



Manual 5050-0617 Last revised on 3/22/2023

This manual applies to:

Model	Required Power	Part Number
SF200	120 VAC	8007-0595-P1

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General Information

Introduction

Thank you for purchasing the SF200, Automatic Solder Feeder. This manual will provide you with the information necessary to properly set up, use, and maintain your system. Please read this manual thoroughly before using the system.

Specifications

Power Consumption	6 Watts
Motor Rate	DC 24 Volts 3.2 Watts
Solder Feed Time	0-7 Seconds
Solder Feed Speed	4.5 to 26 mm (0.14 to 1 in.) per second
Solder Feed Quantity	0 to 182 mm (0 to 7.2 in.)
Solder Return Quantity	0 to 5 mm (0 to 0.2 in.) (Fixed Speed)
Outer Dimensions	107(W) x 110(H) x 215(D)
Weight	Approx. 1.5kg or 3.3 pounds

- This product is protected against electrostatic discharge. (See page X "CAUTION")
- Specifications and design are subject to change without notice.
- Maximum quantity of usable solder is 1 kg (2.2 pounds).

Usable Solder Diameter		
(mm)	0.6, 0.8, 1.0, 1.2	
(in)	0.024, 0.031, 0.039, 0.047	

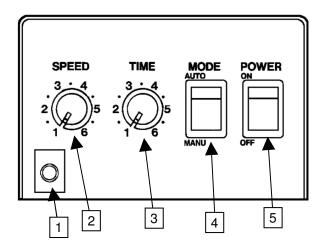
Safety Guidelines

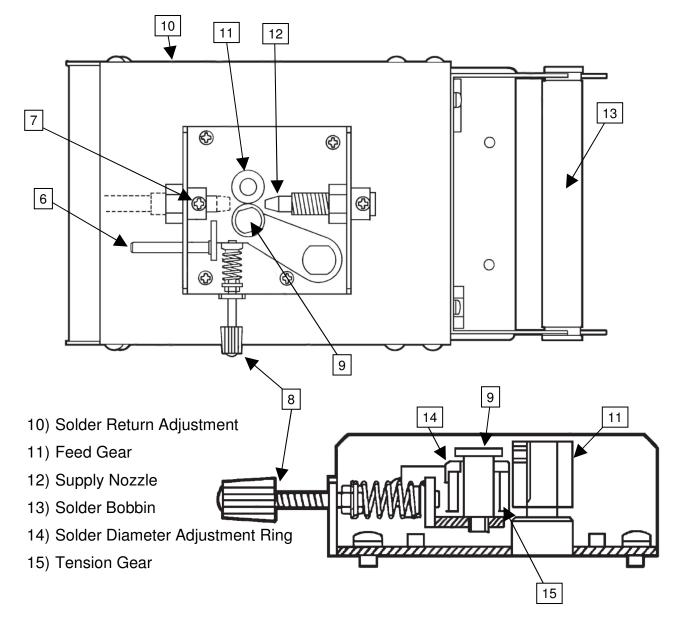
The following are safety precautions that personnel must understand and follow when using or servicing this product.

- Setting up should be done while the soldering iron is cool, or you may get burnt.
- Do not force the guide pipe to bend or turn as this may result in damage.
- Do not operate while feed tube is bent at sharp angles as it may cause clogging.
- Input of switching is no-voltage input. Do not apply voltage to the jack for switch.
- Periodically remove the guide pipe and clear out any flux from clogging the tube.
- Do not force the solder return adjustment screw, as this could cause damage.
- **POTENTIAL SHOCK HAZARD** Repair procedures on PACE products should be performed by qualified service personnel. Line voltage parts may be exposed when the equipment is disassembled. Service personnel must avoid contact with these parts when troubleshooting the product.
- Tips and Heaters are hot when the handpiece is powered on and will remain so for some time after power off. **DO NOT** touch the heater or the tip. Severe burns may result.
- PACE Tip & Tool Stands are designed specifically for use with the associated handpiece and houses it in a manner that protects the user from accidental burns.
- Always use PACE systems in a well-ventilated area. Fume extraction systems are highly recommended to help protect personnel from solder flux fumes.
- Exercise the proper precautions when using chemicals (e.g., solder paste or flux). Refer to the Material Safety Data Sheet (MSDS) supplied with each chemical and adhere to all safety precautions recommended by the manufacturer.
- WARNING The handpiece must be placed into the stand when not in use.
- This equipment is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the equipment by a person responsible for their safety.
- Do not replace the power supply cord with one that is inadequately rated.

Power Supply Features

- 1) Foot Pedal Jack
- 2) Feed Speed Control Knob
- 3) Feed Time Control Knob
- 4) Mode Selection Switch
- 5) Power Switch
- 6) Release Lever
- 7) Securing Screw
- 8) Tension Adjustment Knob
- 9) Tension Gear Guide Shaft

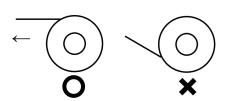




System Set-Up

Set up the system using the following steps.

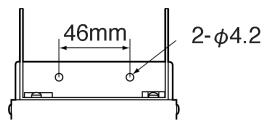
- 1. Attach the Solder Feeder Tube Assembly to your iron following the instruction sheet included in the package.
- 2. Connect the Feed Nozzle
 - a. Loosen the securing screw, called as item 7 in the Power Supply Features diagram.
 - b. Insert the receiving end of the Solder Feeder Tube into the Feed Port located on top of the Solder Feeder unit. The receiving end should slide completely into the Feed Port, with the base of the receiving end being flush to the port.
 - c. Gently tighten the securing screw to hold the receiving end in place. Be careful that the securing screw is not overtightened as the receiving end could be damaged.
- 3. Connect the Foot Pedal
 - a. Plug the foot pedal into the appropriate jack located on the front of the Solder Feeder unit.
- 4. Setting the Solder. If there is any solder in the feed tube, remove it before installing new solder.
 - a. Slide the spool of solder onto the Solder Bobbin onto the solder bobbin and place on the holder



- located at the rear of the station. Be sure the solder is feeding from the top of the bobbin, as shown in the diagram to the left.
- b. Feed the solder through the supply nozzle.
- c. While holding the release lever, feed about 10mm or ½" of solder between the tension gears and into the receiving end of the feed tube

assembly.

- d. Turn the power switch to ON and set the feed mode to MANUAL
- e. Press the feed switch, or footswitch, and begin feeding solder.
- 5. Changing the Solder Diameter. When changing to a different solder, the SF200 will likely need some adjustments or even a different Solder Guide Nozzle. To change the solder, follow the steps below.
 - a. Turn the unit off, hold open the release lever and roll any remaining solder back onto the spool and remove.
 - b. Loosen the tension at the solder feed gears by tightening (turning clockwise) the Tension Adjustment Knob.
 - c. Replace Solder Guide Nozzle if needed, install new solder spool onto the Solder Bobbin, readjust Tension Adjustment Knob for the new solder.
- 6. Vertical Mounting. The SF200 can be hung vertically from a wall or shelf, facing down, using the two 4.2mm holes found near the solder bobbin at the back of the unit.



Operation

<u>Mode</u>

- **AUTO MODE** If you press the feed switch or foot pedal, solder will be fed using the set time and speed settings, regardless of how long the switch is pressed.
- **MANUAL MODE** Pressing the feed switch or foot pedal will feed solder at the set speed until the switch or pedal is released.

Adjustment of the Nozzle Position

If there is solder in the guide pipe, pull it out before adjusting the nozzle position.

• Loosen the pipe securing nut, turn the guide pipe to adjust the position of nozzle, then tighten the pipe securing nut.

Do not overtighten knurled nut or use pliers to tighten. Do not tighten nut if feeder tube is removed, unrepairable damage to collet may occur.

A CAUTION

Do not overtighten the pipe securing nut, or the guide pipe may break. Only adjust the nozzle position when the soldering iron tip is cold, otherwise you may get burned.

Setting for Feed Time and Feed Speed

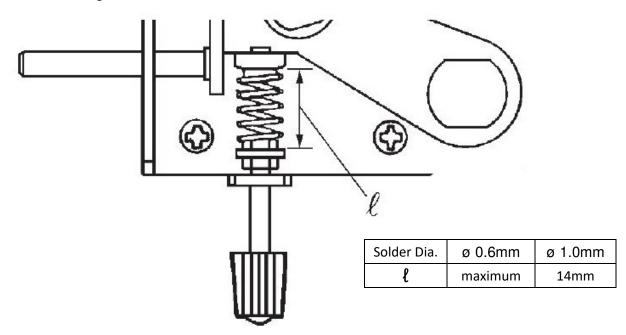
Set the speed before setting the time. The speed can be set when using either AUTO or MANUAL mode. The time can only be set in AUTO mode.

Adjustment of Tension

When adjusting the tension, there are two points to consider.

- Tension should be high enough that feed gears are not slipping against the solder wire.
- The tension should be loose enough to prevent excessively forcing solder into a feed tube that is clogged.

When using fine solder (around 0.6mm/0.024 in or 0.8mm/0.031 in thick), set the tension loosely. Refer to chart and diagram below.



Adjusting the Solder Return

The SF200 can retract a specified length of solder at the end of a feed operation, which may be useful when dealing with automated soldering equipment. The amount of solder returned into the feed line can be adjusted between 0-5mm (0-0.2 in). Solder will be taken up instead of fed out if the amount of solder return is bigger than the amount of solder feed. Please use the smallest amount of solder return possible to prevent issues. If the working end of the solder wire is returned to the nozzle, there may be issues with flux build-up. To adjust the return amount, insert a flat-head screwdriver into the hole on the left side of the station to access the return adjustment screw. Turn the screwdriver clockwise for more return or counterclockwise to reduce the amount of solder return.

Troubleshooting

If the solder is not feeding smoothly through the machine, please consider the following.

- Are you using proper parts for the diameter of solder?
- Is the tension adjusted properly?
- Is the feed tube bent or malformed?
- Is solder stuck in/on the feed gear or tension gear?
- Has the nozzle become clogged by flux or other debris?
- Is the Foot Pedal plug connected correctly?
- Has the fuse blown?
- Is the power cord connected properly?



This product includes features such as electrically conductive plastic parts and grounding of the handpiece and station for protecting the soldering work from Electro-Static Discharge. Be sure to observe the following.

- 1. The handle and other plastic parts are not insulators, they are conductors. When repairing or replacing parts, be careful of exposing live electrical parts or of damaging the electrical insulation.
- 2. Be sure to ground the unit during use.

Spare Parts

Description	PACE Part Number
Solder Feeder Tube Assembly	1325-0018-P1
Solder Feeder Adaptor Clip	1134-0092-P1
Nozzle, Solder Guide, 0.6mm	1259-0180-P1
Nozzle, Solder Guide, 0.8mm	1259-0181-P1
Nozzle, Solder Guide, 1.0mm	1259-0182-P1
Nozzle, Solder Guide, 1.2mm	1259-0183-P1

PACE LIMITED WARRANTY STATEMENT

Limited Warranty

Seller warrants to the first user that products manufactured by it and supplied hereunder are free of defects in materials and workmanship for a period of one (1) year from the date of receipt by such user. This Warranty as applied to blowers, motor pumps, x-ray tubes, lenses, optical/lighting probes and cameras is limited to a period of six (6) months. Monitors, computers and other brand equipment supplied but not manufactured by PACE are covered under their respective manufacturer's warranty in lieu of this Warranty.

This warranty does not cover wear and tear under normal use, repair or replacement required as a result of misuse, improper application, mishandling or improper storage. Consumable items such as tips, heaters, filters, etc. which wear out under normal use are excluded. Failure to perform recommended routine maintenance, alterations or repairs made other than in accordance with Seller's directions, or removal or alteration of identification markings in any way will void this warranty. This warranty is available only to the first user, but the exclusions and limitations herein apply to all persons and entities.

SELLER MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Seller will, at its option, repair or replace any defective products at its facility or other locations approved by it at no charge to user or provide parts without charge for installation by the user in the field at user's expense and risk. User will be responsible for all costs of shipping equipment to Seller or other location for warranty service.

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