



EL130 Box Offset Lab

Program: Electrician Technician

Course: EL 130 Flexible Cables/Conduit Bending and Raceways

Objective: Under the supervision of your instructor, you should be able to do the following:

- Identify parts of the Hand Bender
- Make a box offset with ½" EMT conduit

Lab Equipment:

- N/A

Required Tools:

- ½" Pipe Bender
- Hacksaw

Materials:

- 3– 40" piece of EMT pipe
- 1 – Pencil
- 1 – 4S metal box

Safety:

- Safety glasses
- Hard hat

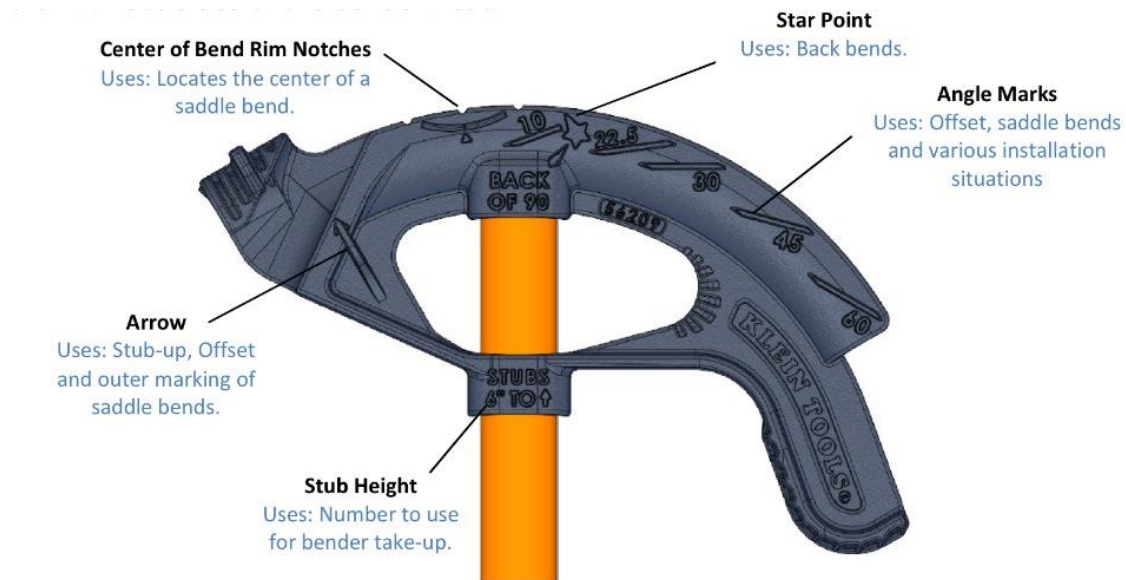
Resources: N/A

Time Required: 2 hours



Procedure: *(Eye Protection must always be worn)*

Before students start bending, teach the parts of the hand bender, what they are used for, and how each bender is not the same in respect to the take. (They could be off by a ½" either way)



- Mark a the EMT pipe 2 ½" from the end of the pipe
- Place a second mark 2" further from the end of the pipe from the first mark.
- Stand the Pipe bender upside down and slide the conduit through the shoe and line the first mark, (A) with the arrow on the bender.
- Put your foot on the floor, bracing the end of the bender.
- Brace the pipe under your shoulder and bend the pipe down so the bottom of the pipe becomes parallel with the 10° mark.
- Slide the pipe down to where the second mark, (B), will line up with the arrow and then rotate the pipe 180° until the pipe is upside down.
- Bend the pipe once again to the 10° line on the bender
- Take your bend to a box and see if it fits correctly and adjust if needed.