

**3450 Sabin Brown Road • Wickenburg, Arizona 85390** (800) 992-3833 • (928) 684-2813 • www.bnproducts.com

# DBD-25X PORTABLE REBAR BENDER

## Tool Manual DBD-Series 0-180 degree Rebar Benders



### **BN Products-USA, LLC.**

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NOTE: When using electric tools, basic safety precautions should always be followed to reduce the risk of electric shock and personal injury, including the followings items:

### READ ALL INSTRUCTIONS AND SAVE THEM FOR FURTURE REFERENCE

- 1. Keep hands away. From all moving parts and rollers while operating.
- 2. Dress properly. Loose clothing or jewelry can get caught in moving parts. Wear sturdy boots with non-skid soles. Steel toed boots and safety glasses are recommended.
- 3. Keep children and bystanders away. Distractions can cause you to lose control.
- 4. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- 5. Stay alert. Watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs or alcohol. A moment of inattention while operating power tools may result in serious personal injury.

- 6. Do not exceed the maximum number of bars that can be bent at one time. Please refer to specifications.
- 7. When positioning the bar between rollers, make sure to lay it flat on the machine surface. Failure to do so may cause the rebar to fly out.
- Do not expose tool to rain or use in damp locations.. Do not use tool in presence of flammable liquids or gases. Keep work area well lit. If the tool is used outdoors, keep it covered when not in use and protect it from rain or water.
- 9. Do not try to bend materials harder than "Grade 60 or 600N/mm2" as they will either crack and fly out or cause machine failure.
- 10. Disconnect tool from receptacle when not in use. Disconnect when servicing or changing rollers to prevent accidents.
- 11. Keep tool clean at all times for best and safest performance. Follow instructions for lubricating and changing parts. Keep hands dry and free of oil or grease. Inspect switches, tool cords periodically and have them repaired or replaced by an authorized service center if damaged. Check moving parts for alignment and binding as well as for breakage and improper mounting. Damaged parts should be repaired or replaced by an authorized service facility unless otherwise indicated in this instruction book.

### DBD-25X Portable Rebar Bender

1. Moving bending roller Center roller 2. Adjustable stopper 3. Main switch 4. 5. Pilot lamp Operation button On/Off 6. 7. Angle setter (lever type) 2-stops Angle stopper (two) 8. 9. Emergency stop button 10. Plug-in for foot switch 11. Roller set 12. Foot Operated Switch



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### SPECIFICATIONS

Model	DBD-25X
Max. Bending Capacity	7/8" (#7) (22 mm) Grade 60 Rebar
Bending Angle	0-180°
Bending Speed	6 seconds for 180° bend
Electric Power Supply	115 Volts, 50/60Hz, 12 amps
Dimensions L x W x H (mm)	16.4" x 18" x 16.2" (420) x (462) x (415)
Weight (Kg)	190 lbs. (86 kg)

#### DBD-25X Rebar Bender Roller Selection Chart

Recommended Bending Roller Selection Chart for DBD-25X Bender on Standard Hook Details Combination of Center Roller and Moving Roller according to the bar size:

Bar Diameter Size Max. Grade 60	Center Roller #	Center Roller Outside Diameter	CRSI Recommended Inside Bend Diameter	Moving Roller	No. of bars that can be bent at one time
7/8" (22mm) #7	No. 5	4.75" (120mm)	5.25" (134mm)	No. 1	1 -Piece
3/4" (19mm) #6	No. 5	4.75" (120mm)	4.50" (115mm)	No. 1	2 -Pieces
5/8" (16mm) #5	No. 4	3.75" (96mm)	3.75" (96mm)	No. 3**	2 -Pieces
1/2" (13mm) #4	No. 3	3.12" (79mm)	3.00" (76mm)	No. 5	3 -Pieces
3/8" (10mm) #3	No. 1	1.95" (50mm)	2.25" (57mm)	No. 6	4 -Pieces

\*\* Use a second No. 4 Roller on moving roller to produce a complete 180° Bend.

Recommended Bending Roller Selection Chart for DBD-25X Bender on Stirrup Hooks Combination of Center Roller and Moving Roller according to the bar size:

Bar Diameter Size Max. Grade 60	Center Roller #	Center Roller Out- side Diameter	CRSI Recommended Inside Bend Diameter	Moving Roller	No. of bars that can be bent at one time
5/8" (16mm) #5	No. 1	1.95" (50mm)	2.50" (51mm)	No. 6	2 -Pieces
1/2" (13mm) #4	No. 1	1.95" (50mm)	2.00" (51mm)	No. 6	3 -Pieces
3/8" (10mm) #3	**	1.63" (42mm)	1.50" (38mm)	No. 6	4 -Pieces

\*\* Use roller shaft only with no roller.

#### Bending Roller Sizes for DBD-25X Bender Only

Part Number -Roller Number	Outside Diameter
#1BR5140 -No. 1	1.95" (50mm)
#1BR5142 -No. 2	2.73" (70mm)
#1BR 5143 -No. 3	3.12" (79mm)
#1BR51441 -No. 4	3.75" (96mm)
#1BR51451 -No. 5	4.75" (120mm)
#1BR5146 -No. 6	6.13" (156mm)



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### WARNING: ALWAYS UNPLUG THIS TOOL BEFORE ATTACHING OR REMOVING ROLLERS OR ACCESSORIES.

- 1. Select and set the correct rollers for the bars to be bent. See the table above.
- 2. Plug the electrical power cord into an appropriate outlet.
- 3. Lay the bar on the machine surface between the center roller and bending roller. Adjust the stopper so that the bar is parallel to the front edge of the machine.
- 4. Turn the main switch on and check that the pilot lamp has lit up.
- 5. Set the angle and make a test bend. If the bent angle is not exact, adjust the angle setter slightly to the right or left. Lock in the angle stoppers to duplicate the same angle each time.
- 6. Push the operation button or foot switch. The moving bending roller will automatically return to the start position once the bend has been completed.
- 7. If it is necessary to stop the machine in an emergency, push the emergency stop button or release your foot from the foot operated switch. The bending roller will return to the start position automatically.

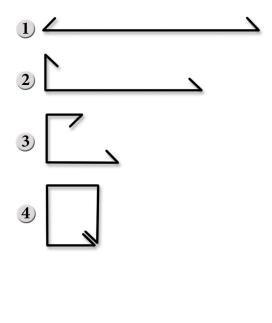


### BENDING ANGLES CAN BE PRESET

- 1. Set the angle setter to 135° then tighten the right angle stopper to lock the 135° position.
- 2. Set the angle setter to 90° then tighten the left angle stopper to lock the 90° position.
- 3. Set the angle setter to 135°. Push the operation button to make your first bend.
- 4. Slide the rebar to the desired length and set the angle setter to 90°. Push the operation button to complete your second bend.

For stirrups, cut your rebar to the desired length before bending. Then make both bends for your turndowns. Finally make your (3) 90° bends to connect your ends together. See below.

WARNING: Never touch any moving parts or rollers while the rebar bender is being operated.

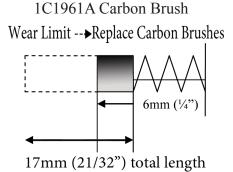




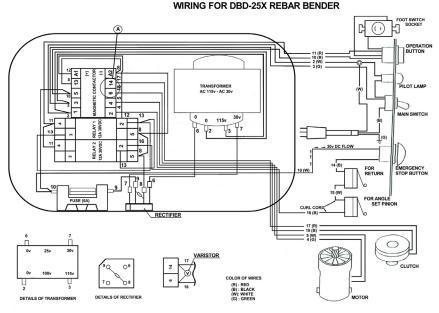
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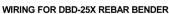
### INSPECTION AND MAINTENANCE WARNING: ALWAYS UNPLUG TOOL BEFORE PERFORMING MAINTENANCE. DO NOT USE PARTS OR ACCESSORIES THAT ARE NOT GENUINE DIAMOND BRAND from BN Products-USA

1. At least once a month remove the bottom plate and grease all the visible gears and pinions. At the same time, check the carbon brushes for wear or damage. Replace with new brushes if they are worn out.



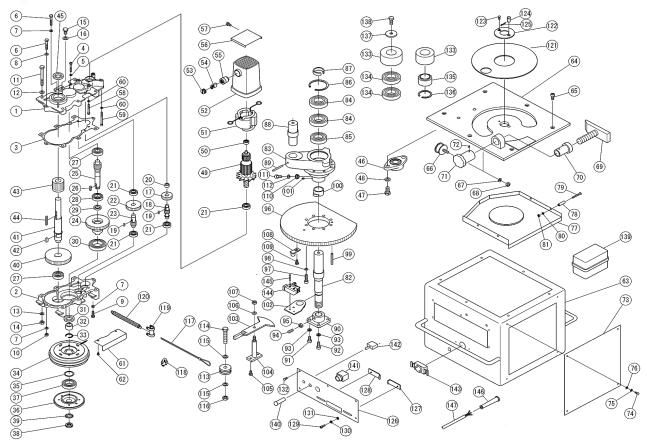
- 2. Check that there are no loose nuts and bolts before starting the operation.
- 3. After operation is completed, be sure to remove metal dust, dirt, oil, etc... adhering to the machine surface.
- 4. In order to empty the metal dust from the bender, (remove side cover DBD-25X and DBD-32X models) then tilt the machine to one side allowing the debris to fall out of the catch pan. Be sure to blow out any remaining dirt and dust with compressed air prior to using the tool again (wear safety goggles to block blowing debris).







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No.	Part No.	Part Name	Qty
1	1BR5001	GEAR CASE M	1
2	1BR5002	GEAR CASE C	1
3	1BR5206	GEAR CASE PACKING	1
4	7CB06045	CAP BOLT M6X45	2
5	7SW006	SPRING WASHER M6	2
6	7B08050	BOLT M8X50	3
7	7SW008	SPRING WASHER M8	4
8	7PW008	PLATE WASHER M8	1
9	7B08025	BOLT M8X25	1
10	7N008	NUT M8	1
11	7B10100	BOLT M10X100	4
12	7PW010	PLATE WASHER M10	4
13	7SW010	SPRING WASHER M10	4
14	7N010	NUT M10	4
15	7B12020	BOLT M12X20	1
16	7WF12	SEAL WASHER WF12	1

No.	Part No.	Part Name	Qty
17	1BR5023	HELICAL GEAR	1
18	1BR5025	PINION NO.1	1
19	1BR5024	HELICAL GEAR KEY	2
20	1BR5009	NEEDLE BEARING TA1212	1
21	1BR5003	BEARING 6202V, 6202ZZ	4
22	1BR5026	GEAR NO.1	1
23	1BR5027	PINION NO.2	1
24	1BR5028	GEAR NO.2	1
25	1BR5029	PINION NO.3	1
26	1BR5030	PINION KEY 7X7X20	1
27	1BR5004	BALL BEARING 6204	2
28	1BR5006	BALL BEARING 6005	1
29	1BR5015	OIL SEAL SC22-32-7	1
30	1BR5008	BALL BEARING 6009Z	1
31	1BR5016	OIL SEAL SC45-62-9	1
32	1BR5010	NEEDLE BEARING TA223020	1



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No.	Part No.	Part Name	Qty
33	1BR5011	CIRCLIP AR-30	1
34	1BR5038	7TMF1342 CLUTCH ASS'Y	1
35	1BR5043	SHIM	1
36	1BR5038D	CLUTCH ARMATURE FLANGE	1
37	1BR5007	BEARING 6007ZZ	1
38	1BR5031	BEARING NUT	1
39	1BR5032	BEARING WASHER	1
40	1BR5033	GEAR NO.3	1
41	1BR5035	SHAFT	1
42	1BR5034	GEAR NO.3 KEY	1
43	1BR5036	PINION NO.4	1
44	1BR5037	PINION KEY	1
45	1BR5017	OIL SEAL SC30-45-8	1
46	1BR5047	FLANGE UNIT UCFL205	1
47	7B14028	BOLT M14X28	2
48	7SW014	SPRING WASHER M14	2
49	1BR5012C	ARMATURE	1
50	1BR6200ZZ	BALL BEARING 6200ZZ	1
51	1BR5012B	STATOR COIL	1
52	1BR5012D	MOTOR HOUSING	1
53	1BR5012H	BRUSH CAP	2
54	1BR5012A	CARBON BRUSH SET	1
55	1BR5012E	CARBON BRUSH HOLDER	2
56	1BR5048	MOTOR COVER	1
57	7B08015	BOLT M8X15 WITH WASHER	1
58	7CB06050	CAP BOLT M6X50	2
59	7CB06070	CAP BOLT M6X70	2
60	7SW006	SPRING WASHER M6	4
61	1BR5044	CLUTCH COVER	2
62	7PB06008	PAN HEAD BOLT M6X8 W/WASHER	4
63	1BR50501A	FRAME	1
64	1BR50511	BASE	1
65	7CB10020	CAP BOLT M10X20	6
66	1BR5133	DAMPER	1
67	7SW010	SPRING WASHER M10	1
68	7N010	NUT M10	1
69	1BR5063	ADJUSTABLE STOPPER	1
70	1BR5064	ADJUSTABLE NUT	1

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No.	Part No.	Part Name	Qty
71	1BR5065	ADJUSTABLE HANDLE	1
72	1BR5066	SPRING PIN Φ5X8	2
73	1BR5055	SIDE COVER	2
74	7PB06008	PAN HEAD BOLT M6X8	8
75	7SW006	SPRING WASHER M6	8
76	7PW006	PLATE WASHER M6	8
77	1BR7120	DUST COVER	1
78	1BR7121	DUST COVER STAY	4
79	7SB06050	FLAT HEAD BOLT M6X50	4
80	7SW006	SPRING WASHER M6	4
81	7N006	NUT M6	4
82	1BR5068	MAIN SHAFT	1
83	1BR5069	SWIVEL ARM	1
84	1BR5070	BALL BEARING 6208Z	2
85	1BR5071	BALL BEARING 6207Z	1
86	1BR5072	SNAP RING C-80	1
87	1BR5073	SPACER	1
88	1BR50741	ROLLER SHAFT	1
89	1BR5075	SPRING PIN Ø8X60	1
90	1BR50791	MAIN SHAFT CLAMP	1
91	7CB10020	CAP BOLT M10X20	2
92	7CB10025	CAP BOLT M10X25	2
93	7SW010	SPRING WASHER M10	4
94	7SS10025	SET SCREW M10X25	1
95	7N010	NUT M10	1
96	1BR5084	SWIVEL GEAR	1
97	7CB10035	CAP BOLT M10X35	8
98	7SW010	SPRING WASHER M10	8
99	7SP08030	SPRING PIN Φ8x30	1
100	1BR5087	LIMIT SWITCH CAM	1
101	7SS06010	SET SCREW M6X10	1
102	1BR51324	ANGLE SET PINION	1
103	1BR52261	ANGLE SETTER	1
104	1BR50941	ANGLE STAND	1
105	7B308015	BOLT M8X15 WITH WASHERS	2
106	1BR5098	DISK SPRING M10	2
107	1BR5099	LOCK NUT SET	1
108	1BR5101	SWITCH CAM	1
109	7B308015	BOLT M8X15 WITH WASHERS	1



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No.	Part No.	Part Name	Qty
110	1BR5107	WIRE CLAMP	1
111	7CB10020	CAP BOLT M10X20	1
112	7SW010	SPRING WASHER M10	1
113	1BR51101	JIB	1
114	7B14070	BOLT M14X70	1
115	7PW014	PLATE WASHER M14	2
116	7UN014	SELF LOCK NUT M14	1
117	1BR5116	WIRE ROPE	1
118	1BR5117	WIRE CLIP WITH NUT	1
119	1BR5118	SPRING HANGER	1
120	1BR5119	RETURN SPRING	4
121	1BR5135	CENTER COVER	1
122	1BR5134	CENTER PLATE	1
123	7SB06015	FLAT HEAD BOLT M6X15	1
124	1BR507811	ROLLER STOPPER	1
125	1BRSS10	SNAP PIN	1
126	1BR5050	SWITCH PANEL	1
127	1BR7070A	ANGLE STOPPER ( R )	1
128	1BR7071	ANGLE STOPPER ( L )	1
129	7CB06018	CAP BOLT M6X18	2
130	7DS006	DISK SPRING M6	2
131	7PW006	PLATE WASHER M6	2
132	7PB306015	PAN HEAD BOLT W/ WASHERS	5
133	1BR5140	ROLLER NO.1 Φ50MM	1
	1BR5142	ROLLER NO.2 Φ70MM	1
	1BR5143	ROLLER NO.3 Φ79MM	1
	1BR51441	ROLLER NO.4 Φ96MM	1

No.	Part No.	Part Name	Qty
	1BR51451	ROLLER NO.5 Φ120MM	1
	1BR5146	ROLLER NO.6 Φ156MM	1
134	76208Z	BALL BEARING 6208Z	6
135	7HSL08	BEARING FOR ROLLER NO.3	1
136	7BR60	SNAP RING BR60 FOR NO.3	1
137	1BR5076	ROLLER CLAMP	2
138	1BR5080	CLAMP BOLT	2
139	1BR5129	1BR5129 CONTROL BOX ASSEMBLY	1
	1BR5406	MAGNET CONDUCTOR	1
	1BR5129C	DIODE	1
	1BR51291K	THYRISTER	1
	1BR5129F	FUSE HOLDER	1
	1BR5129G	FUSE	1
	1BR5129H	TRANSFORMER	1
140	1BR5126	PILOT LAMP	1
141	1BR5127	OPERATION SWITCH	1
	1BR5231	EMERGENCY BUTTON	1
142	3CD0151	MAIN SWITCH	1
143	1BR5128	SOCKET FOR FOOT SWITCH	1
144	1BR5124	LIMIT SWITCH AZ7141	2
145	7PB204030	PAN HEAD BOLT W/ WASHER	4
146	1BR5012G	CORD ARMER	1
147	1BR5012F	CORD SET	1
	1BR5231	EMERGENCY STOP BUTTON (NOT SHOWN)	1
	1BR3100400	HANDLE (NOT SHOWN)	2

