Dillon XL 750 Ultimate Bearing Kit

By JW Systems

Item No: T1749

Thank you for your purchase! <u>Please read through the directions once</u> <u>before you begin</u> and have the Dillon manual for the part # location. This kit will fit ONLY the XL 750 press.

You will need: Degreaser (i.e. paint thinner/brake cleaner), small magnet, dental pick, 1/4" Allen wrench for Shellplate Bolt (#13794), a 1/8" Allen wrench for Brass Tip Set Screw (#13923) and Q-tips for cleaning. The bearing is pre-lubricated for life with 80w oil and Teflon.

Disassembly: Tip - Remove the tool head for easy access to the shellplate.

- 1. Loosen the Brass Tip Set Screw (#13923) one full turn and then remove the Shellplate Bolt (#13794) and Ejector Wire (#13298 /650XL only)
- 2. Put a small piece of masking tape over the shellplate bolt shaft to prevent losing the Index Ball (#13997) or Index Ball Spring (#13891) down the shaft.
- 3. Remove Index Ball (#13997) with a magnet and Index Ball Spring (#13891) with a dental pick or the hooked end of the 650XL Ejector Wire.
- 4. Give all the parts a quick cleaning. **Pay special attention to the bottom of the shellplate**. Gently run the tip of a Q-tip along the edges of the detent holes to check for burrs. If you see any fibers pulled off or feel any burrs, you need to remove them as it can permanently damage the index ball. Take a small piece of fine sandpaper (320 grit or finer), place it over the detent hole and press down with a finger in a twisting motion to remove the burrs. Check again with the Q-tip, repeat as needed. It should be very minor, Dillon does a great job on their machining. <u>You must do this to each of your Shellplates</u>.
- 5. If the bottom shelf of the Shellplate Bolt is rough, you can put it in a drill press at low speed and use fine sandpaper (600 grit or finer) glued to a popsicle stick to remove the rough burrs on the bearing surface. **Do not remove metal, just polish it.**

Assembly:

- 1. Install new Index Ball Spring and Index Ball into the hole on the Platform.
- 2. Slide the Oilite[®] bearing onto the Shellplate Bolt and then slide on the Shellplate.
- 3. Screw in the Shellplate Bolt by hand till it stops. Unscrew the Shellplate Bolt by a quarter of a turn until the Shellplate turns freely. Press down on the Shellplate at the 10:30 o'clock position (12 o'clock is the back of the press), and adjust Shellplate Bolt until you can feel it barely wiggle, then tighten the Brass Tip Set Screw.
- 4. You may have to tighten or loosen the Shellplate Bolt slightly to get the "right feel."
- 5. Install the Ejector Wire.
- 6. <u>I recommend loading 250–500 rounds to break-in the bearing before making any</u> <u>adjustments to spring tension.</u>
- 7. Look at Fig 1. You can see the oil/wear ring on the Shellplate. It is normal and will not damage or harm the Shellplate. Use a soft cloth to wipe off the top of the Shellplate.

Tips for adjusting the index ball spring tension:

If you need to increase the tension of the Index Ball Spring to make the indexing more positive, you can put one or two of the flat washers (included in the kit) into the index ball spring hole. Make sure the washers are lying flat and the bottom of the hole is clean.







Maintenance of Oilite[®] Bearing:

To get the maximum life out of the bearing: **NEVER clean it with a solvent/cleaner! It will strip the oil out of the bearing.** If it becomes dirty, clean it by blowing off with compressed air or wiping with a clean dry paper towel. It will have a slight waxy feel, which is the oil/Teflon. The bearing surface has open pores, which is normal. Keep grease away from the bearing, it will clog the pores and reduce the life of the bearing.

Disassembly of Index Block Bearing: Tip: Use a fine tip marker to mark the location of the index block to help re-assembly

- 1. Remove the toolhead.
- 2. Use a 5/32" Allen wrench to remove two bolts #14037 that hold the Index Block on the XL750 frame. Remove the index block. Be careful not to lose the two washers. If you lose a washer, they are available at a hardware store as a #10 washer.
- 3. Use a 3/32" Allen wrench to remove #13809 SD Roller Bolt.
- 4. Install JW Systems shoulder bolt and ball bearing into the Index Block. Use the short end of the Allen wrench to tighten, no more than 15 inch pounds of torque. Thread locking compound is not recommended, it can seep into the bearing causing premature failure.
- 5. Reinstall the Index Block on the XL750 frame, gently tighten the two 5/32" bolt holding the short end the wrench to prevent overnighting.
- 6. There may be a small gab between the head of the shoulder bolt and bearing. This is normal to allow free movement of the bearing

How to Time the Index Block:

- 1. Double checks to make sure the shellplate and XL750 platform are clean. Cycle the press handle a few times. Pay attention to the location of the primer cup in relation to the shellplate. It should be centered when the shellplate quits rotating.
- 2. If the Shellplate Priming Hole is not centered over the Primer Punch, you will need to adjust the Index Block. Make very small movements as you adjust the Index Block. Moving the Index Block towards the back of the press increases the shellplate movement, moving the Index Block towards the operator slows down the indexing. It may take several attempts to get it just right. While you are testing the index, be sure to move the handle the same way as you would when you're loading.

 For detailed directions on Shellplate Index adjustment and troubleshooting, see the Dillon XL750 user manual on pg. 41. <u>https://www.dillonprecision.com/manuals.html</u>

Maintenance of Index Block Bearing:

UniqueTek, Inc.

Gilbert, AZ

No maintenance is needed for the ball bearing, it is a sealed unit. It will last the life of your press.

Manufactured by JW Systems. Questions or comments? Email me at jeff.wallick@gmail.com Ver. 2-10262020 Copyright © 2020 Jeff Wallick. All Rights Reserved

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