excess moisture when transferred to the blanket is absorbed by the sheets being printed, causing them to curl and create handling difficulties.

The Davidson 2-cylinder principle allows you to run with less moisture and permits better control of the moisture and ink relationship (ink-water balance). You get sharper copy and uniform color.

More uniform dampening distribution means that the desired ink coverage can be maintained with less ink, making for added economy.

#### 3. 2-Cylinder Construction Means A Choice of Offset or Letterpress Methods

Having two cylinders instead of three means that the plate segment and impression segment are located on the same cylinder. On your Davidson the plate segment can be quickly removed from the machine entirely—as can the impression segment. Notice the full accessibility to both segments.

Removable segments plus a detachable dampening unit mean that in less than ten minutes you can convert your Davidson from offset to relief printing. Simply remove the dampening unit and offset segments, mount a relief segment, and the Davidson is ready to print from rubber plates, T-bottom type, etc.

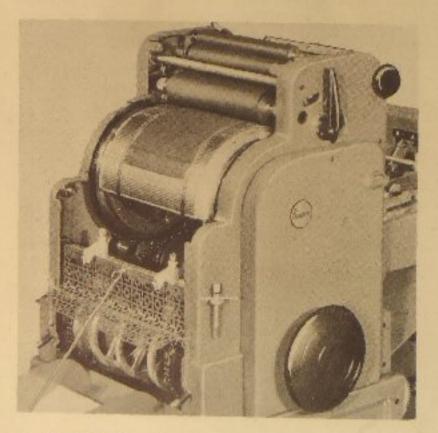


Fig. 17 Davidson Set Up for Relief Printing

Most pressure adjustments for offset are automatically correct for relief operation and no time need be lost in readjusting the machine when switching from one process to the other. A paper master duplicating operation may be changed to a high-speed relief imprinting operation in a matter of minutes. The Davidson Dual 2-cylinder principle makes it possible to use the process best suited for each job—on the same standard machine.

#### 4. Dry Offset Printing

One of the new developments in offset printing combines letterpress and offset to produce printing which embodies the best characteristics of each process. This method is called dry offset, and is described in detail on page 64.

Because of the dual feature of your Davidson, which allows you to print by either the relief or offset method, it is natural to turn to your Davidson to print by the method which combines the two.

Again, your versatile Davidson may be converted from offset to dry offset in five minutes. The accurate pressure adjustments required for dry offset printing are readily made on the Davidson.

#### 5. Embossing

You will be interested to learn that your Davidson is the only commercial machine on the market that is capable of doing dry offset embossing. While one or two large presses can be converted by structural modification to do dry offset printing, only the Davidson can print and emboss simultaneously. For the complete story of how this is done, turn to page 65, and read how you too may produce dry offset embossing on your Davidson.

## 6. Two-Sided Printing

Here again your Davidson offers you an exclusive feature. There will be some jobs—two-sided forms, for example—in which the sheet may be printed on both sides simultaneously. One side is printed from the blanket by offset, while the other is printed from a second planographic plate by direct lithography.

Two-sided printing is possible on a standard Davidson through the use of an extra plate segment. It will allow you to double your output of two-sided forms.

To learn how to print both sides of a sheet in one trip through your Davidson turn to page 66.

## 7. Numbering, Perforating and Imprinting

Removable segments on your Davidson also allow you to do both horizontal and vertical numbering, perforating, and imprinting from Linotype slugs mounted in a chase. These attachments are mounted in place of the segments. Horizontal numbering and perforating may be done together. For example, you may imprint from Linotype slugs such things as parking tickets 3-up, while on the same trip you are perforating and numbering them in two places.

Removable segments, born of the 2-cylinder design, give your Davidson the versatility to make possible this variety of operations—and more.

## 8. Automatic Displacement of Blanket Away From Both Plate and Impression

Some 3-cylinder machines have a manual lever for breaking contact between plate and blanket. If, while the operator's back is turned, a few sheets should fail to feed, the ink will pile up on the blanket surface so that when feeding is restored the first few sheets will be heavily inked, filled in or otherwise unsatisfactory. Furthermore, it is difficult to pull a sheet of paper away from an over-inked blanket. In all likelihood, it would be necessary to stop and wash the blanket.

On your Davidson if a sheet fails to feed, an automatic mechanism immediately lowers the blanket cylinder away from the upper cylinder. In this new position the blanket surface does not touch the plate and therefore ink cannot build up on the blanket. With the Davidson running, the paper feeding may be stopped

# 9. Surface Speeds and Pressures Between Cylinders are Easily Controlled

You need never be troubled with the suspeed relationships on your 2-cylinder Deson Dual. When a plate and a blanket of correct specifications are mounted, the suspeeds of the blanket and plate segment exactly equal. As the thickness of sheets from is changed, it is only necessary to alter amount of packing on the impression segment obtain the exact same surface speed pressure required between blanket and impression segment. This factor can be determined simple arithmetic.

## 10. Long Life-Low Maintenance

With two cylinders instead of three Davidson has one less gear in the gear train a result there is less possibility of back-lash to wear on gears. This permits more accordister and more uniform pressures. Nother heavy drive gears on your upper cylinder example, is driven by a half-inch thick, chine steel gear.

Your Davidson has been precision builty years of rugged dependability. Have you existed the overall construction of your David Its heavy main frame and base castings? You noticed the heavy Oilite bearings is main frames and on the soft ink rollers? The preponderance of machined parts as pared with the number of stamped parts?

Properly lubricated and correctly adj your Davidson is capable of long and tro free operation. The most important adjusts are those relating to pressures. The heavy struction and 2-cylinder design make it

## **RELIEF PRINTING ON YOUR DAVIDSON\***

In the introduction we spoke of relief printing as characterized by a physical separation between the image and the non image. It also differs from offset lithography in that the image plate prints directly on the paper, rather than to a blanket and then to the paper. In our discussion of lithographic inks on page 27 we spoke of the basic characteristic of this ink as being water repellent in nature. This characteristic has in the past somewhat limited the freedom offered in the selection of colors and ink conditioners. In relief printing, however, we have full flexibility in the selection of inks and ink conditioners, as the ink need not be grease-base and resistant to moisture.

When we print by the relief, or letterpress, method on the Davidson the lower cylinder (blanket drum) now becomes the impression cylinder, and the image to be printed is carried on that portion of the upper cylinder heretofore regarded as the impression segment in offset printing. As the sheet of paper comes between the two cylinders the letterpress plate (or other letterpress medium) which is located on the impression portion of the upper cylinder, contacts the paper and transfers its image, using the blanket drum as a platen, or impression, cylinder (Fig. 106).

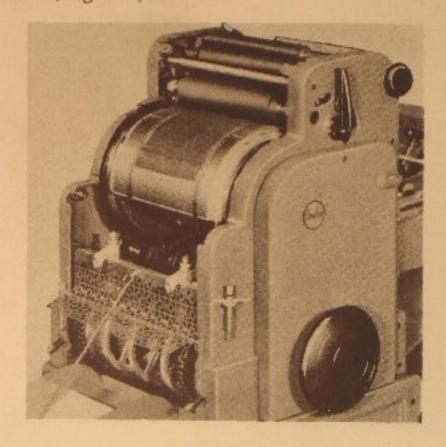


Fig. 106 Relief Printing on Your Davidson

"See p. 110-Checklist of Operation Sequences.

Relief printing on the Davidson finds extensive use in such applications as the printing of envelopes, in which sticky-back rubber plates may be used; numbering; perforating; imprinting such things as sales promotion literature by means of Linotype slugs; and long run form work from brass-backed rubber plates.

#### CONVERTING TO RELIEF

Your standard Davidson Dual is easily converted from offset operation to relief operation in less than ten minutes (Fig. 107).

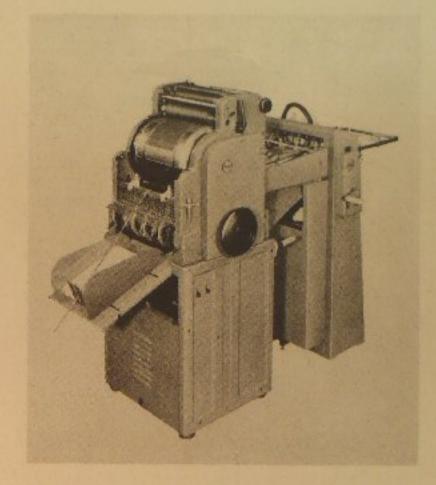


Fig. 107 Davidson Set Up for Relief Printing

Pressures when properly set for offset are automatically at their correct relief setting if plates of the specified height are used. Here is how this quick conversion is made:

## 1. Remove Dampening Unit

With the Damporite bottle and Damporite solution in the fountain tray removed, the machine may be relieved of the dampening unit by merely removing the two dampening unit mounting screws (Fig. 108a) with the T-handle wrench and lifting the entire unit off as shown (Fig. 108).

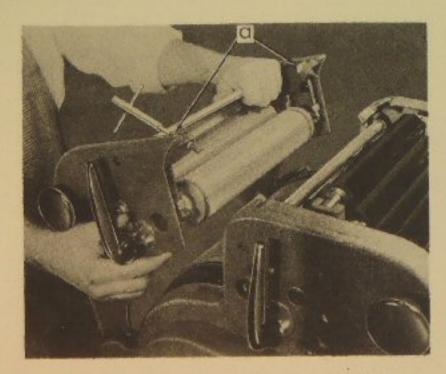


Fig. 108 Removing the Dampening Unit

## 2. Remove the Impression Segment containing the Draw Sheet and Packing

It is held in place by four screws which are removed by loosening with the T-handle wrench (Fig. 109). When a segment has been removed, always stand it on end. This will protect its surface from dirt and physical harm.

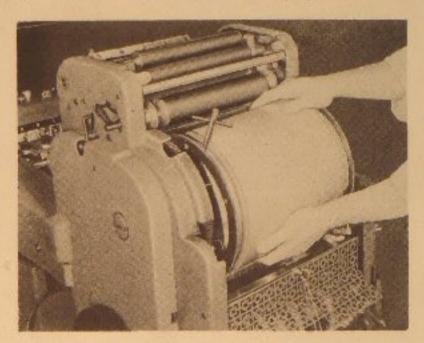


Fig. 109 Removing the Impression Segment

## 3. Remove the Plate Segment

The plate segment is held in position by the two plate segment holding screws located in the center of the segment. When loosening these screws be sure to hold the segment with one hand so that it does not drop.

## 4. (Optional) Change Blanket

The medium offset blanket is satisfactory for relief operation, especially for rubber plate work. However, if a great deal of relief operaor Linotype slugs, better results may be obtained by using a blanket with a firmer surface especially designed for this work. Relief blankets are described on page 94.

## 5. Mount the Relief Segment

A relief segment (horizontal or vertical rail segment for mounting T-bottom type, rubber plate segment, sticky-back rubber plate segment, etc.) is mounted in the position formerly occupied by the offset impression segment. This position may be identified by the four holes for the mounting screws located in the segment rings (Fig. 110a). To mount the relief segment, first move the two segment lock nuts (Fig. 110b) which are used to secure the segment, from their present position to the opposite side where the relief segment is to be attached. They are located on the inside of the segment rings. They should be centered in the slots (Fig. 110c). The relief segment is then mounted on the upper cylinder and held in place with the two segment holding screws.

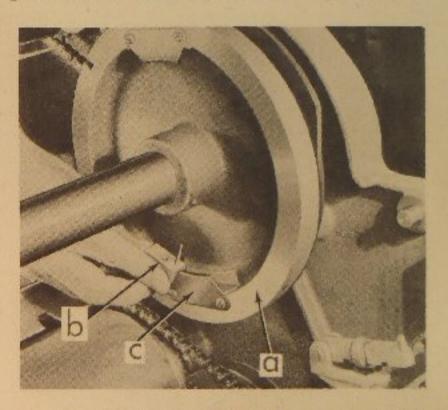


Fig. 110 Positioning the Relief Segment Lock Nuts

## 6. Set Ejector Cam

When printing by offset, the image was transferred to the blanket and, hence, the sheet was turned over during delivery so that the image would be visible to the operator. In relief printing, however, the image is placed on top of the sheet from the upper cylinder and the sheet need not be turned over during delivery. To accomplish this relief delivery it is only necessary to adjust the gripper bar so that it releases

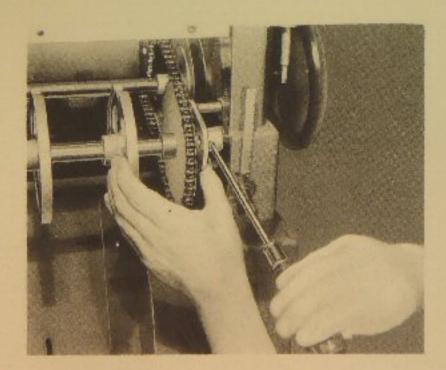


Fig. 111 Setting the Relief Ejector Cam

the sheet before it is turned over. This is done by moving the relief ejector cam into the relief position. To do this loosen the relief ejector set screw with a screwdriver and slide the cam all the way out toward the center of the machine as shown in Fig. 111. The sheet will now be ejected without being turned.

#### 7. Set Paper Catcher for Relief Operation

The sheet is now being delivered as the gripper bar reaches the lower ejector wheels; it is therefore necessary to raise the paper catcher to a new position to receive the sheets. This is done by lifting the paper catcher unit from its four mounting pins in the lower position and mounting it on the two upper mounting pins (Fig. 112). The paper catcher support bar (Fig. 112a) is placed into the plate provided for it on the stand spreader, as shown.

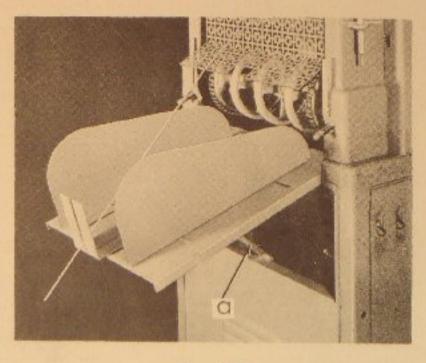


Fig. 112 Setting the Paper Catcher for Relief Delivery

## 8. Mount Upper Ejector Wheels

The sheet now has to travel a small distance to the paper catcher after its release by the gripper bar. Two upper ejector wheels (Fig. 113a) are therefore provided to assist in controlling the sheet in relief delivery. These are mounted on the cross bar directly above the lower ejector wheel as shown. Each upper ejector wheel must ride directly over a lower ejector wheel. They are held in place by the thumb screws (Fig. 113b). The upper ejector wheels are designed so that when they are working together they toe-in slightly toward the center of the sheet. Each wheel will then have a tendency to eject the paper toward the center. By holding each wheel up and examining it carefully you will determine which way the wheel toes.

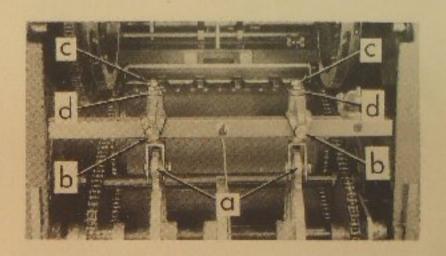


Fig. 113
The Upper Ejector Wheels are Used for Relief Only

The upper ejector wheels should be so adjusted that as a sheet passes under them they turn slightly. This means that the wheel should not contact the lower ejector wheel, but should be located very close to it. The upper ejector wheels may be lowered and raised by loosening the lock nut on top (Fig. 113c) and turning the adjusting screw (Fig. 113d) until you notice the wheels begin to turn when paper is feeding. The wheels should be located outside the image area on the sheet. When located in this manner, the wheels will not roll across the fresh wet ink. This will keep the wheels free of ink and avoid smearing. When moving an upper ejector wheel be sure to move the lower ejector wheel also. Avoid placing the upper ejector wheel directly over a gripper finger.

## MOUNTING THE RELIEF PLATE

The several types of relief plates are mounted as follows:

## A. On the Rail Segment

T-bottom type is mounted in the rails of the segment and is held in place by the small line-lock clips as shown in Fig. 114.

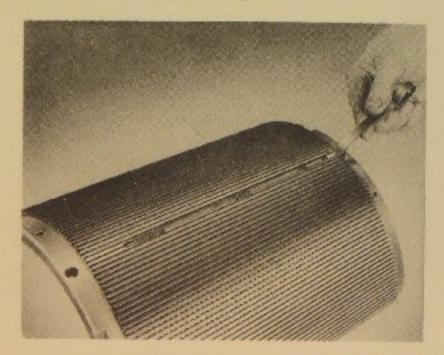


Fig. 114 Rail Segment with T-Bottom Type and Line-Lock Clips

Curved electros prepared with T-bottom mountings are slid into position in the rail segment as shown in Fig. 115.

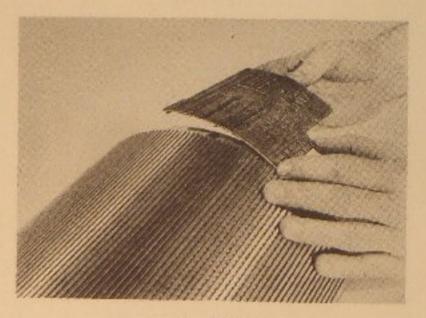


Fig. 115 Attaching a Curved Electro to the Rail Segment

Brass-backed rubber plates are mounted on the rail segment by securing their top and bottom edges with the brass sheet retainers (Fig. 116a). These retainers are slid into the proper grooves as shown. The sides of the brass-back rubber plate are held in place with steel marginal bands anchored at the top and bottom of the segment (Fig. 116b). These may be attached by placing the anchor hook on one end in the segment, inserting a screwdriver in the loop on the opposite end and applying pressure as shown.

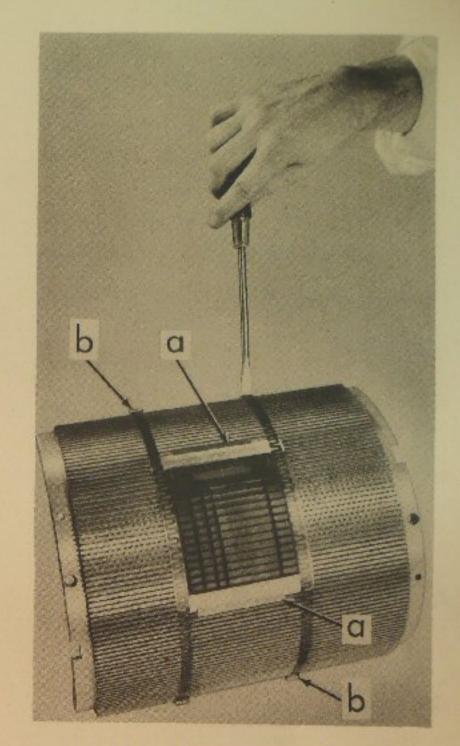


Fig. 116 A Brass-backed Rubber Plate

Sticky-back plates are mounted on a rail segment after it has been covered with a brass draw sheet anchored in the same fashion as the brass sheet on the brass-backed rubber plate just described. The sticky-back rubber plates may now be mounted on the brass sheet by laying them in the desired position and applying slight pressure. To change positions, the stickyback plate is merely pulled off and replaced in a different location.

## B. On the Rubber Plate Segment

The rubber plate segment is furnished as standard equipment with the relief kit for your Davidson. When using this segment, a rubber plate should be mounted on a piece of brass the full length of the segment so that it may be anchored at the top and bottom by the clips provided (Fig. 117a). It is further secured by the two marginal bands as explained above.

Sticky-back rubber plates may be mounted

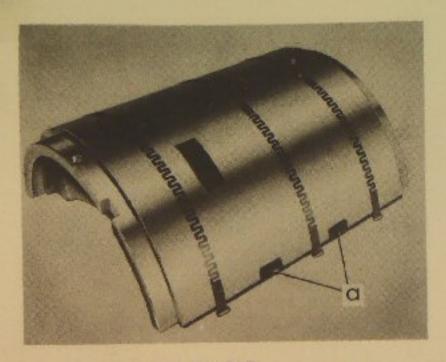


Fig. 117

A Rubber Plate Mounted on a Brass Sheet Attached to the Relief Segment

on the full-sized brass sheet which is used to cover this segment (Fig 117). To mount, lay them in the desired position and apply pressure

with the palm of the hand.

The correct height for sticky-back rubber plates is .085". The brass under them is .010". However, if a brass-backed rubber plate (that is, a rubber plate which is vulcanized to a brass sheet) is used, the total thickness of brass and rubber plate should be .095". This is a standard size in the plate making trade. When ordering brass-backed rubber plates, therefore, it is a good idea to specify that they are for use on your Davidson and should be .095" high.

## C. Linotype Slugs

A Linotype slug chase is available for imprinting of literature, etc. This imprint chase offers a form area 2" x 9", and is described on page 85.

## D. Numbering

See page 85 for vertical and horizontal numbering attachment for any standard Davidson Dual.

## RUNNING RELIEF

Paper is fed for relief operation in exactly the same manner as for offset operation. The delivery is slightly different in that the sheet is released by the gripper bar before it is turned over, and hence is guided into the raised paper catcher by the ejector wheels. When the sheets are being delivered, they should feed into the

paper catcher evenly. Correct and careful settings of the upper ejector wheel pressure will insure trouble-free delivery of sheets during relief operation. It is important that the upper ejector wheels be set lightly so that the delivery of sheets passing between the upper and lower

ejector wheels is not impeded.

To increase the amount of impression when printing by relief, it is necessary to use the blanket drum as an impression cylinder. That is, in relief printing it is necessary to raise and lower the blanket drum to obtain the proper impression. Correct impression pressure is extremely important, especially in rubber plate printing. One of the advantages of rubber plate printing is the fact that a light "kiss" impression is all that is required. Excess pressure will distort the image and reduce the life of the plate. To obtain proper impression, reduce blanket pressure until it does not print at all. Then increase impression gradually until the proper pressure is obtained. This is done on the operating side. First loosen the two blanket latch holding screws (Fig. 118a). While holding the adjusting screw with a screwdriver, loosen the lock nut on the adjusting screw with the small wrench (Fig. 118). Turn the adjusting screw clockwise to raise the blanket and increase pressure. Never try to determine the correct impression on a rubber plate by inspecting the back of the printed sheet.

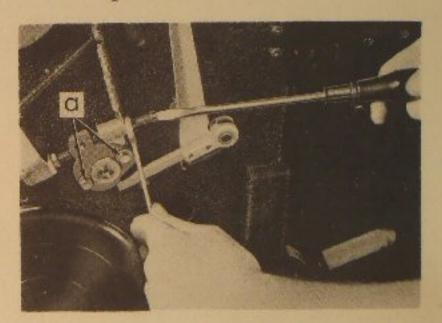


Fig. 118
Adjusting Impression Pressure (for Relief Only)

When relief media of the correct height are used, no change in the ink roller pressure should be necessary. However, should a variation be encountered, the ink form rollers should be set individually so that they lightly contact the relief form. Before switching from offset to relief, it is a good idea to completely check all

pressures so that they will be correct when the conversion is made.

The 2-cylinder principle, which provides for displacement of the blanket drum away from both the impression and plate during offset, affords the same safeguard during relief operation. This operates in such a manner as to drop the blanket away from the relief forms so that no impression is transferred to the blanket when the feeding of sheets is interrupted.

#### Imprinting Envelopes by Relief using Rubber Plates

Sticky-back rubber plates are excellent for imprinting of envelopes for three reasons: they may be changed in seconds, they print evenly on an envelope even though the flap may add an additional thickness in some places, and finally, they are inexpensive.

Avoid carrying too much ink on the ink rollers, as excess ink will tend to fill in the small

characters of the rubber plate.

If impression is not uniform, additional pressure may be applied to the weak area by adding a layer of Scotch tape to the brass sheet under the rubber plate.

#### Care of Rubber Plates

If a brass-backed plate is used, it should be fastened securely on all four sides.

Sticky-back rubber plates should be tapped down firmly with the palm of the hand so that there are no air pockets under them. If it is necessary to twist or move a stickyback plate on the segment, always remove it entirely and re-mount.

Be sure ink form roller pressures and impres-

sion are correct.

Don't over-ink a rubber plate; it will fill in and look messy.

Use Davidson Washorite to clean a rubber

plate. Never use kerosene.

To store sticky-back plates, put them on the holland cloth furnished with the plates, or on glass, metal, etc. Do not stick them to paper. If the sticky-back becomes dirty, it will not adhere to the segment or brass sheet. In this case, clean the back lightly with a rag dampened with Washorite.

Dust the face of all rubber plates with Dustorite (blanket powder) before storage. This conditions the rubber and helps to preserve it.

## Converting from Relief to Offset

When it is desired to convert the Davidson from relief operation to offset it is merely necessary to follow the steps for converting from offset to relief in reverse order. It is important when converting from relief back to offset that the %6" mark, showing correct pressure between the offset plate and the blanket, be re-established. When this correct pressure relationship between the two cylinders has been re-established for offset printing, the machine may be set up for the first offset job.

## DRY OFFSET PRINTING ON YOUR DAVIDSON\*

Dry offset printing is a method of printing which combines the letterpress and offset methods so as to utilize the chief advantages of each. Instead of printing from a planographic plate on which the separation between image and non-image areas is accomplished chemically by a balance of ink and water, dry offset utilizes a metal plate carrying an image which has been etched in relief to provide the physical image separation characteristic of letterpress printing. This raised or relief image is inked in the normal letterpress manner, which provides for inking only that portion of the plate which is to print. Unlike letterpress, which prints directly from relief plate to the paper, the dry offset plate transfers its inked image to the rubber blanket, which in turn "offsets" this image onto the sheet. Therefore, in dry offset, we have a letterpress type of inking with an offset type of image transfer.

Dry offset printing offers several advantages:

 Because the image is raised, no dampening unit or ink-water balance is required.
 This means less operator attention and simpler operation.

 Because the dry offset plate does not touch the paper, but rather contacts the blanket with a light, "kiss" impression, extremely long plate life may be expected (Fig. 119). Runs of over a million impressions from a single plate are common.

 Because there can be no emulsification of the ink, uniformity of color can be maintained exactly as desired throughout the entire run.

4. Because the image is offset onto the sheet by means of a rubber blanket, dry offset printing may be done on paper stock of almost any desired surface texture, one of the chief advantages of the lithographic offset process.

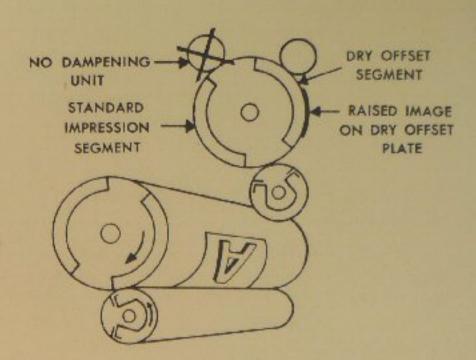


Fig. 119 Dry Offset Printing on Your Davidson

- Because a lighter layer of ink is used in offset, ink costs are reduced by this method.
- The full freedom in selection of inks and ink conditions offered to letterpress printing is available when printing by dry offset.

 The quick makeready, characteristic of offset printing in general, is also afforded dry offset.

Dry offset printing on your Davidson is accomplished by removing the dampening unit and by substituting a dry offset segment (containing this relief plate) in place of the standard plate segment. Your Davidson may be converted from either offset or relief to dry offset printing in a matter of minutes.

Complete instructions for dry offset operation are furnished with every dry offset segment, and are also available from your Davidson Distributor. Complete instructions for the making of dry offset plates are also available.

To order dry offset segments, see page 81.

<sup>°</sup>See p. 110-Checklist of Operation Sequences.

## PRODUCTION ACCESSORIES

Both productivity and ease of operation of your Davidson may be increased through the use of the special purpose attachments and accessories described on the following pages. All are available from your Davidson Distributor, who is ever anxious to study your own printing problems with you, and to make recommendations aimed at more efficient operation or increased profit. Do not hesitate to call on his experience whenever you have a printing question.

## **AUXILIARY SEGMENTS**

The removable segments of your Davidson are the key to its wide flexibility and to the variety of unique applications made possible by the 2-cylinder design.

## AUXILIARY SEGMENTS FOR MODELS 241 AND 251

#### A. Standard Offset Segment

To print two sides of a sheet simultaneously an additional plate segment is mounted in place of the standard impression segment (see page 66). This standard offset plate segment will accommodate all ten inch wide plates (serrated edge, straight edge, oval hole or pin bar) which are between 15 and 16" long and .006" thick. To order this segment, specify Part No. 241-25AA Standard Plate Segment.

## B. Special Segment for .010" plates

This segment is undercut .010" and is used when running plates .010" thick (grained plates). Thinner plates may be run on this segment by underlaying the plate with whatever is necessary to bring the total of plate and underlay to .010".

To order, specify Part No. 221-418AA Special .010" Plate Segment.

#### C. Quick Change Segment for Paper Masters

This segment is designed for the application which requires frequent plate changes, such as short run duplicating and systems work. It is equipped with a pin bar and clamp which permit the changing of plates in a matter of seconds. Substituted for the standard offset plate segment, it will accommodate all plates .006" in thickness, a maximum of 10" in width and 15 to 15%" in length. To order, specify Part No. 540-430 Quick Change Segment.

#### D. Rubber Plate Segment

The rubber plate segment for relief printing on Models 241 and 251 is made to accommodate either .095" brass mounted rubber plates or .085" sticky-back rubber plates. It is mounted in the impression position. To order, specify Part No. 251-163A Rubber Plate Segment.

To order the complete kit for converting from offset to relief (consisting of the rubber plate segment, two upper ejector wheels, relief blanket and necessary mounting parts), specify Part No. 251-182A Rubber Plate Relief Kit.

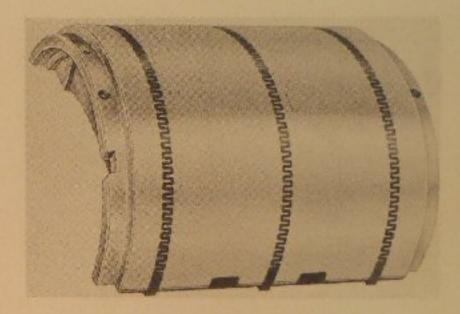


Fig. 126A Rubber Plate Segment

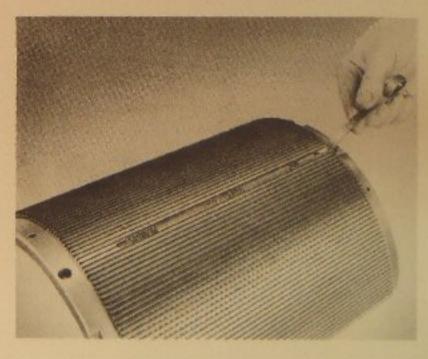


Fig. 126B Horizontal Rail Segment

## E. Dry Offset Segment

This segment is designed to hold .032" thick dry offset plates of various sizes (see page 64). It is mounted in the standard plate segment position. To order, specify Part No. 780-1AA Dry Offset Segment.

## F. Embossing Segment

Similar to the dry offset segment above, the embossing segment is used in conjunction with it to produce dry offset embossing on a standard Davidson (see page 65). It is mounted in the impression position. To order, specify Part No. 780-6AA Embossing Segment.

## G. Horizontal Rail Segment

This segment is designed to accommodate T-bottom type, milled Linotype slugs, curved electros, push-in rubber slugs as well as .085" thick sticky-back rubber plates (which are mounted on a brass sheet attached to the segment) and .095" thick brass mounted rubber plates. To order, specify Part No. 221-444A Horizontal Rail Segment—Complete (see Fig. 114).

To order the complete kit for converting from offset to relief, with a horizontal rail segment substituted for the usual rubber plate segment, specify Part No. 221-444AAA Relief Kit with Rail Segment.

## H. Vertical Rail Segment

Similar to the horizonal rail segment except that the rails run from the top of the segment to the bottom, this segment is used primarily for special applications. To order, consult your Davidson Distributor.

## FOR MODEL 233

## A. Segment Adapter

All segments for Models 241 and 251 Davidsons may be mounted on the Model 233 through the use of an adapter. To order this adapter, specify Part No. 788-7A Auxiliary Segment 10" Adapter (Fig. 127).

## **B. Standard Offset Plate Segment**

To print two sides of the sheet simultaneously, an additional plate segment is mounted

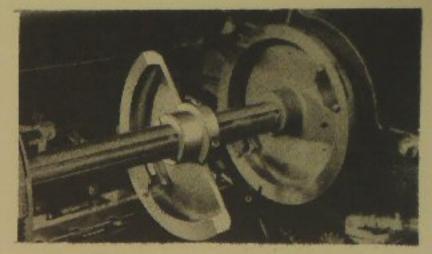


Fig. 127 Auxillary Segment 10" Adapter

in the place of the standard impression segment (see page 66). This segment will accommodate all .006" thick plates which are between 15 and 16" long and up to 17%" wide. To order, specify Part No. 233-225AA Standard Plate Segment.

## C. Special Segment for .010" plates

This segment is undercut .010" and is used when running plates .010" thick (grained plates). Thinner plates may be run on this segment by underlaying the plate with whatever is necessary to bring the total of plate and underlay to .010". To order, specify Part No. 233-2AA Special .010" Plate Segment.

## D. Rubber Plate Segment

This segment is made to accommodate .095" brass mounted rubber plates or .085" sticky-back rubber plates. The brass mounted rubber plates are placed directly on the segment while the .085" sticky-back plates are mounted on a .010" brass sheet covering the plate surface. Sticky-back plates .095" thick may be mounted directly on the segment. To order, specify Part No. 233-163A Rubber Plate Segment.

## E. Dry Offset Segment

This full width segment for the Model 233 is made to accommodate a .032" dry offset plate (see page 64). To order, specify Part No. 778-1AA Dry Offset Segment.

## F. Embossing Segment

Similar to the Model 233 dry offset segment above, the embossing segment is used with it to produce dry offset embossing (see page 65). It is mounted in the impression segment position. To order, specify Part No. 778-7AA Embossing Segment.

Davidson suction feeder. To order this assembly for the Model 251, specify Part No. 847-192A Extra Suction Head—Complete; for Models 241 and 233 specify Part No. 97-516AA Extra Suction Head—Complete.

#### COMBINATION SUCTION HEAD

When feeding heavy stocks and stocks with rough surfaces, good suction contact can be obtained through the use of a suction head with a rubber foot. This Combination Suction Head is supplied with either the rubber suction foot or the standard metal suction foot, depending on the job requirements. To order, specify Part No. 97-2016AA Combination Suction Head.

#### FEEDER LEVELING DEVICE

For feeding folded stock, booklets, paper bags, etc., which will not stack evenly, a Feeder Leveling Device is available. This attachment holds the pile so that the top sheet is horizontal regardless of the arrangement below. It is available for all Davidsons except Model 251. Contact your Davidson Distributor for details about this useful attachment.

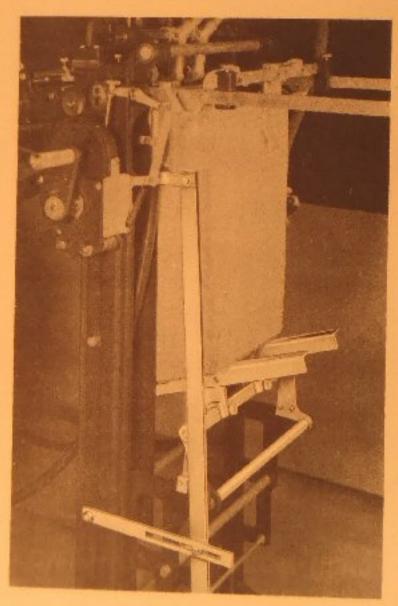


Fig. 137 Feeder Leveling Device

#### IMPRINT CHASE

Imprinting from standard Linotype slugs is accomplished on the Davidson by the use of an Imprint Chase offering a form area of 2" x 9". The Imprint Chase is excellent for imprinting advertising literature, catalogs, letterheads, etc. This attachment may be used in conjunction with the Model 751-1AA Numbering Unit to imprint and number at the same time.

To order the Imprint Chase, complete with mounting sector, specify Model No. 753-1AAA Imprint Chase and Sector—Complete. To order the Imprint Chase only (if mounting sector is already available as part of the numbering unit), specify Part No. 753-1AA Imprint Chase.

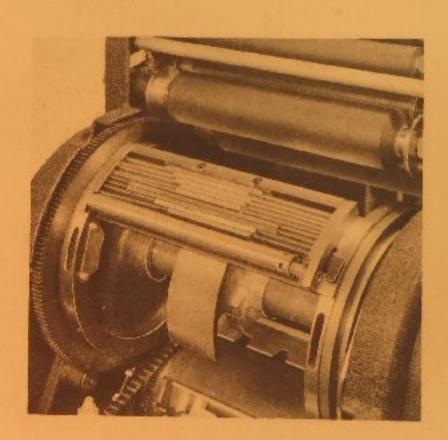


Fig. 138 Imprint Chase

## NUMBERING UNIT-PERFORATING

Numbering on your Davidson may be done with a Numbering Head Holder which replaces the usual segments. Mounted on the same sector as the Imprint Chase, this Numbering Head Holder will also hold a type-high perforating rule. This makes it possible to imprint, number and perforate at the same time. In addition to the Numbering Head Holder shown in figure 139-A, another numbering unit is available which will number both horizontally and vertically (see figure 139-B).

When ordering numbering and perforating equipment, consult your Davidson Distributor to obtain proper specifications.

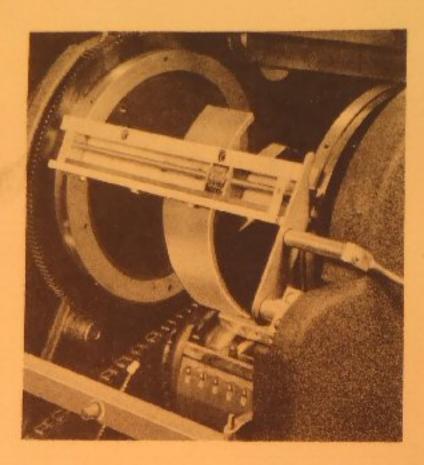


Fig. 139-A Numbering Head Holder

## ALTERNATE SHEET FEED ATTACHMENT

Occasionally it is desirable to feed one sheet for every two revolutions of the machine. To

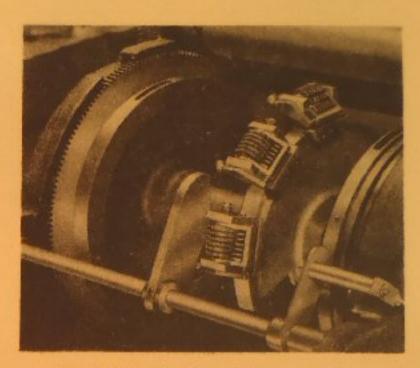


Fig. 139-B Davidson Numbering Units

accomplish this, the alternate sheet feed attachment is available. It attaches to any Davidson suction feeder. To order, specify Part No. 97-2027A Alternate Sheet Feed Attachment.

## PLASTIC COVER

A plastic cover to protect your Davidson against dust and dirt is available. To order, specify Part No. 251-191 Plastic Cover.