

Spare Parts Catalog 16 S 2531 TO

Material number: 1356.080.094

Current date: 24.05.2017

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#### Notes relating to the spare parts catalog

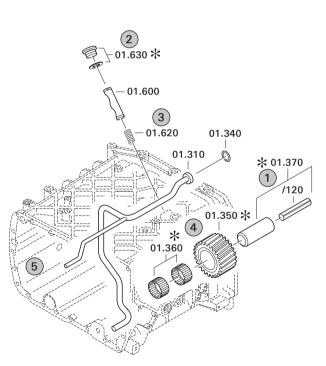


#### Setup of the spare parts catalog

- Cover sheet
- Tecnical 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
0680814	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)		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

		Sachnummer Product number	Benennung (Description)		Description (Benennung)	Menge Quantity	Einheit Unit
C	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)	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 distina base

#### 5 Parts, dotted display

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

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Pos.	Information	Amendment number
001	Use case	
002	Customer CNHTC - China National Heavy Duty Truck Group	
003	City Jinan	
004	DUNS	
005	Vehicle / Apparatus	
006	Sales Name ZZ1316V326ME1R/R7UDM	
007	Manufacturer CNHTC - China National Heavy Duty Truck Group	
008	Engineering Name	
009	Product Use TRUCK	
010	Vehicle/Hardware Type TRAILER TRUCK	
011	SOP	
012	Engine	
013	Sales Designation MC13.54-50	
014	Manufacturer CNHTC - China National Heavy Duty Truck Group	
015	Drivetrain type DIESEL	
016	Eng.Displ. 12419 cm3	
017	Cylinder 6	
018	Nom. power 397 kW	
019	RPM at nom. power 1900 1/min	
020	Nom. torque 2500 Nm	
021	RPM at nom. torque 1050 1/min	
022	Classification use case	
023	DESIGNATION, CLUTCH MFZ430	
024	MANUFACTURER, CLUTCH ZF-SACHS	
025	TOTAL NUMBER OF WHEELS 8	
026	NUMBER OF DRIVING WHEELS 4	
027	DYNAMIC TYRE RADIUS 517 mm	
028	REAR AXLE RATIO 3.08	
029	INERTIA TORQUE .137 kg/m2	
031	PERMISS.GROSS VEHICLE WEIGHT 18 t	
032	PERMISS.GROSS COMBIN.WEIGHT 30 t	
033	Product description	
057	DESIGN, RELEASE SHAFT	

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Pos.	Information	Amendment number
058	WIDTH ACROSS FLATS,RELEAS.FORK 94 mm	
061	REF.LENGTH,RELEASE BEAR.FLAN -24.2 mm	
062	DIAMETER, RELEASE FLANGE 62.62 mm	
064	OIL CAPACITY, GEARBOX 25 dm3	
065	OIL FILL VARIANT EX WORKS	
066	OIL GRADE PERMISSIBLE ACC. TO TE-ML02	
067	OIL CLASS FIRST FILLING E	
068	CODING OUTER CONSERVATION KA2	
071	CONSERVATION SPECIFICATION ZFN 916	
072	COLOR JET BLACK	
073	COLOUR CLASSIFICATION ACC. TO RAL 9005	
074	PAINTING, ZF STANDARD 915 W	
092	Alias ID	
093	CNHTC - China National Heavy Duty Truck Group WG9725220399/1	

# Assembly group overview

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Graphics	Pos.	Material number	Name	Quantit y	Amend. no.	Techn. Info.
	910	1356.051.344	16 S 2531 TO	1		
	988	1356.177.004	ACCESSORIES	1		

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Material number: 1356.080.094



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	IRAN KIT	Alternative material
202	0666.690.171		ADHESIVE	15		Z00034267711			
230			UNION SCREW	1					
	0737.300.028		UNION SCREW	1					
	0634.801.331		SEALING RING	1			12X18		
250	0730.365.303		WARNING PLATE	2		Z00034267711			

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Pos.	Information	Amendment number
001	Use case	
002	Customer China National Heavy Duty Truck	
003	City Jinan	
004	DUNS 65-389-6704	
005	Product description	
006	ATTACHED AGRREGATES 1 IT3 ECOSPLIT	
007	ATTACHM.POS.HEAT EXCHANGER BACK LEFT	
008	DES.CONN.HEAT EXCHANGER FLANGE-MOUNTED	
009	CLEANNESS SCALE NUMBER 1 20	
010	CLEANNESS SCALE NUMBER 2 16	
011	CLEANNESS SPECIFICATION ZFN 5015	
029	OIL CAPACITY, GEARBOX 25 dm3	
030	OIL FILL VARIANT EX WORKS	
031	OIL GRADE PERMISSIBLE ACC. TO TE-ML02	
032	OIL CLASS FIRST FILLING E	
033	CODING OUTER CONSERVATION KA2	
035	CODING INNER CONSERVATION KI1	
036	CONSERVATION SPECIFICATION ZFN 916	
037	COLOR JET BLACK	
038	COLOUR CLASSIFICATION ACC. TO RAL 9005	
039	PAINTING, ZF STANDARD 915 W	

# Assembly group overview

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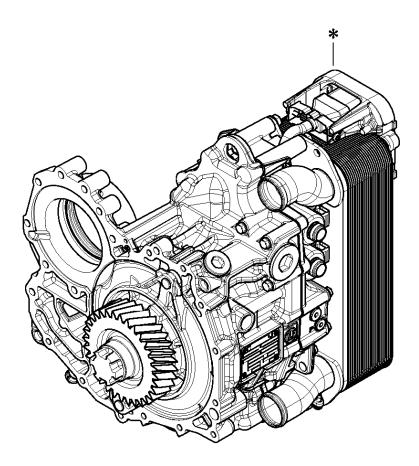
Graphics	Pos.	Material number	Name	Quantit y	Amend. no.	Techn. Info.
	910	1356.007.181	16 S 253 TO IT	1		
155.A1.03-1	922	6093.050.070	IT 3 ECOSPLIT T	1		
155.E1.05-1	924	6093.101.805	ANCHORAGE	1		

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Material number: 1356.051.344

Plant: 155.A1.03-1



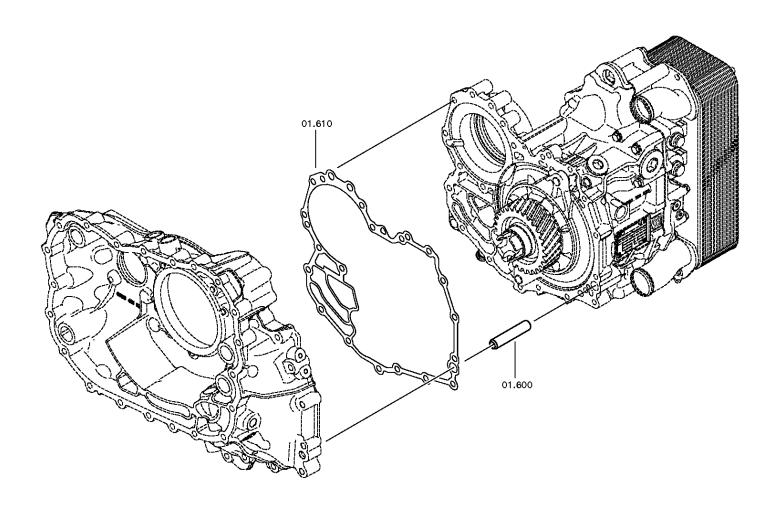


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Material number: 1356.051.344

Plant: 155.E1.05-1



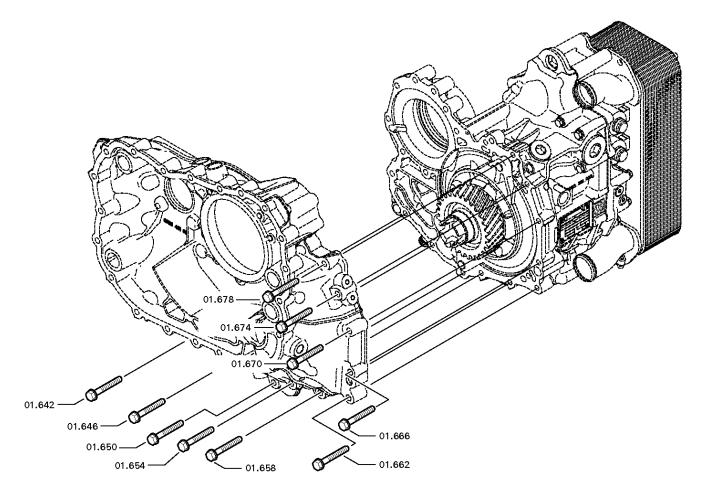


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Material number: 1356.051.344

Plant: 155.E1.05-2



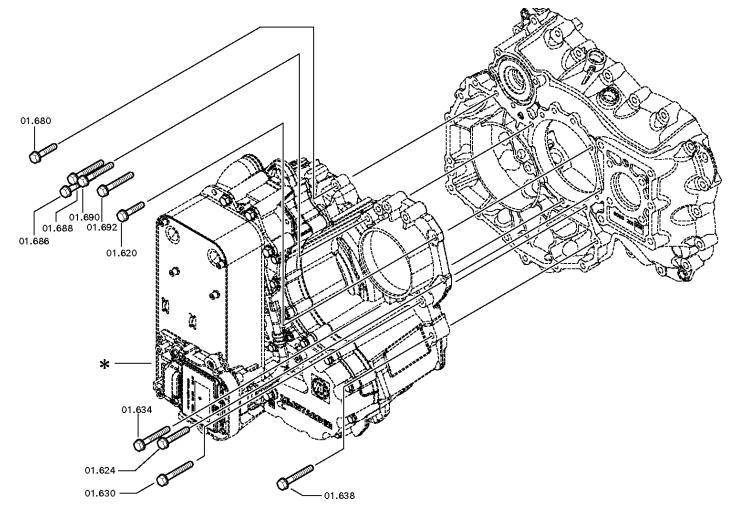


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Material number: 1356.051.344

Plant: 155.E1.05-3





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Material number: 1356.051.344

Plant: 155.E1.05-1



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
600	0731.201.563	3	CYLINDRICAL PIN	1					
610	0501.331.587	1	GASKET	1			INDARDER IT3		
620	0636.100.433	3	HEXAGON SCREW	1		Z00009178010	M10X40		
624	0636.100.433	3	HEXAGON SCREW	1		Z00009178010	M10X40		
630	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
634	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
638	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
642	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
646	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
650	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
654	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
658	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
662	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
666	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
670	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
674	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
678	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
680	0636.100.433	3	HEXAGON SCREW	1		Z00009178010	M10X40		
686	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
688	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
690	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
692	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		

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Pos.	Information	Amendment number
001	Use case	
002	Customer China National Heavy Duty Truck	
003	City Jinan	
004	DUNS 65-389-6704	
005	Product description	
006	INSTALLATION POS TRANSMISSION HORIZONTAL LEFT	
007	TRANSMISSION ATTACHMENT FLANGE-MOUNTED	
012	ATTACHMENT VARIANT, INTARDER ASSEMBLED	
013	NUMBER OF GEARS 16	
014	RATIO, BOTTOM GEAR 13.8	
015	RATIO, TOP GEAR .84	
016	SET OF RATIOS SG	
017	NOTE ON TYPE OF GEAR SHIFT SYS TURNING SHAFT	
018	POSITION, GEAR SHIFT SYSTEM HORIZONTAL LEFT	
019	DESIGN, SHIFT PATTERN H-H	
020	VERSION SHIFT SUPPORT SERVO	
021	VERSION ACTUATION SHIFT SYSTEM CONTROL CABLE	
023	DESIGN PSE PSE2	
024	DESIGN PSE WITH VALVE PRESSURE RELIEF VALVE 6	
026	MAIN CUTOFF VALVE WITH	
027	NO. TAPPETS MAIN CUTOFF VALVE 2	
028	POS. AIR CON MAIN CUTOFF VALVE F	
030	DESIGN AIR SHUT-OFF GV-VALVE	
031	DIA.THROTTLE VALVE AIR SUPPLY 1.3 mm	
032	SELECTION PATTERN VARIANT GEAR SHIFT PATTERN 1	
033	VERSION OF SYNCHRONIZER 1 1+2 GEAR BK-SYNCHR.MOLYBDAEN	
034	VERSION OF SYNCHRONIZER 2 3+4 GEAR BK-SYNCHR.MOLYBDAEN	
035	REFERENCE LENGTH INPUT SHAFT 117 mm	
036	STANDARD TYPE INPUT SHAFT SAE	
037	NUMBER OF WEDGES INPUT SHAFT 10	
038	VERSION OF INPUT SHAFT FORM C	
039	NOMINAL DIAMETER INPUT SHAFT 2 in	
040	DIAMETER, JOURNAL, INPUT SHAFT 25 mm	

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Pos.	Information	Amendment number
041	TYPE FIT SPIGOTS INPUT SHAFT F7	
042	VER. BEAR. SPIGOTS INPUT SHAFT TAPER ROLLER	
045	DESIGN,CONN., CLUTCH HOUSING SAE 1	
046	CENTR.DIA, HSG/ENGINE CONNECT. 511.175 mm	
047	NUMBER OF BORES, ENGINE CONN. 12	
048	BORE DIA, ENGINE CONNECTION 11 mm	
049	DESIGN, RELEASE SHAFT	
050	WIDTH ACROSS FLATS, RELEAS. FORK 94 mm	
053	REF.LENGTH,RELEASE BEAR.FLAN -24.2 mm	
054	DIAMETER, RELEASE FLANGE 62.62 mm	
055	DESIGN RELEASE CYLINDER WITHOUT GROOVE	
056	OUTER DIA. OUTPUT FLANGE RA 180 mm	
058	NO.OF SCREWS OUTPUT FLANGE RA 4	
060	DIA. THREAD OUTPUT FL. SCR. RA M14	
061	THREAD PITCH OUTPUT FL SCR. RA 1.5 mm	
062	THREAD LENGTH OUTP.FL SCREW RA 50 mm	
064	DIMENSION SHIFT TURRET DIST. 300 mm	
065	MEAS. LOC. SHIFT TURRET DIST. SHIFT LEVER-LOCATION	
066	SELECTOR LEVER y	
067	RADIUS SELECTOR LEVER 65 mm	
068	SELECTOR LEVER POSITION C	
069	DESIGN OFFSET SELECTOR LEVER OUTSIDE	
070	LENGTH OFFSET SELECTOR LEVER 28 mm	
071	SHIFT LEVER y	
072	RADIUS 1 SHIFT LEVER 65 mm	
073	RADIUS 2 SHIFT LEVER 85 mm	
075	SHIFT LEVER CONNECTION KNURLING	
076	DESIGN, OFFSET, SHIFT LEVER INSIDE	
078	LEVER POSITION SHIFTING OUTPUT A	
079	GEAR SHIFT LEVER ANGLE EPSILON 5.625 GRAD	
082	SPRING ARRANGEMENT Q1	
083	SPRING FORCE DETENT PLUNGER RG 60 N	
086	SELECTOR SPRING FORCE, OUTSIDE 80 N	

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Pos.	Information	Amendment number
088	HUMP SPRING FORCE, OUTSIDE 120 N	
089	HUMP SPRING FORCE, CENTRE 70 N	
091	SPRING FORCE OUTS. DETENT NEUT 200 N	
093	ALLOCATION DETENT LEVER VER. C	
094	SWITCH, REVERSE GEAR y	
095	DESIGN, RG (REV.GEAR) SWITCH CLOSING	
096	DESIGN, CONNECTION, RG SWITCH DIN BAYONET	
097	CODE SWITCH RG A1	
098	PROT.CAP SWITCH, REVERSE GEAR y	
099	SWITCH, NEUTRAL GEAR y	
100	DESIGN,NG(NEUTRAL GEAR)SWITCH OPENING SWITCH	
101	DESIGN, CONNECTION, NG SWITCH DIN BAYONET	
102	CODE SWITCH NG A1	
103	PROT.CAP SWITCH, NEUTRAL GEAR y	
104	PRESSURE SWITCH n	
109	RG-GATE-IDENTIFICATION SWITCH n	
114	SWITCH RG-ENGAGED n	
119	SWITCH GP y	
120	DESIGN, GP SWITCH CLOSING	
121	DESIGN, CONNECTION, GP SWITCH DIN BAYONET	
122	CODE SWITCH GP A1	
123	PROTECTING CAP GP SWITCH y	
124	SWITCH GP-END POSITION n	
129	SWITCH GV n	
134	SWITCH HG n	
139	SWITCH 1 GEAR n	
144	ATTACHM.POS.HEAT EXCHANGER IN FRONT RIGHT	
145	DES.CONN.HEAT EXCHANGER PREPARED	
146	VER. TRANSMISSION VENTILATION BREATHER	
158	PULSE SENSOR INTARDER WITH	
159	PULSE RATE PULSE SENS INTARDER 12.21 IMP/U	
160	PROT.CAP PULSE SENSOR INTARDER y	
161	DES.CONN. PULSE SENSOR INTARDER DIN BAYONET	

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Pos.	Information	Amendment number
162	DESIGN PULSE SENSOR INTARDER KITAS II	

# Assembly group overview

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Graphics	Pos.	Material number	Name	Quantit	Amend. no.	Techn. Info.
161.01.09-1	110	1356.101.004	TRANSMISSION HOUSING	1		
161.01.81-1	180	1325.101.810	CLUTCH HOUSING	1		
161.02.05-1	10	1356.102.017	INPUT SHAFT	1		
161.02.80-1	240	1325.102.802	CONNECTION PLATE	1		
161.02.01-1	910	1325.102.018	CONNECTION PLATE	1		
068.03.01-1	20	1316.103.013	COUNTERSHAFT	1		
161.04.12-1	30	1356.104.027	MAIN SHAFT	1		
161.05.01-1	130	1325.105.002	RETURN	1		
161.06.04-1	40	1356.106.003	TRANSMISSION SHIFT SYSTEM	1		
161.06.02-1	44	1325.106.803	TRANSMISSION SHIFT SYSTEM	1		
068.07.25-1	460	1316.108.884	GEAR SHIFT HOUSING	1		
068.07.38-1	910	1316.108.075	GEAR SHIFT HOUSING	1		
068.07.25-1	914	1316.108.459	GEARSHIFT SHAFT	1		
068.07.75-1	924	1316.108.070	DETENT	1		
062.08.30-1	954	1316.171.403	END COVER	1		
068.08.45-1	960		PNEUMATIC SERVO UNIT	1		
068.09.11-1	934	1316.109.058	CONNECTING PARTS	1		
068.09.11-1	940	1316.109.433	CONNECTING PARTS	1		
161.10.04-1	200	1356.110.002	OIL SUPPLY	1		
161.10.01-1	920	1325.110.005	PUMP	1		
068.10.02-1	932	1316.111.011	SELECTOR LEVER	1		
	466	1316.111.818	SELECTOR LEVER	1		
068.12.08-1	918	1316.149.478	SET OF SPRINGS	1		
161.28.01-1	370		PLANETARY RANGE	1		
161.40.01-1	50	1356.112.001	GV-SHIFT SYSTEM	1		
161.40.80-1	340	1325.112.817	GV-SHIFT SYSTEM	1		
161.43.02-1	40	1325.131.007	RC HOUSING	1		
161.43.40-1	50	1325.131.401	CLOSING COMPONENTS	1		
161.44.04-1	10		PLANETARY DRIVE	1		
161.44.41-1	60	1325.132.415	OUTPUT FLANGE	1		
161.45.03-1	20	1325.133.007	SYNCHRONIZER	1		
161.46.01-1	30	1325.134.007	GP SHIFT SYSTEM	1		

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# Assembly group overview

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Graphics	Pos.	Material number	Name	Quantit y	Amend. no.	Techn. Info.
161.46.40-1	400	1325.134.404	SWITCH	1		
161.57.04-1	510	1325.145.007	RANGE SELECTION	1		
161.70.05-1	480	1356.170.003	SHUT-OFF VALVE	1		
161.90.08	320	1325.147.009	SCREW PLUG	1		
161.93.76-1	260	1325.168.011	CLUTCH RELEASE DEVICE	1		
161.93.17-1	262	1315.301.230	PROTECTION CAP	1		

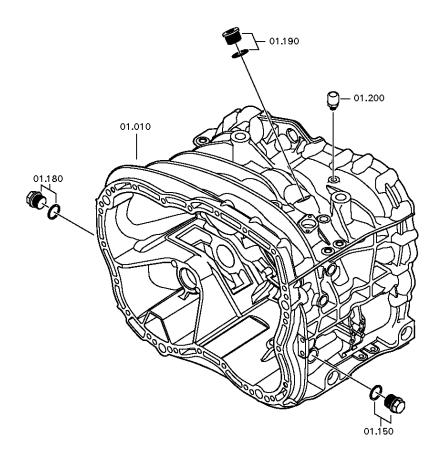
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Material number: 1356.007.181

Plant: 161.01.09-1

TRANSMISSION HOUSING





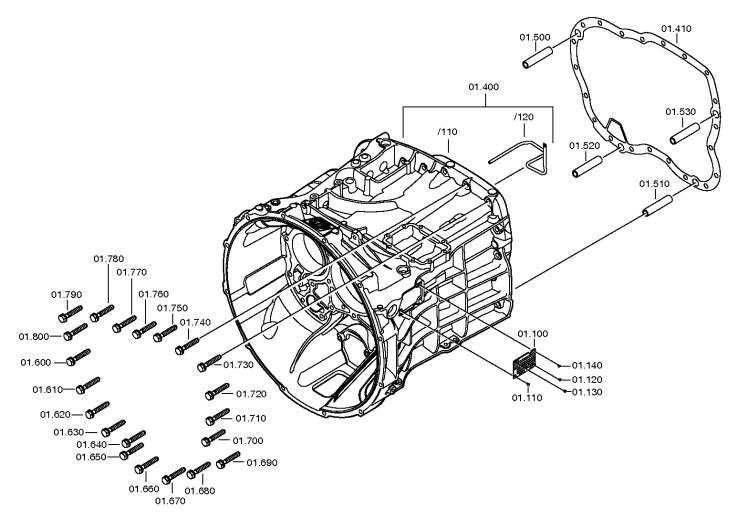
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Material number: 1356.007.181

Plant: 161.01.81-1

TRANSMISSION HOUSING





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Material number: 1356.007.181

Plant: 161.01.09-1



Pos.	number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
LO	1325.201.031		TRANSMISSION HOUSING	1		Z00008470912	KPL.BEARBEITET*GP-ANZ		
100			TYPE PLATE	1			KONZERN		
	0730.365.241		TYPE PLATE	1			EINHEITSSCH. VERDREHSICHER		
	0730.365.259		TYPE PLATE	1			EINHEITSSCH.VERDREHSICHER BRASILIEN		
-	0730.365.267		TYPE PLATE	1			CHINA		
	0730.300.258		TYPE PLATE	1			EINHEITSSCH.VERDREHSICHER		
	0730.365.271		TYPE PLATE	1			RUSSLAND/ KYRILLISCH		
	0730.365.257		TYPE PLATE	1			S.S.CH IRAN		
-	0730.365.800		TYPE PLATE	1		Z00015972510			
-	0730.302.754		TYPE PLATE	1			AUSFUEHRUNG UNIVERSAL		
110	0731.300.027		BLIND RIVET	1		Z00007904810			
120	0731.300.027		BLIND RIVET	1		Z00007904810			
130	0731.300.027		BLIND RIVET	1		Z00007904810			
L40	0731.300.027		BLIND RIVET	1		Z00007904810			
150			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		
180			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		
190			SCREW PLUG	1		Z00010164412	70N.M*DICHTRING M26X1,5		
	0636.100.811		SCREW PLUG	1		Z00010164420	M26X1,5		
	0634.801.249		SEALING RING	1		Z00010164420	26X31		
200	0501.218.540		BREATHER	1					
400	1325.201.025		CLUTCH HOUSING	1			SAE D=11*ABSTZG.2X D= 9*UNBEARB.SENSOR/GV/M8/ SCHUTZBL/LEITG		
410	0501.322.776		GASKET	1					
500	0731.201.563		CYLINDRICAL PIN	1					
510	0731.201.563		CYLINDRICAL PIN	1					
520	0731.201.563		CYLINDRICAL PIN	1					
530	0731.201.563		CYLINDRICAL PIN	1					
500	0636.016.405		HEXAGON SCREW	1		Z00007060111	M10X60		

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Material number: 1356.007.181

Plant: 161.01.09-1



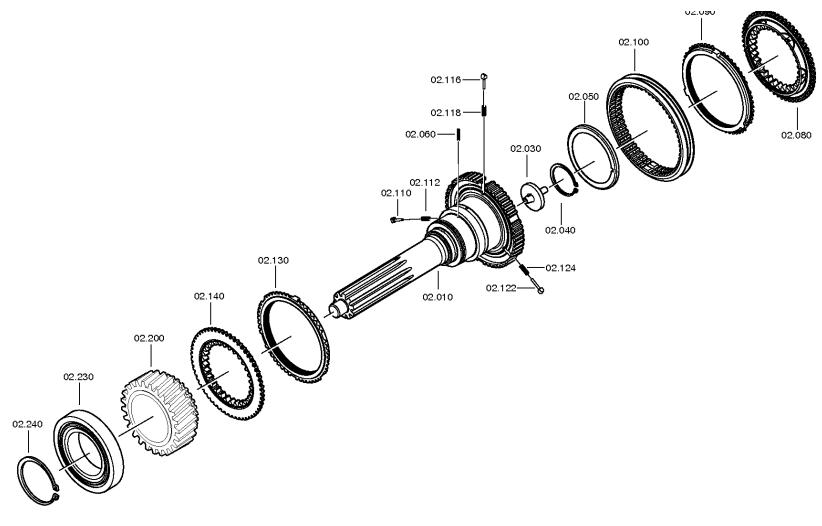
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
610	0636.016.405		HEXAGON SCREW	1		Z00007060111	M10X60		
620	0636.016.405		HEXAGON SCREW	1		Z00007060111	M10X60		
630	0636.016.405		HEXAGON SCREW	1		Z00007060111	M10X60		
640	0636.016.405		HEXAGON SCREW	1		Z00007060111	M10X60		
650	0636.016.405		HEXAGON SCREW	1		Z00007060111	M10X60		
660	0636.016.405		HEXAGON SCREW	1		Z00007060111	M10X60		
670	0636.016.405		HEXAGON SCREW	1		Z00007060111	M10X60		
680	0636.016.405		HEXAGON SCREW	1		Z00007060111	M10X60		
690	0636.016.405		HEXAGON SCREW	1		Z00007060111	M10X60		
700	0636.016.405		HEXAGON SCREW	1		Z00007060111	M10X60		
710	0636.016.405		HEXAGON SCREW	1		Z00007060111	M10X60		
720	0636.016.405		HEXAGON SCREW	1		Z00007060111	M10X60		
730	0636.016.405		HEXAGON SCREW	1		Z00007060111	M10X60		
740	0636.016.405		HEXAGON SCREW	1		Z00007060111	M10X60		
750	0636.016.405		HEXAGON SCREW	1		Z00007060111	M10X60		
760	0636.016.405		HEXAGON SCREW	1		Z00007060111	M10X60		
770	0636.016.405		HEXAGON SCREW	1		Z00007060111	M10X60		
780	0636.016.405		HEXAGON SCREW	1		Z00007060111	M10X60		
790	0636.016.405		HEXAGON SCREW	1		Z00007060111	M10X60		
800	0636.016.405		HEXAGON SCREW	1		Z00007060111	M10X60		

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Material number: 1356.007.181

Plant: 161.02.05-1 INPUT SHAFT



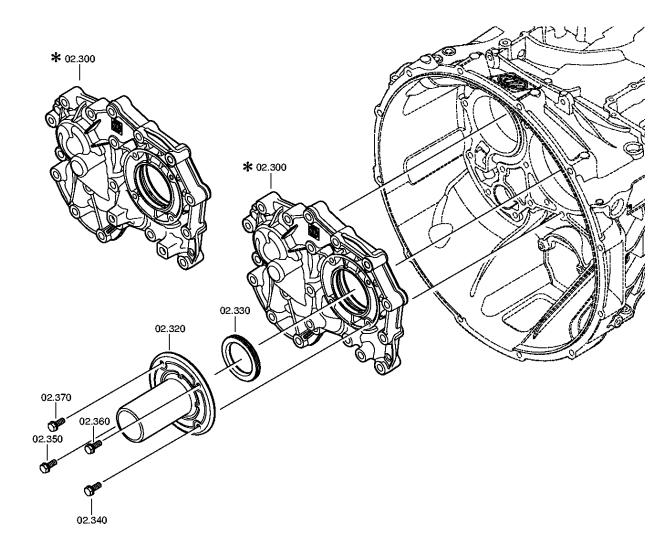


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Material number: 1356.007.181

Plant: 161.02.01-1 INPUT SHAFT



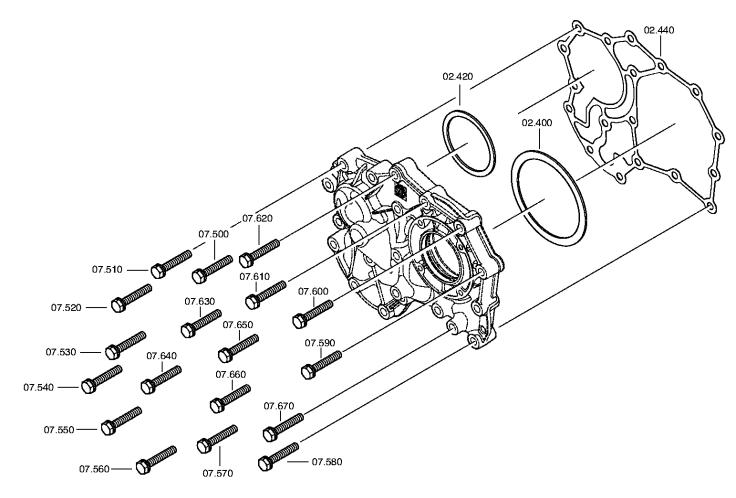


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Material number: 1356.007.181

Plant: 161.02.80-1 INPUT SHAFT





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Material number: 1356.007.181

Plant: 161.02.05-1



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	1356.302.103		INPUT SHAFT	1					
30	1354.302.019		TUBE	1					
40	0630.502.027		RETAINING RING	1			50X2		
50	0750.101.179		OIL DAM	1		Z00037157511	77,0X95,5X6,0		
80	1297.304.523		CLUTCH BODY	1			ZF BK144		
90			SYNCHRO.RING	1			ZF-BK144*ZFF*LOKAL HNG		
	1316.304.189		SYNCHRO.RING	1			ZF-BK 144		
	1297.304.507		SYNCHRO.RING	1			ZF-BK144		
100	1297.304.516		SLIDING SLEEVE	1			ZF BK150		
110	1297.304.436		PRESSURE PART	1					
112	0732.040.409		COMPRESSION SPRING	1					
116	1297.304.436		PRESSURE PART	1					
118	0732.040.409		COMPRESSION SPRING	1					
122	1297.304.436		PRESSURE PART	1					
124	0732.040.409		COMPRESSION SPRING	1					
130			SYNCHRO.RING	1			ZF-BK144*ZFF*LOKAL HNG		
	1316.304.189		SYNCHRO.RING	1			ZF-BK 144		
	1297.304.507		SYNCHRO.RING	1			ZF-BK144		
140	1297.304.523		CLUTCH BODY	1			ZF BK144		
200	1316.302.067		HELICAL GEAR	1			Z35 IN 1316 302 026(1)		
230	0750.117.732		TAPERED ROLLER BEARING	1			85,0X150,0X30,5		
240	0730.501.598		RETAINING RING	1			85X4		
300	1325.302.055		CONNECTION PLATE	1		Z00013937810			
320	1325.302.029		GUIDE TUBE	1		Z00013937810			
330			SHAFT SEAL	1		Z00013937810	55X78X8		
	0734.310.435		SHAFT SEAL	1			55X78X8 FA.CFW		
340	0636.100.466		SCREW WITH WASHER ASSEMBLY	1		Z00009178210	M8X22		
350	0636.100.466		SCREW WITH WASHER ASSEMBLY	1		Z00009178210	M8X22		
360	0636.100.466		SCREW WITH WASHER ASSEMBLY	1		Z00009178210	M8X22		
370	0636.100.466		SCREW WITH WASHER ASSEMBLY	1		Z00009178210	M8X22		

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Material number: 1356.007.181

Plant: 161.02.05-1



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
400			SHIM	1			H= 0,90- 2,40(ABSTUFUNG:0,05MM)		
	2050 200 004		SHIM	1			A=2,2 IN 2050 309 090 C45E		
	2050.309.094		ЭПІМ	1			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)		
	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		
	2030.309.034		SHIM	1			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		
				1			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		

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Material number: 1356.007.181

Plant: 161.02.05-1



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
	0730.301.506		SHIM	1			h=2,40		
420			SHIM	1			H= 1,85- 3,25(ABSTUFUNG:0,05MM)		
	0730.112.938		SHIM	1		C01007375C10			
	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)		
440	0501.324.454		GASKET	1		C01005568F10			
500	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
510	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		

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Material number: 1356.007.181

Plant: 161.02.05-1



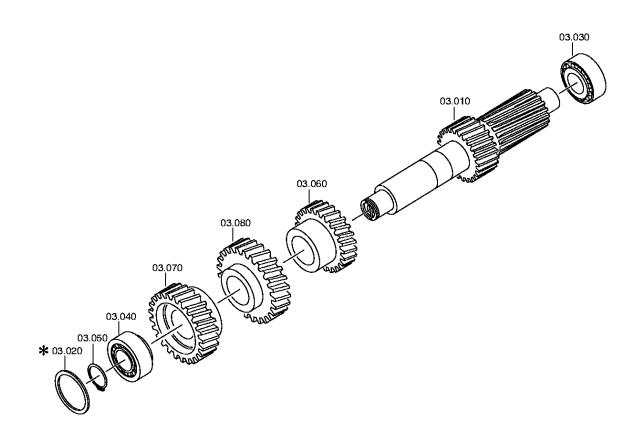
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
520	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
530	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
540	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
550	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
560	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
570	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
580	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
590	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
600	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
610	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
620	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
630	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
640	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
650	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
660	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		
670	0636.102.270		HEXAGON SCREW	1		Z00009177410	M10X60		

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Material number: 1356.007.181

Plant: 068.03.01-1





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Material number: 1356.007.181

Plant: 068.03.01-1



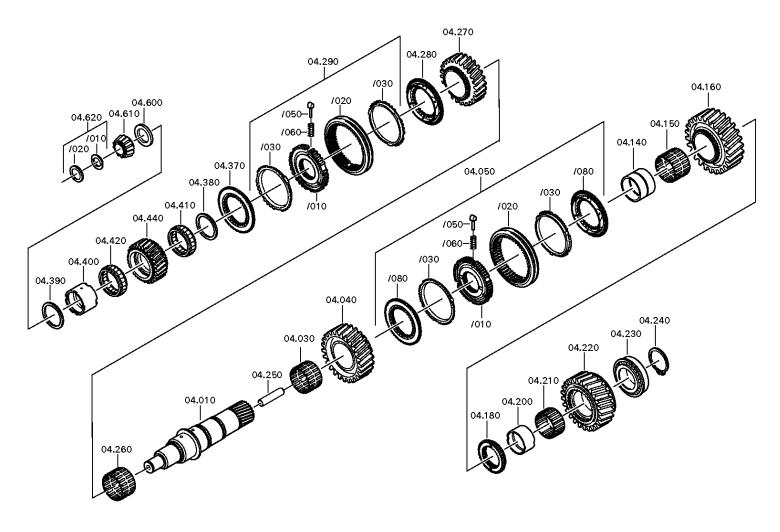
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	1316.303.033		COUNTERSHAFT	1			ENTHALT.IN 1316 303 032(0)		
30	0750.117.009		TAPERED ROLLER BEARING	1			49,213x103,188x44,475		
40	0750.117.009		TAPERED ROLLER BEARING	1			49,213x103,188x44,475		
50			RETAINING RING	1		Z00027144136	H= 2,40- 3,00(ABSTUFUNG:0,05MM)		
	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	I	RETAINING RING	1		Z00027144110	h=2,60		
	0730.303.165		RETAINING RING	1		Z00027144110	h=2,55		
	0730.302.599	I	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	1316.303.071		HELICAL GEAR	1			KON 1		
80	1316.303.065		HELICAL GEAR	1			Z35 IN 1312 303 013(1)		

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Material number: 1356.007.181

Plant: 161.04.12-1





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Material number: 1356.007.181

Plant: 161.04.12-1



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	1316.304.132		MAIN SHAFT	1					
30	0750.115.597		NEEDLE CAGE	1			ZFF*LOKAL HNG 92,0X100,0X62,8		
10	1316.304.002		HELICAL GEAR	1			2G/Z38 IN 1316 304 005(1)		
50	1356.204.009		SYNCHRONIZER	1			KPL.1+2G*BK160 MOLYBDAEN* ECOSPLIT 3+4*LOKAL		
10	1297.304.527		SYNCHRO.BODY	1			ZF BK160		
20	1297.304.517		SLIDING SLEEVE	1			ZF BK160		
30			SYNCHRO.RING	2			ZFF*LOKAL HNG		
50	1297.304.436		PRESSURE PART	3					
60	0732.040.409		COMPRESSION SPRING	3					
30			CLUTCH BODY	2			BK160*ZFF*LOKAL HNG		
-	1316.304.156		CLUTCH BODY	1					
-	1297.304.529		CLUTCH BODY	1			ZF160 BK		
40	1312.304.084		BUSH	1			ENTHALT.IN 1312 304 007(2)		
50	0750.115.598		NEEDLE CAGE	1			ZFF*LOKAL HNG 96,0X104,0X71,6		
.60	1316.304.010		HELICAL GEAR	1			1G/Z47 IN 1312 304 033(0)		
.80	1312.304.124		CLUTCH BODY	1			ENTHALT.IN 1312 304 055(0)		
00	1316.304.133		BUSH	1			A=50,00 IN 1312 304 010(2)		
10	0750.115.599		NEEDLE CAGE	1			ZFF*LOKAL HNG 90,0X98,0X49,8		
20			HELICAL GEAR	1					
-	1316.304.012		HELICAL GEAR	1			RG*Z44 IN 1312 304 125(0)		
-	1316.304.235		HELICAL GEAR	1					
30	0750.117.678		TAPERED ROLLER BEARIN	G 1			80,000X139,992X36,512		
40			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			
-	0730.303.183		RETAINING RING	1		Z00027144110	h=3,35		
-	0730.303.182		RETAINING RING	1		Z00027144110			
-	0730.303.181		RETAINING RING	1		Z00027144110			
-	0730.303.180		RETAINING RING	1		Z00027144110			
-	0730.303.179		RETAINING RING	1		Z00027144110			
-	0730.303.178		RETAINING RING	1		Z00027144110			
	0730.303.187		RETAINING RING	1		Z00027144110	I .		

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Material number: 1356.007.181

Plant: 161.04.12-1



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
	0730.303.188		RETAINING RING	1		Z00027144110	h=3,60		
	0730.303.189		RETAINING RING	1		Z00027144110	h=3,65		
250	1312.304.150		TUBE	1					
260	0750.115.597		NEEDLE CAGE	1			ZFF*LOKAL HNG 92,0X100,0X62,8		
270	1316.304.008		HELICAL GEAR	1			3G/Z34 IN 1312 304 135(1)		
280	1297.304.523		CLUTCH BODY	1			ZF BK144		
290	1356.204.010		SYNCHRONIZER	1			KPL.3+4G*BK144 MOLYBD*ANSCHL. INTEGR VERST*ECO 3+4*LOKAL		
/10	1297.304.525		SYNCHRO.BODY	1			ZF BK144		
/20	1297.304.516		SLIDING SLEEVE	1			ZF BK150		
/50	1297.304.436		PRESSURE PART	3					
/60	0732.040.409		COMPRESSION SPRING	3					
370	1297.304.523		CLUTCH BODY	1			ZF BK144		
380	0750.101.193		THRUST WASHER	1			ZFF*LOKAL HNG 67,0X81,7X5,0		
390	0750.101.193		THRUST WASHER	1			ZFF*LOKAL HNG 67,0X81,7X5,0		
400	0750.119.161		BEARING INNER RING	1			ZFF*LOKAL HNG 67,00X77,00X66,16		
410	0750.115.531		ROLLER CAGE	1			77,0X101,0X29,0		
420	0750.115.531		ROLLER CAGE	1			77,0X101,0X29,0		
440	1316.304.103		HELICAL GEAR	1			Z32		
600			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)		
610	0750.120.342		TAPERED ROLLER BEARING	1			ZFF*LOKAL HNG 42,070X40,386		
620	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)		

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Material number: 1356.007.181

Plant: 161.04.12-1



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	IRAN KIT	Alternative material
	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)		

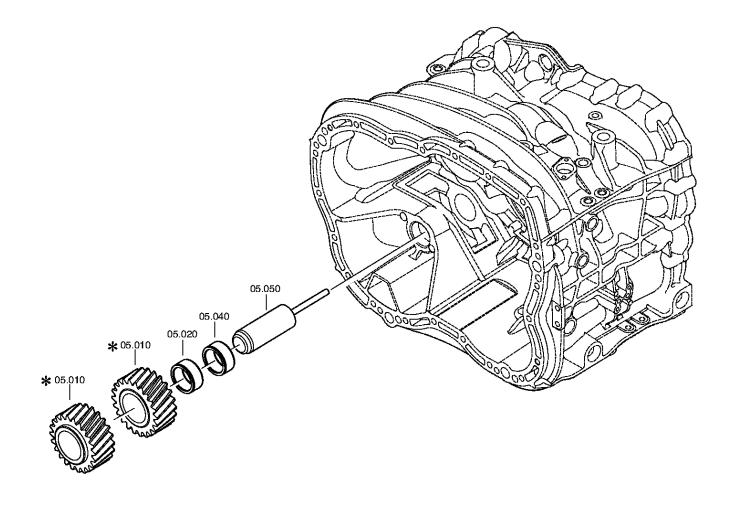
Page 1 from 1

Material number: 1356.007.181

Plant: 161.05.01-1

Material-assembly-group-no: 1325.105.002





Page 1 from 1

Material number: 1356.007.181

Plant: 161.05.01-1

Material-assembly-group-no: 1325.105.002



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	IRAN KIT	Alternative material
10			REVERSE IDLER GEAR	1					
	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)		
20	0750.115.596		NEEDLE CAGE	1			ZFF*LOKAL HNG 45,0X57,0X24,8		
40	0750.115.596		NEEDLE CAGE	1			ZFF*LOKAL HNG 45,0X57,0X24,8		
50	1316.201.030		REVERSE IDLER SHAFT	1			KPL.16S221*SG*L=102		
/120	0631.329.295		SLOTTED PIN	1			10X118		

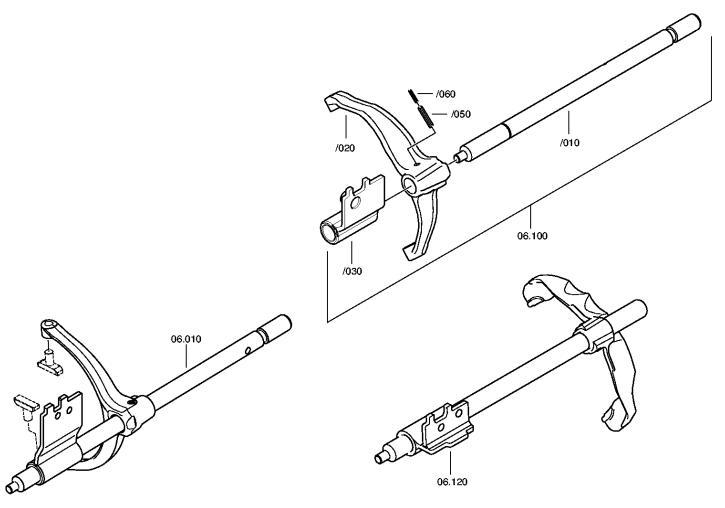
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Material number: 1356.007.181

Plant: 161.06.04-1

TRANSMISSION SHIFT SYSTEM





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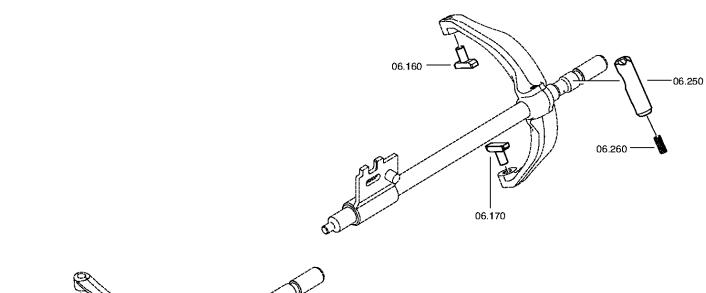
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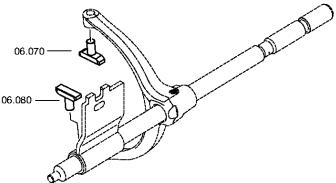
Material number: 1356.007.181

Plant: 161.06.02-1

TRANSMISSION SHIFT SYSTEM







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Material number: 1356.007.181

Plant: 161.06.04-1

Material-assembly-group-no: 1356.106.003



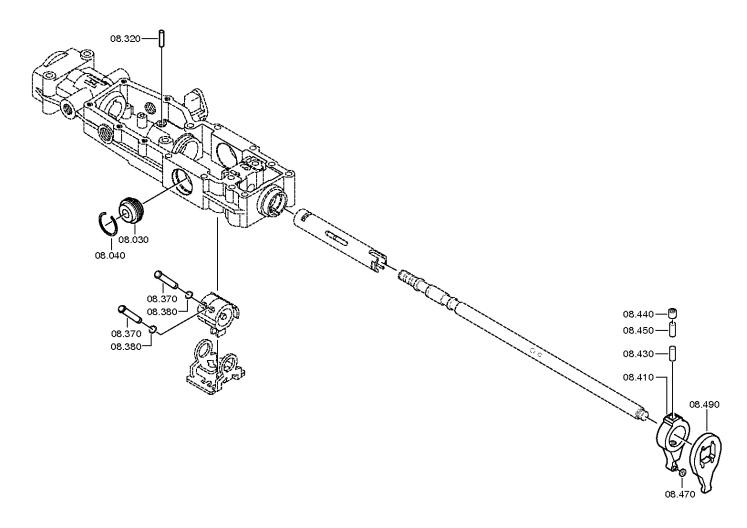
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	1356.206.012		GEAR SHIFT RAIL	1			KPL*WBI-3/4G*LANG*MIT GANGERKENNUNG*LOKAL		
70	1316.306.015		SLIDING PAD	1					
80	1316.306.015		SLIDING PAD	1					
100	1356.206.013		GEAR SHIFT RAIL	1			KPL*WBI-1/2G*LANG*LOKAL		
120	1356.206.014		GEAR SHIFT RAIL	1			KPL*WBI-RG*LANG*LOKAL		
160	1316.306.015		SLIDING PAD	1					
170	1316.306.015		SLIDING PAD	1					
250	1313.306.013		LOCKING PIN	1					
260	0732.040.736		COMPRESSION SPRING	1					

Page 1 from 3

Material number: 1356.007.181

Plant: 068.07.25-1 GEAR SHIFT HOUSING



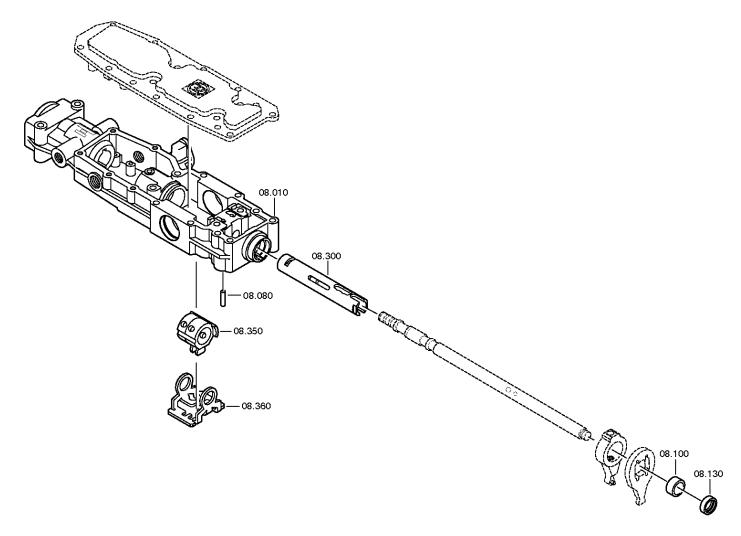


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Material number: 1356.007.181

Plant: 068.07.38-1 GEAR SHIFT HOUSING



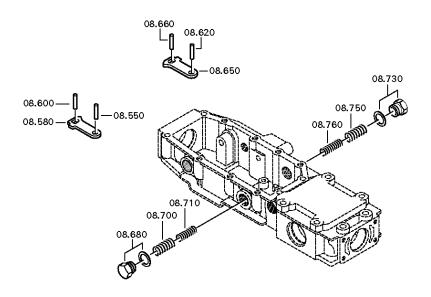


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Material number: 1356.007.181

Plant: 068.07.75-1 GEAR SHIFT HOUSING





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Material number: 1356.007.181

Plant: 068.07.25-1

Material-assembly-group-no: 1316.108.884



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	1315.307.383		GEAR SHIFT HOUSING	1		Z00008223510			
30	0501.209.212		DETENT	1			KPL.		
10	0630.532.130		V-RING	1			1 = 1		
30	0631.306.123		CYLINDRICAL PIN	1		Z00008223510	8X24		
100	0730.260.703		BUSH	1		Z00008223510			
L30	0734.309.765		SHAFT SEAL	1			28,0X42,0X11,0		
300	1315.307.294		QUILL SHAFT	1			ENTHALT.IN 1315.307.293(1)		
320	0731.201.702		PIN	1			,		
350	1315.307.735		DRIVER	1		Z00011746811			
360	1315.307.218		LOCKING PIECE	1		Z00008223510			
370	1316.208.003		PIN	2			KPL.		
380	0630.501.006		RETAINING RING	2			10X1		
110	1316.208.002		VALVE LEVER	1			KPL.		
130	0731.201.732		PIN	1					
140	0635.303.019		NEEDLE BUSH	1			10X14X15		
150	0731.201.732		PIN	1					
170	1315.307.226		ROLLER	1					
190	1315.307.292		LEVER	1					
550	0631.306.832		CYLINDRICAL PIN	1			6X20		
580	1315.307.203		DETENT LEVER	1					
500	0631.306.832		CYLINDRICAL PIN	1			6X20		
520	0631.306.832		CYLINDRICAL PIN	1			6X20		
550	1315.307.203		DETENT LEVER	1					
60	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		
'00	0732.040.985		COMPRESSION SPRING	1					
10	0732.040.984		COMPRESSION SPRING	1					
'30			SCREW	1		Z00010146310	M22X1,5		
	1315.307.736		SCREW	1		Z00010146312	M22X1,5		
	0730.009.515		SEALING RING	1		Z00010146312	A22X27		
750	0732.040.985		COMPRESSION SPRING	1					
'60	0732.040.984		COMPRESSION SPRING	1					

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Material number: 1356.007.181

Plant: 068.07.25-1

Material-assembly-group-no: 1316.108.884



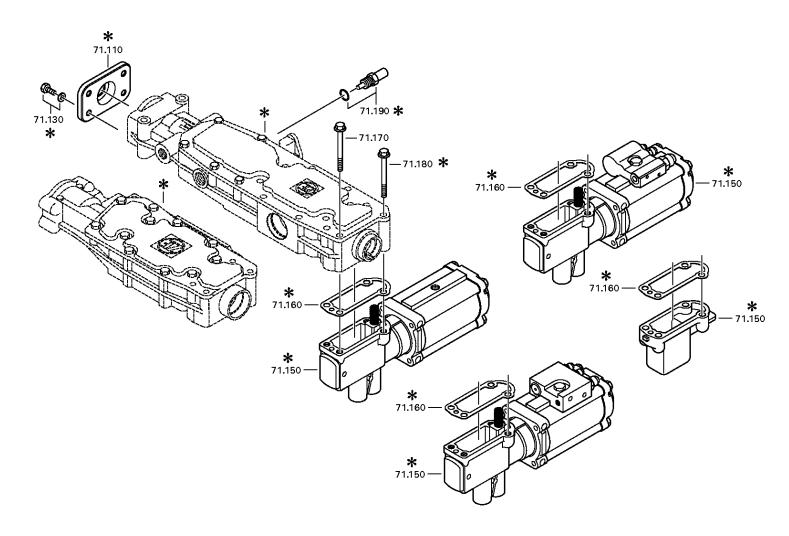
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	IRAN KIT	Alternative material
870	1315.307.013		GASKET	1					
890	0736.300.137		HEXAGON SCREW	8			M8X80 M8X80		
930	1341.307.104		PROTECTION CAP	1					
940	6005.300.639		SHIFT LEVER	1					
950			BOLT+NUT	1			M10X65		
	0636.100.713		HEXAGON SCREW	1		Z00007890810	M10X65		
	0637.100.419		HEXAGON NUT	1		Z00007892710	M10		

Page 1 from 2

Material number: 1356.007.181

Plant: 062.08.30-1 END COVER



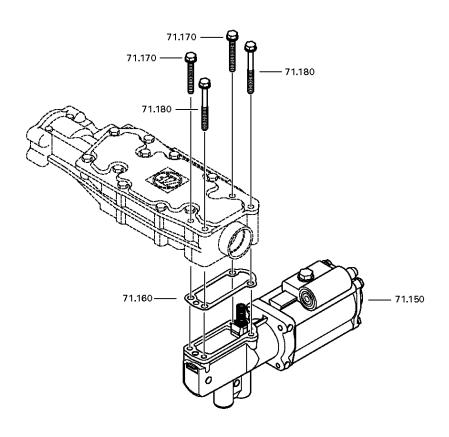


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Material number: 1356.007.181

Plant: 068.08.45-1 END COVER





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Material number: 1356.007.181

Plant: 062.08.30-1

Material-assembly-group-no: 1316.171.403



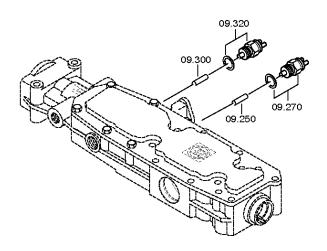
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
110	1341.307.113		COVER	1		Z00009271410			
130			HEXAGON SCREW	4		Z00007891111	M8X20		
	0636.100.796		HEXAGON SCREW	1		Z00007891120	M8X20		
	0630.100.295		WASHER	1		Z00007158414			
150	0501.216.414		PNEUMATIC SERVO UNIT	1			KPL. PSE2 DBV6		
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			

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Material number: 1356.007.181

Plant: 068.09.11-1 CONNECTING PARTS





Page 1 from 1

Material number: 1356.007.181

Plant: 068.09.11-1

Material-assembly-group-no: 1316.109.058



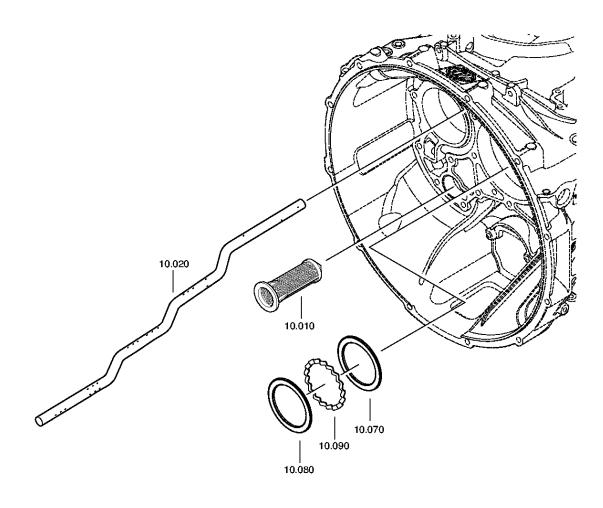
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	6038.202.043	3	CUT-OFF VALVE	1		Z00037902710	KPL.H-H*ZULUFTDROSSEL 1,55		
12	0637.510.666	5	PLUG	1		Z00037902710	M12X1		
30	0501.209.188	3	BALL CASTER	1		Z00037902710	KPL.		
50	0501.209.188	3	BALL CASTER	1		Z00037902710	KPL.		
70			O-RING	1		Z00034779511	ZFF*LOKAL HNG 42X3		
	0634.313.505	5	O-RING	1		Z00026363710	42X3		
	0501.331.851	L	O-RING	1		Z00026363710	42X3		
90			HEXAGON SCREW	4		Z00037902710	M8X65		
	0636.100.519	)	HEXAGON SCREW	1		Z00007054110	M8X65		
	0630.100.295	5	WASHER	1		Z00007158414			
150			SCREW	1		Z00037902710	M22X1,5		
	1315.307.736	5	SCREW	1		Z00010146312	M22X1,5		
	0730.009.515	5	SEALING RING	1		Z00010146312	A22X27		
160	1315.307.384	1	BOLT	1		Z00037902710	ENTHALT.IN 1250 307 589(2)		
170	0732.042.207	7	COMPRESSION SPRING	1		Z00037902710			
250	0731.201.446	5	PIN	1			ENTHALT.IN 0731 201 445(2)		
270			SWITCH	1		Z00004287211	OEFF*45N.M*DICHTRING*BAJONETT* SCHUTZKAPPE		
	0501.219.856	5	SWITCH	1			OEFFNER DIN BAJONETT		
	0634.801.062	2	SEALING RING	1			18X24		
300	0731.208.256	5	PIN	1			A=30,0		
320			SWITCH	1		Z00025033610	SCHL*45N.M*DICHTRING*BAJONETT* SCHUTZKAPPE		
	0501.331.660		SWITCH	1		Z00025033617			
	0634.801.062	2	SEALING RING	1		Z00025033617	18X24		
	0700.300.427	7	PROTECTION CAP	1		Z00025033617			

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Material number: 1356.007.181

Plant: 161.10.04-1 OIL SUPPLY



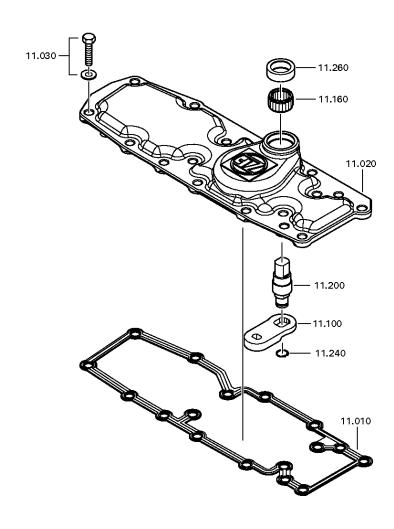


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Material number: 1356.007.181

Plant: 068.10.02-1 OIL SUPPLY



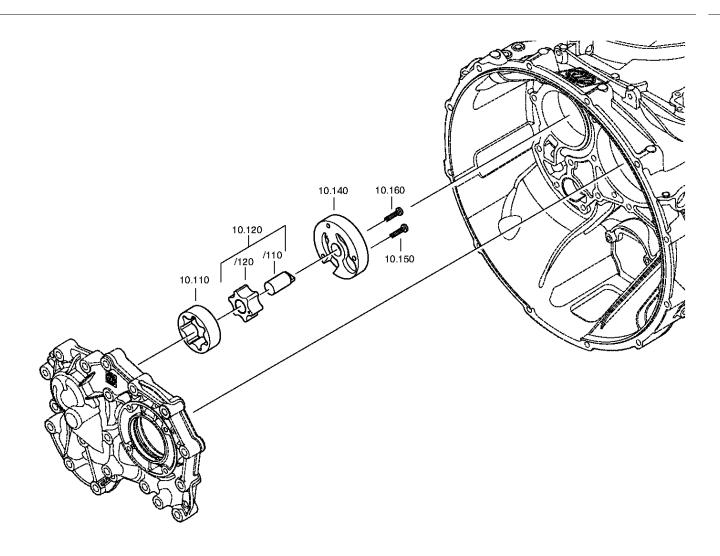


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Material number: 1356.007.181

Plant: 161.10.01-1 OIL SUPPLY





Page 1 from 1

Material number: 1356.007.181

Plant: 161.10.04-1

Material-assembly-group-no: 1356.110.002



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	0501.318.802		SCREEN INSERT	1					
10	0501.324.072		GASKET	1		Z00033959410			
20			COVER	1		Z00033959410	ZFF/ZFDH		
20	1356.301.001		OIL TUBE	1			ECO 4 16G LANG		
30			HEXAGON SCREW	5		Z00033959410	M8X25		
	0636.016.401		HEXAGON SCREW	1			M8X25		
	0630.100.295		WASHER	1		Z00007158414			
70	0730.300.745		WASHER	1			A=3,30 A=3,30		
80	0730.150.766		WASHER	1					
90	1315.302.040		SPACER RING	1					
100			SELECTOR LEVER	1		Z00033959410	ZFF*LOKAL HNG		
110	1315.303.027		ROTOR	1					
120	1314.202.039		PUMP SHAFT	1			KPL.		
140	1325.303.017		PUMP COVER	1					
150	0736.101.076		TORX SCREW	1			M6X30		
160	0736.101.076		TORX SCREW	1			M6X30		
160			NEEDLE SLEEVE	1		Z00033959410	ZFF*LOKAL HNG 22X28X10		
200			SELECTOR SHAFT	1		Z00033959410	ZFF*LOKAL HNG		
240	0630.531.240		V-RING	1		Z00033959410			
260			SHAFT SEAL	1		Z00033959410	20X30X7		
	0734.309.392		SHAFT SEAL	1			20,0X30,0X7,0		

Page 1 from 1

Material number: 1356.007.181

Material-assembly-group-no: 1316.111.818



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
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	1297.307.326		SELECTOR LEVER	1			R65		
340			BOLT+NUT	1			M10X50		
	0636.011.756		HEXAGON SCREW	1			M10X50		
	0637.100.419		HEXAGON NUT	1		Z00007892710	M10		

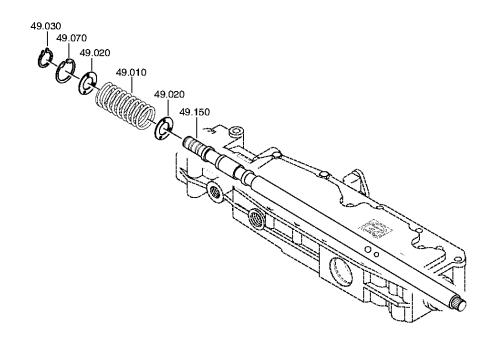
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Material number: 1356.007.181

Plant: 068.12.08-1

Material-assembly-group-no: 1316.149.478





Page 1 from 1

Material number: 1356.007.181

Plant: 068.12.08-1

Material-assembly-group-no: 1316.149.478



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	0732.040.630		COMPRESSION SPRING	1					
20	0730.301.376		WASHER	2					
30	0630.532.138		V-RING	1					
70	0630.502.022		RETAINING RING	1			40X1,75		
150	1315.307.517		GEARSHIFT SHAFT	1					

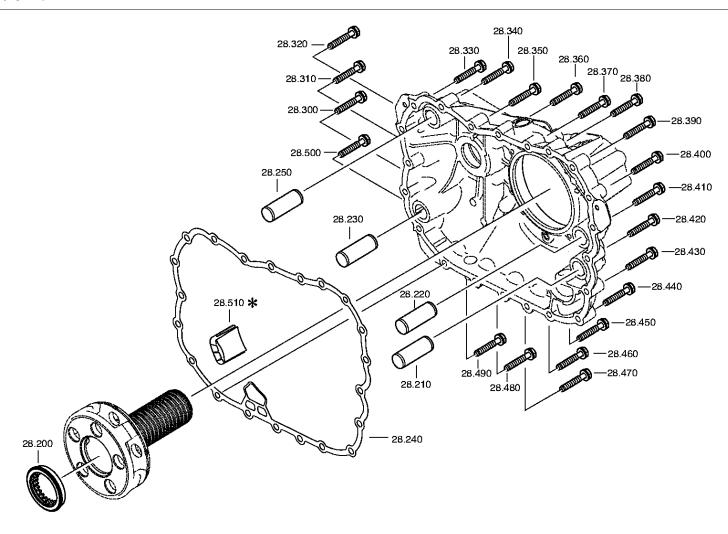
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Material number: 1356.007.181

Plant: 161.28.01-1

Material-assembly-group-no: 1325.128.807





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Material number: 1356.007.181

Plant: 161.28.01-1

Material-assembly-group-no: 1325.128.807



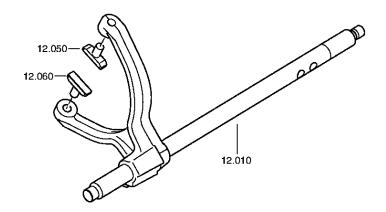
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
200	1315.332.073		PRESSURE DISK	1		Z0003322351	0		
210	0731.300.002		CYLINDRICAL PIN	1					
220	0731.300.002		CYLINDRICAL PIN	1					
230	0731.300.002		CYLINDRICAL PIN	1					
240	0501.323.705		GASKET	1					
250	0731.300.002		CYLINDRICAL PIN	1					
300	0636.016.405		HEXAGON SCREW	1		Z0000706011	1 M10X60		
310	0636.016.405		HEXAGON SCREW	1		Z0000706011	1 M10X60		
320	0636.016.405		HEXAGON SCREW	1		Z0000706011	1 M10X60		
330	0636.016.405		HEXAGON SCREW	1		Z0000706011	1 M10X60		
340	0636.016.405		HEXAGON SCREW	1		Z0000706011	1 M10X60		
350	0636.016.405		HEXAGON SCREW	1		Z0000706011	1 M10X60		
360	0636.016.405		HEXAGON SCREW	1		Z0000706011	1 M10X60		
370	0636.016.405		HEXAGON SCREW	1		Z0000706011	1 M10X60		
380	0636.016.405		HEXAGON SCREW	1		Z0000706011	1 M10X60		
390	0636.016.405		HEXAGON SCREW	1		Z0000706011	1 M10X60		
400	0636.016.405		HEXAGON SCREW	1		Z0000706011	1 M10X60		
410	0636.016.405		HEXAGON SCREW	1		Z0000706011	1 M10X60		
420	0636.016.405		HEXAGON SCREW	1		Z0000706011	1 M10X60		
430	0636.016.405		HEXAGON SCREW	1		Z0000706011	1 M10X60		
440	0636.016.405		HEXAGON SCREW	1		Z0000706011	1 M10X60		
450	0636.016.405		HEXAGON SCREW	1		Z0000706011	1 M10X60		
460	0636.016.405		HEXAGON SCREW	1		Z0000706011	1 M10X60		
470	0636.016.405		HEXAGON SCREW	1		Z0000706011	1 M10X60		
480	0636.016.405		HEXAGON SCREW	1		Z0000706011	1 M10X60		
490	0636.016.405		HEXAGON SCREW	1		Z0000706011	1 M10X60		
500	0636.016.405		HEXAGON SCREW	1		Z0000706011	1 M10X60		
510	6093.301.034		COVER	1					

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Material number: 1356.007.181

Plant: 161.40.01-1 GV-SHIFT SYSTEM



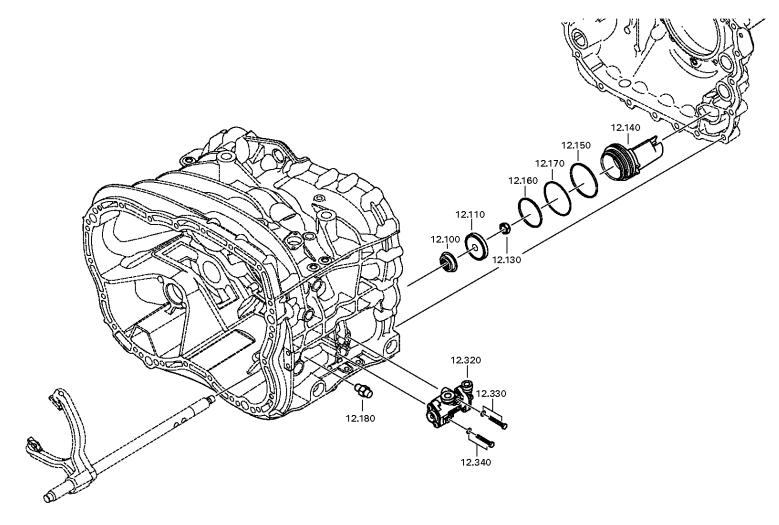


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Material number: 1356.007.181

Plant: 161.40.80-1 GV-SHIFT SYSTEM





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Material number: 1356.007.181

Plant: 161.40.01-1

Material-assembly-group-no: 1356.112.001



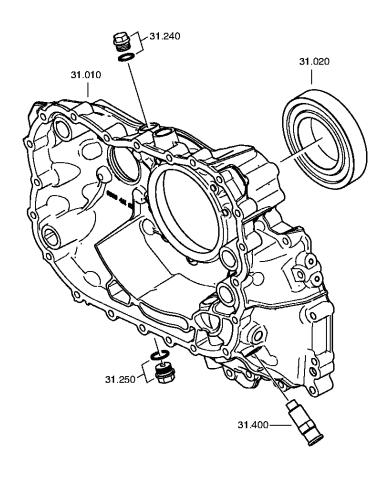
Pos.	Material number	Customer material	Name	Quantity ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	1356.212.002	2	GEAR SHIFT RAIL	1		KPL.GV*E32 LANG*16 GANG		
50	1316.306.015	5	SLIDING PAD	1				
60	1316.306.01	5	SLIDING PAD	1				
100	0750.112.132	1	FLANGE PACKING	1		25X40X15		
110	0501.324.670	0	PISTON	1				
130	0737.300.03	7	LOCKING NUT	1		MS16X1,5		
140	1325.312.012	2	CYLINDER	1				
150			O-RING	1		ZFF*LOKAL HNG		
	0634.313.018	3	O-RING	1		82X3		
	0501.331.849	9	O-RING	1		82X3		
160			O-RING	1		ZFF*LOKAL HNG		
	0634.313.320	0	O-RING	1		67X3		
	0501.331.850	0	O-RING	1		67X3		
170	1315.312.034	4	SPRING	1				
180			DETENT PLUNGER	1		235N*50N.M		
	1324.207.033	3	DETENT PLUNGER	1		KPL. *235 N		
	0730.008.604	4	SEALING RING	1	C01009860C	10		
300	0637.510.665	5	PLUG	1		M10X1		
320	0501.219.848	3	5/2 WAY VALVE	1	Z0003506063	SPLITGRUPPENVENTIL VERSION B 96,1mmx49,8mm		
330	0736.300.659	9	TORX SCREW	1	Z0003506063	12 M6X45		
340	0736.300.659	9	TORX SCREW	1	Z0003506063	12 M6X45		

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Material number: 1356.007.181

Plant: 161.43.02-1 RC HOUSING



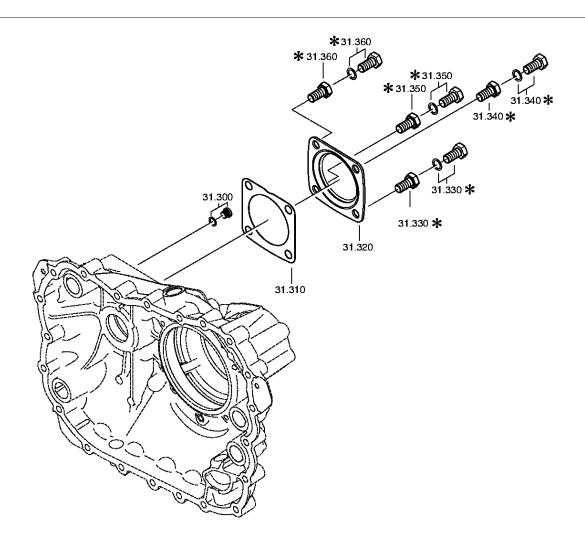


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Material number: 1356.007.181

Plant: 161.43.40-1 RC HOUSING





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Material number: 1356.007.181

Plant: 161.43.02-1

Material-assembly-group-no: 1325.131.007



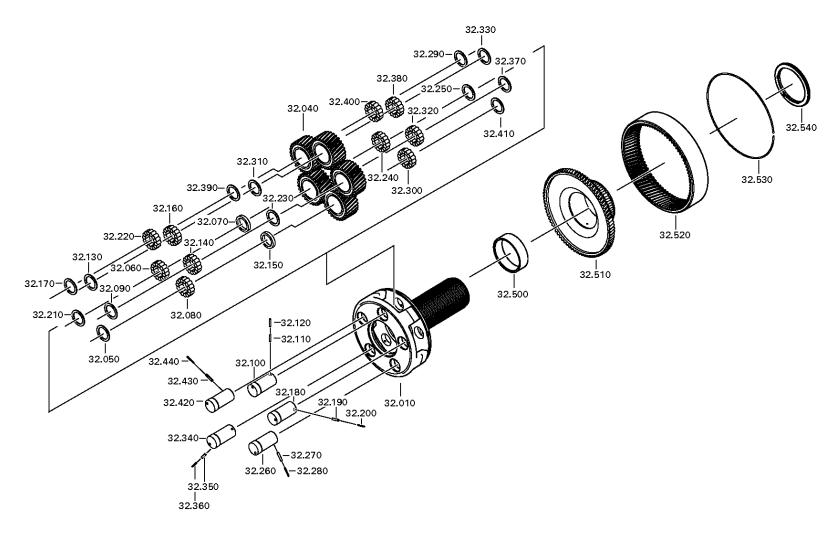
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	6093.201.008		HOUSING	1		Z00005682510	KPL.*ECOSPLIT*GD		
12	0637.510.020		PLUG	1					
14	0637.510.020		PLUG	1					
16	0637.510.020		PLUG	1					
18	0637.510.020		PLUG	1					
20	0750.116.394		BALL BEARING	1			90,0X160,0X30,0		
240			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		
250			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		
300			SCREW PLUG	1		C01004359F10	15N.M*DICHTRING M10X1		
	0636.100.793		SCREW PLUG	1		Z00010111613	M10X1		
	0730.008.055		SEALING RING	1			10X14		
310	1238.308.201		GASKET	1			ENTHALT.IN 1238 308 202(2)		
320	1328.301.170		COVER	1		Z00008068010			
330			HEXAGON SCREW	1		Z00007061014	M12X25		
	0636.016.406		HEXAGON SCREW	1		Z00007061018	M12X25		
	0630.100.284		WASHER	1		Z00007158217			
340			HEXAGON SCREW	1		Z00007061014	M12X25		
	0636.016.406		HEXAGON SCREW	1		Z00007061018	M12X25		
	0630.100.284		WASHER	1		Z00007158217			
350			HEXAGON SCREW	1		Z00007061014	M12X25		
	0636.016.406		HEXAGON SCREW	1		Z00007061018	M12X25		
	0630.100.284		WASHER	1		Z00007158217			
360			HEXAGON SCREW	1		Z00007061014	M12X25		
	0636.016.406		HEXAGON SCREW	1		Z00007061018	M12X25		
	0630.100.284		WASHER	1		Z00007158217			
100			PULSE SENSOR	1		Z00005204011	L= 35,0*35N.M*O.DICHTRING*BAJO* KITAS*SCHUTZKAPPE*FLAE DICHT		
	0501.221.588		PULSE SENSOR	1					

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Material number: 1356.007.181

Plant: 161.44.04-1 PLANETARY DRIVE



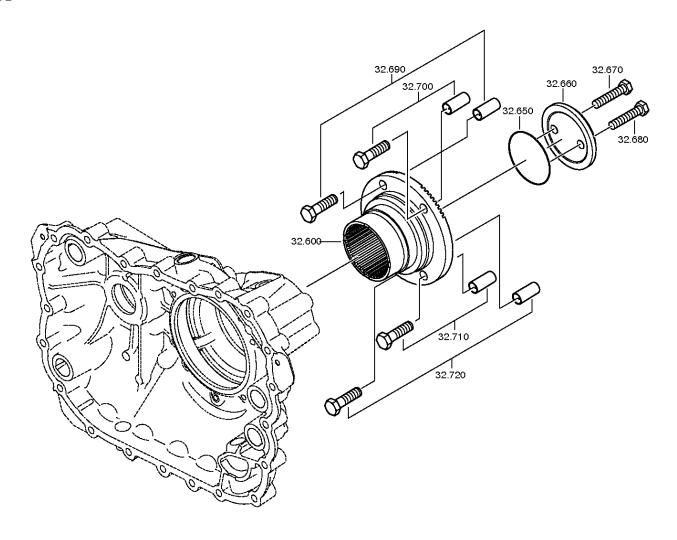


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Material number: 1356.007.181

Plant: 161.44.41-1 PLANETARY DRIVE





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Material number: 1356.007.181

Plant: 161.44.04-1

Material-assembly-group-no: 1325.132.005



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	1316.232.039		PLANET CARRIER	1					
40	1316.232.011		PLANET GEAR SET	1			KPL.		
50	0730.109.323		INTERMEDIATE WASHER	1			A=2,30 IN 0730 105 951(2)		
60	1325.232.003		ROLLER	1			KPL.SATZ*PLANETENRAD*LOKAL		
70	0730.109.309		INTERMEDIATE WASHER	1			A=7,90 IN 0730 105 951(2)		
80	1325.232.003		ROLLER	1			KPL.SATZ*PLANETENRAD*LOKAL		
90	0730.109.323		INTERMEDIATE WASHER	1			A=2,30 IN 0730 105 951(2)		
100	1316.332.140		PLANET SHAFT	1					
110	0631.329.147		SLOTTED PIN	1			6X26		
120	0631.329.261		SLOTTED PIN	1			3,5X26		
130	0730.109.323		INTERMEDIATE WASHER	1			A=2,30 IN 0730 105 951(2)		
140	1325.232.003		ROLLER	1			KPL.SATZ*PLANETENRAD*LOKAL		
150	0730.109.309		INTERMEDIATE WASHER	1			A=7,90 IN 0730 105 951(2)		
160	1325.232.003		ROLLER	1			KPL.SATZ*PLANETENRAD*LOKAL		
170	0730.109.323		INTERMEDIATE WASHER	1			A=2,30 IN 0730 105 951(2)		
180	1316.332.140		PLANET SHAFT	1					
190	0631.329.147		SLOTTED PIN	1			6X26		
200	0631.329.261		SLOTTED PIN	1			3,5X26		
210	0730.109.323		INTERMEDIATE WASHER	1			A=2,30 IN 0730 105 951(2)		
220	1325.232.003		ROLLER	1			KPL.SATZ*PLANETENRAD*LOKAL		
230	0730.109.309		INTERMEDIATE WASHER	1			A=7,90 IN 0730 105 951(2)		
240	1325.232.003		ROLLER	1			KPL.SATZ*PLANETENRAD*LOKAL		
250	0730.109.323		INTERMEDIATE WASHER	1			A=2,30 IN 0730 105 951(2)		
260	1316.332.140		PLANET SHAFT	1					
270	0631.329.147		SLOTTED PIN	1			6X26		
280	0631.329.261		SLOTTED PIN	1			3,5X26		
290	0730.109.323		INTERMEDIATE WASHER	1			A=2,30 IN 0730 105 951(2)		
300	1325.232.003		ROLLER	1			KPL.SATZ*PLANETENRAD*LOKAL		
310	0730.109.309		INTERMEDIATE WASHER	1			A=7,90 IN 0730 105 951(2)		
320	1325.232.003		ROLLER	1			KPL.SATZ*PLANETENRAD*LOKAL		
330	0730.109.323		INTERMEDIATE WASHER	1			A=2,30 IN 0730 105 951(2)		
340	1316.332.140		PLANET SHAFT	1					
350	0631.329.147		SLOTTED PIN	1			6X26		
360	0631.329.261		SLOTTED PIN	1			3,5X26		

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Material number: 1356.007.181

Plant: 161.44.04-1

Material-assembly-group-no: 1325.132.005



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
370	0730.109.323		INTERMEDIATE WASHER	1			A=2,30 IN 0730 105 951(2)		
380	1325.232.003		ROLLER	1			KPL.SATZ*PLANETENRAD*LOKAL		
390	0730.109.309		INTERMEDIATE WASHER	1			A=7,90 IN 0730 105 951(2)		
400	1325.232.003		ROLLER	1			KPL.SATZ*PLANETENRAD*LOKAL		
410	0730.109.323		INTERMEDIATE WASHER	1			A=2,30 IN 0730 105 951(2)		
420	1316.332.140		PLANET SHAFT	1					
430	0631.329.147		SLOTTED PIN	1			6X26		
440	0631.329.261		SLOTTED PIN	1			3,5X26		
500	1325.332.011		BUSH	1					
510	1316.332.130		RING GEAR CARRIER	1					
520	1315.332.041		RING GEAR	1			IN 1316 332 055(1)		
530	0730.513.583		LOCKING WIRE	1			A=3,20 IN 0730 505 052(2)		
540	0735.298.169		AXIAL NEEDLE BEARING	1			103,3X128,4X10,0		
600	1325.332.036		OUTPUT FLANGE	1					
650			O-RING	1			ZFF*LOKAL HNG		
	0634.313.805		O-RING	1			82X4		
	0501.331.852		O-RING	1			82X4		
660	1312.332.028		WASHER	1					
670	0636.011.777		HEXAGON SCREW	1			M12X60		
680	0636.011.777		HEXAGON SCREW	1			M12X60		
690			HEXAGON SCREW	1			SCHUTZKAPPE M14X1,5X50		
	0636.100.202		HEXAGON SCREW	1			M14X1,5X50		
	1315.332.067		PROTECTION CAP	1					
700			HEXAGON SCREW	1			SCHUTZKAPPE M14X1,5X50		
	0636.100.202		HEXAGON SCREW	1			M14X1,5X50		
	1315.332.067		PROTECTION CAP	1					
710			HEXAGON SCREW	1			SCHUTZKAPPE M14X1,5X50		
	0636.100.202		HEXAGON SCREW	1			M14X1,5X50		
	1315.332.067		PROTECTION CAP	1					
720			HEXAGON SCREW	1			SCHUTZKAPPE M14X1,5X50		
	0636.100.202		HEXAGON SCREW	1			M14X1,5X50		
	1315.332.067		PROTECTION CAP	1					

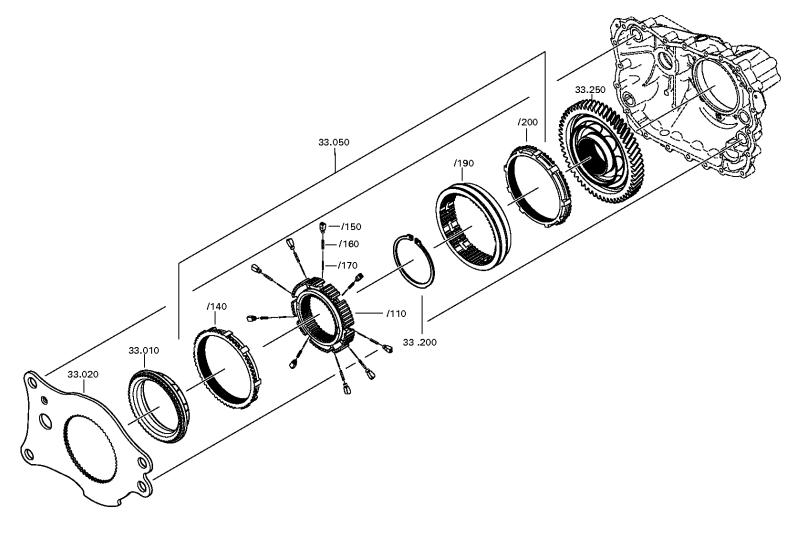
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Material number: 1356.007.181

Plant: 161.45.03-1

Material-assembly-group-no: 1325.133.007





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Material number: 1356.007.181

Plant: 161.45.03-1

Material-assembly-group-no: 1325.133.007



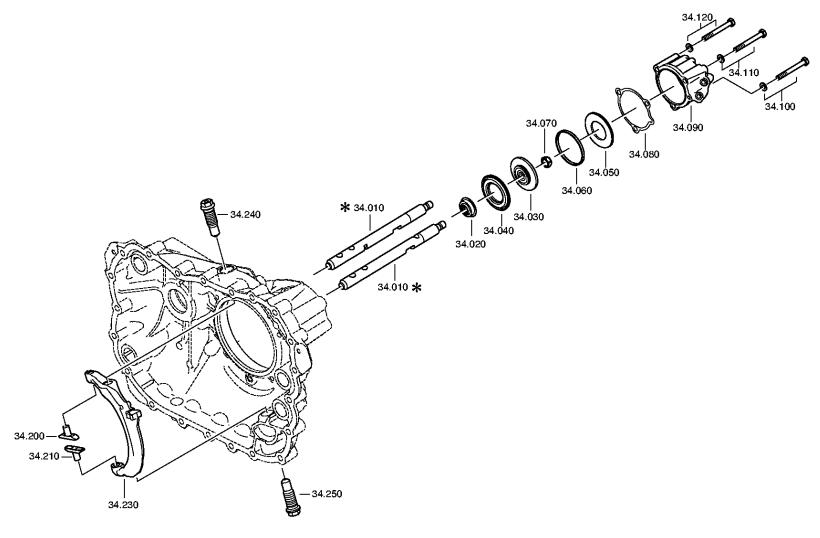
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	1296.333.050		CLUTCH BODY	1			ENTHALT.IN 1296.333.053(1)		
20	1325.333.016		PLATE	1					
50	1325.233.016		SYNCHRONIZER	1			KPL.GP*DRUCKGUSS*LOKAL		
/110	1313.333.001		SYNCHRO.BODY	1			ENTHALT.IN 1296 333 014(1)		
/140			SYNCHRO.RING	1			ZFF*LOKAL HNG		
	1296.333.044		SYNCHRO.RING	1					
	1296.333.045		SYNCHRO.RING	1					
	1297.333.137		SYNCHRO.RING	1			ZF-BK165/74		
/150	1240.304.278		PRESSURE PART	9					
/160	0732.040.385		COMPRESSION SPRING	9					
/170	0732.040.386		COMPRESSION SPRING	9					
/190	1325.333.018		SLIDING SLEEVE	1					
/200			SYNCHRO.RING	1			ZFF*LOKAL HNG		
	1296.333.044		SYNCHRO.RING	1					
	1296.333.045		SYNCHRO.RING	1					
	1297.333.137		SYNCHRO.RING	1			ZF-BK165/74		
200	0630.501.175		RETAINING RING	1			125X3,7		
250	6093.204.010		CLUTCH BODY	1			KPL. E33		

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Material number: 1356.007.181

Plant: 161.46.01-1 GP SHIFT SYSTEM



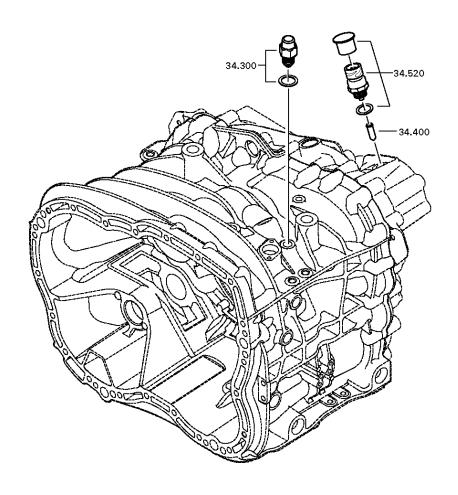


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Material number: 1356.007.181

Plant: 161.46.40-1 GP SHIFT SYSTEM





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Material number: 1356.007.181

Plant: 161.46.01-1

Material-assembly-group-no: 1325.134.007



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	1325.334.017		GEAR SHIFT RAIL	1					
20	0750.112.253		FLANGE PACKING	1			25X40X15		
30			PISTON	1			GP		
	1315.334.034		PISTON	1			ENTHALT.IN 1315 334 040(2)		
	1315.334.063		PISTON	1					
40	0734.307.294		SEALING RING	1			49X91X7,4 FA.KACO		
50	0734.307.294		SEALING RING	1			49X91X7,4 FA.KACO		
60	0750.112.066		GUIDE RING	1					
70	0737.300.037		LOCKING NUT	1			MS16X1,5		
80	0501.322.778		GASKET	1					
90	1325.334.013		CYLINDER	1			GP		
100			HEXAGON SCREW	1		Z00007349210	M10X90		
	0636.015.688		HEXAGON SCREW	1		Z00007349212	M10X90		
	0630.100.294		WASHER	1		Z00007158111			
110			HEXAGON SCREW	1		Z00007349210	M10X90		
	0636.015.688		HEXAGON SCREW	1		Z00007349212	M10X90		
	0630.100.294		WASHER	1		Z00007158111			
120			HEXAGON SCREW	1		Z00007349210	M10X90		
	0636.015.688		HEXAGON SCREW	1		Z00007349212	M10X90		
	0630.100.294		WASHER	1		Z00007158111			
200	1325.334.008		SLIDING PAD	1			GP		
210	1325.334.008		SLIDING PAD	1			GP		
230	1325.334.007		GEARSHIFT FORK	1			GP		
240			SWIVEL SCREW	1			O.SCHEIBE*ZF KAMA		
			SWIVEL SCREW	1		Z00015655010	WTB*ZF KAMA M24X1,5		
	1324.334.008		SWIVEL SCREW	1		Z00015655010			
	1315.334.074		SWIVEL SCREW	1		Z00015655010			
250			SWIVEL SCREW	1			O.SCHEIBE M26X1,5 SK6		
	1315.334.068		SWIVEL SCREW	1			M26X1,5X129,5		
300			DETENT PLUNGER	1			145N*50N.M		
	1324.207.035		DETENT PLUNGER	1			KPL. *145 N		
	0730.008.604		SEALING RING	1					
400	1295.212.006		PIN	1			KPL.		

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Material number: 1356.007.181

Plant: 161.46.01-1

Material-assembly-group-no: 1325.134.007



Pos.	Material number	Customer material	Name	Quantity			кер кіт	Alternative material
520			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			

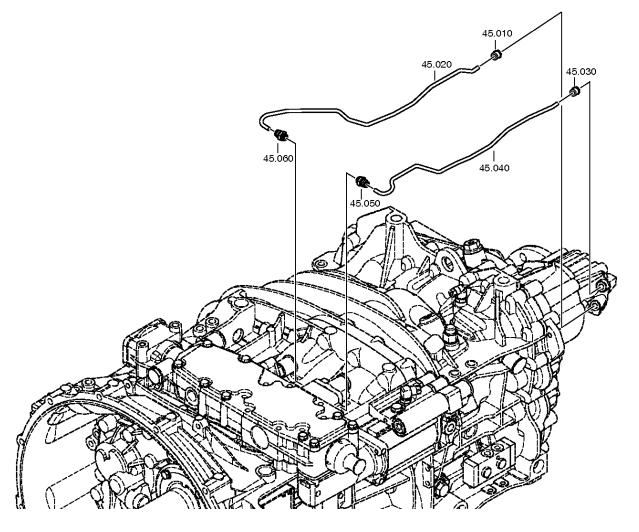
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Material number: 1356.007.181

Plant: 161.57.04-1

Material-assembly-group-no: 1325.145.007





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Material number: 1356.007.181

Plant: 161.57.04-1

Material-assembly-group-no: 1325.145.007



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	IRAN KIT	Alternative material
10	0501.324.029		PLUG-IN COUPLING	1					
20	1325.345.009		TUBE	1			H-H		
30	0501.324.029		PLUG-IN COUPLING	1					
40	1325.345.008		TUBE	1			E13MP		
50	0501.326.099		PLUG-IN COUPLING	1			M14X1,5 ROHR 8MM		
60	0501.326.099		PLUG-IN COUPLING	1			M14X1,5 ROHR 8MM		

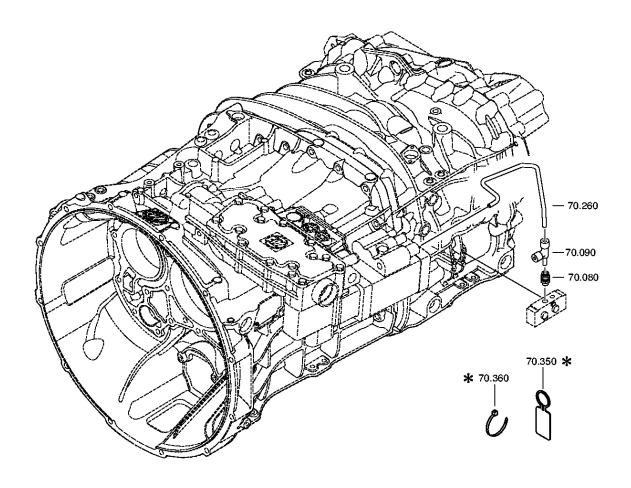
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Material number: 1356.007.181

Plant: 161.70.05-1

Material-assembly-group-no: 1356.170.003





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Material number: 1356.007.181

Plant: 161.70.05-1

Material-assembly-group-no: 1356.170.003



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	IRAN KIT	Alternative material
80	0501.324.477		PLUG-IN COUPLING	1			M12X1,5 ROHR 8MM		
90	0501.324.457		PLUG-IN COUPLING	1					
92	0637.510.118		PROTECTING SLEEVE	1					
260	1325.345.039		TUBE	1		Z00007299711	8X1 ZWISCHEN DBV UND GV		

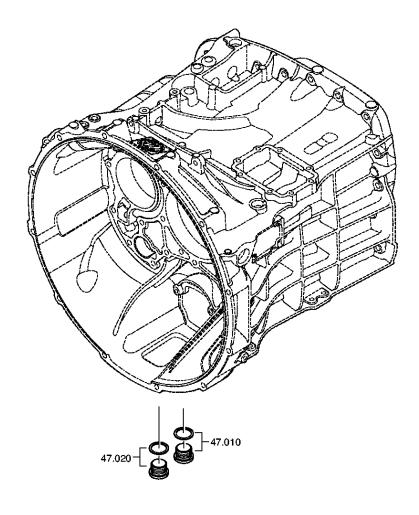
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Material number: 1356.007.181

Plant: 161.90.08

Material-assembly-group-no: 1325.147.009





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Material number: 1356.007.181

Plant: 161.90.08

Material-assembly-group-no: 1325.147.009



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	IRAN KIT	Alternative material
10			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		
20			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		

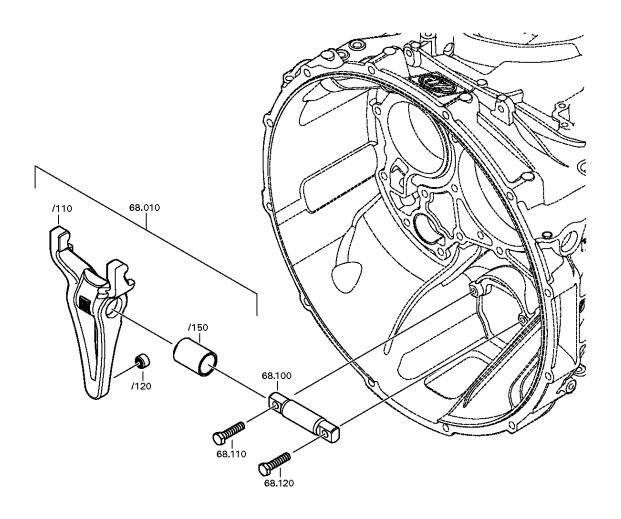
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Material number: 1356.007.181

Plant: 161.93.76-1

**CLUTCH RELEASE DEVICE** 





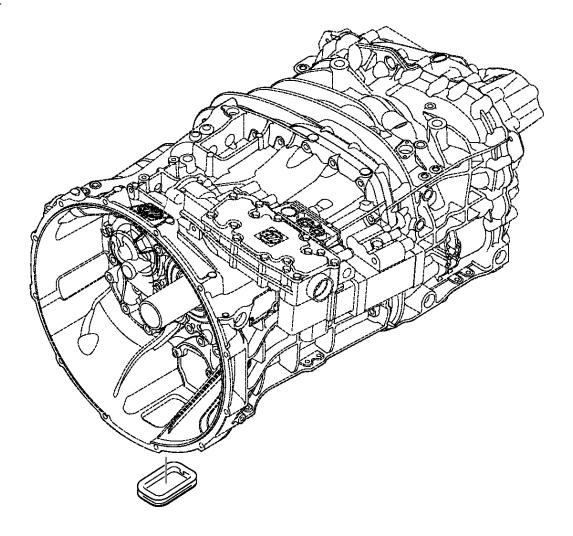
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Material number: 1356.007.181

Plant: 161.93.17-1

**CLUTCH RELEASE DEVICE** 





Page 1 from 1

Material number: 1356.007.181

Plant: 161.93.76-1

Material-assembly-group-no: 1325.168.011



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	1325.268.009		RELEASE FORK	1			KPL*GABELWEITE 94,0*KUGEL D=		
10	1323.200.003		INCLEASE FORK	1			12*I=1,76*OHNE ROLLE*1-SK*LOKAL		
/110			RELEASE FORK	1			ZFF*LOKAL HNG		
/120	0501.315.159		BALL CUP	1			KS12-18-12		
/150	0501.323.199		BEARING BUSH	1			30x37x50		
100	1325.368.008		RELEASE SHAFT	1			A=119,8mm		
110	0636.016.416		HEXAGON SCREW	1			M12X50		
120	0636.016.416		HEXAGON SCREW	1			M12X50		
262	1315.301.230		PROTECTION CAP	1					

## **Technical Cover**

Page 1 from 1

Material number: 6093.050.070



Pos.	Information	Amendment number
001	Use case	
002	Customer China National Heavy Duty Truck	
003	City Jinan	
004	DUNS 65-389-6704	
005	Use case	
006	Customer Dongfeng Motor	
007	City Shiyan City	
008	DUNS 65-452-5021	
009	Product description	
010	BRAKE POWER MAX 500 kW	
011	BRAKE TORQUE MAX 3500 Nm	
012	RATIO 2.035	
013	DESIGN, TRANSMISSION MANUALLY	

# Assembly group overview

Page 1 from 1

Material number: 6093.050.070



Graphics	Pos.	Material number	Name	Quantit y	Amend. no.	Techn. Info.
	910	6093.001.023	IT 3 TRUCK	1		
155.C2.03-1	916	6070.010.004	EST 54 T	1		
155.E2.01-1	920	6093.109.800	ANCHORAGE	1		
155.F5.01-1	990	6070.110.027	SOFTWARE	1		

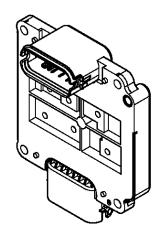
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Material number: 6093.050.070

Plant: 155.C2.03-1

Material-assembly-group-no: 6070.010.004





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Material number: 6093.050.070

Plant: 155.C2.03-1

Material-assembly-group-no: 6070.010.004



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
	6070.010.004		EST 54 T	1			INTARDER 3		

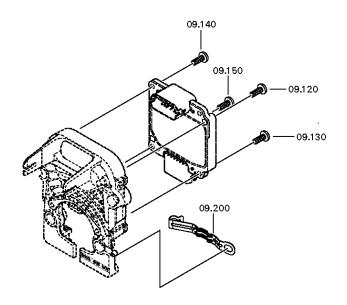
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Material number: 6093.050.070

Plant: 155.E2.01-1

Material-assembly-group-no: 6093.109.800





Page 1 from 1

Material number: 6093.050.070

Plant: 155.E2.01-1

Material-assembly-group-no: 6093.109.800



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
120	0636.102.673		HEXALOBULAR DRIVING SCREW	1		Z00015420210	M6X16		
130	0636.102.673		HEXALOBULAR DRIVING SCREW	1		Z00015420210	M6X16		
140	0636.102.673		HEXALOBULAR DRIVING SCREW	1		Z00015420210	M6X16		
150	0636.102.673		HEXALOBULAR DRIVING SCREW	1		Z00015420210	M6X16		
200	0501.326.597		CLAMPING BRACKET	1					

Page 1 from 1

Material number: 6093.050.070

Plant: 155.F5.01-1

Material-assembly-group-no: 6070.110.027





Page 1 from 1

Material number: 6093.050.070

Plant: 155.F5.01-1

Material-assembly-group-no: 6070.110.027



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	IRAN KIT	Alternative material
10	6070.210.028		FLASH FILE	1			IT3*STANDARD*ABS*AP122*NP		
/10	6070.310.110		BASIC PROGRAM	1			IT3*STANDARD*AP122		
/20	6070.310.054		DATA RECORD	1			IT3*STANDARD*ABS*AP122*NP		
30	6070.310.025		CUSTOMER BOOT LOADER	1			IT3*ZF STANDARD		

## **Technical Cover**

Page 1 from 1

Material number: 6093.001.023



Pos.	Information	Amendment number
001	Use case	
002	Customer ZF Drivetech Co., Ltd.	
003	City Hangzhou, Zhejiang	
004	DUNS 54-526-6199	
005	Use case	
006	Customer China National Heavy Duty Truck	
007	City Jinan	
800	DUNS 65-389-6704	
009	Product description	
010	RATIO 2.035	
012	RETARDER ADAPTION APPLICATION TRUCK	
013	DESIGN, RETARDER POWER	
014	RETARDER ADAPTION USAGE ECOSPLIT/ASTRONIC	
015	ATTACHM. POS., HEAT EXCHANGER LEFT HAND	
016	DIA,WATER CONN,HEAT ECXHANGER 60	
017	DESIGN WATER DRAIN HEAT EXCHANGER WA-VORNE	
018	ATTACHMENT POS. ELECTR.CONTROL TOP	
019	DESIGN, CENTRAL WIRING WT LINKS	

# Assembly group overview

Page 1 from 1

Material number: 6093.001.023



Graphics	Pos.	Material number	Name	Quantit y	Amend. no.	Techn. Info.
155.01.10-1	110	6093.101.012	HOUSING	1		
155.02.01-1	210	6093.102.002	CONTROL UNIT	1		
155.02.80-1	220	6093.102.800	CONTROL UNIT	1		
155.04.01-1	300	6093.104.008	RETARDER	1		
155.04.80-1	310	6093.104.800	RETARDER	1		
155.05.02-1	400	6093.105.011	HEAT EXCHANGER	1		
155.05.81-1	410	6093.105.800	HEAT EXCHANGER	1		
155.07.02-1	500	6093.107.001	WIRING	1		

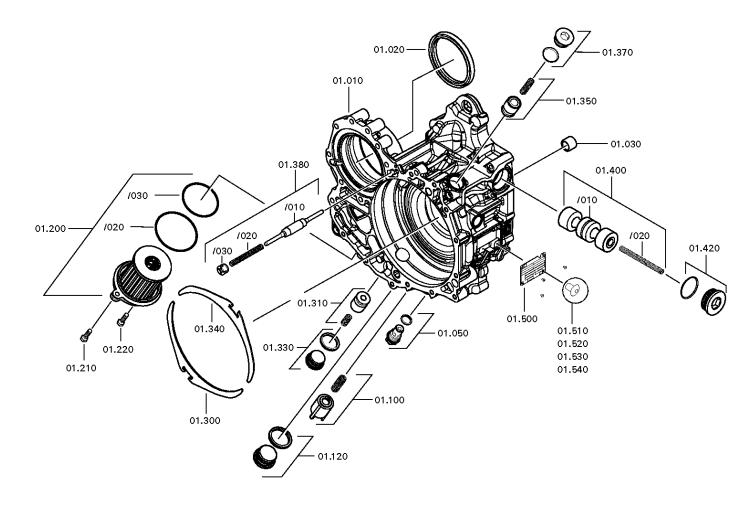
Page 1 from 1

Material number: 6093.001.023

Plant: 155.01.10-1

Material-assembly-group-no: 6093.101.012





Page 1 from 2

Material number: 6093.001.023

Plant: 155.01.10-1

Material-assembly-group-no: 6093.101.012



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
.0	6093.301.098		HOUSING	1					
20			SHAFT SEAL	1					
			SHAFT SEAL	1			WTB		
	0734.300.421		SHAFT SEAL	1			105,0X125,0X12,0/16,0		
	0734.300.679		SHAFT SEAL	1			105X125X16		
30	0635.301.124		NEEDLE BEARING	1		Z00035462710	18X26X20		
50			SCREW PLUG	1			60N.M*O-RING MIT GLEIT-IE M24X1,5		
	0736.300.163		SCREW PLUG	1		Z00010176411	M24X1,5 M24X1,5		
	0634.349.854		O-RING	1			21X2		
100	6093.201.021		PISTON	1			FUER BEFUELLVENTIL		
/10	6093.301.044		PISTON	1			SCHNELLBEFUELLVENTIL		
/20	0732.042.389		COMPRESSION SPRING	1					
120			SCREW PLUG	1			M42X1,5		
	0636.100.479		SCREW PLUG	1		Z00010744510	M42X1,5		
	0634.349.856		O-RING	1			38,0X2,5		
200	0501.215.163		SUCTION FILTER	1			KPL. *		
/20	0634.316.699		O-RING	1			91X3		
/30	0634.316.700		O-RING	1			78X3		
210	0636.100.798		HEXAGON SCREW	1		Z00007891411	M8X32		
220	0636.100.798		HEXAGON SCREW	1		Z00007891411	M8X32		
300	6093.301.051		OIL DAM	1					
310	6093.201.042		PISTON	1			KPL. FÜR REDUZ.		
/10	6093.301.085		PISTON	1			REDUZEINRICHTUNG		
/20	0732.300.025		COMPRESSION SPRING	1					
330			SCREW PLUG	1			M33X2		
	0736.300.153		SCREW PLUG	1		Z00010174810	M33X2 ERZ. M33X2		
	0634.349.855		O-RING	1			30,0X2,5		
340	6093.301.051		OIL DAM	1					
350	6093.201.042		PISTON	1			KPL. FÜR REDUZ.		
/10	6093.301.085		PISTON	1			REDUZEINRICHTUNG		
/20	0732.300.025		COMPRESSION SPRING	1					
370			SCREW PLUG	1			M33X2		
	0736.300.153		SCREW PLUG	1		Z00010174810	M33X2 ERZ. M33X2		
	0634.349.855		O-RING	1			30,0X2,5		

Page 2 from 2

Material number: 6093.001.023

Plant: 155.01.10-1

Material-assembly-group-no: 6093.101.012



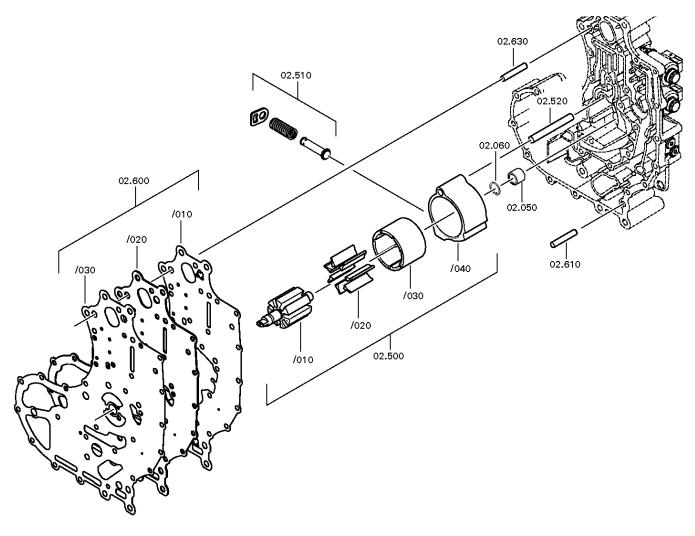
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
380	6093.201.041		PISTON	1			FUER ENTLEERVENTIL		
/10	6093.301.069		PISTON	1			ENTLEERVENTIL		
/20	0732.042.856		COMPRESSION SPRING	1			CFT23-WSV		
400	6093.201.020		PISTON	1			FUER HAUPTUMSCHALTVENTIL		
/10	6093.301.043		PISTON	1			HAUPTUMSCHALTVENTIL		
/20	0732.042.558		COMPRESSION SPRING	1					
420			SCREW PLUG	1			M48X1,5		
	0736.300.223		SCREW PLUG	1			M48X1,5		
	0634.349.857		O-RING	1			42,0X2,5		
500	0730.365.241		TYPE PLATE	1			EINHEITSSCH. VERDREHSICHER		
510	0731.300.027		BLIND RIVET	1					
520	0731.300.027		BLIND RIVET	1					
530	0731.300.027		BLIND RIVET	1					
540	0731.300.027		BLIND RIVET	1					

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Material number: 6093.001.023

Plant: 155.02.01-1 CONTROL UNIT





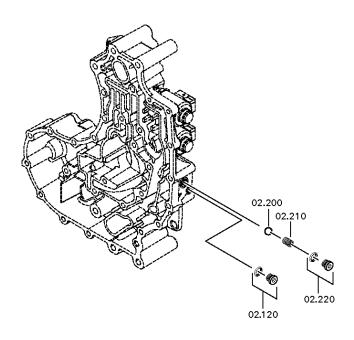
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Material number: 6093.001.023

Plant: 155.02.01-2 CONTROL UNIT



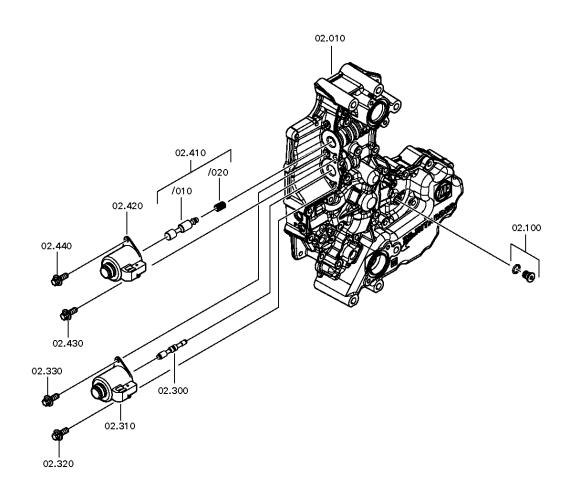


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Material number: 6093.001.023

Plant: 155.02.01-3 CONTROL UNIT





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Material number: 6093.001.023

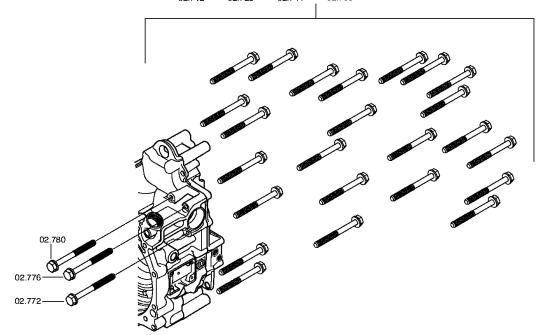
Plant: 155.02.80-1 **CONTROL UNIT** 



Bildtafel:

Figure: Figure: Figura: 155.02.80

02.792 02.764 02.700 02.716 02.732 02.748 02.796 02.768 02.704 02.720 02.736 02.752 02.756 02.784 02.800 02.708 02.724 02.740 02.788 02.804 02.712 02.728 02.744 02.760



Page 1 from 3

Material number: 6093.001.023

Plant: 155.02.01-1

Material-assembly-group-no: 6093.102.002



Pos.	number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
LO	6093.302.042		CONTROL HOUSING	1			INTARDER IT3		
0	0635.301.425		NEEDLE BEARING	1			16X24X22		
60	0630.502.010		RETAINING RING	1			24X1,2		
.00			SCREW PLUG	1		Z00010162912	25N.M*O-RING M12X1,5		
	0636.100.792		SCREW PLUG	1		Z00010162916			
	0634.349.853		O-RING	1			9,5X2,0		
.20			SCREW PLUG	1		Z00010162912	25N.M*O-RING M12X1,5		
	0636.100.792		SCREW PLUG	1		Z00010162916	M12X1,5		
	0634.349.853		O-RING	1			9,5X2,0		
.00	0635.460.023		BALL	1			12		
10	1204.304.116		COMPRESSION SPRING	1					
220			SCREW PLUG	1		Z00010111911	25N.M*O-RING MIT GLEIT-IE M14X1,5		
-	0636.100.689		SCREW PLUG	1		Z00010111910	M14X1,5		
-	0634.349.858		O-RING	1			11X2		
00	6093.302.025		PISTON	1			FUER STEUERVENTIL		
10	0501.330.120		MAGNET	1		Z00016552610			
320	0636.102.673		HEXALOBULAR DRIVING SCREW	1		Z00015420210	M6X16		
30	0636.102.673		HEXALOBULAR DRIVING SCREW	1		Z00015420210	M6X16		
10	6093.202.003		PISTON	1		Z00009388710	FUER SCHALTVENTIL		
10	6093.302.039		PISTON	1					
20	0732.042.270		COMPRESSION SPRING	1					
20	0501.330.120		MAGNET	1		Z00016552610			
130	0636.102.673		HEXALOBULAR DRIVING SCREW	1		Z00015420210	M6X16		
40	0636.102.673		HEXALOBULAR DRIVING SCREW	1		Z00015420210	M6X16		
00	0501.217.385		PUMP	1		Z00017143510			
10	0501.326.406		ROTOR	1					
20	0501.326.405		PENDULUM	7					
30	0501.326.407		CAGE	1					
40	0501.325.970		RING SLIDE	1					
10	6093.203.001		SET OF SPRINGS	1			KPL. PUMPE		

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Material number: 6093.001.023

Plant: 155.02.01-1

Material-assembly-group-no: 6093.102.002



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
520	0631.306.874		CYLINDRICAL PIN	1			12X100		
600	0501.217.473		GASKET	1		Z00010574910	KPL. SERIENWERKZEUG ZWISCHENBLECH		
/10	0501.326.584		GASKET	1			SERIENWERKZEUG ZWISCHENBLECH IT-GEHAEUSE 451mmx379mmx0, 33mm		
/20	0501.326.586		INTERMEDIATE PLATE	1			SERIENWERKZEUG ZWISCHENBLECH IT-GEHAEUSE		
/30	0501.326.585		GASKET	1			SERIENWERKZEUG ZWISCHENBLECH ST-GEHAEUSE 451mmx379mmx0, 33mm		
610	0631.100.005		CYLINDRICAL PIN	1			10X75		
630	0631.100.005		CYLINDRICAL PIN	1			10X75		
700	0736.300.642		HEXAGON SCREW	1			M8X80		
704	0736.300.642		HEXAGON SCREW	1			M8X80		
708	0736.300.642		HEXAGON SCREW	1			M8X80		
712	0736.300.642		HEXAGON SCREW	1			M8X80		
716	0736.300.642		HEXAGON SCREW	1			M8X80		
720	0736.300.642		HEXAGON SCREW	1			M8X80		
724	0736.300.642		HEXAGON SCREW	1			M8X80		
728	0736.300.642		HEXAGON SCREW	1			M8X80		
732	0736.300.642		HEXAGON SCREW	1			M8X80		
736	0736.300.642		HEXAGON SCREW	1			M8X80		
740	0736.300.642		HEXAGON SCREW	1			M8X80		
744	0736.300.642		HEXAGON SCREW	1			M8X80		
748	0736.300.642		HEXAGON SCREW	1			M8X80		
752	0736.300.642		HEXAGON SCREW	1			M8X80		
756	0736.300.642		HEXAGON SCREW	1			M8X80		
760	0736.300.642		HEXAGON SCREW	1			M8X80		
764	0736.300.642		HEXAGON SCREW	1			M8X80		
768	0736.300.642		HEXAGON SCREW	1			M8X80		
772	0736.300.642		HEXAGON SCREW	1			M8X80		
776	0736.300.642		HEXAGON SCREW	1			M8X80		
780	0736.300.642		HEXAGON SCREW	1			M8X80		

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Material number: 6093.001.023

Plant: 155.02.01-1

Material-assembly-group-no: 6093.102.002



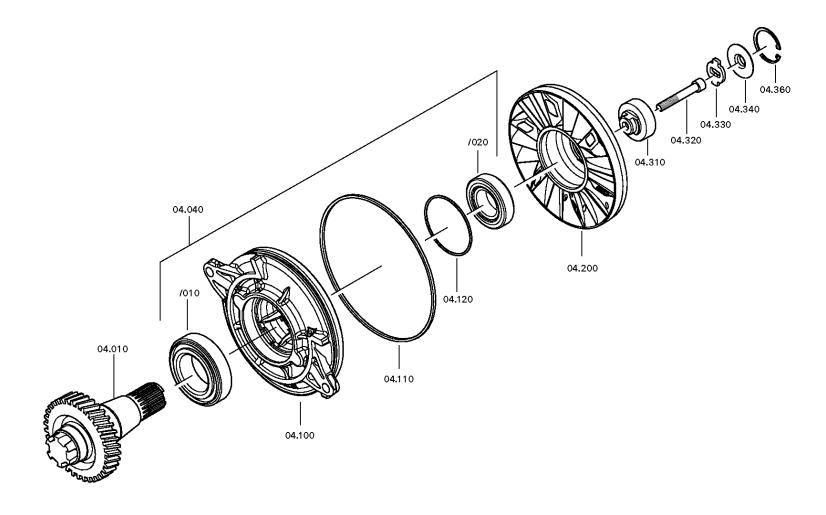
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	IRAN KIT	Alternative material
784	0736.300.642		HEXAGON SCREW	1			M8X80		
788	0736.300.642		HEXAGON SCREW	1			M8X80		
792	0736.300.642		HEXAGON SCREW	1			M8X80		
796	0736.300.642		HEXAGON SCREW	1			M8X80		
800	0736.300.642		HEXAGON SCREW	1			M8X80		
804	0736.300.642		HEXAGON SCREW	1			M8X80		

Page 1 from 2

Material number: 6093.001.023

Plant: 155.04.01-1 RETARDER





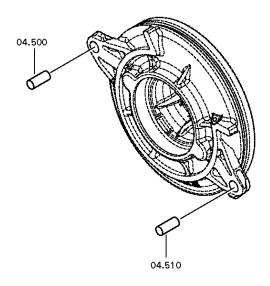
Page 2 from 2

Material number: 6093.001.023

Plant: 155.04.80-1

RETARDER





Page 1 from 1

Material number: 6093.001.023

Plant: 155.04.01-1

Material-assembly-group-no: 6093.104.008



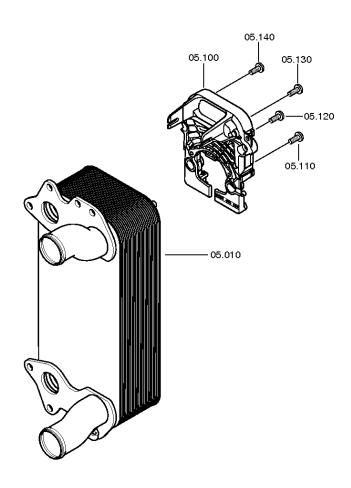
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	6093.304.079		PINION SHAFT	1			POWER*Z28		
40			TAPERED ROLLER BEARING	1					
	6093.204.008		TAPERED ROLLER BEARING	1			KPL.LAGERSATZ* FA.NTN		
/10	0735.372.115		TAPERED ROLLER BEARING	1			63,500X112,712X30,162		
/20	0735.300.376		TAPERED ROLLER BEARING	1			45,00X85,00X24,75		
	6093.204.002		TAPERED ROLLER BEARING	1			KPL.LAGERSATZ FA.TIMKEN		
/10	0735.372.110		TAPERED ROLLER BEARING	1			63,500X112,712X30,163		
/20	0735.372.200		TAPERED ROLLER BEARING	1			45,00X85,00X24,75		
100	6093.304.089		STATOR	1			21 SCHAUFELN*NP		
110	0634.349.849		O-RING	1		Z00028038310	230X5		
120	0750.113.011		RECTANGULAR RING	1			95,0X100,0X2,2		
200	6093.304.093		ROTOR	1			NP		
310	6093.304.106		DRIVER DISC	1		Z00023585610			
330	6093.304.034		CROSS DISC	1					
340	6093.304.035		SEALING WASHER	1					
360	0630.502.029		RETAINING RING	1			55X2		
500	0631.306.097		CYLINDRICAL PIN	1			16X36		
510	0631.306.097		CYLINDRICAL PIN	1			16X36		

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Material number: 6093.001.023

Plant: 155.05.02-1 HEAT EXCHANGER



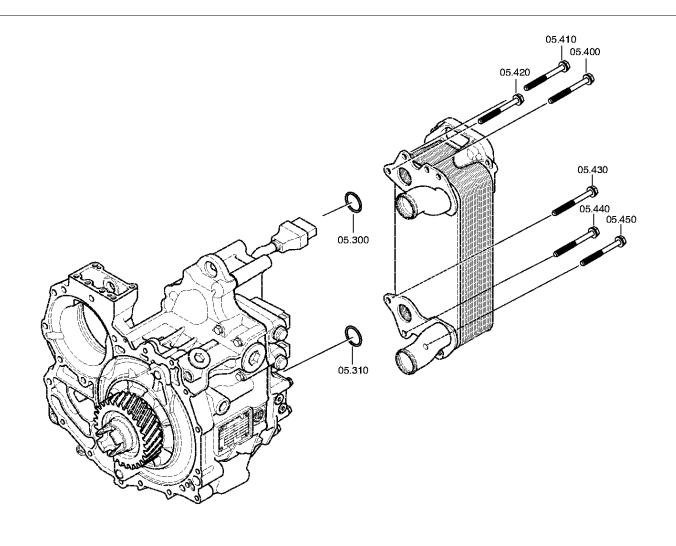


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Material number: 6093.001.023

Plant: 155.05.81-1 HEAT EXCHANGER





Page 1 from 1

Material number: 6093.001.023

Plant: 155.05.02-1

Material-assembly-group-no: 6093.105.011



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	0501.221.839		HEAT EXCHANGER	1		Z00031859411	IT3*LKW*DM60		
100	6093.205.006		CARRIER	1			KPL. GD		
110	0636.102.673		HEXALOBULAR DRIVING SCREW	1		Z00015420210	M6X16		
120	0636.102.673		HEXALOBULAR DRIVING SCREW	1		Z00015420210	M6X16		
130	0636.102.673		HEXALOBULAR DRIVING SCREW	1		Z00015420210	M6X16		
140	0636.102.673		HEXALOBULAR DRIVING SCREW	1		Z00015420210	M6X16		
300	0634.313.092		O-RING	1			45X4		
310	0634.313.092		O-RING	1			45X4		
400	0636.100.376		HEXAGON SCREW	1		Z00007342910	M10X115		
410	0636.100.376		HEXAGON SCREW	1		Z00007342910	M10X115		
420	0636.100.376		HEXAGON SCREW	1		Z00007342910	M10X115		
430	0636.100.376		HEXAGON SCREW	1		Z00007342910	M10X115		
440	0636.100.376		HEXAGON SCREW	1		Z00007342910	M10X115		
450	0636.100.376		HEXAGON SCREW	1		Z00007342910	M10X115		

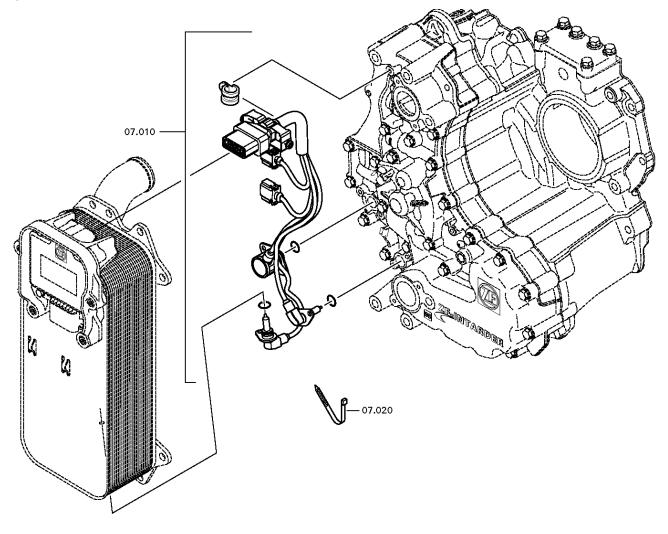
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Material number: 6093.001.023

Plant: 155.07.02-1

Material-assembly-group-no: 6093.107.001





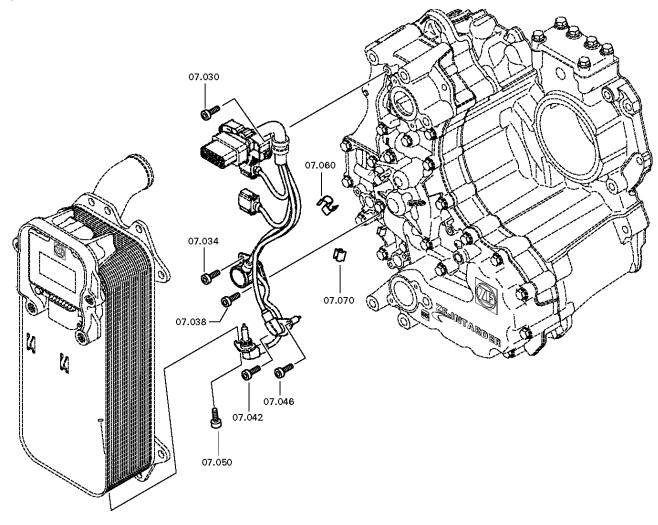
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Material number: 6093.001.023

Plant: 155.07.02-2

Material-assembly-group-no: 6093.107.001





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Material number: 6093.001.023

Plant: 155.07.02-1

Material-assembly-group-no: 6093.107.001



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	0501.219.774		CABLE	1		Z00020742511	LKW/ZENTRKABEL/ECU-SENSOR- AKTUATOR/P-KERMAMIK-SENSOR		
20	0659.160.068		CABLE CLIP	1			3,6X200		
30	0636.102.673		HEXALOBULAR DRIVING SCREW	1		Z00015420210	M6X16		
34	0636.102.673		HEXALOBULAR DRIVING SCREW	1		Z00015420210	M6X16		
38	0636.102.673		HEXALOBULAR DRIVING SCREW	1		Z00015420210	M6X16		
42	0636.102.673		HEXALOBULAR DRIVING SCREW	1		Z00015420210	M6X16		
46	0636.102.673		HEXALOBULAR DRIVING SCREW	1		Z00015420210	M6X16		
50	0636.102.673		HEXALOBULAR DRIVING SCREW	1		Z00015420210	M6X16		
60	0659.100.021		CABLE TERMINAL	1					
70	0659.100.020		CABLE TERMINAL	1					