

## G-03: Bore Hole

### SAFETY FIRST

- Follow all Caterpillar facility safety standards when performing this task.
- Be aware of spinning and thrusting spindle and sudden movement by the work head.

### EQUIPMENT

- indicators (1/10000 - .0001)
- Jo blocks (gage blocks)
- micrometers (inside/outside/depth)
- Vernier calipers
- hole gages

### RESOURCES

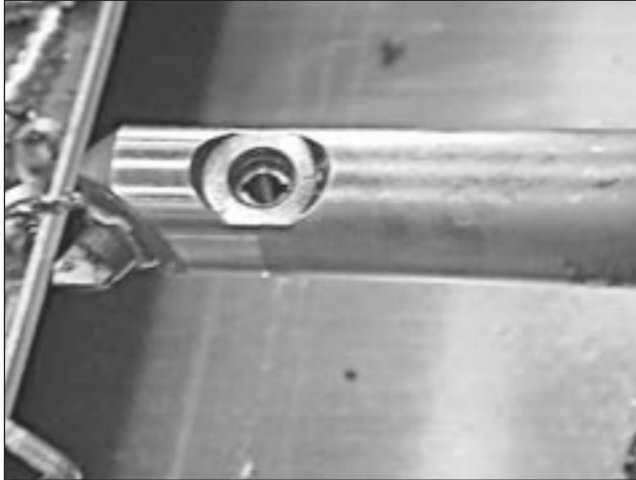
- manufacturer's manuals
- Machinery Handbook
- print

### Bore Hole (DevLieg)

1. **Verify the piece setup.**
2. **Verify that the piece is located.**
3. **Drill a pilot hole, following the Toolmaker procedures.**
  - Step drill the hole, if needed.
4. **Verify the zero setting.**

**5. Select the boring bar.**

- Select the boring bar according to the requirements on the print.

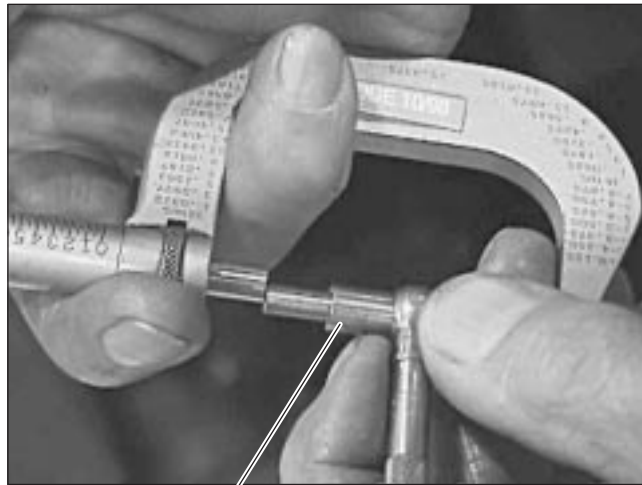
**6. Check the boring bar tip for sharpness and installation.**

- Sharpen and adjust as needed.

**7. Select the required arbor to fit the boring bar.****8. Install the boring bar into the arbor.**

- Set the speeds and feeds according to Toolmaker standards.

9. Address the boring bar to the hole.
10. Begin boring the hole.
11. Inspect the chip for uniformity as the boring bar cuts the hole.
  - Adjust speeds and feeds, as necessary.
12. Measure the hole to verify print requirements.



Telescoping Gage