

101-1274: Mark 7[®] Shuttle Priming System Update Kit

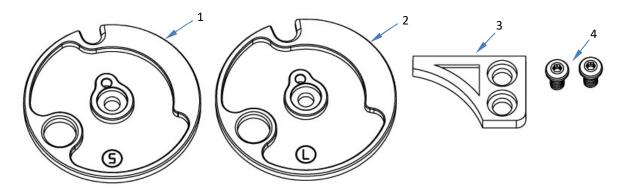
Installation Instructions

Packaging Contents:

This package contains the following parts. If any are missing, please contact Mark 7 Support:

Call: 888-462-7577, option 3 (9am – 4pm EST) E-mail: support@markvii-loading.com

Item #	Part #Part #	Description	Qty
1	201-1394-01	Primer Disk, Shuttle - Small Primer	1
2	201-1394-02	Primer Disk, Shuttle - Large Primer	1
3	201-1425	Load Plate	1
4	201-1588	Primer Side Plate Screw	2



Tools needed:

- 1. 1/2" Allen Wrench
- 2. 1/8" Allen Wrench
- 3. 7/64" Allen Wrench
- 4. 3/32" Allen Wrench
- 5. 5/64" Allen Wrench
- 6. 1/16" Allen Wrench
- 7. 0.050" Allen Wrench
- 8. 1/4" Open-End Wrench
- 9. Brass Hammer or Rubber Mallet (if bearing needs repositioning see Step 4)



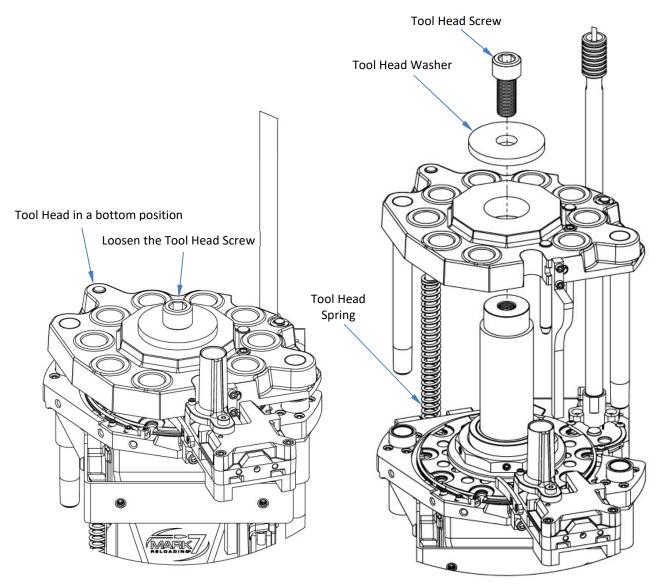
Installation Instructions:

To replace the Primer Disk, complete the following steps:

Step 1: Remove the Tool Head Assembly

- a. Move the Tool Head to its lowest position.
- b. Loosen the Tool Head Screw using a 1/2" Allen Wrench but DO NOT remove it (See Caution Below)
- c. After the Tool Head Screw is loose move the Tool Head to its top position.
- d. Remove the Tool Head Screw, the Tool Head Washer, the Tool Head, and the Tool Head Spring.

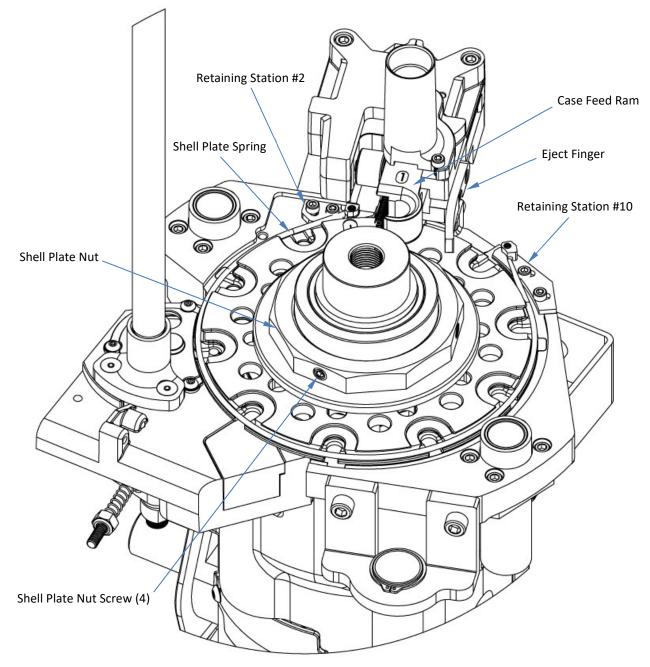
<u>Caution!</u> Do not remove the Tool Head Screw while the Tool Head is in the bottom position. The Tool Head Spring is compressed in that position and can throw the Tool Head upwards rapidly, creating a dangerous situation.



Step 2: Remove the Shell Plate.



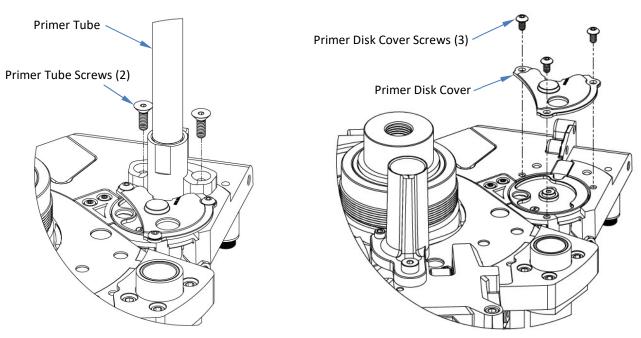
- **a.** Loosen the Shell Plate Nut Set Screws (qty 4) using a 1/8" Allen Wrench.
- **b.** Remove the Shell Plate Nut.
- **c.** Loosen Retaining Station #2 and Retaining Station #10. There are two 6-32 screws (use a 7/64" Allen Wrench), and one 4-40 set screw (use a .050" Allen Wrench) on each retaining station.
- d. Remove the Shell Plate Spring.
- e. Using a 1/16" Allen Wrench, loosen the Eject Finger screws and rotate the Eject Finger upwards and out of the way.
- **f.** Push and hold the Case Feed Ram inside the Case Feed Housing (spring-loaded) and Remove the Shell Plate.



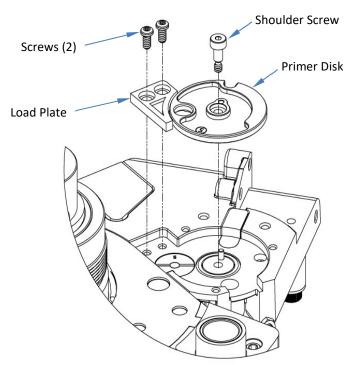


Step 3: Remove the Primer Disk

- **a.** Remove the Primer Tube Screws (qty 2) using a 3/32" Allen Wrench. Remove the Primer Tube.
- **b.** Remove the Primer Disk Cover Screws (qty 3) using a 5/64" Allen Wrench. Remove the Primer Disk Cover.



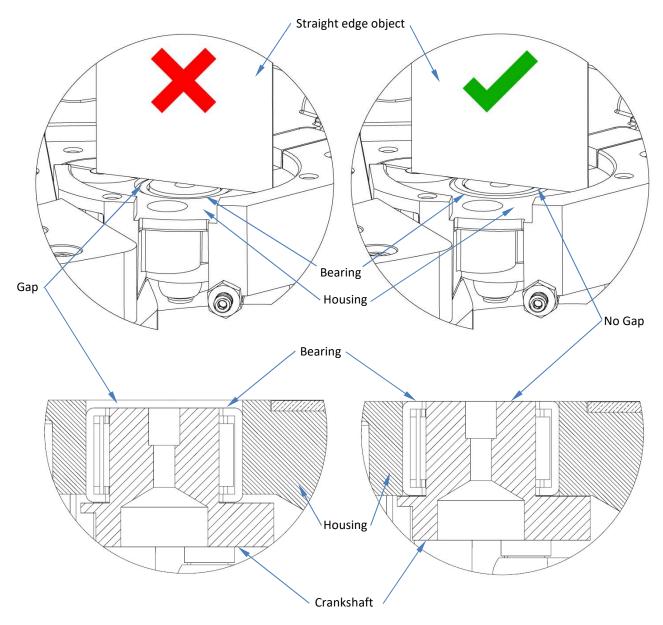
- **c.** Remove the two screws holding the Load Plate in place using a 5/64" Allen Wrench. Discard the screws and the original Load Plate
- **d.** Remove the Shoulder Screw using a 3/32" Allen Wrench. Remove and discard the original Primer Disk. Save the Shoulder Screw for use later.





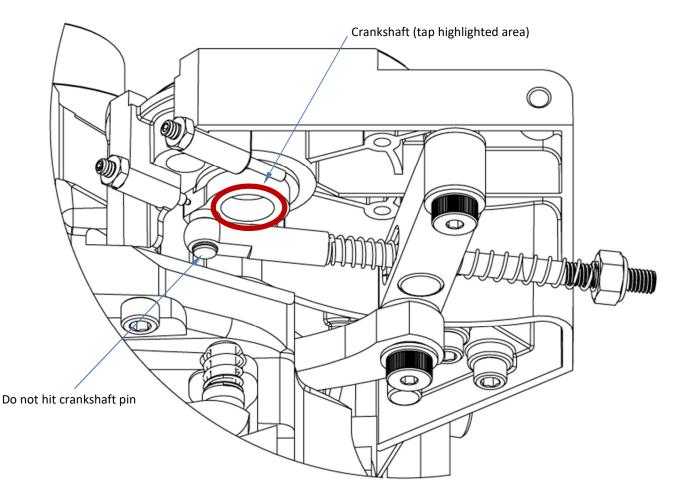
Step 4: Bearing Height Verification

- **a.** Under certain scenarios, there is a possibility that the previous revision Primer Disk may have displaced the main bearing. Its position needs to be verified before replacing the Primer Disk. The center of the bearing must be flush or slightly higher than the Primer Housing surface (see drawing below).
- b. Using a straight edge (a business card or similar object can be used), ensure the bearing has not been pushed down into Primer Housing. When the straight edge is placed over the bearing, it should be clear that the bearing is flush with the Primer Housing or slightly higher than the Primer Housing. If there is any gap between the straight edge and the bearing, this indicates that the bearing has been pushed down into the Primer Housing and will need to be reset. A flashlight can be used during this test to help determine if there is a gap or not (shine the light from behind the straight edge and look for light coming through a gap).





- c. If the bearing has been pushed into the housing, tap the bearing from underneath until flush.
 - 1. Locate the Crankshaft underneath the Priming System Housing.
 - 2. Using a brass hammer or rubber mallet, tap the Crank's highlighted area until bearing is flush (refer to the drawings in Step 4b).



<u>Caution!</u> Do not use a steel hammer.

<u>Caution!</u> Do not hit the Crankshaft pin.

<u>Caution!</u> Do not operate the machine without primer disk installed.

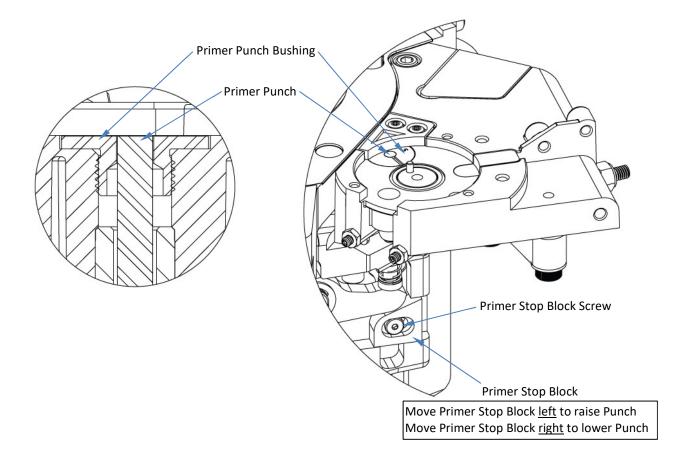
NOTE: It is critical that the Bearing height is correct for proper operation. If you have difficulty resetting the bearing height, please contact the Mark 7 Reloading Technical Support Department:

Call: 888-462-7577, option 3 (9am – 4pm EST) E-mail: support@markvii-loading.com



Step 5: Primer Disk Reinstallation

NOTE: Prior to installing the new disk, verify the resting Primer Punch is flush with the Primer Punch Bushing. Adjust the Primer Punch height if needed by moving Primer Stop Block. Tighten the Primer Stop block Screw using a 5/64" Allen Wrench after adjustment (see drawing below).

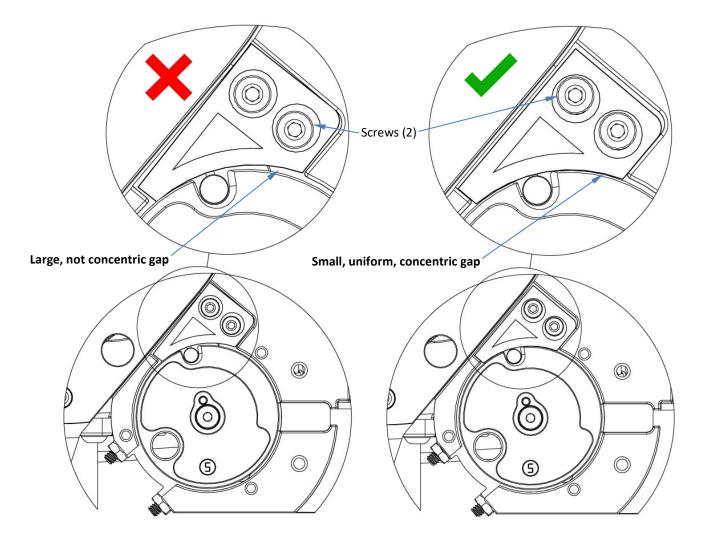




- **a.** Install the new Primer Disk and secure it with the Shoulder Screw using a 3/32" Allen Wrench (refer to the drawings in Step 3).
- **b.** Install the new Load Plate and new screws. Leave screws loose (refer to the drawings in Step 3).
- c. Position the Load Plate so that there is a very small and uniform gap between it and the Primer Disk. A piece of paper or thin strip of material may be used as a shim. Strive for a smallest gap possible between the Load Plate and the Primer Disk. Make sure the gap is uniform and concentric.
- **d.** Tighten the two screws using a 5/64" Allen Wrench. <u>Do not overtighten</u> (see Caution below).

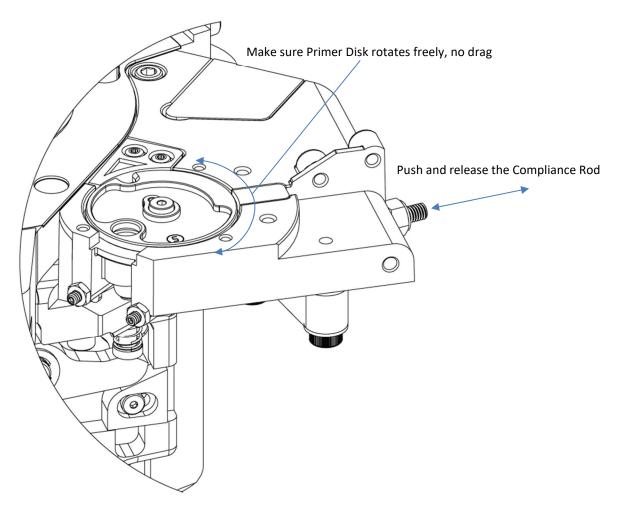
NOTE: It is critical to install the Load Plate as close and concentric to the Primer Disk as possible without binding. After tightening screws, move the disk to ensure no binding occurs.

<u>Caution!</u> Do not overtighten the two Screws. Overtightening can permanently deform the plastic Load Plate.





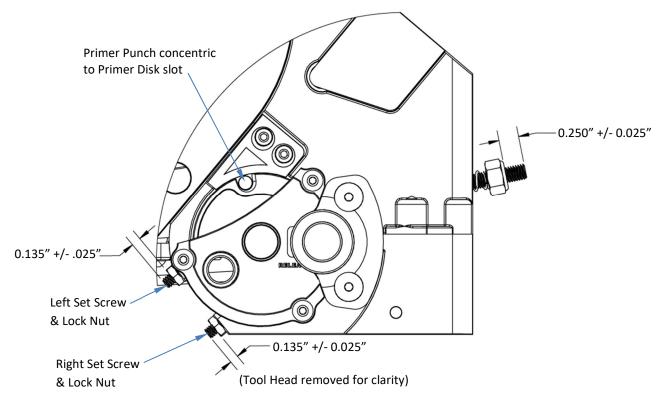
e. Push and release the Compliance Rod in the direction shown in the drawing below. Make sure the Primer Disk rotates in both directions smoothly without any drag. If there is no drag, insert a Primer and repeat the test to assure that there is still no drag and the operation is smooth. Remove the Primer when finished.



- **f.** Reinstall the Disk Cover, Primer Tube, Shell Plate, Retaining Spring, Shell Plate Nut, Tool Head Spring, Tool Head, Tool Head Washer and Tool Head Screw. Follow the sequence described in Steps 1-3 in reverse order.
- **g.** Repeat the test with the Compliance Rod to assure the Primer Disk still moves smoothly in both directions without any drag.



- **h.** Verify the disk start and stop positions. Adjust the set screws as needed to assure correct alignment.
 - Move the Tool Head to its top position. Make sure the primer feeds into the Primer Disk properly. Adjust the Primer Disk position if needed. To adjust, release the Right Lock Nut using a 1/4" Open-End Wrench and adjust the Right Set Screw using a 1/16" Allen Wrench, securing the Lock Nut when adjustment is complete.
 - Move the Tool Head to its bottom position. Make sure the Primer Punch is concentric to the Primer Disk slot. If adjustment is needed, release the Left Lock Nut using a 1/4" Open-End Wrench and adjust the Left Set Screw using 1/16" Allen Wrench, securing the Lock Nut when adjustment is complete.
 - Nominal dimensions are shown below, but adjustments may be needed as per the instructions above.



After all adjustments have been made, please verify the following:

- Tool Head Dies have been set up properly
- Primer Pocket is being properly swaged
- Shell Plate index has been adjusted correctly
- Press has been properly calibrated (if press is automated)

More information can be found on the Mark 7 website: <u>https://www.markvii-loading.com</u>, and helpful videos can be accessed here: <u>https://www.youtube.com/c/Mark7Reloading/videos</u>. Contact the Mark 7 Reloading Technical Support Department if there are any questions regarding the above verifications:

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