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.

REV 16k



1621E-R

12-1/2" PLANER



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

63445

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[©] 2016 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.

AWARNING

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

Table of Contents

Safety 2	Maintenance11
Specifications5	
Setup 6	Warranty16
Onematica	



	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.
AWARNING	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 INFORMATION

General Tool Safety Warnings

AWARNING

Read all safety warnings and 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.

- 1. KEEP GUARDS IN PLACE and in working order.
- REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- KEEP WORK AREA CLEAN.
 Cluttered areas and benches invite accidents.
- 4. DON'T USE IN DANGEROUS ENVIRONMENT.
 Don't use power tools in damp or wet locations,
 or expose them to rain. Keep work area well lighted.

- 5. KEEP CHILDREN AWAY. All visitors should be kept safe distance from work area.
- 6. MAKE WORKSHOP KID PROOF with padlocks, master switches, or by removing starter keys.
- 7. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
- 8. USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.

Table A:	RECOMMENDED MINIMUM WIRE GAUGE
	FOR EXTENSION CORDS
	(120 VOLT)

NAMEPLATE AMPERES	EXTENSION CORD LENGTH			
(at full load)	25'	50'	100′	150′
0 – 6	18	16	16	14
6.1 – 10	18	16	14	12
10.1 – 12	16	16	14	12
12.1 – 16	14	12	Do no	t use.

- 9. USE PROPER 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 cord will cause a drop in line voltage resulting in loss of power and overheating. Table A shows the correct 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.
- 10. WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
- 11. ALWAYS USE SAFETY GLASSES. Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
- 12. SECURE WORK. Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.

- DON'T OVERREACH.
 Keep proper footing and balance at all times.
- 14. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- 15. DISCONNECT TOOLS before servicing; when changing accessories, such as blades, bits, cutters, and the like.
- REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure switch is in off position before plugging in.
- 17. USE RECOMMENDED ACCESSORIES.
 Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
- NEVER STAND ON TOOL.
 Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
- 19. CHECK DAMAGED PARTS. Before further use of the tool, 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 conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
- DIRECTION OF FEED.
 Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
- 21. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.

Grounding Instructions



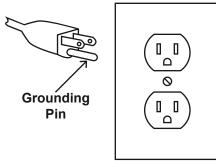
AWARNING

TO PREVENT ELECTRIC SHOCK AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION READ AND FOLLOW THESE INSTRUCTIONS:

110-120 VAC Grounded Tools: Tools with Three Prong Plugs

- In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.
- 2. Do not modify the plug provided if it will not fit the outlet, have the proper outlet installed by a qualified electrician.
- 3. Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.
- Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.
- Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug.

Repair or replace damaged or worn cord immediately.



125 VAC 3-Prong Plug and Outlet (for up to 125 VAC and up to 15 A)

- 7. This tool is intended for use on a circuit that has an outlet that looks like the one illustrated above in 125 VAC 3-Prong Plug and Outlet. The tool has a grounding plug that looks like the plug illustrated above in 125 VAC 3-Prong Plug and Outlet.
- 8. The outlet must be properly installed and grounded in accordance with all codes and ordinances.
- 9. Do not use an adapter to connect this tool to a different outlet.

Tool Safety Warnings

For Your Own Safety Read Instruction Manual Before Operating Tool

- 1. Remove all foreign objects, such as nails or metal fragments, from the workpiece before planing.
- 2. Do not use to plane non-wood materials.
- 3. Do not plane workpieces shorter than 15", narrower than 3/4", wider than 12-1/2" or less than 1/8" thick.
- Blades are very sharp and are double-edged!
 Wear heavy-duty leather work gloves at all times when replacing, adjusting, or handling a blade.
- 5. Change both knives at once. Changing knives individually could result in imbalance.
- Do not unclog dust chute with tool plugged in or blades moving.
 Do not insert your finger into the dust chute.

- Connect dust chute to bag or dust collection system (not included) before use. Do not use without a dust bag or dust collection system.
- 8. DO NOT OPERATE WITH ANY GUARD DISABLED, DAMAGED, OR REMOVED. Moving guards must move freely and close instantly.
- 9. The use of accessories or attachments not recommended by the manufacturer may result in a risk of injury to persons.
- 10. When servicing use only identical replacement parts.
- 11. Only use safety equipment that has been approved by an appropriate standards agency. Unapproved safety equipment may not provide adequate protection. Eye protection must be ANSI-approved and breathing protection must be NIOSH-approved for the specific hazards in the work area.

- 12. 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.
- 13. Industrial applications must follow OSHA guidelines.
- 14. Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- 15. Avoid unintentional starting.

 Prepare to begin work before turning on the tool.
- 16. 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.
- 17. WARNING: The cord of this product contains lead and/or di (2-ethylhexyl) phthalate (DEHP), chemicals known to the State of California to cause cancer, and birth defects or other reproductive harm. Wash hands after handling. (California Health & Safety Code § 25249.5, et seq.)

- 18. WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Some examples of these chemicals are:
 - Lead from lead-based paints
 - Crystalline silica from bricks and cement or other masonry products
 - Arsenic and chromium from chemically treated lumber

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. (California Health & Safety Code § 25249.5, et seq.)

- WARNING: This product contains di (2-ethylhexyl) phthalate (DEHP), a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. (California Health & Safety Code § 25249.5, et seq.)
- 20. 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.

Vibration Safety

This tool 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 tools regularly or for an extended period should first be examined by a doctor and then have regular medical check-ups 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 tool. If you feel any medical or physical 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.
- 3. Use tools with the lowest vibration when there is a choice between different processes.
- Include vibration-free periods each day of work.
- Grip workpiece as lightly as possible (while still keeping safe control of it). Let the tool do the work.
- To reduce vibration, maintain the tool as explained in this manual. If any abnormal vibration occurs, stop use immediately.



SAVE THESE INSTRUCTIONS.

Specifications

Electrical Rating	120VAC / 60Hz / 15A
Motor No Load Speed	n0: 17500/min
Maximum Cutting Depth	3/32"
V-Belt	135J



Setup - Before Use:



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.

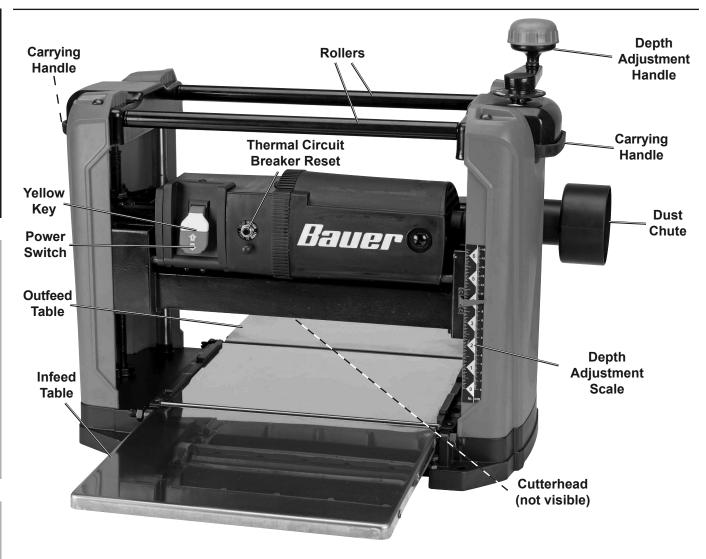
AWARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Turn the Power Switch of the tool off and unplug the tool 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.

Functions



Power Switch Positions







Figure A

Assembly/Mounting

CAUTION! Transport Planer using Carrying Handles only, do not lift with Rollers.

Installing Dust Chute

Note: Dust Chute may be installed in either left or right discharge direction.

- 1. Using included Wrench, attach Dust Chute to back of Planer with two Hex Screws.
- 2. Attach dust collection system to discharge end.

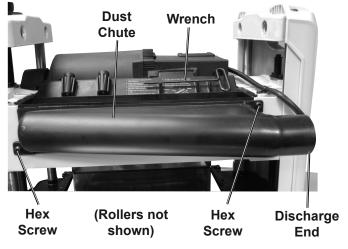


Figure B

Attaching Handle

- Using included Wrench, attach Depth Adjustment Handle to top of right Carrying Handle with Hex Bolt and Washer.
- 2. Insert Plug into opening to cover hardware.

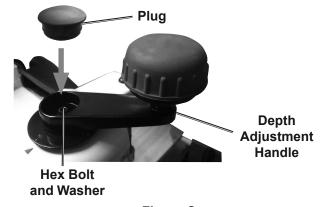


Figure C

Mounting

WARNING! Attach Planer securely to solid and level surface that can support weight of Planer and workpiece, with enough clearance for movement of workpiece.

Note: Verify that mounting surface has no hidden components before drilling or driving bolts.

- 1. Use base to mark mounting holes on mounting surface.
- Mount base to mounting surface using appropriate hardware (sold separately).

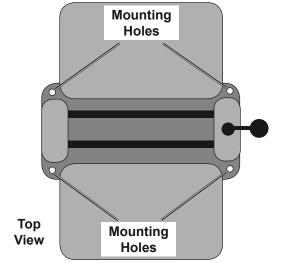


Figure D

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.

Tool Set Up

AWARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:

Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before performing any procedure in this section.

TO PREVENT SERIOUS INJURY:

DO NOT OPERATE WITH ANY GUARD DISABLED, DAMAGED, OR REMOVED.

Leveling Table Extensions

1. Place a level (sold separately) across Planer Table and Infeed Table, then check level.

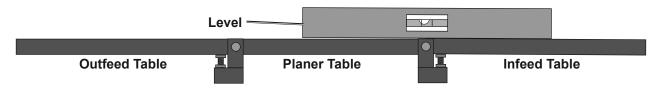


Figure E

- Adjust as needed by lifting Infeed Table and adjusting Leveling Bolts beneath it.
- 3. Repeat with Outfeed Table.

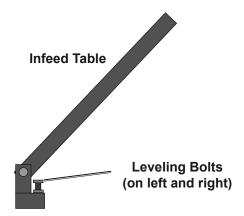


Figure F

Workpiece and Work Area Set Up

- Designate a work area that is clean and well-lit.
 The work area must not allow access by children or pets to prevent distraction and injury.
- Route the power cord along a safe route to reach the work area without creating a tripping hazard or exposing the power cord to possible damage. The power cord must reach the work area with enough extra length to allow free movement while working.
- 3. There must not be objects, such as utility lines, nearby that will present a hazard while working.

General Operating Instructions

WARNING! TO PREVENT SERIOUS INJURY FROM HAZARDS SUCH AS KICKBACK:

Do not plane workpieces shorter than 15", narrower than 3/4", wider than 12-1/2", or less than 1/8" thick. Use only natural dry woodstock which is free from nails, staples, knots, etc. Feed into Planer in line with the grain.

Do not plane wood that is twisted, warped, knotted or bowed.

Note: If one side of workpiece is uneven, plane with flat side down first. If both sides are uneven, run one side through a jointer to flatten it before planing.

Note: Use Depth Adjustment Scale as a reference to indicate thickness of finished workpiece.

Note: Practice on scrap material until familiar with Planer's capabilities.

- Make sure dust collection system is in place.
- 2. Make sure Power Switch is in the off-position.
- 3. Plug in Planer.

Note: Use calipers to measure workpiece.

 Place workpiece on Planer Table, then turn Depth Adjustment Handle counterclockwise to lower Cutterhead until it just touches workpiece.

<u>WARNING!</u> To prevent serious injury, do not turn Planer on with workpiece under Cutterhead.

 Remove workpiece, then turn Depth Adjustment Handle counterclockwise.
 One full turn will remove 1/16" of material.

NOTICE: Do not remove more than 3/32" of material at one time (1-1/2 turns of Depth Adjustment Handle).

<u>NOTICE:</u> Keep long workpieces level by supporting them on both ends of Planer with stands or by other means.

6. Turn on Planer by lifting the Power Switch up.

 After Cutterhead has reached full speed, slowly guide workpiece into Planer until Infeed Roller takes control. Workpiece will auto feed through Planer, do not push on workpiece once it starts autofeeding.

<u>WARNING!</u> To prevent serious injury from kickback, stand on side nearest the switch and to the side.

<u>WARNING!</u> Keep hands out from underneath Cutterhead.

8. Retrieve workpiece from Outfeed side.

Note: If using assistant, Rollers may be used to transport workpiece from Outfeed to Infeed.

Note: If one or both ends of workpiece have a deeper cut, the problem may be snipe.

See Troubleshooting on page 13 for a solution.



Figure G: Workpiece

Continue to remove material until desired thickness is achieved.

NOTICE: To prevent damage from clogging, empty dust collection system frequently.

10. To prevent accidents, turn off tool, lock by removing yellow key from Power Switch, and unplug tool from its electrical outlet after use. Clean and lubricate according to **Maintenance and Servicing on page** 11, then store tool indoors out of children's reach.

- 1. Turn Planer off and unplug from its electrical outlet.
- 2. Using included Wrench, loosen Hex Screws on Dust Chute, then Remove two Hex Screws on Blade Guard. Remove Blade Guard.

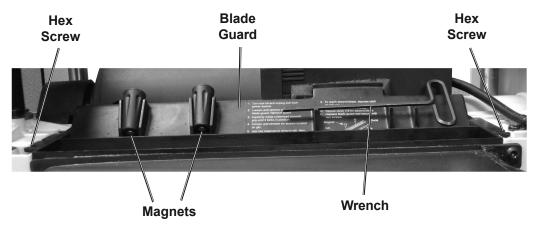


Figure H

CAUTION! Blades are very sharp and are double-edged! Wear heavy-duty leather work gloves at all times when handling a blade.

- 3. Wearing gloves, rotate Cutterhead toward you until it locks into place.
- 4. Remove six Hex Screws on Gib, then using Magnets (see Figure H), remove Gib.

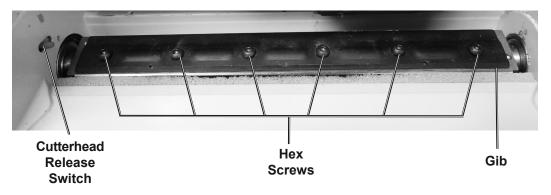


Figure I

<u>CAUTION!</u> Change both Blades at the same time. Changing Blades individually could result in imbalance.

5. Using Magnets, remove Blade, rotate or replace, placing holes over Tabs.

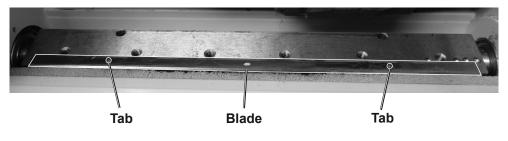


Figure J

- 6. Replace Gib and six Hex Screws, tighten Screws securely.
- 7. Push Cutterhead Release Switch (see Figure I) forward to allow rotation to the second Blade. Repeat steps 4 through 6.
- 8. Replace Blade Guard and two Hex Screws, then tighten Dust Chute.

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:

Turn the Power Switch of the tool off and unplug the tool from its electrical outlet before performing any procedure in this section.

TO PREVENT SERIOUS INJURY FROM TOOL 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 tool. Check for:
 - · loose hardware,
 - · misalignment or binding of moving parts,
 - · cracked or broken parts,
 - · damaged electrical wiring, and
 - any other condition that may affect its safe operation.

- PERIODICALLY, wear ANSI-approved safety goggles and NIOSH-approved breathing protection and blow dust out of the motor vents using dry compressed air.
- 3. AWARNING! If the supply cord of this power tool is damaged, it must be replaced only by a qualified service technician.

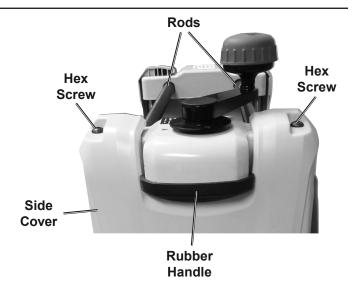
Cleaning

AFTER USE:

- Wear ANSI-approved safety goggles and NIOSH-approved breathing protection, blow debris from Planer using dry compressed air
- b. Remove resin residue with pitch and gum remover.
- c. Empty dust collection system.
- d. Wipe external surfaces with clean cloth.
- e. Wax tables.

Internal Maintenance

- Using allen wrench (not included), remove Hex Screws on Side Cover.
- 2. Remove Rubber Handle, Side Cover and Rods.



Lubrication

1. Elevation Screws and Columns

- a. Remove both Side Covers.
- b. Clean Elevation Screws and Columns.
- c. Lubricate with a light coating of multipurpose grease (sold separately).

2. Roller Chains

- a. Remove left Side Cover.
- b. Use chain cleaner (sold separately) according to manufacturers instructions.
- c. Lubricate with chain oil (sold separately), wipe off excess oil.

Replacing V-Belt

- Remove right Side Cover.
- 2. Remove Belt Cover.

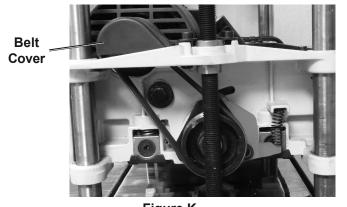


Figure K

- 3. Move Belt back and forth on pulleys, while pulling Belt away from pulleys, one groove at a time.
- Put new Belt on upper pulley, then move Belt back and forth onto lower pulley, while pushing it onto pulley, one groove at a time.
- 5. Replace Belt Cover, Rods, Right Panel and Rubber Handle.
- 6. Replace Hex Screws.

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.

Troubleshooting

Workpiece		
Problem	Possible Causes	Likely Solutions
Deeper cut at	Too little support of long boards.	Provide better support for long boards.
ends of board (snipe).	2. Uneven force on cutter head.	Level Tables according to Leveling Table Extensions on page 8.
Torn, ragged,	Blades dull or damaged.	Replace blades.
rough or raised grain.	2. Cut is too heavy.	2. Reduce depth of cut.
	3. Blades cutting against grain.	3. Cut with grain.
	4. Wood has a high moisture content.	4. Use dry wood.

Planer		
Problem	Possible Causes	Likely Solutions
Tool will not start.	Cord not connected.	Check that cord is plugged in.
	2. No power at outlet.	Check power at outlet. If outlet is unpowered, turn off tool and check circuit breaker. If breaker is tripped, make sure circuit is right capacity for tool and circuit has no other loads.
	Internal damage or wear. (Carbon brushes or switch, for example.)	3. Have qualified technician service tool.
Tool operates slowly.	Extension cord too long or wire size too small.	Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load. See Table A on page 3.
Performance	Blades dull or damaged.	Replace blades.
decreases over time.	2. Carbon brushes worn or damaged.	2. Have qualified technician replace brushes.
Roller case	Sprockets and/or chain dirty.	Clean and lubricate sprockets and/or chain.
adjustment difficult	Elevating screws and/ or columns dirty.	Clean and lubricate elevating screws and/or columns.
	3. Elevating screws worn.	3. Replace elevating screws.
Chain jumping	Sprockets worn.	Have sprockets replaced.
	2. Chain worn.	2. Have chain replaced.
Belt Slipping	Loose belt	Replace belt.
Excessive dust in air	Leaking bag or loose connection.	Check connections or replace collection bag.
Excessive noise or rattling.	Internal damage or wear. (Carbon brushes, bearings, or fan for example.)	Have qualified technician service tool.
Overheating/	1. Dull blades.	Replace blades.
Circuit breaker	2. Forcing boards through planer.	2. Allow auto feed to work at its own rate.
tripping.	3. Blade dull or damaged.	3. Replace blades.
	4. Cut is too heavy.	4. Reduce depth of cut.
	Motor being strained by long or small diameter extension cord.	 Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load. See Table A on page 3.

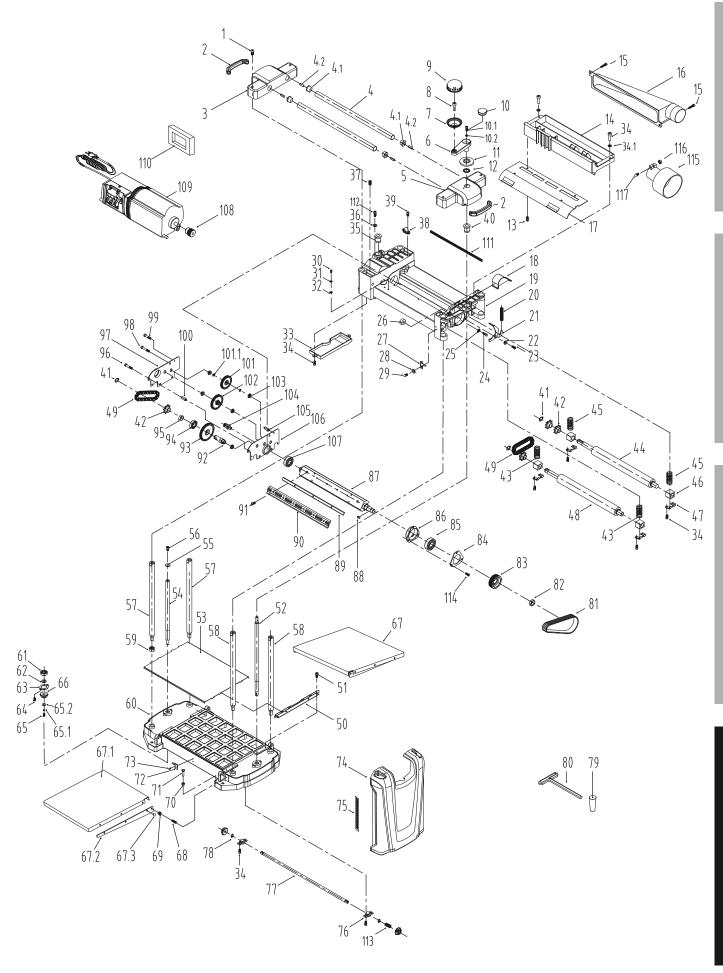


Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect power supply before service.

Parts List

Part		Qty
1	Pan Head Screw	4
3	Portable Sheath	2
3	Left Cap	1
4	Roller	2
4.1	Plug	4
4.2 5	Pin Right Cap	1 1
6	Crank Arm	1 1
7	Handle	1
8	Handle Shaft	1
9	Knob	1
10	Plug	1 1
10.1	Hex Screw	1
10.2	Washer	1
11	Washer	1
12	Washer	1
13	Tapping Screw	4
14	Dust Hood	1
15	Hex Screw	2
16	Dust Adapter	1
17	Dust Chute	1
18	Belt Guard	1
19	Carriage Frame	1
20	Spring	1
21	Cutterhead Lock Plate	1
22	Spacer	1
23 24	Hex Screw Hex Bolt	1 1
25	Flat Washer	1 1
26	Spacer	1
27	Pointer	1
28	Flat Washer	2
29	Cross Head Screw	2
30	Cross Head Screw	2
31	Spring Washer	2
32	Serrated Washer	2
33	Gearbox Cover	1
34	Hex Screw	16
34.1	Washer	2
35	Nut	1
36	Flat Washer	4
37	Set Screw	1
38	Power Cord Clamp	1
39	Cross Head Screw	1
40	Nut	1
41	Retaining Ring Sprocket	3
42 43	Spring	2
44	Outfeed Roller	1
45	Spring	2
46	Bearing Block	4
47	Retainer	4
48	Infeed Roller	1
49	Roller Chain	2
50	Guide	2
51	Hex Screw	12
52	Right Elevating Screw	1
53	Platen	1
54	Left Elevating Screw	1
55	Flat Washer	1
56	Hex Screw	1
57	Left Column	2
58	Right Column	2
59	Hex Nut	4

60 Base 61 Bearing 62 Spacer 63 Retainer 64 Pan Head Screw 65 Hex Screw 65.1 Spring Washer 66 Gear 67 Table Extension Assembly 67.1 Table Extension 67.2 Bracket 67.3 Rivet 68 Adjust Screw 69 Hex Nut 70 Hex Nut 71 Leveling Bolt 72 Bracket 73 Cross Head Screw 74 Side Cover 75 Scale 76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat<	1 2 2 2 2 2 2 4 2 4 12 4 4 4 4 2 1 2 1 2
62 Spacer 63 Retainer 64 Pan Head Screw 65 Hex Screw 65.1 Spring Washer 65.2 Flat Washer 66 Gear 67 Table Extension Assembly 67.1 Table Extension 67.2 Bracket 67.3 Rivet 68 Adjust Screw 69 Hex Nut 70 Hex Nut 71 Leveling Bolt 72 Bracket 73 Cross Head Screw 74 Side Cover 75 Scale 76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	2 2 2 2 2 4 4 2 4 4 4 4 4 2 4 2 1 2 1 2
63 Retainer 64 Pan Head Screw 65 Hex Screw 65.1 Spring Washer 65.2 Flat Washer 66 Gear 67 Table Extension Assembly 67.1 Table Extension 67.2 Bracket 67.3 Rivet 68 Adjust Screw 69 Hex Nut 70 Hex Nut 71 Leveling Bolt 72 Bracket 73 Cross Head Screw 74 Side Cover 75 Scale 76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	2 2 2 2 4 2 2 4 12 4 4 4 2 4 2 1 2 1 2
64 Pan Head Screw 65 Hex Screw 65.1 Spring Washer 65.2 Flat Washer 66 Gear 67 Table Extension Assembly 67.1 Table Extension 67.2 Bracket 67.3 Rivet 68 Adjust Screw 69 Hex Nut 70 Hex Nut 71 Leveling Bolt 72 Bracket 73 Cross Head Screw 74 Side Cover 75 Scale 76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	2 2 2 4 2 2 4 12 4 4 4 2 4 2 1 2 1 2
65. Hex Screw 65.1 Spring Washer 65.2 Flat Washer 66 Gear 67 Table Extension Assembly 67.1 Table Extension 67.2 Bracket 67.3 Rivet 68 Adjust Screw 69 Hex Nut 70 Hex Nut 71 Leveling Bolt 72 Bracket 73 Cross Head Screw 74 Side Cover 75 Scale 76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	2 2 4 2 2 4 12 4 4 4 2 4 2 1 2
65.1 Spring Washer 65.2 Flat Washer 66 Gear 67 Table Extension Assembly 67.1 Table Extension 67.2 Bracket 67.3 Rivet 68 Adjust Screw 69 Hex Nut 70 Hex Nut 71 Leveling Bolt 72 Bracket 73 Cross Head Screw 74 Side Cover 75 Scale 76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	2 2 4 2 2 4 12 4 4 4 2 4 2 1 2
65.2 Flat Washer 66 Gear 67 Table Extension Assembly 67.1 Table Extension 67.2 Bracket 67.3 Rivet 68 Adjust Screw 69 Hex Nut 70 Hex Nut 71 Leveling Bolt 72 Bracket 73 Cross Head Screw 74 Side Cover 75 Scale 76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	2 4 2 2 4 12 4 4 4 2 4 2 1 2
66 Gear 67 Table Extension Assembly 67.1 Table Extension 67.2 Bracket 67.3 Rivet 68 Adjust Screw 69 Hex Nut 70 Hex Nut 71 Leveling Bolt 72 Bracket 73 Cross Head Screw 74 Side Cover 75 Scale 76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	4 2 2 4 12 4 4 4 4 2 1 2 1 2
67 Table Extension Assembly 67.1 Table Extension 67.2 Bracket 67.3 Rivet 68 Adjust Screw 69 Hex Nut 70 Hex Nut 71 Leveling Bolt 72 Bracket 73 Cross Head Screw 74 Side Cover 75 Scale 76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	2 2 4 12 4 4 4 2 4 2 1 2
67.1 Table Extension 67.2 Bracket 67.3 Rivet 68 Adjust Screw 69 Hex Nut 70 Hex Nut 71 Leveling Bolt 72 Bracket 73 Cross Head Screw 74 Side Cover 75 Scale 76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	2 4 12 4 4 4 2 4 2 1 2
67.2 Bracket 67.3 Rivet 68 Adjust Screw 69 Hex Nut 70 Hex Nut 71 Leveling Bolt 72 Bracket 73 Cross Head Screw 74 Side Cover 75 Scale 76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	4 12 4 4 4 4 2 4 2 1 2
67.3 Rivet 68 Adjust Screw 69 Hex Nut 70 Hex Nut 71 Leveling Bolt 72 Bracket 73 Cross Head Screw 74 Side Cover 75 Scale 76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	12 4 4 4 2 4 2 1 2 1 2
68 Adjust Screw 69 Hex Nut 70 Hex Nut 71 Leveling Bolt 72 Bracket 73 Cross Head Screw 74 Side Cover 75 Scale 76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	4 4 4 2 4 2 1 2 1 2
69 Hex Nut 70 Hex Nut 71 Leveling Bolt 72 Bracket 73 Cross Head Screw 74 Side Cover 75 Scale 76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	4 4 2 4 2 1 2 1 2
70 Hex Nut 71 Leveling Bolt 72 Bracket 73 Cross Head Screw 74 Side Cover 75 Scale 76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	4 4 2 4 2 1 2 1 2
71 Leveling Bolt 72 Bracket 73 Cross Head Screw 74 Side Cover 75 Scale 76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	4 2 4 2 1 2 1 2
72 Bracket 73 Cross Head Screw 74 Side Cover 75 Scale 76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	2 4 2 1 2 1 2
72 Bracket 73 Cross Head Screw 74 Side Cover 75 Scale 76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	4 2 1 2 1 2
74 Side Cover 75 Scale 76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	2 1 2 1 2
75 Scale 76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	1 2 1 2
76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	2 1 2
76 Support 77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	2 1 2
77 Shaft 78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	1 2
78 Retaining Ring 79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	2
79 Magnet 80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	
80 Hex Wrench 81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	
81 Belt 82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	1
82 Hex Nut 83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	1
83 Pulley 84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	1
84 Bearing Cover 85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	1
85 Bearing 86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	1
86 Bearing Seat 87 Cutterhead 88 Key 89 Blade	1
87 Cutterhead 88 Key 89 Blade	1
88 Key 89 Blade	1
89 Blade	1
	2
90 Gib	2
91 Pan Head Screw	12
92 Shaft	1
93 Gear	1
- · ·	1
94 Bearing	1
	1
	-
97 Outside Cover	1
98 Hex Screw	3 2
99 Hex Screw	
100 Spacer B	4
101 Gear	1
101.1 Washer	2
102 Gear	1
103 Bushing	5
104 Pinion	1
105 Spacer A	2
106 Inside Cover	1
107 Bearing	1
108 Motor Pulley	1
109 Motor	1
110 Foam Gasket	1
111 Foam Gasket	1
112 Hex Screw	4
113 Spring	1
114 Hex Screw	
115 Dust Port	3
116 Hex Nut	3 1
117 Cross Head 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.

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.

