



# Tips & Tricks

**By: Tom Cote**

**Sr. Mechanical Eng/CAD Manager**

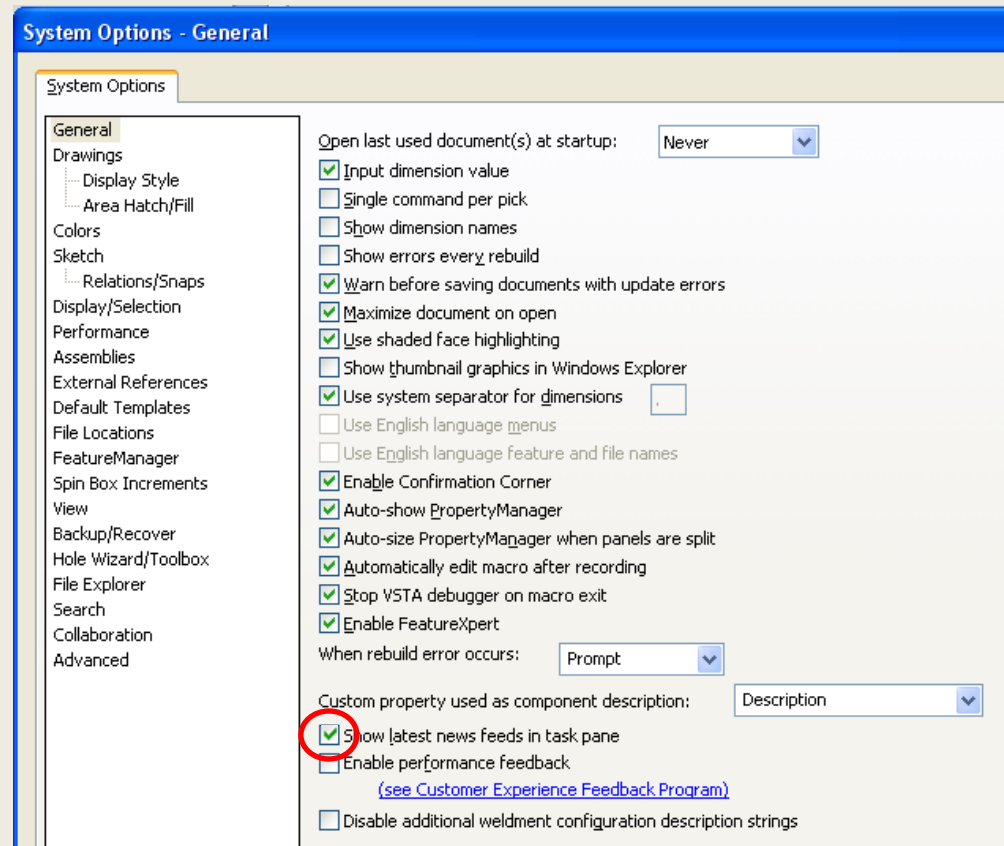
**Veeco Solar Equipment, Inc.**

**CMNC-SWUG Co-chair**



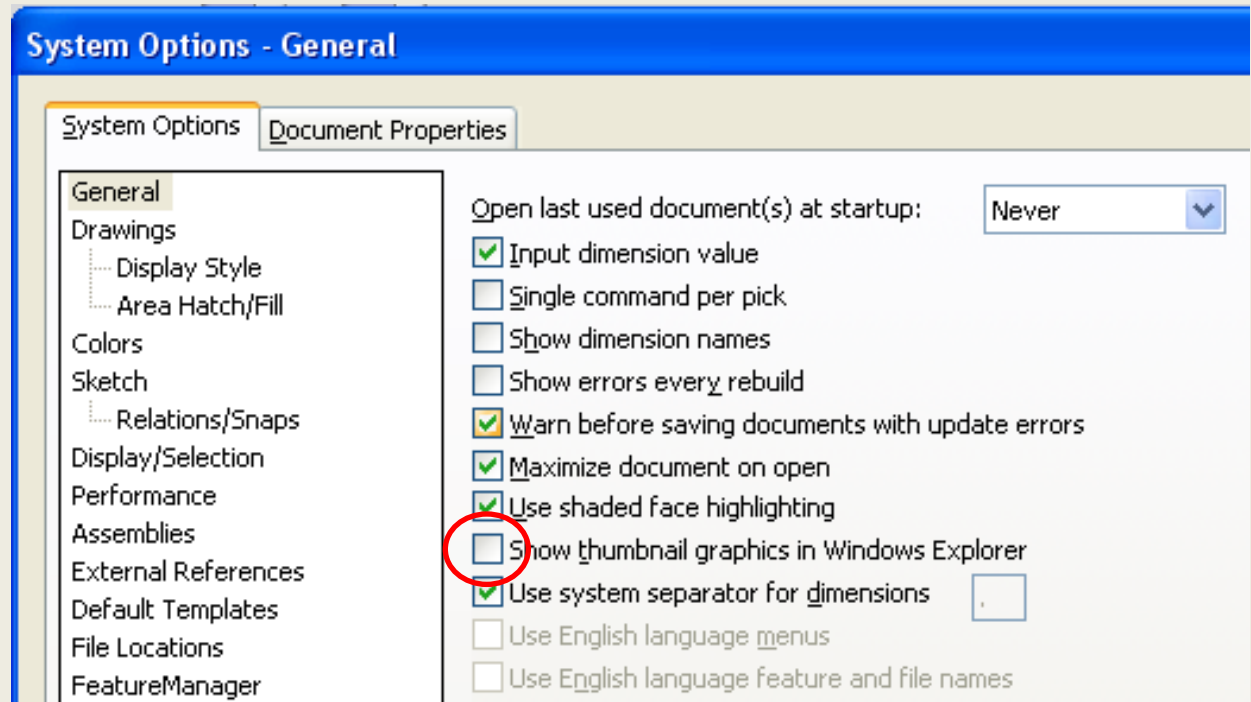
# General Setup

- Shut off RSS feeds from SolidWorks



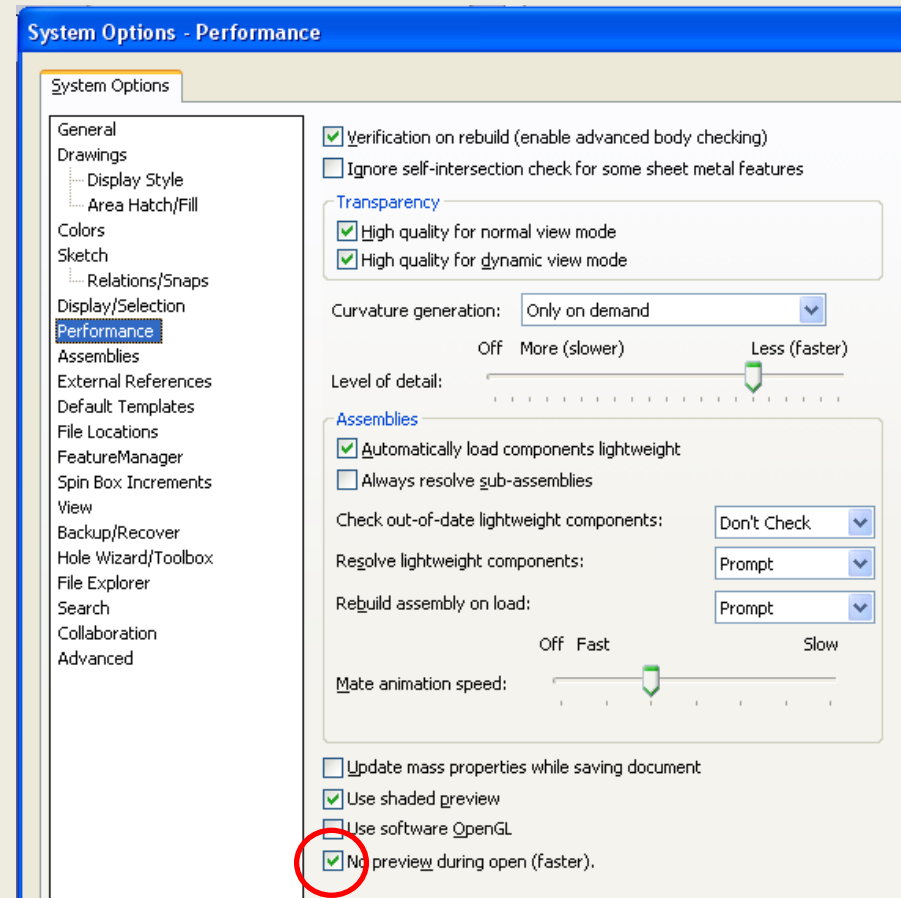
# General Setup

- Do not show thumbnail graphics in Windows Explorer



# General Setup

- No preview on open



# General

- Defrag often, at least once a week

The image shows a Windows XP desktop environment. On the left, the Start menu is open, displaying the user's name 'Tom Cote' and a list of applications including Internet Explorer, Microsoft Office 2003, and SolidWorks 2009. The 'System Tools' folder is expanded, and 'Disk Defragmenter' is highlighted. On the right, the Disk Defragmenter utility window is open, showing a table of disk volumes and their status.

Volume	Session Status	File System	Capacity	Free Space	% Free Space
(C:)	Analyzed	NTFS	112 GB	81.05 GB	72 %
(G:)		FAT32	3.84 GB	959 MB	24 %

Below the table, the utility displays two bar charts: 'Estimated disk usage before defragmentation' and 'Estimated disk usage after defragmentation'. The first chart shows a fragmented disk with many thin vertical bars of various colors (red for fragmented files, blue for contiguous files, green for unmovable files, and white for free space). The second chart shows a defragmented disk with a single large blue bar, indicating that files are now contiguous. At the bottom, there are buttons for 'Analyze', 'Defragment', 'Pause', 'Stop', and 'View Report', along with a legend for the bar colors.

# *Early Morning Lockup*

## **Here is the Problem:**

The first launch of SolidWorks locks-up  
everyday

Works fine after that

The issue manifests when HP Printer drivers are  
installed on the PC

# Early Morning Lockup

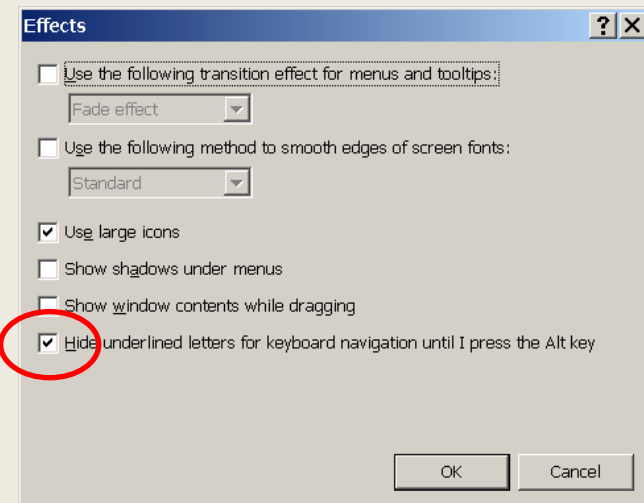
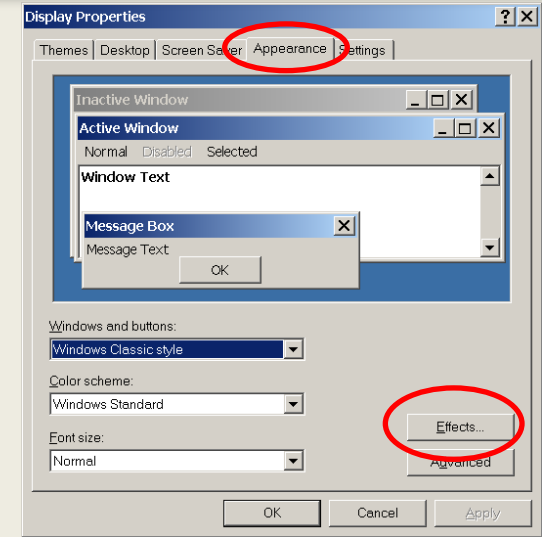
## The Solution:

Right click on the open desktop  
and select Properties

Appearance Tab

Select Effects

Disable “Hide underlined letters  
for keyboard navigation until  
I press the Alt key”





# Sketch

- Context sensitive menu's (shortcut bar), the "S" key
- This menu will change depending upon what you are doing inside of SolidWorks.
  - You can customize this menu, RMB in command area



# *Sketch*

- Trim & Extend in one command
- Hold the “Ctrl” key to avoid auto relations
- Delete a relation by selecting the icon and the delete key.

# Sketch

- Smart Dimensions, You can lock the dimension orientation by the Left Mouse Button



**Pointer is unlocked. Change the measurement and the position of the dimension.**



**Pointer is locked. Measurement is locked; dimension position is available.**

# *Sketch*

- When drawing a rectangle, circle, etc... you can toggle to a different one by the “a” key
- There is a new slot feature in SolidWorks 2009
  - Did anyone know the old way?
  - Equal Slots
  - Temporary Axis in assemblies
- Use the shift key when dimensioning to the Min or Max of a slot, two holes, etc...

# *Sketch*

- Create an angle dimension without centerlines.
  - You should consider design intent when using
  - Think of the next guy that will work on your model
- New in SolidWorks 2009, Negative equals a positive. You can now use negative numbers in your sketch.



# Parts

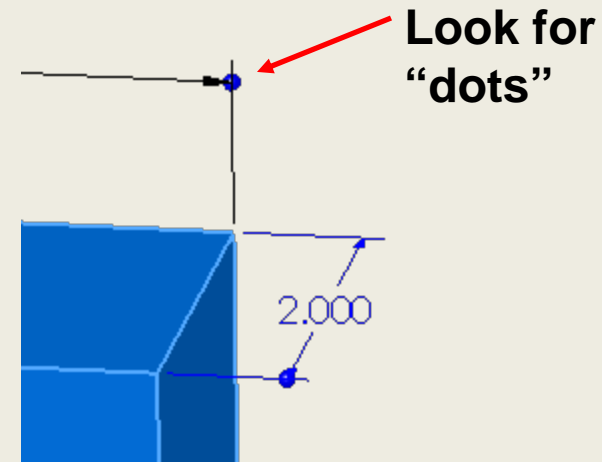
- Instant 3D, Enables the dragging of handles, dimensions & sketches to dynamically modify features.
  - Meaning, you can drag a feature to modify it even if is dimensioned (constrained)



**Shaded, Option is enabled**

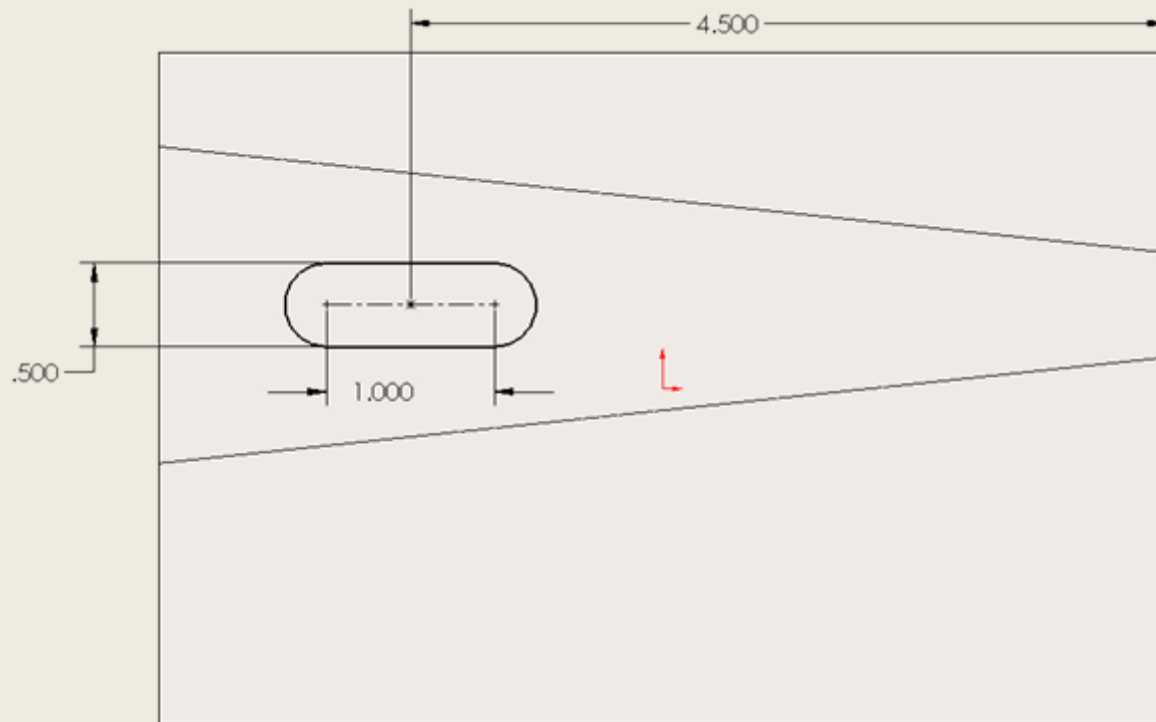


**Clear, Option is not enabled**



# Parts

- Use symmetry to locate a slot in a part



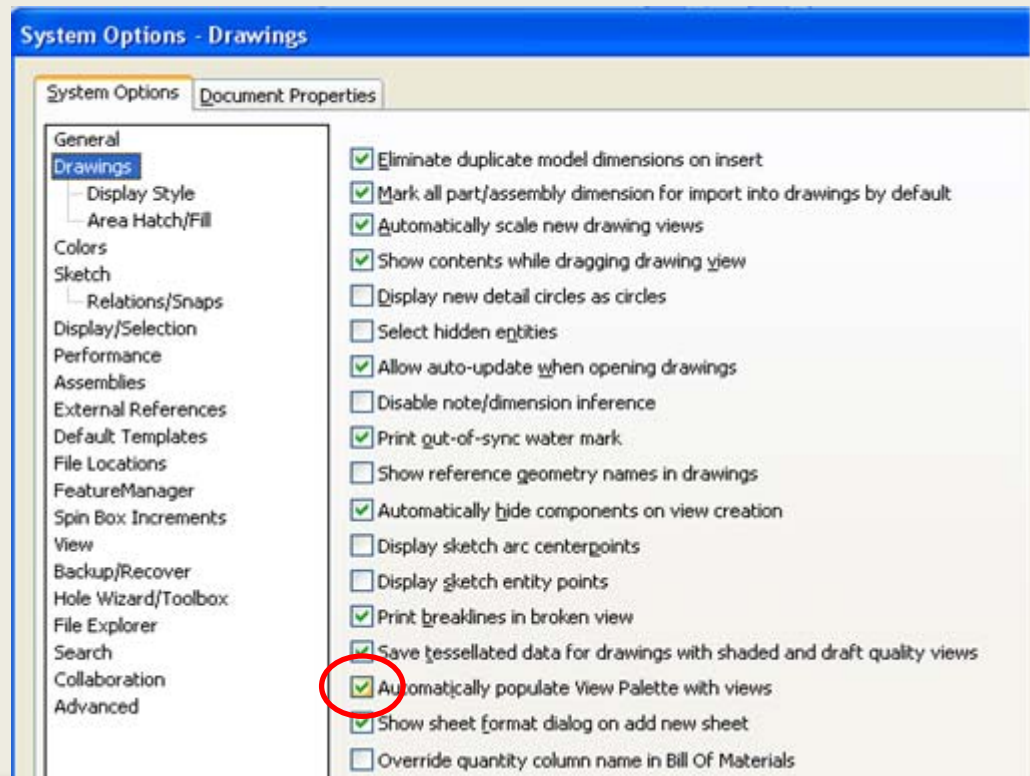
# *Parts*

- Copy feature by “Ctrl” and dragging to new location
- Copy a plane by “Ctrl” dragging
- When using the measure command and you want a new set contacts simply pick outside the area away from everything and it will clear the current selection.



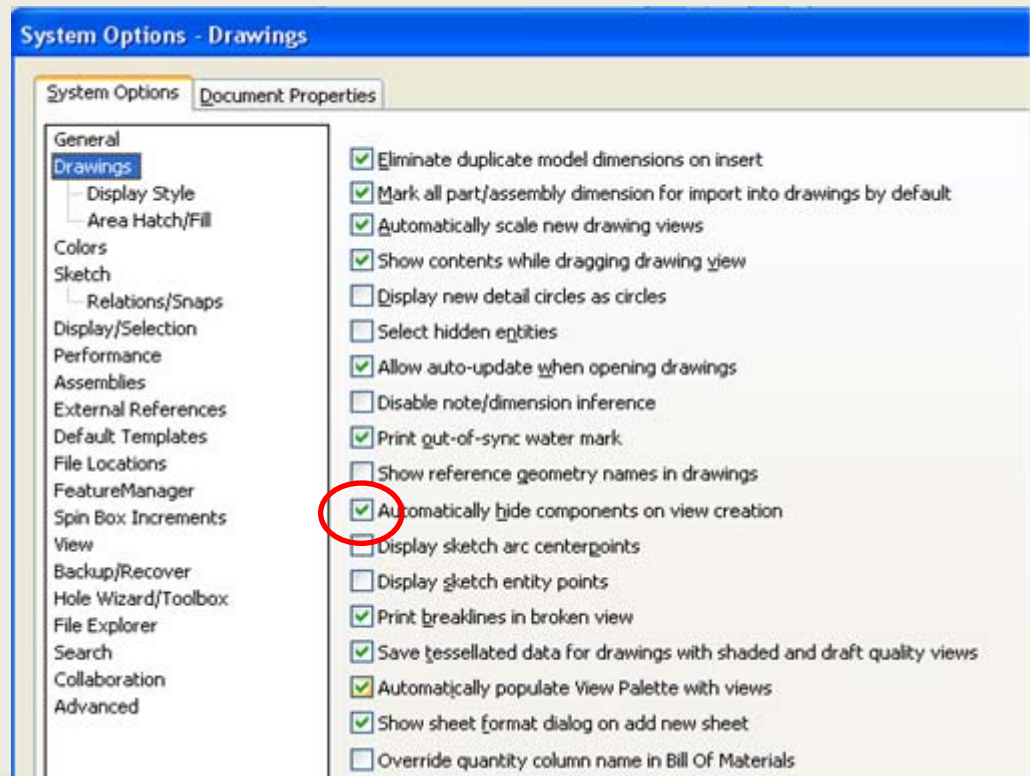
# Drawings

- View pallet can be very helpful but if you don't use it shut the feature off to help increase performance.



# Drawings

















- Automatically hide components on view creation.



# Drawings

- You can look for parts not ballooned in an assembly drawing by expanding the BOM on the drawing and looking at the symbol.

Symbol indicating if item has a balloon on drawing

10			13	44004595		SCREW, PAN
11			12	44004554		SETSCREW, C
12			11	44003879		SCREW, SHCS
13			10	44003685		HEX HD SCRE
14			9	44003345		1_2-13 X 1 FH
15			8	44001057		SCREW, SHCS
16			7	36001001		ELECTRIC CY
17			6	17002039	A	GUARD, ACTU

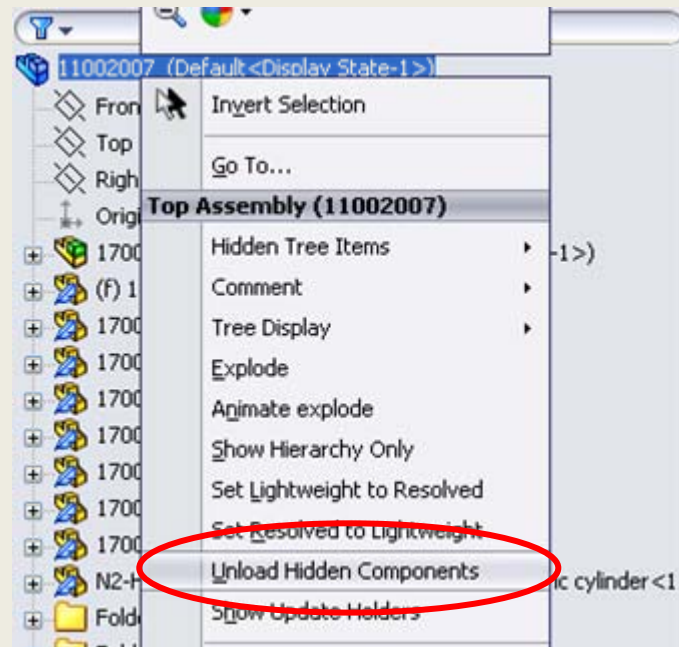
# *Drawings*

- Yes, you can copy custom properties from a part or assembly model to a drawing.
- Use the “Alt” key to grab and drag a drawing view
- Use the “Alt” key to grab and drag a table
- Use the “Alt” key when dimensioning, note or annotations to override the soft snap location.



# Assemblies

- To help in large assembly performance, RMB select at the top of the feature tree and select “Unload Hidden Components” from tree



# *Assemblies*

- “Ctrl” and drag a part or a sub-assembly to make a copy
- Use the “Alt” key and drag a part to quickly mate it into place. Use the Tab key to flip between aligned and anti-aligned.
- When reordering parts in the feature tree to stop the parts from trying to “drop” into a sub-assy hold the “Alt” key.

# *Assemblies*

- Use the “Ctrl” key to copy parallel planes.
- The more search paths that you have for finding parts that longer it takes to open an assembly.
- Use the Copy with Mates command to avoid recreating mates when copying parts. Works well on hardware.

# *Assemblies*

- Use multi-mates
- Use Multi-mate folders
- When making parts transparent in an assembly it becomes very difficult to pick the transparent part, don't worry though, you can toggle it on when you're working by holding down the 'SHIFT' key.

Questions????



Tom Cote

[tom@cmnc-swug.com](mailto:tom@cmnc-swug.com)