

# **Spare Parts Catalog**

4 WG 160

Material number: 4656.054.117

Current date: 07.11.2014

ZF Friedrichshafen AG Hauptverwaltung 80038 Friedrichshafen Deutschland

Telefon: +49 7541 77-0

Telefax: +49 7541 77-908000 zuständiges Werk:

www.zf.com Passau

#### Notes relating to the spare parts catalog

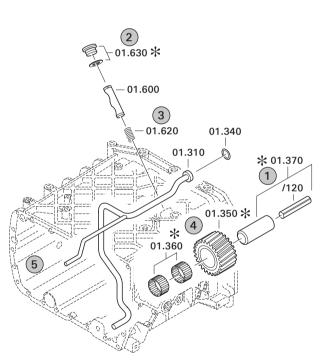


#### Setup of the spare parts catalog

- 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			Technische Info Technical info	Description (Benennung)	Menge Quantity	Einheit Unit
068.08.17 1316.170.001 AUSLEGER		AUSLEGER	WL	SHIFT TURRET	1	Stk
068.08.06	068.08.06 1316.170.031 DECKEL		WL*H-H *VM	COVER	1	Stk
068 <mark>0</mark> 814 1316.170.808 DECKEL		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

### **Technical Cover**

Page 1 from 3



Pos.	Information	Amendment number
	CUSTOMER: HYUNDAI	
	CUSTOMER-IDENT-NO.: 81LF-01101	
	1.PERFORMANCE CALC.: 4656 706 897	
	VEHICLE DESIGNATION: RADLADER HL740-7A	
	WEIGHT LOADED: 11,50 TO	
	ENGINE: CUMMINS	
	ENGINE POWER: 91,0 KW	
	SPEED: 2.130 DRZ	
	INPUT TORQUE: 600 NM	
	SPEED: 1.400 DRZ	
	TYRE SIZE: 20,5X25	
	TYRE RADIUS DYN: 0,720 M	
	AXLE RATIO: 22,846	
	MAX. SPEED: 36,0 KM/H	
	PRODUCT DESCRIPTION: ZF-ERGOPOWER TRANSMISSION	
	TRANSMISSION TYPE 4 WG 160	
	DROP CENTER DISTANCE: 500 MM	
	VEHICLE: LOADER	
	1. GEAR FORWARD: 4,012	
	2. GEAR FORWARD: 2,174	
	3. GEAR FORWARD: 1,088	
	4. GEAR FORWARD: 0,619	
	1. GEAR REVERSE: 3,804	
	2. GEAR REVERSE: 2,061	
	3. GEAR REVERSE: 1,031	
	NUMBER OF PULSES ENGIN: 4	
	NUMBER OF PULSES TURB: 51	
	NUMBER OF PULSES MRK: 55	
	NUMBER OF PULSES OUTP.: 60	
	CONVERTER: W 300	
	CONVERTER PART NR: 4168030264	
	LOCK-UP CLUTCH: WITHOUT	
	STALL TORQUE RATIO: 2,57	

### **Technical Cover**

Page 2 from 3



Pos.	Information	Amendment number
	TORQUE CONVERTER ABSORP 344 NM	
	STATOR FREEWHEEL: WITHOUT	
	ENGINE INPUT: REMOTE MOUNTED VIA JOINT SHAFT	
	INPUT FLANGE: MECH 5 C	
	OUTPUT: STANDARD	
	OUTPUT CONVERTER SIDE: WITHOUT AXLE DISCONNECT	
	OUTPUT FLANGE CONVERTER MECH 6 C	
	AXIAL DISPLACEBILITY: WITHOUT	
	OUTPUT PTO SIDE: WITHOUT PARKING BRAKE	
	OUTPUT FLANGE PTO SIDE: MECH 6 C	
	1.PTO FLANGE: SAE B 2/4 HOLE	
	DRIVER / PROFILE: SAE B-B 16/32 DP 15 T	
	GEAR CHANGE CONTROL: ZF-ERGOSHIFT/ PROP VALVE	
	VOLTAGE: 24 VOLT	
	SPEED CONTROL: CONNECTION VIA EST	
	OIL LEVEL TUBE: WITHOUT	
	OIL DIPSTICK: WITHOUT	
	FILTER INSTALLATION: DIRECT MOUNTED	
	PRES. DROP SWITCH: CLOSING SWITCH	
	EMERGENCY STEERING PUMP WITHOUT	
	OIL TEMPERATURE SENSOR: WITH (VIA EST )	
	ELECTRIC PARTS ORDER: INCLUDED IN SCOPE OF SUPPLY	
	GROUP LOOSE PARTS: 4656.183.171	
	CONTROL UNIT: EST 37A	
	GEAR SELECTOR: DW 3	
	DISPLAY: WITHOUT	
	WIRING: WITHOUT	
	OIL CAPACITY: CA. 21 LITRE	
	GEARBOX OIL FILLING: WITHOUT	
	OEL-CLASS: OIL SPECIFICATION TE ML 03	
	PRIMER PAINT: BLACK RAL 9005	
	DOCUMENTATION GEAR BOX:	
	SECTION DRAWING: 4656 554 002	

### **Technical Cover**

Page 3 from 3



Pos.	Information	Amendment number
	INSTALLATION DRAWING: 4656 654 117	
	GEARBOX DIAGRAM: 4656 700 048	
	OIL CIRCUIT DIAGRAMM: 4656700080	
	INSTAL. INSTRUCTIONS: 0000 702 271	
	DRAWING 6009.665.002	
	DRAWING GEAR SEL. 1: 6006.630.033	
	CONNECTION DIAGRAMM: 6006.700.564	
	CONNECTION DIAGRAMM: 6029.701.742	

## Assembly group overview

Page 1 from 2



Graphics	Pos.	Material number	Name	Quanti ty	Amend. no.	Techn. Info.
4656130023 00	270	4656.130.023	ENGINE CONNECTION	1		
4656130401 00	280	4656.130.401	ENGINE CONNECTION	1		
4166030185 00	500	4166.030.185	CONVERTER	1		
4656102023 00	30	4656.102.023	INPUT	1		
4656101050 01	10	4656.101.050	TRANSMISSION HOUSING	1		
4657101408 00	20	4657.101.408	TRANSMISSION HOUSING	1		
4656171050 00	350	4656.171.050	COUPLING	1		
4656172039 00	360	4656.172.039	COUPLING	1		
4656173045 00	370	4656.173.045	COUPLING	1		
4656174035 00	380	4656.174.035	COUPLING	1		
4656175048 00	390	4656.175.048	CLUTCH	1		
4656176058 00	400	4656.176.058	CLUTCH	1		
4656103007 00	50	4656.103.007	OUTPUT	1		
4656103411 00	60	4656.103.411	OUTPUT	1		
4656103414 00	70	4656.103.414	OUTPUT	1		
4656154004 00	340	4656.154.004	POWER TAKE-OFF	1		

# Assembly group overview

Page 2 from 2



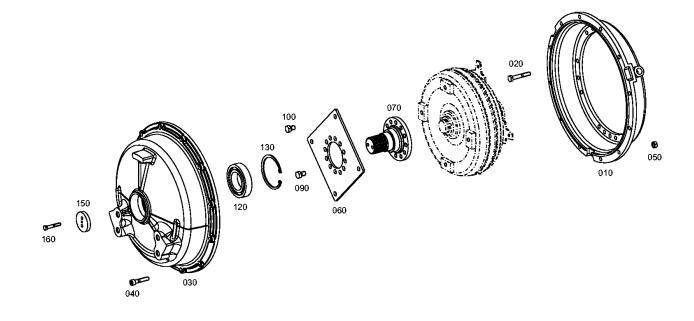
Graphics	Pos.	Material number	Name	Quanti ty	Amend. no.	Techn. Info.
4656106013 00	110	4656.106.013	SHIFT SYSTEM	1		
4657106407 20	115	4657.106.407	SHIFT SYSTEM	1		
4656159019 21	120	4656.159.019	SHIFT SYSTEM	1		
4656120003 00	190	4656.120.003	PRESSURE REGULATOR	1		
4656122005 00	220	4656.122.005	PRESSURE OIL PUMP	1		
4656137004 00	310	4656.137.004	EMERGENCY STEERING PUMP	1		
4656125006 00	250	4656.125.006	INDUCTIVE SENSOR	1		
4657124002 00	240	4657.124.002	TEMPERATURE SENSOR	1		
4656138015 00	330	4656.138.015	FILTER	1		
4656131005 00	290	4656.131.005	OIL DIPSTICK	1		
4656199018 00	490	4656.199.018	LOOSE PARTS	1		
4656183171 00	495	4656.183.171	LOOSE PARTS	1		

Page 1 from 1

Material number: 4656.054.117

Plant: 465613002300





Page 1 from 1

Material number: 4656.054.117

Plant: 465613002300



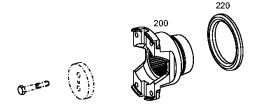
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	4656.330.008		CONVERTER BELL	1			D-TEIL		
20	0636.100.713		HEXAGON SCREW	18			M10X65		
30	4657.330.037	9304580	COVER	1					
40	10636 100 801	REPLACEMENT FOR 0636.101.115	CAP SCREW	12			M10X50		
50	0637.006.281		HEXAGON NUT	12		Z00015425010	M10		
60	4657.330.005	9300177	DIAPHRAGM	1					
70	4657.330.053	9305013	INPUT SHAFT	1		K01306/0610	Z=24		
90	0636.102.411		HEXAGON SCREW	12			M12X18		
100	0636.102.411		HEXAGON SCREW	4			M12X18		
120	0750.116.221	9304583	BALL BEARING	1			55,000X100,000X21,000		
130	0630.532.157	9304584	V-RING	1					
150	4627.303.027	1000002070	WASHER	1					
160	0636.100.722		HEXAGON SCREW	2			M8X50		

Page 1 from 1

Material number: 4656.054.117

Plant: 465613040100





Page 1 from 1

Material number: 4656.054.117

Plant: 465613040100



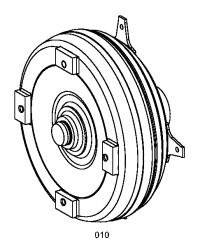
Pos.	Material number	Customer material	Name	Quantity ME	Amend. no.	Techn. Info.	RAN KIT	Alternative material
200	4644.330.132	1000003893	INPUT FLANGE	1		MECHANIC 5C Z=24		
220	4657.330.042	9302029	SCREEN SHEET	1	K00197/0210	S=2,0		

Page 1 from 1

Material number: 4656.054.117

Plant: 416603018500





Page 1 from 1

Material number: 4656.054.117

Plant: 416603018500



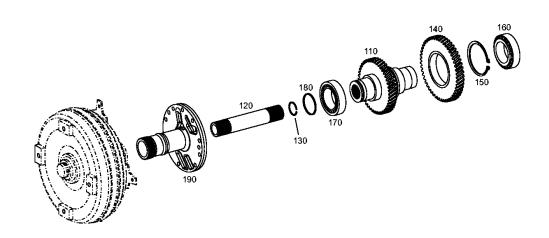
ı	Pos.	Material number	Customer material	Name	Quantity ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
[:	10	4168.030.264	84141993	CONVERTER	1				

Page 1 from 1

Material number: 4656.054.117

Plant: 465610202300





Page 1 from 1

Material number: 4656.054.117

Plant: 465610202300



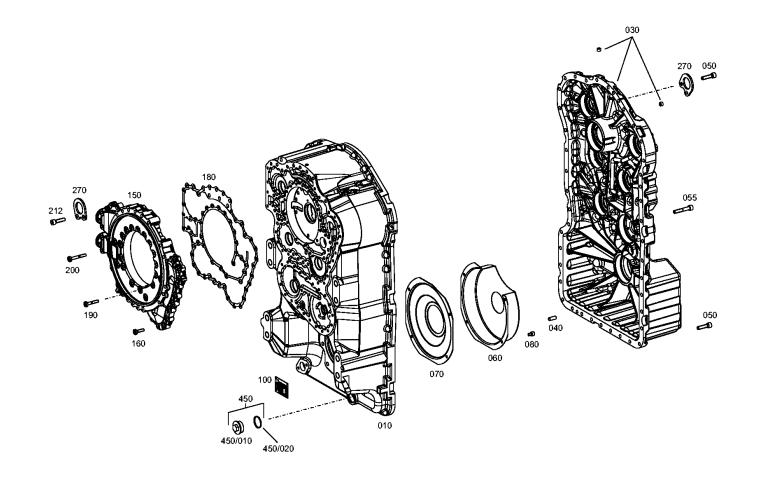
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
110	4656.302.022	9301448	INPUT SHAFT	1			Z=51*Z=30		
120	4656.302.010	9301449	TURBINE SHAFT	1					
130	0630.513.099	9301450	SNAP RING	1					
140	4656.302.014	8603299	INPUT GEAR	1			Z=61		
150	0630.501.054	1000003751	RETAINING RING	1			90X3		
160	0750.117.905	9301452	TAPERED ROLLER BEARING	1		Z00009825310	60,000X95,000X27,000		
170	0750.117.905	9301452	TAPERED ROLLER BEARING	1		Z00009825310	60,000X95,000X27,000		
180	0634.402.557		R-RING	1			60X3		
190	4656.302.036	9305015	STATOR SHAFT	1		K04309/0710	Z=46		

Page 1 from 2

Material number: 4656.054.117

Plant: 465610105001



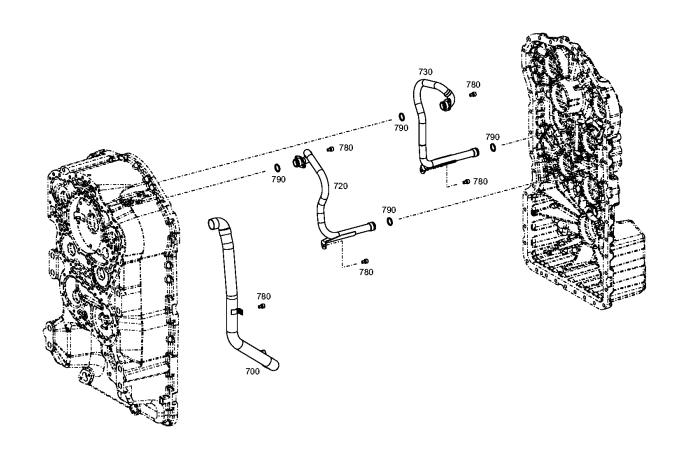


Page 2 from 2

Material number: 4656.054.117

Plant: 465610105002





Page 1 from 1

Material number: 4656.054.117

Plant: 465610105001



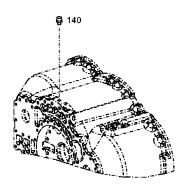
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	4656.201.032	T244795	HOUS.FRONT SECT	1			KPL.		
30	4472.239.195		HOUSING REAR PART	1					
30	4656.201.048		HOUSING REAR PART						4472.239.195
40	0631.306.816	VOE15077503	CYLINDRICAL PIN	2			10X24		
50	0636.100.816		CAP SCREW	35			M10X40		
55	0636.100.817		CAP SCREW	6			M10X60		
60	4656.301.016	8603304	SCREEN SHEET	1					
70	4656.301.017	ZGAQ-01404	SCREEN SHEET	1					
80	0636.100.803		CAP SCREW	4			M8X12		
100	0730.365.092		TYPE PLATE	1			ZF-Standard/Passau		
150	4656.301.047	87712648	OIL FEED.HOUSG.	1					
160	0736.300.233		TORX SCREW	15			M8X30		
180	4656.301.023	9301468	GASKET	1					
190	0736.300.182		TORX SCREW	21			M8X45 M8X45		
200	0736.300.183		TORX SCREW	4			M8X60 M8X60		
212	0636.100.816		CAP SCREW	2			M10X40		
270	4656.301.018	A138608	FIXING PLATE	2					
450	4475.280.216	8603319	SCREW PLUG	1					
/20	0634.314.304	9301477	O-RING	1			35X2		
700	0501.218.765	420406-00901	SUCTION TUBE	1		Z00009825310			
720	0501.213.156	0501 213 156	OIL TUBE	1					
730	0501.213.157	8605281	OIL TUBE	1					
780	0636.100.803		CAP SCREW	7			M8X12		
790	0634.306.213	1000000285	O-RING	4			22X3		

Page 1 from 1

Material number: 4656.054.117

Plant: 465710140800





Page 1 from 1

Material number: 4656.054.117

Plant: 465710140800



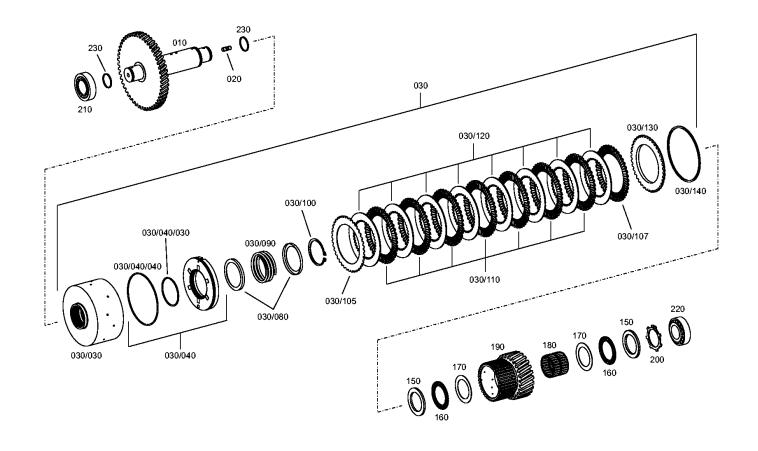
F	Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
[]	140	0750.131.027	50359078	BREATHER	1					

Page 1 from 1

Material number: 4656.054.117

Plant: 465617105000





Page 1 from 2

Material number: 4656.054.117

Plant: 465617105000



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	4656.371.057	84395227	SHAFT	1		Z00009825310	Z=64		
20	0636.607.039	8603407	STUD	1			M10X16		
30	4656.271.005	8603664	CLUTCH BODY	1					
/30	4656.371.048	T244798	DISC CARRIER	1			D-TEIL*Z=44		
/40	4657.275.006	ZGAQ-00849	PISTON	1			KPL.		
//30	0634.313.643	8603409	O-RING	1			75X3		
//40	0634.313.719	8603410	O-RING	1			142X3		
/80	4656.371.022	331384A1	GUIDE RING	2					
/90	0732.042.654	ZGAQ-01933	COMPRESSION SPRING	1					
/100	0630.501.046	1239942	RETAINING RING	1			70X2,5		
/105	0501.212.373	KD41416001	OUTER CLUTCH DISK	1					
/107	0501.212.373	KD41416001	OUTER CLUTCH DISK	1					
/110	0501.212.372	KD41416002	DISC	7			h=2.5		
/120	0501.316.591	ZGAQ-00853	INNER CLUTCH DISK	8					
/130	0750.101.183	550/42964	END SHIM	1			159,0X8		
/140			SNAP RING	1					
	0730.513.684	ZGAQ-00855	SNAP RING	1			h=2,10		
	0730.513.685	1.115-00321	SNAP RING	1			h=2,25		
	0730.513.686	8603417	SNAP RING	1			h=2,40		
	0730.513.687	ZGAQ-00858	SNAP RING	1			h=2,55		
	0730.513.688	1.115-00327	SNAP RING	1			h=2,70		
	0730.513.698	ZGAQ-00860	SNAP RING	1			h=2.85		
	0730.513.689	1.115-00331	SNAP RING	1			h=3,00		
	0730.513.690	ZGAQ-00862	SNAP RING	1			h=3,15		
	0730.513.691	ZGAQ-00863	SNAP RING	1			h=3,30		
	0730.513.692	8603424	SNAP RING	1			h=3,45		
	0730.513.693	ZGAQ-00865	SNAP RING	1			h=3,60		
	0730.513.694	1.115-00341	SNAP RING	1			h=3,75		
	0730.513.695	1.115-00343	SNAP RING	1			h=3,90		
	0730.513.696	8603428	SNAP RING	1			h=4,05		
	0730.513.697	ZGAQ-00869	SNAP RING	1			h=4,20		
150	0635.290.114	8603430	RUNNING DISK	2			55X78X5		
160	0735.368.076	8603431	AXIAL NEEDLE CAGE	2			55,0X78,0X3,0		
170	0635.290.012	8603432	AXIAL WASHER	2			55X78X1		

Page 2 from 2

Material number: 4656.054.117

Plant: 465617105000



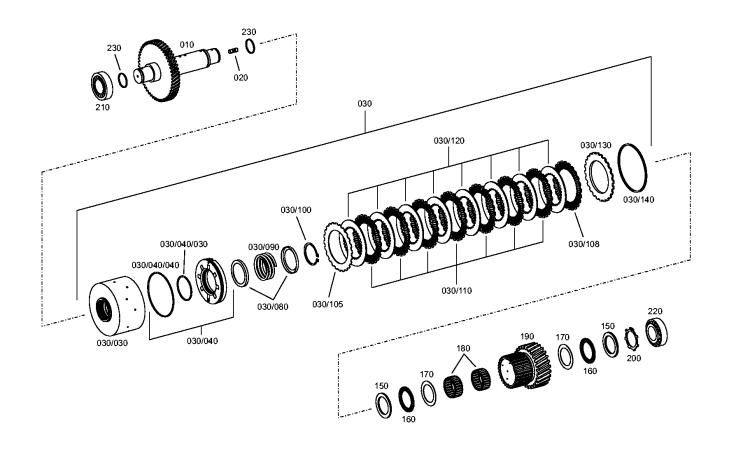
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
180	0735.321.508	8603643	NEEDLE CAGE	1			K 55,0X63,0X50,0		
190	4656.371.040	ZGAQ-01413	IDLER	1			Z=30		
200	0501.316.378	1.115-00015	RETAINING RING	1					
210	0750.117.906	VOE15078595	TAPERED ROLLER BEARING	1		Z00009825310	39,688X76,200X23,812		
220	0750.117.906	VOE15078595	TAPERED ROLLER BEARING	1		Z00009825310	39,688X76,200X23,812		
230	0734.401.267	A138654	PISTON RING	2					

Page 1 from 1

Material number: 4656.054.117

Plant: 465617203900





Page 1 from 2

Material number: 4656.054.117

Plant: 465617203900



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	4656.372.074	84395231	SHAFT	1		Z00009825310	Z=56		
20	0636.607.039	8603407	STUD	1			M10X16		
30	4656.272.007	87560263	COUPLING	1			K2/K3 4/6WG160 KPL. RF=16		
/30	4656.372.030	9305032	DISC CARRIER	1			D-TEIL*Z=27		
/40	4656.272.003	9305033	PISTON	1			KPL. K2/K3/K4		
//30	0634.313.574	99707034427	O-RING	1			64X3		
//40	0634.313.498	999001812	O-RING	1			120X3		
/80	4642.308.083	1000002083	GUIDE RING	2					
/90	0732.041.183	1000000890	COMPRESSION SPRING	1					
/100	0630.501.040	1239967	RETAINING RING	1			58X2		
/105	0501.212.368	KD41414001	FRICTION DISC	1					
/108	0501.212.368	KD41414001	FRICTION DISC	1					
/110	0501.212.369	KD41414002	DISC	7					
/120	0501.316.590	9305036	INNER CLUTCH DISK	8					
/130	0750.101.181	ZGAQ-01947	END SHIM	1			137,5X6		
/140			SNAP RING	1					
	0730.513.456		SNAP RING	1			A=2,10 IN 0730 513 415(2)		
	0730.513.420		SNAP RING	1			A=2,25 IN 0730 513 415(2)		
	0730.513.417		SNAP RING	1			A=2,40 IN 0730 513 415(2)		
	0730.513.668	ZGAQ-01951	SNAP RING	1			A=2,55		
	0730.513.669	331425A1	SNAP RING	1			A=2,70		
	0730.513.670		SNAP RING	1			A=2,85		
	0730.513.671		SNAP RING	1			A=3,00		
	0730.513.672		SNAP RING	1			A=3,15		
	0730.513.673		SNAP RING	1			A=3,30		
	0730.513.674		SNAP RING	1			A=3,45		
	0730.513.675		SNAP RING	1			A=3,60		
	0730.513.676		SNAP RING	1			A=3,75		
	0730.513.677		SNAP RING	1			A=3,90		
	0730.513.678		SNAP RING	1			A=4,05		
	0730.513.679		SNAP RING	1			A=4,20		
150	0635.290.079		RUNNING DISK	2			50X70X4		
160	0735.368.077		AXIAL NEEDLE BEARING	2			50,0X70,0X3,0 FA.INA		
170	0635.290.020	8603440	AXIAL WASHER	2			50X70X1		

Page 2 from 2

Material number: 4656.054.117

Plant: 465617203900



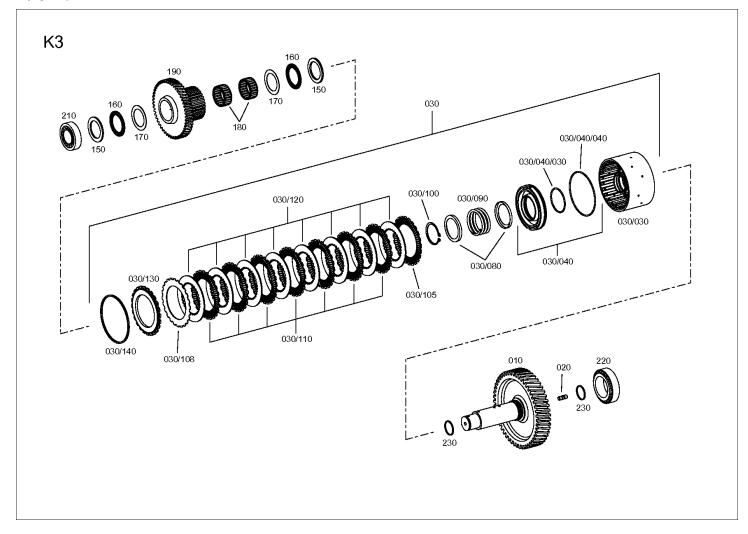
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	IRAN KIT	Alternative material
180	0735.321.410	8603441	NEEDLE CAGE	2					
190	4656.372.028	ZGAQ-01421	IDLER	1			Z=27		
200	0501.316.377	331441A1	RETAINING RING	1					
210	0750.117.906	VOE15078595	TAPERED ROLLER BEARING	1		Z00009825310	39,688X76,200X23,812		
220	0750.117.906	VOE15078595	TAPERED ROLLER BEARING	1		Z00009825310	39,688X76,200X23,812		
230	0734.401.267	A138654	PISTON RING	2					

Page 1 from 1

Material number: 4656.054.117

Plant: 465617304500





Page 1 from 2

Material number: 4656.054.117

Plant: 465617304500



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	4656.373.029	84395234	SHAFT	1		Z00009825310	Z=53*D-TEIL		
20	0636.607.039	8603407	STUD	1			M10X16		
30	4656.272.007	87560263	COUPLING	1			K2/K3 4/6WG160 KPL. RF=16		
/30	4656.372.030	9305032	DISC CARRIER	1			D-TEIL*Z=27		
/40	4656.272.003		PISTON	1			KPL. K2/K3/K4		
//30	0634.313.574		O-RING	1			64X3		
//40	0634.313.498		O-RING	1			120X3		
/80	4642.308.083		GUIDE RING	2					
/90	0732.041.183		COMPRESSION SPRING	1					
/100	0630.501.040	1239967	RETAINING RING	1			58X2		
/105	0501.212.368		FRICTION DISC	1					
/108	0501.212.368	KD41414001	FRICTION DISC	1					
/110	0501.212.369		DISC	7					
/120	0501.316.590		INNER CLUTCH DISK	8					
/130	0750.101.181	ZGAQ-01947	END SHIM	1			137,5X6		
/140			SNAP RING	1					
	0730.513.456	185446A1	SNAP RING	1			A=2,10 IN 0730 513 415(2)		
	0730.513.420		SNAP RING	1			A=2,25 IN 0730 513 415(2)		
	0730.513.417		SNAP RING	1			A=2,40 IN 0730 513 415(2)		
	0730.513.668		SNAP RING	1			A=2,55		
	0730.513.669		SNAP RING	1			A=2,70		
	0730.513.670		SNAP RING	1			A=2,85		
		0730 513 671	SNAP RING	1			A=3,00		
	0730.513.672		SNAP RING	1			A=3,15		
	0730.513.673		SNAP RING	1			A=3,30		
	0730.513.674		SNAP RING	1			A=3,45		
	0730.513.675		SNAP RING	1			A=3,60		
	0730.513.676	_	SNAP RING	1			A=3,75		
	0730.513.677		SNAP RING	1			A=3,90		
	0730.513.678		SNAP RING	1			A=4,05		
	0730.513.679		SNAP RING	1			A=4,20		
150	0635.290.079		RUNNING DISK	2			50X70X4		
160	0735.368.077		AXIAL NEEDLE BEARING	2			50,0X70,0X3,0 FA.INA		
170	0635.290.020	8603440	AXIAL WASHER	2			50X70X1		

Page 2 from 2

Material number: 4656.054.117

Plant: 465617304500



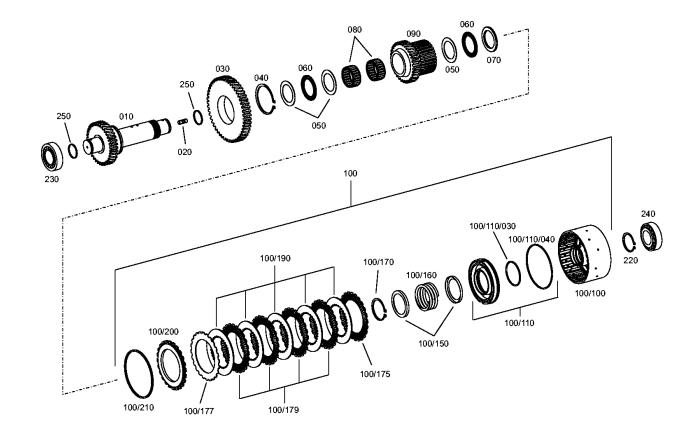
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
180	0735.321.410	8603441	NEEDLE CAGE	2					
190	4656.373.009	8603444	IDLER	1			Z=55		
210	0750.117.906	VOE15078595	TAPERED ROLLER BEARING	1		Z00009825310	39,688X76,200X23,812		
220	0750.117.905	9301452	TAPERED ROLLER BEARING	1		Z00009825310	60,000X95,000X27,000		
230	0734.401.267	A138654	PISTON RING	2					

Page 1 from 1

Material number: 4656.054.117

Plant: 465617403500





Page 1 from 2

Material number: 4656.054.117

Plant: 465617403500



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	4656.374.041	130712-00917	SHAFT	1		Z00009825310	Z=38*Z=34		
20	0636.607.039	8603407	STUD	1			M10X16		
30	4656.374.014	ZGAQ-01428	GEAR	1			Z=61		
40	0630.501.050	8900125218	RETAINING RING	1			80X2,5		
50	0635.290.020		AXIAL WASHER	3			50X70X1		
60	0735.368.077	8603439	AXIAL NEEDLE BEARING	2			50,0X70,0X3,0 FA.INA		
70	0635.290.079		RUNNING DISK	1			50X70X4		
80	0735.321.410		NEEDLE CAGE	2					
90	4656.374.017	ZGAQ-01429	IDLER	1			Z=37		
100	4656.274.002	550/41298	COUPLING	1			KPL.K4 4WG-130/160 RF=10		
/100	4656.374.035	T244800	DISC CARRIER	1			Z=27		
/110	4656.272.003	9305033	PISTON	1			KPL. K2/K3/K4		
//30	0634.313.574	99707034427	O-RING	1			64X3		
//40	0634.313.498	999001812	O-RING	1			120X3		
/150	4642.308.083		GUIDE RING	2					
/160	0732.041.183		COMPRESSION SPRING	1					
/170	0630.501.040	1239967	RETAINING RING	1			58X2		
/175	0501.212.368	KD41414001	FRICTION DISC	1					
/177	0501.212.368	KD41414001	FRICTION DISC	1					
/179	0501.212.369		DISC	4					
/190	0501.316.590		INNER CLUTCH DISK	5					
/200	0750.101.181	ZGAQ-01947	END SHIM	1			137,5X6		
/210			SNAP RING	1					
	0730.513.456		SNAP RING	1			A=2,10 IN 0730 513 415(2)		
	0730.513.420		SNAP RING	1			A=2,25 IN 0730 513 415(2)		
	0730.513.417		SNAP RING	1			A=2,40 IN 0730 513 415(2)		
	0730.513.668		SNAP RING	1			A=2,55		
	0730.513.669		SNAP RING	1			A=2,70		
	0730.513.670		SNAP RING	1			A=2,85		
		0730 513 671	SNAP RING	1			A=3,00		
	0730.513.672		SNAP RING	1			A=3,15		
	0730.513.673		SNAP RING	1			A=3,30		
	0730.513.674	ZGAQ-01957	SNAP RING	1			A=3,45		
	0730.513.675	331431A1	SNAP RING	1			A=3,60		

Page 2 from 2

Material number: 4656.054.117

Plant: 465617403500



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
	0730.513.676	ZGAQ-01959	SNAP RING	1			A=3,75		
	0730.513.677	0730 513 677	SNAP RING	1			A=3,90		
	0730.513.678	331434A1	SNAP RING	1			A=4,05		
	0730.513.679	ZGAQ-01962	SNAP RING	1			A=4,20		
220	0630.501.035	1000002633	RETAINING RING	1			50X2		
230	0750.117.906	VOE15078595	TAPERED ROLLER BEARING	1		Z00009825310	39,688X76,200X23,812		
240	0750.117.906	VOE15078595	TAPERED ROLLER BEARING	1		Z00009825310	39,688X76,200X23,812		
250	0734.401.267	A138654	PISTON RING	2					

Page 1 from 1

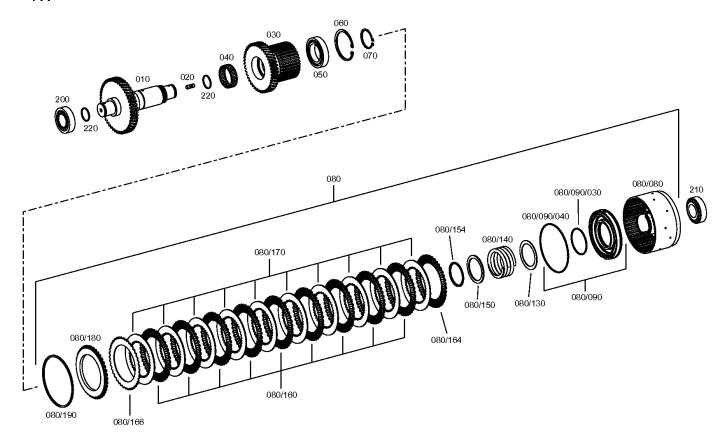
Material number: 4656.054.117

Plant: 465617504800

Material-assembly-group-no: 4656.175.048



ΚV



Page 1 from 2

Material number: 4656.054.117

Plant: 465617504800



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	4656.375.030	130712-00918	SHAFT	1		Z00009825310	Z=55		
20	0636.607.039	8603407	STUD	1			M10X16		
30	4656.375.016	A138672	IDLER	1			Z=49		
40	0735.321.408		NEEDLE CAGE	1			K 60,0X68,0X20,0		
50	0735.301.814		BALL BEARING	1			55,000X90,000X18,000		
60	0630.502.042		RETAINING RING	1			90X3		
70	0630.501.038		RETAINING RING	1			55X2		
80	4656.275.010		COUPLING	1			KPL.KV/KR 3/4WG-160L RF=20		
/80	4656.375.029		DISC CARRIER	1			Z=44		
/90	4657.275.006	ZGAQ-00849	PISTON	1			KPL.		
//30	0634.313.643		O-RING	1			75X3		
//40	0634.313.719	8603410	O-RING	1			142X3		
/130	0730.110.373		WASHER	1					
/140	0732.042.711	8603454	COMPRESSION SPRING	1					
/150	0730.011.028		SUPPORTING RING	1					
/154	0501.324.228		L-RING	1					
/160	0501.212.372		DISC	9			h=2.5		
/164	0501.212.373		OUTER CLUTCH DISK	1					
/166	0501.212.373	KD41416001	OUTER CLUTCH DISK	1					
/170	0501.316.591		INNER CLUTCH DISK	10					
/180	0750.101.183	550/42964	END SHIM	1			159,0X8		
/190			SNAP RING	1					
	0730.513.684		SNAP RING	1			h=2,10		
	0730.513.685		SNAP RING	1			h=2,25		
	0730.513.686		SNAP RING	1			h=2,40		
	0730.513.687		SNAP RING	1			h=2,55		
	0730.513.688		SNAP RING	1			h=2,70		
	0730.513.698		SNAP RING	1			h=2.85		
	0730.513.689		SNAP RING	1			h=3,00		
	0730.513.690		SNAP RING	1			h=3,15		
	0730.513.691		SNAP RING	1			h=3,30		
	0730.513.692	8603424	SNAP RING	1			h=3,45		
	0730.513.693	-	SNAP RING	1			h=3,60		
	0730.513.694	1.115-00341	SNAP RING	1			h=3,75		

Page 2 from 2

Material number: 4656.054.117

Plant: 465617504800



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
	0730.513.695	1.115-00343	SNAP RING	1			h=3,90		
	0730.513.696	8603428	SNAP RING	1			h=4,05		
	0730.513.697	ZGAQ-00869	SNAP RING	1			h=4,20		
200	0750.117.906	VOE15078595	TAPERED ROLLER BEARING	1		Z00009825310	39,688X76,200X23,812		
210	0750.117.906	VOE15078595	TAPERED ROLLER BEARING	1		Z00009825310	39,688X76,200X23,812		
220	0734.401.267	A138654	PISTON RING	2					

Page 1 from 1

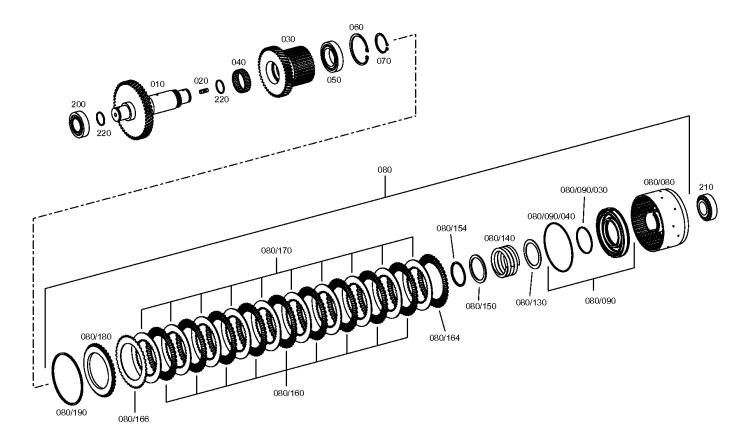
Material number: 4656.054.117

Plant: 465617605800

Material-assembly-group-no: 4656.176.058



KR



Page 1 from 2

Material number: 4656.054.117

Plant: 465617605800



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	4656.376.011		SHAFT	1		Z00009825310	Z=58		
20	0636.607.039	8603407	STUD	1			M10X16		
30	4656.375.016	A138672	IDLER	1			Z=49		
40	0735.321.408		NEEDLE CAGE	1			K 60,0X68,0X20,0		
50	0735.301.814		BALL BEARING	1			55,000X90,000X18,000		
60	0630.502.042		RETAINING RING	1			90X3		
70	0630.501.038		RETAINING RING	1			55X2		
80	4656.275.010		COUPLING	1			KPL.KV/KR 3/4WG-160L RF=20		
/80	4656.375.029		DISC CARRIER	1			Z=44		
/90	4657.275.006	ZGAQ-00849	PISTON	1			KPL.		
//30	0634.313.643		O-RING	1			75X3		
//40	0634.313.719	8603410	O-RING	1			142X3		
/130	0730.110.373		WASHER	1					
/140	0732.042.711	8603454	COMPRESSION SPRING	1					
/150	0730.011.028		SUPPORTING RING	1					
/154	0501.324.228		L-RING	1					
/160	0501.212.372	KD41416002	DISC	9			h=2.5		
/164	0501.212.373		OUTER CLUTCH DISK	1					
/166	0501.212.373	KD41416001	OUTER CLUTCH DISK	1					
/170	0501.316.591		INNER CLUTCH DISK	10					
/180	0750.101.183	550/42964	END SHIM	1			159,0X8		
/190			SNAP RING	1					
	0730.513.684		SNAP RING	1			h=2,10		
	0730.513.685		SNAP RING	1			h=2,25		
	0730.513.686		SNAP RING	1			h=2,40		
	0730.513.687		SNAP RING	1			h=2,55		
	0730.513.688		SNAP RING	1			h=2,70		
	0730.513.698		SNAP RING	1			h=2.85		
	0730.513.689		SNAP RING	1			h=3,00		
	0730.513.690		SNAP RING	1			h=3,15		
	0730.513.691		SNAP RING	1			h=3,30		
	0730.513.692	8603424	SNAP RING	1			h=3,45		
	0730.513.693	-	SNAP RING	1			h=3,60		
	0730.513.694	1.115-00341	SNAP RING	1			h=3,75		

Page 2 from 2

Material number: 4656.054.117

Plant: 465617605800



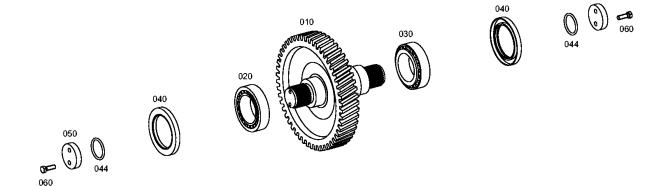
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
	0730.513.695	1.115-00343	SNAP RING	1			h=3,90		
	0730.513.696	8603428	SNAP RING	1			h=4,05		
	0730.513.697	ZGAQ-00869	SNAP RING	1			h=4,20		
200	0750.117.906	VOE15078595	TAPERED ROLLER BEARING	1		Z00009825310	39,688X76,200X23,812		
210	0750.117.906	VOE15078595	TAPERED ROLLER BEARING	1		Z00009825310	39,688X76,200X23,812		
220	0734.401.267	A138654	PISTON RING	2					

Page 1 from 1

Material number: 4656.054.117

Plant: 465610300700





Page 1 from 1

Material number: 4656.054.117

Plant: 465610300700



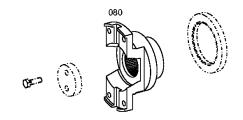
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	IRAN KIT	Alternative material
10	4656.303.021	87712664	OUTPUT SHAFT	1		K01110/0610	Z=60		
20	0750.117.905	9301452	TAPERED ROLLER BEARING	1		Z00009825310	60,000X95,000X27,000		
30	0750.117.905	9301452	TAPERED ROLLER BEARING	1		Z00009825310	60,000X95,000X27,000		
40	0750.111.307	6149188E	SHAFT SEAL	2			70X100X10		
	0634.306.328		O-RING	2			38X4		
50	0730.002.713	50380587	WASHER	2					
60	0636.100.800		HEXAGON SCREW	4			M8X25		

Page 1 from 1

Material number: 4656.054.117

Plant: 465610341100





Page 1 from 1

Material number: 4656.054.117

Plant: 465610341100



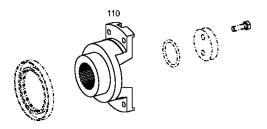
Pos.	Material number	Customer material	Name	Quantity ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
80	4642.303.059	1000002077	INPUT FLANGE	1		MECHANIC 6C		

Page 1 from 1

Material number: 4656.054.117

Plant: 465610341400





Page 1 from 1

Material number: 4656.054.117

Plant: 465610341400



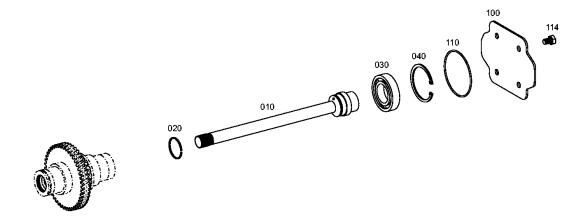
Pos.	Material number	Customer material	Name	Quantity ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
110	4642.303.059	1000002077	INPUT FLANGE	1		MECHANIC 6C		

Page 1 from 1

Material number: 4656.054.117

Plant: 465615400400





Page 1 from 1

Material number: 4656.054.117

Plant: 465615400400



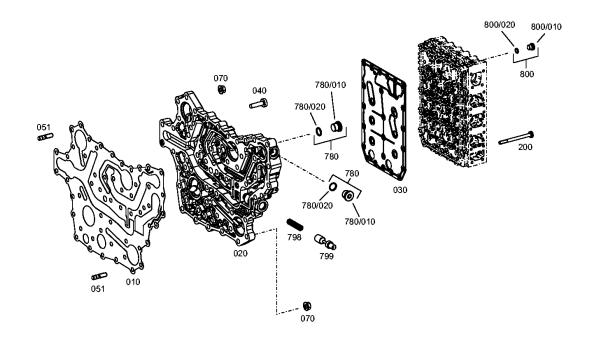
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	IRAN KIT	Alternative material
10	4656.354.005	ZGAQ-01447	PUMP SHAFT	1			Z=21		
20	0634.402.140	00412711	R-RING	1			50X2,5		
30	0750.116.008	9300455	BALL BEARING	1			45,000X85,000X19,000		
40	0630.502.040		RETAINING RING	1			85X3		
100	4656.354.008	ZGAQ-01449	COVER PLATE	1		K00883/9710			
110	0634.313.179		O-RING	1			104X3		
114	0636.102.411		HEXAGON SCREW	4			M12X18		

Page 1 from 1

Material number: 4656.054.117

Plant: 465610601300





Page 1 from 1

Material number: 4656.054.117

Plant: 465610601300



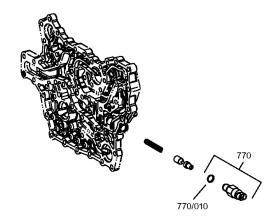
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	4656.306.136	9303019	GASKET	1					
20	4656.306.151	8603185	DUCT PLATE	1					
30	4656.306.179	ZGAQ-04412	INTERMEDIATE SHEET	1		Z00016403510			
40	0736.300.233		TORX SCREW	37			M8X30		
51	0636.102.496		STUD	14			M8X25		
70	0637.100.139		HEXAGON NUT	14			M8		
200	0736.300.093	550/41382	TORX SCREW	23			M6X76		
780	4475.280.208		SCREW PLUG	2					
/20	0634.316.523	9301941	O-RING	1			13X2		
798	0732.042.761	8603534	COMPRESSION SPRING	1			D=1,6		
799	4657.306.031	550/41444	PISTON	1					
800	4475.280.197	6524736M1	SCREW PLUG	8			M10X1 KPL.MIT O-RING		
/20	0634.303.280	590808	O-RING	1			8X1,5		

Page 1 from 1

Material number: 4656.054.117

Plant: 465710640720





Page 1 from 1

Material number: 4656.054.117

Plant: 465710640720



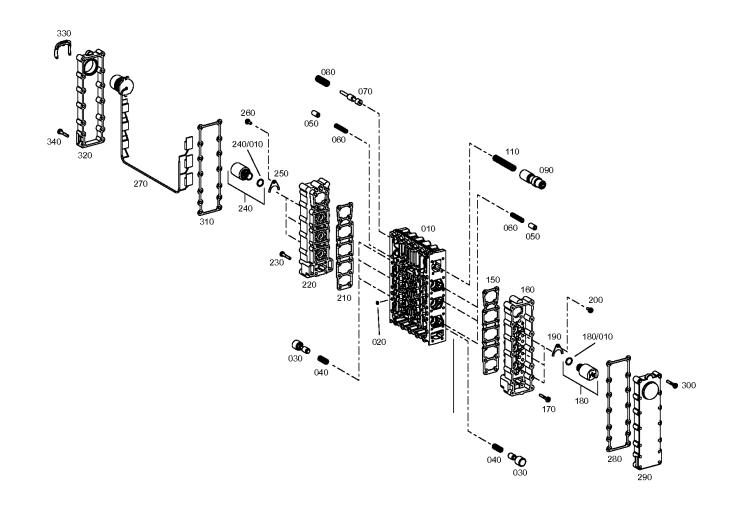
Pos.	Material number	Customer material	Name	Quantity ME	Amend. no.	Techn. Info.	iken kit	Alternative material
770	0501.210.966	571707408	TAPPET SWITCH	1				
/10	0634.306.523	1000000291	O-RING	1		13X2		

Page 1 from 2

Material number: 4656.054.117

Plant: 465615901921



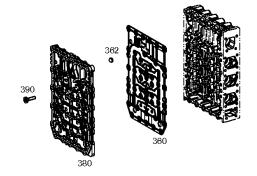


Page 2 from 2

Material number: 4656.054.117

Plant: 465615901922





Page 1 from 2

Material number: 4656.054.117

Plant: 465615901921



Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	4656.306.170	9305079	VALVE BLOCK	1					
20	0730.361.070	8603367	ORIFICE	6			D=0,8 IN 0730 361 120(2)		
30	4656.306.095	8603368	PISTON	6					
40	0732.042.538	8603369	COMPRESSION SPRING	6					
50	4656.306.013	8603370	PISTON	6					
60	0732.042.539		COMPRESSION SPRING	6					
70	4656.306.074		PISTON	1					
80	0732.042.631		COMPRESSION SPRING	1					
90	4656.306.152		CONTROL PISTON	1					
110	0732.042.719		COMPRESSION SPRING	1					
150	4656.306.158		GASKET	1					
160	4656.306.116	8603376	HOUSING	1					
170	0736.300.229		TORX SCREW	18			M5X30		
180	0501.314.770		PRESSURE REGULATOR	3					
/10	0734.313.134		O-RING	1					
190	1043.326.045		FIXING PLATE	3					
200	0736.101.094		TORX SCREW	3			M5X12 IN 0736 101 053(2)		
210	4656.306.158	9303082	GASKET	1					
220	4656.306.116	8603376	HOUSING	1					
230	0736.300.229		TORX SCREW	18			M5X30		
240	0501.314.770		PRESSURE REGULATOR	3					
/10	0734.313.134		O-RING	1					
250	1043.326.045		FIXING PLATE	3					
260	0736.101.094		TORX SCREW	3			M5X12 IN 0736 101 053(2)		
270	4656.206.006		WIRING HARNESS	1			KPL.HSG-94 SERIE 1		
280	4656.306.157		GASKET	1					
290	4656.306.054		COVER	1					
300	0736.300.229		TORX SCREW	14			M5X30		
310	4656.306.157		GASKET	1					
320	4656.306.055		COVER	1					
330	1058.327.026		RETAINING CLAMP	1					
340	0736.300.229		TORX SCREW	14			M5X30		
360	4656.306.180		INTERMEDIATE SHEET	1		Z00016403510	D-Teil		
362	0501.316.715	9300054	SCREEN	6					

Page 2 from 2

Material number: 4656.054.117

Plant: 465615901921



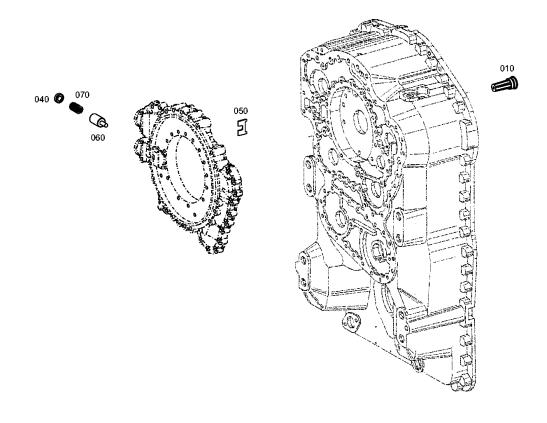
Pos.	Material number	Customer material	Name	Quantity ME	Amend. no.	Techn. Info.	IRAN KIT	Alternative material
380	4656.306.150	8603628	DUCT PLATE	1				
390	0736.300.092		TORX SCREW	18		M6X23		

Page 1 from 1

Material number: 4656.054.117

Plant: 465612000300





Page 1 from 1

Material number: 4656.054.117

Plant: 465612000300



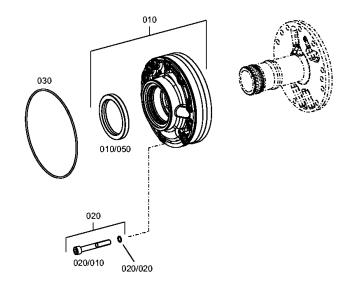
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	IRAN KIT	Alternative material
10	0501.211.384	9300061	VALVE	1		K00720/9810			
40	4656.306.077	ZGAQ-00913	PRESSURE PLATE	1					
50	4656.306.078	ZGAQ-00914	LOCKING PLATE	1					
60	4656.306.107	1.409-00009	PISTON	1		K00720/9810			
70	0732.042.767	8603383	COMPRESSION SPRING	1		K00720/9810			

Page 1 from 1

Material number: 4656.054.117

Plant: 465612200500





Page 1 from 1

Material number: 4656.054.117

Plant: 465612200500



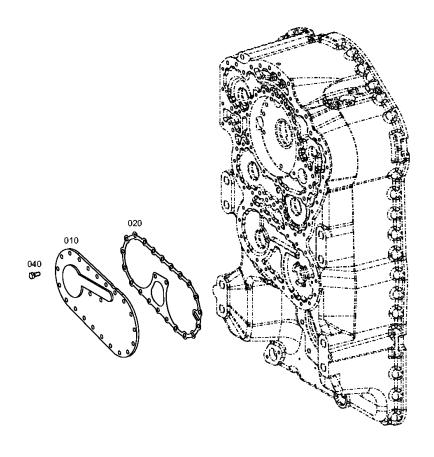
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	IRAN KIT	Alternative material
10	0501.214.894	9303088	GEAR PUMP	1					
/50	0634.311.837	9301951	SHAFT SEAL	1			75X95X10		
20	4475.280.205		CAP SCREW	10					
/20	0634.313.215	9301954	O-RING	1			9,5X1,6		
30	0634.313.999		O-RING	1		K01165/0610	182X3		

Page 1 from 1

Material number: 4656.054.117

Plant: 465613700400





Page 1 from 1

Material number: 4656.054.117

Plant: 465613700400



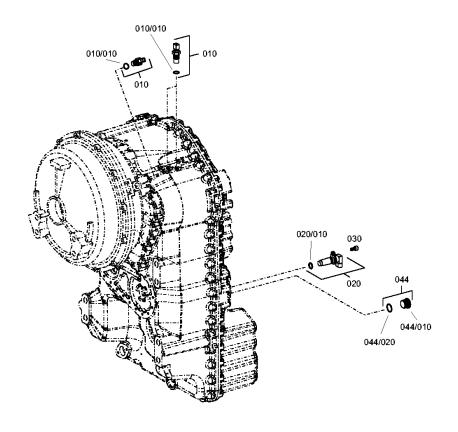
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	IRAN KIT	Alternative material
10	4656.337.005	8603393	COVER	1					
20	4656.337.010	9301958	GASKET	1		K00072/01110			
40	0636.015.681		HEXAGON SCREW	23			M8X18		

Page 1 from 1

Material number: 4656.054.117

Plant: 465612500600





Page 1 from 1

Material number: 4656.054.117

Plant: 465612500600



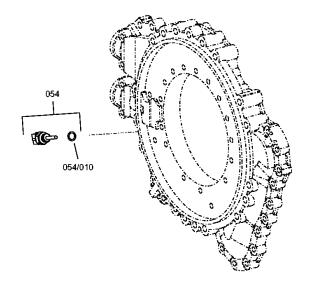
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	Rep kit	Alternative material
10	0501.209.719	14683452200	INDUCTIVE SENSOR	3					
/10	0734.313.125	9303094	O-RING	1					
20	0501.317.949	9300063	SPEED SENSOR	1		K02042/9910	ENTHALT.IN 0501 317 941(2)		
	0634.313.728		O-RING	1			15,54X2,62		
30	0636.115.293	REPLACEMENT FOR 0636.101.680	CAP SCREW	1			M8X16		
44	4475.280.209		SCREW PLUG	1					
/20	0634.313.233	9301962	O-RING	1			23X2		

Page 1 from 1

Material number: 4656.054.117

Plant: 465712400200





Page 1 from 1

Material number: 4656.054.117

Plant: 465712400200



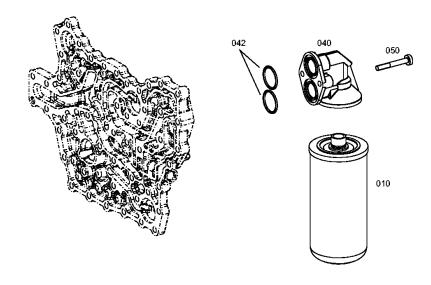
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	iken kit	Alternative material
54	0501.322.532	87712669	TEMPERATURE SENSOR	1		K00547/0610			
/10	0634.313.366	8603402	O-RING	1			11X2		

Page 1 from 1

Material number: 4656.054.117

Plant: 465613801500





Page 1 from 1

Material number: 4656.054.117

Plant: 465613801500



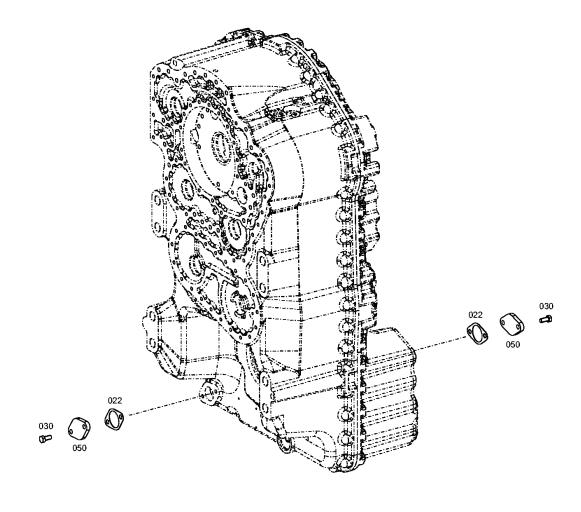
POS	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	IRAN KIT	Alternative material
10	0501.323.154	070208	PRESSURE FILTER	1			KPL.		
40	0501.210.925	8603403	FILTER HEAD	1			KPL.		
42	0634.306.053	04135130	O-RING	2		K01160/0610	34,2X3		
50	0736.300.183		TORX SCREW	2			M8X60 M8X60		

Page 1 from 1

Material number: 4656.054.117

Plant: 465613100500





Page 1 from 1

Material number: 4656.054.117

Plant: 465613100500



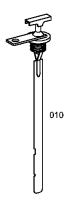
Pos.	Material number	Customer material	Name	Quantity	ME	Amend. no.	Techn. Info.	IRAN KIT	Alternative material
22	4642.331.216		GASKET	2					
30	0636.015.681		HEXAGON SCREW	4			M8X18		
50	4644.301.014	1000002129	COVER PLATE	2			E=8		

Page 1 from 1

Material number: 4656.054.117

Plant: 465619901800





Page 1 from 1

Material number: 4656.054.117

Plant: 465619901800



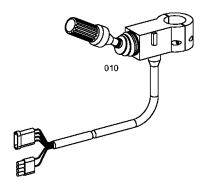
Pos.	Material number	Customer material	Name	Quantity ME	Amend. no.	Techn. Info.	ikeb kit	Alternative material
10	4656.231.005	ZGAQ-01470	OIL DIPSTICK	1				

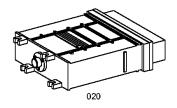
Page 1 from 1

Material number: 4656.054.117

Plant: 465618317100







Page 1 from 1

Material number: 4656.054.117

Plant: 465618317100



	Pos.	Material number	Customer material	Name	Quantity ME	Amend. no.	Techn. Info.	Ken KIT	Alternative material
Ì	10	0501.216.209	590507	RANGE SELECTOR	1	K00483/0810	KPL.		
ĺ	20	6009.092.613	ZGAQ-01978	CONTROL UNIT	1				