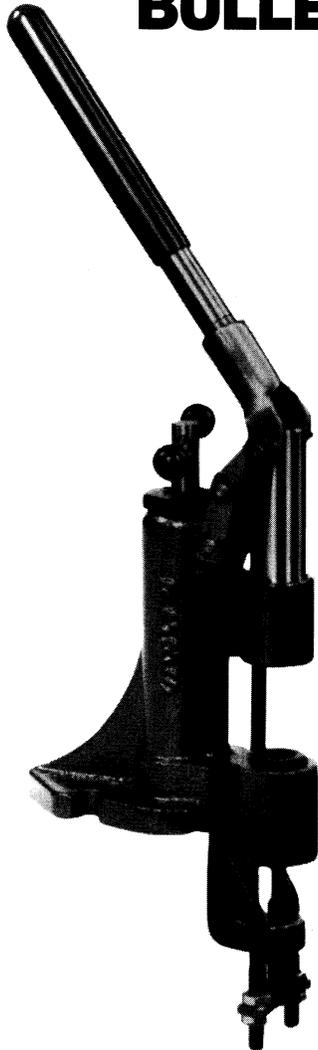


RCBS[®]

LUBE-A-MATIC[®] 2

BULLET SIZER/LUBRICATOR



P R O D U C T I N S T R U C T I O N S

SAFETY

General

- Use the equipment as the manufacturer recommends. Study the instructions carefully and become thoroughly familiar with the operation of the tool. Don't take short cuts.
 - Observe "good housekeeping" in the work area. Keep tools and components neat, clean and orderly.
 - Always wear adequate eye protection.
 - If any unusual resistance is encountered when moving the operating handle, STOP IMMEDIATELY and investigate the cause. To proceed against unusual resistance may damage equipment and/or cause serious injury!
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GENERAL INFORMATION

Unpack the Lube-A-Matic 2 carefully. It is completely assembled except for the handle which screws into the Handle Yoke Assembly at the top of the tool. A drawing of the Lube-A-Matic 2 and a list of current part numbers appear elsewhere in this booklet.

The Lube-A-Matic 2 frame, housing and lubricant reservoir are cast in one piece – from sturdy cast iron – for strength 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.

The rugged construction of the Lube-A-Matic 2 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. To size and lubricate a bullet, you merely insert a bullet into the Sizer Die and pull down on the operating handle. As the bullet is driven into the Bullet Sizer Die the gas check is seated (when required) and the bullet is properly lubricated and swaged to a perfect cylindrical shape and proper diameter.

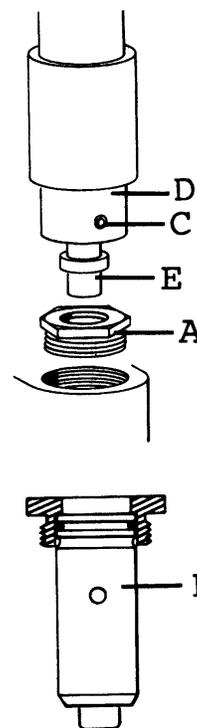
Depending upon the size and number of grooves in the bullet, the amount of lubricant to be dispensed is controlled manually by the Lube Pressure Handle. The lubricant is forced from the lubricant reservoir through holes in the Bullet Sizer Die and into the grooves of the bullet.

Lube-A-Matic Sizer Dies are designed to swage, seat gas checks, and lubricate the bullet simultaneously. Bullet Sizer 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 a setscrew. See your dealer for a complete list of Bullet Sizer Dies and Top Punches or consult our latest catalog.

Before proceeding with the operating instructions, mount the Lube-A-Matic 2 on a solid bench with 3/8" bolts. Then attach the operating handle.

Install The Bullet Sizer Die

Remove the Die Locking Cap **A** from the casting by unscrewing it out of the die cavity. Insert the top of the Bullet Sizer Die **B** into the bottom of the Die Locking Cap. Push the 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. Holding the die and cap firmly together, insert the die into the die cavity. Carefully thread the Die Locking Cap back into the threads of the casting. Check to make certain the Die Locking Cap is on straight and not cross-threaded. When the threads are correctly engaged, hand screw the Die Locking Cap down as far as it will go. Then gently tighten with a wrench. **DO NOT USE EXCESSIVE FORCE.**



Install The Top Punch

Unscrew the Allen-type setscrew **C** until it clears the hole inside of the Ram **D**. Insert the Top Punch **E** – small end first – into the Ram hole until the shoulder on the Top Punch is against the bottom of the Ram. Then tighten the setscrew.

Check Alignment

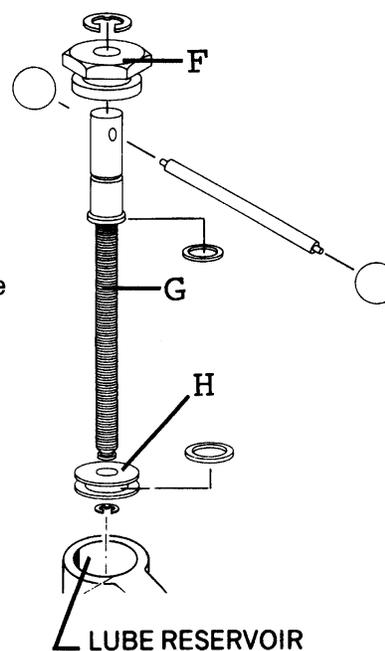
Lower the operating handle until the Top Punch is even with the Die Locking Cap. Now, very slowly, continue to lower the handle and run the Top Punch into the Bullet Sizer Die – checking for clearance. If the Top Punch does not enter the die easily and smoothly, **STOP** immediately. Raise the handle and check the Top Punch to make sure it is properly inserted into the Ram hole. Also 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 unusual resistance, contact the customer service department at RCBS.

Insert The Bullet Lubricant

For optimum lubricating results we recommend the RCBS Bullet Lubricant supplied with your Lube-A-Matic 2. Additional sticks of this lubricant are available from your dealer. For proper lubrication, the Lube-A-Matic 2 must be operated at normal room temperature.

Pull the operating handle down to the bottom of its stroke. Using a wrench remove the Lube Pressure Assembly by unscrewing the Reservoir Cap **F** counter-clockwise. Pull the entire assembly out of the lubricant reservoir. Check the position of the Lube Plunger **H** on the Lube Pressure Screw **G**. The plunger should be positioned at the top of the screw. If it is not, turn the plunger clockwise until it reaches the top.

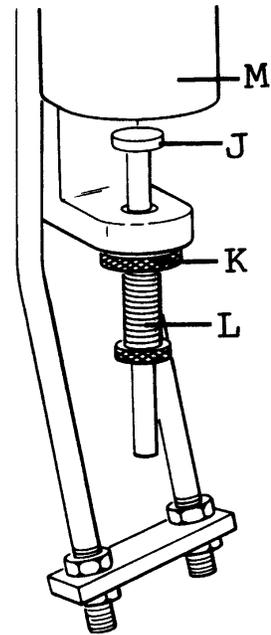
Remove the wrapper from the stick of lubricant. With your finger remove some lubricant from the stick. Then take one of the bullets you'll be sizing and lubricating, and lightly coat the *outsides* of the bullet rings only. Do not fill the grooves with lubricant. The first bullet you run into a *new* Bullet Sizer Die should always be lightly lubricated to prevent sticking. Now, place the stick of lubricant into the lubricant reservoir. Replace the Lube Pressure Assembly by inserting it back into the lubricant reservoir and tightening the Reservoir Cap.



Adjust Sizing Depth

The Bullet Ejector Rod **J** has two functions: 1) It ejects the bullet from the Bullet Sizer Die after sizing. 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:

1. Unscrew the Bullet Ejector Rod Lock Ring **K** counter-clockwise as far down as it will go.
2. Then turn the Bullet Ejector Screw **L** clockwise and upwards until the head of the Bullet Ejector Rod **J** is 1/2 inch below the die cavity **M**. This will permit the bullet to be driven deep enough into the Bullet Sizer Die for you to check lubricant pressure and coverage.
3. Now take the bullet you hand-lubricated and insert it – base first – into the Bullet Sizer Die.
4. Holding the bullet upright, push the operating 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

Now turn the Lube Pressure Handle COUNTER-CLOCKWISE until you feel a slight resistance. The resistance you feel is the lube plunger pressing down against the stick of lubricant in the reservoir. Since this is the first lubricant to be placed in the reservoir, a few extra turns of the handle may be required to fill the cavity inside the casting. Raise the operating handle to eject the bullet from the Bullet 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.

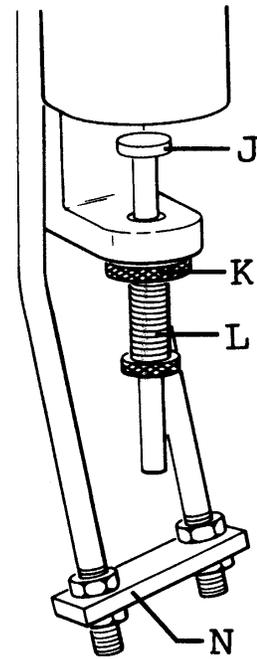
The Properly Lubricated Bullet

A properly lubricated bullet should have lubricant in the lubricating grooves only – and almost none elsewhere. If a bullet is to be crimped into a case, do not lubricate the cannelure (crimping groove). If the lubricant does not completely fill the bullet grooves, turn the Lube Pressure Handle counter-clockwise a few more turns. This will increase the lubrication pressure. Run a new bullet into the Bullet 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 deep the bullet is driven into the Bullet Sizer Die. This depth can be adjusted by raising or lowering the Bullet Ejector Rod **J**.

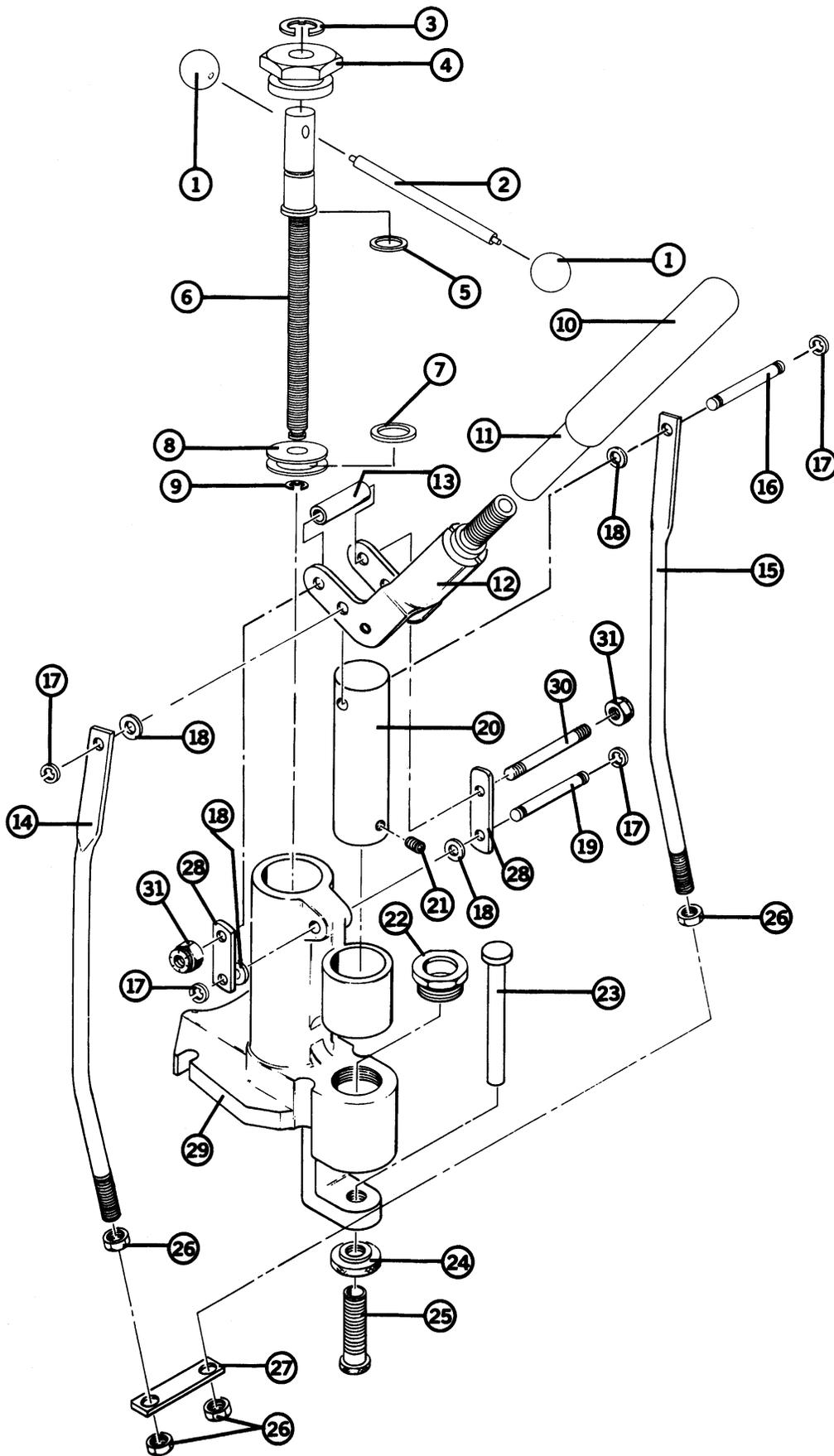
1. Take the last bullet you sized and lubricated and inspect it for coverage. If all the grooves are not filled with lubricant, it means the bullet is not being driven deep enough into Bullet Sizer Die.
2. To increase this depth unscrew Bullet Ejector Rod Lock Ring **K**, screw Bullet Ejector Screw **L** 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 Bullet Sizer Die. In this case the Bullet Ejector Screw **L** must be screwed upward one or more turns.
4. When you finally have the correct depth adjustment tighten the Bullet Ejector Rod Lock Ring to keep the Bullet Ejector Screw in position. You are now ready to size and lubricate your first newly cast bullets!



NOTE: Continue to turn the Lube Pressure Handle counter-clockwise as the lubricant is used. Larger bullets with bigger lubricating grooves will require more lubricant. If the grooves are not being filled with lubricant, turn the Lube Pressure Handle counter-clockwise until the proper amount is dispensed. If you notice a bullet is receiving excessive lubrication, run one or more new bullets into the Bullet Sizer 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 Bullet Sizer Die

1. Raise the operating handle up as far as it will go.
2. Remove the Top Punch from the ram by unscrewing the allen setscrew.
3. Remove the Reservoir Cap from the casting by turning counter-clockwise.
4. Lower the operating handle as far as it will go.
5. Hold a bullet upright between the Bullet Ejector Rod **J** and the Bullet Ejector Plate **N**, and raise the handle up all the way. This will raise the Bullet Sizer Die far enough out of the die cavity for it to be removed by hand. Some effort may be required to remove the die due to the stickiness of the lubricant.



LUBE-A-MATIC® 2 PARTS LIST

KEY	PART NO.	DESCRIPTION
1	80054	Handle Knob (2)
2	80053	Lube Pressure Handle
3	09105	Retaining Ring
4	80048	Threaded Reservoir Cap
5	80055	Fiber Washer
6	80042	Lube Pressure Screw
7	80051	O-Ring
8	80047	Lube Plunger
9	80052	Retaining Ring
10	09264	Handle Grip
11	80064	Metal Handle
12	80067	Handle Yoke Assembly
13	80068	Handle Yoke Spacer
14	80079	Linkage Arm, left
15	80080	Linkage Arm, right
16	80057	Ram Link Pin
17	80056	Retaining Ring IRR 1000-25 (4)
18	80072	Handle Link Washer (4)
19	80058	Handle Link Pin
20	80043	Ram
21	09099	Setscrew 10/32 x 1/4 Flat Point
22	80045	Die Locking Cap
23	80085	Bullet Ejector Rod
24	80049	Bullet Ejector Rod Lock Ring
25	80044	Bullet Ejector Screw
26	80081	Jam Nut 5/16 x 18 (4)
27	80082	Bullet Ejector Plate
28	80073	Handle Link (2)
29	80041	Main Body Casting
30	80070	Handle Link Bolt
31	80071	Tri-Lock Nut 1/4 -20 (2)
	80008	Bullet Lubricant (not shown)

RCBS

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reloading equipment in the world.
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If you disagree, tell us - we want to do something about it!*

Customer Service

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