THE MORSE PRINTER

Models :

No. 1-T TAPE PRINTER.

No. 1-P PAGE PRINTER.

INSTRUCTION BOOKLET

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THE MORSE PRINTER.

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THE MORSE PRINTER.

The Creed Morse Printer is the standard printer for translating Morse signals in a perforated tape into Roman characters, printed upon a paper tape or in page form on a paper roll.

It consists of mechanism to feed and control the perforated tape, mechanism to select from the perforations and mechanism to translate this selection into print.

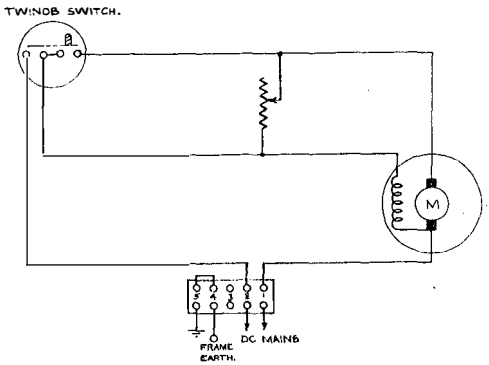
Model No. 1T prints upon a paper tape $\frac{3}{8}$ in. or $\frac{1}{2}$ in. wide and will operate satisfactorily at 100 words per minute. Its motor is rated at $\frac{1}{8}$ h.p., and consumes 120 watts, and both the printer and motor are mounted on a black stove enamelled aluminium base fitted with a metal tape drawer with a recess for small tools. The types are inked by means of small rollers, which can be changed readily when exhausted.

The Page Printer (Model 1P) has fitted, in place of the tape printing attachment as supplied on Model 1T, a simple page printing paper carriage and feeding mechanism. The return of the paper carriage, when the end of a line of printing is reached, is controlled by a carriage return signal, which is transmitted over the line. Simultaneously, the platen is turned and the paper fed upwards.

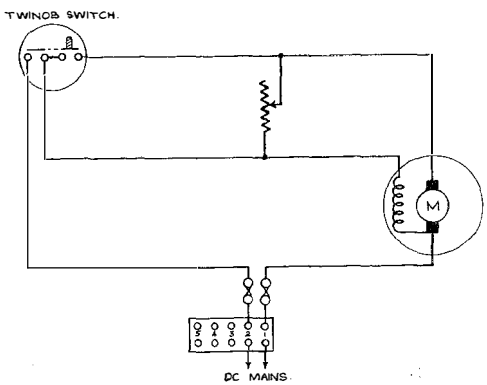
The Page Printer is normally mounted on a pedestal, and the driving motor, which is rated at $\frac{1}{8}$ h.p. and consumes approximately 120 watts, is placed on a shelf beneath the Printer. It is inadvisable to run this machine at more than 80 words per minute.

The perforated tape from the Creed Morse Reperforator is fed into the Printer by first pushing in the non-stop check lever with one hand, thus holding the selectors down, and feeding the tape along the guide plate with the other until the tape engages with the tape feed sprocket wheel, which will then automatically feed the tape forwards. When engagement is made the non-stop check lever should be released allowing the selectors to operate.

The Creed Morse Printer prints one sign per revolution, i.e., the figure o is printed in the same time as the letter E. Also it pulls through only one space of blank tape per revolution, so that blank spaces on the perforated tape represent loss of time in printing. For this reason not more than five spaces should be left between messages. Longer spaces, besides causing delay in printing, cause a delay in gumming, the gummer having to tear off the long portion between messages.



TAPE PRINTER WIRING DIAGRAM



PAGE PRINTER WIRING DIAGRAM.

Fig. 1.

OPERATION.

The tape from the Creed Morse Reperforator is passed into the Printer as shown in Fig. 2, and is fed forward, letter by letter, in a guide way over a series of ten pairs of selectors (a pair of which is shown).

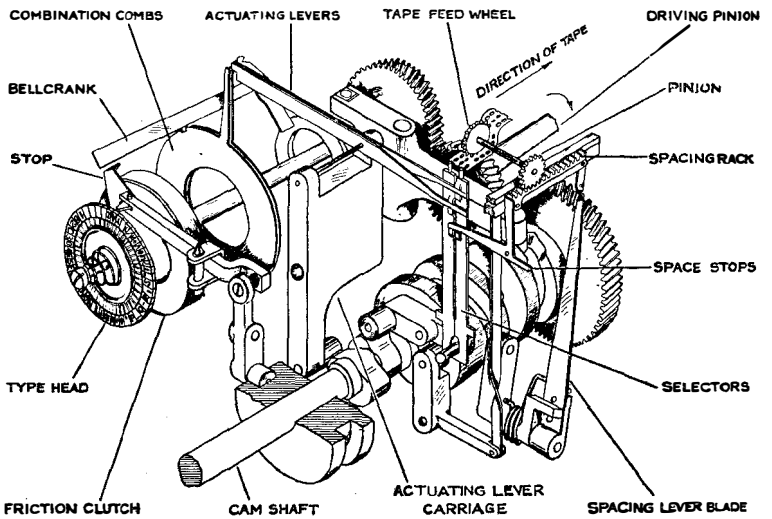


Fig. 2.

When a selection is being made these selectors are permitted to rise under the action of springs (not shown) until their ends either come into contact with the tape or pass through a perforation in the tape, so that some move upwards further than others.

Engaging with each selector is an actuating lever, pivotted at its centre on the actuating lever carriage. As a result of the upward movement of the selectors, the further extremities of the actuating levers are set in one of two positions, depending on whether the selectors controlling them have passed through a hole or not. When moved to the lower position they are

brought in line with the tops of the combination combs and, on being moved to the left by the actuating lever carriage, turn these combs through a small angle.

When in the upper position, the extremities of the actuating levers in their movement to the left, pass over the combs without moving them.

Each of these combination combs is slotted on its edge with a different arrangement of slots, and can be made to occupy one of two positions, one of which, in combination with other selected combs, opens a longitudinal slot in the whole series of twenty combs, and permits a spring-controlled bellcrank to drop in.

Passing through the axis of the drum is a spindle which continually rotates the typehead and type stop through a friction clutch.

When the selected combs have opened a longitudinal slot and permitted a bellcrank to drop, the outer end of the latter is projected into the path of the stop, thus momentarily arresting the rotating typehead and causing the clutch to slip.

A cam on the main shaft is timed to actuate a hammer when the typehead ceases to revolve, and thus causes it to strike the back of that particular type directly opposite the paper, and so record an impression.

There are actually fifty-four radial positions round the circumference of the combs. Two of these are taken up by the comb extension, and two others are allotted to blank types, one corresponding to the selection of a space, the other to no tape or reversals. Thus the total number of printing positions available is fifty.

After the operations of selecting and printing are completed, the bellcrank is restored by a suitable cam motion, and the stop and typehead continue to revolve until the next letter is selected.

The perforated tape is fed forward by a star-wheel fitted to a small spindle carrying a toothed wheel, which is rotated as required by the movement of a cam-controlled rack.

This rack is given a forward motion for feeding purposes, but is disengaged from the toothed wheel on its return so that the tape is only fed in one direction.

The extent of the forward movement of the rack is controlled by its preceding backward movement, and this is limited by the distance to the first space signal, that is, the length of a letter.

To provide for this limit there is a group of ten space levers or space stops normally in the path of the rack, and preventing its backward movement.

Each space stop is also in the path of one pair of selectors, and when either selector of a pair passes through a perforation in the tape, the corresponding space-stop is moved out of the path of the rack.

Hence with any letter or figure of the International Morse Code there is a clear backward path for the feed rack until it reaches a space signal, or a portion of the perforated tape bearing centre-holes only, in which case no space stops are moved.

It will thus be seen that the length of the forward feeding movement is controlled by the distance the rack travels back to the first unmoved space stop.

On the tape model, printing takes place on a small circular rubber-faced platen, which is moved round one letter space per revolution of the cam shaft by means of a feed pawl working on a ratchet wheel.

On the page model, in place of the small circular platen, is a typewriter platen mounted on a suitable carriage.

The platen bracket is supported by two pivots arranged so that the bracket may be dropped back clear of the type-head to permit of the renewal of the inking rollers and the cleaning of the types.

The bracket is held in its operating position by two spring blades which engage with slots in two specially shaped screw-heads on the base. The height of these screws is variable, thus giving an adjustment of the distance between the type face and the platen. The blades may be disengaged from the screws by pressing them sideways with the thumbs.

The bracket may be completely removed from the base by withdrawing the two pivots, which are screwed in. With the pivots out, it is possible to slide the bracket from its locating faces on the base. In doing this, the trunnion rod which operates the carriage is withdrawn from the trunnion.

The mechanism is connected to the main feed lever on the base of the machine through a universal joint. The reciprocating motion of the feed lever is transmitted through suitable links to the feed pawl, which engages with the ratchet wheel attached to the spring drum. This drum also carries a rack-toothed wheel, which meshes with a corresponding rack on the platen carriage. Mounted parallel to the link, which operates the feed pawl, are two other links carrying dogs, which, when depressed, engage with the clutch cross head and partake of its motion. One of the links is connected to the line feed mechanism, and the other to a lever, which throws the feed pawl and its associated retaining pawl out of engagement with the ratchet wheel. The carriage return control lever is mounted on the base of the machine with one end held by spring pressure against the lower edge of the bellcrank which responds to the carriage return signal. The other end projects beyond the base and over the two dogs.

When the Printer is in operation the carriage is fed along, one letter at a time, for each revolution of the cam shaft, and in doing so winds up the carriage return spring contained in the drum. On the arrival of the carriage return signal the bell-crank above the control lever drops into its slot and the control lever, under the impulse of the spring, follows it, thus bringing the dogs, which are normally at rest, into engagement with the oscillating clutch cross head.

The movement thus imparted to the dogs causes one of them, through its associated link, to rock the line feed lever, causing the line feed pawl to turn the platen shaft. The other dog disengages the feed and retaining pawls, thus allowing the drum to revolve under the impulse of the carriage return spring, and return the platen to a position ready to start a fresh line. The auxiliary links connected to the dogs have suitable extensions whereby the paper may be fed up, or the carriage returned, by hand if required.

DISMANTLING.

Remove the gear guard at the rear of the Printer. Slip a spare comb rack over the selectors and tie back the actuating lever carriage. Unscrew the three selecting head fixing screws, disengage the actuating levers from the comb rack and lift the selecting head from its keyway.

Next remove the printing head. Lift up the feed lever link after disengaging the feed lever fulcrum from the paper feed pawl lever. Draw out the printing head pins, and the printing head can then be detached from its base.

To remove the printer body, first take off the splash cover and type hammer bracket, unscrew the six base fixing-down screws and the body will then lift off its keyways.

PRINTER BODY.

To dismantle the printer body unit, remove the comb rack by unscrewing the nut from under the comb stop and lift it clear of the combs.

Next remove the comb stop by unscrewing the holding-down screws ; take off the type-head spur wheel by driving out the taper pin ; gently tap the end of the type carriage spindle and draw the spindle away from the body.

Unscrew the body bush and disengage the body from its rear support, then lift the bellcrank springs over the ends of the bellcranks. Now lift out the bellcranks, all of which are interchangeable. Unscrew the printer body lock nuts ; remove the washer, bellcrank bearing, top bellcrank rack, top comb distance ring and bottom bellcrank rack. Then remove the combs, comb distance rings, one of which is placed between each comb, and the bottom comb distance ring.

Should the combs be disarranged during this process, they can be replaced in their proper order according to the numbers stamped on their faces, No. 1 being the last to be replaced.

SELECTING HEAD.

When dismantling the selecting head, first remove the actuating levers, of which there are ten spacing and ten marking, from the actuating lever carriage by pulling out the lever pivot.

Then remove the lever carriage by drawing out the carriage pivot. Unscrew the spacing rack guide lever link screw; release the rack guide lever link from the spacing rack guide by carefully moving the link sideways. Then pull out the spacing lever pivot, thus freeing the spacing lever from the base.

Remove the space stop bracket screws and carefully draw the space stop bracket away from the selecting head. Lift the selector spring pins off the selector spring supports, thus allowing the selectors to drop down.

After unscrewing, remove the selector face plate and selector guide plate. Make certain that the non-stop check lever is out of engagement with the selector lever. Then draw out the selector returning bar, being careful not to twist it when so doing.

It is essential that the check lever should be out of engagement with the selector lever, otherwise the selectors are in danger of being bent when the returning bar is withdrawn. Lift out the selectors and, after unscrewing, lift off the selecting head.

SELECTING HEAD BRACKET.

To dismantle the selecting head bracket, remove the spacing rack guide link pins from the spacing rack guide. This is done by removing the spring rings on the end of the pins and drawing the pins out carefully with a pair of pliers.

Draw out the space stop pivot, thus releasing the space stops, which are all interchangeable. (Care should be taken when replacing the space stop rack to see that it fits right home otherwise the space stops will be thrown out of alignment, and cause wrong letters to be printed when starting up again.)

TYPE HEAD.

First remove two types from the typehead to make the use of a screwdriver on the clutch plate screws easier. The types can then be removed with a pair of tweezers, after lifting the type retaining plate slightly.

Unscrew the clutch plate screws and withdraw the clutch together with its carriage, away from the clutch body, taking care when doing so that the clutch shoes, which are apt to fly out when released, are not lost. By inserting a small tool (clutch shoe holder—Fig. 15) over the clutch shoes before completely withdrawing the carriage, this can be prevented. Now unscrew the clutch, which can be withdrawn.

To remove the types, hold the carriage with the types facing upwards ; unscrew the type retaining spring screw and lift off the type retaining spring and plate.

This gives access to the types, any of which can be lifted out as desired. In the event of types accidentally dropping out of the carriage it is advisable to consult the type charts when re-assembling, as a misplaced type will not agree with the selection.

SLIP ATTACHMENT (MODEL 1T.)

To dismantle the slip attachment, first lift off the paper guide cap ; take off the spring ring on top of the platen pin and lift off the platen holder.

Next remove the paper feed roller spring from the platen pin, and thus free the feed roller spindle.

Remove the split ring from the bottom end of the feed roller spindle, and pull out the spindle from the feed roller spindle pivot.

Unscrew the feed roller spindle nut, and lift off the paper feed pawl lever. When renewing the platen, first cut the existing one off its holder and slide the new one over the top of the holder into position.

CARRIAGE (MODEL 1P.)

Drive out the taper pin from the line feed ratchet and remove the line feed lever and the ratchet wheel.

Push the platen as far as it will go to the left, and knock out the taper pin from the pneumatic buffer. Run down the clock spring by depressing the lever at the rear of the spring drum. Take the screw from the end of the platen spindle and remove the platen knob. Slacken the bush clamping screw at the left hand end of the carriage and drive out the platen shaft. The platen carriage can now be removed from the shaft. Take out the screw from the back end of the spindle and drive it out of its bearing, taking care to disengage the pawls. The spring drum and ratchet wheel can now be removed from the spindle.

Unhook the returning springs and remove the screws from the feed pawl actuating lever. Pull out the retaining pins from the platen bracket, and withdraw the bars and the dogs.

ASSEMBLING.

PRINTER BODY UNIT.

To reassemble the printer body unit, replace the comb distance collar and ring, followed by the combs, starting with No. 20 (number facing upwards), with one comb distance ring between each pair of combs, and then after placing one comb distance ring on the top of the last comb, the following parts should be slipped on in the following order : bottom bellcrank rack, top comb distance ring, top bellcrank rack, bellcrank bearing, body washer and body lock nuts.

Place in position about six bellcranks equally spaced around the body. Move the top bellcrank rack until these six bellcranks are absolutely free to move up and down, then lock the rack with its two lock nuts.

The most convenient method of replacing the bellcranks is to place the printer body on two small strips of wood, thus raising it a sufficient distance above the bench to allow free movement of the bellcranks. The bellcranks can then all be replaced with their respective springs.

From now on, reverse the method of dismantling, but while screwing up the body bush ensure that the unit is mounted on a flat surface.

While reassembling the comb rack C.P. to the unit, withdraw the top row of spring plungers, resting the tips of the plungers at the sides of the holes. When in position, replace the plungers.

SELECTING HEAD.

Replace the selecting head bracket. To replace the selectors, commence at the rear end of the selecting head. In this position the marking selectors are on the left and the spacing selectors are on the right, and starting from the first slot in the selector racks, first insert one marking and one spacing selector, making sure that the first marking selector is fitted with a spring clip.

The punched projections on the selectors should be visible to the mechanic when assembling in this manner.

Next, insert the selector returning bar, making sure that it is right home. Thread the selector springs on to the selector spring pins, and pull the pins on to the spring supports. Now place the selector guide plate in position. It will now be quite easy to push each selector into its respective hole on the guide plate with a pair of tweezers, but do not use any force when so doing.

The selectors can be pulled down by holding up the end of the selector lever. Insert the non-stop check lever, replace the selector face plate and the detachable slip, making sure that the selectors are right down. Then replace the space stop bracket.

SPACE STOP BRACKET.

Hold back the spacing rack guide which will hold the space stops in their respective slots. The space stop bracket can now be placed in position on the selector face plate.

Then see that the non-stop check lever is out of engagement with the selector lever, thus allowing the selectors to rise, also that the spacing rack guide lever link is in an upright position.

Each space stop should rest on the punched projection at the bottom of each pair of selectors, and by holding down the bracket as directed, the space stops can be put in their respective places.

When this is done, lift the bracket up until the sprocket wheel spindle is in line with the bearing hole in the bracket. Then gently push the bracket into place on the keyway, making sure that the end of the bracket is firmly fitted against the stop in the selector face plate before screwing it up.

The greatest care is necessary in replacing the selector head bracket, as considerable damage can be done unless these instructions are carefully carried out. Replace the spacing rack guide lever into its slot in the guide rack, replace the screw and replace the lever, by inserting the pivot.

Restore the actuating lever spring in position, and replace the actuating lever carriage by inserting the pivot. Replace the actuating levers and the cam rollers on their respective pins,

being careful to see that the shoulder of each roller is on the inside. Slip a spare comb rack over the actuating levers and tie back the actuating lever carriage.

Having assembled the component parts, they should be screwed down to the main base in the reverse order to that adopted when dismantling. Special care, however, should be paid to the selecting head. Insert each actuating lever in its own slot in the comb rack C.P. and before screwing down the selecting head make sure that the selector lever cam roller is riding on its cam, and not on the steel washer between the selector lever and the actuating lever carriage cams, otherwise the selector lever will be bent when screwing down the head.

TYPE HEAD.

Replace the types in their correct order ; replace the type retaining plate spring and screw. When this has been done, the types, if pushed forward, should be brought back into position smartly.

It is as well to try each type separately to make sure that it is free. The clutch shoes and springs can now be replaced. If the small tool supplied is placed over the shoes the type carriage can be inserted into the clutch body.

CARRIAGE (MODEL 1P).

Replace the dogs and the bars, and put the retaining pins back in position in the carriage bracket. Screw the feed pawl actuating lever in place and hook the returning springs to their pins.

Slide the spring drum and ratchet wheel on to the spindle, and replace the screw at the back end of the spindle.

Replace the platen on its shaft and slide the latter into its bearings. Tighten the bush clamping screw, replace the platen knob and its screw. Drive the taper pin into the pneumatic buffer. Wind up the spring sufficiently to cause the carriage to return smartly when the spring is tripped.

Replace the ratchet wheel and the line feed lever, seeing that the feed pawl is on the blank tooth on the ratchet wheel when the platen is at the extreme left of the shaft. Drive the taper pin into the line feed ratchet.

ADJUSTMENTS.

BELLCRANKS.

The bellcrank lifting collar should raise the bellcranks clear of the combs for the latter to be returned to normal by the comb returning pins. The amount of lift is adjusted by means of the knurled adjusting nut situated behind the printer body.

When adjusted, this nut can be locked by the set screw provided in the collar. If the bellcranks are not lifted sufficiently by the collar, the combs will not return to normal ; on the other hand, if they are lifted too much, the selected bellcrank will not drop low enough to arrest the type stop. The lift of the bellcranks when correctly set should be approximately .01 ins. above the surface of the combs.

TYPE HAMMER.

The type hammer should be adjusted so as to clear the types. If it is adjusted too far forward, it will continually rub against the types and cause blurred printing. If too far back from the types, it will fail to push them forward sufficiently to print well. This adjustment, which is effected by means of the set screw in the hammer, should be sufficient to produce a clear impression. After adjustment, the locking nut should be tightened up.

POSSIBLE FAULTS AND RECTIFICATION.

WRONG LETTERS.

These may be due to the bellcranks not being lifted high enough to clear the combs when they are moved.

MISSING LETTERS.

These may be due to the space stops wearing and the feed rake slipping past them. This happens especially at high speeds. They may also be caused by the end of the feed rake wearing and feeding the tape too far forward and therefore obstructing the movement of the selectors.

In any trouble with the selecting head, it is as well first of all to ascertain that the selectors are all rising and falling freely. Attention should then be given to the feeding mechanism to see that the tape is fed so that the holes are over the selectors. Then look to see that the space stops function properly, i.e., are free in their slots, and arrest the rake properly.

BREAKAGE OF TYPES.

Breakage of the letter P and those types near to it, such as N. O. Q. R. etc., has been found to be due to mis-selections passing through the machine. When blank tape is passing, the typehead is arrested in a certain position corresponding to the space signal. If a mis-selection immediately follows the space signal, the gear ratio of the typehead is such that the hammer will fly out and strike the types at a position corresponding to the letter P or thereabouts, whilst they are revolving. Although the hammer is fitted with a spring safety device the continual tapping on the letter P and adjacent types eventually causes their breakage. The mis-selections referred to are generally key signals on the tape between messages. We recommend that particular attention should be given to the strength of the flat spring behind the type hammer, so that it is as light as possible, and that care should be taken to avoid running key signals through the Printer.

BAD PRINTING.

This may be due to oil getting on the type faces, or to the type hammer being too far away from the type wheel, or because the paper is too far from the type wheel. The correct distance between the paper and the types is 1/32in., and between the hammer and the types .02in.

CARRIAGE TROUBLES (MODEL 1P only).

Excessive lubrication of the paper carriage mechanism or the use of a too heavy grade of oil is in many cases the cause of carriage troubles.

The paper carriage mcchanism of the Creed Morse Printer consists entirely of slow-moving parts and only the lightest lubrication is required.

This applies particularly to :—

(1) The shaft carrying the platen ;

(2) The piston which fits the dash-pot on the platen ;

(3) The control dogs.

Excessive lubrication, or the use of heavy oil on these parts will cause sluggish operation and faulty feeding of the paper.

Referring to items (1) and (2), only the lightest oil should be used and this should be applied in very small quantities. Care should be taken to keep the piston free from dirt.

If dirt is allowed to accumulate on this part the platen will be stopped on its return travel before it reaches the end of the line ; the feed and retaining pawls will remain disengaged, and the platen will not be fed forward on the commencement of a fresh line.

Referring to item (3), the control dogs are actuated by spring controlled levers and are also returned to their normal positions by springs.

It is, therefore, highly important that they should operate freely on their pivots and that undue friction caused by the use of heavy lubricating oil should be avoided.

The faults which can be caused by clogged dogs are :—

(a) Failure of line feed due to the fact that the spring operating the line feed lever is not strong enough to press the dog into engagement against the extra friction caused by the clogging.

(b) Continuous line feed due to the returning spring on the dog not being strong enough to disengage the dog.

(c) Failure of carriage-return, due to the spring operating the carriage-return lever not being strong enough to press the dog into engagement.

MAINTENANCE.

Oil working parts and bearings with Wakefield's Castrol A.A.

A drop of paraffin placed on the inking wheel will considerably lengthen the life of the wheel and cause a better impression to be given.

The Creed typehead clutch requires grease once every four weeks. The grease gun supplied with the machine enables this operation to be done easily and without dismantling the clutch.

In order to fill the gun, the plunger should be withdrawn and the barrel half filled with "Crimsengcre"; the plunger should be inserted and pushed in until the shoulder is flush with the top end of the gun. Surplus grease should be wiped from the end of the gun. The amount left in the barrel will then be a suitable charge for the clutch.

One of the screw holes on the clutch body is marked with a line or dot. Removal of the screw from this hole uncovers a channel which leads into the clutch chamber.

Hold the gun by the knurled portion between finger and thumb, press the nozzle into the hole in the clutch body, holding the gun at a slight angle so as not to damage the types. Then press the plunger down as far as it will go.

Full oiling instructions are given on Lubrication Charts 519 (Tape Model) and 519P (Page Model), one of which is supplied with each machine.

SPARE PART LIST

FOR THE

MORSE PRINTER

WHEN referring to this list, it should be noted that the lettering C.P. affixed to part names indicates a complete part. A complete part consists of two or more separate parts assembled to form a convenient section or unit which may be easily attached to, or detached from, the machine.

The serial number of the instrument, which will be found on the name plate, must be quoted in all cases when ordering spares, as well as the name and number of the part required.

In the past, it has been found that the identification of Types has presented some difficulty. If the following instructions are carefully complied with no trouble will be experienced in ordering Types.

First quote the class of Type (" AQ ") and the style number by reference to the Type Style Chart (Fig. 24). In the latter, style numbers for Morse Page Printers will be found in the second column and for Tape Printers, in the fourth column. The character number, which can be ascertained from the Master Type Charts (Fig. 25 for large types, and Fig. 26 for small types), should be quoted last.

Thus an order for six large letters " K " for a Morse Tape Printer would read :—

6 Types AQ/306/11.

Bei allen Aufträgen für Ersatzteile sind die Nummer der Maschine, die sich auf dem Firmenschild befindet, sowie auch der Name und die Nummer des verlangten Teiles zu geben.

Dans tous les cas de commander des pièces de rechange, le numéro de la machine, qui se trouve sur le plaque, ainsi que le nom et le numéro de la pièce exigée, doivent être cités.

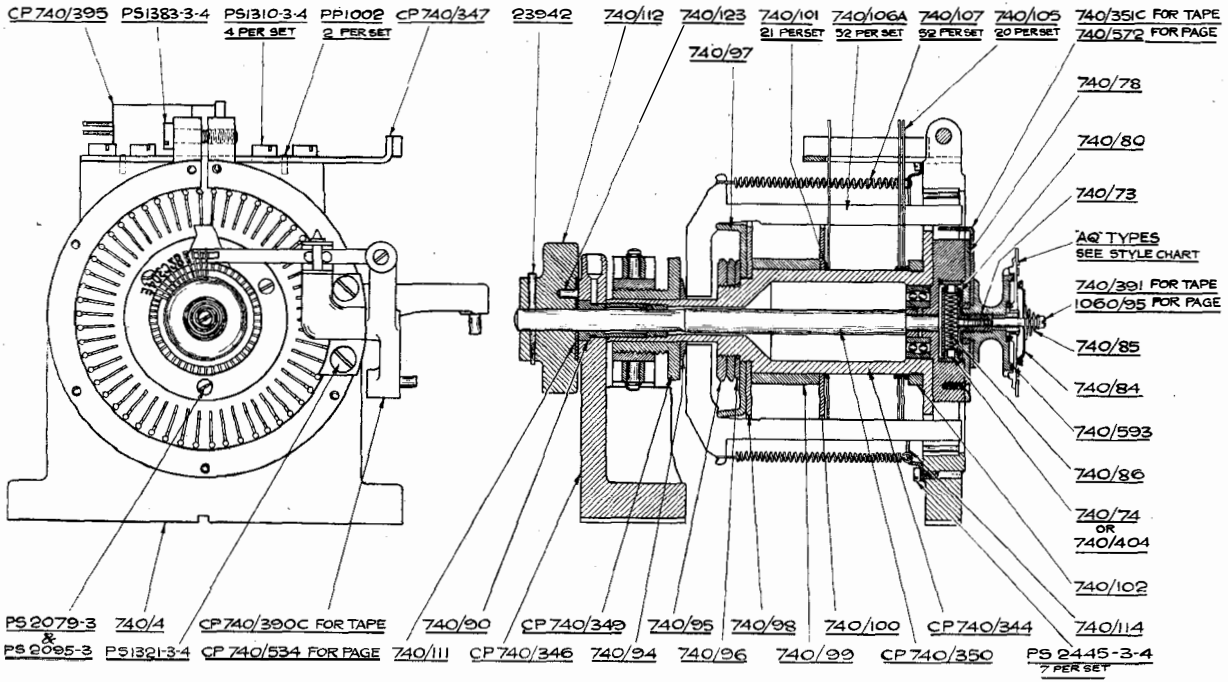


Fig. 3. Elevation and Longitudinal Section of Combination Head.

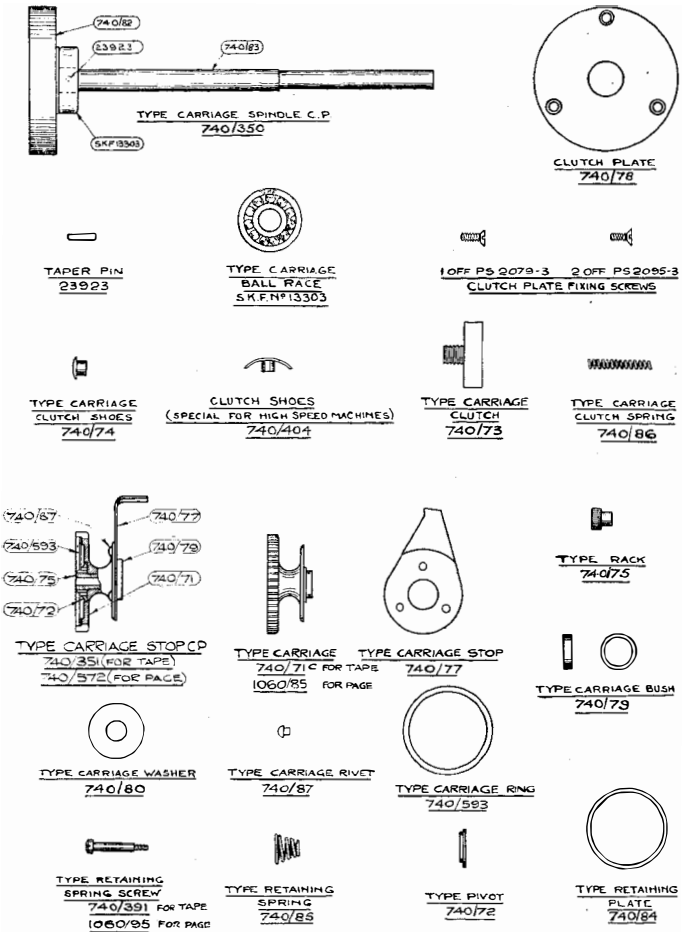


Fig. 4. Typehead Parts.

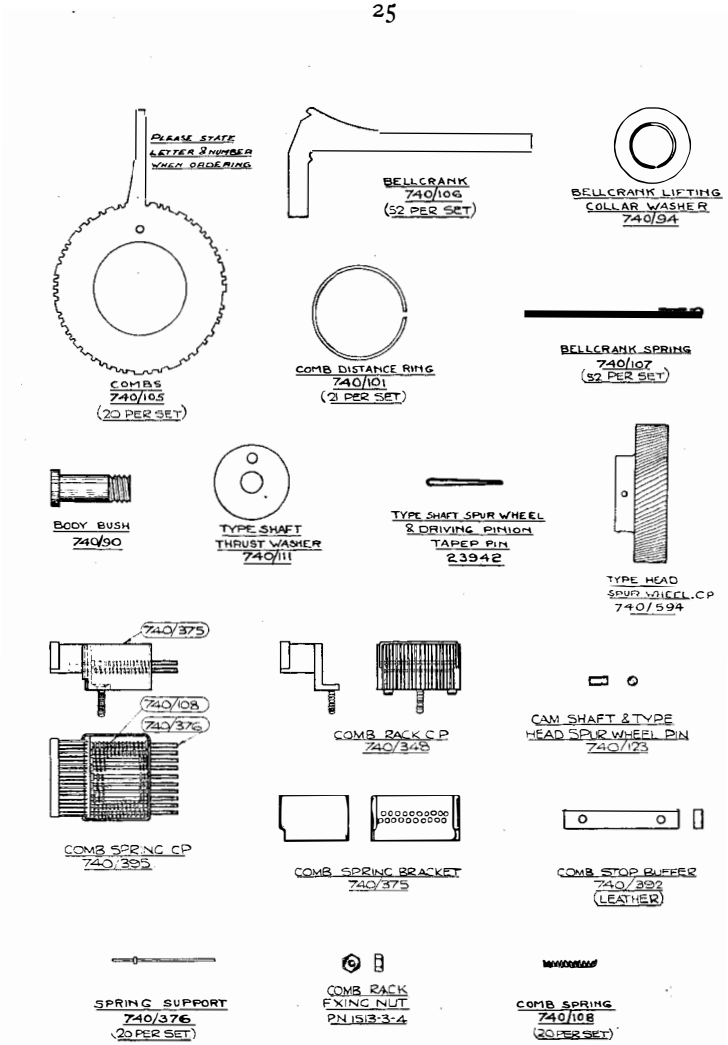


Fig. 5. COMBINATION HEAD PARTS.

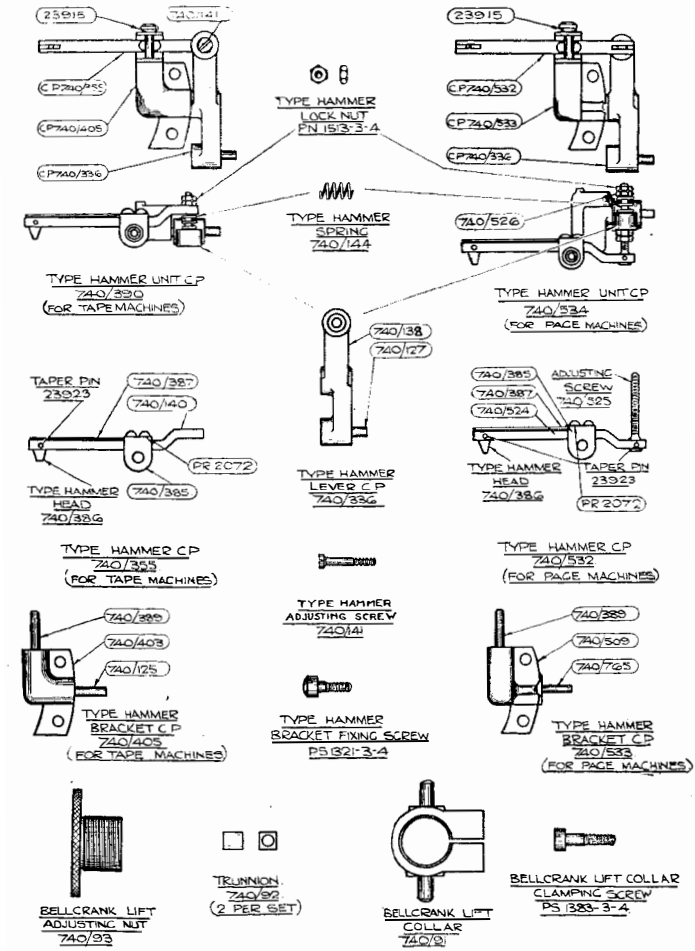


Fig. 6. Type Hammer Parts.

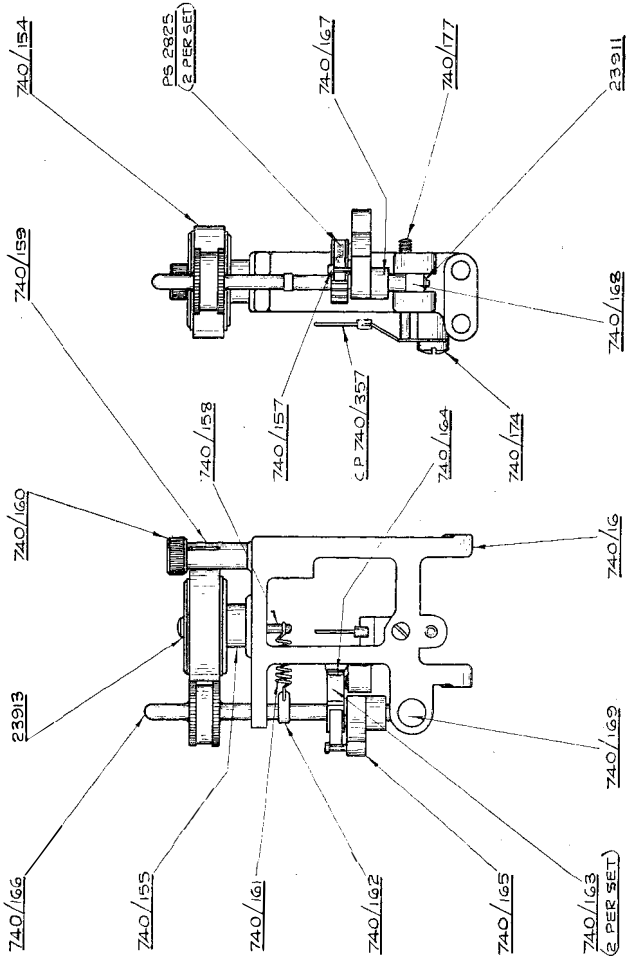


Fig. 7. Printing Head C.P.

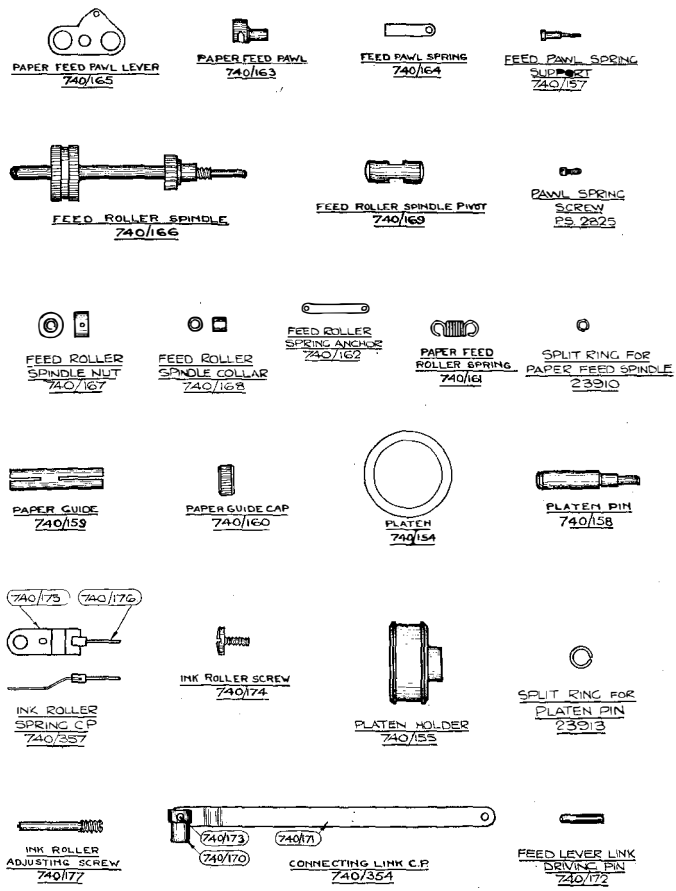


Fig. 8. Printing Head Parts.

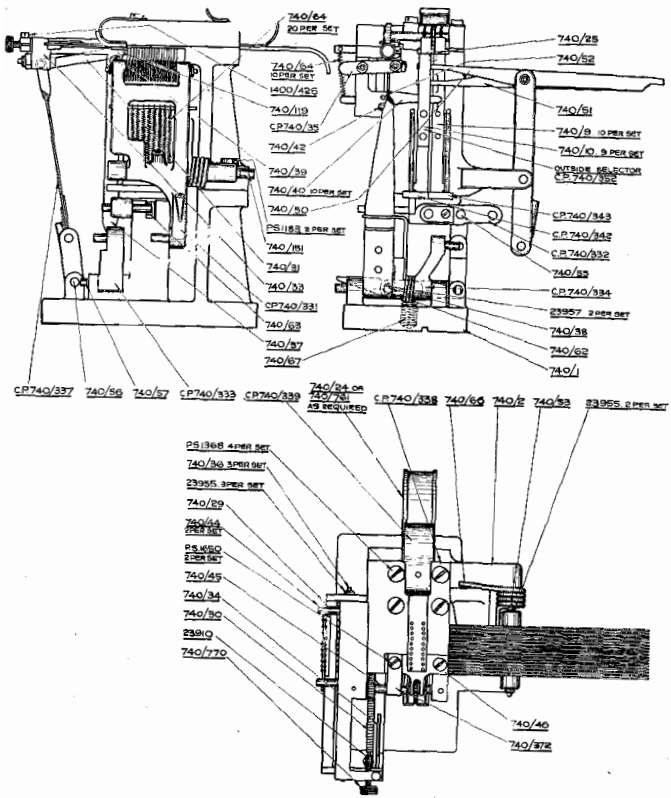
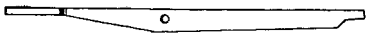
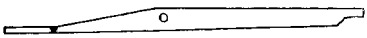


Fig. 9. Selecting Head C.P. 740/70.



ACTUATING LEVER (A)
740/50
(10 PER SET)

PRINTING HEAD PIN 'A' 2
ACTUATING LEVER
CARRIAGE PIVOT
740/151



ACTUATING LEVER (B)
740/51
10 PER SET

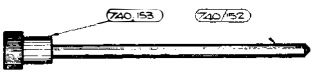
ACTUATING LEVER
CARRIAGE SPRING
740/66

ACTUATING LEVER
PIVOT
740/53

LOCKING RING
FOR ACTUATING
LEVER PIVOT
23955

NON-STOP SCREW
CHECK LEVER
740/59

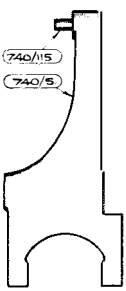
NON STOP
CHECK LEVER COLLAR
740/60



PRINTING HEAD PIN CP
740/156

NON STOP CHECK
LEVER SPRING
740/61

NON STOP
CHECK LEVER
740/58



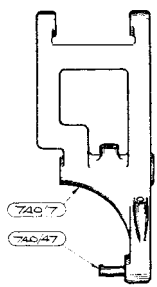
BELL CRANK
LEVER CP
740/335

TABLE OF SPLIT RINGS	
FOR PIN	PART NO
3/32 DIA	23910
1/8 DIA	23911
3/16 DIA	23912
1/4 DIA	23913
5/16 DIA	23914
5/32 DIA	23915

TABLE OF LOCKING RINGS	
DIA OF BORE	PART NO
3/32 DIA	23955
1/8 DIA	23956
5/32 DIA	23957
3/16 DIA	23958
7/32 DIA	23960
1/4 DIA	23959

TABLE OF 1/8 TAPER PINS

A	B	PART NO
1/4	063	23918
3/8	063	23923
11/16	121	23933
1 1/8	076	23942
1 3/8	152	23943
1 5/8	152	23945



ACTUATING LEVER
CARRIAGE CP
740 331

Fig. 10. SELECTOR PARTS.

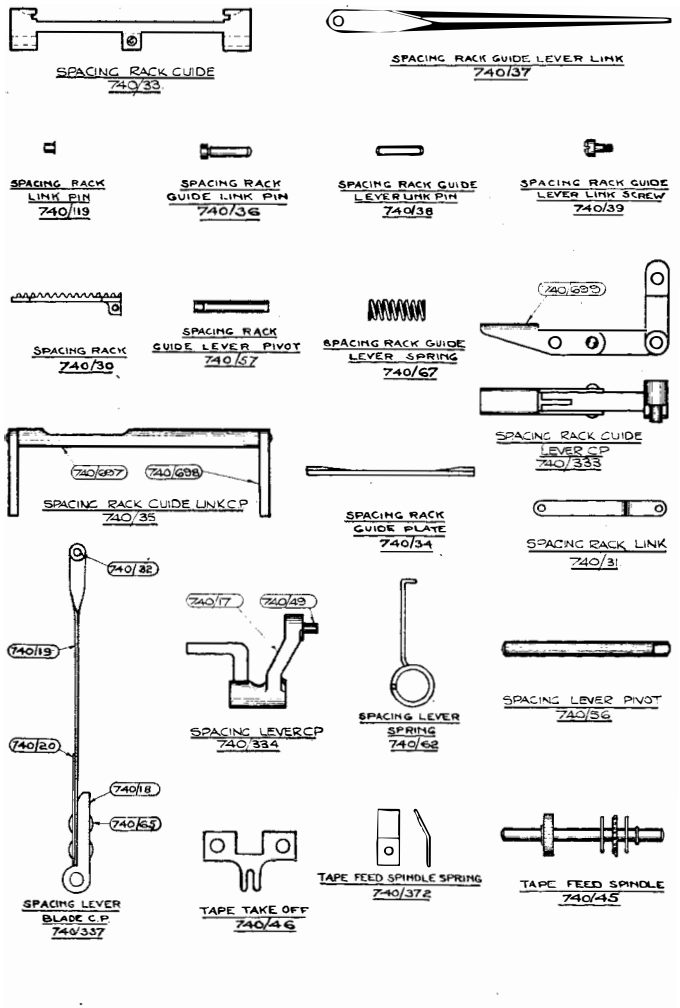


Fig. 11. Selector Parts.

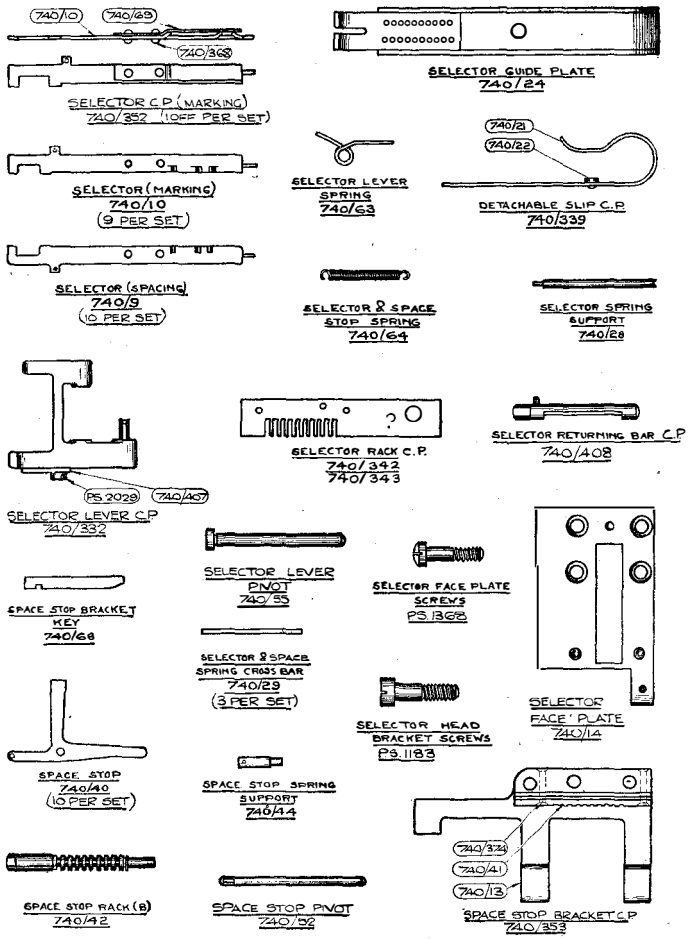


Fig. 12. SELECTOR PARTS.

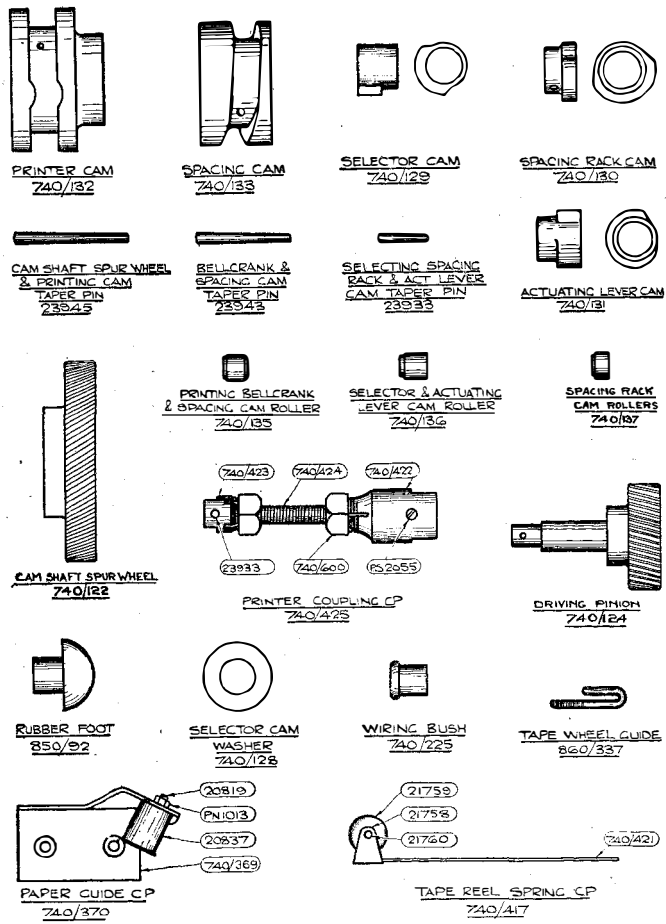
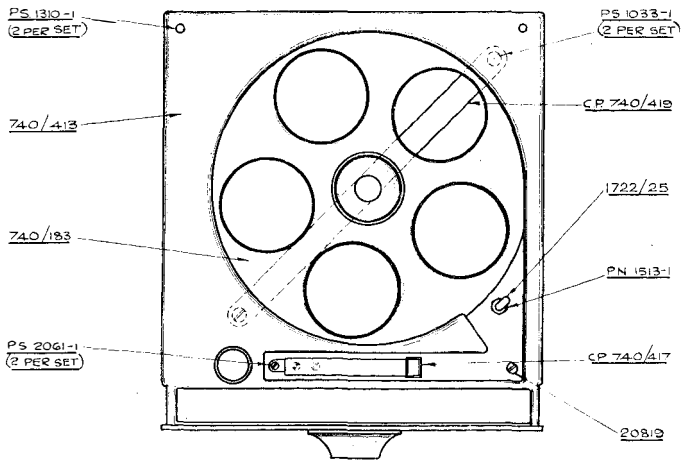
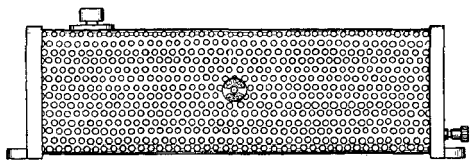


Fig. 13. Base Parts.



TAPE WHEEL DRAWER C P
740/414



MICKLEWRIGHTS SLIDING RESISTANCE
100ω FOR 110V
300ω FOR 220V

INK ROLLER

SUPPLIED IN BOTTLES
EACH CONTAINING 100 ROLLERS

GRADES & COLOURS

'A' QUALITY	'B' QUALITY (SPECIAL)
PURPLE RECORD	PURPLE COPYING
PURPLE COPYING	
BLACK RECORD	
UNINKED ROLLERS	

Fig. 14. Base Parts.

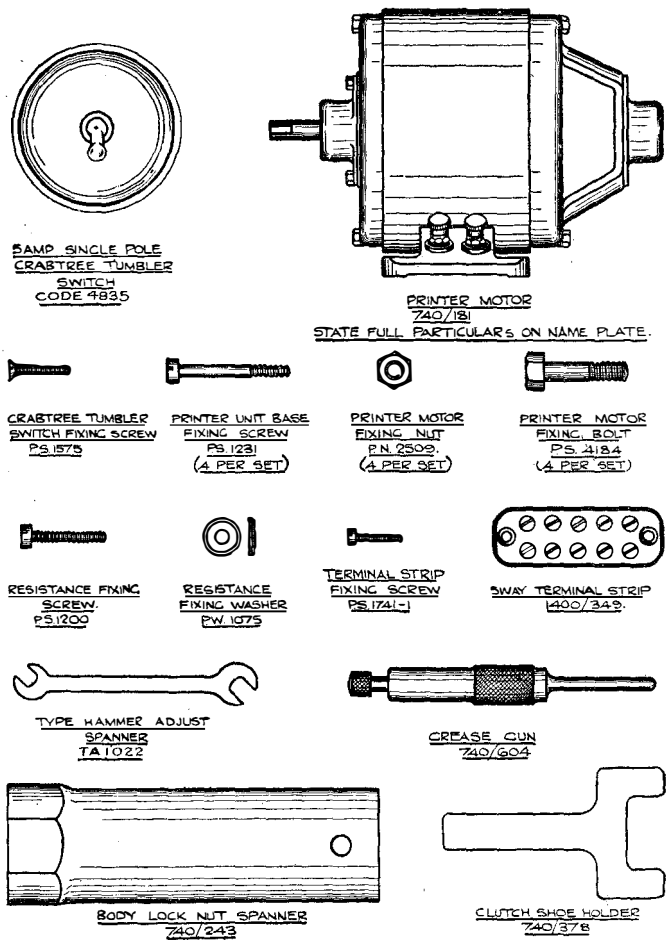


Fig. 15. Base and Accessory Parts.

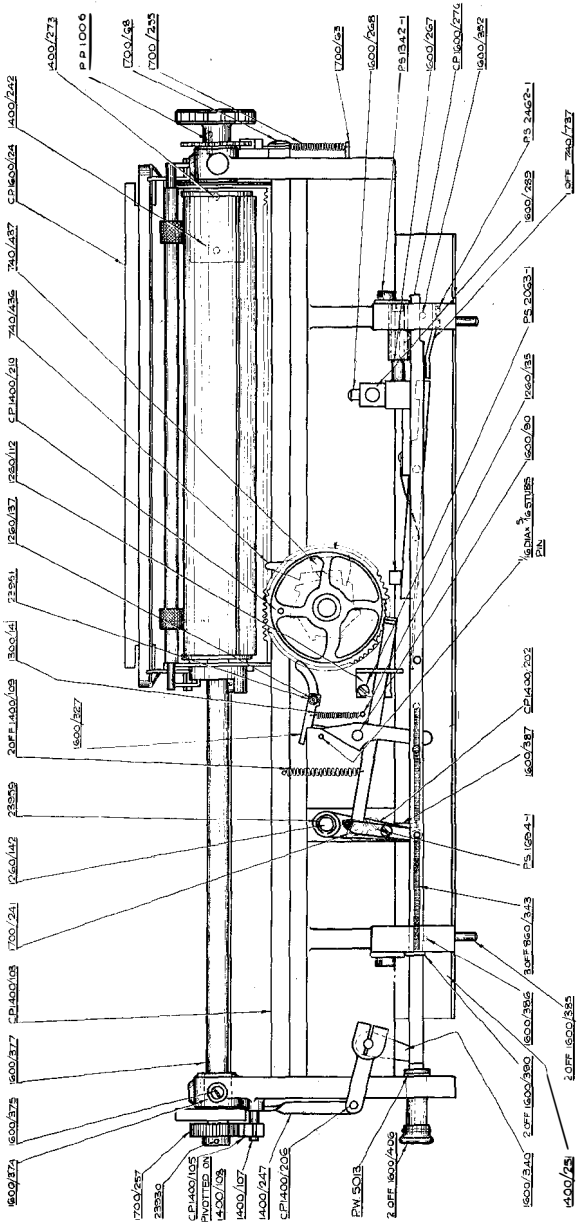


Fig. 16. Morse Page Printer Carriage Assembly (Elevation).
1600/330.

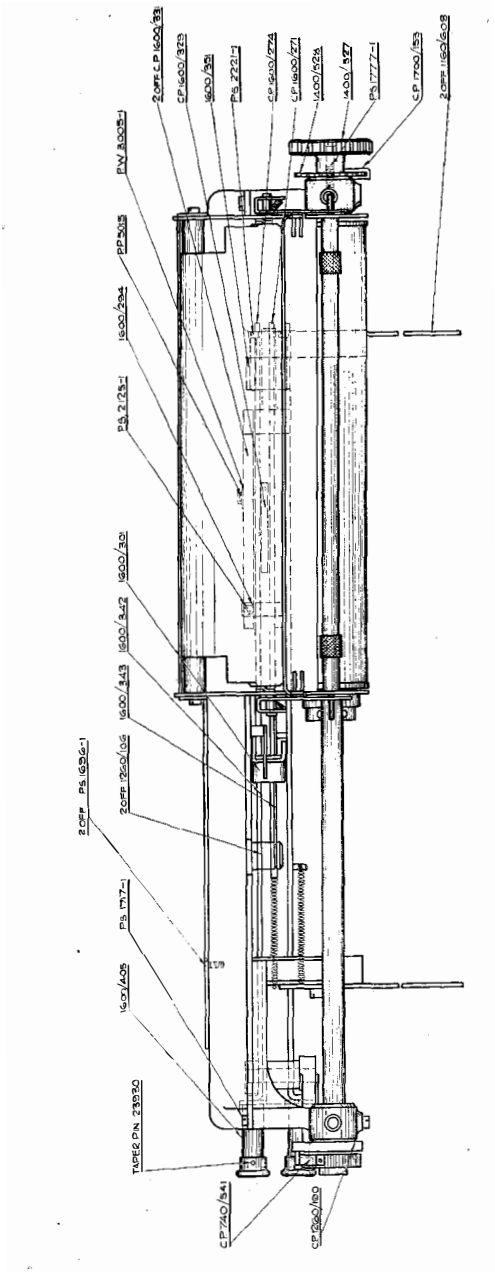


Fig. 17. Morse Page Printer Carriage Assembly (Plan).
1600/330.

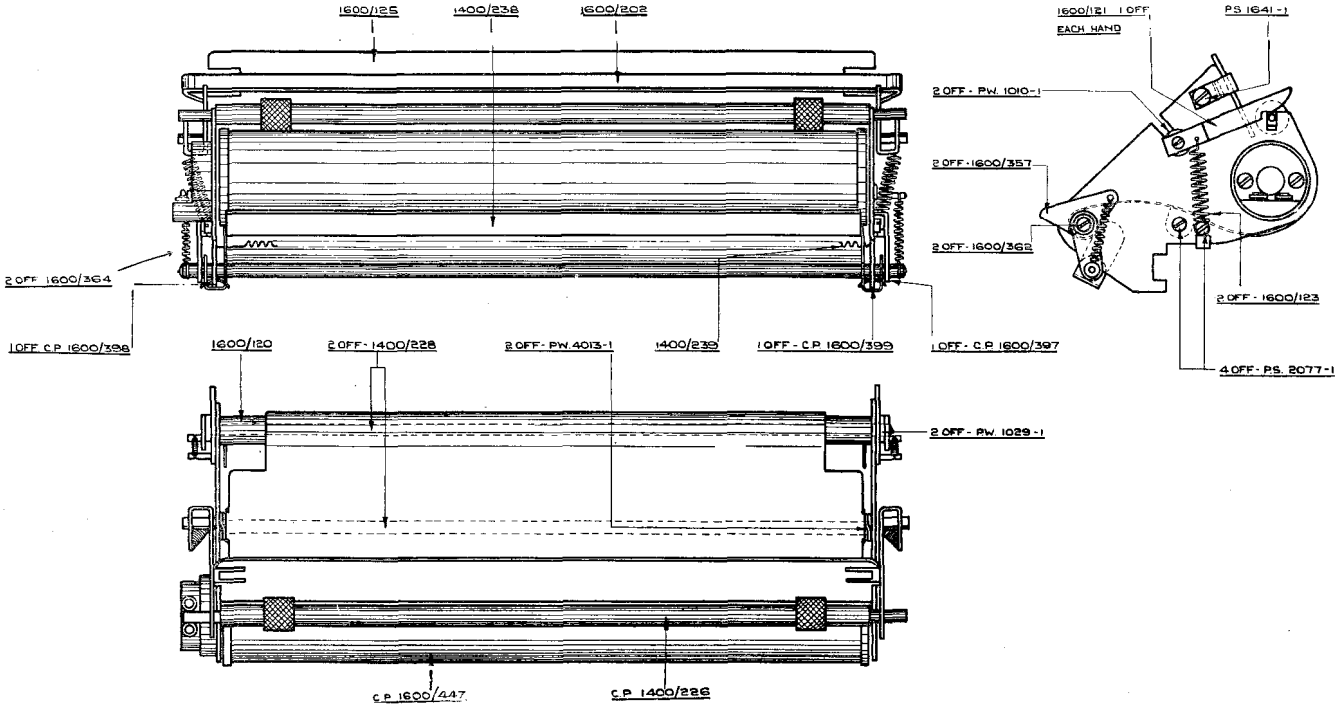


Fig. 18. Carriage C.P.
1600/124.

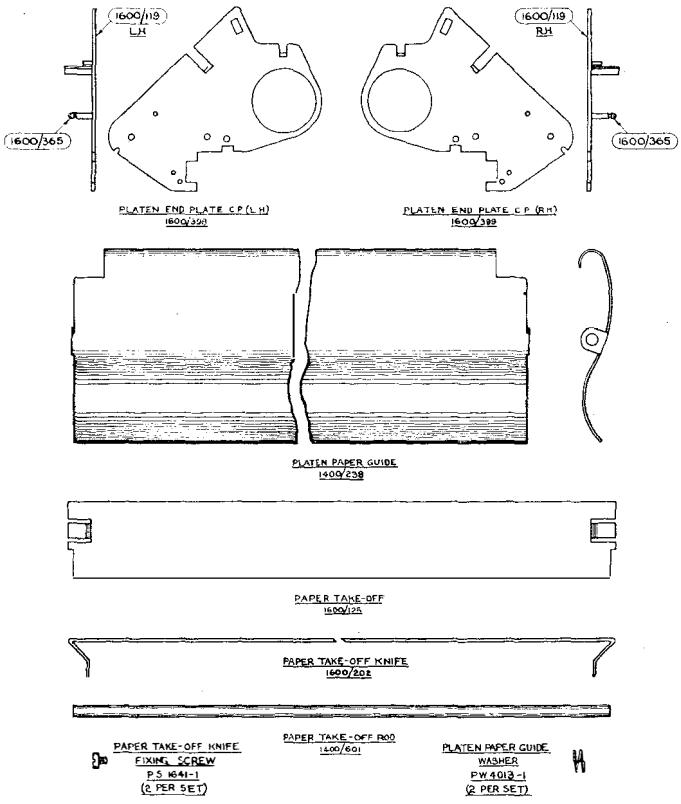


Fig. 19. Carriage Platen Parts.

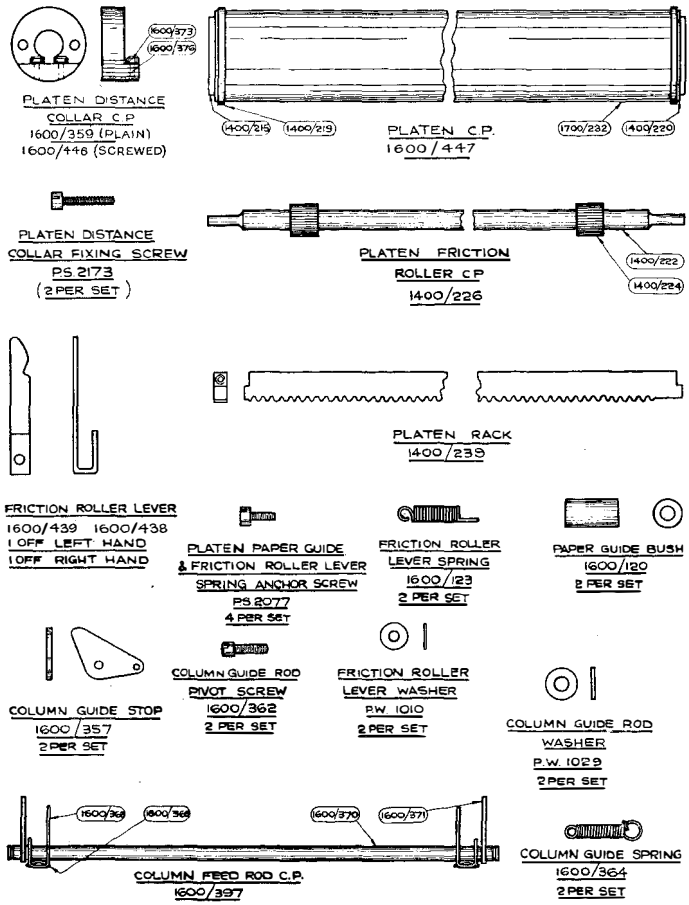


Fig. 20. Carriage Platen Parts.

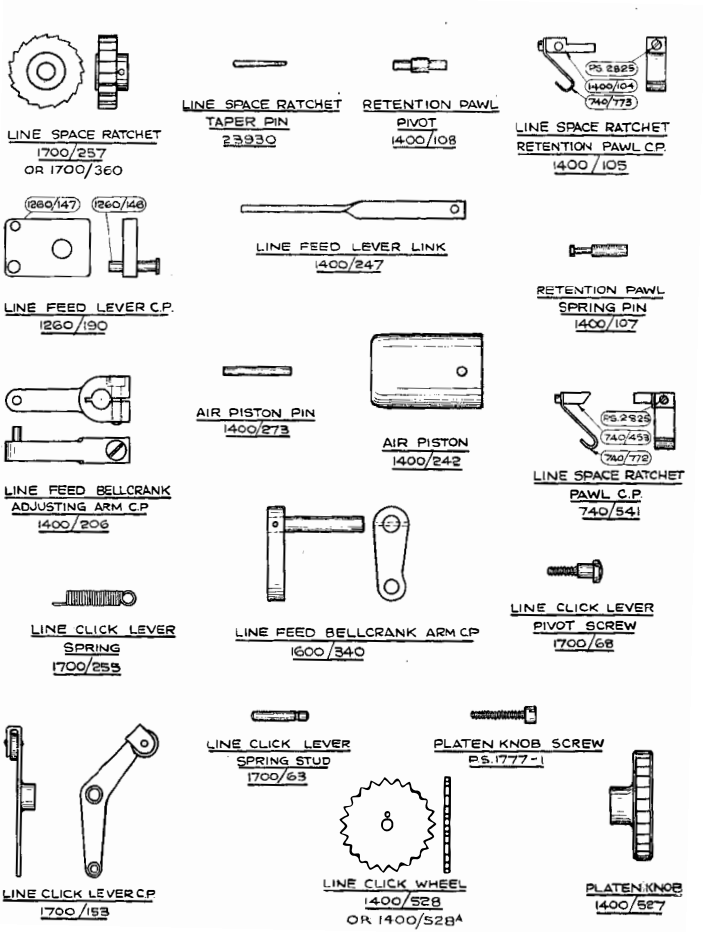


Fig. 21. Carriage Parts.

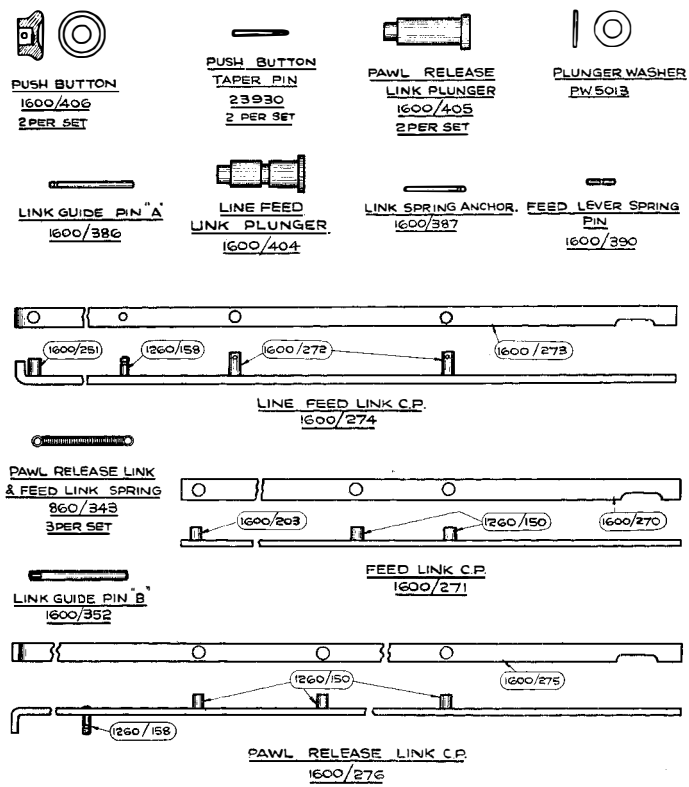


Fig. 22. Carriage Parts.

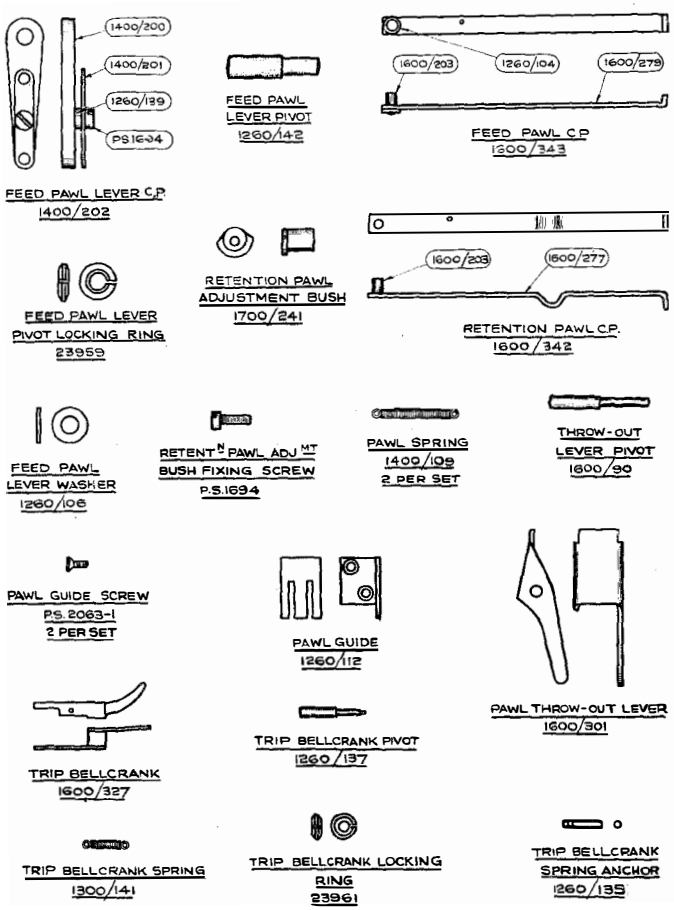


Fig. 23. Carriage Parts.

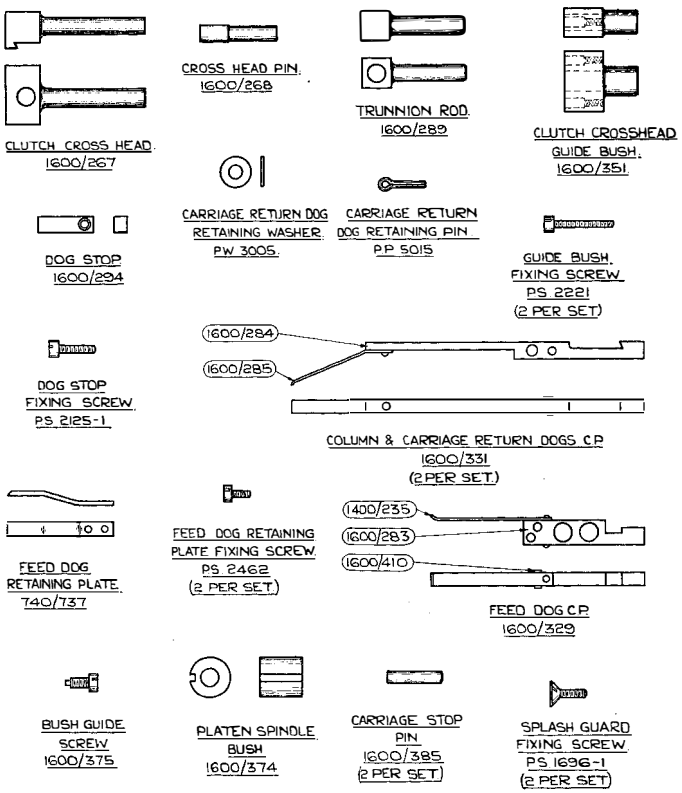


Fig. 24. Carriage Parts.

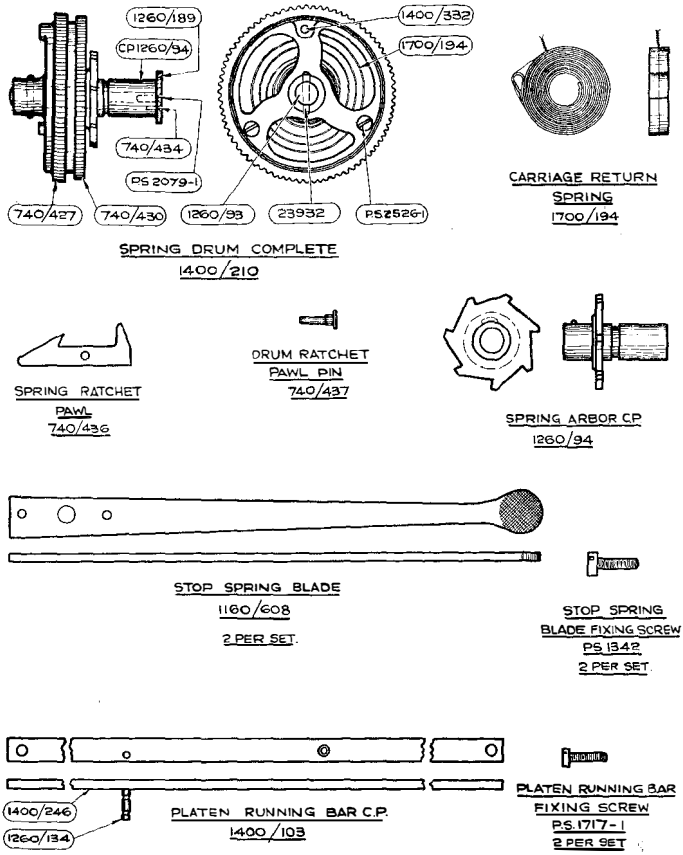


Fig. 25. Carriage Parts.

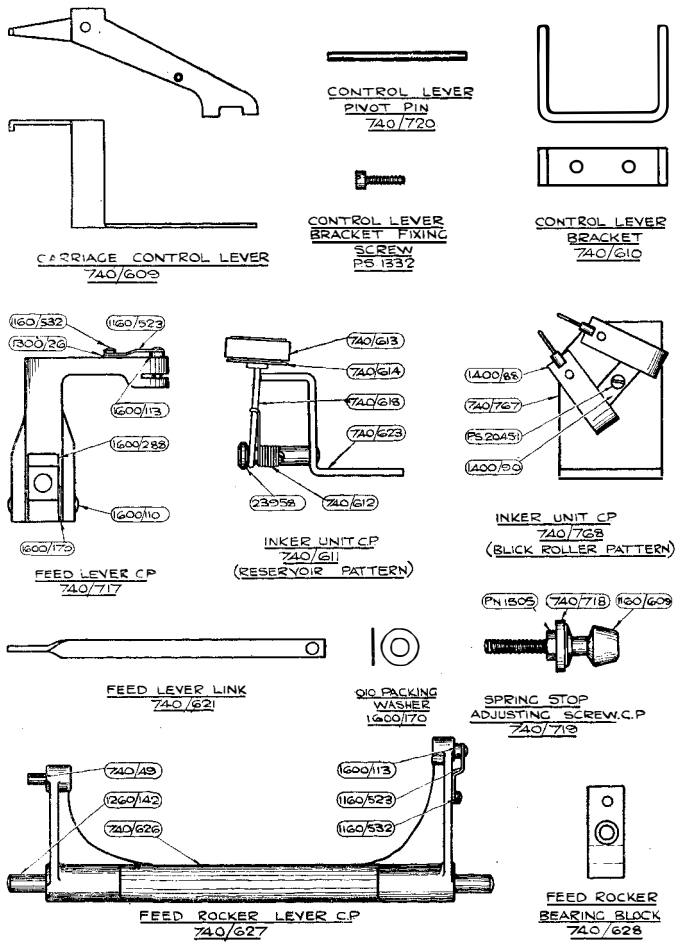


Fig. 26. Page Printer Base Parts.

MORSE PRINTER.

(See Figs. 3 to 26).

Mumerical Index of Parts.

Part No.	*Description.*	
720/199	Spanner (for typehammer adjustment)	*Replaced by* TA.1022
720/230	Motor packing	
720/9	Selector (spacing)	
740/10	Selector (marking)	
740/23	Flanged pin (detachable slip retaining stud)	*Renumbered* PP.8553
740/24	Selector guide plate	
740/29	Selector and space stop spring cross bar	Supplied as C.P.740/798
740/30	Spacing rack	
740/31	Spacing rack link	
740/33	Spacing rack guide	
740/34	Spacing rack guide plate	
740/35	Spacing rack guide link C.P.	
740/36	Spacing rack guide link pin	
740/37	Spacing rack guide lever link	
740/38	Spacing rack guide lever link pin	
740/39	Spacing rack guide lever screw	PS.5285
740/40	Space stop	
740/41	Space stop rack "A"	
740/42	Space stop rack "B"	
740/44	Space stop spring support	
740/45	Tape feed spindle	
740/46	Tape take-off	
740/50	Actuating lever "A"	
740/51	Actuating lever "B"	
740/52	Space stop pivot	PP.6526
740/53	Actuating lever pivot	
740/55	Selector lever pivot	
740/56	Spacing lever pivot	
740/57	Spacing rack guide lever pivot	
740/58	Non-stop check lever	

Part. No.	*Description.*	*Renumbered.*
740/59	Non-stop check lever pivot screw	PS.5526
740/60	,, ,, ,, ,, bush	PB.1125
740/61	,, ,, ,, spring	PG.3038
740/62	Spacing lever spring	
740/63	Selector lever spring	
740/64	Space stop and selector spring	PG.7034
740/66	Actuating lever carriage spring	
740/67	Spacing rack guide lever spring	
740/68	Space stop bracket key	KY.1009
740/70	Selecting head C.P.	
740/73	Clutch	
740/74	Clutch shoe	
740/78	Clutch plate	
740/79	Bush for type carriage	PB.1103
740/80	Type carriage washer	PW.5017
740/84	Type retaining plate	
740/85	Type retaining spring	PG.3012
740/86	Type clutch spring	PG.5006
740/87	Type carriage stop rivet	PR.5025
740/89	Type carriage assembly C.P. (Tape machines)	
740/90	Body bush	
740/91	Bellcrank lifting collar	
740/92	Trunnion (for bellcrank lifting collar)	
740/93	Bellcrank lift adjusting nut	
740/94	Bellcrank lifting collar washer	PW.5157
740/95	Bellcrank bearing nut	PN.5039
740/96	Bellcrank bearing washer	PW.5134
740/97	Bellcrank bearing	
740/101	Comb distance ring	
740/102	Comb distance ring "B"	
740/103	Bellcrank lever pivot	PP.6530
740/105	Comb (please state marking)	
740/106	Bellcrank	
740/107	Bellcrank spring	PG.7085
740/108	Comb spring	PG.5019
740/111	Typeshaft thrust washer	
740/116	Body locating pin	PP.6576
740/119	Spacing rack link pin	

Part No.	*Description.*	*Renumbered.*
740/120	Combination head C.P. (Tape machines)	
740/134	Bellcrank cam	
740/135	Cam roller (hammer operating lever, bellcrank lifting lever, etc.)	
740/136	Cam roller (selector and actuating lever)	
740/137	Cam roller (spacing rack)	
740/141	Typehammer adjusting screw	
740/144	Typehammer spring *Replaced by*	PG.5014
740/145	Body front support key	
740/146	Body rear support key	
740/147	Selector bracket key	
740/148	Camshaft bearing bush	PB.1129
740/149	Driving pinion spindle bearing bush	PB.1128
740/151	Actuating lever carriage pivot	
„	Printing head pin "A"	
740/154	Platen	
740/155	Platen holder	
740/156	Printing head pin C.P.	
740/157	Feed pawl spring anchor	PP.9014
740/158	Platen pin	PP.9001
740/160	Paper guide cap	
740/161	Feed roller spring	PG.7091
740/162	Feed roller spring anchor	
740/163	Paper feed pawl	
740/164	Feed pawl spring	PG.2028
740/165	Feed pawl lever	
740/166	Feed roller spindle	
740/167	Feed pawl lever nut	
740/168	Feed roller spindle collar	
740/169	Feed roller spindle pivot	
740/172	Feed lever link driving pin	
740/174	Ink roller spring screw	
740/177	Ink roller adjusting screw	
740/181	$\frac{1}{8}$ h.p. D.C. motor	
740/190	Printing head C.P.	
740/225	Wiring bush	PE.1001
740/243	Body spanner	TA.1016

Part No.	*Description.*	*Renumbered.*
740/331	Actuating lever carriage C.P.	
740/332	Selector lever C.P.	
740/333	Spacing rack guide lever C.P.	
740/334	Spacing lever C.P.	
740/335	Bellcrank lever C.P.	
740/336	Typehammer lever C.P.	
740/337	Spacing lever blade C.P.	
740/338	Selector face plate C.P.	
740/339	Detachable slip C.P.	
740/342	Selector rack C.P. (marking side)	
740/343	Selector rack C.P. (spacing side)	
740/347	Comb stop C.P.	
740/348	Comb rack C.P.	
740/350	Type carriage spindle C.P.	
740/351	Type carriage stop C.P.	
740/352	Selector C.P.	
740/353	Space stop bracket C.P.	
740/355	Typehammer C.P.	
740/357	Ink roller spring C.P.	
740/370	Paper guide C.P.	
740/372	Tape feed spindle spring	
740/376	Comb spring support	PP.8570
740/378	Clutch shoe holder	TA.1017
740/381	Driving pinion	GR.2014
740/382	Driving pinion shaft	
740/384	Cam shaft C.P.	
740/385	Typehammer shackle	
740/386	Typehammer head	
740/387	Typehammer head spring	PG.2053
740/390	Typehammer unit C.P.	
740/391	Type carriage stop screw	PS.5501
740/392	Comb stop leather buffer	
740/393	Felt (used under tape printer base)	PF.1027
740/395	Comb spring C.P.	
740/404	Clutch shoes (high speed)	
740/405	Typehammer bracket C.P.	
740/407	Selector bar retaining plate	
740/408	Selector bar returning bar C.P.	
740/417	Tape wheel spring C.P.	

Part No.	*Description*	*Renumbered.*
740/421	Tape reel spring	PG.2051
740/422	Motor coupling sleeve	
740/423	Printer coupling sleeve	
740/424	Flexible coupling	
740/425	Printer coupling C.P.	
740/525	Typehammer adjusting screw	PS.6808
740/526	Typehammer adjusting nut	
740/532	Typehammer C.P.	
740/533	Typehammer bracket C.P.	
740/534	Typehammer unit C.P.	
740/572	Type carriage stop C.P.	
740/577	Type carriage assembly C.P. (Page machines)	
740/583	Spacing paper roller bracket collar	PB.1130
740/585	Page Printer table C.P.	
740/590	Combination head C.P. (Page machines)	
740/593	Type carriage washer	PW.5173
740/594	Type head spur wheel C.P.	
740/600	Coupling sleeve lock nut	
740/604	Grease gun C.P.	TA.1015
740/607	Lifting handle (R.H.)	
740/608	Lifting handle (L.H.)	
740/609	Carriage control lever	
740/621	Feed lever link	
740/699	Spacing rack guide extension lever	
740/715	Oil splash guard	
740/716	Main frame base plate	
740/717	Feed lever C.P.	
740/718	Spring stop adjusting screw collar	PB.1134
740/719	Spacing stop adjusting screw C.P.	
740/723	Felt (used under Page Printer base)	PF.1028
740/736	Paper tension roller C.P.	
740/767	Inker bracket C.P.	
740/768	Inker unit C.P.	
740/769	Retaining clip	
740/770	Rack adjusting screw	
740/783	Motor belt ($\frac{1}{4}$in. dia.)	
740/785	Tape reel spring and bracket C.P.	
740/786	Tape guide adjustable arm	
740/795	Oval link chain	

Part No.	*Description.*	*Renumbered.*
740/798	Spacing rack and link C.P.	
850/92	Rubber foot	RB.1006
850/121	Carriage control lever spring anchor pin	PP.6008
920/38	Paper roll bush screw	PS.6205
1060/95	Type carriage stop screw	PS.5502
1160/523	Feed lever spring clip	PK.2003
1160/532	Feed lever spring clip rivet	PR.5018
1160/609	Spring stop adjusting screw	
1285/53	Locking ring pliers	TA.1023
1285/58	Spanners (8 B.A. and 10 B.A.)	TA.1036
1300/26	Feed lever spring clip washer	PW.5003
1300/123	Feed lever pivot	
1300/260	Carriage pivot pin	PP.5513
1400/88	Ink roller spring C.P.	
1400/90	Ink roller spring clamping plate	
1400/349	5-way terminal strip C.P.	CB.1011
1400/392	Paper tension roller	
1400/393	Paper tension roller spindle C.P.	
1400/493	Paper roll bush	
1600/110	Trunnion block pivot	
1600/113	Feed lever link pivot	PP.7596
1600/170	Trunnion block washer *Replaced by*	PW.5226
1600/288	Trunnion block	
1600/330	Platen carriage C.P. (see separate list for components)	
1600/385	Carriage stop pin	
1600/389	Carriage control lever spring	PG.7098
1700/286	Spanner (4 B.A. and 6 B.A.)	TA.1022
1722/25	Tape guide (for tape wheel drawer)	
20819	Tape guide screw	PS.5519
20837	Paper guide roller	RL.1024
21759	Tape reel spring roller	
21760	Tape reel spring roller pivot	
23089	Self closing oiler	
23910	Split ring (for securing space rack link to blade)	
23911	Split ring (for securing feed roller spindle)	

Part No.	*Description.*	*Renumbered.*
23912	Split ring (for securing bellcrank lifting collar trunnion (1) and selector lever pivot (2))	
23915	Split ring (for securing type-hammer C.P.)	
23918	Taper pin (for securing hammer head)	
23923	Taper pin (for securing type-hammer head and typehammer adjusting screw)	
,,	Taper pin (for securing clutch body to typehead spindle)	
23933	Taper pin (for securing actuating lever, selector and spacing rack cams)	
23933	Taper pin (for securing printer coupling sleeve)	
23941	Taper pin (for securing driving pinion to shaft)	
23942	Taper pin (for securing typehead spur wheel)	
,,	Taper pin (for securing driving pulley)	
23943	Taper pin (for securing spacing and bellcrank cams)	
23945	Taper pin (for securing printing cam and camshaft spur wheel)	
23955	Locking ring (for securing actuating lever pivot)	
,,	Locking ring (for securing spacing rack guide link pins)	
23956	Locking ring (for securing connecting link C.P.)	
,,	Locking ring (for securing control lever pivot)	
23957	Locking ring (for securing spacing rack guide lever link pin)	
23959	Locking ring (for securing feed lever and platen)	

Part No.	*Description.*	*Renumbered.*
MB.1003	Motor brush for Wilson Wolf and Horace Green motors (2 per set)	
MB.2003	Motor brush for Croydon Motor (2 per set)	
PN.1005	Nut (for securing tape guide)	
PN.1005	Nut (for securing tape guide adjustable arm)	
PN.1013	Nut (for securing paper guide roller)	
PN.1505	Nut (for securing collar to spring stop adjusting screw)	
PN.1513	Locknut (for securing tape guide to tape wheel drawer)	
PN.1513	Locknut (for typehammer adjustment)	
PN.2509	Nut (for securing paper roller bracket)	
PN.2509	Nut (for securing motor)	
PP.1033	Steady pin for comb stop	
PP.1129	Parallel pin (steady pin for feed rocker)	
PP.1146	Parallel pin (control lever pivot)	
PP.5065	Split pin (for securing paper tension roller chain to spindle)	
PR.1093	Rivet (for securing spacing rack guide lever extension)	
PR.1102	Rivet (for securing space stop rack)	
PR.2072	Snap head rivet (for securing typehammer shackle and spring)	
PR.3136	Rivet (for securing page machine base felt)	
PR.5023	Special rivet (for securing type carriage stop)	
PS.1033	Screw (for securing tape wheel pivot strap)	
PS.1183	Screw (for securing selector bracket C.P.)	
PS.1200	Screw (for securing resistance)	

Part No.	*Description.*	*Renumbered.*
PS.1231	Screw (for securing tape printer C.P. to metal base)	
PS.1286	Grub screw (for securing motor coupling sleeve)	
PS.1301	Screw (for frame earth)	
PS.1307	Grub screw (for securing motor pulley and paper roll bush)	
PS.1310	Screw (used as stop for tape wheel drawer)	
PS.1310	Screw (for securing comb stop C.P.)	
PS.1321	Screw (for securing typehammer assembly C.P.)	
PS.1332	Screw (for securing splash guard)	
PS.1332	Screw (for securing oil splash guard, control lever bracket, inker unit and spring stop adjusting screws)	
PS.1356	Screw (for securing lifting handles)	
PS.1368	Screw (for securing selector face plate C.P. and space stop bracket C.P.)	
PS.1374	Screw (for securing tape guide adjustable arm)	
PS.1378	Screw (for clamping bellcrank lift adjustment)	
PS.1383	Screw (for clamping body front bracket)	
PS.1390	Screw (for securing combination head, selecting head and gear cover)	
PS.1390	Screw (for securing feed rocker bearing block)	
PS.1575	Screw (for securing tumbler switch)	
PS.1650	Screw (for securing tape take-off)	
PS.1694	Screw (for securing main frame base plate)	
PS.1697	Screw (for securing paper guide C.P.)	

Part No.	*Description.*	*Renumbered.*
PS.1741	Screw (for securing 5-way terminal strip)	
PS.2029	Screw (for securing selector bar retaining plate)	
PS.2045	Screw (for securing ink roller springs)	
PS.2061	Screw (for securing tape wheel spring C.P.)	
PS.2072	Screw (for securing rack adjusting screw)	
PS.2079	Screw (for clutch plate grease gun hole)	
PS.2095	Screw (for securing clutch plate)	
PS.2445	Screw (for securing bellcrank spring anchor)	
PS.2825	Screw (for securing feed pawl springs)	
PS.4189	Screw (for securing motor)	
PS.4191	Screw (for securing paper roller brackets (4) and Motor (4))	
PW.1075	Washer (used with tape printer fixing screws (4) and resistance fixing screws (2))	
PW.1078	Washer (used under frame earth screw)	
PW.3007	Washer (used with resistance fixing screw)	
PW.3011	Washer (used with motor fixing screws)	
PW.4016	Spring washer (used with tape guide adjustable arm fixing screw)	
PW.5171	Felt washer (used with tape printer fixing screws)	

Part No.	*Description.*	*Renumbered.*	
R101	Screws	PS.1183	*See previous sheets.*
R102		PS.1368	
R104		PS.2095	
R105		PS.1383	
R107		PS.1378	
R108		PS.1390	
R109		PS.2825	
R111		PS.1332	
R118		PS.1332	
R121		PS.1694	
R130		PS.2445	
R135		PS.2095	
R139		PS.2045	
R146		PS.1694	
R147		PS.1650	
R153		PS.1321	
R173		PS.1033	
R176		PS.2029	
R186		PS.2061	
RB.1005	Rubber sleeve (bush for tape printer fixing screw holes)		

Un-Numbered Parts and Accessories.

5-amp. single pole 1-way Crabtree switch Code 4835
Micklewright sliding resistance :
100 ohms for 110v. motor.
300 ohms for 220v. motor.
Artic fuse No. 501.
$\frac{3}{8}$ in. brass cuphook (for securing paper tension roller chain to shelf)
S.K.F. ballbearing No. 13303 (for type spindle)
Medium oil.
Typehead grease (Crimsengere).
Oil can (watch type)
Tweezers
Screwdriver No. 1 (5in. by $\frac{1}{8}$in.)
Screwdriver No. 2 (5in. by $\frac{1}{4}$in.)

Part No.	*Description.*	*Renumbered.*
	Paper for Tape Printer (ABARM)	
	Paper for Page Printer (ABATH)	
	Ink rollers (black record on purple copying)	

PAGE PRINTER CARRIAGE PARTS.

740/427	Spring drum	
740/430	Carriage feed ratchet wheel	
740/434	Drum spindle pin	
740/436	Spring ratchet pawl	
740/437	Drum ratchet pawl pin	PP.9015
740/458	Ratchet pawl spring	
740/541	Line space ratchet feed pawl C.P.	
740/737	Feed dog retaining plate	
740/772	Ratchet pawl spring	
860/343	Spring	PG.7014
1160/608	Stop spring blade. (2 per set)	
1260/93	Spring drum spindle	
1260/94	Spring arbor C.P.	
1260/106	Feed pawl lever washer	PW.5057
1260/112	Pawl guide	
1260/135	Trip bellcrank spring anchor	
1260/137	Trip bellcrank pivot	
1260/139	Feed pawl lever retaining plate washer	PW.5049
1260/140	Retention pawl pin	
1260/142	Feed pawl lever pivot	
1260/146	Line feed lever pin	PP.7605
1260/147	Line feed lever	
1260/189	Spring arbor washer	
1260/190	Line feed lever C.P.	
1300/141	Spring	PG.7075
1400/103	Platen running bar C.P.	
1400/105	Line space ratchet retention pawl C.P.	
1400/107	Retention pawl spring pin	
1400/108	Retention pawl pivot	
1400/109	Pawl spring	PG.7037
1400/200	Feed pawl lever	

Part No.	*Description.*	*Renumbered.*
1400/201	Feed pawl lever retaining plate	
1400/202	Feed pawl lever C.P.	
1400/206	Line feed bellcrank adjusting arm	
1400/210	Spring drum C.P.	
1400/226	Platen friction roller C.P.	
1400/228	Paper take off rod	
1400/238	Platen paper guide	
1400/239	Platen rack	
1400/242	Air piston	
1400/247	Line feed lever link	
1400/251	Paper splash guard	
1400/273	Air piston pin	
1400/527	Platen knob	
1400/528	Line click wheel (21 teeth)	
1400/528A	Line click wheel (23 teeth)	
1400/601	Paper take off rod	
1600/90	Throw-out lever pivot	
1600/120	Paper guide bush	
1600/123	Friction roller lever spring	PG.7097
1600/124	8½ Carriage C.P.	
1600/125	8½ in. paper take off	
1600/202	Paper take off knife } supplied assembled	
1600/267	Clutch cross head } as 1600/437	
1600/268	Cross head pin	
1600/271	Feed link C.P.	
1600/274	Line feed link C.P.	
1600/276	Pawl release link C.P.	
1600/289	Trunnion rod	
1600/294	Dog stop	
1600/301	Pawl throw-out lever	
1600/327	Trip bellcrank	
1600/329	Feed dog C.P.	
1600/331	Column and carriage return dog C.P.	
1600/340	Line feed bellcrank arm C.P.	
1600/342	Retention pawl C.P.	
1600/343	Feed pawl C.P.	
1600/351	Clutch cross head guide bush	
1600/352	Link guide pin	
1600/357	Column guide stop	

Part No.	*Description.*	*Renumbered.*
1600/362	Column guide rod pivot screw	
1600/364	Column guide rod spring	
1600/447	Platen C.P.	PG.7096
1600/374	Platen spindle bush	
1600/375	Bush guide screw	PS.6413
1600/385	Carriage stop pin	
1600/386	Link guide pin	
1600/387	Link spring anchor	
1600/390	Feed lever spring pin	PP.6023
1600/397	Column feed rod C.P.	
1600/398	Platen end plate C.P. (left hand)	
1600/399	Platen end plate C.P. (right hand)	
1600/405	Pawl release link plunger	
1600/406	Push button	
1600/437	Clutch crosshead C.P.	
1600/438	Friction roller lever (R.H.)	
1600/439	Friction roller lever (L.H.)	
1600/447	Platen C.P.	PG.7096
1700/63	Line click lever spring stud	
1700/68	Line click lever pivot screw	
1700/153	Line click lever C.P.	
1700/194	Carriage return spring	PG.1502
1700/232	Platen rubber	
1700/241	Retention pawl adjustment bush	
1700/255	Line click lever spring	PG.7092
1700/257	Line space ratchet (21 teeth)	
1700/360	Line space ratchet (23 teeth)	
23930	Taper pin	
23955 23959	Locking rings	
PG.7098	Control lever spring	
PS.1342	2 B.A. × $\frac{9}{16}$″ Ch. Hd. M.S. screw.	
PS.1641	4 B.A. × $\frac{1}{8}$″ Ch. Hd. M.S. screw.	
PS.1694	4 B.A. × $\frac{3}{8}$″ Ch. Hd. M.S. screw.	
PS.1696	4 B.A. × $\frac{3}{8}$″ Csk. Hd. M.S. screw.	
PS.1717	4 B.A. × $\frac{1}{2}$″ Ch. Hd. M.S. screw.	
PS.1777	4 B.A. × $\frac{7}{8}$″ Ch. Hd. M.S. screw.	
PS.2063	6 B.A. × $\frac{1}{4}$″ Csk. Hd. M.S. screw.	
PS.2077	6 B.A. × $\frac{5}{16}$″ Ch. Hd. M.S. screw.	

Part No.	*Description.*	*Renumbered.*
PS.2079	6 B.A. × $\frac{5}{16}$″ Csk. Hd. M.S. screw.	
PS.2125	6 B.A. × $\frac{1}{2}$″ Ch. Hd. M.S. screw.	
PS.2221	6 B.A. × $\frac{7}{8}$″ Ch. Hd. M.S. screw.	
PS.2462	8 B.A. × $\frac{1}{4}$″ Ch. Hd. M.S. screw.	
PW.1010	Std. 4 B.A. brass washer.	
PW.1029	Std. 2 B.A. mild steel washer.	
PW.3005	Std. $\frac{5}{32}$″ mild steel washer.	
PW.4013	Std. $\frac{3}{16}$″ double coil phos. bronze washer.	
PW.5013	$\frac{3}{4}$″ O.D. × .10″ thick × .377″ hole, single coil steel spring washers (special).	
PP.5015	Std. $\frac{3}{64}$ dia. × $\frac{1}{2}$″ length split pin.	
—	$\frac{3}{64}$″ × $\frac{7}{16}$″ Stubs pin.	
—	$\frac{1}{16}$″ × $\frac{5}{16}$″ Stubs pin.	

Woodscrews used on Page Printer.

Length.	*Head.*	*Size.*	*Material.*	*Finish.*	*For Securing.*
$\frac{5}{8}$″	C'sk.	No. 6	MS	—	Location strips
$\frac{5}{8}$″	Rd.	No. 8	MS	Black Japan	Pulley guard
$\frac{5}{8}$″	Rd.	No. 8	MS	Black Japan	Sliding resistance
$\frac{3}{4}$″	C'sk	No. 6	MS	—	Fuses
$\frac{7}{8}$″	Rd.	No. 6	MS	No. 1	5-way terminal strip
1″	Rd.	No. 6	BS	—	Switch
1″	Rd.	No. 10	MS	Black Japan	Tape guide C.P.
1″	Rd.	No. 10	MS	Japan	Table top
1$\frac{3}{4}$″	Rd.	No. 10	MS	Black Japan	Shelf

Fig. 25. Master Type Chart.
(Large Types).

Fig. 26. MASTER TYPE CHART.
(Small Types).

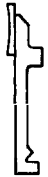
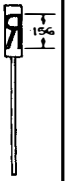
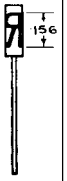
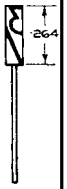
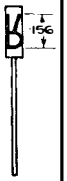
"AQ" TYPE CONCAVE FACE	PAGE PRINTER CONCAVE FACE			TAPE PRINTER FLAT FACE			MORSE PRINTER FLAT FACE		"AQ" TYPE FLAT FACE
	 .093	 .234	 .156	 .093	 .156	 .264	 .093	 .156	
STYLE	308	309	309	307	310	312	311	306	STYLE
PAD	1260/289	740/527	740/527	1260/289	740/253 A	1650/343	1260/289	740/253 A	PAD
MASTER CHART	S.№ 1680	S.№ 1680	S.№ 1670	S.№ 1680	S.№ 1670	S.№ 1670	S.№ 1680	S.№ 1670	MASTER CHART

Fig. 27. Type Style Chart.

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Bristol and London.