

TIPS of the Trade

Hoist Safety



- Specific Dos & Don'ts
- Guidelines
- Safety Features
- Cleaning & Lubrication
- Inspection & Maintenance



For the hoist user, long-term dependable performance is easy to obtain by following simple work guidelines and exercising proper maintenance.

Basic safety rules apply to all three types of Chance link chain, roller chain and nylon strap hoists.

Here are basic considerations when using hoists:

Guidelines

- Never use a hoist over its rating. If in doubt, check the load or use a stronger hoist.
- Use a hoist only in a hook-to-hook straight line. The hoist body, chain or strap should never contact any device or surface which can put the hoist in a bind.
- Take up only static loads. Hoists are not built to withstand impacts or vibrations.
- Keep hoists clean and lubricated.
- Never depend on the nylon strap for insulation safety in hot-line work.
- Never lift or support personnel in any way.

Specific Dos & Don'ts

Rated capacity. Never put a cheater bar on the hoist handle. If you can't readily take up the load with the handle that is furnished, you need a bigger hoist. Overloading a hoist can result in damage and a possible accident. It can also damage the hoist, a condition that could cause a future accident.

Straight-Line Rigging. If the hoist is in any kind of a bind or if the chain and/or body is making a forcible contact with any object, the hoist is being used improperly. Use as a choker (where the chain or strap is wrapped around the load) or as a load binder (to secure loads on vehicles) invariably violates this rule.



Not a load binder. Using a hoist as a load binder violates three of the five basic guidelines to be followed when operating hoists. When used as a load binder, hoist rated capacity is likely to be exceeded. In most instances, a hook-to-hook straight line application cannot be obtained. In all cases, traveling loads cause both impact and vibration.



Avoid impact, vibrations. Hoists are designed to carry or move static loads. Do not subject hoists to impact or vibrations.

Use hoists only in a hook-to-hook straight line. Do not let the hoists come in contact with another device or surface.



Avoid ever using a hoist as a load binder, as shown above.

Avoid self-ratcheting. This is a fast but dangerous and foolish way to lower loads. Under certain load conditions with the hoist in the "lower" mode, a flip of the handle can result in a rapid back-and-forth motion. This is a result of a match between the load mass and the natural oscillation frequency of the handle. It results in a repetitive and rapid-fire impacting of the hoist (and probably other rigging as well) that a hoist is not designed to withstand.

DON'T DO THIS! Lowering of the load should always be accomplished through manual jacking of the hoist handle. **Do not wire safety hooks open. Hoists have been returned to Chance for servicing with the hooks wired open.**

Keep clean and lubricated. To work perfectly, hoists have to be clean. You've learned to keep sand and dirt out of your fishing reel, so it is with a hoist. Give it the same consideration. It has parts machined to tighter tolerances than your favorite reel.

Safety Features

- Do not depend on a hoist nylon strap for safety insulation in live-line maintenance. It is not designed for this purpose and cannot be depended upon because of uncertain moisture and contamination. If working lines hot or if you need safety insulation, use an insulated link stick in the rigging. Always maintain OSHA clearance distances.
- The closure on safety hooks is put there for your safety. Do not defeat safety by wiring it open or removing it even though this may save a few seconds in rigging or de-rigging.
- Avoid unnecessary human exposure. Hoists should never be used to support or lift personnel. Do not leave loads unattended or suspended in mid-air. Warn others of overhead loads.

Inspection and Maintenance



Hoists should be inspected on a regular basis.

- Check hoists regularly. Replace worn or damaged parts.
- Check hoist hooks carefully. If hook is bent or opening stretched, this is a sign the hoist has been overloaded or placed in a bind. At the very least, the hooks should be replaced. The same goes for latches on safety hooks that do not fit properly. In addition to loss of the safety feature, this is another indication of probable misuse.
- Check chains and straps for integrity. Bent or severely worn chain links, rusty or bent roller chain links and fraying of nylon straps are conditions requiring replacement of the worn or damaged items.

Cleaning and Lubrication



Chance® hoists are pull-tested before leaving the factory.

The best maintenance is preventive maintenance. If caked dirt or mud should unavoidably get into the mechanism or on the chain, remove it. Don't let continued hoist operation carry and grind dirt further in the mechanism. Periodically return hoists to your shop for inspection, cleaning and replacement of worn or damaged parts. Chance® Tool Lubricant (Catalog Number M1909) is a non-toxic, non-corrosive material that gives hoists the lubrication needed to keep them in top working condition. Lubricant coats the moving parts with a tough, durable film to reduce wear and prevent malfunction. It comes in a plastic squeeze bottle. Chance Lubricant is also available as a dry film blend of solid lubricants (Catalog Number C4002335). Basic ingredient is Molybdenum Disulfide. Apply as any aerosol-packaged spray material. It air-dries and bonds to the tool surface almost instantly.

Save this article for future reference and training. Permission to reprint for training purposes is granted by Hubbell Power Systems, Inc. as long as the article content is not altered in any way from the way we published it.



Chance® Lubricant is easy to apply.

Summary

Thoroughly read the instruction manual that comes with your hoist. Recognize that as with most tools, operational safety of hoists depends largely upon you, the user. Take care of yourself by taking care of your hoists.



www.hubbellpowersystems.com 573-682-5521

©Copyright 2004 & 2013 Hubbell Incorporated

TIPS&NEWS Reprinted from Vol. 51,
No. 1 MARCH 1990

NOTE: Hubbell has a policy of continuous product improvement. Please visit hubbellpowersystems.com to confirm current design specifications.

BR09004E
Rev. 8/13