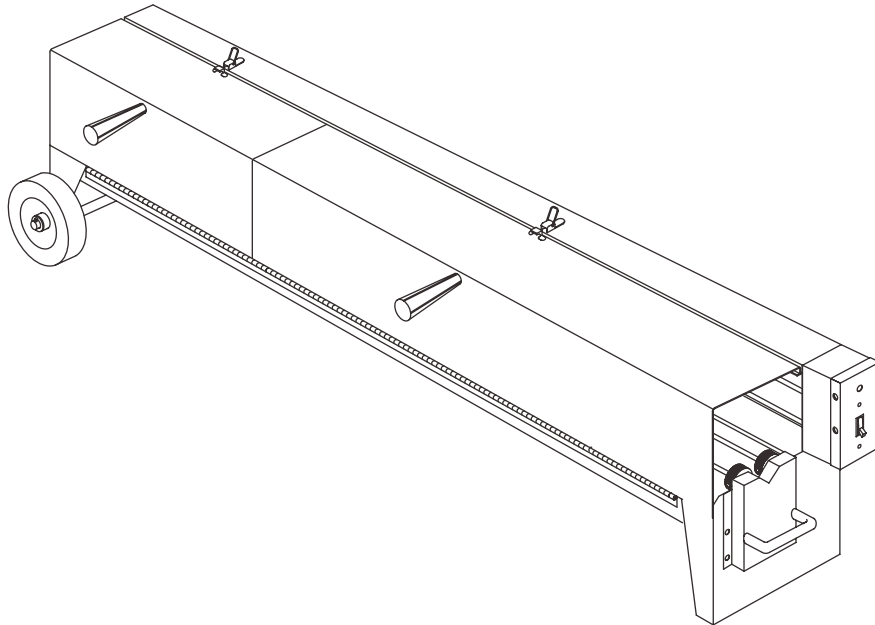




Current Tools

FOR THE PROFESSIONAL ELECTRICIAN

Current Tools™ Model 453
1/2" to 6" PVC Heater
with Automatic Rotation



Operating, Maintenance, Safety and Parts Manual

6/2020



Read and understand this material before operating or servicing this PVC heater. Failure to understand how to safely operate and service this unit may result in serious

CURRENT TOOLS • P. O. BOX 17026 GREENVILLE, SC 29606
800.230.5421 or 864-721-4230 • FAX 864-721-4232
www.currenttools.com

RETAIN SAFETY INFORMATION



This manual should be read and understood by all personnel who operate or service this PVC heater. Failure to understand how to safely operate and service this unit could result in injury or death. This unit should only be operated by qualified personnel.

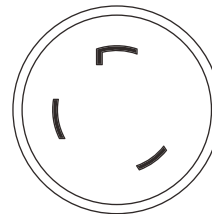
IMPORTANT SAFETY INFORMATION

- ALWAYS wear hand protection when operating this equipment and when bending PVC conduit. Use handle to open and close the PVC heater door(s).
- DO NOT use in wet conditions. DO NOT expose to rain or moisture.
- DO NOT use near flammable materials.
- DO NOT leave PVC heater unattended.
- Turn PVC heater off when not in use.
- Use for heating PVC conduit only. DO NOT use for any other purpose.
- Use only for PVC conduit sizes specified.
- Operate only in a well ventilated area.
- Use only with a grounded power source.

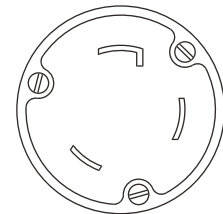
The electric plug on this PVC heater includes a grounding conductor and is the twist to lock type as shown. Only connect the unit to a 30 AMP receptacle which is properly installed and grounded to meet all applicable electrical codes. Do NOT remove or modify the plug in any way.

! WARNING !

ELECTRIC SHOCK HAZARD! Only connect this PVC Heater to a 30 AMP, properly grounded receptacle. Do NOT modify the plug which is provided with the unit. Failure to follow these warnings can result in serious injury or death.



LOCKING PLUG



RECEPTACLE

SPECIFICATIONS — 453 PVC Heater

| | |
|-------------------|-----------------------------------------------------------|
| Model No. | - 453 Automatic Rotation |
| Capacity | - 1/2" to 6" PVC conduit |
| Power | - 230 volts AC - Single Phase, 28 amps, 60 hz, 6400 watts |
| Dimensions | - 11 5/8" x 15 7/8" x 74" |
| Weight | - 72 lbs. |

MATERIALS NEEDED

- Sponge or clean cloth
- Bucket with clean water
- Insulated gloves



OPERATING INSTRUCTIONS — 453 PVC Heater

1. Place PVC conduit heater on a flat, dry surface. Plug heater into a grounded power source. Turn switch to ON position. *Rollers will begin to rotate.*
2. Put on insulated gloves.
3. After warm-up period, (approximately 7 min.) place conduit on rollers inside the heater. Using the handle, close the door(s) over the section of PVC to be heated.
4. To test, lift one end of the PVC conduit. Conduit is ready when it has a glossy appearance and bends when lifted.

NOTE: PVC conduit MUST be rotated to provide even heating and to prevent scorching.

NOTE: PVC conduit will take approximately 30 seconds to heat for each 1/2" of PVC conduit diameter. (Example: 2" PVC conduit will heat in approximately 2 minutes.)

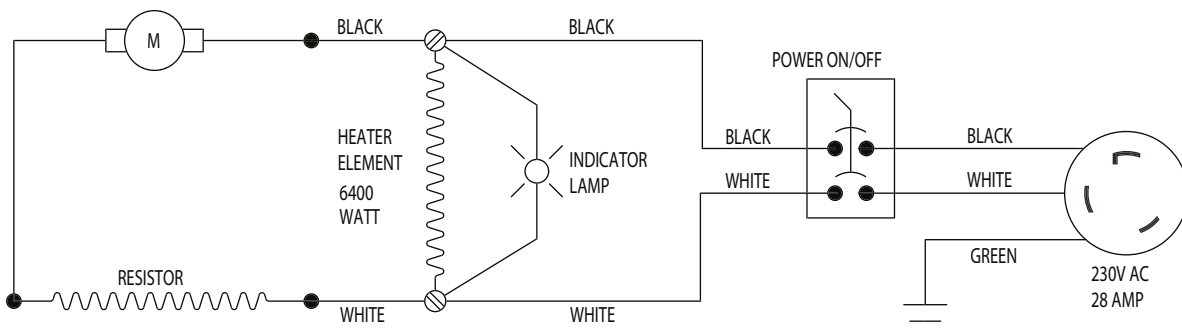
5. Open the heater door(s) using the handle and remove conduit from heater and place on a clean, flat surface. Hand bend to desired angle. The bend can be set by allowing to air cool or decrease this time by rubbing the bend with a sponge soaked in cool water. NOTE: Be Sure to keep all liquids away from the PVC heater and turn unit off when not in use.



PVC CONDUIT HEATER ACCESSORIES

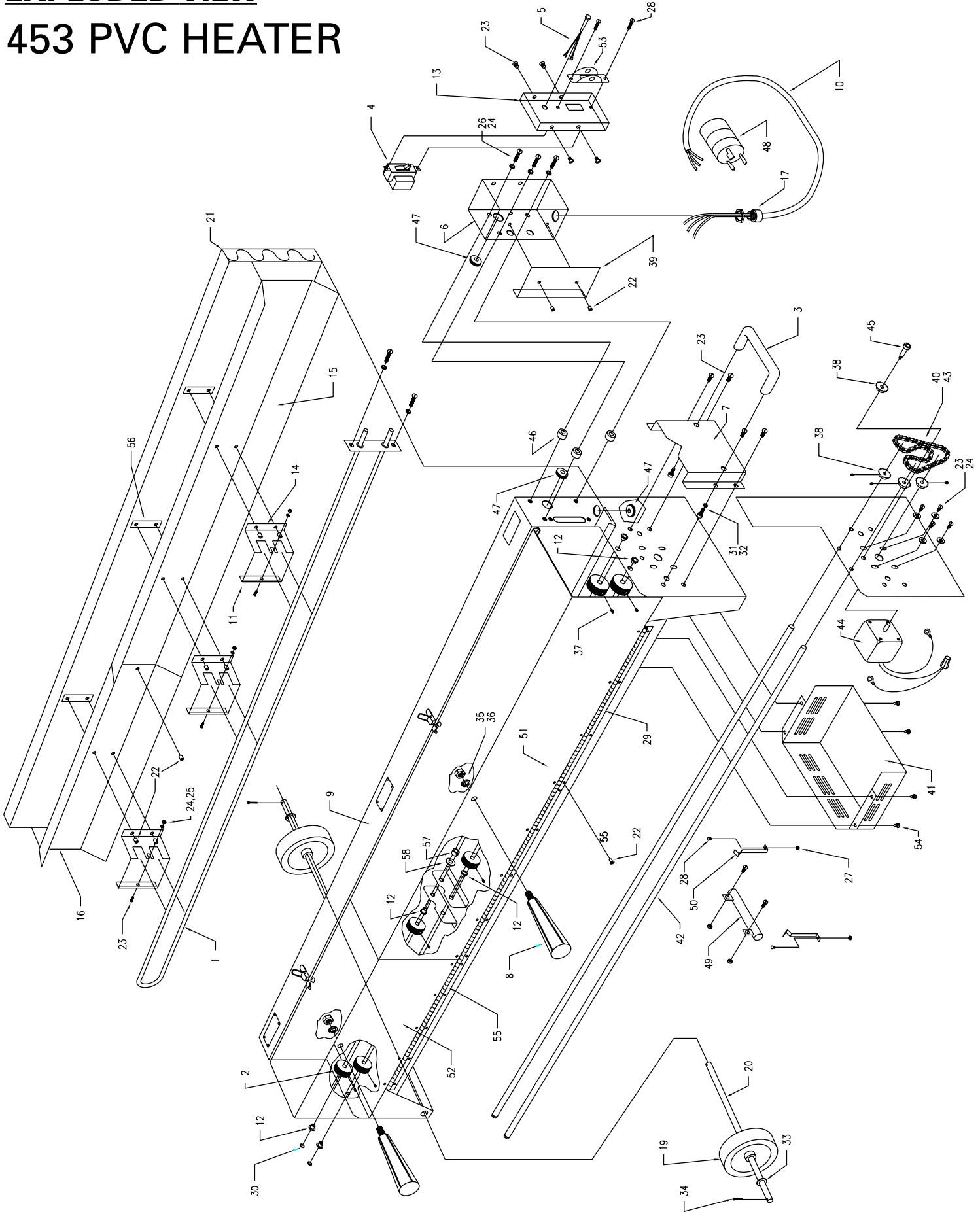
- To prevent flattening and crimping during the bending process, Current Tools *plug sets* are recommended for 2" and larger PVC conduit.
- Current Tools Model #454 PVC support stand is recommended to prevent sagging of the conduit during the heating process.

WIRING SCHEMATIC



EXPLODED VIEW

453 PVC HEATER





PARTS LIST – 453 PVC HEATER

| | | | |
|---------|--------------|----|------------------------------------|
| 1..... | 452-1 | 1 | HEATING ELEMENT |
| 2..... | 453-9 | 6 | KNURLED WHEEL |
| 3..... | 450-11 | 1 | LIFT HANDLE |
| 4..... | 452-19 | 1 | SWITCH |
| 5..... | 452-20 | 1 | INDICATOR LIGHT |
| 6..... | 452-6 | 1 | ELECTRICAL BOX |
| 7..... | 453-7 | 1 | CHAIN GUARD |
| 8..... | 452-18 | 2 | DOOR HANDLE |
| 9..... | 452-30 | 1 | MAIN HOUSING FAB |
| 10..... | 452-31 | 1 | POWER CORD |
| 11..... | 452-15 | 3 | RETAINER CLIP |
| 12..... | 453-17 | 6 | BUSHING |
| 13..... | 452-5 | 1 | COVER-ELEC. BOX |
| 14..... | 452-14 | 3 | RETAINER BRACKET |
| 15..... | 452-046 BENT | 1 | HEAT SHIELD-LONG |
| 16..... | 452-047 BENT | 1 | HEAT SHIELD-SHORT |
| 17..... | 452-21 | 1 | STRAIN RELIEF |
| 18..... | 453-22 | 1 | WIRING KIT (NOT SHOWN) |
| 19..... | 451-13 | 2 | WHEEL |
| 20..... | 452-26 | 1 | AXLE |
| 21..... | 450-9 | 1 | INSULATION – 2" THICK (9"W x 70"L) |
| 22..... | 450-28A | 6 | RIVET – 3/16 X 1/4 SS |
| 23..... | 451-22 | 15 | SCREW – PAN PHILLIPS, 10-32 x 3/8" |
| 24..... | 450-14J | 10 | #10 FLAT WASHER |
| 25..... | 450-14K | 5 | #10-32 HEX NUT |
| 26..... | 452-6D | 3 | SCREW – PAN PHILLIPS, 10-32x3/4" |
| 27..... | 77-036A | 2 | NUT – HEX, 6-32 |
| 28..... | 77-061 | 6 | SCREW – PAN PHILLIPS, 6-32x3/8" |
| 29..... | 452-34 | 1 | HINGE – LONG |
| 30..... | 453-10A | 2 | RETAINING RING-EXTERNAL 5/16 |
| 31..... | 450-11A | 2 | SOC HD. CAP SCREW M8x12 |
| 32..... | 450-11B | 2 | M8 LOCK WASHER |
| 33..... | 77-017A | 2 | 1/2" FLAT WASHER |
| 34..... | 451-23 | 2 | COTTER PIN 3/32x3/4 |
| 35..... | 452-27 | 2 | 3/8 LOCK WASHER |
| 36..... | 452-28 | 2 | 3/8-16 HEX NUT |
| 37..... | 453-19 | 6 | SET SCREW-1/4-20x1/4" |
| 38..... | 453-4 | 4 | SPROCKET-25B14, 5/16 DIA BORE |
| 39..... | 452-33 | 1 | HEAT SHIELD |
| 40..... | 453-1 | 1 | CHAIN – #25 (18 1/2" L) |
| 41..... | 453-6 | 1 | MOTOR GUARD |
| 42..... | 453-10 | 2 | LINE SHAFT |
| 43..... | 453-2 | 1 | MASTER LINK – #25 |
| 44..... | 453-11 | 1 | GEARMOTOR |
| 45..... | 453-14 | 1 | SHOULDER BOLT – 5/16x3/4" |
| 46..... | 450-20 | 3 | SPACER |
| 47..... | 453-21 | 3 | GROMMET |
| 48..... | 452-29 | 1 | POWER PLUG |
| 49..... | 453-16 | 1 | RESISTOR |
| 50..... | 77-058A | 2 | MOUNTING BRACKET-RESISTOR |
| 51..... | 452-7 | 1 | DOOR – LARGE |
| 52..... | 452-042 | 1 | DOOR – SMALL |
| 53..... | 452-19A | 1 | SWITCH PROTECTOR |
| 54..... | 453-6A | 4 | SELF-TAPPING SCREW, HEX 8x1/4" |
| 55..... | 452-35 | 1 | HINGE – SHORT |
| 56..... | 452-14A | 3 | BACK UP PLATE |
| 57..... | 453-10B | 1 | SHAFT COLLAR |
| 58..... | 9544-21 | 1 | WASHER – FLAT, 5/16 |