✓ ALWAYS bleed pressure before working on a compressed air system.

Materials Handling

- ✓ ALWAYS get help in moving heavy or awkward loads. Use properly maintained lifting devices where appropriate, and watch for pinch points!
- ✓ ALWAYS look for rough edges, protruding nails, staples, etc., before unpacking materials. A quick check before unpacking can save you from being cut later. Remember, some packing materials such as strapping can whip back when it's cut; so be careful!
- ✓ NEVER use a hammer and chisel to open a drum. They can slip and injure you.
- ✓ ALWAYS handle compressed gas cylinders correctly. Use handcarts and restraining devices when moving cylinders to keep them from rolling and crushing your hands or feet.
- ✓ ALWAYS operate devices such as forklifts and cranes according to established safety procedures.

Arrive Home Alive

U.S. Department of Labor Mine Safety and Health Administration Visit our Web site at www.msha.gov

Repair and Maintenance of Surface Equipment



Best Practice Series BP-68

Remember to:

- Always obtain directions to the work area, and information about mine hazards.
- Conduct work area examinations.
- Make sure equipment is safe to operate.
- Wear appropriate protective equipment.
- · Wear safety belts and lines.
- Always secure equipment before working on it.

The following generic safety tips are designed to help both mechanics and repair persons work more safely.

General Safety

- ✓ ALWAYS wear appropriate personal protective equipment for the job you're doing. Don't wear jewelry or loose fitting clothes that can become caught in moving parts.
- ✓ ALWAYS follow all safety rules and procedures – shortcuts can kill.
- ✓ ALWAYS deenergize equipment and use lockout and tagout procedures to ensure that equipment is not accidentally started while troubleshooting or attempting to make repairs.
- ✓ ALWAYS block equipment parts securely.

- ✓ ALWAYS use safety lines, or other fall protection measures when there's a danger of falling.
- ✓ ALWAYS be sure guards are adequate and in place when working around equipment. When testing equipment with guards off, keep well clear of moving machinery.
- ✓ ALWAYS replace guards correctly after completing repairs.
- ✓ NEVER work beneath suspended loads.
- ✓ REVIEW the appropriate service manual when making repairs. Make repairs to manufacturer's specifications.
- ✓ NEVER smoke or use open flames around degreasing, cleaning, or fueling areas.

Hand Tools

- ✓ NEVER throw or toss tools to coworkers.
- ✓ ALWAYS use the right tool for the job. For example, don't use a screwdriver as a punch, prybar, wedge, or pinch bar; or a wrench as a hammer.
- ✓ ALWAYS store tools safely.
- ✓ ALWAYS inspect hand tools before using them. Remove defective tools from service at once.
- ✓ KEEP KNIVES sharp and have blade locks on them. Cut away from your body.
- ✓ USE WRENCHES PROPERLY, and don't use "cheater bars" unless your wrench is designed for them. Position

- yourself so you won't slip and fall if the wrench breaks.
- ✓ USE TORQUE WRENCHES carefully, and recalibrate them according to manufacturer's specifications.
- ✓ USE PLIERS for their intended purpose. Cushion grips on pliers won't protect you from electric shock.

Portable Power Tools

- ✓ ALWAYS keep tools in good, safe, working order. Inspect tools before every use, and remove defective ones from service.
- ✓ ALWAYS check to see that power cords and air hoses are in good condition. Replace them if they're frayed, kinked, bent, or broken.
- ✓ NEVER hang power cords or air hoses on nails, bolts, or over sharp edges.
- ✓ ALWAYS keep cords and hoses away from heat, solvents, oils, and chemicals to keep them from being damaged.
- ✓ ALWAYS disconnect the power source before changing accessories on a power tool. Replace all guards correctly before using the tool again.
- ✓ ALWAYS use proper shear pins in powerdriven sockets.
- ✓ NEVER activate a pneumatic tool until it's in position to start.

Compressed Air

- ✓ NEVER use compressed air to clean or dry tools, equipment, or clothing.
- ✓ NEVER point an air hose at another person.