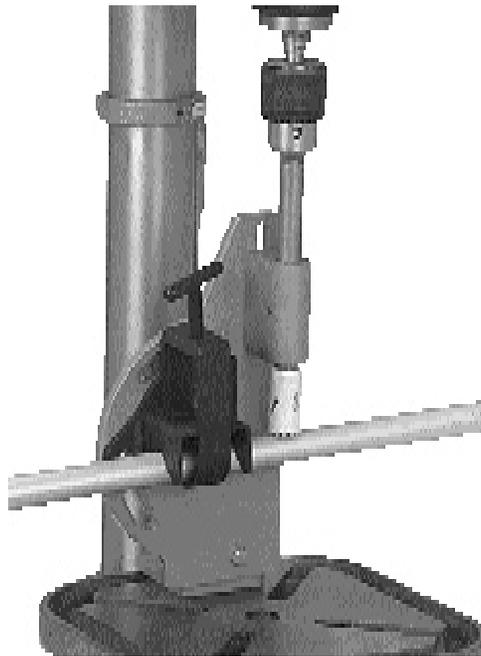




PIPE/TUBE NOTCHER

Model 42324

ASSEMBLY & OPERATING INSTRUCTIONS



Visit our website at: <http://www.harborfreight.com>



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

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For technical questions or replacement parts, please call 1-800-444-3353.

SPECIFICATIONS MODEL # 42324 PIPE NOTCHER

Construction	.224" Chrome Plated Steel Frame
	.149" Black Oxide Steel Clamp
	.485" Handle/Clamp Screw
	Machined Aluminum Spindle Support
Spindle Dimensions	3/4" with 1/2"-20 thread
Spindle Adapter	1/2" to 5/8"
Angle Adjustment	0-60° Left
Mounting Bracket	Adjustable
Net Weight	9.8 Lbs.

FEATURES OF THIS PRECISION PIPE NOTCHER

1. This precision pipe notcher is a useful fixture for your drill press, allowing you to make round cuts in pipes and tubing of various shapes at any angle from 0-60 degrees.
2. Sturdy and durable steel frame holds your workpieces rigid during operation.
3. Base is adaptable to any worktable, and is especially suited to be mounted on drill press tables.
4. The base may be swiveled and rotated, which in conjunction with the adjustable pipe holder makes cutting compound angles very easy.
5. Works with any standard drill press, and is adaptable to a large variety of round cutters, hole saws, and milling bits.

Warning: When using this pipe notcher with any powered tool, observe all safety precautions relevant to that equipment. Refer to the owner's manual of the power equipment for safe practices in the use of attachments.

SAVE THIS MANUAL

You will need this manual for the safety warnings and cautions, assembly instructions, operating procedures, maintenance procedures, trouble shooting, parts list, and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep both this manual and your invoice in a safe, dry place for future reference.

NOTICE

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.

SAFETY WARNING & CAUTIONS

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

1. **KEEP WORK AREA CLEAN.** Cluttered areas invite injuries.
2. **OBSERVE WORK AREA CONDITIONS.** Do not use tools in damp, wet, or poorly lit locations. Don't expose to rain. Keep work area well lit. Do not use electrically powered equipment in the presence of flammable gases or liquids.
3. **KEEP CHILDREN AWAY.** Children must never be allowed in the work area. Do not let them handle machines, tools, or equipment.
4. **STORE IDLE EQUIPMENT.** When not in use, tools must be locked up in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
5. **DO NOT FORCE THE TOOL.** It will do the job better and more safely at the rate for which it was intended. Do not use inappropriate attachments in an attempt to exceed the tool's capacities.
6. **USE THE RIGHT TOOL FOR THE JOB.** Do not use a tool for a purpose for which it was not intended.
7. **DRESS PROPERLY.** Do not wear loose clothing or jewelry, as they can be caught in moving parts. Non-skid footwear is recommended. Wear restrictive hair covering to contain long hair. Always wear appropriate work clothing.
8. **USE EYE, EAR AND BREATHING PROTECTION.** Always wear ANSI approved impact safety goggles if you are producing metal filings or wood chips. Wear an ANSI approved dust mask or respirator when working around metal, wood, and chemical dusts and mists. Use ANSI approved ear protection when working in a loud or noisy environment.
9. **DO NOT OVERREACH.** Keep proper footing and balance at all times. Do not reach over or across running machines.
10. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect power cord periodically, and if damaged, have it repaired by an authorized technician.
11. **STAY ALERT.** Watch what you are doing. Do not operate this machine when you are tired.
12. **DO NOT OPERATE MACHINERY WHILE UNDER THE INFLUENCE OF ALCOHOL, DRUGS, OR PRESCRIPTION MEDICINES.**
13. **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. Check for alignment and binding of moving parts, any broken parts or mounting fixtures, and any other condition that may affect proper operation.
14. **REPLACEMENT PARTS AND ACCESSORIES.** When servicing, use only identical replacement parts, which are available from Harbor Freight Tools. Use of any other parts will void the warranty.

ASSEMBLY AND SET UP

NOTE: This notcher is designed for use with threaded, metal-cutting hole saws.

Basic Assembly and Set-up.

1. The Spindle (#7) is shipped in the reverse position. Remove it and re-insert it in the correct position prior to using the tool.
2. Your pipe notcher must be mounted to your drill press table, using the adjustable angle joint plate (#17). Depending on the configuration of your drill press table, you may use T-bolts, carriage bolts or standard machine bolts, washers and nuts. Hardware is not supplied.
3. After mounting, be sure that the spindle travels smoothly without binding against the bushings (#5). Any undue friction will cause excessive wear of the bushings.
4. The angle of the notcher can be adjusted by loosening the bolts (#16) that adjust the adjustable angle joint plate, and moving the assembly as necessary.
5. For side to side adjustments, loosen the bolts (#15) that hold the adjustment plate to the body (#13).
6. When installing the hole saw, check first to see if its arbor is 1/2" or 5/8". The threads on the spindle are for 1/2", however, there is an adapter (#3) for 5/8" models that can be screwed on over the 1/2" threads. You may need to use the adapter washer (#4) to assure a good, secure fit.
7. To install a saw blade or bit, first fix the spindle in place with the locking pin (#14). *Do not use locking pliers or clamps to hold the spindle, as this will cause damage.* Slide the locking pin through the hole in the side of the spindle support (#6) and through the spindle. Install the blade, then remove the locking pin.

WARNING: Make sure the pin is removed prior to engaging the drill.

OPERATION

Using the Pipe Notcher Fixture.

1. Insert the tubing you wish to cut in the clamp assembly (#1), underneath the inverted "V". The inverted "V" feature of the clamp will hold your tubing (up to 2" long) in place. Do not insert the tubing more than half of its length. When cutting in severe angles, only insert the tubing far enough to start the cut. Secure the tubing in place using the handle/clamp screw assembly (#2).
2. Set the speed of your drill press to approximately 500 rpm for most materials. When cutting thin wall, hard alloy tubing such as chrome-moly, higher speeds will be required. When cutting softer, coarser materials, slower speeds may be ideal. **SUGGESTION: Practice on scrap material before making cuts on your work material.**
3. As you work, lubricate both the hole saw and the bushings with cutting oil to extend service life.
4. When doing severe angle cuts with large diameter tubing, you will need to put the spindle support in its uppermost position in order to accommodate its size. However, you should always position the spindle support as low as possible to preserve accuracy. To move the spindle support, simply loosen the two bolts (#16) that affix it to the body, reposition, and secure the bolts.
5. To adjust the angle of the clamp, loosen the bolts (#15) that secure it to the body, reposition to the angle you desire according to the angle indicator (#10), and retighten the bolts.
6. When the tube is clamped in the notcher and the angle is properly set, you can proceed to cut the workpiece.
7. To remove the blade or bit, shut off the drill press, insert the locking pin into the spindle support, and remove the bit.

MAINTENANCE

Please observe good shop practices for your safety and to extend the work life of your tools.

1. Periodically brush away cuttings and debris from the notcher, especially the bushings and spindle area to avoid scoring or binding these components.
2. Use a suitable light grease on the bushings to prevent overheating and wear.
3. When cutting metal tubes, use plenty of cutting fluid to prevent tool or material overheating, and to remove cuttings from the work area.
4. Be sure to carefully align the drill press spindle and the pipe notcher spindle to prevent binding.
5. After use, clean the tube notcher, and apply a light lubrication to all moving parts and unpainted metal to prevent rust.
6. Leave the locking pin in place in the spindle support when moving or storing this fixture.
7. Store the notcher covered and in a dry, dust free place.
8. Help avoid injury by preventing access to this tool by unauthorized persons and children.

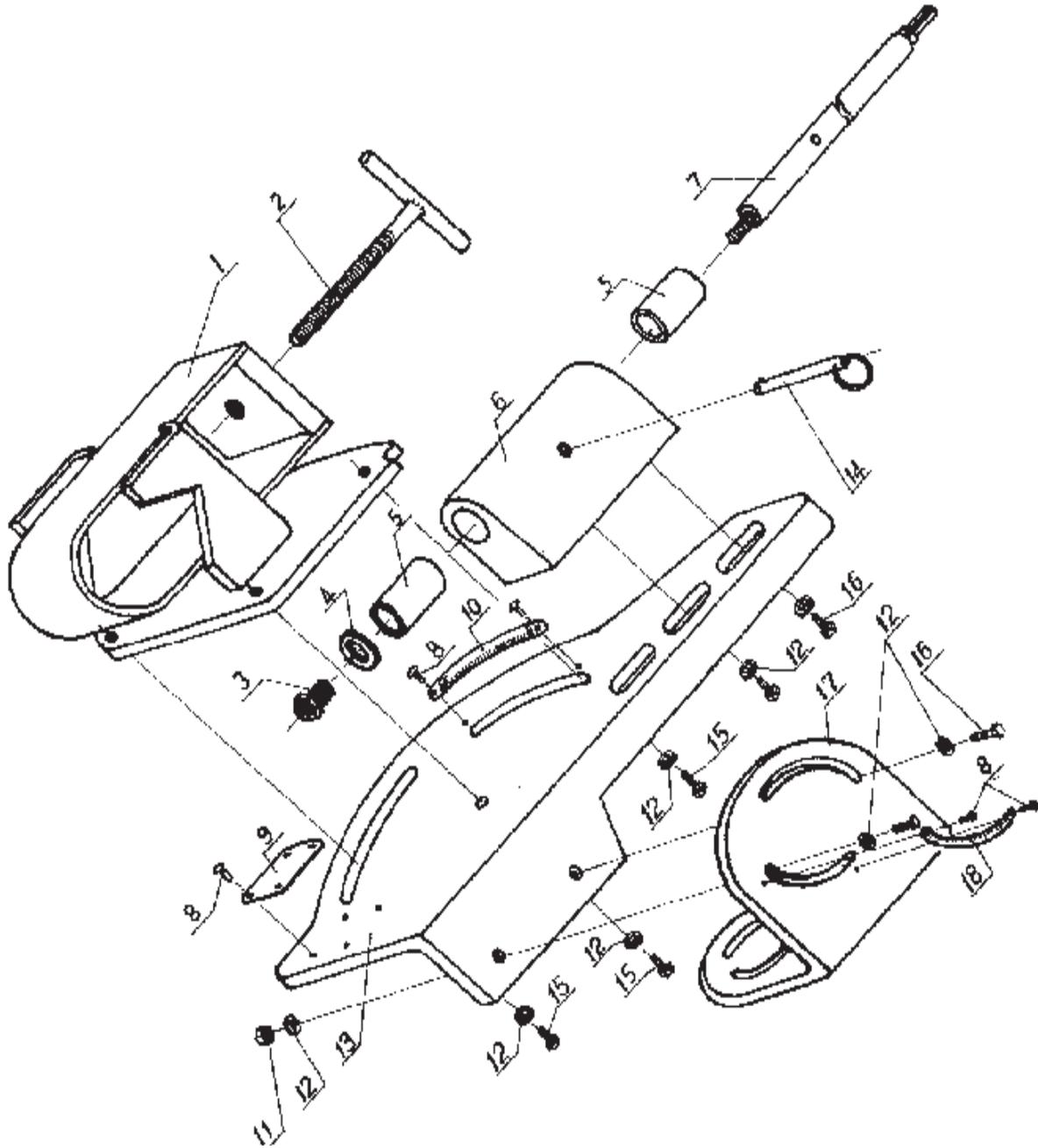
ITEM #42324 PIPE NOTCHER PARTS LIST					
PART	DESCRIPTION	QTY	PART	DESCRIPTION	QTY
1	Clamp Assembly	1	10	Angle Indicator	1
2	Handle/Clamp Screw	1	11	M8 Nut	2
3	5/8" Hole Saw Adapter	1	12	M8 Washer	9
4	5/8" Hole Saw Adapter Washer	1	13	Body	1
5	Bushing	2	14	Locking Pin	1
6	Spindle Support	1	15	M8 x 16 Bolt	3
7	Spindle	1	16	M8 x 20 Bolt	4
8	Rivet	4	17	Adjustable Angle Joint Plate	1
9	Label	1	18	Angle Indicator	1

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY: NEITHER THE MANUFACTURER NOR 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.

MODEL # 42324 PIPE NOTCHER PARTS DIAGRAM

Please refer to the parts list on previous page



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.

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