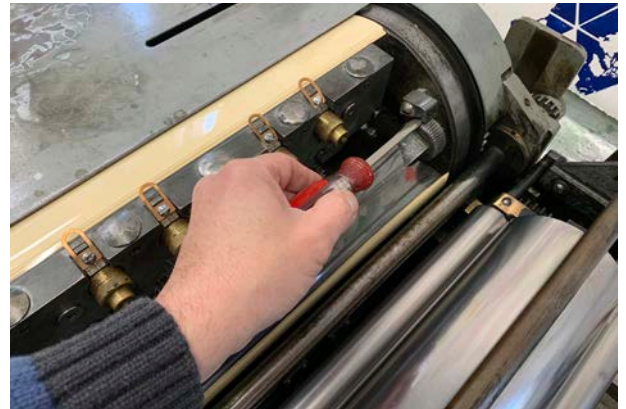




Tools you will need: the crescent wrench and small screwdriver from the tool board, and some packing tape. To change the tympan, use the folding Allen key set.



Pop the ratchet pawl on the tympan bar with the screwdriver. Do NOT unscrew the bolt. This releases the toothed ratchet wheel.



Crank the press forward slightly in trip and draw out the tympan and packing paper. You may need to tug a little to release the tape.



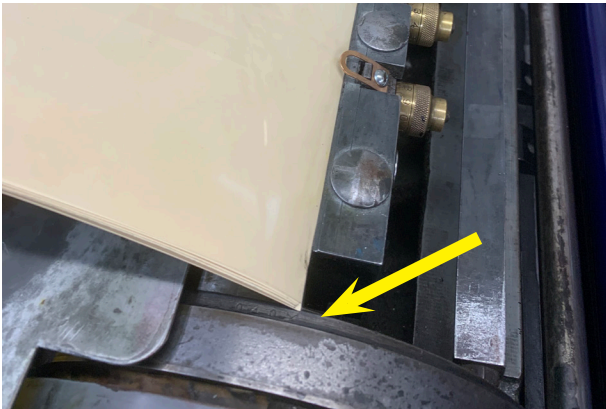
Pull out the packing sheets and add/remove sheets to modify the impression. More packing means more pressure on the form.



Packing comes in 0.005" and 0.008" thicknesses, located on the right-hand press shelves. The No 4 is a 0.040" press; be sure to include 0.004" for the tympan.



Check the packing tape on the end of the tympan, as it can lose grip over time. If it needs to be replaced, remove the old, and attach the new sticky side up.



Jog the packing together and push forward underneath the head of the tympan. Make sure the packing sheets do not extend into or beyond the groove on the printing drum.



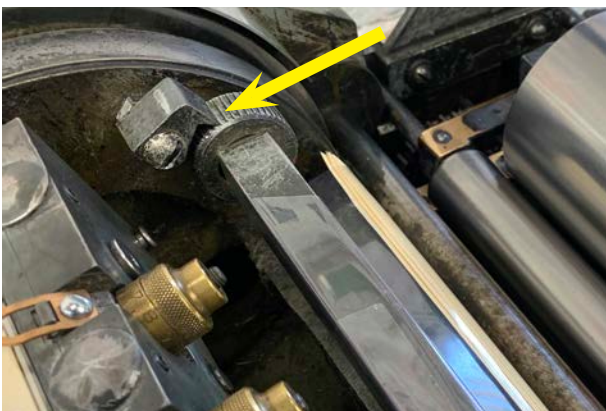
Roll the press forward in trip, keeping the tympan and packing pressed firmly against the printing drum.



Fold the end of the tympan under the reel bar



And secure the tympan end with the packing tape.



Flip the ratchet pawl on the tympan bar so gravity makes it rest against the ratchet wheel. Turn bar until finger tight.



Use the Crescent wrench to tighten the tympan. *Do not overtighten – the tympan may tear!*

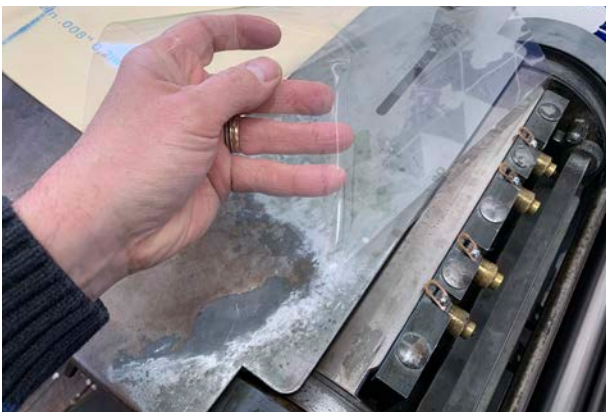
## Vandercook No. 4 Tympan Change



The Mylar tympan is pretty durable; usually it will be replaced once a month. But it can tear during use and need to be changed.



Loosen the Allen-headed bolts on the gripper plate with the Allen set from the tool wall. The necessary key is marked yellow.



Pull the old tympan from the gripper plate, reserving the packing. Discard the old tympan in the trash.



The tympan sheets are in the flat files; Mylar tympan sheets are preferable but there are some paper tympan sheets if desired.

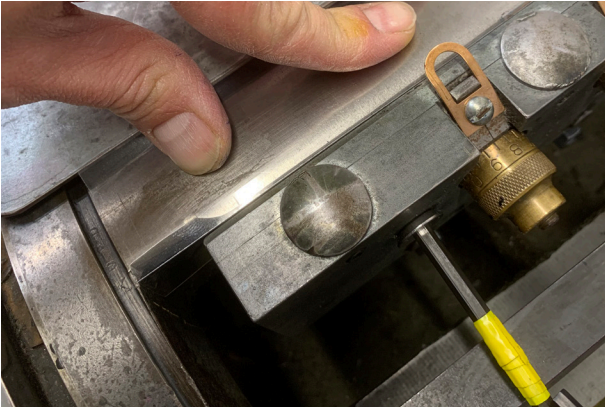


Slip the scored and folded edge of the tympan sheet into the space between the printing drum and the gripper plate.



Make sure the tympan is centered and does not extend beyond the grooves in the printing drum.

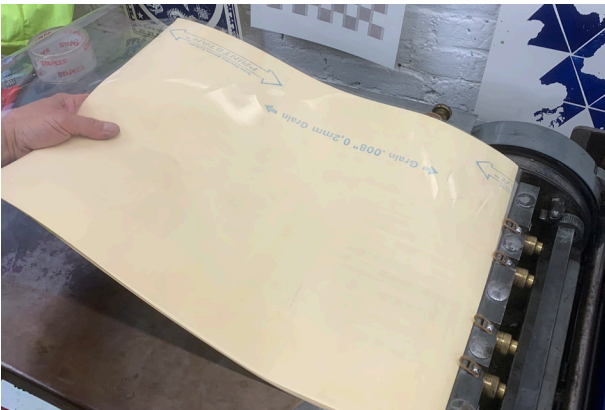
## Vandercook No. 4 Tympan Change



Hold the tympan in place while you tighten the Allen bolts on the gripper plate.



Add packing tape to the tail of the tympan, sticky side up.



Repack as usual.

# REFLEX LETTERPRESS

## Weekly Press Rails Lubrication



Use a few drops of blue 3-in-1 oil on a small piece of rag. Rag pieces are in the cubby under the paperboard. Always use a fresh rag.



Wipe the top of the near press rail to the end of the bed. The idea is to renew the film of oil, not to saturate it with puddles.



Wipe the bottom of the rail...



...and the top of the bearing platform.



Crank the printing head forward in trip to lubricate the head of the rail as well.



Repeat for the other side of the press – top and bottom of rail and top of bearing platform. Record the date in the log on the wall next to the end of the press.

# REFLEX LETTERPRESS

## End-Of-Day Press Wipedown



Rust never sleeps. WD-40 is here to help. Use the dedicated wipedown rag.



Spray WD-40 on the pressbed. Not much is needed, just a judicious spritz.



Wipe down the pressbed in its entirety, including the guide rails. Give the lockup bar some love, too.



Don't forget to crank the press forward to get under the paperboard.



The press cover keeps dust and condensation off the press bed. It's stored in the yellow bag on the wall.



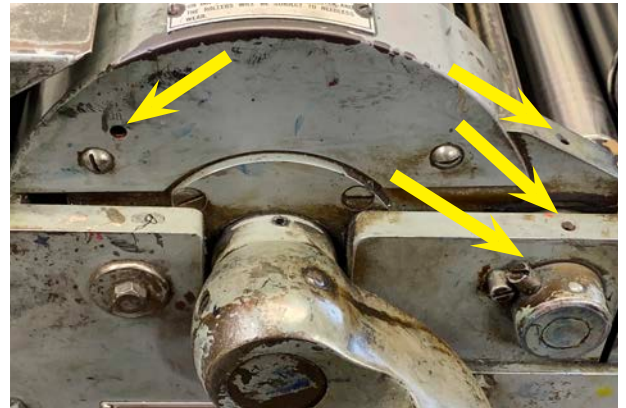
Cover the press. You're good to go.

# REFLEX LETTERPRESS

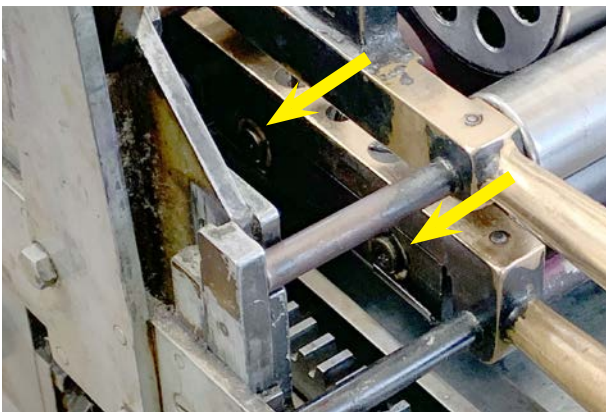
## Press Mechanism Lubrication



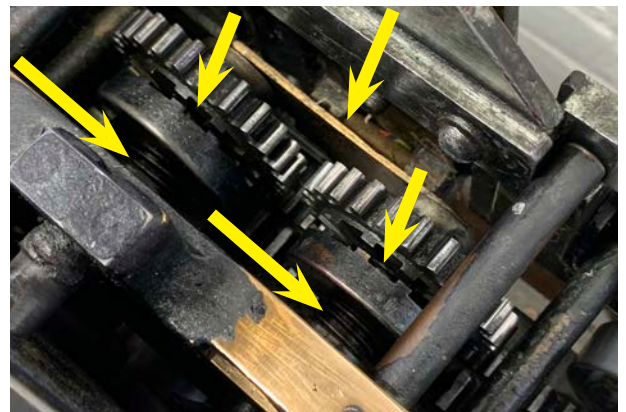
For lubricating the press mechanisms, we use the silicone 3-in-1 oil. It is a lighter weight oil, but has protective properties.



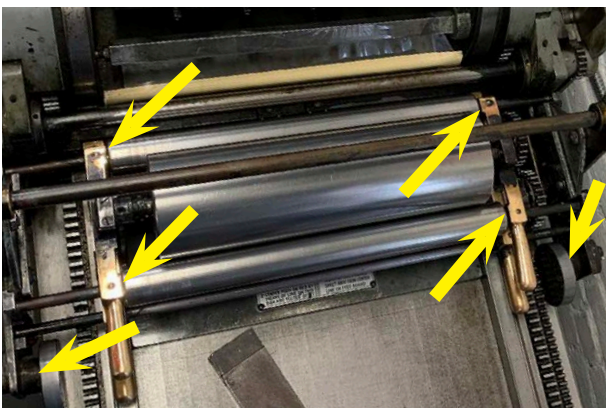
Oil holes on the near side of the press. Be generous with the oil. Dribble a little into the seam of the height adjustment cam.



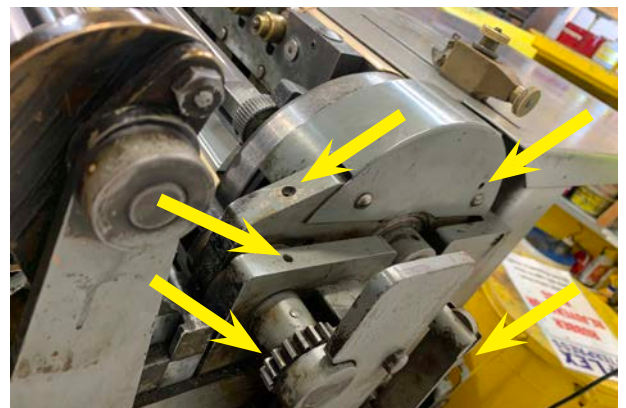
Oil the ends of the form roller shafts where the Nyliners emerge.



On the further side of the roller assembly, oil both pinion gears and roller shafts, and the copper clutch plate.



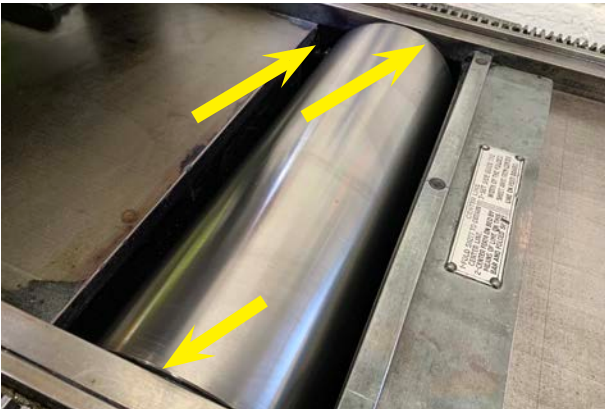
Oil the bearings for the idler rollers and the shaft for the leader bearings. Oil these bearings on both sides of the assembly.



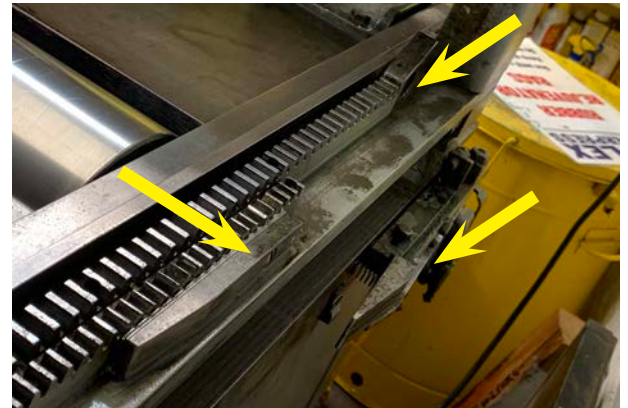
More oil: in the corresponding oil holes on the far side of the press; the bearings and gears for the print head mechanism, and the gripper plate mechanism.

# REFLEX LETTERPRESS

## Press Mechanism Lubrication



Dribble some oil on either side of the drive roller shafts and on the drive chain, as the press is running.



Oil the holding lever and the parts of the printing track near the top of the press.



Also oil the levers and portions of the track near the bottom of the press.



The final lubricant is the Vaseline in the back of the press cubby.



Periodically apply a dab of Vaseline to the worm gear of the oscillating roller. This is necessary maybe once a quarter.



## Refilling The Solvent Dispensers



There are three solvent dispensers to keep full. Never leave a solvent can empty. Be sure to use gloves while handling solvents.



The Type Wash dispenser simply unscrews. For Rubber Rejuvenator or Ultimate Orange, align tabs and pull off (shown here.)



The Ultimate Orange is in easy-to-pour gallon jugs. They may be recycled when empty.



The Rubber Rejuvenator is in metal canisters with a screw-off cap. They may also be recycled when empty.



The Type Wash is in a 5 gallon pail, with a pail pump for easy dispensing. The Type Wash dispenser will fill quickly, so watch out for solvent sprays when pumping.



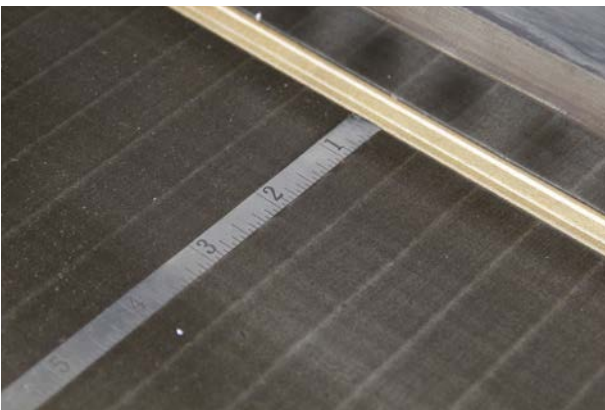
The WD-40 canister also has a pail pump installed. Only use the designated WD-40 spray bottle, as WD-40 will dissolve other spray mechanisms.



To start a cutting operation, release the setscrew to allow the crank to move.



Crank the backstop into position for the appropriate cutting depth.



The distance from the blade forward is measured by the integral ruler on the cutter bed.



The distance behind the blade to the paper backstop is measured by the tape. It is good to  $\pm 1$  mm.



Place scrap paper above the paper stack to take the clamp pressure, and below the stack to allow the blade to cut cleanly through the stack.



Spin the clamp wheel to drop the clamp down on the paper stack. Be sure the paper stack is secure, or else you will cut trapezoids, not rectangles.



The red failsafe prevents the blade from moving down until released. Press the top bar to move out of the way.



Make sure you have control of the cutter handle, and release the failsafe.



Cut with an even, controlled stroke. **For soft, cottony papers, you may need to slowly rock the blade down through the stack, a quarter inch at a time.**



Loosen the clamp wheel to release the paper stack from the clamp.



Pull the stack from behind the cutter.



Dispose of any scrap paper in the recycling.

## Vandercook No 4 Roller Adjustment



In trip, crank the print head to the end of the press. Lower the roller assembly. Use the roller gauge curved side up.



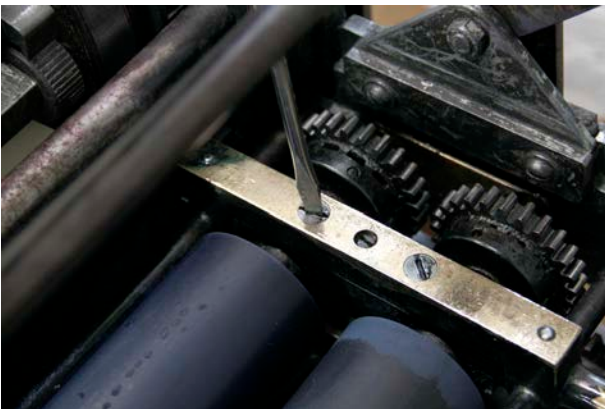
The roller gauge should gently slip underneath the rollers with a small amount of resistance. It should feel equal on all rollers.



To adjust, remove the oscillating roller and place at head of press. Keep the form rollers down for constant checking.



Three bolts attach to the roller frame on either end. The middle one is a set screw; the others adjust the roller height.



Loosen the set screws first, then adjust the rollers, using fractional turns. Remember: LEFT=LOWER, RIGHT=RAISE.



Check frequently with the roller gauge until set. Don't forget to re-tighten the set screws when done, or the rollers will shift.



Always store flammable or combustible fluids and materials in the Flammables Cabinet. This includes ink.



Keep the rags in the metal disposal cans. Note proper disposal of each kind of rag.



Use gloves whenever you use solvent. Also note the magnifying visor with a box of interchangeable lenses – great for working with small adjustments.



Use the fan in exhaust for solvent fumes. In the winter, only open the fan window and let the fan draw air from the building. Otherwise, the studio will get very cold.



Eye wash is available for any emergency. Don't question or hesitate, just use. Open and squirt. Use several if needed.

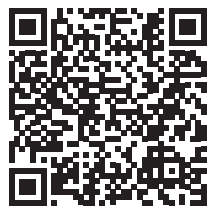


For any questions on any chemical used, consult the MSDS folder. Also, note the first aid kit above it. The eye wash lives here too.

# REFLEX LETTERPRESS



Sharpies will dissolve in Type Wash. Feel free to mark on the pressbed and Boxcar base. Also, if the Handy Lockup Bar gets stuck, use the rubber mallet, not the hammer.



Helpful video on how to use the window!

The window must be open to use the fan. Use intake for cooling, exhaust for fumes. Close the window before leaving the studio.



The larger fonts of wood type are in Tupperwares under the composing table.

## Miscellaneous Useful Information



Recycling and trash receptacles. Notice the recycling symbol on the blue can. Recycle if possible. If it's gross, use the trash.



Your studio entertainment center. Radio, CD player, amplifier. Bluetooth and headphone jack available. Enjoy the jazz.



Printing blocks and cuts are in plastic caddies underneath the composing table. There are a variety of images and sizes.



Ink in the Flammables Cabinet is organized by type. Please preserve this organization!



For the large 1kg vacu-seal cans, use the big screwdriver on the tool wall, and twist, don't pry the top off.



Keep the surface of the ink as smooth and flat as possible. Some inks may develop a skin over time; you may need to remove all or part of it.



Never dig into the ink. Always use the flat of the ink knife and smooth out a reasonable amount for use.



When done, give a couple of spritzes of Anti-Skin Spray before closing the can.



Wrap extra ink in plastic wrap for storage. Mark it with name, color and date. Inks will usually last a month this way, but some may last longer.