



April 2006



## CADCLIP - AutoCAD R14 - 2006 - Grip Tricks

This tutorial is accompanied with a Video CADCLIP which can be downloaded for free at [www.dgcad.com](http://www.dgcad.com) > AutoCAD R14 - 2006 Grip Tricks

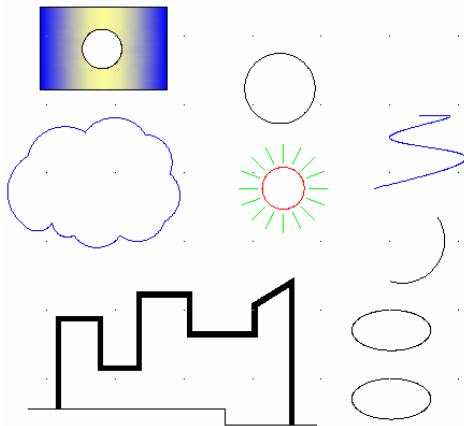


Diagram A

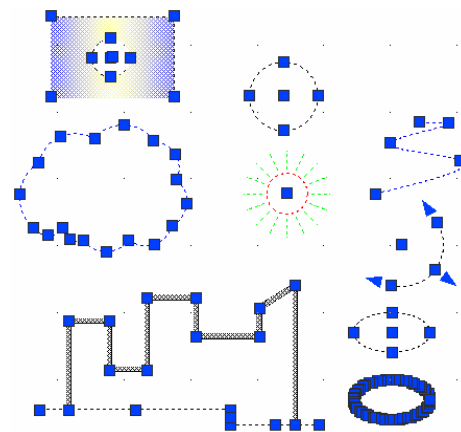


Diagram B

If grips are enabled you simply click the object(s) to activate the grip(s). See diagram B. All objects have some sort of grips on it. In the Options dialog box click on Selection to see the Grips settings.

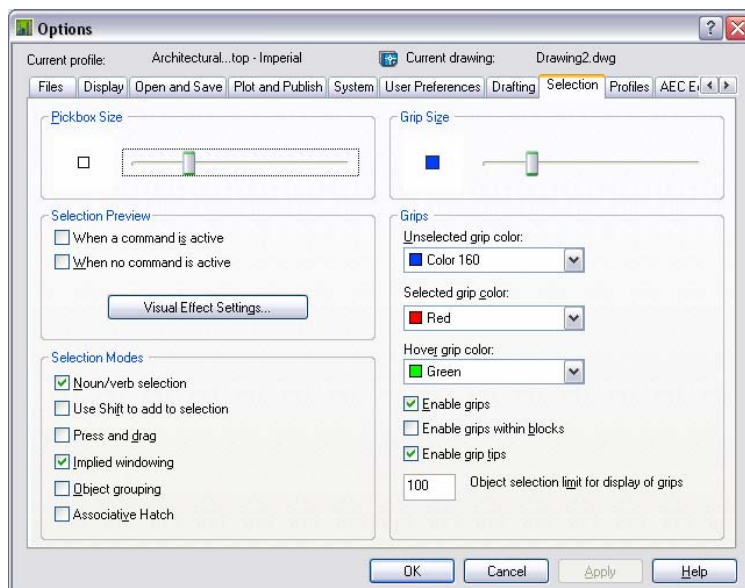


Diagram C

Lines have endpoint grips and midpoint grips, polylines have segment ends, circles have quadrants and a center, blocks have the insertion, a revcloud has endpoints and bulge points, etc. You can enable grips within blocks.

Note a few options in the Options > Selection Dialog box.

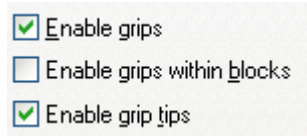


Diagram D

If grips are enabled, when an object is selected the 'Cold' grips highlight (blue). Once you select a grip with your cursor it becomes 'Hot' (red). These colors can be changed in the Options > Selection dialog box. Diagram C. Once a grip is hot you can do various actions.

Check the 'pickadd' setting. Diagram E. On the properties palette check the 'pickadd' toggle. This will allow you to select more than one object at a time without using the 'shift' key.

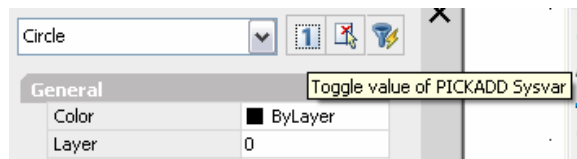


Diagram E

You can very quickly move or copy an object accurately by using grips and not having to enter a command. Diagram E.

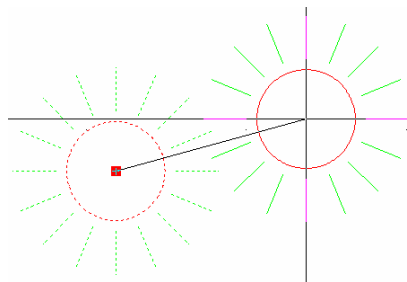


Diagram F

**Use Osnaps in conjunction with Otracking and Grips !**

**Use the TAB to toggle thru the local osnaps as you hover over the geometry.**



Diagram G

Each object has it's own grips and can behave a little differently depending on the object type and the grip selected. You can enable grips within blocks as well. Text grips will vary depending on if it is Mtext or Dtext and also how the text is justified.

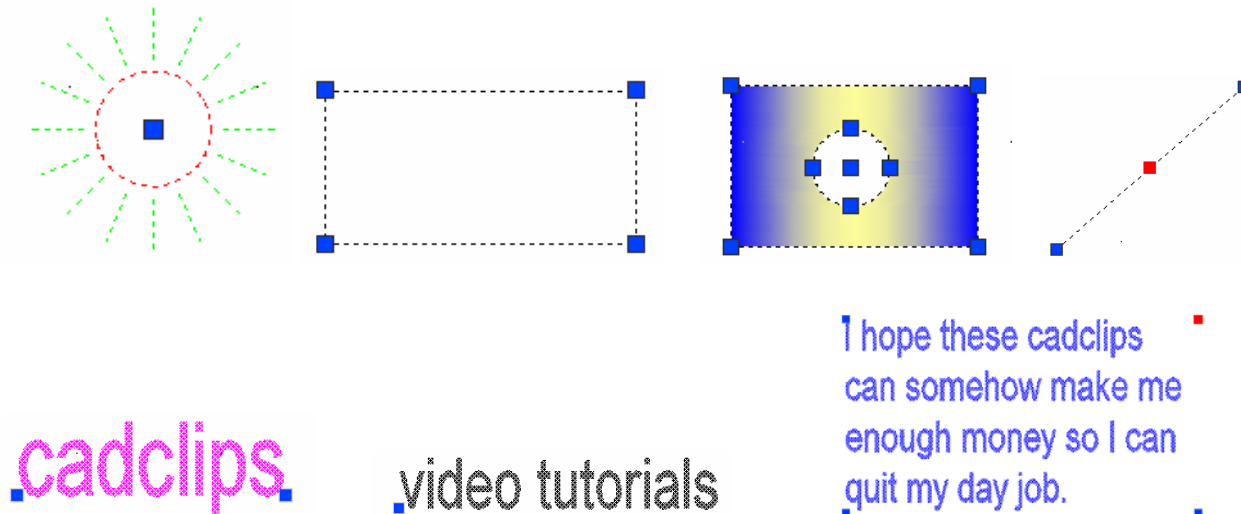


Diagram H

Once a grip is hot, hitting the 'Spacebar' or 'Enter' keys will toggle through 5 actions. Stretch, Move, Rotate, Scale and Mirror. Notice that there is no 'Copy' action. That is because Copy is a subcommand of Move. In fact all actions have subcommands. See Diagram I.

```

** MIRROR **
Specify second point or [Base point/Copy/Undo/eXit]:

** STRETCH **
Specify stretch point or [Base point/Copy/Undo/eXit]:

** MOVE **
Specify move point or [Base point/Copy/Undo/eXit]:

** ROTATE **
Specify rotation angle or [Base point/Copy/Undo/Reference/eXit]:

** SCALE **
Specify scale factor or [Base point/Copy/Undo/Reference/eXit]:

** MIRROR **
Specify second point or [Base point/Copy/Undo/eXit]:

```

Diagram I

Once again depending on the object being gripped and the grip being selected will govern the behavior of the action. Sometimes Stretch is exactly like Move because you have selected the midpoint of a line or the center of a circle or the insertion of a block or piece of text. See video demonstration.

An undocumented feature is to use shift+click to make more than one Grip hot.

If you do not use the shift key you will automatically be routed into the Grip actions on the first hot grip. See Diagram J and demonstration. With multiple Hot Grips you can do more.

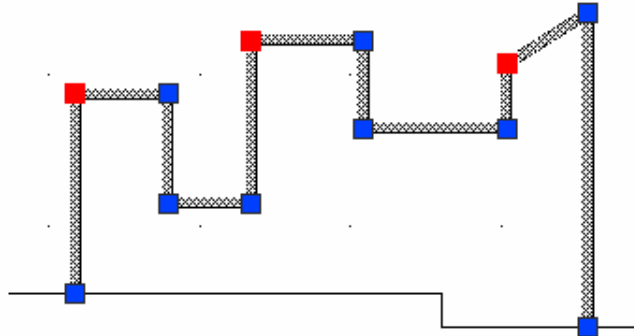


Diagram J

Dimensions also take full advantage of Grips. There are 3 functions of dimension grips. The 'text', the 'dimension line' location and the 'extension line' location. Changing the extension line location changes the length of the dimension. Depending on how your dimstyle is setup will depend on how the dimension text behaves with a gripped move. See diagram K.

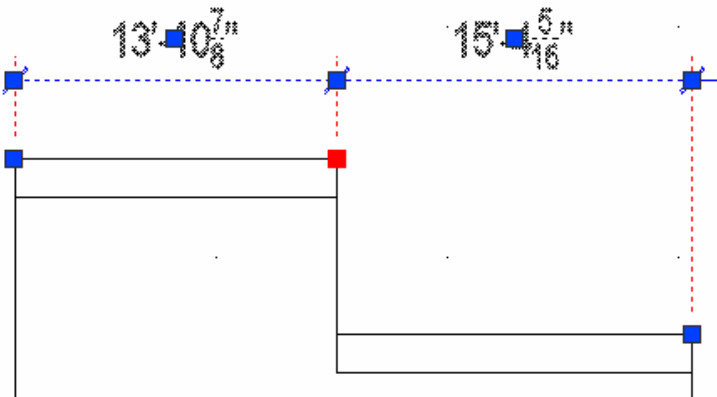


Diagram K

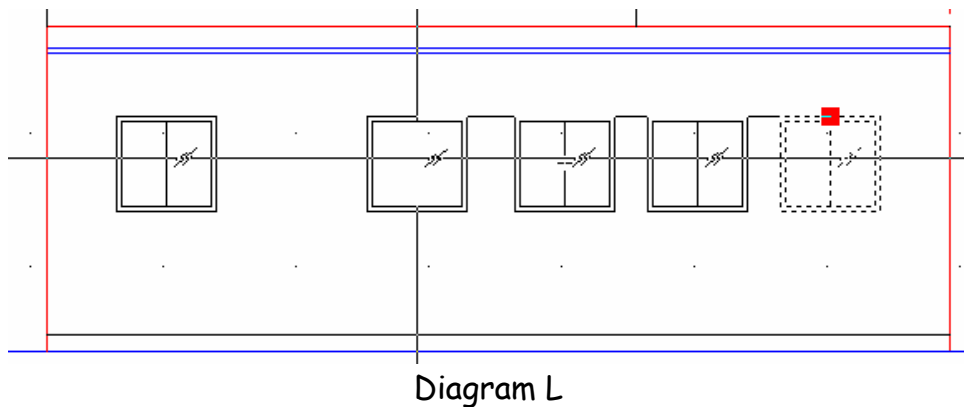
### GRIP TRICK

Use ctrl+hot grip to make 'Incremented Copies'. Diagram L.

Here's how.

1. Click on an object.
2. Click the cold grip that you want to use as a 'base point' and make it hot.
3. Hit the spacebar once to change to the 'move' option.
4. Type in a 'c' for the copy subcommand and hit enter.

5. Now drag the object in the desired direction, type in a number and hit enter.
6. (You have now set the copy increment.)
7. While still dragging hold in the ctrl key and move the mouse.
8. Notice that it is now jumping / incrementing based on the previous distance.
9. While still holding the ctrl key in click and place several new incremented copies.
10. While still in the same command, let go of the ctrl key, and drag to make a new copy somewhere else. You now have a new 'increment' set.
11. While still dragging hold the ctrl key in again and now you can place copies at the new incremented distance.



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