

phd[®] REBUILD PROCEDURES: SERIES FCB CYLINDER - ML314570

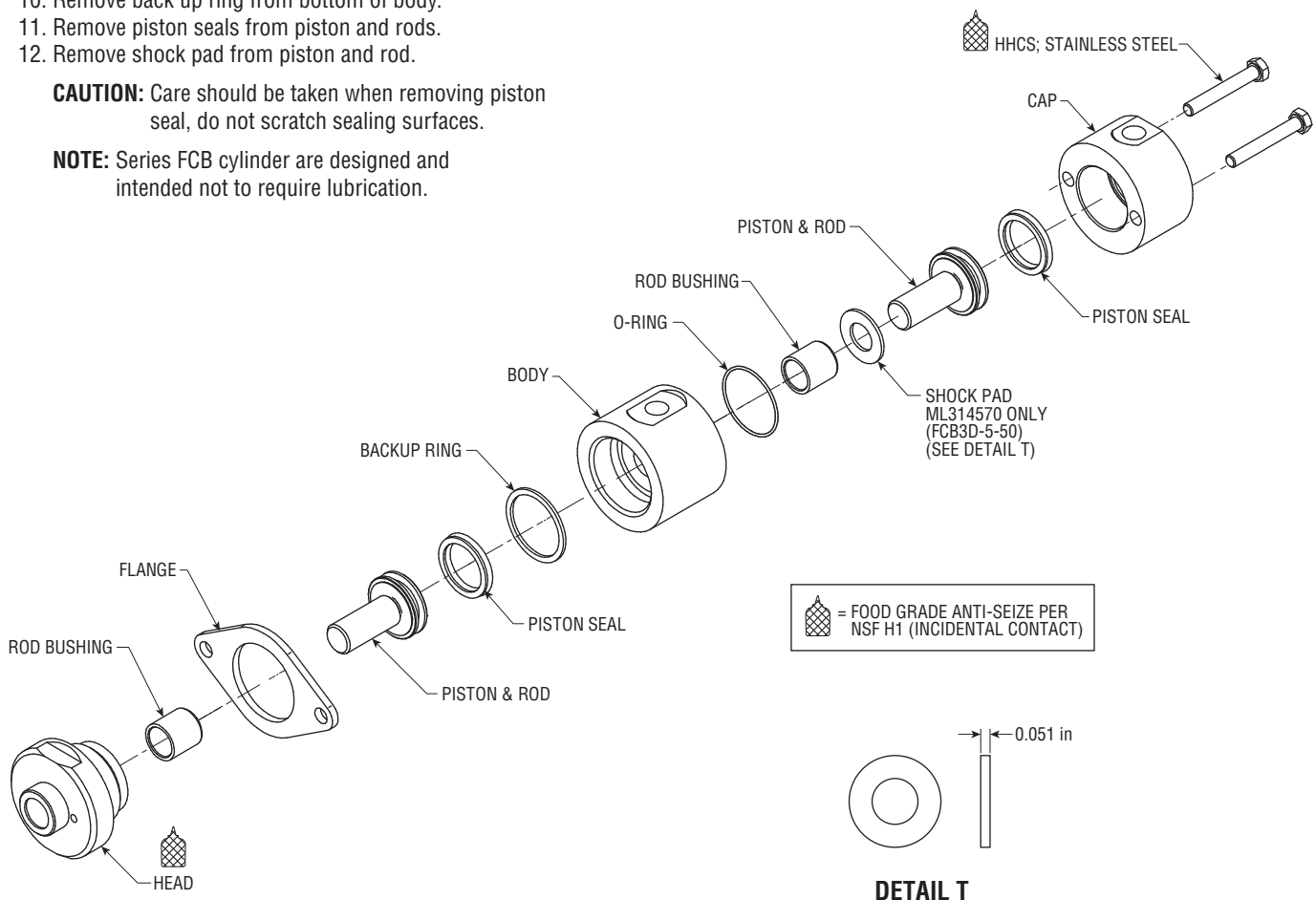
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DISASSEMBLY OF THE CYLINDER

- WARNING:** All air pressure in unit must be relieved prior to disassembly of cylinder.
- During disassembly, be careful to avoid scratching sealing areas.
- Place head of unit into vise and clamp on flat end of head.
- Remove HHCS from cap.
- Remove cap, slide piston and rod from cap or body.
- Slide rod bushing from body and remove o-ring from groove at back of body.
- Using a 1-11/16 open end crows foot, slip crows foot onto flats in body and rotate CCW (counter clockwise) removing body from head.
- Slide piston and rod from head or body.
- Slide rod bushing from head and remove flange.
- Remove back up ring from bottom of body.
- Remove piston seals from piston and rods.
- Remove shock pad from piston and rod.

CAUTION: Care should be taken when removing piston seal, do not scratch sealing surfaces.

NOTE: Series FCB cylinder are designed and intended not to require lubrication.



ML to Kronos to Standard Cross Reference

ML ORDER CODE	KRONOS REPLACEMENT	MID POSITION STROKE	STANDARD ORDER CODE
ML314570	45 40155	0.196 [5.0]	FCB3D-5-50

TOOLS NEEDED:

- 1-11/16 open end crows foot with square broach
- Small non-metallic flat blade screwdriver
- 8 mm socket
- 80-250 in-lb torque wrench

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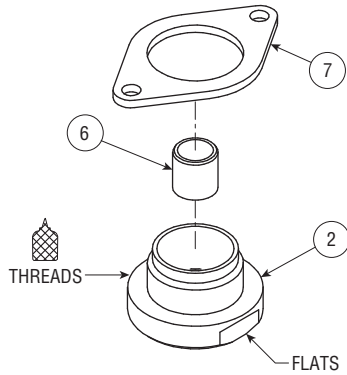


FIGURE 1

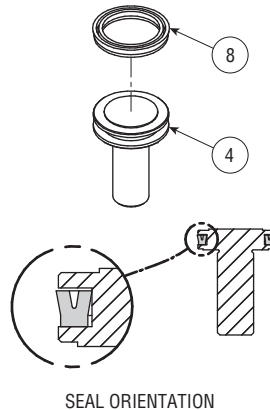
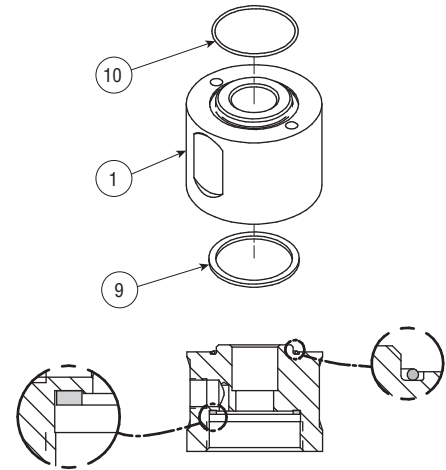
SEAL ORIENTATION
FIGURE 2

FIGURE 3

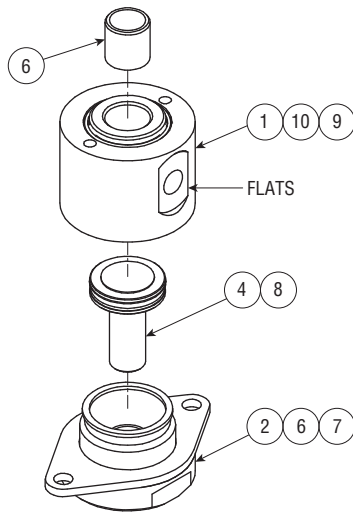


FIGURE 4

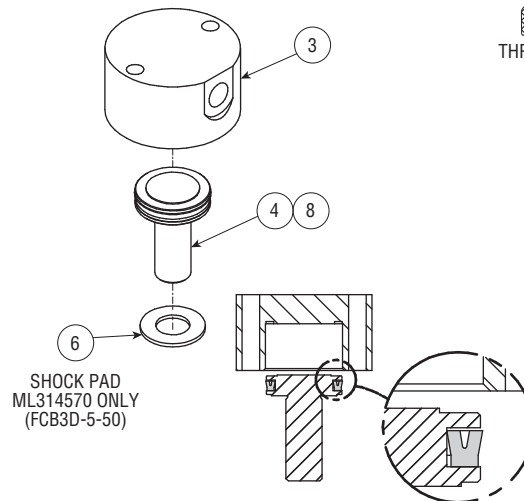


FIGURE 5

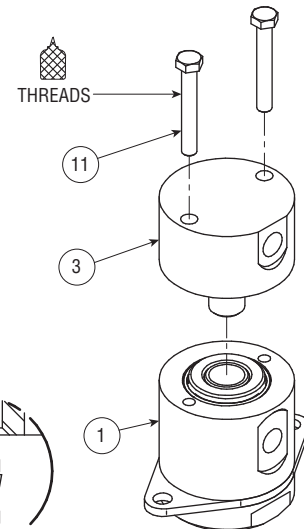


FIGURE 6

ASSEMBLY PROCEDURES:

1. Place head (2) into vise locating on flats and secure. (see Figure 1)
2. Install bushing (6) into head. (see Figure 1)
3. Apply food grade anti-seize per NSF H1 incidental contact to threads on head (2). (see Figure 1)
4. Slip flange (7) onto threads of head (2). (see Figure 1)
5. Install piston seal (8) onto both P&Rs (4), note seal orientation. (see Figure 2 & 5)
6. Install back up ring (9) into bottom of body (1). (see Figure 3)
7. Install o-ring (10) into groove in back of body (1). (see Figure 3)
8. Slip piston and rod assembly (4, 8) into head assembly (2, 6, 7). (see Figure 4)
9. Slip bushing (6) into body assembly (1, 10, 9) and thread body assembly (1, 10, 9) orienting flange (7) to desired position. Torque with 1-11/16 open end crows foot on body flats to 250 in-lbs. (see Figure 4)

10. Install shock pad (6) onto piston rod (4), seat against face of piston (4). (see Figure 5)

11. Install mid-position piston and rod assembly (4, 8) into cap (3). (see Figure 5)

NOTE: Take care to easily work piston seal (8) into cap (3) bore as not to cut or damage piston seal (8).

12. Place Figure 5 assembly onto Figure 4 assembly lining up through holes in body (1) with threaded holes in cap (3). (see Figure 6)

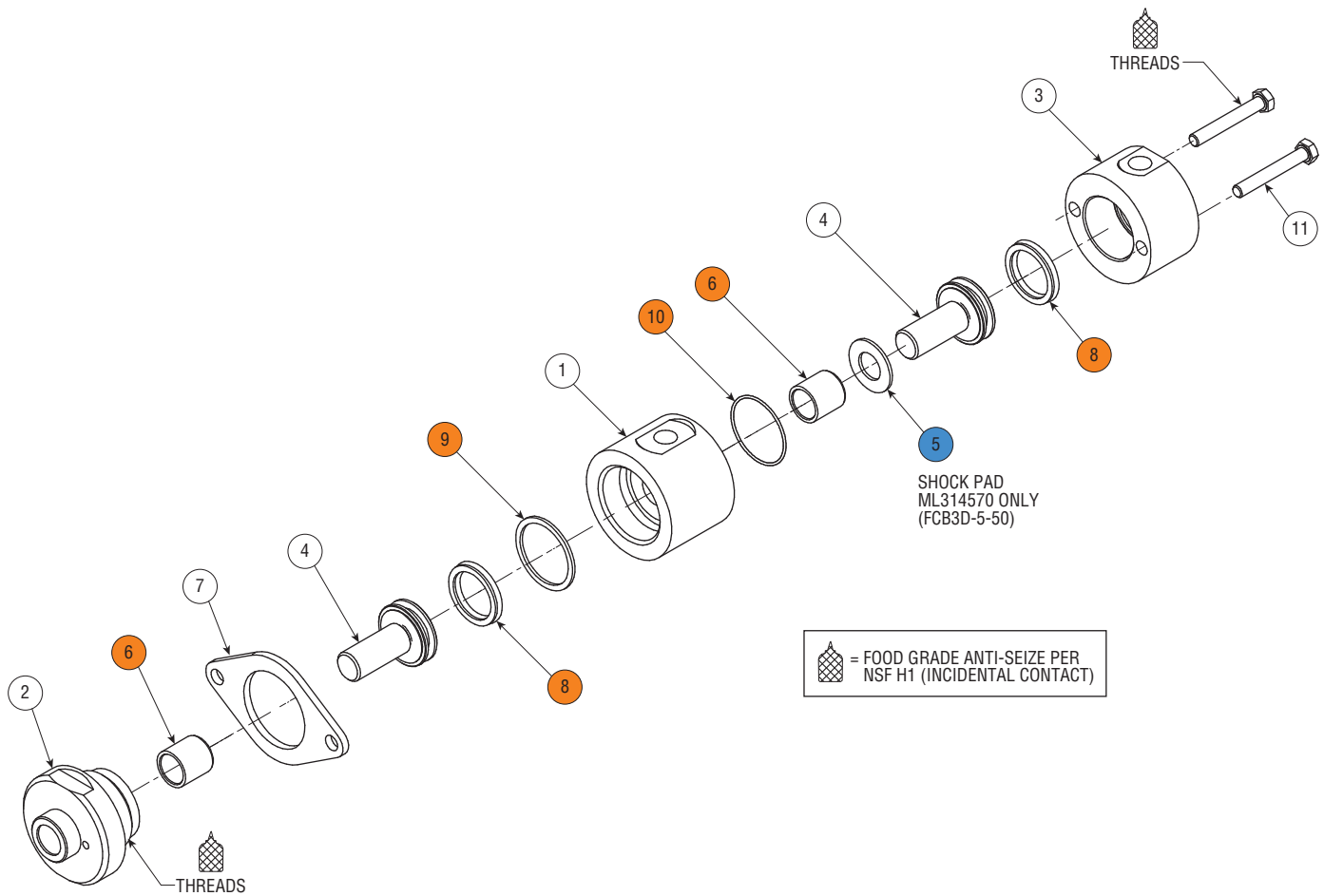
13. Apply food grade anti-seize per NSF H1 incidental contact to threads on hex head bolts (11). Install through cap (3) using an 8 mm socket and torque to 80 in-lbs. (see Figure 6)



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KEY	PART DESCRIPTION	(FCB3D-5-50)
		ML314570
1	Body	87997
2	Head	87994
3	Cap	87995
4	Piston & Rod	87996
5	Shock Pad	88412
6	Rod Bushing	87970-007
7	Flange	87998
8	Piston Seal	86978
9	Backup Ring	86977
10	O-Ring	3642-119-2
11	HHCS; Stainless Steel	85027-030

KIT DESCRIPTION	KIT NUMBER	COLOR CODE*
ML314570 Repair Kit	88416	

* Color code designates parts to be included in kit

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