

## GENERAL INSTRUCTIONS

**Matrices:** Before running matrices, be sure that all parts with which they come in contact have been thoroughly cleaned of oil and dirt. To run 18 point matrices in 90-channel magazine, remove I-336, matrix channel guard strip, from the top.

**Metal:** This machine has been tested with new Linotype metal. Since the slug delivered cannot be any better than the metal from which it is cast, we strongly recommend the service offered by metal companies of making periodic analyses of sample slugs.

To obtain the best results, a metal pig feeder should be used. It is the sure method of maintaining the proper and constant metal level necessary for casting good slugs.

Metal temperature should be checked occasionally with a glass thermometer (X-1480). When considering metal temperature, it should be understood that many factors are involved. In certain circumstances, best results can be obtained when maintaining the temperature as low as 520 degrees. The best working temperature can be determined only by local conditions, such as the type of work produced, the speed of casting, the use of a cooling system, etc. We have adopted a factory standard of 535 degrees for electric pots, 550 degrees for gas

pots, since these operating temperatures have been found to cover average conditions. The methods of readjustment to suit individual conditions are detailed elsewhere in these pages.

**Burrs or Imperfect Print from Linotype Slugs:** Negligence is the only cause of unclean or imperfect print from Linotype slugs and is due to one or more of four causes: (1) the failure to keep the spacebands clean; (2) setting loose lines; (3) overheated metal; (4) failure to remove damaged matrices. If the metal is allowed to accumulate on the spacebands it will crush in the side walls of the matrices and ruin them, thus causing burrs to appear in the print. Spacebands should be removed from the machine at least once every eight hours, and any metal adhering to the slide at the casting point scraped off. Use for this purpose a piece of brass rule or other metal not as hard as the spaceband. Rub the spacebands on a flat board on which has been sprinkled Dixon's graphite, X-57, which can be purchased from our agencies. Be sure that operators set their lines full. Loose lines ruin matrices. Take a matrix proof frequently and remove defective matrices or they will ruin others. Most important of all, keep the machine clean.

## Get The Best From Your Linotype

Linotypes, like other machines, require care and attention for their best operation. Maintenance work is least arduous and most effective when it is done systematically. Have a maintenance schedule and adhere to it faithfully. Include such items as:

### DAILY—

1. Brush metal chips from machine.
2. Clean plunger, well and well feed holes.
3. Wipe off pot mouthpiece.
4. Wipe off molds and vise jaws.
5. Clean spacebands.
6. Cast slug and check type high and point size.

### WEEKLY—

1. Clean and polish molds and liners.
2. Clean out mouthpiece holes and vents.
3. Clean metal drippings from under pot throat.
4. Check lock-up.
5. Oil mold disk slide and grease support screw.
6. Check position of mold wipers; apply graphite on felts if necessary.
7. Clean and oil vise assembly; check knife wiper.
8. Brush dirt from keyboard.
9. Graphite assembler and delivery slides.
10. Clean driving pulley and clutch leathers.
11. Clean dust from motor.
12. Wipe off cams and tighten screws.
13. Clean and oil distributor box.
14. Clean distributor screws; oil bearings.

### MONTHLY—

1. Clean the lugs of one or two fonts of matrices (determined by number and use of fonts).
2. Clean magazines containing these fonts.
3. Brush escapements thoroughly.
4. Examine condition of assembler star.
5. Examine assembling elevator buffers.
6. Examine assembler slide brake shoes.
7. Examine keyboard rubber rolls.
8. Examine galley and slug adjuster buffers.
9. Examine ejector blades.
10. Examine distributor box rails, bar point and matrix lift.
11. Clean and oil keyboard.
12. Check operation of vise automatic.
13. Check matrix transfer for proper adjustment.
14. Oil mold turning cam shoe and vise jaw wedge felts.
15. Oil all rollers.
16. Oil all shafts.
17. Fill all grease cups.
18. Clean gas burners.

**NOTE:** For the location of lubricating points and recommended lubricants, consult the booklet "Linotype Lubrication." For machine adjustments and mechanical descriptions of functions, see the official Linotype manual "Linotype Machine Principles," a 474-page completely indexed book which can be had from any Linotype agency (X-1752).