

**DIRECTIONS**

for using the

**OLIVER**

**MODEL 21**

**Four - Bank Typewriter**



**OLIVER Typewriter Manufacturing Co. Ltd.**

Contractors to  
His Majesty's Government and Foreign Governments

Head Office :  
80 Gloucester Road, CROYDON

Telegrams : BRITOLIVER, CROYDON.

Telephone : THORNTON HEATH 4291 (4 lines)

# *DIRECTIONS*

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## **The OLIVER MODEL 21**

**Four-Bank Typewriter**

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*Always quote the number of your Typewriter, and  
state size of carriage, when writing to us regarding it*

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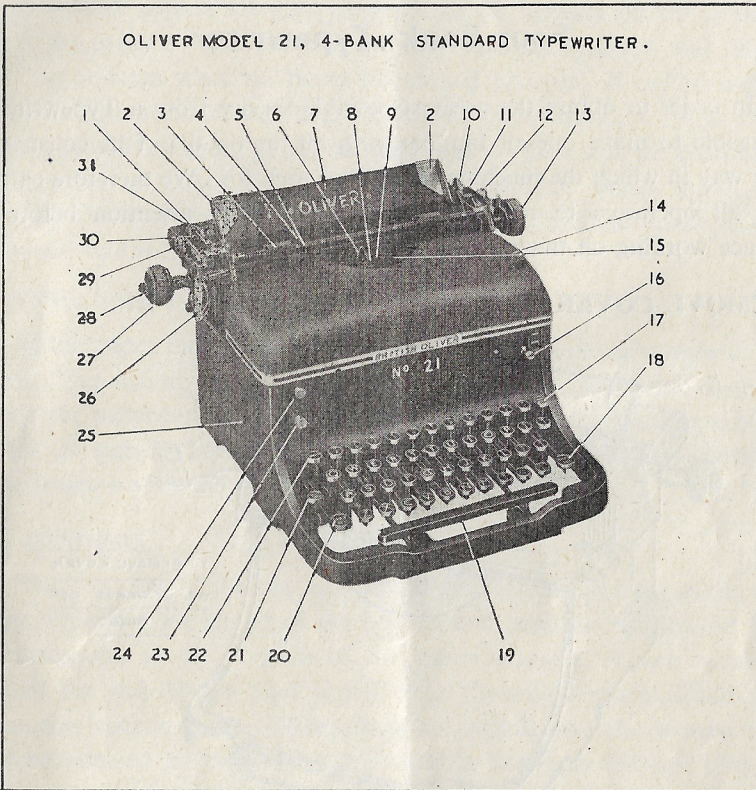
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# OLIVER MODEL 21, 4-BANK STANDARD TYPEWRITER



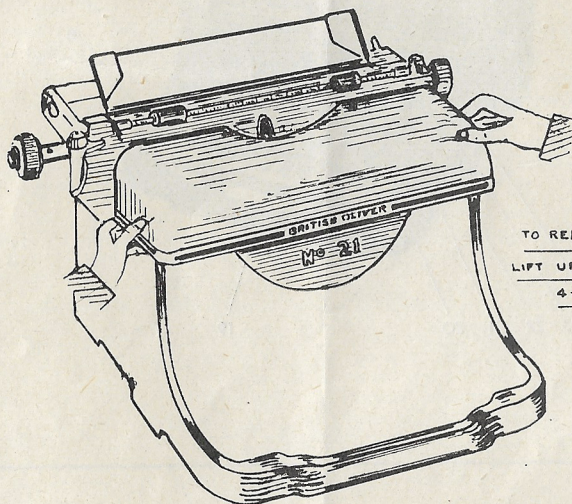
- |   |                                     |
|---|-------------------------------------|
| 1. Line Space Adjusting Lever             | 17. Back Space Key                  |
| 2. Lateral Paper Guides                   | 18. Shift Key Right                 |
| 3. Paper Holding Bail                     | 19. Space Bar (Independent Action)  |
| 4. Cylinder                               | 20. Shift Key Left                  |
| 5. Cylinder Scale                         | 21. Shift Lock Key                  |
| 6. Card Holder                            | 22. Tabulator Key                   |
| 7. Paper Rest                             | 23. Keyset Tabulator Setting Button |
| 8. Ribbon Carrier                         | 24. Margin Release Button           |
| 9. Ribbon                                 | 25. Ribbon Wind Rod                 |
| 10. Paper Release Lever                   | 26. Line Spac. Lever                |
| 11. Keyset Tabulator Stop Clearance Lever | 27. Cylinder Knob Left              |
| 12. Carriage Release Lever Right          | 28. Variable Line Space Plunger     |
| 13. Cylinder Knob Right                   | 29. Carriage Release Lever Left     |
| 14. Ribbon and Dust Proof Cover           | 30. Marginal Stops                  |
| 15. Line Finder                           | 31. Margin Scale                    |
| 16. Ribbon Setting and Stencil Switch     |                                     |

# The OLIVER MODEL 21

## Four-Bank Typewriter

In order to obtain the greatest possible service from a Typewriter it is indispensable to make oneself familiar with all the details of its construction, and the way in which the machine should be cared for. We therefore earnestly request all operators to read these instructions with attention before they commence working on the machine.

### TO REMOVE COVER



TO REMOVE COVER  
LIFT UPWARDS OFF  
4-PINS.

### CARRIAGE RELEASE

The carriage is released by the levers (12) and (29) on either the right or left side. When one of the release levers is pressed down, the carriage can be moved freely in both directions. The lever must not be let free until the carriage is in the desired position.

### INSERTING THE PAPER

Place the carriage in the centre of the typewriter. Insert the paper at the back of the writing cylinder (4) and in front of the paper rest (7), and

turn cylinder thumb wheel (13) for feeding in the paper. Before the paper is wound further, lift the cylinder scale (5) forward off the cylinder (4) to allow the paper to feed between the scale and the cylinder, and return the scale to its position when the paper has passed between. If carbon copies are to be taken, please make sure that the carbon paper does not project beyond the top edge of the writing paper, as this is apt to cause trouble when inserting the paper, besides being likely to smear the cylinder. When moving paper holder bail (3) lift cylinder scale slightly forward off cylinder to avoid friction between the bail roller and the writing cylinder.

### **ALIGNING THE PAPER**

If the paper has been inserted aslant, move the paper release lever (10) forward. This action releases the pressure of the feed rollers and at the same time lifts the paper holding bail off the cylinder, thus releasing the paper which can then be moved freely. Do not forget to return the release lever to its normal position after the paper has been adjusted.

### **LINE FINDERS**

The top edge of the two line finders (15), placed in front of the writing cylinder, indicates the height of the line wanted, and the incisions in the top edge correspond to the position of the letters sidewise. These incisions are also used for steadying a lead pencil when drawing horizontal and vertical lines on the writing sheets. When drawing vertical lines the writing cylinder should be released by pressing in the variable line space plunger (28).

### **RELEASING THE WRITING CYLINDER**

The machine can easily be set for typing on ruled paper. Merely release the cylinder from the spacing mechanism by pressing in the cylinder release plunger (28) and set the machine for any wanted line. When the lever is released after the line has been found, the spacing mechanism automatically comes into action and the machine will type along the line upon which the machine has been set for. An advantage of this arrangement is that the rubber is worn uniformly and the formation of deep ridges in the cylinder is prevented. The convenient position of the cylinder-release plunger makes it possible to release and turn the cylinder, as well as to reinstate the spacing mechanism, with a single manipulation. The cylinder thumb wheel is turned round,

with the thumb and index finger of the left hand, the release plunger being pressed in simultaneously with the inner joint of the index finger. If the machine is to be used with the cylinder released, for instance, for drawing vertical lines with a lead pencil, the cylinder release lever immediately beneath the left hand thumbwheel should be used by pressing downwards. When the work has been done; turn the lever back, this will cause the spacing mechanism to re-engage with the cylinder. (There is no indication number on the illustration for the lever here referred to.)

## **LINE SPACING**

To begin a new line the carriage should always be fully returned by the line space lever (26) on the left side of the carriage. The Oliver Four-Bank is fitted with standard three line space gear, but can be fitted with five line spaces, viz., the three spacings found on all typewriters, and in addition  $1\frac{1}{2}$  and  $2\frac{1}{2}$  spacings. The  $1\frac{1}{2}$  spacing is especially recommended for correspondence, being most proportional in relation to the size of the type, besides which it saves 30 per cent. of the paper in comparison with typing on space 2. The halving of the spaces, moreover, is of considerable convenience when typing technical matter, containing signs and symbols, such as  $m^2$ ,  $15^\circ$ ,  $CO_2$ , etc. This can be done without releasing the cylinder.

The fixing of the line spaces is performed with the line space-adjusting lever (1) on the left side of the carriage. The innermost position—when the figure 1 stands opposite the pointer—is for typing with the closest spacing.

## **MARGIN ADJUSTMENT AND TYPE LOCK**

The Right and Left Margin Stops are situated immediately behind the paper rest (7) and are easily accessible by lifting the paper rest. The stops can then be set by depressing the finger knob and sliding the stop to the required position according to the margin scale. The type lock comes into operation seven letters after the bell has given a signal.

## **MARGIN RELEASE**

After the type have been locked at the end of the line, typing can be continued after a light touch on the margin-release button (24). This also applies if it is desired to write in the left hand margin at the beginning of a line.

## **PAPER GUIDE**

If the next sheet is to be inserted with the same margin as the preceding one the paper guide (2) on the paper rest should be used. Before taking out the written sheet move the guide up to the edge, and hold the fresh sheet up against the guide during insertion.

## **SHIFTING THE RIBBON and TYPING STENCILS**

By changing the position of the ribbon shifter (16) on the front plate, the ribbon will be set for typing with black ink (lowest position), with red ink (highest position), or for stencil writing (intermediate position).

For writing stencils the same touch is used as for ordinary typing with one carbon copy, but the touch should be as uniform as possible and the types should be carefully cleaned before starting.\*

## **BACK SPACING**

A pressure on the back space key (17) will move the carriage back one space. This key may also be used in connection with the tabulator as described in the following paragraph.

## **THE TABULATOR. KEYSSET ACTION**

The tabulator rack with its stops is placed at the back of the paper rest (7). Underneath the rack is a bearing in which a selector is moved in a vertical plane. By pressing down the key marked Tabulator (22), to the

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\*Most stencil papers contain acids which affect the rubber rollers detrimentally. In order to protect the rollers as much as possible, it is necessary to observe the greatest cleanliness and care. After each use it is advisable to pull a sheet of good blotting paper through the machine for sucking up any adhering acid. If acids or oil are getting in between the rubber and metal tube the rollers will be spoilt in a short time.

left of the keyboard, the action is raised and the carriage is left free to move until it strikes against the next stop to the right. The movement of the carriage is automatically cushioned.

For setting the tabulator proceed as follows. Determine on the cylinder scale where you want the carriage to stop. Press the button " T " (23), which will automatically set the required tabulator stop. The tabulator stops can be set at any position of the carriage.

A slight upward pressure of the clearing lever (11) at the right-hand end of the tabulator bar will clear all the tabulator stops in one movement.

There is also a device fitted in the centre of the back of the machine just below the tabulator stop rack, for clearing any one tabulator stop and leaving others in use. For example, if the tabulator stop at No. 70 on the scale is to be cleared, place the carriage in position so that No. 70 on the front scale bar is immediately over the centre line of the card holder, and then press in the actuating plate at the back of the machine, and this particular stop will be cleared.

(There is no indication number on the illustration of the device here referred to).

In the case of sums the tabulator should be set for hundreds, in which case, after the tabulator position has been reached, the tens are typed with one touch, and units with two touches on the space bar before striking the figures or figure wanted; for thousands press down back spacing key once or more according to requirements.

The tabulator may be used to advantage for paragraphing. The first stop may then, for example, be set nine steps to the right from the left-hand margin. The tabulator can also be used for writing addresses, dates, signatures, etc., when desired to have such matter uniformly placed on the sheet, the stops being in that case set in fixed places where wanted. It will be understood that the paper guide (2) must be kept in the same place in these circumstances.



## **CAPITAL and SMALL LETTERS**

For changing from small to capital letters, or the upper signs on the respective keys, use either of the shift keys (18) or (20) fitted on both sides of the keyboard. The type keys must not be struck until one of the shift keys has been pressed down, and the latter is to be held down until all the capitals or signs have been struck.

## **SHIFT LOCK**

If a whole line or lengthy passage is to be typed with capitals, press down the shift-lock key (21) causing the shifting arrangement to be locked in the lower position. The change back to small letters is effected with a light touch on the shift key.

In the OLIVER Four-Bank it is not the carriage with the cylinder that is raised and lowered during the shifting, but this function is performed by the segment holding the type bars. By this method the movement is more rapid and shock-free, and less power is required than with machines having a carriage shift. This construction has further made it possible to provide the OLIVER Four-Bank with an extremely stable and durable carriage, making it move silently and with exceptional smoothness both during the typing and line changing. Whatever the length of carriage, or the weight of the work upon it, the power required to shift the movement remains light and constant.

## **WRITING on POST-CARDS, FILING CARDS, Etc.**

The card holder (6) presses the card firmly against the cylinder just above the line of writing, consequently the operator is able to write on cards of all kinds very close to the top and bottom edges, without the risk of the card changing its position during writing.

## **CARBON COPIES**

The special design of the OLIVER Four-Bank enables the operator to take a number of carbon copies without using a harder touch than when writing ordinary letters.

## THE ADJUSTABLE TOUCH

The OLIVER Four-Bank is always adjusted at the factory for the lightest touch. In spite of this exceptionally light touch, the writing is very firm and smooth. If the operator, however, desires a harder touch, the tension can easily be changed. Underneath the machine is a regulator and dial. By turning the regulator the tension on the key springs can be decreased or increased as desired. When the indicator points to "O" the touch is the lightest attainable, as it is turned towards "6" the touch gradually becomes harder.

At typing the keys should be struck with a quick "staccato" blow with the tips of the fingers. The fingers must not be allowed to rest on the keys and thus prevent the type bars from returning to the rest position.

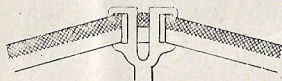
## THE RIBBON

The ribbon reverses automatically, but may at any time be manually reversed by pressing in the Left or Right hand end of the ribbon wind rod (25.) By turning this rod in the direction away from the operator, the ribbon can be transferred from one spool to the other.

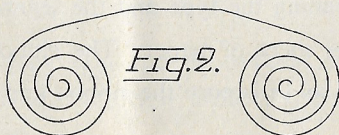
When a new ribbon is to be fitted, remove the cover (14) of the ribbon spools, press in the right-hand ribbon wind rod (25), and wind up the ribbon on the left-hand spool. Press down the shift-lock key (21). Set the colour changer (16) on red and keep the space bar (19) pressed down, for instance by laying a ruler between the keyboard and the space bar. In this way the ribbon carrier (8) is retained in the top position enabling the ribbon to be easily removed from it. Next, take both spools out of their housings and loosen the ribbon from the centre piece of the right-hand spool. The loose end of the new ribbon is then fastened on the centre piece of the right-hand spool, and a couple of turns of ribbon are wound on. Replace the spools on their respective pins in the direction shown by the accompanying sketch, Fig. 2. Afterwards, place the ribbon at the back of the ribbon carrier (8) and insert it in the openings, as shown by Fig. 1. Release the space bar and shift-lock key.

Before putting back the covers on the spool cases, note that the driving pins of the spools mesh in the notches on the centre of the bearing mechanism. It is of the greatest importance that the ribbon spools run without any friction. When putting on a two-colour ribbon—such as black and red—the colour used most should be at the top.

The OLIVER Four-Bank uses  $\frac{1}{2}$ " ribbon.



*Fig. 1.*



*Fig. 2.*

## **HANDLING and CARE of the MACHINE**

The OLIVER Four-Bank requires very little oiling. When delivered from the factory the internal parts of the machine are oiled for six months ahead. Of the external parts, it is really only the carriage rail which requires special oiling. At least twice a month this rail should be cleaned with a soft piece of cloth moistened in good typewriter oil. The machine must not be oiled until it has been carefully cleaned from dust and erased material. Keep in mind that too much oil is as bad as none at all. Too much oil collects dust and makes the machine sluggish in working. Use the soft brush supplied with the machine frequently for removing dust. Clean the types regularly with the type brush, moving the brush in the direction of the type bars. Clean the type segment with the soft brush by brushing it and the type bars towards you. When cleaning the type and the segment, the keyboard should be kept covered with a sheet of paper. The ribbon and dust proof cover (14) can be lifted off so as to expose the ribbon and segment, for cleaning or changing the ribbon.

When making erasures, push the carriage to one side so that the material rubbed off will fall on the dust plate, and not down into the machine. Never erase in front of the ribbon carrier. Put on the cover, when the machine is not in use.

Satisfactory service is ensured at all times by a staff of expert mechanics. Please communicate with your agent or direct to our Head Office, Victory Works, 80 Gloucester Road, Croydon.

A clean and well-cared-for machine is necessary for the performance of first-class and rapid work. Regular attention by a faithful and competent mechanic will lengthen the life of the machine.

## **RIBBONS AND CARBONS**

No machine can be expected to give its best results unless it is fitted with a first-class ribbon. It is false economy to use a good machine with poor materials. The ribbons and carbons bearing the Oliver name have been thoroughly tested and selected for their good work. The former are supplied in various grades of inking and details will be sent on request.

## **OUTSTANDING FEATURES SUMMARISED**

The Model 21 OLIVER produces especially clean writing. Good-looking work is a credit to the operator as well as being very desirable from a business point of view.

The machine is fitted with a streamlined cover for the typebar segment and ribbon. This can easily be removed for cleaning or changing the ribbon, by lifting straight upwards. It also has the advantage of completely covering the continual flash of the typebars in front of the eyes, whilst the machine is operated.

The touch is unusually light and smooth and adjustable to suit individual taste. The operation is completely effortless, making for greater speed with the absence of fatigue.

There is also independent action for the space bar movement. This gives an extremely light touch to the space bar and contributes towards speedy operation of the machine.

The Shift is another labour-saving device when compared with a machine fitted with a rising and falling carriage. With the Model 21 OLIVER the effort required is constant, and does not vary whatever the length of the carriage or the work that is on the platen. This feature makes for greater rigidity in the carriage and better alignment.

Another very good feature about the Model 21 is its adaptability for correcting a word which has to be altered through an error in typing. For instance: if the word "though" has been written instead of "through," the Model 21 simplifies the correction by use of the space bar. First the incorrect word is erased, then commencing at the last letter of the previous word, the

space bar is depressed and held down at the bottom of its traverse whilst the first letter of the correct word is struck and this occurring for each letter until the last of the word has been typed. The space bar is then used normally. It will then be seen that the correct word has been inserted in practically the same space as that taken by the incorrect word. The appearance will be neat and the difference in the spacing hardly noticeable.

## **PLATENS**

The platens are NOT interchangeable. Apart from the fact that a change is rarely desired or necessary, the aim of our designers was to eliminate moving parts and reduce unnecessary vibration and consequent noise. Hard or soft platens can be supplied as desired.

CONTROLS are placed in the most convenient positions with a view to assisting the typist. The tabulator stops are immediately cleared in one operation and WITHOUT moving the carriage.

## **WRITING LIMITS**

There are practically no limits to No. 21 Oliver. It will type from the top to the bottom edges of the paper, a feature which makes the machine specially good for writing on post-cards or index cards.

## **ABSENCE OF NOISE**

By the use of ball bearings and the elimination of vibration the machine is free from unnecessary noise. The carriage return is "silent" and the action of the type bars smooth and the "clatter" usually associated with typewriters is absent.

**CLEANING TYPE:** No cross members or other obstructions stand in the way of easy access to the type faces and the necessary occasional cleaning is facilitated.

**DUST PROOF:** Vital parts of the machine are well protected against dirt or dust and regular cleaning and oiling will keep them in good condition indefinitely.

**RUST PROOF:** All parts likely to be attacked by rust are thoroughly Parkerised before erection. Stainless steel or chromium plate is employed on all bright parts.

**THE RIBBON** is automatically reversed in use or can be instantly reversed by hand as required. Its housing is fitted with a dust-proof cover. A good machine is worth a good ribbon with proper protection.

**VISIBILITY:** The absence of cross bars gives a clear sight of the work in progress.

**KEYBOARD:** The standard keyboard is the best known for "touch operation," but any kind of layout can be supplied to order (special signs, etc.).

**MANIFOLDING OR STENCIL CUTTING:** The Oliver No. 21 will produce a large number of carbon copies without special effort and its clean-cut type is unusually good for stencil work.

**TABULATOR:** The keyset tabulator provides a stop position for each division of the scale. It is particularly useful for figure or analysis work.

**GENERAL INFORMATION:** The No. 21 Oliver is supplied in **VARIOUS LENGTHS OF CARRIAGES, viz.:**

10½	ins.	giving	a	writing	line	of	10	ins.
12½	„	„	„	„	„	„	12	„
15	„	„	„	„	„	„	14¾	„
17¾	„	„	„	„	„	„	17½	„

**TYPE VARIATION:** The standard machine is fitted with "Pica" or "Elite" type. Special fractions, engineers' signs or foreign accents can be arranged as desired.

**COLOUR:** The standard finish is Chrome Plating and Black Ripple Enamel. This finish is effective as an anti-dazzle medium.

FRASER MEIKLE LTD.  
Warner House  
Warner St., London E.C.1