

Operating Instructions & Parts List

Bramley Model 068HE Electric/Hydraulic Thin Wall Tube Bender



Licence Number
706519

BRAMLEY

Bramley Electric/Hydraulic Thin Wall Tube Bender

Thank you for purchasing the Bramley Electric/Hydraulic Thin Wall Tube Bender. The Machine is designed to bend Mild Steel with a maximum wall thickness of 2mm to a maximum angle of 180°. The Machine will bend Aluminium with wall thickness to 3mm and is capable of bending some Stainless Steel grades, up to a maximum OD of 1-1/2" (38mm). Generally, acceptable bends can be achieved in grades 409 and 304 with a 2.0mm wall thickness – however as results can vary, it is recommended a cautious test bend be tried with new material.

Former Sets (containing 1x Tube Former and 2x Followers) are sold separately and are available in individual sizes: 1", 1-1/4", 1-1/2" and 2". Other OD sizes between 1" and 2" can be manufactured to order at POA if required.

Operation and Assembly

1. Mount the Electric/Hydraulic power pack on the Tripod leg base.

2. Choose the desired Former for bending and place it on the end of the Hydraulic Ram.

NOTE: The Formers are designed for use on standard mild steel tube up to 2 mm wall thickness and stainless steel tube up to 1.6 mm wall thickness.

Mount the slipper follower arm assemblies on the front of the tube bender utilizing the three pins supplied .

Note:

- The smaller formers (1" & 1-1/4") require the location pins to be inserted in the shortest hole pitching of the Link Arms (4) and the Roller Support Arms (6 & 7).
- The mid-range 1-1/2" former requires the location pins to be inserted in the middle hole pitching of the Link Arms and the Roller Support Arms.
- The large 2" former requires the location pins to be inserted in the largest hole pitching of the Link Arms and the Roller Support Arms.

3. Ensure that the slipper arm assemblies are at the front

most position – closest position together.

Insert the tubing to be bent into the machine between the slipper rollers and the tube former.

Then insert the corresponding slippers from each side such that they butt up to each other where the centre of the bend will be – middle of former.

Screw up the adjusting screws so that the tubing is fitting snugly between the former and the slippers.

Ensure that the Oil Filler Plug (10) is loose – allowing air to vent to the oil reservoir and that the Pressure Release Screw (12) located at the bottom left hand end of the hydraulic unit is firmly shut – clockwise rotation.

4. Depress trigger switch located on the handle of the pump unit. Keep trigger switch depressed until the desired angle of bend is achieved. DO NOT exceed speed #4 for 2" tube.

NOTE: Bending over 180° will cause damage to both the tube being bent and the Former.

5. When the angle of bend is achieved, release the Pressure

Release Screw (12). The ram will retract by way of the internal retraction spring.

Then holding the slipper adjusting screws push them together back to the original straight forward position.

6. Pull the three link arm pins (8) out of the slipper follower arm assemblies & the former and gently remove the former from the inside of the bend.

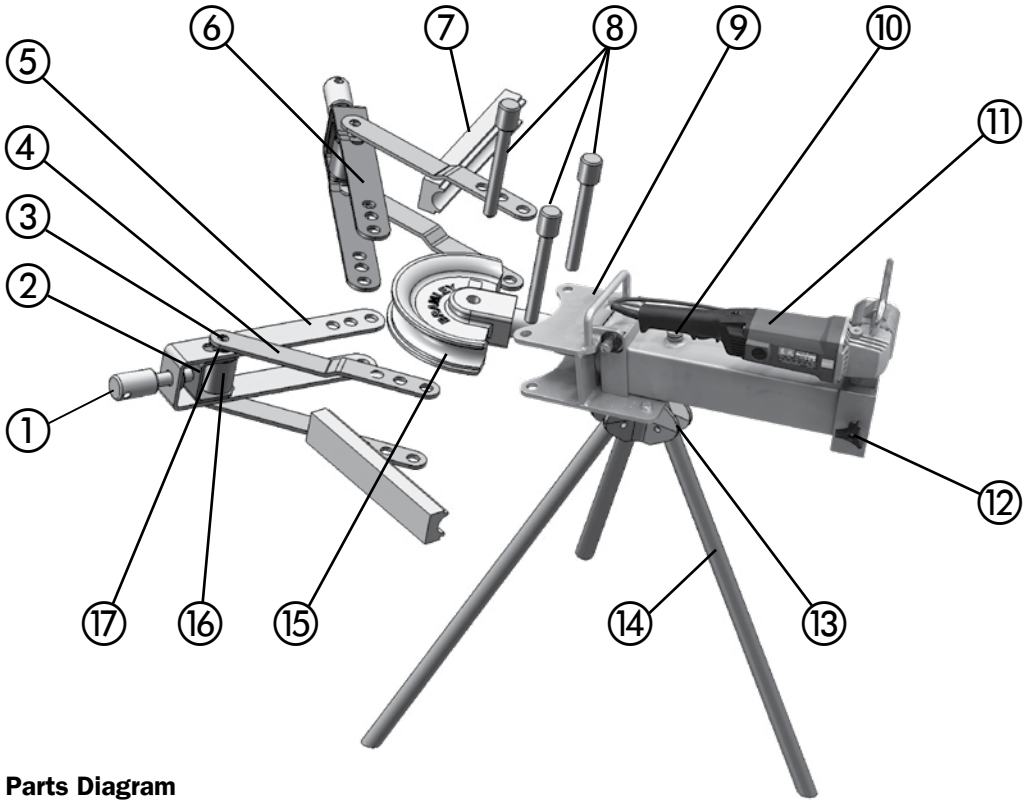
Remove your tube that has been bent to the desired angle.

Re-assemble unit and repeat the above steps to produce subsequent bends.

Check oil at regular intervals. When topping up, ensure that the oil is free of any foreign matter. Check the oil level by un-screwing the Oil Filler Plug (10) and filling to just below the filler port.

When the oil has been topped up, fit the Oil Filler Plug in to the filler port loosely. In a near vertical position operate the pump unit. Let the ram extend for about 100 mm. Then open the Pressure Release Screw and ensure that the ram retracts fully.

The unit is now ready for full operation.



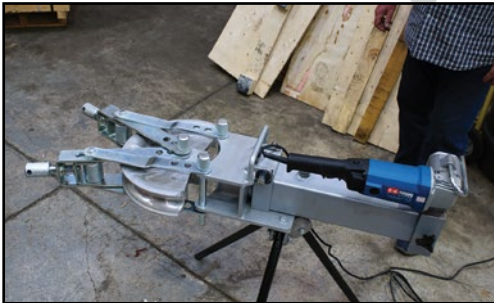
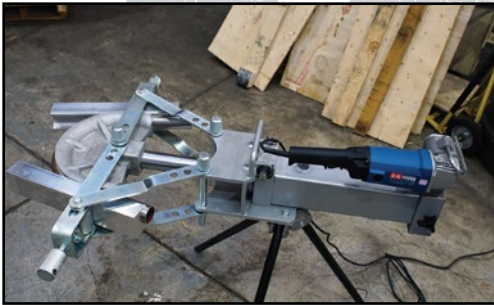
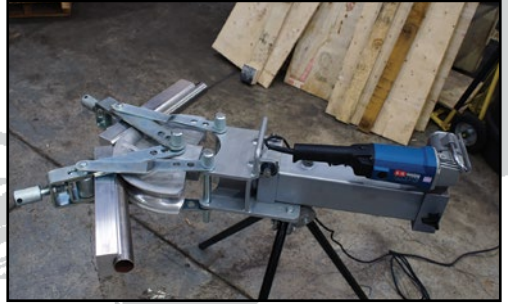
Parts Diagram

Ref No.	Part No.	Description
1	6816	Pressure screw
2	6811	Slipper Roller Clevis
3	6814	Slipper Roller Pin
4	6810	Link Arm (2x)
5	6808	Slipper Roller Support straight
6	6809	Slipper Roller Support Bent
7		Slipper (<i>separate supply</i>)
8	6817	Link Arm Pins (3x)
9	6805	Top Plate
10	6815	Oil Filler Plug
11	22-05A	15 Tonne Hydraulic Ram
12	6816	Pressure Release Screw
13	6818	Tripod Head
14	6819	Leg (3x)
15		Former
16	6812	Slipper Roller
17	6813	Slipper Roller Spacer

Formers Size Range

Tube Size	Centreline Radius of Bend
1" (25.4mm)	115mm
1-1/4" (31.8mm)	115mm
1-1/2" (38mm)	140mm
2" (51mm)	165mm

Sequence of performing your tube bend



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