New AutoCAD 2013 Layout Tools
(AutoCAD 2013)
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Autodesk incorporated some new and powerful tools within AutoCAD 2013. These tools are advanced detailing on the layout tab of AutoCAD. Remember when AutoCAD 2012 was released and Autodesk implemented the base view and projected views for Inventor parts, assemblies, and presentations? Well 2013 release has additional tools that work with Inventor and AutoCAD’s 3D objects. In this document I will walk you through some of these tools to show what they do and how you can use them to your advantage.

Base: (VIEWBASE) Instead of Inventor files only, you can now use the 3D objects within the active AutoCAD drawing regardless if they’re xref’d, blocks, or live content. In the model space, it prompts you to select individual objects or select all solids and surfaces.

If starting from a layout tab, it’ll select all solids and surfaces available in the model space and prompts for a location for the base view.

Section: (VIEWSECTION) Creates a section view of a selected AutoCAD or Inventor 3D model. If Infer Constrains is on, the section line is constrained to the parent view geometry based on the object snap points. If Infer Constrains is off, the section line is not constrained to the parent view geometry. However, you can add constraints manually after you create the section view.

You have 5 options for creating section views (Full, Half, Offset, Aligned, and From Object). That’s more options than Inventor offers when creating section views.

Detail: (VIEWDETAIL) Detail views are projected views from an existing drawing view, which shows a specific portion of the view at an enlarged scale.

When you launch AutoCAD 2013, you will notice a new tab “Layout”

The Layout tab is where all the magic happens. Again, in this document we’re only focusing on the Create View panel, but notice the “Styles and Standards” pane. You
can add and modify styles for your presentation needs but clicking the icons on the left of each style group.

Make sure you have a 3D model drawing live or xref’d into your drawing. While on the Model tab, you will notice most of the tools are greyed out, however, we’re going to click Base > From Model Space.

First, you’re prompted to select a 3D object, after the selection, hit enter.

Next, you’re prompted to choose a layout for the destination of your view, then hit enter.

Last, place the view and create one or two projected views.

Now that we have a base view, we can start sectioning these views...
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On the Ribbon, navigate to the Layout tab and locate “Section”

From the selection list, choose “Offset”

Now, draw a section line through the part.

Note: Once you're done drawing the section line, hit enter or right-click and choose exit. DO NOT hit “Esc”.

SECTION A-A
SCALE 1/32" = 1'-0"
Now that we have our views, you can modify them by changing the scale, identifiers “A”, text height, color, etc.

If you select one of the views, you will get a standard grip and selector grip.

The selector gives you the ability to change the scale of the view on the fly, which also changes the view title.

To modify the Identifiers, turn on the Properties dialog box then select the view (section/detail) and note the Annotation panel:

Section Styles and Detail Styles can be adjusted using the small icons on the left of the style drop down:

The style dialog is similar to the DimStyle dialog box. Here’s some screenshots showing information that can set via styles:
Identifier and Arrows:
Settings for Identifier (text style, color, and characters) visual properties, symbols used for the ends of the section line and location of the Identifier.

Cutting Plane:
Display settings of the cutting plane for the section line itself.
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**View Label:**
These settings control the contents of the Section View Title. Notice the title has multiple fields.

**Hatch:**
Change the scale, angel, and visual appearances of the hatch within the section view.