

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.

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56411

Hydraulic Punch Driver Kit



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


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.

⚠ WARNING

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

WARNING SYMBOLS AND DEFINITIONS

	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.
⚠ CAUTION	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

⚠ WARNING

Read all safety warnings and instructions.

Failure to follow the warnings and instructions may result in serious injury.

Save all warnings and instructions for future reference.

1. **Keep the work area clean and well lighted.** Cluttered benches and dark areas increase the risk of injury to persons.
2. **Keep bystanders and children away while operating the tool.** Distractions can result in loss of control of the tool.
3. **Stay alert. Watch what you are doing and use common sense when operating the tool. Do not use the tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating the tool increases the risk of injury to persons.
4. **Use safety equipment.** Wear ANSI-approved safety goggles and heavy-duty work gloves during use.
5. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair increases the risk of injury to persons as a result of being caught in moving parts.
6. **Do not force the Punch Driver Kit.** Use the correct product for your application. The correct product will do the job better and safer at the rate for which it is designed.
7. **Store the tool when it is idle out of reach of children and other untrained persons.** A tool is dangerous in the hands of untrained users.

8. **Maintain the Punch Driver Kit with care.** Keep this product clean. Properly maintained products are less likely to malfunction. Do not use damaged products. Tag damaged products “**Do not use**” until repaired.
9. **Use only accessories that are recommended by the manufacturer for the specific tool model.** Accessories that may be suitable for one product may become hazardous when used on another product.
10. **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
11. **Protect the Pressure Hose.** Do not drop heavy objects on the Hose. Avoid kinks in the Hose. Maintain proper clearance to avoid damage to the Hose and Coupler.
12. **Maintain labels and nameplates.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
13. **Use the right product for the job.** There are certain applications for which this product was designed. Do not use small products to do the work of larger industrial products. Do not use this product for a purpose for which it was not intended.
14. **Tool service must be performed only by a qualified service technician.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
15. **When servicing the Punch Driver Kit, use only identical replacement parts. Use only authorized parts.**
16. **Keep children and bystanders away while operating a tool.** Distractions can cause you to lose control.
17. 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.



SAVE THESE INSTRUCTIONS.

Specifications

Maximum Capacity	11 Gauge (for mild carbon steel) 16 Gauge (for stainless steel)
Punching Force	10 Ton (20,000 lb.)

Operating Instructions



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.

1. Bleed air from Hydraulic System before first use. Refer to *Bleeding Instructions* on page 7.
2. Do not exceed the Maximum Cutting Capacity of 11 Gauge for mild carbon steel and 16 Gauge for stainless steel.
3. Practice on scrap material of the same composition and thickness before using the actual workpiece to help familiarize yourself with the Punch Driver Kit.
4. Select the size of the Threaded Stud to be used, either 3/4" or 7/16". The 7/16" Threaded Stud is used with the 1.115" Punch and Die.
5. Select the size of the Punch and Die to be used. Be sure to use the same size Punch and Die together. Refer to the *Parts List* on page 10.
6. Plan and measure the location of the hole to be punched in the workpiece. This hole must fit the Threaded Stud to be used.
7. Drill a lead hole at the center point of the hole marked and measured in step 6.
8. Thread the end of the Threaded Stud with the shorter threads into the Punch Head. Refer to Figure A.
9. Slide the Adapter and then the Die onto the Threaded Stud.
10. Slide the workpiece with the drilled hole down onto the Die, as shown in Figure A.

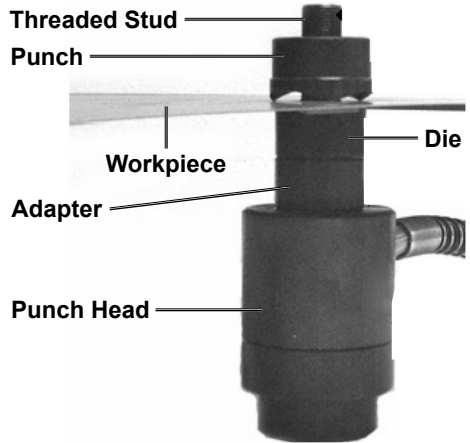


Figure A

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11. Thread the Punch down onto the workpiece as tightly as possible.
12. Turn the Release Valve to the "ON" position. Refer to Figure B.



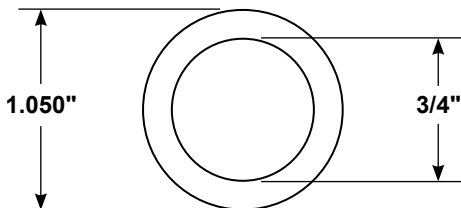
Figure B

13. Grasp the Pump Handle and pump it up and down until the Punch has punched through the workpiece.
14. Turn the Release Valve to the "OFF" position.
15. Thread off the Punch, remove the workpiece, the Die and the Adapter. Remove the Threaded Stud from the Punch Head.
16. Carefully remove the punched material and its residue.
17. Clean, then store the Punch Driver Kit indoors in its Carrying Case, out of reach of children.

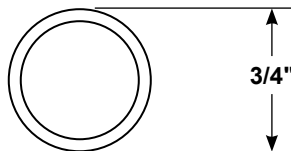
Recommended Punch Size Chart

Punch	Pipe / O.D.	Conduit O.D. Intermediate	Thin Wall O.D.	Electrical Metal Tubing O.D.
1.115"	3/4"/1.050"	1.029"	0.922"	0.922"
1.362"	1"/1.315"	1.29"	1.163"	1.163"
1-11/16" (1.687")	1-1/4"/1.660"	1.638"	1.51"	1.570"
1-15/16" (1.937")	1-1/2"/1.900"	1.883"	1.74"	1.74"
2-3/8" (2.375")	2"/2.375"	2.360"	2.197"	2.197"

PIPE



TUBE



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Maintenance



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

⚠️ WARNING

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.

1. **BEFORE EACH USE**, inspect the general condition of the tool and its accessories. Check for:
 - loose hardware
 - binding of moving parts
 - cracked, worn, or damaged attachments
 - damaged Pressure Hose
 - any other condition that may affect its safe operation.
2. **AFTER EACH USE**, wipe external surfaces of the tool with clean cloth.
3. Keep clean and free from dirt, grease and grit.
4. Store tool in its Carrying Case when not in use.

If a problem occurs, have the problem corrected before further use.

Do not use damaged equipment.

Bleeding Instructions

During shipment and handling, air may get trapped in the hydraulic system. This can interfere with the performance of the Punch Driver Kit. Bleed air from the hydraulic system according to the following instructions.

1. Open the Release Valve, making sure the Punch Head is fully extended, and unscrew the Hose Coupler to disconnect the Hose from the Punch Head. Close the Release Valve, press down the core rod in the Hose Coupler.
2. Pump the Pump Handle. Release the Hose Coupler until oil flows out of the Hose.
3. Reattach the Hose to the Punch Head.
4. Open Release Valve, and Pump Handle several times in rapid succession. Repeat this procedure until the Punch Driver Kit is working properly.

Troubleshooting

Problem	Possible Causes	Likely Solutions
Handle stroke only partly effective.	Air in pump chamber.	Follow the Bleeding Instructions above.
Handle raises on its own.	Sticking or leaking Release Valve.	Remove and clean the Release Valve.
Handle snaps back.	Sticking Delivery Valve.	Open Release Valve. Pump rapidly several times. Close Valve.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS DOCUMENT 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.

Record Serial Number Here:

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

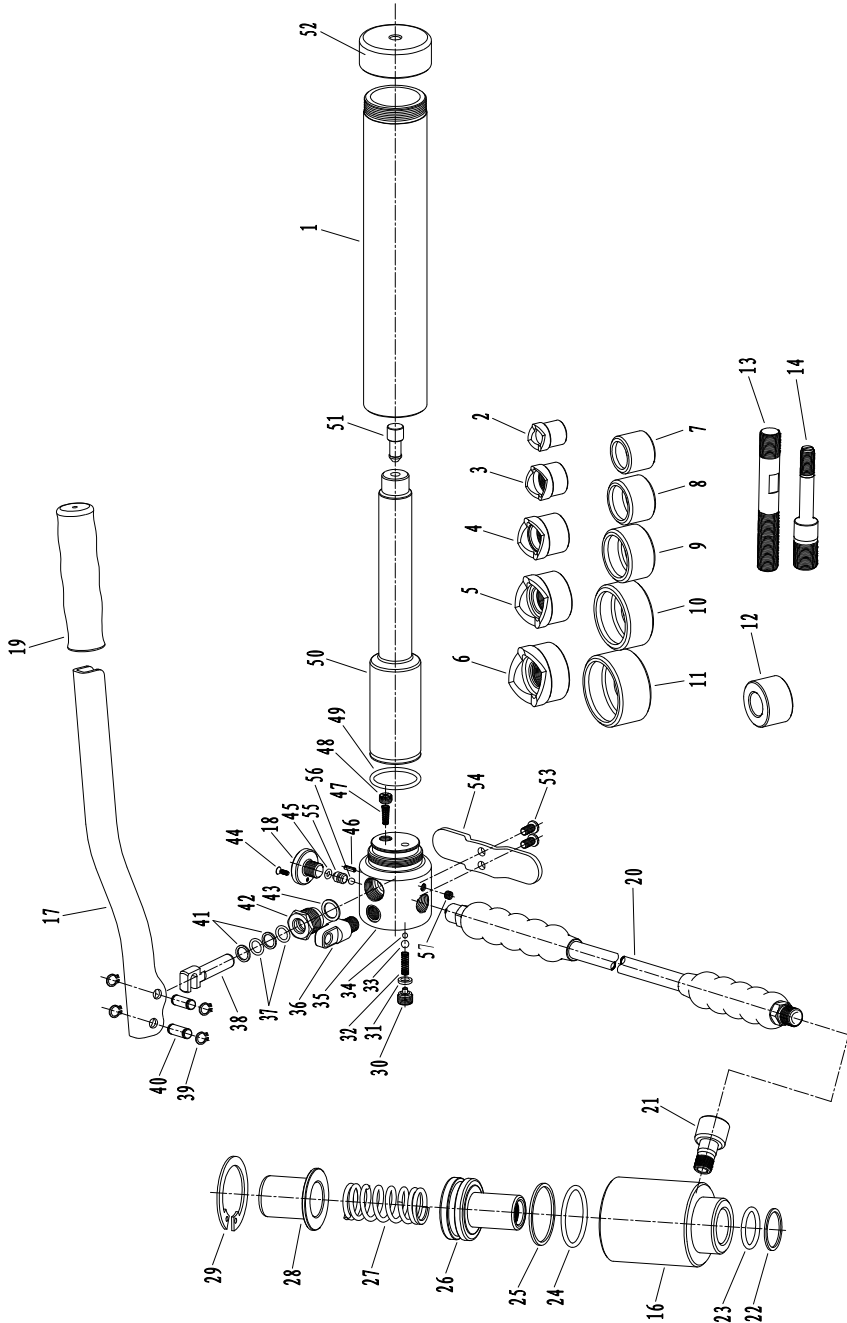
Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

Parts List and Diagram

Parts List

Part	Description	Qty	Part	Description	Qty
1	Hydraulic Pump Tube	1	30	Oil Seal Valve	1
2	Punch 1.115" for 3/4" Pipe	1	31	Nylon Washer	1
3	Punch 1.362" for 1" Pipe	1	32	Spring	1
4	Punch 1-11/16" for 1-1/4" Pipe	1	33	Steel Ball	1
5	Punch 1-15/16" for 1-1/2" Pipe	1	34	Steel Ball	1
6	Punch 2-3/8" for 2" Pipe	1	35	Pump Body	1
7	Die for 1.115" Punch	1	36	Handle Stand	1
8	Die for 1.362" Punch	1	37	O-Ring	2
9	Die for 1-11/16" Punch	1	38	Plunger Piston	1
10	Die for 1.15/16" Punch	1	39	Circlip	4
11	Die for 2-3/8" Punch	1	40	Pin	2
12	Adapter	1	41	Retaining Ring	2
13	Threaded Stud 3/4"	1	42	Big Plug Screw	1
14	Threaded Stud 7/16"	1	43	O Seal Ring	1
15	Carrying Case (Not Shown)	1	44	Flat Head Bolt	1
16	Punch Head	1	45	O-Ring	1
17	Pump Handle	1	46	Pin 3x12	1
18	Release Valve	1	47	Conical Spring	1
19	Grip	1	48	Oil Return Valve	1
20	Pressure Hose	1	49	O-Ring	1
21	Pressure Hose Coupler	1	50	Oil Tank	1
22	Retaining Ring	1	51	Plug Cock	1
23	O-Ring	1	52	End Cover	1
24	O-Ring	1	53	Bolt	2
25	Retaining Ring	1	54	Foot Base	1
26	Piston	1	55	Oil Return Piston	2
27	Spring	1	56	Steel Ball C5	2
28	Spring Base	1	57	Locking Screw	1
29	Circlip	1			

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.

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