

PITTSBURGH[®] AUTOMOTIVE

Hydraulic Punch Driver Kit

Item 96718

INSTRUCTIONS AND PRECAUTIONS

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

⚠ WARNING

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

When unpacking, make sure
that the product is intact and
undamaged.

If any parts are missing or broken,
please call 1-800-444-3353
as soon as possible.

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Tools. Diagrams within this document 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.

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



Specifications

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

Important Safety Information

1. Keep work area clean and well lit. Cluttered or dark areas invite accidents.
2. Keep children and bystanders away while operating the Punch Driver Kit. Distractions can cause you to lose control.
3. Stay alert, watch what you are doing and use common sense when operating the Punch Driver Kit. Do not use the Punch Driver Kit while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating hydraulic tools may result in serious personal injury.
4. Use safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
5. Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
6. Do not force the Hydraulic Punch Driver Kit. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it was designed.
7. Store idle tool out of the reach of children and do not allow persons unfamiliar with the Hydraulic Punch Driver Kit or these instructions to operate the Hydraulic Punch Driver Kit. This tool is dangerous in the hands of untrained users.
8. Maintain tool. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the Hydraulic Punch Driver Kit's operation. If damaged, have the Hydraulic Punch Driver Kit repaired before use. Many accidents are caused by poorly maintained power tools.
9. Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
10. Have Hydraulic Punch Driver Kit serviced by qualified service technician using only identical replacement parts. This will ensure the safety of Hydraulic Punch Driver Kit is maintained.
11. Maintain product labels and nameplates. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
12. This product is not a toy. Keep it out of reach of children.
13. **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, birth defects or other reproductive harm. (California Health & Safety Code § 25249.5, et seq.)

- 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.

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.

- Bleed air from Hydraulic System before first use. See page 4.
- When selecting a work piece, please do not exceed the Maximum Cutting Capacity of 0.12" for mild carbon steel and 0.08" for stainless steel.

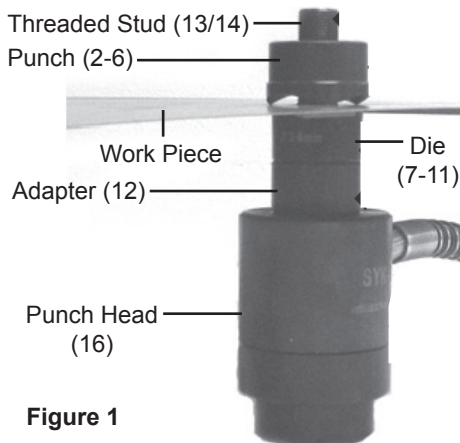


Figure 1

- Practice with a scrap work piece before using the actual work piece. Working with a scrap work piece will help you familiarize yourself with the Punch Driver Kit.
- Select the size of the Threaded Stud (13, 14) to be used, either 3/4" or 7/16".
- Select the size of the Punch and Die to be used (see Parts List on page 6).
- Plan and measure the location of the hole to be punched in the work piece. This hole must fit the Threaded Stud to be used.
- Drill a lead hole at the center point of the hole marked and measured in step 5.
- The 7/16" Threaded Stud is to be used with Punch (2) and Die (7).
- Thread the Threaded Stud into the Punch Head (16). Note that the end with the shorter threads is threaded into the Punch Head. See Figure 1.
- The Adapter (12) is to be used with all Punch and Dies that are used.
- Slide Adapter and then Die onto the Threaded Stud.
- Slide your work piece with the drilled hole down onto the Die, as shown in Figure 1.
- Thread the Punch down onto the work piece as tightly as possible.
- Turn the Release Valve (18) (see Figure 2) to the "ON" position.

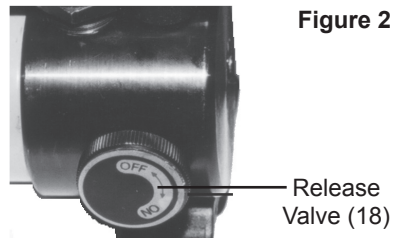


Figure 2

15. Grasp the Pump Handle (17) and pump it up and down until the Punch has punched through the work piece.
16. Turn the Release Valve (18) to the "OFF" position.
17. Thread off the Punch, remove the work piece, the Die and the Adapter. Remove the Threaded Stud from the Punch Head.
18. Carefully remove the punched material and its residue.
19. Clean, then set the Punch Driver Kit into its Carrying Case and store the tool indoors out of children's reach.

2. **AFTER EACH USE**, wipe off Punch Driver Kit with clean, moist cloth.
3. Service to the Punch Driver Kit should only be done by a qualified Service Technician.

Bleeding Instructions

1. **NOTE:** During shipment and handling, air may get trapped in the hydraulic system-Hydraulic Pump with Pressure Hose. This can interfere with the performance of the Punch Driver Kit. Bleed air from the hydraulic system according to the following instructions.
2. Open the Release Valve, making sure the Punch Head is fully extended, and unscrew the coupler to disconnect the Hose from the Punch Head. Close the Release Valve, press down the core rod in the Hose Coupler.
3. Pump the Pump Handle. Release the Hose Coupler until oil flows out of the Hose.
4. Attach the Hose to the Punch Head.
5. Open Release Valve, and Pump Handle several times in rapid succession. Repeat this procedure until the Punch Driver Kit is working properly.

Maintenance and Servicing

1. **BEFORE EACH USE**, inspect the general condition of the Hydraulic Punch Driver Kit. Check for loose attachments, binding of moving parts, cracked or broken attachments, and any other condition that may affect its safe operation. If any abnormality is found, have the problem corrected before further use. **Do not use damaged equipment.**

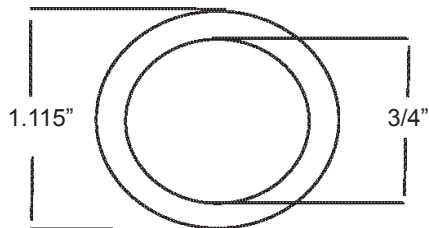
Troubleshooting

PROBLEM	POSSIBLE CAUSES	PROBABLE 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.

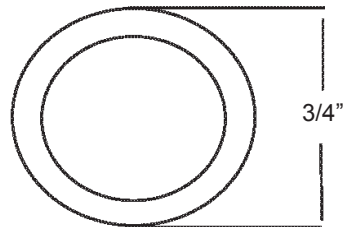
Punch Sizes/Pipe, Conduit, Metal Tubing Outside Diameter Specifications Chart

Punch	Pipe / O.D.	Conduit O.D. Intermediate	Thin Wall O.D.	Electrical Metal Tubing O.D.
1.115"	3/4" / 1.505"	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



Parts List

Part	Description	Qty
1	Hydraulic Pump with Pressure Hose	1
2	Punch 1.115" for 3/4" Pipe	1
3	Punch 1.362" for 1" Pipe	1
4	Punch 1-11/16" for 1-1/4" Pipe	1
5	Punch 1-15/16" for 1-1/2" Pipe	1
6	Punch 2-3/8" for 2" Pipe	1
7	Die for 1.115" Punch	1
8	Die for 1.362" Punch	1

Part	Description	Qty
9	Die for 1-11/16" Punch	1
10	Die for 1.15/16" Punch	1
11	Die for 2-3/8" Punch	1
12	Adapter	1
13	Threaded Stud 3/4"	1
14	Threaded Stud 7/16"	1
15	Carrying Case (not shown)	1
16	Punch Head	1
17	Pump Handle	1
18	Release Valve	1

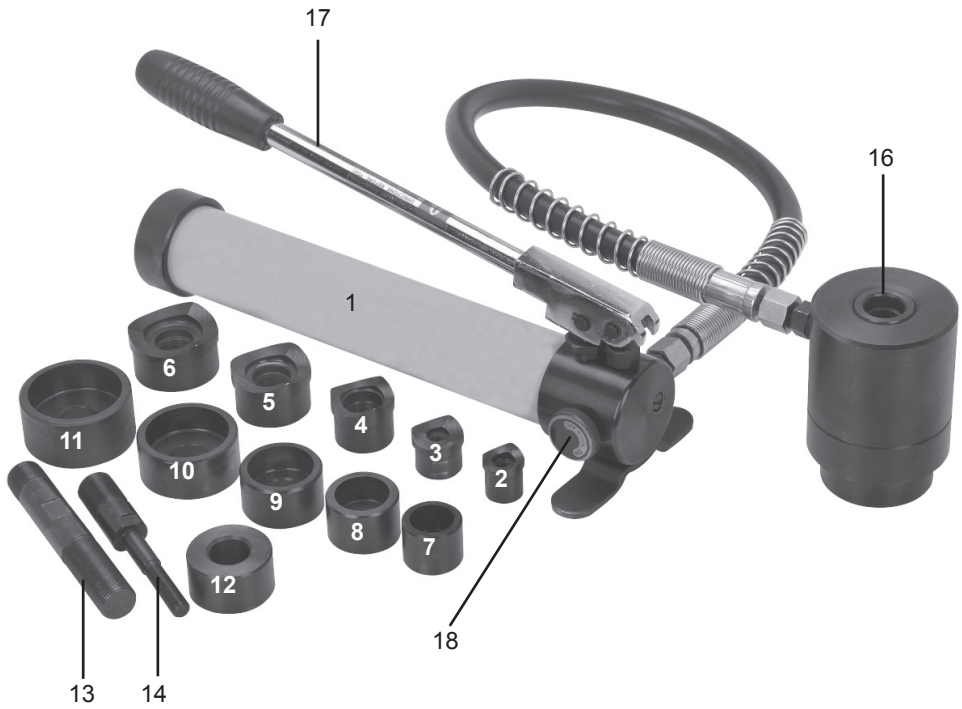
Record Serial Number Here:

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

PLEASE READ THE FOLLOWING CAREFULLY

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 Diagram



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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