



## Instruction & Repair Parts Sheet

## B222 & B222A Electric Sidewinder® Bender

**IMPORTANT: RECEIVING INSTRUCTIONS:** Visually inspect all components for shipping damage. If any shipping damage is found, notify carrier at once. Shipping damage is NOT covered by warranty. The carrier is responsible for all repair or replacement costs resulting from damage in shipment.

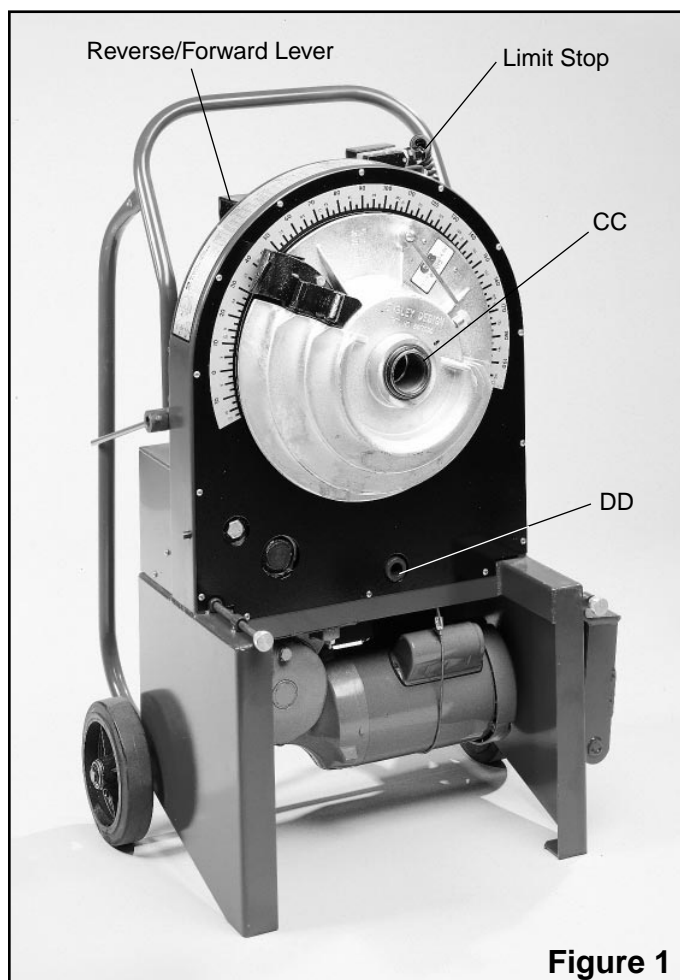
# SAFETY FIRST

**IMPORTANT USER SAFETY AND PROTECTION:** In setting up systems to fit your operations, care must be taken to select the proper components and design to insure appropriate integration with your operations and existing equipment and that all safety measures have been taken to avoid the risk of personal injury and property damage from your application or system.

**GB ELECTRICAL, INC. CANNOT BE HELD RESPONSIBLE FOR DAMAGE OR INJURY CAUSED BY UNSAFE USE, MAINTENANCE OR APPLICATION OF ITS PRODUCTS.** Please contact GB's technical service department for assistance if you are in doubt as to the proper safety precautions essential to designing and setting up your particular application.

### B222A Electric Sidewinder® Bender

½" through 2" for Rigid Steel and Aluminum,  
Thinwall EMT, IMC, and PVC-coated conduit



**Figure 1**

### Bending Instructions - Thinwall EMT Conduit

#### To bend ½" through 1¼" EMT conduit

1. Select the ½"-1¼" EMT bending shoe with permanently mounted clevis.
2. Select the ½"-1¼" EMT conduit support.
3. Place shoe on hollow shaft of electric bender by pulling out spring loaded pin on shoe and align lugs on back of shoe with holes on the front plate of bender frame (see Figure 3).
4. Push remote control button to revolve the shoe so pointer indicator is just below the zero mark on the protractor scale (5 to 10 degrees before zero mark).
5. Load conduit selection into clevis with conduit resting on the conduit support. Make sure conduit is in proper position prior to bending.

#### B222 Models:

6. Once the conduit is in proper bending position, place the forward/reverse lever (located on top of bender front) into the forward position. Proceed to bend by pushing the remote control button. When desired bending angle is reached, remove your finger from button and bending process will stop.
7. To remove conduit, place the control lever into the reverse position and press remote control button. Once conduit is loose, take your finger off the button and remove conduit for installation.

#### B222A Models:

6. Proceed to bend by pressing the FWD button on the pendant control. Hold the button until the pointer on the shoe activates the limit stop. Release the button.
7. To remove conduit, press and hold REV button until conduit is loose enough to remove from bend shoe. Release button.

## To bend 1½" and 2" EMT conduit

1. Select 1½" or 2" EMT shoe along with the clevis, follow bar and eccentric clamp.
2. Place shoe on frame as indicated in step #3 under ½" through 1¼" EMT instructions.
3. Follow step #4 under ½" through 1¼" EMT instructions.
4. See Figure 1 for mounting the eccentric clamp support. To assemble, place split shaft (C) into hollow shaft (CC) and at the same time align shaft (D) with hole (DD) in the center of base. Ease both into a forward position. Turn bend knob (E) to the right and draw up tight (see Figure 2). Tighten bolt (A) until finger tight. Pressure lever (F) should be in the down position.
5. Mount clevis (G) on front of bending shoe as shown in Figure 2.
6. Load conduit into clevis. Insert follow bar under conduit so that end of follow bar rests against the clevis and sits on the roller of the eccentric clamp.
7. Once the conduit is in the proper bending position, raise pressure lever (F) to its highest vertical position to lock in place. Your setup should now look like Figure 2.
8. Once the conduit is in proper bending position, place the forward/reverse lever (located on top of bender front) into the forward position. Proceed to bend by pushing the remote control button. When desired bending angle is reached, remove your finger from button and bending process will stop.
9. To remove conduit, place the control lever into the reverse position and press remote control button. Once conduit is loose, take your finger off the button and remove conduit for installation.

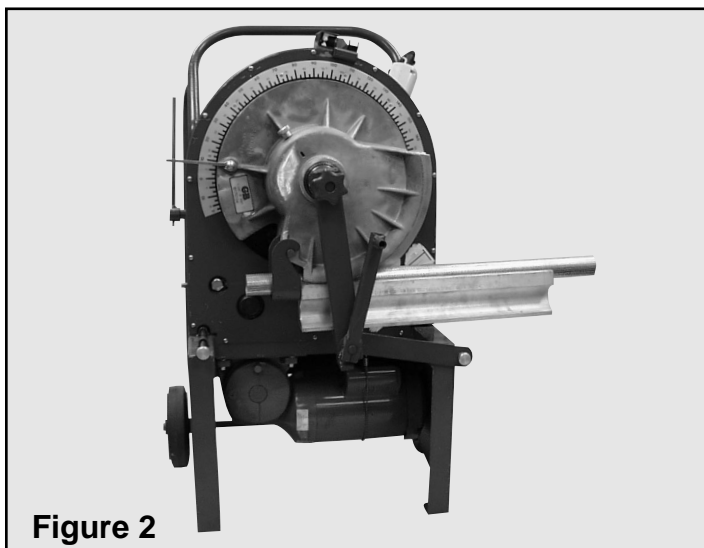


Figure 2

## Bending Instructions - IMC Conduit

### To bend ½" through 1¼" IMC conduit

Use the standard rigid shoe and bending instructions for bending rigid conduit as indicated below.

### To bend 1½" and 2" IMC conduit

Use the combination IMC and rigid shoe setup. Follow same instructions as shown for 1½" and 2" EMT sizes.

## Bending Instructions - Rigid Conduit

This bender is designed to bend schedule 40 pipe and rigid conduit, size ½" through 2". Do not attempt to bend schedule 80 pipe or reinforcing bar.

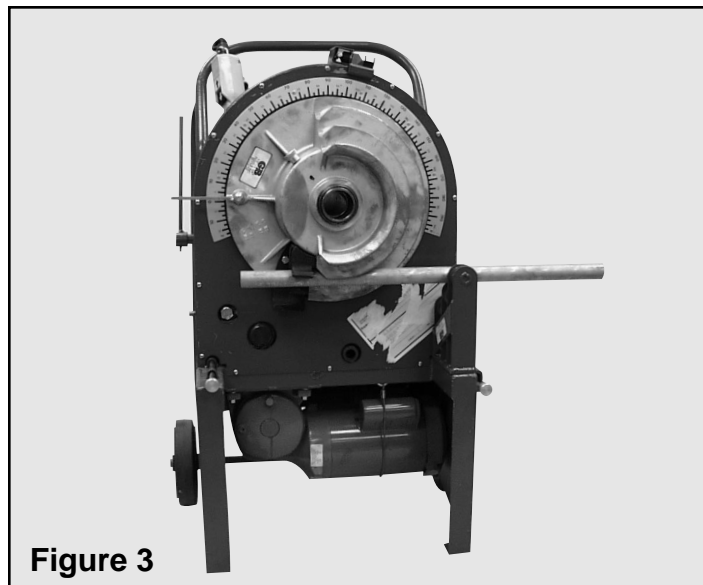


Figure 3

## To bend ½" through 2" Rigid Conduit

1. Mount desired bending shoe on operating side (see Figure 3).
2. Place shoe on hollow drive shaft, pull out spring supported plunger and move shoe toward drive sprocket, shifting the bending shoe to align lugs on back of shoe with holes in drive sprocket.
3. Install corresponding support rollers with smaller roller toward bender. This permits inserting pipe through hook for alignment of bending mark.

### B222 Models:

4. With control switch in reverse, push remote control button to revolve the shoe so that the pointer on shoe is between 5 and 10 degrees below on the scale.
5. With control switch in forward, push remote control button and check alignment of bending mark as shoe movement locks the pipe.
6. Proceed to make a bend to the desired degree. The scale on bender is **NOT** to be used as indication of the exact degree of bend. See Table "B" for scale reading.

### B222A Models:

4. Push REV button and hold until shoe pointer is 5 to 10 degrees below on scale.
5. With FWD button pushed, check alignment of bending mark as shoe rotation locks the pipe.
6. Proceed to make a bend to the desired degree. The scale on bender is **NOT** to be used as indication of the exact degree of bend. See Table "B" for scale reading.

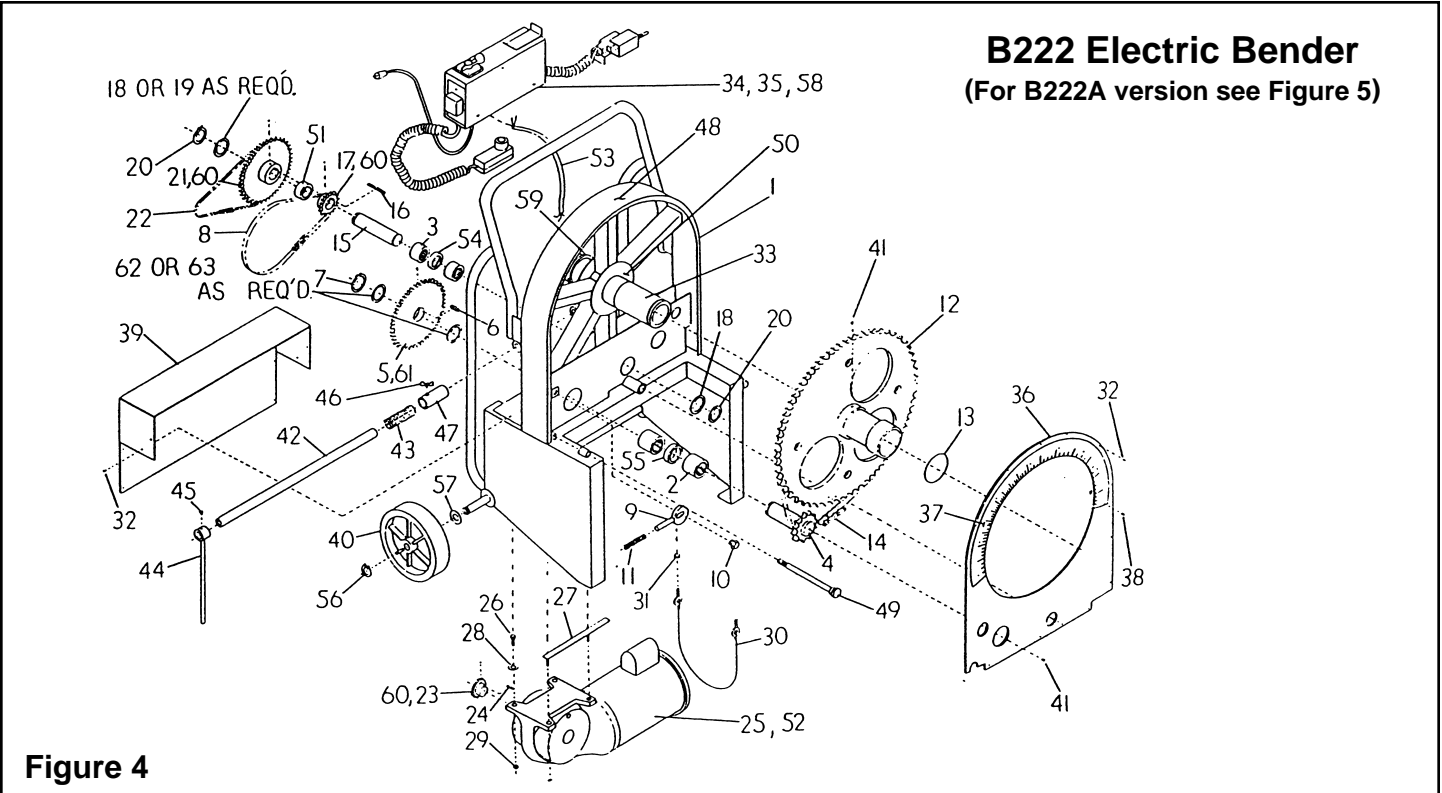
## Bending Instructions - PVC Coated Conduit

### To bend ½" through 1½" PVC-coated conduit

Use the next size up EMT shoe groove and the respective bending instructions for bending PVC-coated conduit (i.e., to bend ½" PVC coated conduit, use ¾" EMT shoe groove).

### To bend 2" PVC-coated conduit

Use special 2" PVC-coated conduit shoe, clevis and follow bar. The setup and operation is the same as bending 2" EMT or IMC.



**B222 Electric Bender**  
(For B222A version see Figure 5)

**Figure 4**

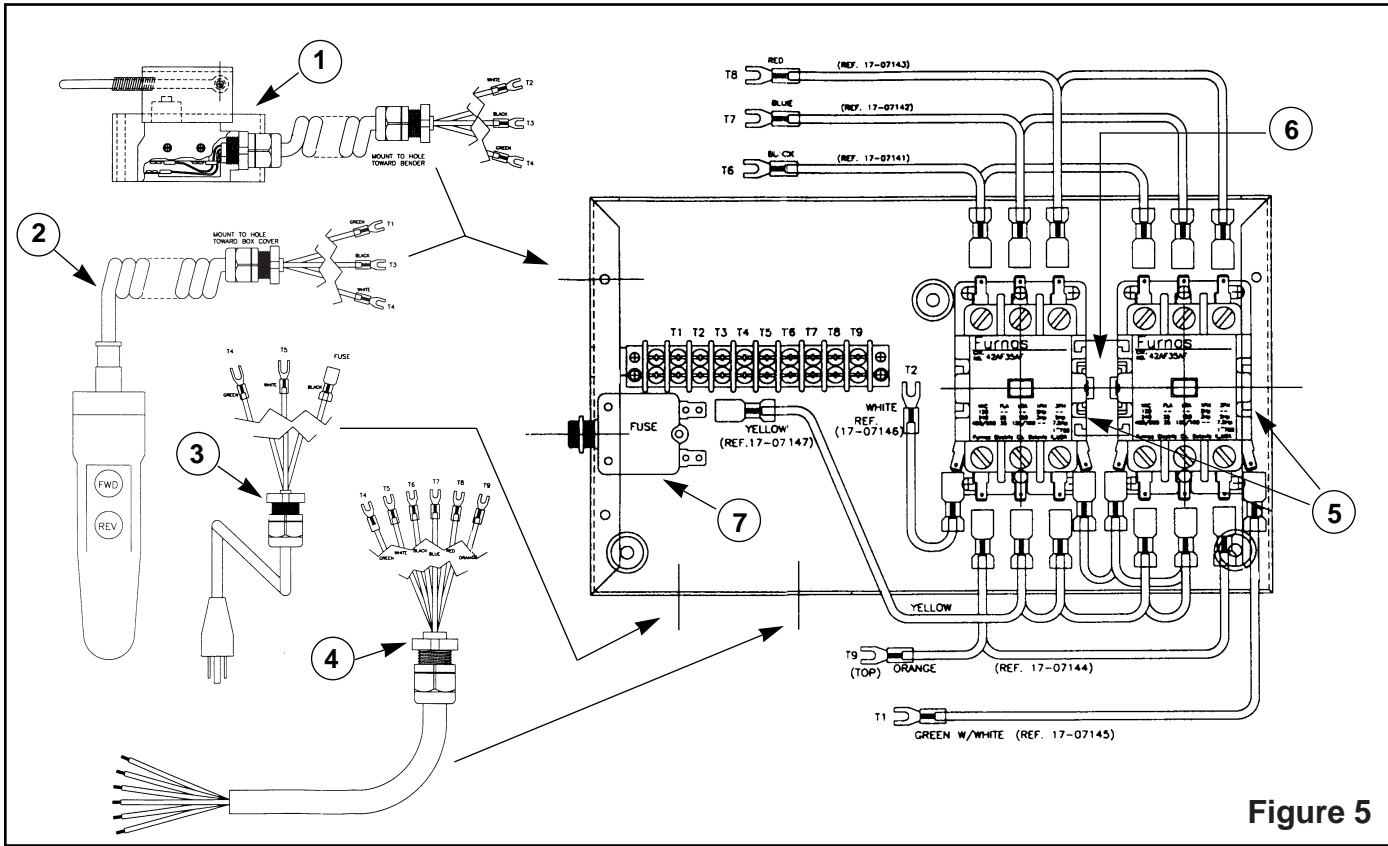
**Parts List**

**Model B222 & B222A Electric Bender (115 volt)**

When ordering parts, state model and serial number of bender. Order parts by part number and description and state quantity.

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	17-0901	Bender Chassis Weldment	1	32	99-82	Sheet Metal Screw #10-32 x 3/8"	26
2	17-413	Center Shaft Bearing	2	33	17-33	Nylon Sleeve Bearing	1
3	17-414	Outboard Bearing	1	34	17-07118	Control Box Assembly	1
4	17-050A	Sprocket and Shaft Assembly	1	35	17-25	Control Box Cover	1
5	17-491	Sprocket	1	36	17-26	Cover Plate	1
6	17-55	Center Shaft Key	1	37	17-403	Protractor	1
7	99-351	Retaining Ring	1	38	99-41	Pop Rivet	8
8	17-499	Roller Chain	1	39	17-2041	Rear Drive Cover	1
9	17-0250	Idler Weldment	1	40	36-430	Wheel	2
10	99-701	Hex Head Capscrew 3/8"-11" x 1"	1	41	99-18	Zerk Alemite Fitting	1
11	35-81	Spring	1	42	17-912	Gauge Guide	1
12	17-092	Sprocket Assembly	1	43	17-82	Spring	1
13	17-80	Snap Ring	1	44	17-094	Pipe Gauge	1
14	17-416	Roller Chain	1	45	99-86	Square Head Set Screw 1/4"-20" x 1/2" Long	1
15	17-560A	Idler Shaft	1	46	99-804	Wing Screw 1/4"-20" x 3/4" Long	1
16	17-2024	Idler Shaft Key	1	47	17-0229	Slip Guide Assembly	1
17	17-42	Sprocket	1	48	17-4035	Bending Instructions Label	1
18	99-927	Thrust Washer	As Needed	49	17-051	Hinge Pin Assembly	2
19	99-926	Thrust Washer	As Needed	50	99-901	Fiber Shim	1
20	99-365	Retaining Ring	2	51	17-942	Idler Shaft Spacer	1
21	17-4036	Driven Sprocket (B222 Model)	1	52	17-728	Box Connector	1
	17-4053	Driven Sprocket (B222A Model)	1	53	17-7020	5 Wire Cord	1
22	17-4038	Roller Chain (B222 Model)	1	54	17-940	Bearing Spacer	1
	17-4055	Roller Chain (B222A Model)	1	55	17-914	C'Sht. Bearing Spacer	1
23	17-4037	Motor Sprocket	1	56	99-301	Retaining Ring	2
24	17-563	Motor Sprocket Key	1	57	99-9027	Washer	2
25	17-7049	Gearmotor (B222 Model)	1	58	99-918	Washer	3
	17-7073	Gearmotor (B222A Model)	1	59	99-32	Retaining Ring	1
26	99-705	Hex Head Capscrew 3/8"-16" x 1 1/4"	2	60	99-840	Set Screw 5/16"-18" x 5/16" Long	3
27	17-0264	Mount Bar Weldment	1	61	99-8033	Set Screw 3/8"-16" x 1/2" Long	1
28	99-911	Flat Washer 3/8" Std.	6	62	99-9011	Thrust Washer	As Needed
29	99-660	Hex Nut 3/8"-16"	4	63	99-9030	Thrust Washer	As Needed
30	17-0266	Motor Strap Assembly	1				
31	99-607	Hex Nut 5/16"-18"	4				

## Control Box Assembly For B222A Models



Item	Part Number	Description	Quantity
1	17-07148	Limit Switch Assembly	1
2	17-07149	Pendant Cord Assembly	1
3	17-07150	Power Cord Assembly	1
4	17-07151	Motor Cord Assembly	1
5	17-7068	Contactors 3 Pole 120V AC coil	2
6	17-7069	Mechanical Interlock	1
7	17-7071	Fuse, 20 Amp thermal	1

**Note:** Cord fittings are part of the cord assemblies.

**REPAIR AND SERVICE INSTRUCTIONS:** For repair service and parts contact your nearest GB ELECTRICAL Service Center. The GB ELECTRICAL Service Center will provide complete and prompt service on all GB ELECTRICAL products.

<p><b>PARTS AND SERVICE:</b> For quality workmanship and genuine GB ELECTRICAL parts, select an Authorized GB Service Center for your repair needs. Only repairs performed by an Authorized Service Center displaying the official GB Authorized sign are backed with full factory warranty. Contact GB Electrical (414)352-4160 for the name of the nearest GB Authorized Service Center.</p>	<p><b>WARRANTY:</b> GB ELECTRICAL, INC. warrants its product against defects in workmanship and materials for 1 year from date of delivery to user. Chain is not warranted. Warranty does not cover ordinary wear and tear, abuse, misuse, overloading, altered products or use of improper fluid.</p>	<p><b>WARRANTY RETURN PROCEDURE:</b> When question of warranty claim arises, send the unit to the nearest GB Authorized Service Center for inspection, transportation prepaid. Furnish evidence of purchase date. If the claim comes under the terms of our warranty the Authorized Service Center will REPAIR OR REPLACE PARTS AFFECTED and return the unit prepaid.</p>
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6101 N. Baker Road, Milwaukee, WI 53209 • Phone: (414) 352-4160 • FAX (414) 352-2377