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.

21a

PORTLAND

13" STRING TRIMMER





Visit our website at: http://www.harborfreight.com Email our technical support at: productsupport@harborfreight.com 62567

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.

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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.

AWARNING

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

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WARNING SYMBOLS AND DEFINITIONS		
A	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.	
▲ DANGER	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.	
▲WARNING	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.	
ACAUTION	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.	
NOTICE CAUTION	Addresses practices not related to personal injury.	

IMPORTANT SAFETY INSTRUCTIONS

AWARNING

When using electric gardening appliances, basic safety precautions should always be followed

to reduce the risk of fire, electric shock, and personal injury, including the following:

READ ALL INSTRUCTIONS

Power Cord Safety



WARNING! - To reduce the risk of electric shock, use only with an extension cord intended for outdoor use, such as an extension cord of cord type

SW-A, SOW-A, STW-A, STOW-A, SJW-A, SJOW-A, SJTW-A, or SJTOW-A.

- Ground Fault Circuit Interrupter (GFCI) protection should be provided on the circuit(s) or outlet(s) to be used for the gardening appliance. Receptacles are available having built-in GFCI protection and may be used for this measure of safety.
- Do not Abuse Cord Do not carry appliance by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.

- 3. To reduce the risk of electric shock, this appliance has a polarized plug (one blade is wider than the other) and will require the use of a polarized extension cord. The appliance plug will fit into a polarized extension cord only one way. If the plug does not fit fully into the extension cord, reverse the plug. If the plug still does not fit, obtain a correct polarized extension cord. A polarized extension cord will require the use of a polarized wall outlet. This plug will fit into the polarized wall outlet only one way. If the plug does not fit fully into the wall outlet, reverse the plug. If the plug still does not fit, contact a qualified electrician to install the proper wall outlet. Do not change the equipment plug, extension cord receptacle, or extension cord plug in any way. This design is referred to as double-insulated, indicated by \square .
- 4. Extension Cord Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized extension cord will cause a drop in line voltage resulting in loss of power and overheating.

Extension Cord Size

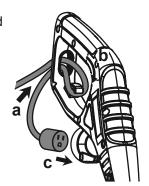
The following table shows the correct cord size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

TABLE A - MINIMUM WIRE GAUGE FOR EXTENSION CORDS (120 VOLT)				
Ampere Rating	EXTENSION CORD LENGTH			
(at full load)	25′	50′	100'	150′
0 – 6	18	16	16	14
6 – 10	18	16	14	12
10 – 12	16	16	14	12
12 – 16	14	12	Not recor	nmended

Connecting Cord

To reduce the risk of the cord pulling out during operation:

- Make a loop in the extension cord, and press that cord loop through the hole in the handle.
- b. Hook that cord loop around the cord hook.
- Make sure the Trigger is released, then plug the cord into the connector.



Personal Safety

- Dress Properly Do not wear loose clothing or jewelry. They can be caught in moving parts. Use of rubber gloves and substantial footwear is recommended when working outdoors. Wear protective hair covering to contain long hair.
- Wear ANSI-approved safety goggles and heavy-duty work gloves. Use face or dust mask if operation is dusty.
- 3. Avoid Unintentional Starting Do not carry plugged-in appliance with finger on switch. Be sure switch is off when plugging in.
- 4. Do not Overreach Keep proper footing and balance at all times.
- Stay Alert Watch what you are doing. Use common sense. Do not operate appliance when you are tired.



Wear thick jeans and steel-toed work boots to help prevent injury caused by flying debris.

- 7. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure. In addition, people with pacemakers should:
 - Avoid operating alone.
 - · Don't use with power switch locked on.
 - Properly maintain and inspect to avoid electrical shock.
 - Any power cord must be properly grounded.
 Ground Fault Circuit Interrupter (GFCI)
 should also be implemented –
 it prevents sustained electrical shock.

Gardening Appliance Use and Care

- Avoid Dangerous Environment -Do not use appliances in damp or wet locations.
- 2. Do not Use In Rain.
- 3. Keep Children Away All visitors should be kept at a distance from work area.
- 4. When servicing use only identical replacement parts.
- Use Right Appliance Do not use appliance for any job except that for which it is intended.
- Do not Force Appliance It will do the job better and with less likelihood of injury at the rate for which it was designed.
- 7. Store Idle Appliances Indoors When not in use, appliances should be stored indoors in dry, and high or locked-up place out of reach of children.
- Maintain Appliance With Care Keep cutting edge sharp and clean for best performance and to reduce the risk of injury. Follow instructions for lubricating and changing accessories. Inspect appliance cord periodically, and if damaged, have it repaired by an authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean, and free from oil and grease.

- 9. Check Damaged Parts Before further use of the appliance, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other condition that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by a qualified technician unless indicated elsewhere in this manual.
- 10. Disconnect Appliance Disconnect the appliance from the power supply when not in use, before servicing, when changing accessories such as blades, and the like.
- 11. Keep guards in place and in working order.
- 12. Only replace the line on this appliance with the line material and diameter of line listed on the Specifications table. Other materials, such as wire, rope, or blades can damage the appliance and be forcefully and dangerously ejected from the appliance upon breaking.

Vibration Hazard

This appliance vibrates during use. Repeated or long-term exposure to vibration may cause temporary or permanent physical injury, particularly to the hands, arms and shoulders. To reduce the risk of vibration-related injury:

- Anyone using vibrating appliances regularly or for an extended period should first be examined by a doctor and then have regular medical checkups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud's Disease should not use this appliance. If you feel any symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.
- 2. Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.
- Wear suitable gloves to reduce the vibration effects on the user.
- 4. Use appliances with the lowest vibration when there is a choice between different processes.
- 5. Include vibration-free periods each day of work.
- Grip appliance as lightly as possible (while still keeping safe control of it).
 Let the appliance do the work.
- To reduce vibration, maintain the appliance as explained in this manual. If any abnormal vibration occurs, stop use immediately.

General Safety

- The spool will continue to rotate for a few seconds after use. Allow it to stop completely and unplug it before putting the appliance down, making any adjustments, or servicing the appliance.
- Do not use in rain, snow, sprinklers, or wet grass.Do not rinse off the Trimmer.
- Use only during daylight hours.
- Carefully inspect the wire spool and guard before plugging in the Trimmer. Do not use Trimmer if any part is cracked or damaged.
- 5. Cover the Trimming Blade after every use.

- 6. Do not use appliance for other than intended use.
- Maintain labels and nameplates on the appliance.
 These carry important safety information.
 If unreadable or missing, contact
 Harbor Freight Tools for a replacement.
- 8. The warnings, precautions, 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.



SAVE THESE INSTRUCTIONS.

Specifications

Electrical Rating	120VAC / 60Hz / 4A
No Load Speed	7,800 RPM
Replacement Line Type	0.065" Nylon



Set Up Instructions



Read the <u>ENTIRE</u> IMPORTANT SAFETY INSTRUCTIONS section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

AWARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Make sure that the Power Switch/Trigger is in the off-position and unplug the appliance from its electrical outlet before performing any procedure in this section.

Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

Assembly

Install Guard

- CAUTION! TO PREVENT ACCIDENTAL CUTS: Cover the Trimming Blade (27-2) with a blade cover before installing the Guard.
- Align Guard (27-3) over Housing as shown in Figure A.

<u>WARNING!</u> TO PREVENT SERIOUS INJURY FROM FLYING DEBRIS AND PIECES OF TRIMMING LINE: Install the guard <u>only</u> in the orientation shown.

3. Attach Guard to Housing using Screw (27-4).

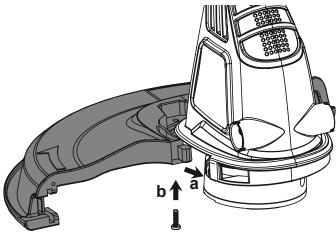


Figure A: Guard Installation

Install Auxiliary Handle

- 1. Position Auxiliary Handle over Handle Bracket (11).
- 2. Install Locking Knob (12-2) and tighten it in place to secure the Handle.
- Loosen the Locking Knob and move the Auxiliary Handle to the desired position.
 WARNING! Tighten the Locking Knob after adjustment.

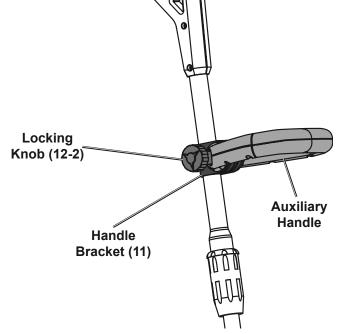


Figure B: Auxiliary Handle Installation

Install Edge Guide

- 1. Snap Edge Guide (25) into holes on both sides of Housing as shown in Figure C.
- 2. Use the Edge Guide to limit striking objects with the Line while trimming nearby.
- 3. Flip the Edge Guide up out of the way when not in use.

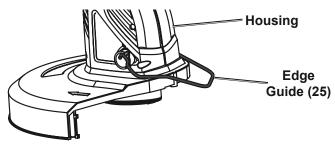
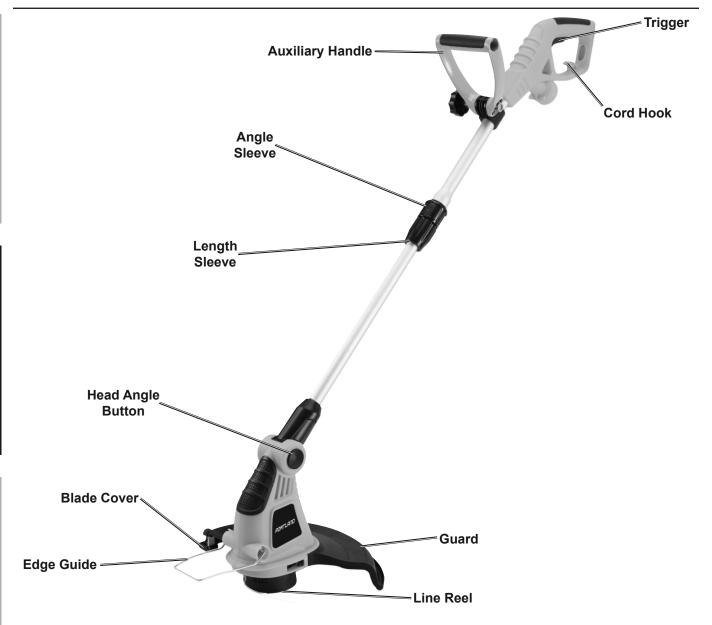


Figure C: Install Edge Guide

Functions



Available Accessories/Attachments

AWARNING

Use of any accessory or attachment other than those listed below may increase the risk of serious injury.

Only replace the line on this appliance with the line material and diameter of line listed on the Specifications table. Other materials, such as wire, rope, or blades can damage the appliance and be forcefully and dangerously ejected from the appliance upon breaking.

Accessories and attachments are not available for this product.

Operating Instructions



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

AWARNING

TO PREVENT SERIOUS INJURY:

Before operating the gardening appliance, put on ANSI-approved safety goggles, close-toed work boots, long pants, and other safety gear. Safety goggles and other safety gear are sold separately.

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Make sure that the Power Switch/Trigger is in the off-position and unplug the appliance from its electrical outlet before setting up the appliance.

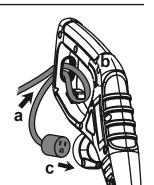
Using Cord Hook

- An extension cord (sold separately) will be required. Ensure that the extension cord is an outdoor type extension cord and that it is the correct design to accept this appliance's plug.
- 2.

WARNING!
TO PREVENT ELECTRIC SHOCK AND SERIOUS PERSONAL INJURY:
The extension cord must remain

secured to the appliance's plug.

- Secure the extension cord using the cord hook as explained below.
 - a. Make a loop in the extension cord, and press that cord loop through the hole in the handle.
 - b. Hook that cord loop around the cord hook.
 - c. Make sure the Trigger is released, then plug the cord into the connector.



Replacing Nylon Line

1. Press in buttons on side of Reel (33) and remove Reel Cover (38) and Spool (36).

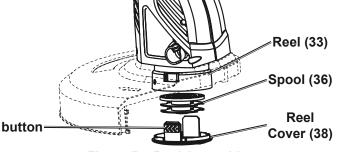


Figure D: Reel Assembly

- Remove all old Line from Spool.
- 3. Find the middle of a piece (up to 9 feet) of 0.065" Nylon Line.
- 4. Insert middle of line into groove on center of Spool.

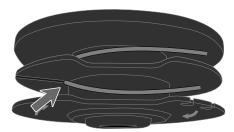


Figure E: Insert Line

5. Wind both ends into grooves using slight tension and following arrow direction.

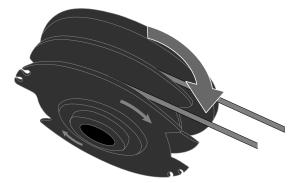


Figure F: Wind Line

- Insert Spool partway into Reel, insert line ends through Reel holes and pull line ends snug. Close Reel.
- 7. Reassemble Reel Cover onto Reel and make sure that both buttons pop back into place.

Feeding Nylon Line

NOTICE: To prevent damage, DO NOT BUMP REEL. This string trimmer feeds Line automatically when stopping.

 Make sure area is safe to operate appliance in, then operate it at full speed.



Release Trigger and allow Line to stop fully.

3. Line will feed slightly. Repeat as desired.

Note: Line will feed only if Spool is wound correctly and can unwrap freely.

4. To manually feed Line, unplug the Power Cord, press the Feed Button (34) at the base of the Reel, and pull out the Line slightly. Keep pushing the Button and pulling the Line out until the Line reaches the desired length.

Adjusting Working Height

- 1. Loosen the Length Sleeve.
- 2. Adjust the Tube to the desired Length.
- 3. Tighten the Length Sleeve.

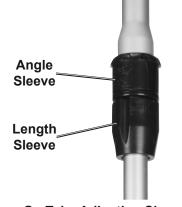


Figure G: Tube Adjusting Sleeves

Trimmer Operation

- If head is in vertical position, pull back on Angle Sleeve, rotate head 180°, and release Angle Sleeve.
 CAUTION! Make sure Angle Sleeve locks in the new position.
- To adjust head angle, press the Head Angle Button (27), adjust as desired, and release Button. CAUTION! Make sure head angle locks in the new position.
- Clear the work area of all fragile objects and all objects that may be thrown during operation. Keep extension cord clear of work area.
- 4. Remove the Blade Cover and keep it available.

- Make sure Trigger is released, then connect the Power Cord to the extension cord, see Using Cord Hook on page 9.
- 6. Squeeze the Trigger, and slowly move the spinning Line across the work area.

<u>CAUTION!</u> DO NOT STRIKE THE HEAD, doing so may damage it and cause it to break.

7. To prevent accidents, turn off the appliance and unplug it after use. Clean, then cover the Trimming Blade with the Blade Cover and store the appliance indoors out of children's reach.

Edger Operation

- If head is in horizontal position, pull back on Angle Sleeve, rotate head 180°, and release Angle Sleeve.
 CAUTION! Make sure Angle Sleeve locks in the new position.
- To adjust head angle, press the Head Angle Button (27), adjust as desired, and release Button. CAUTION! Make sure head angle locks in the new position.
- Clear the work area of all fragile objects and all objects that may be thrown during operation. Keep extension cord clear of work area.
- 4. Remove the Blade Cover and keep it available.

- Make sure Trigger is released, then connect the Power Cord to the extension cord, see Using Cord Hook on page 9.
- 6. Squeeze the Trigger, and slowly move the spinning Line across the work area.

<u>CAUTION!</u> DO NOT STRIKE THE HEAD, doing so may damage it and cause it to break.

7. To prevent accidents, turn off the appliance and unplug it after use. Clean, then cover the Trimming Blade with the Blade Cover and store the appliance indoors out of children's reach.

Maintenance and Servicing



Procedures not specifically explained in this manual must be performed only by a qualified technician.

AWARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Make sure that the Power Switch/Trigger is in the off-position and unplug the appliance from its electrical outlet before performing any procedure in this section.

TO PREVENT SERIOUS INJURY FROM APPLIANCE FAILURE:

Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

Cleaning, Maintenance, and Lubrication

- 1. **BEFORE EACH USE**, inspect the general condition of the appliance. Check for:
 - · loose hardware,
 - misalignment or binding of moving parts,
 - · damaged cord/electrical wiring,
 - · cracked or broken parts, and
 - any other condition that may affect its safe operation.

- 2. **AFTER USE**, clean external surfaces of the appliance with clean, moist cloth.
- 3. To feed/replace trimming Line, see instructions on page 10.
- 4. AWARNING! If the supply cord of this appliance is damaged, it must be replaced only by a qualified service technician.

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.

Parts List

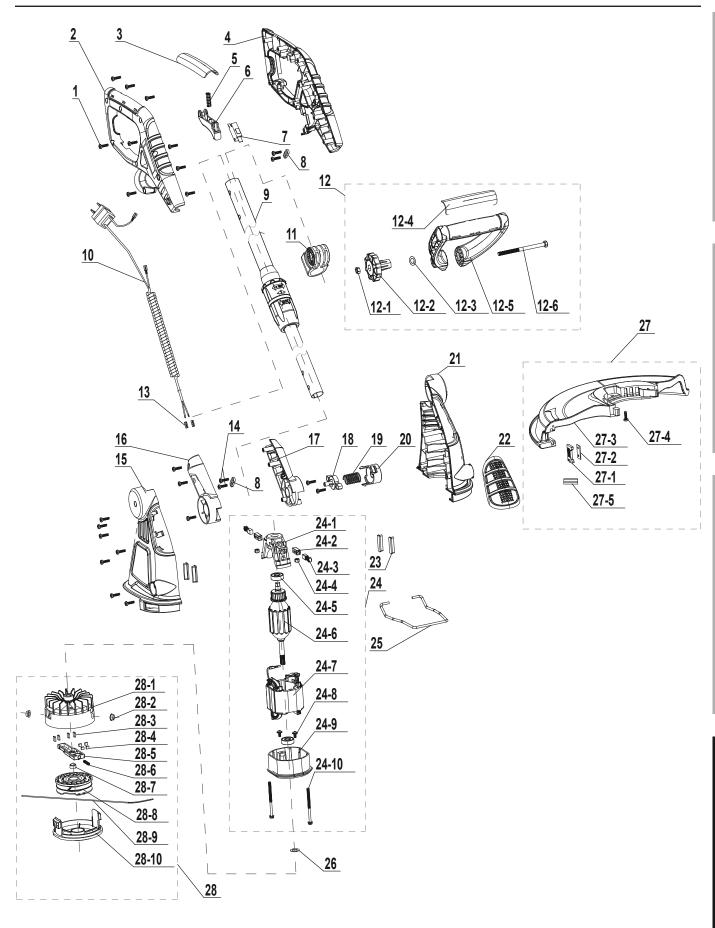
Part	Description	Qty
1	Self Tapping Screw	23
2	Right Handle	1
3	Soft Grip	1
4	Left Handle	1
5	Spring	1
6	Trigger	1
7	Switch	1
8	Cable Clamp	2
9	Shaft	1
10	Flexible Wire	1
11	Handle Bracket	1
12	Auxiliary Handle	1
12-1	Nut	1
12-2	Knob	1
12-3	Washer	1
12-4	Soft Grip	1
12-5	Auxiliary Handle	1
12-6	Bolt	1
13	Terminal	2
14	Screw	2
15	Right Housing	1
16	Right Aluminum Cover	1
17	Left Aluminum Cover	1
18	Clamp	1
19	Angle Button Spring	1
20	Head Angle Button	1
21	Left Housing	1
22	Soft Grip	1
23	Shock Pad	4
24	Motor Asm.	1

Part	Description	Qty
24-1	Motor Back Support	1
24-2	Copper Brush Holder	2
24-3	Carbon Brush	2
24-4	Nut	2
24-5	608Z Bearing	2
24-6	Rotor Asm.	1
24-7	Stator Asm.	1
24-8	Self Tapping Screw	2
24-9	Motor Front Bracket	1
24-10	Screw	2
25	Edge Guide	1
26	Flat Washer	1
27	Guard Asm.	1
27-1	Blade Bracket	1
27-2	Blade	1
27-3	Guard	1
27-4	Flange Tap Screw	1
27-5	Adhesive	1
28	Reel Asm.	1
28-1	Reel	1
28-2	Rivet	2
28-3	Shim B	4
28-4	Shim A	4
28-5	Skate	1
28-6	Slide Spring	1
28-7	Hole Plug	1
28-8	Spool	1
28-9	Nylon Line	1
28-10	Reel Cover	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. Specify UPC 792363625678 when ordering parts.



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.

