SOLIDWORKS CHEAT SHEET

goengineer

USER INTERFACE

Quickly access your current projects
Recent Documents Shortcut – R

Prevent UI changes caused by accidentally undocking your CommandManager
Tools > Customize > Lock Command Manager and Toolbars

Quickly locate less frequently used commands
Drag and drop results to add to toolbar, click eyeglasses to learn default location

Control two environments
FM area and graphics area, RMB – Customize

Customize mouse gestures with 4, 8 or 12 context-sensitive gestures
RMB – Drag to activate, Recommended Right Gesture: OK, Recommended Left Gesture: Cancel

Flip your model 180 degrees
Hold Shift and click the arrow – System Options – View – View Rotation, Alt = Roll, Shift = 90

Clean up unnecessary text within your FeatureManager
RMB top node in FM > Tree Display > Suppress Configuration / Display State Names if only one

Navigate your FeatureManager tree
Click up/down arrow – System Options > FM > Arrow Key navigation

Tidy up your entire tree in one click
Shift+C – Collapse the Feature/Assembly tree

Find the corresponding feature/component
Click in the graphics area, System Options > FM > Scroll selected item into view

Display the true order of your features
RMB top node in FM > Tree Display > Show Flat Tree View

Hover over any item in the FeatureManager tree
RMB top node in FM > Toggle Dynamic Reference Visualization buttons

Access all of your FeatureManager tree data
Click in the graphics area, Shortcut D, access the 'Breadcrumbs' in the graphics area

Filter FeatureManager and graphics area by a string of text
Type string into filter bar

Make more precise bulk selections
RMB in blank space in graphics area

Easily access your most used features/sketches
RMB > Add to favorites, reorder if necessary

Recall your previously selected items after accidentally deselecting them
RMB in blank space > context toolbar

Recall complex selection sets of any type of geometry with a single click
Make selection > RMB > Save selection

Browse directly to the help page of interest
Click the question mark at the top right corner of any PM

Avoid the tiny scroll bars when modifying your PropertyManager selections
RMB > Autosize, double-click bottom edge of box

Quickly copy pre-existing plane to offset
Components in Assembly, Fillets/Chamfers from FM, Arrowhead of notes – Ctrl+drag

Move features by Shift dragging from FeatureManager Tree
Shift+drag

Select all of filtered or pre-selected geometry
Ctrl+A

Toggle the visibility of all non-geometric items in a single click
Click the eyeball icon

SKETCH

Make sketches look more like they would in 2D tools
System Options > Sketch > Auto-rotate view normal to sketch plane

Toggle circle/arc/rectangle modes
Click A while sketch tool is active

Add relations in two clicks rather than three
Click shared endpoint, select relation from context toolbar

Detach both endpoints of an entity
RMB entity to detach, click 'Detach segment on Drag,' drag endpoint

Select midpoint without an RMB
Hover over midpoint until it is dynamically highlighted and select it

Move sketch entities without activating the command
Windows, select entities, Ctrl+Drag, release Ctrl key, move sketch to new position, release

Start a new line without needing to escape from the current tool
Click drag, release or click, click, double-click

Temporarily disable automatic relations while sketching in busy areas
Hold Ctrl while sketching to temporarily disable automatic relations

Extend entries just as easily as trimming them
Power Trim, hold Shift while swiping for extend

Restore incremental segments in case you got too trigger happy
Hover over red dot that appears in the place of the last trimmed entity

Fillet non-intersecting entities to auto extend/trim
Drag yellow preview to resize visually

Add a virtual sharp to any sketch or drawing view geometry
Ctrl+select two entities, activate the Point Tool

Create driving or driven arc length dimensions
Smart Dimension > select arc and two endpoints

Combine overall length of lines and arcs into one driving dimension
Select chain, Make Path, Path Length Dimensions

Lock dimensions alignment to horizontal, vertical or diagonal
RMB to lock the dimension orientation while specifying its location

Automatically add required relations and/or dimensions
Fully Define Sketch

Stretch multiple entities while overriding their current dimensions
Stretch Entities

Create a slave sketch that's dependent on the master sketch
Pre-select sketch and plane/face, Insert > Derived Sketch

Create an independent copy of a sketch
Crtl+C, select plane/face, Crtl+V

Differentiate stacked sketches with color
RMB inactive sketch in FM > Sketch Color

Convert external and internal profile edges by selecting a face
External profile – Select face, internal profile, select all inner loops

Create the geometry instead of creating the 3D sketch
Create solid model, create 3D sketch, select edge, Ctrl+A, convert entities, delete body

Create a plane normal to model edge
Pre-select any model edge, insert a sketch

FEATURES

Sweep Property Manager
A sketch is no longer needed for circular profile sweeps

Type equations directly into PropertyManager input fields
Modify dialog box

Add comments to your equations on the fly
Type the single quote character ' in a dialog box to identify the following text as a comment

Easily modify the dialog box when Instant3D is active
Double-click the dimensions blue dot or extension rather than the number

Automatically set end condition (works for up to vertex as well)
Double-click surface while in Extrude (Cut) PM

Use FeatureWorks (comes with every license of SOLIDWORKS starting in 2016)
Select Face > Edit feature button from context toolbar

Purge unnecessary configurations data on save to minimize file size
System Options > Performance > Purge cached configuration data

Freeze upstream features to prevent them from being recalculated during every rebuild
System Options > General > Enable Freeze Bar

Diagnose a slow models rebuild time
Command Manager > Evaluate

Quickly take a rough measurement on a curvy part
Measure dialog > Point-to-Point

SURFACES

Repairing/Flattening imported Geometry
Copy surface, delete body, extend, face fillet, convert to sheet metal

Cut normal to curved surfaces (overmold)
Split line, copy surface, thicken cut, copy surface and thicken

Calculate the internal volume of a container
Create liquid level plane, Intersect

Complex ruffled geometry
Revolve surface, project curve, delete body, loft

ASSEMBLIES

Find top level assemblies within a large directory
Open dialog > activate filter(s)

View and change references before opening as assembly
Open dialog box > Select file > References

Apply properties to multiple components at once
Pre-select components, activate Property tab, update property, apply

Temporarily hide faces
RMB while Select Other is activated

Temporarily disable selecting through transparency
Hold Shift while selecting

Locate identical instances
Selection drop-down

Automatically group the same components
RMB top-level assembly > Tree Display > Group Component Instances

Hide components with a single keystroke
Tab to hide, Shift+Tab to show (bodies in 2016)

Quickly toggle to 'hidden space'
Click on any component to send it back to shown state

Temporarily display a transparent preview of all hidden components
Hold Ctrl+Shift+Tab, click on components to show

Display independent isolated view of any component
Select components > select 'Component Preview' from context toolbar

Automatically make first component transparent
Mate Property Manager > Options > Make first selection transparent

Skip your typical alignment options with Quick Mates
RMB drag a component to pre-orient it for best results

Opening your largest assemblies in seconds
View, Section, Measure, etc.

DRAWINGS

Quick View
Open drawings in seconds for printing or review

Context Toolbar
Open associated drawing from the model

Model Colors
Visually differentiate components within a drawing, System Options > Document Properties > Detailing

Highlight Changes
Highlight changed model dimensions and compare, System Options > Colors > Use specified color for changed drawings dimensions

Smart Arrow
Always point arrow head away from dimension, System Options, Document Properties > Dimensions > Radius > Smart arrows attach to arcs and point away from dimension

View Letter Reuse
Reuse letters from views that have been deleted, System Options > Drawings > Reuse view letters from deleted auxiliary, detail and section views

Ignore views outside of sheet borders
Click Zoom to Sheet on the View toolbar or View > Modify > Zoom to Sheet

Break Alignment
Hold Ctrl while placing new view

Reverse Section View
Double-click section line to reverse

Custom Shape Detail
Any style but 'Per Standard' or 'Broken Circle' to select 'Profile'

Save Rotated View
Apply changes from 3D Drawings View Tool

Relocate Dimension
Shift+drag from one view to another

Auto Organize
Ctrl+A to select all dimensions

Dimension Palette
Modify multiple dimensions at once

Angle Dimensions
No need for a construction line, pick the line and an endpoint of same line, Cross will appear and be available for selection