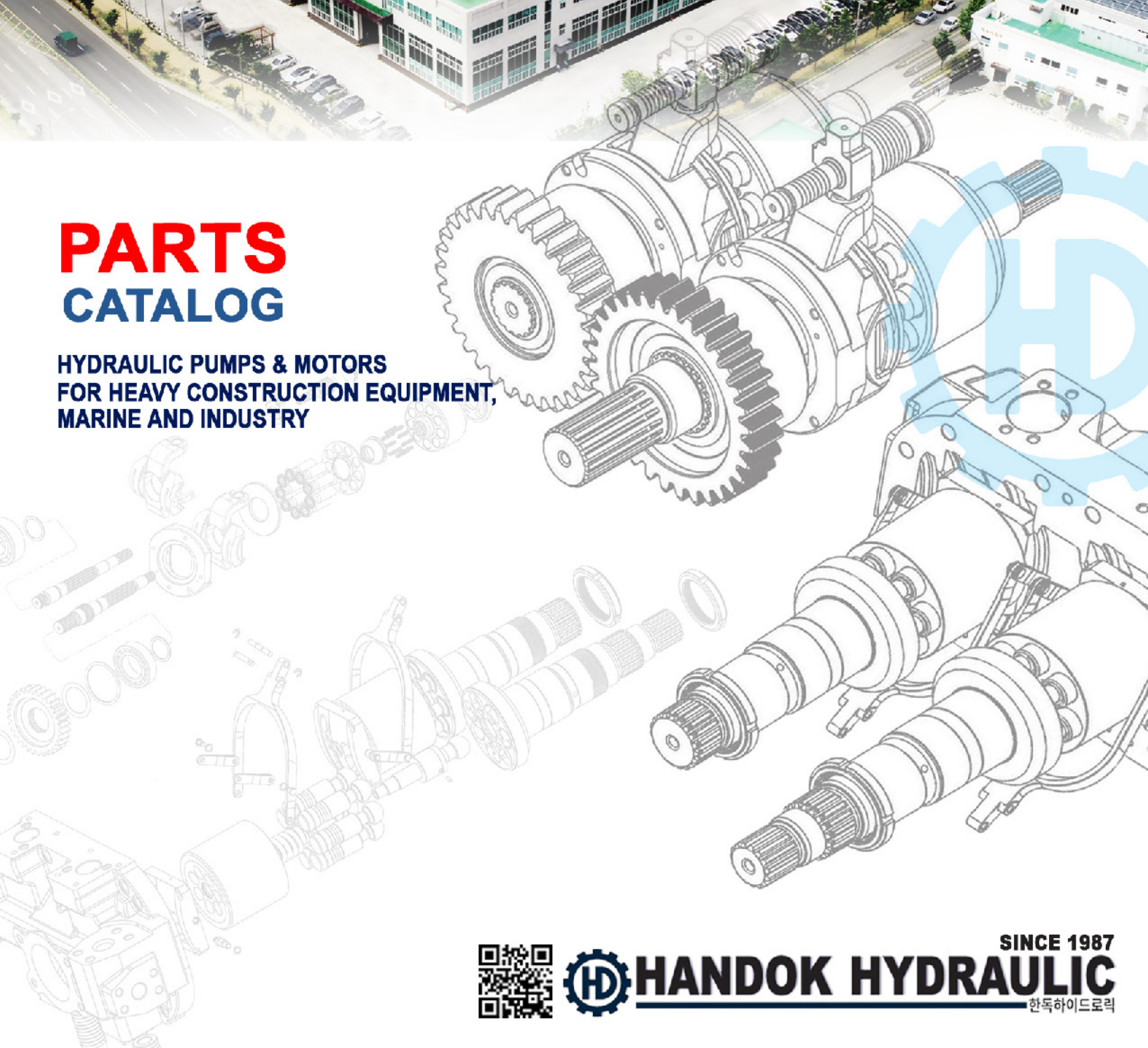




PARTS CATALOG

HYDRAULIC PUMPS & MOTORS
FOR HEAVY CONSTRUCTION EQUIPMENT,
MARINE AND INDUSTRY



HANDOK HYDRAULIC

SINCE 1987

한독하이드로릭

Production Facilities



Shop Floor and each of Divisions



QUALITY POLICY



BEST QUALITY

We pursue top quality

VARIOUS ITEMS

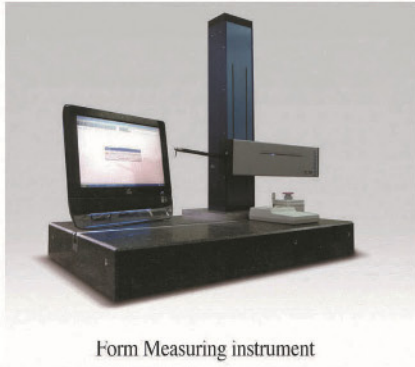
Our various inventory can meet our esteemed customer's needs.

COMPETITIVE PRICE

To give competitive price to our customers is our goal

BEST SERVICE

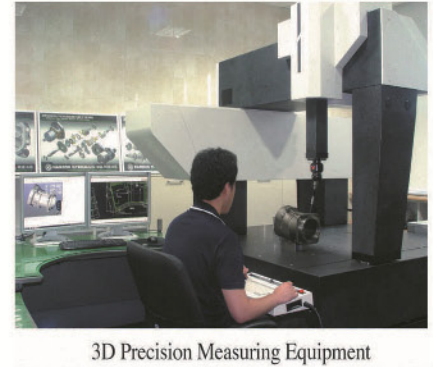
We provide our best service for your satisfaction.



Form Measuring instrument



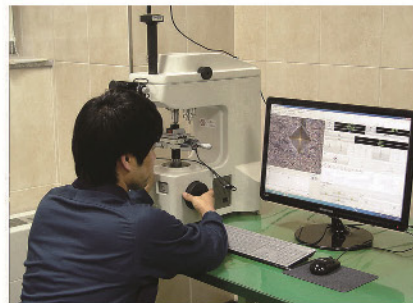
Coil Spring Test Machine



3D Precision Measuring Equipment



Brinell & Rock Well Hardness Tester



Quality Control for Hardness



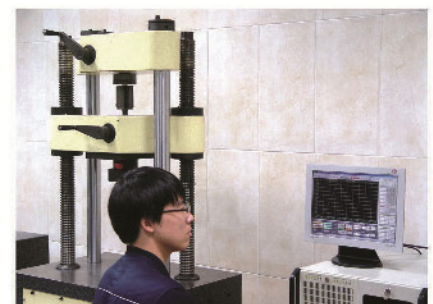
Illumination Meter & Metallurgical Microscope



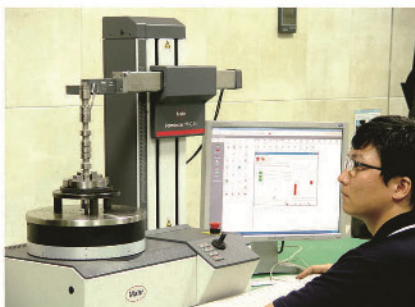
Inspection for Brass Brazing with Ultrasonic Test



Optical Emission Spectrometer



Tension And Yield Strength Test



Form Tester



Precision Measuring for Quality Control



Angle Sensor Tester

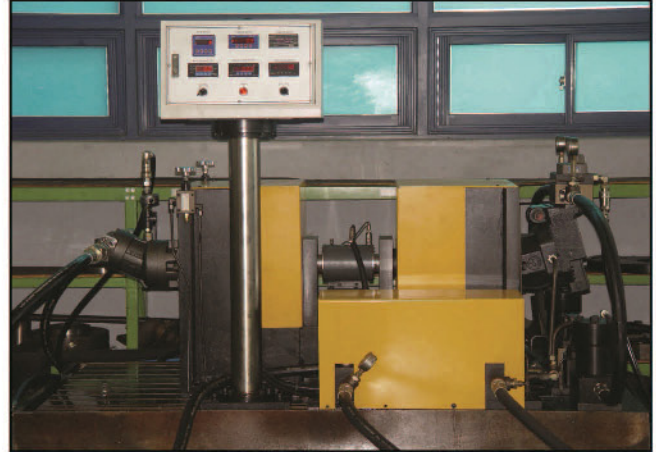


VARIOUS TEST MACHINERY

BENCH PUMP TEST



BENCH MOTOR TEST



GEAR PUMP TEST



EPR TEST



REGULATOR TEST



PRESSURE ENDURANCE TEST



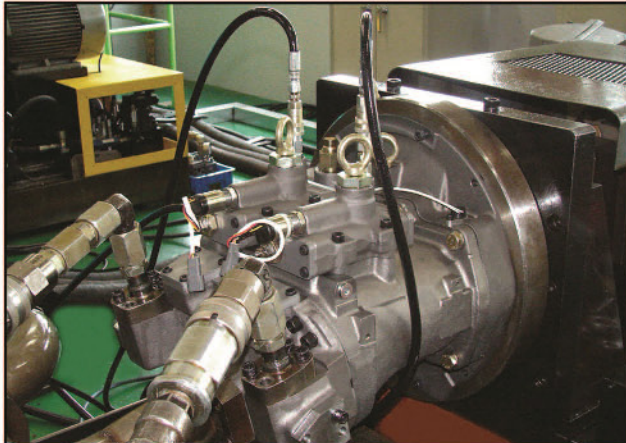
VARIOUS TEST MACHINERY



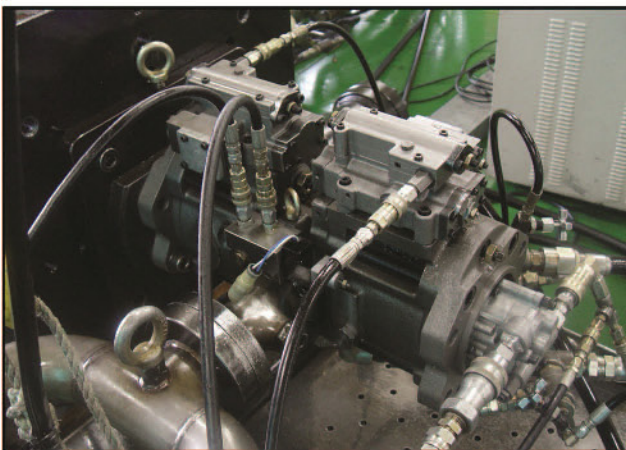
MULTI TEST MACHINERY



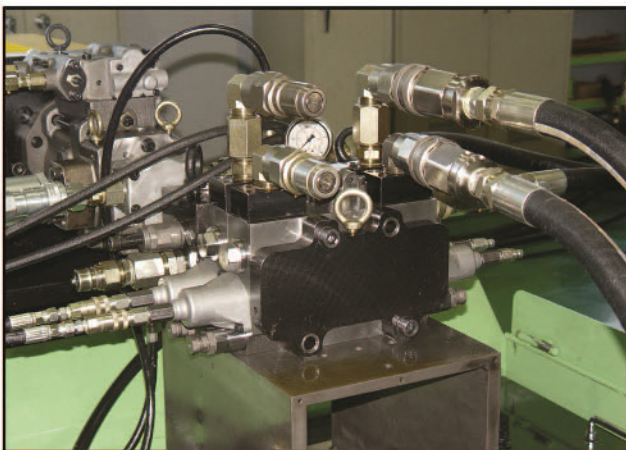
HPV050/O102/O118 PUMP



H3V112DTK PUMP



LOAD SENSING CONTROL VALVE



H6VM55/80/107/160/250 MOTOR

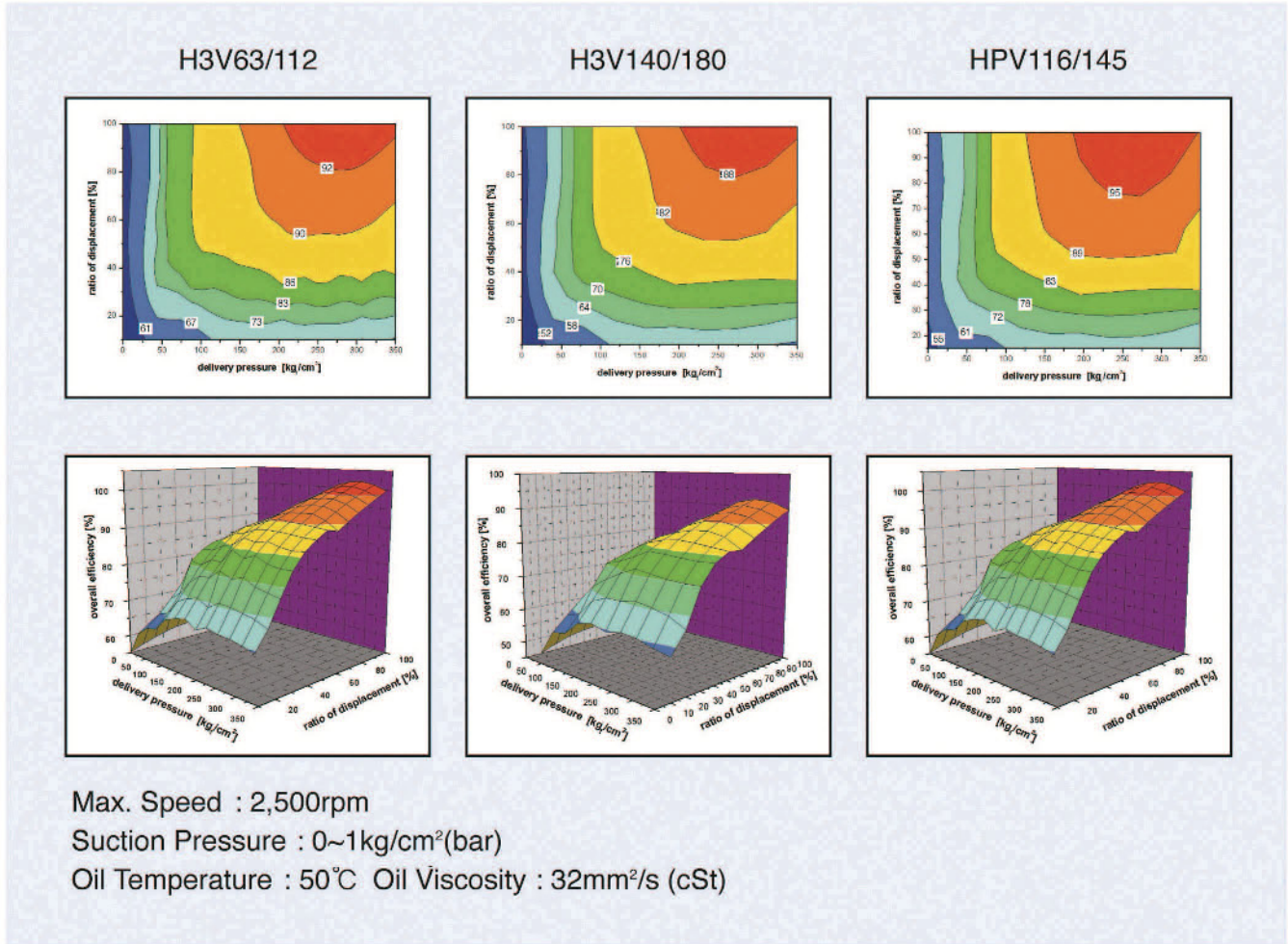


DOUBLE GEAR PUMP

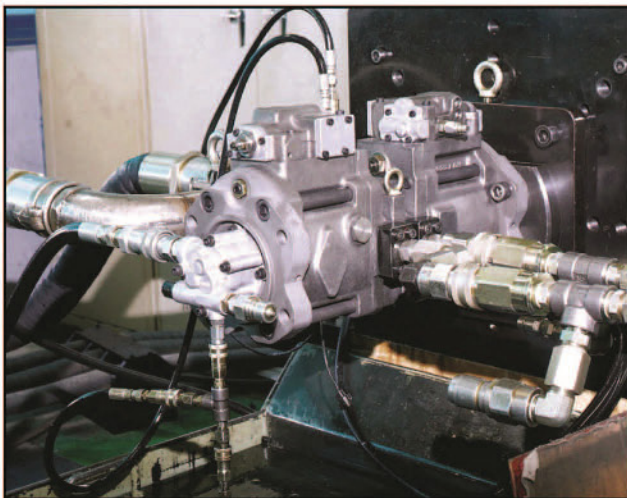




PERFORMANCE CURVE FOR SWASH PLATE & BENT AXIS TYPE PISTON PUMPS

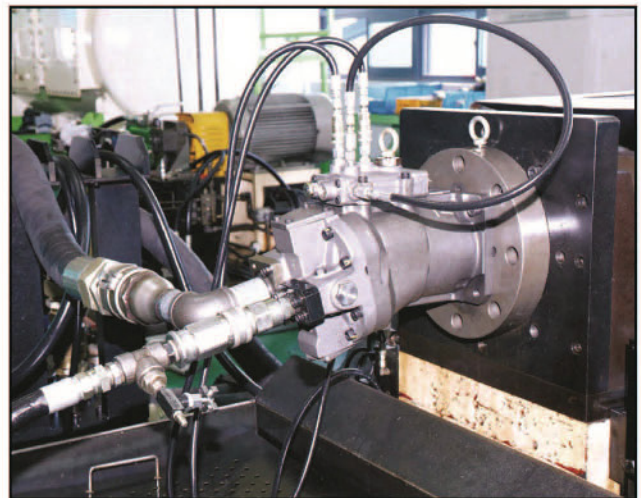


SWASH PLATE TYPE PISTON PUMPS



H3V PUMP SERIES (63/112/140/180/280)

BENT AXIS TYPE PISTON PUMPS



HPV 116/145 PUMP SERIES

MAJOR PRODUCTS

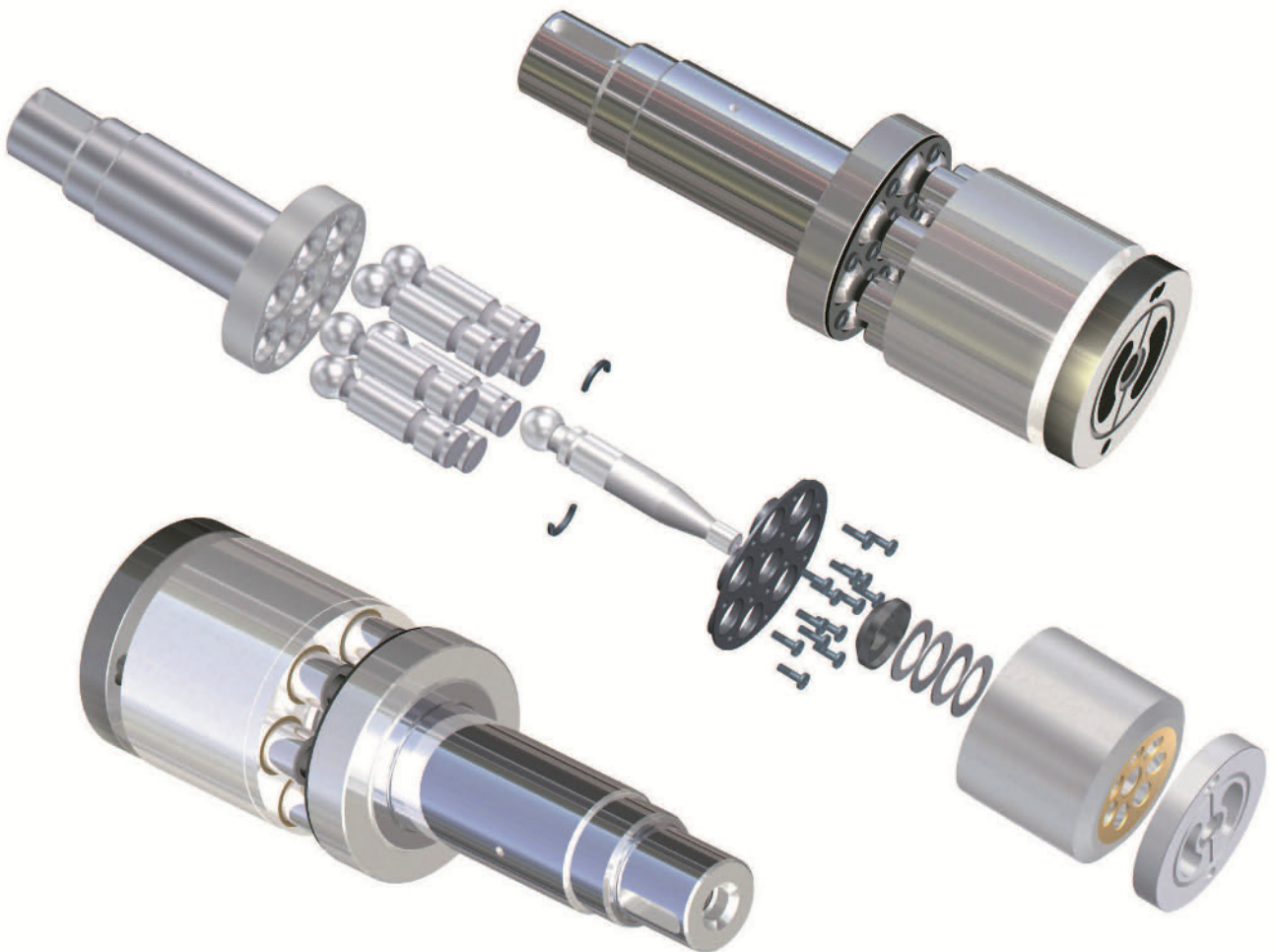
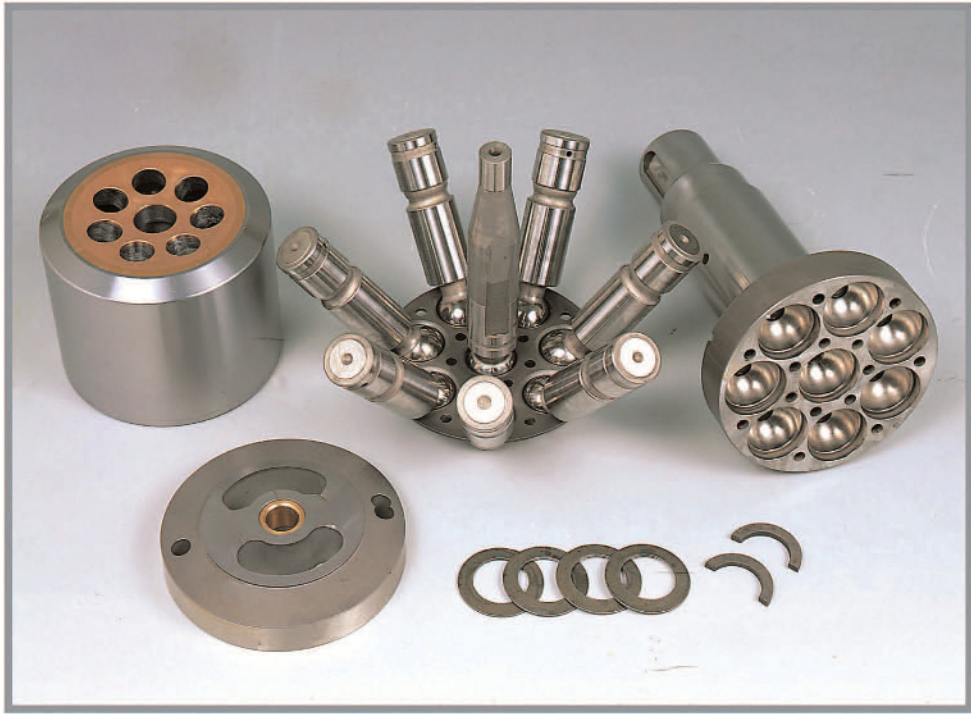


NO	MAKER	MODEL
1	KAWASAKI	NV SERIES
		NVK SERIES
		H3V / H5V / H7V SERIES
		KVC SERIES
		M2X SERIES
		M5X SERIES
		MX SERIES
		DNB SERIES
2	EATON	33 / 46 / 54
3	UCHIDA / HYDROMATIC / REXROTH	A2F SERIES
		A3V SERIES
		A4V SERIES
		A11V SERIES
		A6V SERIES
		A7V SERIES
		A8V / A8VO SERIES
		A10V SERIES
		AP2D SERIES
		HPV / HPVO SERIES
4	HITACHI	HMG / HMGF SERIES
		HMT SERIES
		HPKO55K
5	NACHI	PVD - 00B / 0B / 1B / 2B / 3B

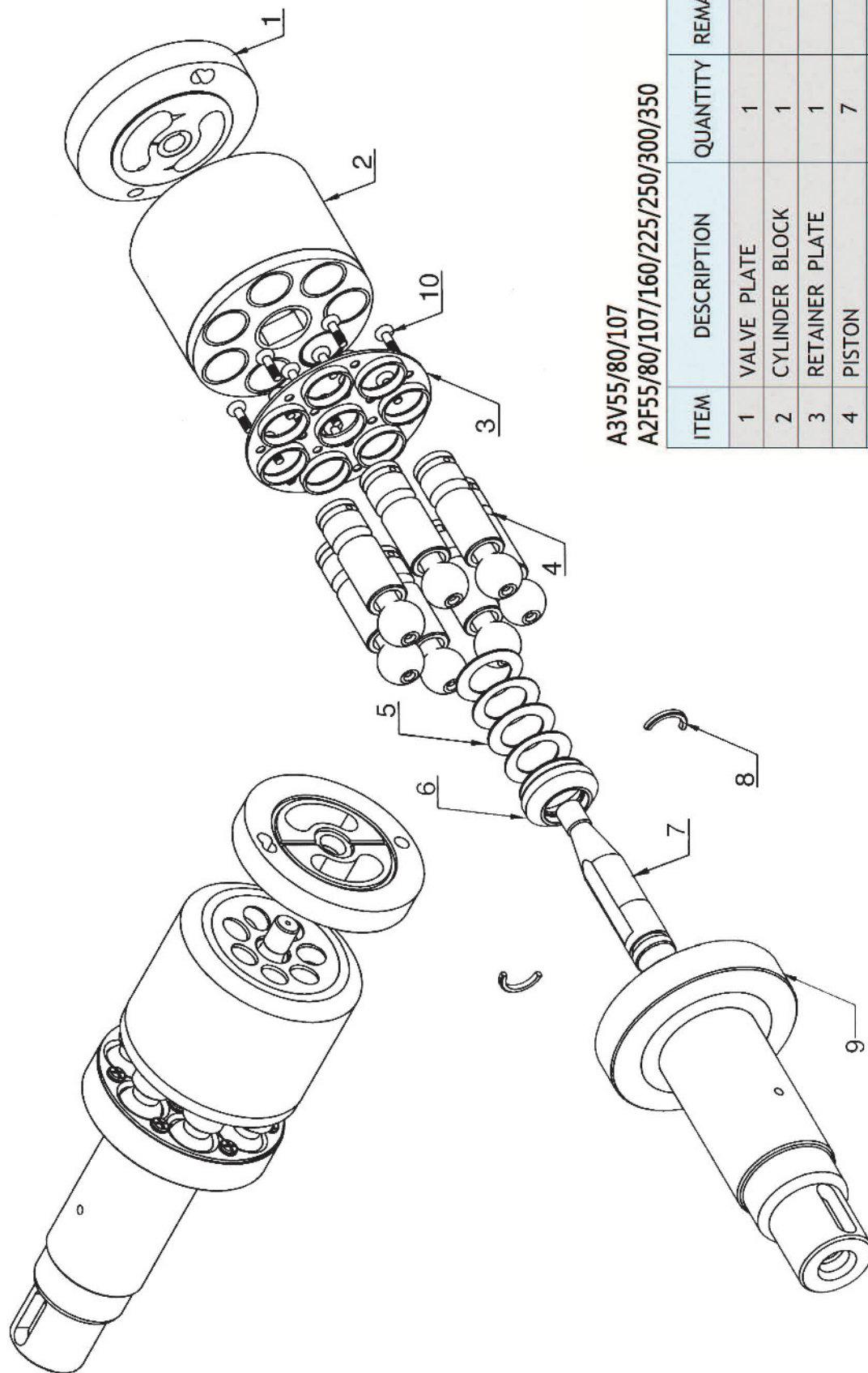
NO	MAKER	MODEL
6	KOMATSU	PC(HPV) SERIES
		KPV / KMF / LPD SERIES
		PC-CONTROL VALVE
7	MITSUBISHI / CATERPILLAR	SPV10/10
		SPK10/10
		PPS140
		MS SERIES
		MCB SERIES
		AP12 / SBS SERIES
8	DAIKIN / SAUER SUNDUSTRAND	12G / 14G / 16G / 140G
		PVD SERIES
		M / MF SERIES
9	SHIBAURA	VRD SERIES
10	SHIBAURA	MFB / SG SERIES
11	TEIJIN SEIKI	HTM SERIES
11	LINDE	GM SERIES
		HPR SERIES
		BPR SERIES
12	KAYABA	B2PV SERIES
		MAG / MSF SERIES
12	KAYABA	PSV2 SERIES
		LPVD SERIES
13	LIEBHERR	LMF SERIES



A2F, A3V SERIES



A2F, A3V SERIES



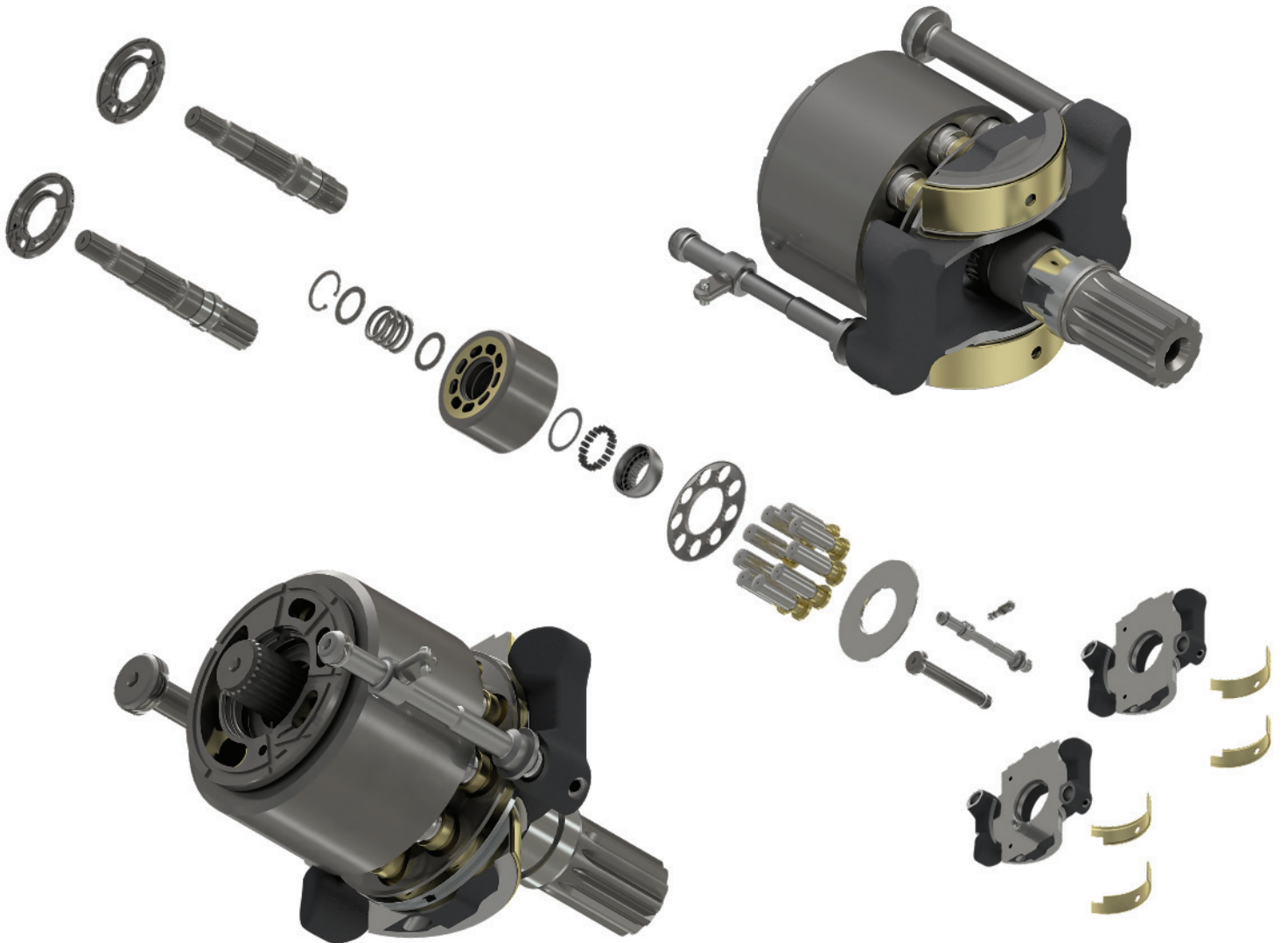
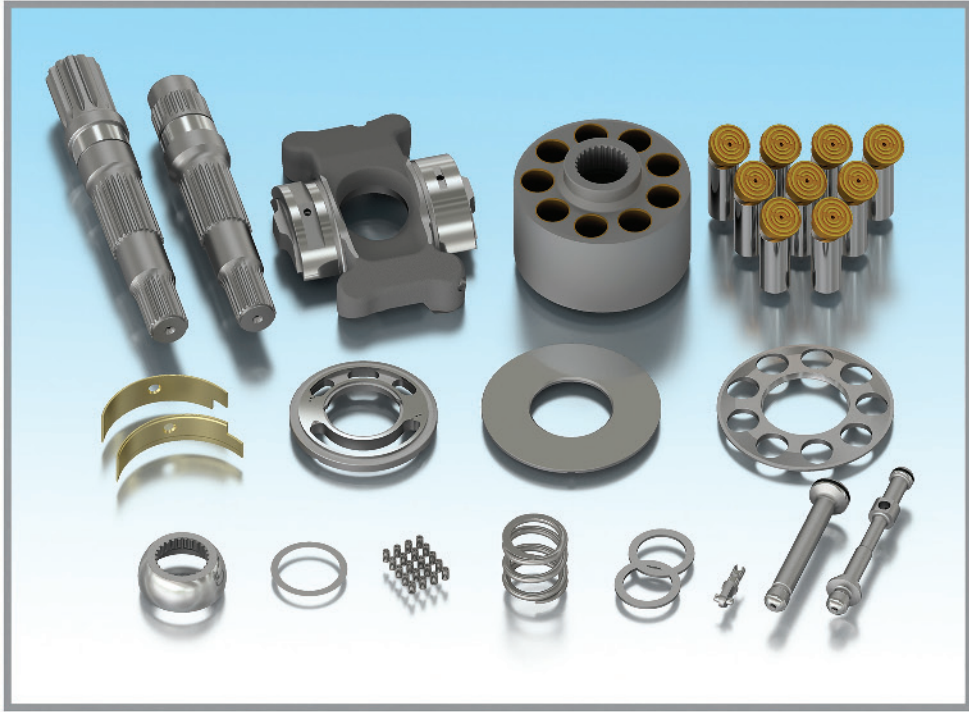
A3V55/80/107
A2F55/80/107/160/225/250/300/350

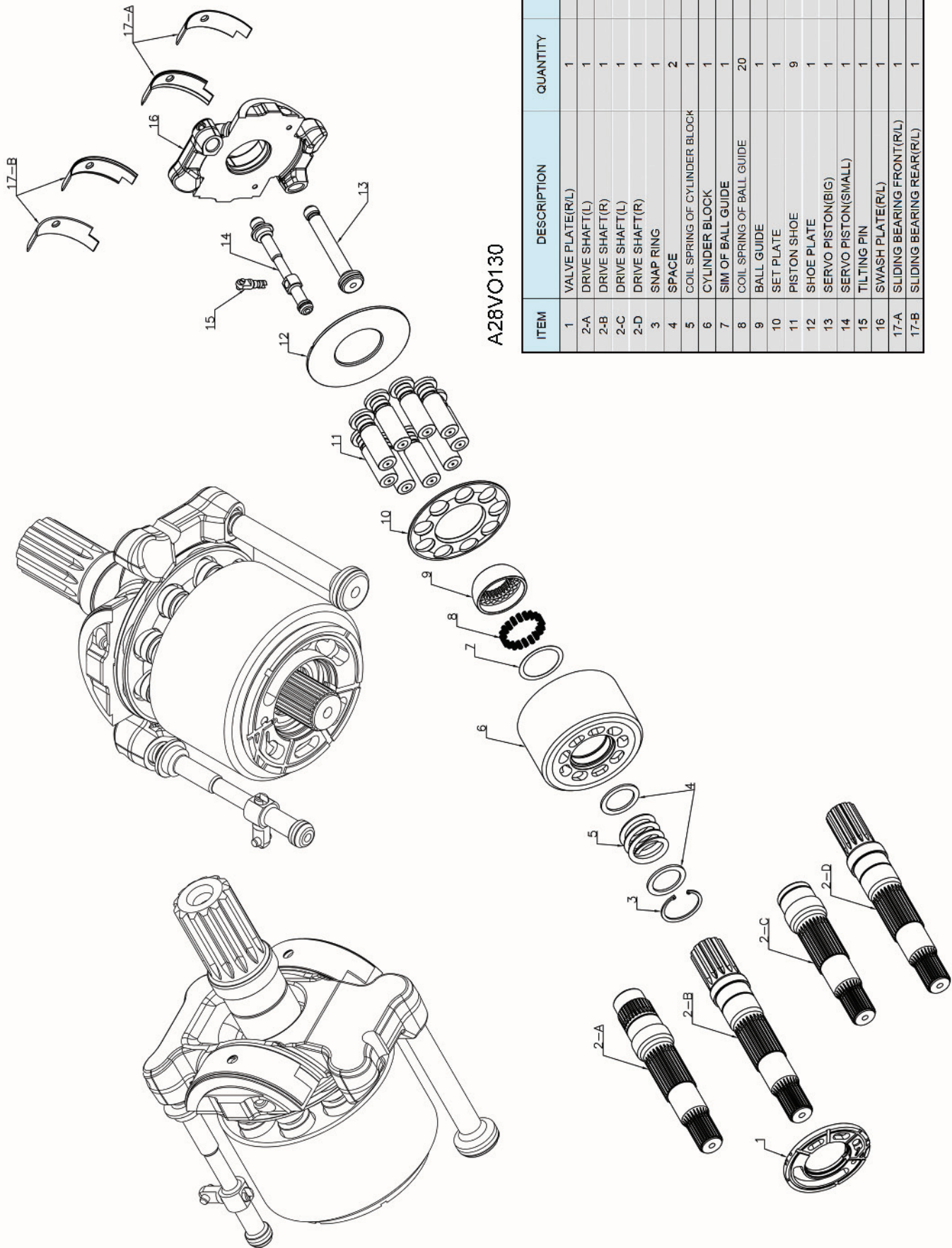
ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE	1	
2	CYLINDER BLOCK	1	
3	RETAINER PLATE	1	
4	PISTON	7	
5	DISK SPRING	4	
6	DISK SPRING HOLDER	1	
7	CENTER PIN	1	
8	SPACE	2	
9	DRIVE SHAFT	1	
10	SOCKET BOLT	14	

HAN DOK HYDRAULIC



A28VO130



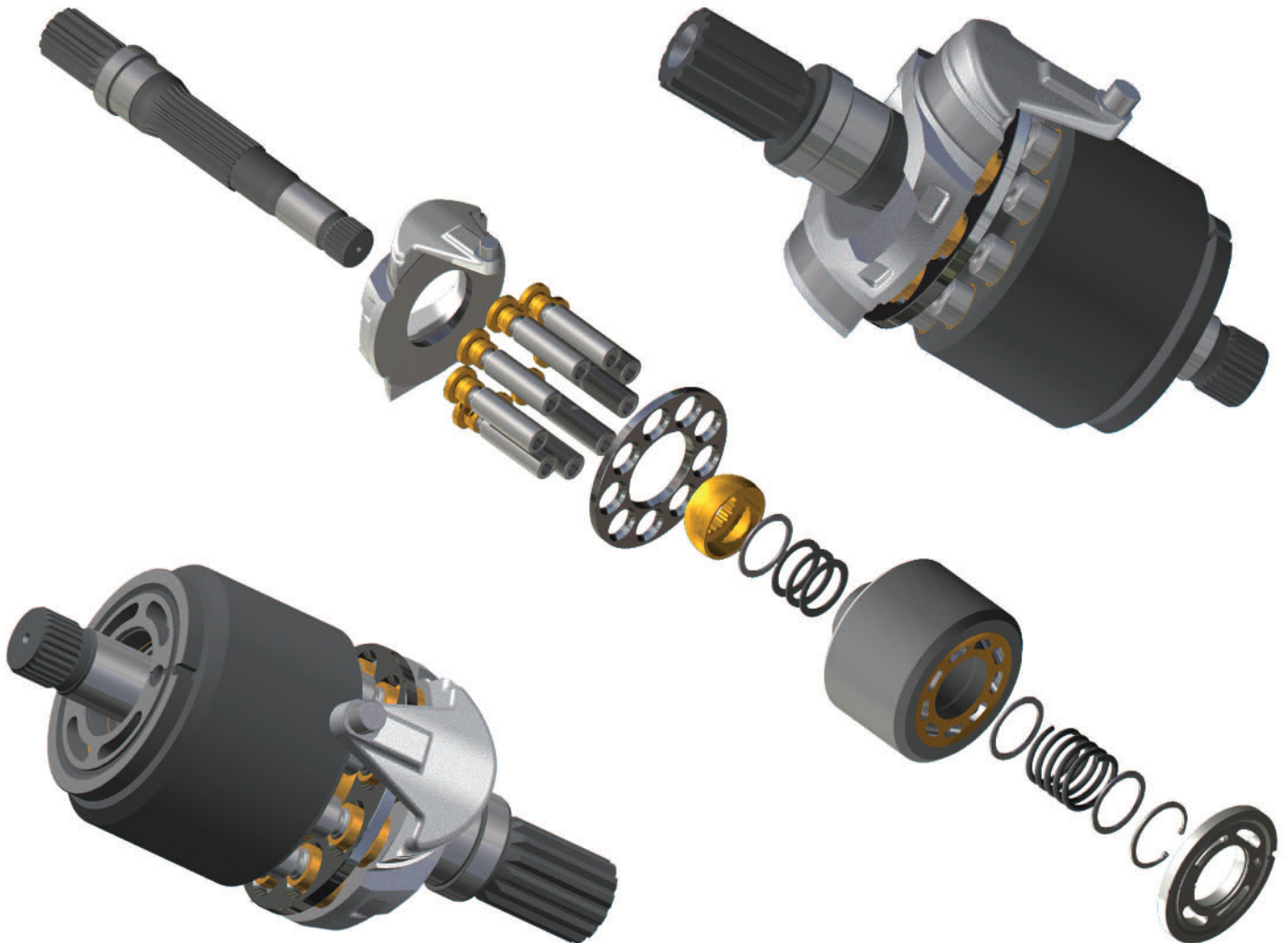


A28VO130

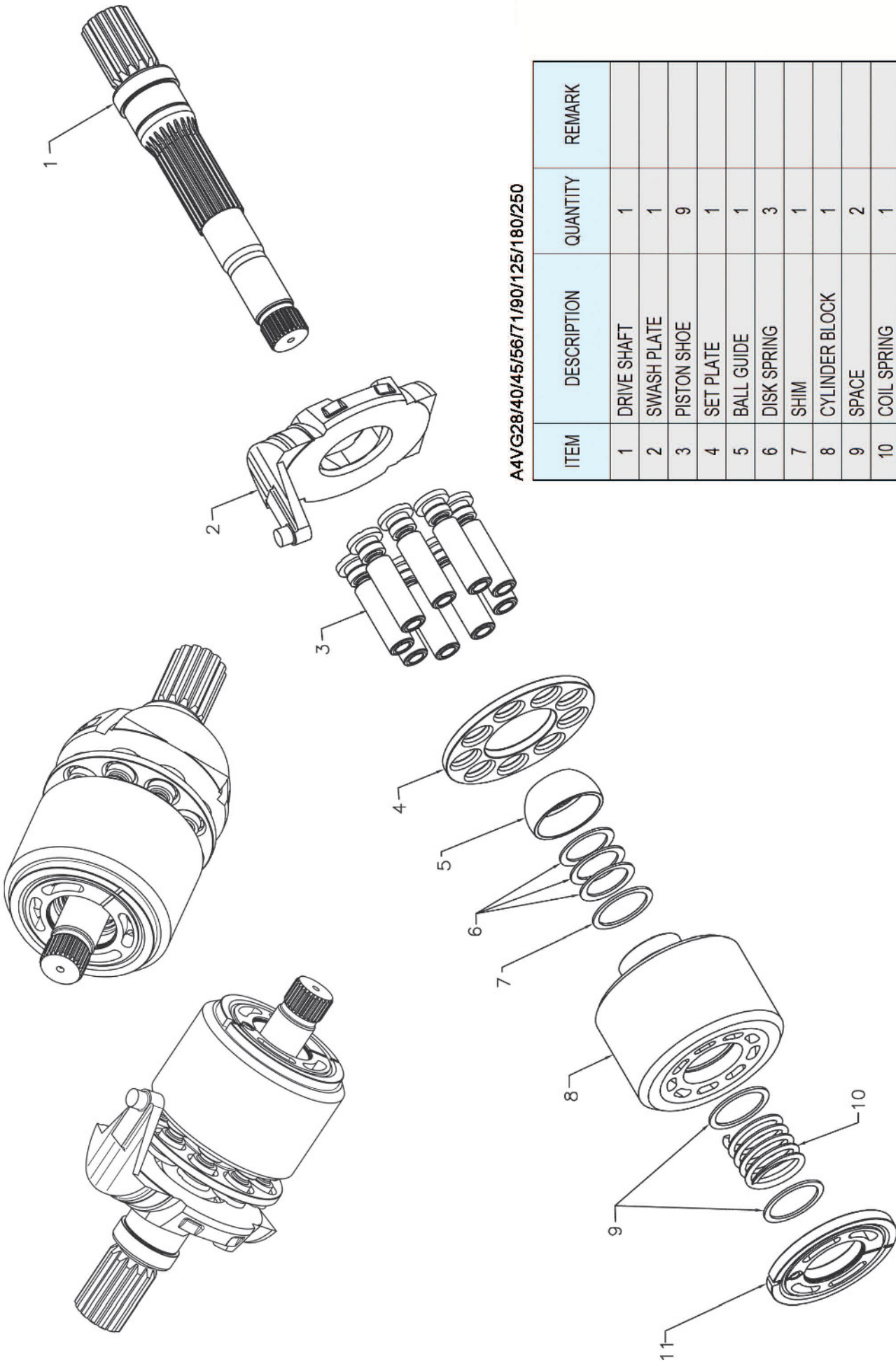
ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE(R/L)	1	
2-A	DRIVE SHAFT(L)	1	
2-B	DRIVE SHAFT(R)	1	V90N130
2-C	DRIVE SHAFT(L)	1	V90N130
2-D	DRIVE SHAFT(R)	1	V90N130
3	SNAP RING	1	
4	SPACE	2	
5	COIL SPRING OF CYLINDER BLOCK	1	
6	CYLINDER BLOCK	1	
7	SIM OF BALL GUIDE	1	
8	COIL SPRING OF BALL GUIDE	20	
9	BALL GUIDE	1	
10	SET PLATE	1	
11	PISTON SHOE	9	
12	SHOE PLATE	1	
13	SERVO PISTON(BIG)	1	
14	SERVO PISTON(SMALL)	1	
15	TILTING PIN	1	
16	SWASH PLATE(R/L)	1	
17-A	SLIDING BEARING FRONT(R/L)	1	
17-B	SLIDING BEARING REAR(R/L)	1	



A4VG SERIES



A4VG SERIES



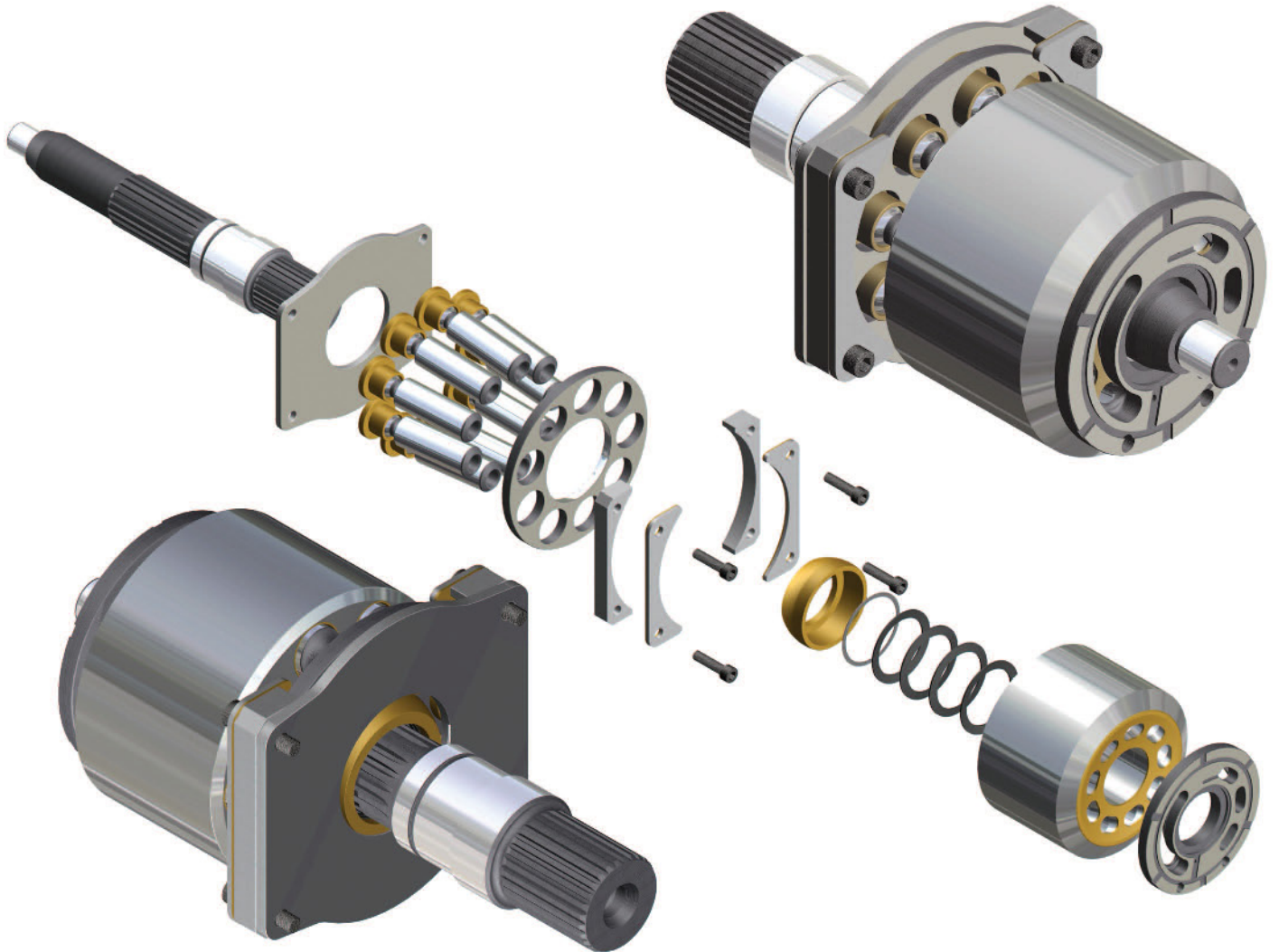
A4VG28/40/45/56/71/90/125/180/250

ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	SWASH PLATE	1	
3	PISTON SHOE	9	
4	SET PLATE	1	
5	BALL GUIDE	1	
6	DISK SPRING	3	
7	SHIM	1	
8	CYLINDER BLOCK	1	
9	SPACE	2	
10	COIL SPRING	1	
11	VALVE PLATE	1	

HANDOK HYDRAULIC

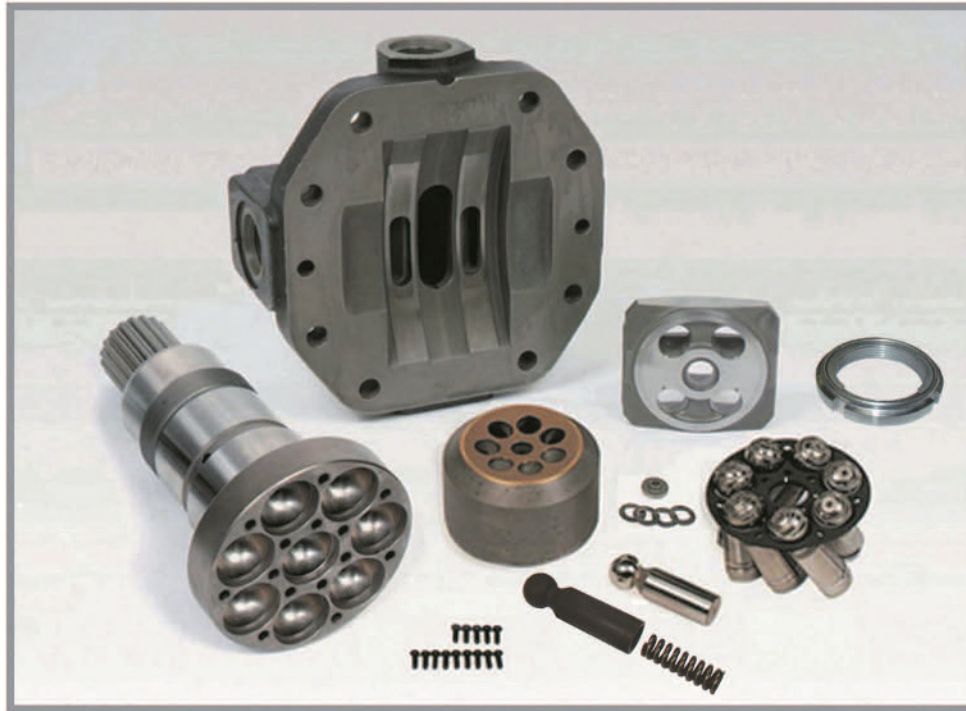


A4VSO SERIES

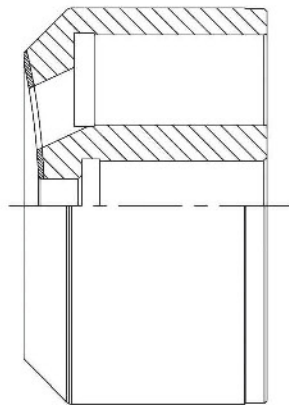




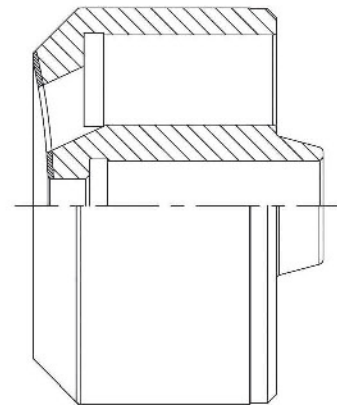
A6VM SERIES



IT IS DIFFERENT SHAPE BETWEEN REXROTH TYPE AND UCHIDA TYPE

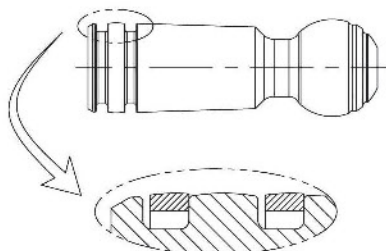


CYLINDER BLOCK



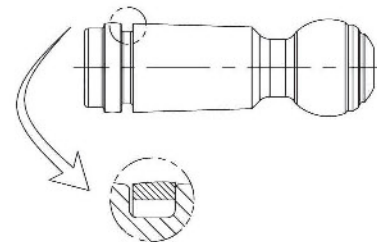
FOR REXROTH-TYPE

FOR UCHIDA-TYPE

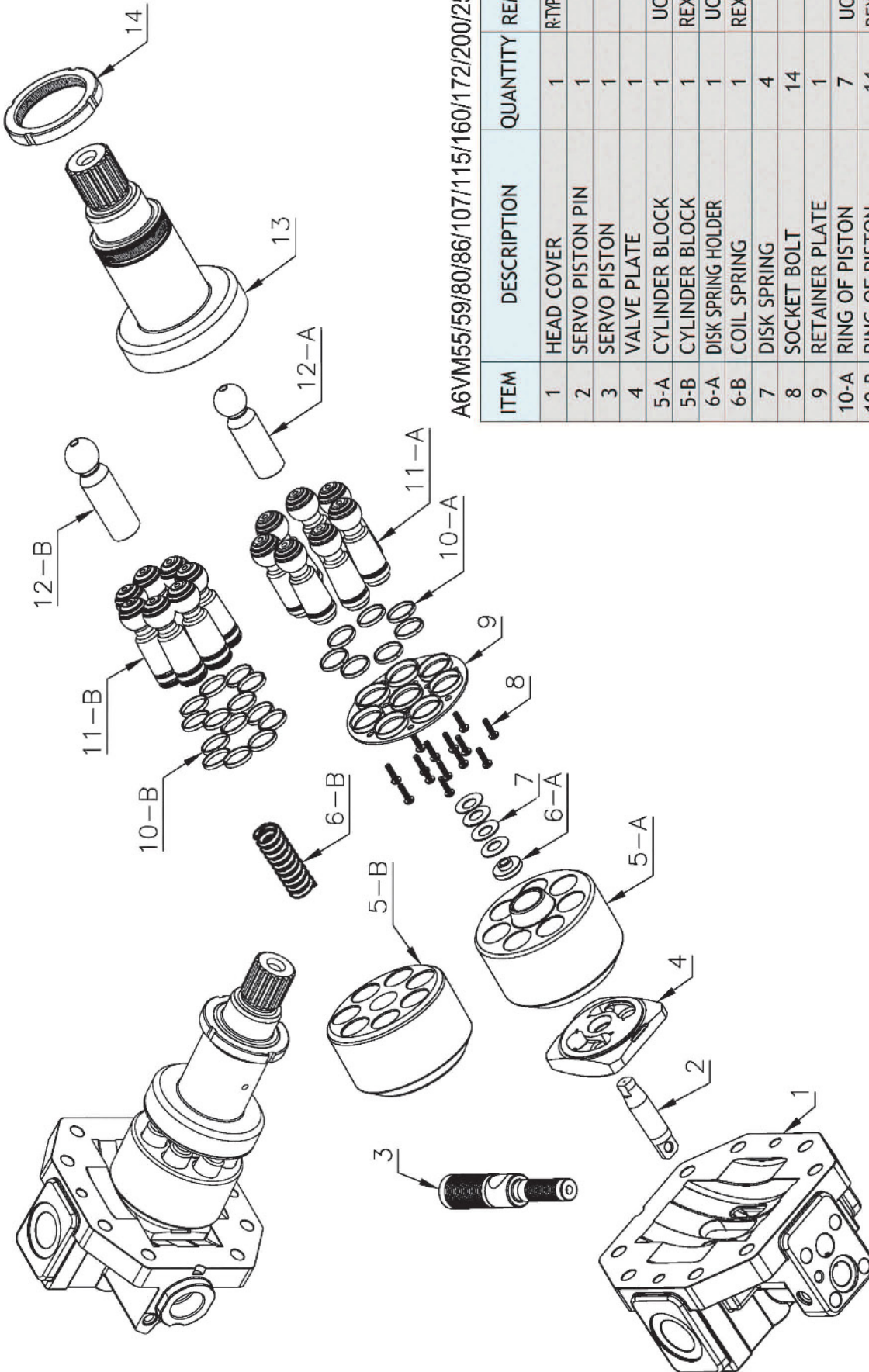


(TWO RING)

PISTON



(ONE RING)

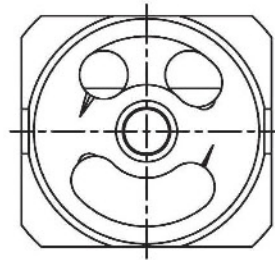


A6VM55/59/80/86/107/115/160/172/200/250

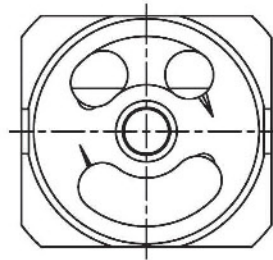
ITEM	DESCRIPTION	QUANTITY	REMARK
1	HEAD COVER	1	R-TYPE, U-TYPE
2	SERVO PISTON PIN	1	
3	SERVO PISTON	1	
4	VALVE PLATE	1	
5-A	CYLINDER BLOCK	1	UCHIDA
5-B	CYLINDER BLOCK	1	REXROTH
6-A	DISK SPRING HOLDER	1	UCHIDA
6-B	COIL SPRING	1	REXROTH
7	DISK SPRING	4	
8	SOCKET BOLT	14	
9	RETAINER PLATE	1	
10-A	RING OF PISTON	7	UCHIDA
10-B	RING OF PISTON	14	REXROTH
11-A	PISTON (ONE RING)	7	UCHIDA
11-B	PISTON (TWO RING)	7	REXROTH
12-A	CENTER PIN (DISK)	1	
12-B	CENTER PIN (COIL)	1	
13	DRIVE SHAFT	1	
14	LOCK NUT	1	



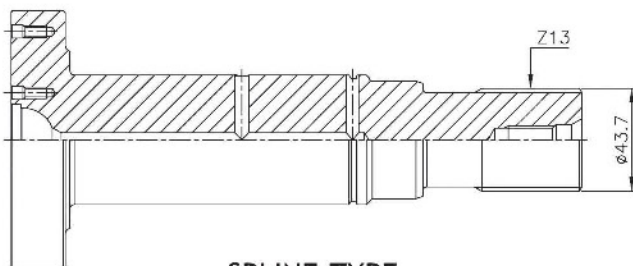
A7V SERIES



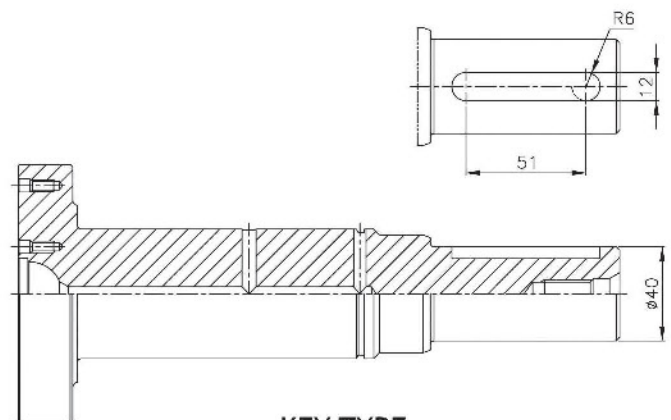
CW (R)



CCW (L)

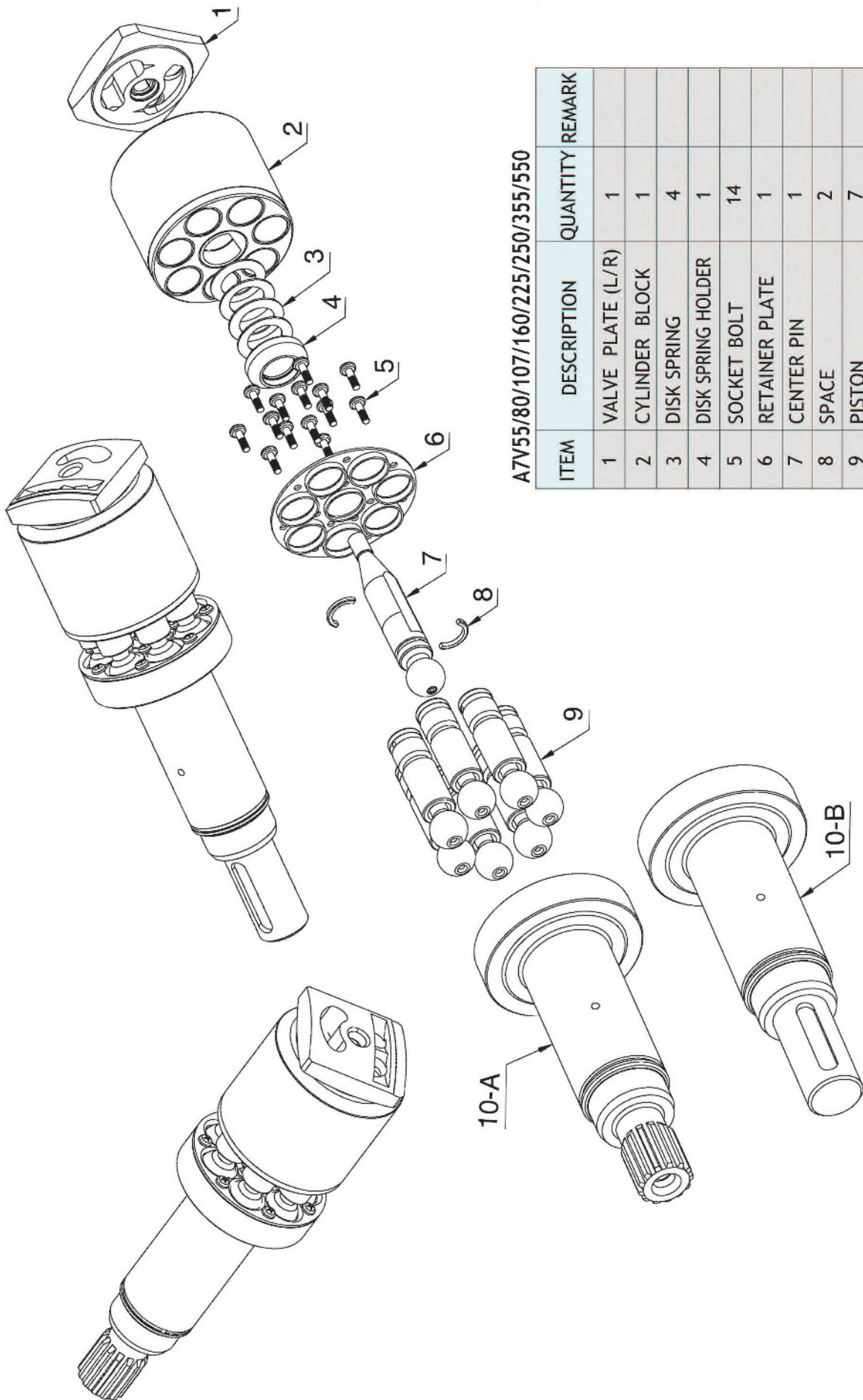


SPLINE-TYPE



KEY-TYPE

IT IS DIFFERENT SHAPE BETWEEN KEY TYPE AND SPLINE TYPE

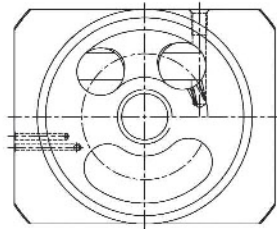
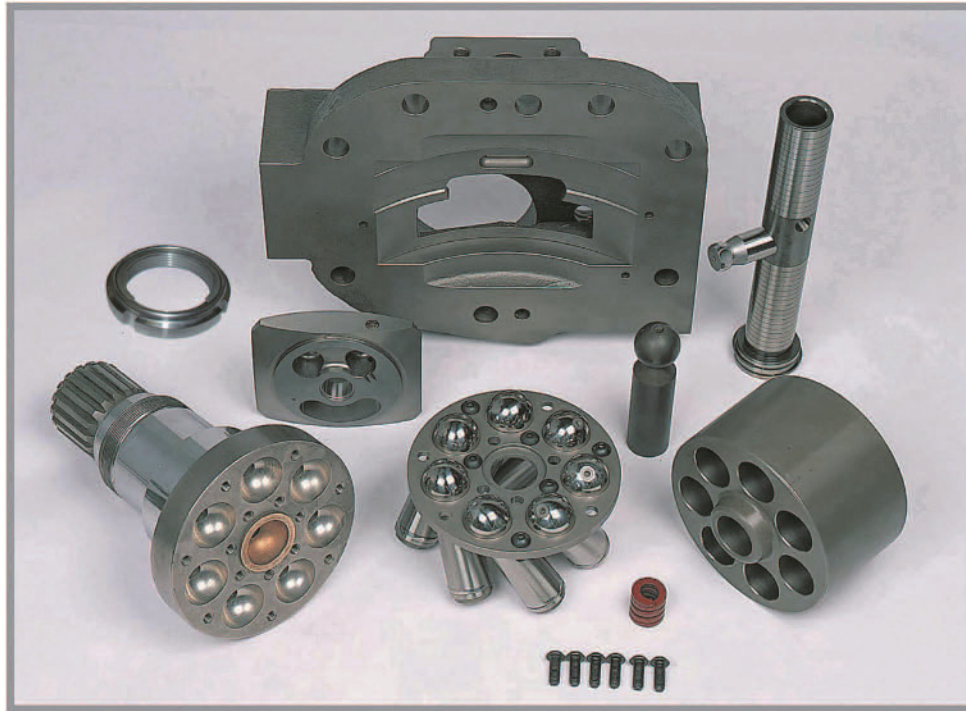


A7V55/80/107/160/225/250/355/550

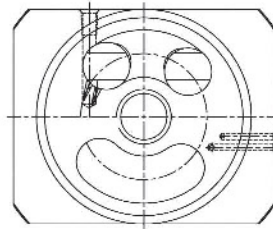
ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE (L/R)	1	
2	CYLINDER BLOCK	1	
3	DISK SPRING	4	
4	DISK SPRING HOLDER	1	
5	SOCKET BOLT	14	
6	RETAINER PLATE	1	
7	CENTER PIN	1	
8	SPACE	2	
9	PISTON	7	
10-A	DRIVE SHAFT(SPLINE)	1	
10-B	DRIVE SHAFT(KEY)	1	



A7VO SERIES

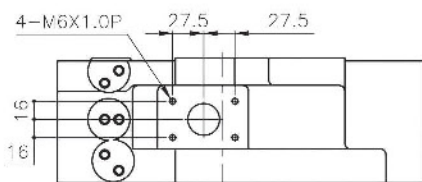
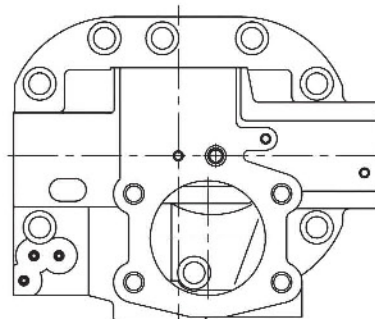
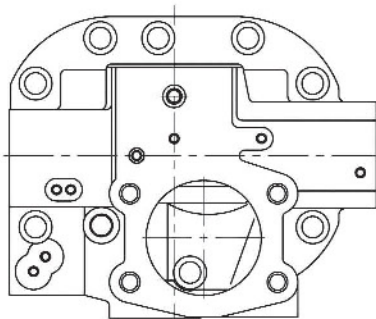


CCW (L)

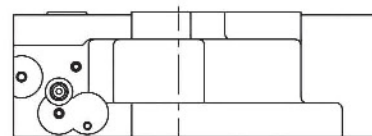


CW (R)

IT IS DIFFERENT WITH VALVE PLATE

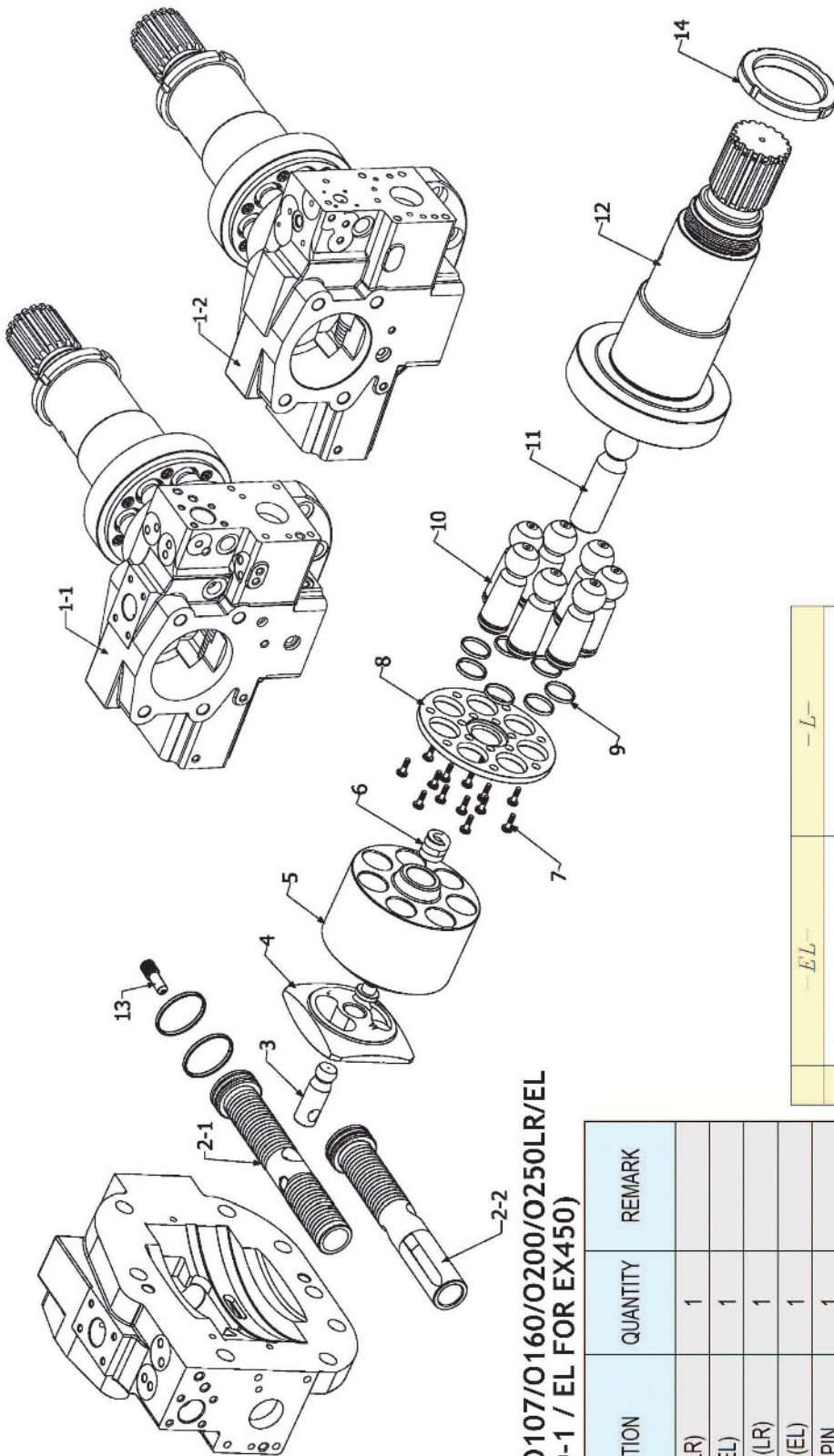


HEAD COVER(LR)



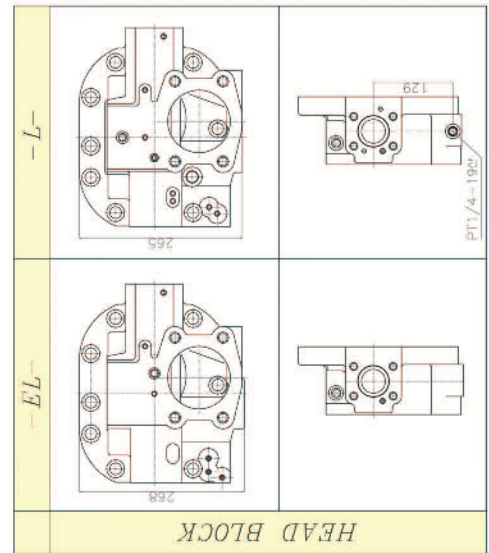
HEAD COVER(EL)

IT IS DIFFERENT SHAPE OF HEAD COVER LR TYPE AND EL TYPE



**A7VO55/O80/O107/O160/O200/O250LR/EL
(LR FOR EX400-1 / EL FOR EX450)**

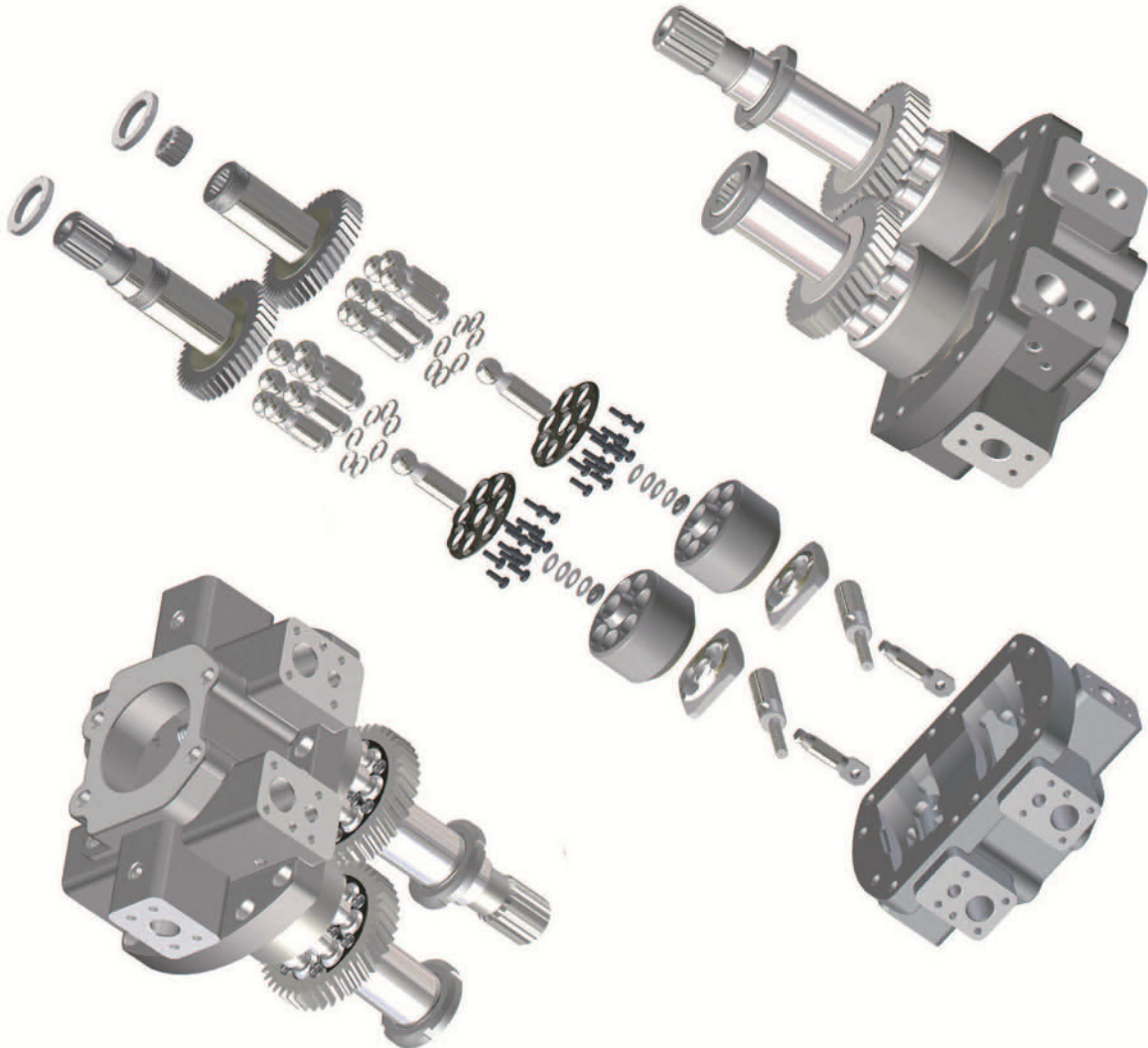
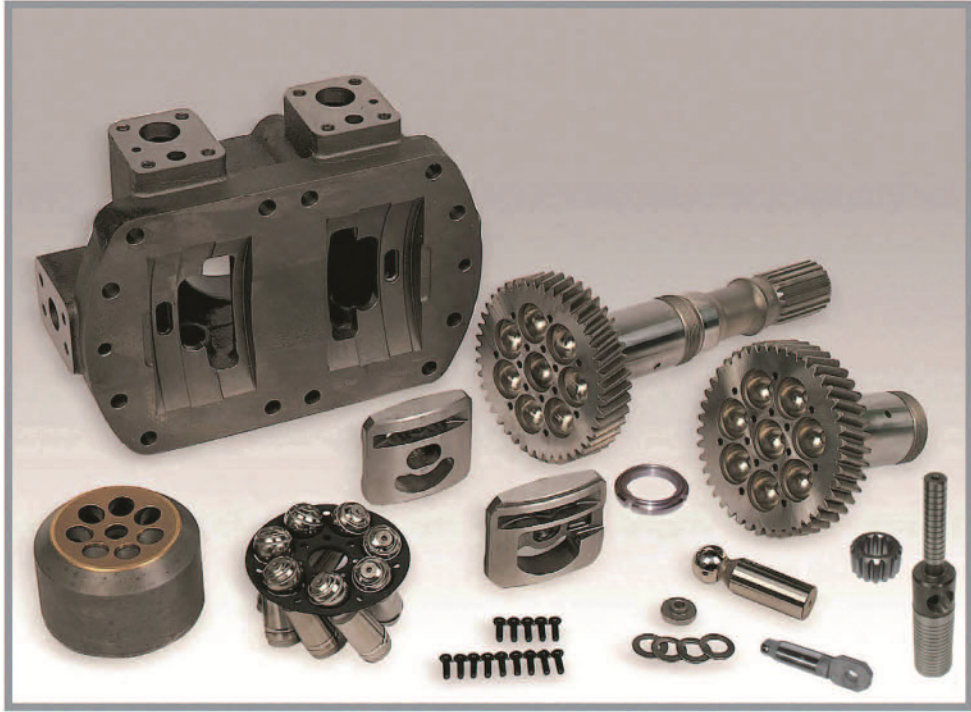
ITEM	DESCRIPTION	QUANTITY	REMARK
1-1	HEAD COVER (LR)	1	
1-2	HEAD COVER (EL)	1	
2-1	SERVO PISTON (LR)	1	
2-2	SERVO PISTON (EL)	1	
3	SERVO PISTON PIN	1	
4	VALVE PLATE (LR)	1	
5	CYLINDER BLOCK	1	
6	COIL SPRING	1	
7	SOCKET BOLT	14	
8	RETAINER PLATE	1	
9	RING OF PISTON	7	
10	PISTON	7	
11	CENTER PIN	1	
12	DRIVE SHAFT	1	
13	SERVO PISTON GUIDE PIN	1	
14	LOCK NUT	1	

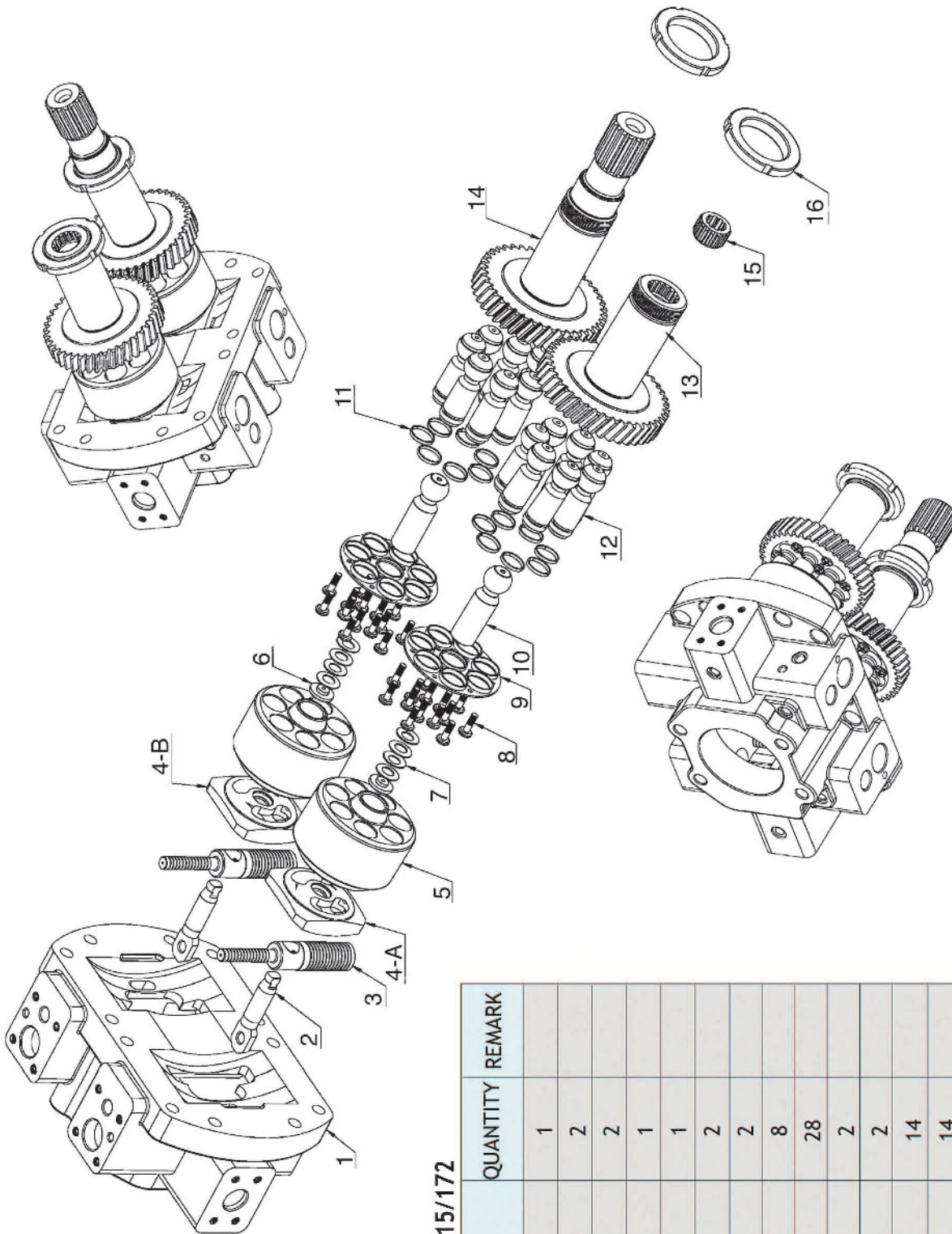


HANDOK HYDRAULIC



A8V SERIES



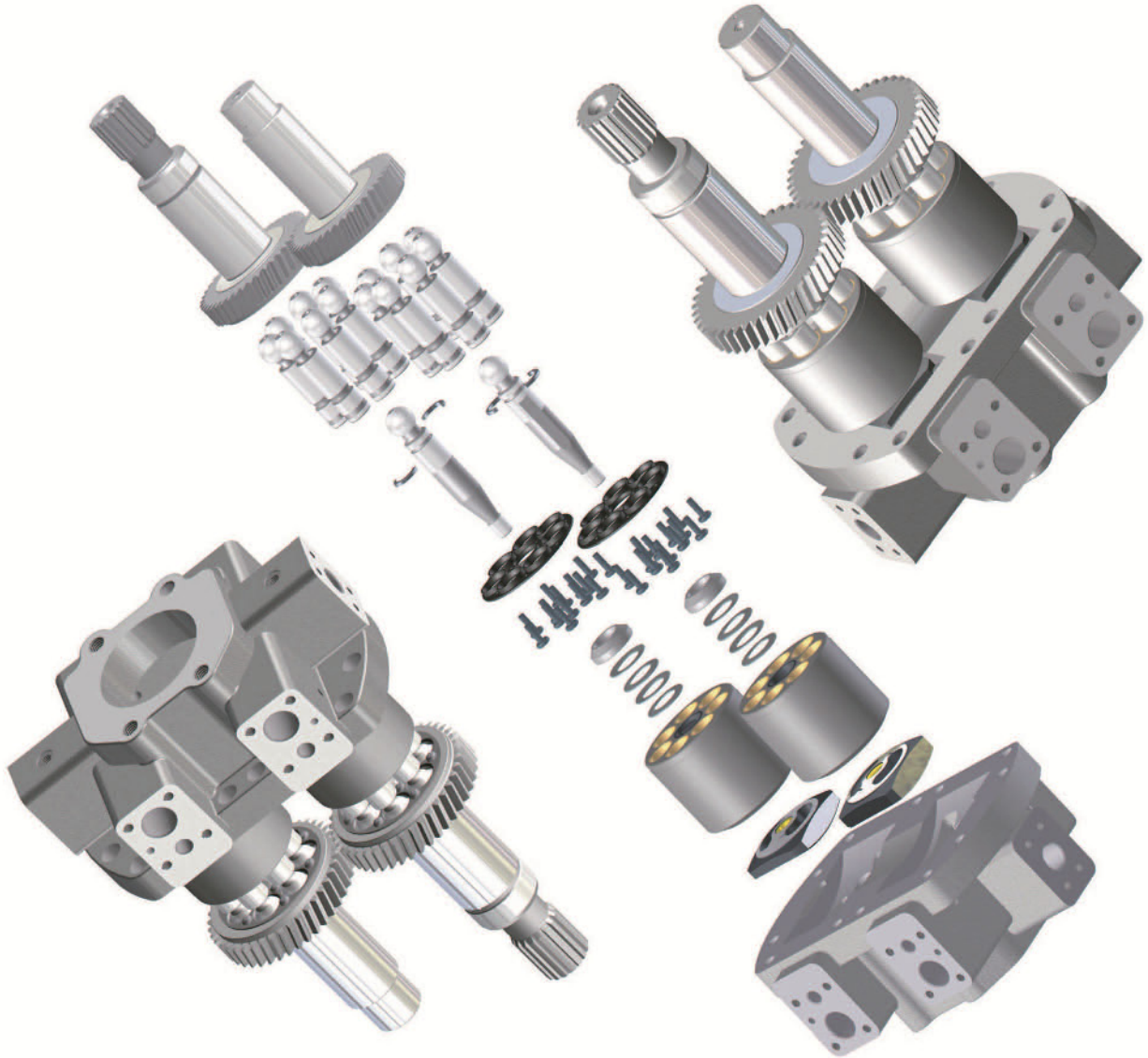
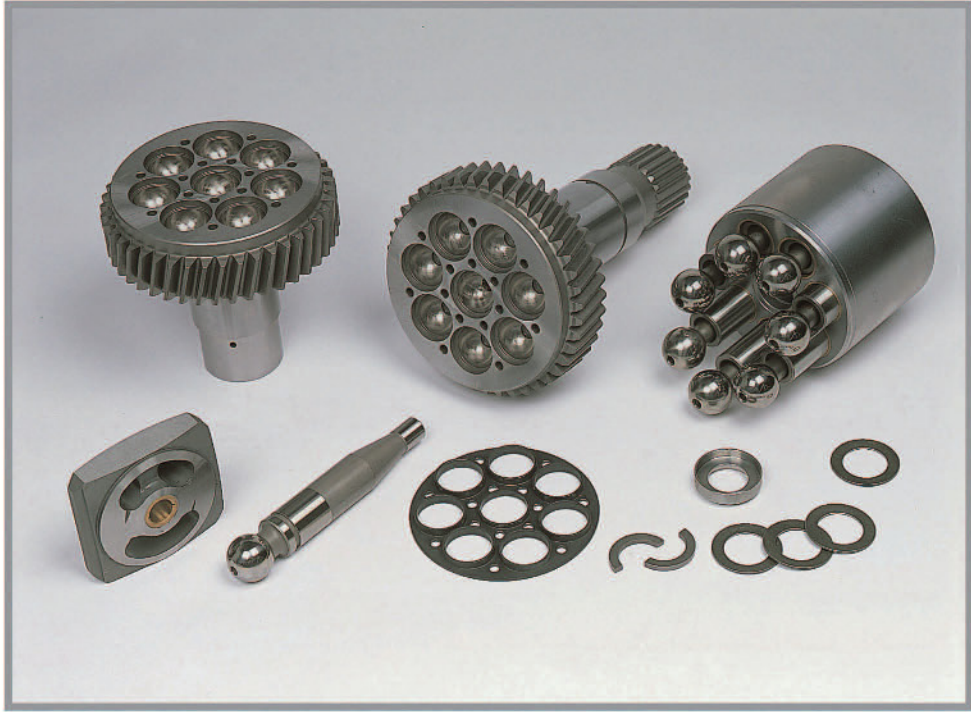


A8V55/59/80/86/107/115/172

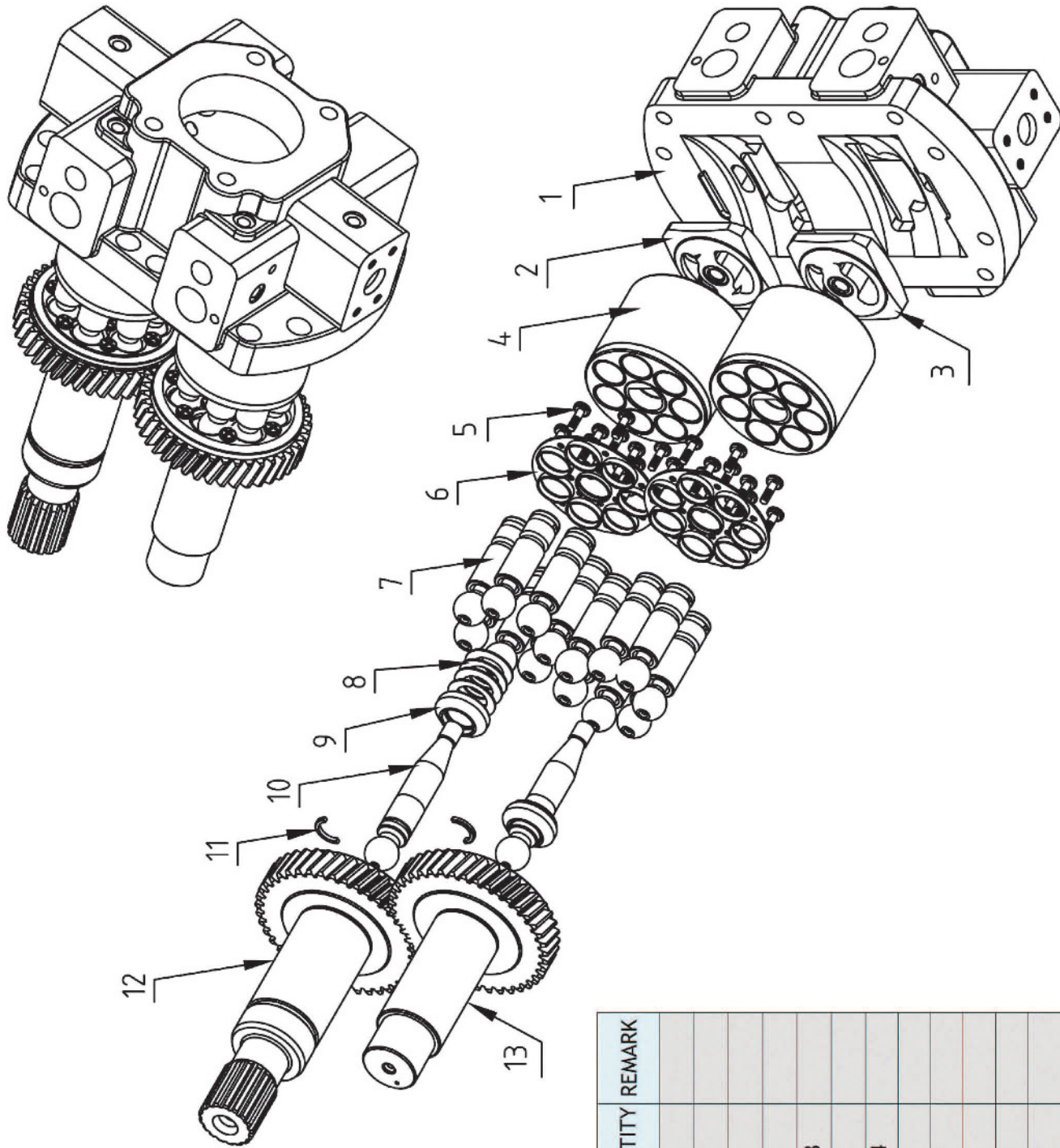
ITEM	DESCRIPTION	QUANTITY	REMARK
1	HEAD COVER	1	
2	SERVO PISTON PIN	2	
3	SERVO PISTON	2	
4-A	VALVE PLATE (L)	1	
4-B	VALVE PLATE (R)	1	
5	CYLINDER BLOCK	2	
6	DISK SPRING HOLDER	2	
7	DISK SPRING	8	
8	SOCKET BOLT	28	
9	RETAINER PLATE	2	
10	CENTER PIN	2	
11	RING OF PISTON	14	
12	PISTON	14	
13	DRIVE SHAFT(L)	1	
14	DRIVE SHAFT(R)	1	
15	COUPLING	1	
16	LOCK NUT	2	



A8V (SR1R) SERIES



A8V(SR1R) SERIES



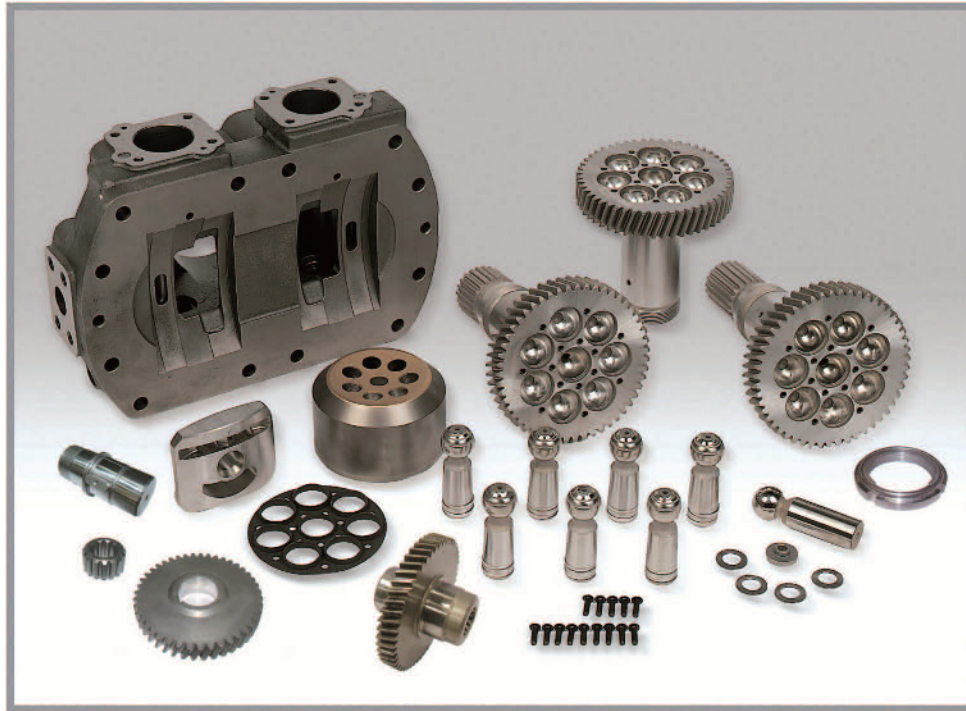
A8V55/80/107/160SR1R

ITEM	DESCRIPTION	QUANTITY	REMARK
1	HEAD COVER	1	
2	VALVE PLATE (R)	1	
3	VALVE PLATE (L)	1	
4	CYLINDER BLOCK	2	
5	SOCKET BOLT	28	
6	RETAINER PLATE	2	
7	PISTON	14	
8	DISK SPRING	8	
9	DISK SPRING HOLDER	2	
10	CENTER PIN	2	
11	SPACE	4	
12	DRIVE SHAFT (R)	1	
13	DRIVE SHAFT (L)	1	

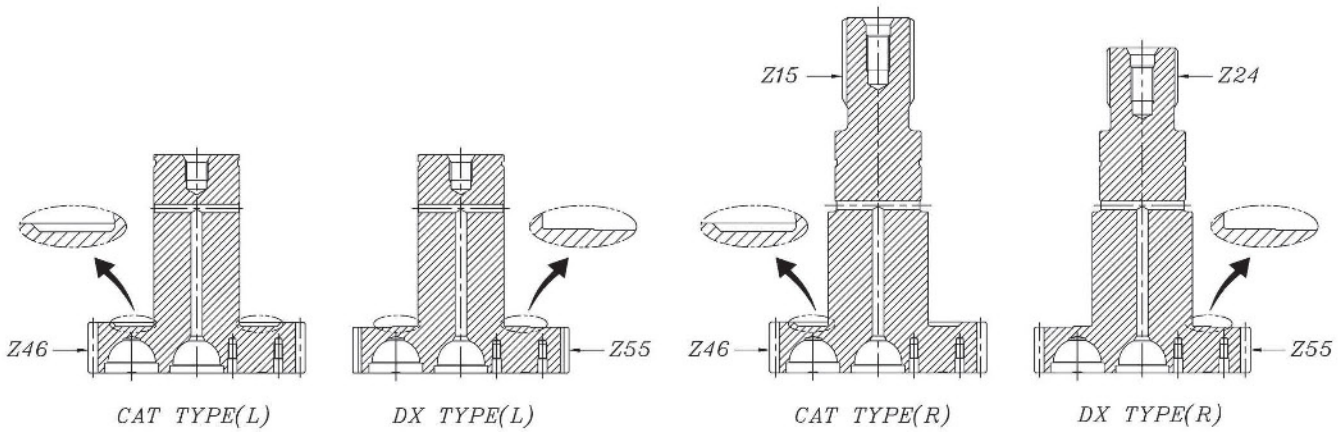
HAN DOK HYDRAULIC



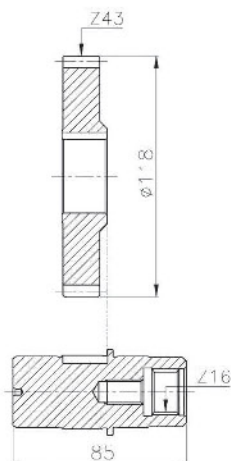
A8VO SERIES



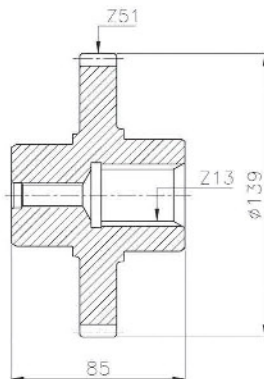
IT IS DIFFERENT SHAPE BETWEEN
A8VO200(CAT TYPE) AND A8VO200(DX TYPE)



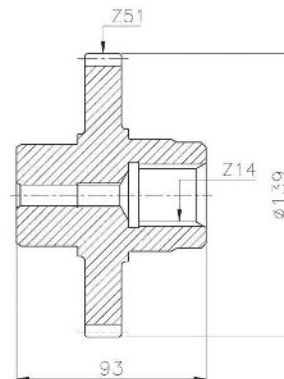
CAT TYPE-16T



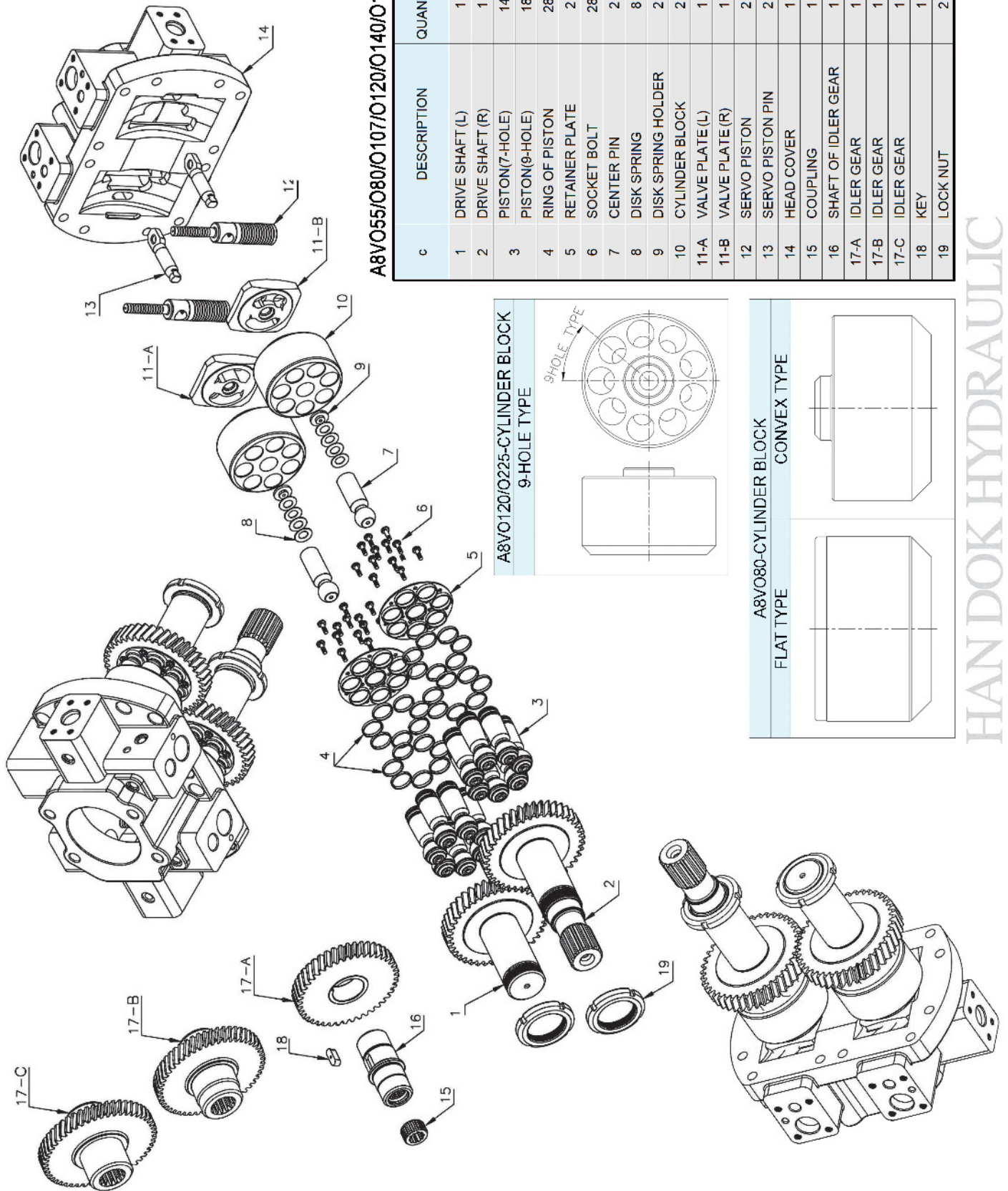
FIAT TYPE-13T



FIAT TYPE-14T



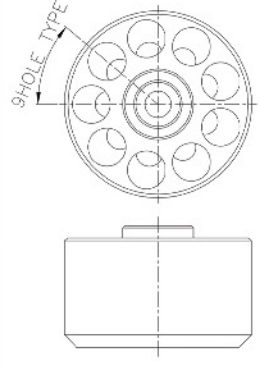
IT IS DIFFERENT IDLE GEAR FOR A8VO107



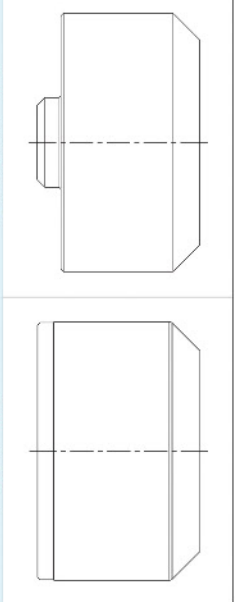
A8VO55/O80/O107/O120/O140/O160/O200/O225

c	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT (L)	1	
2	DRIVE SHAFT (R)	1	
3	PISTON(7-HOLE)	14	
4	PISTON(9-HOLE)	18	
5	RING OF PISTON	28	
6	RETAINER PLATE	2	
7	SOCKET BOLT	28	
8	CENTER PIN	2	
9	DISK SPRING	8	
10	DISK SPRING HOLDER	2	
11-A	CYLINDER BLOCK	2	
11-B	VALVE PLATE (L)	1	
11-B	VALVE PLATE (R)	1	
12	SERVO PISTON	2	
13	SERVO PISTON PIN	2	
14	HEAD COVER	1	
15	COUPLING	1	
16	SHAFT OF IDLER GEAR	1	
17-A	IDLER GEAR	1	CAT TYPE
17-B	IDLER GEAR	1	FIAT TYPE-14T
17-C	IDLER GEAR	1	FIAT TYPE-13T
18	KEY	1	
19	LOCK NUT	2	

A8VO120/O225-CYLINDER BLOCK
9-HOLE TYPE



A8VO80-CYLINDER BLOCK
CONVEX TYPE



HAN DOK HYDRAULIC



A10V SERIES



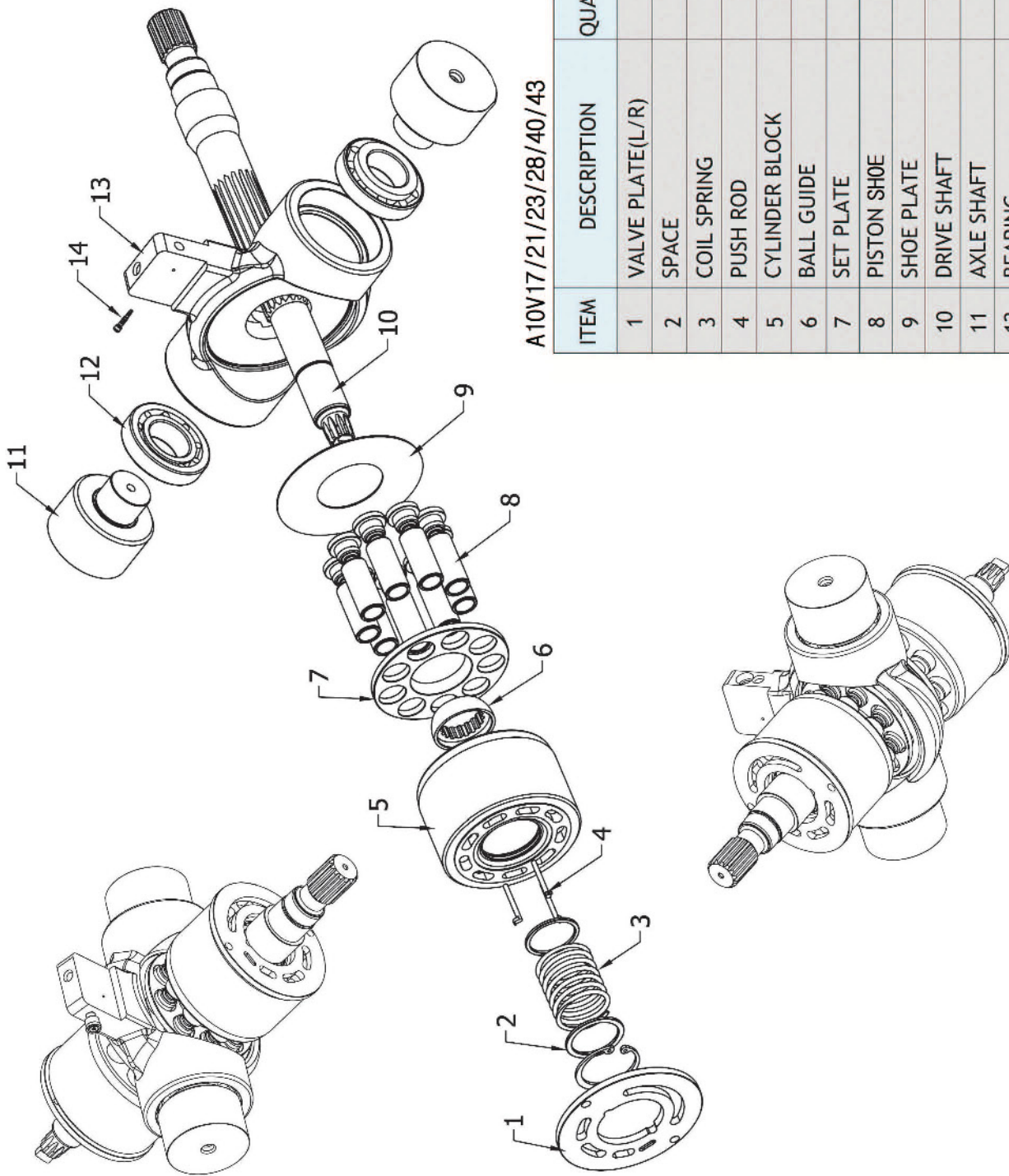
IT IS DIFFERENT SHAPE BETWEEN A10V40(REXROTH TYPE) AND A10V43(UCHIDA TYPE) OF PARTS.

● A10V40(REXROTH TYPE)

<p>Technical drawing of V/PLATE (CCW-L) for A10V40, showing a circular plate with a diameter of 45.3 mm.</p>	<p>Technical drawing of V/PLATE (CW-R) for A10V40, showing a circular plate with a diameter of 45.3 mm.</p>	<p>Technical drawing of CYLINDER BLOCK for A10V40, showing a cross-section with a width of 8.8 mm and a diameter of 39 mm.</p>	<p>Technical drawing of SET PLATE for A10V40, showing a cross-section with a diameter of 12 mm and a reference to 18Z-JIS.</p>
V/PLATE (CCW-L)	V/PLATE (CW-R)	CYLINDER BLOCK	SET PLATE

● A10V43(UCHIDA TYPE)

<p>Technical drawing of V/PLATE (CCW-L) for A10V43, showing a circular plate with a diameter of 34.2 mm.</p>	<p>Technical drawing of V/PLATE (CW-R) for A10V43, showing a circular plate with a diameter of 45.3 mm.</p>	<p>Technical drawing of CYLINDER BLOCK for A10V43, showing a cross-section with a width of 5.5 mm, a diameter of 36.6 mm, and a reference to 18Z-DIN.</p>	<p>Technical drawing of SET PLATE for A10V43, showing a cross-section with a diameter of 13.8 mm and a reference to 18Z-DIN.</p>
V/PLATE (CCW-L)	V/PLATE (CW-R)	CYLINDER BLOCK	SET PLATE



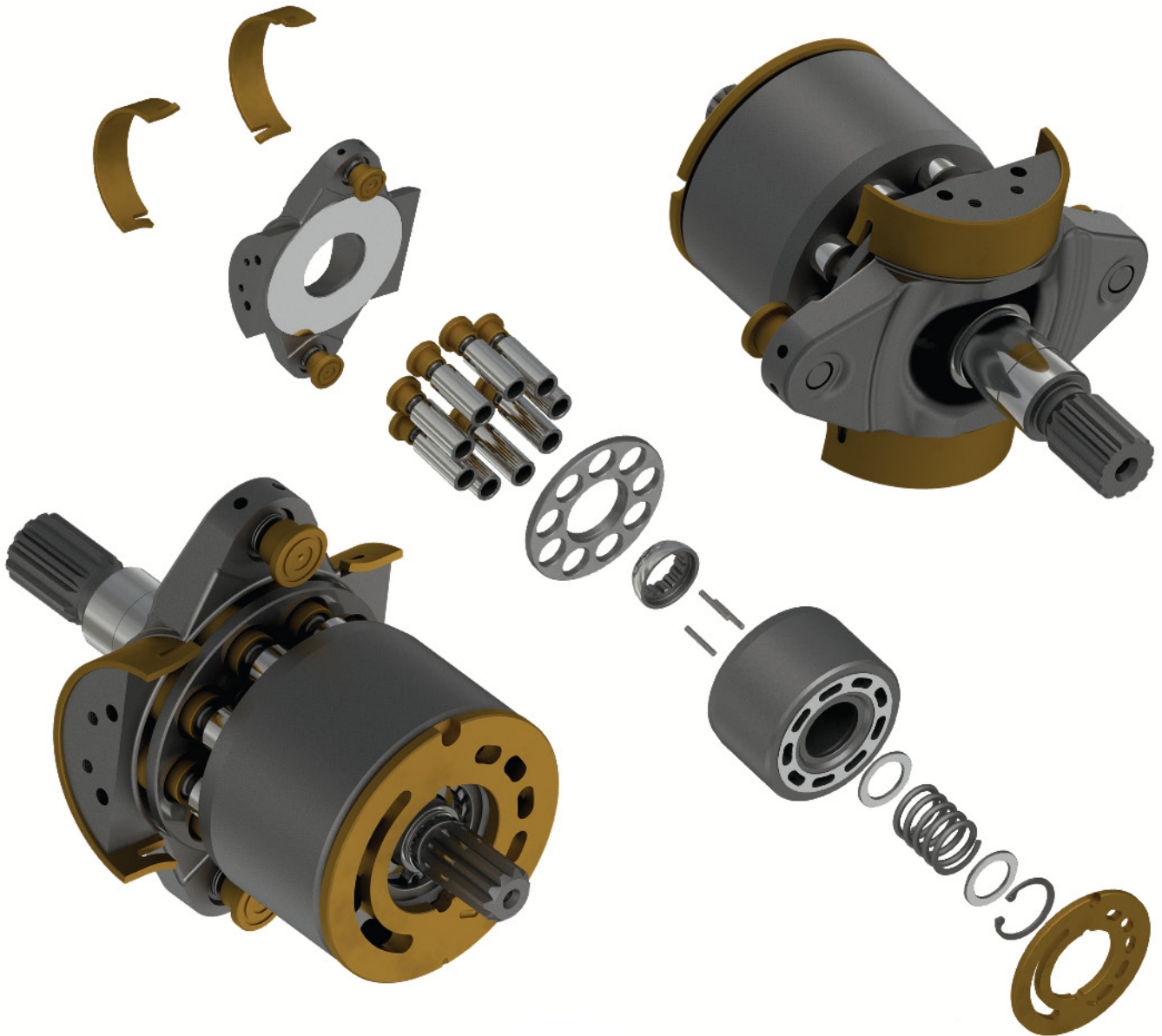
A10V17/21/23/28/40/43

ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE(L/R)	1	
2	SPACE	2	
3	COIL SPRING	1	
4	PUSH ROD	3	
5	CYLINDER BLOCK	1	
6	BALL GUIDE	1	
7	SET PLATE	1	
8	PISTON SHOE	9	
9	SHOE PLATE	1	
10	DRIVE SHAFT	1	
11	AXLE SHAFT	2	
12	BEARING	2	
13	HANGER	1	
14	COMPEN PISTON	1	

HANDOK HYDRAULIC

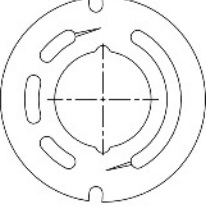
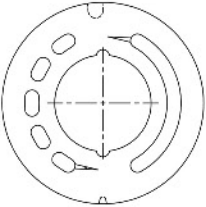
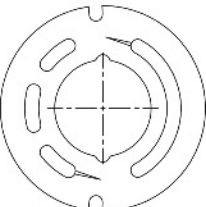
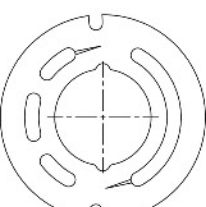


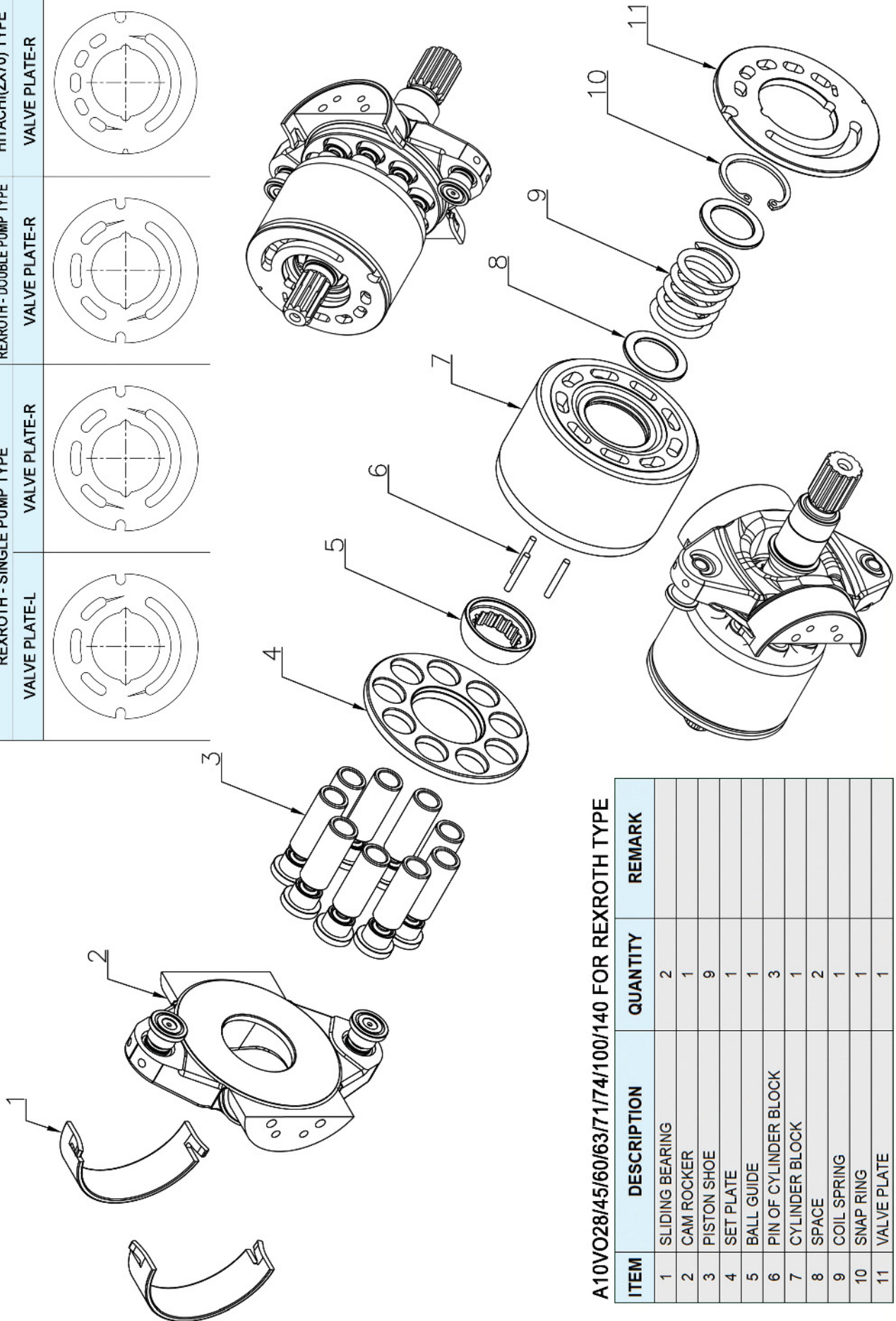
A10VO SERIES





IT IS DIFFEREN SHAPE BETWEEN A10VO28 VALVE PLATE AND A10VO28LR VALVE PLATE

A10VO28		A10VO28LR
REXROTH - SINGLE PUMP TYPE VALVE PLATE-L	VALVE PLATE-R	HITACHI(ZX70) TYPE VALVE PLATE-R
		
		



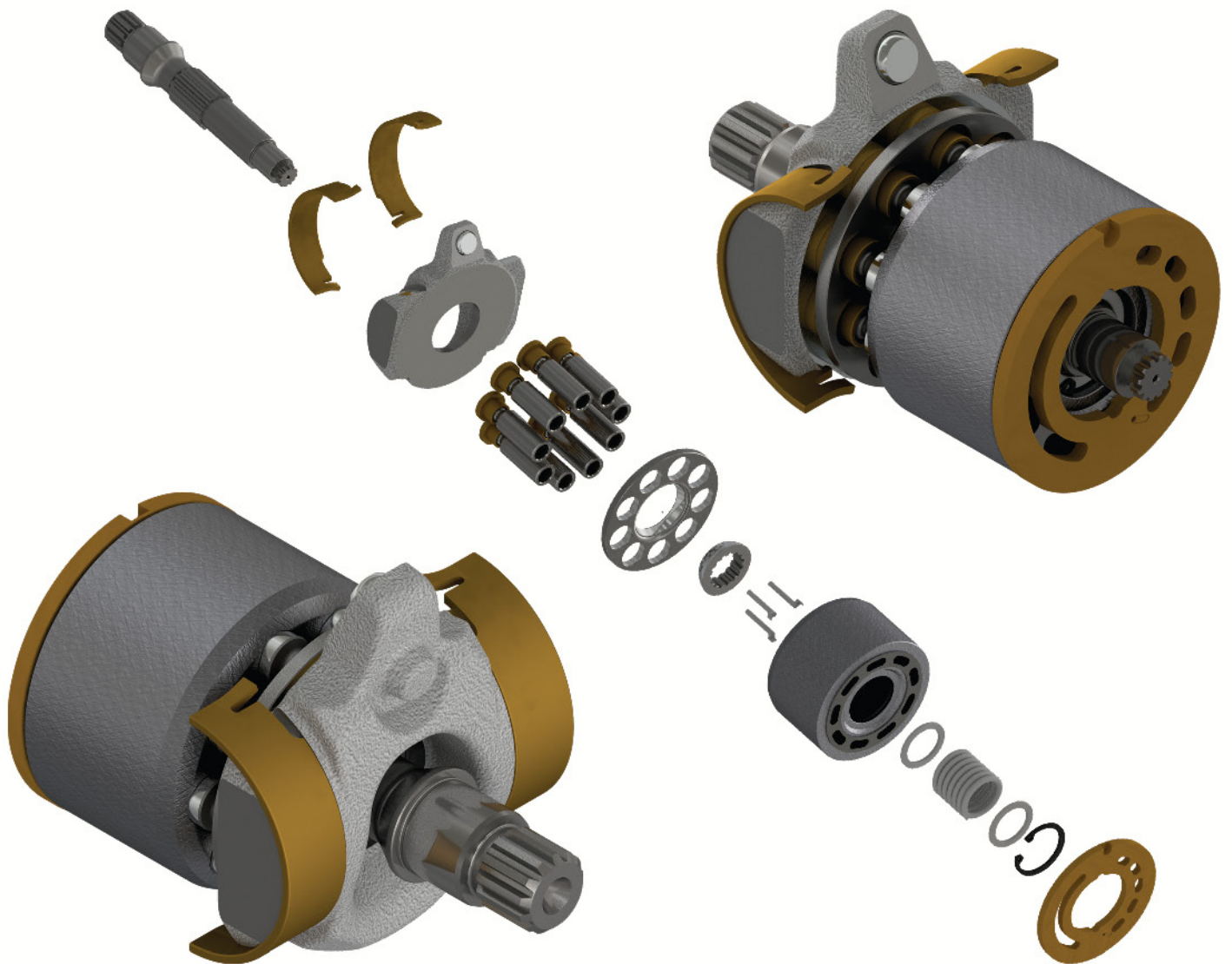
A10VO28/45/60/63/71/74/100/140 FOR REXROTH TYPE

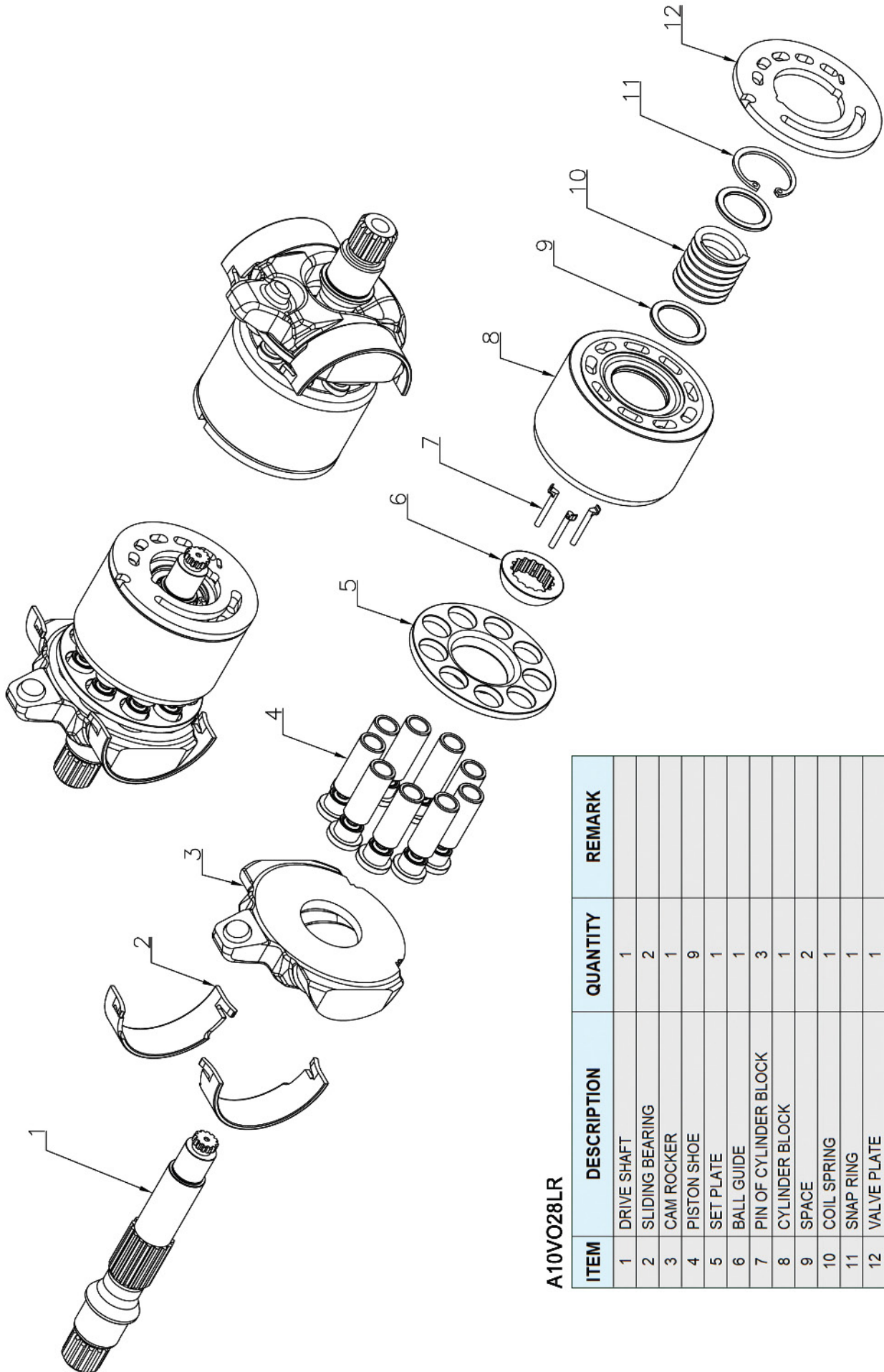
ITEM	DESCRIPTION	QUANTITY	REMARK
1	SLIDING BEARING	2	
2	CAM ROCKER	1	
3	PISTON SHOE	9	
4	SET PLATE	1	
5	BALL GUIDE	1	
6	PIN OF CYLINDER BLOCK	3	
7	CYLINDER BLOCK	1	
8	SPACE	2	
9	COIL SPRING	1	
10	SNAP RING	1	
11	VALVE PLATE	1	

HANDOK HYDRAULIC



A10VO28LR





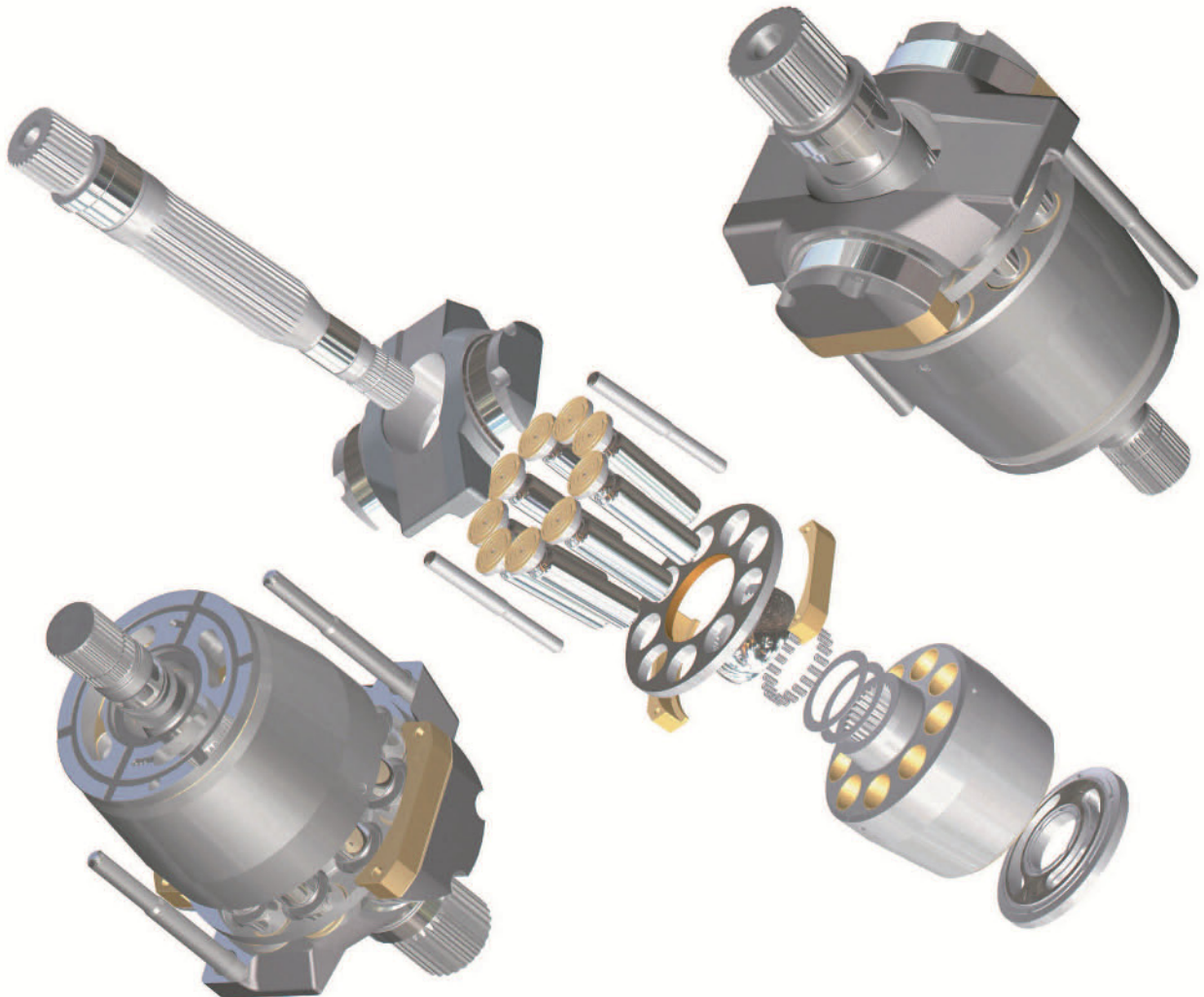
A10VO28LR

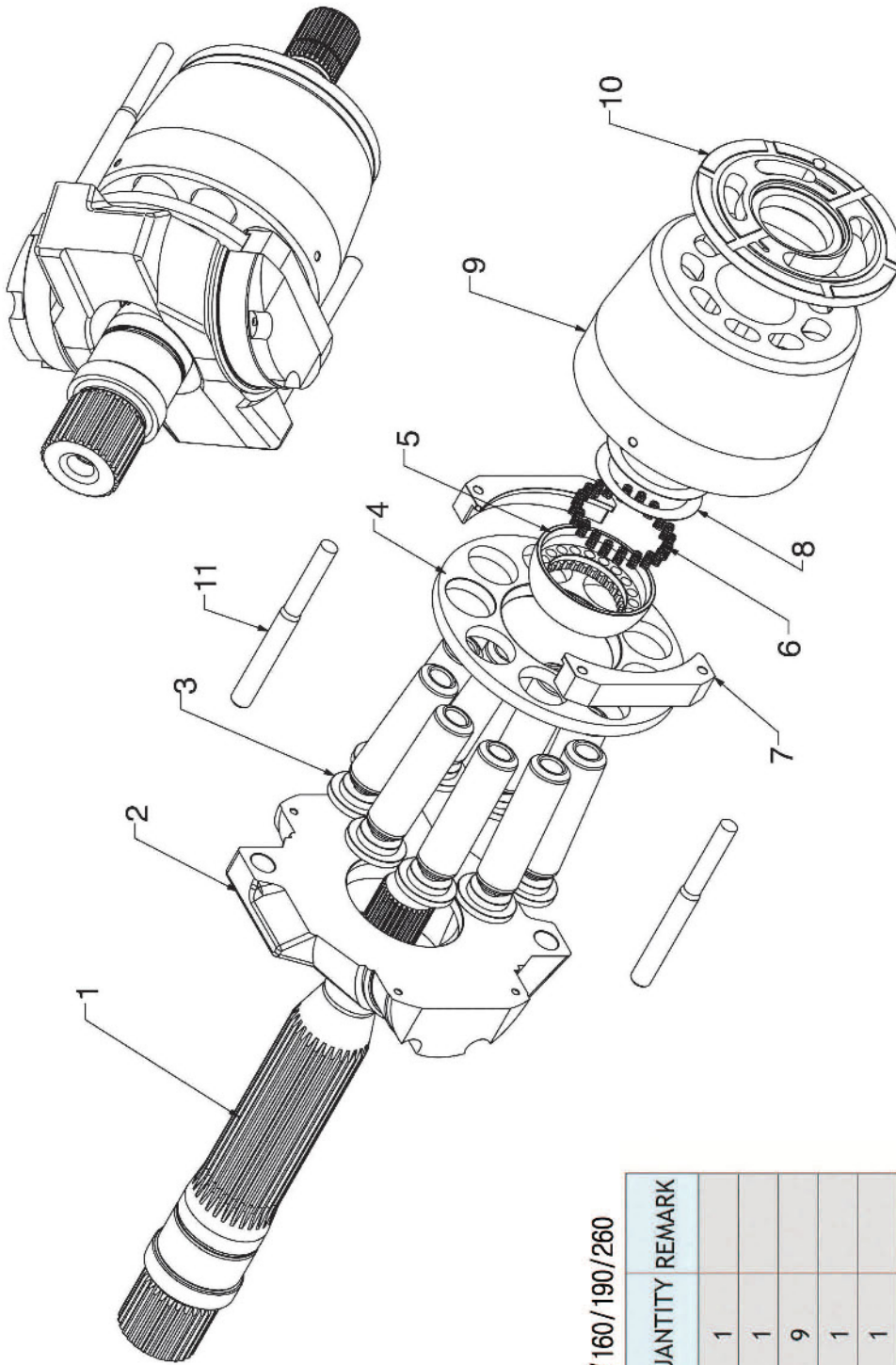
ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	SLIDING BEARING	2	
3	CAM ROCKER	1	
4	PISTON SHOE	9	
5	SET PLATE	1	
6	BALL GUIDE	1	
7	PIN OF CYLINDER BLOCK	3	
8	CYLINDER BLOCK	1	
9	SPACE	2	
10	COIL SPRING	1	
11	SNAP RING	1	
12	VALVE PLATE	1	

HAN DOK HYDRAULIC



A11VSO SERIES



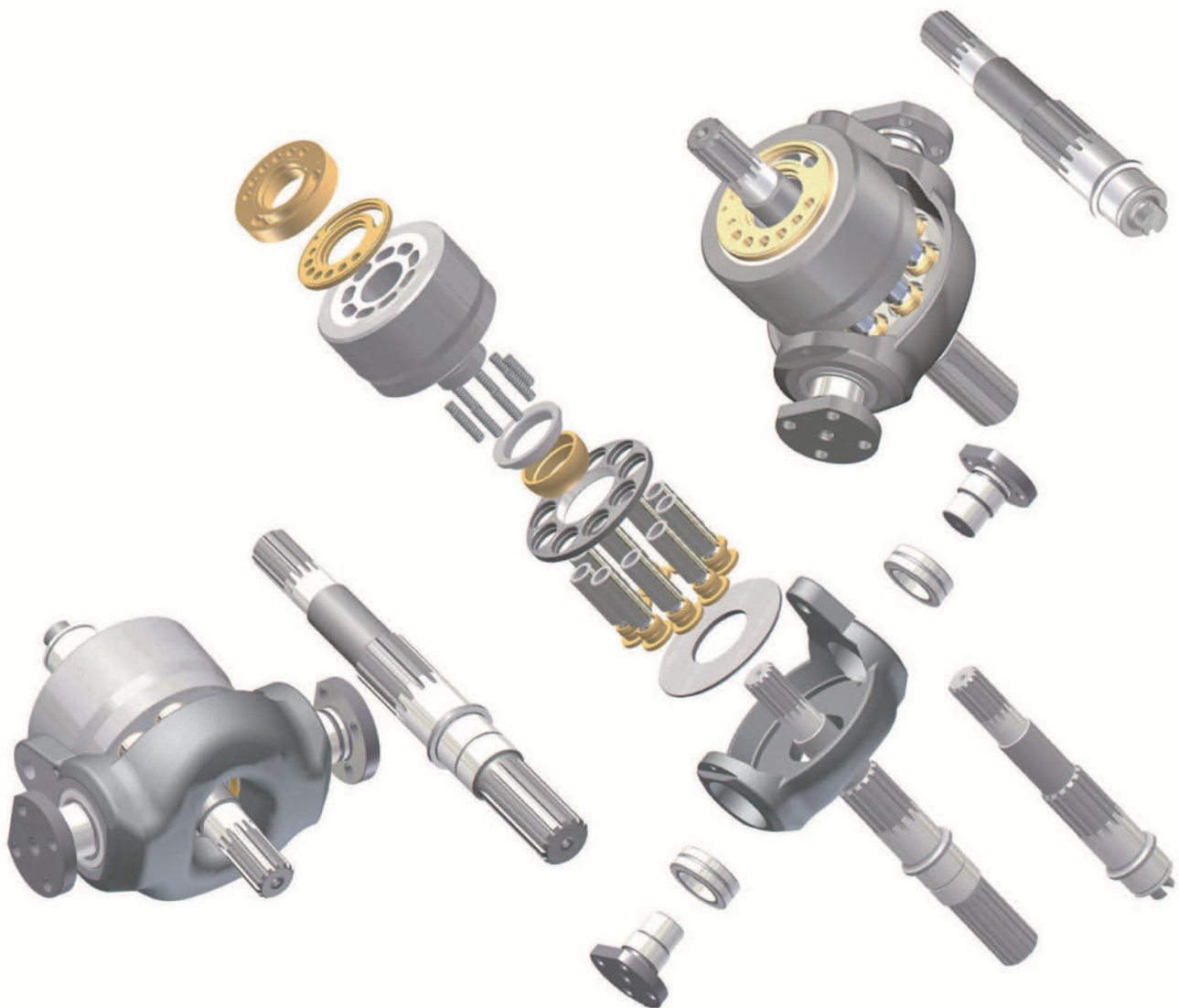


A11VSO40/60/75/95/130/145/160/190/260

ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	SWASH PLATE	1	
3	PISTON SHOE	9	
4	SET PLATE	1	
5	BALL GUIDE	1	
6	COIL SPRING	20	
7	FIX PLATE	2	
8	SHIM	2	
9	CYLINDER BLOCK	1	
10	VALVE PLATE(L/R)	1	
11	PUSH ROD	2	



AP12(E200B,E320B)

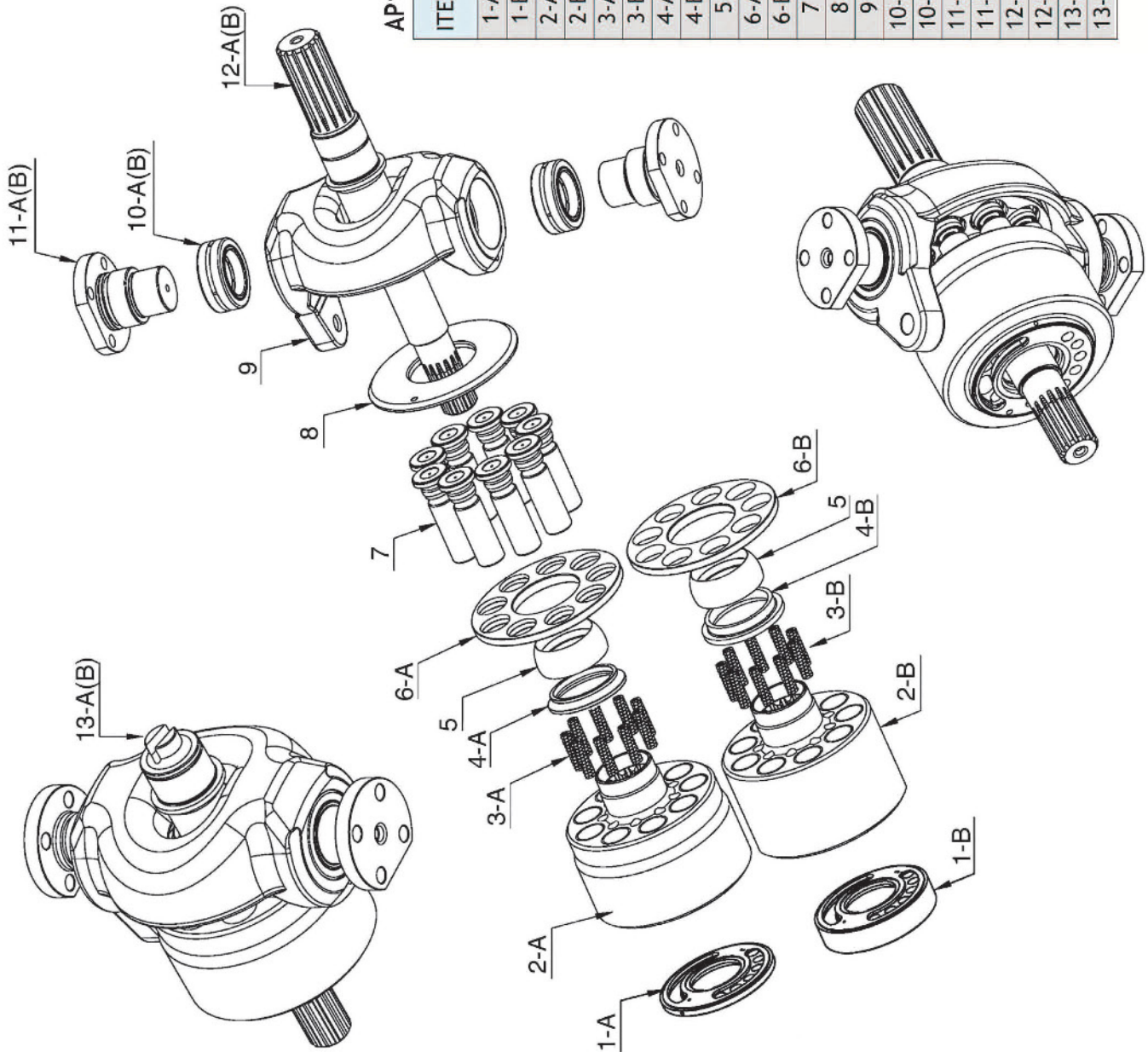


AP12(E200B,E320B)



AP12(E200B/E320B)

ITEM	DESCRIPTION	QUANTITY	REMARK
1-A	VALVE PLATE(E200B)(L/R)	1	
1-B	VALVE PLATE(E200B)(L/R)	1	
2-A	CYLINDER BLOCK(E320B)	1	
2-B	CYLINDER BLOCK(E200B)	1	
3-A	COIL SPRING(E320B)	9	
3-B	COIL SPRING(E200B)	9	
4-A	SPACE(E320B)	1	
4-B	SPACE(E200B)	1	
5	BALL GUIDE	1	
6-A	SET PLATE(E320B)	1	
6-B	SET PLATE(E200B)	1	
7	PISTON SHOE	9	
8	SHOE PLATE(E200B/E320B)	1	
9	SWASH PLATE	1	
10-A	BEARING(E320B)	2	
10-B	BEARING(E200B)	2	
11-A	AXLE SHAFT(E320B)	2	(88X50X40)
11-B	AXLE SHAFT(E200B)	2	(84X50X35)
12-A	DRIVE SHAFT-R(E320B)	1	
12-B	DRIVE SHAFT-R(E200B)	1	
13-A	DRIVE SHAFT-L(E320B)	1	
13-B	DRIVE SHAFT-L(E200B)	1	



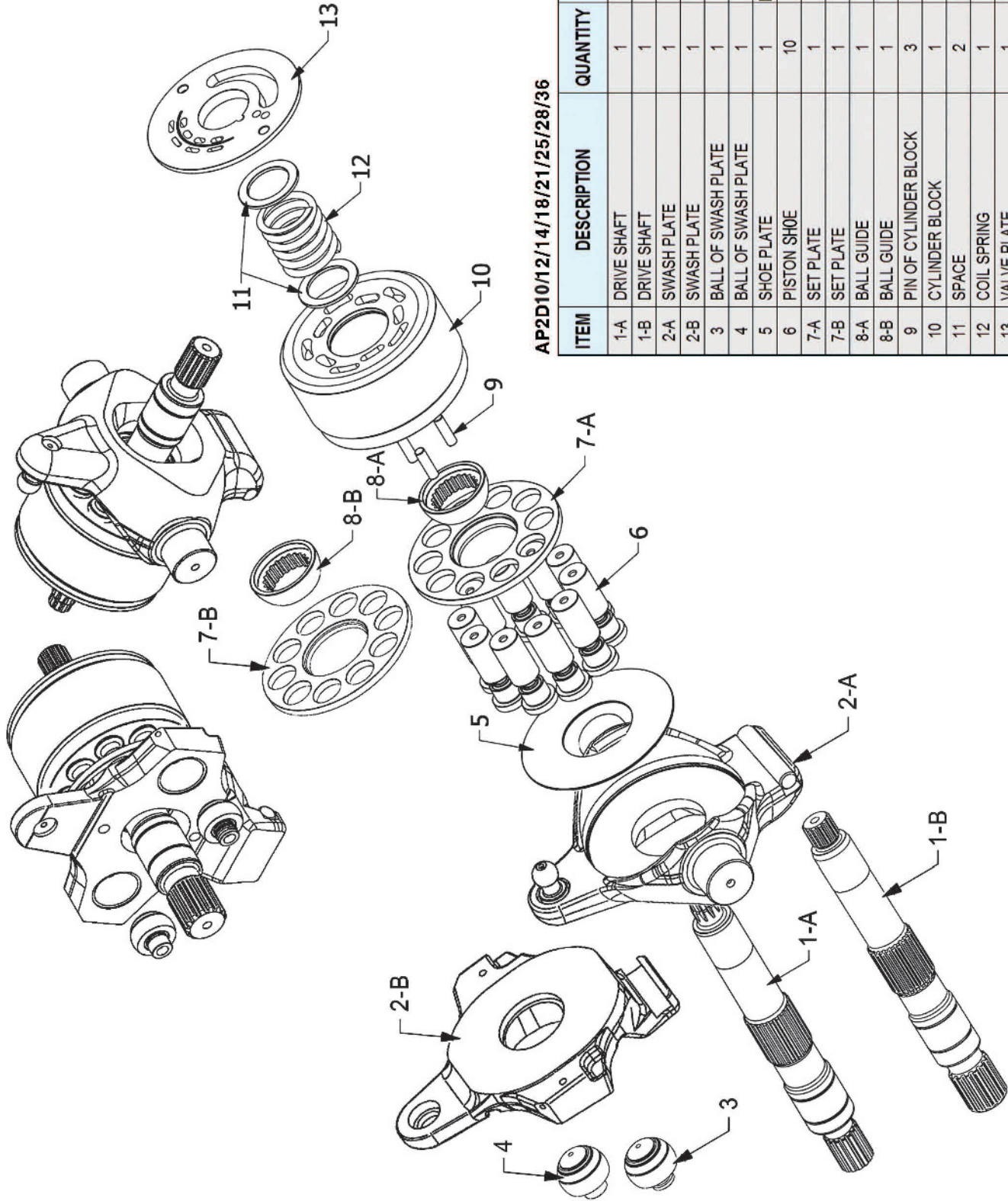
HANDOK HYDRAULIC



AP2D SERIES



		AP2D36-TRUNNION TYPE	AP2D36-CRADLE TYPE
SWASH PLATE			
14T			
15T			
	BALL GUIDE & SET PLATE		

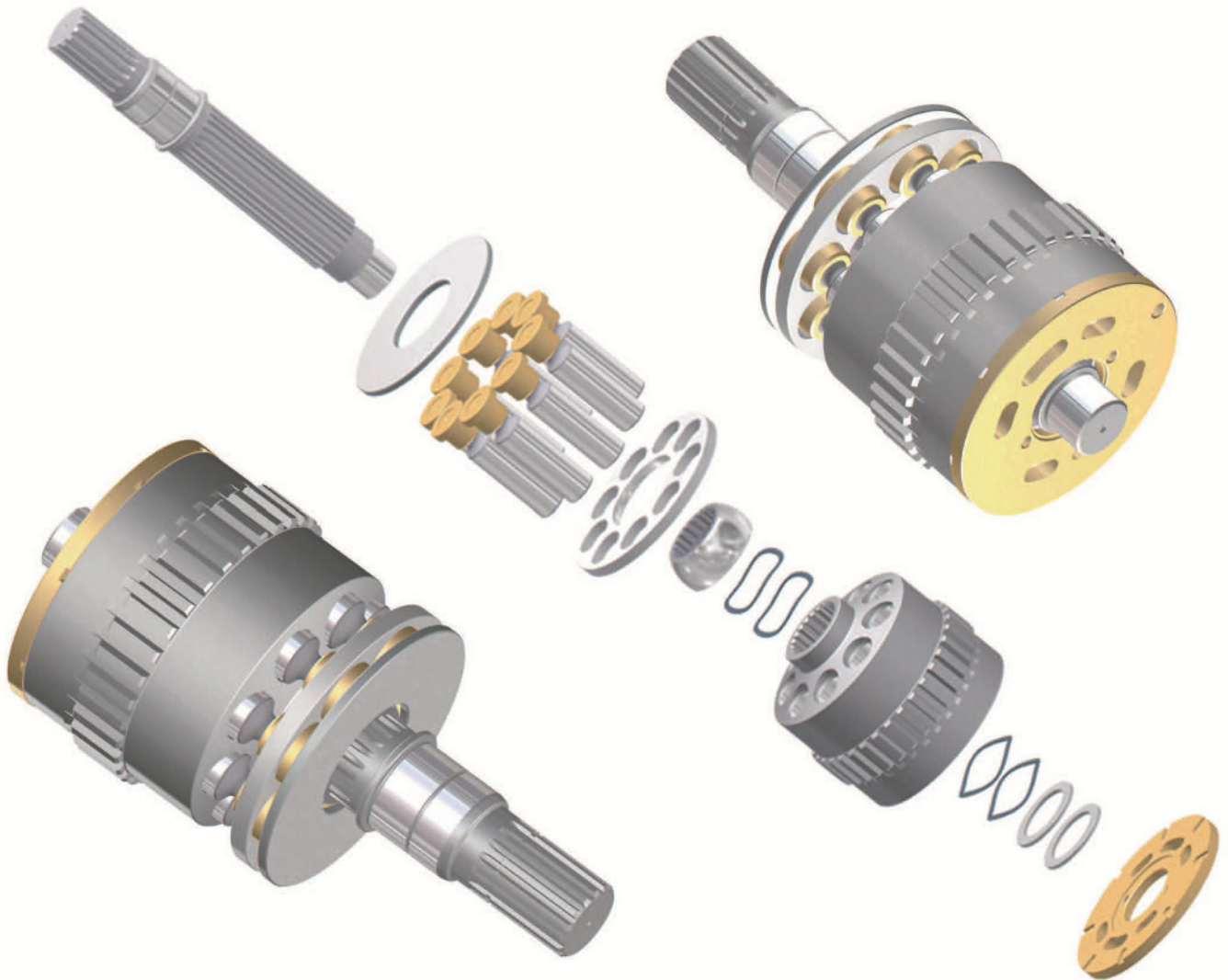
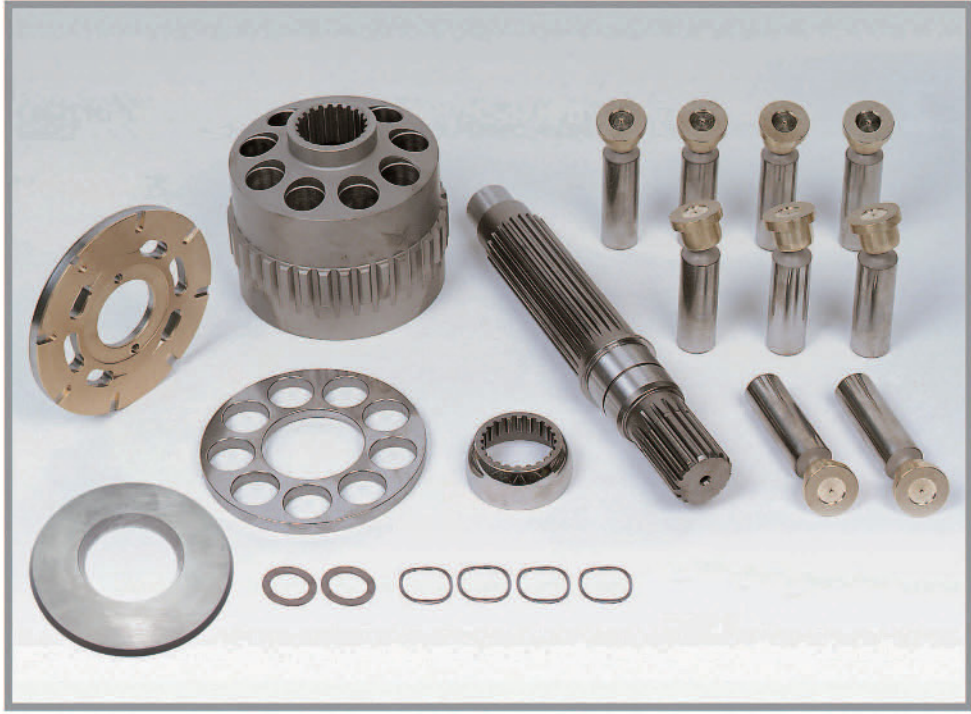


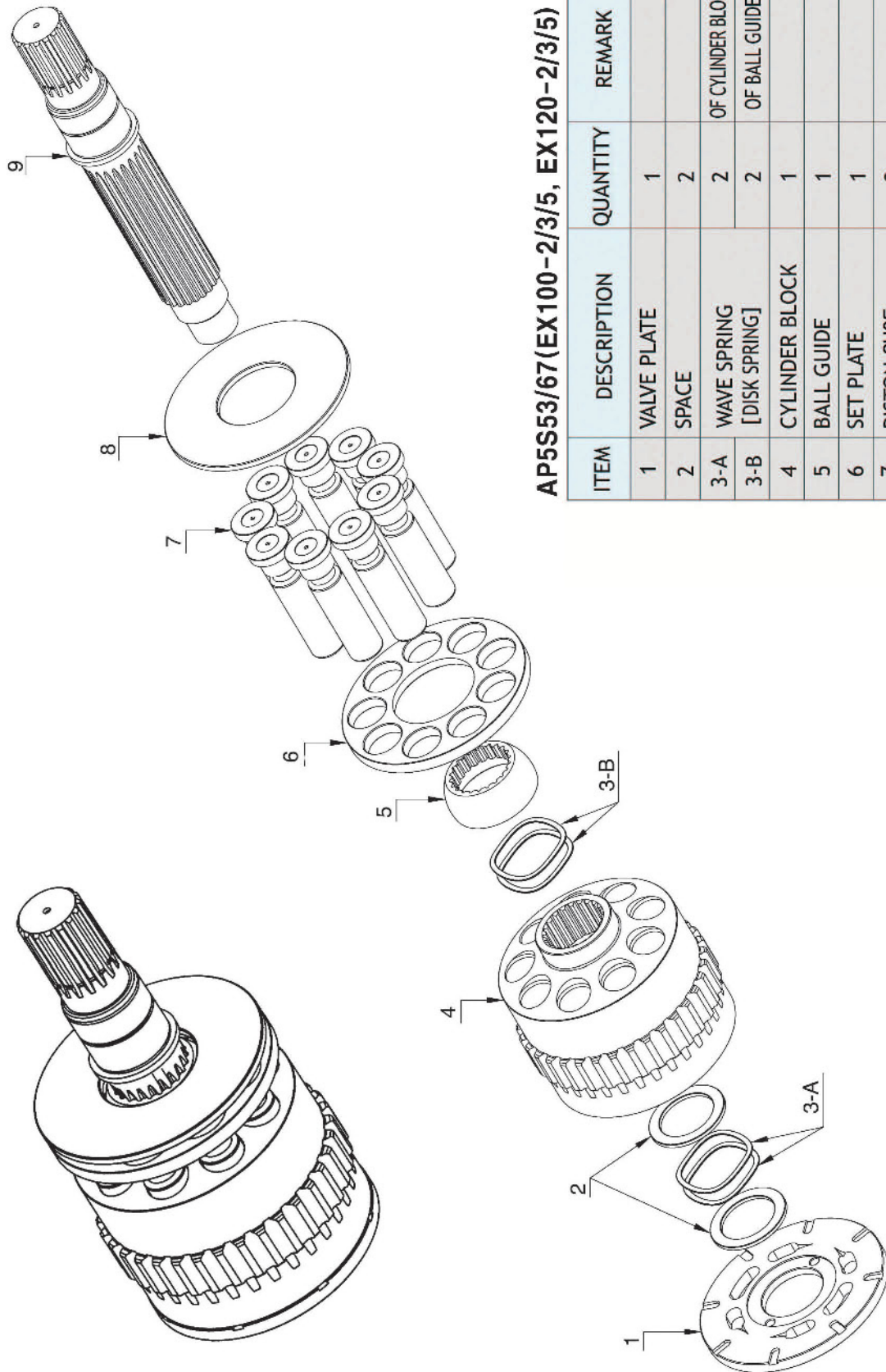
AP2D10/12/14/18/21/25/28/36

ITEM	DESCRIPTION	QUANTITY	REMARK
1-A	DRIVE SHAFT	1	15T
1-B	DRIVE SHAFT	1	14T
2-A	SWASH PLATE	1	TRUNNION
2-B	SWASH PLATE	1	CRADLE
3	BALL OF SWASH PLATE	1	L
4	BALL OF SWASH PLATE	1	R
5	SHOE PLATE	1	FOR TRUNNION
6	PISTON SHOE	10	
7-A	SET PLATE	1	TRUNNION
7-B	SET PLATE	1	CRADLE
8-A	BALL GUIDE	1	TRUNNION
8-B	BALL GUIDE	1	CRADLE
9	PIN OF CYLINDER BLOCK	3	
10	CYLINDER BLOCK	1	
11	SPACE	2	
12	COIL SPRING	1	
13	VALVE PLATE	1	



AP5S53/67(EX100-2/3/5, EX120-2/3/5)



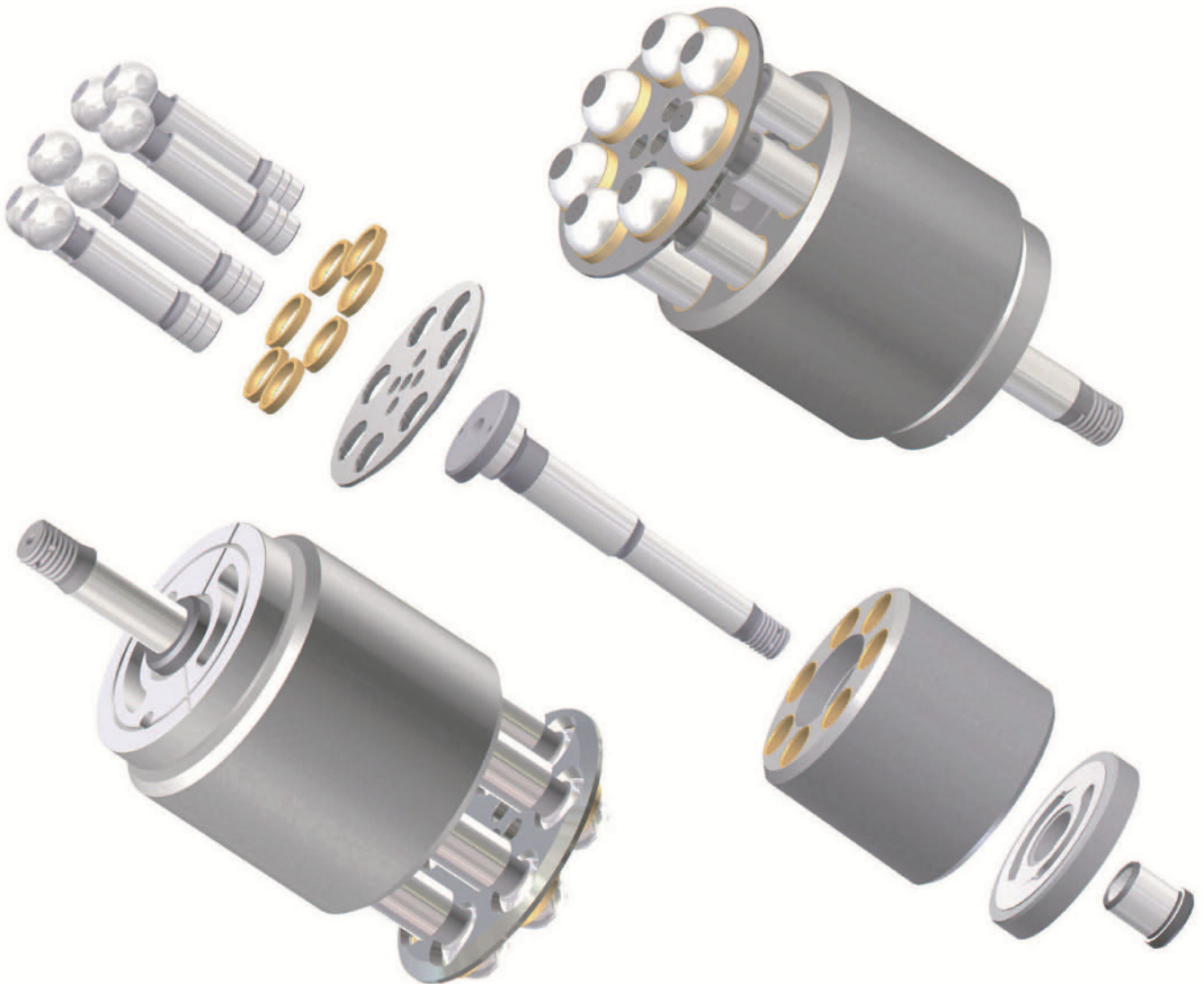


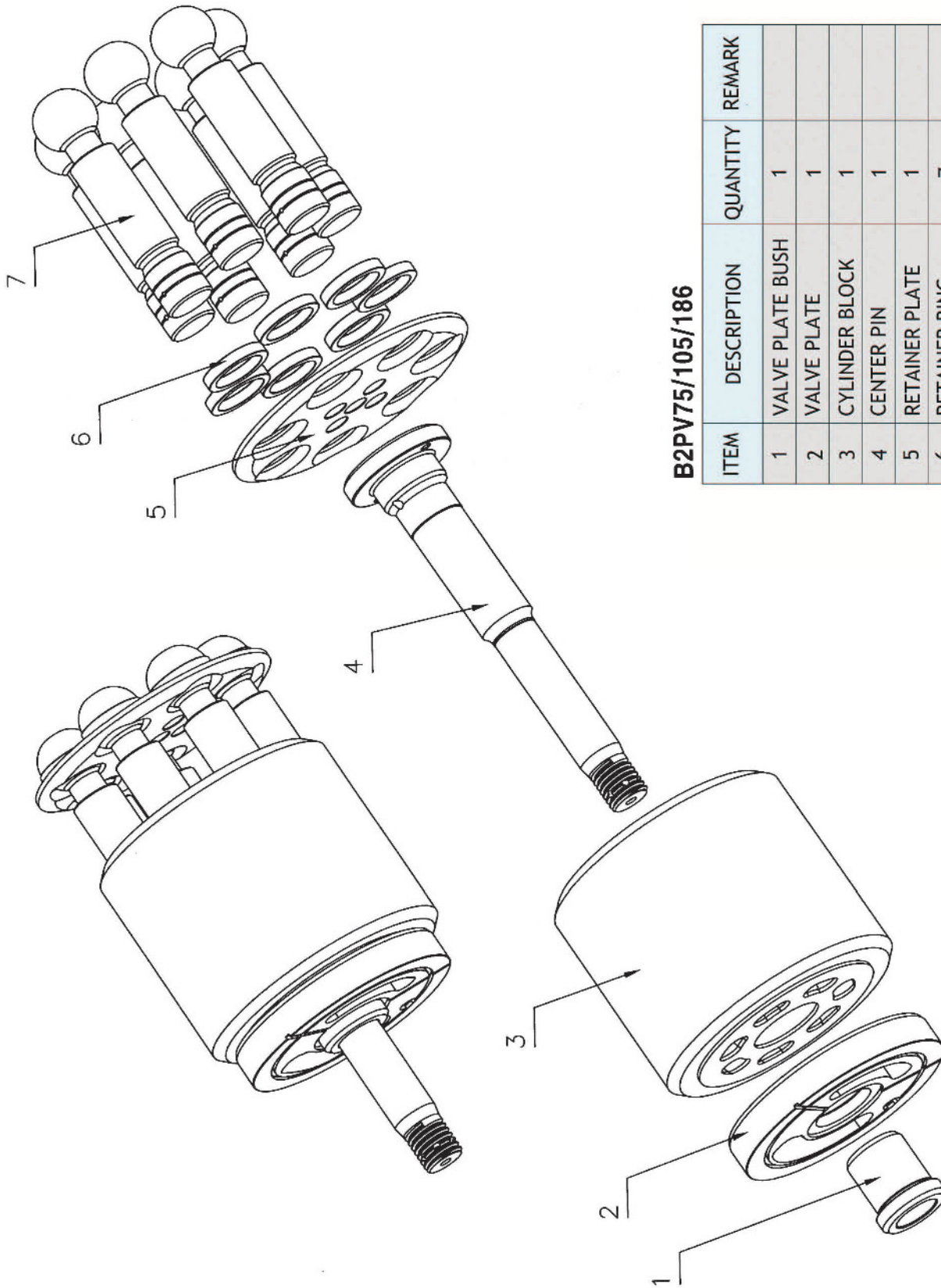
AP5S53/67(EX100-2/3/5, EX120-2/3/5)

ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE	1	
2	SPACE	2	
3-A	WAVE SPRING	2	OF CYLINDER BLOCK
3-B	[DISK SPRING]	2	OF BALL GUIDE
4	CYLINDER BLOCK	1	
5	BALL GUIDE	1	
6	SET PLATE	1	
7	PISTON SHOE	9	
8	SHOE PLATE	1	
9	DRIVE SHAFT	1	



B2PV SERIES



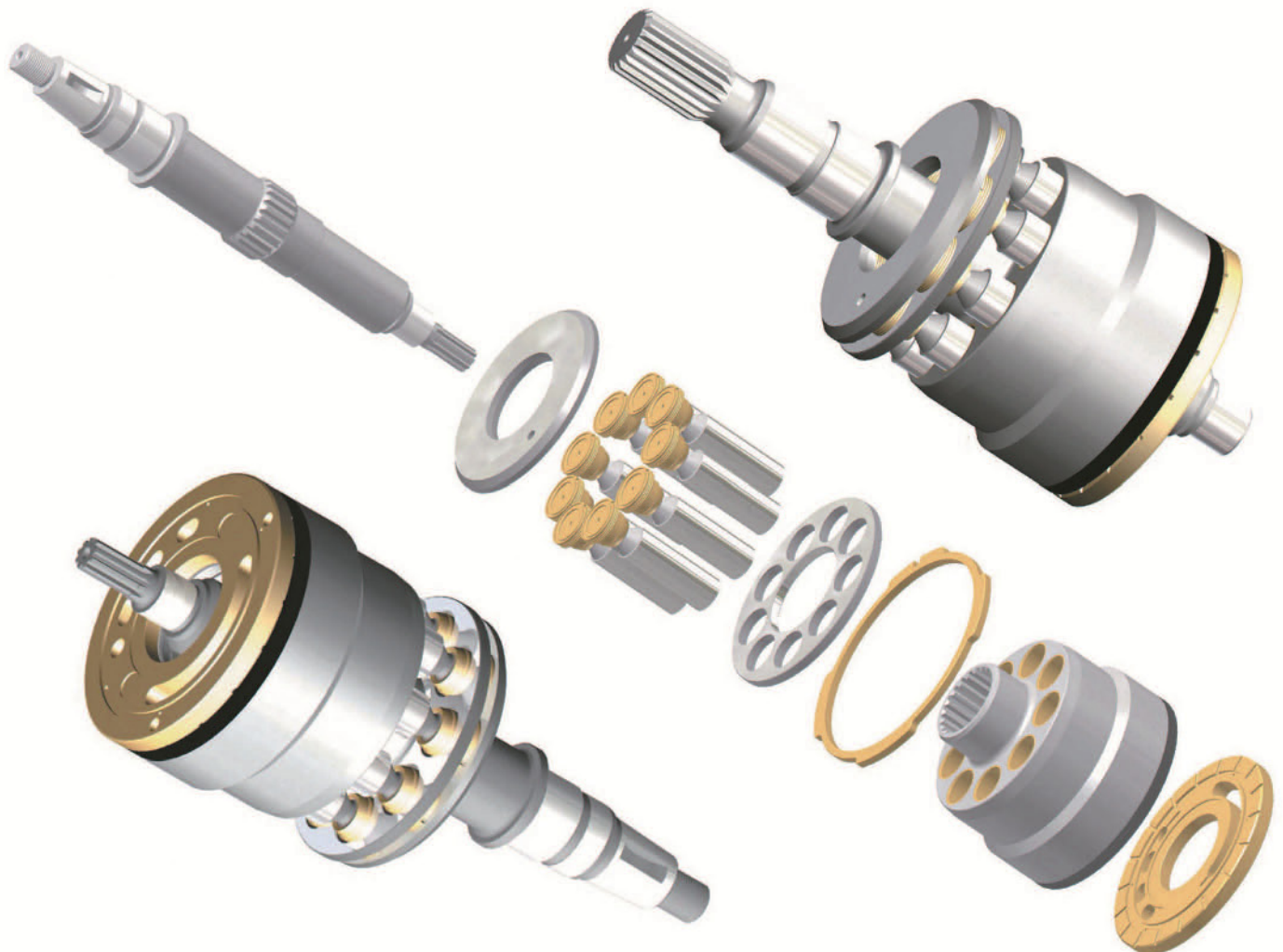


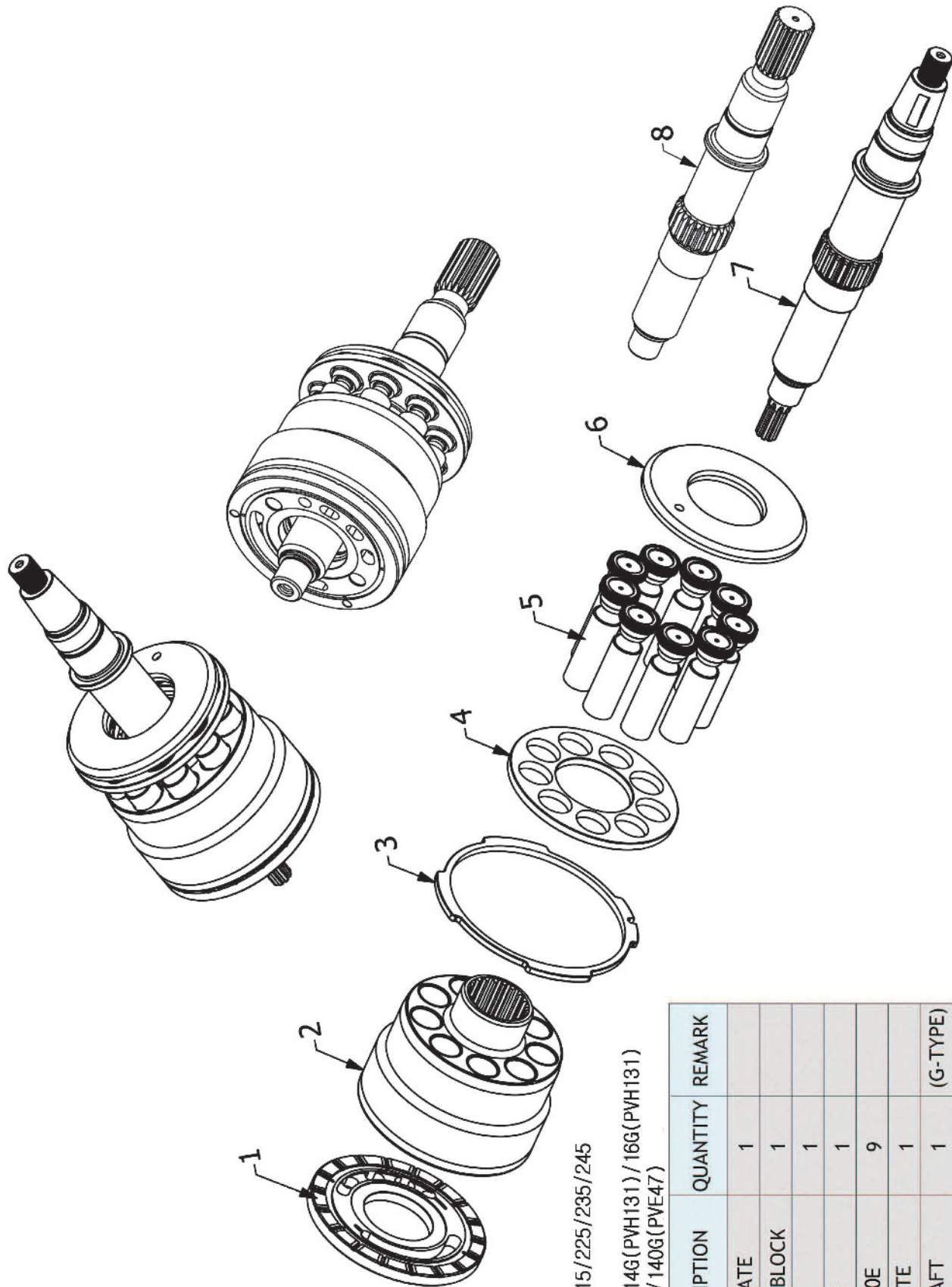
B2PV75/105/186

ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE BUSH	1	
2	VALVE PLATE	1	
3	CYLINDER BLOCK	1	
4	CENTER PIN	1	
5	RETAINER PLATE	1	
6	RETAINER RING	7	
7	PISTON	7	



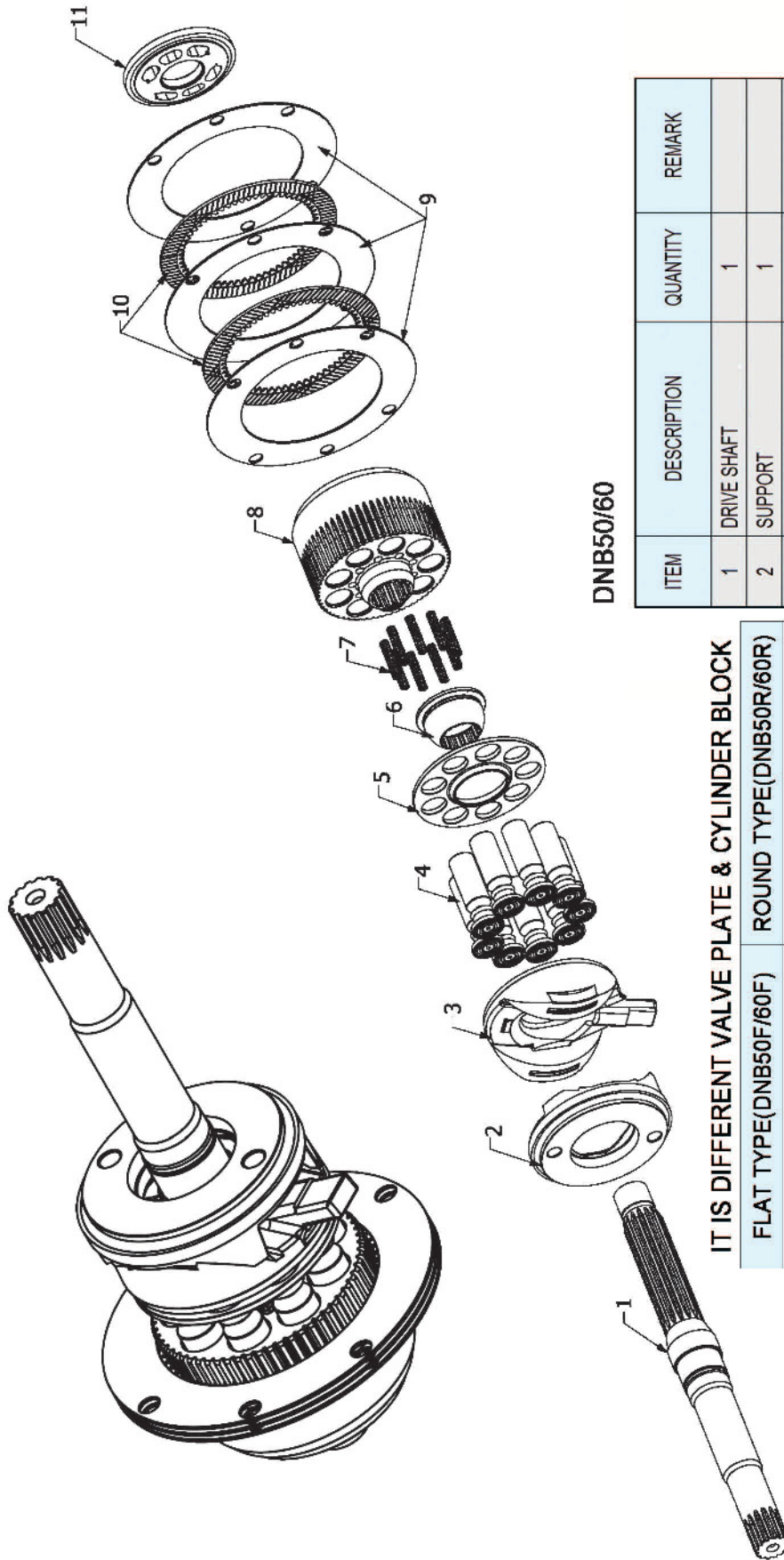
CAT SERIES





EXCAVATOR CAT15/225/235/245
 MOTOR GRADER
 CAT12G(PVH98)/14G(PVH131)/16G(PVH131)
 CAT120G(PVE35)/140G(PVE47)

ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE	1	
2	CYLINDER BLOCK	1	
3	FIX PLATE	1	
4	SET PLATE	1	
5	PISTON SHOE	9	
6	SHOE PLATE	1	
7	DRIVE SHAFT	1	(G-TYPE)
8	DRIVE SHAFT	1	(E-TYPE)

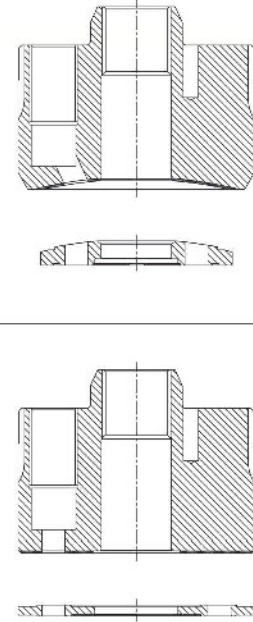


DNB50/60

ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	SUPPORT	1	
3	SWASH PLATE	1	
4	PISTON SHOE	9	
5	SET PLATE	1	
6	BALL GUIDE	1	
7	COIL SPRING	9	
8	CYLINDER BLOCK	1	
9	SEPARATION PLATE	3	
10	FRICION PLATE	2	
11	VALVE PLATE	1	

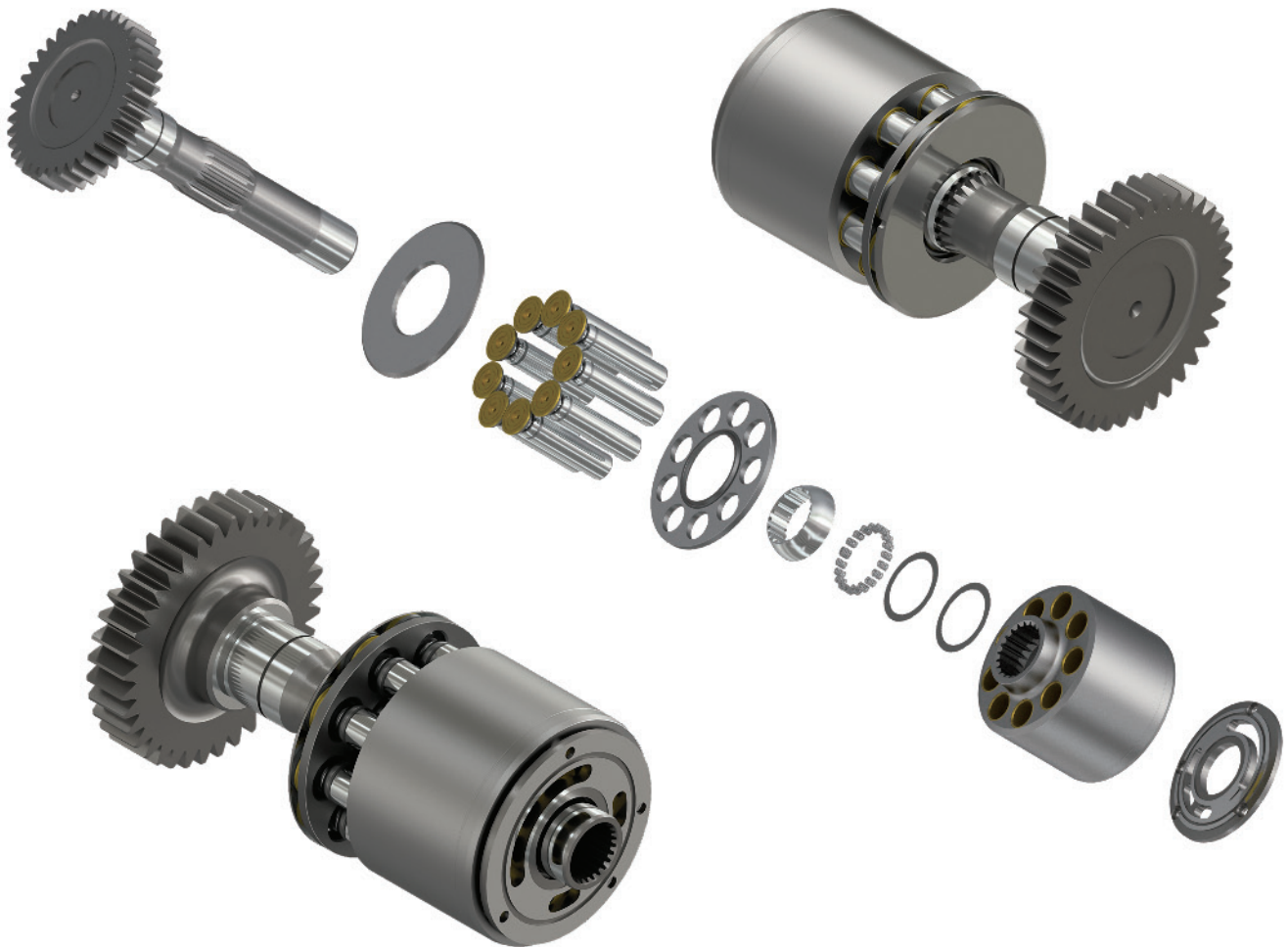
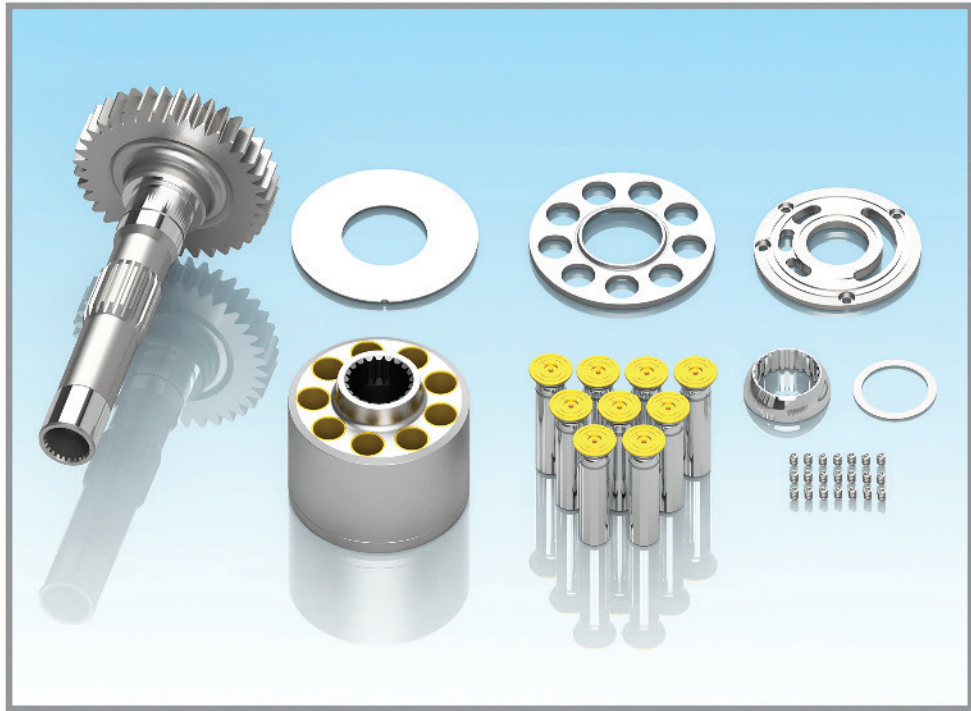
IT IS DIFFERENT VALVE PLATE & CYLINDER BLOCK

FLAT TYPE(DNB50F/60F) ROUND TYPE(DNB50R/60R)

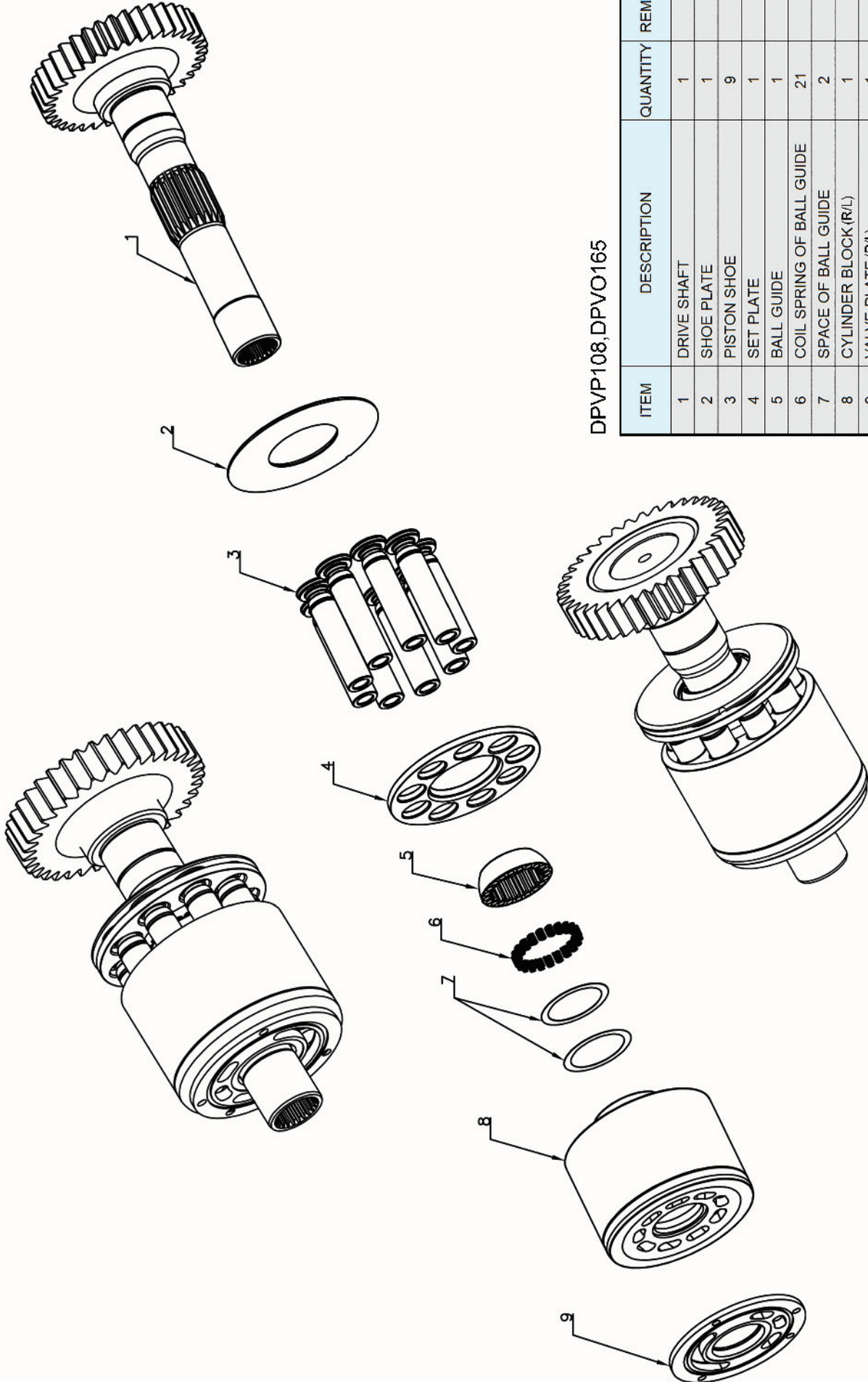




DPVP108, DPVO165



DPVP108, DPVO165



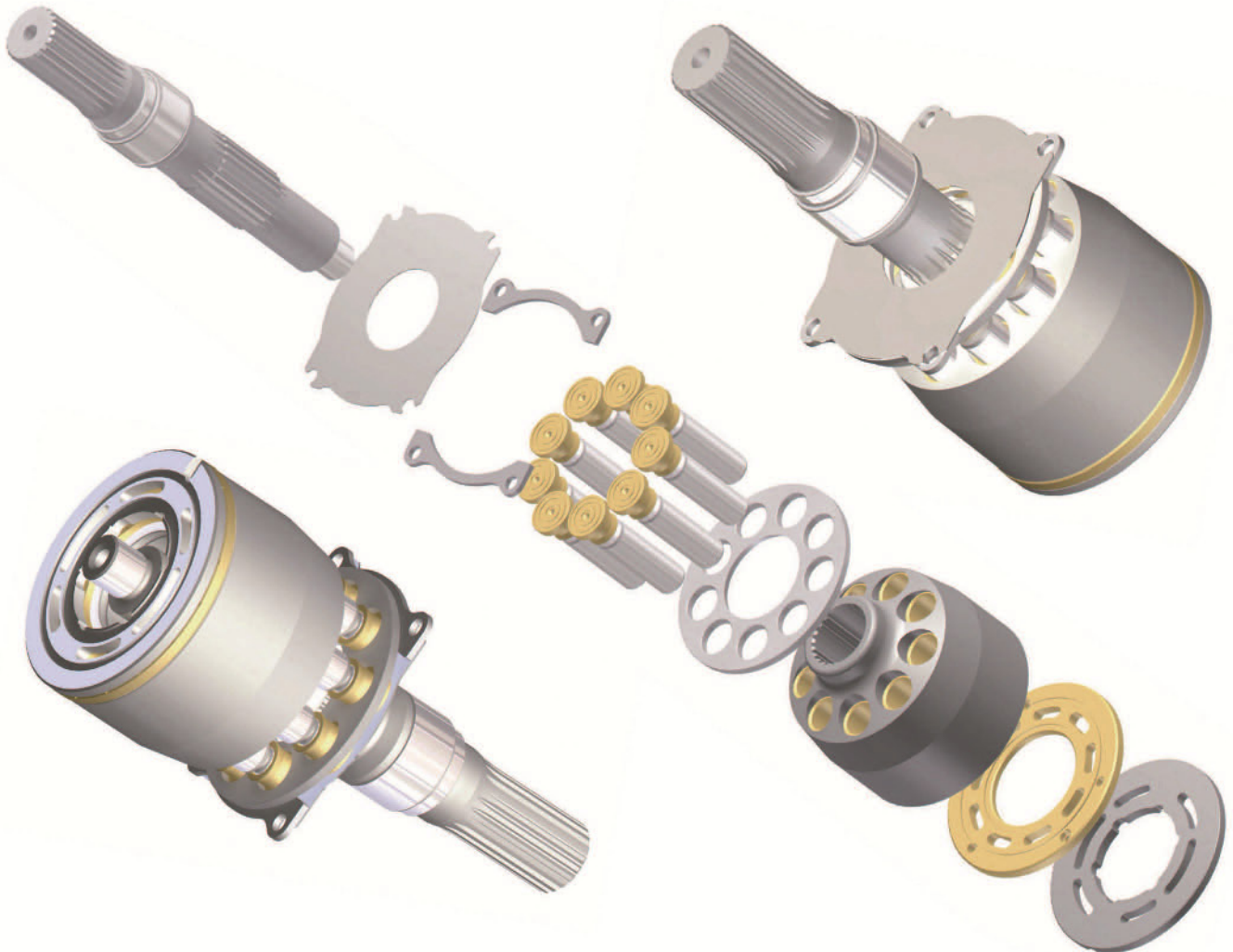
DPVP108, DPVO165

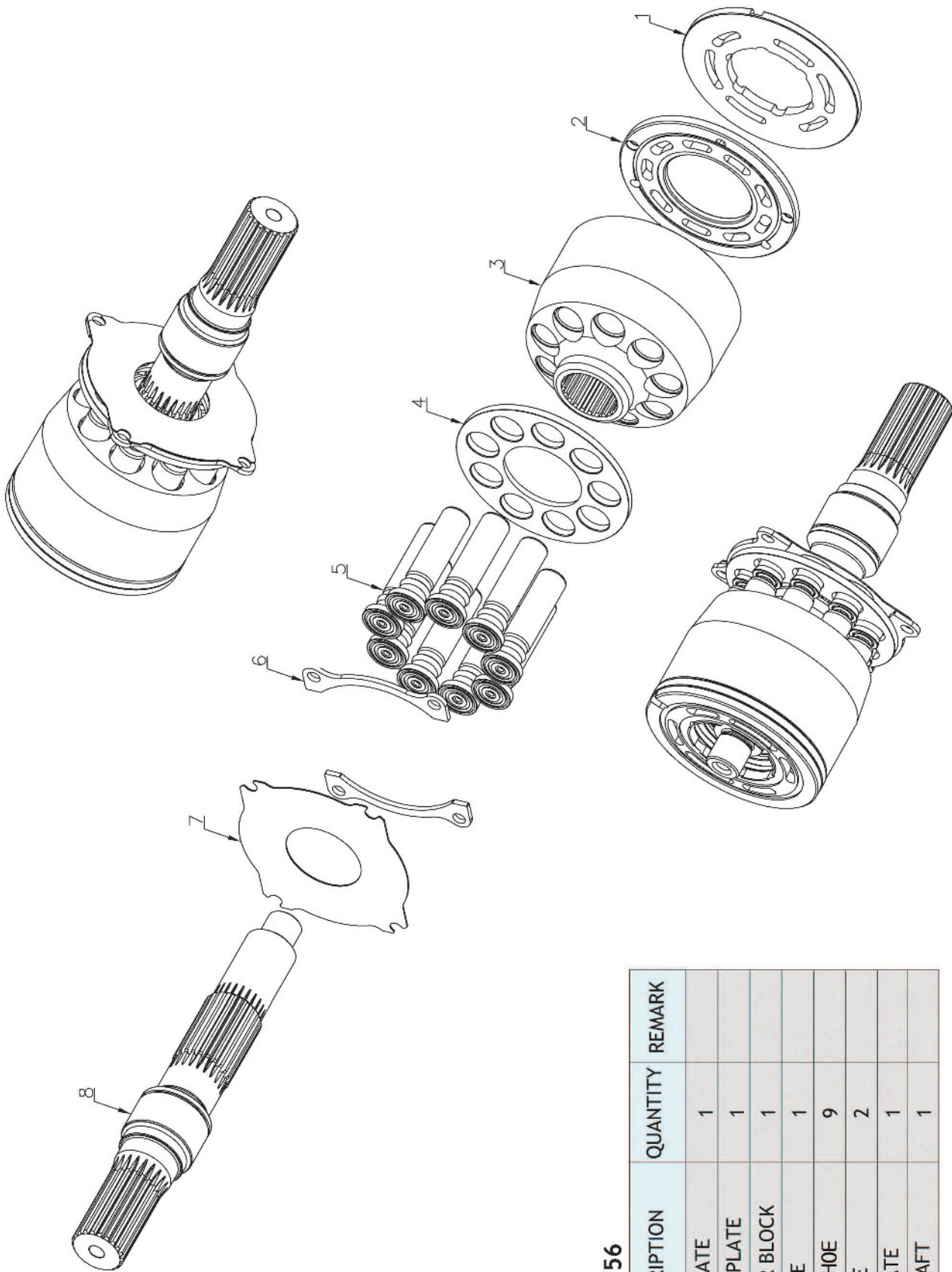
ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	SHOE PLATE	1	
3	PISTON SHOE	9	
4	SET PLATE	1	
5	BALL GUIDE	1	
6	COIL SPRING OF BALL GUIDE	21	
7	SPACE OF BALL GUIDE	2	
8	CYLINDER BLOCK (R/L)	1	
9	VALVE PLATE (R/L)	1	

HAN DOK HYDRAULIC



EATON SERIES





EATON33/46/56

ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE	1	
2	BEARING PLATE	1	
3	CYLINDER BLOCK	1	
4	SET PLATE	1	
5	PISTON SHOE	9	
6	FIX PLATE	2	
7	SHOE PLATE	1	
8	DRIVE SHAFT	1	

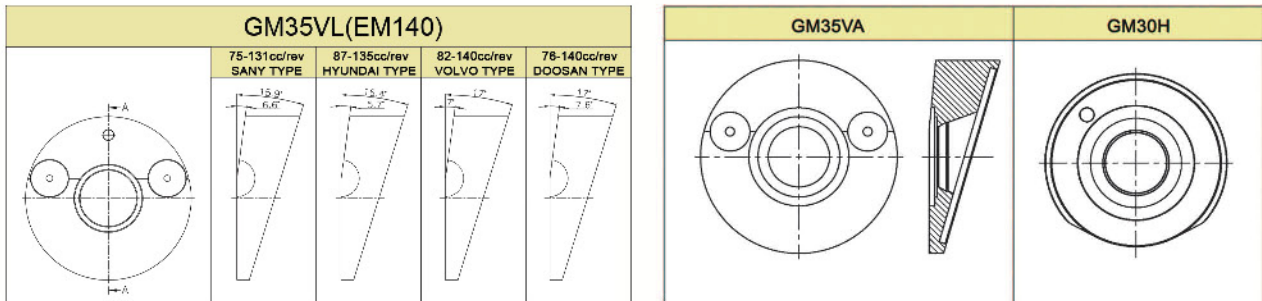
HAN DOK HYDRAULIC



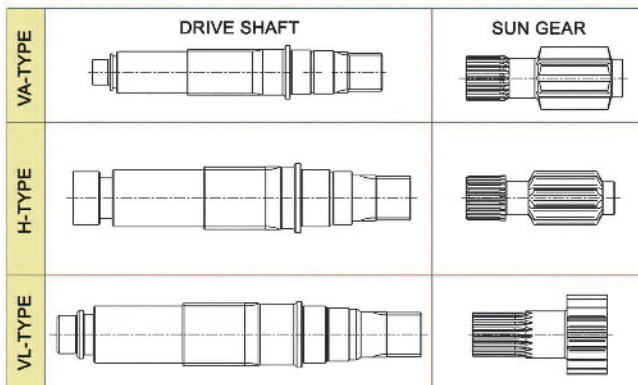
GM SERIES



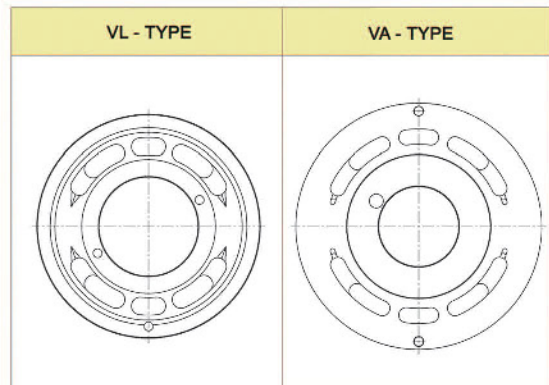
IT IS DIFFERENT SWASH PLATE



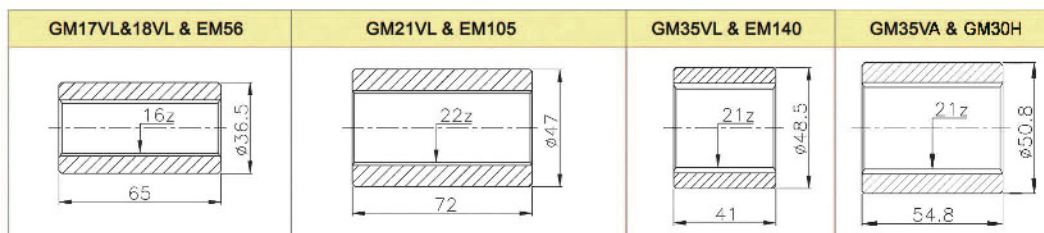
IT IS DIFFERENT DRIVE SHAFT & SUN GEAR



IT IS DIFFERENT VALVE PLATE

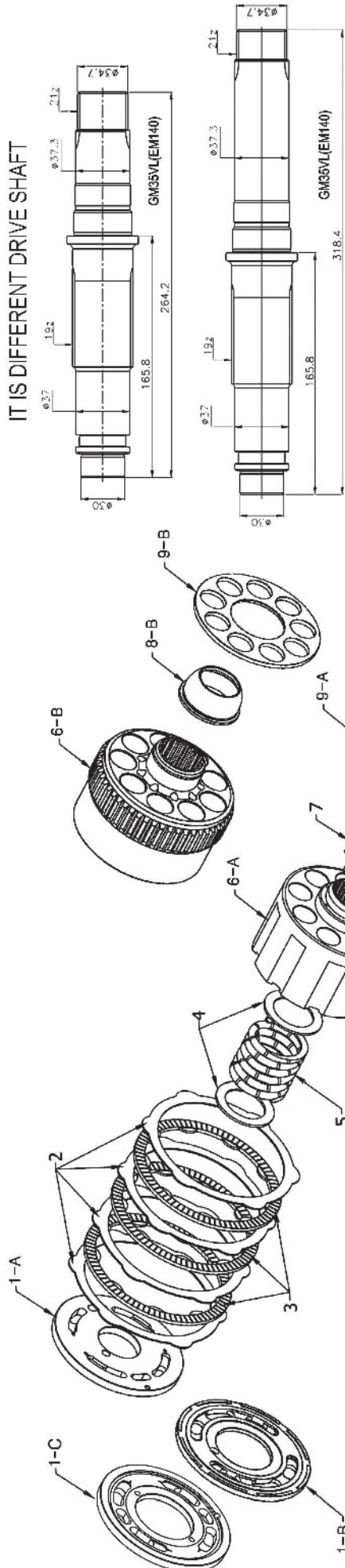


IT IS DIFFERENT COUPLING

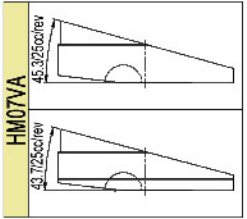




IT IS DIFFERENT DRIVE SHAFT



IT IS DIFFERENT SWASH PLATE



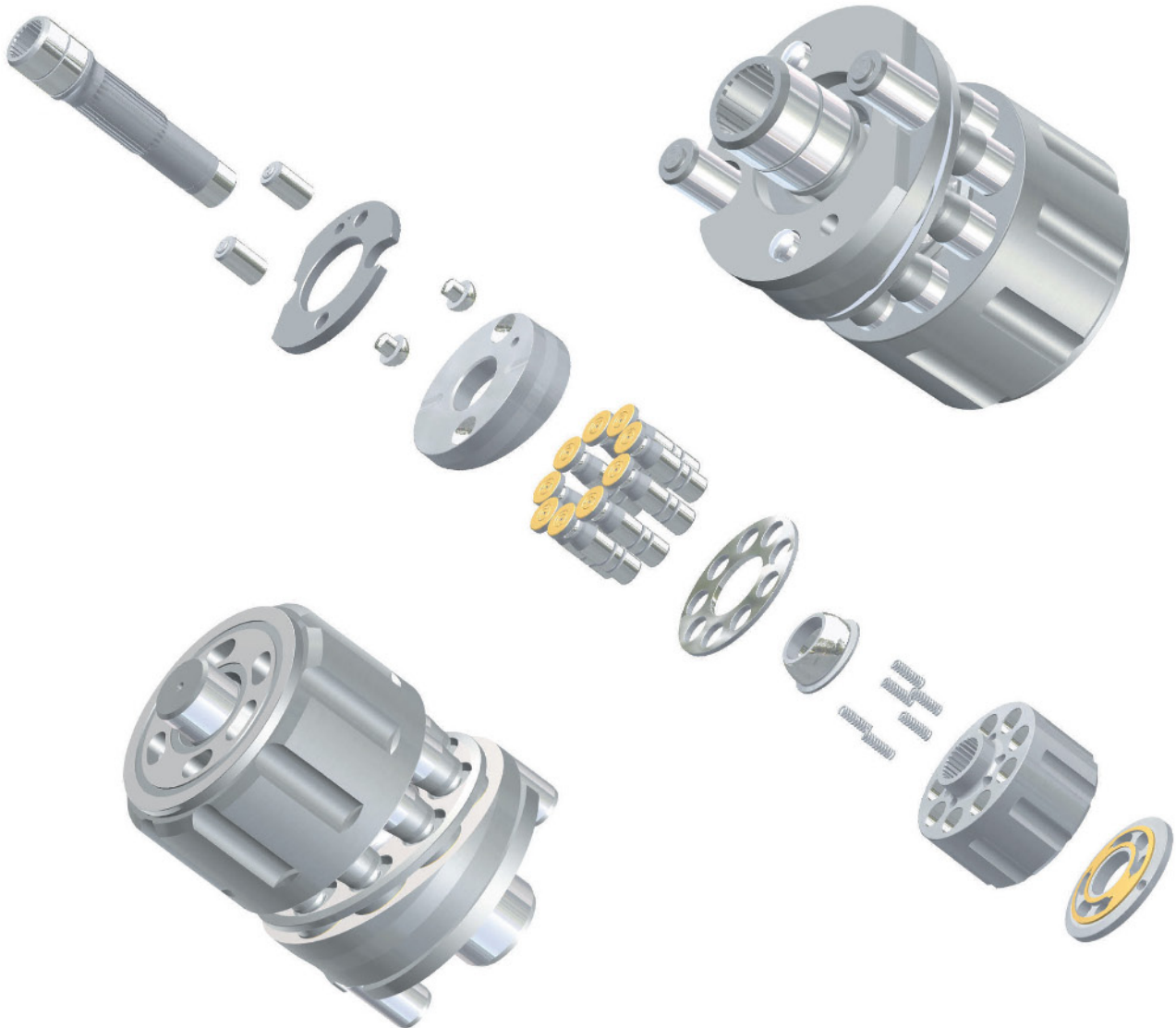
GM02/03/04/05/06/08/09/18/23/24/28/30/35/38

ITEM	DESCRIPTION	QUANTITY	REMARK
1-A	VALVE PLATE (VA-TYPE)	1	
1-B	VALVE PLATE (VB-TYPE)	1	
1-C	VALVE PLATE (VL-TYPE)	1	
2	SEPARATION PLATE	4	
3	FRICTION PALTE	3	
4	SPACE	2	
5	COIL SPRING	1	
6-A	CYLINDER BLOCK (VA-TYPE)	1	
6-B	CYLINDER BLOCK (VB-TYPE)	1	
7	PIN OF CYLINDER BLOCK	6	
8-A	BALL GUIDE (VA-TYPE)	1	
8-B	BALL GUIDE (VB-TYPE)	1	
9-A	SET PLATE (VA-TYPE)	1	
9-B	SET PLATE (VB-TYPE)	1	
10-A	PISTON SHOE (VA-TYPE)	9	
10-B	PISTON SHOE (VB-TYPE)	9	
11	SHOE PLATE	1	
12-A	SWASH PLATE (VLVA-TYPE)	1	
12-B	SWASH PLATE (H-TYPE)	1	
13-A	DRIVE SHAFT (VA-TYPE)	1	
13-B	DRIVE SHAFT (H-TYPE)	1	
13-C	DRIVE SHAFT (VL-TYPE)	1	
14	COUPLING	1	
15-A	SUN GEAR (VA-TYPE)	1	
15-B	SUN GEAR (H-TYPE)	1	
15-C	SUN GEAR (VL-TYPE)	1	

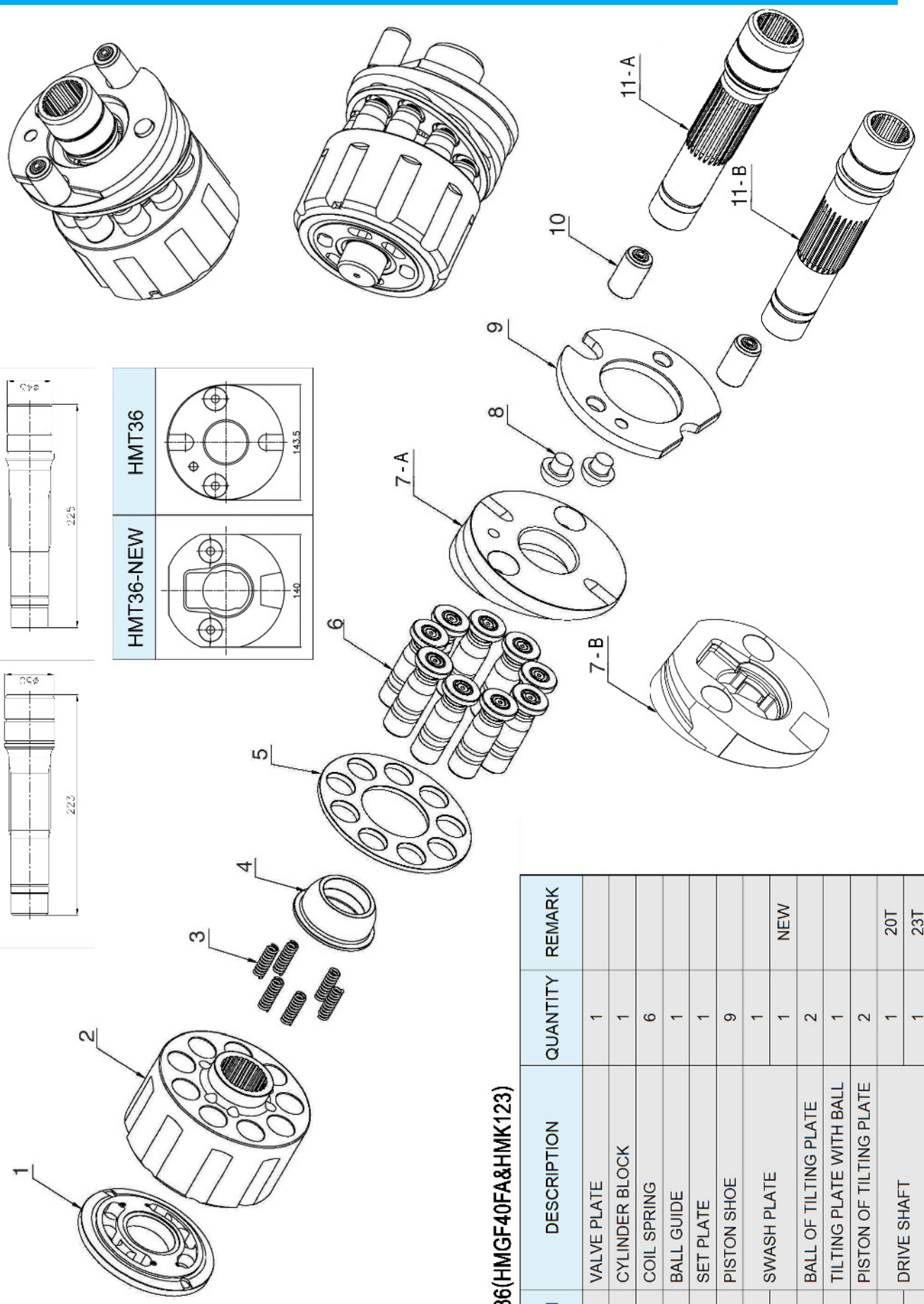
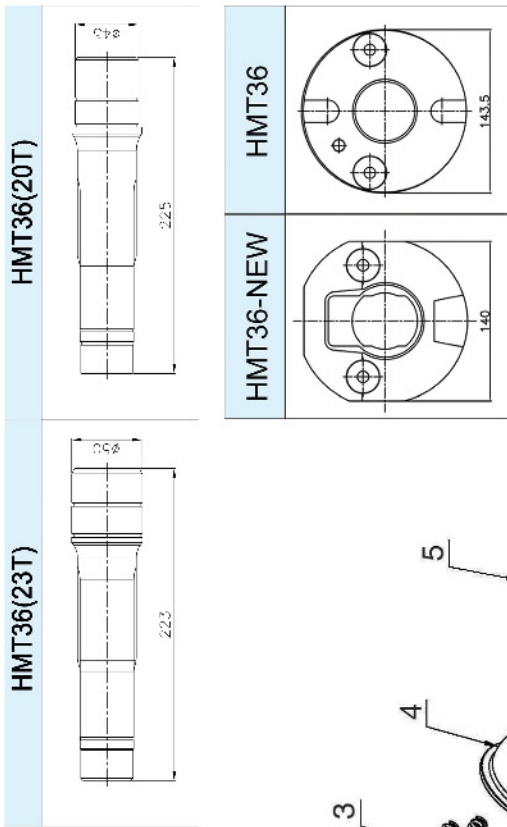
HAN DOK HYDRAULIC



HMT36(HMGF40FA&HMK123)



HMT36(HMGF40FA&HMK123)



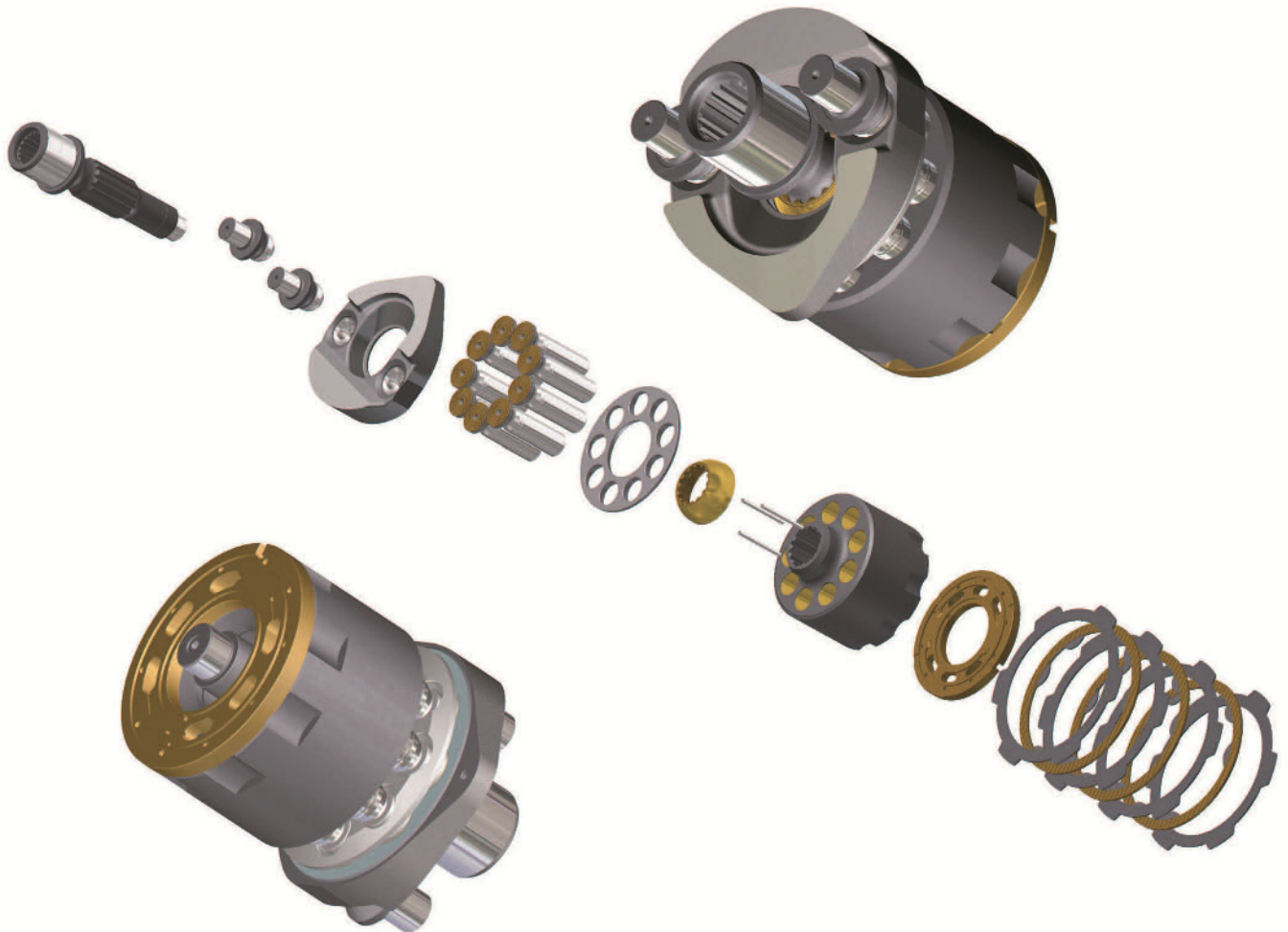
HMT36(HMGF40FA&HMK123)

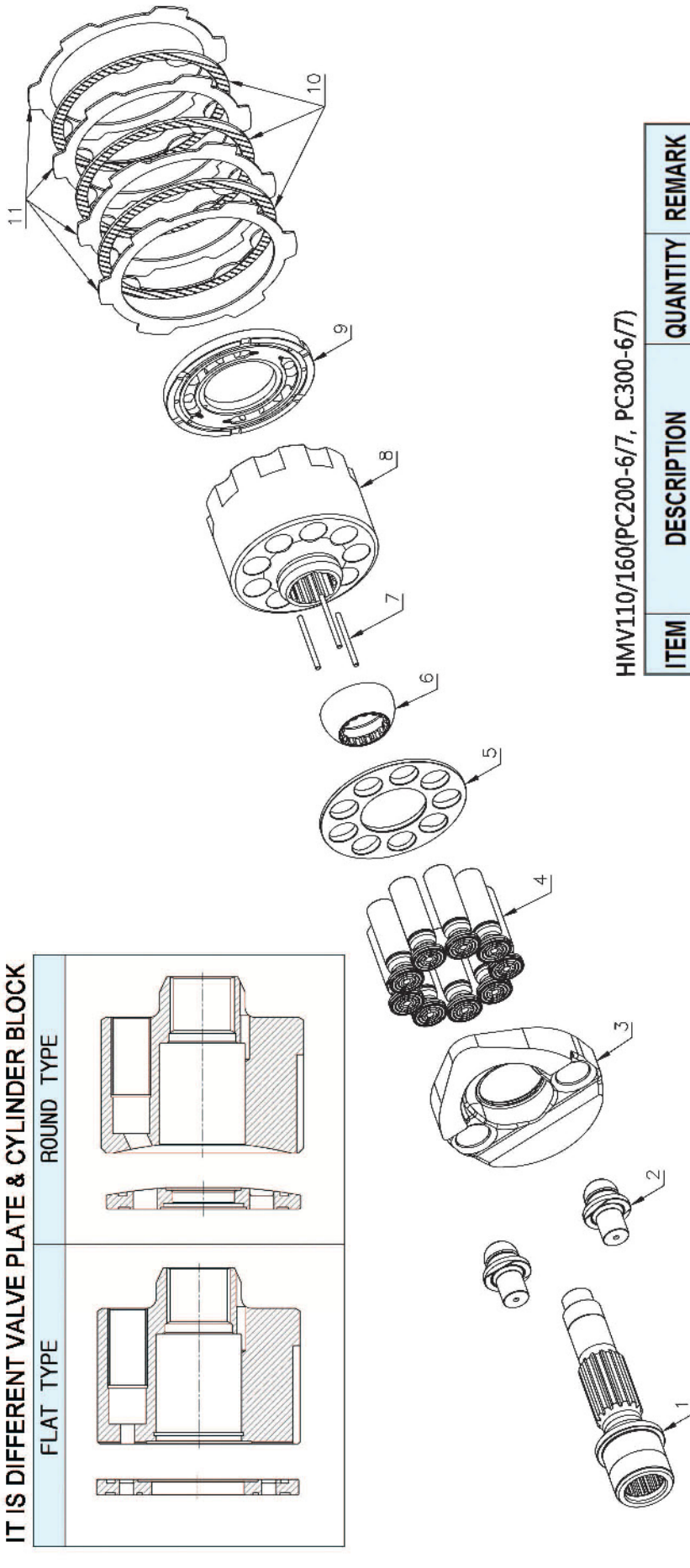
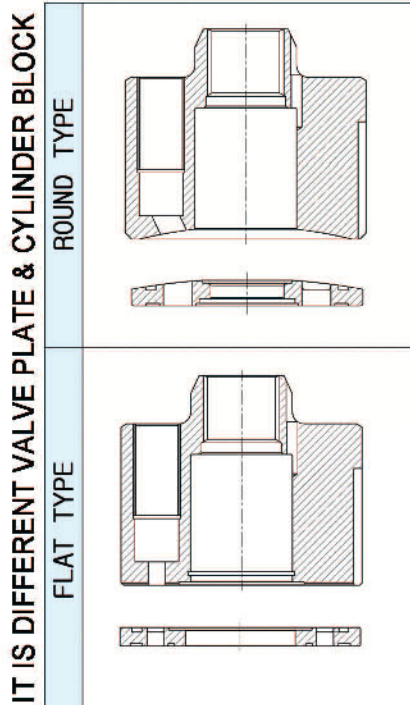
ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE	1	
2	CYLINDER BLOCK	1	
3	COIL SPRING	6	
4	BALL GUIDE	1	
5	SET PLATE	1	
6	PISTON SHOE	9	
7-A	SWASH PLATE	1	
7-B	SWASH PLATE	1	NEW
8	BALL OF TILTING PLATE	2	
9	TILTING PLATE WITH BALL	1	
10	PISTON OF TILTING PLATE	2	
11-A	DRIVE SHAFT	1	20T
11-B	DRIVE SHAFT	1	23T

HAN DOK HYDRAULIC



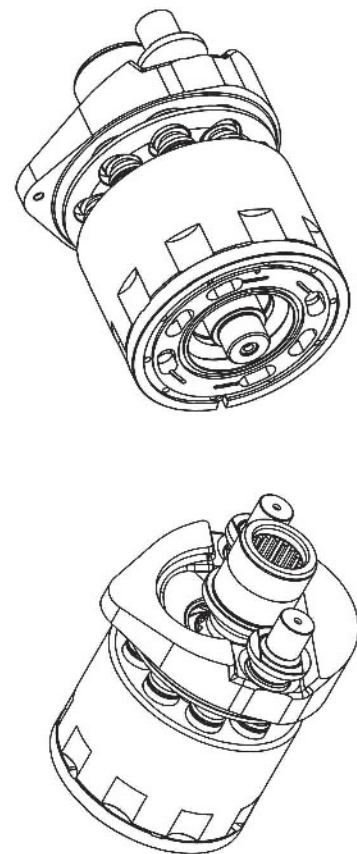
HMV110/160(PC200-6/7, PC300-6/7)





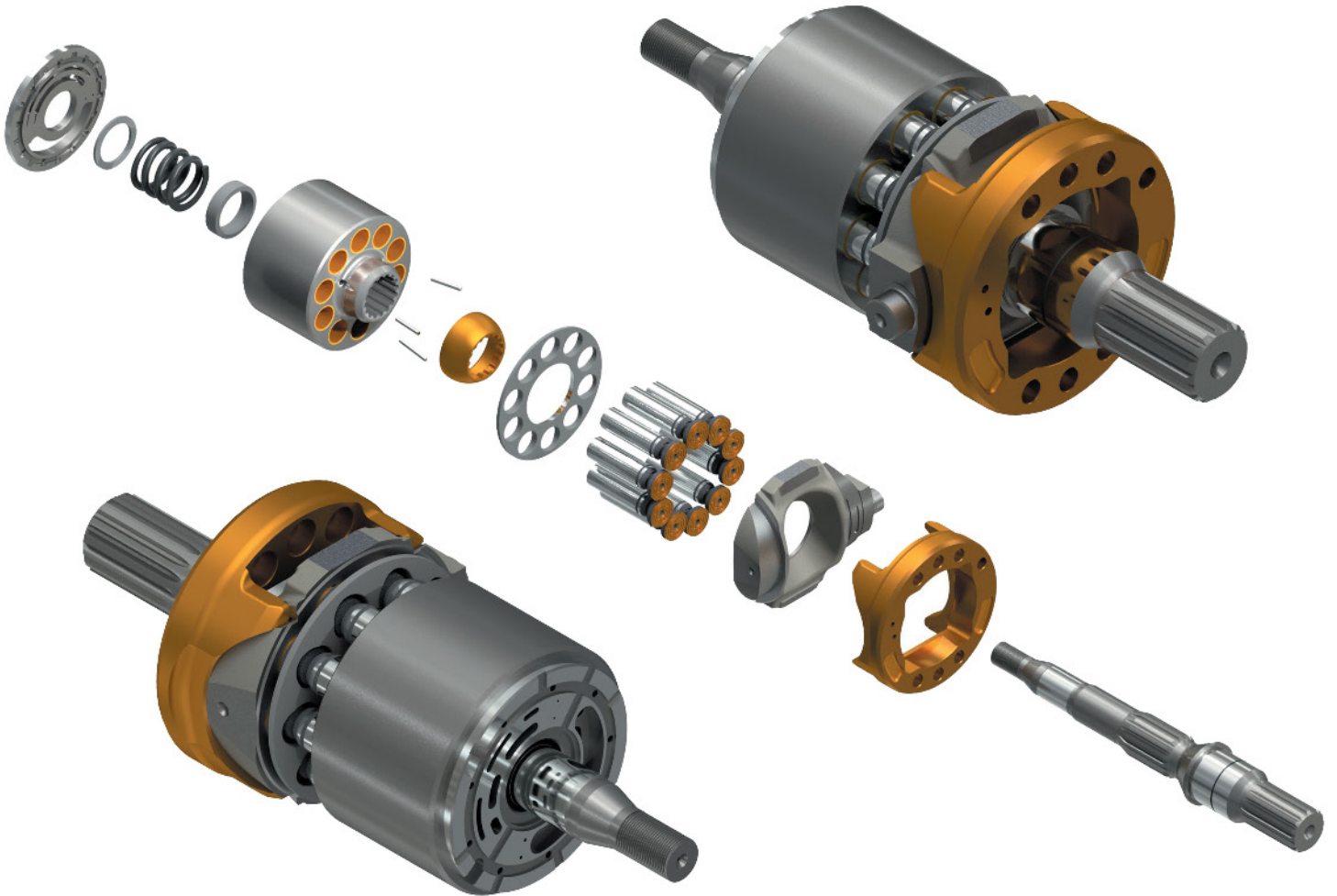
HMV110/160(PC200-6/7, PC300-6/7)

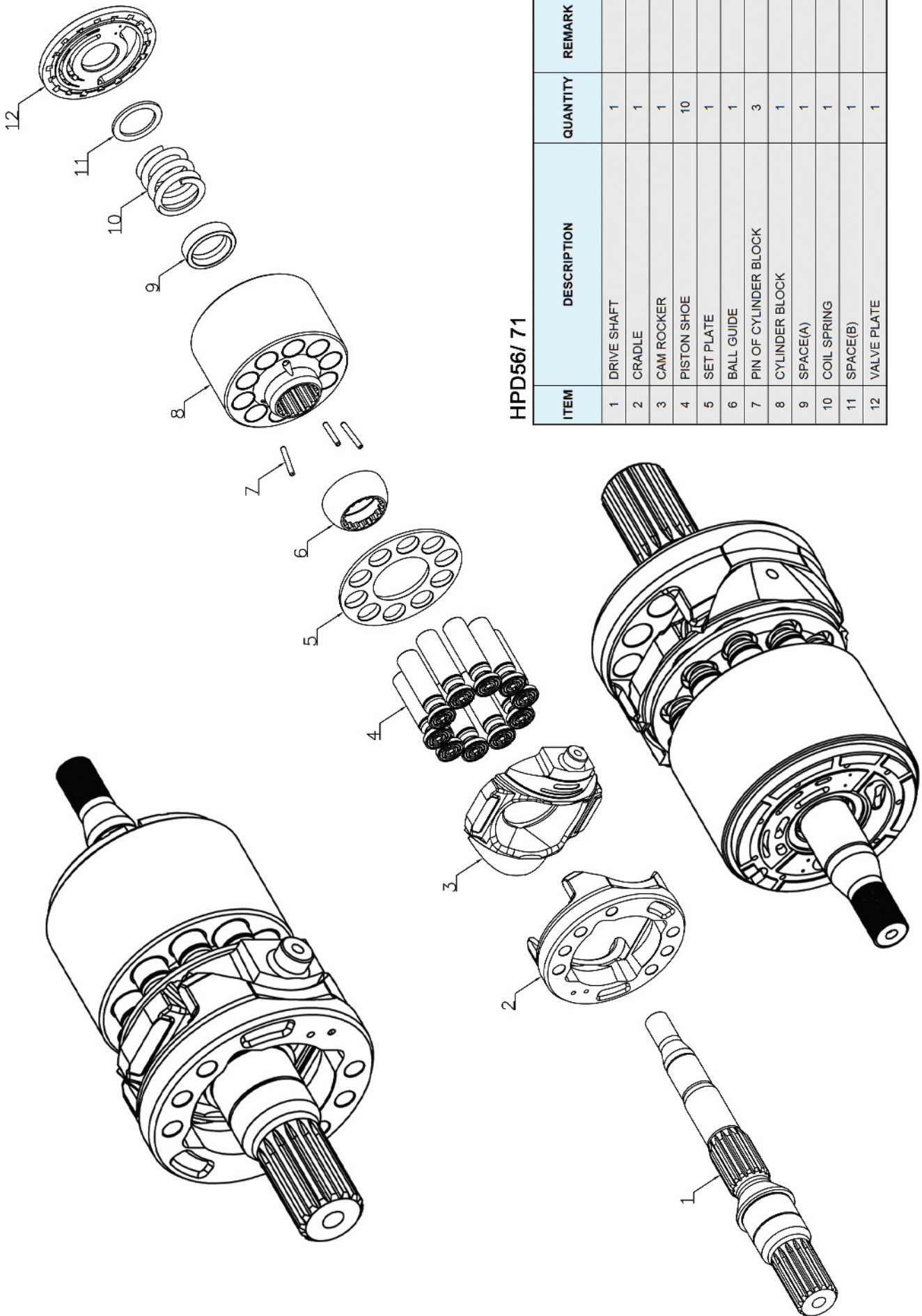
ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	BALL OF CAM ROCKER	2	
3	CAM ROCKER	1	
4	PISTON SHOE	9	
5	SET PLATE	1	
6	BALL GUIDE	1	
7	PIN OF CYLINDER BLOCK	3	
8	CYLINDER BLOCK	1	
9	VALVE PLATE	1	
10	FRICTION PLATE	3	
11	SEPARATION PLATE	4	





HPD SERIES

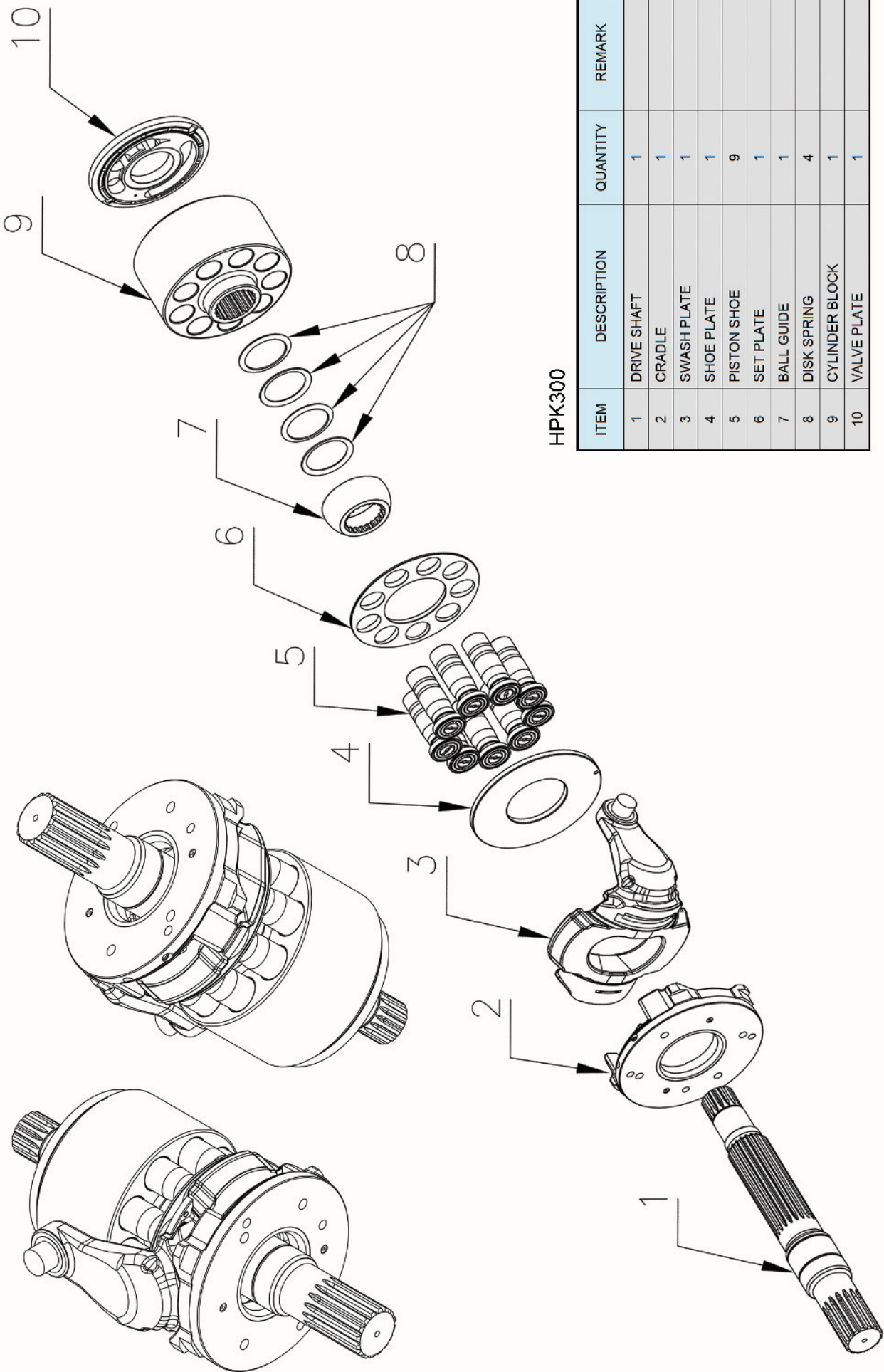




HPD56/ 71

ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	CRADLE	1	
3	CAM ROCKER	1	
4	PISTON SHOE	10	
5	SET PLATE	1	
6	BALL GUIDE	1	
7	PIN OF CYLINDER BLOCK	3	
8	CYLINDER BLOCK	1	
9	SPACE(A)	1	
10	COIL SPRING	1	
11	SPACE(B)	1	
12	VALVE PLATE	1	

HAN DOK HYDRAULIC

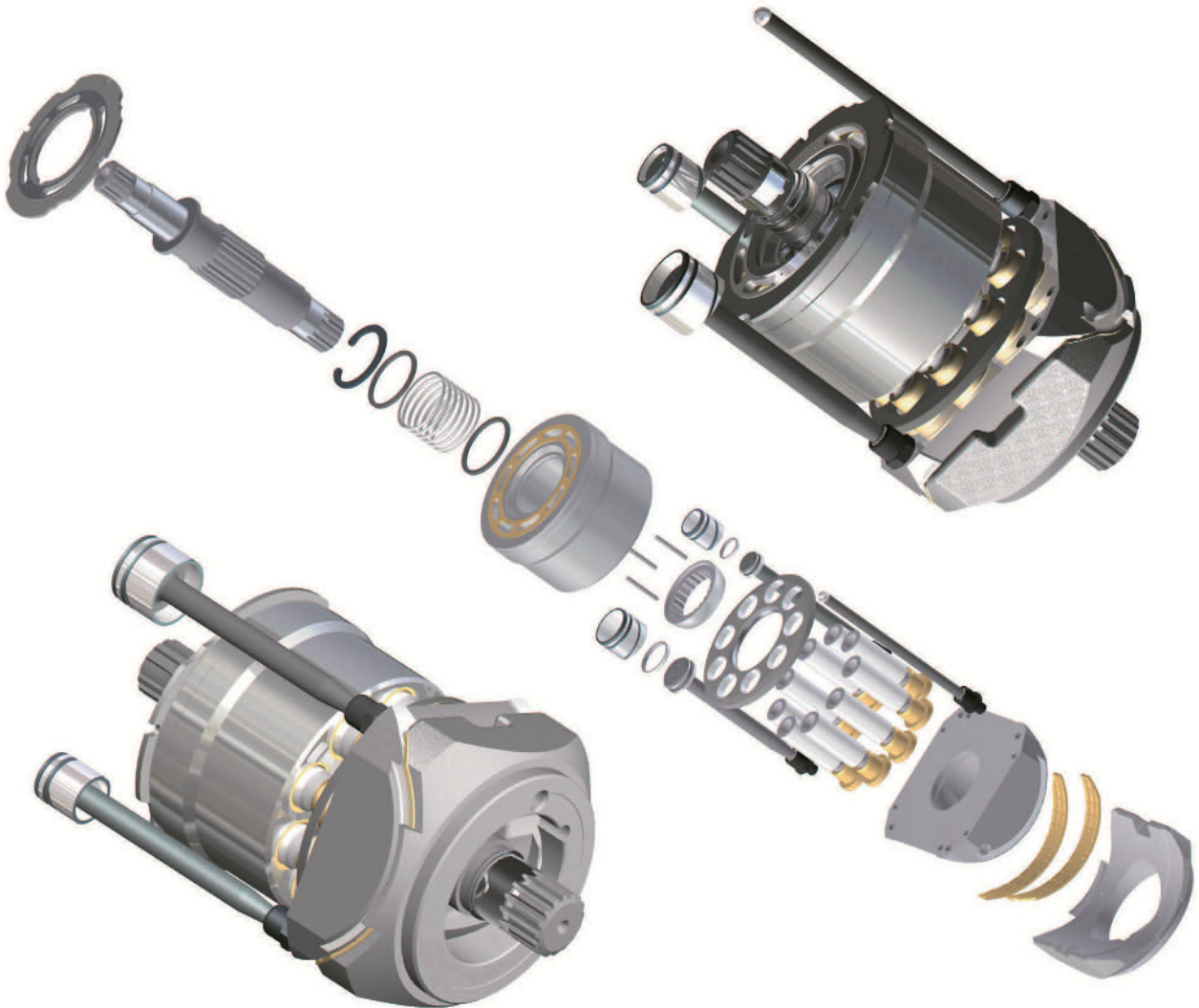


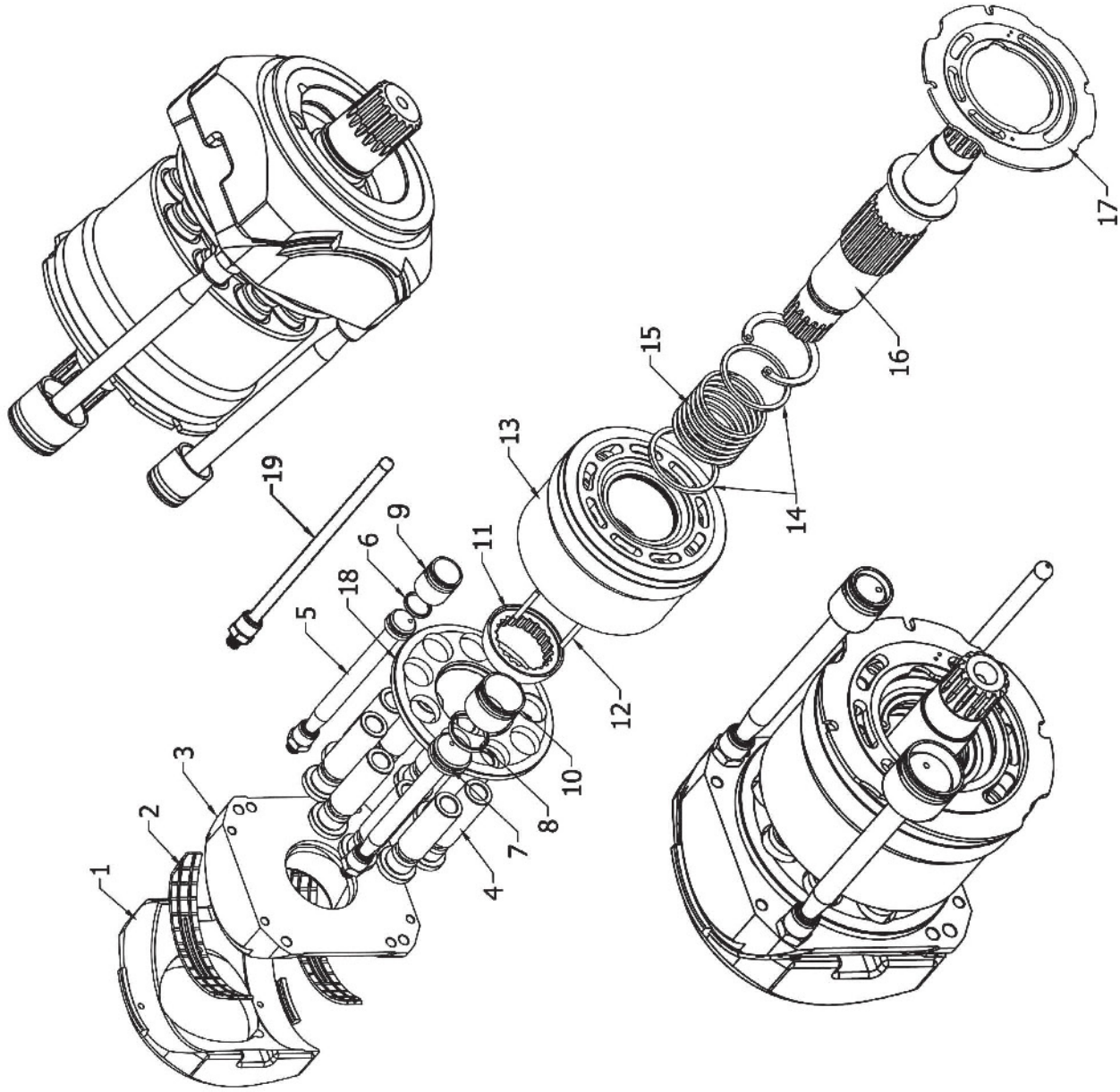
HPK300

ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	CRADLE	1	
3	SWASH PLATE	1	
4	SHOE PLATE	1	
5	PISTON SHOE	9	
6	SET PLATE	1	
7	BALL GUIDE	1	
8	DISK SPRING	4	
9	CYLINDER BLOCK	1	
10	VALVE PLATE	1	



HPR75/90/100



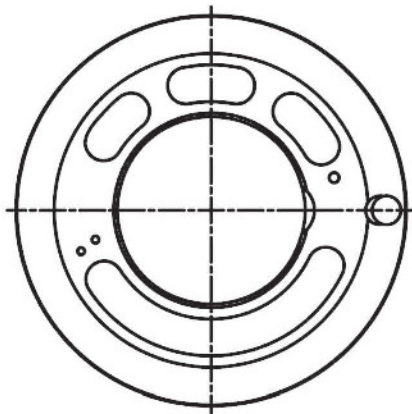


HPR75/90/100

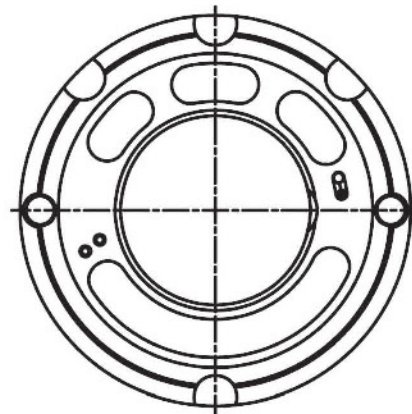
ITEM	DESCRIPTION	QUANTITY	REMARK
1	SUPPORT (L/R)	1	
2	SLIDING BEARING (L/R)	2	
3	SWASH PLATE	1	
4	PISTON SHOE	9	
5	SERVO PISTON (SMALL)	1	
6	RING (SMALL)	1	
7	SERVO PISTON (BIG)	1	
8	RING (BIG)	1	
9	BUSHING (SMALL)	1	
10	BUSHING (BIG)	1	
11	BALL GUIDE	1	
12	PIN	3	
13	CYLINDER BLOCK	1	
14	SPACE	2	
15	COIL SPRING	1	
16	DRIVE SHAFT	1	
17	VALVE PLATE (L/R)	1	
18	SET PLATE	1	
19	PUSH ROD	1	



HPR115/130/160



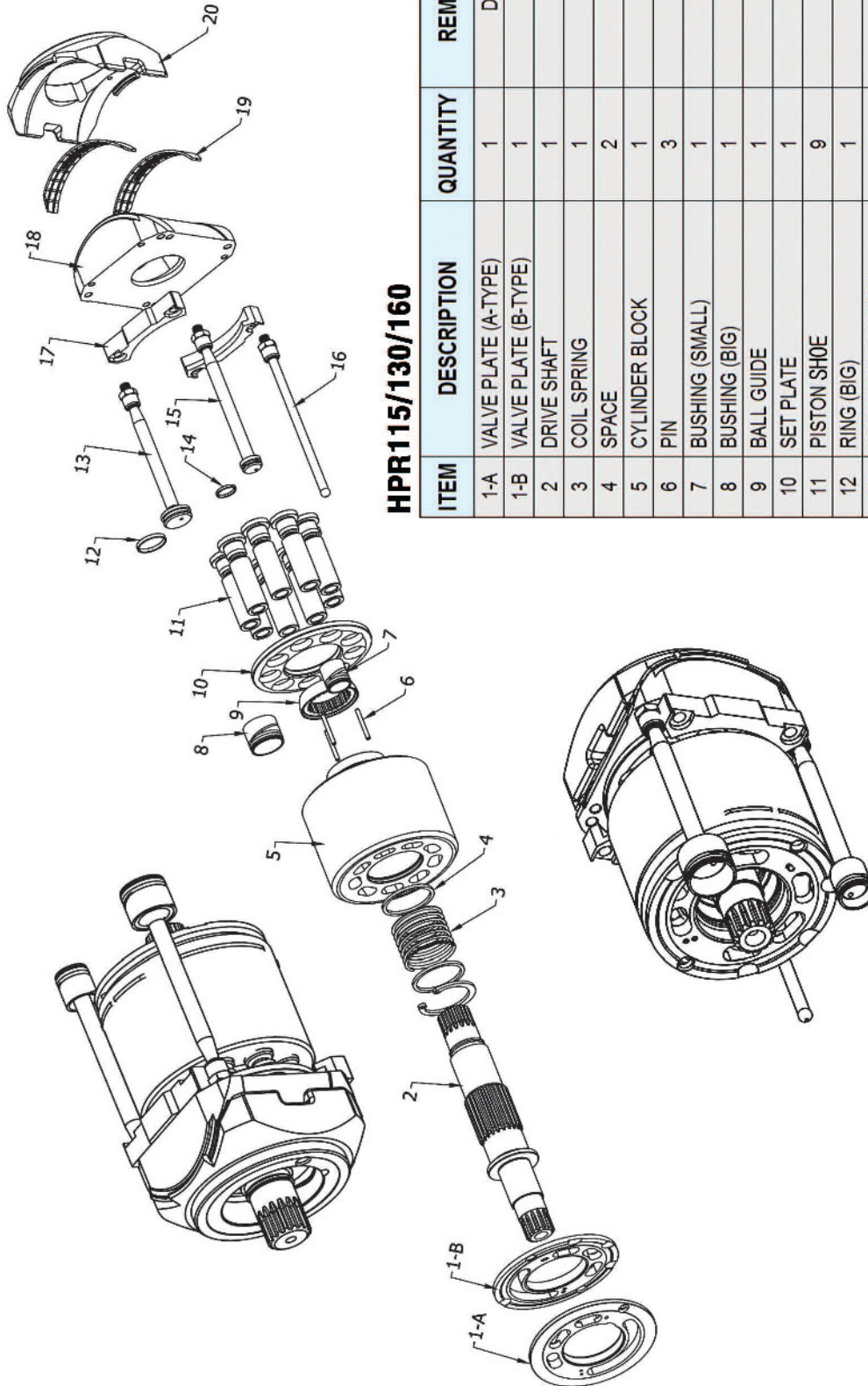
A-TYPE(DR)



B-TYPE

IT IS DIFFERENT SHAPE OF THE BACK FACE

HPR115/130/160



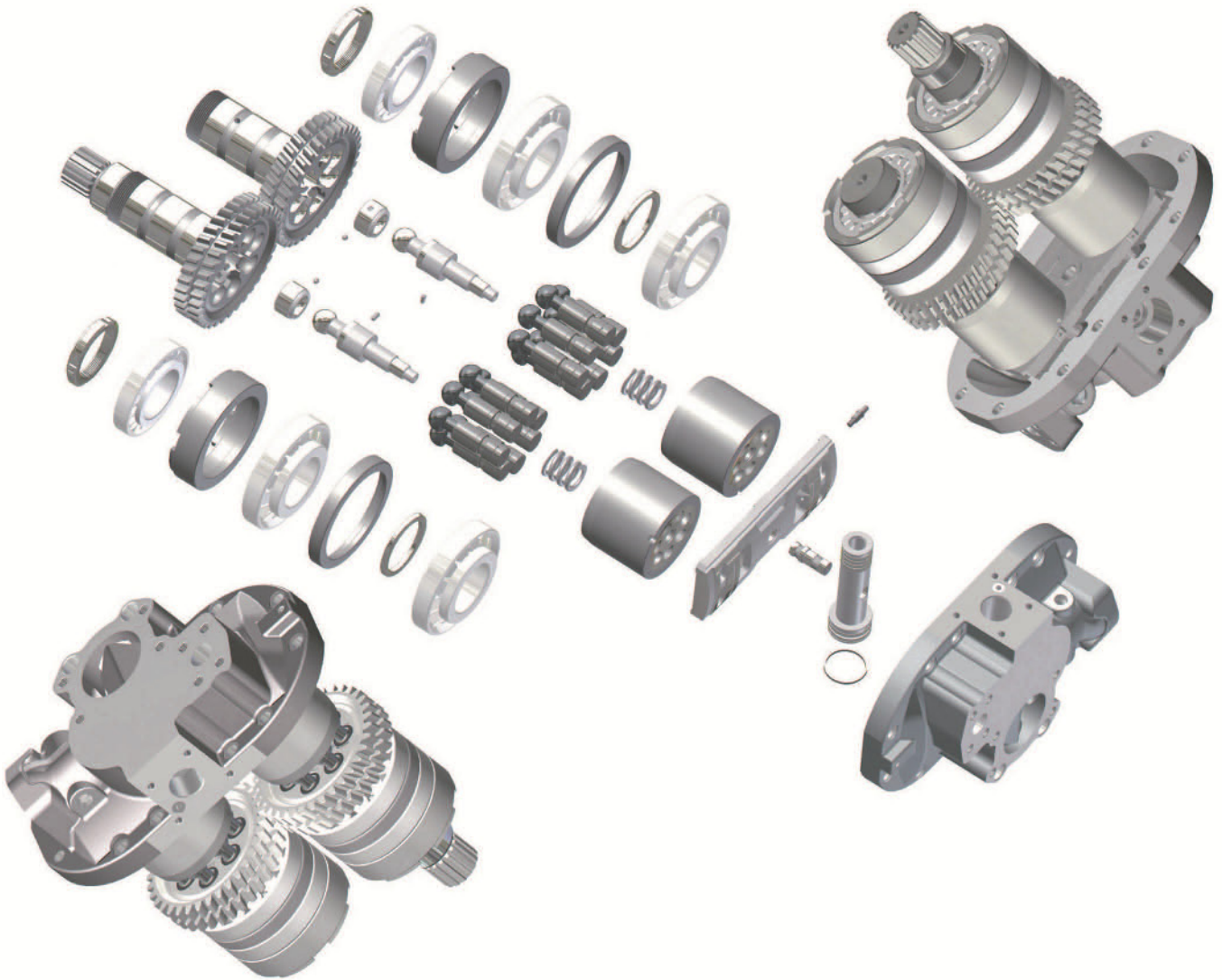
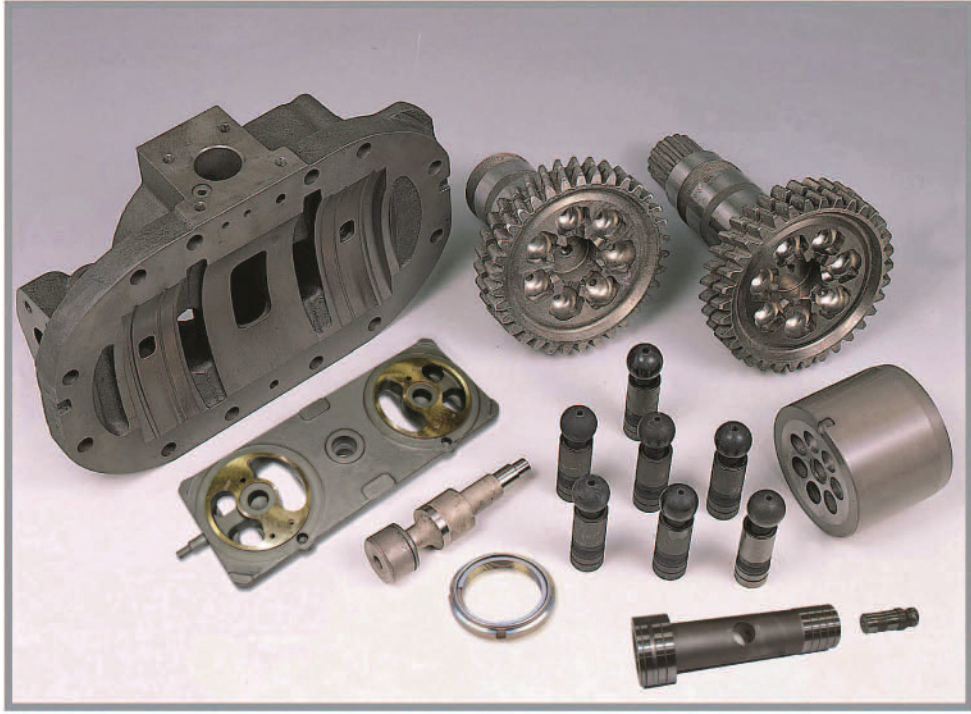
HPR115/130/160

ITEM	DESCRIPTION	QUANTITY	REMARK
1-A	VALVE PLATE (A-TYPE)	1	DR
1-B	VALVE PLATE (B-TYPE)	1	
2	DRIVE SHAFT	1	
3	COIL SPRING	1	
4	SPACE	2	
5	CYLINDER BLOCK	1	
6	PIN	3	
7	BUSHING (SMALL)	1	
8	BUSHING (BIG)	1	
9	BALL GUIDE	1	
10	SET PLATE	1	
11	PISTON SHOE	9	
12	RING (BIG)	1	
13	SERVO PISTON (BIG)	1	
14	RING (SMALL)	1	
15	SERVO PISTON (SMALL)	1	
16	PUSH ROD	1	
17	FIX PLATE	2	
18	SWASH PLATE	1	
19	SLIDING BEARING (L&R)	2	
20	SUPPORT (L/R)	1	

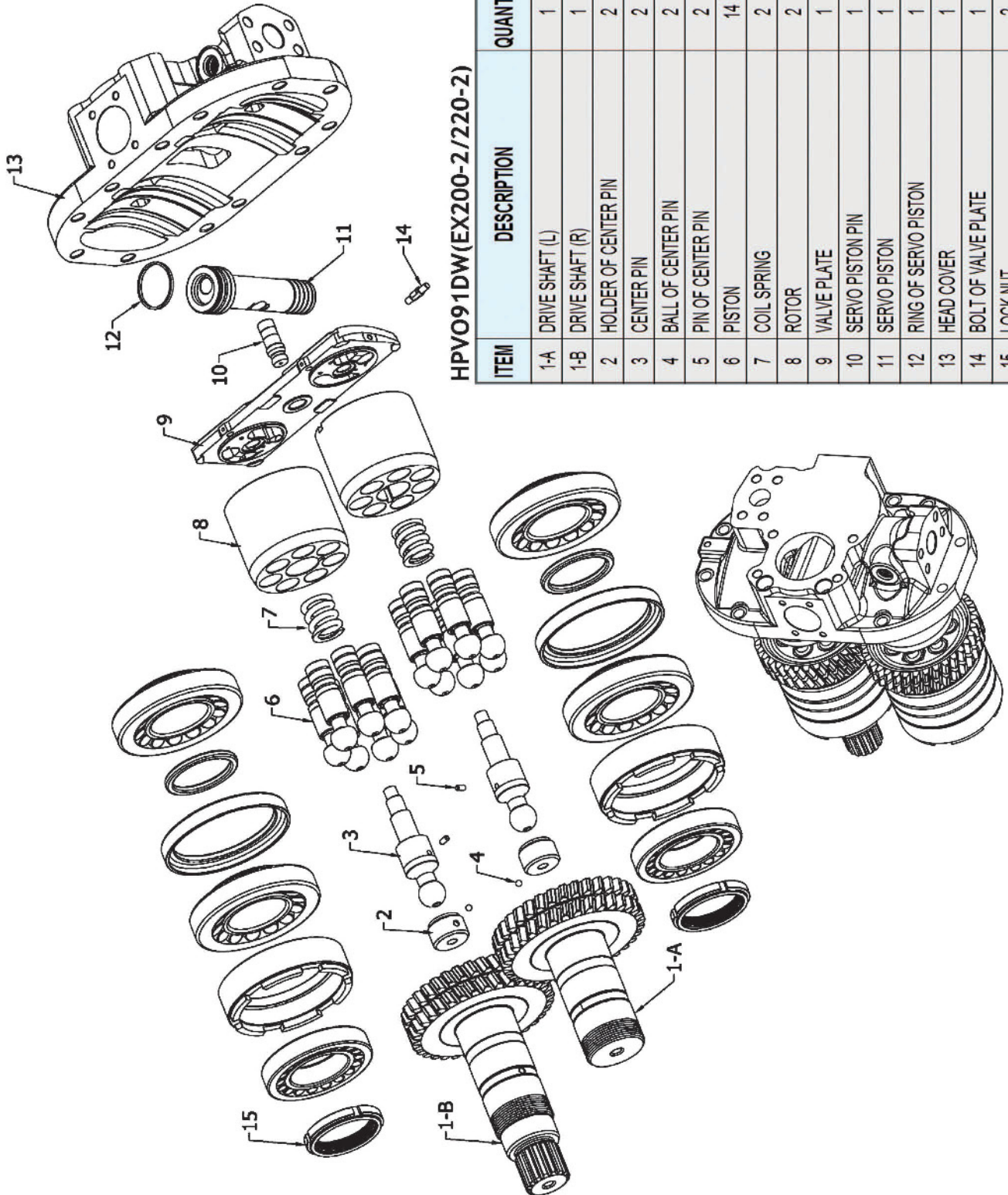
HAN DOK HYDRAULIC



HPV091DW(EX200-2/220-2)



HPV091DW(EX200-2 / 220-2)



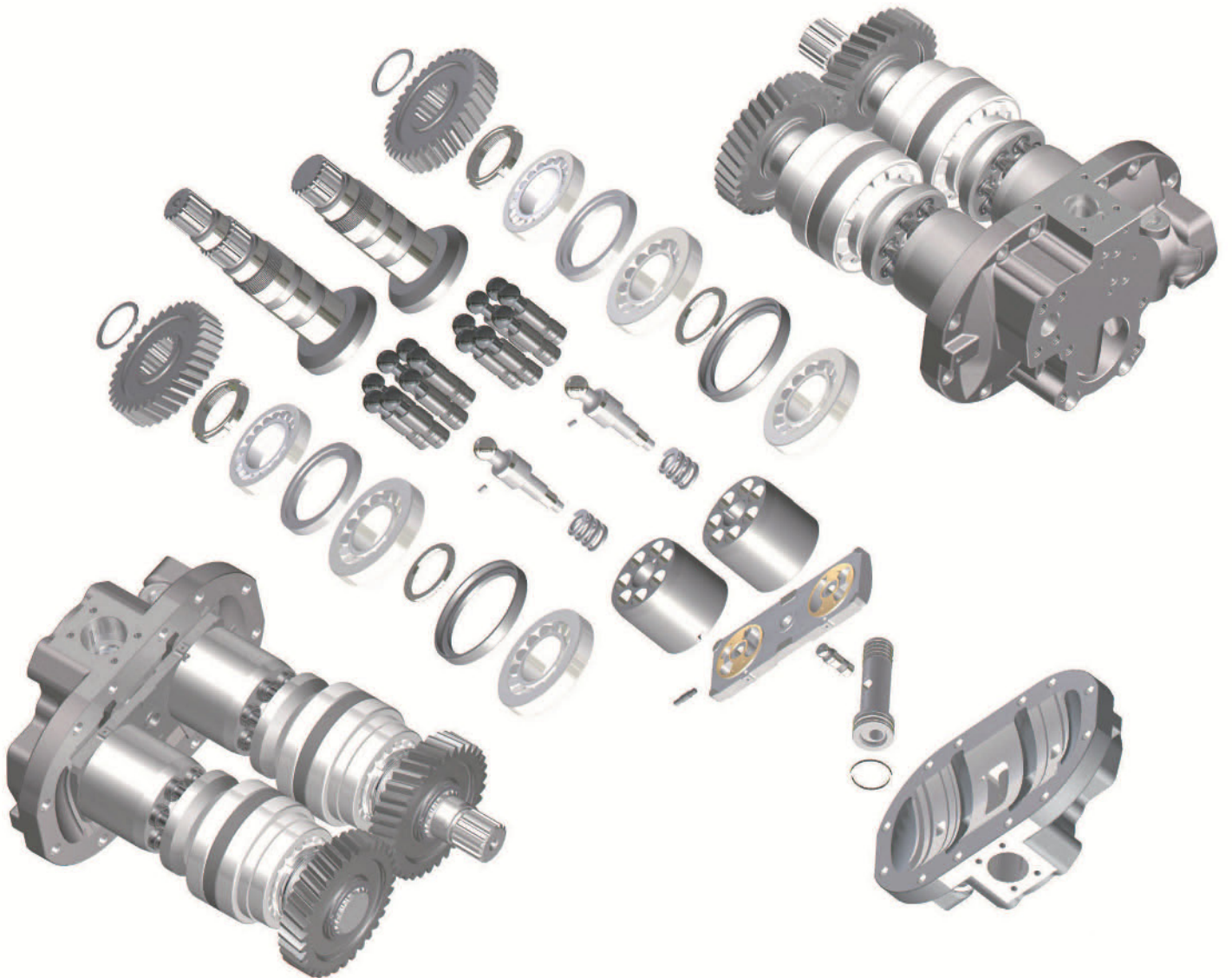
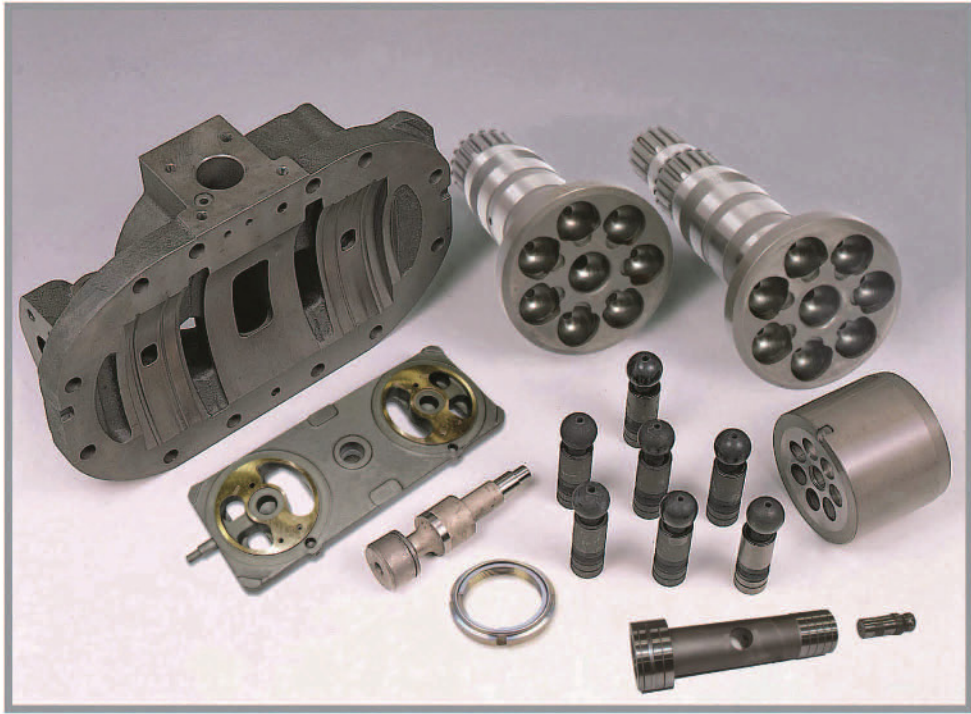
HPV091DW(EX200-2/220-2)

ITEM	DESCRIPTION	QUANTITY	REMARK
1-A	DRIVE SHAFT (L)	1	
1-B	DRIVE SHAFT (R)	1	
2	HOLDER OF CENTER PIN	2	
3	CENTER PIN	2	
4	BALL OF CENTER PIN	2	
5	PIN OF CENTER PIN	2	
6	PISTON	14	
7	COIL SPRING	2	
8	ROTOR	2	
9	VALVE PLATE	1	
10	SERVO PISTON PIN	1	
11	SERVO PISTON	1	
12	RING OF SERVO PISTON	1	
13	HEAD COVER	1	
14	BOLT OF VALVE PLATE	1	
15	LOCK NUT	2	

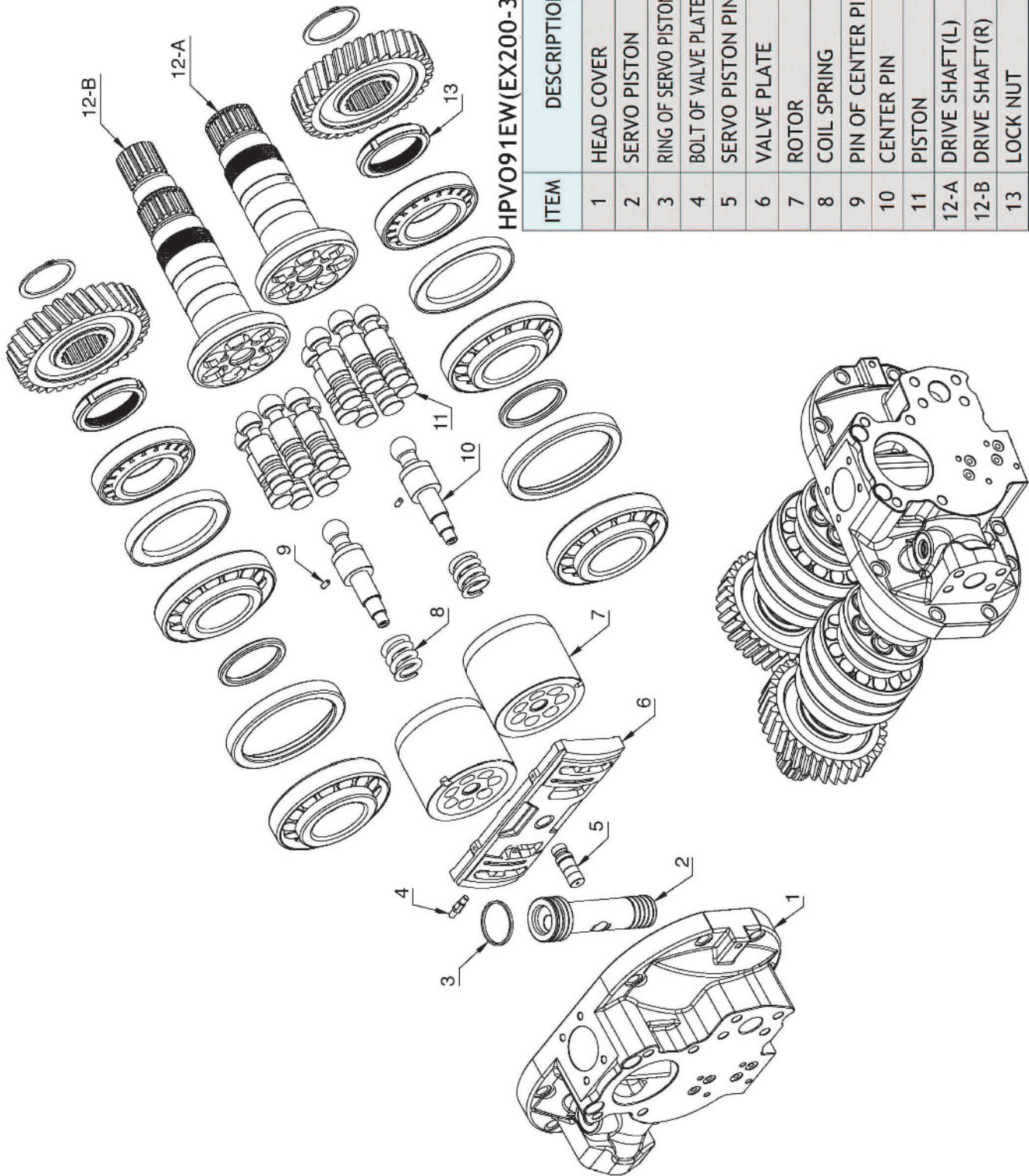
HAN DOK HYDRAULIC



HPV091EW(EX200-3/220-3)



HPV091EW(EX200-3/220-3)



HPV091EW(EX200-3/220-3)

ITEM	DESCRIPTION	QUANTITY	REMARK
1	HEAD COVER	1	
2	SERVO PISTON	1	
3	RING OF SERVO PISTON	1	
4	BOLT OF VALVE PLATE	1	
5	SERVO PISTON PIN	1	
6	VALVE PLATE	1	
7	ROTOR	2	
8	COIL SPRING	2	
9	PIN OF CENTER PIN	2	
10	CENTER PIN	2	
11	PISTON	14	
12-A	DRIVE SHAFT(L)	1	
12-B	DRIVE SHAFT(R)	1	
13	LOCK NUT	2	

HANDOK HYDRAULIC

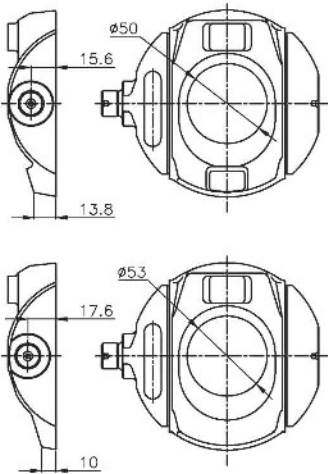


HPV75(PC60-6/7/8)

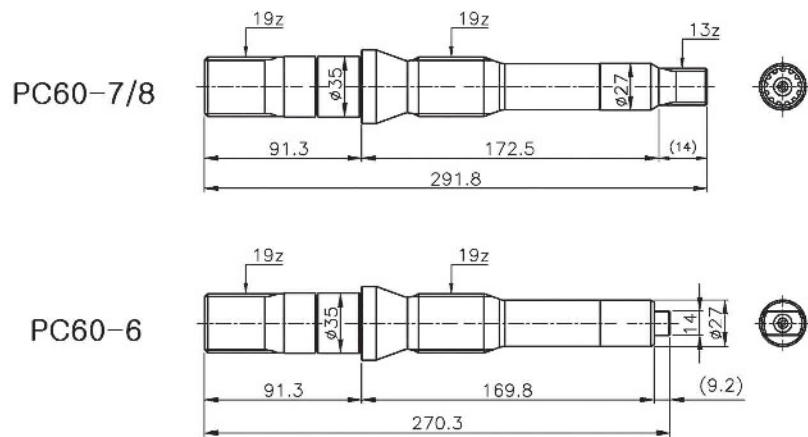


IT IS DIFFERENT SHAPE BETWEEN PC60-6 AND PC60-7/8

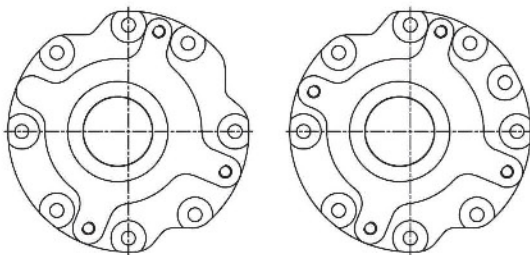
* CAM ROCKER *



* DRIVE SHAFT *



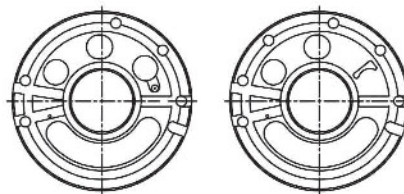
* CRADLE *



PC60-6

PC60-7/8

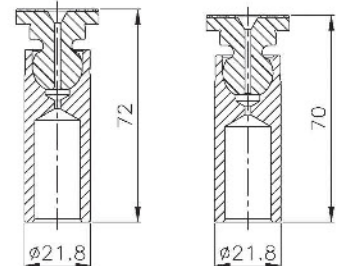
* VALVE PLATE *



PC60-6

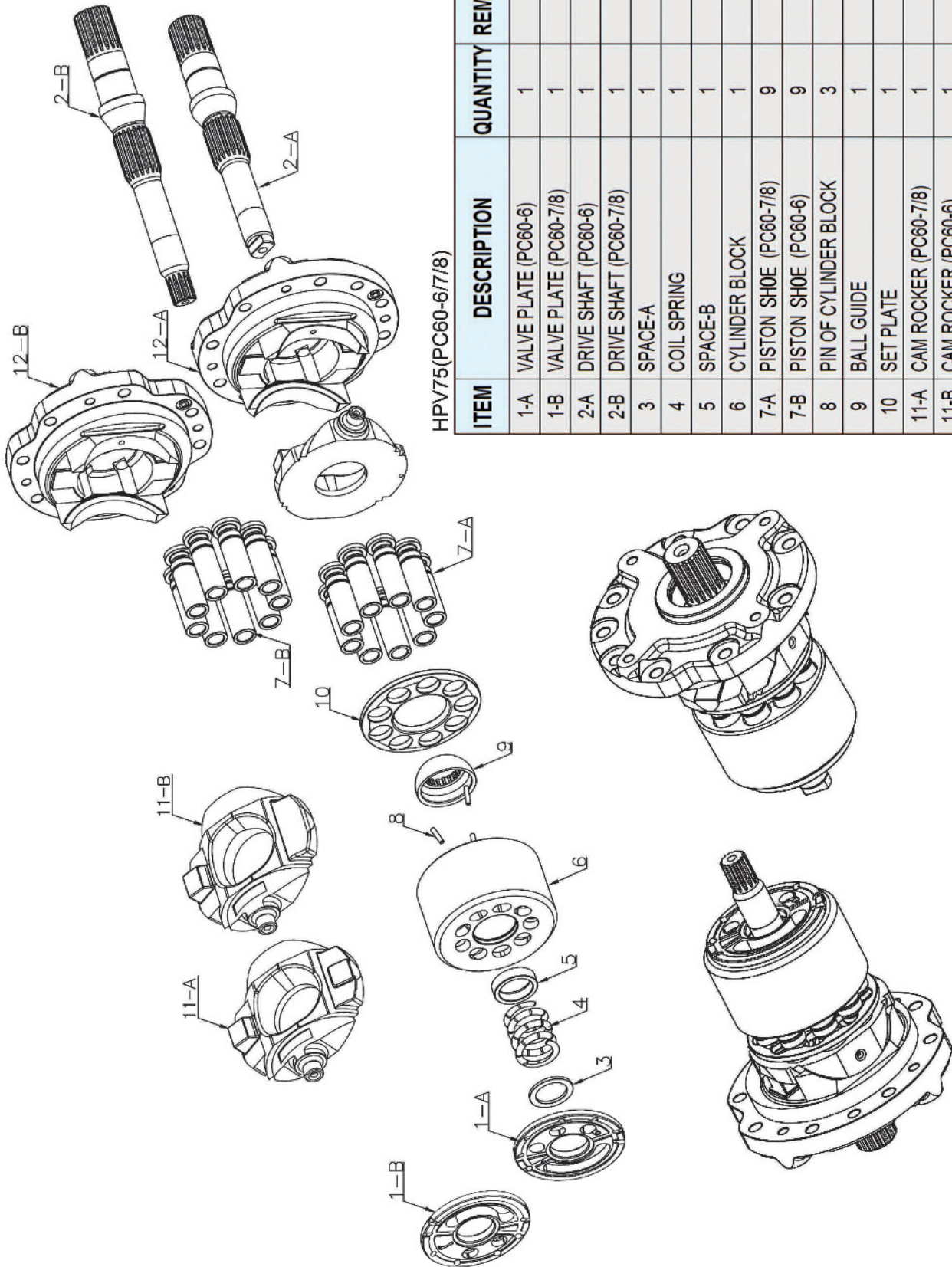
PC60-7/8

* PISTON *



PC60-6

PC60-7/8

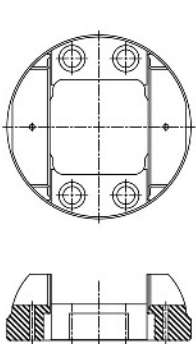


HPV75(PC60-6/7/8)

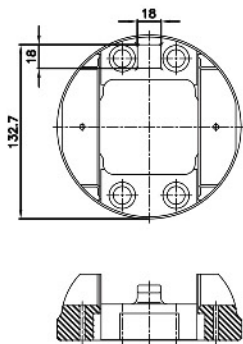
ITEM	DESCRIPTION	QUANTITY	REMARK
1-A	VALVE PLATE (PC60-6)	1	
1-B	VALVE PLATE (PC60-7/8)	1	
2-A	DRIVE SHAFT (PC60-6)	1	
2-B	DRIVE SHAFT (PC60-7/8)	1	
3	SPACE-A	1	
4	COIL SPRING	1	
5	SPACE-B	1	
6	CYLINDER BLOCK	1	
7-A	PISTON SHOE (PC60-7/8)	9	
7-B	PISTON SHOE (PC60-6)	9	
8	PIN OF CYLINDER BLOCK	3	
9	BALL GUIDE	1	
10	SET PLATE	1	
11-A	CAM ROCKER (PC60-7/8)	1	
11-B	CAM ROCKER (PC60-6)	1	
12-A	CRADLE (PC60-7/8)	1	
12-B	CRADLE (PC60-6)	1	



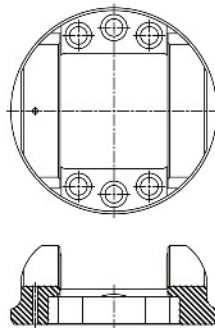
HPV95/132/140/165/375



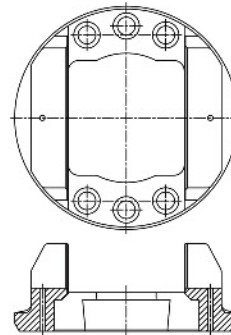
HPV95C
(PC200-6)



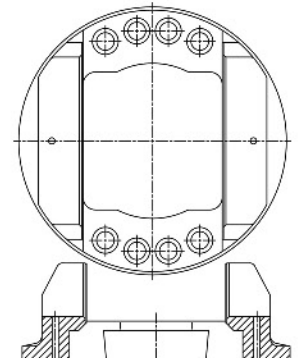
HPV95A
(PC200-7)



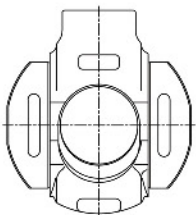
HPV140
(PC300-7&8)



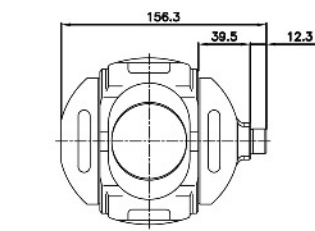
HPV132&165
(PC300-6&400-6/7)



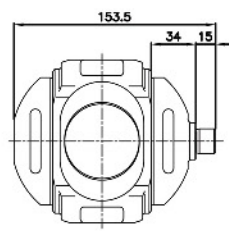
HPV375
(PC800-8)



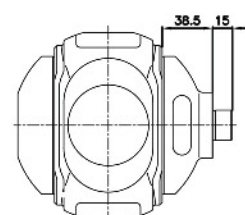
HPV95C
(PC200-6 OLD)



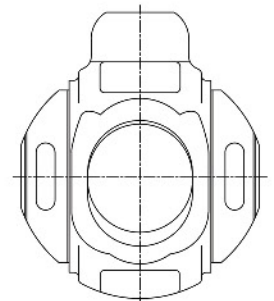
HPV95H
(PC200-6 NEW&PC200-8)



HPV95A
(PC200-7)



HPV140
(PC300-7&8)



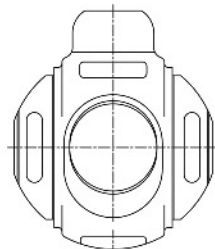
HPV375
(PC800-8)



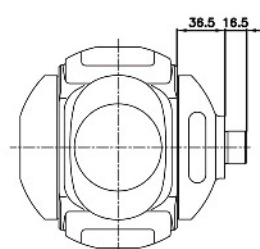
HPV95C
(PC200-6&7)



HPV95H
(PC200-8)

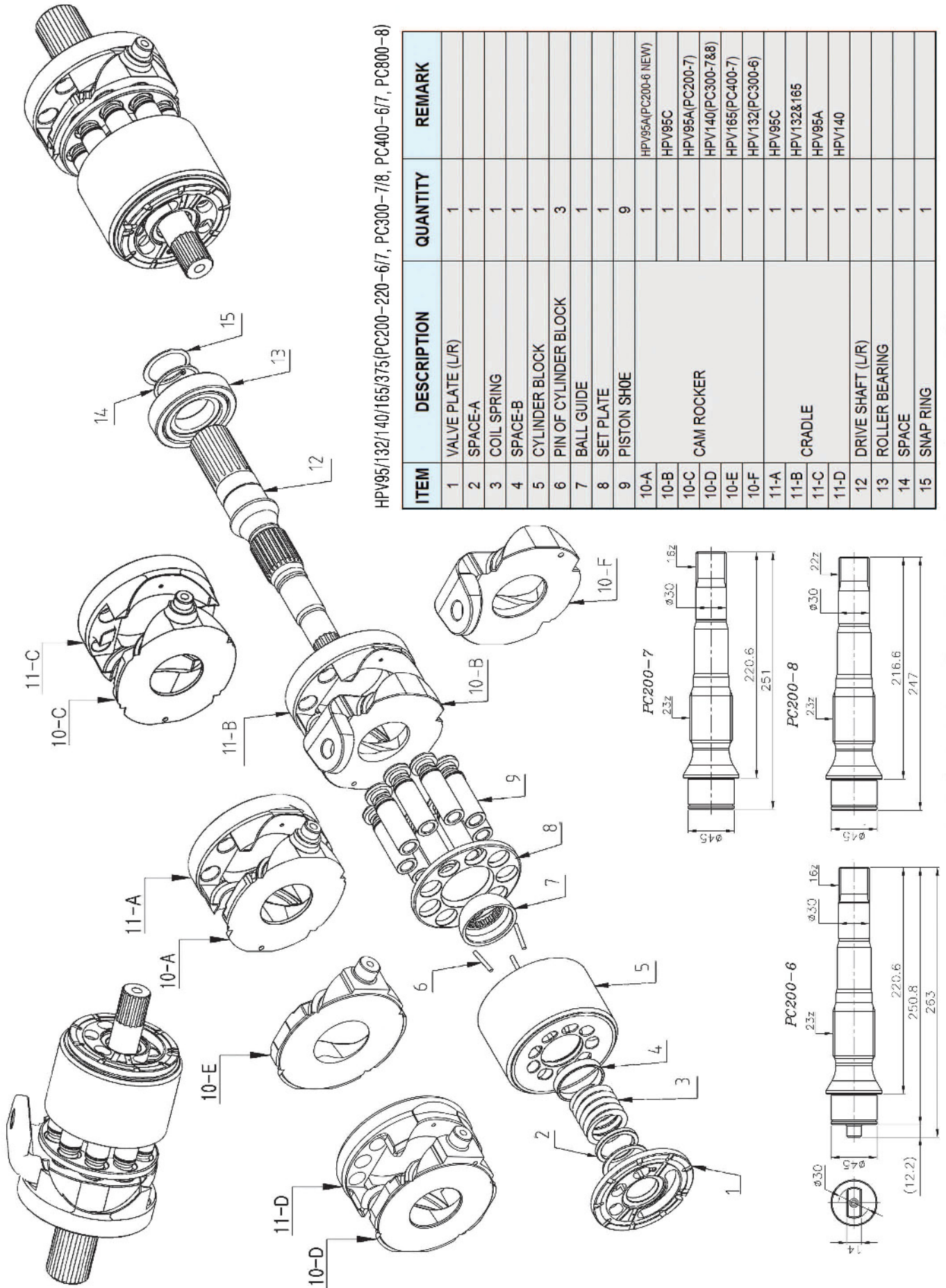


HPV95C
(PC200-6 OLD)



HPV95C
(PC200-6 OLD)

HPV95/132/140/165/375



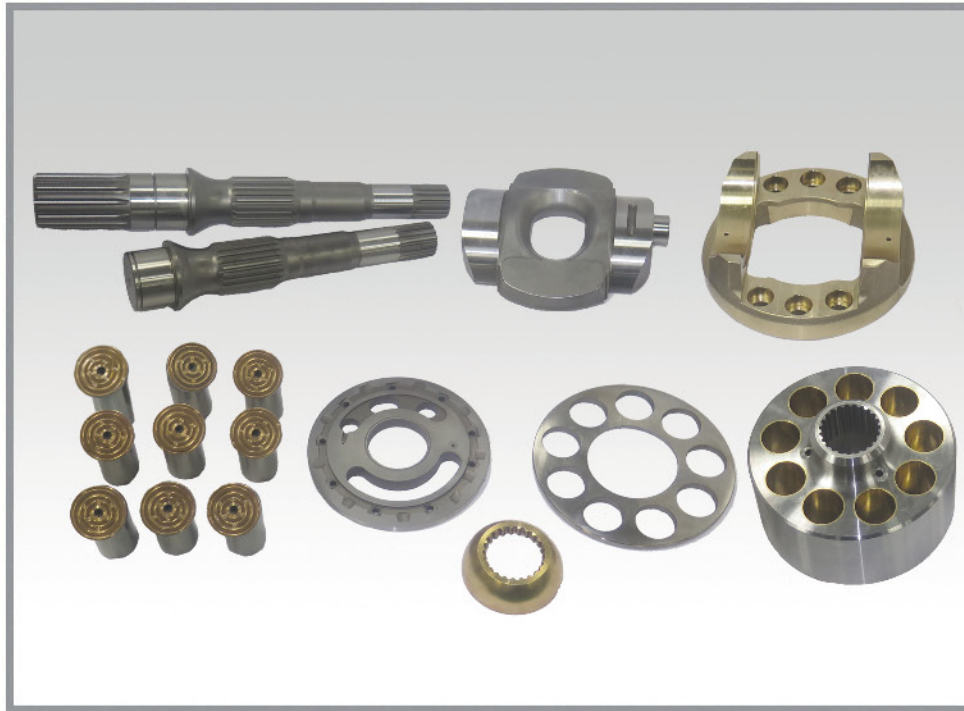
HPV95/132/140/165/375(PC200-220-6/7, PC300-7/8, PC400-6/7, PC800-8)

ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE (L/R)	1	
2	SPACE-A	1	
3	COIL SPRING	1	
4	SPACE-B	1	
5	CYLINDER BLOCK	1	
6	PIN OF CYLINDER BLOCK	3	
7	BALL GUIDE	1	
8	SET PLATE	1	
9	PISTON SHOE	9	
10-A	CAM ROCKER	1	HPV95A(PC200-6 NEW)
10-B		1	HPV95C
10-C		1	HPV95A(PC200-7)
10-D		1	HPV140(PC300-7&8)
10-E		1	HPV165(PC400-7)
10-F		1	HPV132(PC300-6)
11-A	CRADLE	1	HPV95C
11-B		1	HPV132&165
11-C		1	HPV95A
11-D	1	HPV140	
12	DRIVE SHAFT (L/R)	1	
13	ROLLER BEARING	1	
14	SPACE	1	
15	SNAP RING	1	

HANDOK HYDRAULIC

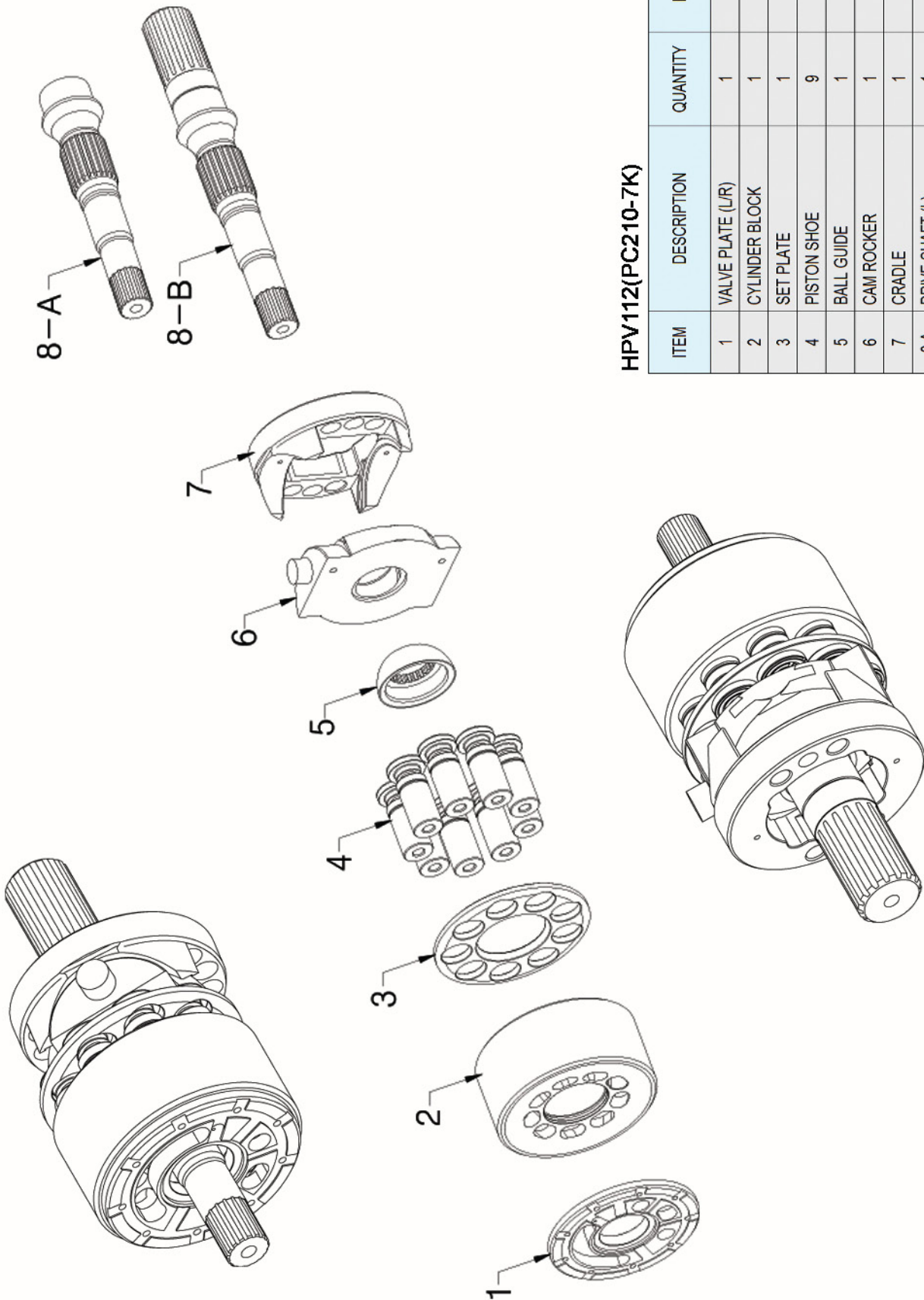


HPV112



	HPV112(PC210-7K)	HPV165(PC400-7)		HPV112(PC210-7K)	HPV165(PC400-7)	
PISTON			CAMROCKER			
BALL & SET PLATE				CYLINDER BLOCK		
VALVE PLATE						

IT IS DIFFERENT SHAPE BETWEEN HPV112(PC210-7K) AND HPV165(PC400-7)

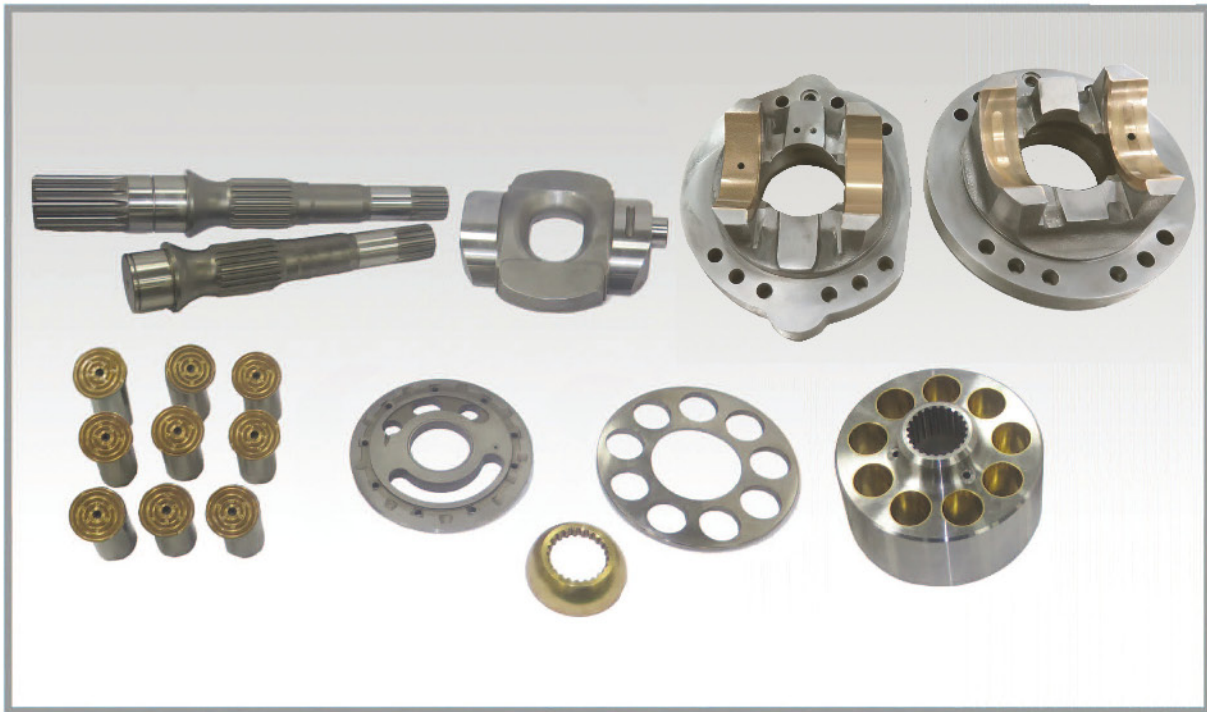


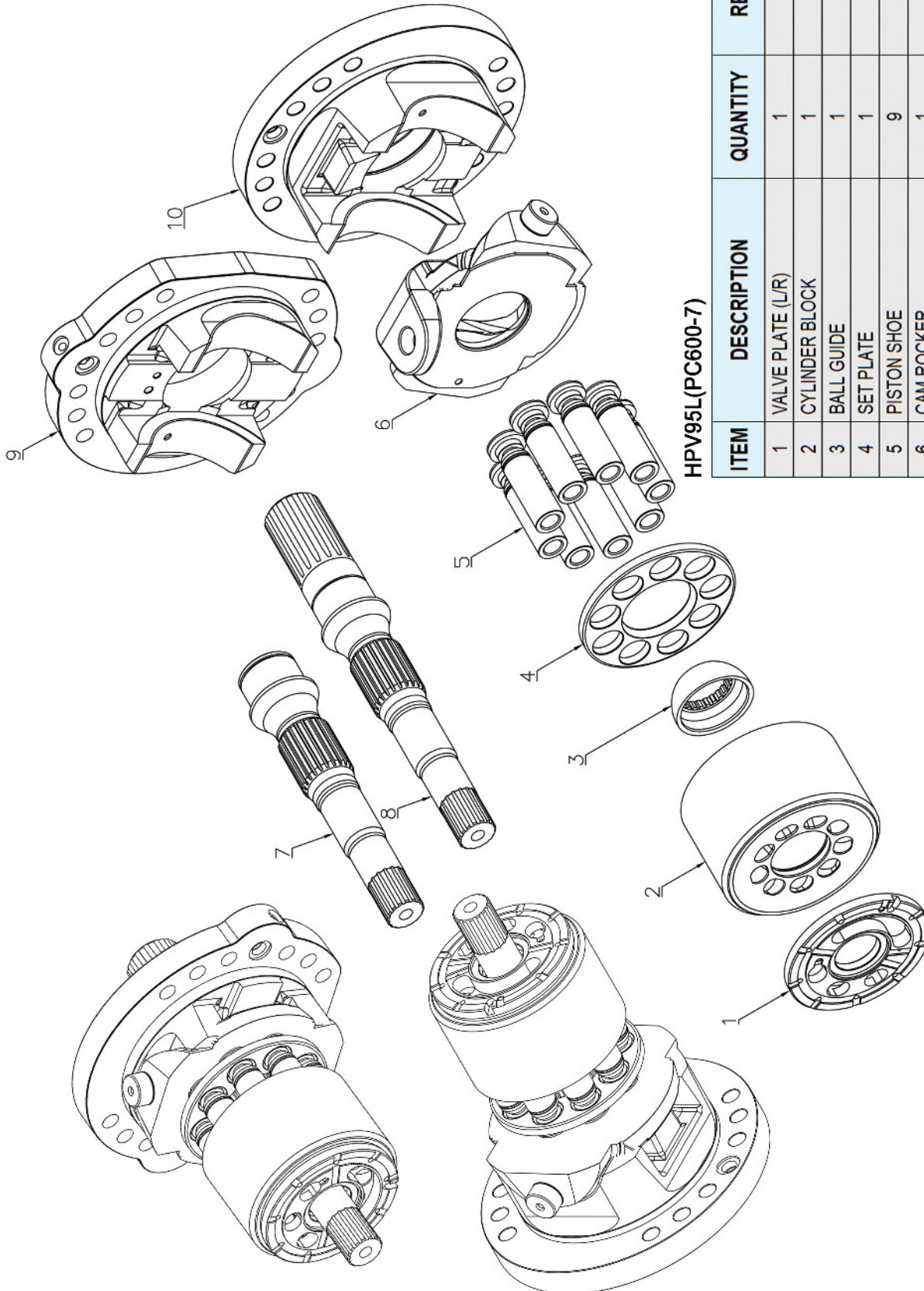
HPV112(PC210-7K)

ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE (L/R)	1	
2	CYLINDER BLOCK	1	
3	SET PLATE	1	
4	PISTON SHOE	9	
5	BALL GUIDE	1	
6	CAM ROCKER	1	
7	CRADLE	1	
8-A	DRIVE SHAFT (L)	1	
8-B	DRIVE SHAFT (R)	1	



HPV95L(PC600-7)





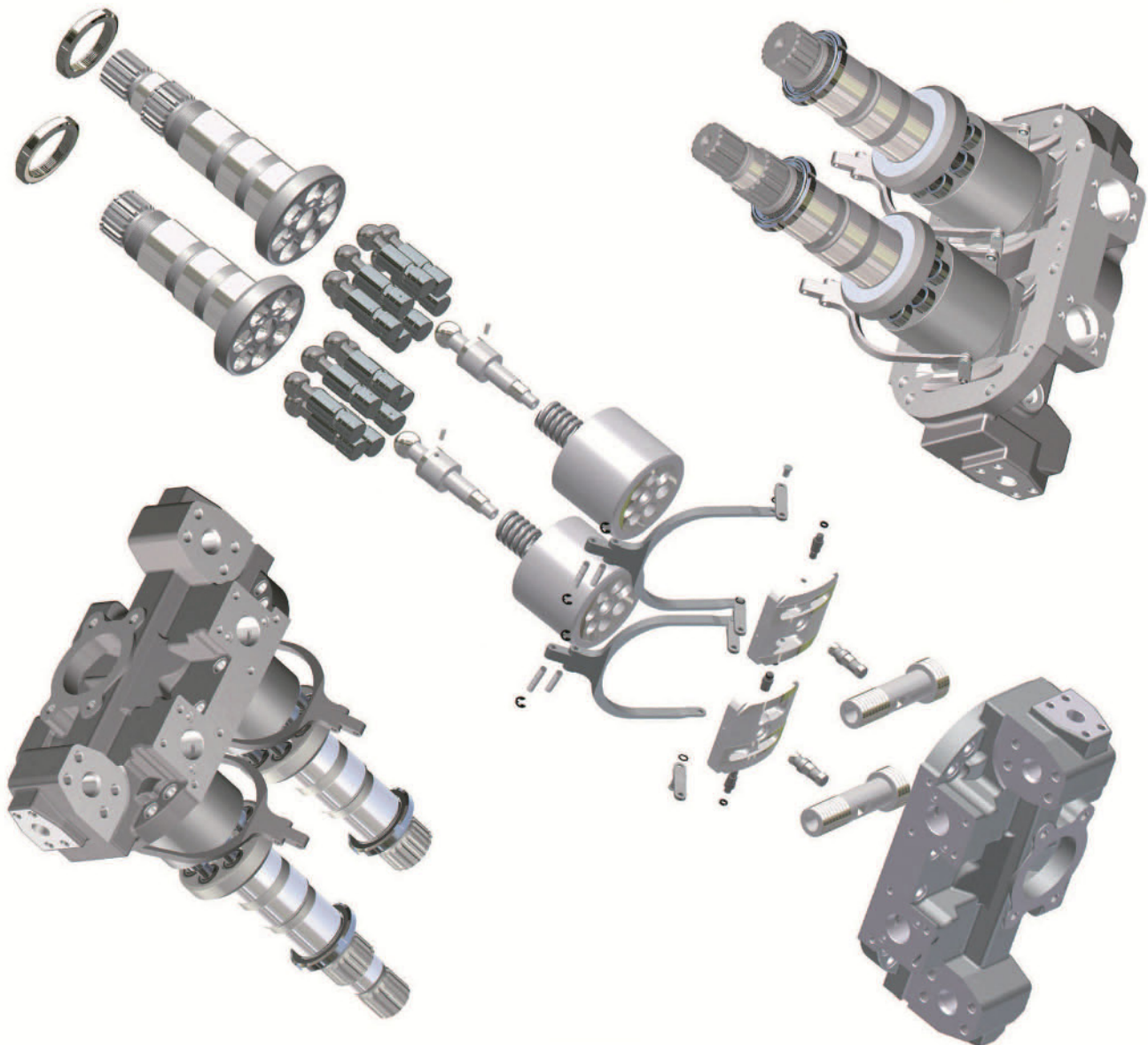
HPV95L(PC600-7)

ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE (L/R)	1	
2	CYLINDER BLOCK	1	
3	BALL GUIDE	1	
4	SET PLATE	1	
5	PISTON SHOE	9	
6	CAM ROCKER	1	
7	DRIVE SHAFT (L)	1	
8	DRIVE SHAFT (R)	1	
9	CRADLE-L	1	
10	CRADLE-R	1	

HANDOK HYDRAULIC

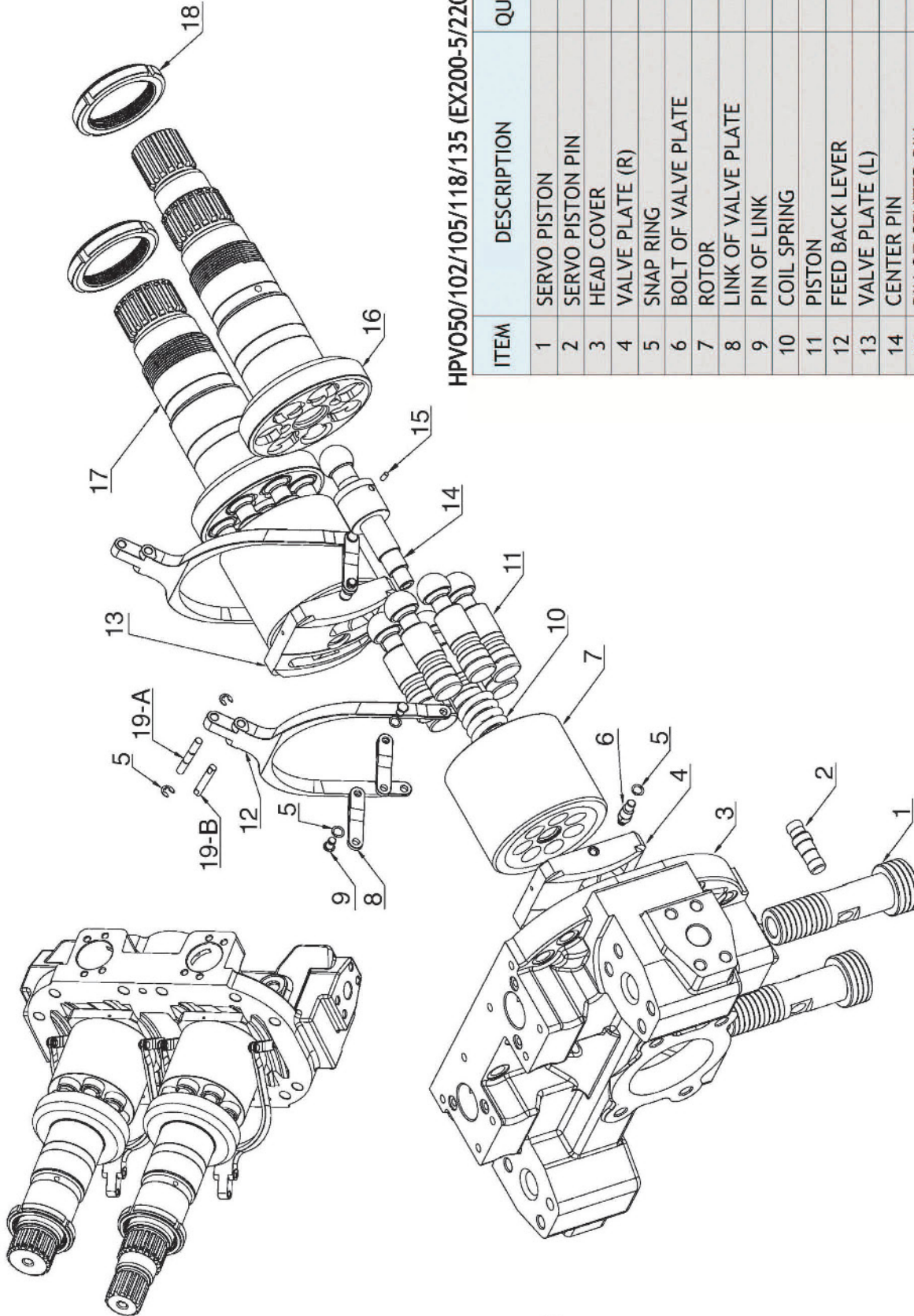


HPV050/102/105/118/135





HPV050/102/105/118/135 (EX200-5/220-5, ZAXIS200/220/230)



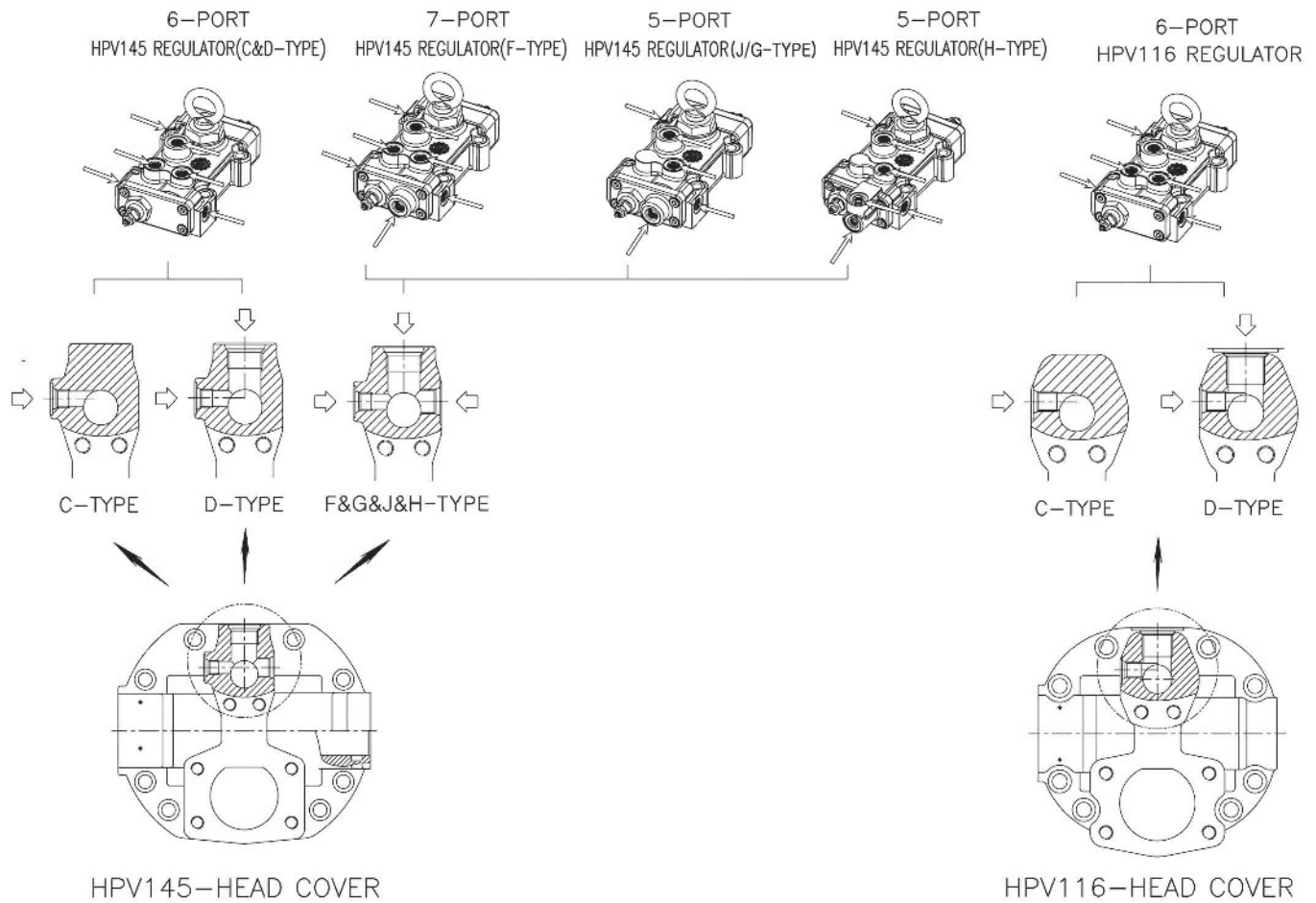
ITEM	DESCRIPTION	QUANTITY	REMARK
1	SERVO PISTON	2	
2	SERVO PISTON PIN	2	
3	HEAD COVER	1	
4	VALVE PLATE (R)	1	
5	SNAP RING	12	
6	BOLT OF VALVE PLATE	4	
7	ROTOR	2	
8	LINK OF VALVE PLATE	4	
9	PIN OF LINK	4	
10	COIL SPRING	2	
11	PISTON	14	
12	FEED BACK LEVER	2	
13	VALVE PLATE (L)	1	
14	CENTER PIN	2	
15	PIN OF CENTER PIN	2	
16	DRIVE SHAFT (R)	1	
17	DRIVE SHAFT (L)	1	
18	LOCK NUT	2	
19-A	PIN OF FEED BACK-A	2	
19-B	PIN OF FEED BACK-B	2	

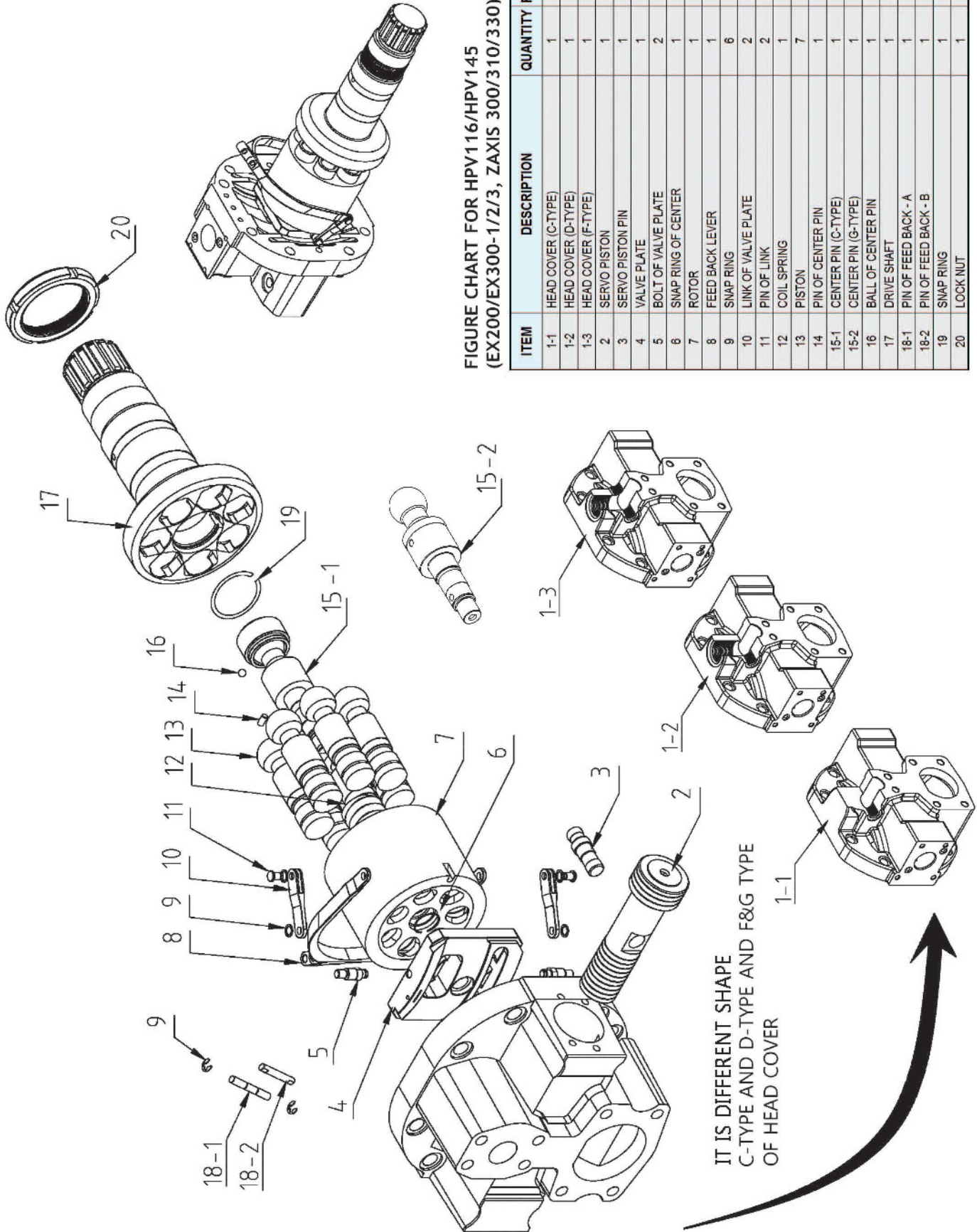


HPV116 / 145



HPV116/145 HEAD COVER & REGULATOR TYPE





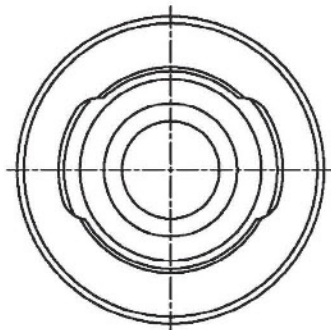
**FIGURE CHART FOR HPV116/HPV145
(EX200/EX300-1/2/3, ZAXIS 300/310/330)**

ITEM	DESCRIPTION	QUANTITY	REMARK
1-1	HEAD COVER (C-TYPE)	1	
1-2	HEAD COVER (D-TYPE)	1	
1-3	HEAD COVER (F-TYPE)	1	
2	SERVO PISTON	1	
3	SERVO PISTON PIN	1	
4	VALVE PLATE	1	
5	BOLT OF VALVE PLATE	2	
6	SNAP RING OF CENTER	1	
7	ROTOR	1	
8	FEED BACK LEVER	1	
9	SNAP RING	6	
10	LINK OF VALVE PLATE	2	
11	PIN OF LINK	2	
12	COIL SPRING	1	
13	PISTON	7	
14	PIN OF CENTER PIN	1	
15-1	CENTER PIN (C-TYPE)	1	C-TYPE
15-2	CENTER PIN (G-TYPE)	1	G-TYPE
16	BALL OF CENTER PIN	1	
17	DRIVE SHAFT	1	
18-1	PIN OF FEED BACK - A	1	
18-2	PIN OF FEED BACK - B	1	
19	SNAP RING	1	
20	LOCK NUT	1	

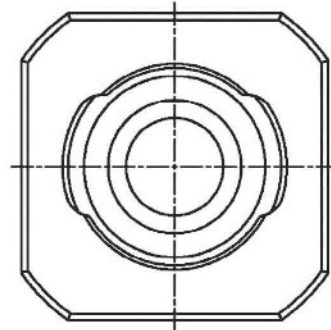
IT IS DIFFERENT SHAPE
C-TYPE AND D-TYPE AND F&G TYPE
OF HEAD COVER



HPV125A

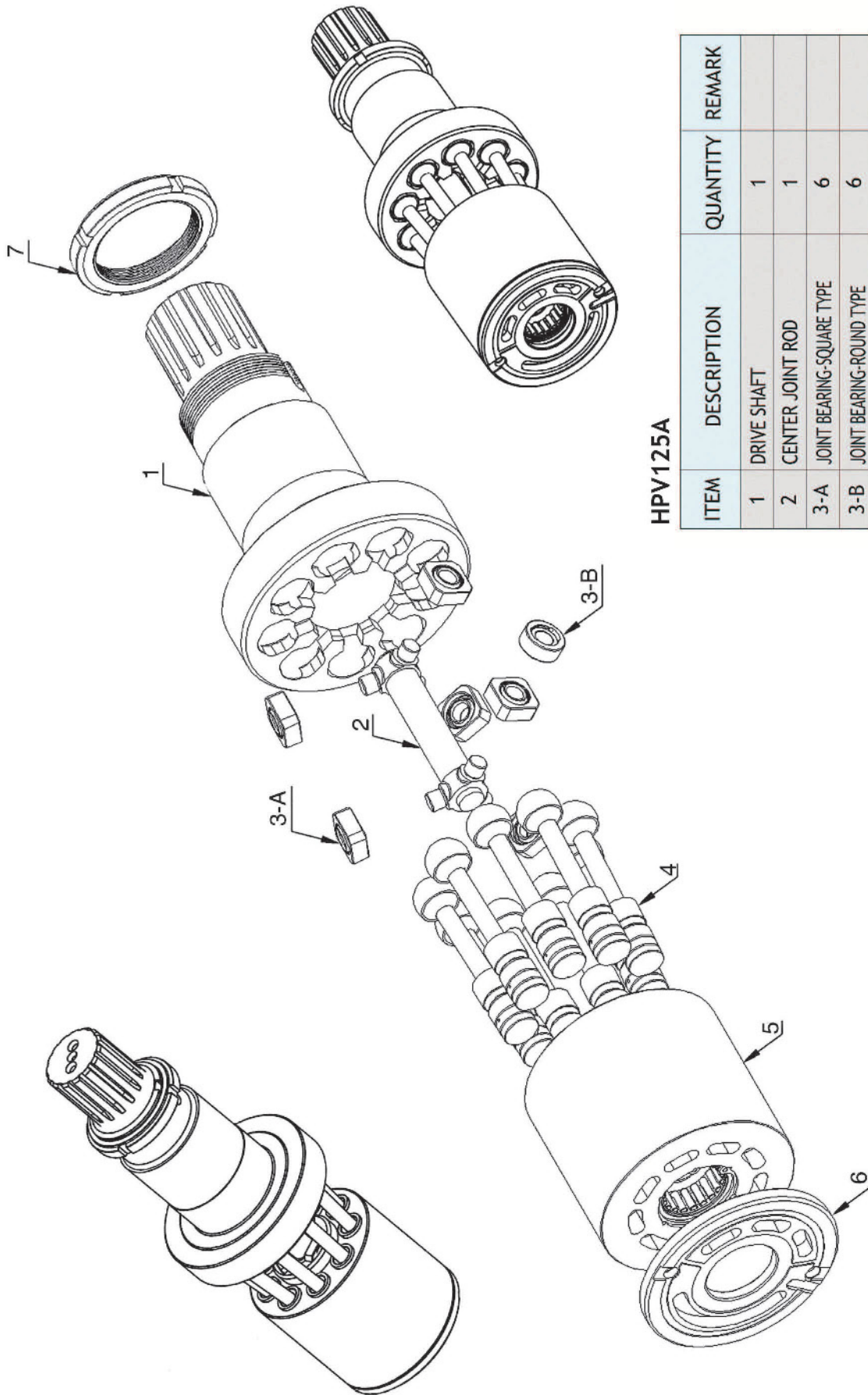


ROUND TYPE



SQUARE TYPE

IT IS DIFFERENT SHAPE BETWEEN
ROUND TYPE AND SQUARE TYPE OF JOINT BEARING

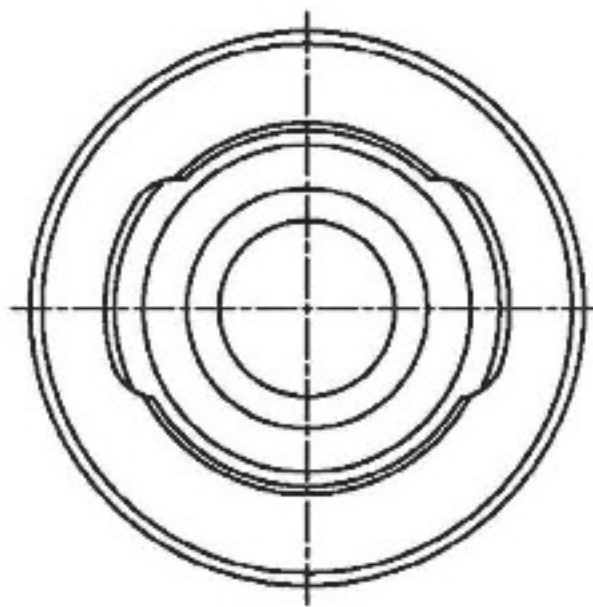


HPV125A

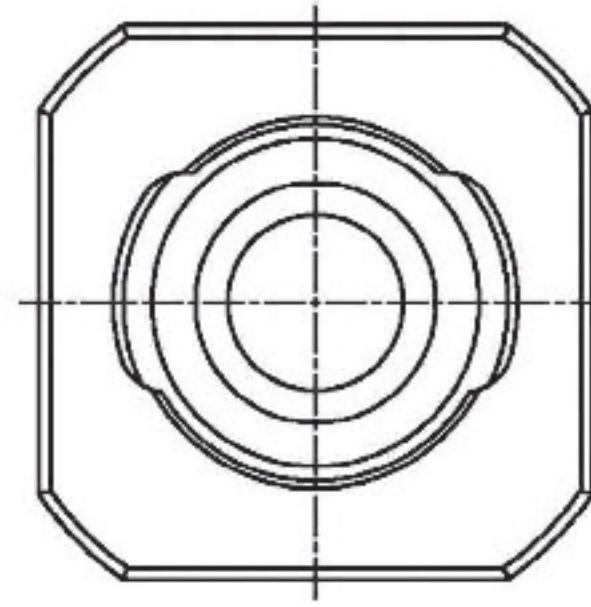
ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	CENTER JOINT ROD	1	
3-A	JOINT BEARING-SQUARE TYPE	6	
3-B	JOINT BEARING-ROUND TYPE	6	
4	PISTON	9	
5	ROTOR	1	
6	VALVE PLATE	1	
7	LOCK NUT	1	



HPV125B&HMT125AC

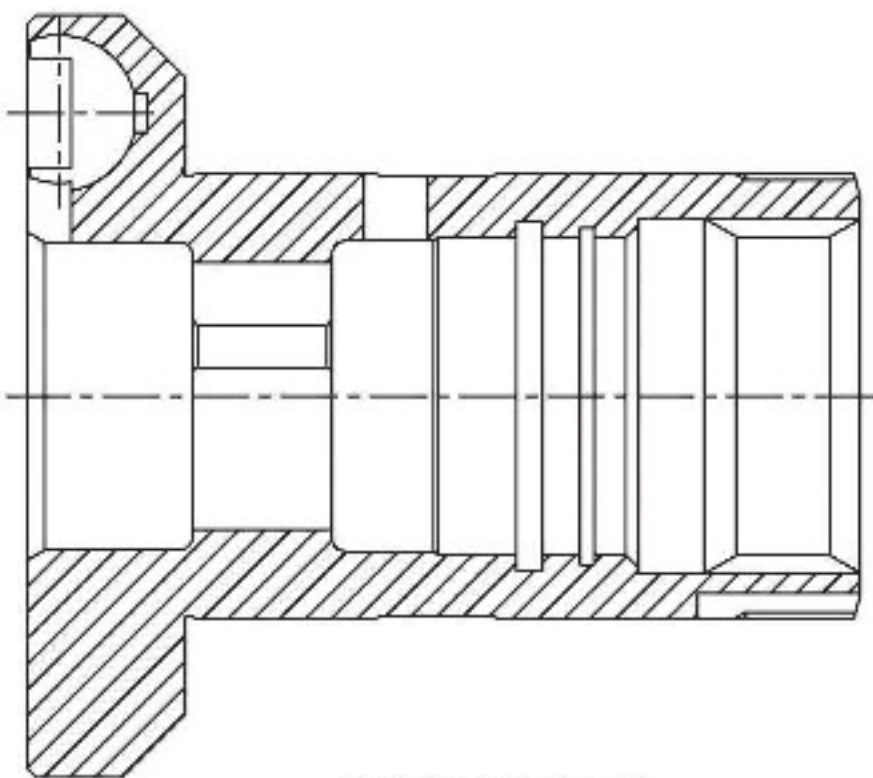


ROUND TYPE

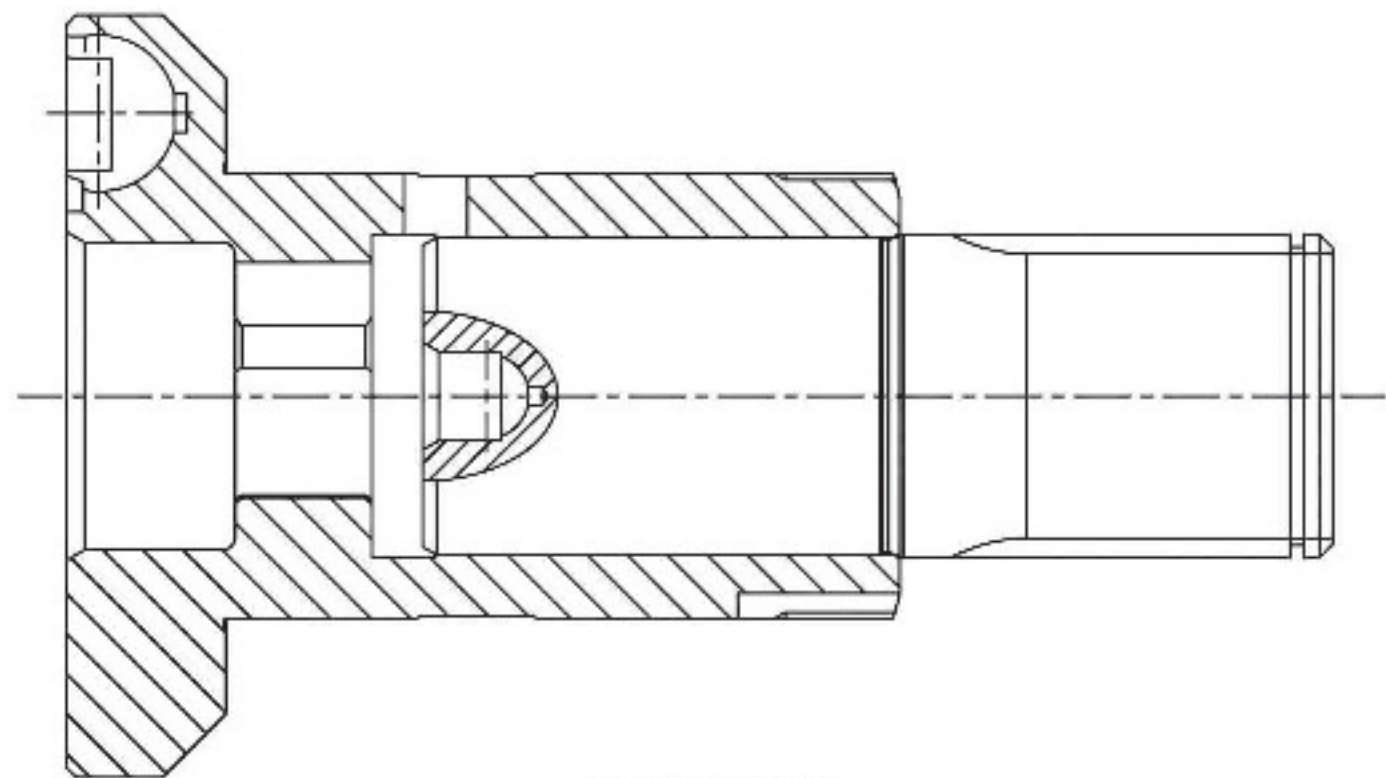


SQUARE TYPE

IT IS DIFFERENT SHAPE BETWEEN ROUND TYPE AND SQUARE TYPE OF JOINT BEARING



HMT125AC



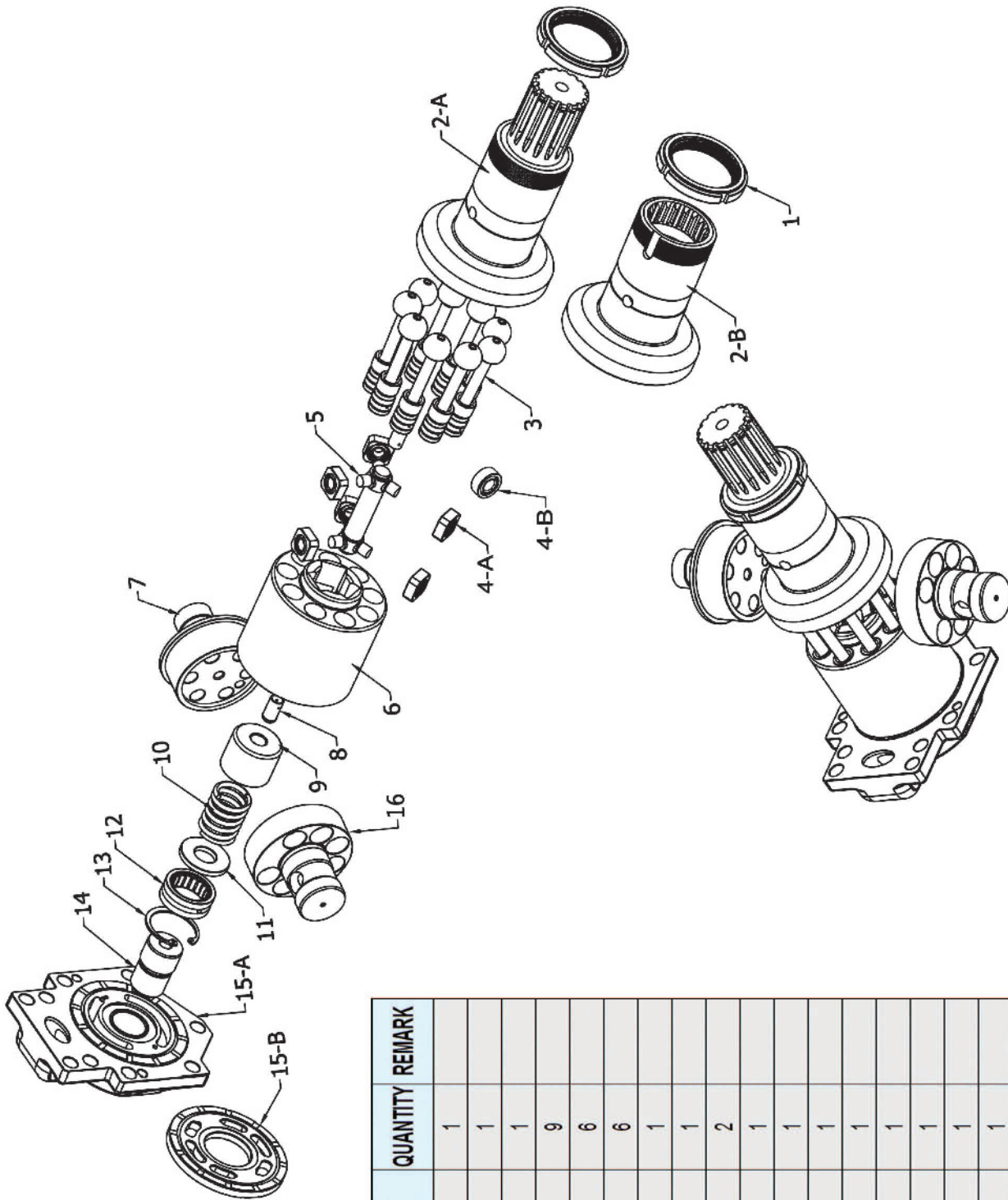
HPV125B

IT IS DIFFERENT SHAPE BETWEEN HMT125AC AND HPV125B OF DRIVE SHAFT

HPV125B&HMT125AC



HAN DOK HYDRAULIC

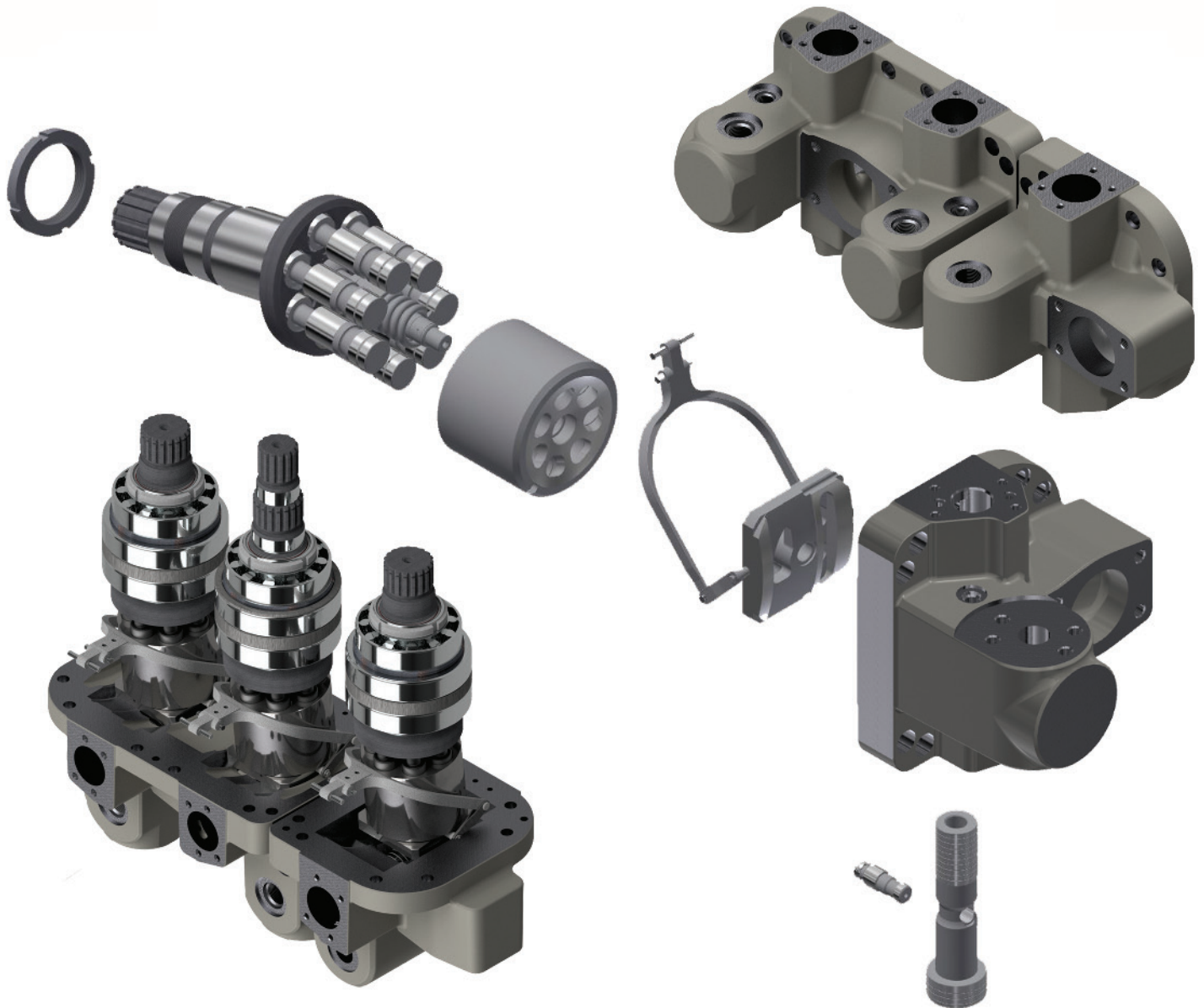


HPV125B/HMT125AC

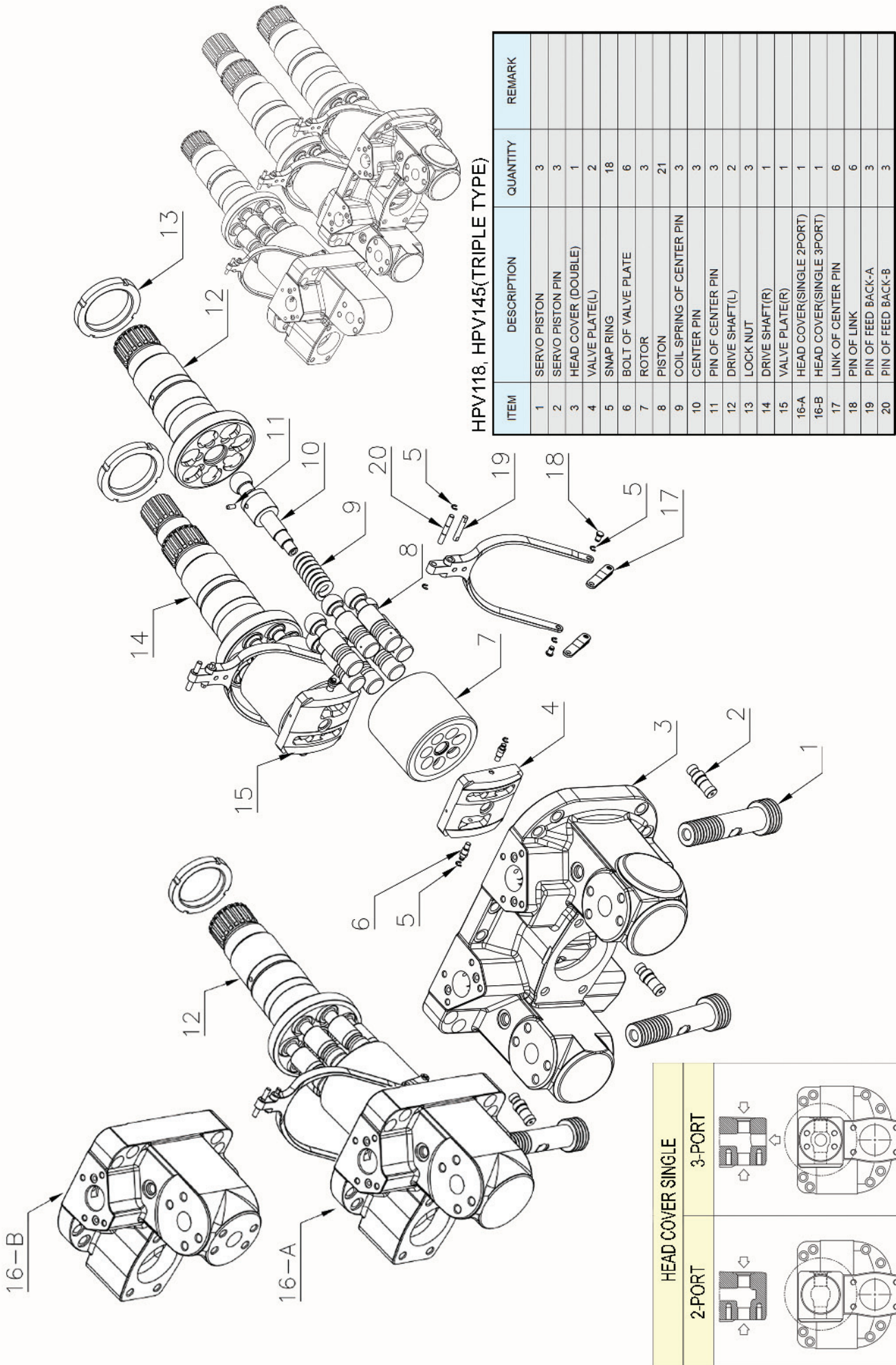
ITEM	DESCRIPTION	QUANTITY	REMARK
1	LOCK NUT	1	
2-A	DRIVE SHAFT (HPV125B)	1	
2-B	DRIVE SHAFT (HMT125AC)	1	
3	PISTON	9	
4-A	JOINT BEARING - SQUARE TYPE	6	
4-B	JOINT BEARING - ROUND TYPE	6	
5	CENTER JOINT ROD	1	
6	ROTOR	1	
7	AXLE SHAFT	2	
8	JOINT STOPPER	1	
9	HOLDER	1	
10	COIL SPRING OF ROTOR	1	
11	WASHER	1	
12	NEEDLE BEARING	1	
13	SNAP RING	1	
14	CENTER SHAFT	1	
15-A	HEAD VALVE	1	
15-B	VALVE PLATE	1	
16	ROTARY JOINT	1	



HPVO118T, HPVO145T (TRIPLE TYPE)

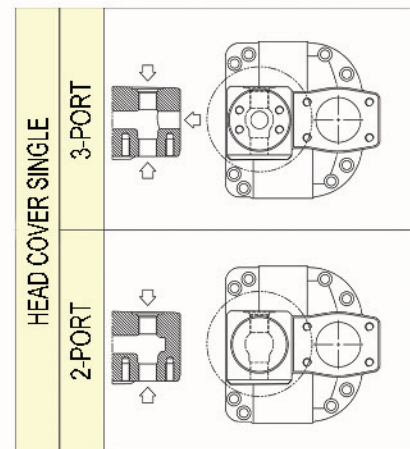


HPV118, HPV145 (TRIPLE TYPE)



HPV118, HPV145 (TRIPLE TYPE)

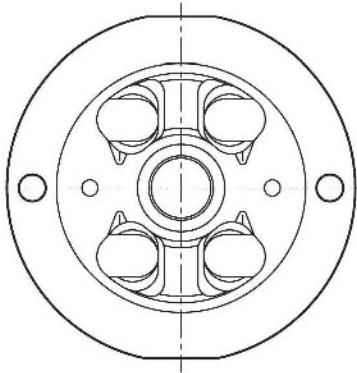
ITEM	DESCRIPTION	QUANTITY	REMARK
1	SERVO PISTON	3	
2	SERVO PISTON PIN	3	
3	HEAD COVER (DOUBLE)	1	
4	VALVE PLATE(L)	2	
5	SNAP RING	18	
6	BOLT OF VALVE PLATE	6	
7	ROTOR	3	
8	PISTON	21	
9	COIL SPRING OF CENTER PIN	3	
10	CENTER PIN	3	
11	PIN OF CENTER PIN	3	
12	DRIVE SHAFT(L)	2	
13	LOCK NUT	3	
14	DRIVE SHAFT(R)	1	
15	VALVE PLATE(R)	1	
16-A	HEAD COVER(SINGLE 2PORT)	1	
16-B	HEAD COVER(SINGLE 3PORT)	1	
17	LINK OF CENTER PIN	6	
18	PIN OF LINK	6	
19	PIN OF FEED BACK-A	3	
20	PIN OF FEED BACK-B	3	



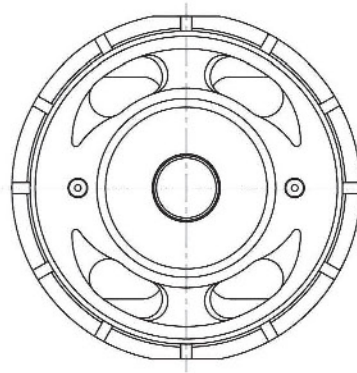
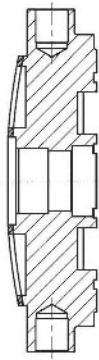
HAN DOK HYDRAULIC



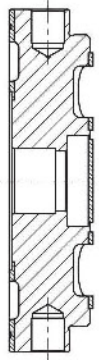
HMGC/HMGF SERIES



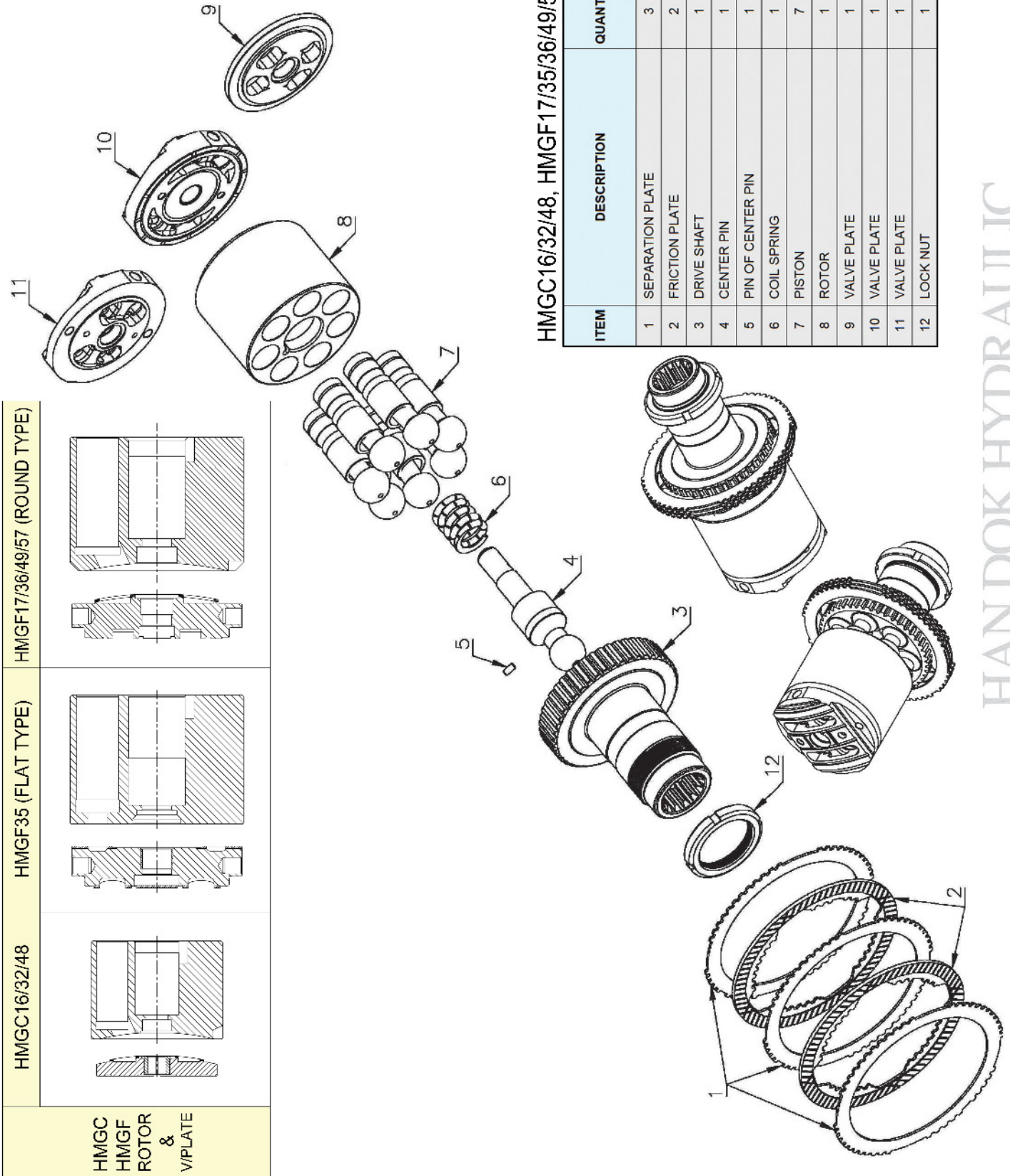
HMGF-TYPE



HMGC-TYPE



IT IS DIFFERENT SHAPE HMGC AND HMGF OF VALVE



HMGC16/32/48, HMGF17/35/36/49/57

ITEM	DESCRIPTION	QUANTITY	REMARK
1	SEPARATION PLATE	3	
2	FRICTION PLATE	2	
3	DRIVE SHAFT	1	
4	CENTER PIN	1	
5	PIN OF CENTER PIN	1	
6	COIL SPRING	1	
7	PISTON	7	
8	ROTOR	1	
9	VALVE PLATE	1	HMGC SERIES
10	VALVE PLATE	1	HMGF35
11	VALVE PLATE	1	HMGF36/49/57
12	LOCK NUT	1	

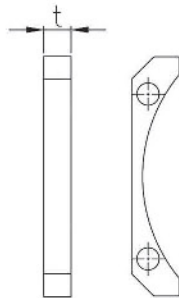
HANDOK HYDRAULIC



HPV35/55/70/90/110/160

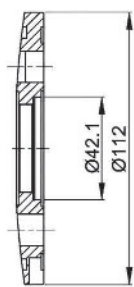


IT IS DIFFERENT SPACE THICKNESS

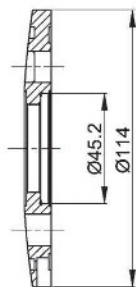


TYPE	SPACE THICKNESS(t)		
	A	B	C
HPV35 (PC60-3/5)	8.00	8.03	8.05
HPV55 (PC120/120-3/5)	9.44	9.46	9.475
HPV70/90 (PC200/220-3/5)	11.54	11.56	11.575
HPV160 (PC300/400-3/5)	13.54	13.56	13.575

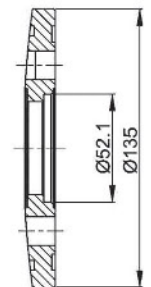
IT IS DIFFERENT VALVE PLATE & CRADLE SHAPE(HPV35/55/70/90/160)



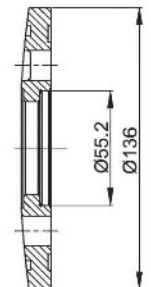
PC200-3



PC200-5



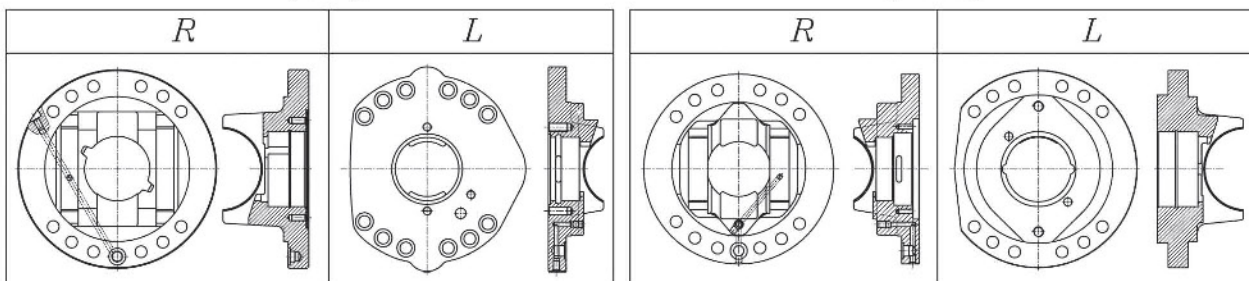
PC300-3/400-3



PC300-5/400-5

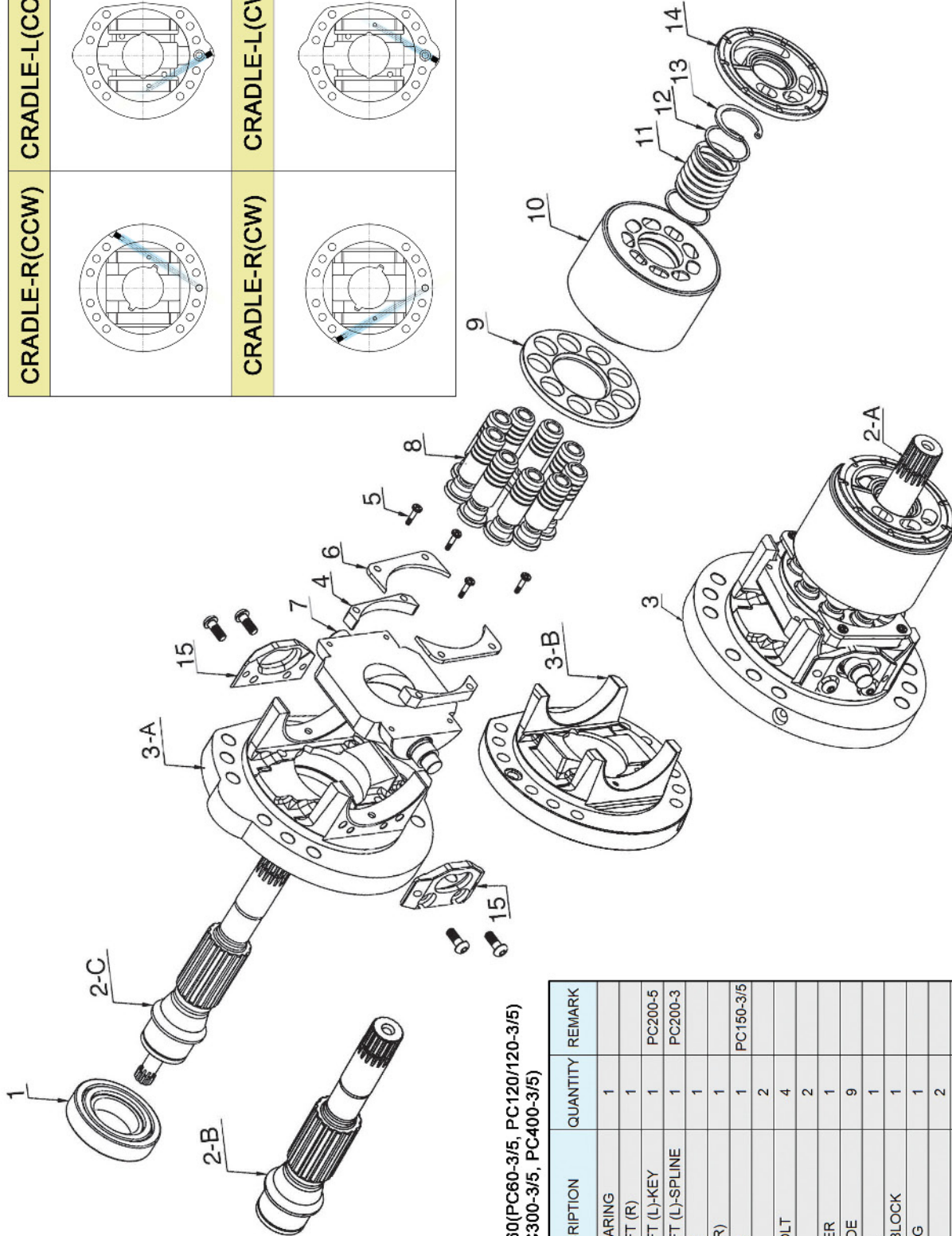
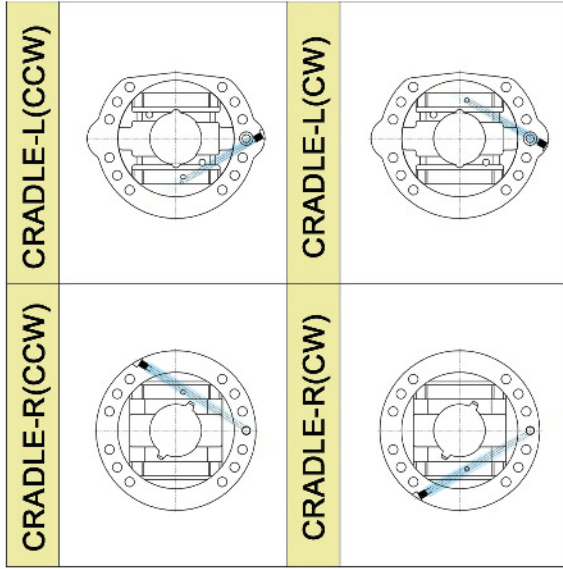
(CW)

(CCW)





IT IS DIFFERENT SHAPE BETWEEN
CCW AND CW TYPE OF HPV90(PC200-3) CRADLE



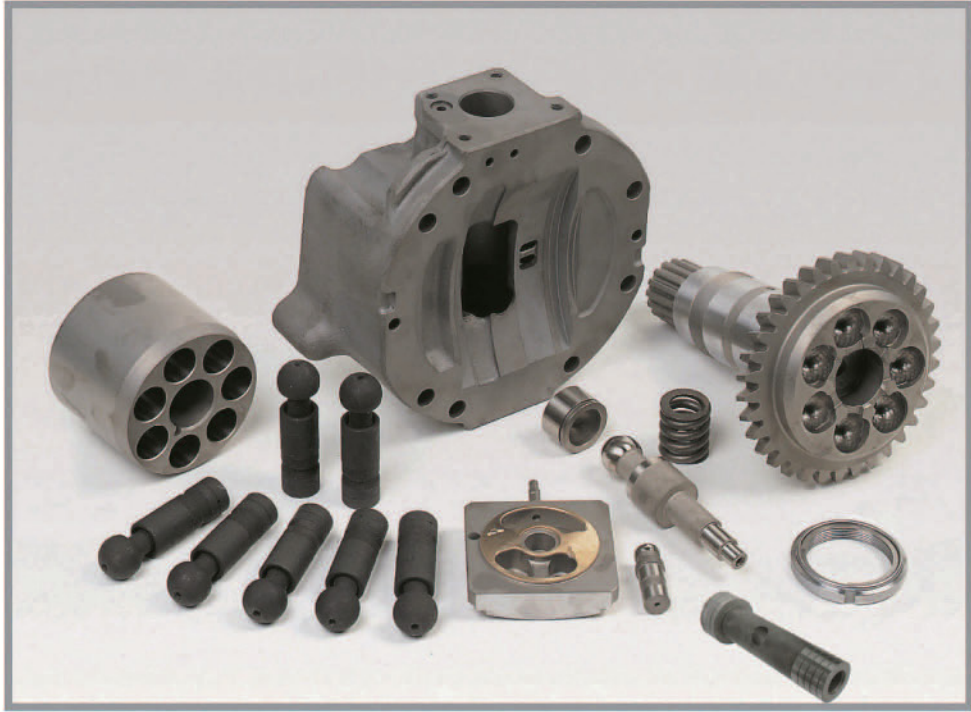
HPV35/55/70/90/160(PC80-3/5, PC120/120-3/5)
PC200/220-3/5, PC300-3/5, PC400-3/5)

ITEM	DESCRIPTION	QUANTITY	REMARK
1	ROLLER BEARING	1	
2-A	DRIVE SHAFT (R)	1	
2-B	DRIVE SHAFT (L)-KEY	1	PC200-5
2-C	DRIVE SHAFT (L)-SPLINE	1	PC200-3
3	CRADLE (R)	1	
3-A	CRADLE (L/R)	1	
3-B	CRADLE (L)	1	PC150-3/5
4	SPACE	2	
5	SOCKET BOLT	4	
6	FIX PLATE	2	
7	CAM ROCKER	1	
8	PISTON SHOE	9	
9	SET PLATE	1	
10	CYLINDER BLOCK	1	
11	COIL SPRING	1	
12	WASHER	2	
13	SNAP RING	1	
14	VALVE PLATE (L/R)	1	
15	THRUST BEARING	2	

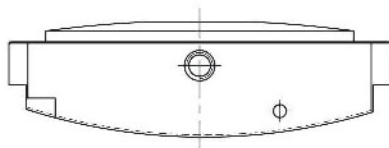
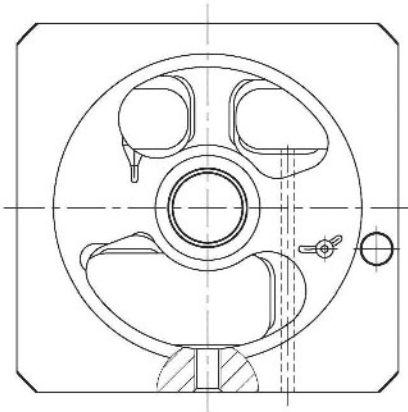
HAN DOK HYDRAULIC



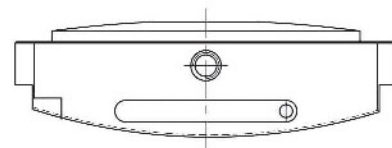
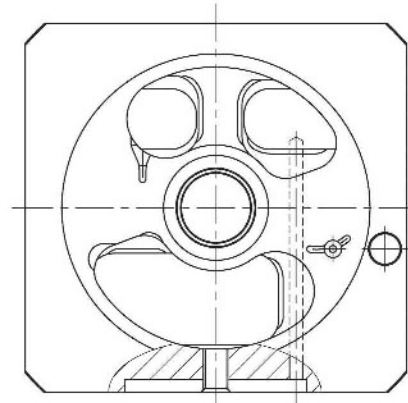
HPV091DS/ES



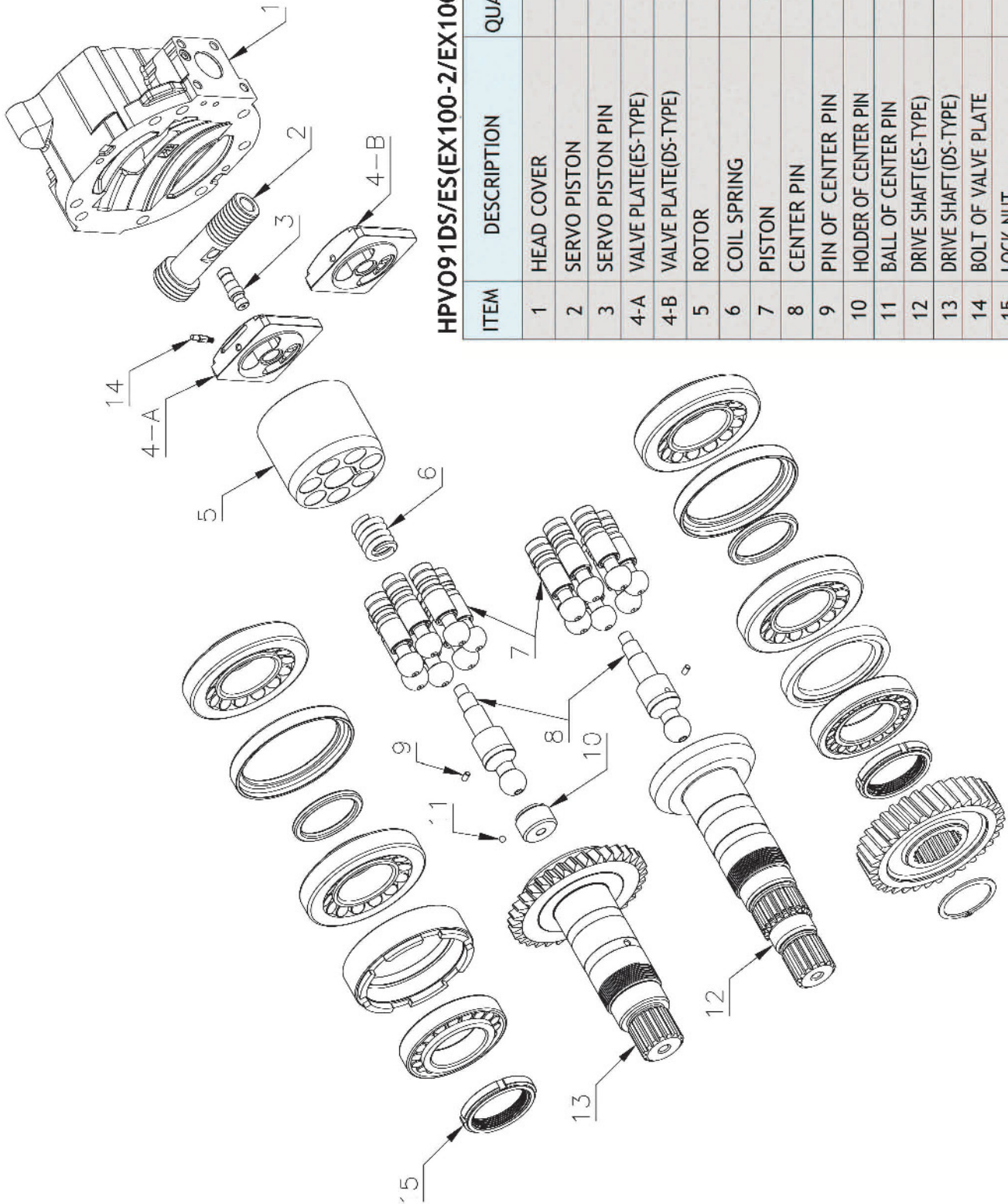
IT IS DIFFERENT SHAPE BETWEEN
HPV091ES TYPE AND HPV091DS TYPE OF VALVE PLATE



HPV091DS



HPV091ES

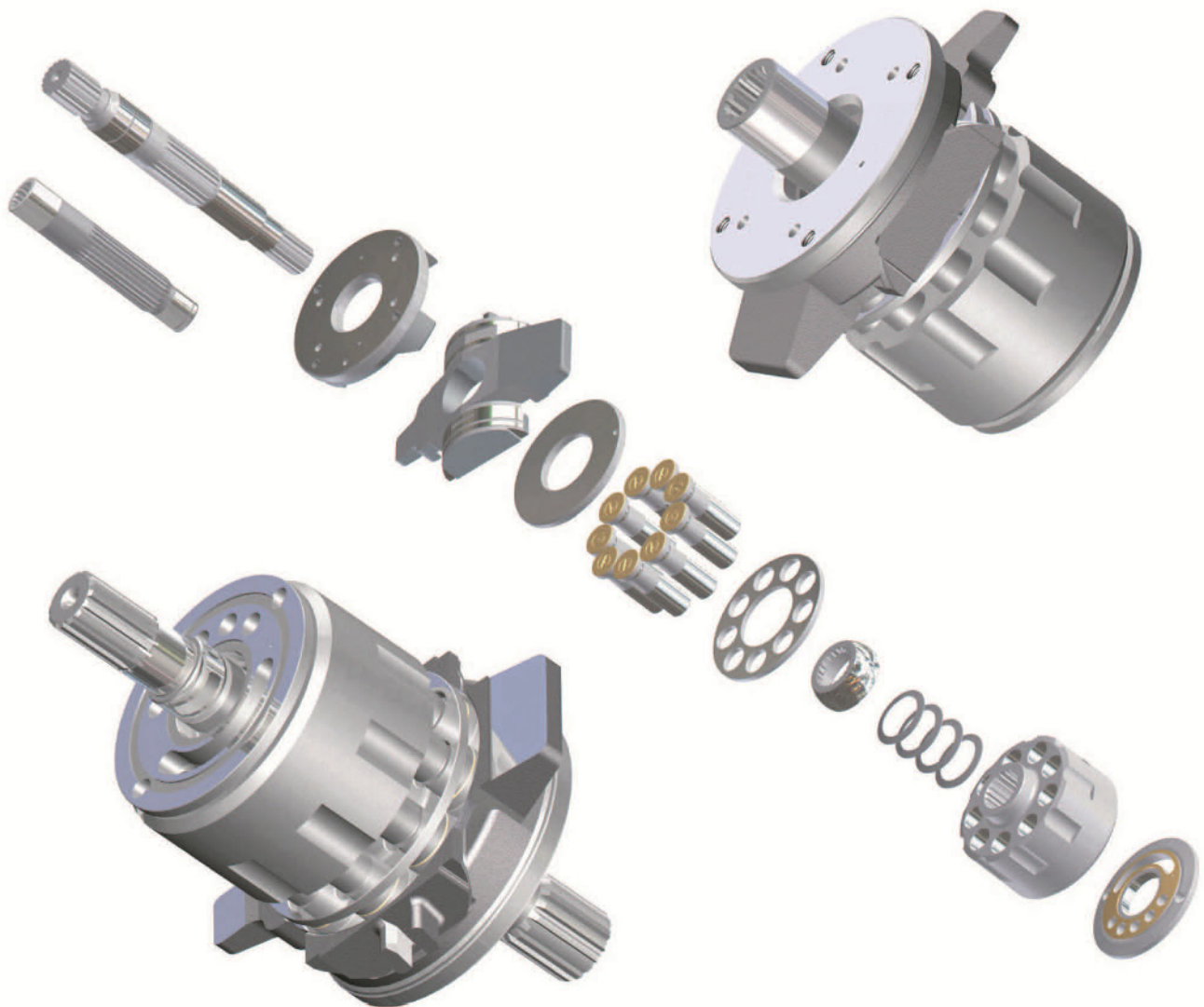
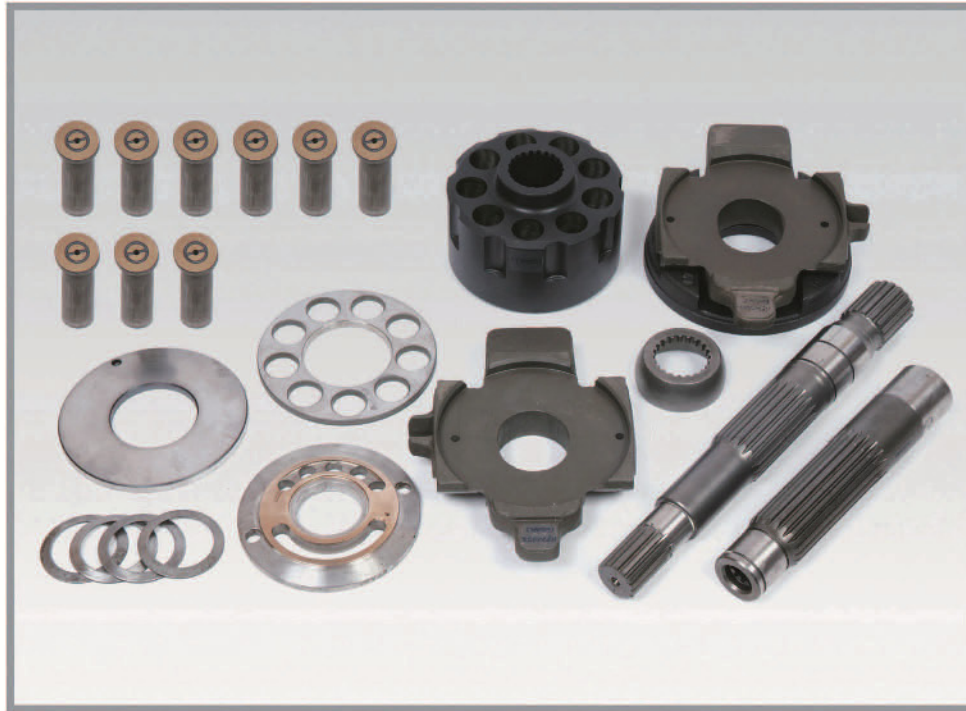


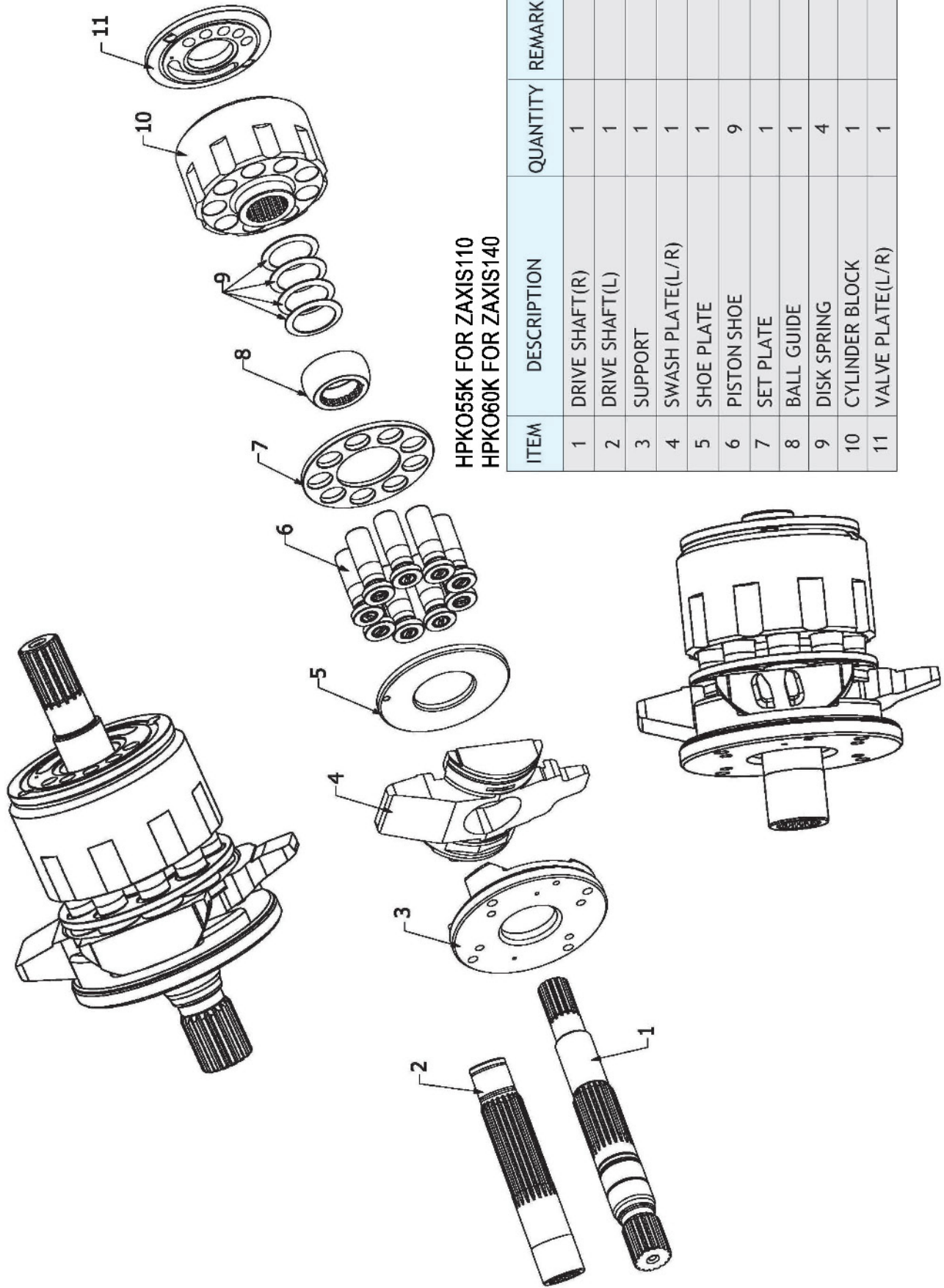
HPV091DS/ES(EX100-2/EX100-3/5)

ITEM	DESCRIPTION	QUANTITY	REMARK
1	HEAD COVER	1	
2	SERVO PISTON	1	
3	SERVO PISTON PIN	1	
4-A	VALVE PLATE(ES-TYPE)	1	
4-B	VALVE PLATE(DS-TYPE)	1	
5	ROTOR	1	
6	COIL SPRING	1	
7	PISTON	14	
8	CENTER PIN	2	
9	PIN OF CENTER PIN	2	
10	HOLDER OF CENTER PIN	1	DS-TYPE
11	BALL OF CENTER PIN	1	DS-TYPE
12	DRIVE SHAFT(ES-TYPE)	1	
13	DRIVE SHAFT(DS-TYPE)	1	
14	BOLT OF VALVE PLATE	1	
15	LOCK NUT	2	



HPKO SERIES





HPKO55K FOR ZAXIS110
HPKO60K FOR ZAXIS140

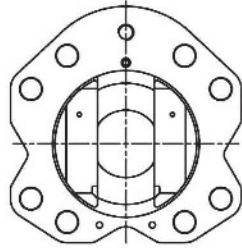
ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT (R)	1	
2	DRIVE SHAFT (L)	1	
3	SUPPORT	1	
4	SWASH PLATE (L/R)	1	
5	SHOE PLATE	1	
6	PISTON SHOE	9	
7	SET PLATE	1	
8	BALL GUIDE	1	
9	DISK SPRING	4	
10	CYLINDER BLOCK	1	
11	VALVE PLATE (L/R)	1	



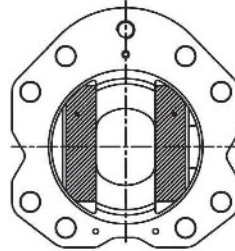
H3V/H5V SERIES



H3V SERIES



H5V SERIES



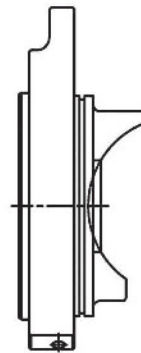
BRASS BRAZING ON THE SLIDE SURFACE OF H5V SERIES

CATERPILLAR

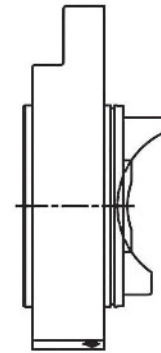
H3V SERIES



H5V SERIES



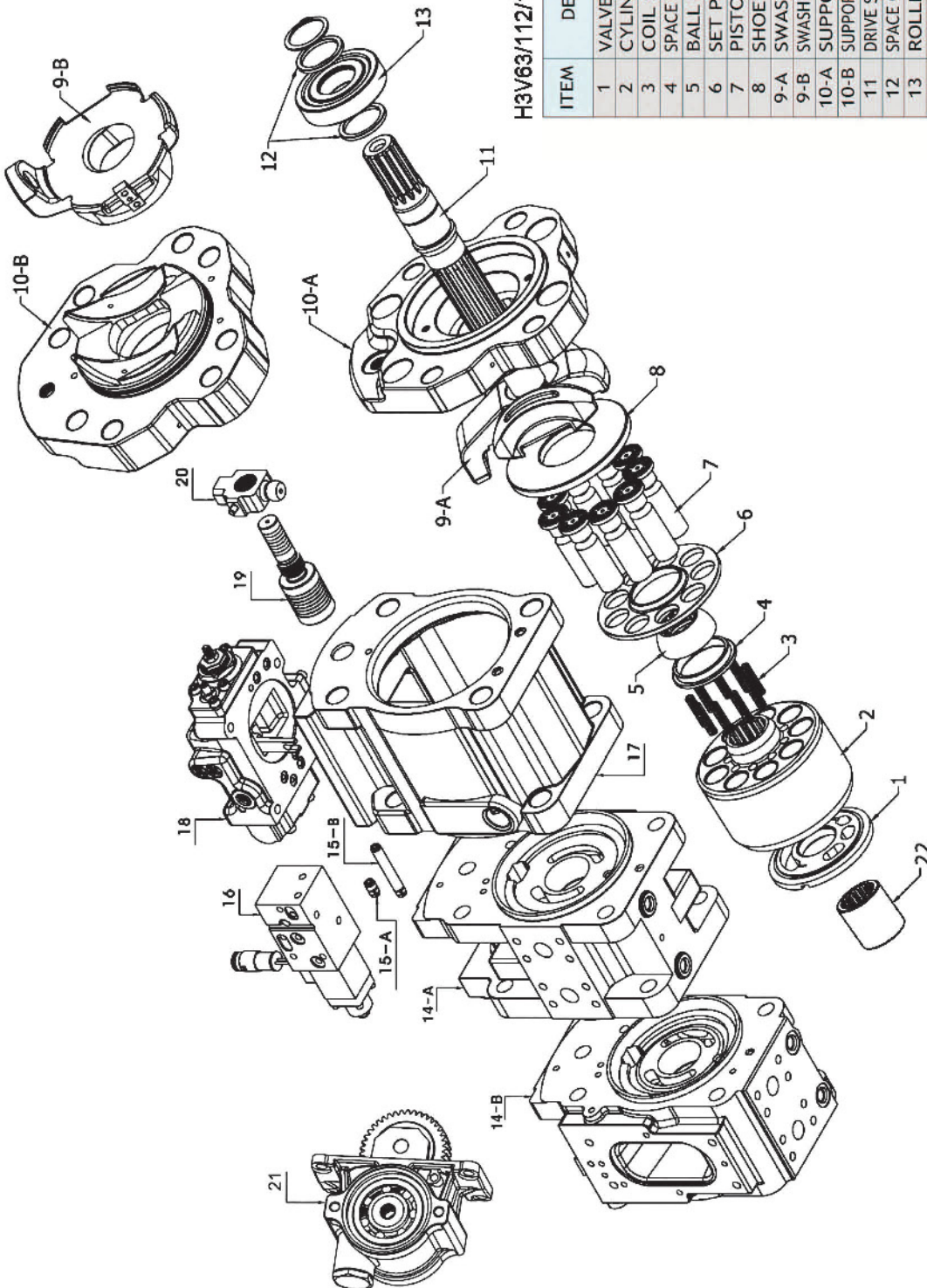
(L)



(R)

IT IS DIFFERENT SHAPE BETWEEN H3V SERIES AND H5V SERIES

H3V/H5V SERIES



H3V63/112/140/180/280, H5V80/140/160/180/200

ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE(L/R)	1	
2	CYLINDER BLOCK	1	
3	COIL SPRING	9	
4	SPACE OF BALL GUIDE	1	
5	BALL GUIDE	1	
6	SET PLATE	1	
7	PISTON SHOE	9	
8	SHOE PLATE	1	
9-A	SWASH PLATE	1	
9-B	SWASH PLATE(CATERPILLER)	1	
10-A	SUPPORT	1	
10-B	SUPPORT(CATERPILLER)	1	
11	DRIVE SHAFT(FR/RR)	1	
12	SPACE OF DRIVE SHAFT	2	
13	ROLLER BEARING	1	
14-A	VALVE BLOCK	1	
14-B	VALVE BLOCK(H3V/DTP/H5V-SERIES)	1	
15-A	CHECK VALVE-SHORT	1	
15-B	CHECK VALVE-LONG	1	
16	EPR VALVE	1	
17	CASE	1	
18	REGULATOR ASSY	1	
19	SERVO PISTON	1	
20	TILTING PIN	1	
21	PTO BOX ASSY	1	
22	COUPLING	1	

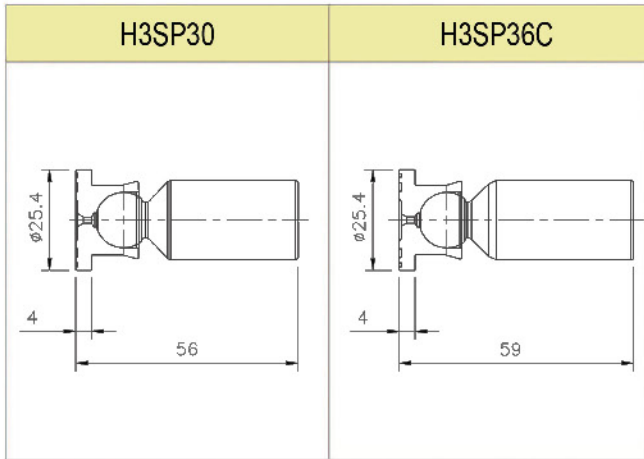
HAN DOK HYDRAULIC



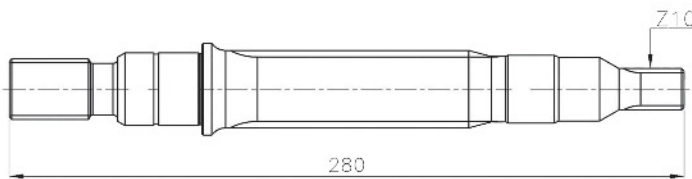
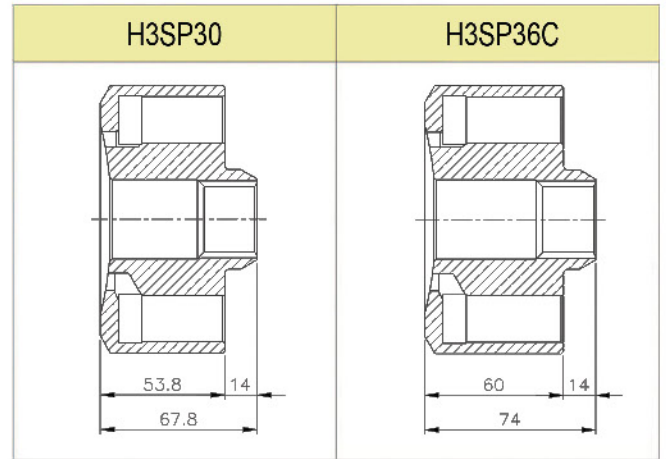
H3SP30&36C



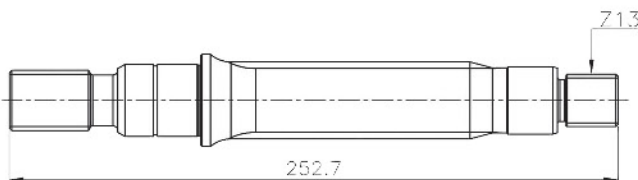
IT IS DIFFERENT PISTON



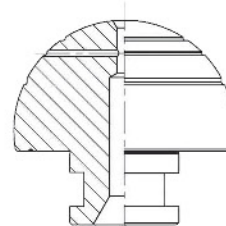
IT IS DIFFERENT CYLINDER BLOCK



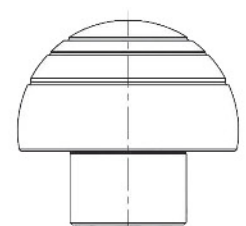
DOUBLE PILOT TYPE



SINGLE PILOT TYPE



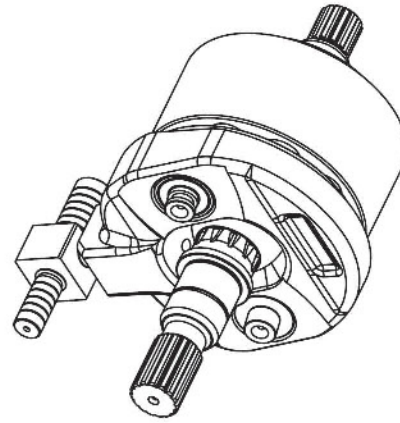
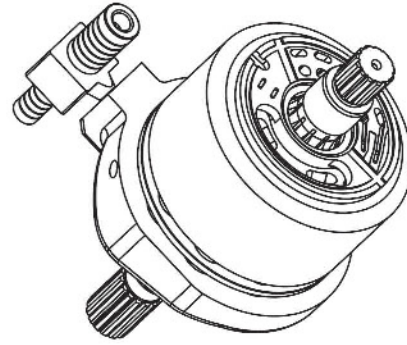
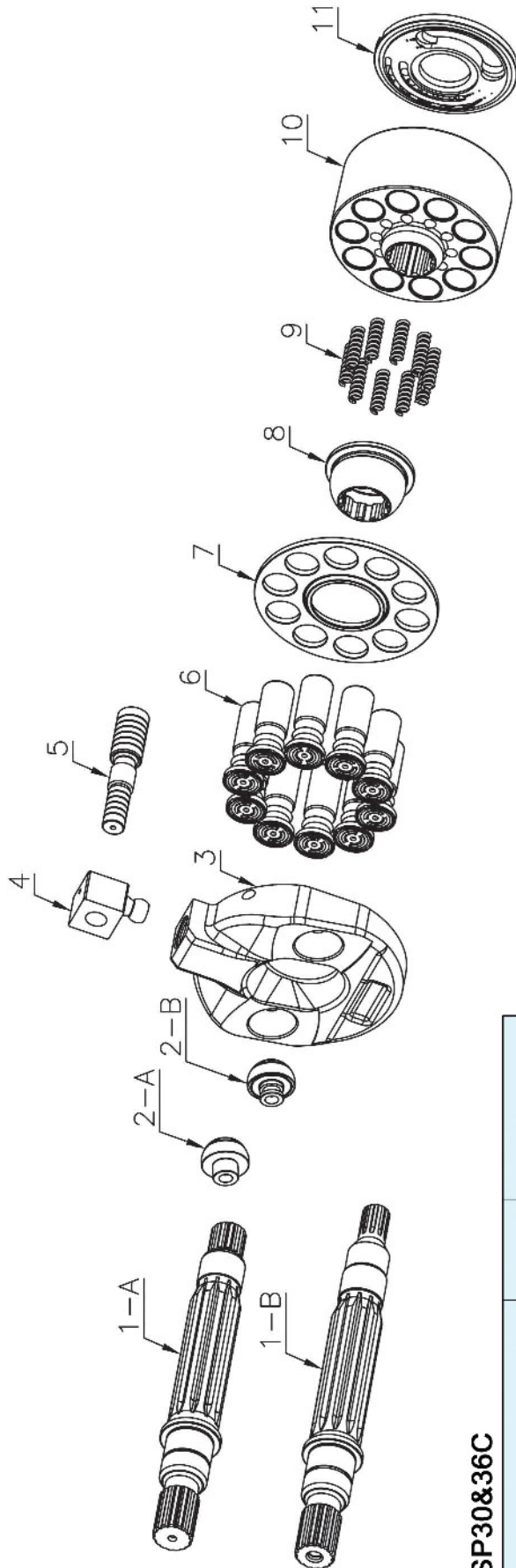
(R)



(L)

IT IS DIFFERENT SHAPE BETWEEN DOUBLE AND SINGLE PILOT TYPE OF DRIVE SHAFT

IT IS DIFFERENT SHAPE BETWEEN R TYPE AND L TYPE OF BALL

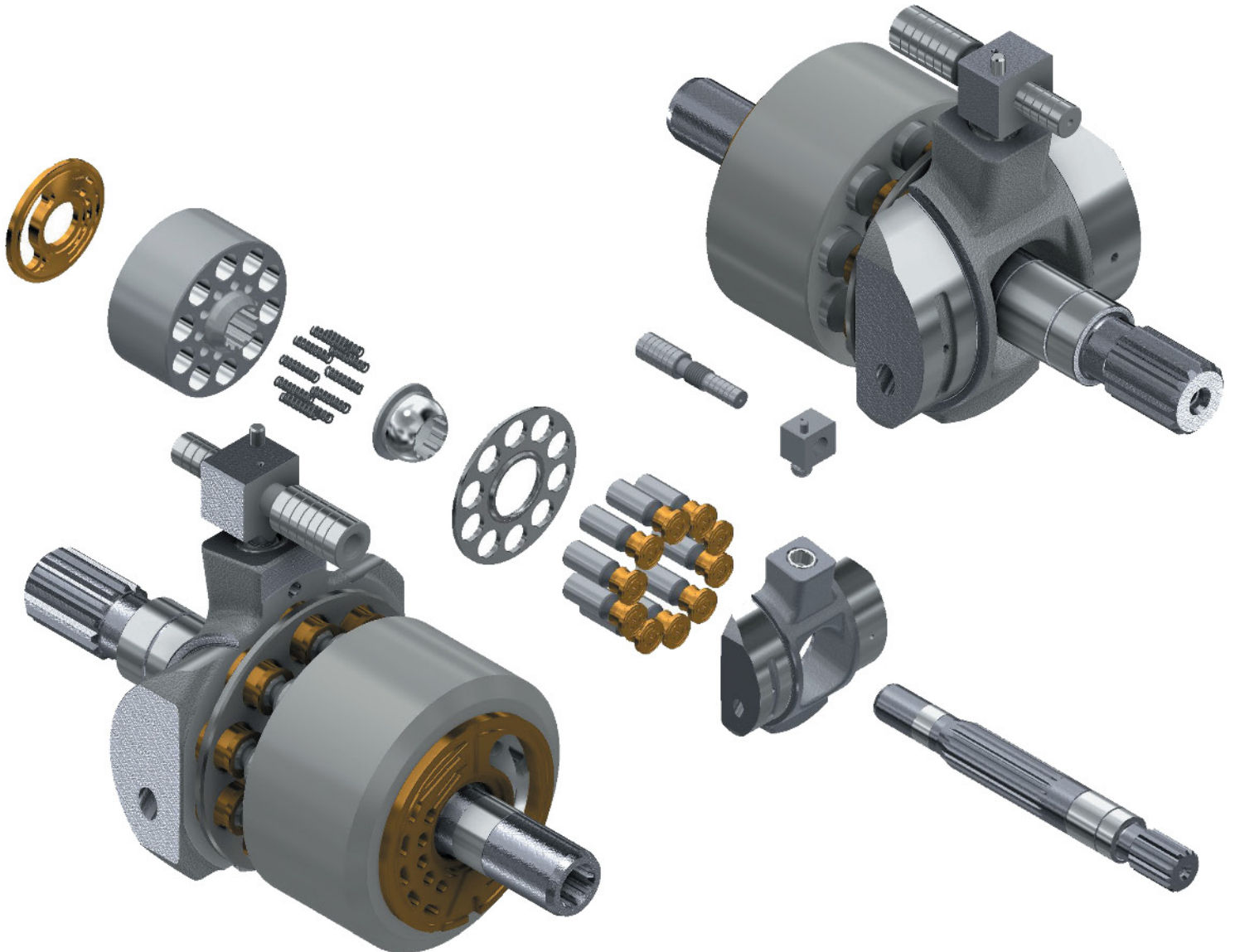


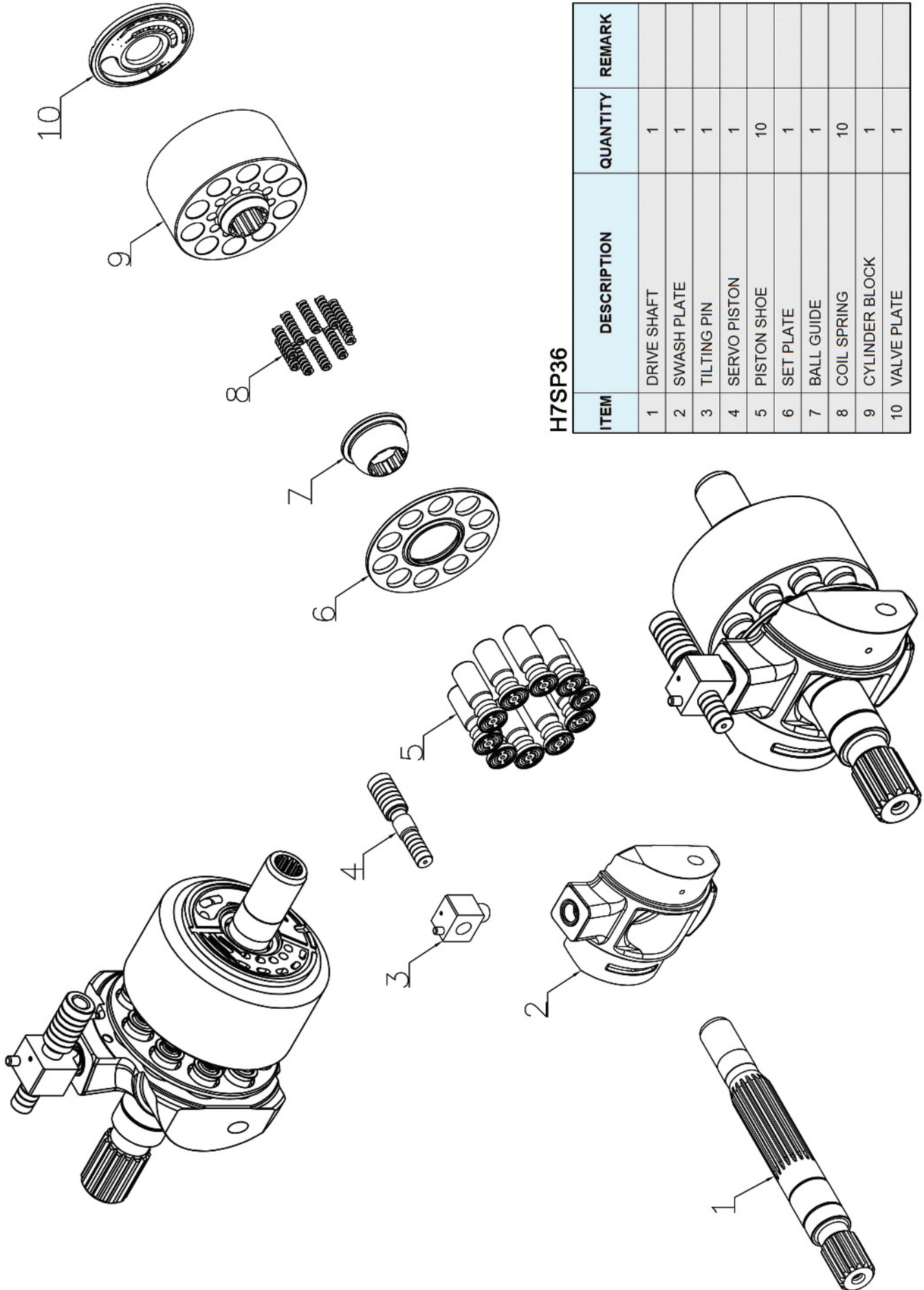
H3SP30&36C

ITEM	DESCRIPTION	QUANTITY	REMARK
1-A	DRIVE SHAFT	1	SINGLE PILOT TYPE
1-B	DRIVE SHAFT	1	DOUBLE PILOT TYPE
2-A	SWASH PLATE PIVOT BALL (L)	1	
2-B	SWASH PLATE PIVOT BALL (R)	1	
3	SWASH PLATE	1	
4	TILTING PIN	1	
5	SERVO PISTON	1	
6	PISTON SHOE	10	
7	SET PLATE	1	
8	BALL GUIDE	1	
9	COIL SPRING	10	
10	CYLINDER BLOCK	1	
11	VALVE PLATE	1	



H7SP36





H7SP36

ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	SWASH PLATE	1	
3	TILTING PIN	1	
4	SERVO PISTON	1	
5	PISTON SHOE	10	
6	SET PLATE	1	
7	BALL GUIDE	1	
8	COIL SPRING	10	
9	CYLINDER BLOCK	1	
10	VALVE PLATE	1	

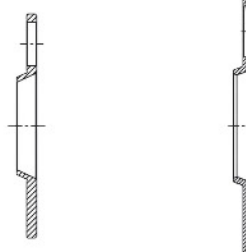


H3V112DP&H5V160DP&H5V200DP(DPH)/212DPH



H3V SERIES

H5V SERIES



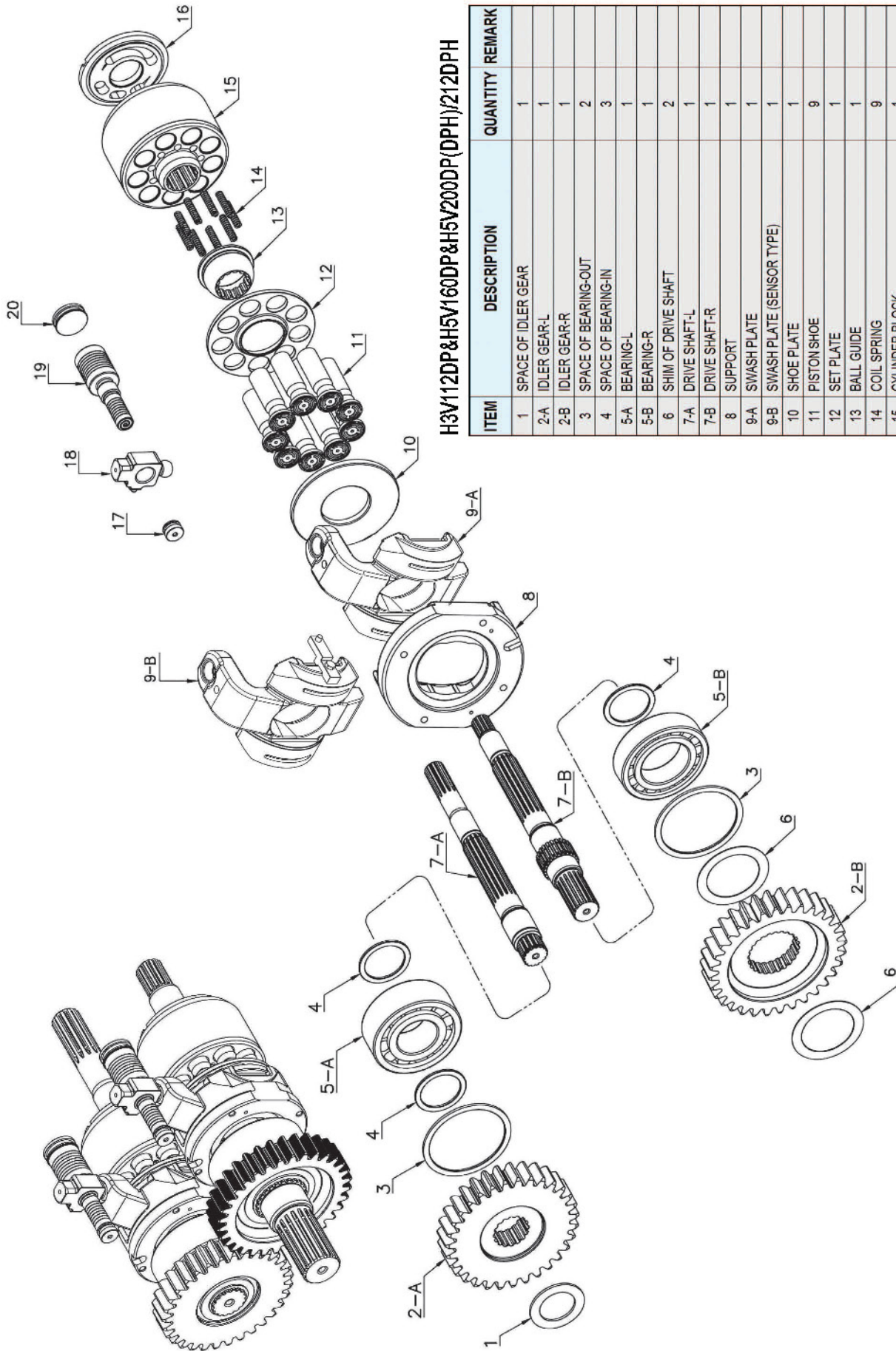
IT IS DIFFERENT SHAPE BETWEEN H3V SERIES AND H5V SERIES

H5V200DPH / H5V212DPH
DRIVE SHAFT - L

H5V200DPH / H5V212DPH
DRIVE SHAFT - R

H5V200DPH (4500LC)	
H5V200DPH (ZAXIS-HITACHI)	
H5V212DPH (KPM)	
H5V212DPH (CAT)	

H5V200DPH (4500LC)	
H5V200DPH (ZAXIS-HITACHI)	
H5V212DPH (KPM)	
H5V212DPH (CAT)	

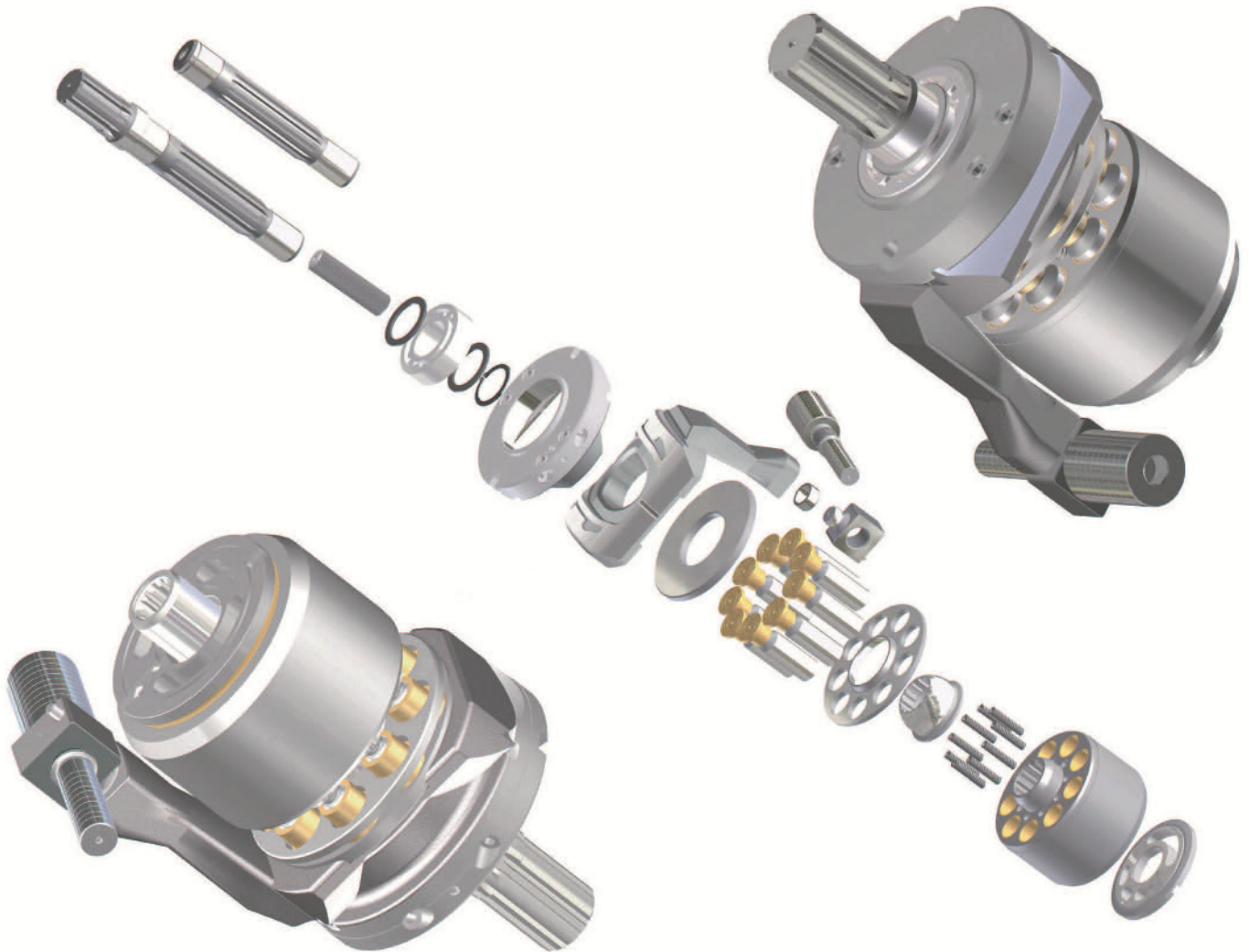


H3V112DP&H5V160DP&H5V200DP(DPH)/212DPH

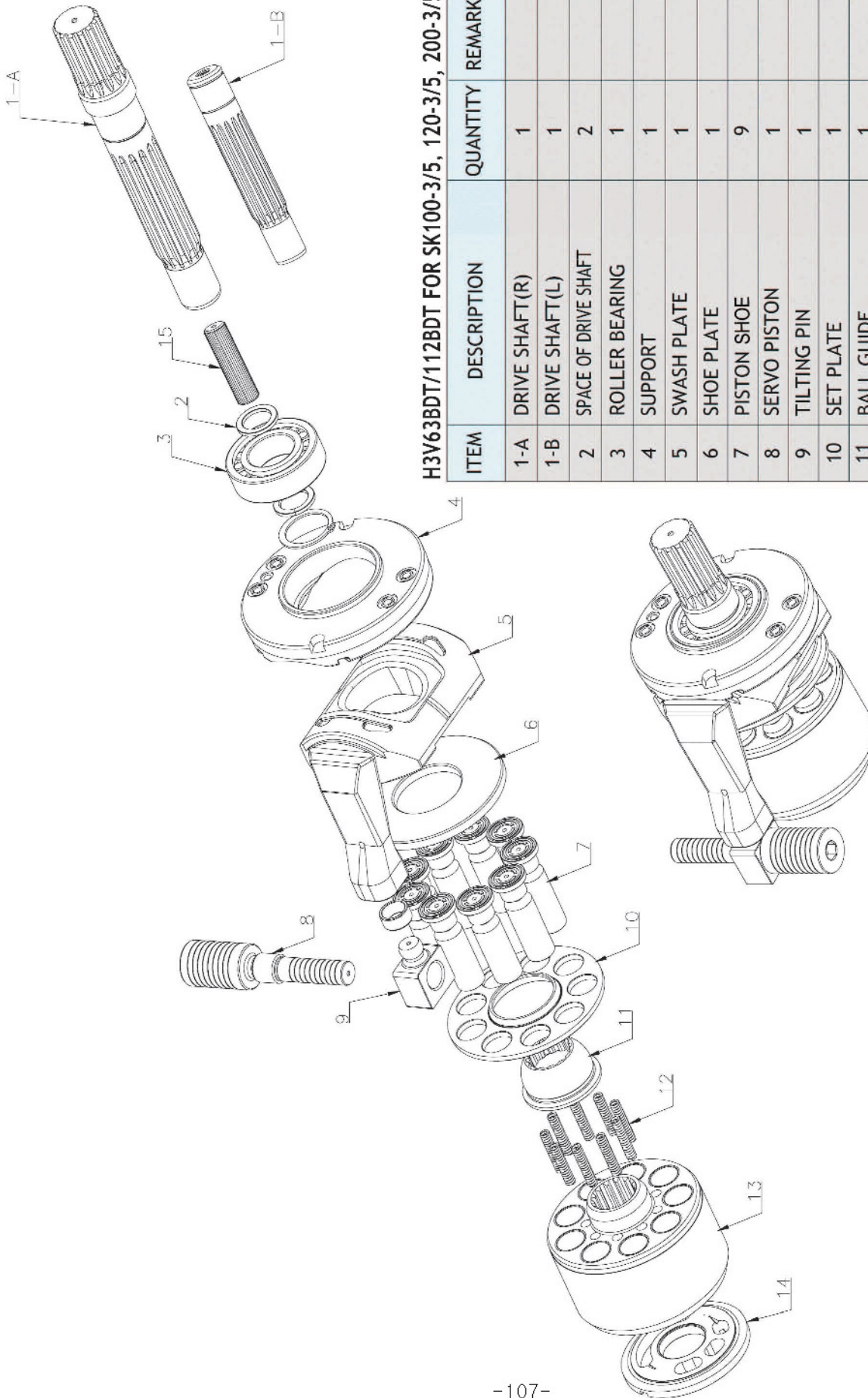
ITEM	DESCRIPTION	QUANTITY	REMARK
1	SPACE OF IDLER GEAR	1	
2-A	IDLER GEAR-L	1	
2-B	IDLER GEAR-R	1	
3	SPACE OF BEARING-OUT	2	
4	SPACE OF BEARING-IN	3	
5-A	BEARING-L	1	
5-B	BEARING-R	1	
6	SHIM OF DRIVE SHAFT	2	
7-A	DRIVE SHAFT-L	1	
7-B	DRIVE SHAFT-R	1	
8	SUPPORT	1	
9-A	SWASH PLATE	1	
9-B	SWASH PLATE (SENSOR TYPE)	1	
10	SHOE PLATE	1	
11	PISTON SHOE	9	
12	SET PLATE	1	
13	BALL GUIDE	1	
14	COIL SPRING	9	
15	CYLINDER BLOCK	1	
16	VALVE PLATE (L/R)	1	
17	STOPPER-SMALL	1	
18	TILTING PIN	1	
19	SERVO PISTON	1	
20	STOPPER-BIG	1	



H3V63BDT/112BDT FOR KOBELCO



H3V63BDT/112BDT FOR KOBELCO



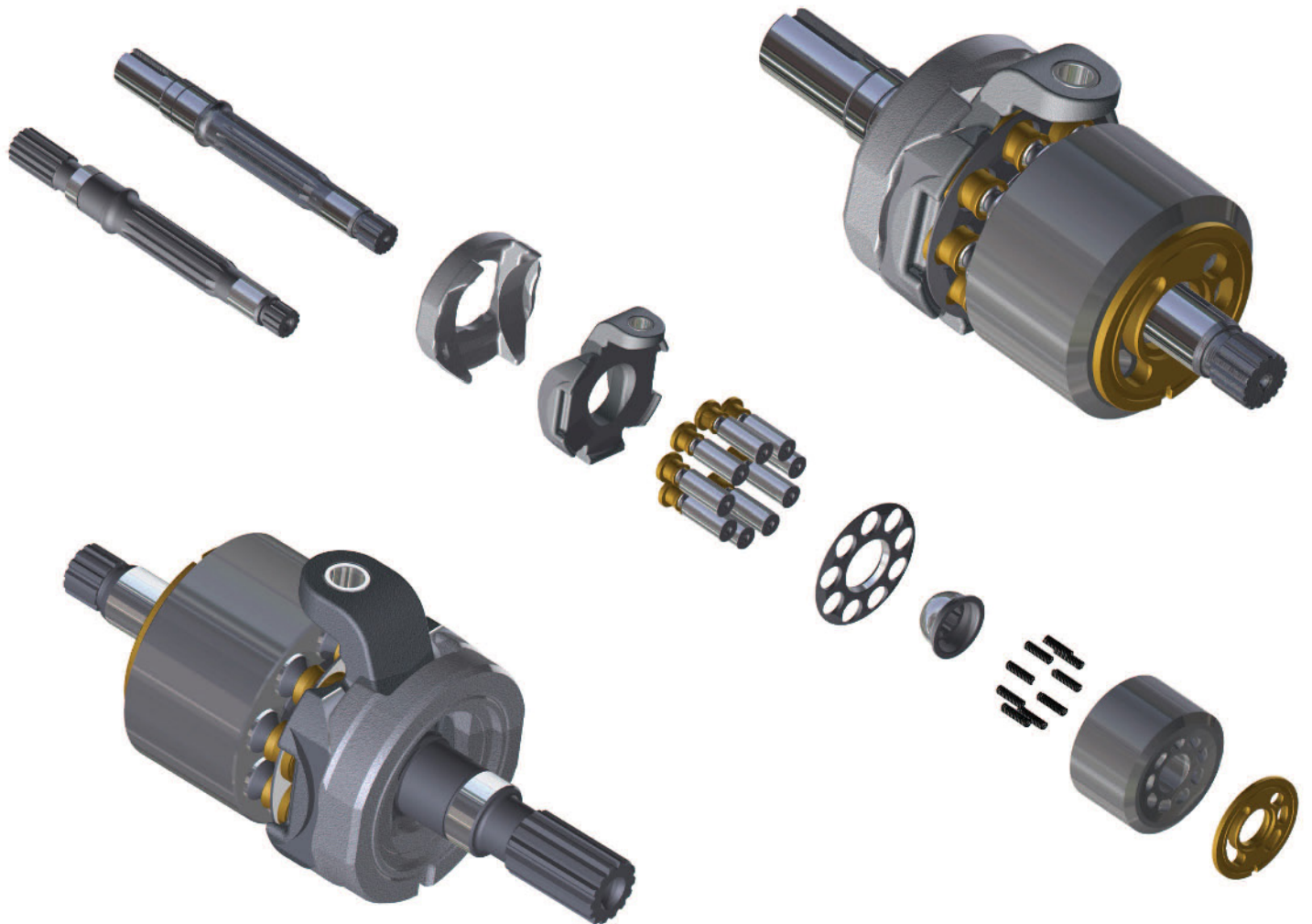
H3V63BDT/112BDT FOR SK100-3/5, 120-3/5, 200-3/5, 220-3/5

ITEM	DESCRIPTION	QUANTITY	REMARK
1-A	DRIVE SHAFT (R)	1	
1-B	DRIVE SHAFT (L)	1	
2	SPACE OF DRIVE SHAFT	2	
3	ROLLER BEARING	1	
4	SUPPORT	1	
5	SWASH PLATE	1	
6	SHOE PLATE	1	
7	PISTON SHOE	9	
8	SERVO PISTON	1	
9	TILTING PIN	1	
10	SET PLATE	1	
11	BALL GUIDE	1	
12	COIL SPRING	9	
13	CYLINDER BLOCK	1	
14	VALVE PLATE	1	
15	COUPLING	1	

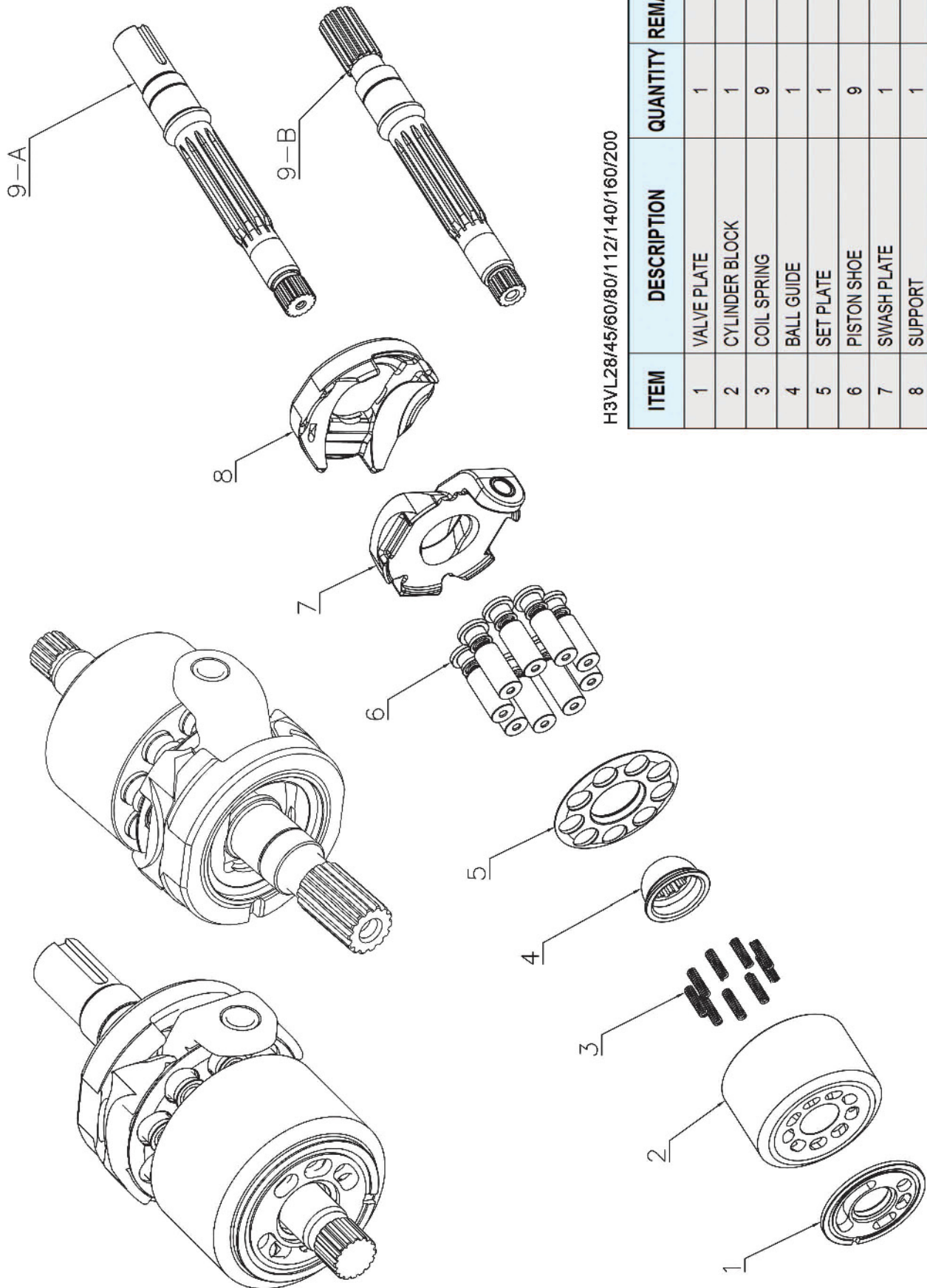
HAN DOK HYDRAULIC



H3VL SERIES



H3VL SEREIES



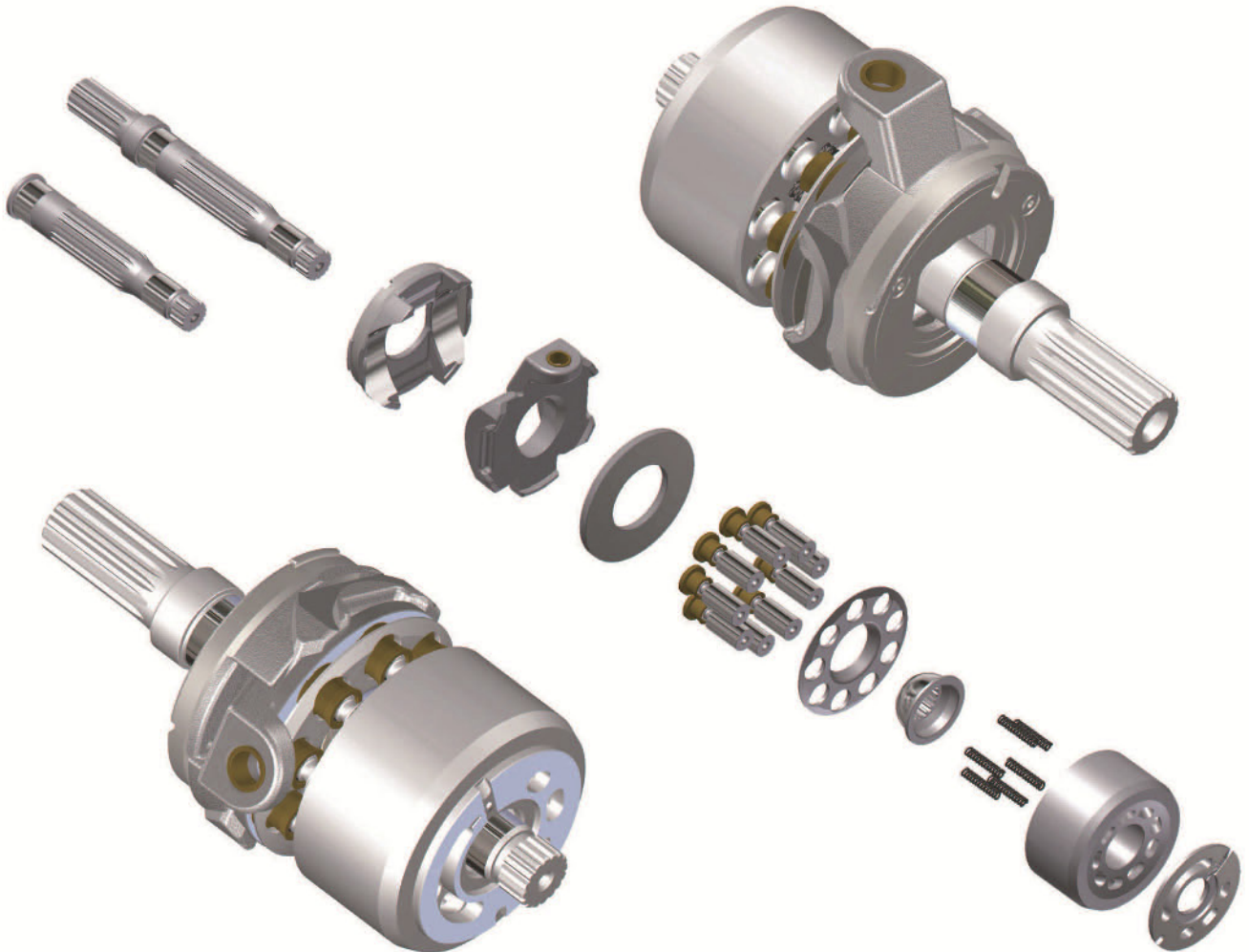
H3VL28/45/60/80/112/140/160/200

ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE	1	
2	CYLINDER BLOCK	1	
3	COIL SPRING	9	
4	BALL GUIDE	1	
5	SET PLATE	1	
6	PISTON SHOE	9	
7	SWASH PLATE	1	
8	SUPPORT	1	
9-A	DRIVE SHAFT (KEY TYPE)	1	ISO/SAE
9-B	DRIVE SHAFT (SPLINE TYPE)	1	

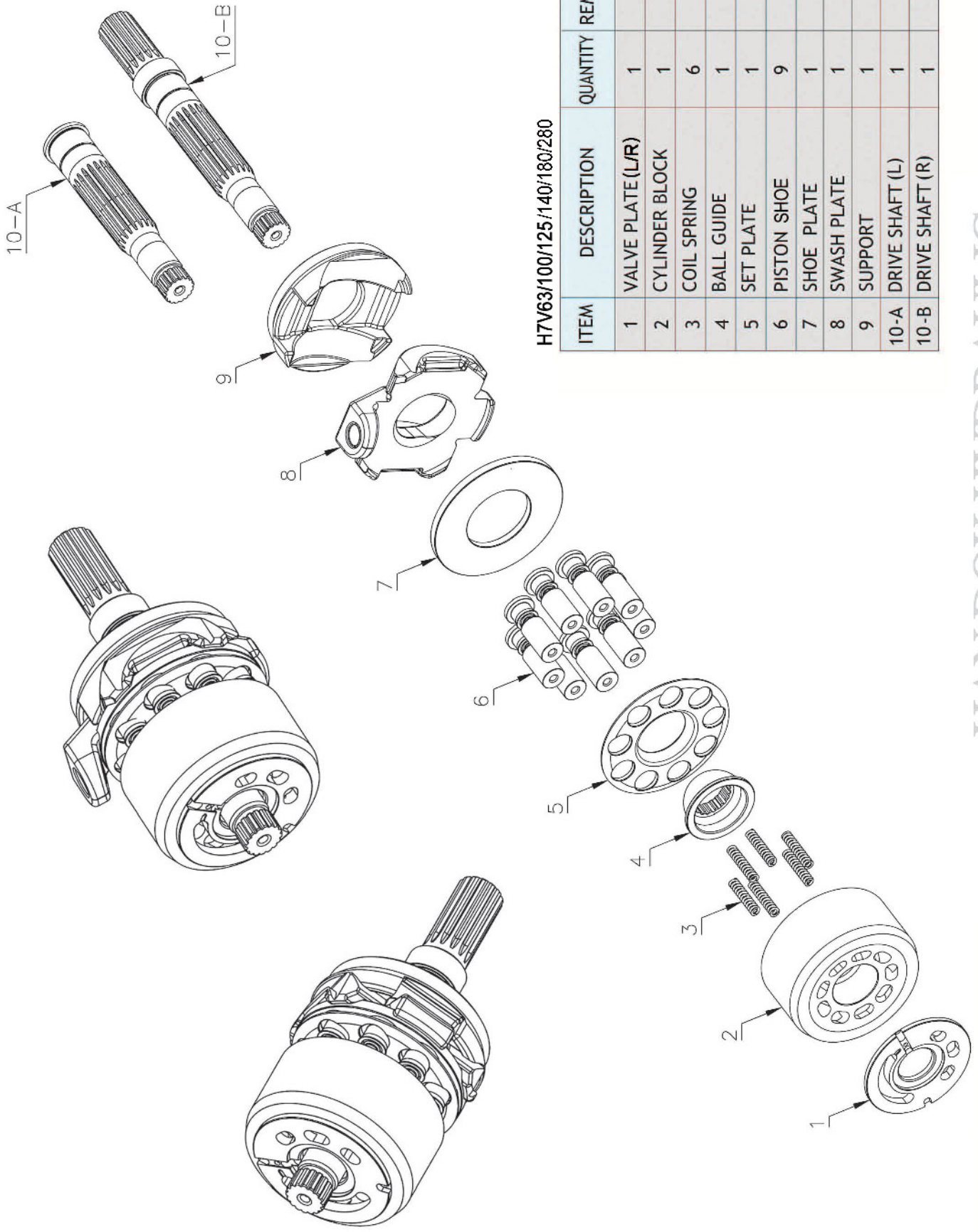
HAN DOK HYDRAULIC



H7V SERIES



H7V SERIES

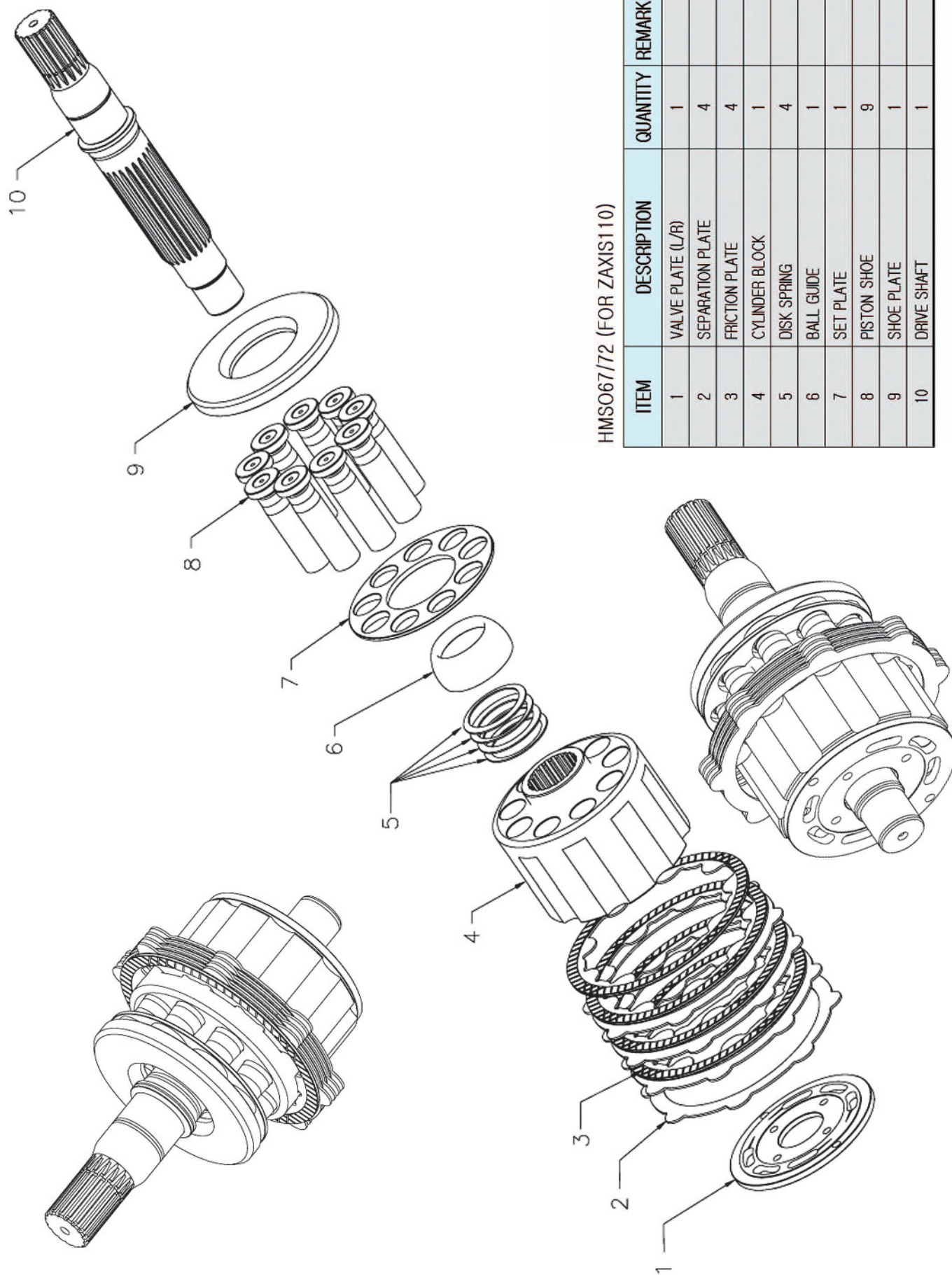


H7V63/100/125/140/180/280

ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE (L/R)	1	
2	CYLINDER BLOCK	1	
3	COIL SPRING	6	
4	BALL GUIDE	1	
5	SET PLATE	1	
6	PISTON SHOE	9	
7	SHOE PLATE	1	
8	SWASH PLATE	1	
9	SUPPORT	1	
10-A	DRIVE SHAFT (L)	1	
10-B	DRIVE SHAFT (R)	1	

HAN DOK HYDRAULIC

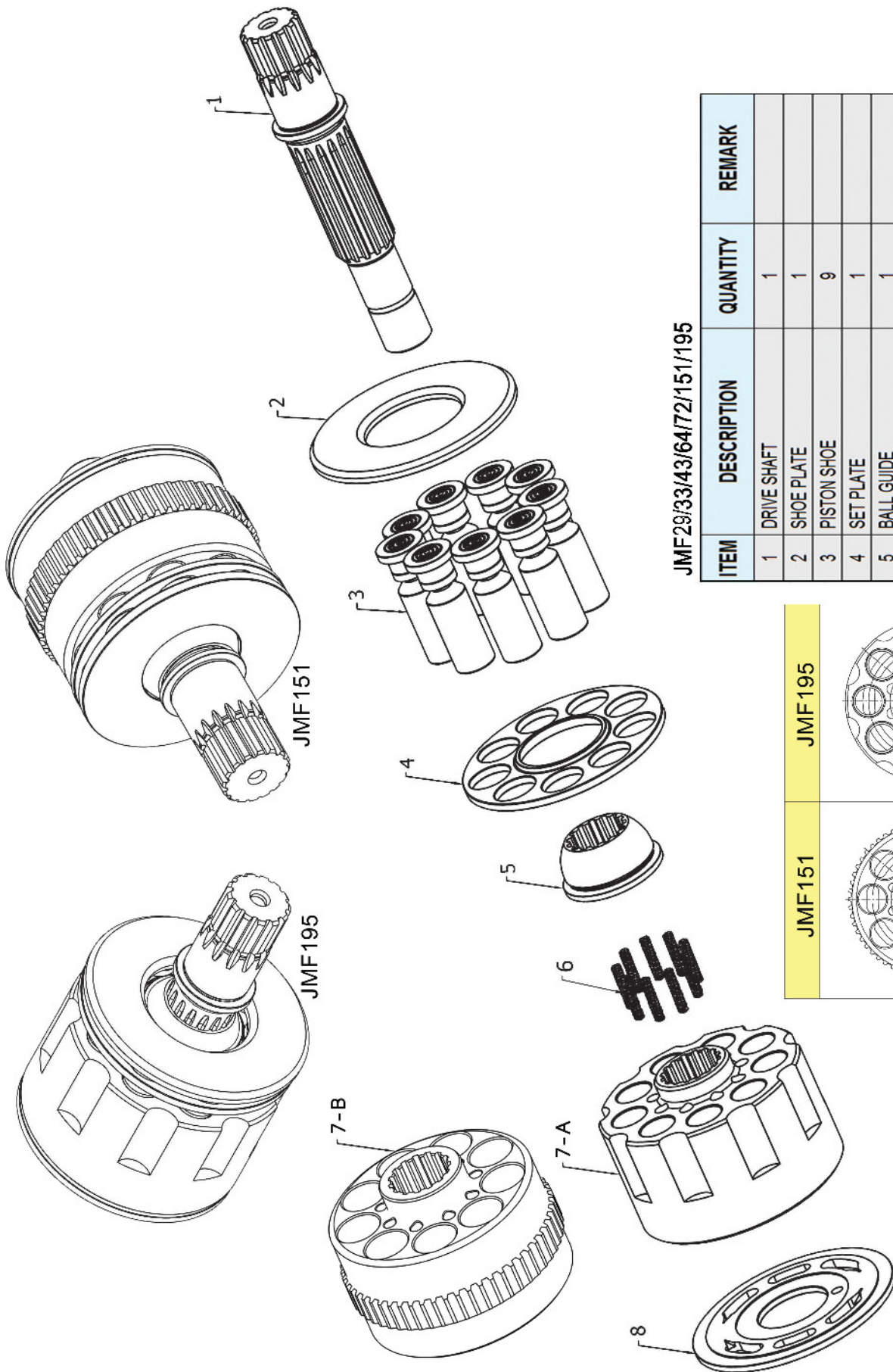
HMSO67/72(FOR ZAXIS110)



HMSO67/72 (FOR ZAXIS110)

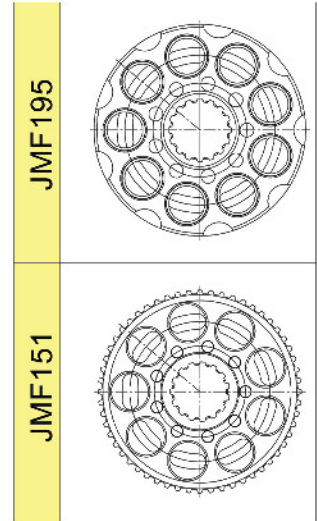
ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE (L/R)	1	
2	SEPARATION PLATE	4	
3	FRICTION PLATE	4	
4	CYLINDER BLOCK	1	
5	DISK SPRING	4	
6	BALL GUIDE	1	
7	SET PLATE	1	
8	PISTON SHOE	9	
9	SHOE PLATE	1	
10	DRIVE SHAFT	1	

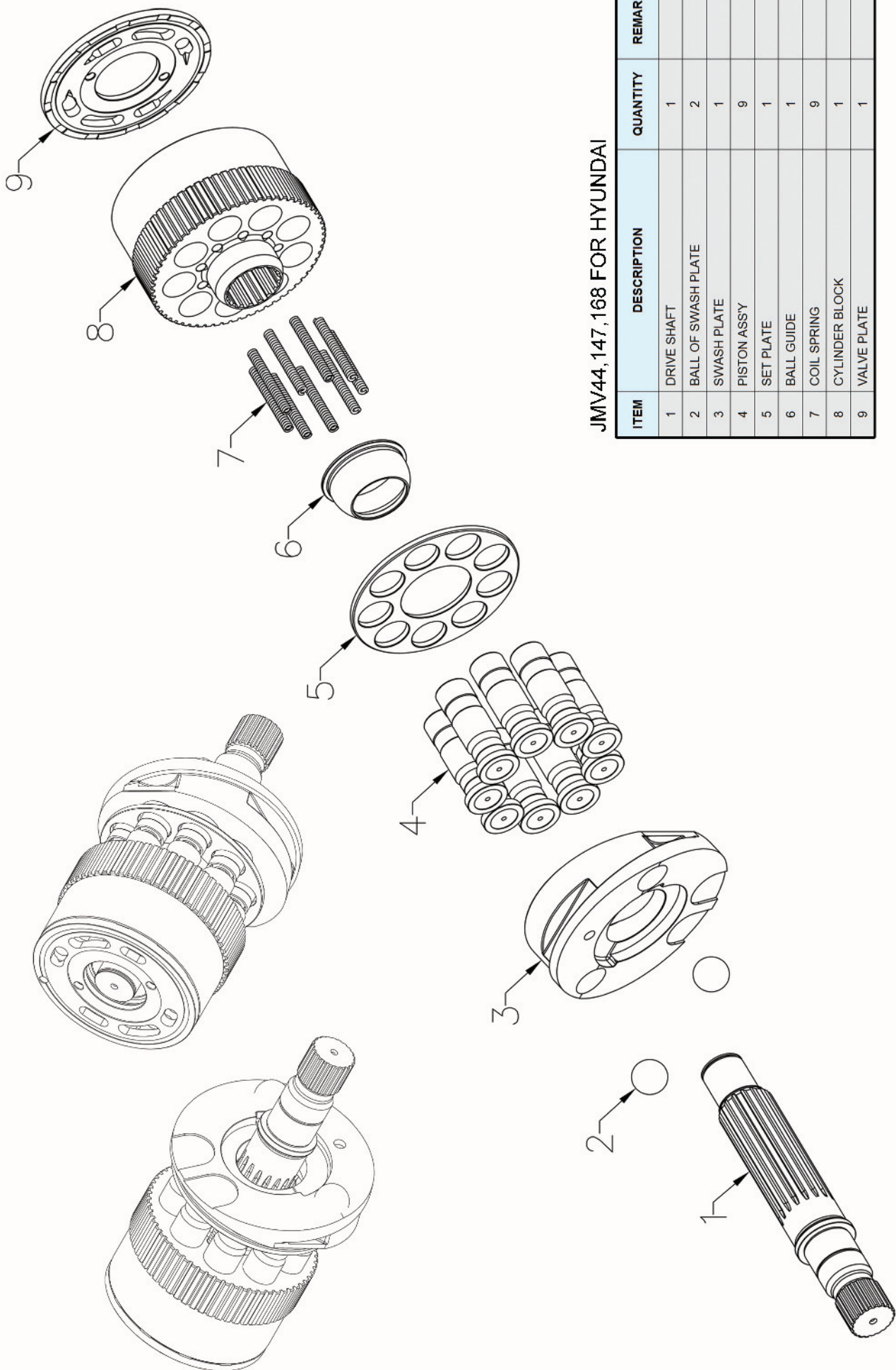
HANDOK HYDRAULIC



JMF29/33/43/64/72/151/195

ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	SHOE PLATE	1	
3	PISTON SHOE	9	
4	SET PLATE	1	
5	BALL GUIDE	1	
6	COIL SPRING	9	
7-A	CYLINDER BLOCK	1	JMF195
7-B		1	JMF151
8	VALVE PLATE	1	



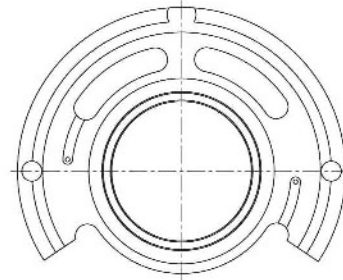
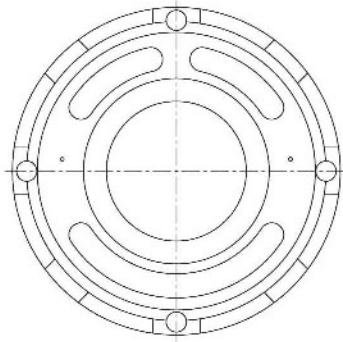


JMV44, 147, 168 FOR HYUNDAI

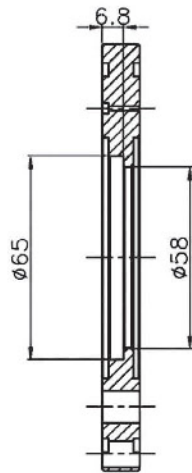
ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	BALL OF SWASH PLATE	2	
3	SWASH PLATE	1	
4	PISTON ASSY	9	
5	SET PLATE	1	
6	BALL GUIDE	1	
7	COIL SPRING	9	
8	CYLINDER BLOCK	1	
9	VALVE PLATE	1	



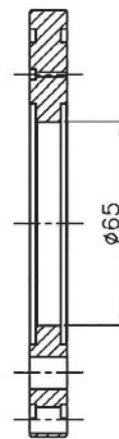
KVC SERIES



DP-TYPE

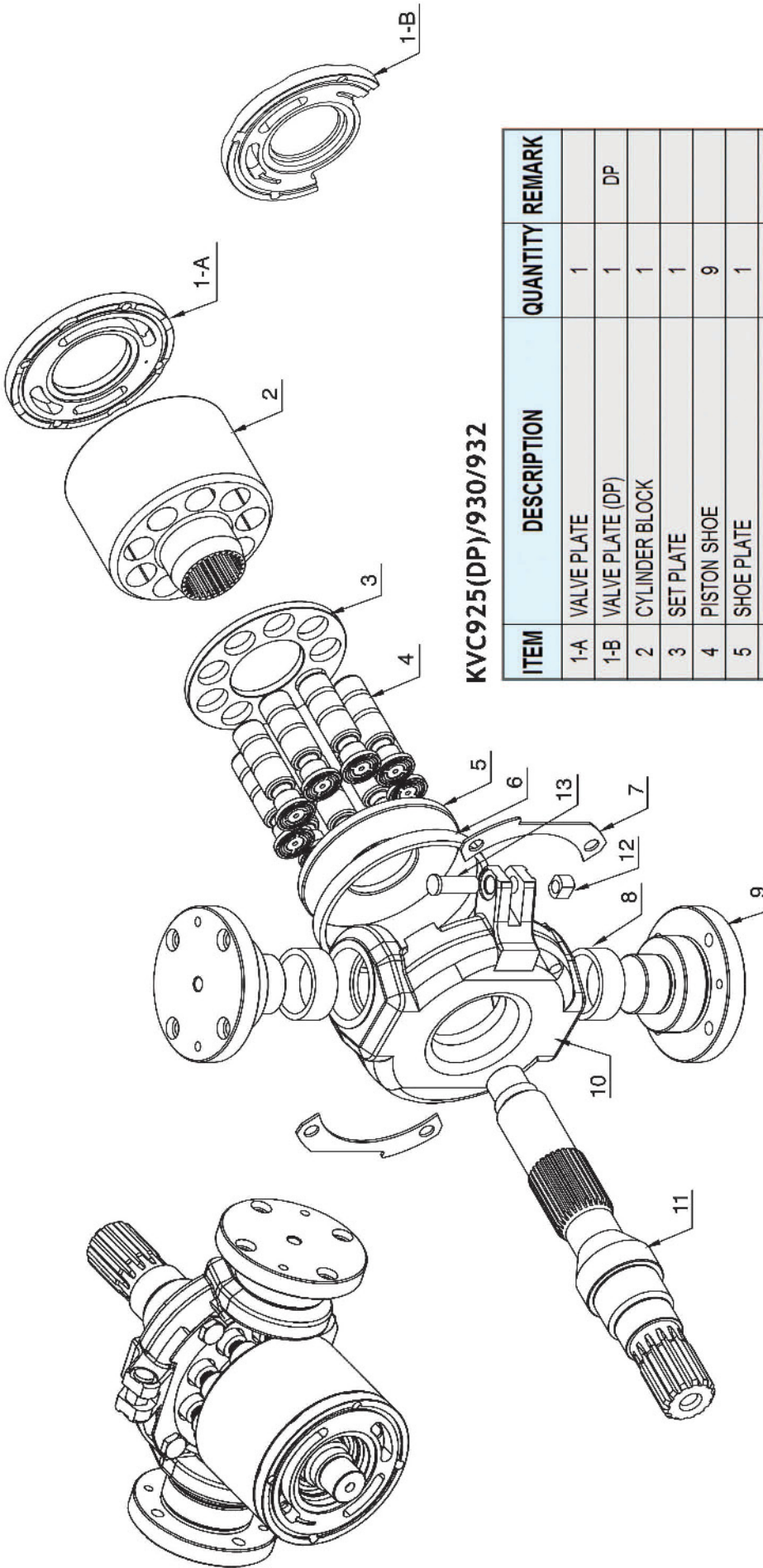


(UH07-3)



(UH07-5)

IT IS DIFFERENT SHAPE BETWEEN UH07-3 TYPE AND UH07-5 TYPE OF VALVE PLATE



KVC925(DP)/930/932

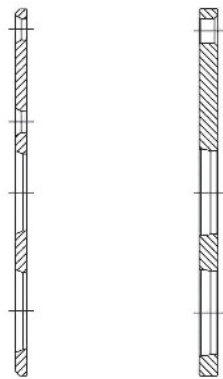
ITEM	DESCRIPTION	QUANTITY	REMARK
1-A	VALVE PLATE	1	
1-B	VALVE PLATE (DP)	1	DP
2	CYLINDER BLOCK	1	
3	SET PLATE	1	
4	PISTON SHOE	9	
5	SHOE PLATE	1	
6	GUIDE RING	1	KVC930/932
7	FIX PLATE	2	
8	AXLE BUSHING	2	
9	AXLE SHAFT	2	
10	SWASH PLATE	1	
11	DRIVE SHAFT	1	
12	GUIDE PIECE	1	KVC925
13	PIN OF SWASH PLATE	1	KVC925/932



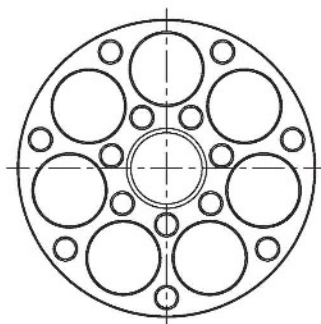
KMF, KPV SERIES



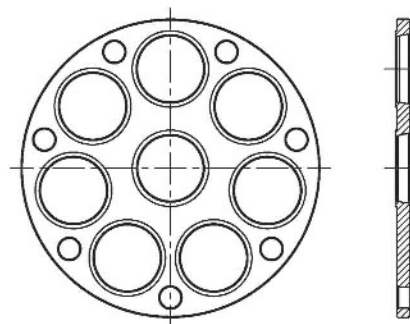
RETAINER PLATE



TAPER TYPE FILLET TYPE

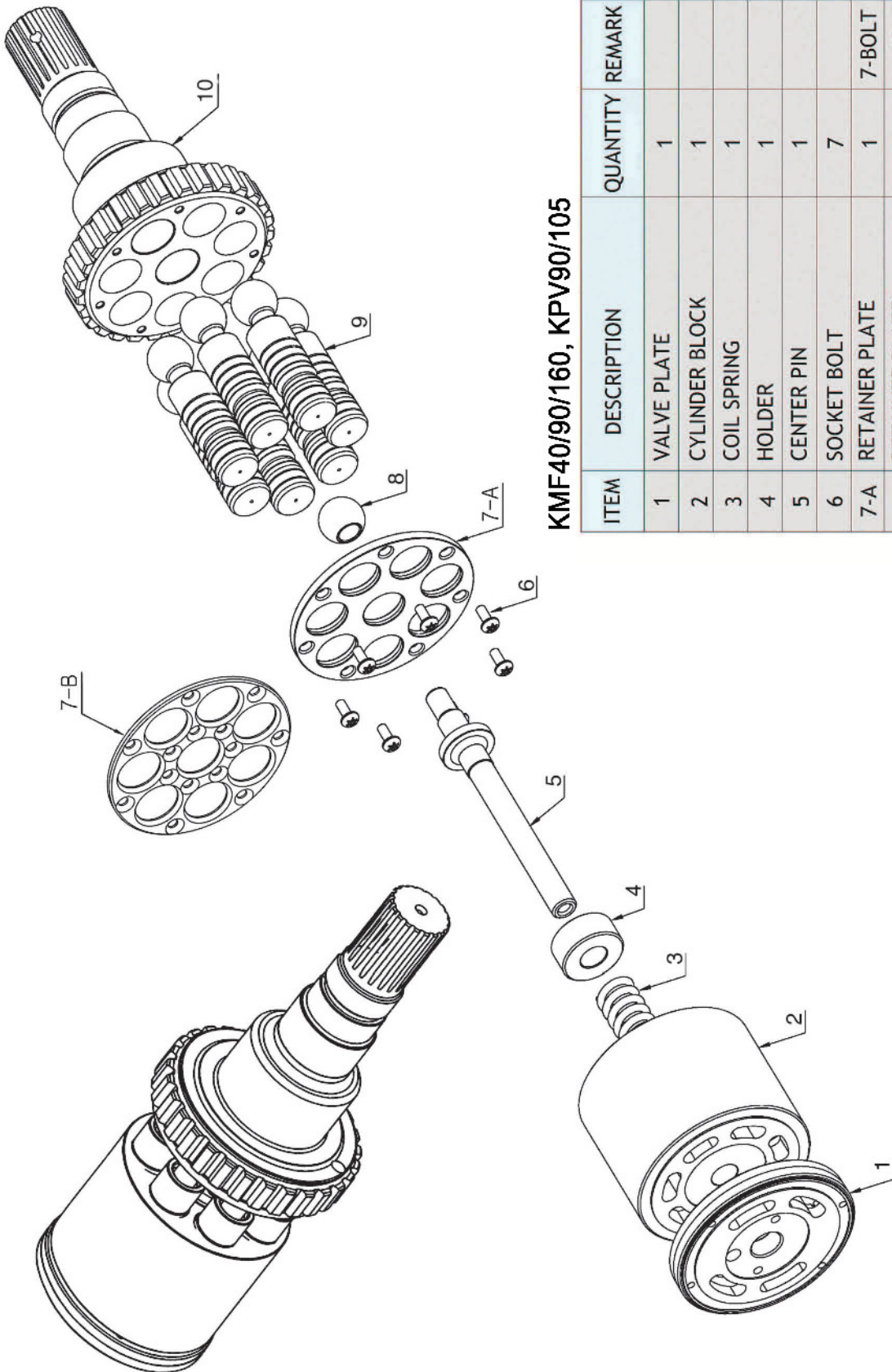


14-BOLT TYPE



7-BOLT TYPE

IT IS DIFFERENT SHAPE BETWEEN 7-BOLT TYPE AND 14-BOLT TYPE

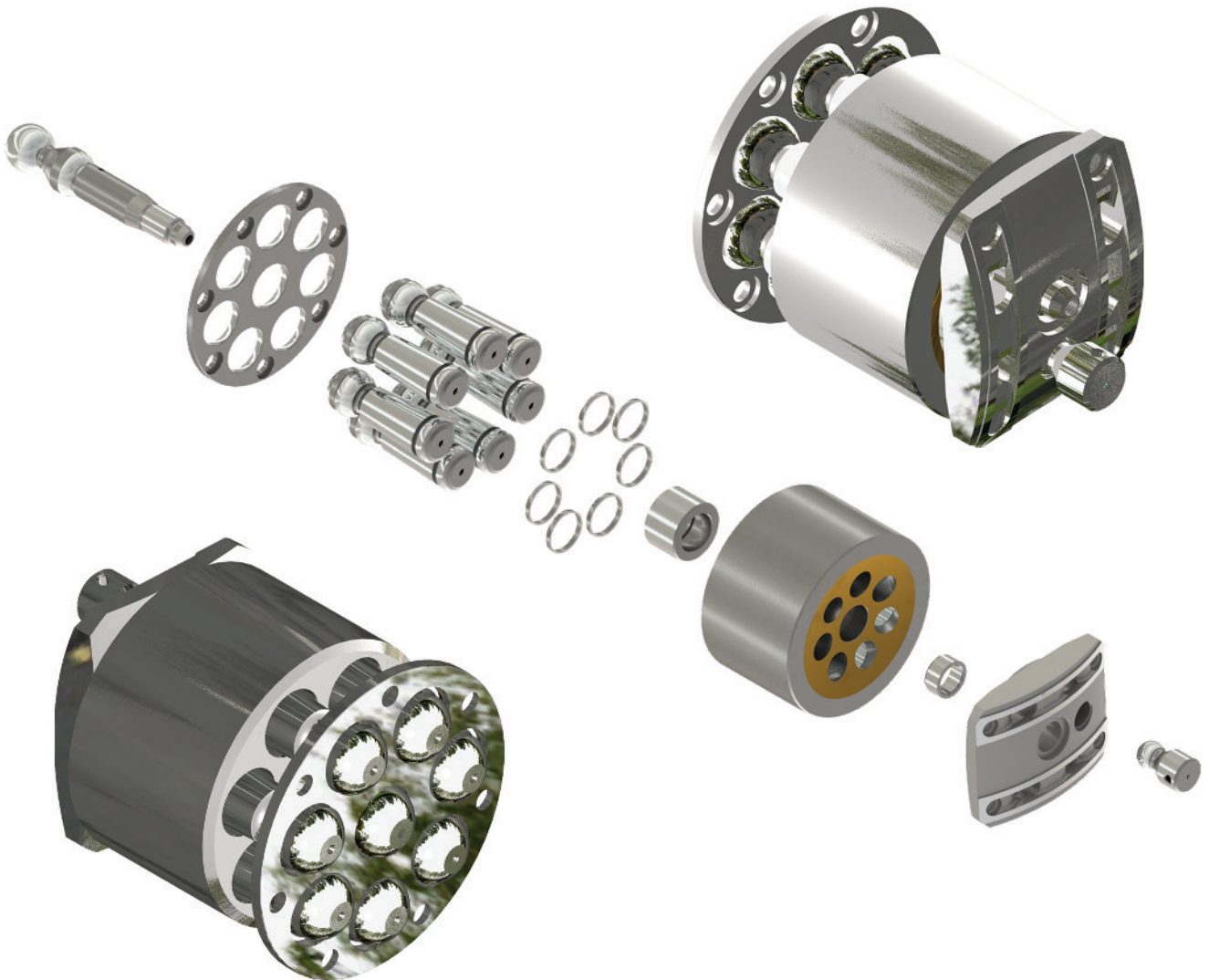
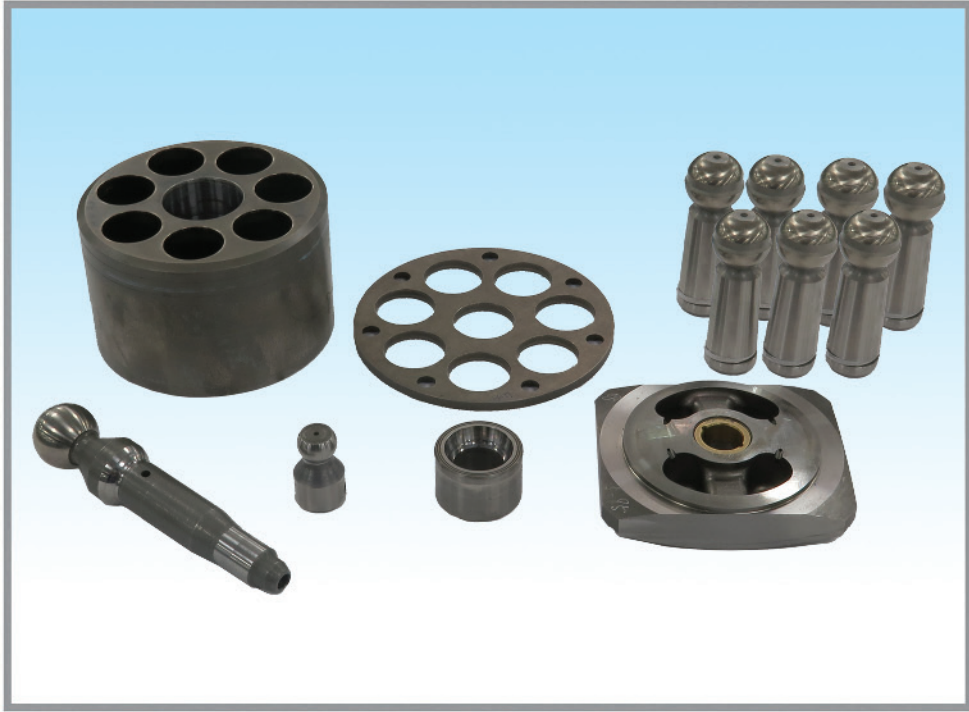


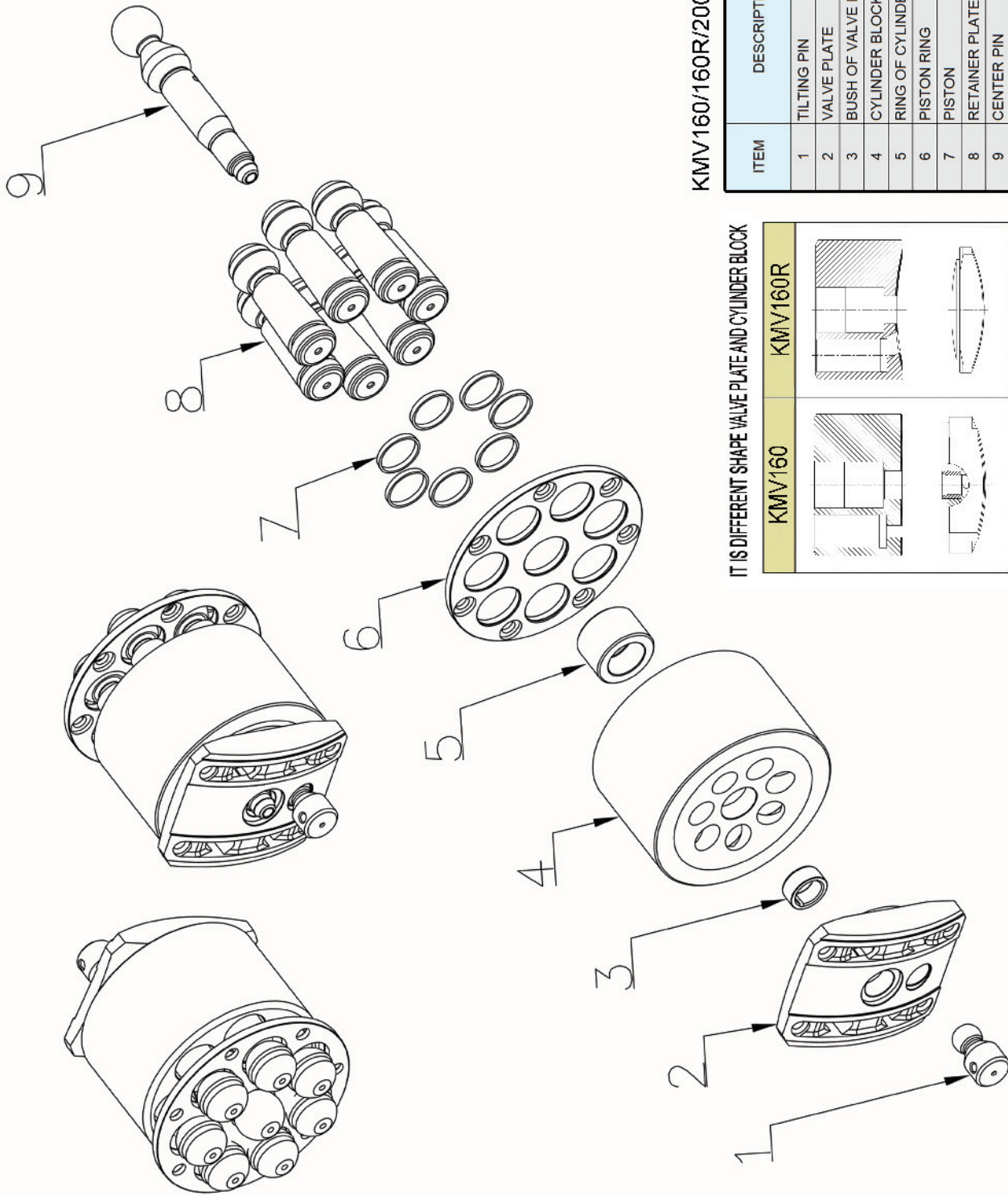
KMF40/90/160, KPV90/105

ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE	1	
2	CYLINDER BLOCK	1	
3	COIL SPRING	1	
4	HOLDER	1	
5	CENTER PIN	1	
6	SOCKET BOLT	7	
7-A	RETAINER PLATE	1	7-BOLT
7-B	RETAINER PLATE	1	14-BOLT
8	CENTER BALL	1	
9	PISTON	7	
10	DRIVE SHAFT	1	



KMV SEREIS

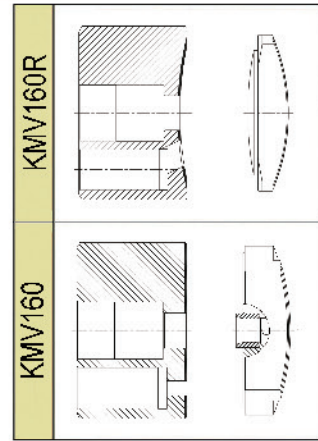




KMV160/160R/200

ITEM	DESCRIPTION	QUANTITY	REMARK
1	TILTING PIN	1	
2	VALVE PLATE	1	
3	BUSH OF VALVE PLATE	1	
4	CYLINDER BLOCK	1	
5	RING OF CYLINDER BLOCK	1	
6	PISTON RING	7	
7	PISTON	7	
8	RETAINER PLATE	1	
9	CENTER PIN	1	

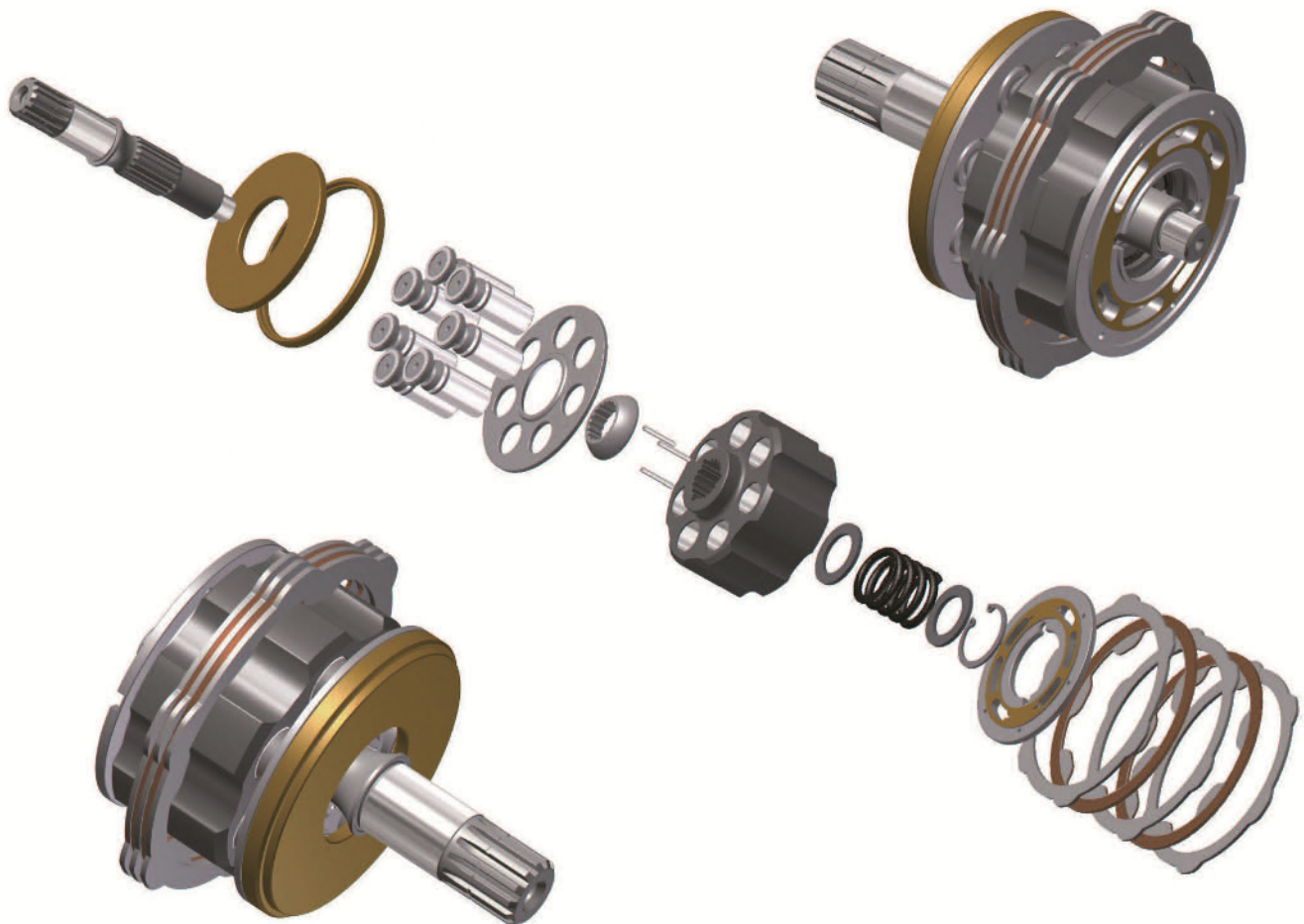
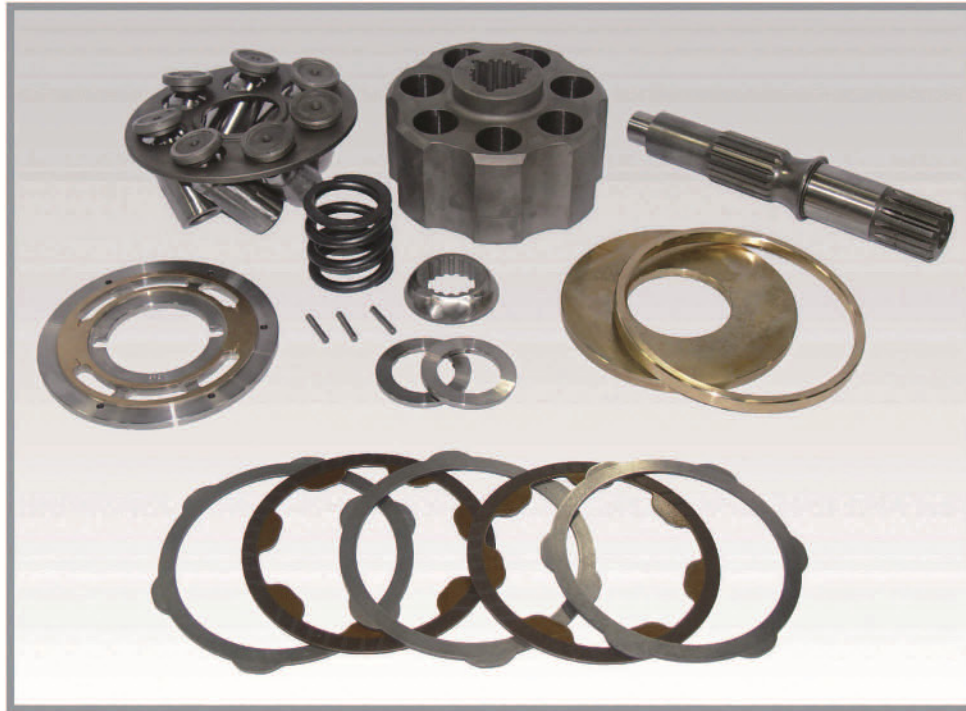
IT IS DIFFERENT SHAPE VALVE PLATE AND CYLINDER BLOCK

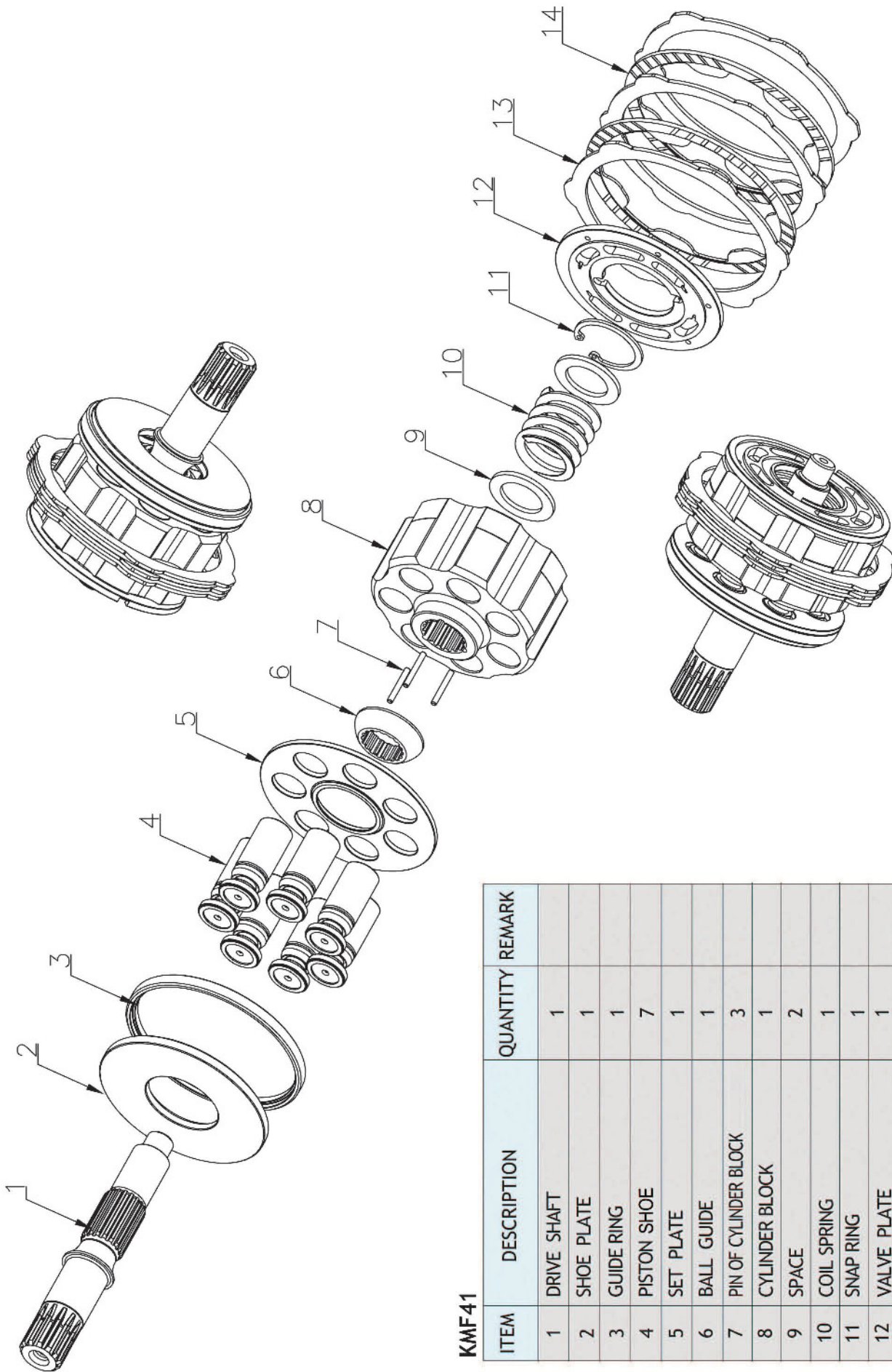


HAN DOK HYDRAULIC



KMF41





KMF41

ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	SHOE PLATE	1	
3	GUIDE RING	1	
4	PISTON SHOE	7	
5	SET PLATE	1	
6	BALL GUIDE	1	
7	PIN OF CYLINDER BLOCK	3	
8	CYLINDER BLOCK	1	
9	SPACE	2	
10	COIL SPRING	1	
11	SNAP RING	1	
12	VALVE PLATE	1	
13	SEPARATION PLATE	3	
14	FRICITION PLATE	2	



KMF125/230 FOR KOMATSU



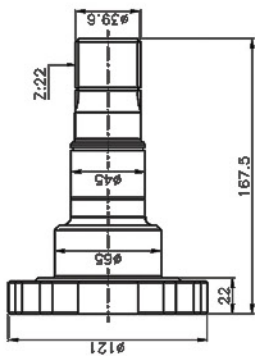
KMF125			
ONE RING TYPE			
TWO RING TYPE			

IT IS DIFFERENT SHAPE BETWEEN ONE RING TYPE AND TWO RING TYPE OF PISTON

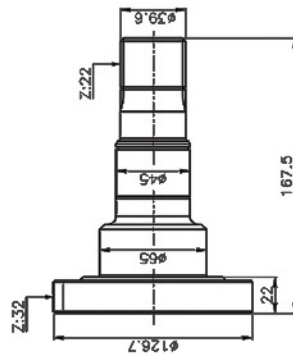
KMF125/230 FOR KOMATSU



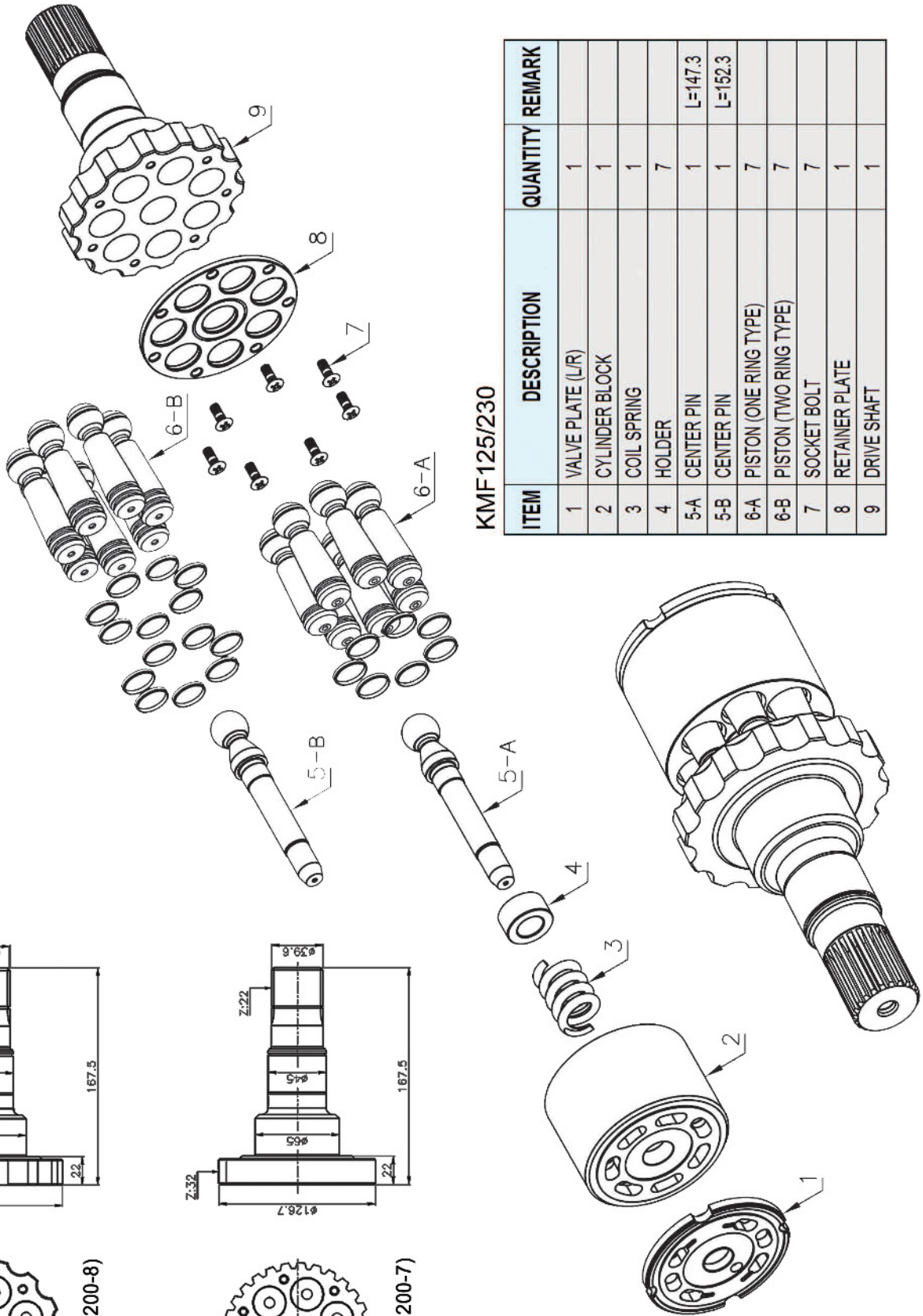
IT IS DIFFERENT SHAPE BETWEEN KMF125 DRIVE SHAFT



KMF125(PC200-8)



KMF125(PC200-7)

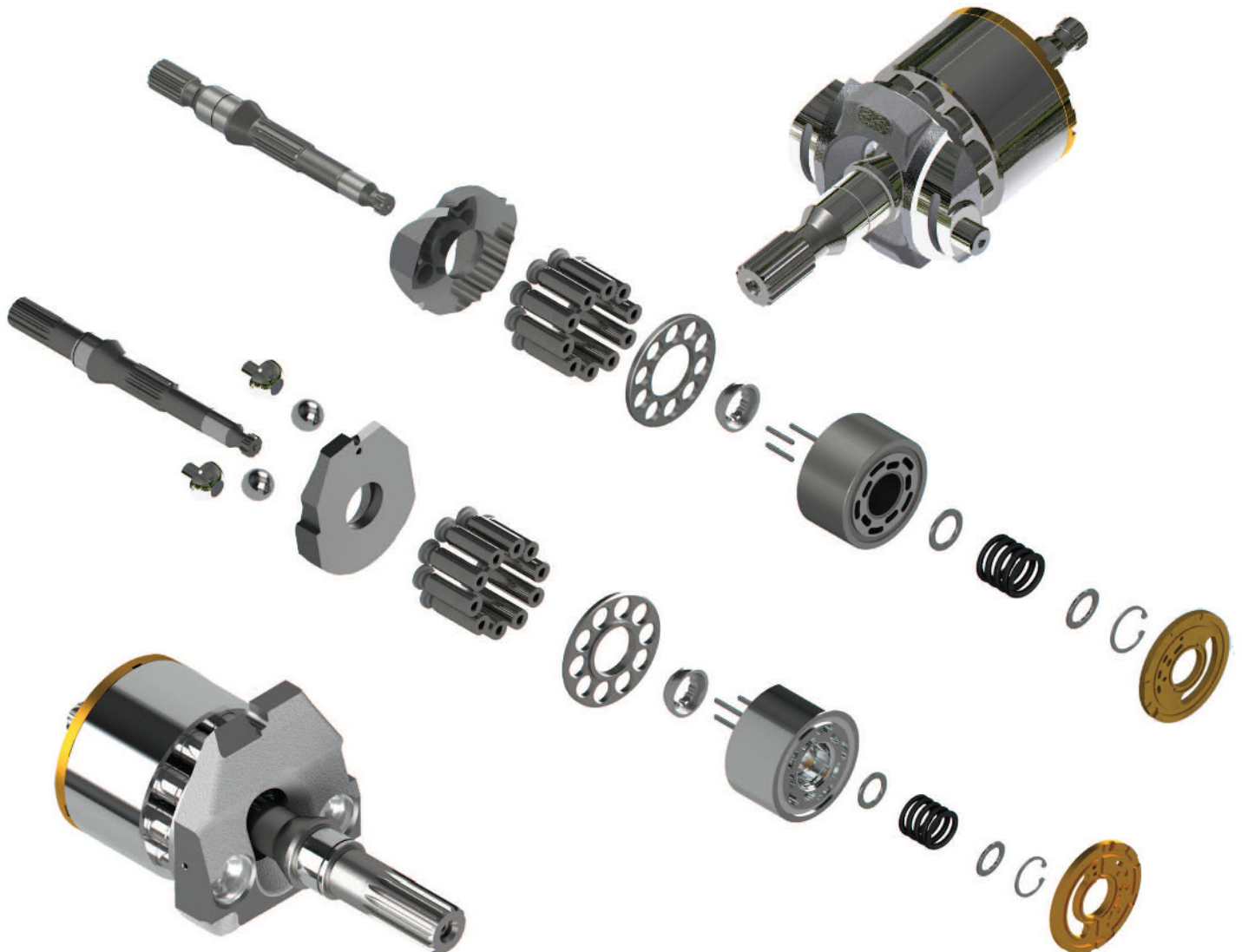


ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE (L/R)	1	
2	CYLINDER BLOCK	1	
3	COIL SPRING	1	
4	HOLDER	7	
5-A	CENTER PIN	1	L=147.3
5-B	CENTER PIN	1	L=152.3
6-A	PISTON (ONE RING TYPE)	7	
6-B	PISTON (TWO RING TYPE)	7	
7	SOCKET BOLT	7	
8	RETAINER PLATE	1	
9	DRIVE SHAFT	1	

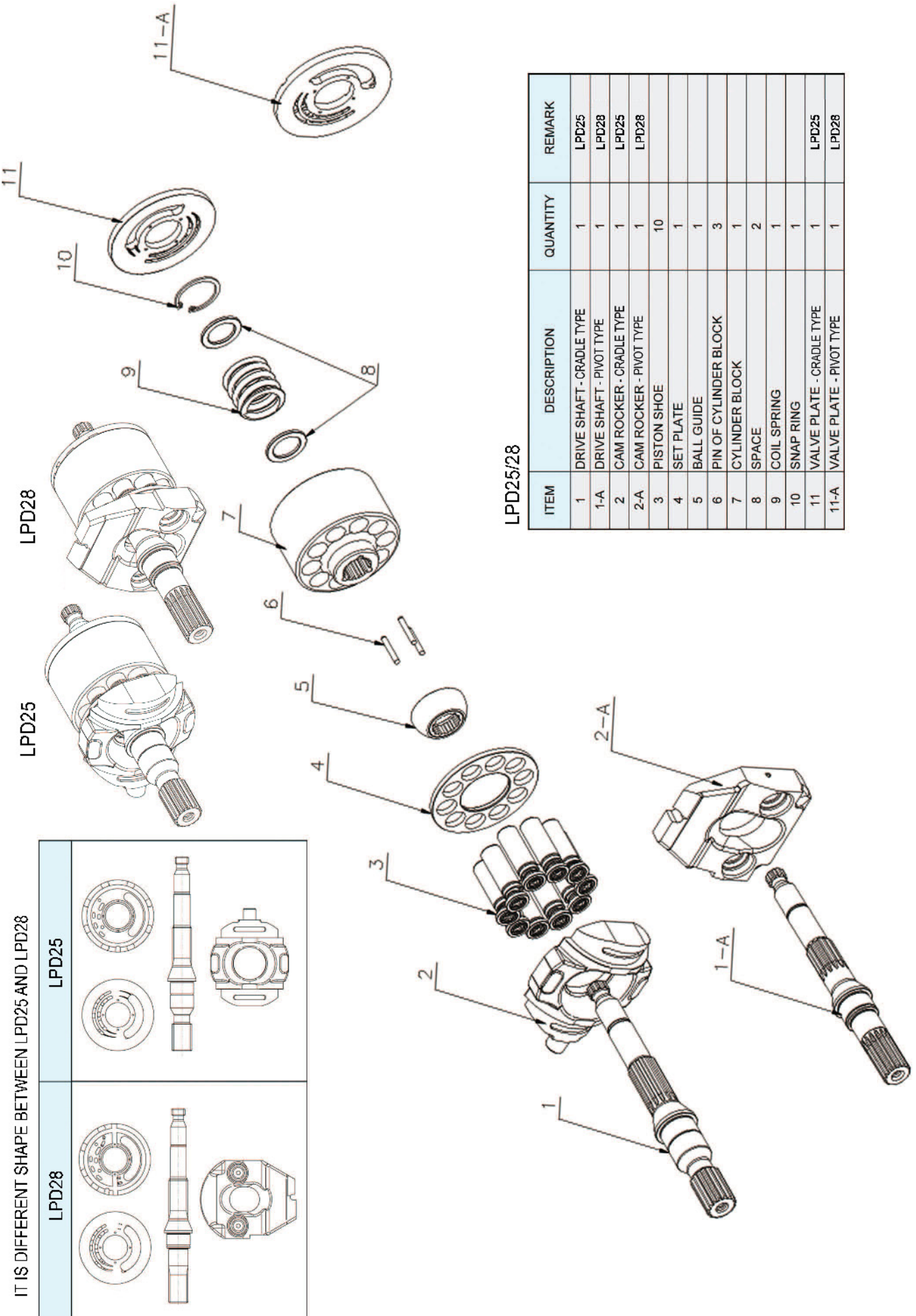
HAN DOK HYDRAULIC



LPD25/28 FOR KOMATSU



LPD25/28 FOR KOMATSU



LPD25/28

ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT - CRADLE TYPE	1	LPD25
1-A	DRIVE SHAFT - PIVOT TYPE	1	LPD28
2	CAM ROCKER - CRADLE TYPE	1	LPD25
2-A	CAM ROCKER - PIVOT TYPE	1	LPD28
3	PISTON SHOE	10	
4	SET PLATE	1	
5	BALL GUIDE	1	
6	PIN OF CYLINDER BLOCK	3	
7	CYLINDER BLOCK	1	
8	SPACE	2	
9	COIL SPRING	1	
10	SNAP RING	1	
11	VALVE PLATE - CRADLE TYPE	1	LPD25
11-A	VALVE PLATE - PIVOT TYPE	1	LPD28

IT IS DIFFERENT SHAPE BETWEEN LPD25 AND LPD28

LPD28	LPD25

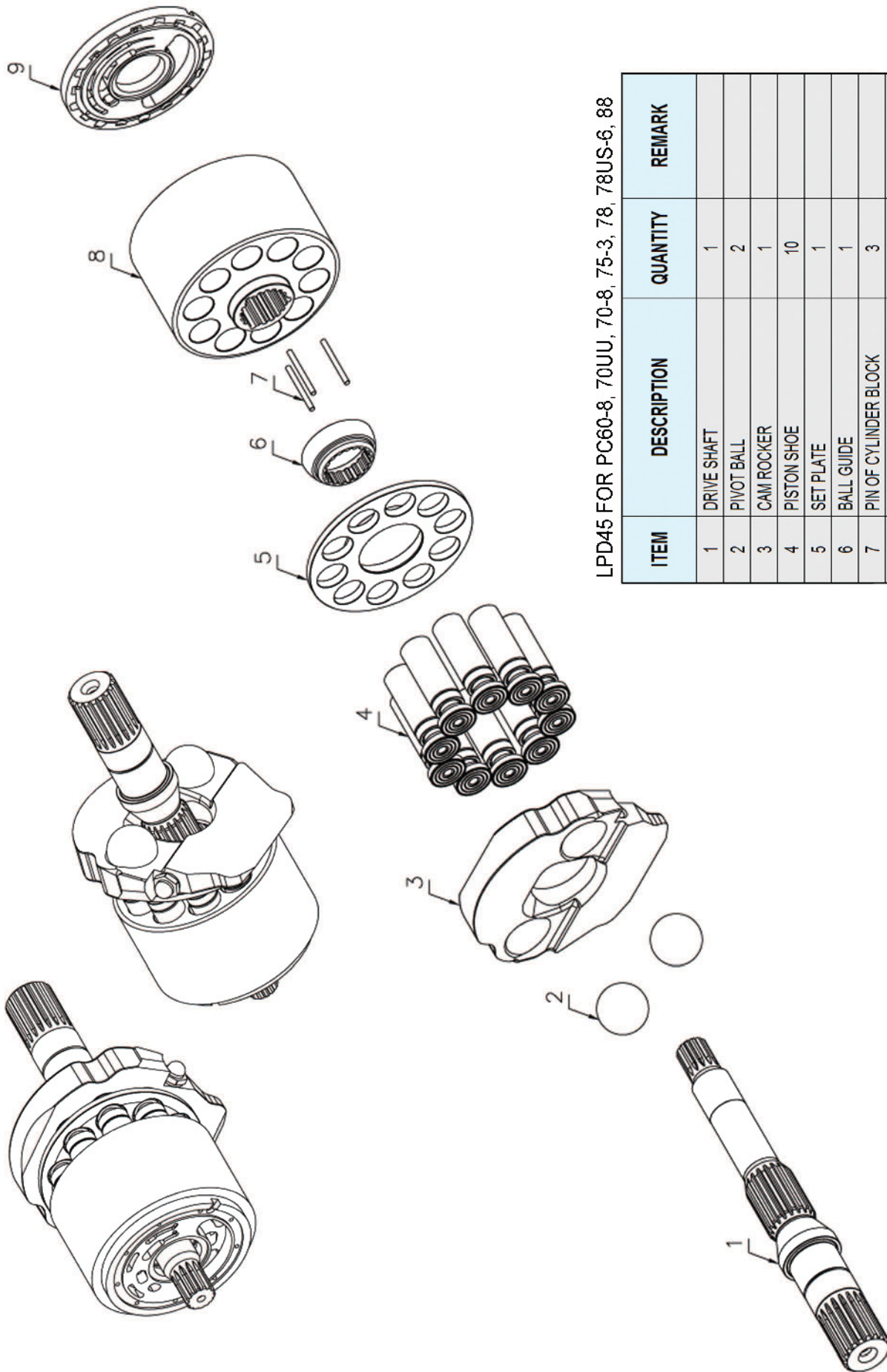
HAN DOK HYDRAULIC



LPD45(PC78) FOR KOMATSU



LPD45(PC78) FOR KOMATSU



LPD45 FOR PC60-8, 70UU, 70-8, 75-3, 78, 78US-6, 88

ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	PIVOT BALL	2	
3	CAM ROCKER	1	
4	PISTON SHOE	10	
5	SET PLATE	1	
6	BALL GUIDE	1	
7	PIN OF CYLINDER BLOCK	3	
8	CYLINDER BLOCK	1	
9	VALVE PLATE	1	

HAN DOK HYDRAULIC



LPV28/30/45 FOR KOMATSU



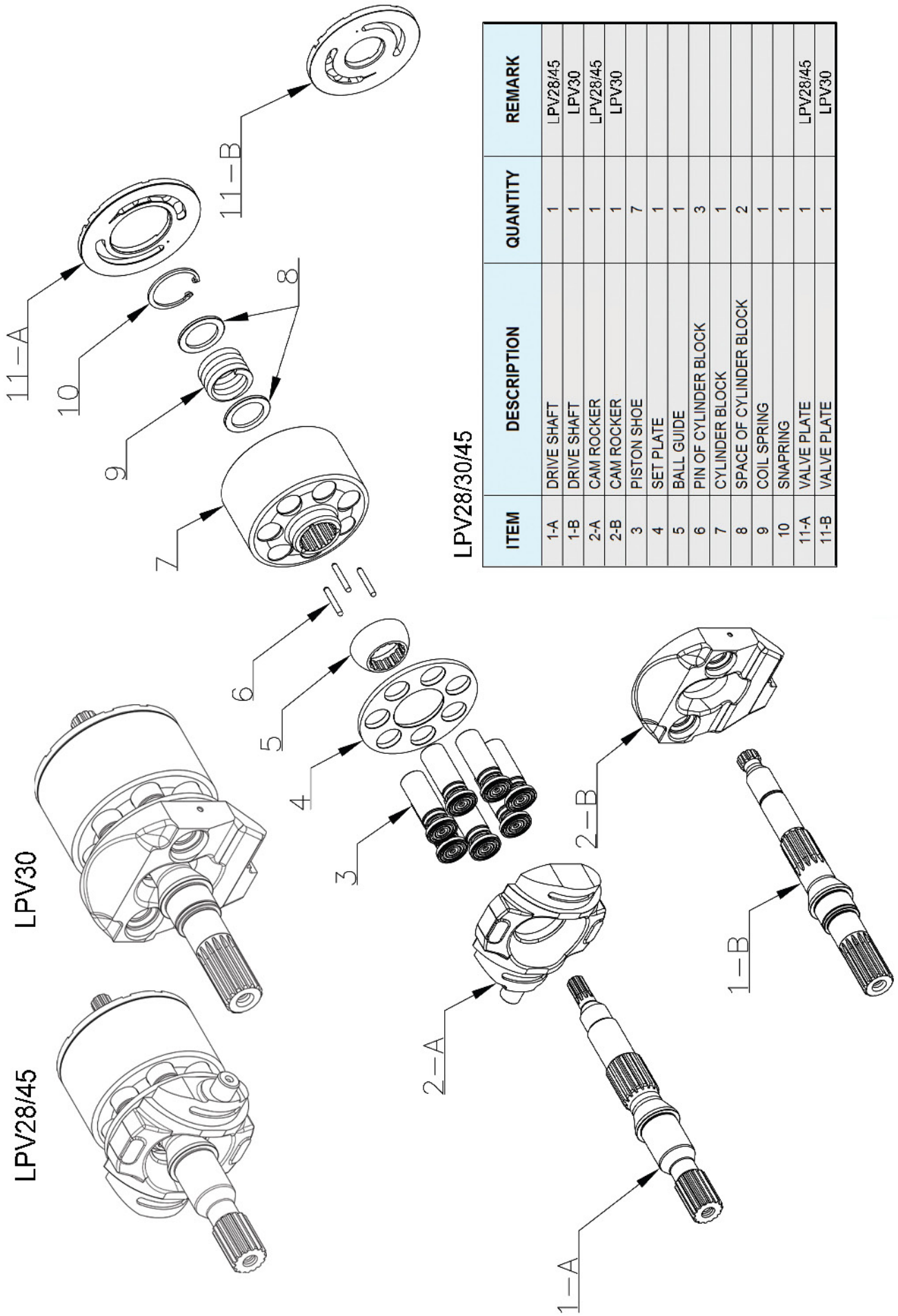
LPV28/30/45 FOR KOMATSU



IT IS DIFFERENT SHAPE BETWEEN LPV28/45 AND LPV30

LPV28/45

LPV30



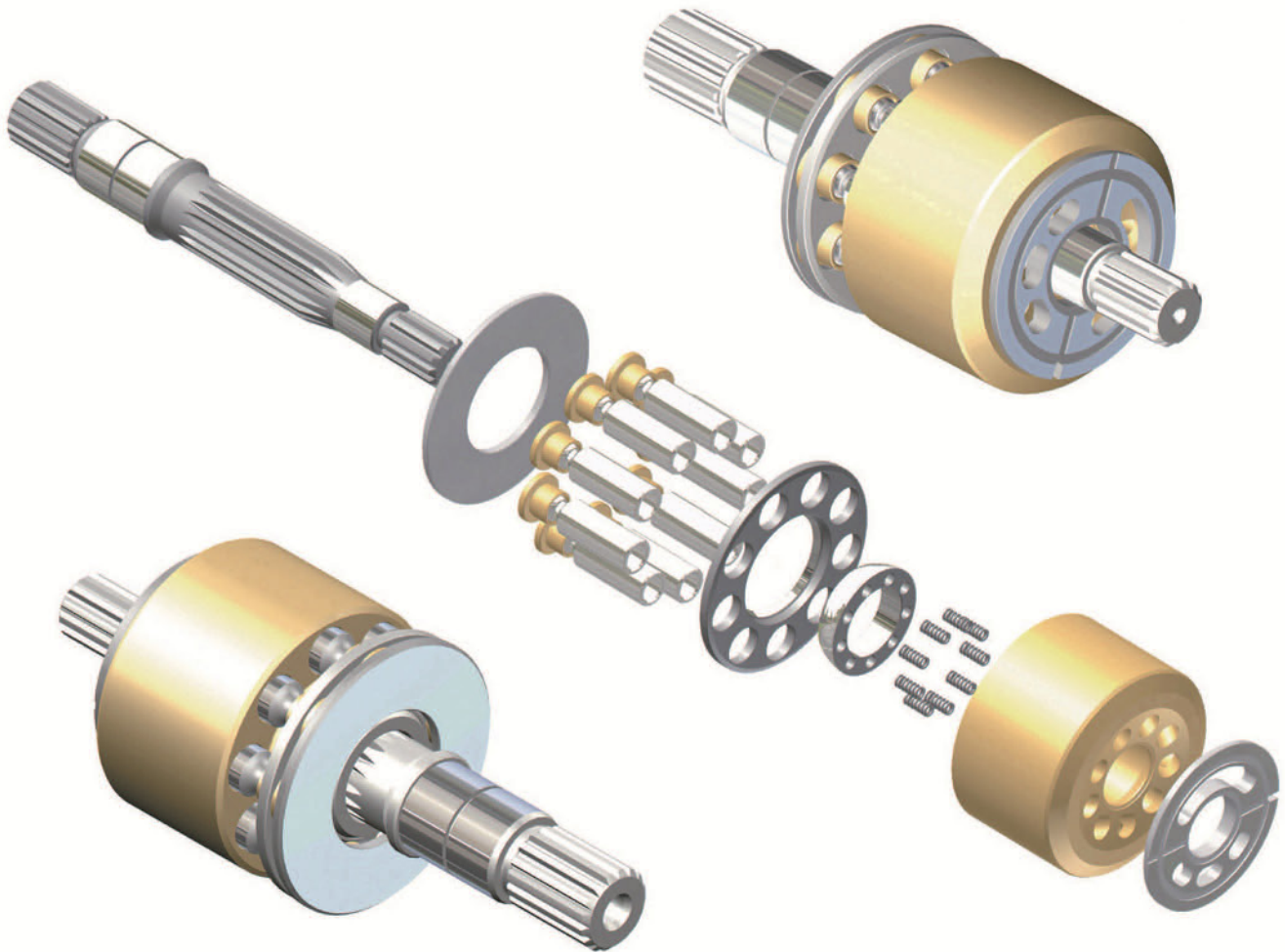
LPV28/30/45

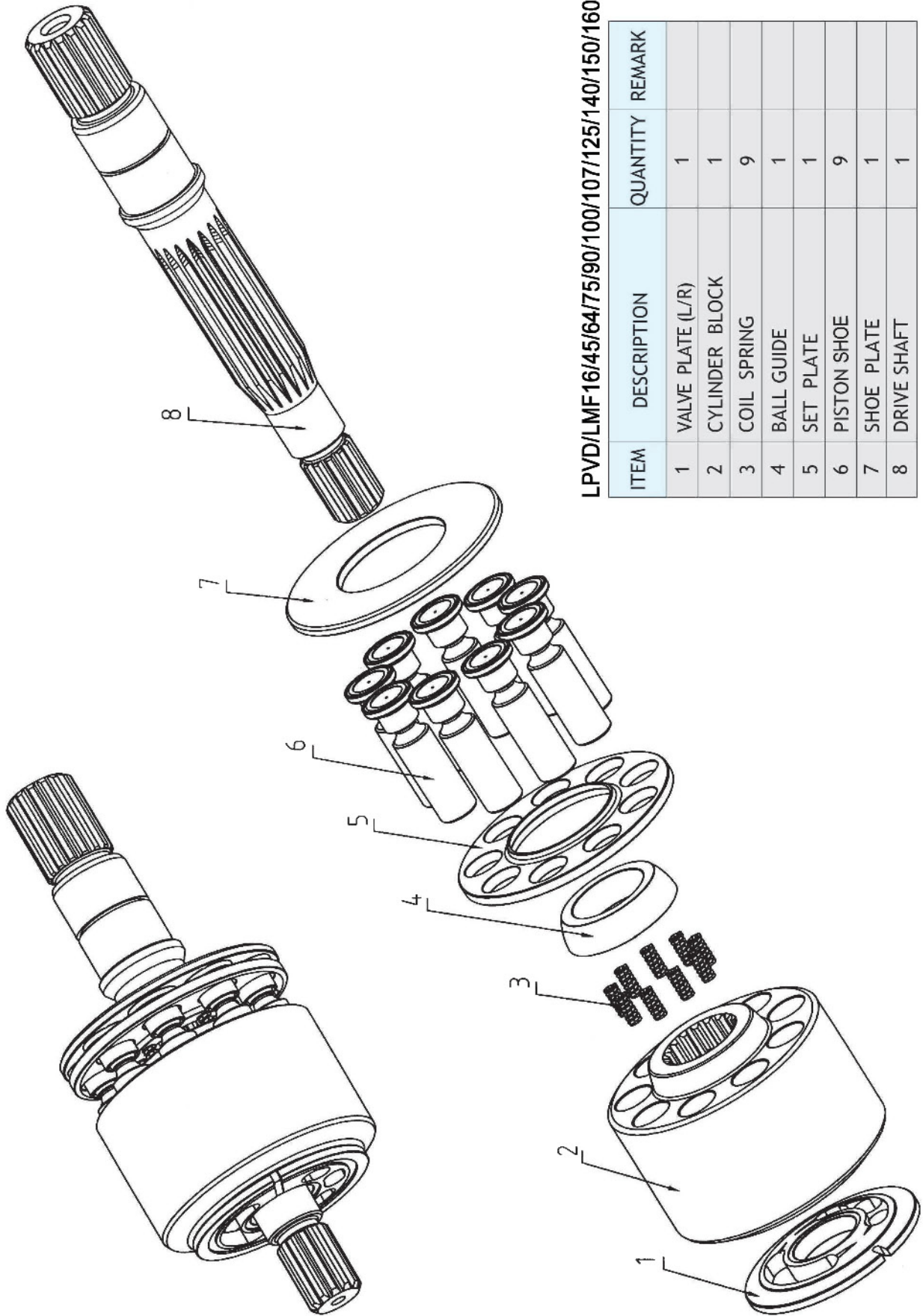
ITEM	DESCRIPTION	QUANTITY	REMARK
1-A	DRIVE SHAFT	1	LPV28/45
1-B	DRIVE SHAFT	1	LPV30
2-A	CAM ROCKER	1	LPV28/45
2-B	CAM ROCKER	1	LPV30
3	PISTON SHOE	7	
4	SET PLATE	1	
5	BALL GUIDE	1	
6	PIN OF CYLINDER BLOCK	3	
7	CYLINDER BLOCK	1	
8	SPACE OF CYLINDER BLOCK	2	
9	COIL SPRING	1	
10	SNAPRING	1	
11-A	VALVE PLATE	1	LPV28/45
11-B	VALVE PLATE	1	LPV30

HAN DOK HYDRAULIC



LPVD/LMF SERIES



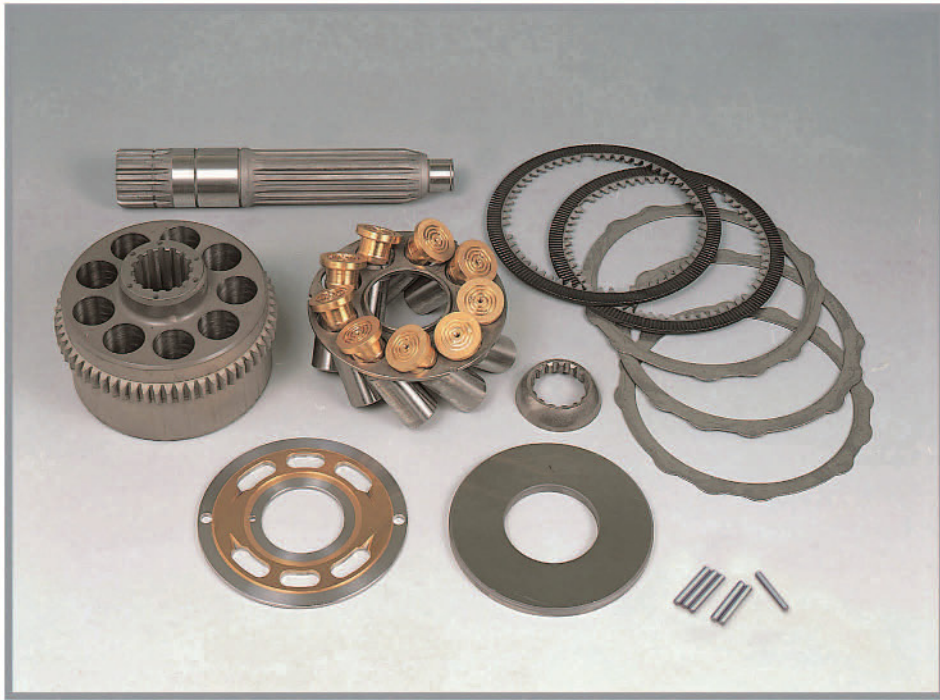


LPVD/LMF16/45/64/75/90/100/107/125/140/150/160/165

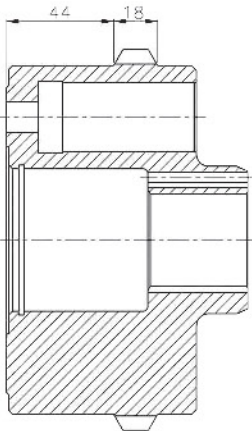
ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE (L/R)	1	
2	CYLINDER BLOCK	1	
3	COIL SPRING	9	
4	BALL GUIDE	1	
5	SET PLATE	1	
6	PISTON SHOE	9	
7	SHOE PLATE	1	
8	DRIVE SHAFT	1	



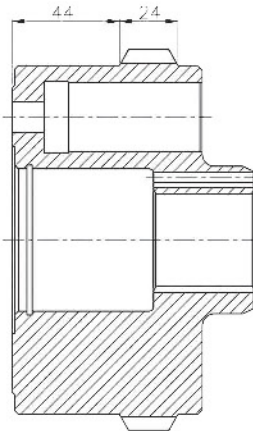
M2X SERIES



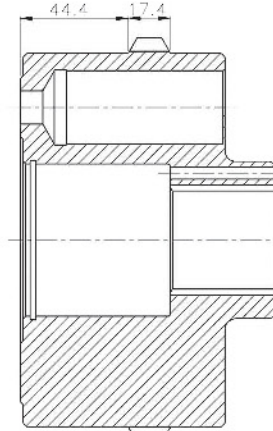
IT IS DIFFERENT SHAPE BETWEEN
M2X170&210 AND M2X170&210(CAT TYPE) PARTS



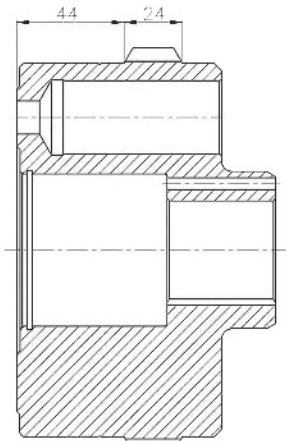
M2X170



M2X170 (CAT TYPE)



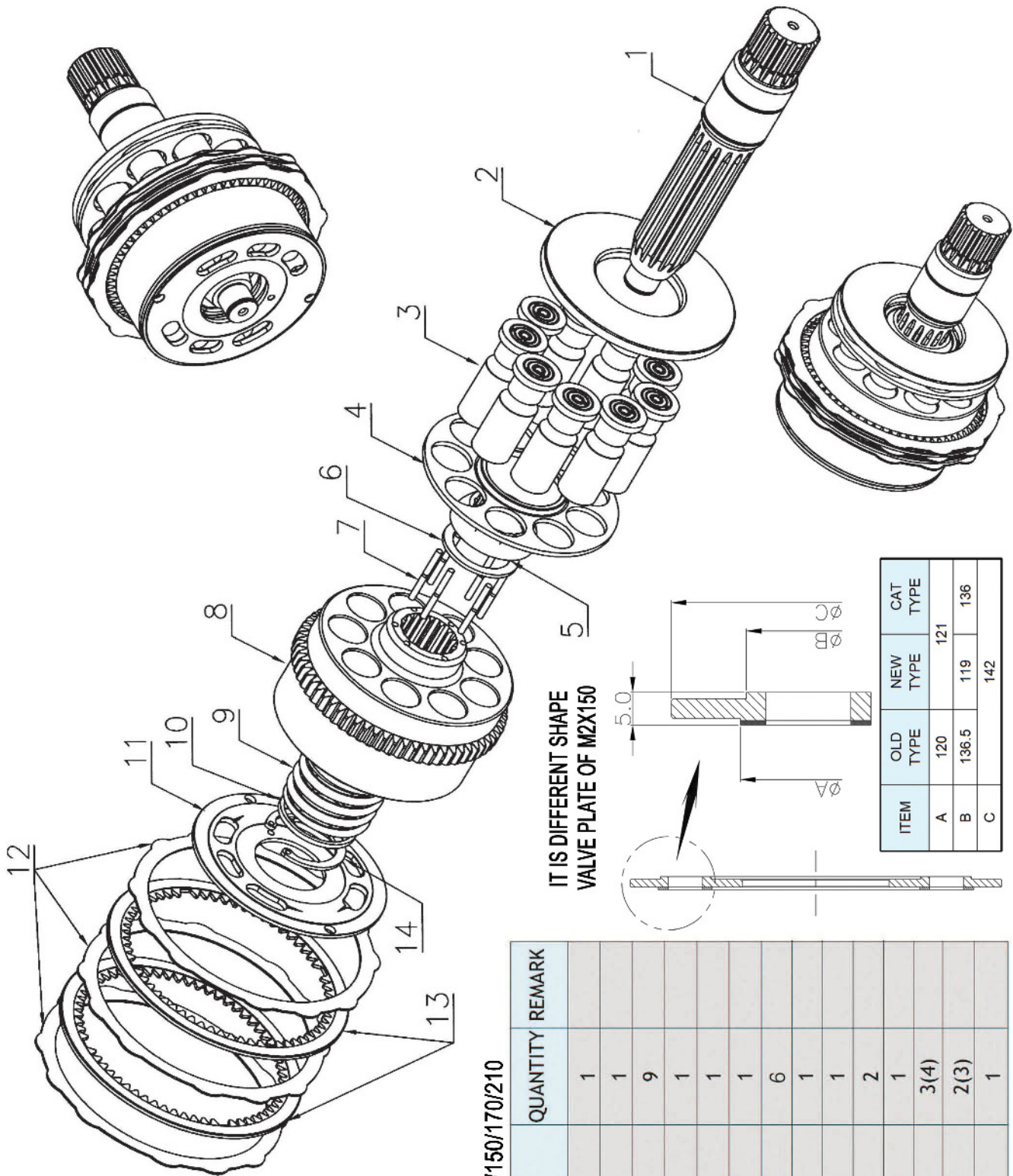
M2X210



M2X210 (CAT TYPE)

IT IS DIFFERENT SHAPE BETWEEN M2X150 DRIVE SHAFT AND M2X150(CAT TYPE) DRIVE SHAFT

M2X150	M2X150 (CAT TYPE)



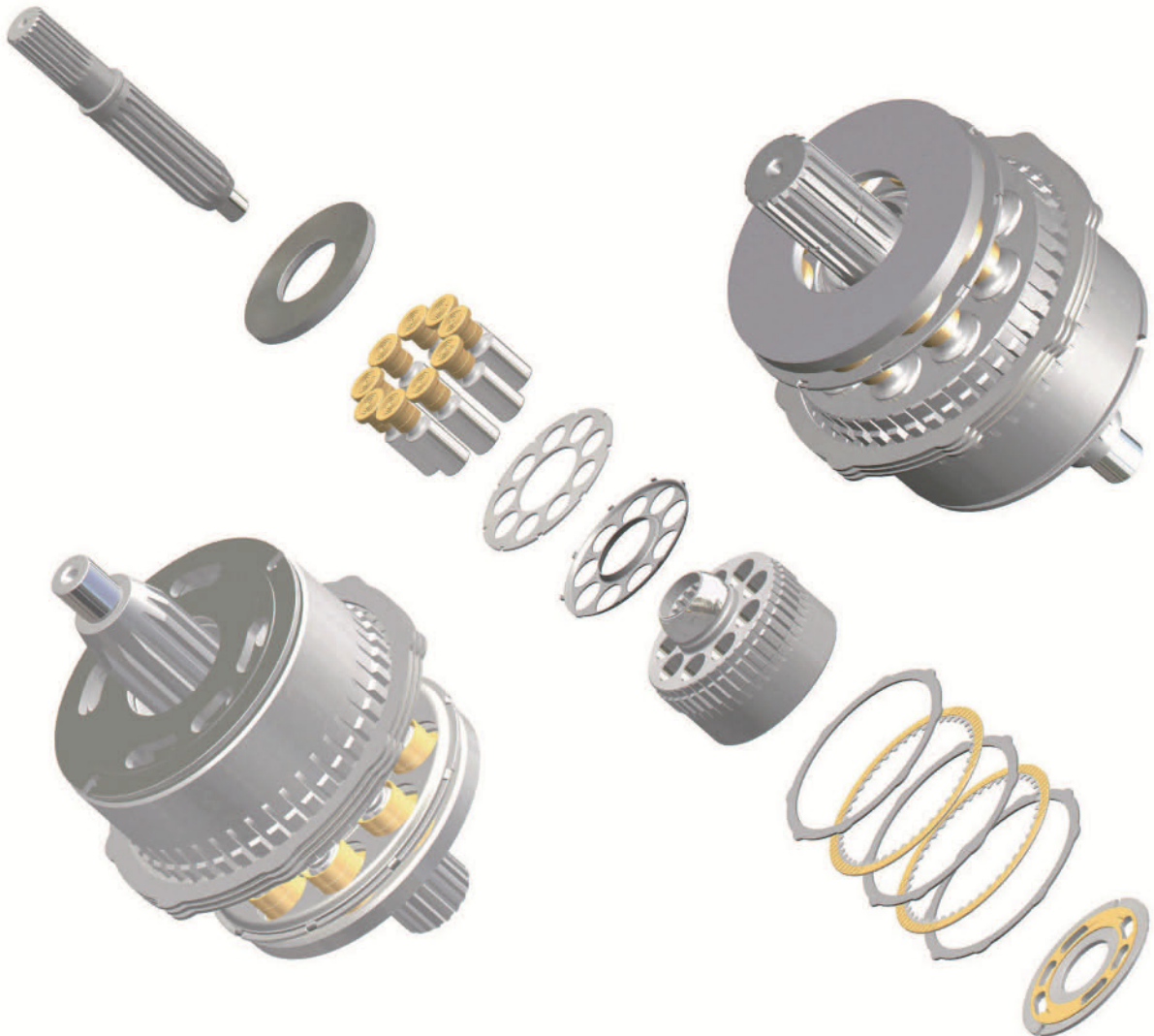
M2X55/63/96/120/128/146/150/170/210

ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	SHOE PLATE	1	
3	PISTON SHOE	9	
4	SET PLATE	1	
5	BALL GUIDE	1	
6	SPACE OF BALL GUIDE	1	
7	PIN OF CYLINDER BLOCK	6	
8	CYLINDER BLOCK	1	
9	COIL SPRING	1	
10	SPACE	2	
11	VALVE PLATE	1	
12	SEPARATION PLATE	3(4)	
13	FRICTION PLATE	2(3)	
14	SNAP RING	1	

ITEM	OLD TYPE	NEW TYPE	CAT TYPE
A	120	121	
B	136.5	119	136
C		142	

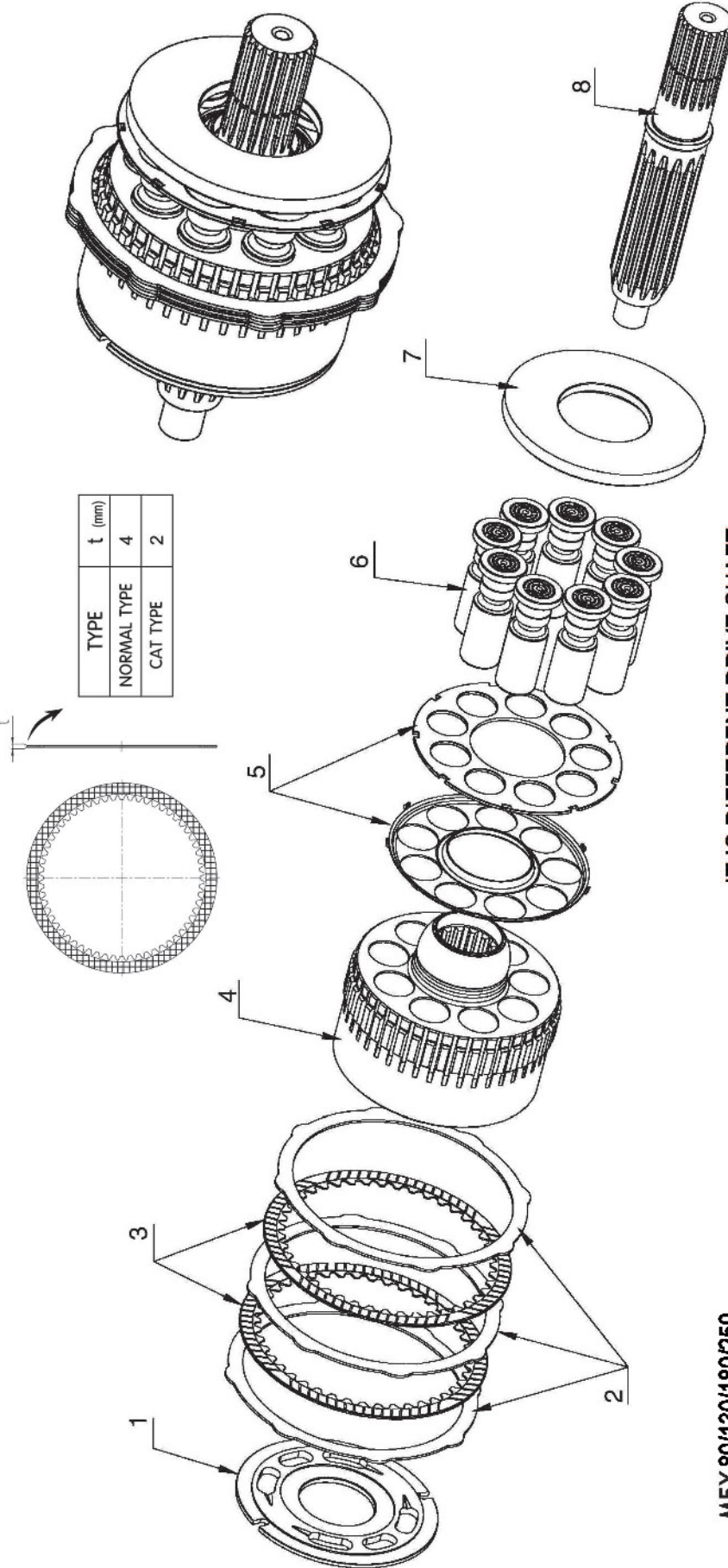


M5X SERIES





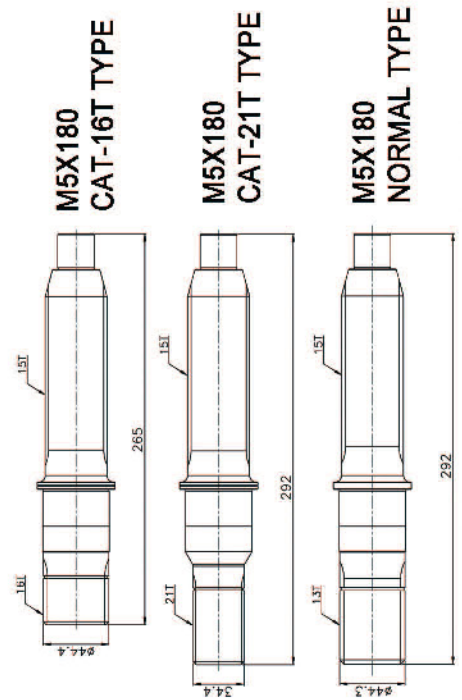
IT IS DIFFERENT FRICTION PLATE



M5X 80/130/180/250

ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE	1	
2	SEPARATION PLATE	3	
3	FRICTION PLATE	2	
4	CYLINDER BLOCK	1	
5	SET PLATE WITH SPRING	1SET	
6	PISTON SHOE	9	
7	SHOE PLATE	1	
8	DRIVE SHAFT	1	

IT IS DIFFERENT DRIVE SHAFT



HAN DOK HYDRAULIC

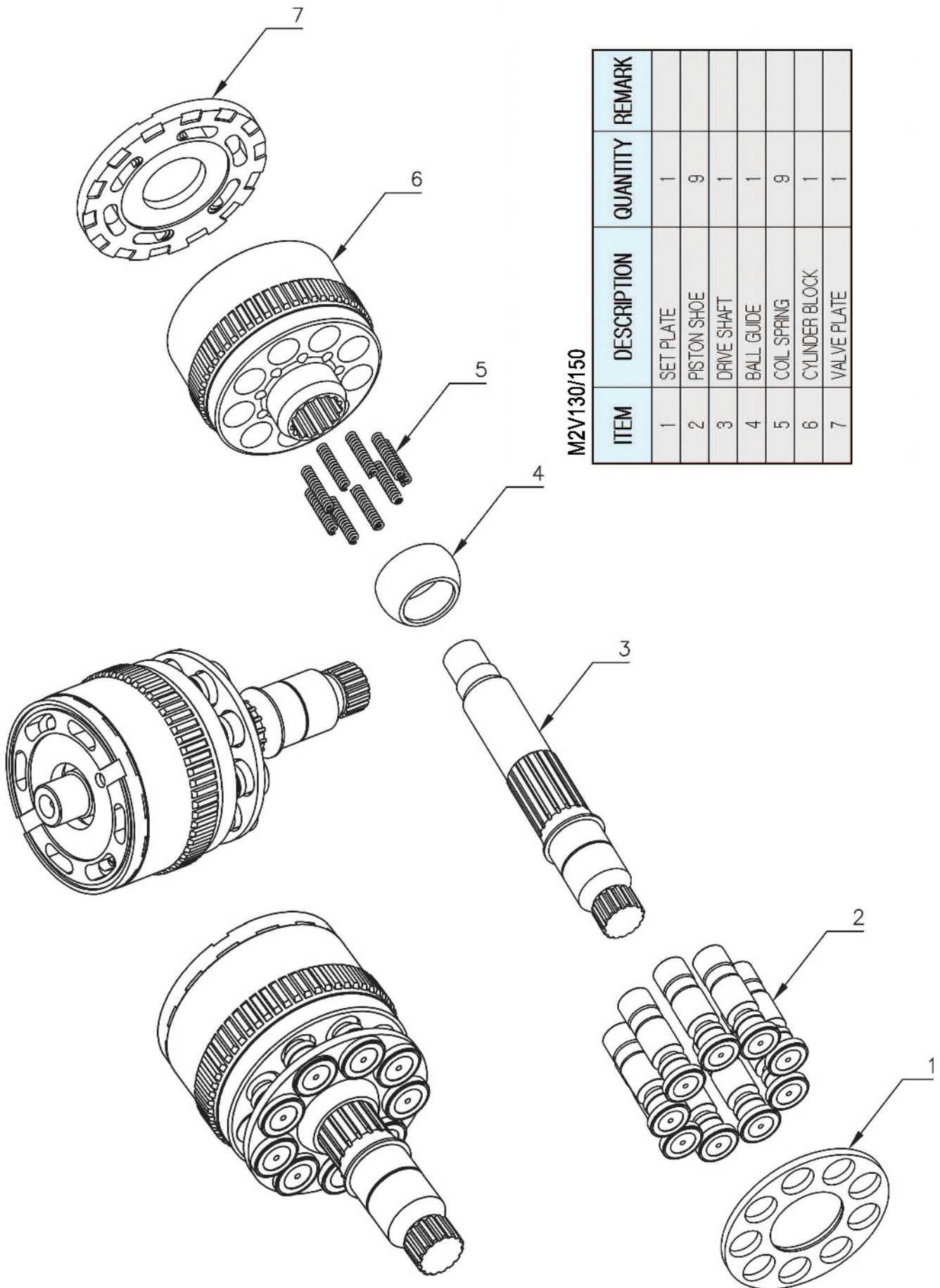


M2V SERIES FOR NABTESCO



IT IS DIFFERENT SHAPE BETWEEN M2V130(SK200-5) AND M2V150(SK200-1/3)

	M2V130(SK200-5)	M2V150(SK200-1/3)
BALL GUIDE & SET PLATE		
PISTON SHOE		
VALVE PLATE		
CYLINDER BLOCK		



M2V130/150

ITEM	DESCRIPTION	QUANTITY	REMARK
1	SET PLATE	1	
2	PISTON SHOE	9	
3	DRIVE SHAFT	1	
4	BALL GUIDE	1	
5	COIL SPRING	9	
6	CYLINDER BLOCK	1	
7	VALVE PLATE	1	

HANDOK HYDRAULIC



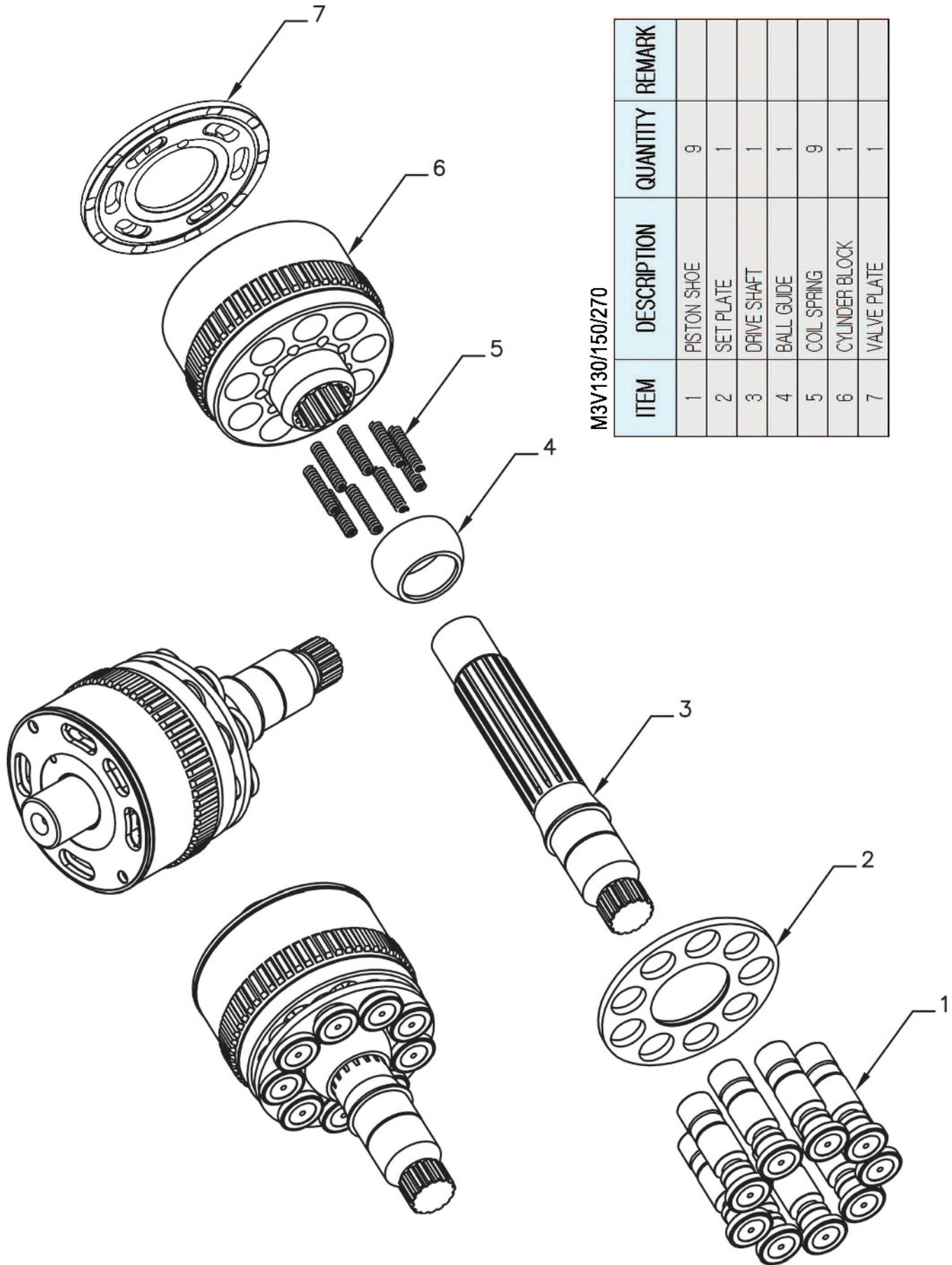
M3V SERIES FOR NABTESCO



IT IS M3V130/150(SK200-6) OF PARTS

BALL GUIDE & SET PLATE 	PISTON SHOE
CYLINDER BLOCK 	VALVE PLATE

M3V SERIES FOR NABTESCO



M3V130/150/270

ITEM	DESCRIPTION	QUANTITY	REMARK
1	PISTON SHOE	9	
2	SET PLATE	1	
3	DRIVE SHAFT	1	
4	BALL GUIDE	1	
5	COIL SPRING	9	
6	CYLINDER BLOCK	1	
7	VALVE PLATE	1	

HAN DOK HYDRAULIC



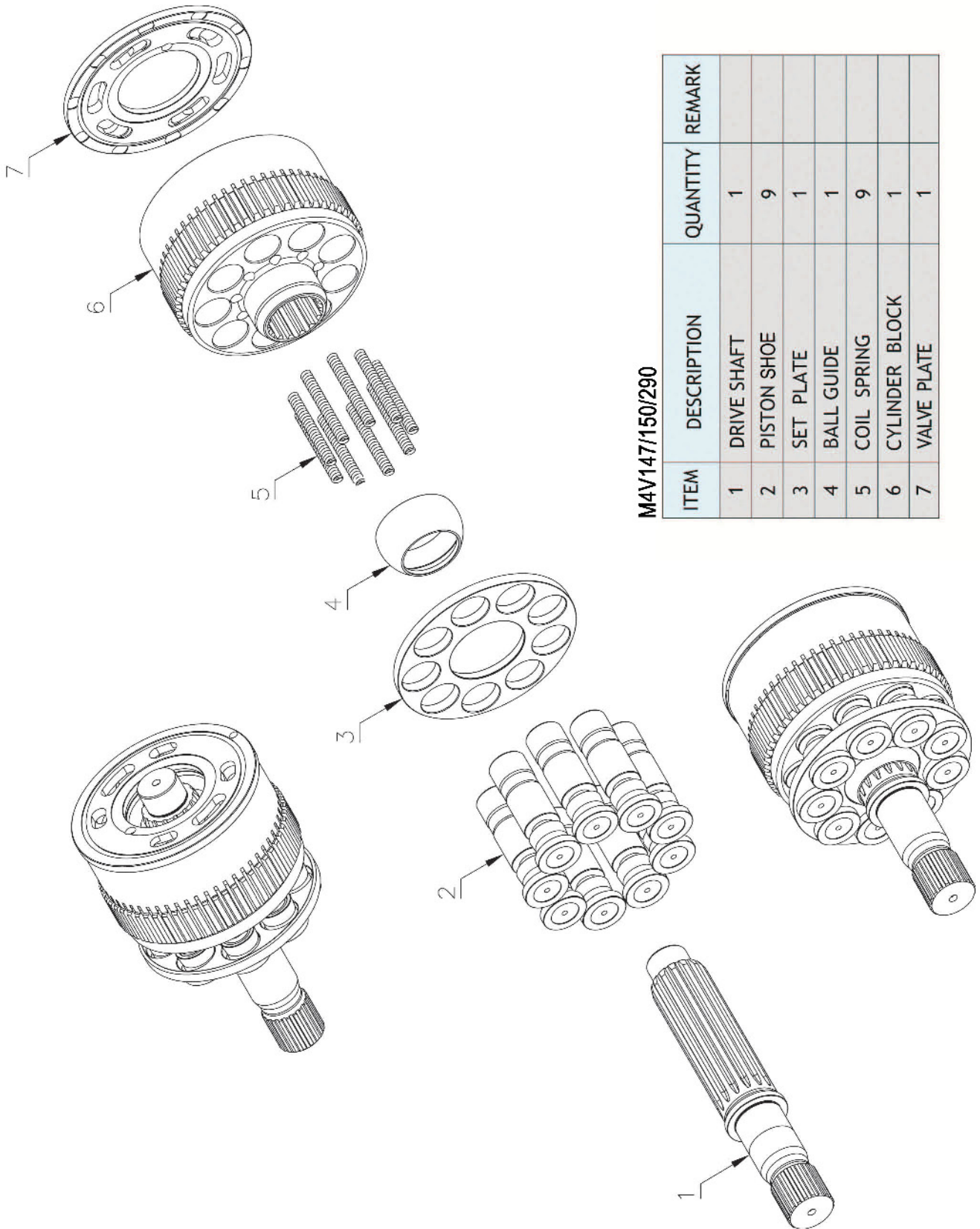
M4V SERIES FOR NABTESCO



IT IS DIFFERENT SHAPE BETWEEN M4V147(SK200-6E) AND M4V150(SK220-6E)

	M4V147(SK200-6E)	M4V150(SK220-6E)
BALL GUIDE & SET PLATE		
PISTON SHOE		
VALVE PLATE		
CYLINDER BLOCK		

M4V SERIES FOR NABTESCO



M4V147/150/290

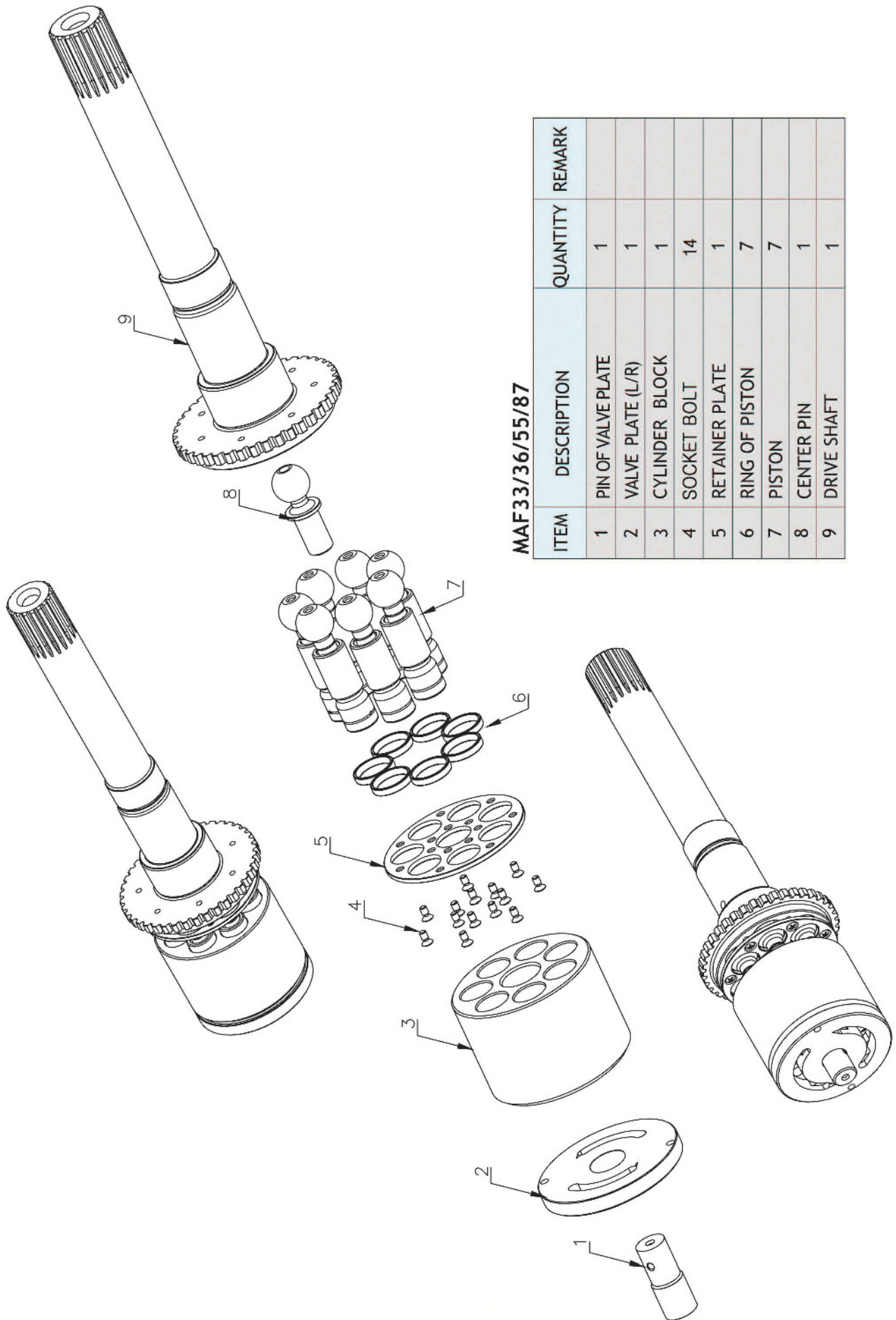
ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	PISTON SHOE	9	
3	SET PLATE	1	
4	BALL GUIDE	1	
5	COIL SPRING	9	
6	CYLINDER BLOCK	1	
7	VALVE PLATE	1	

HANDOK HYDRAULIC



MAF SERIES





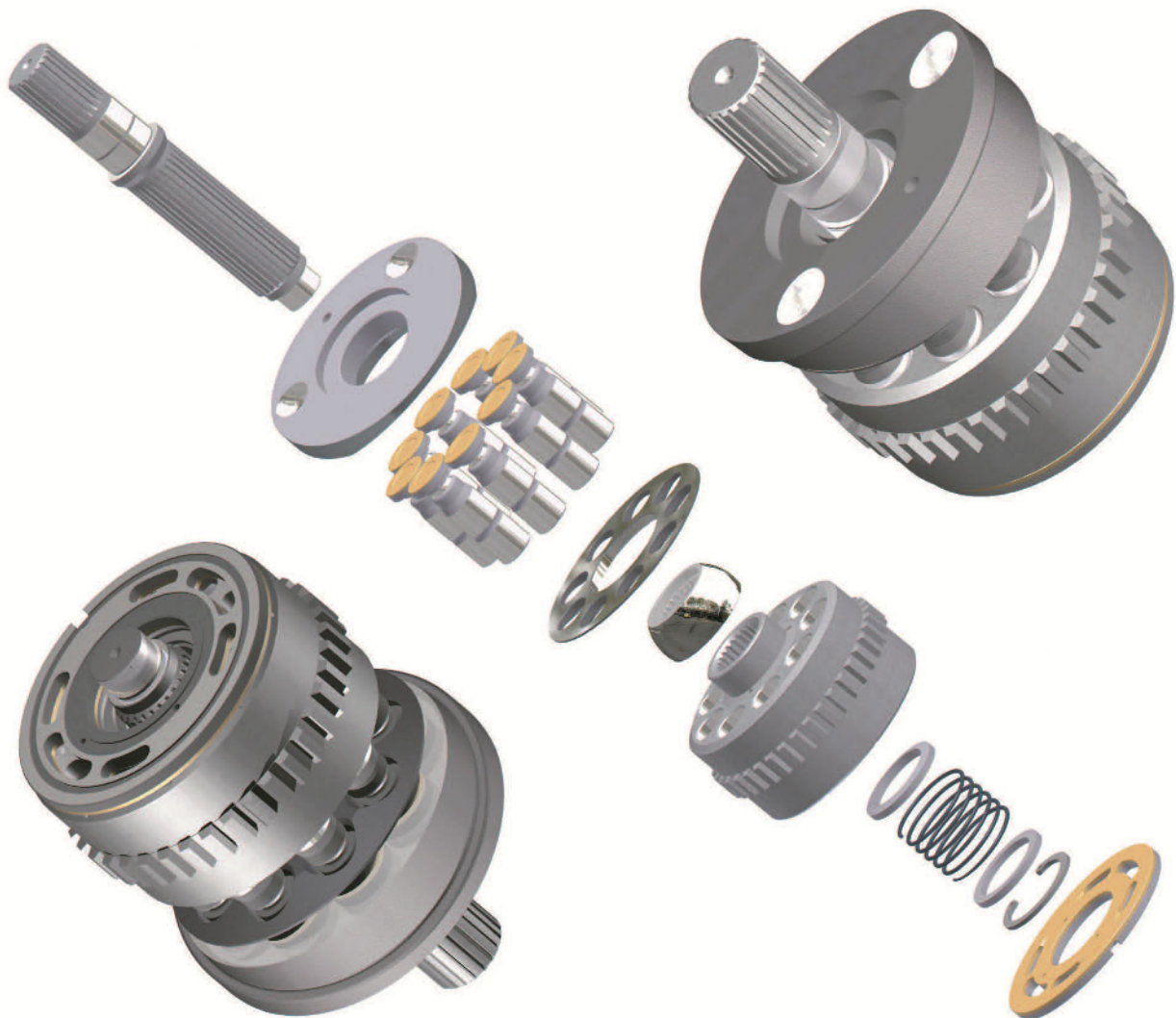
MAF33/36/55/87

ITEM	DESCRIPTION	QUANTITY	REMARK
1	PIN OF VALVE PLATE	1	
2	VALVE PLATE (L/R)	1	
3	CYLINDER BLOCK	1	
4	SOCKET BOLT	14	
5	RETAINER PLATE	1	
6	RING OF PISTON	7	
7	PISTON	7	
8	CENTER PIN	1	
9	DRIVE SHAFT	1	

HANDOK HYDRAULIC

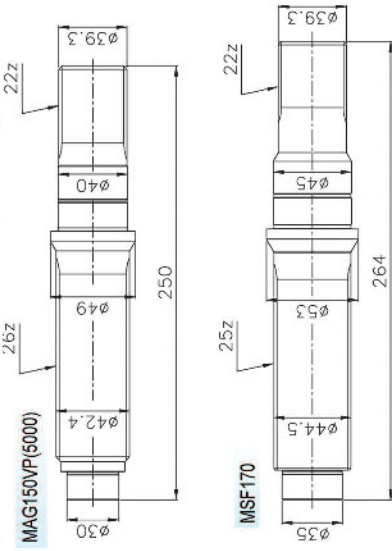


MAG/MSF SERIES

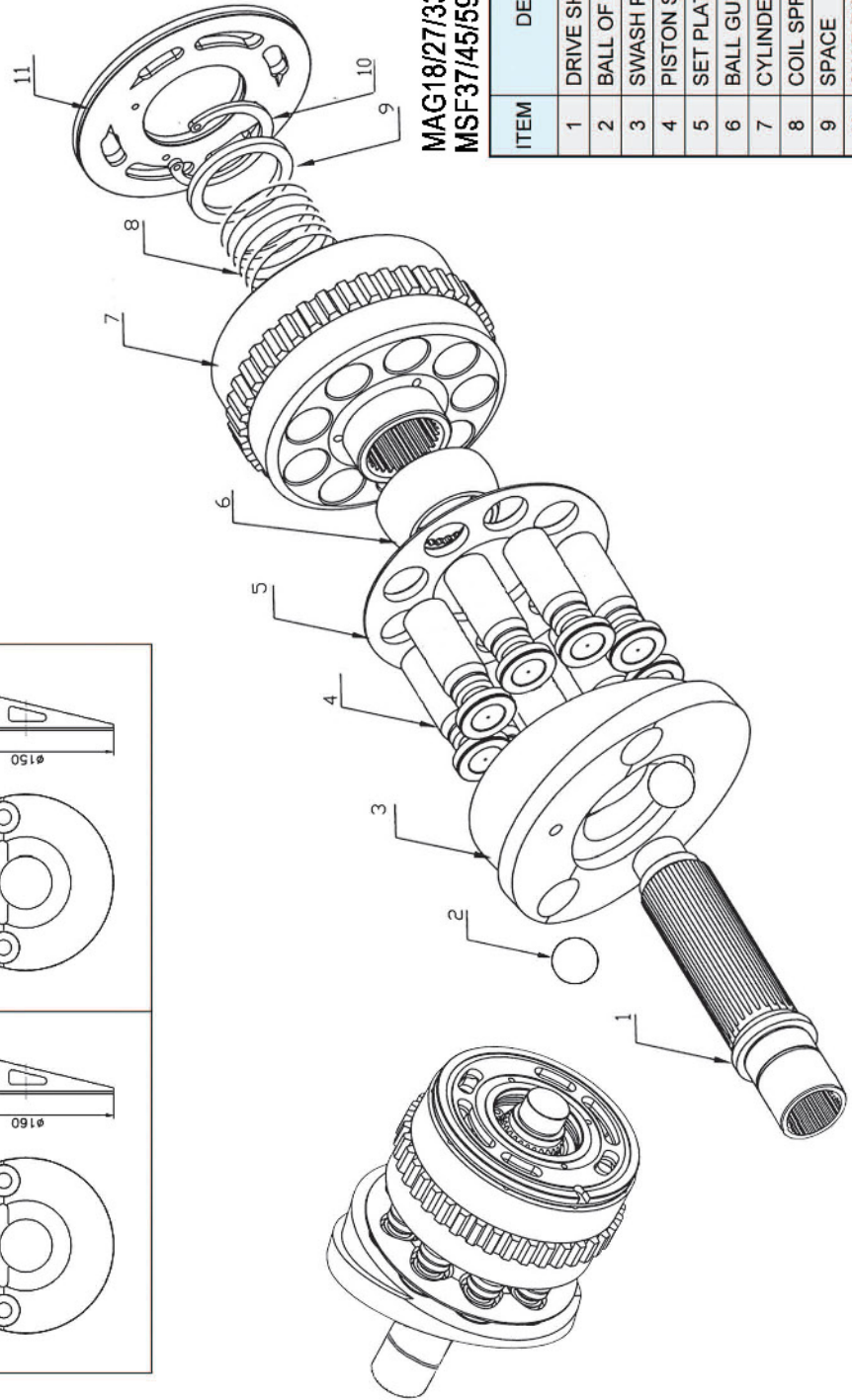
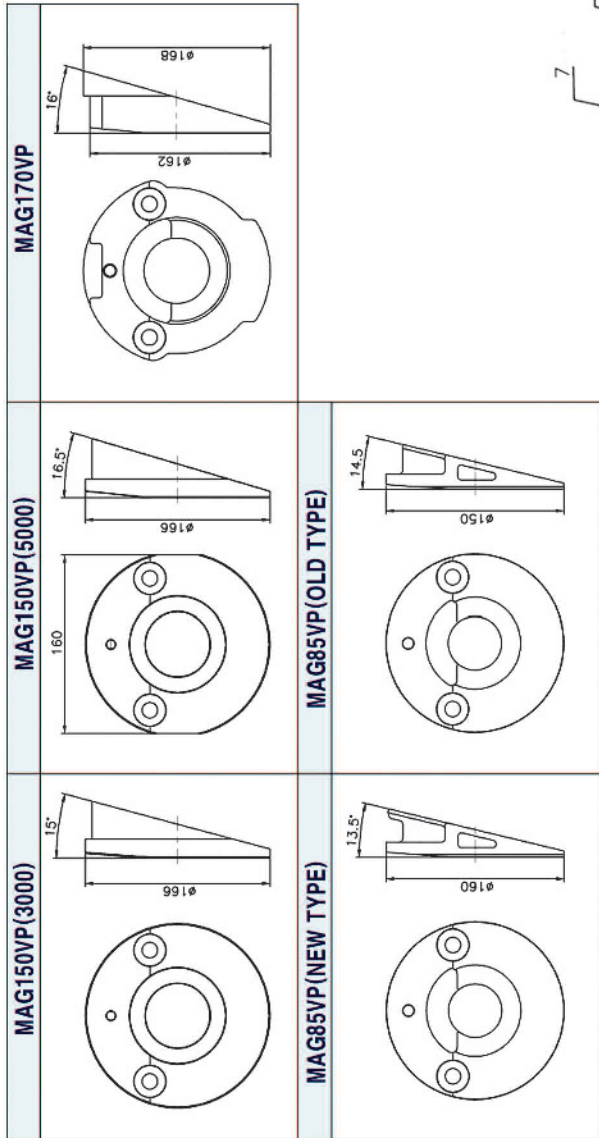




IT IS DIFFERENT SHAPE BETWEEN DRIVE SHAFT MAG SERIES AND MSF SERIES



IT IS DIFFERENT SHAPE SWASH PLATE



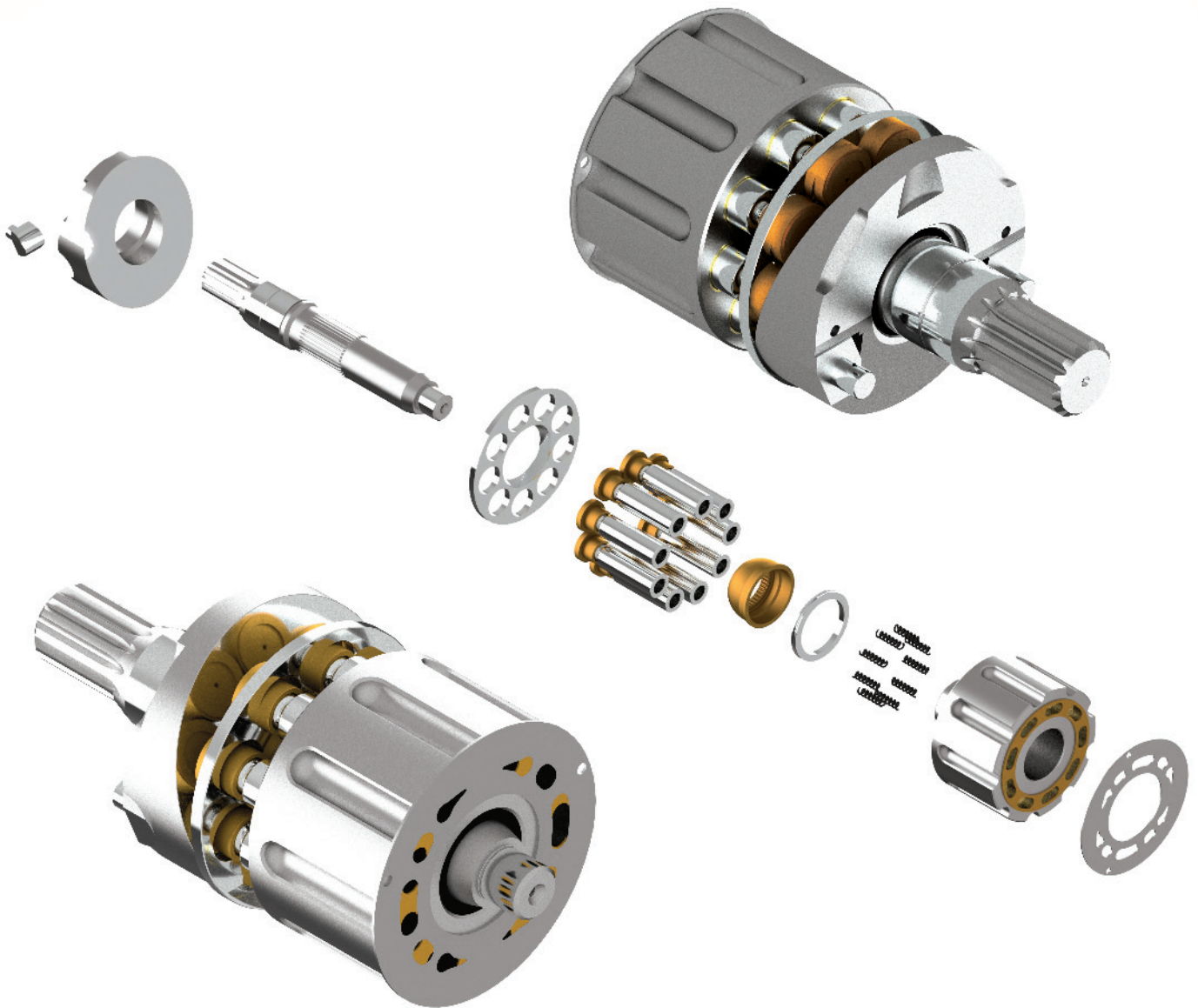
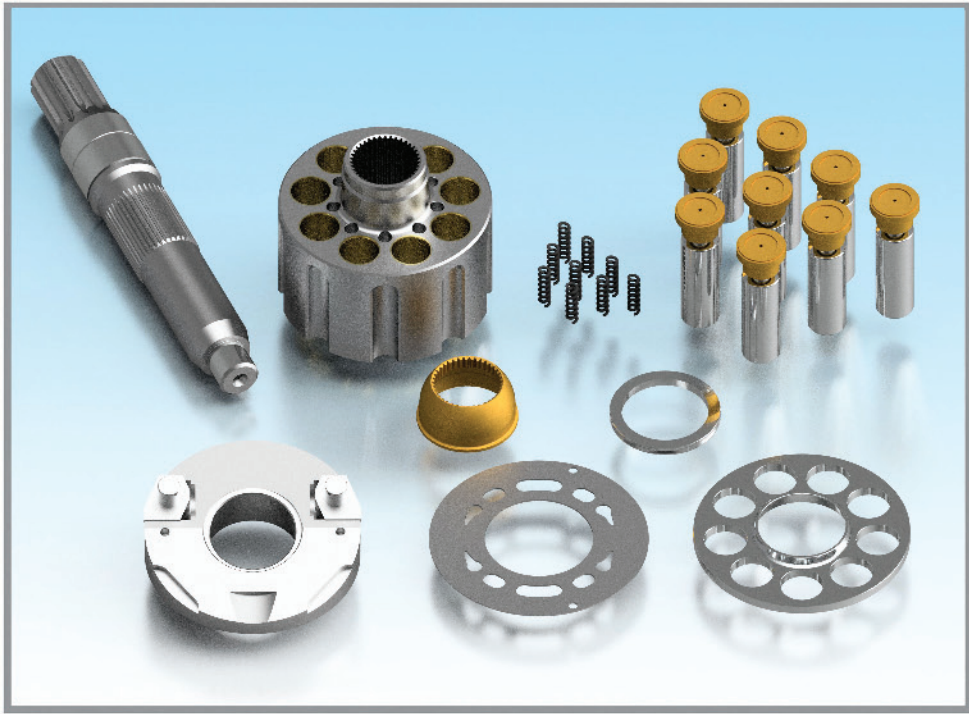
MAG18/27/33/85/150/170/200/330
MSF37/45/59/89/170/200/230/340

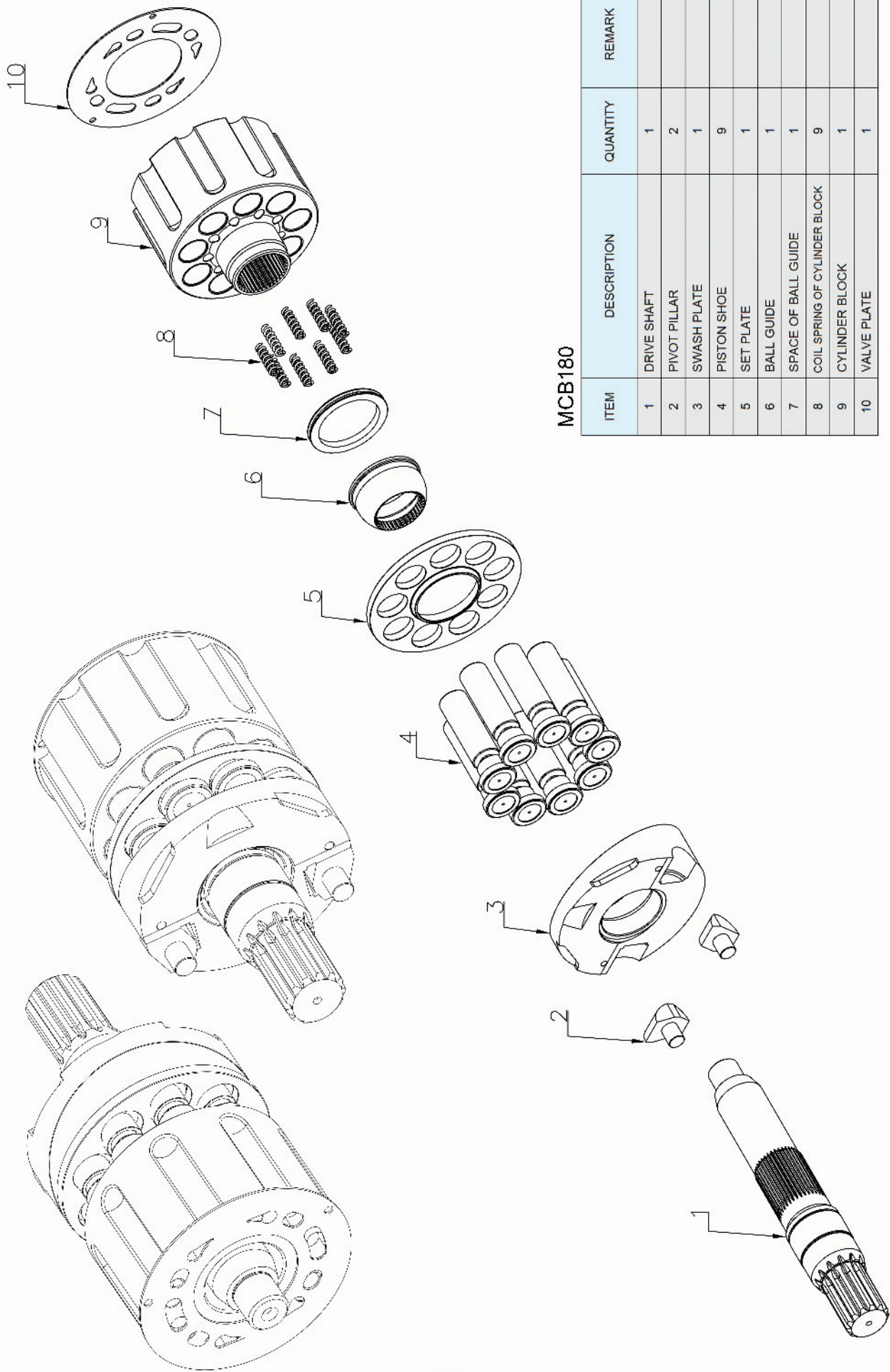
ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	BALL OF SWASH PLATE	2	
3	SWASH PLATE	1	
4	PISTON SHOE	9	
5	SET PLATE	1	
6	BALL GUIDE	1	
7	CYLINDER BLOCK	1	
8	COIL SPRING	1	
9	SPACE	1	
10	SNAP RING	1	
11	VALVE PLATE	1	

HAN DOK HYDRAULIC



MCB180





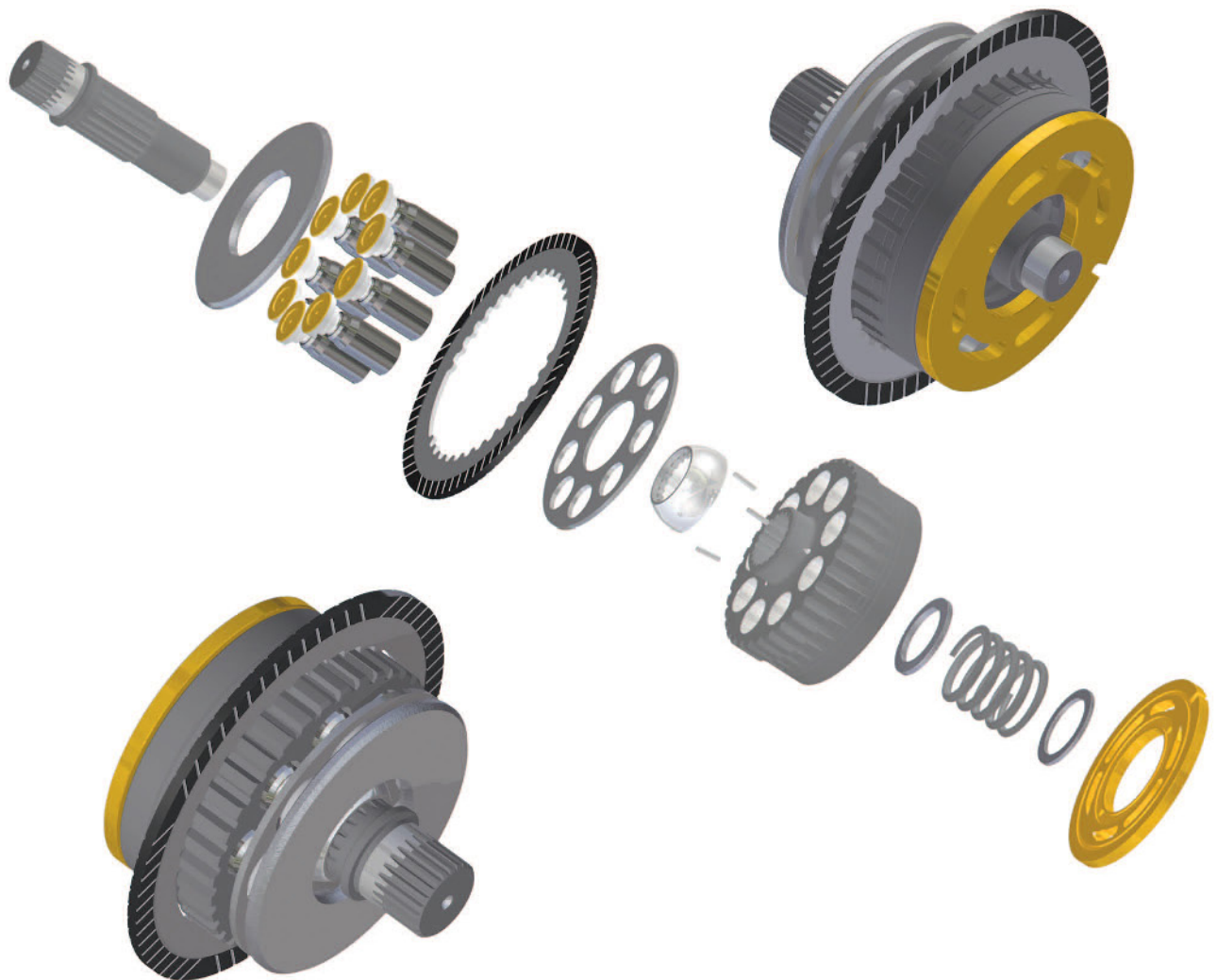
MCB180

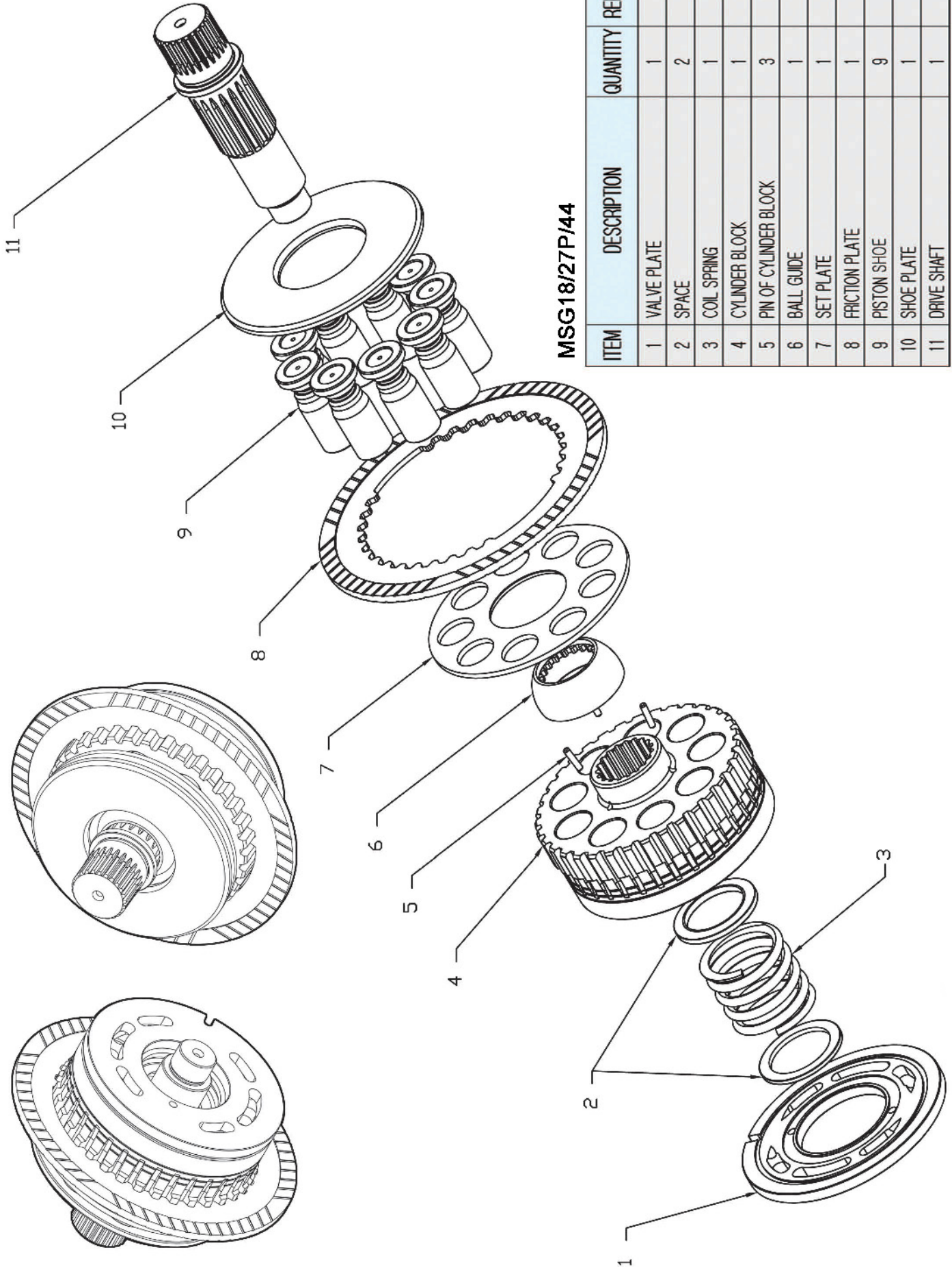
ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	PIVOT PILLAR	2	
3	SWASH PLATE	1	
4	PISTON SHOE	9	
5	SET PLATE	1	
6	BALL GUIDE	1	
7	SPACE OF BALL GUIDE	1	
8	COIL SPRING OF CYLINDER BLOCK	9	
9	CYLINDER BLOCK	1	
10	VALVE PLATE	1	

HAN DOK HYDRAULIC



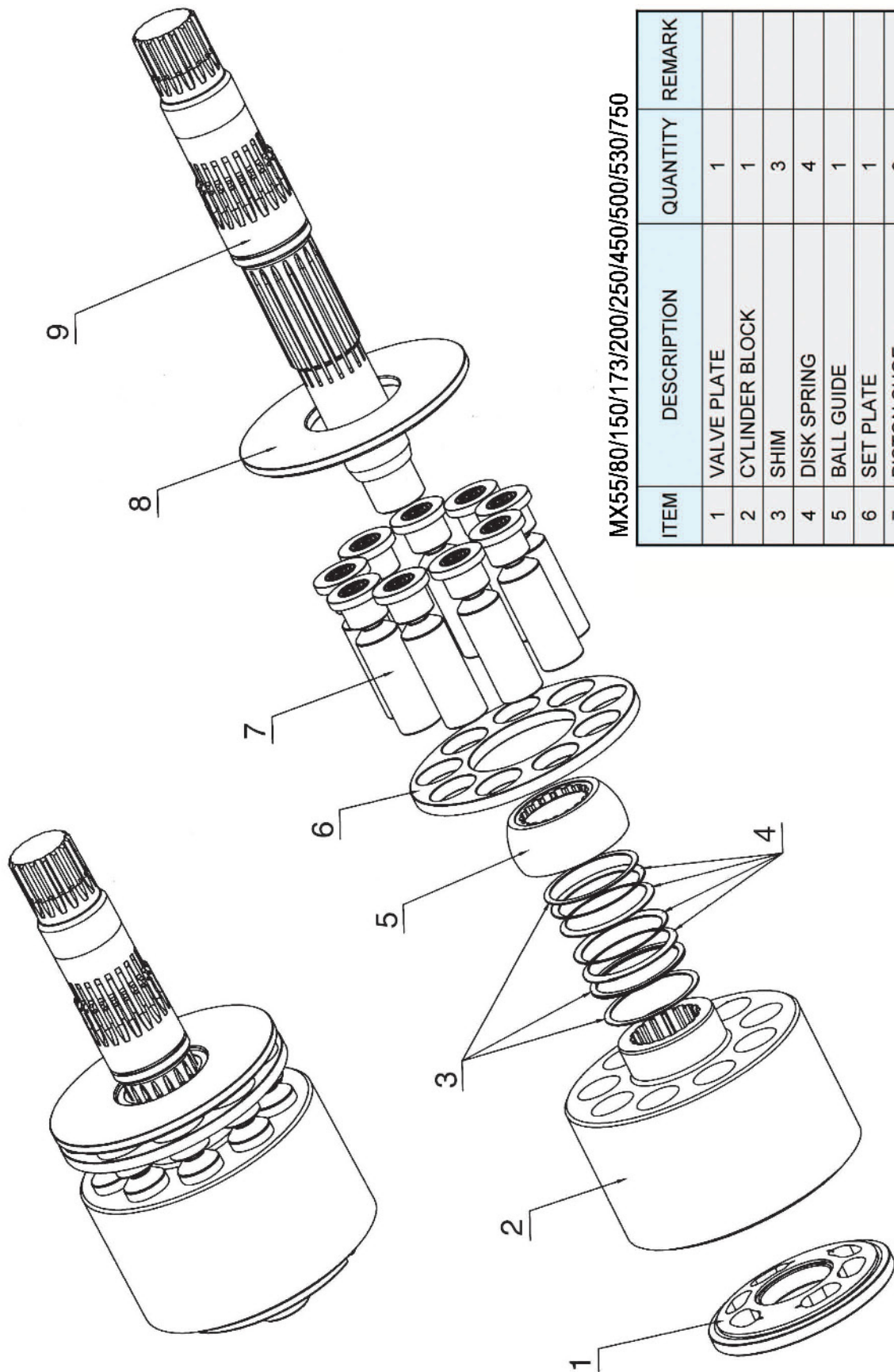
MSG SERIES





MSG18/27P/44

ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE	1	
2	SPACE	2	
3	COIL SPRING	1	
4	CYLINDER BLOCK	1	
5	PIN OF CYLINDER BLOCK	3	
6	BALL GUIDE	1	
7	SET PLATE	1	
8	FRICION PLATE	1	
9	PISTON SHOE	9	
10	SHOE PLATE	1	
11	DRIVE SHAFT	1	

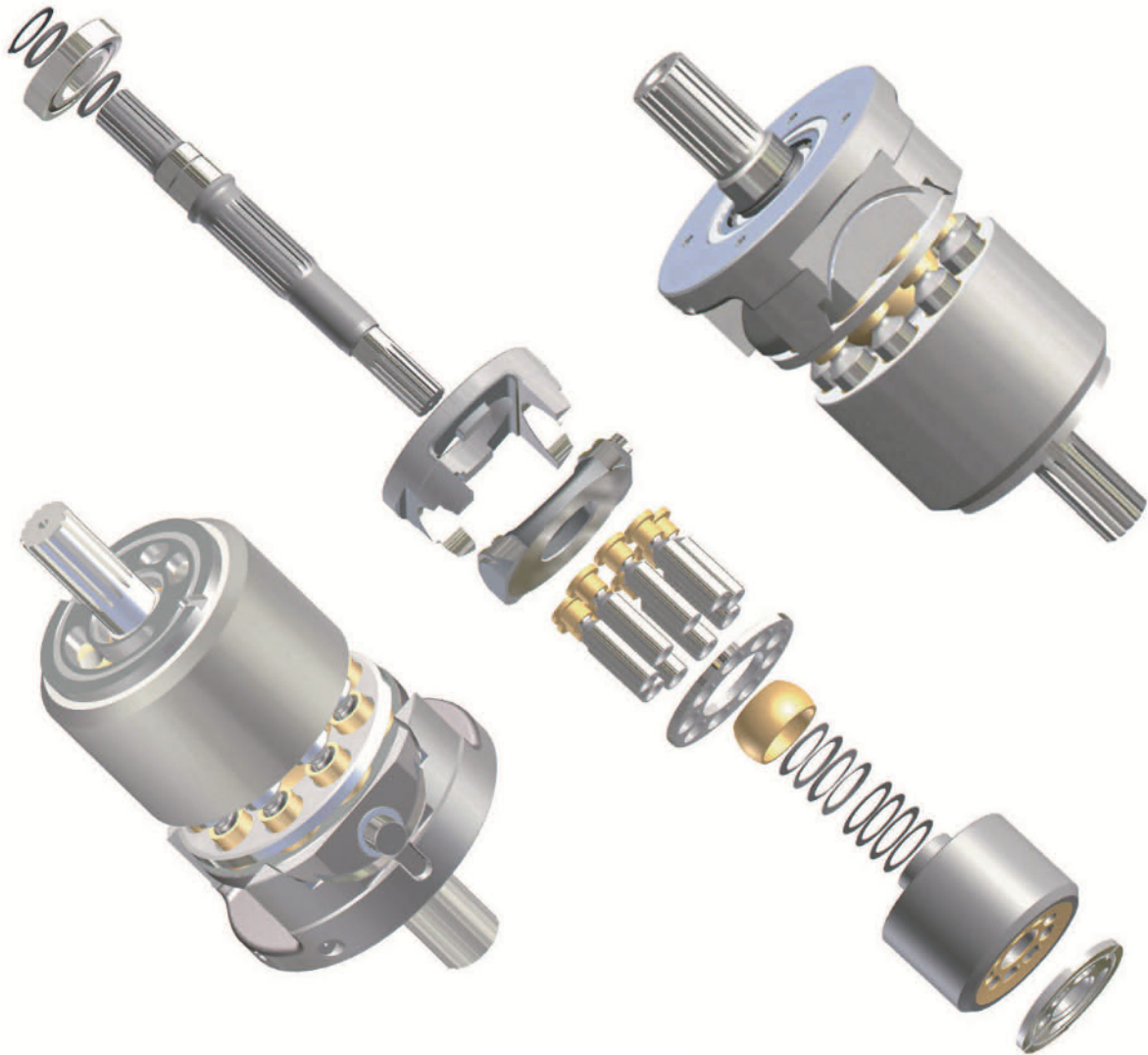
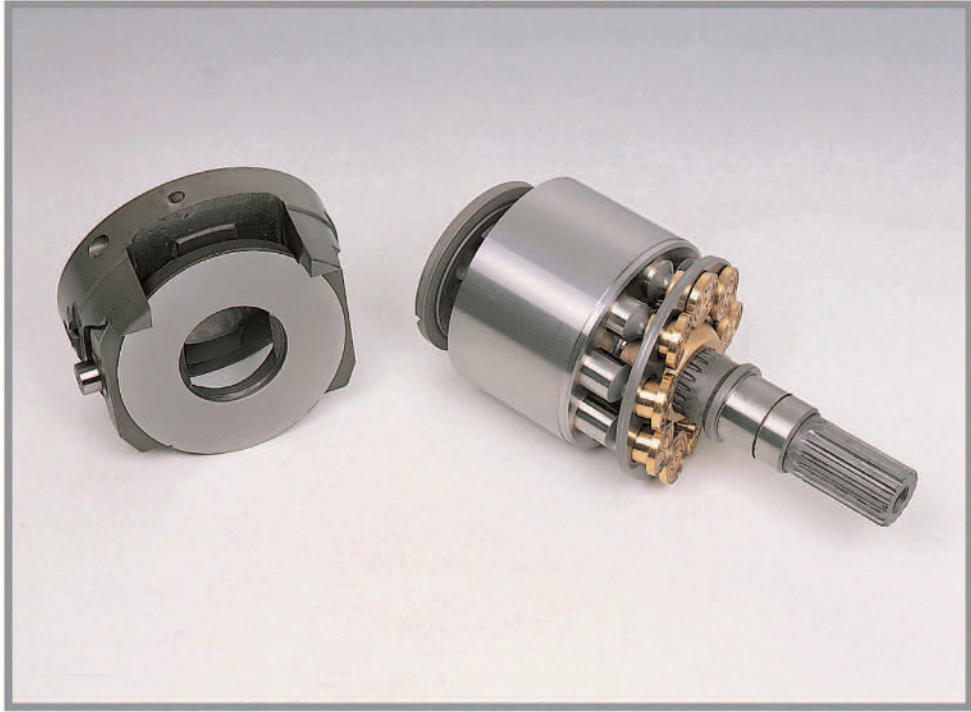


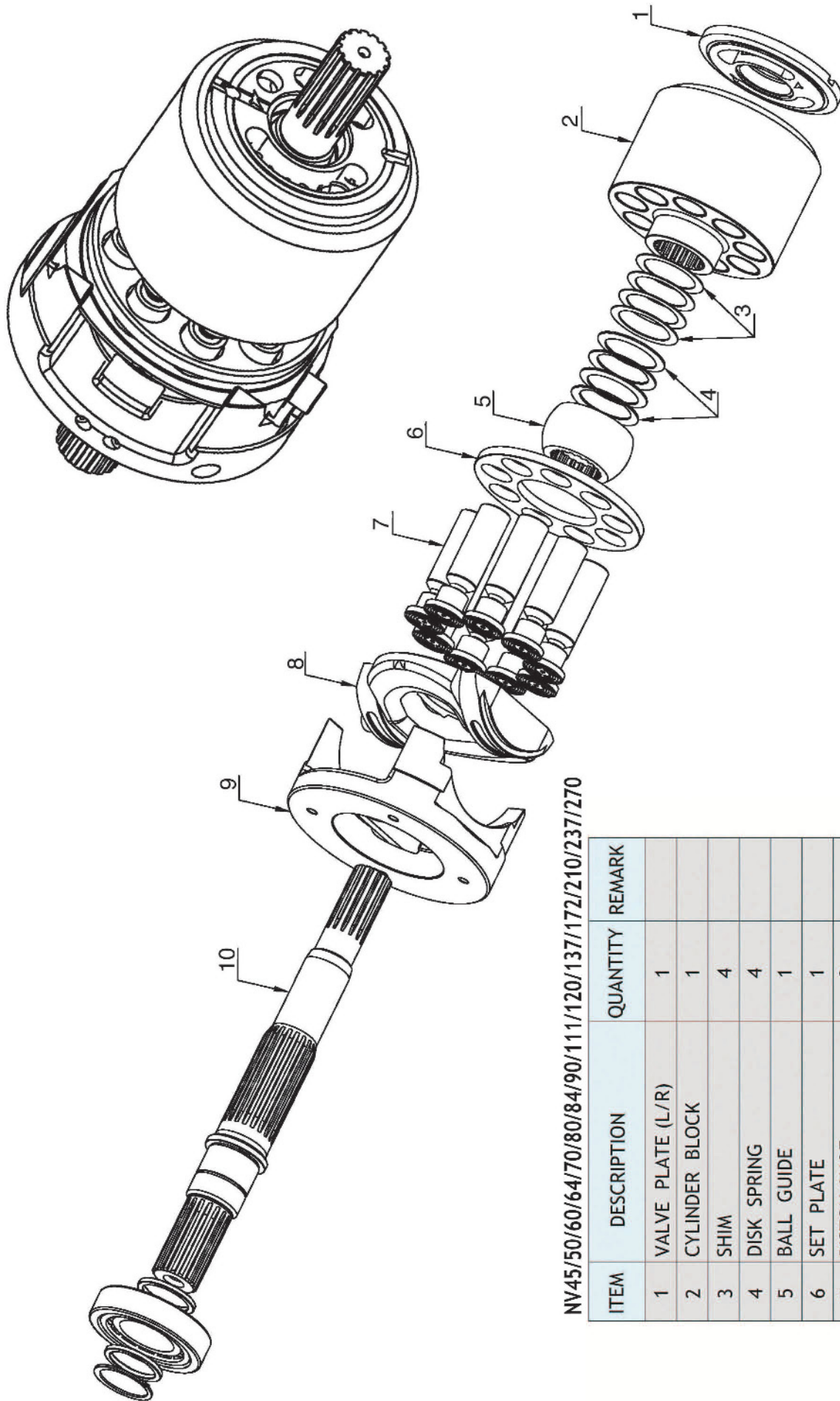
MX55/80/150/173/200/250/450/500/530/750

ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE	1	
2	CYLINDER BLOCK	1	
3	SHIM	3	
4	DISK SPRING	4	
5	BALL GUIDE	1	
6	SET PLATE	1	
7	PISTON SHOE	9	
8	SHOE PLATE	1	
9	DRIVE SHAFT	1	



NV SERIES



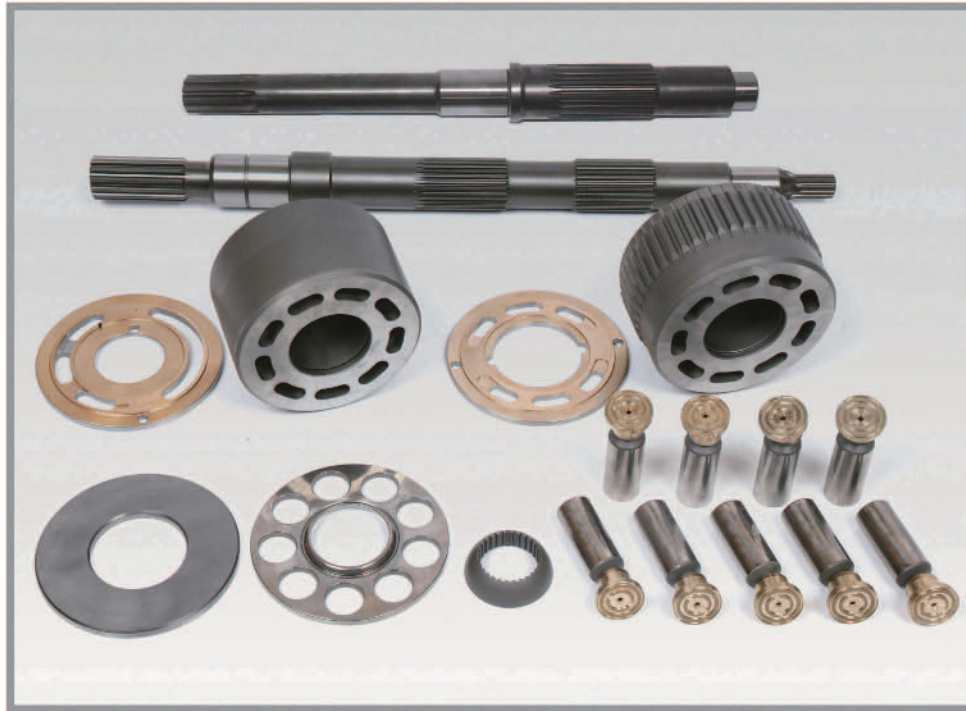


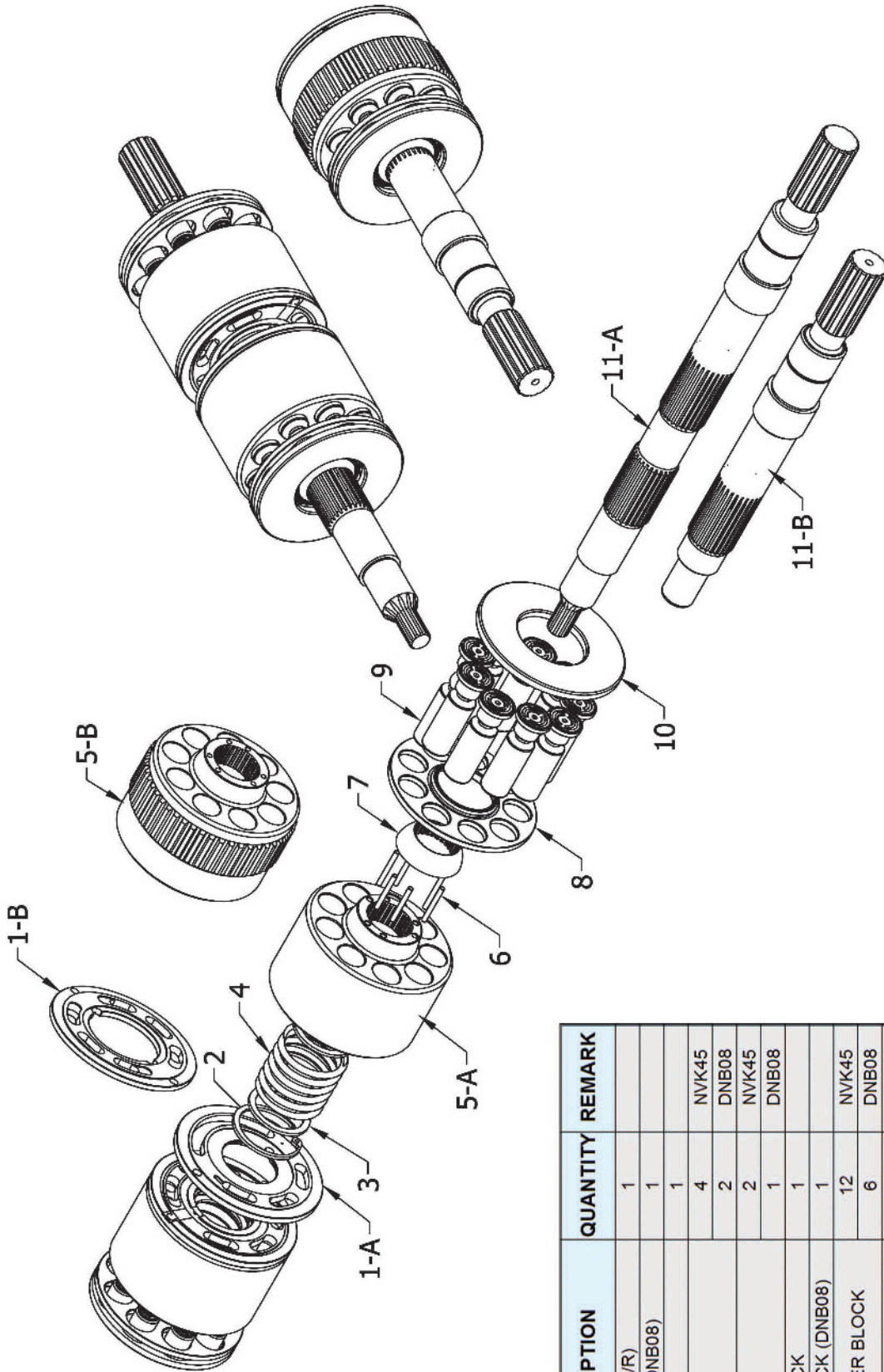
NV45/50/60/64/70/80/84/90/111/120/137/172/210/237/270

ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE (L/R)	1	
2	CYLINDER BLOCK	1	
3	SHIM	4	
4	DISK SPRING	4	
5	BALL GUIDE	1	
6	SET PLATE	1	
7	PISTON SHOE	9	
8	SWASH PLATE	1	
9	SUPPORT	1	
10	DRIVE SHAFT (L/R)	1	



NVK45/DNB08





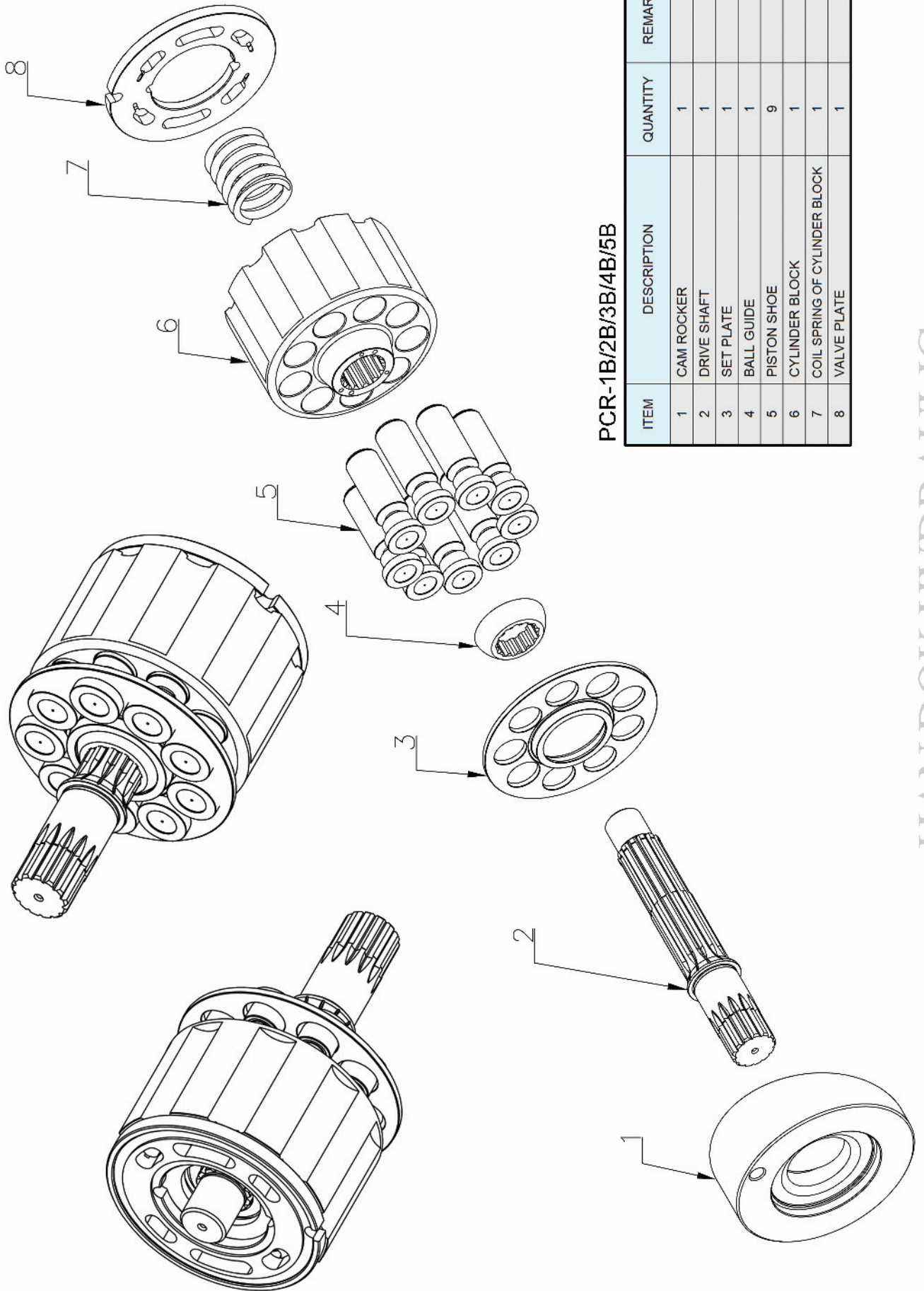
NVK45/DNB08

ITEM	DESCRIPTION	QUANTITY	REMARK
1-A	VALVE PLATE (L/R)	1	
1-B	VALVE PLATE (DNB08)	1	
2	SANP RING	1	
3	SPACE	4	NVK45
4	COIL SPRING	2	DNB08
5-A	CYLINDER BLOCK	2	NVK45
5-B	CYLINDER BLOCK (DNB08)	1	DNB08
6	PIN OF CYLINDER BLOCK	12	NVK45
7	BALL GUIDE	6	DNB08
8	SET PLATE	2	NVK45
9	PISTON SHOE	1	DNB08
10	SHOE PLATE	18	NVK45
11-A	DRIVE SHAFT	9	DNB08
11-B	DRIVE SHAFT (DNB08)	2	NVK45
		1	DNB08
		1	



PCR SERIES





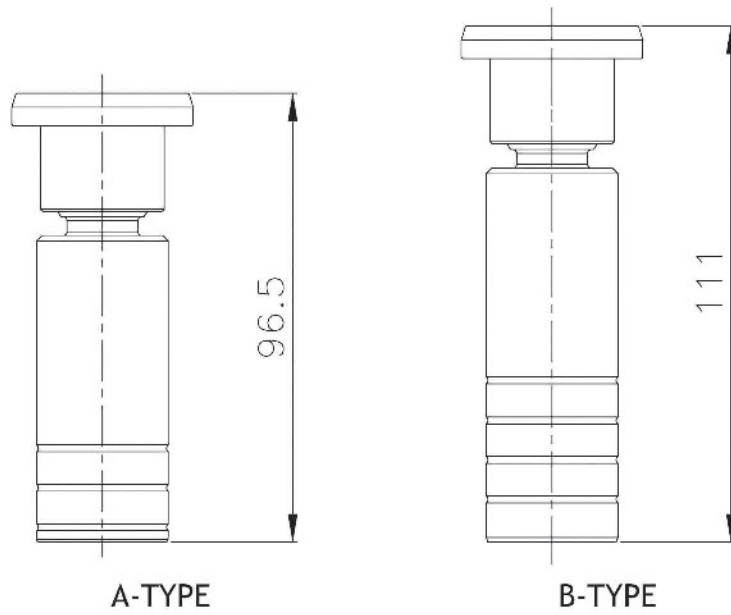
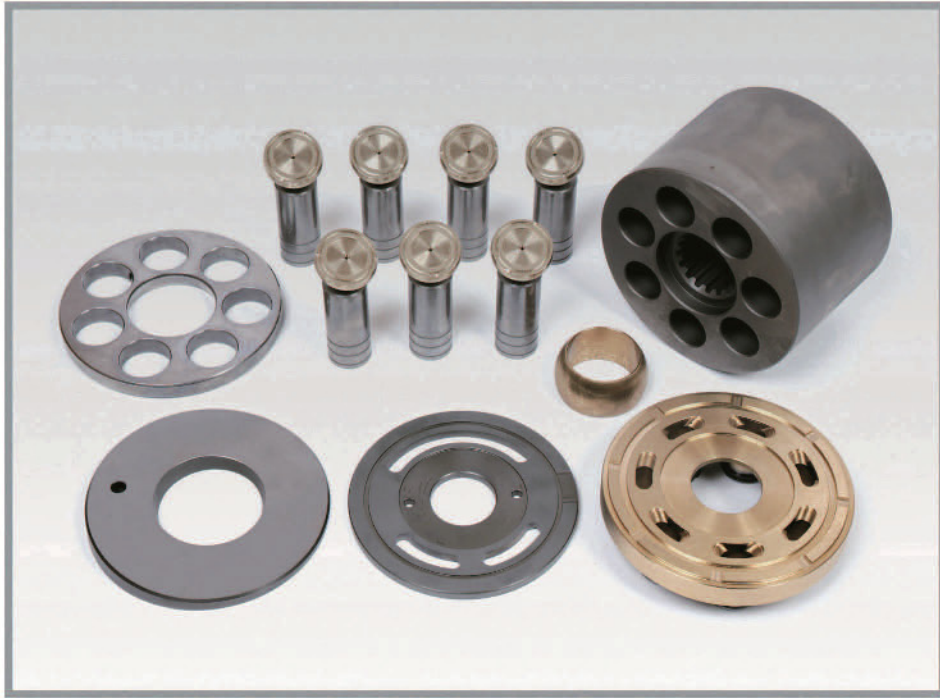
PCR-1B/2B/3B/4B/5B

ITEM	DESCRIPTION	QUANTITY	REMARK
1	CAM ROCKER	1	
2	DRIVE SHAFT	1	
3	SET PLATE	1	
4	BALL GUIDE	1	
5	PISTON SHOE	9	
6	CYLINDER BLOCK	1	
7	COIL SPRING OF CYLINDER BLOCK	1	
8	VALVE PLATE	1	

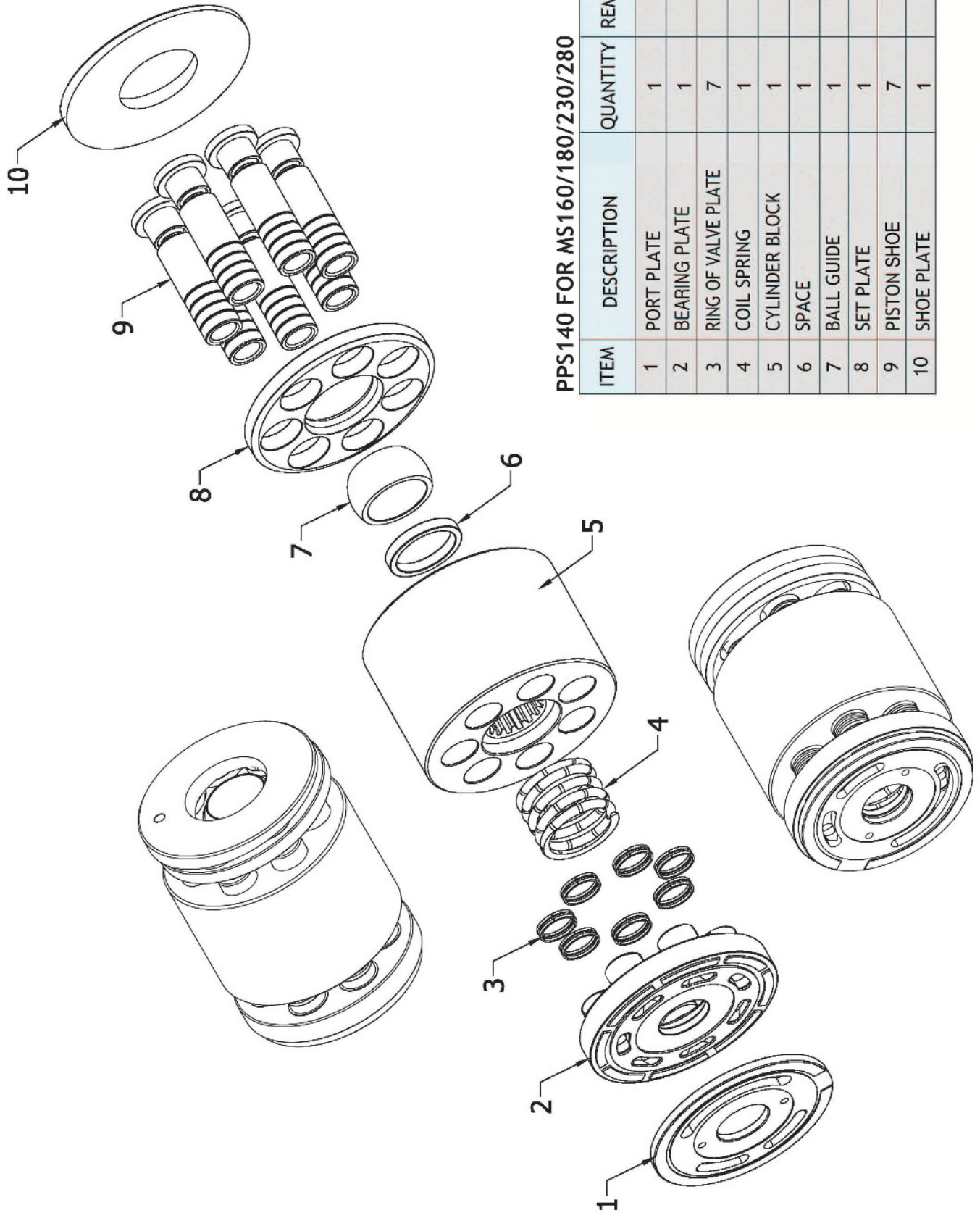
HAN DOK HYDRAULIC



PPS140 SERIES



IT IS DIFFERENT PISTON LENGTH

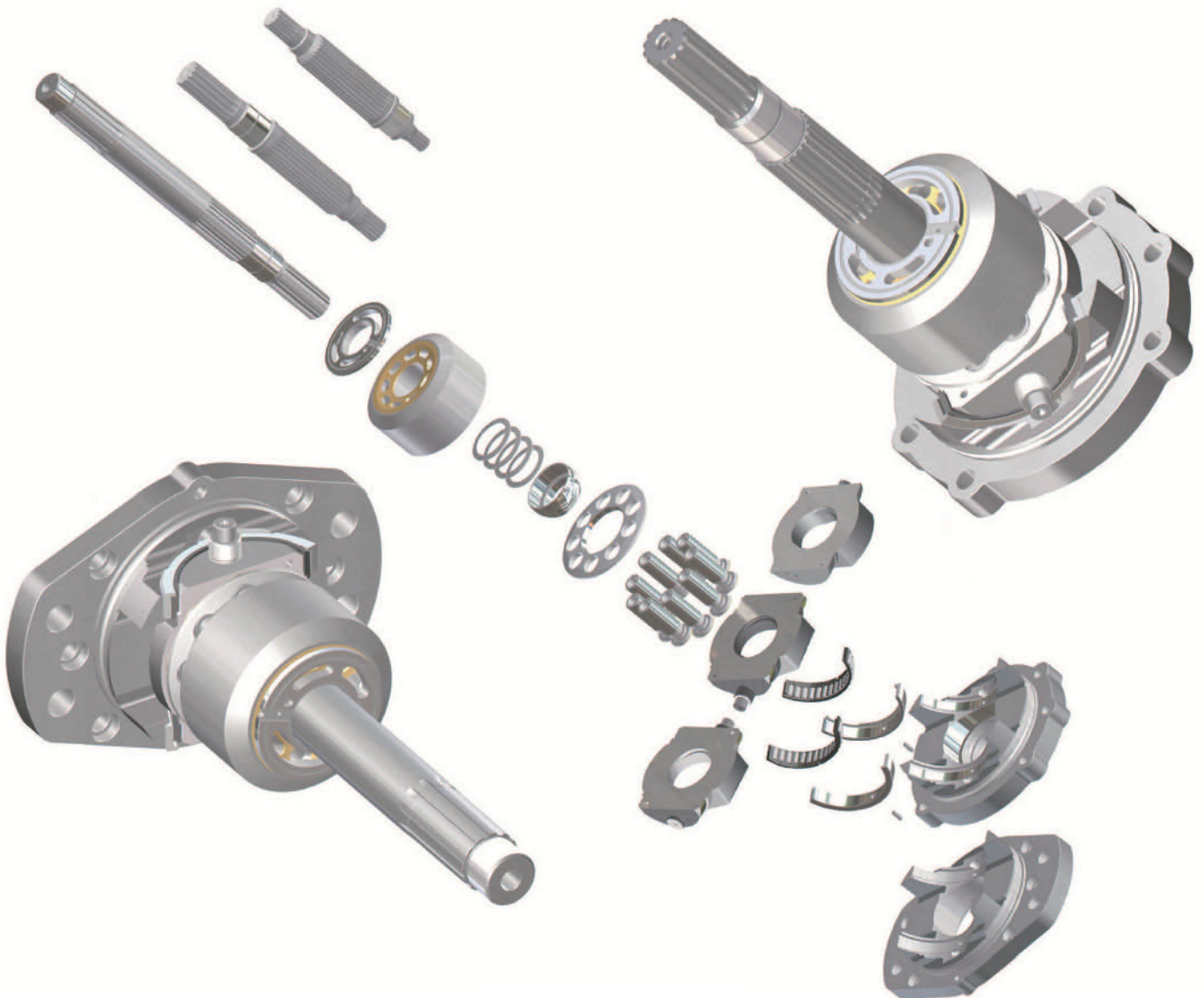


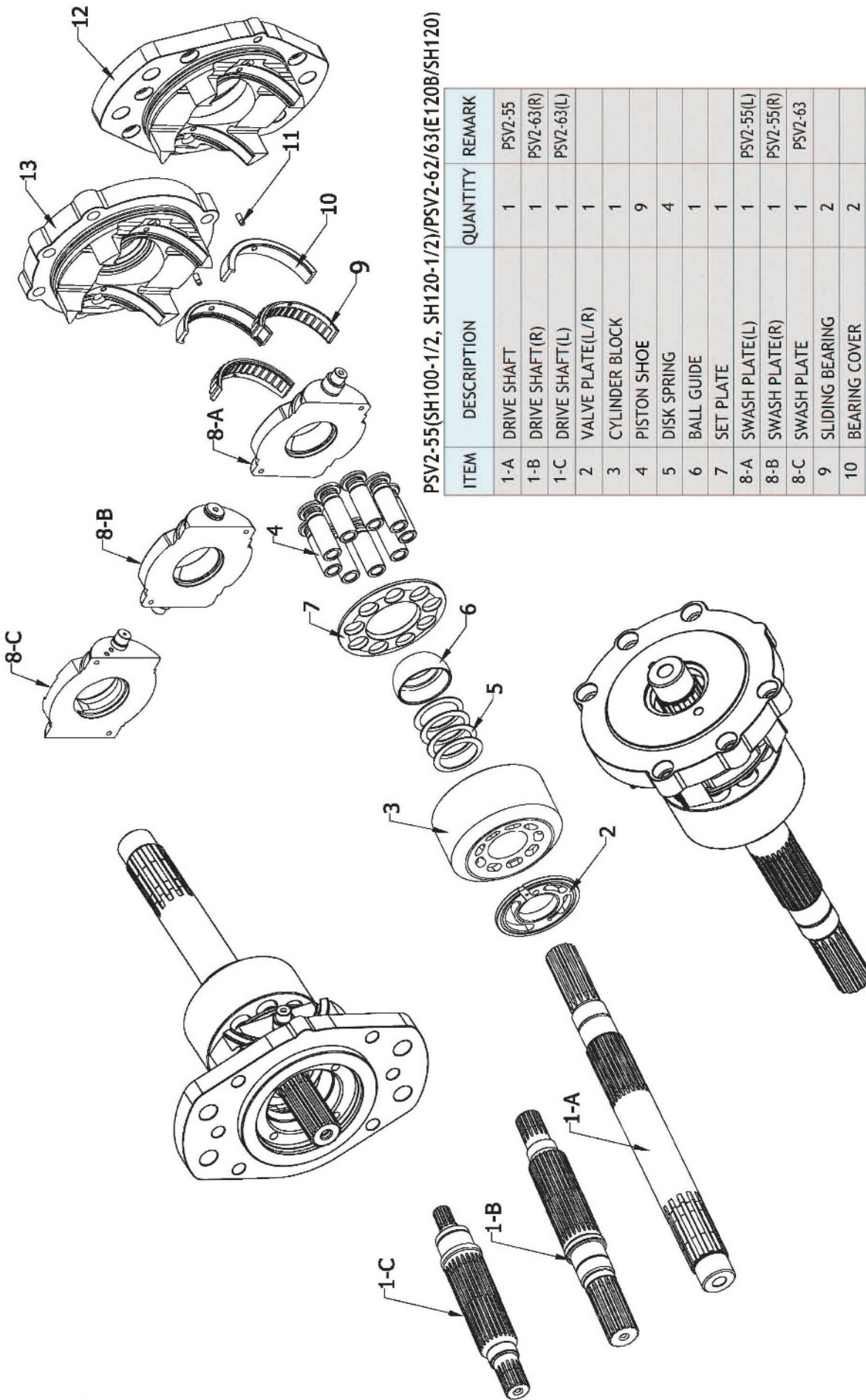
PPS140 FOR MS160/180/230/280

ITEM	DESCRIPTION	QUANTITY	REMARK
1	PORT PLATE	1	
2	BEARING PLATE	1	
3	RING OF VALVE PLATE	7	
4	COIL SPRING	1	
5	CYLINDER BLOCK	1	
6	SPACE	1	
7	BALL GUIDE	1	
8	SET PLATE	1	
9	PISTON SHOE	7	
10	SHOE PLATE	1	



PSV2-55/62/63



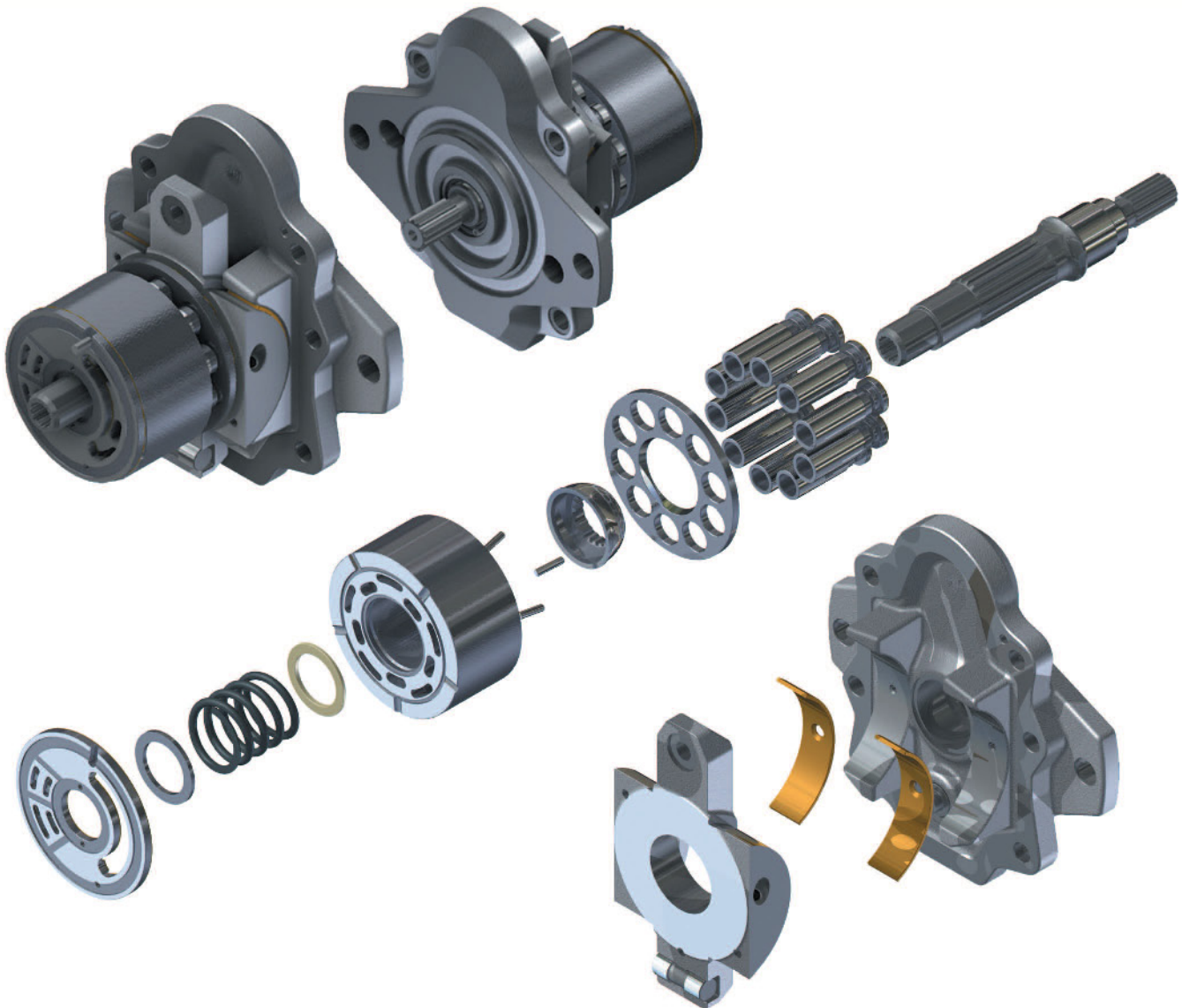
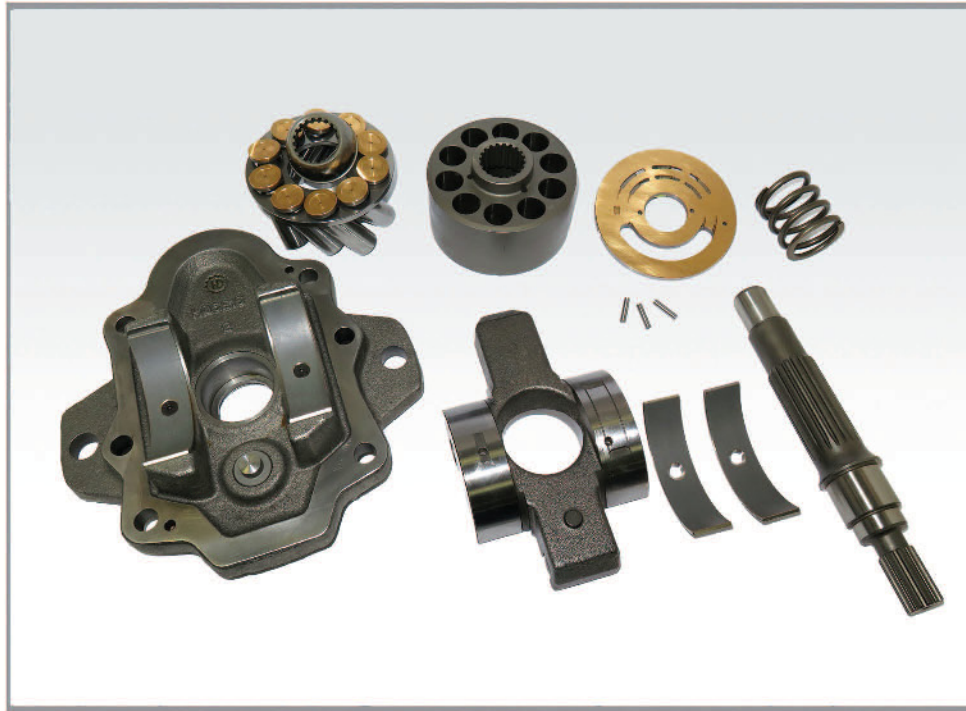


PSV2-55(SH100-1/2, SH120-1/2)/PSV2-62/63(E120B/SH120)

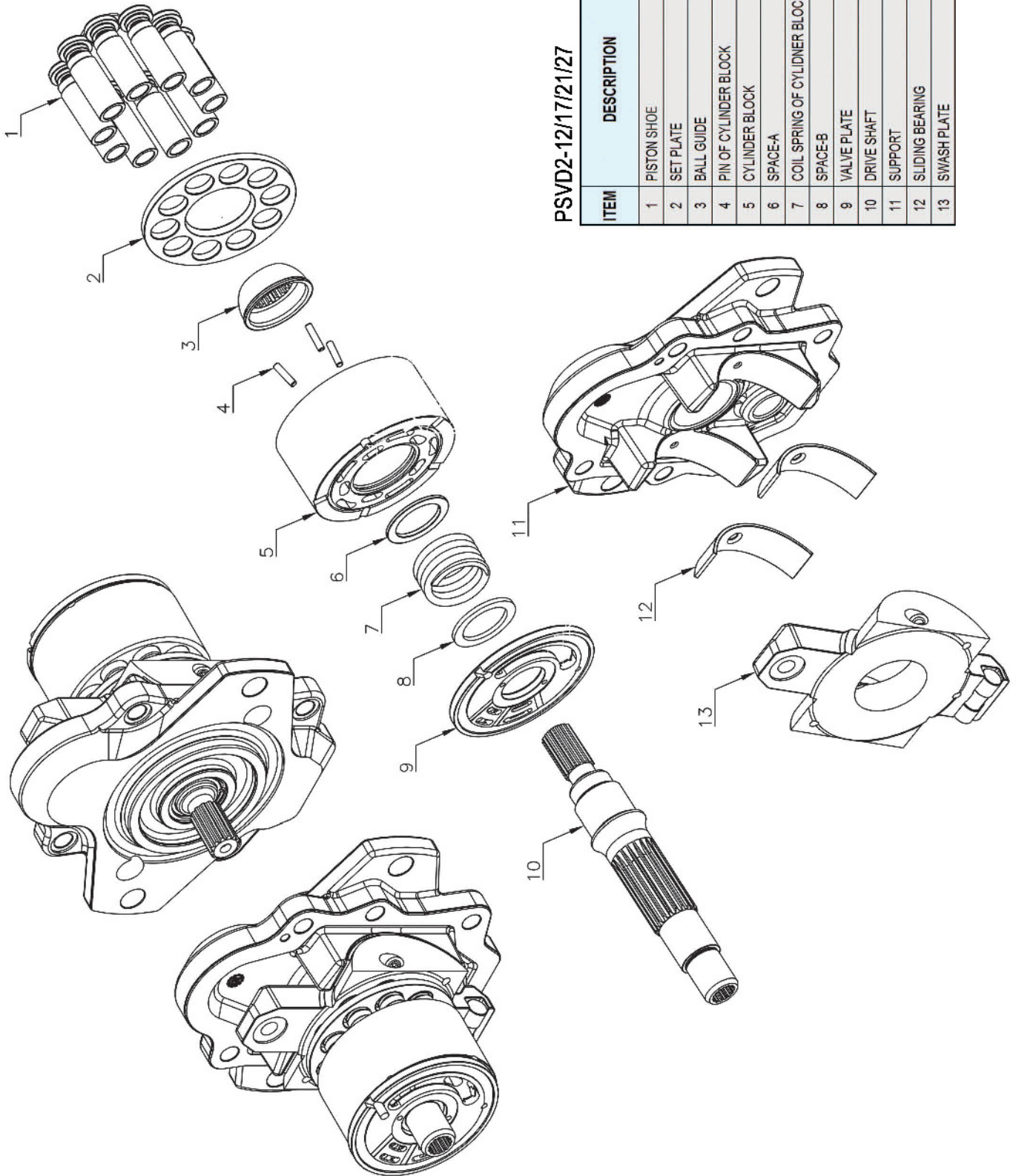
ITEM	DESCRIPTION	QUANTITY	REMARK
1-A	DRIVE SHAFT	1	PSV2-55
1-B	DRIVE SHAFT (R)	1	PSV2-63(R)
1-C	DRIVE SHAFT (L)	1	PSV2-63(L)
2	VALVE PLATE (L/R)	1	
3	CYLINDER BLOCK	1	
4	PISTON SHOE	9	
5	DISK SPRING	4	
6	BALL GUIDE	1	
7	SET PLATE	1	
8-A	SWASH PLATE (L)	1	PSV2-55(L)
8-B	SWASH PLATE (R)	1	PSV2-55(R)
8-C	SWASH PLATE	1	PSV2-63
9	SLIDING BEARING	2	
10	BEARING COVER	2	
11	PIN	2	
12	CRADLE (R)	1	
13	CRADLE (L)	1	



PSVD2 SERIES



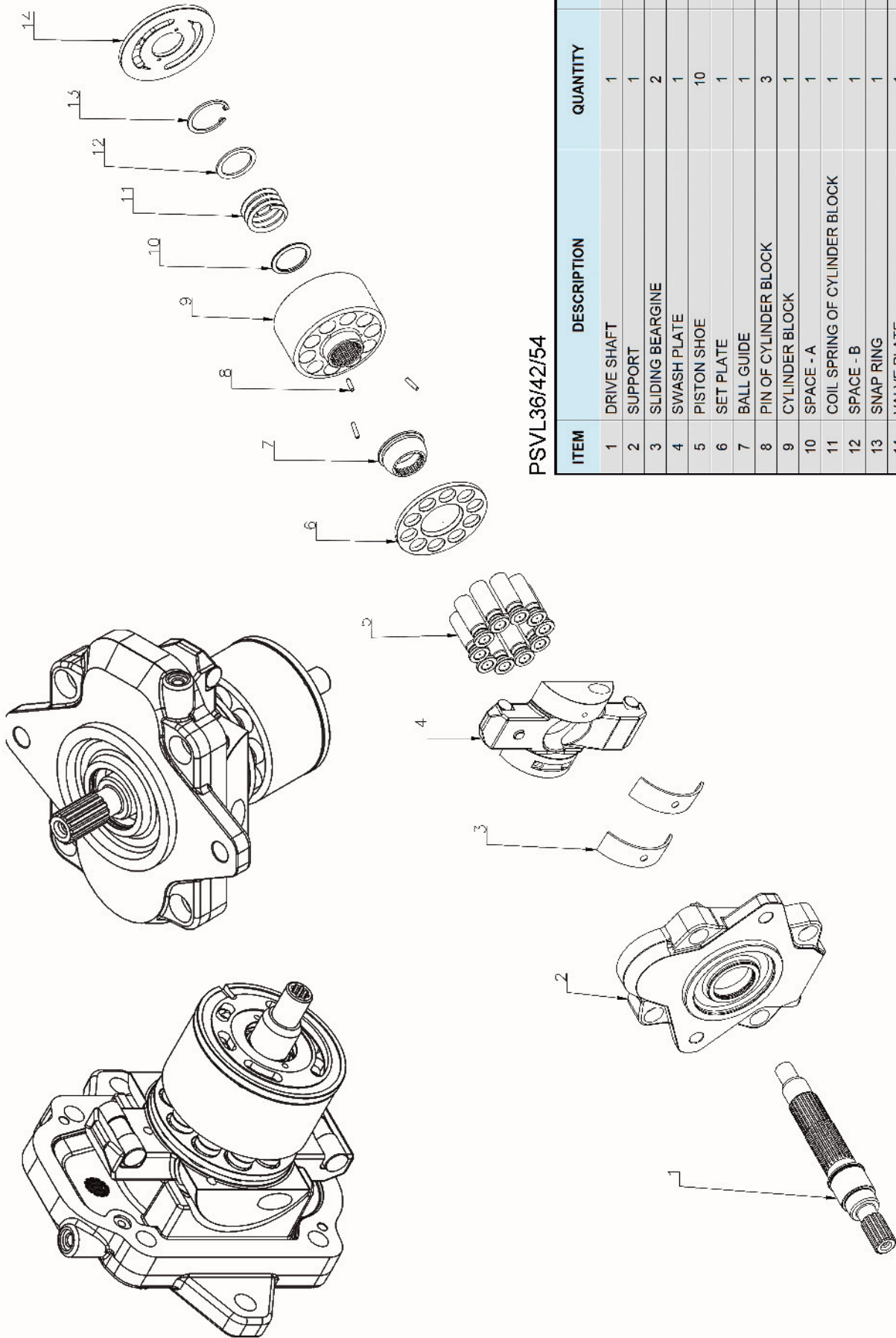
PSVD2 SERIES



PSVD2-12/17/21/27

ITEM	DESCRIPTION	QUANTITY	REMARK
1	PISTON SHOE	10	
2	SET PLATE	1	
3	BALL GUIDE	1	
4	PIN OF CYLINDER BLOCK	3	
5	CYLINDER BLOCK	1	
6	SPACE-A	1	
7	COIL SPRING OF CYLINDER BLOCK	1	
8	SPACE-B	1	
9	VALVE PLATE	1	
10	DRIVE SHAFT	1	
11	SUPPORT	1	
12	SLIDING BEARING	2	
13	SWASH PLATE	1	

HANDOK HYDRAULIC

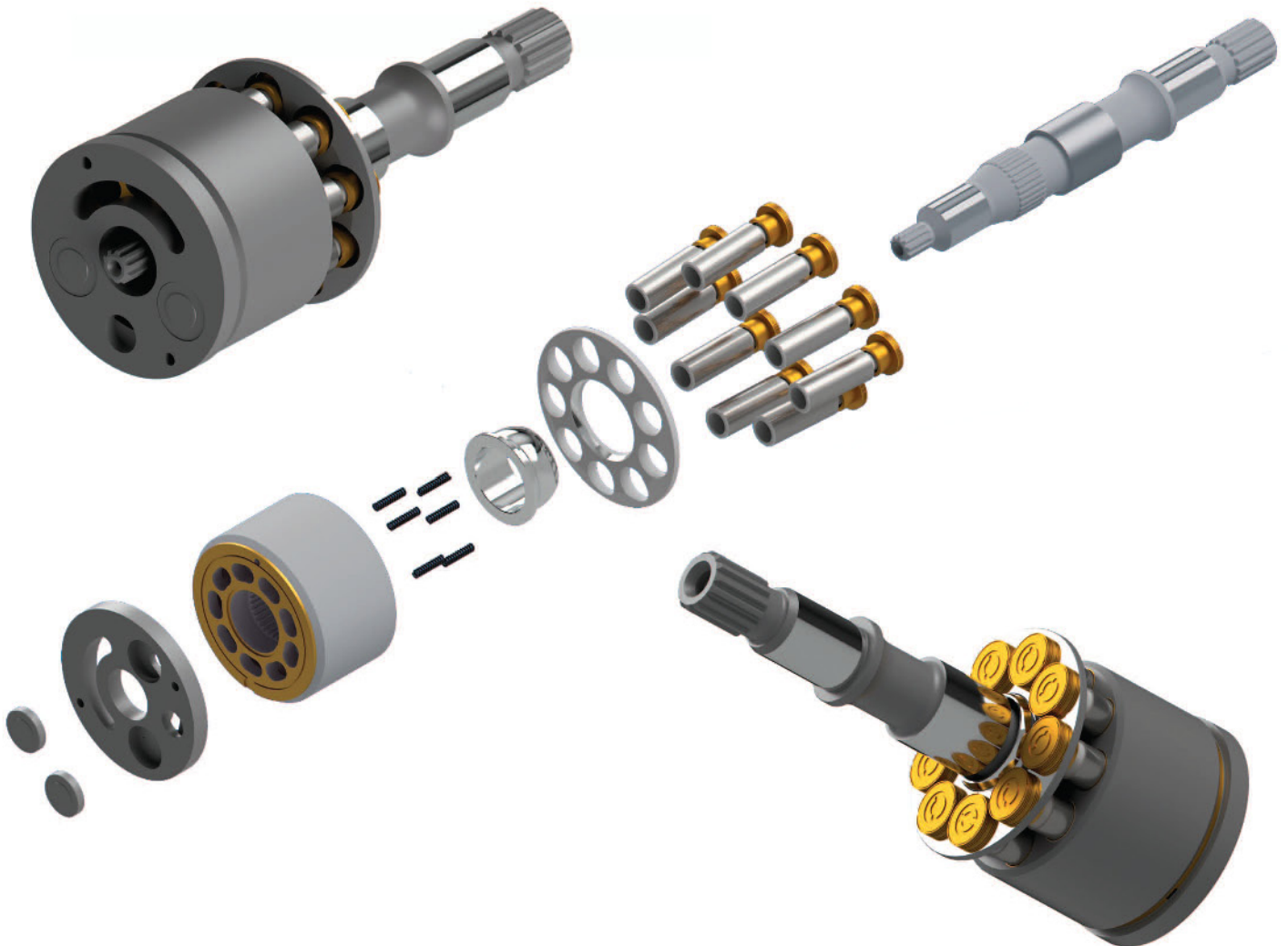


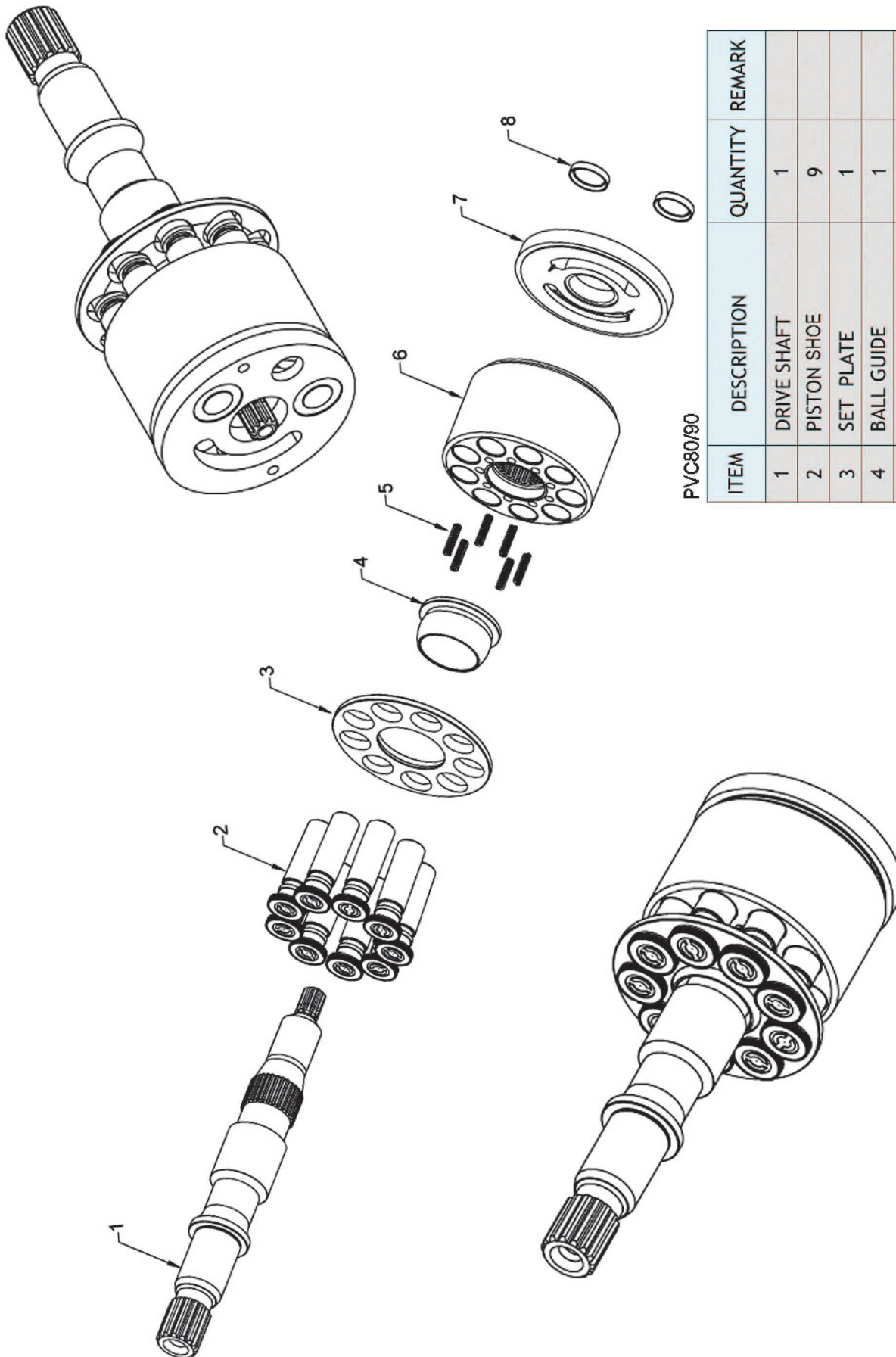
PSVL36/42/54

ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	SUPPORT	1	
3	SLIDING BEARING	2	
4	SWASH PLATE	1	
5	PISTON SHOE	10	
6	SET PLATE	1	
7	BALL GUIDE	1	
8	PIN OF CYLINDER BLOCK	3	
9	CYLINDER BLOCK	1	
10	SPACE - A	1	
11	COIL SPRING OF CYLINDER BLOCK	1	
12	SPACE - B	1	
13	SNAP RING	1	
14	VALVE PLATE	1	



PVC80/90





PVC80/90

ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	PISTON SHOE	9	
3	SET PLATE	1	
4	BALL GUIDE	1	
5	COIL SPRING	6	
6	CYLINDER BLOCK	1	
7	VALVE PLATE	1	
8	CUSHION PISTON	2	

HAN DOK HYDRAULIC

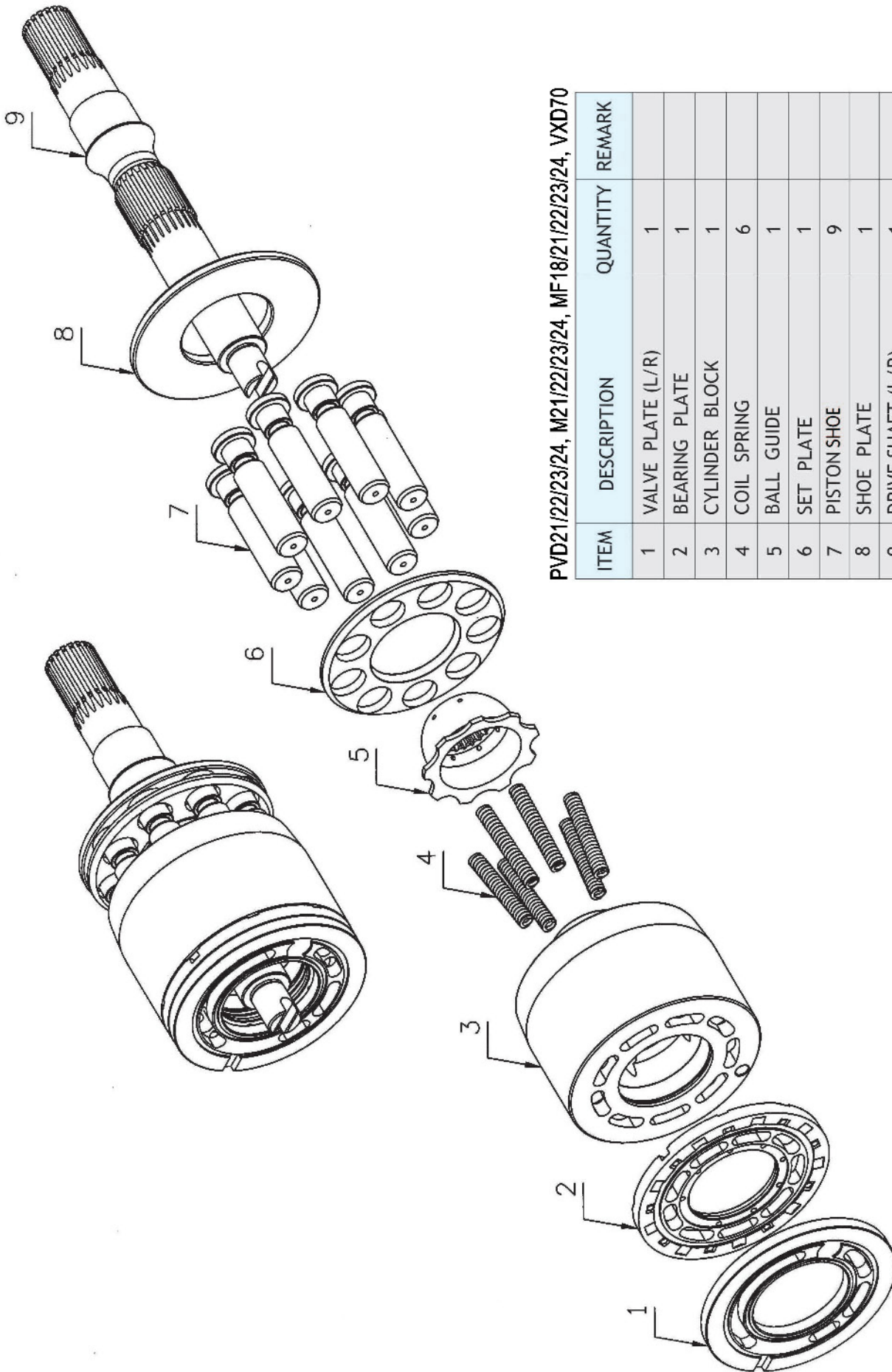


PVD/M/MF/VXD SERIES



IT IS DIFFERENT SHAPE VALVE PLATE

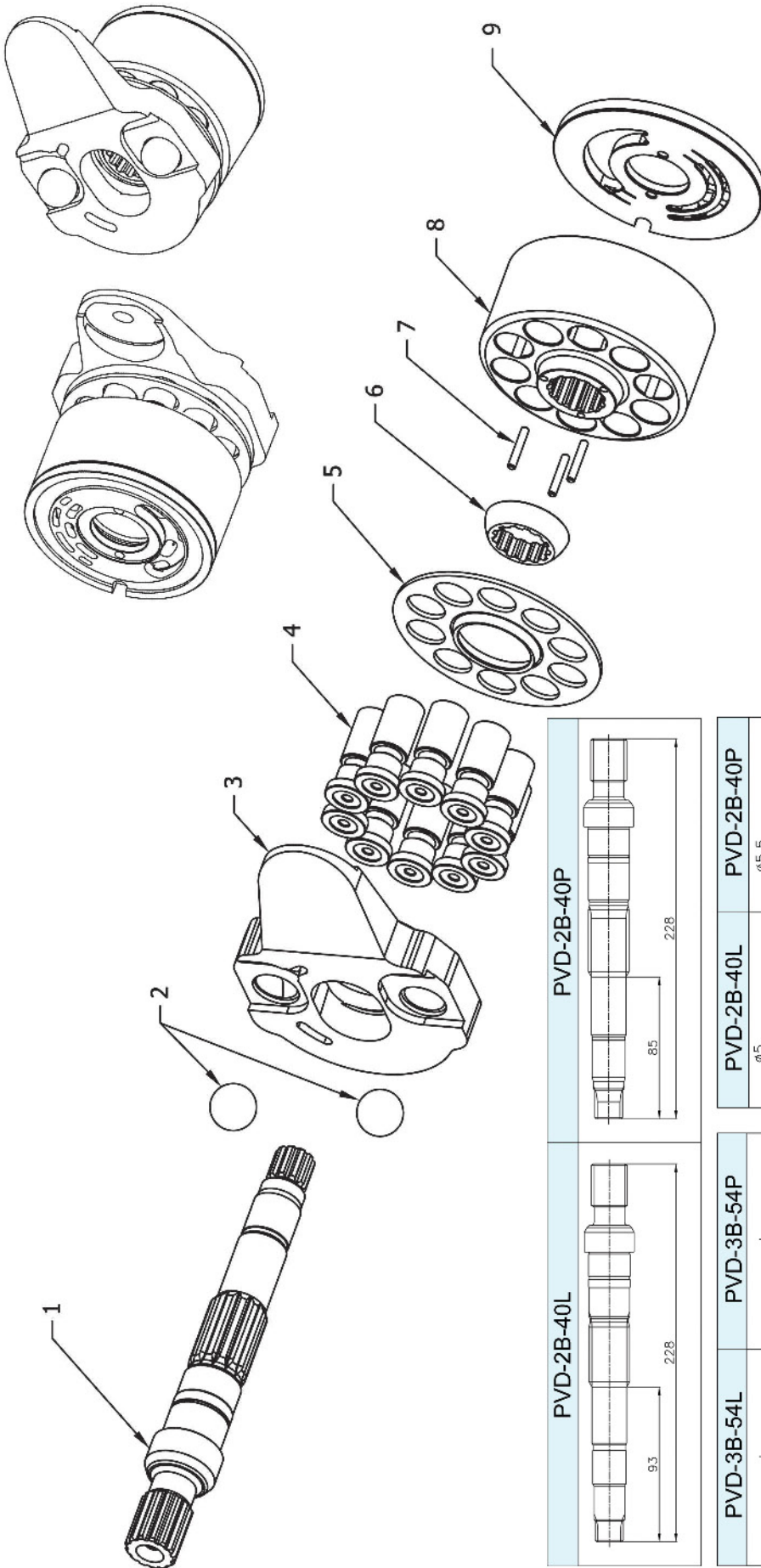
V NOTCH TYPE		
PVD22 (OLD TYPE)	PVD21 / 22 & SPV20 / 21 / 22 / 23 / 24	MF18
PROPEL NOTCH TYPE		
PV20 / 21 / 22 / 23 / 24	MF20 / 21 / 22 / 23 / 24	



PVD21/22/23/24, M21/22/23/24, MF18/21/22/23/24, VXD70

ITEM	DESCRIPTION	QUANTITY	REMARK
1	VALVE PLATE (L/R)	1	
2	BEARING PLATE	1	
3	CYLINDER BLOCK	1	
4	COIL SPRING	6	
5	BALL GUIDE	1	
6	SET PLATE	1	
7	PISTON SHOE	9	
8	SHOE PLATE	1	
9	DRIVE SHAFT (L/R)	1	

PVD-00B/0B/1B/2B/3B



PVD-00B/0B/1B/2B/3B

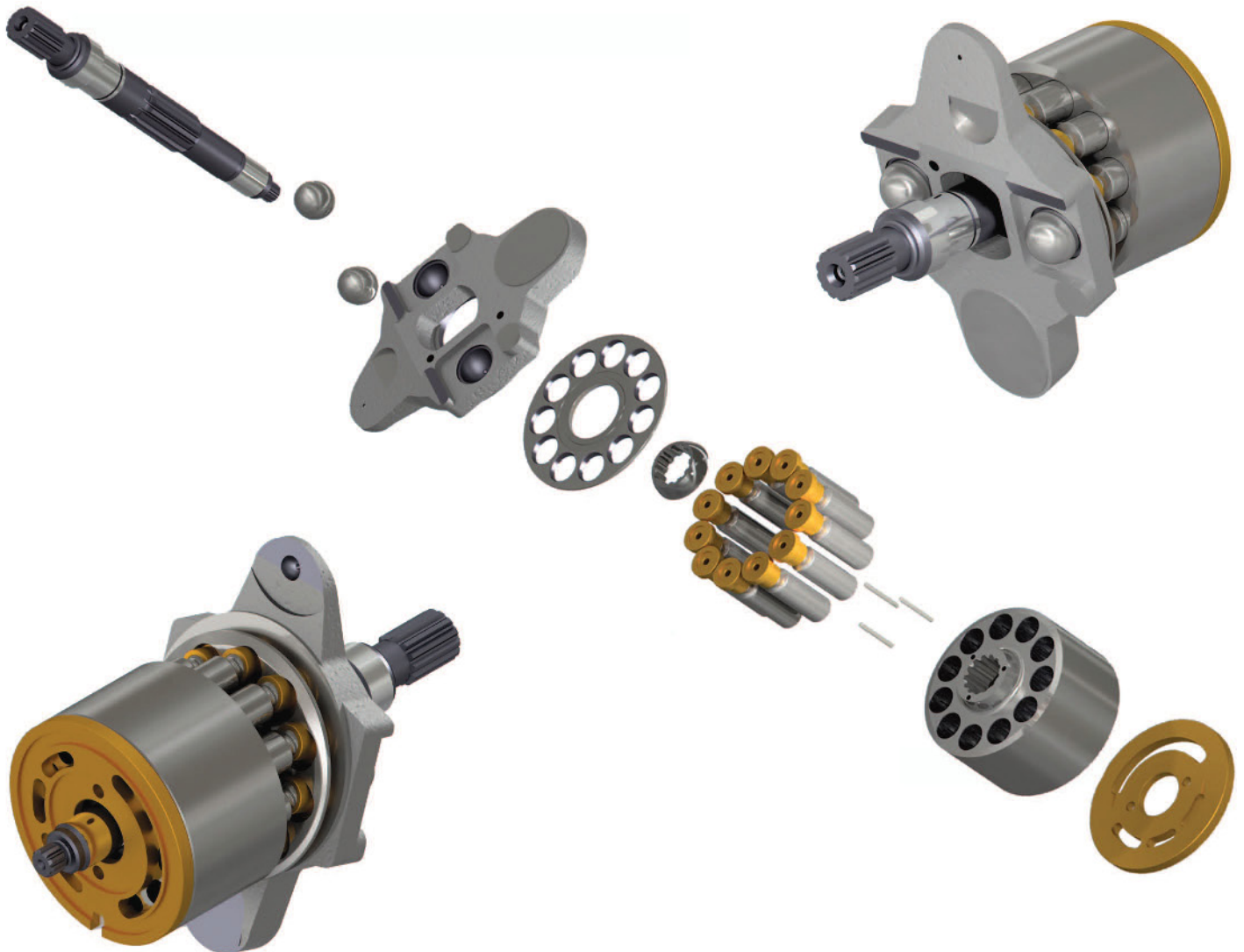
ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	PIVOT BALL OF SWASH PLATE	2	
3	SWASH PLATE	1	
4	PISTON SHOE	10	
5	SET PLATE	1	
6	BALL GUIDE	1	
7	PIN OF CYLINDER BLOCK	3	
8	CYLINDER BLOCK	1	
9	VALVE PLATE	1	

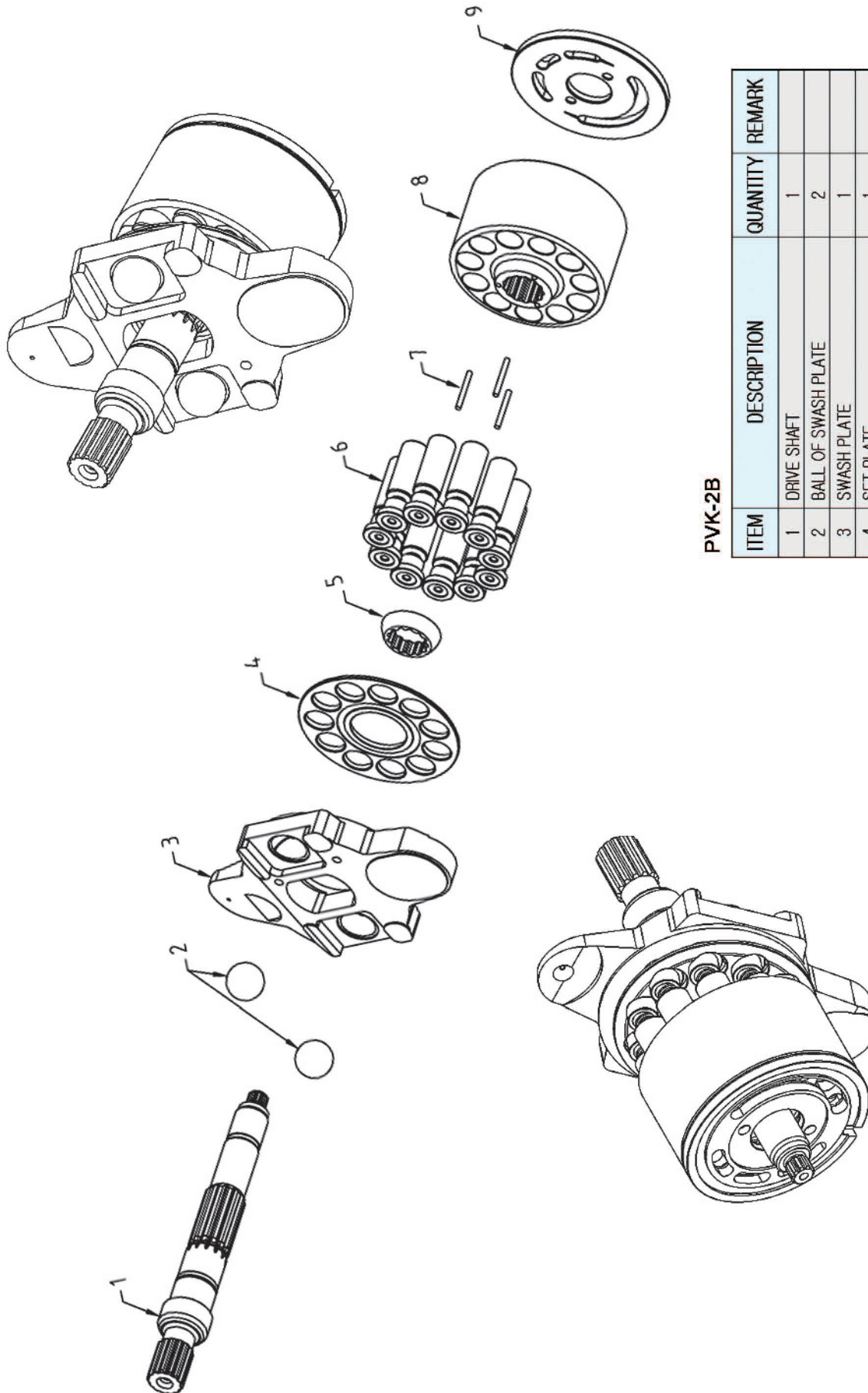
	PVD-2B-40L	PVD-2B-40P	PVD-2B-40L	PVD-2B-40P

HAN DOK HYDRAULIC



PVK-2B





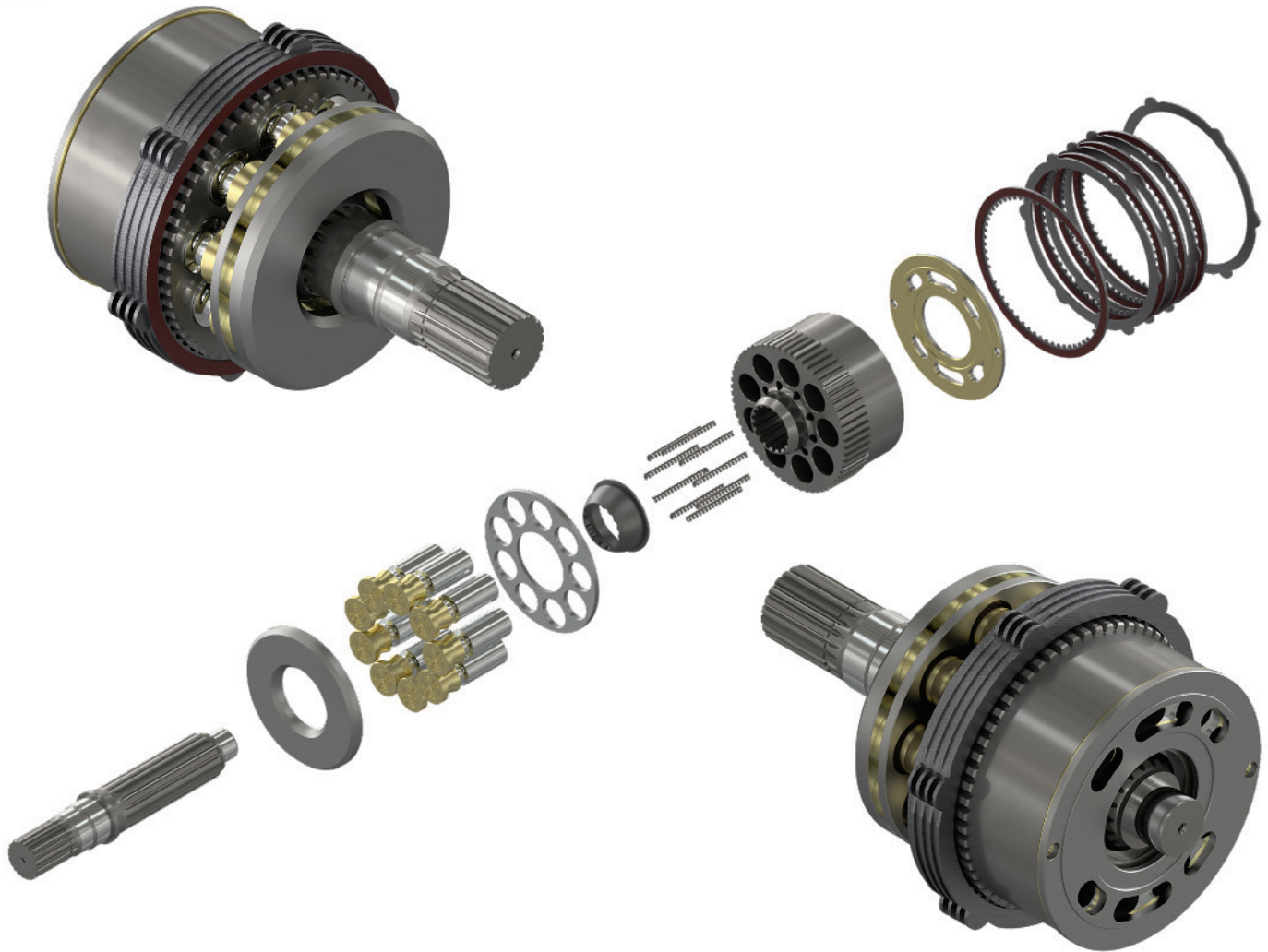
PVK-2B

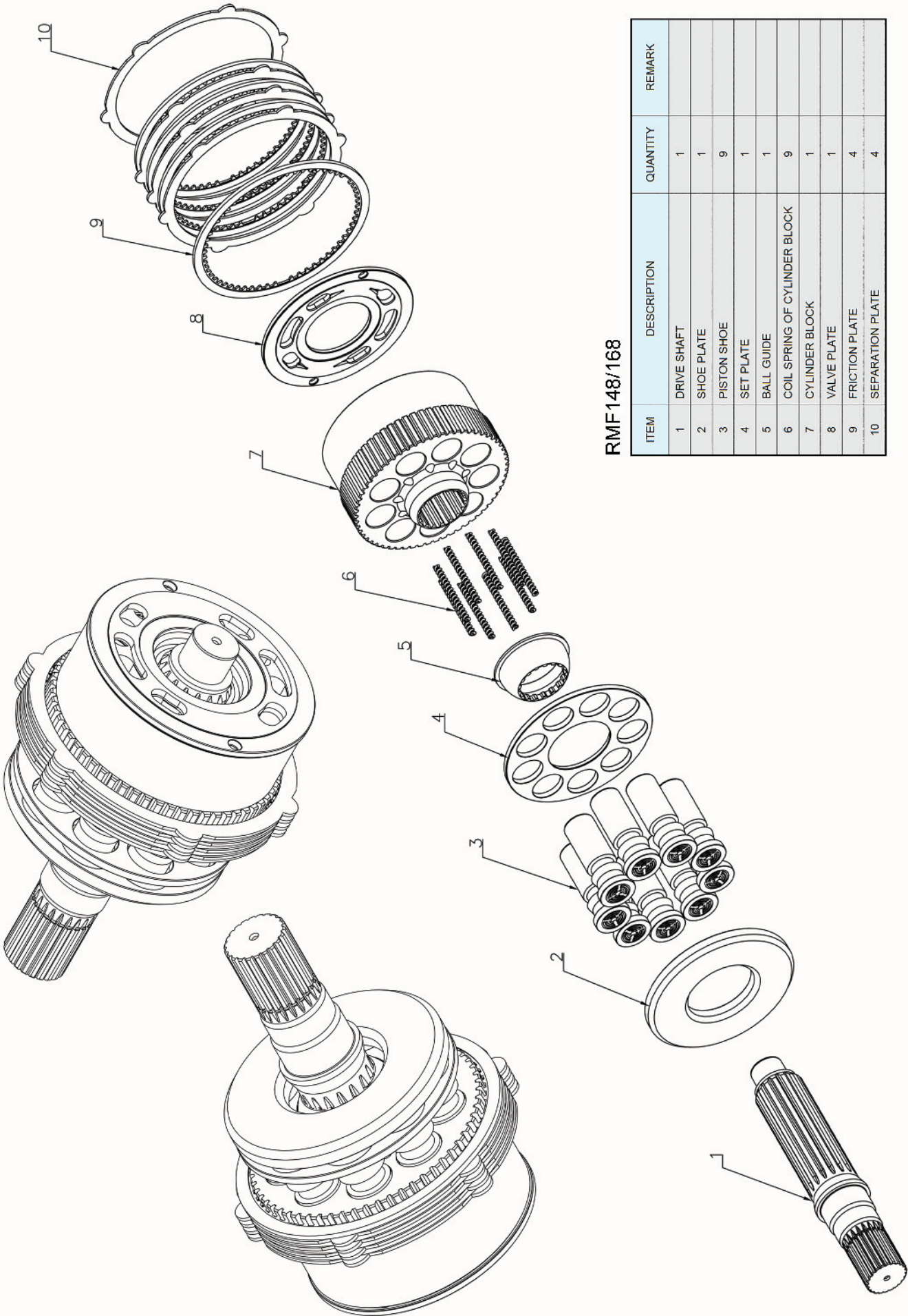
ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	BALL OF SWASH PLATE	2	
3	SWASH PLATE	1	
4	SET PLATE	1	
5	BALL GUIDE	1	
6	PISTON SHOE	11	
7	PIN OF CYLINDER BLOCK	3	
8	CYLINDER BLOCK	1	
9	VALVE PLATE	1	

HANDOK HYDRAULIC



RMF SERIES





RMF148/168

ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	SHOE PLATE	1	
3	PISTON SHOE	9	
4	SET PLATE	1	
5	BALL GUIDE	1	
6	COIL SPRING OF CYLINDER BLOCK	9	
7	CYLINDER BLOCK	1	
8	VALVE PLATE	1	
9	FRICITION PLATE	4	
10	SEPARATION PLATE	4	

HAN DOK HYDRAULIC



SBS SERIES



IT IS DIFFERENT SHAPE BETWEEN B/C SERIES AND E SERIES

<p>SBS80-L (B/C/D SERIES)</p>	<p>SBS80-R (B/C/D SERIES)</p>
<p>SBS80-L (E SERIES)</p>	<p>SBS80-R (E SERIES)</p>
<p>SBS120-L (E SERIES)</p>	<p>SBS120-R (E SERIES)</p>

IT IS DIFFERENT SHAPE BETWEEN D/SHAFT(L-11T) AND D/SHAFT(L-15T)

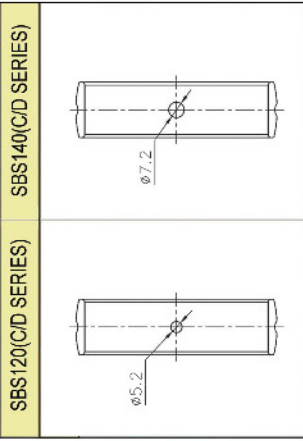
<p>SBS120/140-L (11T)</p>	<p>SBS120/140-L (15T)</p>
----------------------------------	----------------------------------

IT IS DIFFERENT SHAPE BETWEEN KEY TYPE AND SPLINE TYPE

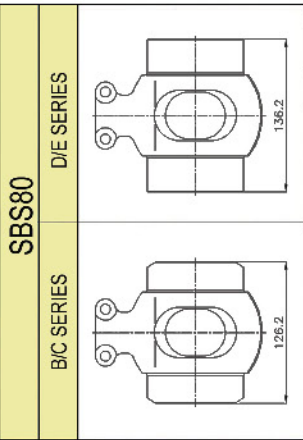
<p>SBS120/140-R (KEY TYPE)</p>	<p>SBS120/140-R (SPLINE TYPE)</p>
---------------------------------------	--



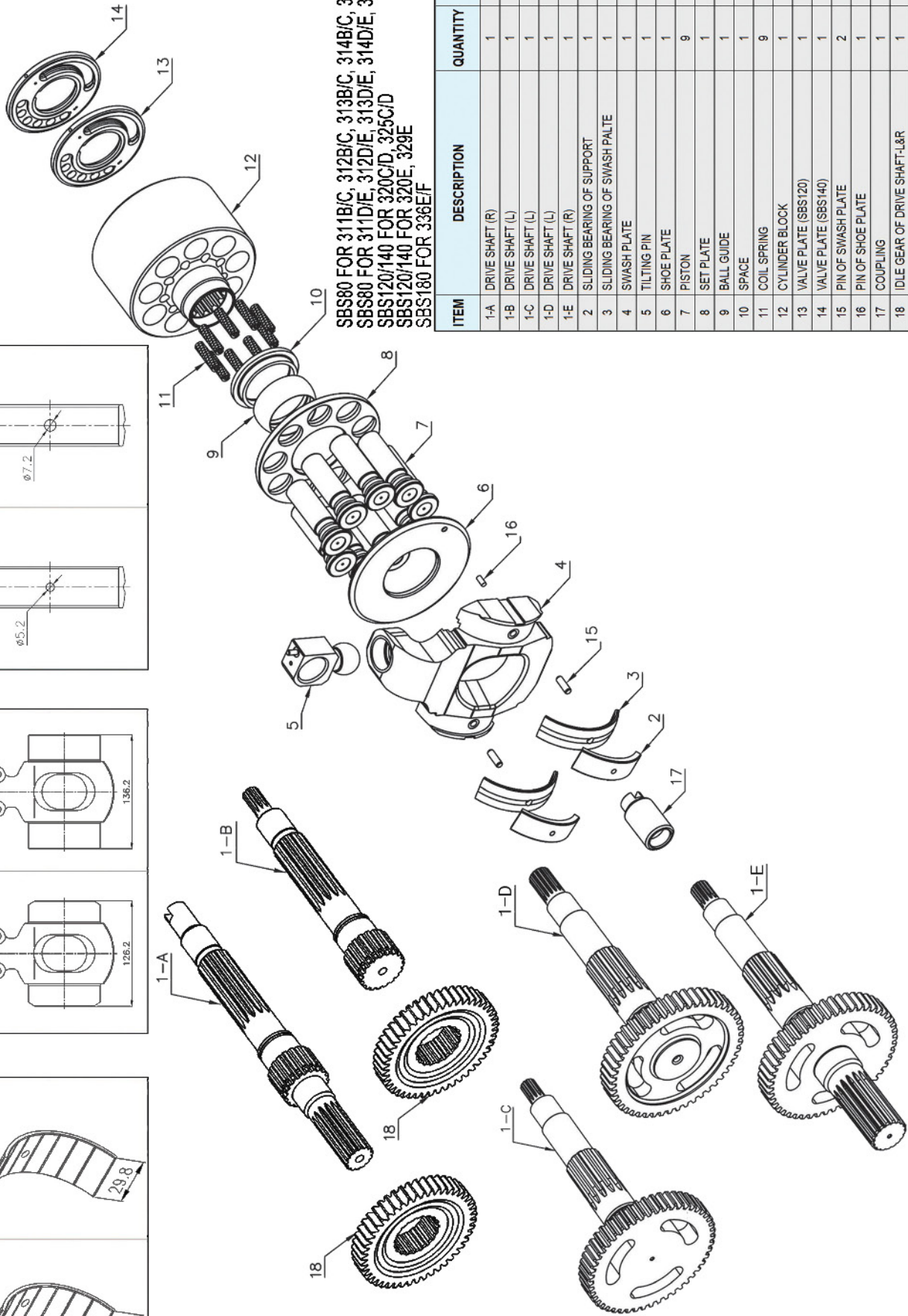
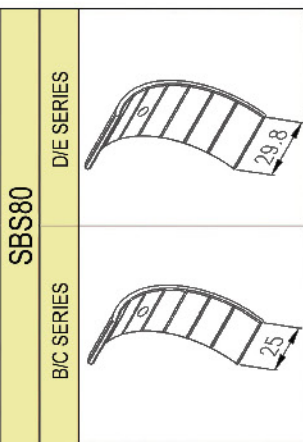
IT IS DIFFERENT SHAPE-BEARING PLATE OF SWASH PLATE



IT IS DIFFERENT SWASH PLATE



IT IS DIFFERENT SLIDING BEARING



SBS80 FOR 311B/C, 312B/C, 313B/C, 314B/C, 315B/C
 SBS80 FOR 311D/E, 312D/E, 313D/E, 314D/E, 315D/E
 SBS120/140 FOR 320C/D, 325C/D
 SBS120/140 FOR 320E, 329E
 SBS180 FOR 336E/F

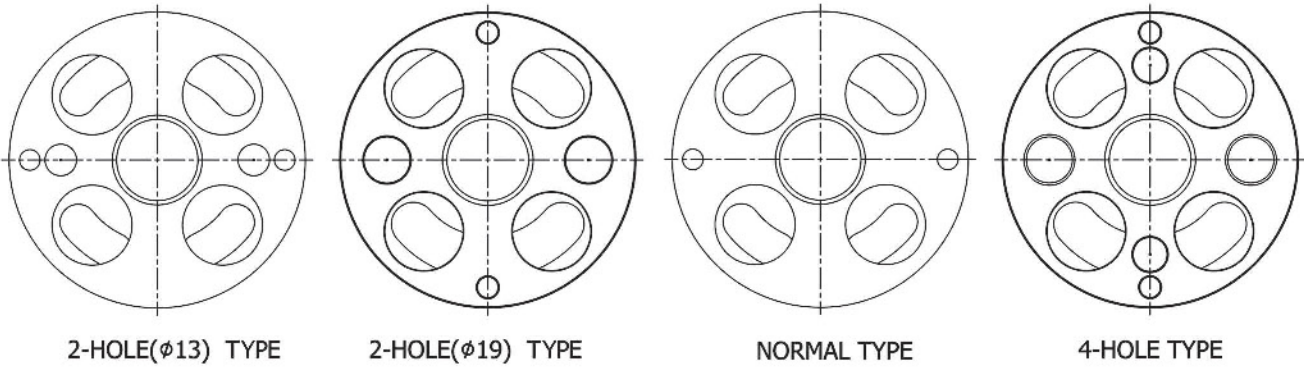
ITEM	DESCRIPTION	QUANTITY	REMARK
1-A	DRIVE SHAFT (R)	1	KEY TYPE
1-B	DRIVE SHAFT (L)	1	10T
1-C	DRIVE SHAFT (L)	1	11T
1-D	DRIVE SHAFT (L)	1	15T
1-E	DRIVE SHAFT (R)	1	17T
2	SLIDING BEARING OF SUPPORT	1	
3	SLIDING BEARING OF SWASH PLATE	1	
4	SWASH PLATE	1	
5	TILTING PIN	1	
6	SHOE PLATE	1	
7	PISTON	9	
8	SET PLATE	1	
9	BALL GUIDE	1	
10	SPACE	1	
11	COIL SPRING	9	
12	CYLINDER BLOCK	1	
13	VALVE PLATE (SBS120)	1	
14	VALVE PLATE (SBS140)	1	
15	PIN OF SWASH PLATE	2	
16	PIN OF SHOE PLATE	1	
17	COUPLING	1	
18	IDLE GEAR OF DRIVE SHAFT-L&R	1	



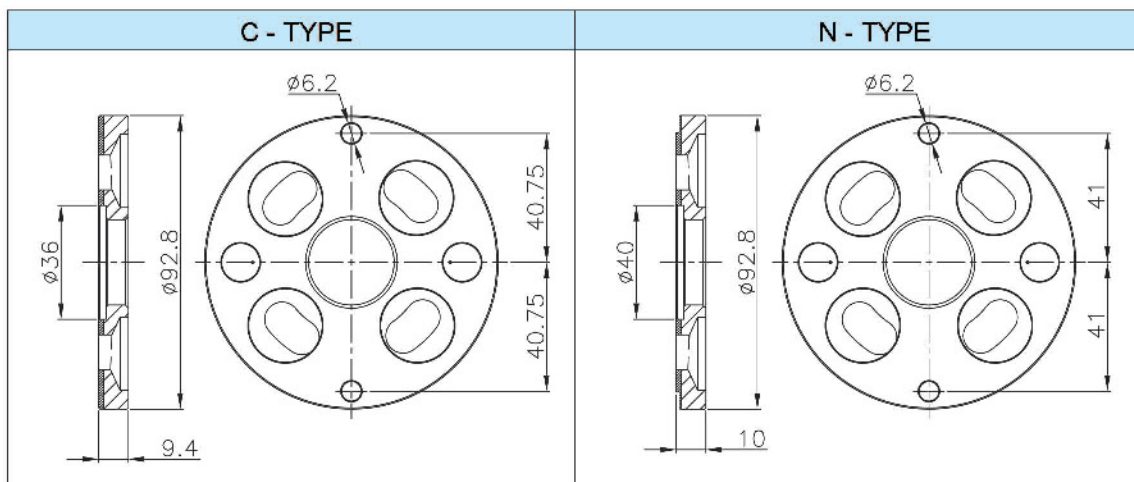
SG/MFB SERIES

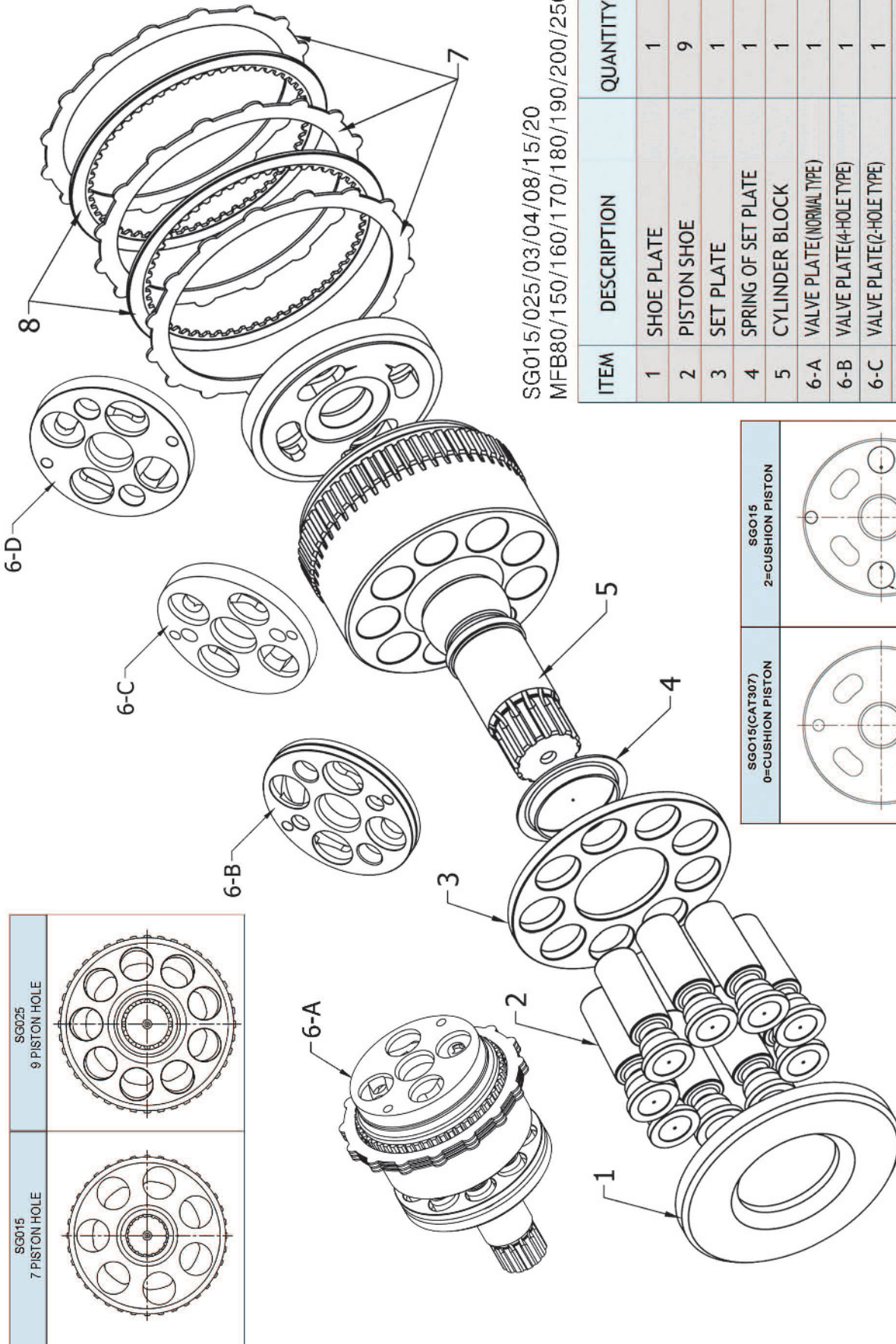


IT IS DIFFERENT VALVE PLATE (SG08) OF BACK FACE



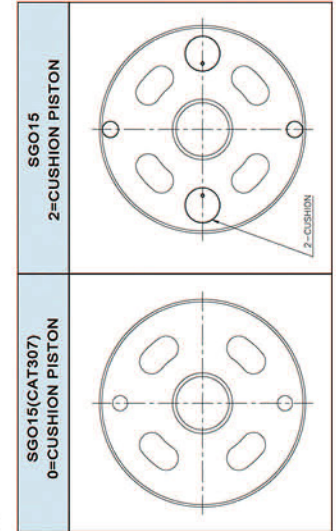
IT IS DIFFERENT VALVE PLATE (SG02) C-TYPE AND N-TYPE





SG015/025/03/04/08/15/20
MFB80/150/160/170/180/190/200/250

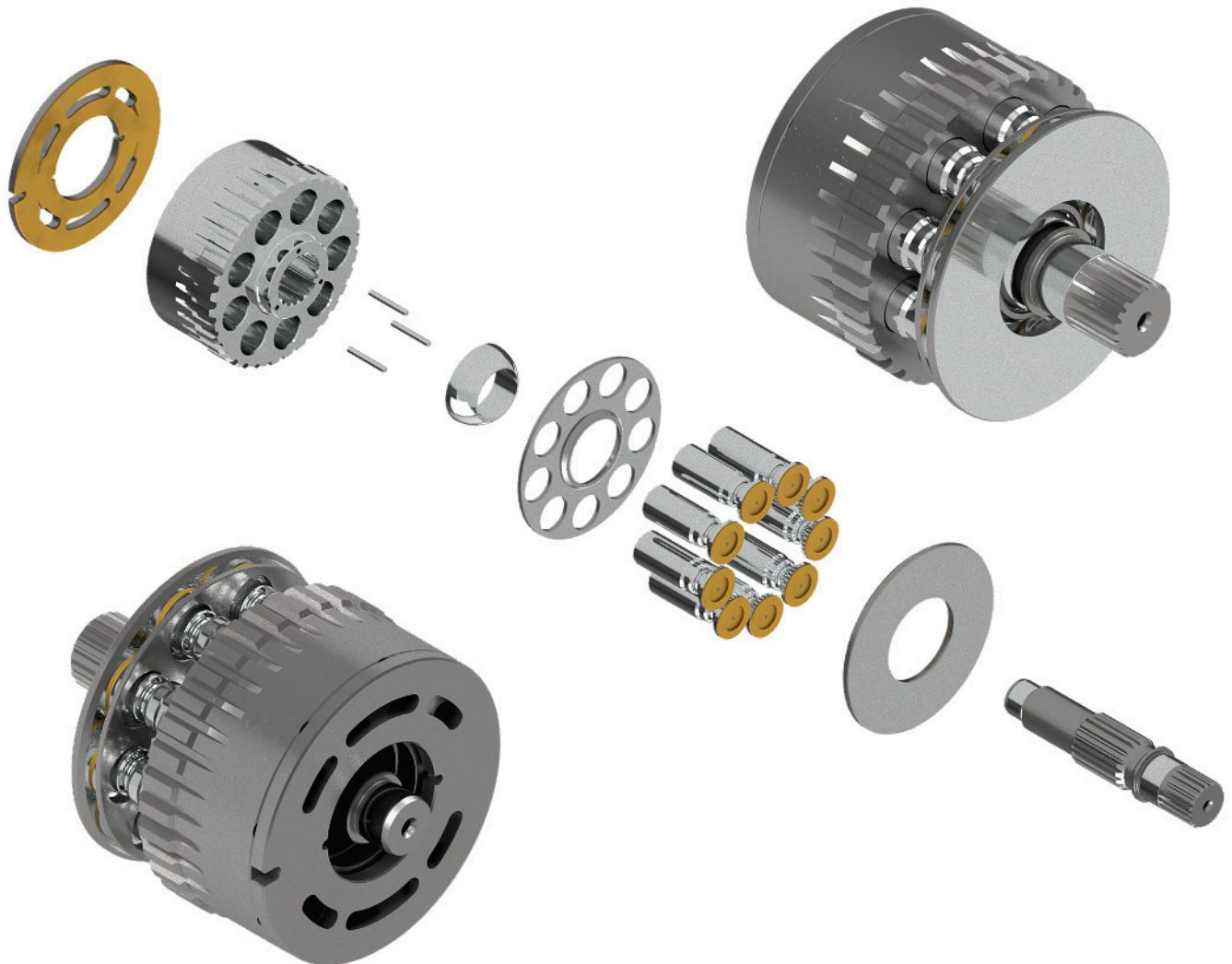
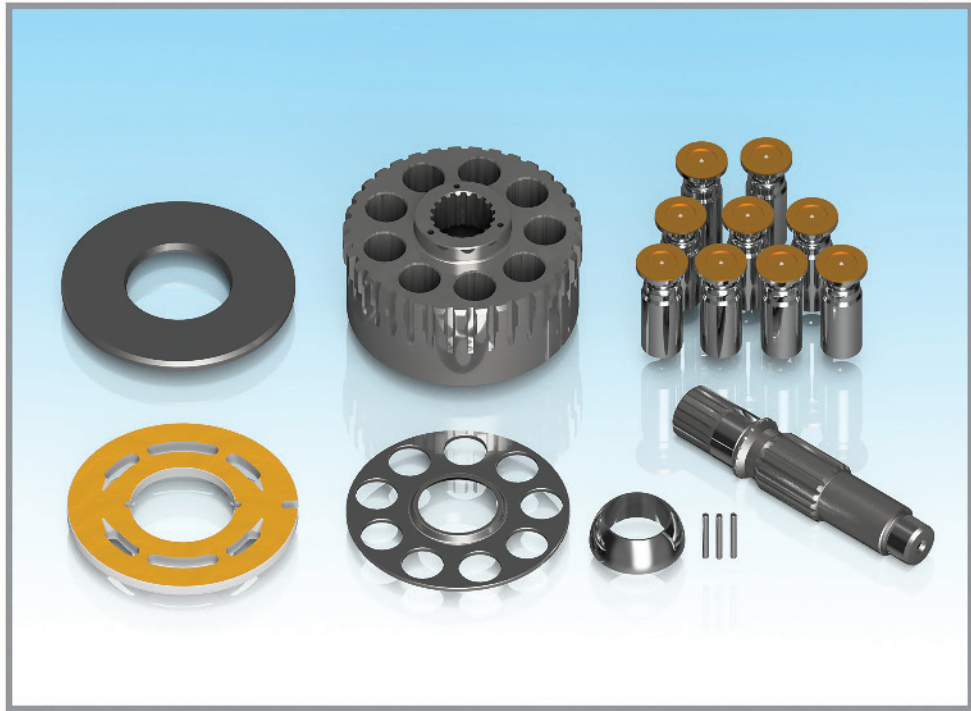
ITEM	DESCRIPTION	QUANTITY	REMARK
1	SHOE PLATE	1	
2	PISTON SHOE	9	
3	SET PLATE	1	
4	SPRING OF SET PLATE	1	
5	CYLINDER BLOCK	1	
6-A	VALVE PLATE(NORMAL TYPE)	1	
6-B	VALVE PLATE(4-HOLE TYPE)	1	
6-C	VALVE PLATE(2-HOLE TYPE)	1	Φ13
6-D	VALVE PLATE(2-HOLE TYPE)	1	Φ19
7	SEPARATION PLATE	3	
8	FRICTION PLATE	2	

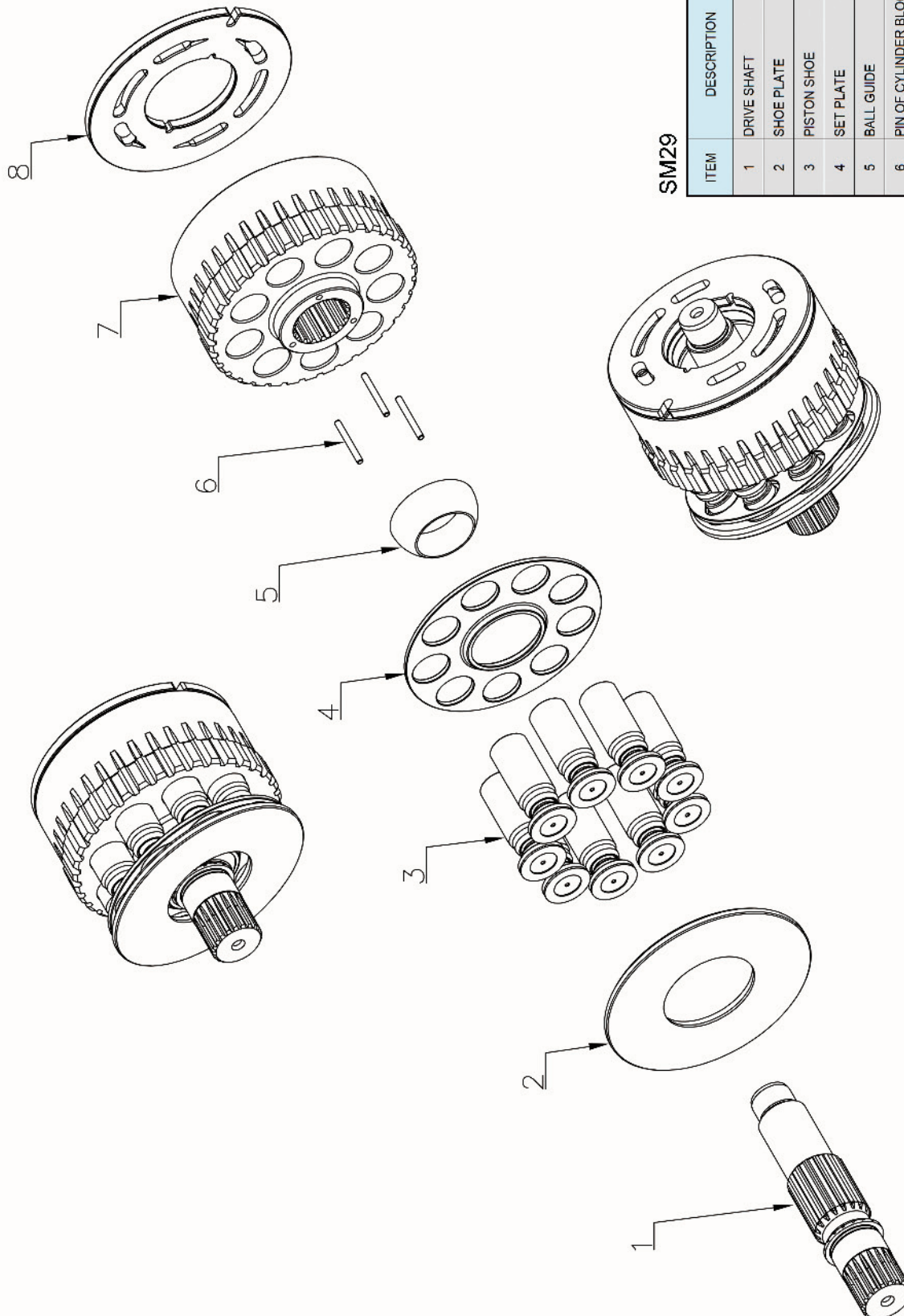


HAN DOK HYDRAULIC



SM29





SM29

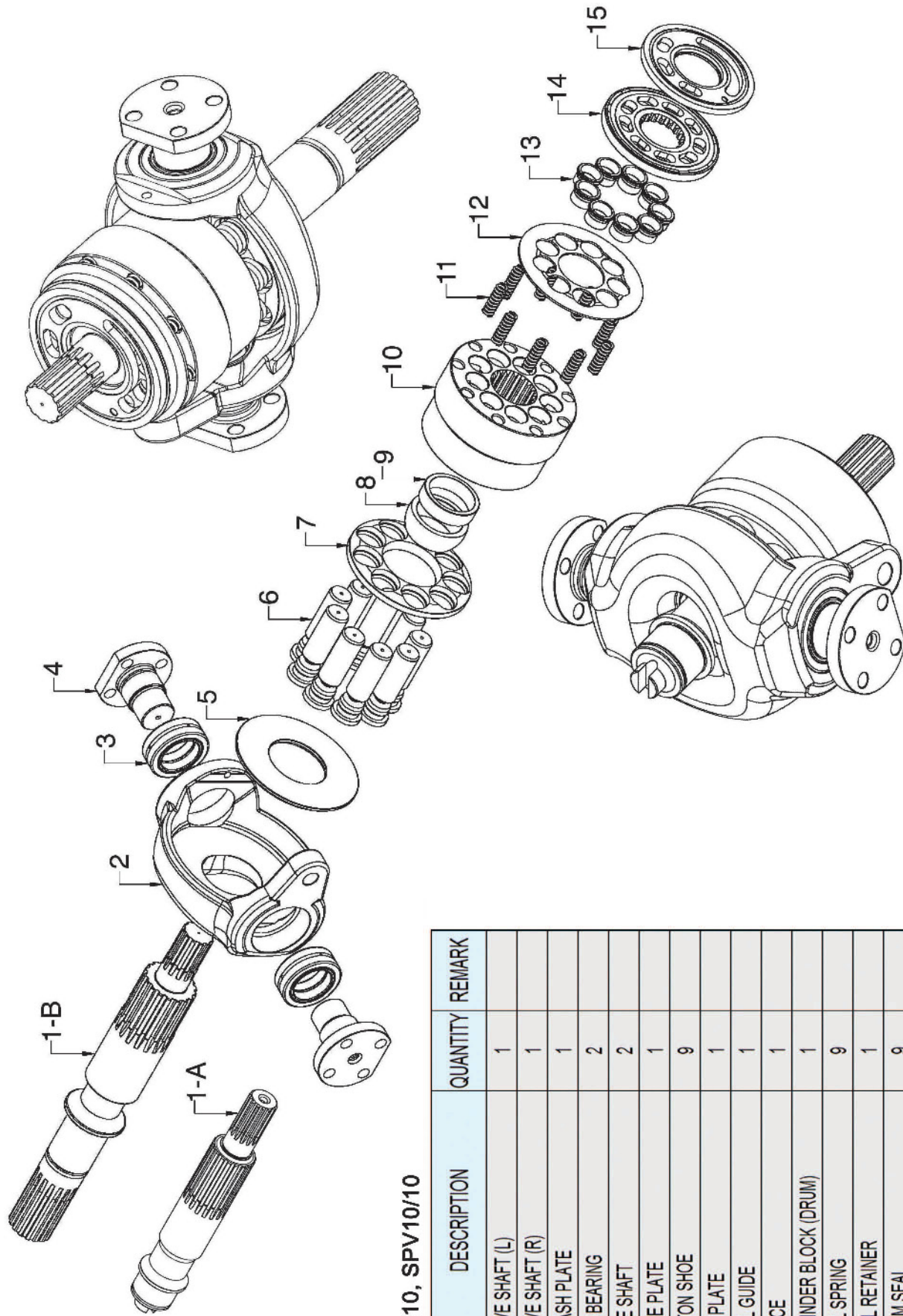
ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	SHOE PLATE	1	
3	PISTON SHOE	9	
4	SET PLATE	1	
5	BALL GUIDE	1	
6	PIN OF CYLINDER BLOCK	3	
7	CYLINDER BLOCK	1	
8	VALVE PLATE	1	



SPK10/10, SPV10/10



SPK10/10, SPV10/10



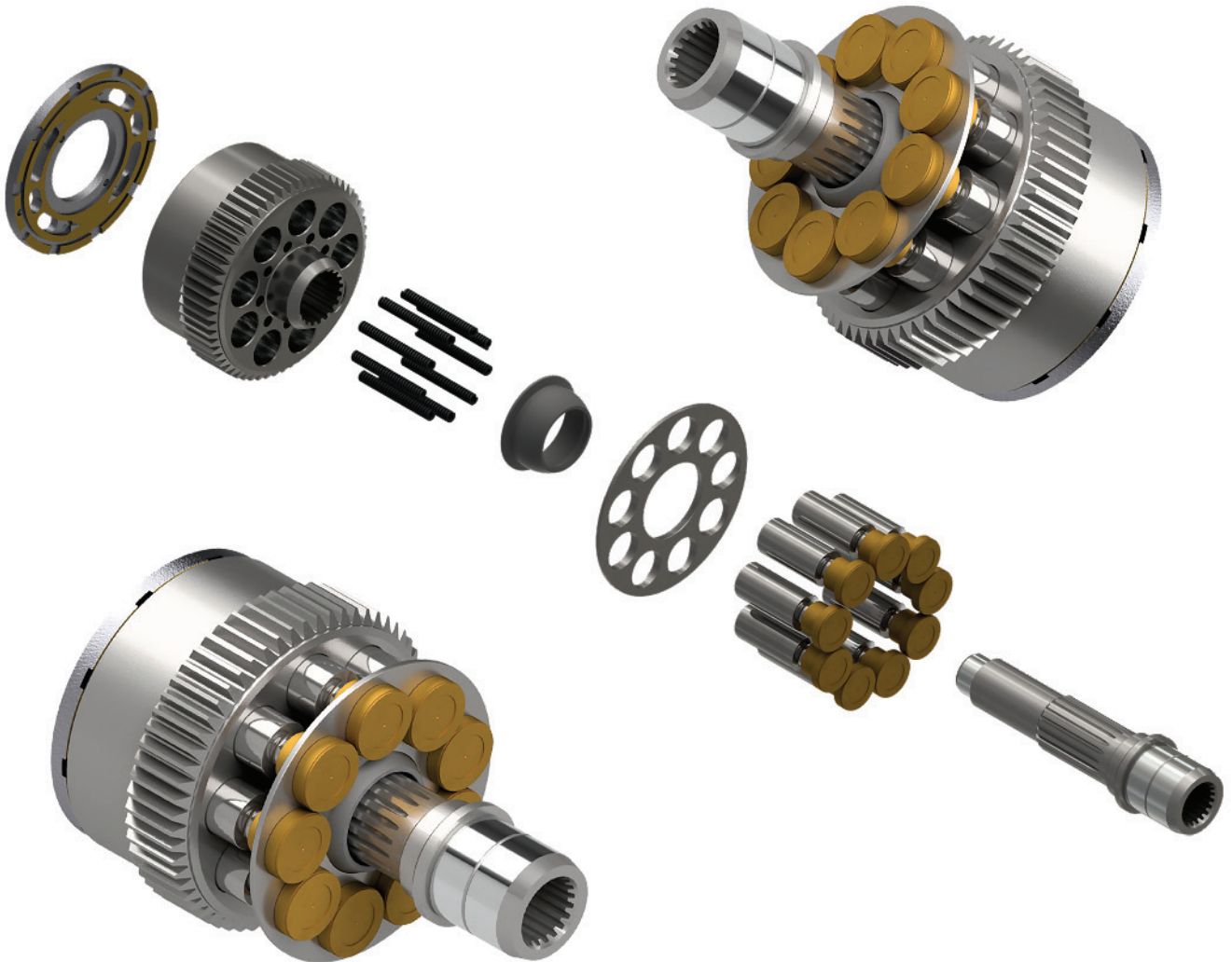
SPK10/10, SPV10/10

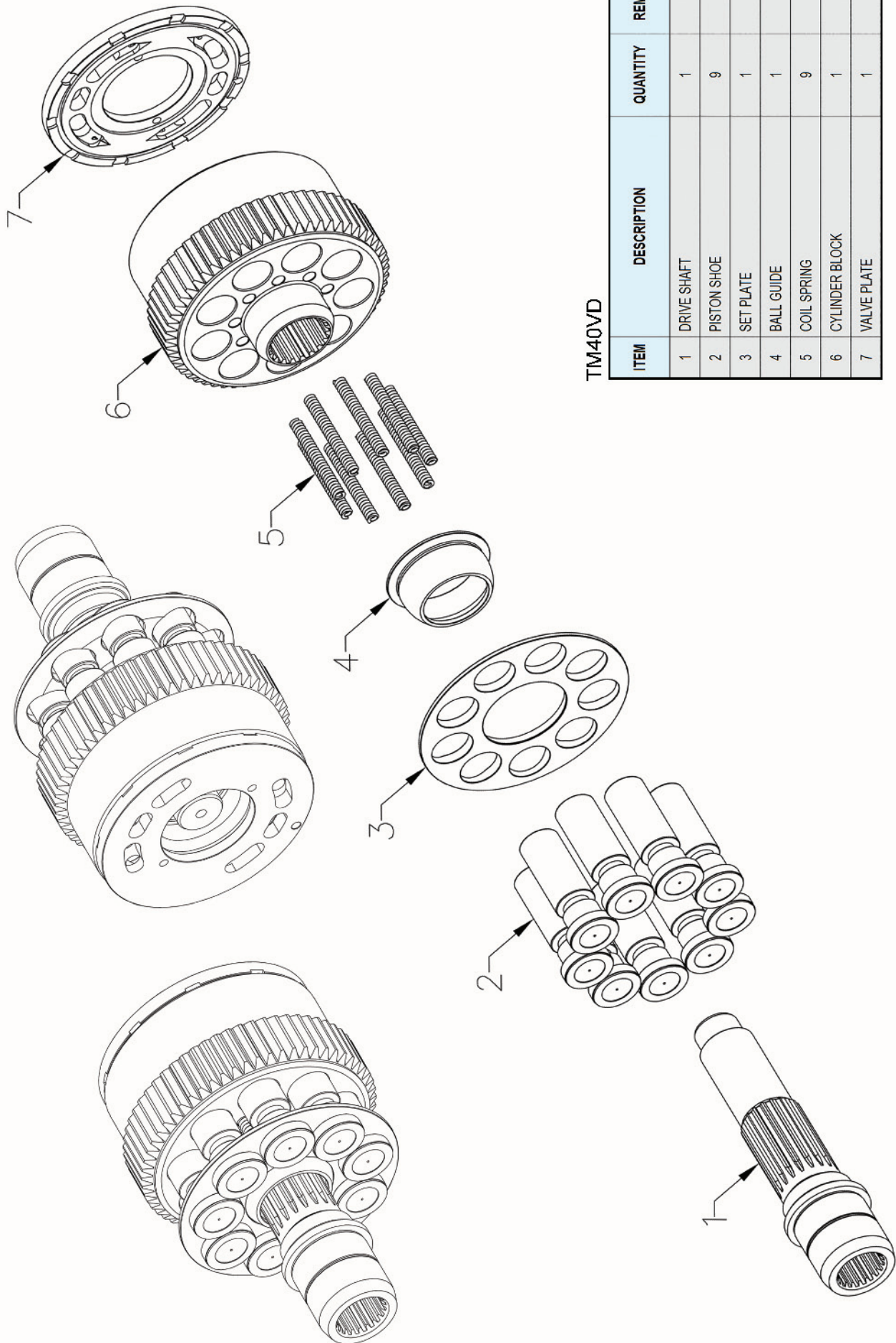
ITEM	DESCRIPTION	QUANTITY	REMARK
1-A	DRIVE SHAFT (L)	1	
1-B	DRIVE SHAFT (R)	1	
2	SWASH PLATE	1	
3	EYE BEARING	2	
4	AXLE SHAFT	2	
5	SHOE PLATE	1	
6	PISTON SHOE	9	
7	SET PLATE	1	
8	BALL GUIDE	1	
9	SPACE	1	
10	CYLINDER BLOCK (DRUM)	1	
11	COIL SPRING	9	
12	SEAL RETAINER	1	
13	DRUM SEAL	9	
14	BEARING PLATE	1	
15	PORT PLATE (LR)	1	

HANDOK HYDRAULIC



TM40VD



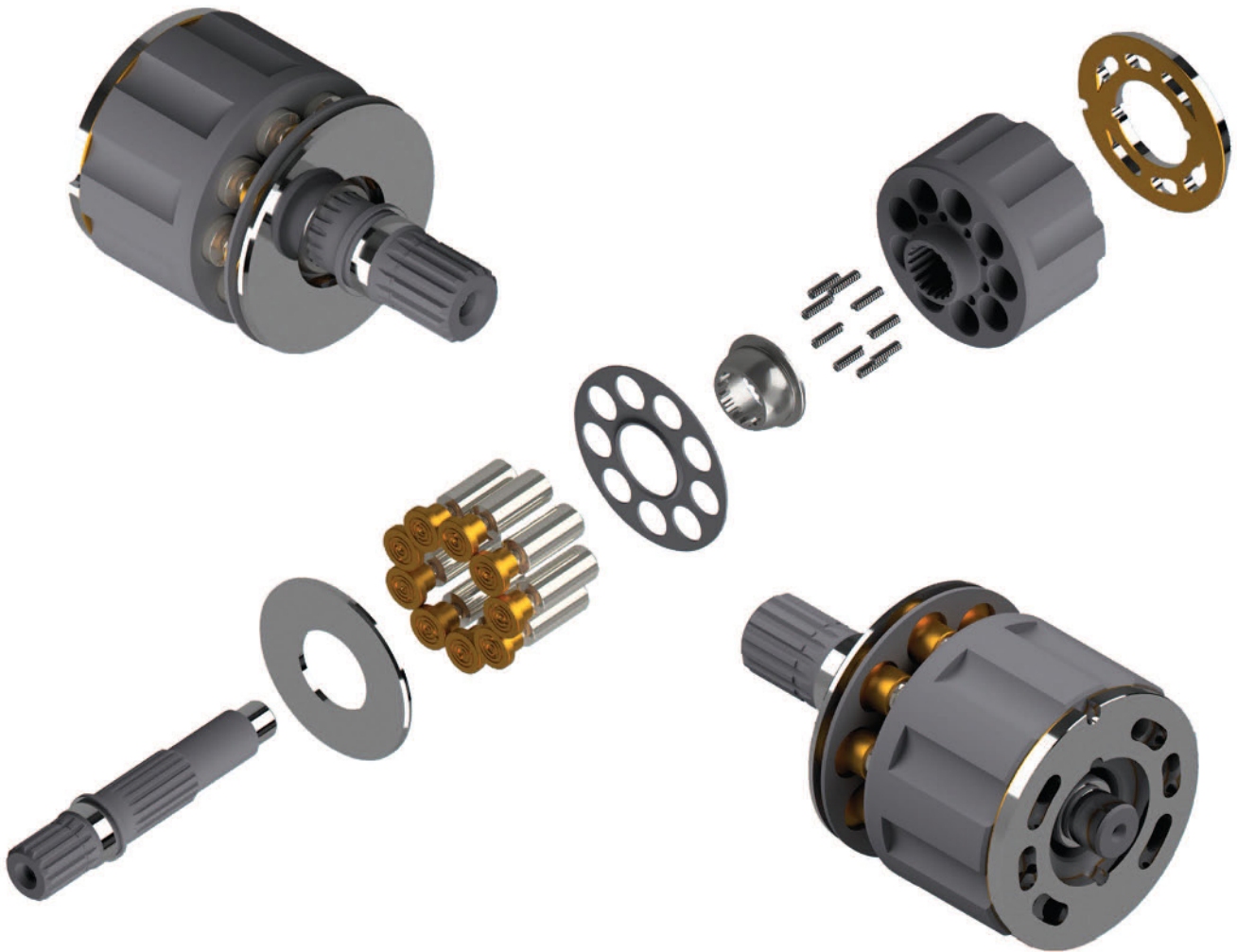


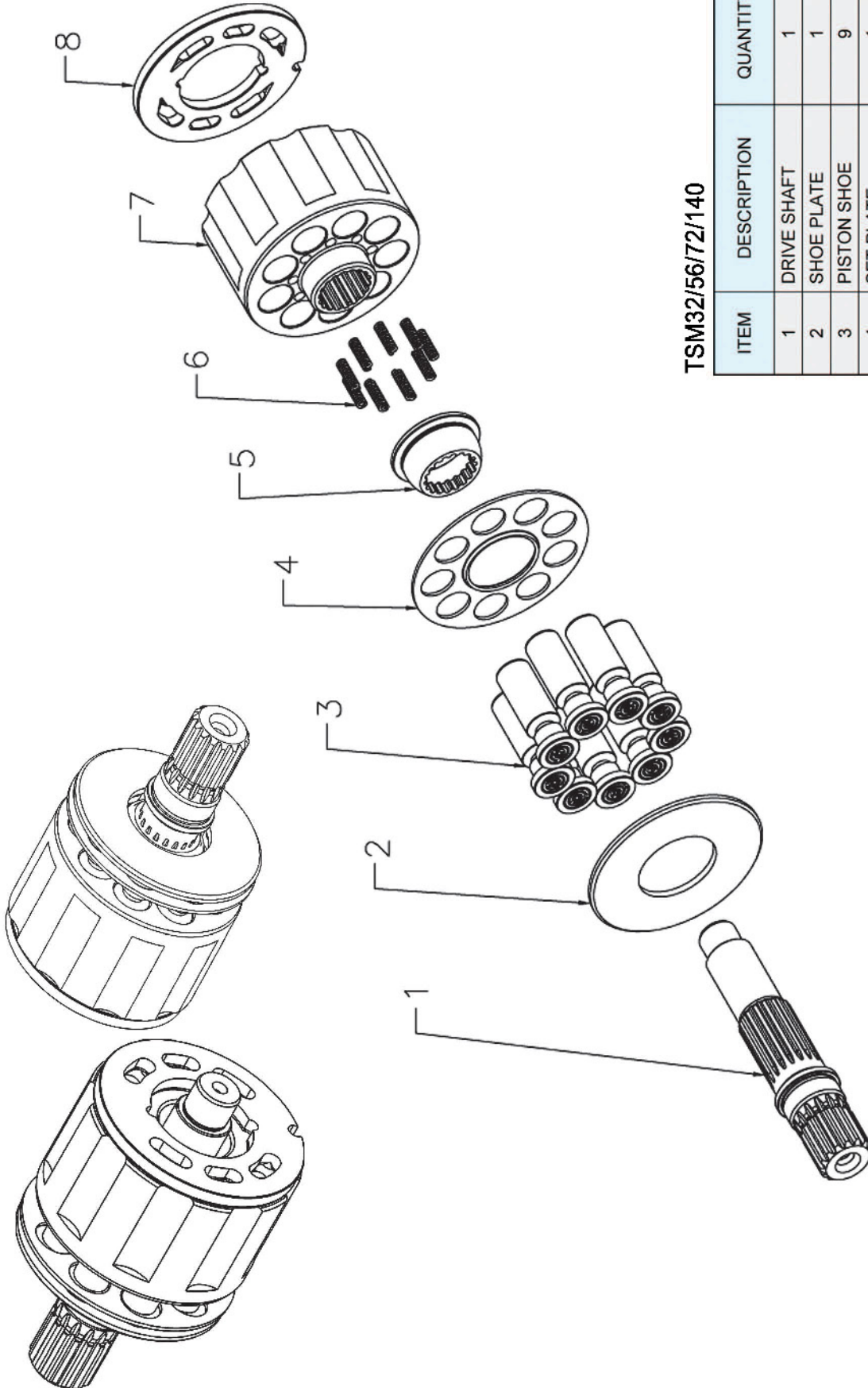
TM40VD

ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	PISTON SHOE	9	
3	SET PLATE	1	
4	BALL GUIDE	1	
5	COIL SPRING	9	
6	CYLINDER BLOCK	1	
7	VALVE PLATE	1	



TSM SERIES



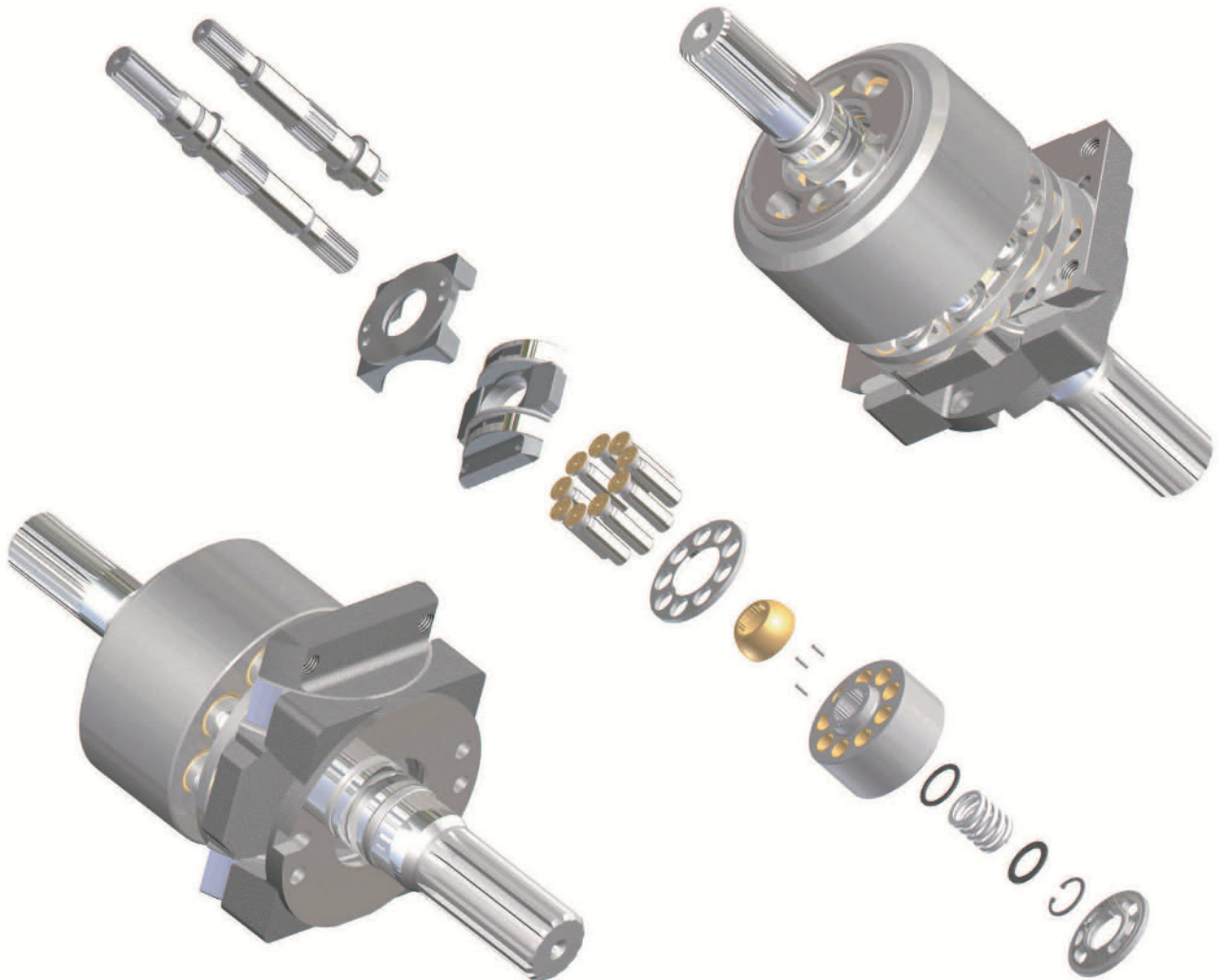


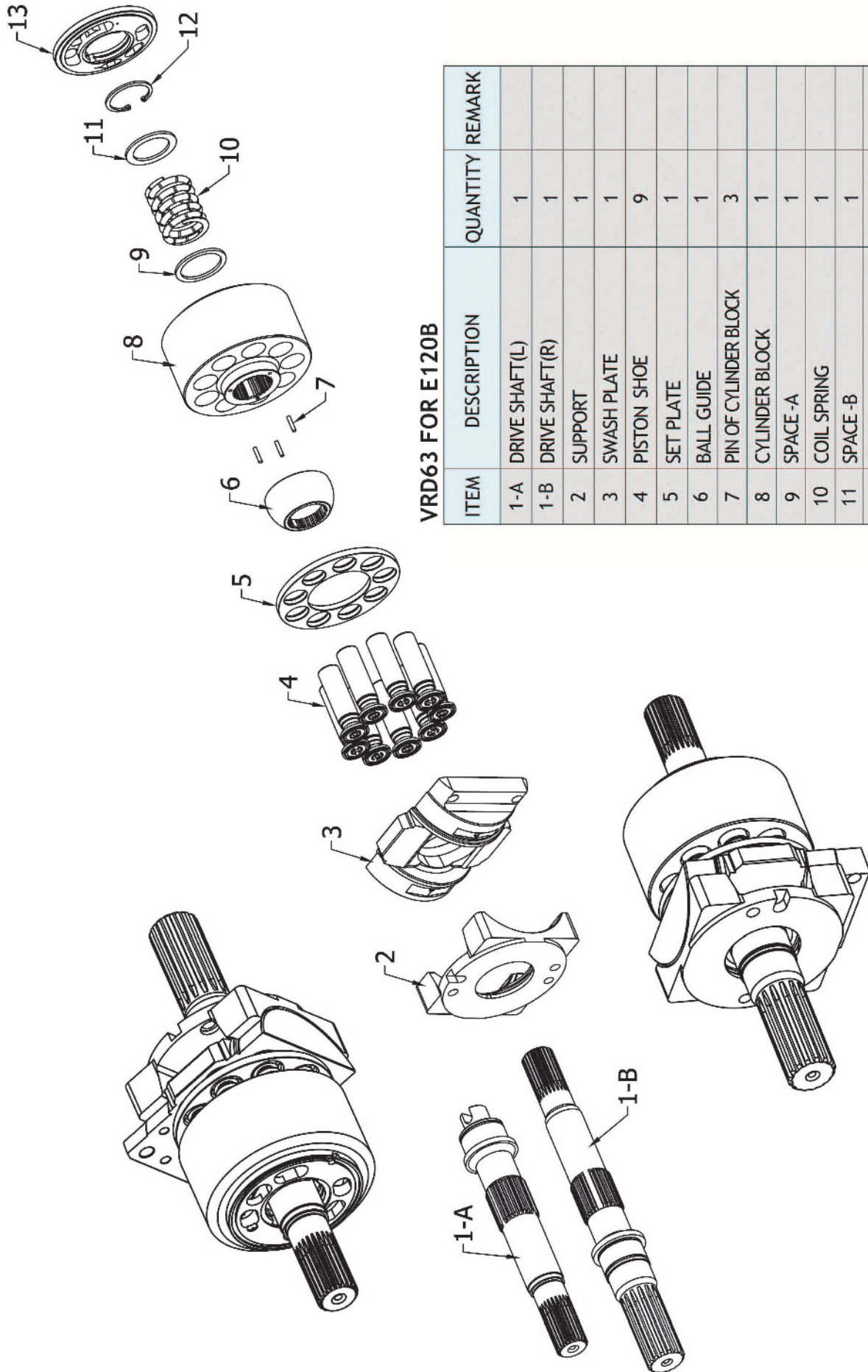
TSM32/56/72/140

ITEM	DESCRIPTION	QUANTITY	REMARK
1	DRIVE SHAFT	1	
2	SHOE PLATE	1	
3	PISTON SHOE	9	
4	SET PLATE	1	
5	BALL GUIDE	1	
6	COIL SPRING	9	
7	CYLINDER BLOCK	1	
8	VALVE PLATE	1	



VRD63





VRD63 FOR E120B

ITEM	DESCRIPTION	QUANTITY	REMARK
1-A	DRIVE SHAFT(L)	1	
1-B	DRIVE SHAFT(R)	1	
2	SUPPORT	1	
3	SWASH PLATE	1	
4	PISTON SHOE	9	
5	SET PLATE	1	
6	BALL GUIDE	1	
7	PIN OF CYLINDER BLOCK	3	
8	CYLINDER BLOCK	1	
9	SPACE -A	1	
10	COIL SPRING	1	
11	SPACE -B	1	
12	SNAP RING	1	
13	VALVE PLATE(L/R)	1	



Power of Hydraulic

Kawasaki Series Replacement Parts



Uchida & Hydromatic & Rexroth Series Replacement Parts



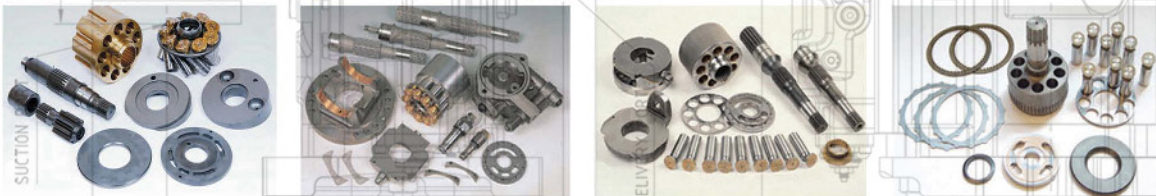
Hitachi Series Replacement Parts



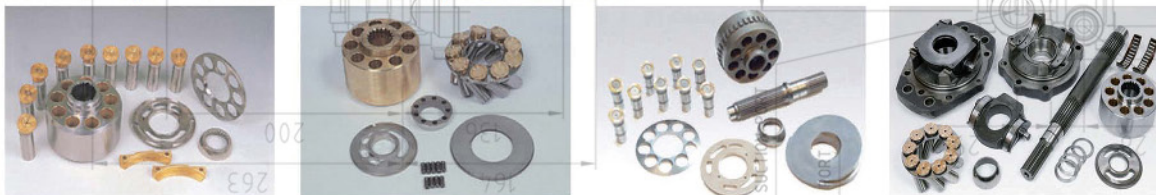
Mitsubishi / Caterpillar Series Replacement Parts



Komatsu & Shibaura & Deijin Seiki Series Replacement Parts



Linde & Kayaba & Liebherr Series Replacement Parts



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87

GEAR PUMP SUCTION
2-DELIVERY

GEAR PUMP DELIVERY PORT