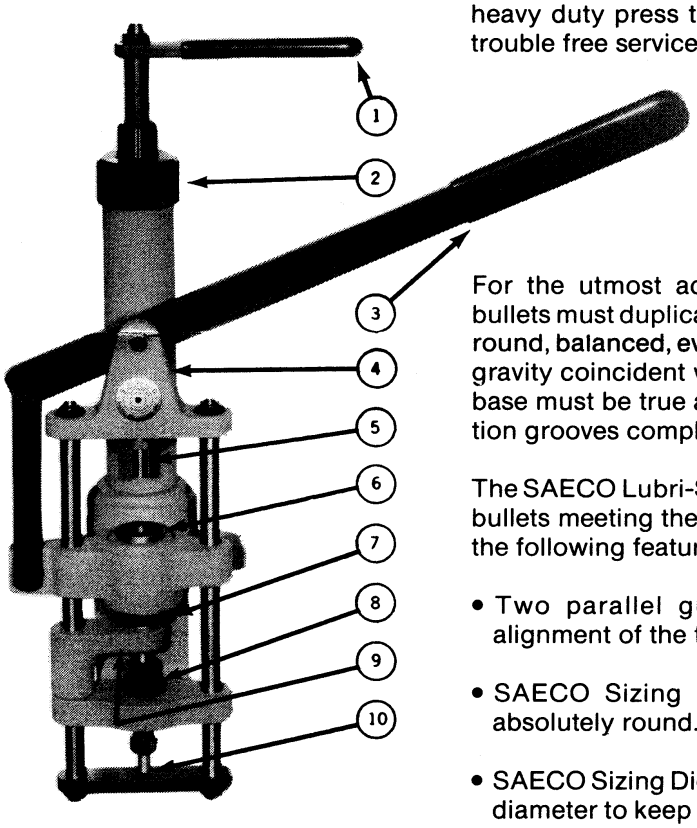
SAECO MATCH-PRECISION LUBRI-SIZER

REDDING

INSTRUCTIONS FOR ASSEMBLY AND OPERATION

The SAECO Match-Precision Lubri-Sizer is a heavy duty press that will give many years of trouble free service.



For the utmost accuracy of cast bullets, all bullets must duplicate each other. They must be round, balanced, evenly sized with the center of gravity coincident with the center of form. The base must be true and square with the lubrication grooves completely and evenly filled.

The SAECO Lubri-Sizer lets you easily produce bullets meeting these requirements because of the following features:

- Two parallel guide rods assure proper alignment of the top punch and sizing die.
- SAECO Sizing Dies are precision honed absolutely round.
- SAECO Sizing Dies have an exclusive prelead diameter to keep bullets straight while sizing.
- SAECO Top Punches have a 60° centering shoulder.
- Adjustable pressure lubricant reservoir.
- Swing out gas check seater lets you seat gas checks squarely and properly.

SAECO

ASSEMBLY AND MOUNTING

When shipped to you, the operating handle and links, **3**, are disconnected and packed separately. The Sizing Die, **6**, and the Top Punch,**5**, are priced separately and should be purchased in the caliber and style desired.

A double "C" clamp is available as an option for attaching your Lubri-Sizer to a bench. The two hooks of this clamp are hooked over the two side ears of the back of the main Lubri-Sizer casting which is then clamped over the edge of your bench. In the event you wish to bolt your Lubri-Sizer directly to the edge of your work bench or to a steel plate, holes for this purpose are provided in the main body.

The operating handle, **3**, should be installed per the drawing, using the pins and snap rings provided. The die, **6**, is installed with the inside punch in place, and secured with the lock ring, **7**, finger tight. The top punch, **5**, to fit the nose of your particular bullet, is then installed in the top bracket casting, **4**.

OPERATION

To load stick lubricant, remove the top grease cap assembly, **2**, and partially fill the grease tube. Care should exercised when putting the pressure washer back into the tube in order not to damage the leather cup. The top cap should be screwed down hand tight and then the grease pressure operating lever, **1**, screwed down until the resistance of the grease is met and spring pressure applied to the grease.

A cast bullet is placed at the entrance of the die on top of the inside punch and the operating lever, **3**, lowered to bring the top punch, **5**, in contact with the nose of the bullet. The die has a prelead oversize diameter for a depth of approximately .3 inch to enable the bullet to feed into the die in absolute straight alignment. The constriction between this prelead diameter and the net die size is a concentric 7° taper, which prevents shearing of lead.

The downward travel of the bullet is limited by the adjustment screw, **8**, which should be adjusted so that the top grease groove of the bullet just reaches the grease port in the die, thus avoiding a deposit of grease on the bullet nose.

A properly sized and lubricated bullet should be the same diameter as the groove diameter of your barrel, or not more than .001 inch larger than the groove diameter. A properly cast bullet should be cast .001 - .002 inch over the finished size dimension, as oversizing will very often distort a cast bullet, particularly in the softer alloys. The SAECO Lubri-Sizer is amply strong to size a bullet down .003 inches or more, although we do not recommend this practice for the above reasons. One of the main variable factors in accuracy with the cast lead alloy bullets is absolute uniformity and concentricity. This is the reason that we have gone to the extreme lengths that we have to produce a tool with the absolute alignment and concentricity.

CAUTION: We strongly recommend that the two stop nuts which hold the top bracket casting, 4 , to the top of the two guide rods be left permanently in place. These were tightened at the factory with special alignment tooling in place in the top punch hole and die hole in order to properly align this top bracket with the center line of the frame. Without this special tooling it is very difficult to properly realign this top bracket.

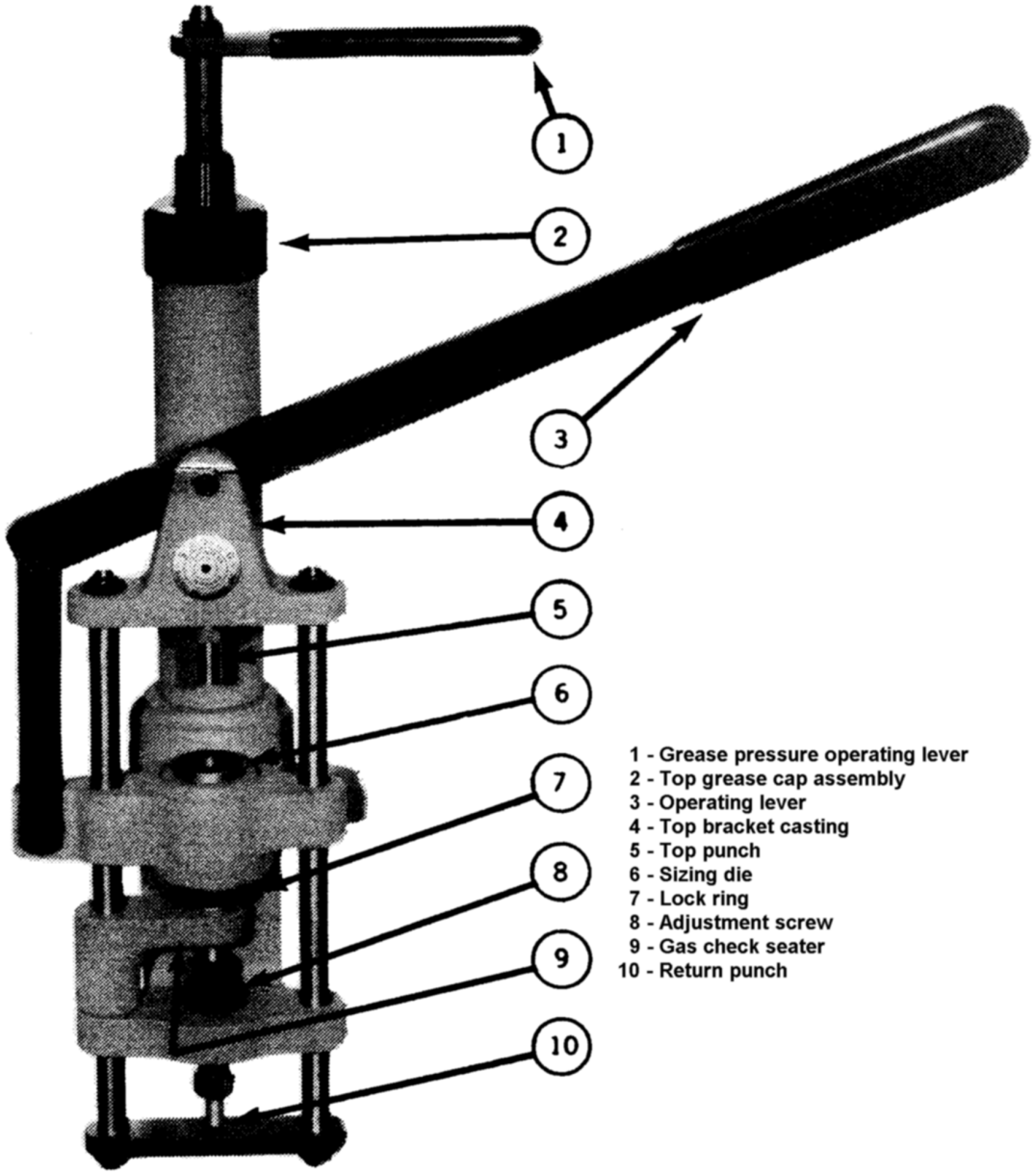
In operation, you will soon learn how much spring pressure to the grease screw is necessary to properly lubricate your particular bullet with your particular lubricant. Room temperature also has a bearing in this pressure. Depending on bullet size and the above factors you should be able to size and lubricate from 20 to 50 bullets with one or two turns of the grease pressure screw.

Dies for your SAECO Lubri-Sizer are available in all of the sizes listed in our catalog, and top punches are available to fit most popular bullet styles. Refer to catalog for order numbers.

USE OF THE GAS CHECK SEATER

The gas check seater, **9**, is provided as standard equipment on all SAECO Lubri-Sizers. Its function is to swing around to restrict the down travel of the return punch, **10**, which in turn restricts the downward travel of the inside punch.

In operation, the gas check is either lightly pushed onto the base of the bullet by hand or the gas check may be placed at the top orifice of the die supported by the inside punch and the base of the bullet then placed in the gas check. With the gas check seater swung around into position as described above, the top punch is lowered to make contact with the nose of the bullet. The operating handle is then further lowered to push the bullet and gas check on down into the die to the point where contact is made with the restricted inside punch, then slight additional force applied to seat the gas check on the base of the bullet in straight alignment. This seating of the gas check takes place in the top prelead area of the die before the bullet enters the net die size. The gas check seater is then swung out of the way and additional pressure applied to the operating handle, thereby forcing the bullet, together with the gas check, down further into the die, thus sizing and lubricating in the normal manner. This entire operation being performed at one time assures proper seating of the gas check and sizing of the bullet in concentricity.



1 - Grease pressure operating lever
2 - Top grease cap assembly
3 - Operating lever
4 - Top bracket casting
5 - Top punch
6 - Sizing die
7 - Lock ring
8 - Adjustment screw
9 - Gas check seater
10 - Return punch