



# NovaStrip Heat Tile Machine Operations & Maintenance

N1026  
N378



[www.Novatekco.com](http://www.Novatekco.com)

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**Specifications subject to changes without notice!**

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# OPERATION AND MAINTENANCE MANUAL FOR

N1026-N378

## NOTICE

FOR PROFESSIONAL USE ONLY



**WARNING**



IMPORTANT SAFETY INFORMATION ENCLOSED.

READ AND UNDERSTAND THIS MANUAL BEFORE OPERATING THIS PRODUCT.

IT IS YOUR RESPONSIBILITY TO MAKE THIS SAFETY INFORMATION AVAILABLE TO OTHERS THAT WILL OPERATE THIS PRODUCT.

FAILURE TO OBSERVE THE FOLLOWING WARNING COULD RESULT IN INJURY.



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### PLACING MACHINE IN SERVICE

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- Always install, operate, inspect, and maintain this product in accordance with all applicable standards and regulations (local, state, country, federal, etc.).
- Always use proper gauge cord with correct connections.
- Be sure all cords are securely connected to the recessed male plug.
- Ensure an accessible emergency shutoff when your machine is connected to power. Make others aware of its location.
- Do not use damaged, frayed, or deteriorated electrical cords or connections.
- Do not leave machines in operation unattended.
- Keep all electrical connections clear of water or other liquid hazards.
- Always turn off, unplug, AND COOL DOWN your machine before performing any maintenance.
- Do not operate the machine while flammable or volatile liquids such as gasoline, diesel, or jet fuel are present. Failure to do so can result in explosion.
- Keep work area clean, uncluttered, and illuminated.
- Do not remove any labels. Replace any damaged labels.

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### USING THE MACHINE

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- Always wear protection when operating or performing maintenance.
  - Always use Personal Protective Equipment appropriate to the work being performed. This may include dust mask or other breathing apparatus, safety glasses, ear plugs, gloves, apron, safety shoes, hard hat, and other equipment.
  - If applicable, prevent exposure and breathing of harmful dust and particles:
    - Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
      - Lead from lead based paints,
      - Crystalline silica from bricks and cement and other masonry products
      - Arsenic and chromium from chemically treated lumber
    - Your risk from these exposures varies, depending on how often you do this type of work.
  - Keep others a safe distance from your work area, or ensure they use appropriate Personal Protective Equipment.
  - This machine is not designed for working in explosive environments, including those caused by fumes and dust, or near flammable materials.
  
  - Ensure machine in "off" position before connecting to power.
  - Do not carry or drag the machine by the cord.
  - Do not operate or maintain the machine under the influence of medication, drugs, or alcohol.
  - Never use a damaged or malfunctioning machine.
  - Do not modify the machine, safety devices, or accessories.
  - Do not use this machine for purposes other than those recommended.
  - Only use accessories recommended by Novatek Corp.
  - Whenever applicable, wear safety shoes, hard hat, safety goggles, gloves, dust mask, and any other appropriate protective clothing in the work area.
  - Do not indulge in horseplay. Distraction can cause accidents.
  - Do not clean machine parts with diesel fuel or any other petroleum distillates.
  - Do not operate the machine with broken or damaged parts.
  - This tool is not designed for working in explosive atmospheres.
  - Use common sense. This machine operates under high temperatures. Do not move, touch, store, or perform maintenance until you are certain the machine is cool.
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## SECTION I

### INTRODUCTION

This operation and maintenance manual is furnished with each **NovaStrip 1026** unit. It outlines general equipment use and the operation and maintenance requirements for efficient and safe operation.

### **READ ALL INSTRUCTIONS AND DATA IN THIS OPERATION AND MAINTENANCE MANUAL PRIOR TO OPERATION OF THIS EQUIPMENT.**

These instructions are for your protection and convenience. Please read them carefully since failure to follow the precautions could result in injury. Whenever using electric powered equipment, basic safety precautions should be followed.

If after reading this manual anything seems unclear, contact a **NOVATEK** authorized distributor or **NOVATEK** directly by dialing 1-866-563-7800.

## SECTION II

### GENERAL DESCRIPTION

The **NovaStrip 1026**, a portable infrared heating unit designed and manufactured for **Novatek**, softens tile adhesive for complete intact tile removal. This unit is capable of heating up to eight (8) 9" x 9" tiles or six (6) 12" x 12" tiles within a single pass.

The **NovaStrip 378**, a portable infrared heating unit designed and manufactured for **Novatek**, softens tile adhesive for complete intact tile removal. This unit is capable of heating up to eight (3) 9" x 9" tiles or six (2) 12" x 12" tiles within a single pass.

This unit consists of a heat panel with individually wrapped heating elements, which are removable if damaged. This unit also includes a built in thermo-well for accurate temperature reading and control. It features a Central Processing Unit allowing for optimum heat and timing control. The unit also utilizes a removable handle for ease of transportation and/or shipping.

- ❖ **The NovaStrip 1026 requires a 220/240v, single phase power source** which can be plugged into a 50 amp outlets or service.
- ❖ **The NovaStrip 378 requires a 120V, single phase power source** which can be plugged into a 15 amp outlets or service.
- ❖

**WARNING** DO NOT use circuits exceeding specified voltage. Higher voltage will damage controls and could cause shock or fire hazards. Do not wire to multi phase power. This will damage the unit and void warranty.

### PRIOR TO START UP

Prior to tile removal with the EcoStrip provide the following:

- A. Make sure to clean all dirt and debris from the floor surface prior to tile removal.
- B. Whenever possible, strip excess wax and or coating build-up on floor surface.
- C. Familiarize yourself with all fire extinguishers, fire safety equipment, and emergency exits.
- D. Remove any dust, dirt or waxy residue build-up on heat panel surface.
- E. Remove any dust or dirt build-up on the controls and control panel.
- F. Make sure you have heat resistant gloves for the HOT tile removal.
- G. You might have to put on the handle if the unit was shipped to your location. When you put the handle on make sure to connect the power plug.

### START-UP

- A. Position unit over a section of concrete to allow unit to heat to desired temperature. If concrete area is unavailable, position the unit over tile being removed.
- B. Check unit to make sure breaker switch is in the off position.

- C. Plug power cord into a grounded 20Amp outlet.
- D. Turn breaker switch to the ON position. The timer light will turn on to indicate the unit is heating.
- E. Heat panel will take about 15-20 minutes to heat to temperature.
- F. After 20 minutes, the timer will expire and the machine will shut off. The timer can be reset by tilting the unit towards the operator.

**CAUTION:** While heat panel is heating to temperature if positioned over tile, check the tile periodically to insure you are not over heating the tile. Unit may have to be moved to a new section of tile before unit is up to full temperature.

## SECTION III

### ROUTINE MAINTENANCE

Inspect the unit for any loose or damaged parts prior to each use.

**CAUTION:** Make sure power supply is off and cools prior to inspection.

1. Wipe outside surfaces of unit to remove accumulated dust or dirt. Clean out dust and dirt from control panel. NEVER USE SOLVENTS.
2. Periodic checks should be made to ensure the timer CPU is working properly.
3. Clean face of heat panel daily by wiping surface with a damp towel. This will help remove accumulated wax, dust, or dirt built up on the face of panel.

**CAUTION:** Make sure power supply is off and the machine is cooled down prior to cleaning

4. Inspect power connection to heat panel and connection to the thermocouple. Make sure connectors are secure to the power lines and that there are no bare wires showing. If connectors are loose or bare wires are showing electrical shock may occur.

### CONTROL DESCRIPTIONS

#### 1. Key Switch

This on/off switch has been included into this system to provide power to the controls and heater panel when set in the "ON" position. When the switch is in the "OFF" position, the key may be removed for safety against any unauthorized use.

#### 2. Emergency Stop Button

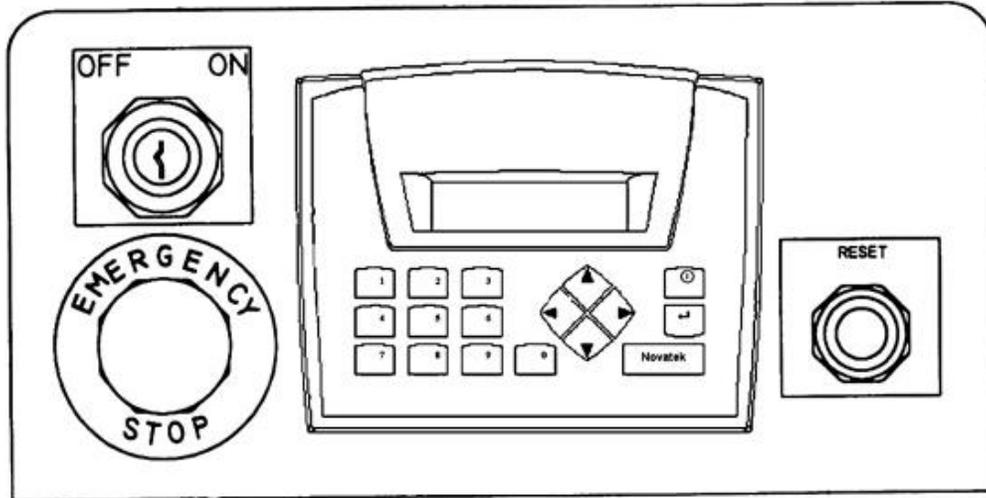
This has been included to cut power to the controls and heat panel immediately in case of emergency. To re-activate the unit, the button needs to be restored to the "ON", pulled out position.

#### 3. Semiconductor Fuse

This semiconductor fuse is used to protect the solid state relay and the other controls against any power surges within the line. If there is no power to the timer/heater panel or if you lose power suddenly, the semiconductor fuse may be blown. To replace the fuse or check condition of the fuse, you must open the control panel. The casing of the fuse will be discolored if blown. If fuse is blown, remove with pliers/wrench, and replace with new part. **CAUTION:** Make sure unit is unplugged from power source prior to fuse verification.

#### 4. Temperature / Timer Controller / CPU

The multi display temperature/ timer controller is pre-set from the factory (Temperature 400- 625 Degrees and Timer 59.99 minute max) allowing the operator to increase or decrease the temperature and timing set values. Once the set time runs out, the operator has the option to press the reset button, which will start the timing cycle over. The operator may choose to allow the set time to run out, which will shut off power to the heat panel allowing the panel to cool to room temperature. The controller is linked to a thermocouple, which is attached to a thermo well on the heat panel, sending precise readings back to the controller. This will allow the operator to adjust the unit temperature (in degrees Fahrenheit) to meet your specific application.



**N1026/N378 Control Panel**

### **5. Circuit Breaker**

This is attached to the unit's main power supply to help protect the unit's controls against power surges. This is also included to help protect the operator against electrical shock.

## **SECTION IV**

### **PRIOR TO START-UP**

Prior to attempting tile removal with the Novastrip ensure the following:

1. Make sure to clean dirt and debris from floor surface prior to tile removal.
2. Whenever possible, strip excess wax and/or coating build-up on floor surface.
3. Familiarize yourself with all fire extinguishers, fire safety equipment, and emergency exits.
4. Remove any dust, dirt, or waxy residue build-up on heat panel surface.
5. Remove any dust or dirt built-up on the controls and control panel.
6. Make sure you have heat resistant gloves for the HOT tile removal
7. You might have to install the handle if the unit was shipped to your location. When installing the handle, make sure to connect the power plug and thermocouple.

### **START - UP**

1. Position unit over a section of concrete to allow unit to heat to desired temperature. If concrete area is unavailable position unit over tile being removed.
2. Check unit to make sure breaker and key switch are in the off position.
3. Plug power cord into unit and be sure to twist cord connector ¼ turn clockwise to lock the plug into position.
4. Switch main breaker to the ON position.
5. Turn Key switch to the ON position. The temperature / timer controller will light and run a self diagnosis test which will take about five (5) seconds. If not, make sure Emergency STOP Button is in the pulled out position and the circuit breaker is in the ON position.

**CAUTION:** At this point unit is on and panel is heating.

6. Heat panel will take about 15-20 minutes to heat to the factory preset temperature. Novastrip is positioned over tile, check tile periodically to ensure you are not over-heating the tile. Unit may have to be moved to a new section of tile before unit is up to full temperature.
7. Once the unit reaches full temperature, reset timer to begin the timing function. This timer may be reset to meet your needs (see SECTION V) with a maximum preset time of 59.99.

**NOTE:** Once the timer reaches ZERO, power is cut to the heat panel, push the reset button to start elapse time or unit will proceed to cool down mode.

## SECTION V

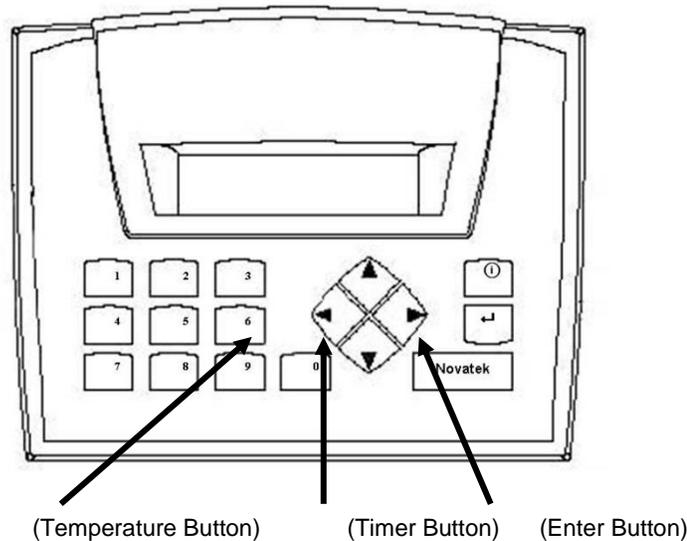
### SETTING CONTROLLER FUNCTIONS

#### Temperature / Timer Controller

A. NOVATEK has set-in parameters which will allow you to increase or decrease the temperature. Press the temperature button and then the up arrow to increase, or down arrow to decrease the set temperature by increments of 5 degrees. Once you reach the lowest set point (400°) or highest set point (625°) the LED reading will not allow you to proceed past these parameters. You may also use the key pad to set your desired temperature setting.

#### Timer

B. The timer has been preset for a maximum time of 59.99 which may be adjusted to meet your timing needs. Press the timer button and then the up arrow to increase or down arrow to decrease the set time. Once you reach the lowest set parameter (00.01) or highest set parameter (59.99), the LED reading will not allow you to proceed past these parameters. You may also use the key pad to set your desired timing parameter between these points. Once you reach your desired setting press the enter button (↵) to update your new settings in the controller. When a timing cycle has been activated the clock will count down. When the count reaches zero an alarm will sound. Press the reset button to re-start cycle and return power to the heat panel. If reset button is not pushed within 20 seconds cycle will end and unit will go into cool down mode.



**WARNING:** Attempting to circumvent preset factory parameters will results in the void of all warranties.

## SECTION VI

### REMOVAL PROCEDURE

At this point the heat panel has heated to full temperature ready for heat application. Different floor characteristics such as the tile thickness, tile adhesive, or just the material make up of the tile will result in different heat-up and removal times. A routine will quickly be established for each new removal application.

Removal Procedure:

1. Place NOVASTRIP 1026 or 378 over designated area of tile to be removed.
2. Push the timer reset button to start / continue the preset time cycle.
3. Once the timer reaches zero an audible alarm will sound. This means it is time to move the unit to a new section of tile to be removed. Press reset button.

4. While the unit is heating the new section of tile, remove the previously heated tile with a long reach scraper.
5. Once you have completed your removal application for the day, allow the time cycle to reach zero (alarm will sound) or press Emergency Stop Button.
6. This will shut off the power to the heat panel and the controller will go into cool down mode which will allow it to return to room temperature.
7. Place a block under the front of the unit's base shroud. This will allow air to circulate under the shroud helping to accelerate the cooling process.
8. The controller display will indicate the cooling process.
9. Once the controller displays "safe to transport" and the heat panel sticker on top of base shows 95° or less, the unit is ready to be moved.
10. Turn the key switch to the OFF position.
11. Switch circuit breaker to the OFF position.
12. Disconnect plug from power source.

**The NOVA STRIP 1026 or 378 can now be safely transported.**

**WARNING**

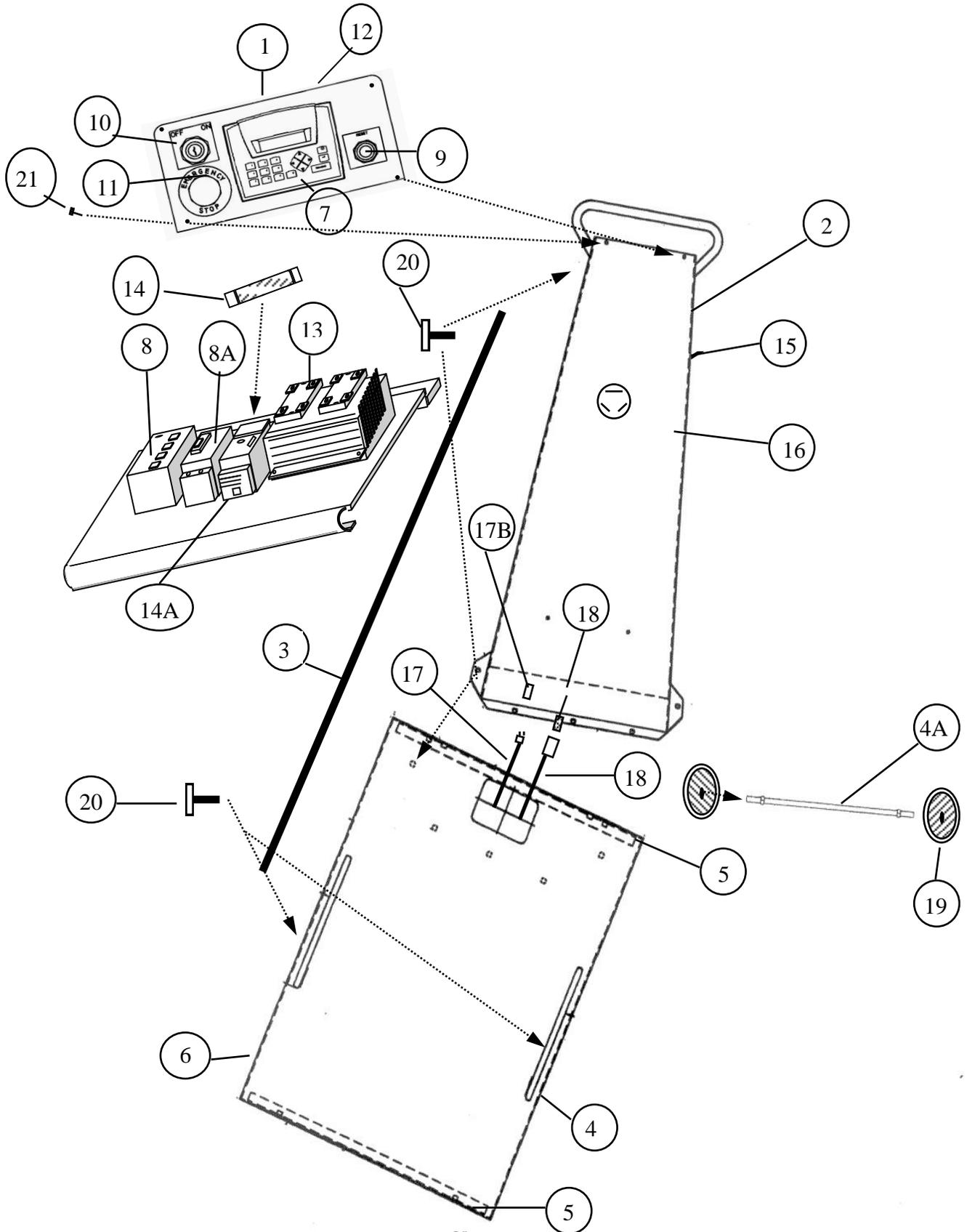
**The unit shroud may still be quite hot! Move the unit with severe caution, wear heat resistant gloves.**

**PARTS BREAKDOWN N1026**

<b>Ref.</b>	<b>Part No.</b>	<b>Description</b>
1	N102601	CONTROL PANEL
2	N102602	HANDLE ASSEMBLY
3	N102603	HANDLE SUPPORT BARS
4	N102604	BASE ASSEMBLY
4A	N102605	AXLE
5	N102606	PANEL RETAINER BRACKETS
6	N102607	HEAT PANEL
7	N200510	TEMPERATURE / TIMER CONTROLLER
8	N200600	POWER SUPPLY - DC CONVERTER
8A	N200610	THERMOCOUPLE TRANSMITTER
9	N401199	RESET BUTTON
10	N401201	KEY SWITCH
11	N401203	EMERGENCY STOP BUTTON
12	N401305	AUDIBLE ALARM
13	N601625	SOLID STATE RELAY
14	N500300	FUSE
14A	N500301	FUSE HOLDER
15	N500350	50 AMP BREAKER
16	N702627	RECESSED 4 WIRE 50 AMP PLUG
16A	N702626	FEMALE 4 WIRE 50AMP CONNECTOR
17	N401400	THERMO COUPLE
17B	N401402	THERMO COUPLE PLUG "FEMALE"
18	N401500	POWER CONNECTORS
19	N061500	WHEELS
20	N805381	GRIP KNOBS
21	N142078	SOCKET HEAD CAP SCREWS

**SEE DIAGRAM OF UNIT AND DIAGRAM OF CONTROL PANEL ON NEXT PAGE.**

**DIAGRAM OF UNIT AND CONTROL PANEL N1026**

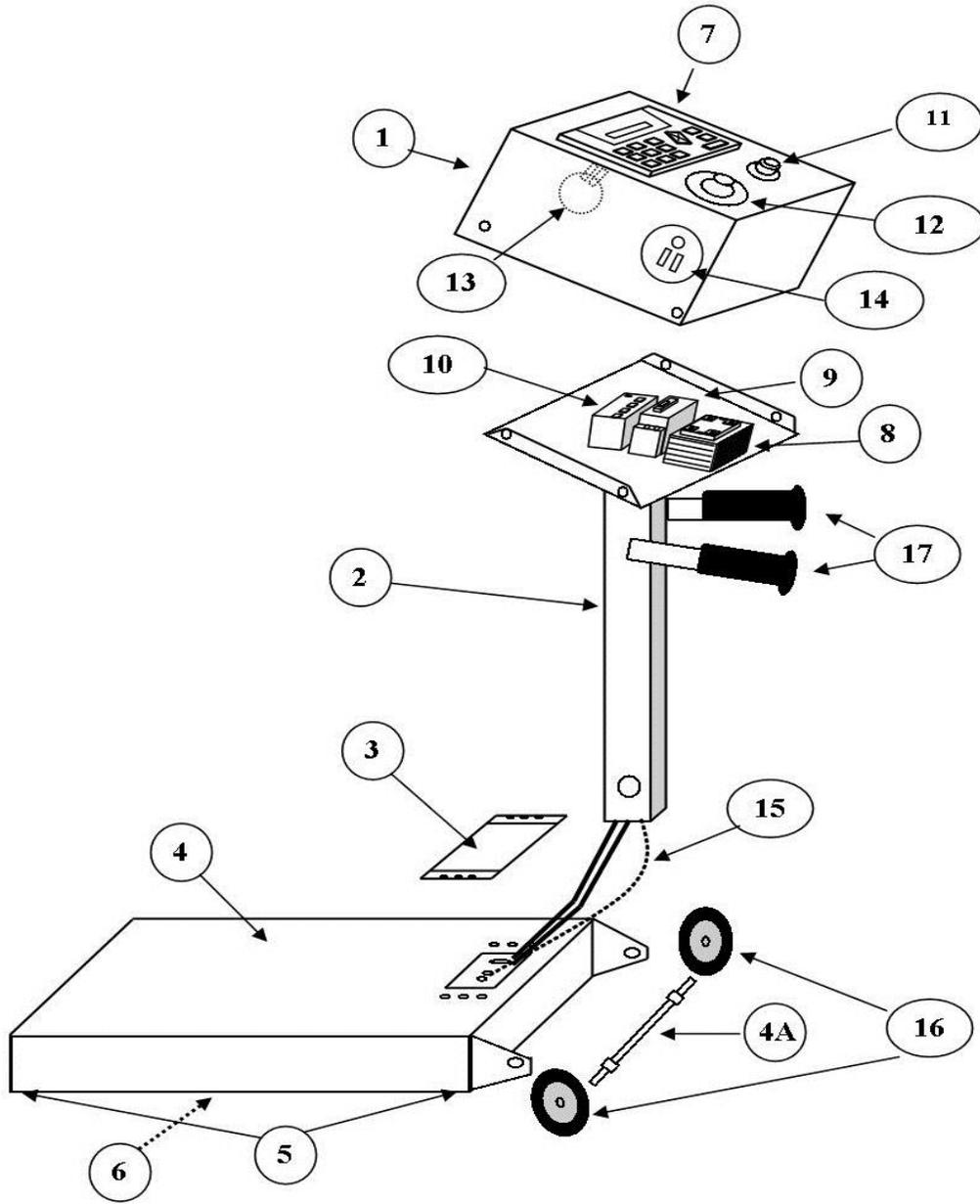


**PARTS BREAKDOWN N378**

<b>Ref.</b>	<b>Part No.</b>	<b>Description</b>
1	N37801	CONTROL PANEL
2	N37802	HANDLE ASSEMBLY
3	N37803	BASE COVER
4	N37804	BASE ASSEMBLY
4A	N37805	AXLE
5	N37806	PANEL RETAINER BRACKETS
6	N37807	HEAT PANEL
7	N200510	TEMPERATURE/TIMER CONTROLLER
8	N601600	SOLID STATE RELAY
9	N200610	THERMOCOUPLE TRANSMITTER
10	N200600	POWER SUPPLY - DC CONVERTER
11	N401199	RESET BUTTON
12	N401203	EMERGENCY STOP BUTTON
13	N401305	AUDIBLE ALARM
14	N305278	RECESSED MALE POWER PLUG
15	N401410	THERMO COUPLE
16	N061500	WHEELS
17	312.G204G	RUBBER GRIP

**SEE DIAGRAM OF UNIT AND DIAGRAM OF CONTROL PANEL ON NEXT PAGE**

**DIAGRAM OF UNIT AND CONTROL PANEL**



## SECTION VII

### **SAFETY RULES**

The NOVATEK Corporation unit (NOVASTRIP 1026 and 378) is a highly efficient system designed to radiate heat through the tile to soften adhesive for tile removal. In order to properly operate this unit effectively and safely, the following safety precautions should be strictly adhered to:

1. Do not leave unit unattended when connected to power source. Turn OFF electric supply and disconnect from power source every time the unit is not being used and/or before servicing.
2. Do not operate with damaged and/or malfunctioning parts. If unit is not working as specified in this manual due to misuse. Repair damaged parts or return to an Authorized Repair and Service Center.

**NOTE: Always repair with genuine NOVATEK parts, to ensure operational safety and to protect limited warranty.**

3. Keep loose clothing and all body parts away from face of heat source and/or heat shroud, as unit gets extremely HOT!
4. Sweep tile surface and remove any excess buildup of wax residue prior to heating surface. This will help to eliminate any fumes and foul odors.
5. Turn off all controls before disconnecting from power source. This will help against controller malfunction.
6. Do not operate around flammable or combustible liquids and/or gases.
7. Electric shock may occur if operated outdoors or on wet surfaces.
8. Never operate the unit in a manner where there is the possibility of physical contact with the heat panel.
9. Do not operate this unit if under the influence of alcohol, drugs, or illegal substances that may impair operator reflexes and /or awareness.
10. It is the responsibility of the unit's owner to insure that the equipment is maintained in a safe operating condition.
11. Never touch the heat panel during heating cycle as the panel surface gets extremely hot. Heat panel surface will stay hot even after unit is turned off for about a period of 20 –30 minutes or longer.

**WARNING** Failure to follow these rules and instructions could result in severe bodily injuries or death, could cause a serious malfunction of the unit, and could result in property damage. Read these rules and instructions carefully prior to initial use of the unit.

### **TROUBLE SHOOTING**

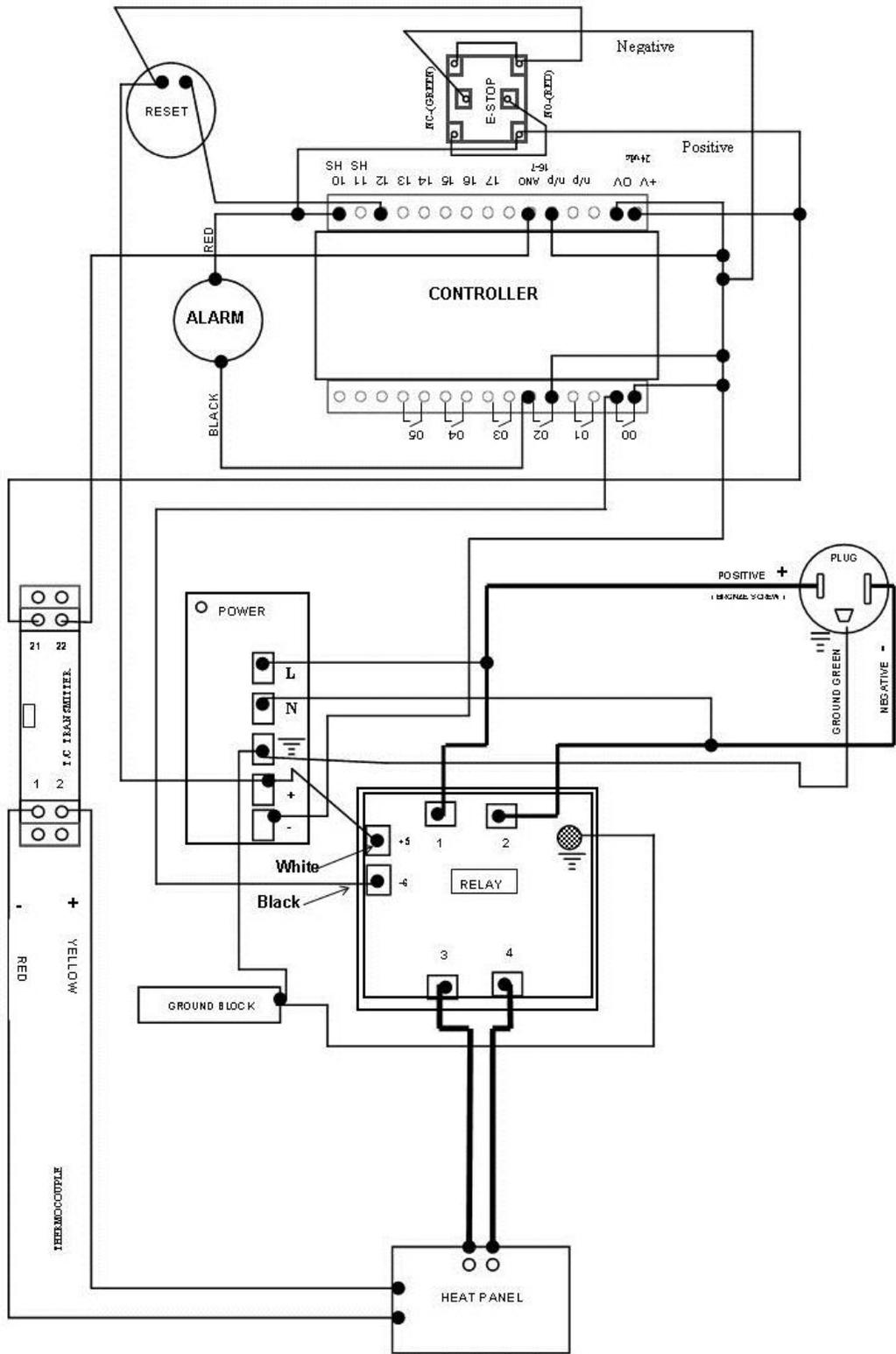
This unit has several features for your safety and convenience. Here are some trouble shooting and maintenance tips.

1. The **NOVASTRIP 1026** comes equipped with a third leg (semiconductor fuse) and a 50Amp breaker which are used to protect the solid state relay, timer / temperature controller against any sudden electrical surges.
  - **If the unit is plugged in and turned on but the heat panel does not heat:**
    - Check 50Amp breaker to ensure it is in the ON position.
  - **If unit still does not heat and breaker is in ON position:**
    - Unplug power supply and take off control panel. Check semi-conductor fuse for any discoloration. If discoloration is present, replace the fuse.
2. The NOVASTRIP 378 comes equipped with a power converter which is used to protect the operator and power the timer / temperature controller.
  - A. If the unit is plugged in and turned on but the heat panel does not heat:**  
Check 20Amp panel breaker to ensure it is in the ON position and not tripped.
  - B. If unit still does not heat and breaker is in ON position:**  
Unplug power supply and take off control panel. Check for any loose or disconnected wire.

**NOTE: IF AFTER FOLLOWING THESE TWO PROCEDURES POWER IS NOT RESTORED, CONTACT A NOVATEK FOR A RETURN AUTHORIZATION NUMBER. THE MACHINE NEEDS TO BE INSPECTED AND TESTED BY A NOVATEK TECHNICIAN**



**WIRING DIAGRAM for NOVASTRIP N378**



## NOVATEK CORPORATION LIMITED WARRANTY

The **TOOLS** manufactured by **NOVATEK CORPORATION** are warranted to be free from defects in material and workmanship for a period of **180 DAYS** from the date of purchase from **NOVATEK CORPORATION**. This warranty does not apply to accessories. All electrical components of the tool are also warranted to be free from defects in material and workmanship for a period of **180 DAYS**.

This warranty applies only to **TOOLS** purchased new from **NOVATEK CORPORATION**. This warranty does not apply to any **TOOL** which has been abused, misused, modified, or repaired by someone other than **NOVATEK CORPORATION** or its authorized repair center.

If a **TOOL** proves defective in material or workmanship within one year of purchase from **NOVATEK CORPORATION**, it should be returned to **NOVATEK CORPORATION**, transportation pre-paid. The return must be authorized by a **RETURN MERCHANDISE AUTHORIZATION NUMBER (R.M.A. #)** obtained from **NOVATEK CORPORATION** prior to returning the **UNIT**. All packages must show clearly on the outside the return merchandise authorization number. All packages received without any R.M.A. # on the outside will be refused by **NOVATEK CORPORATION** receiving department.

Warranty claims will only be considered upon adequate proof of date of purchase. **NOVATEK CORPORATION** will, at its option, **REPAIR or REPLACE DEFECTIVE PARTS**. Repairs or replacements are warranted as above for the remainder of the original warranty period. The sole liability of **NOVATEK CORPORATION** and the user's exclusive remedy under this warranty is limited to the repair or replacement of the defective product.

THERE ARE NO OTHER WARRANTIES EXPRESSED OR IMPLIED AND **NOVATEK CORPORATION** SHALL NOT BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OR ANY OTHER EXPENSES OR REPAIR OR REPLACEMENT AS DESCRIBED ABOVE.

All warranty claims should be forwarded to:

**NOVATEK CORPORATION**  
**700 Schell Lane**  
**Phoenixville, PA 19460**

**ATTENTION: CLAIM AND SERVICE DEPARTMENT**  
**R.M.A. # \_\_\_\_\_**

**CALL Toll Free at 1-866-563-7800 for your RMA number prior to shipping.**

Also include a brief description of the problem as well as a phone number, contact name and return address in case **NOVATEK CORPORATION** service personnel has to get in contact with you.