



# Spare Parts Catalog

4 BP 210

Material number: 4681.054.007

Current date: 11.05.2019

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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: 4681.054.007



4 BP 210 /

Pos.	Information	Amendment number
	CUSTOMER: LIUGONG	
	1.PERFORMANCE CALC.: 4657 708 152	
	VEHICLE DESIGNATION: CLG856H STANDARD	
	WEIGHT EMPTY: 17,200 TO	
	ENGINE: CUMMINS T4F FR93882	
	ENGINE POWER: 167,5 KW	
	SPEED: 2000 U/MIN	
	INPUT TORQUE: 949 N/M	
	SPEED: 1500 U/MIN	
	TYRE SIZE: 23,5-25	
	TYRE RADIUS DYN.: 0,765 M	
	AXLE RATIO: 23,333	
	MAX. SPEED: 38,6 KM/H	
	PRODUCT DESCRIPTION: ZF-ERGOPOWER TRANSMISSION	
	TRANSMISSION TYPE: 4 WG 210	
	DROP CENTER DISTANCE: 540 MM	
	PRODUCTION LOCATION: PASSAU	
	VEHICLE: WHEEL LOADER	
	1. GEAR FORWARD: 4,152	
	2. GEAR FORWARD: 2,089	
	3. GEAR FORWARD: 1,072	
	4. GEAR FORWARD: 0,636	
	1. GEAR REVERSE: 3,937	
	2. GEAR REVERSE: 1,981	
	3. GEAR REVERSE: 1,017	
	NUMBER OF PULSES ENGIN: 4	
	NUMBER OF PULSES TURBINE: 54	
	NUMBER OF PULSES MRK: 55	
	NUMBER OF PULSES OUTPUT: 49	
	CONVERTER: W 340	
	CONVERTER PART NO.: 034 H 160 BP	
	LOCK-UP CLUTCH: WITHOUT	
	STALL TORQUE RATIO: 2,35	

# Technical Cover

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Material number: 4681.054.007



4 BP 210 /

Pos.	Information	Amendment number
	TORQUE CONVERTER ABSORPTION: 190 NM	
	STATOR FREEWHEEL: WITHOUT	
	ENGINE INPUT: DIRECT MOUNTED TO ENGINE	
	ENGINE: CUMMINS	
	ENGINE-CONNECTION: 4657500288	
	OUTPUT: STANDARD	
	OUTPUT CONVERTER SIDE: WITHOUT AXLE DISCONNECT	
	OUTPUT FLANGE CONVERTER SIDE: MECH 7 C	
	AXIAL DISPLACEABILITY: WITHOUT	
	OUTPUT PTO SIDE: WITH PARKING BRAKE	
	DISC BRAKE: SAHR FSG 88	
	RELEASE PRESSURE: 120 - 150 BAR	
	MEDIUM: HYDRAULIC OIL DIN 51524 PART 2	
	CONNECTION BRAKE PRESSURE: M 10 X 1	
	OUTPUT FLANGE PTO SIDE: MECH 7 C	
	POWER TAKE OFF: 1 PTO COAXIAL ENGINE-DEPENDENT	
	PTO - DISCONNECTION: WITHOUT	
	1.PTO FLANGE: SAE C 2/4 HOLE	
	DRIVER PROFILE: SAE C -C 12/24 DP 17 Z	
	GEAR CHANGE CONTROL: ZF-ERGOSHIFT/ PROP VALVE	
	VOLTAGE: 24 VOLT	
	SETTING SPECIFICATION: 4657.700.099	
	SPEED CONTROL: CONNECTION VIA EST	
	OIL LEVEL TUBE: MOUNTED ON CONVERTER SIDE	
	OIL DIPSTICK: SHORT STRAIGHT	
	FILTER INSTALLATION: DIRECT MOUNTED	
	PRES. DROP SWITCH: CLOSING SWITCH	
	EMERGENCY STEERING PUMP: WITHOUT	
	TEMPERATURE SENSOR T/C: WITH (VIA EST )	
	GEARBOX BREATHER: WITH	
	ERGO INCH: WITHOUT	
	SOFTWARE OPTIONS OHNE_SOFTWARE	
	ELECTRIC PARTS ORDER: INCLUDED IN SCOPE OF SUPPLY	



Pos.	Information	Amendment number
	SCOPE OF SUPPLIES CONTROL UNIT EST 37A	
	GEAR SELECTOR ES1C	
	WIRING COMPLETE	
	SEPARATE ORDER: WITHOUT	
	GROUP LOOSE PARTS: 4651 183 040	
	GEAR SELECTOR: ES1C	
	2ND GEAR SELECTOR: WITHOUT	
	DISPLAY: WITHOUT	
	LOAD SENSOR: WITHOUT	
	WIRING: WITH	
	OIL CAPACITY TRANSM.: CA. 27 LITRE	
	OIL FILLING TRANSM.: WITHOUT	
	OIL GRADE TRANSM.: TE- ML 03	
	WITH OR WITHOUT PAINTING PRIMING	
	PRIMER PAINT: YELLOW RAL 1006	
	DOCUMENTATION GEAR BOX: -----	
	SECTION DRAWING: 4657 500 092	
	INSTALLATION DRAWING: 4681 654 007	
	GEARBOX DIAGRAM: 4657 700 045	
	OIL CIRCUIT DIAGRAM: 4657 700 143	
	INSTALL. INSTRUCTIONS: 0000 702 951	
	DOCU. CONTROL UNIT: -	
	DRAWING 6009 665 002	
	DRAWING GEAR SEL. 1: 0501 219 677	
	CONNECTION DIAGRAM: 6029 702 769	

# Assembly group overview

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Material number: 4681.054.007



4 BP 210 /

Picture	Pos.	Material number	Name	Quantity	Amend. no.	Techn. Info.
465713008600	270	4657.130.086	ENGINE CONNECTION	1		
416603418500	500	4166.034.185	CONVERTER	1		
465710202600	30	4657.102.026	INPUT	1		
465710107801	10	4657.101.078	TRANSMISSION HOUSING	1		
465710140800	20	4657.101.408	TRANSMISSION HOUSING	1		
414313900100	15	4143.139.001	TYPE PLATE	1		
465717103200	350	4657.171.032	COUPLING	1		
465717202800	360	4657.172.028	COUPLING	1		
465717301700	370	4657.173.017	COUPLING	1		
465717404300	380	4657.174.043	COUPLING	1		
465717501400	390	4657.175.014	COUPLING	1		
465717601700	400	4657.176.017	COUPLING	1		
465710300600	50	4657.103.006	OUTPUT	1		
465710340700	60	4657.103.407	OUTPUT	1		
465610901800	170	4656.109.018	PARKING BRAKE	1		
465710941300	70	4657.109.413	PARKING BRAKE	1		

# Assembly group overview

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Material number: 4681.054.007



4 BP 210 /

Picture	Pos.	Material number	Name	Quantity	Amend. no.	Techn. Info.
465715402100	340	4657.154.021	POWER TAKE-OFF	1		
465710601200	110	4657.106.012	SHIFT SYSTEM	1		
465710640782	115	4657.106.407	SHIFT SYSTEM	1		
465615901921	120	4656.159.019	SHIFT SYSTEM	1		
465712300600	225	4657.123.006	CONTROL UNIT	1		
465612000300	190	4656.120.003	PRESSURE REGULATOR	1		
465712200500	220	4657.122.005	PRESSURE OIL PUMP	1		
465613700400	310	4656.137.004	EMERGENCY STEERING PUMP	1		
465712500700	250	4657.125.007	INDUCTIVE SENSOR	1		
465712400200	240	4657.124.002	TEMPERATURE SENSOR	1		
465613801500	330	4656.138.015	FILTER	1		
465713100400	290	4657.131.004	FILLER NOZZLE	1		
465118304000	490	4651.183.040	LOOSE PARTS	1		

# Picture

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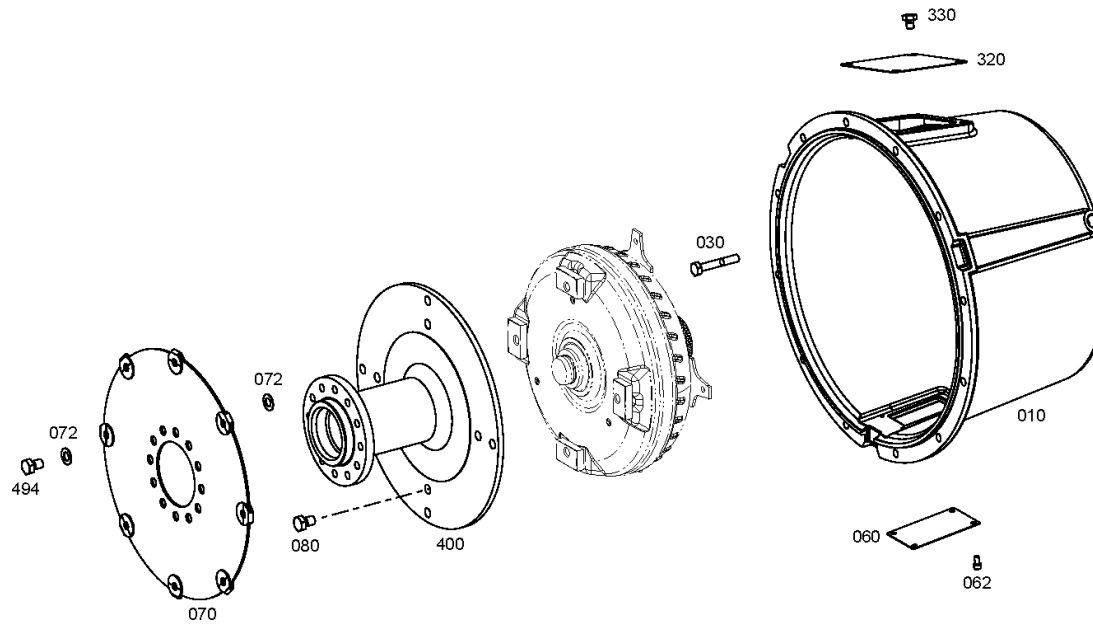
Material number: 4681.054.007

Picture: 465713008600

Material-assembly-group-no: 4657.130.086



4 BP 210 /  
ENGINE CONNECTION





# Picture

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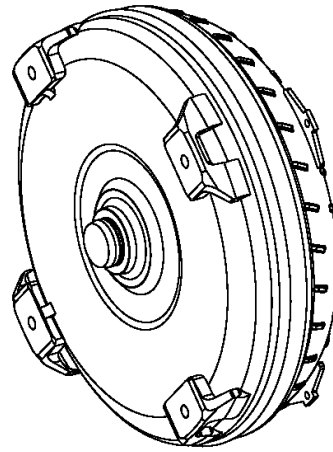
Material number: 4681.054.007

Picture: 416603418500

Material-assembly-group-no: 4166.034.185



4 BP 210 /  
CONVERTER



010

# Picture

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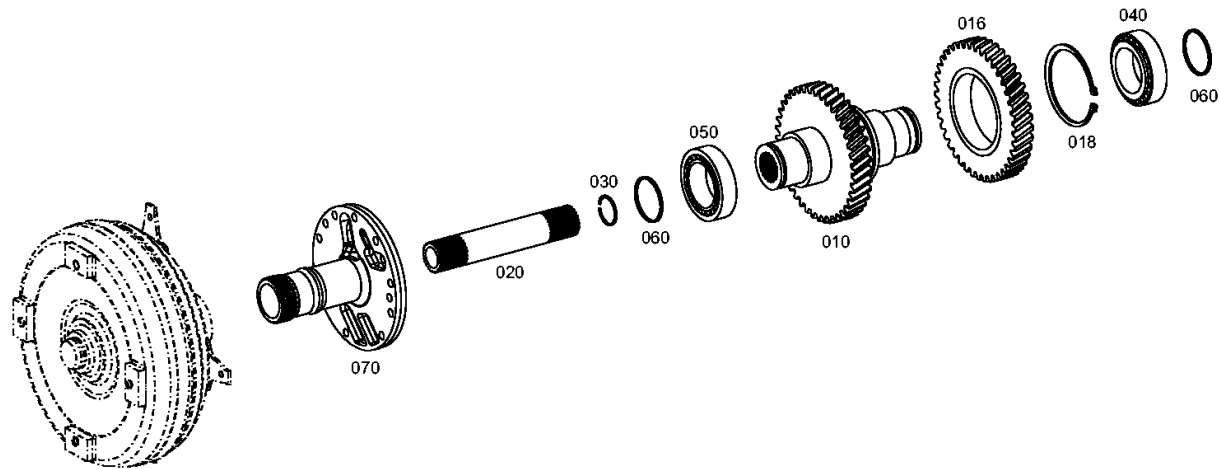
Material number: 4681.054.007

Picture: 465710202600

Material-assembly-group-no: 4657.102.026



4 BP 210 /  
INPUT



# Picture

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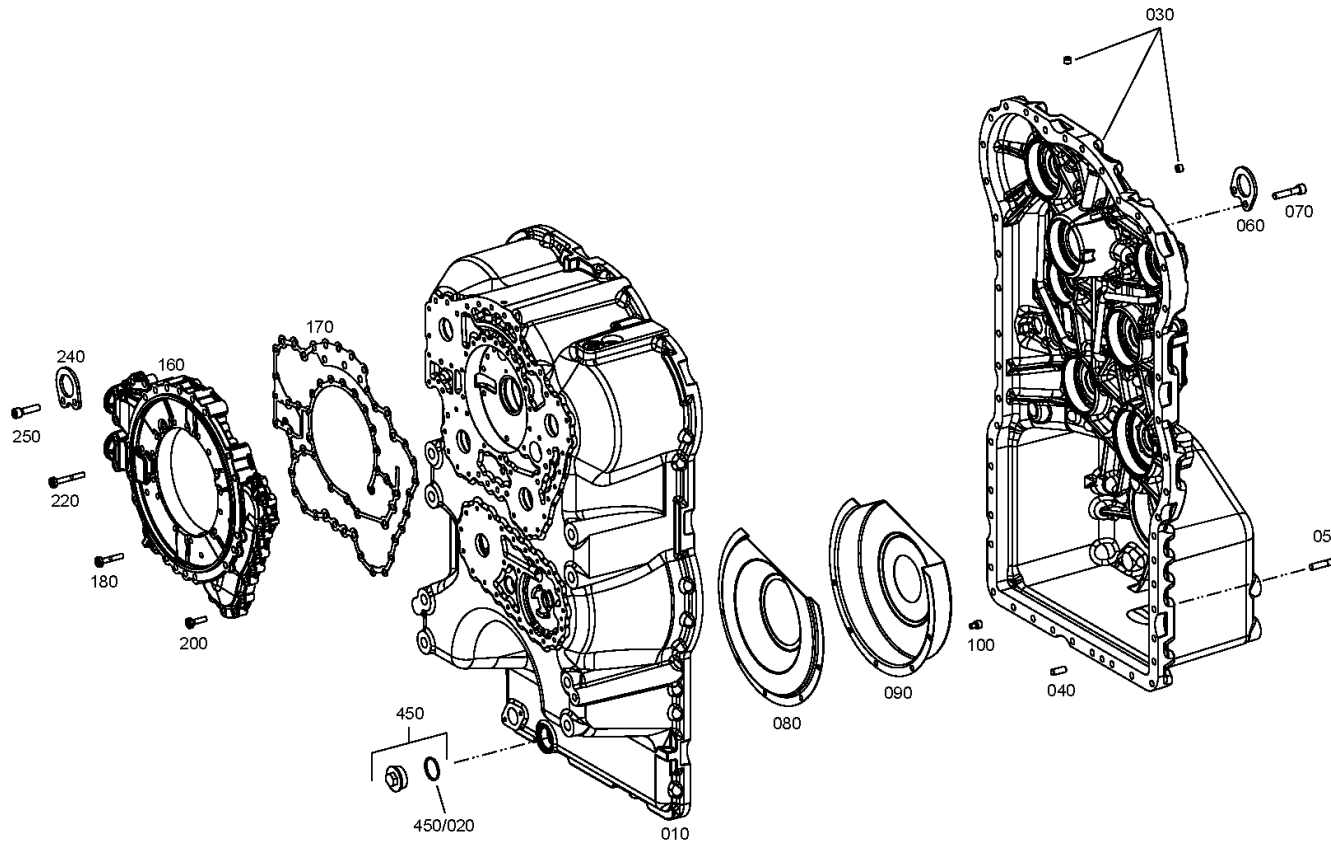
Material number: 4681.054.007

Picture: 465710107801

Material-assembly-group-no: 4657.101.078



4 BP 210 /  
TRANSMISSION HOUSING



# Picture

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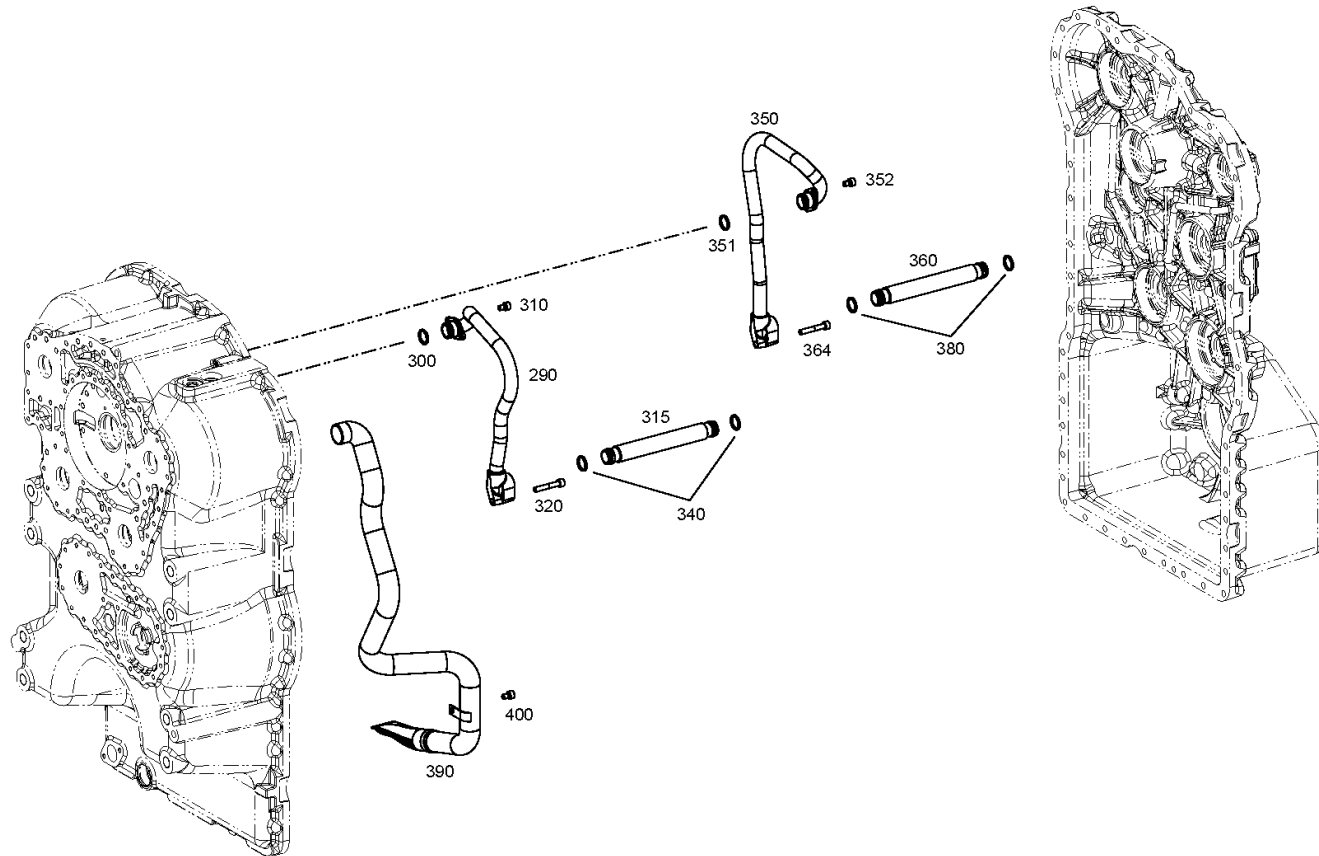
Material number: 4681.054.007

Picture: 465710107802

Material-assembly-group-no: 4657.101.078



4 BP 210 /  
TRANSMISSION HOUSING



# Picture

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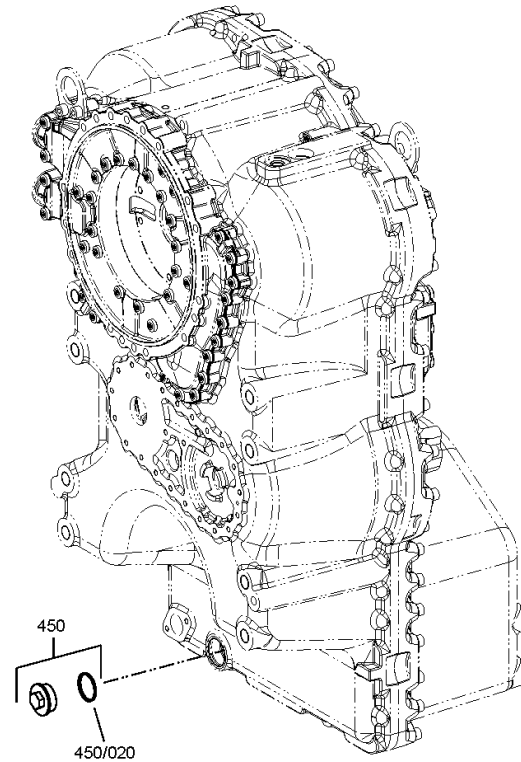
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Picture: 465710107880

Material-assembly-group-no: 4657.101.078



4 BP 210 /  
TRANSMISSION HOUSING



# Picture

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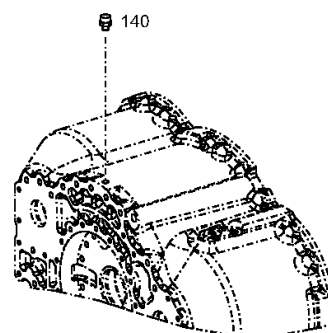
Material number: 4681.054.007

Picture: 465710140800

Material-assembly-group-no: 4657.101.408



4 BP 210 /  
TRANSMISSION HOUSING



# Picture

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Material number: 4681.054.007

Picture: 414313900100

Material-assembly-group-no: 4143.139.001



4 BP 210 /  
TYPE PLATE



010

# Picture

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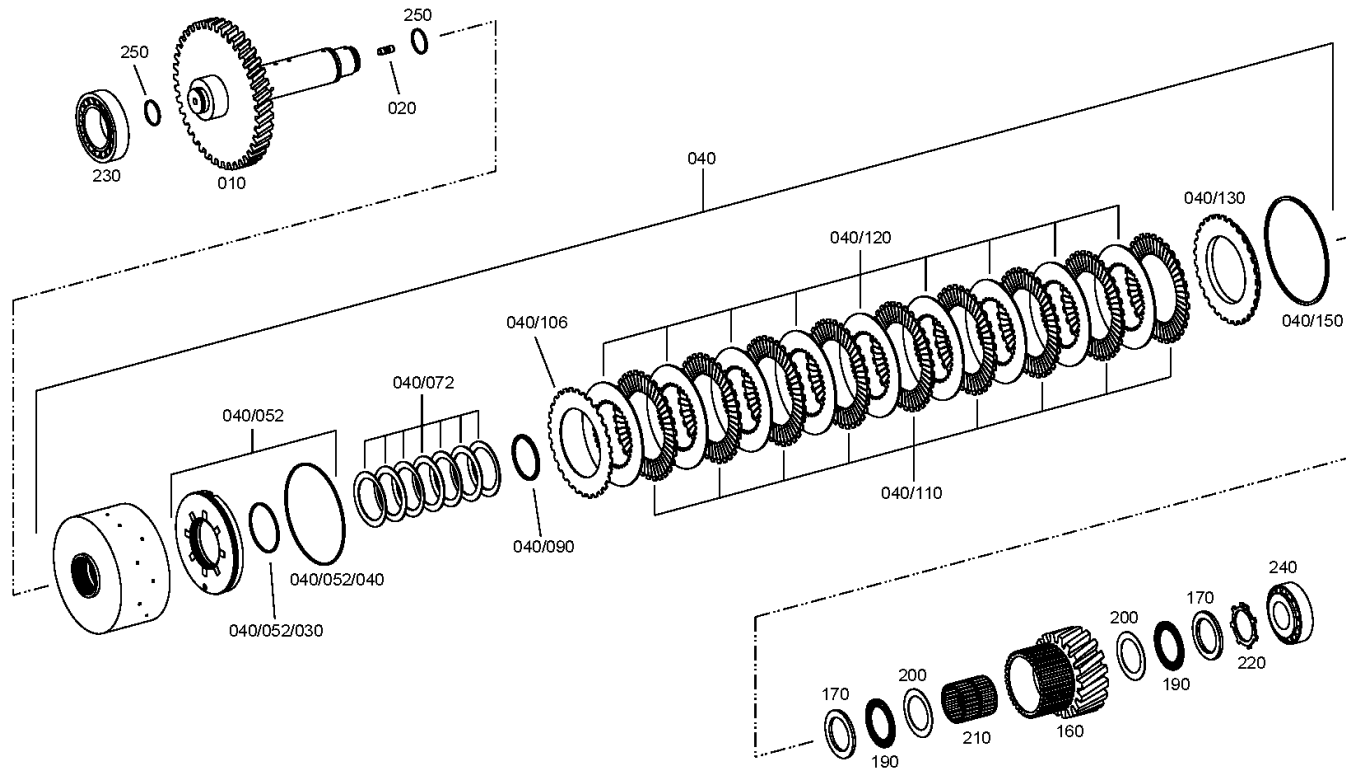
Material number: 4681.054.007

Picture: 465717103200

Material-assembly-group-no: 4657.171.032



4 BP 210 /  
COUPLING





# Picture

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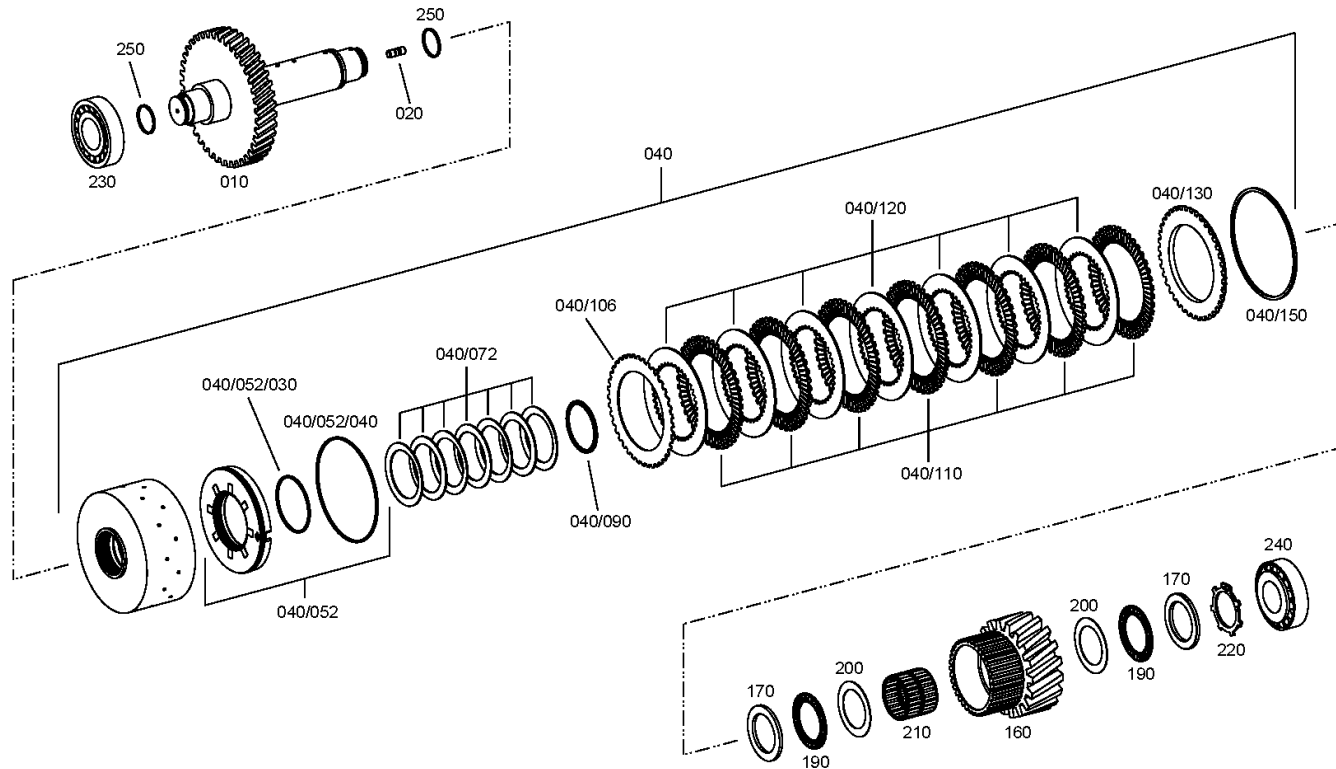
Material number: 4681.054.007

Picture: 465717202800

Material-assembly-group-no: 4657.172.028



4 BP 210 /  
COUPLING



# Picture

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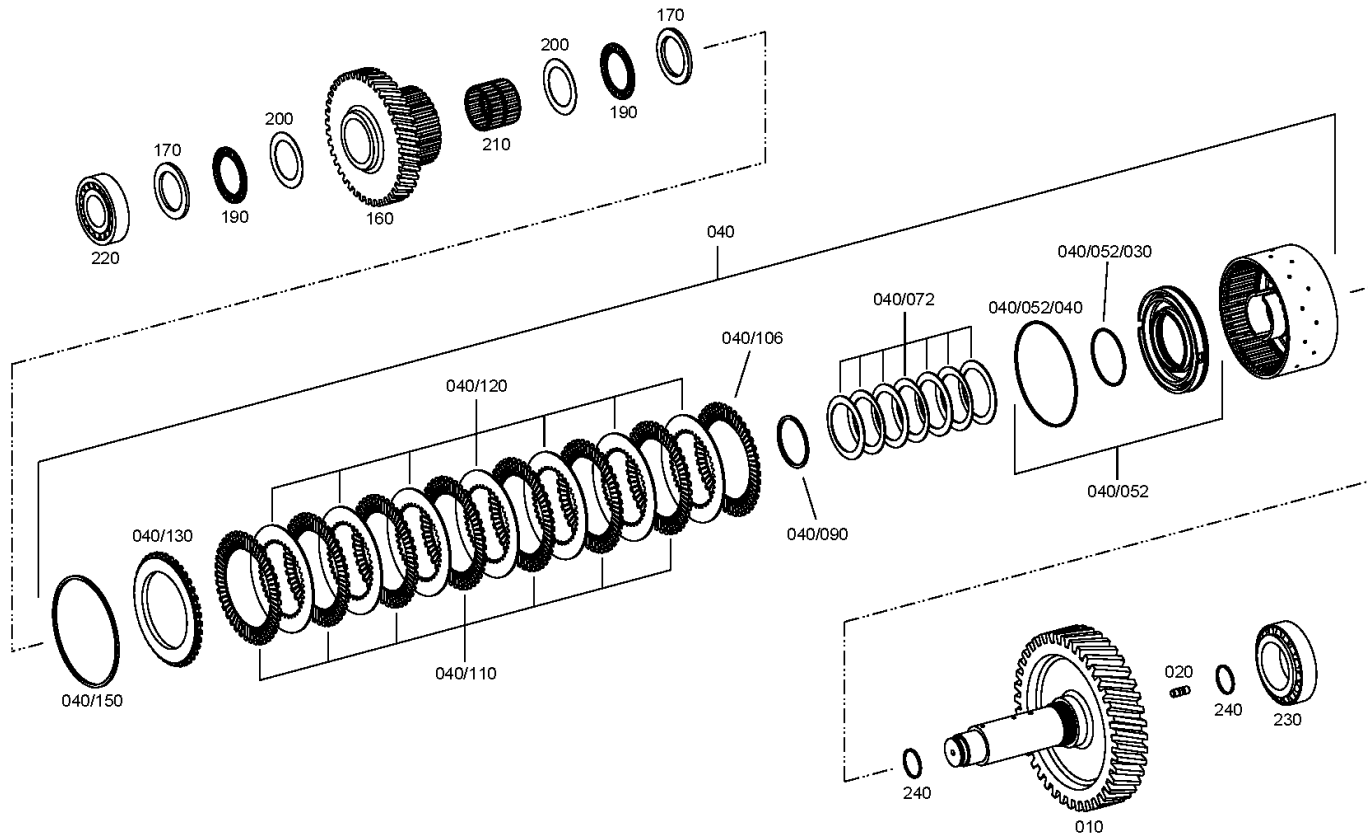
Material number: 4681.054.007

Picture: 465717301700

Material-assembly-group-no: 4657.173.017



4 BP 210 /  
COUPLING



# Picture

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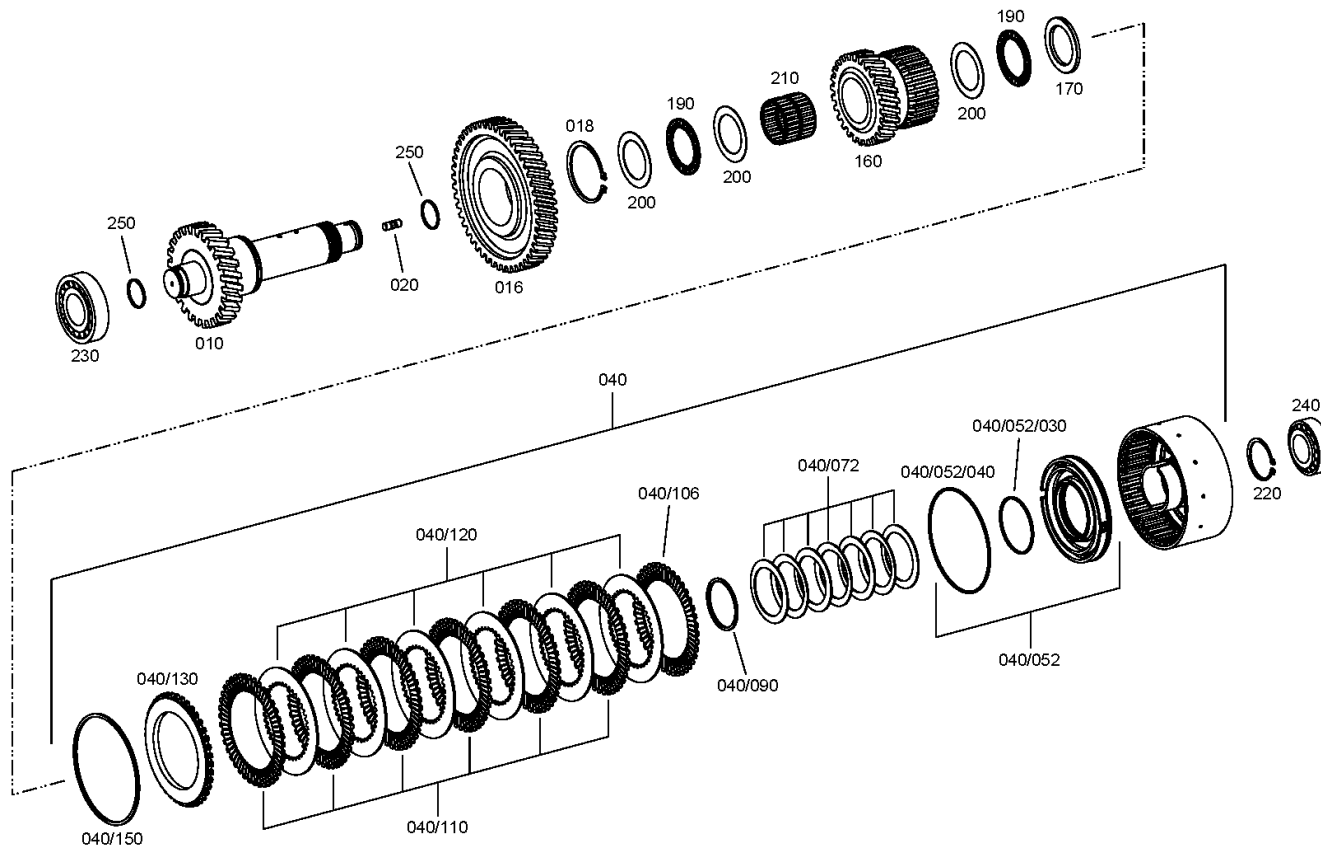
Material number: 4681.054.007

Picture: 465717404300

Material-assembly-group-no: 4657.174.043



4 BP 210 /  
COUPLING



# Picture

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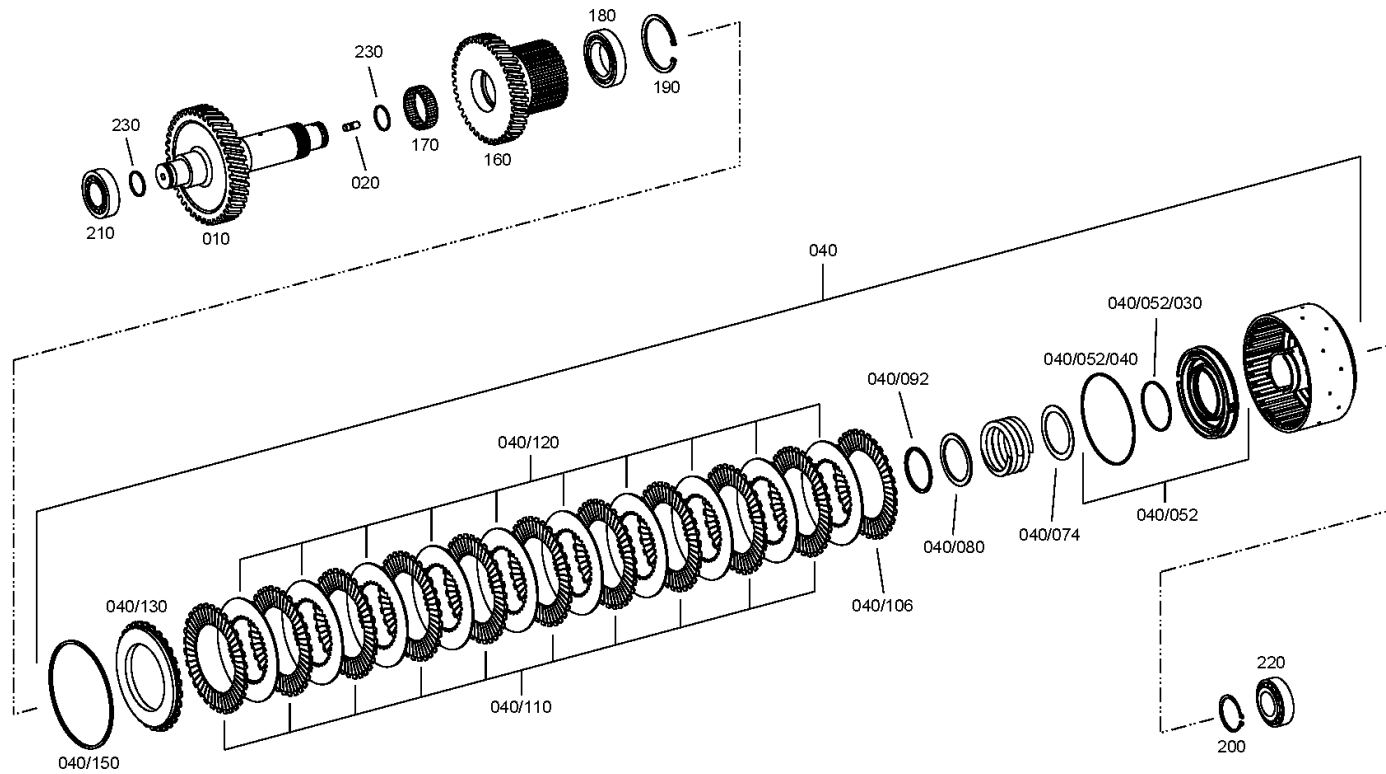
Material number: 4681.054.007

Picture: 465717501400

Material-assembly-group-no: 4657.175.014



4 BP 210 /  
COUPLING



# Picture

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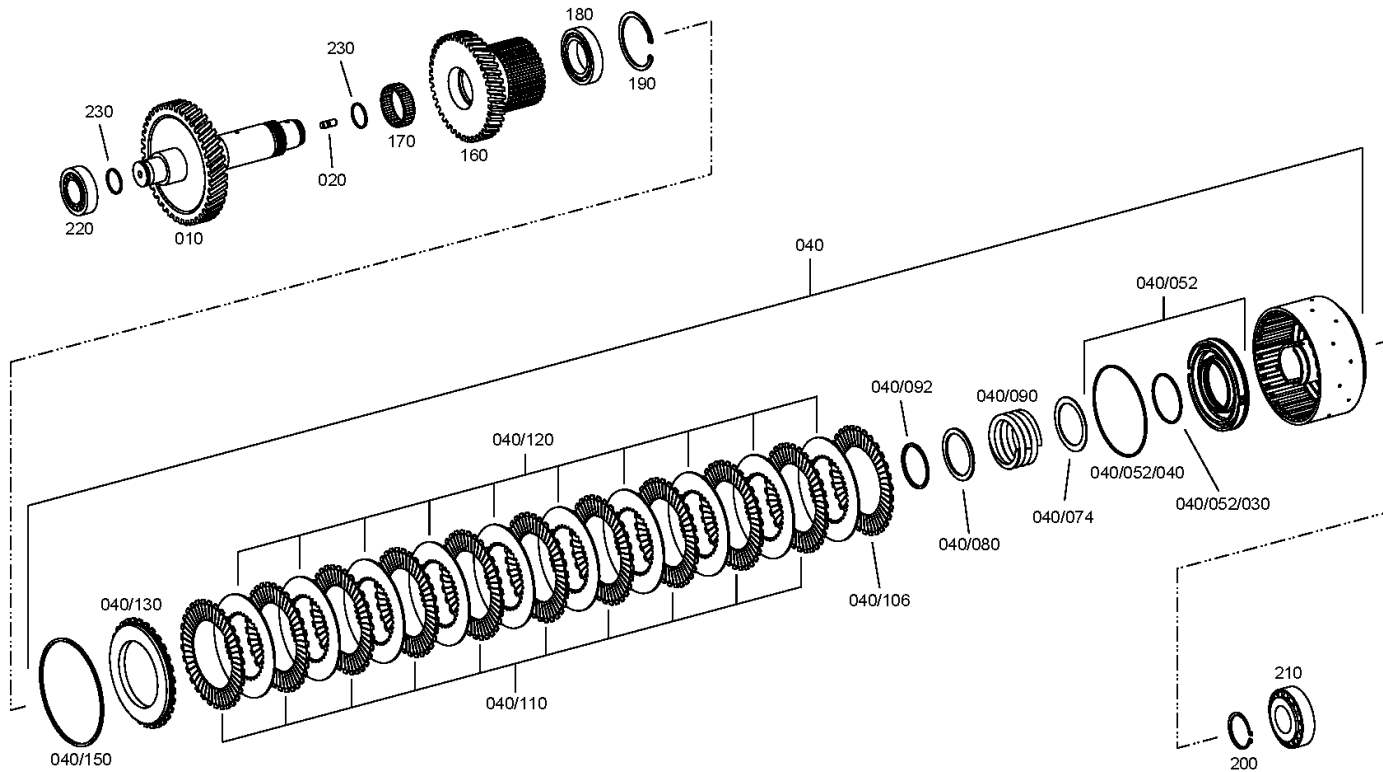
Material number: 4681.054.007

Picture: 465717601700

Material-assembly-group-no: 4657.176.017



4 BP 210 /  
COUPLING



# Picture

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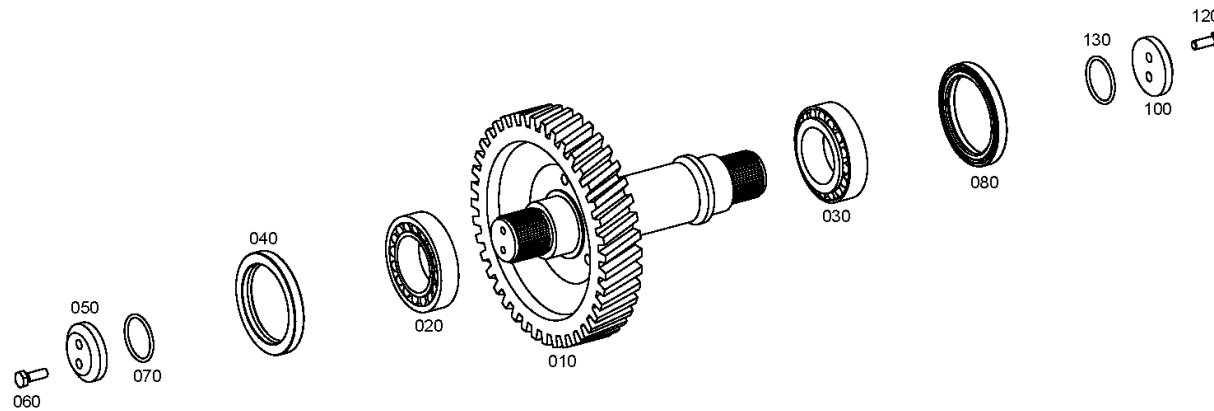
Material number: 4681.054.007

Picture: 465710300600

Material-assembly-group-no: 4657.103.006



4 BP 210 /  
OUTPUT



# Picture

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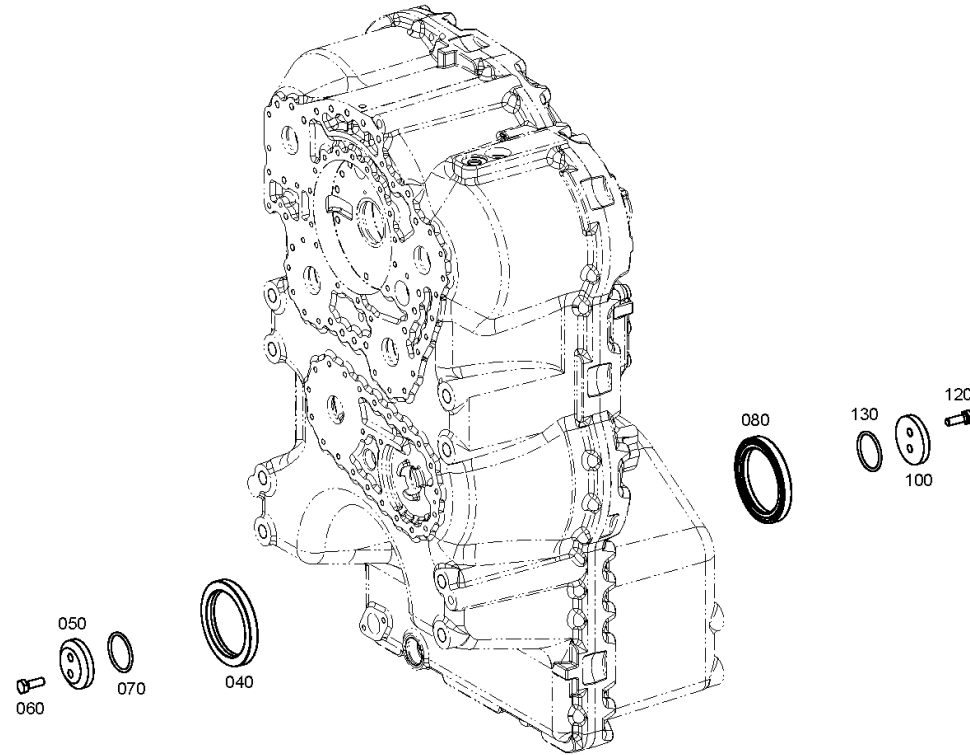
Material number: 4681.054.007

Picture: 465710300680

Material-assembly-group-no: 4657.103.006



4 BP 210 /  
OUTPUT



# Picture

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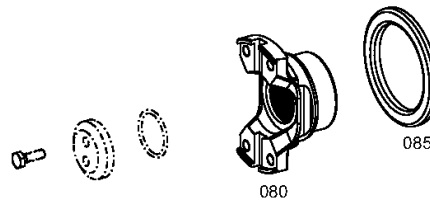
Material number: 4681.054.007

Picture: 465710340700

Material-assembly-group-no: 4657.103.407



4 BP 210 /  
OUTPUT





# Picture

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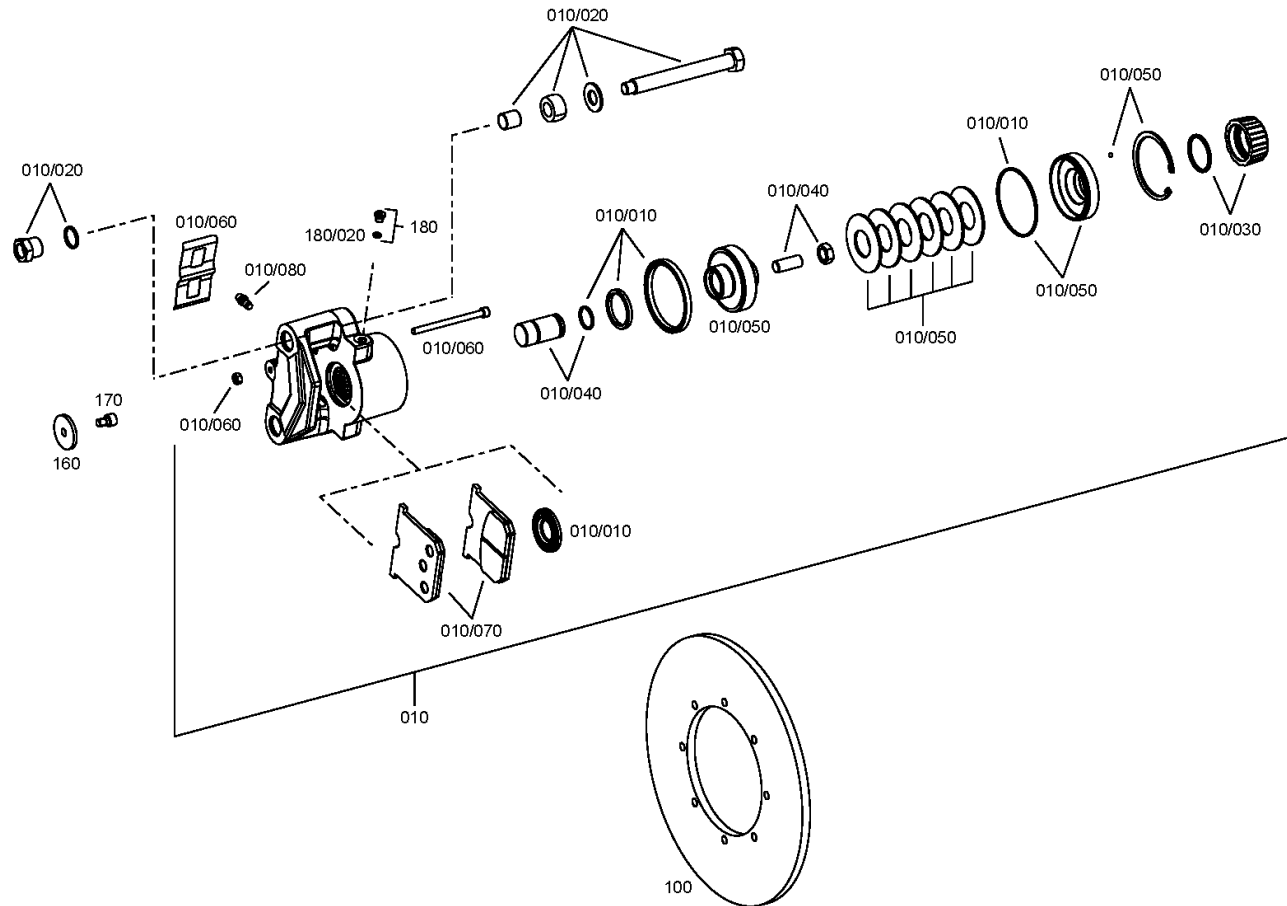
Material number: 4681.054.007

Picture: 465610901800

Material-assembly-group-no: 4656.109.018



4 BP 210 /  
PARKING BRAKE



# Picture

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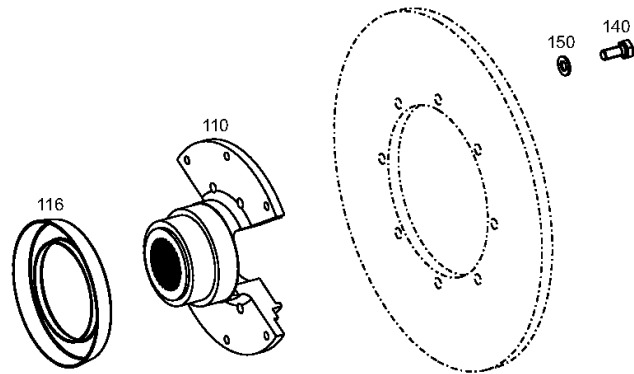
Material number: 4681.054.007

Picture: 465710941300

Material-assembly-group-no: 4657.109.413



4 BP 210 /  
PARKING BRAKE



# Picture

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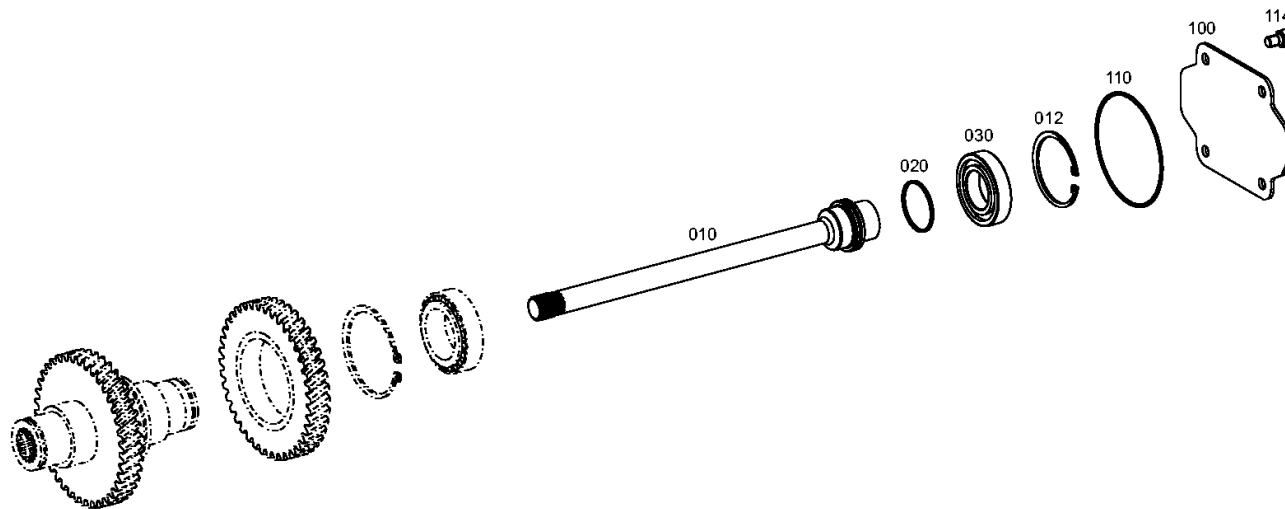
Material number: 4681.054.007

Picture: 465715402100

Material-assembly-group-no: 4657.154.021



4 BP 210 /  
POWER TAKE-OFF



# Picture

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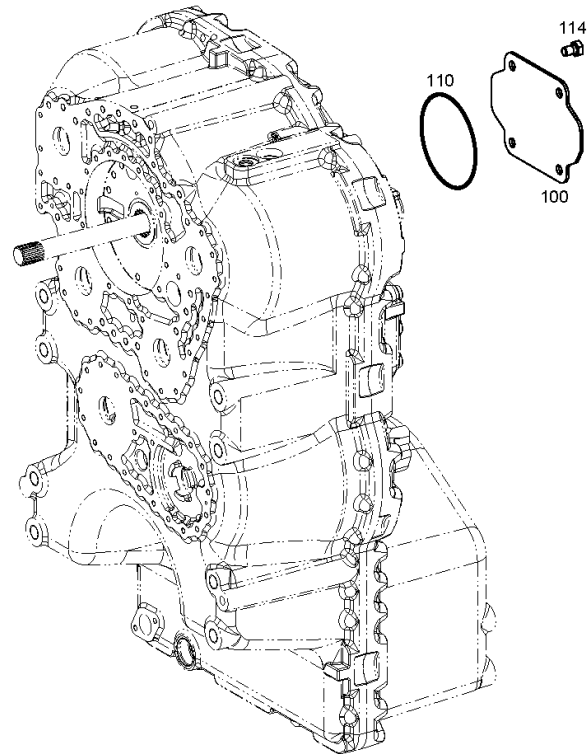
Material number: 4681.054.007

Picture: 465715402180

Material-assembly-group-no: 4657.154.021



4 BP 210 /  
POWER TAKE-OFF



# Picture

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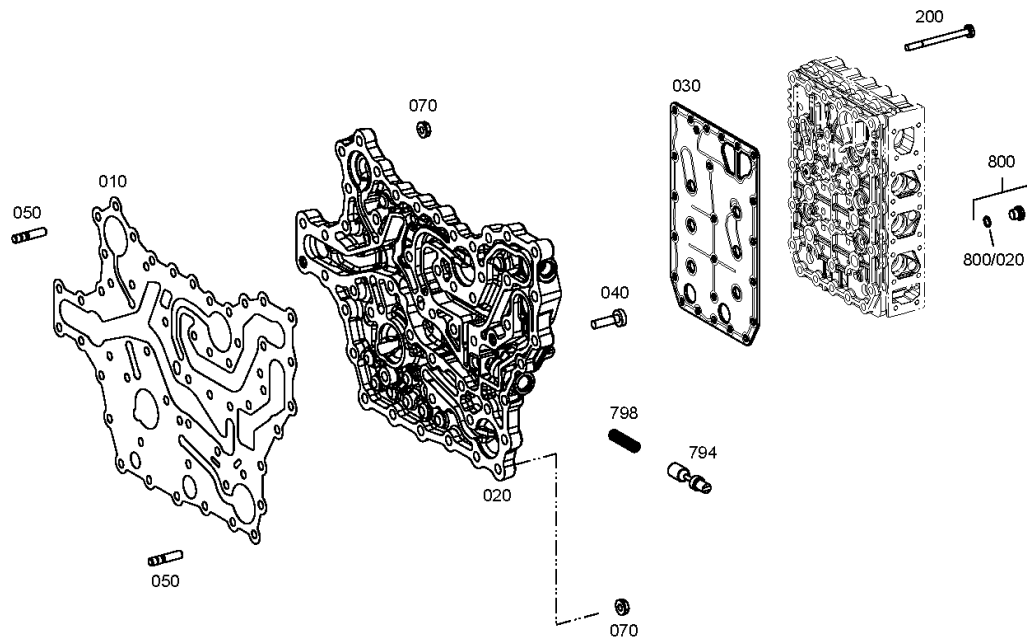
Material number: 4681.054.007

Picture: 465710601200

Material-assembly-group-no: 4657.106.012



4 BP 210 /  
SHIFT SYSTEM



# Picture

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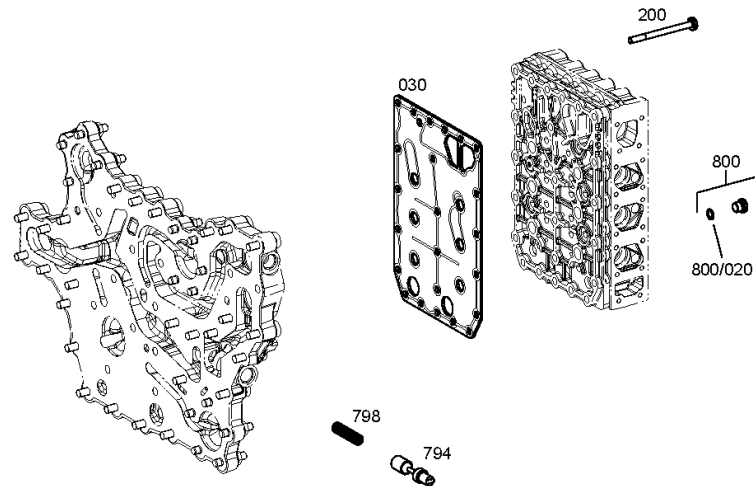
Material number: 4681.054.007

Picture: 465710601280

Material-assembly-group-no: 4657.106.012



4 BP 210 /  
SHIFT SYSTEM



# Picture

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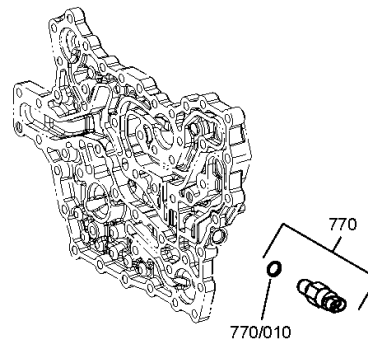
Material number: 4681.054.007

Picture: 465710640782

Material-assembly-group-no: 4657.106.407



4 BP 210 /  
SHIFT SYSTEM



# Picture

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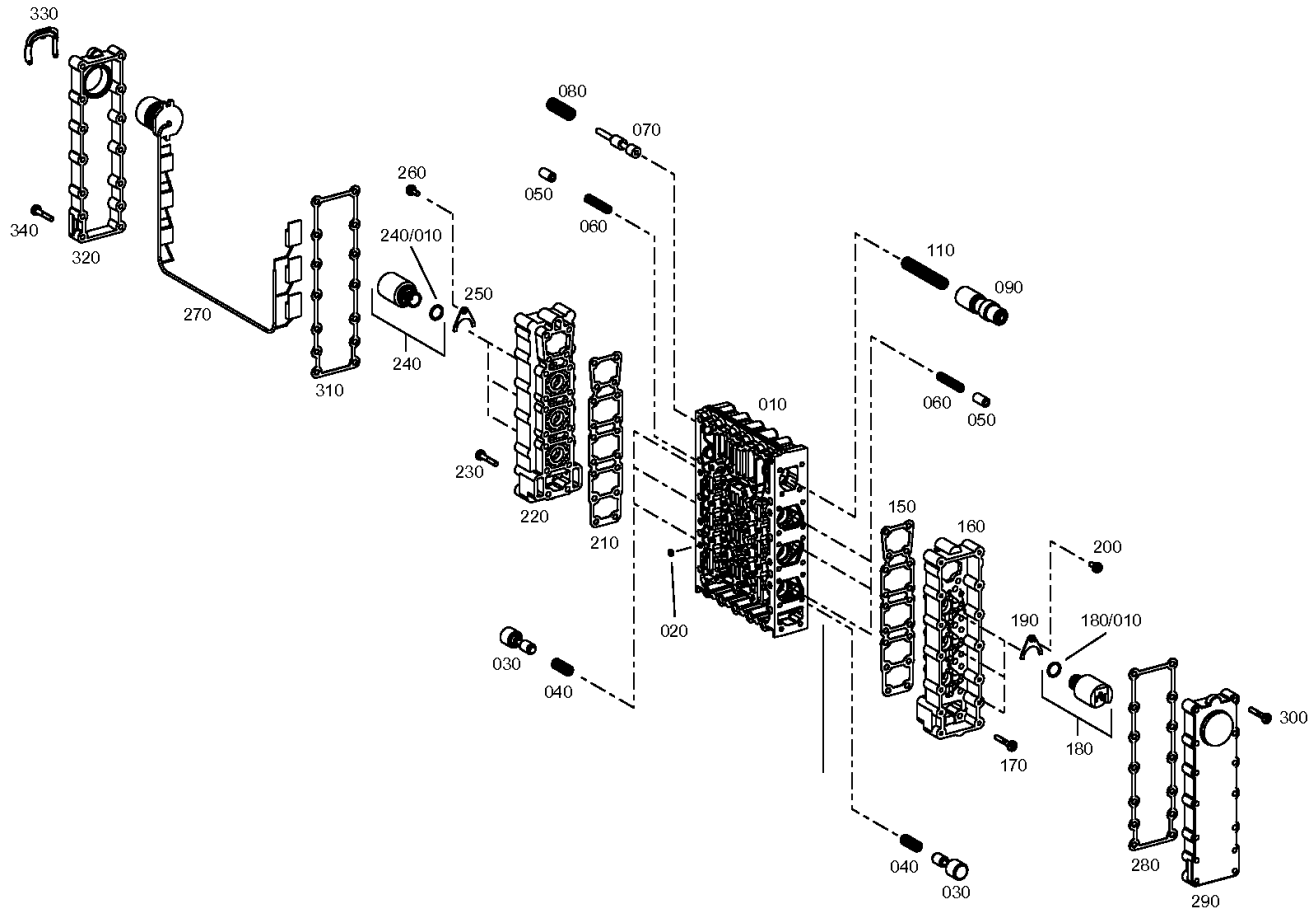
Material number: 4681.054.007

Picture: 465615901921

Material-assembly-group-no: 4656.159.019



4 BP 210 /  
SHIFT SYSTEM





# Picture

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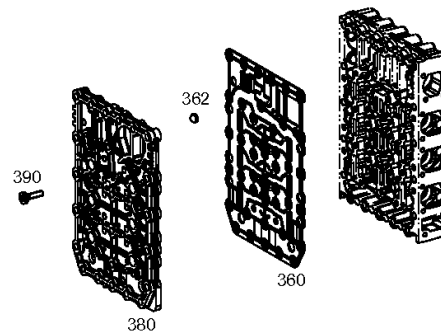
Material number: 4681.054.007

Picture: 465615901922

Material-assembly-group-no: 4656.159.019



4 BP 210 /  
SHIFT SYSTEM



# Picture

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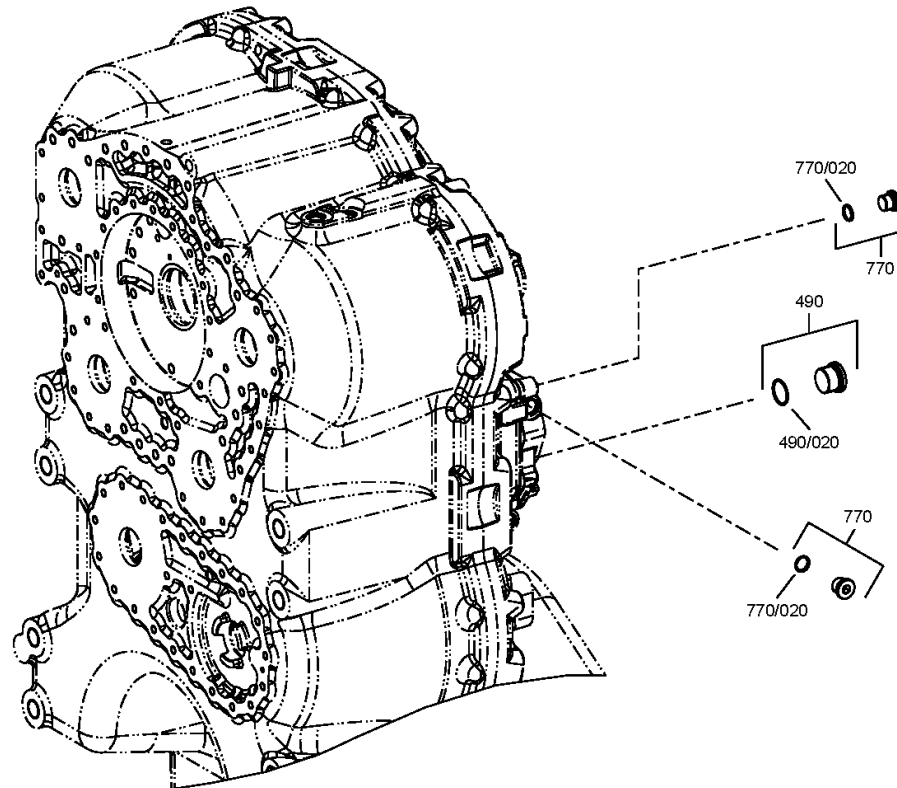
Material number: 4681.054.007

Picture: 465712300600

Material-assembly-group-no: 4657.123.006



4 BP 210 /  
CONTROL UNIT



# Picture

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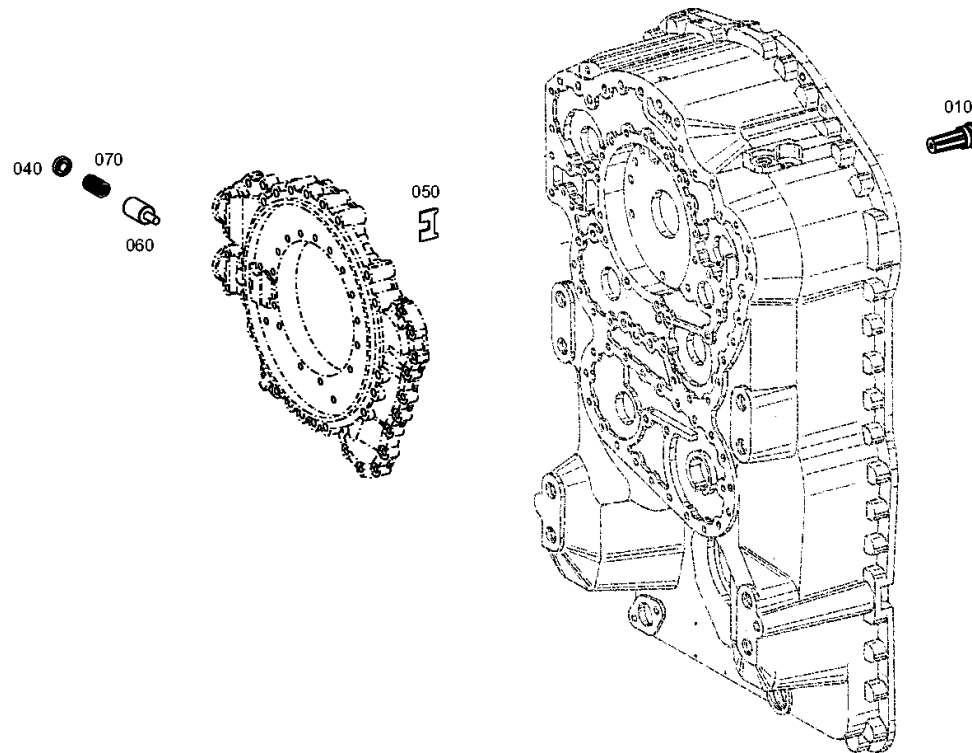
Material number: 4681.054.007

Picture: 465612000300

Material-assembly-group-no: 4656.120.003



4 BP 210 /  
PRESSURE REGULATOR



# Picture

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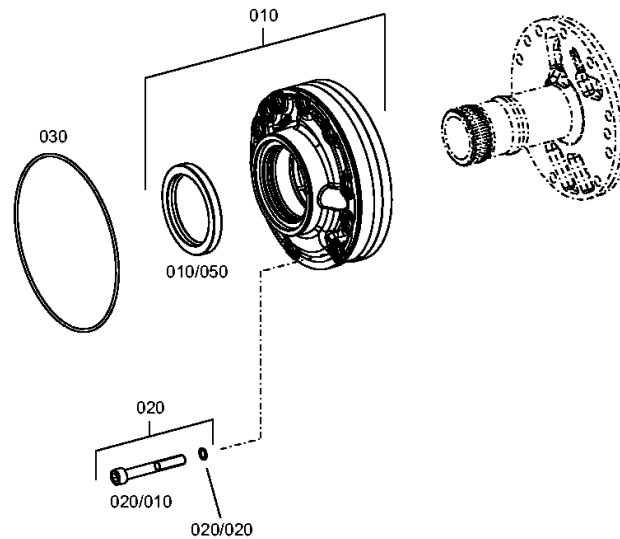
Material number: 4681.054.007

Picture: 465712200500

Material-assembly-group-no: 4657.122.005



4 BP 210 /  
PRESSURE OIL PUMP



# Picture

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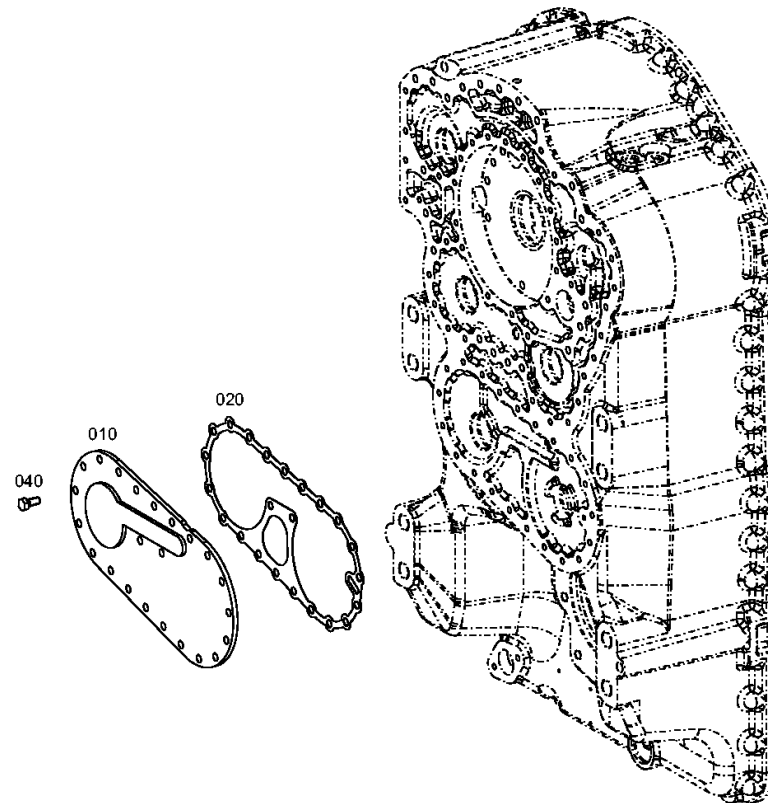
Material number: 4681.054.007

Picture: 465613700400

Material-assembly-group-no: 4656.137.004



4 BP 210 /  
EMERGENCY STEERING PUMP



# Picture

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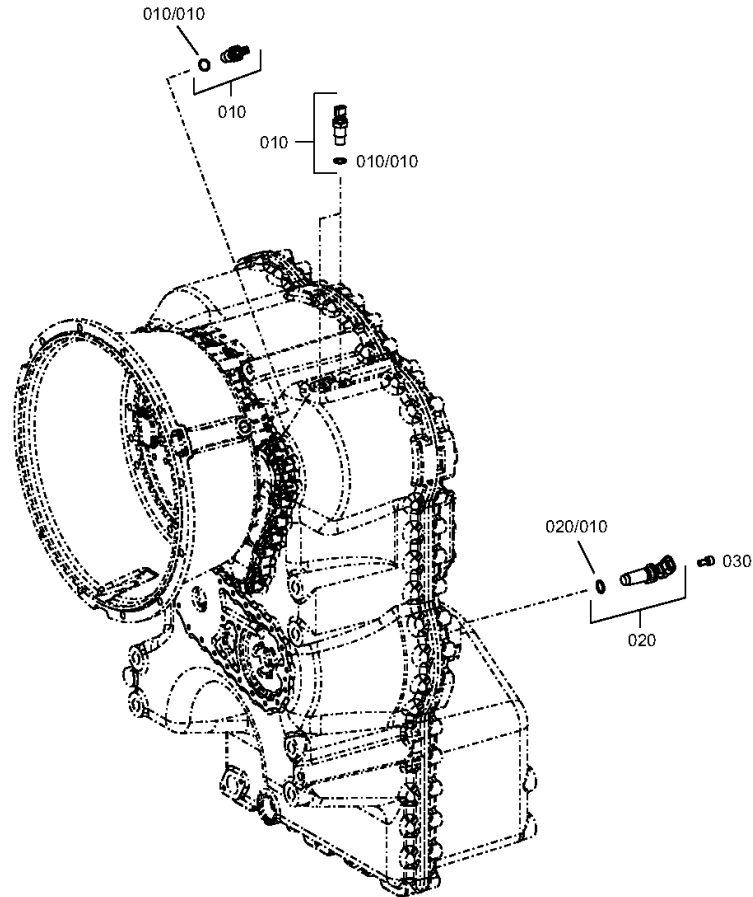
Material number: 4681.054.007

Picture: 465712500700

Material-assembly-group-no: 4657.125.007



4 BP 210 /  
INDUCTIVE SENSOR



# Picture

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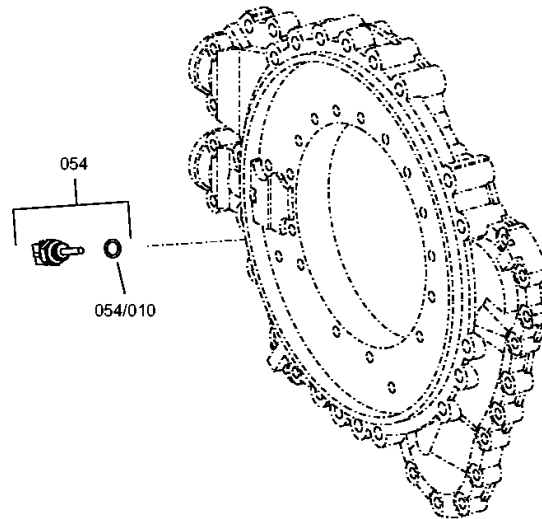
Material number: 4681.054.007

Picture: 465712400200

Material-assembly-group-no: 4657.124.002



4 BP 210 /  
TEMPERATURE SENSOR



# Picture

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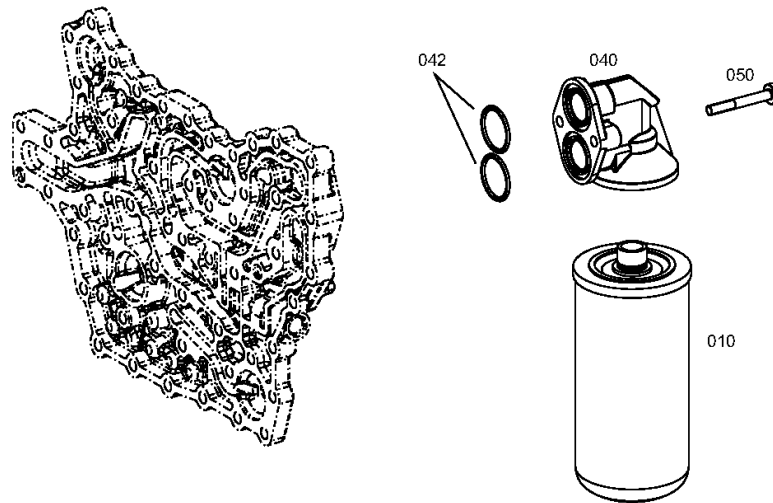
Material number: 4681.054.007

Picture: 465613801500

Material-assembly-group-no: 4656.138.015



4 BP 210 /  
FILTER





# Picture

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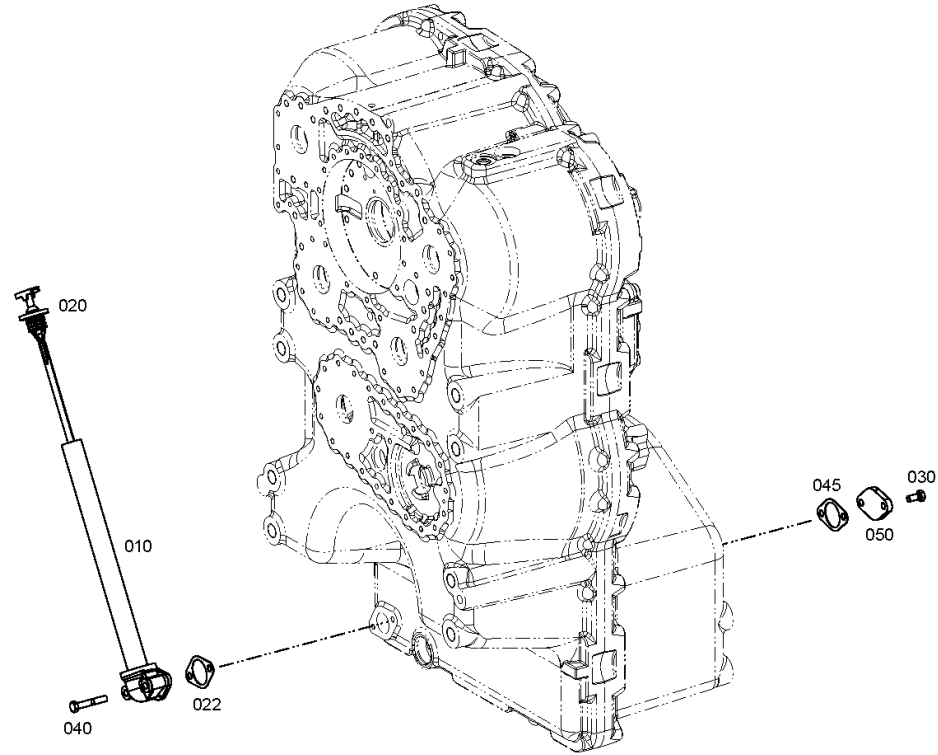
Material number: 4681.054.007

Picture: 465713100400

Material-assembly-group-no: 4657.131.004



4 BP 210 /  
FILLER NOZZLE



# Picture

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Material number: 4681.054.007

Picture: 465118304000

Material-assembly-group-no: 4651.183.040



4 BP 210 /  
LOOSE PARTS

