

DI-ACRO ***#3 HAND BENDER*** ***INSTRUCTION MANUAL***



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

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Metal Fabrication Equipment

*... a Division of **ACROTECH***

TABLE OF CONTENTS

A.	SAFETY INFORMATION	PG. 3
B.	MAINTENANCE	PG. 3
C.	#3 HAND BENDER PARTS BREAKDOWN	PG. 4-5
D.	QUIK LOK MOUNTING INSTRUCTIONS	PG. 6
E.	QUIK LOK PARTS BREAKDOWN	PG. 7-8
F.	SPECIFICATIONS & THE ART OF BENDING	PG. 9
G.	OPTIONAL STAND	PG. 10
H.	BENDER TOOLING	PG. 11-12-13
I.	WARRANTY	PG. 14

A. Safety Instructions



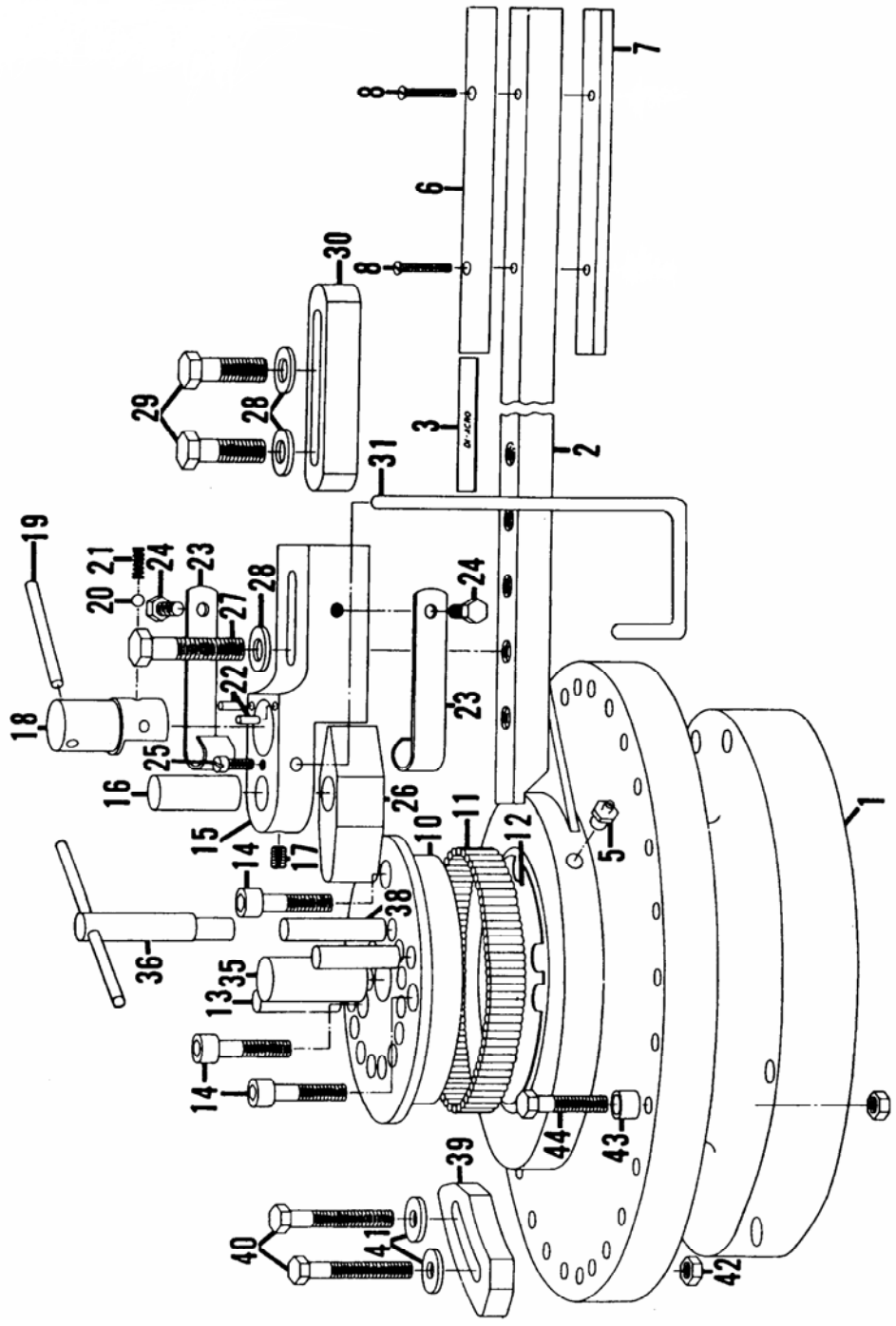
Before bender is set up for operation, mount on work bench or stand* with stand or work bench bolted in place.

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

B. Maintenance

Add grease in grease zerker periodically.

**PARTS BREAKDOWN
#3 HAND BENDER
8130800-080**

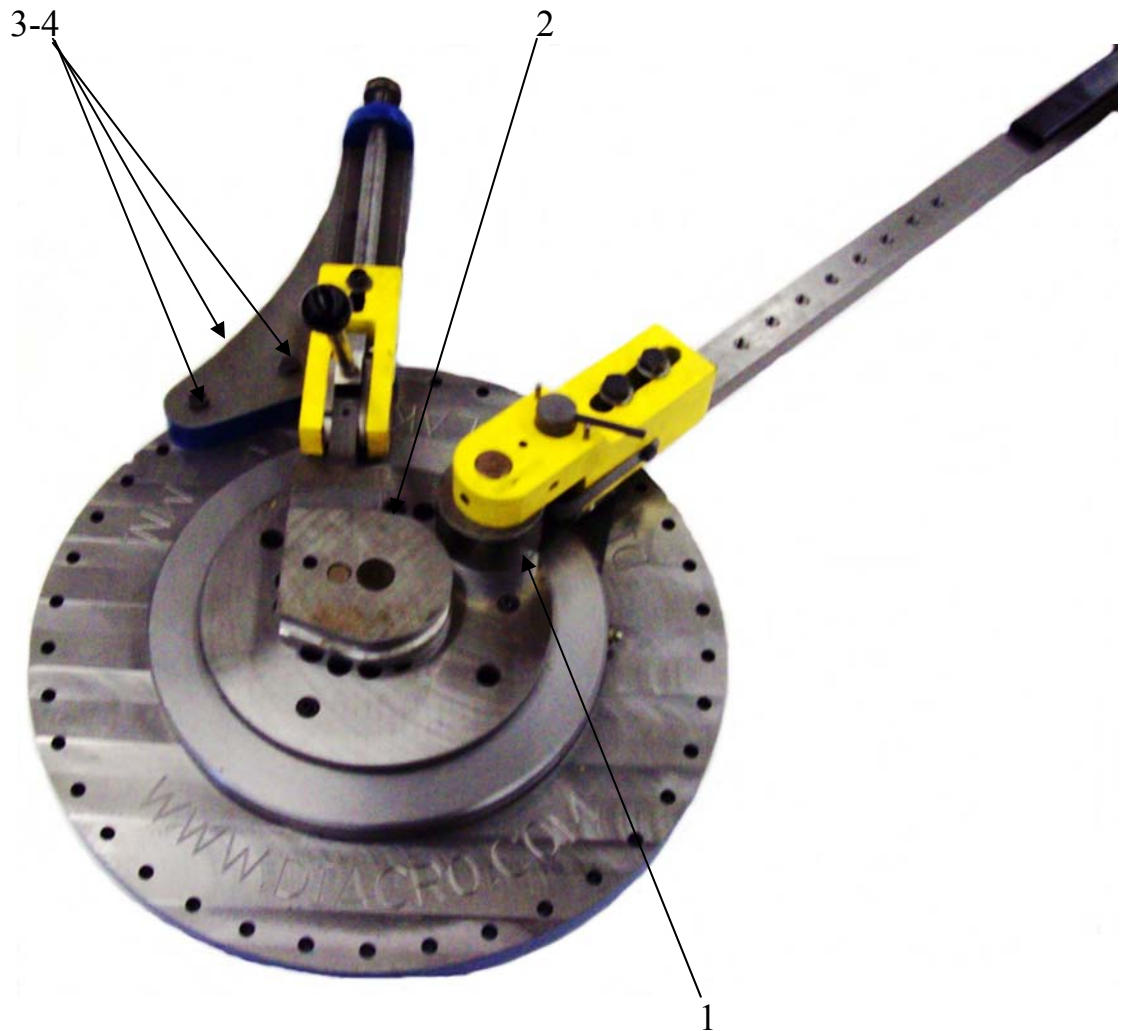


PARTS LIST
#3 HAND BENDER
8130800-080

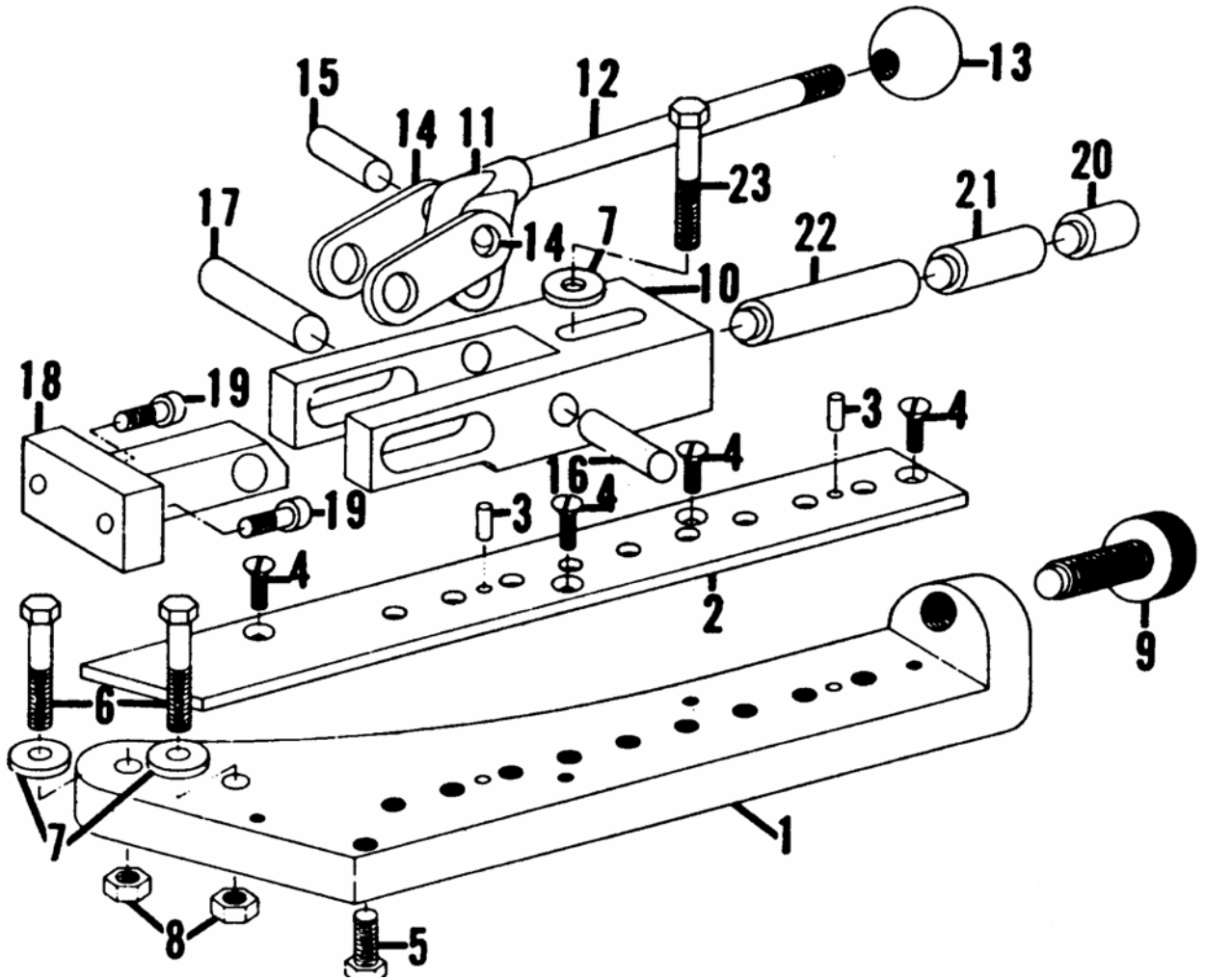
ITEM	PART NUMBER	DESCRIPTION	QTY
1	8130110-100	BASE	1
2	8100120-800	HANDLE ARM WELDMENT	1
3	8150650-110	NAMEPLATE	1
5	120-0191-P	GREASE FITTING	1
6	8130120-800	HANDLE	2
8	22C0104C0508	SCREW-FLAT 1/ 4-20X5/8	4
10	8130110-501	MOUNTING PLATE	1
11	8310300-200	ROLLER BEARING	109
12	8130570-203	SHIM	6
13	8130120-301	MTG PL PIN	2
14	20A0308C1102	SCREW-SOCKET CAP 3/8-16X1-1/2	3
15	8200121-701	NOSE HOLDER	1
16	8000120-301	NOSE PIN	1
17	23A0308C0102	SCREW-SOCKET SET 3/8-16X1/2	1
18	8158121-702	TRIGGER	1
19	18A0104X3000	SPRING PIN 1/4X3	1
20	8010461-000	STEEL BALL	1
21	8210510-204	SPRING	1
22	8310301-200	NEEDLE ROLLER	2
23	8120510-401	NOSE SPRING	2
24	21A0516C0102	SCREW-HEX 5/16-18X1/2	2
25	23A0104C0102	SCREW-SOCKET SET 1/4 -20X1/2	1
26	8130121-701	FORMING NOSE	1
27	21A0102F3000	SCREW-HEX 1/ 2-20X3	2
28	0102WILLIAMS WASHER	1/ 2 WILLIAMS WASHER	4
29	21A0102F1304	SCREW-HEX 1/ 2-20X1-3/4	2
30	8120121-701	NOSE HOLDER SUPPORT	1
31		BEND LOCATING GAUGE (SEE BELOW)	
	8200142-003	BEND LOC GAUGE ARM	1
	8130142-003	BEND LOC ROD	1
	8300142-003	STOP BUTTON	1
	8470511-900	RETAINING RING	2
35	8130016-970	RADIUS PIN	1
36	8130120-371	LOCKING PIN ASSEMBLY	1
38	8130120-303	HOLDING PIN	1
39	8120142-001	ANGLE GAUGE	1
40	21A0308C2104	SCREW-HEX 3/8-16X2-1/4	2
41	61X0308	WASHER-FLAT 3/8	2
42	30X0308C	NUT-FULL 3/8-16	3
43	8100142-001	RETURN STOP	1
44	21A0308C2104	SCREW-HEX 3/8-16X2-1/4	1

D. QUIK-LOK MOUNTING INSTRUCTIONS

1. Remove nose and replace with Forming Roller
2. Mount grooved Radius Collar as shown below
3. Set quik-lok to match up with flat side of Radius Collar.
4. Locate two 3/8" diameter bolts in Quik Lok base and tighten. Make sure Handle locks in forward position.



PARTS BREAKDOWN
#3 HAND BENDER QUIK LOK ASSEMBLY
8136111-373



PARTS LIST
#3 BENDER QUIK LOK ASSEMBLY
8136111-373

ITEM	PART NUMBER	DESCRIPTION	QTY
1	8136111-300	BASE	1
2	8600111-300	SLIDE	1
3	19A0104X1000	DOWEL PIN 1/ 4X1	2
4	22C0104C0304	SCREW-FLAT HD 1 /4-20X3/4	4
5	21A0308C2104	SCREW-HEX 3/8-16X2-1/4	1
6	21A0308C2304	SCREW-HEX 3/8-16X2-3/4	2
7	0308WILLIAMS WASHER	WASHER-WILLIAMS 3/8	3
8	30X0308C	NUT-FULL 3/8-16	2
9	8500111-301	KNURL HEAD SCREW	1
10	8126111-302	HANGER	1
11	8400111-300	HANDLE BLOCK	1
12	8500111-300	HANDLE ROD	1
13	8120810-700	PLASTIC KNOB	1
14	8930111-300	LINK	2
15	8156120-301	LINK PIN	1
16	19A0102X2102	DOWEL PIN 1/ 2X2-1/2	1
17	19A0508X2102	DOWEL PIN 5/8X2-1/2	1
18	8920111-300	NOSE ASSEMBLY	1
19	20A0516C0508	SCREW-SOC HEAD 5/16-16X5/8	2
20	8156111-301	SPACER ROD A	1
21	8300111-301	SPACER ROD B	1
22	8400111-301	SPACER ROD C	1
23	21A0308C2102	SCREW-HEX 3/8-16X2-1/2	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
Material Capacities								
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, REFER TO THE DI-ACRO “**ART OF BENDING**” THAT WAS INCLUDED ALONG WITH THIS CATALOG. IT SHOWS OVER 90 DIAGRAMS AND CHARTS TOGETHER WITH VALUABLE TOOLING SUGGESTIONS.

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




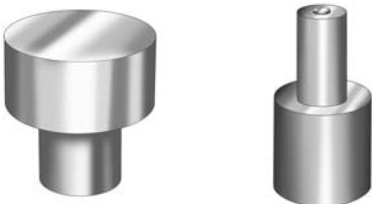

CALL ACROTECH FOR PRICE AND AVAILABILITY






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

PART NUMBER	DESCRIPTION	QTY
21A0102C2102	Screw-HHCS 1/2-13X2-1/2	3
61X0102	Washer-Flat 1/2	3
31X0102	Nut-Hex Jam 1/2-13	3


#3 BENDER TOOLING

DESCRIPTION	PART NUMBER	SIZE
BUILT-UP FORMING NOSE 	8130250-000	4" HT
FORMING ROLLER 	8130690-000	3" DIA
RADIUS BLOCK 	8130000-920	ZERO
	8130002-920	1/16" R
	8130004-920	1/8" R
	8130006-920	3/16" R
	8130008-920	1/4" R
	8130004-970	1/8" R
 RADIUS PIN	8130006-970	3/16" R
	8130008-970	1/4" R
	8130010-970	5/16" R
	8130012-970	3/8" R
	8130014-970	7/16" R
	8130016-970	1/2" R
	8130018-970	9/16" R
	8130020-970	5/8" R
	8130022-970	11/16" R
	8130024-970	3/4" R
	8130026-970	13/16" R
	8130028-970	7/8" R
	8130020-930	15/16" R
	8130100-930	1" R
 RADIUS COLLAR	8130102-930	1-1/16" R
	8130104-930	1-1/8" R
	8130106-930	1-3/16" R
	8130108-930	1-1/4" R
	8130110-930	1-5/16" R
	8130112-930	1-3/8" R
	8130114-930	1-7/16" R
	8130116-930	1-1/2" R
	8130118-930	1-9/16" R
	8130120-930	1-5/8" R
	8130122-930	1-11/16" R
	8130124-930	1-3/4" R
	8130126-930	1-13/16" R
	8130128-930	1-7/8" R
	8130130-930	1-15/16" R
	8130200-930	2" R
	8130204-930	2-1/8" R
	8130208-930	2-1/4" R
	8130212-930	2-3/8" R
	8130216-930	2-1/2" R
8130220-930	2-5/8" R	
8130224-930	2-3/4" R	
8130228-930	2-7/8" R	
8130300-930	3" R	

#3 BENDER TOOLING

DESCRIPTION	PART NUMBER	SIZE	
		TUBE DIA.	
 <p>GROOVED FORMING ROLLER</p>	8130016-790	1/2"	
	8130020-790	5/8"	
	8130024-790	3/4"	
	8130028-790	7/8"	
	8130100-790	1"	
	8130008-790	1/4" IPS	
	8130012-790	3/8" IPS	
	8130017-790	1/2" IPS	
 <p>FOLLOW BLOCK</p>		LENGTH	TUBE DIA
	8136016-006	6"	1/2"
	8136016-009	9"	1/2"
	8136016-012	12"	1/2"
	8136020-006	6"	5/8"
	8136020-012	12"	5/8"
	8136020-015	15"	5/8"
	8136024-009	9"	3/4"
	8136024-012	12"	3/4"
	8136024-015	15"	3/4"
	8136028-009	9"	7/8"
	8136028-015	15"	7/8"
	8136028-021	21"	7/8"
	8136100-012	12"	1"
	8136100-015	15"	1"
	8136100-021	21"	1"
	8136008-006	6"	1/4" IPS
	8136008-009	9"	1/4" IPS
	8136008-012	12"	1/4" IPS
	8136012-006	6"	3/8" IPS
	8136012-012	12"	3/8" IPS
	8136012-015	15"	3/8" IPS
	8136013-009	9"	1/2" IPS
8136013-015	15"	1/2" IPS	
8136013-021	21"	1/2" IPS	
 <p>CLAMP BLOCK (USE WITH QUIK-LOK CLAMP)</p>		TUBE DIA.	
	8136016-320	1/2"	
	8136020-320	5/8"	
	8136024-320	3/4"	
	8136028-320	7/8"	
	8136100-320	1"	
	8136008-320	1/4" IPS	
	8136012-320	3/8" IPS	
	8136013-320	1/2" IPS	

#3 BENDER TOOLING

DESCRIPTION	PART NUMBER	TUBE DIA.	C/L RADIUS
 <p>RADIUS COLLAR "A" STYLE (USE WITH QUIK-LOK CLAMP)</p>	8136108-016	1/2"	1-1/4"
	8136200-016	1/2"	2"
	8136300-016	1/2"	3"
	8136124-020	5/8"	1-3/4"
	8136300-020	5/8"	3"
	8136400-020	5/8"	4"
	8136200-024	3/4"	2"
	8136300-024	3/4"	3"
	8136400-024	3/4"	4"
	8136216-028	7/8"	2-1/2"
	8136400-028	7/8"	4"
	8136600-028	7/8"	6"
	8136300-100	1"	3"
	8136400-100	1"	4"
	8136600-100	1"	6"
	8136116-008	1/4" IPS	1-1/2"
	8136200-008	1/4" IPS	2"
	8136300-008	1/4" IPS	3"
	8136124-012	3/8" IPS	1-3/4"
	8136300-012	3/8" IPS	3"
	8136400-012	3/8" IPS	4"
	8136216-013	1/2" IPS	2-1/2"
	8136400-013	1/2" IPS	4"
	8136600-013	1/2" IPS	6"

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.