

# ***DI-ACRO #1A HAND BENDER INSTRUCTION MANUAL***



**ACROTECH**  **DI-ACRO**

Manufacturers of **K-Prene®**... the unequalled **Urethane**

Metal Fabrication Equipment

**www.acrotech inc.com** **www.diacro.com** **800-345-0583**

... a Division of **ACROTECH**

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## A. Safety Instructions



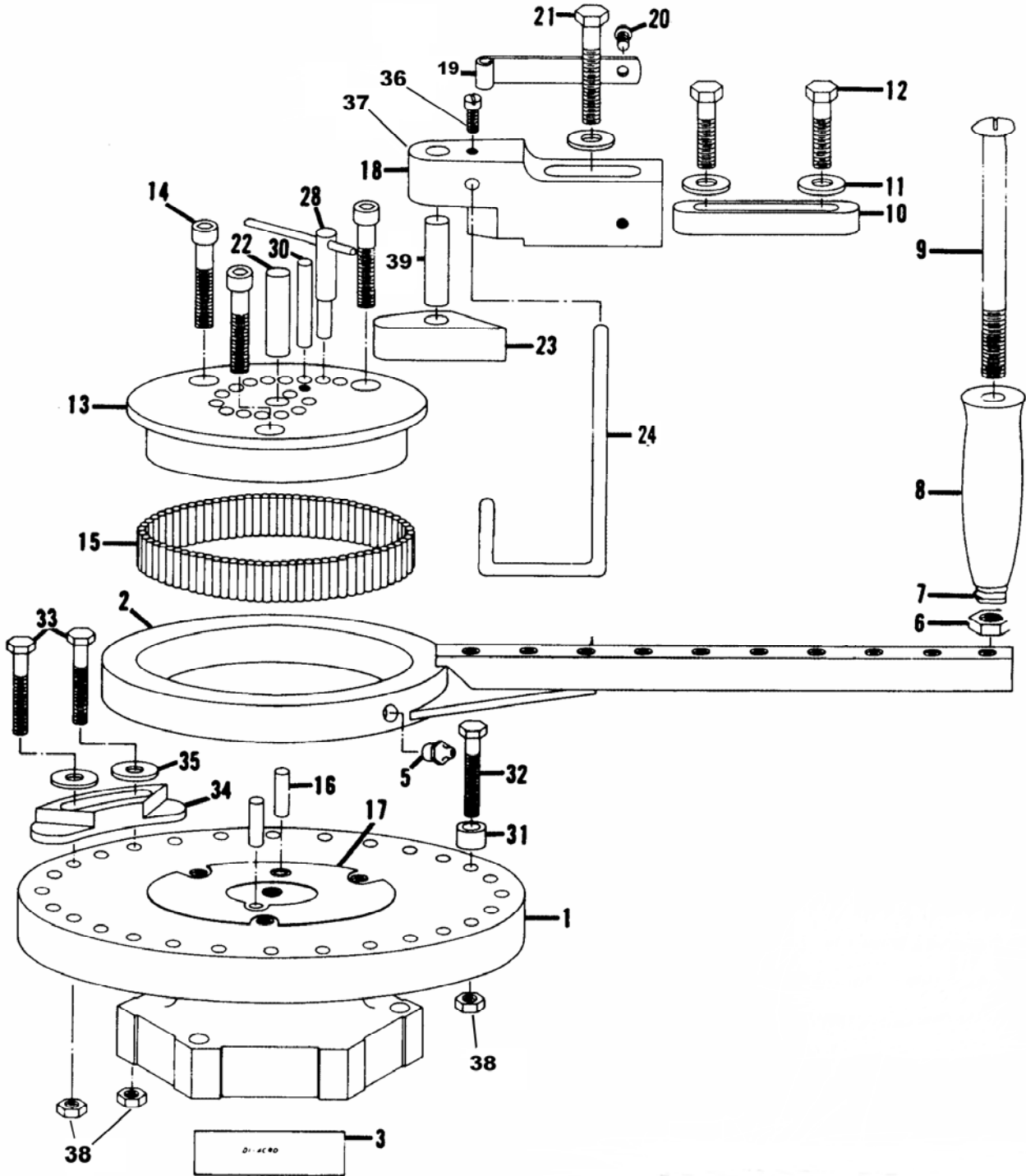
**Before bender is set up for operation, mount on work bench or stand\* with stand or work bench bolted in place.**

**\*IF BENDER IS MOUNTED ON ITS OWN STAND, SECURE STAND TO FLOOR**

## B. Maintenance

Add grease in grease zerck periodically.

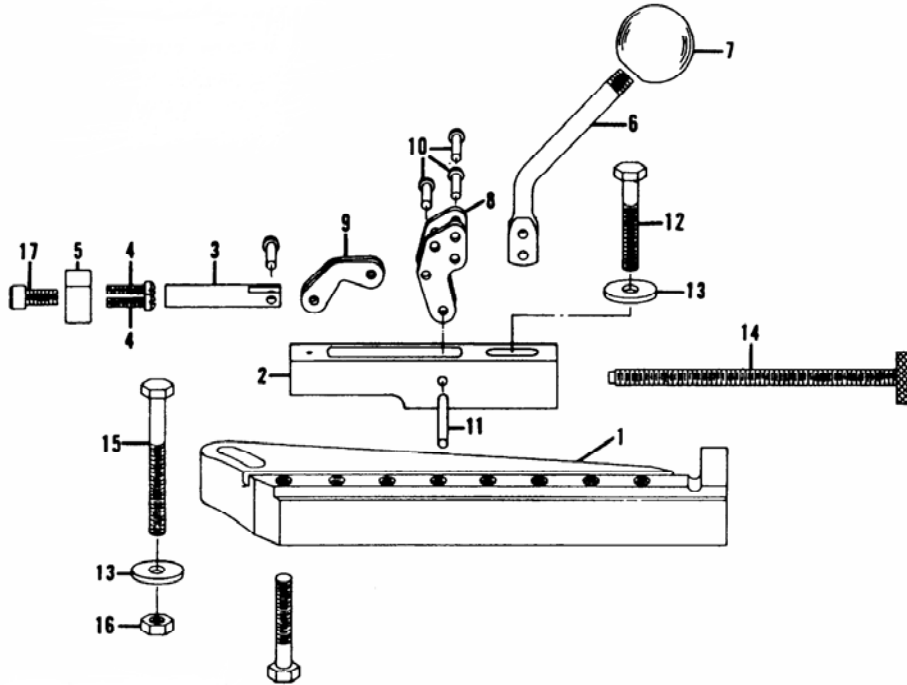
**PARTS BREAKDOWN  
#1A HAND BENDER  
8110800-080**



**PARTS LIST  
#1A HAND BENDER  
8110800-080**

ITEM	PART NUMBER	DESCRIPTION	QTY
1	8110110-100	BASE	1
2	8110120-800	HANDLE ARM WLDMT	1
3	8150650-110	NAMEPLATE	1
5	120-0191-P	GREASE FITTING	1
6	31X0102C	NUT-JAM 1 /2-13	1
8	8120811-400	HANDLE-REVOLVING	1
9	20A0102C4000	SCREW-SOC HD 1/ 2-13X4	1
10	8100121-701	NOSE HOLDER SUPPORT	1
11	0308WILLIAMS	WILLIAMS WASHER	3
12	21A0308C1104	SCREW-HEX 3/8-16X1-1/4	2
13	8110110-501	MOUNTING PLATE	1
14	20A03081102	SCREW-SOC HD 3/8-16X1-1/2	3
15	8310301-200	NEEDLE ROLLER	97
16	8110120-301	PIN	2
17	8110570-203	SHIIM	7
18	8000121-701	NOSE HOLDER	1
19	8110510-401	NOSE SPRING	1
20	20B0104C0308	SCREW-BUT HD 1/4-20 X 3/8	1
21	21A0308C2000	SCREW-HEX 3/8-16X2	1
22	8110008-970	RADIUS PIN	1
23	8110121-701	FORMING NOSE	1
24		BEND LOCATING GAUGE (SEE BELOW)	
	8120142-003	BEND LOCATING ARM	1
	8110142-003	BEND LOCATING ROD	1
	8100142-003	BEND LOCATING BUTTON	1
	8470511-800	RETAINING RING	2
28	8110120-370	LOCKING PIN ASSEMBLY	1
30	8110120-303	HOLDING PIN	1
31	8000142-001	RETURN STOP	1
32	21A0516C2000	SCREW-HEX HD 5/16-18X2	1
33	21A0516C2000	SCREW-HEX HD 5/16-18X2	2
34	8110142-001	ANGLE GAUGE	1
35	61X0516	WASHER-FLAT 5/16	2
36	23A0104C0308	SCREW-SOC SET 1/4X3/8	1
37	23A0516C0308	SCREW-SOC SET 3/16X3/8	1
38	30X0516C	NUT-FULL 5/16-16	3
39	19A0102X1304	DOWEL PIN 1/2X1-3/4	1

**PARTS BREAKDOWN  
#1A HAND BENDER QUIK LOK ASSEMBLY  
8116111-373**



**PARTS LIST  
#1A BENDER QUIK LOK ASSEMBLY  
8116111-373**

ITEM	PART NUMBER	DESCRIPTION	QTY
1	8116111-300	BASE	1
2	8116111-302	HANGER A	1
3	8000111-300	SLIDE ARM	1
4	21A0X10F0308	SCREW-HEX HEAD #10-24X3/8	2
5	8100111-300	NOSE	1
6	8200111-300	HANDLE ARM	2
7	8120810-600	PLASTIC KNOB	1
8	8111312-400	HANDLE LINK	2
9	8111312-500	LINK	1
10	8470310-100	RIVET	4
11	19A0316X1104	DOWEL PIN 3/16X1-1/4	1
12	21A0516C1304	SCREW-HEX HD 5/18-16X1-3/4	2
13	0308WILLIAMS WASHER	WASHER-WILLIAMS 3/8	2
14	8100111-303	SUPPORT SCREW WLDMT	1
15	21A0516C2102	SCREW-HEX HD 5/18-16X2-1/2	1
16	30X0516C	HEX NUT 5/18-16	1
17	20A0516C0508	SCREW-SOC HD 5/18-16X5/8	1

## SPECIFICATIONS OF HAND BENDER

	No. 1A		No. 2		No. 3		No. 4	
	In.	mm	In.	mm	In.	mm	In.	mm
Max. Radius Capacity	6	152.4	9	228.6	12	304.8	12	304.8
Height of Std. Forming Nose	3/4	19.1	1	25.4	1-1/2	38.1	1-1/2	38.1
Center Pin Hole-Diameter	1/2	12.7	1	25.4	1	25.4	1	25.4
Operating Leverage	16	406.4	29	736.6	40	1016	40	1016
<b>Material Capacities</b>								
Round Mild Steel Bar	5/16	7.9	1/2	12.7	5/8	15.9	1	25.4
Square Mild Steel Bar	1/4	6.4	3/8	9.5	1/2	12.7	3/4	19.4
Steel Tube-16 Gauge	1/2	12.7	3/4	19.1	1	25.4	1-1/4	31.8
Standard Iron Pipe	--	---	3/8 IPS	9.5	1/2 IPS	12.7	1 IPS	25.4
Flat Steel Bar (easy way)	3/16x1,4.8x 25.4		1/4x1-1/2,6.4x 38.1		1/4x2,6.4x50.8		3/8x4.9.5x 101.6	
Flat Steel Bar (hard way)	1/8x1/2,3.2x 12.7		1/8x3/4,3.2x 19.1		1/8x1,3.2x25.4		1/4,1,6.4x25.4	



### *THE ART OF BENDING*

FOR A COMPLETE DESCRIPTION OF 20 BENDING OPERATIONS WITH CLEAR STEP-BY-STEP ILLUSTRATIONS OF EACH, ORDER THE 20-PAGE DIACRO "ART OF BENDING" CATALOG WITH OVER 90 DIAGRAMS AND CHARTS TOGETHER WITH VALUABLE TOOLING SUGGESTIONS.

**F. OPTIONAL STAND PART NUMBER 8230110-900  
 STAND DIMENSIONS ARE:  
 20" WIDE, 15" DEEP, 33-1/4" HIGH**





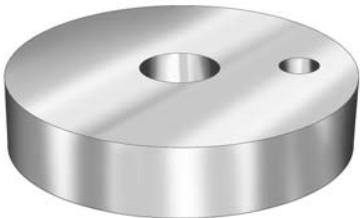

**CALL ACROTECH FOR PRICE AND AVAILABILITY**

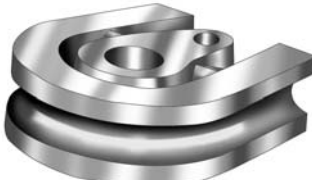


Fasteners needed to attach Hand Bender to stand are the following:  
 Fasteners to attach stand to floor are not included

PART NUMBER	DESCRIPTION	QTY
21A0308C2104	Screw-HHCS 3/8-16 X 2-1/4	3
61X0508	Washer-Flat 3/8	3
31X0508	Nut-Hex Jam 3/8-16	3

## #1A BENDER TOOLING

DESCRIPTION	PART NUMBER	SIZE	
<b>BUILT-UP FORMING NOSE</b> 	8110250-000	2" HT	
<b>FORMING ROLLER</b> 	8110016-790	1-1/2" DIA	
<b>RADIUS BLOCK</b> 	8110000-920	ZERO	
	8110001-920	1/32" R	
	8110002-920	1/16" R	
	8110003-920	3/32" R	
	8110002-970	1/16" R	
 <b>RADIUS PIN</b>	8110004-970	1/8" R	
	8110006-970	3/16" R	
	8110008-970	1/4" R	
	8110010-970	5/16" R	
	8110012-970	3/8" R	
	8110014-970	7/16" R	
	8110016-970	1/2" R	
	8110018-970	9/16" R	
	8110020-970	5/8" R	
	 <b>RADIUS COLLAR</b>	8110022-930	11/16" R
		8110024-930	3/4" R
		8110026-930	13/16" R
8110028-930		7/8" R	
8110030-930		15/16" R	
8110100-930		1" R	
8110102-930		1-1/16" R	
8110104-930		1-1/8" R	
8110106-930		1-3/16" R	
8110108-930		1-1/4" R	
8110110-930		1-5/16" R	
8110112-930		1-3/8" R	
8110114-930		1-7/16" R	
8110116-930		1-1/2" R	
8110118-930		1-9/16" R	
8110120-930		1-5/8" R	
8110122-930		1-11/16" R	
8110124-930		1-3/4" R	
 <b>GROOVED FORMING ROLLER</b>	8110200-930	2" R	
		<b>TUBE DIA.</b>	
	8110008-790	1/4"	
	8110010-790	5/16"	
	8110012-790	3/8"	
	8110014-790	7/16"	
8110016-790	1/2"		

<b>#1A BENDER TOOLING</b>				
<b>DESCRIPTION</b>	<b>PART NUMBER</b>	<b>SIZE</b>		<b>C/L RADIUS</b>
		<b>LENGTH</b>	<b>TUBE DIA</b>	
 <b>FOLLOW BLOCK</b>	8116008-620	3"	1/4"	
	8100008-620	6"	1/4"	
	8116010-620	3"	5/16"	
	8100010-620	6"	5/16"	
	8116012-620	6"	3/8"	
	8116014-620	6"	7/16"	
	8116016-620	6"	1/2"	
 <b>CLAMP BLOCK</b> (USE WITH QUIK-LOK CLAMP)		<b>TUBE DIA.</b>		
	8116008-320	1/4"		
	8116010-320	5/16"		
	8116012-320	3/8"		
	8116014-320	7/16"		
	8116014-320	1/2"		
 <b>RADIUS COLLAR "A" STYLE</b> (USE WITH QUIK-LOK CLAMP)	8116020-008	1/4"		5/8"
	8116100-008	1/4"		1"
	8116116-008	1/4"		1-1/2"
	8116024-010	5/16"		3/4"
	8116110-010	5/16"		1"
	8116116-010	5/16"		1-1/2"
	8116100-012	3/8"		1"
	8116200-012	3/8"		2"
	8116300-012	3/8"		3"
	8116108-014	7/16"		1-1/4"
	8116200-014	7/16"		2"
	8116300-014	7/16"		3"
	8116108-016	1/2"		1-1/4"
	8116200-016	1/2"		2"
8116300-016	1/2"		3"	

# Warranty & Limitation of Liability

Defective parts of a product manufactured by ACROTECH/DI-ACRO will be replaced or repaired at no charge for twelve (12) months following delivery to the original purchaser. Labor is included for the first 90 days. This warranty becomes void when products have not been used according to instructions furnished by ACROTECH/DI-ACRO, nor does it cover any altered parts or unauthorized repairs. We cannot be responsible for the cost of repairs made or attempted outside of our factory. All warranty claims are made FOB our plant, providing such item(s) is returned freight prepaid to our plant for examination.

This warranty does not apply to parts, components or systems not manufactured by ACROTECH/DI-ACRO. These products are covered instead by the existing warranties, if any, of their manufacturers. Normal service items with a reasonable life expectancy of less than one year are warranted only to the extent of the reasonable life under normal use and service.

Authorization must be obtained from ACROTECH/DI-ACRO before returning parts or equipment to the factory. ACROTECH/DI-ACRO will satisfy this warranty by replacing the product or refunding the purchase price upon receipt and inspection of the product.

ACROTECH/DI-ACRO's liability under this warranty shall not exceed the amount paid for the product.

**THIS IS ACROTECH/DI-ACRO'S SOLE WARRANTY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, WHICH ARE HEREBY EXCLUDED, INCLUDING IN PARTICULAR ALL WARRANTIES OF MERCHANTABILITY, FITNESS OR ANY LOSS, DAMAGE OR EXPENSES DIRECTLY OR INDIRECTLY RELATED TO THE USE OF ITS PRODUCT OR FROM ANY OTHER CAUSE OR FOR CONSEQUENTIAL DAMAGES INCLUDING, WITHOUT LIMITATION, LOSS OF TIME AND LOSS OF PRODUCTION.**

**IT IS EXPRESSLY UNDERSTOOD THAT ACROTECH IS NOT RESPONSIBLE FOR DAMAGE OR INJURY CAUSED TO OTHER PRODUCTS, MACHINERY, PROPERTY OR PERSONS BY REASON OF THE USE OF ITS PRODUCTS.**