



Construction Fact Sheet

An Innovation for Lifting Maintenance Hole Covers and Frames

The Problem

- Maintenance workers are exposed to extremely high forces when handling maintenance hole covers. To remove the hole cover or frame, a pry bar is used and then the cover or frame is dragged/rolled.
- The hole covers and frames each weigh over a 40 kgs.
- Workers may be at risk of back pain and shoulder pain. The injuries can be the result of a one-time overexertion, but generally develop over a long period of time.
- Lifting heavy loads in stooped postures, often requiring workers to pick up the hole's cover or frame, increasing the risk of injury even further.

One Solution

- Use a maintenance hole cover lifter, which is a cover lifter wheeled-leverage device designed to assist in the removal and replacement of maintenance hole and catch basin covers.

How It Works

- One tool lifts the cover or frame by pushing down on a long handle which reduces the required force.



Traditional lifting process



Cover lifter



- Alternative lifters include:
 - A dolly designed with hooks and levers
 - A dolly designed with a magnet
 - Hydraulic hole cover lifters
 - Truck mounted magnetic hole cover lifters
- Magnetic devices are available that require no power or recharging. To use these devices, the magnet is positioned onto the centre of the steel surface and is turned on using a manually-controlled handle. The magnet is switched off by pressing a safety lock and moving the handle in the opposite direction.
- For the manually powered dollies, pressing down on the handles, lifts the cover.
- Mechanically powered lifters raise the cover or frame using hydraulics or other means.
- The cover can then be swung to one side and pushed to the desired location.



Magnetic hole cover lifter

Benefits

- Hole cover lifters reduce the risk of injury.
- The worker stands away from the cover so the risk of getting the hand or foot pinched is avoided.
- Hole cover lifters eliminate direct manual lifting of the covers from the hole and the ground.
- The hole cover lifter eliminates the dragging or rolling of the covers or frames.
- The hole cover lifter is efficient and takes minimal time to operate.



Hydraulic hole cover lifter

For More Information

- Products may also be found on the internet using the following search terms: “hole cover lifter.”
- Local contractor tool and equipment suppliers or rental companies may be another source of information on products.
- For general information on this solution, call the Infrastructure Health and Safety Association at 416-674-2726 or 1-800-781-2726.



Truck mounted magnetic hole cover lifter