PACIFIC

DL-120 LOADER

Reloading is for you

Shotshell reloading is an easy, fascinating hobby. It can be quickly learned by the novice, if the basic steps of shotshell reloading are understood.

There are seven basic steps to reloading a shotshell. These seven steps must always be taken in their proper order.

The following are the seven basic steps, read carefully.

1. DEPRIME—The expended primer must be removed from the case to be reloaded.

2. REPRIME—A new battery cup primer of the correct size for the case being loaded must be inserted where the expended primer was removed.

3. POWDER—The measured charge of powder is placed into the primed case. There are many different powders available today. To provide the correct load each of these powders require a different amount, both by volume and by weight. Pacific has taken all the guesswork out of this step by the use of precision made charge bushings that exactly measure the correct amount of the type powder they are designed for. Each bushing is marked with the quantity in grains and the type powder they are designed for.

4. WADS—The proper wad column is placed in case with the over powder wad next to the powder. The proper wad column always consists of an over powder wad and a filler wad. The over powder wad may be either one of two types, plastic or nitro card. The filler wads are made of moulded fiber or felt. Over powder wads and filler wads come in several thicknesses. The thickness of the wads used is de-

pendent on the load and the case being loaded. There are also many one piece wad column/shot protector wads available. These wads are handy and help provide exceptionally uniform patterns. These wads also vary in length and the correct wad for the case being loaded must be obtained.

5. WAD SEATING – Wads must be seated so the correct amount of pressure is placed upon the powder. This wad pressure varies with the type of powder and wads used. Proper pressure for the type of powder can be determined from charts available from the powder manufacturer.

6. SHOT – The correct amount of shot is placed in the case. Pacific has simplified the measurement of shot by the use of bushings much the same as the powder bushings. These bushings measure a predetermined quantity of shot into the case. All bushings are marked with the quantity of shot they will drop. Correct amount of shot to be used with a given amount of powder may be determined from powder manufacturers' charts.

7. CRIMP – The case is crimped to hold the components in place. The crimp serves several purposes. The crimp holds the shot from falling out of the case, it helps retain the pressure that has been placed on the wads and helps prevent entry of moisture into the case. Case mouths must be in reasonably good condition for best results from your reloads.

ADJUSTMENT AND OPERATING INSTRUCTIONS

Please read carefully

The DL-120 has been designed for the hunter and novice reloader. Simplicity, ease of operation, safety and economy are built into this loader. By carefully reading and following these operational instructions you can produce quality reloads on your first attempt.

Before attempting to follow the instructions some preloading preparations must be made.

1. Mount your DL-120 on a sturdy bench. If possible in a place where you will have 16 to 18 inches of clear bench space on either side of loader.

2. Sort cases as to brand and type and inspect for defects such as burned base wad, split shell heads, thin mouths and holes burned through outside of case. Cases showing such defects should be discarded or destroyed.

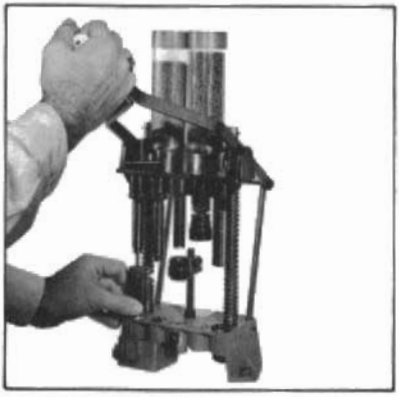
3. Place supply of these sorted cases in shallow container to the left of loader. Place proper size primers to the left of loader between loader and empty cases.

4. Determine correct wad column from chart and place proper wads in dispenser at the left of loader.

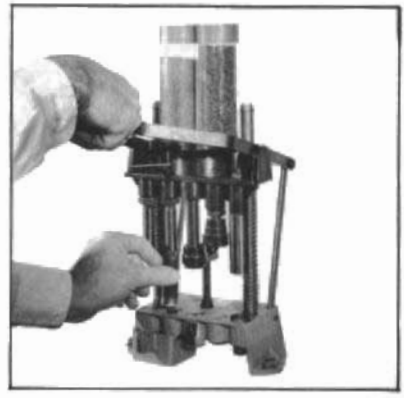
5. Make sure that the correct charge bushings for the load and powder type desired are in the loader.

6. Make sure that the charge bar operating lever is fully to the left and place proper powder into the left hand hopper and the desired shot into right hand hopper and replace hopper caps.

OPERATING PROCEDURE



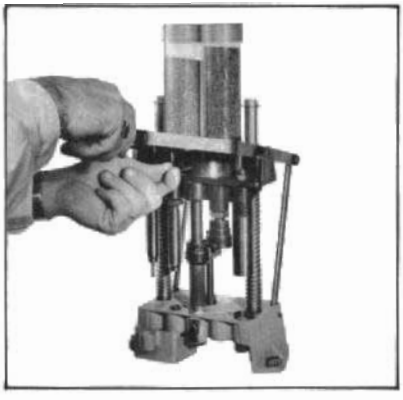
1. DEPRIME – Take empty fired case in left hand, start mouth of case over deprime punch and move operating lever to full down position to deprime case.



2. REPRIME – Place proper size primer (determined from enclosed chart) into priming cup. With case in left hand start mouth of deprimed case over primer seating punch and bring operating handle to full down position to reprime case.

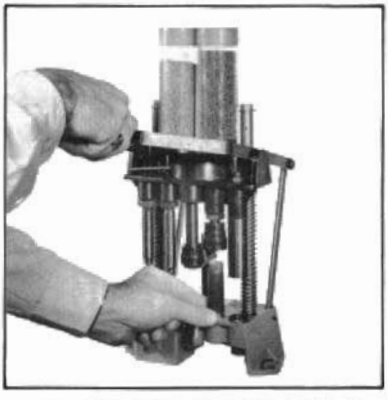
3. POWDER – With left hand place primed case in wad quide, bring operating lever down far enough to allow drop tube to open fingers in wad guide. Move charge bar operating lever all the way to the right to drop correctly metered charge of powder into case. Return operating handle to full up position.

4. WADS AND WAD SEATING – With left hand place correct wad column into wad guide. Move operating lever to full down position to seat wads to correct depth and pressure. (See adjustment procedure instructions for adjustment and reading of wad pressure indicator.)



5. SHOT—With case still in wad guide and handle still in the full down position, move charge bar operating lever all the way to the left to drop correctly metered charge of shot into case.

NOTE—There should be from ½ to 9/16 inch between shot and mouth of case if correct wad column and pressure have been used.



6. CRIMP—The DL-120 uses two stage crimping to provide the best crimp possible. The crimp is started in this position. With left hand place case with new primer, powder, wads and shot in place in recess in base casting. Bring operating handle to full down position. This begins the crimping operation.

NOTE—See adjustment procedure instructions for correct adjustment of #1 crimp die if adjustment should prove necessary.

7. CRIMP—The final crimp and sizing of the paper or plastic portion of the case is done in this operation. With left hand, place case with started crimp in shell holder and bring operating handle to full down position.

8. FINISHED SHELL – You should now have an excellent reload ready to fire in any type of shotgun.

ADJUSTMENT PROCEDURE

The Pacific DL-120 has been designed so that a minimum of adjustments are necessary. There are only three adjustments that may need to be made.

WAD PRESSURE: Adjustment of the wad pressure ram is made by the use of a coin in the slot in the bottom of the ram. Ram is threaded up to decrease or down to increase wad pressure. Wad Pressure Indicator is located on the front of the base casting. With case with wads inserted and operating handle in full down position, pressure is read at point of indicator. This scale is marked in 10 lb. divisions from 0 to 90 lbs. pressure.

WAD GUIDE: The wad guide bracket is adjusted at the factory and should need little or no adjustment except when changing gauges. To adjust, loosen thumb screw in rear of wad guide bracket and adjust up or down as necessary to allow the wad fingers to enter case approximately ¼". Check carefully so that wad guide is centered below wad pressure ram and retighten thumb screw (finger tight only).

#1 CRIMP DIE: The #1 Crimp Die is factory adjusted and should need no further adjustment unless changing gauges or from paper to plastic or plastic to paper. Adjustment of this die will determine the quality of the crimp you receive. If #1 Crimp Die is adjusted too low, the case will be crushed and wrinkled just above the brass portion of the case. If the die is adjusted too high, crimp will be too deep and the case will not be completely closed in the center. To adjust, loosen lock nut and thread die up or down to correct depth and retighten lock nut. NOTE: When loading plastic cases, align small button on side of 8 point crimp die between the points on the plastic case where previous crimp had been made. This will greatly improve the appearance and quality of the crimp obtained on these cases.

CHANGING CHARGE BUSHINGS

The DL-120, like all Pacific manually operated shotshell loaders uses removable shot and powder bushings. The shot and powder bushings are of different outside diameter to prevent accidental interchange.

TO CHANGE BUSHINGS: Changing bushings is best accomplished when the hoppers are empty. (To empty hoppers, loosen loader from bench, remove cap from shot hopper and pour shot into container, repeat operation for powder and replace loader on bench.) Remove stop pin from rear of charge bar and charge bar operating lever from front of charge bar. Rotate charge bar while holding hand under the rear of charge bar. Shot bushing will drop out into your hand. Replace shot bushing with one for load desired and continue to rotate bar until powder bushing drops out. Replace this bushing with one for load desired and continue to rotate bar until stop pin and charge bar operating handle can be replaced. Place proper powder in left hand hopper and desired shot in right hand hopper and you are ready to begin loading. CAUTION: Use bushing only with the powder it is marked for.

INSTRUCTIONS FOR CHANGING DIE SETS

The DL-120 die sets are available in all popular gauges. To convert your loader to another gauge you need only to obtain the correct die set and bushings for the proper load.

To remove present die set from loader, begin with the deprime punch. Loosen lock nut and thread die down until it is removed from die head. Repeat operation on primer seating punch. Remove powder drop tube, with coin in slot in bottom of tube, by threading down until it is threaded clear of the die head. Remove #1 crimp die by loosening lock nut and threading it down until it is clear of the die head. Remove final crimp die by loosening ⅜ x 16 jam nut on top of die head. Remove wad guide by threading wad guide cap off wad guide body. Remove shell holder by removing nut on bottom of base and lifting shell holder up. Install die set of different gauge by reversing the above procedure.

See Adjustment Procedure for final adjustment of dies.

PACIFIC WARRANTY

All Pacific Shotshell reloading equipment is carefully inspected and adjusted before shipment. Pacific guarantees all workmanship and materials and will replace or repair defective parts at no charge. In case of accidental damage or mis-use Pacific will replace parts at the regular parts price.

Pacific Gunsight Company cannot assume any liability for damage which may result from the use of the products or information given herein. This is necessary because Pacific Gunsight Company has no control over the manner in which products or components are used in the reloading operation.

All prices and/or specifications subject to change without notice.

MEMBER NATIONAL RELOADING MANUFACTURERS ASSOCIATION

MANUFACTURED IN U.S.A. BY

PACIFIC GUNSIGHT COMPANY

Box 4495 Lincoln, Nebraska 68504

MEMBER OF THE NATIONAL SHOOTING SPORTS FOUNDATION INC

TROUBLE SHOOTING CHART

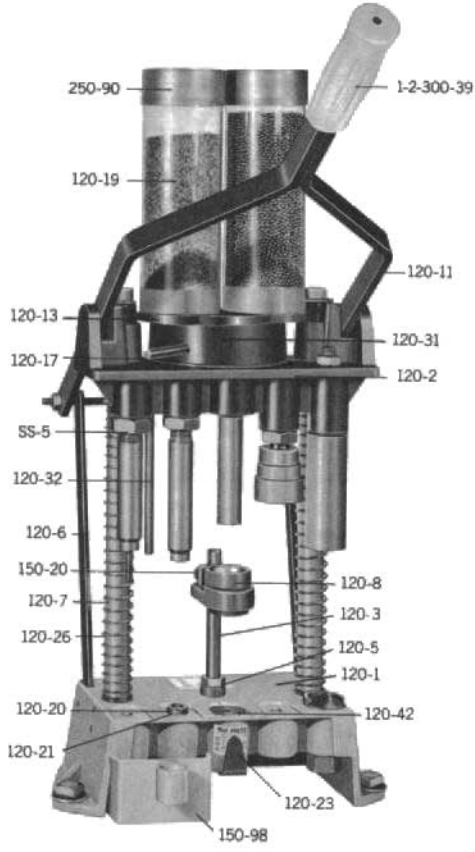
TROUBLE	CAUSE	CURE
Loaded case will not chamber or chambers hard.	1. Cases loaded when damp. 2. Cases picked up dampness after loading. 3. Cases swelled from too much wadding. 4. Weak cases.	1. Dry empty fired cases in oven for ten minutes at 200 before loading. (Do not attempt to dry loaded shells in this manner.) 2. Store loaded ammunition in cool dry places. 3. Consult charts for proper wad column and pressure for case and load. 4. Cases loaded too many times, walls will not support wad pressure. Discard cases.
Bloopers or Roar Outs	1. Powder not igniting properly.	1. Primer not hot enough, change to hotter primers. Use only primer designed for case being loaded. 2. Wad pressure insufficient. Check wad pressure frequently when loading. 3. Foreign matter over primer flash hole. Exercise care in handling process, check cases for dirt or other foreign matter prior to loading. 4. Cold lot of powder. Increase wad pressure or change to powder of another lot.
Loaded cases do not hold crimp.	1. Cases fatigued. 2 Wad column too long.	1. Discard cases. 2. Consult charts for proper wad column and pressure for case and load.
Heads pulled off cases after firing.	1. Cases fatigued.	1. Discard cases.
Cases stick in final crimp die.	1. Cases damp. 2. Final crimp die dirty. 3. Cases swelled from too much wadding.	1. Dry empty fired cases in oven for ten minutes at 200 before loading. (Never attempt to dry loaded shells in this manner.) 2. Clean inside of final crimp die with carbon tet. or lighter fluid. 3. Consult charts for proper wad column and pressure for case and load.
Collapsed cases.	1. #1 crimp die adjusted too low.	1. Adjust #1 crimp die up.
Shell is not completely closed in center of crimp.	1. #1 crimp die adjusted too high. 2. Insufficient wadding.	1. Adjust #1 crimp die down. 2. Consult charts for proper wad column and pressure for case being loaded.

PRIMER CHART

BRAND OF CASE	REM 97	REM 57	WIN 209	CCI 109	CCI 157	FED. 209	ALCAN G57F	ALCAN WW209	ALCAN 220
WIN. Paper and Plastic	X		X	X		X		X	X
REM. & PETERS Paper Cases		X			X		X		
REM. & PETERS Plastic Cases	X		X	X		X		X	X
FEDERAL	X		X	X		X		X	X

PARTS AND PRICE LIST

PART NO.	DESCRIPTION	PRICE
120-1	Base	$8.40
120-2	Die Head	3.50
120-3	Wad Guide Bracket Post	.70
120-4	Lever Bolt	.40
120-5	Lock Nut	.20
120-6	Link (2)	2.60
120-7	Guide Post (2)	3.50
120-8	Wad Guide Bracket	1.10
120-11	Operating Lever	4.20
120-13	Powder Measure	2.40
120-14	Stop Pin	.20
120-17	Charge Bar Handle	.30
250-18	"E" Clip (2)	.30
120-19	Hopper Tubes (2)	2.60
120-20	Primer Base	.30
120-21	Primer Base Disc	.30
120-22	Primer Base Spring	.20
120-23	Wad Pressure Indicator	1.60
250-24	Wad Pressure Spring	.40
120-26	Post Spring (2)	.60
120-31	Charge Bar	3.80
150-32	Roll Pin (3/16 x 1) (4)	.50
250-37	Stop Nut (3/8 x 16)	.30
120-32	Platen Stop	.70
1-2-300-39	Lever Grip	.30
120-42	Wad Pressure Base	2.20
250-43	Hopper Screw (2)	.20
1-300-50	Measure Seals (2)	.70
350-73	Jam Nut	.20
2-300-89	Roll Pin (1/4 x 1) (2)	.30
250-90	Hopper Caps (2)	.40
150-20	Knurled Lock Screw	.40
150-98	Primer Catcher	.80
250-32	Shot Bushings	2.00
250-33	Powder Bushings	2.00
SS-15	Jam Nut	.20
120-9	Deprime Punch	2.20
150-10	Primer Punch	1.30
350-52	Bracket Sleeve	.80
250-19	Drop Tube	3.30
250-25	Shell Holder	2.80
150-29	Crimp Die	4.00
150-30	Crimp Plunger	2.20
250-60	#1 Crimp Die For Paper	3.00
250-61-6	Crimp Starter Die 6 point	3.00
250-61-8	Crimp Starter Die 8 point	3.00
350-73	Jam Nut (3/8 - 16)	.20
250-74	Hex Nut (1/2 - 20)	.20
350-58	"E" Clip	.30
350-67	1/4-20 Hex Nut	.20
250-21	Wad Guide Cap	2.20
150-47	Jam Nut 9/16 - 18 (2)	.50



NOTICE: Prices and/or specifications are subject to change without notice. Discontinued products may or may not have replacement parts available. Call for availability 800-338-3220.