

Problem	Possible Cause	Solution
<i>Drive Train</i> (Headstock)  Turn the Mark V on and nothing happens.	Machine unplugged.	Plug machine in.
	Switch defective.	Replace switch.
	Switch wires disconnected.	Check wires. If disconnected, call Factory for directions.
	Power cord defective.	Replace power cord.
	Motor defective.	Replace the motor. <b>Should be done by an authorized Service Dealer or Shopsmith Factory Repair.</b>
Motor only hums.	Motor bearings worn and binding.	Replace the motor. <b>Should be done by an authorized Service Dealer or Shopsmith Factory Repair.</b>
	Start switch in motor defective.	Replace the motor. <b>Should be done by an authorized Service Dealer or Shopsmith Factory Repair.</b>
Mark V starts up slowly.	Shop temperature below 55°.	Warm up shop.
	Starting windings in motor defective.	Replace the motor. <b>Should be done by an authorized Service Dealer or Shopsmith Factory Repair.</b>
	Motor bearings worn and binding.	Replace the motor. <b>Should be done by an authorized Service Dealer or Shopsmith Factory Repair.</b>
Mark V loses power or stalls at all speeds.	Poly V-belt loose.	Tension Poly V-belt and/or apply belt dressing sparingly.
	Poly V-belt worn.	Replace Poly V-belt.
	Drive belt worn.	Replace drive belt.

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Mark V loses power or stalls at all speeds (cont.).	Drive belt in a bind.	With unit turned off and unplugged, turn the speed dial slowly to high. This will separate the sheaves, allowing belt to become free.
	Work being forced.	Take your time; let the machine do the work.
	Blade or cutters dull.	Touch up or sharpen blade or cutters.
	Drive and ring assembly broken.	Replace drive and ring assembly.
	Rip fence or miter gauge misaligned, blade or disc binds.	Align rip fence or miter gauge.
	Extension cord too long or wire gauge too small.	Replace with shorter, fatter cord. <b>See Electrical Requirements.</b>
	Motor defective.	Replace the motor. <b>Should be done by an authorized Service Dealer or Shopsmith Factory Repair.</b>
Motor loses power at high speeds.	Sheaves sticking on shafts.	Lubricate sheaves.
	Speed setting too high for application of tool, thus reducing torque.	Reduce speed, creating more torque.
	Speed control set at inaccurate RPM.	Recalibrate RPM settings ( <b>See page D-6</b> )
Excessive vibration at high speed.	Drive belt worn.	Replace drive belt.
	Poly V-belt worn.	Replace Poly V-belt.
	Accessory is improperly mounted on spindle.	Mount accessory properly.
	Accessory out of balance or misaligned.	Repair accessory or check alignment.

Problem	Possible Cause	Solution
Metal-on-metal clatter or banging at all speeds.	Fan sheave rubbing on motor bracket.	Check Allen screw that holds sheave to motor shaft. If loose, tighten it. If tight, sheave may be worn into spacer. Replace sheave and spacer.
Metal-on-metal clatter or banging at high speeds.	Control sheave assembly hitting speed control bracket.	Reset high speed stop in speed control dial.
Belts slipping or squealing.	Poly V-belt loose.	Tension Poly V-belt.
	Poly V-belt worn.	Replace Poly V-belt.
	Drive belt worn.	Replace drive belt.
	Forcing material.	Do not force material, slow down.
Motor runs, auxiliary spindles turn, but main spindle doesn't turn.	Drive and ring assembly disconnected or broken.	Reconnect or replace drive and ring assembly.
Motor runs, lower auxiliary spindle turns, but upper auxiliary and main spindles don't turn.	Poly V-belt worn or broken.	Replace Poly V-belt.
Motor runs, but none of the spindles turn.	Drive belt worn or broken.	Replace drive belt.
	Retaining ring and washer off motor shaft.	Reassemble retaining ring, washer and motor shaft spring on motor shaft.
Top of headstock gets hot.	Poly V-belt improperly tensioned.	Tension Poly V-belt properly.
	Air flow clogged	Clean.
	Motor over heating	Replace Motor.
	Drive Sleeve/Idler Shaft - missing lower auxiliary hub.	Assemble.
	Quill Feed - bearings worn.	Replace bearings.