OPERATION AND INSTALLATION INSTRUCTIONS

1) Each roller must be inspected before each use. The chain and 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.

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—neoprene, 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) Check to be sure that the floor surface or sub-surface cannot "giveway" 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, it always pays to remember that uneven moving surfaces can cause the load to balance on three points at times. Therefore, it is suggested that, for safety's sake, the Hilman Rollers be oversized by 25% to compensate for this condition.

20) Rollers should be periodically inspected in accordance with Hilman Maintenance Instructions (See page 14) to insure that all parts are fully functional.

21) When using Hilman Rollers, it is assumed that 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 lack of experience in using Hilman Rollers, be sure to contact our technical staff.