

OPERATING, MAINTENANCE & PARTS MANUAL

MANUAL DE FUNCIONAMIENTO,
MANTENIMIENTO Y PIEZAS

MANUEL D'ENTRETIEN,
D'OPÉRATION ET DE PIÈCES

HAND OPERATED LEVER HOIST

POLIPASTO MANUAL DE PALANCA

PALAN MANUEL À LEVIER

CM[®] SERIES 602/603

Before installing hoist, fill in the information below.

Antes de instalar el polipasto, rellene los datos siguientes.

Enregistrez les informations suivantes avant de faire l'installation.

Rated Load / Carga Nominal / Charge nominale _____

Serial No. / N° de Serie / No. de Ser. _____

Purchase Date / Fecha de Compra / Date d'achat _____

CAPACITIES:
SERIES 602:
550 LBS (250 KG.)

SERIES 603:
1100 LBS (500 KG.)

Follow all instructions and warnings for inspecting, maintaining and operating this hoist.

The use of any hoist presents some risk of personal injury or property damage. That risk is greatly increased if proper instructions and warnings are not followed. Before using this hoist, each operator should become thoroughly familiar with all warnings, instructions and recommendations in this manual. Retain this manual for future reference and use.

Forward this manual to operator. Failure to operate equipment as directed in manual may cause injury.

CAPACIDADES DE CARGA:
SERIES 602:
550 LBS (250 KG.)

SERIES 603:
1100 LBS (500 KG.)

Siga todas las instrucciones y advertencias para inspeccionar, mantener y operar este polipasto.

El uso de cualquier polipasto presenta algunos riesgos de daños a las personas o a las cosas. Este riesgo se ve incrementado si no se siguen correctamente las instrucciones y advertencias. Antes de usar el polipasto el operario debería estar familiarizado con todas las advertencias, instrucciones y recomendaciones de este manual. **Guarde este manual para futuras consultas.**

Entregue este manual al operario. Si el equipo no se maneja tal y como se recomienda en el presente manual, es posible que se produzcan situaciones de peligro que pueden resultar en daños personales.



SERIES 602

SERIES 603

CHARGES NOMINALES:
SERIES 602:
550 LBS (250 KG.)

SERIES 603:
1100 LBS (500 KG.)

Veillez vous conformer à toutes les instructions et avertissements d'inspection, d'entretien et d'opération de ce palan.

L'utilisation de tout appareil de levage comporte des risques de blessures ou de dégâts matériels. Ces risques sont de beaucoup accrus si les instructions et avertissements ne sont pas suivis. Tous les opérateurs devraient se familiariser complètement avec toutes les recommandations instructions et avertissements de ce manuel avant d'utiliser ce palan. **Conservez ce manuel pour utilisation et référence future.**

Remettre ce manuel à l'opérateur. L'utilisation de cet équipement contrairement aux directives de ce manuel peut causer des blessures.



HOOSIER CRANE
SERVICE COMPANY

CM HOIST PARTS AND SERVICES ARE AVAILABLE IN THE UNITED STATES AND IN CANADA

As a CM Hoist and Trolley user you are assured of reliable repair and parts services through a network of Master Parts Depots and Service Centers that are strategically located in the United States and Canada. These facilities have been selected on the basis of their demonstrated ability to handle all parts and repair requirements promptly and efficiently. To quickly obtain the name of the Master Parts Depot or Service Center located nearest you, call (800) 888-0985. Fax: (716) 689-5644.

LAS PIEZAS Y REPARACIONES DE LOS POLIPASTOS DE CM ESTÁN ASEGURADAS EN ESTADOS UNIDOS Y CANADÁ

Como usuario de un polipasto y carro de CM le aseguramos cualquier reparación o la disponibilidad de cualquier pieza de repuesto a través de una red de almacenes de piezas de repuesto y centros de servicio situados estratégicamente en Estados Unidos y Canadá. Estas instalaciones se han seleccionado en base a su capacidad demostrada en la reparación de equipos y suministro de piezas de repuesto de forma rápida y eficaz. Para obtener la dirección del almacén de piezas de repuesto o del centro de servicio más cercano, llame al teléfono (800) 888-0985. Fax: (716) 689-5644 (sólo en Estados Unidos y Canadá).

LE SERVICE DE RÉPARATION ET DE PIÈCES POUR PALANS CM EST DISPONIBLE AUX ÉTATS-UNIS ET AU CANADA

Soyez assurés qu'en temps d'utilisateur de palan et treuil CM, d'un service de réparation et de pièces fiable par l'entremise d'un réseau de Centres de service et de Dépôts de pièces maîtresses qui sont stratégiquement situés aux États-Unis et au Canada. Ces établissements ont été sélectionnés sur une base de leur habileté démontrée à s'occuper promptement et efficacement des besoins de réparation de pièces. Composez le (800) 888-0985, télécopieur : (716) 689-5644 pour obtenir rapidement le nom du dépôt de pièces maîtresses ou du centre de service situé le plus près.



SAFETY PRECAUTIONS

Each Series 602/603 Manually Operated Lever Hoist is built in accordance with the specifications contained herein and at the time of manufacture complies with our interpretation of applicable sections of *ASME B30.21, *ANSI/ASME HST-3M and the Occupational Safety and Health Act-1970.

The safety laws for elevators and for dumbwaiters specify construction details that are not incorporated in CM industrial hoists. We recommend the use of equipment that meets state and national safety codes for such use. Columbus McKinnon Corporation cannot be responsible for applications other than those for which CM equipment is recommended.



THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS WHICH IF NOT FOLLOWED COULD ENDANGER THE PERSONAL SAFETY AND/OR PROPERTY OF YOURSELF AND OTHERS. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL AND ANY PROVIDED WITH THE EQUIPMENT BEFORE ATTEMPTING TO OPERATE YOUR SERIES 602/603 LEVER HOIST.



*Copies of this standard can be obtained from ASME Order Department, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300, U.S.A.

WARNING

Improper operation of a hoist can create a potentially hazardous situation which, if **NOT** avoided, could result in **death** or **serious injury**. To avoid such a potentially hazardous situation, the operator shall:

1. **NOT** operate a malfunctioning or unusually performing hoist.
2. **NOT** operate the hoist until you have thoroughly read and understood this manual.
3. **NOT** operate a hoist which has been modified without the manufacturer's approval or certification to be in conformity with applicable OSHA regulations.
4. **NOT** lift or pull more than rated load for the hoist.
5. **NOT** use damaged hoist or hoist that is **NOT** working properly.
6. **NOT** use hoist with twisted, kinked, damaged, or worn load chain.
7. **NOT** operate with any lever extension (cheater bar).
8. **NOT** attempt to "free chain" the hoist while a load is applied.
9. **NOT** use the hoist to lift, support, or transport people.
10. **NOT** lift loads over people and make sure all personnel remain clear of supported load.
11. **NOT** attempt to lengthen the load chain or repair damaged load chain.
12. Protect the hoists load chain from weld splatter or other damaging contaminants.
13. **NOT** operate a hoist when it is restricted from forming a straight line from hook to hook in the direction of loading.
14. **NOT** use load chain as a sling or wrap load chain around load.
15. **NOT** apply the load to the tip of the hook or to the hook latch.
16. **NOT** apply load unless load chain is properly seated in the chain wheel(s) or sprocket(s).
17. **NOT** apply load if bearing prevents equal loading on all load supporting chains.
18. **NOT** operate beyond the limits of the load chain travel.
19. **NOT** leave load supported by the hoist unattended unless specific precautions have been taken.
20. **NOT** allow the chain or hook to be used as an electrical or welding ground.
21. **NOT** allow the chain or hook to be touched by a live welding electrode.
22. **NOT** remove or obscure the warnings on the hoist.
23. **NOT** operate a hoist which has **NOT** been securely attached to a suitable support.
24. **NOT** operate a hoist unless load slings or other approved single attachments are properly sized and seated in the hook saddle.
25. **NOT** lift loads that are **NOT** balanced and the holding action is **NOT** secure, taking up slack carefully.
26. **NOT** operate a hoist unless all persons are and remain clear of the supported load.
27. Report malfunctions or unusual performances of a hoist, after it has been shut down until repaired.
28. **NOT** operate a hoist on which the safety placards or decals are missing or illegible.
29. Be familiar with operating controls, procedures and warnings.

CAUTION

Improper operation of a hoist can create a potentially hazardous situation which, if not avoided, could result in **minor** or **moderate** injury. To avoid such a potentially hazardous situation, the operator shall:

1. Maintain a firm footing or be otherwise secured when operating the hoist.
2. Check brake function by tensioning the hoist prior to each lift operation.
3. Use hook latches. Latches are to retain slings, chains, etc. under slack conditions only.
4. Make sure the hook latches are closed and **not** supporting any parts of the load.
5. Make sure the load is free to move and will clear all obstructions.
6. Avoid swinging the load or hook.
7. Make sure hook travel is in the same direction as shown on the controls.
8. Inspect the hoist regularly, replace damaged or worn parts, and keep appropriate records of maintenance.
9. Use the hoist manufacturer's recommended parts when repairing the unit.
10. Lubricate load chain per hoist manufacturer's recommendations.
11. **NOT** use the hoist load limiting or warning device to measure load.
12. **NOT** use limit switches as routine operating stops unless allowed by manufacturer. They are emergency devices only.
13. **NOT** allow your attention to be diverted from operating the hoist.
14. **NOT** allow the hoist to be subjected to sharp contact with other hoists, structures, or objects through misuse.
15. **NOT** adjust or repair the hoist unless qualified to perform such adjustments or repairs.

The hoists are intended for general industrial use for moving loads within their load ratings. prior to installation and operation, the user should review the application for abnormal environmental or handling conditions.

GENERAL SAFETY INFORMATION

ADVERSE ENVIRONMENTAL CONDITIONS

Do not use the hoists in areas containing flammable vapors, liquids, gasses or any combustible dust or fibers. Do not use the hoist in highly corrosive, abrasive, wet environments or in applications involving exposure to temperatures below -10°F or above 130°F.

MOVING HAZARDOUS LOADS

The hoists are not recommended for lifting materials that could cause widespread damage if dropped. The lifting or moving of materials that could explode or cause chemical or radioactive contamination requires fail-safe, redundant supporting devices that are not incorporated into these hoists.

INSTALLATION

1. Read and understand the safety precautions on page 7 of this manual.
2. Estimate the load that is to be lifted or moved and make sure it does not exceed the hoist's rated capacity (550 lbs. / 250 Kg. for the Series 602 and 1100 lbs. / 500 Kg. for the Series 603).
3. Make sure that the support to which the upper hook is attached is strong enough to hold several times the weight of the load. Be sure the hoist is solidly held in in the uppermost part of the upper hook, the latch is closed and the latch does not contact the support.
4. Make sure that the hoist is rigged so that the upper and lower hooks will form a straight line when the hoist is operated and the frame is free to swivel and will not come in contact with any object.
5. Spanish and French Warning labels for the loose end ring are packed separately. If needed, attach these to the loose end ring at installation.

WARNING

Failure to use as directed herein may cause injury to you or others and could result in property damage.

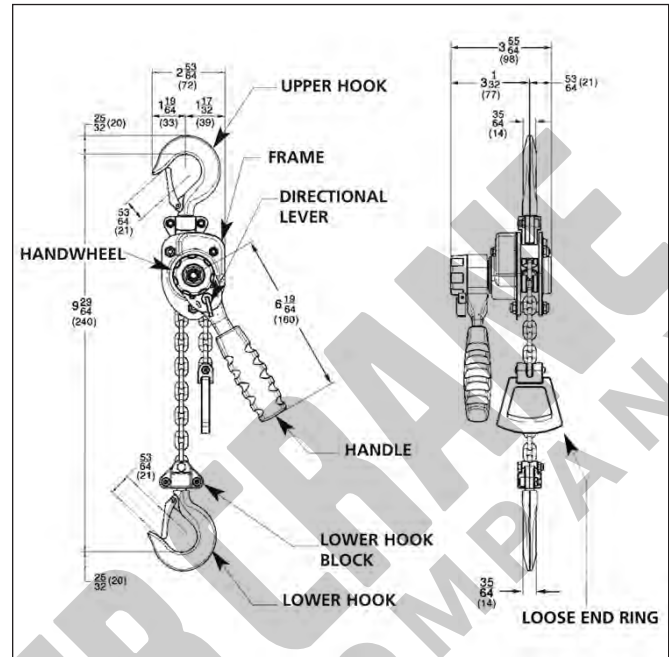
- **DO NOT** exceed the 550 lbs. (250 Kg.) capacity of the hoist or 58 lbs. (26 Kg.) handle pull on the Series 602, or 1100 lbs. (500 Kg.) capacity of the hoist or 56 lbs. (25 Kg.) handle pull on the Series 603 when lifting or pulling.
- **DO NOT** use the hoist to lift people or loads over people.
- **DO NOT** use a damaged or malfunctioning hoist.
- **DO NOT** use if the load chain is twisted, kinked, worn, stretched or damaged.
- **DO NOT** use unless the hoist's frame and chain form a straight line between hooks.
- **DO NOT** use if the hoist's frame is in contact with any object.
- **DO NOT** leave a suspended load or hoist under tension unattended.
- **DO NOT** use an extension on the handle. Operate using hand power only.
- **DO NOT** apply loads to the tip of the hooks or to the hook latches.
- **DO NOT** remove warning labels and tags from the hoist.

OPERATION

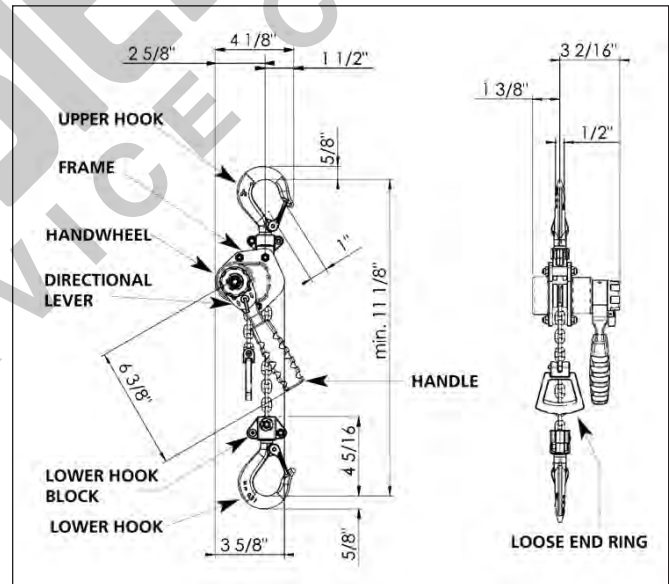
Before using the Series 602/603 Lever Hoist, familiarize yourself with main parts (See Fig. 1). Always check the hoist for proper operation before use and under no circumstance should you attempt to use a malfunctioning hoist. To reduce the risk of injury, the user must read and understand this manual.

FIGURE 1

SERIES 602 LEVER HOIST



SERIES 603 LEVER HOIST



| Model Number | Max. Capacity | Standard Lift | Chain Size | Minimum Distance Between Hooks | Pull on Handle to Lift Max. Capacity | Net Weight | Shipping Weight |
|--------------|---------------------|---------------|------------|--------------------------------|--------------------------------------|------------------|------------------|
| TB602 | 550 lbs. (250 kg.) | 5 ft. (1.5 m) | 4 x 12 mm | 9-7/16" (240 mm) | 58 lbs. (26 kg.) | 5 lbs. (2.3 kg.) | 6 lbs. (2.7 kg.) |
| TB603 | 1100 lbs. (500 kg.) | 5 ft. (1.5 m) | 4 x 12 mm | 11-1/8" (282 mm) | 56 lbs. (25 kg.) | 6 lbs. (2.7 kg.) | 7 lbs. (3.2 kg.) |

FREE CHAINING

In this mode, the load can be pulled through the hoist in either direction by hand for quick attachment to the load. To set the hoist to free chaining mode:

1. With no load on the hoist, move the directional lever to the center (neutral) position.
2. *Pull the load chain, in either direction, to its desired length so that the lower hook can be attached to the load. Note that the chain must feed into the hoist freely. If it does not, check for twisted chain. A twisted chain may become damaged by the chain guide rollers or liftwheel and result in chain damage.
*Pull the chain slowly and be careful: HANDLE MAY SPIN.

OPERATING THE LEVER HOIST

The Series 602/603 Lever Hoist can be used in any position as long as it is rigged to pull in a straight line from hook to hook and the frame is free to swivel on the upper hook.

WARNING

If the hoist is not rigged in a straight line hook to hook manner or if the frame is not free to swivel on the upper hook, handle pull may break the frame, bend upper hook and/or break the chain and cause physical injury or loss of load.

TO AVOID INJURY:

Always rig the hoist in a straight line hook to hook manner and do not allow the frame to touch the load or any object when in use.

When operating in limited spaces, use attachments or slings to make sure the frame is free to swivel on the upper hook and that there are no obstructions that would prevent you from operating the hoist.

1. Suspend or attach the hoist from an adequate support (see INSTALLATION).
2. Following the instruction for FREE CHAINING, take up the slack chain and attach the lower hook to load to be lifted or moved. Make sure that the load will be applied to the bowl of the lower hook and that it will not be applied to the latch or tip of the hook.
3. To lift or pull load, set the directional lever to the (↑) LOAD position and slowly pull chain in either direction by hand to ensure the hoist is out of the free chaining mode. Be careful: HANDLE MAY SPIN. Then operate the handle up and down to tension the load only enough to check that the brake is engaged and that the attachments to hooks and load are firmly seated. Then repeatedly operate the handle up and down to lift or pull the load. DO NOT OVERLOAD! A handle pull of 58 pounds (26 Kg.) results in applying the maximum capacity of 550 pounds (250 Kg.) to the Series 602 hoist, and a handle pull of 56 lbs. (25 Kg.) results in applying the maximum capacity of 1100 lbs. (500 Kg.) to a Series 603 hoist.
4. To lower or loosen the load, move the directional lever to the (↓) UNLOAD position and operate the handle up and down repeatedly.

WARNING

With no load on the hoist and when the directional lever is in the (↑) LOAD or (↓) UNLOAD position, pulling sharply on either end of the chain will cause the handle to spin rapidly.

TO AVOID INJURY:

Never pull sharply on either end of the chain when the directional lever is in the (↑) LOAD or (↓) UNLOAD position.

WARNING

If directional lever is forced out of engagement with a load applied, load will be released.

TO AVOID INJURY:

With a load applied to the hoist, do not force the directional lever into the center (neutral) position.

LOCKED BRAKE

If a hoist under load is suddenly relieved of the load by removing the load from the hoist by some other means, the brake will remain locked. The brake could also lock if the lower hook block is run tightly against the frame. To unlock the brake, move the directional lever to the (↓) UNLOAD position and pull sharply on the handle, or reapply the load and operate the hoist in the normal manner.

MAINTENANCE/INSPECTION

The Series 602/603 Lever Hoist normally requires very little maintenance, other than the frequent and periodic inspection listed in the chart on page 5. However, if the hoist is disassembled for inspection, the following should be observed when reassembling.

1. The pawl must engage the teeth of the ratchet as shown in Figure 2.
2. The check washer must be positioned on the ratchet hub as shown in Figure 2.
3. When installing the chain, it must be fed through the chain guide rollers with the welds away from the liftwheel, the lower hook must be directly below the upper hook and the loose end ring must be positioned and oriented at the end of the chain as shown in Figure 3.
4. A rivet is used to attach the latch to the hook. To remove the latch grind off the head of the rivet. When installing the latch, only peen over the end of the rivet enough to secure it.

FIGURE 2

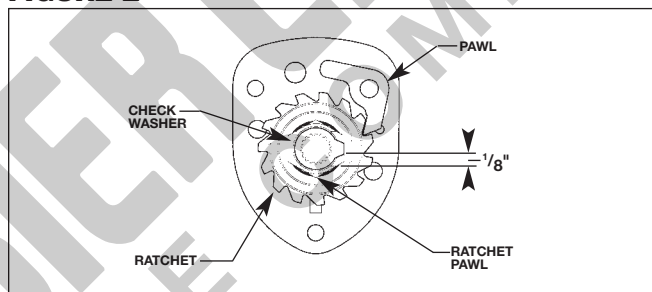


FIGURE 3

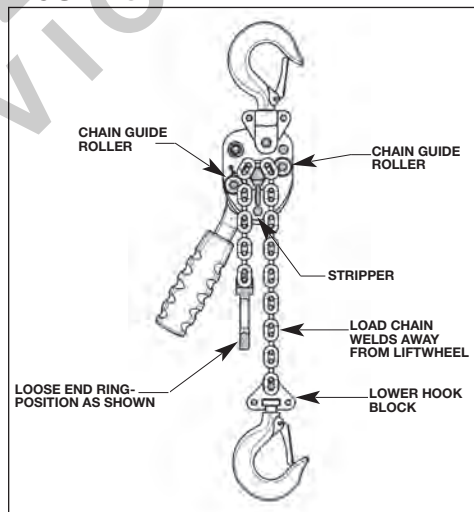


FIGURE 4

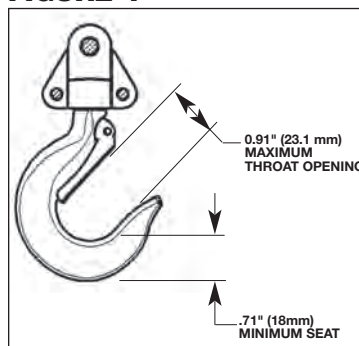
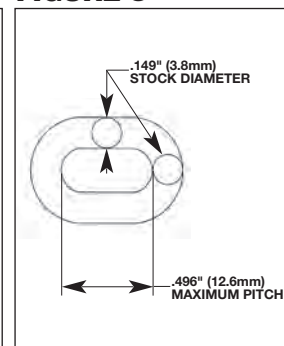


FIGURE 5



FREQUENT & PERIODIC INSPECTION CHART

| Item | Frequency | | WHAT TO CHECK | Inspection Method | Acceptance Level |
|-----------------|------------------|---------------------------|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| | Daily (Frequent) | EVERY 6 MONTHS (PERIODIC) | | | |
| LABELING & TAGS | X | X | Nameplate, capacity label warning labels & free chaining tag | Visually | These items must be legible and securely fastened to the hoist. Replace if necessary. |
| OPERATION | X | X | General Operation | Lift & lower a light load | 1. Chain must feed into and out of the hoist freely. 2. Brake must hold the load when handle is released. |
| | — | X | Overload test | Lift & lower a 688 lb. (312 Kg.) load for the 602 or a 1378 lb. (625 Kg.) for the 603 one foot (300 mm) | 1. Pull on handle should be about 73# (33Kg.) 2. Brake should operate smoothly while lowering. |
| | X | X | Directional Lever | Movement | Lever must move smoothly. |
| | X | X | Free Chaining | Movement | In free chaining mode, chain should feed into and out of the hoist freely when pulled by hand. |
| HOOK ASSEMBLIES | X | X | Hook opening & bowl wear | Measure opening and bowl wear | See Figure 4. |
| | X | X | Hook latch | Operation, engagement & damage | 1. Latch must not be damaged. 2. Latch must operate smoothly with sufficient pressure to engage the tip of the hook tightly. |
| | X | X | Hook deformation | Visually | Hook must not be bent more than 10 degrees from the plane of the unbent hook. |
| | X | X | Hook chain screw, upper hook pin, hook collars and hook collars hardware | Visually | There must be no damage, corrosion, excessive wear or looseness. |
| | X | X | Hooks, chemical damage, cracks, gouges | Visually | There must be no excessive cracks, |
| Chain | X | X | Lubrication | Visually | Chain should be frequently lubricated using Frisk Bros. Lubriplate 10-R, or equal. |
| | X | X | Corrosion, Pitting, Gouges | Visually | There must be no excessive corrosion, pitting or gouges on the chain. |
| | X | X | Wear & Contamination | Measure chain for wear & stretch | See figure 5. |
| | X | X | Deformation & Twists | Visually | Chain must be free of twists. |
| Brake Disc | — | X | Wear & Contamination | Measure thickness & visually | Take the hoist out of service if the thickness is less than 0.094" (2.4 mm) or if the friction surfaces are glazed, oily or contaminated. |
| Hoist Head | — | X | Side plate & Covers | Visually | Frame and covers should not be damaged or corroded. |
| | X | X | Handle | Visually | Handle must not be bent or corroded. Grip should not be damaged. |
| | — | X | Stripper | Visually | Stripper must not be bent, corroded or worn. |
| | X | X | Hardware | Visually | All nuts must not be corroded and must be securely tightened. |
| | — | X | Pawl & Ratchet | Visually | There should be no excessive wear of the ratchet teeth and the tip of the pawl. The pawl spring should not be corroded or stretched. |

*Daily or before each use.

REPAIR PARTS LIST

WARNING

Using "Commercial" or other manufacturer's parts to repair the CM Hoists may cause load loss.

TO AVOID INJURY:

Use only CM supplied replacement parts. Parts may look alike but CM parts are made of specific materials or processed to achieve specific properties.



ORDERING INSTRUCTIONS

The following information must accompany all correspondence orders for replacement parts:

1. Hoist Model Number from identification plate.
2. Serial number of the hoist stamped below identification plate.
3. Length of lift.
4. Part number of part from parts list.
5. Number of parts required.
6. Part name from parts list.

Parts for your hoist are available from your local authorized repair station. For the name of the nearest parts or service center, visit our website www.cmworks.com or call the Columbus McKinnon customer service department at (800) 888-0985.

SERIES 602/603 LEVER HOIST PARTS LIST

| Description | Part Number | |
|------------------------------|-------------|----------|
| | 602 | 603 |
| CHAIN STOP ASSEMBLY | 00230260 | |
| LOAD CHAIN (PER FOOT CODE) | XFT04012 | 02100009 |
| HOOK LATCH KITS (2 INCLUDED) | 00230168 | 00400449 |



WARRANTY

LIMITATION OF WARRANTIES, REMEDIES AND DAMAGES

THE WARRANTY STATED BELOW IS GIVEN IN PLACE OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE, NO PROMISE OR AFFIRMATION OF FACT MADE BY ANY AGENT OR REPRESENTATIVE OF SELLER SHALL CONSTITUTE A WARRANTY BY SELLER OR GIVE RISE TO ANY LIABILITY OR OBLIGATION.

Seller warrants that on the date of delivery to carrier the goods are free from defects in workmanship and materials.

SELLER'S SOLE OBLIGATION IN THE EVENT OF BREACH OF WARRANTY OR CONTRACT OR FOR NEGLIGENCE OR OTHERWISE WITH RESPECT TO GOODS SOLD SHALL BE EXCLUSIVELY LIMITED TO REPAIR OR REPLACEMENT, F.O.B. SELLER'S POINT OF SHIPMENT, OF ANY PARTS WHICH SELLER DETERMINES TO HAVE BEEN DEFECTIVE or if Seller determines that such repair or replacement is not feasible, to a refund of the purchase price upon return of the goods to Seller.

Any action against Seller for breach of warranty, negligence or otherwise, must be commenced within one year after such cause of action occurs.

NO CLAIM AGAINST SELLER FOR ANY DEFECT IN THE GOODS SHALL BE VALID OR ENFORCEABLE UNLESS BUYER'S WRITTEN NOTICE THEREOF IS RECEIVED BY SELLER WITHIN ONE YEAR FROM THE DATE OF SHIPMENT. Seller shall not be liable for any damage, injury or loss arising out of the use of the goods if, prior to such damage, injury or loss, such goods are (1) damaged or misused following Seller's delivery to carrier; (2) not maintained, inspected, or used in compliance with applicable law and Seller's written instructions and recommendations; or (3) installed, repaired, altered or modified without compliance with such law, instructions or recommendations.

UNDER NO CIRCUMSTANCES SHALL SELLER BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES AS THOSE TERMS ARE DEFINED IN SECTION 2-715 OF THE UNIFORM COMMERCIAL CODE.

INDEMNIFICATION AND SAFE OPERATION

Buyer shall comply with and require its employees to comply with directions set forth in instructions and manuals furnished by Seller and shall use and require its employees to follow such instructions and manuals and to use reasonable care in the use and maintenance of the goods. Buyer shall not remove or permit anyone to remove any warning or instruction signs on the goods. In the event of personal injury or damage to property or business arising from the use of the goods, Buyer shall within 48 hours thereafter give Seller written notice of such injury or damage. Buyer shall cooperate with Seller in investigating any such injury or damage and in the defense of any claims arising therefrom.

If Buyer fails to comply with this section or if any injury or damage is caused, in whole or in part, by Buyer's failure to comply with applicable federal or state safety requirements, Buyer shall indemnify and hold Seller harmless against any claims, loss or expense for injury or damage arising from the use of the goods.

CMCO Warranty (HOISTS)

A. Columbus McKinnon Corporation ("Seller") warrants to the original end user ("Buyer") that: (a) for a period of one (1) year from the date of Seller's delivery of the goods (collectively, the "Goods") to the carrier, the electrical components of the Goods will be free from defects in workmanship and materials; and (b) for the life of the Goods, the mechanical components of the Goods will be free from defects in workmanship and materials.

B. IN THE EVENT OF ANY BREACH OF SUCH WARRANTY, SELLER'S SOLE OBLIGATION SHALL BE EXCLUSIVELY LIMITED TO, AT THE OPTION OF SELLER, REPAIR OR REPLACEMENT, F.O.B. SELLER'S POINT OF SHIPMENT, OF ANY GOODS THAT

SELLER DETERMINES TO HAVE BEEN DEFECTIVE OR, IF SELLER DETERMINES THAT SUCH REPAIR OR REPLACEMENT IS NOT FEASIBLE, TO A REFUND OF THE PURCHASE PRICE UPON RETURN OF THE GOODS TO SELLER. NO CLAIM AGAINST SELLER FOR ANY BREACH OF (i) SUCH WARRANTY WITH RESPECT TO THE ELECTRICAL COMPONENTS OF ANY GOOD SHALL BE VALID OR ENFORCEABLE UNLESS BUYER'S WRITTEN NOTICE THEREOF IS RECEIVED BY SELLER WITHIN ONE (1) YEAR FROM THE DATE OF SELLER'S DELIVERY TO THE CARRIER AND (ii) SUCH WARRANTY WITH RESPECT TO THE MECHANICAL COMPONENTS OF ANY GOOD SHALL BE VALID OR ENFORCEABLE UNLESS BUYER'S WRITTEN NOTICE THEREOF IS RECEIVED BY SELLER WITHIN ONE (1) YEAR FROM THE DATE THE DATE ANY ALLEGED CLAIM ACCRUES. EXCEPT FOR THE WARRANTY SET FORTH ABOVE, SELLER MAKES NO OTHER WARRANTIES WITH RESPECT TO THE GOODS, WHETHER EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUALITY AND/OR THOSE ARISING BY STATUTE OR OTHERWISE BY LAW OR FROM ANY COURSE OF DEALING OR USE OF TRADE, ALL OF WHICH ARE HEREBY EXPRESSLY DISCLAIMED.

C. IN NO EVENT SHALL SELLER BE LIABLE TO BUYER OR ANY THIRD PARTY WITH RESPECT TO ANY GOOD, WHETHER IN CONTRACT, TORT OR OTHER THEORY OF LAW, FOR LOSS OF PROFITS OR LOSS OF USE, OR FOR ANY INCIDENTAL, CONSEQUENTIAL, SPECIAL, DIRECT OR INDIRECT DAMAGES, HOWSOEVER CAUSED. SELLER'S MAXIMUM LIABILITY TO BUYER WITH RESPECT TO THE GOODS SHALL IN NO EVENT EXCEED THE PRICE PAID BY BUYER FOR THE GOODS THAT ARE THE SUBJECT OF THE APPLICABLE CLAIM.

D. Seller shall not be liable for any damage, injury or loss arising out of the use of the Goods if, prior to such damage, injury or loss, such Goods are: (1) damaged or misused following Seller's delivery to the carrier; (2) not maintained, inspected, or used in compliance with applicable law and Seller's written instructions and recommendations; or (3) installed, repaired, altered or modified without compliance with such laws, instructions or recommendations.

E. This warranty is limited and provided only to the original end user. Each Good must be registered within sixty (60) days of receipt of each product to establish eligibility. Please register at www.cmworks.com/hoist-warrantyregistration or submit registration card via US mail.

F. Any action against Seller for breach of warranty, negligence or otherwise in connection with the electrical components of any Good must be commenced by Buyer within one (1) year after: (a) the date any alleged claim accrues; or (b) the date of delivery of the Goods to Buyer, whichever is earlier. Any action against Seller for breach of warranty, negligence or otherwise in connection with the mechanical components of any Good must be commenced by Buyer within one (1) year after the date any alleged claim accrues.

WARNING

Alterations or modifications of equipment and use of nonfactory repair parts can lead to dangerous operation and injury.

TO AVOID INJURY:

- Do not alter or modify equipment.
- Do use only factory replacement parts

NOTES



HOOSIER CRANE
SERVICE COMPANY

NOTES



HOOSIER CRANE
SERVICE COMPANY

HOOSIER CRANE
SERVICE COMPANY



USA: Ph: (800) 888.0985 • (716) 689.5400 • Fax: (716) 689.5644 • www.cmworks.com
CANADA: Ph: (877) 264.6478 • Fax: (877) 264.6477 • www.cmworks.com