



WTC MACHINERY Engineered to perform. Built to last.

WTC Machinery is a global leader in designing and building machinery and tooling for heavy equipment repair facilities.

HCRS-1C



Overview

The HCRS-1C Hydraulic Cylinder Repair Stand provides a stable platform for disassembling, servicing and reassembling hydraulic cylinders. The HCRS-1C provides hydraulic assist to remove and reinstall the piston assembly, and a full set of clamps and supports to safely service only rod eye hydraulic cylinders.

Using the self-contained hydraulic system, the HCRS-1C removes and re-installs piston keeper nuts with torque up to 20,000 ft-lbs (27,100 N-m), and removes and installs piston rods with a force up to 28,860 lbs.

Specifications:

Maximum Cylinder Weight:	8000 lbs (3650 kg)
Maximum Barrel Diameter:	20 in (0.76 m)
Maximum Cylinder Length:	120 in (3.04 m) ***Unlimited with extensions***
Maximum Rod Eye Width:	8.8 in (225 mm)
Maximum Piston Nut (Across Flats):	6.3 in (162 mm)
Piston Extraction / Insertion Force:	14,000 lbs (6560 kg-f)
Maximum Torque:	20,000 lb-ft (27,100 N-m)

Electrical

Power Requirements:	2 Hp (1.5 kW)
Standard Voltages:	120/60, 220/50, 230/60 Single-Phase

HCRS-1C Specifications

DIMENSIONS

Weight3500 lbs (1600 kg) **Length**..... 235 inches (6,00 m)
Width 39 inches (1,00 m) **Height** 55 inches (1,40 m)

HYDRAULIC

Maximum Pressure 3000 p.s.i. (206 bar)
Maximum Flow 1.0 gpm (3.8 lpm)

ELECTRICAL 2 Hp (1.5 kW) 1 Phase Electric

Standard Voltages:

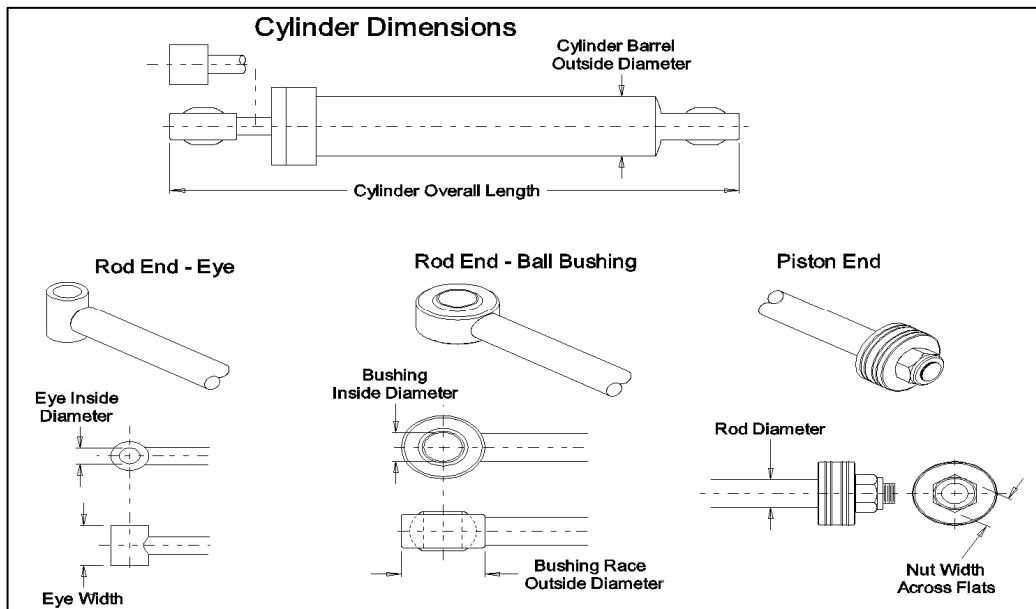
<u>50 Hz</u>	<u>60 Hz</u>
220 V / 11.5 A	230 V / 9.5 A
110 V / 22.5 A	120 V / 19.0 A

TORQUING CAPACITY **20,000 Foot-Pounds (27100 N-m)**

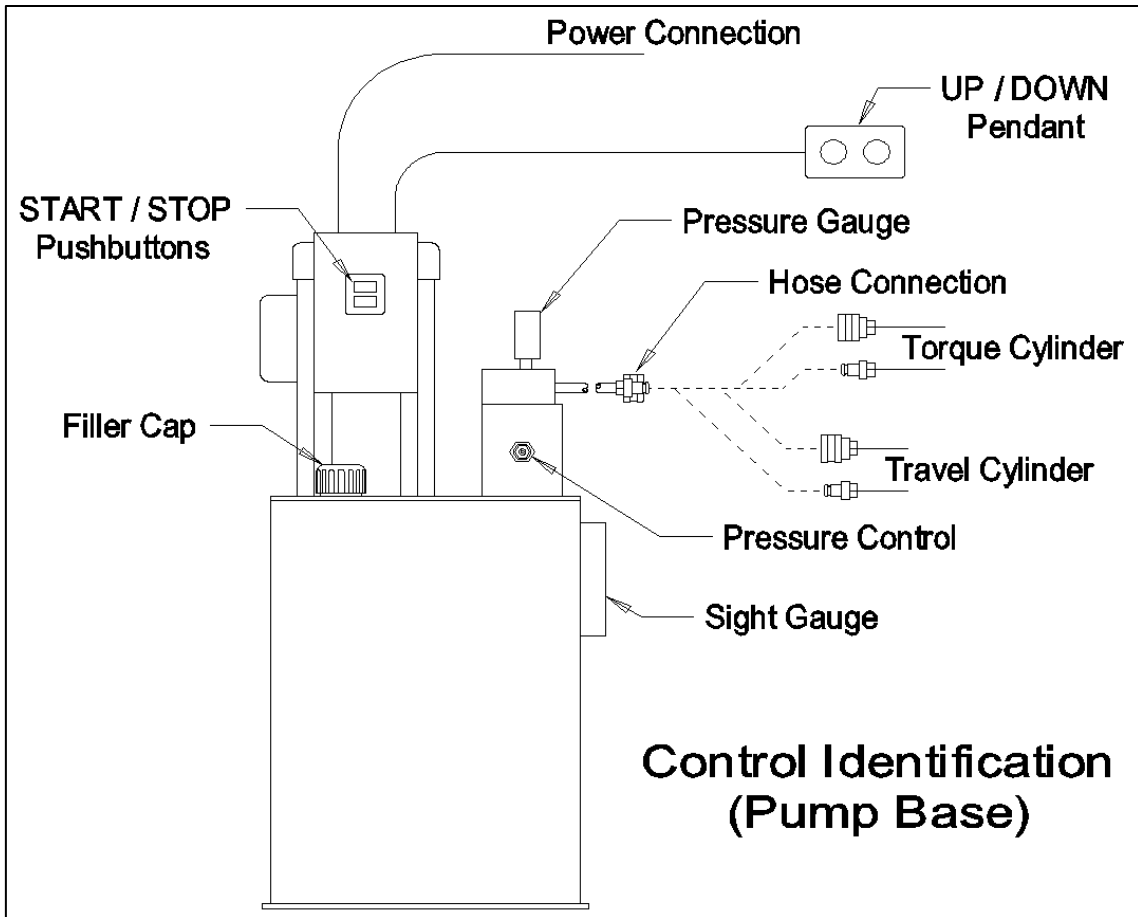
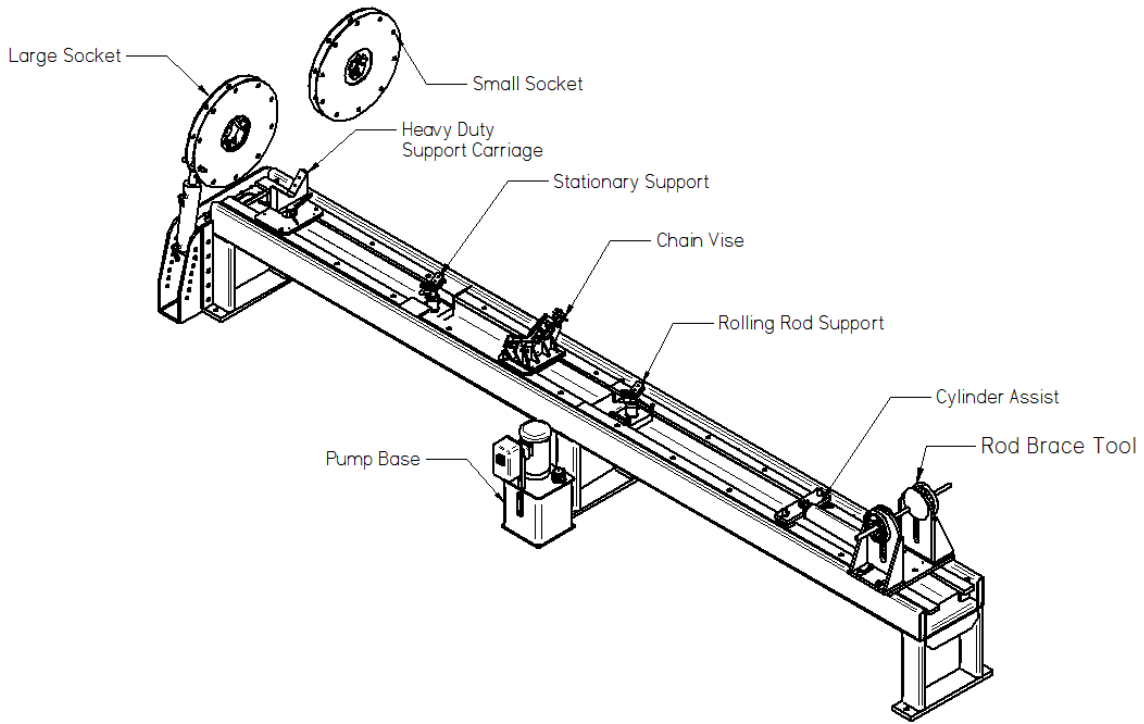
EXTRACT / INSERT FORCE **20,400 Pounds (9270 kg-F) Extract / 24,900 Pounds (11320 kg-F) Insert**

CAPACITY - MAXIMUM / MINIMUM CYLINDER SPECIFICATIONS

Weight< 8000 lbs (3650 kg) **Cylinder Barrel Diameter** 20 inches (,76 m)
Overall Length...<120 inches (3,04 m) unlimited with extensions
Bushing Inside Dia.....> 1-1/2 inches (38 mm)
Rod Eye Width...< 8-7/8 inches (225 mm) **Rod Eye Inside Dia**.....> 1-1/2 inches (38 mm)
Piston Nut Width (Across Flats) ... < 6-3/8" (162 mm)



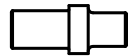
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



 0.25" (6,3 mm)

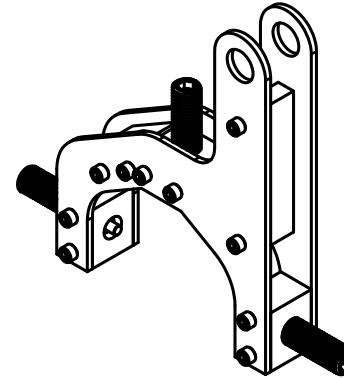
 0.31" (7,9 mm)

 0.37" (9,5 mm)

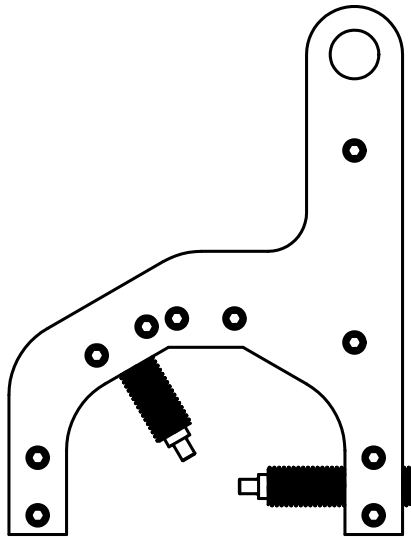
 0.43" (11,1 mm)

 0.50" (12,7 mm)

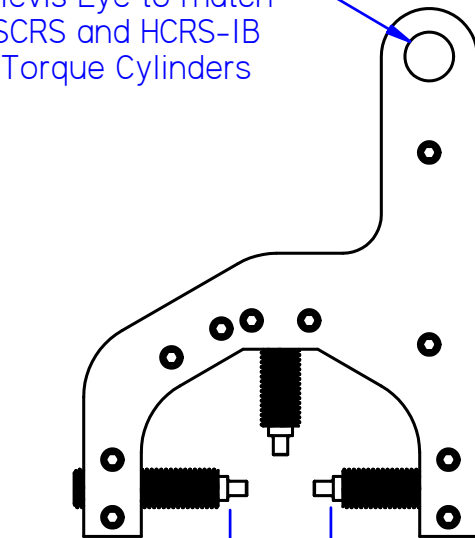
Spanner Pin Set
3 Pins per Set



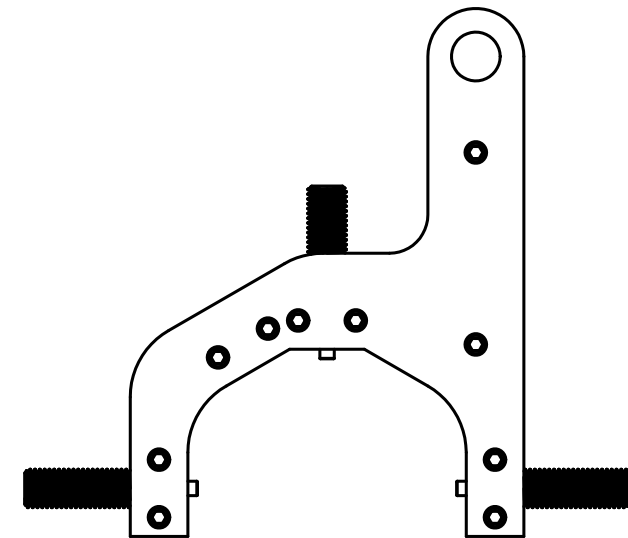
Clevis Eye to match
SCRS and HCRS-1B
Torque Cylinders



3-Hole Gland Nuts



2.62"
(67 mm)
Minimum
Diameter



7.25"
(184 mm)
Maximum
Diameter

2-Hole and 4-Hole Gland Nuts



WTC Machinery, LLC

W 1222 LINDEN ROAD
IXONIA, WISCONSIN 53036 USA

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TOLERANCES UNLESS OTHERWISE SPECIFIED

FABRICATED DIMENSIONS +/- 1/16
FRACTIONAL DIMENSIONS +/- 1/64
DECIMAL DIMENSIONS +/- .010
INSIDE RADII 1/32
ANGULAR DIMENSIONS +/- 1/2
SURFACE FINISH 125
BREAK ALL SHARP EDGES

DO NOT SCALE DRAWING

TITLE **Heavy Side-Spanner Tool**

NEXT ASSEMBLY

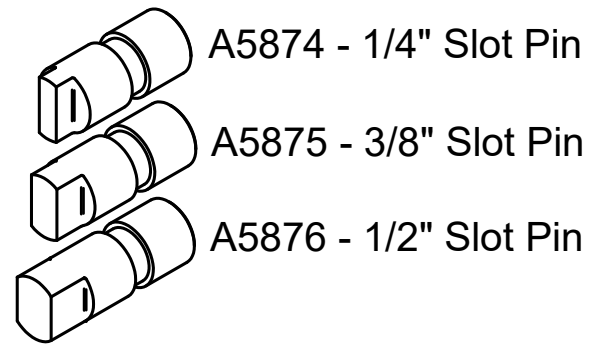
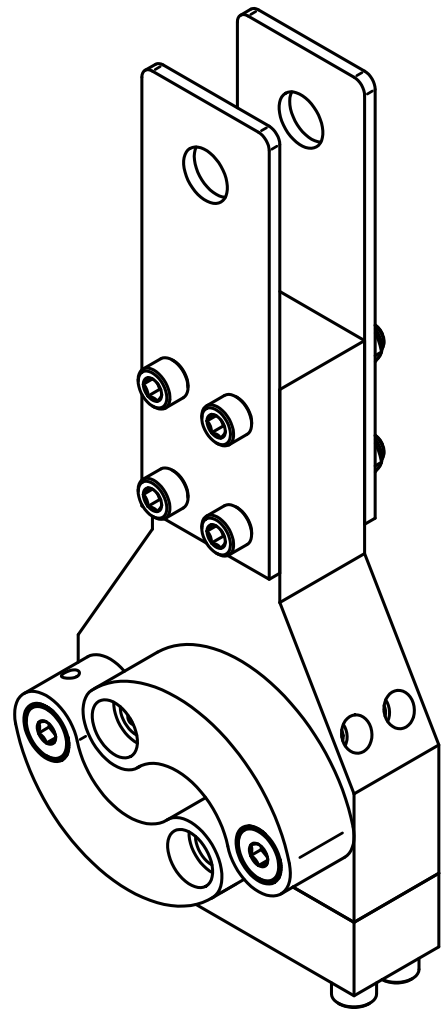
USED ON
SCRS and HCRS-1B Cylinder Benches

SHEET DATE 14.05.22

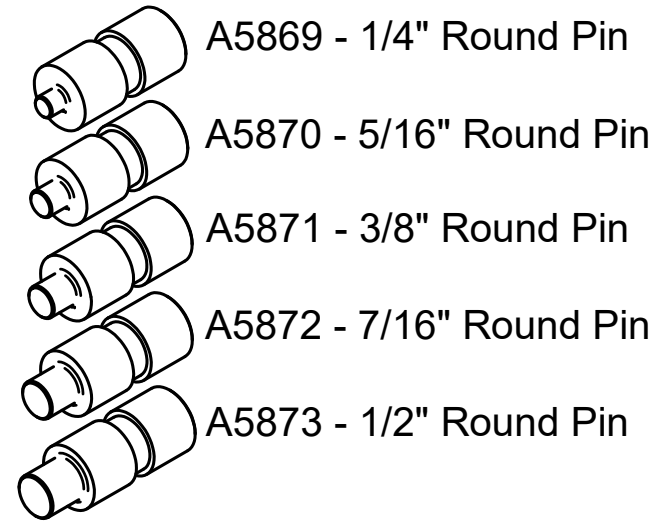
SIZE DRAWING NUMBER REV

DRAWN Solid Edge WGT 19.8 lbs

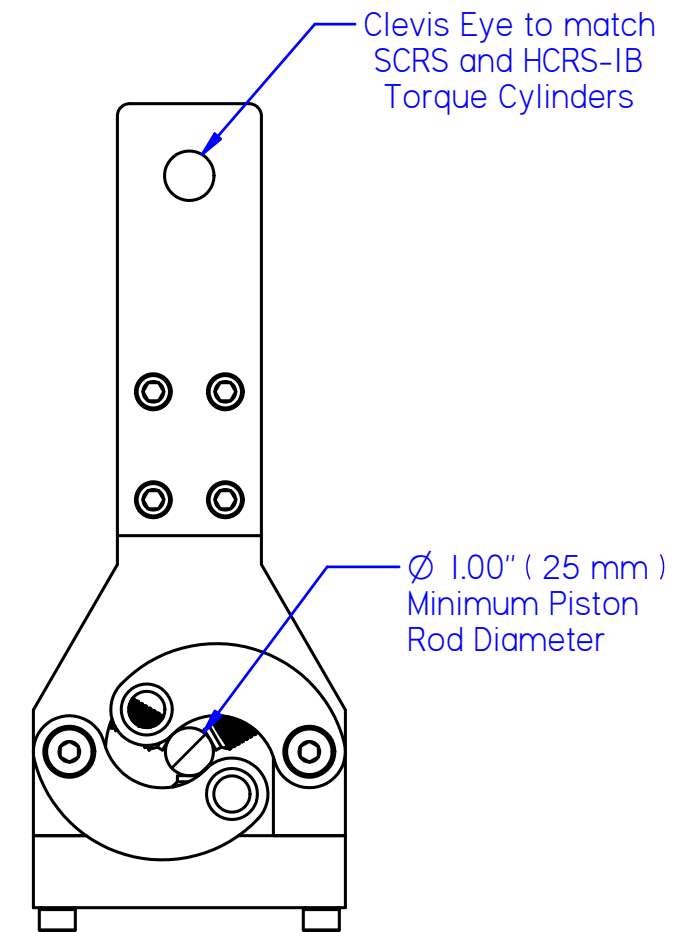
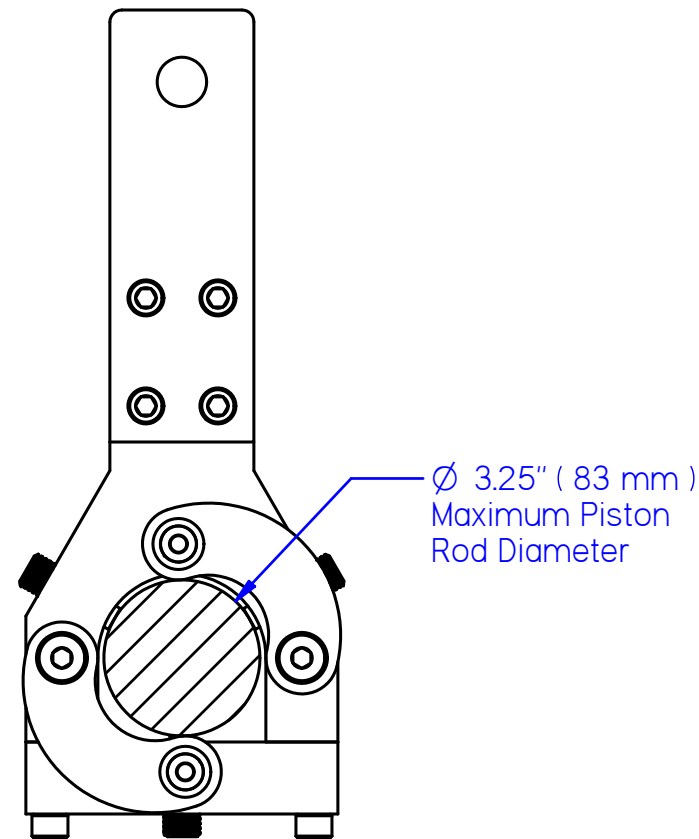
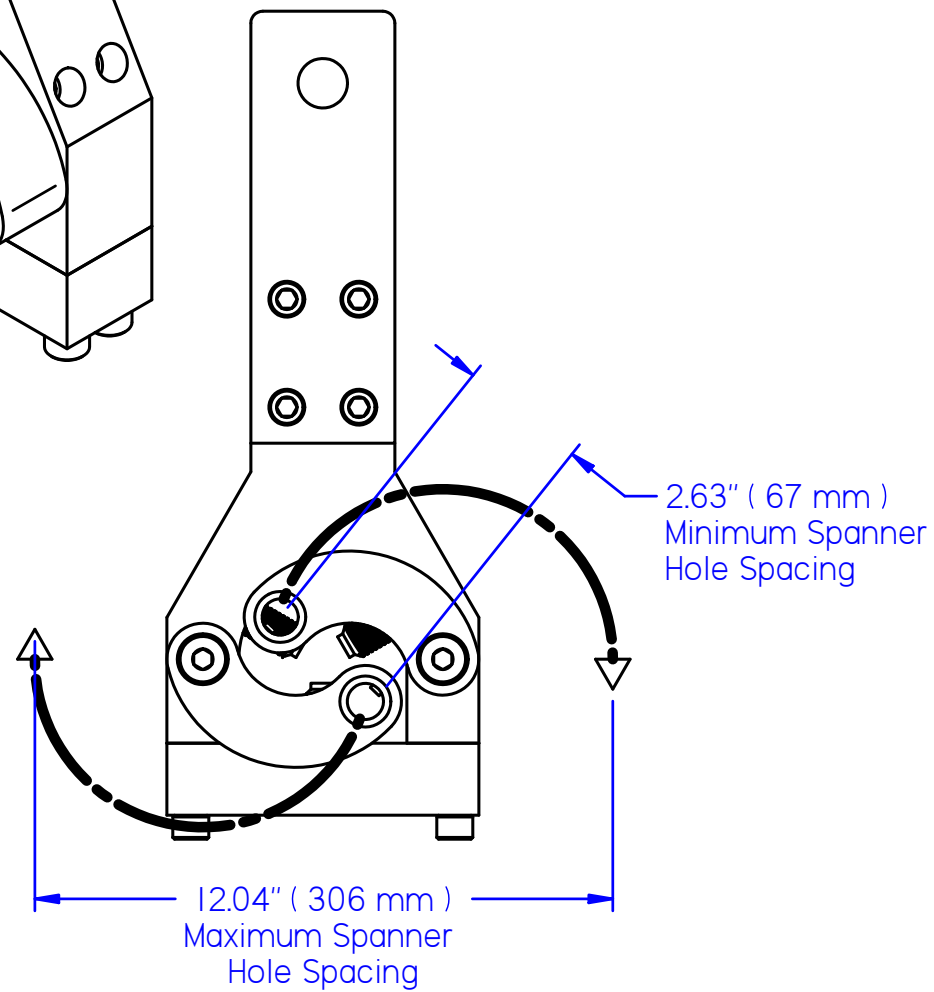
A B3855 B



Slot Spanner Pins (2 of Each)



Round Spanner Pins (2 of Each)



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 FRACTIONAL DIMENSIONS +/- 1/64
 DECIMAL DIMENSIONS +/- .010
 INSIDE RADII 1/32
 ANGULAR DIMENSIONS +/- 1/2
 SURFACE FINISH 125

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 BREAK ALL SHARP EDGES
 DO NOT SCALE DRAWING

NEXT ASSEMBLY
 SCRS / HCRS-1B Cylinder Benches
 USED ON
 SCRS / HCRS-1B Cylinder Benches

TITLE					Face Spanner Tool				
SHEET	DATE	14.03.06	SIZE	DRAWING NUMBER	REV				
DRAWN	WGT	35.9 lbs	B	B3840	A				
Solid Edge									

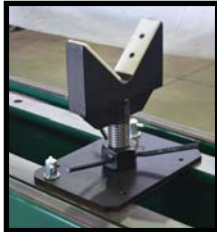


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HCRS-1C



HEAVY DUTY SUPPORT CARRIAGE



CHAIN VISE



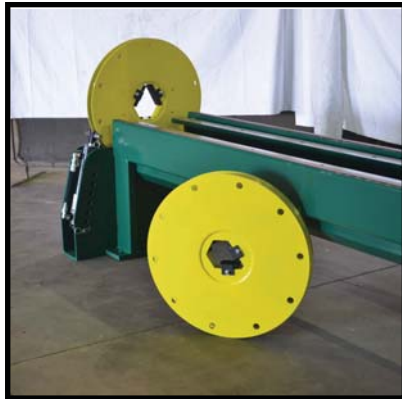
STATIONARY SUPPORT



ROLLING ROD SUPPORT



ROD BRACE TOOL



PUMP BASE



HCRS-1C CYLINDER REPAIR BENCH

CONTACT WTC MACHINERY FOR MORE INFORMATION:

800-248-8405 (US)

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Email: Sales@WTCMachinery.com



W1222 LINDEN ROAD, IXONIA, WISCONSIN 53036 USA

Phone: 800-248-8405 or 262-567-3993 • Fax: 262-567-4307 www.wtcmachinery.com

MANUFACTURERS/BENEFICIARY'S WARRANTY CERTIFICATE WTC MACHINERY, LLC WARRANTY

WTC MACHINERY, LLC warrants its products to be free from defects in material and workmanship under normal use and service for a period of twelve (12) months after date of shipment. WTC MACHINERY, LLC undertakes to be responsible for any defect that may arise due to faulty raw materials, design, workmanship and defective parts and to replace them without extra cost. Freight charges are the customer's responsibility. Our warranty is not transferable.

WTC MACHINERY, LLC shall have the option of requiring the return of all parts claimed defective. Parts proved to be defective, due to defect in workmanship and/or material, shall be either repaired or replaced free of charge, F.O.B. our designated factory. All parts warranty claims are subject to inspection by WTC MACHINERY, LLC and acceptance at the factory

Our warranty does not obligate us to bear the cost of labor or transportation charges in connection with the replacement or repair of defective parts and the removal and/or remounting of the parts repaired or replaced under this warranty, unless specifically authorized in writing by WTC MACHINERY, LLC. All parts returned to the factory must be shipped freight prepaid; no collect freight will be accepted by the factory. Forms authorizing such returns for inspection must accompany all returns.

This warranty shall not apply to products not manufactured by WTC MACHINERY, LLC.

Outside purchased equipment and accessories (not of WTC manufacture) are warranted only to the extent of the original equipment manufacturer's warranty and subject to their allowance to WTC MACHINERY, LLC. In this respect, our warranty obligations must conform and be limited to the warranty extended to WTC MACHINERY, LLC by its suppliers as extended to the customer.

We shall, in no event, be liable for consequential damages or contingent liability arising out of the failure of any unit or part to operate properly, or that is subject to:

- Ordinary operating wear, abuse, misuse, or overloading;
- Repairs or alterations by parties other than WTC MACHINERY, LLC;
- The use of improper fluids, contaminated fluids or improper filtering;
- The use of improper voltage hookup in the electrical connections of any equipment;
- Negligence, accident or damages due to deterioration during periods of storage by the purchaser prior to installation and operation;
- Damages occurred in shipment after leaving factory en route to customers' delivery point, as title to equipment passes to customer when loaded onboard for shipment, f.o.b. factory, and customer must place his own claim against damaged goods directly to the shipping company and not against WTC MACHINERY, LLC, its factory, or any of its personnel.
- Damages due to circumstances beyond the control of WTC MACHINERY, LLC and in connection with fulfilling any obligation under this warranty.

To the maximum extent permitted by applicable law, in no event shall WTC Machinery, LLC be liable for indirect, special, incidental or consequential damages resulting from personal injury, loss of business profits or business interruption from the use of its products, or from the inability to use its products.

This warranty is exclusive and is in lieu of all other expressed and implied warranties, including but not limited to implied warranties or merchantability and fitness for a particular purpose. WTC MACHINERY, LLC shall not be subject to any other obligations or liabilities whatsoever with respect to equipment manufactured or supplied by WTC MACHINERY, LLC, or services rendered to it.