QC Industries LLC

Driven By Customers ...
Powered by Proven Products

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Installation, Maintenance, and Parts Manual

Flextrac Conveyors

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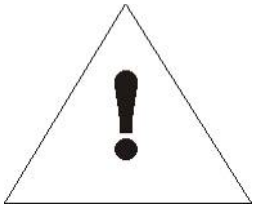
1.01 Warnings – General Safety



Observe safe practices when setting up and operating your QC Industries conveyor.

Climbing, sitting, walking, or riding on conveyor can cause severe injury. Keep off conveyors.

Do not operate conveyors in an explosive environment.

Exposed moving parts can cause severe injury. Lock out power before removing guards or performing maintenance.

Gearmotors may be hot. Do not touch gearmotors.

QC Industries cannot control the installation and/or application of conveyors. Taking protective measures is the responsibility of the user. When conveyors are used in conjunction with other equipment, or as part of a multiple conveyor system, check for potential pinch points and/or other mechanical hazards before system start-up.

During normal operation, please make sure that all guards are in place and securely attached to conveyor.

Loosening stand height or angle adjustment screws can cause conveyor sections to drop down unexpectedly, causing severe injury. Support conveyor sections prior to loosening stand height or angle adjustment screws.

Injury is possible if the stands are not lagged to the floor, cross ties are not used, or angle braces are not present. Never place a conveyor in operation until all proper mounts are installed and secured. It is the end user's responsibility to ensure that the support system is safe and secure.

Never operate equipment unless all operating instructions are understood and all guards, interlocks, covers, safety devices or circuits and protective components are functioning properly.

Never operate or service this equipment if under the influence of alcohol, drugs or other substances or conditions which decrease alertness or judgment.

1.02 Foreword

Congratulations on purchasing a conveyor from QC Industries, LLC, the leader in low profile conveyors! QC Industries offers the finest low-profile conveyors available, using the highest quality materials and state of the art manufacturing processes. QC Industries conveyors boast a number of innovative engineering features to assure you of hassle-free setup, smooth operation, and years of continued low maintenance use. We are proud of our quality products and are committed to providing you dependable service!

Check your shipment

Before opening the shipment, visually inspect the outside of the crate/box for shipping damage. Carefully unpack the crate/box, inspecting for component damage which may have occurred inside the packing materials. Contact the carrier and QC Industries regarding any damage that may have occurred during shipment. Check the contents of your shipment against the supplied packing slip and inform QC Industries of any discrepancies.

Please read this manual

Inside this manual you will find instructions on how to set up and maintain your QC Industries conveyor properly, as well as maximize its performance. Please take the time to read this manual and familiarize yourself with these setup and maintenance instructions. These instructions will help assure a long product life that requires a minimum amount of service and keeps your conveyor working at its maximum capacity.

If you need assistance

If you need assistance with your QC Industries conveyor, a highly trained support staff is only a phone call away. QC Industries welcomes the opportunity to assist you. You can contact the Customer Service department Monday through Friday, 8am-5pm EST at (513) 753-6000. In addition, your local distributor can provide support in many ways. Our distributors have been trained at the factory and can be dispatched to your facility to help. You can also visit our website for additional information and technical documents – www.qcindustries.com

1.03 Product Description

The Flextrac Conveyor has many typical conveyor components. Below is a description of the basic parts and options for the Flextrac Conveyor **(Figure 1)**.

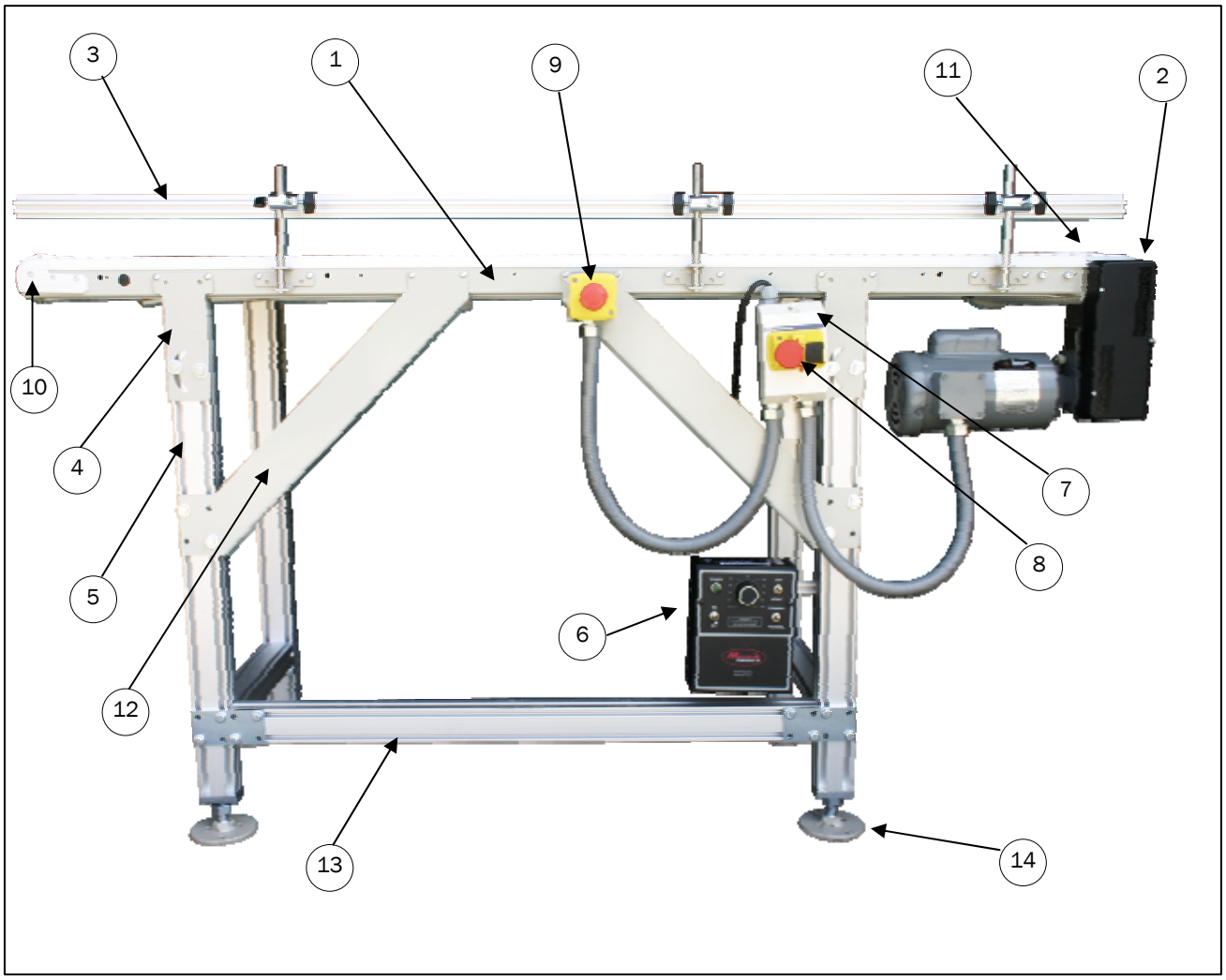


Figure 1

Typical Components

1. Conveyor
2. Gear Mounting Package
3. Sides & Guide Accessories
4. Standard Mounts
5. Support Stands
6. Variable Speed Controller
7. Motor Starter
8. Emergency Stop
9. Remote Emergency Stop
10. Idler End
11. Drive Pulley End
12. Angle Brace
13. Cross Ties
14. Leveling Foot

1.04 Tools Required

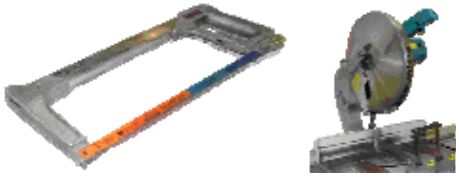
Set of Allen Wrenches
9/64”, 5/32”, 3/16”, 1/4”

Large Adjustable Wrench

A Bubble Level for frame alignment

Screw Gun with T25 Torx bit

Aluminum and Steel Cutting Hack Saw or equivalent



Tape Measure

Wrenches: 7/16”, 1/2”

2.01 When Your Shipment Arrives

❶ Check your shipment for damage

a. If you have not already done so, visually inspect the outside of the crate or boxes for shipping damage.

b. Carefully unpack the crate or box, inspecting the components for damage which may have occurred inside the packing materials.

c. Contact the carrier and QC Industries regarding any damage that may have occurred during shipment.

d. Check the contents of the shipment against the included packing slip and notify QC Industries of any discrepancies.

❷ Locate the items from your order

a. Each conveyor will ship in its own custom built box.

b. Drive Mounting Packages are assembled at the factory with the gearmotor attached for Standard Duty Electric and Pneumatic drives; for Heavy Duty Electric Drives, the right angle speed reducer will be assembled, but the motor will be in a separate box.

c. Steel Telescoping Stands and Aluminum Multiple Conveyor Stands will ship in individual boxes. Aluminum Exact Width Stands ship two to a box.

d. Casters are included in the box with the Drive Mounting Package.

e. Cross Ties will ship in a custom built box; the mounting hardware will ship in a bag in the box with the Drive Mounting Package.

f. Mounts are packaged, all within the box with the Drive Mounting Package.

g. Sides and Guiderails will ship in the conveyor's box, with the exception of 24" wide conveyors whose boxes are too wide to also accommodate sides; in this case the Siderails or Guiderails will ship in a custom built box. Clamps to hold the siderail to the conveyor will be attached to the conveyor at the factory; mounting brackets for guides and hardware will ship in a separate plastic bag in the box with the Drive Mounting Package.

❸ Record the Conveyor's Serial Number

a. The conveyor's serial number is located on the frame at the drive end of the conveyor, opposite the side on which the gearmotor will be mounted.

b. Record the serial number in a place where it can be accessed for reference; a place has been provided on the back cover that can be used for multiple conveyors. This will assist any future inquires regarding the conveyor, its accessories, the order it was shipped on, or replacement parts.

c. Proceed to Section 2.02 for the Sequence of Installation.

2.02 Sequence of Installation

To set up the conveyor after receiving your shipment, QC Industries recommends following these steps. Please refer to their respective sections for more detailed instructions.

❶ Move the Conveyor and Accessories into location

Figure 1

Using appropriate equipment and safe moving methods, move the conveyor and accessories to the desired assembly, staging, or installation area (Figure 1). Set the conveyor in the correct operating orientation with regard to the drive position and belt direction.

See Section 2.03 for detailed instructions

❷ Mount the Conveyor to its Stands and Cross Ties or Mounts

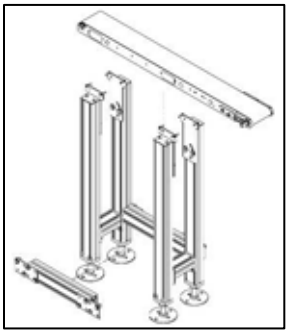


Figure 2

Use QC Industries stands and mounts (or any compatible stands and hardware) to mount the conveyor in the desired location (Figure 2). Make sure the conveyor mounted on stands is on a flat, level surface. QC Industries recommends that stands with leveling feet are anchored to the floor.

See Sections 2.04 – 2.11 for detailed instructions

❸ Install the Sides or Guides

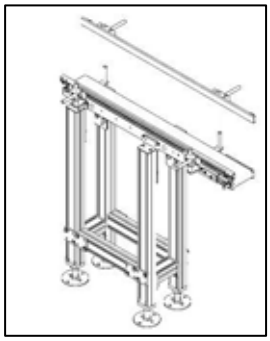


Figure 3

It is recommended that Side and Guide Rail Assemblies are next in the sequence, as once the Gearmotor is in place they may be difficult to install properly (Figure 3).

See Sections 2.12 – 2.13 for detailed instructions

❹ Install the Drive and Mounting Package

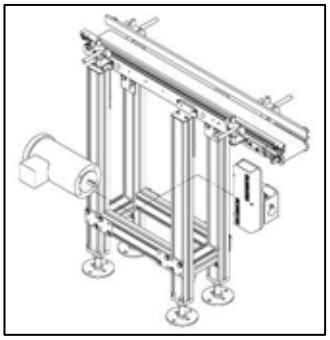


Figure 4

Wire the motor using the appropriate diagrams of the motor style, voltage and phase you have purchased (Figure 4). QC Industries recommends that all wiring be completed by a certified electrician.

See Sections 2.14 – 2.20 for detailed instructions

2.03 Conveyor Orientation

❶ Orient the Conveyor based on the Drive Location

a. Set the conveyor in its operating position, taking care to note where the drive will be located. Flextrac Conveyors are built with the drive pulling with a left hand drive or right hand drive (left hand and right hand are defined as if you are standing at the drive end of the conveyor).

The 13th digit in the conveyor's part number will indicate the orientation and direction, as shown in the following example of a 12" wide x 10' long conveyor:

1PSBHWW-LLL-**A**S1-1AAAN

There are two positions available (**Figure 1**):
A Left Hand, Drive Pulling
B Right Hand, Drive Pulling

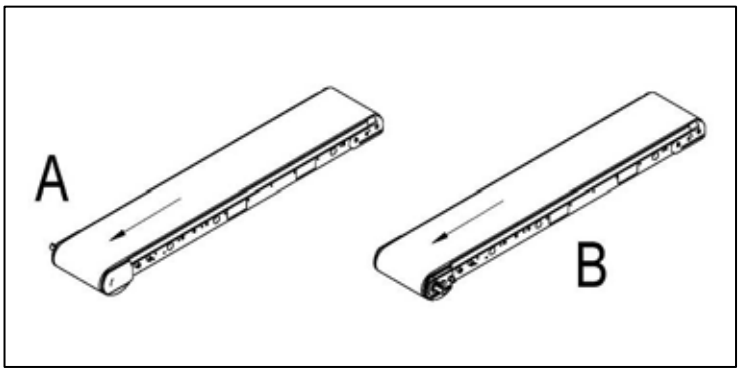


Figure 1

❷ Install Stands, Mounts, Sides, Guides, Drives and Mounting Packages

a. Proceed to **Sections 2.06 – 2.13** for instructions on installing Stands and Mounts.

b. Proceed to **Sections 2.14 – 2.15** for instructions on installing Sides or Guides.

c. Proceed to **Sections 2.16 – 2.22** for instructions on installing Drives and Mounting Packages.

2.04 Sequence of Installation for Conveyors Longer than 12'

To set up the conveyor after receiving your shipment, QC Industries recommends following these steps. Please refer to their respective sections for more detailed instructions.

❶ Move the Conveyor and Accessories into location

Using appropriate equipment and safe moving methods, move the conveyor and accessories to the desired assembly, staging, or installation area. Set the conveyor in the correct operating orientation with regard to the drive position.

See Section 2.03 for detailed instructions

❷ Assemble the Conveyor and Mount it to its Stands and Cross Ties or Mounts

Use QC Industries stands and mounts (or any compatible stands and hardware) to mount the conveyor in the desired location (Figure 1). Make sure the conveyor mounted on stands is on a flat, level surface. QC Industries recommends that stands with leveling feet are anchored to the floor.

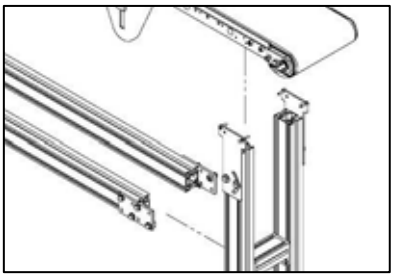


Figure 1

See Sections 2.06 – 2.13 for detailed instructions

❸ Install the Sides or Guides

It is recommended that Side and Guide Rail Assemblies are next in the sequence, as once the Gearmotor is in place they may be difficult to install properly (Figure 2).

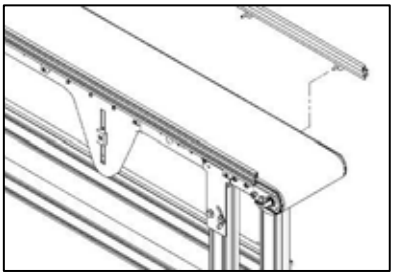


Figure 2

See Sections 2.14 – 2.15 for detailed instructions

❹ Install the Drive and Mounting Package

Wire the motor using the appropriate diagrams for the motor style, voltage and phase you have purchased (Figure 3). QC Industries recommends that all wiring be completed by a certified electrician.

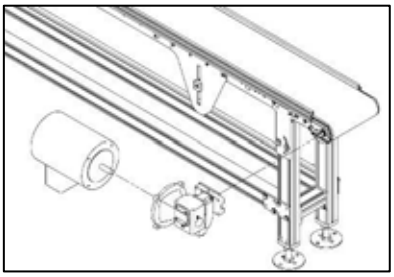


Figure 3

See Sections 2.16 – 2.22 for detailed instructions

❹ Install the Belt and Set the Catenary Sag

The belt will ship bundled separate from the rest of the conveyor. Approximately 1 foot extra will be shipped that can be used for spare parts.

See Sections 2.05 for detailed instructions

2.05 Conveyors Longer than 12’

For Flextrac Conveyors longer than 12 feet, the conveyor frames will ship unassembled with the belt bundled. There is a separate process for assembling the conveyor that is dependent on whether or not your conveyor was ordered with stands.

❶ Assemble the Conveyor - For Conveyors with Stands

a. Locate the Tie Bars and Frame Joint Stands. Remove the four 5/16” Socket Head Screws using a 1/4” Allen Wrench.

b. Turn the Frame upside down, and locate the Tie Bar on the inside, with the Lock Plate to the inside of the Tie Bar. Position the Frame Joint Stand Bracket over the frame so the holes line up, and insert a 5/16-18 x 1” long Socket Head Screw through the end hole of the bracket until it is engages in the Lock Plate.

c. Slide the adjoining Frame into position, so the side of the frame is between the Frame Joint Stand Bracket and Tie Bar. Locate the Lock Plate to the inside of the Tie Bar, and insert a 5/16-18 x 1” long Socket Head Screw through the second hole from the end of the bracket until it engages in the Lock Plate (**Figure 1**).

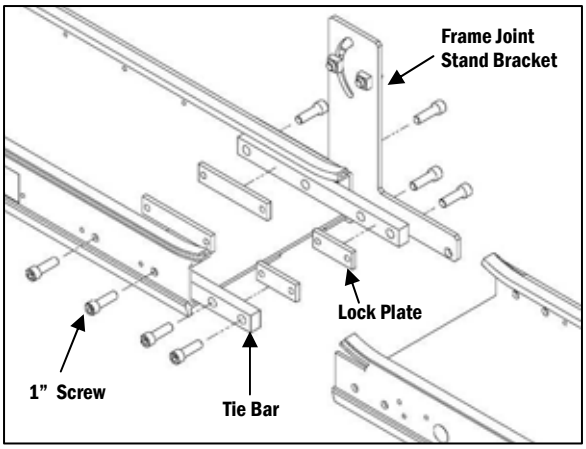


Figure 1

d. Follow the same procedure to install the Frame Joint Stand Bracket/Tie Bar Assembly on the opposite side of the conveyor and all other joints. Note: both of the swivel cutouts in the Stand Brackets should be oriented in the same direction.

e. Turn the conveyor upside-down onto its slider bed.

f. Insert the stand’s base onto the brackets installed on the conveyor by guiding the 5/16-18 Square Nuts into the extrusion channels (**Figure 2**).

g. Tighten the 5/16-18 Hex Head Screws in the Brackets with a 1/2” Wrench when the stand is in the approximate desired position. For most applications, this is when the extrusion touches the frame; for others, such as on cleated conveyors, the extrusion should be offset from the frame.

h. Attach Aluminum Exact Width Stands to the Idler End and Drive End of the conveyor. Refer to **Section 2.06** for specific instructions.

i. Turn the conveyor over and lift it onto its stands. It is recommended that at least three people are present to do so – one at each end and one to support the joint.

f. Install Angle Braces or Cross Ties as instructed in **Sections 2.07 and 2.08**.

g. Proceed to **step 3** to install the belt.

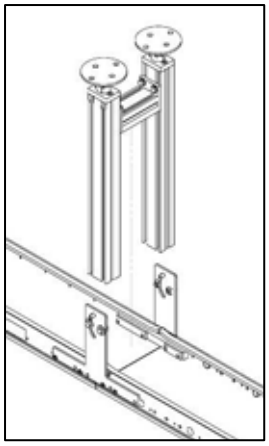


Figure 2

2.05 Conveyors Longer than 12' (continued)

❷ Assemble the Conveyor - For Conveyors without Stands

a. To assemble a Frame to an adjoining Frame, start by turning both frames upside down.

b. Using a 1/4" Allen Wrench, remove the four 5/16" Socket Head Screws to disassemble the Tracking Block and Lock Plate from the Tie Bar (**Figure 3**).

c. Slide the Extension Frame into position over the Tie Bars, and locate the Lock Plates to the inside of the Tie Bars. Insert a 5/16-18 x 1" long Socket Head Screw through the second 5/16" hole from the end of the Extension Frame until it engages in the Lock Plate. Repeat for the other side and for all other joints.

d. Proceed to **step 3** to install the belt.

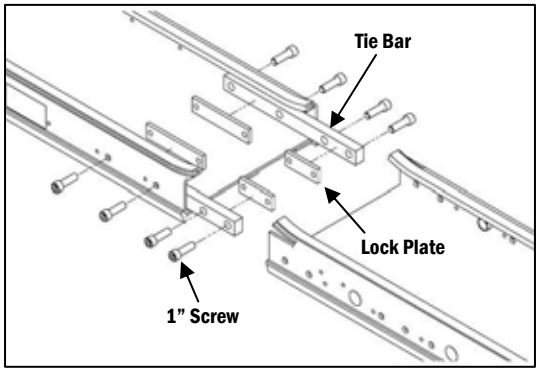


Figure 3

❸ Install the Belt and Set the Catenary Sag

Prior to installing the Belt on the Conveyor, the Sides or Guides and Drive Mounting Package should be installed.

See **Sections 2.14 – 2.15** for detailed instructions to install the Sides or Guides

See **Sections 2.16 – 2.22** for detailed instructions to install the Drive Mounting Package and Gearmotor.

a. Unwrap the belt from its packaging, and lay on top of the slider bed.

b. Starting at the Tail End, loop the belt over the end of the Tail Pulley and into the Frame. Pull the belt through the Frames to the Drive End of the Conveyor, and lay it over the Drive Sprockets.

c. Engage the belt into the Sprockets by fitting the Sprocket Teeth into the belt's openings. Note that only 1 sprocket is secured to the square shaft, the other sprockets are allowed to float. Spread the floating sprockets as widely and evenly as possible, approximately 3"-4" apart.

d. Pull the belt tight down the length of the slider bed and position the splice halfway down the length of the Drive Frame. Wrap the belt halfway over the sprockets (**Figure 4**), and grip the belt from the outside to engage it with the fixed sprocket. Next, adjust the floating sprockets until they are engaged as well. All of the sprockets must be engaged before the belt can wrap all the way around the pulley.

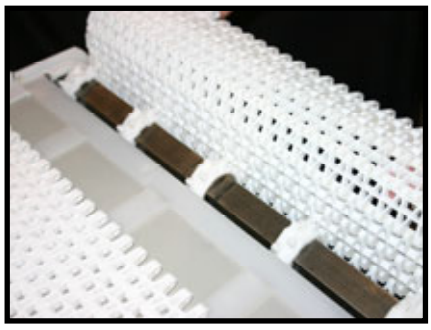


Figure 4

e. Flextrac conveyors over 20' long use a Gravity Take Up Roller located on the Drive Frame for Catenary Sag **(Figure 5)**. Conveyors under 20' use the belt's weight under the Drive Shaft for Sag **(Figure 6)**.

Figure 5

(i). For conveyors with a Gravity Take Up Roller: To maintain proper sprocket engagement for the longest time, the gravity roller should ride halfway up the slot **(Figure 5)**.

(ii). For conveyors without a Gravity Roller: The belt should ride even with the bottom of the catenary sag guard under the drive. Flextrac conveyors will operate properly only if the correct number of links are in the belt. If there is one too many, the belt will sag too much under the drive and have trouble returning into the frame's flange. The visual check is if the belt's catenary sag is hanging below the white plastic guard, there is a link too many in the belt **(Figure 6)**. If this is the case, remove a link before operating the conveyor.

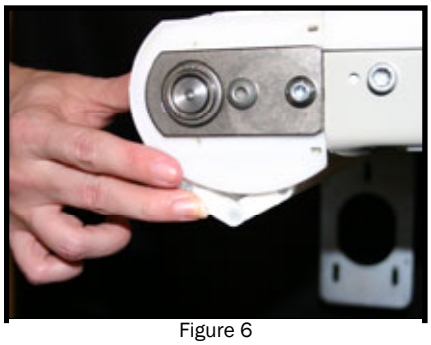


Figure 6

f. Remove or add links from one end of the belt to set the Catenary Sag at the proper elevation. Finish by linking one end of the belt to the other. Slide a rod through the modules until the head meets the edge module. Secure the rod by tapping its head into place with hammer or mallet **(Figure 7)**.

Figure 7

The Conveyor is now ready to operate.

2.06 Aluminum Exact Width Stands

Aluminum Exact Width Stands can be located anywhere along the length of the frame, as they mount directly to the conveyor's accessory holes in the frame. Ideally, the stands should be placed as far apart as possible for maximum stability.

When selecting the locations for the stands, consider the Drive and Mounting Package you have purchased. Some configurations will require the stand to be located a few positions down the conveyor from the Drive.

The stand at the Tail End of the conveyor normally has no obstructions and can be placed as close to the end as needed.

❶ Prepare the Stand for Installation

a. For shipment, the stands will have their mounting bracket slid down the extrusion. Use a 1/2" Wrench to loosen the Hex Head Screws holding the Brackets and move them up to engage the conveyor frame, approximately 1 1/2" (or more for flighted belts) (Figure 1).

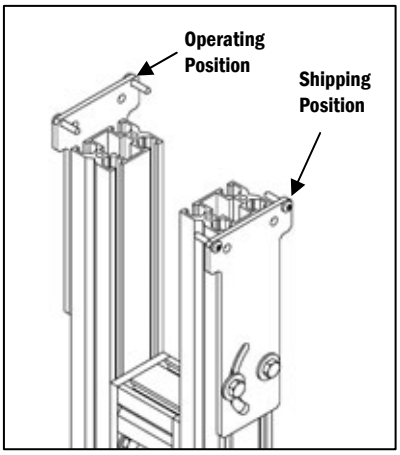


Figure 1

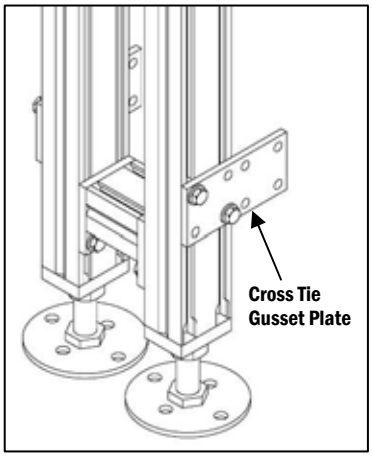


Figure 2

b. If the stands are to be used with Aluminum Cross Ties, it is advised to attach the Gusset Plates prior to mounting the conveyor (Figure 2). Refer to Section 2.06 on Aluminum Cross Ties for specific instructions.

❷ Install the Stand

a. Locate the bag of 10-32 x 7/8" long Torx Head Thread Forming Screws from one of the boxes with the shipment. There are four per stand.

b. Line up the stand with the accessory holes in the side of the conveyor frame and use a Screw Gun with a Torx bit to fasten the stand to the frame (Figure 3).

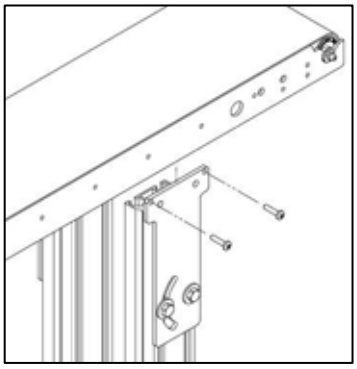


Figure 3

❸ Adjust the Height using the Leveling Feet

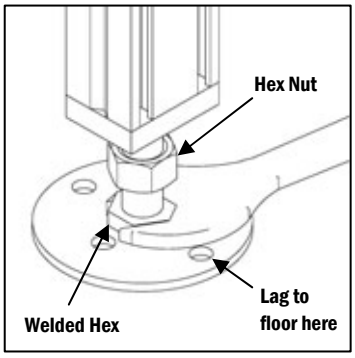


Figure 4

The Leveling Feet on all of QC Industries Stands are designed to allow fine adjustment and so they can be lagged to the floor. Note: if it is not feasible to permanently attach the stands to the floor or the conveyor is to be made mobile with casters, then Cross Ties or Angle Braces must be used.

To adjust the stand height with the Leveling Feet:

a. Use a large adjustable wrench to loosen the Hex Nut

b. Rotate the hex welded to the foot to the desired height **(Figure 4).**

c. Retighten the Hex Nut to secure it in position.

Injury is possible if the stands are not lagged to the floor, cross ties are not used, or angle braces are not present. Never place a conveyor in operation until all proper mounts are installed and secured.

d. Frame alignment is one of the key items that assure the belt properly tracks during startup. Make sure the conveyor frame has no twist by using a bubble level and checking measurements from the mounting surface.

e. Proceed to **Section 2.07** for instructions on installing Angle Braces.

f. Proceed to **Section 2.08** for instructions on installing Cross Ties.

g. Proceed to **Sections 2.14 – 2.15** for instructions on installing Sides and Guides.

2.07 Angle Braces

When it is not feasible to bolt the Aluminum Exact Width Stands to the floor, they can be stabilized by use of Angle Braces. Angle Braces will only work for conveyors mounted horizontally. If your conveyor is mounted at an incline, Cross Ties must be used instead. Also, Angle Braces will only work with stands that are 18" or taller (i.e. part number 0182-18-21-WW).

Angle Braces are shipped as a set, with one Right Hand Brace and one Left Hand Brace, with four Torx Head Screws, and four screw sets (Hex Head Screw, Flat Washer, and Square Nut).

Before installing Angle Braces, the Aluminum Exact Width Stands should already be assembled to the conveyor.

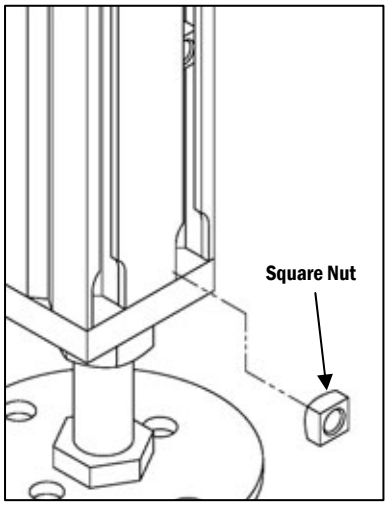


Figure 1

❶ Install the Angle Braces to Exact Width Stands

a. Start by inserting the square nuts in the stand leg's channel at the base where the channel has been routered (Figure 1).

b. Place the Angle Brace over the Square Nuts, and insert the Hex Screws and Washers into Square Nuts (but do not fully tighten them). There are four holes provided, but only two of them will be used.

c. Using a Screw Gun with a Torx bit, drive in the Torx Head Screws into the top section of the Brace (Figure 2). The holes will line up with accessory holes in the conveyor's frame.

d. Tighten the Hex Head Screws so the Brace is secured to the stand, and repeat the installation for the Brace on the other side.

e. Frame alignment is one of the key items that assure the belt properly tracks during startup. Make sure the conveyor frame has no twist by using a bubble level and checking measurements from the mounting surface.

f. Proceed to Sections 2.14 – 2.15 for instructions on installing Sides and Guides.

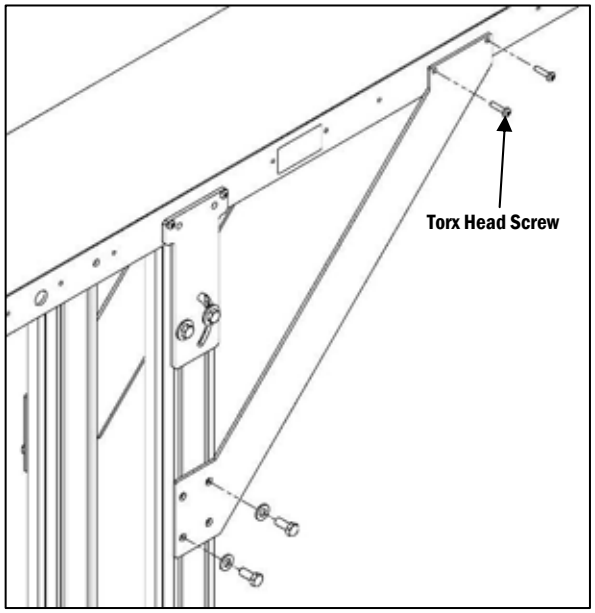


Figure 2

2.08 Aluminum Cross Ties

When it is not feasible to bolt the Aluminum Stands to the floor, the conveyor and stand assembly can be stabilized by use of Cross Ties.

Cross Ties are sold in standard lengths, and are meant to be cut to length during installation based on the final placement of the stands.

The Cross Ties can be installed once the conveyor has been secured to the stands.

In one of the boxes of the shipment, there will be a bag containing the Cross Tie Gusset Plates and fasteners.

❶ Install the Gusset Plates to Aluminum Stands

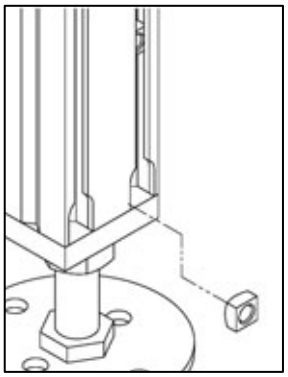


Figure 1

a. Insert two Square Nuts into each leg's channel from the base where the channel has been routered (Figure 1).

b. The Gusset Plate should be positioned over the Square Nuts in the channel and secured with the Hex Head Screws and Flat Washers (Figure 2). Although there are eight holes in the Gusset Plate, only four of them will be used.

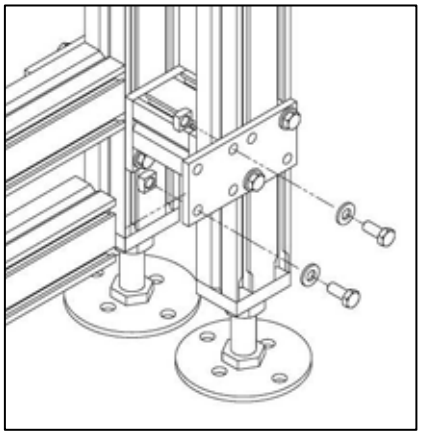


Figure 2

❷ Install the Cross Tie Extrusions

a. Measure the distance between the stands and cut the Cross Tie Extrusion to fit with a saw blade that is appropriate for Aluminum (Figure 3).

b. The Gusset Plates can mount to the inside or outside of the stand's leg, or to the stand's Cross Member if there is no room on the leg (note: this will require disassembly of the stand to do so).

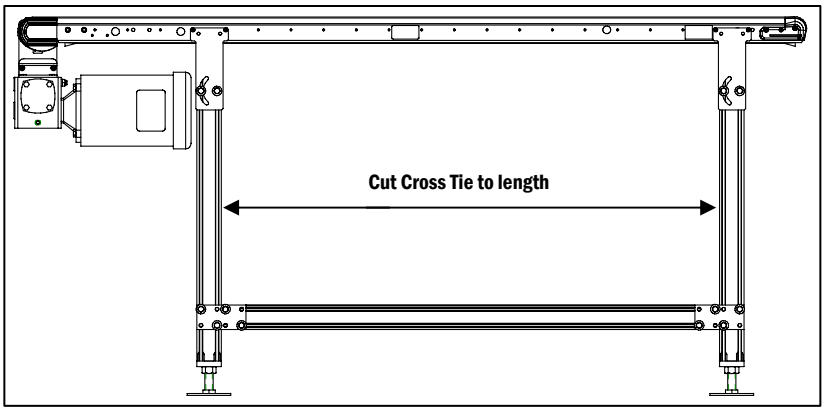


Figure 3

c. Proceed to Sections 2.14 – 2.15 for instructions on installing Sides and Guides.

2.09 Casters

QC Industries offers swivel locking casters to replace the stands' leveling feet for applications when conveyors need to be moveable.

Casters will ship in a separate box from the stands.

❶ Install Casters to Aluminum or Steel Stands

a. Remove the Leveling Foot from the stand by loosening the Hex Nut with a large adjustable wrench. Spin the foot to unthread it from the stand leg until it is free.

b. Install the Casters by threading the 4 1/2" stem into the base of the stand where the Leveling Foot was previously. The Caster will have its own 3/4-10 Hex Nut (**Figure 1**).

c. Once the conveyor is mounted on the stand, the caster's stem can be used for final height adjustment, up to 1 1/2" up or down. Use a large adjustable wrench to loosen the hex nut, engage the swivel lock, then rotate the caster to the desired height by hand, and finally retighten the Hex Nut to secure it in position.

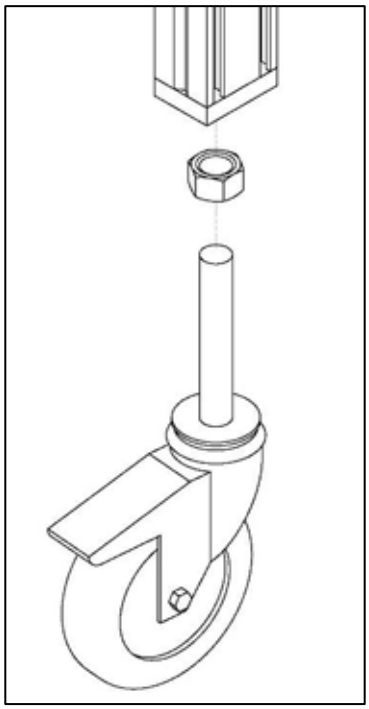


Figure 1

❷ Secure the System

a. When the conveyor is not being moved or is in operation, the Caster's swivel lock should be engaged. It is conveniently located over the caster's wheel so it can be engaged and disengaged by foot.

b. QC Industries requires the use of Cross Ties or Angle Braces if Casters are used. Note: The width of the system should be no less than 1/3 of the system's height (i.e. for a 36" high system, a stand assembly on casters should be at least 12" wide). When assembling, please make sure the assembly is stable for your application.

Warning: Moving conveyors with casters can create dynamic forces that could tip the conveyor. Use caution when moving a conveyor with casters.

c. Proceed to **Sections 2.14 – 2.15** for instructions on installing Sides and Guides.

2.10 Steel Telescoping Stands

Steel Telescoping Stands are used when a wide range of adjustment is needed for the stands.

They are available in four widths and four height ranges. The nominal stand width used must be at least 2" wider than the conveyor that will be mounted on it.

❶ Adjust the Height of the Stand

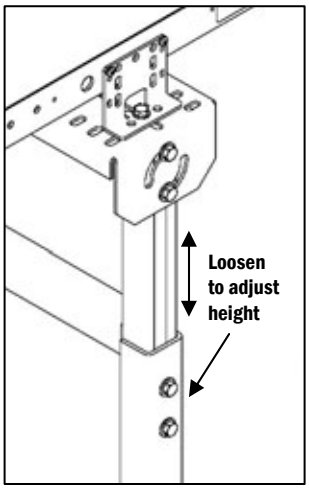


Figure 1

a. Adjust the Stand's height to the desired elevation before mounting the conveyor. Loosen the Hex Head Screws that secure the channel with a 9/16" Wrench (Figure 1). If Cross Ties are to be used with the stands, it is recommended to install the Cross Tie Gusset Plates before finishing the height adjustment. See Section 2.09 for detailed instructions.

b. Slide the stand's H Section up or down in the channel. Re-tighten the screws to secure it in position.

If it is necessary to use the stand's telescoping adjustment once the conveyor it installed, the conveyor must be supported by some other means, as the stand will not support any weight during the adjustment.

❷ Determine the Stand Locations

a. Consider the drive package you have purchased when locating the stand closest to the conveyor's drive. The motor and drive package in some cases will require more space.

b. The stand at the idler end of the conveyor normally has no obstructions and can be placed as close to the end as needed. Ideally, the stands should be placed as far apart as possible for maximum stability.

❸ Install the Mount

a. Use of Steel Telescoping Stands requires the use of a separate mount, which is not included with the stand.

b. Instructions for installing mounts to the conveyor and stand are in Section 2.13.

2.10 Steel Telescoping Stands (continued)

❹ Adjust the Leveling Foot

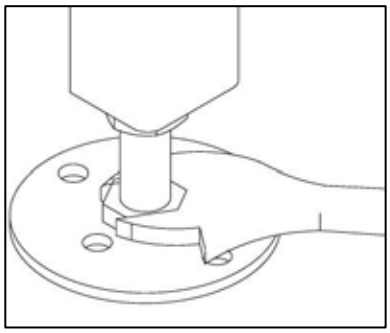


Figure 2

a. Once the conveyor is mounted on the stand, the Leveling Feet can be used for final height adjustment, up to 1 1/2" up or down.

b. Use a large adjustable wrench to loosen the Hex Nut, then rotate the hex welded to the foot to the desired height (**Figure 2**), and finally retighten the 3/4-10 Hex Nut to secure it in position.

c. The Leveling Feet on all of QC Industries Stands are designed so they can be lagged to the floor. If it is not feasible to permanently attach the stands to the floor or the conveyor is to be made mobile with casters, then Cross Ties must be used.

Injury is possible if the stands are not lagged to the floor, cross ties are not used. Never place a conveyor in operation until all proper mounts are installed and secured.

d. Frame alignment is one of the key items that assure the belt properly tracks during startup. Make sure the conveyor frame has no twist by using a bubble level and checking measurements from the mounting surface.

e. Proceed to **Sections 2.14 – 2.15** for instructions on installing Sides and Guides.

2.11 Steel Cross Ties

When it is not feasible to bolt Steel Stands to the floor, the conveyor and stand assembly can be stabilized by use of Cross Ties.

Cross Ties are sold in standard lengths, and are meant to be cut to length during installation based on the final placement of the stands.

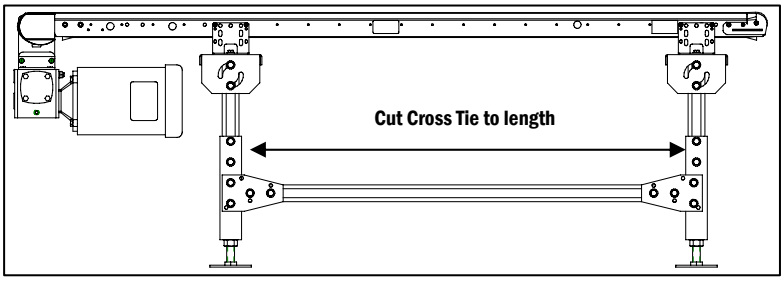


Figure 1

❶ Cut the Unistrut to length

Measure the inside distance between the stands and cut the Unistrut sections to length with a saw blade that is appropriate for steel (Figure 1).

❷ Install the Gusset Plates to the Steel Stand

The Gusset Plates mount through the holes in the lower leg of the stand assembly (Figure 2).

a. To install, the H Section of the stand must first be lifted clear of the mounting holes (Figure 3).

b. Place a Gusset Plate over the holes in the Stand Leg's Base, and insert a 3/8-16 x 1 1/2" Hex Head Screw with a 3/8" Flat Washer through the two holes.

c. Secure the Gusset Plate by positioning a Double Nut Clamp in the inside of the Stand Leg, and threading the Hex Head Screws into it.

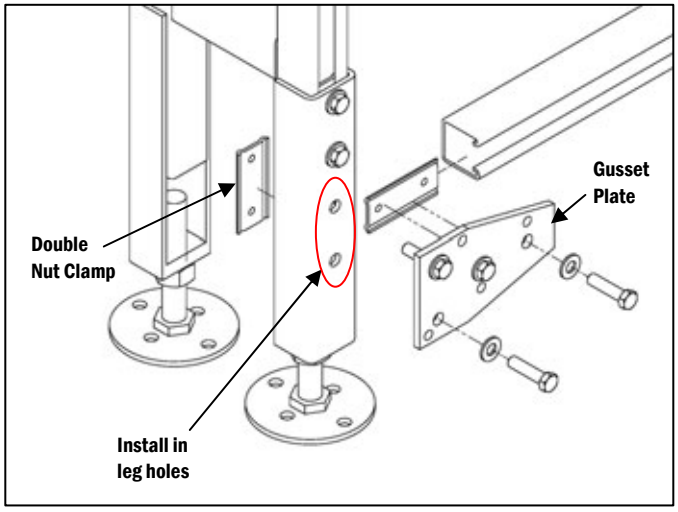


Figure 2

d. The Double Nut Clamp can be used to engage the Stand's H Section if the Double Nut Clamp creates an interference with the H Section.

❸ Install the Cross Tie to the Gusset Plate

a. Position a Double Nut Clamp over the remaining 3/8" holes in the Gusset Plate, insert Hex Head Screws with Washers through, and engage them loosely into the Double Nut Clamp.

b. Slide the Unistrut Cross Tie in behind the Nut Clamp so it butts up against the Stand Leg, and secure it in place by tightening the Hex Head Screws.

c. Proceed to Sections 2.14 – 2.15 for instructions on installing Sides and Guides.

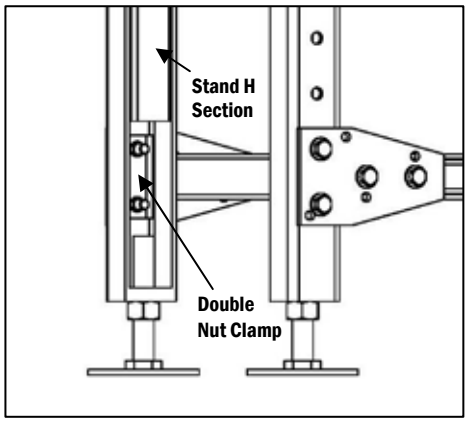


Figure 3

2.12 Steel Stands with Stabilizers

Steel Stands with Stabilizers are used when it is not possible to support the conveyor with more than one stand.

They are available in four widths and four height ranges. The nominal stand width used must be at least 2" wider than the conveyor that will be mounted on it.

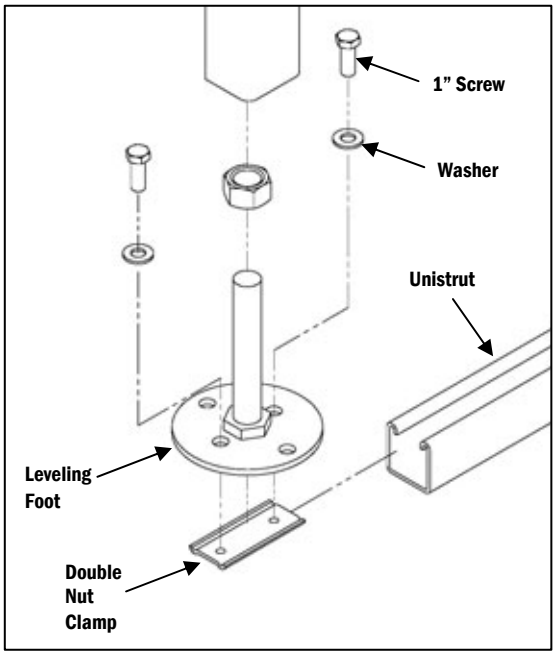


Figure 1

❶ Install the Stabilizers to the Leveling Feet

a. Rotate the feet so the holes 2" apart are in line (Figure 1).

b. Slide the Double Nut Clamp into the Unistrut channel.

c. Assemble the feet to the channel with the 3/8-16 x 1" Hex Head Screws and 3/8" Washers from the top of the foot, into the Double Nut Clamp and tighten them into position. The fine adjustment using the leveling feet is not available once the stabilizers are installed.

❷ Adjust the Height of the Stand

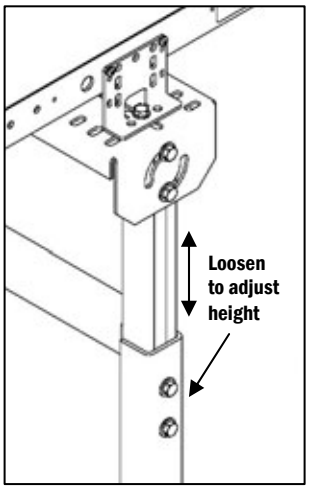


Figure 1

a. Adjust the Stand's height to the desired elevation before mounting the conveyor. Loosen the Hex Head Screws that secure the channel with a 9/16" Wrench (Figure 2).

b. Slide the stand's H section up or down in the channel. Re-tighten the screws to secure it in position.

If it is necessary to use the stand's telescoping adjustment once the conveyor it installed, the conveyor must be supported by some other means, as the stand will not support any weight during the adjustment.

❸ Determine the Stand Location

a. Consider the drive package and if the system will be balanced when locating the stand. The motor and drive package in some cases will require more space.

❹ Install the Mount

a. Steel Stands require the use of a separate mount. Instructions for installing mounts to the conveyor and stand are in Section 2.13.

b. Proceed to Sections 2.14 – 2.15 for instructions on installing Sides and Guides.

2.13 Universal Adjustable Side Mounts

The Universal Adjustable Side Mounts are used to support the conveyor above its mounting surface.

There are three versions available: Frame Mounted (125-0181-04), Tee Slot Mounted (125-0181-01), and Multi-Tier Stand Mounted (125-0181-05). They are each supplied with fasteners appropriate for the style of mounting.

The standard-height Universal Adjustable Side Mount is used for conveyors with cleats 1" high or less. It will create a top of belt height of about 3 1/2" from the mounting surface or stand top plate.

If the conveyor has a cleat height of 2" or 3", the Universal Raised Side mount is used. It will create a top of belt height of about 5 1/4" from the mounting surface or stand top plate. The Universal Raised Side Mount is available in three versions as well: Frame Mounted (125-0182-04), Tee Slot Mounted (125-0182-01), and Multi-Tier Stand Mounted (125-0182-05).

❶ Frame Mounted Universal Adjustable Side Mounts

a. For the frame mounted versions, the mount can be installed on the conveyor anywhere along its length that there are accessory holes available **(Figure 1)**.

b. The thread-forming 10-32 x 7/8" Torx Head Screws provided with the Mounts are long enough to allow accessories to be stacked over one another (such as a Guide Bracket).

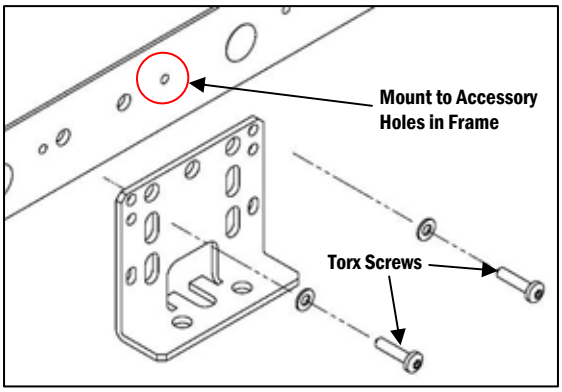


Figure 1

❷ Tee Slot Mounted Universal Adjustable Side Mounts

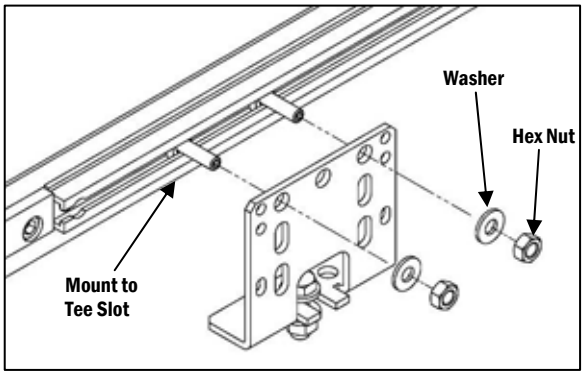


Figure 2

a. For the Tee Slot Mounted version **(Figure 2)**, insert the 1/4-20 Square Nuts in the tee slot, and thread the 1/4-20 x 1" Set Screws into the Square Nuts.

b. Locate the Mount over the Set Screws, and tighten them in place so they dig into the tee slot.

c. Secure the Mount by placing 1/4" Flat Washers onto the Set Screws and threading 1/4-20 Hex Nuts onto them.

2.13 Universal Adjustable Side Mounts (continued)

❸ Install the Mount to a Steel Stand

The Frame Mounted and Tee Slot Mounted versions of the Side Mount can be secured to the top plate of a Steel Telescoping Stand.

a. Using the fasteners provided, insert a 5/16-18 x 3/4" Hex Head Screw through a 5/16" Flat Washer and into the slot in the base of the mount **(Figure 3)**.

b. Secure the mount using a second Flat Washer and 5/16-18 Hex Nut from the underside of the stand.

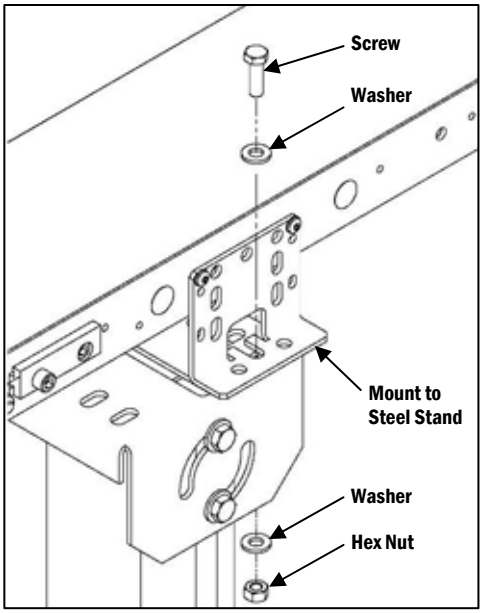


Figure 3

❸ Multi-Tier Stand Mounted Universal Adjustable Side Mounts

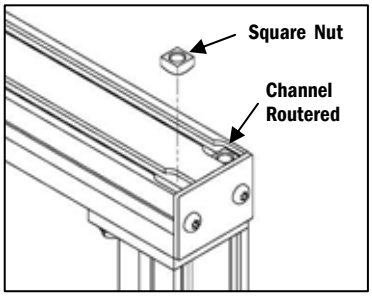


Figure 4

The Multi-Tier Stand version mounts to the conveyor the same as the frame mounted version, but comes with Square Nuts and Hex Head Screws for mounting into the channels of the top extrusion of the Aluminum Multi Tier Stand, through the two holes in the mount's base.

a. To install, insert one 5/16-18 Square Nut into each channel of the Stand's Top Extrusion **(Figure 4)**. The channel has been routered to accommodate the Square Nut.

b. Place the Mount over the Square Nuts, and thread a 5/16-18 x 3/4" Hex Head Screw with 5/16" Flat Washer through the mount and into the Square Nut **(Figure 5)**. Leave the assembly slightly loose for adjustment in the next step.

c. Secure the Mount to the conveyor using a Screw Gun with a Torx bit and the 10-32 x 7/8" Thread Forming Torx Head Screws with #10 Flat Washers.

d. Tighten the Mount to the Stand.

e. Proceed to **Sections 2.14 – 2.15** for instructions on installing Sides and Guides.

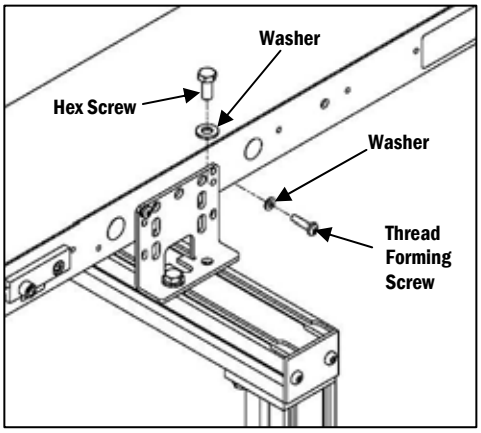


Figure 5

2.14 Fixed Side Rails

Fixed sides are available in “Low” and “High”. The Siderails have a tee slot integrated into them that can be used to mount other accessories. The tee slot is sized for a 1/4-20 Square Nut.

Fixed sides are available in 2 styles: as a plain Aluminum Extrusion and with UHMW Wearstrip.

Unlike Adjustable Guides, Fixed Sides are not designed to be the full length of the conveyor.

❶ Installing Fixed Sides

In most cases, Fixed Sides should not be installed until the conveyor is mounted on its supports; the Universal Adjustable Side Mount with Tee Slot Mounting is the exception and requires that Fixed Sides are installed first.

The conveyor will be shipped with Siderail Clamps loosely fastened to the side of the conveyor frame. In general, clamps will be spaced every 12”.

a. Slide the Siderail extrusion through the Siderail Clamps, so the end of the rail is even with the end of the Conveyor’s Frame (Figure 2).

b. Using a Screw Gun with a T25 Torx bit, tighten the Siderail Screws.

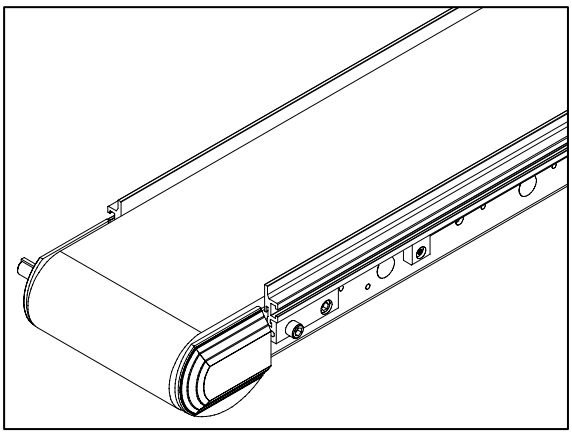


Figure 2

2.15 Adjustable Guides

Adjustable Guides are available in 3 heights: 1", 2", and 3", and are available with either thumbscrew adjustment or set screw adjustment.

The Guiderails are supported by an assembly that must be built in place.

❶ Mount the Guide Brackets

a. Attach the Guide Brackets to the conveyor frame using the 10-32 x 7/8" Thread Forming Torx Head Screws provided (**Figure 1**). The large hole of the guide bracket should face upward.

b. The Guide Brackets should be spaced on approximately 24" centers down the length of the conveyor.

c. Secure a rod vertically to the Guide Bracket with a 1/4-20 x 1/2" Hex Head Screw and 1/4" Lock Washer from the underside of the Guide Bracket.

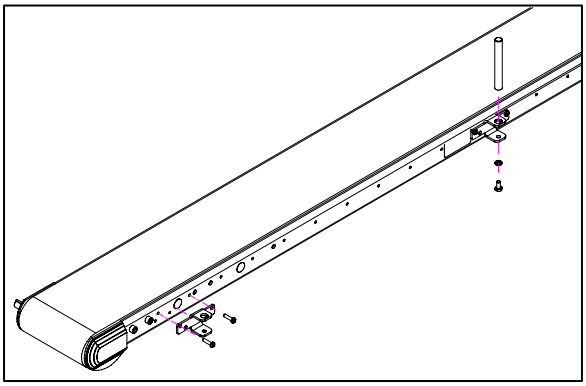


Figure 1

❷ Prepare the Guide Rail

a. Slide 1/4-20 x 1/4" Hex Head Screws into the tee slot of the Guiderail. If your guide assembly is the 1" version, these screws are already installed (**Figure 2**).

b. Screw an Adjusting Rod over each screw and hand tighten, but leave it loose enough that the rod and screw can still slide in the tee slot. The rod's locations should be approximately the same as the Guide Brackets mounted to the conveyor.

c. Place a round Cross Block all the way down each adjusting rod so it touches the Guiderail and tighten it down with the Set Screw or Thumbscrew.

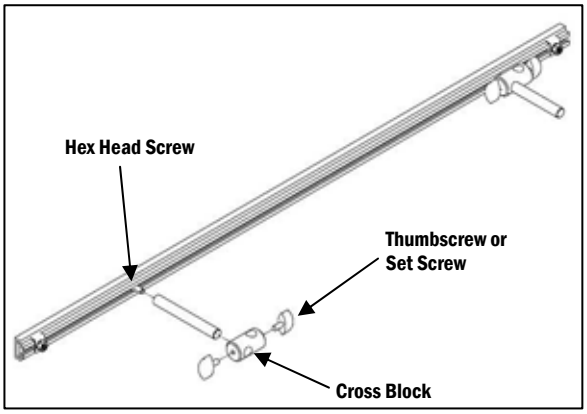


Figure 2

❸ Install the Guide Rail to the Brackets

a. Install the Guiderail/Rod/Cross Block assembly over the vertical rods connected to the Guide Brackets, and secure them in place vertically **(Figure 3)**.

b. By loosening and tightening the fasteners in the Cross Block, the Guiderail can now be adjusted vertically or horizontally as needed; once in the desired location, finish tightening the horizontal rods so they hold the Guiderail rigidly.

c. For guides used with Top Drive Mounting Packages, the Guiderail may have to be installed 3" down the conveyor, as there will be interference between the Guiderail and Drive Mounting Plate; this will cause the guides to extend 3" beyond the end of the conveyor.

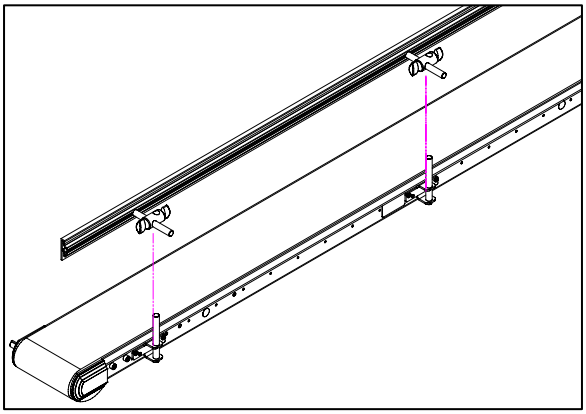


Figure 3

d. Proceed to **Sections 2.16 – 2.22** for instructions on installing the Drive and Mounting Package.

2.16 Side Drive Mounting Packages

Side Drives are direct-coupled to the conveyor's drive pulley. There are three types of gearmotor offered for Side Drives: Heavy Duty Electric, Standard Duty Electric, and Pneumatic. For Standard Duty and Pneumatic Drives, the speed reducer and motor will ship installed on the drive mounting package.

For Heavy Duty Drives, the motor is always shipped in its own box. The right angle speed reducer will be attached to the drive mounting package.

They are available with Heavy Duty Electric gearmotors which use right angle speed reducers, or with Standard Duty Electric and Pneumatic gearmotors which are mounted in line with the drive pulley.

They can only be mounted to conveyors with "S" or "D" drive pulleys (i.e. with a 1/2" shaft with keyway protruding from the drive pulley). They are not compatible with "H" pulley with the hex input. If you have a conveyor with a hex input, please consult QC Industries Customer Service department for the correct parts.

The drive package will ship separate from the conveyor with the speed reducer attached.

❶ Prepare the conveyor

a. Remove the 5/16-18 Hex Nut and the 1/2" Hex Head Cap Screw using a 1/2" Wrench (Figure 1).

b. Remove and discard the Nylon Tape that is wrapped around the drive pulley shaft.

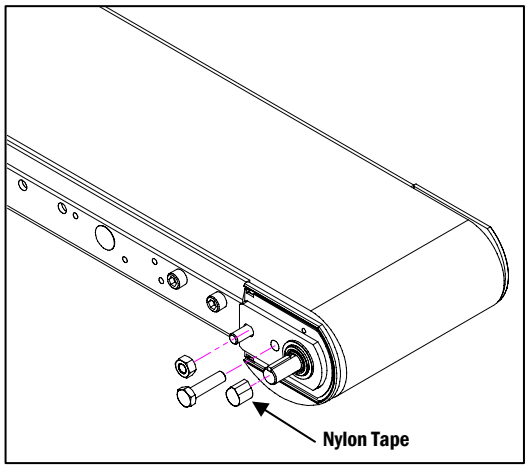


Figure 1

❷ Prepare the Drive Package

a. Remove the Drive Mounting Plate by first removing four Button Head Screws using a 5/32" Allen Wrench (Figure 2). One screw is held in place by a nut. Use a 7/16" Wrench to remove it.

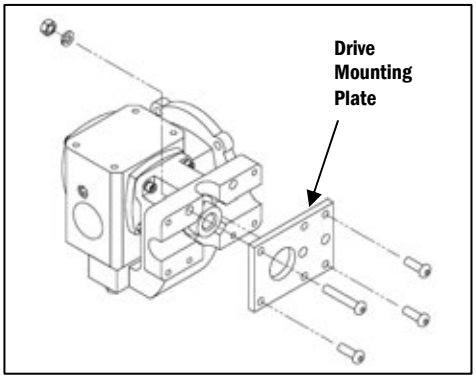


Figure 2

❸ Install the Drive Mounting Plate

a. Place the Drive Mounting Plate over the conveyor's spacer block stud and secure it in place with the 5/16-18 Hex Nut and 1/2" Hex Head Cap Screw (Figure 3).

b. Position the shaft key so its near edge is even with the face of the Drive Mounting Plate.

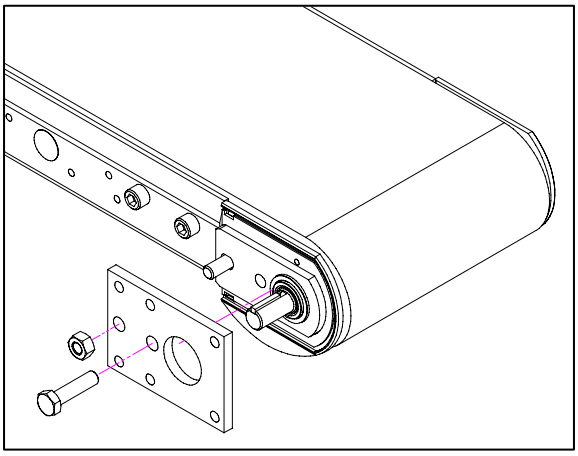


Figure 3

❹ Install the Drive Package

a. Rotate the Drive Pulley by moving the belt by hand so the Key in the conveyor's shaft is in the 12 o'clock position (Figure 4).

b. Rotate the Input Quill on the speed reducer so the keyway in the Tapered Coupling Half is in the 12 o'clock position.

c. Slide the Speed Reducer/Casting/Coupling assembly onto the conveyor's shaft. While holding the assembly in place, replace and tighten two of the 1/4-20 x 3/4" Button Head Screws using a 5/32" Allen Wrench.

d. The Set Screw in the Tapered Coupling Half should be visible through the top opening in the Casting (Figure 5). Using a 3/32" Allen Wrench, tighten the Set Screw to secure its position on the Key.

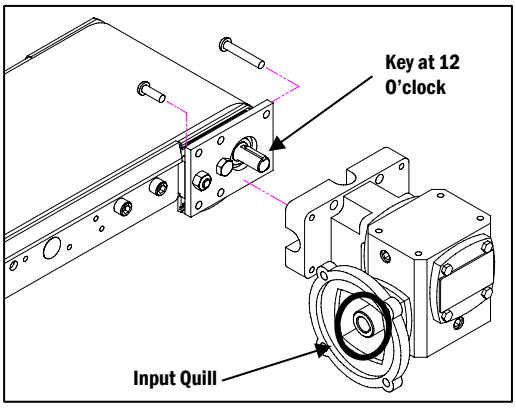


Figure 4

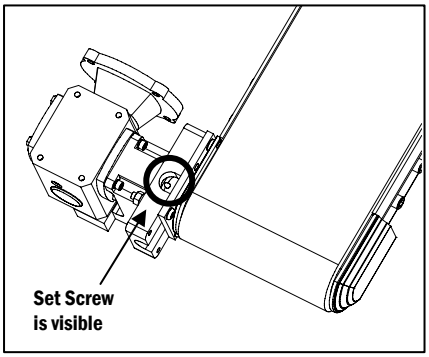


Figure 5

e. Replace and tighten the other two 1/4-20 Button Head Screws (one with a 1/4-20 Hex Nut and 1/4" Lock Washer).

f. Retighten the conveyor's Tracking Screw until it contacts the drive mounting plate. The conveyor does not require re-tracking if the 5/16" Socket Head Cap Screws in the tracking block were not loosened.

❺ Install the Speed Reducer's Vent Plug and Motor

a. For Heavy Duty Electric Gearmotors, proceed to Section 2.18 for instructions on how to install the speed reducer's vent plug, and then to Section 2.19 for instructions on installing the motor. It is recommended to install the vent plug before the motor to have the best access.

b. For Standard Duty Electric and Pneumatic gearmotors, the conveyor is now ready for operation.

2.17 Top and Bottom Drive Mounting Packages

Top and Bottom Drives are designed to mount the gearmotor either above or below the conveyor for space savings. They are available with Heavy Duty Electric gearmotors which use right angle speed reducers, or with Standard Duty Electric and Pneumatic gearmotors which are mounted parallel to the drive pulley.

The Drive Package will ship separate from the conveyor with the speed reducer attached, and the speed reducer's sprocket already attached to its shaft. For Standard Duty and Pneumatic Drives, the speed reducer and motor will ship installed on the drive mounting package. For Heavy Duty Drives, the motor is always shipped in its own box; the right angle speed reducer will be attached to the drive mounting package.

They can only be mounted to conveyors with "S" or "D" drive pulleys (i.e. with a 1/2" shaft with keyway protruding from the drive pulley). They are not compatible with the hollow pulley style with a hex input. If you have a conveyor with a hex input, please consult QC Industries Customer Service Department for the correct parts.

Top and Bottom Drives use either a Timing Belt or Chain transmission. The steps for installation are the same for both.

The conveyor will ship with one of the spacer block studs replaced by a 5/16" Flat Head Screw on the side that the drive will be mounted (refer to the conveyor's drive position in Section 2.03 for an explanation).

❶ Prepare the conveyor

a. Remove the Flat Head Screw from the Bearing Plate with a 3/16" Allen Wrench (Figure 1).

b. Remove the Hex Nut using a 1/2" Wrench.

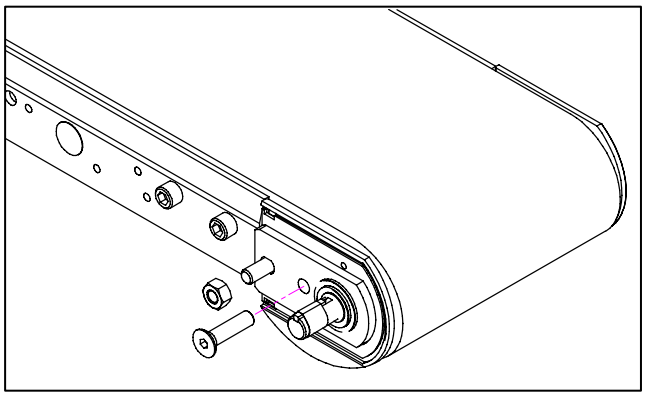


Figure 1

❷ Prepare the Drive Package

a. Remove the Guard by removing the three 6-32 x 1 1/2" Socket Head Screws using a 7/64" Allen Wrench (Figure 2). The top Sprocket and Belt (or Chain) are loose under the Guard.

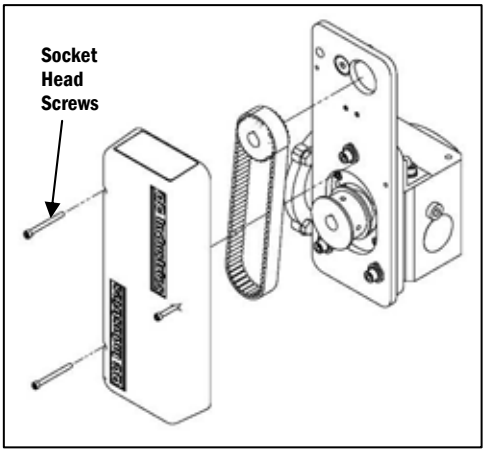


Figure 2

2.17 Top and Bottom Drive Mounting Packages (continued)

❸ Install the Drive Package

a. Mount the Drive Mounting Plate over the conveyor shaft and Spacer Block Stud (Figure 3).

b. Replace and tighten the 5/16-18 x 3/4" Flat Head Screw in the countersunk hole of the Drive Mounting Plate.

c. Replace and tighten the 5/16-18 Hex Nut.

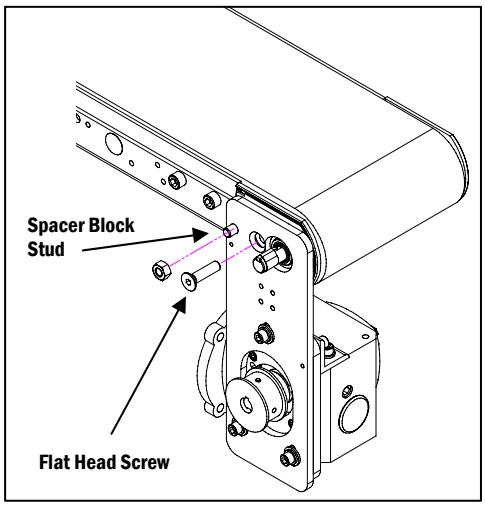


Figure 3

❹ Install the belt (or chain)

a. Remove the nylon tape from the conveyor's shaft that holds the key for shipment (Figure 4).

b. Loosen (but do not remove) the three 1/4-20 Socket Head Cap Screws holding the speed reducer subplate in position using a 3/16" Allen Wrench.

c. Thread the Tracking Screw in to allow the Subplate to move toward the conveyor (Figure 5).

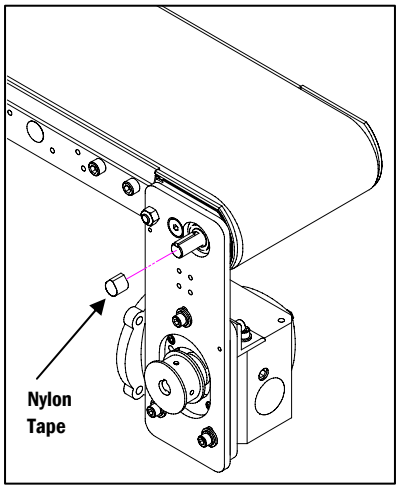


Figure 4

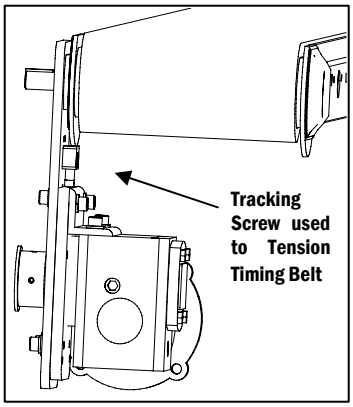


Figure 5

d. Slide the top Sprocket onto the conveyor's Shaft and Key, so it is centered over the lower Sprocket. Secure it in place by tightening the two Set Screws with a 3/32" Allen Wrench. If your drive uses Chain, the Set Screws in the sprockets require a 1/8" Allen Wrench.

e. Install the Timing Belt (or Chain) over the Sprockets.

2.17 Top and Bottom Drive Mounting Packages (continued)

❺ Prepare for operation

a. Tension the Timing Belt (or Chain) by running out the Square Head Set Screw to move the Subplate away from the conveyor **(Figure 6)**.

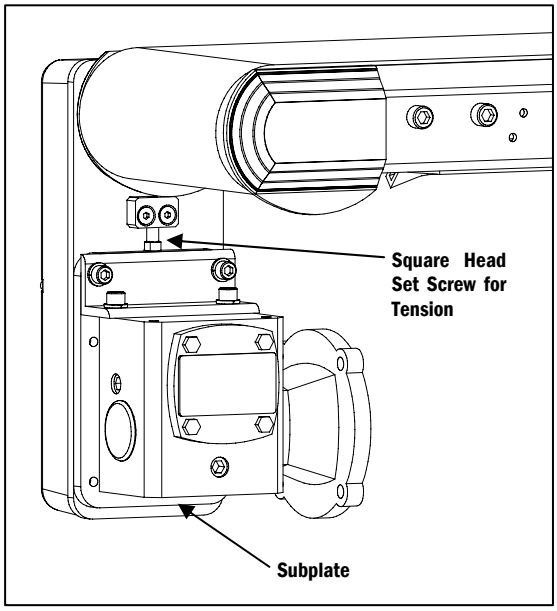


Figure 6

b. The Timing Belt is properly tensioned when it takes approximately 60 lbs of force to deflect one span of the belt .09".

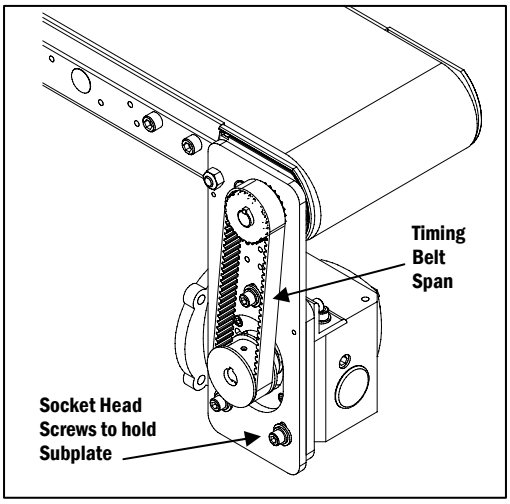


Figure 7

c. Retighten the three 1/4-20 Socket Head Screws with a 3/16" Allen Wrench to hold the Subplate in position **(Figure 7)**.

d. Replace the Guard and secure it with the three 6-32 x 1 1/2" Socket Head Cap Screws using a 7/64" Allen Wrench.

❻ Install the Speed Reducer's Vent Plug and Motor

a. For Heavy Duty Electric Gearmotors, proceed to **Section 2.18** for instructions on how to install the speed reducer's vent plug, and then to **Section 2.19** for instructions on installing the motor. It is recommended to install the vent plug before the motor to have the best access.

b. For Standard Duty Electric and Pneumatic gearmotors, the conveyor is now ready for operation.

2.18 Install the Speed Reducer's Vent Plug

a. Using a 1/4" Allen Wrench, remove the Pipe Plug from the topmost port in the speed reducer (**Figure 1**). For Bottom and Side Drives, use the location above the reducer's flange. For Top Drives, use the location opposite the shaft above the nameplate.

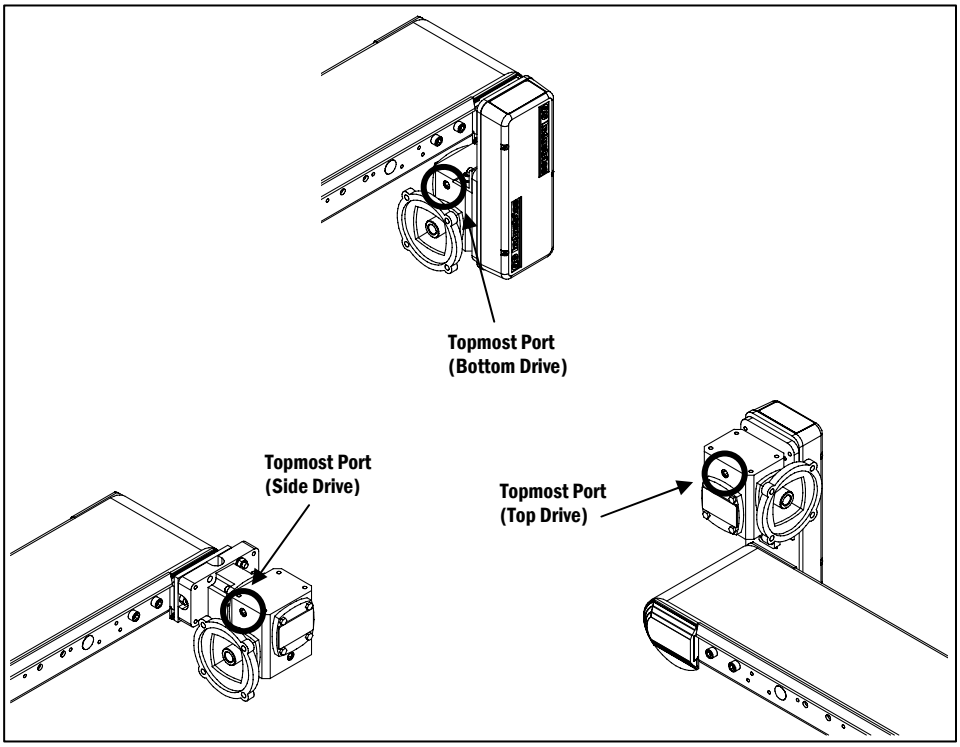


Figure 1

b. While the reducer is open, verify that there is oil in the case. If there is not, fill the speed reducer as instructed in **Section 3.05** of this manual. All speed reducers will ship with the proper amount of oil in them, but should be checked regardless, as this is the best time to fill it if necessary.

c. Locate the two pieces of the Vent Plug in the speed reducer's hardware bag (that also includes the flange mounting screws, packet of anti-seize, and other information).

d. Gently thread the brass half into the plastic half, and install it into the vacated port in the reducer 1/4 turn past hand tightening (**Figure 2**).

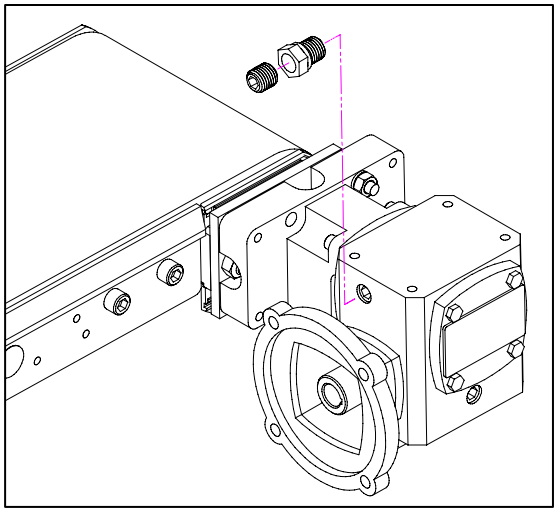


Figure 2

2.19 Installing a Heavy Duty Motor

The motor is always shipped in its own box. It must be installed onto the speed reducer by the installer.

❶ Strike the Key on the Motor's Shaft

a. Unpack the motor from its box and packaging.

b. Position the key so it is 1/4" from the front face of the shaft.

c. Hold a Flathead Screwdriver with the head at the back end of the key, and lightly tap the area adjacent to the key to upset material (**Figure 1**). This material will not allow the key to move axially when assembled to the speed reducer (for more, refer to Boston Gear's 700 SERIES WORM GEAR SPEED REDUCERS INSTALLATION, LUBRICATION, OPERATION INSUTRUCTIONS AND PARTS document provided with the speed reducer).

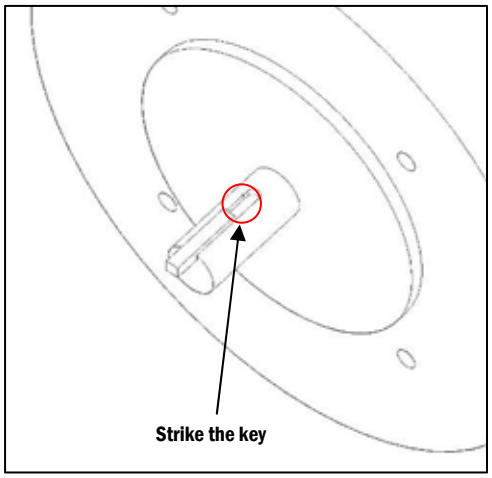


Figure 1

❷ Install the Motor to the Speed Reducer

a. On the Speed Reducer, rotate the input quill by hand until the keyway is in the 12 o'clock position. Do the same with the motor.

b. Open the packet of anti-seize compound that shipped with the Speed Reducer. Generously apply it to the speed reducer input quill and motor shaft.

c. Install the motor onto the speed reducer by guiding the keyed shaft into the speed reducer input quill. Take care to ensure that the key did not shift during installation.

d. Rotate the motor until the workbox is in the desired location (normally pointing horizontally away from the conveyor) and secure it in place with the 4 Hex Head Screws provided using a 7/16" Wrench (for 42 frame motors) or a 9/16" Wrench (for 56 frame motors).

e. QC Industries recommends that all wiring be completed by a certified electrician. Refer to the documentation contained in the motor's box for instructions on electrical connections. Once the motor is wired, the conveyor is ready for operation.

2.20 Standard Duty Remote Drives

Remote Drives are used when it is not feasible to mount the Drive directly to the conveyor.

The Gearmotor will ship assembled to the Remote Drive mount.

The Remote Drive should be hard-mounted to a surface in line and at the same elevation as the conveyor's Drive Pulley **(Figure 1)**, with a coupling used between the conveyor and Gearmotor that will allow for slight misalignment, so the bearings are not unnecessarily loaded.

QC Industries offers two types of couplings for the Standard Duty Remote Drive: a Single Piece Flex Coupling, and a Three Piece Flex Coupling. Both are sold separately from the Remote Drive.

The Standard Duty Gearmotor has a 1/2" diameter round shaft with flat.

To install:

a. If a hex extension shaft is to be used (such as to drive several conveyors in parallel with the same shaft), select a coupling with a 1/2" diameter – 1/2" hex.

b. If the Remote Drive is to be directly coupled to the conveyor, select a coupling with a 1/2" diameter – 1/2" diameter.

c. The Remote Drive must be rigidly mounted as well. The base has clearance holes for 1/4" screws.

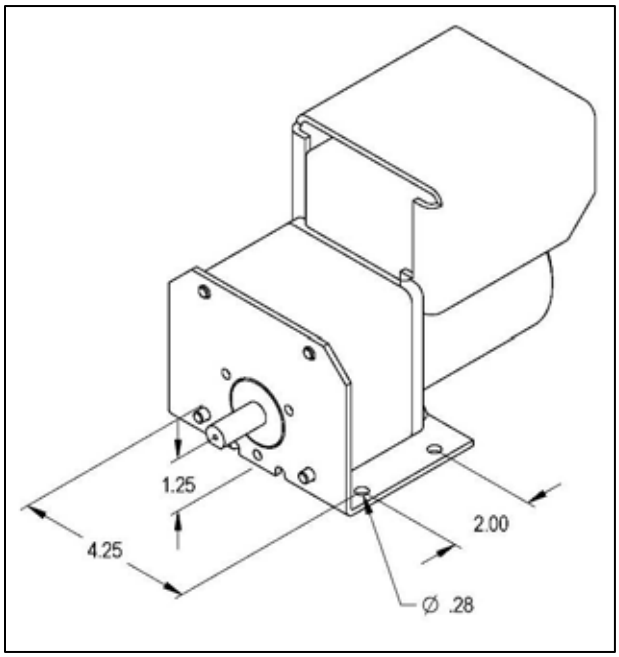


Figure 1

2.21 Pneumatic Remote Drives

Remote Drives are used when it is not feasible to mount the Drive directly to the conveyor.

The Gearmotor will ship assembled to the Remote Drive mount.

The Remote Drive should be hard-mounted to a surface in line and at the same elevation as the conveyor's Drive Pulley **(Figure 1)**, with a coupling used between the conveyor and Gearmotor that will allow for slight misalignment, so the bearings are not unnecessarily loaded.

QC Industries offers two types of couplings for the Pneumatic Remote Drive: a Single Piece Flex Coupling, and a Three Piece Flex Coupling. Both are sold separately from the Remote Drive.

The Gearmotor has a 1/2" diameter round shaft with flat.

To install:

a. If a hex extension shaft is to be used (such as to drive several conveyors in parallel with the same shaft), select a coupling with a 1/2" diameter – 1/2" hex.

b. If the Remote Drive is to be directly coupled to the conveyor, select a coupling with a 1/2" diameter – 1/2" diameter.

c. The Remote Drive must be rigidly mounted as well. The base has clearance holes for 1/4" screws.

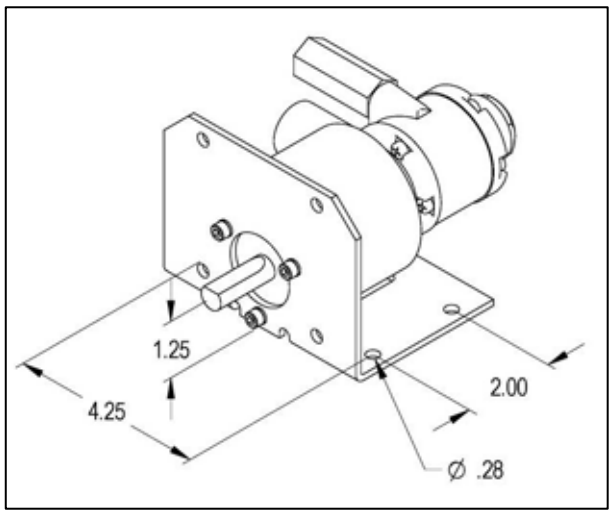


Figure 1

2.22 Heavy Duty Remote Drives

Remote Drives are used when it is not feasible to mount the Drive directly to the conveyor.

The Speed Reducer will ship assembled to the Remote Drive mount. The motor will ship in its own box.

The Remote Drive should be hard-mounted to a surface in line and at the same elevation as the conveyor's drive pulley **(Figure 1)**, with a coupling used between the conveyor and Gearmotor that will allow for slight misalignment, so the bearings are not unnecessarily loaded.

QC Industries offers two types of couplings for the Heavy Duty Remote Drive: a Single Piece Flex Coupling, and a Three Piece Flex Coupling. Both are sold separately from the Remote Drive.

The Gearmotor has a 1/2" diameter round shaft with 1/8" square key.

To install:

a. If a Hex Extension Shaft is to be used (such as to drive several conveyors in parallel with the same shaft), select a coupling with a 1/2" diameter – 1/2" hex.

b. If the Remote Drive is to be directly coupled to the conveyor, select a coupling with a 1/2" diameter – 1/2" diameter.

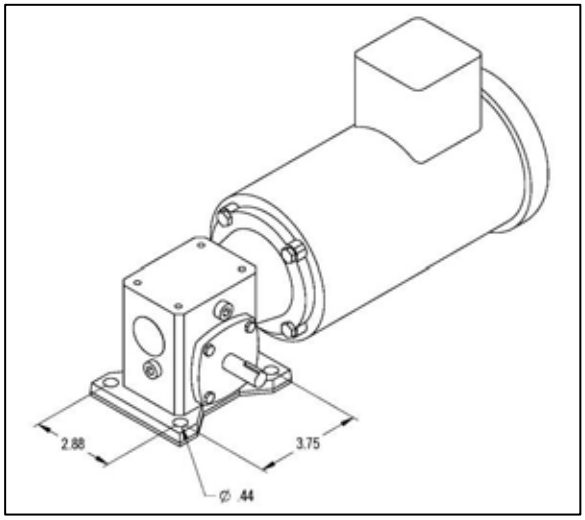


Figure 1

c. The Remote Drive must be rigidly mounted as well. The base has clearance holes for 5/16 screws. Note: for 56 frame motors, the speed reducer's flange will protrude below the speed reducer mounting base.

d. Finally, refer to **Section 2.18** for instructions on how to install the speed reducer's vent plug, and then to **Section 2.19** for instructions on installing the motor. It is recommended to install the vent plug before the motor to have the best access.

3.01 Maintenance Foreword

Managing conveyor life is both a comprehensive and important consideration from the day a system is conceived until the day it is retired from service. From a business perspective, maintenance is an essential activity for the achievement of optimal return on investment, as well as a key to remaining competitive in a hyper-competitive world.

Like maintenance for many other systems, the maintenance of conveyor systems divides into three broad categories: predictive, preventive, and corrective. The obvious advantage of predictive and preventive maintenance is that downtime surprises can be avoided, and when action needs to be taken, all of the parts, materials, and timing can be arranged for operational convenience.

To assure the highest performance for your conveyor system, QC Industries has combined a selection of high quality durable components and superior design criteria that support all aspects of conveyor operational effectiveness with the minimal amount of conveyor preventive maintenance.

Preventive maintenance, such as the cleaning of the conveyor, maintenance of the belt and replacement of the bearings will be regimented by the type of environment to which the conveyor system is subjected, the number of hours in operation, and the amount of performance demanded of the system.

Predictive measures, such as belt replacement schedules, periodic bearing replacement intervals, and overall equipment inspection shall be determined by the environment the conveyor is subjected to, the number of hours in operation, and the production effects of measures taken at the corrective phase.

Maintenance, in general, affects all aspects of conveyor operational effectiveness and risks, not just system availability and cost — specifically safety, operational efficiency, energy efficiency, product quality, and environmental integrity.

The following sections are QC Industries' requirements for assuring the conveyor system is always operating at the factory specifications with minimal production interruption please follow these guidelines. If any questions arise please call our customer service department at (513) 753-6000.

3.02 Belt Change and Module Replacement

Single piece frame Flextrac conveyors are shipped assembled with the plastic chain installed from the factory. Flextrac conveyors do not require any tensioning or alignment. All belts are aligned by the center sprocket being fixed in the proper location.

Flextrac conveyors will ship from QC Industries with an extra 12" of belt that can be used as replacement modules, or if it is necessary to add links.

❶ Remove a rod from the belt

Before the rod can be removed, the side of the belt with the rod heads must be anchored to prevent module breakage. A Box Head Wrench wedged between the belt and edge guide is suitable.

Use the slack in the belt to create a triangle with two links so the rod is exposed above the edge guide, then position the wrench so the head of the rod can move freely through it during removal **(Figure 1)**.

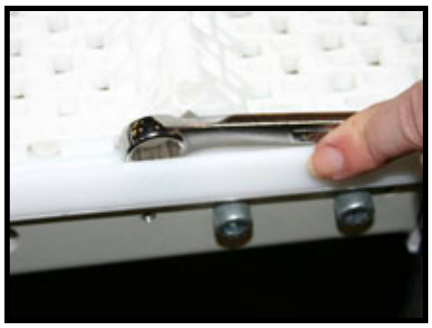


Figure 2

Once the head side of the belt is anchored, the rod can be removed. Position a punch (or some similar tool, such as a 3/16 or 4mm T-Handle Allen Wrench) against the trimmed end of the rod. Strike the end of the punch with a mallet, and the head will pop out from the opposite side **(Figure 2)**.

The rod can now be completely removed from the belt.

Figure 3

With the rod removed, the belt can be taken off of the conveyor from one end, or with an adjacent rod removed **(Figure 3)**, individual modules can be removed for replacement.

Figure 4

❷ Install the new belt / modules

To replace a belt, lay the new roll on top of the slider bed. Unroll the belt so that the thicker side of the modules faces upward.

String belt around tail pulley **(Figure 4)**, and guide it through the frame from the tail end to the drive end.

Figure 5

3.02 Belt Change and Module Replacement (continued)

❸ Engage the Belt in the Sprockets

Note that only 1 sprocket is secured to the square shaft, the other sprockets are allowed to float. Spread the floating sprockets as widely and evenly as possible, approximately 3”-4” apart.

Wrap the belt halfway over the sprockets (**Figure 5**), and grip the belt from the outside to engage it with the fixed sprocket. Next, adjust the floating sprockets until they are engaged as well. All of the sprockets must be engaged before the belt can wrap all the way around the pulley.

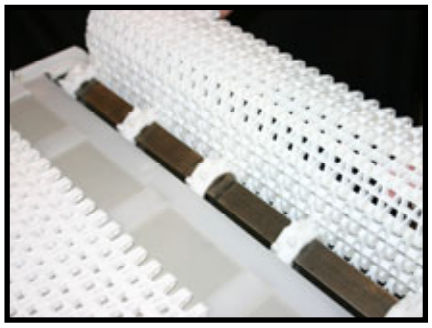


Figure 5

❹ Replace the Rod

Slide the removed rod back through the modules until the head meets the edge module. Secure the rod by tapping its head into place with hammer or mallet (**Figure 6**).

Figure 6

❺ Trim the Rod

If new rods are being used (i.e. those not supplied with the belt), it may be necessary to trim the rod to length before the conveyor can operate. Once the Rod is installed and the head is secure, use a set of diagonal cutters to trim the excess (**Figure 7**).

Figure 7

❻ Verify correct number of links

Flextrac conveyors will operate properly only if the correct number of links are in the belt. If there is one too many, the belt will sag too much under the drive and have trouble returning into the frame’s flange. The visual check is if the belt’s catenary sag is hanging below the white plastic guard, there is a link too many in the belt (**Figure 8**).

If this is the case, remove a link before operating the conveyor.

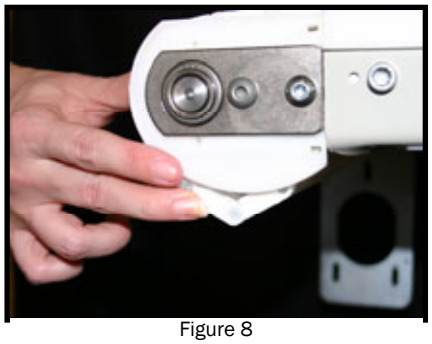


Figure 8

3.03 Belt Care

❶ Belt Cleaning

Flextrac belts are made of five basic materials base materials (Polypropylene, Polyethylene, Acetal, Nylon, and Super Temperature). Refer to Section 3.07 for how to determine what material your belt is based on the conveyor or belt's part number.

All of the materials are resistant to general cleaners, except for Nylon, which is hygroscopic and should not be in contact with water. Nylon should be physically cleaned with a brush or towel.

Belts can usually be cleaned with general household cleaners; however some cleaners (that contain alcohols, acetone, MEK, chlorinated solvents, etc.) may attack belts.

Never hose off the bearings or use solvents in these areas as this may significantly reduce bearing life.

❷ Physical Damage

Scoring or wear lines in the plastic chain should not affect the belt's performance. Broken modules should be replaced using the steps outlined in

❸ Skipping Links

Belt slippage occurs when the belt is under tensioned for the load, which could be caused by a number of factors:

a. Excessive concentrated load on the conveyor.
b. Rod wear
c. Edge wear
d. Excessive belt wear due to accumulating product.
e. Belt elongation due to exposure to a chemical incompatibility.

If skipping cannot be overcome by either removing the causing condition, it is likely the belt needs to be replaced.

3.04 Bearing Replacement

Flextrac conveyors use roller bearings which have been permanently lubricated with Micro-Poly solid lubricant at the factory. QC Industries recommends that these bearings be removed and replaced as needed (See Table Below).

❶ Bearing Replacement

The replacement interval is dependent on the speed at which the conveyor is running and the environment it is in. The chart below shows the replacement interval in years.

Replacement Interval in Years		
1 Shift	2 Shifts	3 Shifts
6	3	2

Example: a conveyor running in a 3 shift operation can go 2 years between replacements.

Note: The replacement interval can be drastically affected by environmental issues such as moisture, dust, heat, and chemicals. Please consider these when determining the correct interval for your application.

The conveyor is shipped with a H1 Food-Grade Micro-Poly Lubricant which is a mixture of polymers, oils, and other additives.

3.05 Speed Reducer Oil

Heavy Duty Speed Reducers are filled with oil that will have to be changed after the first 1,500 hours, and then after every 5,000 hours of service.

❶ Emptying and Refilling

a. The oil can be emptied by removing the lowest pipe plug in the box so it can be drained without removing it from the conveyor **(Figure 1)**. When the speed reducer is empty, the pipe plug must be replaced tightly to prevent leakage.

b. The quantity of oil in the speed reducer is 3.3 fluid ounces. Note that this is the final quantity of oil, which assumes the speed reducer was completely emptied prior to filling.

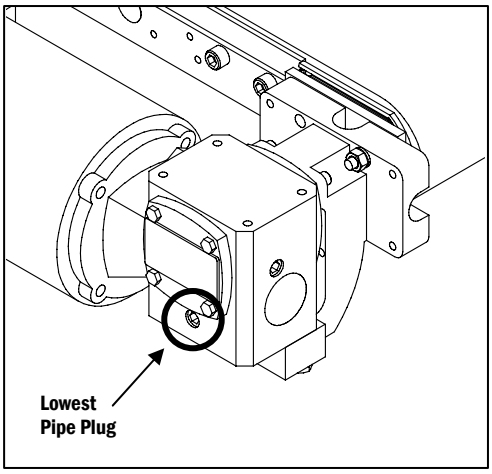
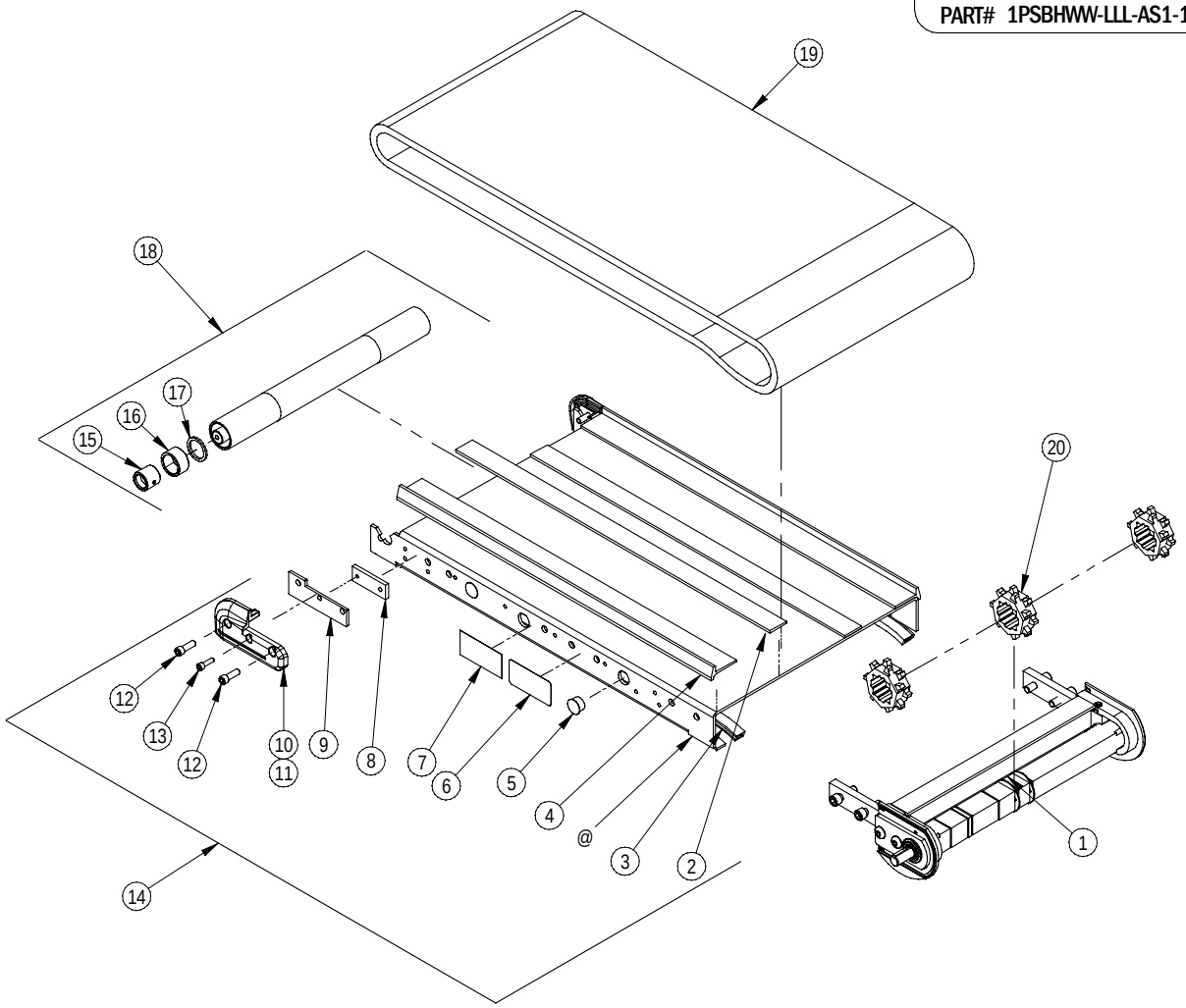


Figure 1

Flextrac Series Edge Guide Conveyor
Single Output Shaft

LEGEND	
(5)	Location on Parts List
@	Part not sold separately
PART#	1PSBHWW-LLL-AS1-1AAAN

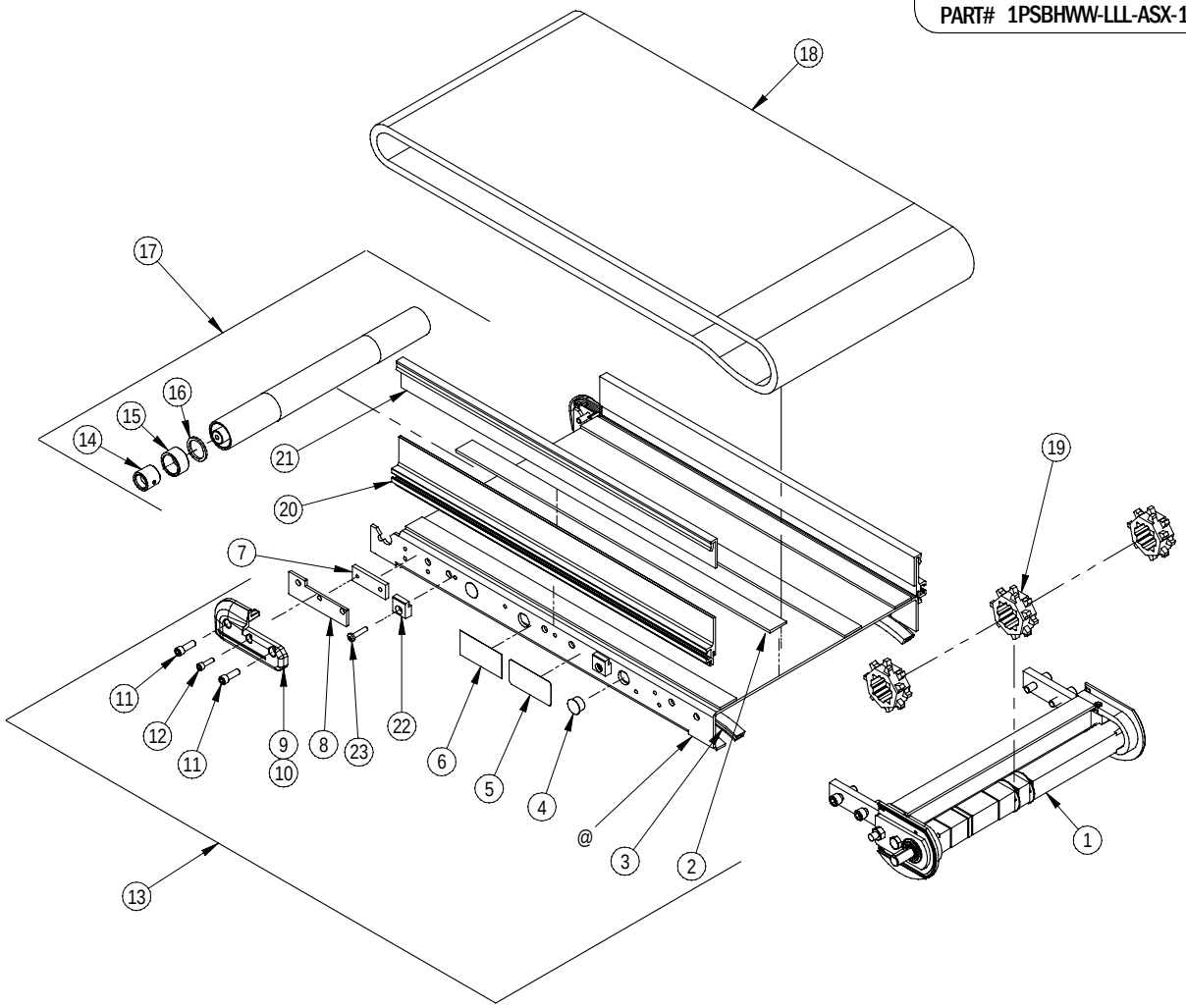


Item	Part No.	Description
1	PC-0099-1S-WW-A	ASSY DRIVER FLEXTRAC LH "S"
2	MAT-UHMW-.125x1	WEAR STRIP UHMW W/PSA BACKING .125" X 1"
3	PC-0250-012	WEAR STRIP UHMW RETURN FLANGE
4	PC-EDGE-LLL.LL	GUIDE EDGE EXTRUSION UHMW W/ADHESIVE
5	125-0078-024	PLUG FRAME
6	SHOP-307	LABEL WARNING
7	SHOP-325	LABEL QC LOGO
8	PC-0027-00	PLATE LOCK TAIL RETAINER
9	PC-0001-001	RETAINER TAIL FOR PLASTIC CHAIN
10	PC-TRC-LH	COVER RETAINER TAIL - LH
11	PC-TRC-RH	COVER RETAINER TAIL - RH
12	125-0072-074	SCREW SOCKET HEAD CAP ZP 1/4-20 X 3/4
13	125-0070-006	SCREW SOCKET HEAD CAP ZP 10-32 X 5/8
14	PC-E086-WW-LLL	ASSY FRAME WITH EDGE GUIDE
15	125-0094-01	RACE INNER BEARING
16	SCE149P	BEARING TAIL SOLID LUBE
17	NT14L8	THRUST WASHER
18	PC-0110-WW	ASSY FLEXTRAC TAIL PULLEY
19	1P-WW-LLLL-1AAAN	BELT FLEXTRAC WHITE POLYPROPYLENE
20	PC-SPKT-01	SPROCKET 7-TOOTH

4057 Clough Woods Dr. | Batavia, OH 45103 | (513) 753-6000 | Fax: (513) 753-6001 | www.qcindustries.com

Flextrac Series Edge Guide Conveyor
Single Output Shaft

LEGEND	
(5)	Location on Parts List
@	Part not sold separately
PART#	1PSBHWW-LLL-ASX-1AAAN



Item	Part No.	Description
1	PC-0099-1S-WW-A	ASSY DRIVER FLEXTRAC LH "S"
2	MAT-UHMW-.125x1	WEAR STRIP UHMW W/PSA BACKING .125" X 1"
3	PC-0250-012	WEAR STRIP UHMW RETURN FLANGE
4	125-0078-024	PLUG FRAME
5	SHOP-307	LABEL WARNING
6	SHOP-325	LABEL QC LOGO
7	PC-0027-00	PLATE LOCK TAIL RETAINER
8	PC-0001-001	RETAINER TAIL FOR PLASTIC CHAIN
9	PC-TRC-LH	COVER RETAINER TAIL - LH
10	PC-TRC-RH	COVER RETAINER TAIL - RH
11	125-0072-074	SCREW SOCKET HEAD CAP ZP 1/4-20 X 3/4
12	125-0070-006	SCREW SOCKET HEAD CAP ZP 10-32 X 5/8
13	PC-S086-WW-LLL	ASSY FRAME FOR HIGH SIDES

Item	Part No.	Description
14	125-0094-01	RACE INNER BEARING
15	SCE149P	BEARING TAIL SOLID LUBE
16	NT14L8	THRUST WASHER
17	PC-0110-WW	ASSY FLEXTRAC TAIL PULLEY
18	1P-WW-LLLL-1AAAN	BELT FLEXTRAC WHITE POLYPROPYLENE
19	PC-SPKT-01	SPROCKET 7-TOOTH
20	125-0174-LLL	SIDE LOW ALUMINUM EXTRUSION
	125-0215-LLL	SIDE HIGH ALUMINUM EXTRUSION
21	PC-0100-LLL-WS	WEARSTRIP LOW SIDES
	PC-0150-LLL-WS	WEARSTRIP HIGH SIDES
22	125-0154-CP	CLAMP ALUMINUM SIDE RAIL
23	125-0071-026	SCREW PHIL TCS SS 10-32 X 1

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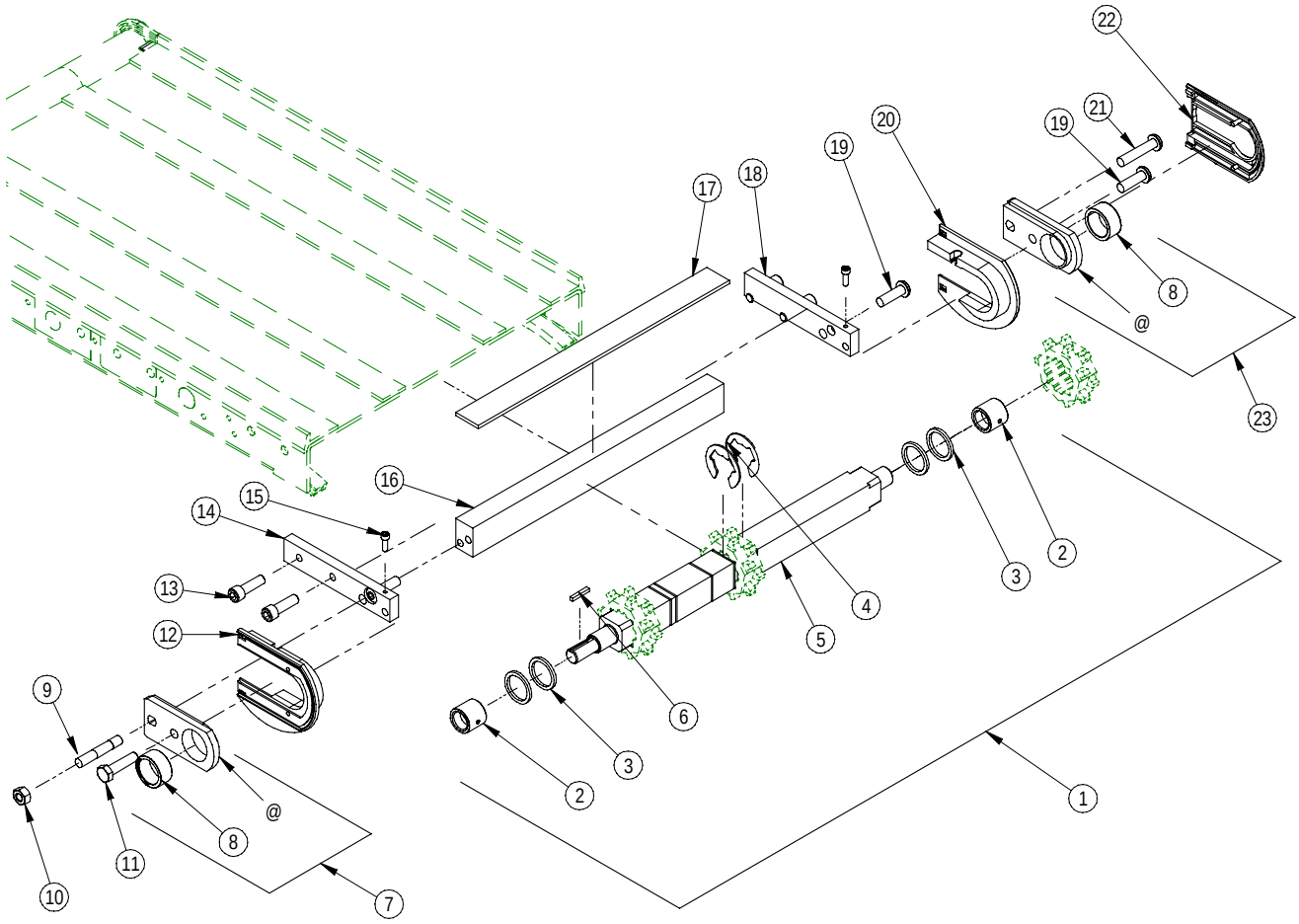
Flextrac "S" Driver Assembly

LEGEND	
(5)	Location on Parts List
@	Part not sold separately
PART#	PC-0099-S-WW-A



Item	Part No.	Description
1	PC-0140-S-WW	ASSY Flextrac SERIES "S" DRIVE PULLEY
2	125-0094-01	RACE INNER BEARING
3	NT14L8	THRUST WASHER
4	PC-0140-E-RING	RING RETAINING E-STYLE
5	PC-014S-WW	SHAFT DRIVE SQUARE SINGLE OUTPUT
6	125-0078-018	KEY SS 1/8 SQUARE X 3/4
7	125-0090-002	ASSY 125 BEARING PLATE LH
8	SCE148PP0H	DRIVER BEARING - SOLID LUBE
9	125-0022-00-W	STUD 5/16 CR SPACER BLOCK
10	125-0075-013	NUT HEX 5/16-18 SS
11	125-0075-004	SCREW HEX HEAD CAP 5/16-18 X 1 1/4 SS
12	PC-CSG-LH	GUARD CATENARY SAG - LH
13	125-0075-003	SCREW SOCKET HEAD CAP 5/16-18 X 1 SS
14	PC-0025-LH	BRACKET DRIVE LH
15	125-0073-059	SCREW SOCKET HEAD CAP 8-32 X 3/8 SS
16	PC-0139-WW	BLOCK SPACER
17	MAT-UHMW-.125X1	WEARSTRIP UHMW W/PSA BACKING .125X1"
18	PC-0025-RH	BRACKET DRIVE RH
19	125-0075-010	SCREW BUTTON HEAD CAP 5/16-18 X 1 SS
20	PC-CSG-RH	GUARD CANTENARY SAG - RH
21	125-0075-032	SCREW BUTTON HEAD SOCKET CAP 5/16-18 X 1 1/2 SS
22	PC-BRG-COVER	COVER BEARING
23	125-0090-001	ASSY 125 BEARING PLATE RH

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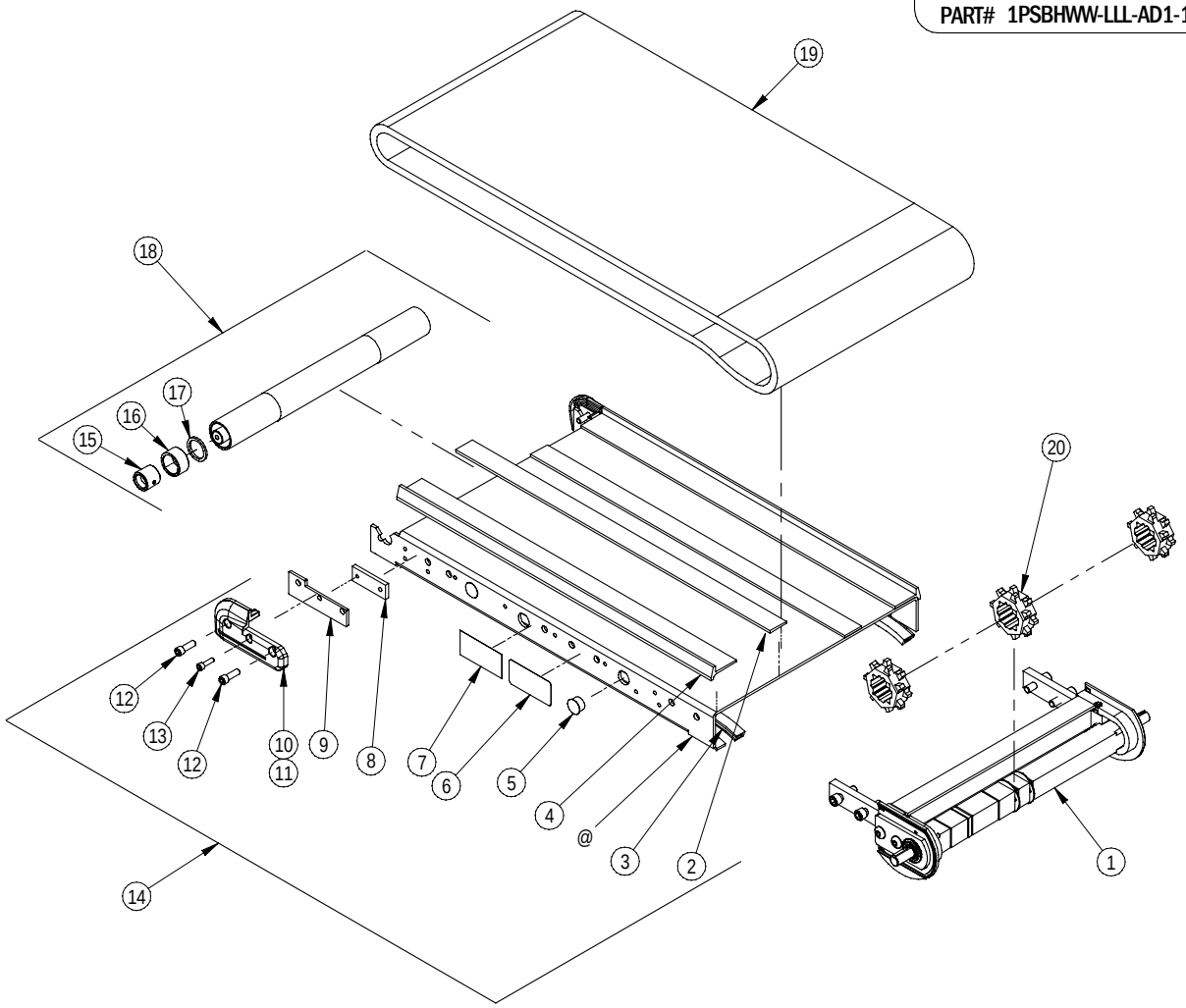
Flextrac Series Edge Guide Conveyor
Dual Output Shaft

LEGEND	
(5)	Location on Parts List
@	Part not sold separately
PART#	1PSBHWW-LLL-AD1-1AAAN



Item	Part No.	Description
1	PC-0099-D-WW-A	ASSY DRIVER FLEXTRAC LH "D"
2	MAT-UHMW-.125x1	WEAR STRIP UHMW W/PSA BACKING .125" X 1"
3	PC-0250-012	WEAR STRIP UHMW RETURN FLANGE
4	PC-EDGE-LLL.LL	GUIDE EDGE EXTRUSION UHMW W/ADHESIVE
5	125-0078-024	PLUG FRAME
6	SHOP-307	LABEL WARNING
7	SHOP-325	LABEL QC LOGO
8	PC-0027-00	PLATE LOCK TAIL RETAINER
9	PC-0001-001	RETAINER TAIL FOR PLASTIC CHAIN
10	PC-TRC-LH	COVER RETAINER TAIL - LH
11	PC-TRC-RH	COVER RETAINER TAIL - RH
12	125-0072-074	SCREW SOCKET HEAD CAP ZP 1/4-20 X 3/4
13	125-0070-006	SCREW SOCKET HEAD CAP ZP 10-32 X 5/8
14	PC-E086-WW-LLL	ASSY FRAME WITH EDGE GUIDE
15	125-0094-01	RACE INNER BEARING
16	SCE149P	BEARING TAIL SOLID LUBE
17	NT14L8	THRUST WASHER
18	PC-0110-WW	ASSY FLEXTRAC TAIL PULLEY
19	1P-WW-LLLL-1AAAN	BELT FLEXTRAC WHITE POLYPROPYLENE
20	PC-SPKT-01	SPROCKET 7-TOOTH

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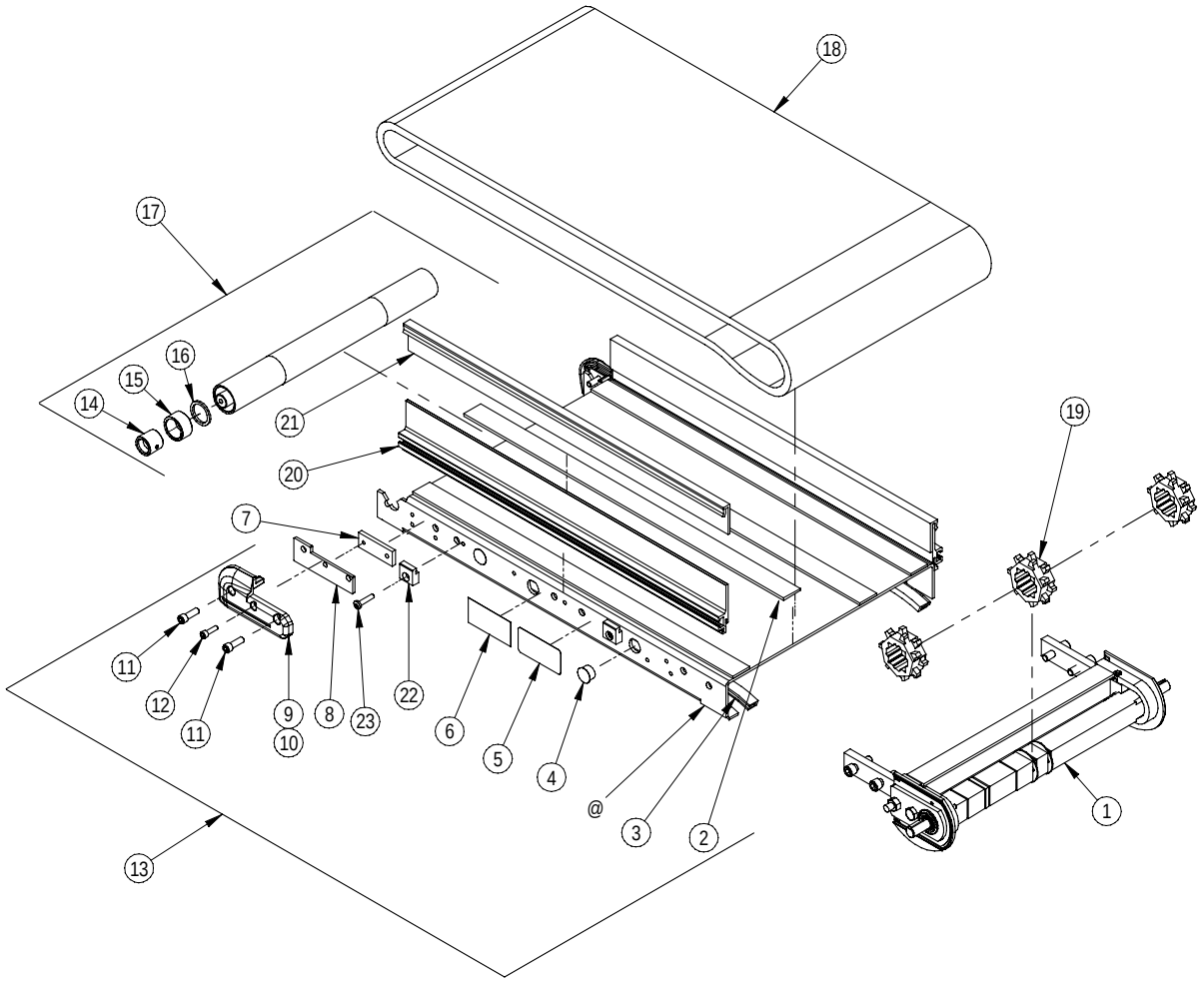
Flextrac Series Edge Guide Conveyor
Dual Output Shaft

LEGEND	
(5)	Location on Parts List
@	Part not sold separately
PART#	1PSBHWW-LLL-ADX-1AAAN



Item	Part No.	Description	Item	Part No.	Description
1	PC-0099-D-WW-A	ASSY DRIVER FLEXTRAC LH "D"	14	125-0094-01	RACE INNER BEARING
2	MAT-UHMW-.125x1	WEAR STRIP UHMW W/PSA BACKING .125" X 1"	15	SCE149P	BEARING TAIL SOLID LUBE
3	PC-0250-012	WEAR STRIP UHMW RETURN FLANGE	16	NT14L8	THRUST WASHER
4	125-0078-024	PLUG FRAME	17	PC-0110-WW	ASSY FLEXTRAC TAIL PULLEY
5	SHOP-307	LABEL WARNING	18	1P-WW-LLLL-1AAAN	BELT FLEXTRAC WHITE POLYPROPYLENE
6	SHOP-325	LABEL QC LOGO	19	PC-SPKT-01	SPROCKET 7-TOOTH
7	PC-0027-00	PLATE LOCK TAIL RETAINER	20	125-0174-LLL	SIDE LOW ALUMINUM EXTRUSION
8	PC-0001-001	RETAINER TAIL FOR PLASTIC CHAIN		125-0215-LLL	SIDE HIGH ALUMINUM EXTRUSION
9	PC-TRC-LH	COVER RETAINER TAIL - LH	21	PC-0100-LLL-WS	WEARSTRIP LOW SIDES
10	PC-TRC-RH	COVER RETAINER TAIL - RH		PC-0150-LLL-WS	WEARSTRIP HIGH SIDES
11	125-0072-074	SCREW SOCKET HEAD CAP ZP 1/4-20 X 3/4	22	125-0154-CP	CLAMP ALUMINUM SIDE RAIL
12	125-0070-006	SCREW SOCKET HEAD CAP ZP 10-32 X 5/8	23	125-0071-026	SCREW PHIL TCS SS 10-32 X 1
13	PC-S086-WW-LLL	ASSY FRAME FOR HIGH SIDES			

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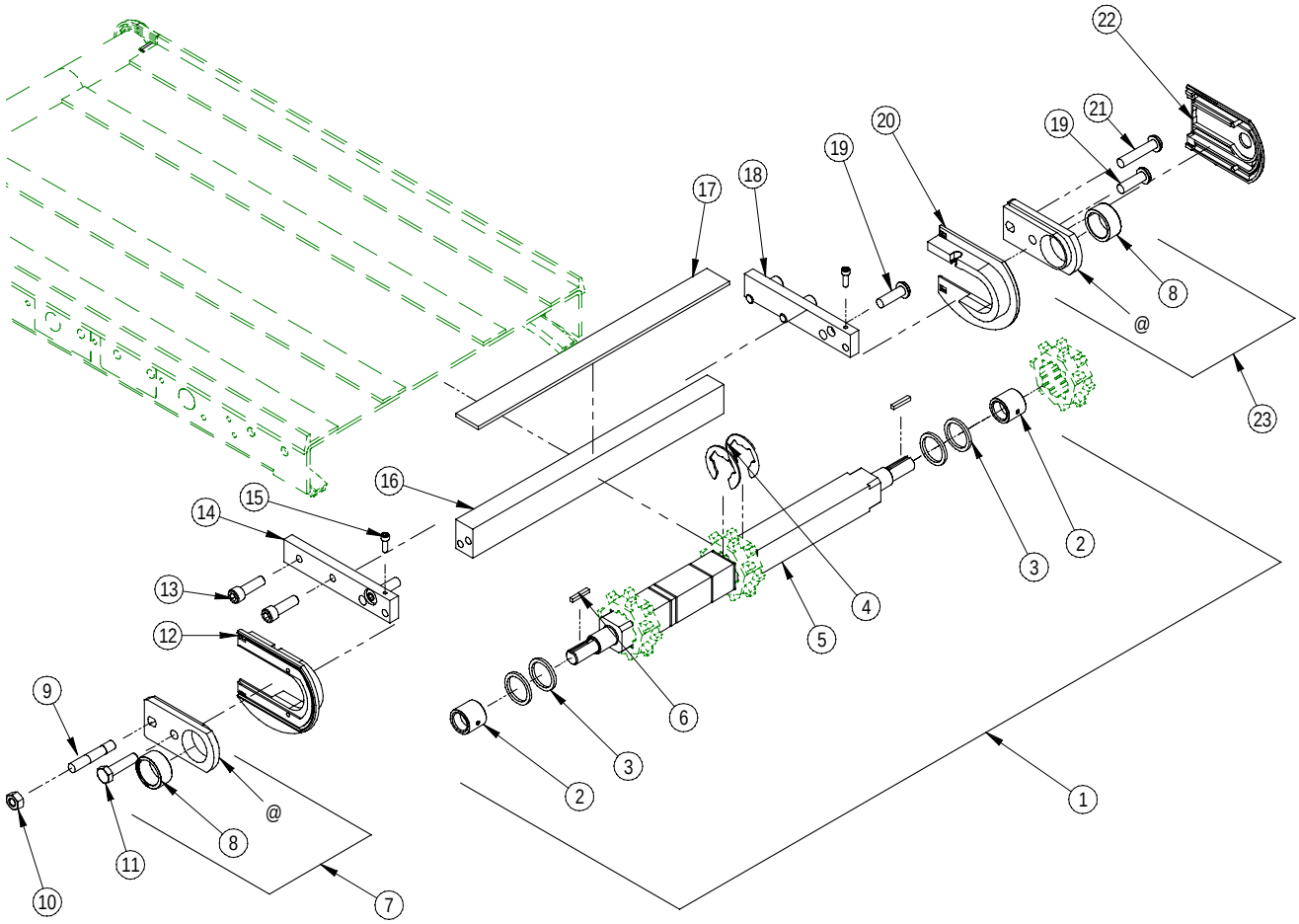
Flextrac "D" Driver Assembly

LEGEND	
(5)	Location on Parts List
@	Part not sold separately
PART#	PC-0099-D-WW-A



Item	Part No.	Description
1	PC-0140-S-WW	ASSY Flextrac SERIES "S" DRIVE PULLEY
2	125-0094-01	RACE INNER BEARING
3	NT14L8	THRUST WASHER
4	PC-0140-E-RING	RING RETAINING E-STYLE
5	PC-014D-WW	SHAFT DRIVE SQUARE DUAL OUTPUT
6	125-0078-018	KEY SS 1/8 SQUARE X 3/4
7	125-0090-002	ASSY 125 BEARING PLATE LH
8	SCE148PP0H	DRIVER BEARING - SOLID LUBE
9	125-0022-00-W	STUD 5/16 CR SPACER BLOCK
10	125-0075-013	NUT HEX 5/16-18 SS
11	125-0075-004	SCREW HEX HEAD CAP 5/16-18 X 1 1/4 SS
12	PC-CSG-LH	GUARD CATENARY SAG - LH
13	125-0075-003	SCREW SOCKET HEAD CAP 5/16-18 X 1 SS
14	PC-0025-LH	BRACKET DRIVE LH

Item	Part No.	Description
15	125-0073-059	SCREW SOCKET HEAD CAP 8-32 X 3/8 SS
16	PC-0139-WW	BLOCK SPACER
17	MAT-UHMW-.125X1	WEARSTRIP UHMW W/PSA BACKING .125X1"
18	PC-0025-RH	BRACKET DRIVE RH
19	125-0075-010	SCREW BUTTON HEAD CAP 5/16-18 X 1 SS
20	PC-CSG-RH	GUARD CANTENARY SAG - RH
21	125-0075-032	SCREW BUTTON HEAD SOCKET CAP 5/16-18 X 1 1/2 SS
22	PC-BRG-COVER-H	COVER BEARING WITH SHAFT HOLE
23	125-0090-001	ASSY 125 BEARING PLATE RH

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3.07 Recommended Spare Parts

QC Industries recommends that the following items be stocked as spares to minimize downtime and ensure optimum performance of your Flextrac conveyor (**Figure 1**):

Part #	Description
125-0110-WW-E	Sealed Tail Assembly
1P-WW-LLLL-1AAAN	Standard Polypropylene Belt
125-0090-001	RH Bearing Plate Assembly
125-0090-002	LH Bearing Plate Assembly
PC-SPKT-01	Standard (Type 1) Sprocket
PC-ROD01-PPWW	Polypropylene Rod

**CONTACT QC INDUSTRIES REPRESENTATIVE FOR ADDITIONAL MATERIALS

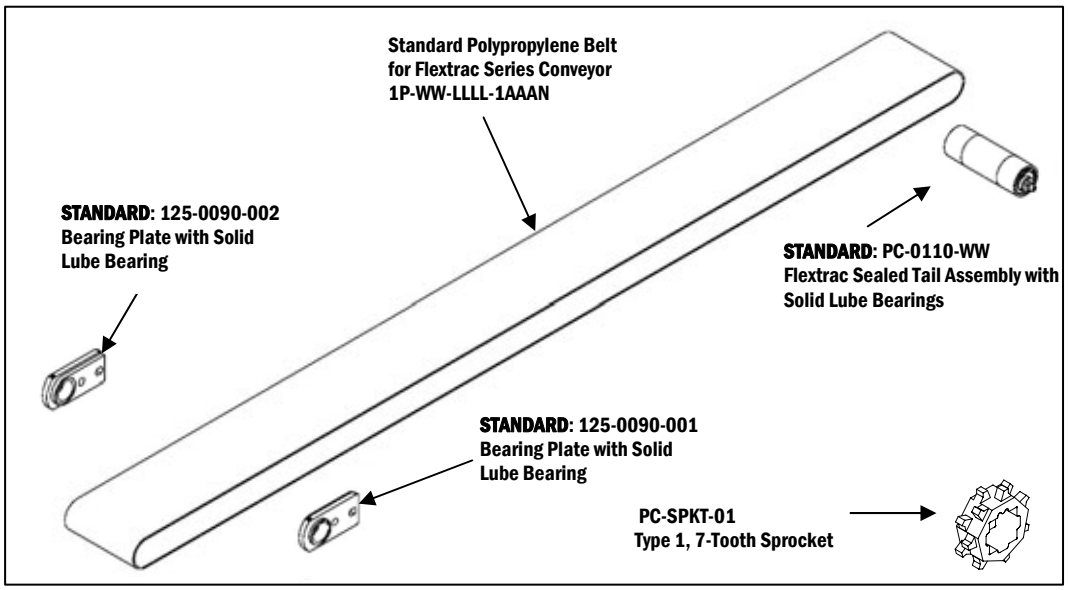
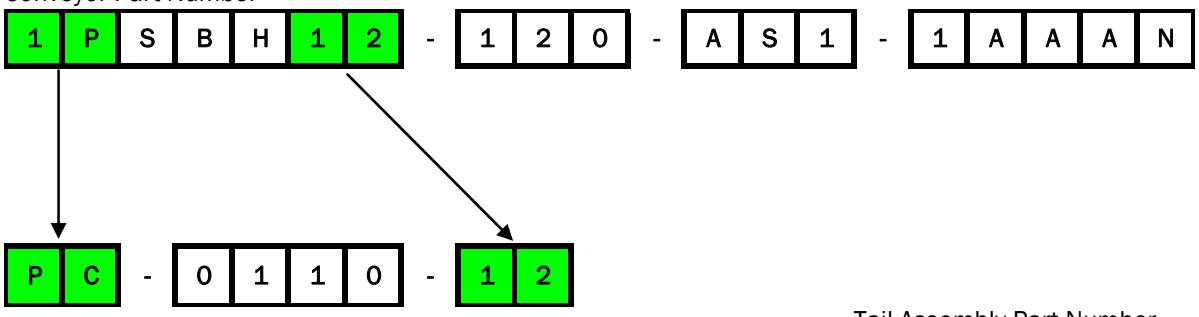


Figure 1

To build a Tail Assembly's part number, use the 2-digit width of the conveyor for "WW".

Example:

Conveyor Part Number



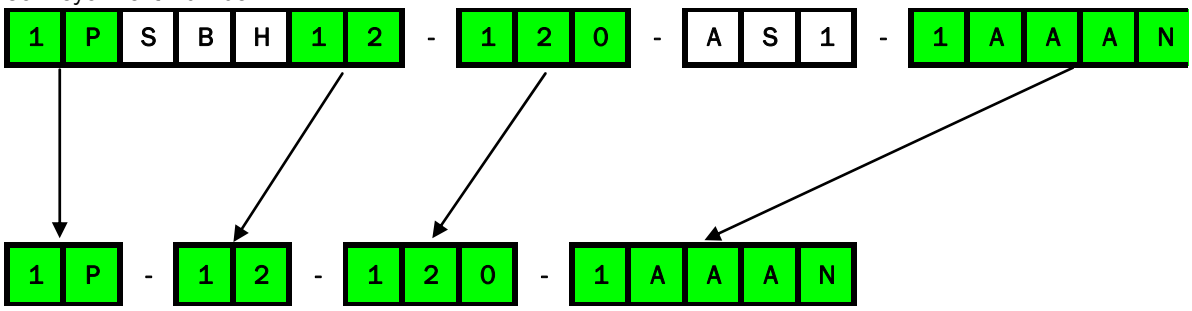
Tail Assembly Part Number

3.08 Recommended Spare Parts

To build a Flextrac Belt part number, use the conveyor's part number.

Example:

Conveyor Part Number



Belt Part Number

Where LLLL = Total Length of Conveyor (in Inches):

Number of 10FT Mid-Sections:
A = (1) 10 ft sections = 120"
B = (2) 10 ft sections = 240"
C = (3) 10 ft sections = 360"
Etc…

= [078 (drive section) + 060 (tail section) + A (number of 10ft mid-sections)]
= (78" + 060" + 120")
= 0258

"1AAAN" refers to the Standard White Flush Grid Polypropylene Belt with Standard Polypropylene Rods. Each digit refers to a specification for the belt:

1st digit: Manufacturer's Series
2nd digit: Material
3rd digit: Color
4th digit: Rod Material
5th digit: Flight Height/Sideguard material ("N" if none)
6, 7, 8th digits: Qty of Flights (no digits are present if Flight Height/Sideguard = N)

To order spare or replacement parts, please contact QC Industries Customer Service department at (513) 753-6000.

3.09 Troubleshooting

Note: if you are unable to remedy the problem with these corrective actions, please contact QC Industries Customer Service at (513) 753-6000. Failure to correct the problem may lead to abnormal use of the conveyor, thereby voiding the warranty.

Symptoms	Possible Cause	Corrective Action
Belt is skipping teeth or stops under load	Application demand is more than the conveyor is rated for	Verify the conveyor's capacity for the application
	Too much Catenary Sag	Remove a link as instructed in **Section 3.02**
	Belt is running 'drive pushing'	Flextrac conveyors can only be run moving toward the drive - reverse the installation
	Sprockets are not engaged	Re-engage sprockets as instructed in **Section 3.02**
Belt does not move without load	Timing Belt or Chain under drive guard is not connected	Verify correct installation as instructed in **Section 2.15**
	Key is missing between drive shaft and speed reducer	Reinstall the key as instructed in **Sections 2.14 - 2.15**
Degradation of Belt properties	Belt is being attacked by chemicals or excessive heat	Contact factory to discuss application parameters for proper belt selection
	Belt's useful life has expired	Replace the belt
Belt is discoloring	Plastic is subjective to discoloration when exposed to UV light	None
Motor is hot	Normal operation - motor can run with a skin temperature of 221°F under normal conditions	None
	Motor is not protected with overload protection and is drawing too much current	Install overload protection on the motor
Speed Reducer is hot	Normal operation – speed reducer can run with a skin temperature of 225°F under normal conditions	None
	The reducer's vent plug was not installed	Install vent plug as instructed in **Section 2.16**
Speed Reducer is leaking oil	Speed reducer's useful life has expired	Replace the speed reducer
	Initial installation not performed correctly and speed reducer input seal is damaged	Purchase a new speed reducer and follow manufacturers installation instructions carefully
Bearing noise	Bearings are damaged or failing	Replace bearings
Belt is traveling the reverse of the desired direction	Motor or speed controller not wired properly	Check wiring, correct per wiring instructions

4.01 Conveyor Serial Number

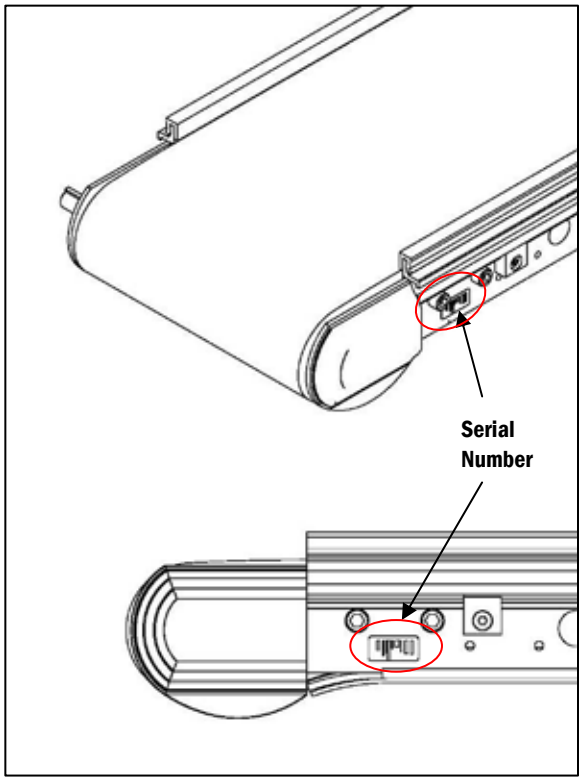


Figure 1

The conveyor's serial number is located on the frame at the drive end of the conveyor, opposite the side on which the gearmotor will be mounted (Figure 1).

Record the serial number in a place where it can be accessed for reference; a place has been provided on the back cover that can be used for multiple conveyors. This will assist any future inquires regarding the conveyor, its accessories, the order it was shipped on, or replacement parts.

4.02 Conveyor Warranty

QC INDUSTRIES warrants that our conveyors are free from defects in materials and workmanship and fit for the ordinary purposes for which such goods are used, under normal installation, use and service for five (5) years from date of purchase or 10,500 hours of running use, whichever is sooner. QC INDUSTRIES will replace any defective part within the warranty period, without charge, provided:

(1) The Purchaser gives QC INDUSTRIES prompt written notice of the defect, including the date of purchase and original purchase order number.
(2) The Purchaser will then be given a return goods authorization number (RGA#) which must be displayed on all labels and packing slips returned with merchandise. (See RGA section)
(3) The Purchaser pays for delivery of the defective part to QC INDUSTRIES for inspection and verification of the defect.
(4) The Purchaser shall pay all shipping and insurance charges for the replacement part from QC INDUSTRIES and the cost of installing the replacement part.

This warranty is limited to the replacement of defective parts. QC INDUSTRIES WILL NOT BE LIABLE FOR ANY DAMAGES CAUSED BY ANY DEFECT IN THIS UNIT. This warranty shall not apply if any failure of this unit or its parts is caused by unreasonable use, lack of maintenance, improper maintenance and/or repairs, incorrect adjustments, exposure to corrosive or abrasive material, moisture causing damage, or any modification or alteration affecting the operation of the unit which is not authorized by QC INDUSTRIES in writing. This warranty shall not apply to the following items that are covered by their manufacturer's warranty, subject to any limitation contained in those warranties.

(A)	Bearings	(D)	Controllers
(B)	Motors	(E)	Casters
(C)	Reducers	(F)	Belts (unless otherwise agreed to in writing)

CAUTION: Any attempt to repair such items may actually void the manufacturer's warranty. Any description of this unit is only to identify it and is not a warranty that the unit fits the description. Only an official of QC INDUSTRIES may make any warranties for QC INDUSTRIES. Any warranties implied by law are limited in duration to the one (1) year term of this warranty. EXCEPT AS SET FORTH HEREIN, QC INDUSTRIES MAKES NO OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED, OR STATUTORY, INCLUDING MERCHANTABILITY FOR FITNESS OR ANY PARTICULAR PURPOSE.

Lost or Damaged Goods

Shipments should be inspected immediately upon receipt for lost or damaged goods. Any loss or damage should be noted on the carriers receipt (or bill of lading) at the time of acceptance. If items are perceived to be lost or damaged after the shipment has been accepted, it becomes more difficult to file a claim with the carrier if the receipt does not indicate such loss or damage. Do not, at any time, request the carrier to return any items or shipment to QC Industries without previous authorization from our company for such a return. Please notify QC Industries as soon as any loss or damage is discovered and request the department that handles the lost or damaged goods. You will need to know a complete description of all lost or damaged items. If replacement items are needed, a purchase order made out to QC Industries will need to be supplied. QC Industries will then contact the carrier's local agent and request that an inspection of the items be performed. This is absolutely necessary. Unless an inspection is performed, the carrier will not entertain any claim for loss or damage. After the inspection has been completed, the carrier will notify QC Industries. If the carrier takes responsibility for the claim, a credit will be issued to you for the replacement item(s), including freight charges from QC Industries, where applicable. If the carrier does not take responsibility for the claim, a representative of QC Industries will contact you.

4.03 Returns

If, for any reason, an item needs to be returned to QC Industries or an in-house order needs to be canceled or revised, the Purchaser is required to adhere to the following series of steps to ensure that the return or cancellation is handled in the proper manner.

RGA Policy/Instructions:

(1) Promptly call QC Industries Customer Service at (513) 753-6000 and request a Returned Goods Authorization. At this time, you will be asked to answer pertinent questions relating to the returned items. We ask that you have the following information ready:
   (A) Name of distributor (if applicable) through which item(s) were purchased.
   (B) Name of the Customer and/or end user of the item(s).
   (C) Any/all purchase order numbers related to the item(s) in question.
   (D) Phone numbers and names of contacts involved in the return (if it becomes necessary that they be contacted later).
   (E) Complete part numbers of all items involved in the return.
   (F) Complete description as to the reason for the return and the actions that need to be taken. (If the item is to be replaced, a new purchase order number must be supplied by the Purchaser along with complete shipping and billing instructions. These replacements will be treated as separate orders by QC Industries and evaluated for possible credit only after returned items are received and evaluated.

(2) After the call is made to QC Industries, we will process your RGA and you will be faxed the RGA number to use for returning the item(s). RGA numbers will not be given verbally over the phone.

(3) Upon receipt of your RGA, you are required to return the item(s) within 30 days of receipt of authorization. After 30 days, the Return Authorization will be void if item(s) are not received by QC Industries. All shipping charges and freight insurance charges of returned goods will be the responsibility of the Purchaser.

(4) The RGA number must be clearly marked on the outside of all packages. It must also be on any paperwork, packing slips, or delivery receipts. If there is no RGA number visible on the package, the package may be refused and sent back at the Purchaser's expense.

(5) After receipt of returned goods, QC Industries will evaluate the item(s) for credit and take the appropriate action. Standard items that are returned in new, resalable condition will be credited for the amount of the purchase less 20%. Full credit will only be issued on items that are considered to be defective at the time of shipment from QC Industries and are evaluated to be under warranty. Please allow 30 days for credits to be issued.

Order Cancellation / Revision Policy

If it becomes necessary to cancel or revise an order prior to the order being shipped, QC Industries reserves the right to evaluate each order that is to be canceled or revised and determine if any charges are applicable. A 20% restocking charge will apply if an order is assembled and ready to ship prior to its cancellation or revision and the order is totally comprised of standard stock items. If the order contains other than stock items, an evaluation will be made based on the status of the order. Additional charges will be included with the 20% restocking charge if any of the following conditions are met:

(A) The order contains any items that are considered to be non-stock items and these items have already been produced by QC Industries or one of its suppliers.

(B) The order contains any items that require special handling or assembly and these processes have been completed.

(C) The Customer has specified that they will pick-up an order from QC Industries' facility by a predetermined time and that time frame has expired. In this case, QC Industries will make an attempt to notify the Customer. If this cannot be accomplished in a reasonable time, the order will be disassembled and the Customer will be charged a restocking fee and any additional charges based on the orders contents as explained herein.

For future reference, record the date, part number and serial number for each conveyor in your order.

Date	Part Number	Serial Number

Additional Conveyor Products from QC Industries

125 Series Belt Conveyors

- Available in four styles:
  - Automation
  - Corrosion Resistant
  - Cleated
  - Magnetic
- Less than 5-minute belt change

Widths up to 24", lengths up to 25'

125Z Series Angled Frame

- Available in five configurations
- Five standard angles: 30°, 60°, 45°, 75°, 90°
- Patent-pending Z-Track™ simplifies belt tracking and locks in adjustments — even through belt changes

250 Series Center/End Drive

- Based on our popular 125 Series design
- Belt is highest point on conveyor for part overhang
- Conveyor features a drive position in the center, which frees up both ends of the conveyor to fit tight clearances

InnerDrive Conveyors

- Save space by moving the motor inside the conveyor frame
- Safe, efficient 24vdc motor
- Low profile design
- Variable speed control card easily integrates with "run-on-demand" applications

For more information, visit our website — www.qcindustries.com —
or contact a member of our knowledgeable sales staff at (513) 753-6000