REFERENCE BOOK FOR GRAPHOTYPE CLASS 6300

DEPARTMENT OF THE ARMY Washington 25, D. C., 11 February 1952

TM 10-626D is published for the information and guidance of all concerned.

[AG 461.01 (23 Nov. 51)]

By Order of the Secretary of the Army:

OFFICIAL:

J. LAWTON COLLINS

WM. E. BERGIN

Chief of Staff, United States Army

Major General, USA
The Adjutant General

Distribution:

Active Army:

Tech Svc (1); AFF (5); AA Comd (5); OS Maj Comd (25); Base Comd (5); MDW (5); Log Comd (5); A (20); FC (2); Sch (2) except 10 (30); Gen Dep (10); Dep 10 (10); Ars (1); Mil Dist (3).

NG: None ORC: None

For explanation of distribution formula, see SR 310-90-1.

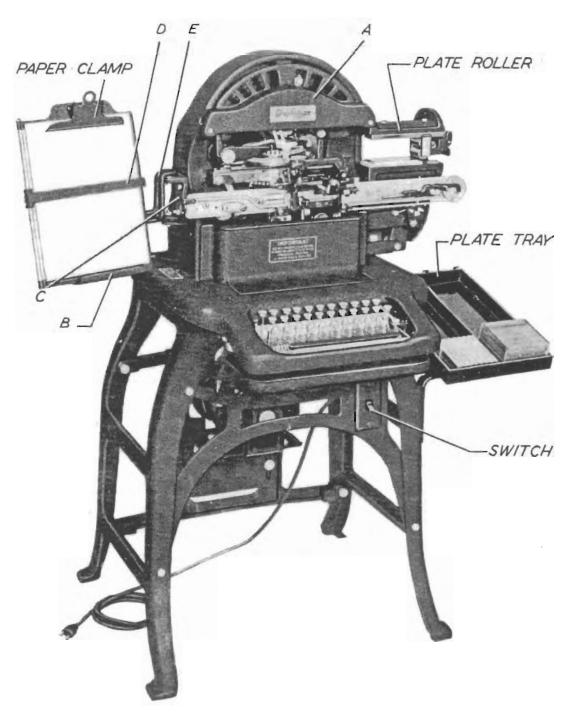


FIGURE 1
Class 6340 Graphotype

CAUTION — Before removing or installing the carriage equipped with the embossing indicator, remove the Guard, A, shown in Figure 1.

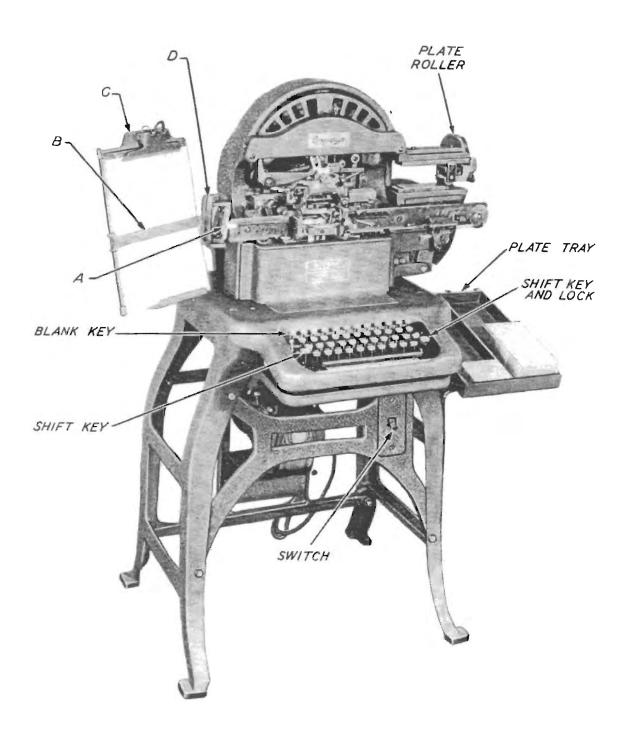


FIGURE 2 Class 6380 Graphotype

INTRODUCTORY

Class 6340 Graphotype machines will emboss upper case (capital) letters only. Class 6380 Graphotype machines will emboss both upper case (capital) letters and lower case (small) letters. However, due to the similarity of the two machines in the Class 6340 series and Class 6380 series, the instructions given in this book apply to both series of machines. In instances where the instructions concern Graphotype machines in one series and not the other, such paragraphs will be clearly indicated.

Setting Up

When removing your Graphotype machine from the shipping crate, do not dismantle any parts or disturb any adjustments. Never grasp the flywheel to move the machine. To do so may result in distortion of the flywheel.

After unpacking the machine, remove the rust preventative oil that was applied to some parts of the machine. Use a soft, non-lint cloth moistened with a non-inflammable solvent cleaner.

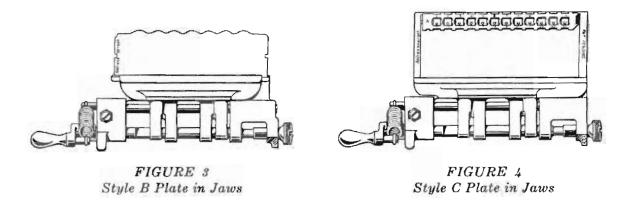
Attach the copy holder, C (figure 2) by inserting the pins of the arm, D, into the lugs at the rear of the copy holder. Then attach the plate tray by fastening the brackets for the tray to the right front leg of the Graphotype machine as shown in figures 1 and 2.

IMPORTANT: Before starting to operate the Graphotype machine, be sure it is properly lubricated. Refer to instructions in this book under the heading "LUBRICATION." Make sure that the electric current and voltage correspond with the specifications on the mame plate of the motor. Then connect the service cord to a light or wall socket.

Operation

Insert the information from which the plates are to be embossed, beneath the spring clip at the top of the copy holder. The line indicator, B (figure 2) is adjustable and may be slid up or down to designate each line of information that is being embossed onto the Addressograph plate.

INSERTING PLATE INTO JAWS: The carriage and plate jaws should both be in neutral position before attempting to insert a plate into the plate jaws. To restore the carriage to neutral position, place the index finger of the left hand under the hook, D (figure 7). Then, with the thumb, press down on the lever, E (figure 7) and move the carriage to the right as far as it will go. To restore the plate jaws to neutral position, raise the knurled



knob, B (figure 7) until the jaws move forward as far as possible. Next, pull forward on the handle, F (figure 7), thus raising the plate jaws to the "up" position. With the left hand press down on the handle, F, and with the right hand insert a plate into the plate jaws. Then release the handle, F.

IMPORTANT: Be sure the plate is inserted between the jaws as far as it will go, and that the plate is moved as far to the left as possible so that it rests snugly against the plate stop, G (figure 7).

If style "B" Serpentine plates are being embossed, insert plate into the plate jaws with the trade-mark "Addressograph" facing the operator and toward the left, as shown in figure 3. Locating the plate in this manner will facilitate the insertion of the embossed plate into the plate frame.

If styles "A" or "C" plates are being embossed, insert into the jaws with the tab sockets upwards, and the numbered side of the sockets facing the operator as shown in figure 4.

If style "EE" plates are being embossed, insert into the jaws with the curved edge upward, and the plate rails toward the Graphotype machine. With a plate inserted in the jaws, raise the handle, F (figure 7), and swing it rearward until the plate rests on the plate support. Place the index finger of the left hand behind the hook, D (figure 7) and, with the thumb, press down

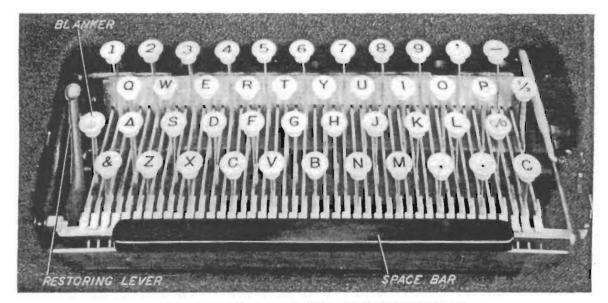


FIGURE 5. Keyboard of Class 6340 Graphotype

on the lever, E (figure 7). Then move the carriage to the left against the carriage stop located on the carriage rail. The plate will then be in position to start embossing.

NOTE: When moving the carriage left or right, always depress the lever E, to disengage the escapement mechanism.

The arrangement of characters and the space bar on the keyboard for both the 6380 and 6340 series Graphotype machines is similar to that of a standard typewriter. (See figures 5 and 6.) As each key is depressed, the type is embossed and the carriage moves to the right for correct spacing between the characters. Should a character fail to emboss and a key remain

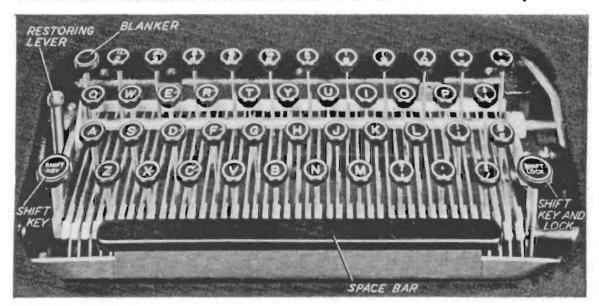


FIGURE 6. Keyboard of Class 6380 Graphotype

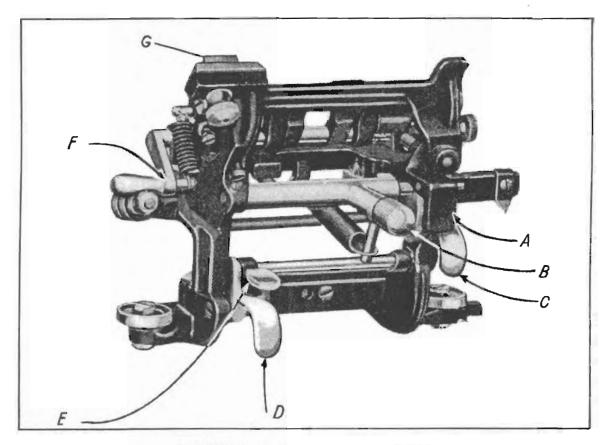


FIGURE 7. Detailed View of Carriage

in down position, it can be restored to neutral (upper) position by pressing forward on the restoring lever shown in figures 5 and 6.

When depressing the keys of the Graphotype, the finger must follow the key downward to the limit of its stroke, otherwise the machine will not function properly. To become accustomed to the correct method of manipulating the keys, the operator should practice by depressing the keys slowly, then gradually increase the speed.

BLANKER KEY. The blanker key is used to provide spaces between words or figures when re-embossing over type already embossed, and for blanking down remaining characters of a line when a new line is shorter than a line previously embossed.

The blanker is not intended for blanking down entire plates for re-embossing.

On Class 6340 series Graphotype machines, the blanker key is located at the left end of the third row of keys from the top, as shown in figure 5. On Class 6380 series Graphotype machines, the blanker key is located at the left end of the top row of keys as shown in figure 6, and can be operated only when either one of the two "shift" keys are held down.

SPACING: To space between characters, depress the space bar (see figures 5 and 6). The carriage will then move one space to the right each time the space bar is depressed. To space between the lines of type, place the index finger of the right hand behind the hook, C, (figure 7) and with the thumb, press the lever, A, (figure 7) rearward one notch for each space desired between the lines. If your Graphotype is arranged for certain styles of plates requiring two different line spacings, change the spacing by raising the knurled knob, B, (figure 7) and pull it forward slightly. Then shift it to the right or left, depending on the spacing required.

BACK SPACER: To space the carriage back one space to the left, press to the left on the back-spacing lever, A (figure 2).

TO EMBOSS (Class 6340 Series Only). Only upper case (capital letters) can be embossed on a Graphotype Class 6340, as models in this series are not equipped with "shift" keys. Embossing is accomplished by merely depressing the keys for the desired characters.

TO EMBOSS (Class 6380 Series Only). To emboss an upper case (capital letter) depress either one of the two "shift" keys (figure 6) and hold it down while embossing the desired character. If it is desired to emboss all upper case (capital letters) on Class 6380 series Graphotype machines, depress the key marked "Shift Lock" (figure 6) located to the right of the keyboard, and tilt the top of the key to the rear—away from operator—thus locking it in the "down" position.

TO REMOVE EMBOSSED PLATE. After completing the embossing on a plate, move the carriage to the right, then raise the knurled knob, B, (figure 7) and pull up and forward on the handle, F (figure 7). Open the jaws of the carriage by pressing down on the handle, F, and remove the plate.

IMPORTANT: Do not operate the Graphotype machine without an Addressograph metal plate in embossing position. To do so would result in damage and possible breakage of dies and punches. Without an Addressograph plate between the die and punch, when embossing, the punch is permitted to enter too deeply into the face of the die, causing the die to spread, and the character on the punch to be malformed.

CAUTION: Your Graphotype machine has been designed and adjusted for the embossing of certified Addressograph metal plates. To emboss other metal plates may necessitate compensating adjustments of the machine. Paper or other kinds of material should never be embossed on a Graphotype machine. To do so may result in excessive breakage of dies and punches or cause the faces of the dies to become filled. When again embossing "Addressograph" metal plates, it will result in the characters being imperfectly formed.

Embossing Indicator

The embossing indicator illustrated in figure 8 is available only for wide-plate carriages, and is furnished only if specified when the machine is ordered.

The embossing indicator is used especially when a number of plates are to be embossed with data spaced at various locations on the plates and it is essential that this data be located in the same positions on all plates, so that the impressions from the plates will accurately register in alignment on printed forms.

With the copy from which a plate is to be embossed, inserted into the copy holder (figure 8), the carriage should be brought to the position at which the pointer (figure 8) will point to the first character of the copy. The carriage is then in position to emboss the first character on the plate in the identical location as on the copy.

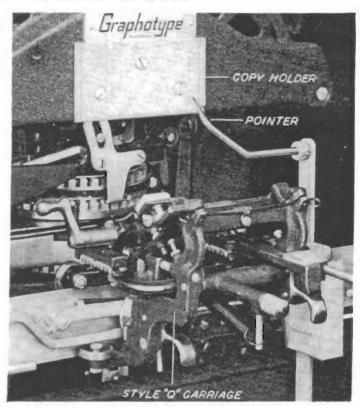


FIGURE 8. Carriage with Embossing Indicator

The embossing indicator spaces horizontally with the carriage and vertically, as the plate is brought into position for embossing each succeeding line. Therefore, by assuring alignment of the pointer with each character of the copy when making each embossure on the plate, the spacing of the embossed characters on the plate will be identical to the spacing on the copy.

Plate Roller

The plate roller is a separate attachment located at the right side of the Graphotype machine as shown in figures 1 and 2. Its purpose is to roll a plate so that all embossed characters will be exactly the same height.

After a plate has been completely embossed, push the thumb lever, A (figure 7) as far back as it will go. Then grasp the hook, D, lightly with the left hand, and with the index finger of the right hand, press the lever, D (figure 9) to the left. Then push the carriage all the way to the right, and the plate roller will automatically roll the embossed type on the plate to a uniform type height.

After the plate has been rolled, move the carriage to the left where it will locate and be held against the stop, E (figure 9). Return the carriage jaws to neutral position by raising the knurled knob, B (figure 7). Then pull up and forward on the handle, F (figure 7); open the jaws of the carriage by pressing down on the handle, F (figure 7), and remove the plate.

PLATE ROLLER (hand-operated) FOR DUPLIGRAPH PLATES. The hand operated plate roller is also a separate attachment. It is attached to,

and located immediately above the regular plate roller, as shown in figure 9. Its purpose is to roll letter plates (and other plates that are longer than regular plates) so that all embossed characters will be exactly the same in height. After a plate has been completely embossed, remove the top and bottom scored edges from the plate by inserting the edges into slot "B" (figure 9) and tip the plate up and down until the edges are completely broken off. Then turn the hand crank, C (figure 9) clockwise until the plate

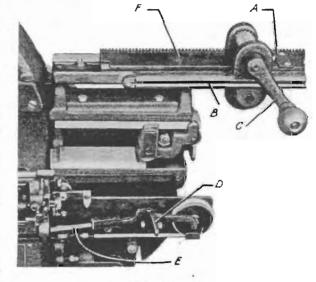


FIGURE 9
View of Plate Roller for Dupligraph Plates

anvil, F (figure 9) is in neutral, or the extreme left position. Next, place the plate into position on the anvil block (top line of embossing to rear) and insert right end of plate under clip, A (figure 9). Turn the hand crank, C counterclockwise until the plate anvil is at the extreme right position. Then turn the hand crank clockwise until the plate anvil is returned to neutral (left) position, and remove the plate.

General Maintenance

REPLACING DIES AND PUNCHES: Dies and punches are simple to replace—no mechanical skill being required. The dies are located in the upper section of the die head. The punches are located in the lower section. Always turn off the motor before making die or punch replacement.

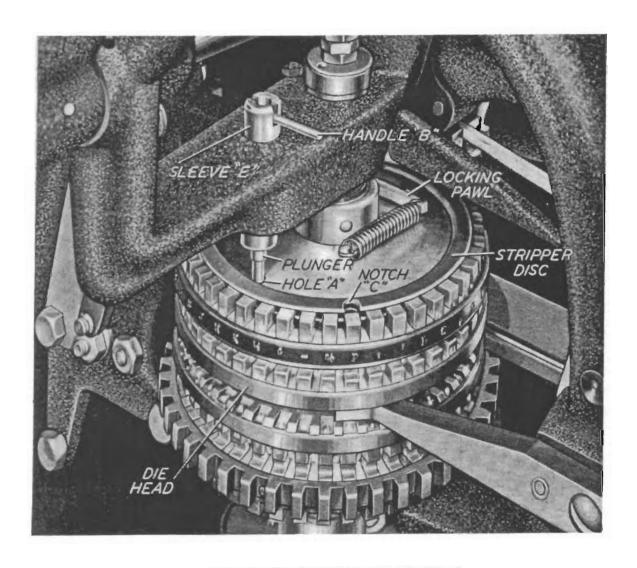


FIGURE 10. View of Class 6340 Die Head

TO REPLACE DIE (Class 6340 Series Only).

CAUTION: When making die or punch replacement on a Graphotype Class 6340, check carefully during each step in the procedure to see that the notches in the dies and punches (which face toward the center of the die head) are all in alignment. In handling the die head, a die or punch may accidentally be moved up or down, beyond its normal position. When turning the die head, such die or punch will strike the inner edge of the stripper disc and may cause considerable damage.

- 1. Facing the rear of the machine turn the die head by hand until the hole "A" (figure 10) in the stripper disc is directly beneath the bottom end of the plunger, as shown in figure 10.
- 2. Lower the plunger by turning the handle "B" until it locates in the *deep* slot in the sleeve "E", as shown in figure 10. This will permit the lower end of the plunger to drop into the hole "A" in the stripper disc.
- 3. Turn the die head clockwise until the die to be replaced is located directly beneath the notch "C" (figure 10) in the stripper disc. Then remove the die by pushing it upward through the notch "C" in the stripper disc. NOTE: With the plunger located in the hole in the stripper disc, more effort will be required when first starting to turn the die head. However, after it is disengaged from its locking pawl, the die head will then turn with comparative ease.
- 4. Insert the new die through the notch "C" with the die face down and the slot near the upper end of the die facing the center of the die head. Thrust the die downward until the top of the die is approximately even with the tops of the other dies in the die head.
- 5. Turn the die head clockwise until there is a distinct "click" signifying that the locking pawl has become engaged.
- 6. Raise the plunger and turn the handle "B" until it locates in the shallow slot in the sleeve, "E." This will retain the plunger in a raised position so that it will not engage the hole "A" in the stripper disc. Always be sure that the plunger is located in the raised position before turning on the motor.

TO REPLACE PUNCH. (Class 6340 Series Only).

1. Facing the rear of the machine, turn the lower plunger to the right until the handle locates in the deep slot of the sleeve. This will cause the

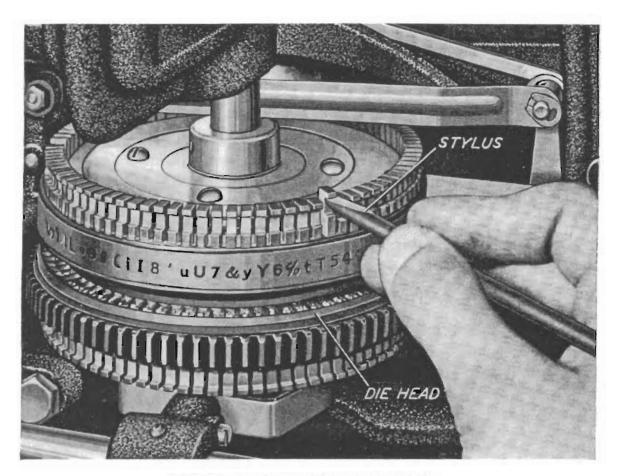


FIGURE 11. View of Class 6380 Die Head

plunger to rise until it contacts the lower stripper disc where it will be held by spring tension.

- 2. Turn the die head clockwise until there is a distinct "click" signifying that the lower plunger has entered the hole in the lower stripper disc.
- 3. Turn the die head clockwise until the punch to be replaced is located directly above the notch in the lower stripper disc. Then remove the punch by pushing it downward through the notch in the disc. NOTE: With the lower plunger located in the hole in the lower stripper disc, more effort will be required when first starting to turn the die head. However, after it is disengaged from its locking pawl, the die head will turn with comparative ease.
- 4. Insert the new punch through the notch in the lower stripper disc with the face of the punch up and the slot near the lower end of the die head.
- Turn the die head clockwise by hand until there is a distinct "click" signifying that the locking pawl has become engaged

6. Press down on the handle of the lower plunger and turn the handle until it locates in the shallow slot in the lower sleeve. This will retain the plunger so that it will not engage the hole in the lower stripper disc. Always be sure that the lower plunger is located in the shallow slot of the sleeve before turning on the motor.

TO REPLACE DIE (Class 6380 Series Only).

1. Facing the rear of the machine, turn the die head by hand until the die to be replaced is toward the rear, in which position it is readily accessible.

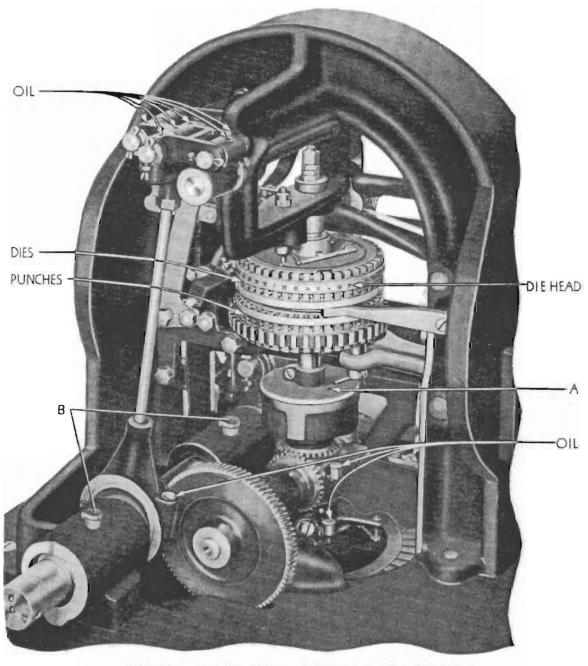


FIGURE 12. Rear View of Class 6340 Graphotype

Then insert a stylus (pointed wooden stick) provided with your Graphotype machine, in the slot at the top of the die and lift upward, as shown in figure 11, thus releasing the die from the die head.

2. Insert the new die into the slot in the die head, with the die face down, and the large slot near the upper end of the die facing toward the outside edge of the die head.

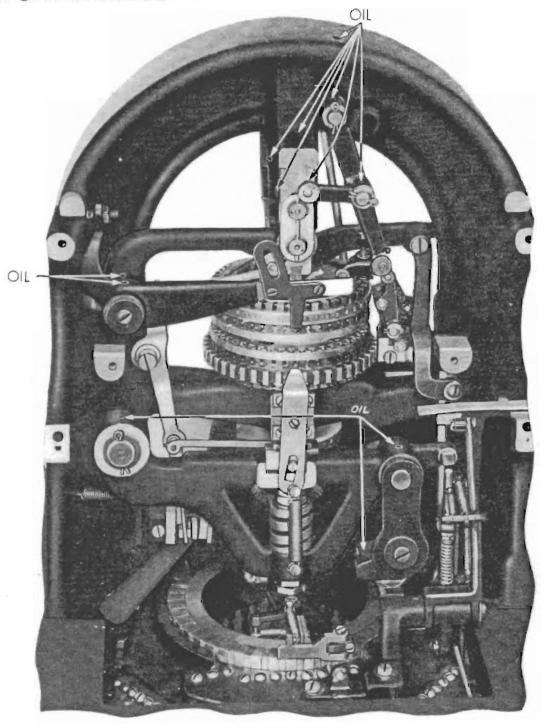


FIGURE 13. Front View of Class 6340 Graphotype

TO REPLACE PUNCH (Class 6380 Series Only).

- 1. Facing the rear of the machine, turn the die head by hand until the punch to be replaced is toward the rear, in which position it is readily accessible. Insert the stylus (pointed wooden stick) provided with your Graphotype machine into the large slot near the lower end of the punch, and press downward, thus releasing the punch.
- 2. Insert the new punch into the slot with the face of the punch up, and the large slot near the lower end of the punch facing toward the outside edge of the die head.

Lubrication

Proper lubrication of all parts of your Graphotype machine which are subject to wear is extremely important. The frequency of oiling is determined by the conditions under which the machine is operated. For example, if your Graphotype machine is operated daily and continuously, the bearings should be lubricated once a week unless otherwise indicated in the following instructions.

NOTE: Never attempt to lubricate when the machine is in operation. ALWAYS TURN OFF THE SWITCH. Do not apply oil in the slots in which the dies and punches operate, nor to the dies and punches. If oil lodges in the face of a die or punch, the character will not emboss to a full and distinct formation, and will result in indistinct impressions from the plate. Apply a few drops of Duro-Vis oil daily to the points of lubrication for the bearings as indicated in figures 12 and 13 for the Graphotype Class 6340, or figures 14 and 15 for Graphotype Class 6380.

There are two different styles of main shaft bearings for Class 6300 Graphotype machines. Each style of bearing employs a different system of lubrication. On the later models, an oil cup is provided at the top of each bearing. These oil cups are indicated in figure 12 (key letter B) and in figure 14 (key letter B). Fill these oil cups (one on each bearing) with Duro-Vis oil once a week.

On the previous models, the bearings are constantly lubricated with oil from two oil wells. Check these oil wells once a week to see that the Duro-Vis oil is approximately at a level with the bottom of the bronze bearings. DO NOT FILL BEYOND THIS POINT.

The clutch should be kept lubricated by applying about twenty-five drops of Duro-Vis Oil through the oil hole "A" (figures 12 and 14) in the clutch housing cover about once each month. The motor is equipped with the latest type packed bearings. Apply about twelve drops of Duro-Vis oil about every six months in the oil holes for the two bearings of the motor.

DO NOT OVER OIL. Should excess oil appear on the outside of the various parts after oiling, it should be wiped off.

Duro-Vis oil is especially prepared and has proved to be the most satisfactory lubricant for Addressograph Products. Duro-Vis oil is available through your local Addressograph Sales and Service Office. An all-purpose oil is not satisfactory and may fail to lubricate properly.

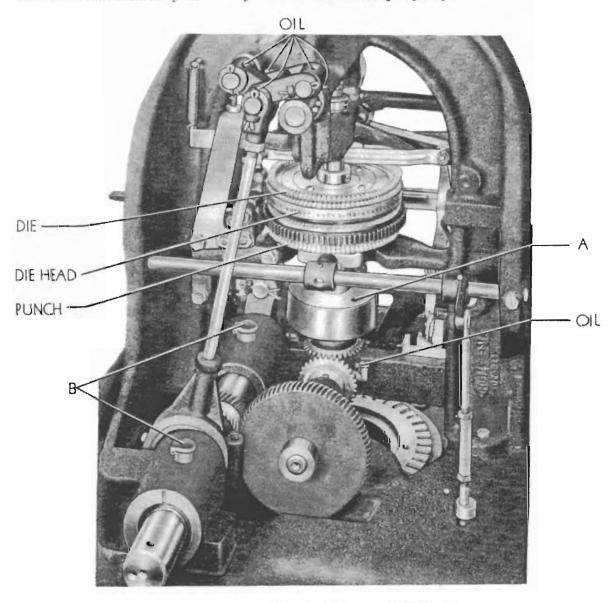


FIGURE 14. Rear View of Class 6380 Graphotype

By observing the following suggestions, the operator will acquire skill in operating the Graphotype machine, which will result in greater speed and accuracy.

It is important that the operator be comfortably seated, directly in front of the machine. Use the left hand to open the carriage jaws while inserting a blank plate with the right hand. While handling the above operations, the operator can read the information that is to be embossed.

Practice spacing the name and address or other information uniformly on the plate, as it is being embossed. For example, in embossing plates with average address information, the first line should be started in the first top space with the carriage at the extreme left position. The operator will quickly learn to determine where the second and the third lines should begin. This is important in order to produce a plate that will present a neat appearance when it is used with the Addressograph machine for imprinting. Following are examples which illustrate the proper way to space lines when embossing names and addresses:

MR. GEORGE WRIGHT,
SWIFT FARM STATION,
YPSILANTI, MICH.

Mr. John E. Wilson c/o John I. Howard 160 E. Jackon St. Milwaukee, Wis.

The operator should frequently emboss all Graphotype characters on a plate and inspect carefully to see that each character is properly formed.

To avoid the possibility of vibration, your Graphotype machine should be set so that all four legs bear evenly and solidly on the floor.

Do not operate your Graphotype machine with vacant die or punch slots in the die head. If the machine is arranged so that certain characters are not wanted in the die head, be sure that such die and punch positions are occupied by dummy dies and punches. NOTE: Dummy dies and punches may be had by grinding off the faces of discarded dies and punches of the same style type.

To secure the most satisfactory operating results from your Graphotype machine, it is recommended that a standard operating speed be maintained of from 440 revolutions per minute to 460 revolutions per minute.

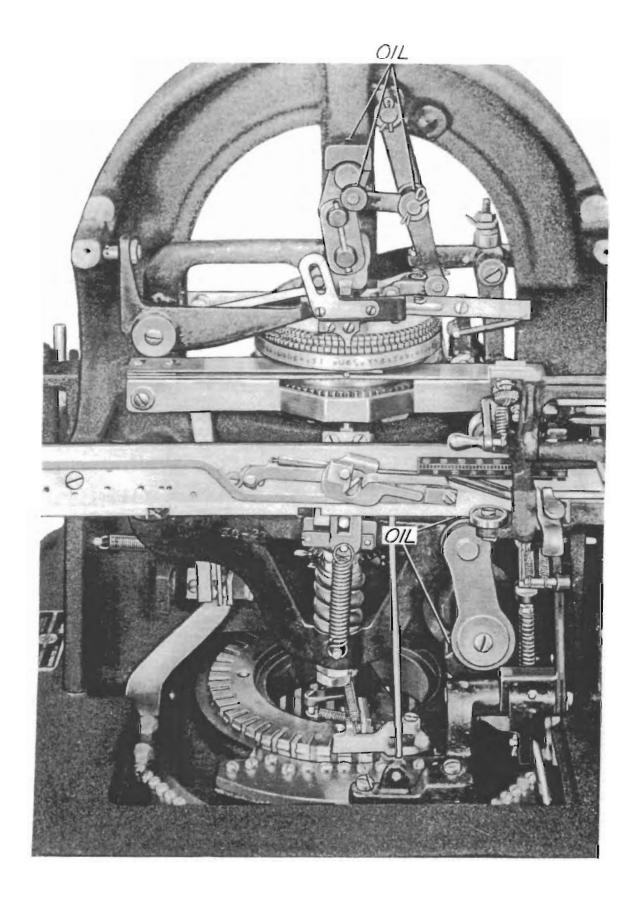


FIGURE 15. Front View of Class 6380 Graphotype

INDEX

P	age
SETTING UP	1
OPERATION	1
Inserting Plate Into Jaws	2
Blanker Key	4
Spacing	5
Back Spacer	5
To Emboss (Class 6340)	5
To Emboss (Class 6380)	5
To Remove Embossed Plate	5
Embossing Indicator	6
PLATE ROLLER	7
Plate Roller (for Dupligraph Plates)	7
MAINTENANCE	8
Dies—To Replace (Class 6340)	9
Punches—To Replace (Class 6340)	9
Dies—To Replace (Class 6380)	11
Punches—To Replace (Class 6380)	13
Lubrication	13
OPERATING SUGGESTIONS	15

PROTECTING YOUR ADDRESSOGRAPH INVESTMENT

THE profitable application of Addressograph Methods is inseparably linked with the use of Certified Supplies. These supplies in combination with the machine equipment constitute the Method.

The Addressograph Organization—pioneers in the office equipment field—not only conceived, developed and made Addressograph available to business—they developed the supplies which are an inherent part of the method and which are essential to insure low operating costs and trouble-free operation.

Each Certified Addressograph Supply item has been designed to give greater convenience, greater service and the greatest earning power possible from its use.

Certified Addressograph Supplies and Accessories are made only by the Addressograph-Multigraph Corporation. The standards of quality and performance have been established by Addressograph, based on an engineering knowledge and scientific application that only the manufacturer of Addressograph can possess.

No other organization has or can have the real interest, experience, knowledge and facilities to create and maintain the essential high standards for Addressograph supplies.

In the manufacture of Certified Supplies only the best materials are used—materials which must meet the most rigid specifications. In every step of manufacture exacting inspection tests are made. Finally, the finished products are required to pass exhaustive performance tests under every conceivable operating condition. This vigilance never ceases.

Certified Addressograph Supplies, because of their uniformly high quality, protect you against losses of time and money by providing efficient machine operation, uninterrupted service and lowest maintenance costs.

Only your local Addressograph Sales and Service Office carries stocks of these Certified Supplies, machine Parts and Accessories so as to facilitate the protection of your Addressograph investment.