

BD-02: Check and Adjust Table Squareness with Axis Travel (Sundstrand)

SAFETY FIRST

- Follow all Caterpillar facility safety standards when performing this task.

EQUIPMENT

- Maintenance Mechanic hand tools
- dial indicator (capable of reading .0001")
- dial indicator extension bar

RESOURCES

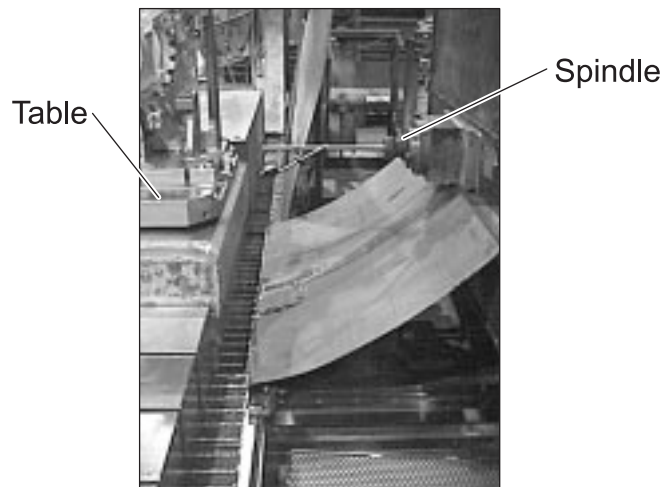
- Sundstrand Maintenance Mechanic Manual

Check and Adjust Table Squareness with Axis Travel (Sundstrand)

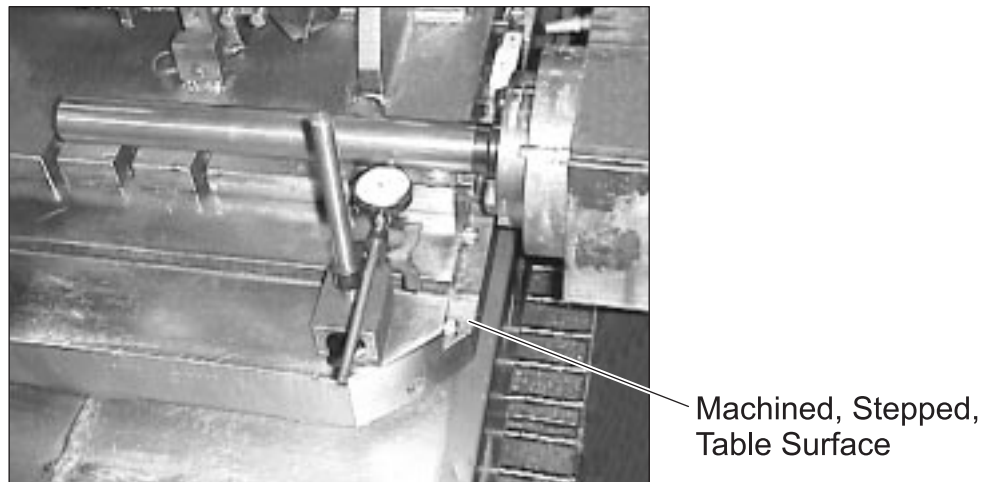
1. Install the dial indicator.

- Remove any tool currently in the spindle.
- Install the extension rod for the indicator.
- Attach the indicator to the extension rod.



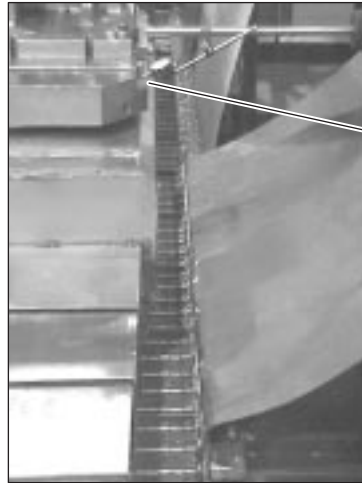
2. Move the spindle clear of the table.**3. Position the table with the machined, stepped surface to measure the X-axis.**

- The keyway on the Sundstrand is not as accurate as the machined, stepped surface for fixture location.



4. Move the Z-axis into position.

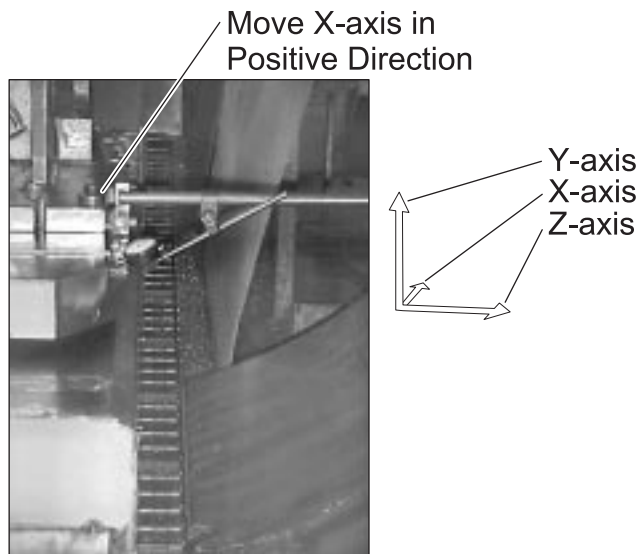
- Carefully move the indicator to the near corner of the table, just making contact with the table edge.



Move Until Indicator
Makes Contact with
Table Edge

5. Zero the indicator.**6. Measure the table squareness.**

- Move the X-axis in the positive direction to measure the table surface on the far corner.



7. Compare the readings.

- If the indicator readings exceed .001 inch in either direction, adjust the table.

8. Remove the covers to obtain access to the table mounting bolts.

Remove Covers to
Provide Access to
Table Mounting Bolts

**9. Loosen the eight mounting bolts.****10. Adjust the table according to the indicator readings.****11. Measure and adjust the table, as needed.**

- Continue adjusting the table until the tolerance is within .001 inches.

12. Tighten the table bolts.**13. Replace the covers.**

- Reseal covers with RTV.

14. Verify X- and Z-axes and adjust as shown in the task BD-07: Set Home.

- Any adjustment to the table requires resetting home.

15. Verify machine operation.