

# Air Compressor Safety

The following are examples of accidents that have occurred with air compressors:



- An employee was working on an air compressor when the gauge blew off, hitting a customer's car in the parking lot.
- An air compressor hose lost a fitting and an employee was hit in the face, which required several stitches.
- A renter claimed that the air hose blew off a fitting and hit a worker in the back.
- The hose on an air compressor broke off and blew sand and gravel in the face of a customer.

## Recommendations for rental stores:

- Know what protective devices your machine is equipped with. Verify that each item is securely in place such as the drawbar coupling chains and pins, alarms and warning lamps, guards and shields, drain covers, plugs and caps, and pressure relief devices.
- Inspect and maintain equipment regularly according to the manufacturers' guidelines.
  - Inspect electrical wiring for worn or damaged insulation. Install new wiring if wires are damaged.
  - Check for fuel, oil and hydraulic fluid leaks. Replace worn or damaged hoses/lines. After repairs are made, clean the machine before you operate it.
  - Make certain that any unsafe condition has been satisfactorily remedied. Always tag the air compressor with a "DO NOT OPERATE" tag at the control panel and disconnect the battery if an unsafe condition exists.
  - Use parts, lubricants and service technicians recommended by the manufacturer.
  - Maintain the cooling system according to the manufacturer's instructions. Hot coolant can spray out and burn you if you improperly service the cooling system.
- For long-term rentals, perform weekly preventative maintenance checks.



# Compressor Safety (continued)



## Advise renters of these safety tips:

- ✓ Carefully read and follow all safety signs and instructions on the air compressor.
- ✓ Always stop the engine and allow the air compressor to cool before you refuel. Remove the filler cap only when cool enough to touch with a bare hand. Do not refuel while smoking or when near open flame or sparks. Never overfill fuel tanks or fluid reservoirs.
- ✓ Exhaust fumes can kill. Do not operate an air compressor in an enclosed area.
- ✓ Make certain all hoses, shut-off valves, flow limiting valves and other attachments are connected according to the manufacturer's instructions.
- ✓ If the air compressor is to be used in conjunction with other sources of air, be certain there is a check valve installed at the service valve.
- ✓ Warn anyone who is near the air compressor before you start it and make sure they are safely clear before starting.
- ✓ The noise of an air compressor can damage hearing. Make certain all personnel in the working area have adequate ear protection. If recommended by the manufacturer, keep air compressor doors closed.
- ✓ Familiarize yourself with warning devices, gauges and operating controls and be sure you know the emergency shutdown procedure before starting the air compressor.
- ✓ After starting the engine, observe gauges, instruments and warning lights to ensure that they are functioning and their readings are within the normal operating range.
- ✓ No machine should be operated if any part is not in proper working condition.
- ✓ Stay clear of the machine during electrical storms, it can attract lightning.
- ✓ Keep personnel out of line with or away from discharge openings at valves, couplings or hoses.
- ✓ Do not exceed the manufacturer's air pressure rating.
- ✓ Make certain all connections are securely made and hoses under pressure are secured with appropriate safety devices to prevent whipping.
- ✓ Do not perform any work on the air compressor unless you are authorized to do so.

*These "Safety Corner" examples and checklists were provided by Mary Ann Gormly, risk management coordinator at ARA Insurance Services, Kansas City, Mo., a subsidiary of the American Rental Association. She can be reached at 800-821-6580.*