

## **Cutting Trouble-Shooting Guide:**

This machine is a powerful metal cutting saw and it would have no problem to cut you. You must treat the machine with respect to avoid any injuries.

The advice should be used as a guide only. All machines are unique so there may be differences. Adjustments to the machine must be only be done by qualified and trained personnel. Any electrical adjustment must only be done by a qualified electrician and all safety aspects requiring electrical lockout must be followed. There is a very real potential for accidental electrical shock!

### **BE CAREFUL! WORK SAFELY!**

- Do not operate any machine until you have read the manual and have been instructed on all standard shop safety precautions.
- Keep away from all moving parts including but not limited to the following; saw blade, blade wheels, pulleys, v-belts, motor, etc.
- Never operate the machine unless all guards are in place.
- Machines are designed for use by only one operator; do not let two people work on the machine at the same time.
- Always keep the machine and your work area clean and remove all obstacles.
- Never load, unload stock or remove cut parts from the machine while the blade is running.
- Support long or heavy stock in the front and rear of the machine.
- Always clamp the stock securely before operating the machine.
- When changing the blade always wear gloves and safety glasses. Do not throw the blade into the air to uncoil. If you do not know how to uncoil the blade get instructions from your blade supplier.
- Do not wear jewelry, gloves, loose clothing, and ties or have long hair unconfined while operating this machine.
- When performing maintenance work on the bandsaw machine always disconnect the power supply.
- Use the proper speeds, feeds and coolant as required.
- Do not let the coolant pump operate dry.
- Do not let the hydraulic level to become low.

<b>PROBLEM</b>	<b>PROBABLE CAUSE</b>	<b>SOLUTION</b>
Excessive blade breakage	Teeth too coarse	Use finer pitch
	Misalignment of guides	Adjust blade guides
	Excessive tension	Adjust blade tension
	Blade speed too slow	Increase blade speed
	Excessive feed	Reduce feed
	Brittle blade weld	Improve welding technique
	Incorrect wheel tracking	Check blade tracking and adjust if required
	Wheels damaged	Check wheels for damage and play
	Insufficient coolant	Increase coolant flow and check concentration
Early tooth wear	Excessive speed	Decrease speed
	Blade too fine	Use coarser pitch blade
	Feed too low	Increase feed



	Improper coolant	Check type and concentration of coolant
	Incorrect blade break-in	Break blade in by decreasing the blade feed for the first 20 minutes of cutting.
	Scale on surface of material	Remove scale
Teeth stripping	Material not clamped securely in vise	Clamp material firmly
	Gullets filling	Use coarser pitch
	3 teeth not in contact with material	Use finer pitch
	Excessive feed	Reduce feed
	Improper coolant	Check type and concentration of coolant
	Insufficient coolant	Increase coolant flow
	Blade speed too low	Increase blade speed
	Material has hard spots	Use a harder blade and / or a finer pitch
Blade twisting	Excessive blade pressure	Adjust feed pressure
	Blade not in alignment with guide	Check guide for wear and adjust
	Blade guide arms are too far from material	Move guide arms to be closer to material
Blade will not cut	Blade teeth pointing in the wrong direction	Remove blade, turn blade inside out, teeth must point in direction of travel
Not cutting square	Vise not square	Square vise
	Material not square	Clamp material correctly
	Excessive pressure	Reduce feed pressure
	Improper blade tension	Adjust tension
	Blade dull	Change blade
	Blade too fine pitch	Use coarser pitch blade
Machine will not turn on	No power to the machine	Turn on disconnect
	Emergency stop button is depressed	Turn and pull emergency stop button
	Motor overload has been tripped	Determine reason the overload has been tripped then open cover on electric box and reset overload
	Fuses are blown.	Disconnect power, check fuses, replace. Determine why fuse blew.
	Impatient	Wait 2 minutes after turning on power



Motor fails to develop full power, overload	Low voltage	Correct supply voltage
	Power line overload	Reduce load on line trips
	Under size wire	Increase wire size and or diameter
	Air circulation to motor is restricted	Clean air vents in motor
Blade vibration	Incorrect blade speed	Increase or decrease blade speed
	Insufficient blade tension	Increase blade tension
	3 teeth not in contact with material	Use finer pitch
	Blade tooth selection incorrect	Use different tooth form
Cut finish too rough	Too coarse blade pitch	Use finer blade pitch
	Blade speed too slow	Increase blade speed
	Excessive pressure	Decrease feed pressure
Blade gullets plugged	Blade pitch too fine	Increase blade pitch
	Improper or insufficient coolant	Increase coolant flow and check coolant concentration
	Blade brush ineffective	Check blade brush, replace and / or adjust as required
	Blade speed too low	Increase blade speed
Cut bowed	Excessive feed pressure	Decrease feed pressure
	Gullets plugging	See above
Blade jamming	Material not securely clamped	Clamp material securely
	Blade too coarse	Use finer pitch blade
	Blade speed too low	Increase blade speed
	Blade feed rate too high	Decrease blade feed rate
	Blade tension too low	Correctly set blade tension