

THESE INSTRUCTIONS ARE FOR KIT PVG32 CONTROL VALVES

TOOLS AND SUPPLIES REQUIRED:

- TOOLS: 5MM ALLEN HEX AND 13MM HEX SOCKET
- SEALS: SEE BOM FOR SEAL PART NUMBER KITS

PVG32 CONTROL VALVES MACHINE REMOVAL:

**SEE WORKHEAD DRAWINGS FOR BOTH PVG32 VALVE LOCATIONS.

1. POWER OFF THE MACHINE AND TAG OUT BEFORE PERFORMING CONVERSION.
2. MAKE SURE THAT THE PRIME MOVER AND HYDRAULIC PUMP ARE BOTH OFF.
3. LABEL EACH OF THE ELECTRICAL CABLES AND HYDRAULIC HOSES FOR CORRECT RE-ASSEMBLY.
4. REMOVE VALVES FROM THE MACHINE AND KEEP EXISTING FASTENERS.
5. MARK PVG32 VALVES LEFT OR RIGHT FOR CORRECT ORIENTATION TO BE MAINTAINED.

PVHC SEAL REPLACEMENT PROCEDURE:

6. ELECTRICAL ACTUATION (PVHC) DISCONNECT WITH 5MM HEX ALLEN DE-TORQUE AND THEN CAREFULLY LOOSEN EACH BOLT, IN-TURN EQUALLY (SEE FIG 1.1).
7. REMOVE AND DISCARD O-RINGS AND CLEAN THE AREA OF ANY DEBRIS (SEE FIG 1.1).
8. INSTALL SEALS INTO THE MAIN VALVE FACE MAKE SURE THAT THEY REMAIN IN POSITION (SEE FIG 1.1).
9. CAREFULLY INSTALL THE ELECTRICAL ACTUATION (PVHC) MAKING SURE THAT THE O-RINGS REMAIN IN-PLACE.
10. PLACE TWO BOLTS INTO DIAGONAL FREE HOLES AND TAKE TURNS THREADING BOTH BOLTS SO THAT THEY PULL DOWN THE PILOT VALVE LEVEL. SNUG BOLTS UNTIL O-RINGS ARE COMPRESSED. SNUG FOLLOWING A CRISSCROSS PATTERN, TORQUE EACH BOLT TO $8 \pm .5$ NM [70 ± 5 IN-LB.].
11. INSTALL THE TWO REMAINING BOLTS, TAKE TURNS THREADING BOTH BOLTS, FOLLOWING A CRISSCROSS PATTERN, TORQUE EACH BOLT TO $8 \pm .5$ NM [70 ± 5 IN-LB].

PVM SEAL REPLACEMENT PROCEDURE:

12. MECHANICAL ACTUATION (PVM) DISCONNECT WITH 5MM HEX ALLEN DE-TORQUE AND THEN CAREFULLY LOOSEN EACH BOLT, IN-TURN EQUALLY (SEE FIG 1.1).
13. REMOVE AND DISCARD O-RINGS AND CLEAN THE AREA OF ANY DEBRIS (SEE FIG 1.1).
14. INSTALL SEALS INTO THE MAIN VALVE FACE MAKE SURE THAT THEY REMAIN IN POSITION (SEE FIG 1.1).
15. CAREFULLY INSTALL THE MECHANICAL ACTUATION (PVM) MAKING SURE THAT THE O-RINGS REMAIN IN-PLACE.
16. PLACE TWO BOLTS INTO DIAGONAL FREE HOLES AND TAKE TURNS THREADING BOTH BOLTS SO THAT THEY PULL DOWN THE PILOT VALVE LEVEL. SNUG BOLTS UNTIL O-RINGS ARE COMPRESSED. SNUG FOLLOWING A CRISSCROSS PATTERN, TORQUE EACH BOLT TO $8 \pm .5$ NM [70 ± 5 IN-LB.].
17. INSTALL THE TWO REMAINING BOLTS, TAKE TURNS THREADING BOTH BOLTS, FOLLOWING A CRISSCROSS PATTERN, TORQUE EACH BOLT TO $8 \pm .5$ NM [70 ± 5 IN-LB].

WORK SECTIONS SEAL REPLACEMENT PROCEDURE:

18. REMOVE TIE ROD NUTS USING A 13 MM HEX SOCKET.
19. REMOVE THE PVP ASSEMBLY (SEE FIG. 1.3).
20. LABEL & REMOVE WORK SECTIONS (PVB) BE SURE THAT THE ORDER OF THE WORK SECTIONS IS PRESERVED. IT IS IMPORTANT THAT THE ORDER REMAIN CONSISTENT.
21. LASTLY IS PVS END PLATE.
22. FOR EACH SECTION AREA DISCARD O-RINGS AND CLEAN SURFACE AREA OF DEBRIS.
23. USING THE TIE RODS STACK ALL THE SECTIONS IN THEIR ORIGINAL ORDER BE SURE THAT THE O-RINGS STAY SEATED BEFORE PUSHING TOGETHER.
23. LASTLY, INSTALL THE PVP MAKE SURE THAT THE INTERFACE O-RINGS REMAIN IN PLACE.
24. ASSEMBLE TIE ROD NUTS WITH A 13 MM HEX SOCKET AND APPLY TORQUE (APPROXIMATELY 248 ± 18 IN-LB. [$28 \text{NM} \pm 2 \text{NM}$]).

PVG32 CONTROL VALVES MACHINE ATTACHMENT:

25. USE EXISTING FASTENERS TO REMOUNT PVG32 VALVES IN THERE PROPER LEFT AND RIGHT LOCATIONS ONTO THE WORKHEAD.
 26. CONNECT ALL THE ELECTRICAL CABLES AND HYDRAULIC HOSES PER THEIR LABELED DESIGNATIONS.
 27. REMOVE TAGOUT AND POWER ON THE MACHINE.
- **REQUEST AIR-BLEED FOR ALL OF THE WORK SECTIONS AND THE INLETS.

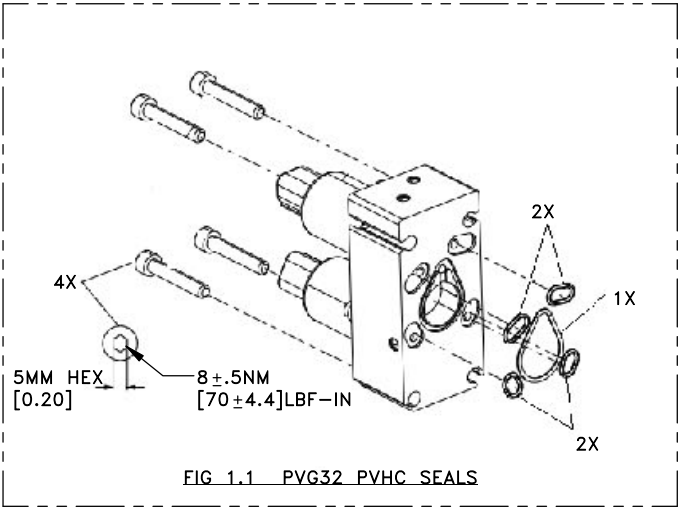
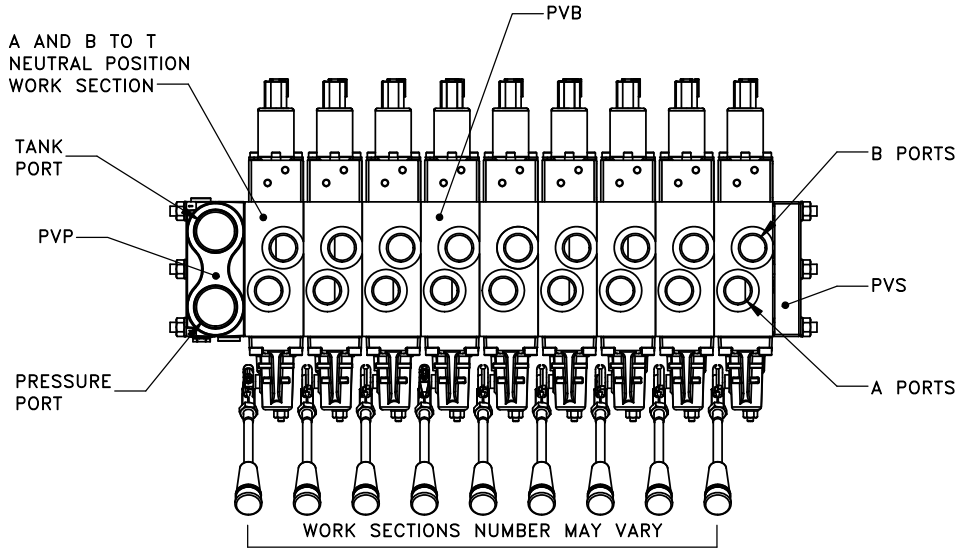
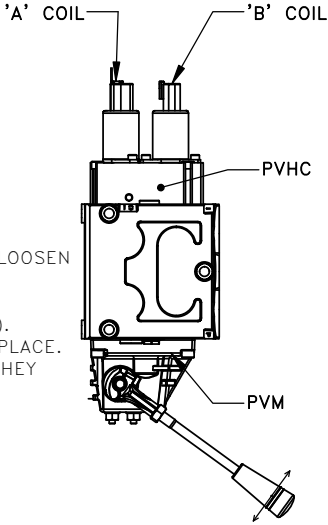


FIG 1.1 PVG32 PVHC SEALS

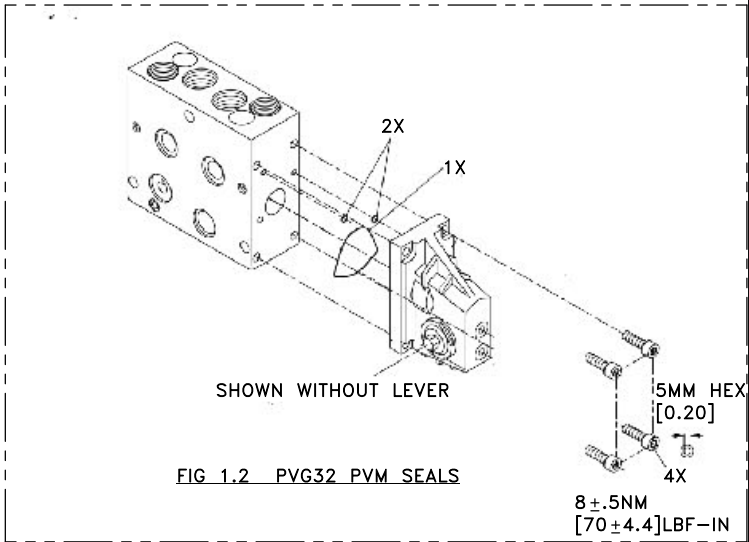


FIG 1.2 PVG32 PVM SEALS

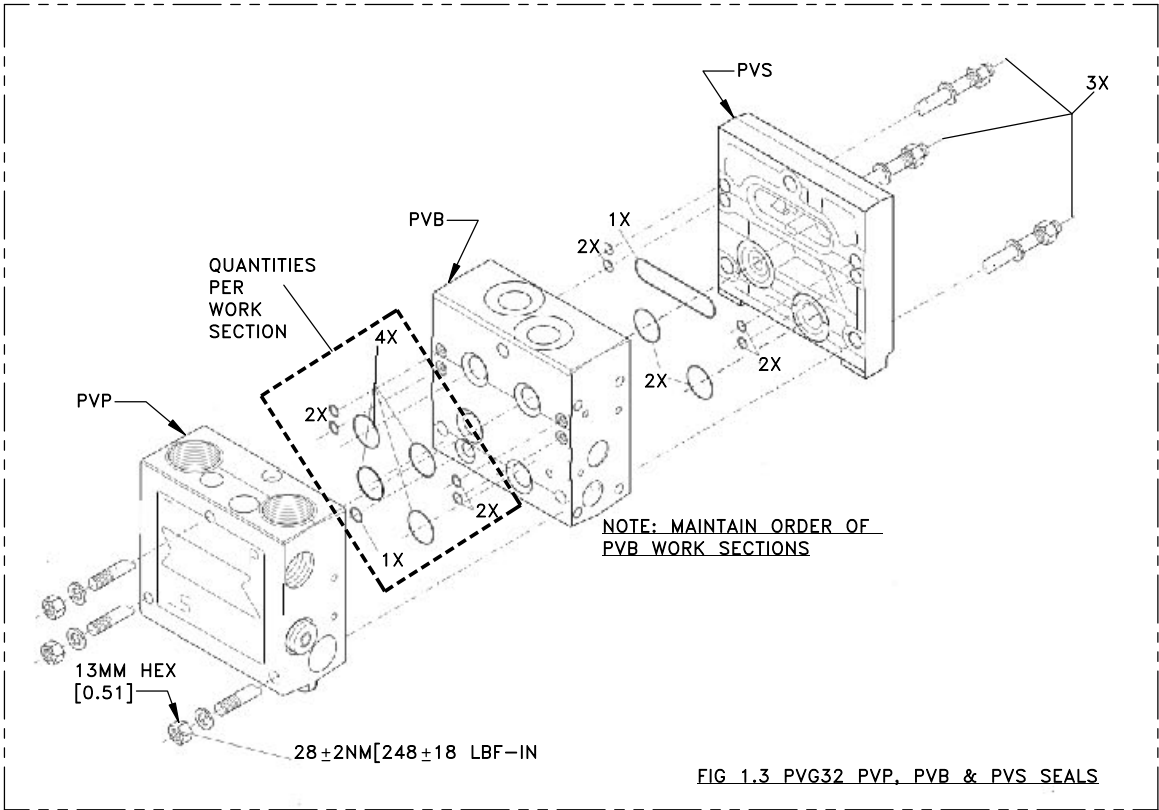


FIG 1.3 PVG32 PVP, PVB & PVS SEALS

REV	EN	DESCRIPTION		DATE	DRN
1	6281	NEW RELEASE		7-22	PR
DIMENSION TOLERANCES UNLESS OTHERWISE SPECIFIED					
LINEAR		.XX=±.03	.XXX=±.010		
ANGULAR		X°=±1°	X.X°=±.5°		
SURFACE FINISH NOT TO EXCEED		125/√	SMOOTH ALL SHARP EDGES CLEAN ALL WELDS		
THIS PRINT AND ALL INFORMATION WITHIN BELONGS TO RACINE RAILROAD PRODUCTS					
RACINE RAILROAD PRODUCTS RACINE, WISCONSIN USA					
DESCRIPTION					
INSTRUCTIONS, PVG32 SEAL KIT					
MATERIAL					
SEE BOM					
USED ON		793171 793172 793173 793174	SCALE 8:1	DATE 07-29-22	
DRN PR	CHK	APP	JOB NO RD040183	SHEET 1 OF 1	
DWG SIZE C		CATALOG A		DWG NO 800399	