



Model DL-300 LOADER

SHOT SHELL

COMPLETE ADJUSTMENT AND OPERATING PROCEDURE

You are now the proud owner of the finest shot shell reloader available at any price. By following the procedures outlined in this folder you will realize many years of enjoyment and trouble-free reloading.

IMPORTANT: *To reload the maximum number of shells per hour you must follow the sequence and procedures as shown herein.*

PREPARATION FOR LOADING

Your DL-300 Loader is factory adjusted to load any regular 2 $\frac{3}{4}$ " shell case that was originally supplied with star crimp. To load cases that were supplied with roll type crimp, special equipment is necessary.

- 1** First mount your DL-300 securely on a sturdy bench. When mounting loader be sure operating lever can be moved all the way down against stops.
- 2** Sort cases as to brand, place about 100 empty cases in shallow pan and place on left side of loader.
- 3** Place proper size of primers on bench on left side of loader as shown in photos on the following page.
- 4** Place proper wads in wad dispenser and place on right side of loader.
- 5** Check to make sure desired charge bar (300-31) is installed in loader.
- 6** Install measure hoppers (300-41) in position as shown with measure baffles (1-300-47) in place on top of measure casting (300-9).

IMPORTANT: Do Not place powder and shot in hoppers at this time.

STOP: Before proceeding read the following instructions. (Several times if necessary.) Be sure you understand the function of this type of loader. It is best to be alone the first time loader sequence is set up, and until you have loaded at least 100 shells. When you are finished loading leave 5 shells in shell plate so set-up procedure need not be repeated.

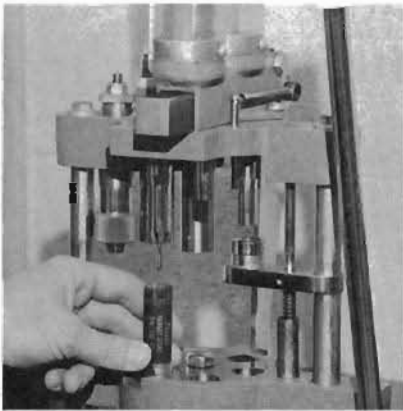
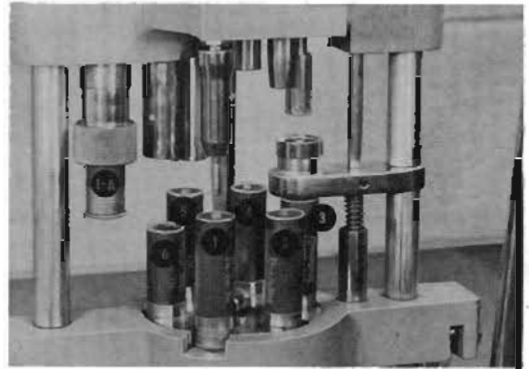
CAUTION: Before reloading shells that you have picked up, remember, they may have been discarded after several firings. Each shell should be carefully examined both inside and out. Any shells found defective should be discarded or destroyed.

- A. Any shell having two piece base wad construction, in which one of the pieces has burned through or blown out.
- B. Split shell head.
- C. Thin mouth.
- D. Charred area in paper body along the body seam or at the top of the brass head.
- E. A loose body, one that has started to pull out of the brass head.
- F. Swelled head.

Model DL-300 LOADER

SET-UP PROCEDURE

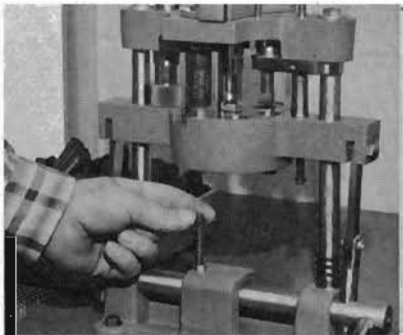
Every movement of operating lever must come to a complete stop. Once lever is moved you must follow through to avoid double charging. A case that has been over charged will be very obvious, as it will not accommodate a double charge of shot.



- A.** With left hand, place empty case into shell plate (300-45) station #1.

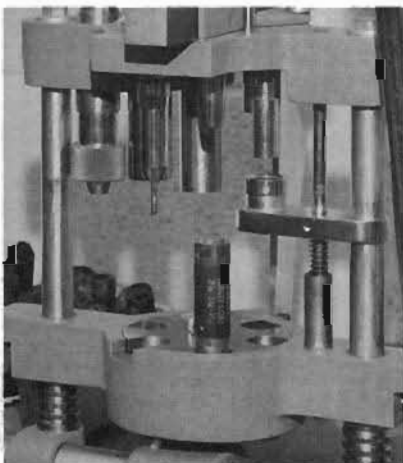
IMPORTANT: If there is any resistance to putting case into shell plate, set case aside at this time.

- Move operating lever (300-40) all the way down against stops.
- This operation decaps shell in station #1.



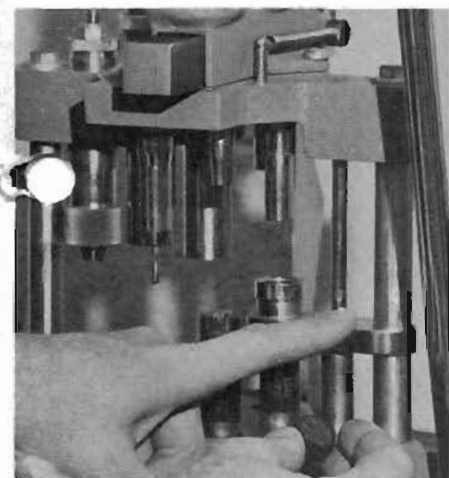
- B.** With left hand, place primer of proper size on primer post (300-15).

- Move operating lever (300-40) all the way back against stops and release.
- This operation reprimers empty case.
IMPORTANT: Proper size primers must be used or base of case will be concaved causing misfire.

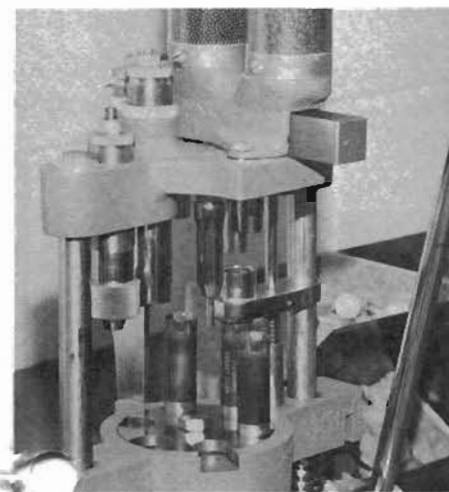


- C.** With left hand, rotate shell plate (300-45) so empty primed case will stop at station #2.

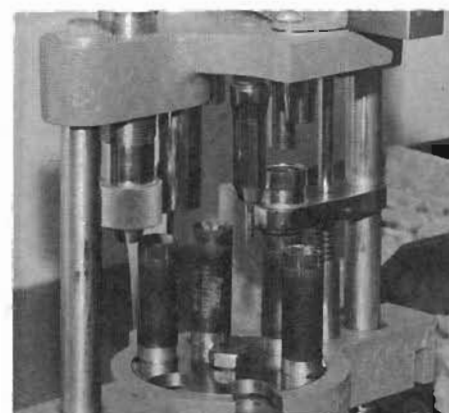
- Place proper type of powder into front hopper.
(A full powder hopper will load over 100 target loads).
REPEAT INSTRUCTION A AND B IN STATION #1.
- This operation decaps and reprimers in station #1.
Charges powder into case in station #2.
With left hand, rotate shell place so case with primer and powder is in station #3.
- Place empty case in station #1.



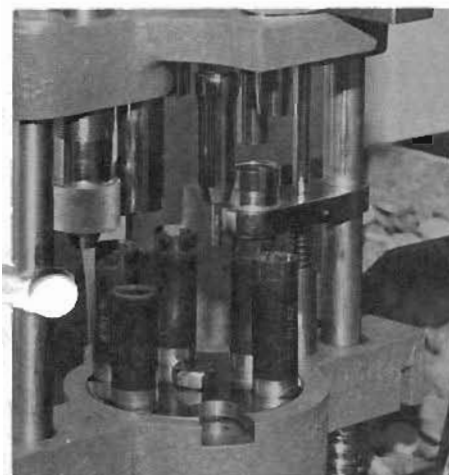
- D.** With left index finger, hold down on wad guide bracket (300-25). With right hand, place proper wads into wad guide (300-21-M) (Both wads are seated at one time.)
- REPEAT INSTRUCTION A AND B
 - This operation decaps and reprimers case in station #1.
Drops powder into case in station #2.
Seats wads into case in station #3.



- E.** With left hand, rotate shell plate so case with primer, powder, and wads is in station #4.
- Place proper size shot into back hopper.
(A full hopper of shot will load 100 target loads 1 1/8 oz.)
 - REPEAT INSTRUCTION A, B AND D
 - This operation decaps and reprimers case in station #1.
Drops powder into case in station #2.
Seats wads into case in station #3.
Drops shot into case in station #4.



- F.** With left hand, rotate shell plate so case with primer, powder, wads, and shot is in station #5.
- REPEAT INSTRUCTION A, B AND D
 - This operation decaps and reprimers case in station #1.
Drops powder into case in station #2.
Seats wads into case in station #3.
Drops shot into case in station #4.
Crimps case in station #5.



- G.** With left hand, rotate shell plate so case with primer, powder, wads, shot and crimp is in station #6.
- REPEAT INSTRUCTION A, B AND D
 - This operation decaps and reprimers case in station #1.
Drops powder into case in station #2.
Seats wads into case in station #3.
Drops shot into case in station #4.
Crimps case in station #5.
Sizes and taper-locs case in station #6.

TO REMOVE LOADED SHELL

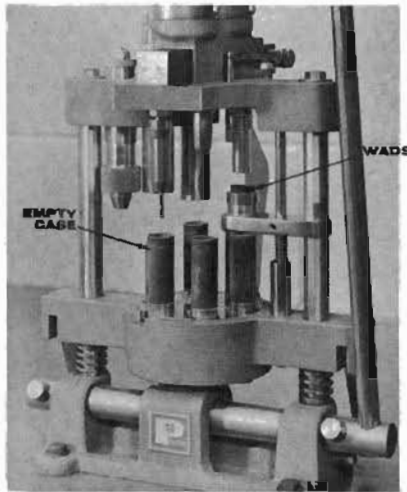
With left hand, grasp shell in station #6 near the brass and remove from loader (this automatically rotates shell plate).

IMPORTANT:

Do not tip loaded shell when removing from loader as this will cause base to drag and make removal difficult.

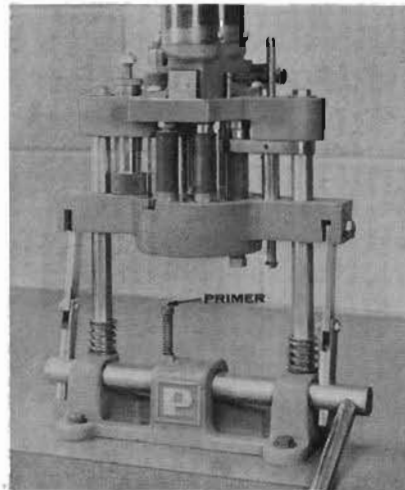
NOW THAT SEQUENCE IS SET UP PROCEED AS FOLLOWS

1.



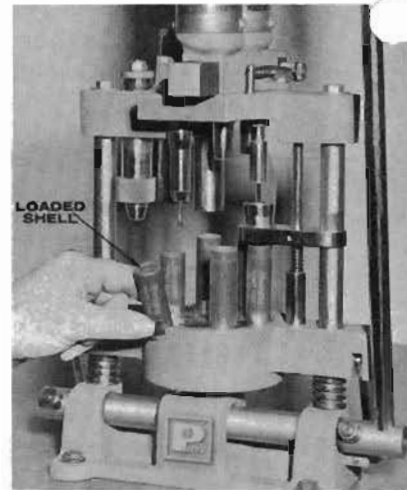
Place empty case into shell plate and wads into wad guide.

2.



Move operating lever down to complete stop. Place primer into primer cup.

3.



Move operating lever up to complete stop and remove loaded shell.



Station 1-A (Optional use)
Used only on cases with excessive headspace.
Completely reconditions head and rim of case.

All loaders are factory adjusted to accept a case in reasonable condition that will chamber in most guns. In the case of guns with very tight headspace, the shell plate (300-45) can be adjusted by tightening shell plate bolt (300-46) so only a perfect case will be accepted.

REMOVING EXCESSIVE HEADSPACE FROM CASE

This operation should generally be used when loading shells with low inside base wad. To operate properly in loader, case must go into shell plate (300-45) without any drag. All shells that fit snug should be placed into station #1-A for pre-sizing. This operation is performed automatically when regular sequence of operation is made.

IMPORTANT: If station #1-A is used be sure to place a good case in station #1.

ADJUSTMENT PROCEDURE

All loaders are factory adjusted. Do not attempt adjusting until you are positive adjustment is needed.

WAD PRESSURE

You will note that wad pressure is calibrated from 30 to 100 lbs. on shaft under movable platen at station #3. Before reading can be taken, operating lever (300-40) must be in down position against stops and loader in regular sequence of operation. Adjustment is made by loosening lock nut on part (300-33) and screwing down to increase, up to decrease pressure (1/16" equals 10 lbs.), tighten lock nut.

PRIMER POST ADJUSTMENT

Be sure primer post is not concaving head of shell. Primer post can easily be adjusted to seat primer flush only, and not exert pressure on base of case.

ADJUSTMENT PROCEDURE

(Continued)

CRIMP ADJUSTMENT

To adjust crimp depth, loosen bushing lock nut (300-27) and screw bushing (300-26) down to increase crimp, up to decrease. Tighten lock nut (300-27).

TAPER-LOC ADJUSTMENT

To adjust taper-loc taper, loosen bushing lock nut (300-12) and screw bushing (300-65) down to increase taper, up to decrease. Remember: The more taper that is used the deeper the crimp must be. Tighten lock nut (300-12).

CRIMP STARTER DIE AND BRACKET INSTALLATION

(Used only when loading new unfired case)

- Remove complete die assembly from station #5 and #6.
- Place crimp plunger (300-66) (special small size) in crimping assembly.
- Reassemble crimp die and place in station #6.
- Attach crimp starter die bracket to bushing (300-65) with bolt provided. Install crimp starter die in bracket and place assembly into station #5.

SPECIAL INSTRUCTIONS

CAUTION: Do not use any type of lubrication oil on the charge bar. For proper operation it must be kept dry and free of oil. Use only a small amount of light oil on roller bearings and a good grade of gun grease on cam and guide posts. CHAMBERING PROBLEMS are usually caused from damp cases or excessive wadding or wad pressure.

Do not load damp cases as they will not resize properly and will not function in self-loading guns. (Unprimed cases may be dried by placing in 180° oven for about 10 minutes.)

CAUTION: Do not get shot mixed with powder as this will cause misfires.

To determine proper Wad Column, remember: When using desired Powder and shot Charge, with proper Wad Pressure, there should be 1/2 to 9/16" of space from top of Shot to mouth of Case before crimping.

NOTE:

Changing powder, shot and charge bar. Disconnect charge bar spring (300-37). Remove top guide post bolts (300-48). Lift off complete head assembly. When replacing head assembly be sure movable platen (300-2) is in up position.

CHARGE BARS AVAILABLE FOR DL-300 (when ordering please specify Model Number 300)

Factory Load Equivalent	Case	Bar Length Number	Grain Weight Powder	Oz. Wad of Shot Pressure	Type of Load
2 3/4 Dr	1 1/2 oz.	2 3/4" #1	21 Red Dot	1 1/8 80	12 Gauge Target Load
2 3/4 Dr	1 1/2 oz.	2 3/4" #13	22.5 Win. #450 LS	1 1/8 70	12 Gauge Target Load
3 Dr	1 1/2 oz.	2 3/4" #2	21 Red Dot	1 1/8 80	12 Gauge Target Load
3 Dr	1 1/2 oz.	2 3/4" #14	23.5 Win. #450 LS	1 1/8 70	12 Gauge Target Load
3 Dr	1 1/2 oz.	2 3/4" #3	20 AL-101	1 1/8 60	12 Gauge Target Load
3 Dr	1 1/2 oz.	2 3/4" #4	17 Super M	1 1/8 25	12 Gauge Target Load
3 1/4 Dr.	1 1/4 oz.	2 3/4" #15	24.5 Win. #450 LS	3/4 70	12 Gauge Hunting Load
3 1/4 Dr.	1 1/4 oz.	2 3/4" #5	30 AL-5	3/4 90	12 Gauge Hunting Load
3 3/4 Dr	1 1/4 oz.	2 3/4" #6	33 AL-5	3/4 90	12 Gauge Hunting Load
3 3/4 Dr	1 1/4 oz.	2 3/4" #16	35.5 Win. #500 HS	3/4 70	12 Gauge Hunting Load
3 3/4 Dr	1 1/4 oz.	2 3/4" #7	33 Herco	3/4 90	12 Gauge Hunting Load
4 Dr	1 1/2 oz.	2 3/4" #17	40.5 Win. #540 MS	1 1/2 70	12 Gauge Hunting Load
4 Dr	1 1/2 oz.	2 3/4" #9	38 Herco	1 1/2 90	12 Gauge Hunting Load
Short Mag.	1 1/2 oz.	2 3/4" #8	38 AL-7	1 1/2 90	12 Gauge Hunting Load
4 Dr	1 1/2 oz.	2 3/4" #11	**35 Herco	1 1/2 90	12 Gauge Hunting Load
Short Mag.	1 1/2 oz.	2 3/4" #10	**35 AL-7	1 1/2 90	12 Gauge Hunting Load

**Supplied for use with Alcan air wedge or other plastics, over powder wads. When using plastic wads you may reduce pressure approximately 25%.

When using Winchester Western ball powder, it is necessary to use a primer with some type of covering over the flash hole. This prevents the ball powder from entering the anvil and powder cup, causing improper ignition.

Pacific Gun Sight 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 Gun Sight Company has no control over the manner in which products or components are used in the reloading operation.

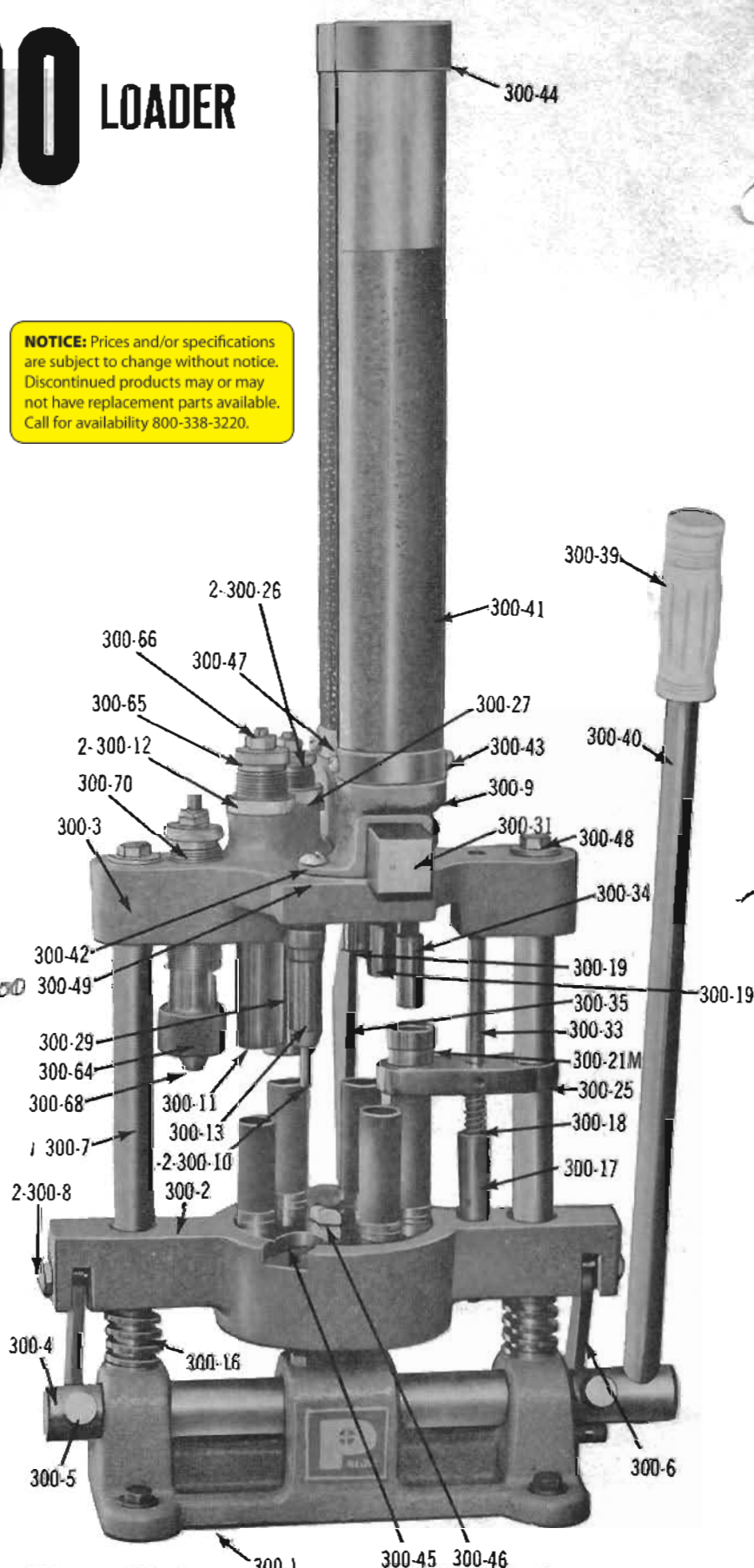
PARTS LIST

Model DL-300 LOADER

Be sure to specify model number when ordering.

PART NUMBER	DESCRIPTION	PRICE EACH
#300-1	Base Casting	\$14.00
#300-2	Movable Platen	19.20
#300-3	Die Head	18.40
#300-4	Pivot Shaft	8.00
#300-5	Eccentric Arm	2.40
#300-6	Link	1.30
#300-7	Guide Post	4.00
2-300-8	End Screw .....	.80
#300-9	Powder Measure Casting	10.40
1-2-300-10	Decap Pin .....	.80
#300-11	Taper Loc Size Die/Nut	5.80
2-300-12	Size Die Lock Nut .....	.40
#300-13	Primer Extractor Body	4.80
#300-14	Primer Post Spring (not shown) .....	.20
#300-15	Primer Post Complete (not shown) .....	.80
#300-16	Platen Spring	1.20
#300-17	Wad Guide Stop .....	.80
#300-18	Wad Guide Spring .....	.40
#300-19	Powder Drop Tube	1.60
#300-19	Shot Drop Tube (not shown)	1.60
#300-21M	Wad Guide Cap	1.60
1-2-300-22	Spring Fingers (not shown)	1.00
1-2-300-24	Wad Pressure Spring (not shown) .....	.40
#300-25	Wad Guide Bracket	6.40
2-300-26	Crimp Die Bushing	1.80
2-300-28	Crimp Die Spring (not shown) .....	.40
#300-29	Crimp Die/Nut	3.40
#300-30	Crimp Plunger-Regular (not shown)	2.00
#300-31	Charge Bar	5.20
#300-32	Wad Pressure Base (not shown)	2.00
#300-33	Wad Guide Bracket Rod .....	.80
#300-34	Wad Ram	1.20
#300-35	Charge Bar Cam w/screws	4.40
#300-36	Charge Bar Roller & Roller (not shown)	1.60
#300-37	Charge Bar Spring .....	.80
#300-38	Charge Bar Spring Post .....	.80
#300-39	Lever Grip .....	.20
#300-40	Operating Lever	3.20
#300-41	Measure Hopper	2.80
#300-42	Measure Bolt .....	.20
#300-43	Hopper Screw .....	.10
1-300-90	Hopper Cap (not shown) .....	.20
#300-45	Shell Plate	17.20
#300-46	Shell Plate Bolt w/Nut	1.00
1-300-47	Measure Baffle, (not shown) .....	.20
#300-48	Guide Post Bolts .....	.20
#300-49	Measure Plate	1.00
1-300-50	Measure Seal (not shown) .....	.40
#300-65	Size Die Bushing	1.60
#300-66	Crimp Plunger (special)	2.00
#300-64	Size Die Body & Cap	5.20
#300-68	Eject Punch	1.60
#300-69	Eject Spring	1.20
#300-70	Eject Punch Bushing	2.75
DL-300	Loader Complete	\$174.50
ACCESSORY PARTS		
1-2-300-61	Crimp Starter Die	\$ 4.80
#300-99	Crimp Starter Die Bracket	1.00

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.



Pacific Gun Sight Co. cannot assume any liability for damage which may result from the use of the DL 300 Loader or from information given herein.

This is necessary because Pacific Gun Sight Co. has no control over the manner in which shells are loaded or components used in the loading operation.



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Form #P-K-62

