Introduction

Before leaving the factory each GROMA typewriter is subjected to exacting tests through experienced experts. We fully guarantee that only unobjectionable typewriters leave our factory.

The operation of the GROMA typewriter, model "Combina" is most simple. Nevertheless we recommend to pay attention to the specially marked points of these instructions.
Part 1 — How to Get the "Combina" Ready for Use

In order to get my "Combina" typewriter ready for use I must, after having removed the box cover, push the carriage locking lever (14) to the rear. Hereby the motion of the carriage to either side is released, i.e. the machine is ready for typing. For transport the "Combina" is screwed to the baseplate by means of two screws each on the right and on the left side. If the machine shall be removed from the box bottom (baseplate) for the first time, the cover is removed as described in (6). Now the already mentioned 2 screws on either side are unscrewed (43). One of each two screws is located behind the casing directly beside the strong tension springs for case shifting left and right below. The screws are red-marked.

The machine is removed from the base plate by pushing the two levers (44) downward and simultaneously lifting the machine upward. If these two levers are also secured by screws, the latter can be removed for ever, as they were required for transport only.

Please get accustomed to an even, not too intensive actuation of the keys and avoid glossy papers which due to their poor absorption of ink will be only too likely to render smeared types.

During the transport of the machine the carriage is secured from lateral displacement by the carriage locking lever (14). Hence the locking lever (14) should be shifted to the rear before using the machine.

In order that the sheet with the printed text has a smooth and perfect rest, the sheet support (22) must be folded up. This is brought about by simply pressing the releaser (20). Then the sheet support (22) automatically moves into operative position.
Change of the Colour Ribbon

Special attention should be devoted to the insertion and change of the colour ribbon.

The colour ribbon spool is provided with a standardized colour ribbon of exactly 13 mm width. The lower half of the unicoloured ribbon is used by changing the left spool over to the right side and the right spool to the left side. When inserting the ribbon in the ribbon holder the following four illustrations must be observed.

Part 2 — The Proper Use of the "Combina"

Keyboard

The keyboard of the "Combina" is arranged according to the DIN standard and equipped with 44 key levers; hence 88 characters can be printed. The beauty of the printed text depends upon the way the keys are pressed; it is recommended to get accustomed to even, not too strong pressure.

Left Case-shifting Key

The left case-shifting key serves to print CAPITAL LETTERS.

Case-shifting Arrangement

If several capital letters shall be typed in succession, the case-shifting arrangement (3) must be operated. A light pressure on the left case-shifting key (2) is sufficient to again cancel this case-shifting position.

Key Pressure Regulator

Movement of the pressure regulator in direction green — hard, in direction yellow — soft.

Locking Release and Clearing Key

If the right margin settar (26) is properly adjusted, i.e. in such a manner that its right rounded-off edge coincides with the right outer edge of the inserted sheet of paper, the line is blocked about 2 steps before the end of the paper. After pressing this key (5) further printing is possible. If text shall be written before the set left margin, this key must be pressed and, simultaneously, the carriage must be moved to the right to the desired position. If several type levers side by side are jammed,
a pressure on this key is sufficient to restore the levers to their rest position.

**Cover Cap**
The cover cap serves to protect the types and the colour ribbon spools. For cleaning the types and replacing the ribbon the cover cap can be taken off upward. The carriage is moved out to the left, in order that the line spacing lever be not positioned on top of the cover cap. Now the cover cap is seized from below at the level of the ribbon coils and is lifted and removed. For placing it again the two springs on the right and left side are inserted in the slots of the lateral casing and the cap is tightly pressed down until it is engaged.

**Left Carriage Arresting Slide**
In order to enable the carriage to be removed or exchanged the two slides (7) and (31) must be pressed inward simultaneously, whereupon the carriage can be lifted and removed.

**Pin Roller Arrestment**
If the pin roller shall operate permanently (for example when writing on ruled paper), the left platen rotating button must be pulled out and, simultaneously, the pin roller arrestment (8) by turned backward. In order to release this locked position it is sufficient to slightly pull out the platen rotating button.

**Line Spacing Lever**
By pushing back the extra long line spacing lever with handle (9) to the right the next line is automatically spaced.

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**Left Platen Rotating Button**
This button is used for rotating the printing platen.

**Pin Roller Button**
If ruled sheets shall be typed upon, the pin roller button must be pulled out and the platen be turned so far until the line to be typed coincides with the dash being in the middle of the line position indicators (19) and (25). Thereupon the pin roller button is released again.

**Left Carriage Releaser**
Upon pressing the left (12) or the right (28) carriage releaser, the carriage can be shifted in either direction up to the margin stop. Only when the carriage has reached the desired position the carriage releaser is allowed to be left free.

**Line Spacing Setter**
By pressing the line spacing setter and shifting it backward or forward the desired line spacing can be adjusted. The individual spacings are marked on it.

**Carriage Locking**
In order to secure the carriage during transport of the machine from lateral displacement, the carriage locking lever (14) is pushed to the fore and the carriage is shifted to central position. During the printing operation the carriage locking lever must be directed backward. This interlocking also protects the machine from being used by unauthorized persons.

**Paper Lay Mark**
By the adjustable paper lay mark uniform feeding of the printing material is ensured.
16 Left Margin Setter
By pressing the handle of the left margin setter (16) and, simultaneously, shifting the latter the left typing margin is set. However, if some text shall be typed before the left margin, the unlocking key (5) must be pressed and the carriage be shifted to the right at the same time.

17 Paper Holding Bail
The paper holding bail carries the two attachment rollers which press the paper towards the platen.

18 Attachment Rollers
The two attachment rollers mounted to the paper bail allow of printing on the paper sheet down to its bottom edge. They shall be positioned about 10 division marks within the right and left edges of the paper.

19 Left Line Level Indicator
This indicator serves to find out the line to be typed. Its central mark coincides with the basic lines of the characters. For drawing vertical and horizontal lines the hole in the indicators is used as support for the pencil.

20 Releaser for Sheet Support
In order to bring the sheet support (22) in operating position only the releaser (2) need be pressed.

21 Colour Ribbon Holder
The introduction of the colour ribbon into the ribbon holder (21) is described in part 1 of these instructions. Attention should be paid to the fact that the cover cap must be removed as described in (6).

22 Sheet Support
The bottom part of the sheet support prevents the sheet from tumbling over and creasing and allows of reading the printed text.

23 Top Part of Sheet Support
If the sheet support shall be extended, the top part (23) can be pulled out upwards.

24 Postcard Holder
The postcard holder allows of typing on postcards and paper sheets of smaller sizes starting from the top edge.

25 Right Line Level Indicator
See under No. 19.

26 Right Margin Setter
The end of line is adjusted by pressing and shifting the right margin setting means (26). About seven letters before the line is blocked a bell rings. By pressing the unlocking key (5) the blocking of the line is cancelled whereupon typing can be continued up to the end of the platen. It is advisable to adjust the right margin setting means so that the right rounded-off edge of the slide coincides with the paper edge.

27 Paper Releaser
The paper releaser serves to properly position the paper sheets. It is pulled to the fore during which movement it simultaneously also lifts the paper bail. Thus the sheets are left entirely free and can easily be levelled and aligned.

28 Right Carriage Releaser
When the latter is pressed the carriage can be moved in either direction.
Total Clearing Lever
(Only for typewriter with tabulator) Explanation see tabulator arrangement in these instructions.

Right Platen Rotating Button
This button is used to rotate the platen.

Right Carriage Arresting Slide
Same as in point 7, q.v.

Colour Ribbon Reversal
During the typing process the colour ribbon is automatically rewound from one spool to the opposite one. If the supply spool is empty, reversal is effected automatically. By moving the lever (32) to the rear or to the fore the motion of the colour ribbon can also be adjusted at will by hand.

Model Designation
Combina

Red Key (Accent Key)
For printing letters with an accent first the respective accent must be typed and then the letter, as the carriage does not move on after the dead key is pressed.

Tabulator Key
(Only for machines with tabulator) Explanation see tabulator arrangement of these instructions.

Rider Setting and Clearing Key
(Only for machines with tabulator) Explanation see also tabulator arrangement of these instructions.

Return Key
The return key (37) when pressed moves the carriage one step to the right. Advantageously it may be used also for adding operations. E.g.: After the last digit has been added, the respective number is typed whereupon the return key is twice pressed. Then the tens column is added and, after having typed the resulting number, the return key is once more pressed, and so on.

\[
\begin{align*}
15346,\text{—} & \\
28,63 & \\
8563,16 & \\
23937,79 & 
\end{align*}
\]

Colour Ribbon Zone Adjustment
In normal typing the blue mark at the colour ribbon zone adjusting device is visible. If a certain text shall be particularly stressed, this adjusting device is turned so far to the rear until the red marked point becomes visible. For typing on stencils the adjusting device is moved to neutral (central) position (colour ribbon in rest).

Mind the Case-shifting Key
This key serves to print CAPITAL LETTERS.

Rubber Foot
4 large, suction type rubber feet lend the typewriter a firm standing.

Letter Spacing Key
By means of the letter spacing key (41) the letters are spaced.
Special mention must be made of the fact that the spacer (41) of the "Combina" has two functions. First the normal spaces between the words are produced by pressing the spacer. Secondly the carriage step can be divided. Hereby mistakes caused by omission can be corrected without affecting the legibility of the text, as is shown in the following example:

The correcting spacer of the "Combina"
The correcting spacer of the "Combina"

That means the wrongly printed word spacer is erased and printed again into the old space. This is done as follows:
The last letter of the preceding word is typed once again, then the spacer key is pressed. Without releasing the latter the first letter of the erased word is typed, whereupon the spacer is released. Now the spacer is pressed afresh and all letters of the word to be corrected are rewritten (i.e. always with the spacer pressed). When the last letter is typed, normal typing can be continued.
In this way it is possible also by skilful typing to obtain even margins just by utilizing the semi-spaces by means of the spacer key.

Part 3 — Tabulator Arrangement

Tabulator

The tabulator is advantageously used for printing names, numbers, figures, addresses, etc. in columns beside and exactly below each other. After the tabulator has been set in the way described below, the carriage by operating the tabulator key is immediately moved to the beginning of the next column, i.e. the free space between the columns is jumped over.

Setting the Riders

After the carriage has been moved to the point where printing shall be effected, the rider setting and clearing key (36) is pressed down (designated with ↓). Hereby one rider is set, i.e. the carriage is stopped in this position during the subsequent tabulating operation. Such a rider exists for each division mark on the paper bail, so that any desired number of columns can be adjusted. When setting a rider mind the fact that the carriage is allowed to be moved on only after the setting and clearing keys have been released.

Tabulating

In all points in which a rider has been set the carriage stops when the tabulator key (35) is pressed. Due to the ingeniously arranged TABULATOR CENTRIFUGAL BRAKE the carriage slides silently and smoothly to the point desired.
Clearing the Riders

If an already set rider is desired in another place, the carriage, by pressing the tabulator key, is brought to the rider to be displaced.

Single Clearing

In this point the rider setting and clearing key (36) is pressed b a c k w a r d (designated with —). Hereby the rider is cleared, i.e. the carriage now overtravels this point when the tabulator key is used. Now the new rider can be set.

Total Clearer

If a form with different positions of the columns shall be typed, a pressure on the total clearing lever (29) on the right side of the carriage is sufficient to clear all riders in one.

Typing Pattern

567. Helmut Zimmer Hamburg 26 Maxstr. 14 100,—
568. Otto Fink Ulm Otto-May-Str. 6 487,10
569. Paul Müller Leipzig C1 Feldstr. 3 583,20
570. Kurt Krause München Salzburger Str. 1 720,—

By pressing the tabulator key the carriage moves over the distances made visible by blue printed lines.

Part 4 — How to Take Care of My "Combina"

How to Make Copies

For making copies the quality of the carbon paper used is decisive. Therefore, always ask for "typewriter carbon paper". When several sheets are clamped, it is recommended to wrap a narrow strip of folded paper round the top edges of the sheets, in order to avoid possible displacing of the sheets.

Corrections

For correcting, the carriage is best shifted as far as possible to the right or of the left, in order that the eraser particles cannot get into the interior of the machine. If troubles occur, always apply to a skilful typewriter expert.

General Maintenance

During the guaranty period repairs should be done only in our factory or by licensed typewriter experts, otherwise the guaranty is voided.

Oiling should always be done immediately after the typewriter has been cleaned.

For oiling the sliding rails and the various fulcrums only clean, non-resinous typewriter oil must be used.

The slots of the segment in which the type levers run must not be oiled in any case.

The types must not be brushed crosswise but lengthwise, it being recommended to place a non-revelling rag on the key-board and the type levers, in order that the key-board be not soiled.

Muddy platens are cleaned with spirit; benzine destroys the rubber.
Altogether we recommend to bring the typewriter every now and then to an expert workshop to have it overhauled there.

Part 5 —

Removing, Putting on, and Exchanging the Carriage of the "Combina"

When removing the "Combina" carriage attention must be paid in any case to the fact that the lever for the carriage lock (14) is pushed to the fore and the carriage is arrested thereby. Only then the two carriage arresting slides on the left and on the right side (7 and 31) are simultaneously pushed inward and the carriage is taken off upwards. When the carriage is put on again, the carriage arresting slides (7 and 31) must also be pushed inward and the carriage must be placed on to the typewriter vertically from above in such a manner that the colour ribbon holder (21) be positioned exactly in the centre of the two line position indicators (19) and (25). If the carriage is seated firmly, the two carriage arresting slides are allowed to return, whereupon the carriage locking (14) can be released by pushing the locking lever backward.