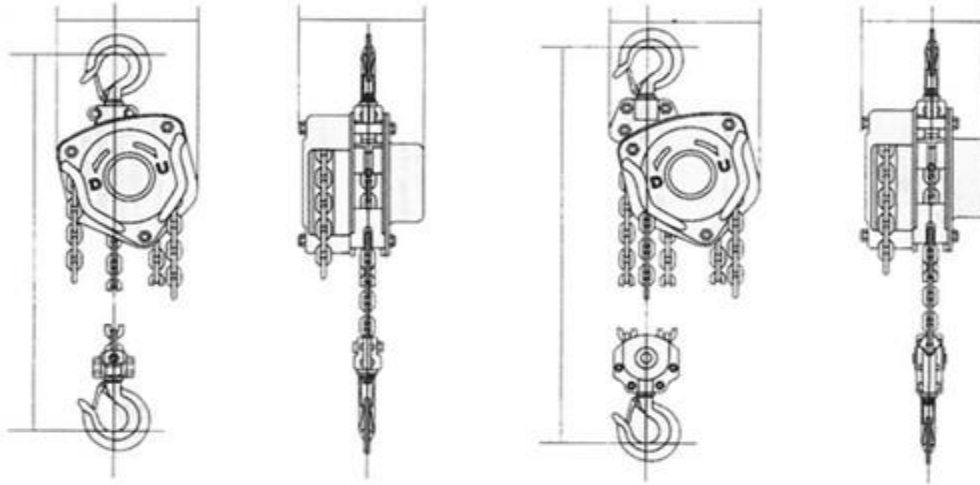


General

Manual chain hoists are commonly known as chain blocks and are designed for heavy duty lifting and materials handling operations. Chain blocks raise and lower loads by pulling on the hand chain. Chain blocks can be of single or double fall configurations depending on the capacity of the block.



Inspection before Use

Ensure that the chain block ID plate and WLL is clearly visible and legible.

The pre-use inspection for a chain block should include the following:

Load chain

1. Inspect chain for wear.
2. Inspect chain for gouges, nicks, arc burns, twisted & bent links and corrosion.
3. Inspect for correct reeving on multi-reeved units (3 and 5 tonne).

Lift wheels & Sheave wheels

1. Inspect lift wheel for foreign material, wear and corrosion.
2. Inspect dead end pins for wear, tightness and corrosion.

Hooks

1. Inspect hooks for signs of opening, cracking, bending, arc burns and corrosion.
2. Hooks should swivel freely.
3. Inspect safety latches for condition & operation.
4. Measure the hook throats for allowable service openings.

Hand chain

1. Inspect chain for wear.
2. Inspect chain for twisted or gouged links and corrosion.
3. Inspect connecting link for signs of opening.

Miscellaneous

1. Inspect frame and covers for distortion, cracks, gouges, corrosion & other damage.
2. Inspect hangers (3 and 5 tonne) for cracks, gouges, corrosion & other damage.
3. Inspect unit for clear WLL identity.

Care in Use

1. The load chain must always mesh correctly with the load sheave. With multi fall chain blocks twists can arise by turning over the bottom hook through the load chain.
2. Regularly lubricate the whole length of the load chain with machine or gear oil but be careful not to over lubricate as oil or grease on the brake discs can cause the brake to malfunction and slip.
3. Confirm that the brake is functioning properly by hoisting the load 100mm and check the brake when lowering the load.
4. Non-vertical (sideways pulling) of the hand chain is not recommended on Rig-Mate chain blocks.
5. The hand chain is equipped with a safety link. When the safety link opens or deforms, stop at once and inspect for the cause.
6. Confirm that the monorail beam or structure supporting the chain block is of sufficient strength to support the load to be lifted.
7. Never lift loads in excess of the WLL of the chain block.
8. Never walk or work under a hoisted load and never lift, support or transport people.
9. Use chain blocks manually only.
10. Do not permit more than one operator to pull on the hand chain at one time.
11. Lift loads correctly with proper slings and attachments. Never lift with the point of the hook and never use the load chain as a sling by back hooking.
12. Lifting a load with two chain blocks is not recommended. If the operation is unavoidable, hoist the load with utmost care, keeping the load balanced.
13. Never run the load chain out too far. When operated beyond the range of lift, an excessive load that can cause damage will be imposed on the chain block.
14. Chain blocks are designed for lifting loads vertically and should not be used for horizontal or angle hoisting.
15. Extreme temperatures will reduce the durability of the hoist. Loads should be hoisted or lowered very slowly and carefully in extreme temperatures.
16. Never leave a load hanging on the hoist.
17. Never use the chain or hook as a ground for welding.
18. Use only genuine Rig-Mate parts and chains for repairing.

The hooks and load chains are made of special alloy steels and are precisely heat-treated. Never weld or heat-treat them.

Load chains are exceptionally long wearing, but wear is unavoidable and certain conditions will cause wear and corrosion that will lower the strength. Load chains worn beyond the permissible limits must be replaced.

Hooks

- The opening will elongate with overloads and incorrect hooking. When the hook opening is elongated beyond permissible limits it is dangerously deformed and must be replaced immediately.
- Never galvanize or subject the chain, or other load bearing parts to any other plating process.



WARNING

- Chain Blocks should always be used in line with good lifting and rigging practice and as per the manufacturer's recommendations.
- Incorrect Chain Block use could result in a dangerous situation that could cause property damage, serious injury or death.
- Take care when applying lubricant to a Chain Block. Excessive or careless lubrication may lead to the lubricant penetrating the brake, which could then fail under load.

From A. Noble & Son LTD.