

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

# DBD-25H 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.
- 8. 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

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



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#### Recommended Bending Roller Selection Chart for DBD-25H 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
1" (25mm) #8	No. 7	5.97" (153mm)	6.00" (155mm)	No. 1	1 -Piece
7/8" (22mm) #7	No. 6	5.15" (132mm)	5.25" (135mm)	No. 3	1 -Piece
3/4" (19mm) #6	No. 4	4.45" (114mm)	4.50" (115mm)	No. 5	2 -Pieces
5/8" (16mm) #5	No. 3	3.63" (93mm)	3.75" (95mm)	No. 6	2 -Pieces
1/2" (13mm) #4	No. 2	3.09" (79mm)	3.00" (80mm)	No. 8	3 -Pieces
3/8" (10mm) #3	No. 1	2.54" (65mm)	2.25" (60mm)	No. 9	4 -Pieces

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

#### Recommended Bending Roller Selection Chart for DBD-25H 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 Outside Diameter	*ACI Recommended Inside Bend Diameter	Moving Roller	No. of bars that can be bent at one time
5/8" (16mm) #5	No. 1	2.54" (65mm)	2.50" (51mm)	No. 8	2 -Pieces
1/2" (13mm) #4	Special *	1.95" (50mm)	2.00" (51mm)	No. 9	3 -Pieces
3/8" (10mm) #3	**	1.57" (42mm)	1.50" (38mm)	No. 9	4 -Pieces

\* Requires optional roller #1BR5140 used on DBD-25X bender \*\* Use roller shaft only with no roller, shaft outside diameter 1.57"

Bending Roller Sizes for DBD-25H Rebar Bender				
Part Number -Roller Number	Outside Diameter			
#1BR4212500 -No. 1	2.54" (65mm)			
#1BR4212600 -No. 2	3.09" (79mm)			
#1BR4207000 -No. 3	3.63" (93mm)			
#1BR4207201 -No. 4	4.45" (114mm)			
#1BR4207101 -No. 5	4.45" (114mm)			
#1BR4207300 -No. 6	5.15" (132mm)			
#1BR4212800 -No. 7	5.97" (153mm)			
#1BR4209600 –No. 8	6.48" (166mm)			
#1BR4212900 –No. 9	7.14" (183mm)			

Information from CRSI -Concrete Reinforcing Steel Institute, www.crsi.org





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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.

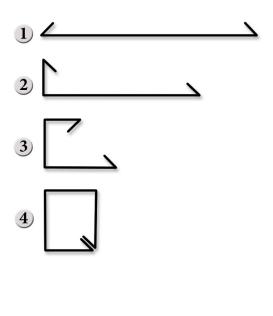


#### BENDING ANGLES CAN BE PRESET

- 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.



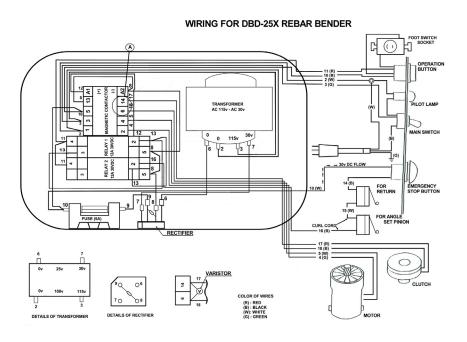


#### INSPECTION AND MAINTENANCE WARNING: ALWAYS UNPLUG TOOL BEFORE PERFORMING MAINTENANCE. DO NOT USE PARTS OR ACCESSORIES THAT ARE NOT GENUINE DIAMOND BRAND from BN Products-USA

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.

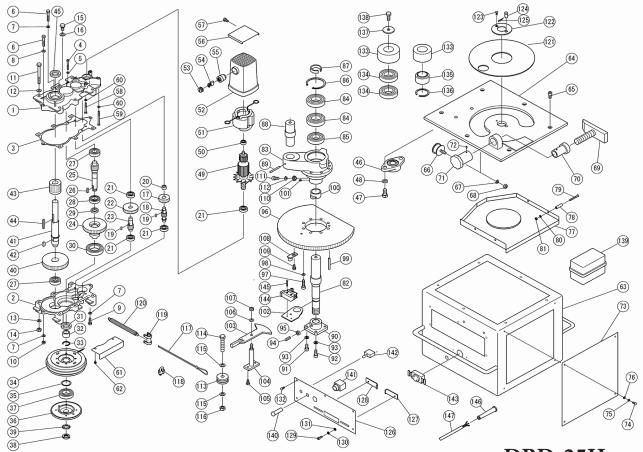
1C1961A Carbon Brush Wear Limit --→Replace Carbon Brushes 6mm (¼") 17mm (21/32") total length

- 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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### DBD-25H

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

No.	Part No.	Part Name	Qty
16	7WF12	SEAL WASHER WF12	1
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	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



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No.	Part No.	Part Name	Qty
31	1BR5016	OIL SEAL SC45-62-9	1
32	1BR5010	NEEDLE BEARING TA223020	1
33	1BR5011	CIRCLIP AR-30	1
34	7TMF1341	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	1BR4206200	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	7PB206008	PAN HEAD BOLT M6X8 W/WASHER	4
63	1BR1025600	FRAME	1
64	1BR2062800	BASE	1
65	7CB10020	CAP BOLT M10X20	6
66	1BR5133	DAMPER	1
67	7SW010	SPRING WASHER M10	1

No.	Part No.	Part Name	Qty
68	7N010	NUT M10	1
69	1BR5063	ADJUSTABLE STOPPER	1
70	1BR5064	ADJUSTABLE NUT	1
71	1BR5065	ADJUSTABLE HANDLE	1
72	7SP05008	SPRING PIN Φ5X8	2
73	1BR3110400	SIDE COVER	2
74	7PB06010	PAN HEAD BOLT M6X10	8
75	7SW006	SPRING WASHER M6	8
76	7PW006	PLATE WASHER M6	8
77	1BR3110500	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	1BR2062700	SWIVEL ARM	1
84	1BR5070	BALL BEARING 6208Z	2
85	1BR5071	BALL BEARING 6207Z	1
86	7SRH80	SNAP RING C-80	1
87	1BR5073	SPACER	1
88	1BR5074	ROLLER SHAFT	1
89	7RC08060	SPRING PIN Φ8X60	1
90	1BR5079	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	1BR3110200	SWIVEL GEAR	1
97	7CB10035	CAP BOLT M10X35	8
98	7SW010	SPRING WASHER M10	8
99	7RC08030	SPRING PIN Φ8x30	1
100	1BR5087	LIMIT SWITCH CAM	1
101	7SS06006	SET SCREW M6X6	1
102	1BR51324	ANGLE SET PINION	1
103	1BR3110600	ANGLE LEVER	1
104	1BR50942	ANGLE STAND	1
105	7B308015	BOLT M8X15 WITH WASHERS	2
106	1BR5098	DISK SPRING M10	2



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No.	Part No.	Part Name	Qty
107	1BR5099	LOCK NUT SET	1
108	1BR5101	SWITCH CAM	1
109	7B308015	BOLT M8X15 WITH WASHERS	1
110	1BR5107	WIRE CLAMP	1
111	7CB10020	CAP BOLT M10X20	1
112	7SW010	SPRING WASHER M10	1
113	1BR51101	JIB	1
114	7B14060	BOLT M14X60	1
115	7PW014	PLATE WASHER M14	2
116	7NU014	SELF LOCK NUT M14	1
117	1BR4206600	WIRE ROPE	1
118	1BR5117	WIRE CLIP WITH NUT	1
119	1BR5118	SPRING HANGER	1
120	1BR5119	RETURN SPRING	4
121	1BR4206300	CENTER COVER	1
122	1BR5134	CENTER PLATE	1
123	7SB06015	FLAT HEAD BOLT M6X15	1
124	1BR50782	ROLLER STOPPER	1
125	7SSP10	SNAP PIN SSP-10	1
126	1BR5050	SWITCH PANEL	1
127	1BR4206400	ANGLE STOPPER ( R )	1
128	1BR4206500	ANGLE STOPPER ( L )	1
129	7CB06018	CAP BOLT M6X18	2
130	7GW006	TEETHED WASHER M6	2
131	7PW006	PLATE WASHER M6	2
132	7PB306015	PAN HEAD BOLT W/ WASHERS	5
133	1BR421250A	ROLLER NO.1 Φ65MM	1
133	1BR4212600	ROLLER NO.2 Φ79MM	1
133	1BR420700A	ROLLER NO.3 Φ93MM	1
133	1BR4207201	ROLLER NO.4 Φ114MM	1
133	1BR420710A	ROLLER NO.5 Φ114MM	1
133	1BR421270A	ROLLER NO.6 Ф132MM	1

No.	Part No.	Part Name	Qty
133	1BR4212800	ROLLER NO.7 Φ153MM	1
133	1BR420960A	ROLLER NO.8 Φ166MM	1
133	1BR421290A	ROLLER NO.9 Φ183MM	1
134	1BT5070	BALL BEARING 6208Z	6
135	7K5B4012	DU BUSH	1
	7K5B4025	DU BUSH	1
	8P1085	TOOL BOX	1
137	1BL5402000	ROLLER CLAMP	2
138	7B812025	CLAMP BOLT M12X25	2
139	1BR5200	1BR5129 CONTROL BOX ASSEMBLY	1
139	1BR5406	MAGNET CONTACTOR	1
139	1BR51296	DIODE u05G	1
139	1BR51291K	THYRISTER	1
139	1BR5129F	FUSE HOLDER	1
139	1BR5129G	FUSE	1
139	1BR5200B	TRANSFORMER 115V	1
140	1BR5126	PILOT LAMP	1
141	7BN25F10	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
	1BR2062900	STAND	2
	1BR4206700	STAND STAY	1
	7B10025	BOLT M10X25	10
	7N010	NUT M10	2
	7SW010	SPRING WASHER M10	10
	1BR5231	EMERGENCY STOP BUTTON (NOT SHOWN)	1
	1BR3100400	HANDLE (NOT SHOWN)	2

