

KENCO PIPELIFTTM

Operators Manual Conforms to the latest revisions of ASME B 30.20 and BTH-1 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 Pipe LiftTM. The Pipe LiftTM provides the ultimate in below the hook pipe handling versatility. The Pipe LiftTM 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 Pipe LiftTM system.

This manual should be made available to all persons who may use or maintain the Pipe LiftTM 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 Pipe LiftTM operation that are in force in your area.
- 2. Before operating the KENCO Pipe LiftTM, 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.

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



B. Personal Safety

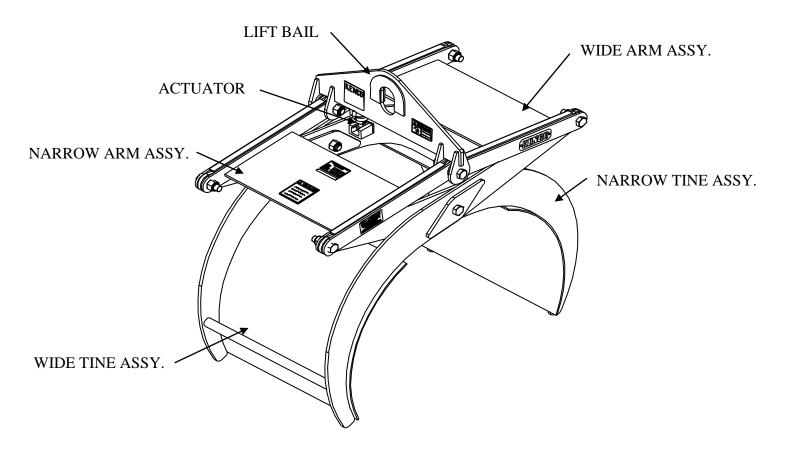
- 1. Wear appropriate protective clothing and related safety equipment including protective glasses, hardhat, gloves, protective shoes, hearing protection, and any other equipment/devices dictated by job conditions.
- 2. Do not wear loose clothing, jewelry, or hairstyles that could become entangled in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

C. Operation Safety.

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

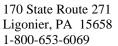


Section III. Identification of Major Components



Section IV. Setup.

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





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



Section V. Operation.



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



Manipulation of the Pipe Lift™ by ground personnel for the purpose of alignment with load shall only be done with Pipe Lift™ suspended above the pipe. KEEP ALL HANDS

AWAY FROM THE PIPE LIFT™ DURING

OPERATION.

A. Automatic operation:

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

B. Semi-Automatic Operation: (If Applicable)

- 1. Ensure that the Pipe LiftTM's capacity and range are appropriate to the pipe to be handled
- 2. Position Pipe LiftTM at or near center of object to be lifted.
- 3. Lower Pipe LiftTM onto object, taking care to minimize impact.
- 4. Ensure that all persons are clear of Pipe LiftTM and pipe.
- 5. Release tension on lift cable.
- 6. Lift Handle
- 7. Raise Pipe Lift™ and load in a smooth motion. Do not "jerk".
- 8. Deposit at desired location.
- 9. Release tension on lift cable. Remove Pipe LiftTM (Pipe LiftTM is latched in open position automatically)

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



- C. Avoid Jarring, swinging, and otherwise unnecessary manipulation of the load.
- D. Avoid handling of loads off center.
- E. DO NOT USE THE PIPE LIFT TO PICK MULTIPLES OF ITEMS IN A SINGLE PICK.
- F. Observe all safety practices associated with operation of hoist machinery.
- G. DO NOT USE PIPE LIFTTM TO DRAG LOADS.
- H. <u>DO NOT ALLOW LOAD (PIPE) TO CONTACT ANY SURFACE/OBJECT WHILE BEING HANDLED.</u>



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



Section VI. Maintenance

A. Daily:

- 1. Visually inspect Pipe LiftTM 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 PIPE LIFTTM 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:

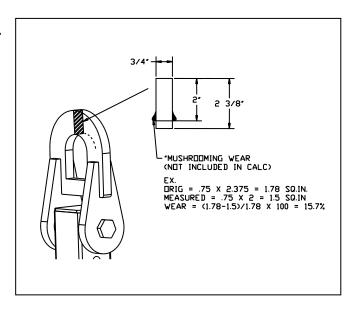
A. General

- 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.

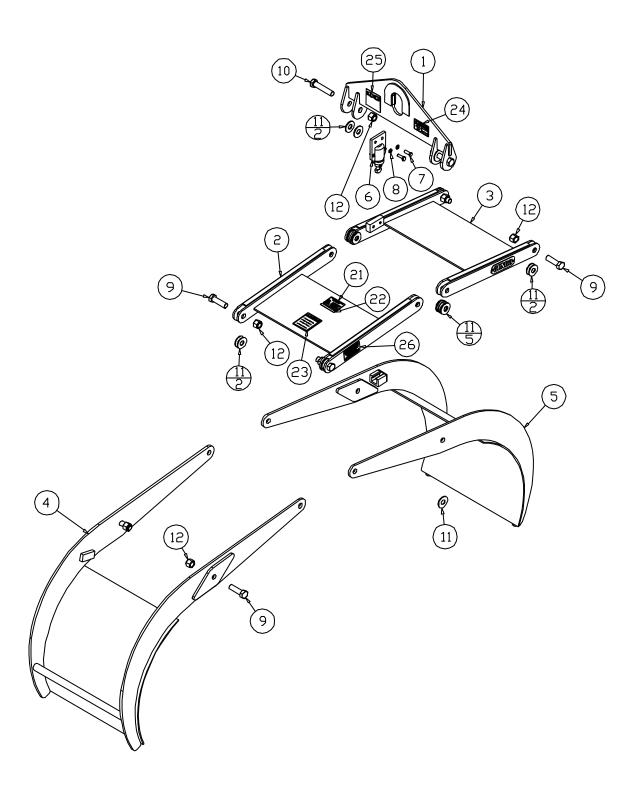
a. Any visible deformation of a pin, shaft or bolt shall require replacement of that part.

4. Pads – Replace if:

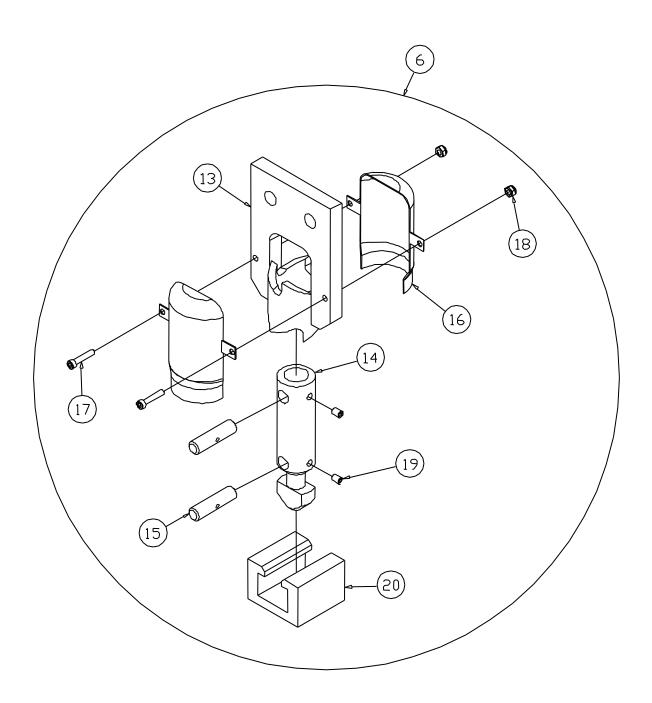
- a. For units utilizing urethane gripping pads, if surface of any given mounting bolt is not at least 3/32" below the surface of the pad,.
- b. Any de-lamination of the pad from the backing plate.
- c. Any scarring, chunking, or missing pad material constituting a total combined loss of surface area 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 21 **USAGE** WT **CAPACITY**

THIS LIFTER IS DESIGNED TO ASME BTH-1 22 **DESIGN CATEGORY SERVICE CLASS**



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Model: KL 12000

Unit Weight: 900 lbs.

Capacity: 12000 lbs.

Usage: 16' - 20' Barrier Wall

170 State Route 271, Ligonier, PA 15658 www.kenco.com 1-877-4-ATTACH



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.

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DO NOT allow load to contact other objects while suspended.

INSPECT LIFTER PRIOR TO EACH USE.



WARNING

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	LIFT BAIL ASSY.
2	1	NARROW ARM ASSY.
3	1	WIDE ARM ASSY.
4	1	NARROW TINE ASSY.
5	1	WIDE TINE ASSY.
6	1	ACTUATOR ASSY.
7	2	GRADE 8 CAPSCREW
8	2	LOCK WASHER
9	6	GRADE 8 CAPSCREW
10	2	GRADE 8 CAPSCREW
11	24	FLAT WASHER
12	8	NYLOCK NUT
13	1	ACTUATOR BODY ASSY.
14	1	ACTUATOR SHAFT
15	2	ACTUATOR PIN
16	2	ACTUATOR COVER
17	2	SOCKET HEAD CAPSCREW
18	2	NYLOCK NUT
19	2	SET SCREW
20	1	RECIEVER BLOCK
21	1	IDTAG
22	1	BTH TAG
23	1	WARNING1
24	1	WARNING2
25	1	ID STICKER
26	2	DANGER STICKER



Section IX. Warranty

A. Policy

- 1. KENCO Corporation (KENCO) warrants the KENCO Pipe Lift™ 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.