

CUT STONE LIFTER
CTL6K27T39
Operators Manual
Conforms to ASME B 30.20-2006 and
BTH-1-2005
Design Category B, Service Class 3



170 State Route 271
Ligonier, PA 15658
1-800-653-6069

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RECORD INFORMATION HERE

FOR REFERENCE

MODEL	
BODY SERIAL NUMBER	
Notes:	



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Section I. General Information.

May we take this opportunity to thank you for purchasing the Kenco Cut Stone Lifter. The Cut Stone Lifter provides the ultimate in below the hook Block handling versatility. The Cut Stone 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 Cut Stone Lifter system.**

This manual should be made available to all persons who may use or maintain the Cut Stone 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 Cut Stone Lifter operation that are in force in your area.
2. Before operating the Kenco Cut Stone 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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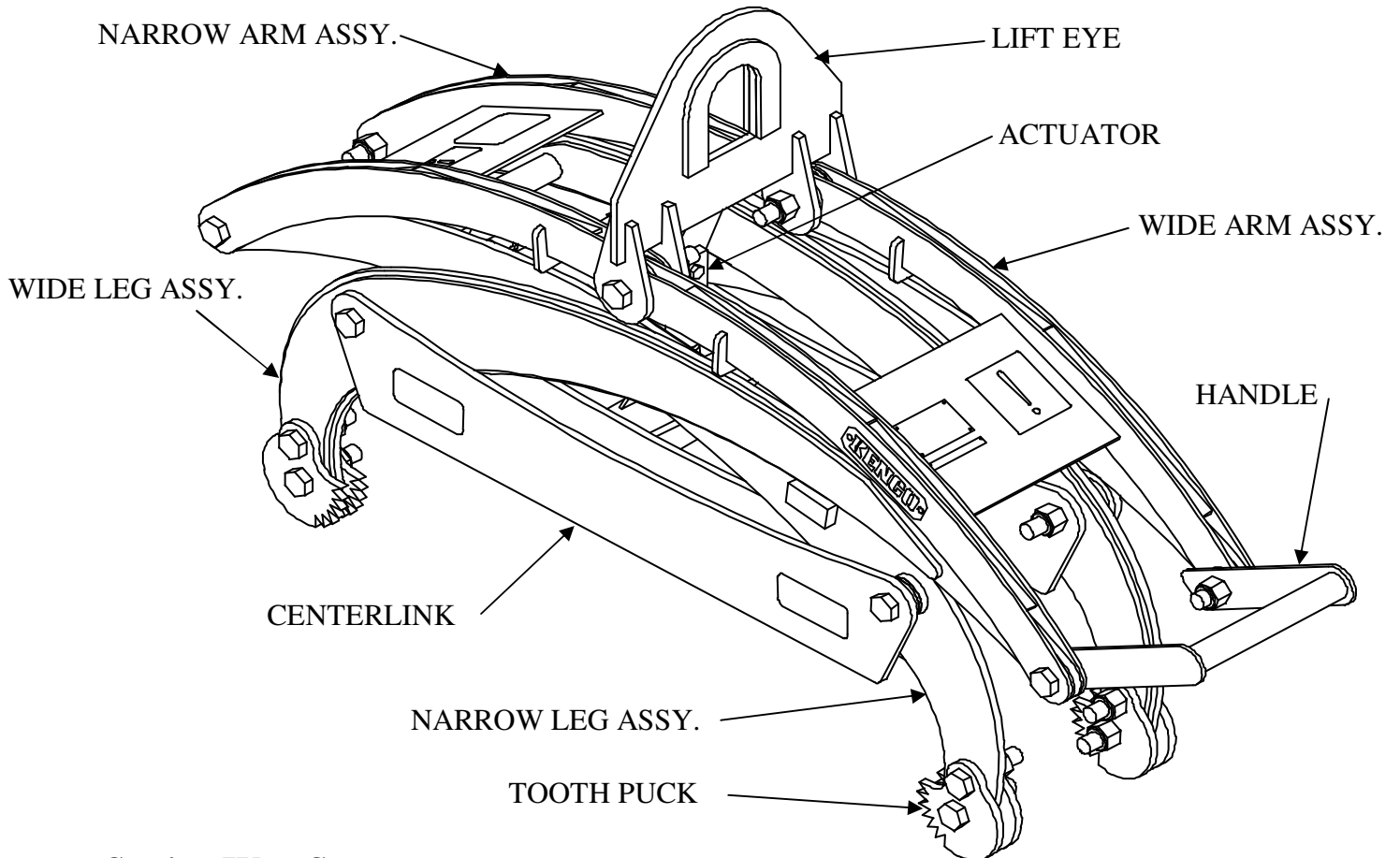
B. Personal Safety

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 Cut Stone Lifter or rigging hardware.
3. Keep hands, feet, and any other appendages clear of the Cut Stone Lifter while in operation.

C. Operation Safety.

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

Section III. Identification of Major Components



Section IV. Setup.

- A. Check the Cut Stone Lifter for any signs of damage incurred during shipping.
- B. Record model and serial # of assembly and components.
- C. Attach the Cut Stone 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 CUT STONE LIFTER.**
 3. **UNDER NO CIRCUMSTANCES SHOULD ANY COMPONENT USED AS RIGGING TO THE CUT STONE LIFTER BE OF A RATED CAPACITY LESS THAN THAT OF THE CUT STONE LIFTER.**



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4. **DO NOT RIG UNPROTECTED NYLON SLINGS OR WIRE ROPE DIRECTLY THROUGH LIFT BAIL.**

5. **IF USING EQUIPMENT OTHER THAN A CRANE: USE RIGGING OF SUFFICIENT LENGTH TO PREVENT CONTACT BETWEEN CUT STONE LIFTER AND EQUIPMENT.**



Section V. Operation.



Before attempting to use the Cut Stone Lifter device **ALWAYS** perform a test lift on the intended object(s) to confirm proper operation. **DO NOT** use a Cut Stone Lifter to handle objects beyond the rated capacity or range.



Manipulation of the Cut Stone lifter by ground personnel for the purpose of alignment with load shall only be done with Cut Stone lifter suspended above the block. **KEEP ALL HANDS AWAY FROM THE CUT STONE LIFTER DURING OPERATION.**

A. Automatic operation:

1. Ensure that the Cut Stone Lifter's capacity and range are appropriate to the block to be handled.
2. Position Cut Stone Lifter at or near center of object to be lifted.
3. Lower Cut Stone Lifter onto object, taking care to minimize impact.
4. Ensure that all persons are clear of Cut Stone Lifter and Block.
5. Release tension on lift cable to cycle the actuator.
6. Raise Cut Stone 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 Cut Stone Lifter into open position to prolong actuator life.)
9. Remove Cut Stone Lifter (Cut Stone Lift is latched in open position automatically)

Tip: The majority of wear on the Cut Stone lifter and associated components results from shock loading, impacting, and poor alignment of the Cut Stone lifter with the load. Minimizing these incidents will greatly extend the life of the Cut Stone 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 CUT STONE 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 CUT STONE LIFTER TO DRAG LOADS.

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



The Cut Stone 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 Cut Stone Lifter and load NEVER be allowed to contact other items.



Section VI. Maintenance

A. Daily:

1. Visually inspect Cut Stone 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 (WD40™)**

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 CUT STONE 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:

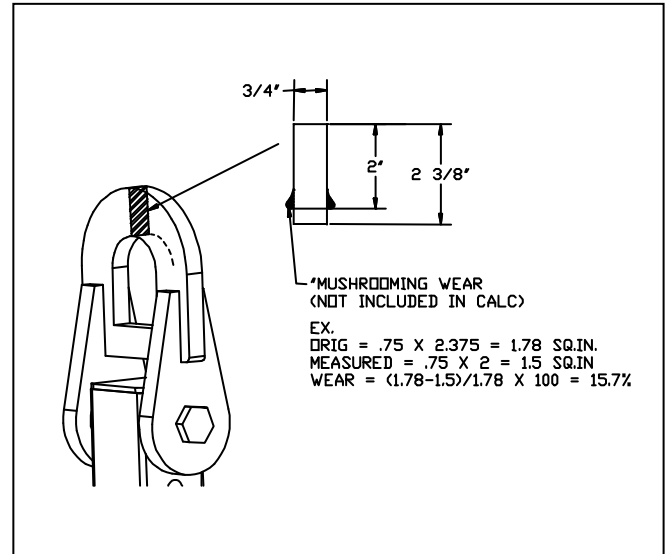
A. General

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.

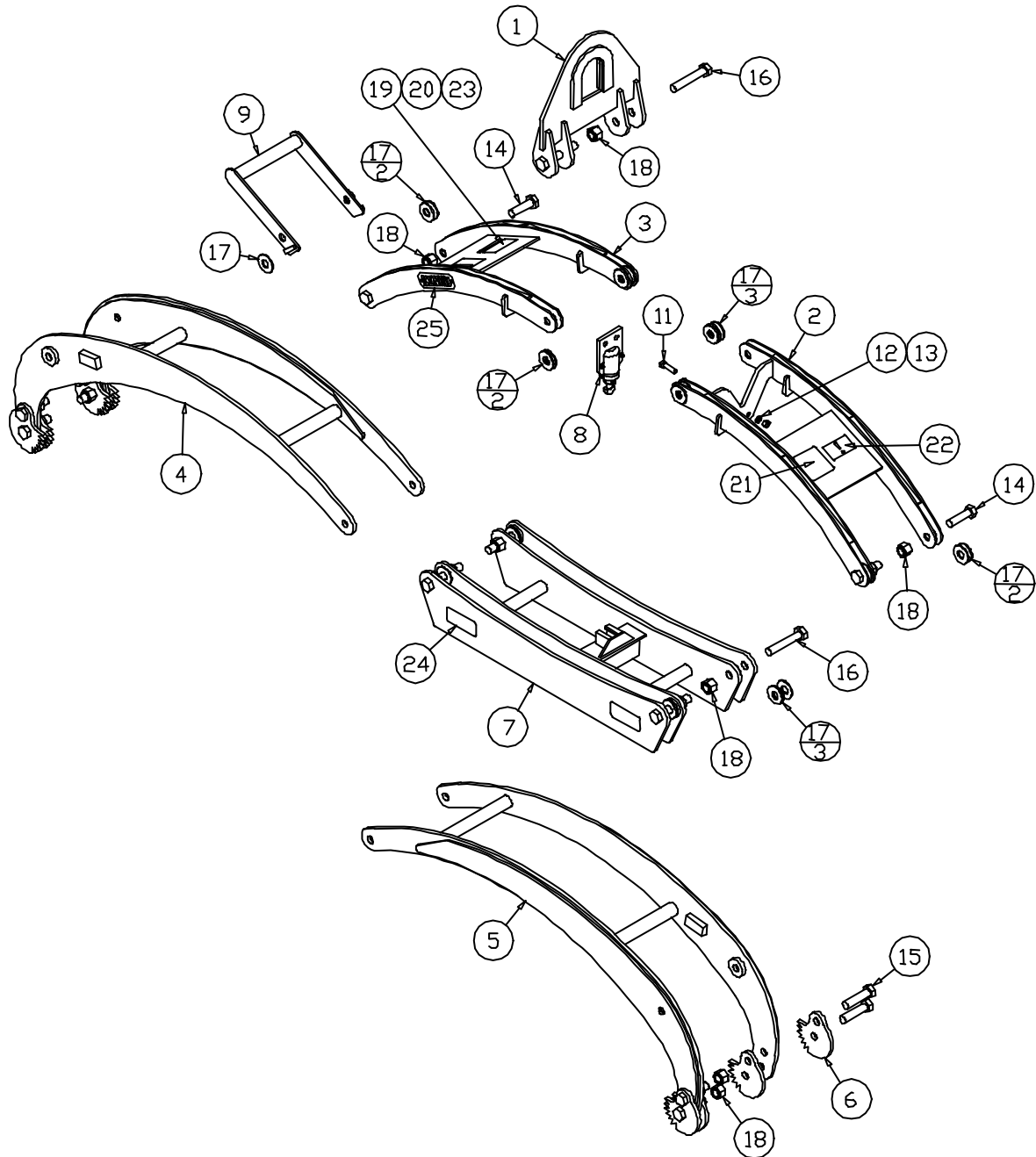
3. Pins/Bolts.

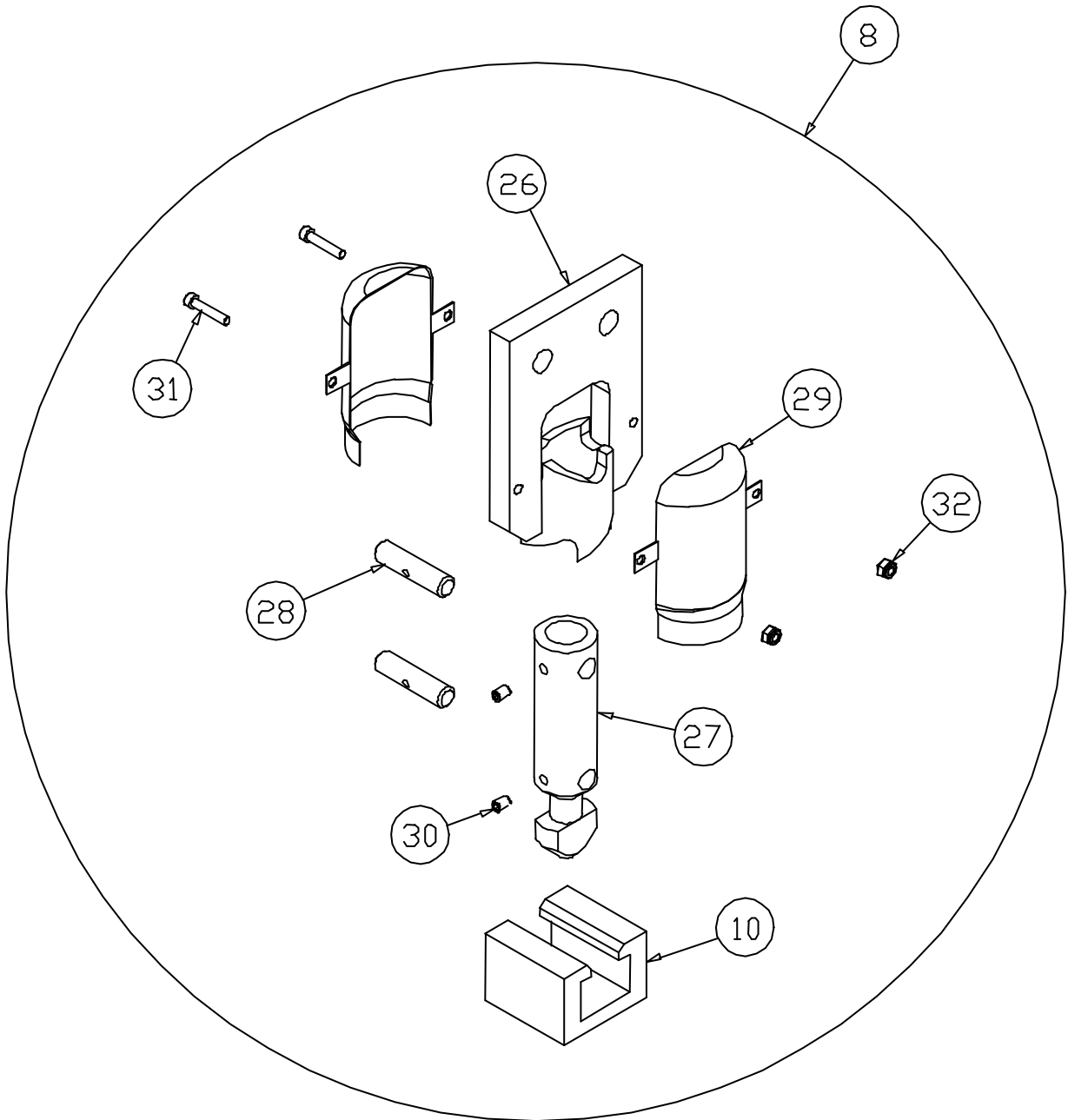
- a. Any visible deformation of a pin, shaft or bolt shall require replacement of that part.

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





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KENCO CORPORATION
877-4ATTACH


MODEL


USAGE

CAPACITY WT.

SERIAL NO.

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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.

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

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 **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.

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Model: KL 12000

Unit Weight: 900 lbs.

Capacity: 12000 lbs.

Usage: 16' - 20' Barrier Wall

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DANGER

DO NOT STAND UNDER OR NEAR WHILE MACHINE IS OPERATING



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

Item Number	Quantity	Part Name
1	1	NG6K24T30 LIFT EYE ASSY. COMP.
2	1	CTL6K27T39 ARM ASSY. NARROW COMP.
3	1	CTL6K27T39 ARM ASSY. WIDE COMP.
4	1	CTL6K27T39 LEG ASSY. NARROW
5	1	CTL6K27T39 LEG ASSY. WIDE
6	8	CTL6K27T39 TOOTH PUCK
7	1	CTL6K27T39 C-LINK ASSY. COMP.
8	1	LARGE ACTUATOR ASSY.
9	1	CTL6K27T39 HANDLE ASSY.
10	1	LARGE REC. BLOCK
11	2	.5 X 2 CAPSCREW
12	2	.5 LOCK WASHER
13	2	.5 NUT
14	4	1 X 3.5 CAPSCREW
15	8	1 X 4 CAPSCREW
16	6	1 X 5.5 CAPSCREW
17	32	1 FLAT WASHER
18	18	1 NYLOCK NUT
19	1	KENCO ID TAG
20	1	BTH TAG
21	1	KENCO ID STICKER
22	1	SMALL WARNING STICKER
23	1	LARGE WARNING STICKER
24	4	LONG DANGER STICKER
25	2	SMALL BADGE
26	1	LARGE ACTUATOR BODY
27	1	LARGE ACTUATOR SHAFT
28	2	LARGE ACTUATOR PIN
29	2	LARGE ACTUATOR COVER
30	2	.25 X .375 SET SCREW
31	2	.1875 X 1 SOCKET HEAD CAP SCREW
32	2	.1875 NYLOCK NUT



Section IX. Warranty

A. Policy

1. KENCO Corporation (KENCO) warrants the Kenco Cut Stone 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 LIEU 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.