

Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

WARNING! Read all instructions. Failure to follow all instructions listed below may result in serious injury.

Work area safety

- **Keep children and bystanders away while operating. Distractions can cause you to lose control.**
- **Keep work area clean and well lit. Cluttered or dark areas invite accidents.**

Personal safety

- **Wear ANSI-approved safety goggles, NIOSH-approved dust mask respirator, and heavy-duty work gloves during use and service.**
- **Stay alert and use common sense when operating. Do not use when tired or under the influence of drugs, alcohol or medication.**
- **Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.**

Product use and care

- **This product is not a toy. Keep it out of reach of children.**
- **Use the correct product for your application. The correct product will do the job better and safer at the rate for which it was designed. Do not modify this product or use it for a purpose for which it is not intended.**
- **Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the product's operation. If damaged, have the product repaired before use.**
- **Use the product and accessories in accordance with these instructions and in the manner intended for the particular type of product, taking into account the**

working conditions and the work to be performed. Use of the product for operations different from those intended could result in a hazardous situation.

Service

- Have product serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the product is maintained.
- Maintain labels and nameplates on the product. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.

Miscellaneous

- Keep hands clear of the gears and rollers of the Rolling Mill.
- Do not exceed the minimum or maximum gauge of wire or sheet stock listed for this product.
- The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Specifications

Capacity	Wire - .031" to .197" Sheet - 35 Gauge to .079"
Gears	3:1 Gear Ratio
Includes	2 Smooth Rollers 1 Wire Roller 2 Pattern Rollers

Unpacking

When unpacking, check to make sure that the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

Set up instructions

Read the entire important safety information section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

Assembly

- Remove the protective plastic coverings from all items including the attached Rollers.
- Connect the Operating Handle (1) to the Shaft Gear (10) with Bolt (11) and Washer (12), as shown on the cover.
- Slide the Working Handle (2) between the Right and Left Screw Gears (4,5) into the hole on top of the unit.

Mounting

- The Mill must be mounted before use. Choose a work surface that is flat, level, and capable of bearing the weight of the Mill and work pieces.
- Operating Handle must be positioned to rotate freely.
- Using the Base of the Mill as a template, mark with a pencil where the holes need to be drilled. Verify that installation surface has no hidden utility lines before drilling.
- Drill holes in the work surface and mount the Mill firmly using appropriate hardware (not included).

Inserting rollers

- Remove the uppermost Bolt (11) and Washer (12) from Side Gear (7).
- Remove Side Gear located below Right Screw Gear (4). See Figure 1.
- Remove Left Screw Gear (5) and Right Screw Gear (4) from the Mill body by turning counterclockwise

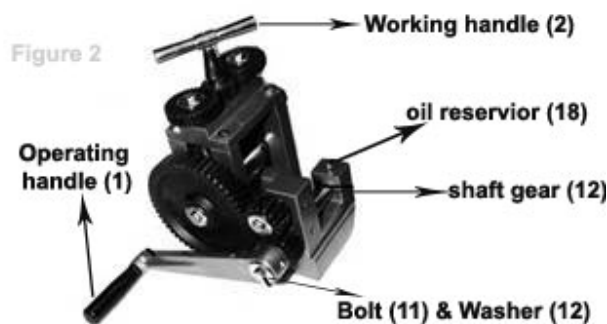
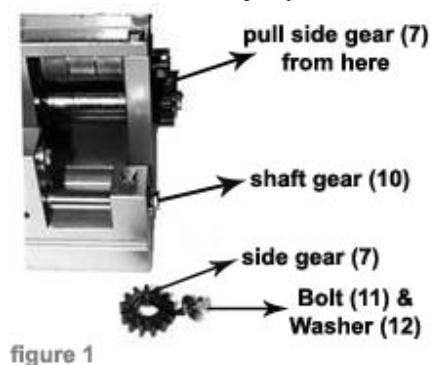
- Remove all four Bolts (11) from Cover (6) of the Mill. Pull Cover up and off.
- With the Cover off, pull Roller and Plates (13) up and out of Mill.
- Choose the correct Roller for the job.

- Remove Plates from end of Roller that was in the machine and install on the end of the chosen Roller.
- Slide Plates and desired Roller back down into Mill body. Attach the Side Gear making certain that the tab slides into place with the curved end inside. Place the Cover back on the unit.
- Thread Bolt with Washer back into place on the body.

Operating instructions

- Choose the desired Roller. The Mini-Rolling Mill comes with five different Rollers two Smooth Rollers (15), two Pattern Rollers (17), and a Wire Roller (16). Choose the Roller with the pattern best suited to your work piece. Install as directed in the Assembly section of this manual.
- Fill the Oil Reservoir (18) with high quality light machine oil.
- Turning the Working Handle will raise or lower the top roller, changing the amount of space between the Rollers. This will also determine the depth of indentation that is made by the Roller.
- Insert the work piece and turn the Operating Handle to pull it through the Rollers.
- Clean, then store the product indoors, out of children's reach.

Caution: Keep hands clear of gears and rollers during operation. The gears and rollers can cause injury.



Maintenance and servicing

Caution: Damaged products can fail, causing personal injury. Do not use a damaged product. If abnormal noise or vibration occurs, have the problem corrected before further use.

Cleaning, maintenance and lubrication

- **Before each use, inspect the general condition of the product. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, and any other condition that may affect its safe operation.**
- **After use, clean external surfaces of the product with clean, moist cloth.**

Please read the following carefully

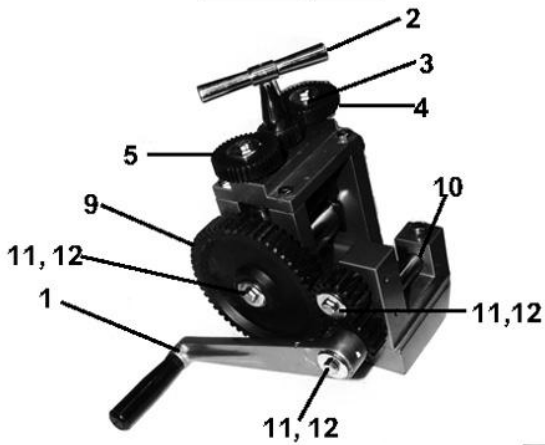
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Parts list & Assembly diagram

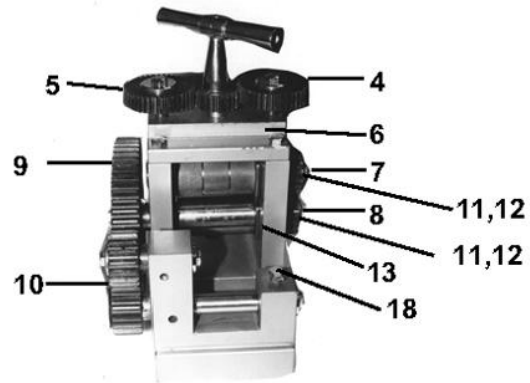
Part	Description	Qty.
1	Operating Handle	1
2	Working Handle	1
3	Handle Gear Screw	1
4	Right Screw Gear	1

5	Left Screw Gear	1
6	Cover	1
7	Side Gear	1
8	Side Gear	1
9	Main Gear	1
10	Shaft Gear	1
11	Bolt	9
12	Washer	5
13	Plates	2
14	Plate Fitting	1
15	Smooth Roller	2
16	Wire Roller	1
17	Pattern Roller	2
18	Oil Reservoir	1

Parts Figure A



Parts Figure B



Rollers

