

Shopsmith Jigsaw Troubleshooting

Due to the complexity of older-style jigsaws (as compared to today's modern Scroll Saws), our Shopsmith Jigsaws are susceptible to a number of problems. For that reason, we are going to be covering General Operational problems, as well as problems with the Table System, Blades and Blade Guides in this issue. We'll be following-up with workpiece problems, and problems with wood-cutting, metal-cutting and plastics-cutting in the up-coming July/August edition.

GENERAL PROBLEMS

Problem	Possible Cause(s)	Remedy
Drive Shaft heats-up &/ or head vibrates	Bearings worn Drive hub loose If driven by V-Belt, belt may be too tight Drive shaft pulley loose Oil level low	Replace bearings (factory job) Tighten drive hub Loosen belt tension Secure pulley Add oil to reservoir
Tool won't start or starts slow	Machine stiff from cold Capacitor on motor defective Motor Defective	Slow MARK V speed setting to "A" Warm shop to 55-degrees or above Replace capacitor (factory job) Replace or rebuild motor (factory job)
Power coupler difficult to install	Drive hubs out of alignment	Re-align drive hubs
Mounting tubes difficult to insert in power mount	Tubes out of alignment	Re-align tubes

TABLE PROBLEMS

Problem	Possible Cause(s)	Remedy
Table hard to tilt	Foreign material between trunion & base Burrs on trunion or in slots in base Tilt lock too tight	Remove table, clean trunion Remove burrs with fine file Loosen tilt lock
Table not tilted as indicated	Venier scale out of alignment Table warped	Re-align vernier scales Replace table
Table wobbles or moves	Tilt lock not secure Trunion bolts not secure	Tighten tilt lock Tighten trunion bolts
Table insert rubs blade	Insert not properly oriented Lower blade chuck jaws not properly centered	Turn table insert until blade operates freely Center lower blade chuck jaws

BLADE & BLADE GUIDE PROBLEMS

Problem	Possible Cause(s)	Remedy
Blade heats-up &/or breaks frequently	Blade guides not properly adjusted	Re-adjust blade guides
	Wrong blade for job	Select proper blade
	Cutting too tight a radius for blade size	Select smaller blade
	Feed rate too fast	Feed slowly using light, forward pressure
Blade slows &/or stops	Twisting blade or pressing against side of blade	Use light, forward pressure
	RMP's too fast	Reduce machine speed
	Blade binding in stock	Keep kerf open. Squeezing workpiece can close kerf.
Blade bends in stock	Turning too tight a radius for blade size	Select smaller blade
	Twisting blade or pressing against side of blade	Use light, forward pressure
	Upper blade guide too tight	Re-adjust upper blade guide
	Oil level low	Check oil level. Add oil if needed.
Blade bends in stock	Blade not adequately tensioned	Apply additional blade tension
	Twisting blade or pressing against side of blade	Use light, forward pressure
	RPM's too fast	Reduce machine speed
	Feed rate too fast	Feed slowly using light, forward pressure
Blower not operating	Blade too narrow for thickness of stock	Select wider blade
	Air pump seal dry or worn	Lubricate air pump seal. If blower doesn't begin to work, replace seal
Blower not operating	Blower tube disconnected	Reconnect blower tube
	Blower tube blocked	Clean blower tube with pipe cleaner

WORKPIECE PROBLEMS

Problem	Possible Cause(s)	Remedy
Workpiece difficult to cut	Flade dull Worng blade for job Twisting blade or pressing against side of blade Feed rate too fast Workpiece dense or hard Cutting too tight a radius for blade size	Change to new blade Select proper blade Use light, forward pressure Feed slowly using light, forward pressure Cutting difficulty is normal. Have patience. Select smaller blade
Workpiece jumps up-and-down on table	Hold-down not adjusted properly Cutting too tight a radius or feeding too fast Not applying adequate downward pressure on workpiece Blade binding in workpiece	Readjust hold-down Select smaller blade. Feed slowly using light, forward pressure Hold workpiece down firmly on table surface while cutting Keep kerf open. Squeezing workpiece can close kerf.
Workpiece won't slide easily across worktable	Table insert improperly installed "proud" of worktable surface Foreign material on worktable surface	Reinstall talbe insert flush with table surface Clean and apply paste wax to table surface.

PROBLEMS WITH WOOD-CUTTING

Problem	Possible Cause(s)	Remedy
Can't keep blade on cutting line	Blade dull Wrong blade for the job Twisting blade or pressing against side of blade Blade inadequately tensioned Feed rate too fast Blade guides not properly aligned	Change to new blade Select proper blade Use light, forward pressure Apply additional blade tension Feed slowly using light, forward pressure Realign blade guides
Blade won't cut small curves	Blade too wide for cutting small radius Blade dull Twisting blade or pressing against side of blade	Change to narrower (smaller) blade Change to new blade Feed slowly using light, forward pressure
Blade won't cut straight &/or angle of cut is not as indicated on trunion	Blade dull Blade not adequately tensioned Twisting blade or pressing against side of blade Feed rate too fast Worktable not tilted as indicated Blade guides improperly aligned	Replace with new blade Apply additional blade tension Use light, forward pressure Feed slowly using light, forward pressure Re-adjust worktable angle Re-align blade guides
Blade leaves uneven cut &/or excessive mill marks on workpiece	Backing stock away from the blade Blade too coarse Blade guides improperly adjusted Hold-down not keeping stock firmly against worktable surface	Cut with steady, light, forward pressure Change to finer-tooth blades Re-adjust blade guides Re-adjust hold-down

PROBLEMS WITH METAL-CUTTING

Problem	Possible Cause(s)	Remedy
Cut edge bonds	Insufficient workpiece support around cutting area	Use auxiliary plywood table, as described in "Operations" section of Owner's Manual
Teeth break or wear quickly	Using improper (probably wood-cutting) blade	Select proper (metal-cutting) blade
Excessively rough workpiece edges	Blad too coarse for the job	Select proper (metal-cutting)blade

PROBLEMS WITH PLASTIC-CUTTING

Problem	Possible Cause(s)	Remedy
Kerf closes, binds on blade & causes plastic to melt	Feed rate too slow	Gradually increase feed rate with light, forward pressure until problem ceases
	Machine RPM's too fast	Reduce machine speed

PROBLEMS WITH MACHINE FILING AND SANDING

Problem	Possible Cause(s)	Remedy
Machine file or sandpaper clogs quickly	Machine RPM's too fast	Reduce machine speed
	Feed rate too fast	Feed slowly using light, forward pressure
	Glue or paint on workpiece	This is normal. Clean machine file or sandpaper frequently.