



Spare Parts Catalog

6 WG 160

Material number: 4656.056.058

Current date: 03.08.2018

ZF Friedrichshafen AG

Hauptverwaltung

80038 Friedrichshafen

Deutschland

Telefon: +49 7541 77-0

Telefax: +49 7541 77-908000

www.zf.com

zuständiges Werk:

Passau

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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Material number: 4656.056.058



6 WG 160 /

Pos.	Information	Amendment number
	CUSTOMER: HBM-NOBAS	
	STATE: NORDHAUSEN	
	VEHICLE DATA: -----	
	VEHICLE APPLICATION: GRADER BG 160	
	WEIGHT LOADED (TO): 16.00	
	ENGINE: PERKINS 1106C-E60TA	
	ENGINE POWER(KW): 120	
	SPEED (RPM): 2200	
	INPUT TORQUE(NM): 630	
	SPEED (RPM): 1400	
	TIRES: 17,5 R 25	
	TIRE RADIUS (M): 0.645	
	AXLE RATIO: 20.365	
	MAX. SPEED (KM/H): 39	
	PRODUCT DESCRIPTION: ZF-ERGOPOWER TRANSMISSION	
	TRANSMISSION TYPE 6 WG 160	
	DROP CENTER DISTANCE: 500 MM	
	VEHICLE: GRADER	
	VERSION SPECIAL EXECUTION	
	1. GEAR FORWARD: 5,202	
	2. GEAR FORWARD: 3,367	
	3. GEAR FORWARD: 2,191	
	4. GEAR FORWARD: 1,418	
	5. GEAR FORWARD: 0,944	
	6. GEAR FORWARD: 0,611	
	1. GEAR REVERSE: 4,939	
	2. GEAR REVERSE: 2,078	
	3. GEAR REVERSE: 0,895	
	NUMBER OF PULSES ENGIN: 4	
	NUMBER OF PULSES TURB: 51	
	NUMBER OF PULSES MRK: 55	
	NUMBER OF PULSES OUTP.: 56	
	CONVERTER: W 300	

Technical Cover

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Material number: 4656.056.058



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Pos.	Information	Amendment number
	CONVERTER PART NR: 030 H 250	
	LOCK-UP CLUTCH: WITHOUT	
	STALL TORQUE RATIO: 2,066	
	TORQUE CONVERTER ABSORP 581 NM	
	STATOR FREEWHEEL: WITHOUT	
	ENGINE INPUT: REMOTE MOUNTED VIA JOINT SHAFT	
	INPUT FLANGE: MECHANIC	
	INPUT FLANGE-TYPE: MECH 5 C	
	OUTPUT: STANDARD	
	OUTPUT CONVERTER SIDE: WITHOUT AXLE DISCONNECT	
	OUTPUT FLANGECONVERTER MECHANIC	
	OUTPUT FLANGE TYPE: MECH 6 C	
	OUTPUT PTO SIDE: WITH PARKING BRAKE	
	DISC BRAKE: SAHR FSG 75	
	CONNECTION BRAKE PRESSU JIC 9/16-18	
	RELEASE PRESSURE: 120 - 150 BAR	
	MEDIUM: HYDRAULIK OIL DIN 51525	
	OUTPUT FLANGE PTO SIDE MECHANIC	
	OUTPUT FLANGE-TYPE: MECH 6 C	
	POWER TAKE OFF: 1 PTO COAXIAL ENGINE-DEPENDENT	
	DISCONNECTION: WITHOUT	
	FLANGE: SAE C 2 HOLE	
	DRIVER / PROFILE: SAE C 12/24 DP 14 T	
	GEAR CHANGE CONTROL: ZF-ERGOSHIFT/ PROP VALVE	
	VOLTAGE: 24 VOLT	
	OPERATING PRESSURE: 16+2 BAR	
	CABLE CONNECT. TO EST 3 BAYONET	
	CONTROL SYSTEM: -----	
	ELECTRIC PARTS ORDER: INCLUDED IN SCOPE OF SUPPLY	
	SEPERATE ORDER: EST-37A 6009.092.364	
	NACH FLB 4656 706 867	
	GROUP LOOSE PARTS: 4656.183.033	
	CONTROL UNIT: EST 37A	

Technical Cover

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Material number: 4656.056.058



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Pos.	Information	Amendment number
	VEHICLE SUPPLY VOLTAGE: 24 VOLT	
	GEAR SELECTOR: VTS 3	
	DISPLAY: FOR INBOARD MOUNTING	
	WIRING: WITH	
	OIL TEMPERATURE SENSOR: WITHOUT	
	SPEED CONTROL: CONNECTION VIA EST	
	OIL LEVEL TUBE: MOUNTED ON CONVERTER SIDE	
	OIL DIPSTICK: CUSTOMER SIDE ADAPTION	
	DELIVERY OIL LEV. TUBE: ASSEMBLED	
	FILTER INSTALLATION: SEPARATE	
	ADDITIONAL FILTER WITHOUT	
	PRES. DROP SWITCH: CLOSING SWITCH	
	EMERGENCY STEERING PUMP WITHOUT	
	GEARBOX BREATHER: WITH	
	DOCUMENTATION GEAR BOX: -----	
	SECTION DRAWING: 4656 554 002	
	GEARBOX DIAGRAM: 4656 700 036	
	OIL CIRCUIT DIAGRAMM: 4656 700 037	
	DOCU. CONTROL UNIT: -----	
	DRAWING 6009.665.002	
	DRAWING GEAR SEL. 1: 6006.635.005	
	CONNECTION DIAGRAMM: 6006.700.529	
	WIRING DIAGRAMM: 6029.701.192	
	CONNECTION DIAGRAMM: 6029.701.193	
	DRAWING DISPLAY: 6007.603.047	
	OIL CAPACITY: CA. 21 LITRE	
	GEARBOX OIL CAPACITY: WITHOUT	
	OEL-CLASS: OIL SPECIFICATION TE ML03	
	PRIME CODE: 5 BLACK RAL 9005	
	INSTAL. INSTRUCTIONS: 0000 702 271	
	INSTALLATION DRAWING: 4656.656.058	
	PERFORMANCE CALC.: 4656 706 867	

Assembly group overview

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Material number: 4656.056.058

Graphics	Pos.	Material number	Name	Quantity	Amend. no.	Techn. Info.
465613002300	270	4656.130.023	ENGINE CONNECTION	1		
465613040100	280	4656.130.401	ENGINE CONNECTION	1		
416603017200	500	4166.030.172	CONVERTER	1		
465610201500	30	4656.102.015	INPUT	1		
465610101901	10	4656.101.019	TRANSMISSION HOUSING	1		
465617105500	350	4656.171.055	COUPLING	1		
465617204000	360	4656.172.040	COUPLING	1		
465617304800	370	4656.173.048	COUPLING	1		
465617403800	380	4656.174.038	COUPLING	1		
465617504800	390	4656.175.048	CLUTCH	1		
465617605800	400	4656.176.058	CLUTCH	1		
465610300800	50	4656.103.008	OUTPUT	1		
465610341100	60	4656.103.411	OUTPUT	1		
465610900500	170	4656.109.005	PARKING BRAKE	1		
465610940600	70	4656.109.406	PARKING BRAKE	1		
465615400600	340	4656.154.006	POWER TAKE-OFF	1		

Assembly group overview

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Material number: 4656.056.058



6 WG 160 /

Graphics	Pos.	Material number	Name	Quantity	Amend. no.	Techn. Info.
465610601300	110	4656.106.013	SHIFT SYSTEM	1		
465710640720	115	4657.106.407	SHIFT SYSTEM	1		
465615901921	120	4656.159.019	SHIFT SYSTEM	1		
465612300200	230	4656.123.002	CONTROL UNIT	1		
465612000500	190	4656.120.005	PRESSURE REGULATOR	1		
465612200500	220	4656.122.005	PRESSURE OIL PUMP	1		
465613700400	310	4656.137.004	EMERGENCY STEERING PUMP	1		
465612500600	250	4656.125.006	INDUCTIVE SENSOR	1		
465712400100	240	4657.124.001	TEMPERATURE SENSOR	1		
465613800500	330	4656.138.005	FILTER	1		
465619940200	335	4656.199.402	LOOSE PARTS	1		
465613100600	290	4656.131.006	OIL DIPSTICK	1		
465619902900	490	4656.199.029	LOOSE PARTS	1		
465618303300	495	4656.183.033	LOOSE PARTS	1		

Plant

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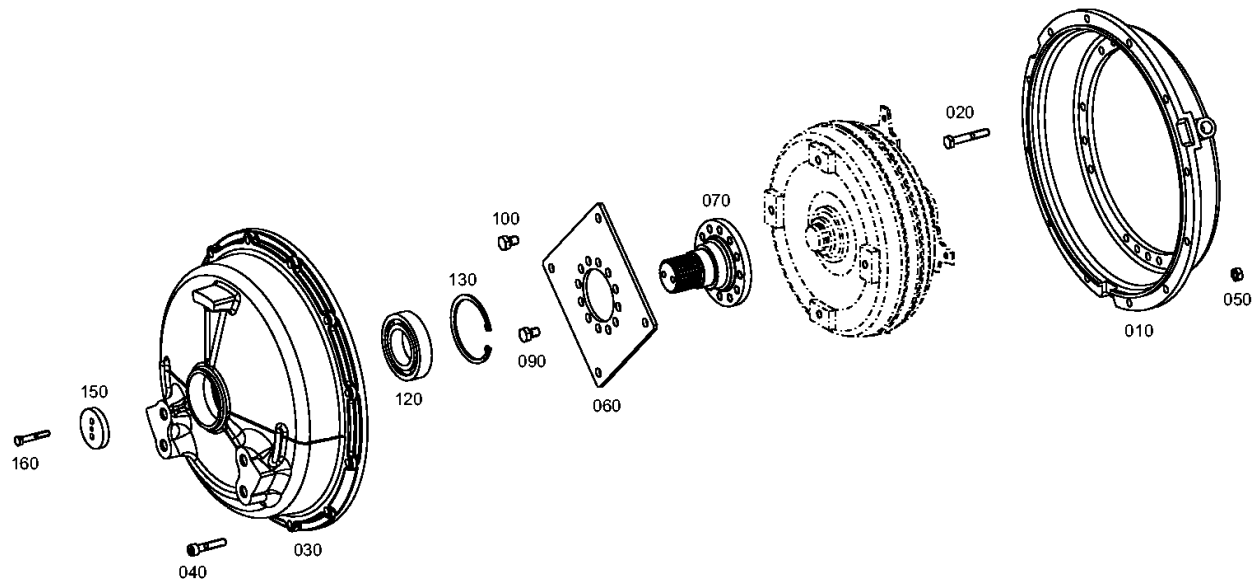
Material number: 4656.056.058

Plant: 465613002300

Material-assembly-group-no: 4656.130.023



6 WG 160 /
ENGINE CONNECTION



Plant

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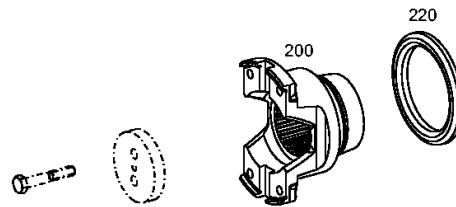
Material number: 4656.056.058

Plant: 465613040100

Material-assembly-group-no: 4656.130.401



6 WG 160 /
ENGINE CONNECTION



Plant

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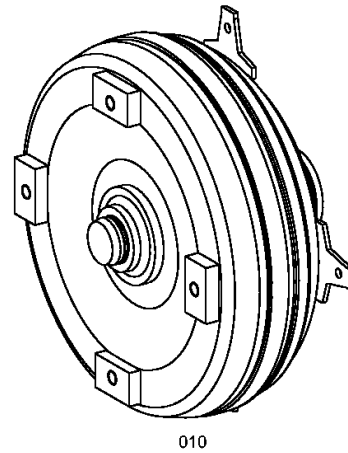
Material number: 4656.056.058

Plant: 416603017200

Material-assembly-group-no: 4166.030.172



6 WG 160 /
CONVERTER



010

Plant

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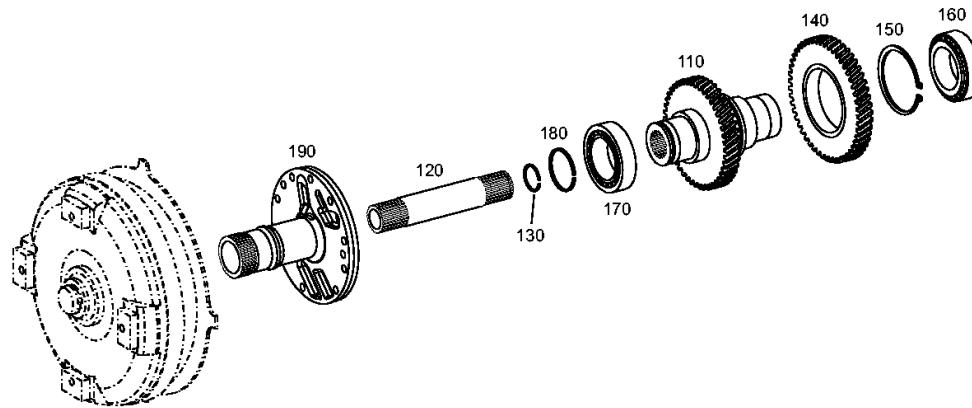
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Plant: 465610201500

Material-assembly-group-no: 4656.102.015



6 WG 160 /
INPUT



Plant

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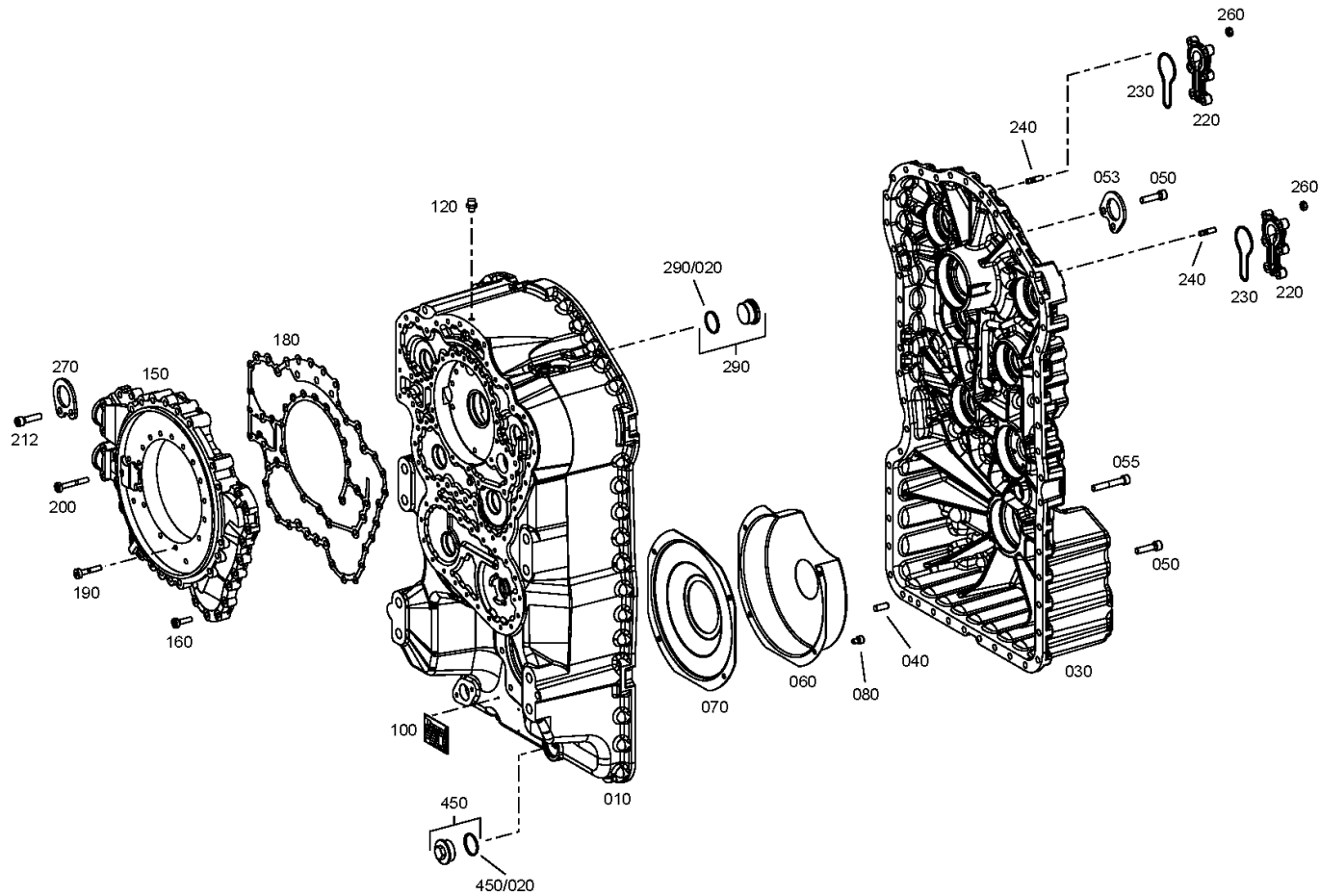
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Plant: 465610101901

Material-assembly-group-no: 4656.101.019



6 WG 160 /
TRANSMISSION HOUSING



Plant

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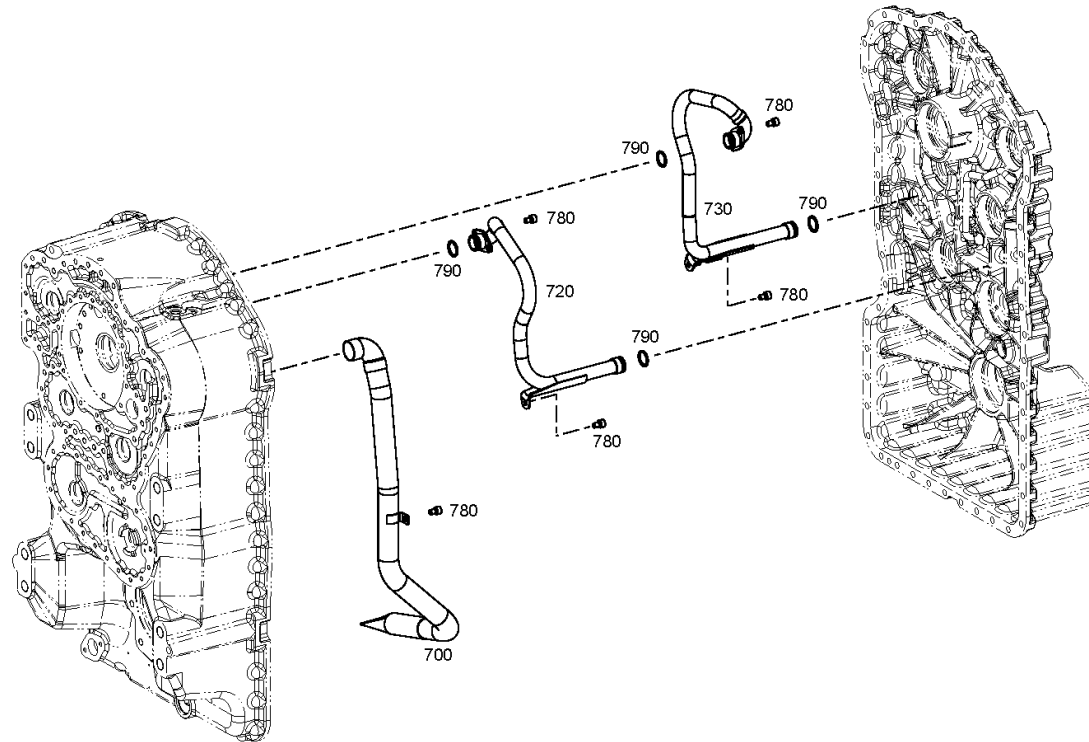
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Plant: 465610101902

Material-assembly-group-no: 4656.101.019



6 WG 160 /
TRANSMISSION HOUSING



Plant

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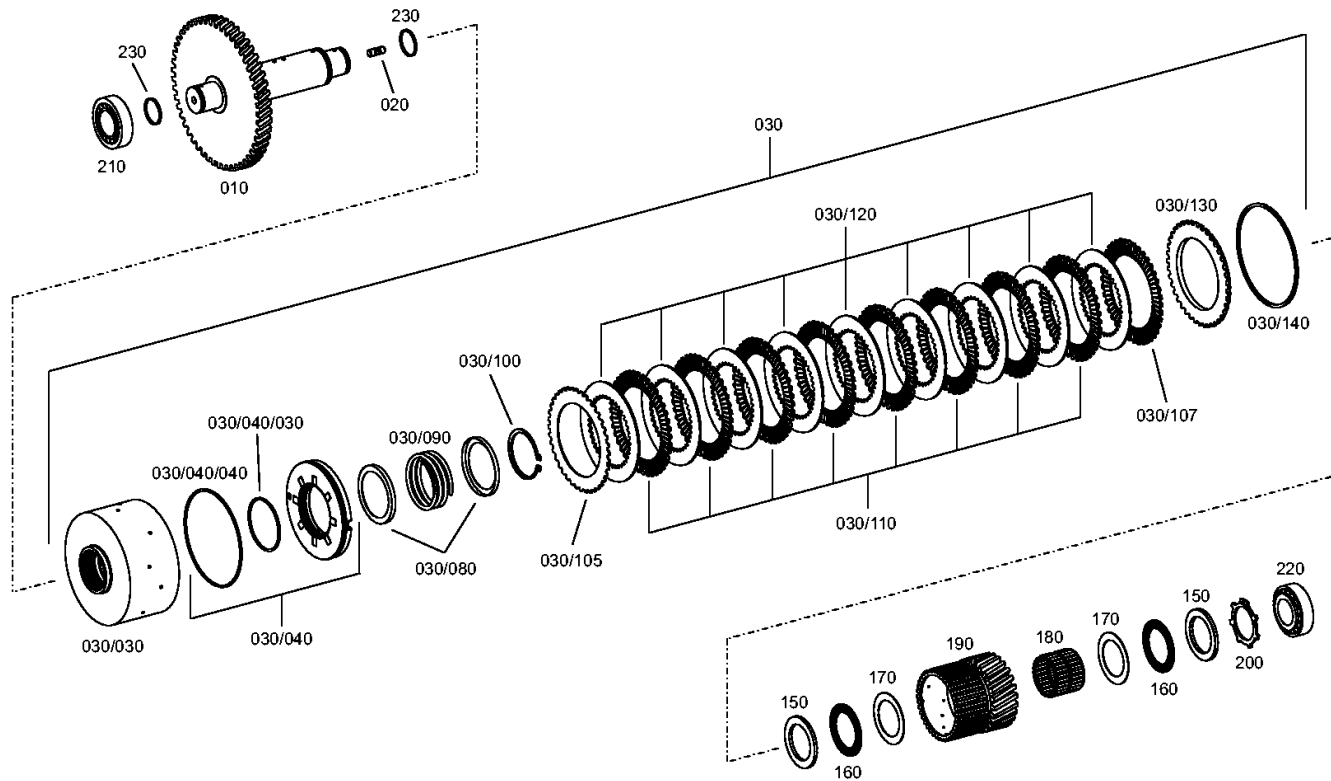
Material number: 4656.056.058

Plant: 465617105500

Material-assembly-group-no: 4656.171.055



6 WG 160 /
COUPLING



Plant

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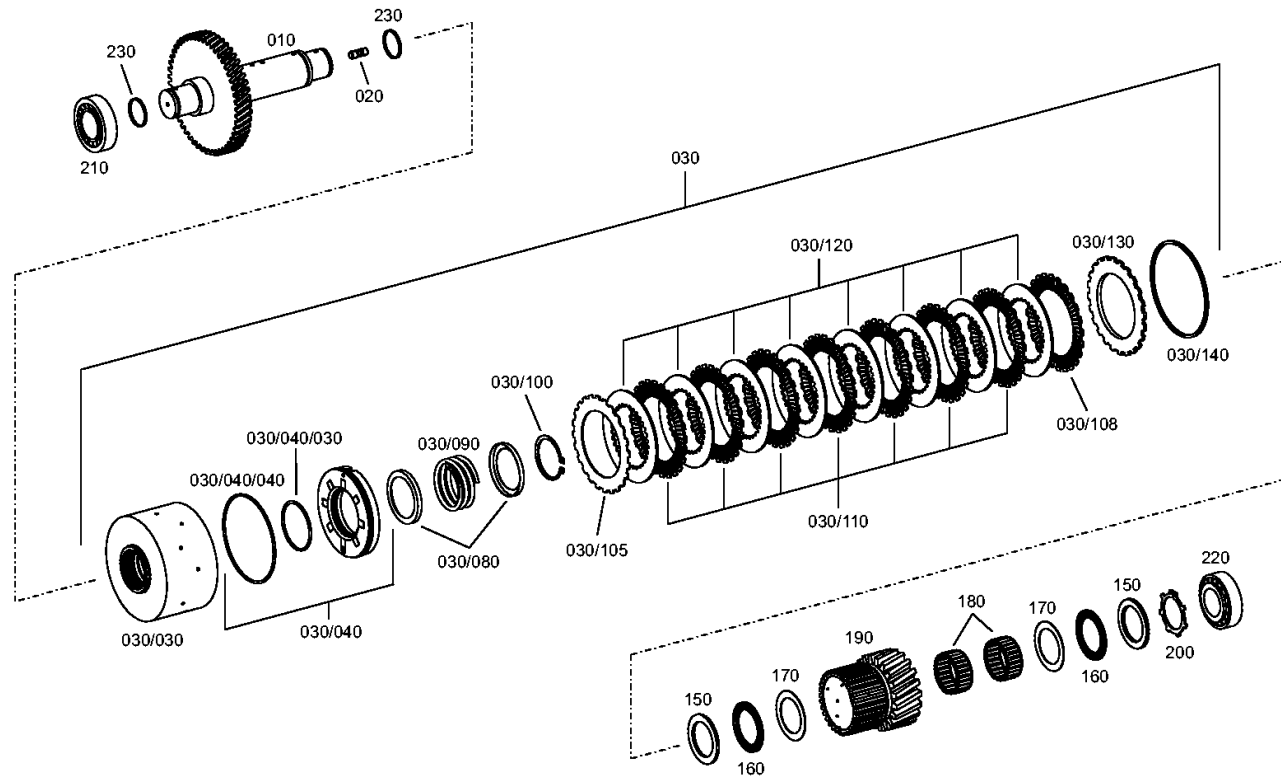
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Plant: 465617204000

Material-assembly-group-no: 4656.172.040



6 WG 160 /
COUPLING



Plant

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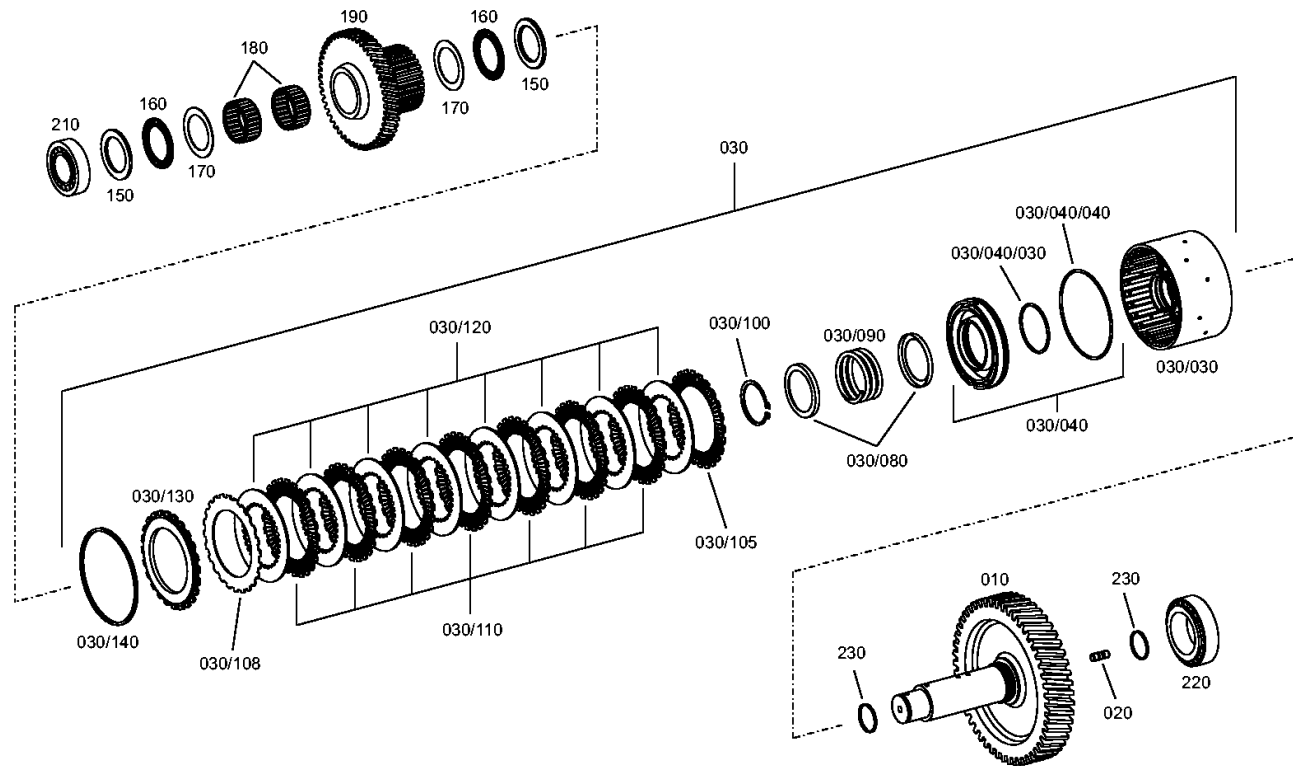
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Plant: 465617304800

Material-assembly-group-no: 4656.173.048



6 WG 160 /
COUPLING



Plant

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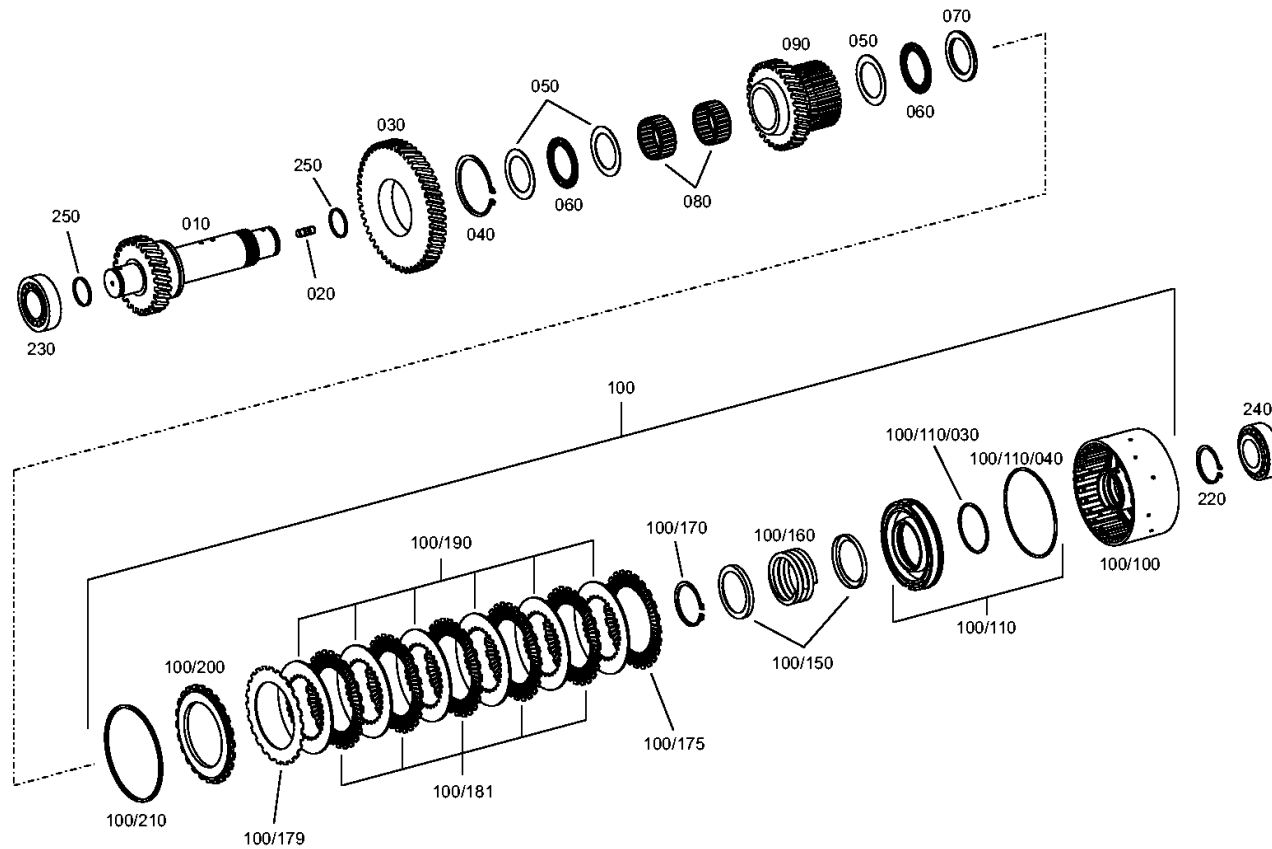
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Plant: 465617403800

Material-assembly-group-no: 4656.174.038



6 WG 160 /
COUPLING



Plant

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Material number: 4656.056.058

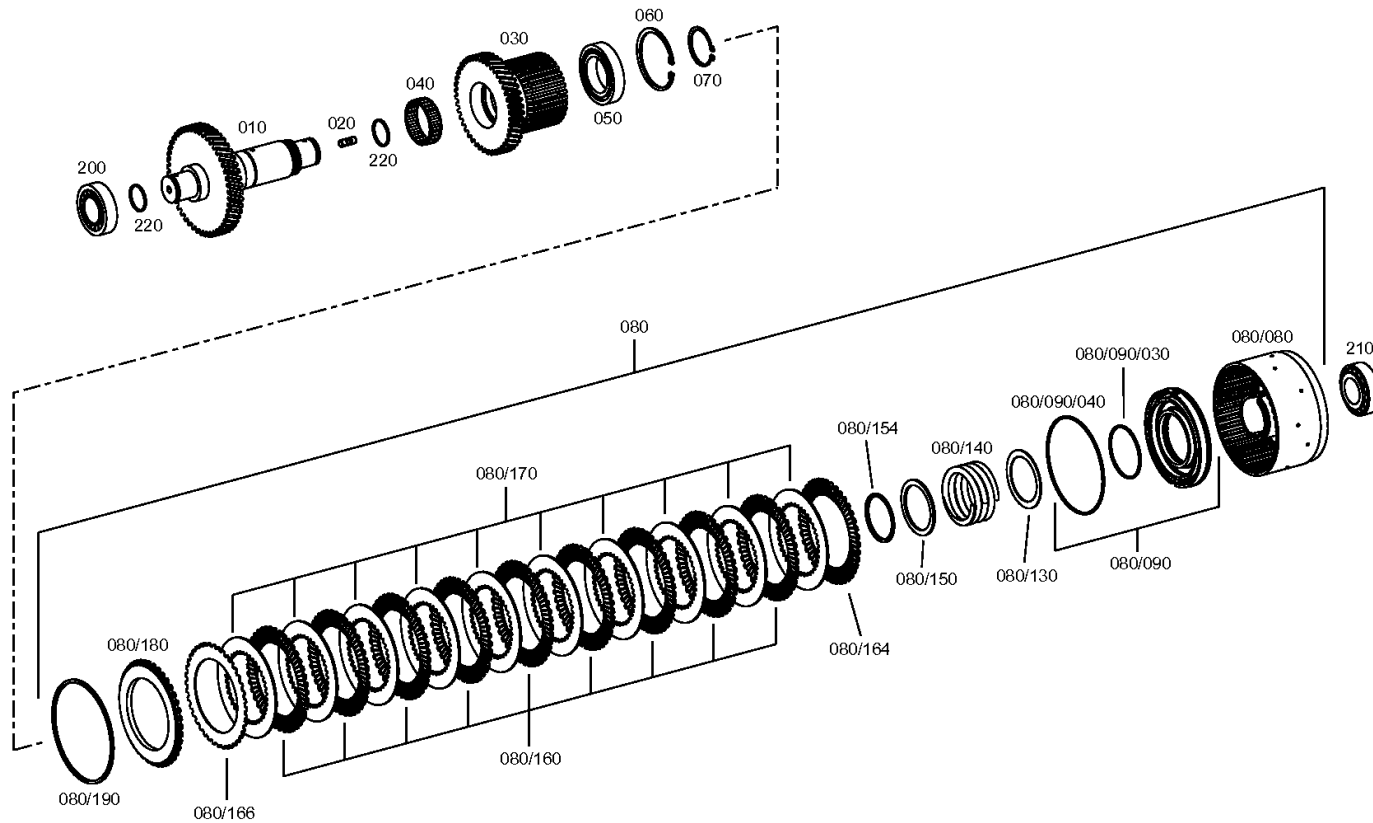
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Material-assembly-group-no: 4656.175.048



6 WG 160 /
CLUTCH

KV



Plant

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Material number: 4656.056.058

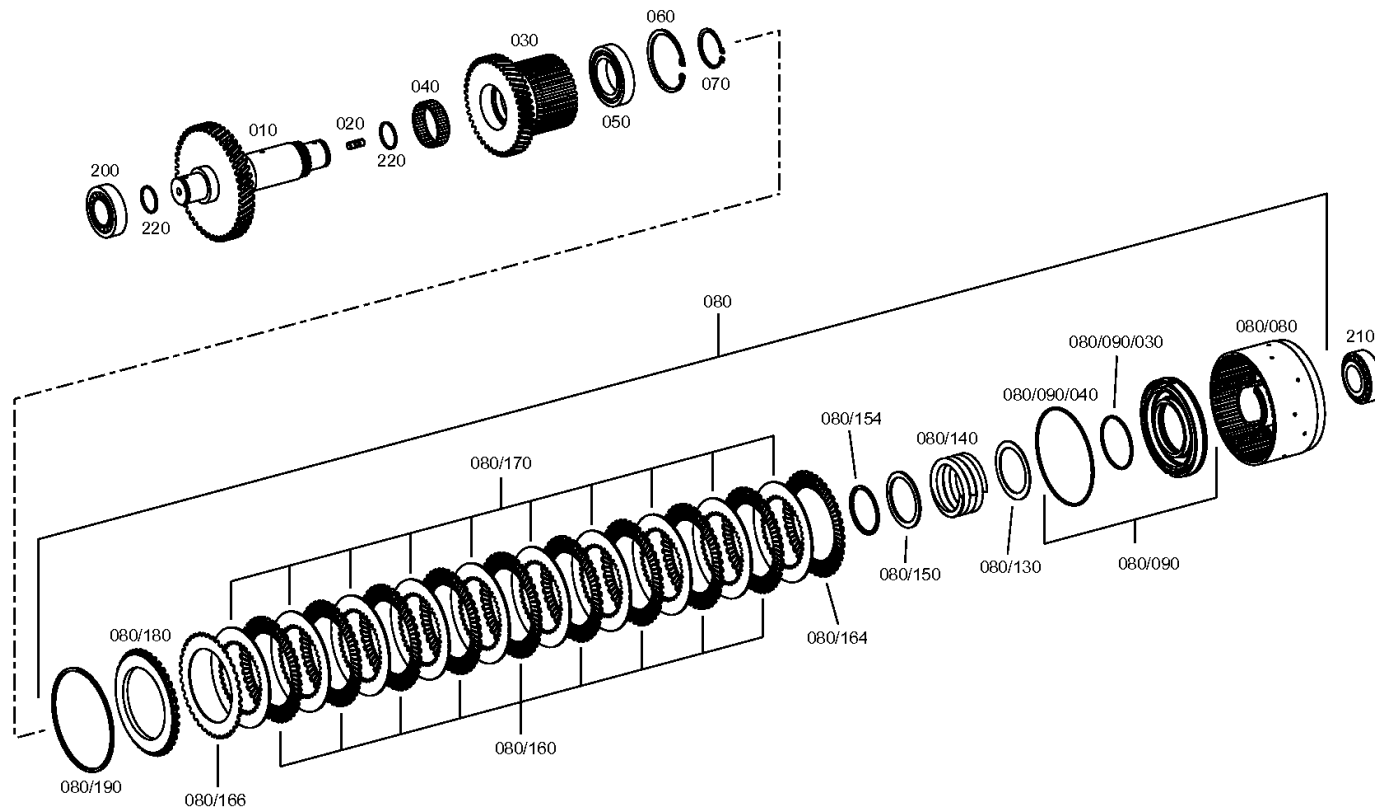
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Material-assembly-group-no: 4656.176.058



6 WG 160 /
CLUTCH

KR



Plant

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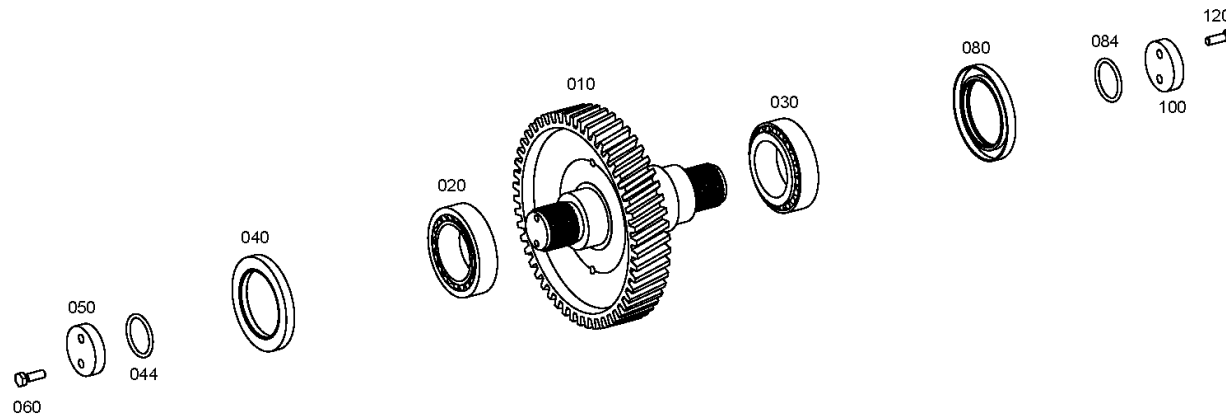
Material number: 4656.056.058

Plant: 465610300800

Material-assembly-group-no: 4656.103.008



6 WG 160 /
OUTPUT



Plant

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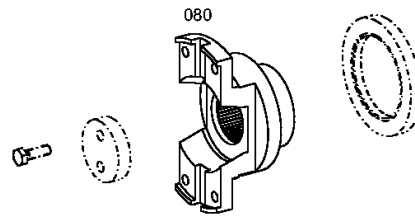
Material number: 4656.056.058

Plant: 465610341100

Material-assembly-group-no: 4656.103.411



6 WG 160 /
OUTPUT



Plant

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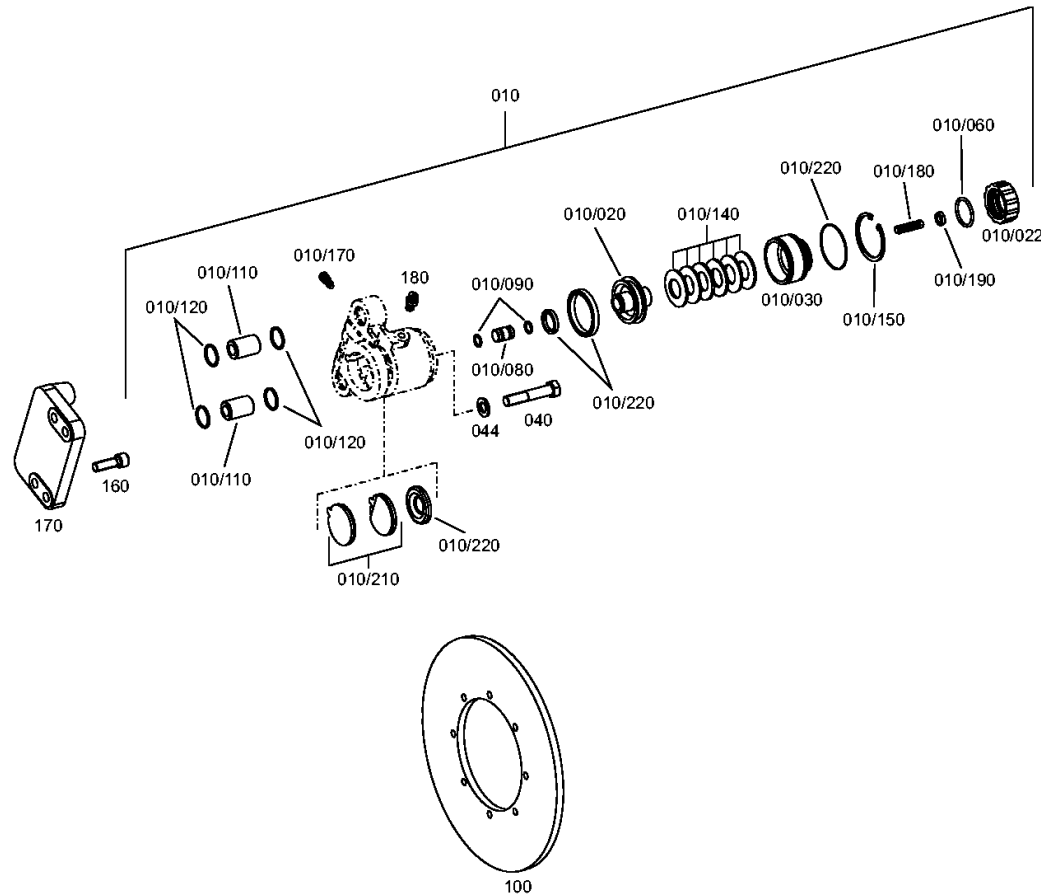
Material number: 4656.056.058

Plant: 465610900500

Material-assembly-group-no: 4656.109.005



6 WG 160 /
PARKING BRAKE



Plant

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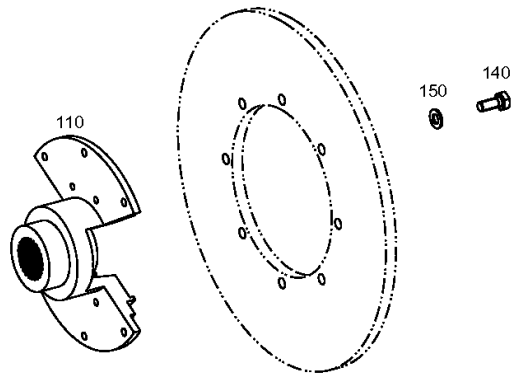
Material number: 4656.056.058

Plant: 465610940600

Material-assembly-group-no: 4656.109.406



6 WG 160 /
PARKING BRAKE



Plant

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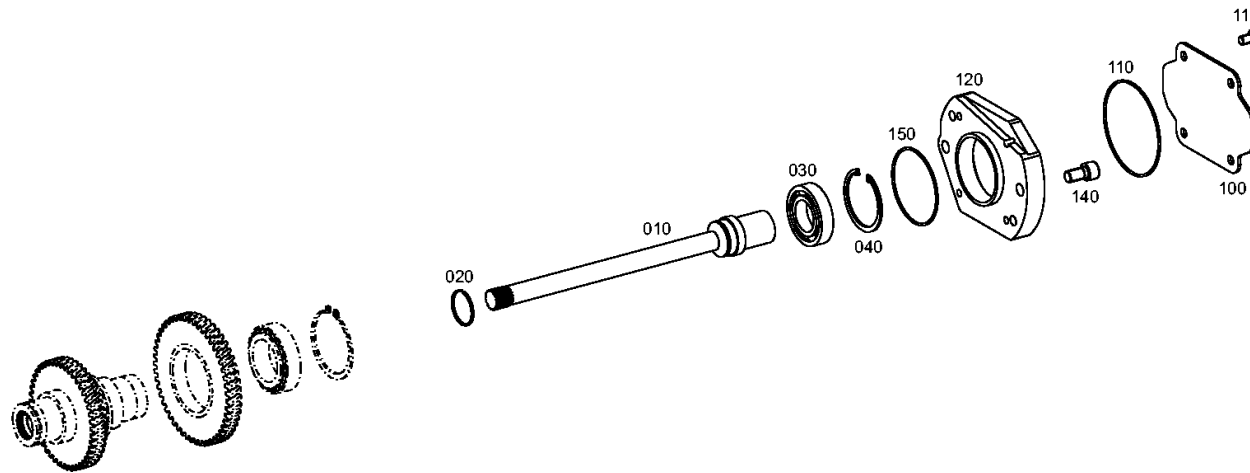
Material number: 4656.056.058

Plant: 465615400600

Material-assembly-group-no: 4656.154.006



6 WG 160 /
POWER TAKE-OFF



Plant

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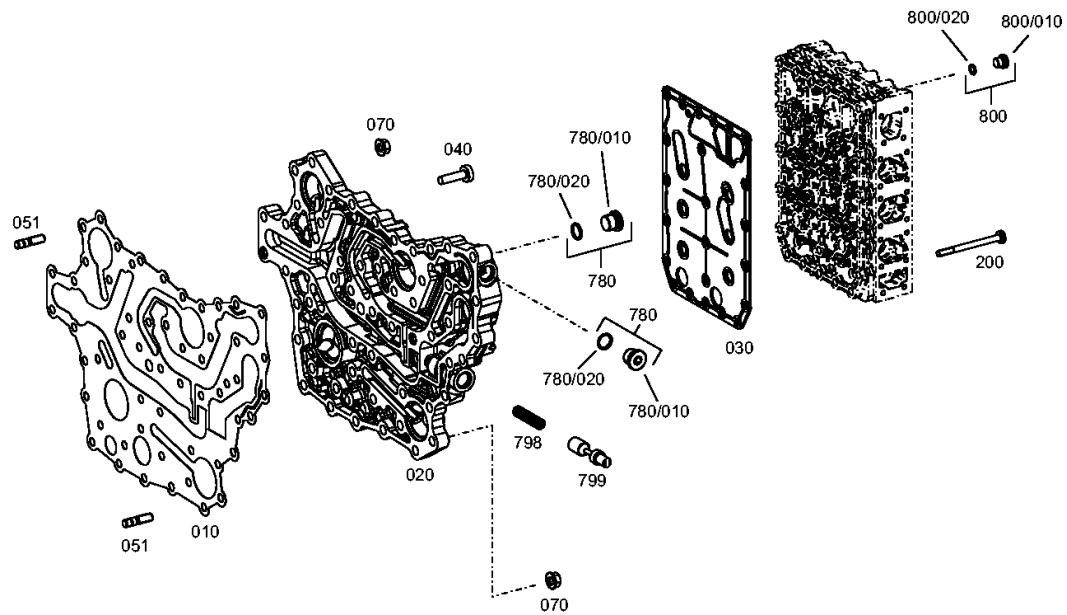
Material number: 4656.056.058

Plant: 465610601300

Material-assembly-group-no: 4656.106.013



6 WG 160 /
SHIFT SYSTEM



Plant

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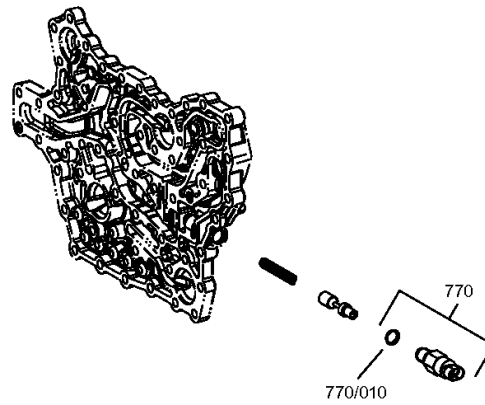
Material number: 4656.056.058

Plant: 465710640720

Material-assembly-group-no: 4657.106.407



6 WG 160 /
SHIFT SYSTEM



Plant

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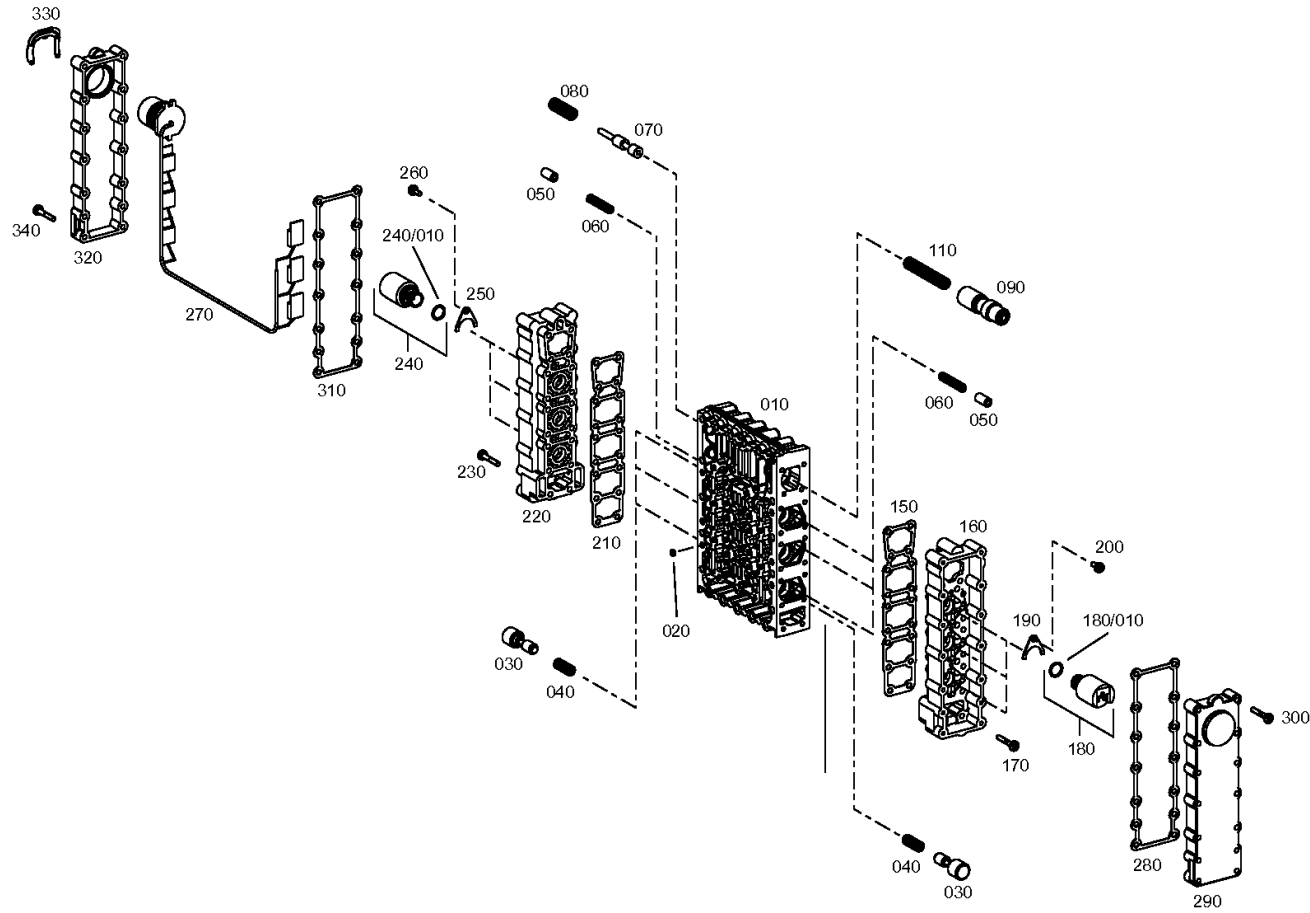
Material number: 4656.056.058

Plant: 465615901921

Material-assembly-group-no: 4656.159.019



6 WG 160 /
SHIFT SYSTEM



Plant

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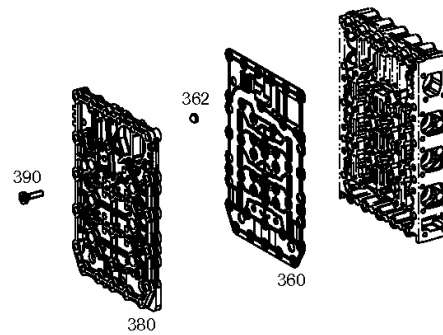
Material number: 4656.056.058

Plant: 465615901922

Material-assembly-group-no: 4656.159.019



6 WG 160 /
SHIFT SYSTEM



Plant

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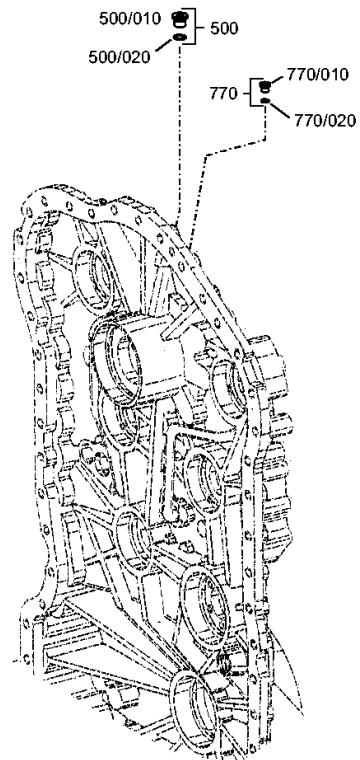
Material number: 4656.056.058

Plant: 465612300200

Material-assembly-group-no: 4656.123.002



6 WG 160 /
CONTROL UNIT



Plant

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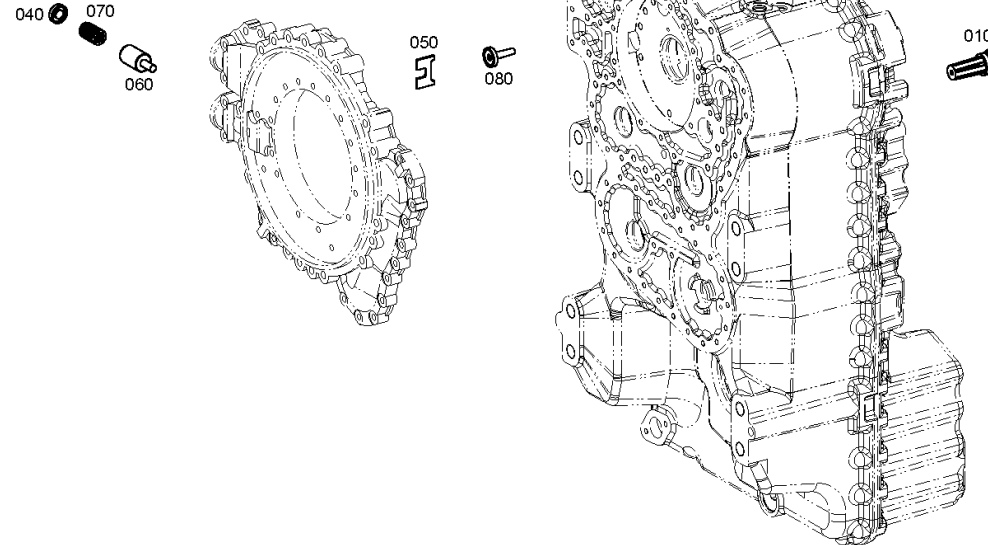
Material number: 4656.056.058

Plant: 465612000500

Material-assembly-group-no: 4656.120.005



6 WG 160 /
PRESSURE REGULATOR



Plant

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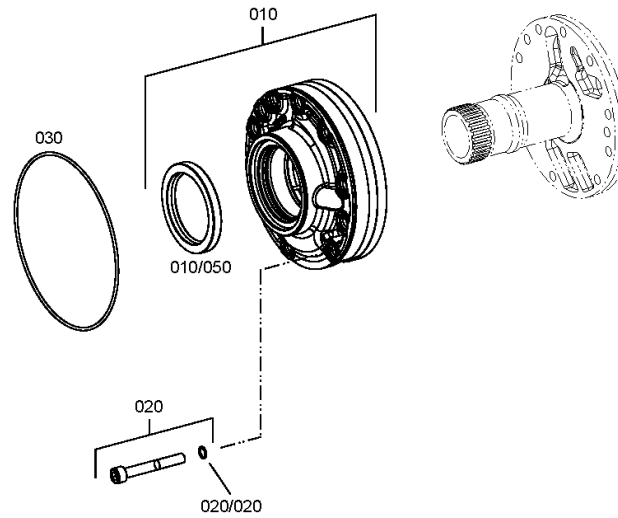
Material number: 4656.056.058

Plant: 465612200500

Material-assembly-group-no: 4656.122.005



6 WG 160 /
PRESSURE OIL PUMP



Plant

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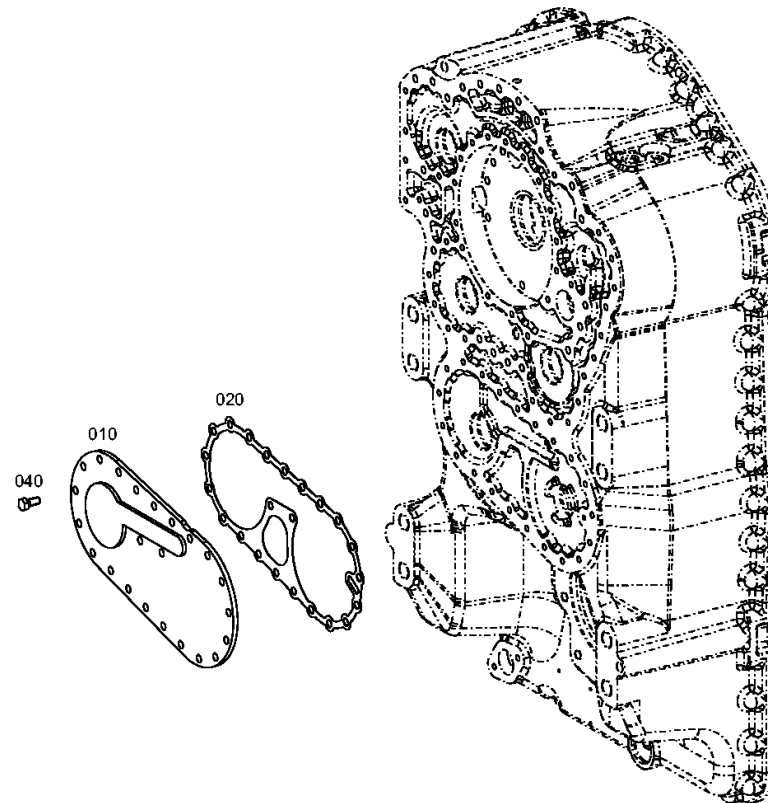
Material number: 4656.056.058

Plant: 465613700400

Material-assembly-group-no: 4656.137.004



6 WG 160 /
EMERGENCY STEERING PUMP



Plant

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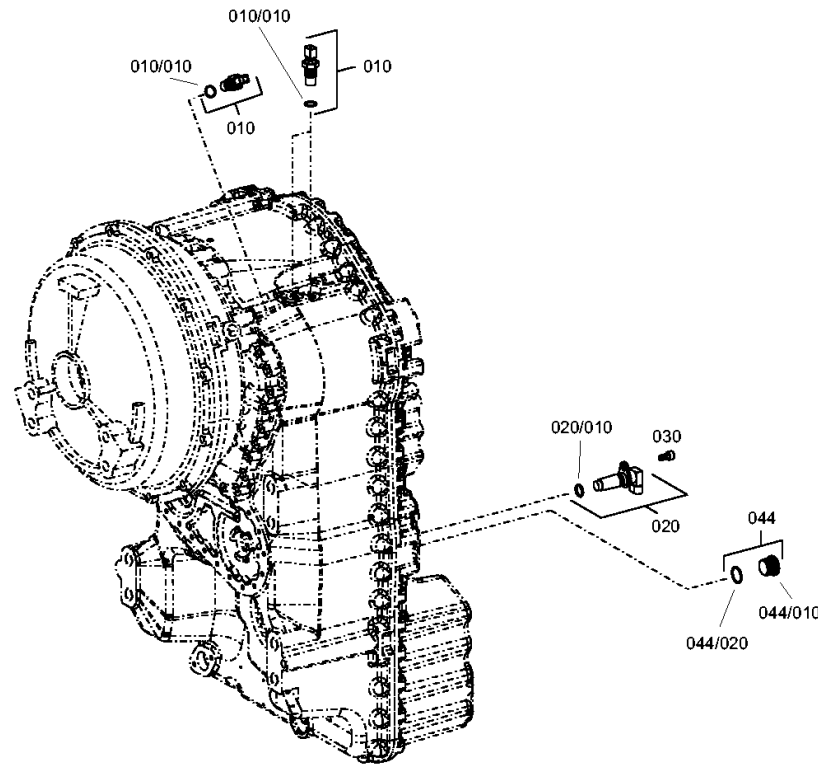
Material number: 4656.056.058

Plant: 465612500600

Material-assembly-group-no: 4656.125.006



6 WG 160 /
INDUCTIVE SENSOR



Plant

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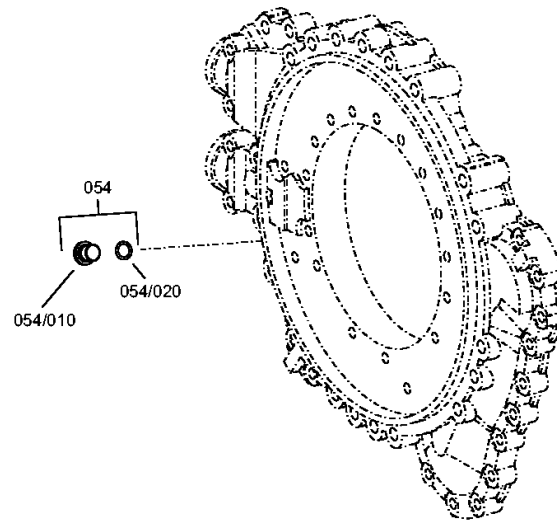
Material number: 4656.056.058

Plant: 465712400100

Material-assembly-group-no: 4657.124.001



6 WG 160 /
TEMPERATURE SENSOR



Plant

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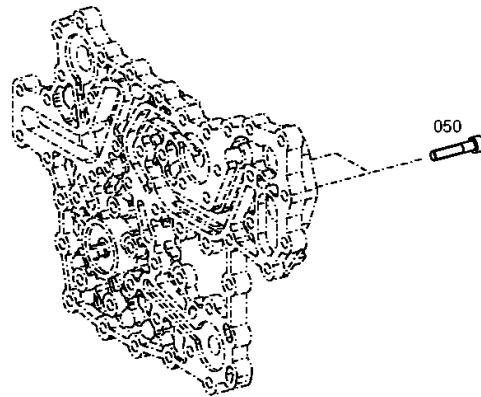
Material number: 4656.056.058

Plant: 465613800500

Material-assembly-group-no: 4656.138.005



6 WG 160 /
FILTER



Plant

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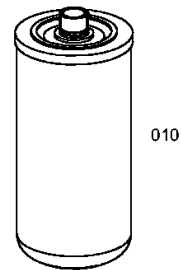
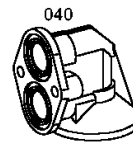
Material number: 4656.056.058

Plant: 465619940200

Material-assembly-group-no: 4656.199.402



6 WG 160 /
LOOSE PARTS



Plant

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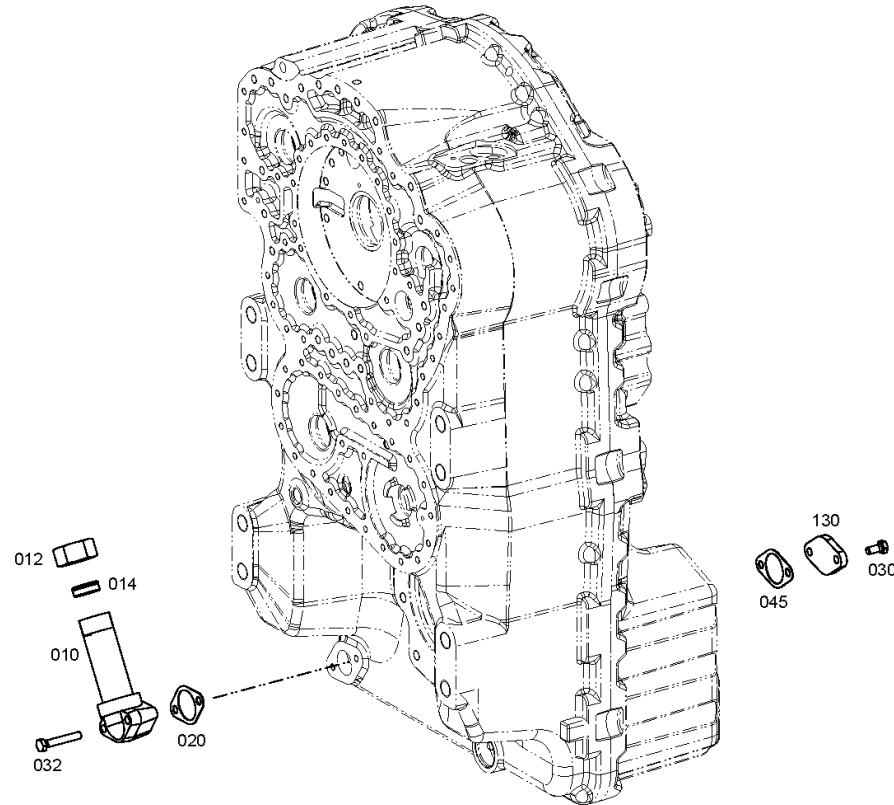
Material number: 4656.056.058

Plant: 465613100600

Material-assembly-group-no: 4656.131.006



6 WG 160 /
OIL DIPSTICK



Plant

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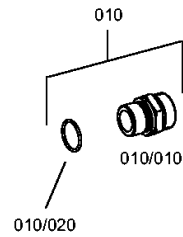
Material number: 4656.056.058

Plant: 465619902900

Material-assembly-group-no: 4656.199.029



6 WG 160 /
LOOSE PARTS



Plant

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Material number: 4656.056.058

Plant: 465618303300

Material-assembly-group-no: 4656.183.033



6 WG 160 /
LOOSE PARTS

