



Spare Parts Catalog

16 S 109 PTO

Material number: 1304.030.026

Current date: 05.03.2018

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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

Technical Cover

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Pos.	Information	Amendment number
001	Use case -----	
002	Customer Otosan Otomobil Sanayl A.S.	
003	City Kadikoey Istanbul	
004	DUNS	
005	Vehicle / Apparatus -----	
006	Sales Name	
007	Manufacturer Otosan Otomobil Sanayl A.S.	
008	Engineering Name	
009	Product Use TRUCK	
010	Vehicle/Hardware Type DUMPER	
011	SOP	
012	Engine	
013	Sales Designation	
014	Manufacturer FORD	
015	Eng.Displ.	
016	Cylinder	
017	Nom. power 220 kW	
018	RPM at nom. power 2400 1/min	
019	Nom. torque 1100 Nm	
020	RPM at nom. torque 1800 1/min	
021	Classification use case -----	
022	DESIGNATION, CLUTCH 395DBE	
023	MANUFACTURER, CLUTCH VALEO	
024	TOTAL NUMBER OF WHEELS 6	
025	NUMBER OF DRIVING WHEELS 4	
026	DYNAMIC TYRE RADIUS 527 mm	
027	REAR AXLE RATIO 5.41	
032	PERMISS.GROSS COMBIN.WEIGHT 26 t	
033	Product description -----	
034	DESIGN PTO J32 NH 1 C	
035	RATIO ROW J32 DG	
038	RATIO VARIANT RG J32 LRG	
039	SWITCHING TYPE PTO J32 PNEUMATIC INTEGRATED	

Technical Cover

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Pos.	Information	Amendment number
040	POSITION PTO J32 CENTRAL	
041	POSITION SWITCH PTO J32 X	
042	OUTP.SPEED PTO (X N-ENG) J32 .77	
043	OIL CAPACITY, GEARBOX 9 dm3	
044	OIL GRADE PERMISSIBLE ACC. TO TE-ML02	
045	COLOR NOT	
049	CODING OUTER CONSERVATION KA1	
050	SCOPE OUTER CONSERVATION T	
051	CODING INNER CONSERVATION KI1	
052	CONSERVATION SPECIFICATION ZFN 916	
056	Alias ID -----	
057	Otosan Otomobil Sanayl A.S. 6C467001AA	

Assembly group overview

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Graphics	Pos.	Material number	Name	Quantity	Amend. no.	Techn. Info.
	910	1304.050.461	16 S 109	1		
	912	6090.012.022	NH 1 C	1		
	914	6090.190.043	ACCESSORIES	1		

Technical Cover

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Pos.	Information	Amendment number
001	Use case -----	
002	Customer Otosan Otomobil Sanayi A.S.	
003	City Kadiköy Istanbul	
004	DUNS	
005	Product description -----	
006	INSTALLATION POS TRANSMISSION HORIZONTAL LEFT	
007	TRANSMISSION ATTACHMENT FLANGE-MOUNTED	
008	RATIO, BOTTOM GEAR 13.41	
009	RATIO, TOP GEAR 1	
010	SET OF RATIOS DG	
011	RATIO, 1ST GEAR 13.41	
012	RATIO, 2ND GEAR 11.35	
013	RATIO, 3RD GEAR 9.56	
014	RATIO, 5TH GEAR 6.69	
015	RATIO, 4TH GEAR 8.09	
016	RATIO, 7TH GEAR 4.72	
017	RATIO, 9TH GEAR 3.35	
018	RATIO, 11TH GEAR 2.39	
019	RATIO, 6TH GEAR 5.66	
020	RATIO, 13TH GEAR 1.67	
021	RATIO, 15TH GEAR 1.18	
022	RATIO, 8TH GEAR 4	
023	RATIO, 1ST GEAR REVERSE 12.69	
024	RATIO, 10TH GEAR 2.84	
025	RATIO, 12TH GEAR 2.02	
026	RATIO, 14TH GEAR 1.42	
027	RATIO, 16TH GEAR 1	
028	RATIO, 2ND GEAR REVERSE 10.74	
029	RATIO PLANETARY GEAR SET 4	
030	NUMBER OF PLANETARY GEARS 5	
032	DESIGN, SHIFT SYSTEM TURNING SHAFT	
033	POSITION, GEAR SHIFT SYSTEM HORIZONTAL RIGHT	
034	DESIGN, SHIFT PATTERN H-H	



Pos.	Information	Amendment number
035	VERSION TUBE R/C PLASTIC PIPING	
040	DESIGN, SEPARATING CLUTCH FULL-SYNCHRONIZED	
041	REFERENCE LENGTH INPUT SHAFT 305 mm	
042	STANDARD TYPE INPUT SHAFT SAE	
043	NUMBER OF WEDGES INPUT SHAFT 10	
044	VERSION OF INPUT SHAFT FORM C	
045	NOMINAL DIAMETER INPUT SHAFT 1.75 in	
046	DIAMETER, JOURNAL, INPUT SHAFT 25 mm	
047	TYPE FIT SPIGOTS INPUT SHAFT F7	
048	DIAMETER SHAFT OF INPUT SHAFT 44 mm	
049	BUSH VARIANT INPUT SHAFT WITHOUT GROOVE	
050	DIAMETER, RELEASE FLANGE 57 mm	
051	TYPE FIT RELEASE BEARING FLA. E8	
052	SEALING CAP RELEASE BEAR.FLAN n	
053	DESIGN BEARING OUTPUT STANDARD SUSPENSION	
054	OUTER DIA. OUTPUT FLANGE RA 180 mm	
055	NO.OF SCREWS OUTPUT FLANGE RA 4	
058	DIA. THREAD OUTPUT FL. SCR. RA M14	
060	REF. LENGTH OUTPUT FLANGE RA 103 mm	
061	THREAD PITCH OUTPUT FL SCR. RA 2 mm	
062	THREAD LENGTH OUTP.FL SCREW RA 50 mm	
064	DIMENSION SHIFT TURRET DIST. 248 mm	
065	MEAS. LOC. SHIFT TURRET DIST. SHIFT LEVER-LOCATION	
066	TYPE OF SHIFT CONTROL CONTROL CABLE	
084	SPRING ARRANGEMENT Q1	
085	TOOLING SET OF SPRINGS W091	
086	SPRING FORCE DETENT PLUNGER RG 60 N	
087	SPRING FORCE,GEAR DETENT NG+GG 68 N	
090	SELECTION PATTERN VARIANT GEAR SHIFT PATTERN 2	
092	DESIGN, SHIFT PATTERN D2	
093	HANDLE SHAPE HAND LEVER 1 1B	
094	DESIGN ANCHORAGE GP-HOUSING M10+WASHER	
095	NOTE PNEUMATIC SYSTEM VALVE	



Pos.	Information	Amendment number
098	SWITCH, REVERSE GEAR y	
099	DESIGN, RG (REV.GEAR) SWITCH OPENING SWITCH	
100	NOTE ON SWITCH, REVERSE GEAR GEAR SHIFT RAIL	
101	PROT.CAP SWITCH, REVERSE GEAR y	
103	SWITCH, NEUTRAL GEAR y	
104	DESIGN,NG(NEUTRAL GEAR)SWITCH OPENING SWITCH	
105	PROT.CAP SWITCH, NEUTRAL GEAR y	
107	FUNCTION OF R/C SWITCH GP	
108	STANDARDS TYPE HOLLOW FLANGE HEXAGON SCREW	
109	DESIGN, GP SWITCH WITHOUT GROOVE	
110	PROTECTING CAP GP SWITCH n	
122	ATTACHED AGRREGATES 1 WITHOUT WSK	
123	FUNCTION OF S/G SWITCH GV	
124	DESIGN, GV SWITCH WITHOUT GROOVE	
125	PROTECTING CAP GV SWITCH n	
130	ATTACHM.POS.HEAT EXCHANGER WITHOUT GROOVE	
132	VER. TRANSMISSION VENTILATION BREATHER	
135	REF.LENGTH,RELEASE BEAR.FLAN 190 mm	
137	ATTACHMENT VARIANT, RETARDER WITHOUT	
165	DESIGN PULSE SENSOR INPUT WITHOUT GROOVE	
166	PROT.CAP PULSE SENSOR INPUT n	
171	NO.OF PULSES PULSE SENSOR SFI H68 8 IMP/U	
173	DESIGN PULSE SENSOR SFI H68 WITH	
175	PROT.CAP PULSE SENSOR SFI H68 y	
176	DESIGN CONN.PULSE SENSOR SFI H68 DIN BAYONET	
204	NOTE ON OIL FILL FILL IN OVERFLOW	
205	POSITION, OIL FILLER HOUSING, LH SIDE	

Assembly group overview

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Graphics	Pos.	Material number	Name	Quantity	Amend. no.	Techn. Info.
062.01.11-1	110	1304.101.264	TRANSMISSION HOUSING	1		
062.01.11-1	118	1304.101.402	CONNECTING PARTS	1		
062.01.84-1	120	1304.101.929	TRANSMISSION HOUSING	1		
062.01.90-1	122	1304.101.800	CLOSING COMPONENTS	1		
062.02.40-1	140	1304.102.443	CONNECTION PLATE	1		
062.02.82-1	150	1304.102.805	INPUT SHAFT	1		
062.02.03-1	910	1304.102.153	INPUT SHAFT	1		
062.03.80-1	180	1304.103.804	COUNTERSHAFT	1		
062.03.05-1	920	1304.103.062	COUNTERSHAFT	1		
062.04.05-1	930	1304.104.120	MAIN SHAFT	1		
062.06.22-1	230	1304.106.123	SHIFT SYSTEM	1		
062.06.46-1	238	1304.106.444	CONNECTING PARTS	1		
062.07.08-1	20	1304.107.615	GEARSHIFT SHAFT	1		
062.07.08-1	282	1304.107.840	GEAR SHIFT HOUSING	1		
062.07.08-1	910	1304.107.216	GEAR SHIFT HOUSING	1		
062.07.49-1	914	1304.107.489	GEARSHIFT SHAFT	1		
062.08.02-1	926	1304.170.003	SHIFT TURRET	1		
062.08.02-1	930	1304.170.017	COVER	1		
062.08.02-1	934	1304.170.804	COVER	1		
062.12.02-1	922	1304.149.142	SET OF SPRINGS	1		
062.40.01-1	500	1304.112.006	GV-SHIFT SYSTEM	1		
062.40.40-1	504	1304.112.409	CONNECTING PARTS	1		
062.43.02-1	20	1304.131.070	RC HOUSING	1		
062.43.02-1	512	1304.131.825	RC HOUSING	1		
062.44.06-1	40	1304.132.137	PLANETARY DRIVE	1		
062.44.51-1	50	1304.132.510	PLANETARY DRIVE	1		
062.44.06-1	60	1304.132.808	PLANETARY DRIVE	1		
062.45.05-1	70	1304.133.012	SYNCHRONIZER	1		
062.45.40-1	80	1304.133.404	SYNCHRONIZER	1		
062.46.05-1	90	1304.134.033	GP SHIFT SYSTEM	1		
062.46.40-1	554	1304.134.402	CONNECTING PARTS	1		
062.47.02-1	190	1304.135.005	SPEEDOMETER COVER	1		

Assembly group overview

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Graphics	Pos.	Material number	Name	Quantity	Amend. no.	Techn. Info.
062.47.02-1	194	1304.135.803	SPEEDOMETER COVER	1		
062.57.05-1	390	1304.145.009	RANGE SELECTION	1		
015.98.48-1	40	6005.183.662	SHIFT LEVER	1		

Plant

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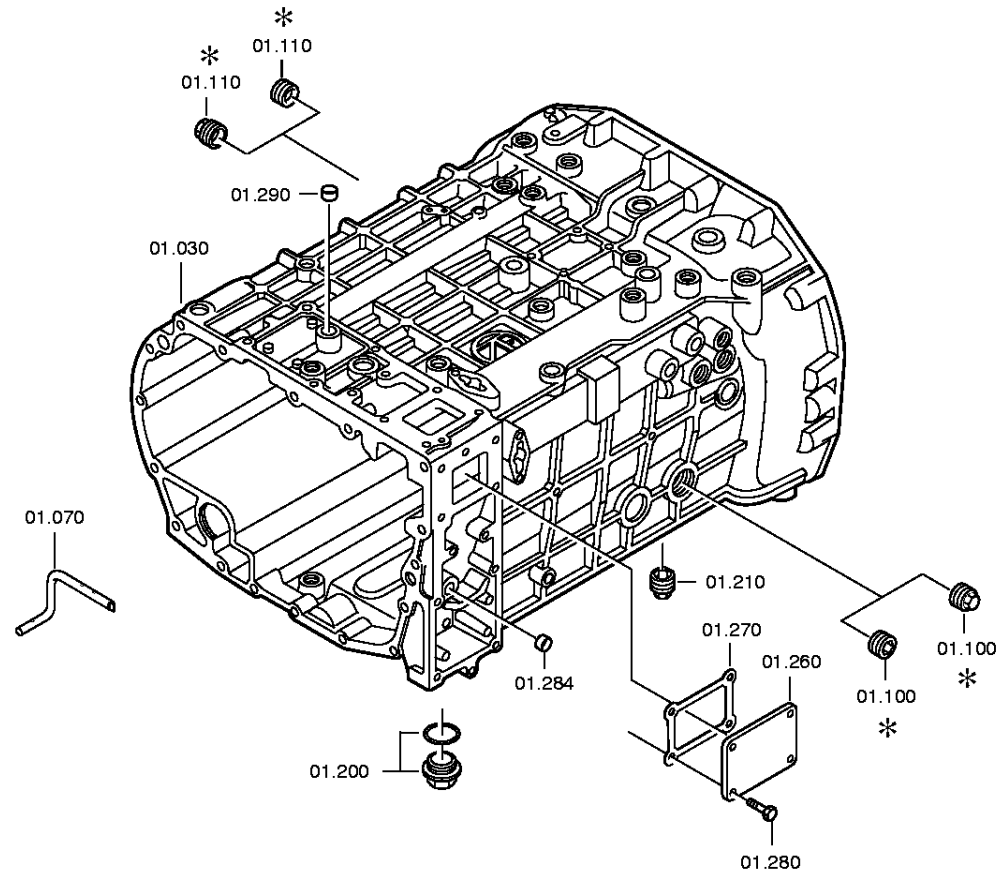
Material number: 1304.050.461

Plant: 062.01.11-1

TRANSMISSION HOUSING



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TRANSMISSION HOUSING



Plant

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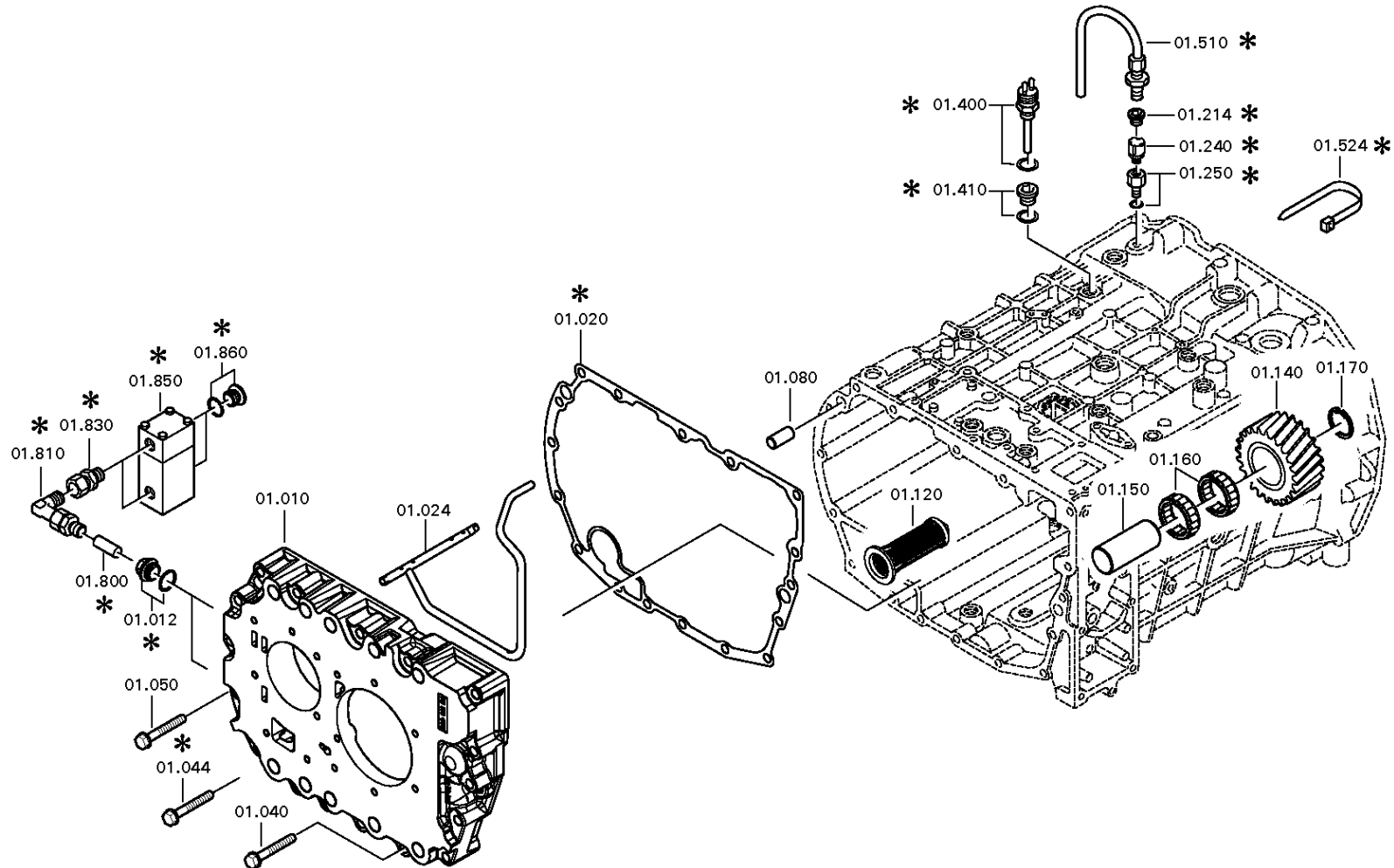
Material number: 1304.050.461

Plant: 062.01.84-1

TRANSMISSION HOUSING



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TRANSMISSION HOUSING



Plant

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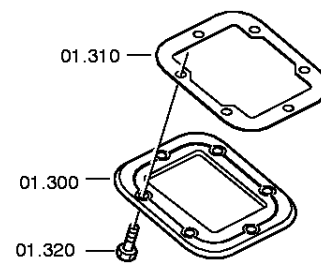
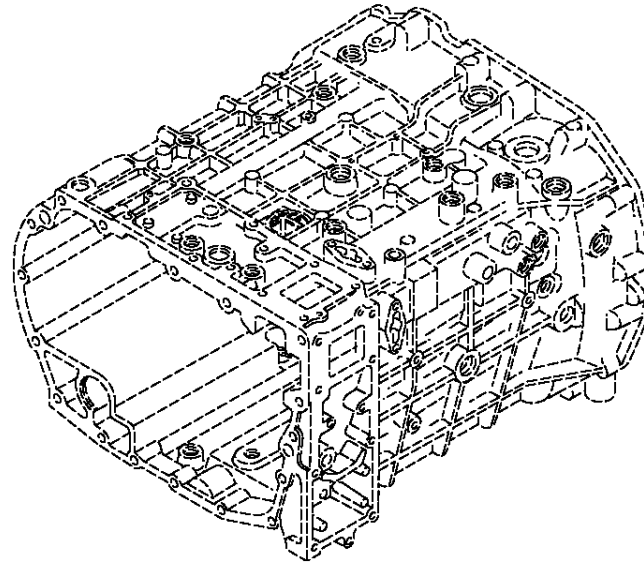
Material number: 1304.050.461

Plant: 062.01.90-1

TRANSMISSION HOUSING



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TRANSMISSION HOUSING



Plant

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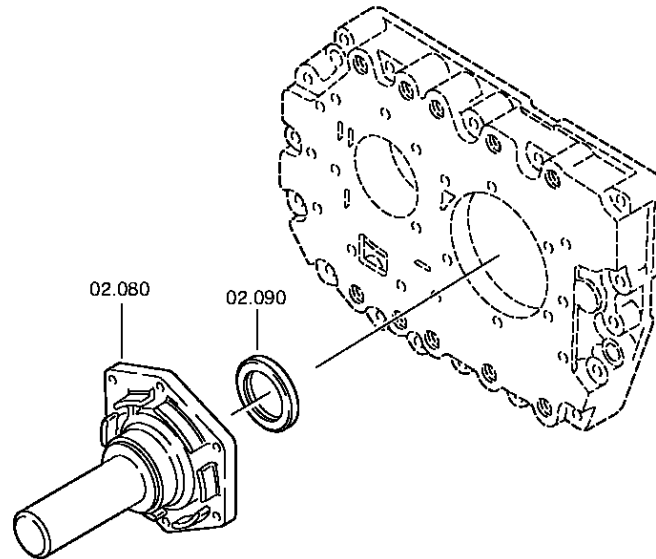
Material number: 1304.050.461

Plant: 062.02.40-1

CONNECTION PLATE



16 S 109 PTO /
CONNECTION PLATE



Plant

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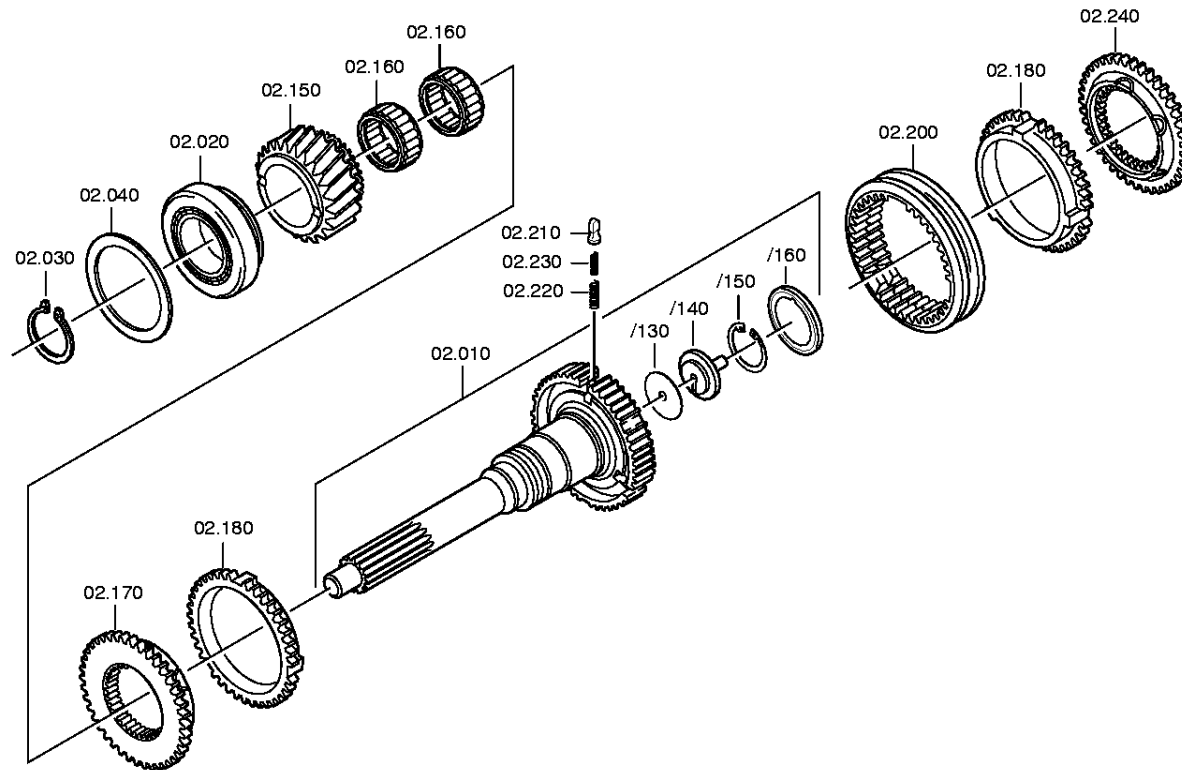
Material number: 1304.050.461

Plant: 062.02.03-1

CONNECTION PLATE



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CONNECTION PLATE



Plant

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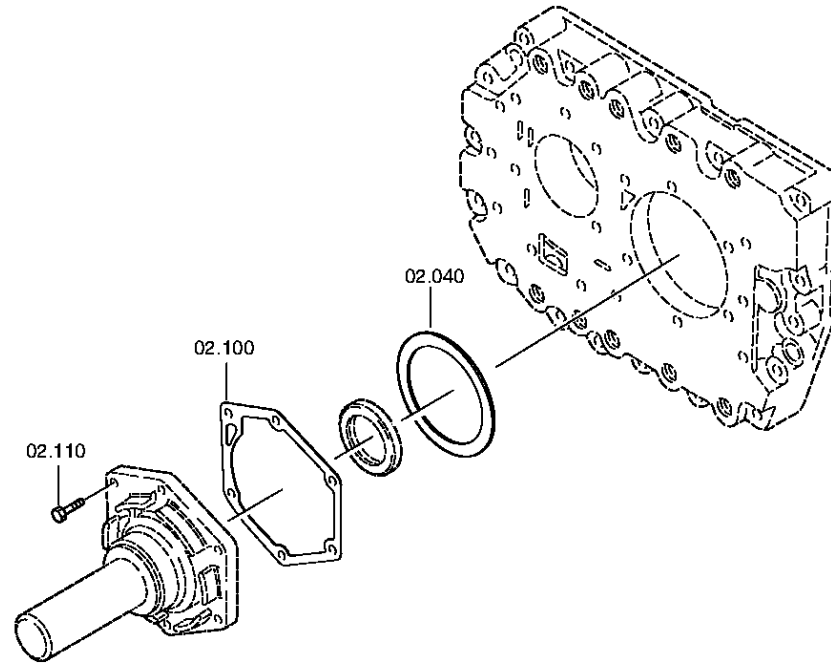
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Plant: 062.02.82-1

CONNECTION PLATE



16 S 109 PTO /
CONNECTION PLATE



Plant

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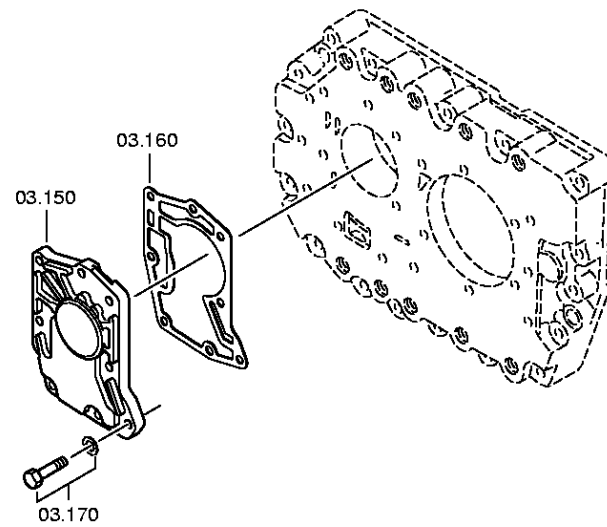
Material number: 1304.050.461

Plant: 062.03.80-1

COUNTERSHAFT



16 S 109 PTO /
COUNTERSHAFT



Plant

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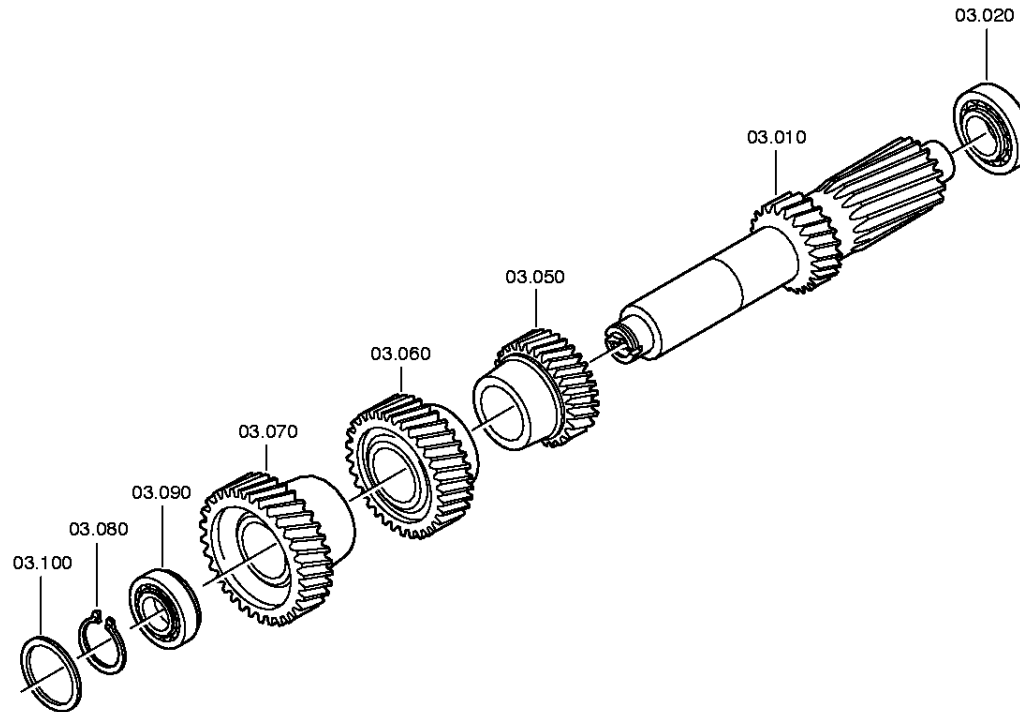
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Plant: 062.03.05-1

COUNTERSHAFT



16 S 109 PTO /
COUNTERSHAFT



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Plant

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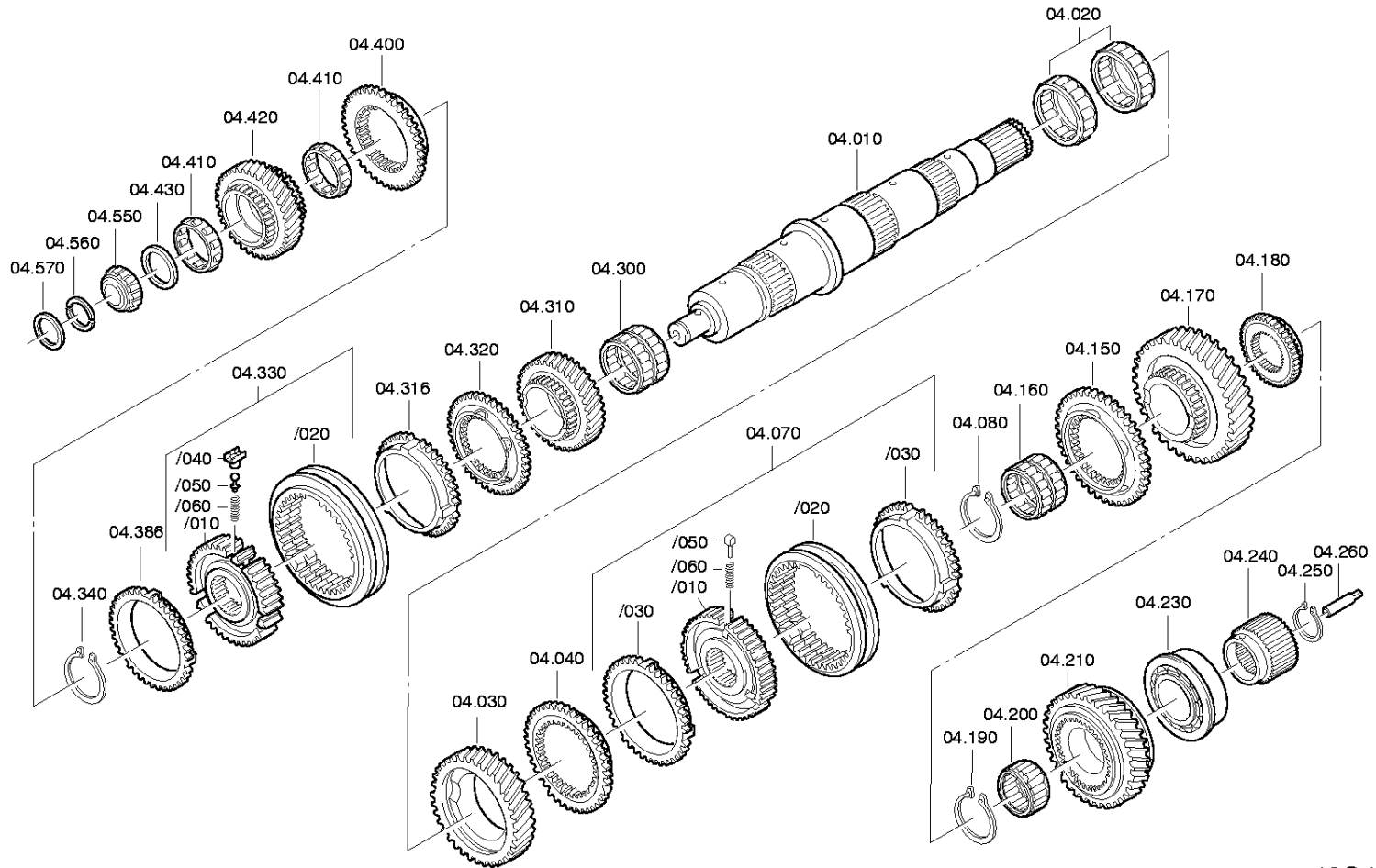
Material number: 1304.050.461

Plant: 062.04.05-1

Material-assembly-group-no: 1304.104.120



16 S 109 PTO /
MAIN SHAFT



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Plant

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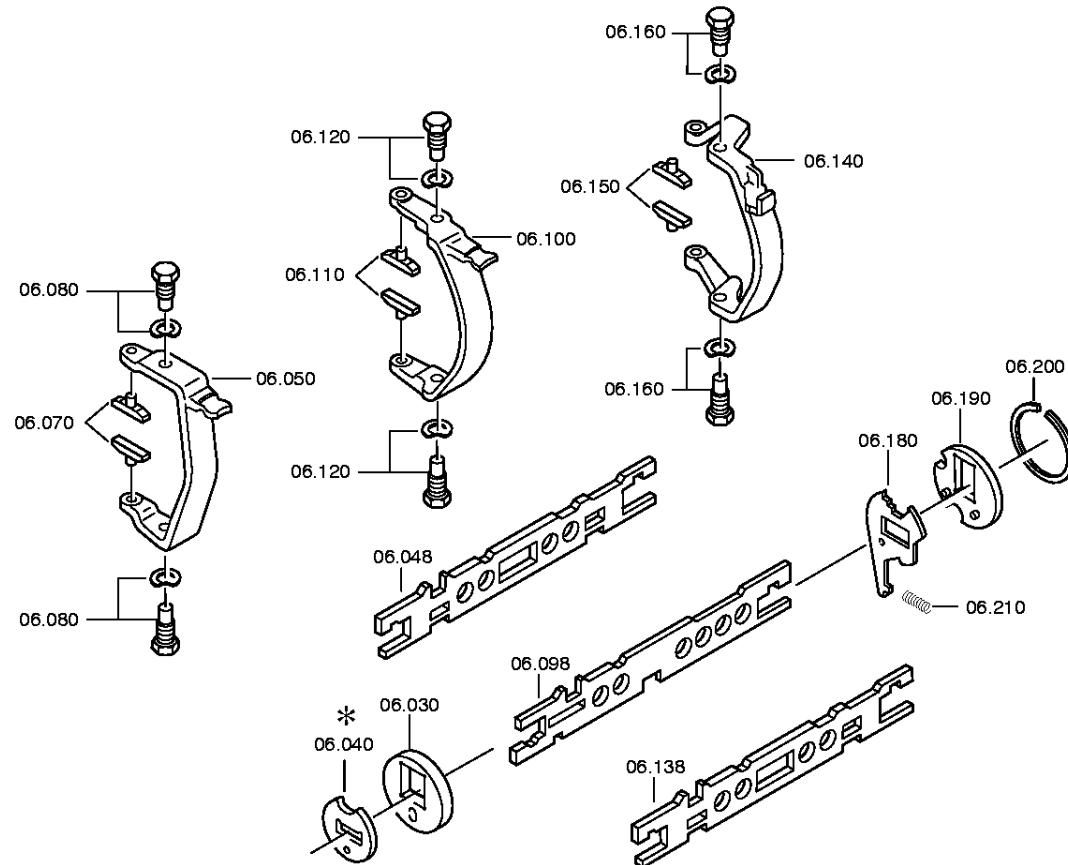
Material number: 1304.050.461

Plant: 062.06.22-1

SHIFT SYSTEM



16 S 109 PTO /
SHIFT SYSTEM



Plant

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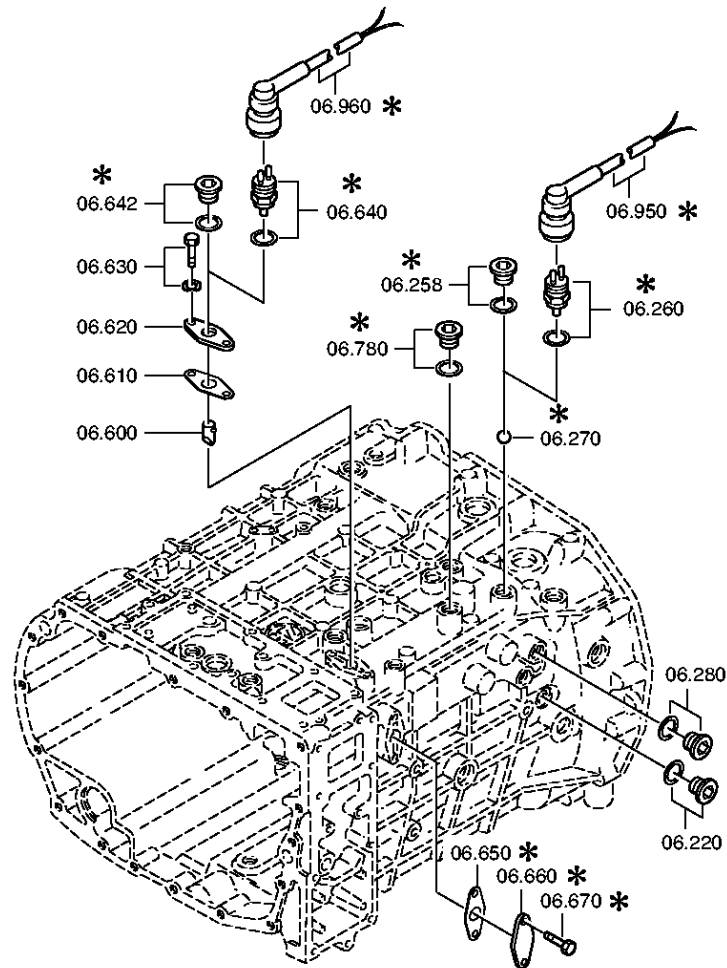
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Plant: 062.06.46-1

SHIFT SYSTEM



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SHIFT SYSTEM



Plant

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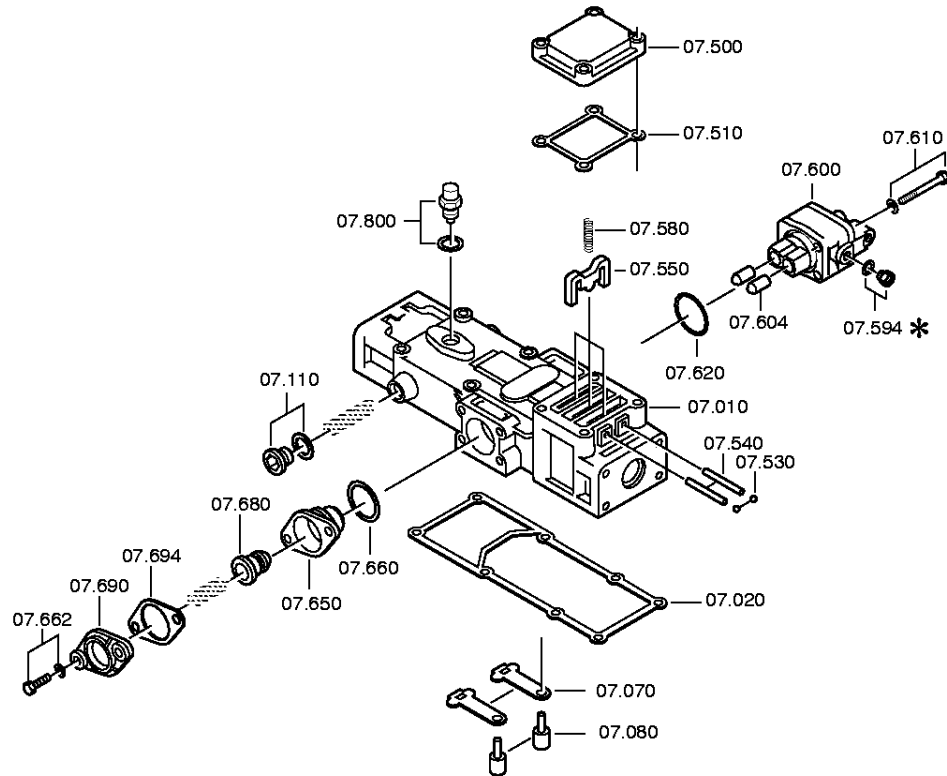
Material number: 1304.050.461

Plant: 062.07.08-1

GEARSHIFT SHAFT



16 S 109 PTO /
GEARSHIFT SHAFT



Plant

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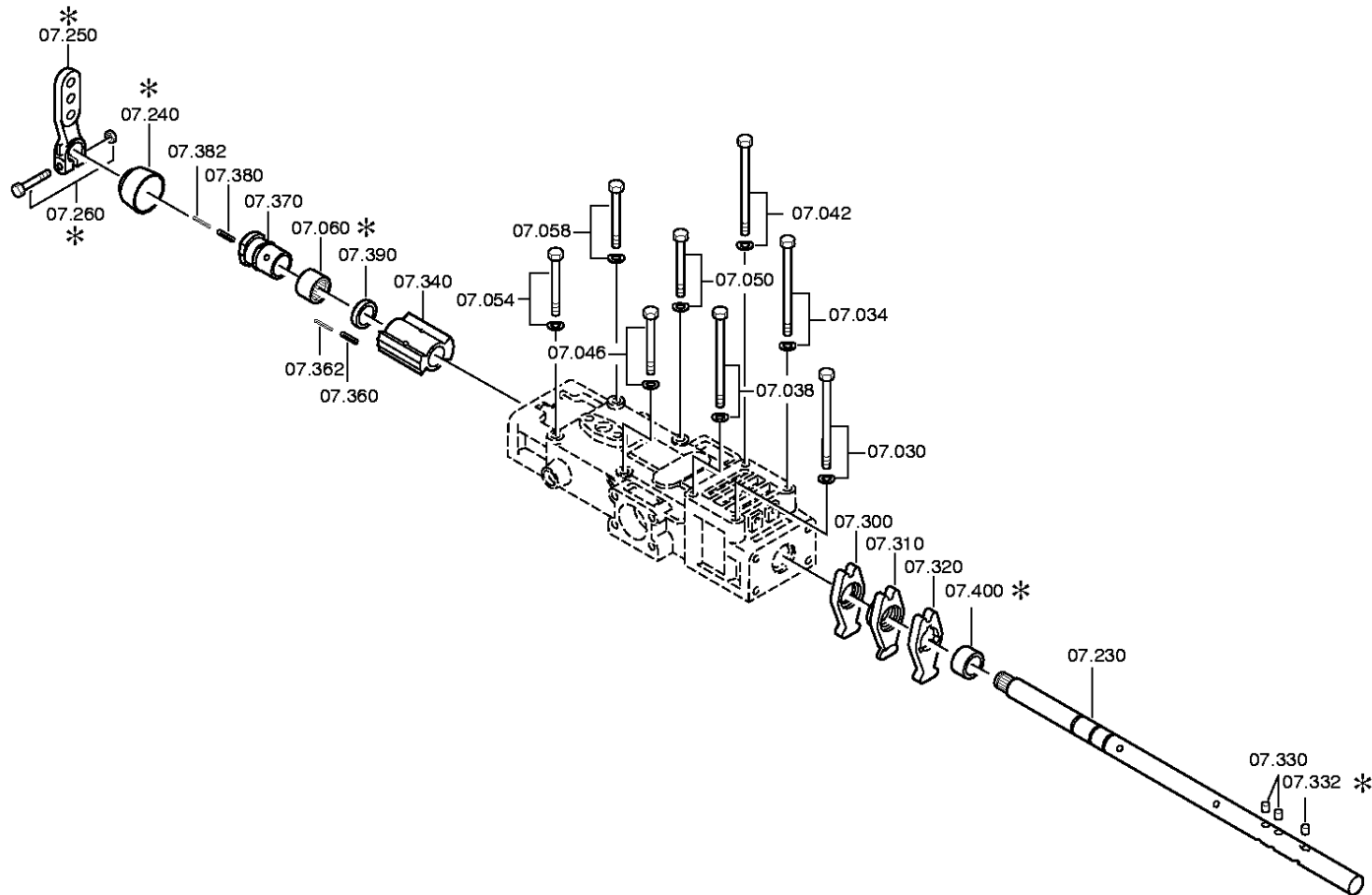
Material number: 1304.050.461

Plant: 062.07.49-1

GEARSHIFT SHAFT



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GEARSHIFT SHAFT



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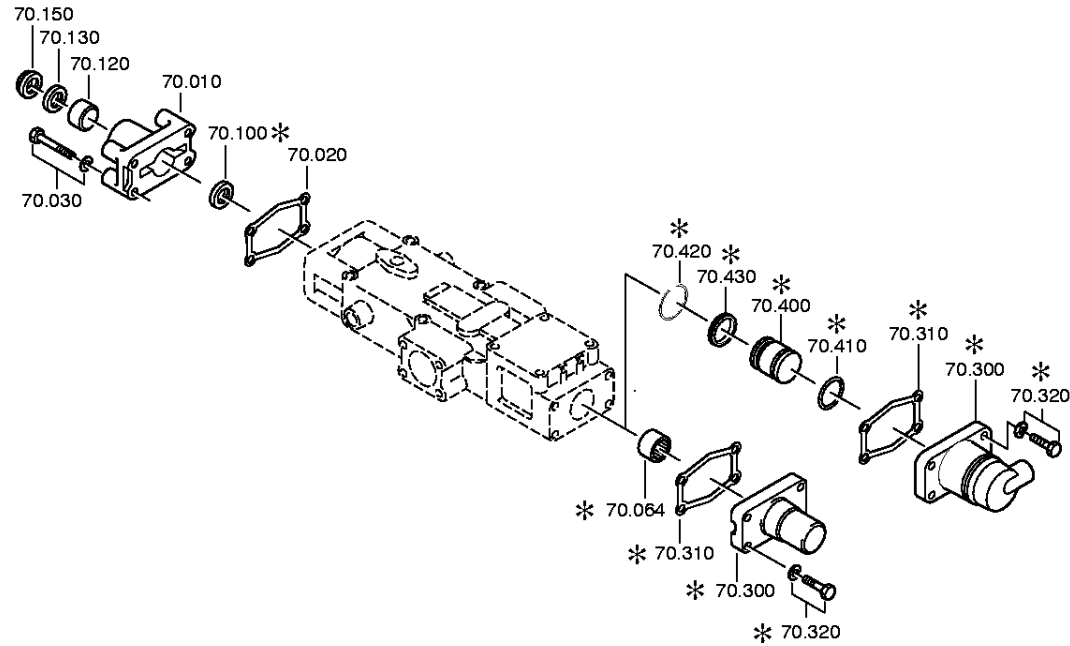
Material number: 1304.050.461

Plant: 062.08.02-1

SHIFT TURRET



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SHIFT TURRET



Plant

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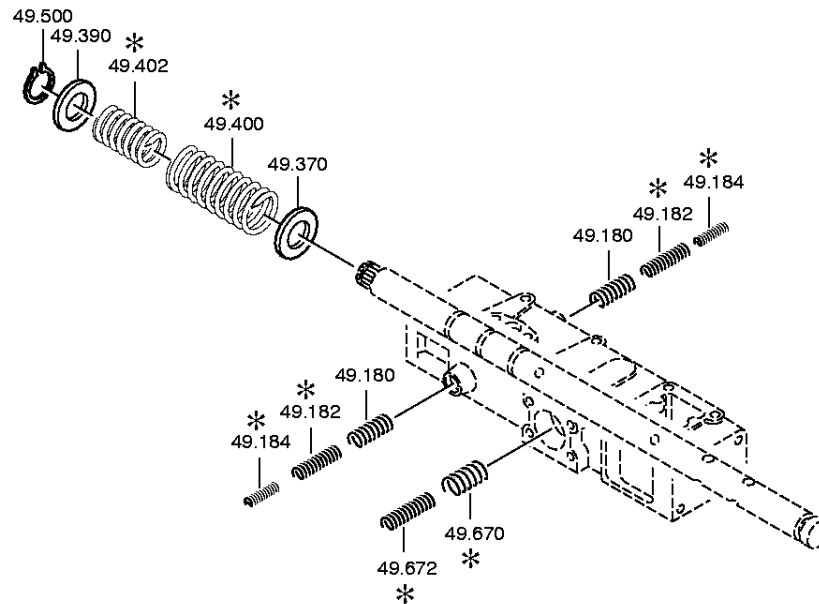
Material number: 1304.050.461

Plant: 062.12.02-1

Material-assembly-group-no: 1304.149.142



16 S 109 PTO /
SET OF SPRINGS



Plant

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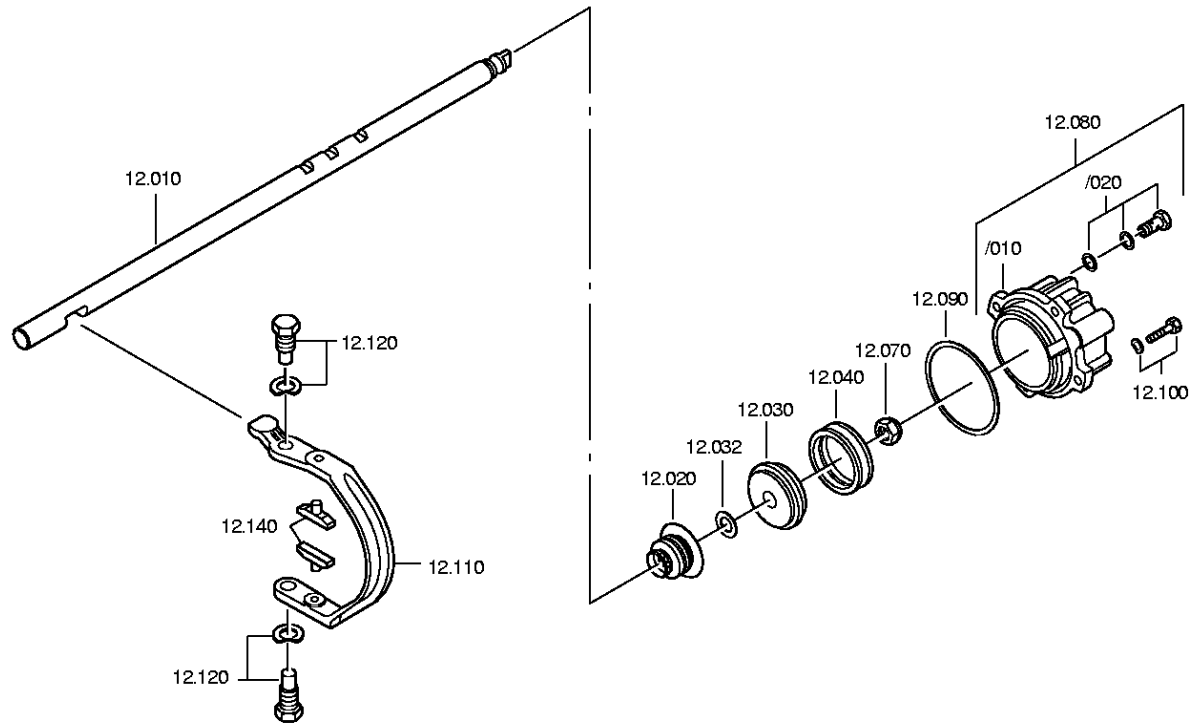
Material number: 1304.050.461

Plant: 062.40.01-1

GV-SHIFT SYSTEM



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GV-SHIFT SYSTEM



Plant

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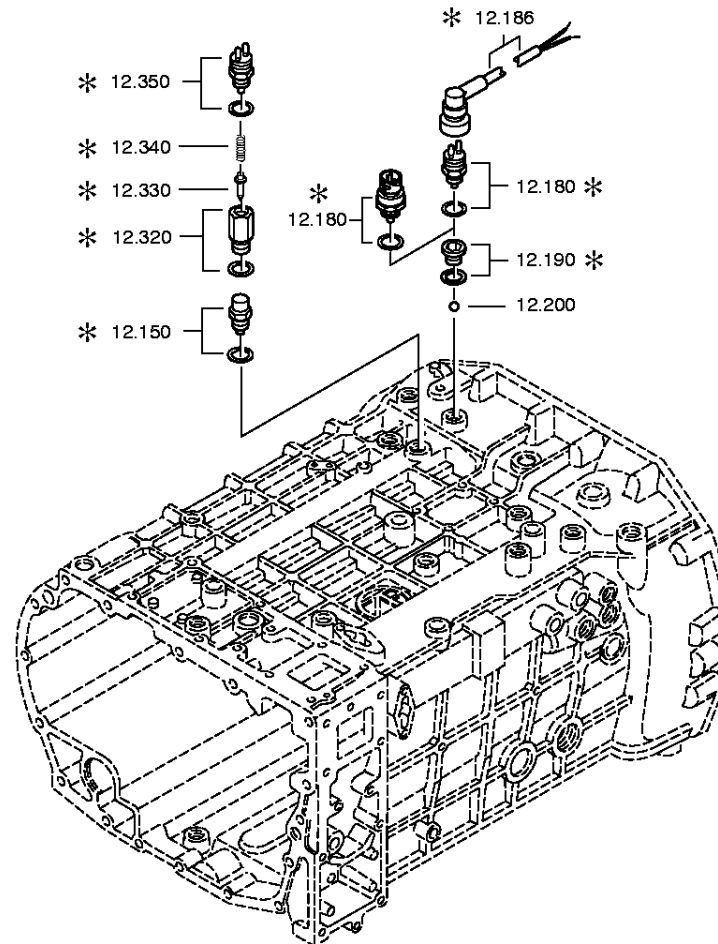
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Plant: 062.40.40-1

GV-SHIFT SYSTEM



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GV-SHIFT SYSTEM



Plant

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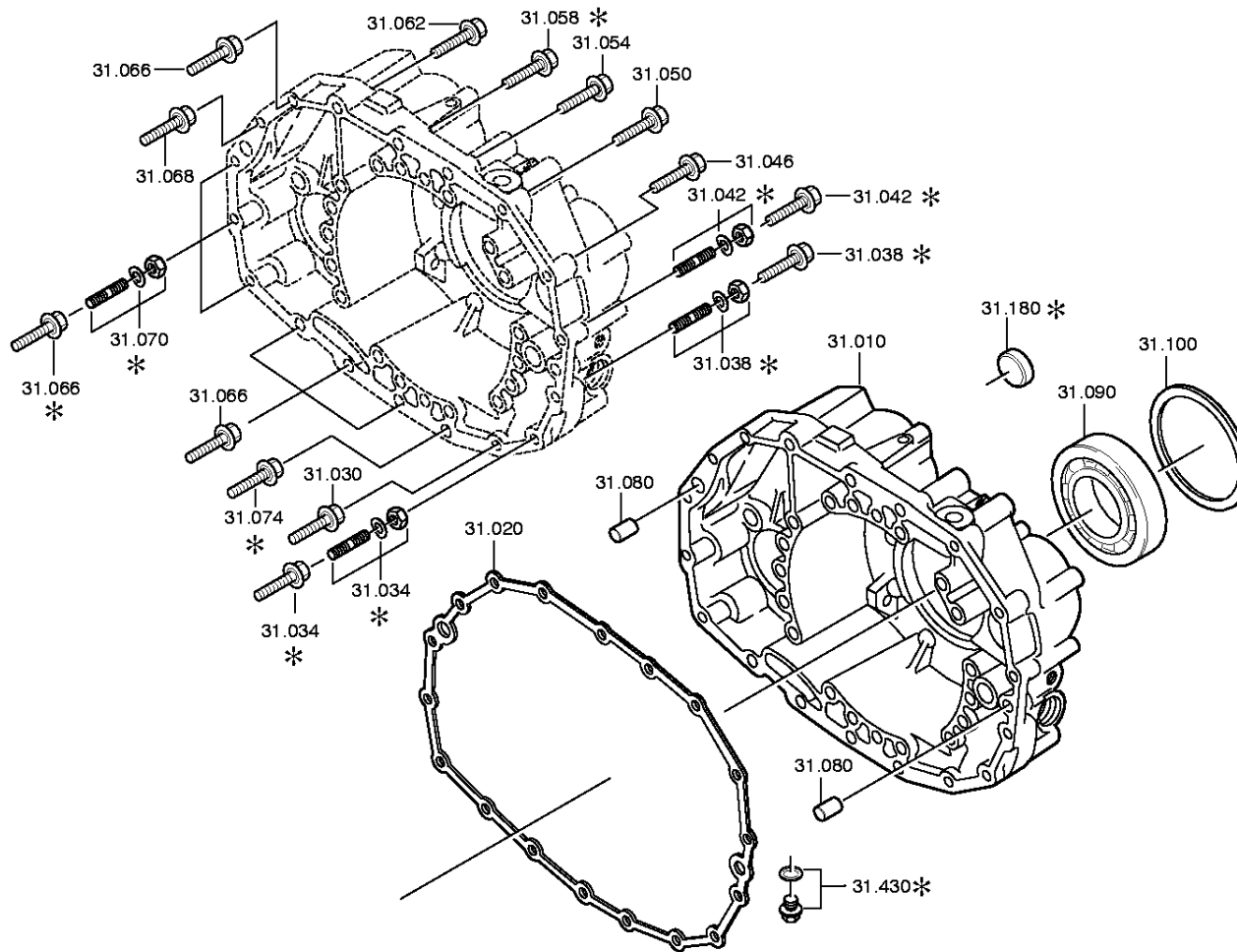
Material number: 1304.050.461

Plant: 062.43.02-1

RC HOUSING



16 S 109 PTO /
RC HOUSING



Plant

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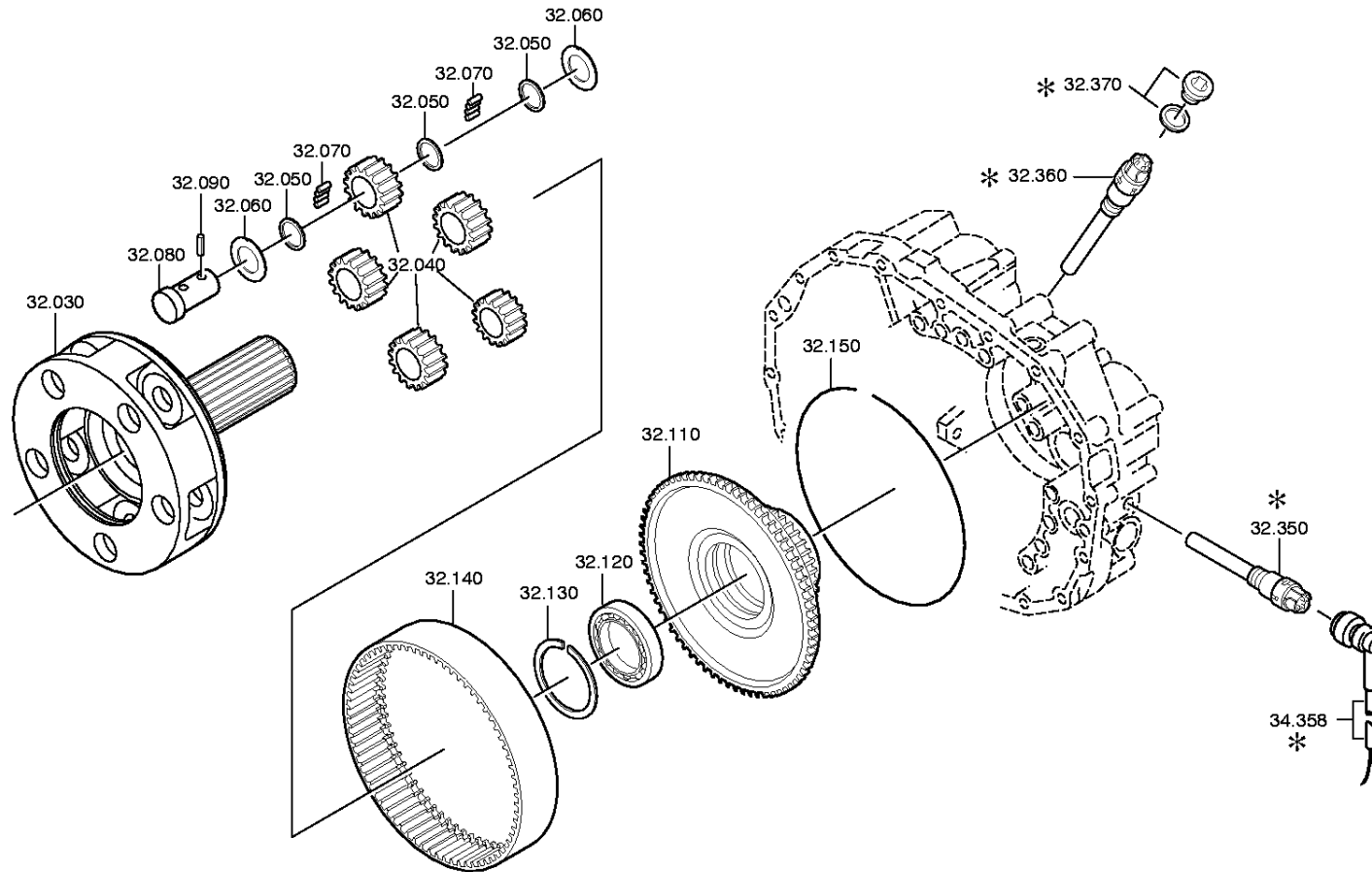
Material number: 1304.050.461

Plant: 062.44.06-1

PLANETARY DRIVE



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PLANETARY DRIVE



Plant

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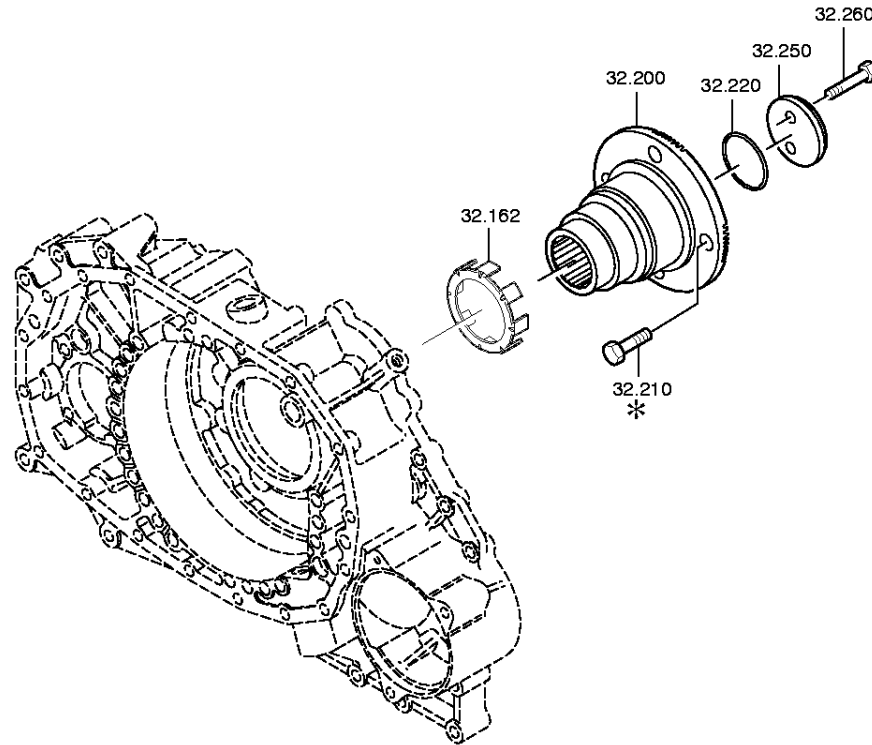
Material number: 1304.050.461

Plant: 062.44.51-1

PLANETARY DRIVE



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PLANETARY DRIVE



Plant

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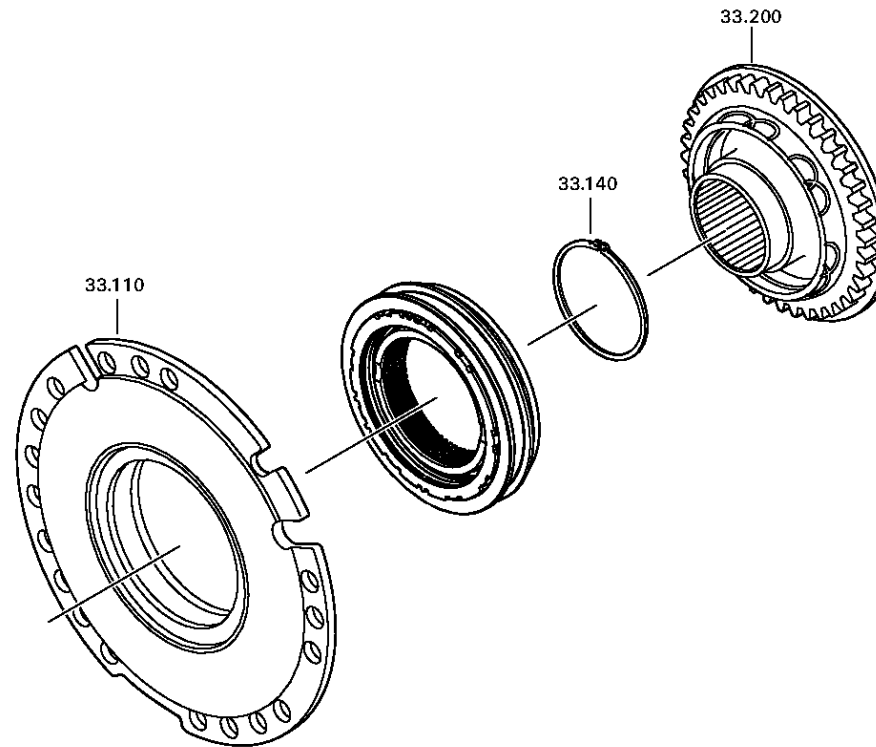
Material number: 1304.050.461

Plant: 062.45.05-1

SYNCHRONIZER



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SYNCHRONIZER



Plant

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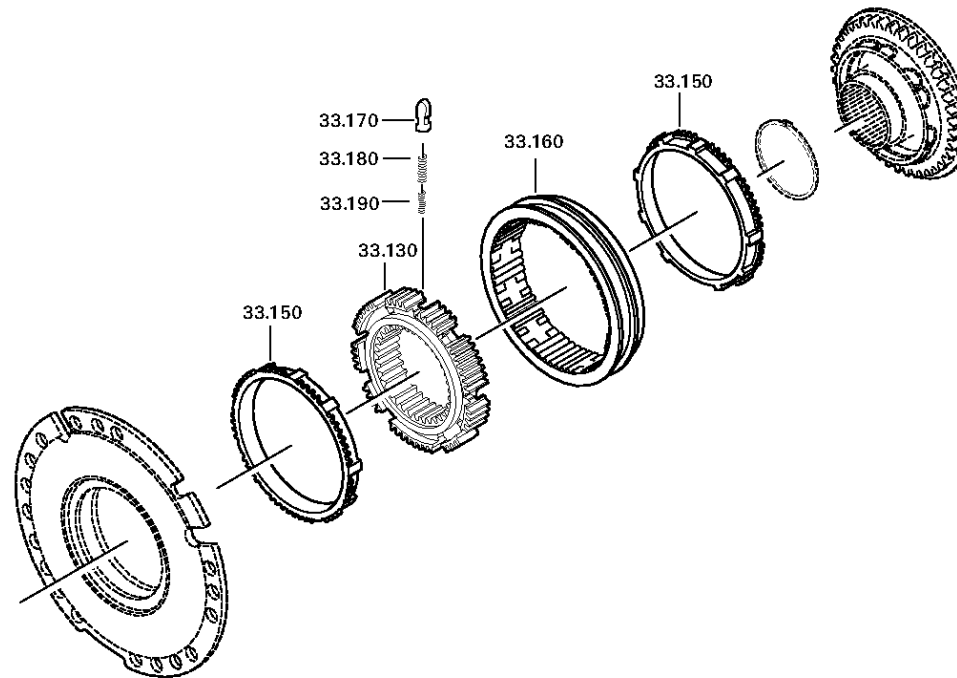
Material number: 1304.050.461

Plant: 062.45.40-1

SYNCHRONIZER



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SYNCHRONIZER



Plant

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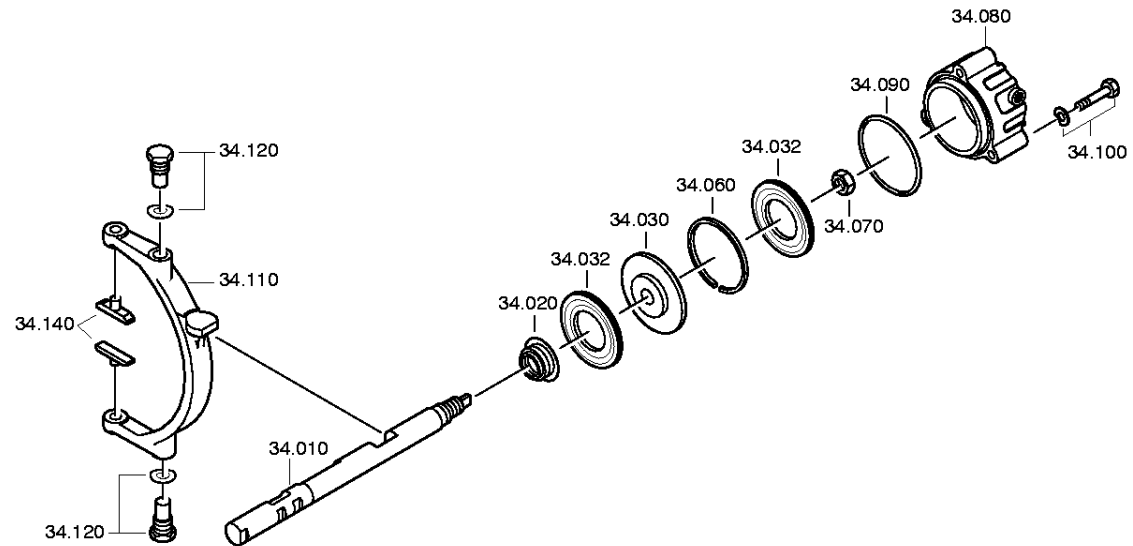
Material number: 1304.050.461

Plant: 062.46.05-1

GP SHIFT SYSTEM



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GP SHIFT SYSTEM



Plant

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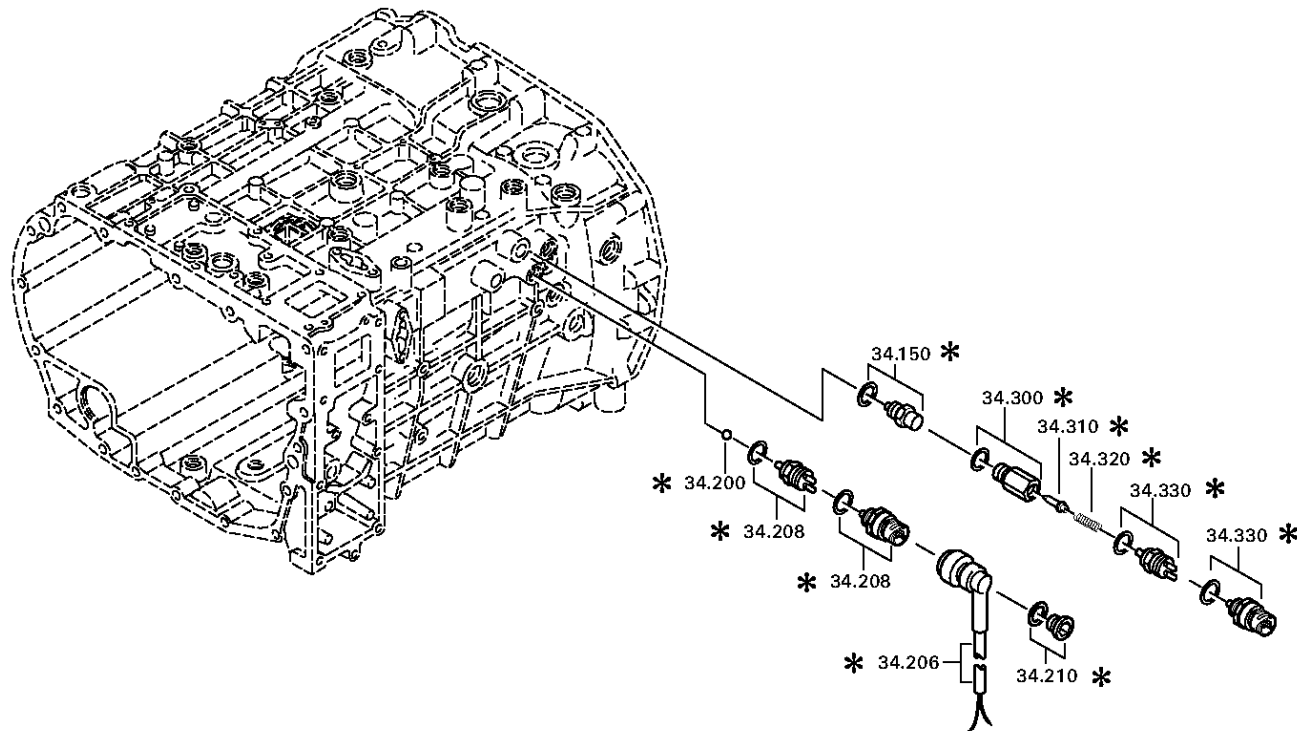
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Plant: 062.46.40-1

GP SHIFT SYSTEM



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GP SHIFT SYSTEM



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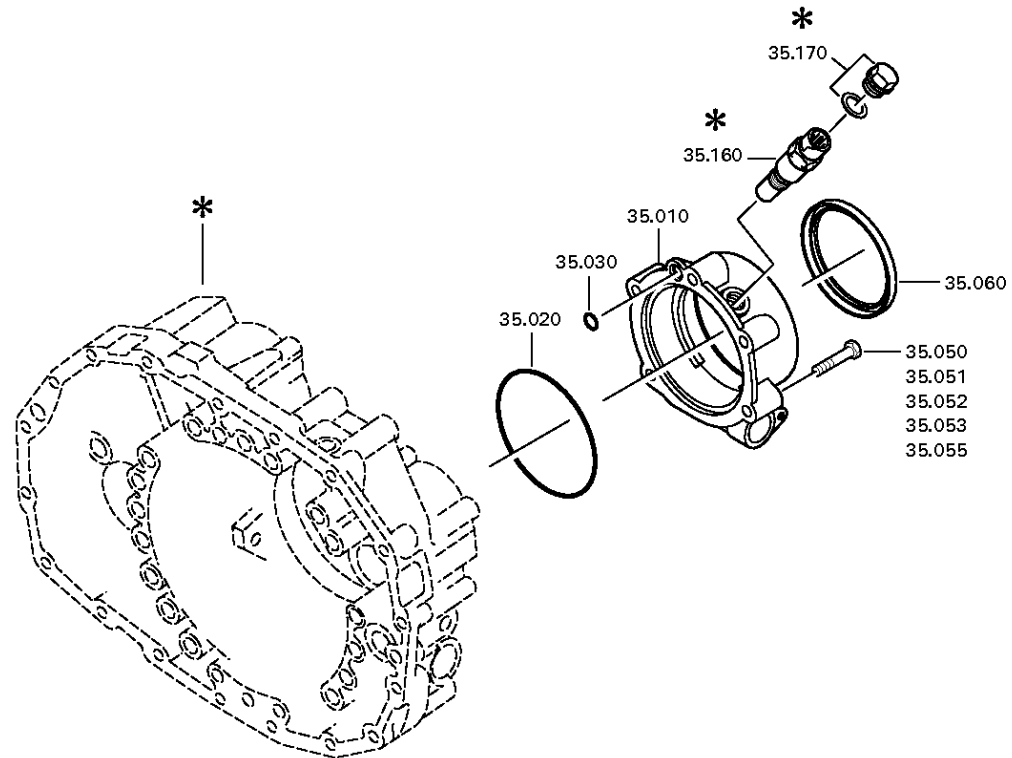
Material number: 1304.050.461

Plant: 062.47.02-1

SPEEDOMETER COVER



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SPEEDOMETER COVER



Plant

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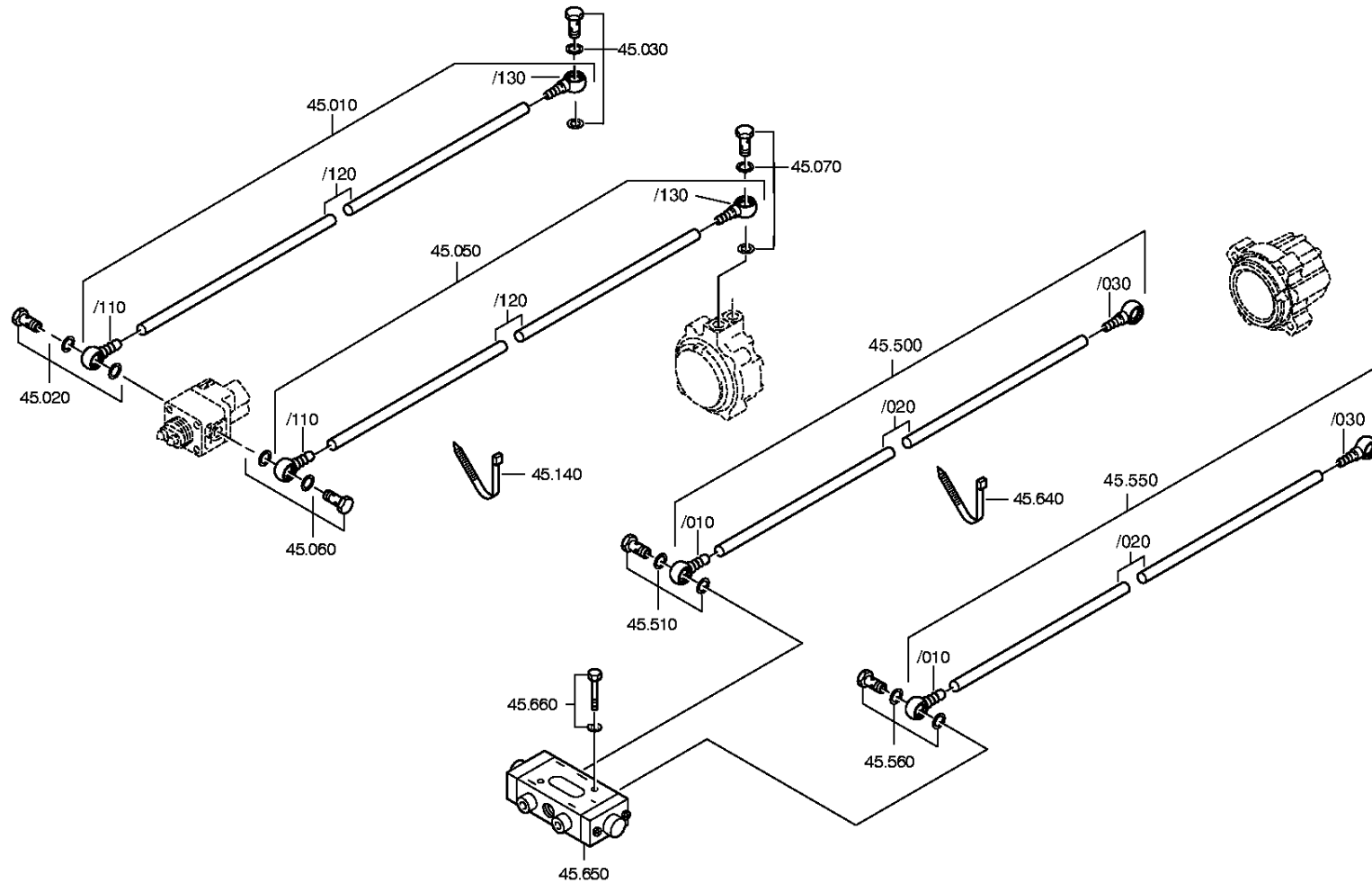
Material number: 1304.050.461

Plant: 062.57.05-1

Material-assembly-group-no: 1304.145.009



16 S 109 PTO /
RANGE SELECTION



Plant

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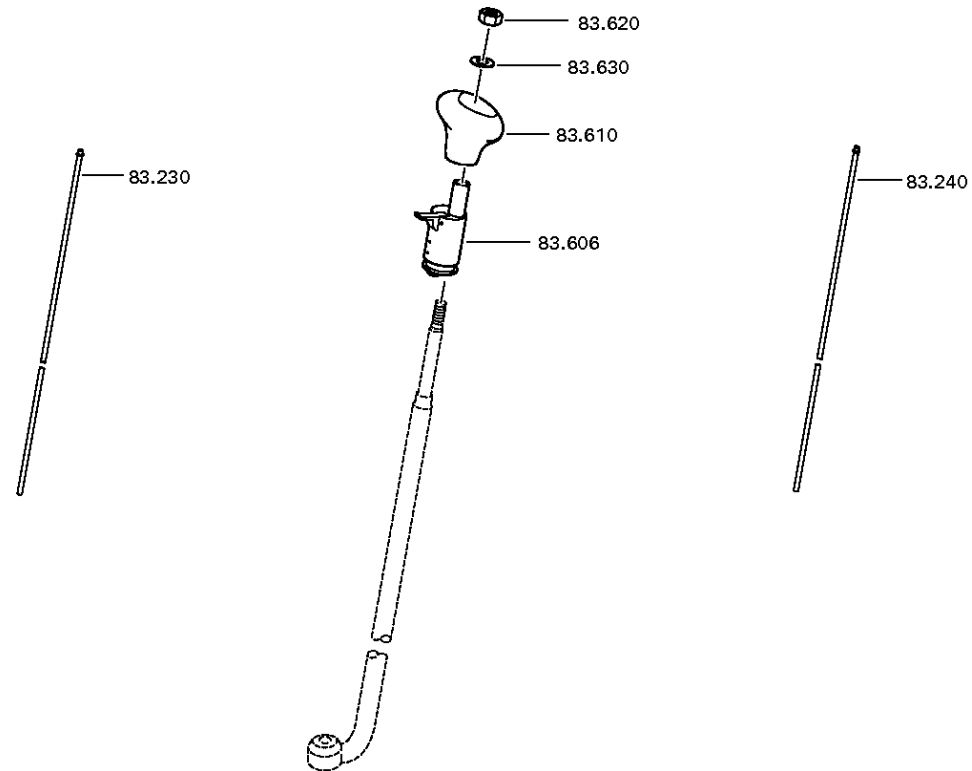
Material number: 1304.050.461

Plant: 015.98.48-1

Material-assembly-group-no: 6005.183.662



16 S 109 PTO /
SHIFT LEVER



Plant

Page 1 from 1

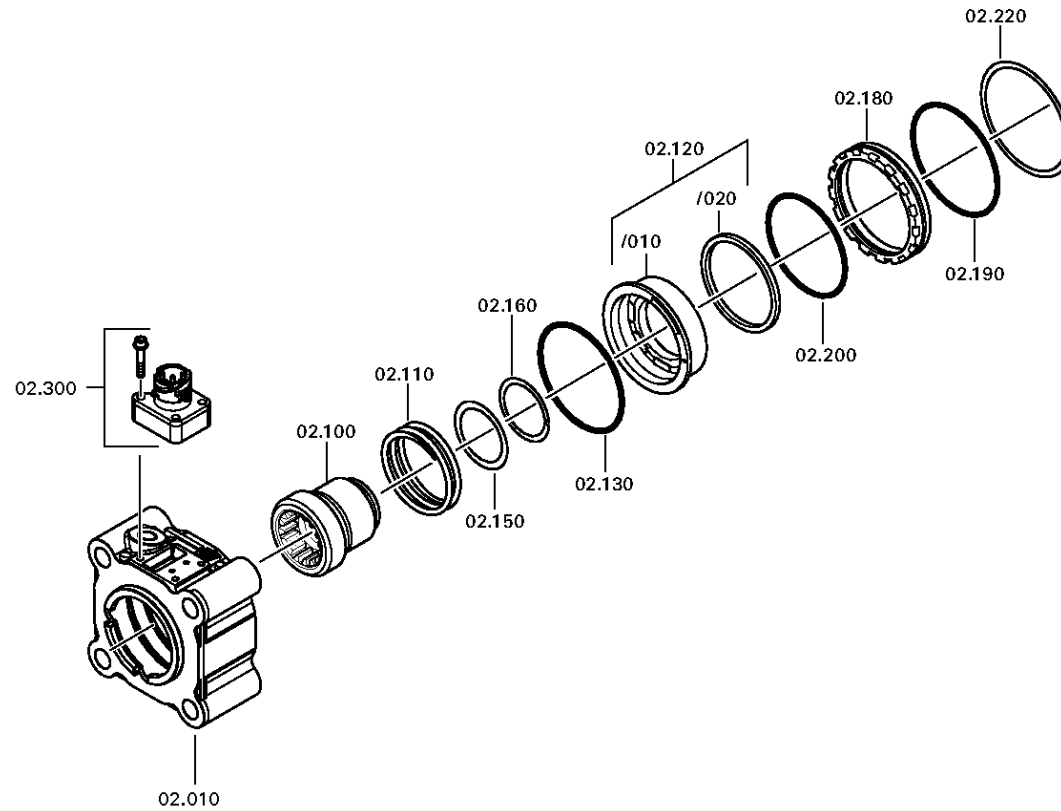
Material number: 6090.012.022

Plant: 054.87.06-1

TYPE PLATE



16 S 109 PTO /
TYPE PLATE



Plant

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Material number: 6090.012.022

Plant: 054.88.05-1

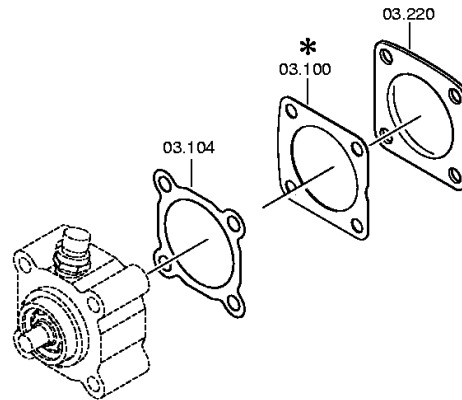
Material-assembly-group-no: 6090.103.005



16 S 109 PTO /
CLOSING COMPONENTS

Bildtafel:
Figure: 054.88.05
Figure:
Figura:

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



NL I C
NH I C

Plant

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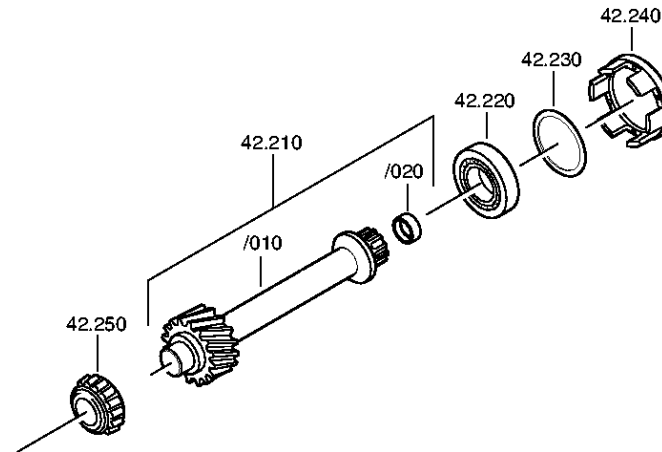
Material number: 6090.190.043

Plant: 054.63.02-1

Material-assembly-group-no: 6090.142.011



16 S 109 PTO /
CONNECTING PARTS



Plant

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Material number: 6090.190.043

Plant: 054.87.81-1

Material-assembly-group-no: 6090.102.802



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ACCESSORIES

