

ECO BLOCK LIFTER NG6K24T30/BLK6K22T26

Operators Manual
Conforms to ASME B 30.20-2006 and
BTH-1-2005
Design Category B, Service Class 3



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RECORD INFORMATION HERE			
FOR REFERENCE			
MODEL			
BODY SERIAL NUMBER			
Notes:			



Section I. General Information.

May we take this opportunity to thank you for purchasing the Kenco Eco Block Lifter. The Eco Block Lifter provides the ultimate in below the hook Block handling versatility. The Eco Block Lifter is quality engineered to provide years of trouble free, low maintenance performance. Please read and fully understand this manual and any additional attached documentation before attempting to setup, operate or maintain the Eco Block Lifter system.

This manual should be made available to all persons who may use or maintain the Eco Block Lifter system. For additional information, please feel free to contact the service department at Kenco at 1-800-653-6069

Section II. Safety

A. General

- 1. Safety practices described in this manual are intended as guidelines for safe operation under most conditions and are supplementary to any and all rules and/or laws governing any aspect of the Kenco Eco Block Lifter operation that are in force in your area.
- 2. Before operating the Kenco Eco Block Lifter, you should have a clear understanding of said laws and regulations to ensure compliance.
- 3. Throughout this manual there are parts tagged with one or more of the following safety warnings. Particular care must be exercised with regard to these statements.

This warning is used where there is a high probability of death or serious injury if the instructions are not followed correctly.

This warning is used where there is a possibility of injury to yourself or others if the instructions are not followed correctly.

This warning is used where there is a possibility of damage to the machine if the instructions are not followed correctly.

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B. Personal Safety

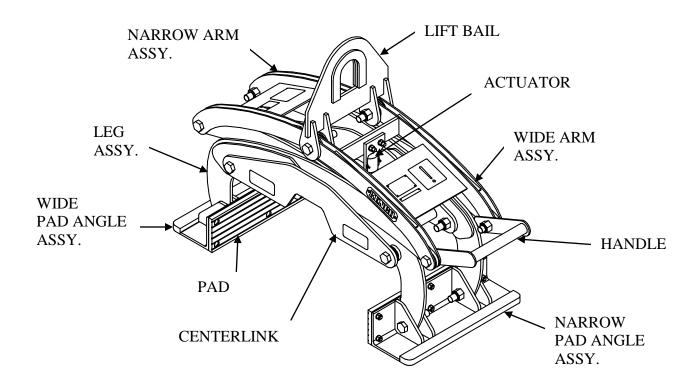
- 1. Wear appropriate protective clothing and related safety equipment including protective glasses, hardhat, gloves, protective shoes, hearing protection, and any other equipment/devices dictated by job conditions.
- 2. Do not wear loose clothing, jewelry, or hairstyles that could become entangled in the Kenco Eco Block Lifter or rigging hardware.
- 3. Keep hands, feet, and any other appendages clear of the Eco Block Lifter while in operation.

C. Operation Safety.

- 1. DO NOT ATTEMPT TO OPERATE OR PERFORM MAINTENANCE ON THE ECO BLOCK LIFTER UNTIL READING AND FULLY UNDERSTANDING THIS MANUAL
- 2. <u>MAINTAIN SAFE DISTANCE FROM LOAD NEVER ALLOW THE ECO BLOCK</u> LIFTER OR LOAD TO PASS OVER ANY PART OF A PERSON.
- 3. DO NOT USE A KENCO ECO BLOCK LIFTER THAT HAS BEEN ALTERED ACCIDENTALLY OR INTENTIONALLY, IN ANY WAY WITHOUT INSPECTION BY QUALIFIED PERSONNEL.
- 4. <u>DO NOT USE A KENCO ECO BLOCK LIFTER FOR ANY TASK OTHER THAN THE INTENDED PURPOSE OF THE DESIGN.</u>



Section III. Identification of Major Components



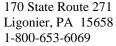
Section IV. Setup.

- A. Check the Eco Block Lifter for any signs of damage incurred during shipping.
- B. Record model and serial # of assembly and components.
- C. Attach the Eco Block Lifter to hoist.
 - 1. Use as few rigging components (shackles, slings, chain, etc.) as possible.
 - 2. ALL RIGGING COMPONENTS MUST HAVE A WORKING LOAD LIMIT THAT IS EQUAL TO OR GREATER THAN THE COMBINED WEIGHT OF INTENDED LOAD PLUS THE ECO BLOCK LIFTER.
 - 3. <u>UNDER NO CIRCUMSTANCES SHOULD ANY COMPONENT USED AS RIGGING</u>
 <u>TO THE ECO BLOCK LIFTER BE OF A RATED CAPACITY LESS THAN THAT</u>
 OF THE ECO BLOCK LIFTER.

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- 4. <u>DO NOT RIG UNPROTECTED NYLON SLINGS OR WIRE ROPE DIRECTLY THROUGH LIFT BAIL.</u>
- 5. <u>IF USING EQUIPMENT OTHER THAN A CRANE: USE RIGGING OF SUFFICIENT LENGTH TO PREVENT CONTACT BETWEEN ECO BLOCK LIFTER AND EQUIPMENT.</u>





Section V. Operation.



Before attempting to use the Eco Block Lifter device <u>ALWAYS</u> perform a test lift on the intended object(s) to confirm proper operation. <u>DO NOT</u> use a Eco Block Lifter to handle objects beyond the rated capacity or range.



Manipulation of the Eco block lifter by ground personnel for the purpose of alignment with load shall only be done with Eco block lifter suspended above the block. KEEP ALL HANDS AWAY FROM THE ECO BLOCK LIFTER DURING OPERATION.

A. Automatic operation:

- 1. Ensure that the Eco Block Lifter's capacity and range are appropriate to the block to be handled.
- 2. Position Eco Block Lifter at or near center of object to be lifted.
- 3. Lower Eco Block Lifter onto object, taking care to minimize impact.
- 4. Ensure that all persons are clear of Eco Block Lifter and Block.
- 5. Release tension on lift cable to cycle the actuator.
- 6. Raise Eco Block Lifter and load in a smooth motion. Do not "jerk".
- 7. Deposit at desired location.
- 8. Release tension on lift cable to cycle the actuator. (Note: avoid undue slamming of the Eco Block Lifter into open position to prolong actuator life.)
- 9. Remove Eco Block Lifter (Eco Block Lift is latched in open position automatically)

Tip: The majority of wear on the Eco block lifter and associated components results from shock loading, impacting, and poor alignment of the Eco block lifter with the load. Minimizing these incidents will greatly extend the life of the Eco block lifter and consumables.

- B. Avoid Jarring, swinging, and otherwise unnecessary manipulation of the load.
- C. Avoid handling of loads off center.
- D. DO NOT USE THE ECO BLOCK LIFTER TO PICK MULTIPLES OF ITEMS IN A SINGLE PICK.
- E. Observe all safety practices associated with operation of hoist machinery.

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F. DO NOT USE ECO BLOCK LIFTER TO DRAG LOADS.

G. <u>DO NOT ALLOW LOAD (BLOCK) TO CONTACT ANY SURFACE/OBJECT WHILE BEING HANDLED.</u>



The Eco Block Lifter handling device produces grip proportional to and dependent on the weight of the load. It is for this reason that while in operation the Eco Block Lifter and load <u>NEVER</u> be allowed to contact other items.



Section VI. Maintenance

A. Daily:

- 1. Visually inspect Eco Block Lifter for signs of stress and wear.
- 2. Check that bolts and nuts are snug.
- 3. Check that key-way area of the attachment and lift body are properly seated.
- 4. Ensure free movement of all components.
- 5. Ensure that all warning labels are present and readable.
- 6. Check that the actuator mounting screws are snug and seated.
- 7. Lubricate all moving mechanisms with penetrating oil.
- 8. LUBRICATE ACTUATOR WITH LIGHT PENETRATING OIL ONLY (WD40TM)

B. Annually*

- 1. Remove pivot bolts and coat with grease.
- 2. Inspect holes, pins, bolts etc. for wear. See sect VII for criteria.
- 3. Remove actuator, clean and lubricate with light penetrating oil check for signs of wear, replace if necessary.

^{*} Frequency depends on usage, environmental conditions, etc.



Section VII. Inspection Criteria

THE ECO BLOCK LIFTER UNIT AND ALL OF ITS ASSOCIATED COMPONENTS SHALL BE REMOVED FROM SERVICE AND TAGGED APPROPRIATELY UNTIL RECERTIFICATION BY A QUALIFIED INDIVIDUAL IN ANY OF THE FOLLOWING CONDITIONS:

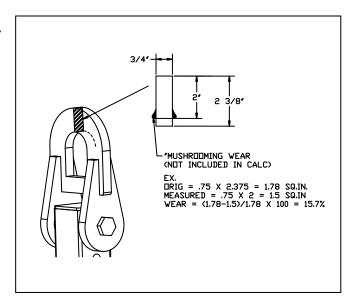
A. General

- 1. Cracking in any component or member.
- 2. Cracking in any weld.
- 3. Visible distortion in any member.
- 4. Visible distortion in any Bolt/Pin/Shaft.

B. Specific

1. Lift Bail

a. The lift bail shall be replaced if a 20% loss in cross-sectional area from the original member(s) can be demonstrated. Note: cross section of welds, "mushroomed" wear faces, and burrs are not accounted for as cross-sectional area. (See ill.)



2. Holes.

a. Any members through which bolted or pinned connections pass shall be replaced if a 10% loss in cross-sectional area from the original member(s) can be demonstrated. Note: cross section of welds, "mushroomed" wear faces, and burrs are not accounted for as cross-sectional area.

3. Pins/Bolts.

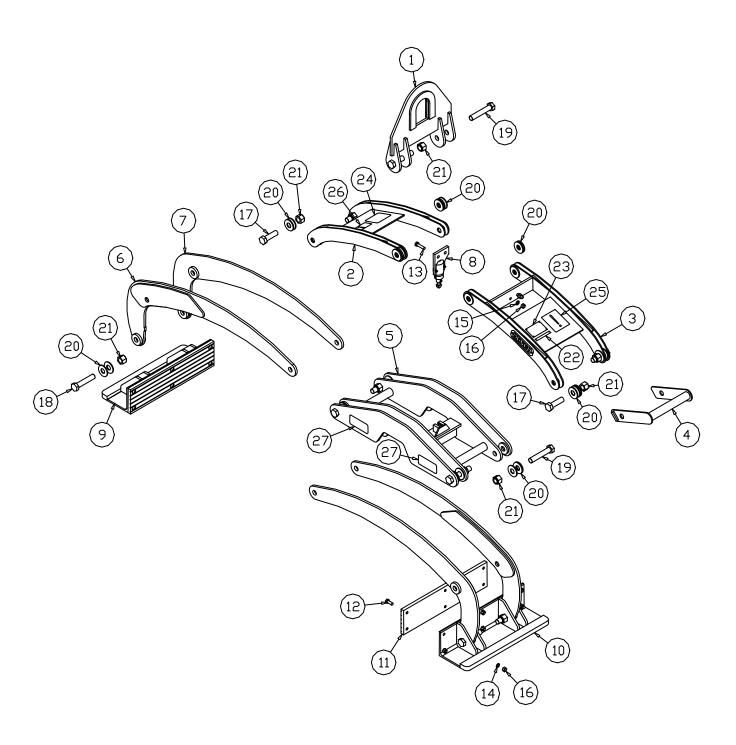
a. Any visible deformation of a pin, shaft or bolt shall require replacement of that part.

4. Pads – Replace if:

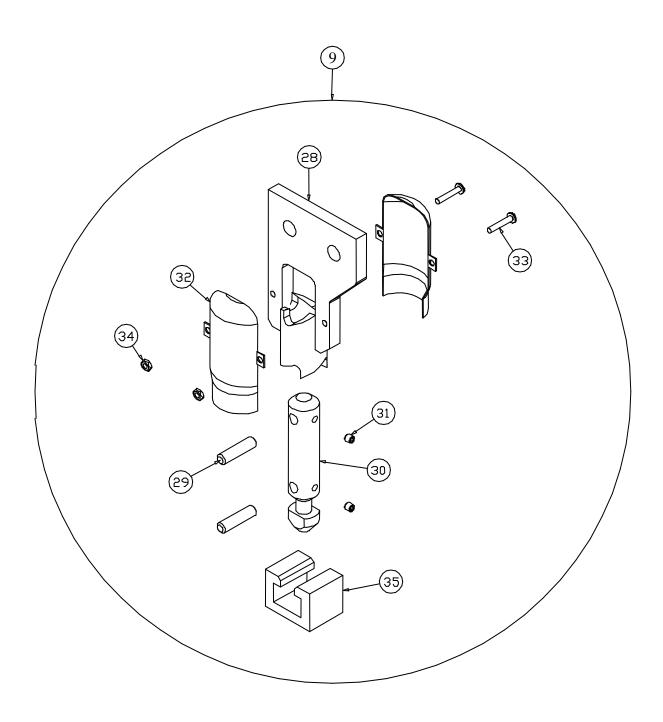
- a. For units utilizing urethane gripping pads, if surface of any given mounting bolt is not at least 3/32" below the surface of the pad,.
- b. Any de-lamination of the pad from the backing plate.
- c. Any scarring, chunking, or missing pad material constituting a total combined loss of surface area greater than 3 sq. in. per pad.
- d. Any single scar, chunk, or missing pad face that is greater than 1 sq. in per pad.

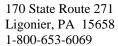


Section VIII. Parts/Drawings











KENCO CORPORATION 877-4ATTACH MODEL 22 **USAGE CAPACITY** SFRIAL NO.

THIS LIFTER IS DESIGNED TO ASME BTH-1 23 SERVICE CLASS **DESIGN CATEGORY**

WARNING

DO NOT exceed the rated load capacity of the lifter.

DO NOT attempt to operate a malfunctioning or damaged unit.

DO NOT allow unit or load to pass over any part of a person.

DO NOT leave a suspended load unattended.

DO NOT remove or obscure any labels or markings.

DO NOT operate or service without first having read and understood the operating manual.

DO NOT lift loads higher than necessary.

DO NOT alter or modify this equipment.

DO NOT use lifter for other than designated purposes.

DO NOT lift unbalanced loads.

DO NOT allow load to contact other objects while suspended.

INSPECT LIFTER PRIOR TO EACH USE.



Model: KL 12000

Unit Weight: 900 lbs.

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Capacity: 12000 lbs.

Usage: 16' - 20' Barrier Wall

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WARNING

Read and understand operator's manual before

using this equipment.

Failure to follow operating and maintenance procedures could result in death or serious injury.

DANGER

DO NOT STAND UNDER OR NEAR WHILE MACHINE IS OPERATING

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NOTE: MODEL AND SERIAL NUMBER OF LIFTER MUST ACCOMPANY PART ORDERS.

Item		
Number	Quantity	Part Name
1	1	NG6K24T30 LIFT EYE ASSY.
2	1	NG6K24T30 NARROW ARM ASSY.
3	1	NG6K24T30 WIDE ARM ASSY.
4	2	NG6K24T30 LEFT LEG ASSY.
5	2	NG6K24T30 RIGHT LEG ASSY.
6	1	NG6K24T30 CENTERLINK COMPLETE ASSY.
7	1	NG6K24T30 NARROW PAD ANGLE ASSY.
8	1	NG6K24T30 WIDE PAD ANGLE ASSY.
9	1	MED. ACTUATOR
10	1	NG6K24T30 HANDLE ASSY.
11	2	PAD 6 X 24
12	12	.5 X 1.25 CAPSCREW
13	2	.5 X 2 CAPSCREW
14	12	.5 INTERNAL LOCK WASHER
15	2	.5 LOCK WASHER
16	14	.5 NUT
17	4	1 X 3.5 CAPSCREW
18	4	1 X 5 CAPSCREW
19	6	1 X 5.5 CAPSCREW
20	40	1 FLAT WASHER
21	14	1 NYLOCK NUT
22	1	KENCO ID TAG
23	1	BTH TAG
24	1	KENCO ID STICKER
25	1	LARGE WARNING STICKER
26	1	SMALL WARNING STICKER
27	4	DANGER STICKER
28	1	MEDIUM ACTUATOR BODY
29	2	MEDIUM ACTUATOR PINS
30	1	MEDIUM ACTUATOR SHAFT
31	2	MEDIUM ACTUATOR SET SCREW
32	2	MEDIUM ACTATOR COVER
33	2	MEDIUM ACTUATOR COVER SCREWS
34	2	MEDIUM ACTUATOR COVER NUTS
35	1	MEDIUM RECIEVER BLOCK



Section IX. Warranty

A. Policy

- 1. KENCO Corporation (KENCO) warrants the Kenco Eco Block Lifter lifting device (not including pads or consumable items) sold by KENCO to be free from proven defects in material and workmanship for a period of six (6) months from the delivery date to the original customer.
- 2. Warranty is limited to replacement of parts and/or assemblies, which upon inspection by KENCO are deemed to be defective in material, workmanship, or both.
- 3. Warranty shall not extend to products that have been altered or repaired in any way without the express written consent of KENCO.
- 4. Warranty shall not extend to any product that has been misused, abused, or improperly applied or any defect resulting thereof.
- 5. Defects and corrosion that are the result of improper storage and/or maintenance are not warrantable.
- 6. Wear items such as Pads, Pins or Lifting bails etc. are not considered for warranty claims.

B. Disclaimer

1. THIS WARRANTY IS EXCLUSIVE AND IN LIEW OF ALL OTHER REPRESENTATIONS AND WARRANTIES EXPRESSED OR IMPLIED, AND KENCO EXPLICITLY DISCLAIMS AND EXCLUDES ANY IMPLIED WARRANTY OF MERCHANTABILITY FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL THE END USER BE ENTITLED TO ANY CONSEQUENTIAL, INCIDENTAL OR CONTINGENT DAMAGES OF ANY KIND ARISING OUT OF BREACH OF CONTRACT, WARRANTY (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORIES OF LAW, WITH RESPECT TO PRODUCTS SOLD OR SERVICES RENDERED BY KENCO, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO.