OIL REMOVING UNIT

OPERATIONS MANUAL
BETRIEBSANLEITUNG
MANUEL D'EMPLOI ET DE MAINTIEN
ISTRUZIONE PER L'USO
MANUAL DE OPERACIONES

English

MODEL *S - 40*
S - 40W
S - 40 OEM
S - 100
S - 100W
S - 100 OEM
S - 200

LESTOPREX AG
8640 RAPPERSWIL
Lager: 8735 St. Gallenkappel

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1. General view

We thank you for buying this OIL REMOVING UNIT. This manual explains about safe and effective usage of this OIL REMOVING UNIT. Read this manual and understand the OIL REMOVING UNIT fully before you start.

2. Notice for safe use

1. Install the OIL REMOVING UNIT properly according to instructions in this book.

2. Connect correct power voltage to the unit.

3. Do not touch the unit while the unit is in operation.

4. Do not use this unit in abnormal environment.

5. This OIL REMOVING UNIT is not offered for food treating application.

6. Disconnect power supply to the unit before you remove the cover of the unit for maintenance, checking etc.

3. Application

This OIL REMOVING UNIT is offered for the following applications. Basically any application not listed bellow is prohibited.

3.1. S - 40 (OEM), S - 100 (OEM) and S - 200 model

a. Removement of oil from surface of coolant liquid in the tank unit of machine tools.

b. Removement of oil from surface of waste liquid of plant.
Note: in this application, temperature of liquid should be below than 60°C and Alkali level should be within 11.

3.2. S - 40W and S - 100W model

a. Removement of oil from surface of liquid reservoir of industrial parts washing machine.
Note: in this application, temperature of liquid should be below than 130°C and Alkali level should be within 13.

4. Specification & External view

4.1. Specification

Items	S-40	S-100	S-200	S-40 W	S-100 W	S-40 OEM	S-100 OEM
power/voltage	AC110V or AV230V						
power/fuse	125mA: AC110V, 63mA: AC230V						
power/Frequency	50 Hz or 60Hz						
power output	3.5 W						
effect (lit./h.)	ca. 4	ca. 8	ca. 14	ca. 4	ca. 8	ca. 4	ca. 8
belt width (mm)	40	100	200	40	100	40	100
belt length (mm)	Standard 800, optional: any length note: length means all over length. Length between unit bottom and weight roller bottom position is 225mm (Standard) How to find total length: (225mm x 2) + 350mm = 800mm (round to 100)						
belt rotation	right or left (according to need)						
program operation	Periodical intermittent operation is possible by timer setting						
timer	yes	yes	yes	yes	yes	no	no
cable	yes	yes	yes	yes	yes	no	no
housing dimensions:							
length (mm)	190	250	350	190	250	190	250
width (mm)	105	105	105	105	105	105	105
heigth (mm)	160	160	160	160	160	160	160
execution:	Standard	Standard	Standard	for washing machine		direct installation to the machine	
temperature character	60° C or below			130° C or below		60° C or below	
alkali character	PH 11 or less			PH 13 or less		PH 11 or less	
weight	4	6	9	3.5	5.5	4	6

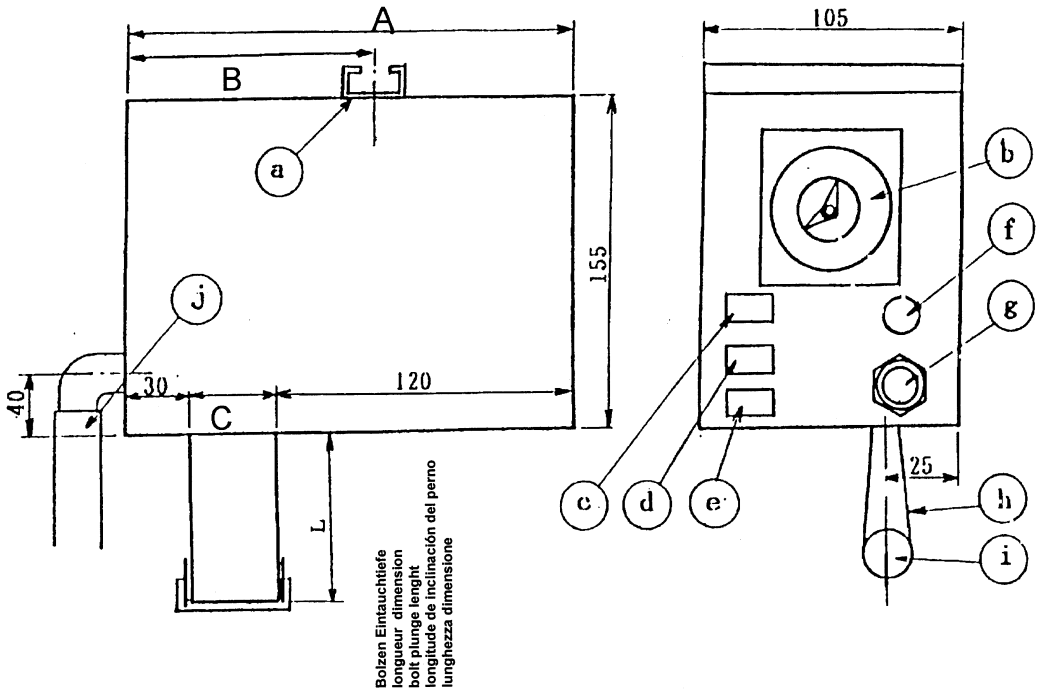
Note: The following page lists up any liquids which the belt of the S-40W and S-100W models will not affect

Influence, class of resistance Belt S-40W and S-100W					
Acetic acid	-				■
Acetic acid amylester	■	Fatty acids	■	Oils, mlneral	■
Acetone	■	Fatty alcohols	■	Oils, vegetable	■
Acetylene	■	Fats	■	Oxalic acid	■
Alcohol	■	Fertillizers	■	Oxygen	■
Alkalis, low, concentration	■	Fish, fishwastes	■	Ozone	■
Alkalis, high, concentration	■	Fluorine	-		■
Aluminium salts	■	Formaldehyde	■	Palm oil	■
Ammonia, gaseous	■	Formic acid	-	Paraffin oil	■
Ammonia, aqueous	■	Fructose	■	Peanut oil	■
Ammonium salts	■	Fruit juices	■	Perfumes	■
Amyl alcohol	■	Fuel	■	Petrol	■
Aniline	■	Fuel oils	■	Potroleum	■
Antimony salts	■		■	Phenol	-
Arachis oil	■	Gasoline	■	Photographic developer	□
		Glucose	■	Phthalic acid	■
Baking fats	■	Glycerine	■	Plastor	■
Baking powder	■	Glycerine triacolate	■	Plasticiser	■
Barium salts	■	Glycol	■	Potash lye	■
Beer	■	Glysantlne	■	Potash salts	■
Benzoic acid	■		■	Propanol	■
Benzene	■	Heptane	■	Proteins	■
Bichromate	■	Hexane	■	Prussiates	■
Bitter almond oil	■	Hydrocarbons, aliphatic	■		
Bitumen	■	Hydrocarbons, aromatic	■	Resorcinol	-
Bleaching lye	□	Hydrocarbons, chlorinated	■		
Borax	■	Hydrochl, acid up to 20 %	-	Salad oils	■
Boric acid	■	Hydrofluoric acid	-	Salicylic acid	■
Brandy	■	Hydrogan peroxide	□	Salt, common	■
Bronine	-	Hydroquinone	□	Sea water	■
Bulane	■		■	Sewages	■
Butter	■	Iodine	-	Soaps	■
Butyl alcohol	■	Iron salts	■	Sodium salts	■
Butyrc acid	■	Isopropanol	■	Solutions, watery, non aggressive	■
		Isooctane	■	Starch syrup	■
Calcium cyanamide	■	Inks	■	Stearic acid	■
Calcium salts	■	Javel water	□	Stucco	■
Carbon tatrachloride	■		■	Sugar	■
Castor oil	■	Kerosene	■	Sulfuric acid up to 60%	-
Caustic soda 100%	■	Ketones	■	Sulfite waste liquors	■
Caustic soda solution	■		■		
Chromic acid	■	Latex	■	Tallow	■
Chromium salts	□	lead tetraethyl	■	Tanning agents	■
Chlorine	■	Lemonades	■	Tar	■
Chlorobenzene	-	Light petroleum	■	Tartaric acid	■
Chlorohydrocarbons	■	Linseed oil	■	Thinners	■
Cider	■	Liquors	■	Tin salts	■
Citric acid	■		■	Toluene	■
Cola concantrates	■	Magnesium salts	■	Town gas	■
Common salt	■	Margarine	■	Transformator oils	■
Copper salts	■	MEK	■	Trichloroethylone	■
Copra oil	■	Mercury	■	Turpentine oil	■
Cottonseed oil	■	Mercury salts	■		
Cresol	■	Methanol	■	Urea	■
Cyclohexane	-	Methyl acetate	■	Urine	■
Cyclohexanone	■	Methylene chloride	■		
	■	Methyl-ethyl-ketone	■	Vaseline	■
Decaline	■	Milk	■	Vinegar	■
Daveloper, photogr.	■	Mineral oils	■		
Diazonium salts	■	Molasses	■	Wine	■
Diesel oil	■	Motor oils	■	Wetting agents	■
Dlethylene glycol	■	Motor spirits	■		
	■	Mustard	■	Xyleno	■
Edible fats	■	-			
Essential oils	■	Nickel salts	■	Yeasts	■
Ester	■	Nitric acid up to 40%	-		
Ether	■			Zinc salts	■
Ethyl acetate	■				
Ethyl alcohol	■				

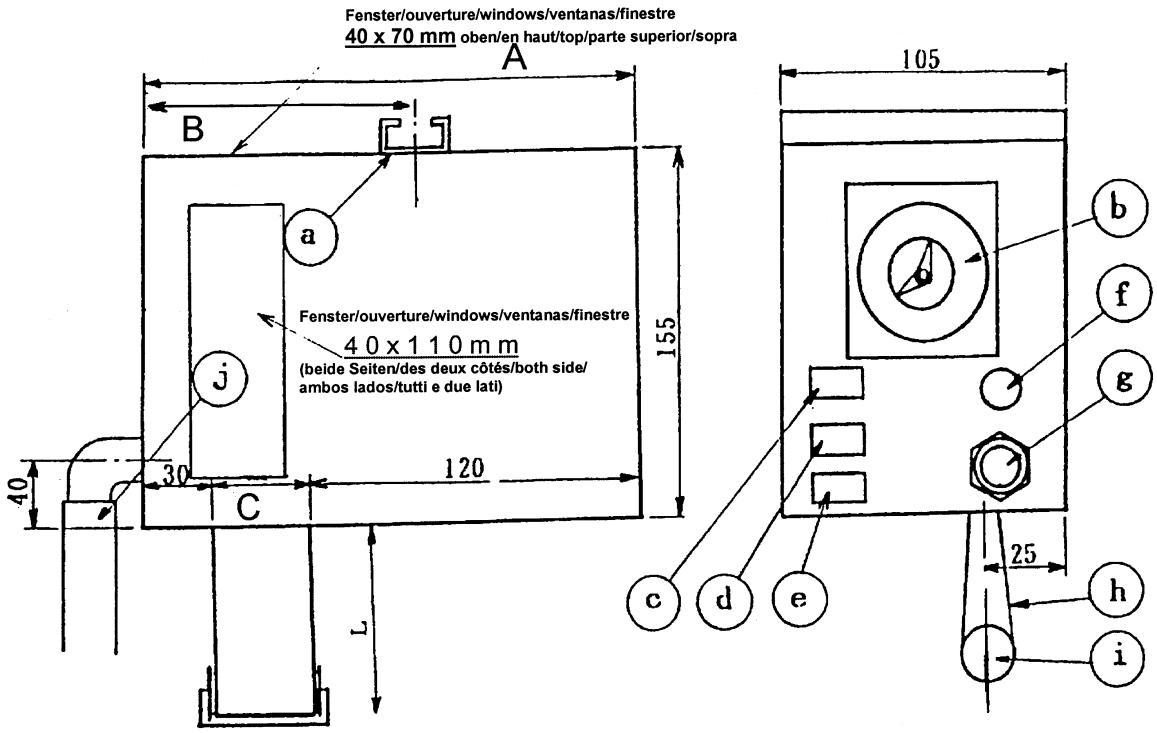
■ resistant
□ partly resistant
- not resistant

4.2. External view (S - 40, S - 100, S - 200)

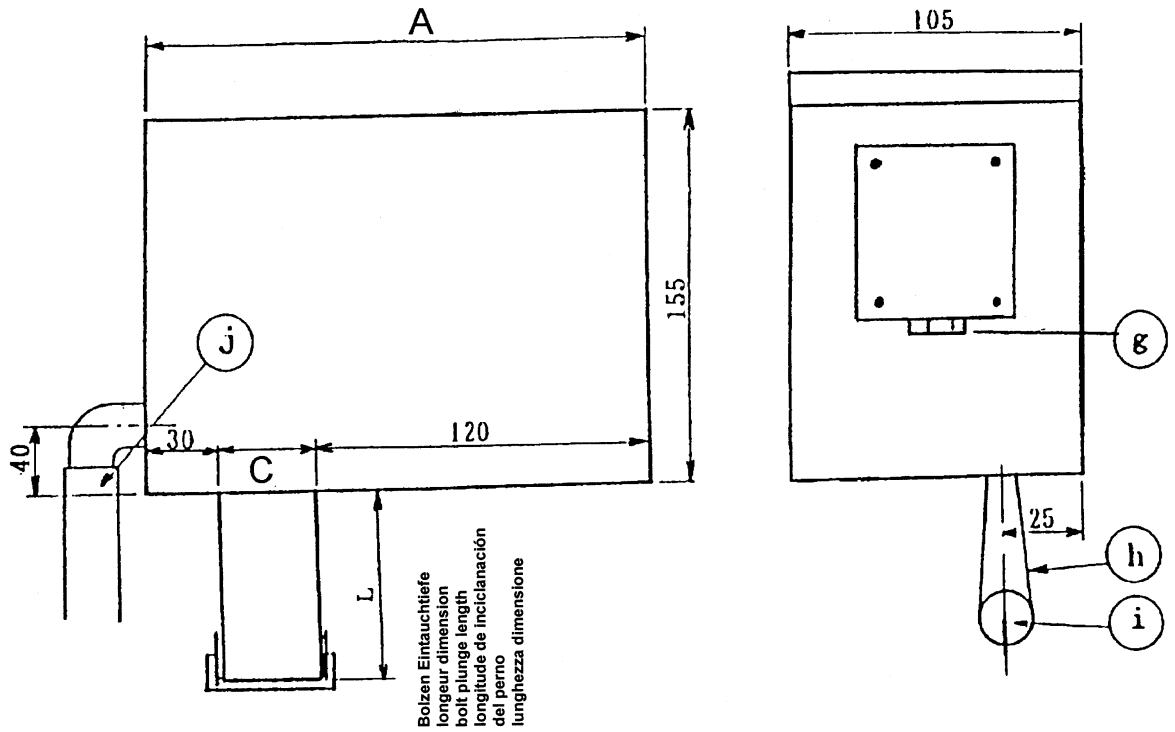
	S - 40	S - 100	S - 200
A	190	250	350
B	90	90	100
C	40	100	200



4.3. External view (S - 40W, S-100W)



4.4. External view (S-40 OEM, S-100 OEM)



4.5. Function of each section (refer to above sketches)

a. Installation bracket
For hanging installation of unit.

b. Program timer
For periodic program operation. 10 minutes per one dog pin.

c. Program operation switch
For switching of program operation ON and OFF.

d. Continous operation switch
For switching of continous operation ON and OFF.

e. Belt rotating direction switch
For switching of belt rotating direction.

f. Fuse/fuse holder
Fuse capacity; AC110V: 125mA, AC220V: 63mA

g. Power cable
Approxi. 1.9m length, 3-pin connector is at end.

h. Belt
For oil removing from liquid.

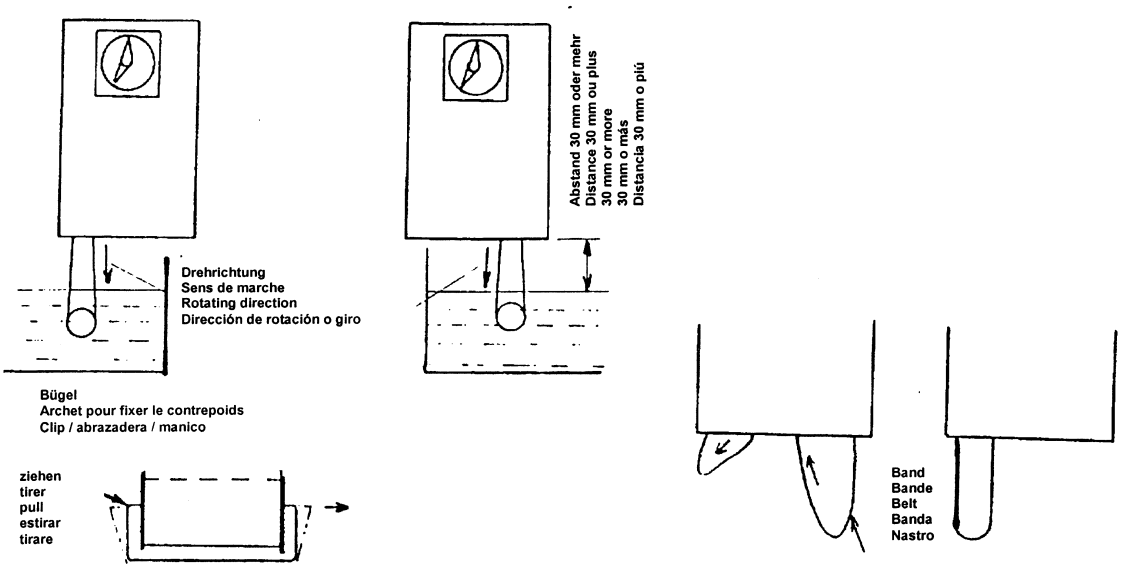
i. Weight roller
For smooth and effective operation of belt.

j. Drain hose
Approxi. 0.6m. For drainage of collected oil throught joint.

5. Installation

- Set the unit on the suitable place of machine tank unit. Its setting height should be more than 30mm above of liquid surface.

- Install the unit where liquid surface is calm and where the unit does not stick out from machine as much as possible.



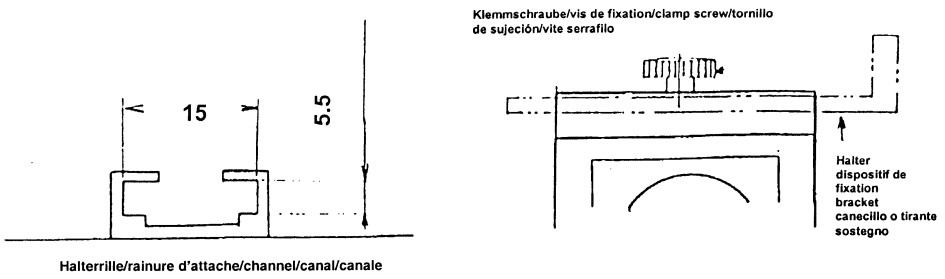
- The side of belt hang down can be shifted.

a. Remove weight roller from belt.
b. Pull the belt toward to belt and pull out belt from other side of frame of unit at bottom.
c. Put the weight roller back on belt.

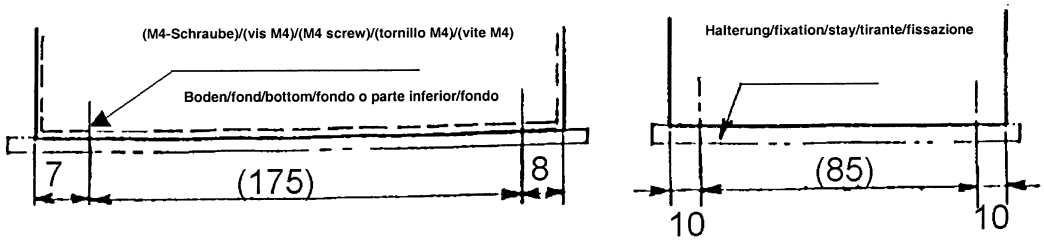
Note: after belt position was shifted, select another belt rotate direction by operation switch.

- Unit installation
  There are two types of installation possible. Select suitable type depending on the situation.

a. Hang down installation using the channel bracket at unit top. Prepare rigid stay and make it pass through the groove of channel bracket. You have the stay thickness as close as the width of the groove for straight shape installation. End of the stay should be bolted on such as tank unit.



b. Mount installation on the tank unit using mount holes at bottom of the unit cover. There are 4 holes of 5mm diameter at corners of unit cover. Bolt down the unit at these holes with 4mm screws on the tank unit.



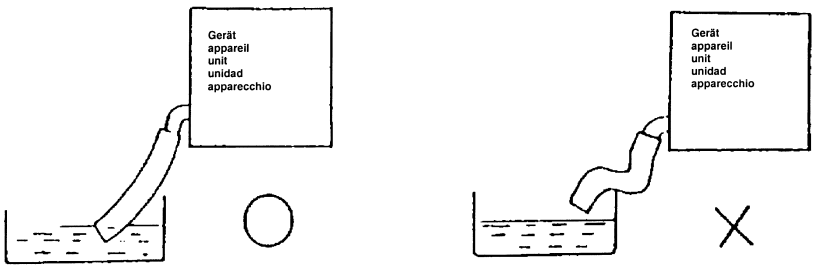
- Electric wiring to the unit

There is the power source cable sticking out from unit at front. Connect the plug of the end of cable to the power source receptor. Installation protect breaker devise at power source for safe operation.

Note: make sure to connect proper power source to the unit. There are two types of AC110V and AC220V.

- Connection of drain hose
  The removed oil from the liquid should be drained out from the unit through drain hose.

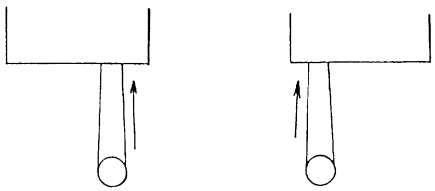
a. Connect the hose to the joint at unit rear side.
b. The hose should install straightly and should not be bended.
   The oil reservoir should be placed beneath the unit.



6. Operation

6.1. Confirmations before unit operation

- Ensure that the unit is propery installed.
- Ensure the rotating direction of belt.
  The direction can be changed by operation switch.



6.2. Continous operation

- Make PROGRAM operation mode OFF
- Make continous operation mode ON.

As soon as the mode comes on, belt starts rotating.

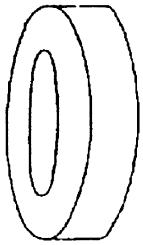
- The mode is made OFF by depressing the continous operation switch to OFF side.

6.3. Program operation

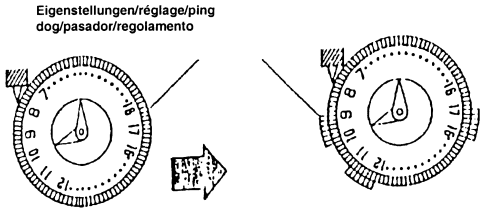
By using program the timer at the front of the unit a 24 hours programming operation is possible.
10 minutes per one pin-dog setting.

a. Make sure power source is off.
   Set the pin dogs.

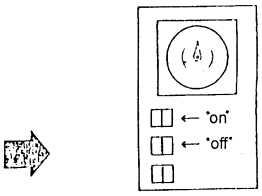
- Remove plastic cover of timer and
  put the time in order by turning needle



- Set the ON time pulling the pin dog.



- Put the plastic cover back on .



b. Make sure CONTINUOUS operation mode is set and connect power source.
c. Make program mode on by PROGRAM switch.
   As soon as the mode is ON, the timer starts operation. While the pin-dog depresses switch at the timer, the belt rotates.
d. The mode has to be uneffect by depressing the program operation switch to OFF.

7. Maintenance

A periodic maintenance is prefered to keep proper function for a long time.
Note: Maintenance has to be proceeded when the power is disconnected.

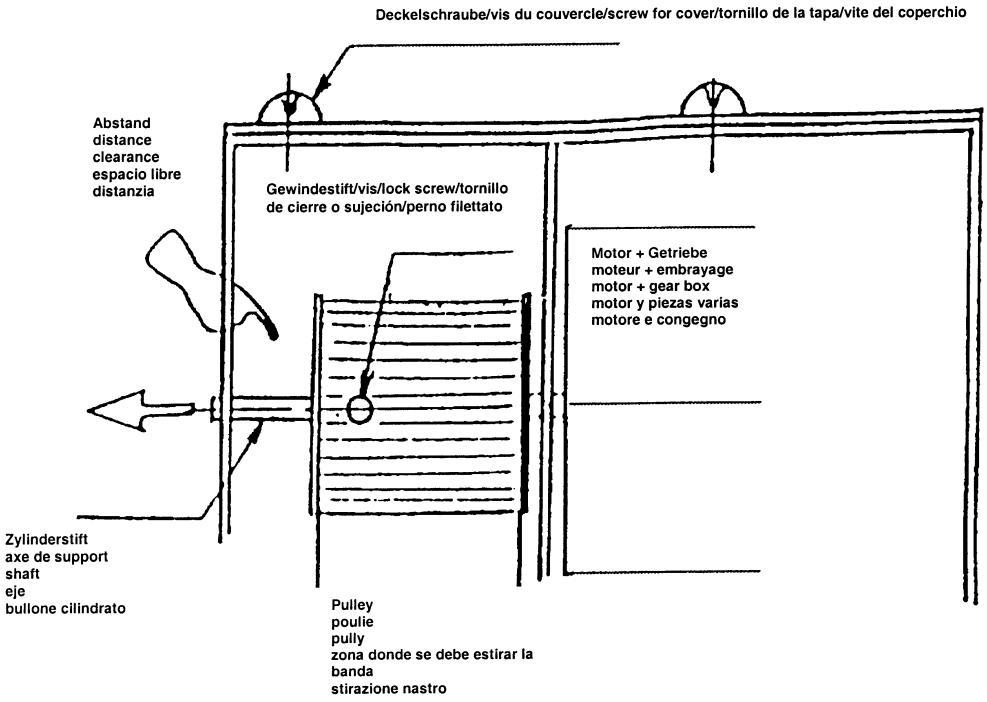
- Wipe-off dust and dirt on the cover
- Remove the dirt at oil scraping point
- Exchange the old belt with a new belt.

Belt exchange procedure:

a. Remove unit outernal cover.
b. Remove the weight roller from the belt by removing the formed wire at its center.
c. Loose the set screw which locks the belt drive roller against the driving shaft at the roller outernal position.
d. Remove the roller driving shaft from the roller.

e. Remove the belt by passing through the clearance between unit cover and the roller.
f. Put new belt back in the unit. Its procedure is just the opposite way of the removing.
g. Put back all screws and covers on the unit.

Note: Make sure all screw and bolts are properly tightened.



8. Modification method for different voltage power source use

The unit accepts 2 types of power voltage of AC110V and AC220V.

Procedure of modification from AC110V to AC220V:

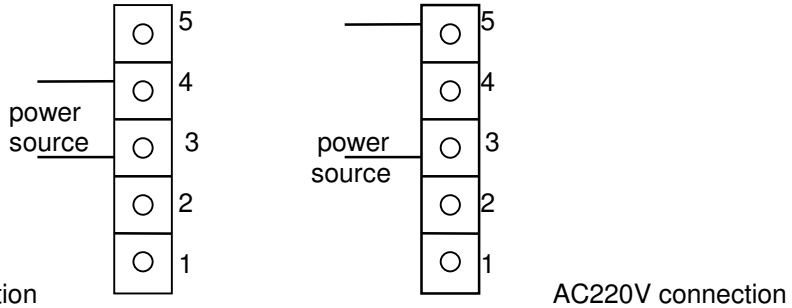
a. Remove the unit external cover.
b. Find the terminal base where the power source wires are connected. Remove the wire at #4 of terminal base, and connect it to #5.

AC220V: power wires have to be connected to #3 and #5.
AC110V: power wires have to be connected to #3 and #4.

c. After made sure correct wiring and proper screw tighten, put the cover back on.
d. Exchange the fuse to 63mA type (AC 220V)

Procedure of fuse exchange, refer chapter 9 of this manual.
Note: AC110V power source requires 125mA capacity fuse.

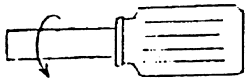
e. Remove the label which shows power source voltage and fuse capacity for AC220V model.



9. General fault finding Guide

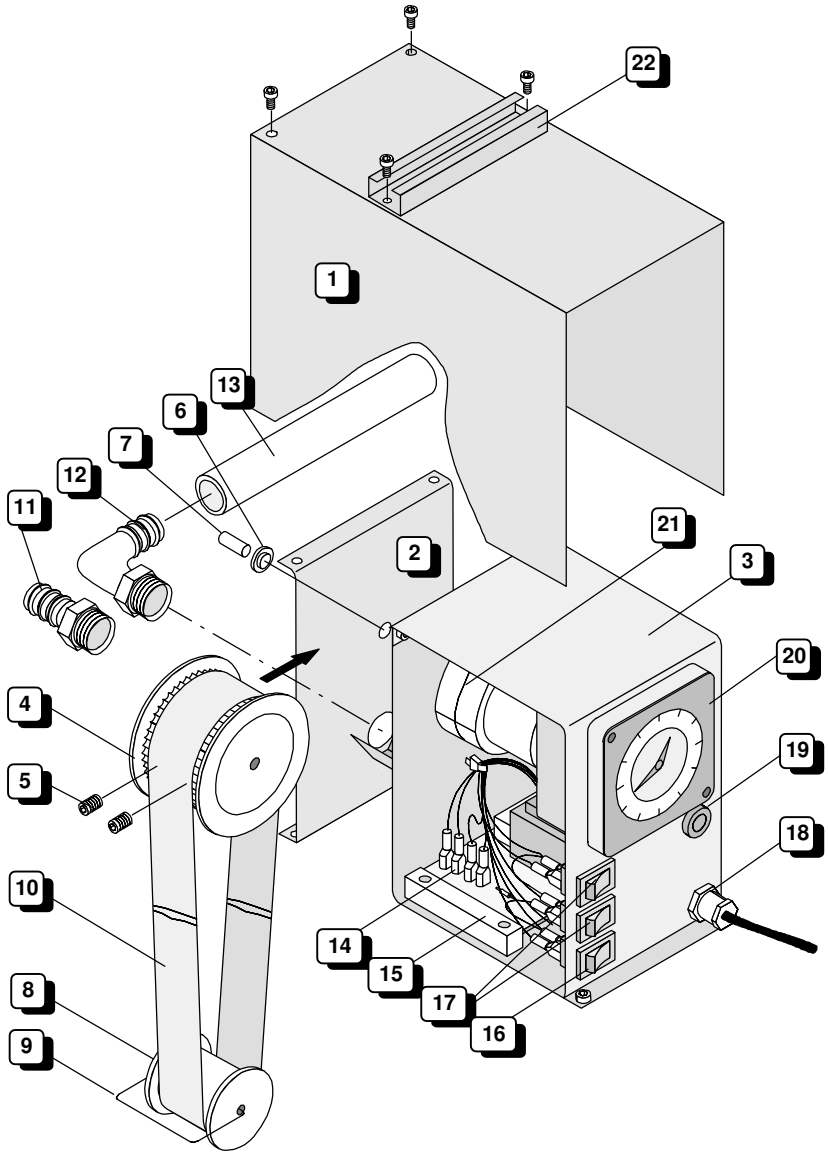
Fault	Possible Cause	Action
- Unit does not operate even power source is ON.	Fuses	Check if the fuse is OK: Capacity of fuse; AC110 V= 125mA, AC220V=63mA The fuse is installed in the black colour holder at the unit front. By loosing holder with screw driver, the fuse can be removed from holder (unit).
- Unit does not operate even the fuse and operation switches condition are ok		Call us
- Oil removing is not executed even belt rotates.	- The belt rotating direction is not correct.	Change belt rotating direction
	- Oil scraping area is filled with dirt.	Clean scraping area
	- The belt is required to change to new belt.	Change belt (For procedure of belt change, refer chapter 7).
- Others		Call us

Sicherung mit Deckel
fusible avec couvercle
fuse holder
zona de sujeción del fusible
valvola con coperchio



Schraubenzieher
tourne vis
screw driver
tornavis
giravite

10. Spares list



SERIES S-40/100/200

No	deutsch	français	english	italiano	español	Typ S-40	Typ S-100	Typ S-200
01	Gehäusedeckel	Couvercle	Outernal cover	Coperchio d. cassa	Cubierta externa	40-1	100-1	200-1
02	Gehäuse	Boîte	Cover	Cassa	Carcasa	40-2	100-2	200-2
03	Frontplatte	Plaque de devant	Board front	Piatta di fronte	Plato de frente	40-3	40-3	40-3
04	Pulley	Poulie	Pully	Stirazione nastro	Estiration banda	40-4	100-4	200-4
05	Gewindestift	Vis	Lock screw	Perno filettato	Tornillo cierre/sujeción	M5 x 16	M5 x 16	M5 x 16
06	Sinterbronce-Lager	Polier	Bearing	Cuscinetto	Soporte	6E7/10 x 4-14 x 2	6E7/10 x 4-14 x 2	6E7/10 x 4-14 x 2
07	Zylinderstift	Axe de support	Shaft	Bullone cilindrato	Eje	6 x 30	6 x 30	6 x 30
08	Gewicht	Poids	Weight	Peso	Peso	40-5	100-5	200-5
09	Bügel	Archet	Wire	Manico	Alambre	40-6	100-6	200-6
10	Band	Bande	Band	Nastro	Banda	40 x Länge	100 x Länge	100 x Länge
11	Schlauchanschluss	Raccord de tube	Connection tube	Attacco tubo	Connexíon tubo	38.135	38.135	38.135
12	Winkel-Schlauchanschluss	Equerre du raccord de tube	Angle-connexion tube	Angolo dell'attacco tubo	Angulo de connexion tubo	38.235	38.235	38.235
13	Schlauch	Tube	Tube	Tubo	Tubo	40-7	40-7	40-7
14	Print	Estacion de cable	Terminal base	Stazione dei cavi	Base de cables	40-8	40-8	40-8
15	Printhalter	Fixation poru estacion de cable	Bracket for terminal base	Sostegno per stazione di cavi	Fijación por base de cables	40-9	40-9	40-9
16	Schalter	Interrupteur	Switch	Interruttore	Interruptor	01803.1102	01803.1102	01803.1102
17	Schalter	Interrupteur	Switch	Interruttore	Interruptor	01801.1146	01801.1146	01801.1146
18	Kabelverschraubung	Visage de cable	Cable screws	Serraggio a vite del cavo	Atornilladura de cables	PG-9	PG-9	PG-9
19	Sicherungselement	Capacité de du fusible	Fuse capacity	Rete di alimentazione	Capacidad de fusible	0031.1096	0031.1096	0031.1096
20	Schaltuhr	Minuterie	Clock	Timer	Reloj	BQT 9-48V	BQT 9-48V	BQT 9-48V
21	Motor	Moteur	Motor	Motore	Motor	10-65910	10-65910	10-65910
22	Halter	Fixation	Bracket	Sostegno	Fijación	40-10	40-10	40-10