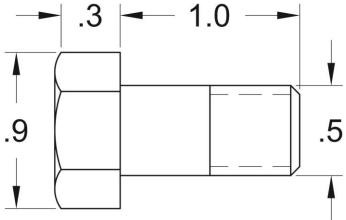
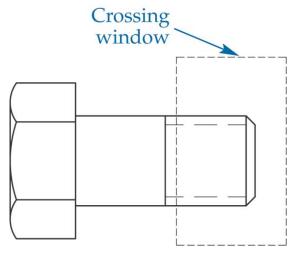
## **AutoCAD and Its Applications BASICS**

## **Exercise 26-3**

- 1. Continue from Exercise 26-2 or start AutoCAD.
- 2. Start a new drawing from scratch or use a decimal-unit template of your choice. Save the drawing as EX26-3.
- 3. Draw a bolt with a 1" shaft, as shown in the first figure.



- 4. Create a block named BOLT from the objects and open it in the **Block Editor**.
- 5. Insert a linear parameter and label it SHAFT LENGTH. Pick the beginning of the bolt shaft as the start point and the end of the shaft as the endpoint.
- 6. Assign a stretch action to the linear parameter. Associate the action with the parameter grip at the end of the shaft.
- 7. Create a crossing window around the end of the shaft, as shown.



8. Select the end of the shaft, the threads, and the edges of the shaft as the objects to which the action applies.

- 9. Enter the **Test Block Window**.
- 10. Select the linear parameter grip at the end of the shaft. Use the grip to stretch the length of the shaft. Notice that the shoulder (unthreaded part) of the bolt remains the same length, but the threaded length of the bolt increases.
- 11. Close the **Test Block Window** and make changes to the block if the shaft did not stretch as expected.
- 12. Retest the block if you made changes.
- 13. Save the block and exit the **Block Editor**.
- 14. Insert the block into the current drawing.
- 15. Enable dynamic input if it is not already enabled. Select the block to display grips. Select the linear parameter grip at the end of the shaft, type 1.5 in the distance field, and press [Enter].
- 16. Resave and close the file.
- 17. Keep AutoCAD open for the next exercise, or exit AutoCAD if necessary.