LEE LOADER

for SHOTGUN SHELLS

COMPLETE INSTRUCTIONS

UNCONDITIONAL GUARANTEE

The Lee Loader is GUARANTEED not to break or wear out through normal use, or it will be repaired or replaced AT NO COST if returned to the factory. Wad fingers are expected to wear through use and are easily replaced, so are not covered by this Guarantee.

Because the components you use are the same as used by ammunition makers, you can expect to reload cartridges equal to or better than factory loaded ammunition. However, because we have no control over the method with which these tools will be used or over the manufacture and storage of powder and primers, we cannot accept responsibility for the use of these tools or charge table.



RELOADING COMPONENTS

POWDER

Determine the load you desire from the charge table and select the powder type indicated. Powder can be purchased in quantities as little as 8 ounces and is sufficient for several boxes of shells.

PRIMERS

Until 1964 all shells used a 209 size primer except Remington and Peters, which used a 57 size primer. Remington and Peters are changing to a 97 size primer, which is the same as the 209, so the primer sizes will, in the future, be one standard size. In the meantime, if you have Remington or Peters shells manufactured before 1964, you will need 57 size and all others will take a 209 or 97 size primer except Remington and Peters .410 shells still use 57 size.

SHOT

Use the shot size of your choice and use the amount shown on the charge table. Never use more than recommended as this increases the breech pressure.

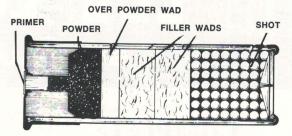
WADS

Each shell should have an over the powder wad, usually made of cardboard, and a filler wad made of a soft, cushiony material. They can be purchased in quantities of 500 or 1,000 very cheaply. The best sizes to get are .135 cardboard wads and 3/8" filler wads for a start.

With this combination it's possible to build up almost any size wad column with one or more of both types in each shell. If necessary, wads can be split with a pocket knife.

Plastic cup wads can be used in place of the cardboard wads and are such a good gas seal that the powder charge must be reduced 10%. To reduce the charge 10%, simply reduce the depth of your powder measure with cardboard discs cut to fit snugly with a total thickness of 1/10 inch.

New one-piece wads are also available which are easy to use and very effective. The manufacturer's instructions should be followed.



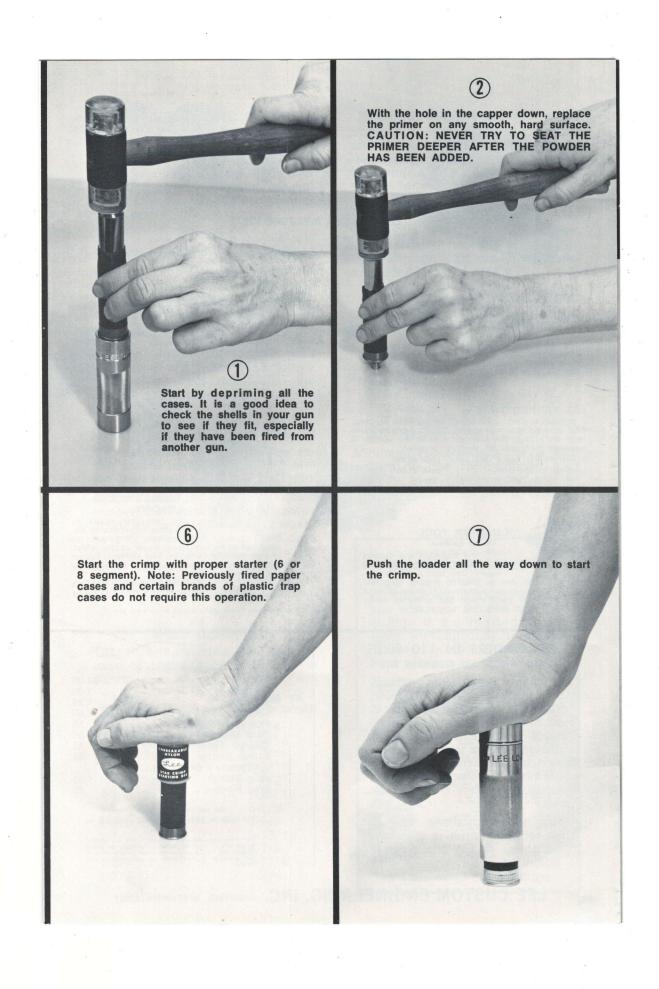
CUTAWAY VIEW OF A LOADED SHELL

WAD PRESSURE

Because of modern reloading components, particularly primers, wad pressure is no longer critical and of very little concern to users of Lee Loaders as there is no mechanical advantage utilized.

If you wish to reload your shells with the exact wad pressure it can be done more accurately with a Lee Loader than any other tool now manufactured by simply seating the wads on a bathroom scale.







CRIMPING PLASTIC SHELLS

For a crimp that holds, it is best to have the wad column a little short so the crimp is depressed slightly in the center. The pie segments then form a wedging action against themselves so the crimp cannot creep open.

TO REPLACE THE ROLL CRIMP

After the shot has been added remove the shell from the loader and insert an over the shot wad. Push the Lee Loader body onto the shell until you can see the paper tube starting to roll past the crimping shoulder. Insert the rammer and pump it up and down while slowly pushing the body down until the desired crimp is formed.

ENLARGING SHELL END RADIUS

This operation is usually unnecessary unless you have difficulty with the shell feeding through your gun.

After the shell is completely loaded remove the rammer. With a washer under the head of the shell (if washer is not available use a nitro card with the center cut out so as to clear the primer), push down hard on the body to force the shell against the crimping shoulder. Eject as usual.

SHOT MEASURE

The shot measures can also be used to measure black powder in drams.

.5%	
SHOT MEASURE	DRAMS OF BLACK POWDER
1/2 Oz. 5/8 Oz.	1-1/4 1-9/16
3/4 Oz.	1-7/8
7/8 Oz.	2-3/16
1 Oz.	2-1/2
1-1/8 Oz.	2-13/16
1-1/4 Oz. 1-3/8 Oz.	3-1/8 3-1/2
1-3/8 OZ. 1-1/2 Oz.	3-13/16
1-5/8 Oz.	4-1/8
1-3/4 Oz.	4-7/16
1-7/8 Oz.	4-3/4
2 Oz.	5

WAD COLUMN REQUIREMENTS

Shotgun shells of different brands and different loads have different interior lengths. This difference must be compensated by the wad column. After the shot has been added there must be only enough-tube left to form a perfect crimp.

The exact length wad column is best determined by trial, as it can vary with different brands of wads and conditions of shells.

APPROXIMATE DISTANCE FROM TOP OF SHELL TO SHOT NEEDED FOR CRIMP

SHELL		STAR CRIMP	ROLL	
10	Gauge	19/32	7/16	
	Gauge	1/2	3/8	
16	Gauge	15/32	11/32	
20	Gauge	7/16	5/16	
28	Gauge	13/32	11/32	
.410	Gauge	5/16	1/4	

Minimum requirements for a wad column are one .135 cardboard wad directly over the powder and at least ¼ inch fiber wad to cushion the shot.

(PAPER SHELLS ONLY)

RESIZING PROBLEMS

Keep your shells in a warm, dry place and it is unlikely that you will have trouble with resizing. If the loaded shells eject with difficulty from the loader it is an indication that heat resizing is needed.

Resizing the paper shells is nearly impossible mechanically, but easily done with heat. Place the empty shells in an oven at 350 degrees for about five minutes or at 150 degrees for a half hour. This not only resizes the shell, but drives out all moisture and redistributes the wax.

If your shells chamber with difficulty or not at all after reloading and did fit easily before reloading, it is an indication your wads are oversize.



LEE PRIMER POCKET **CLEANERS**

Just a light twist does the job. Specify large or small. \$.49* Each



LEE POWDER MEASURE KIT

AUTOMATIC PRIMER POCKET CLEANER

The fastest and easiest way to scrape the residue from primer pocket without damaging pocket or flash hole. One quick push does the job — works like a Yankee Screwdriver. Specify large or small. Only .

LEE PRIMING TOOL Pat.

A portable priming tool designed for precision shooting. Seat your primers with a feel. Thumb pressure alone seats the primer. You can feel it touch the bottom. A precision made tool for precision shooting.

Priming tool with large & small punch each \$2.98* each \$1.80° Shellholder (Specify Caliber) .



CHAMFER TOOL

fits all calibers

Pat. Chamfers and deburrs inside and outside of case necks. One turn does the job. Can also be used to remove the crimp from primer pockets of G.I. brass. Nitrided steel stays sharp. Self protected safety edges won't chip. only \$1.48*

CASE TRIMMER Pat.

Cutter and Lock Stud fit all calibers. Order Pilot by caliber and proper shell holder is included. Automatically squares the mouth while trimming the case to the proper length. A couple of light turns is all it takes. Impossible to shorten case excessively while in holder. cessively while in holder.

Cutter & Lock Stud \$1.48* Pilot & Holder \$1.98*



LEE TARGET MODEL LOADER

No finer tool made for loading target quality ammunition. "The features employed in the Lee Target Model Loader reflect, and are consistent with, the best and most current thinking and practice in the field of loading ultrafine ammo."

- HANDLOADER MAGAZINE

Target Model Loader Per Kit

\$28.98

*Included with the Lee Target Model Loader at no extra cost.

LEE LOADERS IN 110 SIZES

EACH A COMPLETE RELOADING KIT

30 M-30/30 S 30.8 W 30/40 30.9 W 30.0 M 30.0 M 30.0 M 30.0 W 30.0

RIFLE
17 Rem.
22 Hornet
22 K Hornet
218 Bee
221 Fire Ball
222 Rem.
222 Rem. Magnum
223 (5.56mm)
219 Zipper
225 Win.
22/250
220 Swift
224 Weatherby
240 Weatherby
243 Win. 6mm Rem. (244 Rem.)
6mm Hem. (244 Hem.)
25 Rem.
25/35 25/20 W.C.F.
250/3000 Savage 257 Rem. Roberts
257 Hem. Hoberts 257 Weatherby
25/06
303/25
6.5 x 54 Mann. Schoenauer
6.5mm Jap (Arisaka)
6.5 x 55mm Mauser
6.5 Rem. Magnum
6.5 Carcano
264 Win. Magnum
270 Win
270 Win. 270 Weatherby
284 Win.
280 Rem.
7mm Weatherby
7 x 57mm Mauser
7mm Rem. Magnum
7 x 61 Sharpe & Hart
7.5 Swiss

	HIFLE
1 Carbine Win. (.30 W.C.F.)	458 Win. Magnum 460 Weatherby
m.	
avage	PISTOL
avage	
/in. (7.62 NATO)	22 Rem. Jet
Krag (.30 U.S.)	256 Win. Magnum
Springfield	30 Mauser
&H Magnum	32 Auto
/in. Magnum	32 S&W
/eatherby	32 S&W Long (32 Col
lorma Magnum	32 Long Colt
Russian	38 Smith & Wesson
m Mauser	38 Short Colt
ritish	38 Special 38 ACP (.38 Super)
n Jap	357 Magnum
(32 W.C.F.)	380 Auto (9mm Brown
n. SP	Short)
em.	9mm Luger
Lebel	41 Long Colt
mm Mauser	41 Magnum
r- Massa	44 Special
Vin. Magnum Veatherby	44 Magnum
Veatherby Vin.	45 ACP/45 Auto Rim
Vin. SL	45 Colt
in. (W.C.F.)	45 0011
em.	
Vin.	SHOTSHELL
VIII.	10 Ga 31/6" Magnum

41 Long Colt 41 Magnum 44 Special 44 Magnum 45 ACP/45 Auto Rim 45 Colt
SHOTSHELL
10-Ga. 3½" Magnum 10-Ga. 2½" Standard 12-Ga. 3" Magnum 12-Ga. 2¾" Standard 16-Ga. 2¾" Standard
20-Ga. 3" Magnum 20-Ga. 2¾" Standard 28-Ga. 2¾" Standard
.410 Bore, 3" Standard

DADTE LIST

PARIS LIST	
Body	\$4.00
Rammer	
Decapper	1.25
Capper	1.00
Powder Measure	.50
Shot Measure	.50
Charge Table	.25
Crimp Starter	
(Specify 6 or 8 seg.)	
Wad Starter	
Wad Fingers 2 for	.75

See your dealer or order direct. LEE CUSTOM ENGINEERING, INC., will pay the postage.

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