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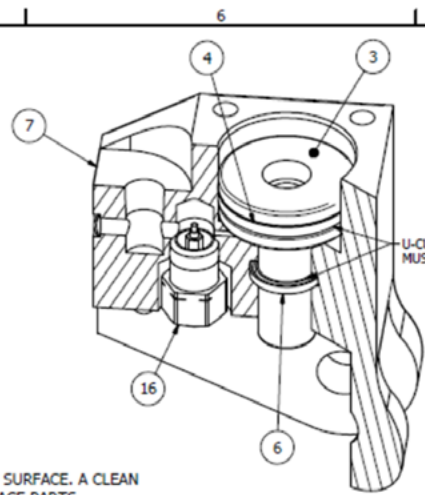
**HOOK DISASSEMBLY:**

NOTE: CLEAR A CLEAN SPACE WITH A CLEAN SURFACE. A CLEAN TOWEL OR CARDBOARD WORKS WELL TO PLACE PARTS.

1. CLEAN HOOK EXTERIOR BEFORE DISASSEMBLY.
2. FLATTEN LOCK TABS #13, LOOSEN AND REMOVE TIE BOLTS #11.
3. REMOVE TOP CAP FROM BODY AND PLACE SPRING #2, TOP CAP, AND TIE BOLTS ASIDE.
4. USE A 5/16" ALLEN WRENCH TO REMOVE BOTH SET SCREW #14 AND JAM SET SCREW #15.
5. HOOK PIN #10 SHOULD SLIDE OUT RELEASING HOOK. IF PIN DOESN'T SLIDE OUT BY HAND, DETERMINE IF REPLACING PIN IS APPLICABLE.
6. USE A 3/4" PUNCH TO TAP LATCH PIN #5 OUT OF BODY #7. CAREFUL NOT TO LOSE LATCH SPRING #12.
7. PRESS ON ROD END OF PISTON #3 AND REMOVE FROM BODY #7.
8. USE A PLASTIC PIC TO DELICATELY REMOVE BOTH PISTON SEAL #4 AND ROD SEAL #6. CAREFUL NOT TO SCRATCH LANDS.
9. USE A THIN WALL 3/8" SOCKET TO REMOVE PRESSURE RELIEF VALVE. CLEAN SEPARATELY IN MINERAL OIL.

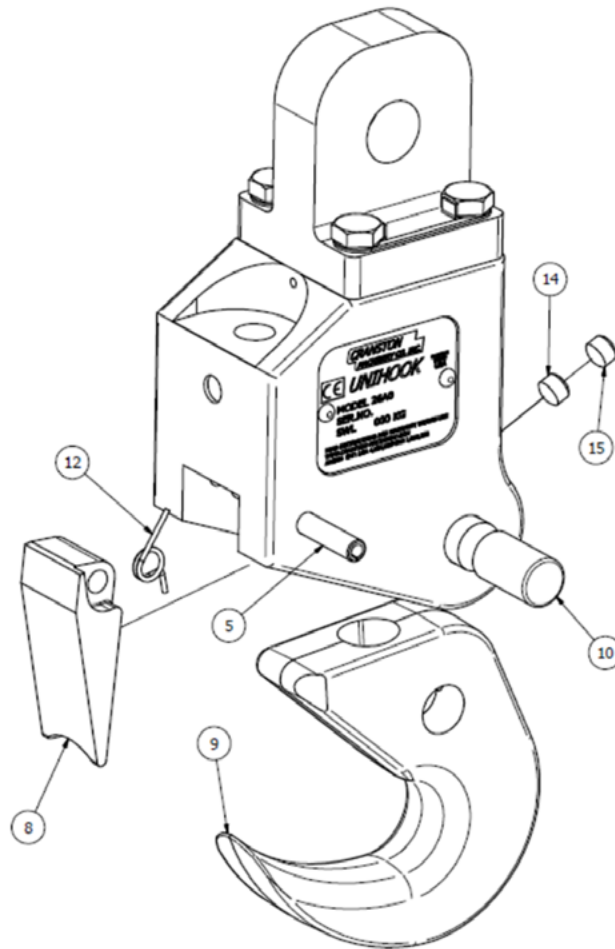
**CLEAN AND INSPECT:**

1. PLACE ALL HOOK COMPONENTS IN A CONTAINER OF CLEAN MINERAL SPIRITS OVERNIGHT.
2. WITH A NYLON PARTS BRUSH, CLEAN ALL SURFACES AND PLACE ON A CLEAN TOWEL.
3. USE SHOP AIR TO DRY ALL INTERIOR SURFACES.
4. INSPECT ALL FOLLOWING AREAS FOR SCRATCHES, ELONGATION OR DAMAGE.
  - A) CYLINDER BORE AND ROD SEAL LAND.
  - B) PISTON ROD AND SEAL LAND.
  - C) TOP CAP PIN BORE.
  - D) HOOK BORE AND PIN IN BOTH HOOK AND BODY.
  - E) LATCH BORE AND BODY LATCH BORE.



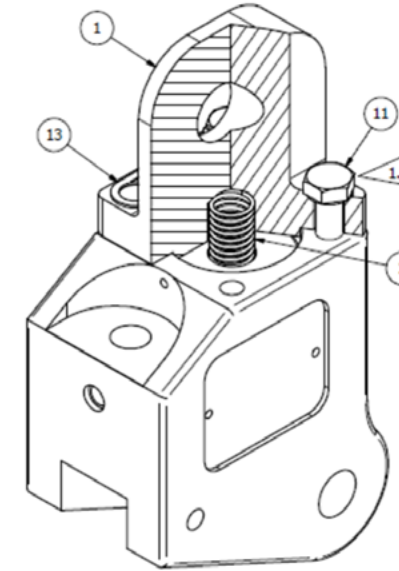
**2 PISTON / BODY ASSEMBLY:**

1. INSPECT INTERNALS OF BODY #7, SEAL GROVE AND AIR PATH FOR CONTAMINATES. CONFIRM BORE IS CLEAN AND FREE OF IMPERFECTIONS.
2. APPLY THREAD SEALANT TO PRESSURE RELIEF VALVE #16. CAREFUL TO AVOID SEALANT AROUND VALVE INTERNALS. HAND THREAD VALVE INTO BODY #7, TIGHTEN WITH SOCKET WRENCH ONE TO TWO TURNS MORE. CONFIRM VALVE IS RECESSED BELOW BODY SURFACE.
3. INSTALL "U" SEAL #6 IN ROD BORE OF BODY #3, WITH "U" UP TOWARDS PISTON BORE.
4. INSTALL "U" SEAL #4 ON PISTON #3 WITH "U" TOWARDS ROD END.
5. APPLY A THIN LAYER OF LUCAS MARINE GREASE TO OUTER LIP OF "U" SEAL #4 AND INNER LIP OF "U" SEAL #6 IN BODY.
6. SMEAR A THIN LAYER OF LUCAS MARINE GRADE GREASE ON THE ENTIRE BORE SURFACE AND THE FIRST THIRD OF PISTON #3 ROD.
7. INSTALL PISTON #3 INTO BODY #7 USING SEAL COMPRESSION FIXTURE BB9695. NOTE: PISTON SHOULD MOVE FREELY AND WITH PISTON DOWN IN THE BORE, THERE SHOULD BE 7/16" MIN. FROM TOP OF PISTON TO TOP OF CYLINDER BODY.



**4 HOOK & LATCH ASSEMBLY:**

1. TAP PIN #5 INTO BODY #7 (THRU SER. PLATE SIDE) 3/16" (APPX. 3/16" INTO CAVITY).
2. DAB LUCAS MARINE GREASE IN HOLE OF LATCH #8 (NOTCHED SIDE).
3. PLACE SPRING #12 ON THE 3/16" OF PIN #5, LONG TANG ON TOP OF PIN AND HORIZONTAL TO HOOK.
4. POSITION LATCH #8 IN PLACE AGAINST SPRING #12, AND FINISH TAPPING PIN #5 TILL FLUSH.
5. SMEAR LUCAS MARINE GREASE IN THE TWO 9/16" HOLES OF BODY #7.
6. PLACE HOOK #9 IN POSITION AND SLIDE IN PIN #10 TILL FLUSH.
7. INSTALL SET SCREW #14 INTO HOOK #9, TIGHTEN UNTIL IT BOTTOMS ON #10 - USE LOCTITE 242.
8. INSTALL JAM SET SCREW #15 INTO HOOK #9 AND TORQUE 7.5 TO 8.3 FT-LBS (1.04-1.14 KG-M). USE LOCTITE 242, LET DRY PRIOR TO USE.



**3 TOP CAP TO BODY ASSEMBLY:**

1. PLACE SPRING #2 ON PISTON AND INSTALL TOP CAP #1 ON PISTON BODY ASSEMBLY.
2. INSERT TWO BOLTS #11 WITH EACH OF TWO LOCK TABS #13 THRU EACH SIDE OF TOP CAP. THREAD BOLTS LOOSELY INTO BODY.
3. TIGHTEN #11 BOLTS IN A CROSS PATTERN TILL SNUG.
4. PRELIMINARY TEST WITH 20 PSI AIR, PISTON SHOULD MOVE FREELY, SUBMERGE BODY INTO WATER AND CHECK FOR AIR LEAKS. NOTE: IF AIR LEAKS, DISASSEMBLE, CHECK U-CUP SEALS #4 AND #6 FOR DAMAGE, CHECK BODY #7 FOR SCRATCHES IN SEAL LANDS. THEN REASSEMBLE AND RETEST.
5. INCREASE PRESURE, AT 25 PSI AND ABOVE AIR ESCAPE OUT PRESSURE RELIEF VALVE. IF NOT VALVE SHOULD BE REPLACED WITH NEW.
6. TORQUE #11 BOLTS IN A CROSS PATTERN TO 24-29 FT-LBS (3.32-4.01 KG-M). MAKE SURE A FLAT ON EACH BOLT IS ALIGNED WITH A LOCK TAB AND THEN BEND UP LOCK TAB AGAINST BOLT HEAD.

**WARNING! ONLY USE THE M30600006 BOLTS. THEY ARE SPECIAL HIGH STRENGTH BOLTS. DO NOT SUBSTITUTE ANY OTHER HEX HEAD BOLTS.**

