LEE SAFETY PRIMER FEED

THIS PRIMER FEED IS USABLE WITH ALL LEE PRESSES EQUIPPED WITH THE LEE LEVER PRIMER SYSTEM



1 INSTALL primer feed bracket with supplied 10-24 screws.



2 INSTALL correct primer feed assembly LARGE white trigger assembly SMALL black trigger assembly into primer feed bracket.



3 LOWER ram and remove primer feed. Remove primer tray from trough.



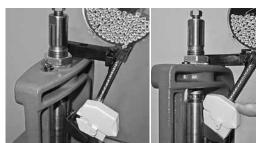
4 DEPRESS primer latch on tray, rotate counterclockwise and lift off cover. Place no more than 100 primers in tray; shake side to side to tip primers upright.



6 RE-ATTACH primer feed



8 LOWER ram (raise handle) to seat the primers. The primers should be flush to slightly below flush when properly seated.



7 DE-PRIME and size a case. With ram at top of stroke (handle down), push the trigger on primer feed to dispense a primer.

NOTE Trigger must be fully forward, then down to dispense a primer.

SMOOTH OPERATION TIP

Spent primers are extremely dirty, and after extended use it my be necessary to clean ram where primer lever is inserted. Clean the ram using gun scrubber, electrical contact cleaner or disc brake cleaner. Be sure to lubricate outside of ram with #30 weight motor oil or equivalent.

CHANGING PRIMER SIZES CAN BE DONE IN SECONDS!

- Replace L-shaped primer arm with the appropriate size
- Substitute appropriate feed assembly

90997 LARGE & SMALL KIT



LEE AUTO-PRIME XR® 90230

Fastest, most convenient way to prime cases off the press. Perfect for those that clean primer pockets or prefer to prime in their easy chair The Auto-Prime XR uses special, inexpensive shell holders. No need to endlessly swap shell holders from your press.





Lee Bench Plate 90251

Turns you into a quick change artist. Patented design allows instant press change. It's so sturdy you can resize the monster 50 BMG case, then quickly switch to a smaller press for priming or other operations. Trapezoidal base block slides into perfect register and is made mmoveable with the quick tightening of four bolts. Includes 3 base blocks; one drilled to fit all current Lee presses. Special elevator bolt

hardware included. Powder coated, thick steel mounts quickly and securely to any bench or tabletop. Wide steel plate distributes load, adding rigidity to the lightest bench top.

Lee Safety Powder Scale

90681 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 Perfect Powder Measure

вообв This measure is unique because it solves all of the problems common to ordinary



drum type measures. A soft elastomer wiper strikes off the metering chamber rather than cut the powder. The cone-shaped nylon drum can be adjusted to zero clearance. The metering rod is calibrated in cubic centimeters, the same units as our Auto Disk Powder measure and dippers. Capable of dispensing charges from 2 to 100 grains.

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.



COMPLETE INSTRUCTIONS

BREECH LOCK CLASSIC CAST

Lee Breech Lock **Quick-Change Die Holders**

Ammunition reloading can be dangerous if done improperly and should not be attempted by persons not willing and able to read and follow instructions exact-

ly. 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



18

22

PARTS LIST

BP3090 Lever

TR2447 Wood Knob

BP2780 Lever Sleeve

FT3128 5/16-18x3 Bolt

7 FM1371 7/16-20 NF Nut (2)

BP2774 Toggle Link (2)

BP3000 Toggle Link Pin

10 BP2777 Lever Clamp

12 FF1428 10-24 Bolt

BP1130

BP2888 Connecting Link (2)

13 OF3606 Primer Deflector

15 OF3615 Retention Pin

16 BP1427 Spacer

14 OF1764 Breech Lock Bushing

17 TP2108 Shell Holder Retainer

Primer Arm · specify LARGE or SMALL

18 BP3064 Clear PVC Tube

19 BP3088 5/64 Roll Pin

21 BP1178 Instructions

22 BP3127 Plastic Cap

23 BP2885 Pivot Pin Thru

24 BP3313 Pivot Pin Blind

BEFORE YOU START RELOADING

SETTING UP YOUR LEE BREECH LOCK CLASSIC CAST PRESS

CONGRATULATIONS ON YOUR PURCHASE OF THE LEE BREECH LOCK CLASSIC CAST PRESS WE DESIGNED THIS PRESS TO BE THE FINEST AND MOST CONVENIENT PRESS MADE.



1 ATTACH the Breech Lock Classic Cast Press to quick removal and installation of a reloading press and adds rigidity to the lightest bench top.



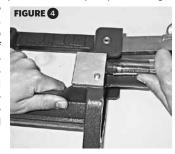
2 ATTACH the primer deflector with the provided #10-24 bolt [SEE FIGURE 2]



3 INSTALL the lever clamp. When sliding the lever a sturdy bench with three 1/4" or 5/16" bolts [SEE through the lever clamp, make sure the lever passes FIGURE 1 Use the press as a template, or print a all the way through the lever sleeve [FIGURE 3] to paper drill template from the INSTRUCTIONS link on prevent breakage. The lever angle is adjustable by our website www.leeprecision.com. For the ultimate in loosening the lever clamp bolt just enough to allow the convenience, consider the Lee Bench Plate [CATALOG teeth on the lever sleeve and toggle link to slip past #90251]. The Lee Bench Plate, with included pre- one another and the lever can be installed on either drilled base block and necessary fasteners, allows side of the press for right or left handed operation.

> 4 SLIDE clear tube onto hose barb on bottom of the press. [FIG. 4]. Spent primers are ejected from the angled hole in ram (provided the primer arm is installed) and deposited into the spent primer trough,

funneling into the clear tube. There is a cap on the end of the tube to allow for convenient disposal of spent primers, or the tube can be routed directly into a



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 Classic Cast 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



that the lock groove will line up lock pin; rotate die 1/6 of a turn. cally depressed, allowing instant when secured. Adjust your die in Lift out and change to your next one-handed removal. or out for proper operation.



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

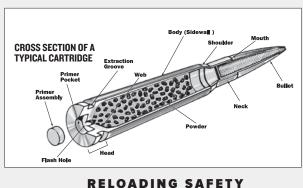


Insert the holder into the press so Remove the die by depressing the Notice how the lock pin is automati-

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 produce higher pressures



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

Read and follow instructions exactly

weight. Any mixup can be dangerous

Exercise care and common sense at all times

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

Be sure you have the correct powder, measure and bullet of the correct

RELOADING IS QUITE A SIMPLE PROCESS

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









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 substitue 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 | than the patented LEE FACTORY CRIMP DIE.

smokeless powder is not an explosive 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

YOU CAN NOW BEGIN RELOADING





1 INSTALL SHELLHOLDER AND APPROPRIATE SIZE PRIMER ARM

Insert the primer arm so the notch in the bottom of the primer arm engages with the cross pin in the ram. As you lift the lever all the way up (lower the ram), the primer arm tips vertical and aligns with the hole in the center of the shellholder. As the lever is lowered, the primer arm drops down and tips back out. Cycle the press lever a few times to familiarize yourself with the lever prime mechanism. NOTE Primer arm must be installed to allow proper function of the spent primer collection system.

2 SIZING DIE ADJUSTMENT While holding the lever all the way down against the stop, insert sizing die with breech lock bushing installed into press frame and turn the sizing die in until it touches the shellholder (FIGURE 5). Raise the lever (lower the ram) and turn the die in an additional ½ to ½ turn. Lower the lever again, and use the ram to apply light pressure to the base of the die. This will keep the die from turning as one tightens the lock ring to secure the adjustment just made. **NOTE** Carbide dies should not be turned in the additional 1/4 to 1/2 turn.

3 PREPARE YOUR CASES If using a steel sizing die, it is necessary to lubricate your cases. This is also a good time to inspect cases for split necks, indications of head separation or other defects. Apply a thin film of LEE CASE RESIZING LUBRICANT (CATALOG #90006) with your fingers. This method will allow you to detect any grit that may be clinging to the case, which would scratch the sizing die if not removed. The case may be sized immediately or allowed to dry.



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 RESIZE THE CASE Place the cartridge case in the shellholder and raise the ram until the shellholder contacts the base of the die. It is important to verify that the shellholder contacts the base of the sizing die when resizing the cartridge case. This establishes correct headspace.

PRIMING YOUR CASE THE BREECH LOCK CLASSIC CAST PRESS includes two primer arms, one each

for large and small primers. With appropriate size primer arm installed, place correct size primer into the cup on FIGURE 6 the primer arm (FIGURE 6). Slowly approach the end of the stroke so you can feel the slight resistance as the primer is pressed into the case. Lift hard enough on the lever to seat the primer flush or slightly below flush. Using the LEE SAFETY PRIME SYSTEM (CATALOG #90997) greatly speeds up this operation. See panel on reverse for details on the Lee Safety Prime System. If you prefer off press priming, an excellent choice is the LEE AUTO PRIME XR®. The Lee Auto Prime XR® is a fast, safe and effective way to prime cases.



6 FLARING THE CASE MOUTH

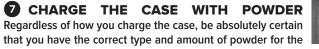
Most handgun cartridges should have their mouths flared to allow easy bullet seating with out shaving. This flaring or expanding die is standard in most LEE PISTOL DIE SETS. The Lee die features a hollow expander plug allowing you to expand and charge the case simultaneously. An AUTO-DISK POWDER MEASURE may be installed on top of this die.

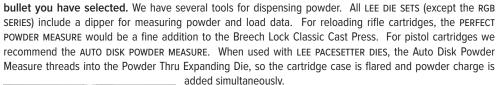
This operation is usually omitted on bottleneck rifle cartridges.

See instructions included with your die set for proper adjustment.

Lee offers a UNIVERSAL CASE EXPANDING DIE

(90798), usable with most rifle and handgun cartridges. Works great to prevent shaving of cast lead bullets or moly and low friction coatings found on high performance jacketed bullets.







8 BULLET SEATING Adjust the BULLET SEATING DIE per the instructions included with your die. Place a bullet on the case mouth and guide it into the die. Raise the ram to the top and withdraw. The knurled 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 com-

pletely inside the case. Then screw the die body in just enough to apply a good crimp. Attempts to apply excessive 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.



9 FINAL CHECK Check your reloaded cartridges for any signs of defects. If there is any doubt about the quality or correctness of a reloaded cartridge, dispose of it properly. Do not take an unnecessary chance on questionable ammunition. If loading maximum loads, it is good practice to remove case lubricant with detergent and water. This will reduce pressure against the bolt.

10 PROTECT YOUR INVESTMENT Ensure that your press will look and function the same as the day you purchased it. Lubricate the ram and all the pivot

points on the press lever linkage. The connecting links can be lubricated through the pivot pin on either side. Nearly any lightweight oil can be used. Avoid water displacing oils such as WD-40. Treat your press like a fine firearm; leave a film of oil on uncoated metal parts at all times.

LEAD WARNING

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

