# **SHRINKER & STRETCHER**

**MODEL: FSM-16** 



**OPERATING MANUAL** 

#### Main date

Technical date:

Working depth: 153.00 cm

Height: 117.50 cm

Width: 41.00 cm

Depth: 92.00 cm

Weight: 36 kg

Packing size:120x20x50 cm

N.W/G.W: 36/38 kg

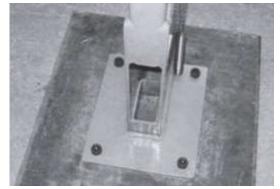
## Set up

**1,** Place the main unit on the floor in the place you like to use the shrinker / stretcher machine. We recommend to place it along a wall or along some other stationary equipment.



As an alternative you can mount the shrinker / stretcher on a movable foot stand. Make sure the foot stand is strong so the head of the main unit don't move while working.





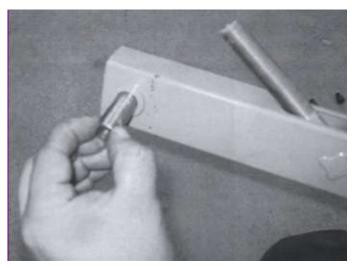
- **2,** Use four concrete anchor plugs and four therefore suitable screws to secure the shrinker / stretcher. Make sure the unit is well secured in the floor or stand. The achor plugs or the screws for this is not part of the delivery.
- 3, The next step is to mount the foot pedal and axle with the M10 screws .



**4**, First grease the axle with some grease.



**5**, Then mount the axle in the hole in the end of the foot pedal.



**6**, Place the foot pedal according to the picture.

Make sure the threaded link screw is pointing into the main unit.

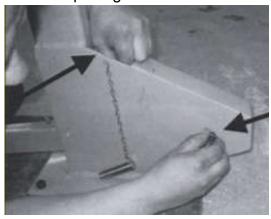


**7,** Move the foot pedal in to the main unit and at the same time, with your other hand guide the threaded link screw up in the opening.

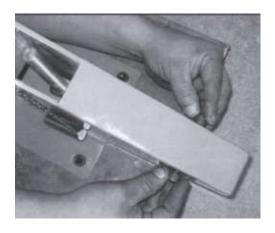




**8,** Then mount the two M10 screws for the axle and at the same keep the screw threaded link in the opening.

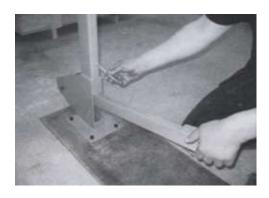


9, Mount both screws and tighten well.





10, Now mount the spring , first onto the main unit, then to the foot pedal.



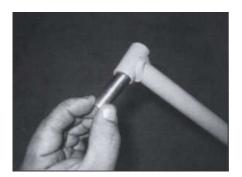


**11,** Next thing is to mount the foot pedal link and the axle with the two M8 screws. Grease the axle with grease.





**12,** Then mount the axle in the hole in the end of the foot pedal.

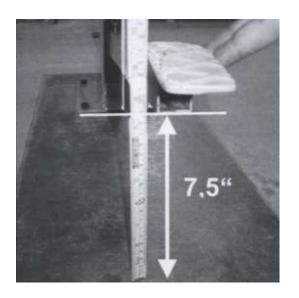


13, Mount the link to the threaded link screw and screw it in about 15 turns.





**14,** The length of the link has to be adjusted so that the height of the low side of the foot pedal is 7,5 inches, +/- 1/2 inch. To do this in the most easy way you put a distance under the foot pedal corresponding to 7,5" and then you adjust the exact number of thread turning on the link unit it fit the fork of the main unit head.





15, Then mount the two M8 screws for the axle and tighten well

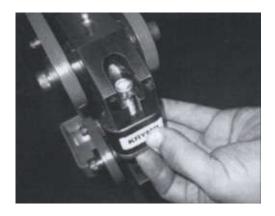




16, Now its time to mount the jaws, first screw the screw into the jaw.



**17.** Then place the jaw one at a time with the text to the outside. Then use the wrench to tighten the jaws.



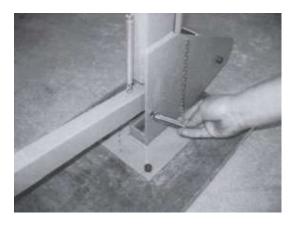


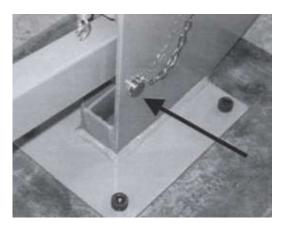
**18,** It is very important to use the same type of jaws, shrinker / shrinker jaws together and stretcher / stretcher jaws together.

It is also very important to have the text to the same direction, best with the text to the outside. On the shrinker jaws the openings has to be placed as on the picture below.



**19,** When the shrinker / stretcher machine is not in use, the securing pin has to be mounted to avoid injuries.





**20,** Place the pair of jaws not in use on the same shelf. Place the T-wrench in the holder in the stand.



## **Operation**

The principal function of this tool is to shrinker or to stretch sheet metal up to 16 gauges (1.5 mm). You can make radius down to 1 inch.

The principal operation is made by applying force with the foot on the foot pedal in a downward direction and at the same time apply the sheet metal work piece between the jaws. When working you move the work piece between every time you press with your foot. By moving smoothly you will be able to make smooth shapes in quick and nice way.

To make the finish of the surface better an "English wheel" is very suitable.

#### **WARNING!**

Do not applying force on the foot pedal without having a piece of sheet metal in between the jaws. The jaws will go broke if no work piece is used. This miss usage can be detected afterwards, not warranty covered this.

## **Part list**

Item	Description	Qty	Item	Description	Qty
1	Foot pedal link	1	28	Out die cover	4
2	Link shaft	1	29	Upper inner die cover	4
3	Screw M8X16	2	30	Roll pin 2x20	16
4	Lock shaft	1	31	Little spring	8
5	Wheel	2	32	Lower inner die cover	4
6	Rotary table	1	33	Lower inner die cover	4
7	Side plate little shaft	1	34	Bear spring	4
8	Side plate	2	35	Frame	1
9	Set collar	4	36	pothook	2
10	Oil hole M6	2	37	Big pull spring	1
11	Die frame	2	38	Screw M10x16	2
12	Little pull spring	2	39	Axle	1
13	Roll pin 3x30	2	40	Hanging chain	1
14	Side plate big shaft	2	40.1	Split pin 3.2x25	2
15	Washer	2	41	Screw M10x20	4
16	Screw M8X20	2	42	Washer 10	4
17	Washer 8	4	43	Fix shaft	1
18	Screw M8X20	4	44	Foot pedal	1
19	Screw M8X30	4	45	Localizer shaft	1
20	Screw M4X8	8	46	Link shaft	1
21	Out die cover	4	47	Wheel	2
22	Upper inner die cover 1	4	48	Nut M6	2
23	Roll pin 2x20	24	49	Bolt M6X35	2
24	Little spring	12	50	lid	4
25	Lower inner die cover	4	51	Plastic washer	4
26	Screw M8x30	4	52	Screw M4x10	4
27	Screw M4x8	8	53	Base	1

