

## Reel Eliminator - EC Series

Operators Manual

# INTRODUCTION

When you purchased your Kice Reel Eliminator, you obtained a high efficiency product cleaner of a proven design based on thousands of installations and years of proven reliability and operation.

We're proud of our products and the people at Kice Industries who craft them. At Kice, we use high manufacturing standards and processes to produce the highest quality products, which have been a trademark of our organization for over 60 years.

Our product development work, driven by the requirements of our customers, has resulted in the present designs of the Kice Reel Eliminators.

This owner's manual is intended as a guide for the proper installation, operation and maintenance to keep your Kice Reel Eliminator operating safely and efficiently on the job. Service information is also included for your benefit.

Sincerely,

Drew Kice, President  
Kice Industries, Inc.

## **WARRANTY**

Limited Warranty and Limitations of Warranty: Kice warrants the equipment manufactured by Kice to be free of defects in material and workmanship for a period of one (1) year from the date of shipment. Kice agrees to repair or replace, at its discretion, any parts found to be defective in the opinion of Kice. Kice is not liable for any costs in connection with the removal, shipment or reinstallation of said parts. This warranty does not apply to abrasion, corrosion, erosion, abuse or misuse of the product. Assistance by Kice in system layout or selecting equipment does not imply Kice's responsibility. Buyer agrees to look to the warranty, if any, of the manufacturer or supplier of products manufactured by others and supplied by Kice for any alleged defects in such products and for any damages or injuries caused thereby or as a result thereof. Where work is made to measurements or specifications furnished by the Buyer, Kice does not assume any responsibility for the accuracy of Buyer's specifications. Kice will not assume responsibility for alteration or repairs unless the same are made with the written consent and approval of Kice.

**BUYER SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ELECTRICAL MANUFACTURER'S RECOMMENDATIONS, UNDERWRITERS CODE AND ALL SAFETY PRECAUTIONS.**

Kice extends no other warranty for any of its products other than the above express warranty, and there are no other warranties, express or implied, including warranties of merchantability, fitness for a particular purpose or otherwise which extend beyond the above limited express warranty. Kice and its dealers shall not in any event be liable for consequential or incidental damages, and this agreement provides buyer's sole and exclusive remedy. Any actions for breach of this agreement or warranty must be commenced within one year after the cause of action has occurred.

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## IMPORTANT

Write down the MODEL and SERIAL NUMBER of the Kice Reel Eliminator, along with the same information for the auxiliary equipment (i.e., fan, filter, airlock valve, etc.).

For additional information, application assistance or special service, you should contact the factory. We will need to know the MODEL and SERIAL NUMBER of your Reel Eliminator. For ready reference, please record this information and the date of delivery or installation on the lines below. See the General Information section for the location of the model and serial number.

MODEL \_\_\_\_\_

SERIAL NUMBER \_\_\_\_\_

Date of delivery or installation \_\_\_\_ / \_\_\_\_ / \_\_\_\_

# GENERAL INFORMATION

## TO THE NEW OWNER

The purpose of this manual is to assist owners and operator in maintaining and operating a Kice Reel Eliminator. Please read it carefully; information and instructions furnished can help you achieve years of dependable performance. Separate manuals may be included for auxiliary equipment that make up a system, such as discharge airlock valves, cyclones and fans, these manuals contain additional information which is not in this manual. You are urged to read all manuals before attempting any operation or repair of the equipment in the system. If any manuals are not included in your owner's packet contact our customer service department.

## USING THIS MANUAL

Equipment receiving information, installation, general operations, and adjustment and maintenance guidelines are outlines for owners and operator of Kice Reel Eliminators. Operating conditions vary considerably and cannot be addressed individually. Through experience however, operators should find no difficulty in developing good operating, safety and monitoring skills.

The term “**disconnect and lockout**” or “**lockout/tagout**” as used in this manual means that power to the equipment has been disconnected through the use of a lockable, manual, power cutoff, or power lockout switch. (per 29 CFR 1910.147)

Directional references are used in this manual, for example RIGHT or LEFT or CLOCKWISE or COUNTERCLOCKWISE, refer to the directions when facing the drive end of the machine.

Photographs and illustrations were current at the time of printing, but subsequent production changes may cause your Kice Reel Eliminator to vary slightly in detail. Kice Industries, Inc. reserves the right to redesign and change the equipment as deemed necessary, without notification. If a change has been made to your Kice Reel Eliminator which is not reflected in this owner's manual, or the illustrated parts list, write or call Kice Industries, Inc., for the current information and parts.

## MODEL AND SERIAL NUMBER

The model of the Reel Eliminator, serial number and date of manufacture can be found stamped on the metal identification plate, located on the top of the Reel Eliminator housing (see Figure 1).



Figure 1 Identification Plate Example

## **GENERAL INFORMATION CONTINUED**

### **KICE REEL ELIMINATOR PARTS AND SERVICE**

Use original Kice Reel Eliminator replacement parts only. These parts are available from Kice Industries, Inc. To obtain prompt, efficient service, always provide the following information when ordering parts:

1. Correct part description and number, as given in the Illustrated Parts List section of this manual.
2. Correct model number.
3. Correct serial number.

**IMPORTANT:** Any unauthorized modification, alteration, or use of non-approved attachments or drive units voids the warranty and releases Kice Industries, Inc. from any liability arising from subsequent use of this equipment. Each type of Reel Eliminator is designed to be used in a specific type of system. Using the Kice Reel Eliminator for a purpose other than what it was designed for could result in personal injury as well as product or property damage.

### **FOR MOTOR AND DRIVE PARTS AND SERVICE**

Purchased items such as speed reducers, motors, and drives are covered by the manufacturer's warranty. Problems with these components should be referred to your local supplier or service representative.

# SAFETY PRECAUTIONS



This safety alert symbol is used on equipment, safety decals and in manuals to call your attention to an important safety message warning you of possible danger to your personal safety. When you see this symbol, be alert; your personal safety or the safety of other persons involved. Follow the instructions in the safety message.

## HAZARD LEVELS

The following definitions for identifying hazard levels are:



**DANGER (RED)** – Danger is used to indicate the presence of a hazard that **WILL** cause **SEVERE** personal injury, death, or substantial property damage if the warning is ignored.



**WARNING (ORANGE)** – Warning is used to indicate the presence of a hazard that **CAN** cause **SEVERE** personal injury, death, or substantial property damage if the warning is ignored.



**CAUTION (YELLOW)** – Caution is used to indicate the presence of a hazard that **WILL** or **CAN** cause **MINOR** personal injury or property damage if the warning is ignored.



**WARNING:** All owners and operators should read this manual, or be instructed in safe operating and maintenance procedures, before attempting to uncrate, install, operate, adjust, or service this equipment.

## SAFETY DECALS

The safety decals on the Reel Eliminator should not be removed, covered over, painted, or otherwise become illegible. If this occurs, the decals should be replaced immediately. Contact our customer service department for replacements.

## **SAFETY PRECAUTIONS CONTINUED**

### **ADDITIONAL SAFETY PRECAUTIONS**

1. Do not attempt to install, connect power to, operate or service your new Reel Eliminator without proper instruction and until you have been thoroughly trained in its use by your employer.
2. Do not attempt to open, work on, clean, service or remove any protective cover, guard, grate or maintenance panel on the Reel Eliminator until the POWER has been turned off and LOCKED OUT.
3. Please ensure all the local, state, and OSHA laws are followed.
4. Do not manually override or electrically by-pass any protective device.
5. Do not connect power to or operate the Reel Eliminator unless all moving parts are covered and all guards, grates, and maintenance panels are in place and securely fastened.
6. Do not abuse, overload, mistreat, or misuse the Reel Eliminator or attempt to operate the equipment if it is need of service, lubrication, maintenance or repair.
7. Never place any part of your body in or near rotating members or moving parts of the Reel Eliminator.
8. Free outlet of the product must be guaranteed at all times. Otherwise, blockage and severe damage may result, or a dangerous situation may occur.
9. Many Reel Eliminators are installed and wired to start automatically or from remote control locations. Keep clear of all moving parts on industrial equipment at all times.
10. Only trained personnel should open the unit for inspection. The equipment should be checked on a daily basis.
11. It is the employer's responsibility to adequately train the employee-operator in the proper and safe use of the equipment. Written safety programs and formal instructions are essential. All new employees must be made aware of company policies and operating rules, especially the established safety and health procedures. Refresher training of employees in the potential hazards of the job is important. Up to date training records must be maintained at the job site.
12. Special attention must be devoted to outside contractors engaged to enter and perform work on equipment or in the work place. Special care must be exercised to insure all such personnel are fully informed of the potential hazards and follow plant rules – with special emphasis on explosion proof electrical tools and cutting or welding in unsafe environments.
13. Keep the work place cleaned up and free of dirt and dust at all times. Do not attempt to work on slippery or unsafe ladders and work platforms when maintenance or repair work is being performed on the equipment.
14. The operator must ensure that adequate lighting conditions are provided at the location of equipment operation.
15. Do not climb on ladders or work on platforms unless maximum load rating is posted. Do not exceed maximum load ratings when installing or servicing the equipment.
16. Never allow any kind of metal or other foreign objects to enter a Reel Eliminator while in operation. Examined raw materials should be used through the machine to ensure proper and consistent operation.
17. All Reel Eliminator inlet and discharge openings must be completely connected to the gravity spouting to prevent human access when the machine is running and remain closed until the POWER IS TURNED OFF AND LOCKED OUT. Keep away from the moving parts of the Reel Eliminator during operation.
18. Operate safely at all times. Use personal protective equipment when and where appropriate, such as hard hats, helmets, gloves, ear plugs, dust masks, and eye protection devices. Keep personal protective equipment in good repair and convenient to the operator.
19. Drive components must be inspected and adjusted after transportation and periodically as required by operating conditions. Check bolts holding the mounting bracket on the Reel Eliminator, sprocket alignment, set screws and keys as appropriate to job conditions.
20. High voltage and rotating parts can cause serious or fatal injury. Only qualified, trained, and experienced personnel must perform installation, operation and maintenance of electrical machinery. Make sure that the motor and the frame of each Reel Eliminator is effectively grounded in accordance with OSHA safety and health standards, the National Electric Code, local codes and EN ISO 60204-1 as required for the classified area.
21. Never stand under any kind of hoist or lifting mechanism, whether or not it is loaded or in operation. Never stand under or near a Reel Eliminator or component when it is being lifted.
22. Qualified personnel must carefully inspect all lifting devices before each use. Never use lifting devices for equipment transport. Never use a lifting device that is damaged, deteriorated or in any way in need of repair.
23. All protective covers, guards, grates, maintenance panels, switches, and warning decals must be kept in place and in good repair. Any equipment with damaged, malfunctioning, defective, or missing protective devices must be taken out of service until the protective device can be repaired or replaced.
24. Any Reel Eliminator which is used in the processing of explosive materials in hazardous environments requires an evaluation on the part of the user and operator of proper and adequate equipment, monitoring equipment, dust control, explosion relief venting, and electrical equipment enclosures. Do not use your equipment in hazardous environments unless it has been properly equipped for the hazard.
25. It is ultimately the operator's responsibility to implement the above listed precautions and ensure proper use of the equipment, maintenance and lubrication. Keep these instructions and list of warnings with your machine at all times.
26. It cannot be assumed that every acceptable safety procedure is contained herein or that abnormal or unusual circumstances may not warrant or require future or additional procedures.

**WORK SAFELY AT ALL TIMES**

# RECEIVING, HANDLING AND INSTALLATION

## RECEIVING AND INSPECTION

Kice Industries Inc. has prepared your new Reel Eliminator for shipment in accordance with the Uniform Freight Classification, we have thoroughly inspected this unit at the factory and, barring damage in transit should be in perfect condition upon arrival.

The Kice Reel Eliminator and accessories should be inspected on receipt for any shipping damage. Check all accessories for free operation of all moving parts.

When a carrier signs the Kice Industries Inc., bill of lading the carrier accepts the responsibility for any subsequent shortages or damage evident or concealed, and the purchaser must make any claim against the carrier. Evident shortage or damage should be noted on the carrier's delivery document before signature of acceptance. Inspection by the carrier of damage evident or concealed must be requested. After inspection, issue a purchase order for necessary parts or arrange for return of the equipment to Kice Industries Inc. factory for repair.

## HANDLING AND STORAGE

Kice Reel Eliminators are shipped in many different configurations. All units are completely assembled and skidded ready for installation. These units must be handled and moved using good rigging techniques, being careful to avoid concentrated stresses that will distort any of the parts. This equipment is designed to be installed with a minimum of assembly on the part of the user. All motor drives and guards that are provided with this Kice product are assembled.

**IMPORTANT:** Speed reducers may be shipped less lubrication; this should be checked before running.

If the Kice Reel Eliminator is not to be installed promptly, store it in a clean, dry location to prevent rust and corrosion of steel components. If outdoor storage is necessary, protection should be provided. Cover the components to prevent the accumulation of dirt and moisture in the housing. Cover motors with waterproof material. Refer to the motor maintenance information for further storage instructions.



**CAUTION:** Use proper equipment when lifting or moving the Reel Eliminators. Make sure all persons and obstructions are clear from path and installation area. See below for details.

## INSTALLATION

1. Installation of the Reel Eliminator (which may include the motor), is completed by the operator. When installing the equipment, please make sure that the moving parts in the inside of the equipment are not accessible. This also fulfils EN ISO 13857-1 where required.
2. Move the Kice Reel Eliminator to the installation area using proper equipment, tool truck or fork lift with the proper lifting capacity. The Reel Eliminator has four attachment points (lifting lug brackets) where equipment that is necessary for lifting the device, such as hoists, ropes, shackles, or clevises can be attached. All attachment points need to be used during lifting. Using lifting points other than those specified, and/or using equipment with insufficient capacity may compromise human safety as well as the structural integrity of the machine itself (see Figure 2).

## RECEIVING, HANDLING AND INSTALLATION CONTINUED

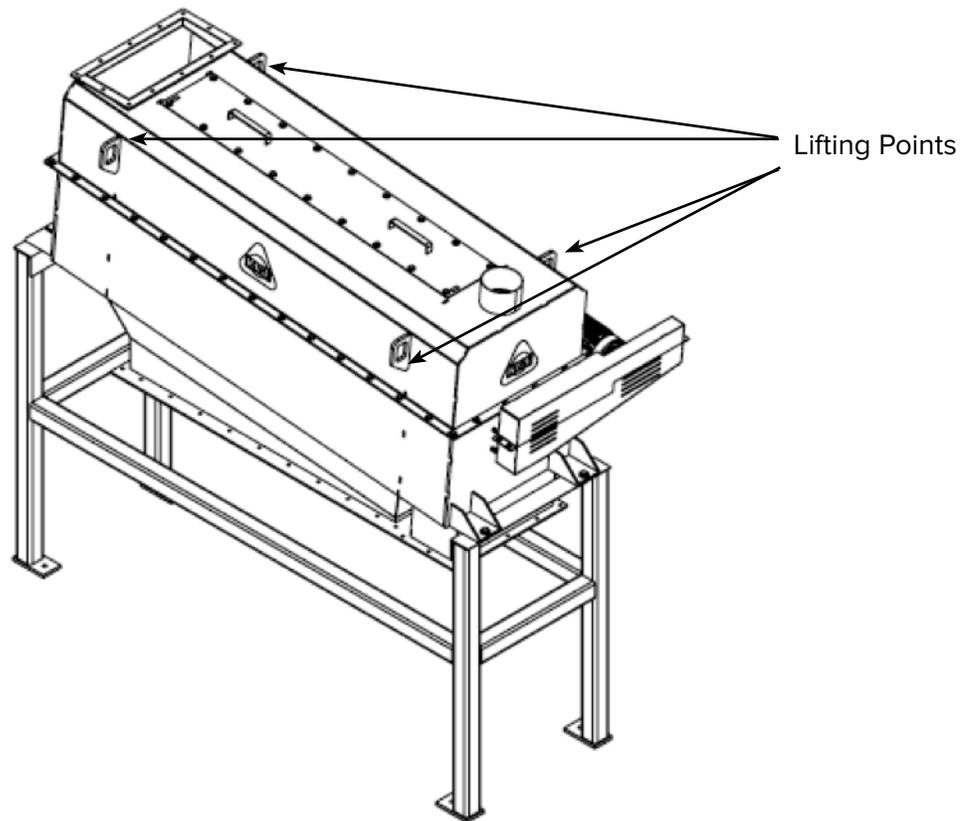


Figure 2 Lifting Points

3. Check all mounting surfaces of the floor, equipment mounting pads, and the Kice Reel Eliminator inlet and outlet flanges. All should be free of any foreign materials. The floor or mounting surface should be level, using shims to ensure proper installation of the equipment. The Reel Eliminator must be separately grounded and installed on steel construction intended for this purpose to mitigate the risk of an electrostatic charge.
4. Place two beads of caulking on the inlet and discharge flanges as necessary, on each side of the bolt holes and around each hole.
5. Tighten all mounting fasteners securely. Refer to the table in this manual for correct torque values. To insure proper operation, the Kice Reel Eliminator must be adequately supported and properly installed. All ductwork or gravity spouting should be independently supported and placed away from access routes and steps. When installing outside, care must be taken to protect the equipment from driving rain.
6. All duct work and required machinery must be assembled to the Reel Eliminator, fully enclosing it for proper use and quality operation. The unit should only be turned on once it is properly connected and fully enclosed. This will also prevent personnel from reaching into the machine during operation.
7. The motor controls and starter can be mounted in any convenient location. Distance or location of the controller does not affect its performance.



**WARNING:** High voltage and rotating parts can cause serious or fatal injury. Only qualified personnel must perform installation, operation and maintenance of electrical machinery. Make sure that any motor and the frame of each Kice Reel Eliminator are effectively grounded in accordance with OSHA standards, the National Electric Code and local Codes.

8. Electrical conduit, junction tees, safety switches, motor starters and sometimes motors are not furnished by Kice Industries, Inc. A local electrician familiar with industrial equipment and local codes should install of the electrical items. Wiring from the controls to the motor and switches should be sized for the amperage rating of the electrical device. All electrical components must be in compliance with current

## RECEIVING, HANDLING AND INSTALLATION CONTINUED

guidelines and codes.

9. Some systems will have additional equipment to wire and check. All items must be checked to insure proper direction of rotation, which is marked on the housing.
10. Test-run the Kice Reel Eliminator. If any unusual noises occur, disconnect and lock-out the power. Open the equipment, manually rotate the reel and inspect for touching or rubbing. The product outlet must remain free and clean at all times; otherwise dangerous operating conditions may occur, causing damage to equipment and/or personnel.
11. Reassemble items removed during inspection and remove lock-out for operation.

## OPERATION AND START-UP PROCEDURE

The purpose of the Reel Eliminator is to separate fines from coarse product. This is accomplished by passing the product through a rotating reel/screen which is at a five degree angle from the stationary housing. Brushes inside help to remove build up on the exterior of the screen. The fine material passes through the screen and into the “fines” hopper. The oversized product passes through the reel and out the discharge end through the “overs” discharge spout (see Figure 3).

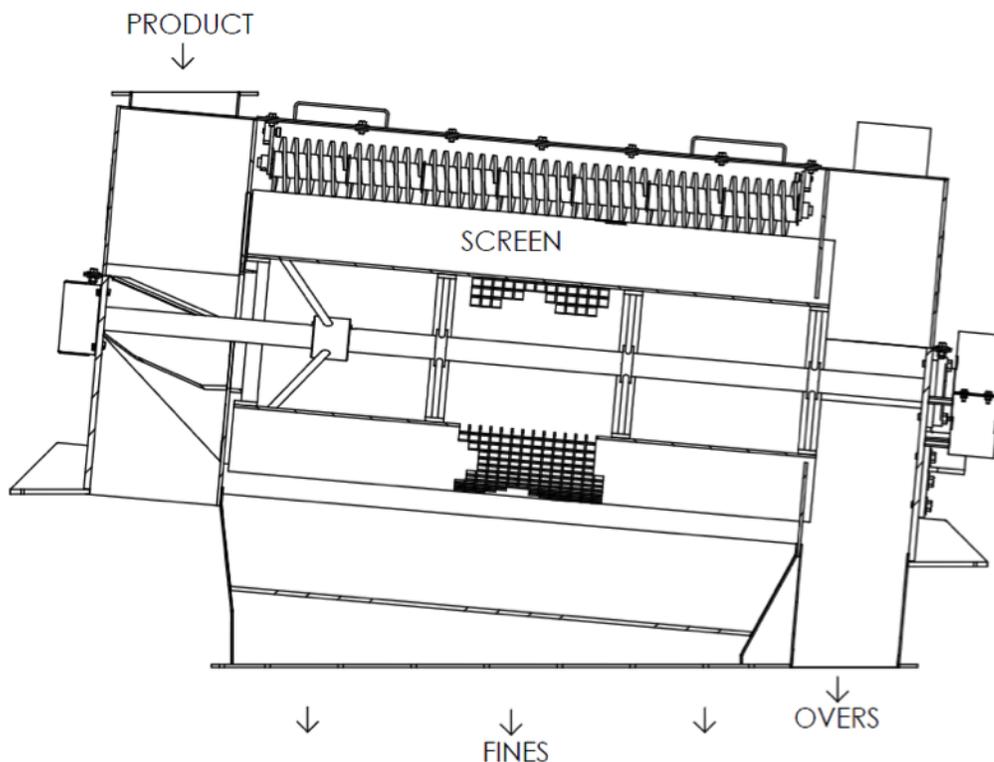


Figure 3 Flow Diagram

Kice Reel Eliminators have an interior reel or screen that separates large particles from fines as the reel rotates. The reel rotates in a clockwise direction (when facing the drive end of the machine, see Figure 4). The fines fall through the screen and out the bottom of the unit, while the larger particles stay in the screen and travel to end of the Eliminator where they are discharged. Different sizes of screens are available depending on the product being separated.

## OPERATION AND START-UP PROCEDURE CONTINUED

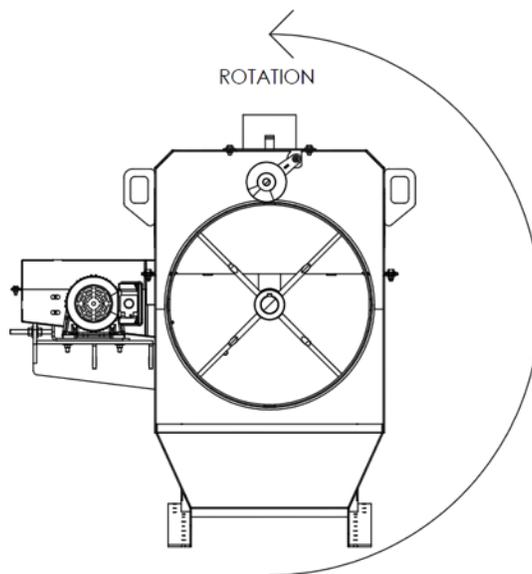


Figure 4 Rotation of Reel

It is the responsibility of owner/employer to provide the necessary training for operating personnel in the proper and safe use of equipment. Written safety programs and formal instruction are essential. All new employees must be made aware of company policies and operating rules, especially the established safety and health procedures. Refresher training of experienced employees in the potential hazards of the job is important. Up-to-date training records must be maintained at the job site.

### START-UP PROCEDURE

1. Inspect the installation prior to starting the eliminator. Check for any loose items or debris that may be in the gravity spout. Check the interior of the eliminator as well.
2. Check the drive installation and chain tension.
3. Check the tightness of all setscrews, nuts and bolts. Tighten the hub set screws or bolts to the proper torque.
4. Install all spouting and remaining safety devices and guards. Verify that the supply voltage is correct and wire the motor. "BUMP" the starter to check for proper rotor rotation.
5. Apply power and check for unusual sounds or excessive vibration. If either exists, see the section on Troubleshooting. Check for correct eliminator speed and complete the installation.

**IMPORTANT:** After approximately 48 hours of operation, the drive chain tension should be checked. Refer to the Maintenance and Service section of this manual for proper procedures.

# MAINTENANCE AND SERVICE

Do not attempt to work on, clean or service the Reel Eliminator, or open or remove any protective cover, guard, grate or maintenance panel until the POWER has been turned off and LOCKED OUT (reference 29 CRF 1910.147), and the Reel Eliminator has come to a complete stop. Additional plant specific Standard Operating Procedures may also apply.



**DANGER:** Never place any part of your body in the Reel Eliminator while the power source is connected to the motor.

Assume at all times that power is “ON”. Treat all conditions as live. This practice ensures a cautious approach that may prevent an accident or injury. Before applying power to any equipment, make certain that all personnel and tools are clear of the machine.

The key to good Reel Eliminator maintenance is regular and systematic inspection of all parts. Inspection frequency should be determined by the severity of the application and local conditions. Adherence to a regular inspection schedule is essential. It is ultimately the operator’s responsibility to implement necessary precautions to insure proper reel eliminator use, maintenance and lubrication.

- Periodically inspect the screen and brushes for damage, excessive wear, or abnormal product build up inside.
- Periodically inspect the bearings and drive chain for excessive wear.
- Bearings should be lubricated approximately every 8 - 10 weeks with No. 2 Lithium complex base grease or equivalent. This is a minimum guideline based on general operating conditions and can vary depending on the application, material, and temperature.
- During any routine maintenance, all set screws and bolts should be checked for tightness. Refer to the table in this manual for correct torque values.

Bearings, Seals and Shaft size used on the Reel Eliminators are:

Model	Shaft Size	Bearing Description	Seal Description
EC 48 / EC 60	1-15/16”	Dodge SC 1-15/16” 4 Bolt Flange Ball Bearing P/N: 124213	NTI 1154-1
EC 72			

## MOTOR AND SPEED REDUCER SERVICE

To obtain parts or service for the Reel Eliminator motor or speed reducer, contact the local dealer or service representative for the particular make of motor or speed reducer used on the unit.

Safety, service, and repair information has been provided from the Motor and Speed Reducer manufacturer. If you have difficulty obtaining service or repair parts, contact the Kice customer service department.

1. Inspect the motor in the following manner:
  - a. Read all materials supplied with the equipment concerning the motor.
  - b. Be sure that the motor is securely mounted to the speed reducer.
2. Inspect the speed reducer:
  - a. Read all materials supplied with the equipment concerning the speed reducer.
  - b. Identify speed reducer type, grease lubrication or oil lubricated.
  - c. If the unit is oil lubricated it is normally shipped dry. Add the appropriate oil as specified by the manufacturer.

## MAINTENANCE AND SERVICE CONTINUED

- d. If the unit is Grease lubricated do nothing. These are sealed units and ready for operation.
3. Inspect the drive:
  - a. Look at the drive, one side is the tight side the other side is the loose. Make sure the loose side is appropriately tensioned as noted in the Drive Chain Tension section below.
  - b. Inspect the sprockets for excessive wear. If either sprocket is worn, replace BOTH sprockets AND the chain.

## DRIVE CHAIN MAINTENANCE

After approximately 48 hours of initial operation, check the drive chain tension. Check it again in 2 to 3 weeks. The following procedures should be followed if the drive chain needs adjusting or replacing.



**CAUTION:** The drive uses a self-lubricated chain. Do not oil or otherwise lubricate.

## DRIVE CHAIN TENSION

When pressed down midway between the sprockets, the drive chain should have a deflection of 2% - 3% of the shaft center distance under no load (see Figure 5). (Example: 20" shaft center to center distance, deflection will be about 1/2").

Adjust the drive tension in the following manner:

1. Disconnect and lock out power.
2. Remove the chain guard.
3. Loosen the motor mount slide bolts.

**NOTE:** If the drive chain is to be replaced, remove it at this time by removing the connecting link and install a new drive chain. Then proceed with the remaining procedures.

4. Tighten the drive chain by turning the motor mount slide bolts.
5. When proper chain tension is achieved, retighten the motor mount slide bolts.
6. Reinstall the chain guard.
7. Reconnect power.

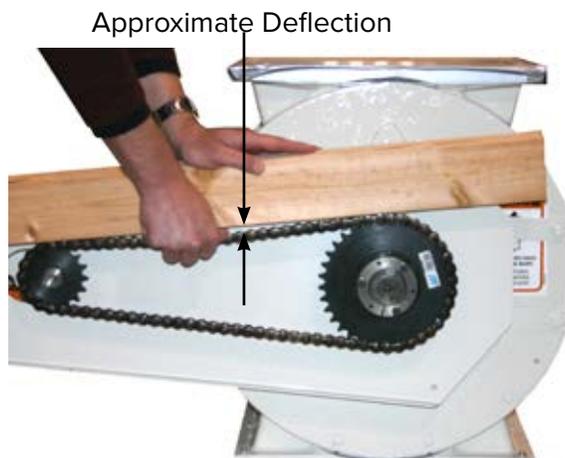


Figure 5 Approximate Chain Deflection

## MAINTENANCE AND SERVICE CONTINUED

### REPLACING BRUSHES

Utilize proper lockout/tagout procedure to disconnect power to the motor

1. Remove the cover plate bolts and lift brush arm assembly from top of Reel Eliminator (see page 19).
2. Remove shoulder bolts on either end that hold brush assembly to housing.
3. Loosen set screw in shaft collar and remove brush arm (see Figure 6).

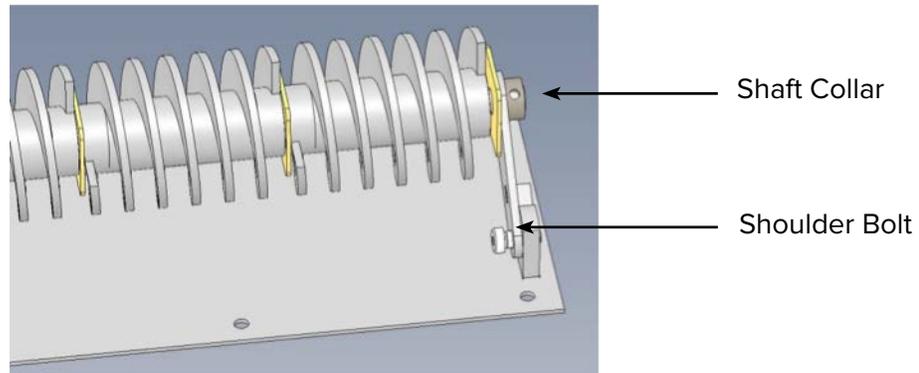


Figure 6 Bolt and Shaft Locations

4. Install new brushes with brass washers between each brush.
5. Install brush arm and tighten set screw onto shaft.
6. Place brush arm back onto housing and install shoulder bolts.
7. Re-install brush arm assembly into Reel Eliminator and tighten bolts.
8. Check to make sure all bolts and fasteners are tight.

### REPLACING THE REEL

Utilize proper lockout/tagout procedure to disconnect power to the motor.

1. Remove chain guard assembly, chain, sprocket, seal plate, and bearing from drive end.
1. Remove bolts and complete top assembly from top of Reel Eliminator (see page 19).
2. Remove bearing guard bearing, seal plate and bearing from opposite the drive end.
3. Remove reel and replace with new reel (see Figure 7).
4. Install seal plates and bearings.
5. Check to make sure new reel freely rotates.
6. Install sprockets, chain, and chain guards.
7. Tension chain according to procedure described in Drive Chain Tension section.
8. Install top assembly of reel eliminator.
9. Check to make sure all bolts and fasteners are tight.

**IMPORTANT:** After approximately 48 hours of operation, the drive chain tension should be checked. Refer to the Maintenance and Service section of this manual for proper procedures.

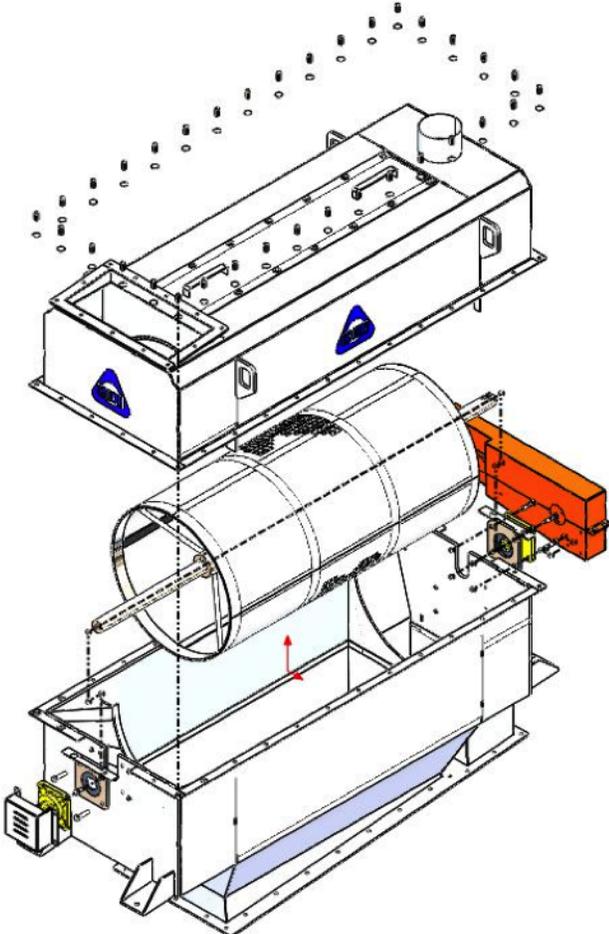


Figure 7 Exploded View

# TORQUE VALUES FOR MAINTENANCE AND INSTALLATION

<b>Recommended U.S. BOLT TORQUE</b> <i>Coarse thread only</i>							
		SAE Grade 5	SAE Grade 5	SAE Grade 8	SAE Grade 8	Socket head cap screw	Socket head cap screw
Bolt Dia.	Thread Size	lb - ft	N - m	lb - ft	N - m	lb - ft	N - m
1/4	20	8.4	11	12	16	11	15
5/16	18	17	24	25	33	23	31
3/8	16	31	42	44	59	41	55
7/16	14	49	67	70	95	65	89
1/2	13	74	100	110	140	100	140
9/16	12	100	140	150	210	140	200
5/8	11	140	190	210	290	200	270
3/4	10	240	330	380	510	350	480
7/8	9	390	520	610	820	570	770
1	8	570	780	910	1100	850	1200
1-1/8	7	790	1100	1300	1700		
1-1/4	7	1100	1500	1800	2500		
1-3/8	6	1500	2000	2400	3200		
1-1/2	6	1900	2600	3200	4300		
1-5/8	5.5	2400	3300	4300	5900		
1-3/4	5	3000	4100	5000	6800		
2	4.5	4500	6100	7500	10000		

Values above are approximations; consult with the manufacturer for torque data.  
 Significant variation may exist within the same grade and size between manufacturers.

## TROUBLESHOOTING

Kice Industries Inc. is careful to insure that each Reel Eliminator is properly assembled prior to shipment; however, there may be other causes for malfunction, the following items are presented for your information and as an aid to help your new machine achieve the highest level of efficiency possible.

<b>Problem</b>	<b>Possible Cause</b>
Excessive Vibration	<ol style="list-style-type: none"> <li>1. Loose mounting bolts, set screws, bearings or couplings.</li> <li>2. Misalignment or excessive wear of bearings.</li> <li>3. Loose screw in one or both of the bearings.</li> <li>4. Misaligned motor.</li> <li>5. Bent shaft due to mishandling or material impact.</li> <li>6. Accumulation of foreign material on the reel.</li> <li>7. Excessive wear or erosion of the reel or screen.</li> <li>8. Externally transmitted vibration.</li> <li>9. Improperly anchored.</li> </ol>
Inadequate Performance	<ol style="list-style-type: none"> <li>1. Reel running too slow – wrong sprockets.</li> <li>2. Check brushes and reel for wear and replace if necessary.</li> <li>3. Foreign material may be built up on the reel or screen.</li> <li>4. Discharge of the Reel Eliminator blocked.</li> </ol>
Excessive Noise	<ol style="list-style-type: none"> <li>1. Vibration originating elsewhere in the system.</li> <li>2. Inadequate structural supports.</li> <li>3. Nearby sound reflecting surfaces.</li> <li>4. Loose accessories or components.</li> <li>5. Loose chain drive or worn sprockets.</li> <li>6. Worn bearings.</li> </ol>
Material Backing Up	<ol style="list-style-type: none"> <li>1. Motor not running.</li> <li>2. Broken drive assembly.</li> <li>3. Reel running too slow – (sprockets reversed).</li> <li>4. Reel or screen blinded over.</li> <li>5. Obstructed inlet or outlet.</li> </ol>
Premature Component Failure	<ol style="list-style-type: none"> <li>1. Prolonged or excessive vibration.</li> <li>2. Inadequate or improper maintenance.</li> <li>3. Abrasive or corrosive elements in the product.</li> <li>4. Misalignment or physical damage to rotating components or bearings.</li> <li>5. Excessive Speed.</li> <li>6. Foreign object jamming the reel.</li> </ol>

## REPLACEMENT PARTS

It is recommended that only Kice Manufactured supplied replacement parts be used. Kice Reel Eliminator parts are built to be fully compatible with the original equipment, using specific alloys and tolerances. These parts carry a standard Kice warranty.

When ordering replacement parts, specify the part name,

Kice Serial Number \_\_\_\_\_

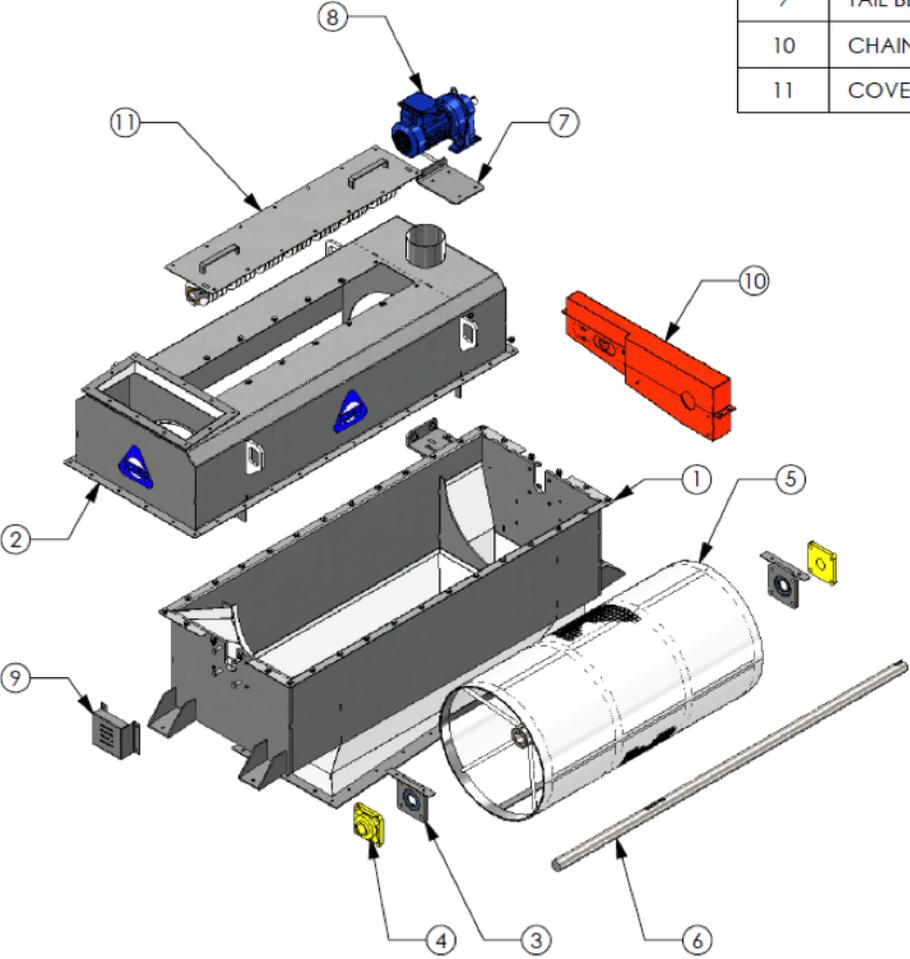
Reel Eliminator model # \_\_\_\_\_ & size \_\_\_\_\_

Bearing size or shaft size \_\_\_\_\_

Most of this information is on the metal nameplate attached to the Reel Eliminator housing.

# ILLUSTRATED PARTS LIST

BILL OF MATERIALS	
ITEM	DESCRIPTION
1	BOTTOM HOUSING
2	TOP HOUSING
3	SEAL PLATE
4	BEARING
5	REEL ASS'Y
6	DRIVE SHAFT
7	MOTOR MOUNT SLIDE
8	GEARMOTOR
9	TAIL BEARING GUARD
10	CHAIN GUARD
11	COVER PLATE w BRUSH ARM



REEL ELIMINATOR  
EXPLODED VIEW

DESCRIPTION:



**KICE INDUSTRIES, INC.**

5500 MILL HEIGHTS DR. WICHITA, KANSAS 67219  
PH: (316) 744-7151 FAX: (316) 744-7355

MJS

DWN:

08-07-2014

DATE:

REL-1000

DWG. NO.

# ADDITIONAL EQUIPMENT FROM KICE INDUSTRIES, INC.

## **Centrifugal Fans - Fans for Every Industrial Need**

Kice fans are durable – built to run around the clock and the calendar, consistently delivering high performance under tough conditions. Four series of versatile workhorse fans are available, including fans and pressure vacuum service operating at both normal and high-pressure differentials.

## **Baghouse Filters - Full Line of Filters/Collectors for Indoor or Outdoor Use**

Five series of high-ratio filters cover most every type of application. They are available in round, square and modular design for capacity, in a large range of sizes. Kice offers an unexcelled selection of filtering materials.

## **Positive Displacement Blowers - Air Powered Units for Pneumatic Conveying Systems**

Kice manufactures a quality line of positive displacement air pump power units. They utilize either positive or negative air pressure to convey materials through a pneumatic system. Pressures, motor sizes and options are matched to your system requirements. A full range of Kice fabricated accessories is available.

## **Multi-Aspirators - Covers Wide Range of Industrial Applications**

Kice has developed a line of aspirators for use in the feed and grain, plastics powder/bulk solids industries in a wide range of sizes and capacities. Models include the Multi-Aspirator, the Portable Aspirator and the Mini-Aspirator. Applications include cleaning, testing, separation, and sizing.

## **Dust Duct - Ductwork and Fitting Standards**

System of pre-engineered piping standards developed especially for air pollution and dust control. Catalog numbering system simplifies design and ordering. Equipment is of solid, sanitary construction, with a smooth aerodynamic design.

## **Rotary Airlocks - World's Most Complete Line of Rotary Airlocks**

Kice builds nearly 100 basic types of airlocks, with thousands of variations available to fit most any pneumatic conveying requirement. Special designs are available for handling difficult materials, high temperatures and high positive and negative pressures. A wide range of capacities is available in both drop-thru and injector series.

**KICE INDUSTRIES, INC.**

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