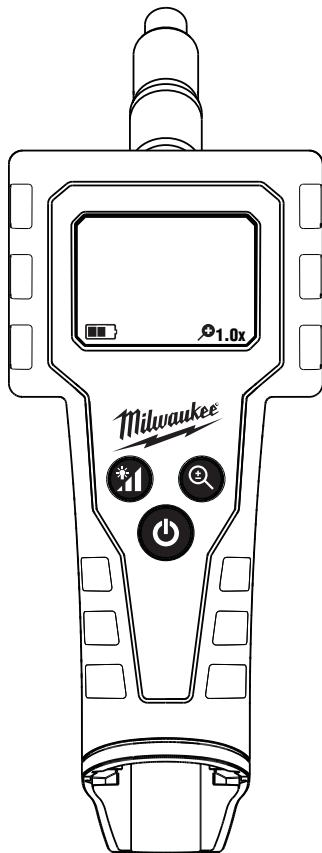


Our associates will ensure the tool works properly before you leave the store. If you experience issues with the tool while completing your project, simply bring it back to the Tool Rental Center to get a replacement. If you purchase Damage Protection at the time of your rental, you are not responsible for repair costs for tools that break due to normal use.



Milwaukee OPERATOR'S MANUAL



**Cat. No.
No de Cat.
2310-21**

12 Volt Digital Inspection Camera

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

GENERAL POWER TOOL SAFETY WARNINGS



WARNING

READ ALL INSTRUCTIONS. FAILURE TO FOLLOW ALL INSTRUCTIONS.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference

WORK AREA SAFETY

- **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
- **Do not operate power tool in an area where it could contact electrical wiring or an electrically charged object.** Contact with a “live” wire or object will make exposed metal parts of the tool “live” and shock the operator.
- **Do not operate power tool near moving machinery.** The cable can be tangled in moving parts, pulling in the power tool and your hands and arms.
- **Do not use near any heat sources** such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

ELECTRICAL SAFETY

- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock. Dry hands before turning tool on or off and before removing or installing the battery pack.

PERSONAL SAFETY

- **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.

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- **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.

POWER TOOL USE AND CARE

- **This Visual Inspection Camera is not intended for medical use or personal inspection.**
- **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
- **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool operation. Do not use if power tool smokes or gives off fumes. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
- **Use the power tool, accessories and tool bits etc., in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation. Only use accessories specifically recommended for this tool. Others may be hazardous.
- **Clean only with dry cloth.** Certain cleaning agents and solvents are harmful to plastics and other insulated parts. Some of these include: gasoline, turpentine, lacquer thinner, paint thinner, chlorinated clean-

ing solvents, ammonia and household detergents containing ammonia. Clean dust and debris from vents. Keep the apparatus handle clean, dry and free of oil or grease.

- **Always remove the battery pack before cleaning.**

BATTERY TOOL USE AND CARE

- **This tool is designed to be powered by a 12 volt MILWAUKEE battery pack** (Cat. No. 48-11-2401). Do not attempt to use with any other voltage or power supply.
- **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
- **When battery pack is not in use, keep it away from other metal objects like paper clips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.
- **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

- **Contact a MILWAUKEE service facility for ALL repairs. Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.
- **Never disassemble the power tool or try to do any rewiring on the power tool's electrical system.**

SPECIFIC SAFETY RULES

- **Maintain labels and nameplates.** These carry important information. If unreadable or missing, contact a MILWAUKEE service facility for a free replacement.

- **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.

Use of shielded cable is required to comply with Class B limits in Subpart B of Part 15 of the FCC rules.



Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received including interference that may cause undesired operation.

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.






Use of shielded cable is required to comply with Class B limits in Subpart B of Part 15 of the FCC rules.

Specifications

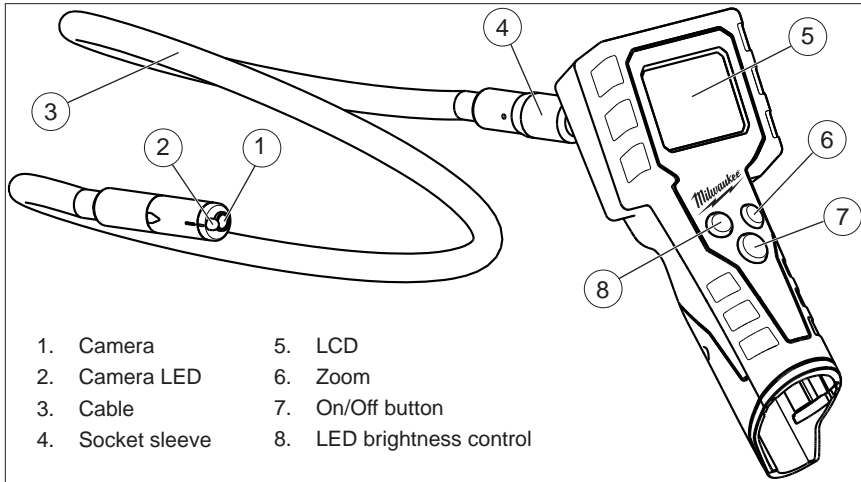
Cat. No.	Volts
2310-21	12 DC

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Symbology

	User must read operator's manual		Federal Communications Commission
	Wear eye protection		Direct Current
	To prevent electric shock, do not allow product to contact live electrical parts		

FUNCTIONAL DESCRIPTION



ASSEMBLY

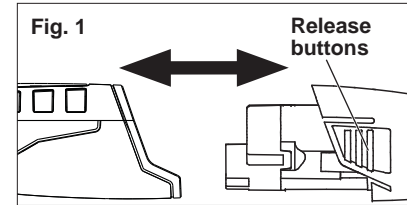
WARNING

Recharge only with the charger specified for the battery. For specific charging instructions, read the operator's manual supplied with your charger and battery.

Inserting/Removing the Battery

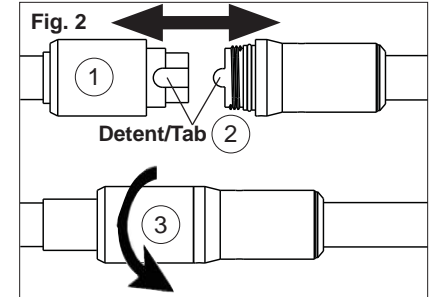
To **remove** the battery, push in the release buttons and pull the battery pack away from the tool.

To **insert** the battery, slide the pack into the body of the tool. Make sure it latches securely into place.



Connecting the Cable

1. Slide back the socket sleeve.
2. Line up the tab on the cable with the detent on the socket.
3. Press the socket and cable together and slide the sleeve over the connection. Tighten the sleeve securely.



OPERATION

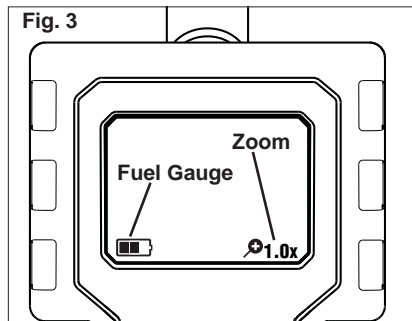
WARNING

To reduce the risk of injury, wear safety goggles or glasses with side shields. Always remove battery pack before changing accessories or making adjustments.

Turning On/Off


Press the On/Off button to turn the tool on and off.

The tool will shut off automatically if unused for 5 minutes.



Fuel Gauge

The fuel gauge is displayed in the lower left corner of the LCD while the tool is on.

 Full Battery Life

 2/3 Battery Life

 1/3 Battery Life



Zoom

The current zoom level is displayed in the lower right corner of the LCD while the tool is on.

To increase the zoom by 0.1 increments between 1.0 and 2.0, press the zoom button. To scroll through the zoom levels, press and hold the zoom button.

Camera LED

The camera LED can be adjusted to 3 levels of brightness and turned off. Press the camera LED button to increase the level of brightness or turn it off.

WARNING

To reduce the risk of explosion, electric shock and property damage, always check the work area before beginning a job. Do not allow cable to contact electrical, chemical, or moving hazards.

Behind walls: Shut off circuit breakers to the entire area.

Inside Pipes: Ensure there is no electrical charge to the pipes before beginning inspection. Do not allow liquid to flow down cable and into tool.

Auto use: Turn off the engine and allow to cool before beginning inspection. Do not allow the visual inspection camera or cable to contact oil, gas, or other corrosive materials.

CAUTION

To reduce the risk of damage to the tool, do not use excessive force or "kink" the cable. Do not use in areas where visual inspection camera and cable will contact corrosive or oily substances.

Do not use the cable to clear clogs or move obstructions. This is not a drain cleaner!

Using the Visual Inspection Camera

1. Adjust the cable to best fit the opening.
2. After checking the workspace for hazards, insert the cable and adjust the zoom and lighting as necessary.

MAINTENANCE

WARNING

To reduce the risk of injury, always unplug the charger and remove the battery pack from the charger or tool before performing any maintenance. Never disassemble the tool, battery pack or charger. Contact a MILWAUKEE service facility for ALL repairs.

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

- Lubrication
- Mechanical inspection and cleaning (gears, spindles, bearings, housing, etc.)
- Electrical inspection (battery pack, charger, motor)
- Testing to assure proper mechanical and electrical operation

Maintaining Tool

If the tool does not start or operate at full power with a fully charged battery pack, clean the contacts on the battery pack. If the tool still does not work properly, return the tool, charger and battery pack, to a MILWAUKEE service facility for repairs.

WARNING

To reduce the risk of personal injury and damage, never immerse your tool, battery pack or charger in liquid or allow a liquid to flow inside them.

Cleaning

Clean dust and debris from charger and tool vents. Keep tool handles clean, dry and free of oil or grease. Use only mild soap and a damp cloth to clean the tool, battery pack and charger 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, battery pack and charger to the nearest service center listed on the back cover of this operator's manual.

ACCESSORIES

WARNING

Always remove battery pack before changing or removing accessories. Only use accessories specifically recommended for this tool. Others may be hazardous.

For a complete listing of accessories refer to your MILWAUKEE Electric Tool catalog or go on-line to www.milwaukeetool.com. To obtain a catalog, contact your local distributor or a service center listed on the back cover of this operator's manual.

3' Extension Cable
Cat. No. 48-53-0110