEXAGON BOLT	3		Z00009177310	M10X35	0,000		
320	0636.102.270	1877892	HEXAGON BOLT	1		Z00009177410	M10X60	0,000		
330	0636.015.685		HEXAGON BOLT	2		Z00009177310	M10X35	0,000		

Parts list

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Material number: 1316.051.933

16 S 221 /

Plant: 068.04.12-1

Material-assembly-group-no: 1316.104.040



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
10	1316.304.132		MAIN SHAFT	1				0,000		
40	0750.115.303	820-400-2490	NEEDLE CAGE	1			92,0X100,0X63,0	0,000		
50	1316.304.002	133-242-3900	HELICAL GEAR	1			2G/Z38 IN 1316 304 005(1)	0,000		
90	1315.204.006		SYNCHRONIZER	1			KPL.1+2G*DK	0,000		
/110	1312.304.106	5 5328 0	CLUTCH DISC	1				0,000		
/120	1268.304.424	5 5280 0	INNER RING	1				0,000		
/130	1268.304.494	820-400-2510	INTERMRING	1			ENTHALT.IN 6002 306 153(0)	0,000		
/140	1268.304.525	133-441-1590	OUTER RING	1			ENTHALT.IN 1310 304 095(1)	0,000		
/150	1312.304.158		SYNCHROBODY	1			ZF-D171/164	0,000		
/160	1312.304.159		COUPLING ELEMENT	3		C01006893A10		0,030		
/170	1310.304.175	5 5320 0	SLIDING SLEEVE	1		C01007317F10		0,000		
/180	0732.040.409		COMPRSPRING	3				0,002		
/190	1297.304.436		PRESSURE PIECE	3				0,004		
/200	1268.304.525	133-441-1590	OUTER RING	1			ENTHALT.IN 1310 304 095(1)	0,000		
/210	1268.304.494	820-400-2510	INTERMRING	1			ENTHALT.IN 6002 306 153(0)	0,000		
/220	1268.304.424	5 5280 0	INNER RING	1				0,000		
/230	1312.304.106	5 5328 0	CLUTCH DISC	1				0,000		
140	1312.304.084	820-400-2530	BUSH	1			ENTHALT.IN 1312 304 007(2)	0,000		
150	0750.115.327	5 8157 0	NEEDLE CAGE	1			96,0X104,0X72,0	0,000		
160	1316.304.010	133-242-3910	HELICAL GEAR	1			1G/Z47 IN 1312 304 033(0)	0,000		
180	1312.304.124		CLUTCH BODY	1			ENTHALT.IN 1312 304 055(0)	0,000		
200	1316.304.133	820-400-2550	BUSH	1			A=50,00 IN 1312 304 010(2)	0,000		
210	0750.115.326	820-400-2560	NEEDLE CAGE	1			90,0X98,0X50,0	0,000		

Parts list

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Material number: 1316.051.933

16 S 221 /

Plant: 068.04.12-1

Material-assembly-group-no: 1316.104.040



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
220	---		HELICAL GEAR	1				0,000		
---	1316.304.012	133-242-3920	HELICAL GEAR	1			RG*Z44 IN 1312 304 125(0)	0,000		
260	0750.117.678	820-400-2570	TAROLLBEARING	1			80,0X140,0X36,5	0,000		
270	---		RETAINING RING	1			S= 2,20- 3,65(ABSTUFUNG:0,06MM)	0,000		
---	0630.501.316	820-400-2580	RETAINING RING	1			80X3,5	0,000		
---	0630.501.336	820-400-2581	RETAINING RING	1			80X3,45	0,000		
---	0630.501.315	820-400-2582	RETAINING RING	1			80X3,4	0,000		
---	0630.501.335	820-400-2583	RETAINING RING	1			80X3,35	0,000		
---	0630.501.314	820-400-2584	RETAINING RING	1			80X3,3	0,000		
---	0630.501.334	820-400-2585	RETAINING RING	1			80X3,25	0,000		
---	0630.501.313	820-400-2586	RETAINING RING	1			80X3,2	0,000		
---	0630.501.333	820-400-2587	RETAINING RING	1			80X3,15	0,000		
---	0630.501.312	820-400-2588	RETAINING RING	1			80X3,1	0,000		
---	0630.501.337	820-400-2589	RETAINING RING	1			80X3,55	0,000		
---	0630.501.338	820-400-2590	RETAINING RING	1			80X3,6	0,000		
---	0630.501.339	820-400-2591	RETAINING RING	1			80X3,65	0,000		
280	1315.332.073		PRESSURE DISC	1				0,000		
300	1312.304.150	820-400-2610	PIPE	1				0,000		
320	0750.115.303	820-400-2490	NEEDLE CAGE	1			92,0X100,0X63,0	0,000		
330	1316.304.008	133-242-3930	HELICAL GEAR	1			3G/Z34 IN 1312 304 135(1)	0,000		
350	1316.304.190		CLUTCH BODY	1		Z00006981311	ZF-BK 144 O	0,000		
370	1356.204.006		SYNCHRONIZER	1		Z00006981311	KPL.3+4G*BK144 MOLYBDAEN* ANSCHL.INTEGR VERST*ECOSPLIT 3+4	0,000		
/10	1356.304.019		SYNCHROBODY	1		Z00006981313		0,000		
/20	1356.304.023		SLIDING SLEEVE	1		Z00006981313	ZF-BK 144	0,000		
/30	1316.304.189	1832004	SYNCHRORING	2		Z00006981313	ZF-BK 144	0,000		

Parts list

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Material number: 1316.051.933

16 S 221 /

Plant: 068.04.12-1

Material-assembly-group-no: 1316.104.040



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
/50	1297.304.436		PRESSURE PIECE	3		Z00006981313		0,004		
/60	0732.040.409		COMPRSPRING	3		Z00006981313		0,002		
390	1316.304.190		CLUTCH BODY	1		Z00006981311	ZF-BK 144 O	0,000		
410	0750.101.158		THRUST WASHER	2				0,000		
420	0750.119.124	5 8910 0	INNER RING	1			67,0X77,0X66,1	0,000		
430	0750.115.531	5 8908 0	ROLLER CAGE	2			77,0X101,0X29,0	0,000		
440	1316.304.103	133-242-3940	HELICAL GEAR	1			Z32	0,000		
460	---		AXIAL WASHER	1			H= 7,30- 8,00(ABSTUFUNG:0,10MM)	0,000		
---	1315.304.048	5 5877 0	AXIAL WASHER	1			A=8,00 IN 1315 304 042(2)	0,000		
---	1315.304.047	5 5859 0	AXIAL WASHER	1			A=7,90 IN 1315 304 042(2)	0,000		
---	1315.304.046		AXIAL WASHER	1			A=7,80 IN 1315 304 042(2)	0,000		
---	1315.304.045	5 5858 0	AXIAL WASHER	1			A=7,70 IN 1315 304 042(2)	0,000		
---	1315.304.044		AXIAL WASHER	1			A=7,60 IN 1315 304 042(2)	0,000		
---	1315.304.043		AXIAL WASHER	1			A=7,50 IN 1315 304 042(2)	0,000		
---	1315.304.085		AXIAL WASHER	1			A=7,40 IN 1315 304 042(2)	0,000		
---	1315.304.086	1833949	AXIAL WASHER	1			A=7,30 IN 1315 304 042(2)	0,000		
480	0750.117.232	820-400-2650	TAROLLBEARING	1			42,0X40,3	0,000		
500	1312.204.040		SPLIT RING	1			GESTANZT	0,000		
/10	---		SPLIT RING	2			S= 4,60- 5,00(ABSTUFUNG:0,10MM)	0,000		
---	0730.107.023	820-400-2660	SPLIT RING	2			A=5,00 IN 0730 106 207(2)	0,000		

Parts list

Page 4 from 4

Material number: 1316.051.933

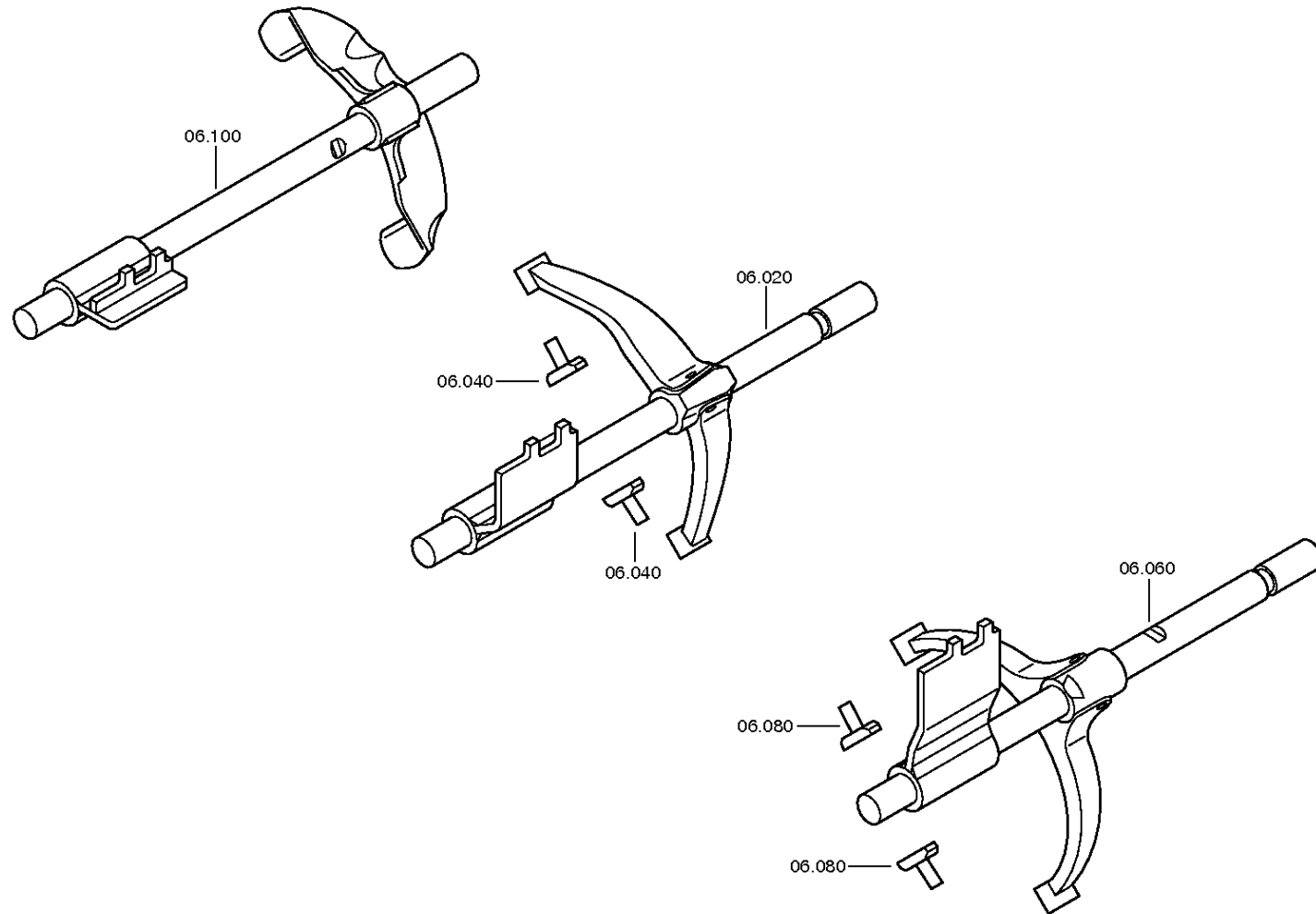
16 S 221 /

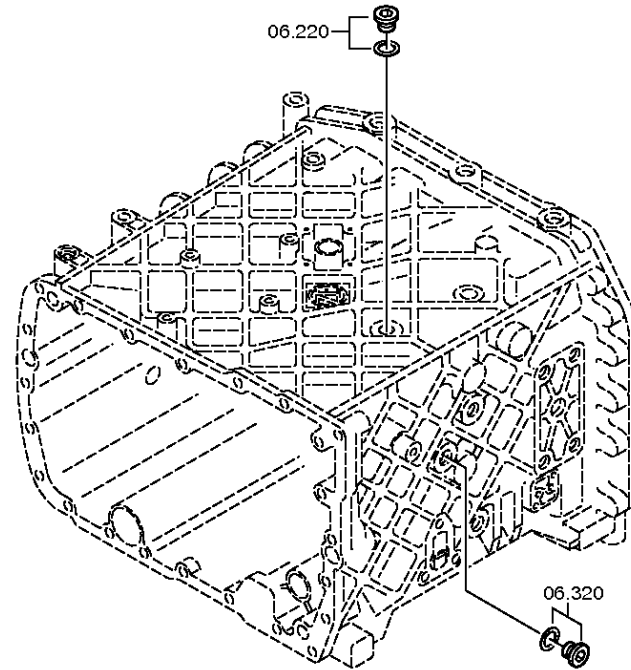
Plant: 068.04.12-1

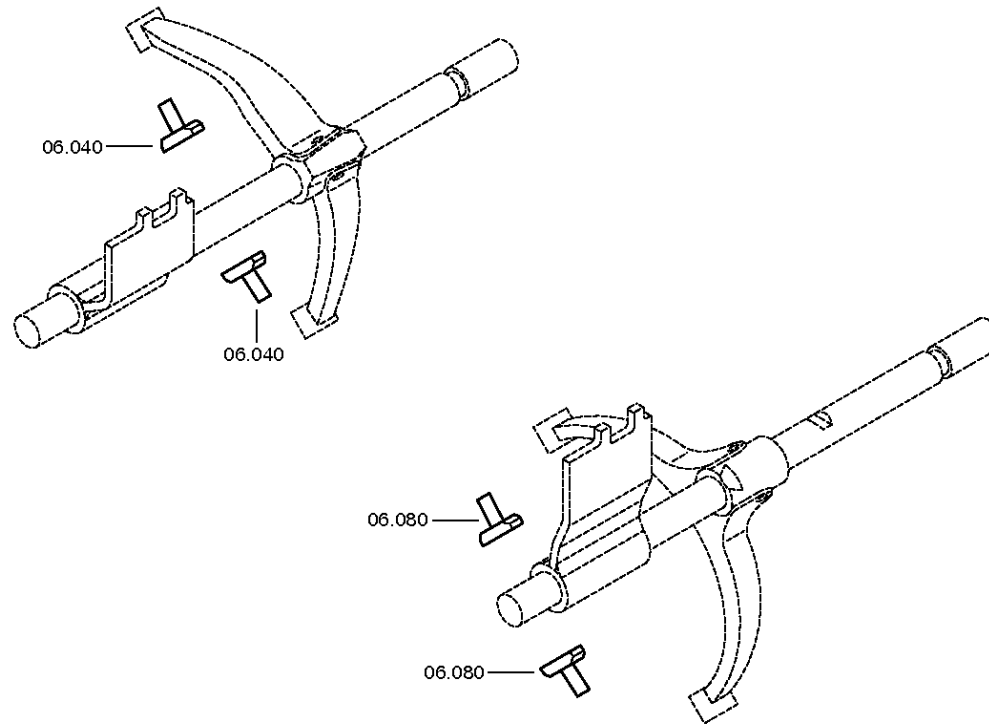
Material-assembly-group-no: 1316.104.040



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
---	0730.107.022	820-400-2661	SPLIT RING	2			A=4,90 IN 0730 106 207(2)	0,000		
---	0730.107.021	820-400-2662	SPLIT RING	2			A=4,80 IN 0730 106 207(2)	0,000		
---	0730.107.020	820-400-2663	SPLIT RING	2			A=4,70 IN 0730 106 207(2)	0,000		
---	0730.107.019	820-400-2664	SPLIT RING	2			A=4,60 IN 0730 106 207(2)	0,000		
/20	0730.062.781	820-400-2670	RETAINING RING	1			ENTHALT.IN 0730 062 636(2)	0,000		







Parts list

Page 1 from 1

Material number: 1316.051.933

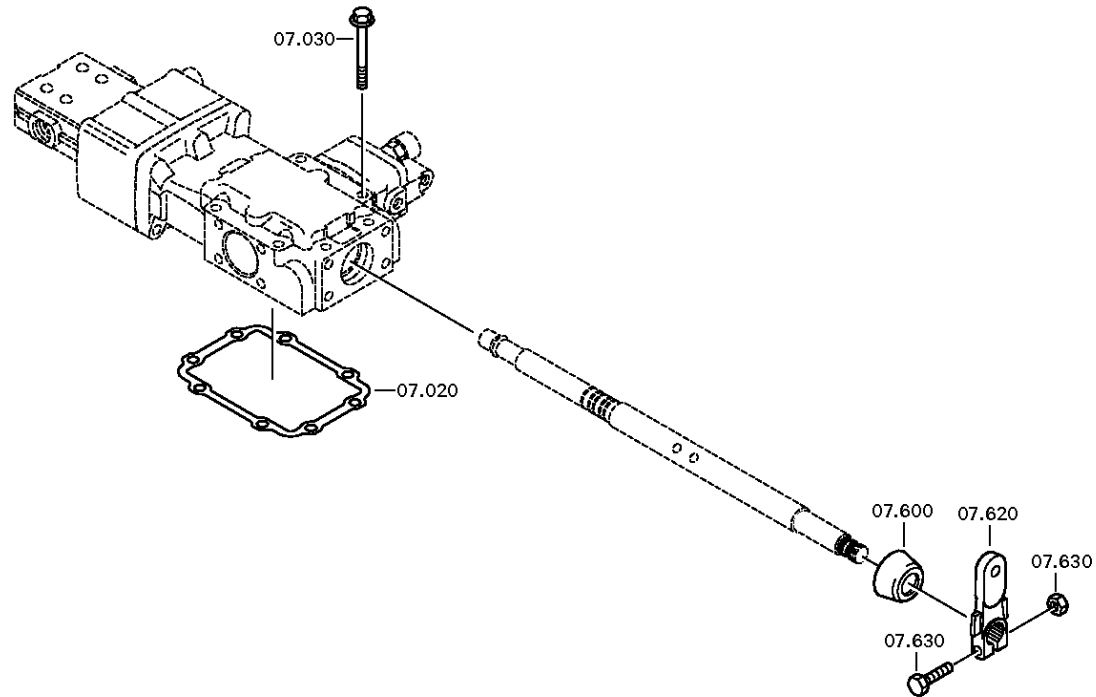
16 S 221 /

Plant: 068.06.01-1

Material-assembly-group-no: 1316.106.008



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
20	1316.206.055		GEAR SHIFT RAIL	1			1+2GANG*LANG*WI	0,000		
40	1316.306.015	5 5342 0	SLIDING PAD	2				0,000		
60	1316.206.058		GEAR SHIFT RAIL	1			3+4GANG*LANG*WI	0,000		
/10	1316.306.030		GEAR SHIFT RAIL	1				0,000		
/20	1325.306.028		GEAR SHIFT FORK	1			3/4G	0,000		
/50	0631.329.086	0148103897	SLOTPIN	1			8X40	7,800		
/60	0631.329.057		SLOTPIN	1			5X40	3,200		
80	1316.306.015	5 5342 0	SLIDING PAD	2				0,000		
100	1316.206.061		GEAR SHIFT RAIL	1			R-GANG*LANG*WI	0,000		
/10	1316.306.028		GEAR SHIFT RAIL	1				0,000		
/20	1355.306.003		GEAR SHIFT FORK	1			RG	0,000		
/50	0631.329.086	0148103897	SLOTPIN	1			8X40	7,800		
/60	0631.329.057		SLOTPIN	1			5X40	3,200		
220	---		SCREW PLUG	1		Z00010111513	35N.M*DICHTRING M18X1,5	0,000		
---	0636.100.791		SCREW PLUG	1		Z00010111521	M18X1,5	0,000		
---	0634.801.062		SEALING RING	1		Z00010111521	18X24	0,001		
320	---		SCREW PLUG	1		Z00010111513	35N.M*DICHTRING M18X1,5	0,000		
---	0636.100.791		SCREW PLUG	1		Z00010111521	M18X1,5	0,000		
---	0634.801.062		SEALING RING	1		Z00010111521	18X24	0,001		

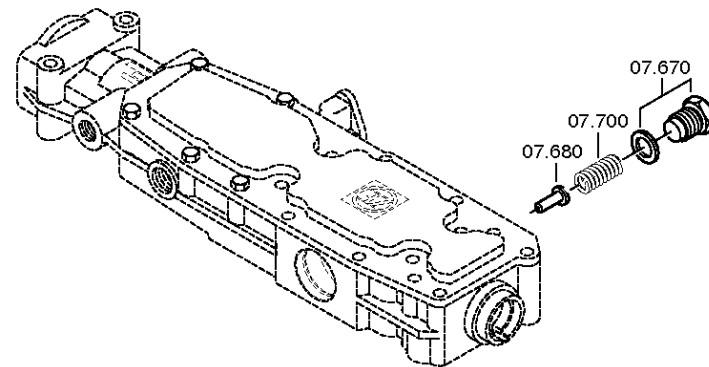


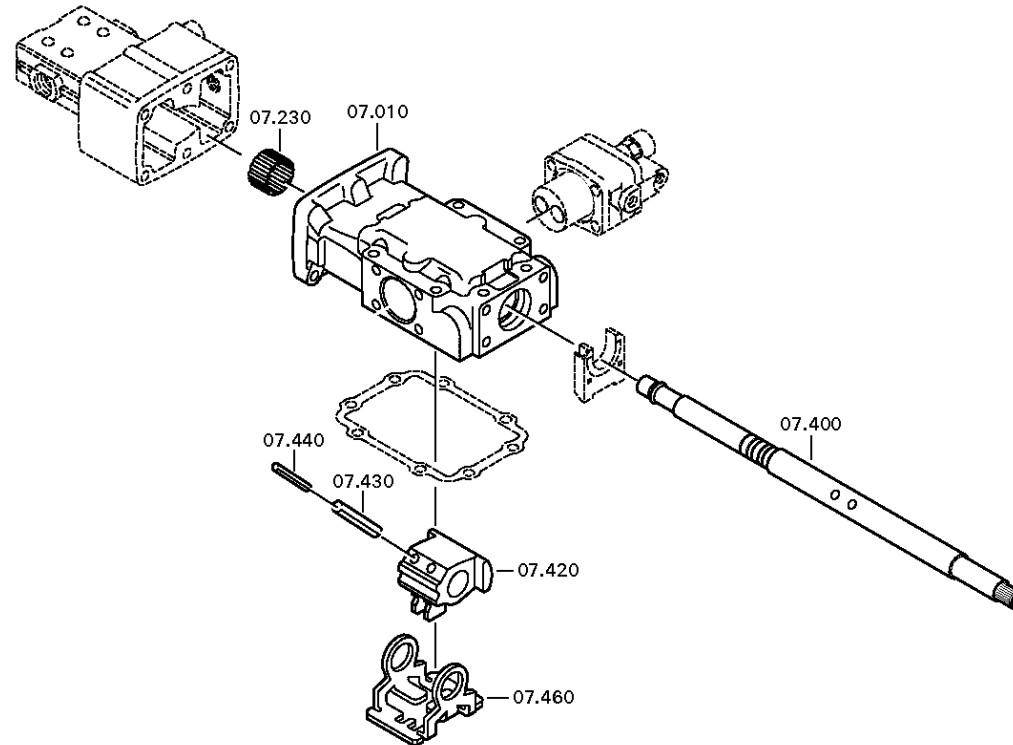
Plant

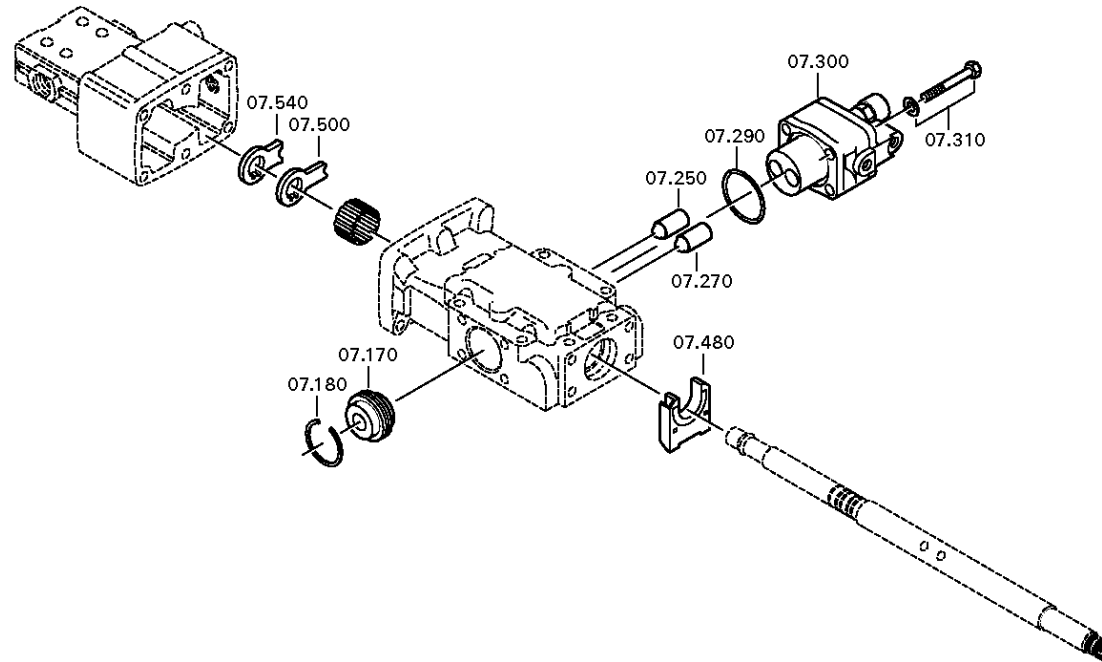
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Material number: 1316.051.933
Plant: 068.07.09-1
CONNECTING PARTS

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GEAR SHIFT HOUSING







Parts list

Page 1 from 2

Material number: 1316.051.933

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Plant: 068.07.71-1

Material-assembly-group-no: 1315.107.833



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
10	1315.307.123		GEAR SHIFT HOUSING	1			ENTHALT.IN 1315 307 122(0)	0,000		
20	1315.307.013	133-138-1020	GASKET	1				0,000		
30	0736.300.136		HEXAGON BOLT	8		Z00009195210	M8X75 M8X75	0,000		
170	0501.209.212	5 5247 0	DETENT	1			KPL.	0,000		
180	0630.532.130		V-RING	1				0,000		
230	0635.303.053	35055200	NEEDLE SLEEVE	1			25X32X20	120		
250	0501.209.188	5 6102 0	BALL ROLLER	1			KPL.	0,000		
270	0501.209.188	5 6102 0	BALL ROLLER	1			KPL.	0,000		
290	0634.313.505		O-RING	1			42X3	0,000		
300	6038.202.043	5 6065 0	CUT-OFF VALVE	1		C01002144C10	KPL.H-H* ZULUFTDROSSEL 1,55	0,000		
310	---		HEXAGON BOLT	4		Z00007054112	M8X65	0,000		
---	0636.100.519		HEXAGON BOLT	4		Z00007054110	M8X65	0,000		
---	0630.100.295		WASHER	4		Z00007158414		0,000		
400	1315.307.094	5 5866 0	GEAR SHIFT SHAFT	1			ENTHALT.IN 1315 307 157(1)	0,000		
420	---		DRIVER	1			W I	0,000		
---	1315.307.092		DRIVER	1				0,000		
430	0631.329.101		SLOTPIN	2			10X45	15		
440	0631.329.073		SLOTPIN	2			6X45	0,000		
460	1315.307.308		LOCKING PIECE	1				0,000		
500	1315.307.304		DETENT SHEET	1				0,000		
540	1315.307.120		DETENT	1				0,000		
600	---		PROTECTING CAP	1		Z00009174510		0,000		
620	1316.307.420		GEAR SHIFT LEVER	1			U551	0,000		
630	---		BOLT+NUT	1		Z00007891713	M10X40	0,000		
---	0636.100.789		HEXAGON BOLT	1		Z00007891711	M10X40	0,000		
---	0637.100.419		HEXAGON NUT	1		Z00007892710	M10	0,000		
670	---		SCREW	1		Z00010146310	M22X1,5	0,000		
---	1315.307.736		SCREW	1		Z00010146312	M22X1,5	0,000		

Parts list

Page 2 from 2

Material number: 1316.051.933

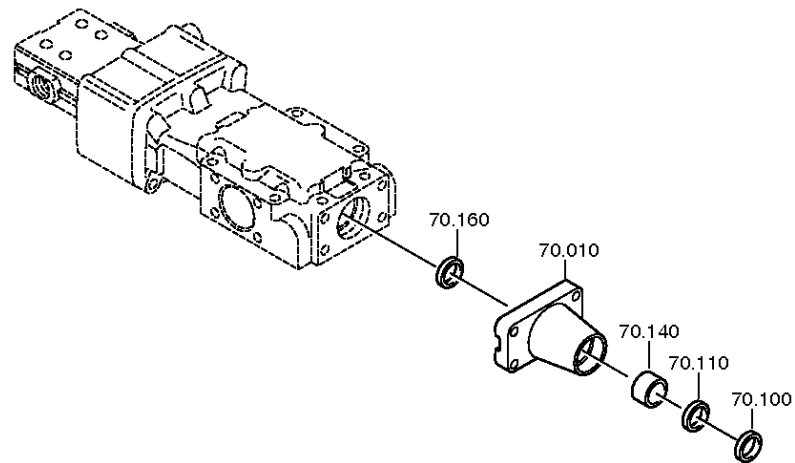
16 S 221 /

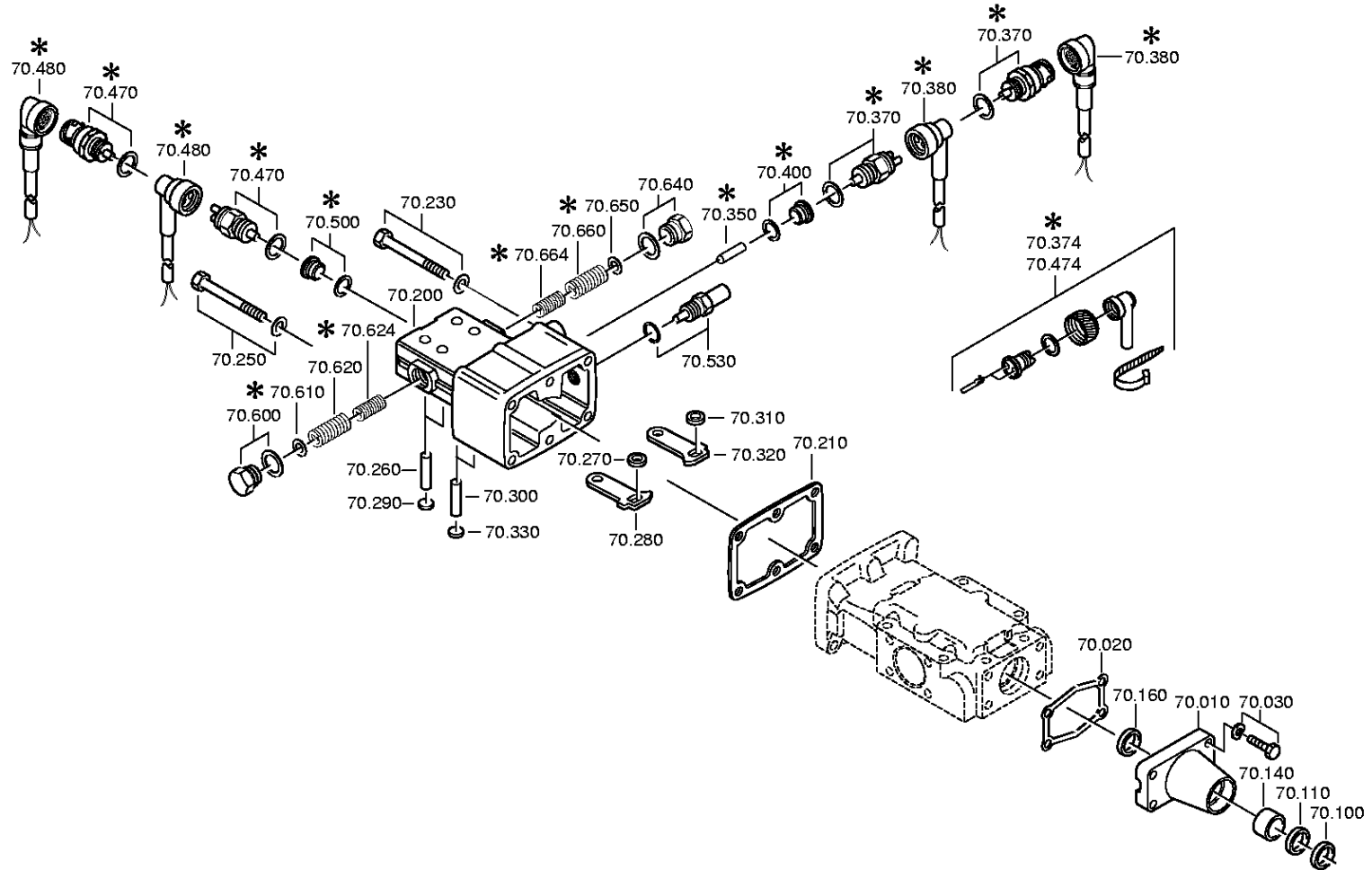
Plant: 068.07.71-1

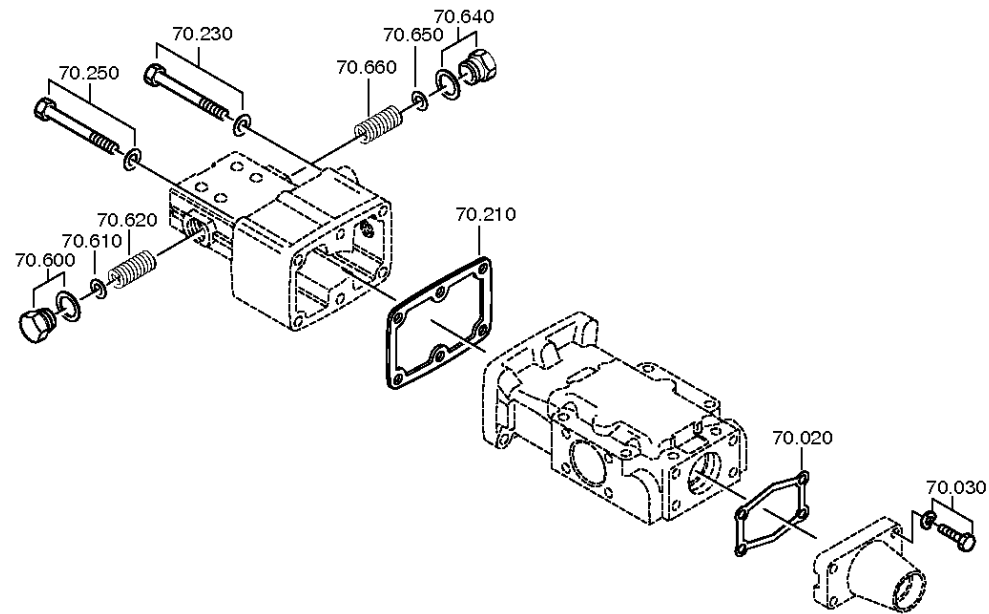
Material-assembly-group-no: 1315.107.833

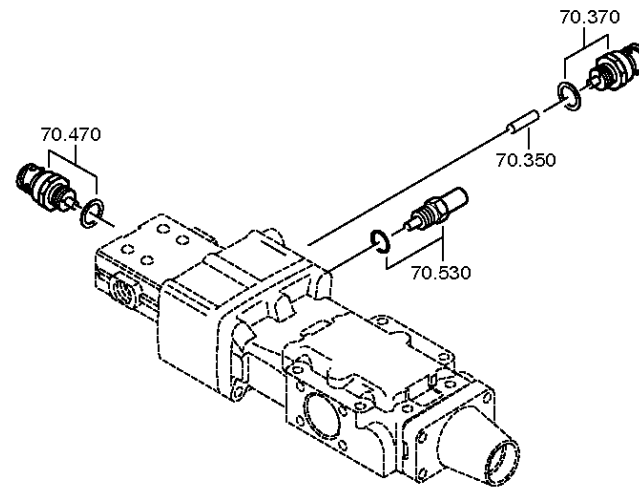


Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
---	0730.009.515		SEALING RING	1		Z00010146312	A22X27	0,000		
680	1315.307.190		BOLT	1			ENTHALT.IN 1250 307 589(2)	0,000		
700	0732.040.985	5 5874 0	COMPRSPRING	1				0,000		









Parts list

Page 1 from 2

Material number: 1316.051.933

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Plant: 068.08.17-1

Material-assembly-group-no: 1316.170.001



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
10	1304.307.425		GEAR SHIFT COVER	1				0,000		
20	0501.318.308		GASKET	1				0,000		
30	---		HEXAGON BOLT	4		Z00007891312	M8X30	0,000		
---	0636.100.797		HEXAGON BOLT	4		Z00007891310	M8X30	0,000		
---	0630.100.295		WASHER	4		Z00007158414		0,000		
100	0634.307.367	2150035300	SCRAPER	1				0,009		
110	---		SHAFT SEAL	1		C01008933B10	25X35X7	0,000		
---	0734.300.196		SHAFT SEAL	1			25X35X7 FA.CFW	0,000		
140	0730.260.330	5006867	BEARING BUSH	1			A=20,00 IN 0730 260 546(2)	0,000		
160	0634.300.020	5006866	SHAFT SEAL	1			25X32X5	0,000		
200	1315.307.140		HOUSING	1			GASSEN-SPERRE	0,000		
210	1315.307.012		GASKET	1				0,000		
230	---		HEXAGON BOLT	3		Z00007069014	M8X85	0,000		
---	0636.011.764		HEXAGON BOLT	3		Z00007069013	M8X85	0,000		
---	0630.100.295		WASHER	3		Z00007158414		0,000		
250	---		HEXAGON BOLT	3		Z00007069014	M8X85	0,000		
---	0636.011.764		HEXAGON BOLT	3		Z00007069013	M8X85	0,000		
---	0630.100.295		WASHER	3		Z00007158414		0,000		
260	0631.306.226		CYLINDRICAL PIN	2			6X32	0,000		
270	0730.006.347	SA 8320-05460	RING	1				5		
280	1304.307.019		DETENT LEVER	1				0,000		
290	---		SEALING CAP	2			14	0,000		
---	0630.361.032		SEALING CAP	2				2,100		
300	0631.306.226		CYLINDRICAL PIN	2			6X32	0,000		
310	0730.006.347	SA 8320-05460	RING	1				5		
320	1304.307.019		DETENT LEVER	1				0,000		
330	---		SEALING CAP	2			14	0,000		
---	0630.361.032		SEALING CAP	2				2,100		
350	0731.208.230		PIN	1			A=30,0	0,000		

Parts list

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Material number: 1316.051.933

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Plant: 068.08.17-1

Material-assembly-group-no: 1316.170.001



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
370	---		SWITCH	1		Z00004287211	OEFF*45N.M* DICHTRING* BAJONETT* SCHUTZKAPPE	0,000		
---	0501.216.474		SWITCH	1				0,050		
---	0634.801.062		SEALING RING	1			18X24	0,001		
---	0700.300.427		PROTECTING CAP	1				0,005		
470	---		SWITCH	1		Z00004287211	SCHL*45N.M* DICHTRING* BAJONETT* SCHUTZKAPPE	0,000		
---	0501.210.058	1864900531	SWITCH	1			KPL.	0,000		
---	0634.801.062		SEALING RING	1			18X24	0,001		
---	0700.300.427		PROTECTING CAP	1				0,005		
530	---		DETENT PLUNGER	1			168N*50N.M*WL	0,000		
---	1324.207.004	1882876	DETENT PLUNGER	1		Z00009531710	KPL. *168 N	0,000		
---	0630.000.072	1000000168	SHIM RING	1			16X22X1	0,010		
600	---		SCREW	1		Z00010146310	M22X1,5	0,000		
---	1315.307.736		SCREW	1		Z00010146312	M22X1,5	0,000		
---	0730.009.515		SEALING RING	1		Z00010146312	A22X27	0,000		
610	0630.001.051		WASHER	1				0,000		
620	0732.040.986		COMPRSPRING	1				5		
640	---		SCREW	1		Z00010146310	M22X1,5	0,000		
---	1315.307.736		SCREW	1		Z00010146312	M22X1,5	0,000		
---	0730.009.515		SEALING RING	1		Z00010146312	A22X27	0,000		
650	0630.001.051		WASHER	1				0,000		
660	0732.040.986		COMPRSPRING	1				5		

Plant

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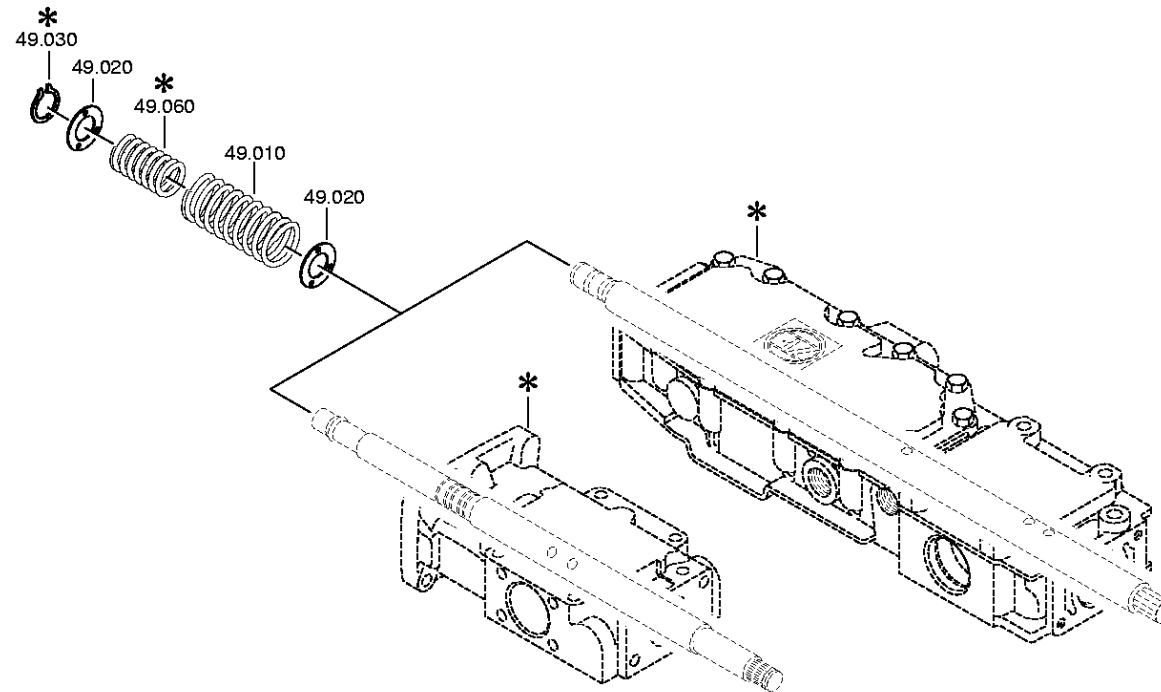
Material number: 1316.051.933

Plant: 068.12.01-1

Material-assembly-group-no: 1316.149.025

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SET OF SPRINGS



Parts list

Page 1 from 1

Material number: 1316.051.933

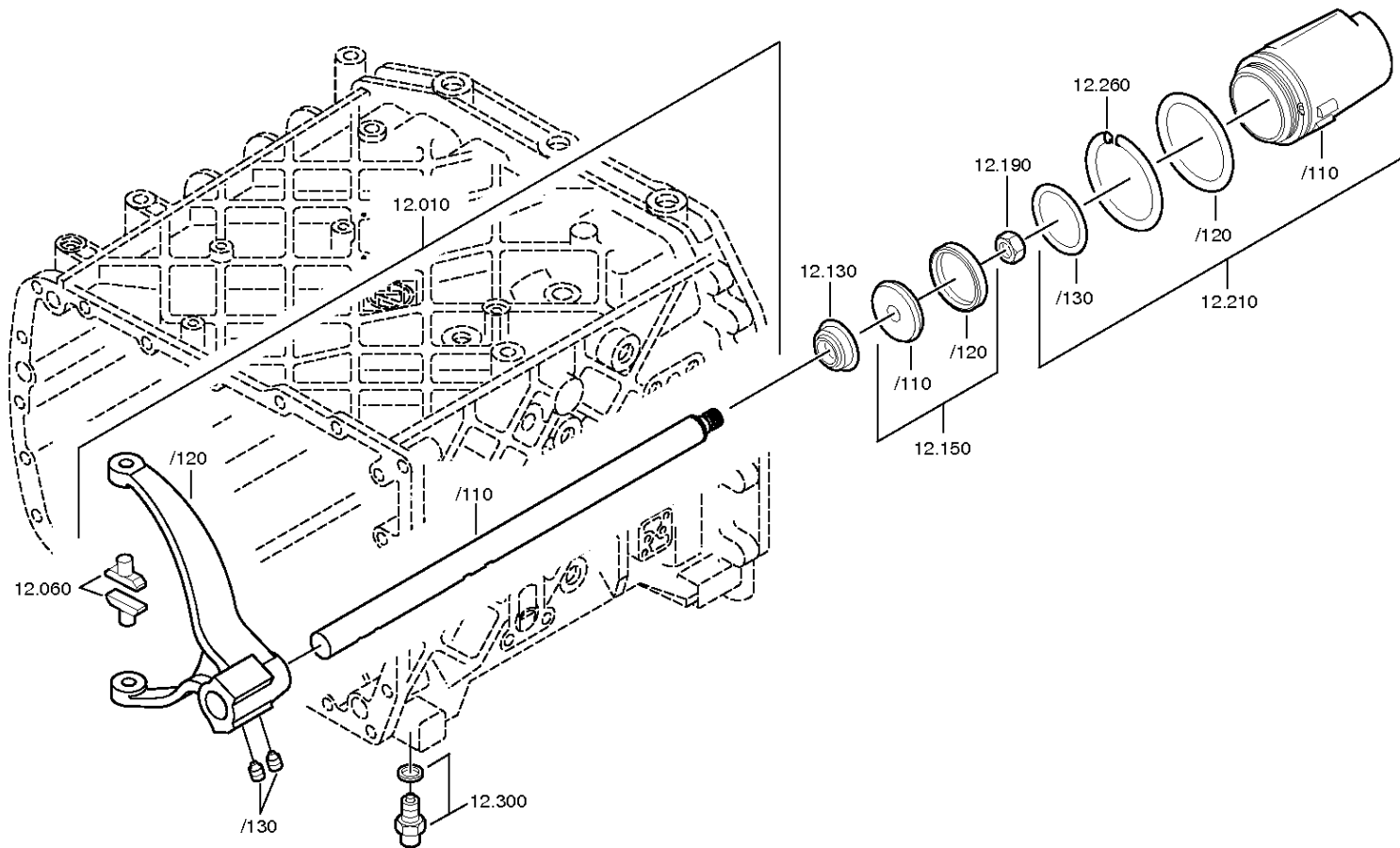
16 S 221 /

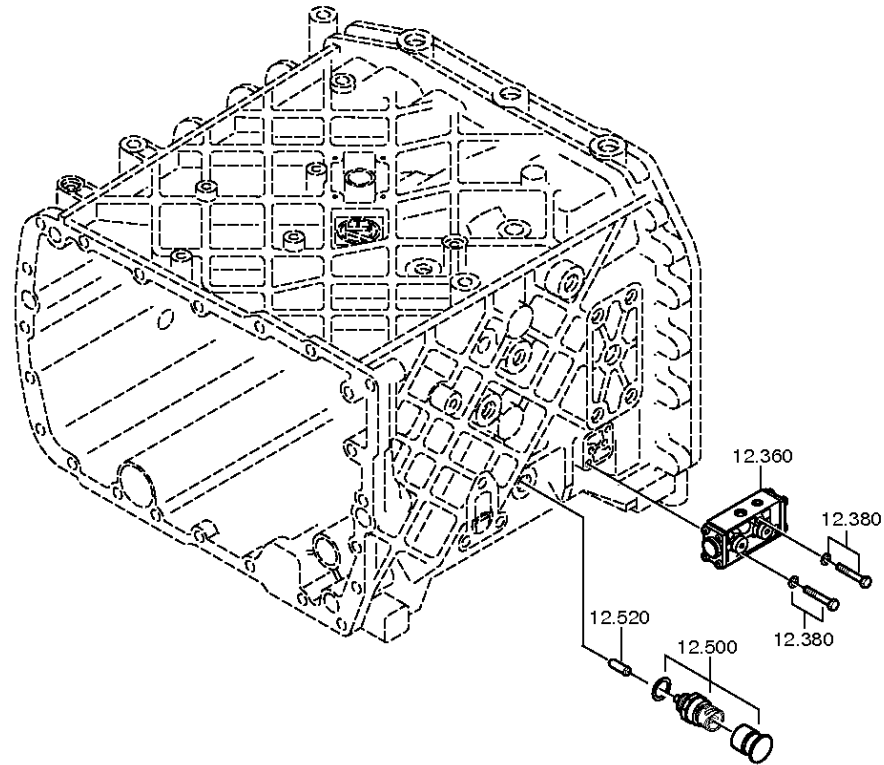
Plant: 068.12.01-1

Material-assembly-group-no: 1316.149.025



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
10	0732.041.549		COMPRSPRING	1				0,000		
20	0730.301.376	1884285	WASHER	2		Z00008917410		0,000		
30	0630.532.138	5004143	V-RING	1				0,000		





Parts list

Page 1 from 2

Material number: 1316.051.933

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Plant: 068.40.04-1

Material-assembly-group-no: 1316.112.012



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
10	1316.212.010		GEAR SHIFT RAIL	1			KPL.GV.LAG.GEH.1	0,000		
/110	1316.312.023		GEAR SHIFT RAIL	1				0,000		
/120	1315.312.074		GEAR SHIFT FORK	1			GV ECO 3	0,000		
/130	---		SET SCREW	2			M12X1	0,000		
---	1315.312.047	42172912	SET SCREW	2				0,000		
60	1316.306.015	5 5342 0	SLIDING PAD	2				0,000		
130	0750.112.131	820-400-2880	FLANGE PACKING	1		Z00003588010	25X40X15	0,000		
150	1315.212.008	1831971	PISTON	1			KPL.	0,000		
/110	---		PISTON	1			GV SINTER/STAHL	0,000		
---	1315.312.020		PISTON	1			GV	0,000		
---	1315.312.003		PISTON	1			GV	0,000		
/120	0750.112.177	172-255-1720	DOUBLE U-PACKING	1			55X63X9,4	0,000		
190	0737.300.037		LOCKING NUT	1		Z00008929010	MS16X1,5	0,000		
210	1316.212.007		CYLINDER	1			KPL.	0,000		
/110	1316.312.015		CYLINDER	1			ENTHALT.IN 1315 312 033(1)	0,000		
/120	0634.313.018		O-RING	1			82X3	0,000		
/130	0634.313.320	820-400-2910	O-RING	1			67X3	0,003		
260	1315.312.034		SPRING	1				0,000		
300	---		DETENT PLUNGER	1			235N*50N.M	0,000		
---	1324.207.033	1878700	DETENT PLUNGER	1			KPL. *235 N	0,000		
---	0730.008.604		SEALING RING	1		C01009860C10		0,000		
360	0501.219.310		5/2 WAY VALVE	1		Z00015060511		0,000		
380	---		HEXAGON BOLT	2			M6X40	0,000		
---	0636.010.740		HEXAGON BOLT	2			M6X40	0,000		
---	0630.001.139		WASHER	2		Z00007164311		0,000		
500	---		SWITCH	1		Z00004287211	SCHL*45N.M* DICHTRING* BAJONETT* SCHUTZKAPPE	0,000		
---	0501.210.058	1864900531	SWITCH	1			KPL.	0,000		

Parts list

Page 2 from 2

Material number: 1316.051.933

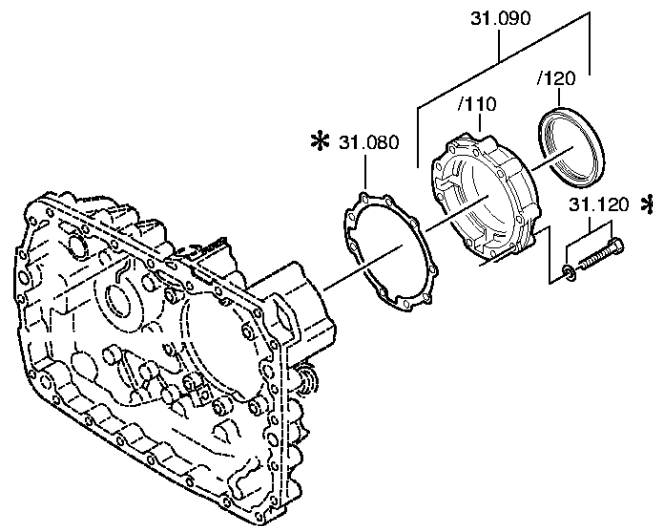
16 S 221 /

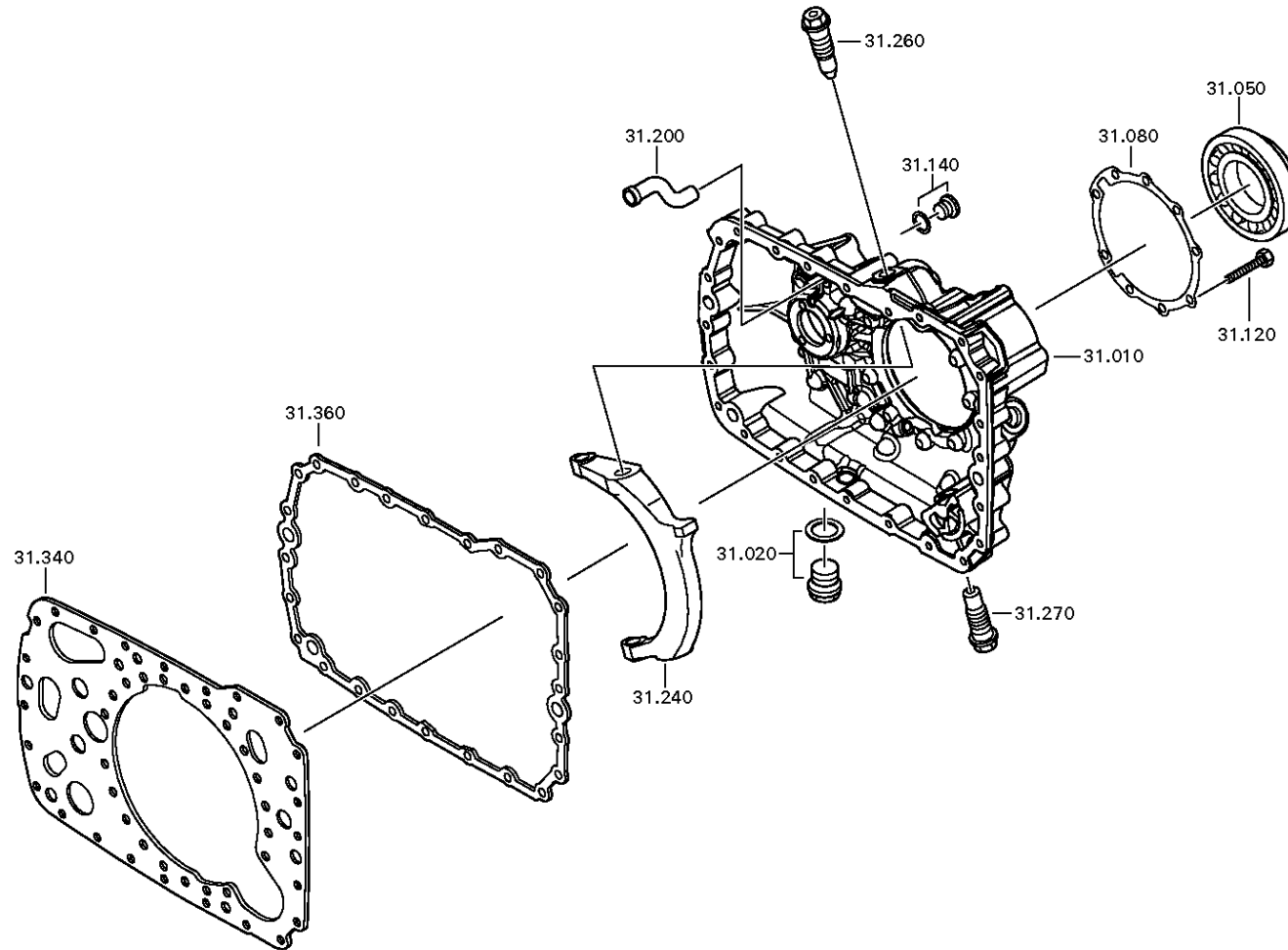
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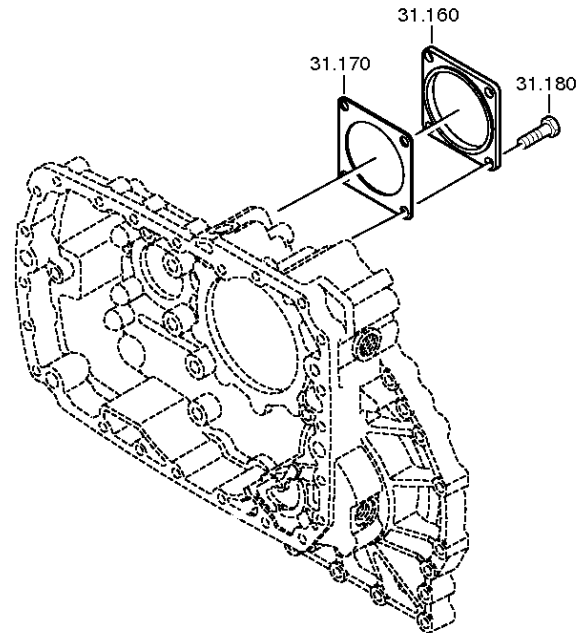
Material-assembly-group-no: 1316.112.012

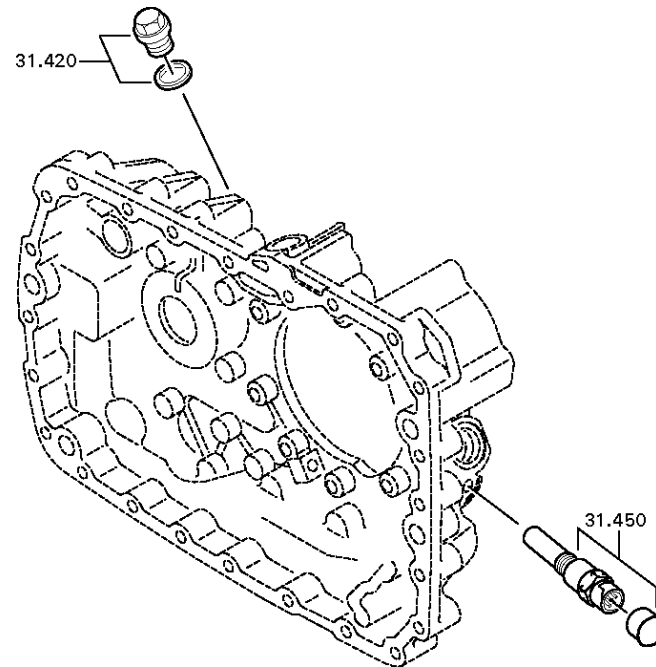


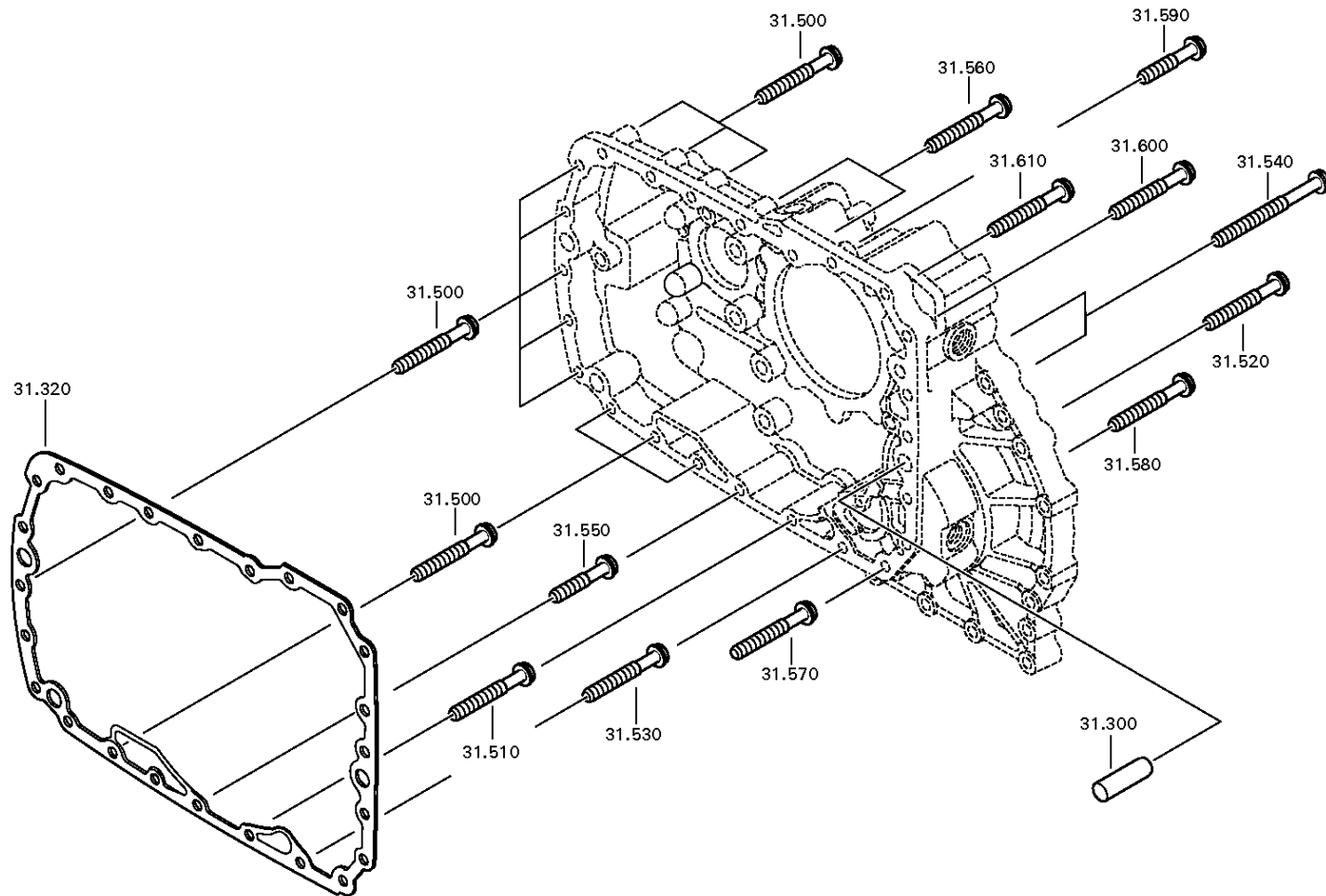
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
---	0634.801.062		SEALING RING	1			18X24	0,001		
---	0700.300.427		PROTECTING CAP	1				0,005		
520	1295.212.006		PIN	1			KPL.	0,000		











Parts list

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Material number: 1316.051.933

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Plant: 068.43.21-1

Material-assembly-group-no: 1315.131.047



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
10	1315.301.224		HOUSING	1			ENTHALT.IN 1315 301 222(0)	0,000		
20	---		SCREW PLUG	1		Z00010112111	60N.M*DICHTRING M24X1,5	0,000		
---	0636.304.088		SCREW PLUG	1		Z00010112110	M24X1,5	0,000		
---	0730.008.637		SEALING RING	1		Z00010112110	A24X29	0,000		
50	0750.116.394	5 8092 0	BALL BEARING	1		C01007214E10		0,000		
80	1315.331.001		GASKET	1		C01005350C10		0,000		
90	1315.231.004		COVER	1			KPL.	0,000		
/120	0750.111.341	8204002990	SHAFT SEAL	1			105X130X12	0,000		
120	0636.016.405		HEXAGON BOLT	9		Z00007060111	M10X60	0,000		
140	---		SCREW PLUG	1		C01004359F10	15N.M*DICHTRING M10X1	0,000		
---	0636.100.793		SCREW PLUG	1		Z00010111613	M10X1	0,000		
---	0730.008.055		SEALING RING	1			A10X14	0,000		
160	1328.301.170	1878388	COVER	1		Z00008068010		0,000		
170	1238.308.201	5006880	GASKET	1			ENTHALT.IN 1238 308 202(2)	0,000		
180	0636.016.406		HEXAGON BOLT	4		Z00007061014	M12X25	0,000		
200	1296.301.008	133-881-0130	SPRAY TUBE	1				0,000		
240	1315.334.039		GEAR SHIFT FORK	1				0,000		
260	---		ARTICULATION BOLT	1		Z00004075611	O.SCHEIBE M24X1,5 SK6	0,000		
---	1315.334.074	1877888	ARTICULATION BOLT	1		Z00004075610		0,000		
270	---		ARTICULATION BOLT	1		Z00004075611	O.SCHEIBE M24X1,5 SK6	0,000		
---	1315.334.074	1877888	ARTICULATION BOLT	1		Z00004075610		0,000		
300	0731.201.563		CYLINDRICAL PIN	3				0,000		
320	1316.301.042	133-158-1320	GASKET	1				0,000		
340	1315.301.118		INTERMPLATE	1			ENTHALT.IN 1315 301 144(0)	0,000		

Parts list

Page 2 from 2

Material number: 1316.051.933

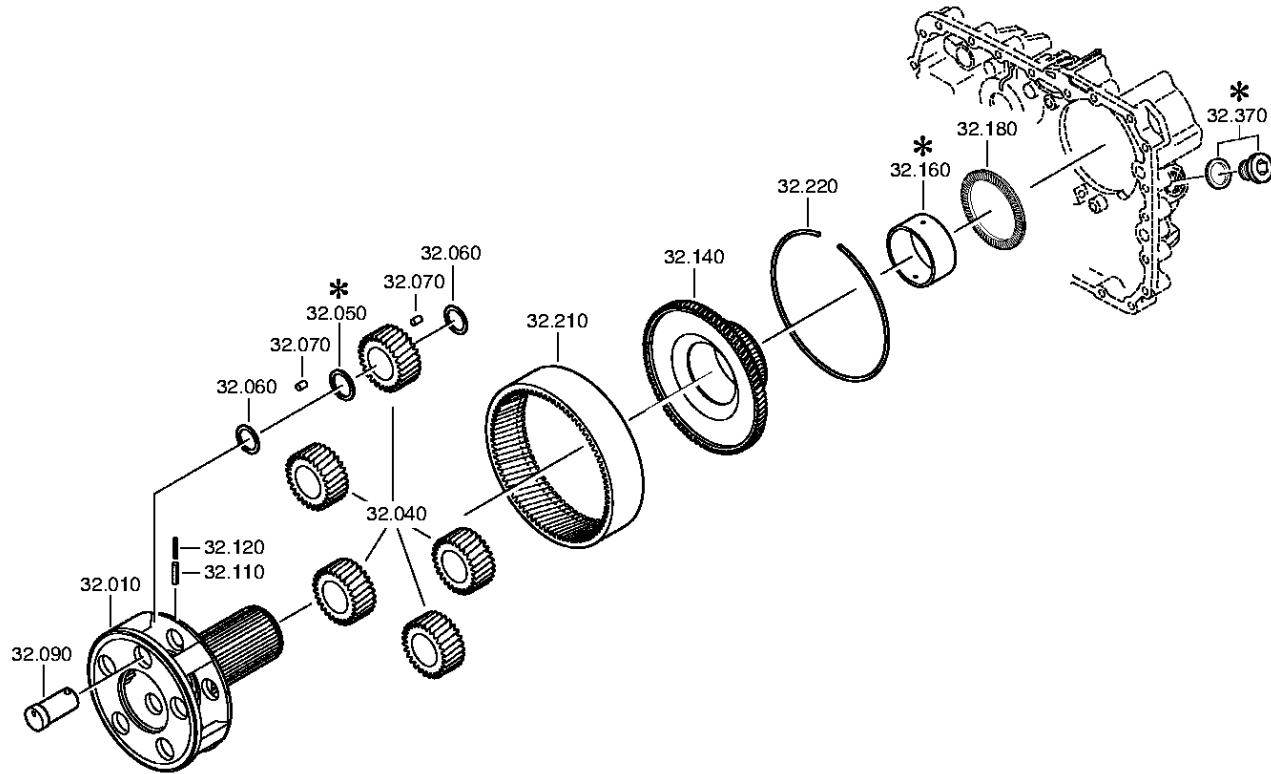
16 S 221 /

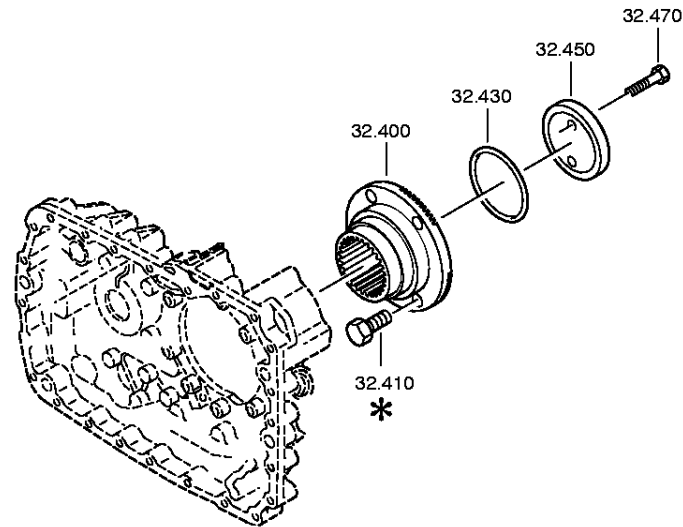
Plant: 068.43.21-1

Material-assembly-group-no: 1315.131.047



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
360	1316.301.042	133-158-1320	GASKET	1				0,000		
420	---		SCREW PLUG	1		Z00010111513	35N.M*DICHTRING M18X1,5	0,000		
---	0636.100.791		SCREW PLUG	1		Z00010111521	M18X1,5	0,000		
---	0634.801.062		SEALING RING	1		Z00010111521	18X24	0,001		
450	---		PULSE SENSOR	1		Z00004287211	35N.M*FLAE.DICHTG* BAJONETT*L=90,0* SCHUTZKAPPE	0,000		
---	0501.210.859		PULSE SENSOR	1		Z00004287210		0,000		
---	0666.790.033		SEALCOMPOUND	1		Z00004287210		0,310		
---	0700.300.427		PROTECTING CAP	1		Z00004287210		0,005		
500	0736.300.123	1880233	HEXAGON BOLT	11			M10X70 M10X70	0,000		
510	0736.300.123	1880233	HEXAGON BOLT	1			M10X70 M10X70	0,000		
520	0736.300.123	1880233	HEXAGON BOLT	1			M10X70 M10X70	0,000		
530	0736.300.123	1880233	HEXAGON BOLT	1			M10X70 M10X70	0,000		
540	0736.300.122		HEXAGON BOLT	2		Z00009403110	M10X110 M10X110	0,000		
550	0736.300.134		HEXAGON BOLT	1		Z00011103210	M10X45 M10X45	0,000		
560	0736.300.123	1880233	HEXAGON BOLT	2			M10X70 M10X70	0,000		
570	0736.300.123	1880233	HEXAGON BOLT	1			M10X70 M10X70	0,000		
580	0736.300.123	1880233	HEXAGON BOLT	1			M10X70 M10X70	0,000		
590	0736.300.134		HEXAGON BOLT	1		Z00011103210	M10X45 M10X45	0,000		
600	0736.300.123	1880233	HEXAGON BOLT	1			M10X70 M10X70	0,000		
610	0736.300.123	1880233	HEXAGON BOLT	1			M10X70 M10X70	0,000		





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Material number: 1316.051.933

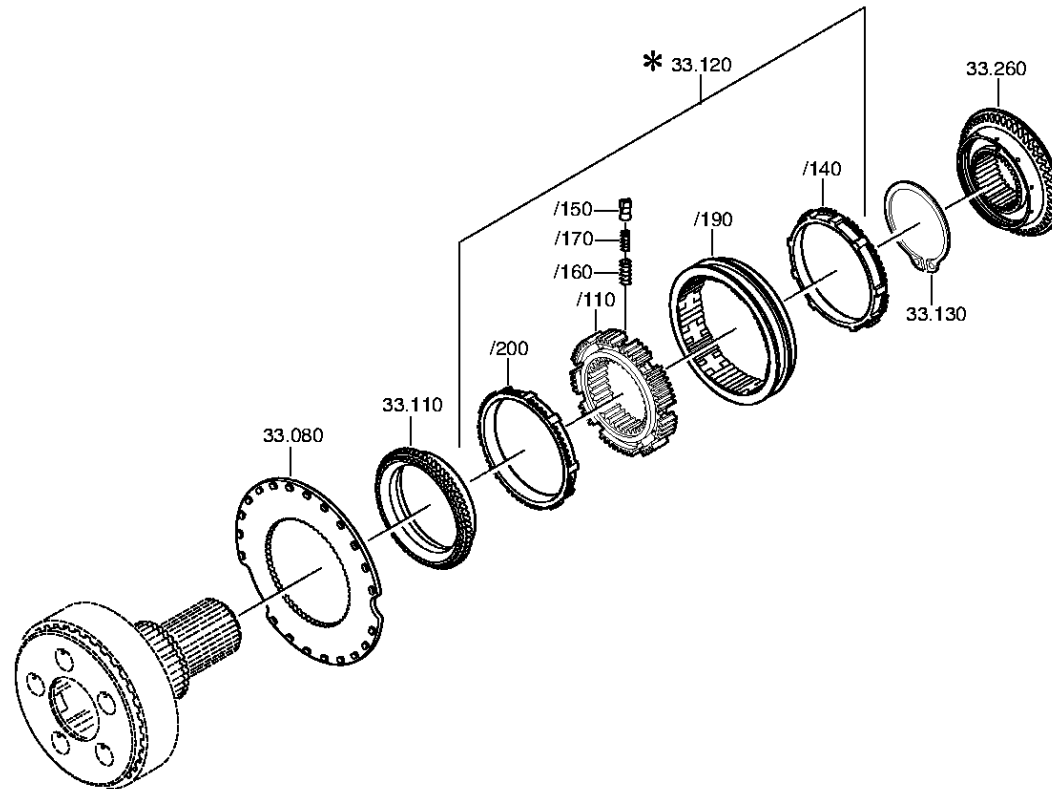
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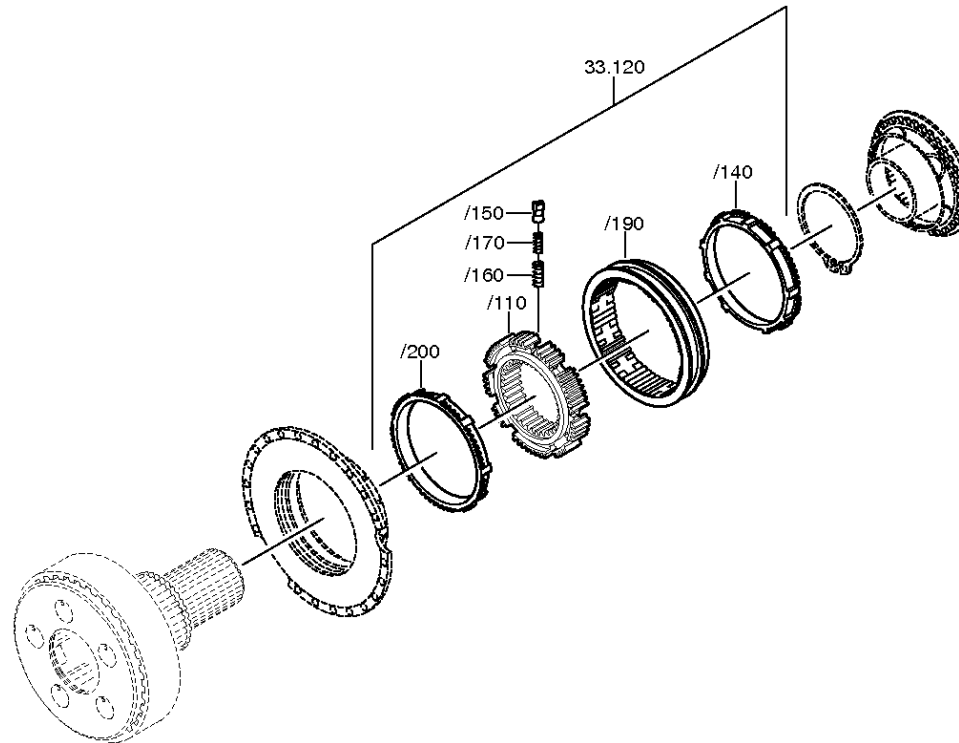
Plant: 068.44.07-1

Material-assembly-group-no: 1316.132.015



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
10	1316.232.039		PLANET CARRIER	1		Z00014438013		0,000		
40	1316.232.011	135-203-0081	PLANET GEAR SET	1			KPL.	0,000		
50	0730.109.309	820-400-3040	INTERMWASHER	5			A=7,90 IN 0730 105 951(2)	0,000		
60	0730.109.323	820-400-3050	INTERMWASHER	10				0,013		
70	0750.119.116	820-400-3060	ROLLER	140			10,0X16,8	0,010		
90	1316.332.140		PLANET SHAFT	5		Z00014438013		0,000		
110	0631.329.147		SLOTPIN	5		Z00014438013	6X26	0,000		
120	0631.329.261		SLOTPIN	5		Z00014438013	3,5X26	0,000		
140	1316.332.130		RING GEAR CARRIER	1		C01007305F10		0,000		
160	1316.333.014		INTERMRING	1				0,000		
180	0735.298.169	820-400-3080	AXIAL NEEDLE BEARING	1			104,5X128,4X10,0 FA.INA	0,000		
210	1315.332.041	5 5867 0	RING GEAR	1		C01007220A10	IN 1316 332 055(1)	0,000		
220	0730.513.583		LOCKING WIRE	1			A=3,20 IN 0730 505 052(2)	0,000		
400	1297.333.110	03	OUTPUT FLANGE	1			ENTHALT.IN 1314 332 007(0)	0,000		
430	0634.313.805		O-RING	1		C01007959910	82X4	0,000		
450	1312.332.028		WASHER	1				0,000		
470	0636.011.777		HEXAGON BOLT	2		Z00007292012	M12X60	0,000		





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Material number: 1316.051.933

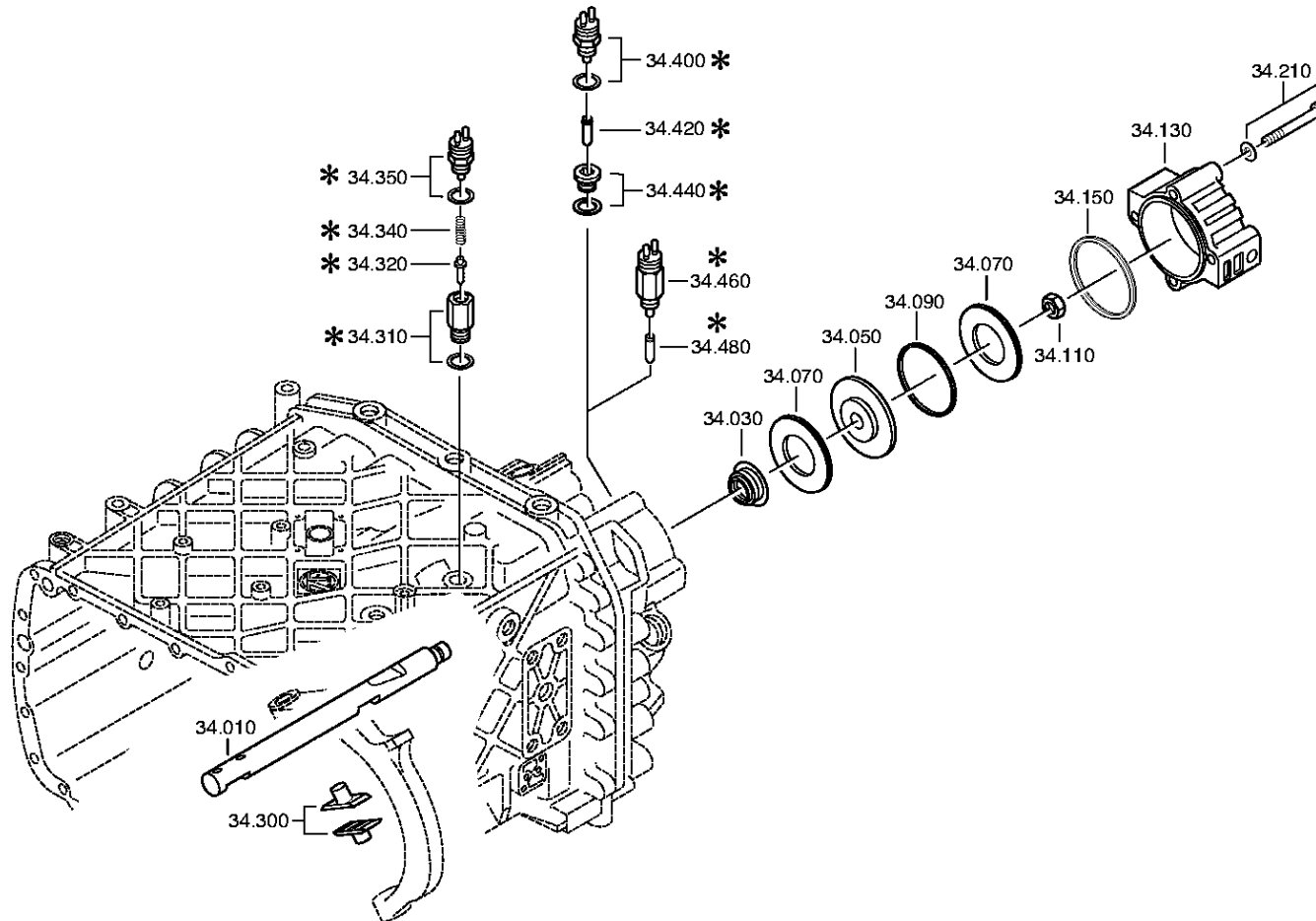
16 S 221 /

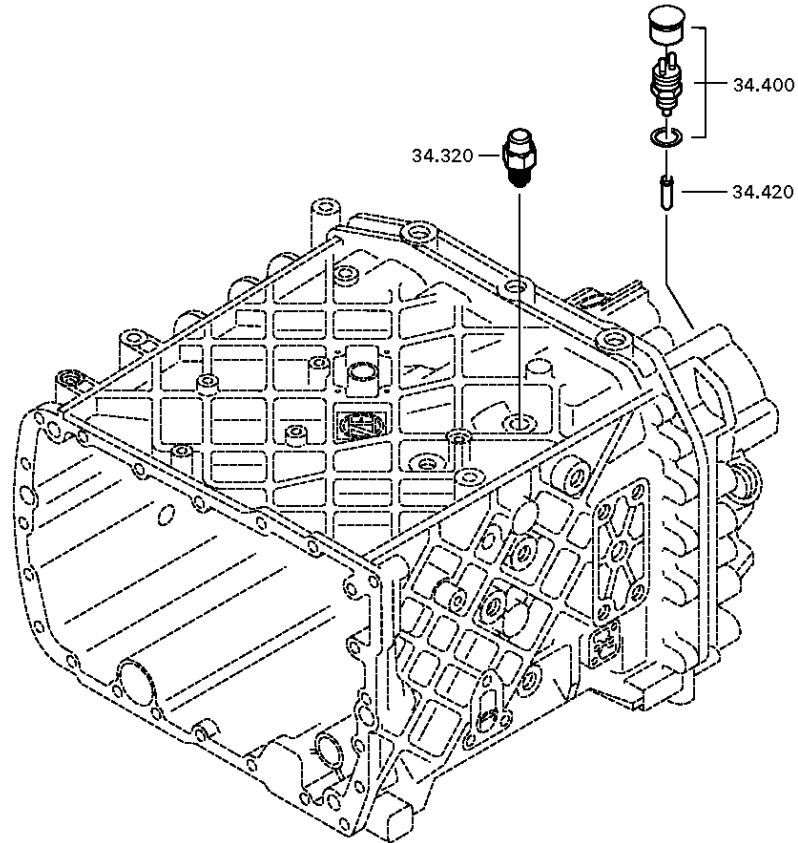
Plant: 068.45.04-1

Material-assembly-group-no: 1316.133.008



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
80	1296.333.046		CLUTCH DISC	1			ENTHALT.IN 1296 333 051(1)	0,000		
110	1296.333.050	5 5302 0	CLUTCH BODY	1		C01002627A10	ENTHALT.IN 1296.333.053(1)	0,000		
120	1316.233.022		SYNCHRONIZER	1			KPL.PROFIL 80GV-GP 90SV-GP	0,000		
/110	1313.333.001		SYNCHROBODY	1			ENTHALT.IN 1296 333 014(1)	0,000		
/140	1296.333.045	5 5301 0	SYNCHRORING	1				0,000		
/150	1240.304.278	1334510410	PRESSURE PIECE	9				0,000		
/160	0732.040.385	0971040080	COMPRSPRING	9				0,000		
/170	0732.040.386	097102000	COMPRSPRING	9				0,000		
/190	1316.333.034		SLIDING SLEEVE	1		C01007317F10	ZF-B 165/74 GP	0,000		
/200	1296.333.045	5 5301 0	SYNCHRORING	1				0,000		
130	0630.501.175	0692274	RETAINING RING	1		Z00006943010	125X3,7	0,000		
260	1316.233.029		CLUTCH BODY	1		C01007305F10	KPL. ZF-B 165/74	0,000		





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Material number: 1316.051.933

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Plant: 068.46.02-1

Material-assembly-group-no: 1316.134.021



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
10	1316.334.016		GEAR SHIFT RAIL	1				0,000		
30	0750.112.253	5 8342 0	FLANGE PACKING	1			25X40X15	0,000		
50	---		PISTON	1			GP	0,000		
---	1315.334.034		PISTON	1			ENTHALT.IN 1315 334 040(2)	0,000		
---	1315.334.063		PISTON	1				0,000		
70	0734.307.294	5 8400 0	SEALING RING	2			49X91X7,4 FA.KACO	0,000		
90	0750.112.066	5 5131 0	GUIDE RING	1				0,000		
110	0737.300.037		LOCKING NUT	1		Z00008929010	MS16X1,5	0,000		
130	1315.334.069	5 5836 0	CYLINDER	1				0,000		
150	0501.317.536	5 6096 0	PROFILE SEALING RING	1				0,000		
210	---		HEXAGON BOLT	4		Z00007349210	M10X90	0,000		
---	0636.015.688		HEXAGON BOLT	4		Z00007349212	M10X90	0,000		
---	0630.100.294		WASHER	4		Z00007158111		0,000		
300	1296.334.004	0692175	SLIDING PAD	2				0,000		
320	---		DETENT PLUNGER	1			145N*50N.M	0,000		
---	1324.207.035		DETENT PLUNGER	1			KPL. *145 N	0,000		
---	0730.008.604		SEALING RING	1				0,000		
400	---		SWITCH	1		Z00004287211	OEFF*45N.M* DICHTRING* BAJONETT* SCHUTZKAPPE	0,000		
---	0501.216.474		SWITCH	1				0,050		
---	0634.801.062		SEALING RING	1			18X24	0,001		
---	0700.300.427		PROTECTING CAP	1				0,005		
420	1295.212.006		PIN	1			KPL.	0,000		

Plant

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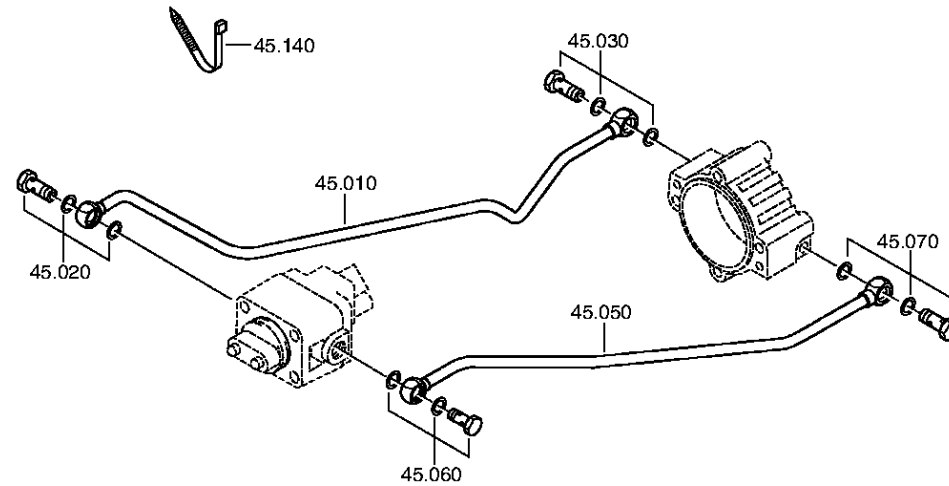
Material number: 1316.051.933

Plant: 068.57.04-1

Material-assembly-group-no: 1316.145.002

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RANGE SELECTION



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Material number: 1316.051.933

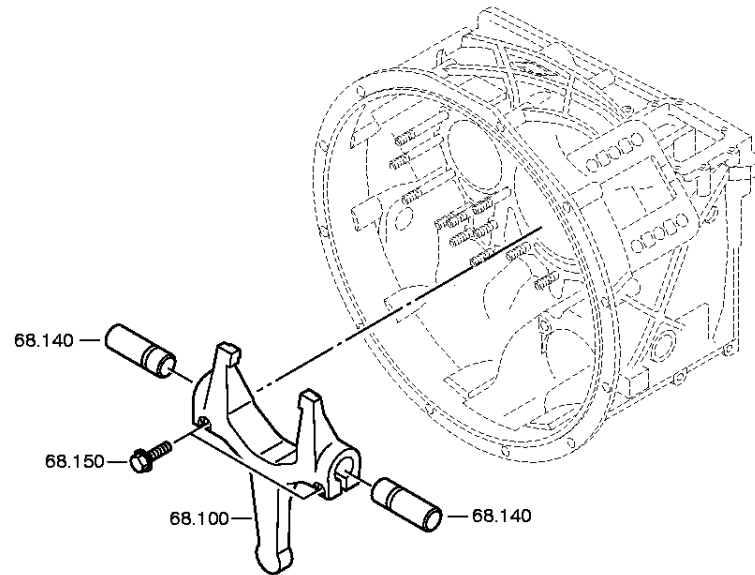
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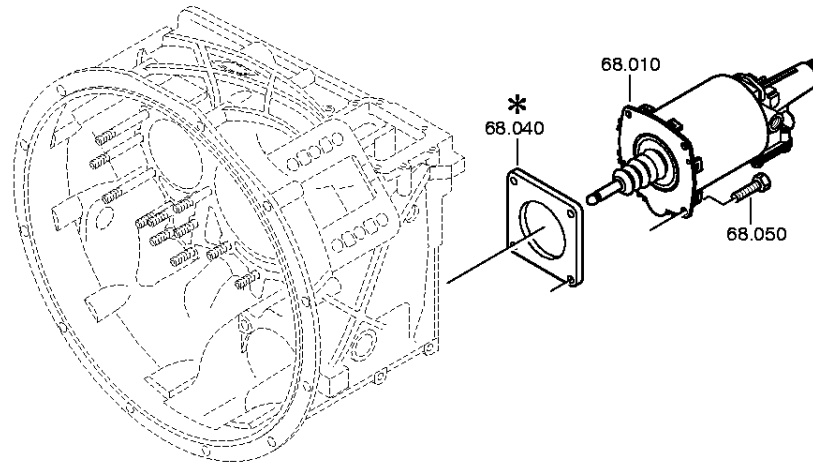
Plant: 068.57.04-1

Material-assembly-group-no: 1316.145.002



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
10	1316.245.012		PIPE	1		C01003831B10	KPL.GP RE*L=589MM* 12X1,5	0,000		
20	---		UNION SCREW	1		Z00010274511	M14X1,5	0,000		
---	0737.300.061		UNION SCREW	1		Z00012473710	M14X1,5	0,000		
---	0634.801.217		SEALING RING	1		Z00010274513	14X20	0,000		
30	---		UNION SCREW	1		Z00010274511	M14X1,5	0,000		
---	0737.300.061		UNION SCREW	1		Z00012473710	M14X1,5	0,000		
---	0634.801.217		SEALING RING	1		Z00010274513	14X20	0,000		
50	1316.245.013		PIPE	1		C01003831B10	KPL.GP LI*L=605MM* 12X1,5	0,000		
60	---		UNION SCREW	1		Z00010274511	M14X1,5	0,000		
---	0737.300.061		UNION SCREW	1		Z00012473710	M14X1,5	0,000		
---	0634.801.217		SEALING RING	1		Z00010274513	14X20	0,000		
70	---		UNION SCREW	1		Z00010274511	M14X1,5	0,000		
---	0737.300.061		UNION SCREW	1		Z00012473710	M14X1,5	0,000		
---	0634.801.217		SEALING RING	1		Z00010274513	14X20	0,000		
140	0659.160.081		CABLE CLIP	1		C01006654E10	4,7X210	0,000		





Parts list

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Material number: 1316.051.933

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Plant: 068.93.13-1

Material-assembly-group-no: 1315.168.030



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Weight	Rep kit	Alternative material
10	0501.006.570		CLUTCH CYLINDER	1		C01007378A10		0,000		
50	0636.016.412		HEXAGON BOLT	4			M8X22	0,000		
100	1315.268.031		RELEASE FORK	1		Z00005397611	KPL.AUSR-WELLE* SW=78	0,000		
/120	0501.315.159		BALL CUP	1			KS12-18-12	0,000		
140	---		SHAFT	2		Z00004667010		0,000		
---	1315.368.060	1887072	SHAFT	2				0,000		
---	0671.190.050		GREASE	2				0,000		
150	---		LOCKING SCREW	2			DURLOK M10X45	0,000		
---	0736.031.059	530537A080980 REPL. FOR 0636031070	LOCKING SCREW	2		C01009473D10	M10X45	0,000		