

HAZARD RECOGNITION

BUS industry **SAFETY** council

DAECHER
CONSULTING GROUP

HAZARD RECOGNITION

Identifying Hazards

- Facility inspections
- Accident investigations

- Use the facility inspection checklist as a guide.
- Inspect each item.
- Identify hazards in the workplace.
- Update checklist as needed. *Customize to your operation.*
- **Address system not just the symptoms.**
- Prioritize & develop an action plan. Implement.

Inspector(s): _____ Date: _____

Check "X" under the Y for Satisfactory Condition observed; N for Improvement Recommended Condition observed.

Housekeeping	Yes	No	Comments
Shop appearance reasonably neat and orderly	<input type="checkbox"/>	<input type="checkbox"/>	_____
Floors/platforms free of liquids, debris and tripping hazards	<input type="checkbox"/>	<input type="checkbox"/>	_____
Work areas clear of debris, tools & parts not in use	<input type="checkbox"/>	<input type="checkbox"/>	_____
Work areas are adequately illuminated	<input type="checkbox"/>	<input type="checkbox"/>	_____
New and used batteries are properly stored	<input type="checkbox"/>	<input type="checkbox"/>	_____

Personal Protective Equipment and First Aid	Yes	No	Comments
Required PPE available and stocked	<input type="checkbox"/>	<input type="checkbox"/>	_____
PPE is clean and in good useable condition	<input type="checkbox"/>	<input type="checkbox"/>	_____
First aid and body fluid kits stocked and available	<input type="checkbox"/>	<input type="checkbox"/>	_____
Eyewash solution stocked and available	<input type="checkbox"/>	<input type="checkbox"/>	_____
Eyewash station in good condition, cleared and labeled	<input type="checkbox"/>	<input type="checkbox"/>	_____

Exits	Yes	No	Comments
Doors free and clear of obstructions; easily open outward	<input type="checkbox"/>	<input type="checkbox"/>	_____
Exit signs at each exit and illuminated by a reliable light	<input type="checkbox"/>	<input type="checkbox"/>	_____
Exit doors are not locked when the building is occupied	<input type="checkbox"/>	<input type="checkbox"/>	_____

Fire Protection	Yes	No	Comments
Extinguishers mounted, accessible and labeled	<input type="checkbox"/>	<input type="checkbox"/>	_____
Extinguishers inspected monthly	<input type="checkbox"/>	<input type="checkbox"/>	_____
Extinguishers inspected/serviced annually	<input type="checkbox"/>	<input type="checkbox"/>	_____
Is the maximum travel distance between extinguishers 75'	<input type="checkbox"/>	<input type="checkbox"/>	_____
Emergency lighting available and operational	<input type="checkbox"/>	<input type="checkbox"/>	_____

Location Safety	Yes	No	Comments
Adequate lighting for vehicles/parking	<input type="checkbox"/>	<input type="checkbox"/>	_____
Location is free of potholes and ruts	<input type="checkbox"/>	<input type="checkbox"/>	_____
Speed limit posted and followed	<input type="checkbox"/>	<input type="checkbox"/>	_____

Flammable and Combustible Materials	Yes	No	Comments
All chemical containers in shop correctly labeled	<input type="checkbox"/>	<input type="checkbox"/>	_____
Flammable & combustible materials stored properly	<input type="checkbox"/>	<input type="checkbox"/>	_____
Oily rags/combustible materials stored in covered containers	<input type="checkbox"/>	<input type="checkbox"/>	_____
"Open top" containers emptied after use	<input type="checkbox"/>	<input type="checkbox"/>	_____
Dispensing drums of flammables are bonded and grounded	<input type="checkbox"/>	<input type="checkbox"/>	_____
Chemical inventory list and SDS book available and updated	<input type="checkbox"/>	<input type="checkbox"/>	_____

WALKING AND WORKING SURFACES

Housekeeping

- Obstructions, clutter, hazards, etc.

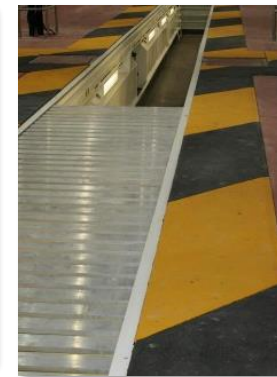


All places of employment, aisles, storerooms, etc. kept clean, orderly and in a sanitary condition.

Fall Protection

Provide fall protection for open sided floor or platform above 4 feet

- A toeboard required when falling material could create a hazard



Provide covers, netting or railings for pits and/or cover when not in use.

EMERGENCY ACTION AND FIRE PREVENTION

Means of Egress



Exit Doors



Free and unobstructed

Able to open at all times
without keys, tools or
special knowledge



EMERGENCY ACTION AND FIRE PREVENTION

Exit Markings

- Clearly visible and marked “Exit”
- If direction of exit is not immediately apparent, signs posted indicating direction
- Doorways along an exit access labeled



- Exit signs illuminated by a reliable source.
- Externally and internally illuminated signs visible in both normal and emergency light mode.

Exit Lighting

Periodic testing of emergency lighting

- 30 second (monthly) and 90-minute (annual) testing



Diagnostic LED which illuminates to convey test results



Self-diagnostic equipment can be setup to automatically perform routine tests. A visual inspection is still required.

EMERGENCY ACTION AND FIRE PREVENTION

Fire Extinguishers and Fire Protection



Blocked



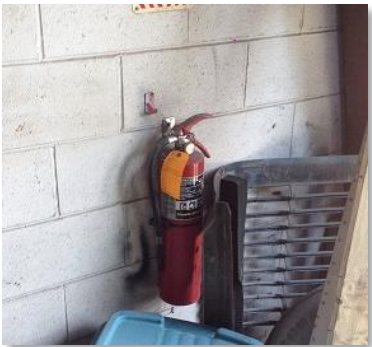
Un-mounted



Unmarked



Annual inspections



Inspections (annual/monthly)



Blocked sprinkler heads

HAZARDOUS MATERIALS

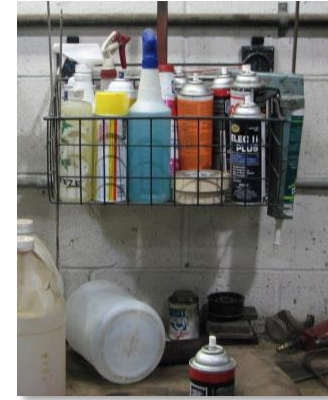
Chemical labeling and Safety Data Sheets



Unlabeled chemical containers and tanks



Flammable Storage Cabinets



Control quantities outside of storage areas



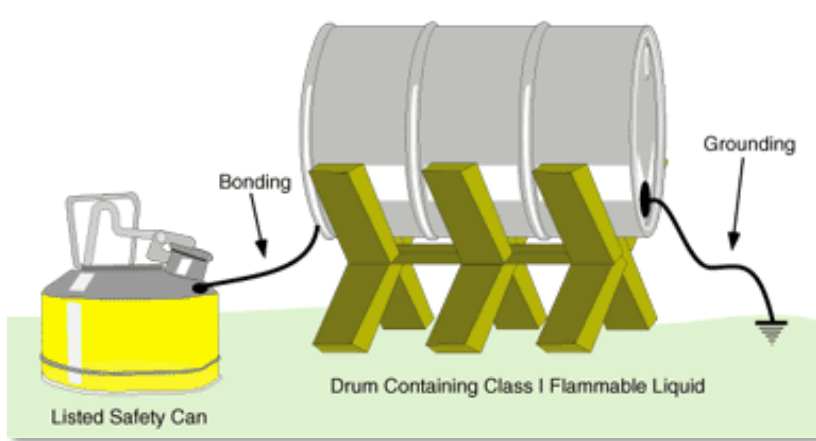
Ingestion (Swallowing):

This product may be harmful or fatal if swallowed. This product may cause nausea, vomiting, diarrhea and restlessness. Do not induce vomiting. Do not give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is unconscious or drowsy, place on the left side with the head down. Seek immediate medical attention.

HAZARDOUS MATERIALS

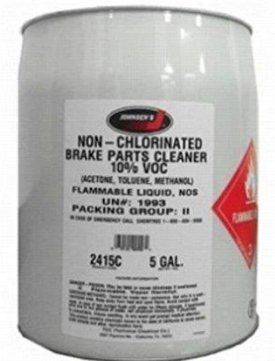
Dispensing Flammable Liquids

- Bonding and grounding



Category 1 or 2 flammable liquids or category 3 flammable liquid with a flashpoint below 100 °F

- GHS Category: 1, 2 or 3
- NFPA Rating: 3 or 4
- HMIS Rating: 3 or 4



HAZARDOUS MATERIALS



HAZARDOUS MATERIALS



HAZARDOUS MATERIALS

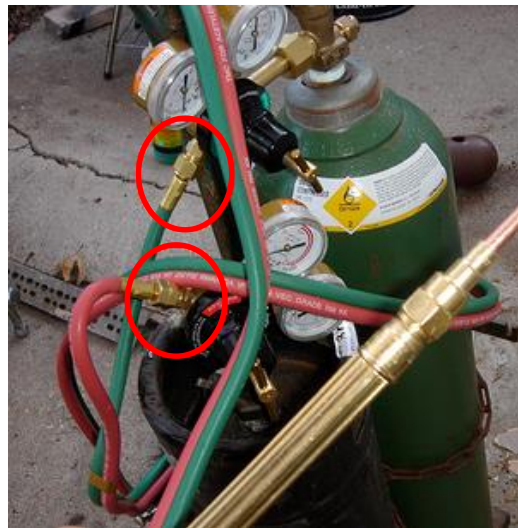
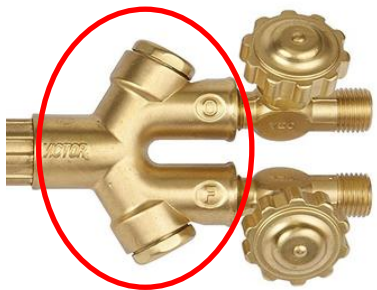
Compressed Gas Cylinders



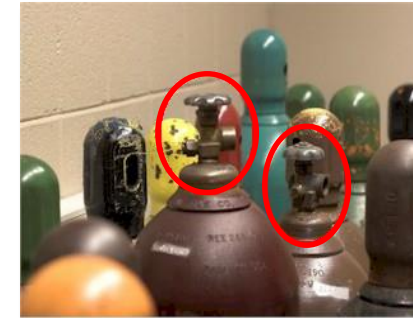
Backflow Valves



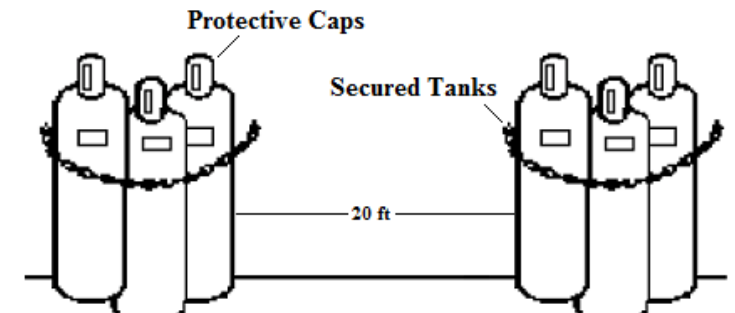
Flashback Arrestors



Unsecured cylinders

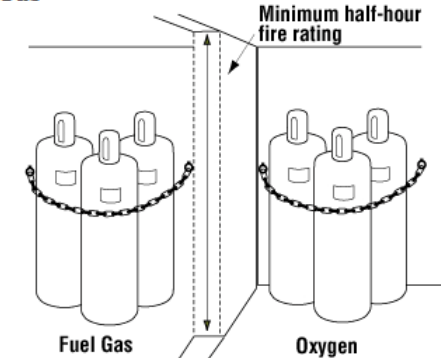


Missing Valve Caps



Fuel Gas

Oxygen



Fuel Gas

Oxygen

HAZARDOUS MATERIALS

Can you spot the hazards?



High Voltage

Oxygen

- Unsecured
- Missing Caps

Acetylene

- Unsecured
- Missing Caps

Flammable Liquid

HAZARDOUS MATERIALS

Compressed Gas Cylinders



Safe work practices



HAZARDOUS MATERIALS

Compressed Gas Cylinders

Tanks stored with relief valve in communication with vapors



Incorrect storage



Correct storage



Propane tank storage

ELECTRICAL

Electrical Panels



Inserts missing inside panel box



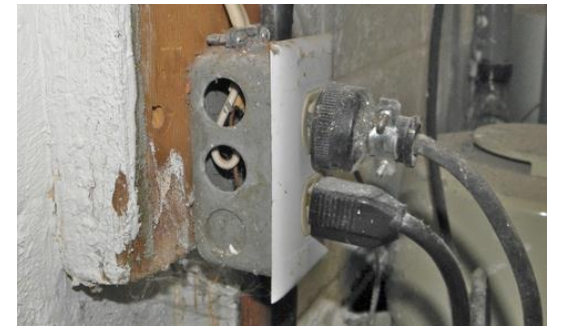
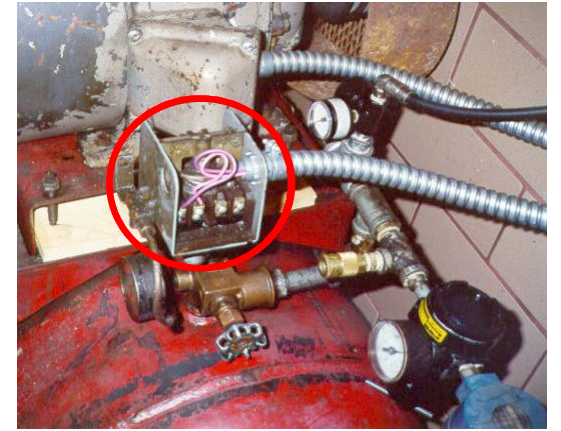
Labeled circuits



Blocked electrical panels and switches



Covers, Faceplates & Openings



Outlets, junction boxes and fittings must have cover, faceplate or fixture canopy

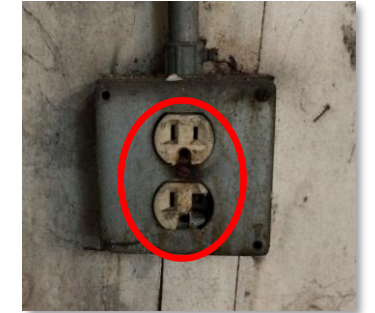
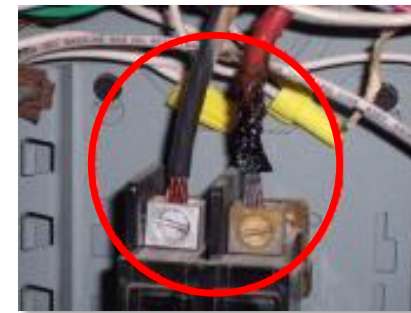


ELECTRICAL

Wiring and Damaged Electrical Equipment



“daisy chaining”



Damaged cords and equipment



Overloaded outlet



Removing the ground



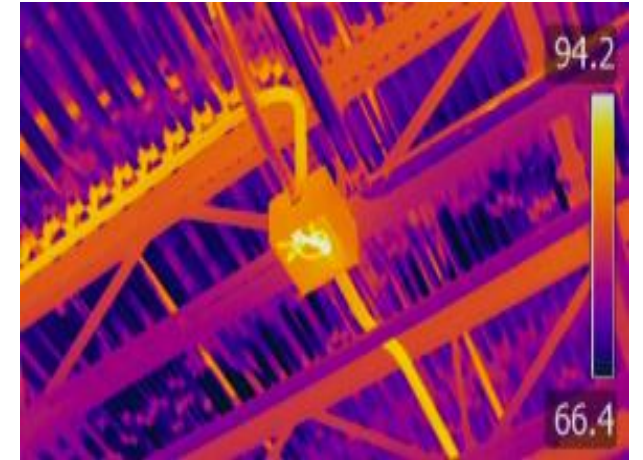
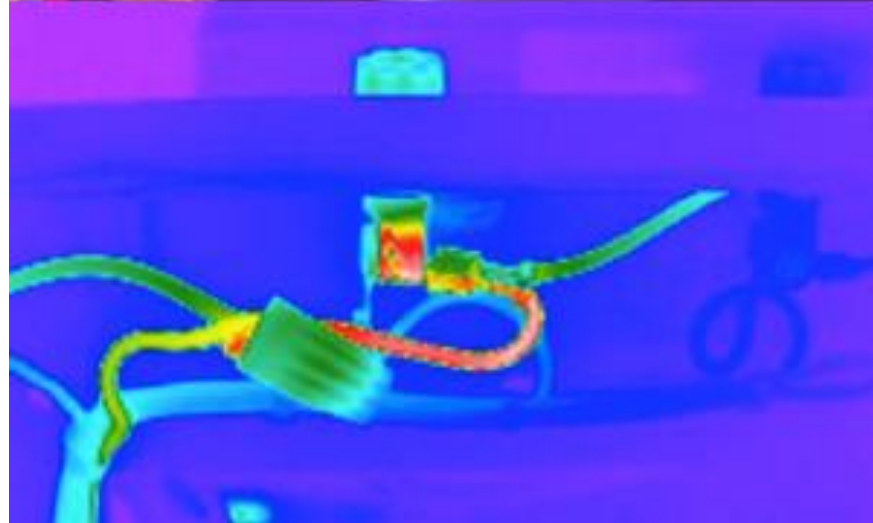
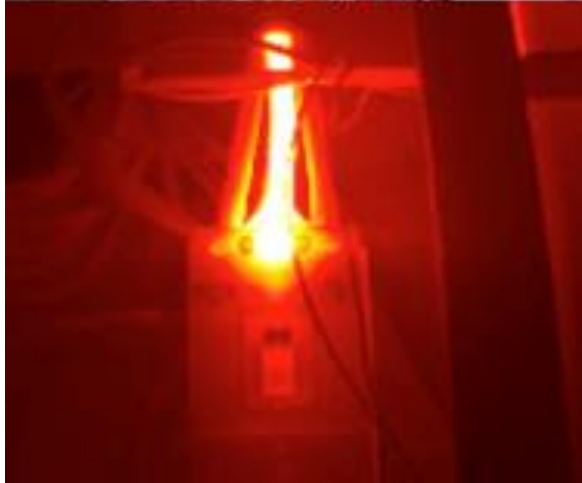
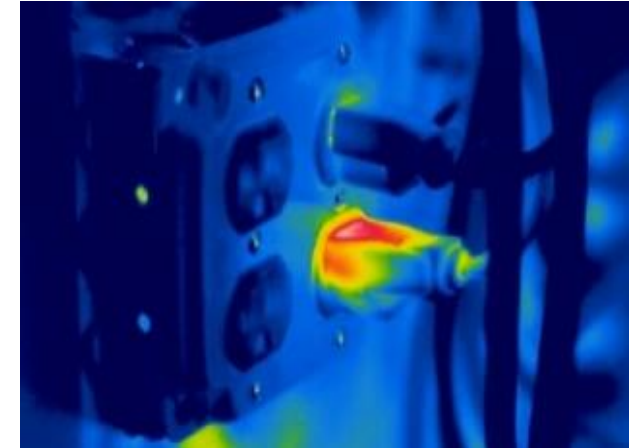
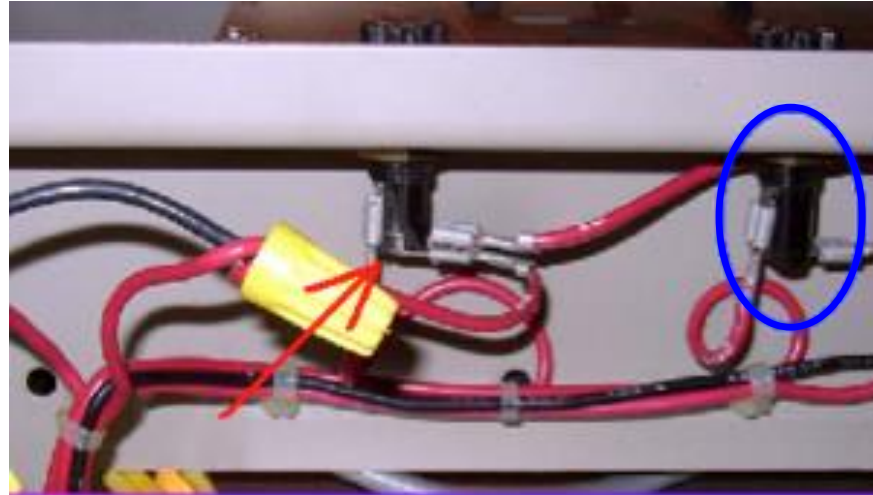
- Temporary wiring only during periods of repair, construction, remodeling, or demolition.
- Not to be used as a substitute for fixed wiring of a structure.



Spliced electrical cords

ELECTRICAL

Wiring and Damaged Electrical Equipment



ELECTRICAL

Working space and labeling



Blocked panels/switches



Panel and switch labeling



VEHICLE LIFTS AND WHEEL RIM MAINTENANCE

Vehicle Lift Safety

- ALI Certified “Gold Label”
- Lift inspections
- Employee training and information



Wheel Rim Maintenance

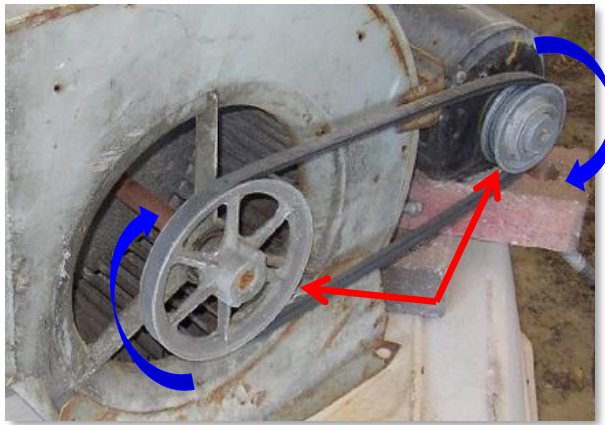
- Operating procedures and training
- OSHA posters
- Equipment and inspections



MACHINERY AND MACHINE GUARDING

Machine Hazards

- Point of operation
- Power transmission equipment
 - Flywheels, pulleys, sprockets & chains, etc.
- Moving parts



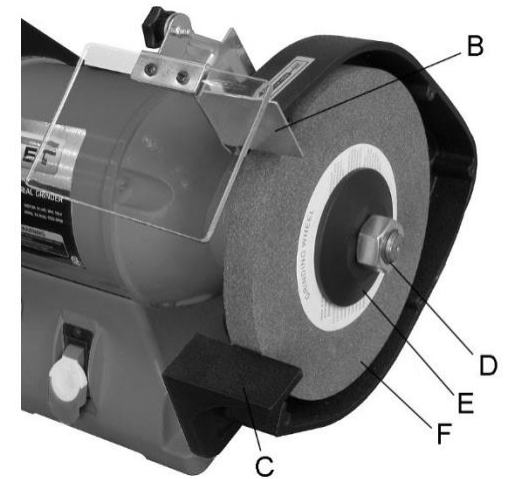
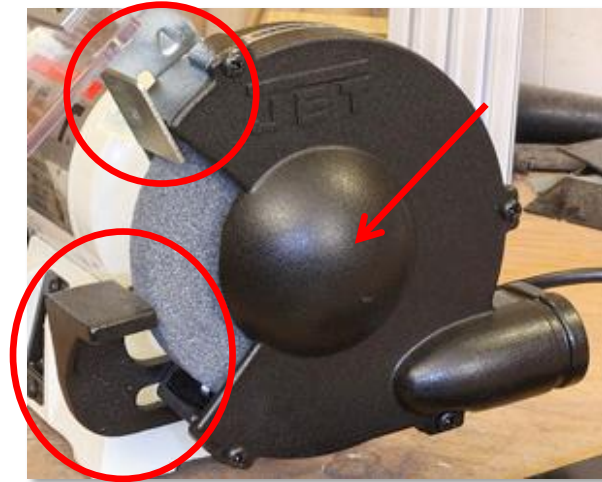
In-running nip points



Point of operation

Bench Grinder (abrasive wheel)

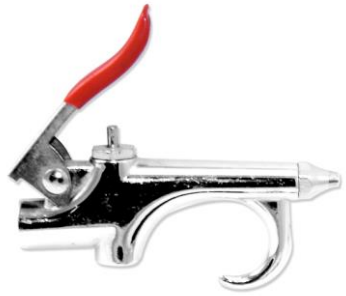
- Work rest adjusted to 1/8" of wheel
- Tongue guard adjusted to 1/4" of wheel
- Side guards must cover flange, spindle end and nut



HAND AND POWER TOOLS

Compressed Air

When pressurized air greater than 30 psi is used for cleaning, the nozzle needs a pressure relief device that limits 30 psi



Male end tips

Safety nozzles

Damaged Tools and Equipment



HAND AND POWER TOOLS

Other Hand-Held Equipment

Jacks and Jack Stands



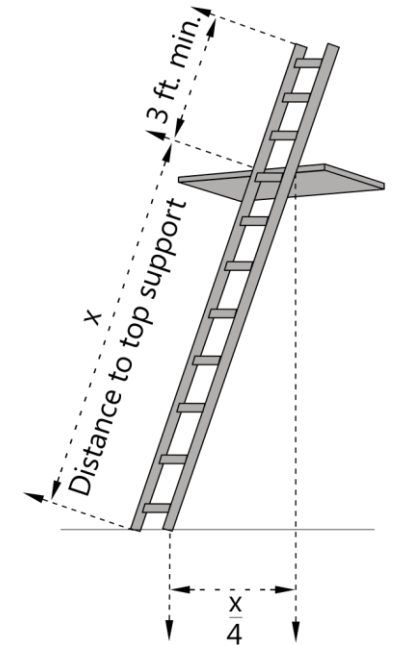
Place damaged or defective equipment out of service



Legible capacity labels



PORTABLE LADDERS



PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment

- Damaged? Usable? Stocked? Available? Proper?



QUESTIONS

Contact Information

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BUS industry **SAFETY** council