

S2265

23/3/13

SHRINKER STRETCHER SHST-16D



OPERATION
SPARE PARTS MANUAL

● STRUCTURE AND FUNCTION

This machine is composed of the body part and the jaws part. The body is high quality steel casting, with a high structural strength, good stability and deep throat depth, it is much better for machining wide sheet material; The jaws are hardening treated chromium steel with very high hardness and toughness. The jaws including Shrinker and Stretcher, The Shrinker forms outside radius curves and the Stretcher forms inside radius curves. Compound curves can be made by working the piece on alternating sides, when both Shrinker and Stretcher, taking care to match work on both sides.

● GENERAL SPECIFICATION

Max. Thickness (mm)	Packing Size (mm) (LxWxH)	Throat Depth (mm)	N.W./G.W.(kg)
1.5	97X64X26	208	29/30

● OPERATION AND ADJUSTMENT

Please make sure the jaws are fixed on the body securely and the body (#1) fixed on a suitable stand firmly before using this tool; The dies with teeth should maintain sharp, each die should be ensured can open or close when handle (#18) depressed, and can recover when handle lift up; Put the metal in the middle of jaw box, and press down the handle when you forming.

Notice: Any work should within it's max. capacity.

The bolt (#3) can be adjusted to control the handle height and open spaces between upper and lower dies according to different conditions.

Assembly Instructions to be used in conjunction with parts diagrams in rear of manual

**Ensure Safety Glasses are worn on assembly of this machine
due to parts under stress (spring etc)**

- # With stand base #13 flat on ground

Position Column # 6 onto stand as shown on “stand and foot pedal drawing “ in manual ,noting position of slots in top of stand are to rear of machine.

- # Fit M16 nut #20 to foot pedal pull bolt and screw it all the way down then back up 5 turns
Then screw on Pipe #12, 5 to 8 turns.

Do not lock up lock nut # 20 yet.

- # Fit one end of spring # 7 to small hole on flat bar rib under the stand top .

Fit other end of spring to hole in small tab on top of Lever # 8

Fit a circlip #24 to one end of pin # 23 and place pin in one side arm on stand ready to assemble lever #8 into, Note a small hammer may be needed to do this.

Carefully insert the end of lever # 8 with spring attached between stand legs and up through between the 2 arms sticking out the front of stand, then pulling down on spring end allowing the hole in the end of the lever to be aligned up with pin # 23.

Hammer pin #23 through all the way and insert another circlip # 24 on the other end.

- # Put a Socket head cap screw # 11 into threaded hole in one end of Pin # 9 (to stop thread getting damaged on assembly)

Lift up arm # 12 and fit into yolk of Lever # 8, insert pin # 9 through and if needed tap pin in through both parts until central. Remove Socket head cap screw from pin.

- # Place Hafco Metalmaster Shrinker- Stretcher (Machine) onto stand aligning up slots on stand with those on Machine

Fasten machine to stand using 4 x bolts Washers and nuts #29, 28,27

- Check the 8 screws # 8 (machine parts Drawing) holding the tooling in are tight

- # Put shaft # 3 into end hole of Bar # 1 and fit a circlip # 5 onto shaft #3 each end up to grooves each side of Bar #1

Insert bar 1 # into hole in end of fulcrum bar in machine.

By Eye, align shaft #3 to be 90 degrees to machine and then tighten screw in Fulcrum bar with a Philips head screw driver to be tight.

- # Fit one M8 Nut #4 onto each of the poles # 2 and screw to end of thread, Then drop the eye of one of the poles down through the body/stand slots far enough to then bring back up through holes in the end of the shaft # 3, Putting the lower eye of pole onto pin #9

Fit large mudguard washer # 10 and Socket head cap screw # 11 to end of pin # 9 to secure pole eye on

Fit another M8 Nut # 4 onto the top end of pole #2.

Repeat other side. And then tighten both Screws # 11 to secure poles # 2 on.

Wind Nuts # 4 up to just meet shaft # 3 then put 2 more nuts # 4 on top of the poles # 2 and tighten.

- # Fit a Nut #25 onto socket head cap screw #26 and screw into stand column #6 .

This is a stop that can be adjusted to regulate height of foot pedal return if needed.

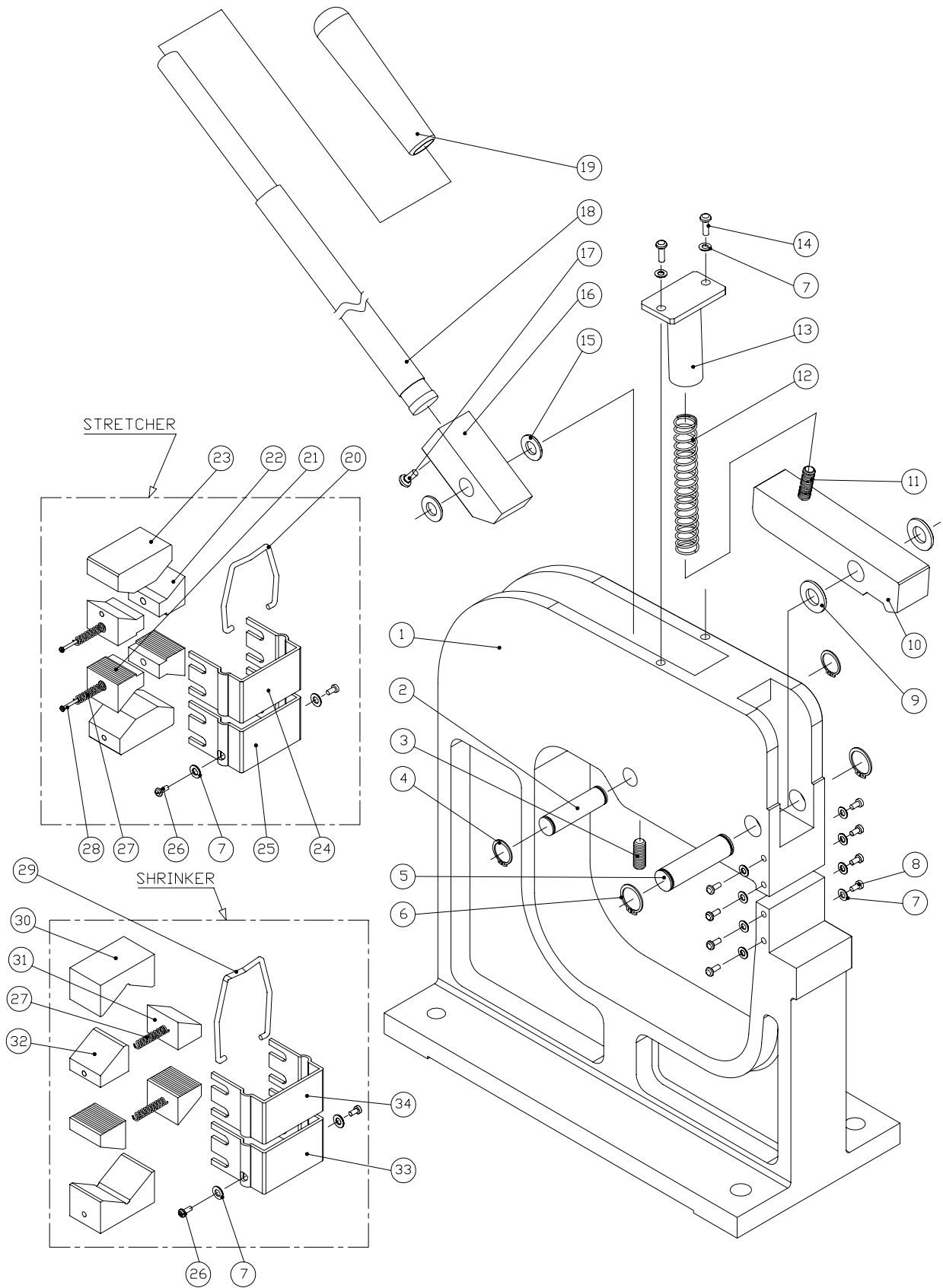
- # Check operation of machine and if needed adjust length of pipe #12 by turning it to lower or raise foot pedal if needed. (disassembly and removal of pin #9 by removing Screws and washers # 10 and # 11 will be needed to do this)

The higher the foot pedal is adjusted the more the machine will perform its set operation and when set correctly bottoming the foot pedal onto stand base is a good way to regulate a consistent operation.

- # Lock M16 Nut # 20

Your Hafco Metalmaster Shrinker - Stretcher is now ready to operate

PART A: MACHINE PARTS DRAWING

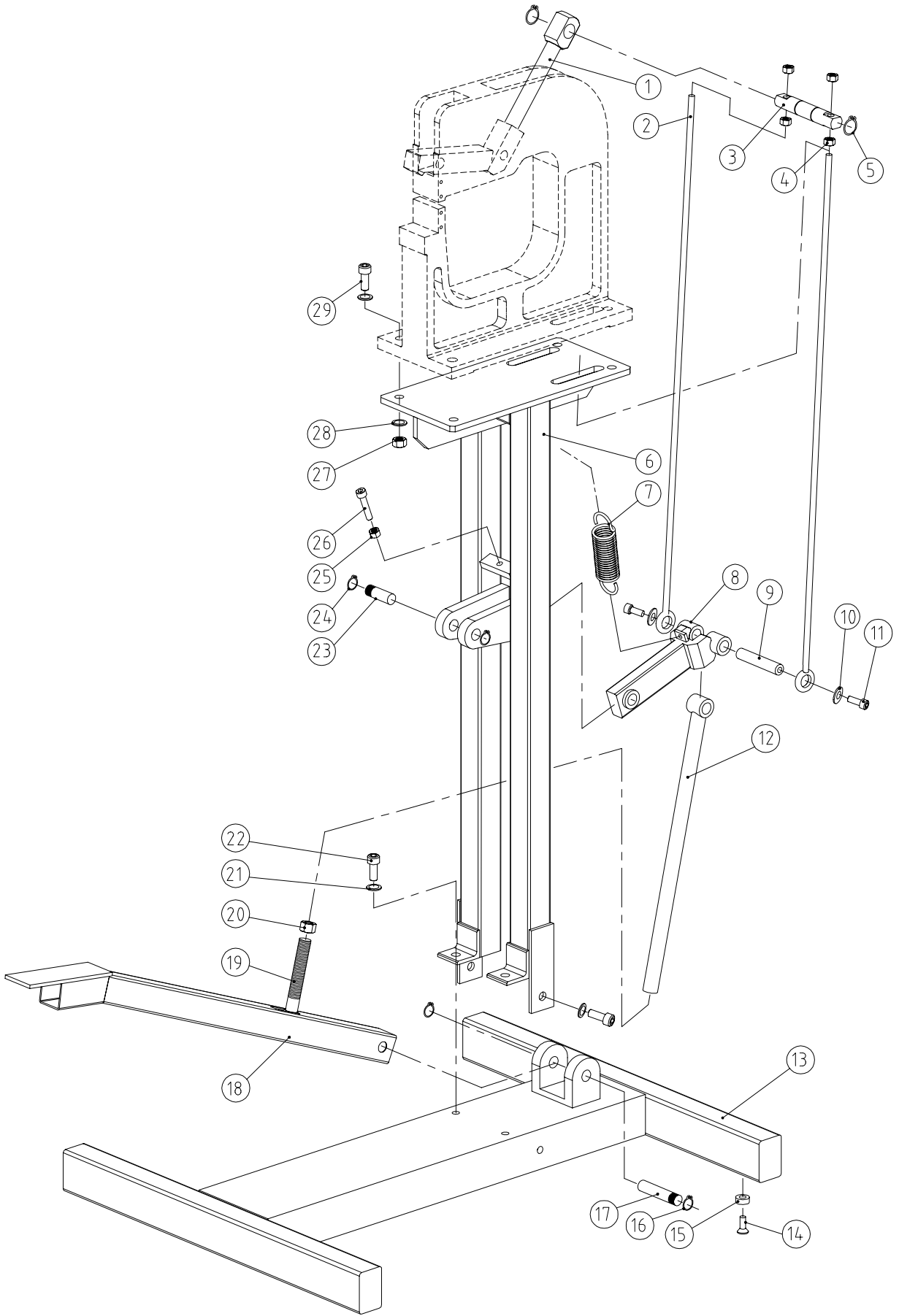


PART A: MACHINE PARTS LIST

Part No.	Fig. No.	Description/Specification	QTY.	Remark
1	SS16-109	Body	1	
2	SS16-106	Pin	1	
3	GB/T77	Inner-hex bolt M8X16	1	
4	GB/T894.1	Retaining ring for bearing13	2	
5	SS16-107	Pin	1	
6	GB/T894.1	Retaining ring for bearing15	2	
7	GB/T95	Flat washer 5	14	
8	GB/T70.2	Inner-hex bolt M5X10	8	
9	SS16-108	Washer	2	
10	SS16-101	Pressure Arm	1	
11	GB/T77	Inner-hex bolt M8X25	1	
12	SS16-102	Pressure Spring	1	
13	SS16-103	Sleeve	1	
14	GB/T70.2	Inner-hex bolt M5X12	2	
15	SS18-401A	Washer	2	
16	SS16-105	Fulcrum Arm	1	
17	GB/T818	Bolt M6X10	1	
18	SS16-104	Handle	NO THIS PART	
19	SS18-106.1	Vinyl Grip for Handle	NO THIS PART	
20	SS16-201	Suspension Wire	1	
21	SS16-202	Die I	2	
22	SS16-203	Die II	2	

23	SS16-204	Upper Pressure Block (Stretcher)	2	
24		Upper Cover for Stretcher	1	
25		Lower Cover for Stretcher	1	
26	GB/T818	Bolt M5X10	4	
27	SS18-206	Spring	4	
28	GB/T65	Bolt M4X35	2	
29	SS16-301	Suspension Wire	1	
30	SS16-304	Pressure V Block	2	
31	SS16-303	Small Jaw	2	
32	SS16-302	Large Jaw	2	
33		Upper Cover for Shrinker	1	
34		Lower Cover for Shrinker	1	

PART B: STAND AND FOOT PEDAL DRAWING



PART B: STAND AND FOOT PEDAL PARTS LIST:

No	Drawing no.	Name	Spe.	Qty	Remarks
1	SS16-ZJ-001	Bar		1	
2	SS16-ZJ-002	Pole		2	
3	SS16-ZJ-003	Shaft		1	
4	GB/T6170	Nut	M8	4	
5	GB/T894.1	Washer	20	2	
6	SS16-ZJ-012	Column		1	
7	SS18-ZJ-104	Spring		1	
8	SS16-ZJ-005	Stand		1	
9	SS16-ZJ-006	Shaft		1	
10	GB/T5287	Big Washer	8	2	
11	GB/T70.1	Screw	M8X16	2	
12	SS16-ZJ-008	Pipe		1	
13	SS16-ZJ-011	Base		1	
14	GB/T819.1	Bolt	M4X10	4	
15	SS16B-1022	Plastic Washer		4	
16	GB/T894.1	Washer	16	2	
17	SS16-ZJ-007	Shaft		1	
18	SS16-ZJ-010	Foot pedal		1	
19	SS16-ZJ-009	Bolt		1	
20	GB/T6170	Nut	M16	1	
21	GB/T95	Washer	10	6	
22	GB/T70.1	Bolt	M10X20	6	
23	SS16-ZJ-004	Shaft		1	
24	GB/T894.1	Washer	16	2	
25	GB/T6170	Nut	M8	1	
26	GB/T70.1	Bolt	M8X40	1	
27	GB/T6170	Nut	M10	4	
28	GB/T95	Washer	10	8	
29	GB/T70.1	Bolt	M10X35	4	