The LEE LOAD-MASTER is the finest reloading machine ever built. To maximize its usefulness, the instructions should be read and fully understood.

**IMPORTANT**

You must do these before you can reload.

1. Bolt to a sturdy bench.
2. Install case inserter.
3. Adjust the dies.
4. Adjust case retainers. (VERY IMPORTANT)
5. Fill the primer feeder with the correct primers (SEE CAUTION PAGE 4).
6. Adjust primer seating depth.
7. Attach powder measure and adjust for the proper charge.
8. Fill the powder measure with the correct powder.

**ALWAYS WEAR SAFETY GLASSES WHEN RELOADING OR SHOOTING**

**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. Failure to follow these instructions may result in serious injury or death.

**WARNING**

The greatest danger in reloading is the double charge. Should you be interrupted while reloading, or should anything go wrong, take every possible precaution in making sure no round has received a double charge.

Only CCI or WINCHESTER brand primers are safe to use with this tool unless you have the optional explosion deflector.

**CAUTION**

The reloading of rifle ammunition requires extra care. Because of the extremely high pressures of most rifle ammunition, you must be sure your cases are in good condition. Inspect them before each reloading for damage and wear. Cases must be trimmed. An excessively long case will pinch the bullet in the end of the rifle chamber and cause dangerously high pressure that could damage your gun and cause personal injury.
Mounting Your Press

Attach your press to a sturdy workbench with 1/4" bolts. Three are required. Mounting distance is the same as the Lee Pro1000 and Turret Press. Screws are not recommended. Be sure that the mounting pads are fully flush with the front edge of your workbench. This insures sufficient clearance for the ram.

It is suggested that ample room be available to the left of the press. This will be your work area and a handy place for your bullets. Only a small area need be kept available to the right of the press for empty cases and loaded rounds.

Case Catcher

As the shell plate is rotated, at the bottom of the stroke, the loaded round is ejected down the chute to the right. The Lee Case Catcher is held by the special bracket which must be attached to your bench with the screws provided. The left end of the bracket should touch the Load-Master right mounting lug. The front edge must be in front of the case feeder bracket.

Case Inserter

Cases are slid close to the shell plate on the downstroke of the ram and pushed into the shell plate as the ram starts upward. This unique action is achieved with a crank connected to an angled slide with the crank slider. The feed bracket can be easily adjusted in or out as required to fully insert the case. Once set, usually no further adjustment is needed unless you change from a very large case to an extremely small case.

The following is best performed without primers and the turret should not be installed.

Insert the round end of the 1/4 square shaft into the feed bracket, making sure that it is turned with a flat side square to the press. The crank wire should enter the end hole of the case slider. Tighten the set screw. Tighten the top screw of the crank slider; use bottom screw to adjust force of shell insertion.

Cycle press to assure free motion. At the upper most ram travel, place a case in front of the shell slider, cycle lever, again place case in front of slider, cycle lever. If the case collides with the case in shell plate, remove feed rod and unscrew feed bracket one or more full turns. When tightening feed bracket, be sure to allow 5/16" clearance between carrier tongue and square rod — about the thickness of a pencil.

Installing the Lee Auto-Disk Powder Measure

The Lee Deluxe Auto-Disk Powder Measure is an improved version with positive pull back.

The bottom end of the chain should pass through the hole in the carrier. Attach the brass pendant to the chain so the measure is fully retracted when the ram is in the extreme down position. Some chain should dangle below the pendant as the weight helps the chain slide through the carrier hole on each cycle. Fine adjustment is easiest done where the chain attaches to the powder measure. The chain passes through two holes in the lever and it will never move, yet it is easily adjusted. Store the connecting link on the end of the chain. It will be available if you need it for a repair.

Installing the Lee Perfect Powder Measure

The Perfect Powder Measure has been attached to the universal charging die and the proper drop tube is installed. The rest of the set of drop tubes are packed with your press so you may load other calibers.

With a case in the shell plate in station #2, screw the Universal Charging Die and Perfect Powder Measure assembly into the turret until it moves the powder drum to the full dump position (crank down). See details on the Universal Charging Die instructions. The carrier has an extension with a hole for the chain to pass through.

Now lower the ram and attach the pendant to the beaded chain with just enough tension to rotate the drum to the fill position (crank up).
It is always important to check the setting of any adjustable powder measure. Normally this is done with a powder scale. If you do not yet have a scale, limit your loading to the charges on the back side of the die instructions. A powder dipper is provided so you can check the charge from your perfect powder measure to double check your setting. The measure, when properly adjusted, will dispense a charge that just fills the dipper. Be sure it is the correct dipper as listed on the Lee load data supplied with the dies. We strongly recommend the Lee Safety Scale as it is the most accurate and sensitive powder scale made.

Preliminary Testing

When you operate the lever you must make complete strokes, stop to stop. Failure to complete the up stroke (lever down) can cause the index flipper to put in a “half-cocked” position at mid-stroke and cause the press to bind. Continued pressure may damage the ejector pawl. If for whatever reason you short stroke the press, pay attention to the indexer as it pulls out of the carrier at mid-stroke. If you feel it bind — STOP — and pull the indexer out manually to the edge of the frame before completing the down stroke.

Cycle the lever up and down a few times to get the feel of your machine. As the ram starts up the case slider should move in and then retract. The indexer rod flipper will be turned slightly to the left at mid-stroke and back again at the very top of the stroke. [Figure 1]. About halfway way down, the indexer will be pulled toward you by a raised rib and moved to the right by the sloping projection on the frame. [Figures 2 and 3]. Near the bottom of the stroke the lever will push against the indexer and smoothly rotate the shell plate exactly 72°.

Always move the ram fully to the stops at both ends of the stroke. Be gentle at the stops. Repeatedly slamming the lever hard against the stops will break something. You have full control of the speed of ram travel and index. While you can go as fast as you like and the machine will not malfunction, going too fast will cause the powder to fling out of your cases while indexing and not permit you to feel when things go wrong. For this reason, we strongly suggest a slow to moderate lever speed. Highest production is achieved with fast lever travel during the mid stroke and learn to slow your travel at both ends of the stoke. Remember that large charges of rifle powder need time to flow, so you must pause sufficiently for all of the powder to enter the case.

One Last Step! Very Important!

At 4 of the 5 loading stations the cases are held in the shell plate with case retainers. The retainers are made to swing out so you can easily remove a case from any position. They must be set so that they hold the case fully into the shell plate. If you push them in too far the case will correctly position them as it passes.

Place a single case in the shell holder and set the case retainers against the case rim in all four stations. The case retainers precisely position the case so that it will be centered to enter the dies and most important to center over the new primer in the second station.

WARNING: If you push the primer feed lever back you must remove the primer in the slide or the primer slide will be damaged. This usually will happen during shell plate removal while primers are in the feeder. Remove the primer by pulling the primer feed lever to the front. Then push down on the primer rocker arm to raise the primer punch and lift out the primer.

Set Primer Depth Adjustment

The 1/4–20 screw that bears against the priming rocker arm may require some fine adjusting to seat primers to your liking. Make very small adjustments and test after each. There is sufficient spring in the linkage to accommodate slight differences in cases.
Operation
Always move the lever fully to the positive stops at both end of lever travel.
Be gentle when you come to the stops to avoid damage. Cases are not perfect and rims may be damaged. It is important to always watch to see that the case fully enters the shell plate.
Always keep the primer trough full with CCI or Winchester brand primers. No other brand is safe to use without the optional explosion deflector.
After the fourth stroke of the lever the sized, primed and charged case should be in a position to start the bullet into the case mouth or rest it on the case mouth if you are loading rifle cases.
That’s all there is to it. The Lee Load-Master is the nicest press you’ll ever use.

WARNING
The greatest danger in reloading is the double charge. Should you be interrupted while reloading or should anything go wrong, go way out of your way to be positive that no round has received a double charge.

Cases can be easily removed from every station by swinging out the case retainer.

Case Feeder
The Lee 4 Tube Magazine Case Feeder and collator are highly desirable options for pistol cases. Attach the cylinder and plate as shown. This assembly should be slightly more than one case length above the carrier tongue. A close adjustment of the height will keep cases from tipping. However, it should not be so close that slight case length variances will cause binding. Tighten the lock nuts. Use two 7/16 wrenches to prevent breaking the bracket.

No case feeder is available for most rifle cases. Rifle cases should be dropped in front of the case slider at the top of the stroke. It will be automatically inserted into the shell plate after the index is completed.

Keep Your Press Clean
It is especially important to frequently clean out the openings in the shell plate which hold the shell. Dirt or gunpowder will keep the case from fully entering the shell plate. This will cause feeding, priming and alignment problems.
Frequently check the primers to be sure they are seated properly. If dirt falls on the priming punch, it will deface the primer. Unless it is extreme, it will cause no harm. To remove the dirt, depress the primer rocker arm to raise the punch and wipe it clean with your finger.

Empty The Spent Primers
Primers are 100% captured inside the ram. To empty, simply slide the cover back while holding a container under the ram. Be sure to close the cover, or it will get bent the next time the ram is raised.

Automotive engine oil is the best. Any kind of oil is better than none. DO NOT USE WD-40 or dry lubricants. These do not offer sufficient protection.
A very tiny amount of grease in the center hole of the shell plate and the square indexer rod will greatly extend the life of the carrier and make it work smooth as silk.

Changing The Turret
Changing calibers is quick and easy because of the removable turret. It is precisely aligned with the knurled lock screw on the left. Loosen the screw so the turret can be rotated about 3/8” and lifted out. When replacing, make certain the lock screw engages the groove in the turret.

Changing Calibers
The fastest way to change dies is to have them installed in their own turret. It then becomes very fast and easy to replace the entire turret.
If the shell head is of a different size it is also necessary to replace the shell plate. The shell plates for the Load-Master are the easiest of all to change.
While the shell plate is off, you can change the primer feeder if another size is needed. Remember to change to the proper type of primers—rifle, pistol, regular or magnum.

Changing The Priming Tool
Remove the knurled nut, case ejector, index rod and shell plate. Swing the case retainer out of the way. Insert the primer punch into the hexagon-shaped hole in the right rear of the carrier. Be sure the tiny spring is installed into the hole at the rear of the primer punch.
Now slip the primer trough over the punch. Push down on the left end of the priming rocker arm to be sure everything is working.
freely. The primer punch will be seen moving up as you push down on the priming rocker arm.

**Changing The Shell Plate**

Remove knurled nut case ejector and indexer. Select proper shell plate from chart on the last page. Replace shell plate on carrier you will have to work it under the primer lever. Place case ejector directly on top of the

shell plate making sure square on top of center post is engaged and case ejector pointer is towards the chute on the right. Secure case ejector and shell plate with knurled nut. Be sure "O" ring and groove is toward shell plate. Install indexer with longer portion of flipper pointing upward and beveled side of indexer to your right.

Wedge locking of the shell plate is adjusted by screwing the flipper out for a tighter lock, screw in for a looser lock. Smoothest operation is attained with the wedge lock slightly loose.

**Changing Dies**

Specific die installation instructions are not included in this manual. Always follow the instructions included with the dies.

**WHEN INSTALLING DIES**

- Follow instructions supplied with dies.
- Always install decapping die in station #1.
- Carbide pistol dies should be installed so they just touch the shell plate.
- Dies for rifle bottle neck case must be screwed in until they touch the shell plate plus 1/4 turn.
- Do not use rifle dies that require end of sizing die be kept away from shell plate. They have dangerous capability of producing ammunition with excessive headspace.

**SPECIFIC STATION REQUIREMENTS**

**STATION #3**

This is the powder charging station

It is strongly recommended that an automatic powder measure be used at this station.

**STATION #2**

This station may not be used to add powder or deprime

A pistol expanding die can be used at this station; if it does not deprime or add to the powder.

[HINT] A carbide sizing die with the decapper removed can be placed at this station. This will provide excellent alignment of the case for priming and will alert you if the case retainer moves out of position. Be sure to install a Lee Universal Decapping Die in station #1 or use a larger caliber die to deprime.

**STATION #1**

This is the only station for depriming.

**STATION #4**

This is typically used to seat the bullet.

On pistol cases where the mouth has been flared, the bullet can be started into the case mouth by hand or can be automatically placed with the optional Lee Bullet Feeder.

The die should be adjusted to seat the bullet at the proper depth. Proper depth is achieved when:

a) Cartridge overall length is short enough to function through your gun's action.

b) The bullet's crimp groove is almost entirely inside the case mouth.

[NOTE: This is not important if a Lee Factory Crimp Die is to be used at the next station.]

b) The bullet is not seated deeper than recommended by the charge table.
Alignment of the Carrier to the Turret

This is an adjustment that need never be done unless you disassemble the carrier from the ram. The draw bolt head, at the bottom of the ram, MUST be loosened so the carrier can be rotated on the end of the ram. With the index flipper in the “in position” and the carrier at the pull-out rib position, swing the carrier clockwise (viewed from top) until center hub of index flipper contacts the pull-out rib. Figure 4. Tighten draw bolt securely — 11.6 ft./lbs.

Fig. 4

Troubleshooting

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE CAUSE</th>
<th>REMEDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primers not fully seated</td>
<td>Lever not lowered to full down stop</td>
<td>Actuate lever to FULL DOWN position</td>
</tr>
<tr>
<td></td>
<td>Die set too deeply to press</td>
<td>Adjust dies to insure carrier can travel to FULL UP position</td>
</tr>
<tr>
<td></td>
<td>Primer rocker arm bolt not properly adjusted</td>
<td>See adjustment procedure in this manual</td>
</tr>
<tr>
<td>Tipped primer or damaged primer slider</td>
<td>Case retainer out of adjustment</td>
<td>See adjustment procedure in this manual</td>
</tr>
<tr>
<td></td>
<td>Cases not aligned well due to out of tolerance or damaged rim</td>
<td>Install sizing die without decapper in priming station for better alignment. (See Changing Dies, Station #2).</td>
</tr>
<tr>
<td></td>
<td>Dirt or gun powder in shell holder grooves</td>
<td>Scrape shell holder grooves with paper clip. Use compressed air to remove debris.</td>
</tr>
<tr>
<td></td>
<td>Tumbling media on primer post or in primer feed</td>
<td>Remove and clean primer feed. Do not process cases with tumbling media lodged in primer flash hole.</td>
</tr>
<tr>
<td>Primer does not feed onto primer punch</td>
<td>Oil in trough</td>
<td>Clean oil from trough.</td>
</tr>
<tr>
<td></td>
<td>Primer trough not full</td>
<td>Keep primer trough full</td>
</tr>
<tr>
<td></td>
<td>Primerslide damaged</td>
<td>Inspect and replace primer slider as needed</td>
</tr>
<tr>
<td>Shell plate fails to index</td>
<td>Damaged case ejector pawl</td>
<td>Straighten pawl to prevent excessive clockwise movement of shell plate</td>
</tr>
<tr>
<td></td>
<td>Carrier out of adjustment</td>
<td>See adjustment procedure in this manual</td>
</tr>
<tr>
<td></td>
<td>Indexer improperly installed</td>
<td>See adjustment procedure in this manual</td>
</tr>
</tbody>
</table>
Accessories

Large Primer Feeder ................. 90077 24.98
Small Primer Feeder ................. 90075 24.98
Shell Plate, specify caliber ........... 29.98
Case Feeder Large ................. 90658 25.00
Small Case Feeder ................. 90659 25.00
(This has a small slider and an extension for short cases.)

Rifle Case Feeder ................. 90663 25.00
(This has a reducer bushing to better fit 223 and 30 Ml cases.) 30 Ml Carbine and other small and short calibers. Rifle cases are best loaded by placing the case in front of the case slider after inspection and lubrication.

Primer Explosion Deflector ........... 90363 5.00
(90079 must be used with all brands of primers other than CCI or Winchester.)

5 Hole Turret ................. 90079 14.98

Loaded round catcher with mounting brake & screws ........... 90084 14.98

Case Collator, fills all four feeder tubes in 10 seconds ........... 90667 14.98

Custom made shell plates
(6 weeks delivery, payment in order) ........... 100.00

Available in over 125 calibers

All of the combinations listed should work quite well. Because of the assorted shapes of cartridges some may require slight modifications to the equipment for best results. It simply isn't possible to make, say, a single case inserter, to work perfectly with every size and shape of cartridge. The factory can usually make custom modifications at reasonable costs. Please contact us for your special needs.

LEE BULLET FEEDER

AVAILABLE AUGUST '95

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.

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List of Sizes

<table>
<thead>
<tr>
<th>Cartridge</th>
<th>Shell Plate</th>
<th>Primer Size</th>
<th>Case Feeder</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 REM JET</td>
<td>15</td>
<td>S</td>
<td>90658</td>
</tr>
<tr>
<td>250 WIN. MAG.</td>
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</tr>
<tr>
<td>30 LUGER</td>
<td>195</td>
<td>S</td>
<td>90659</td>
</tr>
<tr>
<td>30 MAUSER</td>
<td>195</td>
<td>S</td>
<td>90659</td>
</tr>
<tr>
<td>32 ACP</td>
<td>7A</td>
<td>S</td>
<td>90658</td>
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<tr>
<td>32 SHORT COLT</td>
<td>4A</td>
<td>S</td>
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<tr>
<td>32 LONG COLT</td>
<td>4A</td>
<td>S</td>
<td>90659</td>
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<tr>
<td>32 S &amp; W</td>
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<td>32 S &amp; W LONG</td>
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<td>S</td>
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<td>32 H&amp;R Mag.</td>
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<tr>
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<td>9mm LUGER</td>
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<tr>
<td>38 S&amp;W</td>
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<tr>
<td>38 COLT N.P.</td>
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<tr>
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<tr>
<td>38 ACP</td>
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<tr>
<td>38 LONG COLT</td>
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<td>S</td>
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<tr>
<td>38 SPECIAL</td>
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<td>357 MAGNUM</td>
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<td>40 S&amp;W</td>
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<tr>
<td>10mm AUTO</td>
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<tr>
<td>PPC</td>
<td>12L</td>
<td>S</td>
<td>90658</td>
</tr>
</tbody>
</table>

Most of the above sizes can be made up at the factory if the dies are listed in our catalog. Not all dies listed above are available.

Most pistol calibers come with the Deluxe Auto-Disk powder measure and a case feeder carbide dies when available. $330

Most rifle calibers come with the Perfect Powder Measure and Universal charging Die. No case feeder. $320