

## BEFORE YOU START RELOADING



**THE LEE BREECH LOCK HAND PRESS** is ideally suited for use while seated. A right handed person should hold the tool in his left hand and let the lever rest against the left leg. By pushing the tool against your leg, you can move the lever and raise the ram, freeing your right hand to insert the case, primers or bullets.

You will shortly find that you can quite comfortably sit in your favorite chair with your left elbow resting on the arm for lengthy loading without tiring.

## YOU CAN NOW BEGIN RELOADING



① **INSTALL SHELLHOLDER**



② **INSTALL SIZING DIE** Insert a Breech Lock bushing and screw the sizing die in until it touches the shell holder and moves the lever off the stop  $\frac{1}{4}$ ". When properly positioned, tighten the lock ring. **NOTE: DO NOT** move the lever off the stop when using carbide dies.



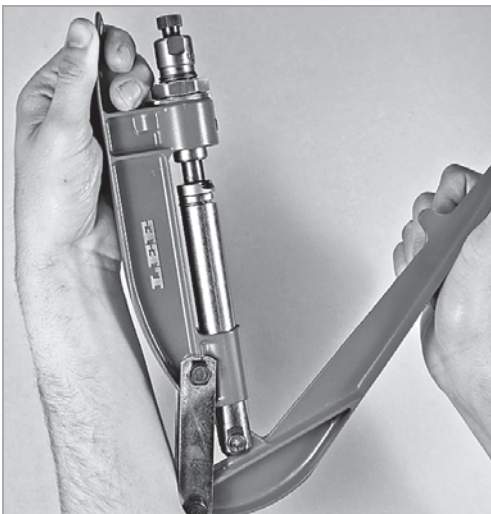
③ **PREPARE YOUR CASES** Inspect your cases while lubricating them. Discard all cases with split necks, indications of head separation or other defects. Wipe on a thin film of Lee Case Lubricant with your fingers. Fingers are the best way of lubing a case as any grit that could damage the die is wiped away. The case may be immediately sized or you can let the lube dry.



**Be sure to lube the inside of the case neck with a cotton swab.**

### CAUTION

If for any reason you do not use Lee Resizing Lubricant, be very careful not to contaminate the powder or primers. All other brands are oil based and have serious, detrimental effects on powder and primers. Because of the stickiness, they also attract grit that can damage the die. Lee Resizing Lubricant costs less and is so superior that it is worth the effort to insist upon it or order direct from the factory.

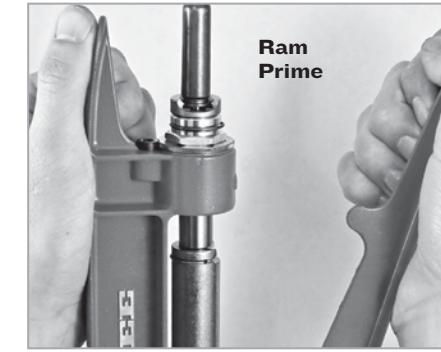


④ **PLACE THE LUBRICATED CASE** in the shell holder and squeeze the levers together. Open the levers and remove the case. Do this with all of the cases before proceeding to the next step. **CAUTION** After every box of 20 rounds, remove the shell holder and dump out the spent primers.

### LEAD WARNING

Primers contain lead: a substance known to cause birth defects, reproductive harm, and other serious physical injury. Wash hands after exposure.

⑤ **PRIME** your case with one of the optional priming tools. Follow instructions included with the tool.



**Auto Prime XR** is hand held and requires special, but inexpensive shell holders.



⑥ **INSERT** a Breech Lock bushing and screw the Expanding Die one turn short of touching the shell holder. This die flares the case mouth for easy bullet insertion. Turn deeper to increase the flare. Adjust to minimum flare needed to start the bullet. Powder may be added through Lee Expanding Die.



⑦ **CHARGE THE CASE**

Regardless of how you charge the case, be absolutely certain you have the correct amount and type of powder for the bullet you have selected. **NEVER** try to seat the primer deeper after the powder has been added.

## Your press features the Lee Breech Lock Quick-Change Die Holders

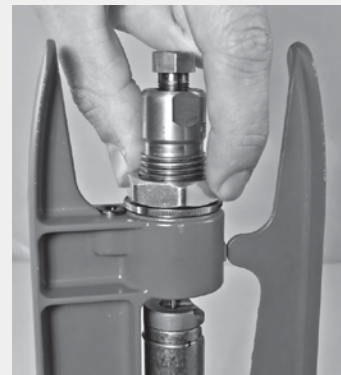


Thread your die into a quick-change holder and lightly snug the lock ring. Once your dies are set you can instantly remove them and replace them to the exact same position. The Breech Lock Hand Press includes a lock pin for initial die set up. If cost is more important than convenience, you can leave the Breech Lock bushing permanently installed and screw your dies in and out as in any conventional press.

Insert the holder into the press so that the lock groove will line up when secured. Adjust your die in or out for proper operation.



Notice how the lock pin is automatically depressed allowing instant one-handed removal.



Remove the die by depressing the lock pin and rotate the die  $\frac{1}{6}$  of a turn. Lift out and change to your next die.

After your dies are set, they can be installed so that the lock groove does not line up with the lock button.

⑨ **SEAT THE BULLET**

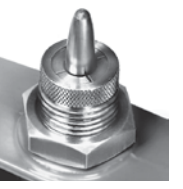
Place a bullet on the case mouth and guide it into the die. Raise the ram to the top and withdraw. The adjusting screw controls the bullet seating depth. Adjust to suit. Usually, seating to the same depth as a factory round works fine. If you desire to crimp, be sure the bullet crimp groove is almost completely inside the case. Then screw the die in just enough to apply a good crimp. Attempts to apply excessive



⑧ **INSERT** a Breech Lock bushing and screw the bullet seating die in until it touches the shell holder and back out one full turn. Fine adjustment will be covered in the next step.



crimp will crush the case. For proper crimp, all cases must be trimmed to the same length. For best utility and accuracy, consider the Lee Factory Crimp Die. You will never crush a case; no crimp groove is required and trim length is not critical.



Lee Factory Crimp Die

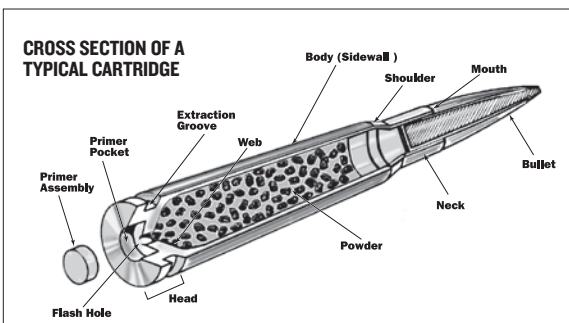


⑩ **IF LOADING MAXIMUM** loads, it is a good practice to remove all traces of case lubricant with detergent and water. This reduces pressure against the bolt.

## IT IS YOUR RESPONSIBILITY TO ENSURE THE SAFETY OF YOUR LOADS

THE FOLLOWING ARE FACTORS THAT WILL INCREASE PRESSURES. SOME WILL BE DANGEROUS.

- **DO NOT USE** more powder than recommended
- **DO NOT USE** a heavier bullet than recommended
- **DO NOT SEAT** the bullet deeper than normal
- **DO NOT USE** magnum primers unless using a slow burning ball powder
- **Greatly oversize bullets, excessively hard bullets or cases that are too long will cause higher pressures**
- **High temperatures, or cartridges stored in a hot car or car trunk will produce higher pressures**



### RELOADING SAFETY

Keep powder away from heat and open flames — Don't smoke

Store powder and primers in their original containers in a cool, dry place

Read and follow instructions exactly

Be sure you have the correct powder, measure and bullet of the correct weight. Any mixup can be dangerous

Exercise care and common sense at all times

### WEAR SAFETY GLASSES WHEN RELOADING OR SHOOTING

#### CASES

The easiest and best way of getting cases is to simply save those from your factory loaded rounds. New and used cases can also be purchased. Cases must be clean and safe. Do not use cases that have cracks or splits. If they have been used more than twice, they should be checked to see that none of them have become too long for safe use. The easiest way is to trim them with a **Lee Case Trimmer**. This automatically cuts them to the correct length and no gauging or measuring is needed. After trimming, be sure to chamfer both the inside and outside of the case. A **Lee Chamfer Tool** works best, but it can be done with a pocket knife.

Straight sided cases, such as those used by most handguns, are loaded with a 3-die set.

#### MILITARY CASES

Used military cases are readily available at low cost. Usually, these have primers that are crimped in place. This is to prevent the primer from coming loose in automatic weapons and jamming the action at an inopportune time. The crimp must be removed before repriming. This can be done with a primer pocket reamer or swaging tool. Even a **Lee Chamfer Tool** can be used to ream the crimp.

#### POWDER

Powder is usually classified as smokeless and black powder. There is also **Pyrodex**, which is a substitute for black powder. We will be using only smokeless powder for reloading.

Each set of Lee Dies is supplied with powder measure and charge table with a generous selection of loads. Additional load data is available from all the powder manufacturers and bullet makers. This is excellent information and should be followed exactly.

Different powders are available to do different jobs. Bullets having a high sectional density (long length in relation to their diameter) require a slow burning powder. This permits sustained peak pressure to gain maximum acceleration within working pressure limits. Short, light bullets use quicker burning powder for complete combustion within the barrel. A wide selection of powder is readily available. Powders should always be stored in their original containers. While smokeless powder is not an explo-

sive and not as dangerous to handle as gasoline, it would be foolish to handle it carelessly and store excessive amounts. Follow the powder manufacturers' recommendations for storage and use.

#### PRIMERS

Rifle and pistol cartridges require different primers. Rifle primers have a thick and stronger cup to withstand the higher pressure. Pistol primers have a thinner cup for easy detonation with a lighter hammer blow. Both rifle and pistol primers are available in regular and magnum. Use regular for all loads except if the load data specifies magnum primers.

Primers must always be stored in their original containers. It is always a wise idea to wear safety or shooting glasses when shooting or reloading.

#### BULLETS

Commercial rifle bullets usually have a soft lead core with a copper jacket. Point shapes come in a variety of styles, but usually have some soft lead exposed to properly mushroom on impact.

The jackets serve a dual purpose: to control the bullet expansion and act as a bearing surface for its high speed travel down the bore. Some bullets have a crimping groove called a cannelure. This groove must be seated almost entirely in the case when crimping the case. The very end of the case mouth is turned into this groove by the bullet seating die used in a tubular magazine gun and most revolver ammunition.

Cast bullets are very popular with the handloader. They are very economical to use and can be as accurate as jacketed bullets. They do not normally expand as well as soft lead jacketed bullets on game. Therefore, it is poor economy to use them for hunting.

#### CRIMPING

Ammunition loaded for hunting should always have the bullets crimped in place, as should ammunition used in tubular magazine and auto-loading rifles. It could ruin your hunt if a bullet wedged in the chamber or pushed back into the case. Best accuracy is usually obtained with crimped ammo as the crimp has an effect on ignition, velocity, pressure and ballistic consistency. No die does a better job crimping than the patented Lee Factory Crimp Die.

### RELOADING IS QUITE A SIMPLE PROCESS

- 1 Case is sized to original dimensions and the spent primer is removed
- 2 Install a new primer
- 3 Add a charge of powder
- 4 Seat a new bullet and crimp if desired



Remove spent primer and size case

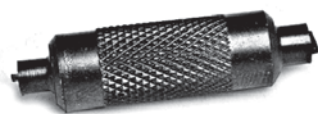
Install new primer



Add powder



Seat a new bullet



**Primer Pocket Cleaner** enhances accuracy and assures full depth primer seating.

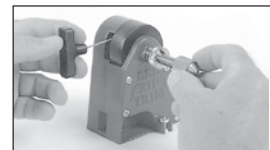
**Lee Case Trimmer** Simplest and safest way to check the case and trim to the correct length.



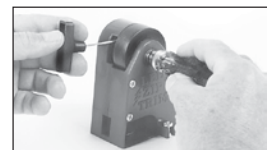
After a few loadings, cases tend to get longer. This could be dangerous if the case were so long that it would pinch the bullet in the end of the chamber. Pressure high enough to damage the gun could result. Notice how the case length gauge passes through the case and stops against the lock stud and trims every case to the correct length.



Trim the case using the Lee Case Trimmer

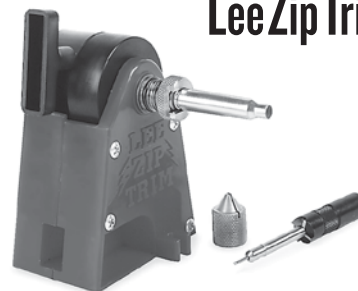


Chamfer the case inside and out



Polish case with steel wool, scouring pad or crocus cloth

### Lee Zip Trim



### Lee Safety Powder Scale

It is the easiest to use, most accurate and sensitive powder scale made exclusively to weigh gun powder. The **Lee Safety Scale** has magnetic dampening and an approach to weight lifter enclosed within its heavy metal base. The exclusive safety beam has a stainless steel razor edge for maximum sensitivity. You can be sure that the **Lee Safety Scale** will retain its original factory accuracy for as long as it is not physically broken.



### Lee Turret Press

A strong, powerful tool that will handle the largest magnum case with ease. Built in primer arm seats primer on the downstroke and the snap in turret lets you set your dies once. When it's time to change calibers, simply snap in a new turret and shell holder and you are ready to load.



### PARTS LIST

HP 2503	Ram	HP 2500	Connecting Link Hand Press (2 required)
HP 2497	Hand Press Frame	TP2108	Shell Holder Retainer
HP 2496	Hand Press Lever	OF3614	Spring, 5/16" long .027 wire
HP2507	C-Clip Retainer for HP2499	OF3615	Lock Pin
HP2499	Clevis Ram Pin	OF1764	Breech Lock Bushing
HP3539	5/16-24x1.620 Bolt GR-A (2 required)	HP2520	Breech Lock Hand Press Instructions
HP3607	5/16-24 Locknut GR-A (2 required)	SD2153	O-Ring

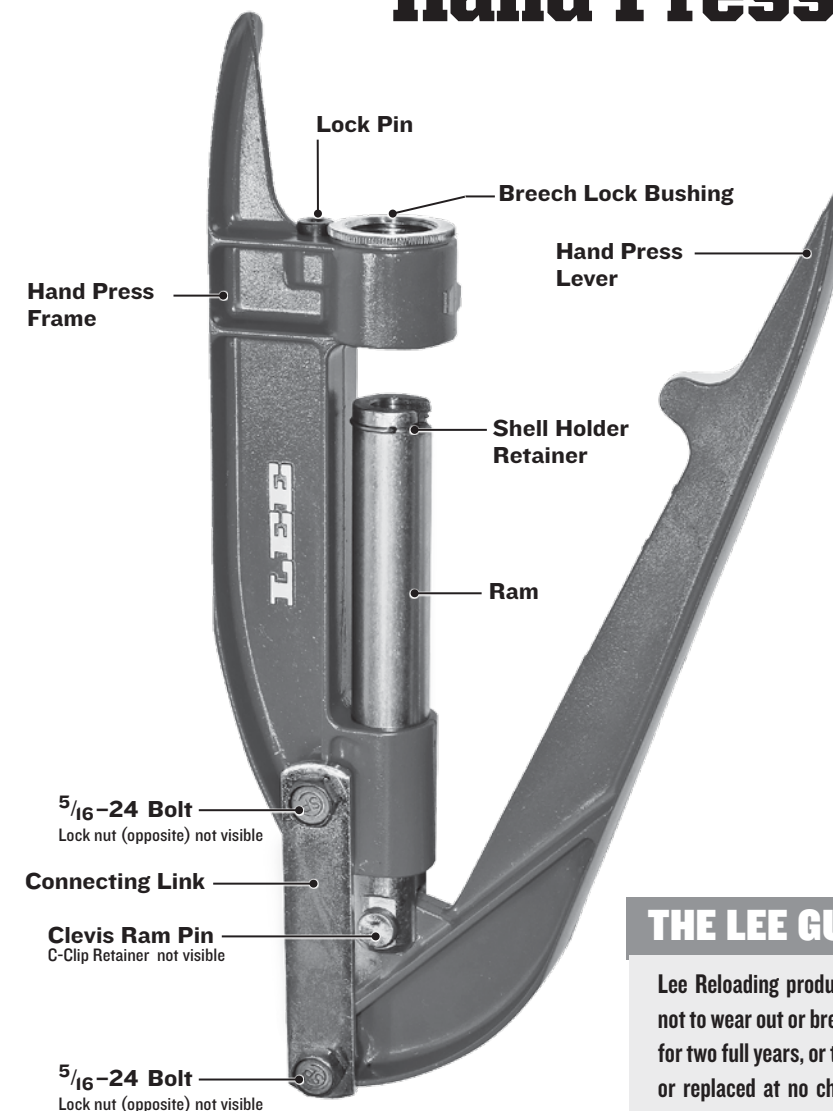
# LEE

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### COMPLETE INSTRUCTIONS

# LEE

# Lee Breech Lock Hand Press



### THE LEE GUARANTEE

Lee Reloading products are guaranteed not to wear out or break from normal use for two full years, or they will be repaired or replaced at no charge if returned to the factory. Any Lee product of current manufacture, regardless of age or condition, will be reconditioned to new, including a new guarantee, if returned to the factory with payment equal to half the current retail price.

### CAUTION

Ammunition reloading can be dangerous if done improperly and should not be attempted by persons not willing and able to read and follow instructions exactly. Children should not be permitted to reload ammunition without strict parental supervision. Always wear safety glasses when reloading and shooting. Ammunition loaded with these tools and data should only be used in modern guns in good condition. We do not accept responsibility for ammunition loaded with these tools or data as we have no control over the manufacture and storage of components or the loading procedure and techniques. Primers and gun powders, like gasoline and matches, can be dangerous if improperly handled or misused.

# LEE

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