Visualizing Assemblies:

Using Autodesk Inventor Presentation Files
Level: Introduction / Intermediate
Learners: New to CAD and New to Inventor
• After today’s lesson, you will be able to add the following to your presentations
  □ Use Tweak-Rotate to add realistic motion
  □ Change the sequence of actions
  □ Organize Groups of tweaks for simultaneous action
  □ Modify the view to benefit the display of all the action
The result

Linked to Animation
1. INITIALIZE
- Start Inventor
- Verify project
  - Selected Project
  - Workspace
  - Libraries
  - Folder Options

a. Startup
b. Save - As

- Open file:
  - File name: [CableHanger.ipn]

- Save-As:
  - File name: [CableHanger.ipn]
  - Save as type: Autodesk Inventor Files (*.iam, *.idw, *.dwg, *.ipt, *.ipn, *.ide)
a. Playing the animation
a. First Tweak - Rotate

- Presentation
- Tweak Components
- Direction (z)
- Component(s)

- Rotate:
  - 6*16*360
  - 8*16*360
  - 10*16*360

- Clear

Linked to animation
a. Change Sequencing

- Presentation
- Animate
- More
  - Pick: Component
  - Move Up (Down)
  - Repeat
a. Groups

- Presentation
- Animate
- More
  - Pick: Components
  - Group
  - Repeat

- Shoulder Pattern 2-A - Inch 3/8 - 1... Tweak (57600.00 deg)
- Shoulder Pattern 2-A - Inch 3/8 - 1... Tweak (10.000 in)
a. Save

- Save the current file:
- Save-As: New file name
• Browser Filter  
  ◦ Sequence View  
• Explosion 1  
  ◦ Create Task  
• Resulting
c. Move Sequences

- Select <LMB>
  - Sequence1
- Drag
  - To Task1
- Repeat
- Result
d. Task 1: View and Camera

- View
- Task1
  - <rmb> Edit
- Set Camera
e. Task 2: View and Camera

- View
- Task 2
  - Edit
- Set Camera
• View
• Task 2
  ◦ Edit
• Set Camera

e. Task 3: View and Camera
f. Recording the animation

- Presentation
- Animate
  - Record
  - File name: FifthAnim.wmv
  - Network Bandwidth: Broadband
  - Image Size: 640x480
  - Auto Reverse

5/31/2013  Inventor - Presentations Plus -jcS
• View the following videos, do you recognize the following?
  □ Tweak-Rotate
  □ Sequencing
  □ Grouping
  □ Modified views / cameras
a. Application / Example

Linked to animation
b. Study this example
The previous video is being used to verify correct fit between the threaded bolt / hole, which of the following methods should be utilized

A. The presentation file animation.
B. The assembly file animation; utilizing a drive constraint with collision detection active.
Questions?
Did we accomplish the following
- A better way to communicate assembly details

Are you ready to apply each the following to new problems / Projects
- Tweak-Rotate
- Sequencing
- Grouping
- Modified views / cameras
A quick review

- Part Models
- Part Drawings
- Questions?
• Modify the presentation file for the arbor press project, include today’s topics
  ❑ Tweak-Rotate
  ❑ Sequencing
  ❑ Grouping
  ❑ Modified views / cameras
• Do not copy my solution
• Have a good weekend

Good, your assignment for Monday