

Grizzly *Industrial, Inc.*®

HYDRAULIC PIPE BENDING MACHINE MODEL G0585 INSTRUCTION SHEET



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INTRODUCTION

The Model G0585 (**Figure 1**) is designed for bending thick walled pipes (black iron, schedule 40, etc.) and has six different bending dies ranging in size from 1/2" to 2" (see **Figure 2**). The Model G0585 is not designed for thin walled pipes.

We stand behind our machines. If you have any service questions or parts requests, please call or write us at the location listed below.

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TECHNICAL DATA

Maximum Working Pressure: 6400 PSI
 Ultrahigh Unloading Pressure 6800–7400 PSI
 Maximum Load..... 20,000 Lbs.
 Maximum Travel..... 9³/₄"
 Pipe Size Capacity 1/2"–2"
 Maximum Pipe Wall Thickness 3/16"
 Hydraulic Oil Tank Volume..... 2.5 Pints
 Type of Hydraulic Oil..... H32
 Maximum Working Force 110 Lbs.
 Weight 119 Lbs.

Size	Schedule 40	Schedule 80
1/2"	X	X
3/4"	X	X
1"	X	X
1 1/4"	X	NO
1 1/2"	X	NO
2"	X	NO

SET-UP

No special set up is required and little space is needed to operate the Model G0585.

Before using, check the hydraulic oil in the cylinder by removing the vented oil bolt (**Figure 3**) and visually ensuring that the piston inside is covered in oil when the pipe bender is in the horizontal position.



Figure 1. Model G0585.



Figure 2. Model G0585 bending dies.



Figure 3. Vented oil bolt.

OPERATION

To bend a pipe:

1. Choose the proper size bending die and slip it on the end of the cylinder ram as shown in **Figure 4**.

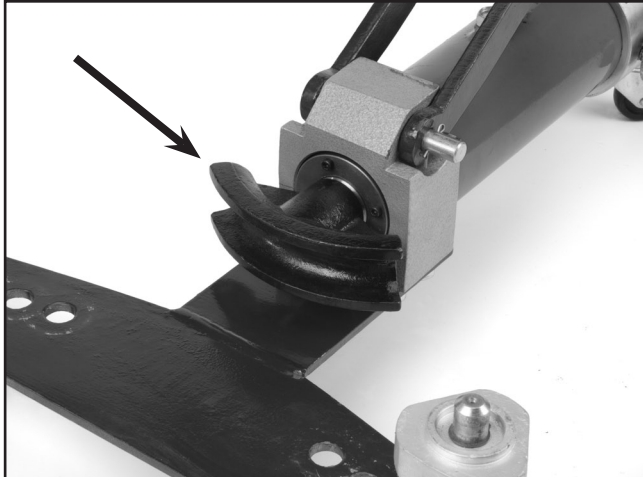


Figure 4. Die installed on cylinder ram.

2. Turn the swaging blocks (**Figure 5**) in the direction of the bending die to the notch that best fits the diameters of the pipe.
3. To account for the pipe shortening during the bending process, make sure the pipe extends beyond the swaging blocks, as shown in **Figure 5**.

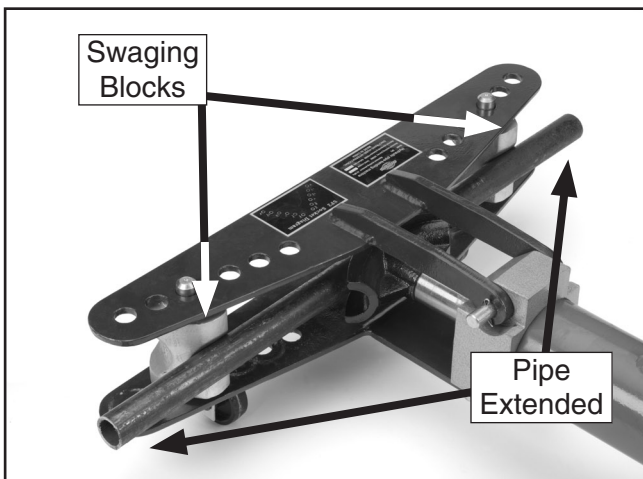


Figure 5. Pipe installed beyond swaging blocks to account for pipe shortening during the bend.

Note—For short pipes, set the swaging blocks close together, as shown in **Figure 6**, to ensure that the pipe extends beyond the swaging blocks to account for pipe shortening during the bend.

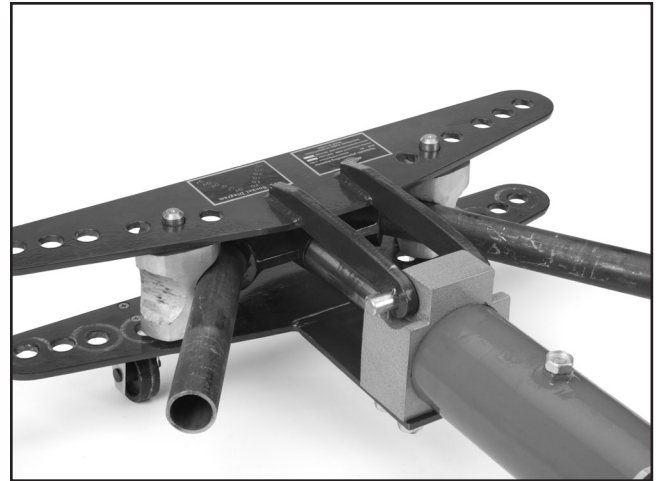


Figure 6. Swaging blocks set close together for bending short pipes.

4. Use the advance pump (**Figure 7**) to quickly advance the die. Note—Only one handle is included with the Model G0585. The picture below shows a piece of pipe being used as a handle in the advance pump.
5. Use the forming pump to bend the pipe as it is designed to apply heavy pressure loads.

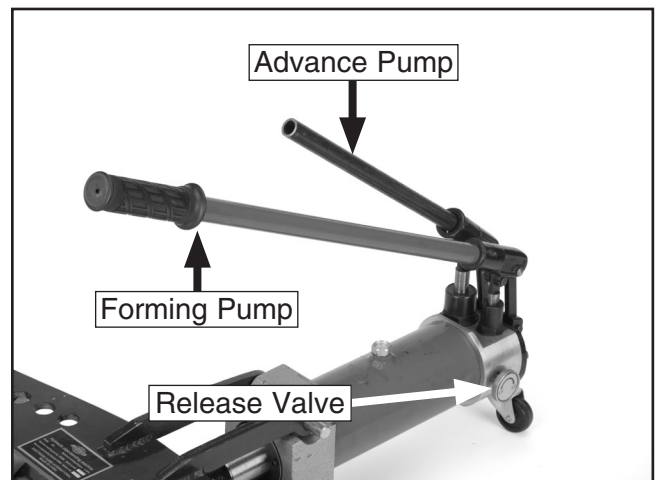


Figure 7. Operating pumps and release valve.

6. When you are finished with your bend, release the pressure by opening the release valve and the ram will automatically retreat.

Operation tips and tricks:

- If the cylinder ram reaches the end of its stroke (8"–9¾") but still has not completed a desired 90° bend, then release pressure just enough to remove the pipe. Lift up the top locking plate and set the swaging blocks either one or two holes farther in to finish the bend.
- We recommend making templates of accurate 45° and 90° angles. These templates allow you to compare them to an almost finished pipe so you do not over- or under-bend the pipe. Using templates will also speed up your work.
- If you pass the 45° angle mistakenly, you can sometimes reverse the pipe and slightly press it enough to reach the required 45°.
- Bends beyond 90° may stress the walls and narrow the center of the pipe. If you need to make bends more than 100°, we recommend heating the pipe during bending to retain the tensile strength of the walls.
- Pipes bent past 90° will flow into the bending die, making the pipe hard to remove after bending. Greasing the inside of the die will make this removal easier, or switching to a larger die for bending the last few degrees will eliminate this difficulty.

MAINTENANCE

- The Model G0585 is basically maintenance free. However, the oil level should be kept constant at about 2.5 pints of quality hydraulic oil.
- Too much oil will force the surplus oil to leak from the cylinder seals and possibly damage them.
- Not enough oil will cause loss of power as air will be sucked in, causing a drop in pressure.

⚠ CAUTION

Hydraulic fluid is under extreme pressure when the ram is under pressure. Always relieve the pressure with the release valve before removing the vented oil bolt shown in Figure 8.

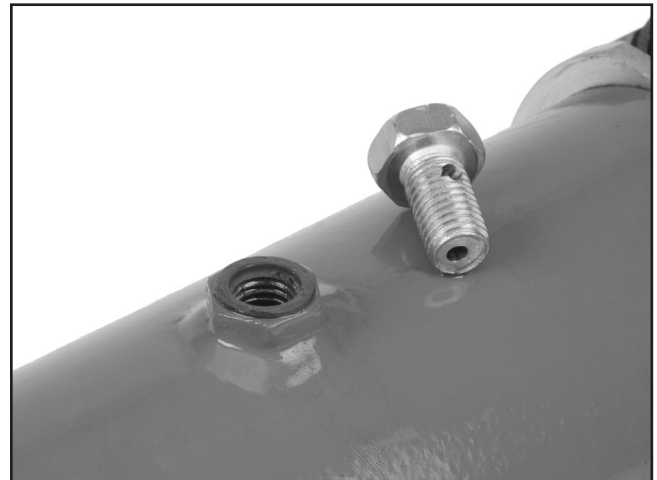
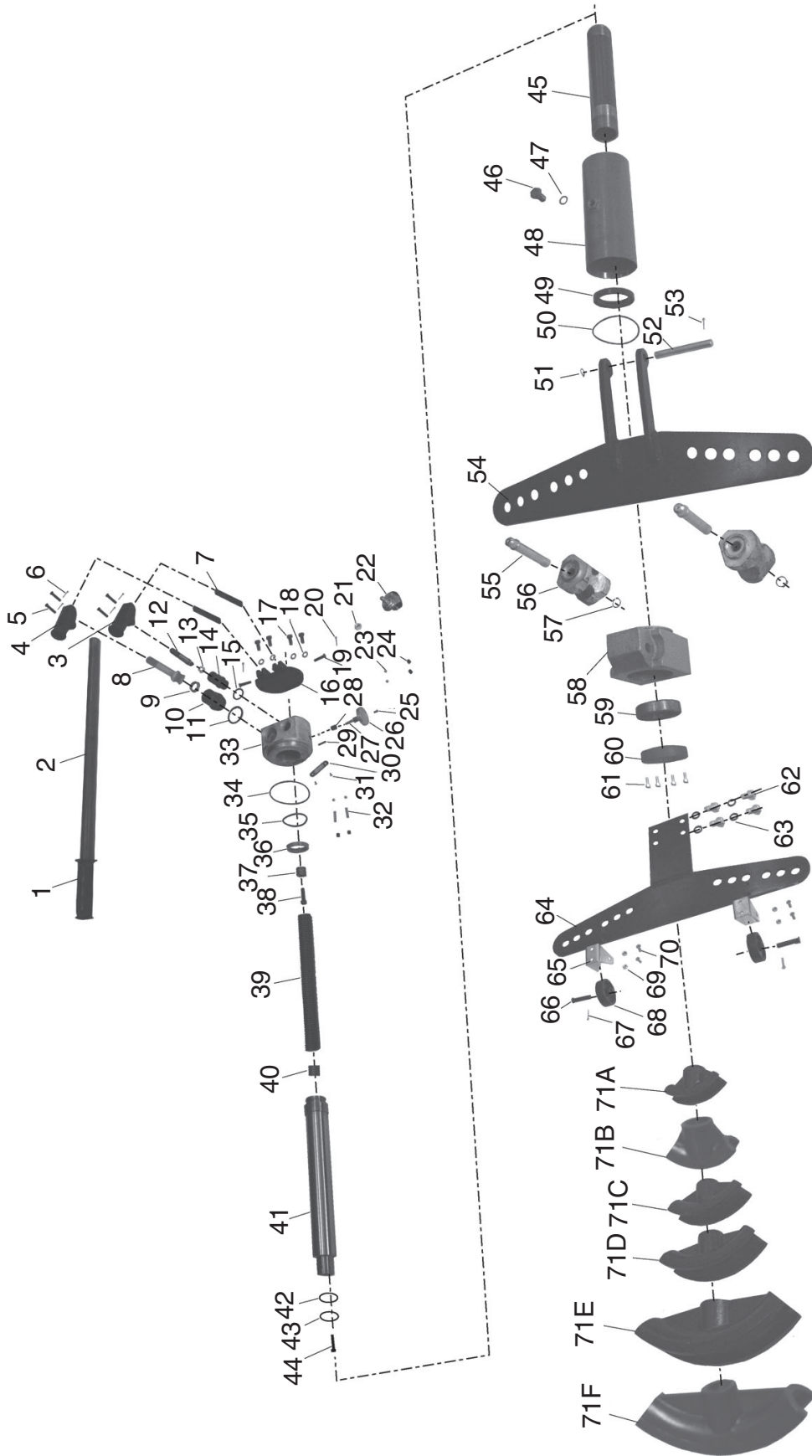


Figure 8. Vented oil bolt removed from cylinder.

NOTICE

The oil bolt is internally vented and cannot be replaced with a regular hex bolt. You must replace it with another vented bolt. Normal hex bolts will block the flow of hydraulic fluid and cause the machine to fail. See the parts list to identify the part number for replacement.

G0585 Parts Breakdown



G0585 Parts List

Ref	Part #	Description
1	P0585001	PUMP HANDLE GRIP
2	P0585002	PUMP HANDLE
3	P0585003	FORMING PUMP SUPPORT
4	P0585004	ADVANCE PUMP SUPPORT
5	P0585005	SOLID PIN 6 X 35
6	P0585006	ROLL PIN 1.5 X 16
7	P0585007	CONNECTING ROD
8	P0585008	LARGE PLUNGER ROD
9	P0585009	YX SHAPE SEAL RING D28
10	P0585010	LARGE PLUNGER CASE
11	P0585011	OIL SEAL GASKET 48 X 39 X 3
12	P0585012	SMALL PLUNGER ROD
13	P0585013	YX SHAPE SEAL RING D16
14	P0585014	SMALL PLUNGER CASE
15	P0585015	OIL SEAL GASKET 31 X 24 X 3
16	P0585016	FOOTSTEP
17	PB09M	HEX BOLT M8-1.25 X 20
18	PW01M	FLAT WASHER 8MM
19	P0585019	PIN SHAFT A6 X 28
20	P0585020	ROLL PIN 1.5 X 16
21	PN09M	HEX NUT M12-1.75
22	P0585022	UNIVERSAL WHEEL
23	P0585023	STEEL PEARL 6.5MM
24	P0585024	PLUG SCREW M8-1.25 X 10
25	PFH25M	FLAT HD SCR M4-.7 X 12
26	P0585026	RELEASE VALVE
27	P0585027	NEEDLE VALVE CORE
28	P0585028	CHAMPING RING
29	PRP78M	ROLL PIN 4 X 10
30	P0585030	OIL FILTER SCREEN
31	PS38M	PHLP HD SCR M4-.7 X 10
32	P0585032	COMPRESSION SPRING
33	P0585033	FRONT OIL CYLINDER SEAT
34	P0585034	O-RING 95 X 3.1
35	P0585035	O-RING 58 X 4
36	P0585036	YX SHAPE SEAL RING D50
37	P0585037	FRONT SPRING SEAT
38	PSB13M	CAP SCREW M8-1.25 X 30

Ref	Part #	Description
39	P0585039	TENSION SPRING
40	P0585040	BACK SPRING SEAT
41	P0585041	PISTON-ROD
42	P0585042	COPPER WASHER
43	P0585043	OIL SEAL GASKET 19 X 14 X 2
44	PSB126M	CAP SCREW M14-2 X 45
45	P0585045	OIL CYLINDER
46	P0585046	VENTED OIL BOLT
47	P0585047	OIL SEAL GASKET 21 X 14 X 2
48	P0585048	OIL TANK
49	P0585049	RUBBER SEAL PD60 X 80 X 10
50	P0585050	O-RING 95 X 3.1
51	P0585051	O-RING 16
52	P0585052	PIN SHAFT
53	P0585053	ROLL PIN 3 X 30
54	P0585054	MALE PLATE
55	P0585055	DIE COVER SHAFT
56	P0585056	DIE COVER
57	P0585057	O-RING 20
58	P0585058	BACK OIL CYLINDER SEAT
59	P0585059	OIL CYLINDER SPLICING CAP
60	P0585060	GUIDE SLEEVE
61	PSB95M	CAP SCREW M5-.8 X 30
62	PB134M	HEX BOLT M14-2 X 25
63	P0585063	SPLIT PIN 14
64	P0585064	FEMALE PLATE
65	P0585065	SWAGING BLOCK BRACKET
66	P0585066	PIN SHAFT A10 X 45
67	P0585067	ROLL PIN 2.5 X 20
68	P0585068	SWAGING BLOCK
69	PN01M	HEX NUT M6-1
70	PFH38M	FLAT HD SCR M6-1 X 16
71A	P0585071A	1/2" BENDING DIE
71B	P0585071B	3/4" BENDING DIE
71C	P0585071C	1" BENDING DIE
71D	P0585071D	1-1/4" BENDING DIE
71E	P0585071E	1-1/2" BENDING DIE
71F	P0585071F	2" BENDING DIE



WARRANTY CARD

Name _____
 Street _____
 City _____ State _____ Zip _____
 Phone # _____ Email _____ Invoice # _____
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*The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. **Of course, all information is strictly confidential.***

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 Card Deck Website Other:

2. Which of the following magazines do you subscribe to?

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<input type="checkbox"/> Family Handyman	<input type="checkbox"/> Popular Science	<input type="checkbox"/> Wood
<input type="checkbox"/> Hand Loader	<input type="checkbox"/> Popular Woodworking	<input type="checkbox"/> Wooden Boat
<input type="checkbox"/> Handy	<input type="checkbox"/> Practical Homeowner	<input type="checkbox"/> Woodshop News
<input type="checkbox"/> Home Shop Machinist	<input type="checkbox"/> Precision Shooter	<input type="checkbox"/> Woodsmith
<input type="checkbox"/> Journal of Light Cont.	<input type="checkbox"/> Projects in Metal	<input type="checkbox"/> Woodwork
<input type="checkbox"/> Live Steam	<input type="checkbox"/> RC Modeler	<input type="checkbox"/> Woodworker West
<input type="checkbox"/> Model Airplane News	<input type="checkbox"/> Rifle	<input type="checkbox"/> Woodworker's Journal
<input type="checkbox"/> Modeltec	<input type="checkbox"/> Shop Notes	<input type="checkbox"/> Other:
<input type="checkbox"/> Old House Journal	<input type="checkbox"/> Shotgun News	

3. What is your annual household income?

\$20,000-\$29,000 \$30,000-\$39,000 \$40,000-\$49,000
 \$50,000-\$59,000 \$60,000-\$69,000 \$70,000+

4. What is your age group?

20-29 30-39 40-49
 50-59 60-69 70+

5. How long have you been a woodworker/metalworker?

0-2 Years 2-8 Years 8-20 Years 20+ Years

6. How many of your machines or tools are Grizzly?

0-2 3-5 6-9 10+

7. Do you think your machine represents a good value?

Yes No

8. Would you recommend Grizzly Industrial to a friend?

Yes No

9. Would you allow us to use your name as a reference for Grizzly customers in your area?

Note: *We never use names more than 3 times.* Yes No

10. Comments: _____

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