

DESIGNED BY JIM SPURGE  
Manufactured By  
**Uni-Hydro, Inc.**  
MODEL: \_\_\_\_\_  
SERIAL: \_\_\_\_\_  
CORONA, MISSOURI 64501  
USA



**45** TON  
**IRONWORKER**

**WARNING**  
BEFORE USING THIS MACHINE, READ AND UNDERSTAND THE OPERATING INSTRUCTIONS AND SAFETY WARNINGS.  
NEVER OPERATE THE MACHINE WITH GUARDS REMOVED.  
NEVER ATTEMPT TO FORCE THE MACHINE TO CUT.  
NEVER OPERATE THE MACHINE WITH THE HANDLE OR LEVER IN THE "STOP" POSITION.  
STAND CLEAR OF REAR OF MACHINE.

**CAUTION**  
MILD STEEL ONLY  
DO NOT CUT STEEL WITH BAR HOLDER OFF

**3-STATION HYDRAULIC IRONWORKER**

EST.



1974



# UNI-HYDRO

For over 45 years Uni-Hydro has built the finest line of ironworkers, plate shears and punch tooling in the fabrication industry. All Uni-Hydro machines feature our patented linkage system and are engineered for exceptional performance and longevity. The result is each ironworker does exactly what an ironworker is supposed to do; cut, bend, notch and punch steel with the least amount of deformation possible.

Some people call us the best kept secret in the Machine Tool Industry. We hope you enjoy exploring our machines and decide to put a legendary Uni-Hydro on your shop floor soon!

**FOR MACHINERY & TOOLING INQUIRIES CALL OUR SALES TEAM AT**

**[800] 328-0036**





\* Shown with optional Slug Type Angle Shear

Uni-Hydro's Model 45-14 is a rugged and compact three station ironworker that has been the signature machine for our company since 1980. Today, it's still the industry's leader in capacity, quality of cuts, power, versatility and affordability. This Model enhances all the Uni-Hydro Ironworkers in giving a customer more tonnage and capacity for the dollar.

## FEATURES:

- Manual punch aligner
- 6" open throat punch with 45-ton capacity
- 14" bar shear with 4-sided blades
- Bar shear hold-down can be fixed or adjustable
- Variable stroke control
- Built for forklift handling
- Magnetic starter for safety and reliability
- 3-Year 1 year unconditional warranty on the original edge of the flat bar shear blade

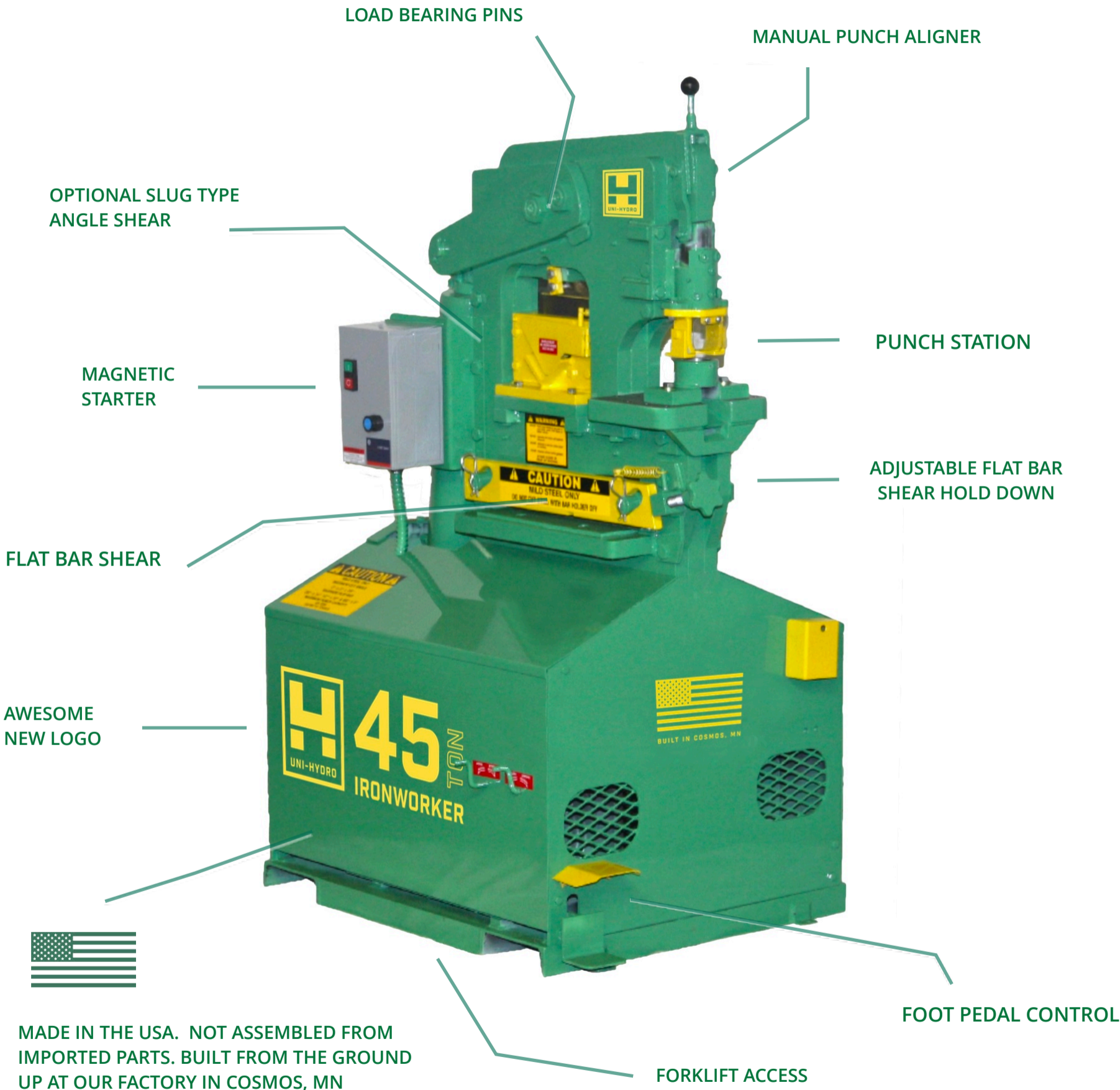
## SPECIFICATIONS

<b>Model</b>	45-14
<b>Tonnage</b>	45
<b>Throat Depth</b>	6"
<b>Punch</b>	1-1/8" hole in 1/2" mild steel 1-3/8" hole in 3/8" mild steel
<b>Bar Shear</b>	3/8" x 14", 1/2" x 10", 5/8" x 6"
<b>Angle Shear 90°</b>	Slug Type - 3" x 3" x 3/8" Sever Cut - 3" x 3" x 1/4"
<b>Miter Angle 45°</b>	Bar Shear - 3" x 3" x 3/8" Slug Type - 2" x 2" x 5/16"
<b>Rod Shear</b>	Round (Max) - 3/4" Square (Max) - 3/4"
<b>V Coper Notcher 90°</b>	For 3" x 3" x 1/4" Angle Iron
<b>Square Notcher</b>	1-3/4" x 2" x 1/4" - (Punch/Power Cavity)

<b>Pipe Notcher (Sch 40 or 80)</b>	1/2", 3/4", 1", 1-1/4", 1-1/2", 1-3/4", 2"
<b>Brake</b>	6" or 9" x 1/4"
<b>Channel Shear</b>	1" & 2" combined or 3" standard
<b>Strokes Per Min</b> Light Material & Max Capacity	Light Material - 50 Max Capacity - 7
<b>Hydraulics</b>	1,000 psi
<b>Oil Capacity</b>	15 quarts
<b>Motor</b>	Standard - 3 HP / 3ph Optional - 3 HP / 1ph
<b>Dimensions (L x W x H)</b>	34" x 28" x 60"
<b>Weight</b>	1,240 lbs
<b>TOOLING AND ACCESSORIES - PAGE 4 &amp; 5</b>	



# UNI-HYDRO IRONWORKER MODEL 45-14 FEATURES



Outfit your Ironworker for maximum productivity with these exceptional tooling choices, optimized for the Power Cavity, Punch and Notching Stations.



SLUG TYPE ANGLE SHEAR



UNIVERSAL SEVER HOUSING FRONT



UNIVERSAL SEVER HOUSING BACK



UNIVERSAL SEVER HOUSING



SPEING RETURN BRAKE



2-PART BRAKE



PIPE NOTCHER



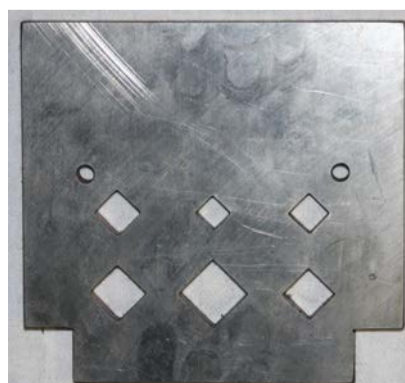
SQUARE NOTCHER



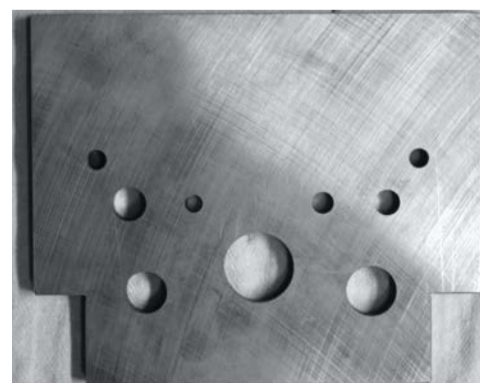
V-COPER NOTCHER



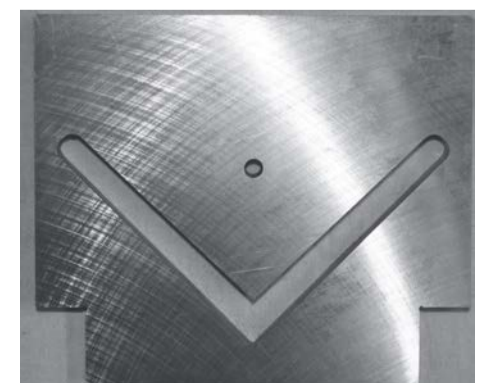
CHANNEL SEVER PLATE



ROD SEVER PLATE



BAR SEVER PLATE



ANGLE SEVER PLATE



# ACCESSORIES

OPTIMIZED FOR PRODUCTIVITY



PUNCH TABLE WITH ADJUSTABLE JIG



BAR SHEAR TABLE



STEEL BIN CATCHER



PUNCH & DIE RACK



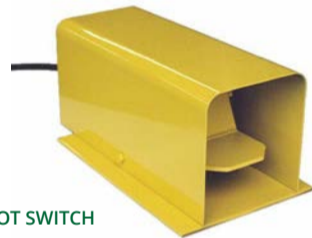
PUNCH NUT WRENCHES



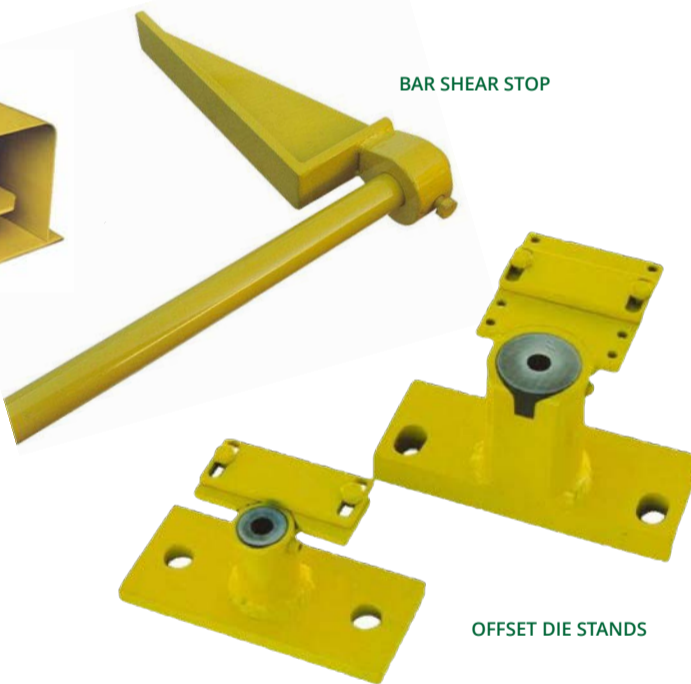
OVERSIZE DIE STANDS



DELUXE BACK GAUGE

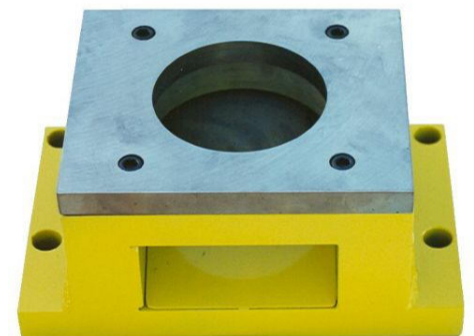


REMOTE FOOT SWITCH

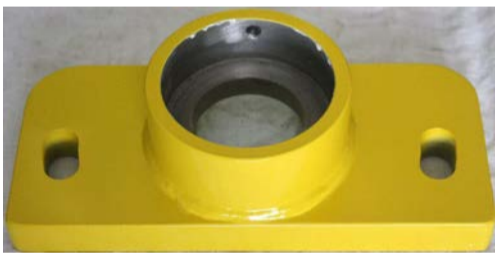


BAR SHEAR STOP

OFFSET DIE STANDS



SPECIAL DIE STAND WITH 7x7 PLATE DIE



OVERSIZE DIE STAND



OVERSIZE DIE SETS



GREASE BANK



OFFSET DIE STANDS



# WHY INVEST IN A UNI-HYDRO?

1

## WE HAVE A LONG HISTORY BUILDING IRONWORKERS IN AMERICA

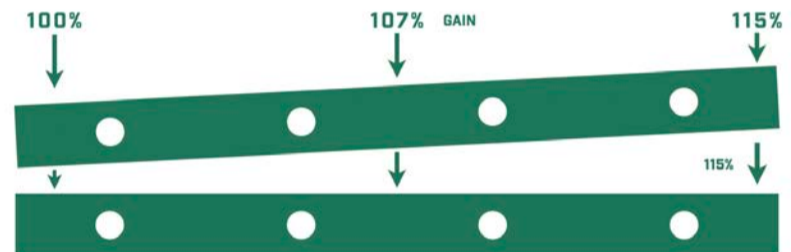
The Dvorak family has been producing hydraulic ironworkers since 1949, with the Uni-Hydro brand in business for over 45 years. Jim Dvorak holds 30 international and 6 stateside patents on ironworkers, with no other ironworker manufacturer or individual coming close to as many patents held by Jim.

2

## PATENTED POWER

The patented mechanical linkage system designed by Jim Dvorak moves the working center plate downward with a slight movement which breaks the molecules of steel in multiple directions in a slicing motion. This ensures the cleanest cuts available in the industry. The design methods found on a Uni-Hydro ironworker have incorporated the tooling stations to push in a non-attached or non-binding method. This ensures our punch stations and power cavity stations operate tooling in a vertical position.

**UNI-HYDRO SHEARS  
GAIN POWER UP TO 115%  
THROUGH THE CUT!**



3

## ENGINEERED FOR A TIGHT FIT AND FINISH

Our rigorous manufacturing process ensures the primary plates are 100% accurate. Each machine has almost 70% more load bearing pin surface than a competitor's machine. This creates a more efficient working cycle throughout the machine's working process. Coupled with this is our world famous mechanical linkage system, that ensures each guillotine cut on our bar shear is as accurate as is possible.

4

## EXCEPTIONAL PUNCHES AND TOOLING

Our tooling doesn't wear out like other machines. Our four-side bar shear blades come with an unconditional 3-Year warranty on the original edge. No other manufacturer offers this guarantee. Our punches and dies are purchased in pairs of the exact same size, not mismatched like the rest of the industry. Each punch and die is coated with oil with a next-level bluing process to prevent oxidation and reduce slag build up. With our punches and dies sitting on the shelf and not rusting you are ensured of getting the best punches & dies for your money.

5

## DESIGNED WITH YOUR SAFETY IN MIND

Uni-Hydro machines are designed for safety of an operator, with shields and pedals in exactly the right place. Uni-Hydro Inc is an American based manufacturing company that **protects our company AND customers** with appropriate product Liability Insurance. Even UNI-HYDRO MANUFACTURED Punches, Dies and Tooling are covered by Uni-Hydro's Product Liability Certification when used in a Uni-Hydro ironworker. With Foreign importers depending on liability pass-through to off-shore manufacturers, who do trust more with your valuable purchase dollars?



# IRONWORKER

## PUNCH TONNAGE CHART

HOLE DIAMETER	3/16"	5/16"	7/16"	1/2"	9/16"	5/8"	11/16"	3/4"	13/16"	7/8"	15/16"	1"	1-1/8"	1-1/4"	1-1/2"
THICKNESS	PRESSURE IN TONS														
18 GA	0.5	0.7	1.6	1.9	2.1	2.4	2.6	2.8	3.1	3.3	3.5	3.8	4	4.2	5.6
16 GA	0.6	0.9	2.1	2.3	2.6	2.9	3.2	3.5	3.8	4.1	4.4	4.7	4.8	6	7
14 GA	0.7	1.2	2.6	2.9	3.3	3.7	4	4.4	4.8	5.1	5.5	5.9	5	7.2	10
12 GA	1	1.5	3.6	4.1	4.6	5.1	5.7	6.2	6.7	7.2	7.7	8.2	7	10	12
10 GA	1.3	2	4.6	5.3	5.9	6.6	7.3	7.9	8.6	9.2	9.9	10.6	10	13	15
5/32"	-	2.3	5.4	6.1	6.9	7.7	8.4	9.2	10	10.7	11.5	12.3	11	16	19
3/16"	-	2.8	6.4	7.4	8.3	9.2	10.1	11	12	12.9	13.8	14.8	17	19	23
1/4"	-	-	8.6	9.8	11.1	12.3	13.5	14.7	16	17.2	18.4	19.7	23	25	30
3/8"	-	-	12.8	14.8	16.5	18.5	20.2	22.1	23.8	25.8	27.5	29.5	33	38	45
1/2"	-	-	-	19.7	22	24.6	26.9	29.5	31.8	34.4	36.8	39.4	45	50	60
5/8"	-	-	-	-	-	30.8	33.7	36.9	39.9	43	46	49.2	56	63	75
3/4"	-	-	-	-	-	-	-	44.3	47.7	51.7	55.2	59	68	75	90
1"	-	-	-	-	-	-	-	-	-	-	-	80	90	100	120

**OVER 20,000 PUNCH & DIE SETS IN STOCK!**

**CALL TODAY!**

UNI-HYDRO INC. - 310 EAST GEMINI AVE. COSMOS, MN 56228. USA

**(800) 328-0036**





**UNI-HYDRO**

**BUILT IN COSMOS, MN** 

**WARNING**  
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REMOVED.  
NEVER ATTEMPT TO SERVICE THIS TOOL  
WHILE IT IS PLUGGED IN.  
NEVER OPERATE WITHOUT SAFETY GLASSES.  
STAND CLEAR OF  
WHEEL OF BELTDRIVE

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**FOR MORE INFORMATION VISIT**

**[WWW.UNIHYDRO.COM](http://WWW.UNIHYDRO.COM)**

**(800) 328-0036**