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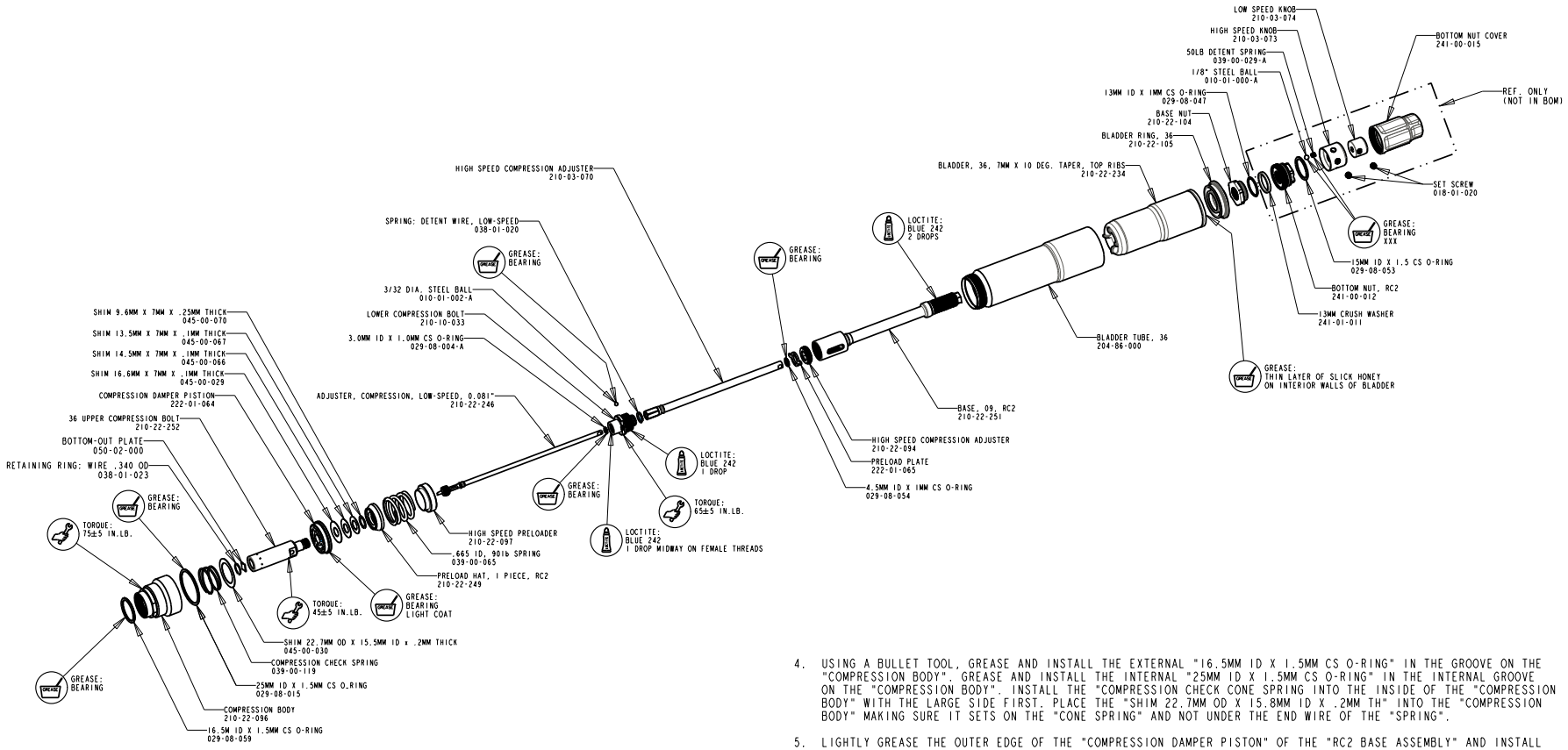
REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	RELEASE FOR PRODUCTION	21 FEB 08	



ASSEMBLY INSTRUCTIONS:

1. INSTALL THE "LOW-SPEED ADJUSTER SCREW" INTO THE "LOWER COMPRESSION BOLT" UNTIL IT STOPS AT THE BOTTOM. GREASE THE "3/32 DIA. STEEL BALL" AND PLACE IT INTO THE LARGER OF THE TWO HOLES IN THE GROOVE OF THE "LOWER COMPRESSION BOLT". SET THE "WIRE DETENT SPRING" IN THE SECOND HOLE OF THE "LOWER COMPRESSION BOLT" AND WORK IT INTO THE GROOVE AWAY FROM THE "BALL" SO THE END IS COVERING THE "BALL". USING A BULLET TOOL, GREASE AND INSTALL THE EXTERNAL "3MM ID X 1MM CS O-RING" IN THE GROOVE OF THE "LOW-SPEED ADJUSTER SCREW". USING A BULLET TOOL, GREASE AND INSTALL THE EXTERNAL "4.5MM ID X 1MM CS O-RING" IN THE GROOVE ON THE "HIGH-SPEED COMPRESSION ADJUSTER" . INSTALL THE "HIGH-SPEED COMPRESSION ADJUSTER" ONTO THE "LOWER COMPRESSION BOLT ASSEMBLY".

2. THREAD THE "HIGH-SPEED ADJUSTER SCREW" IN THE "RC2 BASE" A HALF OF A TURN FROM THE STOP AT THE BOTTOM. INSERT THE "PRELOAD PLATE" THROUGH THE SLOTS ON THE "RC2 BASE" AND PLACE IT DOWN FLAT AGAINST THE "HIGH-SPEED ADJUSTER SCREW". PUT ONE DROP OF BLUE LOCTITE ONTO THREAD OF THE "LOWER COMPRESSION BOLT" AND THREAD IT INTO THE "RC2 BASE ASSEMBLY". MAKE SURE THE "HIGH-SPEED COMPRESSION ADJUSTER" KEYS INTO THE "HIGH-SPEED ADJUSTER SCREW" IN THE "RC2 BASE". TORQUE THE "LOWER COMPRESSION BOLT ASSEMBLY" TO 65 IN-LB WITH A 10MM CROWS FOOT WRENCH WHILE HOLDING THE LOWER END OF THE "RC2 BASE" WITH AN 8MM 6 POINT WRENCH. CHECK THAT THE ADJUSTERS TURN FREE AND THE DETENT IS WORKING ON THE "LOW-SPEED ADJUSTER SCREW".

3. PLACE THE "HIGH-SPEED PRELOADER" OVER THE "RC2 BASE ASSEMBLY" SO THAT IT RESTS ON THE PRELOAD PLATE. INSTALL THE ".625 ID X 90 LB/IN SPRING" ON THE "HIGH-SPEED PRELOADER" FOLLOWED BY THE "PRELOAD HAT" WITH THE LARGER DIAMETER TOWARDS THE "SPRING". PLACE THE "BOTTOM-OUT PLATE" INTO THE "40 UPPER COMPRESSION BOLT" AND CHECK TO MAKE SURE IT SEALS. INSTALL THE "WIRE RETAINING RING" INTO THE LOWER GROOVE OF THE "UPPER BOLT" AND CHECK TO MAKE SURE IT IS FULLY ENGAGED IN THE GROOVE. SLIDE THE "COMPRESSION PISTON", SMALL SIDE FIRST ONTO THE THREADED END OF THE "40 UPPER COMPRESSION BOLT". WITH THE THREADED END OF THE "UPPER COMPRESSION BOLT" FACING UPWARD, INSTALL THE "SHIM 16.6MM OD X 7MM ID X .1MM TH", "SHIM 14.5MM OD X 7MM ID X .1MM TH", "SHIM 13.5MM OD X 7MM ID X .1MM TH", AND "SHIM 9.6MM OD X 7MM ID X .25MM TH". PUT ONE DROP OF BLUE LOCTITE 242 MIDWAY ON FEMALE THREAD OF THE "LOWER COMPRESSION BOLT". KEEP THE "UPPER BOLT ASSEMBLY" INVERTED AND THREAD ON THE "RC2 BASE ASSEMBLY". CAREFULLY INSPECT THAT "SHIMS" ARE CENTERED ON THE "BOLT" AND CLAMPED PROPERLY ON THE "BASE ASSEMBLY". TORQUE THE "UPPER COMPRESSION BOLT ASSEMBLY" TO 45 IN-LB WITH A 10MM CROWS FOOT WRENCH WHILE HOLDING THE LOWER END OF THE "RC2 BASE" WITH AN 8MM 6 POINT WRENCH.

4. USING A BULLET TOOL, GREASE AND INSTALL THE EXTERNAL "16.5MM ID X 1.5MM CS O-RING" IN THE GROOVE ON THE "COMPRESSION BODY". GREASE AND INSTALL THE INTERNAL "25MM ID X 1.5MM CS O-RING" IN THE INTERNAL GROOVE ON THE "COMPRESSION BODY". INSTALL THE "COMPRESSION CHECK CONE SPRING INTO THE INSIDE OF THE "COMPRESSION BODY" WITH THE LARGE SIDE FIRST. PLACE THE "SHIM 22.7MM OD X 15.8MM ID X .2MM TH" INTO THE "COMPRESSION BODY" MAKING SURE IT SETS ON THE "CONE SPRING" AND NOT UNDER THE END WIRE OF THE "SPRING".

5. LIGHTLY GREASE THE OUTER EDGE OF THE "COMPRESSION DAMPER PISTON" OF THE "RC2 BASE ASSEMBLY" AND INSTALL IT INTO THE "COMPRESSION BODY ASSEMBLY". MAKE SURE THE "SHIM" IN THE "COMPRESSION BODY ASSEMBLY" IS NOT PINCHED AND THE "PISTON" HAS PASSED BEYOND THE INTERNAL "O-RING" OF THE "COMPRESSION BODY ASSEMBLY" AND IS HELD IN PLACE BY THAT O-RING. THREAD THE "36 BLADDER TUBE" INTO THE "COMPRESSION BODY". SET THE "36 BLADDER TUBE" IN A COLLET AND TORQUE THE "COMPRESSION BODY" TO 75 IN-LB WITH A 21MM CROWS FOOT WRENCH ON THE WRENCH FLATS OF THE "COMPRESSION BODY".

6. THESE NEXT STEPS WILL BE ASSEMBLED ONTO THE "RC2 BASE VALVE ASSEMBLY" AFTER THE ENTIRE CARTRIDGE IS ASSEMBLED AND FILLED WITH OIL. LIGHTLY GREASE THE INSIDE SURFACES AS WELL AS THE OUTER AND INNER SEALING LIPS OF THE "36 BLADDER". INSTALL THE INNER SEALING LIP OF THE "BLADDER" ONTO THE INNER SEAL GROOVE OF THE "36 BLADDER RING" AND CAREFULLY SPIN TO MAKE SURE IT IS FULLY ENGAGED. PUSH FROM THE TOP OF THE "BLADDER" SO YOU DO NOT COMPRESS IT INWARD AND SLOWLY ROLL THE OUTER SEALING LIP OF THE "BLADDER" ONTO THE "BLADDER RING". INSTALL THE EXTERNAL "13MM ID X 1MM CS O-RING" ONTO THE EXTERIOR GROOVE OF THE "BASE NUT". INSTALL THE EXTERNAL "15MM ID X 1.5MM CS O-RING" ONTO THE GROOVE OF THE "RC2 BOTTOM NUT". THREAD A "SET SCREW" INTO THE THREADED HOLE ON BOTH THE "LOW-SPEED KNOB" AND "HIGH-SPEED KNOB" UNTIL THEY ARE FLUSH WITH THE EDGES. GREASE AND INSTALL THE "50LB DETENT SPRING" FOLLOWED BY THE "1/8 STEEL BALL INTO THE DETENT HOLE ON THE UPPER SIDE OF THE "HIGH-SPEED KNOB".

ITEM NO.	QTY.	PART NUMBER	DESCRIPTION	MATERIAL SPEC

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES [MM]

TOLERANCES ARE:
DECIMALS .XX [.X] ± .01 [0.25] .XXX [.XX] ± .005 [0.13]
ANGLES ± 1°

THIRD ANGLE PROJECTION

PER ASME Y14.5M 1994

APPROVALS		DATE
DWN. BY	E LINDSLEY	05 DEC 07
CHK. BY	B BECKER	06 FEB 08
ENG.	S PELOT	05 DEC 07
MFG.		
ADD.		

FOX Factory, Inc.
130 Hangar Way, Watsonville, CA 95076 USA, Ph 831-768-1100, Fax 831-768-9312

09 36 VAN RC2 BASE VALVE ASSY

SIZE C | PART NO. 820-03-112

PLOT SCALE 0.4:1 | SHEET 1 OF 2