

Repair and Maintenance of Surface Equipment

MSHA 1068 (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 power-driven 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.

- ✓ **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

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