SplineForm Workshop Tools

			MIN	+ Shift	+ Control	+ (Alt)	+ (F2)	Double-Click
Keyboard Shortcut Te	ool	Description	MAC	+ Shift	+ Command)	+ Option	+ Control	Double-Click on tool in toolbar
	k	Arrow Select curve or point. Click and drag for marquee selection		Constrain while dragging, Multiple Selection	On Point: Cycle through Plain, Corner, & Curve Point	Lasso marquee On Curve: Add Point On Point: Delete Point	Drag Handle: Change Curve point to Smooth point	_
R	<u>(</u>	Rotate[†] Rotate Selection		Constrain rotation to 15° increments	In Object View: Rotate Object left/right	In Object View: Rotate Object toward & away	Toggle to Arrow tool In Object View: Toggle to Hand tool	_
S	2	Scale [†] Scale Selection		Scale evenly, horizontally and vertically	—		Toggle to Arrow tool	_
Œ		Flip† Flip Selection		Constrain rotation to 45° increments	_		Toggle to Arrow tool	_
P	۵.	Pen* Creates Bezier lines		Constrains handles to 8 directions while dragging	_	On Curve: Add point On Point: Delete point	Toggle to Arrow tool	
Ð	0.	Pencil* Creates freeform lines		Connect each clicked point with straight line	_	On Curve: Add point On Point: Delete point	Toggle to Arrow tool	_
	6	Razor Cuts Lines		Constrain rotation to 45° increments while dragging	_		Toggle to Arrow tool	
G	ļ	Polygon* Makes Polygon shapes		Makes Shape of equal height & width	Draw shape centered around origin	Toggle between drawing from corner or center	Toggle to Arrow tool	Open Shape preferences dialog box
	T	Text Types text		_				
	2	Magnifying Glas Magnifies view	s		_	Zoom out	Toggle to Arrow tool	Reset zoom level and center origin in window
	Spac	se bar Space Bar Toggle to hand tool		_	Toggle to Magnify tool (+)	+ Control (Win) + Command (Mac) Toggle to Magnify tool (-)		

Mesh Editor Tools

		NIM	+ Shift	+ Control	+ (Alt)	+ (F2)	Double-Click
Keyboard Shortcut	Tool	Description	+ Shift	+ Command	+ Option	+ Control	Double-Click on tool in toolbar
	€ & ¢	Arrow Select and move points. Move parallel to view Move parallel to working plane Move perpendicular to working plane Move perpendicular to object faces	Constrain to left/right/up/d own while dragging Multiple select		Lasso marquee to select	-	Open Magnetic Options dialog box
R	(?	Rotate [†]	_		—	Toggle to arrow	Open Magnetic Options dialog box
S	2	Scale [†]			_	Toggle to arrow	Open Magnetic Options dialog box
		3D Deformations Twist Bend Taper Shear Bulge Wave Scale				Toggle to arrow	Open Deformations Options dialog box (specific to defor- mation type)
R	Ç.	3D Rotate	Rotate around	Rotate left/right	Rotate forward/back	Toggle to arrow	
	٩	Magnifying Glass	_	_	Zoom out	Toggle to arrow	Return to default magnification
	Spac	e bar Space Bar Toggle to hand tool	_	Toggle to Magnify tool (+)	+ Control) (Win) + Command (Mac) Toggle to Magnify tool (-)	_	

*When drawing with the Pen or Pencil tool in the Path View window with no points selected, (or when drawing with the Polygon tool), the Rails will be replaced if they are active; otherwise, the path will be replaced. These tools are used in two steps. First click to place the center of rotation or scale and then click and drag to scale or rotate



		M	+ (Shift)	+ Control	+ (Alt	+(F2)	on tool in toolbar
Keyboard Shortcut	Tool	Description §	+ Shift	+Command)	+ Option	+ Control	Double-Click on tool in toolbar
A 2x A	ф Ф	V-Plane Moves object up, down, left & right H-Plane Moves object in, out, left & right	Constrains movement to axis perpendicular to object's face or to horizontal plane	Mac: Object selection pop-up menu (Win: Right-click)	Duplicate object while moving	Offset object from its centerpoint	
R 2x R 3x R	8) (7) (7)	Rotate Towards/Away Rotates object towards or away in active window Rotates object around axis going into active window Rotates object left or right in active window	Constrain rotation around axis perpendicular to object's face or edge	Trackball rotation	Duplicate object while rotating	Toggle to V-plane tool	
2	φ.	Uniform Scale Scales the selected object in all directions	_	Mac: Object selection pop-up menu	Duplicate object while scaling	Toggle to V-plane tool	_
2x 🔇	D.	Squash & Stretch Scales object in a single dimension	Scale all three dimension values equally	Mac: Object selection pop-up menu	Duplicate object while scaling	Toggle to V-plane tool	_
	S	pace bar Space Bar Toggle to hand tool	Constrains pan to vertical/ horizon- tal	In Standard View: Toggle to Magnify tool (+) In Camera View: Dolly in/out,	Pan in wireframe mode + Control (Win) + Command (Mac) Toggle to Magnify tool (-)		

	×					on tool in toolbar
eyboard Tool	Description g	+ Shift	+ Command)	+ Option	+ Control	Double-Click on tool in toolbar
0 📕	Link Tools Links a child object to parent object	_	Mac: Object selection pop-up menu		Toggle to V-plane tool	
	Unlink Unlinks a child object	_	Mac: Object selection pop-up menu	_	Toggle to V-plane tool	
	Magnifying Glass Zooms in/out	_	_	Zoom in wireframe mode	Toggle to V-plane tool	Return to default magnification level
M	Marquee Magnifying Glass Zooms in/out	_	_	Zoom out	Toggle to V-plane tool	Return to default magnification level
H 🕐	Hand (Navigation) Pans the scene	Constrains to vertical or horizontal movement	In Camera View: Dolly in/out	Pan in wireframe mode	Toggle to V-plane tool	In Free Camera View:Point camera at origin In Standard View: Return to default viewing position.
0 🔍	Orbit Rotate around target	Constrain to up/down	Constrain to left/right	Orbit in wireframe mode	Toggle to V-plane tool	_
00	Roll Bank left/right	_		Roll in wireframe mode	Toggle to V-plane tool	
0 🗵 0 🗵	Marquee Render Ray Traces the selected portion of the scene Phong shades the selected portion of the scene	Constrain Marquee to square	_		_	Render active window



Scale	1
Centerpoint	
Uniform Scale	
Deformation	
Surface	
Other Info	 1

Scale Eventmarks: Hold the COMMAND(Mac) or CONTROL(Win) key while dragging multiple eventmarks

Duplicate Eventmarks: Hold the OPTION(Mac) or ALT(Win) key while dragging eventmark(s)

Snap to Other Eventmarks: Hold the SHIFT key while dragging eventmarks, the Time Marker, or Punch In/Out markers

Snap to Timebar Increments: Hold the CONTROL(Mac) or F2(Win) key while dragging eventmarks, the Time Marker, or Punch In/Out markers

Show or Hide the Sub-Event Timelines: Double-click an object name in the sequencer

Select All of the Eventmarks for an Object: COMMAND (Mac)-double-click or CONTROL(Win)-double-click an object name. Eventmarks can also be selected by dragging a marquee around them with the Arrow tool or by holding the SHIFT key while clicking

Eventmark Info: Double-click on eventmark(s)

Linking Objects: Drag child object onto parent object

Unlinking Objects: Drag linked object between two other unlinked objects.

Re-Build Object List: Command (Mac) or Control (Win) click on "Object Name" to reset the object list to its original state.



Audio Controls: Play & stop an imported audio track



Linear Motion: A blue bar indicates linear motion



Spline Motion: A purple bar with a wavy line indicates spline-based motion



End Animation: A square eventmark indicates a "death" event



Sub-Event Bar: A pink bar indicates animation of a sub-event



Sub-Events: Object Attribute Timelines let you sequence events for just one attribute of an object



Object List/Timeline Divider: Drag this bar to increase or decrease the space in the object list

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