

# Equipment Inspection for Construction Technology

## Construction Technology Safety Boards

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All equipment is vulnerable to manufacturing defects, regular wear and tear, and possible damage due to misuse. As such, periodic maintenance must be performed on all machinery.

Under Regulation 298 of the Education Act, a teacher shall "ensure that all reasonable safety procedures are carried out in courses and activities for which the teacher is responsible..." All stationary equipment should be inspected regularly and inspection documentation maintained. To assist teachers in meeting these obligations, the Board has developed inspection forms.

During normal use or during an inspection, if any of the conditions indicated below is found, the equipment must be locked/tagged out until corrective action can be taken:

- Machine guard is missing and cannot be located
- Machine doesn't work when you turn it on or off
- Electrical short occurs and/or sparking is present and does not stop
- Electrical power cord becomes damaged – i.e. Insulation gets stripped away exposing conducting wires underneath
- Drive belt(s) rip/tear, come loose from motor
- Machine no longer operates correctly – becomes dangerously unbalanced
- Hydraulic lines are compromised and cannot provide power (if applicable)
- Pneumatic lines are compromised and cannot provide power (if applicable)
- Leak in roof is allowing water to drip onto machine
- If the machine is making sounds/movement/vibrations that you know or the operator's manual indicates are not normal
- The breaker for the machine cuts power when the machine is turned on or under load
- The machine is being worked on but the teacher/repair person leaves the room
- When blades or cutters are being changed
- When maintenance is being performed

For more information on setting up an inspection process, please contact your designated Safety Officer.

*Sample equipment inspection sheets provided by the Reitech Corporation under "Additional Resources" to assist in the inspection process. These sheets are not required to be used; however they provide valuable information regarding industry standard inspections.*

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Health, Wellness and Safety provided each school with Technology Programs (Construction, Manufacturing or Transportation) a basic lockout/tagout kit. This kit is a red bag labelled PDSB Lockout Tagout Kit. The purpose of this kit is to provide a means for teaching staff to neutralize energy sources in a piece of equipment in order to prevent accidental injury during maintenance or repair (i.e. machine setup, changing blades/cutters, when guards missing/broken, etc.).

The contents of the lockout/tagout kit should include:

- 6 steel padlocks
- 2 nylon hasps
- 2 100V plug lockout
- 1 220V plug lockout
- 10 lockout tags
- 1 ball valve lockout

The purchase of additional or supplemental lockout equipment is the responsibility of each individual school. Should you require additional materials or a kit please contact the vendor below for more information:

Hansler Smith Limited  
1581 Courtney Park Drive East  
Mississauga, ON L5T 1V9  
905-670-9000

For more details on the use of each piece of lockout equipment, please refer to the manufacturer's instructions. Additional information on lockout/tagout can be found on the Technology Safety Website:

<http://inet.peelschools.org/departments/humres/TechnologySafety1.htm>

**The lockout/tagout kit for your school can be found:**






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(Please fill in appropriate information)

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Lockout is necessary to neutralize energy sources in a piece of equipment in order to prevent injury during maintenance or repair (i.e. machine setup, changing blades/cutters, when guards missing/broken, etc.). Please review the basic procedures are below:

1.	<b>SWITCH OFF</b>	Turn off power at the machine.	
2.	<b>LOCK</b>	<p><i>There are a few options for performing a lockout:</i></p> <p><b>At the machine:</b> a) If the machine has a switch that can be locked – place the switch in the OFF position and secure with a padlock and/or hasp.</p> <p><b>At the plug:</b> b) If the machine is plugged into a drop or outlet - unplug the machine and apply a plug lockout. Use a padlock to secure the case. A plug lockout can be applied to both twist-type and regular plugs.</p> <p><b>Compressed air:</b> c) To lockout compressed air sources, place the valve in the closed position, bleed off the air pressure and then attach the ball valve lockout. Use a padlock to secure.</p> <p><b>* Hardwired machines:</b> To lockout hardwired machines (that do not have a switch that can be locked in the OFF position), the electrical breaker switch that powers the machine should be flipped to the OFF position and the electrical panel should be locked. Alternatively, electrical breaker lockouts can be purchased that can secure and lock individual breaker switches. Please contact one of the approved vendors for more details.</p>	  
3.	<b>TAG</b>	Attach a tag advising not to use/operate the machine. Indicate who has performed the lockout and when it was completed.	
4.	<b>TEST!</b>	Try to start the machine to ensure power has been disconnected.	