

TOOL BOX TALKS

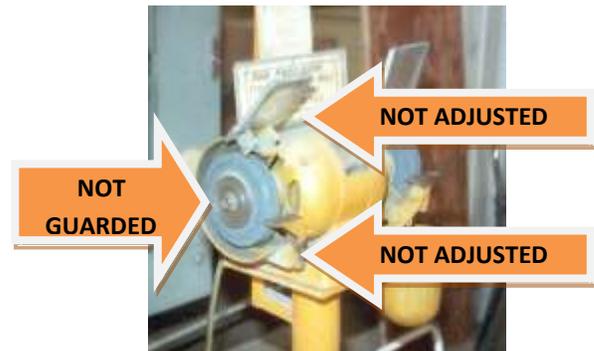
Bench Grinders

One of the most common metalworking tools is the grinder. Grinders are used in almost all garages, shops and jobsites, and can be purchased by anyone, almost anywhere. Grinders produce wheel speeds of 9,000 to 14,000 revolutions per minute (RPM), which expose the operator to serious hazards. Damaged or old grinding wheels can explode at these high speeds, producing flying fragments. They also produce excessive noise and flying particles.

WORKSAFE TIPS

BENCH GRINDER - PPE REQUIRED

- Wear hearing protection produces loud noise
- Wear gloves to prevent laceration
- Wear eye protection for high-velocity particles
- Wear a face shield - flying particles
- Wear an apron - protect abdomen - flying objects
- Respiratory protection-grinding produces dust
- Train operators before they use a grinder
- Read the owner's manual
- Verify grinding wheel RPM is matched or rated higher than the RPM of the grinder motor
- Make sure all guards are in place when operating
- Make sure shaft guards are in place
- Make sure outer wheel guards are in place
- Remove damaged grinders – imminent danger
- Provide restart protection, which keeps the grinder off when power is off and comes back on
- Adjust top tongue guard to within $\frac{1}{4}$ inch of the wheel surface
- Adjust tool rest to $\frac{1}{8}$ inch from wheel surface – prevent objects from being pulled in
- As the wheel wears down, adjust top tongue guard & work rest
- Bolt or secure grinder to a work surface
- Stop grinder if excessive vibration is detected
- Install new grinding wheels per grinder and wheel manufacturer instructions
- Never “make” a wheel “fit” or alter the arbor
- “Ring Test” grinder wheels before installing
- Avoid kickback – use minimum pressure
- Avoid kickback – never “force”
- Remove cord from outlet when changing discs



WorkSAFE

Smart, Accident-Free Environments



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888.499.SAFE (7233)