Creating Toolpaths

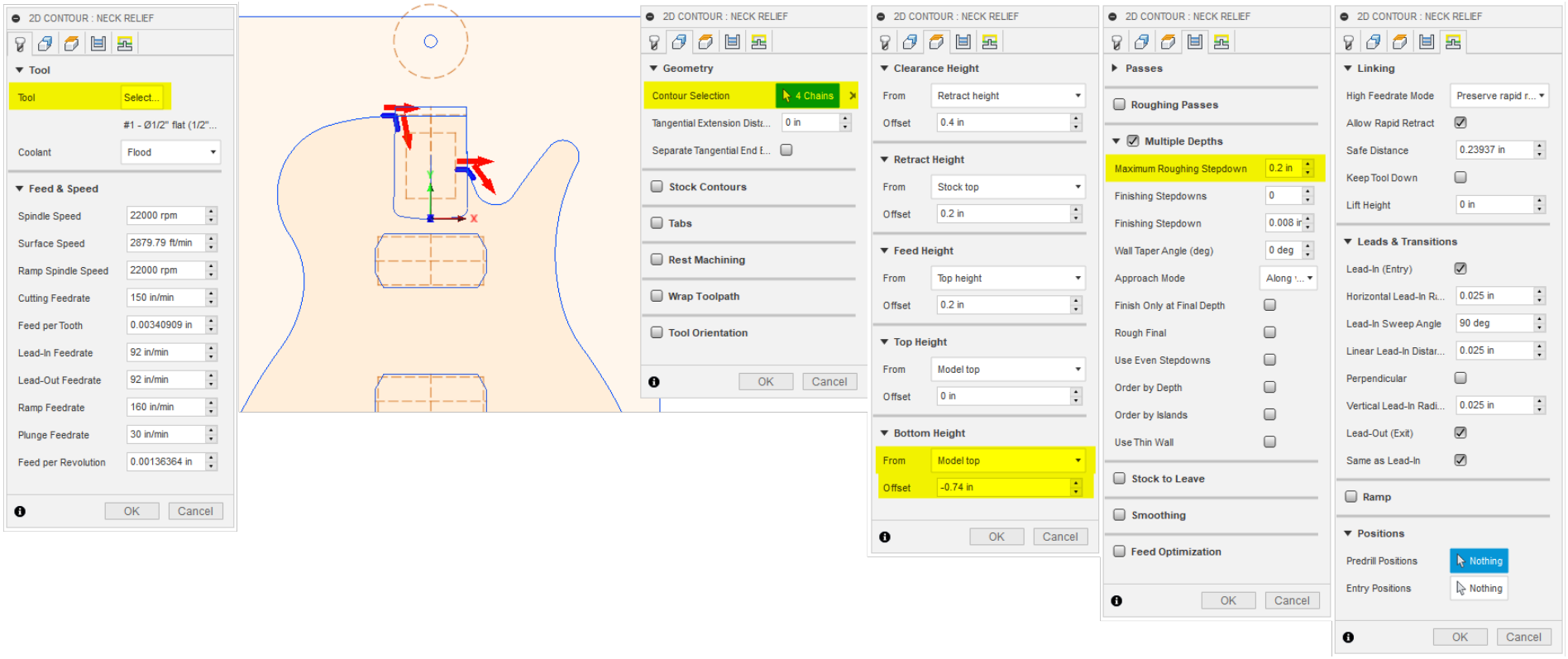
Front Body

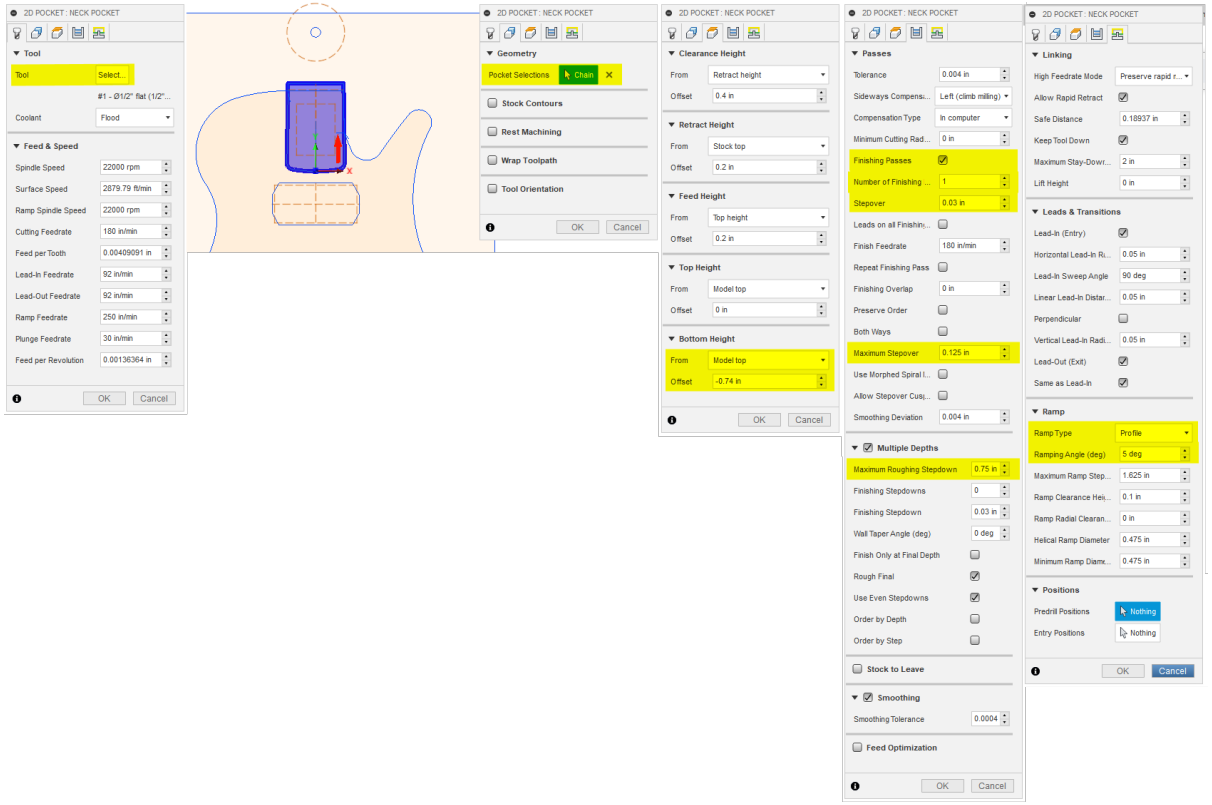
2D Contour	[T1]	NECK RELIEF	1/2" Flat Endmill
2D Pocket	[T1]	NECK POCKET	1/2" Flat Endmill
2D Pocket	[T1]	P/U	1/2" Flat Endmill
2D Contour	[T1]	PROFILE	1/2" Flat Endmill
2D Contour	[T2]	ELEC HOLES	1/4" Flat Endmill
Drilling [Rapid Out]	[T3]	P/U HOLES	5/64" Drill
Drilling [Rapid Out]	[T3]	BRIDGE HOLES	5/64" Drill
Drilling [Rapid Out]	[T3]	STRING HOLES	5/64" Drill

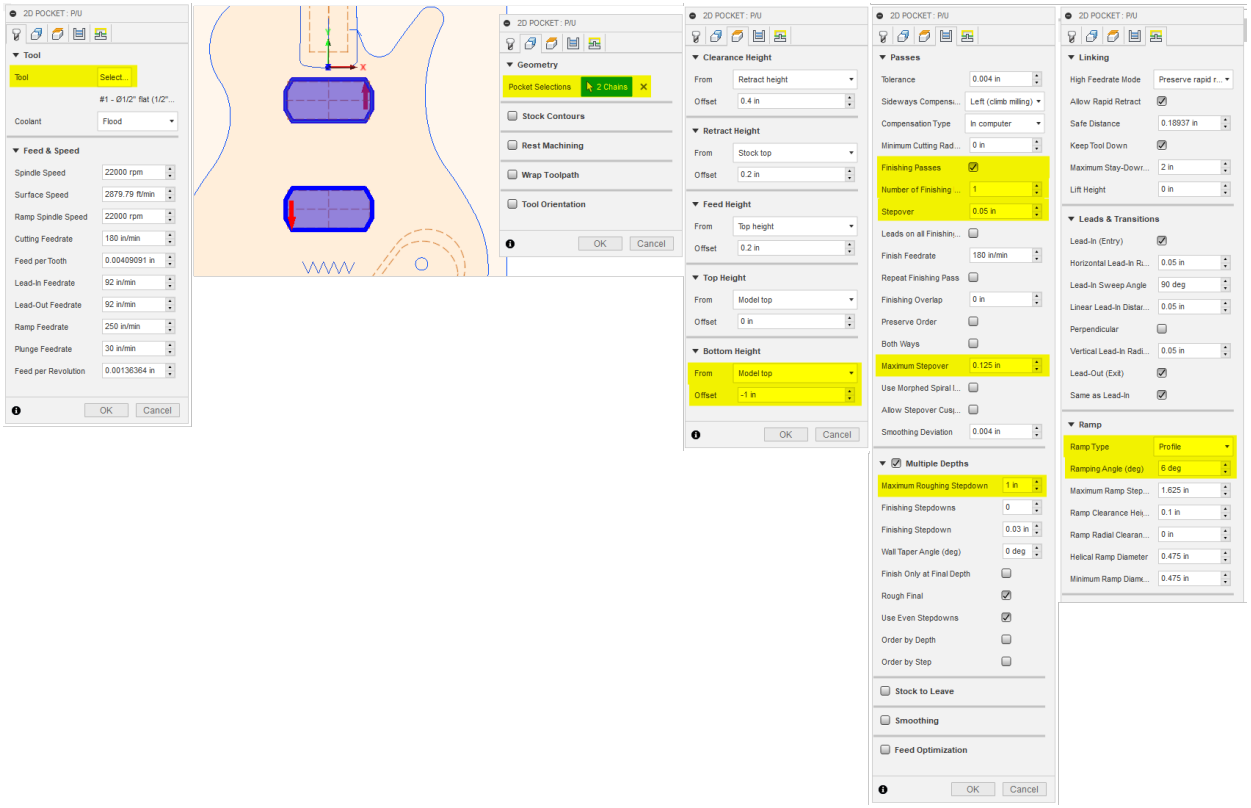
Back Body

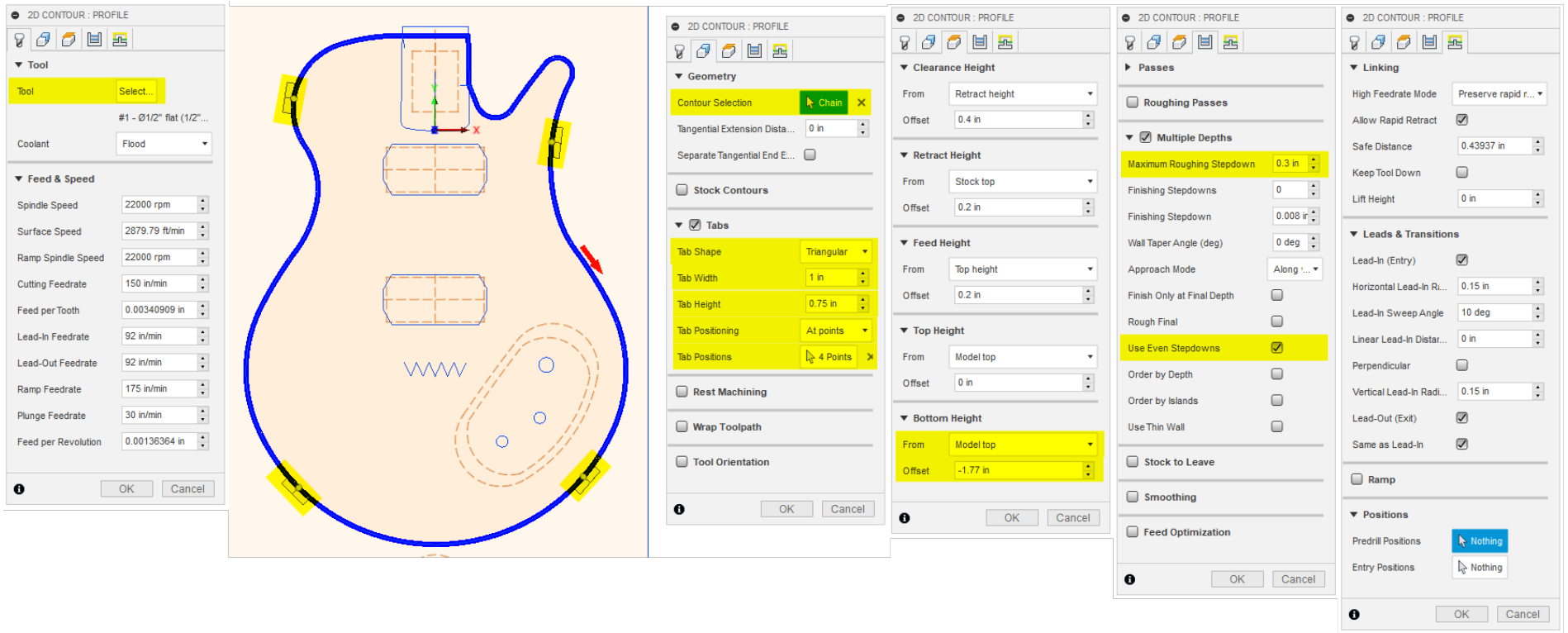
Drilling [Rapid Out]	[T4]	FERRULE HOLES	1/4" Drill
Drilling [Rapid Out]	[T8]	BODY MOUNT HOLES	3/16" Drill
2D Pocket	[T1]	BEAN POCKET	1/2" Flat Endmill
2D Contour	[T1]	BEAN LIP	1/2" Flat Endmill

Front Body Setup
Tool Change: 1/2" End Mill

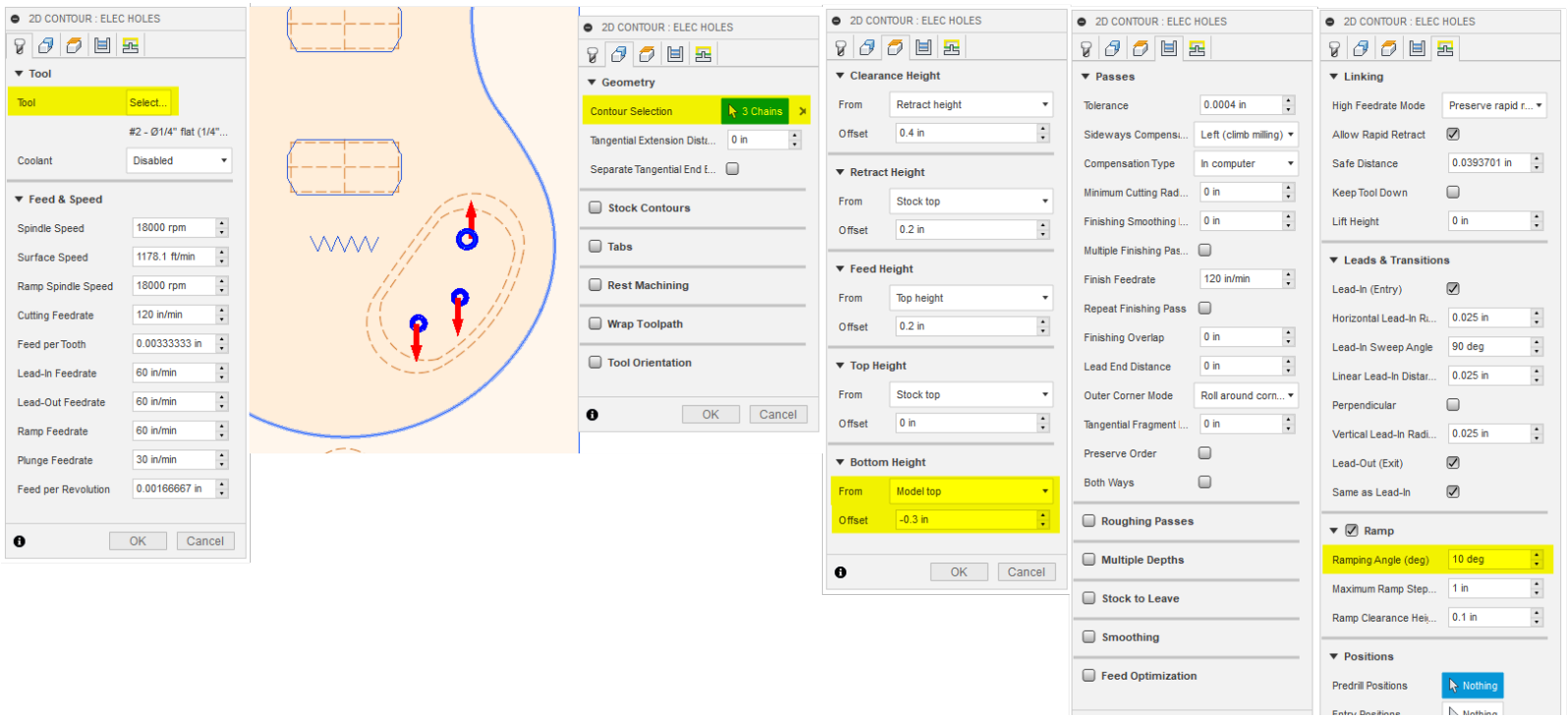


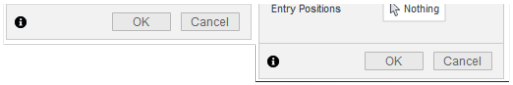

2D POCKET : NECK POCKET
Tool
Tool
Select...
#1 - Ø1/2" flat (1/2"...
Coolant
Flood
Feed & Speed
Spindle Speed
22000 rpm
Surface Speed
2879.79 ft/min
Ramp Spindle Speed
22000 rpm
Cutting Feedrate
180 in/min
Feed per Tooth
0.00409091 in
Lead-In Feedrate
92 in/min
Lead-Out Feedrate
92 in/min
Ramp Feedrate
250 in/min
Plunge Feedrate
30 in/min
Feed per Revolution
0.00136364 in
OK
Cancel
2D POCKET : NECK POCKET
Geometry
Pocket Selections
Chain
Stock Contours
Rest Machining
Wrap Toolpath
Tool Orientation
OK
Cancel
2D POCKET : NECK POCKET
Clearance Height
From
Retract height
Offset
0.4 in
Retract Height
From
Stock top
Offset
0.2 in
Feed Height
From
Top height
Offset
0.2 in
Top Height
From
Model top
Offset
0 in
Bottom Height
From
Model top
Offset
-0.74 in
OK
Cancel
2D POCKET : NECK POCKET
Passes
Tolerance
0.004 in
Sideways Compensa...
Left (climb milling)
Compensation Type
In computer
Minimum Cutting Rad...
0 in
Finishing Passes
Number of Finishing ...
1
Stepover
0.03 in
Leads on all Finishin...
Finish Feedrate
180 in/min
Repeat Finishing Pass
Finishing Overlap
0 in
Preserve Order
Both Ways
Maximum Stepover
0.125 in
Use Morphed Spiral I...
Allow Stepover Cusp...
Smoothing Deviation
0.004 in
Multiple Depths
Maximum Roughing Stepdown
0.75 in
Finishing Stepdowns
0
Finishing Stepdown
0.03 in
Wall Taper Angle (deg)
0 deg
Finish Only at Final Depth
Rough Final
Use Even Stepdowns
Order by Depth
Order by Step
Stock to Leave
Smoothing
Smoothing Tolerance
0.0004
Feed Optimization
OK
Cancel
2D POCKET : NECK POCKET
Linking
High Feedrate Mode
Preserve rapid r...
Allow Rapid Retract
Safe Distance
0.18937 in
Keep Tool Down
Maximum Stay-Dowr...
2 in
Lift Height
0 in
Leads & Transitions
Lead-In (Entry)
Horizontal Lead-In Ri...
0.05 in
Lead-In Sweep Angle
90 deg
Linear Lead-In Distar...
0.05 in
Perpendicular
Vertical Lead-In Radi...
0.05 in
Lead-Out (Exit)
Same as Lead-In
Ramp
Ramp Type
Profile
Ramping Angle (deg)
5 deg
Maximum Ramp Step...
1.625 in
Ramp Clearance Hei...
0.1 in
Ramp Radial Clearan...
0 in
Helical Ramp Diameter
0.475 in
Minimum Ramp Diam...
0.475 in
Positions
Predrill Positions
Nothing
Entry Positions
Nothing
OK
Cancel


2D POCKET : P/U
Tool
Tool
Select...
#1 - Ø1/2" flat (1/2"...
Coolant
Flood
Feed & Speed
Spindle Speed
22000 rpm
Surface Speed
2879.79 ft/min
Ramp Spindle Speed
22000 rpm
Cutting Feedrate
180 in/min
Feed per Tooth
0.00409091 in
Lead-In Feedrate
92 in/min
Lead-Out Feedrate
92 in/min
Ramp Feedrate
250 in/min
Plunge Feedrate
30 in/min
Feed per Revolution
0.00136364 in
OK
Cancel
2D POCKET : P/U
Geometry
Pocket Selections
2 Chains
Stock Contours
Rest Machining
Wrap Toolpath
Tool Orientation
OK
Cancel
2D POCKET : P/U
Clearance Height
From
Retract height
Offset
0.4 in
Retract Height
From
Stock top
Offset
0.2 in
Feed Height
From
Top height
Offset
0.2 in
Top Height
From
Model top
Offset
0 in
Bottom Height
From
Model top
Offset
-1 in
OK
Cancel
2D POCKET : P/U
Passes
Tolerance
0.004 in
Sideways Compensa...
Left (climb milling)
Compensation Type
In computer
Minimum Cutting Rad...
0 in
Finishing Passes
Number of Finishing ...
1
Stepover
0.05 in
Leads on all Finishin...
Finish Feedrate
180 in/min
Repeat Finishing Pass
Finishing Overlap
0 in
Preserve Order
Both Ways
Maximum Stepover
0.125 in
Use Morphed Spiral (...
Allow Stepover Cust...
Smoothing Deviation
0.004 in
Multiple Depths
Maximum Roughing Stepdown
1 in
Finishing Stepdowns
0
Finishing Stepdown
0.03 in
Wall Taper Angle (deg)
0 deg
Finish Only at Final Depth
Rough Final
Use Even Stepdowns
Order by Depth
Order by Step
Stock to Leave
Smoothing
Feed Optimization
OK
Cancel
2D POCKET : P/U
Linking
High Feedrate Mode
Preserve rapid r...
Allow Rapid Retract
Safe Distance
0.18937 in
Keep Tool Down
Maximum Stay-Dowr...
2 in
Lift Height
0 in
Leads & Transitions
Lead-In (Entry)
Horizontal Lead-In Ra...
0.05 in
Lead-In Sweep Angle
90 deg
Linear Lead-In Distar...
0.05 in
Perpendicular
Vertical Lead-In Radi...
0.05 in
Lead-Out (Exit)
Same as Lead-In
Ramp
Ramp Type
Profile
Ramping Angle (deg)
6 deg
Maximum Ramp Step...
1.625 in
Ramp Clearance Hei...
0.1 in
Ramp Radial Clearan...
0 in
Helical Ramp Diameter
0.475 in
Minimum Ramp Diam...
0.475 in

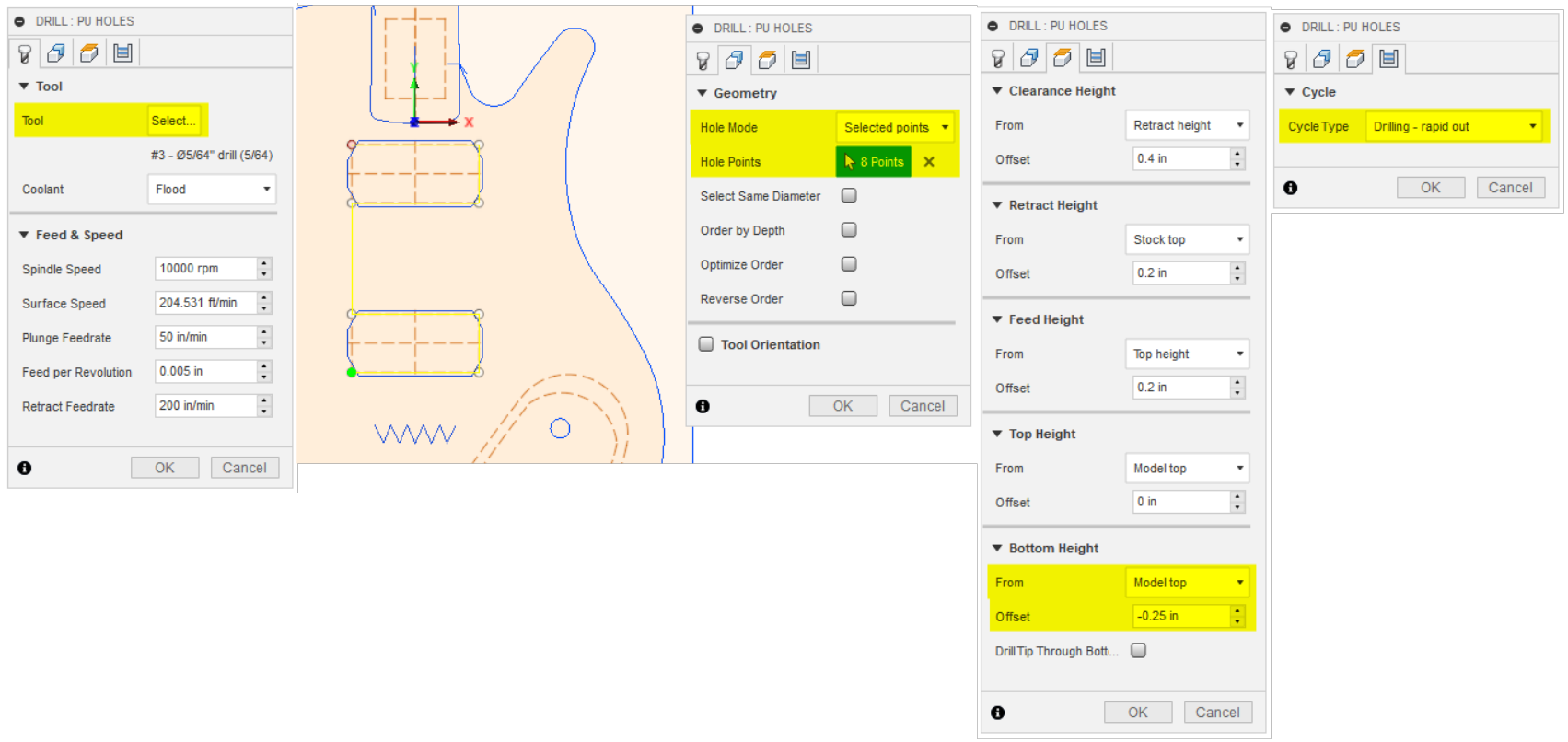

2D CONTOUR : PROFILE
Tool
Tool
Select...
#1 - Ø1/2" flat (1/2"...
Coolant
Flood
Feed & Speed
Spindle Speed
22000 rpm
Surface Speed
2879.79 ft/min
Ramp Spindle Speed
22000 rpm
Cutting Feedrate
150 in/min
Feed per Tooth
0.00340909 in
Lead-In Feedrate
92 in/min
Lead-Out Feedrate
92 in/min
Ramp Feedrate
175 in/min
Plunge Feedrate
30 in/min
Feed per Revolution
0.00136364 in
OK
Cancel
2D CONTOUR : PROFILE
Geometry
Contour Selection
Chain
Tangential Extension Dista...
0 in
Separate Tangential End E...
Stock Contours
Tabs
Tab Shape
Triangular
Tab Width
1 in
Tab Height
0.75 in
Tab Positioning
At points
Tab Positions
4 Points
Rest Machining
Wrap Toolpath
Tool Orientation
OK
Cancel
2D CONTOUR : PROFILE
Clearance Height
From
Retract height
Offset
0.4 in
Retract Height
From
Stock top
Offset
0.2 in
Feed Height
From
Top height
Offset
0.2 in
Top Height
From
Model top
Offset
0 in
Bottom Height
From
Model top
Offset
-1.77 in
OK
Cancel
2D CONTOUR : PROFILE
Passes
Roughing Passes
Multiple Depths
Maximum Roughing Stepdown
0.3 in
Finishing Stepdowns
0
Finishing Stepdown
0.008 in
Wall Taper Angle (deg)
0 deg
Approach Mode
Along '...
Finish Only at Final Depth
Rough Final
Use Even Stepdowns
Order by Depth
Order by Islands
Use Thin Wall
Stock to Leave
Smoothing
Feed Optimization
OK
Cancel
2D CONTOUR : PROFILE
Linking
High Feedrate Mode
Preserve rapid r...
Allow Rapid Retract
Safe Distance
0.43937 in
Keep Tool Down
Lift Height
0 in
Leads & Transitions
Lead-In (Entry)
Horizontal Lead-In R...
0.15 in
Lead-In Sweep Angle
10 deg
Linear Lead-In Distar...
0 in
Perpendicular
Vertical Lead-In Radi...
0.15 in
Lead-Out (Exit)
Same as Lead-In
Ramp
Positions
Predrill Positions
Nothing
Entry Positions
Nothing
OK
Cancel

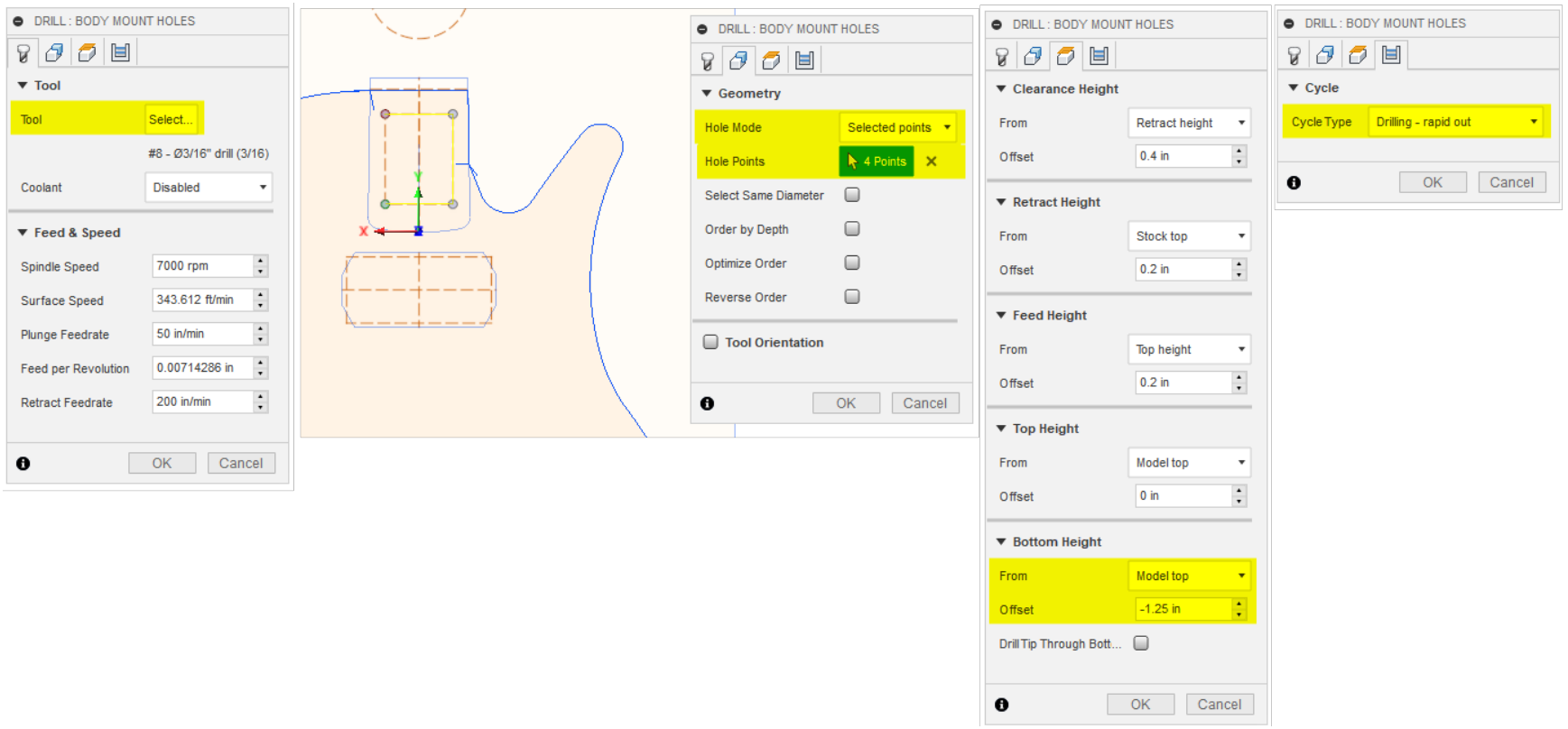
Tool Change: 1/4" End Mill

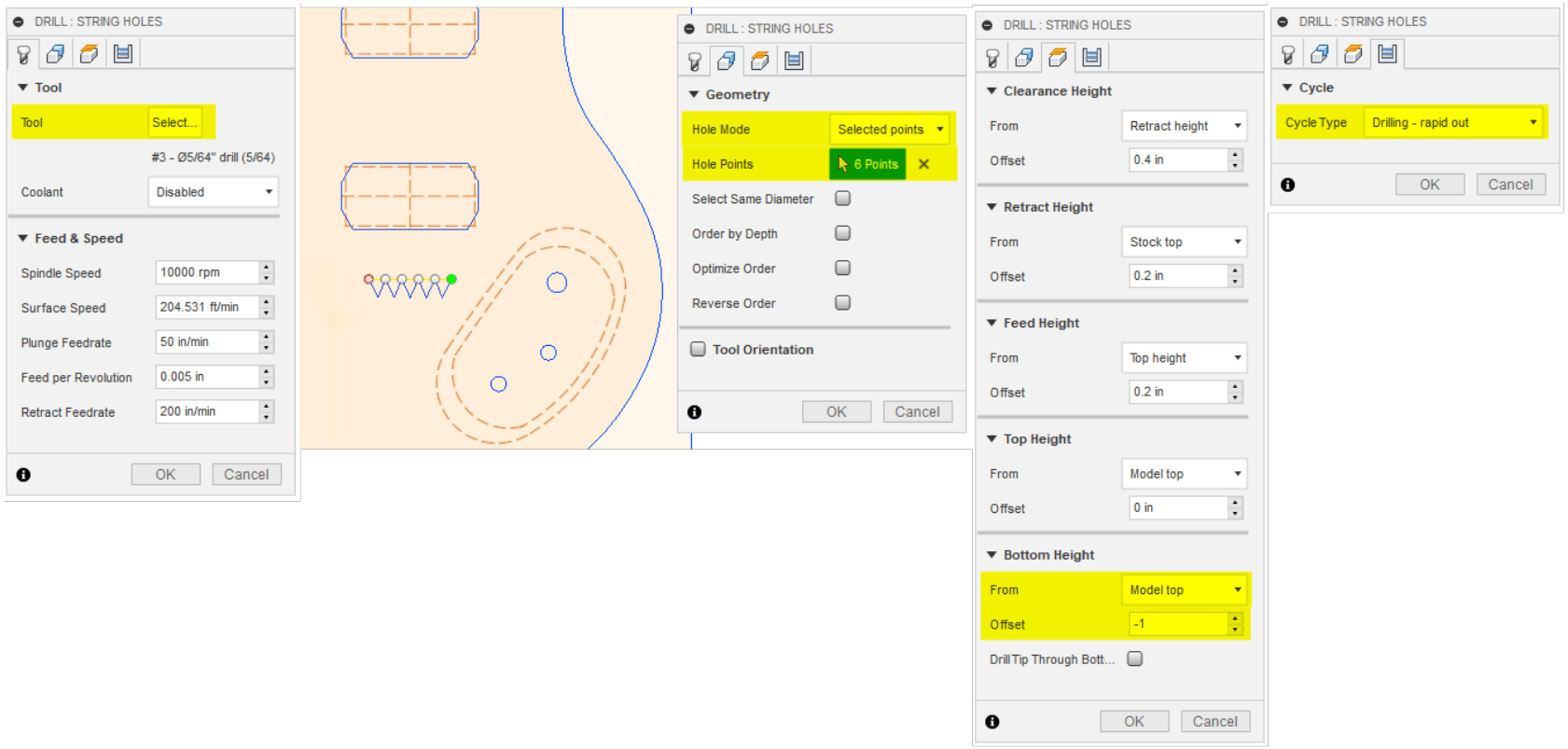




Tool Change: 5/64" Drill

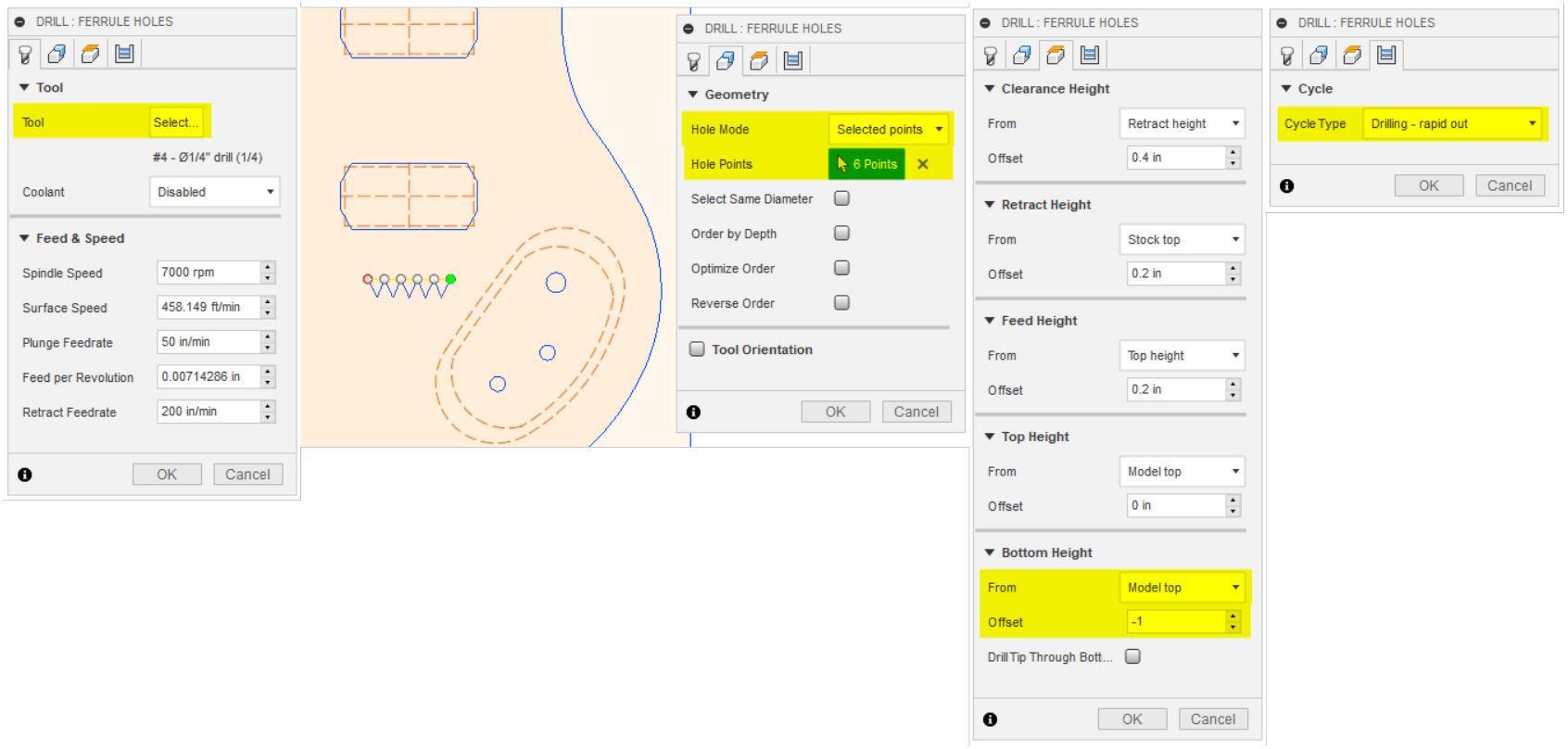



DRILL : BODY MOUNT HOLES
Tool
Tool
Select...
#8 - Ø3/16" drill (3/16)
Coolant
Disabled
Feed & Speed
Spindle Speed
7000 rpm
Surface Speed
343.612 ft/min
Plunge Feedrate
50 in/min
Feed per Revolution
0.00714286 in
Retract Feedrate
200 in/min
OK
Cancel
DRILL : BODY MOUNT HOLES
Geometry
Hole Mode
Selected points
Hole Points
4 Points
Select Same Diameter
Order by Depth
Optimize Order
Reverse Order
Tool Orientation
OK
Cancel
DRILL : BODY MOUNT HOLES
Clearance Height
From
Retract height
Offset
0.4 in
Retract Height
From
Stock top
Offset
0.2 in
Feed Height
From
Top height
Offset
0.2 in
Top Height
From
Model top
Offset
0 in
Bottom Height
From
Model top
Offset
-1.25 in
Drill Tip Through Bott...
OK
Cancel
DRILL : BODY MOUNT HOLES
Cycle
Cycle Type
Drilling - rapid out
OK
Cancel

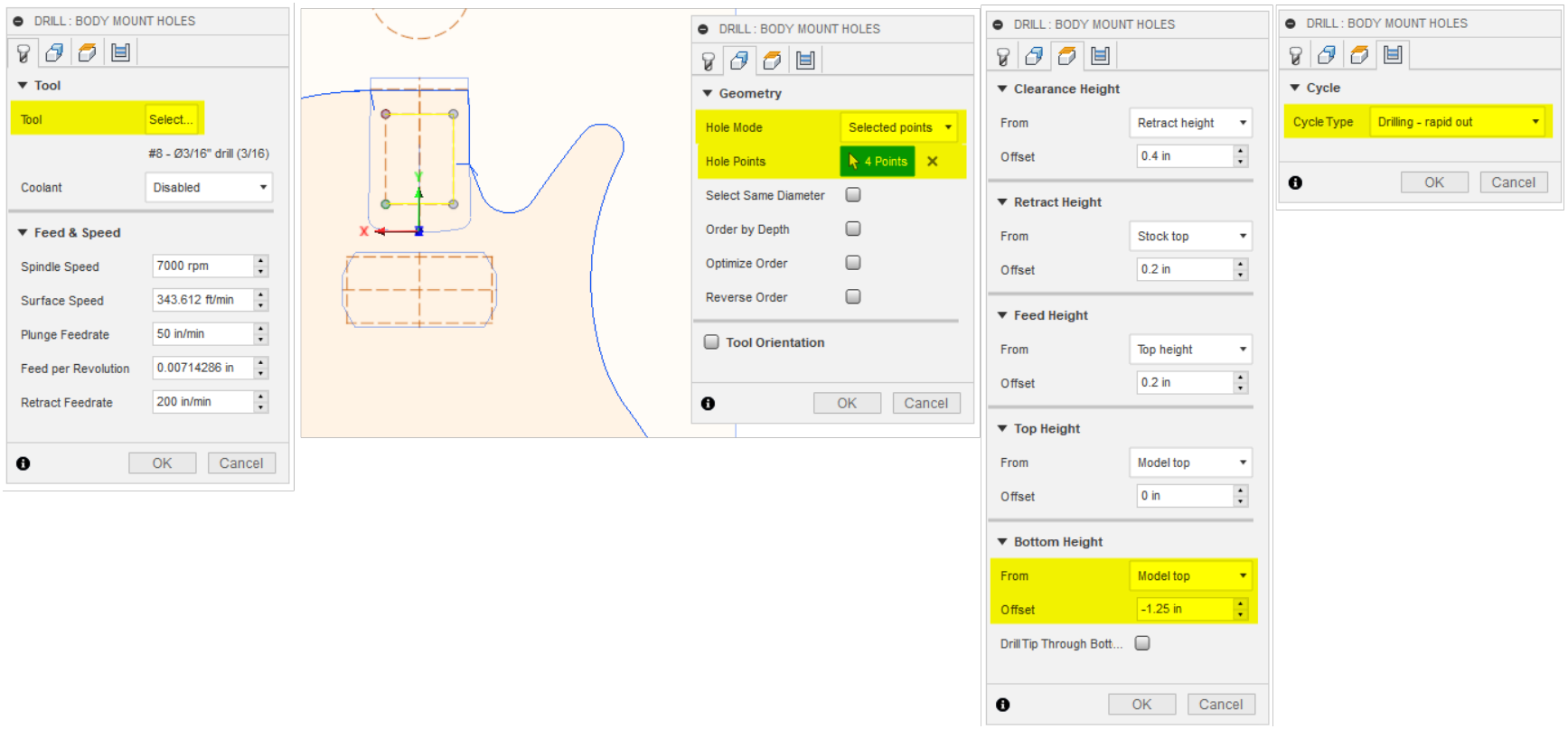

DRILL : STRING HOLES
Tool
Tool
Select...
#3 - Ø5/64" drill (5/64)
Coolant
Disabled
Feed & Speed
Spindle Speed
10000 rpm
Surface Speed
204.531 ft/min
Plunge Feedrate
50 in/min
Feed per Revolution
0.005 in
Retract Feedrate
200 in/min
OK
Cancel
DRILL : STRING HOLES
Geometry
Hole Mode
Selected points
Hole Points
6 Points
Select Same Diameter
Order by Depth
Optimize Order
Reverse Order
Tool Orientation
OK
Cancel
DRILL : STRING HOLES
Clearance Height
From
Retract height
Offset
0.4 in
Retract Height
From
Stock top
Offset
0.2 in
Feed Height
From
Top height
Offset
0.2 in
Top Height
From
Model top
Offset
0 in
Bottom Height
From
Model top
Offset
-1
Drill Tip Through Bott...
OK
Cancel
DRILL : STRING HOLES
Cycle
Cycle Type
Drilling - rapid out
OK
Cancel

BACK

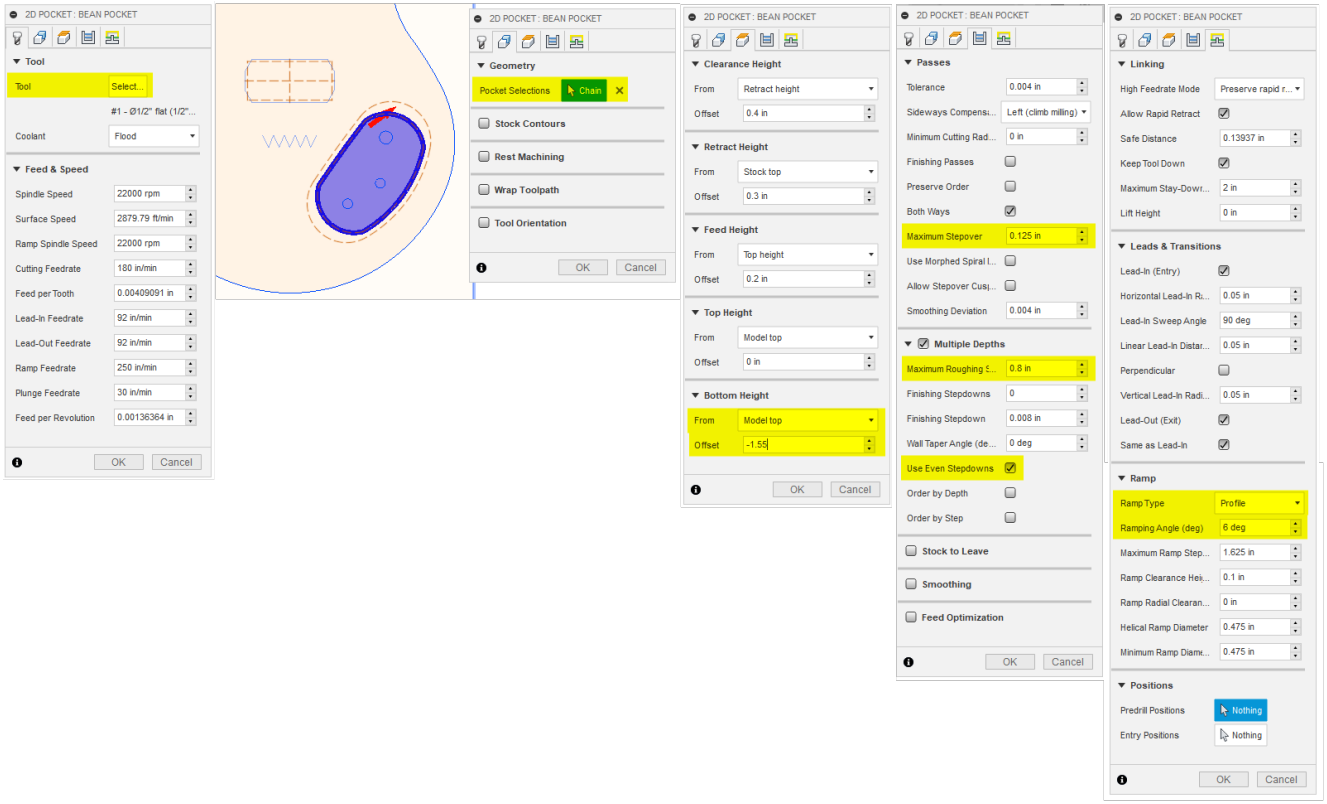
Tool Change: 1/4" Drill

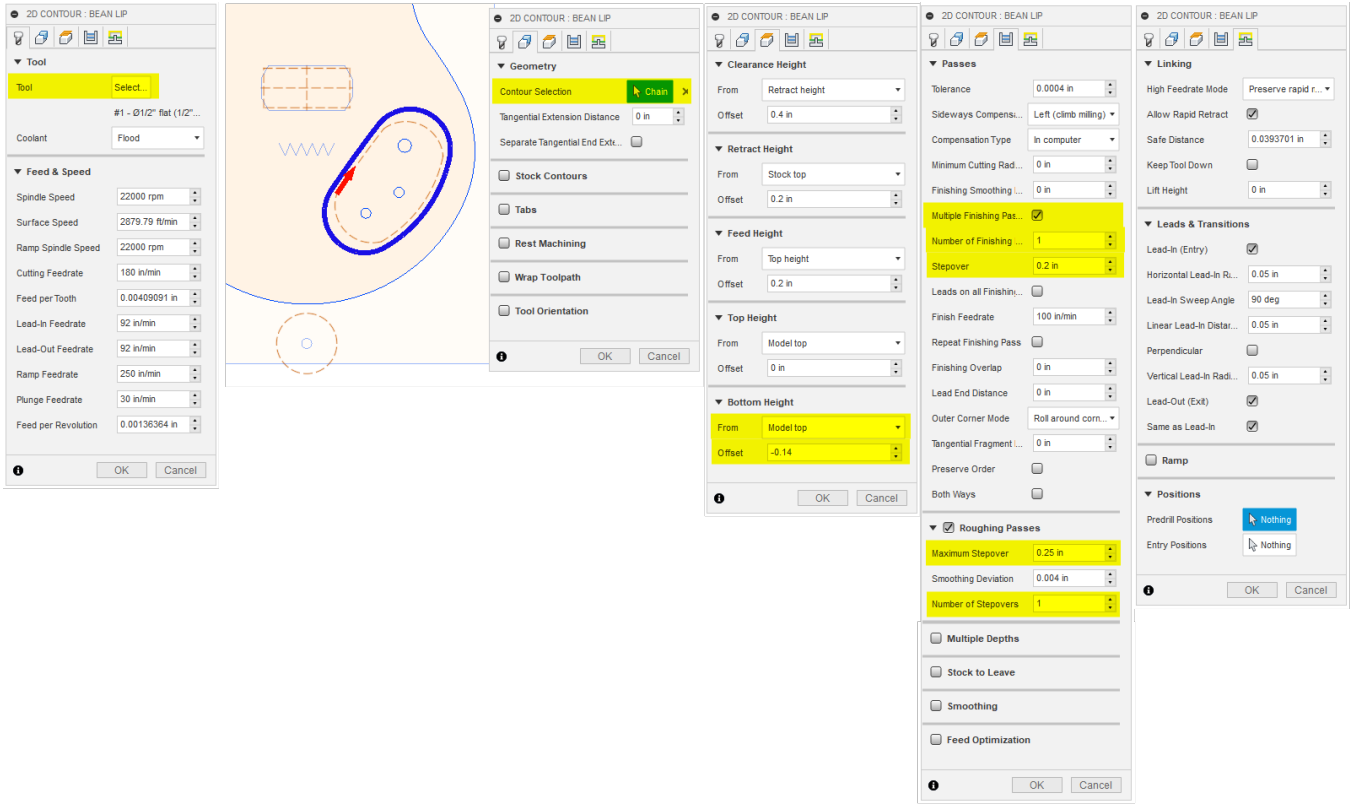


Tool Change: 3/16" Drill



Tool Change: 1/2" End Mill




2D CONTOUR : BEAN LIP
Tool
Tool
Select...
#1 - Ø1/2" flat (1/2"...
Coolant
Flood
Feed & Speed
Spindle Speed
22000 rpm
Surface Speed
2879.79 ft/min
Ramp Spindle Speed
22000 rpm
Cutting Feedrate
180 in/min
Feed per Tooth
0.00409091 in
Lead-In Feedrate
92 in/min
Lead-Out Feedrate
92 in/min
Ramp Feedrate
250 in/min
Plunge Feedrate
30 in/min
Feed per Revolution
0.00136364 in
OK
Cancel
2D CONTOUR : BEAN LIP
Geometry
Contour Selection
Chain
Tangential Extension Distance
0 in
Separate Tangential End Extr...
Stock Contours
Tabs
Rest Machining
Wrap Toolpath
Tool Orientation
OK
Cancel
2D CONTOUR : BEAN LIP
Clearance Height
From
Retract height
Offset
0.4 in
Retract Height
From
Stock top
Offset
0.2 in
Feed Height
From
Top height
Offset
0.2 in
Top Height
From
Model top
Offset
0 in
Bottom Height
From
Model top
Offset
-0.14
OK
Cancel
2D CONTOUR : BEAN LIP
Passes
Tolerance
0.0004 in
Sideways Compensi...
Left (climb milling)
Compensation Type
In computer
Minimum Cutting Radi...
0 in
Finishing Smoothing (...
0 in
Multiple Finishing Pas...
Number of Finishing ...
1
Stepover
0.2 in
Leads on all Finishin...
Finish Feedrate
100 in/min
Repeat Finishing Pass
Finishing Overlap
0 in
Lead End Distance
0 in
Outer Corner Mode
Roll around corn...
Tangential Fragment (...
0 in
Preserve Order
Both Ways
Roughing Passes
Maximum Stepover
0.25 in
Smoothing Deviation
0.004 in
Number of Stepovers
1
Multiple Depths
Stock to Leave
Smoothing
Feed Optimization
OK
Cancel
2D CONTOUR : BEAN LIP
Linking
High Feedrate Mode
Preserve rapid r...
Allow Rapid Retract
Safe Distance
0.0393701 in
Keep Tool Down
Lift Height
0 in
Leads & Transitions
Lead-In (Entry)
Horizontal Lead-In Ri...
0.05 in
Lead-In Sweep Angle
90 deg
Linear Lead-In Distar...
0.05 in
Perpendicular
Vertical Lead-In Radi...
0.05 in
Lead-Out (Exit)
Same as Lead-In
Ramp
Positions
Predrill Positions
Nothing
Entry Positions
Nothing
OK
Cancel