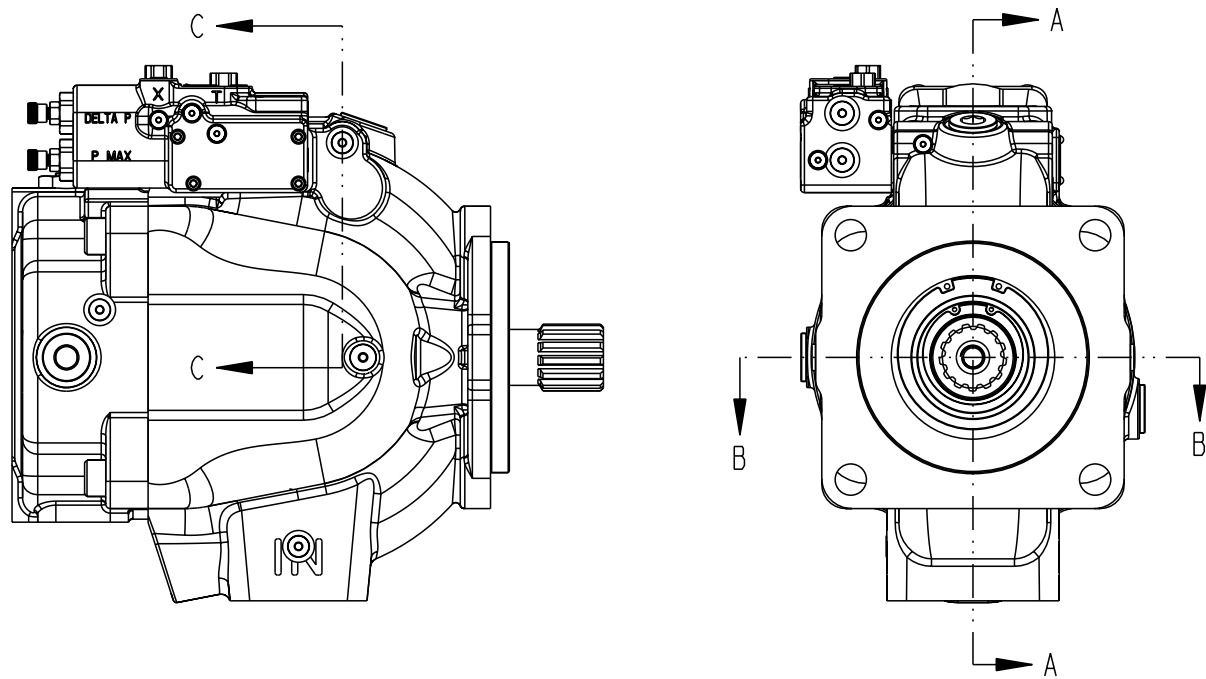
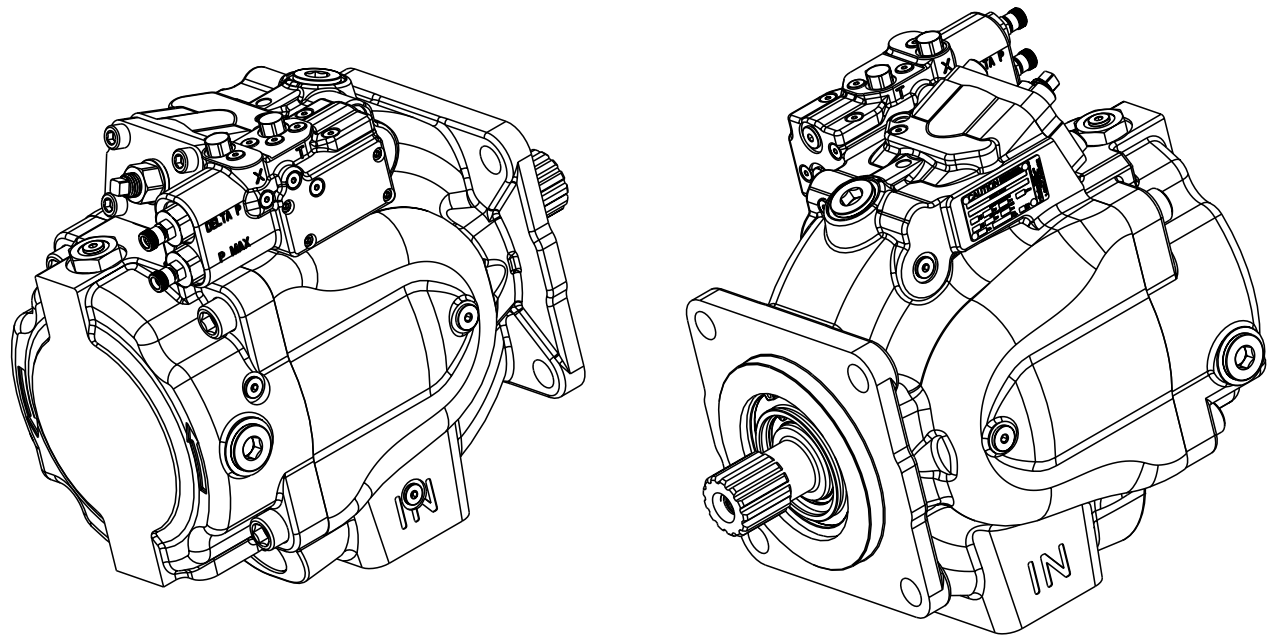
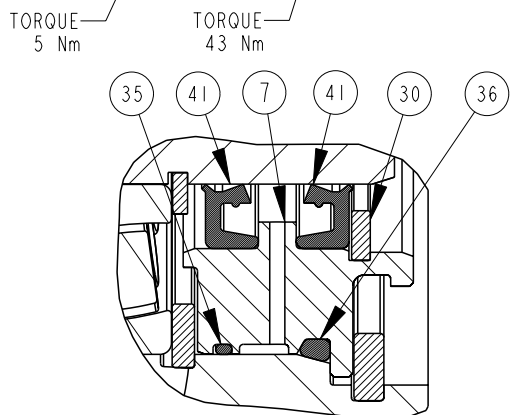
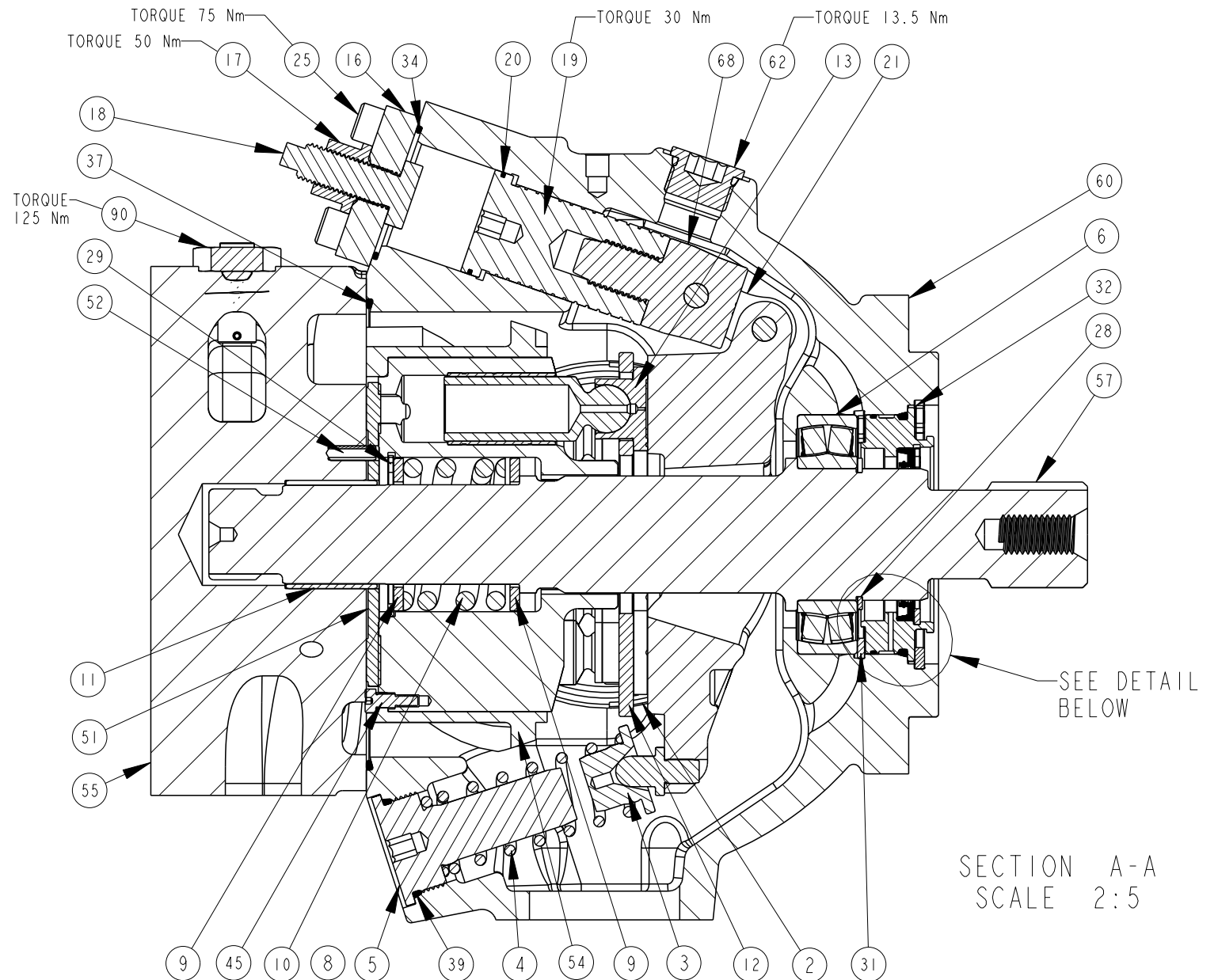


TITLE	DRAWING NUMBER	REVISION	STATUS	SHEET
SERVICE PARTS P3145 DESIGN SERIES 12	P2-145-0406	-	PR	1 OF 7

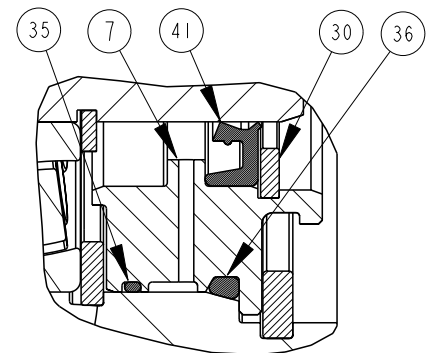
DRAWN BY	DATE	CHANGED BY	DATE	ECN NUMBER
STREHLOW	31OCT02	B. LARKIN	08NOV02	133698



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

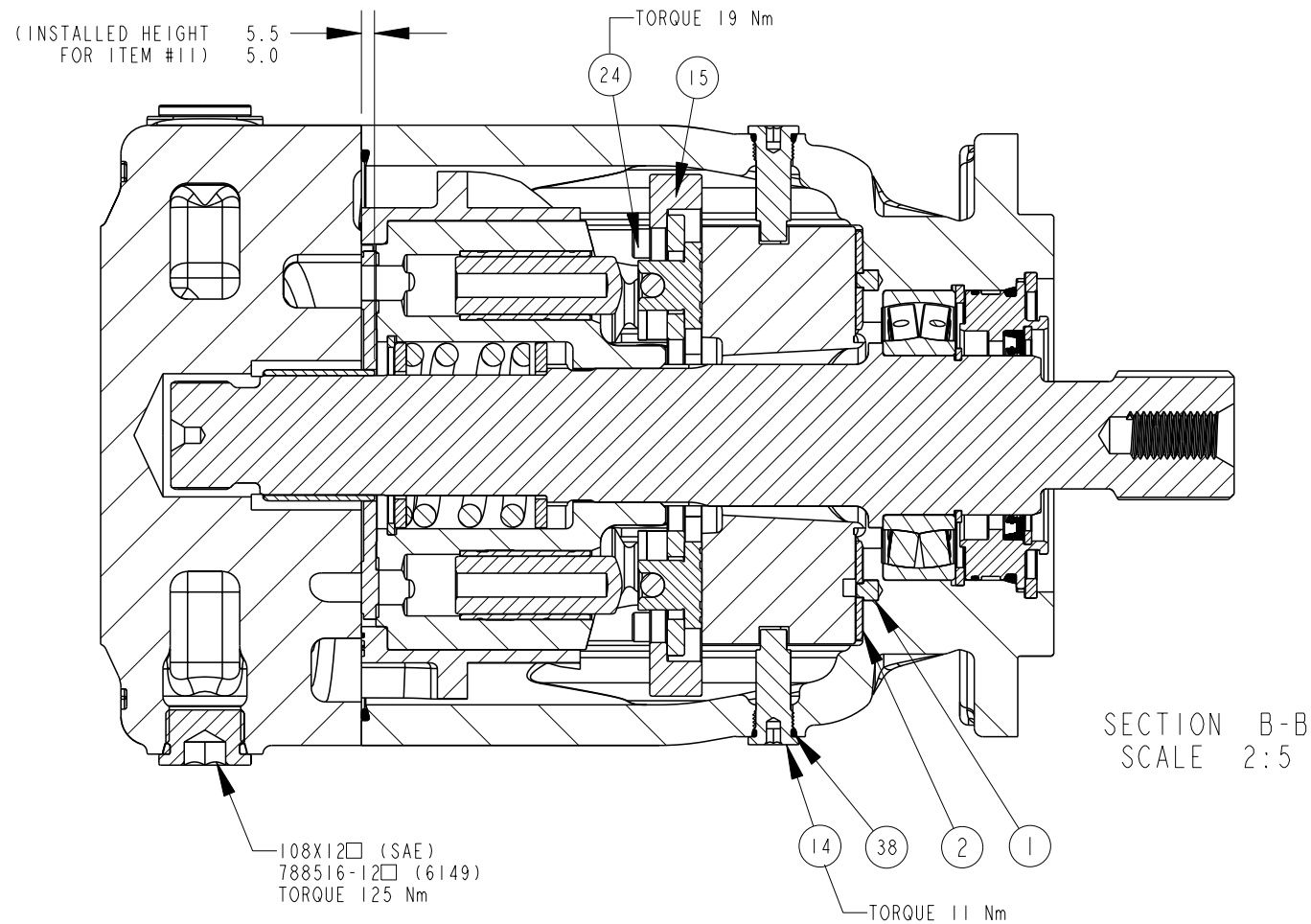


DUAL SHAFT SEAL ASSEMBLY
P2-105-0210-02
SECTION A-A
SCALE 1:1

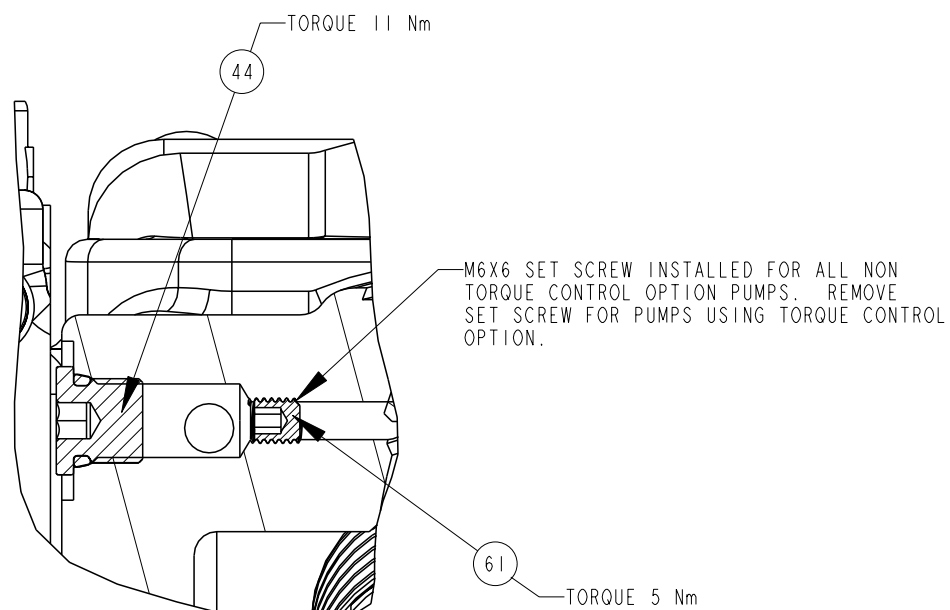


SINGLE SHAFT SEAL ASSEMBLY
P2-105-0210-01
SECTION A-A
SCALE 1:1

TITLE	DRAWING NUMBER	REVISION	STATUS	SHEET
SERVICE PARTS P3145 DESIGN SERIES 12	P2-145-0406	-	PR	2 OF 7

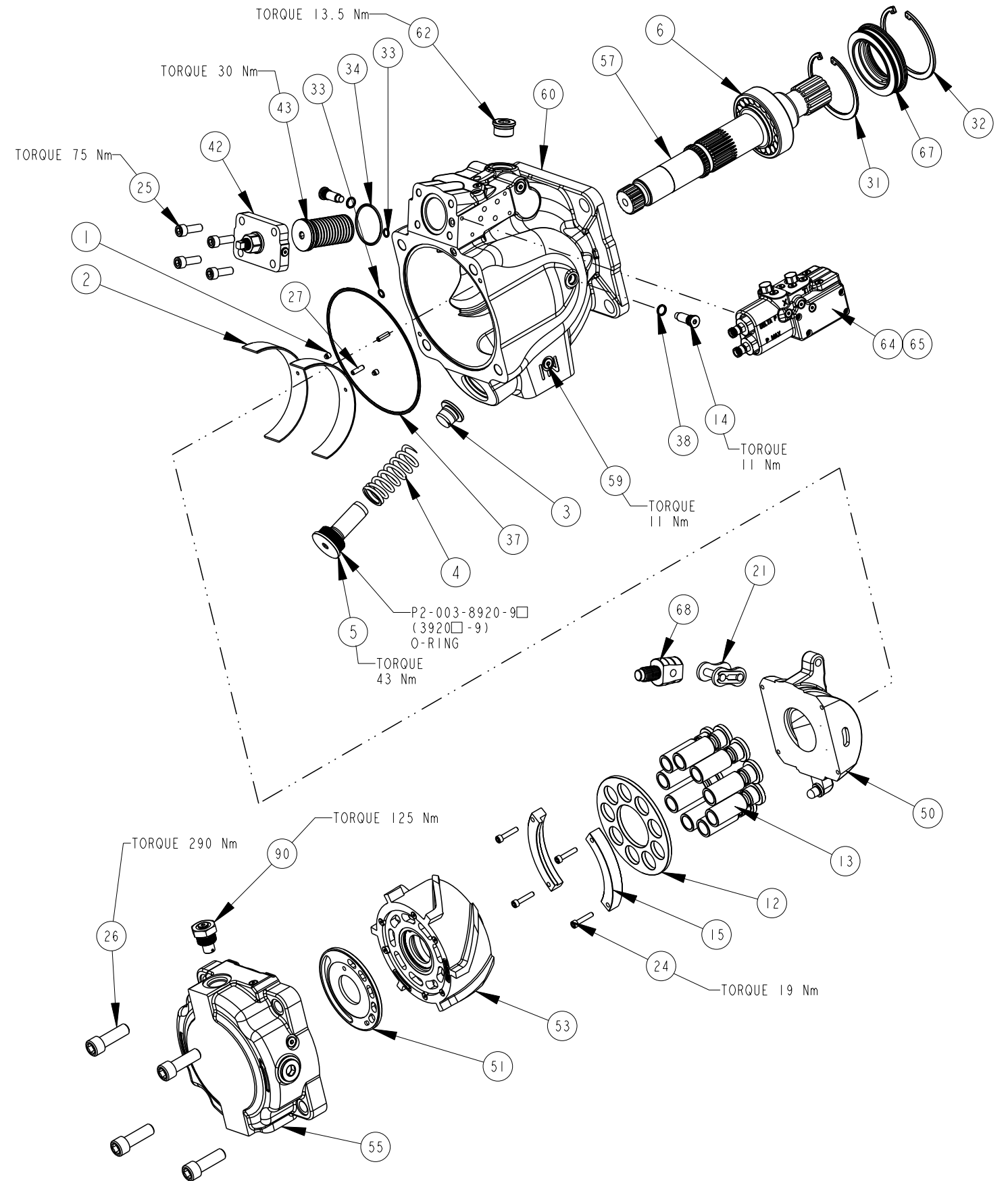


SECTION B-B
SCALE 2:5



SECTION C-C
SCALE 1:1

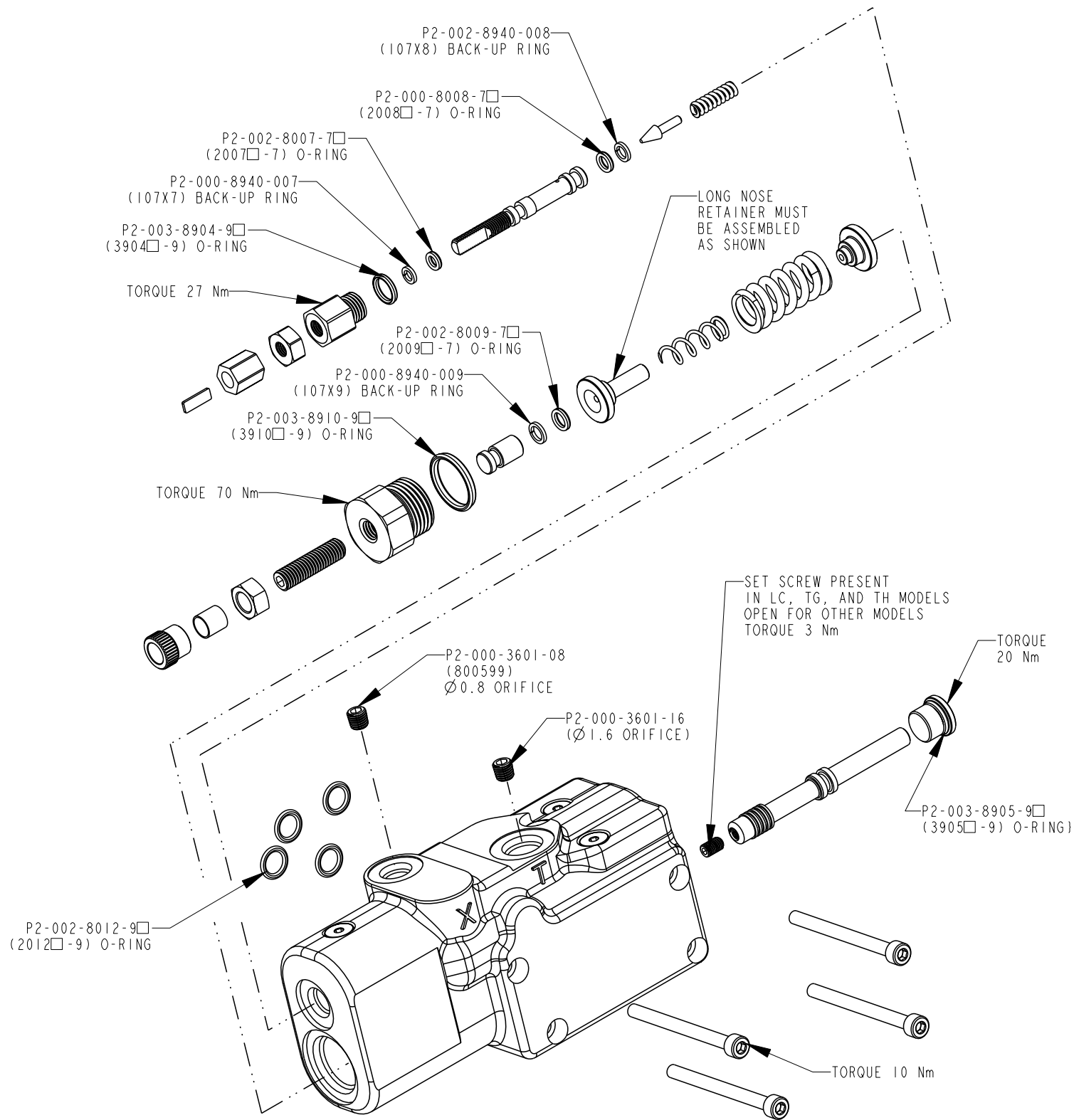
DRAWN BY	DATE	CHANGED BY	DATE	ECN NUMBER
STREHLOW	31OCT02	B. LARKIN	08NOV02	133698



TITLE	DRAWING NUMBER	REVISION	STATUS	SHEET
SERVICE PARTS P3145 DESIGN SERIES 12	P2-145-0406	-	PR	3 OF 7

COMPENSATOR KITS

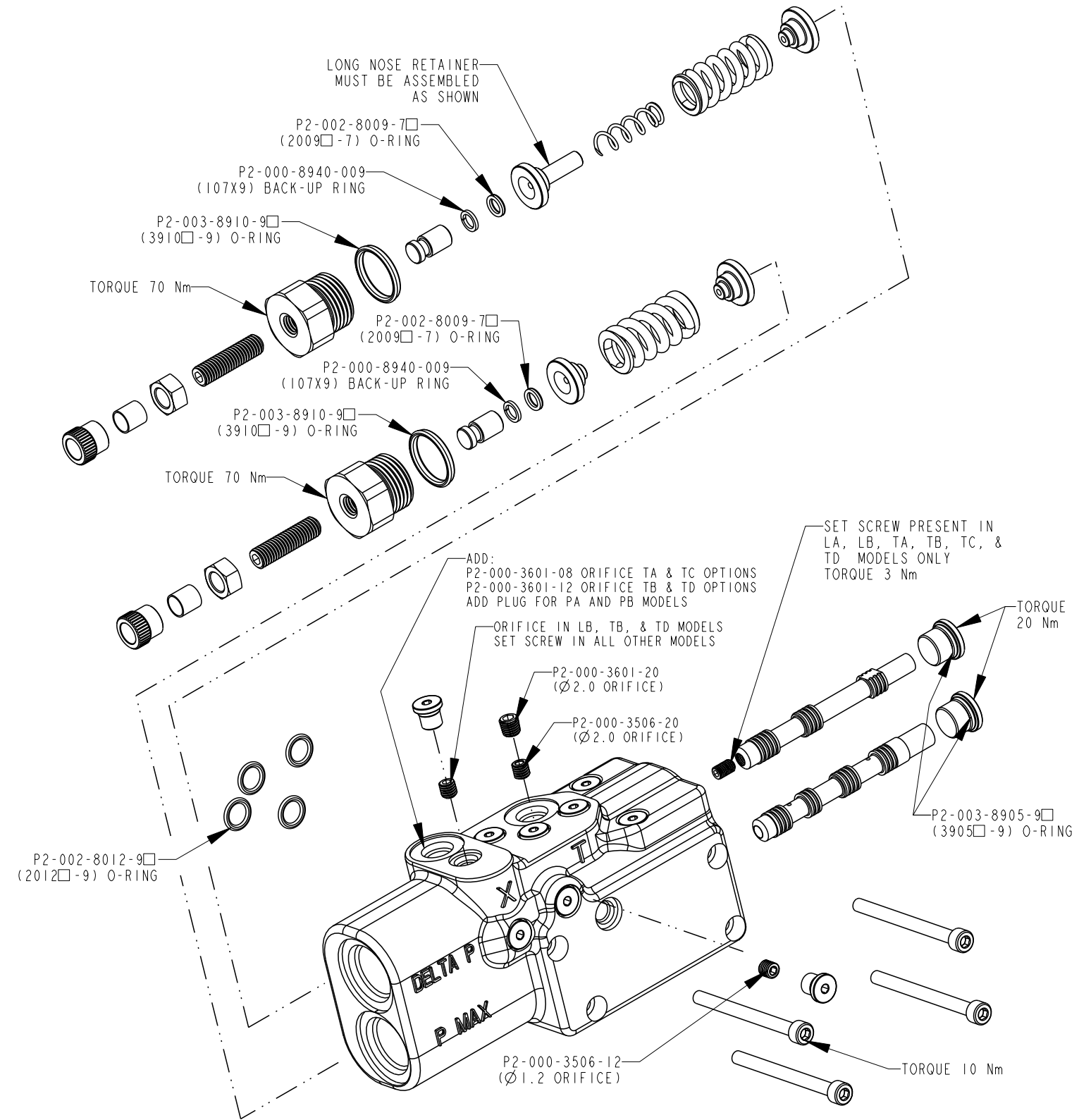
SINGLE SPOOL OPTIONS - ITEM 64



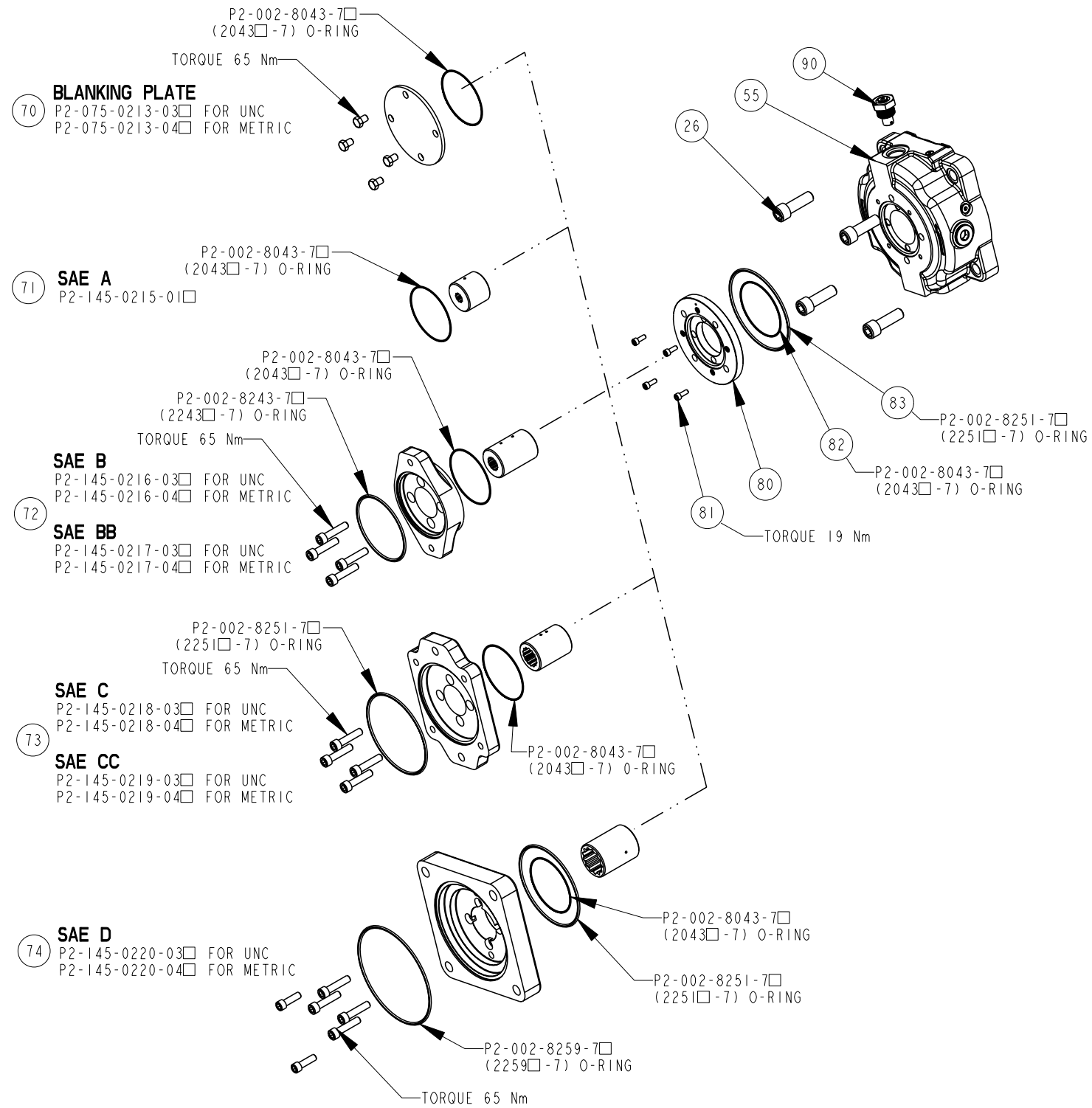
DRAWN BY	DATE	CHANGED BY	DATE	ECN NUMBER
STREHLOW	31OCT02	B. LARKIN	08NOV02	133698

COMPENSATOR KITS

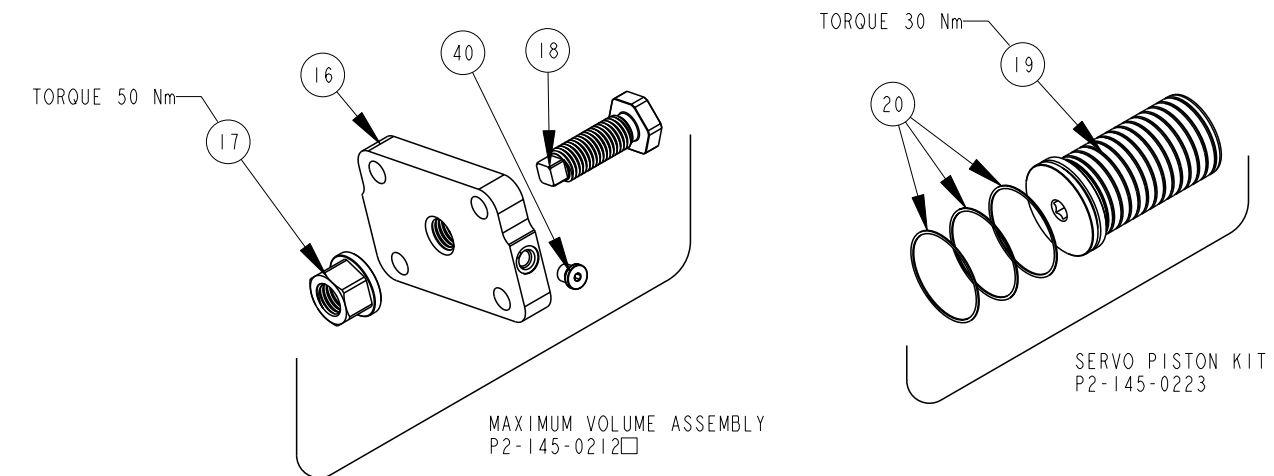
DUAL SPOOL OPTIONS - ITEM 65



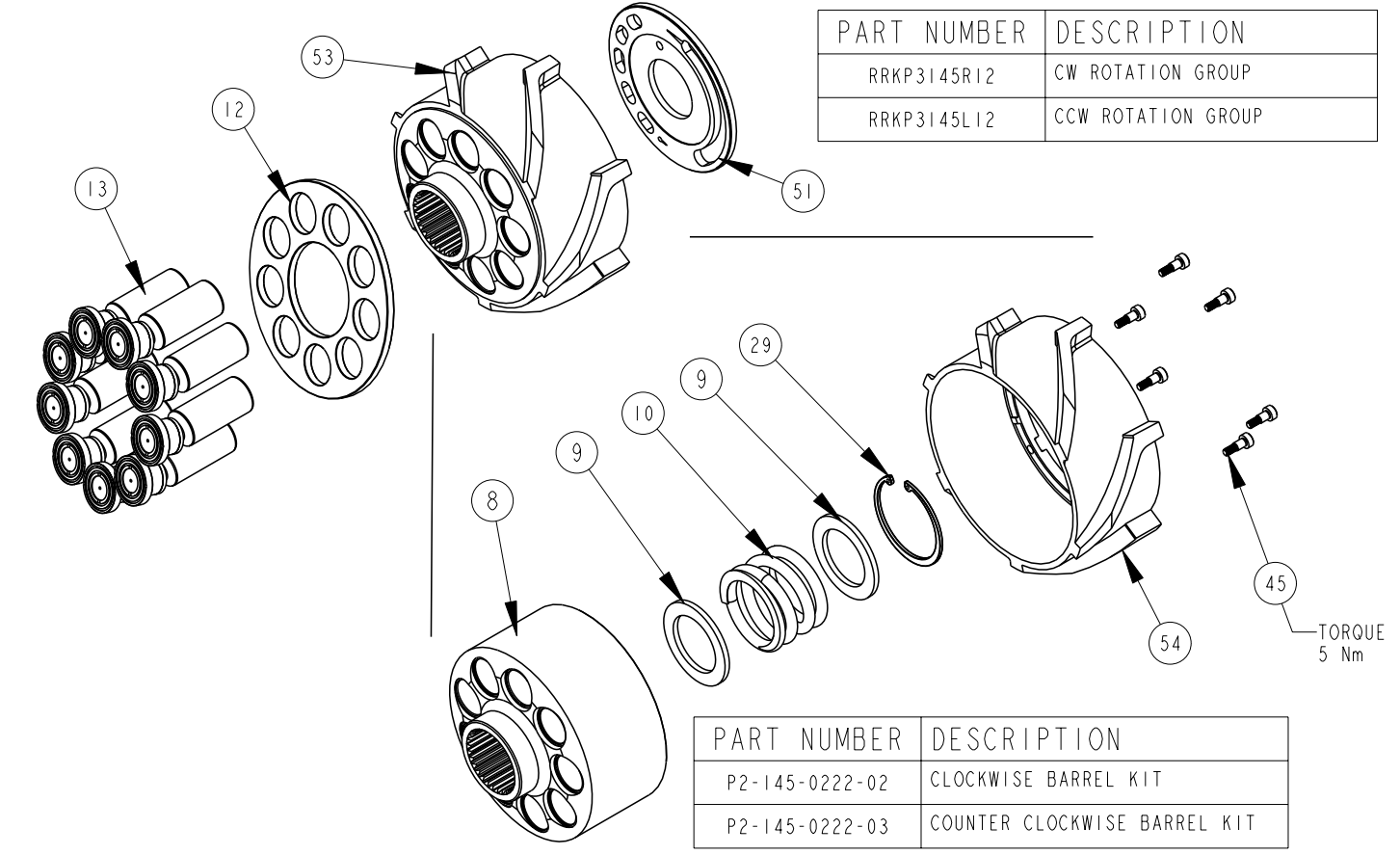
THRU DRIVE KITS



MAX VOLUME ASSEMBLY AND SERVO PISTON KIT

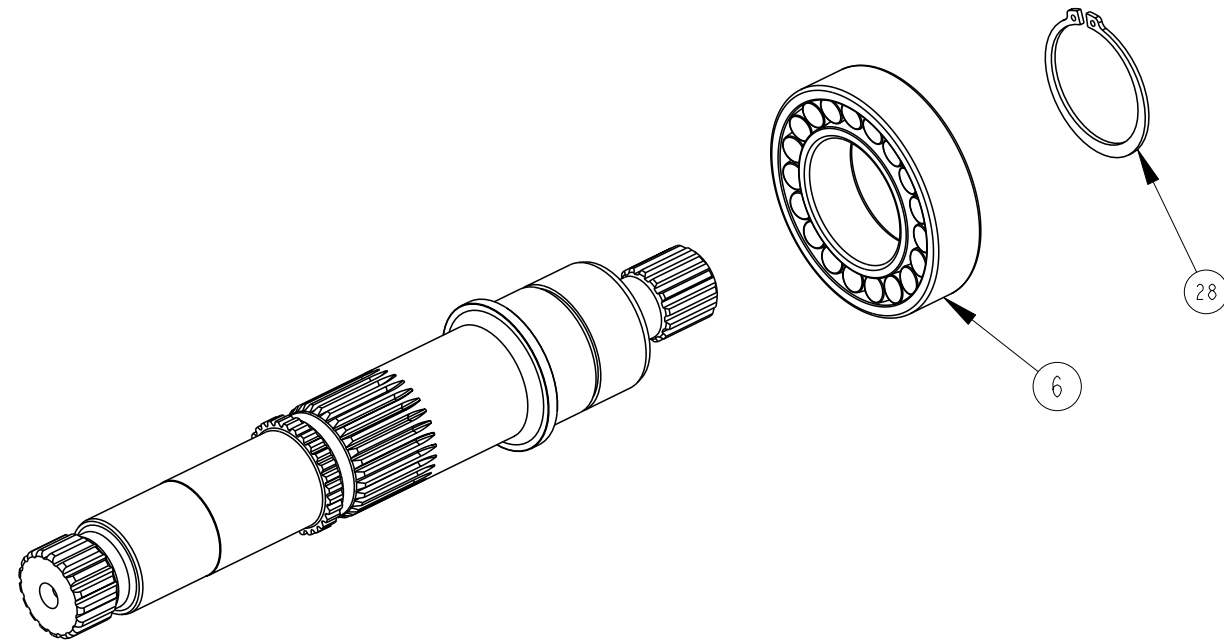


BARREL KIT AND ROTATION GROUP KIT



TITLE	DRAWING NUMBER	REVISION	STATUS	SHEET
SERVICE PARTS P3145 DESIGN SERIES 12	P2-145-0406	-	PR	5 OF 7

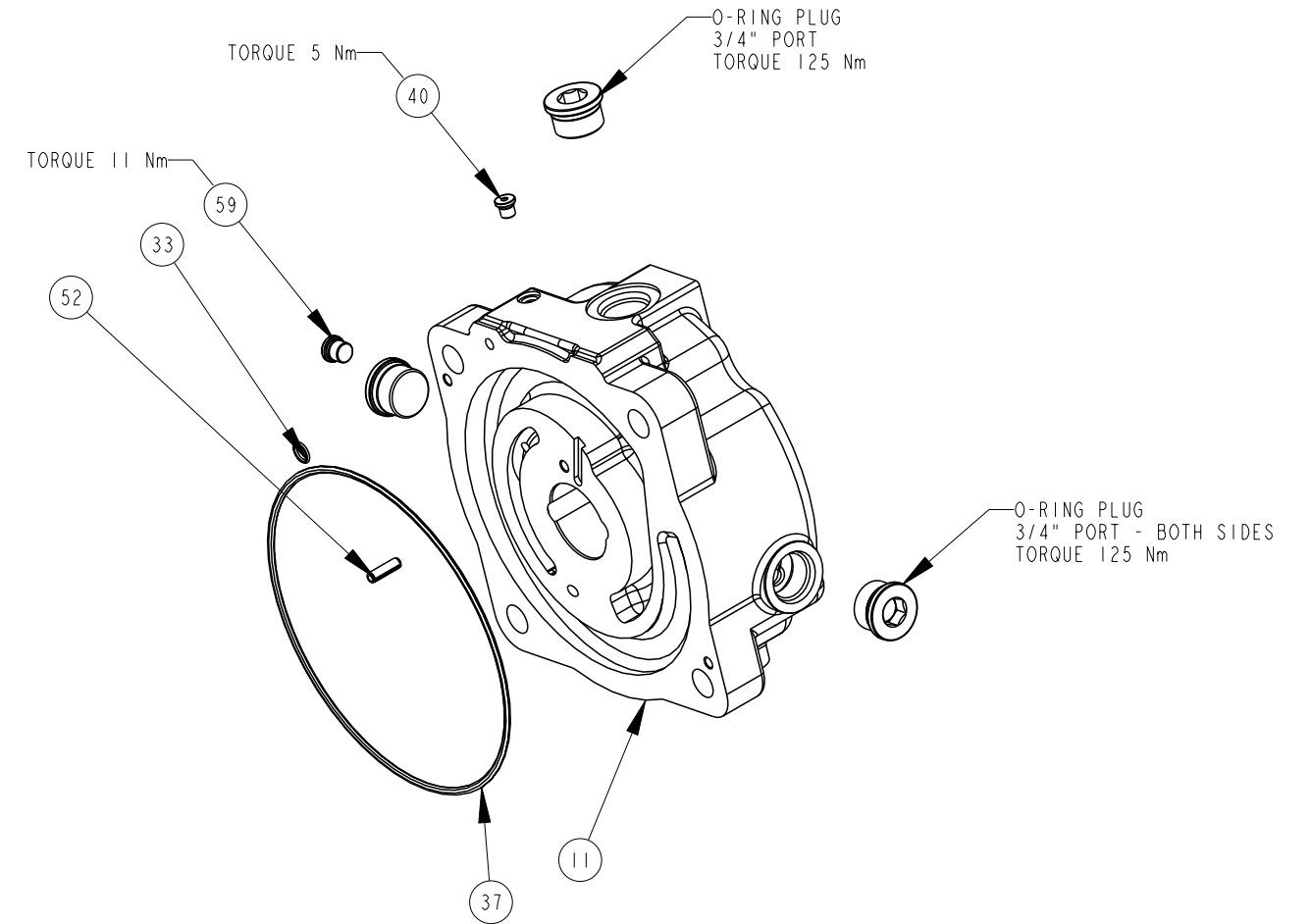
SHAFT ASSEMBLY KITS ITEM 57



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
STREHLOW	31OCT02	B. LARKIN	08NOV02	133698

COVER ASSEMBLY KITS ITEM 55



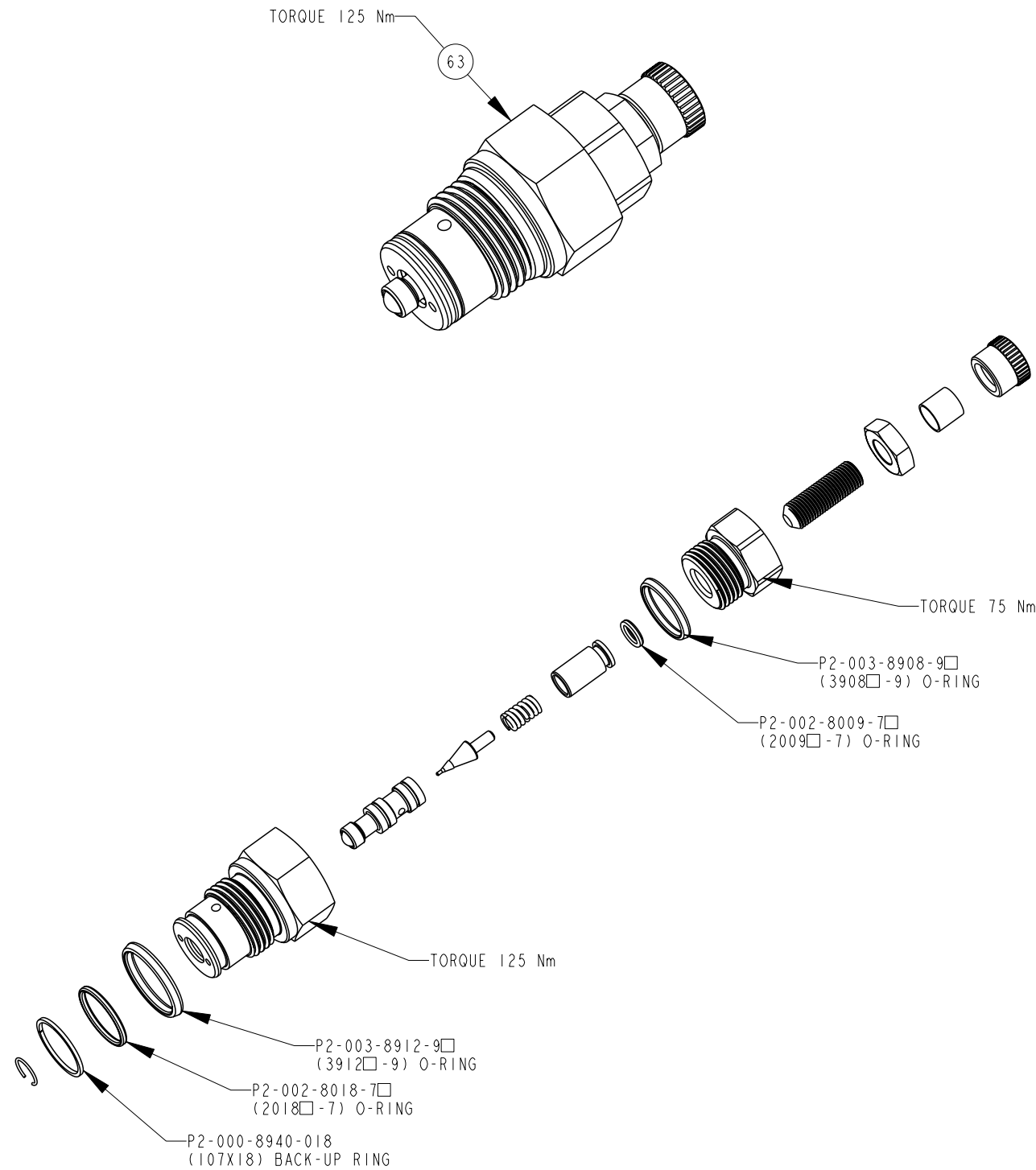
COVER ONLY	COVER ASSEMBLY	DESCRIPTION
P2-145-1015-01	P2-145-0226-09□	SIDE PORT, CCW, UNC
P2-145-1015-02	P2-145-0226-10□	SIDE PORT, CCW, UNC, THRU
P2-145-1015-03	P2-145-0226-11□	SIDE PORT, CCW, METRIC
P2-145-1015-04	P2-145-0226-12□	SIDE PORT, CCW, METRIC, THRU
P2-145-1016-01	P2-145-0226-13□	SIDE PORT, CW, UNC
P2-145-1016-02	P2-145-0226-14□	SIDE PORT, CW, UNC, THRU
P2-145-1016-03	P2-145-0226-15□	SIDE PORT, CW, METRIC
P2-145-1016-04	P2-145-0226-16□	SIDE PORT, CW, METRIC, THRU

TITLE	SERVICE PARTS P3145 DESIGN SERIES 12	DRAWING NUMBER	P2-145-0406	REVISION	-	STATUS	PR	SHEET 6 OF 7
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DRAWN BY	STREHLOW	DATE	31OCT02	CHANGED BY	B. LARKIN	DATE	08NOV02	ECN NUMBER	133698
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TORQUE CONTROL CARTRIDGE

P2-000-0803 □ - ITEM 63



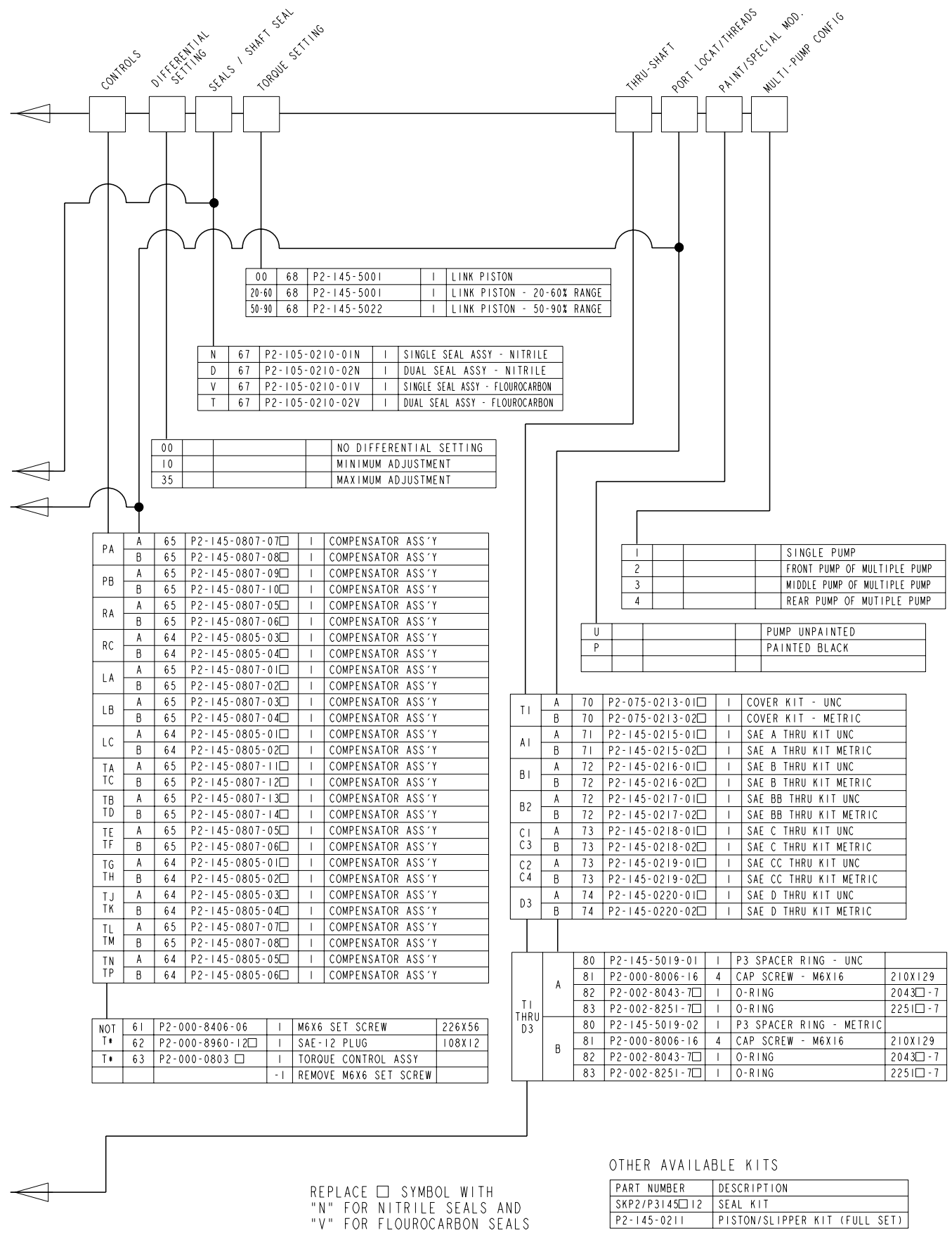
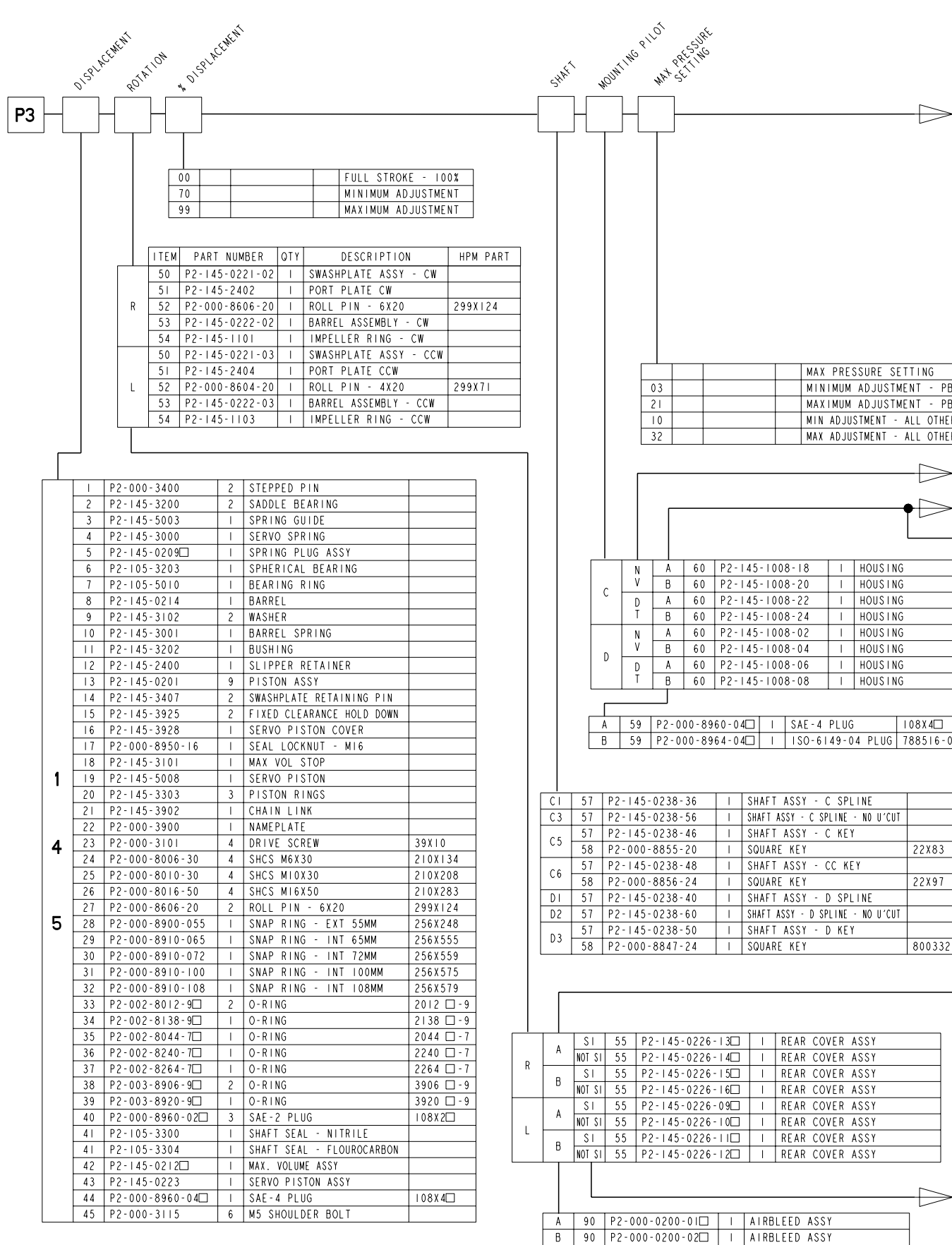
ASSEMBLY, DIS-ASSEMBLY AND REPAIR NOTES

DISASSEMBLY STEPS FOR ENTIRE PUMP

1. REMOVE COVER SCREWS AND COVER
2. REMOVE IMPELLER SCREWS AND IMPELLER
3. DE-STROKE PUMP TO MINIMUM ANGLE WITH MAX VOLUME SCREW
4. REMOVE FIXED CLEARANCE HOLD DOWN SCREWS AND HOLD DOWN PARTS
5. REMOVE ROTATING GROUP (BARREL, SLIPPER RETAINER AND PISTONS)
6. REMOVE SHAFT SEAL CARRIER
7. REMOVE SHAFT
8. REMOVE BIAS SPRING PLUG, SPRING AND RETAINER
9. REMOVE MAX. VOLUME ASSY
10. REMOVE SERVO PISTON ASSY.
11. 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



REPLACE □ SYMBOL WITH
"N" FOR NITRILE SEALS AND
"V" FOR FLOUROCARBON SEALS

OTHER AVAILABLE KITS

PART NUMBER	DESCRIPTION
SKP2/P3145 □ 12	SEAL KIT
P2-145-0211	PISTON/SLIPPER KIT (FULL SET)