

## K-16: Change/Dress Wheel

### SAFETY FIRST

- Follow all Caterpillar facility safety standards when performing this task.
- Be aware of rotating equipment and unexpected machine movement.

### EQUIPMENT

- internal grinder
- dial indicator (tenths)
- setup equipment (required holding device)
- shop towel
- measuring equipment (micrometers, calipers, etc.)
- grinding wheel
- radius dressing tool (if necessary)
- arbor
- blueing, marker, or crayon

### RESOURCES

- dimensional print
- process sheet

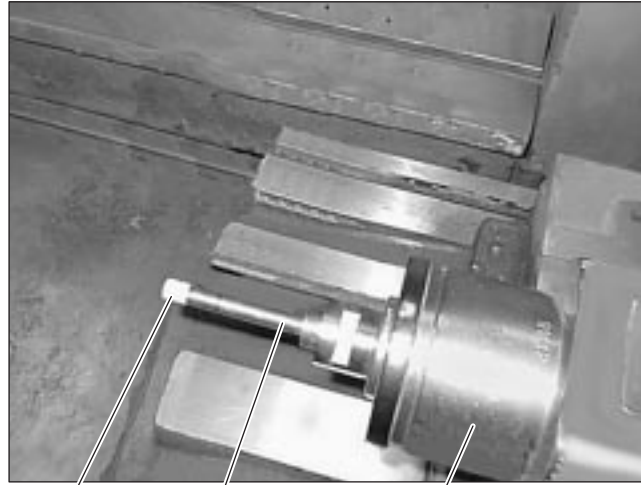
### Dress Wheel

- 1. Select the wheel and the arbor.**
  - Ask for assistance from a qualified journeyman.
  - Read the print and process sheet to determine the part needs.
- 2. Mount the wheel and arbor into the wheel head.**

**Note: The wheel and arbor threads are left handed.**



- Thread the wheel and arbor into the wheel head until they are wrench-tight. Be careful not to cross the threads.



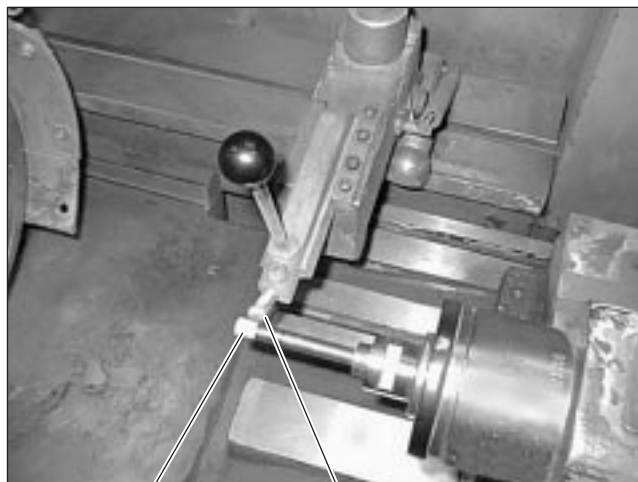
Wheel  
Arbor  
Wheel head

### 3. Inspect the diamond.

- Visibly verify that the diamond is raised above the mounting and does not need replacement. Ask a journeyman for assistance, if necessary.

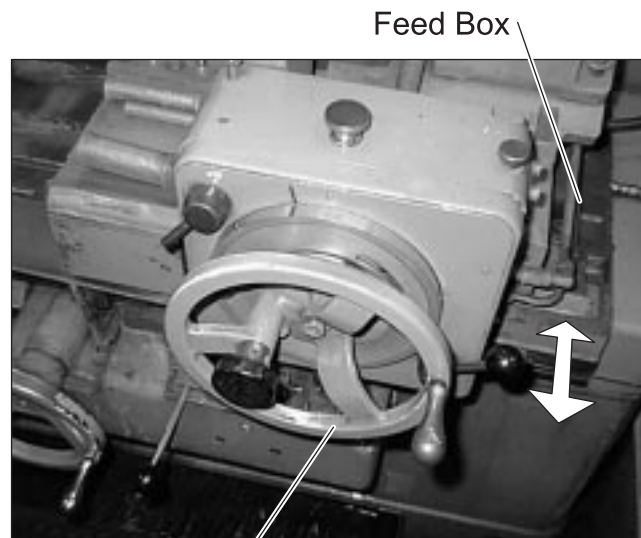
### 4. Move the wheel to the diamond.

- Position the wheel, with the hand wheel, as close as possible to the diamond without actually touching it.



Wheel  
Diamond

- Turn the cross slide (feed) box adjusting wheel clockwise, as shown below, to position the wheel to touch the diamond.



Feed Box Adjuster

### Adjust the Wheel to the Diamond

#### 5. Zero the feed dial.

- Set the feed dial to zero by turning the dial on the cross table adjustment wheel until the zero marks match, as shown below.
- Back wheel head away with the hand wheel.



### Zeroing the Feed Dial

6. **Start the wheel.**
7. **Dress the wheel.**
  - Position the wheel, slowly, to barely make contact with the diamond. Rotate the table hand wheel back and forth.
  - Turn the black dial to set .005-.010 inches when dressing a new wheel. Decrease amount by half as the wheel becomes true. Move the wheel back and forth, repeat until wheel is dressed clean.
  - Back off wheel head with hand wheel.
8. **Position diamond in the storage position.**



Storage Position

**Dressing Diamond Storage Position**

**Note: Install the radius dressing-tool, if the part requires forming a radius.**



**Radius Dressing-Tool**