

Double Impulse Portable Sealers Model: FKR-200A, FKR-300A, FKR-400A

Distributed By:

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General Information

Thank you for purchasing our FKR-A Series Double Impulse Portable Sealers.

This owner's manual contains information relating to your sealer. The manual will provide you with basic information concerning both operation and maintenance of your new machine. Please read it carefully as failure to do so may result in bodily injury and/or damage to the equipment.

Please fill in the information below. You will find the information on the machine identification plate. You will need this information when ordering replacement parts or making technical inquiries.

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EQUIPMENT INFORMATION

✤ Model #

Serial #

Purchase Date:

Reference # (found on packing slip)

✤ Owner:

Safety Instructions

WARNING! Below are general safety precautions and warnings that should be understood prior to setting up or operating your equipment. Read and fully understand all instructions and warnings prior to using this unit. Your safety is most important! Failure to comply with procedures may result in serious injury or property damage. Remember: <u>Your personal safety is your</u> <u>responsibility</u>.

Unsafe practices or unauthorized modifications could result in accidents or property damage. Failure to follow these safety rules and take necessary precautions can result in serious injury as well as damage to equipment.

- Never operate or service your sealer until you have read this manual completely and understand it fully.
- Plug the sealer into a standard 120 Volt, 60Hz wall outlet or surge protector.
- Do not use the sealer if the power cord, plug or any other parts are damaged. Be sure not to allow the power cord to drape into your work area. Check that all parts are operating properly and perform the intended functions. Check for any worn parts before starting operation. Check for all other conditions that may affect the operation.
- Reduce risk of unintentional starting. Make sure the power switch is in the "OFF" position before connecting to the power source.
- Always disconnect sealer from power source before servicing, changing accessories or cleaning the unit.
- To provide protection against the risk of electrical shock, the power connection must be properly grounded at all times.
- Do not leave the sealer unattended when in use. Disconnect the sealer from the power source before leaving the work area.
- Sealer is used solely for sealing thermoplastic materials. Using the machine for any other purpose can cause damage to the machine and operator.
- While operating machinery, wear close-fitting clothing and tie back long hair to prevent any external items from getting caught in the machine. Do not wear jewelry when operating the sealer.



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Never touch the heating element(s) with bare hand while the sealer is plugged into a power source, in operation or just finished operation. Touching heated areas may cause fire and/or severe burns.

- While machine is in operation, do not place fingers, tools, or other foreign objects on or into the machine. Do not place hands or fingers near pinch points. Do not touch machine while it is in operation. Perform all procedures carefully and watch where hands and fingers are at all times.
- The sealer is not water resistant or water proof. Spraying down the machine will damage machine or cause electrical shock. Do not submerge the sealer into water or liquid.
- Do not operate sealer in a corrosive or humid environment.
- Always keep the machine clean, lubricated and in good working condition. Follow any maintenance and lubrication procedures outlined in this manual. Make sure unit is disconnected from power source before cleaning.
- NEVER use any accessories or parts from other manufacturers. Machine should not be altered or modified using parts that are not genuine authorized parts. Doing so will VOID YOUR WARRANTY.
- When replacing the heating elements, always replace the PTFE adhesive under the heating element. A worn PTFE adhesive can cause the heating element to break. The PTFE adhesive works as a barrier between the body of the sealer and the element. Never allow the element to come in direct contact with the sealer body as that will damage the timer.
- Never leave the sealer unattended. Be safe, disconnect the sealer from power source before leaving work area.
- ✤ Always keep out of reach of children and pets.
- Close supervision is necessary when any appliance is near persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge. This sealer is NOT to be used by children or by persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge.
- ✤ DO NOT use the sealer outdoors.
- DO NOT use the sealer while under the influence of drugs, medications or alcohol.

SAVE THESE INSTRUCTIONS - REFER TO THEM OFTEN AND USE THEM TO INSTRUCT OTHERS.

Introduction

FKR-A Series double impulse portable sealers are lightweight and easy to use anywhere. The sealer is ideal for sealing polyethylene and laminated foils. Equipped with top and bottom heating elements, our double impulse sealers can seal thicker thermoplastic materials up to 20mil in total thickness. Applications include sealing around oddly shaped products including drum, box liners or sealing around large, irregularly sized objects.

Features of the FKR-A Series Double Impulse Portable Sealers

Your sealer is equipped with a wide range of standard features and capabilities.

- Impulse sealing no warm up time needed
- Lightweight and easy to operate
- Impulse heat with timer
- ✤ Available in 8", 12", and 16" seal lengths
- ✤ Seal width: 5mm (.19")
- ✤ Manufacturer spare parts kit includes: 2 heating elements

How Do FKR-A Double Impulse Portable Sealers Work?

Basic

Principles

Place material on lower jaw and activate by pressing jaws together

Our FKR-A Series double impulse portable sealers fire a short burst of electricity through a specially designed heating wire to weld thermoplastic materials together. The length of the seal time will depend on the sealing characteristics of the bag being sealed. The sealing process is simple: The operator places the bag between the sealing jaws and presses the jaws together to activate the unit. The operator retrieves the sealed bag and repeats the process. Our FKR-A Series double impulse sealers utilize twin heating element wires, one on the upper sealing jaw and one on the bottom sealing jaw providing greater heat penetration for sealing through thicker materials (up to 20mil total thickness).

Specifications

	FKR-200A	FKR-300A	FKR-400A
Power	110V/60Hz	110V/60Hz	110V/60Hz
Watts	200W	300W	400W
Sealing Length / Width	7.8" / 5mm	11.8" / 5mm	15.7" / 5mm
Power Cord Length	5ft	5ft	5ft
Handle Cord Length	7ft	7ft	7ft
Handle Dimensions	8.9" x 10.2" x 4.7"	13" x 10.2" x 4.7"	17" x 10.2" x 4.7"
Control Box Dimensions	8.7" x 4.9" x 6.9"	8.7" x 4.9" x 6.9"	8.7" x 4.9" x 6.9"
Shipping Dimensions	21" x 14" x 9"	21" x 14" x 9"	21" x 14" x 9"
Gross Weight	15-lbs	19-lbs	20-lbs

Getting to Know your Portable Sealer

FKR-A Series Double Impulse Portable Sealers are simple and efficient sealing machines.



Figure 1. FKR-A Series Double Impulse Portable Sealer Overview

Operating your Sealer

Important

Read this manual carefully, and make it available to everyone connected with the supervision, maintenance, or operation of this machine. Additional copies are available at your request. (Contact your distributor for this information.) Be very careful when operating, adjusting, or servicing this equipment. If in doubt, stop and obtain qualified help before proceeding.

Installation

Place the portable in the desired location with the required electrical power source available. (See power requirements.) Make certain that proper electrical wiring is provided to guard against low voltage. If the voltage is too low, the equipment will not function properly.

Plug the handle to the main base of the machine.



Figure 2. Plug handle to base of machine.

Finding the proper location is a most important function of the initial set-up. One must take several factors into consideration:

- ✤ Adequate power source
- Relationship to source of product
- Relationship to any conveyors necessary to remove finished product
- Convenience of operator

Operation

- 1. Before operating, check the heating element, PTFE cover, PTFE adhesive and the silicone rubber.
- 2. Insert the power cord into the correct receptacle (120V).
- 3. Turn the power switch on.
- 4. Set the timer knob to the lowest setting. Always start with a low setting and increase gradually as needed.
- *5.* Place material to be sealed between the jaws. Hold the handle down firmly to activate the sealing cycle. The timer light will turn off when seal has been completed.
- 6. When red light turns off, keep holding the handles firmly for an additional 2-3 seconds. For a high quality seal, seals must cool under pressure. We usually recommend a congeal setting of at least 2x that of the heat setting but every bag will have variations. Thicker materials will require a longer cool (congealing) time.

Tips for Successful Sealing

- 1. If the seal is broken or damaged, decrease the sealing time.
- 2. If the seal is not fully welded, increase the sealing time.
- 3. If the sealing material sticks to the sealing pad, decrease the congealing time.
- 4. If the width of the seal is not perfect or does not match the size of the element, increase the congealing time.
- 5. Always keep the sealer clean. Remove any residue found on the platform and PTFE cover. Silicone spray may be used for this purpose.
- 6. When replacing the heating elements, always replace the PTFE adhesive under the heating element. A worn PTFE adhesive can cause the heating element to break. The PTFE adhesive works as a barrier between the body of the sealer and the element. Never allow the element to come in direct contact with the sealer body as that will damage the timer.



Maintenance

The following maintenance procedures should be followed to ensure the longevity of your FKR-A Series double impulse portable sealer.

Inspection and Cleaning

- 1. Inspect your machine daily.
- 2. Use a clean cloth to remove any plastic residue remaining on the PTFE cloth.
- 3. When replacing the elements, always check the condition of the bottom PTFE tape.
- 4. Check the condition of the silicone rubber for wear and burns. A damaged silicone rubber will affect the quality of the seal.

Replacement Kit Instructions

Our FKR-A Series double impulse sealers will require new heating elements and PTFE from time to time. Heating elements will break through wear and tear. A good rule of thumb is to replace the PTFE adhesive every time you change your heating element. The PTFE cover prevents the plastic or other thermoplastic material you are sealing from sticking to the heating element.

Replacement kits are available from your distributor. Kits include (2) heating elements, (2) PTFE Covers, and (2) PTFE adhesives. For replacement kit part #s, refer to your model #.

	FKR-200A	FKR-300A	FKR-400A
Replacement Kit	RK-8H5-FKR-200A	RK-12H5-FKR-300A	RK-12H5-FKR-400A
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Heating Element	HE-8-5-FKR-200A	HE-12-5-FKR-300A	HE-16-5-FKR-400A
PTFE Adhesive	TA-8	TA-12	TA-16
PTFE Cover (1" wide)	TC-8-1	TC-12-1	TC-16-1

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To install your replacement kit on your sealer, turn off power and unplug sealer.

Removing Worn Parts.

1. Loosen the four screws on the PTFE cover plate on both sides of the sealer body. Remove the PTFE cover.



Figure 3. Loosen screws on PTFE plate.

Unscrew the cap and nut that are holding the heating element (Figure 4). To remove the heating element, use a screw driver to press down on the mounting screw which is spring loaded (Figure 5). When you release one end of the element, the other element should release easily.



Figure 4. Loosen the cap and nut holding the heating element.



Figure 5. Remove heating element by pressing down on the mounting screw.

3. Peel the PTFE adhesive from the sealer's body.

Installing New Replacement Parts.

1. Remove the backing of the liner found on the PTFE adhesive.

- 2. Apply the adhesive to the sealer's sealing platform. Tuck the adhesive close to the mounting screw as possible. Note: The PTFE adhesive serves as a barrier between the sealer body and element. Never allow the element to come in direct contact with the sealer body. A good rule of thumb is to replace the PTFE adhesive every time you change the element.
- 3. Hook one end of the element to the mounting screw. Place the sealer on its side so that mounting screw is touching the table. To attach the element to the other side, press down on the mounting screw while at the same time use a screw driver to press down on the mounting screw on the other side of the sealer. Both mounting screws should be held down at the same time and this will allow you to attach the other end of the element. Attach cap and nut.
- 4. Replace the PTFE cover.
- 5. Replace the PTFE cover on both sides. Tighten the screws on the PTFE cover plates when the PTFE cover is position smoothly on top of the element. Note: The PTFE cover prevents the plastic or any thermoplastic material you are sealing from sticking to the heating element.

Parts Diagram





Wiring Diagram of the PC Board Instructions: Connect the PC Board 3 and 4 with the input control Connect the PC Board 2 with the Neutral current (N) Connect the PC Board 1 with L1 SX: Board button 1& Travel switch The aviation plug 3 and 4 are the heating control line. Connect the aviation plug 2 with L1 Connect the aviation plug 1 with the PC Board 1

Figure 6. Electric Circuit Diagram Overview





Figure 7. Spare Parts Diagram Overview

Item	Part#	Description	Comments
RKs	RK-Model#	REPLACEMENT KITS Incldues (2) elements, (2) PTFE cover, (2) PTFE adhesive	specify model # when ordering
1		Handle	
2		Handle spring	
3		Screw	
4		Heating block	
5		Insulating panel	
6	TC-specifymodel#	PTFE cover	specify model # when ordering
7	HE-specifymodel#	Heating Element	specify model # when ordering
not shown	TA-specifymodel#	PTFE adhesive	specify model # when ordering
not shown	HTA-FKRA	Heating terminal assembly (screw)	
8		Fixed aluminum shim	
9		Standing leg	
10		Cover plate	
11		Power box	
12	PCB-FKR-A	PC board	
13		Control panel	
14	TRNS-specifymodel#	Transformer	specify model # when ordering
15		Rubber foot	
16		Lifting handle	
17		Timer knob	
18	MSW-FSLH-FKRA	Microswitch	

Figure 8. Spare Parts	s Diagram Overview
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Troubleshooting

Problem	Possible Causes	Solution
No sealing Timer lights off	1. Disconnected power cord 2. Power cord is broken 3. Transformer is broken	1. Check or change plug 2. Replace power cord 3. Replace the transformer
No sealing Timer lights are on	 Heating element is broken Poor contact at heating terminal blocks Microswitch malfunction Microswitch out of place 	 Replace the heating element Clean, tighten or change the heating terminal blocks Replace microswitch Adjust microswitch
Burnt PTFE cloth	1. Timer malfunction 2. Timer setting too high	1. Replace timer 2. Decrease timer setting
Broken heating element	1. Worn PTFE adhesive	1. Replace PTFE adhesive
Wrinkled seal	 Seal time is set too high Cooling (congeal) time is too short 	1. Decrease 2. Increase congealing time
Imperfect seal	1. Worn PTFE cloth 2. Worn silicone rubber	1. Replace PTFE cloth 2. Replace the silicone rubber
Burnt seal	1. Seal time is set too high	1. Decrease seal time
No seal	1. Seal time is set too low	1. Increase seal time
Seal sticking to PTFE cloth	1. Worn or dirty PTFE cloth 2. Worn or dirty silicone rubber	1. Replace or clean PTFE cloth 2. Replace or clean silicone rubber
Seal time is not adjustable	1. Circuit board is damaged	1. Replace timer