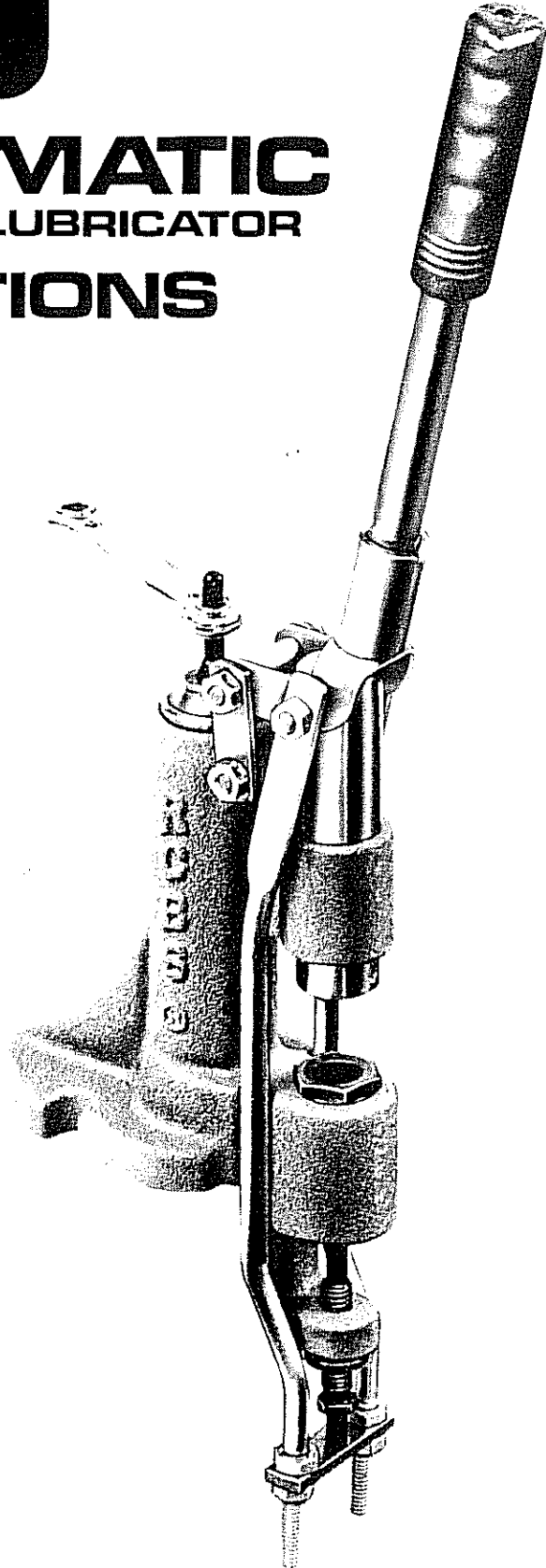


RCBS

OMARK INDUSTRIES 

LUBE-A-MATIC
BULLET SIZER-LUBRICATOR
INSTRUCTIONS



Unpack your Lube-A-Matic carefully.

Your RCBS Lube-A-Matic Bullet Sizer-Lubricator is completely assembled, except for the Handle, which screws into the threaded Handle Spud at the top of the tool. Should any parts be missing, please notify your dealer immediately. (See page 7 of this booklet for description and list of parts.)

What you should know about your RCBS LUBE-A-MATIC Bullet Sizer-Lubricator

RUGGED CONSTRUCTION — PRECISION MACHINED

The Lube-A-Matic frame, housing, and lubricant reservoir are cast in one piece — from sturdy cast iron — for strength, rigidity, and simplicity. The ram-bearing surface, and the Die housing, are drilled and reamed straight through, in one operation. This guarantees perfect alignment of the Top Punch with the Bullet Sizer Die below.

LINK LEVERAGE FOR SMOOTH SIZING

The Lube-A-Matic's rugged construction, combined with the link-leverage system, permits the largest cast bullets to be swaged in one short, continuous stroke, without strain on the tool. This smooth, unhesitating action permits swaging of bullets, and seating of gas checks (if needed) without bullet wobble.

SIZES, SEATS GAS CHECKS, AND LUBRICATES IN ONE OPERATION

To size and lubricate a bullet, you merely insert a bullet into the Sizer Die and pull down on the handle. As the bullet is driven into the Die the gas check is seated (when required) and the bullet is properly lubricated and swaged (shaped without shaving or shearing) to a perfect, cylindrical shape and proper diameter. This Rod has an adjustment screw for regulating the depth the bullet will be driven into the Sizer Die.

BULLET LUBRICATION

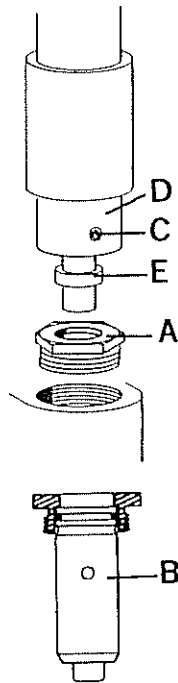
Depending upon the size and number of grooves in the bullet, the amount of lubricant to be dispensed is controlled manually by the Actuator Wrench. The lubricant is forced from the lubricant reservoir through holes in the sides of the Sizer Die and into the grooves of the sized bullet.

BULLET SIZER DIES AND TOP PUNCHES

Lube-A-Matic Bullet Sizer Dies are designed to swage, seat gas checks, and lubricate the bullet simultaneously. Dies — available in many different bullet diameters — lock firmly into the Die Housing with a Hexagonal Locking Cap. Interchangeable Top Punches — available to fit most popular bullet designs — lock rigidly into the steel ram with an Allen Setscrew. For complete list of Sizer Dies and Top Punches, consult the latest RCBS Catalog.

OPERATING INSTRUCTIONS FOR THE LUBE-A-MATIC

Before proceeding with instructions, mount your Lube-A-Matic on a solid bench with 3/8" bolts. Then attach the Handle to the Lube-A-Matic.



INSTALL THE BULLET SIZER DIE

1. Remove hexagonal Die Locking Cap A from the casting by unscrewing it counter-clockwise out of the Die Cavity.
2. Insert the top of Sizer Die B into the bottom of the hexagonal Die Locking Cap. Push Die and Cap together until the top of the Die and the top inside surface of the Cap are flush with each other, as shown at left.
3. Holding the Die and Cap firmly together, insert the Die into the Die Cavity.
4. Carefully thread Locking Cap back into the threads of the casting. Check to make certain that the Locking Cap is on straight and not cross threaded. When the threads are correctly engaged, hand screw the Locking Cap down clockwise as far as it will go. Then, gently tighten with a wrench. **Do not use excessive force. Do not use pliers.**

INSTALL THE TOP PUNCH

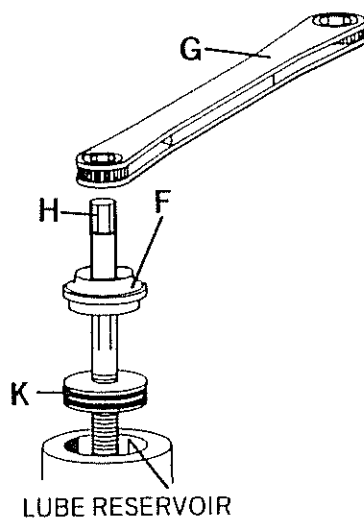
1. Unscrew Allen setscrew C counter-clockwise until it clears the hole inside of Ram D.
2. Insert the Top Punch E — small end first — into ram hole until the shoulder on the top Punch is against the bottom of the Ram. Tighten setscrew.

CHECK ALIGNMENT:

Lower the Lub-A-Matic Handle until the Top Punch is even with the Hexagonal Die Locking Cap. Now, **very slowly**, continue to lower the Handle and run the Top Punch into the Die — checking for clearance. If the Top Punch does not enter the Die easily and smoothly, **STOP** immediately. Raise the Handle, and (1) check the Top Punch to make sure it is properly inserted into the Ram Hole. (2) Check the Die Locking Cap to make sure it is properly seated and not cross-threaded. Then again run the Top Punch into the Die. If you still encounter resistance, notify your dealer immediately.

INSERT THE BULLET LUBRICANT

For optimum lubricating results we recommend the RCBS Bullet Lubricant furnished with your Lube-A-Matic. Additional sticks of this fine lubricant are available from your dealer. For proper lubrication, the Lube-A-Matic must be operated at normal room temperature of 68 to 72° F (20-22° Celsius).



1. Pull Lube-A-Matic Handle down and remove Reservoir Cap F.
2. Place the 1/4" end of Actuator Wrench G on Hexagonal Rod H. **NOTE:** This is a ratchet-type Wrench, and has two ends. Always use the end marked 1/4". One side of this 1/4" end operates clockwise — the other side, counter-clockwise. To help remind you of which end is which — put a dab of paint on the counter-clockwise side. This is the side that faces up during sizing and lubricating.
3. With the Wrench in place, turn Hexagonal Rod H clockwise until Plunger K is raised out of the Reservoir. Remove the Wrench and lift Plunger off Rod.

- Remove wrapper from the stick of lubricant. With your finger remove some lubricant from the stick. Then take one of the bullets you'll be sizing and lubricating, and lightly coat the **outsides** of the lubricant rings only. Do **NOT** fill the grooves with lubricant. The **first** bullet you run into a **new** Sizer Die should always be lightly lubricated to prevent sticking.
- Now, place the hole in lubricant stick over Rod and push lubricant down to the bottom of the Reservoir.

ADJUST SIZING DEPTH

The Bullet Ejector Rod **L** shown at left has two functions: (1) It ejects the bullet from the Die after sizing it. (2) It ensures proper lubrication of bullets by adjusting the depth to which bullets are driven into the Sizer Die.

To adjust the Bullet Ejector Rod:

- Unscrew Lock Nut **M** counter-clockwise as far down as it will go.
- Then turn Adjustment Screw **N** clockwise and upwards, until the head of Ejector Rod **L** is $\frac{1}{2}$ inch below Die Cavity Casting **O**. This will permit bullet to be driven deeply enough into the Die for you to check lubricant pressure and coverage.
- Now take the bullet you hand-lubricated and insert it — base first into the Sizer Die.
- Holding the bullet upright, push the Lube-A-Matic Handle down as far as it will go, and leave it in this position. **If the bullet requires a gas check**, first place the gas check — open end up — into the Die, place the base of the bullet on top of the gas check, and run them into the Die.

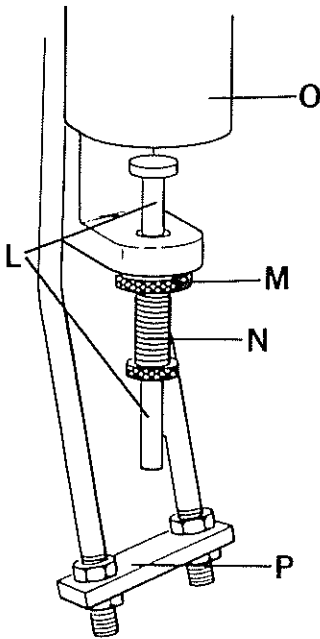
NOTE: When you run a bullet into the Die, always pause briefly before raising the handle. This will give the lubricant time to fill the bullet grooves.

ADJUST FOR LUBRICATION PRESSURE

- Replace the Plunger **K** on Hexagonal Rod **H** and turn plunger clockwise until the rubber "O" rings are just touching the mouth of the Reservoir. Now, being careful not to damage the "O" rings, continue to screw the Plunger down into the Reservoir until you can no longer turn it by hand.
- Place the $\frac{1}{4}$ " end of the Actuator Wrench back onto the Hexagonal Rod, and keep turning the Rod counter-clockwise until the plunger is about halfway down the Reservoir.

NOTE: Since this is the first lubricant to be placed in the Reservoir, a few extra turns of the Wrench may be required to fill the cavity inside the casting.

- Remove the Wrench and replace Reservoir Cap **F**.
- Now, raise the Lube-A-Matic Handle to eject the bullet from the Sizer Die.
- Inspect the bullet to make sure that at least the bottom groove is completely filled with lubricant. Do **not** be concerned with **how much** of the bullet is being covered with lubricant. You will adjust for this later.





DO NOT LUBRICATE
CRIMPING GROOVE
OR ABOVE

LUBRICATE
THIS AREA ONLY

THE PROPERLY LUBRICATED BULLET

A properly lubricated bullet should have lubricant in its lubricating **grooves** only — and almost none elsewhere. If a bullet is to be crimped into a case, do **not** lubricate the **cannelure** (crimping groove). See drawing at left.

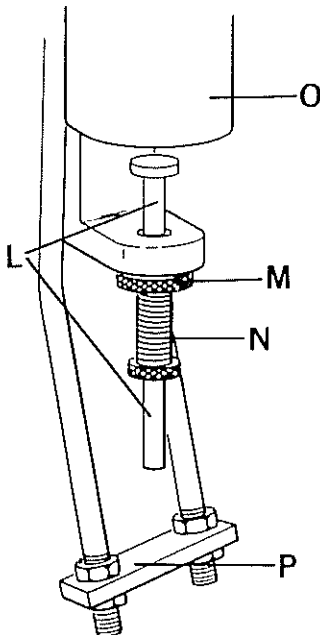
6. If the Lubricant does not completely fill the bullet grooves, replace the Actuator Wrench, and screw the Rod downward a few more turns. This will increase the lubrication pressure.
7. Run a **new** bullet into the Sizer Die, take it out and check it. Repeat this procedure — each time with a new bullet.

ADJUST FOR LUBRICANT COVERAGE

How much of the bullet is covered with lubricant depends upon how deeply that bullet is driven into the Sizer Die. This depth can be adjusted by raising or lowering the Bullet Ejector Rod **L** shown at the left.

1. Take the last bullet you sized and lubricated and inspect it for coverage. If **all** the grooves are **not** filled with lubricant, it means the bullet is not being driven deep enough into the Die.
2. To increase this depth unscrew Lock Nut **M**, screw Adjustment Screw **N** downward a few turns and size a new bullet. Repeat this procedure until you are lubricating **all the grooves**, except the **cannelure** — if the bullet has one.
3. If more than just the grooves is covered with lubricant, the bullet is being driven too deeply into the Die. In this case, Adjustment Screw **N** must be screwed **upward** one or more turns.
4. When you finally have the correct depth adjustment, tighten the Lock Nut to keep the Adjustment Screw in position. You are ready to size and lubricate your first newly cast bullets!

NOTE: Continue to screw the Rod downward as the lubricant is used. Larger bullets with bigger lubricating grooves will require more lubricant. If the grooves are not being filled with lubricant, adjust the Rod downward until the proper amount is dispensed. If you notice a bullet is receiving excessive lubrication, run one or more new bullets into the Die until the lubricating returns to normal. Periodically check to be certain the Lube Plunger does not reach the bottom of the Lubricant Reservoir. Insert another stick of Bullet Lubricant before the previous Lubricant is completely used.

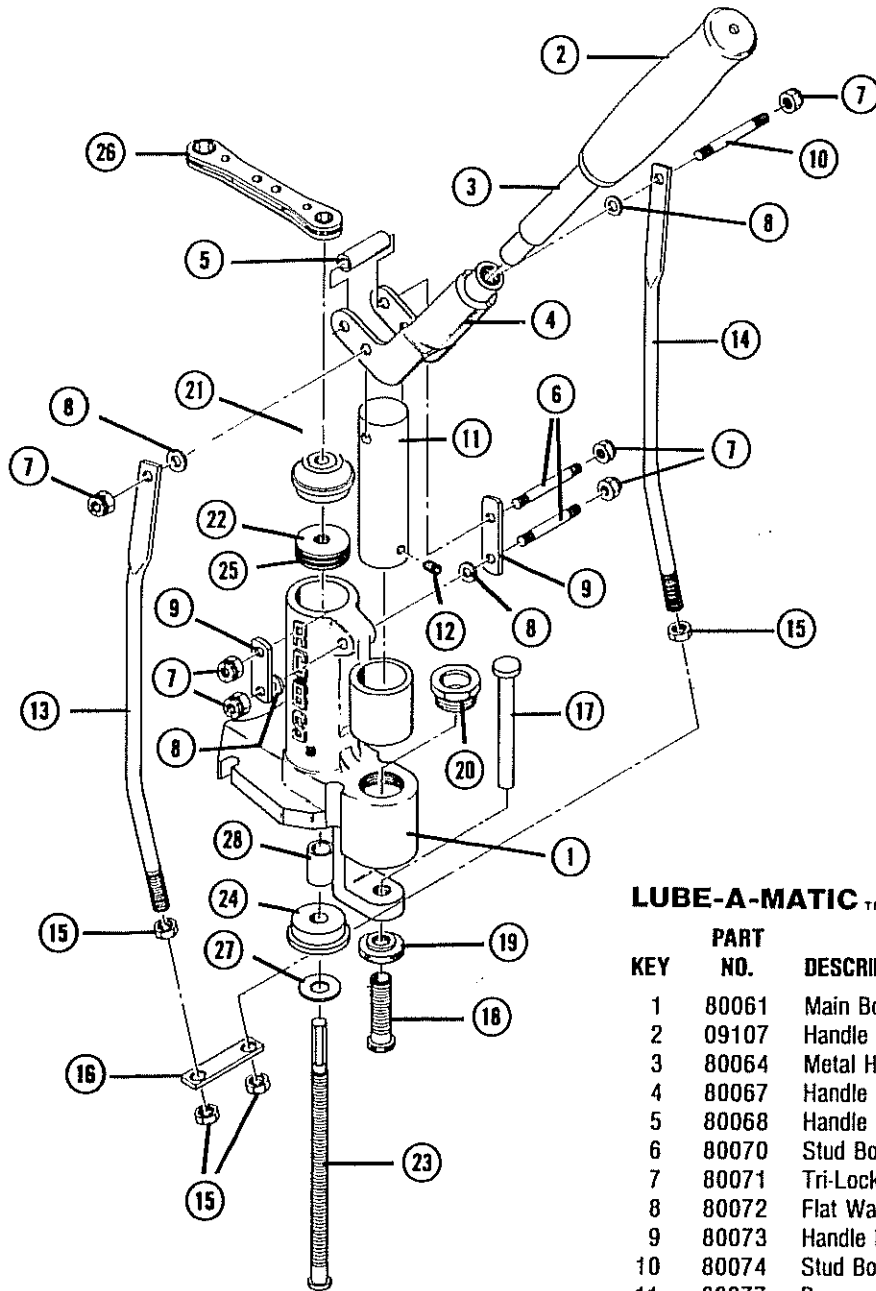


TO REMOVE SIZER DIE:

1. Raise handle up as far as it will go.
2. Remove Top Punch from Ram by unscrewing Allen setscrew.
3. Remove the Hexagonal Die Locking Cap from the Casting by turning counter-clockwise.
4. Lower Handle as far as it will go.
5. Hold a bullet upright between Bullet Ejector Rod **L** and Ejector Plate **P**, and raise the handle up all the way. This will raise the Die far enough out of the Die Cavity for it to be removed by hand.

NOTE: Removal of the Die may require a little effort due to the stickiness of lubricant. But do **not** use pliers or sharp tools to remove.

STORE LUBRICATED DIE IN DIE BOX WHEN NOT IN USE.



LUBE-A-MATIC™ PARTS LIST

KEY	PART NO.	DESCRIPTION
1	80061	Main Body Casting
2	09107	Handle Grip
3	80064	Metal Handle
4	80067	Handle Yoke Assembly
5	80068	Handle Yoke Spacer
6	80070	Stud Bolt (2)
7	80071	Tri-Lock Nut, 1/4x20 (6)
8	80072	Flat Washer, 1/4 (4)
9	80073	Handle Link (2)
10	80074	Stud Bolt
11	80077	Ram
12	09099	Setscrew, 10/32x1/4 CP
13	80079	Linkage Arm, Left
14	80080	Linkage Arm, Right
15	80081	Adjusting Nut (4)
16	80082	Bullet Ejection Plate
17	80085	Bullet Ejector Rod Assembly
18	80086	Bullet Ejector Adjustment Screw
19	80087	Bullet Ejector Lock Nut
20	80088	Die Locking Cap
21	80091	Reservoir Cap
22	80092	Lube Plunger
23	80093	Threaded Rod
24	80094	Base Plug
25	80095	"O" Ring Seal (2)
26	80097	Actuator Wrench
27	80098	Fibre Washer, 1/2"
28	80099	Lube Plunger Spacer

*Not available separately