Owner's Manual & Safety Instructions

Save This Manual Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference. 23k

PITTSBURGH®

24" Digital Laser Level With Angle Finder



Visit our website at: http://www.harborfreight.com
Email our technical support at: productsupport@harborfreight.com

93884

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-888-866-5797 as soon as possible.

Copyright© 2023 by Harbor Freight Tools®. All rights reserved.
No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools.
Diagrams within this manual may not be drawn proportionally. Due to continuing improvements, actual product may differ slightly from the product described herein. Tools required for assembly and service may not be included.

⚠WARNING

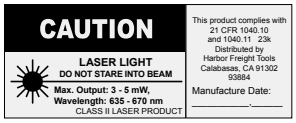
Read this material before using this product.
Failure to do so can result in serious injury.
SAVE THIS MANUAL.

Specifications

Laser Dot Accuracy	Up to 98 Feet
Laser Line Accuracy	Up to 33 Feet
Vial Accuracy	+/- .3 Degrees
Power Source	AAA Batteries (Qty. 2), 9V Battery (Qty. 1)

⚠**Caution:** Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

⚠**Caution:** The use of optical instruments with this product will increase eye hazard.





IMPORTANT SAFETY INFORMATION

Use Precautions

WARNING: When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instructions before using this tool!

1. **Keep work area clean.** Cluttered areas invite injuries.
2. **Observe work area conditions.** Don't expose to rain. Keep work area well lit.
3. **Keep children away.** Children must never be allowed in the work area. Do not let them handle the Laser Level.
4. **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
5. **Use the right tool for the job.** There are certain applications for which this tool was designed. Do not modify and do not use this tool for a purpose for which it was not intended.
6. **Never direct the laser beam into the eyes of any person or animal. THIS MAY CAUSE SEVERE INJURY TO THE EYE.** Do not look into the beam during operation. Make certain to switch the Laser Level to "OFF" when making adjustments or changing the batteries. Laser light, when reflected off a mirror like surface can cause serious eye damage.
7. **Only use the type of battery recommended in this manual.** Use only "AAA" batteries for the Laser, and a 9V battery for the digital display. Do not mix old and new batteries.
8. **Maintain tools with care.** Keep tools clean for better and safer performance.
9. **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
10. **Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if any switch does not turn On and Off properly.
11. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty.
12. **Do not operate tool if under the influence of alcohol or drugs.** Read warning labels if taking prescription medicine to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.
13. **Maintenance.** For your safety, service and maintenance should be performed regularly by a qualified technician.
14. Use fresh batteries. Weak batteries could affect the visibility of this tool.

WARNING: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this document including all text under subheadings therein before set up or use of this product.

General Instructions for Use

WARNING! TO PREVENT SERIOUS INJURY: Only turn Laser on when tool is on workpiece. Do not stare directly at the laser beam.
Do not aim the beam at any person or object other than the workpiece.

WARNING! TO PREVENT SERIOUS INJURY: Do not aim Laser at a workpiece with a reflective surface, such as sheet metal.
Reflective sheet metal could direct the beam back at the operator.

LCD Display Controls

1. **On/Off:** Holding this button down for several seconds turns the LCD display on or off. The display will automatically shut off after a period to conserve battery power.
2. **Hold:** This button keeps the same reading on the display, even if the level's angle changes. Everything on the display will flash except the number while the reading is being held. Press the button again to stop holding the reading.
3. **0% (percent):** This button switches the LCD display between displaying the angle in degrees and displaying the angle as a percent difference from 0° or 90°.
4. **Calibrate (Zero Setting):** This button toggles between reading 0 at the current angle and reading the actual angle. Press the "Calibrate" button once to change the current reading to 0° or 0%. Press the "Calibrate" button again and hold it to restore the level to reading the actual angle. The level will reset to reading the actual angle if it is switched off. Note: Actual calibration of the level (changing the actual angle setting) is not done by this button and needs to be performed by a qualified technician.
5. ◀))) **Sound:** This button toggles the sound. When the sound is on, the level will beep once when it measures any 10° increment and more than once when it reads 0° or 90°. A symbol – ◀))) – will appear above the decimal point on the display and the unit will beep to indicate that the sound is on.



Horizontal and Vertical Vial Use

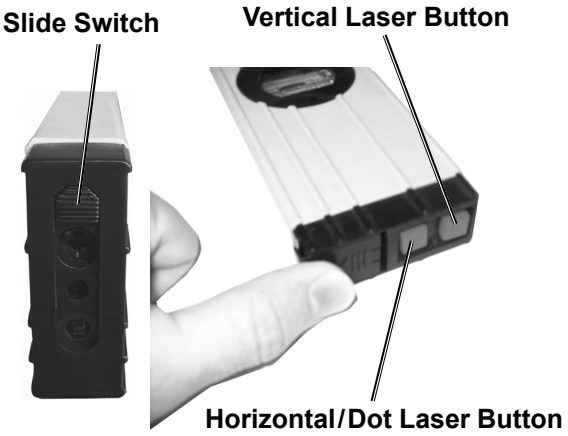
The Vials on the level can be read by observing the bubble within. If the bubble is centered in between the lines, then the Vial is level.

Laser Controls

1. **Vertical Laser Button** - This button turns on the vertical laser line if the Slide Switch is in the upper position. The vertical laser is blocked while the Slide Switch is in the lower position.

2. **Horizontal/Dot Laser Button** - This button turns on the horizontal laser line if the Slide Switch is in the upper position. It can be used along with the vertical laser line to make a cross. When the Slide Switch is in the lower position, the laser is a dot instead.

3. **Slide Switch** - The Slide Switch determines laser operation.
   WARNING! TO PREVENT INJURY: Point the end of the level away from people's eyes when adjusting the Slide Switch. If the Slide Switch is in the lower position, it can conceal an illuminated laser beam.
   If the Slide Switch is in the upper position, the Vertical Laser Button will project a vertical line and the Horizontal/Dot Laser Button will project a horizontal line. When the Slide Switch is in the lower position, the Vertical Laser Button will be covered and the Horizontal/Dot Laser Button will project a simple dot beam.
   CAUTION! To conserve battery power and prevent accidents, move the Slide Switch to the upper position and verify that both lasers are off after use.

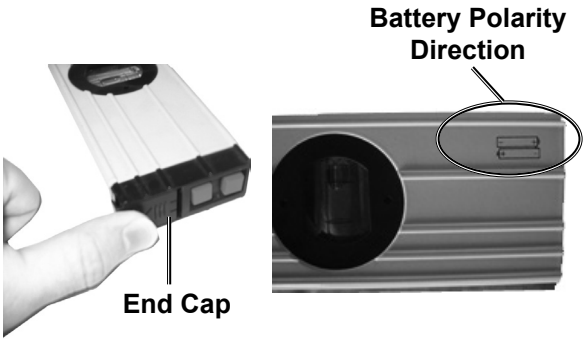


Maintenance and Servicing Instructions

1. **BEFORE EACH USE,** inspect the general condition of the tool. Check for:
   - loose hardware,
   - misalignment or binding of moving parts,
   - cracked or broken parts, and
   - any other condition that may affect its safe operation.
2. **AFTER USE,** wipe external surfaces of the tool with clean cloth.
3. Store the Level in a dry location where it will not freeze or overheat.

Changing or Installing Batteries

1. To change the “AAA” batteries that power the Laser, remove the End Cap and set it aside.
2. Remove the old batteries and replace them with two fresh batteries. Make sure that you match up the positive (+) and negative (-) ends to the diagram on the side of the level. Replace the End Cap.



3. To change the 9 Volt battery that powers the LCD, remove the Battery Cover by first removing the Screw.
4. Install a fresh battery making sure you match up the positive (+) and negative (-) terminals as shown inside the battery compartment. Replace the Battery Cover and the Screw.



PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

Parts List

Part	Description	Qty
1	Ruler Body	1
2	End Cover	1
3	Mirror Set	1
4	Light Tube Set	1
5	Laser Tube	2

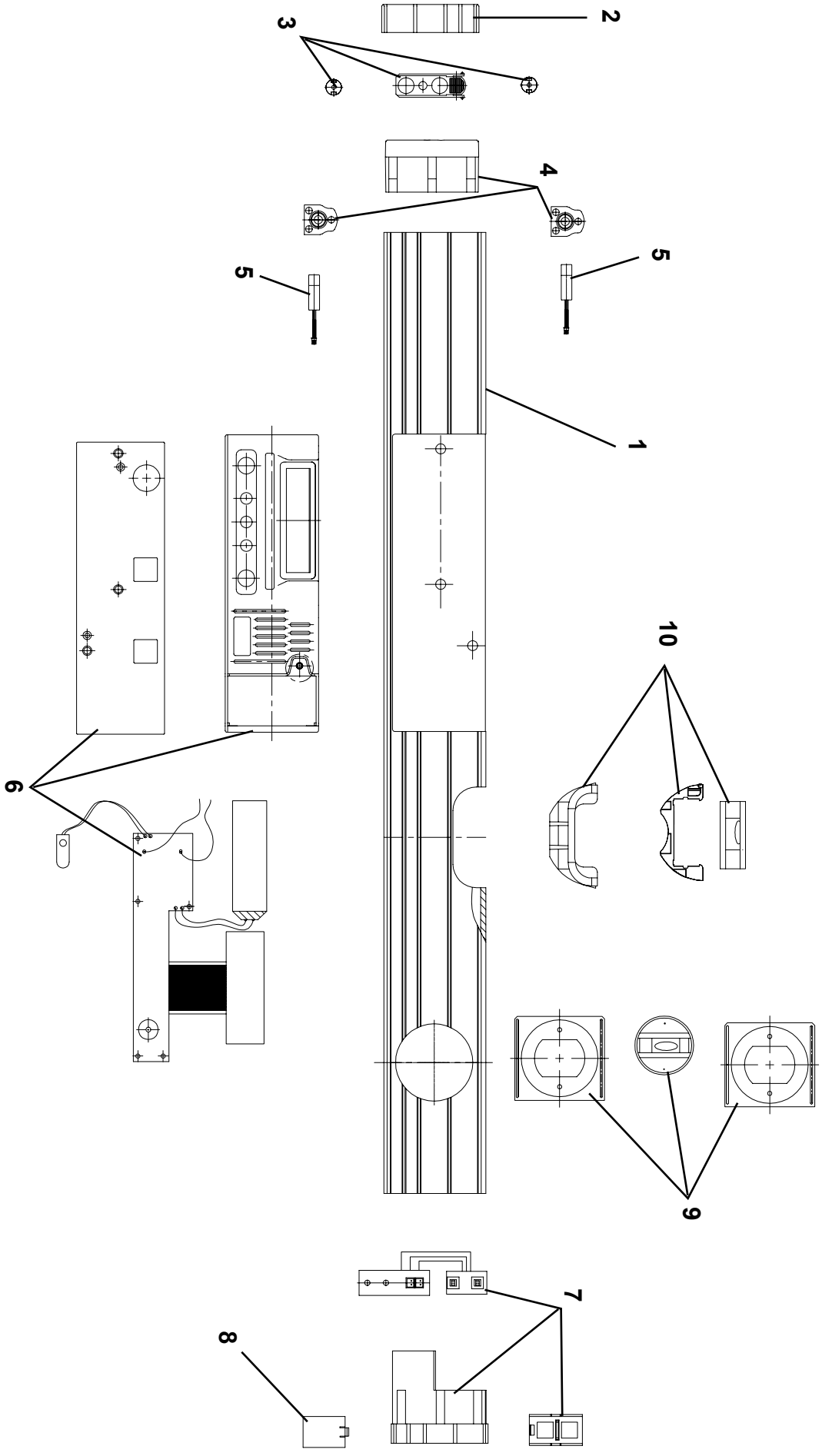
Part	Description	Qty
6	Digital Display Assembly	1
7	Power Switch Assembly	1
8	Battery Cover	1
9	90° Bubble Level Group	1
10	180° Bubble Level Group	1

Record Product's Serial Number Here:_____

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts. Reference UPC 193175475428.

Assembly Diagram



Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

PITTSBURGH®

26677 Agoura Road • Calabasas, CA 91302 • 1-888-866-5797