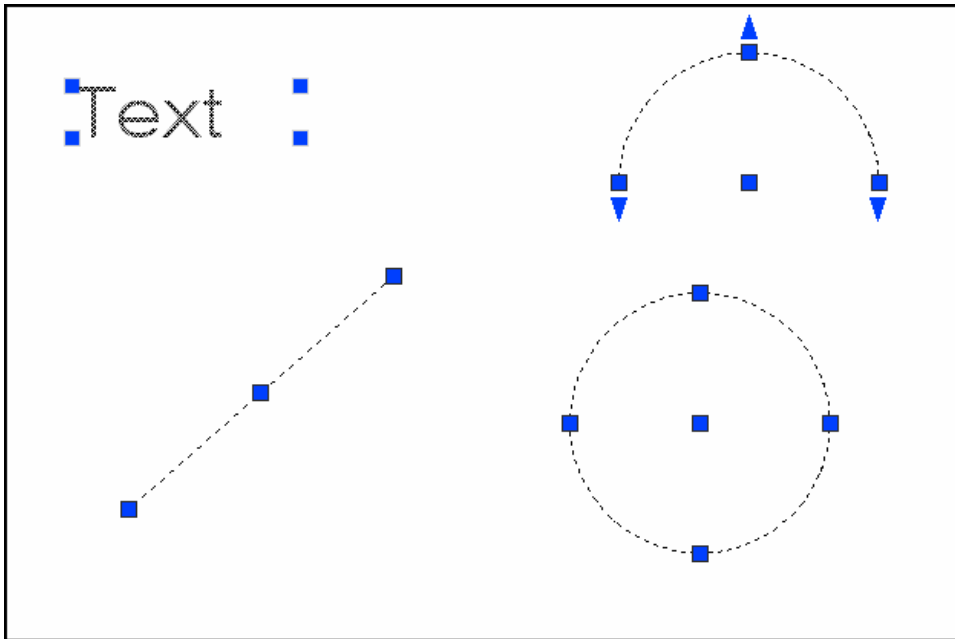# Chapter 22
Grips

Grips Overview 22.1

Entity Grips

Entity grips allow AutoCAD drawings to be edited in an entirely new way. Without entering any edit commands, you can stretch, move, copy, rotate, scale, and mirror entities. You can also snap to geometric features such as endpoints, midpoints, centers, quadrants without entering object snaps.

Grips are the small squares that appear when objects are selected with the crosshairs directly from the command prompt.

Unselected Grip

An unselected grip is one that has not yet been picked with the cursor, but is an item in the current selection set (it is highlighted). Pick an object to see grips.
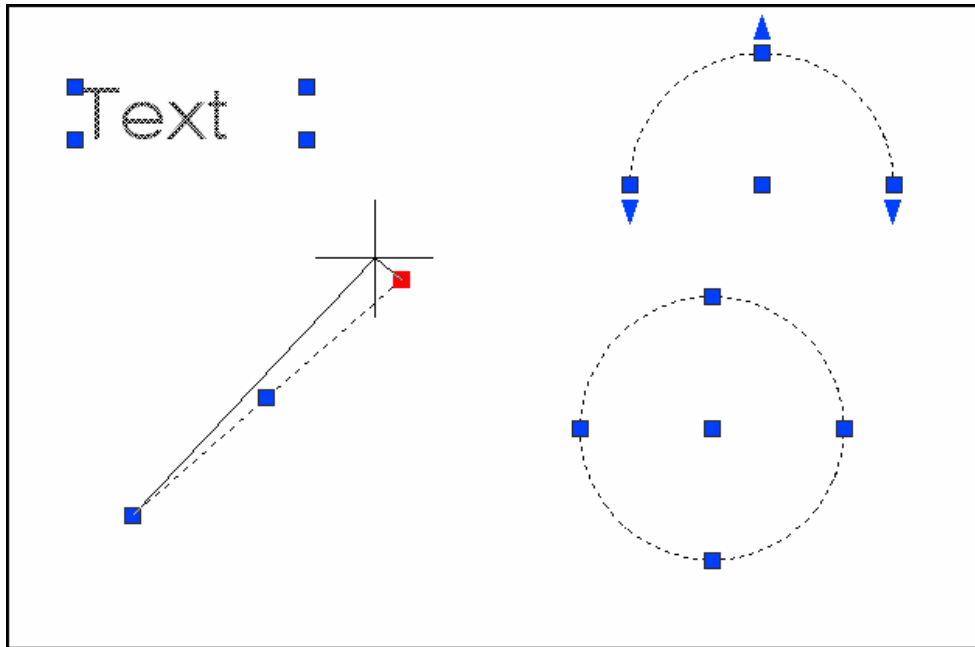
Selected Grip

A selected grip is the grip box that you select with the cursor to define the base point to edit from. It has a solid filled color and is the grip location that editing is done from.

The red grip at the line endpoint is the selected grip

Cancelling Grips

1. **Press** ESC to clear GRIPS.
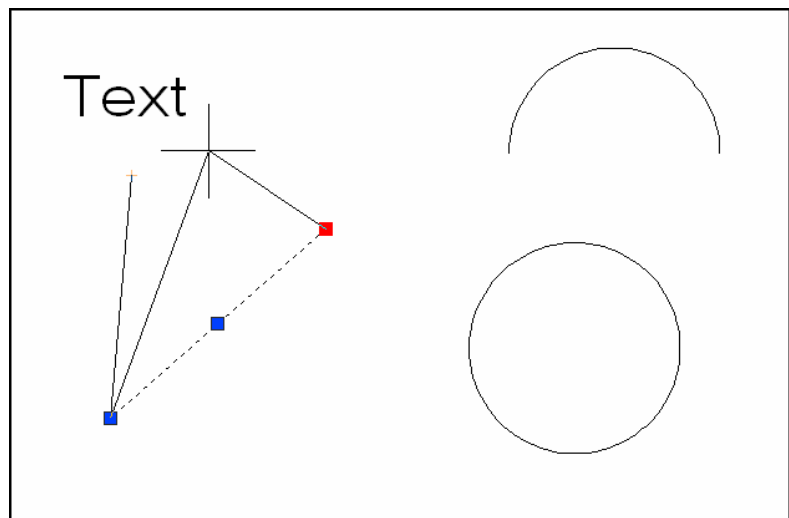
    TIP: If grips are visible on an object, pressing the DEL key or ERASE will delete the selected object.

AutoCAD 2D Tutorial

How To Use Grips 22.2

1. **Pick**   The objects you want to edit.

2. **Pick**   One of the grips to use as the base grip.

3. **Press**   the SPACE BAR, or RIGHT MOUSE
             BUTTON to cycle through the grip
             modes.

                        or
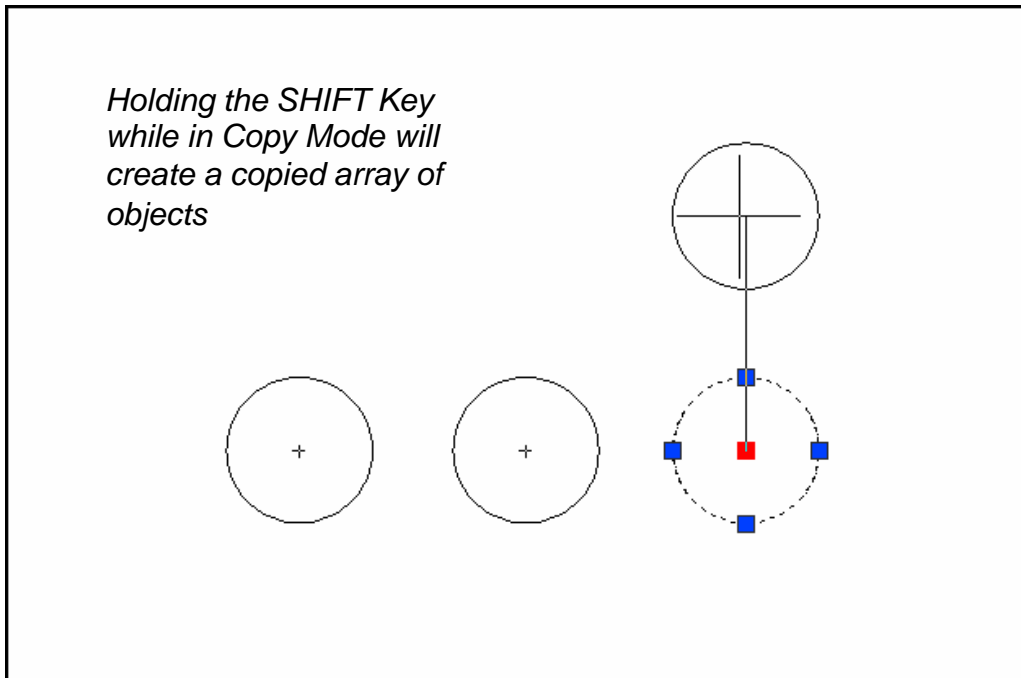
4. **Type**   The keyword for the mode you

             want: Stretch (ST)   Stretch the

             objects. Move (MO)   Move the

             objects. Rotate (RO)   Rotate

             the objects. Scale (SC)   Scale

             the objects. Mirror (MI)

             Mirror the objects.

5. **Drag**   The mouse to perform the operation.

6. **Type**   C to create a new copy of the
             selection set enter C.

7. **Type**   X to exit Grip mode.

AutoCAD 2D Tutorial
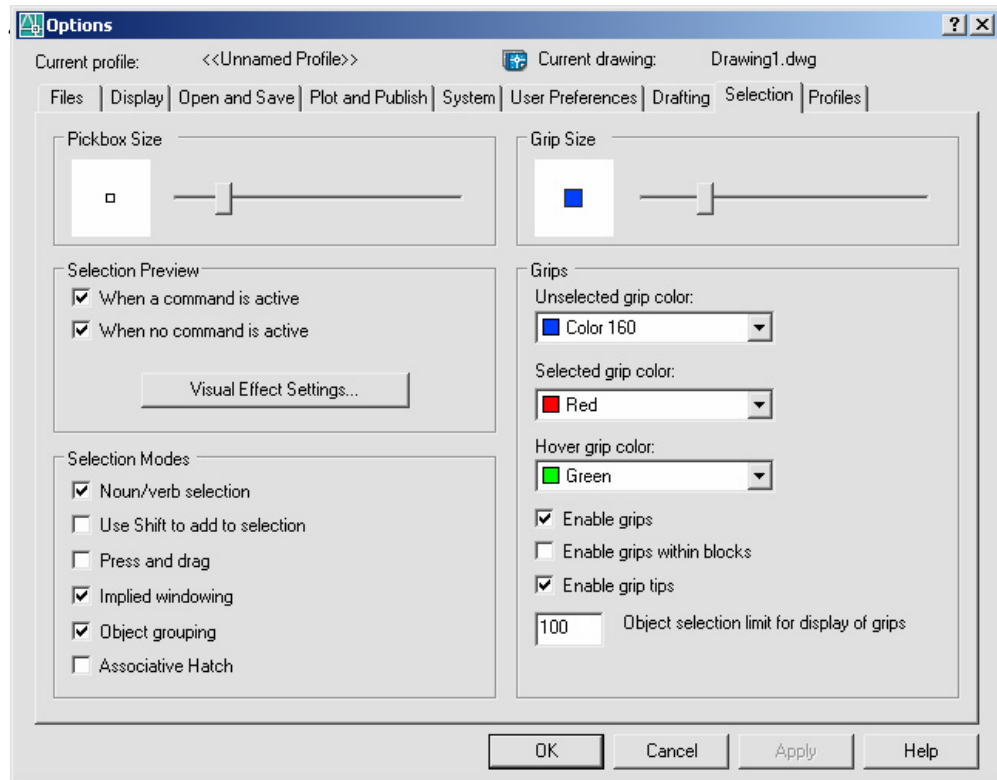
Copy Multiple with Grips 22.3

If you use the COPY option with any one of the edit commands, a temporary auxiliary snap grid is created. To invoke the grid, hold the SHIFT key after specifying the location of the first copy. AutoCAD then uses the X and Y offsets from the original entity to define the snap, grid, and rotation of the remaining entities.

Holding the SHIFT Key while in Copy Mode will create a copied array of objects

Grips Settings (DDGRIPS Command) 22.4

1. **Choose**   Tools, Options...

    or

2. **Type**   DDGRIPS at the command

    prompt.

    Command: **DDGRIPS**

3. **Choose**   the Selection tab from the dialog box.

Enable Grips

Enables the display of grips. AutoCAD stores this setting in the GRIPS
system variable.

Enable Grips Within Blocks

Enables the display of grips on objects within blocks. If you disable this setting (but have Enable Grips selected), blocks are assigned one grip at their insertion point. Disable this setting to work on blocks with many objects. AutoCAD stores this setting in the GRIPBLOCK system variable.

Unselected

Sets the color of unselected (unfilled) grips. Choosing this button displays the Select Color dialog box, in which you set the grip color. AutoCAD stores the color in the GRIPCOLOR system variable.

Selected

Sets the color of selected (filled) grips. Choosing this button displays the Select Color dialog, in which you set the grip color. AutoCAD stores the color in the GRIPHOT system variable.

Grip Size

Changes the size of grips. To adjust the size of grips, move the slider box left or right. AutoCAD stores the pixel size (1-255) of the grips in the GRIPSIZE system variable. Changes the size of grips. To adjust the size of grips, move the slider box left or right. AutoCAD stores the pixel size (1-255) of the grips in the GRIPSIZE system variable.