



# Instruction manual

# 525

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## Foreword

This instruction manual is intended to help the user to become familiar with the machine and take advantage of its application possibilities in accordance with the recommendations.

The instruction manual contains important information on how to operate the machine securely, properly and economically. Observation of the instructions eliminates danger, reduces costs for repair and down-times, and increases the reliability and life of the machine.

The instruction manual is intended to complement existing national accident prevention and environment protection regulations.

The instruction manual must always be available at the machine/sewing unit.

The instruction manual must be read and applied by any person that is authorized to work on the machine/sewing unit. This means:

- Operation, including equipping, troubleshooting during the work cycle, removing of fabric waste
- Service (maintenance, inspection, repair and/or)
- Transport.

The user also has to assure that only authorized personnel work on the machine.

The user is obliged to check the machine at least once per shift for apparent damages and to immediately report any changes (including the performance in service), which impair the safety.

The user company must ensure that the machine is only operated in perfect working order.

Never remove or disable any safety devices.

If safety devices need to be removed for equipping, repairing or maintaining, the safety devices must be remounted directly after completion of the maintenance and repair work.

Unauthorized modification of the machine rules out liability of the manufacturer for damage resulting from this.

Observe all safety and danger recommendations on the machine/unit! The yellow-and-black striped surfaces designate permanent danger areas, eg danger of squashing, cutting, shearing or collision.

Besides the recommendations in this instruction manual also observe the general safety and accident prevention regulations!

## General safety instructions

The non-observance of the following safety instructions can cause bodily injuries or damages to the machine.

1. The machine must only be commissioned of the instruction book and operated by persons with appropriate training.
2. Before putting into service also read the safety rules and instructions of the motor supplier.
3. The machine must be used only for the purpose intended. Use of the machine without the safety devices is not permitted. Observe all the relevant safety regulations.
4. When gauge parts are exchanged (e.g. needle, presser foot, needle plate, feed dog and bobbin) when tread-ing, when the workplace is left, and during service work, the machine must be disconnected from the mains by switching off the master switch or disconnecting the mains plug.
5. Daily servicing work must be carried out only by appropriately trained persons.
6. Repairs, conversion and special maintenance work must only be carried out by technicians or persons with appropriate training.
7. For service or repair work on pneumatic systems the machine must be disconnected from the compressed air supply system. Exceptions to this are only adjustments and functions checks made by appropriately trained technicians.
8. Work on the electrical equipment must be carried out only by electricians or appropriately trained persons.
9. Work on parts and systems under electric current is not permitted, except as specified in regulations DIN VDE 0105.
10. Conversion or changes to the machine must be authorized by us and made only in adherence to all safety regulations.
11. For repairs, only replacement parts approved by us must be used.
12. Commissioning of the sewing head is prohibited until such time as the entire sewing unit is found to comply with EC directives.



It is absolutely necessary to respect the safety instructions marked by these signs.  
**Danger of bodily injuries !**  
Please note also the general safety instructions.

### **IMPORTANT WARNING!**

**To the feeding network cord, it is necessary to connect the respective network plug which has been approved in the country of utilizing the machine. This operation should be performed by a worker acquainted with the electric safety rules being in force in the given country. The supplier is not responsible for any damages caused by defective plug or owing to incorrect assembly of the plug.**

In spite of all safety measures made on the machines, inappropriate actions of the operator may lead to dangerous situations. In industrial sewing machines, attention should be paid to the following still remaining possible sources of injury:

1. Moving sewing needle
  - risk of injury when sewing with raised pressure foot or top roller, because the finger guard is then positioned too high.
2. Moving thread take-up lever
  - risk of injury when inadvertently or intentionally inserting the finger(s) between the thread take-up lever and its guard.
3. Moving pressure member
  - risk of injury when holding sewn work in immediate vicinity of the pressure member and beginning to insert under the pressure member a considerably thicker sewn work portion,
  - risk of injury when sinking the pressure member.
4. When switched off, the clutch motor slows down by inertia but would be reactivated by an accidental tread-ing down of the motor treadle. To avoid such risk, it is advised to hold the handwheel by hand and slightly to depress the motor treadle.

## Part A - Instruction manual

### 1. Proper use of the machine

The machine is designed for decorative (figure) stitching in manufacture of outwear and of ladies' underwear of elastic materials (lycra). It can be used for decorative stitching of canvas footwear as well. In general, only dry material may be sewn on these machines, which should not be thicker than 4 mm when being compressed by the presser foot. The material should not contain any hard objects, because in such opposite case the sewing operation would be possible only with an eye protector. Such eye protector is not supplied for the time being. When sewing very hard or compact materials with a thicker needle, the total thickness thereof is limited. In such case it is also necessary to reduce substantially the sewing speed below the value quoted in the par. 5. These machines may be installed and operated only in dry and maintained rooms.

As manufacturers of industrial sewing machines we start from the supposition that our machines will be operated at least by a trained staff, so that all usual operating activities and their eventual risks may be supposed to be known.

#### Machine noisiness

The noisiness of machines is measured according to ISO 3746, ISO 11204 at the maximum sewing speed.

**Laeq** = equivalent noise level of the machine itself on the working place converted in % of the machine utilization (dB) – is given in the following table

Type of the machine	Noisiness dB	% machine employment
525-101	84	20
525-105	84	20

### 2. Description of the machine

Industrial flat-bed sewing machine for figure stitching of patterns formed by one or two needles. It stitches using a two-thread lockstitch, with two-way drop feed. The stitch length is adjustable by means of a knob mounted on the web of the machine arm. The backward stitching is controlled by a hand lever, eventually, by pedal or by electromagnet in accordance with the equipment of the machine. The shape of the stitched pattern is given by an exchangeable cam, always for one pattern – table 2. The presser foot lifting is controlled by a hand lever, eventually, by pedal, or by a knee lever or by electromagnet in accordance with the machine equipment.

The machine is provided with a large diameter horizontal hook. It has a 1.8 x greater reserve (volume) of threads than a standard hook. The lubricating system of the machine is of a group wick-feed type with automatic regreasing of the hook.

### 3. Machine subclasses

Table 1

Machine type	Hook	Presser foot lifting		Backtacking			Thread trimmer
		Via knee lever or pedal	Via electro-magnet	Via hand lever	Via pedal	Via electro-magnet	
525-101	●	●		●	●		
525-105	●	●	○	●	●	○	●

● standard equipment      ○ optional equipment

### 4. Survey of equipment

This survey does not include the equipment assembled on the stand (see part B).

#### 4.1 -for the subclass -101

##### 4.1.1 Necessary equipment

S791 995068      Parts of backtacking (with pedal)  
 S791 642049      Cam for decorative stitching - standard  
 S791 642037      Adjusting cam – plain stitch

##### 4.1.2 Sewing equipment

S791 124032 35      Sewing equipment 525 E 032 - standard  
 S791 124033 35      Sewing equipment 525 E 033  
 S791 124034 35      Sewing equipment 525 E 034  
 S791 224075 35      Sewing equipment 525 E 075

### 4.1.3 Optional equipment

S791 149001	Attachment for serging operation
S791 235002	Unwinding device
S791 224074	Throat plate 811768 (for stitching fine materials)
S791 400023	Guiding for stitching together
S791 630002	Equipment for stitching with two needles
S791 642038	Cam for decorative stitching
S791 642039	Cam for decorative stitching
S791 642040	Cam for decorative stitching
S791 642041	Cam for decorative stitching
S791 642042	Cam for decorative stitching
S791 642043	Cam for decorative stitching
S791 642044	Cam for decorative stitching
S791 642045	Cam for decorative stitching
S791 642046	Cam for decorative stitching
S791 642047	Cam for decorative stitching
S791 642048	Cam for decorative stitching
S791 642050	Cam for decorative stitching
S791 642051	Cam for decorative stitching
S791 642052	Cam for decorative stitching
S791 642053	Cam for decorative stitching
S791 151016	Hinged foot with front thread slit - zig-zag stitch width 6 mm
S791 151017	Hinged foot with front thread slit - zig-zag stitch width 10 mm
S791 947001	Adjustment gauges
S794 222012	Sewing lamp
S741 610118 40	High mortality spare parts kit in a plastics box

## 4.2 -for the subclass - 105

### 4.2.1 Necessary equipment

S791 995068	Parts of backtacking (with pedal)
S791 642049	Cam for decorative stitching - standard
S791 642037	Adjusting cam - plain stitch
S980 094051	Connecting cable to drive EFKA DC 1600/DA82GA and EFKA VD 552/6F82FA

### 4.2.2 Sewing equipment

S791 124032 35	Sewing equipment 525 E 032 - standard
S791 124033 35	Sewing equipment 525 E 033
S791 124034 35	Sewing equipment 525 E 034
S791 224075 35	Sewing equipment 525 E 075

### 4.2.3 Optional equipment

S791 149001	Equipment for overedging
S791 235002	Unwinding device
S791 224074	Throat plate 811768 (for stitching fine materials)
S791 400023	Guiding for stitching together
S791 630003	Equipment for stitching with two needles
S791 642038	Cam for decorative stitching
S791 642039	Cam for decorative stitching
S791 642040	Cam for decorative stitching
S791 642041	Cam for decorative stitching
S791 642042	Cam for decorative stitching
S791 642043	Cam for decorative stitching
S791 642044	Cam for decorative stitching
S791 642045	Cam for decorative stitching
S791 642046	Cam for decorative stitching
S791 642047	Cam for decorative stitching
S791 642048	Cam for decorative stitching
S791 642050	Cam for decorative stitching
S791 642051	Cam for decorative stitching
S791 642052	Cam for decorative stitching
S791 642053	Cam for decorative stitching
S791 151016	Hinged foot with front thread slit - zig-zag stitch width 6 mm
S791 151017	Hinged foot with front thread slit - zig-zag stitch width 10 mm

S791 947001	Adjustment gauges
S794 222012	Sewing lamp
S791 995153	Presser foot lift via electromagnet
S791 995154	Backtacking via electromagnet
S980 094057	Push button for backtacking EFKA DC 1600/DA82GA
S980 094060	Push button for backtacking EFKA VD 552/6F82FA
S741 610518 40	High mortality spare parts kit in a plastics box

## 5. Technical data

Sewing speed	4400 SPM - maximum 3500 SPM - standard
Stitch type	double-thread lockstitch
Stitch length	max. 5 mm
Pattern width	continuously adjustable - max. 10 mm - according to the respective accessory (cam) used
Presser foot lifting	5 mm - via hand lever 7 mm - via knee lever, pedal, electromagnet
Hook	S980 008250 - horizontal, large diameter
Needle	system 134 No. 90-110
Drive	clutch motor 2800 RPM (min. 0,35 kW) stop motor (min. 0,4 kW)
Head weight	max. 38 kg
Stand weight	61 kg
Opening space of machine head	265 x 120 mm
Bedplate dimension	178 x 476 mm
Length of trimmed thread ends	up to 20 mm
Machine power input with clutch motor	max. 700 W
Machine power input with stop motor	max. 800 W
Equivalent sound pressure level of the machine alone at the working spot with 20 % utilization of the machine during the working shift at the standard sewing conditions	83 dB/A
Ground plan machine dimensions (including stand)	1060 x 550 mm
Machine height (including stand and thread stand)	1490 mm

































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## Part B - Instructions for assembling

### 1. Safety instructions

**Caution!**

The assembly of the machine is to be done only by a trained mechanician.  
All operations connected with the electric installation of this sewing machine are to be done only by an authorized electromechanician. It is absolutely necessary to get acquainted with the instructions concerning the drive supplied by the manufacturer thereof.

### 2. Method of delivering the machine

The content of the delivery is given by the agreement between the supplier and the buyer. There are the following possibilities:

#### 2.1 Complete head with accessories

In this case the delivery contains:

- Complete head.
- Selected spare parts.
- Standard accessories (containing tools – see catalogue of spare parts).
- Special accessories (containing some components of the stand - see catalogue of spare parts).

#### 2.2 Stand

The delivery contains components of the stand, but without the stand components contained in the special accessories delivered with the machine head (see par. 2. 1) and without any electric components.

When not otherwise agreed, the stand will be delivered in disassembled state. When an assembled stand is required, then special accessories from the head delivery will be used.

Stand complete (ordered number S072 500100 for subclasses -101 and -105) contains following items:

MG53 000501	Stand frame
MG53 002501	Big pedal
0907 021084	Set of parts for stand
S615 000316	Stand table top

Equipments for stand (it has to be ordered separately):

Presser foot lifting by pedal:

S522 000450	Small pedal
S980 044982	Presser foot lifting draw bar

Reverse stitching:

S522 000450	Small pedal
S980 060028	Reverse stitching draw bar

#### 2.3 Motor

The delivery contains the proper motor, switch - circuit breaker, complete cabling (except of the plug) and connecting material. According to the motor type, it may contain a control panel. When not otherwise agreed, it is delivered in disassembled state. The machine without thread cutting device is provided with a clutch motor with lever. When positioning or presser foot lifting or backward stitching with electromagnet are required, the machine without thread cutting device must be provided with a stop motor.

Motors are to be chosen according to the following table:

Machine subclass	Ordered number	Name	r of pulley mm	Machine rev. max./min	Approx. specification
101	S359 600030 88	FIR 1148	88	3800	asynchronous <u>bipolar</u> clutch motor switch-circuit breaker with cabling connection material
	S359 600030 75	3 x 400/230 V, 50/60 Hz	75	3200	
	S359 600030 58		58	2500	
105	S359 600045 810	Stopmotor EFKA	58	adjustable adjustable	D-C motor (A-C servo); switch-circuit breaker control panel EFKA V 810/V820 connection material and cabling
	S359 600045 820	DC 1600/DA82GA 1 x 230 V, 50/60 Hz	58		
	S359 600052 88	Stopmotor EFKA	88	3800 3200 2500	asynchronous <u>bipolar</u> stopmotor with friction clutch and brake switch-circuit breaker with cabling connection material control panel EFKA V 810/V820 *
	S359 600052 75	VD 552/6F82FA	75		
	S359 600052 58	3 x 400/230 V, 50/60 Hz	58		

\* Control panel S359 600038/V810 or S359 600050/V820 it is possible to order for setting the stop motor, however, it is not included in supply of the stopmotor and it has to be ordered separately.



The given stop motors have been tested on the machine and comply with the functional requirements. Other types of stop motors may or may not have suitable parameters. The manufacturer thereof does not recommend any use of different stop motor without having tested it.

## 2.4 Motor pulley

By stopmotor EFKA DC 1600/DA82GA is revolutions are set continuously by electronics.

The pulley for the maximum or other sewing speed will be supplied on express wish of the customer.

The pulley are to be chosen according to the following table:

Motor	Sewing speed 50 Hz	Sewing speed 60 Hz	r of pulley mm	Ordered number of pulley
FIR 1148/552/3 EFKA VD552	1810	2170	42	S980 045548
	2020	2430	47	S980 045377
	2150	2580	50	S980 045491
	2330	2790	54	S980 045361
	2500	3000	58	S980 045472
	2710	3260	63	S980 045378
	2890	3460	67	S980 045476
	3020	3620	70	S980 045370
	3230	3880	75	S980 045384
	3450	4140	80	S980 045479
	3660	4400	85	S980 045480
	3790	-	88	S980 045383
	3880	-	90	S980 045481
	4310	-	100	S980 045483

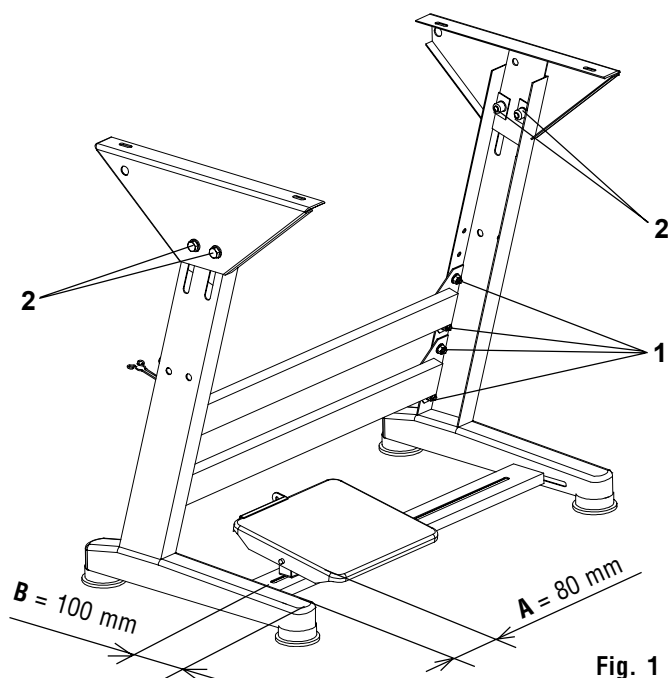


Fig. 1

## 3. Stand table top

For the event when the customer will ensure his own stand table top, its drawing is given on the page 4 (Fig. 5).

## 4. Assembly of the stand frame and height setting (Fig. 1)

Proceed to the assembly of the stand frame according to the Fig. 1. The dimension "B" is destined for a middle-high stature of the machine attending person. For a higher stature it is necessary to increase the dimension "B" and inversely. The machine feet are to be levelled with the floor in loosening the screws (1). Using the screws (2) it is possible to set up the height of the stand table top.







## 5. Assembly and screwing on of the stand table top

### 5.1 Assembly of stand table top (Fig. 2, 3, 4, 5)

Put the rubber inserts for placing the machine head into the stand table top into the recess (2 and 3, Fig. 5). For better fastening, we recommend to stick on the inserts. When mounting the tray (1, Fig. 2) be sure in maintaining the distance "X" on the whole perimeter of the tray between the interior of the tray and the perimeter of the stand table top recess (2).

Screw on the main switch (4) on the stand table top (2, Fig. 3).

Fasten the rubber bumper (3, Fig. 3).

Screw on the motor holder (5) according to the Fig. 3 and 4.

Screw on the lighting transformer (6, Fig. 3) for the lighting – if delivered.

Install electric conductors using clamps (8, Fig. 3) Connection differs according to the given motor, supply voltage and according to the number of conductors of the electric supply. In case of a four-conductor 3 x 400 supply the lighting transformer must be fed by a separate lead-in cable 1 x 230 V – see par. 12.3.

Screw on the drawer (7, Fig. 3).

In its working and tilted position, the machine head should not be in contact with the tray. The motor pulley diameter must comply with the maximum prescribed revolutions of the given type of the sewing machine and of the used motor. Adjust the motor circuit-breaker current according the nominal current given on the motor plate.

#### 5.1.1 Mounting and placing of the machine head on the stand (Fig. 8)

The machine head is in each case supplied with fitted hinges and with a lower cover metal plate meant only for the machine transport. Do not omit to remove the plate before setting the machine head on its stand. Place the machine head into the stand table top.

Put the supporting pin, which is included in the accessory of the machine, into the hole (7).

Mount the thread guides on the machine head.

#### 5.1.2 Assembly of motor pulley, belt, belt covers (Fig. 6)

Assemble motor pulley (2).

Insert V-belt (3) and tighten it by leaning out of the motor. V-belt is tightened correctly when the opposite sides of belt are approaching to each other in distance of about 20 mm with power 10 having an effect in the middle of both sides. Stop motor should be leveled so that the bottom surface of its control panel would be horizontal.

Adjust the stop (4) by bigger pulleys against falling the belt out of the pulley so that the distance from the belt will be 2-3 mm. Adjust pins by smaller pulleys (5) according to the detail (D).

Assemble the bottom cover belt (7) on to the motor.

Assemble upper cover belt (6) by clutch lever motor.

Assemble upper cover belt (6) and position reader by stop motor but only after electrical connection of the head to the stopmotor.

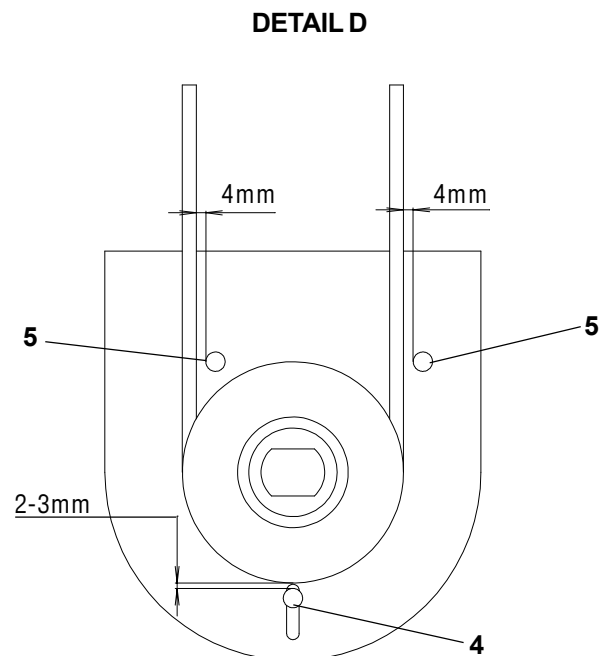
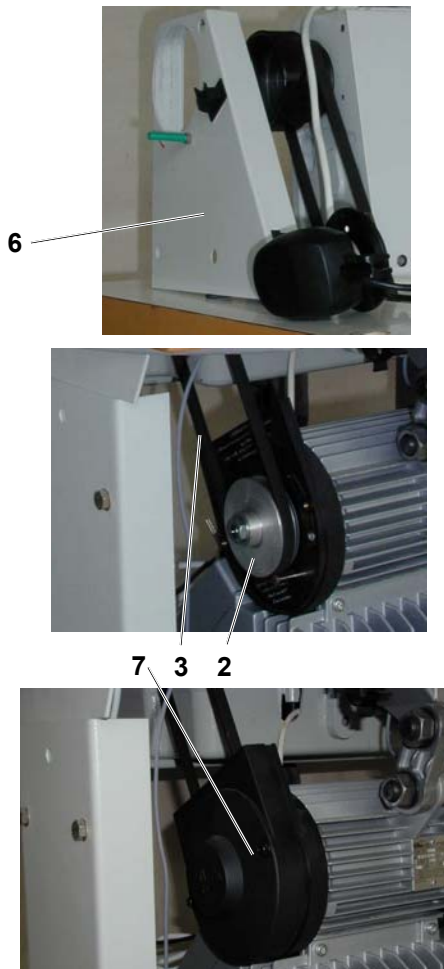


Fig. 6

## 6. Mounting of a position reader and of a control panel of the stop motor (Fig. 7, 8)

Put the position reader (2) on the pin of the hand wheel in such a way, so that the arresting groove of the reader is placed on the arresting stop (4) (in this way, the movement of the position reader body is avoided). Fasten the reader in tightening two screws with an inner hexagon.

With the EFKA stop motor, mount the control panel V 810 (1) onto the upper guard using two screws (3) which are situated on the guard.

With the EFKA stop motor, mount the holder (5) to the panel V 820 (6) using a screw and screw on the holder with the panel to the machine table top.

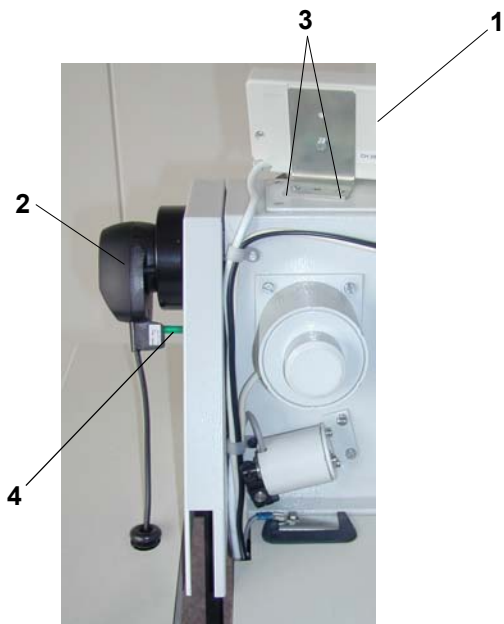


Fig. 7

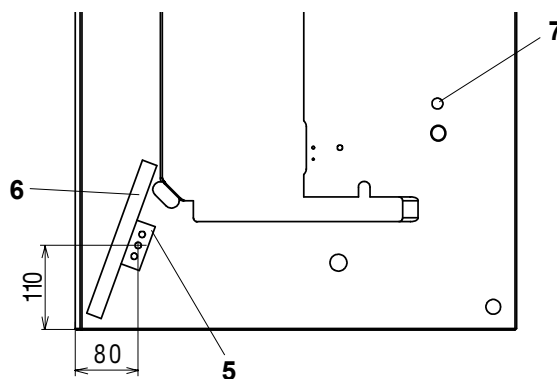


Fig. 8

## 7. Mounting of the equipment for presser foot lifting using electromagnet (Fig. 9, 10)

Loosen the lever (1), remove the spring with the lever (for mechanical presser foot lifting) and mount the spring (2) and the lever (3). Set up the lever (1).

Mount the magnet (4) with the plate (5) using the screws (6) on the machine head according to the given illustrations.

Set the position between the lever (3) and the core of the electromagnet (4) - minimum clearance - presser foot in its bottom dead centre.

Through the slot in the plate connect the magnet to the outlet on the interconnecting cable of the motor and of the head - see par. 12.4.

Remove the supporting pin from the table top (Fig. 8, pos. 7), insert the cover caps (7) into the holes.

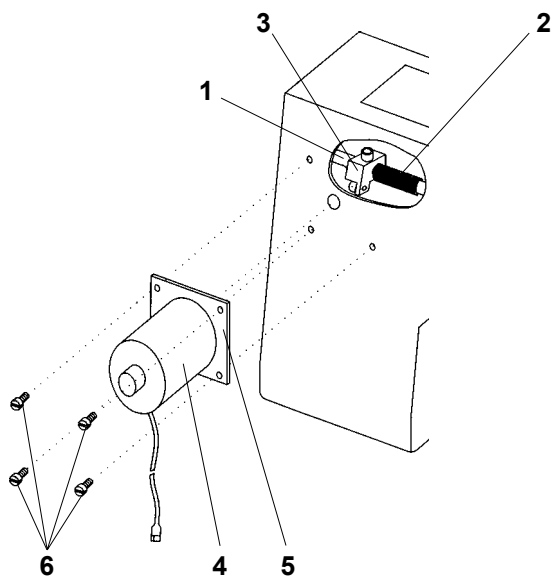


Fig. 9

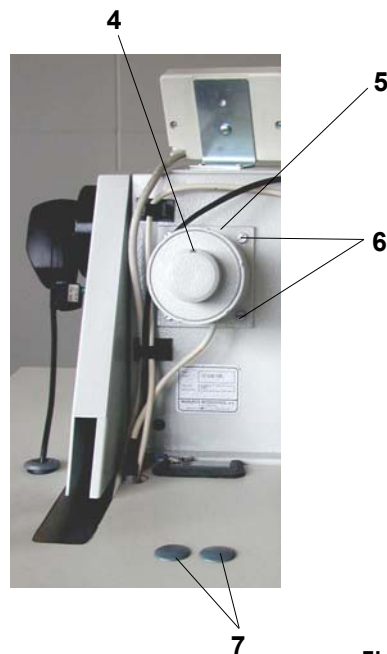


Fig. 10

## 8. Mounting of the equipment for backward stitching (Fig. 11, 12)

Remove the backward stitching lever and the knob for setting the stitch length.  
Mount the knob (1) and the shaft (2).

Put on the lever (3) with the magnet (4) on the shaft (2) and fasten the magnet with screws (5) to the machine arm. Using the screw (6), fasten the lever (3) on the shaft (2).

Connect the magnet conductor through the cutout in the table top into the outlet on the motor and head interconnecting cable. - see par. 12.4.

Using the screws (7), fasten the push button holder (8) to the machine arm. Fasten then the conductor using the clips (9) to the machine arm.



Fig. 11a

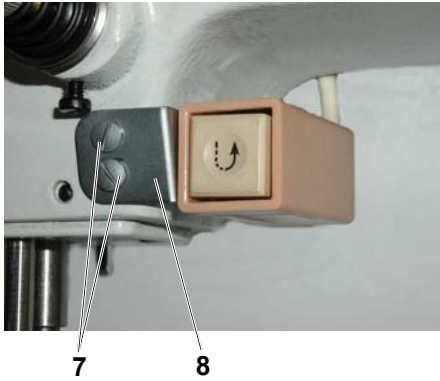


Fig. 11b

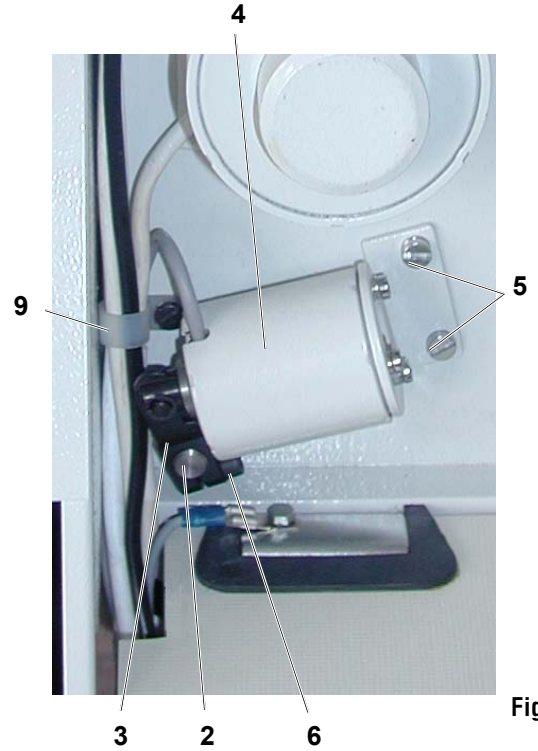


Fig. 12

## 9. Mounting of the lighting (Fig. 13, 14)

Screw on the roller (2) using the screw (1) on the machine head, put on the lighting on the roller (2) and tighten it with the crank-handle (3).

The assembling procedure of the transformer is described in par. 5.1.



Fig. 13

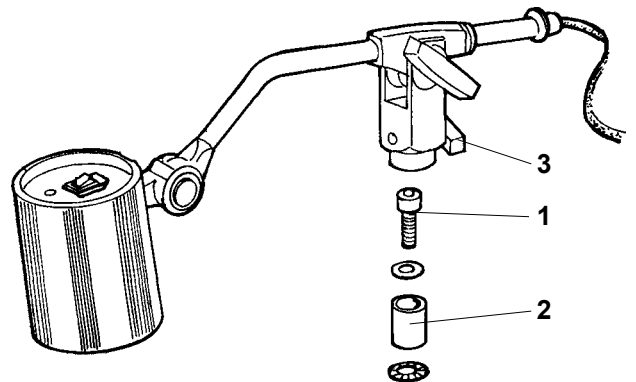


Fig. 14

## 10. Composition and assembly of the thread stand (Fig. 15, 16)

Assemble the thread stand and mount it into the hole in the plate so that its arms would be parallel to the longer edge of a table top.

Each thread may be fed only through one hole in the thread stand arm.

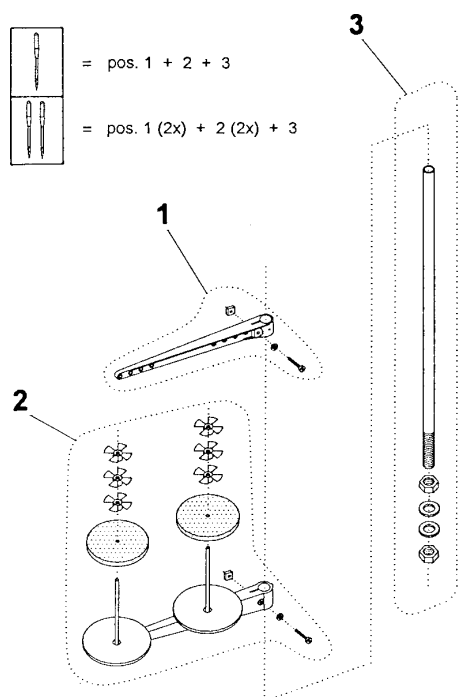


Fig. 15

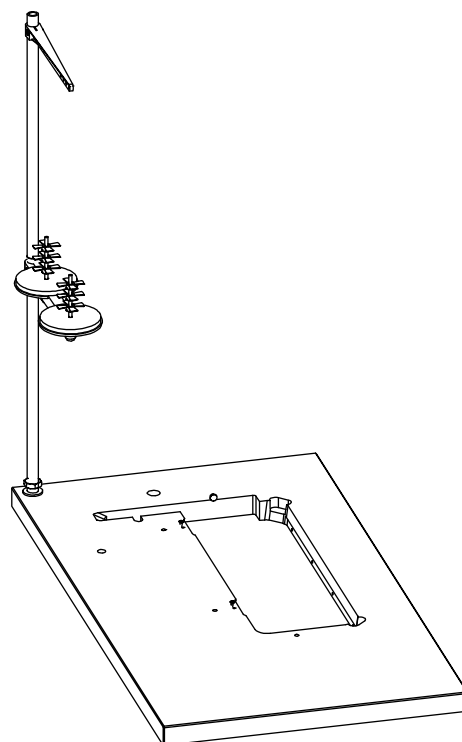


Fig. 16

## 11. Preparation of the machine for sewing

Inspect carefully the machine, clean and try it, if it turns easily and if it is correctly adjusted.

Fill with oil the oil tank for lubricating the hook and for the central wick-feed lubrication – the lubricating spots are marked with red colour on the machine (part A, par. 7.2 - Fig 12, 13).

For lubricating, use oil ESSO SP-NK 10 or an oil with an equivalent quality. Connect the machine to the mains.

With the sewing drives with three-phase motor, check up the direction of the motor rotation through a short-run connecting of the motor switch. The direction of the machine rotation is marked with an arrow on the belt guard.

In case of an incorrect direction of rotation, inverse mutually two phases in the mains plug. Before utilizing the machine in full power, let run it for some minutes on low speed.

## 12. Instructions for putting the electronically controlled drive into operation

When putting these drives into operation, observe the hints mentioned in the accompanying documentation of the manufacturer of this drive. The inobservance of these hints may cause damage of the drive or of the sewing machine head.



### Caution!

The voltage in the mains must comply with the voltage given on the drive plate.

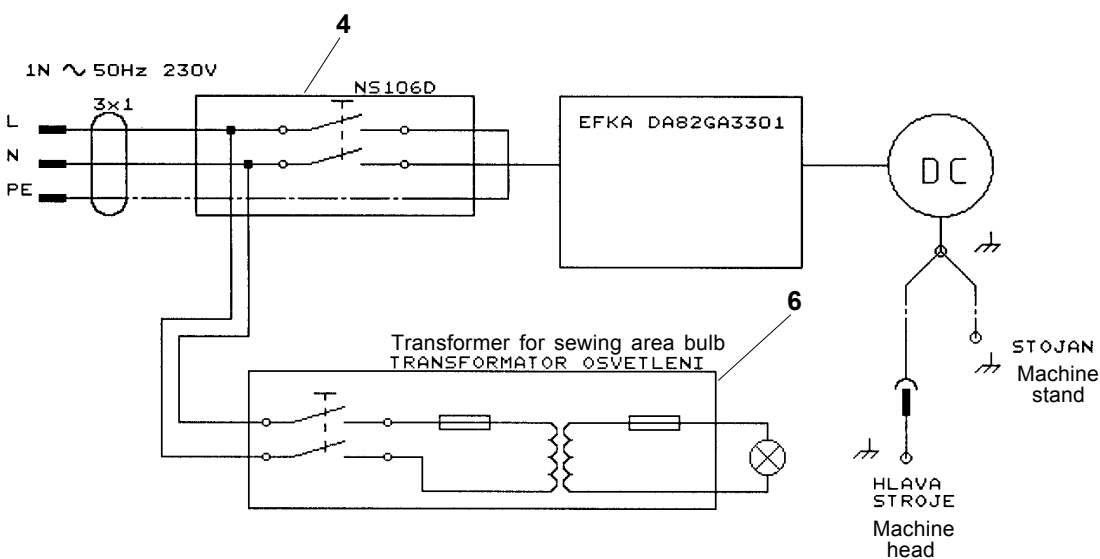


### Caution!

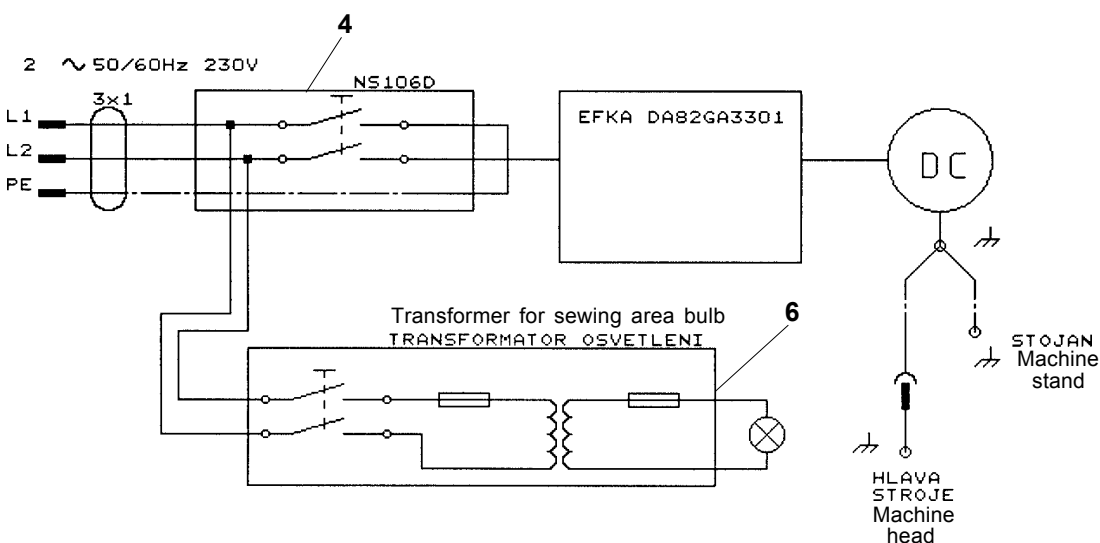
The lighting transformer is not switched off by the main switch (EN 60204-3-1). When proceeding to a repair in the transformer box (e.g. replacement of fuses), it is absolutely necessary to disconnect the mains plug from the mains! Such operations may be carried out only by workers having the respective electrotechnical qualification.

Choose the suitable connection variant according to the following figures:

Circuit layout - Evropa



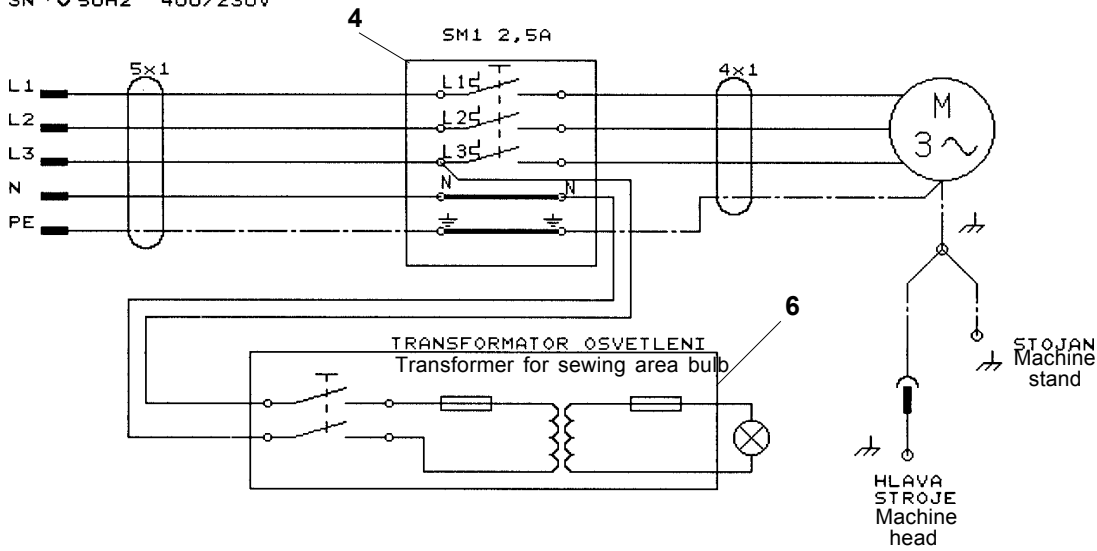
Circuit layout - Amerika



## 12.2 Power supply 3 x 400 V - five wire power distribution, power supply 3 x 230 V - four wire or five wire power distribution

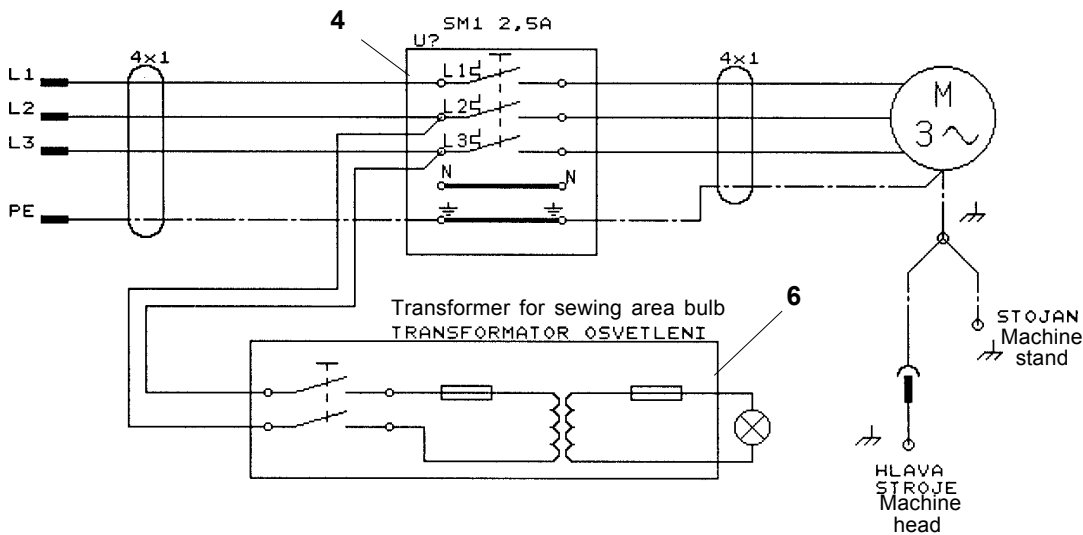
Circuit layout - Evropa

3N ~ 50Hz 400/230V



Circuit layout - Amerika

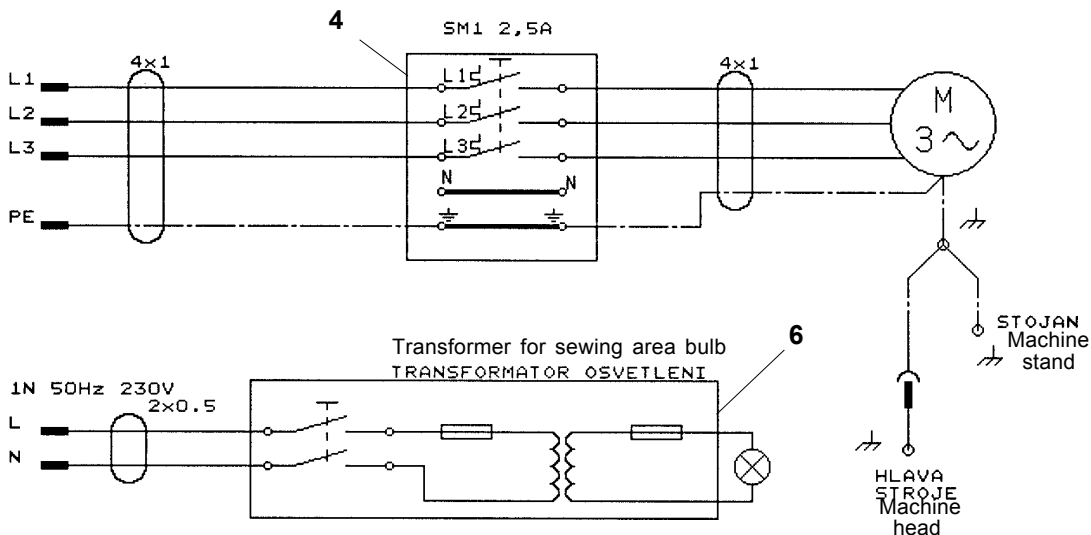
3 ~ 50/60Hz 230V



## 12.3 Power supply 3 x 400 V - four wire power distribution plus 1 x 230 V - two wire cable

Circuit layout

3 ~ 50Hz 400V

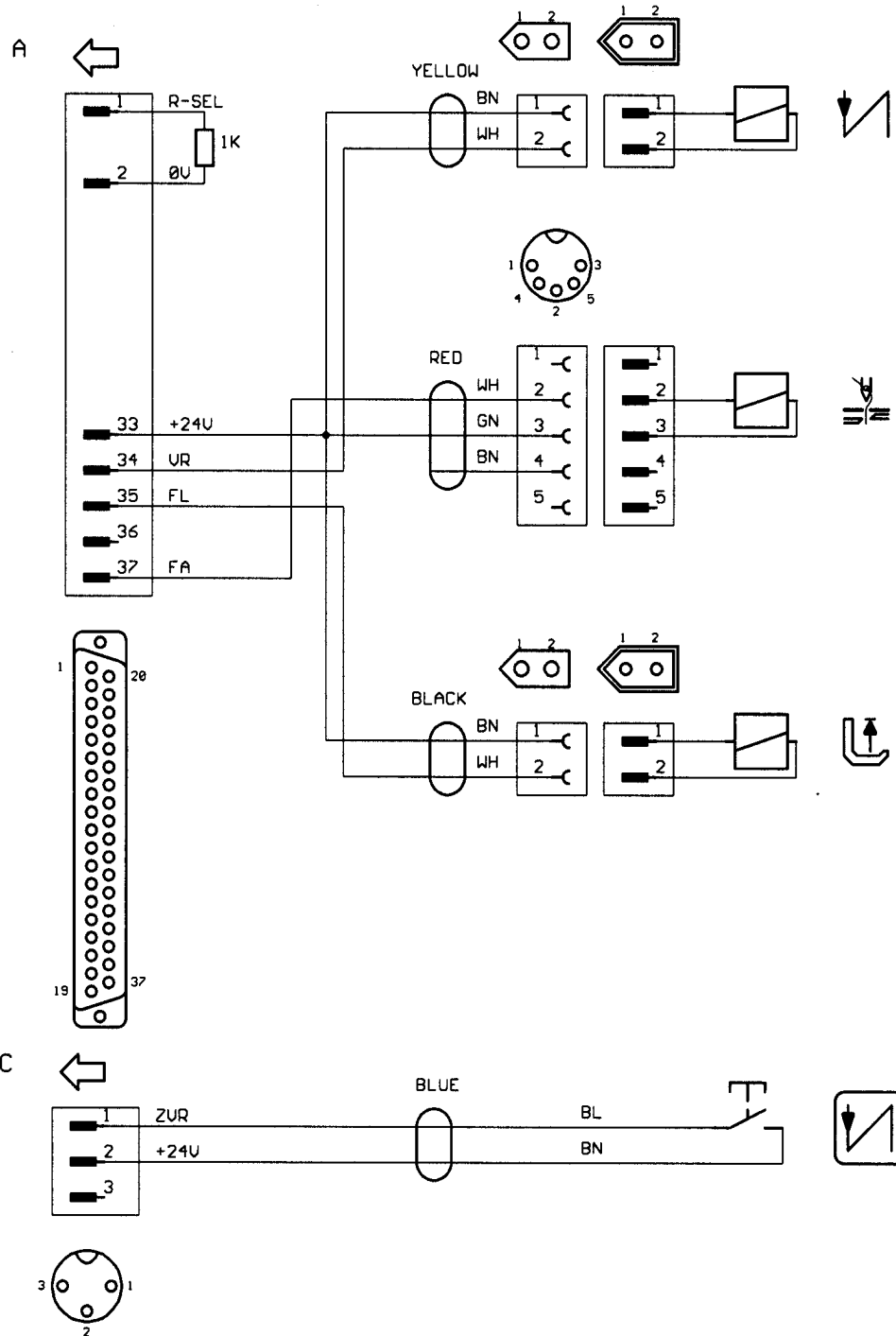




## 12.4 Electrical connection of machine head to the stop motor

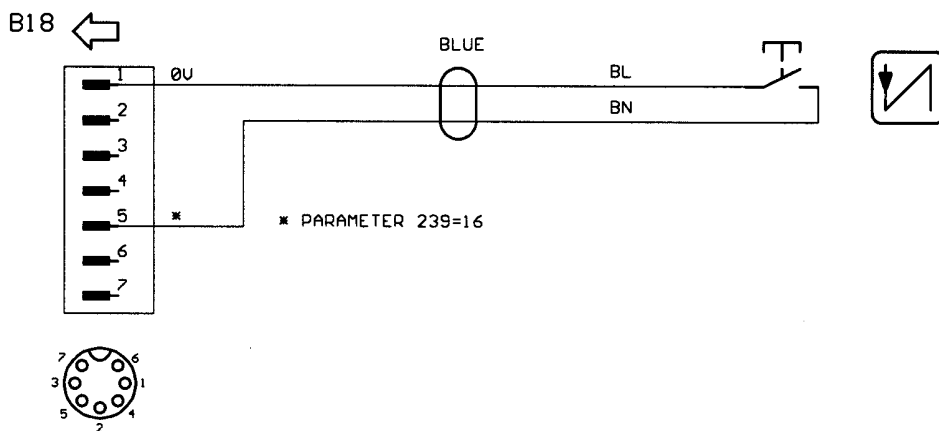
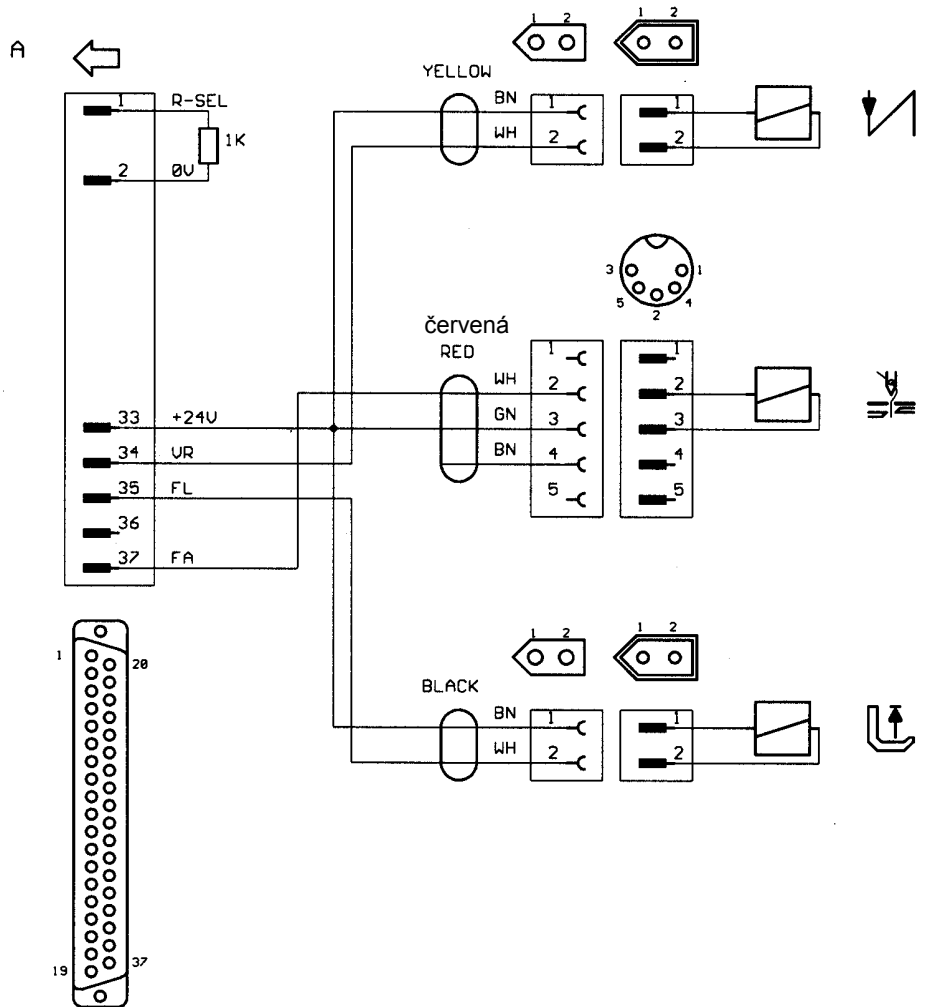
Stop motor S359 600045 XXX - EFKA DC 1600/DA82GA

Circuit layout



Stop motor S359 600052 XX - EFKA VD 552/6F82FA

Circuit layout



## 12.1 Power supply 1 x 230 V - DC motor

## 12.5 Stop motor setting S359 600045 XXX - EFKA DC 1600/DA82GA

### 12.5.1 Setting position reader

- set the parameter **170**, the display will show **Sr1** (reference position)
- depress the pushbutton **>>**, the display will show **PoS 0** and the changing rotation symbol
- turn the hand wheel until the rotation symbol disappears
- turn the hand wheel in such a way, so that the needle point, when moving downward, is on the level of the throat plate
- depress the pushbutton **E** and pass to the parameter **171**

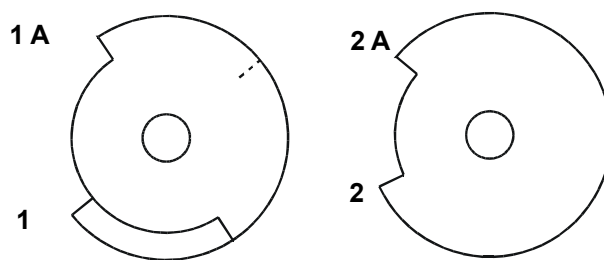
- set the parameter **171**, the display will show **Sr2** (all positions)
- depress the pushbutton **>>**
- the display will show **1 XXX** (value of the bottom position)
- turn the hand wheel, until the value **XXX** begins to change
- turn the hand wheel at the value of the bottom position angle (**160** on the panel)
- depress the pushbutton **E**
- the display will show **2 XXX** (value of the top position)
- turn the hand wheel, until the value **XXX** begins to change
- turn the hand wheel at the value of the top position angle (**460** on the panel)
- depress the pushbutton **P 2x** (return to the sewing mode)
- tread shortly forward the pedal (memory entry)

### 12.5.2 Changes of setting parameters of stop motor setting considering original producer setting

Parameter No	Parameter value	
111	-	Max. revolutions (according to a type of machine)
170	-	Reference position
171	1 160	Lower position
	2 460	Upper position
190	300	Switch on angle of thread trimmer (210°)
202	120	Delay of start run after switch off the signal foot
210	200	Stopping time for fancy bar
213	5	Time off full power of backtacking

## 12.6 Stop motor setting S359 600052 XX - EFKA VD 552/6F82FA

### 12.6.1 Setting position reader



Positions are set by means of discs with cut outs directly in position reader.

#### Setting of the lower position:

- dismount the guard of the position reader
- switch on the mains switch
- tread shortly pedal forward (the machine stops in the needle lower position)
- switch off the mains switch
- turn the beginning of the recess **1** of the overlapping disks in such a way, so that the machine stops with the needle in the position of 3 mm behind the bottom dead center
- check up in repeating the procedure

#### Setting of the top position of the thread lever:

- tread the pedal rearward (the machine stops in the needle upper position)
- switch off the mains switch
- turn the beginning of the recess **2** in such a way, so that the machine stops with the thread lever in the top dead centre
- check up in repeating the procedure.

## 12.6.2 Changes in parameters of stop motor setting considering original producer setting

Parameter No	Parameter value	
111		Max. revolutions (according to a type machine)
190	100	Switch on angle of thread trimmer
202	120	Delay of start run after switch off the signal foot
210	200	Stopping time for fancy bar
213	5	Time off full power of backtacking
239	16	Function of the pushbutton on B 18/5