

Dillon Super 1050

Instruction Manual

May 2007



Dillon
Precision
Products, Inc.

Manufacturers of
The World's Finest
Loading Equipment

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Warranty Agreement

The Dillon Super 1050 reloader has been designed as a commercial machine. Our expectation is that its life expectancy will be in excess of two million rounds of loaded ammunition. All Super 1050 machines are warranted for life from defects in material or workmanship, plus a one-year, 100% warranty against normal wear. All electrical/electronic components in Dillon equipment are covered by a one-year warranty.

Mandatory Safety Measures

The reloading of ammunition and the handling of components (gun powder and primers) is inherently dangerous, indeed shooting firearms is inherently dangerous. Accidents can and do occur, sometimes with disastrous results including, but not limited to, loss of vision, hearing or life. These accidents are nondiscriminatory, they occur with both the novice and the experienced reloader.

Dillon Precision Products has consciously designed the Super 1050 with this in mind. We've shielded the primer magazine and machined clearance holes for the elimination of powder and primer residue. In short, we have done everything we know how, to make the use of our machine as safe as possible.

We cannot however, guarantee your complete safety. In order to minimize your risk, use common sense when reloading and follow these basic rules:

Never operate the machine without ear and eye protection on. Call our customer service department at (800) 223-4570 for information on the wide variety of shooting/safety glasses and hearing protection that Dillon has to offer. Or visit our website at: www.dillonprecision.com

- **PAY ATTENTION:** Load only when you can give your complete attention to the loading process. Don't watch television or try to carry on a conversation and load at the same time. Watch the automatic systems operate and make sure they are functioning properly. If you are interrupted or must leave and come back to your loading, always inspect the cases at every station to insure that the proper operations have been accomplished.
- **SMOKING:** Do not smoke while reloading or allow anyone else to smoke in your reloading area. Do not allow open flames in reloading area.
- **SAFETY DEVICES:** Do not remove any safety devices from your machine or modify your machine in any way.
- **MODIFICATIONS:** Any modifications performed to your machine, or the addition of any unapproved equipment from other manufacturers will void the warranty.
- **LEAD WARNING:** Be sure to have proper ventilation while handling lead components or when shooting lead bullets. Lead is known to cause birth defects, other reproductive harm and cancer. Wash your hands thoroughly after handling anything made of lead.
- **LOADS AND LENGTHS:** Avoid maximum loads and pressures at all times. Use only recommended loads from manuals and information supplied by reliable component manufacturers and suppliers. Since Dillon Precision has no con-

trol over the components which may be used on their equipment, no responsibility is implied or assumed for results obtained through the use of any such components.

Seat bullets as close to maximum cartridge length as possible. Under some conditions, seating bullets excessively deep can raise pressures to unsafe levels. Refer to a reliable loading manual for overall length (OAL).

- **QUALITY CHECKS:** Every 50-100 rounds, perform periodic quality control checks on the ammunition being produced. Check the amount of powder being dropped and primer supply.
- **RELOADING AREA:** Keep your components safely stored. Clear your work area of loose powder, primers and other flammables before loading.
- **COMPONENTS:** Never have more than one type of powder in your reloading area at a time. The risk of a mix-up is too great. Keep powder containers closed.

Be sure to inspect brass prior to reloading for flaws, cracks, splits or defects. Throw these cases away.

Keep components and ammunition out of reach of children.

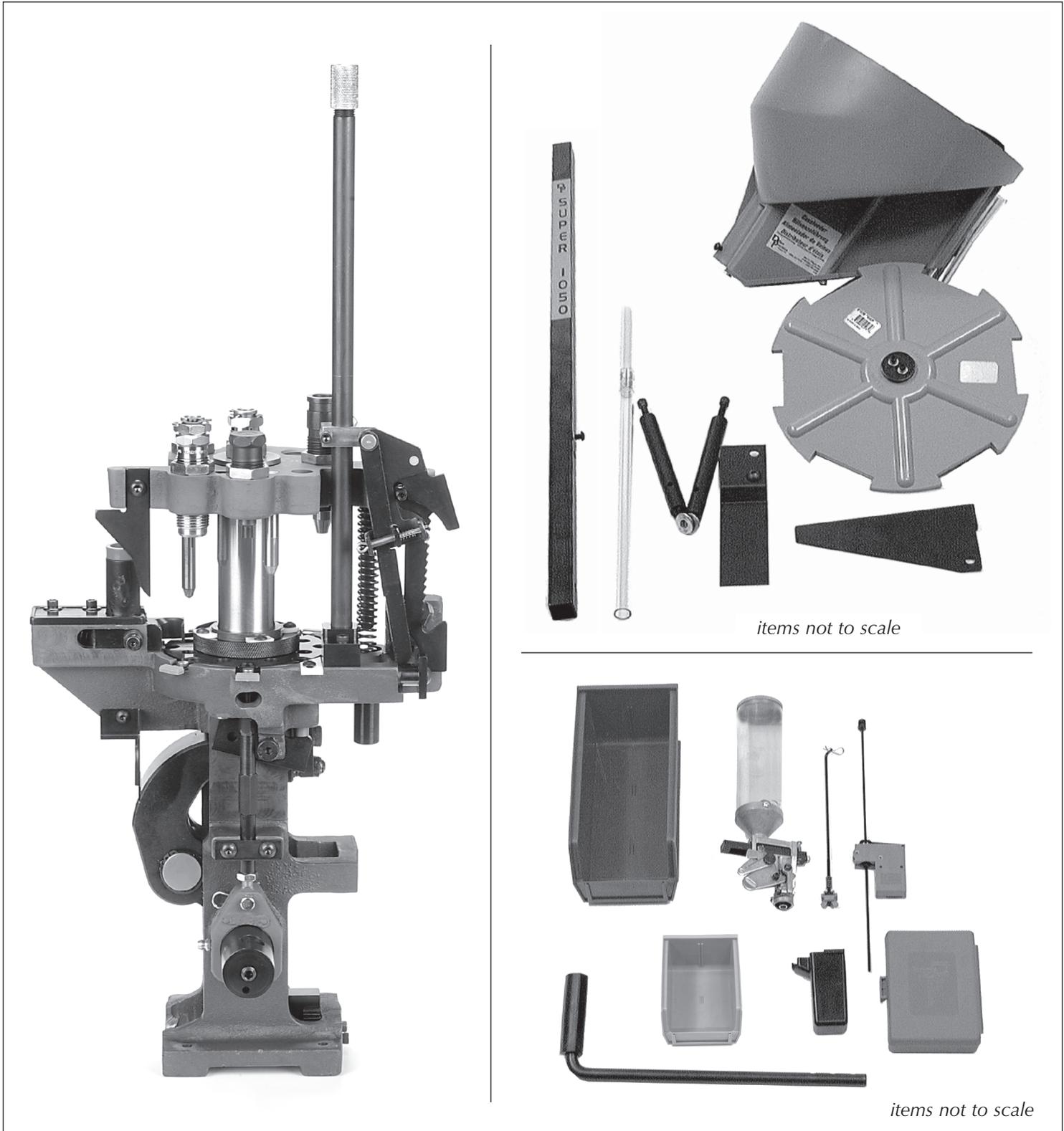
- **BLACK POWDER:** Do not use black powder or black powder substitutes in any Dillon powder measure. Loading black powder cartridges requires specialized loading equipment and techniques. Failure to do so can result in severe injury or death.
- **PRIMERS:** Never force primers. If they get stuck in the operation of the machine, disassemble it and gently remove the obstruction.

Never attempt to clear primers that are stuck in either the primer pickup tube or the primer magazine tube. Never, under any circumstances, insert any type of rod to attempt to force stuck primers out of these tubes. Trying to force primers out of the tube will cause the primers to explode causing serious injury or even death.

If primers get stuck in a primer magazine or pickup tube flood the tube with a penetrating oil (WD-40), throw the tube in the garbage and call us for a free replacement.

Never attempt to deprime live primers – eventually one will go off. When it does it will detonate the others in the spent primer cup. Depriming live primers is the single most dangerous thing you can do in reloading and can cause grave injury or death.

- **LOADED AMMUNITION:** Properly label all of your loaded ammunition (Date, Type of Bullet, Primer, Powder, Powder Charge, etc.).
- **BE PATIENT:** Our loading equipment is conservatively rated and you should have no trouble achieving the published rates with a smooth, steady hand. If something doesn't seem right, stop, look and listen. If the problem or the solution isn't obvious, call us. The reloading bench is no place to get into a hurry.
- **REMEMBER:** If your machine does not perform to your expectations, or if you are having technical difficulties, give us a call. Technical Support (800) 223-4570 or visit our troubleshooting section at: www.dillonprecision.com



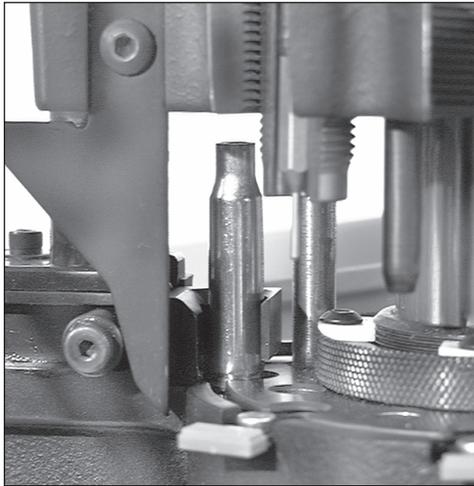
Super 1050 Package Contents

- Super 1050 machine with caliber specific shellplate and loading dies installed and adjusted.
- Casefeeder Assembly: casefeed bowl, caliber specific casefeed plate, casefeed mounting post, casefeed tube, and post studs
- Collection bin support bracket
- Bullet bin bracket
- Collection bin
- Bullet bin
- Spent primer cup
- Powder measure assembly
- Powder bar return rod assembly
- Primer early warning system
- Operating handle
- Die box

See the schematics pages in the back of this manual for more detail.

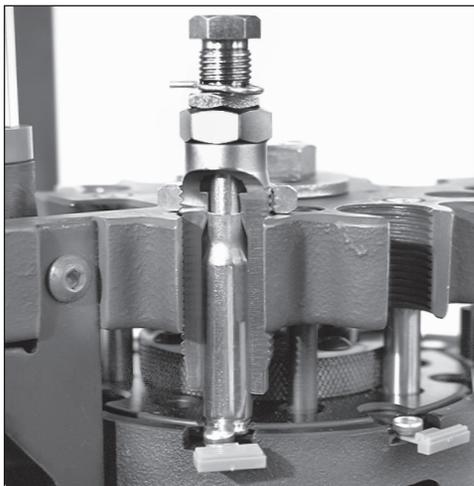
How the Super 1050 Works

Stations 1 - 8 (counterclockwise)
toolhead and dies cut away for clarity



Station 1 - The casefeeder plunger inserts the case into the shellplate.

Station 1: Empty cases are automatically inserted into the shellplate via the electric casefeeder.

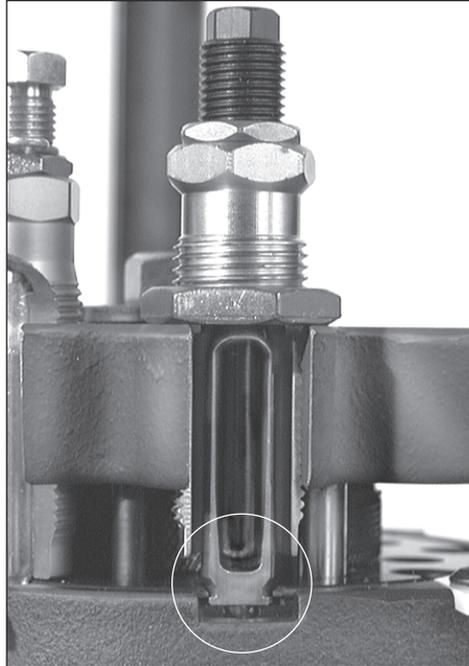


Station 2 - Here, spent cartridge cases are resized and deprimed.

Station 2: Here the spent cartridge cases are resized and deprimed.

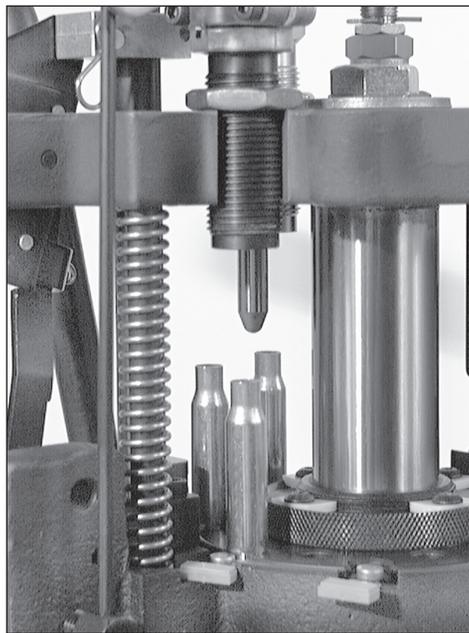
Station 3: This station is totally unique. The case is supported from the inside and slightly expanded (not belled) while simultaneously a swager is driven into the primer pocket to remove any crimp.

Station 4: A new primer is installed at this station. The spring driven primer slide is extremely smooth. The steel shrouded primer magazine is capped with an electronic Early Warning Device to let you know when



Station 3 - Here the case mouth is expanded while a rod supports the case base for swaging.

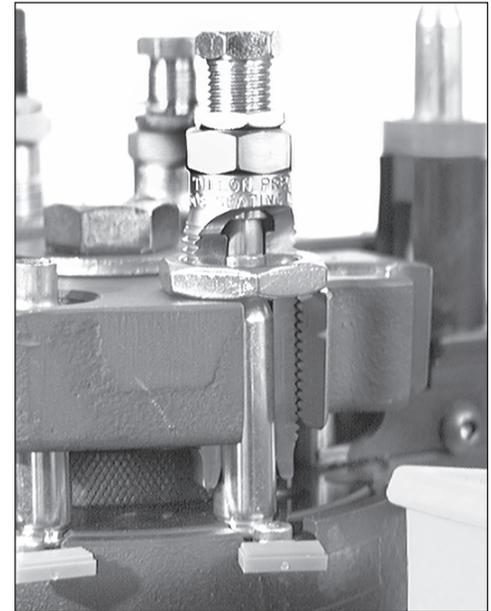
you're down to approximately three primers.



Station 5 - Here the case mouth is belled and powder dispensed.

Station 5: Here the case is belled and powder is dropped by the case-activated powder measure. It is extremely accurate and will not drop powder unless a case is present. Dillon Precision offers an optional accessory to be utilized with the automatic powder measure at this station – Dillon's Low Powder Sensor provides an audible and visual reminder when it's time to refill the powder reservoir.

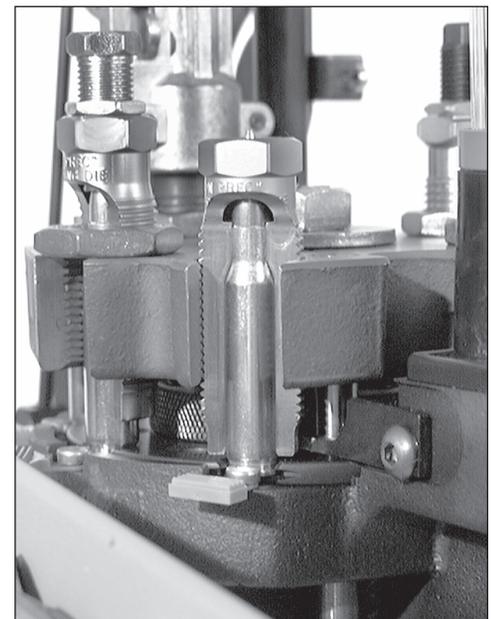
Station 6: This station is open to allow for case inspection.



Station 7 - In this station, the bullet is seated to its proper depth.

Station 7: The bullet is seated to its proper depth at this station.

Station 8: In this station, the bullet is crimped into place. The cartridge is then automatically ejected into a collection bin.



Station 8 - Here the case is crimped and then ejected out of the shellplate with the next pull of the handle.

Your dies have been adjusted at the factory. Before you change anything, try it the way it is, once you thoroughly understand the machine's operation,

make whatever adjustments to the dies you feel necessary.

Reminder: There may be some variation due to components.

Super 1050 Assembly

Your new Super 1050 has been assembled at the factory. All of the adjustments necessary to reload have already been made, in fact we've even adjusted the dies to reload the caliber you have chosen. However, before you can reload you must do some minor assembly.

Due to variations in components, check all stations for proper settings before loading ammunition. It is absolutely necessary that you read the following instructions.

If you get stuck on something that you don't understand, call (800) 223-4570 for technical assistance.

Step 1: Mounting the Super 1050

Select a clear area on your reloading bench. Be certain your bench is free from vibration and is strong enough to support your Super 1050's mass and operating force. If possible, attach your bench to the wall using screws.

Remove the Super 1050 main frame from the packaging and place it on your selected area. The crank extension (#11061) should be to your right. Bring the machine to the forward edge of your bench – be sure to allow clearance for operation of the handle. Mark the four mounting holes using the

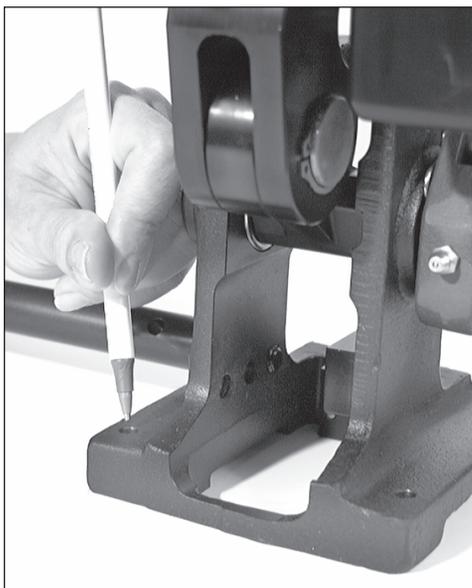


Fig. 1 - Be sure the machine is to the forward edge of the table or bench when marking the four holes to be drilled.

machine as a template. Remove the machine and drill four 1/4" holes through the bench. Replace the machine and bolt securely. **Fig. 1**

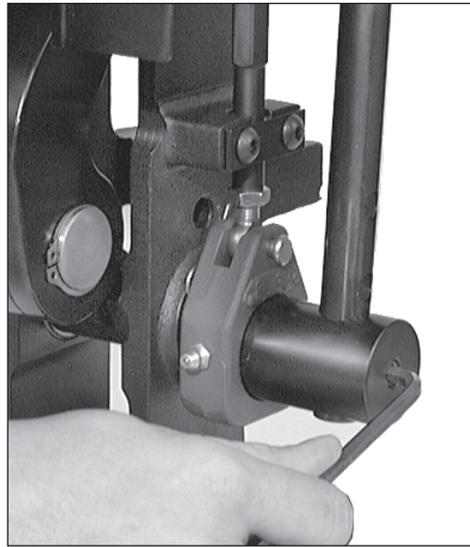


Fig. 2 - Note that there are three different positions for mounting the operating handle.

Install the handle (#17071) as indicated in the parts schematic. Secure in place with the handle set screw (#13432). **Fig. 2** You will note that there are three different positions for mounting the operating handle. Choose the one that feels best for you. The longer the handle, the less force required but the stroke is longer.

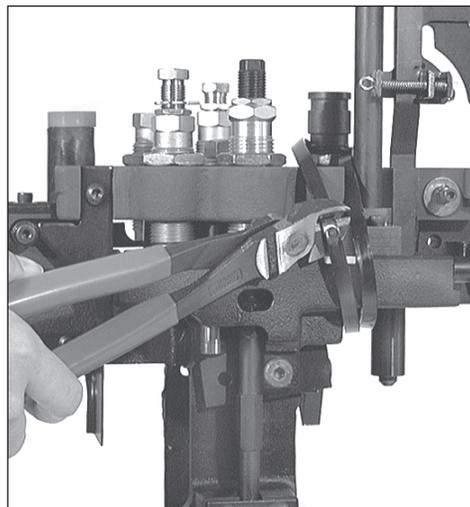


Fig. 3 - Be sure to hold the operating handle in place while cutting the plastic ties.

The toolhead (#20420) is held down on the main frame for shipping by the use of plastic ties. Remove the ties while holding the handle **Fig 3**.

Slowly move the handle up. This will move the toolhead approximately three inches to its "up" position. Note: If the

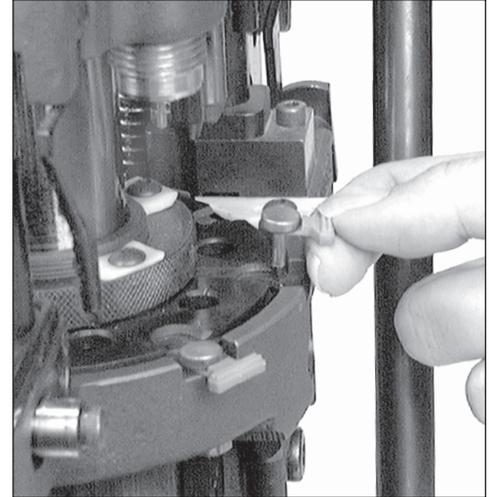


Fig. 4 - Locator button being inserted into its proper position.

handle is not moving freely, carefully inspect for shipping damage.

Install the six brass locator buttons around the shellplate (#12600*). **Fig. 4**

Step 2: Installing the Casefeed Assembly

Using the screw provided (#13377) install the bin bracket (#13238). **Fig. 5**

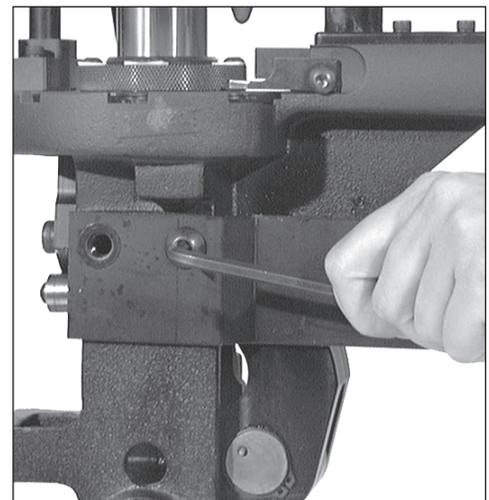


Fig. 5 - See the schematic on page 30 for more details.

Install the bullet bin bracket (#12144) to the casefeed post (#20641) using the screw (#13685) as shown in the schematic on page 30.

Screw the casefeed post studs (#13271) to the main frame (place the washer provided on the bottom post only), tighten securely with an Allen wrench through the cross hole provided.

The casefeed mounting post assembly (#20641) is attached to the casefeed post studs (#13271) by the use of two post bolts (#13205). Attach the

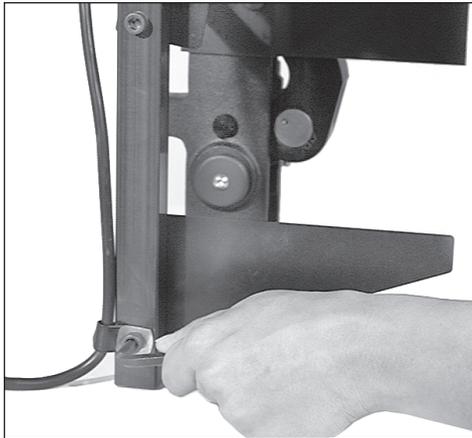


Fig. 6 - Shown is the proper position of the power cable (13539), clamp (13495), and bin support bracket (10991).

power cable and clamp and support bin bracket (#10991) as shown in the schematic on page 30. **Fig. 6**

The casefeed bowl assembly needs

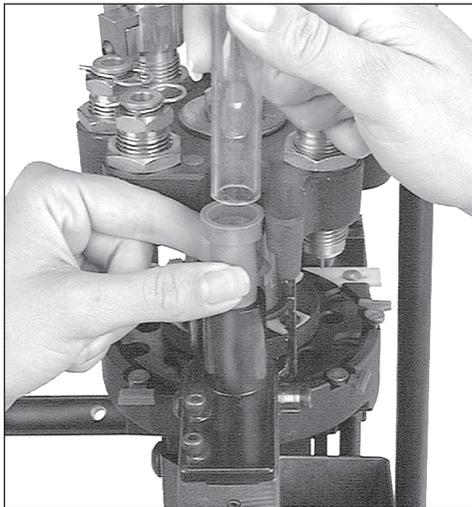


Fig. 7 - The proper location and positioning of the casefeed tube and adapter is as shown above.



Fig. 8 - The end of the casefeed tube marked "up" snaps into the clip at the base of the casefeeder motor housing.

to be placed on the casefeed post with the Dillon logo and the on/off switch facing you.

The casefeed tube (#20533*) should now be inserted into the casefeed adapter (#13654*) **Fig. 7** Note that the tube is marked "up" on one end. Press this end into the tube clip (#13859) attached to the casefeeder motor housing **Fig. 8**. This assembly is now complete.

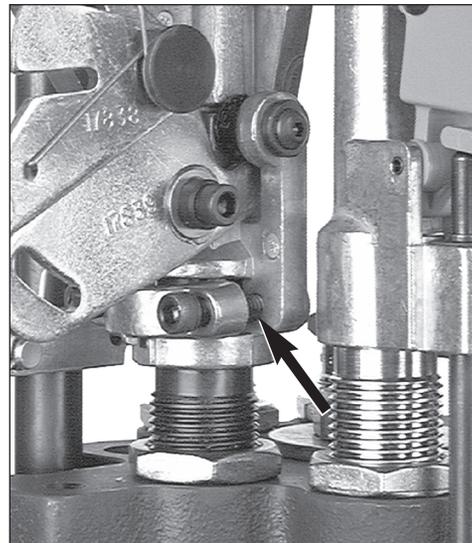


Fig. 9 - See arrow. A slight gap allows the powder die to be adjusted without removing the powder measure.

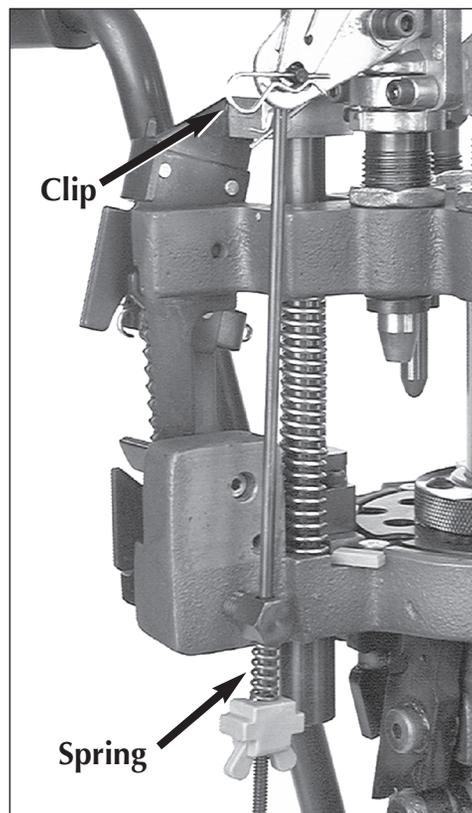


Fig. 10 - Note how the spring above the wing nut is slightly compressed.

Step 3: Installing the Powder Measure

Remove the blue cap from the powder die (#20320) and loosely clamp the powder measure in position. **Fig. 9** Install the powder measure return rod (#13960) through the 3/8" eyebolt (#13089) mounted on the left rear of the main frame. **Fig. 10** Now attach the rod to the powder measure bellcrank using the clip. **Fig. 10** Install the spring (#14033) and wing nut (#13799) on the rod and screw the wing nut up until you feel light tension on the spring. Tighten the powder measure clamp screws (#14037).

Step 4: Installing the Spent Primer Cup and Bullet Bin

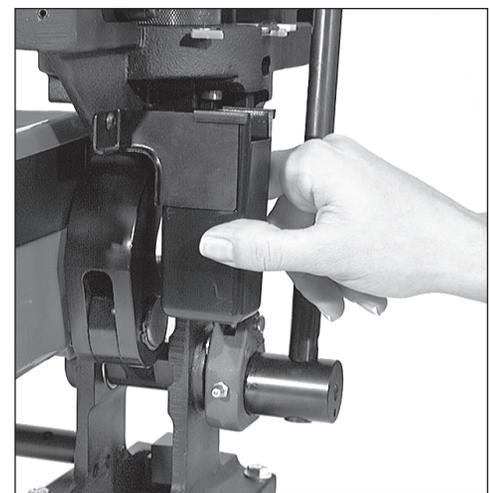


Fig. 11 - See the schematic on page 27 for more details.

Install the spent primer cup (#16699) on the right side as shown on the schematic on page 27. **Fig. 11**

Hook the bullet bin (#13756) and the collection bin (#13484) on to their respective brackets. **Fig. 12**



Fig. 12 - Shown is the proper location of the cartridge collection bin. Note: the bullet bin is replaced by the optional bullet tray in this photo.

Step 5: Cycling the Machine

At this point your assembly should be complete. Gently pull the operating handle towards you, make a full stroke to the bottom and up again. The shellplate should be indexing and the primer slide (#20318*) should function. The casefeed plunger (#13073*) should travel forward to the shellplate. Make sure that you repeat this several times to gain an understanding of the various functions of the machine before you start reloading.

Fig. 13

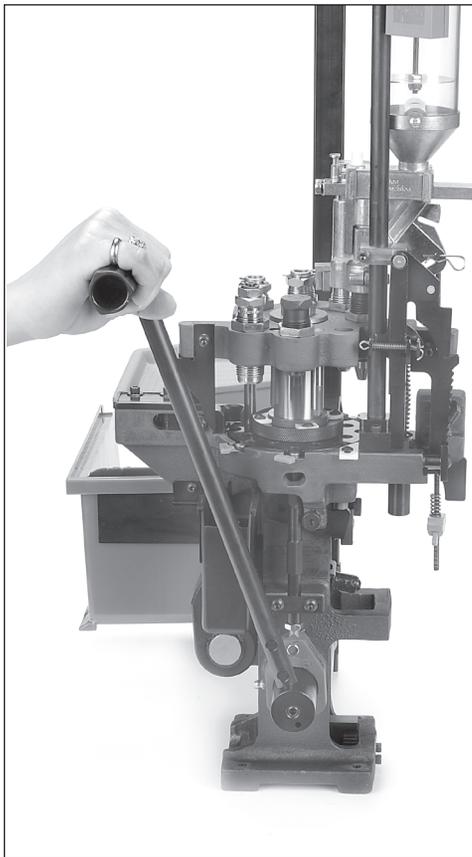


Fig. 13 - Cycle the handle several times to observe the various functions.

Now plug in the casefeed motor and activate the switch. The casefeed plate should turn smoothly within the case-feed bowl.

Assuming that all is well, proceed with components.

Loading Components

Your Super 1050 is equipped with a cartridge activated powder measure that will dispense powder only when a cartridge is in Station 5.

It is important to understand that the adjustable powder bar should reach the end of its travel at the same time that the handle reaches the bottom of its

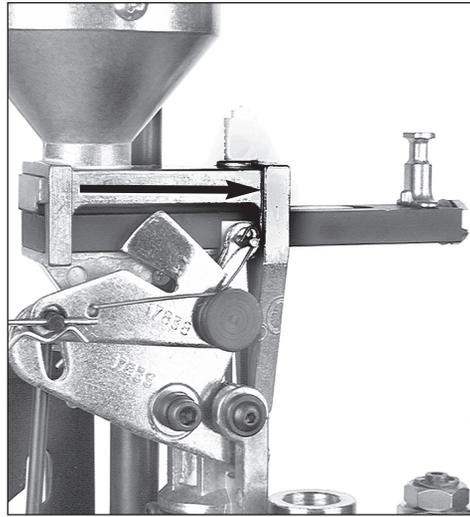


Fig. 14 - This photo shows the powder bar at the end of its travel.

stroke against the frame stop. **Fig. 14** To achieve this adjustment, the die body must be screwed up or down as needed.

The powder die has already been adjusted at the factory. An empty case must be placed in the shellplate at Station 5 in order to check this adjustment. Note that the case used to adjust the powder measure die must already be sized.

NOTE: If you are adjusting for a straight wall case, start your powder die adjustment with the die obviously too high and work down. This will avoid over bellng the case.

If you are adjusting a case with a shoulder, such as a .223, do not turn the die down too far or the shoulder will buckle.

Use a reloading manual to determine how much powder you need for a particular load and an accurate powder scale to determine the weight. Caution:



Fig. 15 - Note the difference between the rifle expander (center) and the pistol expander (right).

While you do not have to use a Dillon Precision powder scale, you should use a scale of equal quality. Do not use scales with plastic frames or "razor blade" pivots. Quality scales have jeweled pivot points. Razor blade pivots can dig into the frame of the scale and give dangerously inaccurate readings.

Powder Measure Adjustments

In Station 5 we adjust the powder measure. It works like this: screw the powder die into the toolhead and insert the pistol powder funnel expander or a rifle powder funnel with the grooved end toward the top of the powder die. **Fig. 15** The funnel should move freely in the die, leaving a loose fit between the top of the die and the powder measure collar. This will enable you to adjust the die to give you a bell on the mouth of your pistol cases making it easier to start the bullet.

On rifle cases, the die should be adjusted so that the powder funnel will contact the mouth of the case and then fully actuate the powder bar. These adjustments are accomplished with a sized case in the shellplate and alternately raising and lowering the operating handle while adjusting the powder die.

When properly adjusted, the powder bar will be moved to the end of its travel by the cartridge case **Fig. 14**.

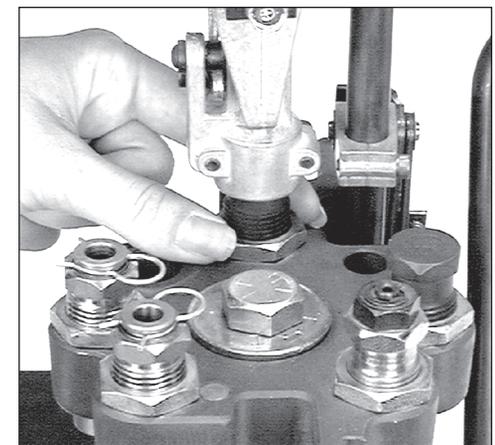


Fig. 16 - Be sure to tighten the lock ring when adjustments are completed.

When you have determined that your adjustments are correct, tighten the lock ring (#14067). **Fig. 16**

Powder Bar Return Rod Assembly

The purpose of the powder bar return rod is to return the powder bar to its closed position.

Remove the blue cap from the powder die (#20320) and loosely clamp the powder measure in position.

To install the powder bar return rod (#13960) remove the blue wing nut (#13799) and rod spring (#14033) from the rod, then insert the bottom end through the 3/8" eyebolt (#13089) that is mounted on the left rear of the main frame.

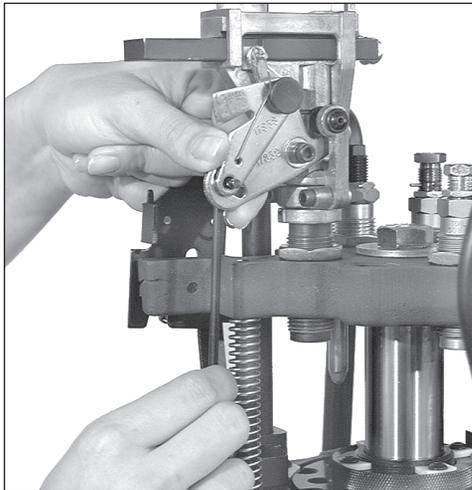


Fig. 17 - Install the return rod clip to secure the powder bar return rod. See the schematic on page 31 for more details.

Next, using your thumb and index finger of your left hand, move the locklink down and align the hole with the slot on the bellcrank. Then, insert the rod through the two holes and insert the return rod clip (#13929). **Fig. 17**

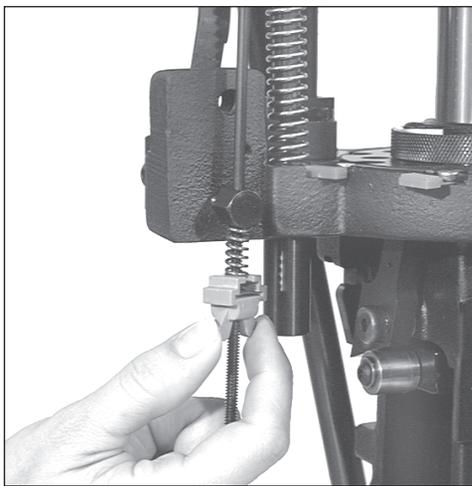


Fig. 18 - See the schematic on page 31 for more details.

Install the spring (#14033) and wing nut (#13799) on the rod and screw the wing nut up until you feel light tension on the spring. **Fig. 18** Tighten the powder measure clamp screws (#14037).

You will notice an adjusting bolt on

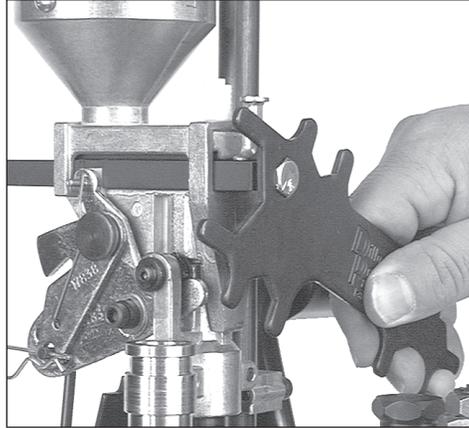


Fig. 19 - Clockwise turns of the powder bar adjustment bolt increase the powder charge while counterclockwise turns decrease the powder charge.

the front of the powder bar. Counterclockwise reduces the powder charge, clockwise increases the charge. **Fig. 19**

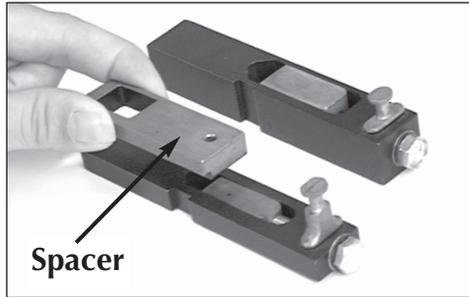


Fig. 20 - Small powder bar (left), large powder bar (right).

Your machine comes with two powder bars. **Fig. 20** One large (#20063) and one small (#20062).

Index a sized and primed case under the measure and operate the machine's handle. Turning the powder bar adjustment bolt clockwise increases the powder charge – counterclockwise turns decreases the powder charge. By trial and error, determine the correct weight of your powder charge by using a powder scale. **Fig. 19**

When the correct powder charge had been set, cycle several cases through the machine and check the load with a scale.

Primer Magazine

Select the proper size primer pick-up tube and fill it by placing the plastic tip over loose primers and pressing down.

You will notice that the primer magazines and primer pick-up tubes have different colored tips. They have been color coded to help you identify size more easily.

The color code is as follows:

- Blue Small Primer Magazine Orifice
- Red Large Primer Magazine Orifice
- Yellow Small Primer Pick-up Tube
- Green Large Primer Pick-up Tube

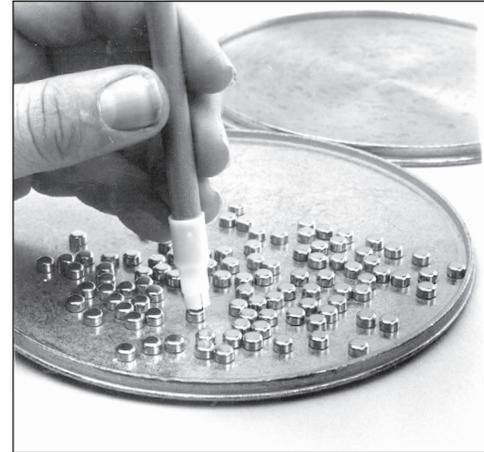


Fig. 21 - All of the primers must be shiny side up.

The shiny side of the primers should be facing up. This is most easily accomplished by use of a primer flip tray. **Fig. 21** This quality cast metal flip tray is available from Dillon Precision and is a better choice than the smaller plastic trays which are difficult to use and have a tendency to warp.

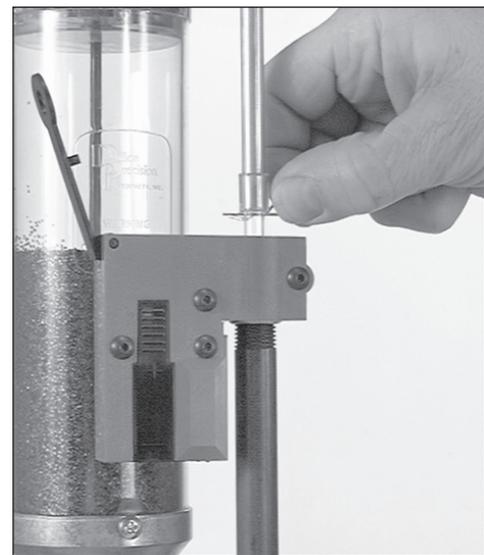


Fig. 22 - When installing primers into the primer magazine, be sure the pick-up tube centers itself before pulling the clip.

Once you've filled the pick-up tube, make sure the little retaining clip is in place at the top of the tube. **Fig. 22** Pivot the switch lever (#13864) away from the Early Warning System housing

and invert the pick-up tube over the primer shield cap (#13957). You will notice the cap has a bevel to help you funnel the primers in. Hold the tube in place as shown in **Fig. 22**, pull the retaining pin and allow the primers to drop into the magazine. Pivot the switch the lever back over the Early Warning System housing. Gently slide the follower rod down through the switch lever and into the primer magazine tube. When you are nearly out of primers, approximately three remaining, the follower will activate the buzzer.

The Electric Casefeeder

Use only clean cartridge cases that have been inspected for any potential problems; split cases, rocks or smaller caliber cartridges that may be hidden in larger caliber cartridges. **Fig 23**



Fig. 23 - When loading, use only cleaned and inspected cartridge cases.

Warning: Be sure that no loaded rounds are mixed with your empty cases. It is possible to feed a blunt nosed cartridge like a .38 Sp. WC into the shellplate upside down and explode it when it is hit by the decap pin.

Now fill the casefeed bowl with



Fig. 24 - The casefeed bowl will hold approximately 500 pistol cases or 350 rifle cases. Do not overload the casefeed bowl.

approximately 500 pistol cases or about 350 rifle cases. **Fig 24**

Your Super 1050 is now charged with components and ready to go, but before you start reloading, read the following explanation of the sequence of the eight reloading stations and the processes that are done at each station.

Review: How the Super 1050 Works

Stations 1 - 8 (counterclockwise)

Station 1: Empty cases are automatically inserted into the shellplate via the electric casefeeder.

Station 2: Here the spent cartridge cases are resized and deprimed.

Station 3: This station is totally unique. The case is supported from the inside and slightly expanded (not belled) while simultaneously a swager is driven into the primer pocket to remove any crimp.

Station 4: A new primer is installed at this station. The spring driven primer slide is extremely smooth. The steel shrouded primer magazine is capped with an electronic Early Warning Device to let you know when you're down to approximately three primers.



Fig. 25 - Dillon's Low Powder Sensor gives an audible and visual warning when the powder reservoir gets low.

Station 5: Here the case is belled and powder is dropped by the case-activated powder measure. It is extremely accurate

and will not drop powder unless a case is present. Dillon Precision offers an optional accessory to be utilized with the automatic powder measure at this station – Dillon's Low Powder Sensor provides an audible and visual reminder when it's time to refill the powder reservoir.

Station 6: This station is open to allow for case inspection.

Station 7: The bullet is seated to its proper depth at this station.

Station 8: In this station, the bullet is crimped into place. The cartridge is then automatically ejected into a collection bin.

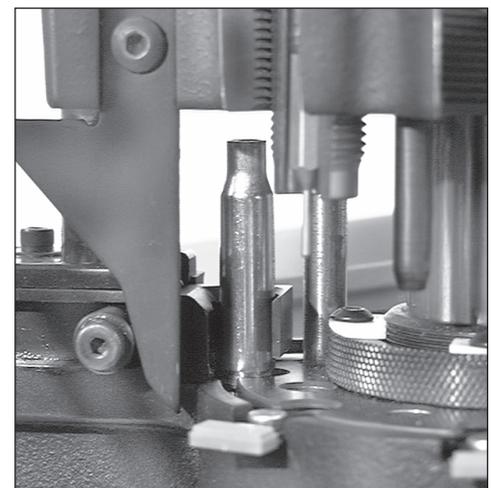
As stated earlier, your dies have been adjusted at the factory. Before you change anything, try it the way it is, once you thoroughly understand the machine's operation, make whatever adjustments to the dies you feel necessary.

Reminder: There may be some variation due to components.

To Begin Reloading

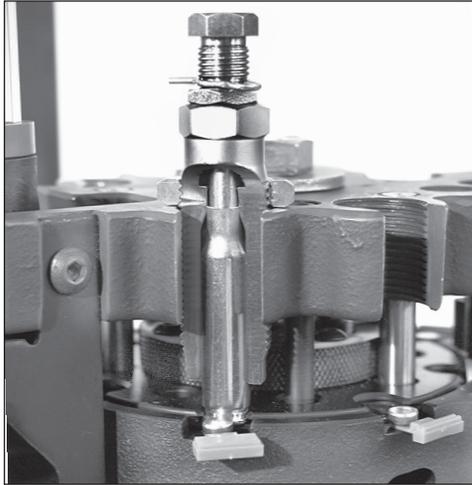
Turn on the switch on the front of the casefeed motor housing. The casefeeder plate should begin to turn. Cases will begin to dispense, base down, into the clear plastic casefeed tube. The motor will continue to run until the tube is full, at which point a micro-switch will temporarily stop the case flow.

From this point the casefeeder will automatically fill the tube as you reload. If the casefeeder does not function properly or the cases do not fall base down, refer to the Troubleshooting section of this manual.



Station 1 - The casefeed plunger inserts the case into the shellplate.

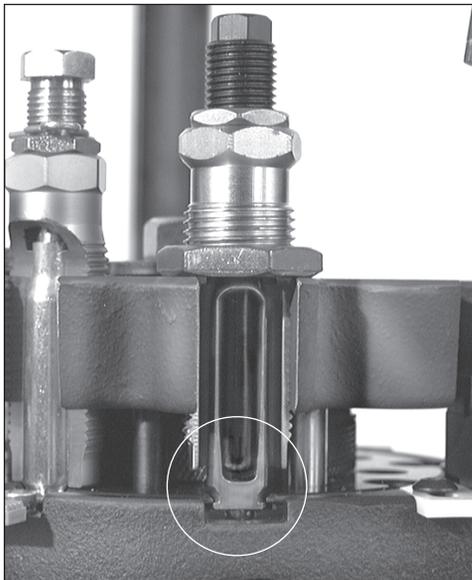
Pull the operating handle smoothly to the bottom stop, then raise the handle, a case has been fed to **Station 1**. Cycle the handle again, strive to be smooth in your operation.



Station 2 - Here, spent cartridge cases are resized and deprimed.

The first case should be indexed to **Station 2**. Cycle the handle again.

It is not necessary to apply any force on the upstroke of the handle. All you are doing on the upstroke is indexing the shellplate. Remember that priming is done on the down stroke. A slow measured upstroke gives you lots of time to pick up the next bullet and ready it for seating. If you count one second down, and one second up, you'll have a good pace.

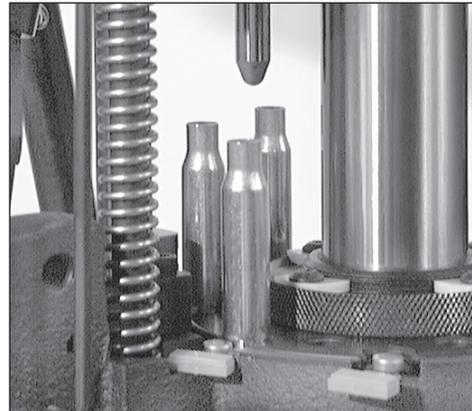


Station 3 - Here the case mouth is expanded while a rod supports the case base for swaging.

The first case should now be in **Station 3** with a case in Stations 1 & 2

as well. Cycle the handle again. The case is swaged and expanded at **Station 3**. Observe the swage operating part (#20314*), if the swage is proper, proceed – if not see items 3 and 4 in the Troubleshooting section of this manual. Cycle the handle again and the case gets primed at **Station 4**.

If the primer is not seated properly (too high or too deep) you will need to adjust the primer push rod (#12819). Clockwise turns of the primer push rod will cause the primer to be seated deeper while counterclockwise turns will seat the primer higher.

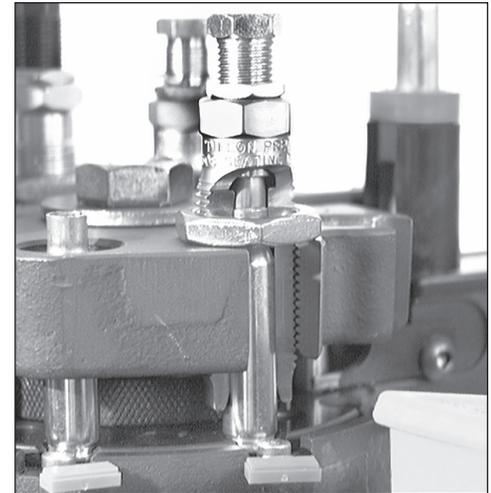


Station 5 - Here the case mouth is belled and powder dispensed.

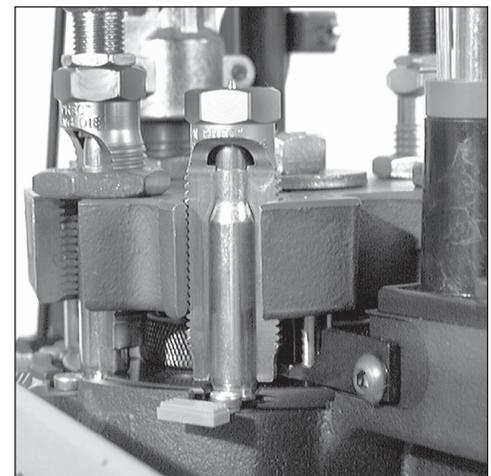
The first case in the sequence should now be primed and at **Station 5**. Remove the locator button (#20637*), extract the round and check the primer. If everything looks okay, replace the case and button and proceed. However, if the primer is not seated properly (too high or too deep) you will need to adjust the primer push rod (#12819). Clockwise turns of the primer push rod will cause the primer to be seated deeper while counterclockwise turns will seat the primer higher.

Cycle the handle again, the automatic powder measure will drop the charge you've selected. Pistol casemouths will be belled at this time. Look through the inspection hole in **Station 6** – you should be able to see your powder charge in the case.

Cycle the handle again. Now, with your left hand, place a bullet on the powder-charged case at **Station 7** and cycle the handle. Your bullet will be seated to its proper depth, if not, a simple height adjustment to the seating stem may be necessary. Refer to a loading manual for proper loaded length (OAL).



Station 7 - In this station, the bullet is seated to its proper depth.



Station 8 - Here the case is crimped and then ejected out of the shellplate with the next pull of the handle.

Cycle the handle again and check for crimp at **Station 8**. Refer to Troubleshooting item 8 for adjustments if necessary. Add a bullet, cycle again. Your first loaded round should now be ejected into the collection bin.

If all has gone well to this point you've got it made. Just keep adding bullets, watch your fingers so they don't get caught and don't hurry. Just try to be smooth in your operation. The speed will come naturally and you'll be doing a thousand rounds per hour before you even realize it.

The following are some adjustment suggestions as well as Troubleshooting hints.

Adjustments

Casefeeder

It may be necessary to readjust the micro-switch for different calibers. Cases may become lodged between the micro-switch and the tube wall. The other extreme is the case failing to put enough pressure on the micro-switch to shut off the system causing it to continue running and overflowing the tube.

Remove the two clutch screws (#13732), lock washer (#13813) and upper clutch (#13632) and the case-feed plate. Place the spacer on the shoulder of the lower clutch and reassemble – see the schematic on page 31 for more details. The casefeed plate should now be approximately 1/8" above the floor of the casefeed bowl. Note: Make sure the casefeed plate is centered in the bowl. **Fig. 26**



Fig. 26 - Make sure the casefeed plate is centered in the bowl with approximately 1/8" all the way around.

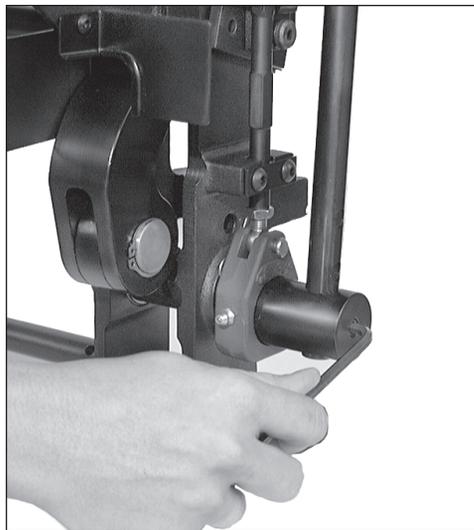


Fig. 27 - Note that there are three different positions for mounting the operating handle.

Handle

The operating handle is adjustable to three different length settings **Fig. 27**. Choose the one most comfortable for your operation. Loosen the set screw (#13432) then retighten when the handle is in the most comfortable position.

Swager

Swaging on the Super 1050 is a simple process and is necessary on all cartridge cases as a means of uniforming the entrance of the primer pocket. **Fig. 28** The swage rod (#20314 large or #20313 - small) is fully adjustable.

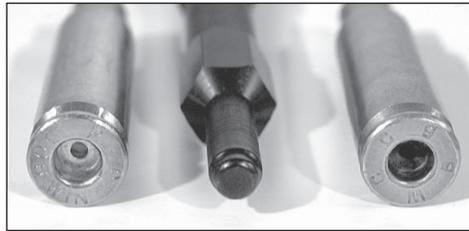


Fig. 28 - Note the difference between the swaged primer pocket (left) and the unswaged primer pocket (right).

Swage Conversion and Adjustment Conversion – Fig. 29

Begin by removing the swage cover (#13064). Next remove the hitch pin (#13840) and slide out the clevis pin

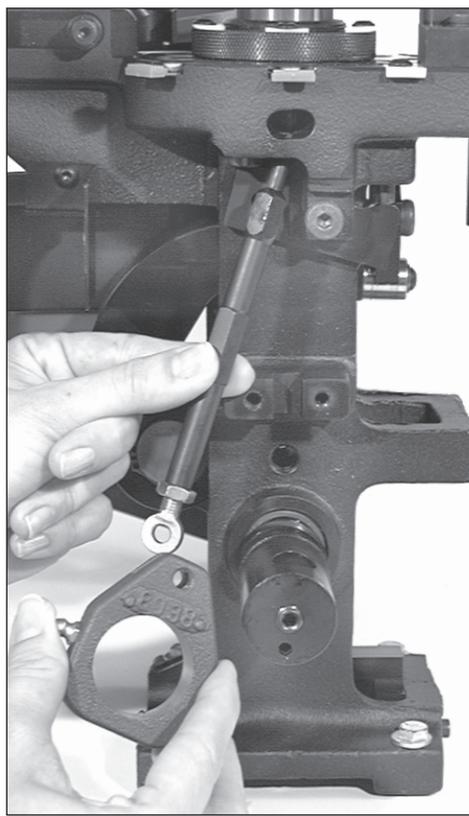


Fig. 29 - See the schematics on page 28 for more details.

(#13522). Remove the operating handle. Rotate the swage connecting rod a half turn and remove it. This will allow you access to the swager. Pull the swager down and out of the machine. **Fig. 29**

Insert the new swager and reassemble.

Swage Adjustments

Use ONLY an unswaged military case for these adjustments.

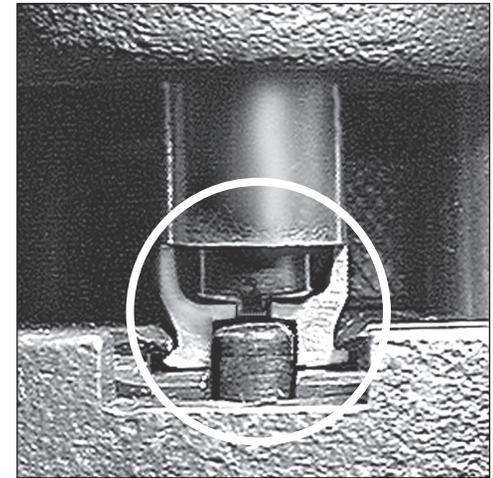


Fig. 30 - A cutaway view of a .45 ACP with the swage rod and the back-up rod properly adjusted in the swaging position.

With the handle in the down position, screw the swage back-up expander down until it makes contact with the case bottom and holds it in place. **Fig. 30**

With the handle still in the down position, turn the swage rod up until it makes contact with the case bottom.

Raise the handle halfway and rotate the swage rod a quarter turn. Now, cycle the handle. Inspect the case and when you achieve a completed swage of the primer pocket, tighten the swage lock nut (#14067).

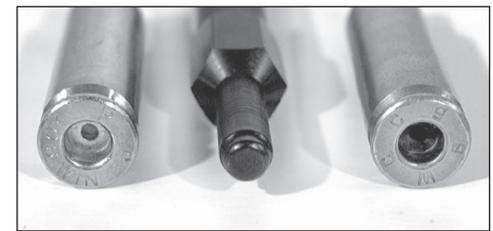


Fig. 31 - Note the difference between the swaged primer pocket (left) and the unswaged primer pocket (right).

A properly swaged pocket will show a rounded edge around the rim. Some military cases (.223 & .308) start out with three small dents around the base

of the pocket, once properly swaged, the dents will no longer be visible. **Fig. 31**

Primer System Change Over Instructions

The Super 1050 has been shipped to you with either the large or small primer system installed. To change the system from large to small or vice versa, follow these instructions:

Be sure all primers have been removed from the primer system. Then remove the Early Warning System and the knurled cap. Then remove the primer magazine (#22031 - large or #22030 - small) and replace it with the new size magazine. Be sure the key on the tip (#14003 - large or #14024 - small) is in the slot and the magazine is all the way down in place. **Fig. 32**



Fig. 32 - Note the shape of the key at the base of the primer magazine tip.

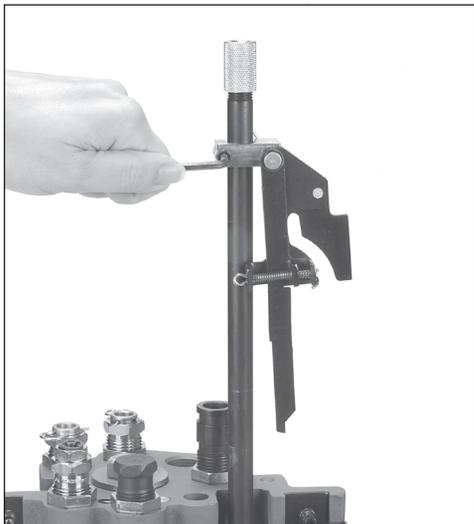


Fig. 33 - Slide the bracket assembly up and out of the way – retighten the lever arm bracket screw to hold it in place.

Pull the operating handle to its down position.

Loosen the lever arm bracket screw (#14037) and slide the bracket assembly up four inches and lock it in place. **Fig. 33**

Raise the operating handle, remove the two primer feed body screws (#13363) and lift off the primer feed body assembly (#20773).

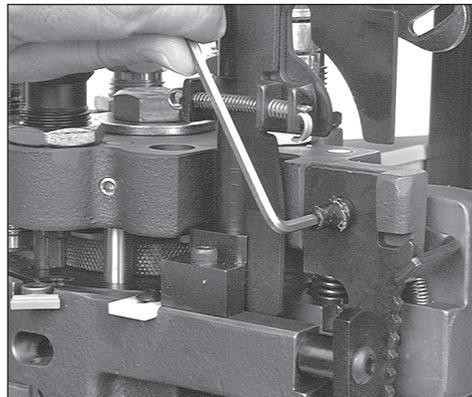


Fig. 34: Remove the toolhead ratchet by first removing the bolt (#12486). See the Toolhead schematic on page 27

Remove the toolhead ratchet (#11688) by removing the bolt (#12486). **Fig. 34**

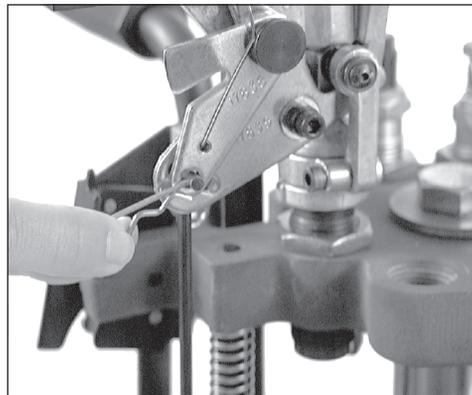


Fig. 35 - After removing the clip and disconnecting the rod, replace the clip in the rod for safe-keeping.

Remove the powder bar return rod (#13960) from the powder measure bellcrank lock link assembly (#11234) by releasing the return rod clip (#13929). **Fig. 35**

Remove the casefeed tube (#20533*) and place it on your bench. Remove the toolhead. **Fig. 36** For more information see the following section: TOOLHEAD REMOVAL.

Now remove the shellplate lock nut (#13425) by loosening the four locator tab screws (#13895) about four full turns. **Fig. 37**

Loosen the ejector tab screw



Fig. 36 - To remove the toolhead unscrew the toolhead bolt and remove.

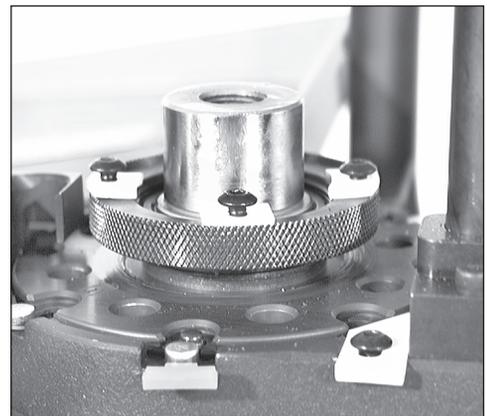


Fig. 37 - The four lock ring screws need only be loosened about four turns to remove the shellplate lock nut.

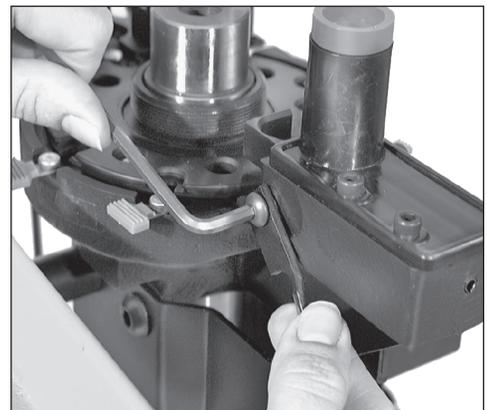


Fig. 38 - Loosen the screw and swing the ejector tab out of the way.

(#13896) and swing the ejector tab (#13189) out of the way. **Fig. 38** Next, slide the casefeed plunger (#13073*) back and remove the shellplate.

Rotate the primer slide stop (#13108) 90°. This will allow you to remove, and replace, the primer slide (#20318 - large or #20317 - small). **Fig. 39**

Next, remove the bushing (#13031 - large or #13222 - small); spring (#13858) and punch (#12849 - large or #13307 - small) and replace them with the parts for your new primer size. Note that there is a specially designed

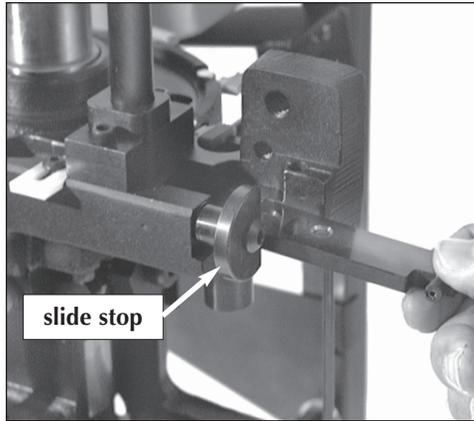


Fig. 39 - Rotate the primer slide stop 90° to move the primer slide freely in or out.
screwdriver supplied for the bushing (included in the accessory bag). **Fig. 40**

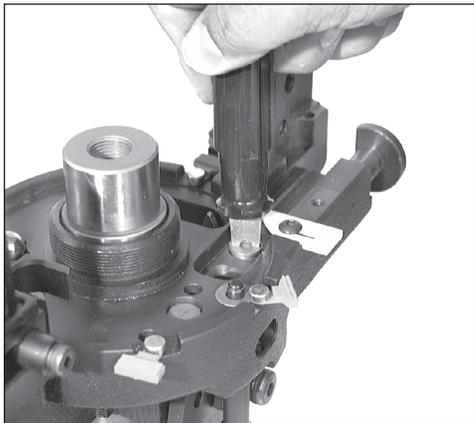


Fig. 40 - A special screwdriver for the bushing has been included in your accessory bag.

You should clean your machine at this time. **Fig. 41**

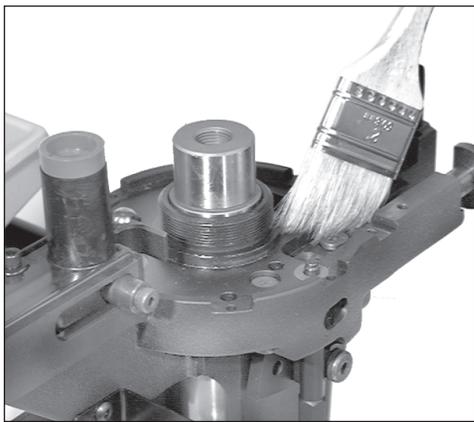


Fig. 41 - It is very important to keep the machine free of grit and debris.

Prior to installation, lube the base of the primer punch. Now adjust your new punch (#12849 - large or #13307 - small) so that it is flush with the bushing (#13130 - large or #13222 - small) by turning set screw (#13226) up or down. If the primer punch is too low, dirt will

collect on top of it leaving imprints on your primers. If it is too high it will bind the slide. Note: You can use the slide for a guide. Slide it back and forth over the bushing to check your adjustments. See the schematic on page 29 or the troubleshooting section for additional information.

To return the lever arm bracket assembly to proper position, manually move the primer slide underneath the shellplate. Pull the operating handle down. Loosen the bracket screw, slide the assembly down until it touches the bottom of the primer slide slot in the frame. Back the bracket up about .010", retighten bracket screw.

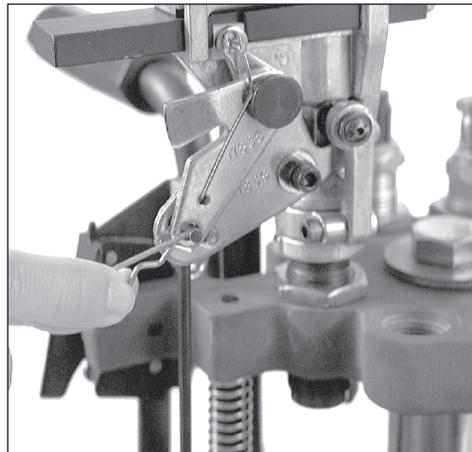


Fig. 42 - After removing the clip and disconnecting the rod, replace the clip in the rod for safe-keeping.

Toolhead Removal

Disconnect the powder bar return rod (#13960) from the bellcrank (#11234) by releasing the return rod clip (#13929). **Fig. 42**

Remove the Primer Early Warning device.

Raise the primer slide lever assembly (#20488) and lock in place - see **Fig. 34**.

Obtain a 15/16" socket or wrench (not supplied) to remove the toolhead bolt (#13342) and washer (#13449). **Fig. 43**

Now remove the toolhead (#20420). Due to being spring loaded, there will be some resistance. Wiggle the toolhead up and off while holding the handle.

After removing the toolhead, carefully lower the handle.

When reinstalling the toolhead bolt (#13342) turn it in only finger tight then cycle the handle up and down to make

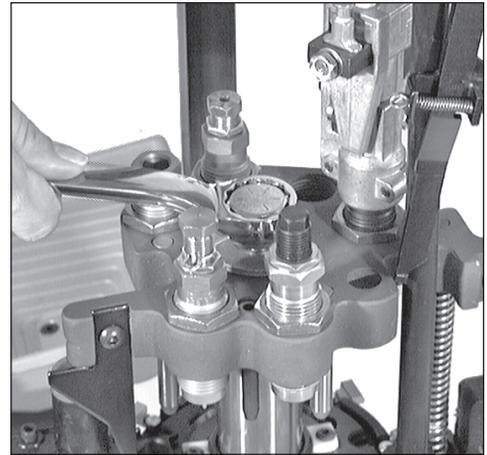


Fig. 43 - Due to being spring loaded, there will be some resistance when pulling the toolhead off.

sure everything is properly located. With the handle in the down position, tighten the toolhead bolt with the above mentioned wrench.

Shellplate Removal

Loosen the ejector tab screw (#13896) and swing the ejector tab (#13189) out of the way. **Fig. 38**

Loosen the four locator tab screws (#13895) about four full turns. **Fig. 37**

Use a toothbrush to remove any powder that may be in the threads before removing the lock ring.

Next remove the lock ring (#20311). Now push the casefeed plunger back (#13073*) and lift the shellplate off. Be sure to lightly grease the bore of the shellplate when reinstalling it. **Fig. 44**

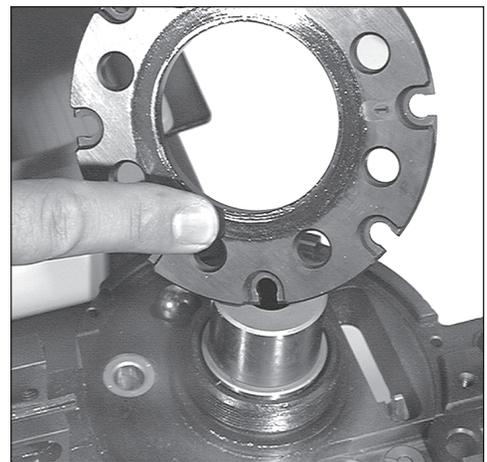


Fig. 44 - Your machine will work its best when properly cleaned and lubricated.

Rule of thumb: turn the lock ring down until tight then back off one-eighth of a turn. Then tighten the four locator tab screws (#13895).

Casefeed Plunger Conversion

When changing calibers it may be necessary to replace the casefeed plunger (#13073*).

To do this, remove the clear casefeed tube (#20533*) and pull out the colored casefeed adapter (#13654*). The adapter is taped for shipping purposes.

Remove the two housing screws (#13815) and the casefeed adapter housing (#11006).

Place your hand on the plunger while removing the roller bolt (#13333). This will prevent the casefeed plunger and spring from jumping out of the machine. **Fig. 45**

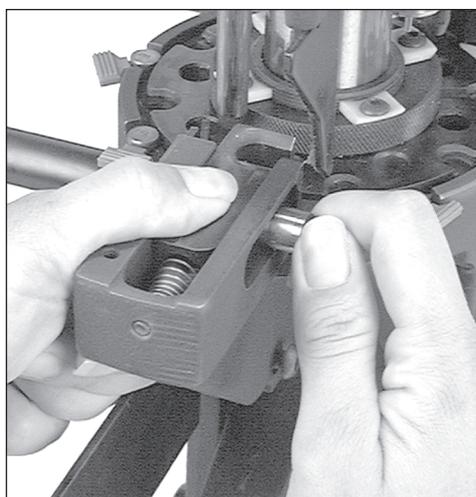


Fig. 45 - The casefeed plunger and spring are under tension. Hold them in place while removing the roller bolt.

Thoroughly clean the track and casefeed parts with a solvent. Now very lightly apply grease to the sides and install the proper size casefeed plunger (#13073*). **Fig. 46** Remember to

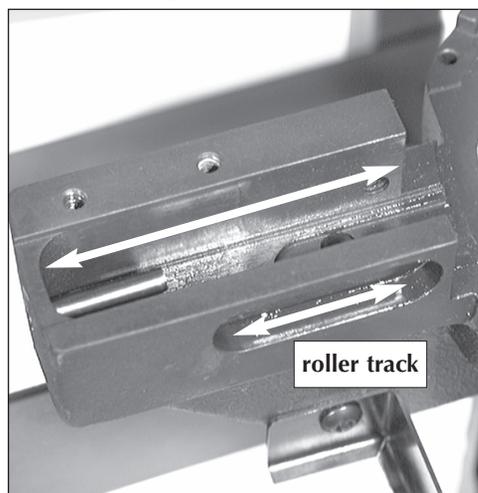


Fig. 46 - Be sure to lightly grease the sides of the casefeed plunger track, casefeed plunger and roller after cleaning.

grease the roller (#13498) and the roller track (**Fig. 46**) and Loctite the threads on the roller bolt (#13333).

Install the casefeed housing and insert the proper size adapter (#13654*). The casefeed tube (#20533*) should now be inserted into the casefeed adapter (#13654*). Note that the tube is marked "up" on one end. Press this end into the tube clip (#13859). See Troubleshooting section for any adjustments.

Die Adjustments

Station 2 - To install the size/decap die

Warning: Never attempt to deprime live primers, an explosion may result.

Move the toolhead down, by lowering the handle all the way down.

Screw the sizing die into Station 2. Continue to screw the die down until it just touches the shellplate. **Fig. 47**

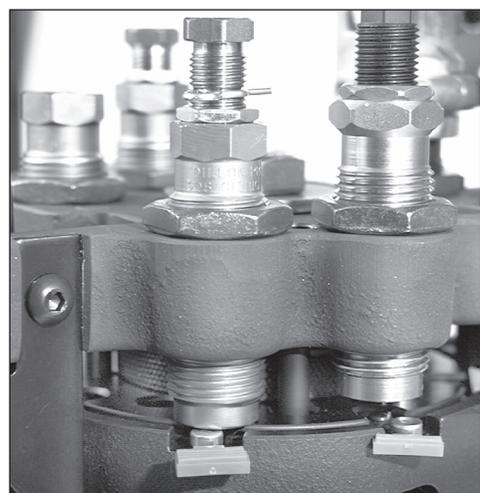


Fig. 47 - Screw the size/decap die down until it just touches the shellplate.

Tighten the die lock ring finger tight. Now move the toolhead up by raising the handle to its upright position.

Note: When loading .270 or .30-06 you need to raise the decap assembly so that the hitch pin clip is a minimum of 1/8" above the silver lock ring as shown in **Fig. 47**.

Place a case in the casefeed funnel. Here, the case drops to the casefeed plunger.

Cycle the handle. The casefeed cam pushes the roller bushing back, dropping the case into the slot of the plunger.

Cycle the handle. The case is inserted into the shellplate.

Note: After raising the handle, insure that you push the handle against its full aft stop. This will insure that the

shellplate fully advanced to the next station.

Note: When priming, pushing the handle against its stop, will insure that the primer is fully seated.

Again, move the toolhead down. The case is now sized. If the case has a spent primer, it will be deprimed. Leave the toolhead in this position with the case fully inserted in the die. **Fig. 48** This will ensure that the die remains in alignment when tightening the lock ring.

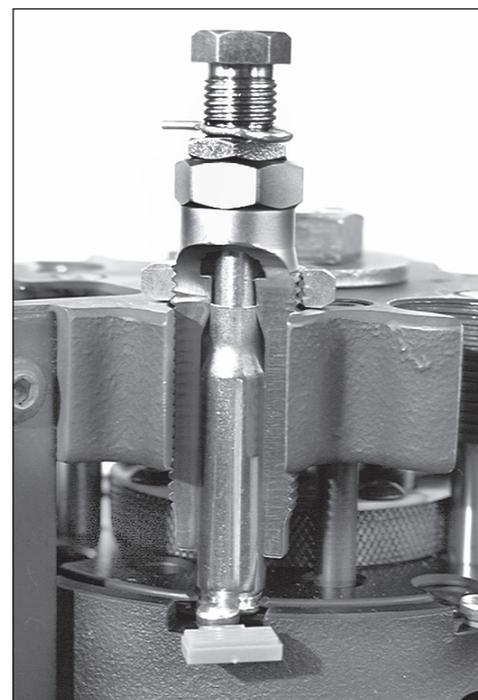


Fig. 48 - As the toolhead continues down, it will reshape the case neck, shoulder and body.

Using a 1" wrench to turn the lock ring and a 7/8" wrench to hold the die body, tighten the lock ring.

Station 3 - Adjustment of the Expander Die

Install the expander die (caliber specific) at Station 3. Place a case in Station 2 and cycle the operating handle once (sending the case to Station 3). Turn the expander die down until you feel it make contact with the case and cycle the operating handle. Make adjustments in one-quarter turn increments until the desired expansion of the case mouth is achieved. Tighten the die lock ring.

A properly expanded case should show a slight flare at the case mouth. **Fig. 49**

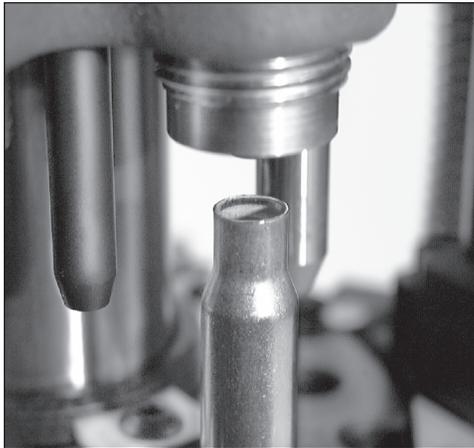


Fig. 49 - You don't need any more expansion than what you see in this photograph.

Station 5 - Adjustment of the Powder Die/Powder Funnel

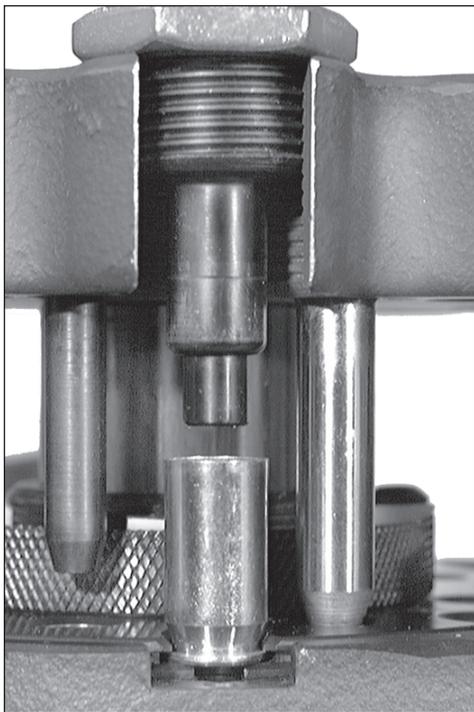


Fig. 51 - When properly adjusted, the case mouth will go past the expanding line and the stem will contact the bottom of the case.

Note: Adjusting the powder die for a straight wall case is not the same as adjusting a powder die for a bottle-necked case. This is because straight wall cases are given a bell and bottle-necked cases are not given a bell.

For the powder bar to properly dispense a measured powder charge, the powder bar must travel its full distance. To travel its full distance, the white cube must contact the powder measure body (see arrow **FIG 52**).

Also the belling process does not begin until after the powder bar has trav-

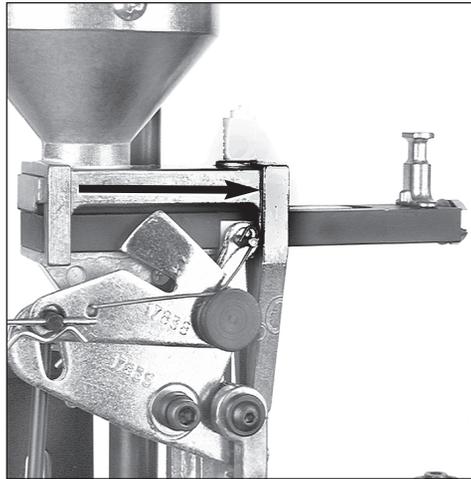


Fig. 52 - This photo shows the powder bar at the end of its travel.

eled its full distance. The angled portion on the bottom of the powder funnel (**Fig. 53**) is what bells the cartridge. Once the white cube has contacted the powder measure body the case is forced upward against the tapered portion of the powder funnel producing a bell. The more the powder die is adjusted down (clockwise) the more the case will be belled.

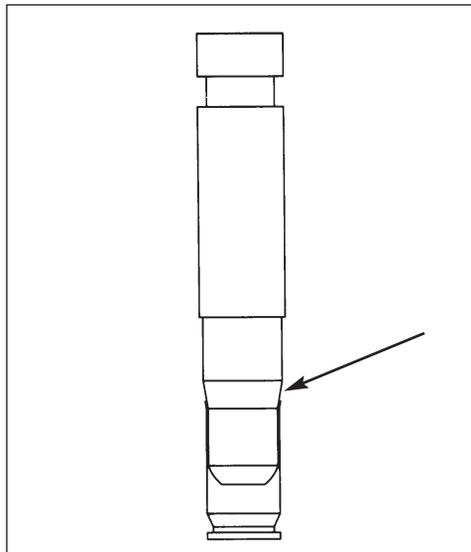


Fig. 53 - Adjusting the powder die up reduces the amount of belling - down increases the amount of belling.

Note: If the powder die is not adjusted down far enough to cause the powder bar to travel its full distance the powder charge will be erratic and the case will not receive enough bell.

Station 5 - Adjustment of the Powder Die/Powder Funnel Cont...

Drop a case into the casefeed funnel and cycle the handle twice. The case should now be in the shellplate at Station 2.

Move the handle down. Notice the resistance at the end of the down stroke. This is the resistance of the case in the sizing die. Raise the handle. The case will index to Station 3.

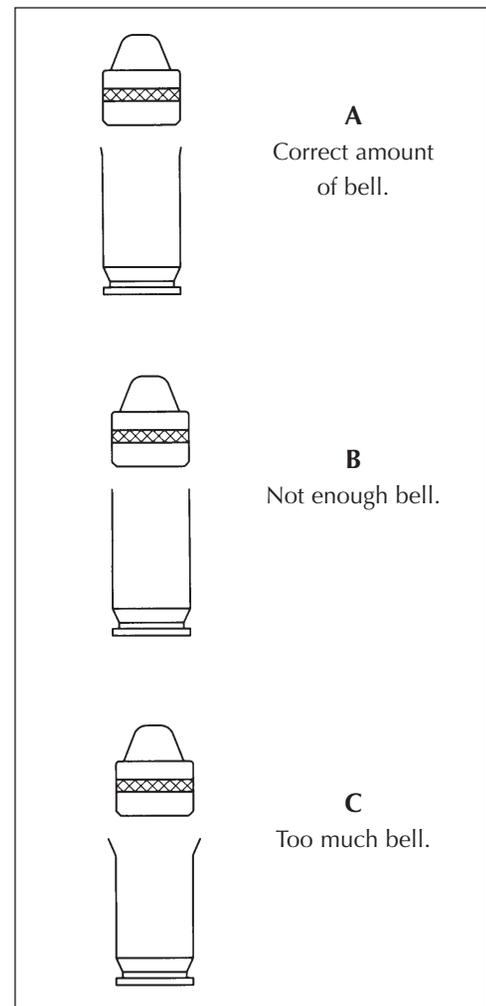
Cycle the handle to advance the case to Station 4. Again, cycle the handle to prime the case and index it to Station 5.

Cycle the handle.

If the white cube has not traveled its full distance, raise the toolhead just enough to pull the case off of the powder funnel (this will prevent the shellplate from indexing while you adjust the powder die). While holding the powder measure, turn the die down 1/8 of a turn. Again lower the toolhead and observe the travel of the powder bar.

Repeat as needed until the powder bar travels its full distance, **Fig. 52**.

Once the powder bar travels fully across you should continue to adjust the powder die for the desired amount of bell (turn the powder die 1/8 of a turn at a time). The desired amount bell is just enough to allow the bullet to sit



on the case mouth without falling off and to keep the case from shaving lead during the seating process - see the illustration (above) example "B".

Note: If you screw the die down too far, the case will look like example "C" in the illustration (right). You must then discard this case, back the powder die off, by turning it counter clockwise, and continue with a new sized case.

You'll soon learn to judge the correct amount of bell by simply looking at it. In the meantime, you might want to use your dial calipers to check it. Twenty thousandths of an inch greater (at the mouth of the case) than its original diameter, should about do it.

Once you've achieved the desired amount of bell - with the case in Station 5, raise the toolhead. Run the lock ring down hand tight.

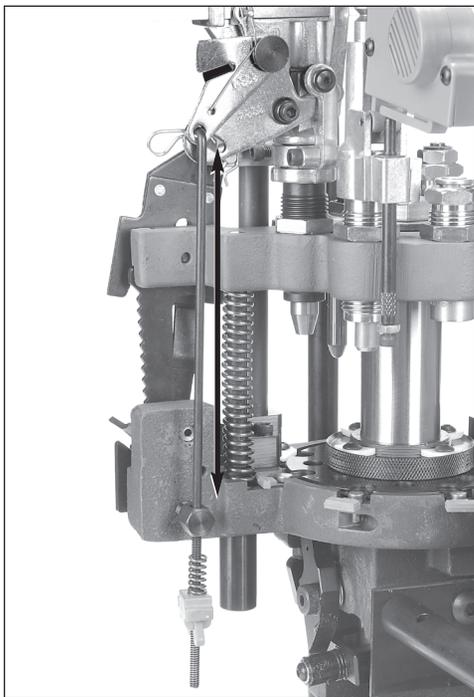


Fig. 54 - Make sure the bellcrank and return rod bolt are aligned.

Insure the bellcrank and the return rod bolt (in the frame) **FIG 54** are aligned. Using a 5/32" Allen wrench, snug the collar clamp screws.

While holding the powder measure in place, snug the lock ring using a 1-1/8" wrench.

Station 7 - General Information on Bullet Seating

The purpose of the seating die is to insert the bullet into the case and to push it down into the case the proper amount.

How far the bullet is pushed into the case will determine the overall length (OAL). Several factors go into determining the proper OAL - such as, the maximum recommended OAL, listed in the reloading manual, and the type of bullet being loaded. The type of bullet can determine the OAL in one of two ways.

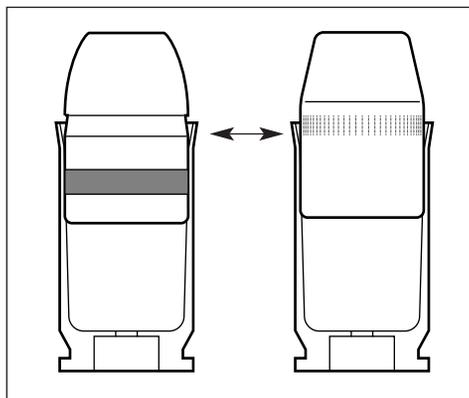


Fig. 55 & 56 - Shown are several examples of a cannelure or crimping groove.

If the bullet has what is called a cannelure, or crimping groove **Fig. 55 & 56**, this will determine the proper OAL. If the bullet you're using doesn't have a cannelure or a crimping groove, then you'll need to refer to your reloading manual for the suggested OAL. The purpose of the cannelure and crimping groove is to secure the bullet by giving the mouth of the case a place to go (without deforming the bullet) when being crimped. When the bullet is properly seated, the mouth of the cartridge case should be near the top of the cannelure/crimping groove.

Refer to your reloading manual. Under the section specified for the caliber you're loading, you'll find a schematic of the cartridge. For example, .38 Special lists a maximum OAL of 1.55" (Lyman Reloading Handbook). If you're seating the bullet to the cannelure/crimping groove, the OAL should be well within the maximum OAL listed, however, use a set of dial calipers to check it. (Dial calipers are available from Dillon Precision). If the bullet you're using doesn't have a cannelure/crimping

groove, refer to the specific type of bullet you're using in the reloading manual. For example - if you're loading a 158 gr. .38 Sp. JHP and it doesn't have a cannelure/ crimping groove, use the suggested OAL of 1.480 (Lyman Reloading Handbook).

Station 7 - Installation and Adjustment of the Seating Die



Please note that every die set includes seating stems to fit most common bullet types. Select the appropriate seating stem for the bullet type you are loading.

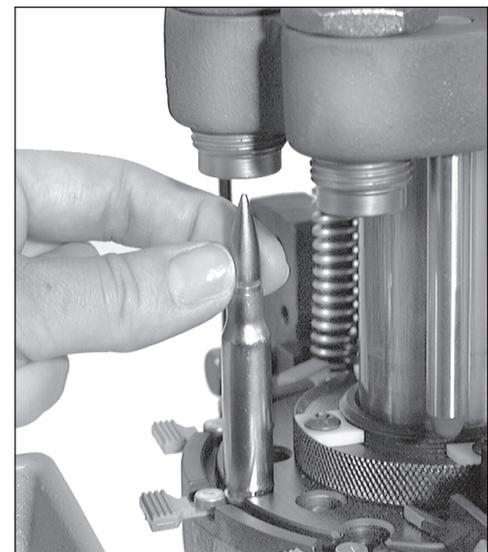


Fig. 57 - Place the bullet on the case mouth at Station 7.

Take the seating die from the die box and screw it into Station 7. Screw the die down until the bottom of the die is flush with the bottom of the toolhead. Note: At this point the die will not be screwed down far enough to begin seat-

ing the bullet, but it will give you a place to start.

Place a case (with a belled case mouth) into Station 7. **Fig. 57**

Place a bullet on the belled case mouth and lower the toolhead. Then, raise the toolhead just enough to inspect the bullet without indexing the shellplate. If the bullet is not seated deep enough, screw the seating die down 1/2 turn at a time. As a guide, one full turn moves the die down about 70 thousandths of an inch, about the thickness of a nickel. Again, cycle the machine and inspect the seating depth. Repeat these steps as necessary until the correct overall length is achieved. Use a dial caliper or equivalent to measure the overall length of the cartridge. Check the overall length of the round against the information in your reloading manual.

Once you have obtained the proper OAL, replace the cartridge into Station 7 and lower the toolhead. Using a 1" wrench to turn the lock ring and a 7/8" wrench to hold the die body, snug the lock ring.

Note: If you ever load a cartridge that you are unhappy with, you can use a Dillon bullet puller to reclaim your components.

Station 8 - Installation and adjustment of the Crimp Die

Screw the crimp die into Station 8. Screw it down until it is flush with the bottom of the toolhead. This is a good starting point for the crimp adjustment.

Place a cartridge with a properly seated bullet into Station 8.

Lower the toolhead and continue to

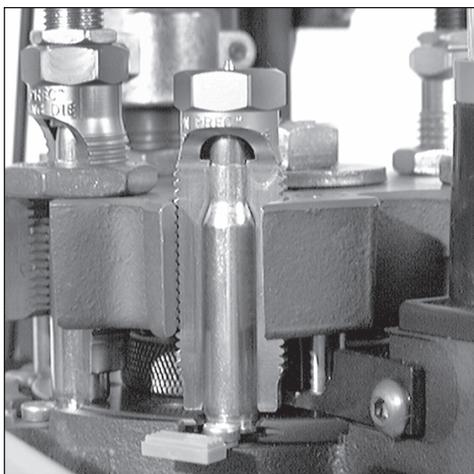


Fig. 58 - Cutaway crimp die shows the area being crimped while the case is being fully supported by the die body.

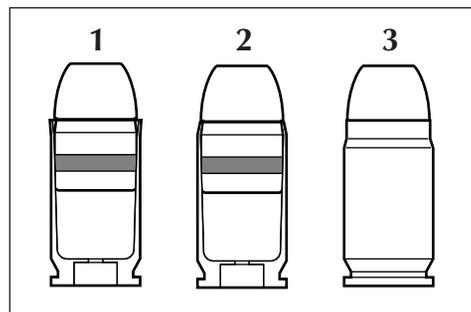
screw the die down until it touches the cartridge. **Fig. 58**

Raise the toolhead and screw the die down 1/8 of a turn, lower the toolhead.

Raise the toolhead halfway and inspect the cartridge. If the bell is still present, or the desired amount of crimp has not been achieved, give the die a 1/8 turn down and try again. Continue making small adjustments to your crimp die until the desired amount of crimp has been achieved.

Once the adjustment is complete, place the case back into Station 8 and lower the toolhead. Using a 1" wrench to turn the lock ring and a 7/8" wrench to hold the die body, snug the lock ring.

Note: When adjusting the crimp die it is important to know what to look for. Check that the crimp: Looks OK, allows your firearm to function consistently and the bullet feels tight in the case.



The drawing of case #3 (above) is a depiction of a case that has been over crimped by adjusting the crimp die down (clockwise) too far. Note the defined line below the mouth of the case and the bulge below the line. This is not a proper crimp. This line is the direct result of the cartridge being over crimped. A line like this will only appear if the crimp die is adjusted down too far. Warning: Over crimping .45ACP, .38 Super, 9mm, etc., can actually cause the bullet to be loose in the case.

Adjustments for calibers 9mm, .38 Sp., .45 ACP and for hot loads that have been fired many times

Configuration 1

To begin, place a military case (sized, decapped and unswaged) into Station 3.

Screw the back-up rod (#12749*) down two turns into the toolhead (#20420). Pull the handle.

Using a wrench turn the back-up rod

(#12749*) down until it hits the inside bottom of the case. Note: Do not force the expander as this will damage the case and the shellplate. Now secure the lock ring (#14062). Raise the handle.

Screw the eyebolt (#13245) all the way into the swager. Grease the clevis pin (#13522) heavily.

Put the swager into position. Push the clevis pin through the connecting rod and eyebolt and secure with the hitch pin (#13840). Replace the swage cover (#13064).

With the military case still in Station 3, pull the operating handle down with your left hand. Now turn the swager upward with your right hand until it meets resistance. With your left hand raise the operating handle about 10 inches. With your right hand turn the swager up a 1/4 turn. Cycle the handle down.



Fig. 59 - Note the difference between the swaged primer pocket (left) and the unswaged primer pocket (right).

Raise the handle just enough to remove the case and inspect the primer pocket to see the amount of swaging being done. The swager should leave a radius entrance on the primer pocket. **Fig. 59**

Turn the swager in, using 1/4 turn increments until you achieve the proper swage. Secure the jam nut (#13682). Note: Do not over swage. This condition will cause damage to the shellplate (#12600*).

When your swager is properly adjusted you will feel resistance during the final 1/2" to 1" of the downward stroke of the handle.

Adjustments for rifle calibers Configuration 2

To begin, place a military case (sized, decapped and unswaged) into Station 3.

Remove the back-up rod (#12749*) from the back-up die (#12184).

With the operating handle in the down position, screw the back-up die into Station 3 until the die comes into contact with the shellplate. Now back

the die out one full turn and secure it in place with the lock ring (#14067).

Leave the handle in the down position. With a wrench, screw the back-up rod into the back-up die. Turn the back-up rod down until it touches the inside bottom of the case. Note: Do not force the expander as this will damage the case and the shellplate. Now secure the lock ring (#13483). Raise the handle.

Screw the eyebolt (#13245) all the way into the swager. Grease the clevis pin (#13522) heavily.

Put the swager into position. Push the clevis pin through the connecting rod and eyebolt and secure with the hitch pin (#13840). Replace the swage cover (#13064).

With the military case still in Station 3, pull the operating handle down with your left hand. Now turn the swager upward with your right hand until it meets resistance. With your left hand raise the operating handle about 10 inches. With your right hand turn the swager up a 1/4 turn. Cycle the handle down.

Raise the handle just enough to remove the case and inspect the primer pocket to see the amount of swaging being done. The swager should leave a radiused entrance on the primer pocket. **Fig. 59**

Turn the swager in, using 1/4 turn increments until you achieve the proper swage. Secure the jam nut (#13682). Note: Do not over swage. This condition will cause damage to the shellplate (#12600*).

When your swager is properly adjusted you will feel resistance during the final 1/2" to 1" of the downward stroke of the handle.

RL1050 vs. Super 1050

Not all parts are the same but some are still interchangeable. We have made changes to several parts used on the Super 1050 that are not interchangeable with the RL1050 machine.

- The Super 1050 primer lever assembly (#21145) has a longer arm to accommodate the higher toolhead travel. This is not available for RL 1050 machines. Primer feed body (#20773) will fit both machines but again the primer lever assembly will not.
- The Super 1050 index lever has been

changed considerably and will not index properly on RL 1050 machines.

- The Super 1050 mainshaft, mainshaft pivot pin, crankshaft assembly, and bearings are completely different.
- The casefeed body has been modified to allow long cases to feed through but is interchangeable between the Super 1050 and RL 1050 machines.
- Any RL 1050 toolhead assembly will fit the Super 1050 machine, but the toolhead ratchet (#11686, RL 1050) must be replaced with ratchet (#11688, Super 1050).
- The toolhead spring, bushing and sleeve, as a set, are longer to accommodate the increased toolhead travel on the Super 1050 but they will work on the RL 1050.
- The RL 1050 spent primer cup has been replaced with a larger, plastic spent primer cup and bracket. It is not interchangeable.

Using RL 1050 toolheads and dies on the Super 1050...

If you want to interchange an RL 1050 toolhead already set for a caliber you want to load onto the Super 1050 you will need to check for the following clearances.

1. Remove the toolhead assembly from the Super 1050.
2. Replace the shellplate with the shellplate for the caliber you intend to load with.
3. Remove the toolhead spring and set the toolhead onto the mainshaft while holding the handle at about mid-travel for proper alignment into the frame. Next, install the washer and toolhead bolt.
4. Slowly lower the handle and look to see if any die comes in contact with the shellplate. Readjust dies as needed.
5. Place one unprimed case in the swage station and again slowly lower the handle. Readjust the expander and swage rod as needed.
6. Once you have reset the dies to the machine, remove the toolhead and reinstall the toolhead spring and complete the rest of the conversion and set up to reload. Reinstall the toolhead.

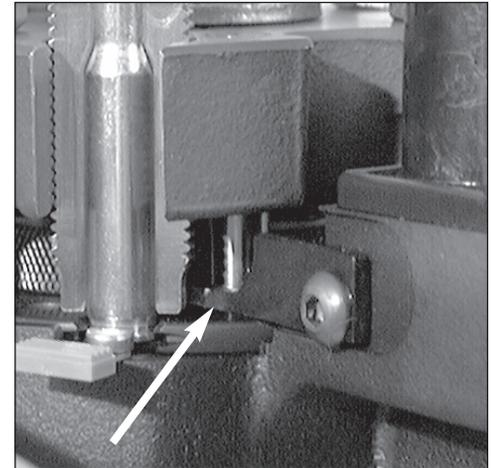
Troubleshooting

.308 Winchester and related calibers with similar case length (.243 and/or .22-250) also lend themselves to reload-

ing on this new machine. No special changes are necessary to the die set.

Hard or Incomplete Indexing

- 1.) Wrong size locator buttons.
- 2.) Index pawl bent or worn (#13705).
- 3.) Shellplate lock ring adjusted too tightly (#20311).
- 4.) Dirt under the shellplate (#12600*).
- 5.) Bent or broken shellplate (#12600*).



When reinstalling the ejector tab (#13189) it is vital that it is not set too low or it will interfere with the shellplate.

- 6.) Ejector tab (#13189) interfering with the shellplate - see above photo.

Station 1: Case Insertion Problems

- 1.) Wrong size case insert plunger (#13073*).
- 2.) Wrong case insert adapter (#13654*).
- 3.) Shellplate lock ring not adjusted tight enough.
- 4.) Dirt in the shellplate (#12600*) pockets or damaged shellplate.
- 5.) Handle being moved too rapidly on upstroke.
- 6.) Bent or broken roller bolt (#13333).
- 7.) Dirt or media in casefeed track.

Station 2: Resizing and Decapping Problems

With .30-06 and .270 calibers it is important to note that the seater and crimp dies must be shortened for clearance reasons. They are available and are included with the respective conversion kits.

- 1.) Crushed cases:
 - a.) Shellplate lock ring too loose or too tight.
 - b.) Not enough radius on the die. Use

Dillon dies whenever possible.

c.) Wrong size or missing locator buttons.

2.) Bending or breaking decapping pins:

a.) Wrong shellplate (#12600*).

b.) Slightly bent decapping assembly or pin.

c.) Berdan primed cases.

d.) Dirt in shellplate pockets.

e.) Handle being moved too rapidly on the down stroke.

f.) Rocks or other foreign objects in cases.

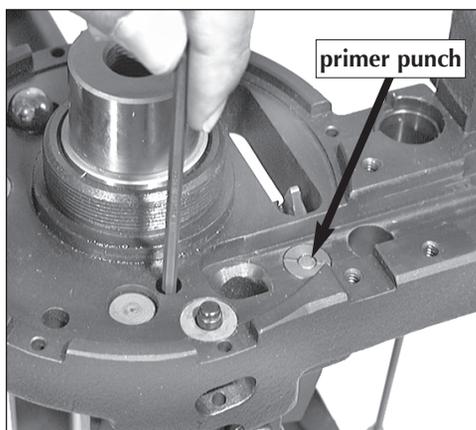
Station 3: Primer Pocket Swaging Problems

1.) Primers smearing or crushing:

a.) Swage back-up rod not down far enough (#13332 or #13348).

b.) Swage rod not adjusted high enough (#20314 - large or #20313 - small).

Station 4: Priming Problems



The above photo shows the rocker arm set screw (#13226) being adjusted. The Super 1050 comes from the factory with this set screw properly adjusted, but over time it can move. When the rocker arm set screw is out of adjustment, it can dent primers and/or cause the primer slide to stick. When properly adjusted, the primer punch (#12849 large - #13307 small) will be flush with the platform surface – see arrow above.

1.) Crushed primers:

a.) Swage rod (#20314 - large or #20313 - small) not adjusted correctly, dirty or worn out.

b.) Dirt in the shellplate (#12600*).

c.) Ringed primer. When a spent primer has been pierced by the decapping pin leaving a ring of metal from the primer in the pocket.

d.) Primer station retain tab (#12930) not adjusted correctly.

e.) Worn primer punch (#12849).

f.) The bench that the machine is mounted on is not rigid enough. This can be corrected by affixing a board to both the wall and your bench.

g.) Hot-loaded ammo that has been fired several times and the base of the case has been flattened out.

2.) High primers:

a.) Adjust the primer push rod (#12819).

b.) On .223 cases the swage back-up rod (#13332) is down too far, slightly collapsing the primer pocket and not allowing the primer to seat fully.

c.) Loose shellplate (#12600*).

d.) Erratic handle motion.

e.) Do not remove the rubber piece on the primer slide.

3.) Smearing primers - see Station 3: Primer Pocket Swaging - item 1

4.) Locator tab:

a.) When adjusting the priming station locator tab, it should be set as close to the case as possible without touching it. Be sure the cases in the shellplate rotate freely past the tab. Change primer magazine tips every 20,000 rounds. Note: Move the handle down, bringing the toolhead down. Move the locator tab in to the case in the priming station.

Station 5. Powder and Case Mouth Belling Problems

1.) Crushing cases:

a.) Wrong size or missing locator buttons.

2.) Spilling powder:

a.) Slamming or going too fast with the operating handle (#17071).

b.) Stick or pencil-lead type powders bridging on the case mouth in the powder funnel (#13005). See conversion chart.

c.) Check powder bar adjustment.

3.) Erratic belling:

a.) Variation in case length. Divide cases by brand.

b.) Handle not moving all the way down on each stroke. Note: Try setting a bullet on the case mouth in Station 6.

4.) Erratic powder charges:

a.) Powder bar not moving full length of its travel. Turn the powder die down until it does.

Station 7: Bullet Seating Problems

1.) Erratic seating depth of the bullet:

a.) Build up of lead shaving and/or lube in the seater or crimp dies.

b.) Bullets having erratic dimension (length and/or the ogive).

c.) Use the proper seating stem for the type of bullet being used.

d.) Variations in case types and/or lots – sort brass.

e.) Refer to a loading manual for proper loaded length (OAL) and additional information.

Station 8: Crimping Problems

1.) Erratic crimping:

a.) Length of cartridge cases erratic, probably due to mixed brands of brass.

b.) Worn out or improperly made die, use Dillon dies whenever possible.

2.) Loose bullet:

a.) Too much taper crimp. Note, this condition also ruins accuracy.

b.) Wrong expander (#12749*).

c.) Thin cases.

Maintenance

Loctite

Loctite should be used following adjustments to or replacement of all threaded screws. Please note that Loctite should be applied to threaded portions only and should be of a non-permanent type. Blue Loctite #242 is recommended.

Swage

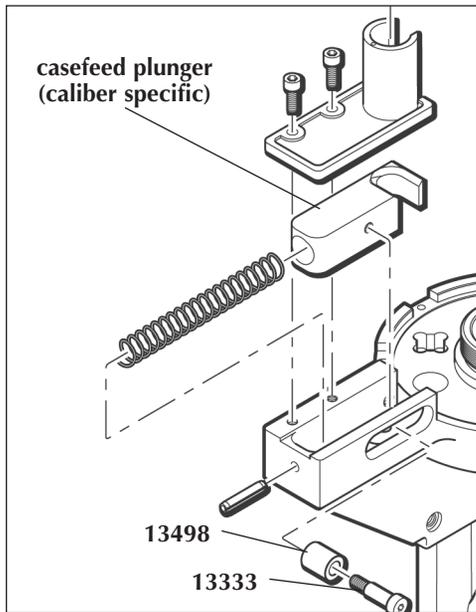
Clean the swage by pulling the operating handle down and use a small brush to clean the tip. Every 10,000 rounds, remove the swage rod (#20314 - large or #20313 - small). and clean, lightly grease and replace. Note: Do not grease the tip of the swage where it contacts the primer pocket.

Lubrication

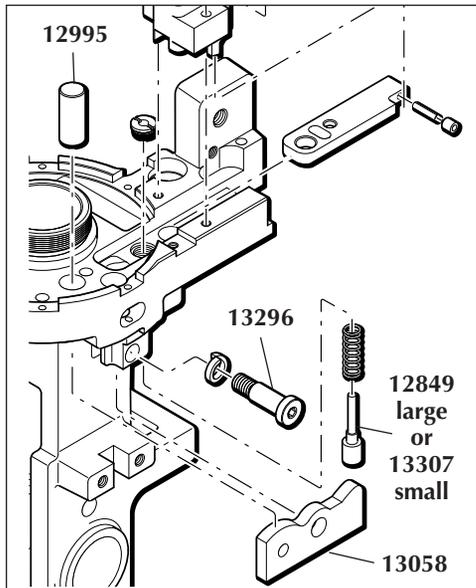
Operating circumstances will dictate the frequency of required lubrication. It is highly recommended that the Super 1050 be cleaned and lubed after every 10,000 rounds of operation.

Use a high-grade, conventional wheel bearing grease – *do not use oil*.

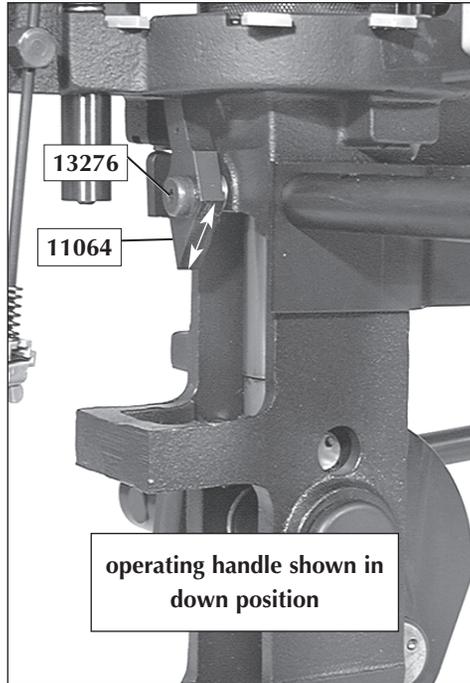
Lubrication Points:



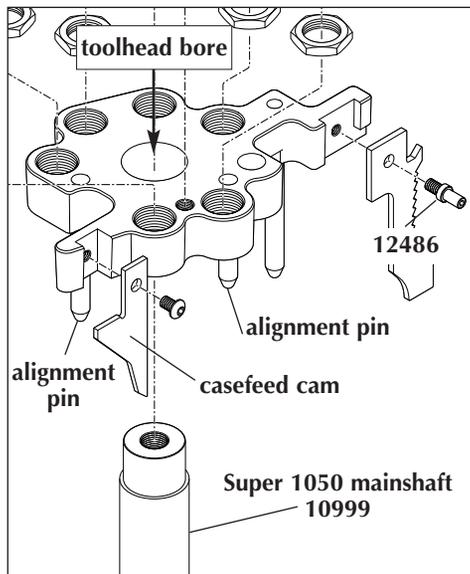
- Casefeed Plunger (#13073*), lube the sides and bottom.
- Casefeed Plunger Roller (#13498) and Bolt (#13333)



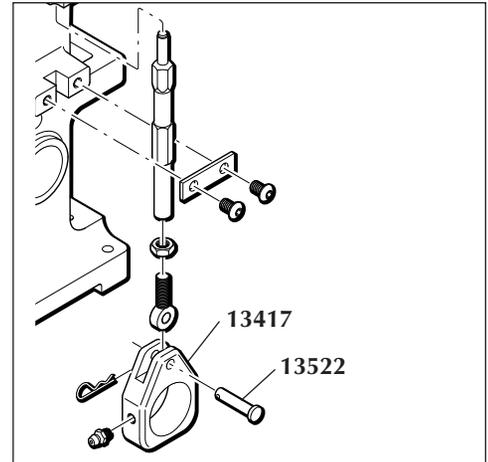
- Tappet (#12995)
- Rocker Arm (#13058), cam surfaces and hole.
- Pivot Bolt (#13296)
- Primer Punch Base (#12849 - large or #13307 - small)



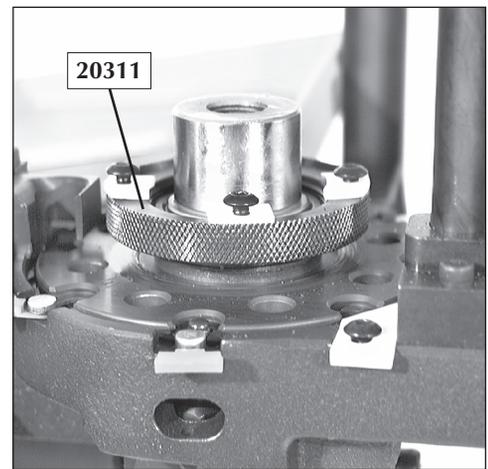
- Lube the Indexing Lever Cam surface (#11064) and Index Lever Shoulder Bolt (#13276). With the handle in the rest position, you will see the Index Roller (#10996) come into contact with the Lever Cam surface. The Index Roller (#10996) also requires periodic lubrication.



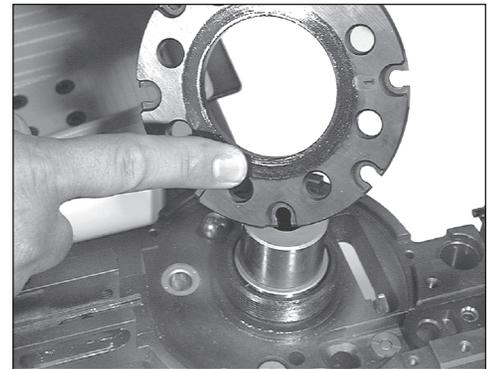
- Alignment Pins (#12972 & #13515 located under the toolhead)
- Cam Guide Bolt (#12486) and its mated slot
- Toolhead Bore (#20420 - lightly to avoid rusting and/or freezing up)
- Mainshaft Lubrication – Use only 30 weight motor oil. **DO NOT** use a penetrating lubricant such as WD-40, Breakfree, etc...



- Swage Connecting Rod (#13417) and Clevis Pin (#13522)



- Shellplate lock ring (#20311), bottom surface to shellplate face.



- Shellplate center hole. It's easiest to lubricate the shellplate center hole when changing from one caliber to another.

We recommend that you use a droplet of Blue Loctite on the threads of the following bolts prior to reinstalling: #13333, #13296, and #13276 (see photos and schematics).

Lube Points for the Super 1050 Crank Assembly

With the handle in the rest position, on the left side of the machine, use a grease syringe to lube the bearing pin (#11009) located in the link arm (#11063). Then, cycle the handle down to the bottom stop.

Again, using the grease syringe, lube the mainshaft pivot pin (#10994) on the left side of the machine via the access hole located 1.2" above the carrier cap (#11010).

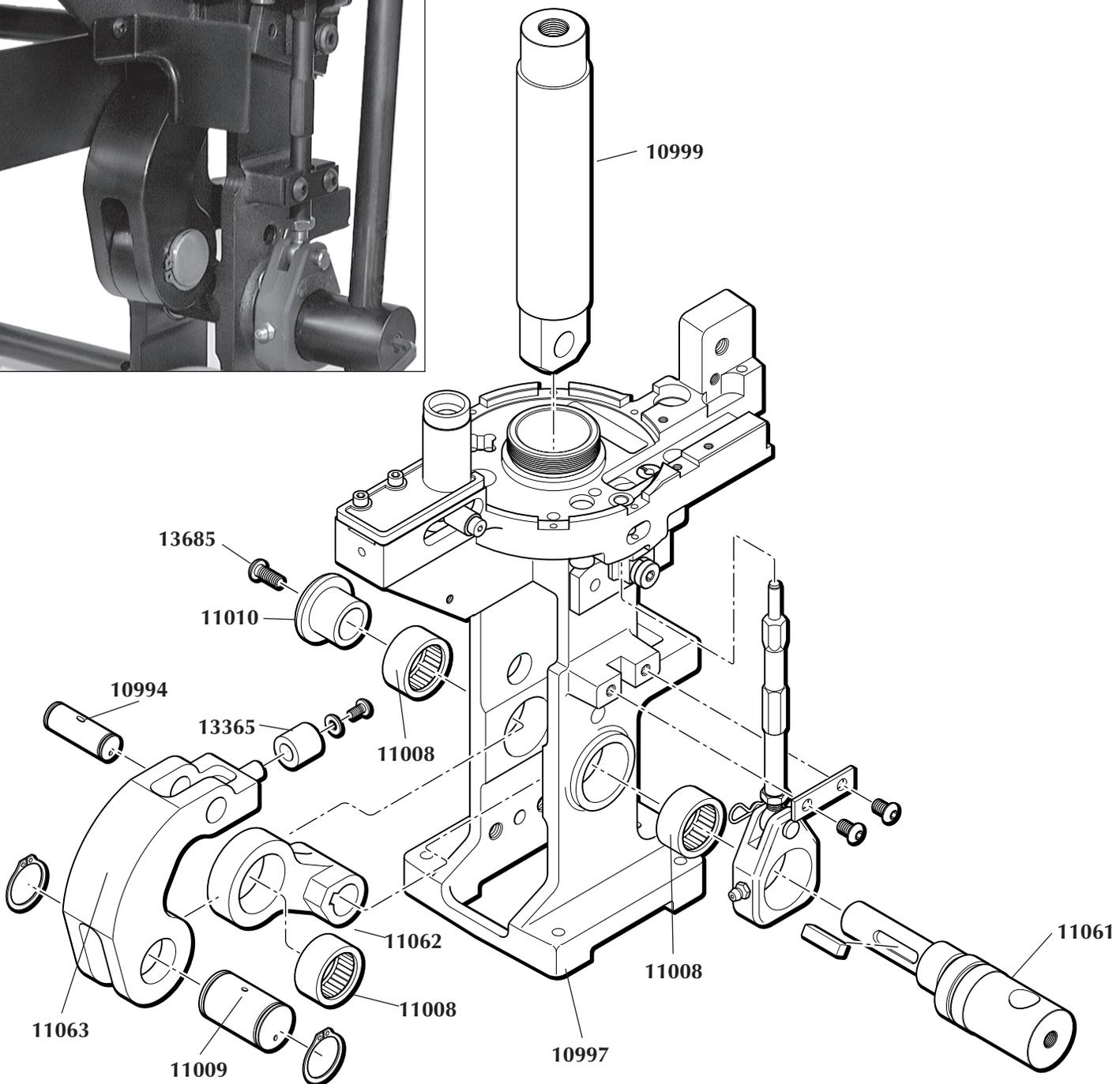
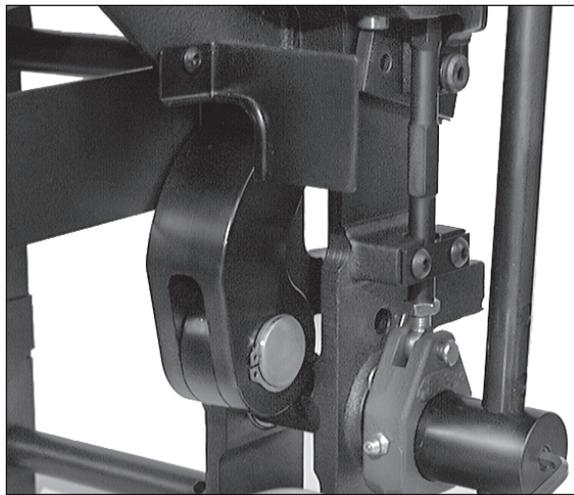
Use 30 weight motor oil on the main-

shaft (#10999).

Towards the back of the machine, lube the indexing lever cam surface (#11064) and index lever shoulder bolt (#13276).

When it is time to lube the roller bearings (#11008) in the frame and crankshaft, first remove the swage rod assembly, swage connecting rod, and operating handle. On the left side of the machine, use a 5/32" Allen wrench to remove the screw (#13685). Slide the carrier cap (#11010) out of its bore and lube the left-hand side roller bearing (#11008) and carrier cap. Next, slide the crank-

shaft (#11061) out of the frame from the right side of the machine BUT NO MORE THAN 3/4". Using a grease syringe, dispense some grease onto the right-hand side roller bearing (#11008). Next, lube the crankshaft surface (#11061). Then, reinsert the crankshaft fully into the frame. Reinstall the carrier cap (#11010). Blue Loctite must be used on the threads before installation, tighten. Finally, reassemble the swage component and operating handle back onto the frame. Lube the swage connecting rod (#13417) and clevis pin (#13522).



Super 1050 - Caliber Conversion Chart

.32 ACP Conversion - #20634

11113 #J Shellplate
14048 #8 Locator Pin (6)
12780 .32 cal. Expander - S
12845 Powder Funnel - S
13810 Adapter - White
13306 Casefeed Plunger - Small
17384 Blue Locator Tab - Short (1)
13569 Blue Locator Tab (5)
14067 Die Lock Ring

.32 S&W Long/H&R Mag Conv - #20634

12107 #D Shellplate
14060 #3 Locator Pin (6)
12780 .32 cal. Expander - S
12845 Powder Funnel - S
13878 Adapter - Green
13306 Casefeed Plunger - Small
17384 Blue Locator Tab - Short (1)
13569 Blue Locator Tab (5)
14067 Die Lock Ring

.380 Auto Conversion - #20483

12441 #3 Shellplate
14060 #3 Locator Pin (6)
13285 .380 cal. Expander - F
13810 Adapter - White
12964 Casefeed Plunger - Small .380
17384 Blue Locator Tab - Short (1)
13569 Blue Locator Tab (5)
14067 Die Lock Ring
13419 1/4 x 28 Jam Nut
13017 Swage Back-up Rod - Large
12184 Swage Die
13483 9/16 x 18 Lock Nut
13005 Powder Activator - Pistol

9mm Conversion - #20482

12938 #5 Shellplate
14060 #3 Locator Pin (6)
12833 9mm cal. Expander - F
13878 Adapter - Green
13306 Casefeed Plunger - Small
17384 Blue Locator Tab - Short (1)
13569 Blue Locator Tab (5)
14067 Die Lock Ring
13005 Powder Activator - Pistol

.357 SIG Conversion - #20068

12940 #W Shellplate
14062 #2 Locator Pin (6)
12833 9mm cal. Expander - F
13878 Adapter - Green
13098 Casefeed Plunger - Medium
17384 Blue Locator Tab - Short (1)
13569 Blue Locator Tab (5)
14067 Die Lock Ring
13005 Powder Activator - Pistol

.38 Super Conversion - #20484

12938 #5 Shellplate
14060 #3 Locator Pin (6)
12833 9mm cal. Expander - F
13878 Adapter - Green
13306 Casefeed Plunger - Small
17384 Blue Locator Tab - Short (1)
13569 Blue Locator Tab (5)
14067 Die Lock Ring
13005 Powder Activator - Pistol

.38 Super Comp Conv. - #21069

12441 #3 Shellplate
14060 #3 Locator Pin (6)
12833 9mm cal. Expander - F
13878 Adapter - Green
13306 Casefeed Plunger - Small
17384 Blue Locator Tab - Short (1)
13569 Blue Locator Tab (5)
14067 Die Lock Ring
13005 Powder Activator - Pistol

.38 Special/.357 Mag. Conv. - #20477

12704 #2 Shellplate
14062 #2 Locator Pin (6)
13137 .38/.357 cal. Expander - D
13802 Adapter - Orange
13098 Casefeed Plunger - Medium
17384 Blue Locator Tab - Short (1)
13569 Blue Locator Tab (5)
14067 Die Lock Ring
13005 Powder Activator - Pistol

9x25 Dillon Conversion - #21525

12940 #W Shellplate
14062 #2 Locator Pin (6)
12833 9mm cal. Expander - F
13872 Adapter - Red
13098 Casefeed Plunger - Medium
17384 Blue Locator Tab - Short (1)
13569 Blue Locator Tab (5)
14067 Die Lock Ring
13005 Powder Activator - Pistol

.40 S&W Conversion - #20545

12940 #W Shellplate
14062 #2 Locator Pin (6)
12912 10mm cal. Expander - W
13878 Adapter - Green
13098 Casefeed Plunger - Medium
17384 Blue Locator Tab - Short (1)
13569 Blue Locator Tab (5)
14067 Die Lock Ring
13005 Powder Activator - Pistol

10mm Auto Conversion - #20788

12940 #W Shellplate
14062 #2 Locator Pin (6)
12912 10mm cal. Expander - W
13872 Adapter - Red
13098 Casefeed Plunger - Medium
17384 Blue Locator Tab - Short (1)
13569 Blue Locator Tab (5)
14067 Die Lock Ring
13005 Powder Activator - Pistol

.38-40 Conversion - #21160

16153 1050 #N Shellplate
14047 #4 Locator Pin (6)
13600 Powder Funnel W - Pistol
13654 Adapter .41 Mag, .44, .45 LC
13073 Casefeed Plunger - Large
17384 Blue Locator Tab - Short (1)
13569 Blue Locator Tab (5)

.41 Magnum Conv. - #20478

11856 #6 Shellplate
13930 #1 Locator Pin (6)
12882 .41 cal. Expander - H
13654 Adapter - Yellow
13073 Casefeed Plunger - Large
17384 Blue Locator Tab - Short (1)
13569 Blue Locator Tab (5)
14067 Die Lock Ring
13005 Powder Activator - Pistol

.44-40 Conversion - #21161

16153 1050 #N Shellplate
14047 #4 Locator Pin (6)
13474 Funnel .44-40
13654 Adapter .41 Mag, .44, .45LC
13073 Casefeed Plunger - Large
17384 Blue Locator Tab - Short (1)
13569 Blue Locator Tab (5)

.44 Special/Magnum Conv. - #20479

12600 #4 Shellplate
14047 #4 Locator Pin (6)
12628 .44 cal. Expander - G
13654 Adapter - Yellow
13073 Casefeed Plunger - Large
17384 Blue Locator Tab - Short (1)
13569 Blue Locator Tab (5)
14067 Die Lock Ring
13005 Powder Activator - Pistol

.45 GAP Conversion - #21010

12999 1050 #1 Shellplate
13930 #1 Locator Pin (6)
11118 1050 .45 GAP Expander
13842 .45 GAP Casefeed Adapter
13098 Casefeed Plunger - Medium
17384 Blue Locator Tab - Short (1)
13569 Blue Locator Tab (5)
14067 Die Lock Ring
13005 Powder Activator - Pistol

.45 ACP Conversion - #20480

12999 #1 Shellplate
13930 #1 Locator Pin (6)
12749 .45 cal. Expander - E
13872 Adapter - Red
13098 Casefeed Plunger - Medium
17384 Blue Locator Tab - Short (1)
13569 Blue Locator Tab (5)
14067 Die Lock Ring
13005 Powder Activator - Pistol

.45 Colt Conversion - #20481

11235 #C Shellplate
14047 #4 Locator Pin (6)
12749 .45 cal. Expander - E
13654 Adapter - Yellow
13073 Casefeed Plunger - Large
17384 Blue Locator Tab - Short (1)
13569 Blue Locator Tab (5)
14067 Die Lock Ring
13005 Powder Activator - Pistol

.475 Linebaugh/.480 Ruger Conv. - #20833

16153 1050 #N Shellplate
15755 #6 Locator Pin (6)
10723 Powder Funnel .475/.480 Ruger
11089 Super 1050 .475/.480 Adapter
13072 Casefeed Plunger 45-70
17384 Blue Locator Tab - Short (1)
13569 Blue Locator Tab (5)
14067 Die Lock Ring
13443 Large Powder Die - Part
20534 1050 Mag CF Tube, Red
21075 Casefeed Plate - Large Rifle
22174 Casefeed Funnel Assembly - Lg
(Requires Extra Large Powder Die - #21253)

Super 1050 - Caliber Conversion Chart

.500 S&W Conversion - #20834

11036 .500 S&W 1050 Shellplate
 13436 #7 Locator Pin (6)
 14465 Powder Funnel, .50 AE
 11090 Super 1050 .500 S&W Adapter
 13072 Casefeed Plunger - Extra Large
 17384 Blue Locator Tab - Short (1)
 13569 Blue Locator Tab (5)
 14067 Die Lock Ring
 13443 Large Powder Die - Part
 20534 1050 Mag CF Tube, Red
 21075 Casefeed Plate - Large Rifle
 22174 Casefeed Funnel Assembly - Lg
 (Requires Extra Large Powder Die - #21253)

.223 Remington Conversion - #20485

12441 #3 Shellplate
 14060 #3 Locator Pin (6)
 13332 Back-up/Expander .223
 13426 Powder Funnel - A
 12146 Adapter (pinned) - White, Long
 13306 Casefeed Plunger - Small
 17384 Blue Locator Tab - Short (1)
 13569 Blue Locator Tab (5)
 14067 Die Lock Ring
 12184 Swage Die Body - Part
 13483 9/16 x 18 Lock Nut

.22-250 Conversion - #21055

12999 #1 Shellplate
 13930 #1 Locator Pin (6)
 12071 1000/1050 .22-250 Expander
 13426 Powder Funnel - A, Rifle
 11005 Super 1050 Adapter - .308 Win
 13098 Casefeed Plunger - Medium
 17384 Blue Locator Tab - Short (1)
 13569 Blue Locator Tab (5)
 14067 Die Lock Ring
 12184 Swage Die Body - Part
 13483 9/16 x 18 Lock Nut

.243 Winchester Conversion - #21054

12999 #1 Shellplate
 13930 #1 Locator Pin (6)
 12070 1000/1050 .243 Expander
 13305 Powder Funnel - I, Rifle
 11005 Super 1050 Adapter - .308 Win
 13098 Casefeed Plunger - Medium
 17384 Blue Locator Tab - Short (1)
 13569 Blue Locator Tab (5)
 14067 Die Lock Ring
 12184 Swage Die Body - Part
 13483 9/16 x 18 Lock Nut

6.5 Grendel Conversion - #20896

11925 #A Shellplate
 14062 #2 Locator Pin (6)
 18947 Powder Funnel 6.5 Grendel
 12943 Adapter - 7.62x39
 13098 Casefeed Plunger - Medium
 13703 Casefeed Spacer
 17384 Blue Locator Tab - Short (1)
 13569 Blue Locator Tab (5)
 14067 Die Lock Ring

.270 Winchester Conversion - #21053

12999 #1 Shellplate
 13930 #1 Locator Pin (6)
 12069 1000/1050 .270 Expander
 13456 Powder Funnel - J, Rifle
 11004 Super 1050 Adapter - .30-06
 13098 Casefeed Plunger - Medium
 17384 Blue Locator Tab - Short (1)
 13569 Blue Locator Tab (5)
 14067 Die Lock Ring
 12184 Swage Die Body - Part
 13483 9/16 x 18 Lock Nut

.30 Carbine Conversion - #20626

12655 #8 Shellplate
 14048 #8 Locator Pin (6)
 12748 .30 M1 Expander - C
 13564 Powder Funnel C
 12641 Adapter - White, Slotted
 13306 Casefeed Plunger - Small
 17384 Blue Locator Tab - Short (1)
 13569 Blue Locator Tab (5)
 14067 Die Lock Ring

.30-30 Conversion - #21052

12075 #7 Shellplate
 14047 #4 Locator Pin (6)
 12068 1000/1050 .30-30 Expander
 13587 Powder Funnel - B, rifle
 11005 Super 1050 Adapter - .308 Win
 13073 Casefeed Plunger - Large
 17384 Blue Locator Tab - Short (1)
 13569 Blue Locator Tab (5)
 14067 Die Lock Ring
 12184 Swage Die Body - Part
 13483 9/16 x 18 Lock Nut

.308 Win./7.62x51 Conversion - #21049

12999 #1 Shellplate
 13930 #1 Locator Pin (6)
 12074 Back Up Expander - .308
 13587 Powder Funnel - B, rifle
 11005 Super 1050 Adapter - .308 Win
 13098 Casefeed Plunger - Medium
 17384 Blue Locator Tab - Short (1)
 13569 Blue Locator Tab (5)
 14067 Die Lock Ring
 12184 Swage Die Body - Part
 13483 9/16 x 18 Lock Nut

.300 WSM Conversion - #20466

18497 #B Shellplate
 13436 #6 Locator Pin (6)
 12074 Back Up Expander - .308
 18415 Powder Funnel, Short - .300 Mag.
 11459 1050 Adapter - .300 WSM
 13072 Casefeed Plunger - Extra Large
 17384 Blue Locator Tab - Short (1)
 13569 Blue Locator Tab (5)
 14067 Die Lock Ring
 12184 Swage Die Body - Part
 13483 9/16 x 18 Lock Nut
 11458 1050 Casefeed Body - Magnum
 (Requires Extra Large Powder Die - #21253)

.30-06 Conversion - #21050

(only conversion kit that includes dies)

10840 .30-06 Die Set
 12999 #1 Shellplate
 13930 #1 Locator Pin (6)
 12073 Back-up Expander - .30-06
 13587 Powder Funnel - B, Rifle
 11004 Super 1050 Adapter - .30-06
 13098 Casefeed Plunger - Medium
 17384 Blue Locator Tab - Short (1)
 13569 Blue Locator Tab (5)
 14067 Die Lock Ring
 12184 Swage Die Body - Part
 13483 9/16 x 18 Lock Nut

7.62 x 39 Conversion - #20631

11925 #A Shellplate
 14062 #2 Locator Pin (6)
 13348 Back Up Expander - 7.62 x 39
 13015 Powder Funnel AK
 12943 Adapter
 13098 Casefeed Plunger - Medium
 13703 Casefeed Spacer
 17384 Blue Locator Tab - Short (1)
 13569 Blue Locator Tab (5)
 14067 Die Lock Ring
 12184 Swage Die Body - Part
 13483 9/16 x 18 Lock Nut

.303 British Conversion - #21051

16153 #N Shellplate
 14047 #4 Locator Pin (6)
 13348 Back Up Expander - 7.62 x 39
 13587 Powder Funnel - B, rifle
 13654 Super 1050 Adapter - .41 Mag.,
 .44, .45 LC
 13073 Casefeed Plunger - Large
 17384 Blue Locator Tab - Short (1)
 13569 Blue Locator Tab (5)
 14067 Die Lock Ring
 12184 Swage Die Body - Part
 13483 9/16 x 18 Lock Nut

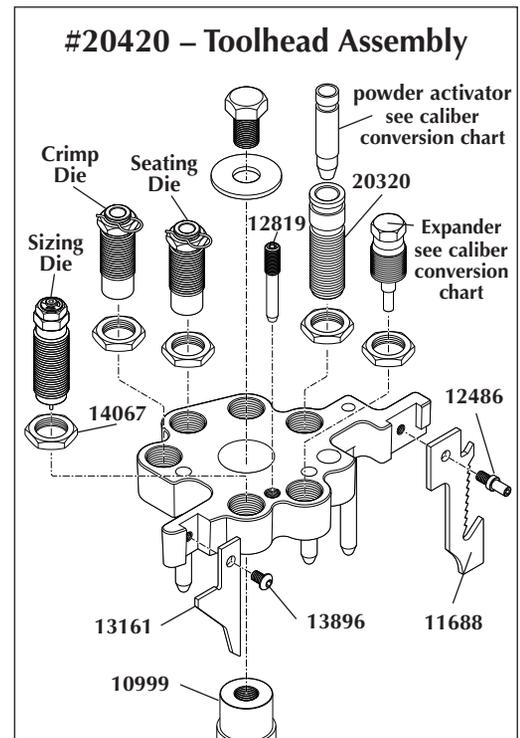
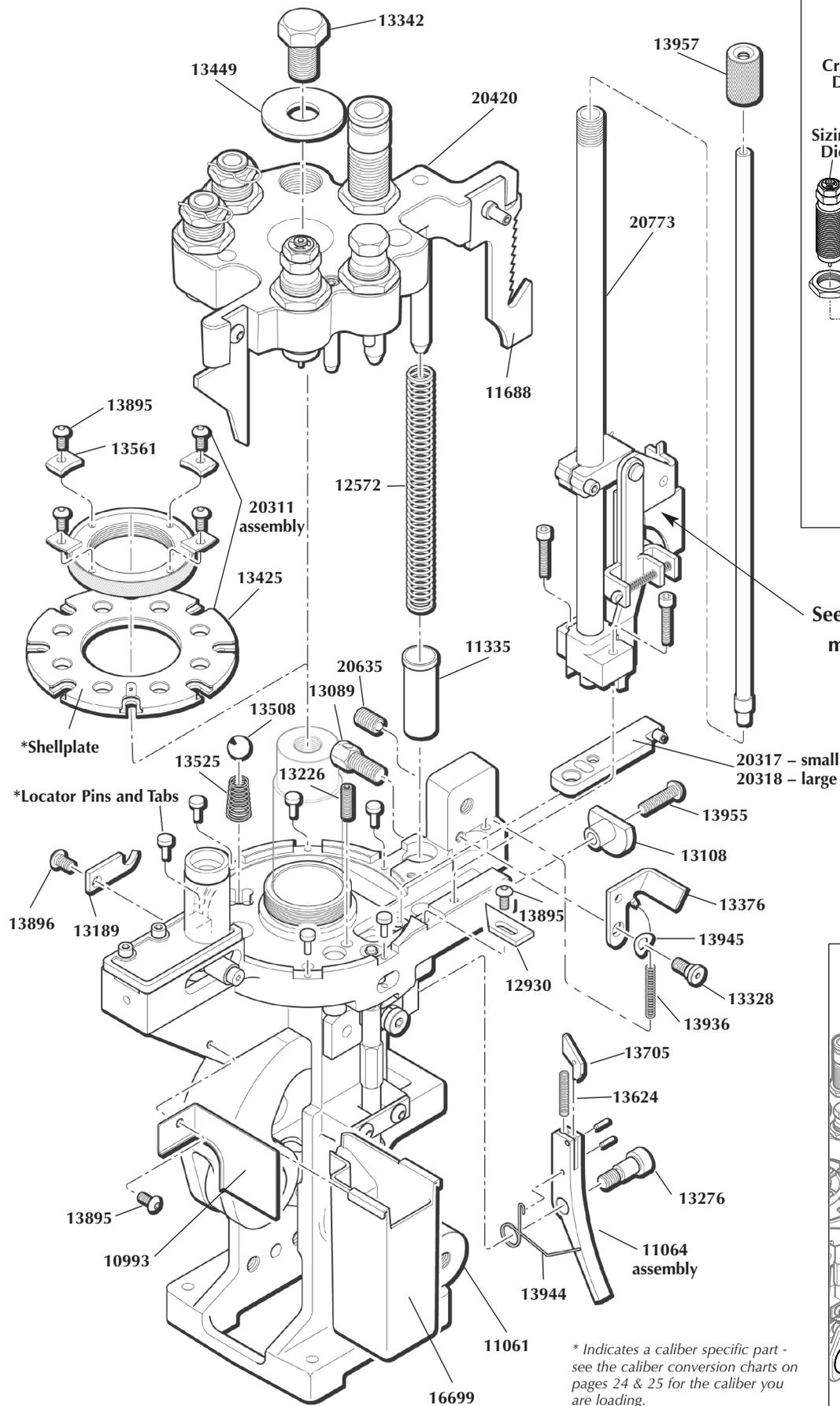
.45-70 Conversion - #21056

12705 1050 Custom #G Shellplate
 13436 #7 Locator Pin (6)
 12072 1000/1050 .45-70 Expander
 13407 Powder Funnel - T, pistol
 11007 Super 1050 Adapter - .45-70
 13072 Casefeed Plunger - Extra Large
 17384 Blue Locator Tab - Short (1)
 13569 Blue Locator Tab (5)
 14067 Die Lock Ring
 12184 Swage Die Body - Part
 13483 9/16 x 18 Lock Nut
 20773 Primer Feed Body/Shield
 20534 1050 Mag CF Tube Red

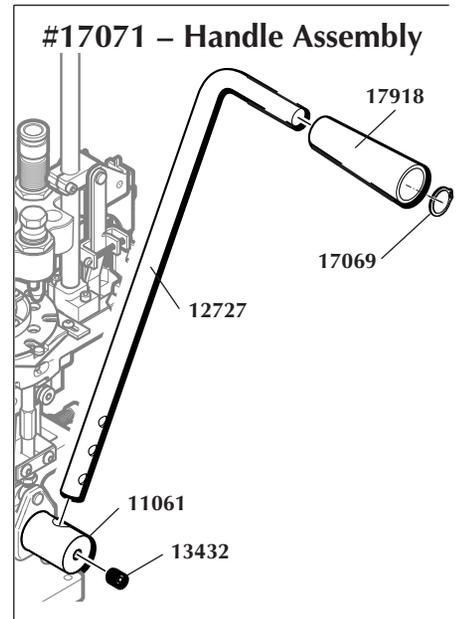
Super 1050 Parts Listing

Part #	Description		
10851	Index Lever, Super 1050B	13449	Toolhead Washer
10991	Bin Support Bracket	13475	Journal Key 1050
10992	Inside Frame Stop	13483	Old Style Jam Nut 9/16x18
10993	Spent Primer Cup Bracket	13484	1050 Cartridge Bin
10994	.560 dia. Mainshaft Pin	13495	Lower Cord Clamp
10997	Super 1050 Frame	13498	Plunger Roller 1050
10999	Mainshaft	13502	Clamp Retaining Screw
11003	Lever Arm	13508	Index Ball 1050
11006	Casefeed Housing	13515	Slide Alignment Pin
11008	BH-1610 Roller Bearing	13522	Clevis Pin
11009	1.00" dia. Pin	13525	Index Ball Spring 1050
11010	Carrier Cap	13561	Lock Ring Insert
11011	Super 1050 Manual	13567	Casefeed Plunger Spring
11061	Crank Shaft	13569	Blue Locator Tabs
11062	Crank Arm	13581	Grease Fittings
11063	Link Arm	13593	5/32" Hex Wrench
11064	1050 Index Lever Assembly	13607	Rocker Bolt Lock Washer
11234	Lock Link Assembly	13611	Casefeed Post Warning Label
11335	Spring Bushing	13624	Index Pawl Spring
11423	Casefeed Funnel 550/650/1050 part	13644	Small Powder Bar Spacer
11688	Toolhead Ratchet	13655	5/16 Washer
11995	Index Lever rev. 2	13664	5/16-18 Nut
12144	Bullet Bin Bracket	13682	Swage Lock Nut 1050
12184	Swage Die Body – Part	13685	1/4-20x1/2 Bracket Bolt
12260	1050 Box For Shipping	13696	3 Packing Foam Pieces
12486	Cam Guide Bolt 1/4x20	13701	Index Pawl Pin 3/8
12572	Toolhead Spring	13705	1050 Index Pawl
12819	Primer System Push Rod	13719	8-32 x 3/8" BHCS
12930	Primer Station Retain Tab	13728	1/8" Hex Wrench
12972	Toolhead Alignment Rod	13738	#10 Washer for Roller
12995	Primer System Tappet	13746	Actuating Lever Cotter Pin
13001	New Lever Arm Bracket	13756	1050 Bullet Bin
13058	Primer System Rocker Arm	13793	Collar Roller
13064	Swage Cover 1050	13799	Strip Nut
13089	Return Rod Eye Bolt	13801	Tinnerman Insert
13091	Alignment Bushing – New	13813	Clutch Spring Washer
13108	Primer Slide Stop "B"	13815	Adapter Housing Screw
13161	Casefeed Cam1050	13818	Powder Bar Insert – Small
13189	1050 Ejector Tab	13827	3/16" Hex Wrench
13205	Post Bolts	13840	Hair Pin Cotter
13226	Rocker Arm Set Screw	13844	Short Lever Spring
13238	Bin Bracket	13845	Body Collar Sleeve
13244	Crank Retaining Pin (2)	13848	Bellcrank Bushing
13245	Primer Swage Adjustment Bolt	13853	Powder Bar Insert – Large
13262	7/32" Hex Wrench (Short)	13858	Primer Punch Spring 1050
13271	Post Stud	13859	Casefeed Tube Clip
13276	Index Lever Shoulder Bolt	13871	Bellcrank Cube
13296	Primer System Rocker Bolt	13882	Powder Measure Lid
13328	1/4-20 Shoulder Bolt	13886	3/32" Hex Wrench
13333	Locator Tab Bolt	13888	E-Clip
13342	Toolhead Bolt	13893	Powder Bar Post – Large
13363	Primer Magazine Socket Bolt	13895	10-24 x 3/8" BH Screw (7)
13365	Index Roller	13896	1/4-20 3/8 BH – Ejector Tab Screw
13376	Ratchet Restriction Tab	13904	Bellcrank Bolt
13377	Bin Bracket Mount Screw	13921	Powder Bar Spacer Plug
13417	Swage Connecting Rod	13929	Return Rod Clip
13419	Swage Rod Lock Nut	13936	Tab/Spring Arm Spring
13425	1050 Shellplate Nut	13939	Body Collar Clamp – Part
13432	Crank Handle Lock Screw	13943	Powder Bar Adjustment Screw
13435	1/4" Hex Wrench	13944	Indexer Return Spring
		13945	5/16" Bowed Washer
		13951	Powder Bar Post – Small
		13955	Lower Plate Screw
		13957	Magazine Shield Cap 1050
		13958	Powder Bar Bolt Washer
		13960	Powder Bar Return Rod – Part
		13964	10-24x1/4 BHCS for Index Roller
		13972	3/16 Roll Pin
		14003	Magazine Orifice – Large – Red
		14023	10-24 5/8 Buttonhead Screw
		14024	Magazine Orifice – Small – Blue
		14033	Return Rod Spring
		14036	Old Powder Bar Return Spring
		14037	10-24x3/4 SHCS – Collar Clamp Screw (2)
		14067	Die Lock ring
		14202	Powder Measure Tube Screw
		14517	Swage Station Bushing
		14808	Collar Roller Bushing
		14990	Slide Roll Pin Sleeve
		16699	Spent Primer Cup
		17069	Snap Ring
		17071	1050 Roller Handle Assembly
		17141	1/4" Hardened Washer
		17384	Blue Locator Tab, Short
		17604	Bracket Pivot Pin
		17808	Casefeed Bowl Insert
		18492	Casefeed Plate, Extra Large Rifle
		20062	Small Powder Bar Assembly
		20063	Large Powder Bar Assembly
		20311	1050 Lock Ring Assembly
		20313	Swage Rod 1050 – Small
		20314	Swage Rod 1050 – Large
		20317	1050 Primer Slide – Small
		20318	1050 Primer Slide – Large
		20320	Powder Die
		20341	1050 Bushing Driver
		20419	1050 Primer System – Small
		20420	1050 Toolhead Assembly
		22221	Super 1050 Auto Powder System
		20476	1050 Primer System – Large
		21108	Super 1050 Primer Arm/Cam – Assembly
		20533	Casefeed Tube, small - black label
		20534	Casefeed Tube, large - red label
		20635	Ratchet Detent Assembly
		20641	Casefeed Mounting Post – Assembly
		20773	Primer Feed Body/Shield
		20785	Powder Measure Body
		21072	Casefeed Plate – Large Pistol
		21073	Casefeed Plate – Small Pistol
		21074	Casefeed Plate – Small Rifle
		21075	Casefeed Plate – Large Rifle
		21275	Body Collar – Complete
		97073	650/1050 Casefeed Assembly (Euro)
		97074	650/1050 Casefeed Assembly

Super 1050 Upper Machine Assembly



See page 29 for more detail.



* Indicates a caliber specific part - see the caliber conversion charts on pages 24 & 25 for the caliber you are loading.

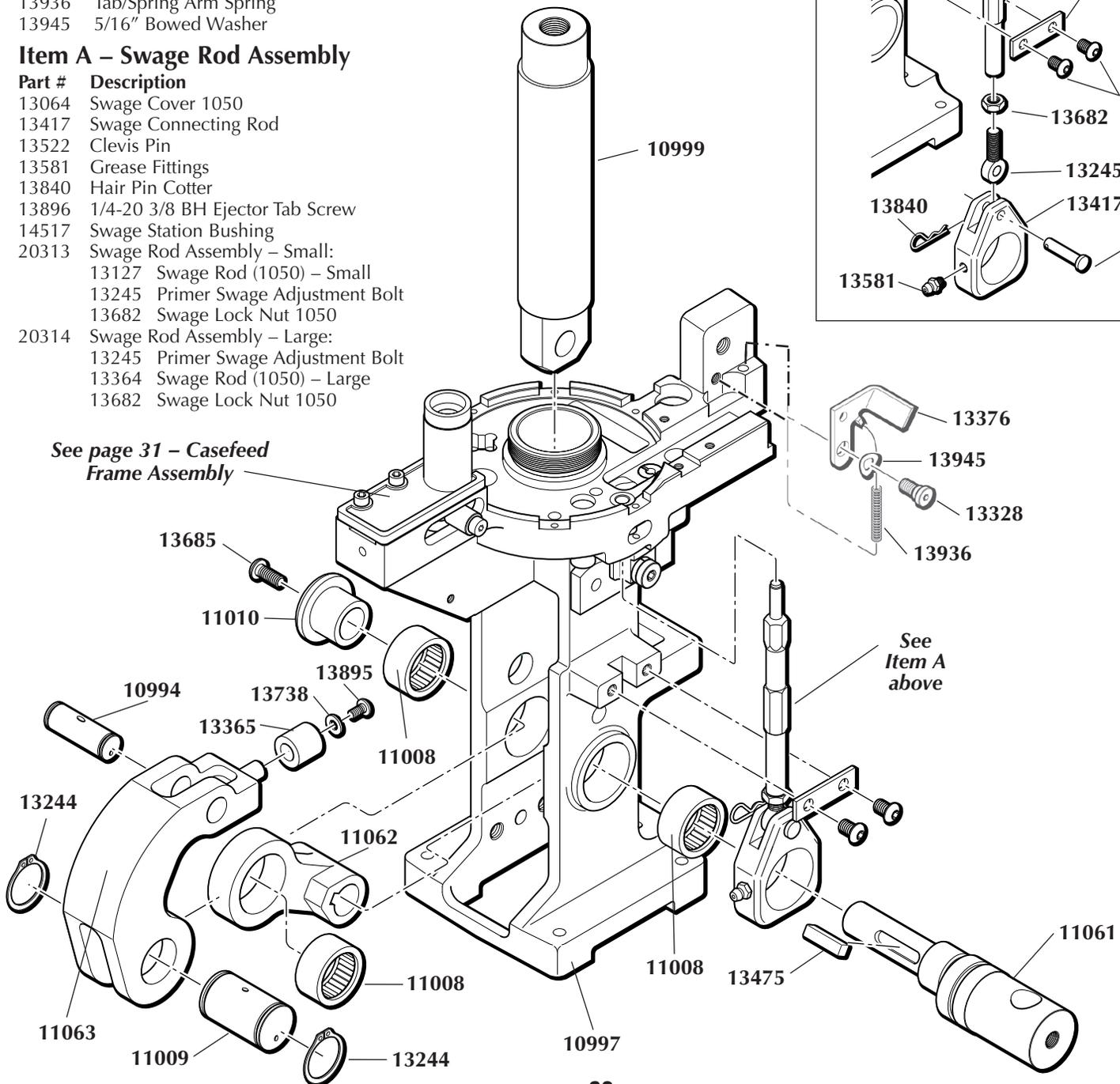
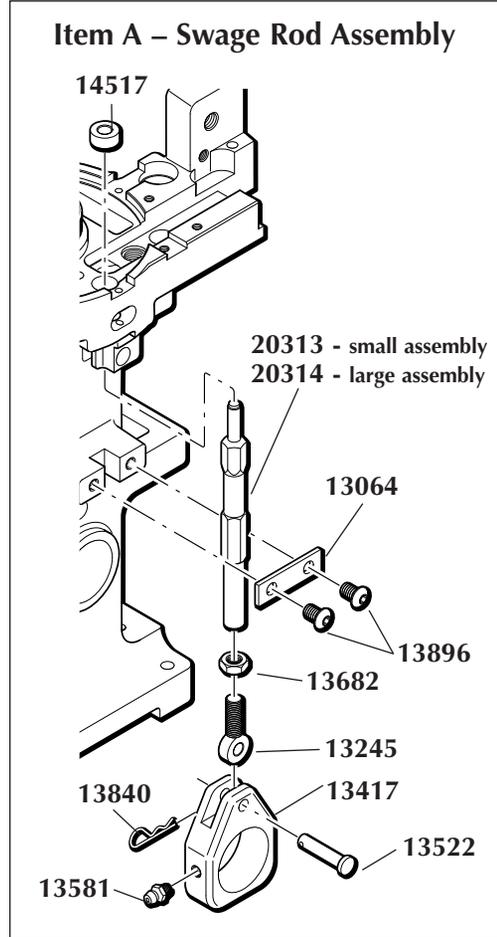
Super 1050 Lower Machine Assembly

Lower Machine Assembly

Part #	Description
10994	Mainshaft Pivot Pin - .560" dia.
10997	Super 1050 Frame
10999	Super 1050 Mainshaft
11008	BH-1610 Roller Bearing (3)
11009	Pin - 1" dia.
11010	Carrier Cap
11061	Crankshaft
11062	Crankarm
11063	Link Arm
13244	Crank Retaining Ring (2)
13328	1/4-20 Shoulder Bolt
13365	Index Roller
13376	Ratchet Restriction Tab
13475	Journal Key
13685	1/4-20x5/8 BHCS
13738	#10 Washer
13895	10-24x3/8 BHCS
13936	Tab/Spring Arm Spring
13945	5/16" Bowed Washer

Item A – Swage Rod Assembly

Part #	Description
13064	Swage Cover 1050
13417	Swage Connecting Rod
13522	Clevis Pin
13581	Grease Fittings
13840	Hair Pin Cotter
13896	1/4-20 3/8 BH Ejector Tab Screw
14517	Swage Station Bushing
20313	Swage Rod Assembly – Small:
13127	Swage Rod (1050) – Small
13245	Primer Swage Adjustment Bolt
13682	Swage Lock Nut 1050
20314	Swage Rod Assembly – Large:
13245	Primer Swage Adjustment Bolt
13364	Swage Rod (1050) – Large
13682	Swage Lock Nut 1050

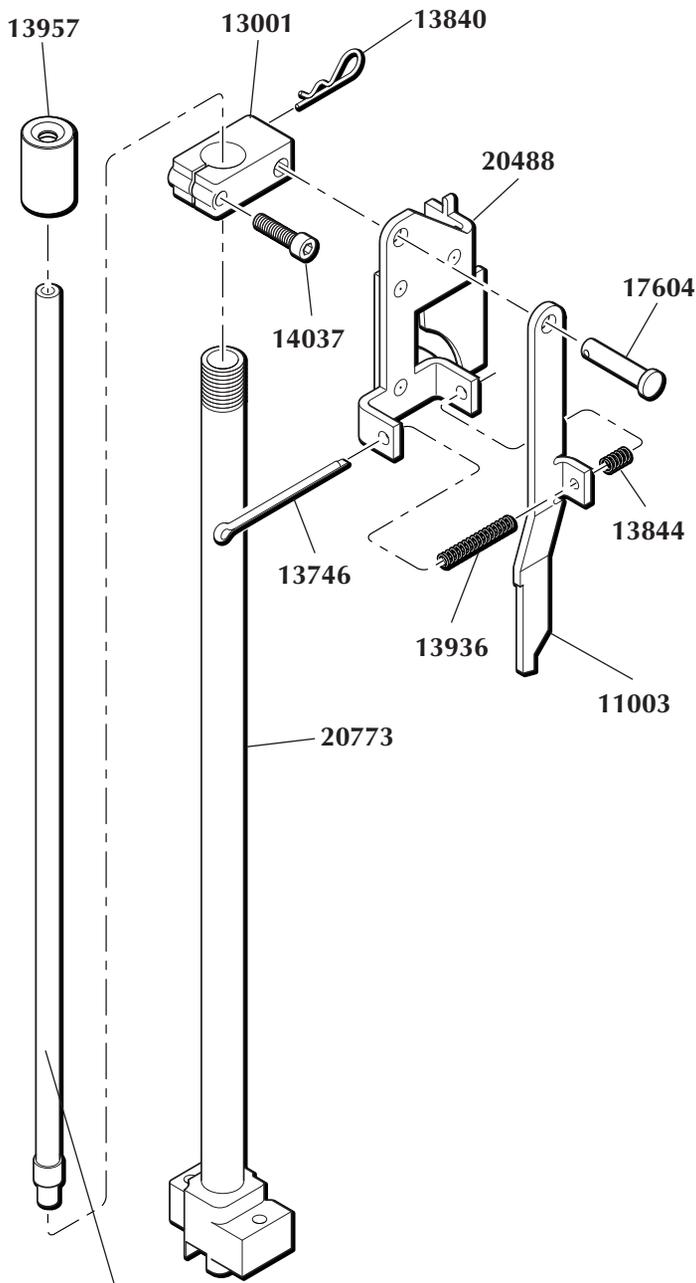


See page 31 – Casefeed Frame Assembly

See Item A above

Primer System Assembly - #21108

Upper

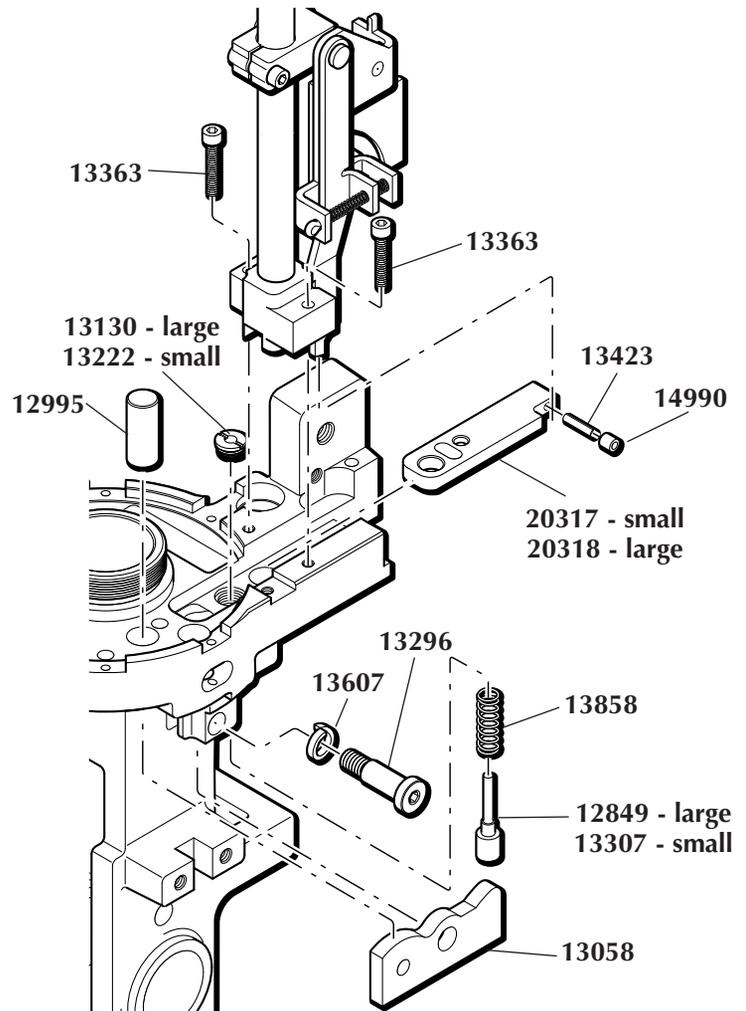


22030 - small
22031 - large

Upper Assembly

Stock	Description
13957	Magazine Shield Cap
20773	Primer Feed Body/Shield
22030	Primer Magazine Tube - Small
22031	Primer Magazine Tube - Large
21145	Primer Arm/Cam Assembly
11003	Slide Actuating Lever
13001	New Lever Arm Bracket
13746	Actuating Lever Cotter Pin
13840	Hair Pin Cotter
13844	Short Lever Spring
13936	Tab/Spring Arm Spring
14037	Clutch/Motor Bolt
17604	Bracket Pivot Pin

Lower

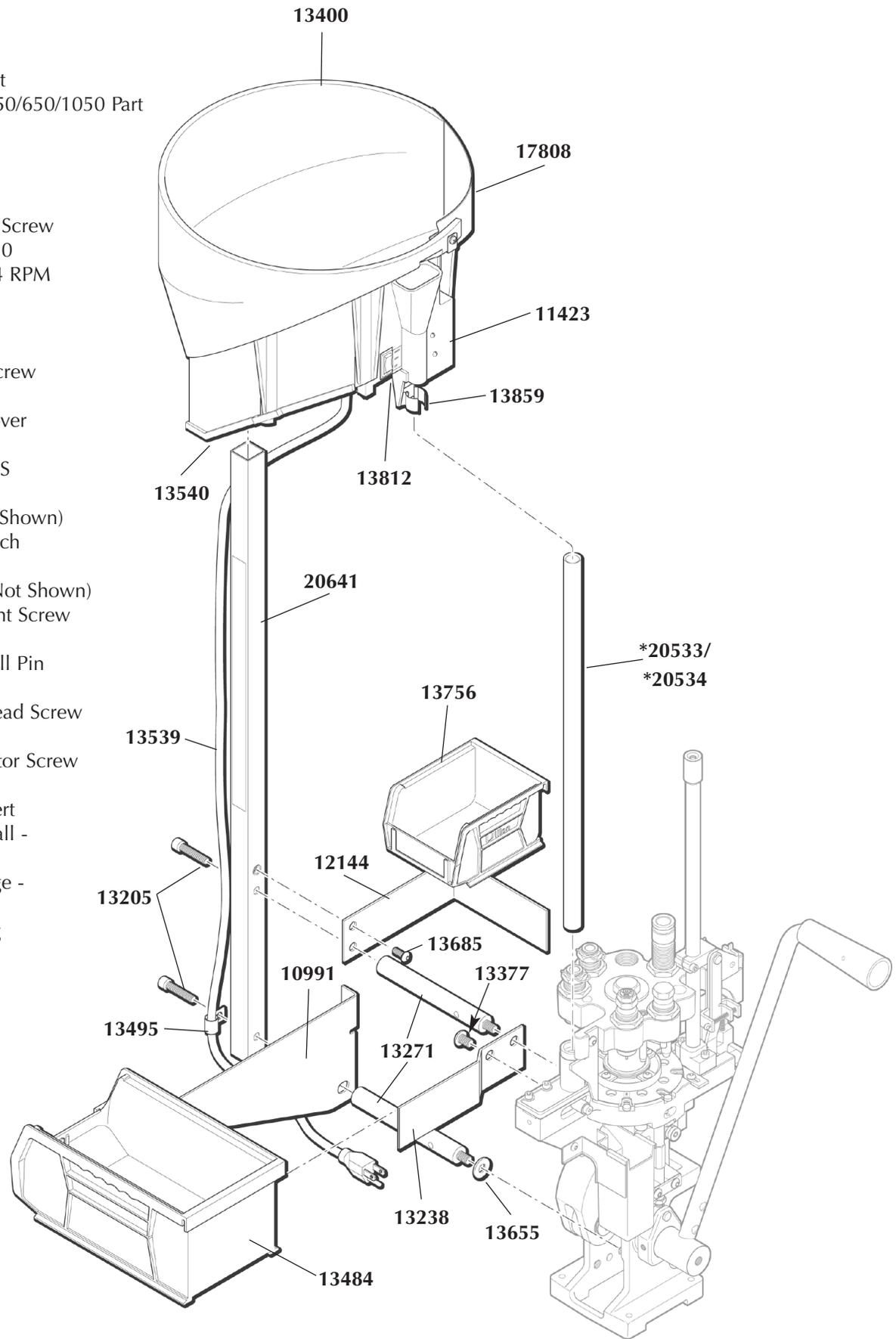


Lower Assembly

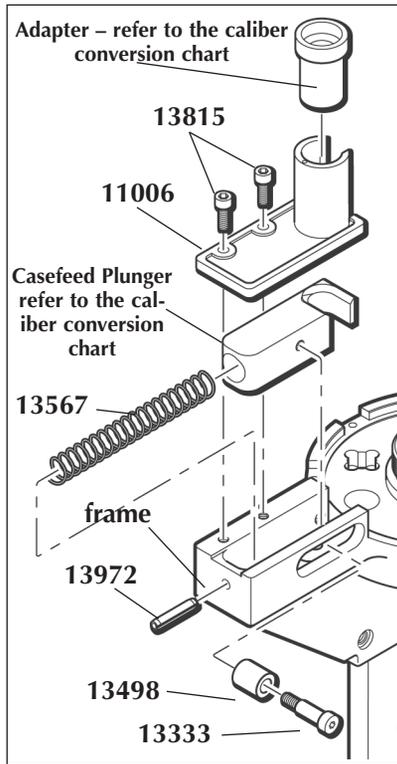
Stock	Description
12849	1050 Primer Punch - Large
12995	Primer System Tappet
13058	Primer System Rocker Arm
13130	Primer Punch Bushing - Large
13222	Primer Punch Bushing - Small
13296	Primer System Rocker Bolt
13307	1050 Primer Punch - Small
13363	Primer Magazine Socket Bolt
13607	Rocker Bolt Lock Washer
13858	Primer Punch Spring 1050
20317	Primer Slide Assembly - Small
13237	Primer Slide 1050 - Small
13423	Roll Pin - 1/8x5/8
14990	Slide Roll Pin Sleeve
20318	Primer Slide Assembly - Large
13105	Primer Slide 1050 - Large
13423	Roll Pin - 1/8x5/8
14990	Slide Roll Pin Sleeve

Super 1050 Casefeeder Assembly

Stock #	Description
10991	Bin Support Bracket
11423	Casefeed Funnel 550/650/1050 Part
12144	Bullet Bin Bracket
13205	Post Bolts
13238	Bin Bracket
13271	Post Stud
13377	Bin Bracket Mount Screw
13400	Casefeed Bowl 1050
13473	Casefeed Motor – 4 RPM (Not Shown)
13484	1050 Cartridge Bin
13495	Lower Cord Clamp
13502	Clamp Retaining Screw
13539	Casefeed Cord Set
13540	Casefeed Motor Cover
13655	5/16 Washer
13685	1/4 - 20 x 5/8 BHCS
13756	Bullet Bin
13779	Micro-Switch (Not Shown)
13812	Lighted Power Switch
13859	Casefeed Tube Clip
13895	10-24 BH Screw (Not Shown)
13954	Micro-Switch Mount Screw (Not Shown)
14022	Casefeed Motor Roll Pin (Not Shown)
14023	10-24 5/8 Buttonhead Screw (Not Shown)
14026	8-32x1/2 Bowl/Motor Screw (Not Shown)
17808	Casefeed Bowl Insert
20533	Casefeed Tube, small - black label
20534	Casefeed Tube, large - red label
20641	Casefeed Mounting Post Assembly
22173	Casefeed Funnel Assembly (Small)
22174	Casefeed Funnel Assembly (Large)

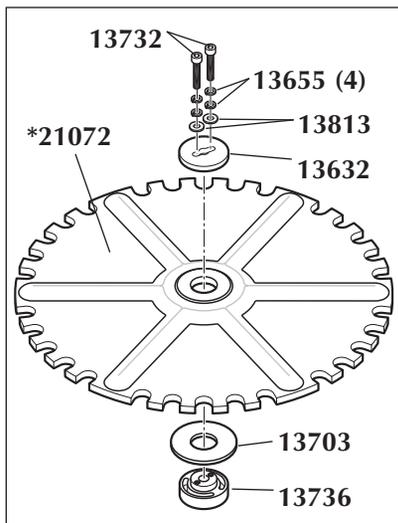


Super 1050 Casefeed Subassemblies



Item A - Casefeed Frame Assembly

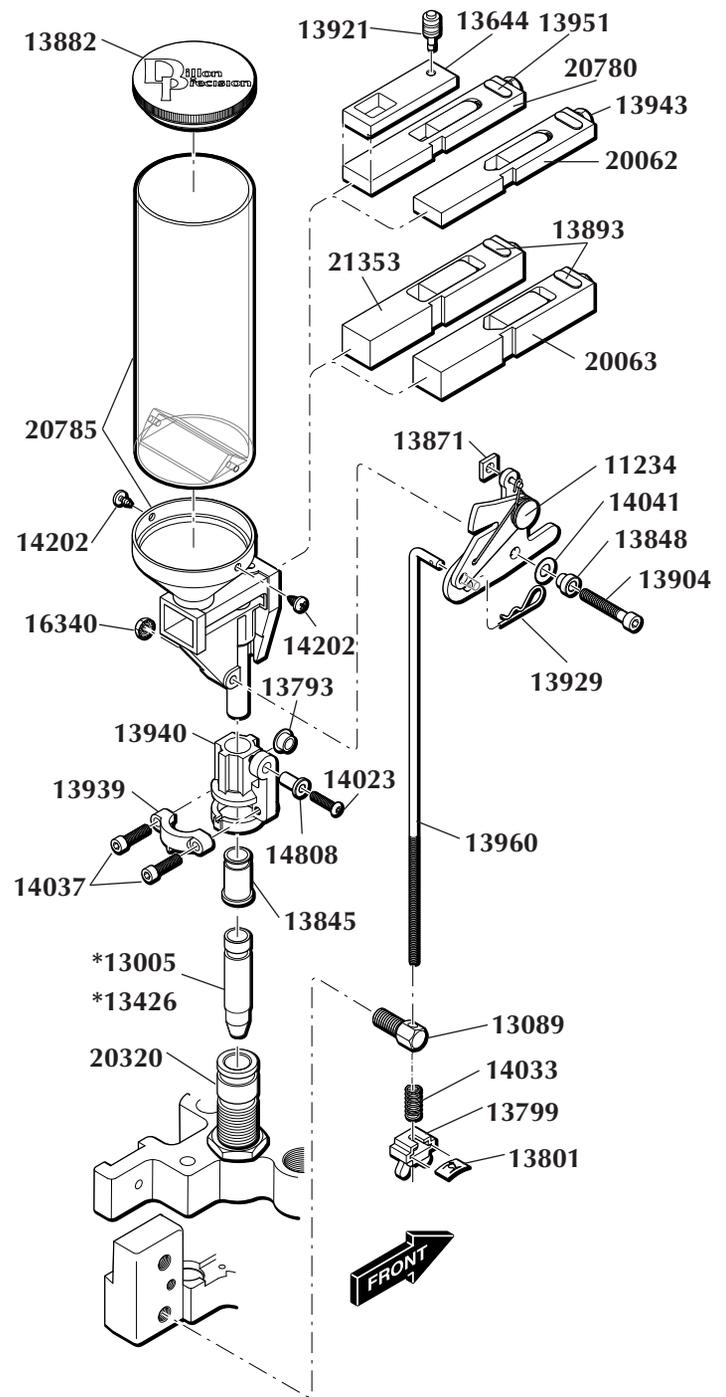
Stock #	Description
13333	Bolt (Locator Tab)
13498	Plunger Roller
11006	Adapter Housing
13567	Casefeed Plunger Spring
13815	Adapter Housing Screw
13972	3/16 Roll Pin



Casefeeder Clutch Assembly

Stock #	Description
13632	Upper Clutch
13655	5/16 Washer
13703	Spacer (.41, .44, .45LC, .357, .30 Carbine)
13732	Clutch/Motor Bolt
13736	Lower Clutch
13813	Clutch Spring Washer
*21072	Casefeed Plate (Large Pistol)
*21073	Casefeed Plate (Small Pistol)
*21074	Casefeed Plate (Small Rifle)
*18420	Casefeed Plate (XL Rifle)

Powder Measure Assembly - #20421



Stock #	Description
11234	Lock Link Assembly
*13005	Powder Activator, Pistol
13089	Return Rod Eye Bolt
*13426	Powder Funnel "A", Rifle
13644	Small Powder Bar Spacer
13793	Collar Roller
13799	Blue Strip Nut
13801	Tinnerman Insert
13818	Powder Bar Insert, Small
13845	Collar Sleeve
13848	Bellcrank Bushing
13853	Powder Bar Insert, Large
13871	Bellcrank Cube
13882	Powder Measure Lid
13893	Powder Bar Post, Large
13904	Bellcrank Bolt
13921	Powder Measure Plug
13929	Return Rod Clip
13939	Collar Clamp
13940	Body Collar Housing - Part

Stock #	Description
13943	Powder Bar Adjust. Screw
13951	Powder Bar Post, Small
13958	Powder Bar Bolt Washer
13960	Powder Bar Return Rod - Part
14023	8-32x3/4 BH Screw
14033	Return Rod Spring
14037	Collar Clamp Screw
14041	Bowed Washer
14202	Powder Measure Tube Screw
14808	Collar Roller Bushing
16340	10-32 Nylon Lock Nut
20062	Powder Bar, Small
20063	Powder Bar, Large
20320	Powder Die
20780	Powder Bar, Extra Small
20785	Powder Measure Body
21275	Body Collar - Complete
21353	Powder Bar, Magnum

* Indicates a caliber specific part - see the caliber conversion charts on pages 24 & 25 for the caliber you are loading for.

On the cover...

The Super 1050 is pictured with optional accessories:

Powder Check System	#21044
Low Powder Sensor	#16306
Bullet Tray	#22215

Other accessories available for the Super 1050 include:

Machine Cover	#13239
Maintenance Kit & Spare Parts Kit	#97018

The Blue Press, Dillon's monthly catalog, has a complete listing of accessories available for all machines.

For a free issue of *The Blue Press*, call our customer service department at: 1-800-223-4570

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SUPER 1050 Manual
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