# IMPULSE DIRECT HEAT SEALER

# OPERATION INSTRUCTIONS

# CONTENTS

## 1.USAGE AND CHARATER

There are two kinds of pedal sealers: impulse sealer and direct heatsealer, Impulse sealer is suitable for sealing polyvinyl chloride, polyethylene bags. Direct heat sealer is suit-able for sealing cellophane, aluminiun foil. Copper foil, tin foil and polystyrene compound bags and heat prints the production date and expiration date in the seal. The temperature is electronically controlled and is easy to be adjusted. The temperature is stably contrclled. The machines are used in the area of food. medicine, daily cosmetics, local specialities, aquatic products, seeds, chemical products, garments etc. They are the best sealers for factories, stores and other areas.

## 2. MAIN DATA AND SPECIFRICATIONS

| TYPE | IMPULSE SEALER | | | | DIRECT | HEAT | SEALER |
|---|---|---|---|---|---|---|---|
| MODEL | KS-F350 | KS-F450 | KS-F600 | KS-F800 | KS-DD200 | KS-DD300 | KS-DD400 |
| LENGTH(MM) | 350 | 450 | 600 | 805 | 200 | 300 | 400 |
| WIDTH(MM) | 2 5 | 2 5 | 2 5 | 2 5 | 14 | 14 | 14 |
| VOLTAGE | SINGLE PHSE 220V OR 110V/50 60Hz | | | | | | |
| SEALING TIME | 0 2.5 | 0 2.5 | 0 2.5 | 0 2.5 | / | / | / |
| IMPULSE | 1250 | 1200 | 1500 | 1800 | 150×2 | 175×2 | 210×2 |
| POWER(W) | | | | | | | |
| RANGE OR THE TEMP(℃) | / | / | / | / | 0 300℃ | 0 300℃ | 0 300℃ |
| DIMENSIONS(MM) | 450X510×880 | 550X520×880 | 700X570×880 | 850X650×900 | | | |
| Wt.(kg) | 25 | 26 | 28 | 32 | 18 | 21 | 23 |

## 3.ADJUSTMENT AND USAGE

### 3.1 ADJUSTMENT AND USAGE OF IMPULSE SEALER

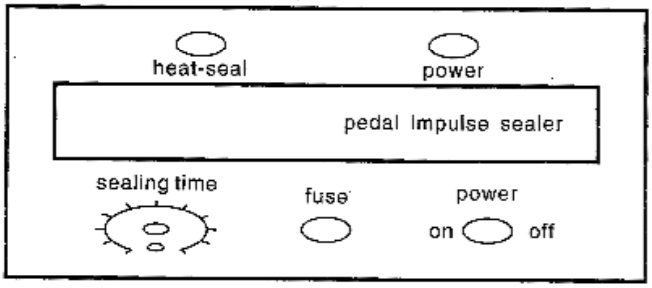



FIG.1. DIAGRAM OF THE CONTROL PANEL FOR IMPULSE SEALER

Connect to 100V/220V power source according to the indication mentioned in the

machine, Switch on the power, the red light is on, Adjust the sealing time according to the materials and the thickness of the bags to be sealed. The sealing time should be adjusted to around grade 1 before sealing. Put the opening of the bag into between the heat sealers, etep down the pdal and the yellow lamp lights. Take out the sealed bag 1 2sec. After the yellow lamp is off.

If the seal is not tight enough, lengthen the sealing time. Try the bag ror several times till it is well sealed with clear figure and no wrinkes. Seal bags at this sealing time and temperature. The cooling time should not be too short, otherwise wrinkles will be caused in the seal. The longer the sealing time, the longer the cooling time.

3.2 adjustment and usage of direct heat sealer.

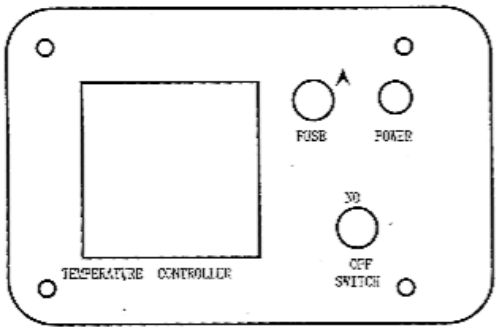



FIG.2 DIAGRAM OF THE CONTROL RANEL FOR DIRECT HEAT SEALER

3.2.1 Loosen the screws for date characters, array the characters according to the requirement and tighten the srews again.

3.2.2 Connect to 110V/220V power source according to the indications mentioned in the machine, Switch on ang the red lamp lights. Adjust the temperature accrding to the material and the thicknes of the bags to be sealed. The preset temperature is not reached when the green lamp is still on, When the red lamp is on, the reduired tempera-ture is reached. It is the right time for working. Put the opening of the bag into between the heaters. Step down the pedal for about 0.2-1.5 sec. And release the pedal. The sealing operationis finished at this time.

3.2.3 If the seal is not tight enough or the date is not well hoat prined. It maybe because the temperature is too low or the time with the padal being stepped wown is too short. The solution is to raise the sealing temperature and (or) to lengthen the time with the pedal being stepped down.

3.2.4 If the bag is melted or the place where the date is printed is broken, for im-pulse sealer, the reason is too long sealing time and for direct heat sealer, the reason is too high temperature or too long time with the pedal being stepped down. The solutionis to shorten the sealing time for impulse sealer and for direct heat sealer, to lover the seal-ing temperature ang(or) to shorten the time with the pedal being stepped down.

3.2.5 Switch off the power and unplug the machine when finish working.

## 4. MAINTENANCE

4.1 Maintenance for impulse sealer.

Never try to seal without bags. Don's set the sealing time to the high grade without and trials. Ortherwise, the teflon cloth will be burned. If some plastics unfortunately adheres to the teflon cloth because of careiessness, never try to scrape it with something hard. Just slightly reduce the sealing time and seal the bag again. Release the pedal a little after the yellow lamp is off. It is very important to get out the bag from one side to the other. The remains of the plastics will be cleared from the teflon cloth with the bag.

4.1.1 Replacement of the heater

Loosen the screws of the plate pressing the teflon cloth, roll back the cloth to let out the heater, loosen the bakelite boxes at both sides of the heater and get out the screws on the copper block, Now the heater can be removed. Replace it with a good new one. The heater should alway be in tension with the function of the spring. The copper block should be tilled if it is oxydised, to ensure it has a good connection with the heater, Pay attention when fixing the heater so that the teroln cloth below is flat(no wrindles are allowed). And the heater must have a excellent isolation. Otherwise the heater will be damaged because of the short-circuit.

4.1.2 Replacement of teflon cloth

Remove the screws and the plates above the teflon cloth, loosen the shaft of the teflon cloth roll, pull cut the cloth and cut the burned part. Reassemble the plates and screws, tighten the roll shaft. No wrinkles are allowed in the reflon cloth, otherwise the seal qualily will be affected.

4.1.3 Replacement of the micro-switch

There is one micro-switch at the side of the machine head. It must be replaced when it is damaged. The adjustment of the pressingpole for micro-swith: Put 1mm thick carton between the upper and lower and lower pressing arms, check if the micro-switch is

pressed and if there is a "click" from the switch, if it is not pressed, adjust down the pressing pole or tighten the nut c3 till the switch is pressed 1 2mm down when it works.

4.1.4 Always keep the sealing surface clean. Otherwise, the remains in the sealing sur-face willshorten the life of the heater and the life of the teflon cloth. When working, never try to clean the sealing surface with wet cloth.

4.1.5 After long timeusage, the rubber in the upper pressing arm must be checked if it is still flat and straight. Otherwise, the seal quality will be affected.

4.1.6 Often add lubricating oli into the moving parts.

4.1.7 All parts in the machine should not be disassembled casually.

4.2 Maintenance for direct heat sealer

4.2.1 Always keep the surface of the date character clean. Avoid any remains on the sealing surface to guarantee the quality of the seal, date printng and the life of the machine.

4.2.2 Never try to clean the sealing surface with wet cloth when the power is still connected. Nover touch the heating block with hand in case of being burned.

4.2.3 The same model of the theater must be used when replacing.

4.2.4 Attention not to connect high voltage soutce to"+","-"inputs or to thermocoupling in case not to damage the temperature contoller.

4.2.5 After long time usage, check if the rubber on the upper pressing arm is flat and straight. Otherwise, the quality of the seal may be affected. Check if the wire connection of the heater and the heater is in good position.

4.6 Often add lubricating oli into the moving parts.

4.7 Don't disassemble any parts in the machine casually.

## 5. PACKING LIST

| | |
|---|---|
| Parts of the machine | 1set |
| Wrench 6" | 1 |
| Cross screw driver 3" | 1 |
| Straight screw driver 3" | 1 |
| Fusee 2-15a | 2-4 |
| Teflon cloth | 1(for impulse sealer only) |
| Heat sealers | 2(for impulse sealer only) |
| Heater | 1(for direct heat sealer) |
| Operation manual | 1 |

## 6.TROUBLES & TROUBLE-SHOOTING

6.1 For impulse sealer

| TROUBLES | CAUSER & SOLUTLONS |
|---|---|
| The seal is no good | To lengthen the sealing time if seal is not tight enough. To shorten the sealing time if the seal is melted. Or The melted seal is carsed by not being pressed tightly. |
| The seal is wrinkled | 1. Overheating. Shorten the sealing time as possible on the condition that the good seal of the bag is guaranteed.<br>2. Insufficient time for cooling. Lengthen the cooling time. |
| The temperature rises when working for some time | it is normal that the tomperature of machine will rise because the machine is started at the room temperature, it absorbs some heat during the operation. Shorten the sealing time sightly to bal-ance the heat. |
| The power lamp doesn't light and the sealer does not work | Check if the power switch is on, if the fuse is all right. |
| The power lamp lights but the sealing lamp is off and the sealer doesn't work. | Step down the pedal to check if the micro-switch works well.<br>See 4.13 for adjustment. |
| The sealer is always electrified when the power is switched on | Swith the power off at once. Check if the micro-swith is all right.<br>See 4.13 for adjustment. |

| 5.2. For direct heat sealer TROUBLES | CAUSE & SOLUTIONS |
|---|---|
| The seal is no good. | To lengthen the tiime with the pedal being stepped down or to raise the sealing temperature. If the seal is not tight enough. Or vice versa, if the seal is melted. |
| There is wrinkles in the seal | 1. Overheating. Shorten the sealing time as possible on the condition that the seal of the bag is guaranted.<br>2. The time with the pedal being stepped down is too long. Shortedn this time. |
| Both power lamp and the lamp of the temp. Controller don't light. | Check if the connection of the heater is in good condition, if the heater is all riht, if the themocoupling is no problem and if the connection of the coupling is ok. |
| The temperature is out of control. | 1. The thermo-coupling is damaged or not well connected.<br>2. There is a problem in the temperature controller. |

## 7.ELECTRICAL PRINCIPLE DIAGRAM

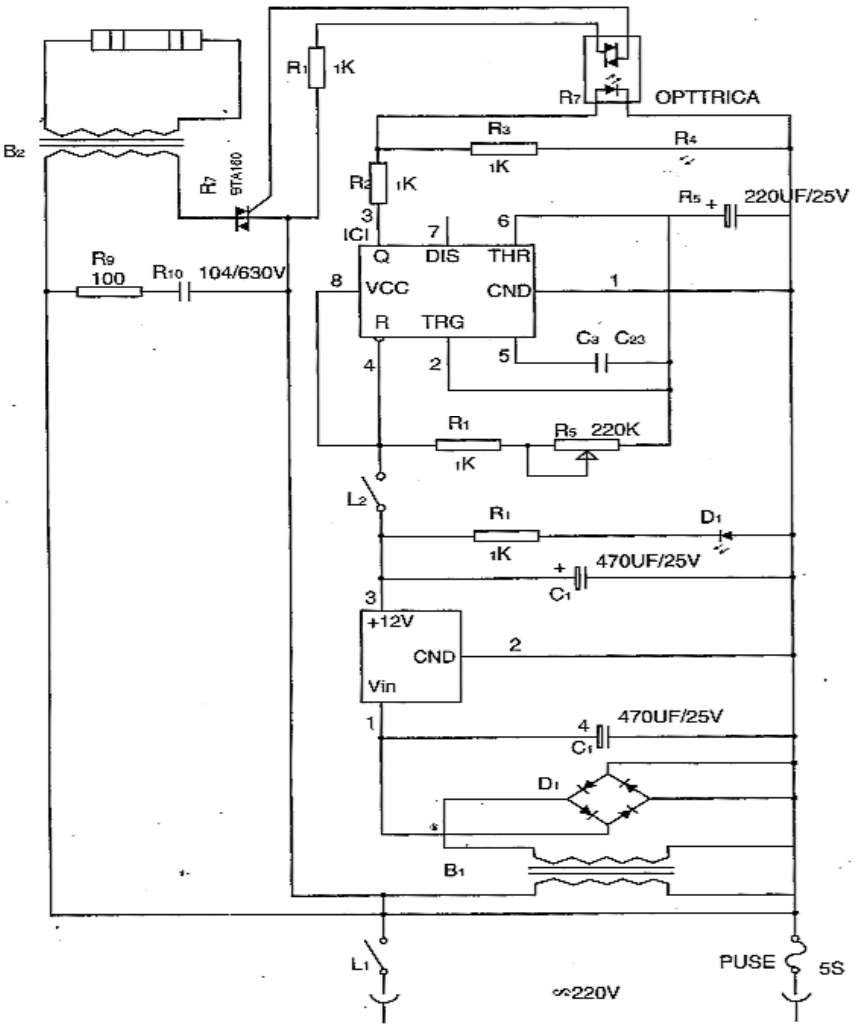



FIGURE 3.ELECTRICAL PRINCIIPLE DIAGRAM FOR IMPULSE SEALER

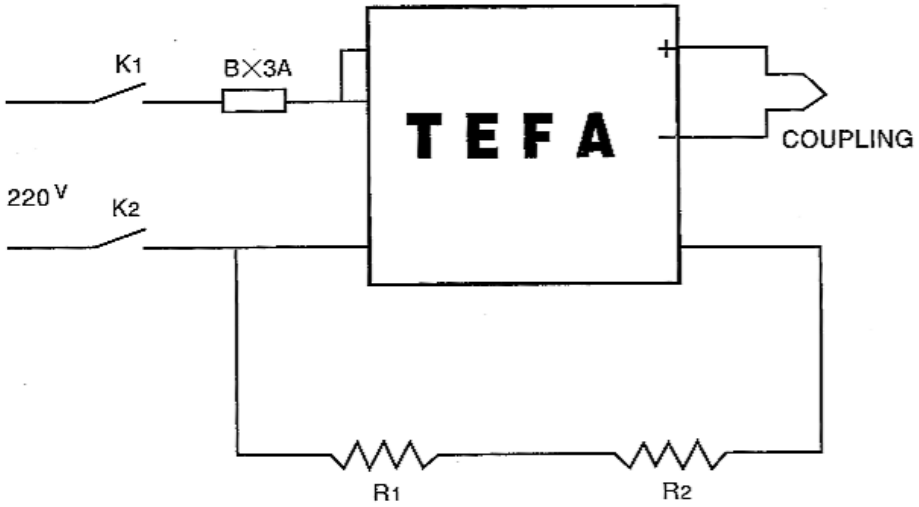
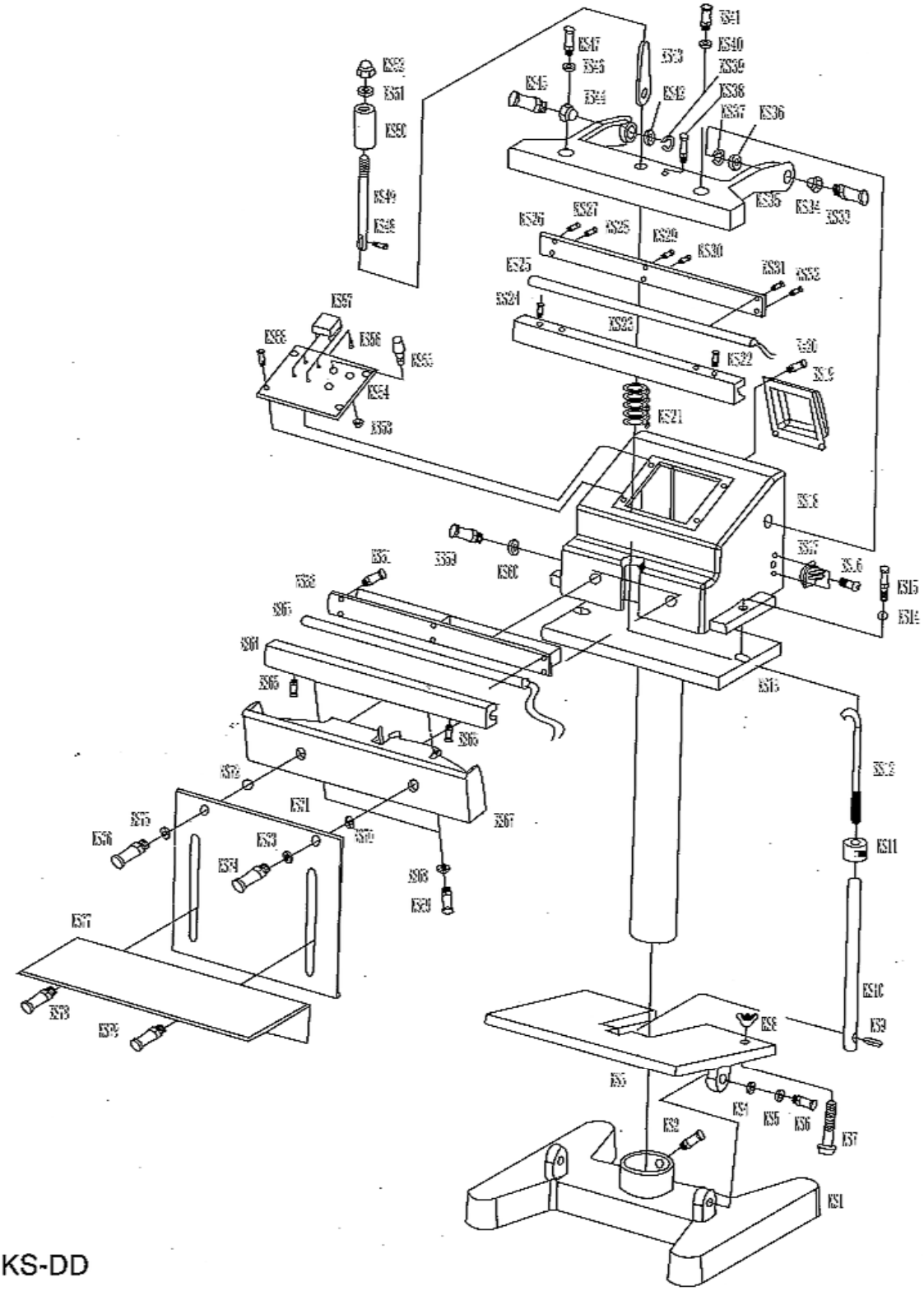



FIGURE 4.ELECTRICAL PRINCIPLE DIAGRAM FOR DIRECT HEAT SEALER

## 8.NAME & NO.OF THE SPARE PARTS



KS-DD

FIG.5. SHAFTS DIAGRAM FOR KS-DD DIRECT HEAT SEALER

| NO | NAME | QUANTITY | NO | NAME | QUANTITY |
|---|---|---|---|---|---|
| KS1 | machine base | 1 | KS44 | Tetrafluorohydrazine convention | 1 |
| KS2 | bolts | 1 | KS45 | outter hex bolts group | 1 |
| KS3 | pedal board | 1 | KS46 | flat washer | 1 |
| KS4 | flat washer | 1 | KS47 | outter hex bolts | 1 |
| KS5 | nuts | 2 | KS48 | flexible pin | 1 |
| KS6 | bolts | 1 | KS49 | polling pole | 1 |
| KS7 | adjusting bolts | 1 | KS50 | rubber cushion | 1 |
| KS8 | butterfly nuts | 1 | KS51 | screw conention | 1 |
| KS9 | flexible pin | 1 | KS52 | cap nut | 1 |
| KS10 | pedal pulling pole | 1 | KS53 | power indicator lamp | 1 |
| KS11 | connecting nuts | 1 | KS54 | operation panel | 1 |
| KS12 | hooker polling pole | 1 | KS55 | power switch | 1 |
| KS13 | column base | 1 | KS56 | Cross recessed pan head screw | 4 |
| KS14 | nuts | 2 | KS57 | temperature controller | 1 |
| KS15 | screws and flat washer | 2 | KS58 | Cross recessed pan head screw | 4 |
| KS16 | wire guider | 1 | KS59 | out hex bolt group | 1 |
| KS17 | Cross recessed pan head screw | 2 | KS60 | flat pad | 1 |
| KS18 | shell | 1 | KS61 | Cross recessed pan head screw | 6 |
| KS19 | out cover | 1 | KS62 | heater pressor | 1 |
| KS20 | inner hex screws | 4 | KS63 | heater | 1 |
| KS21 | spring | 1 | KS64 | lower hating block | 2 |
| KS22 | outer hex bolts | 1 | KS65 | bolts groups | 1 |
| KS23 | upper heating block | 1 | KS66 | bolts groups | 1 |
| KS24 | outer hex bolts | 1 | KS67 | lower fasten base | 1 |
| KS25 | coupling | 1 | KS68 | flat pad | 2 |
| KS26 | coupling board | 1 | KS69 | outter hex bolts | 2 |
| KS27 | Cross recessed pan head screw | 1 | KS70 | flat pad | 1 |
| KS28 | Cross recessed pan head screw | 1 | KS71 | flat pad | 2 |
| KS29 | Cross recessed pan head screw | 1 | KS72 | fix board of worktable | 1 |
| KS30 | Cross recessed pan head screw | 1 | KS73 | flat pad | 1 |
| KS31 | Cross recessed pan head screw | 1 | KS74 | outter hex bolts groups | 1 |
| KS32 | Cross recessed pan head screw | 1 | KS75 | flat pad | 1 |
| KS33 | bolts group | 1 | KS76 | out hex bolt rroup | 1 |
| KS34 | tetrafluorohydrazine convention | 1 | KS77 | work table | 1 |
| KS35 | upper sealing pressor | 1 | KS78 | outter hex bolt group | 1 |
| KS36 | tetrafluorohydrazine pad | 1 | KS79 | outter hex bolt group | 1 |
| KS37 | flexible pad | 1 | | | |
| KS38 | inner hex bolts | 1 | | | |
| KS39 | flexible pad | 1 | | | |
| KS40 | flat washer | 1 | | | |
| KS41 | inner hex screws | 1 | | | |
| KS42 | flexible pad | 1 | | | |
| KS43 | small commecting board | 1 | | | |

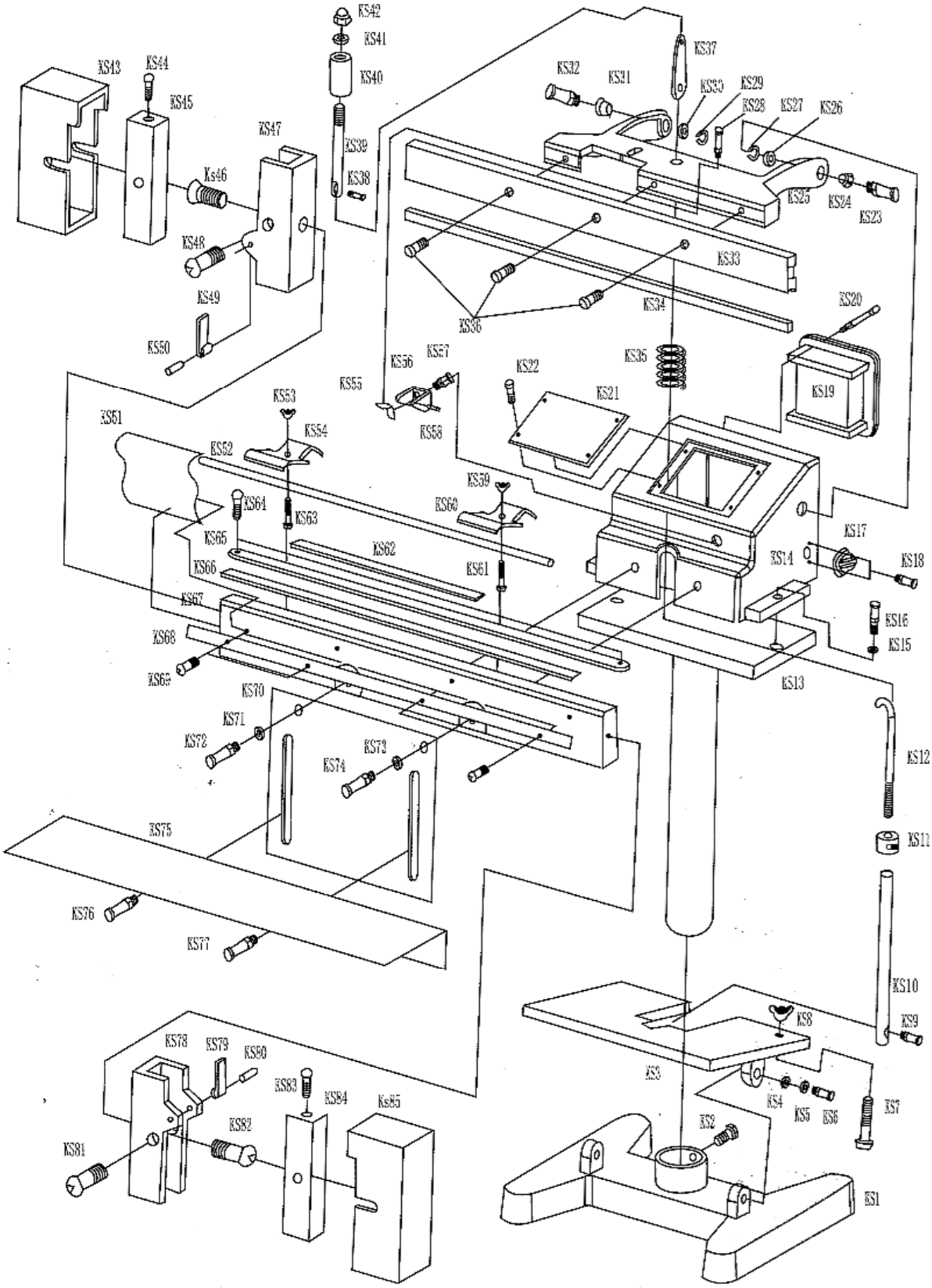



FIG.7. SHAFTS DIAGRAM FOR KS-F IMPULSET SEALER

## ● OPERATION INSTRUCTIONS ●

| NO | NAME | QUANTITY | NO | NAME | QUANTITY |
|---|---|---|---|---|---|
| KS1 | Machine base | 1 | KS44 | Cross recessed pan head screw | 1 |
| KS2 | bolt | 1 | KS45 | copper pole | 1 |
| KS3 | pedal board | 1 | KS46 | Countersunk flat head screws | 1 |
| KS4 | flat washer | 1 | KS47 | ceramic base | 1 |
| KS5 | nut | 2 | KS48 | Cross recessed pan head screw | 1 |
| KS6 | bolt | 2 | KS49 | metal pressor | 1 |
| KS7 | adjusting bolt | 1 | KS50 | pin | 1 |
| KS8 | butterfly nut | 1 | KS51 | tefelon | 1 |
| KS9 | bolt groups | 1 | KS52 | axes for the tefelon | 1 |
| KS10 | pedal board tie | 1 | KS53 | butterfly nuts | 1 |
| KS11 | connecting nut | 1 | KS54 | hold-down plate | 1 |
| KS12 | hoker tie | 1 | KS55 | tuching board | 1 |
| KS13 | upright column base | 1 | KS56 | approximaty switch shelf | 1 |
| KS14 | machine cover | 1 | KS57 | approximaty switch | 1 |
| KS15 | nut | 2 | KS58 | pin | 1 |
| KS16 | screw and flat gasket | 2 | KS59 | butterfly nuts | 1 |
| KS17 | wire guider | 1 | KS60 | pressor | 1 |
| KS18 | Cross recessed pan head screw | 2 | KS61 | bolt | 1 |
| KS19 | transformers and back cover | 1 | KS62 | insulated pad | 1 |
| KS20 | bolt | 4 | KS63 | bolt | 1 |
| KS21 | operation pannel | 4 | KS64 | Countersunk flat head screws | 2 |
| KS22 | Countersunk scres | 4 | KS65 | heater | 1 |
| KS23 | bolt groups | 1 | KS66 | insulated pad | 1 |
| KS24 | tetrafluorohydrazine convention | 1 | KS67 | lower sealing fasten base | 1 |
| KS25 | upper sealing shelf | 1 | KS68 | tefelon pressor | 1 |
| KS26 | tetrafluorohydrazine convention | 1 | KS69 | Cross recessed pan head screw | 1 |
| KS27 | flexible mat | 1 | KS70 | fasten board of working table | 1 |
| KS28 | inner hex screw and nut | 1 | KS71 | flat cushion | 2 |
| KS29 | flexible mat | 1 | KS72 | bolts froups | 1 |
| KS30 | flat washer | 1 | KS73 | flat mat | 1 |
| KS31 | tetrafluorohydrazine convention | 1 | KS74 | bolts groups | 1 |
| KS32 | bolt gruoups | 1 | KS75 | flat | 1 |
| KS33 | pper sealing silicon fasten block | 1 | KS76 | bolts groups | 1 |
| KS34 | silicon rubbers | 1 | KS77 | bolts groups | 1 |
| KS35 | spring | 1 | KS78 | ceramic base | 1 |
| KS36 | inner hex screw | 1 | KS79 | metal pressor | 1 |
| KS37 | small connecting board | 1 | KS80 | pin | 1 |
| KS38 | flexible pin | 1 | KS81 | Cross recessed pan head screw | 1 |
| KS39 | tie | 1 | KS82 | Countersunk flat head screws | 1 |
| KS40 | rubber cushion | 1 | KS83 | pin | 1 |
| KS41 | washer | 1 | KS84 | corn column | 1 |
| KS42 | cap nuts | 1 | KS85 | plastic cover | 1 |
| KS43 | plastice cover | 1 | | | |