Lubricating Bullets

Traditional bullet lubricating methods of placing lube only in the grooves are inferior to the modern method of coating the entire bullet with Lee Liquid Alox. This places the lube where needed, on the surfaces that rub against the bore. Lead bullets must be lubricated or your gun will be fouled with lead and accuracy will be poor.

1. Place bullets in plastic container and dribble some Lee Liquid Alox onto the bullets.
2. Gently shake the bullets in an orbital motion to coat the bullets. If they do not coat completely, add a little more lube.
3. Spread the bullets onto waxed paper and let dry overnight.
4. Load at least one bullet into a case and check to be sure it easily chambers in your gun. If it fits tightly, you must reuse the bullets before loading.

Sizing Bullets

All lead bullets must be lubricated, but it is not absolutely necessary to size all cast bullets. Bullets must be sized if they are so large that they expand the case too much to freely enter the gun’s chamber. Sizing sometimes helps accuracy by making the bullet uniform in diameter. This ensures uniform start pressure and better accuracy.

1. Screw the sizing die into any standard reloading press. Exact depth is unimportant.
2. Install the bullet punch into the ram. This fits all rams that use standard shellholders.
3. Place the red box on top of the sizing die as shown.
4. Place bullet on the punch and push bullet through die.
5. When box is ¾ full, lift the entire box off the die. Invert the box before opening.
6. For rifle and handgun loads, it’s best to re-lube the bullets to insure the sized portion is recoated.

DO NOT SIZE UNLUBED BULLETS; THEY WILL LEAD THE DIE.

Very large and long bullets with a flat nose may stack and push the cover off the box. A washer under one edge of the press base will tilt the press sufficiently to prevent stacking.

LEE Bullet Mold Instructions

Sprue Plate

Mold Handles

Mold Blocks

Helpful Hints

Always drop cast bullets onto a soft cloth of several thicknesses to prevent damage to the hot, relatively soft bullets. Never drop bullet directly from the mold into the lead pot. Metal will splash onto the mold faces and prevent complete closure. Be extremely careful not to get any water into the molten lead. Even a small drop will explode into steam and violently spatter hot lead a surprising distance. Glasses and gloves are recommended when handling molten metal. Do not exceed 1400 FPs velocity with plain base bullets. This means most pistol loads can be loaded without gas checks. Do not exceed 2200 FPs velocity with gas check bullets. This means high velocity rifles must have reduced loads. Many calibers, such as the 30 M1, 30/30, 30/40, 35 Remington and 45/70 can be fired with full loads as velocity is low enough to accept bullet leads with gas checks. Modern trend has been the use of fast burning powders for cast bullets in rifles. It’s our experience that the medium burning powders, such as DuPont 4227, 4198 and 3001 usually give better accuracy. Most bullets from Lee Molds can be used as cast. Sizing should not be considered as an absolute necessity. However, all cast bullets must be lubricated. Light target loads for handguns need lubricant only in the bottom groove. This greatly assists in keeping indoor ranges cleaner and has no detrimental effect on accuracy.

Guarantee

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

WARNING: Melting lead and casting lead objects will expose you and others in the area to lead, which is known to cause birth defects, other reproductive harm and cancer.
Lubricate your mold. Very lightly touch bullet lubricant to the sprue bushing. V-ribs and locating cross pin. Use LEE BULLET LUBE #90007. Do not use LIQUID ALOX as it will bake onto surface and prevent proper closure. Lube Core Pin on Mise and H-P. WARNING: Do not start casting bullets until your mold has been lubricated.

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If you’re an experienced bullet caster, forget most of what was true when using the difficult to use cast iron blocks. The Lee Bullet Mold makes casting bullets easy to fast. No need to cast 50 to 100 before you start getting good bullets. Many times the first one you pour will be good, provided you follow the simple instructions. Because the aluminum mold blocks conduct heat fast, the metal must be extra hot for good bullets.

Take Care of Your Mold
Your Bullet Mold is a precision-made tool. To preserve this built-in accuracy, it’s necessary to lubricate it properly. Silicore or bullet lubricant must be applied to the V-ribs, locating pin and sprue bushing. Lack of lubrication will cause the sprue plate to gull and blocks to mismatch. Damage could be irreparable. When storing for long periods, lightly oil steel parts to prevent rust.

Preparing Your Metal
Wear safety glasses and gloves. After the metal has melted it will have a grey scum on the top. Don’t remove this as it is the tin that has separated from the lead. Flux the metal. Do this by placing a small piece (size of pea) of beeswax or paraffin into the molten metal and stir with the ladle until there is nothing but dark grey powder floating on the metal. This should be removed with the small ladle. Always flux the metal after adding to the pot, or if it needs it.

The smoke cause by fluxing your metal can be ignited with a match. This will keep your work area smoke-free.

Reducing Exposure
Lead contamination in the air, in dust, and on your skin is invisible. Keep children and pregnant women away during use and until clean up is complete. Risk can be reduced - but not eliminated — with strong ventilation; washing hands immediately after use of these products before eating or smoking; and careful cleaning of surfaces and floors with disposable wipes, after lead has had a chance to settle. Use a lead-specific cleaning with EDTA, or a high-phosphate detergent (like most detergents sold for electric dishwashers) and bag wipes for disposal.

Troubleshooting

**Mold not filling out**

- Dip corner of mold in molten metal 8 seconds.
- Wash blocks in solvent, carbon tetrachloride, white gas, mineral spirits, etc.
- Increase heat.
- Sometimes an alloy just won’t work easily. It’s best to start with a new batch and blend it to use it up.
- Flux the metal as per instructions. See Step #2.

**Mold does not line up or closes with difficulty**

- Needs lubrication

**Mold does not release bullet**

- Lubricate your mold as in Step #4 above.
- Don’t get any in the cavity.
- Remove burr by scraping very lightly with a sharp knife inside the cavity.

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