

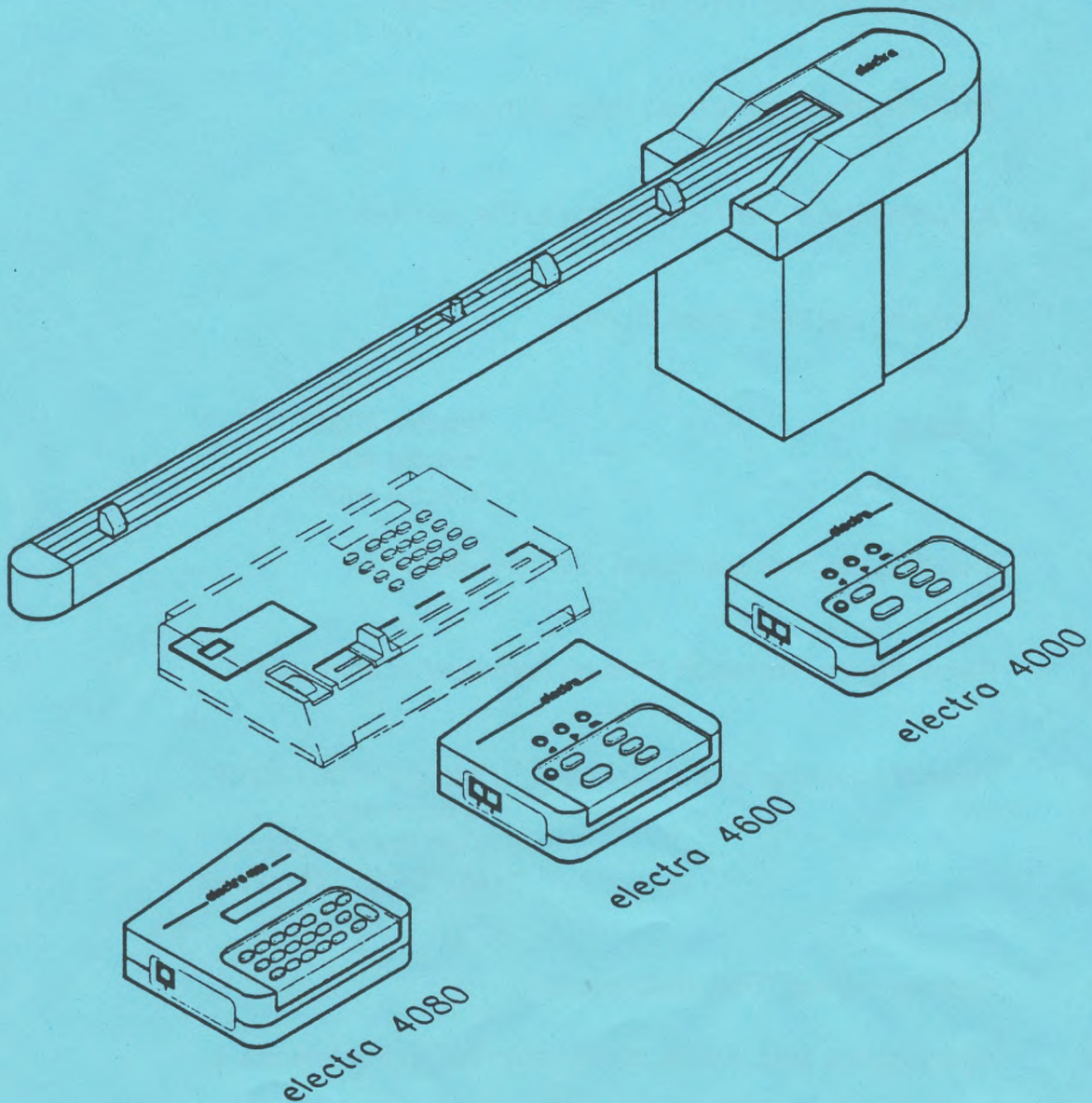
# MOUNTING INSTRUCTIONS

for

**electra 4000**

**electra 4080**

**electra 4600**



## MOUNTING INSTRUCTIONS

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## MOUNTING INSTRUCTIONS

**1. Important instructions for your safety, general advice****1.1 "electra 4..."**

The term "electra 4..." in the following text is referring to all types of motor drives such as: "electra 4000", "electra 4080" and "electra 4600".

When type specific instructions are given, the corresponding precise term is used.

**1.2 Mounting Instructions and Users Manual of the "electra 4..."**

Before you start mounting and start to run your new motor drive "electra 4...", read thoroughly this mounting instructions.

Make shure that all persons who are supposed to operate the "electra 4..." have read and understood the Users Manual of the "electra 4..." as well as the Users Manual of the corresponding knitting machine.

**1.3 Mains Voltage**

Before you start mounting works make shure that the voltage and frequency of your electrical power supply does correspond to the operating voltage indicated on the nameplate located at the rear side of the "electra 4...".

Otherwise, the "electra 4..." must not be connected or operated.

**1.4 Safety instructions and warning when operating the "electra 4..."**

Bevor you touch the GO/STOP button, remove both hands out of the area of movement of any moving parts of the knitting machine and of the "electra 4..."

Never leave unattended the connected or switched on "electra 4...". Other persons, children or animals could set the motor drive unintentionally in operation, persons can suffer severe injuries.

Don't connect the "electra 4..." to the mains before it is mounted to the table as per this mounting instruction.

At the first test after mounting the "electra 4...", the mechanical connection between the motor drive and the locks of the knitting machine **must be disengaged**.

Executing function tests as per 12., both locks of the knitting machine must be set to "GX" position to avoid damages at the locks, needles and pushers.

## MOUNTING INSTRUCTIONS

**1.5 Four Color Changer**

The "electra 4..." can be operated only with a four color changer but not with the standard two color changer "M-Switch Box 16.460.00".

You require:For the E-6000:

COLOR 600      14.655.00  
or  
AUTOCOLOR 600 15.400.00

For the Duomatic 80 / Duomatic-S:

COLOR 80      14.655.00  
or  
AUTOCOLOR 80 15.400.00

**1.6 Bed Extension Kit at the left side.**

If you plan to operate regularly all needles including no. -90 at the left end of the machine bed, we recommend the installation of the Bed Extension Kit (optional) to increase the guidance of both locks.

The **Bed Extension Kit (05.850.00)** is available as an optional accessory.

## MOUNTING INSTRUCTIONS

**2. Contents of motor drive package****2.1 Standard accessories, coming with each "electra 4..."**

Art. no.	Qty.	Name of parts
10.795.01	1	<b>VM-ACCESSORIES BAG</b>
10.688.02	1	EDGE STOP SHIFTER
10.848.02	1	BOX SUPPORT
12.514.12	1	VM-DRIVER FOR CAM BOX
10.930.01	1	<b>VM-FIXATION PARTS</b>
12.309.02	2	CYLINDER SCREW M3X6.5
90.412.32	2	CYLINDER SCREW M3X8
90.711.23	2	TENSION DISK M3
90.640.01	2	WING NUT M3
90.646.77	1	SPECIAL FLUSH NUT M3

**2.2 Standard accessories, depending of country and language**

(One piece per item comes with each "electra 4...")

Art. no.	Qty.	Name of parts
10.920.03	1	MAINS CABLE EUR
10.921.03	1	MAINS CABLE CH
10.922.03	1	MAINS CABLE USA
33.242.03	1	Bedienungs-Anleitung 4000 D
33.243.03	1	Bedienungs-Anleitung 4080 D
33.244.03	1	Bedienungs-Anleitung 4600 D
33.242.13	1	Mode d'emploi 4000 F
33.243.13	1	Mode d'emploi 4080 F
33.244.13	1	Mode d'emploi 4600 F
33.242.23	1	Instruction manual 4000 E
33.243.23	1	Instruction manual 4080 E
33.244.23	1	Instruction manual 4600 E
33.242.43	1	Instrucciones p. el uso 4000 SP
33.243.43	1	Instrucciones p. el uso 4080 SP
33.244.43	1	Instrucciones p. el uso 4600 SP
33.244.93	1	Instruction manual 4600 CHIN
33.637.03	1	Mounting instructions D
33.637.13	1	Mounting instructions F
33.637.23	1	Mounting instructions E
33.637.33	1	Mounting instructions SP

## MOUNTING INSTRUCTIONS

## 2.3 Type specific components of the "electra 4..."

M-ELECTRA 4000 10.510.00 230V/50Hz or  
 M-ELECTRA 4000 10.515.00 120V/60Hz

Art. no.	Qty.	Name of parts
10.550.00	1	M-DRIVE UNIT 4000 230V/50Hz or
10.555.00	1	M-DRIVE UNIT 4000 120V/60Hz
10.796.01	1	VM-ACCESSORIES PACKAGE 4000
10.910.01	2	VM-FCC-CABLE 6/6 KPL.
10.830.00	1	M-CONTROL BOX
10.794.00	1	AS-80 (Replacing the standard mast support)

M-ELECTRA 4600 10.520.00 230V/50Hz or  
 M-ELECTRA 4600 10.525.00 120V/60Hz

Art. no.	Qty.	Name of parts
10.560.00	1	M-DRIVE UNIT 4600 230V/50Hz or
10.565.00	1	M-DRIVE UNIT 4600 120V/60Hz
10.797.01	1	VM-ACCESSORIES PACKAGE 4600
10.910.01	2	VM-FCC-CABLE 6/6 KPL.
10.830.00	1	M-CONTROL BOX
05.970.00	1	M-INTERFACE 6000
10.905.01	1	VM-YARN BREAK CONTROL

M-ELECTRA 4080 10.530.00 230V/50Hz or  
 M-ELECTRA 4080 10.535.00 120V/60Hz

Art. no.	Qty.	Name of parts
10.570.00	1	M-DRIVE UNIT 4080 230V/50Hz or
10.575.00	1	M-DRIVE UNIT 4080 120V/60Hz
10.798.01	1	VM-ACCESSORIES PACKAGE 4080
10.910.01	1	VM-FCC-CABLE 6/6 KPL.
10.860.00	1	M-PROGRAM BOX
10.905.01	1	VM-YARN BREAK CONTROL
10.794.00	1	AS-80 (Replaces the Mast Support)

### 3. Preparing the tables for mounting the "electra 4..."

If one of the following indications is marked on the respective table's package, no further accessories are necessary for mounting the "electra 4..." to this table.

GT-900/4    GT-600/4    T-600/4    T-601/4

Tables RT-63, GT-900 and GT-600, T-600 and T-601 **without** the indication /4 on the package do need additional adaptor accessories for being used with the "electra 4...". The appropriate sets are available as per the following advice.

#### 3.1 Table RT-63

For mounting the "electra 4..." to the RT-63 table, the adaptor **A-600/4 Art.No. 05.630.00** must be attached in advance.

The instruction sheet 33.636.93 is annexed to the A-600/4.

#### 3.2 Table GT-900 / GT-600

For an possibly necessary adaption of the table GT-900 or GT-600 the **Conversion Kit GT/4 Art.No. 05.890.00** is required.

The instruction sheet 33.636.83 is annexed to the Conversion Kit GT/4.

#### 3.3 Table T-600 / T-601

For an possibly necessary adaption of the table T-600 or T-601, the **Conversion Kit T-600/601 Art.No. 05.552.00** is required.

The instruction sheet 33.637.63 is annexed to the Conversion Kit T-600/601.

#### **4. Attaching the "electra 4..." and the knitting machine to the table**

##### **4.1 Recommended sequence of mounting**

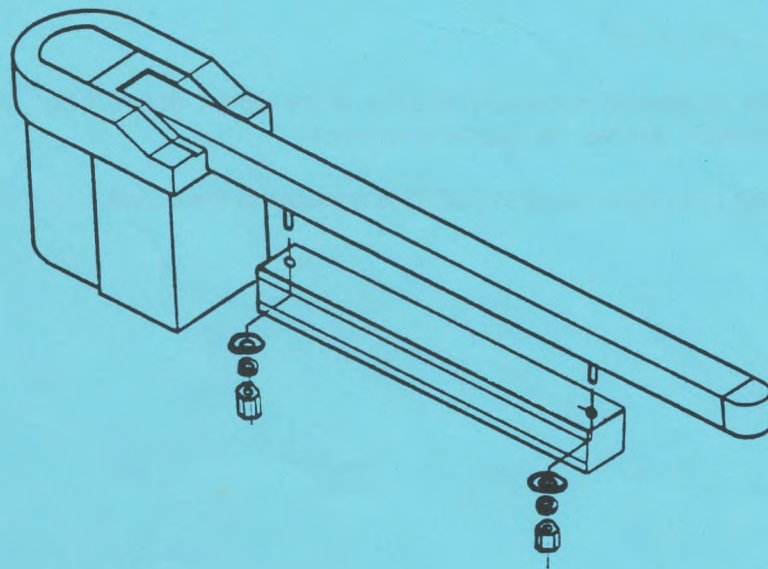
Attaching the "electra 4..." to the table	4.2
Fixing the knitting machine to the table	4.3
Mounting the COLOR / AUTOCOLOR	4.4
Adjustments	4.5
Tightening the special nuts	4.6
Replacement of the Mast Support by the AS-600 / AS-80	4.7

##### **4.2 Attaching the "electra 4..." to the table**

Remove both Special Nuts M6 90.631.67, both Washers 90.750.17 and both Spring Washers 90.700.77 from the screws underneath the motor profile bar.

Set the distance of the two screws accordingly to the fixation holes at the table and place the "electra 4..." in this position.

Apply the two Washers, the two Spring Washers and the two Special Nuts M6 from underneath to the screws and tight them slightly. The "electra 4..." still must be shiftable for it's definite positioning.





## MOUNTING INSTRUCTIONS

**4.3 Fixing the knitting machine to the table**

The knitting machine must be put into final position and fixed with the two annexed clamps.

**Important advice concerning the Mast Support**

The standard Mast Support of all types of knitting machine cannot be used anymore together with the "electra 4...", it must be removed before the "electra 4..." is mounted to the table.

The standard Mast Support is replaced by the AS-600 (E-6000) or the AS-80 (Duo 80 / -S).  
(See also under 4.7)

**4.4 Mounting the COLOR / AUTOCOLOR**

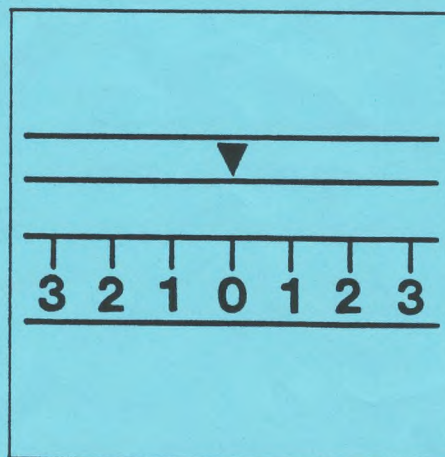
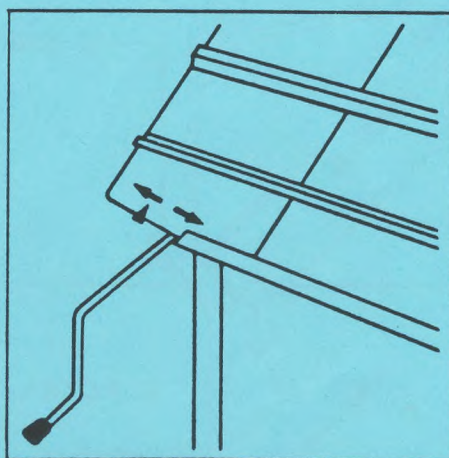
Mount the corresponding four colour changer in accordance to the mounting instructions, annexed to each four colour changer.

(Color 80 / Color 600 / Autocolor 80 / Autocolor 600)

**4.5 Adjustments****4.5.1 Racking position**

Before the execution of the next adjustments the racking position has to be set as follows.

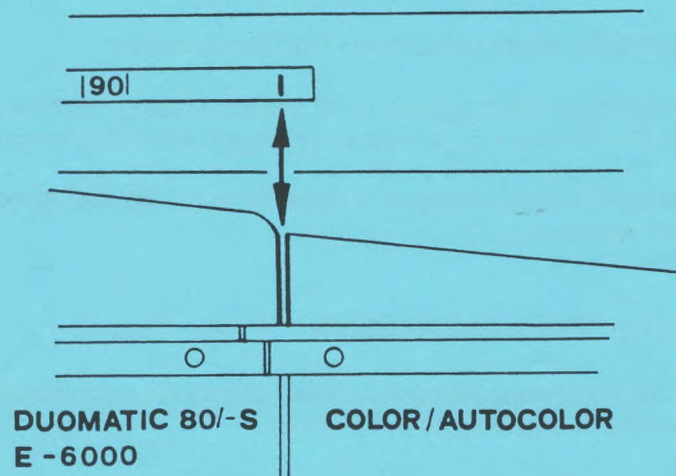
**Arrow face to the "0" ,the Racking handle to low position.**



## MOUNTING INSTRUCTIONS

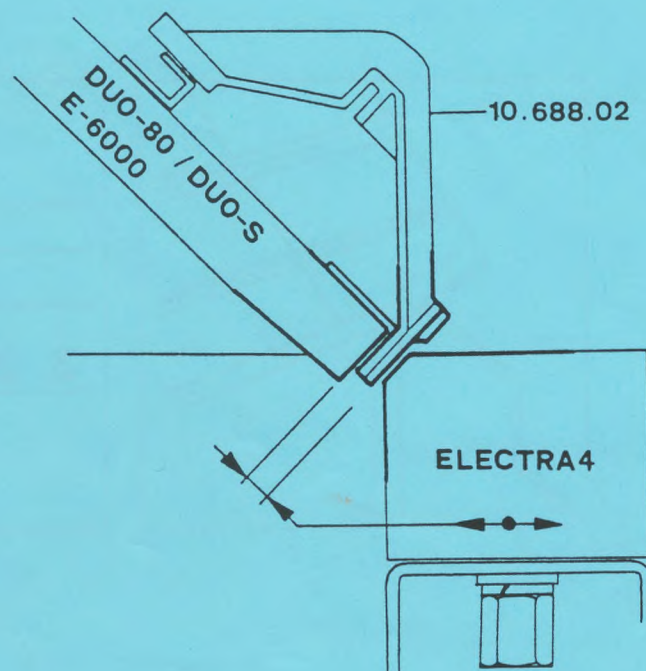
**4.5.2 Position of the "electra 4..." against the rear bed of the knitting machine**

Shift the "electra 4..." to obtain the correct position. (The line at the "electra 4..." must be in line with the end of the rear bed)

**4.5.3 Distance between "electra 4..." and the rear bed.**

The **Edge Stop Shifter 10.688.02** is used as a gauge for adjusting the correct distance.

It is inserted between the rear bed and the "electra 4..." Profile Bar. The Edge Stop Shifter must fit tightly when the two Special Nuts are tightened by hand. Carry out this step **once on the left end and once on the right end** of the knitting bed.



## MOUNTING INSTRUCTIONS

**4.6 Tighting the Special Nuts**

Tight both Special Nuts with a 10 mm spanner.

Check again the adjustments as per 4.5.2 and 4.5.3.

The Edge stop Shifter 10.688.02 must slip tightly in between the rear bed and the Profile Bar.  
(see 4.5.3)

**4.7 Replacing the Mast Support with the AS-600 / AS-80**

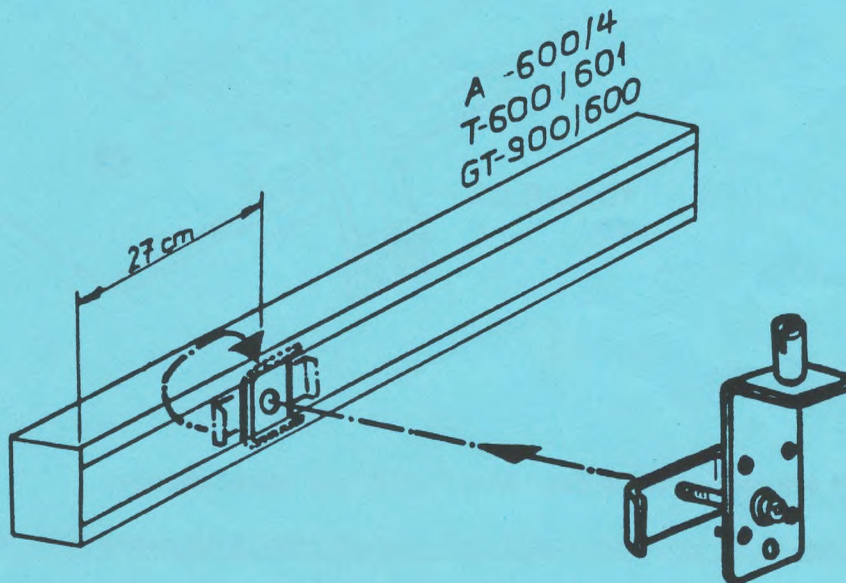
The standard Mast Support of the knitting machine is replaced by:

**AS-600 Art.Nr. 05.280.00** , for E-6000

The corresponding mounting instruction is added to the AS-600 package.

**AS-80 Art.Nr. 10.794.00** , for Duomatic 80 / -S

Mounting as per the illustration below.



(The mounting instruction for the Tension Arm is shown in the users manual of the knitting machine)

## MOUNTING INSTRUCTIONS

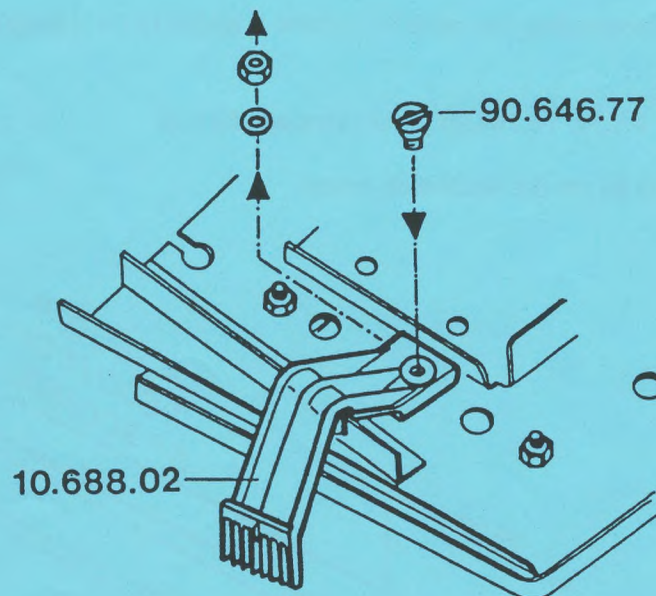
**5. Attaching and adjusting the Edge stop Shifter 10.688.02****5.1 Attaching the Edge stop Shifter to the COLOR / AUTOCOLOR**

The necessary parts are included in the **VM-ACCESSORIES BAG 10.795.01** of the "electra 4..." package.

- 1 x Edge stop Shifter 10.688.02
- 1 x Special Flush Nut 90.646.77

Remove one nut M3 and the spring washer from the shown position at the COLOR / AUTOCOLOR.

Fix the Edge stop Shifter 10.688.02 by means of the Special Flush Nut 90.646.77 at the same place.

**5.2 Standard adjustment of the Edge stop for the four colour changer**

Normally, the Edge stop must be set approximately to the middle of the Edge stop Shifter.

**The edge stop for the four colour changer can be varied in its position about 10 mm to the left or to the right.**

In case of troubles with the activation of the four colour changer the position of the edge stop can be altered.

Edge stop further to the **left** side:

Gives a **smoother** activation of the four colour changer

Edge stop further to the **right** side:

Gives a **harder** activation of the four colour changer

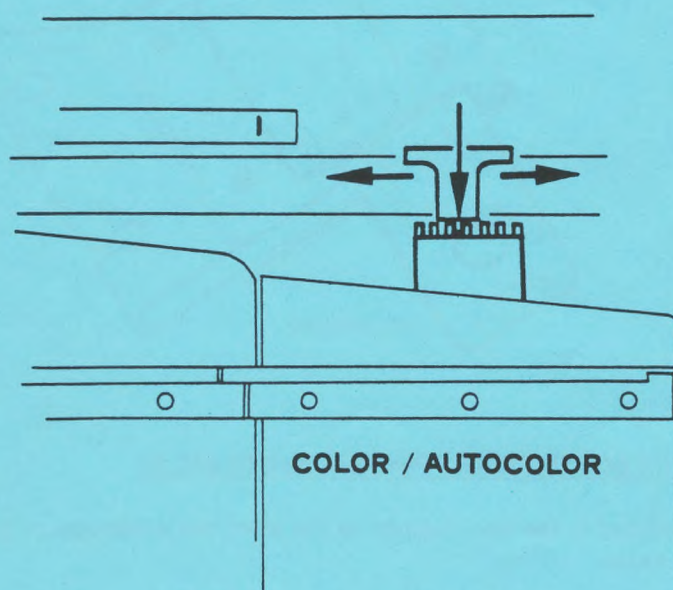
## MOUNTING INSTRUCTIONS

**5.3 Adjusting the Edge stop**

Push the Edge Stop Shifter towards the four colour changer to separate it from the Edge Stop. Move the Edge Stop as desired to the left or right side.

**Important check:** The notch of the Edge stop must fit properly into the Edge stop Shifter 10.688.02 to assure the reliable connection between them. Otherwise, the four colour changer can suffer damages.

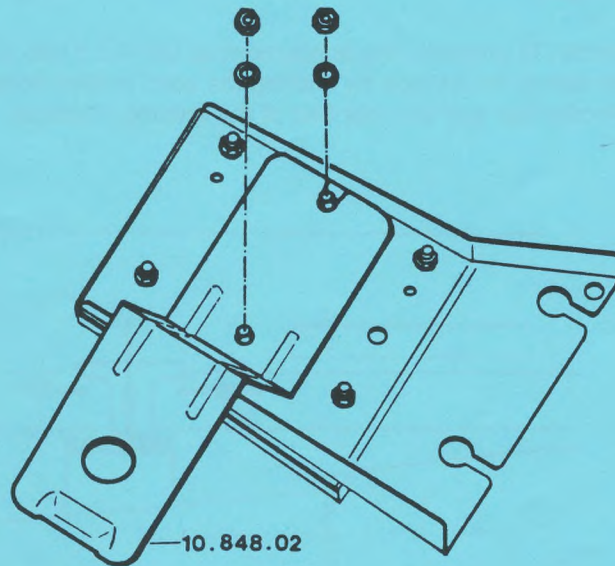
If the notch doesn't fit properly, the adjustment as per 4.5.3 has to be redone. Eventually, the table assembly has to be remade by shifting the bolts in their holes to obtain a closer distance between the Profile Bar and the rear bed of the knitting machine.



## MOUNTING INSTRUCTIONS

**6. Attaching the Control box 10.830.00 / Program box 10.860.00****6.1 Fixing the Box Support 10.848.02**

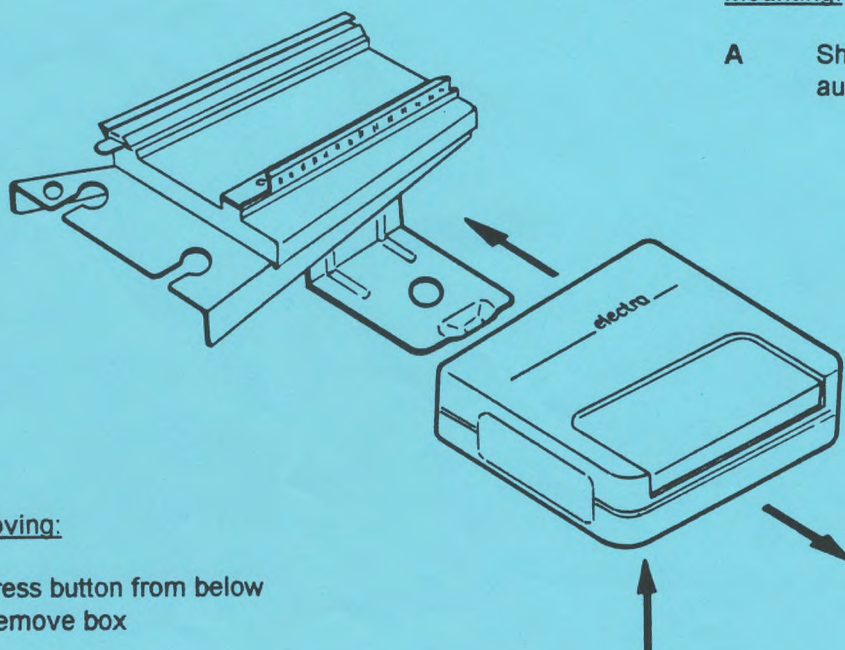
The Box Support is attached to the front bed extension of the COLOR / AUTOCOLOR as shown below.

**6.2 Place the Control box 10.830.00 / Program box 10.860.00**

These are fixed to the Box Support at the front bed extension of the COLOR / AUTOCOLOR as shown below.

**Mounting:**

- A Shift till audible "click"

**Removing:**

- B Press button from below  
C Remove box

## MOUNTING INSTRUCTIONS

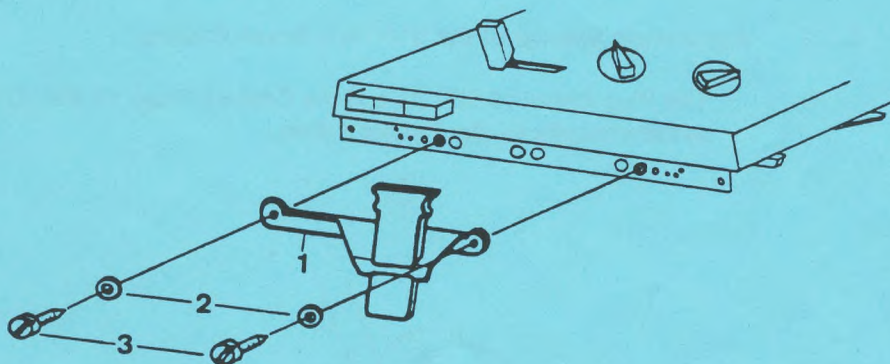
**7. Attaching the Driver for Cam Box to the rear lock****7.1 Duomatic 80 / E-6000**

The necessary parts are included in the **VM-ACCESSORIES BAG 10.795.01** of the "electra 4..." package.

- |   |           |  |
|---|-----------|--|
| 1 | 12.514.12 | Driver for cam box                                     |
| 2 | 90.711.23 | Tension disk M3  |
| 3 | 12.309.02 | Cylinder screw M3 x 6.5 mm <b>(with pointed end)</b> * |

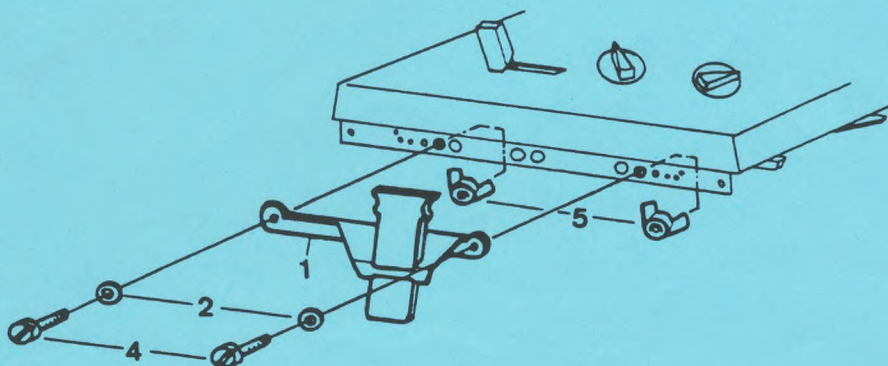
**\* IMPORTANT**

Screws longer than 6.5 mm shall cause trouble of the functions of the rear lock of the knitting machine !

**7.2 Duomatic-S**

The necessary parts are included in the **VM-ACCESSORIES BAG 10.795.01** of the "electra 4..." package.

- |   |           |                          |
|---|-----------|--------------------------|
| 1 | 12.514.12 | Driver for cam box       |
| 2 | 90.711.23 | Tension disk M3          |
| 4 | 12.412.32 | Cylinder screw M3 x 8 mm |
| 5 | 90.640.01 | Wing nut M3              |



## MOUNTING INSTRUCTIONS

**8. VM-Yarn Break Control 10.905.01**

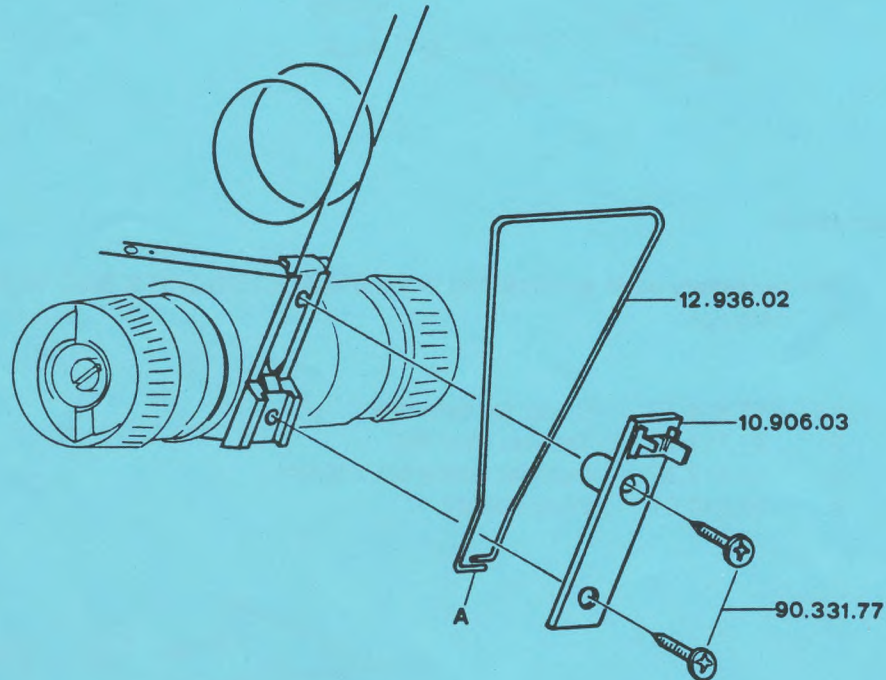
The VM-Yarn Break Control is a standard equipment of the *electra 4080* and *electra 4600*. It contains the parts for both Tension Arms.

**8.1 Attaching the VM-Yarn Break Control to the Tension Arm****8.1.1 Mounting the Contact Strap 12.936.02**

Before tightening the screws the **Contact Strap must be pushed to the upper position** until the lower part "A" is completely covered by the **Plug Board 10.906.03**

**8.1.2 Symmetric line-up of the VM-Yarn Break Control**

The **Plug Board 10.906.03** and the **Contact Strap 12.936.02** must be lined up **symmetrically to the Tension Arm**.





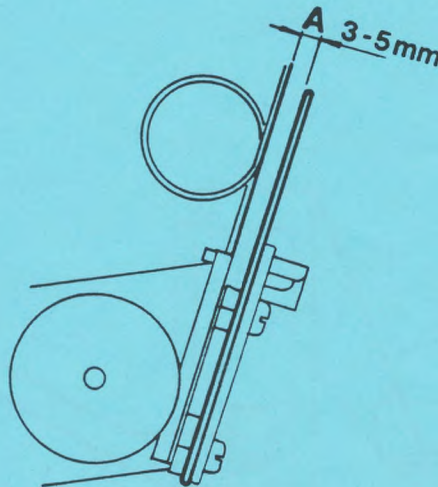
## MOUNTING INSTRUCTIONS

**8.2 Adjusting the Contact Strap 12.936.02**

The distance "A" must be set to about 3 to 5 mm when the Spring Arm 16.401.01 is released and without yarn.

Bend the Contact Strap to achieve the correct distance.

An insufficient distance "A" causes unnecessary stops of the "electra 4..." at knitting operation.

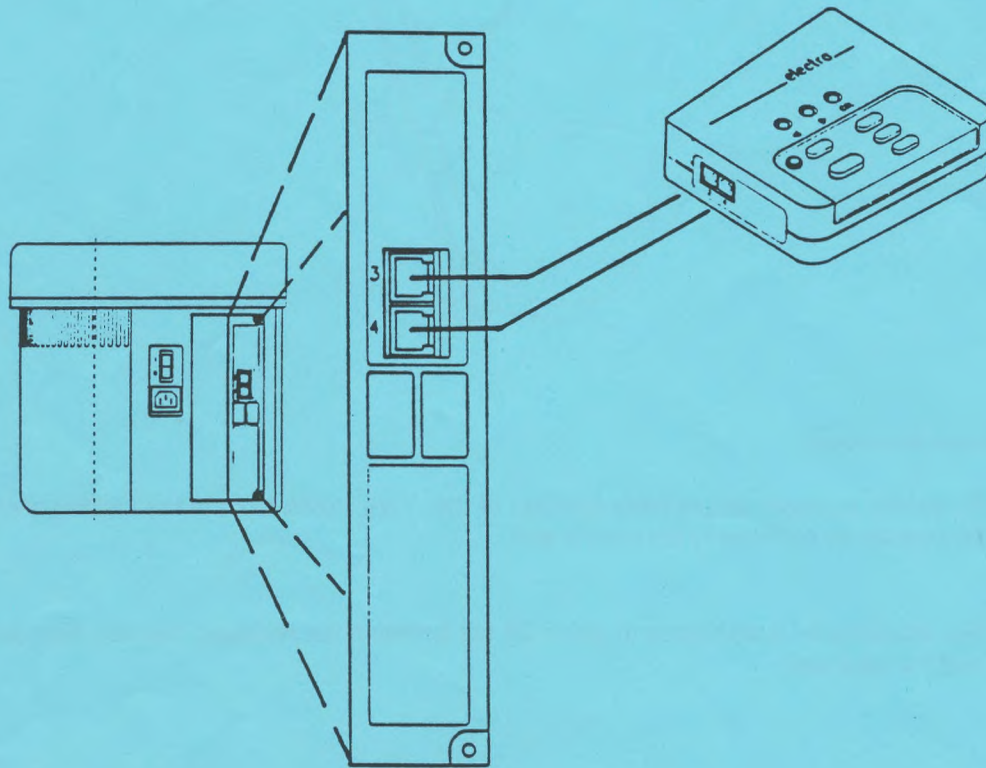
**8.3 Clearance from walls**

To assure a proper and reliable function of the Yarn Break Control the knitting machine must be positioned sufficiently far from a wall.

We recommend a clearance of about **30 cm** between the released Tension Arm (without yarn) and the next wall.

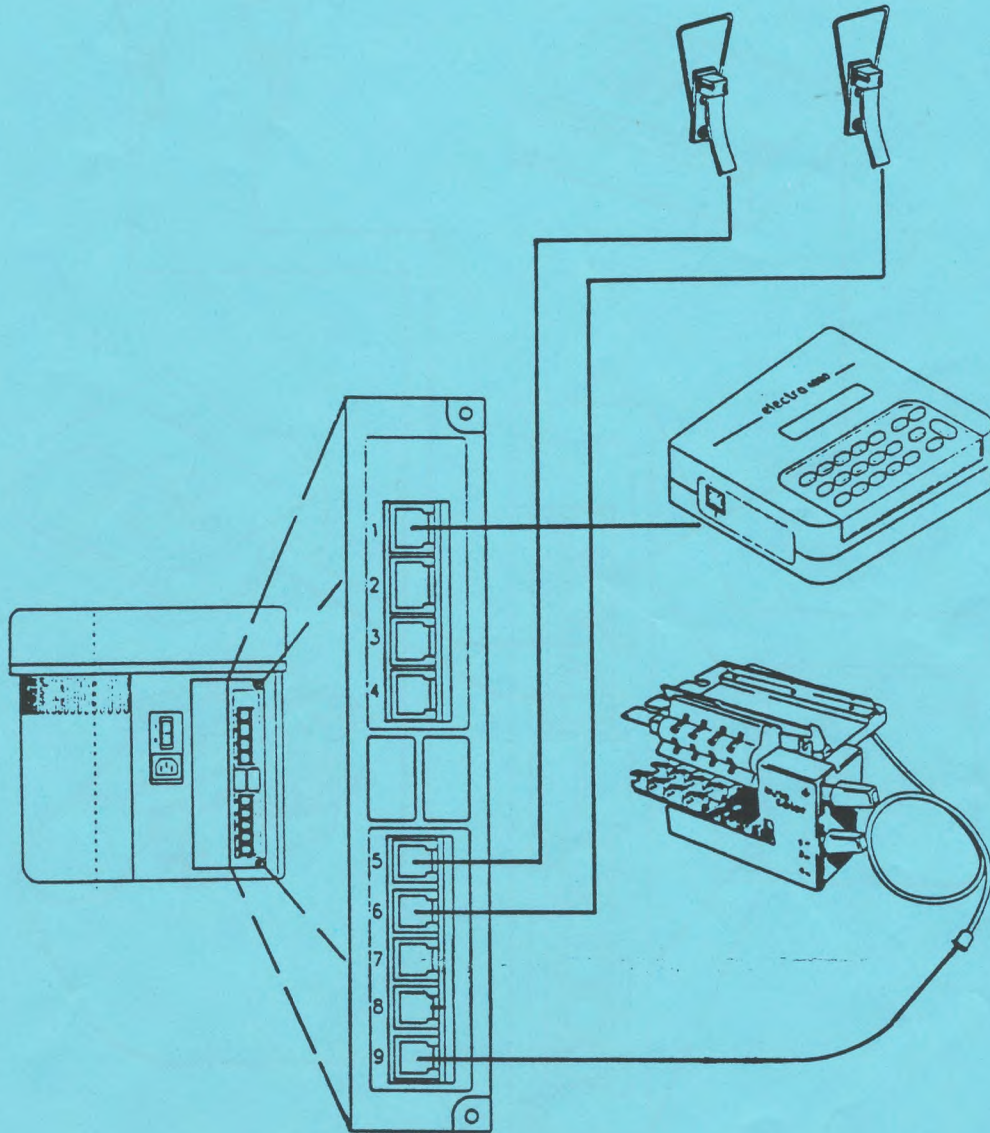
**9.1 Cabling**

**electra 4000**



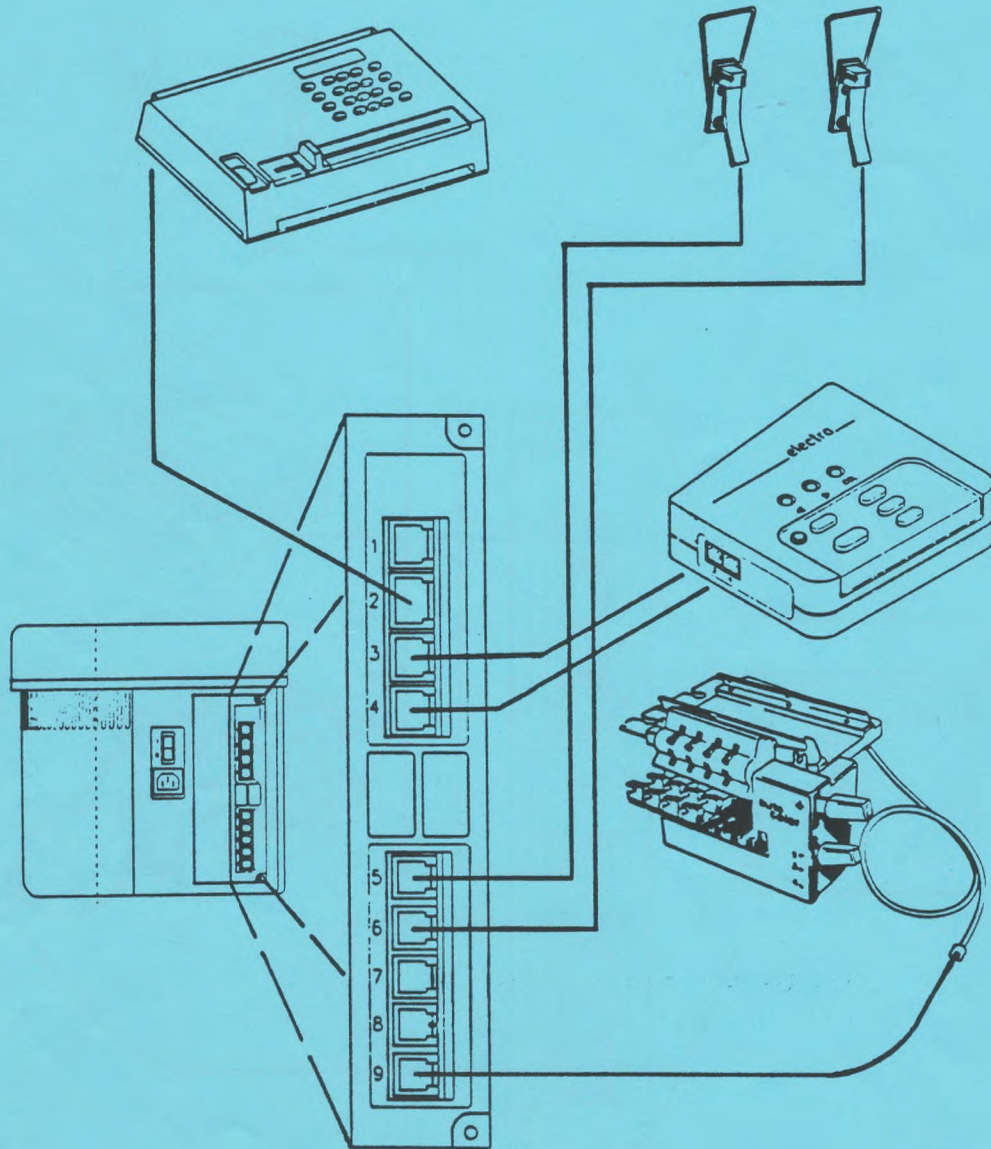
9.2 Cabling

electra 4080



9.3 Cabling

electra 4600



## 10. Installing the Interface Board into the E-6000 box

### 10.1 Advice

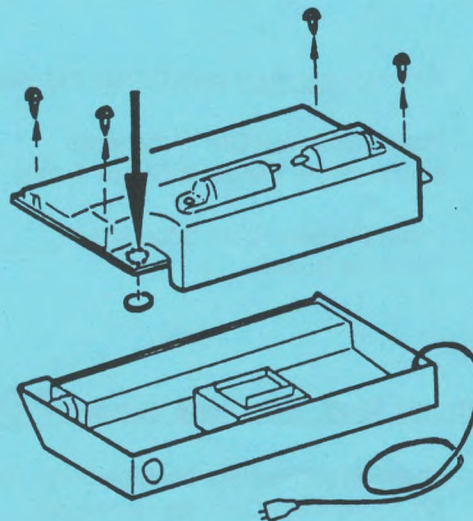
The **electra 4600** can only operate when the Electronic 6000 is equipped with the **M-Interface 6000, 05.970.00**.

### 10.2 Installation of the M-Interface into the E-6000 box.

#### 10.2.1 Removing the bottom cover of the E-6000 box

Remove the four screws and take the bottom cover off.

Break the thin **circular part** out of the housing (shown by arrow) and clean the hole with a knife or a round file to assure that the black plug of the Interface Board does fit properly into this hole.



#### 10.2.2 Exchanging the ROMs

##### Important instructions for the handling of ROMs.

- Be absolutely careful when handling ROMs.
- Avoid damages of the ROMs caused by **electrostatic discharges**.  
Before touching ROMs, any potential electrostatic charges of persons, clothes and equipments have to be discharged, e.g. by touching a metal water pipe.  
If in doubt, consult your supplier !

## MOUNTING INSTRUCTIONS

- Observe the **correct polarity** before plugging the ROMs into the sockets. The half-circular mark of the ROM must fit to the one of the socket.
- The small pin contacts of the ROM must be aligned to the contacts of the socket before plugging in !  
Before plugging in **new ROMs**, the **distance** of the pins must be aligned carefully to the socket before applying force !
- Under any circumstances, make shure that all 28 pins are introduced properly into the socket before applying the final pressure for fitting.

**Electronic 6000, up to serie number 6 999 999**

These machines are equipped with ROMs carrying one of the following numerals:  
\_\_\_.03, or \_\_\_.13, or \_\_\_.23

*For the use with the electra 4600 both ROMs "Muster A" and "Programm \_" must be exchanged by ROMs marked with the numerals \_\_\_.33, or higher.*

Remove carefully both ROMs ("Muster A" and "Programm \_") off the sockets.

Insert the new ROM "Programm \_" (\_\_\_.33 or higher) into the coresponding socket of the VM-Main Circuit Board.

Insert the new ROM "Muster A" (\_\_\_.33 or higher) into the socket of the M-Interface Board.

**Electronic 6000, from serie number 7 000 000 upward**

These machines are equipped with ROMs carrying the numerals \_\_\_.33 ex works. No additional ROMs are necessary.

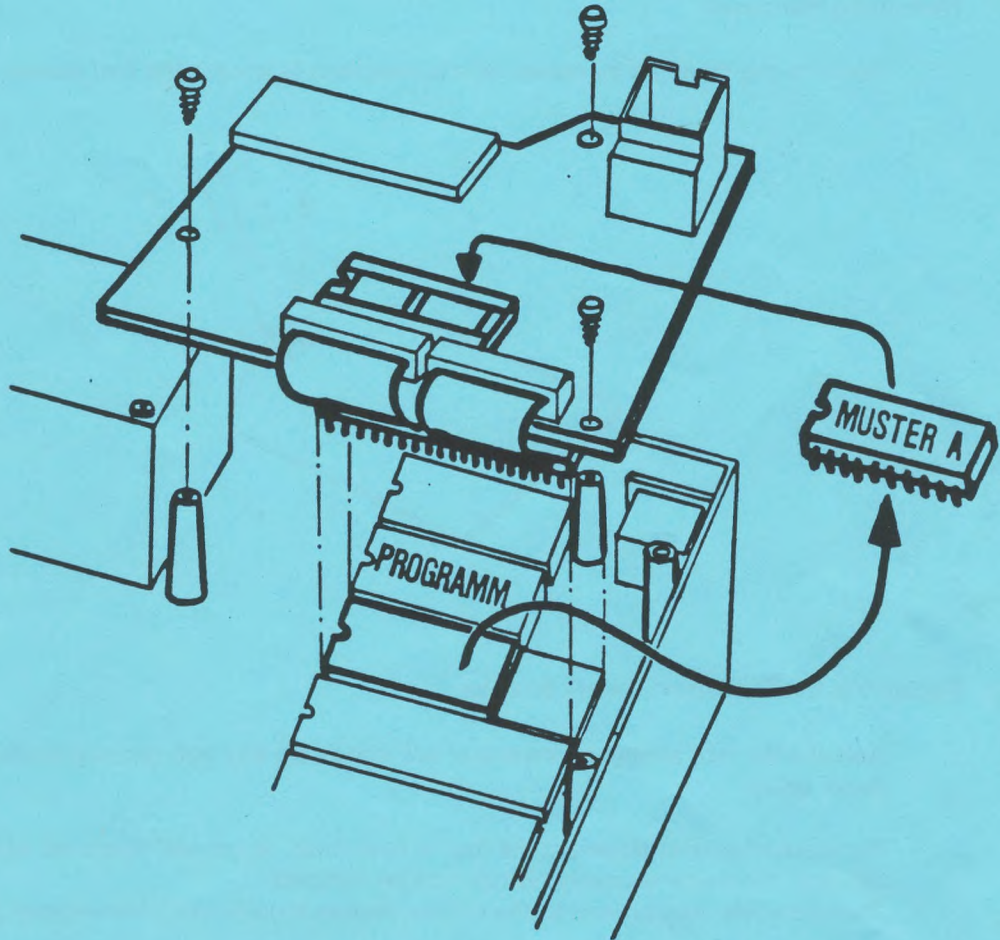
Remove the ROM "Muster A" off the socket at the VM-Main Circuit Board and insert it to the socket at the M-Interface.  
(see fig. 10.2.3)

## MOUNTING INSTRUCTIONS

**10.2.3 Installing the M-Interface Board into the E-6000 box**

Insert the 40-pin plug of the M-Interface Board into the socket of the former "Muster A" ROM.

Fix the M-Interface Board with three screws to the E-6000 box.

**10.2.4 Fixing the bottom cover to the E-6000 box**

Place the bottom cover onto the E-6000 box and make shure that the black socket of the M-Interface Board is accessible through the round hole in the bottom cover.

Finally, fix the bottom cover with the four screws.

## MOUNTING INSTRUCTIONS

**11. Removing the transport safety-screws**

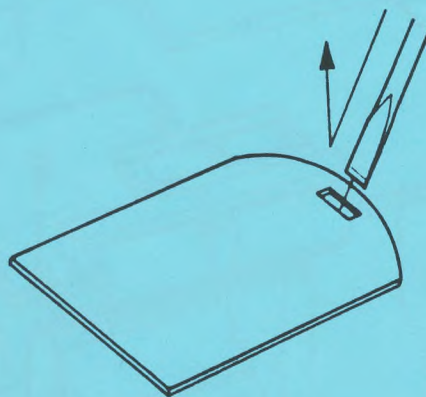
The "electra 4..." is equipped with four **transport safety-screws** M4 x 50 mm to avoid damages during transportation.

**Before operating the motor drive, these 4 screws must be removed.**

They are located underneath the plastic cover as shown below.

**11.1 Removing the cover**

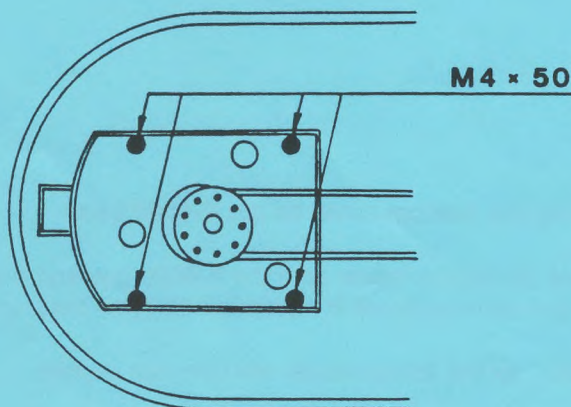
Remove the cover lid by means of a screwdriver to access the four screws.

**11.2 Removing the Transport Safety Screws**

Release the four screws by means of a **3 mm Allen key** and remove them completely from the motor drive.

For a possible later shipment the four screws must be set and tightened again in the original position, otherwise warranty claims may be rejected.

Therefore, we recommend to store these screws together with the original package.





## 12. Test of functions after mounting the "electra 4..."

After mounting and cabling the "electra 4...", the knitting machine and the four colour changer, a short test has to be executed.

During these tests **all needles and pushers** of the knitting machine must be set to the position **"out of work"** and both **locks to "GX"**.

All tests are performed without yarn.

### 12.1 "electra 4000" and "electra 4080"

Cabling must be set up as per 9.1 / 9.2 .

12.1.1 Make shure that the coupling between the rear lock and the belt coupling of the "electra 4..." is not plugged in.

12.1.2 Connect the "electra 4..." to the mains

12.1.3 Set the edge stops at the "electra 4..." to **-50 and +50**

12.1.4 Switch ON the mains switch at the rear side of the "electra 4...".  
E-4000. The LEDs ► and **COL** are must be ON.  
E-4080. The display must show "**COL >>**"

12.1.5 Start the "electra 4..." by pressing the button **GO/STOP** at the Control box (electra 4000) or at the Program box (electra 4080)

**The GO/STOP button also serves to stop the motor drive !**

The belt coupling must be travelling between the left edge stop at -50 and the COLOR/AUTOCOLOR edge stop.

12.1.6 Push the **COL** button while \* the belt coupling is moving **from left to right**. The LED "COL" or the E-4080 display **COL** must go OFF.

From now on, the coupling must travel between the edge stop at positions -50 / +50.

\* At the E-4000 the COL button must be pressed when the belt union is moving from left to right, otherwise the command for colour changing isn't accepted. At the E-4080, the COL button is active on both senses of travelling.

12.1.7 Push the **COL** button again \*.

The LED "COL" is now ON and the belt coupling must travel again between the left edge stop at -50 and the COLOR/AUTOCOLOR edge stop.

**All further functions of the "electra 4000" and of the "electra 4080" are described in the corresponding Users Manuals.**

**If error messages appear on the Program box 10.860.00 of the "electra 4080" please consult your supplier or the "electra 4..." Service Manual.**

## MOUNTING INSTRUCTIONS

**12.2 "electra 4600"**

Cabling must be set up as per 9.3.

12.2.1 Make shure that the coupling between the rear lock and the "electra 4..." is mechanically disengaged.

12.2.2 Set the Edge Stop at the "electra 4..." to **-50 and +50**

12.2.3 Connect the ELECTRONIC 6000 and the "electra 4..." to the mains

12.2.4 

1. Switch ON the ELECTRONIC 6000.
2. Switch ON the "electra 4600".

Always follow this sequence !

12.2.5 Start the "electra 4600" by the **GO/STOP** button at the Control box.

**The GO/STOP button also stops the motor drive !**

Check if the coupling is moving between the left and right Edge stopes at -50 / +50.

12.2.6 Push the **COL** button whilst the coupling is moving **from left to right**.

The LED "COL" must light up and the coupling must advance ONCE to the Edge stop for colour changing at the far right side.

After that the coupling must move again between the Edge stopes -50 / +50, without advancing to the colour changer.

Finally, stop the motor drive by pressing the button **GO/STOP**.

## MOUNTING INSTRUCTIONS

### 12.2.7 Test of functions of "electra 4600" with "ELECTRONIC-6000"

Program the "E-6000":


Cast On no. 97  
Needles -50 / +50

Edge Stops at the "electra 4600":

-50 / +50

Action :	Correct result :	Check or replace in case of test failure :
<p>A. Switch ON the E-6000 and the "electra 4600" and program the go E-6000 ahead to "Start Pos."</p> <p>Connect the coupling between rear lock of the E-6000 and the "electra 4600"</p> <p><u>Set the E-6000 locks to Start Position</u></p>	<p>Display on E-6000 shows "START POS"</p>	<ul style="list-style-type: none"> <li>- Cable 10.912.03</li> <li>- Mains switch of the "electra 4600" 10.719.02</li> <li>- Interface 05.970.00</li> </ul>
<p>B. Push the ENT button at the E-6000</p> <p>Push the GO/STOP button at the "electra 4600"</p>	<p>Display on the E-6000 is flashing "CAST ON"</p> <p>"electra 4600 must not start"</p>	<ul style="list-style-type: none"> <li>- Cable 10.912.03</li> <li>- Interface 05.970.00</li> <li>- VM-Control box 10.753.01</li> </ul>
<p>C. Push the ENT button at the E-6000 until "1R EMPTY" shows up</p> <p>Push the GO/STOP button at the "electra 4600"</p>	<p>Display on E-6000 shows "1R EMPTY"</p> <p>"electra 4600" must move to the left side and must stop at the left Edge Stop at -50</p>	<ul style="list-style-type: none"> <li>- Cable 10.912.03</li> <li>- Interface 05.970.00</li> </ul>
<p>D. Push the ENT button at the E-6000 until "1R EMPTY" shows up.</p> <p>Push the GO/STOP button at the "electra 4600"</p>	<p>Display on E-6000 shows "1R EMPTY"</p> <p>"electra 4600" must move to the right and must stop at the right Edge Stop at +50. LED "COL" lights up. LED "Arrow &gt;" lights up.</p>	<ul style="list-style-type: none"> <li>- Cable 10.912.03</li> <li>- Interface 05.970.00</li> </ul>
<p>E. Push the ENT button at the E-6000 until "RC 0" shows up.</p> <p>Push the GO/STOP button at the "electra 4600"</p>	<p>The row counter on the E-6000 must show "RC 0"</p> <p>The "electra 4600" must move to the colour changer and must move then between the Edge Stops -50 and +50.</p>	

## MOUNTING INSTRUCTIONS

Action :	Correct result :	Check or replace in case of test failure :
<p>F. Push the <b>GO/STOP</b> button at the "electra 4600" while the locks are moving <b>between the Edge Stops</b> from the right to the left.</p>	<p>The "electra 4600" must stop immediately.</p>	
<p>G. Push the  button at the "electra 4600"</p>	<p>The LED "Arrow &gt;" must light up.</p>	
<p>Push the <b>GO/STOP</b> button at the "electra 4600"</p>	<p>The "electra 4600" must move to the right side and must stop at the Edge Stop at +50. On the E-6000 display the error message "206" must show up</p>	<ul style="list-style-type: none"> <li>- Cable 10.912.03</li> <li>- Interface 05.970.00</li> </ul>
<p>H. Push the <b>GO/STOP</b> button at the "electra 4600"</p>	<p>The "electra 4600" must not move before the error message on the E-6000 has been cancelled.</p>	

All further functions of the "electra 4600" and of the ELECTRONIC 6000 are described in the corresponding Users Manuals.

**MOUNTING INSTRUCTIONS****12.3 Testing the function of the Yarn Break Control**

Start the "electra 4080 / 4600". Pull down and release each Tension Arm and release it, simulating thereby a yarn break case.

The motor must stop immediately when the Tension Arm is touching the Contact Strap.

Otherwise, check the correct adjustment as per item 8. and the correct cabling as per items 9.2 / 9.3

**12.4 Checking the feeding eyelet detection of the AUTOCOLOR**

Disengage the knitting machine locks from the "electra 4..." and start the motor drive. Activate twice the upper handle of the AUTOCOLOR to bring up two feeding eyelets at the same time. The motor drive must stop immediately when the second feeding eyelet is jumping into UP position.

Otherwise, check the correct cabling from the AUTOCOLOR to the "electra 4..." as per item 11 or the detection device for the feeding eyelets of the AUTOCOLOR.

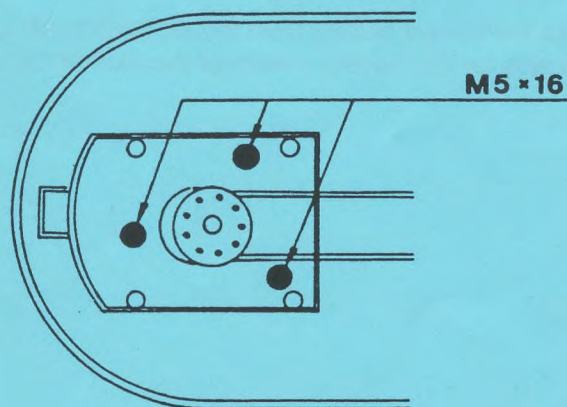
## MOUNTING INSTRUCTIONS

**13. Readjusting the tension of the Tooth Belt**

Principally, the "electra 4..." motor drive doesn't need lubrication.

After a certain period of intensive use it is recommendable to readjust the tension of the Tooth Belt. In case of doubts if the Tooth Belt is still tense enough it should be readjusted preventively.

- 13.1 Remove the Cover "4..." as per item 11.1. Before proceeding at 13.2, make shure that all four transport safety-screws are removed, as per item 11.
- 13.2 Untight the three screws M5 x 16 for about  $\frac{3}{4}$  of a rotation with a 4 mm Allen key. The washers must be just without pressure.  
**Never remove the three screws from the motor drive unit !**
- 13.3 The Tooth Belt is automatically readjusted by the force of an inbuilt spring when the three screws are untight.
- 13.4 Finally, tight the three screws M5 x 16 again and place the cover on top of them.

**14. Attaching the lamp holder of the Lamp 300 to the "electra 4..."**

To fix the lamp holder 17.283.03, the following parts are necessary, as per picture:

- |        |           |  |
|--------|-----------|--|
| 1 pcs. | 12.552.12 | Special hexagon screw M4x11mm                  |
| 1 pcs. | 90.640.17 | Wing nut M4 (coming with the Lamp 300 package) |

