

## Description

Master's PI-20SiK Butane Soldering iron is a variable temperature, self-igniting butane powered, multi-function heat tool. It can be operated as a soldering iron or as a flameless heat tool just by changing tips. Temperature is varied by adjusting the gas control lever.

## Warnings

**WARNING:** This product, when used for soldering and similar applications, produces chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.  
**WARNING:** By-products of the combustion of the fuel used by this product contain chemicals known to the State of California to

For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).  
**WARNING:** The Department of Transportation Hazardous Material Regulations forbid the carriage of butane or other flammable gas products on passenger aircraft. Do not pack this item or any other flammable gas item, in any checked or carry-on luggage.

## Important Safety Instructions

To reduce the risk of injury or property damage, READ AND UNDERSTAND the following warnings:  
1. To prevent fire or damage to work surfaces, be sure hot air exhaust opening is positioned up. Hot air comes out of the exhaust opening in the tip. Keep combustibles and hands away from the opening.  
2. To prevent fuel tank leakage, do not store in environmental area that exceeds 104°F/40°C (such as car dashboard or trunk, direct sun, glove compartment, or other enclosed, unventilated areas).  
3. Be sure to turn "Gas open / Ignition" lever off after use.  
4. Do not perform maintenance or repair unless unit is completely cool. Be certain "Gas open / Ignition" lever is "OFF".  
5. Wait for tips to cool before changing. Keep hands and combustibles from tip area while in use.  
6. When soldering or desoldering always review material safety data sheets (MSDS) for recommended precautions for safe handling and use of solder, solder paste, flux, conformal coatings and any other chemicals.  
7. Store away from, and do not use in the presence of children.  
8. Store in case or keep protective cap on unit while

not in use.  
9. Use only in well-ventilated area. Continuous or extended use indoors should be done only with a local exhaust ventilation to the outside.  
10. Do not expose to open flame or other sources of high temperature.  
11. Use only Master Appliance Ultratane Butane Fuel to insure maximum safety and performance. MSDS upon request.  
12. Always use safety glasses or goggles.  
13. Do not fill gas or store near open flame, heater, furnace or combustible materials.  
14. Do not misuse, abuse, alter or tamper.  
15. It is your responsibility to follow your governmental regulations when disposing of this unit.  
**NOTE:** When operating in extremes of temperature (hot or cold), at high altitude, ignition may be difficult due to the variation of gas pressure caused by these extremes. Gas control settings will also be affected and will vary from those under normal conditions. If difficulties are experienced, please contact our Customer Service Department who will advise on adjustment.



## Filling / Refilling

Make sure the "Gas open/ignition lever" is in the off position before filling. Do not fill gas or store near open flame, heater, furnace, or combustible materials. Make sure the unit is cool before re-fueling. Fill gas holding the unit firmly with the filler valve pointed upwards. To fill, press nozzle of butane can down onto refill opening. Gas will overflow from nozzle when tank is full. Wait a few minutes before using to allow gas to stabilize.

## Ignition Instructions

- Hold torch in upright position with tip facing upward. Place the gas control lever into middle of the setting (fig. 1).
- With thumb or forefinger, slowly pull downward on the gas open / ignition lever, holding in the down position for 3 seconds (fig. 2).
- When catalyst mesh inside the window begins to glow orange, press the lock button (fig. 3) and then release the gas open / ignition lever. This will keep the unit in the ON position. If blue flame is visible in window, turn off the gas open / ignition lever, and repeat the ignition process.
- If unit did not ignite, repeat. Temperature can be changed by adjusting the gas control lever.
- To turn off, pull down on the gas open / ignition lever to release the lock button, then release the gas open / ignition lever.

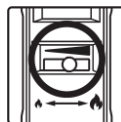


Fig. 1

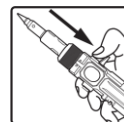


Fig. 2

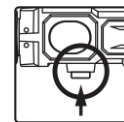


Fig. 3

## Use as a Solder Iron or Heat Tool

All models come with the needle soldering tip pre-installed. To change tips, unscrew tip from flameless heat head, then screw in a replacement tip.

**As a heat tool,** unscrew tip from the flameless heat head. Heated gas flows from the end of the flameless heat head. Use the heated gas to heat, dry or shrink as necessary. Temperature can be varied by adjusting the gas control lever.

**As a flame torch,** remove both the tip and the flameless heat head from the unit. This can be done by unscrewing the knurled nut and removing the flame guard from the housing. The flameless heat head can then be removed from the back end of the flame guard. Reassemble the flame guard onto the housing and secure with the knurled nut. Note that dimple of flame guard must align with slot in insulator head.

## How to Empty Tank of Butane Gas if Needed

- Only empty fuel tank in a well-ventilated area and away from ignition sources. Remember butane is heavier than air.
- Depress the filler valve at the back of the tank with a small-bladed screwdriver and let the butane gas escape through the small orifice opening. Be careful that the butane does not hit against your fingers or hands. This could cause frostbite of the skin.
- One method is to poke a small bladed screwdriver through a piece of paper and then carefully depress the filler valve. The escaping gas will hit the paper and not your hand.
- Never turn gas lever to "ON" and allow gas to evacuate through the tip. Doing this could clog the outlet valve and lead to premature failure.
- Never try to unscrew the filler valve as it is adhesively bonded to the tank. Breaking this bond will destroy the unit, causing the tank to leak.



## Storage of your Heat Tool

- Allow unit to cool.
- Confirm that the lock button is unlocked and that the gas open / ignition lever is in the OFF position.
- Place heat tool inside case for storage, or place protective cap onto heat tool for storage.
- If your unit is not going to be used for a while, store in proper location avoiding elevated temperatures and away from children.

## Trouble Shooting

Problem	Probable cause	Solution
Does not ignite	a. Empty Tank b. Gas flow too high or too low.	a. Refill with butane fuel b. Move gas control lever to left or right.
Low gas pressure Low flame	a. Foreign object blocking tips b. Cold fuel	a. Clean out or replace tips b. Hold unit in hand to allow unit to warmup. <b>DO NOT HEAT HANDLE.</b>
Not enough heat	a. Low fuel	a. Refill with butane gas

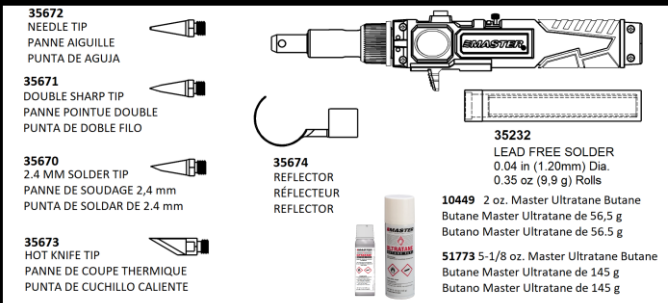
**Note:** Soldering irons utilize the energy produced while evaporating butane gas. Ambient temperature can affect operation. Adjust the unit as necessary.

## Warranty

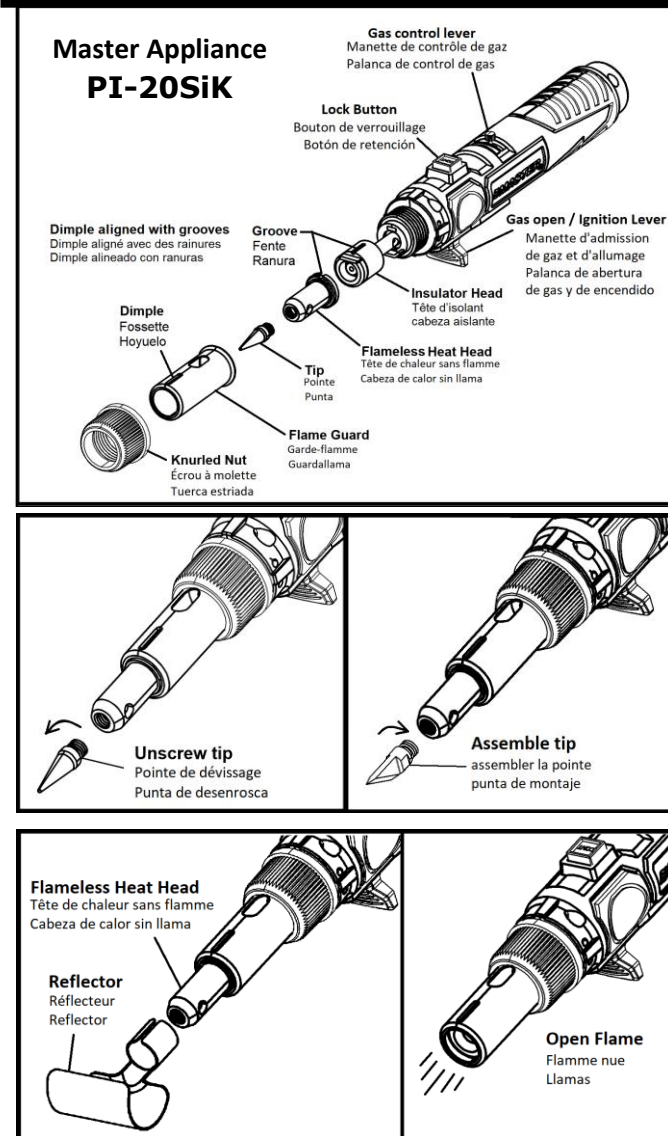
Your butane powered heat tool was carefully tested and inspected before it was shipped from the factory. We warrant this product to be free from defects in materials and workmanship under normal use and service for one year from date of purchase. In the event of a defect in materials or workmanship, we will either repair or replace, without charge, at our option, any part which in our judgement shows evidence of such defect. This warranty does not apply to the attachments or tips, which are items requiring periodic replacement, nor does it apply if the butane powered heat tool has been misused, abused, altered, tampered with, or used with butane fuel other than Master Appliance Ultratane butane fuel. At the end of the warranty period, Master Appliance shall be under no further obligation, expressed or implied. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Master Appliance assumes no responsibility for and this warranty shall not cover any incidental or consequential damages from any defect in this product or its use. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. This warranty gives you specific rights and you may also have other rights which may vary from state to state. **For warranty repair** a proof of purchase receipt or other appropriate proof of date is required with

Your return for warranty repair to Master Appliance. All warranty claims must be made to Master Appliance and not the distributor. We decline responsibility where repairs have been made or attempted by others. Any different guarantee made by others is not authorized by us. If a warranty claim is to be made please return your Master Heat Tool prepaid, with proof of purchase and a note describing the problem to our Repair Department. The Department of Transportation Hazardous Material Regulations forbid this item or any other flammable gas item from being shipped via air.  
**Please empty tool of butane before shipping as described in this manual under "How to Empty Tank of Butane Gas if Needed".** See address below.  
Return your Master Heat Tool prepaid, with a note describing the problem to:  
**Master Appliance Corp.**  
2420 - 18th Street  
Racine, Wisconsin 53403-2381  
Phone: 262-633-7791  
Fax: 262-633-9745  
e-mail: [sales@masterappliance.com](mailto:sales@masterappliance.com)  
[www.masterappliance.com](http://www.masterappliance.com)

## Accessories / Accessoires / Accesoros

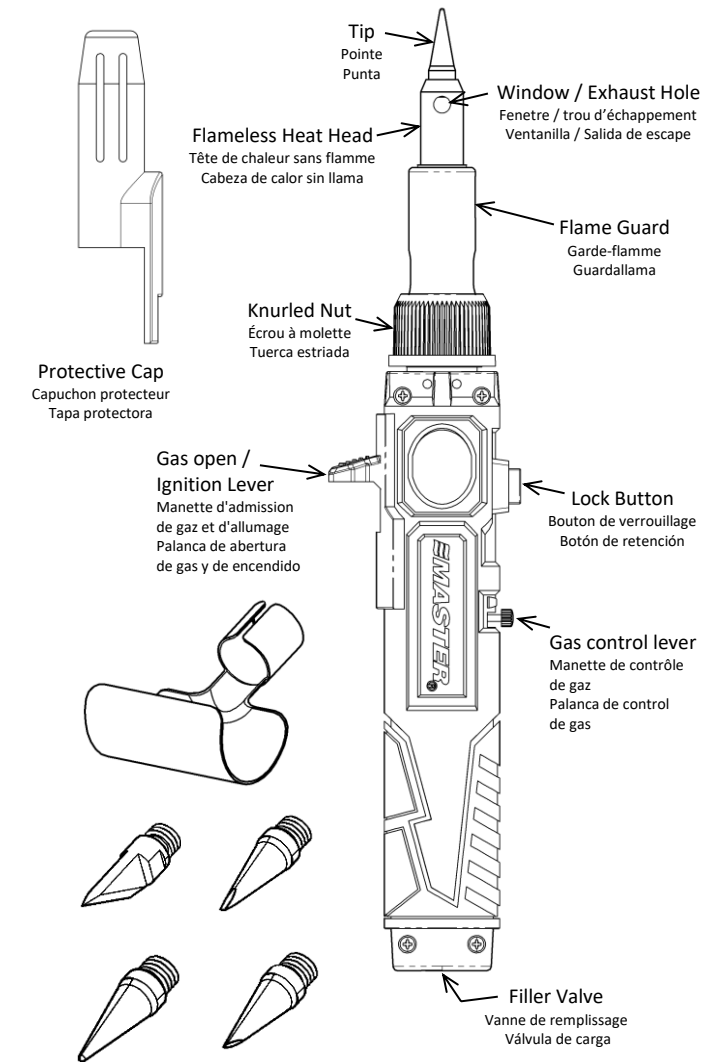


## Functional Description / description fonctionnelle / descripción funcional



**MASTER**  
HEAT TOOLS FOR INDUSTRY™

## PI-20SiK Self-Igniting Cordless Butane Soldering Iron Instruction Manual Mode d'emploi Manual de instrucciones



Read this manual in its entirety before attempting to use this tool. Become familiar with all controls for safety.

Lisez ce manuel entièrement avant de commencer à utiliser l'outil. Familiarisez-vous avec tous les contrôles de sécurité.

Lea completamente este manual antes de tratar de usar esta herramienta. Para mayor seguridad, familiarícese con todos los controles.

### Unit is shipped without fuel.

Appareil expédié sans carburant  
La unidad viene sin combustible

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Racine, WI 53403-2381  
USA

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