

SUGARCREEK, OHIO 44681 PHONE # 1-330-852-2411 • FAX # 1-330-852-2415

UNIT /-70-085

SERIAL No. D-11839

DATE SHIPPED 11-27-99

OPERATING & SERVICE MANUAL

NOTE: When ordering parts, refer to Serial Number of Unit

PLEASE RETAIN FOR YOUR RECORDS. YOU WILL FIND THE SERIAL TAG LOCATED ON THE BACK OF YOUR TUBAR DUMPER. WE ASK THAT YOU NOT REMOVE OR PAINT OVER THE SERIAL TAG, AS THIS IS HOW WE TRACK OUR EQUIPMENT. THE SERIAL NUMBER MAY BE REQUIRED WHEN ORDERING PARTS WITHOUT A PROPER PART NUMBER, WHEN ORDERING MANUFACTURED PARTS, OR CALLING FOR TECHNICAL ASSISTANCE.







The Tubar/Eureka Industrial Group

Manufacturing your custom needs since 1898.





TUBAR / DUMPER SERIES

AMERICAN MADE / BUILT BRICKYARD TOUGH

For you you you you you you you you you

WHY YOU SHOULD CHOOSE TUBAR DUMPERS

- American Made for more than 60 years
- Built for industrial and commercial uses: food, automotive, chemical, paints, metal working, military, pharmaceuticals, processors, packers and many others
- All models can be customized to fit your specifications
- All models can be made of stainless steel
- Lift & Seal features reduce dust and control product flow
- Six of the top 10 food service companies in the U.S. use Tubar dumpers

ISO9001

STANDARD CONFIGURATIONS

BOX DUMPERS / LIFT & SEAL DUMPERS







MAX CAPACITY MAX DUMP HEIGHT MAX DUMP ANGLE

Hoppers can be fabricated to fit industrial and food grade containers

BOX DUMPERS



BOX DUMPER

- · Open Chute or Lift & Seal Designs
- Dump Heights to 6 ft. 1.8288 m
- Dump Angle to 180°
- 8000 lbs. 3629 kg Capacity
- Portable Units Available

HIGH DUMP BOX DUMPER

- · Open Chute or Lift & Seal Designs
- Dump Heights to 40 ft. 12.192 m
- Dump Angle to 180°
- 8000 lbs. 3629 kg Capacity
- Portable Units Available

SLANT MAST BOX DUMPER - LIFT & SEAL DESIGN

- Flow Control
- Dump Heights to 20 ft. 6.0960 m
- Dump Angle to 150°
- 4000 lbs. 1814 kg Capacity

SLANT MAST BOX DUMPER - OPEN CHUTE DESIGN

- Dump Heights to 20 ft. 6.0960 m
- Dump Angle to 150°
- 4000 lbs. 1814 kg Capacity

MANUAL DUMPERS

- 1/2 to 1 and 2 cu./yd.
 38228 to 76455 and 1.5291 cu./m
- Custom Designs
- Stainless Steel for Food Applications

DRUM DUMPERS



LIFT & SEAL DRUM - FLOW CONTROL REQUIRED

- Dump Heights to 6 ft. 1.8288 m
- Dump Angle to 180°
- 1000 lbs. 454 kg Capacity
- Air Powered and Portable Units Available

DRUM DUMPER

- Dump Heights to 6 ft. 1.8288 m
- Dump Angle to 180°
- 1000 lbs. 454 kg Capacity
- Maximum Hopper I.D. 26 in. 66 cm
- · Air Powered and Portable Units Available

HIGH DRUM DUMPER

- · Open Chute or Lift & Seal Designs
- Dump Heights to 40 ft. 12.192 m
- Dump Angle to 180°
- 1000 lbs. 454 kg Capacity
- Portable Units Available

SLANT MAST DRUM - LIFT & SEAL DESIGN

- Flow Control
- Dump Heights to 20 ft. 6.0960 m
- Dump Angle to 150°
- 1000 lbs. 454 kg Capacity

SLANT MAST DRUM - OPEN CHUTE DESIGN

- Dump Heights to 20 ft. 6.0960 m
- Dump Angle to 150°
- 1000 lbs. 454 kg Capacity



PRODUCTS AND SERVICES

AMERICAN MADE / BUILT BRICKYARD TOUGH

STACKERS

PLATFORM STACKERS

- Lift Height to 110 in. 279 cm
- 2000 lbs. 907 kg Capacity
- Platform from 24. x 24 in. to 36. x 36 in.
 61 x 61 cm to 91 x 91 cm
- Two Speed Hand Pump
- Floor Lock

PALLET STACKERS

- Lift Height to 110 in. 279 cm
- 2000 lbs. 907 kg Capacity
- Adjustable Fork Spread
- Two Speed Hand Pump
- Floor Lock

VERTICAL PLATFORM LIFTS

- Lift Height to 40 ft. 12.1920 m
- 10,000 lbs. 2722 kg Capacity
- Platform Size per Customer's Specifications
- Intermittent Stop Locations Available

TILT TABLES

- Tilt Heights to 72 in. 183 cm
- 8000 lbs. 3629 kg Capacity
- · Drum and Box Designs
- Customized Tilt Angles



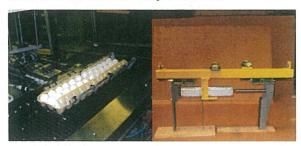
SHOP FLOOR CRANES

Tubar has been building shop floor cranes for over 30 years. Our cranes are built to meet the daily demands of moving heavy loads and objects. Their versatility and ease of operation improve productivity.

- 6000 lbs. 2722 kg Capacity
- Extendable Boom
- · Adjustable Leg Spread
- Floor Brake
- Portable
- Cab Over Engine Attachment

CUSTOM MATERIAL HANDLERS

From moving eggs to moving brick, we develop custom solutions to meet your needs.



EUREKA MACHINE



Our Eureka Machine division has been turning out parts for over 115 years. We specialize in laser cutting and CNC machining to manufacture parts in steel, aluminum, stainless steel, and plastic. We can produce one to a million pieces at competitive prices. Contact us today for a quote.





SCAN IT

See what Tubar and Eureka can do for you.

The Tubar/Eureka Industrial Group
750 Edelweiss Drive NE
PO Box 705
Sugarcreek, Ohio 44681
800-852-2411

tubareureka.com



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Dear Valued Customer,

This machine you have received has been specially designed and built for you according to your specifications and requirements. The following pertinent data is to help you identify your machine. The attached parts manual sheets will provide you with such important information as installation, operation, electrical and hydraulic diagrams and various sub assemblies parts lists.

If you should need other help or more information, please call our Engineering Department at 1-330-852-2411.

Model No.: TD-LS-48"-60"-750#-STAT.

Your Order No.: RH-7624 Date: 8/25/99

Our Shop Order No.: 1-70-085

Sales Drawing No.: CD-1149-D

Capacity: 750 LBS

Max. Container Size: 23 1/2" DIA. x 38 1/2" HIGH

Dump Height: 48" Dump Angle: 60°

Electrical Rating: NEMA 12

Power Supply: 220/3/60

Hydraulic Oil: Mineral base with 150 SSU viscosity at 100 degrees F Temperature.

MOBIL DTE-25 OR EQUAL

Reservoir Capacity: 2 GAL.

Installation Instructions For Stationary Dumpers (Electrical Power Unit Attached)

- 1. A. Secure dumper to floor using 3/4" diameter anchor bolts. A 6" thick reinforced concrete pad is recommended.
 - B. If dumper is furnished with a stand, make sure dumper is secured to the stand using 3/4" diameter hex head cap screws with lockwashers and hex nuts. Again, stand must be anchored to the floor as per above instruction "A".
 - C. Refer to sales drawing of your dumper and make sure that area within horizontal and vertical arc dimensions is clear from any obstructions such as overhead pipe lines, electrical conduit lines, vents, other machinery and structure.
- 2. A. Fill in oil reservoir with proper hydraulic oil. Oil viscosity to be 150 S.S.U. at 100 degrees F temperature. Oil level should be 1-1/2" below top of tank or visible in sight gage.
 - B. Make visual check of hydraulic connections.

WIRING INSTALLATIONS SHOULD BE DONE BY A QUALIFIED ELECTRICIAN.

- A. Check control circuit transformer (not required on 110 volt supply) for proper primary winding connections (208,230 or 460 volts). The label on the outside of electrical enclosure shows for which power supply dumper is wired.
- B. Connect power supply to L1 and L2 for single phase motor or L1, L2, and L3 for three phase motor to motor starter. Lead in wires and breakers or fuses must be sized properly.
- C. Voltage drop under full load conditions must never exceed 10% of rated voltage.
- D. When changing motor voltage (see motor name plate for connection data) change motor starter heaters accordingly. Change control circuit transformer primary connections to suit incoming voltage. (See transformer name plate for connection data.) For proper heater selection, consult factory.
- E. For changing to 208 volt service, consult factory.
- F. Check that all connections are secure.
- 4. Proceed as in operating instructions for initial check out. If hopper does not start to move within 10 seconds after "Start" or "Up" cycle is initiated, reverse any two of the incoming leads at L1, L2, and L3. (3 phase power only.)
- 5. Check limit switches for proper setting. When limit switch is actuated, dumper motion and motor must stop. If hopper hits mechanical stop

before actuating limit switch, readjust limit switch to actuate just before hopper hits mechanical stop.

6. Read operating instructions carefully and cycle unit several times without a load to familiarize the operator with the machine.

Velocity Fuse Release Instructions

This unit is supplied with a velocity fuse in the base of each cylinder to prevent a sudden drop of the load in case of hydraulic line failure.

If the hopper does not come down when the "down" button is pressed (or hand lever on manual control valve is operated), use the following procedure to release the velocity fuse.

- 1. Put the jumper wires across the top limit switch.

 (See the electrical schematic diagram for proper wire numbers.) Unit with air motor does not have top limit switch, so skip this step.
- 2. Close the adjustable flow control valve completely.
- 3. Press the "up" button to open up the velocity fuse. (Operate hand lever if manual control valve is furnished.)
- 4. Press the "down" button (operate hand lever if manual control valve is furnished) and gradually open the adjustable flow control valve so that the hopper comes down smoothly.
- Remove the jumper wires across the top limit switch. (Not required in air power units.)

COUNTERBALANCE VALVE ADJUSTMENT

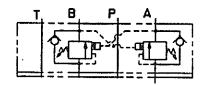
Model No. CBCA-LHN-EBY (0500-1113)

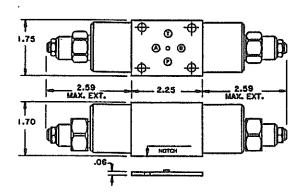
The counterbalance valve resticts the flow of oil flowing out of the component (motor, cylinder, etc.) as system pressure oil is entering the component. This allows control of the speed and smoothness of movement.

- 1. Loosen the locking nut.
- To increase the speed and reduce the pressure, turn the adjusting screw in (clockwise).
- 3. To decrease the speed and increase the pressure, turn the adjustment screw out (counterclockwise).
- 4. Tighten the locking nut.

DUAL COUNTERBALANCE ON A AND B

INTERNALLY PILOTED FROM OPPOSITE CYLINDER PORT





MODEL CBC* *** EBY

①CONTROLS (See page xii)			© A CHECK		®SEALS					
	CODING	ALL MODELS	GENERAL PURPOSE 25 PSI OPENING PRESSURE	CB*A	CB*G	ANTI-CAVITATION C 4 PSI OPENING PRES	HECK CB*A	CB*G	CODING	CBE+
L,	Leakproof screw adjustment	+ .00	H 1000 to 4000 psi 3000 psi standard setting	+ .00	N/A	A 1000 to 4000 psi 3000 psi standard	setting +1.00	N/A	N Buna N	+ .00
C	Tomperproof (1-29) Factory set (30 & over)	l	400 to 1500 psi 1000 psi standard setting	+ .00	N/A	400 to 1500 psi 1000 psi standard	setting +1.00	N/A	V Viton	+ 1.50
	h.		J 2000 to 5000 psi 3000 psi standard setting	N/A	+1.00	C 2000 to 5000 psi 3000 psi standard	setting N/A	+2.00		
			K 1000 to 2500 psi 2000 psi standard setting	N/A	+ .00	1000 to 2500 psi 2000 psi standard	setting N/A	+1.00		
			Customer speci (Setting stampe		+ 1.00 + .50					

TUBAR PRODUCTS

Uhrden, Incorporated

Sugarcreek, Ohio

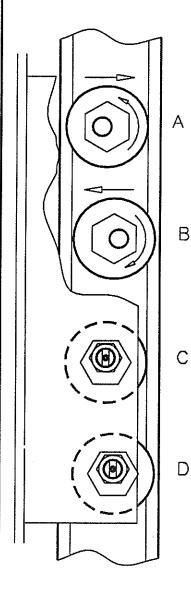
TUBAR DUMPER OPERATING INSTRUCTION NO. 7000-43

- A. CONTROLS: Up-Down-Raise-Lower Selector Switch
- B. LOCATION: Controls are located on left hand side of frame, looking into dumper from loading end, unless otherwise requested by customer.
- C. INSTRUCTIONS: 1. Secure load in hopper.
 - 2. To Dump: Turn the "Up" selector switch knob to left and hold.
 - 3. To Lower: Turn the "Down" selector switch knob to the right and hold.
 - 4. To stop during any time of its cycle, return selector switch knob to center.
 - 5. To raise carriage: Turn the "Raise" selector switch knob to the left and hold.
 - 6. To lower carriage: Turn the "Lower" selector switch knob to the right and hold.

NOTE: Dumper may be equipped with a safety cage and door/doors with interlocking limit switch. In this case, door/doors must be in fully closed position before dumper can be operated.

MAINTENANCE INSTRUCTIONS

- 1. Pivot bearings, roll bearings, and sprocket bearings are equipped with oil impregnated bronze bushings that require lubrication monthly. These bushings should be inspected every six months for wear and replaced as required.
- 2. On portable units, also lubricate caster and wheel bearings every two weeks.
- 3. Maintain oil level at 1-1/2" below the top of the reservoir (or to level of sight gage if so equipped). Add mineral base hydraulic oil with SSU rating between 150 and 210 @ 100 degrees F as required.
- 4. Check suction line strainer in reservoir periodically for clogging. A clogged strainer will cause pump cavitation (a cracking sound) and premature pump failure.
- 5. A drifting load indicates one of the following malfunctions:
 - (A.) Worn cylinder packings. See cylinder drawing for parts required.
 - (B.) Check valve in pump is stuck in open position. Remove and clean. Check valve is located on the high pressure side of the pump.
 - (C.) Leaking control valve. Remove valve and clean. Replace worn packings or replace as required.
- 6. Inability of dumper to lift rated load indicates one of the following malfunctions:
 - (A.) Relief valve is out of adjustment. Relief valve is located on suction side of pump. (Maximum system pressure must not exceed 1750 PSI.)
 - (B.) Defective pump. Replace pump.
 - (C.) See 5A or 5C above.
- 7. The continuous oil flow from the breather line located at the top end of cylinder indicates worn cylinder packings. See cylinder drawings for parts required.



CARRIAGE ROLL ADJUSTMENT INSTRUCTIONS

Your equipment has been factory adjusted to provide proper alignment to ensure correct operation. Should it become necessary to make adjustments in the field, due to floor conditions, container irregularities, or wear, the following steps will allow corrective measures to be made.

NOTE: The eccentric bushings have been tack welded at the factory to prevent movement. It will be necessary to remove the welds to make adjustments. After adjustments are complete, the eccentrics should be tacked in position.

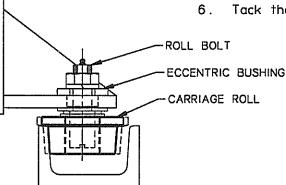
The eccentric bushing allows the carriage rolls to be moved approximately 3/16" each way from center position (Fig. C). When rotated to place the roll bolt in the forward position, it will push the carriage in the opposite direction (Fig. A). When rotated to place the roll bolt to the rearmost position, it will push the carriage the opposite direction (Fig. B).

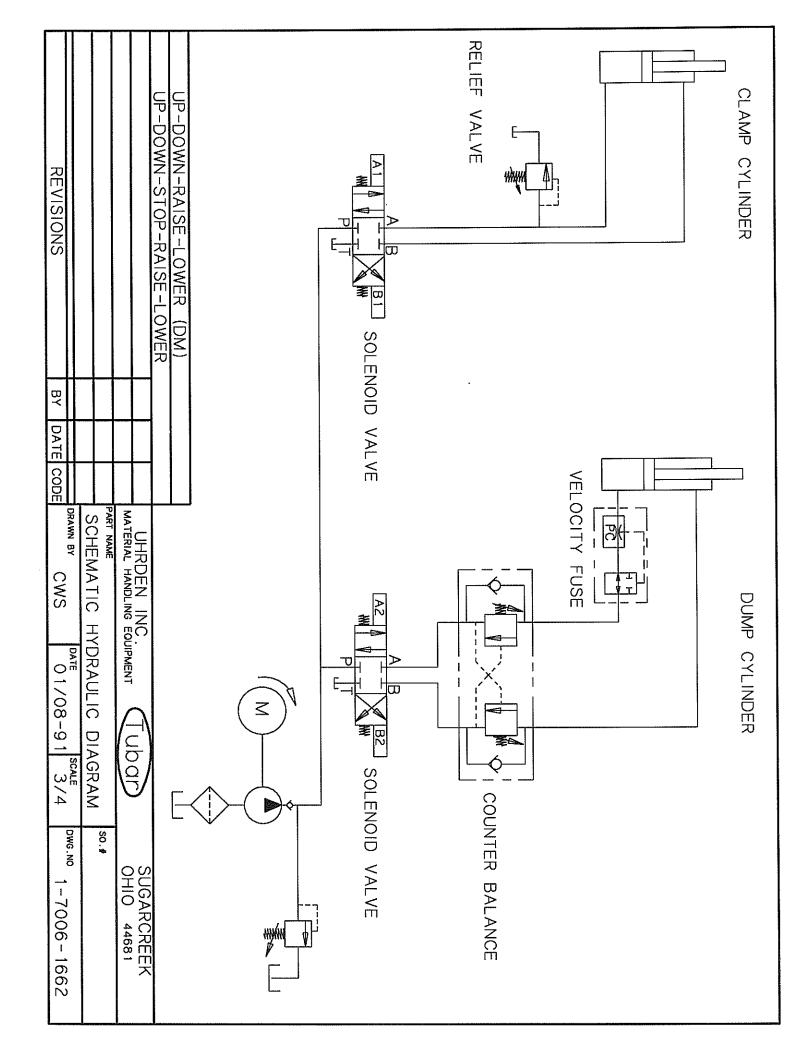
TO RAISE THE FRONT EDGE OF THE CARRIAGE

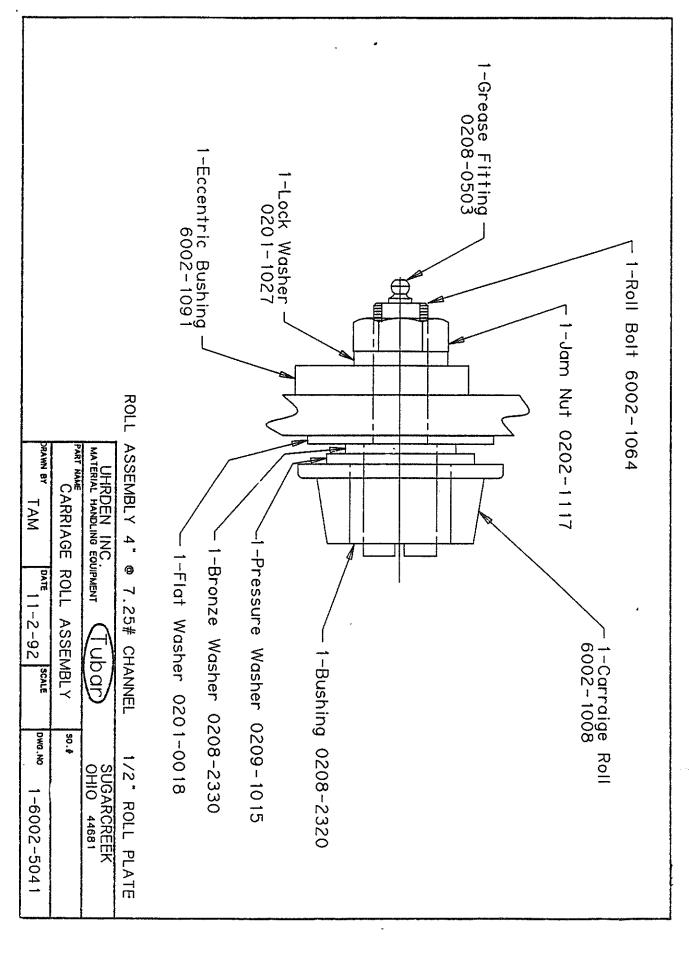
- 1. Turn eccentrics B and C to centered position.
- 2. Rotate the top eccentrics (A) toward the forward position.
- 3. If the desired position is not reached, turn the bottom eccentrics (D) toward the rearward position.
- 4. Turn left and right side eccentrics equally.
- 5. When the carriage is properly aligned, turn eccentrics B and C into position by turning B rearward until the roll contacts the channel, and turning C forward to contact the channel.
- 6. Tack the eccentrics in place.

TO LOWER THE FRONT EDGE OF THE CARRIAGE

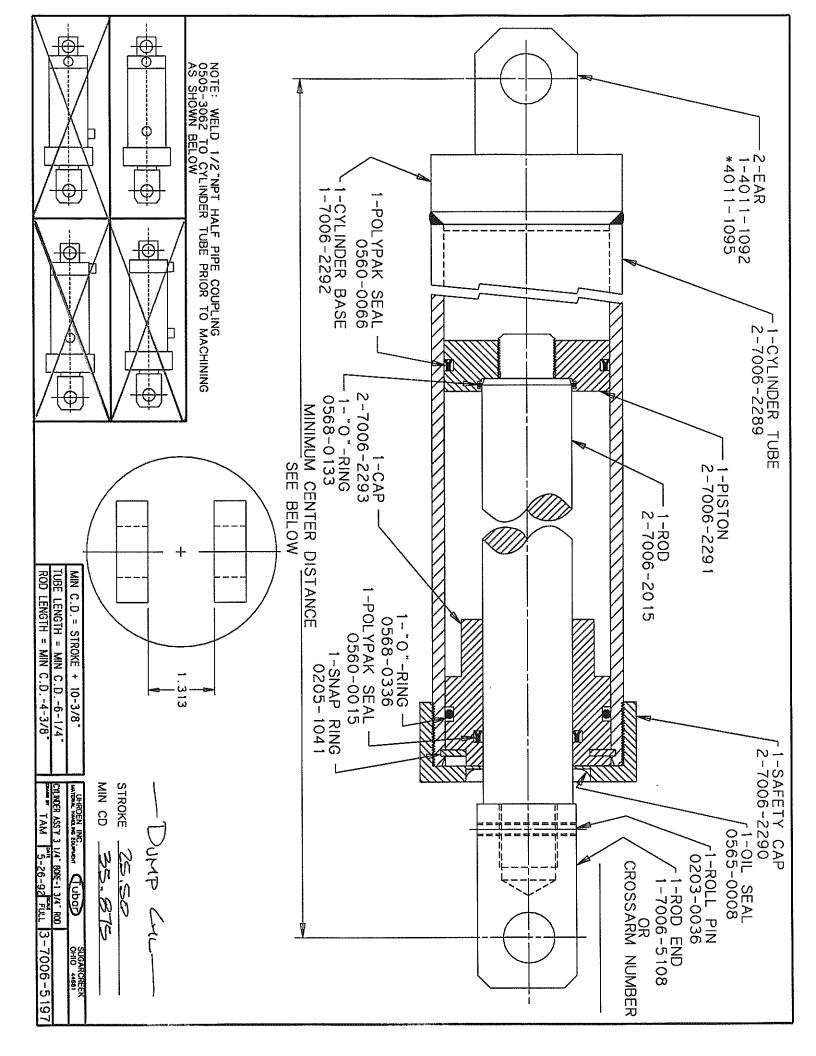
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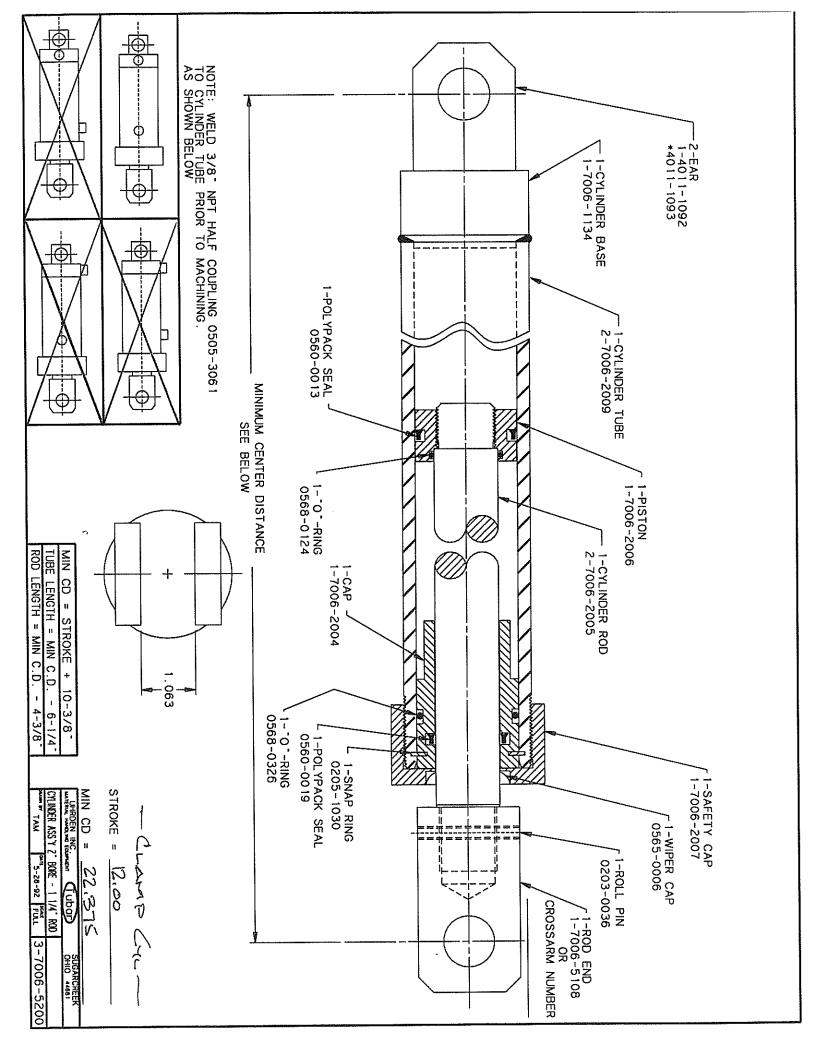


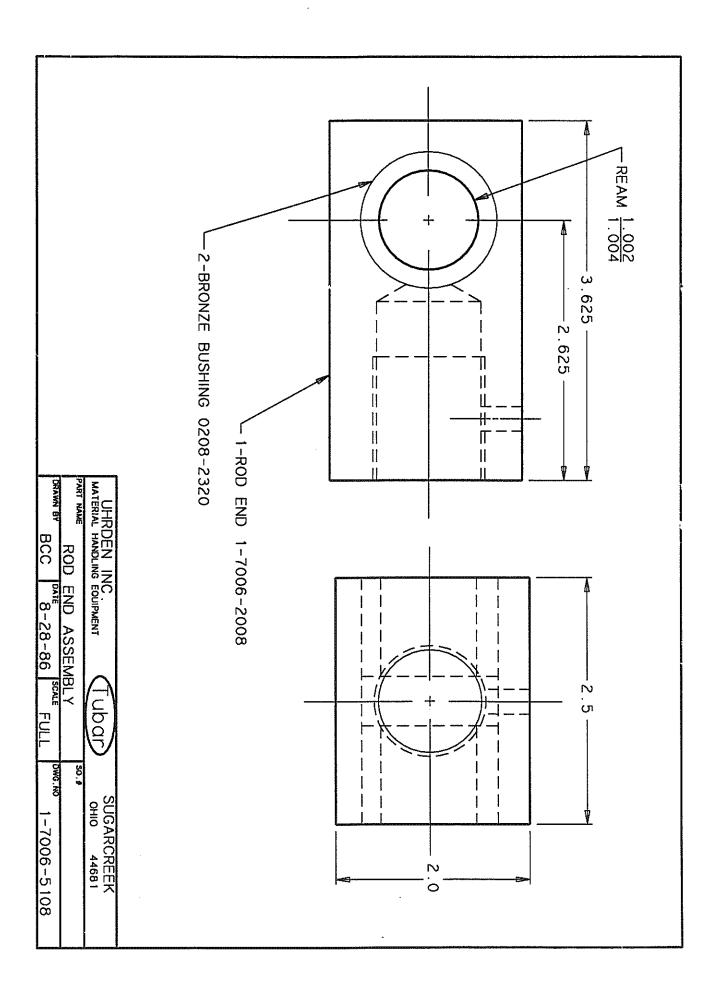


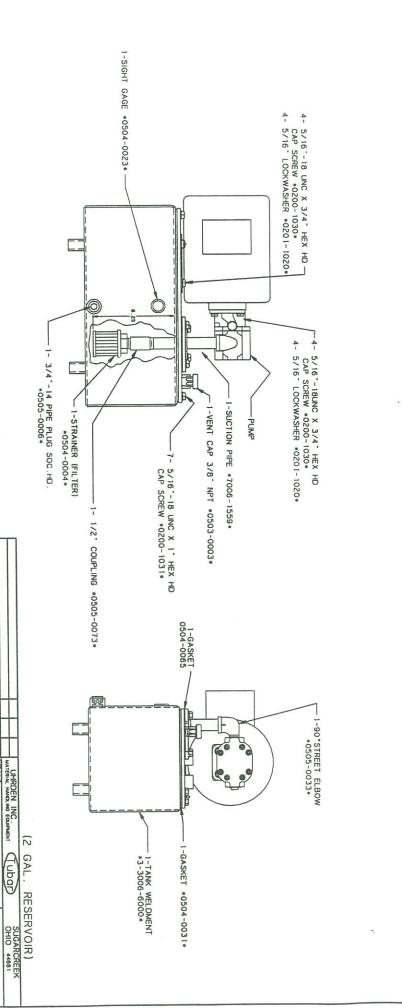


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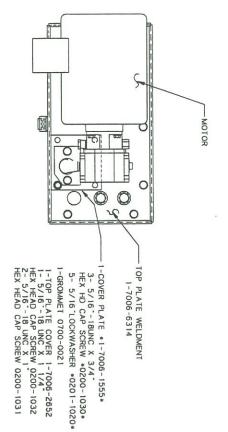
ADDED TOP PLATE COVER REDRAWN & UPDATED 11-11-88

BEE DATE CODE

M.P.T. UNIT ASSEMBLY 20.9

GLT

DATE 11-5-88 SCALE 1/4 DWG.NO 3-7006-5036



WEB	STER	PUI	MPS	BARNES PUMPS						
						X				NOMIO
*7006-5079	*7006-5078	*7006-5077	*7006-5076			*7006-5040	*7006-5039	*7006-5038	*7006-5037	ASSEMBLY
1.0 GPM 0501-0042	1.0 GPM 0501-0042	1.4 GPM 0501-0039	1.4 GPM 0501-0039			0501-0010	1.4 GPM 0501-0011	1.0 GPM 0501-0013	1 0 GPM 0501-0013	PUMP
1/2HP 220/440V 0306-0006	1/2HP 110/220V 0306-0005	3/4HP 220/440V 0306-0008	3/4HP 110/220V 0306-0007			3/4HP 220/440V 0306-0008	3/4HP 110/220V 0306-0007	1/2HP 220/440V 0306-0006	1/2HP 110/220V 0306-0005	MOTOR

