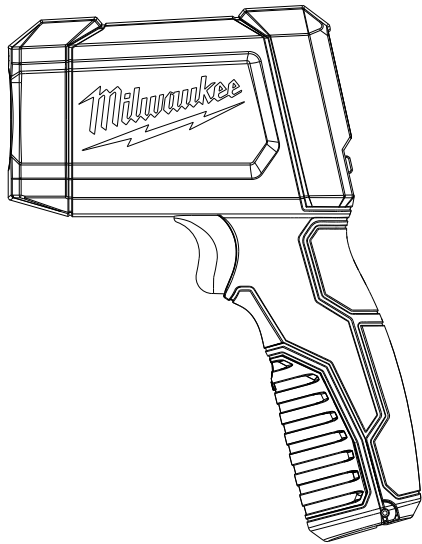
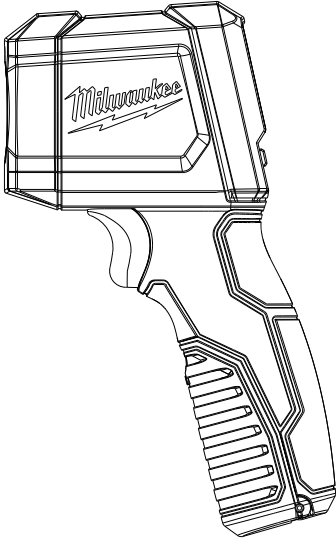




OPERATOR'S MANUAL



Cat. No.
No de Cat.
2267-20
2268-20

Infrared Temp-Guns™

TO REDUCE THE RISK OF INJURY, USER MUST READ AND UNDERSTAND OPERATOR'S MANUAL.

IMPORTANT SAFETY INSTRUCTIONS

⚠ WARNING READ ALL SAFETY WARNINGS AND INSTRUCTIONS. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. **Save these instructions** - This operator's manual contains important safety and operating instructions for the **MILWAUKEE Infrared Temp-Gun™ Thermometer**. Before using the Temp-Gun™, read this operator's manual and all labels on the Temp-Gun™.

LASER SAFETY

- **Laser light** - Do not stare into beam or view directly with optical instruments. Do not point laser light at others. Laser light can cause eye damage.
- **Avoid exposure to laser radiation.** Laser may emit hazardous radiation.
- **Do not point laser at reflective surfaces.** Unpredictable results may occur.

WORK AREA SAFETY

- **Keep children and bystanders away while operating Temp-Gun™.** Store idle Temp-Guns™ out of the reach of children and do not allow persons unfamiliar with the tool or these instructions to operate them.
- **Avoid dangerous environments.** Do not use in rain, snow, damp or wet locations. Do not use in the presence of explosive atmospheres (gaseous fumes, dust or flammable materials) because sparks may be generated when inserting or removing batteries, possibly causing fire.

PERSONAL SAFETY

- **Stay alert, watch what you are doing and use common sense when operating Temp-Gun™.** Do not use while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention may result in serious personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control in unexpected situations.

BATTERY USE AND CARE

- **This tool is designed to be powered by one (1) 9V battery properly inserted into the MILWAUKEE Temp-Gun™.** Do not attempt to use with any other voltage or power supply.
- **Do not leave battery within the reach of children.**
- **Install battery according to polarity (+ / -) diagrams.**
- **Properly dispose of used batteries immediately.**
- **Do not incinerate or dismantle batteries.**
- **Under abusive conditions, liquid may be ejected from the battery, avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.

SERVICE

- **Have your Temp-Gun™ serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the tool is maintained.
- **Do not disassemble.** Incorrect reassembly may result in the risk of electric shock or fire. If it is damaged, take it to a **MILWAUKEE** service facility.
- **Store in a cool, dry place.** Do not store where temperatures may exceed 140°F (60°C) such as in direct sunlight, a vehicle or metal building during the summer.
- **Do not remove or deface labels. Maintain labels and nameplates.** These carry important information. If unreadable or missing, contact a **MILWAUKEE** service facility for a free replacement.



Federal Communications Commission

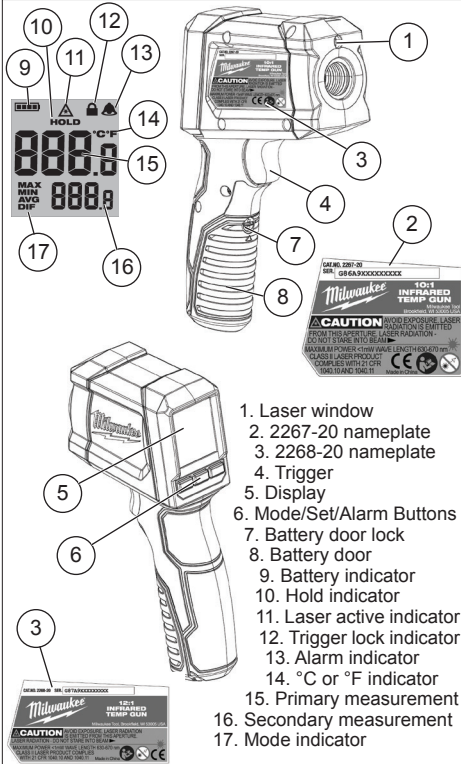
WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Consult the dealer or an experienced radio/TV technician for help.

FUNCTIONAL DESCRIPTION



1. Laser window
2. 2267-20 nameplate
3. 2268-20 nameplate
4. Trigger
5. Display
6. Mode/Set/Alarm Buttons
7. Battery door lock
8. Battery door
9. Battery indicator
10. Hold indicator
11. Laser active indicator
12. Trigger lock indicator
13. Alarm indicator
14. °C or °F indicator
15. Primary measurement
16. Secondary measurement
17. Mode indicator

Specifications

IR Temperature range:

For 2267-20: -30°C to 400°C (-22°F to 752°F)
 For 2268-20: -30°C to 550°C (-22°F to 1022°F)

IR Accuracy:

For 2267-20:
 -30°C to -18°C (-22°F to 0°F): ±2.0°C (4°F) + 0.1°C / 1°C
 -18°C to 0°C (0°F to 32°F): ±2.5°C (5°F)
 0°C to 400°C (32°F to 752°F): ±2.0°C (4°F) or 2.0%
 of reading, whichever is greater

For 2268-20:
 -30°C to -18°C (-22°F to 0°F): ±2.0°C (4°F) + 0.1°C / 1°C
 -18°C to 10°C (0°F to 50°F): ±2.5°C (5°F)
 10°C to 550°C (50°F to 1022°F): ±1.8°C (4°F) or 1.8%
 of reading, whichever is greater

*Assume ambient operating temperature of 23°C ±2°C (70°F to 77°F)

Repeatability: ±0.8% OR ±1°C (±2°F)
 (whichever is greater)

Temperature display resolution:
 0.1°C/°F in Primary and Secondary

Distance to spot (90% energy):
 For 2267-20: 10 to 1
 For 2268-20: 12 to 1

Emissivity: 0.95

Response time: <500 msec

Spectral response: 8 to 14µm

Drop: 2 meters

Laser Type: Class II

Max Power: <1mW

Wavelength: 630-670 nm

Operating temperature: 0°C to 50°C (32°F to 122°F)
Storage temperature: -20°C to 60°C (-4°F to 140°F)
 without battery

Relative humidity: 10 to 85% at 25°C, decreasing
 linearly to 10 to 45% at 50°C

Voltage: 9 DC (one (1) 9V battery)

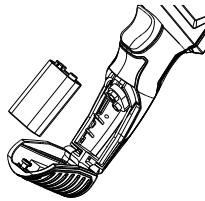
Battery life: Greater than 12 hrs with all functions

NOTE: 2267-20 and 2268-20 may not meet its stated accuracy when exposed to 80-500MHz at 3V/m.

ASSEMBLY

Loading/Changing the Battery

1. Using a flat screwdriver, rotate the battery door lock to the unlocked position and open the battery door.
2. Connect one (1) 9V battery to the connector block. Fit the battery into the compartment.
3. Close the battery door. Turn the battery door lock to the locked position.



Selecting Celsius or Fahrenheit

To set the temperature scale, pull the trigger and then press the SET button three times. Press the buttons above the up and down arrows to toggle between °C and °F. Wait 5 seconds for the setting to save and exit.

Setting the Laser Lock

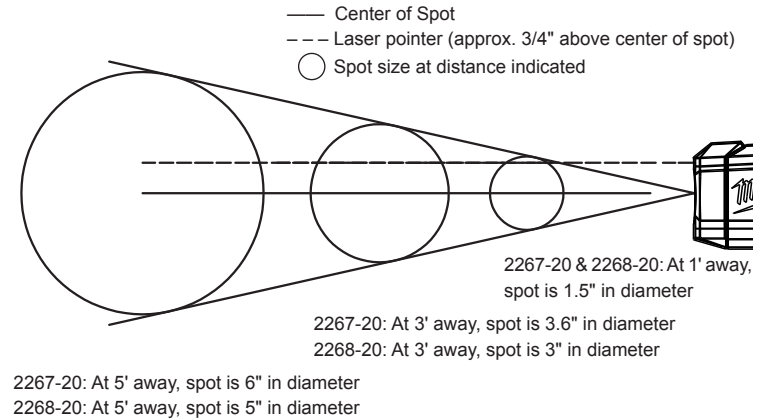
To turn the laser on and off, pull the trigger and then press the SET button four times. Press the buttons above the up and down arrows to toggle between ON and OFF. Wait 5 seconds for the setting to save and exit.

Distance to Spot:

10:1 (2267-20)

12:1 (2268-20)

NOTE: A quick change in temperature (>10°F) affects the meter's readings. Allow the meter to reach ambient temperature before use (5 to 30 minutes, depending on temperature change).




OPERATION

Scanning Object Temperature

1. Pull and hold the trigger for at least 2 seconds and scan the surface temperature of an object. A laser pointer is used for aiming on the area being scanned.

NOTE: The object should be larger than the spot being scanned. If not, readings will be affected. See Distance To Spot for necessary object size.

2. As you continue to hold the trigger, the icon  is displayed along with the primary measurement (surface temperature) and secondary measurement (maximum, minimum, average, or differential temperature) readings.
3. Release the trigger. HOLD is displayed until the screen shuts off in about ten seconds.

Setting the Trigger Lock

To turn the trigger lock on and off, pull the trigger and then press the SET button five times. Press the buttons above the up and down arrows to toggle between ON and OFF. Wait 5 seconds for the setting to save and exit.

Temperature Alarm

Press the ALARM button to turn on the alarm function. The bell icon is displayed. If the temperature reading is outside the preset range, the temperature reading will flash.






Setting Preset Range for the Alarm

1. To set the alarm range, pull the trigger and then press the SET button. Repeat to toggle between HI and LO settings.
2. Press the up or down arrow soft keys to toggle between temperatures. Wait 5 seconds for the ranges to save and exit.

Low Battery

When the Low Battery icon is displayed, change the battery.



SYMBOLGY	
	Volts
	Direct Current
	CAUTION Laser Light - Do Not Stare Into Beam
	Laser product Avoid Exposure: Laser Radiation Is Emitted From This Aperture
	To reduce the risk of injury, user must read operator's manual.

Mode	Description
MAX	Displays maximum temperature measured during a continuous reading
MIN	Displays minimum temperature measured during a continuous reading
AVG	Displays average temperature of last 20 measurements during a continuous reading
DIF	Displays the difference between MAX and MIN during a continuous reading

MAINTENANCE

⚠ WARNING To reduce the risk of injury, always remove the batteries from the tool before performing any maintenance. Never disassemble the tool. Contact a *MILWAUKEE* service facility for ALL repairs.

Maintaining Tool

Keep your tool in good repair by adopting a regular maintenance program. After six months to one year, depending on use, return the tool to a *MILWAUKEE* service facility for repairs.

If the tool does not start or operate at full power with new batteries, clean the contacts on the battery door. If the tool still does not work properly, return the tool to a *MILWAUKEE* service facility for repairs.

Cleaning the Lens

Blow off loose particles with clean compressed air. Carefully wipe the surface with a cotton swab moistened with water. Using a second cotton swab, dry completely.

⚠ WARNING To reduce the risk of personal injury and damage, never immerse your tool in liquid or allow a liquid to flow inside it.

Cleaning

Clean dust and debris from tool. Keep tool handles clean, dry and free of oil or grease. Use only mild soap and a damp cloth to clean the tool since certain cleaning agents and solvents are harmful to plastics and other insulated parts. Some of these include gasoline, turpentine, lacquer thinner, paint thinner, chlorinated cleaning solvents, ammonia and household detergents containing ammonia. Never use flammable or combustible solvents around tools.

Repairs

For repairs, return the tool to the nearest service center listed on the back cover of this operator's manual.

ACCESSORIES

⚠ WARNING Always remove batteries before changing or removing accessories. Only use accessories specifically recommended for this tool. Others may be hazardous.