DIRECTIONS *for* CARE *and* CLEANING

The Style 2E Non-Adjustable Monotype Mold

FOR CASTING IN JUSTIFIED LINES (WITH EITHER HIGH OR LOW QUADS AND SPACES) OR AS SORTS, ANY GIVEN POINT SIZE FROM 5 TO 12 POINT, INCLUSIVE

Superseded in 1934 by
IMPROVED STYLE 3E MOLD

TRADE MARK
MONOTYPE
Reg. U. S. Pat. Off.

LANSTON MONOTYPE
MACHINE COMPANY
PHILA. 3, PA., U.S.A.

8062-12-46-500

Directions *for* Care *and* Cleaning
THE STYLE 2E NON-ADJUSTABLE MOLD

CAUTIONS

CAUTION: This Style 2E MOLD has no adjustments except for the FRONT-ABUTMENT SHOE and the GATE PUSHER, and even those adjustments are not to be changed unless required as described hereafter.

Caution: The only removable parts are the CROSS BLOCK and its SHOE, the MOLD BLADE Unit (consisting of top and bottom BLADES and MOLD-BLADE CARRIER) and the GUIDE, SHOES, and STOP for the MOLD BLADE Unit. The GATE PUSHER may be removed from the CROSS BLOCK and the parts of the MOLD BLADE Unit may be separated for cleaning, but no other parts of this MOLD may be loosened, removed, or altered in position in any way.

Caution: The MOLD BLADES, the faces of the CROSS BLOCK and TYPE BLOCKS, and the GATE PUSHER and its slot in the CROSS BLOCK should be examined occasionally to be sure they are clean and in good condition and that they are getting proper oiling. Other than this, nothing should be done to the MOLD unless parts have worked loose and require readjustment or have collected type metal and require cleaning in accordance with directions given on the following pages.

Caution: MOLDS eleven point and smaller will open setways to .166″, twelve-point MOLDS to .174″; do not attempt to cast a body wider than these limits for to do so will strain or break the MOLD BLADE.

Caution: A new or repaired MOLD requires special attention until the CROSS BLOCK has found its true bearing against the TYPE BLOCKS while running under actual working conditions. After the MOLD has run an hour, test the setting of the CROSS BLOCK. If loose, readjust it. Repeat this test after the MOLD has run half a day and also a full day. If this test be not made, the MOLD may become leaded, causing wear of the CROSS BLOCK and TYPE BLOCKS or forcing them out of alignment.

Caution: Water passages must be kept clean. Whenever the MOLD is taken off the machine, force all water out by means of the air blast and oil the water passages thoroughly by blowing oil through them.

Special Caution: When changing from another style of MOLD to a Style 2E MOLD be sure the OPERATING LEVER 29H is moved to the rear into the rear notch in the PISTON LEVER 18H; that is, the notch which has two little tits over it. If the PISTON LEVER 18H is the old style having no notches, it will be necessary to readjust the OPERATING

LEVER as described on Page 161 of the "Casting Machine Adjustments" book.

DON'TS

Don't loosen the Screws for either Type Block or attempt to change the position of the TYPE BLOCKS. To do so would make it necessary to return the mold to our factory for resetting the blocks.

Don't break the adjustment of the Front-abutment Shoe unless necessary.

Don't loosen the Screws for either Gate Block or attempt to change the position of the GATE BLOCKS unless burring on the jet or leading on the GATE PUSHER indicates definite need for readjustment of the right GATE BLOCK.

Don't attempt to fit a Gate Pusher: This can be done only in our factory and we must have the old GATE PUSHER, or the parts of it if broken, for measurement.

Don't take the Mold Blades out unless necessary for cleaning or examination; as long as the MOLDS produce good type the BLADES usually do not need cleaning.

Don't fail to have bottom surfaces of lower Mold Blade and Carrier flush with each other when assembling them before inserting them in the MOLD.

Don't forget to hold the lower Mold Blade down firmly and perfectly flat against its lower bearing when taking the BLADE out and putting it in.

Don't attempt to force the lower Mold Blade over the NICK PIN nor lift the rear end of the BLADE when passing it between the TYPE BLOCKS.

Don't forget that a new or newly repaired Mold needs plenty of oil for the first few hours of running. After that, our MOLD OILER, regulated to give one drop every two or three minutes, will give ample oiling except for the CROSS-BLOCK COUPLING, which must be oiled by hand.

Don't tap the rear end of the Mold Blades when assembling them.

Don't attempt to cast low quads or spaces without a Matrix Case in place; it will injure the top BLADE.

Don't run metal too hot: Not over 725°, except for extra hard metal which must be run with special care.

Don't neglect water regulation: MOLDS are built to use as little water as possible; use just enough to avoid blistered bodies and bleeding feet. The water from the MOLD should be 130° in temperature—so hot that the finger cannot be held in the stream of water from the MOLD for any length of time.

Don't start casting until ready: When putting on a MOLD be sure that the MOLD and its seat on the machine are clean. Carefully tighten the SCREWS and CLAMPS holding the MOLD in position. See that the MOLD is oiled, turn on the water, turn the machine over once by hand to make sure everything is working properly—then start machine, not before.

Don't lap any part of the Mold nor try to alter its shape: These parts are made by experienced workmen trained for this special work.

Don't neglect the bridge setting: This should be adjusted by the CARRYING-FRAME ADJUSTING GAGE which makes it correct for all MOLDS and MATRICES. Test this setting when changing a MOLD; be sure no adjustments have worked loose and that the MATRICES bear lightly on the MOLD without hammering it.

Don't fail to check the Draw Rod adjustment after each lining up of MATRICES—it will save MOLD, MATRICES, and CENTERING PIN.

Don't fail to watch the height-to-paper: When the MATRIX SEATS of this MOLD wear so that the high quad is .886" high the MOLD should be restored to height.

Don't try to repair Molds: No operator, no matter how skillful, can repair a damaged MOLD, for this requires not only specially trained mechanics but also special tools and testing gages. When returning a MOLD for repairs always enclose with it samples of the type it produces and a memorandum giving details of the defects.

TAKING APART

Re-read the Cautions and Don'ts

(See the "direction arrow" on each figure.)

Have the hands clean and free from particles of metal. Prepare a suitable place for taking the MOLD apart. Spread down a clean sheet of paper on which to place the parts as removed from the MOLD in the following order:

Remove the CROSS BLOCK (**A**) toward the right and take its GATE PUSHER out of it; FRONT-ABUTMENT SHOE (**B**); MOLD-BLADE GUIDE (**C**); SHOE (**D**) for top MOLD BLADE (**E**); SHOE (**G**) for bottom MOLD BLADE (**H**); MOLD-BLADE STOP (**J**); LATCH LEVER (**K**), by pushing up on its lower end to disengage it from its PIN; MOLD BLADES (**E**) and (**H**) and MOLD-BLADE CARRIER (**L**) to the rear keeping them pressed firmly against their bottom bearing while sliding them to rear to prevent injury to NICK PIN; top MOLD BLADE (**E**) from MOLD-BLADE CARRIER (**L**) by lifting top BLADE straight up; and bottom MOLD BLADE (**H**) from MOLD-BLADE CARRIER (**L**) as shown in Fig. 2, by pushing forward on left end of LATCH (**M**) to release BLADE.

CLEANING

Clean carefully all the parts of the MOLD that have been taken off, being especially careful to remove all particles of metal from them. Also clean the slot in the CROSS BLOCK in which the GATE PUSHER operates and the opening in the MOLD in which the MOLD BLADES operate. If any particles of metal adhere to any of the parts or to sides or bottom of MOLD BLADE opening between TYPE BLOCKS, carefully scrape them off with a piece of brass rule newly cut.

Then push the bottom MOLD BLADE gently in from the rear while holding it firmly down against its bottom bear-

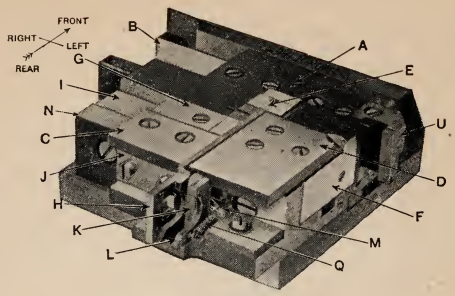


FIGURE 1.
MOLD assembled ready for use.

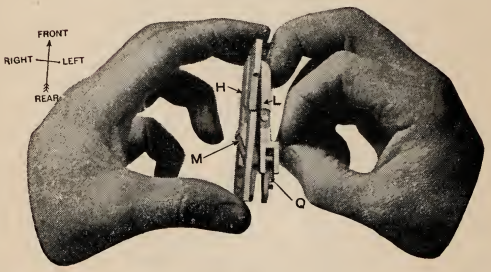


FIGURE 2.
Taking apart or assembling bottom BLADE and CARRIER.

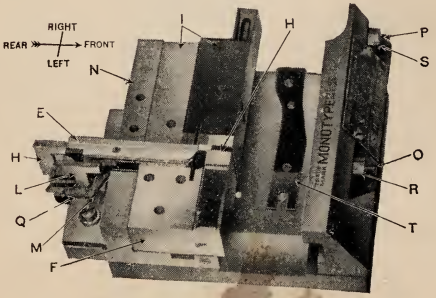


FIGURE 3.
Putting TOP BLADE into position.

ing to push out any loose particles of dirt or metal. CAUTION: Be very careful not to damage the corners on the casting end of the BLADE nor to raise the rear end of the BLADE or attempt to lift it out from the MOLD until it has been drawn back again for enough to clear the NICK PIN, otherwise the NICK PIN will be damaged. Do not try to force the MOLD BLADE over the NICK PIN for to do so will damage the NICK PIN and BLADE; the BLADE should work very freely when inserted in this manner, and if it binds there are particles of metal still adhering to the BLADE or to the sides or bottom of the opening between the TYPE BLOCKS.

ASSEMBLING

Be sure all parts are clean (re-read the preceding directions under the heading "Cleaning") and that the hands are clean and free from particles of metal.

Assemble the bottom MOLD BLADE (**H**) with the MOLD-BLADE CARRIER (**L**) as shown in Fig. 2. Note that the left end of the LATCH (**M**) is pressed forward just enough to slip the MOLD BLADE into position over the front end of the LATCH. Be sure to make the bottom surfaces of BLADE and CARRIER flush with each other.

Slide the MOLD BLADE (**H**) with its CARRIER (**L**) into the MOLD from the rear, keeping them firmly pressed against their lower bearing, and push them gently forward into operating position. CAUTION: When inserting the MOLD BLADE and CARRIER be careful not to damage the corners on the casting end of the MOLD BLADE and do not try to force the MOLD BLADE over the NICK PIN.

Put the top MOLD BLADE (**E**) in position on the MOLD-BLADE CARRIER (**L**). To do this pull the CARRIER (**L**) to the rear just far enough so that the top MOLD BLADE (**E**) can be positioned between the TYPE BLOCKS (**F**) and (**I**) as shown in Fig. 3. Then keeping the BLADE parallel with the TYPE BLOCKS and with its front end resting on the bottom BLADE slide the top BLADE forward until the slot in the top BLADE slips over the projection on the top of the CARRIER (**L**).

Make sure that the underside of the SHOE (**G**) for the bottom MOLD BLADE (**H**) is clean and position it so that it just touches the MOLD BLADE and then clamp it with its SCREW. Move the MOLD BLADE back and forth with the fingers. It should be a snug fit without any play but should not bind. If it binds there is dirt under bottom BLADE (**H**) or between the bottom BLADE and its SHOE (**G**). If there is up and down play in the BLADE, there is dirt between the SHOE (**G**) and its bearing on the right TYPE BLOCK (**I**).

Put the LATCH LEVER (**K**) in position as shown in Fig. 1, pressing forward the LATCH (**M**) to make sure that the LEVER drops into position over its PIN.

Make sure that the under side of the SHOE (**D**) for the top MOLD BLADE (**E**) is clean, position it so that it is squared up with, and just touches, the top BLADE and then clamp it on with its three SCREWS.

Now move the MOLD BLADES back and forth again with the fingers to see that they do not bind. If they do bind it shows that there is dirt between the top and bottom MOLD BLADES (**E**) and (**H**) or between the top MOLD BLADE (**E**) and its SHOE (**D**).

Draw back bottom MOLD BLADE (**H**) and put its STOP (**J**) in position (Fig. 1) holding it gently against the right side of the MOLD BLADE and clamp it with its two SCREWS.

Replace the MOLD-BLADE GUIDE (**C**), squaring it up with the MOLD BLADE, and clamp it with its two SCREWS.

Replace the GATE PUSHER in its slot in the CROSS BLOCK (**A**) and see that it works freely and does not project below the GATE BLOCKS (which would be caused by dirt or particles of metal in the slot or on the PUSHER). CAUTION: Inser the GATE PUSHER with the beveled corner toward the front of the CROSS BLOCK.

The GATE PUSHER seldom needs more than cleaning but if it works loose and permits burring or leading proceed as follows. In the right end of the CROSS BLOCK are two ADJUSTING SCREWS—one pulls and the other pushes the right hand GATE BLOCK. To readjust the GATE PUSHER if it is loose in its slot, loosen the bottom SCREWS holding the right GATE BLOCK to the CROSS BLOCK. Then back off one ADJUSTING SCREW and screw in on the other until trial shows that the GATE PUSHER fits snugly and comes just flush with the bottom of the GATE BLOCKS. All four screws must be tight when making the final check. Of course the GATE PUSHER and its slots between the GATE BLOCKS must be thoroughly cleaned before making this adjustment.

Make sure the CROSS BLOCK (**A**) and its bearings are clean. Put the FRONT-ABUTMENT SHOE (**B**) in position in the MOLD and slide in the CROSS BLOCK from the right.

The FRONT-ABUTMENT ADJUSTING SCREWS (**O**) and (**P**) should not be loosened or their adjustments changed in any way except when running a new or repaired MOLD for the first time (see "Cautions") or in case the ADJUSTING SCREWS become loosened. In such cases proceed to readjust as follows:

When the FRONT-ABUTMENT ADJUSTING SCREWS (**O**) and (**P**) must be adjusted, slide the CROSS BLOCK (**A**) in from the right until its left rear corner comes almost to the MOLD BLADE opening—do not let it pass this opening until the ADJUSTING SCREWS are adjusted or the corner of the CROSS BLOCK (**A**) might strike the corner of left TYPE BLOCK (**F**).

Bring the left ADJUSTING SCREW (**O**) just up to bearing.

Bring right ADJUSTING SCREW (**P**) just up to bearing.

Now move the CROSS BLOCK alternately to the left and right, adjusting the two ADJUSTING SCREWS until the CROSS BLOCK fits so snugly that it can just be moved with the hands by using considerable pressure. Be sure it does not bind at any point. Then tighten LOCK NUTS (**R**) and (**S**) on SCREWS (**O**) and (**P**) and slide CROSS BLOCK back and forth to see that this has not changed the adjustment.

Names *and* Symbols *of the* Style 2E Non-Adjustable Monotype Mold

*NOTE: Only the parts indicated by an asterisk (*) can be applied without returning the Mold to our factory.

BASE PLATE		b1MA2E1
bushing (2)		a1MA2E2
" (for 6MA2E3) (2)		1MA2E4
BASE-PLATE FRONT ABUTMENT	*	2MA2E1
adjusting screw (left, blunt)	2226 *	2MA2E2
" " (right, pointed)	2227 *	2MA2E3
" " lock nut (2)	386 *	2MA2E4
screw (3)	223 *	2MA2E5
BASE-PLATE-FRONT-ABUTMENT NUMBER PLATE		3MA2E1
screw (2)	251 *	3MA2E2
BASE-PLATE-FRONT-ABUTMENT SHOE	*	5MA2E1
BASE-PLATE-GATE-PUSHER CAM		6MA2E1
screw (2)	2166 *	6MA2E2
dowel (2)	7104	6MA2E3
CROSS BLOCK		1MB2E1
coupling	†	1MB2E2
" screw	2165 *	1MB2E3
dowel (to 3MB2E1)		1MB2E4
screw (to adjust 2MB2E1)	2167 *	1MB2E5

†NOTE: If the CROSS-BLOCK COUPLING 1MB2E2 be broken, this part can be replaced by returning to us the pieces of the COUPLING, provided these are in such condition that the required measurements can be obtained from them.

CROSS-BLOCK GATE BLOCK (right)		2MB2E1
screw (front) (2)	236	2MB2E2
" (top) (2)	2228	2MB2E3
CROSS-BLOCK GATE BLOCK (left)		3MB2E1
oil pad (felt)	*	3MB2E2
screw (front) (2)	236	3MB2E3
" (top) (2)	2228	3MB2E4
CROSS-BLOCK GATE PUSHER		4MB2E1
MOLD BLADE (lower) (give point size)		1MC2E1

MOLD BLADE (upper) (give point size)..... 2MC2E1
carrier..... 2MC2E2
" spring pin.....**895**.. 2MC2E4
" latch..... 2MC2E5
" " fulcrum pin.....* 2MC2E6
" " spring.....**6213**..*§ 2MC2E7
" " " eye (2).....*a2MC2E14
" lever.....* 2MC2E12
" " fulcrum pin.....* 2MC2E13
" pin (stop for 2MC2E5)..... a2MC2E15

§ NOTE: If SPRING 2MC2E7 is wanted assembled with its two EYES a2MC2E14 order SPRING 2MC2E7M.

MOLD-BLADE-CARRIER GUIDE BLOCK.....* 3MC2E1
screw.....**2166**..* 3MC2E2
" washer.....**440** * 3MC2E3

MOLD-BLADE STOP..... 7MC2E1
screw (2).....**2166**..* 7MC2E3
" washer (2).....**440**..* 7MC2E4

MOLD-BLADE TOP GUIDE..... 8MC2E1
screw (2).....**2208**..* 8MC2E2

MOLD-BLADE SHOE (for 1MC2E1)..... 9MC2E1
screw.....**2208**..* 9MC2E2

MOLD-BLADE SHOE (for 2MC2E1)..... 10MC2E1
screw (3).....**2208** *10MC2E2

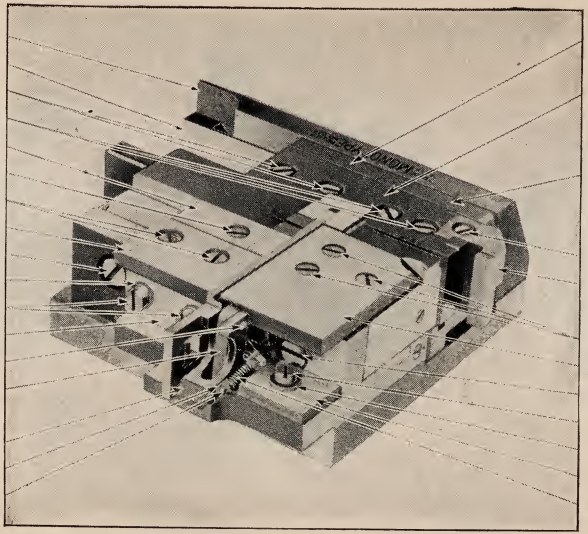
TYPE BLOCK (right)..... 1MD2E1
nick pin..... 1MD2E3
" " plug..... 1MD2E4
oil pad (felt).....* 1MD2E5
plug screw (brass) (2).....**2235**..* 1MD2E7
screw (from a1MA2E1) (short) (3)..**2230**.. 1MD2E11
" (from a9MD2E1) (2).....**2231**.. 1MD2E12
" (from a1MA2E1) (long).....**2229**.. 1MD2E13
" washer.....**441**.. 1MD2E14

TYPE BLOCK (left) (5 to 8 pt.)..... a2MD2E1
(left) (9 to 12 pt.)..... a2MD2E2
plug screw (2).....**2239**.. 2MD2E6
screw (from a1MA2E1) (short) (2)..**2230**.. 2MD2E7
" (from a9MD2E1).....**2231**.. 2MD2E9
" (from a1MA2E1) (long).....**2229**.. 2MD2E11
" washer.....**441**.. 2MD2E12
dowel.....**57**.. 2MD2E26

TYPE-BLOCK GATE KNOCK OFF..... 6MD2E1
screw (2).....**260**.. 6MD2E2

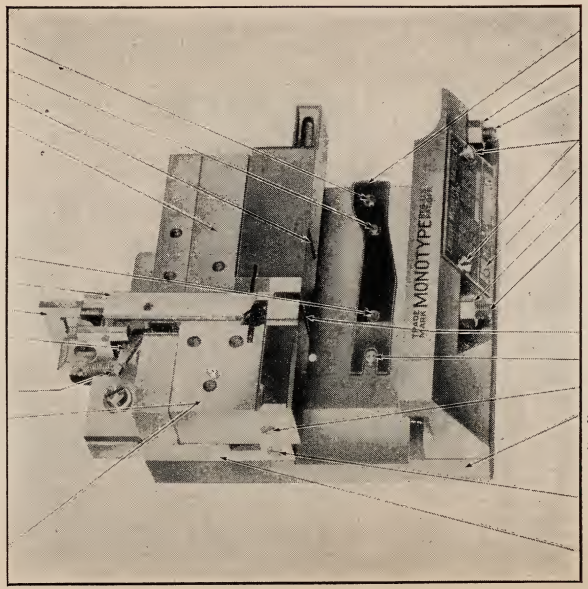
TYPE-BLOCK SQUARING PLATE..... b9MD2E1
plug screw (2).....**2235**..* 9MD2E6
screw (to a1MA2E1) (2).....**2161**.. 9MD2E8

Abutment	2MA2E1
Shoe	5MA2E1
Screw (2)	2MB2E3
Screw (2)	3MB2E4
Shoe	9MC2E1
Screw	9MC2E2
Screw (2)	8MC2E2
Guide	8MC2E1
Screw (2)	1MD2E12
Washer (2)	7MC2E4
Screw (2)	7MC2E3
Stop	7MC2E1
Fulcrum Pin	2MC2E13
Lever	2MC2E12
Pin a	2MC2E15
Carrier	2MC2E2
Eye (2) a	2MC2E14
Pin	2MC2E4



2MB2E1	Gate Block
2MB2E2	Screw (2)
1MB2E1	Cross Block
1MB2E5	Screw
4MB2E1	Gate Pusher
3MB2E1	Gate Block
3MB2E2	Oil Pad
3MB2E3	Screw (2)
1MB2E3	Screw
1MB2E2	Coupling
1MB2E4	Dowel
10MC2E2	Screw (3)
10MC2E1	Shoe
2MD2E9	Screw
3MC2E2	Screw
3MC2E3	Washer
3MC2E1	Guide Block
2MC2E7	Spring

Dowel (2)	6MA2E3
Screw (2)	6MA2E2
Oil Pad	1MD2E5
Type Block	1MD2E1
Plug Screw (2)	1MD2E7
Screw (3)	1MD2E11
Knock Off	6MD2E1
Screw (2)	6MD2E2
Screw (2)	6MA2E2
Mold Blade	2MC2E1
Mold Blade	1MC2E1
Latch	2MC2E5
Fulcrum Pin	2MC2E6
Eye (2)	a2MC2E14
Type Block	a2MD2E1
Plug Screw	2MD2E6
Screw (2)	2MD2E7
Screw	2MD2E11
Washer	2MD2E12
Type Block	a2MD2E2



6MA2E1	Cam
2MA2E4	Nut (2)
2MA2E3	Screw
2MA2E5	Screw (5)
3MA2E2	Screw (2)
3MA2E1	Number Plate
2MA2E4	Nut (2)
2MA2E2	Screw
1MD2E13	Screw
1MD2E14	Washer
1MD2E4	Plug
1MD2E3	Nick Pin
6MA2E3	Dowel (2)
2MD2E5	Plug Screw
a1MA2E1	Base Plate
a1MA2E2	Bushing (2)
1MA2E4	Bushing (2)
9MD2E6	Plug Screw (2)
9MD2E8	Screw (2)
b9MD2E1	Squaring Plate

Mold Repairs

It is not possible for operators to repair MOLDS for they have neither the special tools nor necessary training.

If any defects occur in the type produced by this MOLD that cannot be corrected by following the directions in this folder, the *complete Mold* should be at once returned to our factory with *samples of the defective type;* enclose these in the box with the *Mold and all its parts*, prepay express charges and write us stating (a) point size and number of MOLD; (b) date of shipment and route; (c) details of trouble.

RESTORING TO HEIGHT

When a MOLD is returned to our factory, for any reason whatever, and we find after careful inspection, that it will not true up to produce a high quad above the low limit, the MOLD is restored to height, unless we are advised specifically by the customer to the contrary.

IMPORTANT

This MOLD is held in its box by two screws which pass through the bottom of the box. Preserve this box and its screws for returning MOLD.

LANSTON MONOTYPE MACHINE CO.
PHILADELPHIA 3, PA., U.S.A.