



FOR COMPLETE PRODUCT MANUAL AND WARRANTY INFORMATION PLEASE VISIT [FIELDONEPAINTBALL.COM](http://fieldonepaintball.com)

**SAFETY WARNING!** This is not a toy. Misuse may cause serious injury or death. Eye protection designed specifically for paintball and compliant with ASTM standards must be worn by the user and persons within range. Must be 18 years of age or older to purchase. Persons under 18 years of age must have adult supervision. **READ OWNER'S MANUAL BEFORE USING. ALWAYS COVER BARREL.** Always de-gas your marker, discharging any stored gas in a safe direction, and remove the barrel, loader, air system and any paintballs to make the marker easier and safer to work on.

The Field One Nucleus Engine was designed to give your Force maximum reliability with minimal maintenance. The Nucleus Engine uses U-Cup directional seals along side traditional o-rings. To remove the engine; de-gas your marker and make sure there is no pressure retained inside the marker. Pull up on the back cap (fig 1) until it lifts away from the main body, then pull the engine out towards the rear of the marker (fig 2). Once the engine is separated from the body you can separate the two engine halves by unscrewing the Volume Chamber from the Ram Housing (fig 3). These parts should be tightly screwed together so you may want to use a towel to hold the volume chamber as you twist apart. Apply grease to the areas shown below (fig 4, 5, 6, 7). When re-joining the two engine halves, screw them together very tight so there is no gap between the engine halves (fig 8). You may want to add a small amount of grease to the static o-rings around the outside of the engine to insure a smooth re-entry into the body. To re-install your engine make sure the back cap is in the UP position and slide the engine back into the marker. Make sure the engine is completely inserted and push down on the back cap until it snaps into place. You do not need to change any of the seals unless there is an obvious leak or fault in performance. When troubleshooting always make sure your air tank has adequate pressure and is screwed into the ASA completely and the Cam Drive ASA Knob is fully engaged. Make sure the marker has fresh batteries. Please consult the complete manual at [fieldonepaintball.com](http://fieldonepaintball.com) for a troubleshooting guide and FAQ.

1. Lift Back Block



2. Pull engine out



3. Separate engine halves



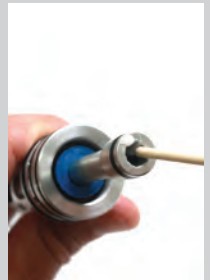
4. Apply light grease to ram U-Cup



5. Apply light grease to Ram Shaft



6. Apply light grease to U-Cup inside Ram



7. Apply light grease to Bolt Stem and o-rings



8. Tighten engine halves together until very tight



O ring 1x3	2	Engine Gas Interlock Plunger
O ring 1x2	1	Engine Ram Housing to Reduction Shaft
O ring 021	2	Engine Outside Ram Housing
O ring 021	3	Engine Outside rear Volume Chamber
U Cup 009	1	Engine inside Ram to Reduction Shaft (opening faces front)
O ring 020	1	Engine outside front Volume Chamber
U Cup 110	1	Engine inside front of Volume Chamber (opening faces back)
O ring 017	2	Engine inside Volume Chamber to Brass Shut Off
U Cup 011	1	Engine back of Ram to Ram housing (opening faces front)
U Cup 011	2	Engine inside Brass Shut Off (openings face away from each other)
O ring 011	1	Engine Inside Front Brass Shut Off
O ring 015	2	Engine Outside Bolt
O ring 1x15	1	Engine Ram Housing in Between Engine Halves

