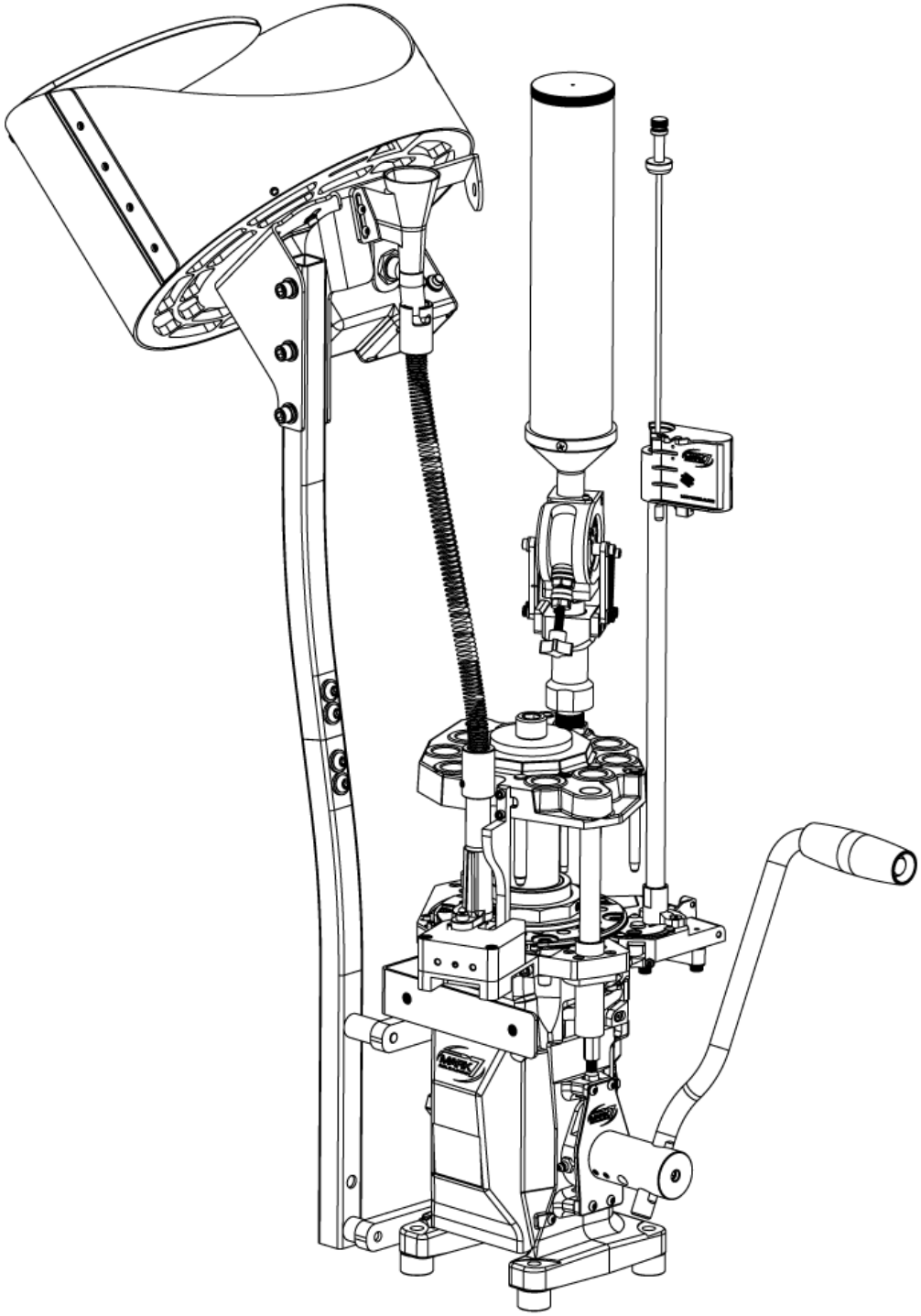
# Mark 7® APEX 10™

**User Manual V 1.2**



**Read this manual. Understand all safety and operating instructions. Failure to comply with the warnings and instructions may result in serious injury, illness or even death.**

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# Important Safety Instructions

Read this manual completely prior to installation and operation. Understand all safety and operating instructions. Failure to comply with the WARNINGS and instructions may result in serious injury or death. WARNINGS throughout this manual will be symbolized by the yellow WARNING symbols seen below.

**WARNING** – Activities using the Mark 7® APEX 10™ are inherently dangerous and may lead to injury and even death. Actions because of using the Mark 7® product are solely the responsibility of the user – if you get injured through the reloading process or through the use of ammunition as a result of the reloading process it is your fault.

**WARNING -** Mark 7® equipment should only be operated by trained personnel that follow all safety precautions. Failure to do so could result in serious injury or death.

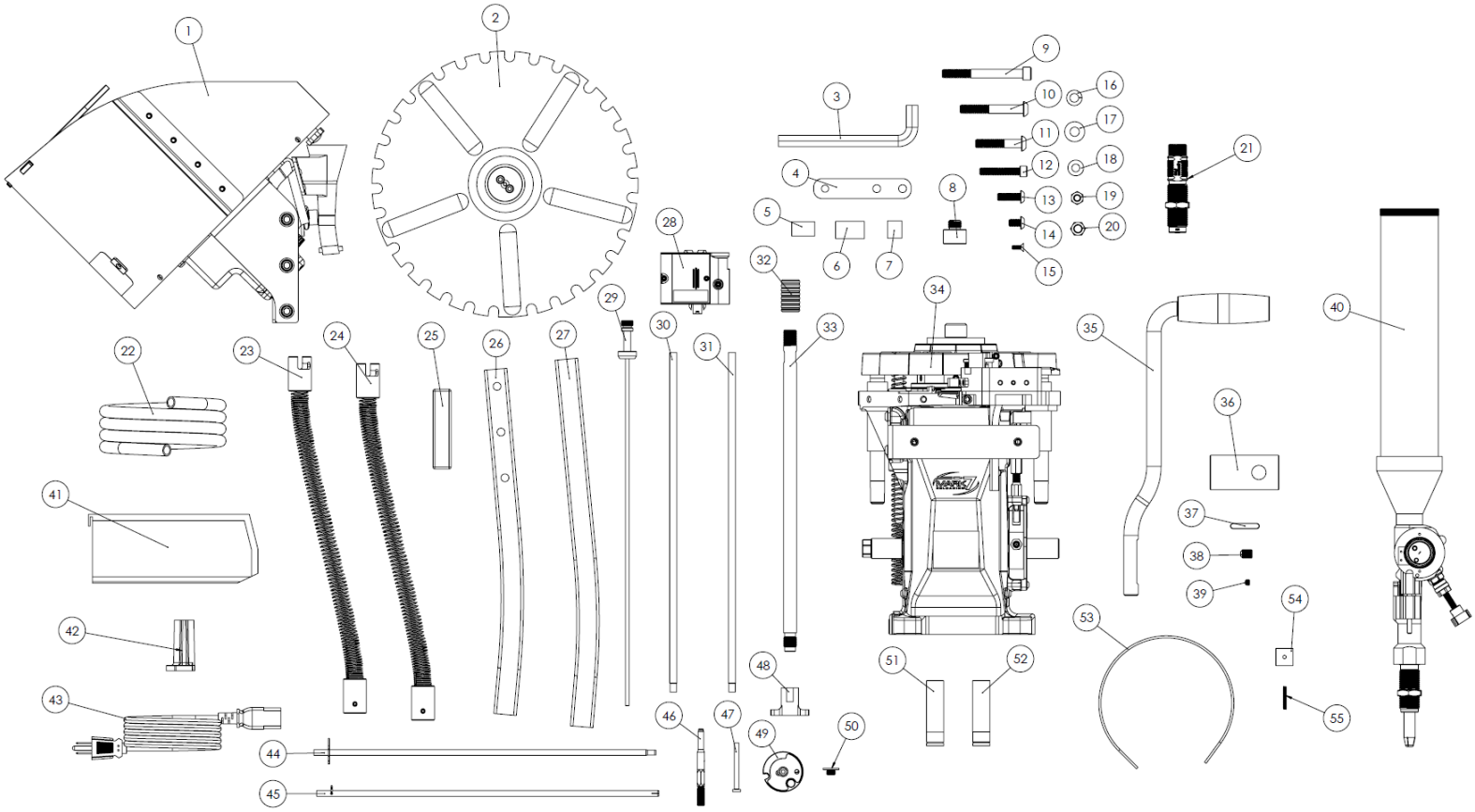
**WARNING** – Never operate the Mark 7® APEX 10™ while impaired.

**WARNING** – Never operate the Mark 7® APEX 10™ without using high quality brass and always use sufficient lubrication on your brass while operating the Mark 7® APEX 10™.

**WARNING** – Always wear protective eyewear to protect eyes from being injured. Flying debris may result when using this equipment. Always wear protective clothing that covers arms, legs, and neck to protect from injury. It is the responsibility of the user to ensure that appropriate protective clothing and equipment are used to provide protection from those hazards to which personnel are exposed or could be exposed while working with this product. Failure to do so could result in serious injury or even death.

## Packaging Contents

The APEX 10™ press is packaged in a single corrugated box (26” X 21” X 16"). The main unit is heavy (35+ lbs.) please use caution when handling the package and removing the press core from the main packaging.



| Item No. | Description | QTY |
|---|---|---|
| 1 | 11" High Speed Case Feeder Assembly | 1 |
| 2 | 11" High Speed Case Feeder Plate | 1 |
| 3 | 1/2” Allen Key | 1 |
| 4 | Case Feeder Pole Mounting Bracket | 2 |
| 5 | Spacer, 5/8” OD x 1” L | 1 |
| 6 | Spacer, 3/4” OD x 1 ¼” L | 1 |
| 7 | Spacer, 3/4” OD x 5/8” L | 1 |
| 8 | Press Base Feet | 4 |
| 9 | 3/8"-16 Thread Size, 3-1/2" Long, Partially Threaded, Socket Cap Screw | 4 |
| 10 | 3/8"-16 Thread, 2.75" Long, Button Head Hex Screw | 1 |
| 11 | 3/8"-16 Thread, 2" Long, Button Head Hex Screw | 1 |
| 12 | 5/16”-18 Thread, 1.75" Long, Socket Head Cap Screw | 1 |
| 13 | 5/16"-24 Thread, 1" Long, Button Head Hex Screw | 4 |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| | | |
|---|---|---|
| 14 | 5/16”-18 Thread, .5" Long, Button Head Hex Screw | 8 |
| 15 | 8-32 Thread, .5” Long, Flat Socket Head Screw | 2 |
| 16 | 3/8" Lock Washer, Stainless Steel | 4 |
| 17 | 3/8" Screw Size, 0.406" ID, 0.875" OD, Standard Washer | 4 |
| 18 | 5/16” Screw Size, .344” ID, 0.6875” OD, Standard Washer | 8 |
| 19 | 5/16”-18 Hex Nut | 1 |
| 20 | 3/8"-16 Lock Nut | 4 |
| 21 | Lyman Pro Universal Hold Down Die | 1 |
| 22 | Primer Offload Clear Hose | 1 |
| 23 | Case Feeder Output Spring, Small | 1 |
| 24 | Case Feeder Output Spring, Large | 1 |
| 25 | Pole Adapter | 1 |
| 26 | Case Feeder Upper Pole | 1 |
| 27 | Case Feeder Lower Pole | 1 |
| 28 | Primer Back Up Rod | 1 |
| 29 | Low Primer Sensor | 1 |
| 30 | Primer Tube Inner, Small | 1 |
| 31 | Primer Tube Inner, Large | 1 |
| 32 | Primer Tube Cap | 1 |
| 33 | Primer Tube Outer | 1 |
| 34 | Apex Press Main Unit | 1 |
| 35 | Handle Assembly | 1 |
| 36 | Handle Adapter | 1 |
| 37 | Main Shaft Crank Key | 1 |
| 38 | Set Screw 3/8"-24 Thread, 1/2" Long | 1 |
| 39 | Set Screw 1/4"-20 Thread, 3/16" Long | 2 |
| 40 | Mechanical Powder Measure | 1 |
| 41 | Offload Bin | 1 |
| 42 | Case Feed Adapter | 1 |
| 43 | Case Feeder Powder Cord | 1 |
| 44 | Primer Pick Up Tube, Small | 1 |
| 45 | Primer Pick Up Tube, Large | 1 |
| 46 | Swage Rod Upper* | 1 |
| 47 | Primer Punch* | 1 |
| 48 | Shuttle Primer Disc* | 1 |
| 49 | Primer Tube Base | 1 |
| 50 | Primer Bushing* | 1 |
| 51 | Case Drop Tube - Large | 1 |
| 52 | Case Drop Tube - Small | 1 |
| 53 | Shell Plate Retention Spring | 5 |
| 54 | Fastener-Mount Cable Tie Holder | 4 |
| 55 | Case Retention Spring | 2 |

*One size installed on press; other size separate.

# Unpacking instructions:

Remove the APEX 10™ Press Core and place on a clean work surface.

**WARNING** – The APEX 10 is shipped with the Tool Head in the down position secured with a zip tie. The Tool Head is spring loaded with a heavy-duty spring. Before cutting the zip-tie place an 11/16” wrench on the main shaft to secure the press and gently raise the Tool Head after the zip tie has been cut.

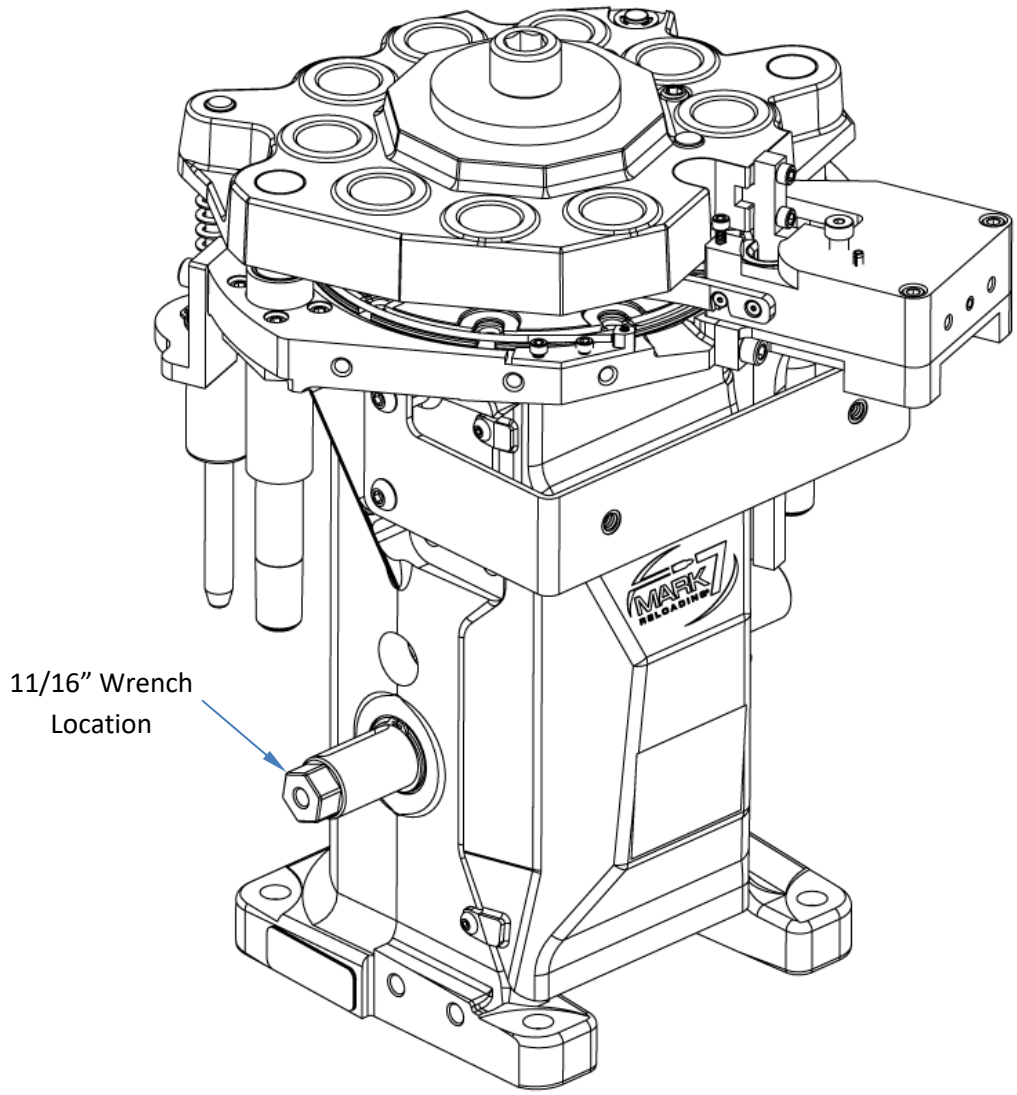


Figure 1: Cutting Zip tie securing Tool Head


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Once the main unit is unpacked and placed on a workbench the APEX 10™ press can be setup a fitted with the accessories. We recommend the following setup order:



## 1. Installing Base Plate Risers spacers

Thread in the 4 baseplate risers into the bottom of the press. Apply grease to the threads for easy installation.

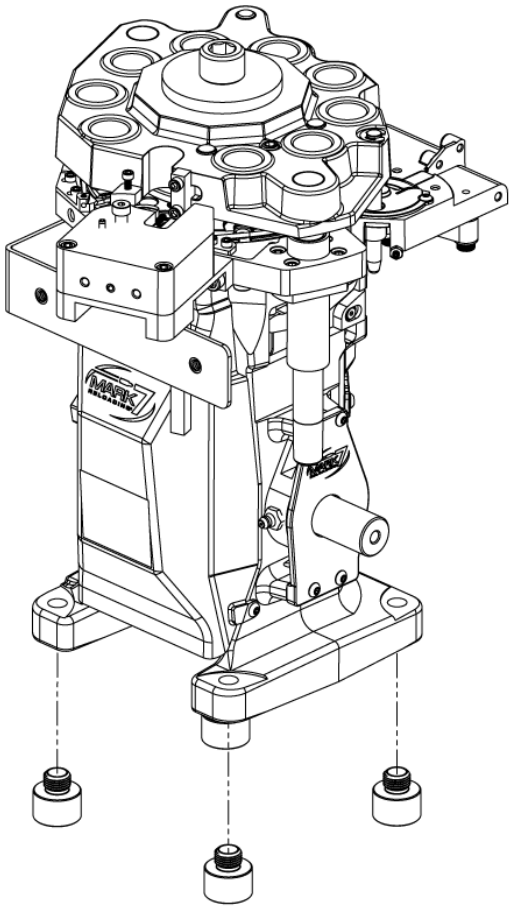

Figure 2: Installing Baseplate Riser Feet

## 2. Mounting to workbench and Handle installation

Next determine the location to mount the press on your reloading workbench. We recommend installing the handle first and lower the Tool Head to the down position to make sure the handle clears the leading edge of the bench. To install the handle first insert the shaft key as shown in the figure below then slide on the handle shaft adapter and lock in place with the 2 x ¼"-20 set screws. Insert the handle and secure in position with the 3/8" Set screw. The handle can be installed on either the right side or left side of the press.

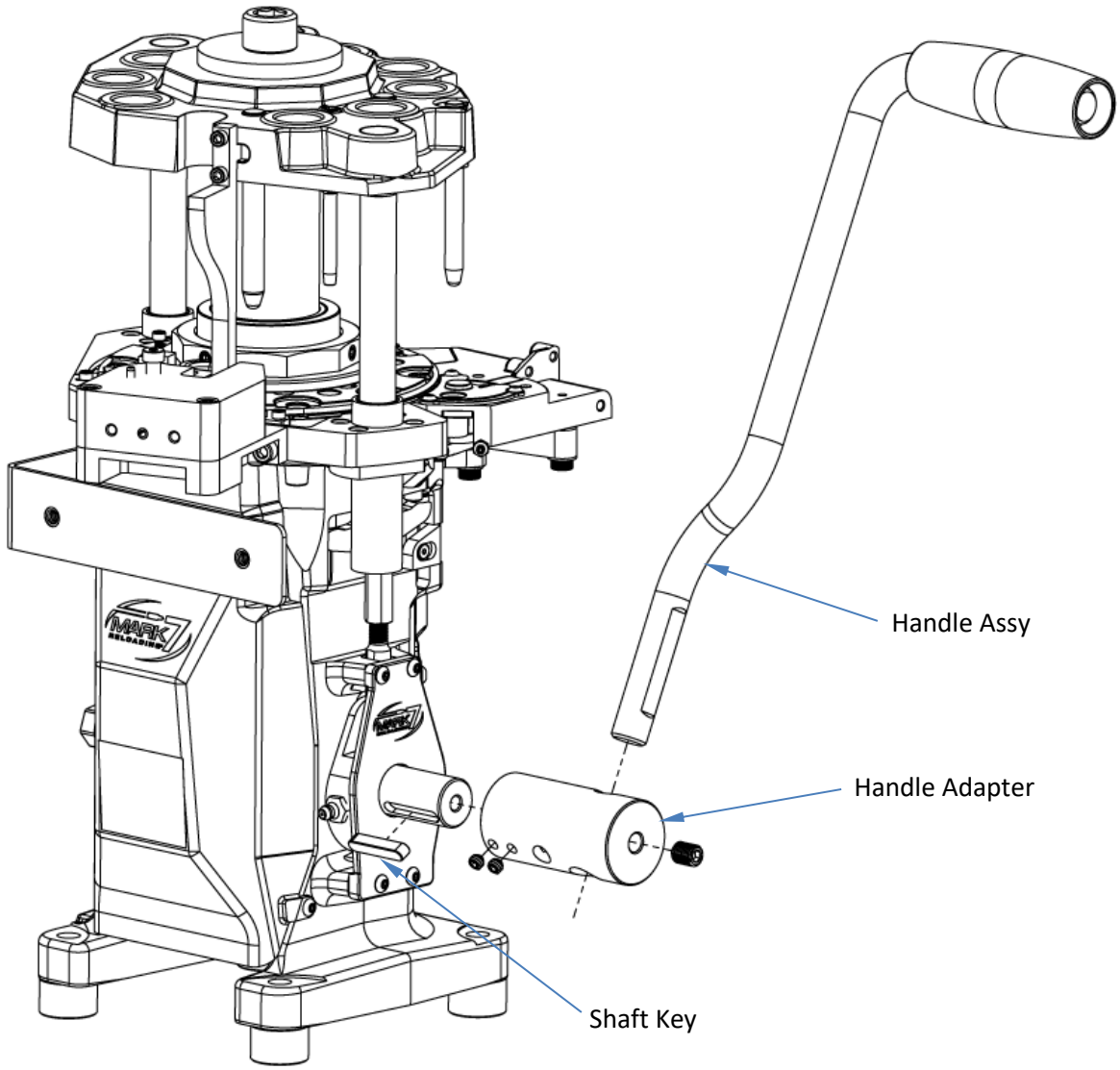


Figure 3: Installing Handle Assy (Note: can be installed on either right or left side)


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Position the press so the handle does not contact the leading edge of the workbench, while tool head is in the bottom position. Using the machine as a template mark the 4-hole locations. For reference, the baseplate mounting holes are 5” square and need be large enough to clear a 3/8 -16 socket head screw. Mounting hardware is provided with the press.

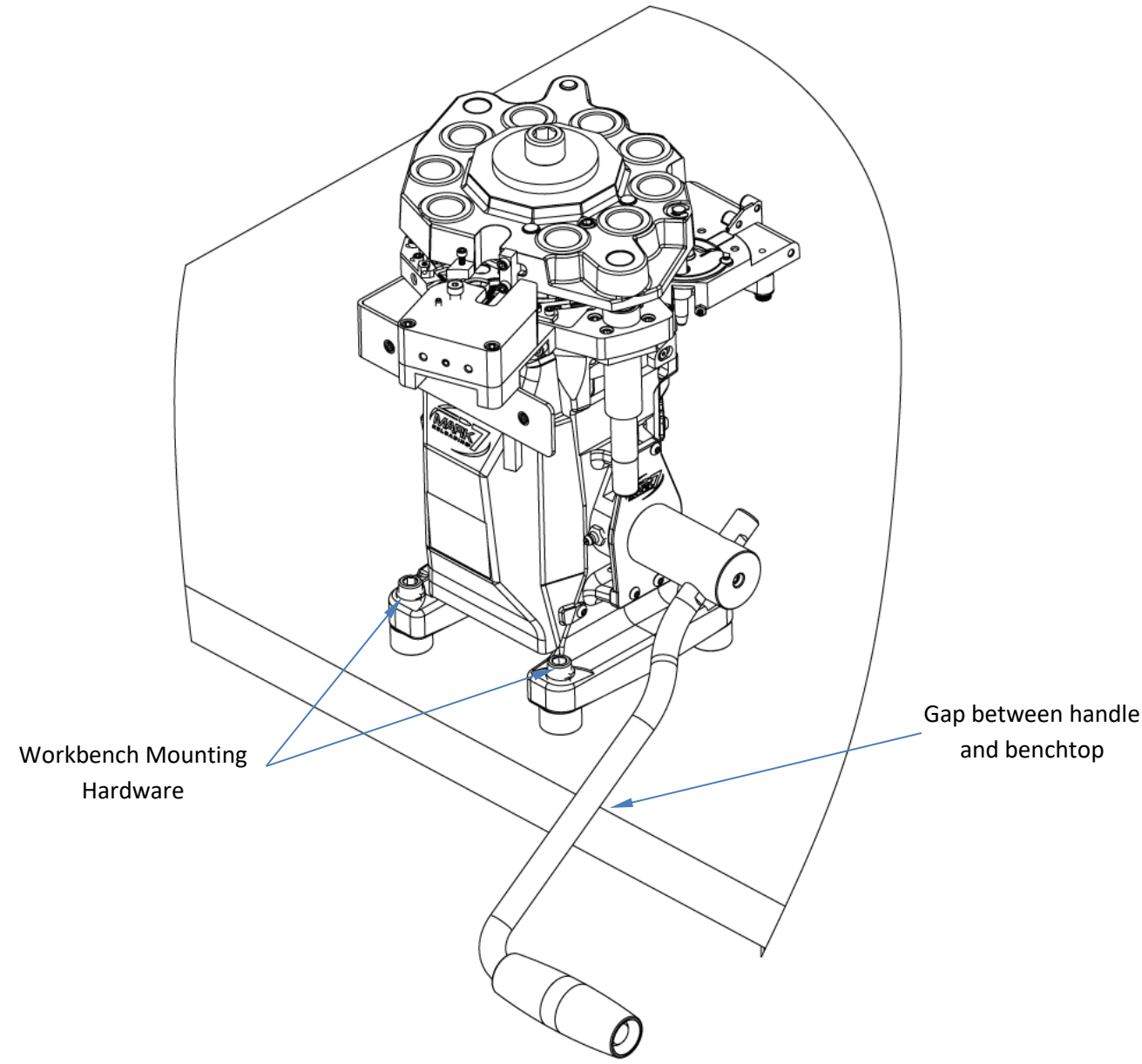


**Figure 4: Mount to workbench with the machine orientated as shown.**

### 3. Case Feeder Installation

Remove the poles and associated hardware from the packaging. Start with installing the pole brackets to the APEX 10 Press (Qty 2). Then install the lower pole to the brackets with the 3/8" screws and 1 ¼" and 5/8" spacers as shown in figure below. Using the pole connector join the two poles together. Wait until the entire assembly is together before doing the final tightening.

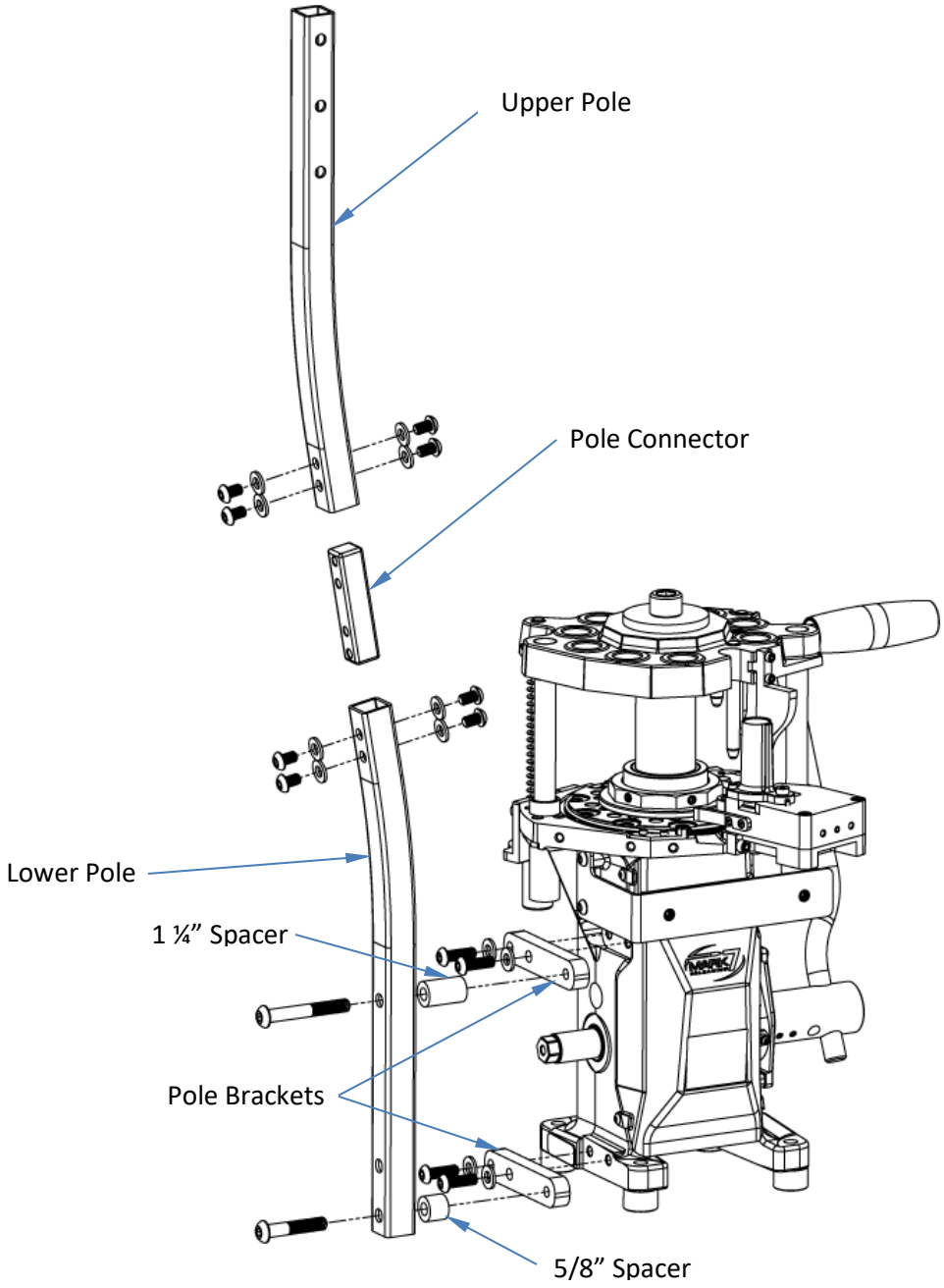


Figure 5: Case Feeder Pole Mounting Hardware


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Slide the top of the pole into the mounting bracket on the Case Feeder and secure it with the 5/16" screws. Insert the Case Feeder plate into the bowl and onto the motor shaft. Rotate the plate until the pins on the motor shaft engage the slots in the bottom of the Case Feeder Plate. There are 4 Case Feeder plates SM P, LG P, SM R, LG R – confirm the correct plate is included for the machine's caliber. Install the top cover by sliding the three tabs into the openings at the back of the Case Feeder bowl. Install the power cord into the side of the case feeder and into an appropriate power outlet.

**Note:** For normal operation, the Case Feeder Plate should rotate clockwise when looking down into the unit.

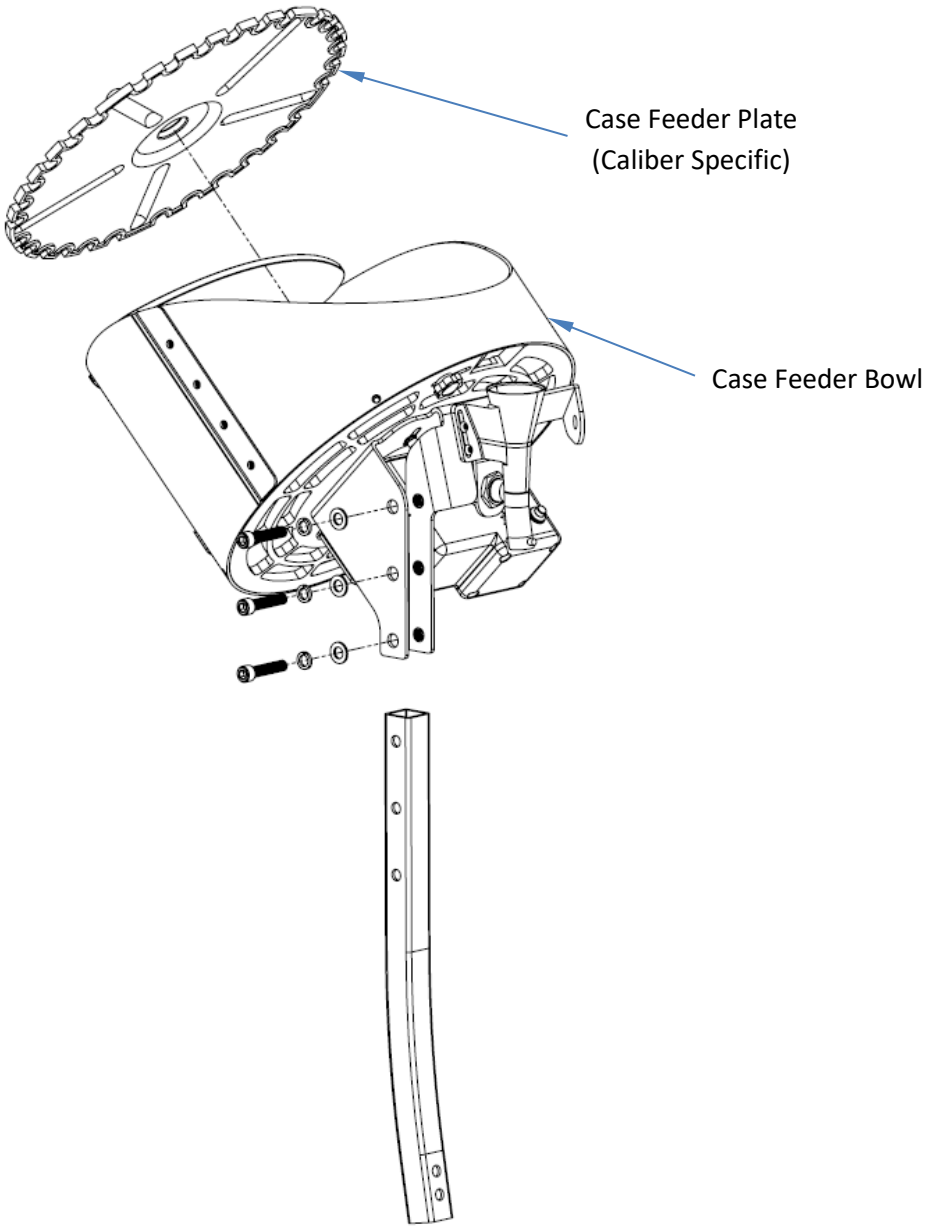


Figure 6: Installing the Case Feeder and plate

**Case Feeder Funnel Adjustment:**

Above the opening of the case funnel there is a door that can be adjusted for opening size. Start with the door in a center location. Adjust the opening to increase or decrease as needed to allow cases to cleanly drop into the funnel. The opening may need to vary depending on case length and motor speed.

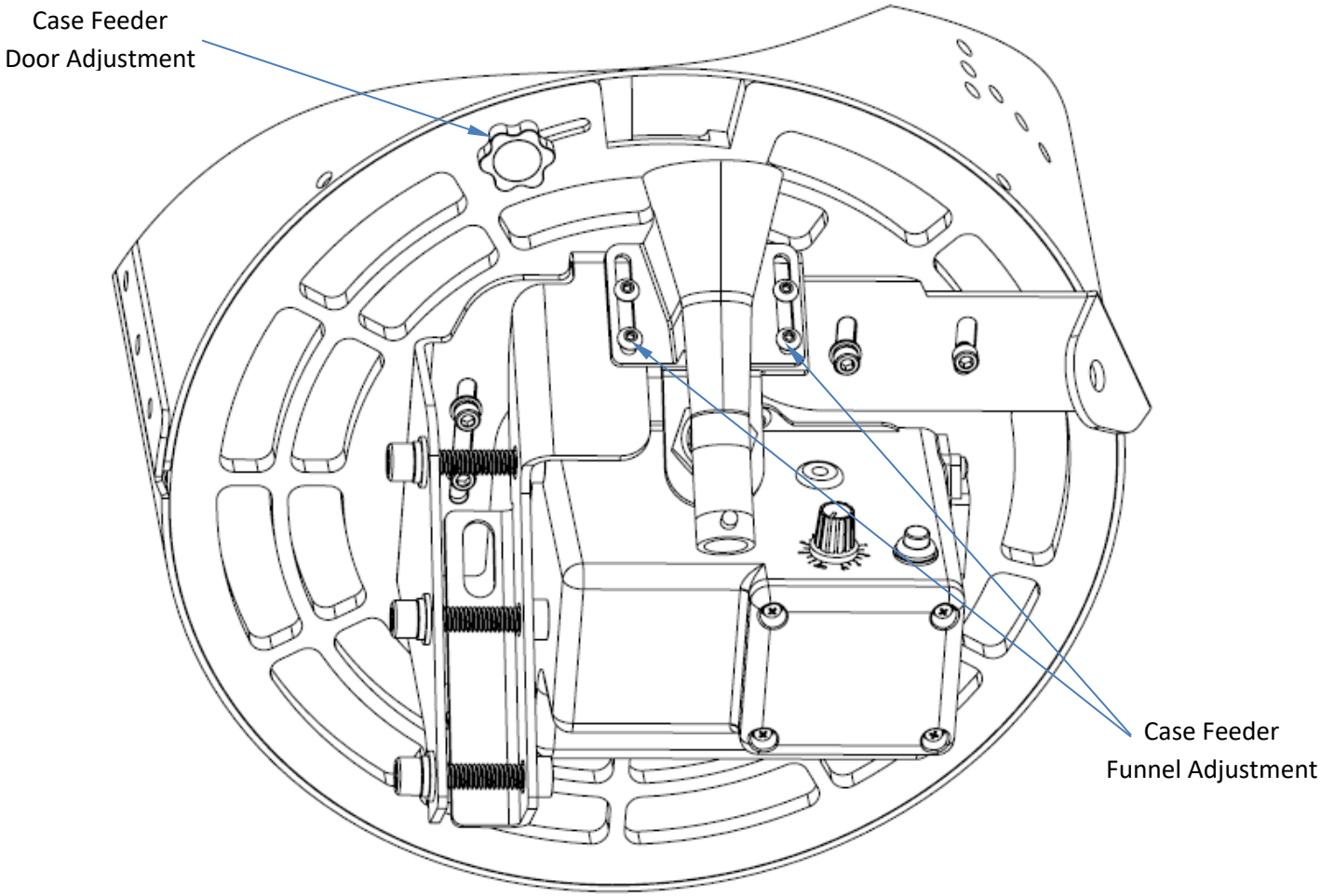


Figure 7: Adjusting Case Feeder Outputs


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The flow of cases is controlled by a Proximity Sensor which is located behind the case feeder funnel. The sensor will shut-off the motor when a case is positioned in front of it and turn it on when there are none in front of it. For best results, the sensor should be positioned as close to the case feeder funnel as possible. The sensor's position can be adjusted by loosening the two jam nuts and moving the sensor forward and back. There is also a small set screw on the back of the sensor which can be used to adjust its sensitivity. Turning it clockwise will increase sensitivity. It is factory set and **should only be adjusted if a problem with sensing occurs**. Adjust is small 1/8 turn increments. If sensitivity is set too high, the sensor will not function correctly.

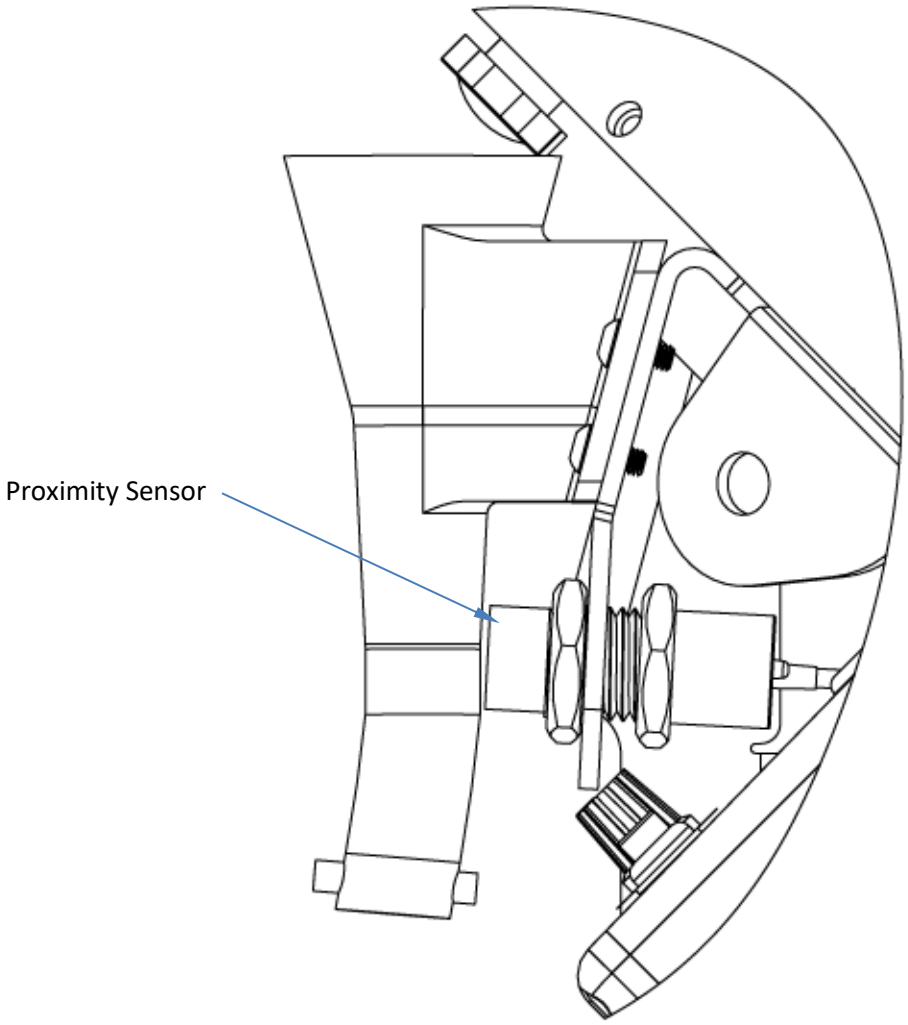


**Figure 8: Case Feeder Proximity Sensor adjustment.**

**Case Feeder Adapter and Drop Tube Assy installation:**

Install the Case Feed Adapter with shoulder screw and socket cap screw provided to the Case Feed Upper Housing. The Case Feed Adapter is designed to rotate out 90 degrees for quick removal of cases in the Drop Tube assy.

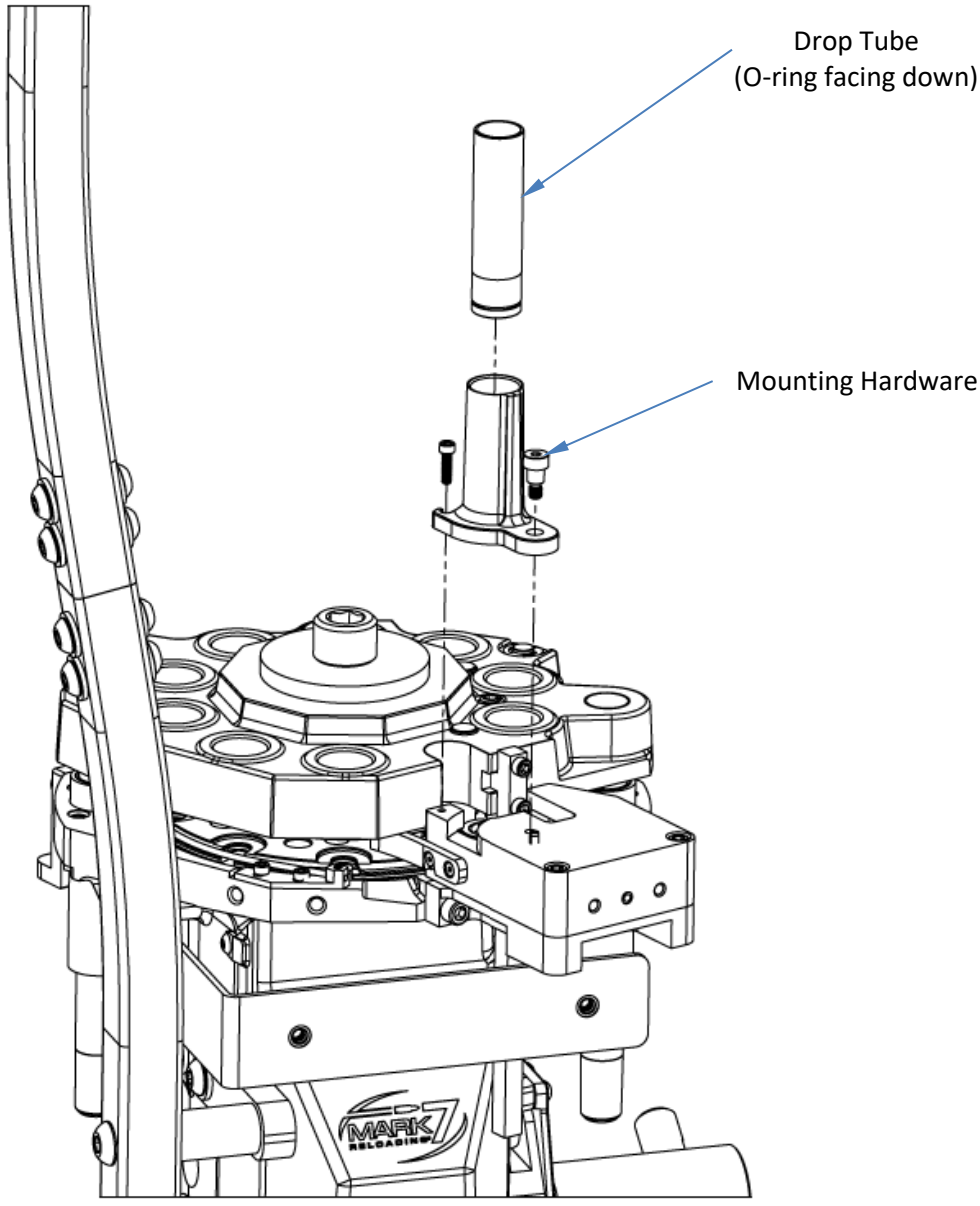


Figure 9: Case Feed Adapter installation.


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Install the spring assembly between the Case Feeder housing and the Case Feed adapter as shown below. The “bayonet” style funnel attachment makes the Feeder Spring easy to remove and attach, simply slide it over the lugs and turn slightly.

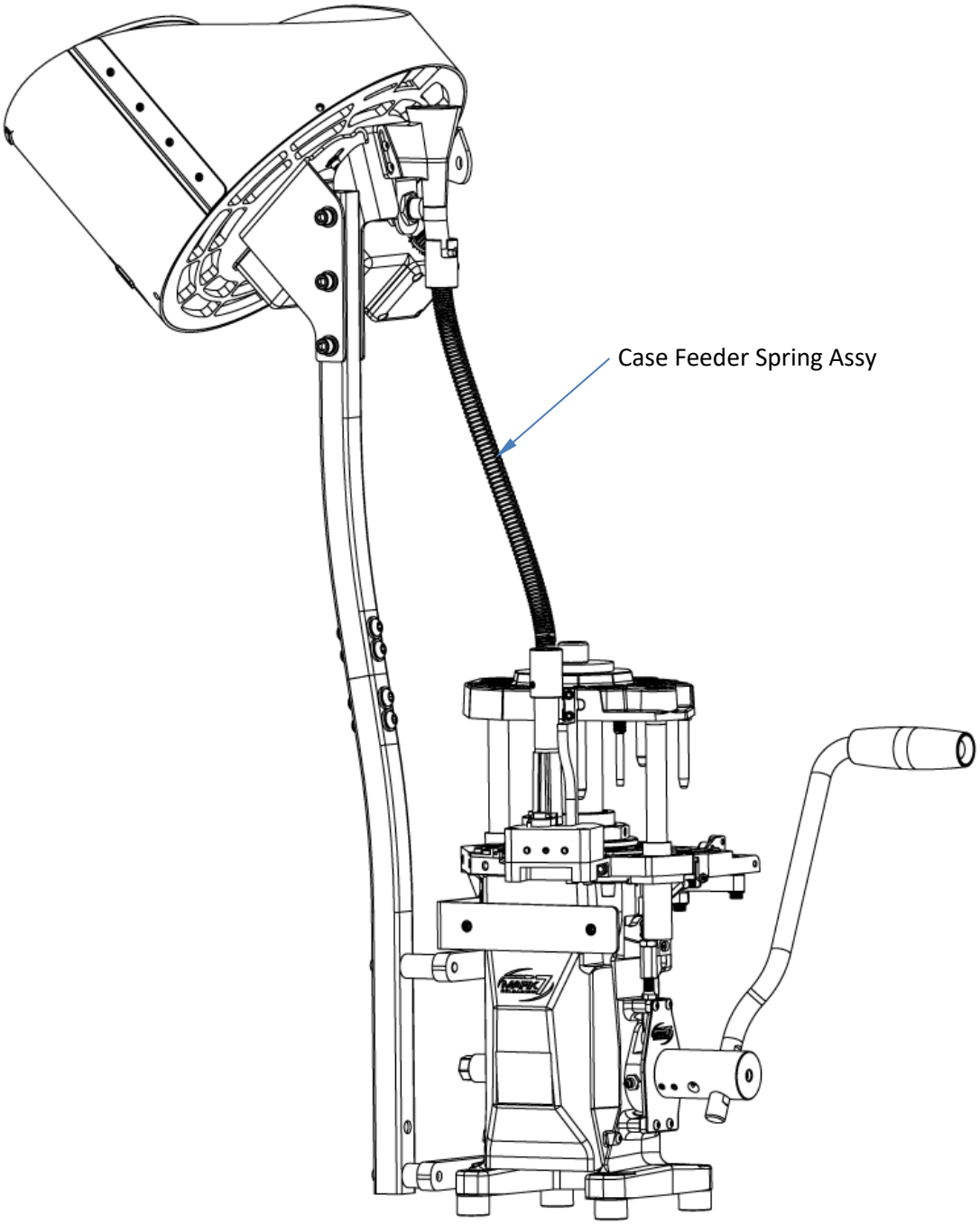


Figure 10: Case Feeder Assy Installed

## 4. Installing Primer Tube Stack Assy and Low Primer Alarm

Using the mounting hardware provided 8-32 flat head screws (QTY 2) mount the primer tube assembly to the primer housing.

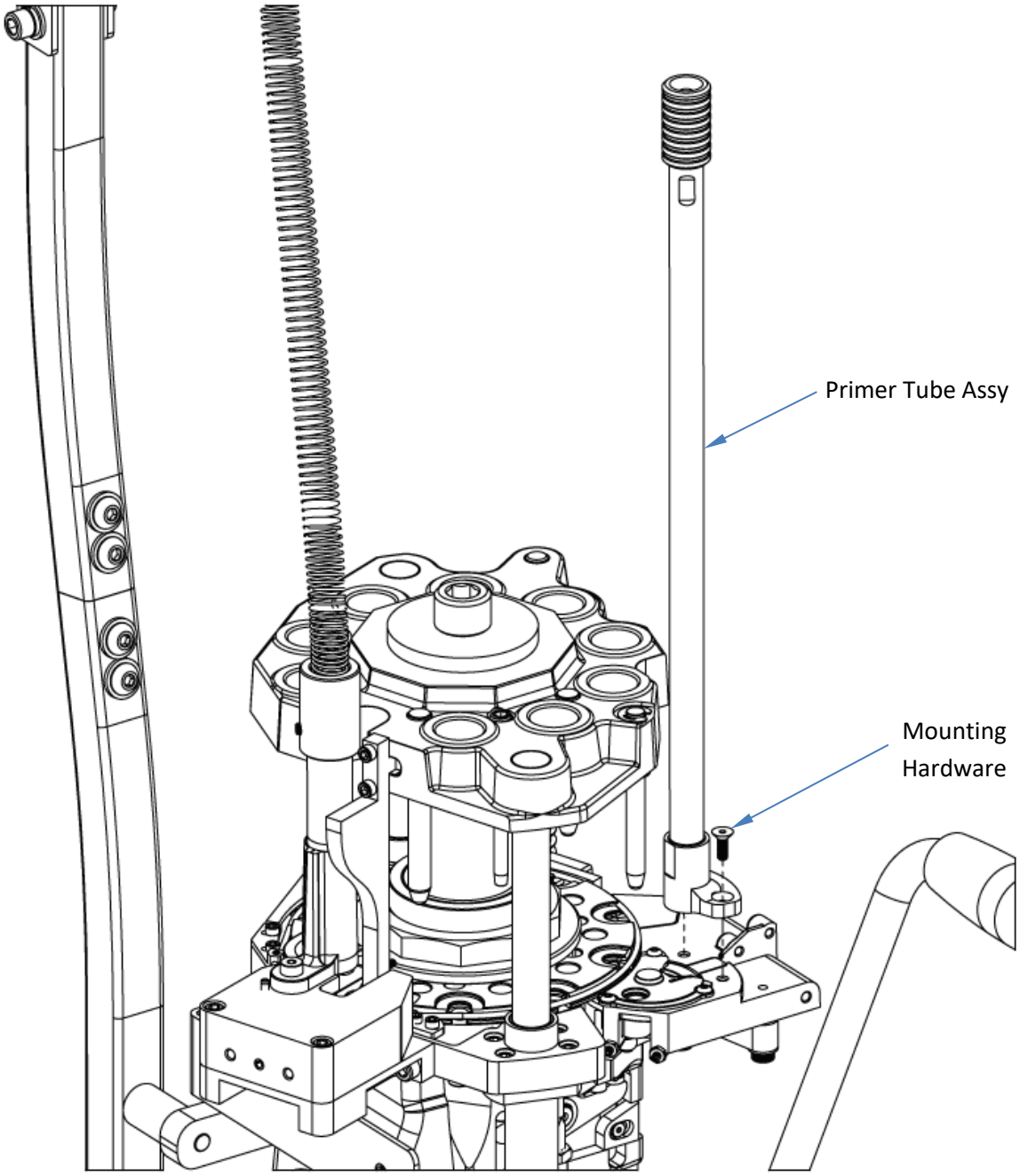


Figure 11: Installing Primer Tube Assy


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Install the PrimerSense® onto the primer tube assembly. Then install the primer back up rod. Once the sensor is oriented in the desired position tighten the setscrew to lock in place.

**Note: If connecting the APEX 10™ to an autodrive platform remove the battery before powering on the machine.**

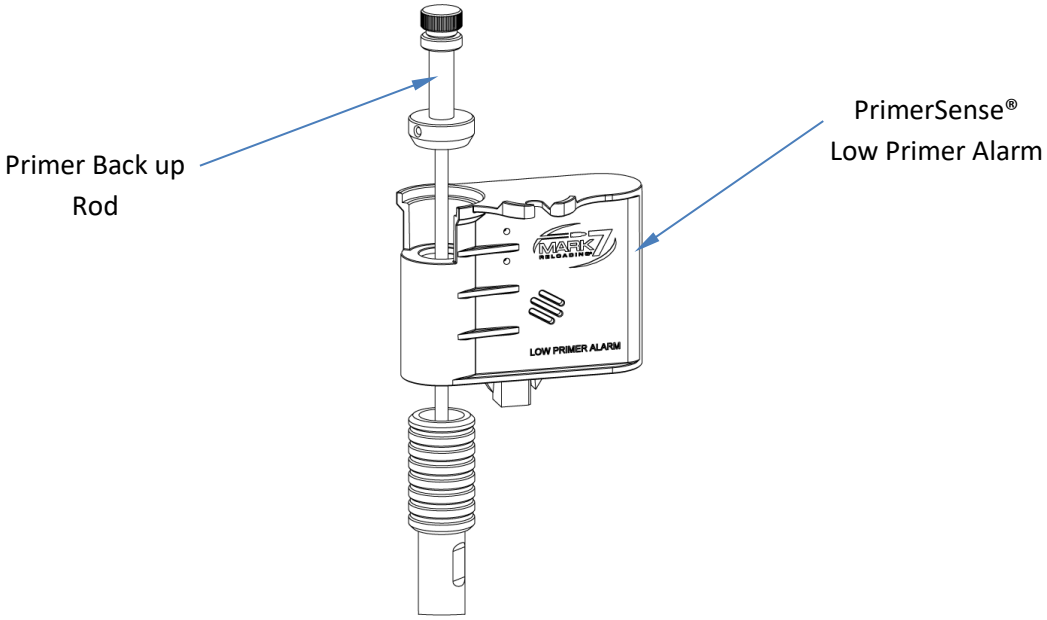


Figure 12: Low Primer Sensor (Front) exploded view

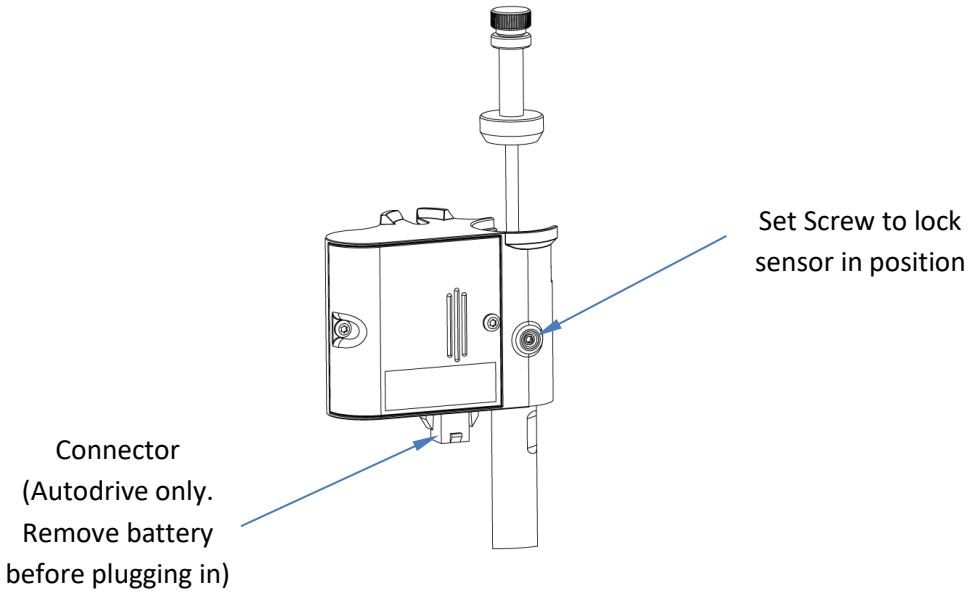


Figure 13: Low Primer Sensor (Rear)

## 5. Powder Measure Installation

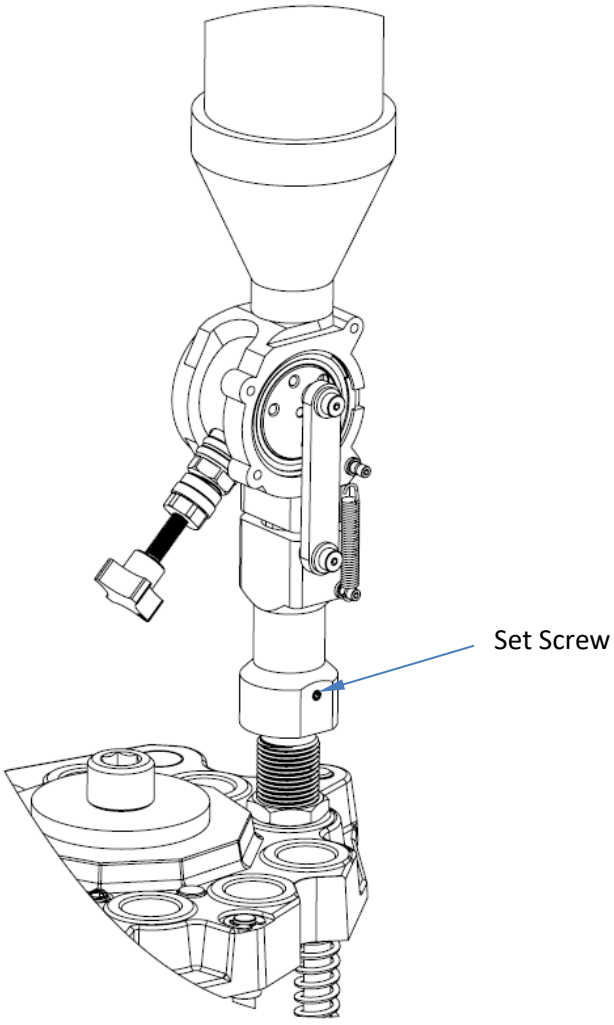


Figure 14: Installing the Powder Measure

Install the Powder Measure onto the Tool Head in station 6. The Powder Measure comes secured to the die and can be threaded into the Tool Head as a complete assembly. Install the die about halfway into the Tool Head and then loosen the set screw locking the lower housing to the die. Lock the die in place and then rotate power measure so the charge adjustment lever is facing the center of the press as shown in Figure 15. Final die adjustment and tightening will be performed later.


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## 6. Mr.Bulletfeeder Installation and Setup (Not included in standard package)

Install the Bullet Feeder on the side of the Case Feeder with the bowl opening towards the press as shown below. There is also a mounting bracket on the side of the Case Feeder that can be used for this purpose. Use the supplied 1” spacer between the bracket and the feeder as shown. The Bullet Feeder should be installed at approximately a 45-degree angle. Refer to the Mr.Bulletfeeder for specific instructions on mounting. Install the bullet drop tube assembly in station #8. The spring may be required to be cut down for proper bullet feeding.

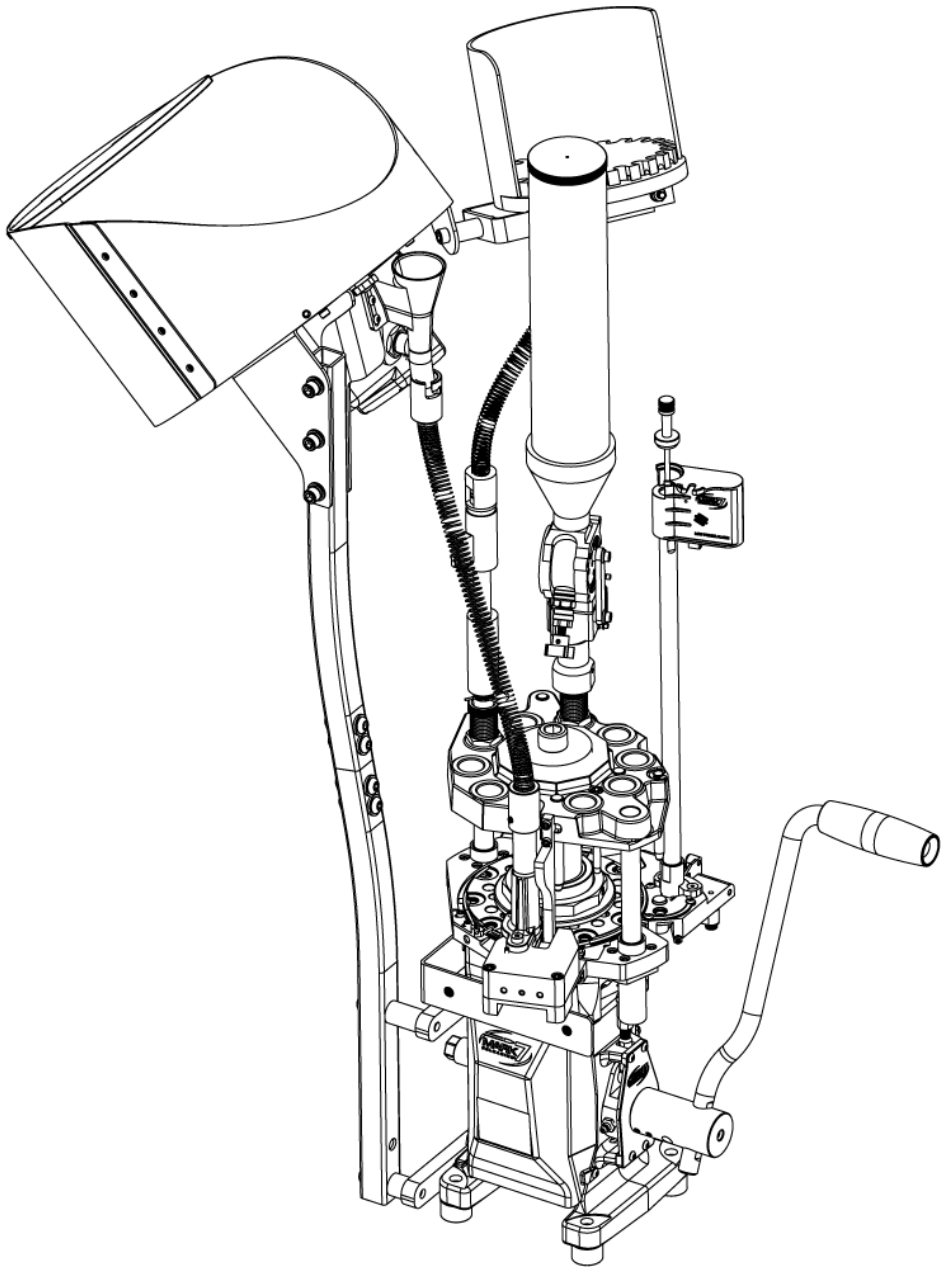

Figure 15: APEX 10 with Mr.Bulletfeeder installed

## 7. Tool Head Recommended Die Positions

With 9 available Tool Head die locations there are many setups the Apex 10™ can be configured/customized for to achieve your loading/processing requirements. We recommend the following setup for standard processing and loading in one pass.

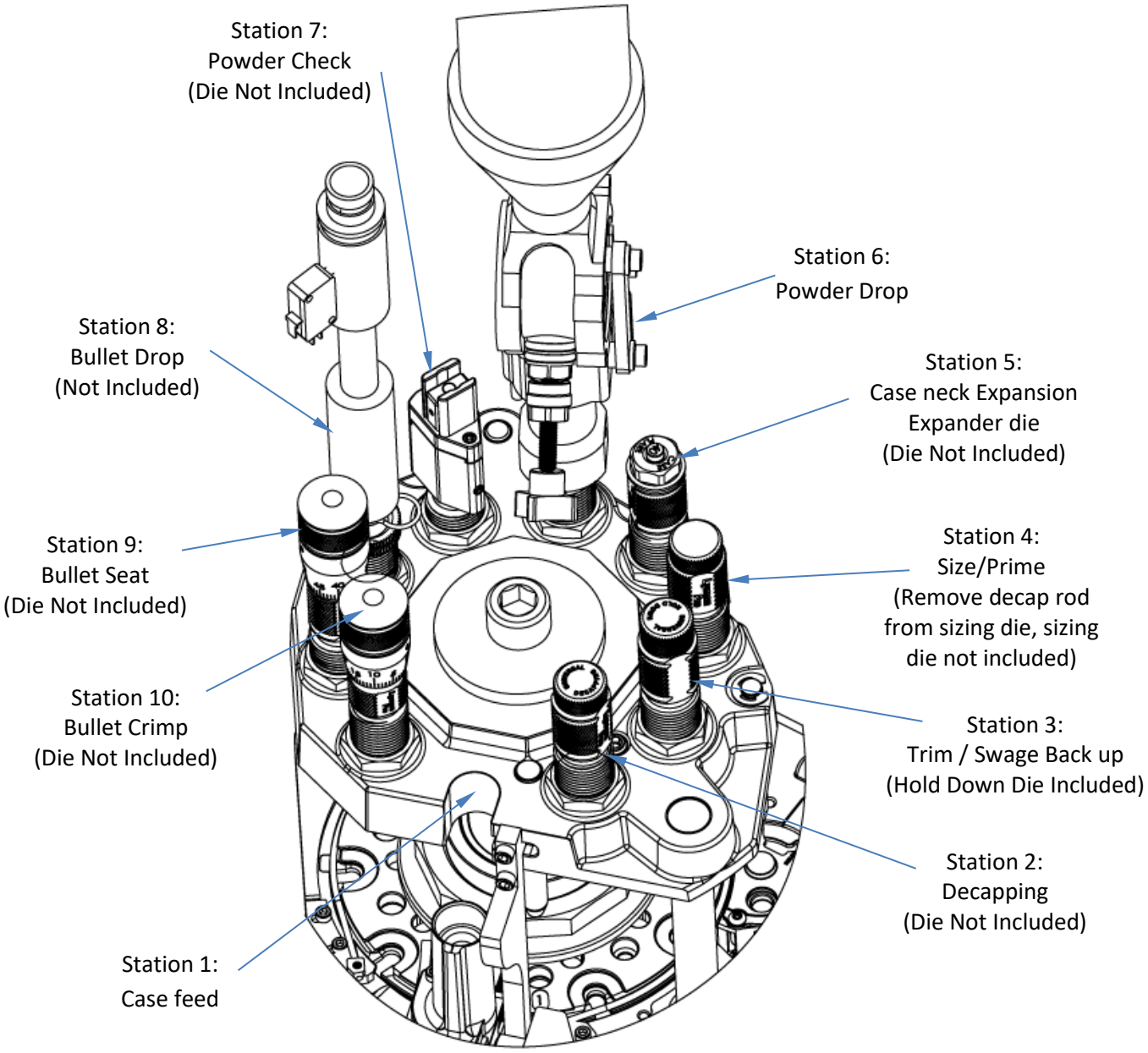


Figure 16: Tool Head Recommended Die Positions


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Once the machine is fully assembled and setup we recommend the following steps to configure the press for operation

- Determine intended use of machine (processing, loading, processing/loading combined and setup press accordingly – please feel free to contact us to discuss your requirements.
- Thread the dies into Tool Head but do not set final adjustments at this time – keep dies partially backed off.
- Cycle the machine a few times without components to ensure smooth operation and proper indexing.

**1. Case feed - sizing/decapping – Station 1 and 2**

Add cases to the Case Feeder in the caliber that you are loading. (Up to about 400 9mm cases or until bowl is about 1/3 full.) Before powering on we recommend detaching case drop tube from the press and directing it into a bucket and running the Case Feeder continuously while watching the cases inside the bowl. The feed plate is equipped with a clutch mechanism to allow the plate to slip in case of a jam or over-load situation. It is factory set; however, adjustment may be required at times. The clutch should be tight enough to allow the plate to rotate with a normal load of cases but slip if an additional load occurs. Note: never fully tighten down the clutch as this could damage the motor. Adjust the opening in the sliding door as needed. The height of the case funnel can also be adjusted up or down as needed, however the factory setting usually works fine for most calibers. The motor speed is adjustable also. Start with the speed at mid-range. This will work for hand operation of the press. If an AutoDrive unit was added, then a faster speed may be required. Note that the Case Feeder is also equipped with a reverse button. If cases were to jam inside the bowl, the motor can be reversed in direction to clear it. Press the button once to make the shell plate turn in reverse and press it again to return to the normal clockwise direction.

Once the Case Feeder is dialed in and the cases are feeding properly re-connect the case drop tube to the press and run a few cases into the machine. Run cases around the shell plate to ensure proper feeding. Install the Akro bin provided with the press to catch the cases as they offload.

Remove the cases from the shell plate and move the Tool head to the down position. Thread the decapping die down until it lightly touches the shell plate. Lock the die in position. Connect the spent primer offloading hose.

Note: Adjust decapping die as necessary to prevent damage to the case flash hole or primer pocket from setting it too low.

## 2. Swage Setup– Station 3

The APEX 10™ is shipped with the swage rod fully backed off in the down position. We recommend cutting an empty case in half (cross-section) and insert it into the shell plate in station 3.

- Move the Tool head to the bottom.
- Lower a swage back up die until the center contacts the bottom of the case. Lower a ¼ turn and lock down. NOTE: If your swage back up die does not have compliance, do not lower it ¼ turn.
- Raise the swage rod until the swage rod enters the primer pocket and the shoulder contacts the bottom of the case. Turn ¼ more and lock in place.
- Remove the case used to adjust the rods and install a case that has been previously decapped.
- Perform a cycle with the case in station 3 -then remove and inspect the primer pocket to confirm that the pocket is swaged properly. Adjust as needed.
- We recommend using a primer pocket gauge especially if using crimped/military brass.

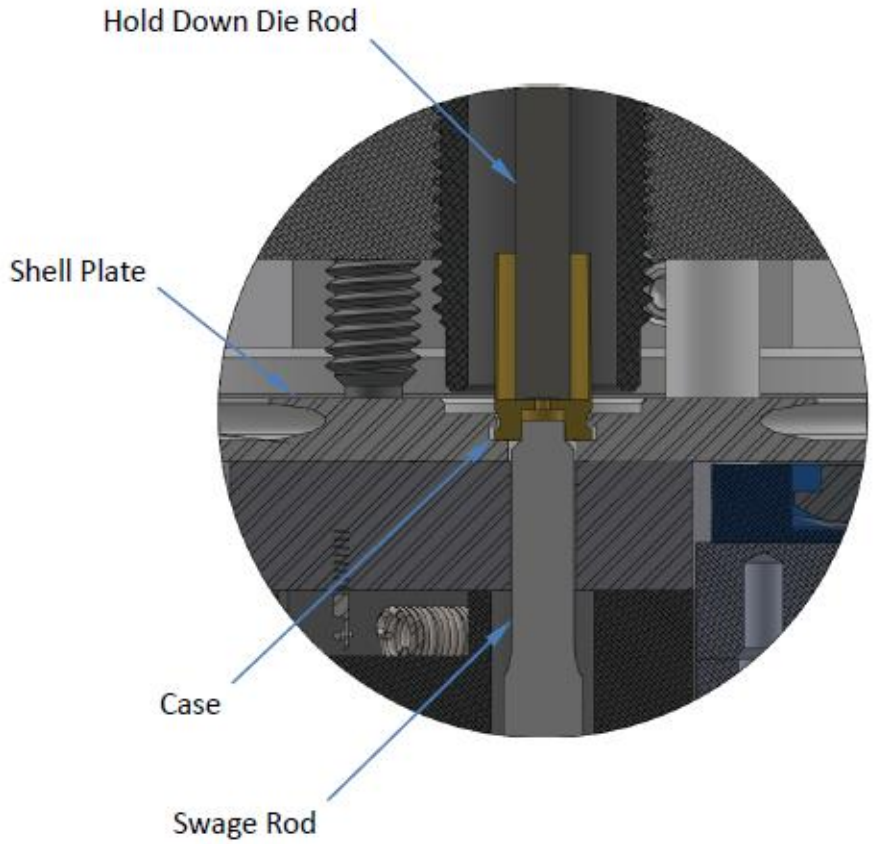


Figure 17: Cross-section of properly adjusted Swage Rod


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### 3. Primer Seating/Sizing

The APEX 10™ comes standard with a 100-stack primer tube either configured for SM or LG primers. Primers can be filled manually using a flip tray and primer pick up tube (included) or using a 3rd party vibratory feed accessory to fill pick up tubes. We recommend the following when setting up the priming system:

- Insert 5-10 primers initially into the primer tube assembly.
- Install a sizing die with the decapping rod removed.
- Cycle the press without a case present to ensure proper primer feeding into the disc.
- Pause with the Tool Head in the down position and verify that the primer punch is raised into the shell plate with a primer.
- Place a case that has been decapped and has a verified primer pocket into the shell plate.
- Cycle the press – there will be some resistance as you get to the bottom of the stoke – use caution. Remove the case and check primer insertion depth.
- Adjust the primer insertion pin until the proper primer depth is achieved.

There are 4 primer adjustments on the APEX 10™ press – refer to Figure 16.

1. Primer Depth – This adjusts the primer insertion depth – Never adjust more than a ¼ of a turn without checking new depth. (#1 on drawing)
2. Primer Punch lower height – This adjustment sets the height of the punch when it is fully retracted. It should flush with the bushing or slightly below in the primer housing. Slide the block side to side to raise or lower. (#2 on drawing)
3. Primer Slot-to-Punch Alignment - This adjustment sets the stopping point of primer transfer slot in the disc as it rotates to the primer punch. The adjustment screw has a spring-loaded tip which cushions the stop of the shuttle disc. It should be set so the disc primer slot is just past center over the punch. This will allow the alignment pin to perform the final alignment with the punch. (#3 on drawing)
4. Primer Slot-to-Tube Alignment – This adjustment sets the stopping point of the primer transfer slot in the disc as it rotates under the primer tube. It should be centered under the tube. (#4 on drawing)

Note: If a jam occurs in the priming system, the disc in the priming mechanism will not rotate and will be struck by the alignment pin in the tool head. Stop what you are doing, clear any cases from the shell plate and carefully locate the cause of the stoppage. Carefully clear the jam.

Note: If the primer tube needs to be removed when it contains primers, it can be carefully slid to the side in order to empty out primers. Remove the two screws holding the primer tube base to the priming unit and carefully slide it to the right. Primers can be dropped out into your hand or a container.

It is recommended that a sizing die with the decapping rod removed be used to hold down the cases in station 4 in order to center the case over the priming punch and to provide additional support to the cases during primer insertion. Thread the sizing die all the way down so that it just starts to touch the shell plate and lock the die in place. Always use case lube when resizing once fired cases. Note: Lube is recommended with pistol caliber tungsten carbide dies to ensure smooth operation. All rifle cases MUST be lubed prior to sizing.

Run a few cases through the sizing die and check cases using a sizing gauge to confirm they are being sized properly. For rifle calibers, we strongly suggest the use of a headspace gauge to verify proper case headspace. The sizing die should be adjusted up or down in the die station to correct headspace.

**WARNING** – Never install more than 100 Primers at once. Always wear protective eyewear and hearing protection when loading primers into the machine and loading. Activities using the Mark 7® APEX 10™ are inherently dangerous and may lead to injury and even death.

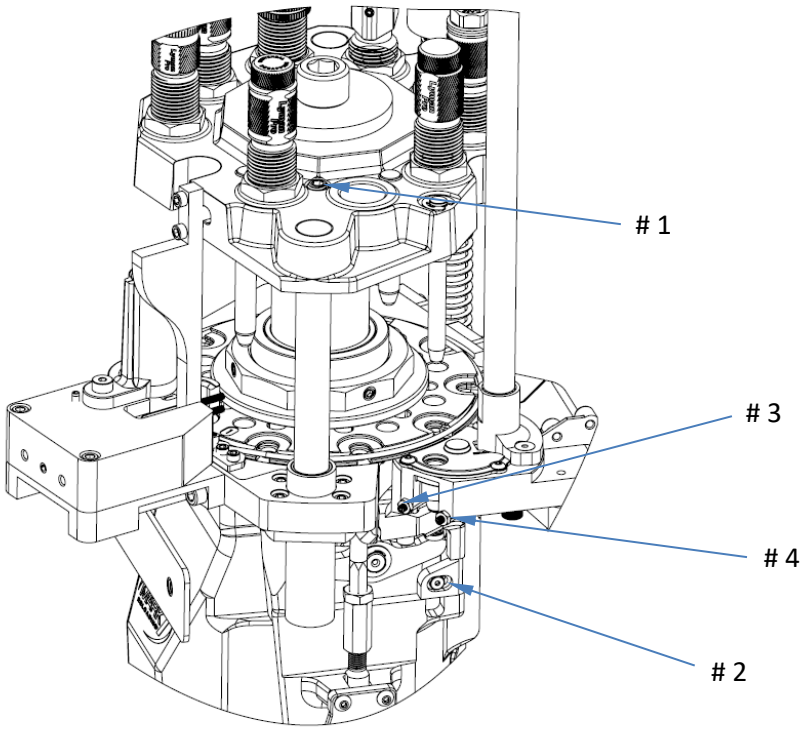


Figure 18: Primer Adjustments


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**4. Case Neck Expansion**

The APEX 10™ uses a dedicated station for neck expansion/flare in Station 5. For pistol calibers we recommend the use of the Lyman Pro Case Flair die. For rifle calibers we suggest the use of a Lyman M Die Neck Expander. We recommend doing an initial setup at this point to achieve just enough flare for the bullet to fit inside the case mouth. The final adjustment is best dialed in later during the bullet drop setup.

**5. Powder Measure Die Height and Powder Charge Adjustment**

Move the Tool Head to its lowest position and install the Powder Measure into Station 6. Thread the powder measure into the die station so that the powder funnel contacts the case. Continue to thread in the powder measure until it comes to a complete stop and the metering drum is at the top of its travel. The internal compliance mechanism spring is now compressed and bottomed out on its hard stop. The plunger assembly will reach the top of its travel while the internal spring is compressing. Back off the powder measure ½ turn then, lock the measure in place with the hex nut. Refer to image in the figure below. For pistol calibers, the drop tube should not cause additional flare on the case mouth. If it does, back off the powder measure additional 1/8 turns until no additional flare is added. **NOTE: If the Powder Measure die height is not set properly the drum may not rotate fully to the dump position which may cause inconsistent powder charges.**

Before adding powder to the measure, rotate the plunger assembly until it is at the middle point of its travel. Turn the plunger adjustment knob all the way in until it bottoms out against the body of the measure, and then turn it back in the other direction about a ¼ turn. This sets the plunger to give the minimum charge. If threaded in too deeply, the metering drum will not rotate, and the measure may suffer damage. Cycle the measure by hand to ensure that it rotates freely.

- To set the powder charge place a primed case in station 6 under the Powder Measure.
- Perform a single press cycle to actuate the Powder Measure.
- Verify the Adjustment lever completes the full stroke range as shown in the Figure below. If it does not adjust die height.
- Remove the case and weigh the charge.
- Empty the case and adjust the charge to the desired level by turning the adjustment knob. Turning clockwise will decrease the charge, counterclockwise will increase the charge.
- Once the desired charge is achieved perform a few dumps – We recommend checking a minimum of 5 dumps to make sure the charge is consistent. **Note: Always discard the first powder dump after making a charge adjustment and make sure to allow for enough drop time for a given load by pausing at the bottom of the stroke before returning the Tool Head to the top of the stoke.**
- Check the die nut and adjustment charge nut for tightness.

Note: For maximum accuracy and minimum deviation ensure that the powder is settled and compacted in the hopper.

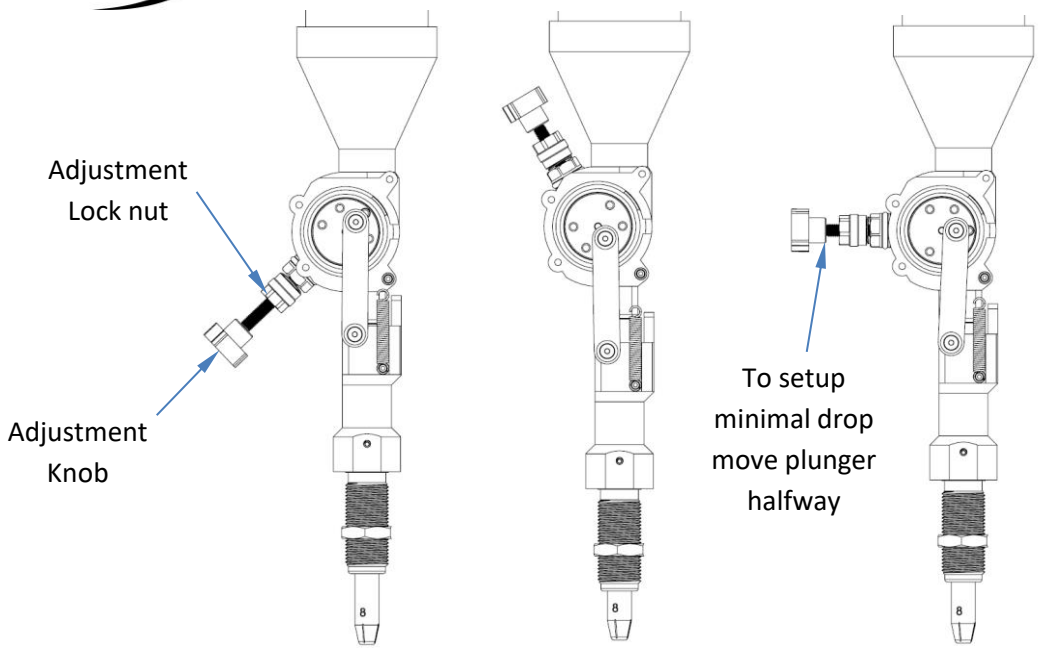


Figure 19: Powder Measure – Fill position (left), Dump position (center), Minimal Drop setup (right)

## 6. Setting up Mr.Bulletfeeder and Bullet Drop Assembly

There are a few adjustments that are critical on the Mr.Bulletfeeder to ensure that it is operating properly, further details on this are in the Mr.Bulletfeeder user manual. We recommend removing the Mr.Bulletfeeder spring and running the bullets into a bucket while making the bowl adjustments until the proper adjustments are achieved. The spring tube assembly may need to be cut between the dropper and the drop tube assembly to the correct length for your setup – this is largely dependent on where the feeder is mounted on the case feeder.

There is a delicate interaction between the bullet dropper and the amount of brass flair provided by expander die for pistol. Setting the right amount of flare is critical to reduce bullet topple and to ensure proper bullet seating with every cycle. The expansion die should open the case mouth just enough for the bullet to slip in – the bullet dropper will provide a slight amount of pressure which will keep the bullet in place.

A way to check for properly adjusted case flair is to remove a round from the shell plate after the bullet has been dropped (but not yet seated) and turn the case upside down. If the bullet falls out of the case, there is likely too much flare.

Adjust the bulletfeeder drop tube assembly so that a single bullet drops when it encounters a case. If more than one bullet drops it is likely the drop tube assembly is adjusted too low in the Tool Head.


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## 7. Bullet Seating / Crimping Setup

The OAL and crimp can be set in station 9 and station 10. It is always best to set these adjustments with a fully loaded shell plate. Run a few rounds through until consistent OAL are achieved. The station 10 spring retaining clamp retains the round in station 10 – to remove a casing manually rotate the shell plate a few degrees, remove the case and then rotate it back into position.

# Mark 7® APEX 10™ Recommended Maintenance

There are a few areas on the APEX 10™ that should be lubricated daily, we recommend checking all the locations noted below before each reloading session to ensure they are properly lubricated.

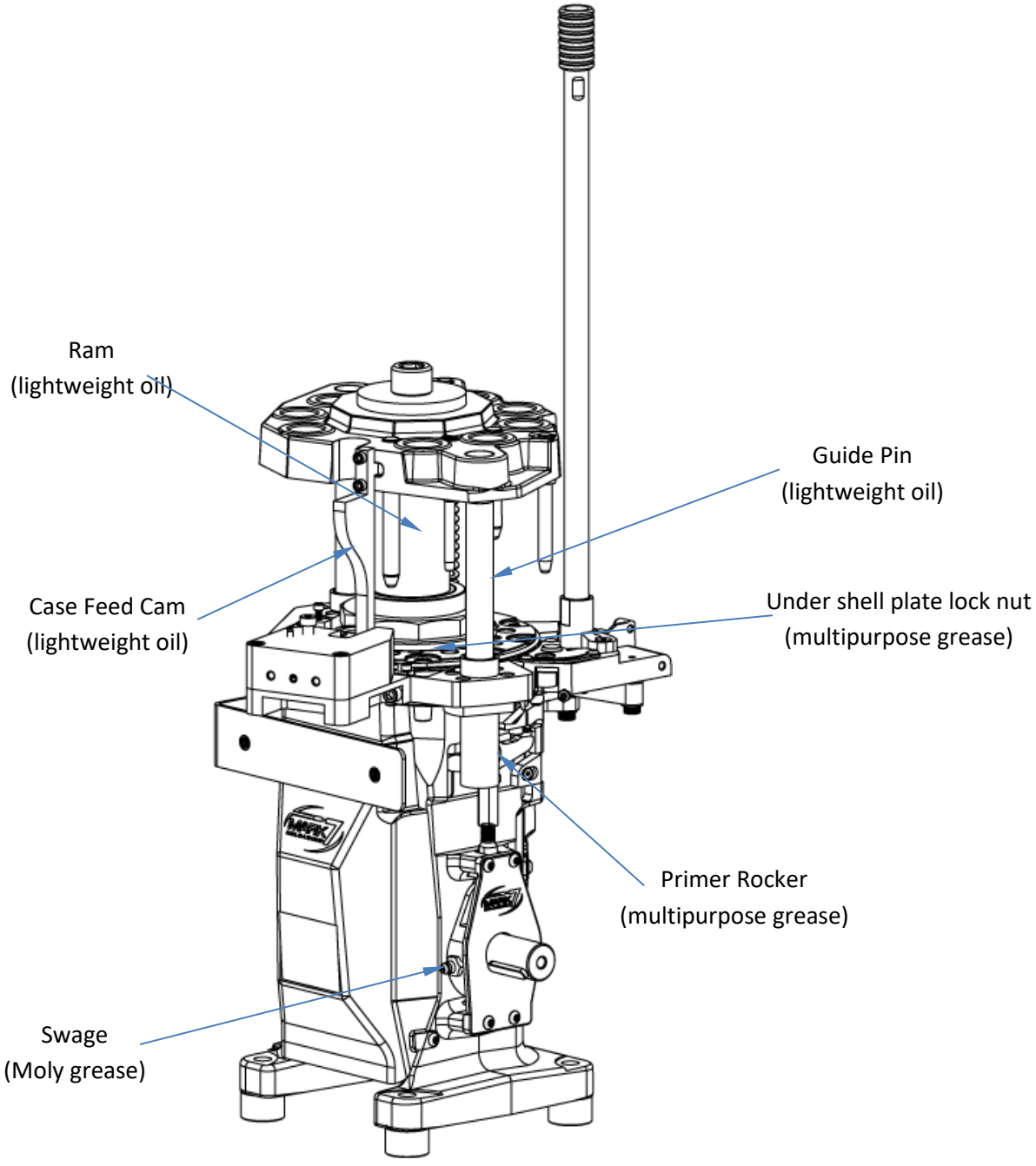


Figure 20: Grease Points


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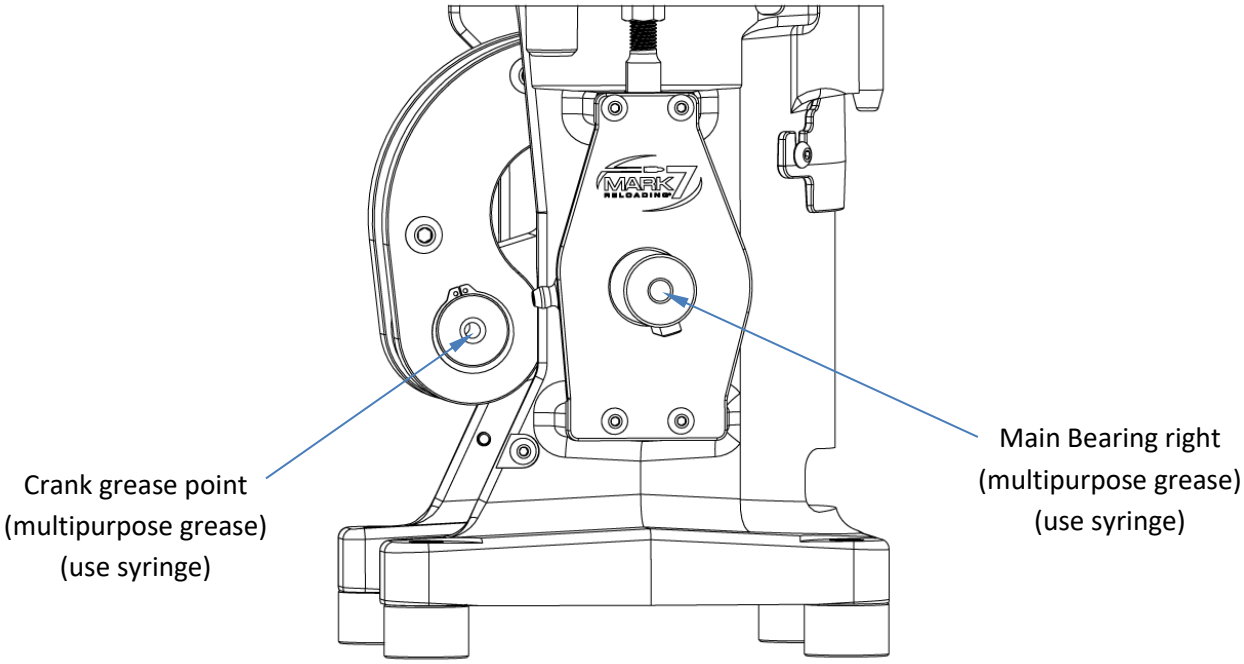


Figure 21: Main Bearing right and Crank grease points

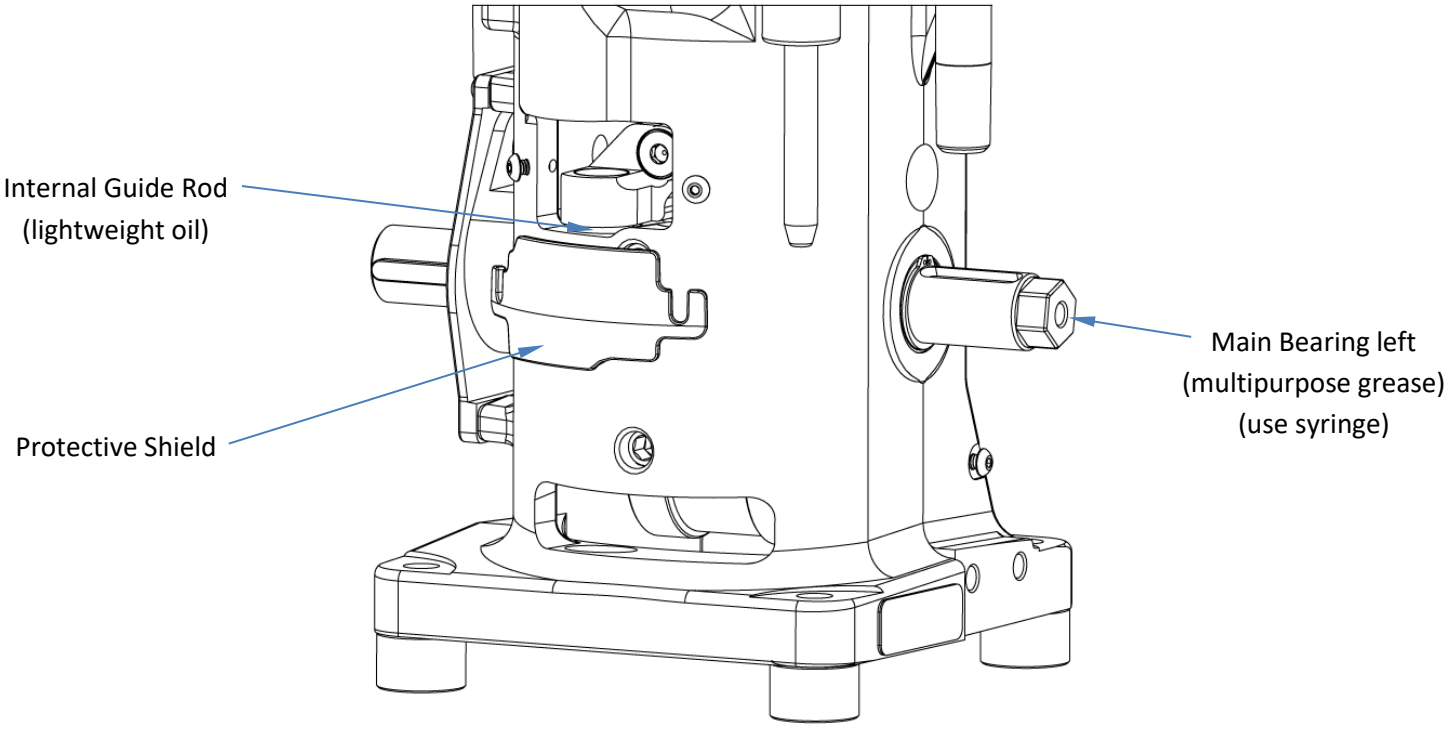


Figure 22: Main Bearing left and Internal Guide Rod lubrication points

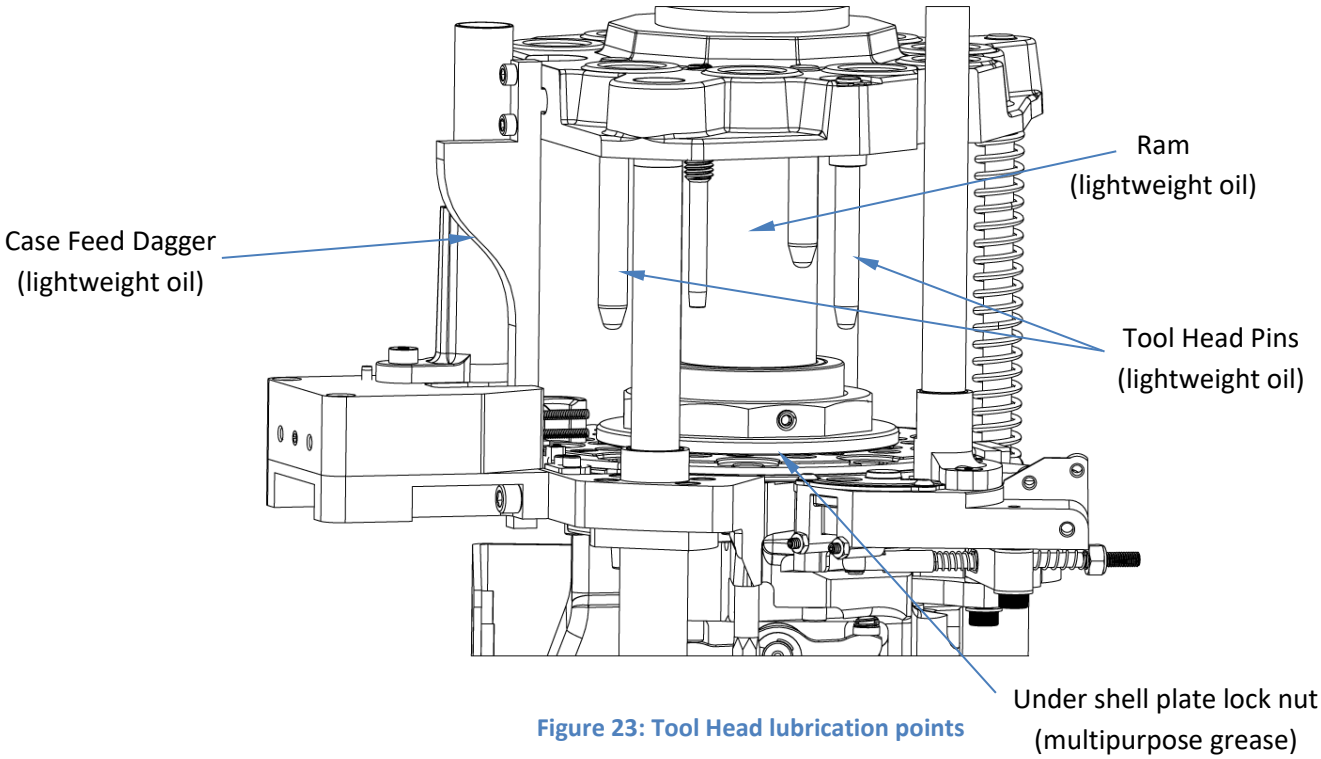


Figure 23: Tool Head lubrication points

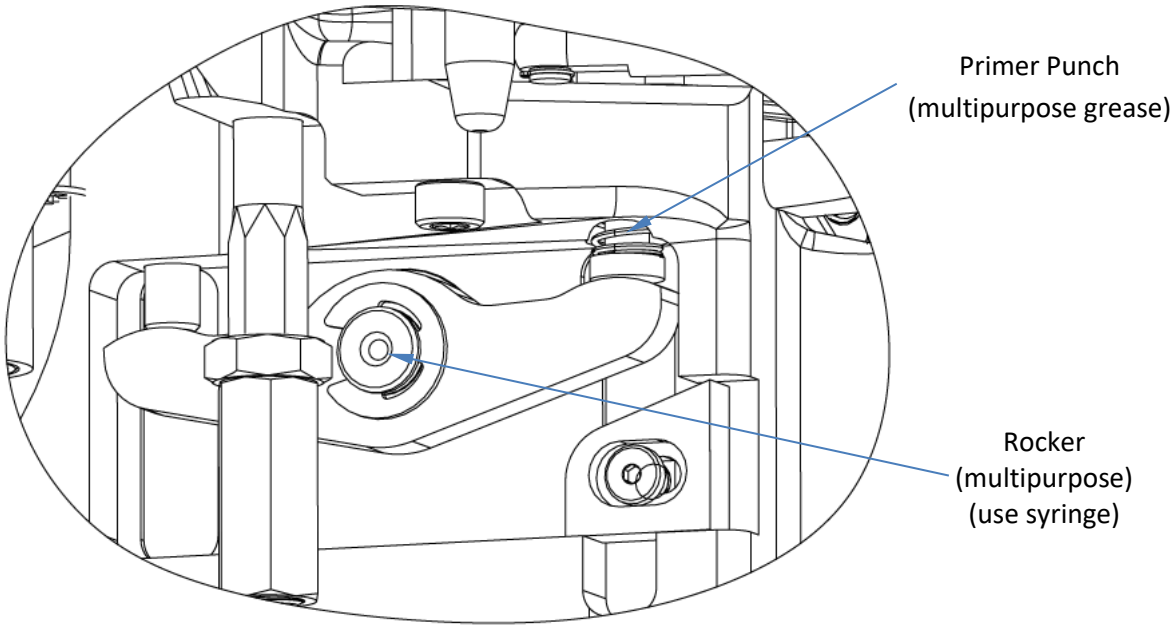


Figure 24: Priming lubrication points


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## Shell Plate Indexing Adjustments

It is important to check the indexing adjustment whenever performing routine press maintenance.

There are 2 main adjustments points/areas to check:

1. Check Index Cam Bearing and Mount for tightness. Keep grease on the bearing surface. To access, put the press in the down position and remove the back plastic cover.

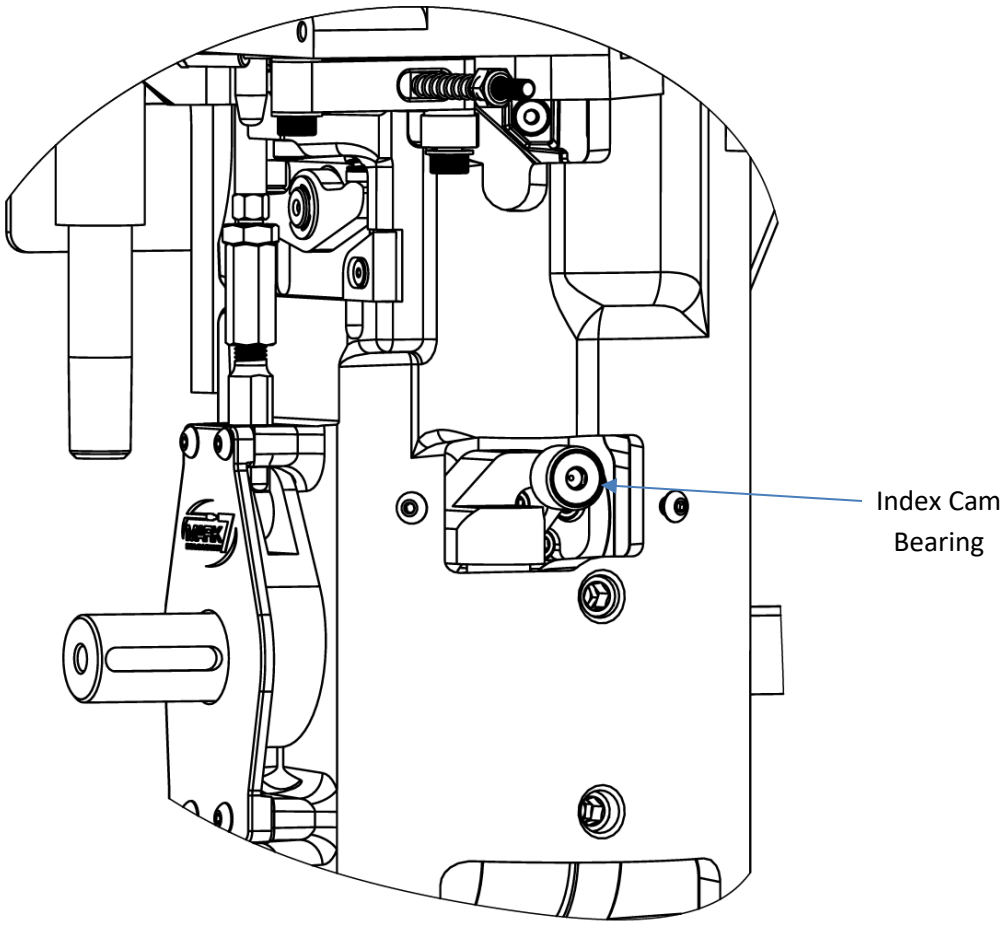


Figure 25: Index Cam Bearing Location (rear of machine)

2. The Index Pawl is factory set to give proper indexing of the shell plate. Adjustment of the Index Pawl should only be made if the shell plate is not lining up properly with the alignment pins. If adjustment is needed, insert a 5/64" hex wrench into the adjustment screw located inside the access hole on the upper left-hand side of the press. See figure #24. Turning the screw clockwise will move the shell plate in a counterclockwise direction. Turning the screw counterclockwise will move the shell plate in a clockwise direction. Turn the screw about a 1/8 turn at a time and cycle the press to check for alignment of the plate and alignment pins. Make this adjustment with no cases on the shell plate. See Figure 26. If indexing issues continue after adjusting the index pawl, please contact customer service for guidance.

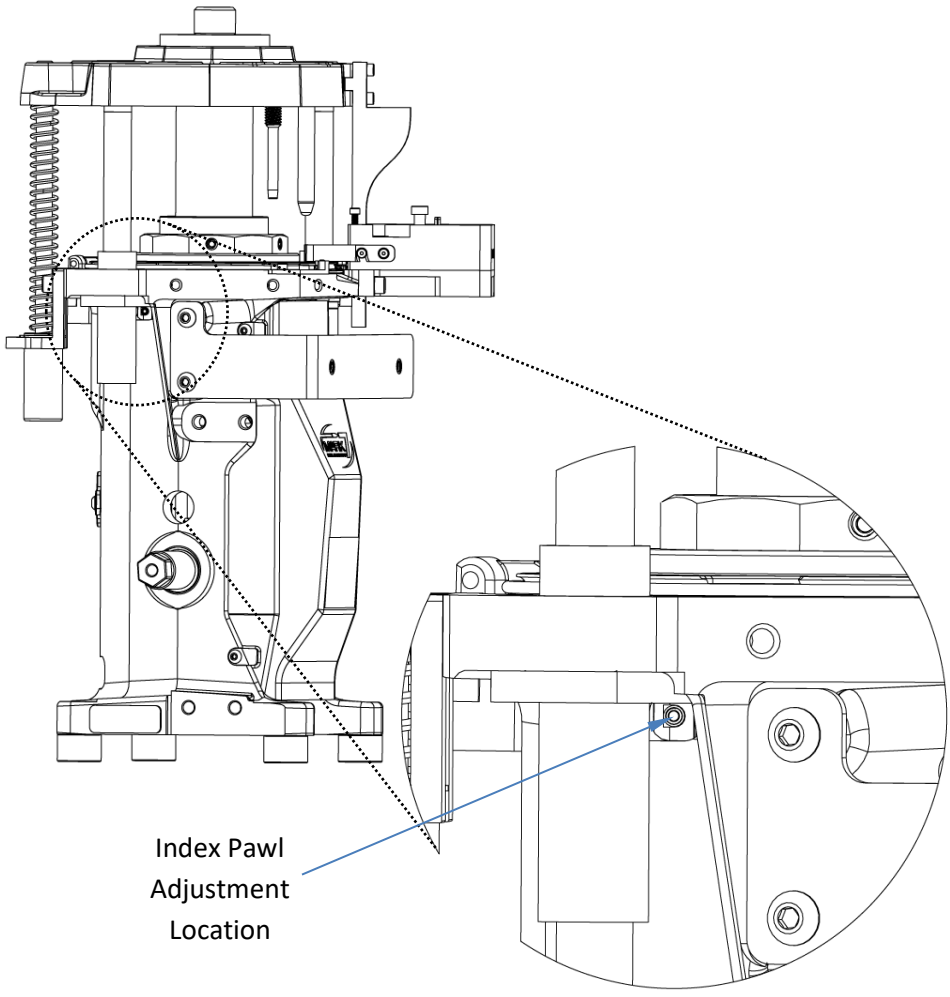


Figure 26: Index Pawl Adjustment Location (left side of machine)


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## Tool Head Removal, Shell Plate Change, Primer Size Change, Swage Rod Change

### 1) Tool Head

To remove the Tool Head, lower fully and loosen the center bolt. Raise the Tool Head and unthread and remove the center bolt. Lift the Tool Head up and off the press, along with the main return spring. When reinstalling the Tool Head, loosen the guide rod bushing bolts and the case feed dagger bolt. Then thread the center bolt ¾ of the way in and lower the Tool Head it to its lowest position. Then fully tighten the center bolt. Once the Tool Head is installed, move it to the lowest accessible position and tighten the guide rod bushings and case feed dagger.

### 2) Shell Plate Change

Remove the Tool Head, then loosen the 4 set screws on the shell plate nut. Unthread the nut and remove it. Next loosen the 4 screws on the shell retainer spring mounts and move them out of the way. Loosen the lock screws on the case ejection arm and pivot it up out of the way. Push in the case feed ram and lift the shell plate off the press. Install new shell plate in reverse order. The shell plate nut should be tight but still allow the plate to rotate smoothly. The 4 set screws on the nut should be snug but do not over tighten. When reinstalling the spring/shell retainer spring mounts, use a case as a guide. The case should pass the retainers smoothly but without looseness.

### 3) Primer Size Change

Remove the Tool Head and Shell Plate, then remove the primer tube assembly by removing the 2 screws on the base. Then remove the 3 screws holding the plastic cover and remove the cover. Next remove the screw in the center of the primer disc and lift off the disc. Remove the 2 screws holding the primer disc guide plate and remove it. Next remove the 2 screws holding the body of the priming mechanism to the press frame and the 1 screw connecting the link arm from the press to the primer mechanism. Be careful not to lose the bushing in the link arm. Move the priming mechanism away from the press body and lift out the primer punch. Using a large, well-fitted, slotted screwdriver, unthread and remove the primer punch bushing from the priming mechanism. Replace the punch with the desired size punch. Replace the bushing with the desired size, be sure there are no burrs on the top surface of the bushing from the screwdriver. Reassemble the unit in reverse order from above. Adjust primer guide plate as close as possible to the disc without creating drag on the disc. See Figure 27. Also change the primer tube installed inside the shield.

**See Diagrams on next page.**

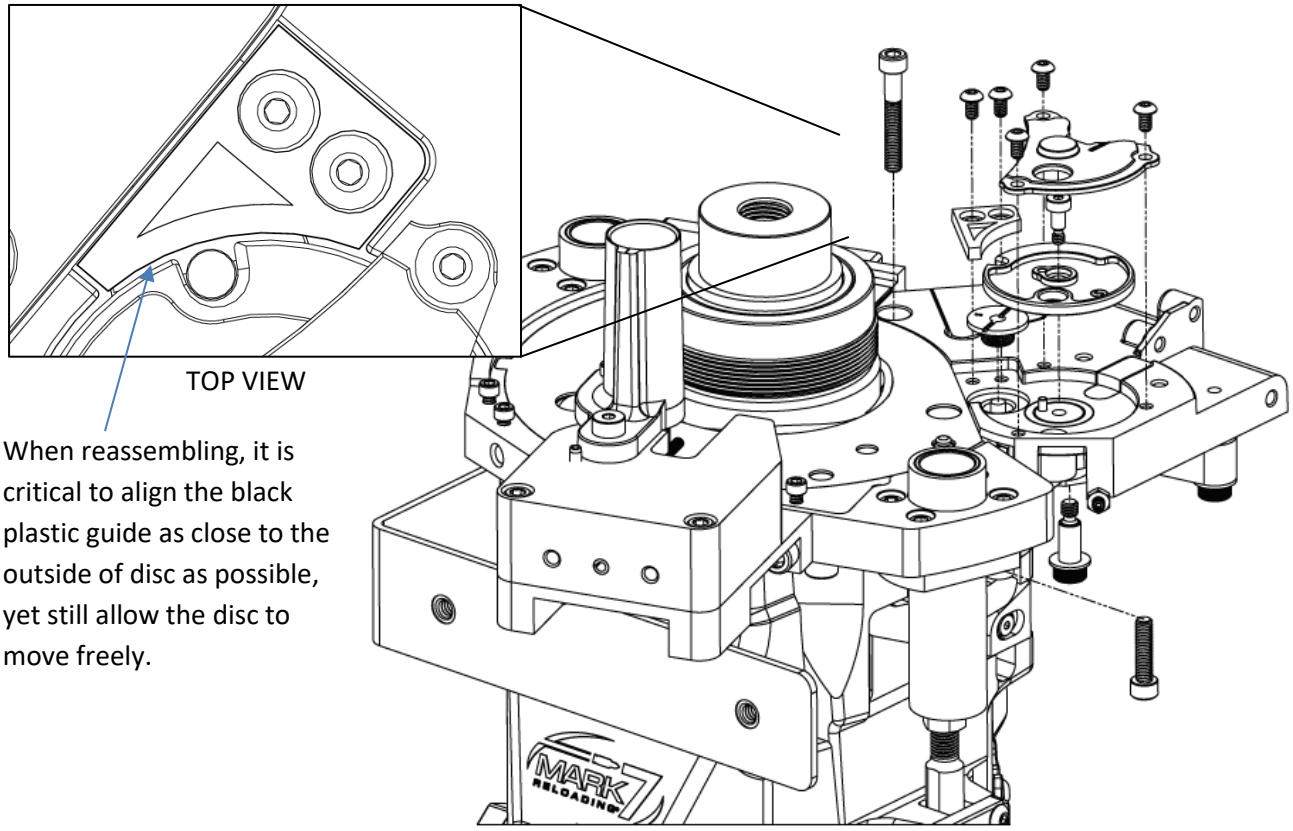


Figure 27: Primer Component removal

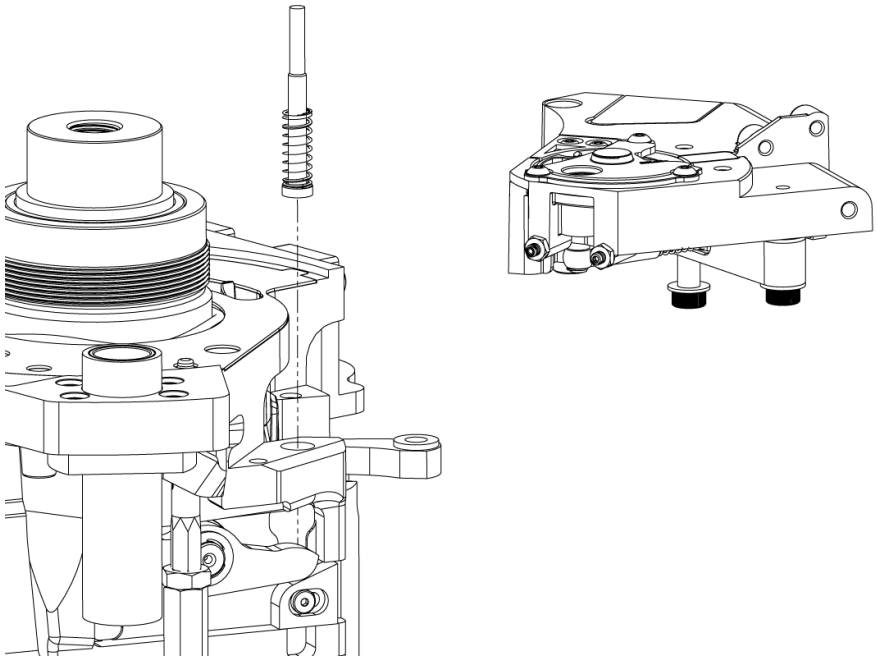

Figure 28: Primer Punch removal


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### 4) Swage Rod Change

Loosen the 2 set screws in the handle shaft adapter and slide the handle and adapter assembly off the shaft. Then remove the shaft key from the shaft. Remove the 4 screws on the swage rod linkage plate and pull off the plate. Next loose the lock nut on the swage rod and unscrew swage rod from the coupler. Hold the swage rod all the way up and slide the linkage slightly to the right on the shaft until it clears the bottom of the swage rod. Slide the swage rod out of the press. Swap the lock nut onto the desired size swage rod. Note: the swage rod for small primers is engraved with a “3” and the rod for large primers is engraved with a “4”. Slide the swage rod into the press and reassemble in reverse order.

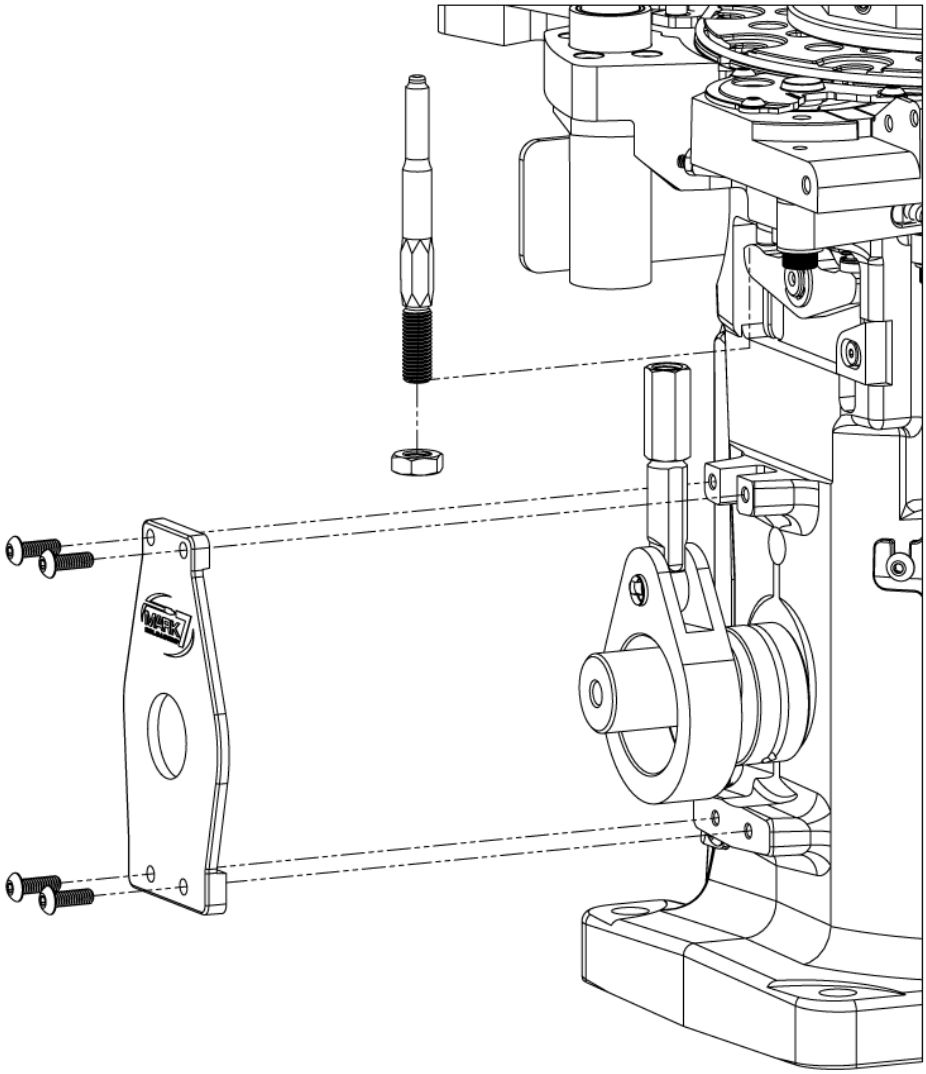

Figure 29: Swage Rod removal

## Storage Recommendations

The following is the proper procedure for storage after a session of use:

1. Ensure that the shell plate is clear of any brass.
2. Remove powder and primers from the press.
3. Check the need for lubrication after every session and apply it as necessary at the key lubrication points outlined in the user manual. Insufficient lubrication creates a potentially dangerous situation and may lead to unreliable results.
4. Turn off the power to the case feeder and the bullet feeder.
5. Keep light weight oil on all metal surfaces.

## Troubleshooting

Refer to the knowledge base section on our website under **SUPPORT** for troubleshooting articles relating to setup and operation.

http://www.markvii-loading.com/

Mark 7 ® Digital Community at www.markvii-loading.com

**Please contact us for technical support**

Phone: 1-888-462-7577

Hours: 8:30am-5:00pm, ET, M–F


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