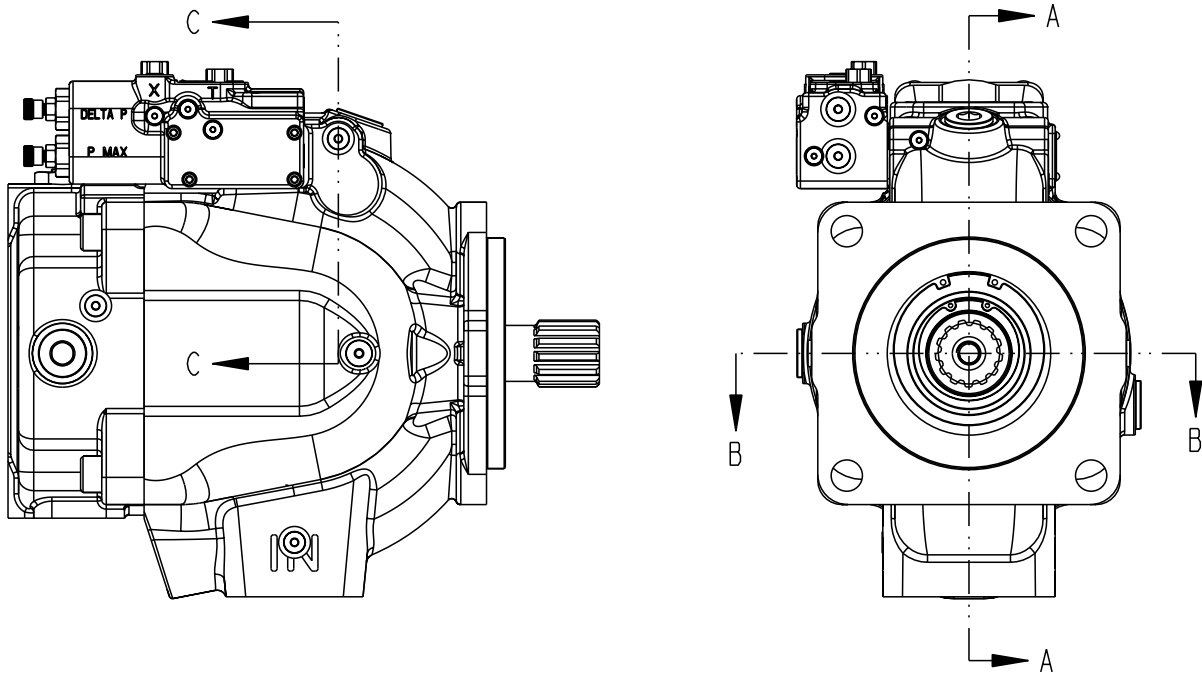
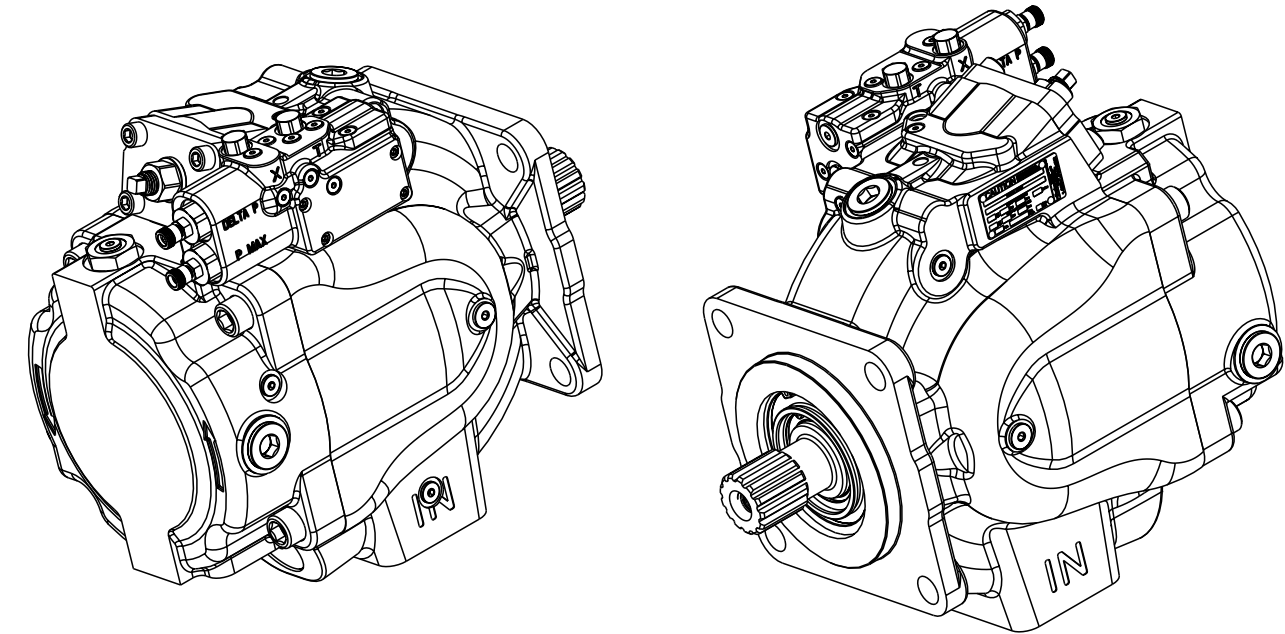


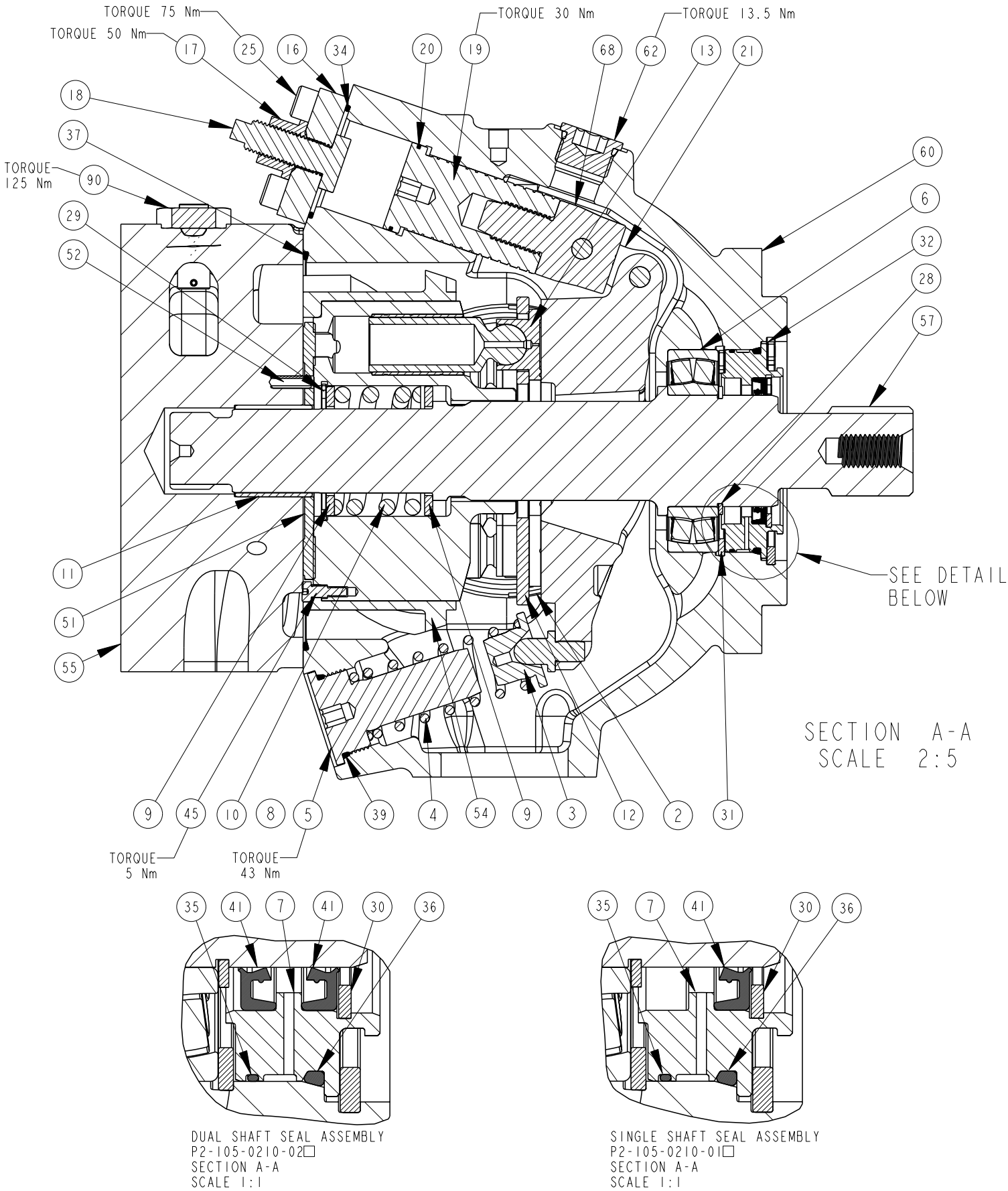
TITLE	SERVICE PARTS P3145 DESIGN SERIES 12	DRAWING NUMBER	P2-145-0406	REVISION	-	STATUS	PR	SHEET 1 OF 7
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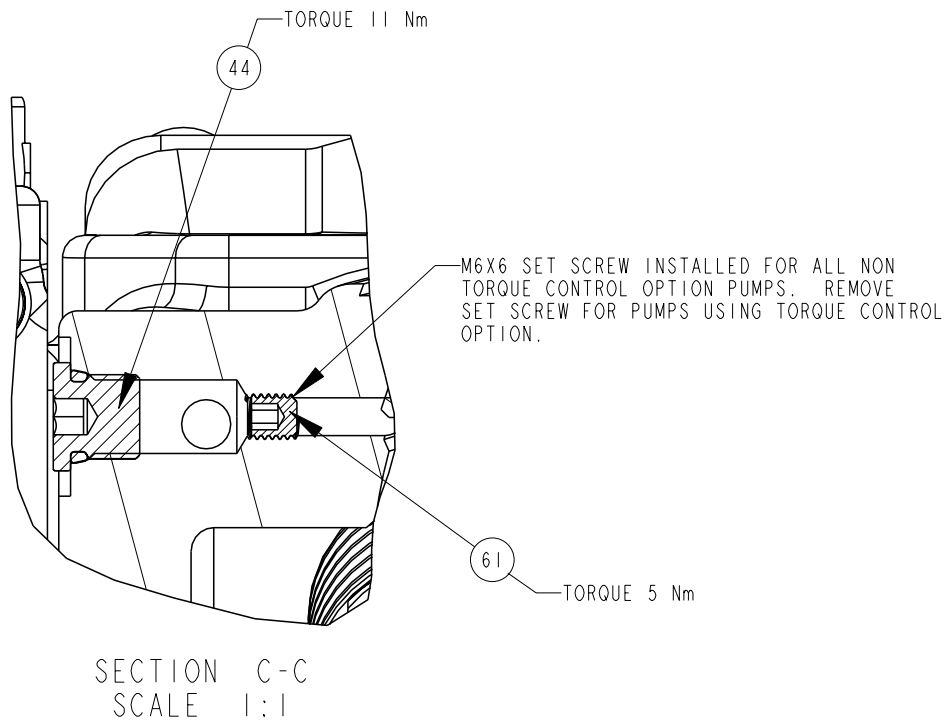
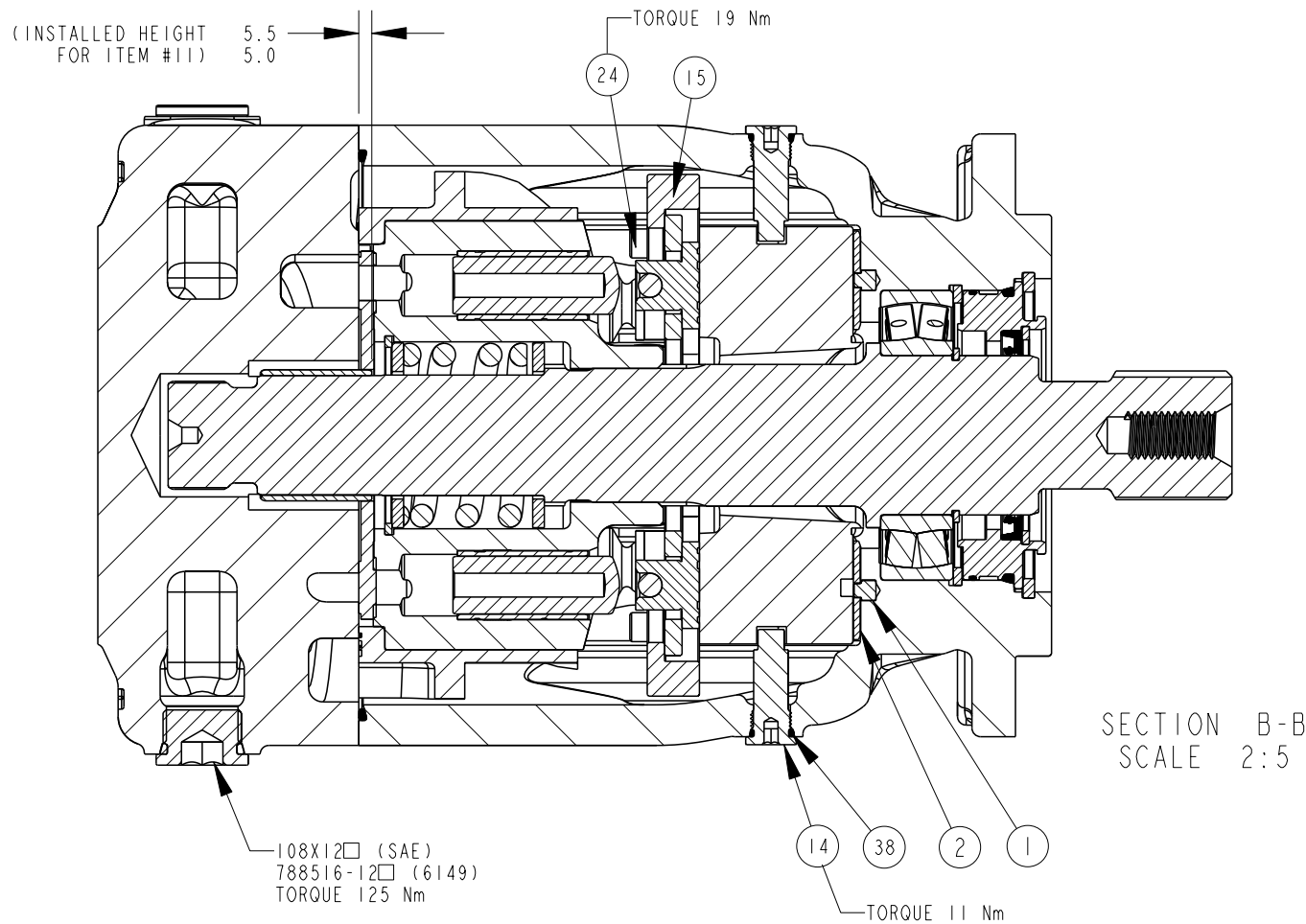
NOTES:
1 PUMP SHOWN IS A RIGHT HAND (CW) ROTATION PUMP. LEFT HAND (CCW) ROTATION PUMPS HAVE OUTLET GAUGE PORT REVERSED.



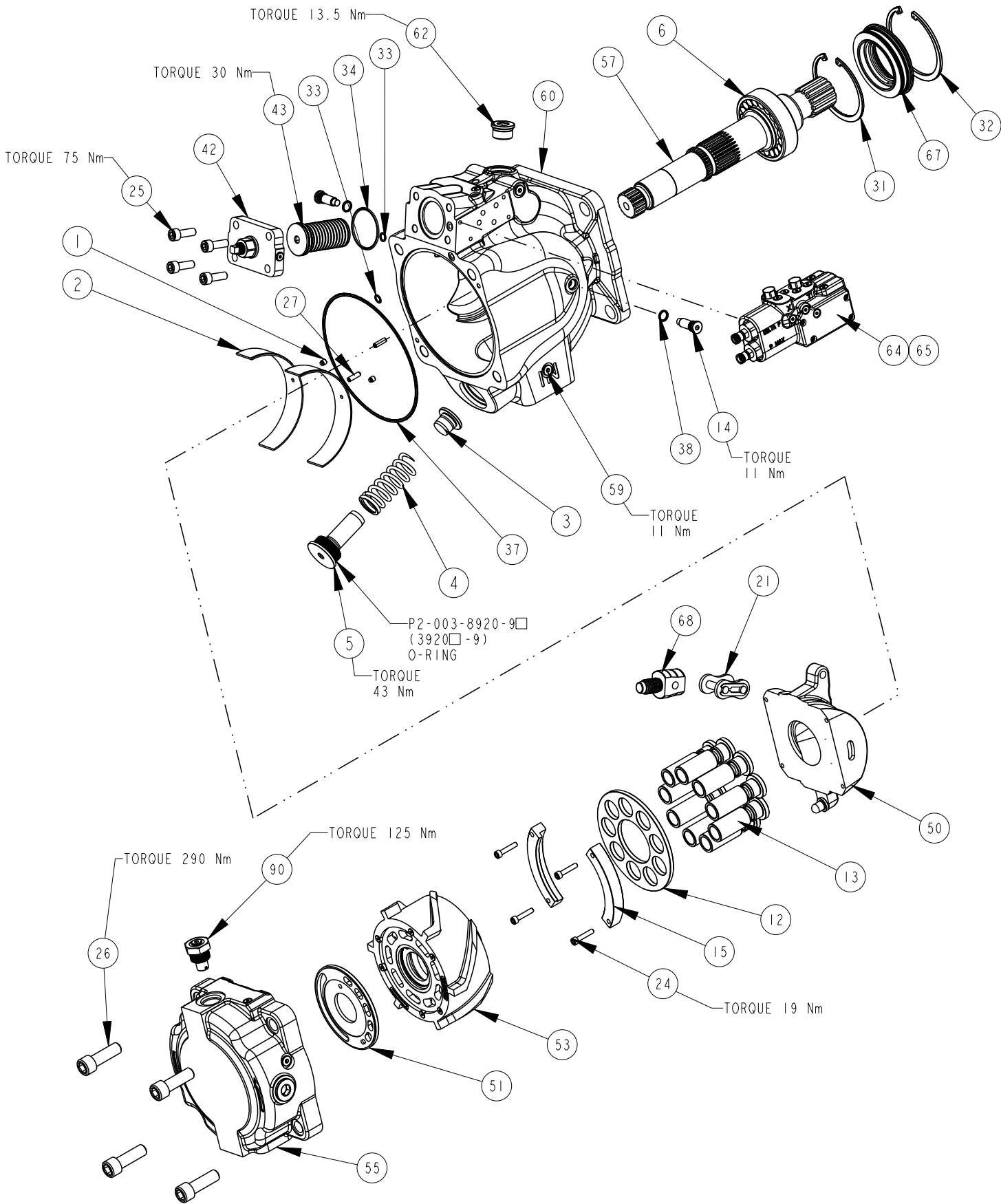
DRAWN BY	STREHLOW	DATE	31OCT02	CHANGED BY	B. LARKIN	DATE	08NOV02	ECN NUMBER	133698
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TITLE	DRAWING NUMBER	REVISION	STATUS	SHEET 2 OF 7
SERVICE PARTS P3145 DESIGN SERIES 12	P2-145-0406	-	PR	



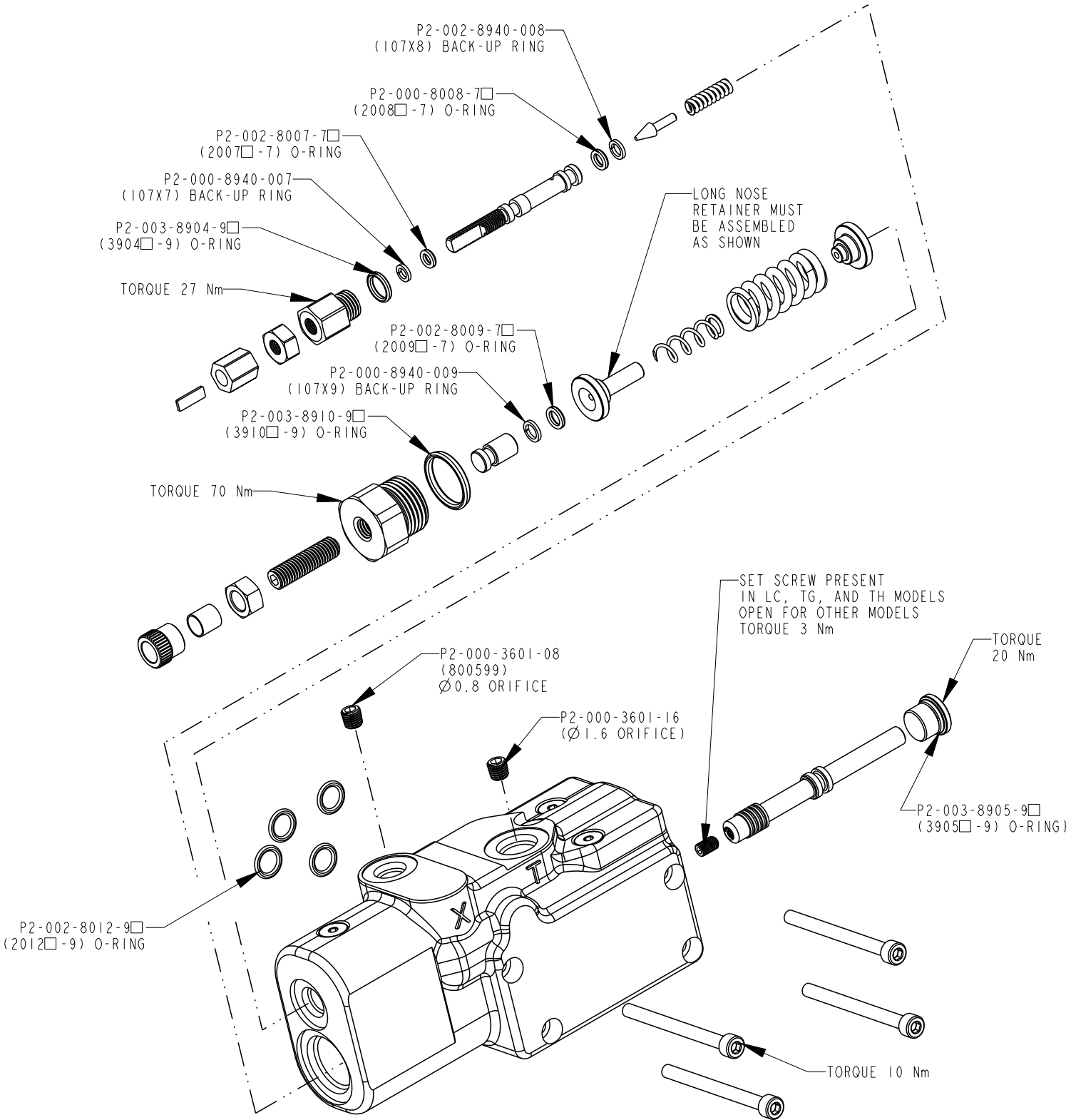
DRAWN BY	DATE	CHANGED BY	DATE	ECN NUMBER
STREHLOW	31OCT02	B. LARKIN	08NOV02	133698



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

COMPENSATOR KITS

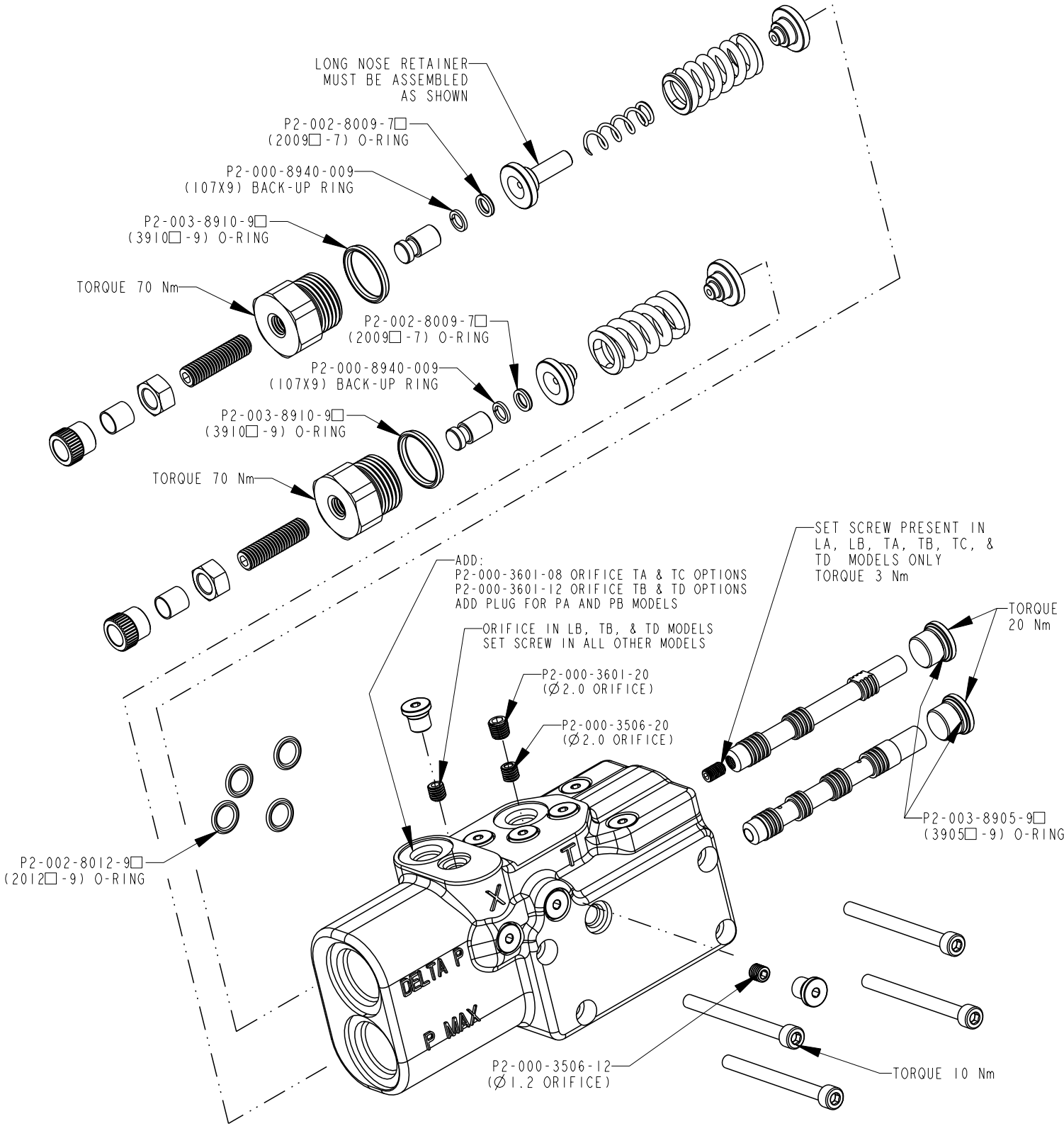
SINGLE SPOOL OPTIONS - ITEM 64



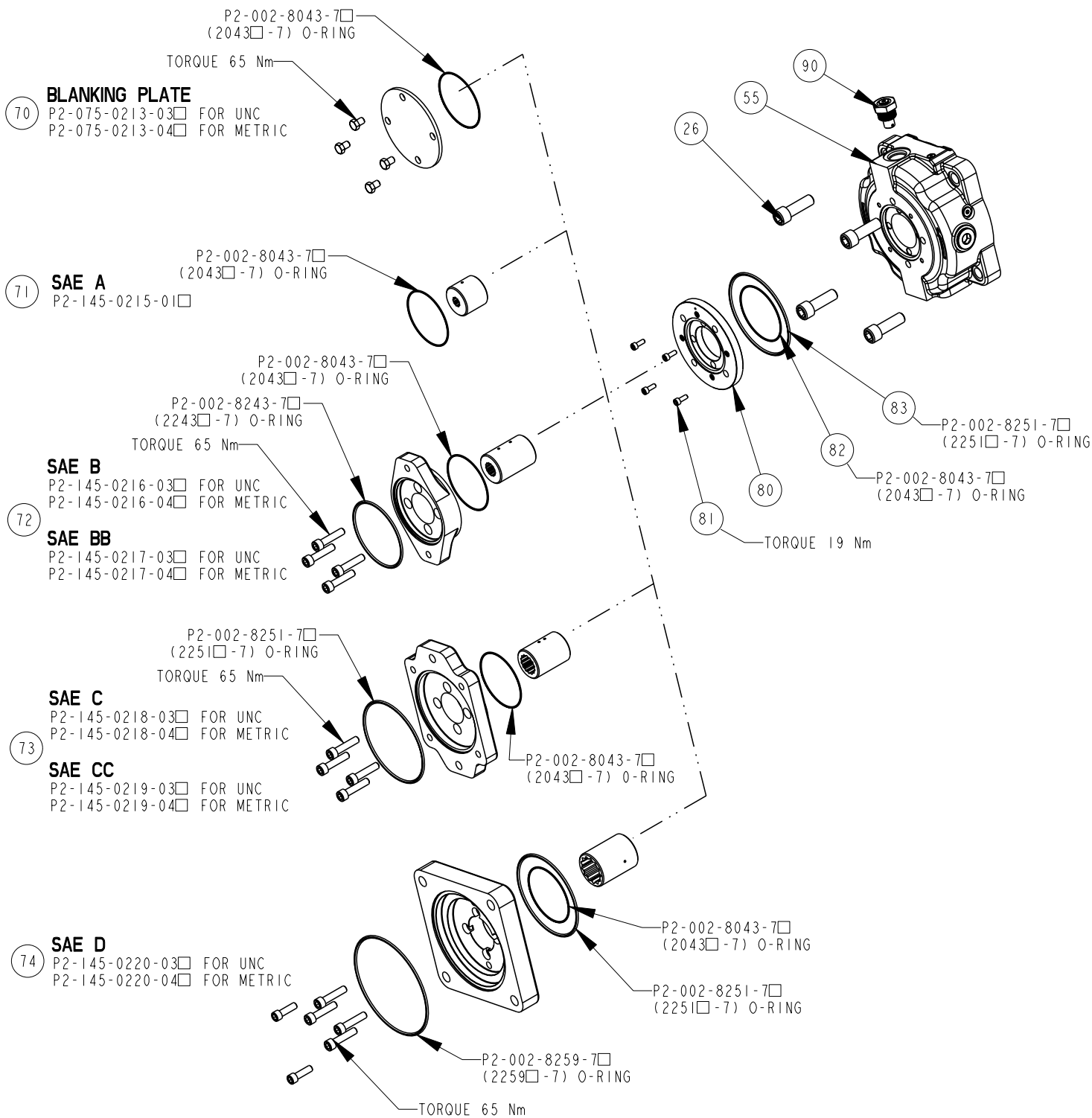
DRAWN BY	DATE	CHANGED BY	DATE	ECN NUMBER
STREHLOW	31OCT02	B. LARKIN	08NOV02	133698

COMPENSATOR KITS

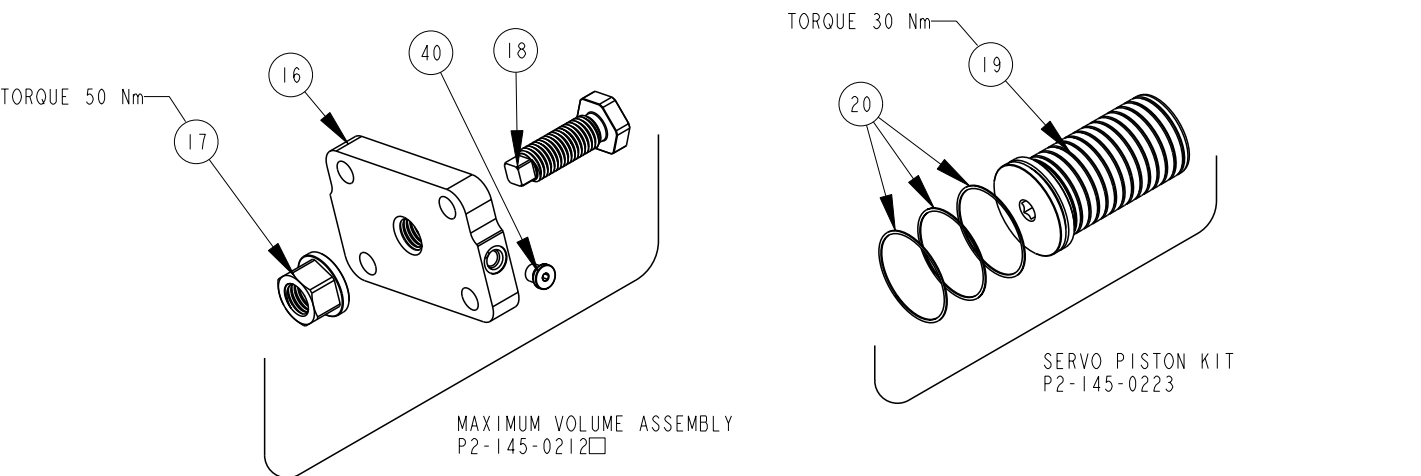
DUAL SPOOL OPTIONS - ITEM 65



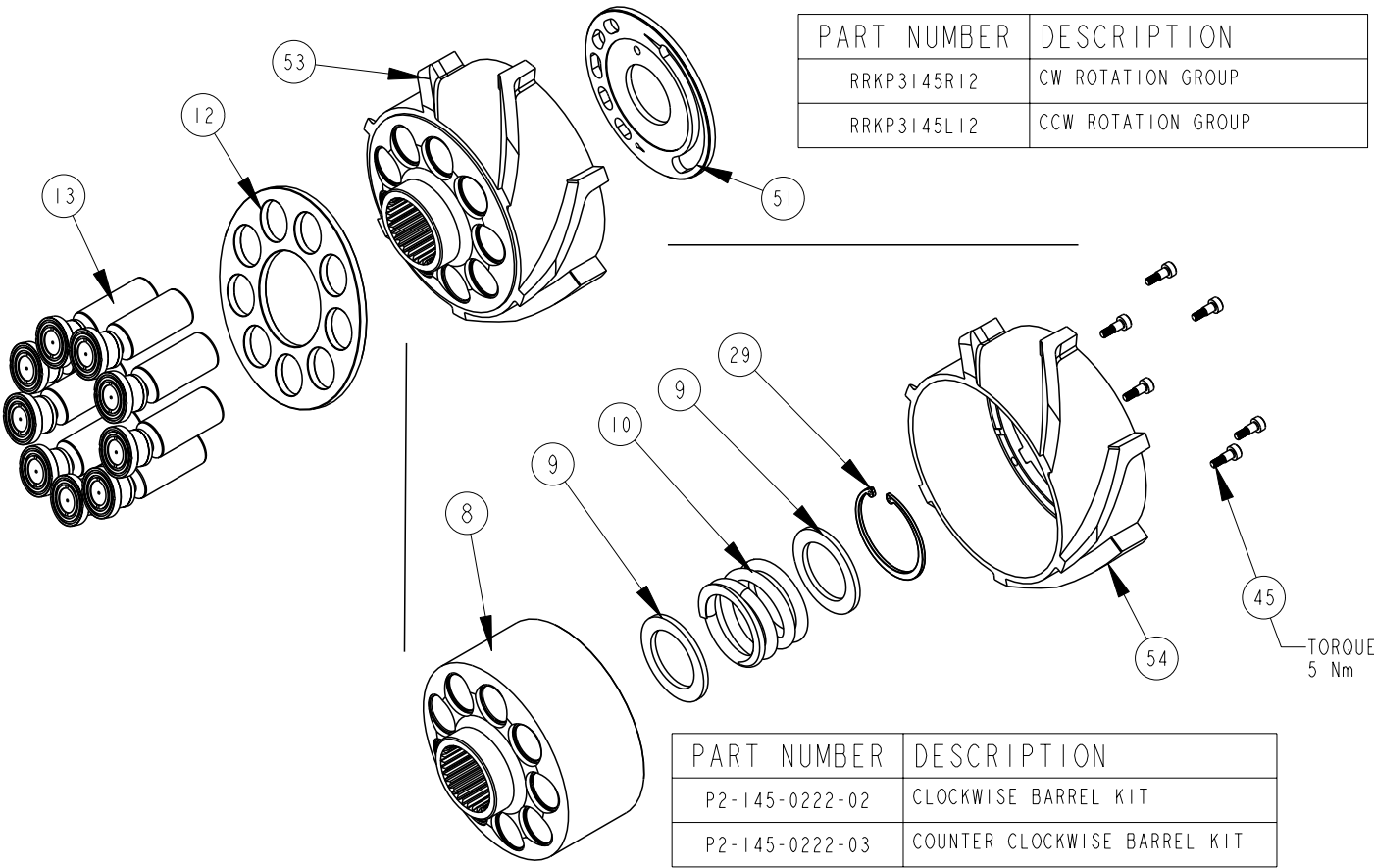
THRU DRIVE KITS



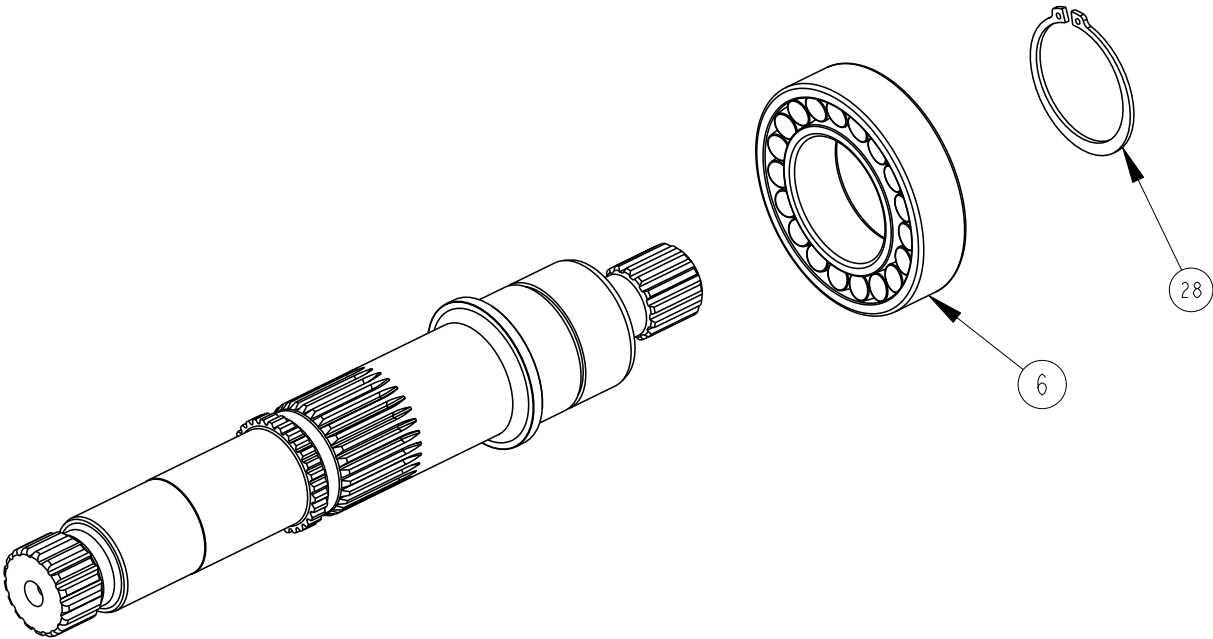
MAX VOLUME ASSEMBLY AND
SERVO PISTON KIT



BARREL KIT AND
ROTATION GROUP KIT



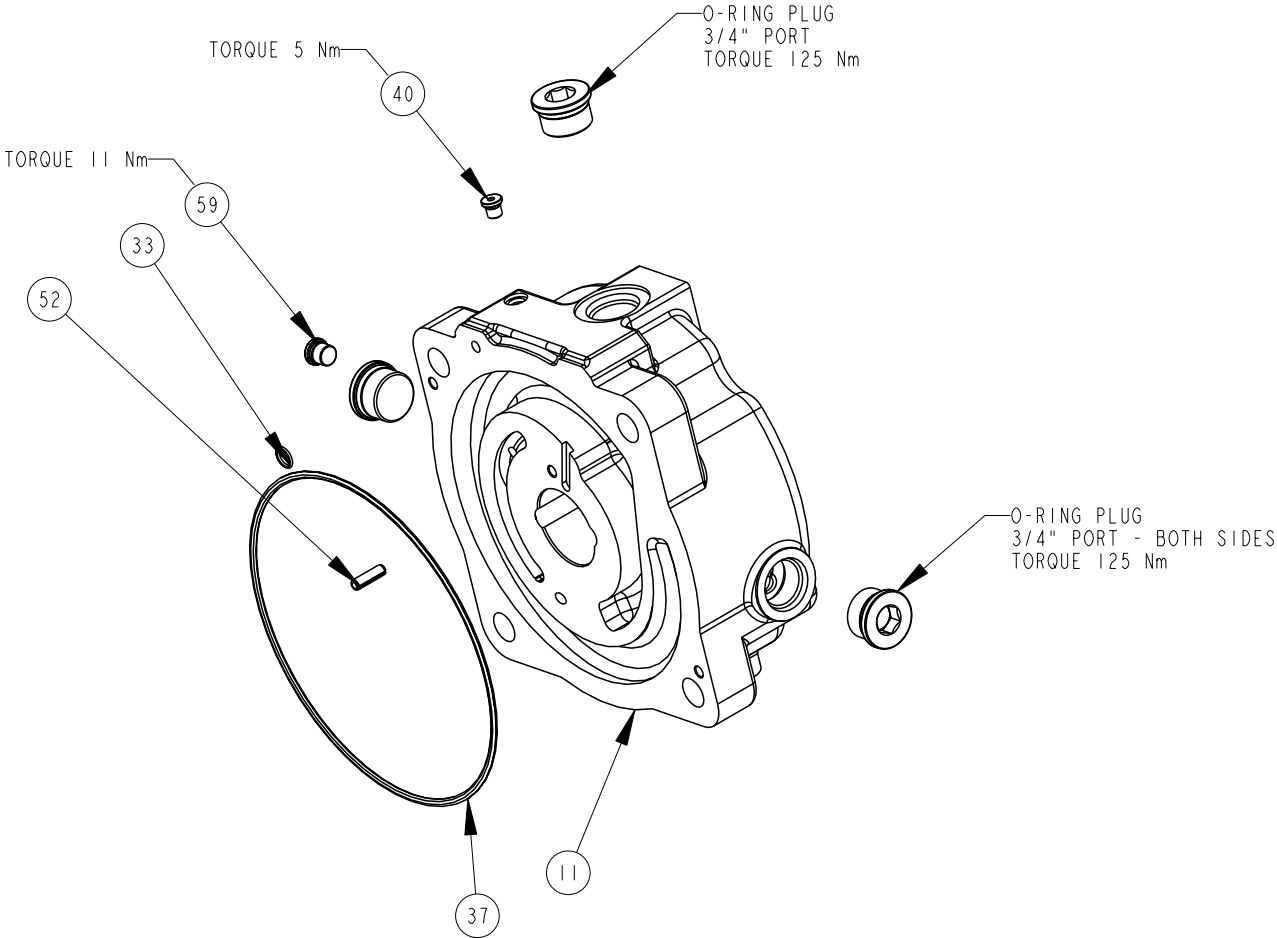
SHAFT ASSEMBLY KITS
ITEM 57



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



COVER ASSEMBLY KITS
ITEM 55

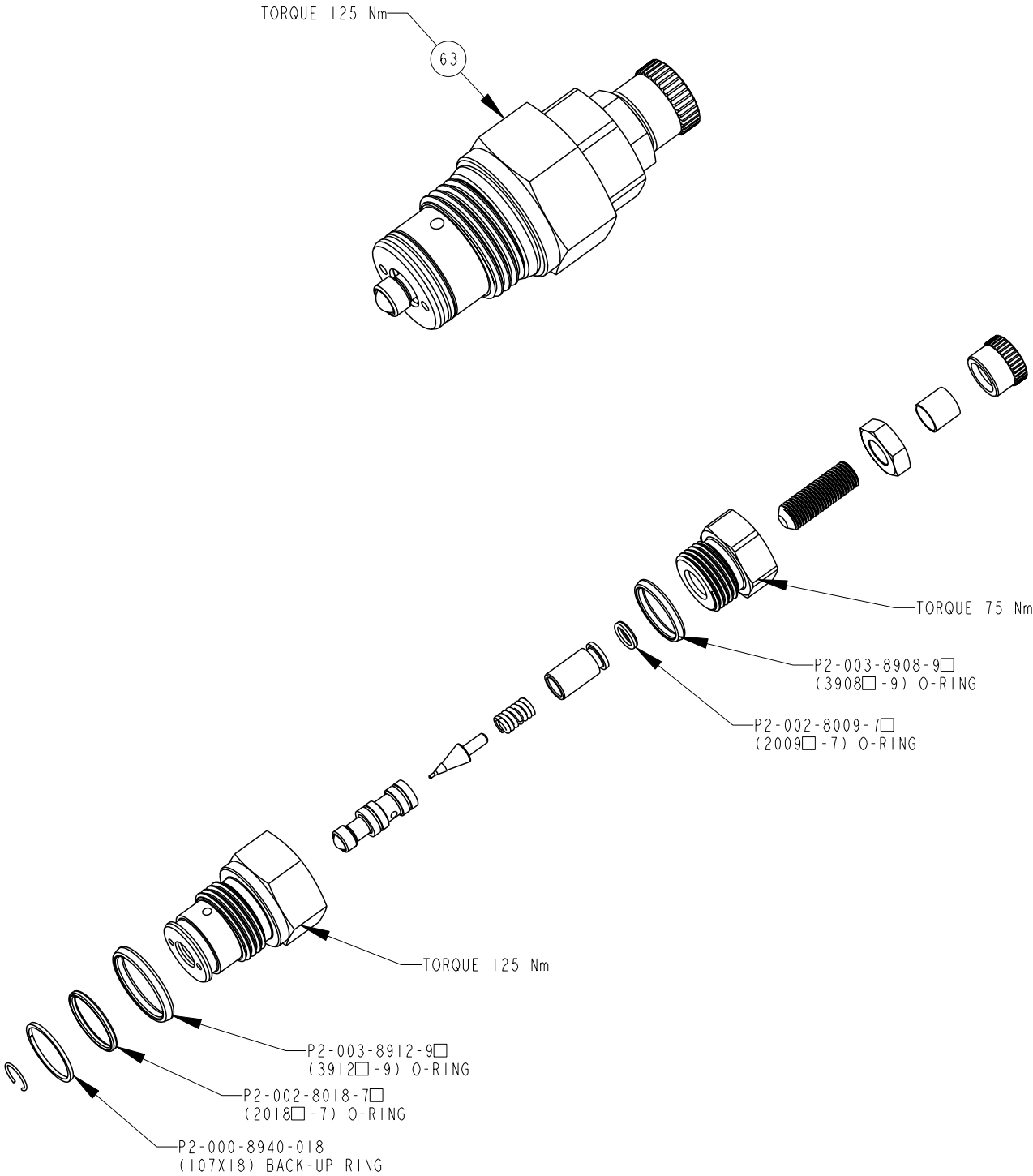


COVER ONLY	COVER ASSEMBLY	DESCRIPTION
P2-145-1015-01	P2-145-0226-09□	SIDE PORT, CCW, UNC
P2-145-1015-02	P2-145-0226-10□	SIDE PORT, CCW, UNC, THRU
P2-145-1015-03	P2-145-0226-11□	SIDE PORT, CCW, METRIC
P2-145-1015-04	P2-145-0226-12□	SIDE PORT, CCW, METRIC, THRU
P2-145-1016-01	P2-145-0226-13□	SIDE PORT, 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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TORQUE CONTROL CARTRIDGE P2-000-0803 □ - ITEM 63



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

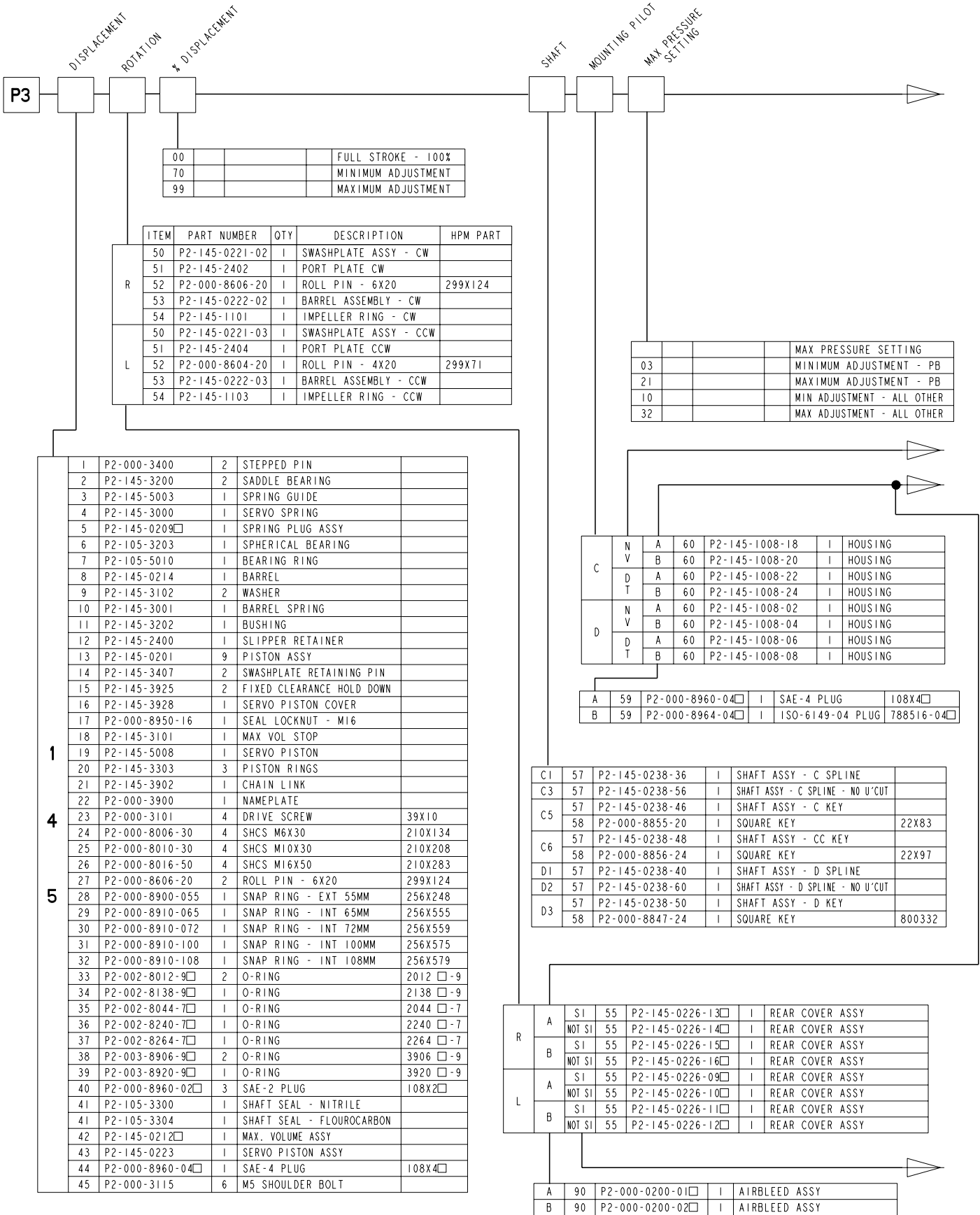
ASSEMBLY, DIS-ASSEMBLY AND REPAIR NOTES

- 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

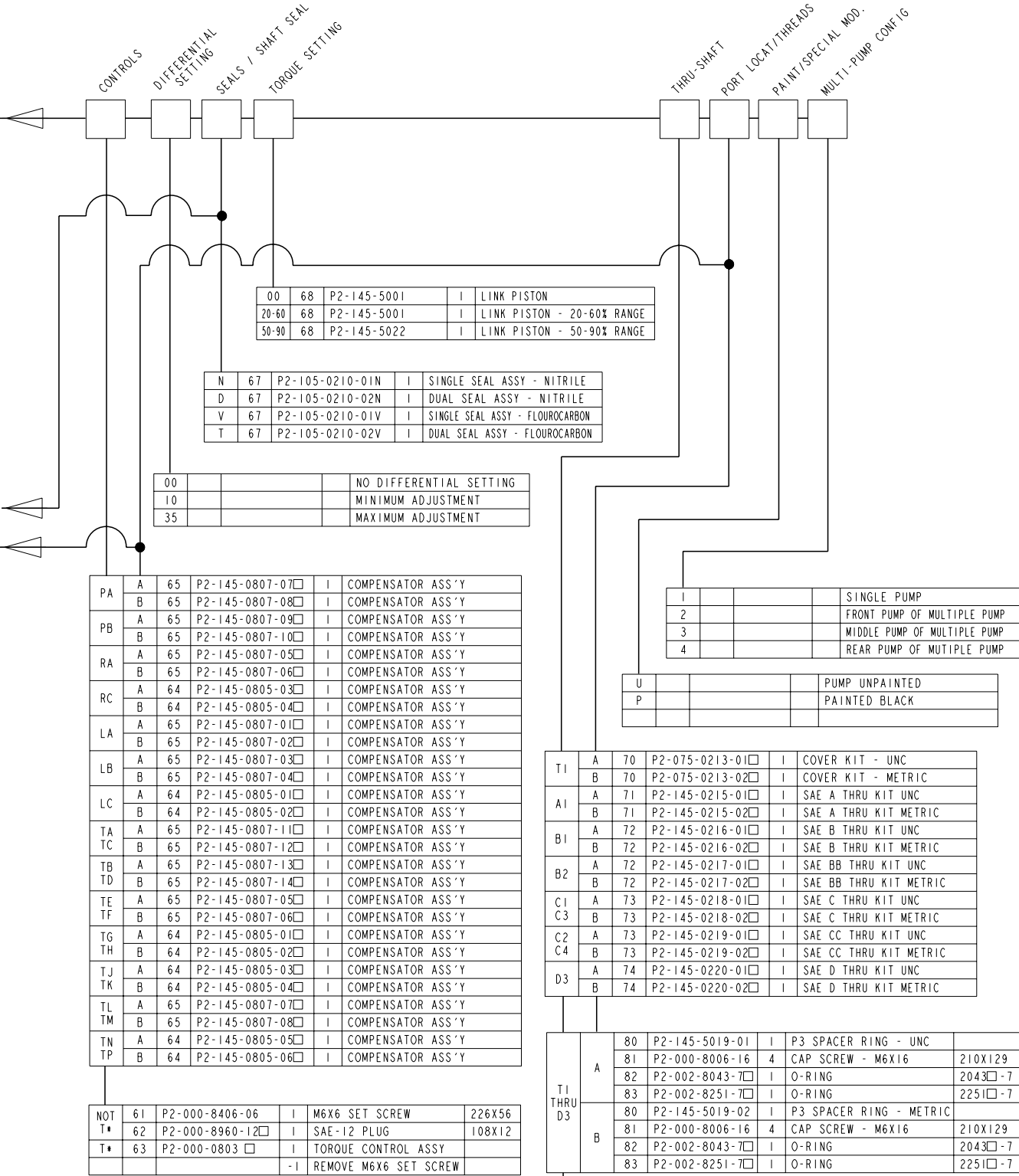
- SHAFT SEAL REPLACEMENT
1. REMOVE SEAL CARRIER ONLY
 2. REMOVE OLD SEAL
 3. INSPECT SHAFT
 4. IF SHAFT IS WORN INSTALL NEW SEAL IN INNER LOCATION FOR SINGLE SEAL APPLICATIONS (SEE SHEET 1). REPLACE SHAFT FOR DUAL SEAL APPLICATIONS



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



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



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)

