

METAL BAND SAW

VERSION 3.1



AUTODESK
PIER 9

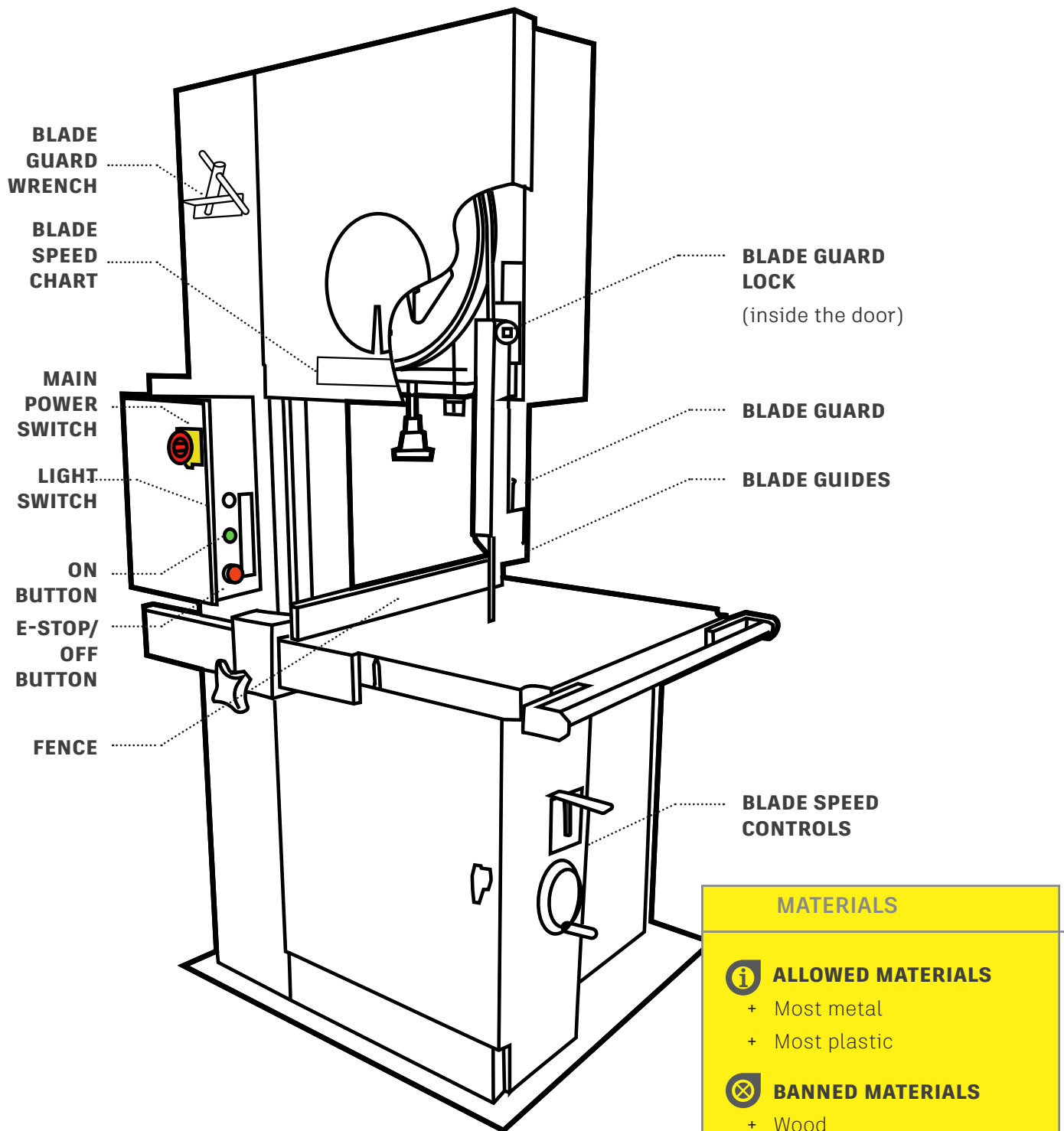
METAL BAND SAW

MACHINE
CONTROLS

VERSION 3.1

THE BAND SAW MAKES CURVED CUTS IN METAL & PLASTIC.

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MATERIALS

i ALLOWED MATERIALS

- + Most metal
- + Most plastic

x BANNED MATERIALS

- + Wood
- + Carbon fiber and composites

? SEE SHOP STAFF FIRST

- + All other materials

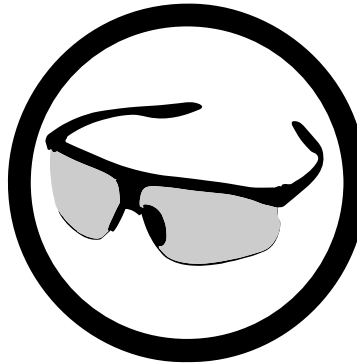
METAL BAND SAW

KEEP IT SAFE

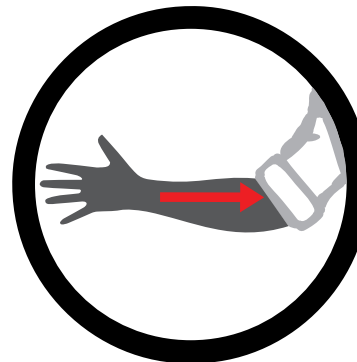
VERSION 3.1

USE PERSONAL PROTECTIVE EQUIPMENT WHEN OPERATING THE BAND SAW.

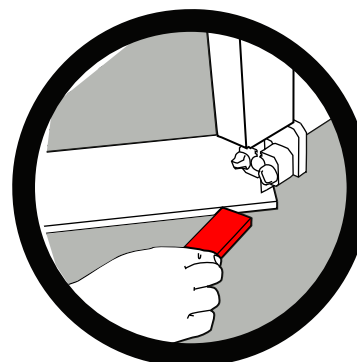
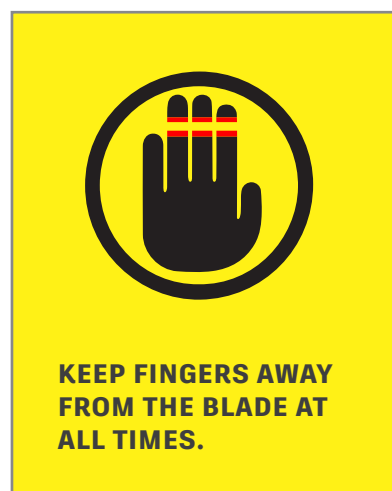
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Always wear safety glasses.



Always wear short sleeves, or rolled sleeves, pull back and tuck in long hair, remove jewelry and lanyards, etc. Do not wear gloves.



Use a pushstick when your fingers are within 4" of the blade. Lower the blade guard 1/4" above the workpiece.

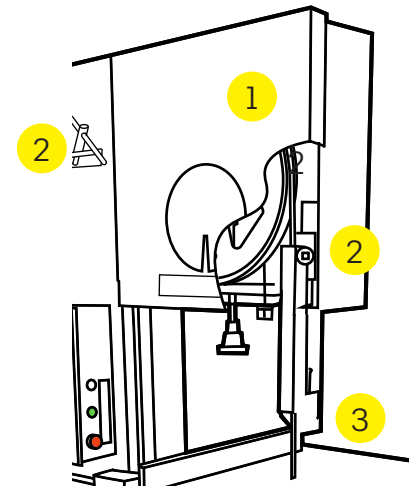
THE BLADE GUARD, GUIDES AND SPEED CAN ALL BE ADJUSTED.

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ADJUSTING THE BLADE GUARD & GUIDES

The blade guard helps to prevent contact with the exposed blade. Adjust the blade guard and guide every time you use the saw.

1. Open the upper door.
2. Loosen the blade guard lock with the blade guard wrench.
3. Adjust the blade guide to be 1/4" above your material.
4. Snug the blade guard lock.
5. Close the door.



ADJUSTING THE BLADE SPEED

The blade speed should be adjusted for each cut.

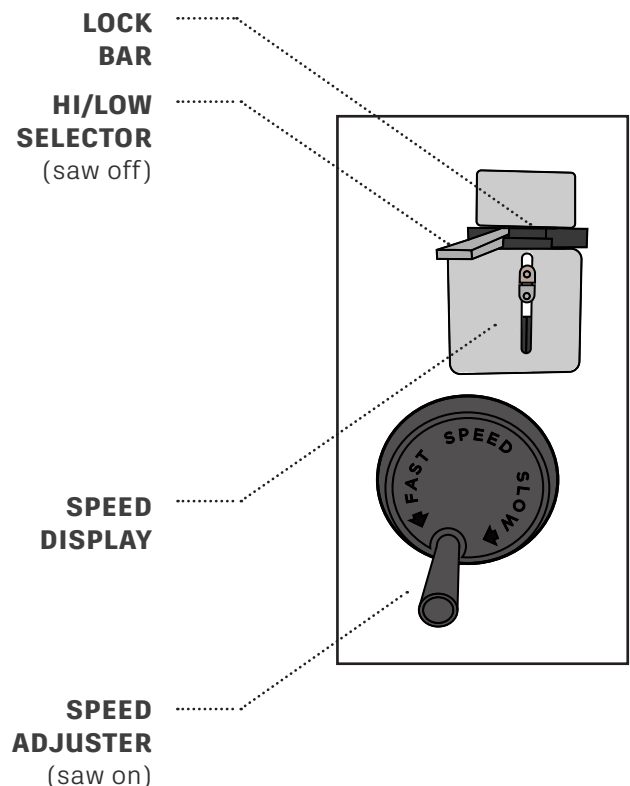
1. Use the chart on the front of the saw to determine the correct speed for your material; slow (steel) or fast (aluminum).
2. Clear the table.
3. Lower the blade guard.

The speed adjuster must be changed with the saw on.

1. Turn on the saw.
2. Adjust the speed by rotating the handle.

The hi/low selector must be changed with the saw off.

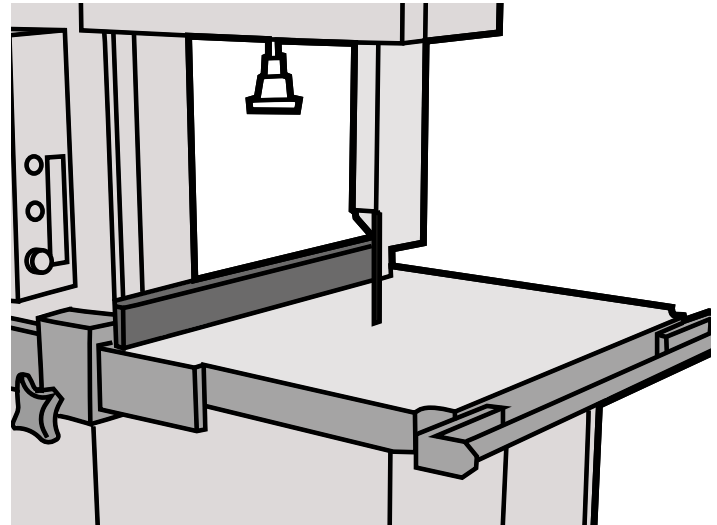
1. Using the instructions above, adjust the saw to its slowest speed.
 - ▶ The lock bar between hi and low will move out of the way when the saw is in the slowest position.
2. Turn the saw off.
3. Lift the gear change lever, and slide it to the desired setting.
 - ▶ You may need to open the cabinet and hand rotate the wheel while trying to fully engage the gears.



MAKING STRAIGHT CUTS

Every band saw has some amount of *drift*. While cutting straight with the blade, it will pull to one side or the other.

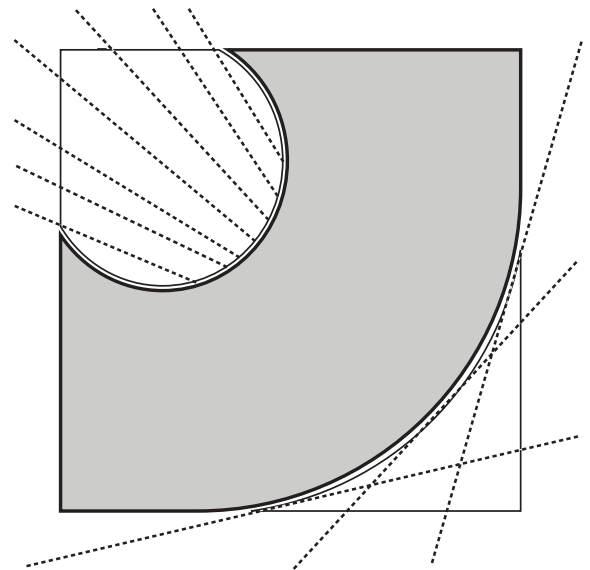
- + Adjust the angle of your work to make a straight cut.
- + Using the fence can help to make a straight cut.



MAKING CURVED CUTS

Blades have a *minimum cut radius* depending on the width of the blade.

- + Forcing a blade to make too tight of a radius will result in friction that heats the work and blade, causing damage to both.
- + Make *relief cuts* to create a small radius.
- + When making relief cuts you must stop the blade completely before backing it out.



AREA AND MACHINE PREPARATION

1. Clean and clear the table.
2. Make sure there is sufficient room around the saw for your workpiece.
3. Have a push stick ready and within easy reach.
4. Adjust the blade guard height.
 - ▶ The height of the blade guide should be about $\frac{1}{4}$ " above your material.
 - ▶ The blade guard covers the blade and helps reduce the chance of injury.

ADJUST THE BLADE GUARD EVERY TIME.

MAKING THE CUT

1. Turn on the blade and wait for the saw to come up to speed.
2. Adjust the speed, according to the chart.
3. Slowly push the material into the blade.
 - ▶ Experience will help determine the correct speed for the material, thickness, blade type and other variables.
4. Keep at least one hand on the material; if blade is under strain, release forward pressure.
5. Stay in control of the material until it is past the back of the blade.
6. Turn off the blade, and wait for it to stop.

ALWAYS ADJUST THE BLADE SPEED FOR YOUR MATERIAL.

CLEANUP

1. Double check that the blade is not moving.
2. Lower the blade guard all the way down.
3. Brush off the table and clean up the area.
4. Recycle scraps and put reusable pieces in the storage bin in the metal shop.

DO NOT CLEAN OFF THE TABLE WITH YOUR HAND WHILE THE BLADE IS MOVING.