# Instructions for Models MB-42, SB-48, TB-60

⚠ **WARNING!** Thoroughly read operators manual before attempting to operate machine
(Machine must be connected to correct power source before switching power on! **DO NOT USE** extension cord.)

Rotate power switch to the **(ON)** position.
Display will read: "Forward C.Bending D."
Ercolina machines have (30) thirty bending programs.
Each program can store (9) nine individual bends.

> Forward C.Bending D.
> mm 000.0   PO51 180°
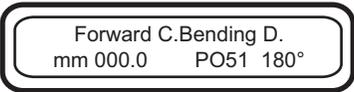
- Control panel keys and their functions (see FIG. A) -

(RETURN)	Returns tool shaft to "0" position
(BEND)	Moves tool shaft to desired bend angle
(CURSOR)	Use for editing program, bend angle and springback value any time during bend cycle
Plus (+)	Increase value when editing
Minus (-)	Decrease value when editing

- Important combination touch key functions -

Reset C axis to "0" ....**(BEND)** or **(RETURN)**
(While turning main power on)
Enter "Language selection mode" ....**(ENTER)**, **Plus (+)** and **Minus (-)**
(While turning main power on)

BENDING MACHINE
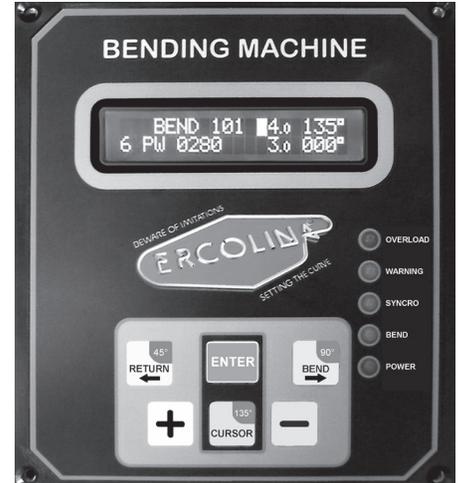
(FIG. A)

Entering a Bend Angle

- Data entry mode -
Depress   **(CURSOR)** key
Display reads   "Data entry yes or no"
Depress   **Plus (+)** = yes

> DATA ENTRY MODE
> + = YES   ENTER = NO

- Select program number -
Depress   **Plus (+)** until desired program is reached 0-30

- Reset selected program to default -
Depress   **Minus (-)** hold for three seconds
Display now reads "Program No.1 12 .000"   or similar

> PROGRAM NO. 1
> 12 .000

- Enter first bend angle -
NOTE: While in programming mode, hot keys quickly move closer to desired angle **(BEND)** = 90°, **(RETURN)** = 45° and
        (CURSOR) = 135°
Depress   **Plus (+)** or **Minus (-)** to enter exact bend angle
Depress   **(ENTER)** to store bend angle

Display will prompt you to enter another bend angle within the same program. If additional bends are required within the same program, input them in the same manner. If no additional bends are required depress (**ENTER**).

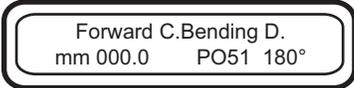Display indicates the program number you edited. (Example P.1 = Program 1)

- Exit data entry mode -
Depress   **(ENTER)**
Display reads   "End of Date Entry"

> END OF DATA ENTRY

- Return to working display -
Depress   **(ENTER)**
Display reads   "Forward C.Bending D."
                   and shows currently selected program

> Forward C.Bending D.
> mm 000.0   PO51 180°

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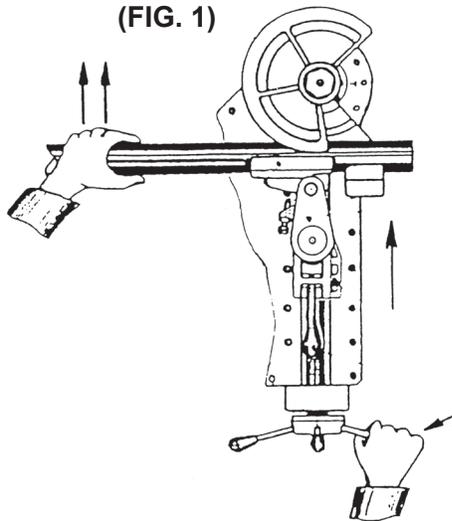➤ *Setting Springback Value*

Setting Springback Value

- Before the bend -

Mount center former and counterbend die
Lubricate face of counterbend die ———→

> **Use ONLY Ercolina
> Spray Grease Part# 810 to
> Lubricate Counterbending Die**

Place material into former with weld seam up, if applicable
Move counterbend die vise forward until die contacts
material (see FIG. 1)
Depress **(ENTER)** to zero display of the counterbend die
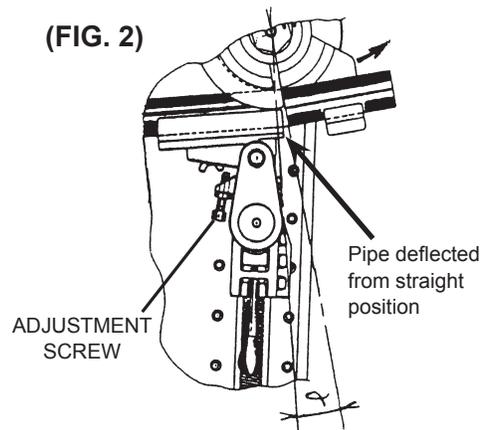position

(FIG. 1)

- Determine initial springback -

Initiate bend cycle by depressing **(BEND)** key or foot pedal
Stop bend cycle when material begins to deflect (see FIG. 2)
Observe degree reading on control panel display
Depress **(ENTER)** to insert springback value into program
Springback must be set for each angle within program
(**Note:** Springback value can be edited as necessary)

- Adjust counterbend die support screw -

Using Allen wrench, rotate screw to contact back of vise
(see FIG. 2)
Secure screw with locking jam nut
Properly adjusted screw improves quality of bend

(FIG. 2)

Pipe deflected
from straight
position

ADJUSTMENT
SCREW

- Finish bend -

Depress and hold **(BEND)** key or foot pedal to complete
bend cycle (see FIG. 3)

(FIG. 3)
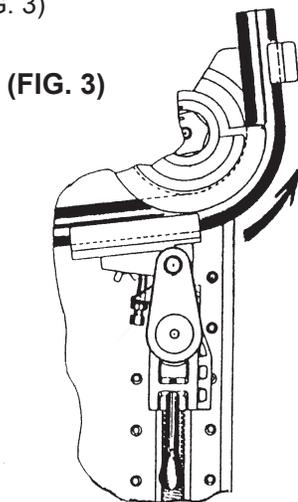
- Return center former to home position -

Depress and hold **(RETURN)** key or foot pedal until bender
returns to "0" home position (see FIG. 4)
Note: Display will automatically advance to next bend within
program

(FIG. 4)
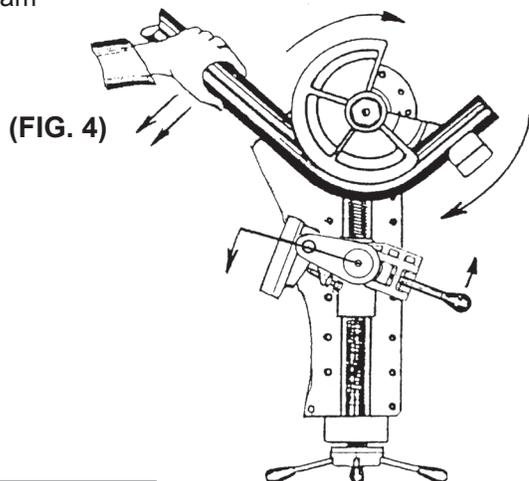
To edit bend angle or springback value after programming
Initiate bend cycle and stop
Depress **(CURSOR)** key once - cursor will flash in the springback field; **(+)** and **(-)** keys can then be used to edit settings
Depress **(CURSOR)** key twice - cursor will flash in the bend angle field; **(+)** and **(-)** keys can then be used to edit settings
Depress **(ENTER)** key to store changes

Entering a Bend Angle ➡