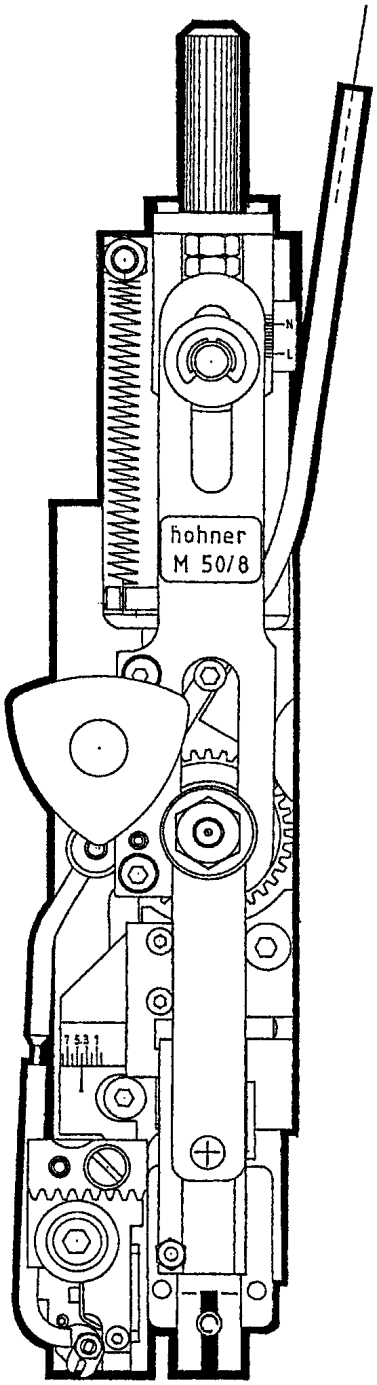
**Operating - Instructions**
**Spare parts list**

hohner

# M 50/8

**04 / 2005**

## Wire Stitching Head




**hohner** Maschinenbau GmbH
Gänsäcker 19, 78532 Tuttlingen, Telephone 07462 / 9468-0, Fax 07462 / 9468-20

## Contents

# I. General and Services

## 1. Safety notices

## A T T E N T I O N

1. Before the operation of the stitching head or before working with the machine, do not forget to read carefully the **hohner**-instructions for use and observe all warning on the machine. The non-observance of this prescription may lead to severe injuries.
2. Do not operate the machine before all safety devices, lock and other security fixtures function or are set up.
3. Before working, cut off the current supply and set safety switch (main switch) to 0.
4. Your right to claim under guarantee can only be followed if the label with the serial number is stuck on the body of the head.

The user is responsible for the safe function of the machine at any time as well as for the observance of all prescriptions of these instructions for use by the operating person. For all questions regarding the safe operation of this machine, please, contact your senior officer or **hohner** sales representative or directly to:


**hohner** Maschinenbau GmbH

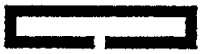
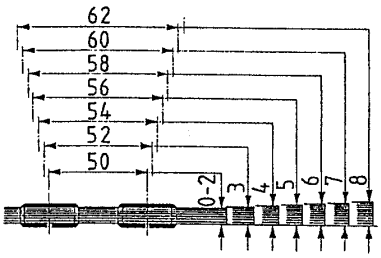
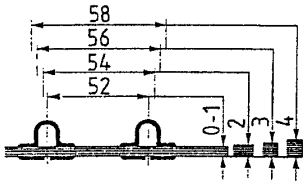
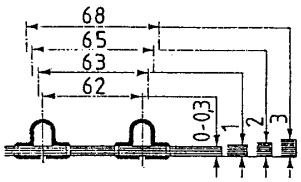
| | |
|---|---|
| Street: | Gänsäcker 19 |
| Town: | D-78532 Tuttlingen |
| Telephone: | 07462 / 94 68 - 0 |
| Fax: | 07462 / 94 68 - 20 |
| Email: | info@hohner-gmbh.de |
| Internet: | www.hohnerstiching.com |

**Spare Parts / Customer Service**

| | |
|---|---|
| Fax: | 07462 / 9468-20 |


**- modifications reserved -**

## 2. Technical and service

| |  |  |  |
|---|---|---|---|
| | Normal stitching | Standard loop stitching | 8 mm<br>loop stitching |
| crown width: | 14 mm<br>0.55 inch. | 14 mm<br>0.55 inch. | 16 mm<br>0.63 inch. |
| loop stitching ø : | -<br>- | ø 6 mm<br>ø 0.23 inch. | ø 8 mm<br>ø 0.31 inch. |
| Max. stitching thickness clenched: | 8 mm<br>0.31 inch. | 4 mm<br>0.16 inch. | 3 mm<br>0.12 inch. |
| Round stitching wire ø: | No. 21 - 23<br>0.80 - 0.70 mm ø<br>0.031 - 0.027 inch. ø<br>No. 24 - 28<br>0.60 - 0.40 mm ø<br>0.024 - 0.016 inch. ø<br>No. 26 - 30<br>0.50 - 0.35 mm ø<br>0.020 - 0.014 inch. ø | No. 24 - 26<br>0.60 - 0.50 mm ø<br>0.024 - 0.020 inch. ø | No. 24 - 26<br>0.60 - 0.50 mm ø<br>0.024 - 0.020 inch. ø |
| Distance index for standaard stitching (in mm): |  |  |  |

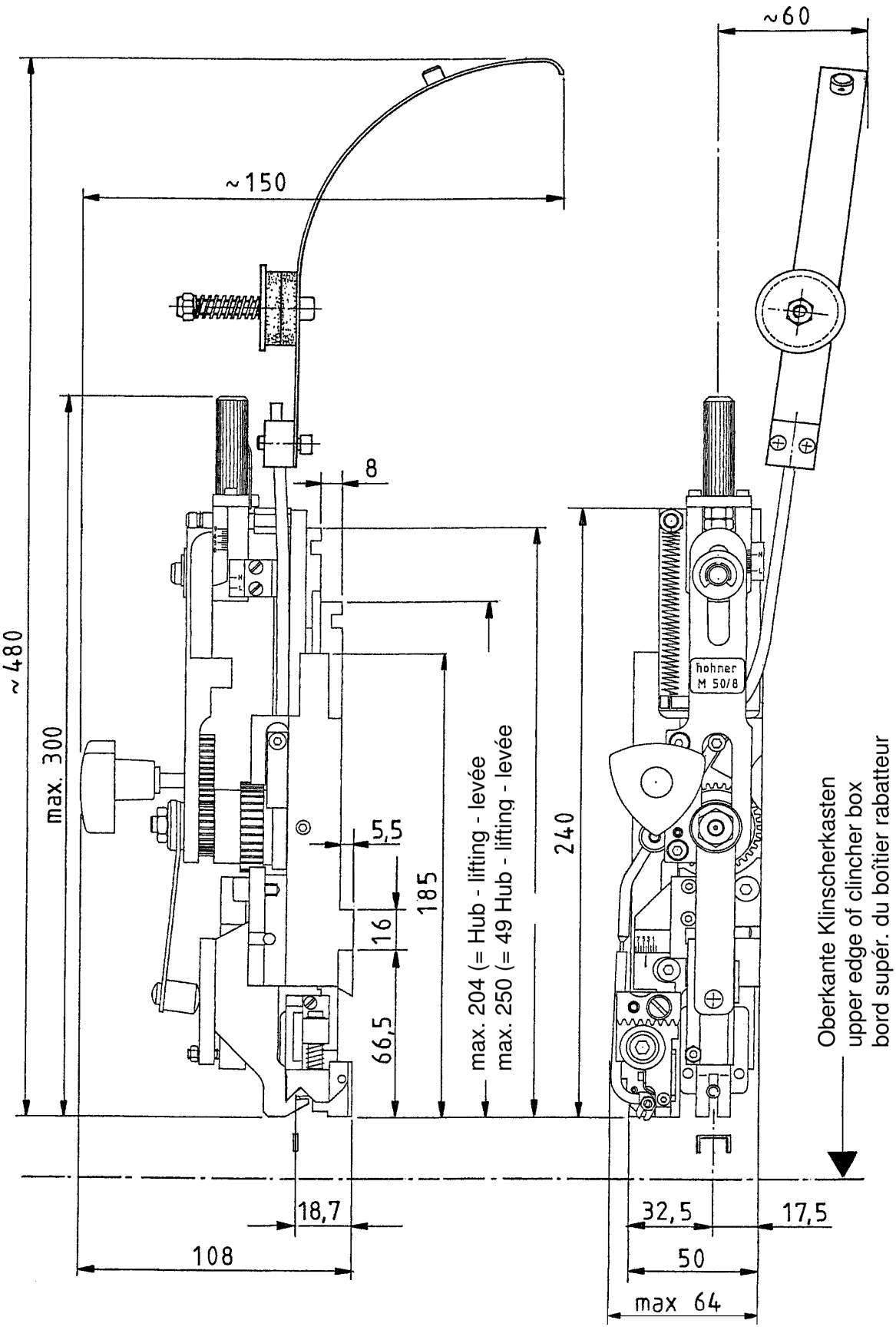
In co-application with centering devices
staple distances enlarge:
approx. 12 mm with centering device small
approx. 20 mm with centering device wide

Net weigt: approx. 2,25 kg
Gross weight: approx. 2,85 kg

**Important:**

Pleas only use name brand steel, in normal or extra hight tension steel versions, depending on usage. By heavy scuffing of wire, scuff resistibility causes wire guides to clog.

3. Foundation plan of the wire stitching head M 50/8



## 4. Accessories / Equipment

Every new Wire Stitching Head M 50/8 is supplied with:

### 4.1 Equipment

| | |
|---|---|
| Art.-Nr. 99 59 130 | 1 wire bow, complete |
| Art.-Nr. 99 59 390 | 1 centerin device adjustable, complete |
| Art.-Nr. 99 59 401 | 1 clincher box, complete |

### 4.2 Tools

| | |
|---|---|
| Art.-Nr. 46 00 033 | 1 hexagon socket screw key T-form handle, no. 4 x 150 |
| Art.-Nr. 94 59 210 | 1 adjusting handle |

### 4.3 Optional features

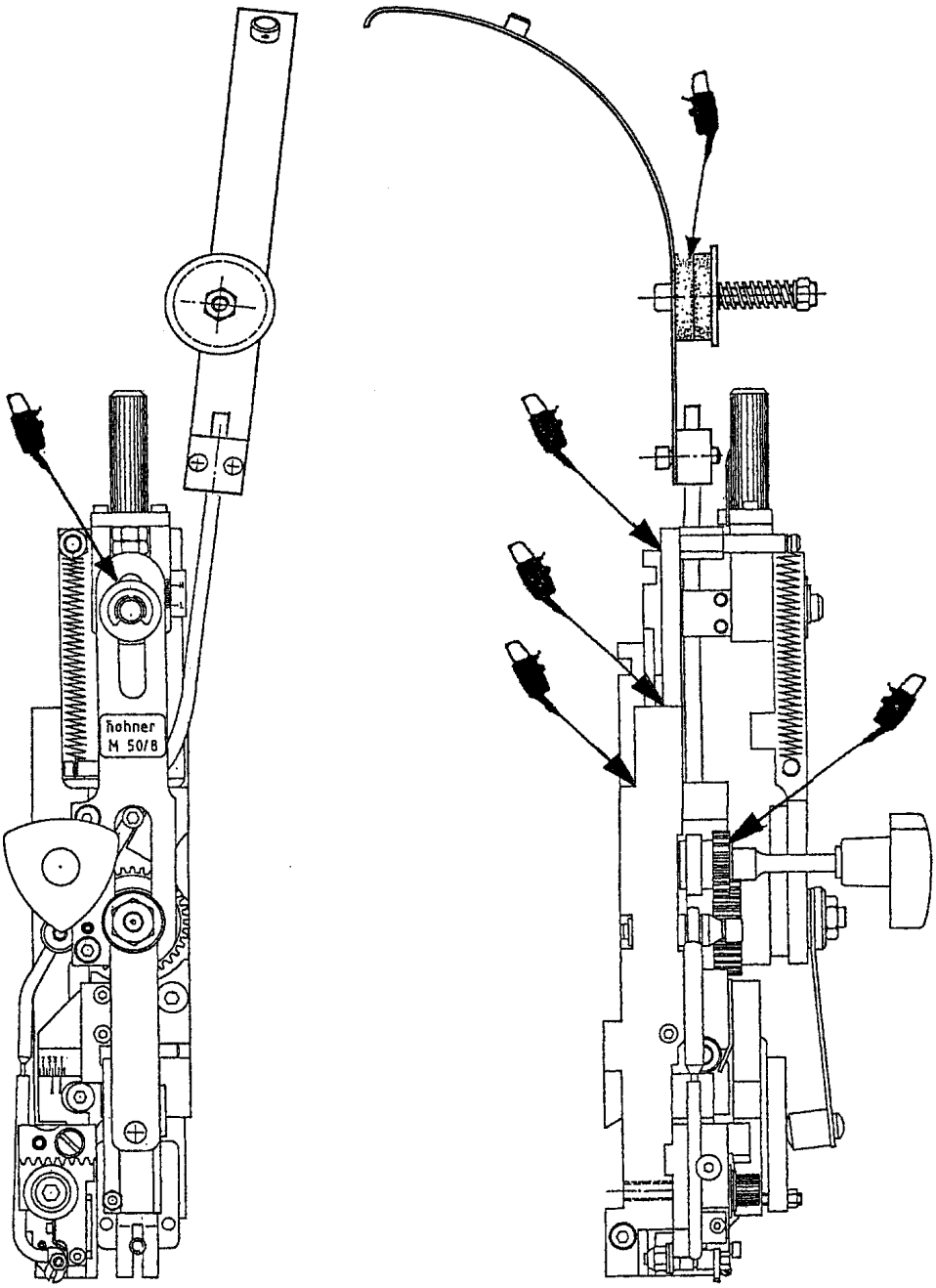
| | |
|---|---|
| Art.-Nr. 99 59 365 | execution with gripper, set cpl. |
| Art.-Nr. 99 59 415 | socket block, cpl. |
| Art.-Nr. 99 59 460 | set for standard loop-stitching |
| Art.-Nr. 99 59 480 | set for loop-stitching „8 mm“ |
| Art.-Nr. 99 59 495 | centering device-roll, set cpl. |

## 5. Lube specification

Apply a first-rate oil only, never a viscous mineral oil spray lubricants.

**We recommend:**
Sliding oil with viscosity grade 65-70
(ISO - viscosity grade according to DIN 51 519).

**Oiling: how often**
In case of need (approx. every 16 working hours). From time to time slightly oil the felt discs on the wire bow. Please observe all these regulations carefully to guarantee a faultless operation.



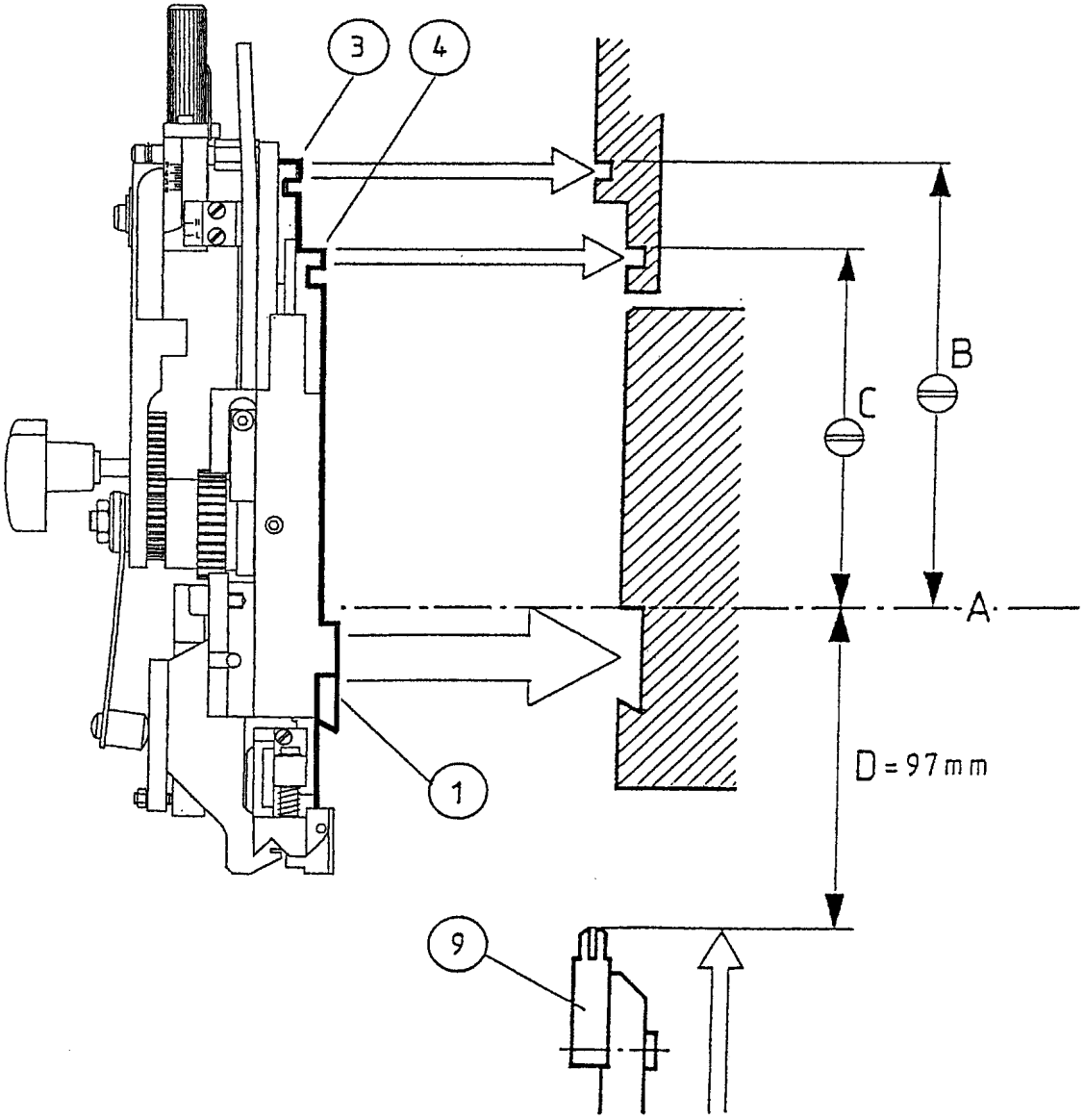
## 6. Installation and adjustment

Before installing the Wire Stitching Heads, be sure the stitcher section of your machine is adjusted properly according to your machine instructions. Please check the following points:

- Drive bars (=) **B and** (=) **C** are parallel to the mounting rail **A** .

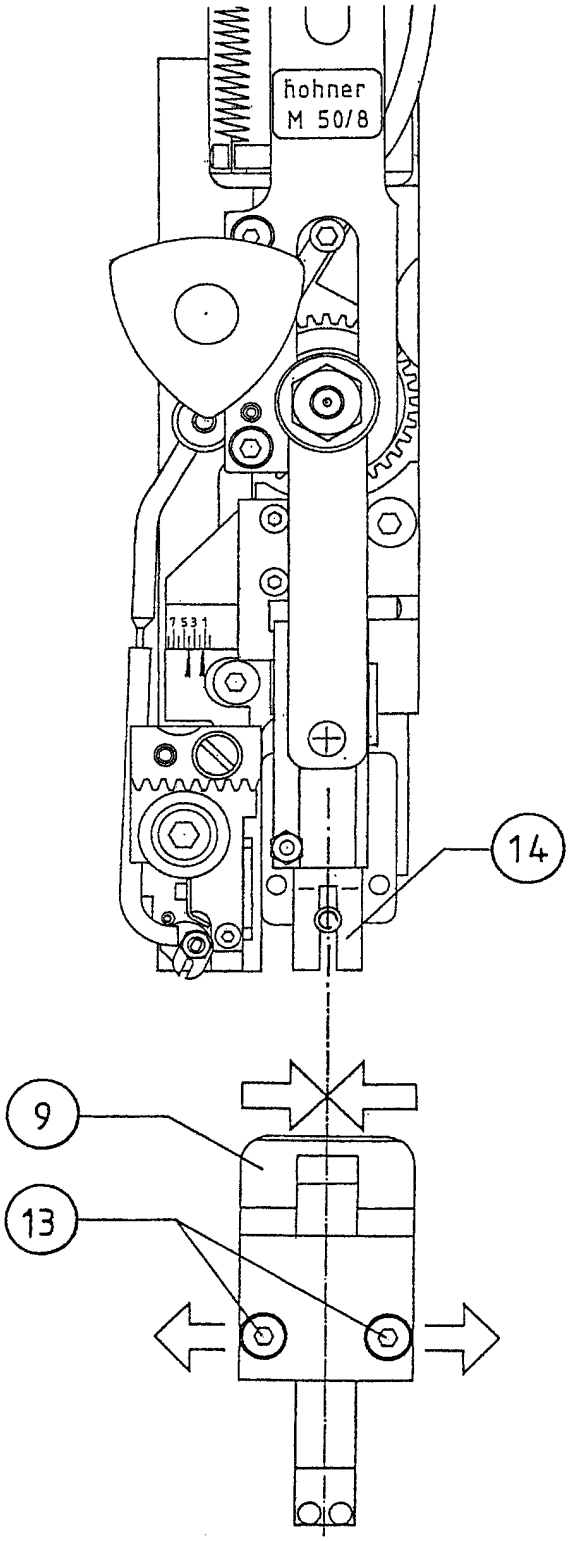
- Install clincher boxes **9** at the stitching section as far as possible form each orther and bring they in the highest position. The control dimension **D** is 97 mm (3.8 inches).

- Loosen the mounting block **1** at the Wire Stitching Head and insert it into the mounting cannel of the stitcher scetion. Before the Wire Stitching Head is fixed, make sure that the receivers **3** and **4** are properly seated in the mountings **B** and **C** .



7. Fine adjustment of the clincher box

Loosen hexagon socket head cap screw **13** . Adjust the clincher box **9** by moving laterally until it is centered with the Wire Stitching Head. The middle of the former **14** must be exactly in alignment with the middle of the clincher box **9**.

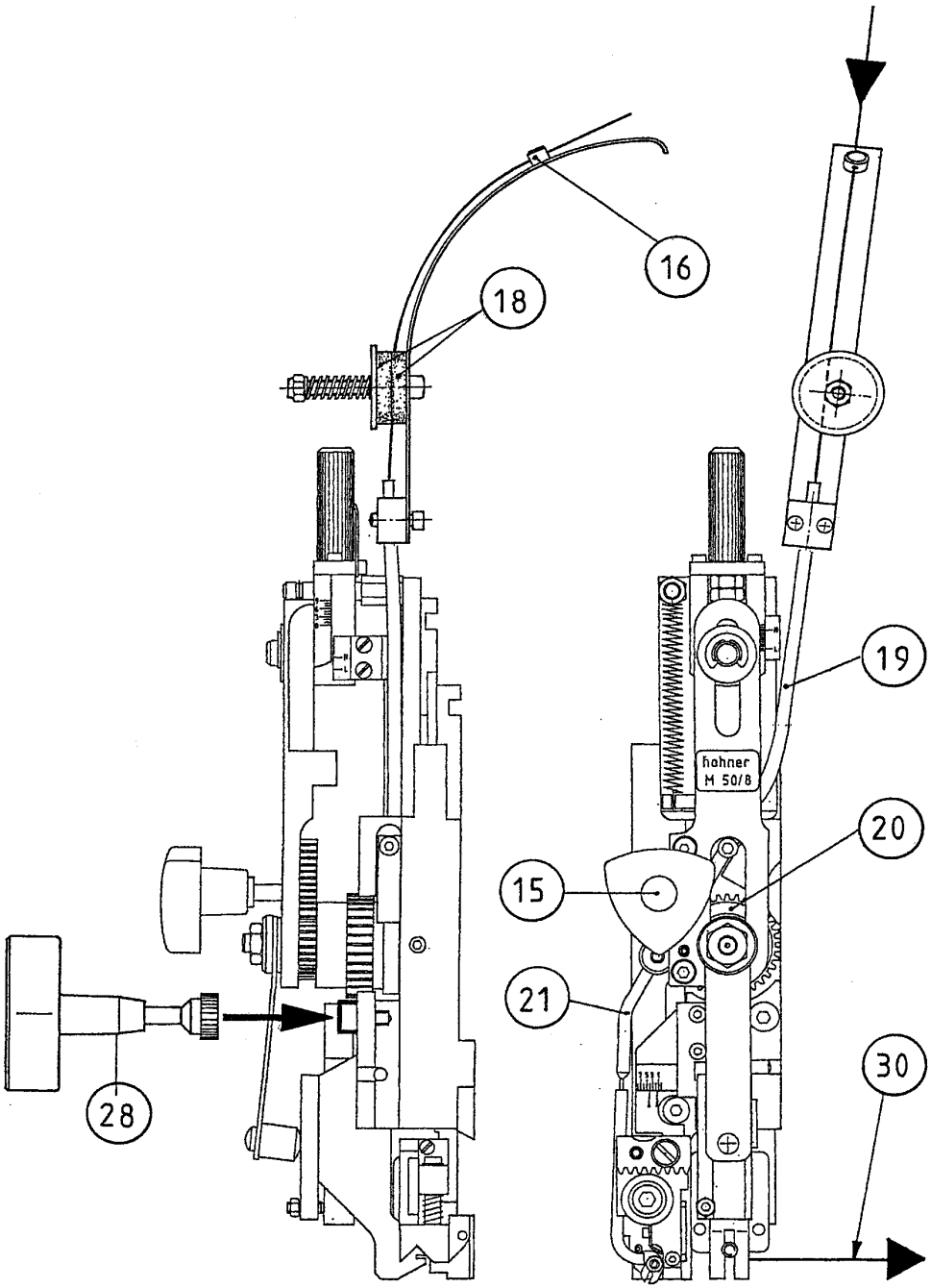


## 8. Inserting the wire

Aturn off the wire transport (turn the three-square handle **15** to the right).

Push the stitching wire **30** from the topside through the eyelet **16** , between the both felt discs **18** , through the wire tube top **19** , between both transporting wheels **20** a bit into the middle wire tube **21** .

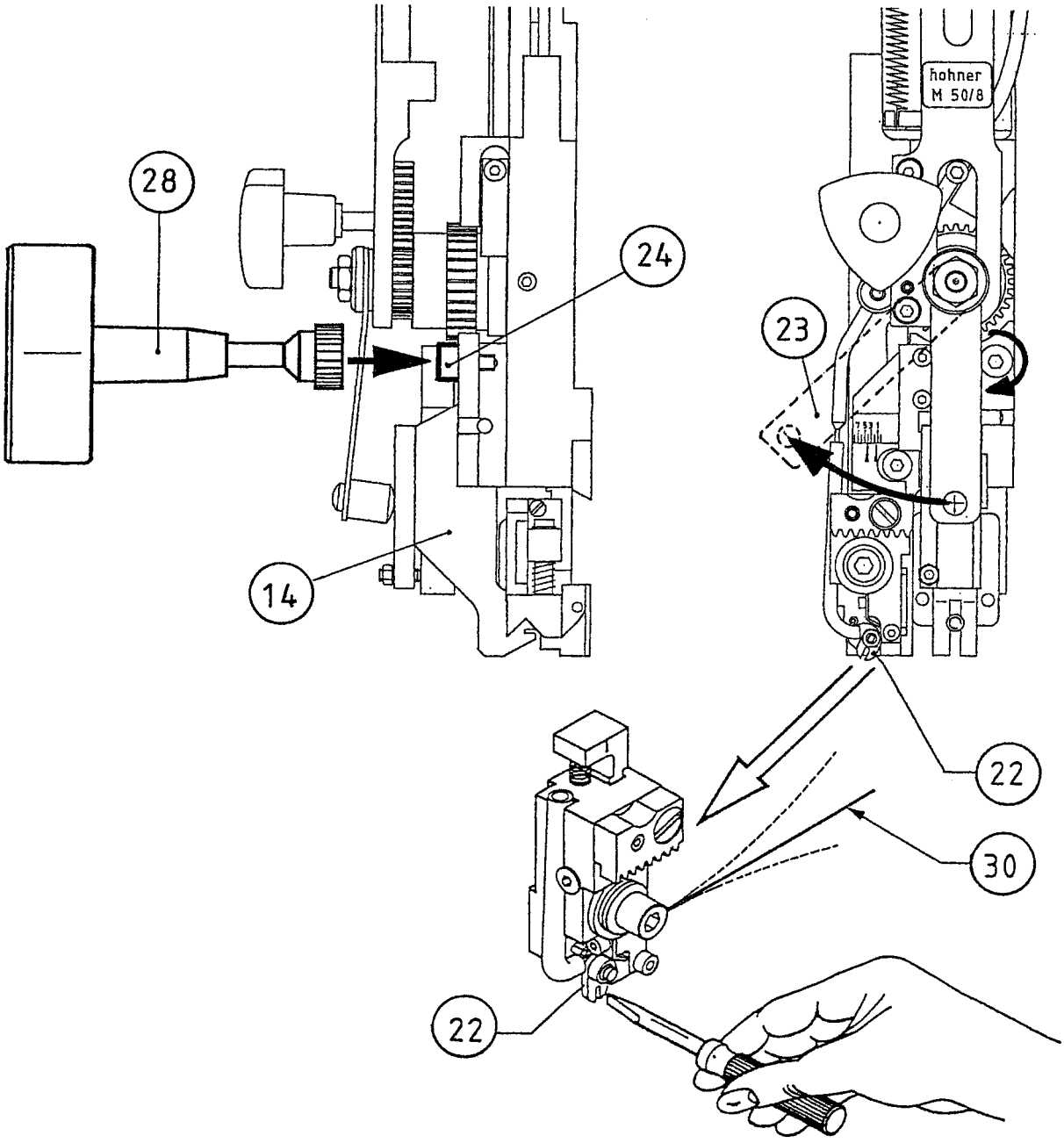
Turn on the wire transport, turn three-square handle **15** to the left. Now, the stitching wire can be transported to the knives with the delivered adjusting handle **28** .



9. Straightening of the wire

The wire must be straight for stitching. If the wire is not straight or if any difficulties appear, try to change the course of the wire by slightly turning the wire straightener **22** by using a screw driver.

If this is unsuccessful the former **14** must be removed. Pivot the leaf spring **23** sideways and remove the former **14** . Now put the adusting handle **28** on the adjusting nut **24** turn to the right and you will see whether the stitching wire **30** is transported bent or staight. If the wire is not exactly horizontal it must becorrected by the wire straigtener **22** until getting a straight wire. Put in again the former **14** and turn back the leaf spring **23** .

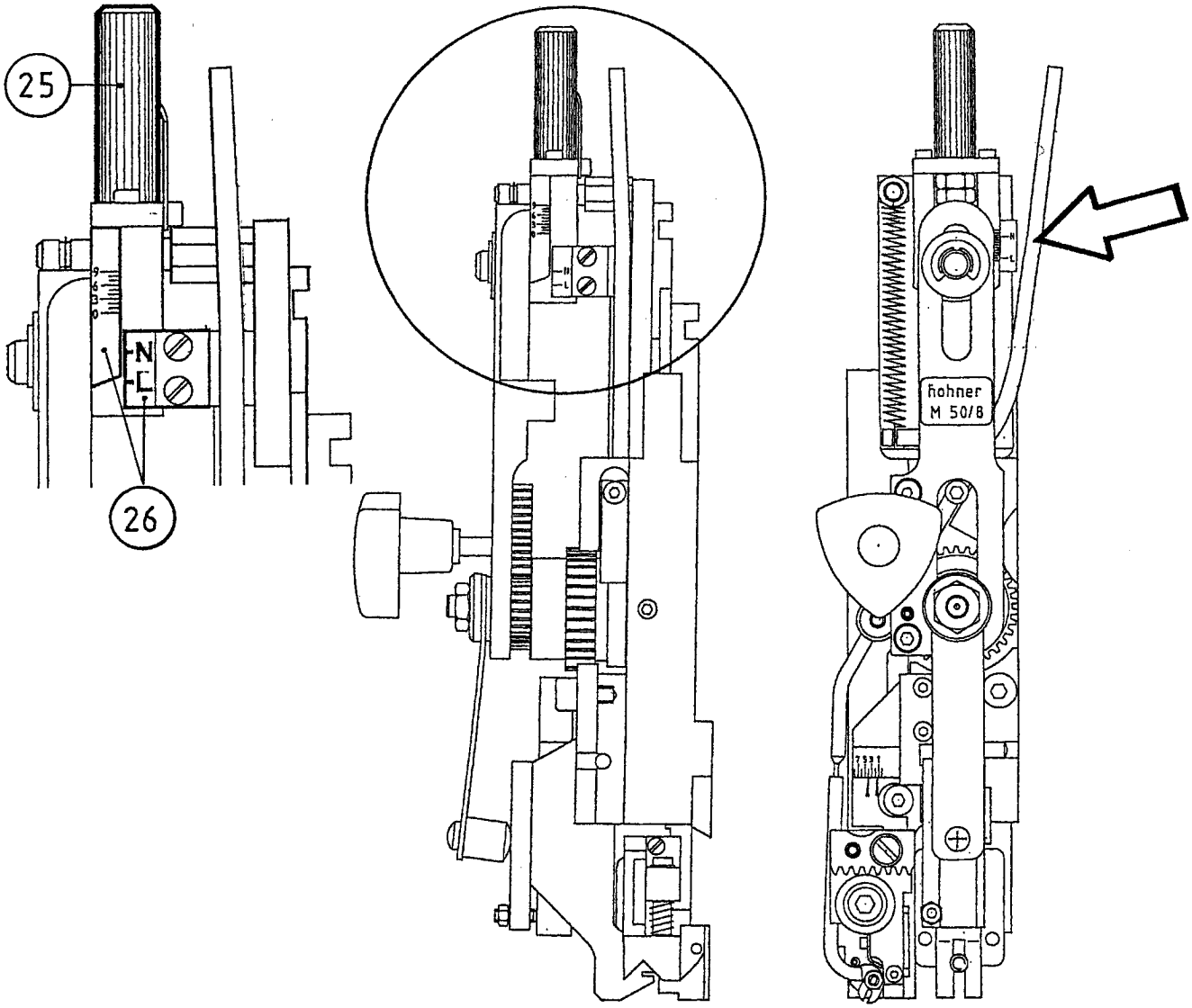


10. Basic setting of wire length

On the right side of the Wire Stitching Head you find a marking block and a scale. The position **„N“** indicates normal-stitching and **„L“** loop-stitching.

Normal-stitching:
Turn the knurled nut **25** until the letter **„N“** is in position of the actual stitching thickness on the scale **26** .

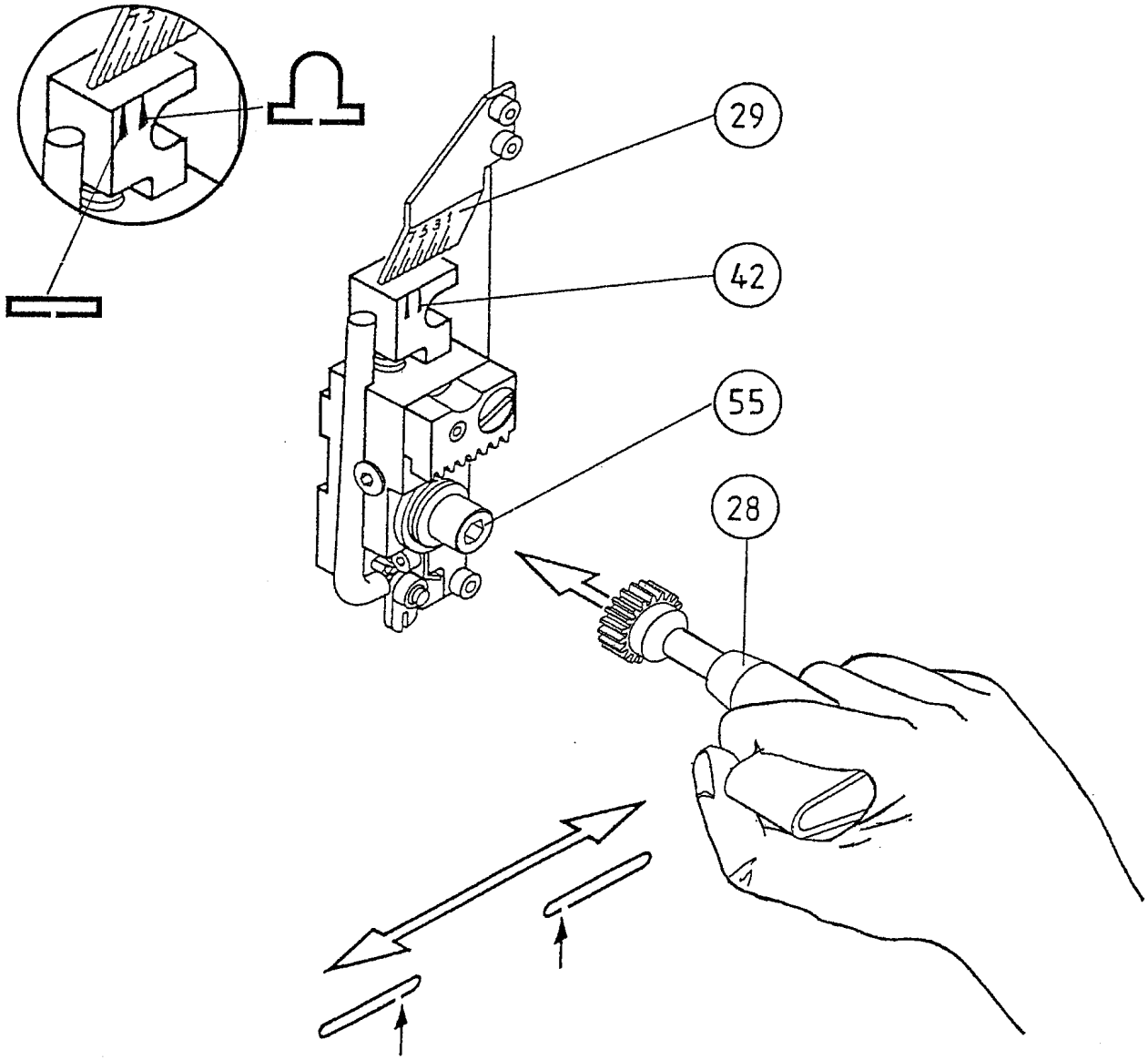
Standard - loop stitching:
Turn the knurled nut **25** until the letter **„L“** is in position of the actual stitching thickness on the scale **26** .

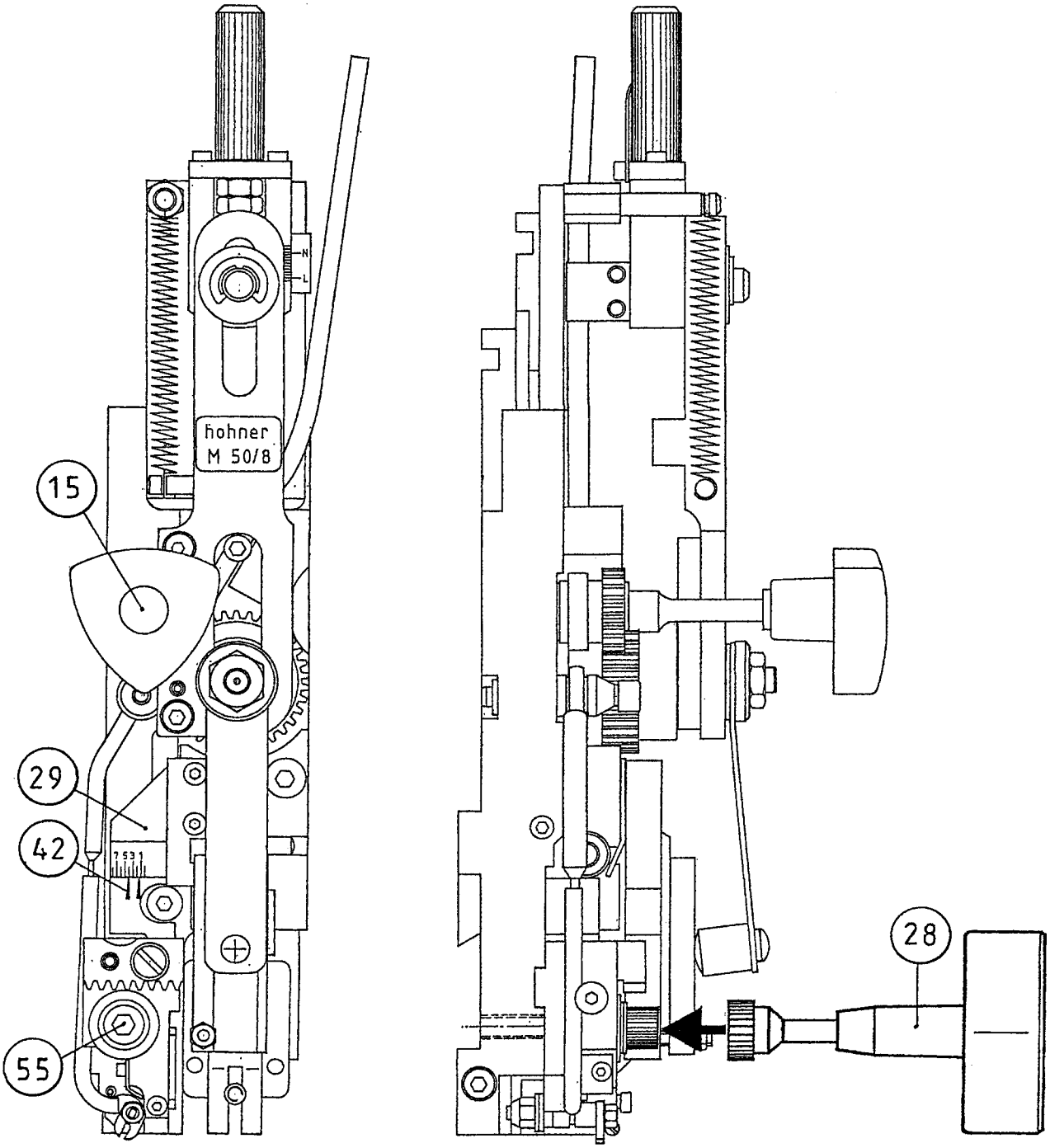


11. Setting of leg length

The thickness of the folder or pad determines the required length of the stitching wire for a complete staple, but first the stitching aggregate must be adjusted to the required stitching thickness (see corresponding machine operating instructions).

Turn off the wire transport with the three-square handle **15** . Put the delivered adjusting handle **28** on the screw **55** . Adjust the needed stitching thickness from the marking stitch on the cutting pusher **42** on the scale **29** . Turn on the wire transport.



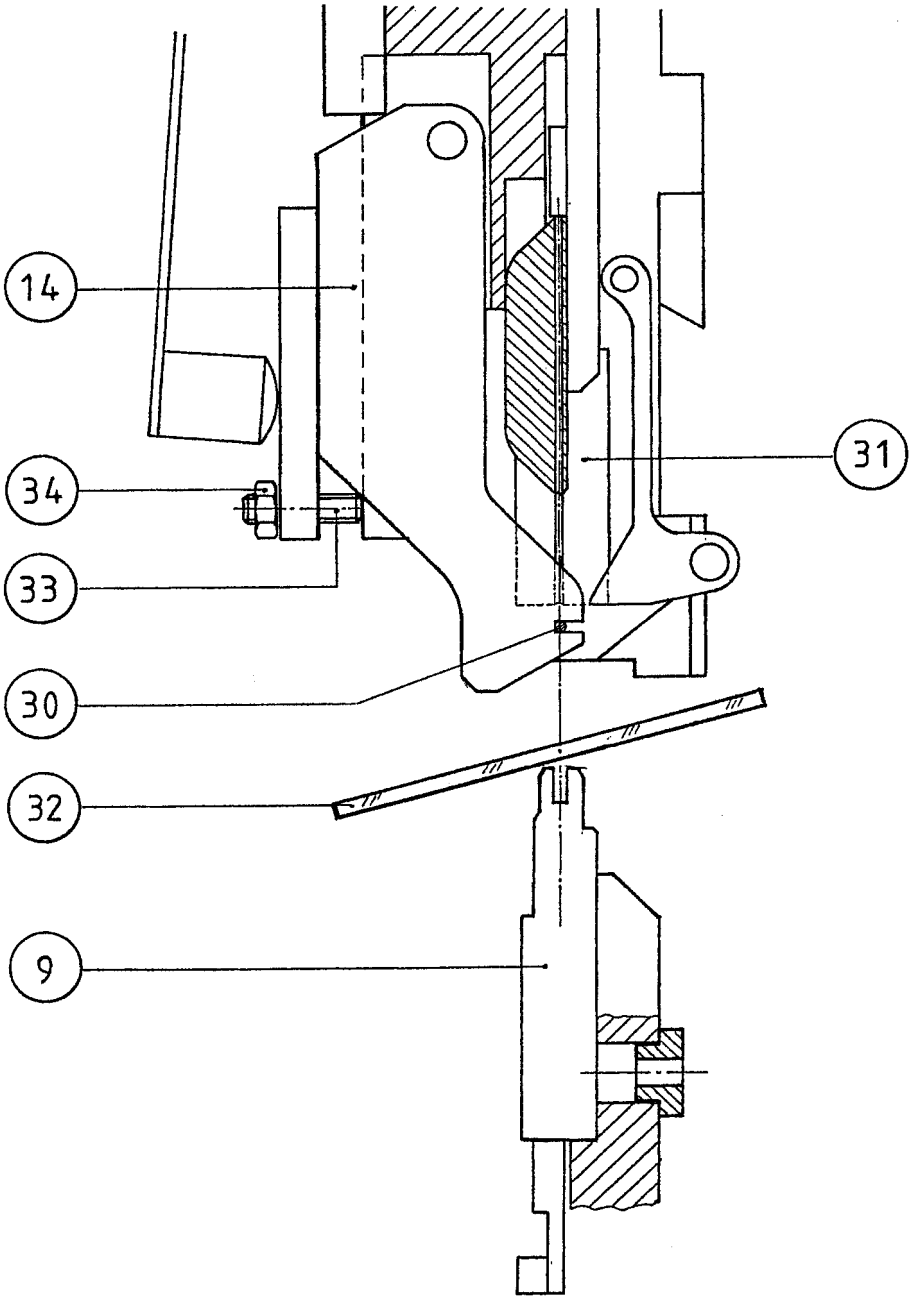

hohner
M 50/8
15
29
42
55
28

## 12. Alignment of former

The stitching will be correctly only when the former **14** swings in so far that the stitching wire **30** comes exactly under the middle of the groove of the bender **31** .
This can be controlled exactly by laying a mirror **32** on the clincher box **9** , by that means the position of the former respecting the wire can be seen cleary. A correction eventually necessary can be obtained by the hexagon socket set screw **33** .

**Important!**

After adjustment tighten hexagon nut **34** again carefully.

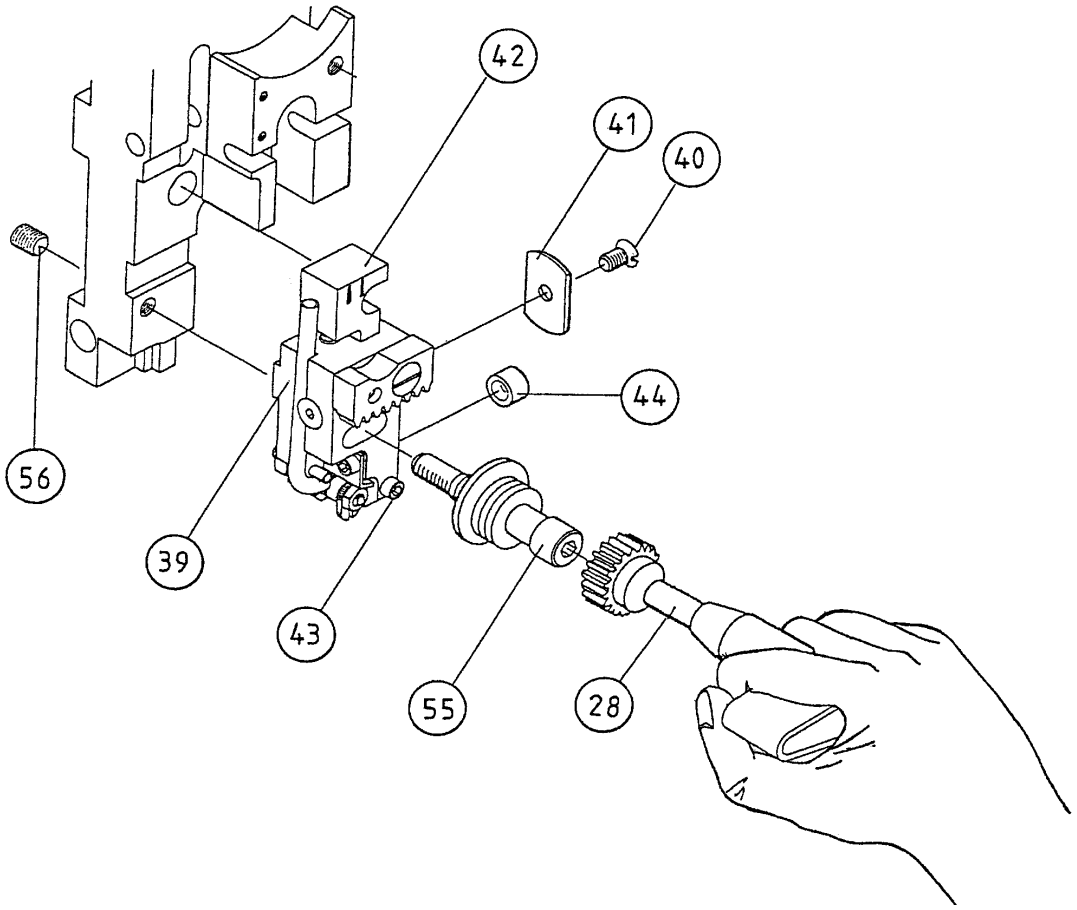


## 13. Exchange of knives

The quality of the stiching mainly depends on the condition of the knives. The knives can be used several times by turning them some degrees.

a) exchange of flat knife **41**
Loosen hexagon socket set screw **56** . Remove the screw **55** and take out the cutting block **39** . Loosen the slotted countersunk head cap screw **40** at the flat knife **41** and exchange the flat knife. Assemble in reversed order.

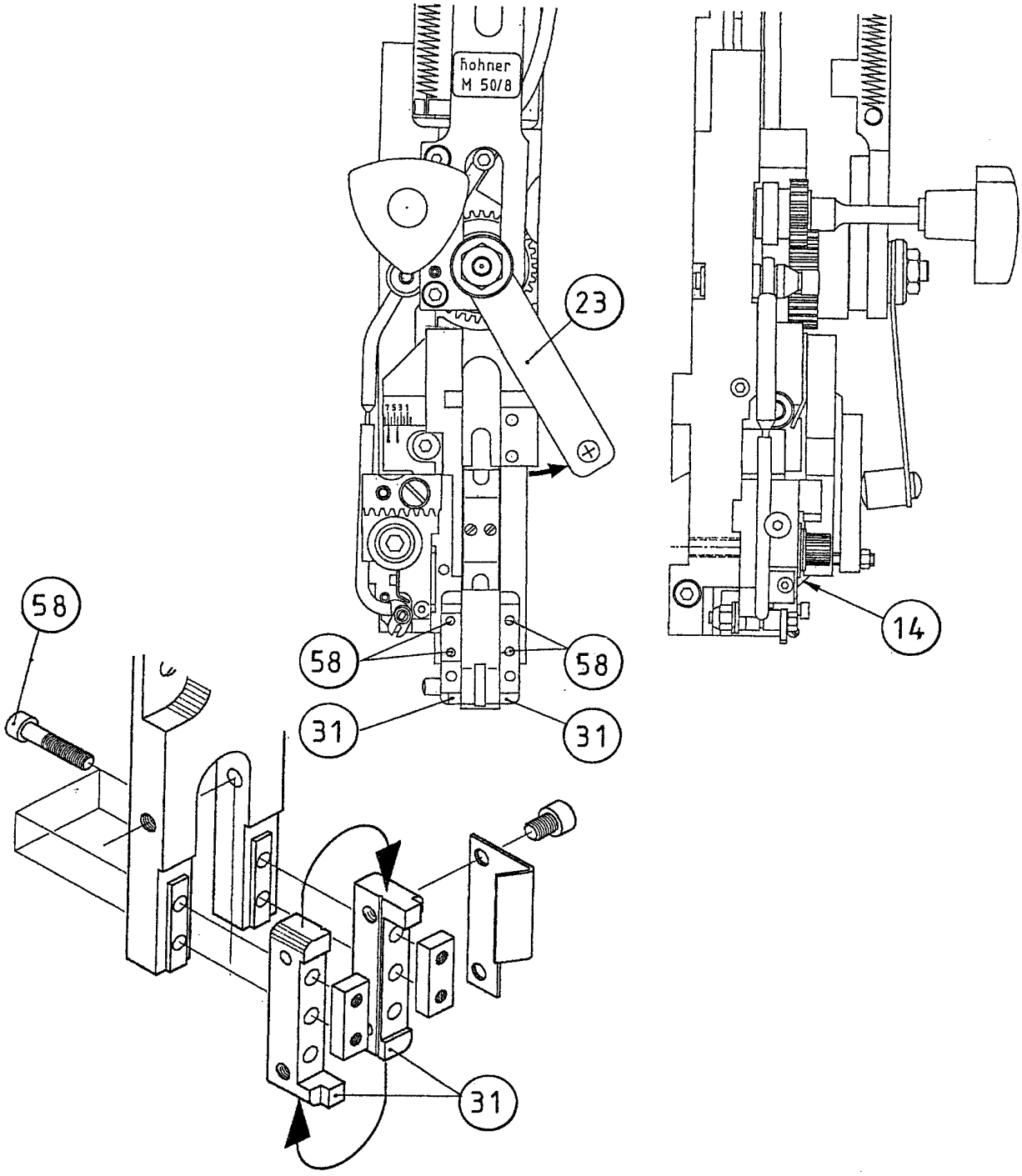
b) exchange of round knife **44**
Loosen hexagon socket set screw **56** . Remove the screw **55** and take out the cutting block **39** . Carefully remove the cutting pusher **42** (the installed compression spring is under pressure). Loosen hexagon socket head cap screw **43** and squeeze out the round knife **44** from the left. Exchange round knife. Assemble in reversed order. When assembling the new round knife you must pay attention that the round knife projects so far that an absolute cutting effect with the counter cutting edge results. For the best results push in the round knife and adjust it at the flat knife pressed down. Tighten the hexagon socket head cap screw **43** again. Make sure that the screw **55** is tightened so strongly that the cutting block **39** can only be slightly adjusted when using the adjusting handle **28** . Tighten the hexagon socket set screw **56** again.



## 14. Exchange of benders

Remove the stitching head, than pivot the leaf spring **23** sideways and remove the former **14** . Turn out the four hexagon socket head cap screws **58** and pull out the benders **31** downwards.

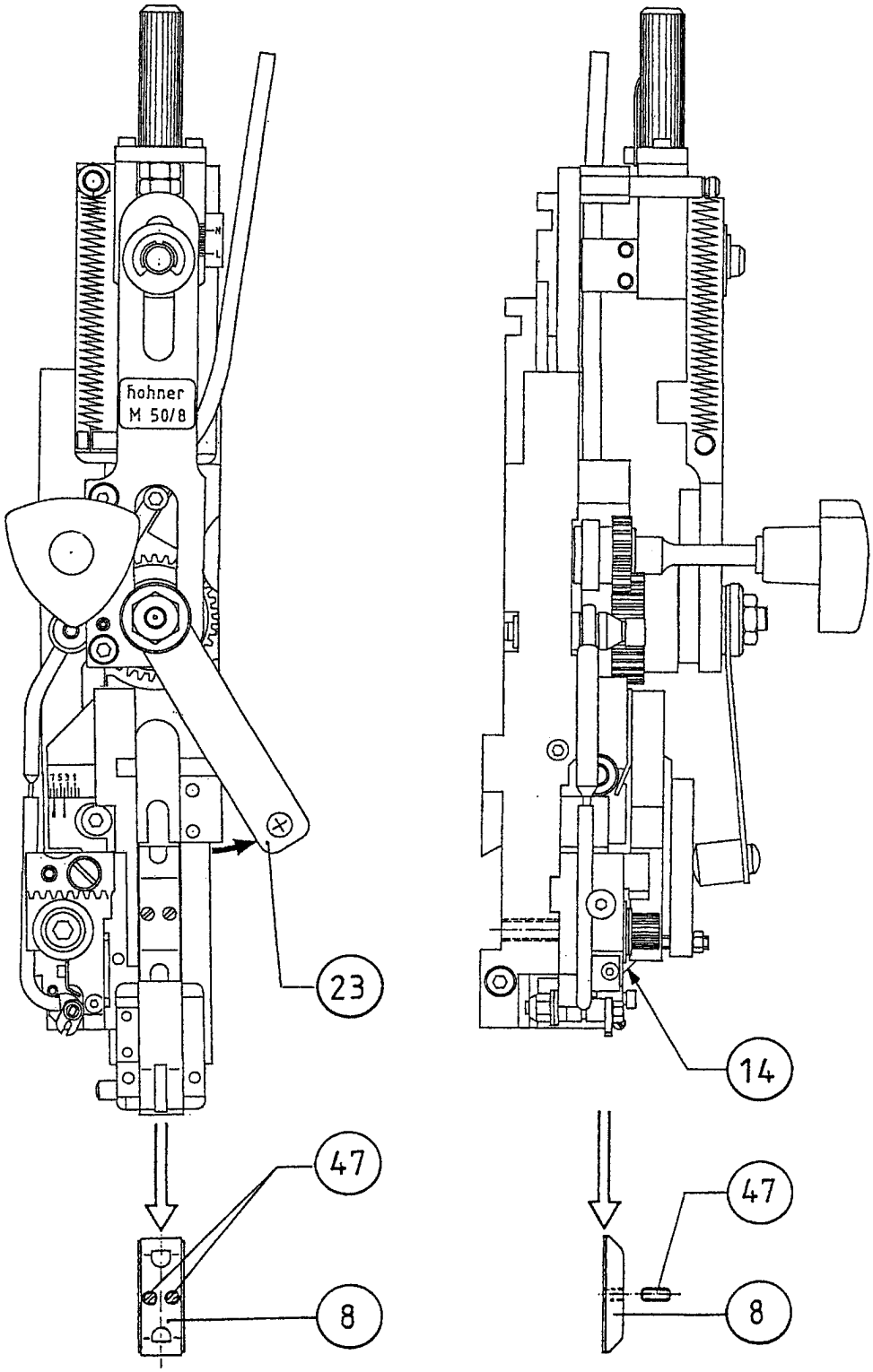
Assemble in reversed order. The benders can be turned and used again.



15. Exchange of driver

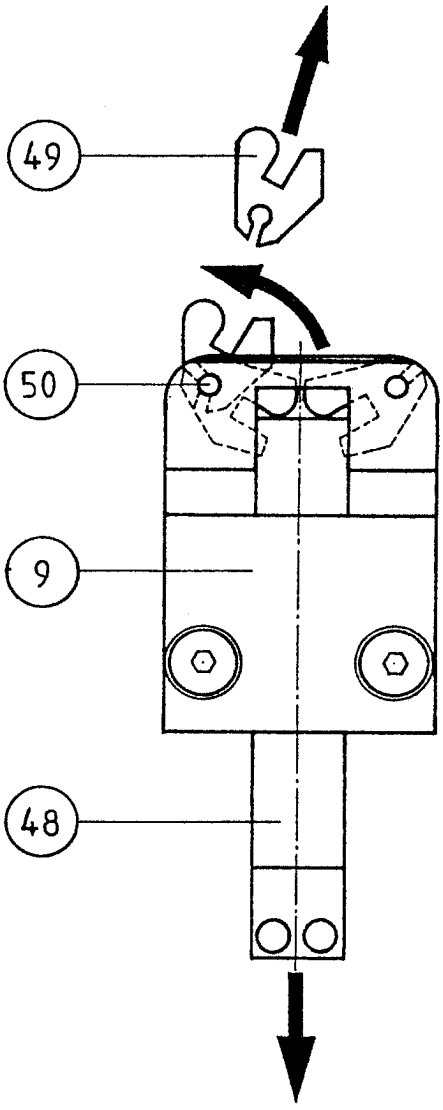
Pivot the leaf spring **23** sideways and remove the former **14** . Turn out both threaded bolts **47** in the driver **8** and pull out the driver downwards.

Assemble in reversed order. If the lower edge of the driver is worn out, the driver can be turned round and used again.



16. Exchange of clinchers

Draw out clincher pusher **48** downwards. Turn clinchers **49** in the clincher box **9** upwards and extract them out of the locking bolt **50** . Push in new clinchers into the locking bolt **50** , turn them around to the middle of the clincher box. Insert the clincher pusher **48** again .



## II. Conversion of the M 50/8

from 

For standard loop-stitching a change part set Art.-No. 99 59 460 consisting of the following parts is needed:

| | | | |
|---|---|---|---|
| Art.-No. | 31 59 454 | driver | L 6 |
| Art.-No. | 31 59 459 | shoe tongue curve | L 6 + 8 |
| Art.-No. | 99 59 455 | main slide bar, cpl. | L 6 |
| Art.-No. | 99 59 457 | former, cpl. | L 6 |
| Art.-No. | 99 59 470 | cutting block, cpl. | L 6 + 8 |

For the „8 mm“ - loop-stitching a change part set Art.-Nr. 99 59 480 consisting of the following parts is needed:

| | | | |
|---|---|---|---|
| Art.-No. | 31 59 459 | shoe tongue curve | L 6 + 8 |
| Art.-No. | 31 59 484 | driver | L 8 |
| Art.-No. | 99 59 470 | cutting block, cpl. | L 6 + 8 |
| Art.-No. | 99 59 483 | former, cpl. | L 8 |
| Art.-No. | 99 59 490 | main slide bar, cpl. | L 8 |


Conversion from normal - stitching to loop - stitching

1. Pivot the leaf spring **23** sideways and remove the former **14** .

2. Remove the pan head screw **59** at the Wire Stitching Head. Remove the hexagon socket head cap screw **5** and the mounting block **1** with the delivered hexagon socket screw key T-former handle, no. 4.

3. Loosen hexagon socket head cap screw **51** and install shoe tongue curve **52** for 6/8 mm loop-stitching. Tighten the hexagon socket head cap screw **51** again.

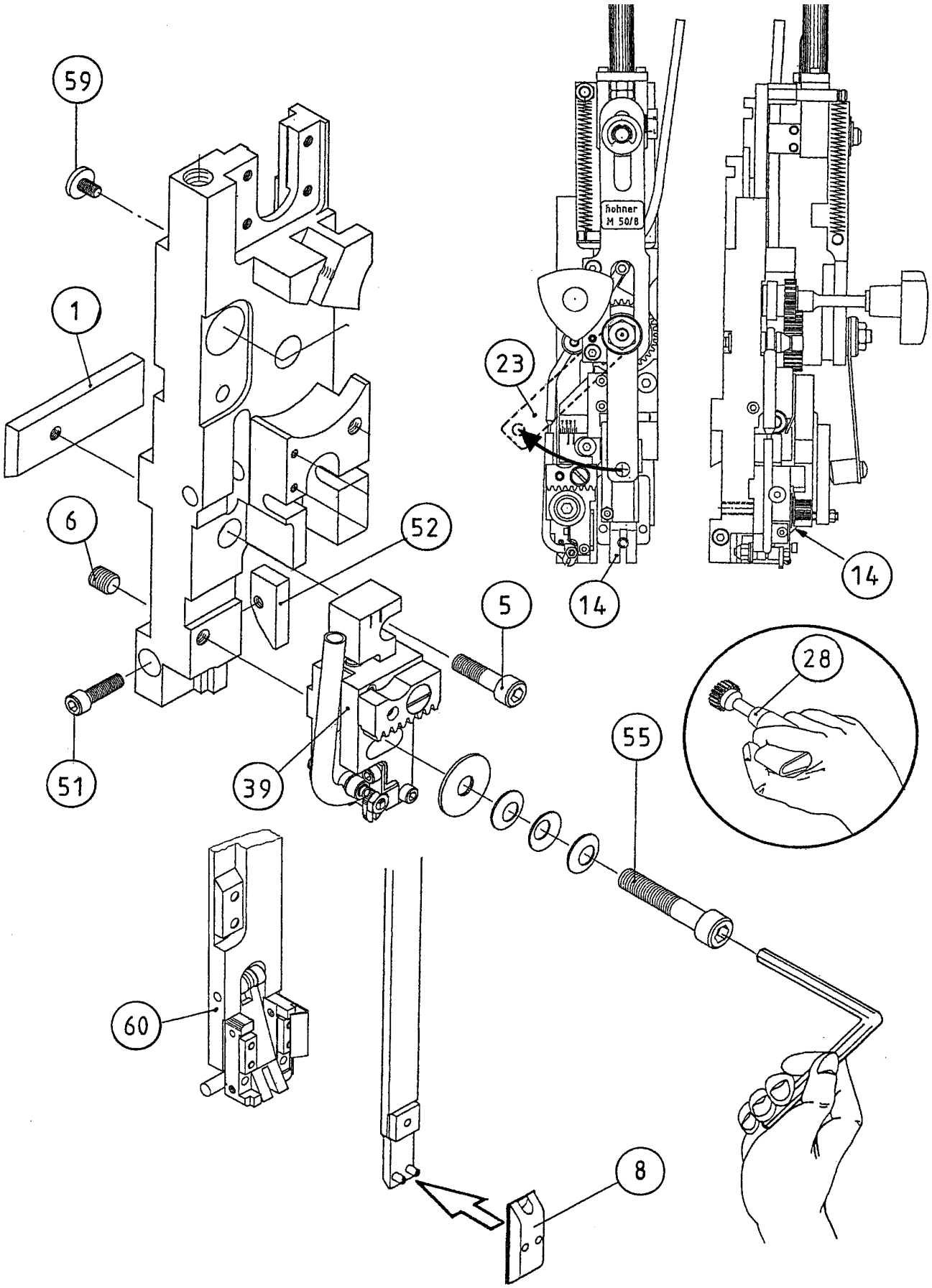
4. Loosen hexagon socket set screw **6** and screw **55** . Install cutting block, cpl. **39** for 6/8 mm loop-stitching. Make sure that the screw **55** is tightened so strongly that the cutting block **39** can only be slightly adjusted when using the adjusting handle **28** . Tighten the hexagon socket set screw **6** again.

5. Exchange driver **8** with the driver for 6 mm or 8 mm loop-stitching.

6. Install main slide bar, cpl. **60** for 6 mm or 8 mm loop-stitching and tighten the pan head screw **59** again.

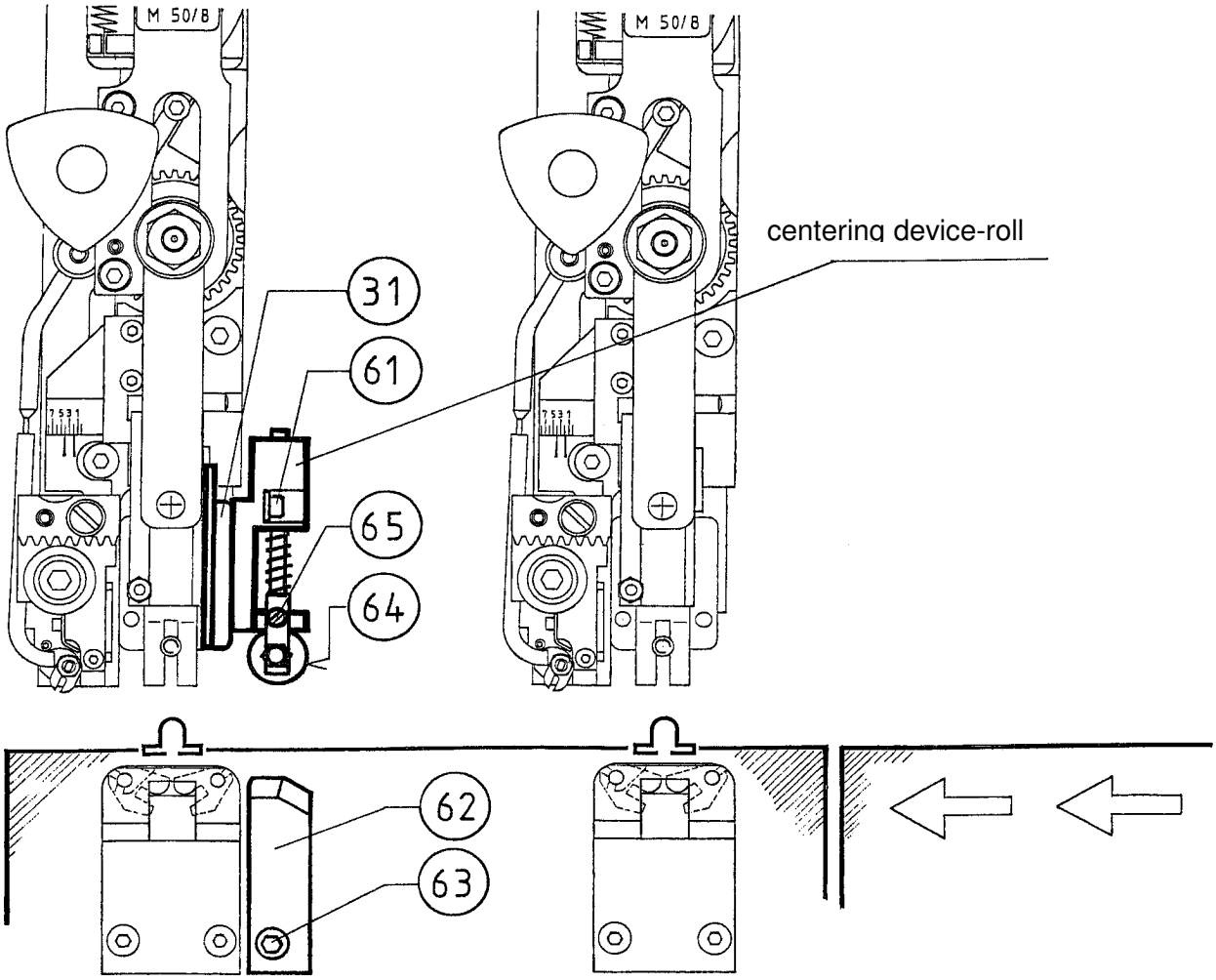
7. Tighten slightly mounting block **1** and hexagon socket head cap screw **5** before installing the Wire Stitching Head. If the Wire Stitching Head is placed correctly tighten mounting block **1** and hexagon socket head cap screw **5** .

8. Install former, cpl. **14** for 6 mm or 8 mm loop-stitching, and pivot back the leaf spring **23** . Adjust the former, see chapter 11, page 42.


59
1
6
52
5
51
39
23
14
14
28
55
60
8
hohner
M 50/8

1. Installation of the centering device-roll

For a frictionless transportation of the loop-stitching material it will be useful, to install one of the centering device-roll (see spare parts list, page 109). In normal case, fit one centering device-roll at the stitching head which is working on the left-hand side (see sketch).




Installation:

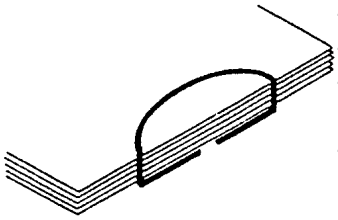
Attach with screw **61** the complete centering device-roll at the benders **31** right side. Fix the guiding cam **62** with screw **63** right, next to the clincher-box to the corresponding stitching head.

Adjsutment:

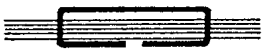
The guiding prism of the roll **64** is adjsuted by turning the screw **65** to the eyelet.

## III. Troubleshooting

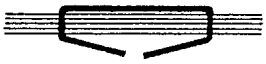
Here are some axamples of faults with specifications of the possible causes. There are often different reasons which have to be investigated step by step. Do not apply all suggestions simultaneously but one after the other makin tests in between. Worn out parts should be exchanged.



Staple back arche:
- wire weak or soft
- wire not straightened: see chapter 9
- lknives worn out: see chapter 13
- pressure of the shoe tongue weak or blocked: remove blocking wire pieces or replace compression spring in the shoe tongue
- wire groove in the driver is dirty, worn out or broken out: remove driver, see chapter 15
  clean wire groove rsp. exchange driver



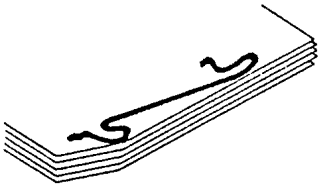
Staple back does not lay tight:
- pressure of the stitching too weak: adjust stitching aggregate to stitching thickness



Staple legs are not bent enough:
- pressure of the stitching too weak: adjust stitching aggregate to stitching thickness
- clincher do not go upwards enough: adjust pression for the clincher lifting at the stitching aggregate
- timing from clincher actuation to lifting actuation ot correct: stitching aggregate must be adjusted again at the manufacturer

Staple back does not lay tight, is saddle shaped:
- pressure of the stitching too weak: adjust stitching aggregate to stitching thicknes
- wire weak or soft
- pressure of the shoe tongue too weak or blocked: remove blocking wire pieces or replace compression spring in the shoe tongue

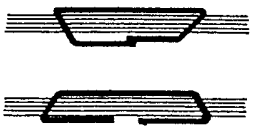
Staple legs rammed and are not correctly bent:
- wire weak or soft
- wire not straightened: see chapter 9
- clincher box must be aligned: see chapter 7
- staple legs not equal length: see chapter 11
- overall wire length too short: see chapter 10
- knives worn out: see chapter 13



Wire does not pierce through and builds sling:
- wire weak or soft
- groove in the bender is clogged by wire pieces
- knives worn out: see chapter 13
- wire groove in the driver ist dirty, worn out or broken out: remove driver, see chapter 15
  clean wire groove resp. exchange driver
- shoe tongue spring too weak: remove blocking wire pieces or replace compression spring in the shoe tongue
- clincher box not aligned properly: see chapter 7

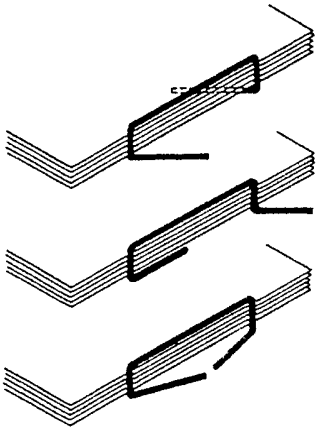
Staples legs break off:
- wire ist brittle: use orthe wire quality see chapter 13
- former is blocked by wire pieces: remove wire pieces, eventually remove former
- tension spring or gripper in former defective
- wire sizes does not coincide with the wire bender parts (bender and driver)
- adjust the former to the groove of the bender

Bulge at one staple edge:
- wire weak or soft
- driver is broken out: see chapter 15
- knives worn out: see chapter 13



Staple legs run together or apart:
- wire not straightened: see chapter 9
- knives worn out: see chapter 13

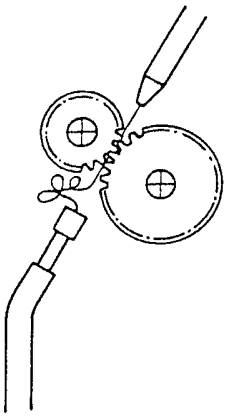
One leg is formed wrong:
- wire not straightened: see chapter 9
- clincher box must be aligned: see chapter 7



One or both legs are formed diagonally:
- wire weak or soft
- wire not straightened: see chapter 9
- knives worn out: see chapter 13
- clinchers broken out: see chapter 16
- adjustment of the cutting box receiver to the stit.head rec. see.chapter 6

Staple legs are formed diagonally to the same side:
- wire not straightend: see chapter 9
- adjustment of the cutting box receiver to the stit.head rec. see.chapter 6

Slightly formed wire pieces trop out:
- wire not straightened: see chapter 9
- hook spring in the bender is defective or bender worn out



Snarled wire between transport wheels and wire tube:
- wire not straightened: see chapter 9
- cutting pusher is jamming: round knife is pressed against flat knife, see chapter 13
  in the cutting block is defective
- cutting rocker is blocked, compression spring
- lower wire tube misplaced or wrongly adjusted: move slinghtly upwards or downwards
- former wrongly adjusted: see chapter 12

Troubleshooting - loop stitching:
Most faults and specifications of the eventual reasons are indicated in the section before.

Only straight wire pieces appear:
- wire not straightened: see chapter 9
- former wrongly adjusted: see chapter 12