

#3 HAND BENDER

OPERATION AND PARTS MANUAL



12430 55th St N • Oak Park Heights, MN 55082

Phone: 651.342.1756 • Fax: 651.342.1293

Email: info@diacro.com

TABLE OF CONTENTS

| | |
|--|----------------|
| SAFETY INFORMATION | PG. 3 |
| MAINTENANCE | PG. 3 |
| #3 BENDER BREAKDOWN AND PARTS LIST | PG. 4-5 |
| QUIK-LOK MOUNTING INSTRUCTIONS | PG. 6 |
| QUIK-LOK BREAKDOWN AND PARTS LIST | PG. 7-8 |
| SPECIFICATIONS & THE ART OF BENDING | PG. 9 |
| OPTIONAL STAND | PG. 10 |
| WARRANTY | PG. 11 |

SAFETY INFORMATION



Before bender is set up for operation, mount on work bench or stand.

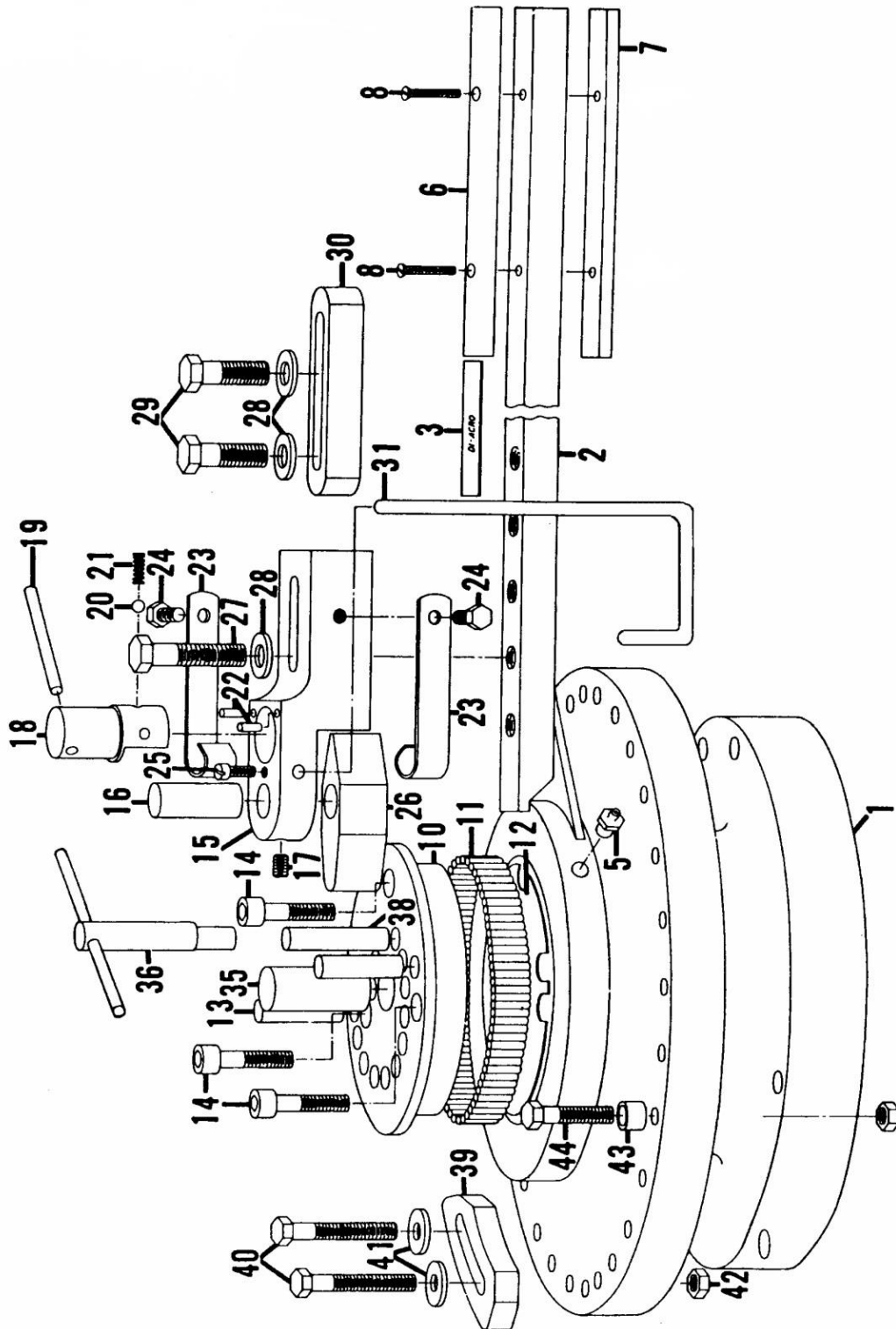
***IF BENDER IS MOUNTED ON ITS OWN STAND, SECURE STAND TO FLOOR.**

MAINTENANCE

Keep machine surfaces clean and free of debris. Periodically add grease in grease fitting.

#3 HAND BENDER PARTS BREAKDOWN

8130800-080



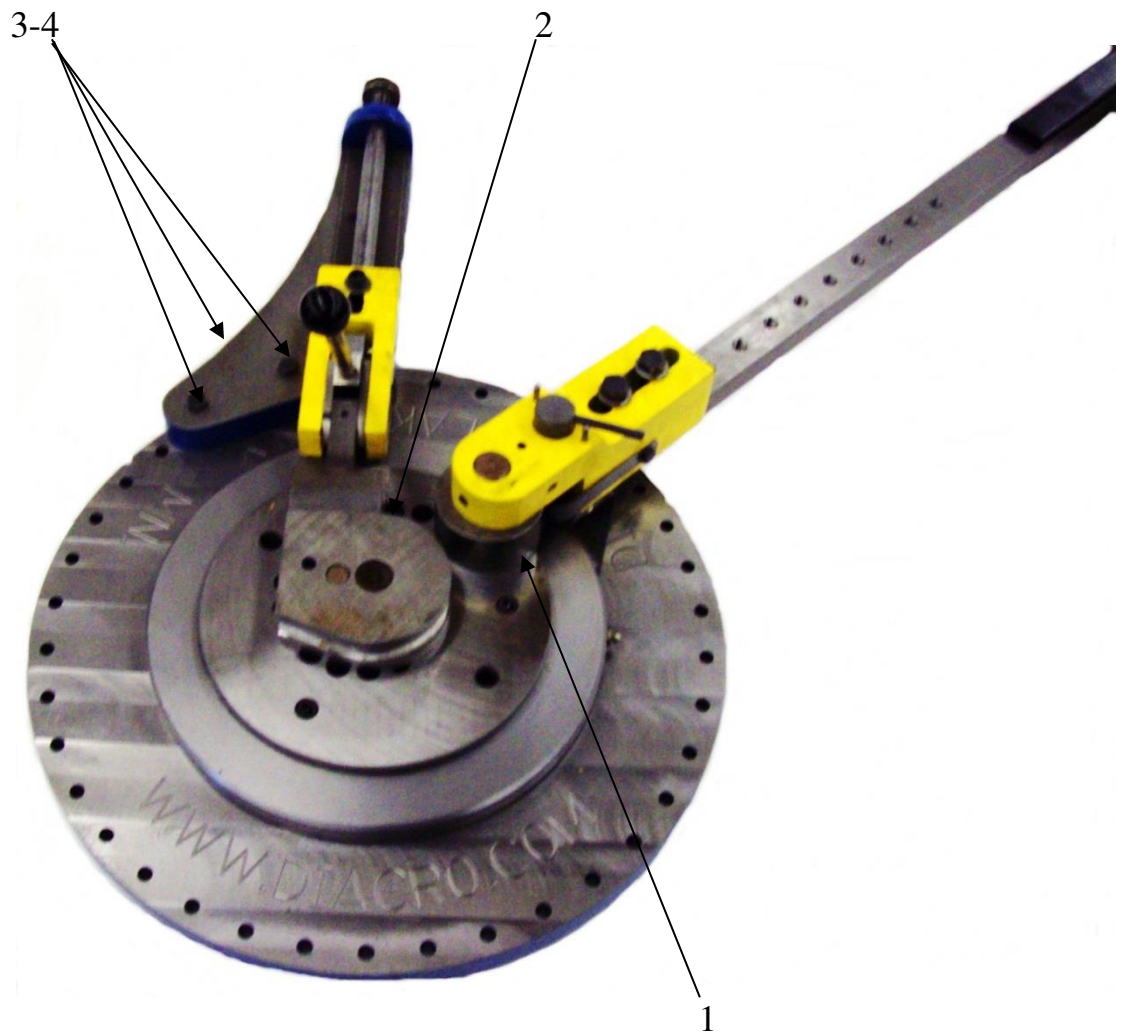
PARTS LIST

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 GRIP | 2 |
| 8 | 20C0104C0508 | SCREW-FHSCS 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 | MOUNTING PLATE PIN | 2 |
| 14 | 20A0308C1102 | SCREW-SHCS 3/8-16X1-1/2 | 3 |
| 15 | 8200121-701 | NOSE HOLDER | 1 |
| 16 | 8000120-301 | NOSE PIN | 1 |
| 17 | 23A0308C0102 | SCREW-SSS 3/8-16X1/2 | 1 |
| 18 | 8158121-702 | TRIGGER | 1 |
| 19 | 18A0104X3000 | PIN-SPRING 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-HHCS 5/16-18X1/2 | 2 |
| 25 | 23A0104C0102 | SCREW-SSS 1/4-20X1/2 | 1 |
| 26 | 8130121-701 | FORMING NOSE | 1 |
| 27 | 21A0102F3000 | SCREW-HHCS 1/2-20X3 | 2 |
| 28 | 0102WILLIAMS WASHER | 1/2 WILLIAMS WASHER | 4 |
| 29 | 21A0102F1304 | SCREW-HHCS 1/2-20X1-3/4 | 2 |
| 30 | 8120121-701 | NOSE HOLDER SUPPORT | 1 |
| 31 | 8130142-071 | BEND LOCATING GAUGE ASSEMBLY | |
| | 8200142-003 | BEND LOCATING GAUGE ARM | 1 |
| | 8130142-003 | BEND LOCATING GAUGE ROD | 1 |
| | 8300142-003 | BEND LOCATING GAUGE BUTTON | 1 |
| | 8470510-900 | RETAINING RING | 2 |
| 35 | 8130016-970 | RADIUS PIN | 1 |
| 36 | 8130120-371 | LOCKING PIN ASSEMBLY | 1 |
| 38 | 8130120-303 | HOLDING PIN 1/2" | 1 |
| 39 | 8120142-001 | ANGLE GAUGE | 1 |
| 40 | 21A0308C2104 | SCREW-HHCS 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-HHCS 3/8-16X2-1/4 | 1 |

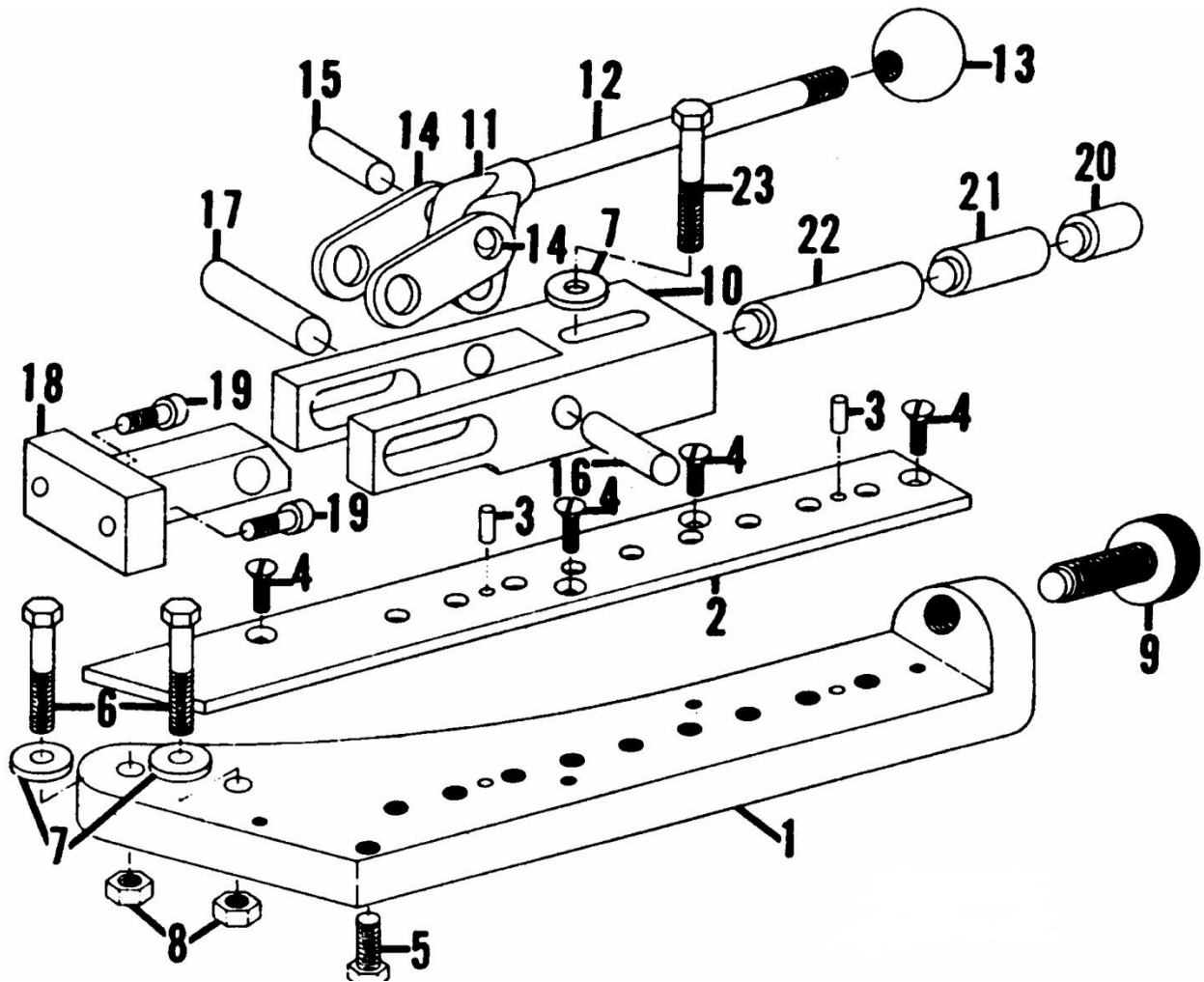
QUIK-LOK MOUNTING INSTRUCTIONS

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



QUIK-LOK PARTS BREAKDOWN

8136111-373



PARTS LIST

8136111-373

| ITEM | PART NUMBER | DESCRIPTION | QTY |
|------|--------------------|-------------------------|-----|
| 1 | 8136111-300 | BASE | 1 |
| 2 | 8600111-300 | SLIDE | 1 |
| 3 | 19A0104X1000 | PIN-DOWEL 1/ 4X1 | 2 |
| 4 | 20C0104C0304 | SCREW-FHMS 1 /4-20X3/4 | 4 |
| 5 | 21A0308C2104 | SCREW-HHCS 3/8-16X2-1/4 | 1 |
| 6 | 21A0308C2304 | SCREW-HHCS 3/8-16X2-3/4 | 2 |
| 7 | 0308WILLIAMSWASHER | 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 |
| 11A | 23A0104C0104 | SCREW-SSS 1/4-20X1/4 | 2 |
| 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 | PIN-DOWEL 1/ 2X2-1/2 | 1 |
| 17 | 19A0508X2102 | PIN-DOWEL 5/8X2-1/2 | 1 |
| 18 | 8920111-300 | NOSE WELDMENT | 1 |
| 18A | 23A0104C0308 | SCREW-SSS 1/4-20X3/8 | 1 |
| 19 | 20A0516C0508 | SCREW-SHCS 5/16-18X5/8 | 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-HHCS 3/8-16X2-1/2 | 1 |

SPECIFICATIONS & THE ART OF BENDING

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) | 3/16x1,4.8x25.4 | | 1/4x1-1/2,6.4x38.1 | | 1/4x2,6.4x50.8 | | 3/8x4.9.5x101.6 | |
| Flat Steel Bar (hard way) | 1/8x1/2,3.2x12.7 | | 1/8x3/4,3.2x19.1 | | 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.

OPTIONAL STAND

Part Number: 8230110-900

Stand Dimensions: 20" WIDE, 15" DEEP, 33-1/4" HIGH

CALL DI-ACRO FOR PRICE AND AVAILABILITY



Fasteners needed to attach Bender to stand are the following:
(Fasteners to attach stand to floor are not included.)

| PART NUMBER | DESCRIPTION | QTY |
|--------------|---------------------|-----|
| 21A0102C3000 | SCREW-HHCS 1/2-13X3 | 3 |
| 61X0102 | WASHER-FLAT 1/2 | 3 |
| 30X0102C | NUT-FULL 1/2-13 | 3 |

Warranty & Limitation of Liability

Defective parts, of a product manufactured by 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 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 other warranty claims are made FOB our plant, providing such items(s) is returned freight prepaid to our plant for examination.

This warranty does not apply to parts, components or systems not manufactured by 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 DI-ACRO before returning parts or equipment to the factory. DI-ACRO will satisfy this warranty by replacing the product or refunding the purchase price upon receipt, inspection and defect identification.

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

THIS IS 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 DI-ACRO IS NOT RESPONSIBLE FOR DAMAGE OR INJURY CAUSED TO OTHER PRODUCTS, MACHINERY, PROPERTY OR PERSONS BY REASON OF THE USE OF ITS PRODUCTS.



12430 55th St N · Oak Park Heights, MN 55082

Phone: 651.342.1756 · Fax: 651.342.1293

Email: info@diacro.com