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Compact Lift Air Chain Hoist

Models CL125K, CL250K and CL500K



Installation and Operation Information

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Save These Instructions





Only allow Ingersoll Rand trained technicians to perform maintenance on this product. For additional information contact Ingersoll Rand factory or nearest distributor.

For additional supporting documentation refer to Table 1. Manuals can be downloaded from ingersollrand.com

The use of other than genuine Ingersoll Rand replacement parts may result in safety hazards, decreased performance and increased maintenance and will invalidate all warranties.

Original instructions are in English. Other languages are a translation of the original instructions. Refer all communications to the nearest **Ingersoll Rand** office or distributor.

Table 1: Product Information Manuals

Publication	Part/Document Number
Product Safety Information Manual	MHD56295 (71441281)
Product Safety Information Manual (ATEX), Declaration of Conformity	47682009001
Product Information Manual	MHD56406 (45550183)
Product Parts Information Manual	MHD56407 (45550191)
Product Maintenance Information Manual	MHD56408 (45550209)



Installation

Prior to installing the product, carefully inspect it for possible shipping damage.

Hoists are supplied fully lubricated from the factory. Refer to "Lubrication" section for recommended oils and lubrication intervals. Lubrication of the load chain is recommended before initial hoist operation. Remove shipping lubrication plug and replace with breather.

WARNING

A falling load may result in death or serious injury. Before installing, read the 'Product Safety Information Manual'.

CAUTION

Owners and users are advised to examine specific, local or other regulations, including American National Standards Institute and/or OSHA Regulations which may apply to a particular type of use of this product before installing or putting hoist to use.

Mounting

Ensure hoist is properly installed before use. Seek advice from qualified source should questions arise before and during installation.

Ensure structure from which hoist is suspended is able to support the weight of the hoist plus the weight of the maximum rated load with a generous factor of at least 500% of the combined weights.

Hook Mounted Hoist

Place hook over mounting structure. Make sure hook latch is engaged.

When hoist is suspended by a top hook, the supporting member should rest completely within the saddle of the hook and be centered directly above hook shank.

CAUTION

Do not use a supporting member that tilts hoist.

Trolley Mounted Hoist

When installing a trolley on a beam, measure the beam flange and temporarily install the trolley on the hoist to determine the exact distribution and arrangement of the spacers. Adjust the spacers in accordance with the trolley manufacturer's literature to provide the correct distance between the wheel flange and the beam. The number of spacers between the trolley side plate and the mounting lug on the hoist must be the same in all four locations in order to keep the hoist centered under the I-beam. The remaining spacers must be equally distributed on the outside of the side plates.

WARNING

At least one mounting spacer must be used between the head of each trolley bracket bolt and the trolley bracket and between each trolley bolt nut and the trolley bracket. Failure to do this could cause the hoist to fall when used improperly.

Ensure torque trolley bolts or nuts are torqued in accordance with manufacturer's specifications. For installation of hoist and trolley on beam, make certain the side plates are parallel and vertical.

After installation ensure beam stops are in place, operate trolley over entire length of beam with a capacity load suspended 4 to 6 inches (10 to 15 cms) off the floor.

CAUTION

To avoid an unbalanced load which may damage the trolley, the hoist must be centered under the trolley.

NOTICE

Trolley wheels ride on the top of the lower flange of the beam.

Air Supply

The air supply must be clean, free from moisture and lubricated to ensure optimum motor performance. Foreign particles, moisture and lack of lubrication are the primary causes of premature motor wear and breakdown. Using an air filter, lubricator and moisture separator will improve overall hoist performance and reduce unscheduled downtime.

Refer to 'General Specifications' on page 3. If air supply varies from what is recommended, product performance will change. The compressed air temperature must not exceed 120°F (55°C) at the motor air inlet.

Refer to Dwg. MHP0191 on page 9, A. Air Out; B. Lubricator; C. Regulator; D. Air In; E. Filter.

Air Lines

The inside diameter of air supply lines must not be smaller than 1/2 in (13 mm) for flexible lines and 1/2 in. (13 mm) for connectors. Before making final connections, all air supply lines should be purged with clean, moisture free air or nitrogen before connecting to inlet. Supply lines should be as short and straight as installation conditions will permit. Long transmission lines and excessive use of fittings, elbows, tees, globe valves etc. cause a reduction in pressure due to restrictions and surface friction in the lines. Note: The inlet strainer is a 3/8 NPT thread.



Air Line Lubricator (standard)

The use of an air line lubricator is required and it should be replenished daily and set to provide 2 to 3 drops per minute of **IR** #10 (10W nondetergent) tool oil. The lubricator must have an inlet and outlet at least as large as the inlet on the motor and capable of passing at least 150 percent of the hoist SCFM requirement. Install the lubricator as close to the air inlet of the motor as possible.

CAUTION

- Lubricator must be located no more than 10 ft (3 m) from the motor.
- Shut off air supply before filling air line lubricator.

Air Line Filter

Place the strainer/filter as close as practical to the motor air inlet port, but upstream from, the lubricator, to prevent dirt from entering the motor. The strainer/filter should provide 20 micron filtration and include a moisture trap. Clean the strainer/filter periodically to maintain its operating efficiency.

Start-Up Procedures

For hoists that have been in storage the following start-up procedures are required.

- 1. Give the hoist an inspection conforming to the requirements in the "Inspection" section on page 6.
- 2. Inject a small amount of ISO VG 32 (SAE 10W) oil in the motor inlet port.
- 3. Operate the motor for 10 seconds in both directions to flush out any impurities.
- a. With no load, operate hoist in "UP" direction and adjust air pressure to 90 psi (6.2 bar).
- 4. The hoist is now ready for normal use.

Main Air Shut-off Valve

All hoists should have a wall mounted shut-off valve.

Chain Container (optional feature)

The chain container is an optional accessory. Check the chain container size to make sure the length of the load chain is within the capacity of the chain container. Replace with a larger chain container if required. When a chain bucket is used, always connect the free end of the chain to the hoist.

Install the chain container per the instructions provided with the chain container kit. Run bottom block to the lowest point and run hoist in the "UP" direction to feed the chain back into the container.

NOTICE

Allow chain to pile naturally in the chain container. Piling the chain carelessly into the container by hand may lead to kinking or twisting that will jam the hoist.

Pendant

Check that all hose connections are tight and that hoses are not twisted or crimped. Contact the factory for pendant lengths greater than 6 ft (2 m).

NOTICE

To avoid damaging the pendant hose, make sure the strain relief cable, not the pendant hose, is supporting the weight of the pendant.

Operation

It is recommended that the user and owner check all appropriate and applicable regulations before placing this product into use. Refer to Product Safety Information Manual.

The hoist operator must be carefully instructed in his or her duties and must understand the operation of the hoist, including a study of the manufacturers literature. The operator must thoroughly understand proper methods of hitching loads and should have a good attitude regarding safety. It is the operators responsibility to refuse to operate the hoist under unsafe conditions.

WARNING

- The hoist is not designed or suitable for lifting, lowering or moving people.
- Never lift loads over people.
- The hook latch is intended to retain loose slings or devices under slack conditions. Use caution to prevent the latch from supporting any of the load.

Hoist Controls

Pendant Operation

Refer to Dwg. MHP3111 on page 9, A. Lower; B. Raise.

The pendant is a control that allows the operator to control the positioning of a load. The two-lever pendant will control hoist movement in the "UP" and "DOWN" direction. Always apply smooth even pressure to pendant levers, avoid quick starts and abrupt stops. This will allow smoother control of suspended loads and reduce undue stress on components.

Emergency Stop

Refer to Dwg. MHP3112 on page 9, A. Lower; B. Raise; C. Emergency Stop.

Product Information Graphics



(Dwg. MHP0191)



(Dwg. MHP0040)



(Dwg. MHP0111)



(Dwg. MHP0102)



(Dwg. MHP0043)



(Dwg. MHP3111)



(Dwg. MHP3112)

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