

LEE-Menting
By "BuckShot"



The above is the stuff I keep in a small plastic box for mould work.

NOT IN THE PICTURE:

- 1) Can of carburetor/brake cleaner
- 2) Can of beer
- 3) Countersink (used for block locating holes that have been peened).
- 4) Punch (used to drive locating dowels further out).
- 5) Single edged razor blade (used to scrape lead off sprue plate).
- 6) Zippo or Bic type lighter to soot cavities.
- 7) Round hardwood toothpicks (to break wire edge and push crud out of the vent lines and block faces) good for some stuff on aluminum blocks).
- 8) Piece of 'float plate' glass (Used as backing when smoothing sprue plate).

The can of beer was too far away and the picture would have been too large, so that's why it's not there. Cleaner was on the workbench, countersink was by the drill press, punch was in the drawer with the other punches and chisels, no excuse for the razor blade, Zippo was in my pocket, toothpicks were in the drawer under the reloading bench. Easier to get at then in e mould 'Red Cross' box in the cabinet :-). Plate glass piece has disappeared. I'm using a 8" piece of 1/2" steel and forgot to set it out.

Starting in the upper left hand corner and going clockwise we have:

- 1) NEI SP (sprue plate) lube. A water based silicone type lube. It works okay, but so does Javalina, and these days Bull Plate lube is the standard by which others are judged.
- 2) Raphine Mould Prep. Atomized graphite in a volatile carrier. Some use it for the cavities as a release. I use a Zippo. The Mould Prep is used to paint the underside of sprue plates and alignment surfaces.
- 3) Small brass bristle brush (don't use on alum moulds) used to brush out vent lines.
- 4) A "Third Hand" magnifying glass. Used to view cavity parting lines for wire edges and for removing the same, ditto vent lines where they enter the cavity, and anything else that needs to be closely examined.
- 5) Swiss double cut triangle file. Used to cut the angles in the top facing mould block edges for enhanced venting. Be VERY careful so you don't get antennas of he bullet base by making them too big. Sometimes more is better, but NOT always :-). Completing vent lines into the cavity and breaking the bottom sprue plate edges before flat sanding.
- 6) A #2 lead pencil. I use this to scribble all over the underside and topside of sprue plates, and on top of mould blocks. After that it may get a coat of Raphine stuff. The clay and graphite of the pencil lead does double duty. It will

tend to fill in machine marks so lead doesn't stick as readily and it does seem to lubricate some. A carpenter's pencil would be better but I can never remember to get some when at the home center.

7) Common 1/4" copper water pipe. It's flattened at both ends and has a sharp edge. This is used for general scraping away of lead flecks on block faces and in vent lines. Use it anywhere on iron or steel blocks. Not a good choice for aluminum anywhere.

8) Snap blade type utility knife. THIS is what I use when inspecting the block faces of new Lee moulds. Any expressed metal moved from one cavity to the next in the cutting process (a wire edge) is more easily removed with this than the hardwood toothpick. On a ferrous set of blocks, generally dragging the toothpick along the edges of the cavity back and forth a couple times will snap off the wire edge. On aluminum it just seems to move it back and forth. So, under the magnifying glass I VERY carefully cut it off. Keep as shallow an angle as possible, keep your hand close to the blade and cut as close to the tip as possible.

Also it seems that quite often your new Lee mould may come complete with some number of tiny bits of aluminum stuck to either block face. It appears they got there before the blocks were mashed together with 20 tons of pressure in their fixture, before the cavity was bored. When these bitty pieces are removed, they leave an impression of themselves behind. Never had a problem in that regard, with the moulds ability to cast bullets. You may be able to pick them out, or off the surface with the toothpick. Normally though, I've found it easier and more positive to use the magnifying glass and with the fresh sharp point of the utility knife, and a fine hand, you can easily flick them off.

The knife is also used on the top and bottom inside edges to trim away any protruding metal caused in the milling process. Ditto around the roller bearing Lee presses in to use as a vertical locating device. Just look closely around it's perimeter and you'll see if there's a problem.

9) A plastic film canister full of Javalina lube, which escaped the lube-sizer and a tiny jeweler's screwdriver to apply it. Trust me when I say you only need a tiny bit. I know that "Tiny" is open to interpretation, but you'll learn just how tiny, "Tiny" is :-). On Lee moulds I touch each of the locating "V's" top and bottom. You want just a sheen of an appearance of lube. On the steel roller bearing, I touch it on the BOTTOM of it's curved surface so as to be away from the cavity. When hot, and you close them, capillary action can have excess lube in the cavity in 2 shakes.

On iron or steel blocks I've tried to lube the locating pins with Javalina. It seems that the vent lines which will usually cross the pin's position literally form a highway for the lube straight into the cavity. Plus the pin can sometimes be VERY close to the cavity. For these I use the Raphine stuff with a Q-Tip when the blocks are cold.

The sprue pivot is an important area needing lube. All that's needed is a dab on top of the plate touching the edge of the screw head. Heat will draw it underneath and onto the shoulder of the screw. Enough finds it's way under the plate to do it's work just fine.

10) Next is a couple 'Major surgery' parts :-). These are 8-32 and 10-32 shouldered socket head screws. They're lying on top of a bag of wave washers. The wave washer may be hard to find. They were for me locally, and their use doesn't require explanation so I'll leave them. The screws are to replace those which have loosened. Either loosened in use or by tightening/stripping. Lee uses self tapping screws which once removed, will NOT (in my experience) remain tight again, ever amen. So I D&T for one of the socket heads and use them instead. I can drill straight down through the block and then tap the hole.

11) The 400 grit wet or dry paper is what the underside of the sprue plates are laid on and polished. You can do 600 too if you want to, but it sure seems 400 is plenty enough.

It all sounds like a lot of stuff, but some moulds need non at all and others may need one or 2 of them. Just give them a good looking over once before using.

Buckshot

