BEFORE YOU START RELOADING
SET UP YOUR LEE BREECH LOCK CHALLENGER PRESS

Attach the Challenger Quick Change to a sturdy bench using ¼ or ½ bolts.

Install the lever clamp so that the cross hole registers with the grooves on the face of the toggle. Pass the lever through the lever clamp to the desired length. The end of the lever should be flush with the edge of the toggle at minimum. You may slide it further through when loading easy to size cases like most handgun cases.

You can now begin reloading

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

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

- Thread your die into a quick-change holder and lightly snug the lock ring.

- After your dies are set, they can be installed so that the lock groove does not line up with the lock button. This allows you to install and remove the die without depressing the lock button.

- 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.

- Remove the die by depressing the lock button and rotate the die ¼ of a turn lift out and change to your next die.

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

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

- Lee Factory Crimp Die

- Lee Auto Prime XR

- Auto Primes XR is a hand held and requires special, but inexpensive shell holders.

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.

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.

PLACING the lubricated die in until you feel it touch the case mouth. If no crimp is desired, back the die out ½ turn. If a crimp is desired, turn the die in ½ turn.

CAUTION

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.

SEAT THE BULLET

Place the 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 crisp, be sure the bullet crisp groove is almost completely inside the case. Then screw the die in just enough to apply a good crisp. Attempts to apply excessive crisp will crush the case. For proper crisp, 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 crisp groove is required and trim length is not critical.

IF LOADING maximum loads, it is a good practice to remove all traces of case lubricant with detergent and water. This will reduce pressure against the bolt.
A wide selection of powders is readily available. Powders should powder for complete combustion within the barrel. Short, light bullets use quicker burning pressure limits. 

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

Take care and common sense at all times. 

Prime powder away from heat and open flames — Don’t smoke. 

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

Exercise care and common sense at all times. 

The easiest and best way of getting cases is to simply save them to the correct length and no gauging or measuring is required. 

Powders should be handled with care.

MILITARY CASES
Used military cases are readily available at low cost. Usually, those have proven to be the most consistent.

PRIMERS
Rifle and pistol cartridges require different primers. Rifle primers are used to ream the crimp.

Primers must always be stored in their original containers. It is necessary to clean ram where 

POWDER
Powder is often the most important factor for consistency and accuracy. 

CROSS SECTION OF A TYPICAL CARTRIDGE

PRIMERS

MILITARY CASES

WEAR SAFETY GLASSES WHEN RELOADING OR SHOOTING

RELOADING SAFETY

The jacket serves a dual purpose: to control the bullet impact.

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TROUBLESHOOTING

To prevent this be sure to tighten the lock rings only when the lock pin is in the groove of the Quick-change insert. If your press is in a humid climate lubricate the bushing and frames threads to prevent corrosion.

OPTIMAL LEE SAFETY PRIMER FEED 90097

DEPRESS primer latch on tray, rotate counterclockwise—this off. Place no more than 100 primers in tray. 

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INSTALL correct primers assembly, 

INSTALL correct primers assembly into primer feed bracket 

SMOOTH OPERATION TIP

Spent primers are extremely dirty, and should be removed from the case. It is necessary to clean ram where shooting or reloading.

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