



# INDIANA UNIVERSITY

OFFICE OF THE EXECUTIVE VICE PRESIDENT  
FOR UNIVERSITY ACADEMIC AFFAIRS

University Environmental Health and Safety

## APPENDIX H - Jacks and Hydraulic Power Tools

General Requirements for all jacks—including lever and ratchet jacks, screw jacks, and hydraulic jacks):

- Must have a stop indicator and the stop limit must not be exceeded.
- Manufacturer's load limit must be permanently marked in a prominent place on the jack and the load limit must not be exceeded.
- The operator shall make sure that the jack has a rating sufficient to lift and sustain the load.
- A jack shall never be used to support a lifted load. Once the load has been lifted, it must immediately be blocked up. Place a block under the base of the jack when the foundation is not firm, and place a block between the jack capacity and load if the cap might slip.
- To set up a jack:
  - The base of the jack shall rest on a firm, level surface;
  - The jack must be correctly centered;
  - The jack head must bear against a level surface; and
  - The lift force must be applied evenly.
- All jacks must be lubricated regularly.
- Each jack must be inspected according to the following schedule: (1) for jacks used continuously or intermittently at one site—inspected at least once every 6 months, (2) for jacks sent out of the shop for special work—inspected when sent out and inspected when returned, and (3) for jacks subjected to abnormal loads or shock—inspected before use and immediately thereafter. Inspection records shall be maintained within using department and retained for 3 years.
- Jacks which are out of order shall be tagged accordingly, and shall be used until repairs are made.

### Hydraulic Jacks

Hydraulic jacks exposed to freezing temperatures shall be supplied with an adequate antifreeze liquid.

### Hydraulic Power Tools

- The fluid used in hydraulic power tools must be an approved fire-resistant fluid and must retain its operating characteristics at the most extreme temperatures to which it will be exposed. The exception to fire-resistant fluid involves all hydraulic fluids used for the insulated sections of derrick trucks, aerial lifts, and hydraulic tools that are used on or around energized lines. This hydraulic fluid shall be of the insulating type.
- The manufacturer's recommended safe operating pressure for hoses, valves, pipes, filters, and other fittings must not be exceeded.