

6 Add Powder & Dispense and Weigh a Charge

Open



Add powder to hopper, be certain of brand and type. Install hopper into the top of the powder measure. Turn on the flow of powder by rotating hopper counterclockwise.

Insert case into shell holder/shell plate, verify hopper is turned on by turning counterclockwise, raise the ram and dispense a charge.

Remove charged case, empty charge on to the scale pan to determine the weight. If charge is light or heavy, see next step for adjusting the drum.

If you are using the Deluxe Auto-Drum on a turret press, it is best to take a charge from the normal loading sequence. The reloading operations jostle the powder measure and cause the powder to pack more efficiently into the powder measure and will result in a slightly higher charge with some powders.

CAUTION
Be certain you have the correct type and amount of powder.



Safety Scale
Product # 90681

The safest practice when selecting a load is to choose a powder type and charge that nearly fills the case. This will prevent an accident from occurring as a double charge would overflow the case alerting the user of a double charge occurred. This is especially important when loading fast burning powder in handgun cases.

7 Adjust Charge

Charge is Light

Each key facet is about 1/10 of a grain. For example, if you are 3/10 of a grain light, rotate key counterclockwise 3 key facets to increase the charge. This will back out the metering rod, increasing the chamber size to drop more powder.

Charge is Heavy

If charge is heavy, rotate the key clockwise to decrease the charge.

Large Capacity Quick Change Drums

NOTE: when you dispense large charges, allow enough time for metering drum to empty. Cartridges like the 300 Win Mag can take up to 3 seconds to fill.

Rule of thumb: allow 1 second per cc for charging and dispensing the powder charge.

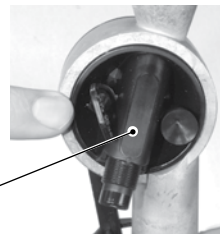


8 Remove the Key

Continue to dump charges and verify. Once it's set to your desired charge or slightly less, remove the key from the metering rod and place back into drums storage bracket.

Nice Feature

You can use a #2 pencil and mark the type of powder and the charge on the flat surface. After you change, simply erase and write something else.

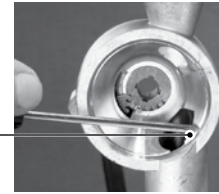


Helpful Tips

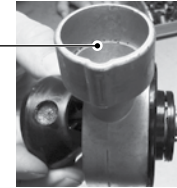
After removing the hopper, there will be some residual powder inside the powder measure where the hopper installs and where the drum installs.

To prevent cross contamination across powder types, you want to make sure this residual powder is removed. The powder measure incorporates a no leak groove that will accumulate fine grain powders, make sure that is cleaned as well. Leave the graphite that is built up on the surface of the drum and inside the measure, this acts as a lubricant.

No leak groove



Remove residual build up



Troubleshooting

If you are experiencing leaking powder

Remove the drum, clean any residual powder off drum and inside casting. Re-install and tighten clamp knob so that there is no clearance between the drum and the die cast body. (**Hint:** use a strip of paper as a feeler gage)

Inconsistent Powder Charges

On large charges, you may not be allowing enough time for the drum to empty. Pause at the top of the press stroke. Allow about 1 second for every 10 grains of powder.

The powder measure hasn't been conditioned adequately. Run a hopper full of powder through the measure to coat surfaces with powder or dust the metering surfaces with powdered graphite.

Check powder through expanding plug, drop tube and Powder Measure riser for oil residue. Push a clean tissue through to remove any residual oil.



WARNING: This product may contain zinc alloyed with trace amounts of lead and other elements which are known to the State of California to cause reproductive harm and cancer. For more information, go to www.P65Warnings.ca.gov. To prevent exposure, do not alter the product by welding, grinding, etc.

LEE
LEE PRECISION, INC.

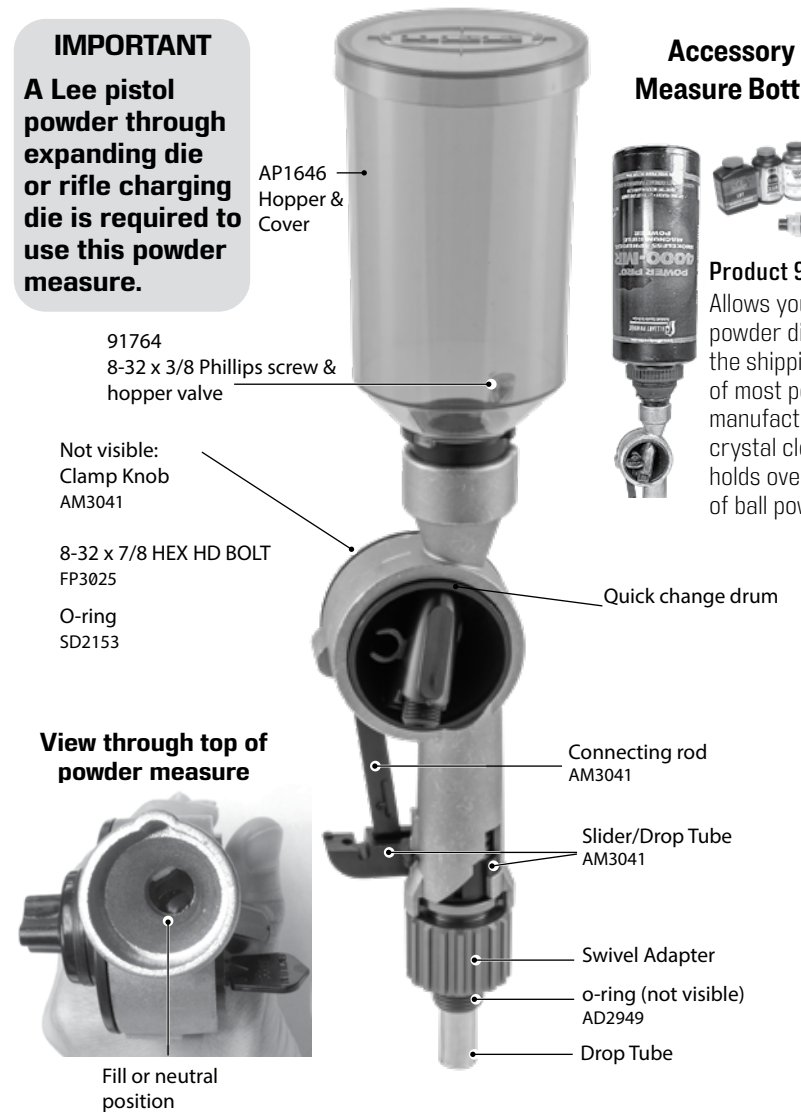
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Hartford, WI 53027
www.leeprecision.com

LEE
LEE PRECISION, INC.

Deluxe Auto-Drum Powder Measure

92003

IMPORTANT
A Lee pistol powder through expanding die or rifle charging die is required to use this powder measure.



Accessory Powder Measure Bottle Adapter



Product 91586

Allows you to dispense powder directly from the shipping container of most popular powder manufactures. Includes a crystal clear bottle that holds over a half a pound of ball powder.

91764
8-32 x 3/8 Phillips screw & hopper valve

AP1646
Hopper & Cover

Not visible:
Clamp Knob
AM3041

8-32 x 7/8 HEX HD BOLT
FP3025

O-ring
SD2153

Quick change drum

View through top of powder measure

Connecting rod
AM3041

Slider/Drop Tube
AM3041

Swivel Adapter

o-ring (not visible)
AD2949

Drop Tube

Fill or neutral position

POWDER MEASURE ACCESSORIES

Quick Change Drum Set
Features four precision molded nylon drums: (2) small, (2) large drums



90453

Rifle Charging Die Kit

Includes short and long charging dies for bottleneck cases



90995

Thanks for purchasing the Deluxe Auto-Drum Powder Measure. This is an automatic case actuated drum powder measure. The Deluxe Auto-Drum includes two infinitely adjustable drums. These will accurately and reliably drop charges from 1 to 80 grains of powder. Machined body with labyrinth groove mates to the precision molded nylon drums, providing a leak free fit with the finest powder. An elastomer wiper inside the body of the measure prevents powder shearing and works great with difficult metering extruded powders.

The hopper incorporates an on/off valve making powder changeover fast and convenient.

LEE LEE PRECISION, INC. *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.

www.leeprecision.com/return

Any Lee product of current manufacture, regardless of age or condition, will be reconditioned to new with a new guarantee, if returned to the factory with payment equal to one half the current retail price plus shipping.

DANGER

Do not use black powder in this powder measure, as it can explode in bulk.

Ammunition reloading can be dangerous if done improperly and can result in serious injury or death.

Selecting and charging powder is the most important thing you can do for both the safety and accuracy for your reloads. Be absolutely certain you have the correct type and amount of powder before you attempt to reload any cartridge.

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 and hearing protection when reloading and shooting.

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.

Always make an uninterrupted up and down stroke when expanding or charging the case. If you become distracted and reverse direction, a double charge could result.

The safest practice when selecting a load is to choose a powder type and charge that nearly fills the case. This will prevent an accident from occurring as a double charge would overflow the case alerting the user of a double charge occurred. This is especially important when loading fast burning powder in handgun cases.

1

1 Select Appropriate Drum

The Deluxe Auto-Drum normally ships with the small drum installed.

The small drum is adjustable from zero to 40 grains, and the large drum is 35 to 100 grains. The large drum can be fitted with the supplied reducer plug to provide a range of 3 to 40 grains.

The large drum can be converted to small capacity drum. Remove the plug from the drum, install into the metering rod. This is a semi-permanent change because it is a press fit into the metering rod. Slide it into the metering rod, and push firmly home with finger. Once installed, the minimum capacity is reduced to about 3 grains, suitable for the tiniest cartridges.

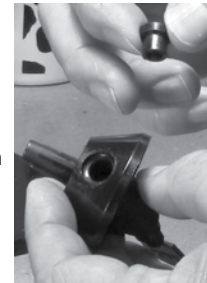
Small Drum

Maximum capacity is 40 grains.



Large Drum

Minimum capacity is 35 grains and maximum capacity is 100 grains.



2 Adjusting charge using adjustment key

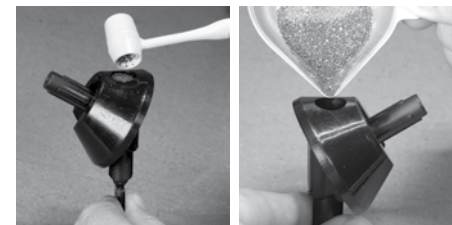
Each of the quick change drums includes a key that you insert into the adjusting screw to make your adjustment. Each facet of the 10 sided key represents .01cc or about a 1/10 grain for the average powder. Light, fluffy powders are going to be less and more dense powders are going to be slightly more. On average, it is 1/10 of a grain per facet.



3 Use Lee Dipper or Safety Scale

Before installing the drum, you can roughly preset the measure using a weighed charge or a charge from an appropriate dipper.

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Adjust Drum

Using the adjustment key, open the metering chamber enough to completely hold your measured charge. Rotate adjustment key until powder is flush with the face of the drum.

2

4 Install Deluxe Auto-Drum into press

ATTENTION

Before you install powder measure, be sure your expanding plug/drop tube and powder measure riser have no oil residue. Push a clean tissue through to remove any residual oil.

A Pistol

Screw powder measure into powder through expanding die. Adjust the powder measure to a convenient position, and secure the swivel adapter to the powder through expanding die.

A Rifle

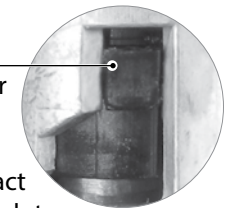
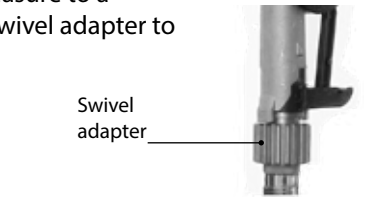
Charging die selection:

Short (# 90668) .86" to 1.76" long

Long (# 90194) 1.76" to 2.62" long

Thread charging die on to Auto-Drum knurled adapter completely. Thread lock ring up towards the top of the die.

Dispense position
Note: slider drop tube should not make contact with top of slot



Insert case into shell holder and raise ram. Thread powder measure and charging die into the press until you feel it stop turning, turn the powder measure in further until the slider drop tube raises to the dispense position. Finger tighten lock ring. If the powder measure is not in a convenient position, loosen the swivel adapter and rotate.

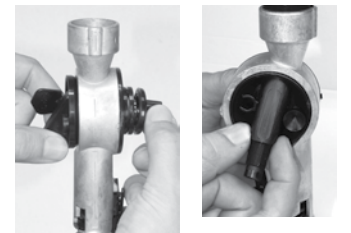
REMEMBER:

A case must be present in the shell holder to activate the powder measure and charge case.

5 Install Drum into Measure to Drop Charge & Verify

Install the drum with the metering rod facing down towards drop tube, aligned with the hopper on the Deluxe Auto-Drum measure.

Tighten the drum screw adequately to prevent powder leakage, yet still allow full drum rotation.



3