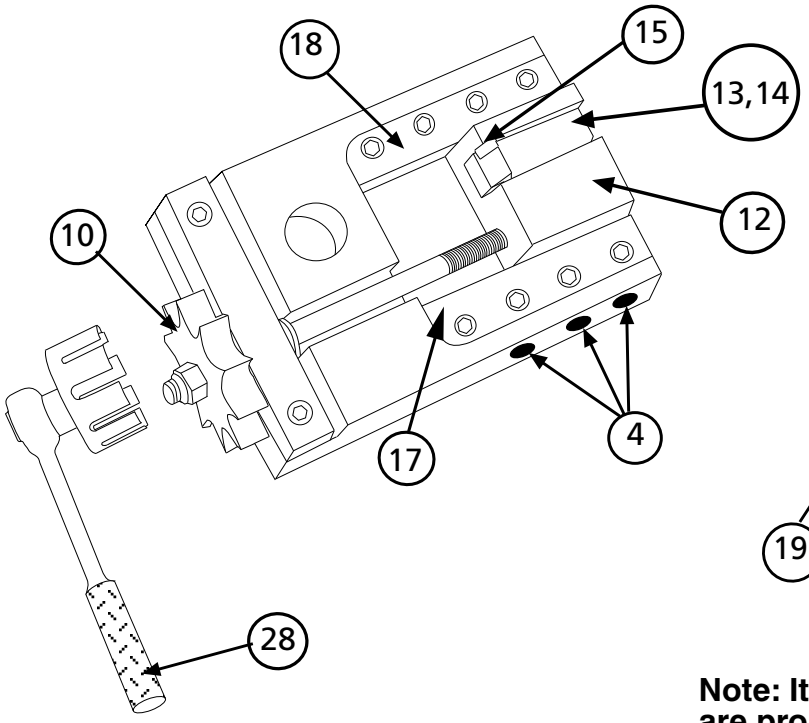
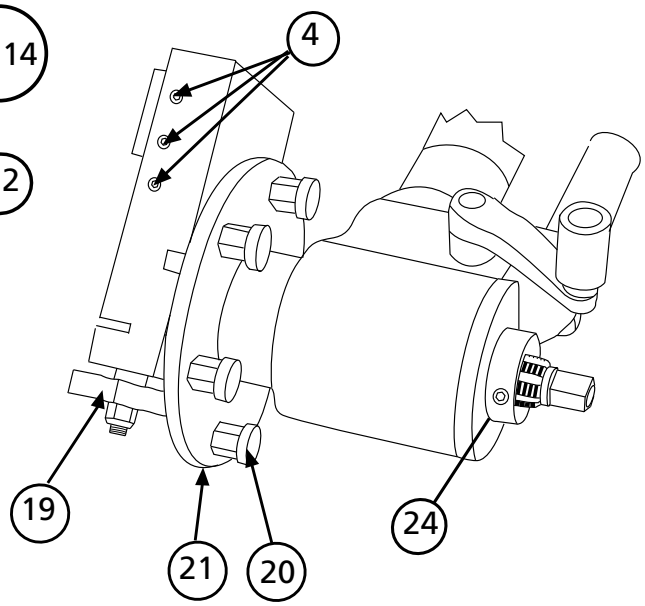
H&S TOOL, INC.

P.O. Box 393
Wadsworth, OH 44282, U.S.A.
Tel: +1 330 336 4550
Fax: +1 330 336 9159
email: info@hstool.com
www.hstool.com

Operating Recommendations for Model MSF Flange Facer





1. Mount the model MSF Machine using the centershaft collet system or the elbow mandrel (see elbow mandrel setup procedure).
2. Install cutting insert (15) into holder (13, 14).
3. Install the low range or high range holder (13,14), depending upon the flange size, into the tool slide (12) .
4. Rotation of the flange facer body is clockwise when looking at it from the rear of the machine.
5. Set the tool slide (12) by rotating the trip wheel (10) with ratchet and socket (26) until the holder extends past the area to be machined.
6. Once the holder is in position, the trip wheel (10) backlash must be cleared and the timing set. Rotate the trip wheel one full turn clockwise to remove the backlash and position it to point directly at the trip ring (19). **NOTE: Failure to perform this procedure will damage the trip screws.**
7. Engage the correct number of trip pins (20) to achieve the required surface finish (see specifications).

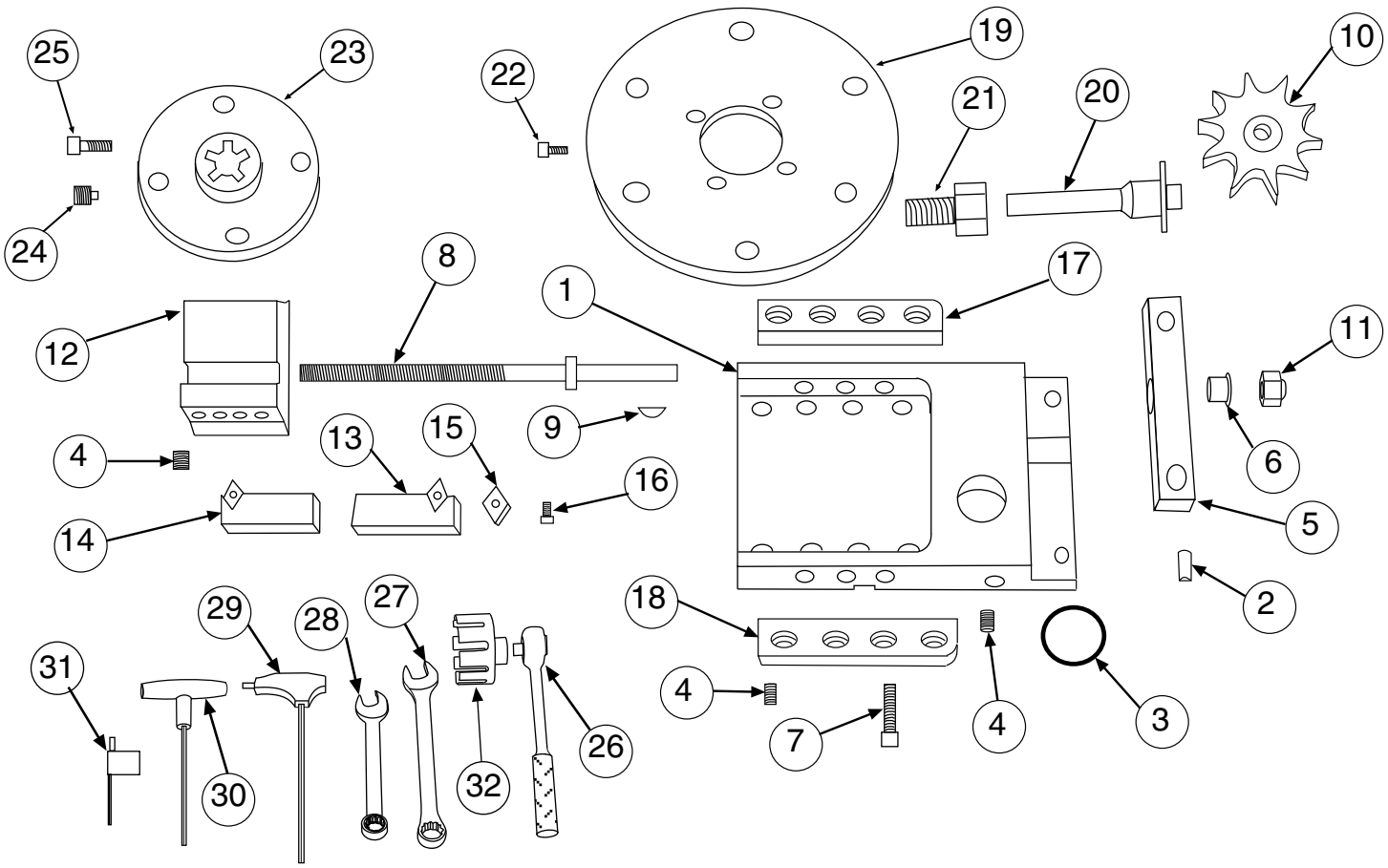
Note: It is Important that the gibs (17, 18) are properly adjusted. Correct adjustment maintains proper timing between the trip wheel and the trip screws. The gibs are properly adjusted when the set screws (4) are tightened evenly to apply enough force to the toolslide (12) that it is difficult to turn the trip wheel by hand.

8. The depth of cut is controlled by rotating the machine crank handle in a clockwise direction. Note: One complete turn is equal to .028" travel.
9. Once the depth of cut is set, tighten set screw (24) in the end plate to lock the machine in place.
10. Activate the machine by operating the air motor and allow the insert to face across the raised flange area.

Specifications

Working Range: 1.25" (31.8 mm) I.D. to 6.19" (157.2 mm) O.D.
Radial Tool Clearance — 6.0" (152.4 mm)
Radial Feed Rate: .005" (0.13 mm) per pin: All 6 pins .030" (0.76 mm) Per Revolution Note: Pins must be engaged at opposing positions for even resurfacing.
Approximate surface finishes are:
1 pin — 63 RMS 3 pins — 125 RMS 6 pins — 500 RMS
Axial Feed Rate: .062" (1.6 mm) Per Full Feed Nut Turn
Approximate Feed Depth Adjustments are:
1/4 turn — .015" (0.38 mm) 1/2 turn — .031" (0.79 mm)
3/4 turn — .046" (1.2 mm)

Parts List
MSF Flange Facer
Part No. 004527



Reference No.	Part No.	Description
1	MSF-004528	Body
2	MSF-004529	Keystock
3	MSF-004530	O-Ring
4	MSF-561856	(12) Socket Head Set Screw
5	MSF-004531	Feed Screw Bracket
6	MSF-060806	(2) Bushing
7	MSF-142010	(10) Socket Head Cap Screw
8	MSF-004532	Feed Screw
9	MSF-001812	Woodruff Key
10	MSF-004533	Trip Wheel
11	MSF-003824	Hex Nut
12	MSF-004534	Tool Slide
13	MSF-004535	Low Range Holder
14	MSF-004536	High Range Holder
15	MSF-004537	Insert

Reference No.	Part No.	Descripton
16	MSF-00TS43	Torx Screw
17	MSF-004538	Left Gib
18	MSF-004539	Right Gib
19	MSF-004540	Trip Ring
20	MSF-004541	(6) Trip Pin
21	MSF-004542	(6) Trip Receptacle
22	MSF-102438	(4) Socket Head Cap Screw
23	MSF-004543	End Plate
24	MSF-561838	(2) Socket Head Set Screw
25	MSF-102458	(5) Socket Head Cap Screw
26	MSF-004544	3/8" Ratchet
27	MSF-004545	5/8" Combination Wrench
28	MSF-004546	9/16" Combination Wrench
29	MSF-004547	5/32" T-Handle Hex Key
30	MSF-004548	3/16" Hex Key
31	MSF-004549	T15 Torx Driver
32	MSF-004550	Trip Wheel Socket

The performance and reliability of H & S products is the result of a combination of quality parts, accurate machining, and careful assembly. Call H & S with your parts requirement to ensure that your repaired tool retains the quality that you originally purchased.

Complete rebuilding service is also available. Contact the factory for details.