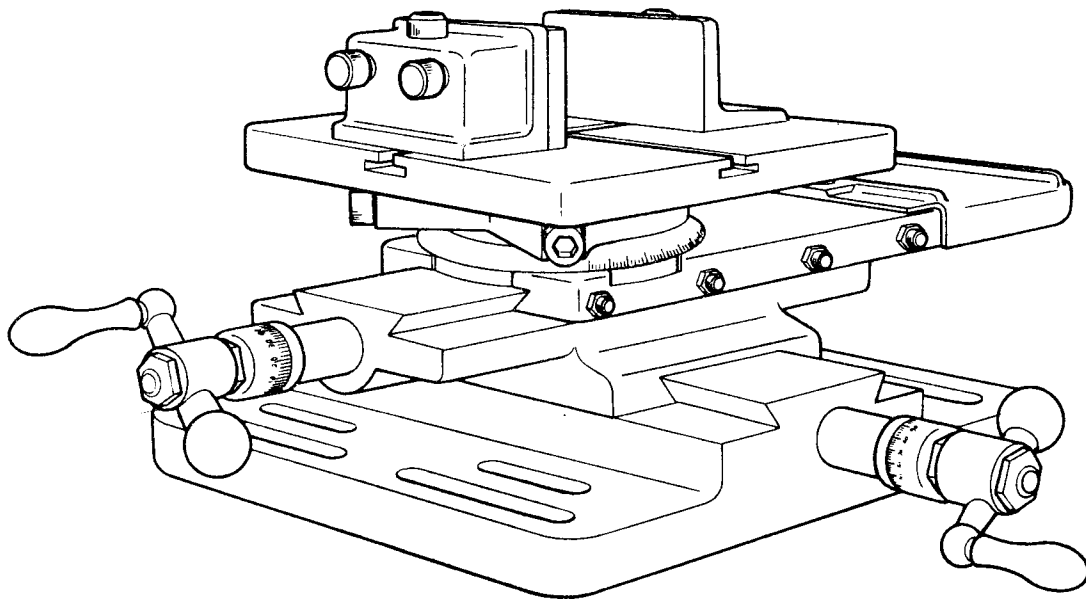


**OPERATING INSTRUCTIONS  
and  
PARTS LIST**

# **ATLAS**



## **1614 UNIVERSAL COMPOUND VISE**

**CLAUSING**

CORPORATION

*SPECIAL PRODUCTS GROUP*

2019 N. PITCHER ST., KALAMAZOO, MICH. 49007

# WARRANTY

The Clausing Corporation, Kalamazoo, Michigan, warrants that each Product will be free from defects in material and workmanship for one year from the date of delivery to the User.

Clausing will correct any defects without charge. Parts will be repaired or replaced at Clausing's option. Warranty work will normally be performed at the User's plant, but at the option and expense of Clausing, the Product, or any part thereof, may be returned to Clausing for the service. User shall provide access to the Product during regular business hours and shall provide such other assistance as determined necessary by Clausing.

Clausing shall not be responsible for expenditures made or incurred by the User for repairs of the Product. The warranty is void for any Product that has been subjected to neglect, misuse, accident, or improper operation, or that has been tampered with or altered in any way.

The foregoing warranty is exclusive and in lieu of all other warranties, express or implied, except as to title, including any implied warranty of MERCHANTABILITY or of FITNESS FOR A PARTICULAR PURPOSE.

The liability of Clausing under this warranty, or for any loss or damage to the equipment, whether the claim is based on contract or negligence, shall not in any case exceed the cost of correcting defects in the equipment as herein provided and upon the expiration of the warranty period all such liability shall terminate. The foregoing shall constitute the exclusive remedy of the User and the exclusive liability of Clausing.

In no event, whether as a result of breach of contract or warranty, or alleged negligence, shall Clausing be liable for special or consequential damages including, but not limited to, loss of profits or revenue, loss of use of the equipment or any associated equipment, cost of capital, cost of substitute equipment, facilities or services, down-time costs, or claims of customers of the User for such damages.

No one other than an officer of Clausing acting in writing is authorized to assume any liability on behalf of Clausing or impose any obligation upon it in connection with the sale of any product other than as stated above.

**CLAUSING CORPORATION**  
KALAMAZOO, MICHIGAN 49007

# CLAUSING CORPORATION

## SAFETY RULES FOR POWER TOOLS

### 1. KNOW YOUR POWER TOOL

Read the owner's manual carefully. Learn its application and limitations as well as the specific potential hazards peculiar to this tool.

### 2. GROUND ALL TOOLS

If tool is equipped with three-prong plug, it should be plugged into a three-hole receptacle. If adapter is used to accommodate two-prong receptacle, the adapter wire must be attached to a known ground. Never remove third prong.

### 3. KEEP GUARDS IN PLACE

and in working order.

### 4. REMOVE ADJUSTING KEYS AND WRENCHES

Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning on tool.

### 5. KEEP WORK AREA CLEAN

Cluttered areas and benches invite accidents.

### 6. AVOID DANGEROUS ENVIRONMENT

Don't use power tools in damp or wet locations. Keep work area well illuminated.

### 7. KEEP CHILDREN AWAY

All visitors should be kept a safe distance from work area.

### 8. MAKE WORKSHOP KID PROOF

— with padlocks, master switches, or by removing starter keys.

### 9. DON'T FORCE TOOL

It will do the job better and be safer at the rate for which it was designed.

### 10. USE RIGHT TOOL

Don't force tool or attachment to do a job it was not designed for.

### 11. WEAR PROPER APPAREL

No loose clothing or jewelry to get caught in moving parts.

### 12. USE SAFETY GLASSES

Also use face or dust mask if cutting operation is dusty.

### 13. SECURE WORK

Use clamps or a vise to hold work when practical. It's safer than using your hand, frees both hands to operate tool.

### 14. DON'T OVERREACH

Keep your proper footing and balance at all times.

### 15. MAINTAIN TOOLS IN TOP CONDITION

Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

### 16. DISCONNECT TOOLS

before servicing and when changing accessories such as blades, bits, cutters.

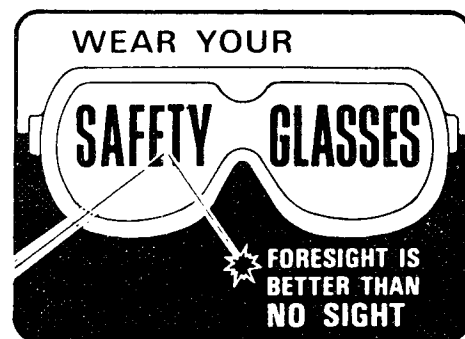
### 17. AVOID ACCIDENTAL STARTING

Make sure switch is "OFF" before plugging in cord.

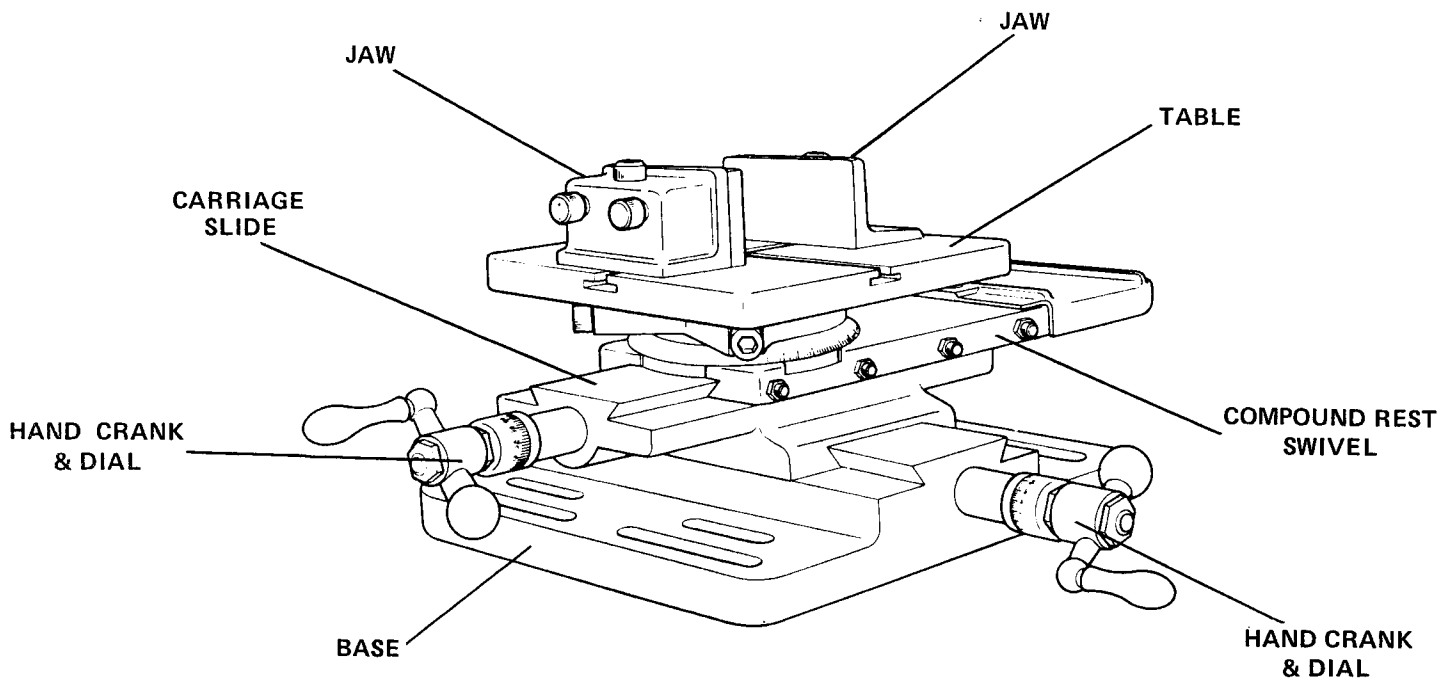
### 18. USE RECOMMENDED ACCESSORIES

Consult the owner's manual. Use of improper accessories may be hazardous.

The operation of any power tool can result in foreign objects being thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields before commencing power tool operation.



# GETTING TO KNOW YOUR ATLAS UNIVERSAL COMPOUND VISE



Model No. 1614

## TABLE OF CONTENTS

|                            |     |
|----------------------------|-----|
| MOUNTING INSTRUCTIONS..... | 2   |
| GENERAL OPERATION.....     | 2   |
| ADJUSTMENTS.....           | 2   |
| LUBRICATION.....           | 2   |
| PARTS SECTION.....         | 3-4 |

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### INSTRUCTIONS FOR ORDERING REPAIR PARTS

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It is important to furnish the following information in addition to QUANTITY required.

1. PART NUMBER
2. PART NAME

ORDER REPAIR PARTS FROM  
CLAUSING SERVICE CENTER  
811 EISENHOWER DRIVE, SOUTH  
GOSHEN, INDIANA 46526

The 1614 Universal Compound Vise may be used for all types of accurate indexing, layout, boring, light die sinking and cavity work, and is built rigidly to permit adapting drill presses to light milling operations. It may also be used on the surface grinder, shaper, milling machine and lathe.

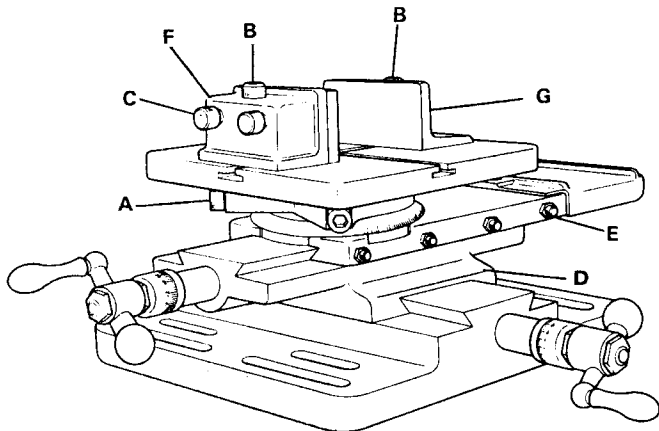


FIG. 1 — 1614 UNIVERSAL COMPOUND VISE

## MOUNTING INSTRUCTIONS

1. First, remove the rust proof coating from the machined surfaces with a kerosene soaked cloth.
2. Place the four cap screws, packed with the vise, in diagonal corners of the vise base and bolt securely in the center of the drill press table.

The vise may be mounted in a similar manner on the shaper or milling machine or may be held on the surface grinder with the magnetic chuck.

The vise and table assembly may be used alone for boring operations on the Atlas lathe. Remove the upper swivel of the compound from the lathe carriage and replace with the table assembly from the Compound Vise.

## GENERAL OPERATION

**FEED SCREWS**—The two feed screws move the vise table on gibbed dovetail slides in either a transverse or crosswise direction. The amount of travel in either direction may be accurately controlled by the use of the dials next to the ball cranks which are graduated into thousandths of an inch.

**WISE TABLE**—The vise table may be rotated to any angle desired by loosening the two screws "A". The circular dial just below the table is graduated through 180° (90° to right and left of zero).

The "T" slots in the top of the table are for positioning the vise jaws or may be used for holding work that is too large or awkward for the vise by the use of "T" bolts and hold downs:

**WISE**—The vise jaws "F" and "G" may be moved along the "T" slots in the table and clamped in position with screws "B". The clamping action of the vise is then accomplished by tightening screws "C".

## ADJUSTMENTS

**GRADUATED FEED SCREW COLLARS**—The two graduated collars or dials on the feed screws may be re-set to zero at any time. Loosen the small set screw in the collar, turn collar so the "O" mark is in line with the witness mark and retighten the set screw.

**FEED SCREWS**—Excessive end play or backlash which may develop in the feed screws may be removed in the following manner:

1. First loosen the lock nut located on the outside of the ball crank handle.
2. Loosen the set screw in the graduated collar.
3. Make the adjustment by turning the nut located between the crank handle and the graduated collar; by turning it to the right the end play will be reduced, by turning it to the left it will be increased.
4. After satisfactory adjustment has been made, retighten the lock nut securely.

**DOVETAIL SLIDES**—Any play or looseness that may develop in the dovetail slides may be removed by adjustment of the gib screws "D" and "E". Loosen the lock nuts on the gib screws, adjust all the screws bearing on the gib so they have the same tension and retighten the lock nuts. A snug but not tight fit is desirable.

## LUBRICATION

Your Universal Compound Vise should receive as much care and attention as any fine tool.

- (a) All surfaces of the dovetails should be kept clean and oiled at all times. Use a good grade of S.A.E. No. 10 motor oil.
- (b) The feed screw bearings should receive two or three drops of oil at frequent intervals.
- (c) The threads of both feed screws should be brushed clean and oiled their entire length periodically.

If the vise is not to be used for some time, a film of oil or grease should be applied to all machined surfaces, such as the table top, T slots, dovetail slides, etc., to prevent rusting.

# PARTS LIST FOR ATLAS UNIVERSAL COMPOUND VISE 1614

| KEY NO. | PART NO. | DESCRIPTION  | KEY NO. | PART NO. | DESCRIPTION                                       |
|---------|----------|--|---------|----------|---|
| 1       | W68-3    | Jaw, Clamp   | 19      | 050-049  | Base, Universal Vise                              |
| 2       |          | 3/8 - 16 x 1 Soc. Hd Cap Screw (4 Req'd)           | 20      |          | 1/2 - 13 Hex Jam Nut (4 Req'd)                    |
| 3       |          | 3/8 - 16 x 1-1/2 Soc. Hd Cap Screw (2 Req'd)       | 21      |          | 7/16 Plain Washer (4 Req'd)                       |
| 4       | 1614-10  | Jaw Face and Pins Assembly                         | 22      |          | 1/2 - 13 x 1-1/2 Square Hd. Mach Bolt (4 Req'd)   |
| 5       | W68-4    | Jaw  | 23      |          | 1/4 - 20 x 3/8 Soc. Set Screw (Cup Pt) (2 Req'd)  |
| 6       | W68-7    | Nut, Jaw Clamp (2 Req'd)                           | 24      | 702-037  | Sleeve, Feed Screw                                |
| 7       |          | # 10 - 24 x 1/2 Flat Hd Mach Screw                 | 25      |          | # 8 - 32 5/16 Hdless Set Screw (Cup Pt) (2 Req'd) |
| 8       | 9-37A    | Guard, Carriage Slide                              | 26      | 10F-62   | Dial, Graduated (2 Req'd)                         |
| 9       |          | 1/4 - 20 x 3/8 Rd Hd Mach Screw (2 Req'd)          | 27      |          | 3/8 - 24 Hex Jam Nut (2 Req'd)                    |
| 10      | 10-301   | Swivel, Compound Rest                              | 28      | L2-61    | Crank, Ball (2 Req'd)                             |
| 11      |          | 1/4 - 28 x 7/8 Hdless Set Screw (Dog Pt) (6 Req'd) | 29      | 9-104    | Handle, Crank (2 Req'd)                           |
| 12      | 10-225   | Nut, Gib Screw (6 Req'd)                           | 30      | 10D-262  | Nut, Ball Crank (2 Req'd)                         |
| 13      | L2-86    | Washer, Feed Screw (2 Req'd)                       | 31      | W68-12   | Screw, Carriage Slide Nut                         |
| 14      |          | #404 Woodruff Key (2 Req'd)                        | 32      | 9-87     | Shim (As Req'd)                                   |
| 15      | 696-077  | Screw, Feed (2 Req'd)                              | 33      | 345-077  | Gib, Combination                                  |
| 16      | W68-1    | Slide, Carriage                                    | 34      | 10-309   | Pin, Swivel Lock (2 Req'd)                        |
| 17      | 345-078  | Gib, Carriage Slide                                | 35      | 937-026  | Wrench, Allen                                     |
| 18      | 537-026  | Nut, Carriage Slide (2 Req'd)                      | 36      | W68-2    | Table   |

ATLAS UNIVERSAL COMPOUND VISE 1614

