

patent no. 10,076,781 B1 Expires November 15, 2037

The APP is the most convenient single station press ever made. You can use any brand shell holder provided the outside diameter does not exceed 13/16" (20,6mm). Any brand or type of die will also work provided they have a 7/8-14 threading. Follow the instructions to install the shell holder, then adjust your dies according to the manufacturer's instructions.



APP Accessories



Automation Kit product 90511 Includes a revolutionary new kind of case and bullet feeder. Jaws automatically open and grasp bullet or case. They then rapidly position the case or bullet into the operating position. Once in position, the jaws instantly open and return for the next case or

bullet. Includes feed tubes, tube supports, risers, case slider and 22 cal. bullet feed jaws.



APP Primer Pocket Swage Kit *product 91582* The new swage kit removes military primer pocket crimps

as fast as you can operate the lever. Universal shell holder adapter allows you to use your press shell holder or X-PRESS shell holder to swage. Typical cases that you will encounter primer pocket crimps are 45 ACP, 223(5.56mm), 30-06, 308(7.62x51), 9mm Luger and special law enforcement 40 S&W.

See complete product instructions shipped with kit.

Heavy Duty Guided Decapper



Use in conjunction
with Universal
Decapping Die
product 90292,
guided decapper
helps align the
case to reduce the
chance of bending or
breaking a decapper.

Product #
91574
91576
91577
91578
91580
91581
91583
91584



APP Bullet Sizing Kit product 91532

Allows nose first bullet sizing, change size with an inexpensive punch and die. Nose first bullet sizing is the most accurate, distortion free and because you are pushing on the base of the bullet no special nose punches are required.

Bullets are sized as rapidly as you can operate the press lever. The sized bullets drop into an attached wide mouth container. This is the perfect tool for the now popular powder coated bullets.

APP Bulge Buster Kit product 91572

The Lee APP Bulge Buster Kit and the appropriate Lee Factory Crimp Die, restores free function of rimless cases that have low base bulges. Low base bulges usually occur from chambers that do not fully support the cartridge or cases resized in carbide dies from manufacturers other than Lee.



Breech Lock Ram Prime product 91612

Start priming in seconds, nothing to adjust. Includes small and large priming assemblies, no tiny parts to fumble with or lose. Effortless priming in the tightest pockets. Uses any brand press shell holder. Safe with all brands of primers.

MOUNT YOUR PRESS

1 The most convenient way to mount your press is with our Lee Bench Plate or Lee Reloading Stand. These systems includes all of the mounting hardware and allows for quick press removal without unbolting from bench. Follow mounting holes identified for Reloader Press as the APP uses the same mounting pattern.

provided here:



90688 Reloading Stand



90251 Bench Plate





Drill template





Mount to leg of Lee reloading stand using provided 1/4-20" bolts and 1/4"-20 nuts



Mount to workbench using (2) **OR** provided # 8 Phillip Head Screws.

-OR-

Purchase qty. 3, ¼" bolts and nuts, and prepare your workbench for use with this press using the drill template

You can also use the press base as a drill template.

leeprecision.com/files/instruct/TMPLP.pdf

Drill three 17/64" (7mm) holes.



CONFIGURING APP FOR RELOADING



Place lock ring inside the bottle adapter. Install the bottle adapter on to the shell holder adapter as shown.



Install universal shell holder into the shell holder adapter. Attach bottle to adapter

Caliber

22 cal.

17 cal. & 204 Ruger

6mm to 25 cal.

27 cal. to 7mm

Using Universal Decapping Die?

You may want to consider adding

a heavy duty guided decapper to

the die. Guided decapper aligns

reducing the likelihood of bending

Caliber

30 cal.

40 cal.

45 cal.

34 cal. to 35 cal

the case and decapping pin,

Product

91574

91576

91577

91578

or breaking the pin.



Remove the lock-ring from your die, and install. Adjust according to your reloading die set instructions.



and secure with a 1/3 of a turn counter clockwise. Rotate the opening of the shell holder to the convenient loading platform to face the operator.



Loosen the Phillips screw on the spline drive bushing.



4 pack Product # 90095

Lightly tighten Phillips clamp screw to retain position. When you are finished, you can remove the adjusted die from the press by rotating the spline drive bushing 1/3 of a turn counterclockwise. When you use it next time, it will return to perfect adjustment.

X-PRESS SHELL HOLDERS (required if you plan to use automation kit)

91580

91581

91583

91584

X-PRESS shell holders and the automation kit # 90511 make the nicest single stage press, the fastest. The balance of the instructions feature their use. A word about X-PRESS shell holders. The X-PRESS shell holder allows easy automation on the APP press, however, the pass through design reduces the amount of "pull" that can be applied to the cartridge. That said, we do not recommend full length resizing rimless bottle neck cases. If you insist, we suggest using only Lee dies and Lee case resizing lubricant # 90006. Only Lee dies include a built-in stuck case remover in the event you damage a rim and stick a case.

Install cartridge 1 specific X-PRESS shell holder into shell holder adapter. If you are depriming, install bottle adapter. (see step #1 above)



Install this shell holder 2 assembly into the base casting and secure with a

1/3 turn counterclockwise. If your shell holder does not rotate freely, the shell holder lips must be set absolutely parallel to the slide rail to allow case feeding.



Push flat blade screwdriver through shell holder adapter to remove detent.



If X-PRESS shell holder doesn't rotate freely, you have an early production shell holder. If you experience feeding problems, contact us for a replacement, or you can remove the detent from the shell holder adapter (see left) to allow free rotation. Don't discard the detent, it is required for other applications. This note only applies to X-PRESS shell holders manufactured before February 2020.



Product	#	Cartridges	Product #		Cartridges	
91534	1	38 Long & Short Colt, 38 SPL, 357 MAG	91544	11	44 SPL/MAG, 45 Colt, 303 Sav.	
91535	2	45 ACP, 308 Win., 30-06	91545	12	22 PPC, 6 PPC, 7.62x39R	
91536	3	30/30, 6.5x55 Mauser, 32/40	91546	13	45 Auto Rim	
91537	4	223 Rem, 5.56 NATO, 300 Blackout	91547	14	44/40, 45 Long Colt	
91538	5	WSM's, 7mm Rem Mag, 303 British	91548	15	25 ACP	
91539	6	218 Bee, 25/20, 32/20	91549	16	7.62x54R, 500 S&W	
91540	7	30 M-1, 32 ACP	91552	19	40 S&W, 9mm Luger	
91541	8	33 Win, 348 Win, 40/65, 45/70	91553	20	17 Hornet, 22 Hornet	
91542	9	41 Magnum	91554	21	6.8 Rem SPC, 224 Valkyrie	
91543	10	220 Swift, 6.5 Jap, 7x64 Brenneke				

(1)

CASE FEEDING

The setscrew found on the rear of the case inserter closes the fingers on the return stroke of the case inserter. For most cases, the adjustment screw should be backed out to allow maximum jaw opening to allow the rim of the case to easily enter the jaws. The **ball end** of the setscrew should protrude

slightly from the bottom of the actuator. Small diameter bottleneck cases such as the .223 may require slight adjustment of the setscrew inward to close the fingers trapping the case as it feeds from the feed tube.



Adjust the setscrew when the case inserter is at the end of the feed rail. Rotate the setscrew clockwise with flat blade screwdriver until there is a slight amount of capture when you slide the case out of the fingers. We found

it best to adjust for the least amount of closure as it provides the largest target for the next case to feed.



BULLET FEEDING

The case inserter is shipped with the large fingers installed. They will work with 25 caliber and larger bullets. If you are sizing bullets smaller than 25 caliber, change the jaws to the 22 caliber [see FIG. 1 at website link below].

SEE INSTRUCTIONS HERE: leeprecision.com/files/instruct/APPchangejaws.pdf





Adjust the setscrew with the case inserter positioned at the end of the feed rail. Rotate the setscrew clockwise with flat blade screwdriver until the bullet is captured in the finger tips.



RISER INSTALLATION

The automation kit includes 5 unique risers, PA4384A-PA4384E. These are double ended and are used for both bullet and case feeding. Case feeding uses the "C" opening and Bullet feeding uses the "O" opening. With case inserter installed on slider rail, select the riser that is slightly shorter than the case or bullet you wish to process.





BULLET FEEDING

Now, select the tallest riser that is NOT taller than the bullet when installed on the case inserter. Place on rail to confirm correct riser. Be sure the "O" side of the riser is above the jaws.



Riser stop

side of the riser is above the jaws.



CASE FEEDING

Now, select the tallest riser that is NOT taller than the case when installed on

the case inserter. Place on the rail to confirm correct riser. Be sure the "C"







Riser installed against stop

Proceed to installing tube supports. If cases | bullets do not freely drop into the jaws from the tube support, see top of page to adjust the jaws.

INSTALLING TUBE SUPPORTS



Select appropriate tube support PA4360A or PA4360B by passing your bullet or case through. Select the smallest hole that the case or bullet will flow through unrestricted.

FIG. 2

PA4360B PA4360A



Insert ¼" support bolt into the adjacent hole vou just selected. Secure 1/4-20 x 7/16 puts bolt with nut. Thread another nut onto bolt about half way. Slide the bolt into the APP base casting as shown.

Orientation of tube support

PA4360A or B FT1994 (qty. 3) Tube Support



1/4 support bolt

T1994

(3)

Place empty case bullet into your previously configured and adjusted case inserter and position as shown. Adjust the nut up or down on the tube support bolt so there is approximately a coins thickness between the bottom of the tube support and the top of the case. Minimizing the clearance gives the best results.





 $\left(4\right)$ Install the last nut on to the tube support bolt underneath. base casting, and tighten nut above rail with 7/16" wrench.

Install clear feed tube for the

appropriate size hole in tube

manufacturer's tolerance on

these tubes, some may fit

loosely in the tube support.

This does not affect anything,

you can tighten the fit with a

round or two of clear tape.

Note: due to the large

(6)

support.



Tighten nut above rail with 7/16" wrench.



5)

When you secure the nut. hold and orientate the tube support so it does not interfere with the press handle during operation as shown.



Lower handle. Re-attach spring to case inserter actuator. Cycle a few cases. If the cases drop too soon. they may rest on top of feed fingers Rotate the feed tube support farther away (clockwise) from the press to delay the dropping. Because of the wide range of diameters and rim configurations, you will have to fine tune this position to provide reliable feeding.



Case rests on fingers. Rotate feed tube support clockwise from press to delay the drop.



Note: while decapping mixed range brass, you may encounter cases with damaged rims that won't feed into shell holder. Remove this case and discard or repair rim damage to allow easy entry.

INSTALLING UNIVERSAL CASE FEEDER (ACCESSORY # 90242)

Works well with most handgun cartridges and small rifle cases like the 223. Can be fitted with optional collator bowl # 90667, fills 4 tube feeder with handgun cases in about 10 seconds. This feeder will not work for bullet feeding. You must use the case inserter supplied in the Automation Kit # 90511. The case slider included in the universal case feeder will not function correctly, it will not center the cases in the X-PRESS shell holder and there is no attach for the feed spring.

With the 1 spring unhooked from case actuator hook. Insert case into jaws of slider base. Place a coin on top of the case mouth. (See setting for bottleneck cases)

Tube Support

1/4-20 nut (qty. 3)

1/4-20 x 3 1/2 bolt # FT2457

FT1994

PA4360A and PA4360B



PA4342B (not visible)

PA4342F

PA4384D

Actuator Slider spring # PR2118

PA4342C

PA4384C

PA4342D

PA4342A

PA4342F

PA4384E

Re-attach the spring to the case (3 actuator and test operation on a few cases. If the cases drop too soon, they may rest on top of feed fingers. Rotate the feed tube support farther away (clockwise) from the press to delay the dropping. Because of the wide range of diameters and rim configurations, you will have to fine tune this position to provide reliable feeding.



Bottleneck case orientation. Note neck just clears top of notch.

Slide the feed 2 plate assembly into the base casting hole, and adjust the top nut so that the bottom of the feed plate assembly rests on top of the coin. Tighten the top nut so that the feed plate assembly clears the frame using a 7/16" wrench.





PART #	DESCRIPTION	PART #	DESCRIPTION
PA4342A	Slider Top Rail	PA4342G	22 cal. Outer Jaw
PA4342B	Actuator Screw	PA4342H	22 cal. Inner Jaw
PA4342C	Actuator	PA4384A	0.53" Riser
PA4342D	Slider Base	PA4384B	0.75" Riser
PA4342E	Large Outer Jaw	PA4384C	1.0" Riser
PA4342F	Large Inner Jaw	PA4384D	0.53" Dual Riser
		PA4384E	1.3" Riser

Install open 2 end of spring into tab of upper APP press casting.



Lower press handle to 4 the 1/2 stroke position (2") and install spring on to case inserter actuator hook as shown. If the closed loop on the spring does not align with hook, twist the

spring towards the press.

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SCAN ME case actuator hook



Cycle the press handle, stop to stop, to ensure smooth operation back and forth. Notice how the jaws open and close when the direction of the slider changes.



Feed tubes # PA4340 .28" # BF3490.42" # BF3489.49" # TR2458 .53"

Slide

case

3

inserter

to slide rail.

PA4342G

CONFIGURING APP FOR BREECH LOCK BULLET SIZING KIT



Breech Lock Bullet Sizer Kit Product 91532

Bullet Sizer & Punch

Product	Dia.	Product	Dia.	Product	Dia.
91505	.224	91514	.314	91523	.427
91506	.225	91515	.323	91524	.429
91507	.243	91516	.329	91525	.430
91508	.278	91517	.339	91526	.451
91509	.284	91518	.356	91527	.452
91510	.285	91519	.357	91528	.454
91511	.308	91520	.358	91529	.457
91512	.309	91521	.401	91530	.501
91513	.311	91522	.410	91531	.510

Diameter not listed? Custom service available factory-direct: leeprecision.com/custom-breech-lock-bullet-sizer-punch



Insert roll marked end of bullet sizer in first into the Breech Lock insert.



Install long end of bottle adapter into Breech Lock Bullet Sizer insert.





Secure lockring as shown. Thread on clear bottle or an empty powder container.



Install breech lock bullet sizer assembly in APP base casting.

Tighten ¹/₃ of a turn counter clockwise.





Install shell holder adapter and appropriate sized punch in upper APP casting.

SCAN ME

([])

(6)



(7) Load the feed tube with bullets (nose first)





Sized bullets will collect in bottle adapter. Or you can use your empty powder bottle or any bottle with a 53mm or 43mm thread.



Note:

If you applied too much Lee Liquid Alox[®] on your bullets, you will have feeding problems as the bullets may stick to the tube or fail to fall from the fingers. If this happens, dust with powdered mica.

If powdered mica isn't available, you can use powdered graphite, but it's messy.

Have a Bullet Sizing Kit and want to install on APP press?



SEE INSTRUCTIONS HERE: leeprecision.com/files/instruct/InstallBulletSizingKitIntoAPPpress.pdf

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CONFIGURING APP FOR BULGE BUSTING

APP Bulge Buster Kit product # 91572 restores free function of rimless cases that have low base bulges. Low base bulges usually occur from chambers that do not fully support the cartridge or cases resized in carbide dies from manufacturers other than Lee. These show a noticeable stop ring near the base. You will most likely find cases with these problems in mixed range brass.



underneath.