Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Fallure to comply with instructions could result in personal injury andior property damage! Retain instructions for future reference.

# phase II Hand Tapper

#### Description

The Hand Tapper provides an efficient, economical means of obtaining straight, perpendicular tapped holes. offset handle allows quick and easy operation. Hardened and ground spindle is balanced to provide a highly sensitive tap feel. Slide locking vise jaws reduce tap bteakage. Unit comes with depth stop, counterbalance, adapter rack, and nine adapters: #6, #8, #10, ¼", ¾6", ¾", ¼" and ¾".

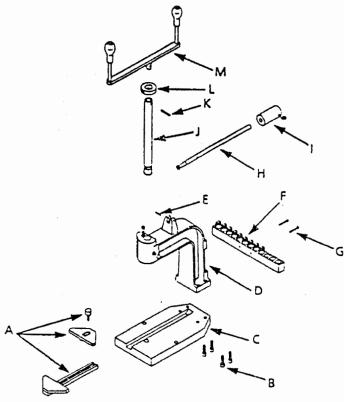


Figure 1 Unpacking

#### Unpacking

Check for shipping damage. If damage has occurred, a claim must be filed with carrier immediately. Check for completeness. Immediately report missing parts to dealer.

**IMPORTANT:** The tool has ben coated with a protective coating. In order to ensure proper ift and operation, the coating must be removed. Remove coating with mild solvents wuch as mineral spirits and a soft cloth. Nonflammable solvents are recommended. After cleaning cover all esposed surfaces with a light coating of oil.

# **▲** CAUTION

Never use highly voiatile slovents.

Avoid getting cleaning solution on paint as it may tend to deteriorate these finishes. Use soap and water on painted components.

The hand tapper is shipped unassembled. Locate and identify the following assemblies and loose parts:

- A. Jaw plates with knob
- B. Four each Socket head bolts
- C. Base D. L-Frame
- E. 4×30mm Dowel pin
- F. Adapter rack with nine adapters
- G. Two each Round head screws
- H. Lever
- I. Counter balance with thumbscrew
- J. Spindle
- K. Taper pin
- L. Collar with setscrew
- M. Handle assembly

#### **Specifications**

| Clearance height ····· | 73/4*        |
|------------------------|--------------|
| Throat depth ······    | ·····73½"    |
| Table size ······      | 61½×12½″     |
| Spindle diameter ····· | 1"           |
| Tap capacity ······    | ····· #0-5½" |
| Weight ·····           | 38 lbs       |

#### **Genreal Safety Information**

- 1. Read and follow all operating instructions before operating tool.
- understand and obey all safety instructions supplied with accessories used with tool.
- Always secure tool to machine table or other work surfaces using both holes provided in the tool base.
- 4. Maintain and lubricate tool properly.



# phase II Hand Tapper

# **Assembly**

Refer to figure 2.
MOUNT L-FRAME

Place the L-Frame (Ref. No. 8) on the base(Ref.No.1) so that spindle guide-way faces the front and the four holes in the flat bottom of the L-Frame are aligned with matching holes in the rear of the base. Insert bolts (Ref.No.2) from the bottom of the base and tighten securely.

#### MOUNT LEVER

Slide lever (Ref.No.23) through the Uslot in bracket so that the disc edge of the lever faces front and the hole in the lever is aligned with holes in the sides of the bracket. Secure lever to bracket using the dowel pin(Ref.No.12). Slide counterbalance (Ref.No.24) onto lever with scerwhole in the rear. Use thumb-screw(Ref.No.25) to secure counterbalance onto lever.

#### **MOUNT HANDLE**

Insert handle (Ref.No.20) into spindle (Ref.No.16) so that the pin hole in the spindle is aligned with the matching hole in the handle. Press taper pin (Ref.No.17) through the holes to secure the handle with spindle.

#### **MOUNT SPINDLE**

Slide collar (Ref.No.19) onto spindle until taper pin stops it and tighten setscrew (Ref.No.18). Insert spindle into L-Frame until collar contacts the lever.

#### **MOUNT JAWPLATES**

Slide fixed jaw (Ref.No.3) into U-slot in the base. Place the moving jaw(Ref.No.4) on the base so that the square slots in its base fits into the slot in fixed jaw rail.

Insert knob (Ref.No.5) into the keyhole of the moving jaw and tighten it into one of the holes in the fixed jaw rail.

#### **MOUNT ADAPTER RACK**

Secure adapter rack (Ref.No.26) to the rear of L-Frame using screws (Ref.No.36).

#### Installation

Always bolt hand tapper to table or work surface using both holes provided in the base (Ref.No.1).

### Operation

Refer to Figure 2.

Select the desired tap (not provided) and secure it with the suitable adapter (Ref.Nos.27 to 35) using set screw Ref.No.13). Adjust spindle height so that tap will be above the workpiece when the adapter with tap is snapped inside the spindle. To adjust spindle height:

- Loosen thumbscrew and move counterlalance until it touches the bracket, and tighten thumbscrew.
- 2.Loosen the set screw (Ref.No.18) in collar and raise or lower spindle to desired height. Tighten set screw after adjusting the height.
- 3.Return counterbalance to original position and tighten thumbscrew.

insert adapter with tap into the spindle and turn adapter until the flats in the adapter seats with flats in spindle. Press and snap adapter inside the spindle. To release adapter ,turn clip (ref.No.14) until the ball (Ref.No.15) is exposed. The adapter is released and can be taken out. Turn the clip back so that the ball is masked by the clip.

Position workpiece on the base so that the tap site is above the tap guide hole in the base. Slide the fixed jaw so that the the fixedjaw rests against one side of the workpiece. loosen knob (Ref.No.5) and move the moving jaw until it rests against the workpiece. Tighten knob to fix hole is found in the fixed jaw rail.

Loosen knob and retract the jaw so that the knob can be inserted into the nearest hole. Move the jaw along the keyway until it touches the workpiece. Tighten knob to clamp workpiece.

The tapping depth can be controlled by setting the spindle stop. To set depth control:

- 1.loosen hex nut (Ref No.9) and raise or lower blot (Ref.No.10) so that the distance between the collar (Ref. No.19) and the bolt equals the required tapping depth.
- 2.Tighten nut after setting bolt height. turn handle (Ref.No.20)clockwise and gradually lower the tap into the hole. Stop turning the handle when collar touches bolt (Ref.No.10). Turn handle counter clockwise to remove tap from hole and the tapping is complete.

#### Lubrication

Lubricate spindel frequently to ensure proper operation. Using light machine oil lubricate spindle through oil Zert (Ref.No.6). Frequently lubricate clip (Ref. No. 14) pathway in spindle.

Please provide following information: -Model number

- -Serial number (if any)
- -Part descriptions and number as shown in parts list

Address parts correspondence to:



14Caesar Place Moonachie, NJ 07074 Tel: 201-933-6300 FAX: 201-933-3801

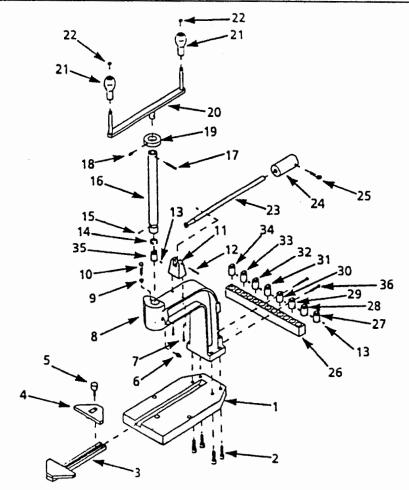


Figure 2-Replacement Parts Illustration

# Replacement Parts List

| Reference |                           |             |                | Reference |                            |                  |      |
|-----------|---------------------------|-------------|----------------|-----------|----------------------------|------------------|------|
| Number    | Description               | Part Number | Qty-           | Number    | Description                | Part Number      | Qty- |
| 1         | Base                      | 8931.00     | 1              | 19        | Collar                     | 8942.00          | 1    |
| 2         | 10-1.5×35mm Socket hd. bo | olt *       | 4              | 20        | Handle                     | 8943.00          | 1    |
| 3         | Fixed jaw                 | 8932.00     | 1              | 21        | (nob                       | 8944.00          | 2    |
| 4         | Moving jaw                | 8933.00     | 1              | 22        | Retaining ring             | 8945.00          | 2    |
| 5         | knob                      | 8934.00     | 1              | 23        | Lever                      | 8946.00          | 1    |
| 6         | Oil zert                  | 8935.00     | 1              | 24        | Counterbalance             | 8947.00          | 1    |
| 7         | 5-0.8×16mm Hex head bolt  | *           | 1              | 25        | Thumbscrew                 | 8948.00          | 1    |
| 8         | L-Frame                   | 8936.00     | 1              | 26        | Adapter rack               | 8949.00          | 1    |
| 9         | Smm-0.8 Hex nut           | *           | 1              | 27        | #6 Adapter                 | 8950.00          | 1    |
| 10        | 5-0.8×28mm Hex head bolt  | *           | 1              | 28        | #8 Adapter                 | 8951.00          | 1    |
| 11        | Bracket                   | 8937.00     | 1              | 29        | #10 Adapter                | 8952.00          | 1    |
| 12        | 4×30mm Dowel pin          | 8938.00     | 1              | 30        | 1/4 " Adapter              | 8953.00          | 1    |
| 13        | 5-0.8×5mm Set screw       | +           | 9              | 31        | ⁵/16" Adapter              | 8954.00          | 1    |
| 14        | Clip                      | 8939.00     | <sup>`</sup> 1 | 32        | % " Adapter                | 8955.00          | 1    |
| 15        | 3/ <sub>16</sub> " Bali   | 8163.00     | 1              | 33        | 7/16" Adapter              | 8956.00          | 1    |
| 16        | Spindle                   | 8940.00     | 1              | 34        | ½" Adapter                 | 89 <b>5</b> 7.00 | 1    |
| 17        | Taper pin                 | 8941.00     | 1              | 35        | % " Adapter                | 8958.00          | 1    |
| 18        | 6-1.0×12mm Set screw      | *           | 1              | 36        | 5-0.8×38mm Round hd. screw | , *              | 2    |

(\*) Standard hardware item available locally

