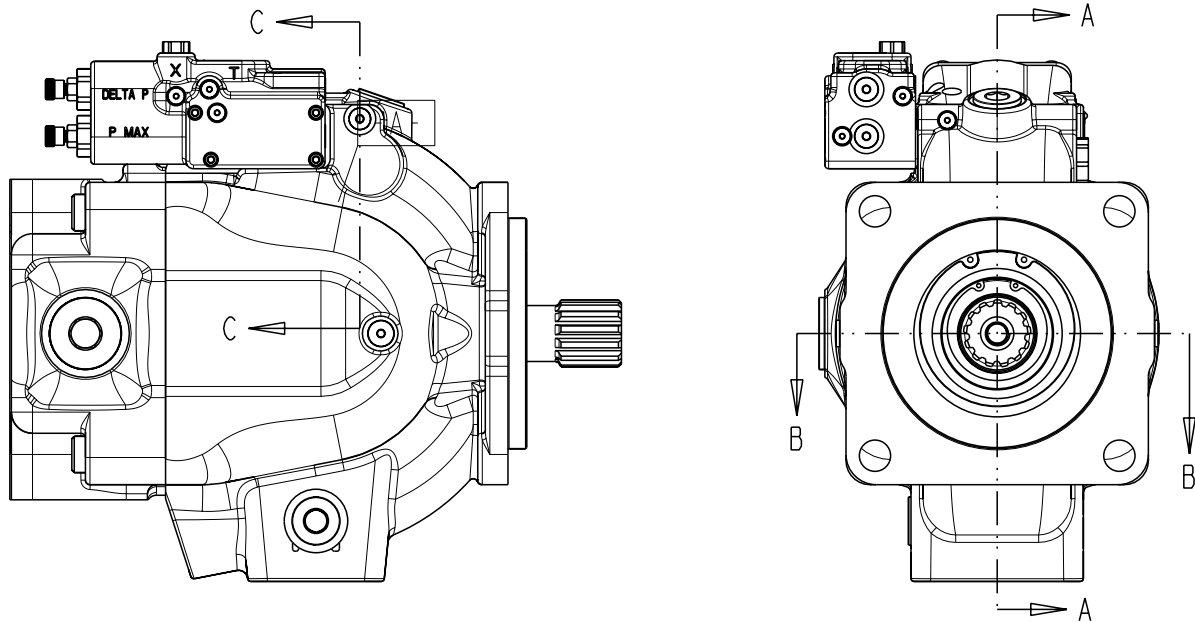
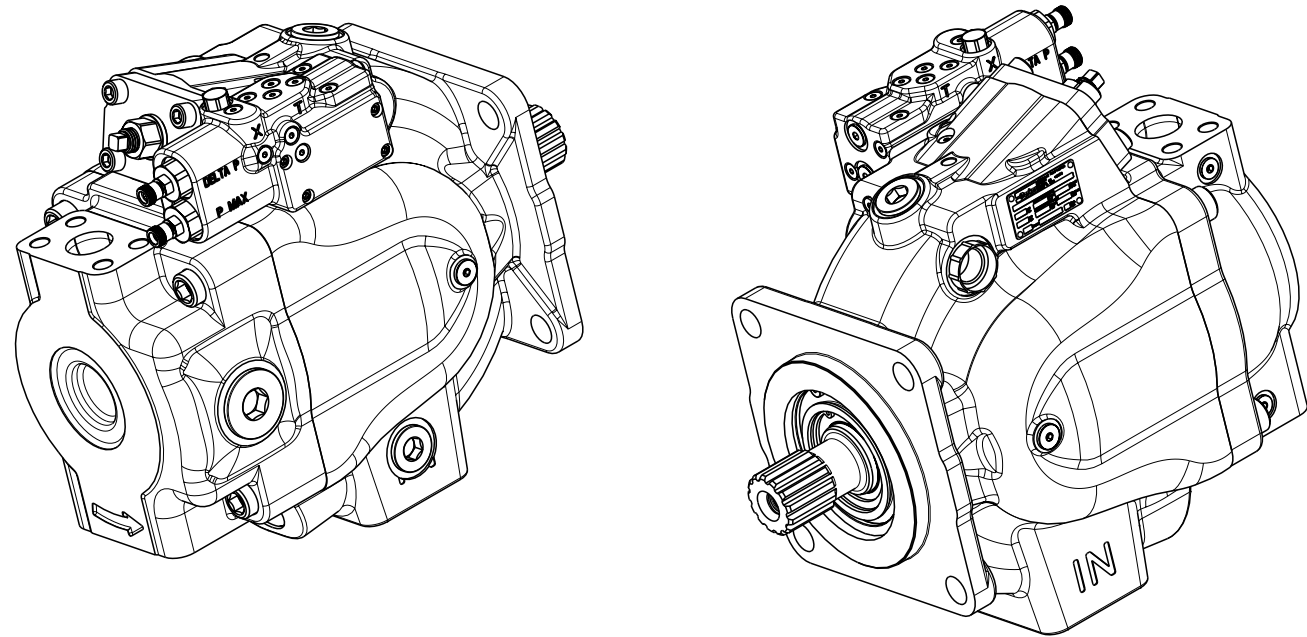
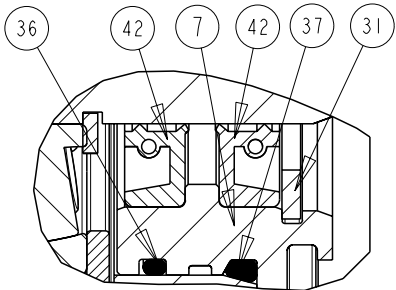
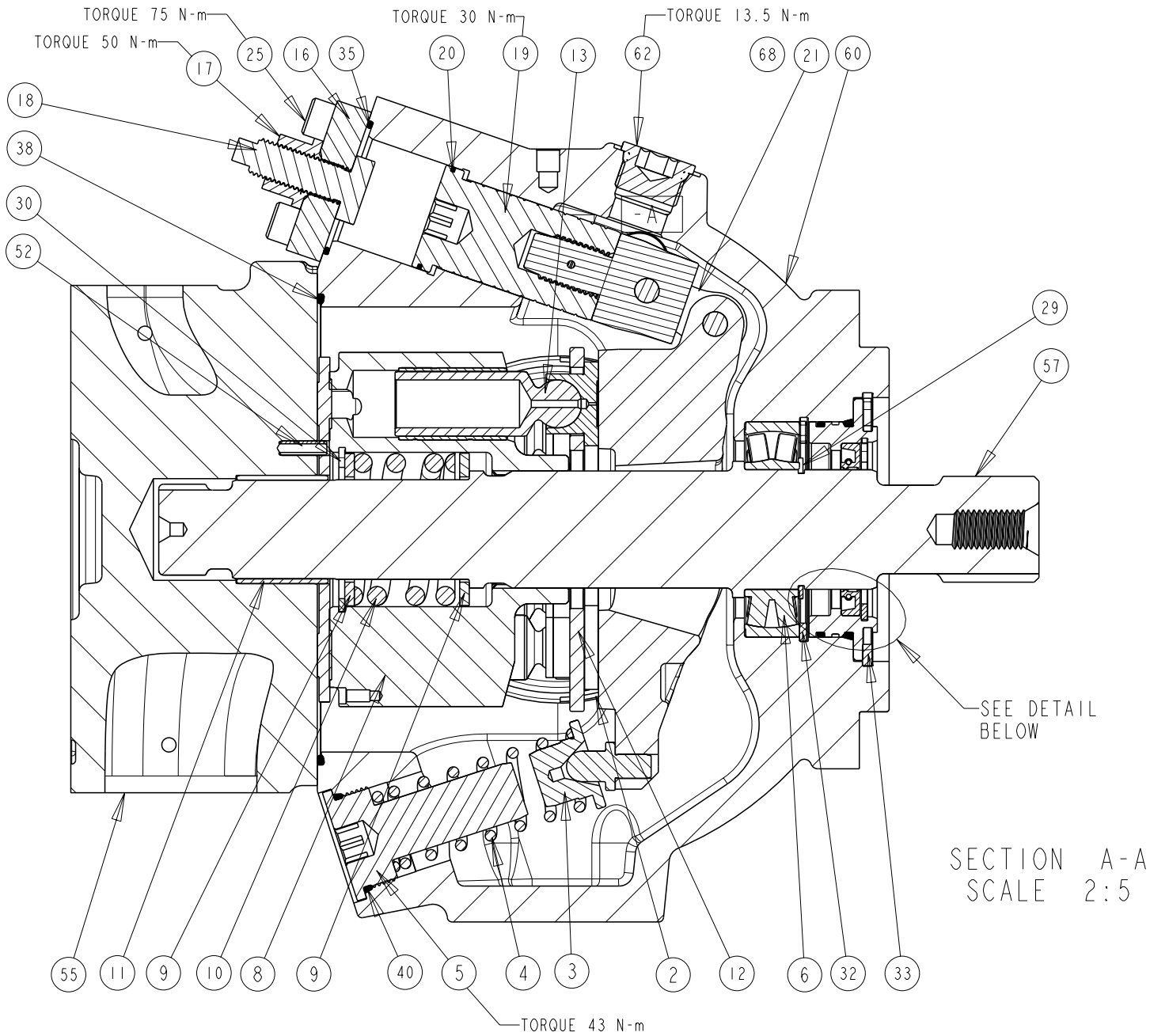


| TITLE | DRAWING NUMBER | REVISION | STATUS | SHEET |
|-----------------------------------------|----------------|----------|--------|--------|
| SERVICE PARTS P2145 DESIGN SERIES II | P2-145-0403 | A | PR | 1 OF 7 |

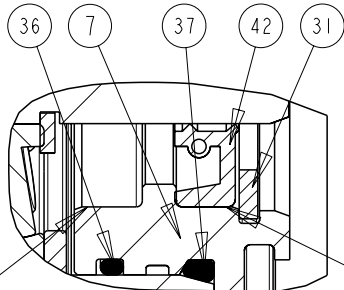
| DRAWN BY | DATE | CHANGED BY | DATE | ECN NUMBER |
|----------|---------|------------|---------|------------|
| E. BOONE | 15APR02 | B. LARKIN | 23MAY02 | 133522 |



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



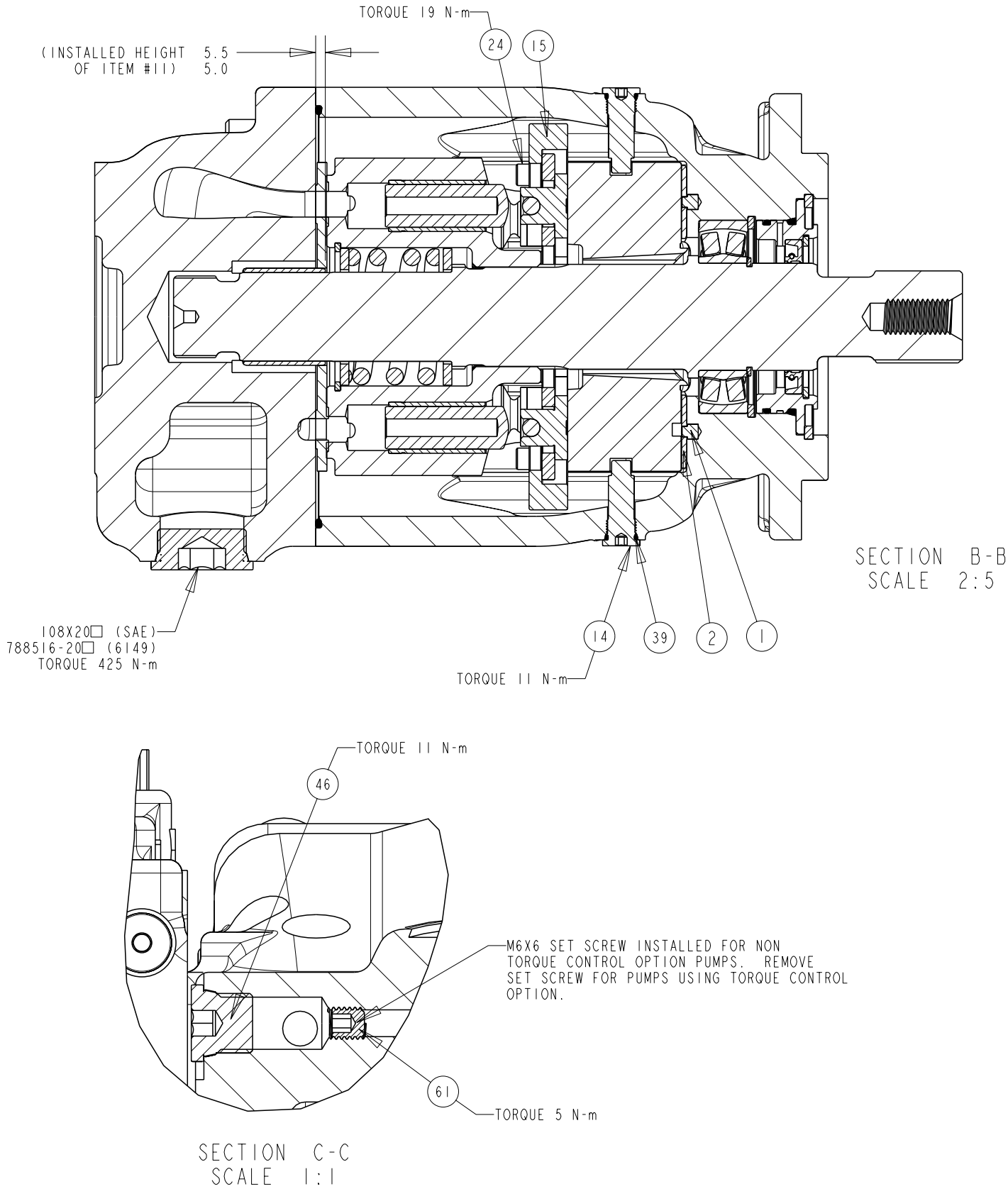
DUAL SHAFT SEAL ASSEMBLY
P2-145-0210-02
SECTION A-A
SCALE 1:1



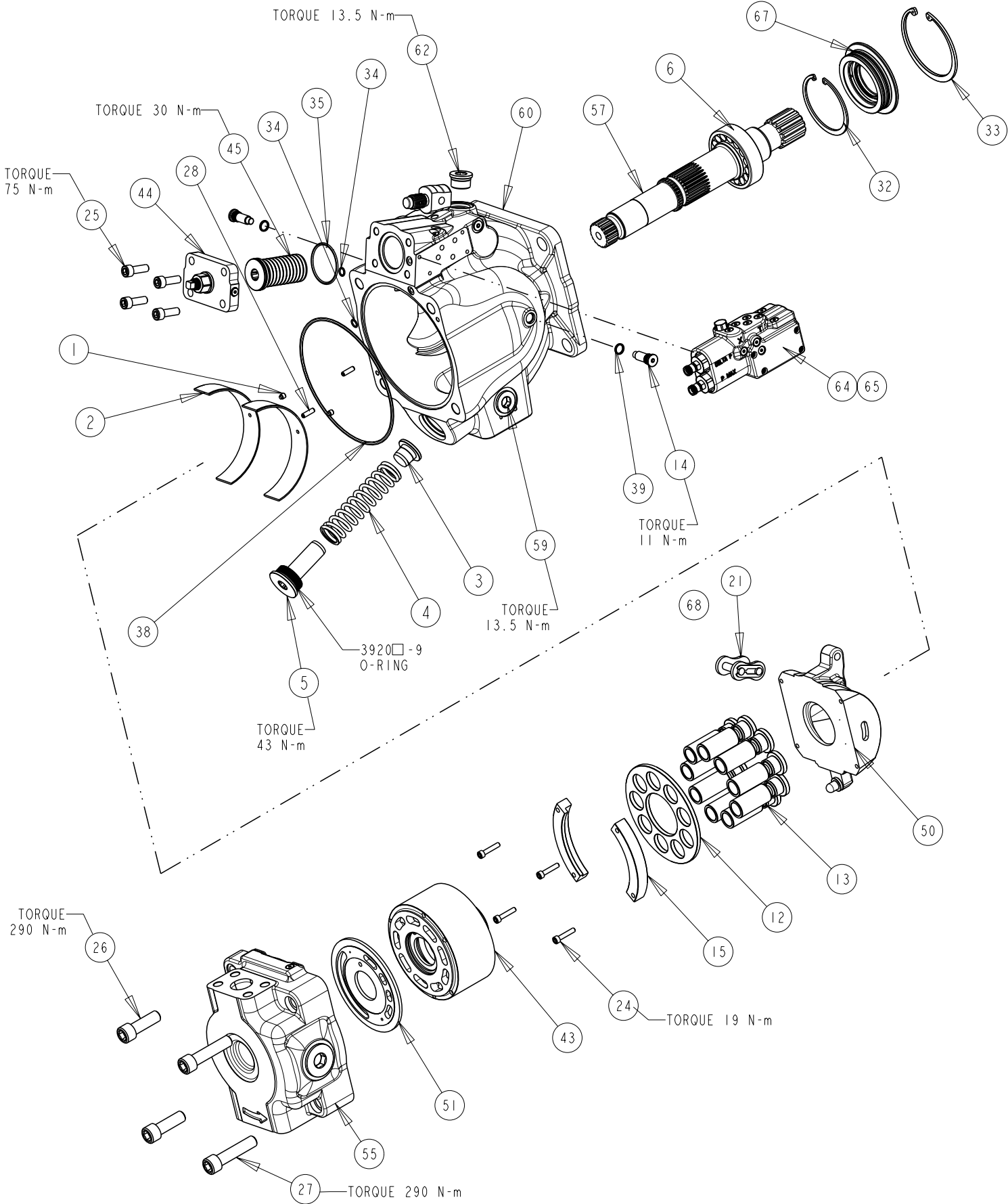
SINGLE SHAFT SEAL ASSEMBLY
P2-145-0210-01
SECTION A-A
SCALE 1:1



| TITLE | DRAWING NUMBER | REVISION | STATUS | SHEET |
|-----------------------------------------|----------------|----------|--------|--------|
| SERVICE PARTS P2145 DESING SERIES 11 | P2-145-0403 | A | PR | 2 OF 7 |

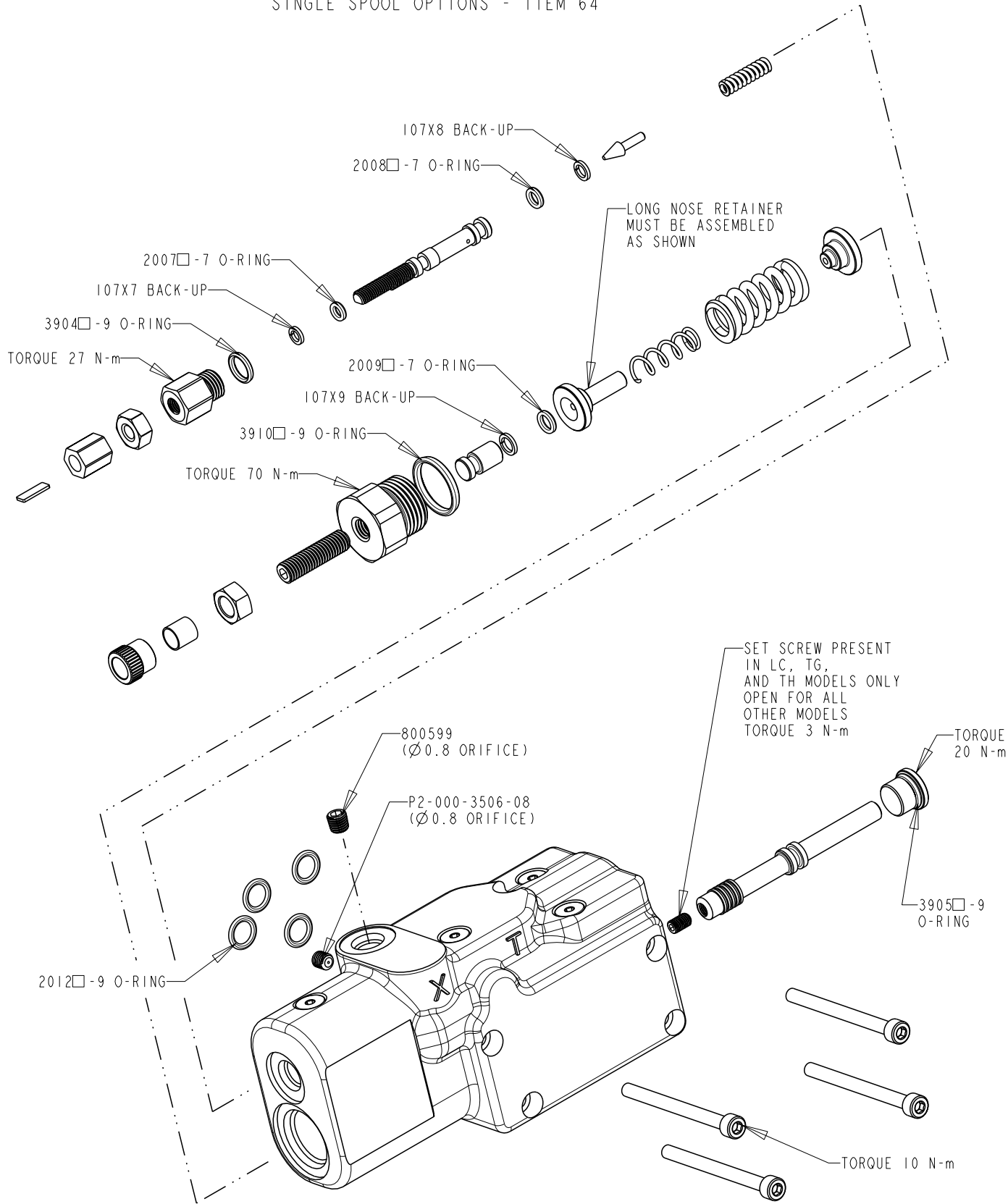


| DRAWN BY | DATE | CHANGED BY | DATE | ECN NUMBER |
|----------|---------|------------|---------|------------|
| E. BOONE | 15APR02 | B. LARKIN | 22MAY02 | 133522 |



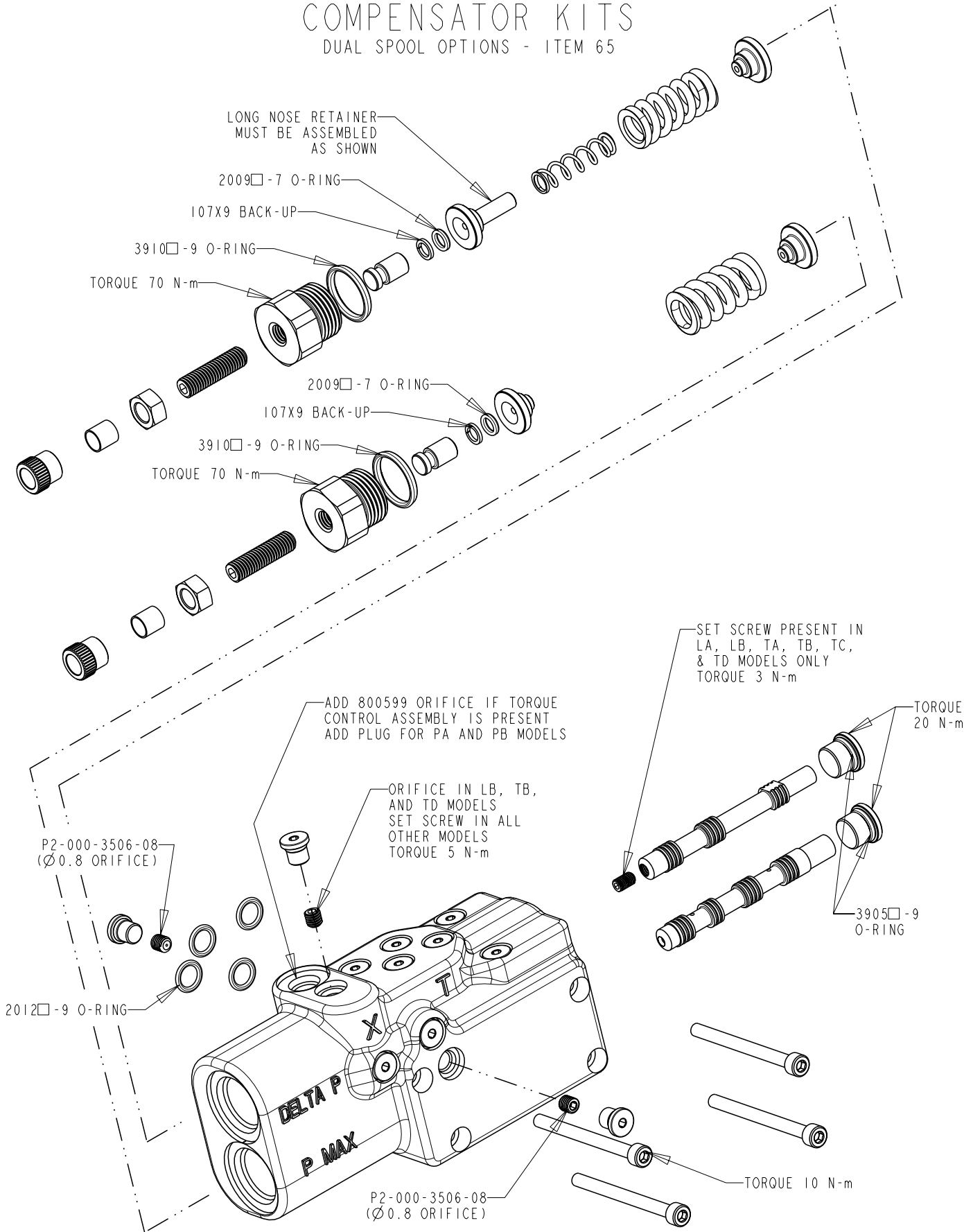
| | | | | | | | | |
|-------|-----------------------------------------|----------------|-------------|----------|---|--------|----|--------------|
| TITLE | SERVICE PARTS P2145 DESIGN SERIES II | DRAWING NUMBER | P2-145-0403 | REVISION | A | STATUS | PR | SHEET 3 OF 7 |
|-------|-----------------------------------------|----------------|-------------|----------|---|--------|----|--------------|

COMPENSATOR KITS SINGLE SPOOL OPTIONS - ITEM 64

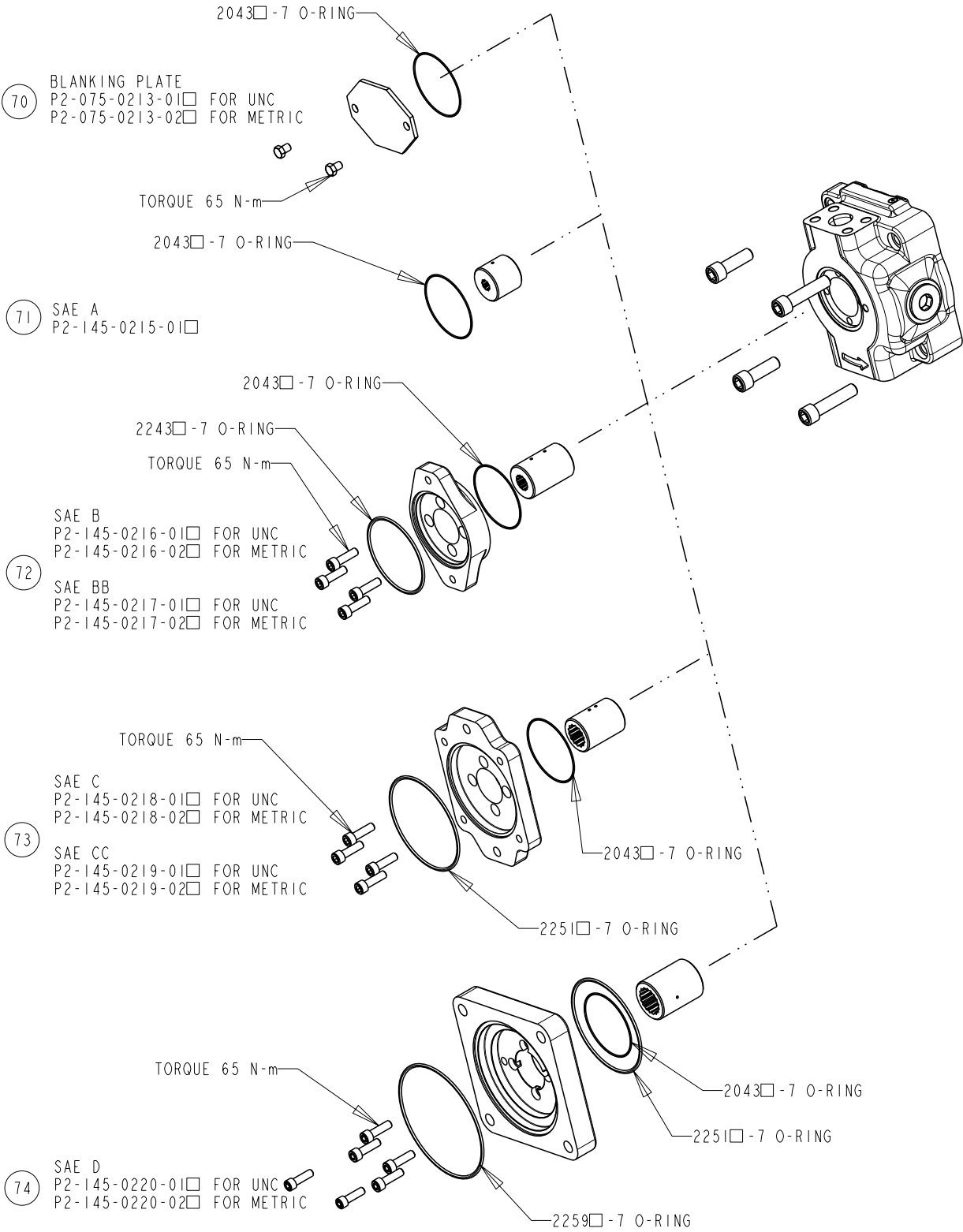


| | | | | | | | | | |
|----------|----------|------|---------|------------|-----------|------|---------|------------|--------|
| DRAWN BY | E. BOONE | DATE | 15APR02 | CHANGED BY | B. LARKIN | DATE | 23MA702 | ECN NUMBER | 133522 |
|----------|----------|------|---------|------------|-----------|------|---------|------------|--------|

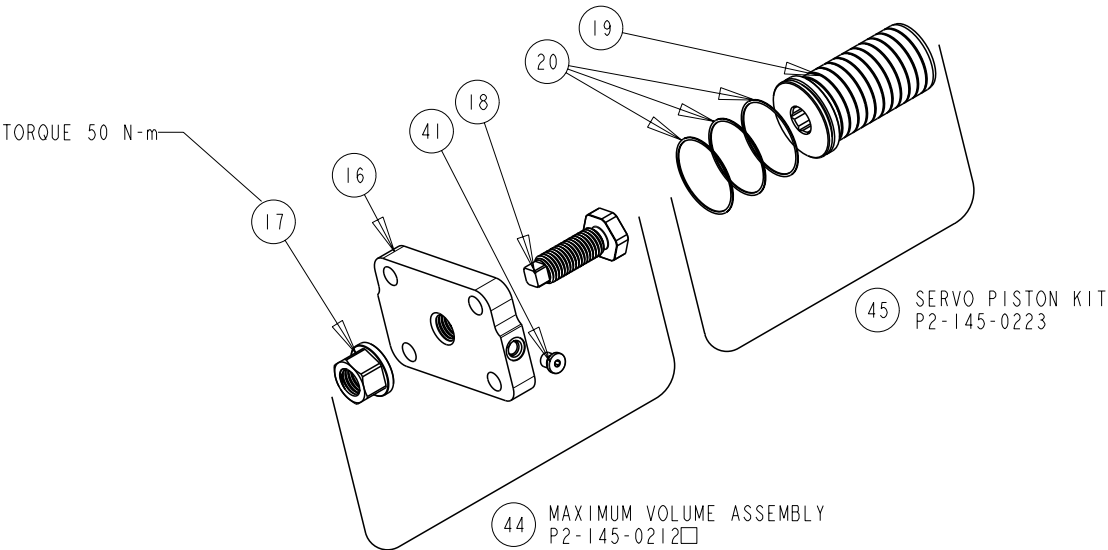
COMPENSATOR KITS DUAL SPOOL OPTIONS - ITEM 65



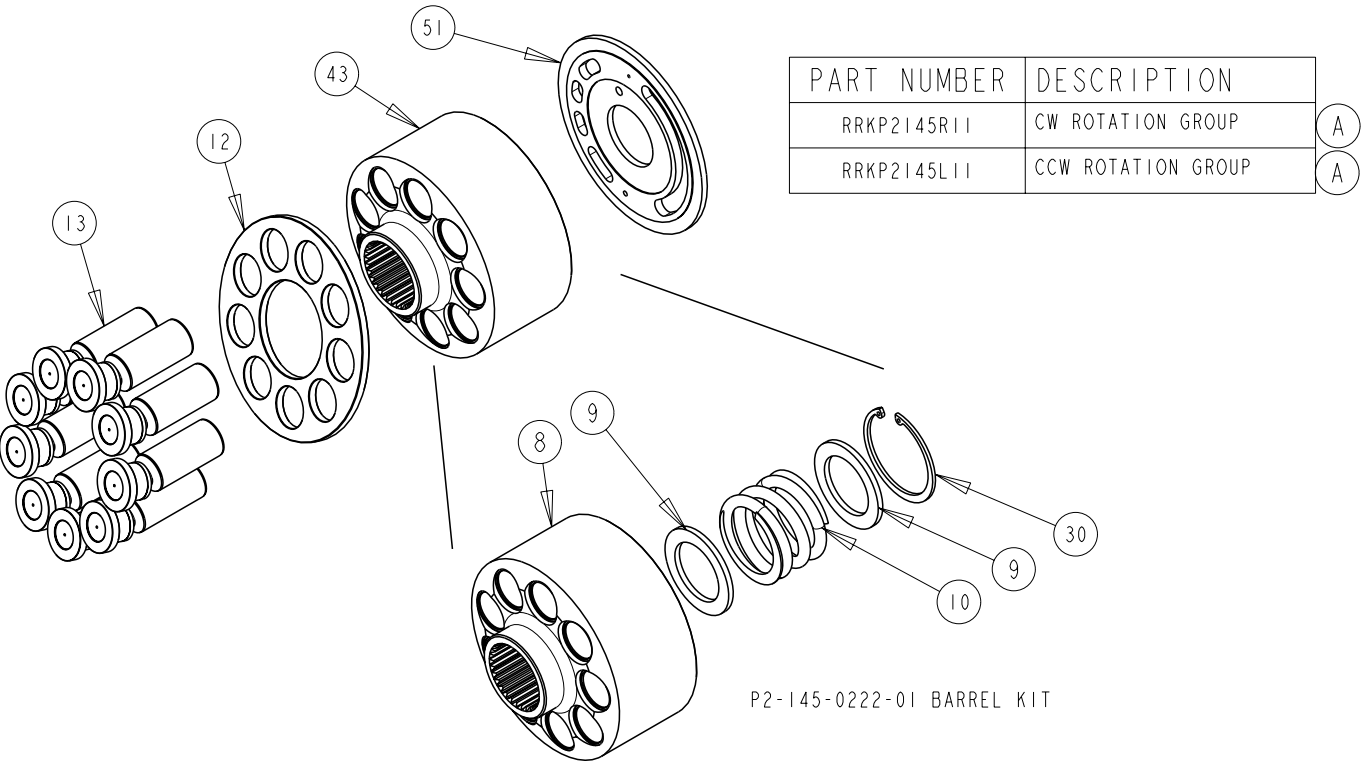
THRU DRIVE KITS



MAX VOLUME ASSEMBLY AND
SERVO PISTON KIT

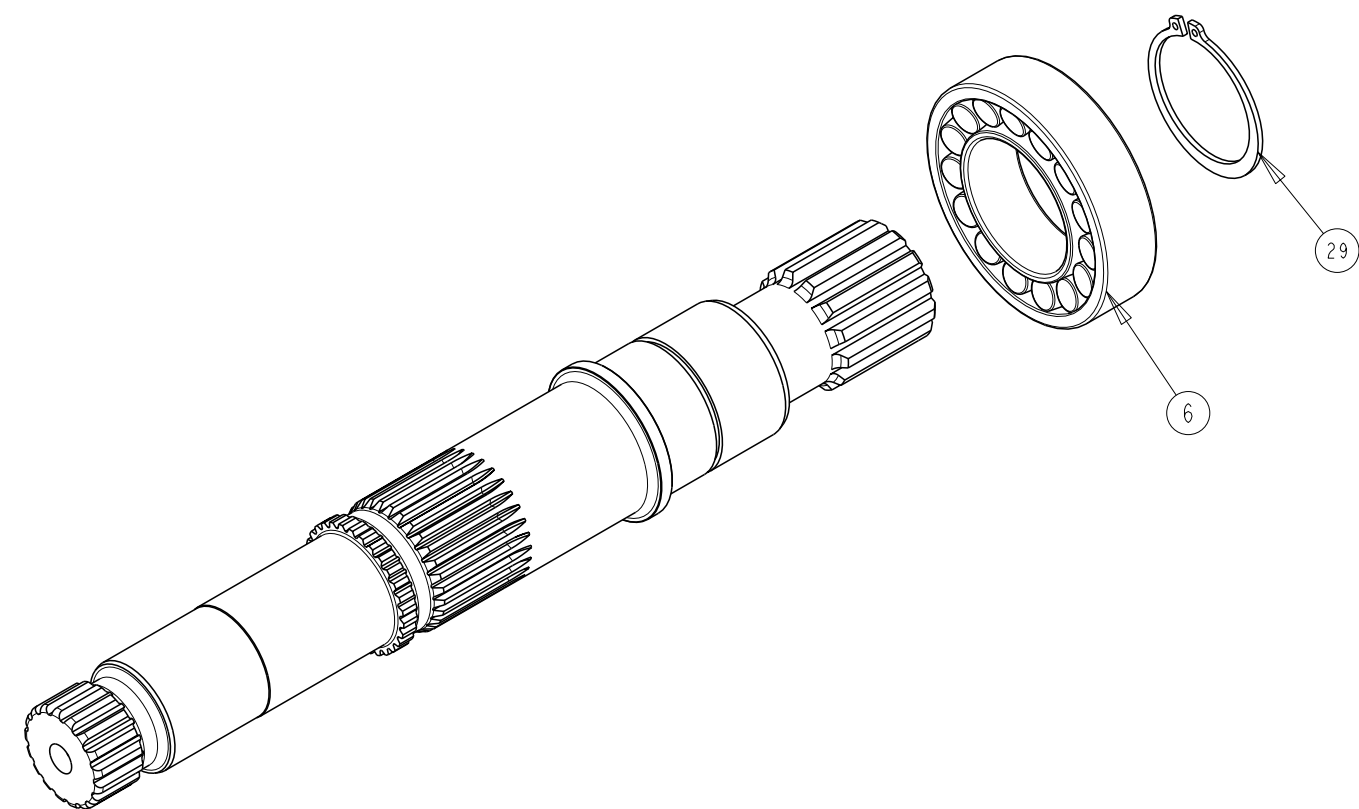


BARREL KIT AND
ROTATION GROUP KIT



| | | | | |
|-----------------------------------------|----------------|----------|--------|--------------|
| TITLE | DRAWING NUMBER | REVISION | STATUS | |
| SERVICE PARTS P2145 DESIGN SERIES 11 | P2-145-0403 | A | PR | SHEET 5 OF 7 |

SHAFT ASSEMBLY KITS
ITEM 57

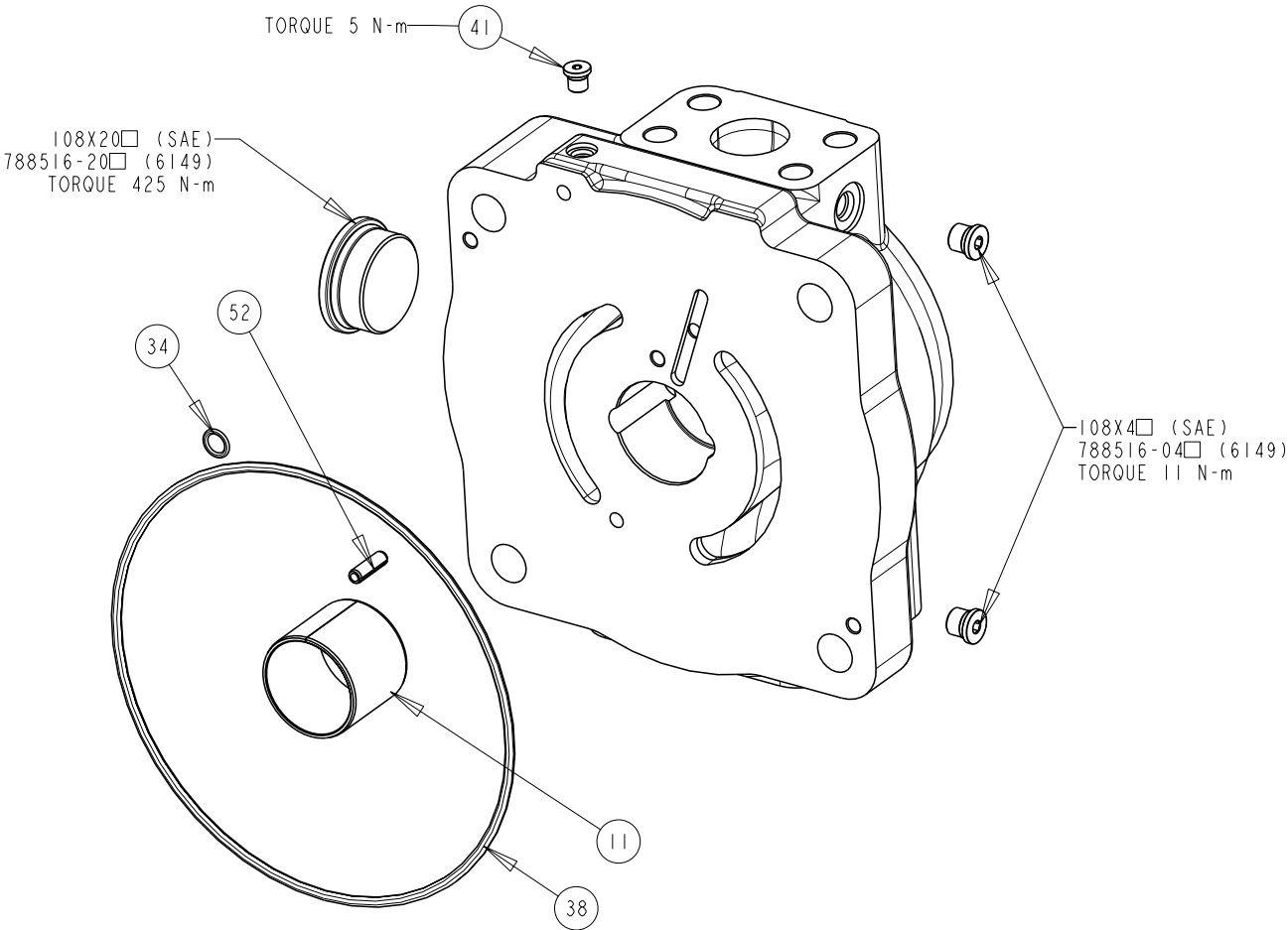


| SHAFT ONLY | SHAFT ASSEMBLY | DESCRIPTION |
|-------------|----------------|---------------------------|
| P2-145-3525 | P2-145-0225-36 | C SPLINE THRU |
| P2-145-3519 | P2-145-0225-40 | D SPLINE THRU |
| P2-145-3533 | P2-145-0225-46 | C KEY THRU |
| P2-145-3535 | P2-145-0225-48 | CC KEY THRU |
| P2-145-3537 | P2-145-0225-50 | D KEY THRU |
| P2-145-3520 | P2-145-0225-56 | C SPLINE THRU NO UNDERCUT |
| P2-145-3546 | P2-145-0225-60 | D SPLINE THRU NO UNDERCUT |



| | | | | |
|----------|---------|------------|---------|------------|
| DRAWN BY | DATE | CHANGED BY | DATE | ECN NUMBER |
| E. BOONE | 15APR02 | B. LARKIN | 23MAY02 | 133522 |

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 |

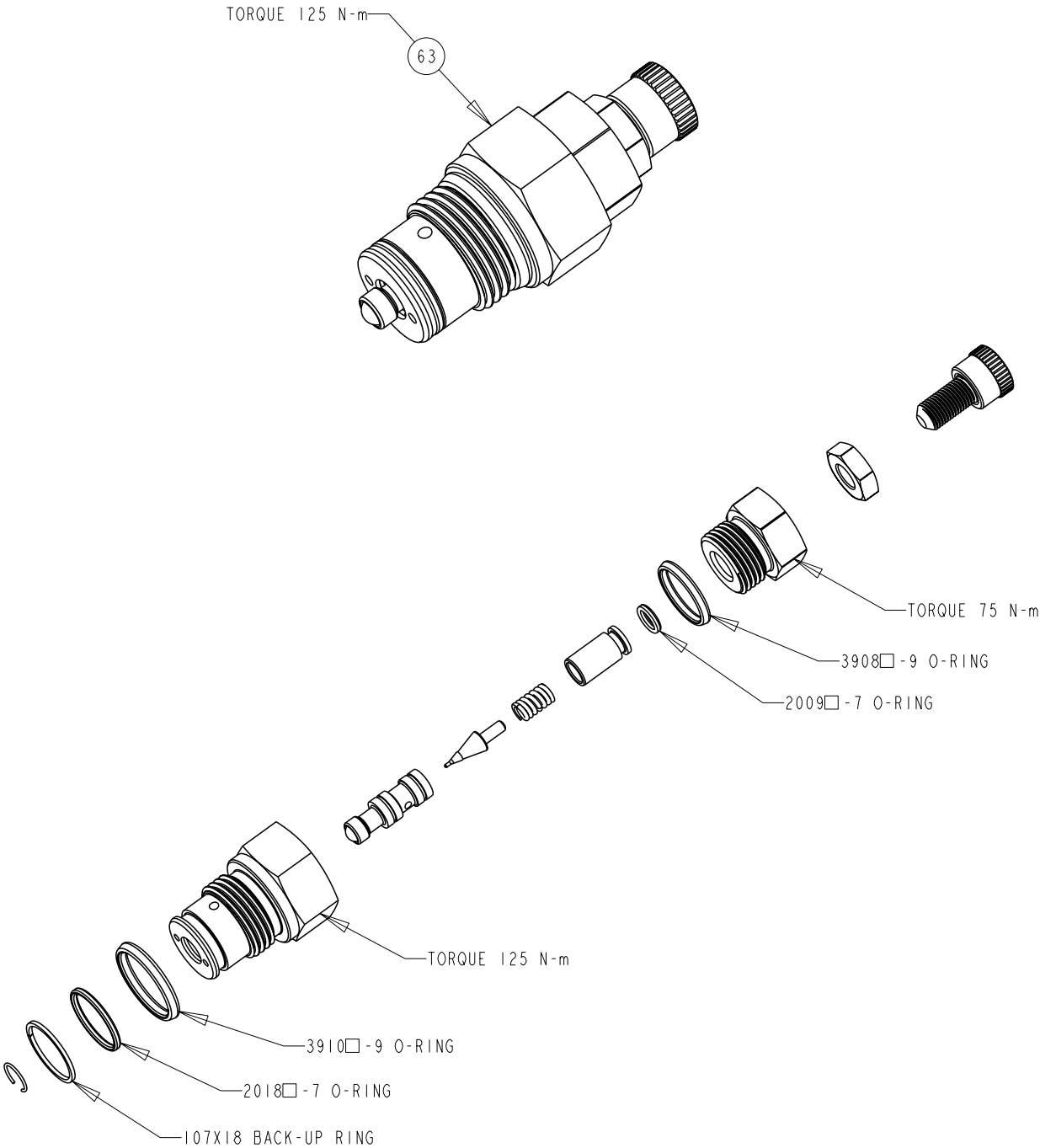


| TITLE | DRAWING NUMBER | REVISION | STATUS | SHEET |
|-----------------------------------------|----------------|----------|--------|--------|
| SERVICE PARTS P2145 DESIGN SERIES II | P2-145-0403 | A | PR | 6 OF 7 |

TORQUE CONTROL CARTRIDGE

P2-000-0803 □ - ITEM 63

A



| DRAWN BY | DATE | CHANGED BY | DATE | ECN NUMBER |
|----------|---------|------------|---------|------------|
| E. BOONE | 15APR02 | B. LARKIN | 23MAY02 | 133522 |

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 ASSY.
 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



