

Question	Causes	Remedy
Built-up edge	<ul style="list-style-type: none"><li>• Cutting speed too low</li><li>• Insufficient cooling / lubrication</li><li>• Incorrect coating for the material</li></ul>	<ul style="list-style-type: none"><li>• Increase cutting speed</li><li>• Increase coolant pressure</li><li>• Select another coating</li></ul>
Chip jam	<ul style="list-style-type: none"><li>• Working feed rate too high for chip removal</li><li>• Drill insert too short for bore depth</li><li>• Insufficient cooling</li></ul>	<ul style="list-style-type: none"><li>• Reduce working feed rate</li><li>• With VEX-S, use a longer drill insert or improve drilling cycle</li><li>• Increase coolant pressure</li></ul>
Large burr formation at the exit of the bore	<ul style="list-style-type: none"><li>• Cutting values too high</li><li>• Insufficient cooling</li><li>• Drill insert/head worn</li></ul>	<ul style="list-style-type: none"><li>• Reduce cutting speed</li><li>• Increase coolant pressure</li><li>• Replace drill insert/head</li></ul>
Fluctuating accuracy	<ul style="list-style-type: none"><li>• Working feed rate too high</li><li>• Insufficient cooling</li><li>• Spindle/setup not stable</li></ul>	<ul style="list-style-type: none"><li>• Reduce working feed rate</li><li>• Increase coolant pressure</li><li>• Check radial run-out</li><li>• Check spindle and setup stability</li></ul>
Poor surface quality	<ul style="list-style-type: none"><li>• Incorrect cutting values</li><li>• Insufficient cooling</li><li>• Spindle/setup not stable</li><li>• Drill insert/head worn</li></ul>	<ul style="list-style-type: none"><li>• Increase or reduce working feed rate and cutting speed</li><li>• Increase coolant pressure</li><li>• Check radial run-out</li><li>• Check spindle and setup stability</li><li>• Replace drill insert or head</li><li>• Improve drilling process</li></ul>
Vibration / chatter	<ul style="list-style-type: none"><li>• Incorrect cutting values</li><li>• Insufficient cooling</li><li>• Spindle/setup not stable</li></ul>	<ul style="list-style-type: none"><li>• Increase or reduce the cutting speed</li><li>• Increase or reduce the working feed rate</li><li>• Increase coolant pressure</li><li>• Check radial run-out</li><li>• Check spindle and setup stability</li></ul>
Wear on cutting edge	<ul style="list-style-type: none"><li>• Incorrect cutting values</li><li>• Insufficient cooling</li><li>• Spindle/setup not stable</li></ul>	<ul style="list-style-type: none"><li>• Increase cutting speed</li><li>• Reduce working feed rate</li><li>• Increase coolant pressure</li><li>• Check spindle and setup stability</li></ul>
Wear on cross-cutting edge	<ul style="list-style-type: none"><li>• Working feed rate too high</li><li>• Insufficient cooling</li><li>• Spindle/setup not stable</li></ul>	<ul style="list-style-type: none"><li>• Reduce working feed rate</li><li>• Increase coolant pressure</li><li>• Check spindle and setup stability</li></ul>

Question	Causes	Remedy
Wear on guiding section	<ul style="list-style-type: none"><li>• incorrect cutting values</li><li>• Insufficient cooling</li><li>• Spindle/setup not stable</li></ul>	<ul style="list-style-type: none"><li>• Reduce cutting speed</li><li>• Reduce working feed rate</li><li>• Increase coolant pressure</li><li>• Check radial run-out</li><li>• Check spindle and setup stability</li></ul>
Break of cutting edge	<ul style="list-style-type: none"><li>• incorrect cutting values</li><li>• Insufficient cooling</li><li>• Spindle/setup not stable</li></ul>	<ul style="list-style-type: none"><li>• Increase cutting speed</li><li>• Increase coolant pressure</li><li>• Check spindle and setup stability</li></ul>
Break of top of drill insert	<ul style="list-style-type: none"><li>• Working feed rate too high</li><li>• Insufficient cooling</li><li>• Spindle/setup not stable</li></ul>	<ul style="list-style-type: none"><li>• Reduce working feed rate</li><li>• Increase coolant pressure</li><li>• Check spindle and setup stability</li></ul>
No chamfer or chamfer not consistent	<ul style="list-style-type: none"><li>• see FAQ for SNAP on page 100</li></ul>	

VEX-P spare parts – Tool body

Item	Description	Part no.
3	Tool body bore Ø range Ø 11.00–11.49 mm	GH-Q-G-4250
	Ø 11.50–11.99 mm	GH-Q-G-4251
	Ø 12.00–12.49 mm	GH-Q-G-4252
	Ø 12.50–12.99 mm	GH-Q-G-4253
	Ø 13.00–13.49 mm	GH-Q-G-4254
	Ø 13.50–13.99 mm	GH-Q-G-4255
	Ø 14.00–14.49 mm	GH-Q-G-4256
	Ø 14.50–14.99 mm	GH-Q-G-4257
	Ø 15.00–15.49 mm	GH-Q-G-4258
	Ø 15.50–15.99 mm	GH-Q-G-4259
	Ø 16.00–16.49 mm	GH-Q-G-4260
	Ø 16.50–17.00 mm	GH-Q-G-4261