

OPERATION MANUAL

DO's for Hilman Rollers

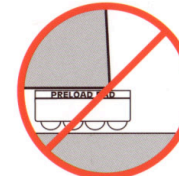
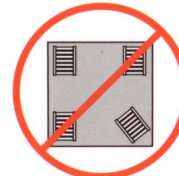
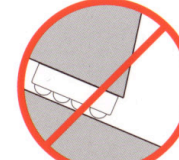


Read manufacturers' instructions before jacking equipment.



Use HILMAN ROLLERS wisely, carefully and prudently.

DON'Ts for Hilman Rollers



OPERATION AND INSTALLATION INSTRUCTIONS

1) Each roller must be inspected before each use. The chain and individual chain rolls should move freely and the entire roller and roller parts should be 100% functional before use.

2) When installing your Hilman Roller under your heavy object, select an area that is easily accessible, and also provides the best load distribution, such as the corners of the object being moved. The point of placement should be able to support that part of the load. Lifting the object may be accomplished by a hydraulic jack, hoist, fork truck, pry bar, or any similar device depending upon the load weight. Lifting height is determined by the height of the roller. Note that the roller's low height makes lifting or raising of the equipment minimal.

3) Particular care should be taken when installing rollers. Such care should include lifting, prying and/or jacking the loads. All relevant manufacturers' bulletins on the use of any accessory equipment should be read.

4) Particular care should be paid to exact alignment of the rollers. Failure to do so could increase surface friction and, in cases of severe misalignment, cause possible shifting of the object on the roller.

5) Roller top should always be fully supported and kept parallel to floor. This is a good case for the use of Preload Pads.

6) When using large capacity rollers with a machined chain track raceway, make certain that the chain roll is positioned properly in the track at dead center of the roller frame. The machined raceway should confine the rolls from shifting side to side. There is a scribed line on the edge of the roller end to facilitate this purpose.

7) If the object being moved has limited contact area or for any reason can shift, the roller should be affixed to the load in at least some temporary manner. This method of affixing the roller to the load should be able to withstand any horizontal force that might result from the load shift.

8) Particular care should be taken when moving top heavy equipment or equipment where there is a high center of gravity. The user should take all necessary precautions so that the load center is not allowed to shift even in the slightest amount. These precautions may include:

- 8.1 Constant monitoring of rollers.
- 8.2 Absolute cleanliness of moving surfaces.
- 8.3 Use of a temporary method of attaching roller to load.
- 8.4 Not moving on uneven surfaces or changing levels.
- 8.5 Use of preload pads.
- 8.6 Not turning load while moving.
- 8.7 Moving slowly at all times.

9) When using swivel models with the locking device (SLD, SLP, or SLS style), a helpful tip is to lock all rollers before aligning and placing under the load. Make sure all Rollers are aligned parallel.

10) Make certain that the load rests upon the entire roller. If a swivel or swivel lock model (SP/SS/SD or SLP/SLD/SLS style) is being used, the load should cover the entire area of the swivel top plate.

11) If the object to be moved has a metal surface which will come in contact with the roller, Hilman Rollers with built-in pads (SP or SLP style) or loose Hilman Preload Pads should be used to prevent any possible metal-to-metal slippage. Padded tops work well even in cases where the object being moved has a wood skid.

12) Similarly, if the floor surface is uneven, consider Padded Hilman Rollers or Hilman Preload Pads to help prevent "slippage" of the roller as it rolls over a "dip" in the floor surface. The pad is designed to compress enough to maintain constant tension on the roller as it encounters a variety of slight level changes.

13) When rolling on a surface that may deviate from a flat condition, a Hilman Preload Pad placed on top of the roller will help to assure that the entire footprint of the roller is bearing the load proportionately. Two types of pads are available, designated by a "P" and fabric impregnated which is designated by "FP". The fabric FP type is designed for a higher degree of predictability and resilience. Consult the manufacturer on any questions concerning the application of these pads.

14) The floor surface or path upon which the Roller transports the heavy load should be clean of all debris and should not have sharp protrusions of any sort.

15) Assure the floor surface or sub-surface cannot "give way" due to the load concentration at that point. If so, the surface must be improved.

16) Steering handles should be used for steering only and never used for pulling or towing the load.

17) The Roller can be towed only when it is permanently affixed to the load.

18) When moving up or down an incline it is imperative that the Hilman Rollers be in some way attached to load. Also, it is recommended that some type of hold-back device be used on inclined surfaces.

19) When rating the Rollers, always remember that uneven moving surfaces can cause the load to balance on three points at times. Therefore, it is suggested for safety's sake, that the Hilman Rollers be oversized by 25% to compensate for this condition.

20) To insure all parts are fully functional, Rollers should be inspected periodically in accordance with Hilman Maintenance Instructions (see opposite).

21) When using Hilman Rollers, it is assumed the user has experience in moving or transporting heavy loads and can apply the common sense practices that apply in the wise and careful methods required to move, shift or transport heavy equipment.

22) If there are any questions or a lack of experience in using Hilman Rollers, be sure to contact the Hilman technical staff.

MAINTENANCE INSTRUCTIONS

1) Rollers should be visually inspected every 50 hours of use, or every three months, whichever comes first, or after a prolonged period of use.

2) User can protect the chain rolls with grease when stored and not in use. Grease, however, can attract foreign matter. Therefore, it is best to remove the excess grease when using the rollers.

3) A detailed inspection includes removing chain from the roller frames and, if an Accu-Roll guidance system is present, removing the side guide rolls from the Accu-Roll block. This detailed inspection should be done a minimum of once yearly, or after prolonged use.

4) Chain inspection points:

- 4.1 Inspect rolls for cracks and/or corrosion.
- 4.2 Check for pin wear on ends.
- 4.3 Check chain linkage for freedom of movement.
- 4.4 Verify that the individual chain rolls as well as the entire chain rotate with complete freedom.

Note: To remove chain, remove E-ring on master pin. Pull the master pin and chain comes apart like a belt.

5) Frame inspection points:

- 5.1 Inspect all structural members for proper integrity.
- 5.2 Make certain all bolts (if any) are free of corrosion.
- 5.3 Clean dirt and grease off the center load plate.
- 5.4 Inspect for any cracks or excessive wear.
- 5.5 Inspect load plate race for wear.

6) Inspection points for Accu-Roll Guide Rolls (applies only to modified Hilman Rollers with optional guidance system):

- 6.1 Inspect Accu-Rolls for cracks and/or corrosion.
- 6.2 Check threads on the Accu-Roll guide stud.

Note: To remove the Accu-Roll Guide Rolls, back out set screw on the block and unscrew the guide roll.

7) Inspection points for track wipers (applies to Rollers with this modification only). Check wiper for excess wear or brittleness. If wiper shows wear, loosen the bolts and adjust the wiper pad.

8) When Roller is ready for use, chains should be lightly oiled or greased, so that all rolls, as well as entire chain, can rotate freely. Accu-Roll guide rolls should be lightly oiled or greased so the guide roll can spin freely.

Note: The Hilman Accu-Roll Guide Roll is sealed, but exterior corrosion should be kept to a minimum.

HILMAN WARRANTY

We warrant each new FT, ERS, and Nyton chain-action Roller sold by us to be free from manufacturing defects in normal service for a period of five (5) years commencing with delivery of the roller to the original user. All other Hilman products manufactured by Hilman retain a one (1) year warranty. Our obligation under this warranty is expressly limited at our option, to the replacement or repair at Hilman, Incorporated, Marlboro, New Jersey 07746 USA, or at a service facility designated by us, of such part or parts as inspection shall disclose to have been defective. This warranty does not apply to defects caused by damage or unreasonable use, including failure to provide reasonable and necessary maintenance, while in the possession of the consumer.

WE SHALL NOT BE LIABLE FOR CONSEQUENTIAL DAMAGES OF ANY KIND, including, but not limited to, consequential labor costs or transportation charges in connection with the replacement or repair of defective parts. We make no warranty with respect to trade accessories. They are subject to the warranties of their manufacturers.

THERE ARE NO WARRANTIES EXCEPT AS ABOVE STATED. HILMAN DISCLAIMS AND EXCLUDES ANY IMPLIED WARRANTY OF MERCHANTABILITY OF ITS GOODS OR WARRANTY OF THE FITNESS OF THOSE GOODS FOR ANY PURPOSE OR USE, subject to the express one-year warranty provided for the repair or replacement of defective goods, the customer acknowledges that it makes its purchase in reliance upon customers' inspection of the goods purchased from Hilman and not by reason of any representations made by or on behalf of Hilman.

We make no other express warranty, nor is anyone authorized to make any on our behalf. Any and all claims arising against Hilman Rollers or subsidiaries or affiliated firms concerning the use of the Hilman Rollers shall be governed by the laws of the State of New Jersey in the USA.



HILMAN ROLLERS

WWW.HILMANROLLERS.COM

12 Timber Lane, Marlboro, NJ 07746 USA
 tel: (732) 462-6277 • fax: (732) 462-6355
 toll free North America: 1-888-2-ROLL-IT