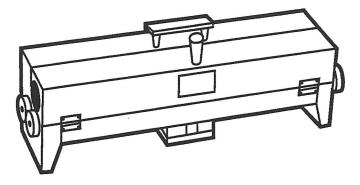
# OPERATION, SERVICE AND PARTS INSTRUCTION MANUAL



For additional copies at no charge order 999 6045.1



## 849 1/2" - 2" ELECTRIC PVC HEATER



### SAFETY FIRST

- Read and understand all operating instructions before using.
- 2. This unit is designed to heat PVC conduit only. Do not use for any other purpose.
- 3. Operate unit on firm, flat, dry surface. Do not expose heater to rain or snow.
- 4. Keep volatile or combustible material away from the heater while in use.
- 5. Operate unit only in a well ventilated area.
- 6. Connect the heater to a grounded power source of equivalent rating (120 V.A.C., 20 amp, 60 cycle).

- 7. Recommend use of a 20 amp G.F.C.I. Safety Cord or Adaptor.
- 8. Wear gloves when operating this unit. When opening and closing cover, use the attached handles.
- 9. When not in use, turn heater off to reduce the possibility of accidental burns.
- 10. Never leave conduit in heater unattended, as conduit will become scorched.
- 11. Calrod element temperature 1000° F (540° C).

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#### **WARRANTY**

Your Greenlee No. 849 Electric PVC Bender is warranteed to be free from defects in material and workmanship. Terms of the warranty are enclosed with your bender along with the Warranty Certificate Card. IMPORTANT: This card must be completed and returned in order to put your warranty into immediate effect.

#### **SPECIFICATIONS**

Model No. 849 2" Electric PVC Bender

**Power:** 120 Volts 20 amp AC, 60 cycle. 3-conduct or 14 Gauge grounded cord with plug supplied with unit.

**Operating Temperature:** 475° Maximum, thermostat controlled.

### **ACAUTION**

Heating element will reach 1000° F (540° C).

Controls: Single-pole power switch.

**Capacity**: Up to 2" diameter PVC conduit. Heats 24" length for 90° elbows of standard radius.

Heating Element: Calrod Type

Dimensions: Depth-7", Length-28-1/4", Height-10-3/4"

Weight: 17 lbs.

#### INTRODUCTION

The Greenlee No. 849 Electric PVC Bender is designed to provide a single operator with an effective and easily portable means for heating small diameter PVC conduit for bending. The only other materials required for making bends are as follows:

- 1. Insulated Rubber or other Heavy Duty Gloves
- 2. Pail of water
- 3. Sponge or clean rag
- 4. Scrap PVC for test run

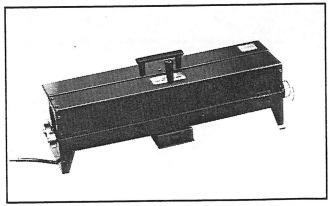


Figure 1

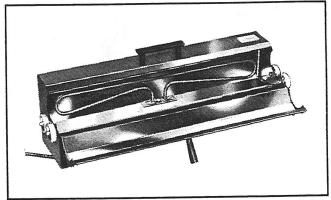


Figure 2

#### IMPORTANT BENDING TIPS

- Use this bender only in a well ventilated area. Do not operate this unit near volatile or combustible materials.
- 2. Wear insulated gloves when operating this unit and always use the plastic handles when moving or opening unit.
- A few practice bends using sections of scrap PVC are always recommended so that operator becomes familiar with the operation of this unit.
- 4. Since a 10 to 15 minute warm-up period is required before bending can begin, operator should set up unit and switch on the power as soon as he arrives at the job site. During warm-up, operator can assemble his materials, plan his bends, and mark the bend areas on the PVC conduit.
- 5. To help prevent kinks or wrinkles when making 90 degree bends in 2" PVC duct, use 2 Greenlee No. 30976 PVC Plugs to trap the air in the conduct and help keep the PVC from flattening or kinking.

#### **OPERATION**

 Set Up - Connect unit to power source (120 Volts, AC, 60 cycle). Turn switch to on position (built-in pilot light indicates when unit is operating). After a warm-up period of 10 to 15 minutes, the heating and bending of PVC conduit can begin.

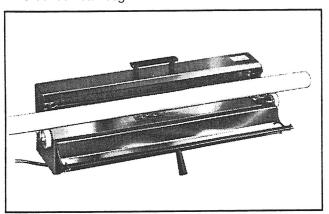


Figure 3

2. Heating PVC - For best results, test for the best heating time using a few pieces of scrap PVC. With all materials at hand lower the door of the unit until it is fully open. Lay first section of PVC between the pairs of guide rollers on either end of the unit as shown in Fig. 3. The section of PVC you wish to bend must be centered within the unit. Keep door of unit closed during the heating process.

To obtain even heating of the PVC, conduit must be constantly rotated by hand, as shown in Fig. 4. The PVC should become pliable enough for bending after about one minute. Heating time may vary due to differences in size and thickness of the PVC. An automatic thermostat regulates temperature and prevents overheating of the unit.

3. Bending PVC - When PVC becomes pliable, lift open

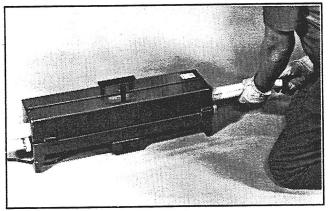


Figure 4

### **ACAUTION**

Keep a close watch on the PVC and keep close track of the time to prevent scorching of the conduit.

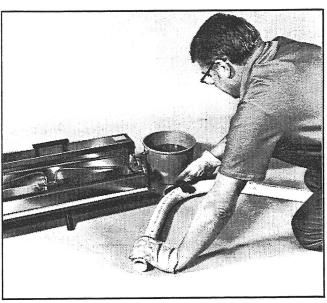
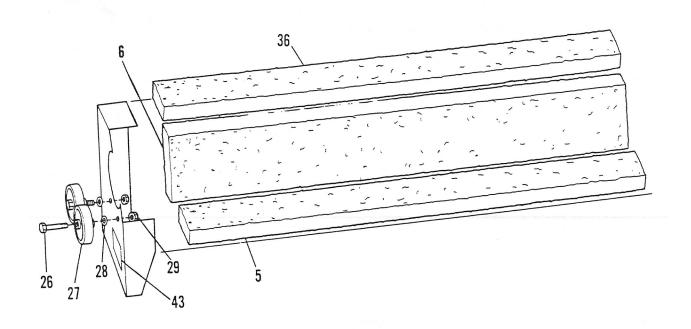
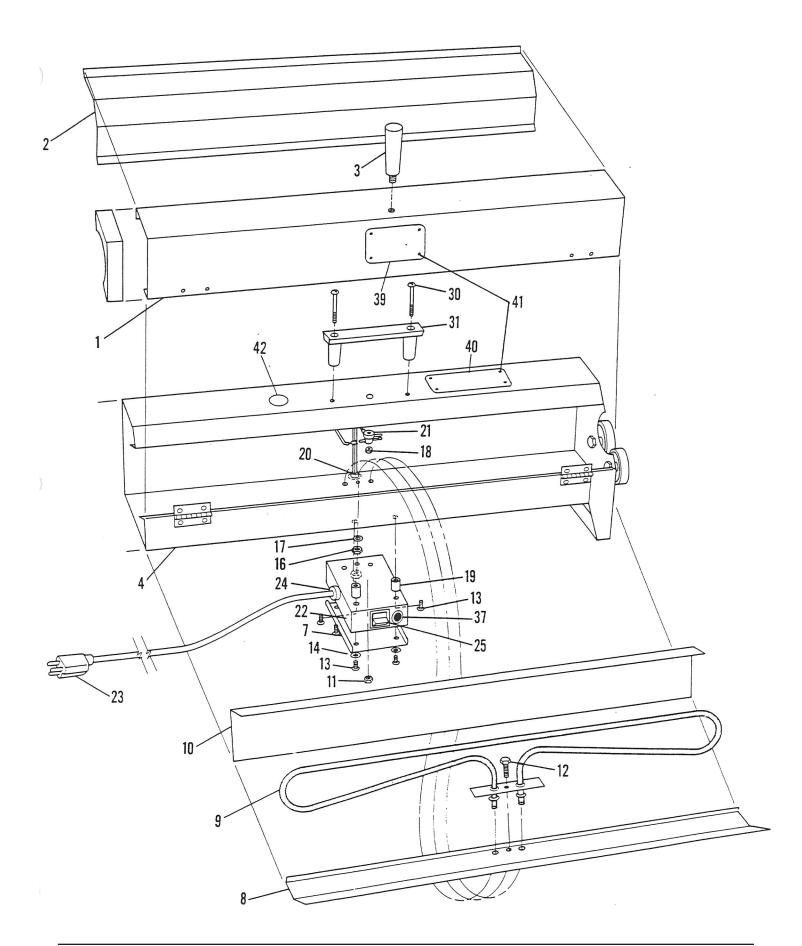


Figure 5

door and remove from unit, laying the conduit on a flat, clean surface. Bend can now be shaped by hand. To set the bend, cool the PVC by using a rag or sponge soaked with cool water, as shown in Fig. 5.

## Exploded View No. 849 2" Electric PVC Bender







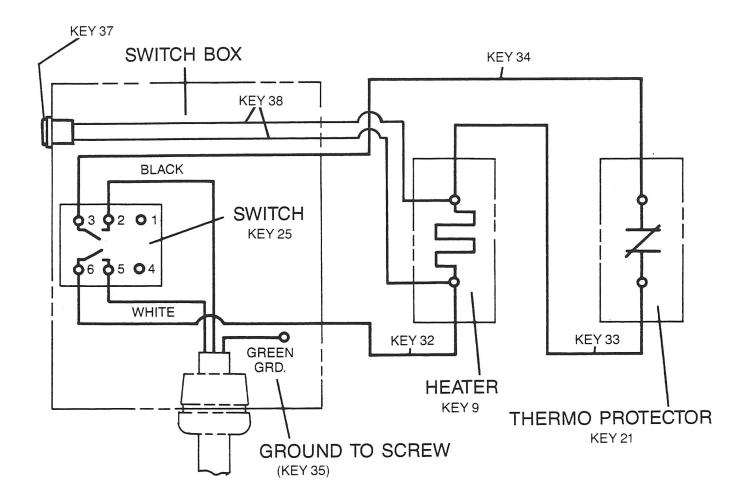
## Parts List No. 849 2" Electric PVC Bender

L/EV/	CONTROL NO	DECORIDEION	OTV
KEY	CONTROL NO.	DESCRIPTION	QTY.
1	502 7773.1	Cover Unit (Key No's. 2, 3, 39, & 4 of Key 41)	1
2	502 7766.9	Reflector, Cover	1
3	905 2976.6	Handle, Davies #692 Heat Resistant Black Plastic	1
4	502 7775.8	Housing Unit (Key No's. 5 thru 22, 40, and 4 of Key 41, 42 & 43)	1
5	502 7761.8	Insulation, Top	1
6	502 7762.6	Insulation, Back	2
7	502 7764.2	Cover, Switch Box	1
8	502 7771.5	Reflector, Housing	1
9	502 7811.8	Heater	1
10	502 8285.9	Reflector, Top Housing	1
11	905 0372.4	Nut, 1/4-20 Hex Jam (for box mounting)	1
12	905 0520.4	Screw, 1/4-20 NC x 3/4 SAE Grade 5 Hex Head Cap	
		(for heater mounting)	1
13	905 0717.7	Screw, #10-24 x 1/2 Round Head Machine	
		(for cover plate and box mounting)	6
14	905 0750.9	Washer, #10 Shakeproof Internal Teeth,	
		3/8 O.D. x .021 Lock	6
16	905 1593.5	Nut, 1/4-20 Zinc Plated Hex (for heater mounting)	1
17	905 1647.8	Washer, 1/4 Shakeproof Internal Teeth Zinc Plated Lock	1
18	905 2434.9	Nut, #8-32 Zinc Plated Hex	1
19	905 2973.1	Spacer, Micro Plastics #166 Nylon (for box mounting)	2
20	918 6008.3	Snap-Bushing, Heyco #SB-500-6 Nylon	1
21	918 6019.9	Thermostat, Bimet #HF-79-114, 475° Range	1
22	502 7763.4	Box Unit, Control (Key No's. 23 thru 25)	i
23	502 7806.1	Cord Unit	1
			-
24	918 6009.1	Bushing, Heyco #SR-7W-2 Nylon Strain-Relief	1
25	918 6015.6	Switch, Carling #RGSCC711RBBA Double Pole	1
26	905 0877.7	Screw, 1/4-20 NC x 1-1/4 SAE Grade 5 Hex Head Cap	4
27	905 2971.5	Wheel, McMaster-Carr #9960-Y-14 1/78	4
00	005 0000 0	Dia Steel Centered Skate	4
28	905 2339.3	Washer, 5/16 ID x 3/4 OD x 1/16, Zinc Plated	4
29	905 1593.5	Nut, 1/4-20 NC Zinc Plated Hex	4
30	905 2969.3	Screw, #10-24 x 2 Round Head Machine	2
31	905 2970.7	Handle, Daview #4560 Heat-Resistant Black Plastic	1
		WARNING: DUE TO HIGH TEMPERATURES USE ONLY	
		WIRE UNITS BELOW OR EQUIVALENT. (SEE WIRING DIAGRAM.)	
32*	502 7751.0	Wire Unit, 7" (Not Shown)	1
33*	502 7752.9	Wire Unit, 10-1/2" (Not Shown)	1
34*	502 7753.7	Wire Unit, 12" (Not Shown)	1
	502 8286.7	Insulation, Control Box (Not Shown)	2
35*	905 2428.4	Screw, #8-32 x 1/4 Parker-Kalen Type-F Zinc-Plated	
		Slotted Round Head Tapping (Not Shown)	1
	918 6008.3	Snap-Bushing, Heyco #SB-500-6 Nylon	
		(Not Shown; for 3 wire units in housing)	2
36	503 6835.4	Upper Insulation	1
37	918 6474.7	Pilot Light	1
38*	503 7278.5	Wire Unit, Pilot Light	2
39	502 8002.3	Product Decal, 849	1
40	503 7201.7	Warning Decal, Hot	1
41	905 3001.2	Pop Rivet	8
42	503 0392.1	Decal, Damp Warming	1
43	503 6096.5	Decal, Electrical Shock	1
	300 000010	200a, 200anoa onoak	

<sup>\*</sup> Not shown on exploded view. See wiring Diagram, page 7.

## **WIRING DIAGRAM**

849 PVC BENDER





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