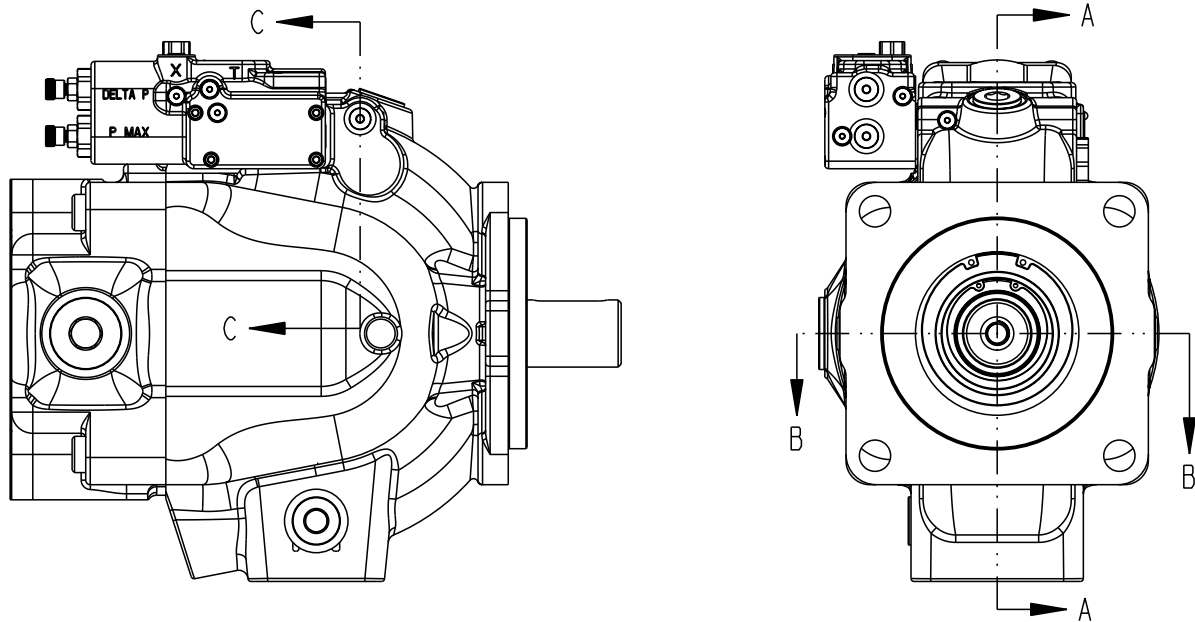
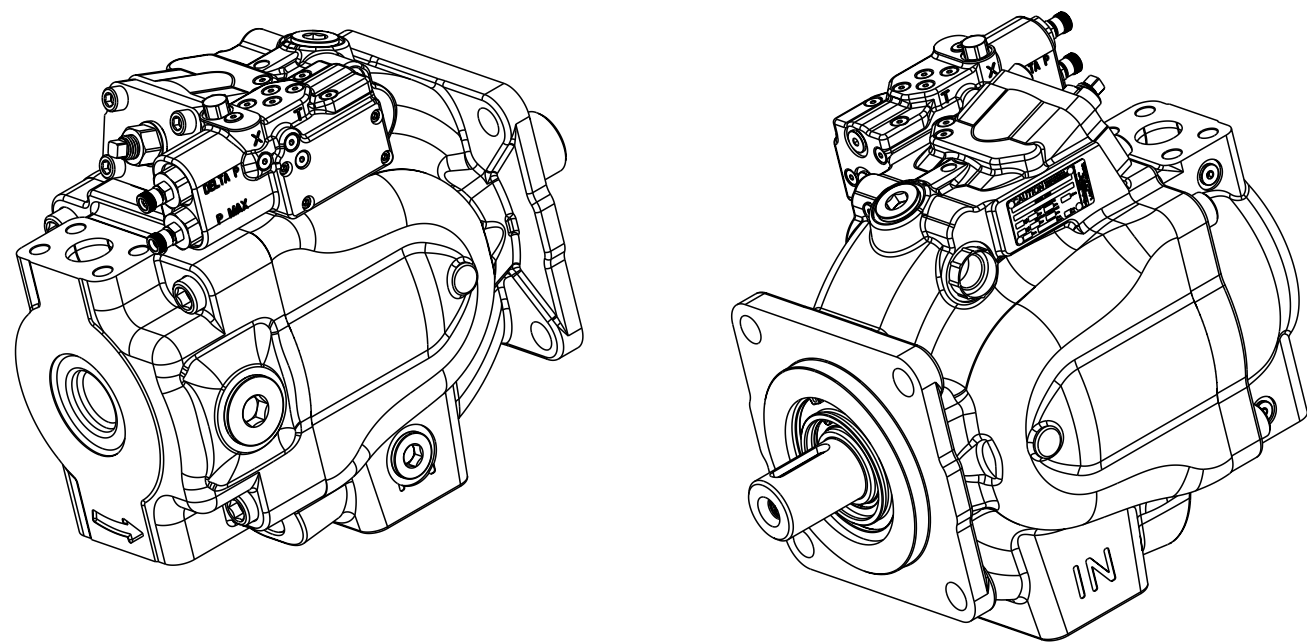
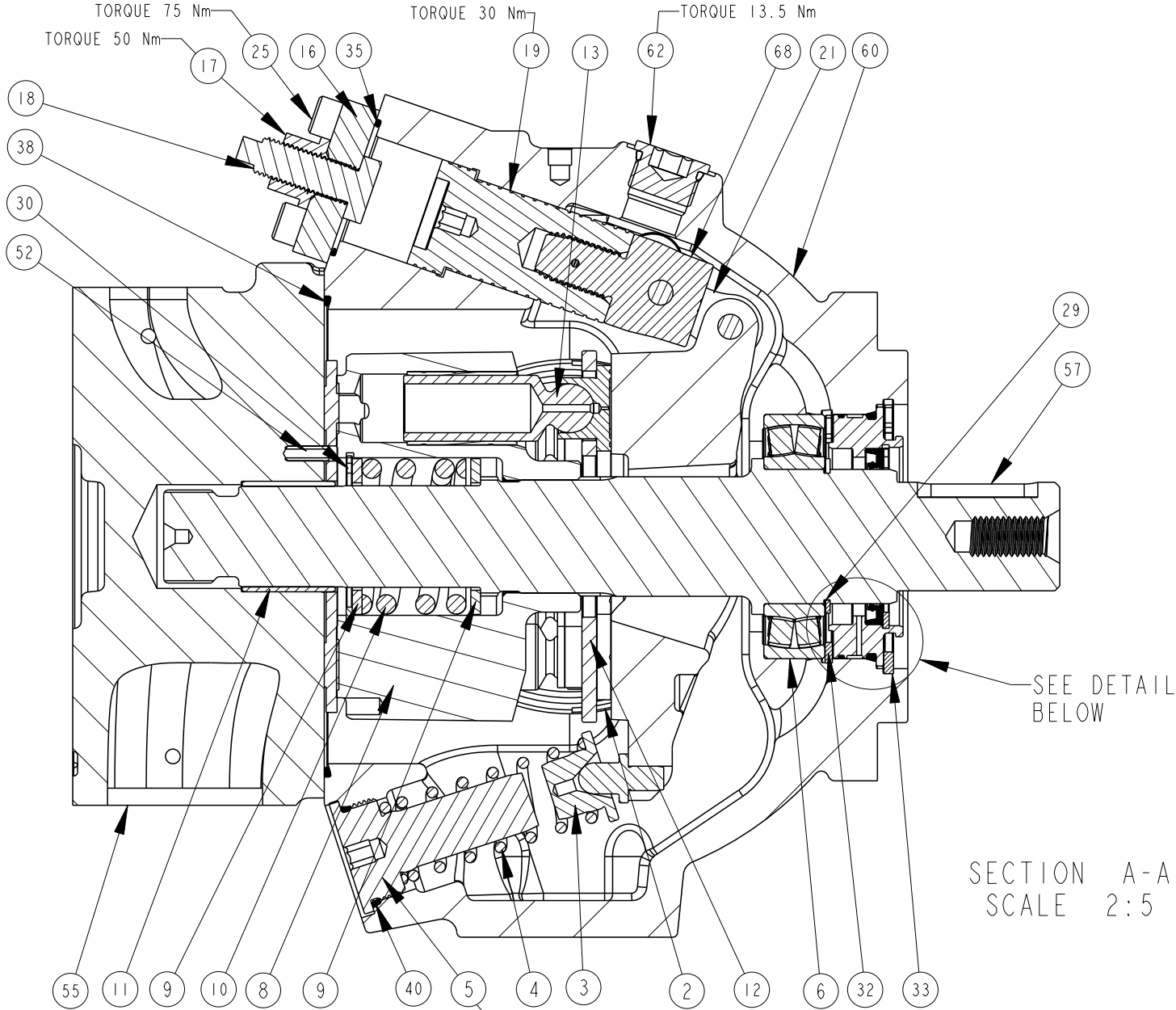


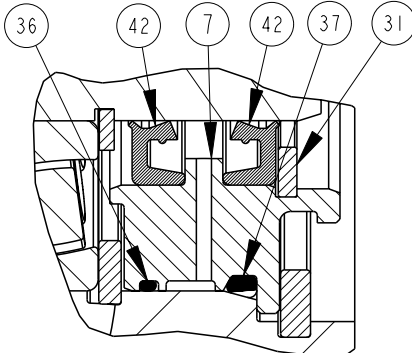


NOTES:
1. PUMP SHOWN IS A RIGHT HAND (CW) ROTATION PUMP. LEFT HAND (CCW) ROTATION PUMPS HAVE OUTLET GAUGE PORT REVERSED.

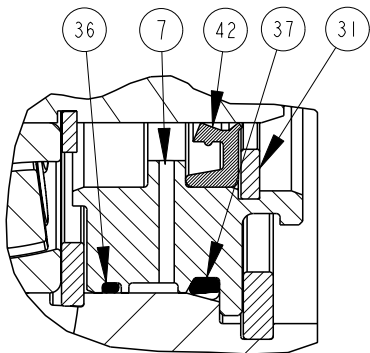


SEE DETAIL BELOW

SECTION A-A
SCALE 2:5

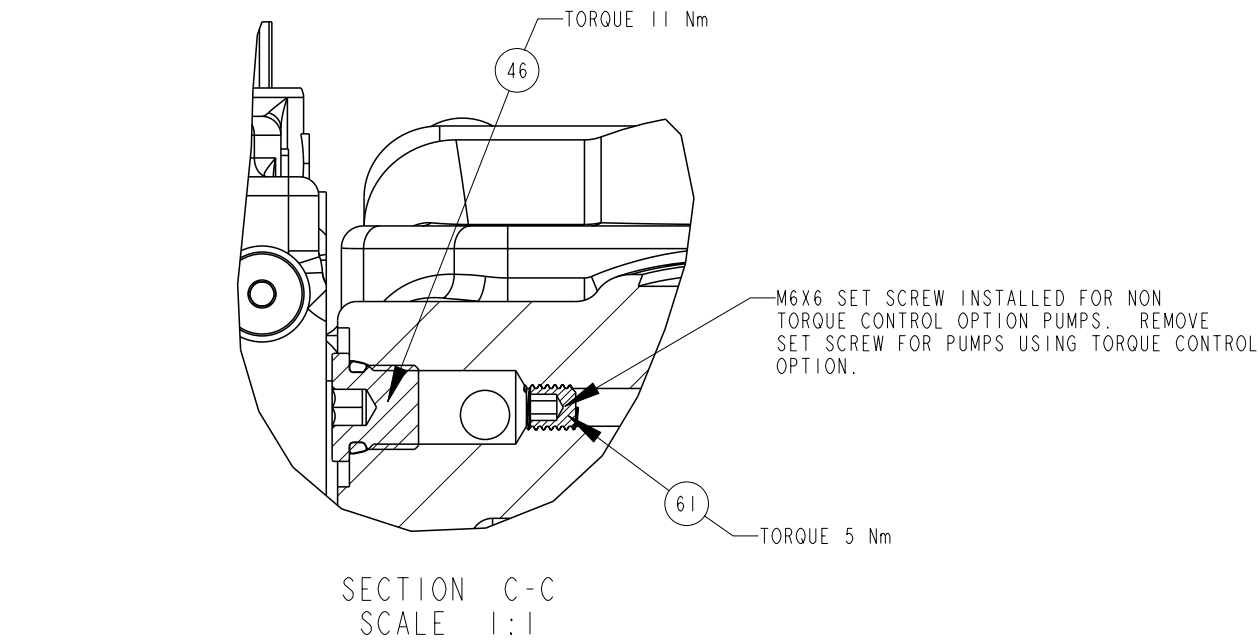
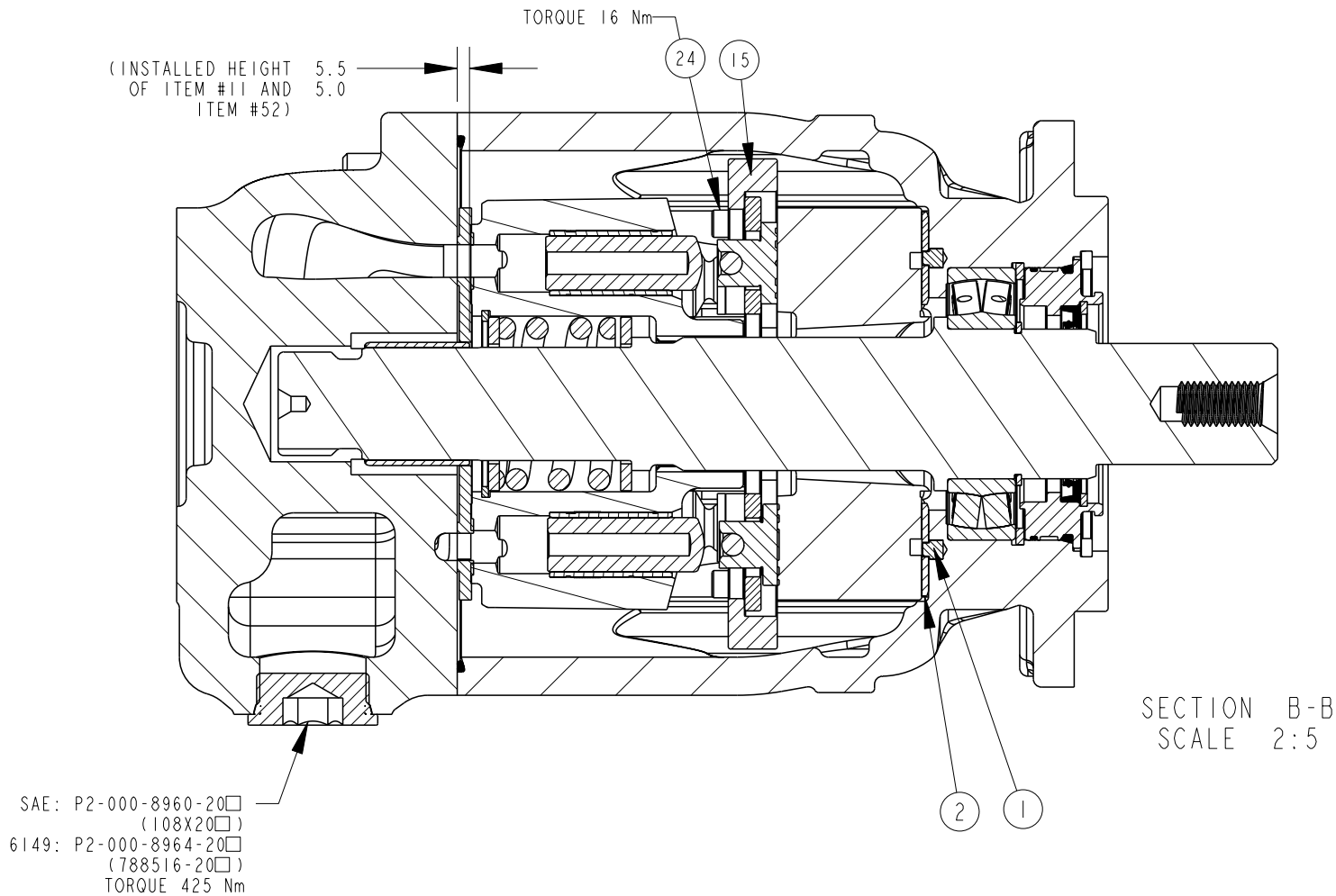


DUAL SHAFT SEAL ASSEMBLY
P2-105-0210-02□
SECTION A-A
SCALE 1:1

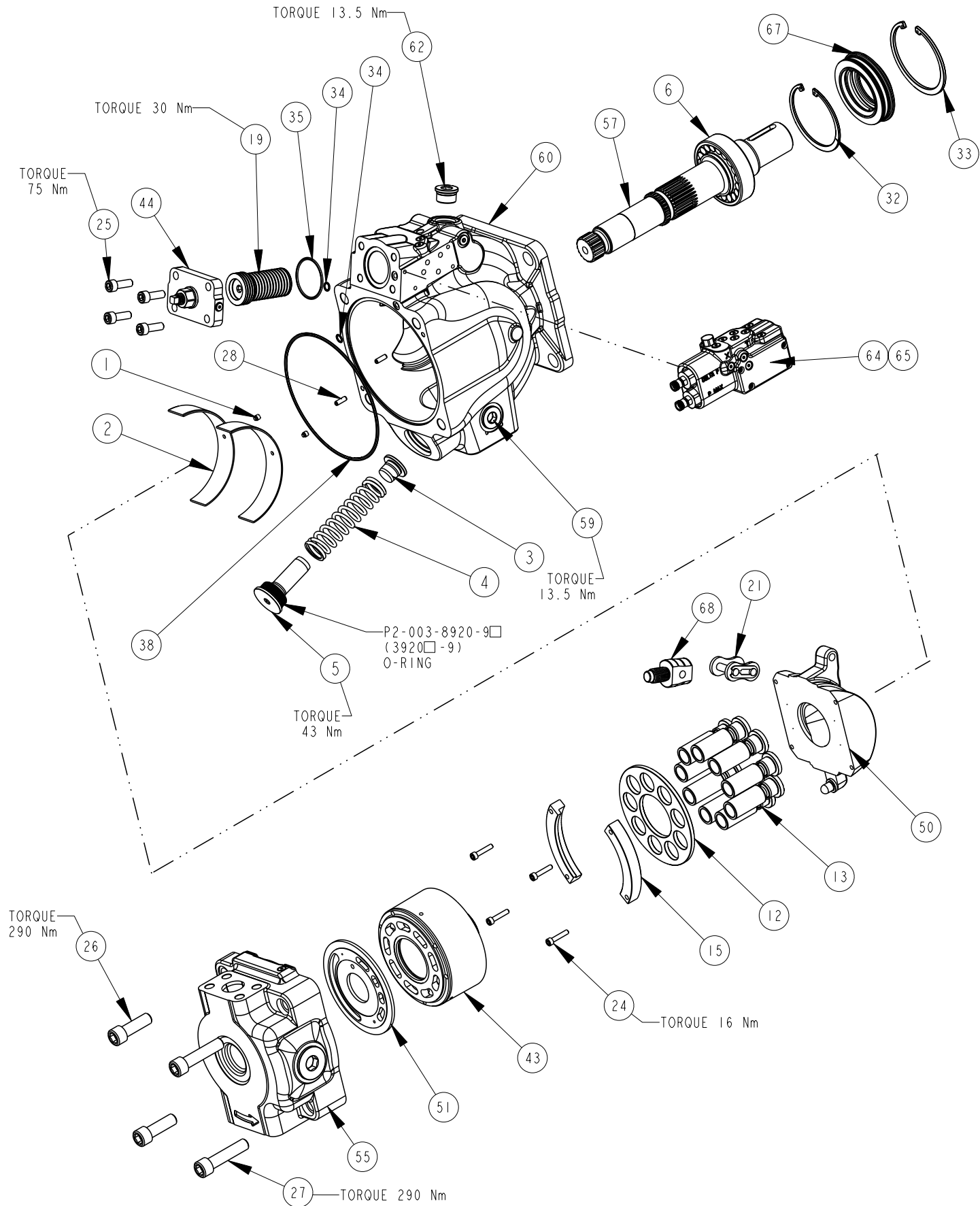


SINGLE SHAFT SEAL ASSEMBLY
P2-105-0210-01□
SECTION A-A
SCALE 1:1

TITLE	DRAWING NUMBER	REVISION	STATUS	SHEET 2 OF 7
SERVICE PARTS P2145 DESING SERIES 13	P2-145-0407	A	PR	

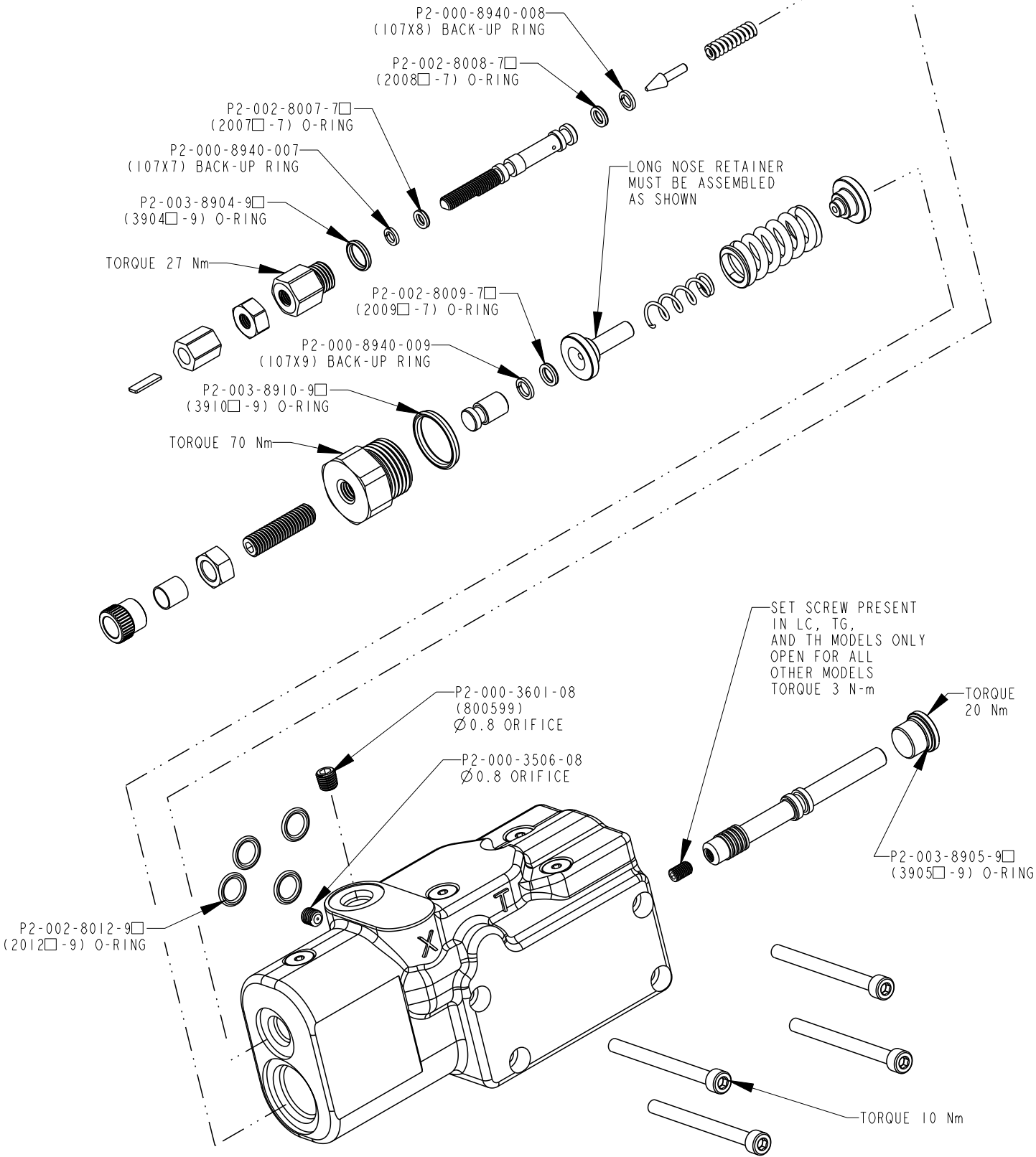


DRAWN BY	DATE	CHANGED BY	DATE	ECN NUMBER
HOEY	22NOV04	J. LAMBERS	20FEB06	134572



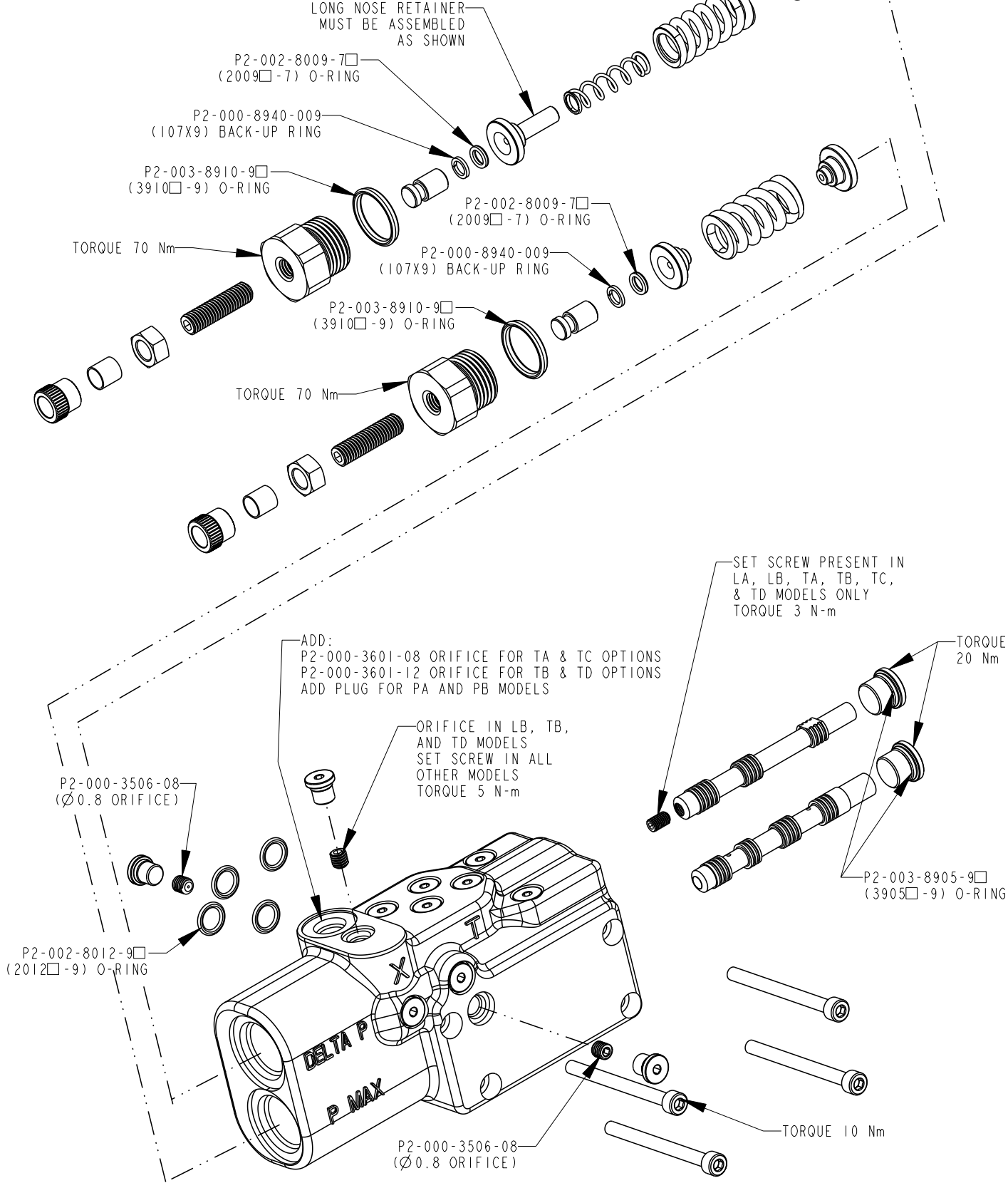
TITLE	DRAWING NUMBER	REVISION	STATUS	SHEET
SERVICE PARTS P2145 DESIGN SERIES 13	P2-145-0407	A	PR	3 OF 7

COMPENSATOR KITS SINGLE SPOOL OPTIONS - ITEM 64

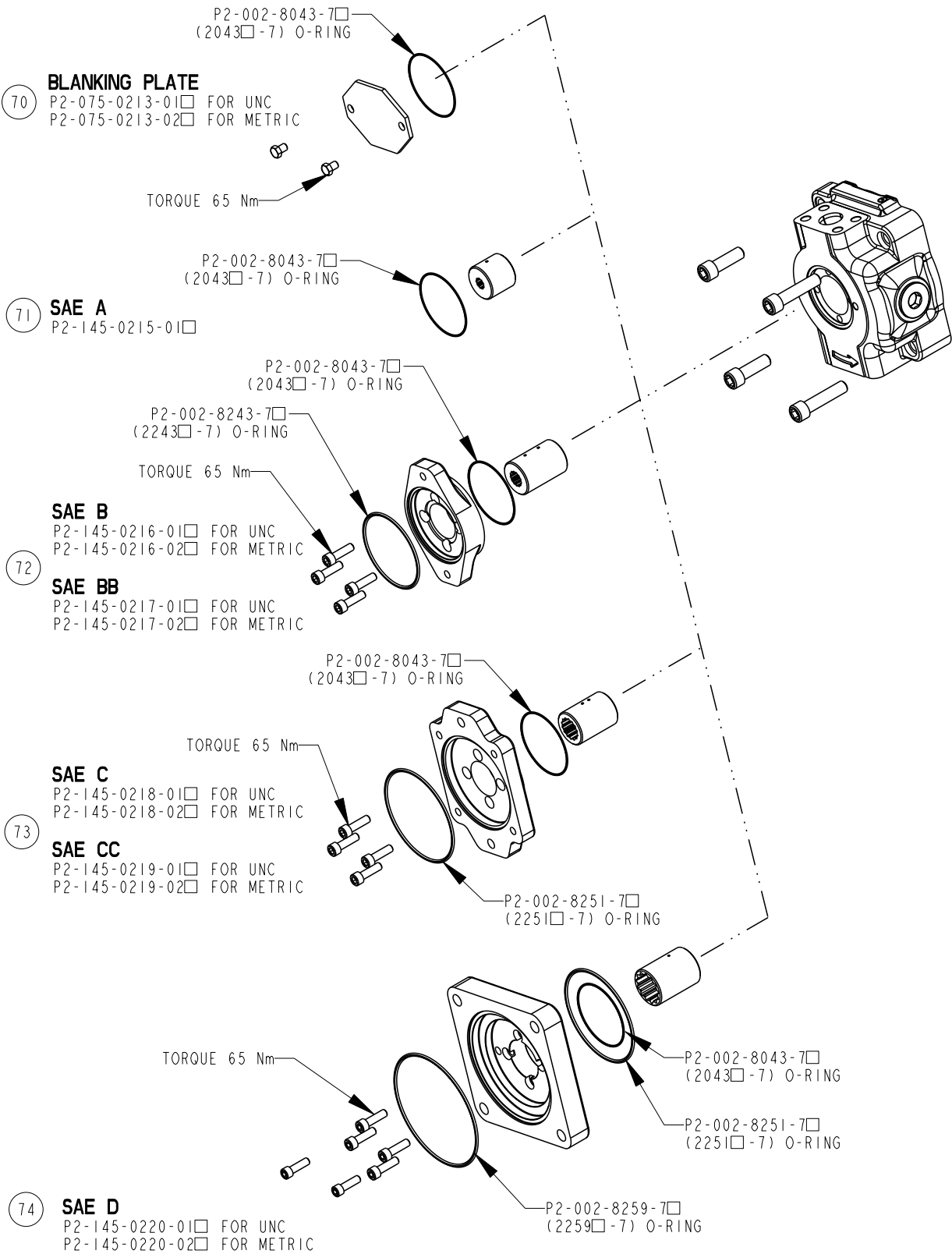


DRAWN BY	DATE	CHANGED BY	DATE	ECN NUMBER
HOEY	22NOV04	J. LAMBERS	20FEB06	134572

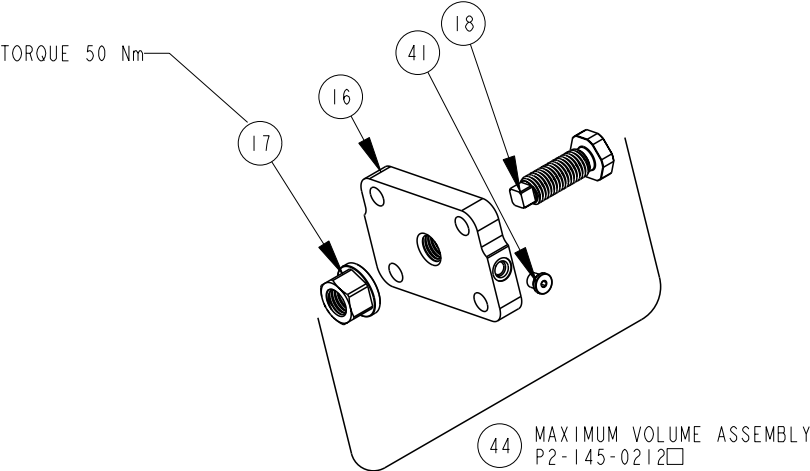
COMPENSATOR KITS DUAL SPOOL OPTIONS - ITEM 65



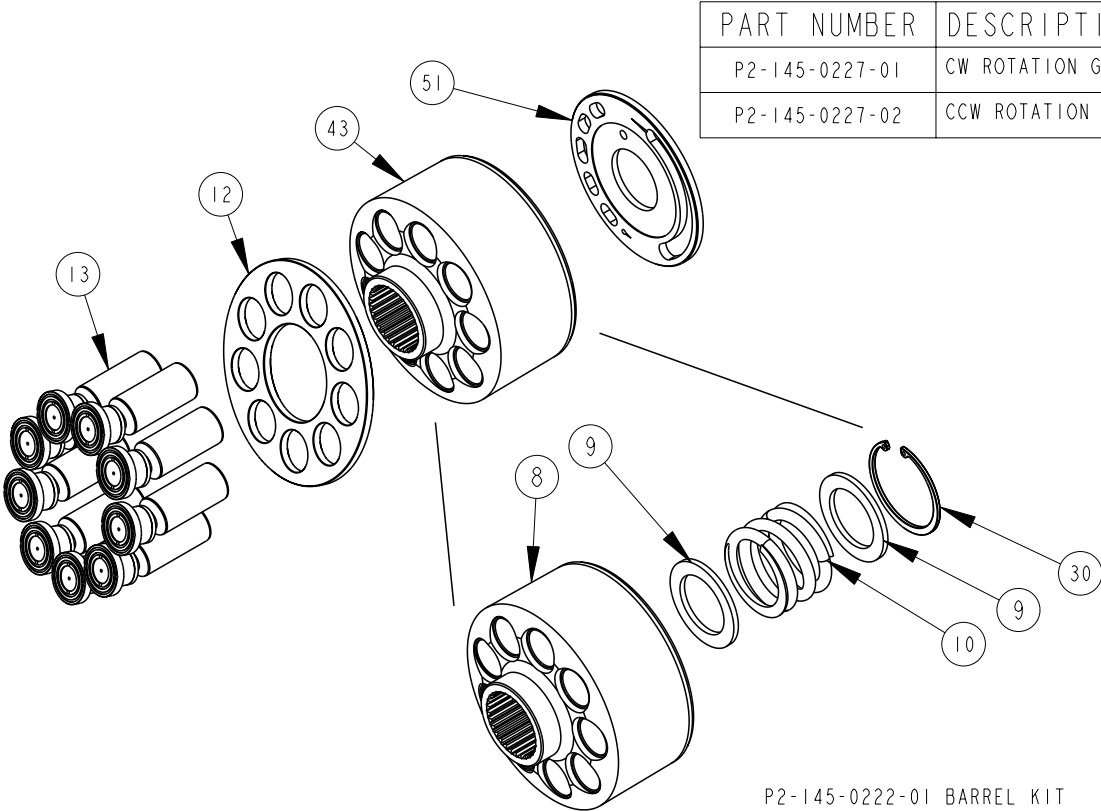
THRU DRIVE KITS



MAX VOLUME ASSEMBLY



BARREL KIT AND
ROTATION GROUP KIT

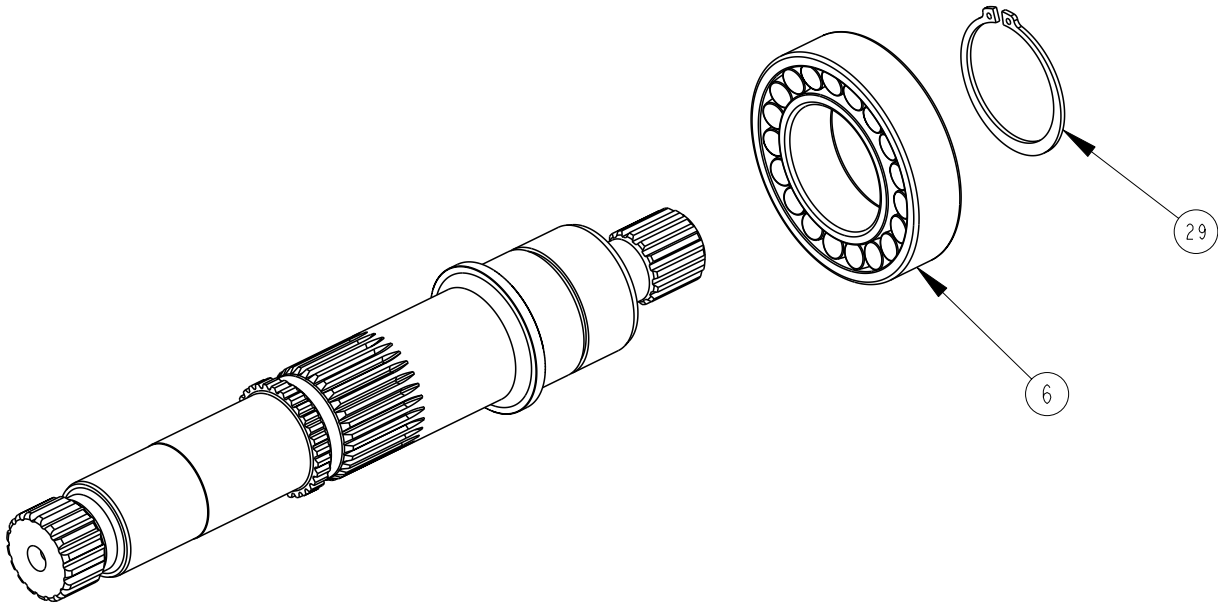


PART NUMBER	DESCRIPTION	HPD PART
P2-145-0227-01	CW ROTATION GROUP	RRKP2145R13
P2-145-0227-02	CCW ROTATION GROUP	RRKP2145L13



TITLE	DRAWING NUMBER	REVISION	STATUS	
SERVICE PARTS P2145 DESIGN SERIES 13	P2-145-0407	A	PR	SHEET 5 OF 7

SHAFT ASSEMBLY KITS ITEM 57

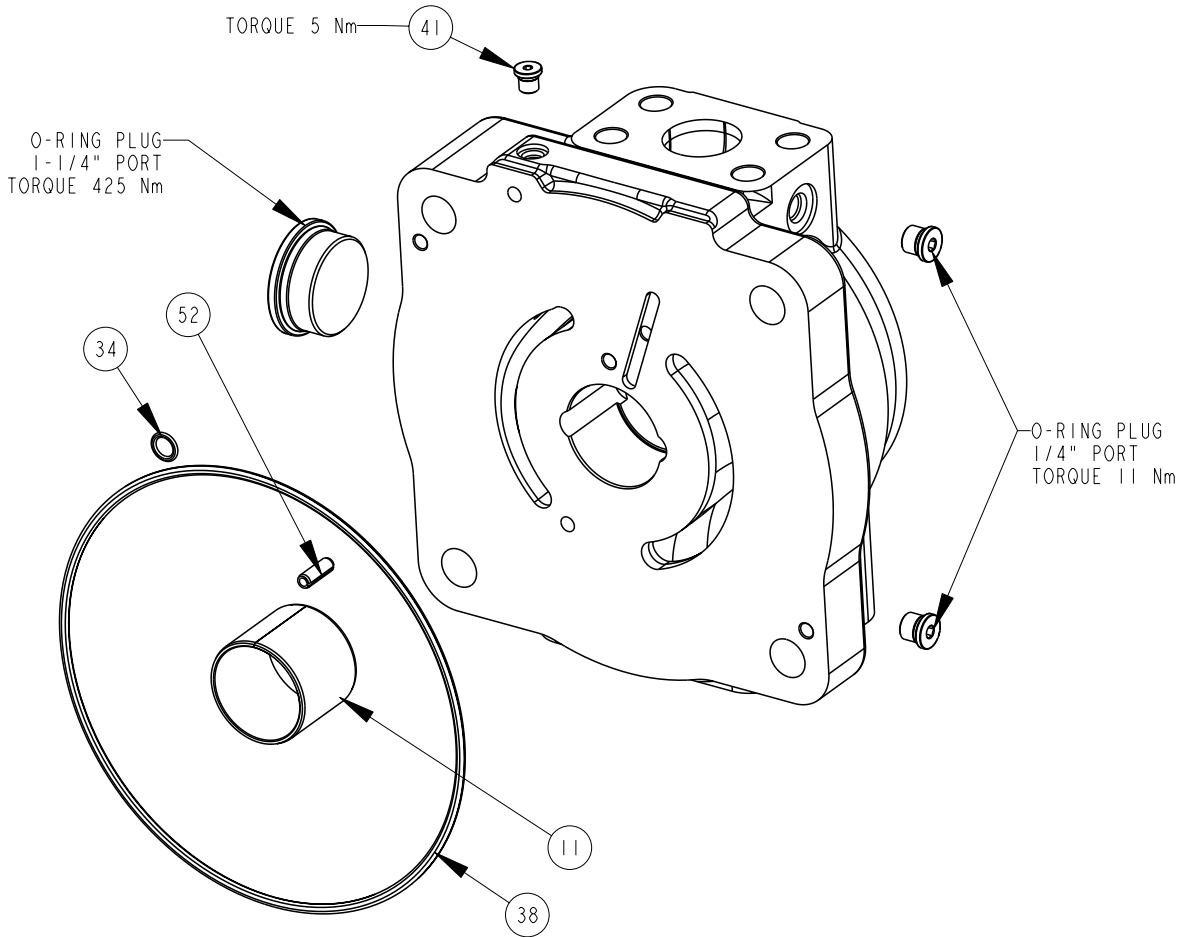


SHAFT ONLY	SHAFT ASSEMBLY	DESCRIPTION
P2-145-3725	P2-145-0238-36	C SPLINE THRU
P2-145-3719	P2-145-0238-40	D SPLINE THRU
P2-145-3733	P2-145-0238-46	C KEY THRU
P2-145-3735	P2-145-0238-48	CC KEY THRU
P2-145-3737	P2-145-0238-50	D KEY THRU
P2-145-3720	P2-145-0238-56	C SPLINE THRU NO UNDERCUT
P2-145-3746	P2-145-0238-60	D SPLINE THRU NO UNDERCUT



DRAWN BY	DATE	CHANGED BY	DATE	ECN NUMBER
HOEY	22NOV04	J. LAMBERS	20FEB06	134572

COVER ASSEMBLY KITS ITEM 55

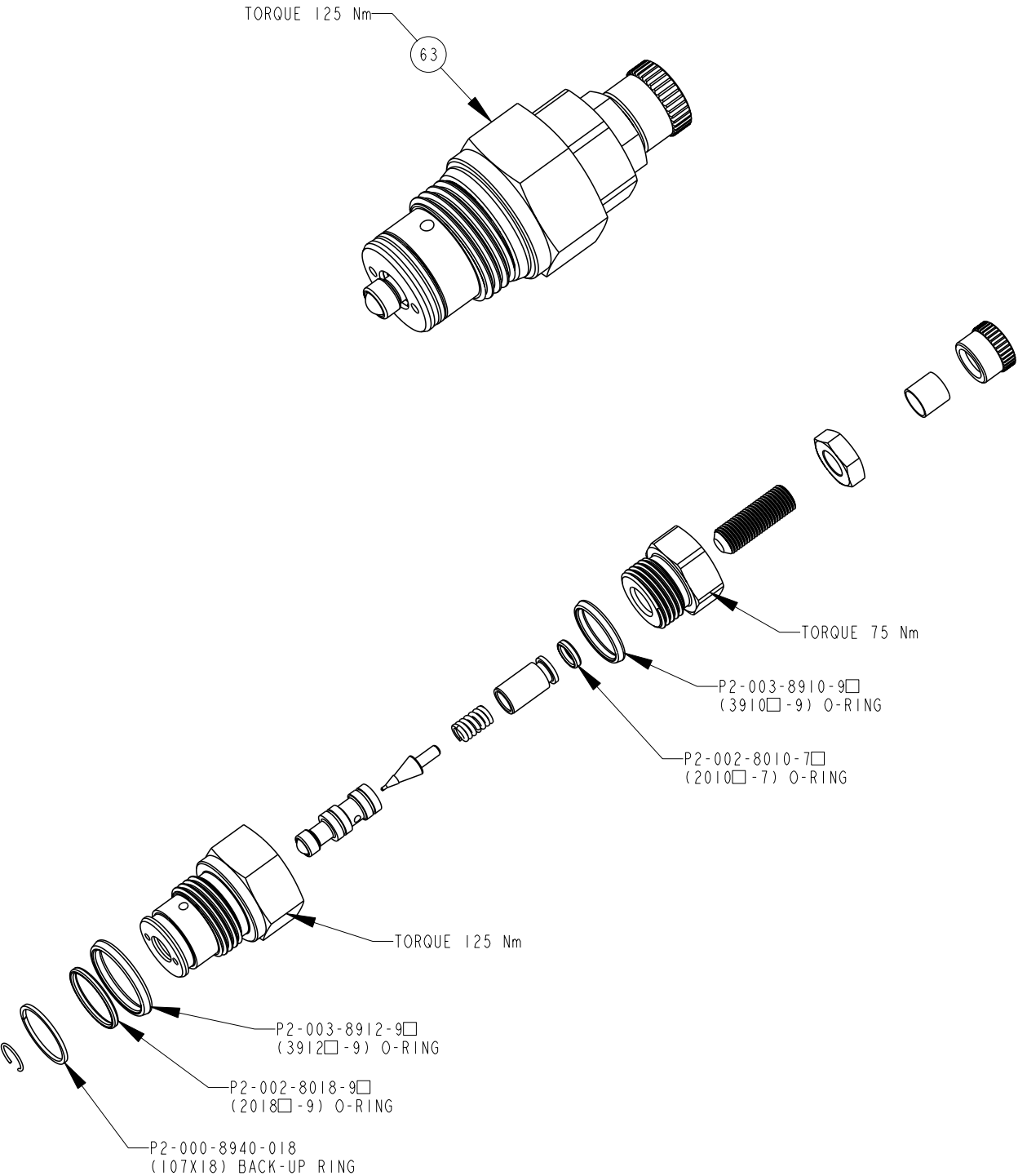


COVER ONLY	COVER ASSEMBLY	DESCRIPTION
P2-145-1013-01	P2-145-0226-01□	SIDE PORTS, CCW, UNC
P2-145-1013-02	P2-145-0226-02□	SIDE PORTS, CCW, UNC, THRU
P2-145-1013-03	P2-145-0226-03□	SIDE PORTS, CCW, METRIC
P2-145-1013-04	P2-145-0226-04□	SIDE PORTS, CCW, METRIC, THRU
P2-145-1014-01	P2-145-0226-05□	SIDE PORTS, CW, UNC
P2-145-1014-02	P2-145-0226-06□	SIDE PORTS, CW, UNC, THRU
P2-145-1014-03	P2-145-0226-07□	SIDE PORTS, CW, METRIC
P2-145-1014-04	P2-145-0226-08□	SIDE PORTS, CW, METRIC, THRU



TITLE	SERVICE PARTS P2145 DESIGN SERIES 13	DRAWING NUMBER	P2-145-0407	REVISION	A	STATUS	PR	SHEET 6 OF 7
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TORQUE CONTROL CARTRIDGE P2-000-0803 □ - ITEM 63



DRAWN BY	HOEY	DATE	22NOV04	CHANGED BY	J. LAMBERS	DATE	20FEB06	ECN NUMBER	134572
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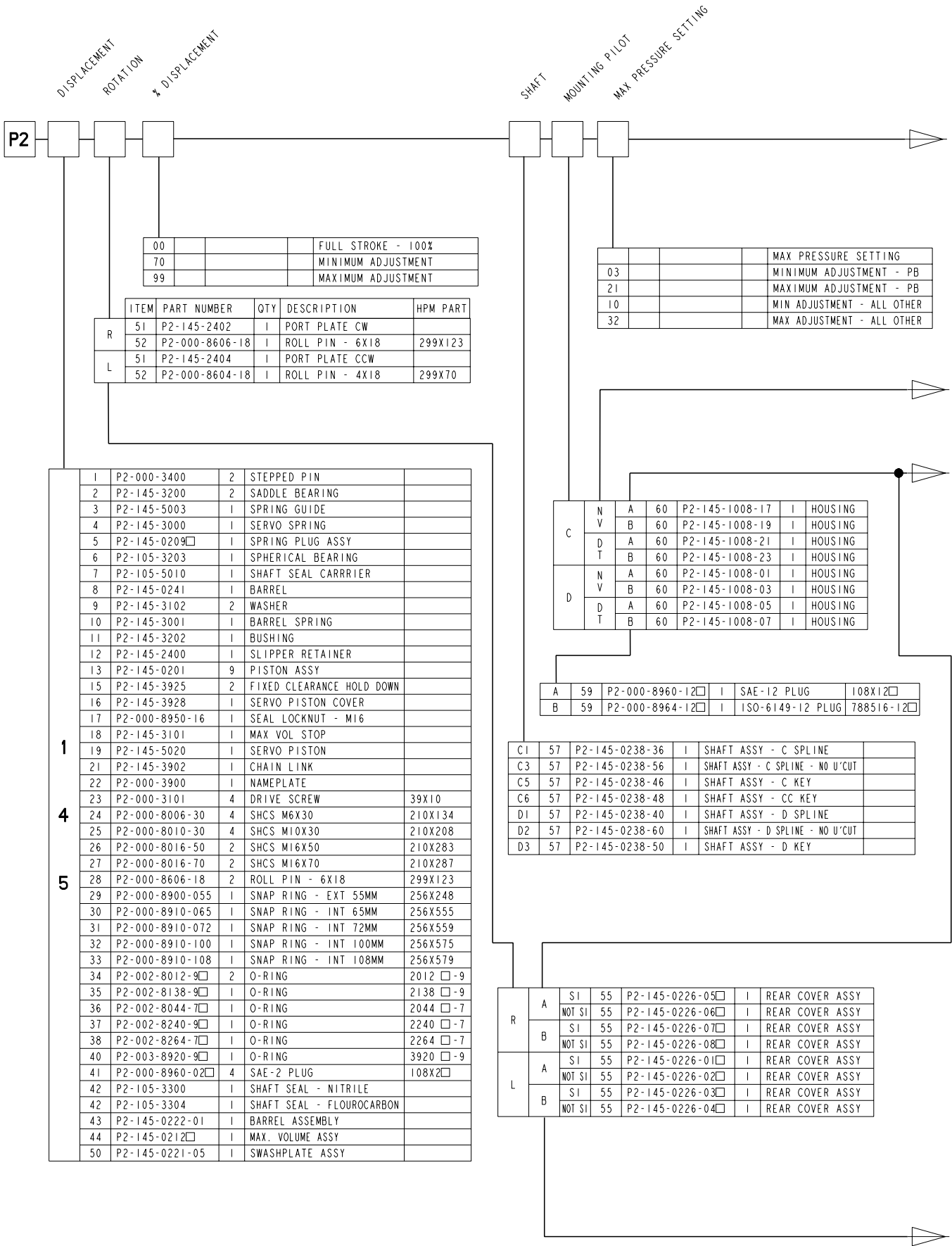
ASSEMBLY, DIS-ASSEMBLY AND REPAIR NOTES

- DISASSEMBLY STEPS FOR ENTIRE PUMP
1. REMOVE COVER SCREWS AND COVER
 2. DE-STROKE PUMP TO MINIMUM ANGLE WITH MAX VOLUME SCREW
 3. REMOVE FIXED CLEARANCE HOLD DOWN SCREWS AND HOLD DOWN PARTS
 4. REMOVE ROTATING GROUP (BARREL, SLIPPER RETAINER AND PISTONS)
 5. REMOVE SHAFT SEAL CARRIER
 6. REMOVE SHAFT
 7. REMOVE BIAS SPRING PLUG, SPRING AND RETAINER
 8. REMOVE MAX. VOLUME ASSY
 9. REMOVE SERVO PISTON
 10. REMOVE SWASHPLATE ASSEMBLY

- SHAFT SEAL REPLACEMENT
1. REMOVE SEAL CARRIER ONLY
 2. REMOVE OLD SEAL
 3. INSPECT SHAFT
 4. IF SHAFT IS WORN INSTALL NEW SEAL IN INNER LOCATION FOR SINGLE SEAL APPLICATIONS (SEE SHEET 1).
REPLACE SHAFT FOR DUAL SEAL APPLICATIONS



TITLE	DRAWING NUMBER	REVISION	STATUS	
SERVICE PARTS P2145 DESIGN SERIES 13	P2-145-0407	A	PR	SHEET 7 OF 7



DRAWN BY	DATE	CHANGED BY	DATE	ECN NUMBER
HOEY	22NOV04	J. LAMBERS	20FEB06	134572

