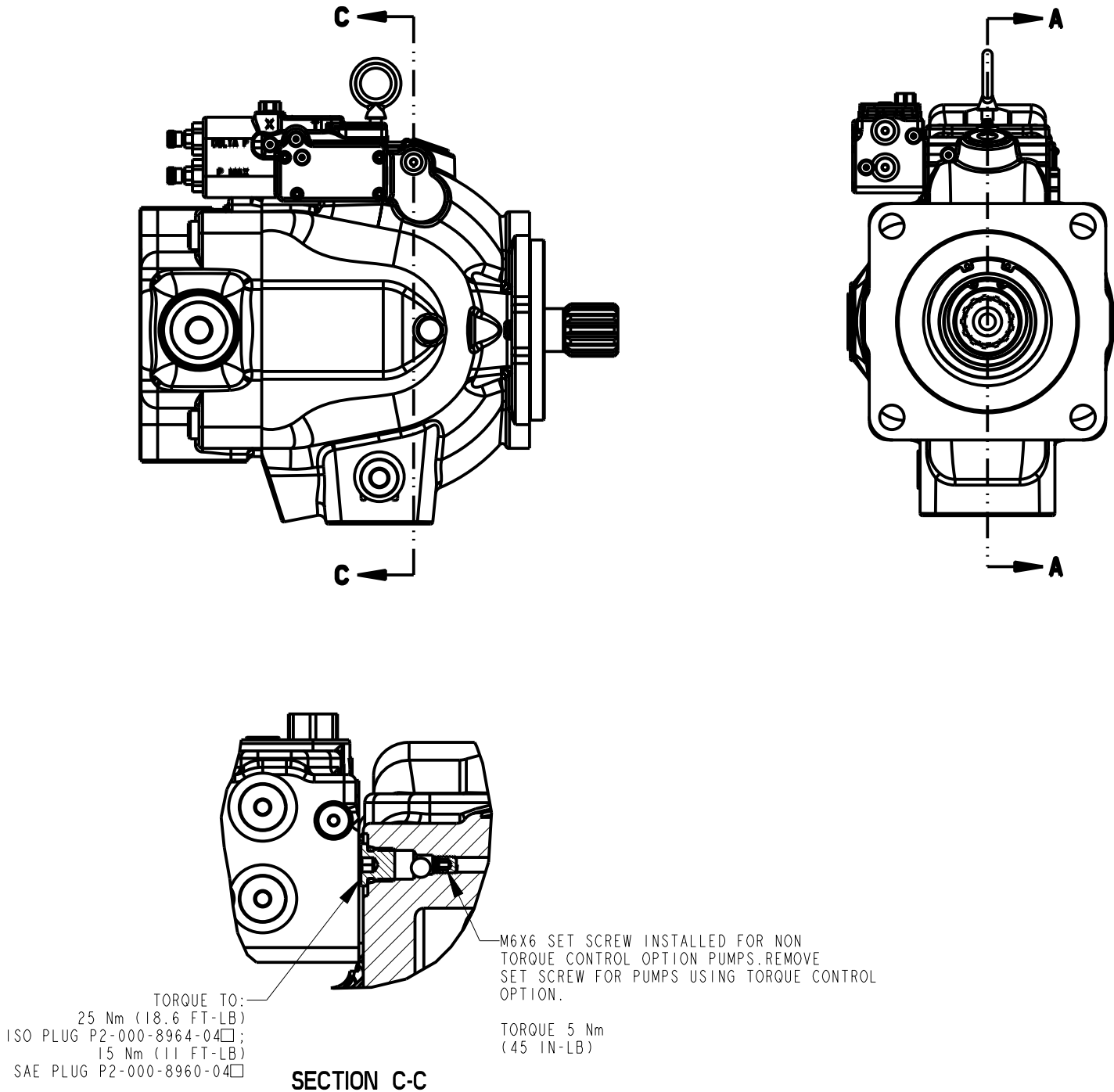
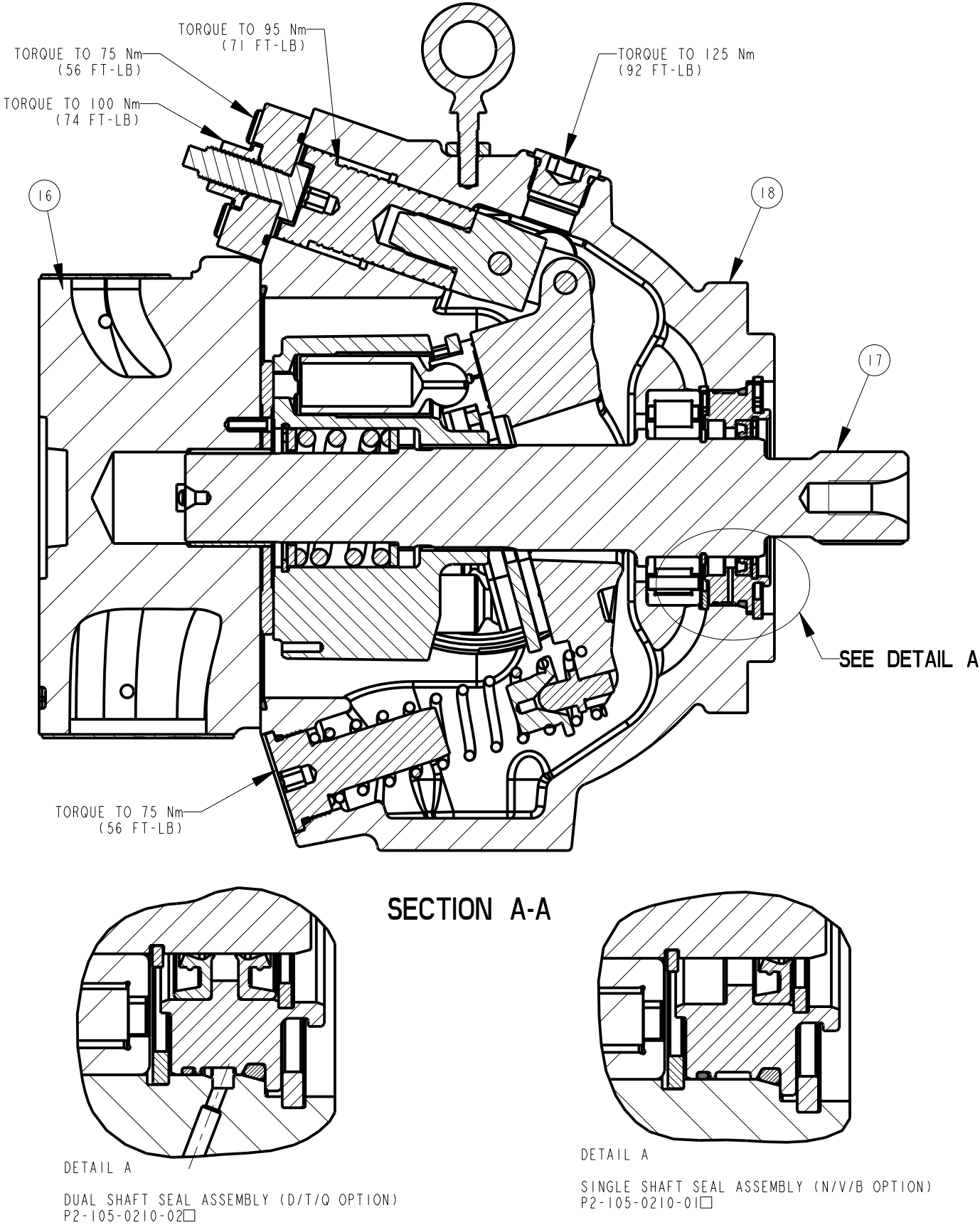
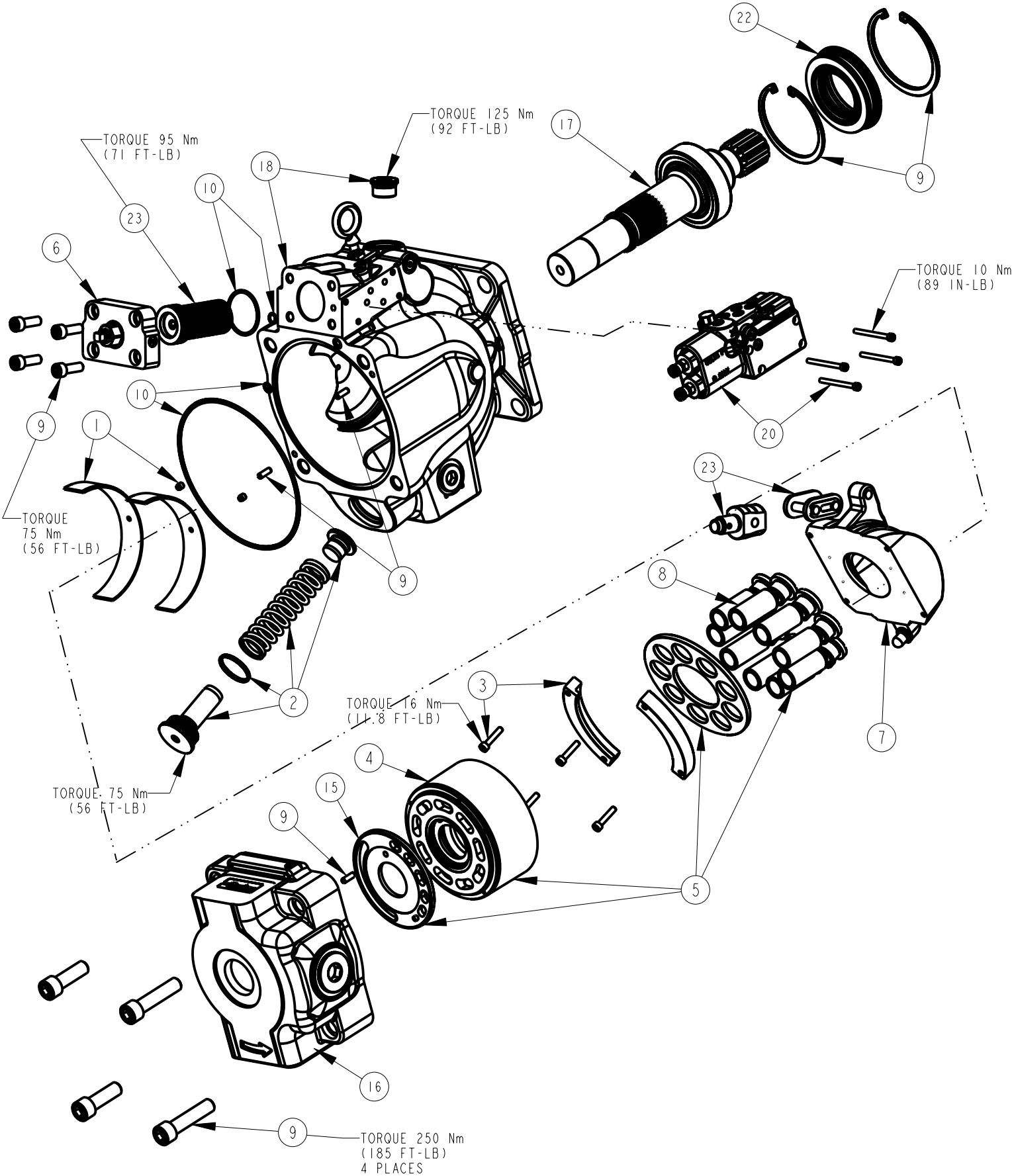




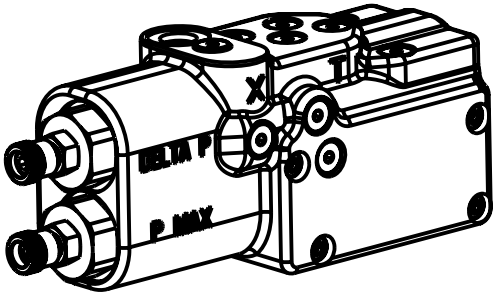
NOTES:
1 PUMP SHOWN IS A RIGHT HAND (CW) ROTATION PUMP. LEFT HAND (CCW) ROTATION PUMPS HAVE OUTLET GAUGE PORT REVERSED.



REPLACE □ SYMBOL WITH
"N" FOR NITRILE SEALS (PUMP CODE SEALING OPTION: N, D, B, Q)
"V" FOR FLOUROCARBON SEALS (PUMP CODE SEALING OPTION: T, V)

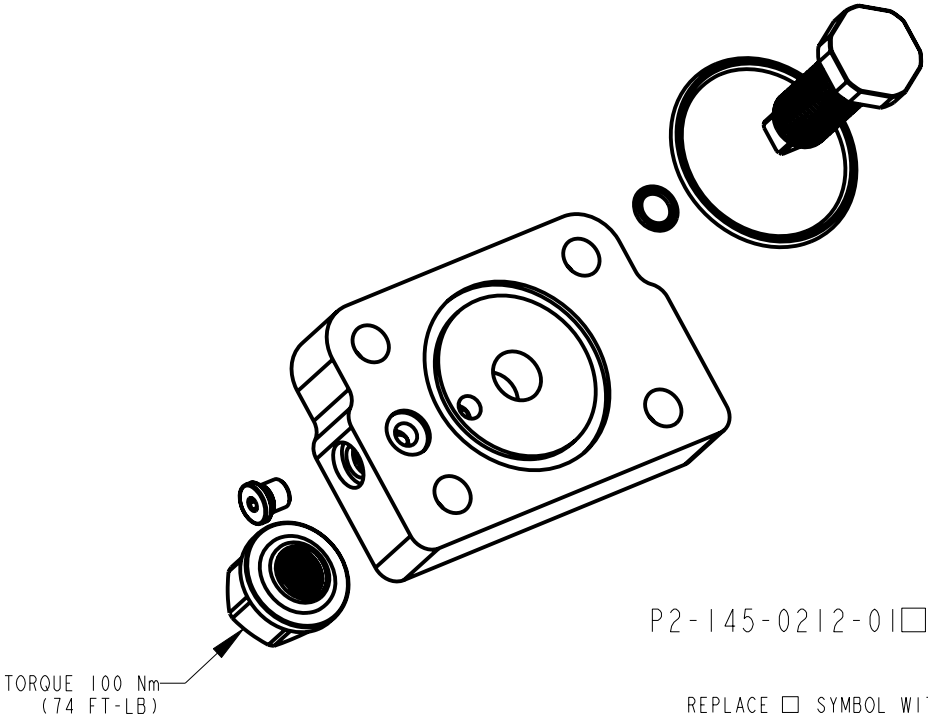


COMPENSATOR KIT ITEM 20



PA	A	20	P2-075-0806-07□	I	COMPENSATOR ASSY
	B	20	P2-075-0806-08□	I	COMPENSATOR ASSY
PB	A	20	P2-075-0806-09□	I	COMPENSATOR ASSY
	B	20	P2-075-0806-10□	I	COMPENSATOR ASSY
RA	A	20	P2-075-0806-05□	I	COMPENSATOR ASSY
	B	20	P2-075-0806-06□	I	COMPENSATOR ASSY
LA	A	20	P2-075-0806-01□	I	COMPENSATOR ASSY
	B	20	P2-075-0806-02□	I	COMPENSATOR ASSY
LB	A	20	P2-075-0806-03□	I	COMPENSATOR ASSY
	B	20	P2-075-0806-04□	I	COMPENSATOR ASSY
TA	A	20	P2-075-0806-11□	I	COMPENSATOR ASSY
	B	20	P2-075-0806-12□	I	COMPENSATOR ASSY
TB	A	20	P2-075-0806-13□	I	COMPENSATOR ASSY
	B	20	P2-075-0806-14□	I	COMPENSATOR ASSY

MAX. VOLUME ASSEMBLY ITEM 6



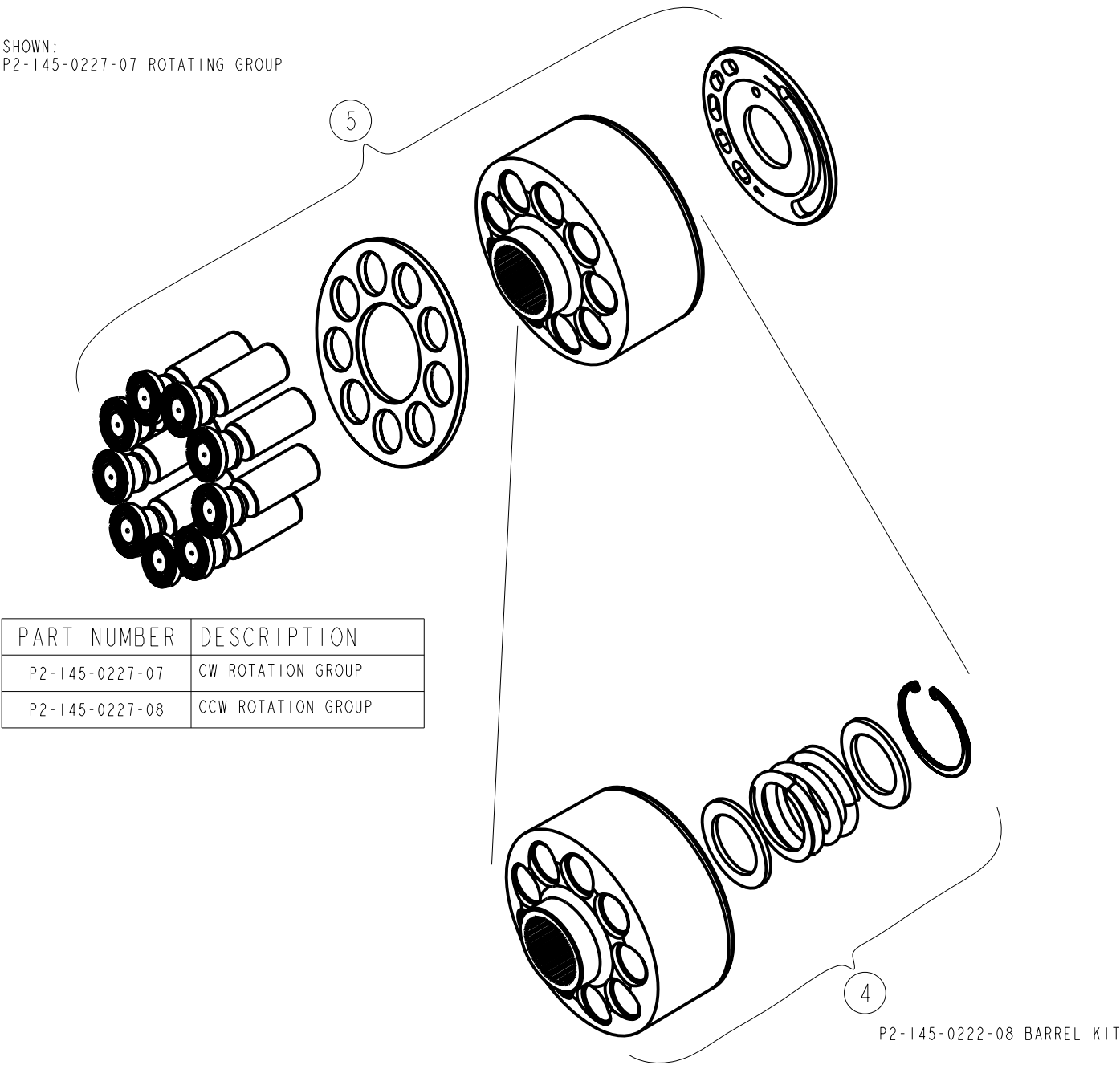
P2-145-0212-01□

REPLACE □ SYMBOL WITH
"N" FOR NITRILE SEALS (PUMP CODE SEALING OPTION: N, D, B, Q)
"V" FOR FLOUROCARBON SEALS (PUMP CODE SEALING OPTION: T,V)

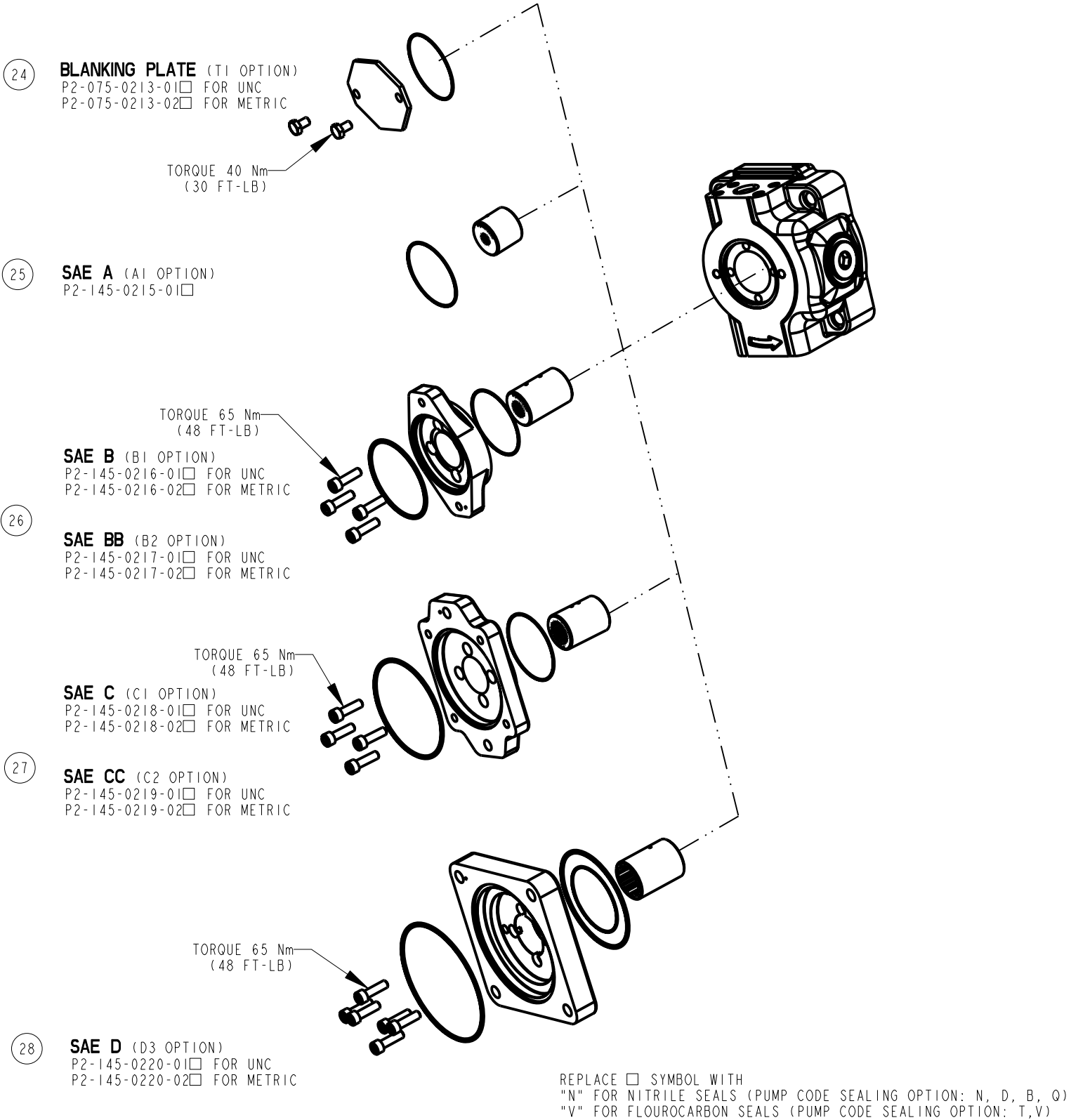


ROTATING GROUP / BARREL KIT
ITEM 5
ITEM 4

SHOWN:
P2-145-0227-07 ROTATING GROUP

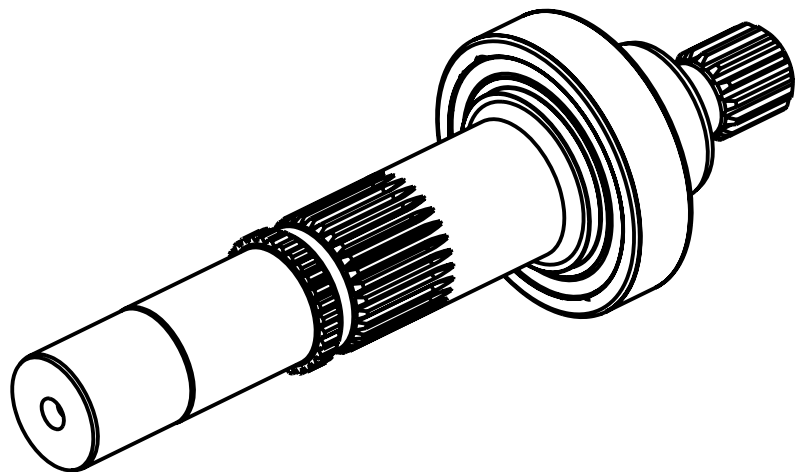


THRU DRIVE KIT



TITLE	SERVICE PARTS P2145 DESIGN SERIES 16	DRAWING NUMBER	P2-145-0413	REVISION	-	STATUS	PR	SHEET	4 OF 8
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SHAFT ASSEMBLY KIT
ITEM 17

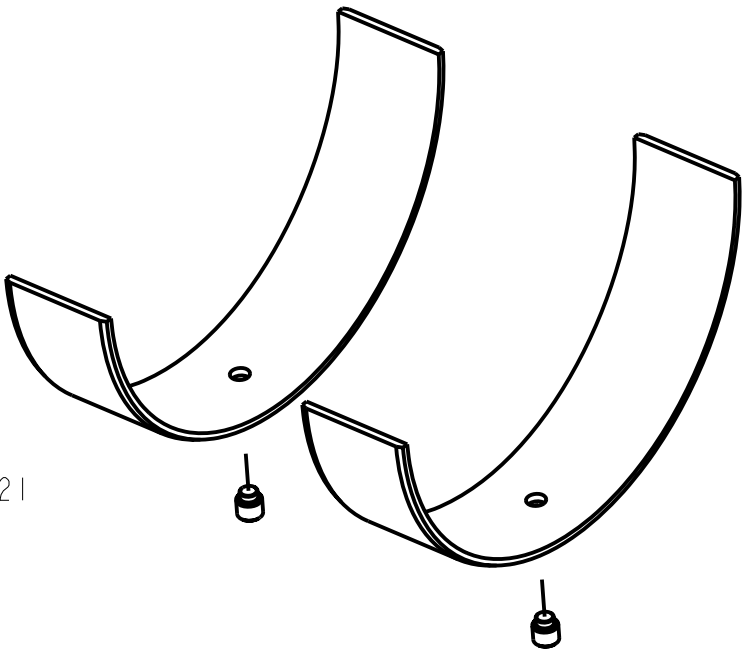


	OPTION	PART NUMBER		DESCRIPTION
C1	NOT SI	P2-145-0225-136	I	SHAFT ASSY - C SPLINE
	SI	P2-145-0225-135	I	SHAFT ASSY - C SPLINE
C2	NOT SI	P2-145-0225-138	I	SHAFT ASSY - CC SPLINE
	SI	P2-145-0225-137	I	SHAFT ASSY - CC SPLINE
C3	NOT SI	P2-145-0225-156	I	SHAFT ASSY - C SPLINE - NO U' CUT
	SI	P2-145-0225-155	I	SHAFT ASSY - C SPLINE - NO U' CUT
C5	NOT SI	P2-145-0225-146	I	SHAFT ASSY - C KEY
	SI	P2-145-0225-145	I	SHAFT ASSY - C KEY
C6	NOT SI	P2-145-0225-148	I	SHAFT ASSY - CC KEY
	SI	P2-145-0225-147	I	SHAFT ASSY - CC KEY
D1	NOT SI	P2-145-0225-140	I	SHAFT ASSY - D SPLINE
	SI	P2-145-0225-139	I	SHAFT ASSY - D SPLINE
D2	NOT SI	P2-145-0225-160	I	SHAFT ASSY - D SPLINE NO U' CUT
D3	NOT SI	P2-145-0225-150	I	SHAFT ASSY - D KEY
	SI	P2-145-0225-149	I	SHAFT ASSY - D KEY
M6	NOT SI	P2-145-0225-172	I	SHAFT ASSY - METRIC SPLINE W50x2x30
	SI	P2-145-0225-168	I	SHAFT ASSY - METRIC SPLINE W50x2x30



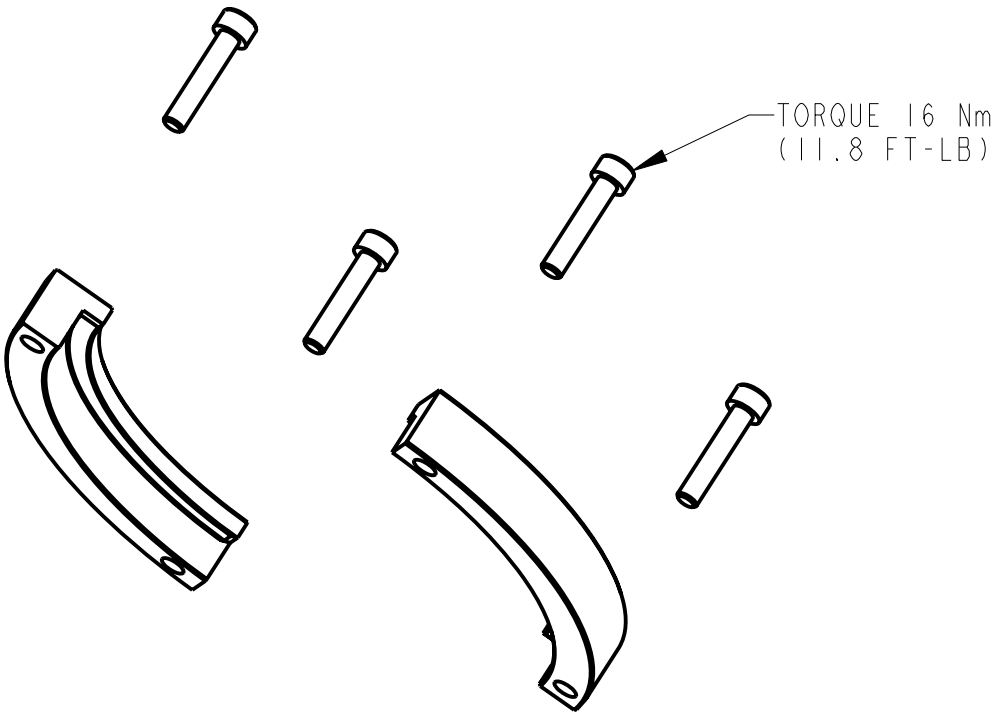
DRAWN BY	DATE	CHANGED BY	DATE	ECN NUMBER
L. NAGEL	14JAN13	-	-	709512

SADDLE BEARING KIT
ITEM 1



P2-145-0229-21

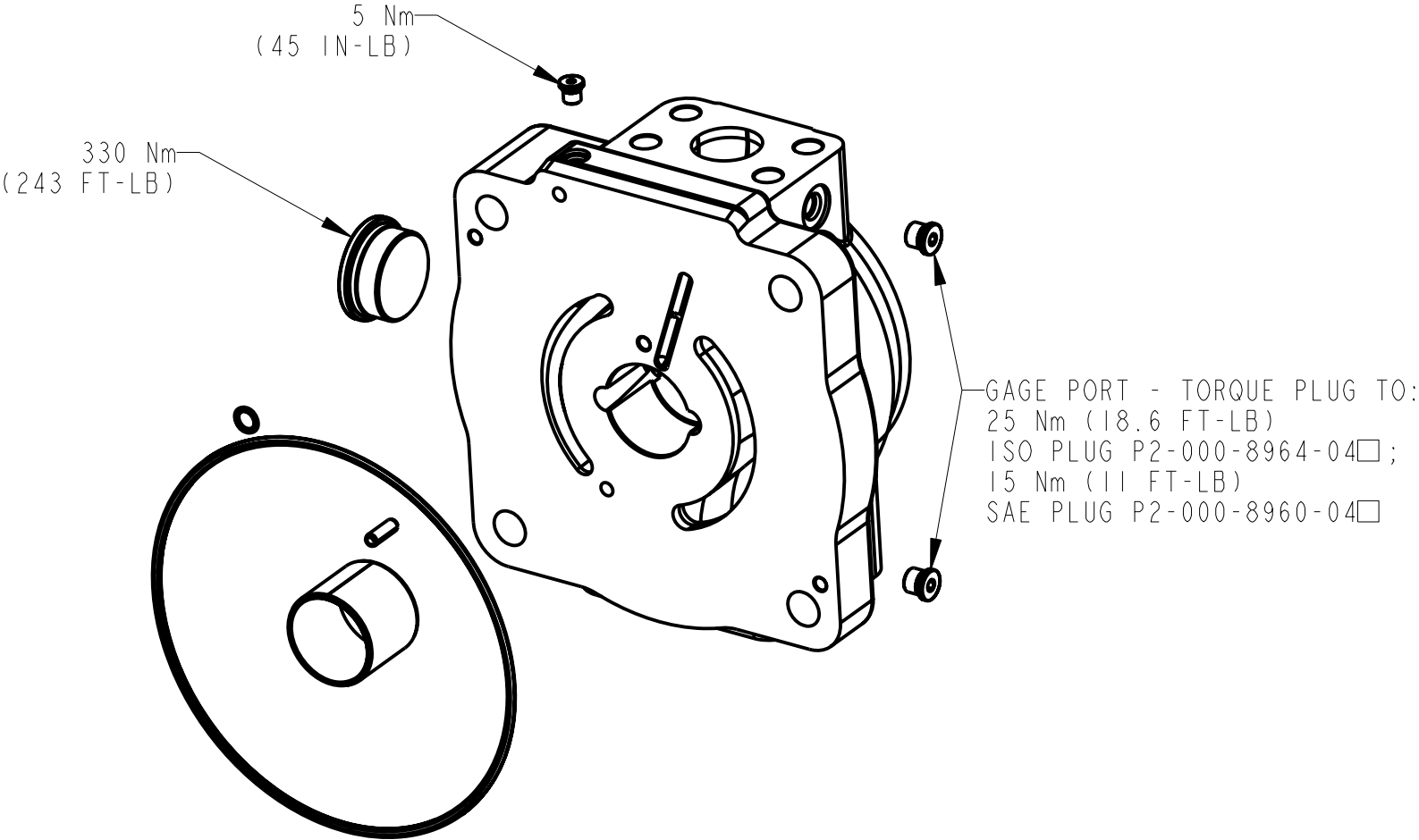
FIXED CLEARANCE HOLD DOWN KIT
ITEM 3



P2-145-0229-23



COVER ASSEMBLY KIT
ITEM 16

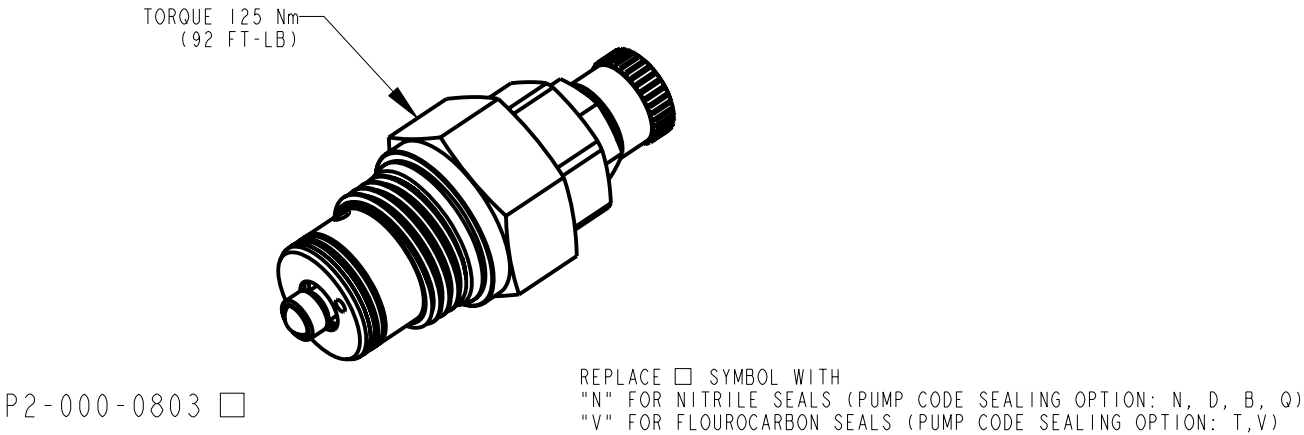


	THRDS		COVER ASSEMBLY	DESCRIPTION
L	A	SI	P2-145-0226-01□	SIDE PORTS, CCW, UNC
	A	NOT SI	P2-145-0226-02□	SIDE PORTS, CCW, UNC, THRU
	B	SI	P2-145-0226-03□	SIDE PORTS, CCW, METRIC
	B	NOT SI	P2-145-0226-04□	SIDE PORTS, CCW, METRIC, THRU
R	A	SI	P2-145-0226-05□	SIDE PORTS, CW, UNC
	A	NOT SI	P2-145-0226-06□	SIDE PORTS, CW, UNC, THRU
	B	SI	P2-145-0226-07□	SIDE PORTS, CW, METRIC
	B	NOT SI	P2-145-0226-08□	SIDE PORTS, CW, METRIC, THRU

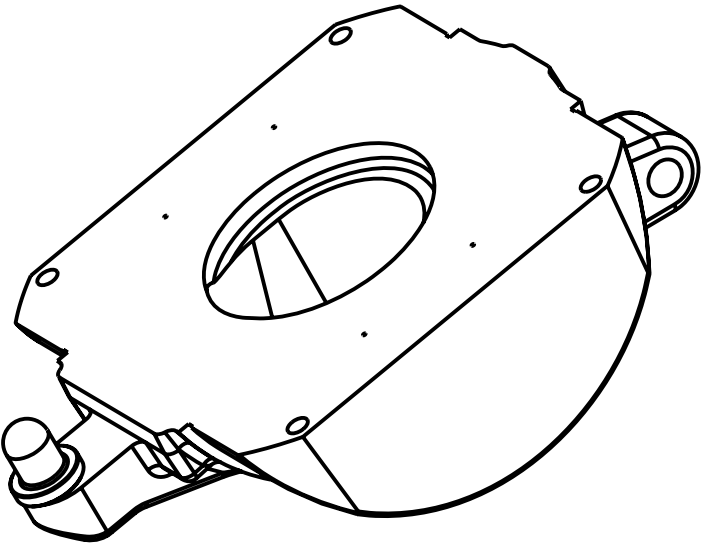
REPLACE □ SYMBOL WITH
"N" FOR NITRILE SEALS (PUMP CODE SEALING OPTION: N, D, B, Q)
"V" FOR FLOUROCARBON SEALS (PUMP CODE SEALING OPTION: T,V)



TORQUE CONTROL CARTRIDGE
ITEM 19



SWASH PLATE KIT
ITEM 7

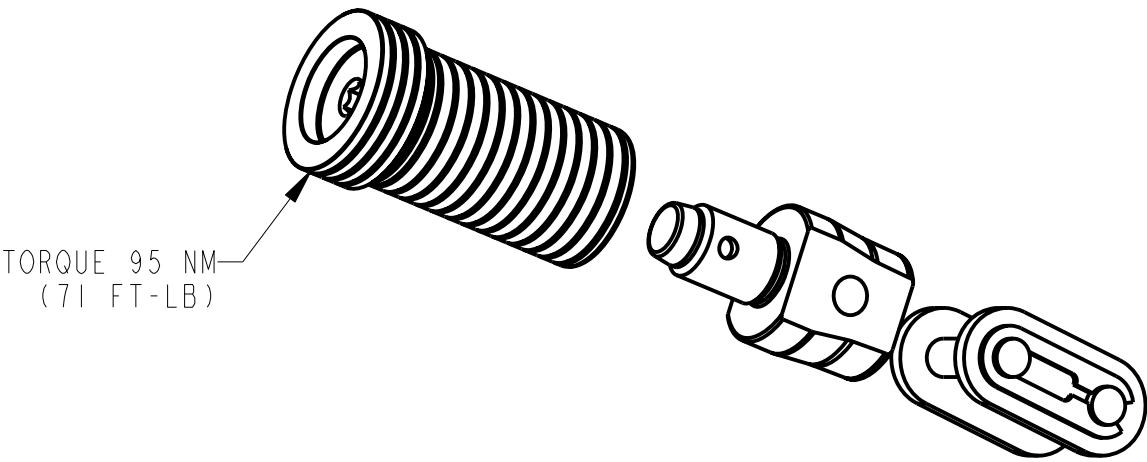


P2-145-0221-05



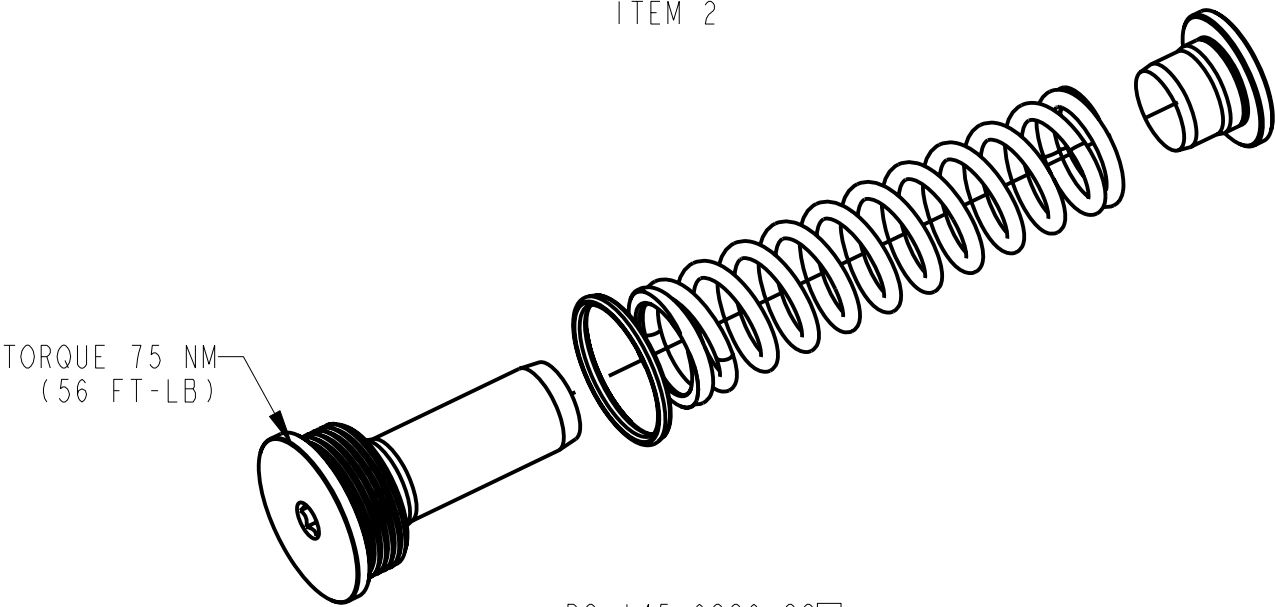
TITLE	SERVICE PARTS P2145 DESIGN SERIES 16	DRAWING NUMBER	P2-145-0413	REVISION	A	STATUS	PR	SHEET 6 OF 8
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SERVO PISTON KIT
ITEM 23



PART NUMBER	DESCRIPTION	
P2-145-0229-19	SERVO PISTON KIT 40%	USE EXEPT WITH TC & TD OPTION
P2-145-0229-20	SERVO PISTON KIT 70%	USE WITH TC & TD OPTION

BIAS SPRING KIT
ITEM 2



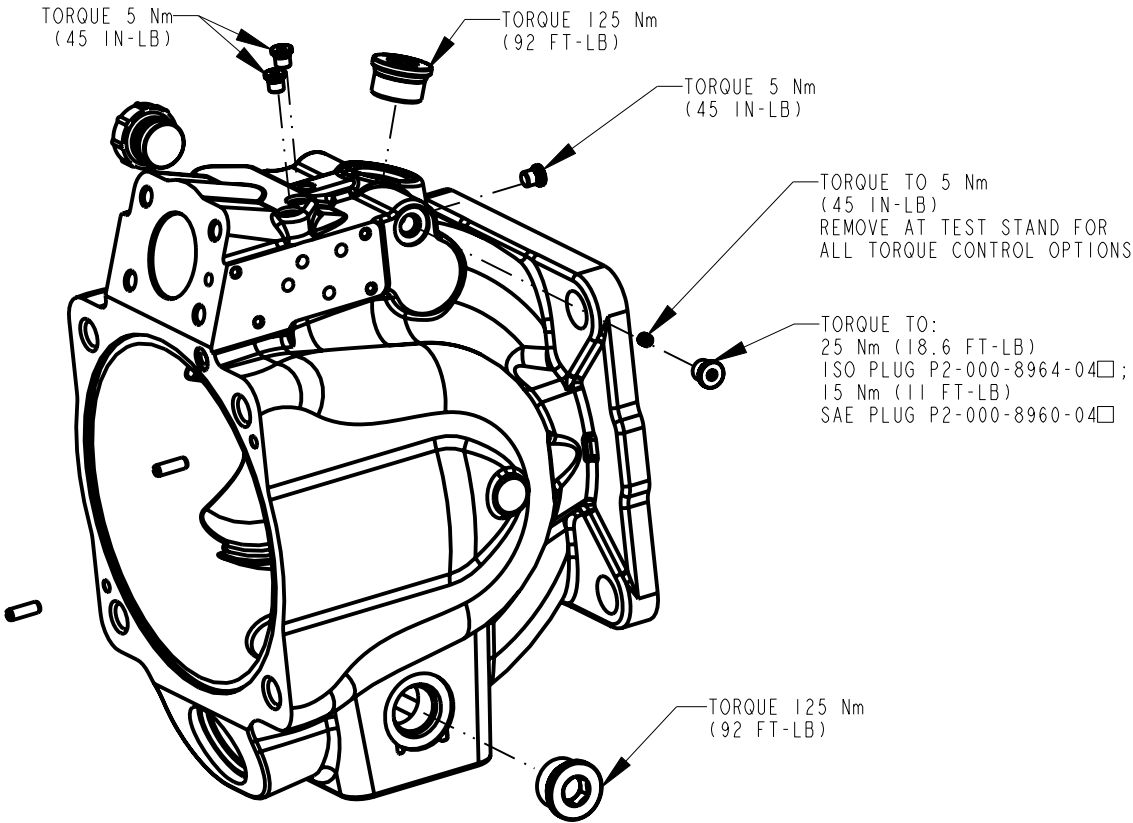
P2-145-0229-22□

REPLACE □ SYMBOL WITH
"N" FOR NITRILE SEALS (PUMP CODE SEALING OPTION: N, D, B, Q)
"V" FOR FLOUROCARBON SEALS (PUMP CODE SEALING OPTION: T,V)



DRAWN BY	DATE	CHANGED BY	DATE	ECN NUMBER
L. NAGEL	14JAN13	-	-	709512

HOUSING KIT
ITEM 18



REPLACE □ SYMBOL WITH
"N" FOR NITRILE SEALS (PUMP CODE SEALING OPTION: N, D, B, Q)
"V" FOR FLOUROCARBON SEALS (PUMP CODE SEALING OPTION: T,V)

MTG-PILOT	SEAL OPTION	THRDS	PART NUMBER	DESCRIPTION
C	N/V/B	B	P2-145-0221-40□	MACHINING C-PILOT 1 SEAL METRIC HOUSING
	D/T/Q	B	P2-145-0221-41□	MACHINING C-PILOT 2 SEAL METRIC HOUSING
D	N/V/B	B	P2-145-0221-42□	MACHINING D-PILOT 1 SEAL METRIC HOUSING
	D/T/Q	B	P2-145-0221-43□	MACHINING D-PILOT 2 SEAL METRIC HOUSING
C	N/V/B	A	P2-145-0221-44□	MACHINING C-PILOT 1 SEAL UNC HOUSING
	D/T/Q	A	P2-145-0221-45□	MACHINING C-PILOT 2 SEAL UNC HOUSING
D	N/V/B	A	P2-145-0221-46□	MACHINING D-PILOT 1 SEAL UNC HOUSING
	D/T/Q	A	P2-145-0221-47□	MACHINING D-PILOT 2 SEAL UNC HOUSING



TITLE	DRAWING NUMBER	REVISION	STATUS	
SERVICE PARTS P2145 DESIGN SERIES 16	P2-145-0413	-	PR	SHEET 7 OF 8

ASSEMBLY, DIS-ASSEMBLY AND REPAIR NOTES

DISASSEMBLY STEPS FOR ENTIRE PUMP

- 1. REMOVE COVER SCREWS AND COVER
- 2. REMOVE MAX. VOLUME ASSY
- 3. REMOVE SERVO PISTON
- 4. REMOVE IMPELLER RING
- 5. REMOVE BIAS SPRING PLUG, SPRING AND RETAINER
- 6. REMOVE FIXED CLEARANCE HOLD DOWN SCREWS AND HOLD DOWN PARTS
- 7. REMOVE ROTATING GROUP (BARREL, SLIPPER RETAINER AND PISTONS)
- 8. REMOVE SHAFT SEAL CARRIER
- 9. REMOVE SHAFT
- 10. REMOVE SWASHPLATE ASSEMBLY

ASSEMBLY STEPS FOR ENTIRE PUMP

- 1. PUT IN SWASHPLATE ASSEMBLY
- 2. INSTALL SHAFT ASSEMBLY
- 3. INSTALL SHAFT SEAL CARRIER
- 4. PLACE ROTATING GROUP (BARREL, SLIPPER RETAINER AND PISTONS)
- 5. FIX THE IMPELLER RING
- 6. FIX HOLD DOWN PARTS AND SCREW IN FIXED CLEARANCE HOLD DOWN SCREWS
- 7. SCREW IN BIAS SPRING PLUG INCL. SPRING AND RETAINER
- 8. SCREW IN SERVO PISTON (NEW LINK PISTON REQUIRED!)
- 9. MOUNT MAX. VOLUME ASSY
- 10. FIX COVER AND SCREW IN COVER SCREWS

ATTENTION: • STEP 4 AND 5 REQUIRES SPECIAL TOOL FOR INSTALLATION THE HOLD DOWN PARTS
=> PLEASE ASK YOUR RESPONSIBLE TECHNICAL SUPPORT

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



DRAWN BY	DATE	CHANGED BY	DATE	ECN NUMBER
L. NAGEL	14JAN13	-	-	709512

NOTES:



