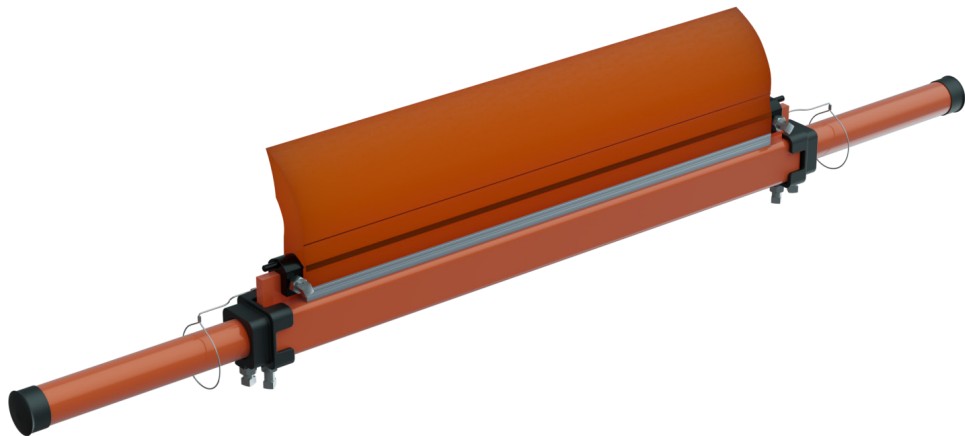




Martin® QC1+™ Cleaner HD

[Go to Martin® QC1+™ Cleaner HD web page](#)



***Operator's Manual
M4124***

Important

MARTIN ENGINEERING HEREBY DISCLAIMS ANY LIABILITY FOR: DAMAGE DUE TO CONTAMINATION OF THE MATERIAL; USER'S FAILURE TO INSPECT, MAINTAIN AND TAKE REASONABLE CARE OF THE EQUIPMENT; INJURIES OR DAMAGE RESULTING FROM USE OR APPLICATION OF THIS PRODUCT CONTRARY TO INSTRUCTIONS AND SPECIFICATIONS CONTAINED HEREIN. MARTIN ENGINEERING'S LIABILITY SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF EQUIPMENT SHOWN TO BE DEFECTIVE.

Observe all safety rules given herein along with owner and Government standards and regulations. Know and understand lockout/tagout procedures as defined by American National Standards Institute (ANSI) ANSI/ASSP z244.1-2024, *The Control of Hazardous Energy Lockout, Tagout And Alternative Methods and Occupational Safety* and Health Administration (OSHA) Federal Register, Title 29 Subtitle B Chapter XVII Subpart J 1910.147, *Control of Hazardous Energy Source (Lockout/Tagout)*; Final Rule.

The following symbols may be used in this manual:

DANGER

Danger: Immediate hazards that will result in severe personal injury or death.

WARNING

Warning: Hazards or unsafe practices that could result in personal injury.

CAUTION

Caution: Hazards or unsafe practices that could result in product or property damages.

IMPORTANT

Important: Instructions that must be followed to ensure proper installation/operation of equipment.

NOTE

Note: General statements to assist the reader.

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Introduction

General

The Martin® QC1+™ Cleaner HD combines effective removal of carryback with “quick-change” replacement of a long-lasting, one-piece blade. To introduce product back into the product flow, the Martin® QC1+™ Cleaner HD is installed on the face of the head pulley. On a dual-cleaner system, a Secondary Cleaner is installed immediately following the Pre-Cleaner to remove stubborn material left on the conveyor belt. If a Pre-Cleaner cannot be used because of space limitations, Secondary Cleaners can be installed alone. Multiple Pre-Cleaners and/or Secondary Cleaners may be required to clean the belt. If the material-handling process or product could be affected by contamination from the use of these belt cleaners, the user is responsible for taking the necessary steps to prevent contamination. Consult Martin Engineering or a representative for alternate belt cleaners or belt cleaner locations to use where contamination may be an issue.

Installations without chutework

These procedures were written for equipment that is being installed on enclosed pulley chutework. If the pulley is not enclosed, the equipment should be installed using the best available field resources and methods to ensure that the critical dimensions are followed for proper installation.

Belt cleaner inspection access

If the belt cleaner is installed on enclosed pulley chutework, a Martin® Inspection Door should be installed. Martin® Inspection Doors are available from Martin Engineering or a representative.

Belt cleaner blades

Martin® QC1+™ Cleaner HD Blades are available in five different materials (see Table I for specifications). Only standard (orange) Martin® QC1+™ Cleaner HD Blades are made of materials that meet Mine Safety and Health Administration (MSHA) requirements under “Interim Fire and Toxicity Criteria for Products Taken Into Underground Mines,” March 22, 1977 (MSHA acceptance number MSHA-IC-95/1, MSHA-IC-95/7).

References

The following documents are referenced in this manual:

- American National Standards Institute (ANSI) z244.1-1982, *American National Standard for Personnel Protection - Lockout/Tagout of Energy Sources - Minimum Safety Requirements*, American National Standards Institute Inc., 1430 Broadway, New York, NY 10018.
- Federal Register, Volume 54, Number 169, Part IV, 29 CFR Part 1910, *Control of Hazardous Energy Source (Lockout/Tagout); Final Rule*, Department of Labor, Occupational Safety and Health Administration (OSHA), 32nd Floor, Room 3244, 230 South Dearborn Street, Chicago, IL 60604.
- *Martin® Inspection Door Operator's Manual, P/N M3891*
- *Martin® Twist Tensioner Operator Manual, P/N M3837*
- *Martin® Spring and Air Tensioners Operator Manual, P/N M3263*

Materials required

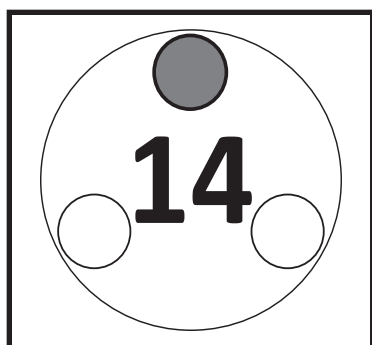
Installation of this equipment requires the use of standard hand tools, grinder, welder, and cutting torch.

Table I. Martin® QC1+™ Cleaner HD Blade Colors, Materials and Specifications

Urethane Selection	Application Description	Typical Materials	Continuous Temperature
Orange	Standard Martin® Urethane Suitable for 80% or more of all belt cleaner applications, including abrasive conditions.	Bauxite, Coke, Coal, Overburden Refuse	-20° to 160°F (-29° to 71°C)
Brown (BR)	Chemical-Resistant Urethane Improves resistance to chemicals; reduced absorption of water in high-moisture environments.	Limestone	-40° to 160° F (40° to 71°C)
Green (GR)	High-Temperature Urethane For exposure to intermittent temperatures up to 350°F (177°C).	Clinker	-40° to 300°F (-40 to 149°C)
Clear (CL)	Low-Rigidity Urethane For dry products such as sand and gravel.	Gravel, Dry Sand	-20° to 160°F (-29° to 71°C)
Navy Blue (NB)	Low-Adhesion Urethane For sticky or tacky materials.	Cement, Glass, Wood Chips	-20° to 160°F (-29° to 71°F)

IMPORTANT*Urethane shelf life*

Urethane put in service after exceeding it's shelf life may wear differently and deteriorate quicker than normal urethane.

NOTE

Code Date is written near bottom of blade as mm/dd/yy-x. In addition to or in place of this date, you may see an imprinted date medallion similar to the example shown. In this example, “14” stands for the year 2014. The small circles represent the quarter of the year. If three circles are “punched” the blade was produced in the first quarter. If none of the circles are “punched” the blade was produced in the fourth quarter. If code date on your blade(s) is not legible or is missing, contact Martin Engineering or a representative.

Table II. Urethane Shelf Life

Blade Color	Shelf Life
Blue	1 Year from Code Date
Brown	2 Years from Code Date
Clear	1 Year from Code Date
Green	2 Years from Code Date
Orange	1 Year from Code Date



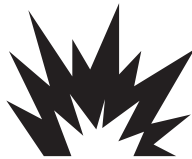
⚠ DANGER

Do not touch or go near the conveyor belt or conveyor accessories when the belt is running. Your body or clothing can get caught and you can be pulled into the conveyor, resulting in severe injury or death.



⚠ DANGER

Before installing, servicing, or adjusting the belt cleaner, turn off and lockout / tagout / blockout / testout all energy sources to the conveyor and conveyor accessories according to ANSI standards. Failure to do so could result in serious injury or death.



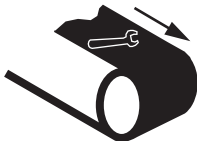
⚠ DANGER

If this equipment will be installed in an enclosed area, test the gas level or dust content before using a cutting torch or welding. Using a torch or welding in an area with gas or dust may cause an explosion resulting in serious injury or death. Follow local confined space procedures.



⚠ WARNING

Before using a cutting torch or welding the chute wall, cover the conveyor belt with a fire retardant cover. Failure to do so can allow the belt to catch fire. Follow local fire watch procedures



⚠ WARNING

Remove all tools from the installation area and conveyor belt before turning on the conveyor. Failure to do so can cause serious injury to personnel or damage to the belt and conveyor.



⚠ WARNING

Mainframe with blade can be heavy and may require two people to lift. Attempting to lift the belt cleaner without assistance could result in injury.

Before Installing Belt Cleaner

IMPORTANT

The delivery service is responsible for damage occurring in transit. Martin Engineering CANNOT enter claims for damages. Contact your transportation agent for more information.

1. Inspect shipping container for damage. Report damage to delivery service immediately and fill out delivery service's claim form. Keep any damaged goods subject to examination.
2. Remove belt cleaner assembly from shipping container.
3. If anything is missing contact Martin Engineering or a representative.



WARNING

Before installing, servicing, or adjusting equipment, turn off and lockout / tagout / blockout / testout all energy sources to the conveyor and conveyor accessories according to ANSI standards. Failure to do so could result in serious injury or death.

4. Turn off and lockout / tagout / blockout / testout energy source according to ANSI standards (see "References").

DANGER

If this equipment will be installed in an enclosed area, test the gas level or dust content before using a cutting torch or welding. Using a torch or welding in an area with gas or dust may cause an explosion resulting in serious injury or death. Follow local confined space procedures.

5. If using a cutting torch or welding, test atmosphere for gas level or dust content. Cover conveyor belt with fire retardant cover.



IMPORTANT

Center the belt cleaner blades to clean an area narrower than the conveyor belt width. This allows for side-to-side movement of the belt and prevents damage to the belt edge.

NOTE

The chute wall that the tensioner will be located on is referred to as the "operator side." The other side of the chute is referred to as the "far side." (If installing dual tensioners, side that is most accessible is "operator side.")

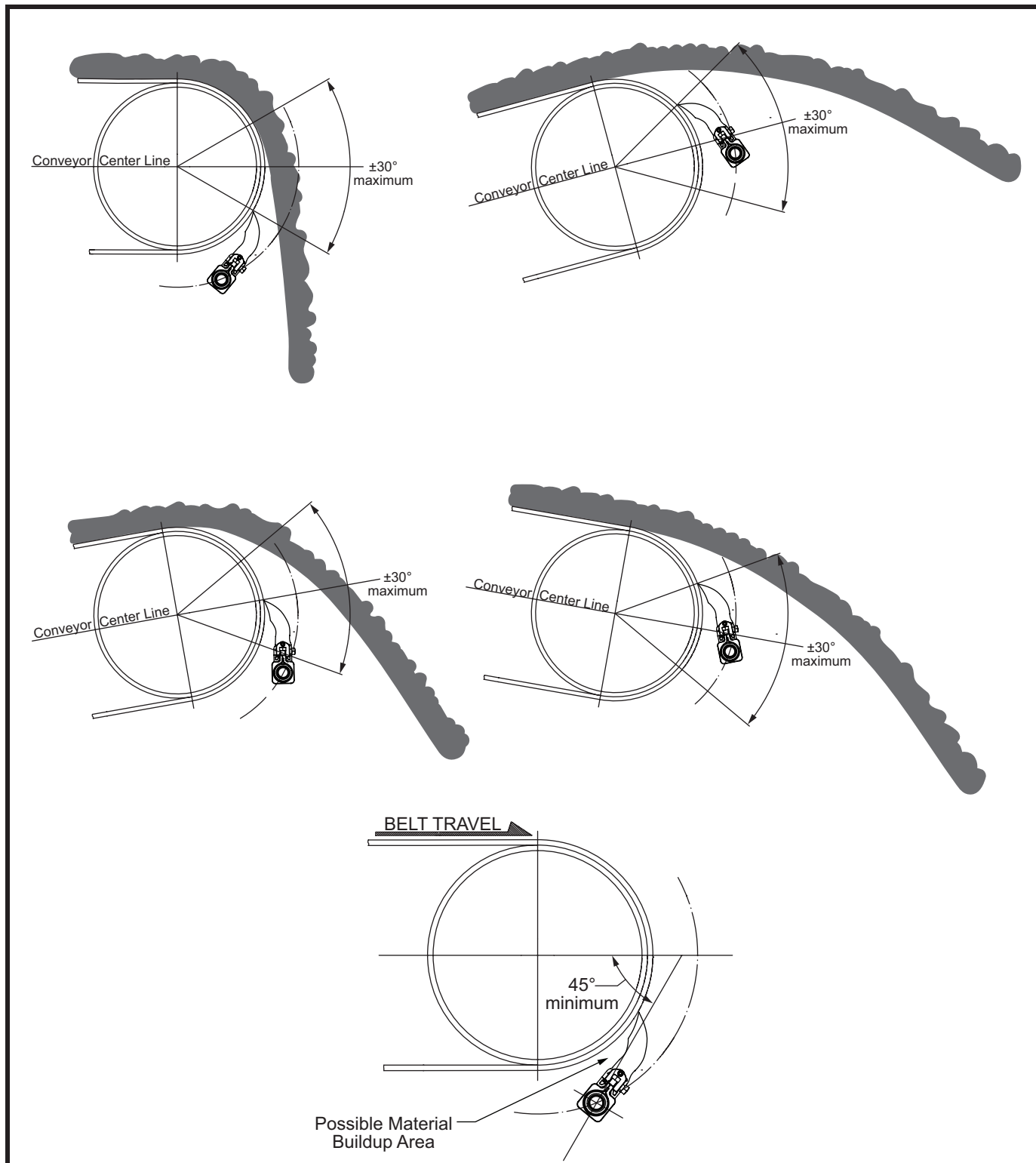


Figure 1. Belt Cleaner Mounting Locations

6. Inspect belt cleaner mounting area for possible obstructions that could interfere with proper mounting. Refer to following guidelines:
 - a. The cleaner can be mounted anywhere on the arc from +30 degrees to -30 degrees from a center line parallel to the belt line as long as:
 - (1) The blade is not in the direct flow of discharging material causing premature blade wear.
 - (2) The diameter of the pulley is big enough that the blade does not trap or hold material between the inside of the blade and the belt.
 - (3) There is at least the equivalent of a 45 degree angle between the blade and belt to prevent material buildup in this space.
 - b. Lack of service is the main cause of poor belt cleaning performance. Follow CEMA guidelines for access:
 - (1) Clearance for service outside the chute must be at least equal to the belt width.
 - (2) Cleaners must have service platforms. CEMA recommends cleaners be mounted at least 24 in. (600 mm) above the work platform.
 - (3) If the belt width is 54 in. (1400 mm) or larger consider access doors on both sides of the chute.
 - c. Refer to “Installing Belt Cleaner and Tensioner and “Part Numbers” sections of this manual for specific mounting and cleaner dimensions

Installing Belt Cleaner and Tensioner

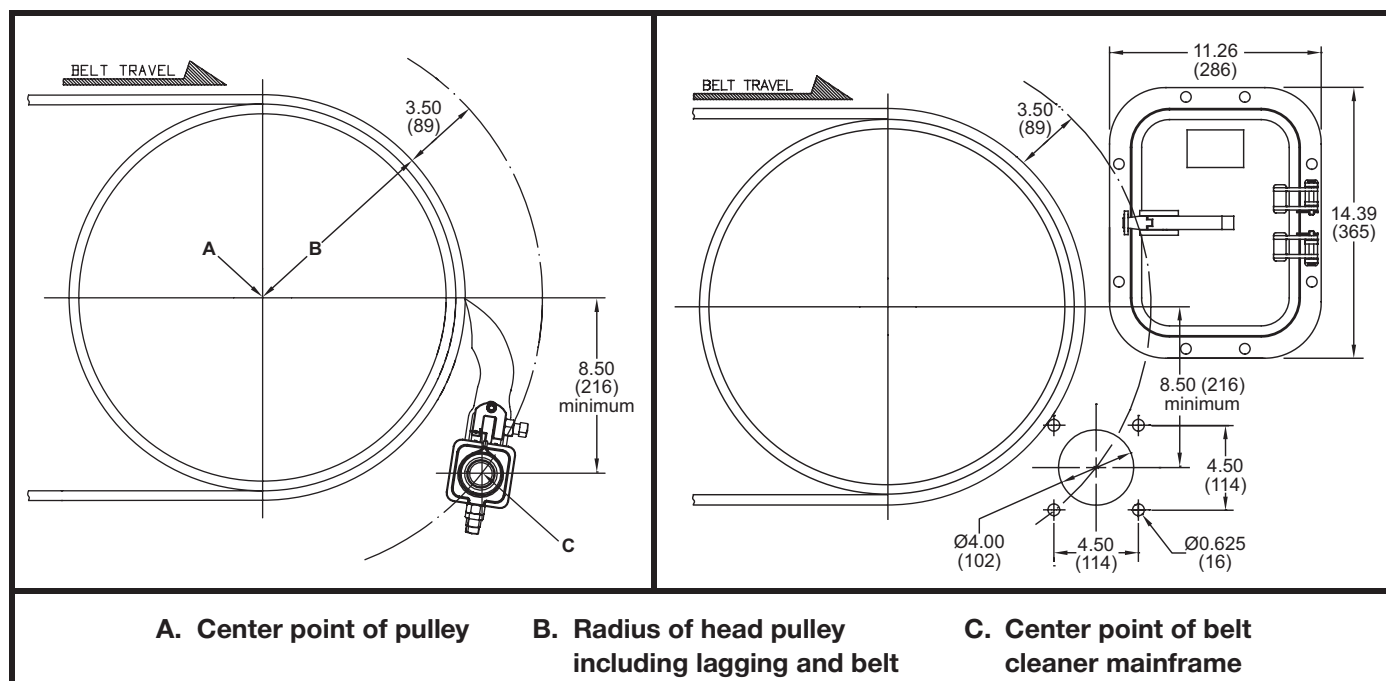


Figure 2. Belt Cleaner Mainframe Location & Chute Wall Cutouts

Locating belt cleaner mainframe

1. On operator side of chute, find pulley center point (A).
2. Measure radius of head pulley including lagging and belt thickness (B). To this dimension, add 3.50 in. (89 mm).
3. Starting from center point (A), measure the total distance calculated in step 2 ($B + 3.50$) and draw an arc on chute wall.
4. Measure down from pulley's horizontal centerline the distance shown in Figure 2 and draw a horizontal line parallel to it. Locate center point of belt cleaner mainframe (C) where this line intersects the arc on the chute wall.
5. Make sure mainframe and blade do not lie in path of material unloading from conveyor belt.
6. Repeat steps 1 through 5 for far side chute wall.
7. Drill or cut holes for tensioner mounting plates on chute walls
 - a. If bolting tensioner mounting plates to chute walls, do the following:
 - (1). Drill or cut one 4-in. hole for mainframe and four 5/8-in. holes for screws in both operator side and far side chute walls. Remove burrs and sharp edges.
 - b. If welding tensioner mounting plates to chute walls, do the following:
 - (1). Drill or cut one 4-in. hole for mainframe in both operator side and far side chute walls. Remove burrs and sharp edges.
8. If using Martin® Inspection Door, cut access door opening and mounting holes according to *Martin® Inspection Door Operator's Manual*, P/N M3891.

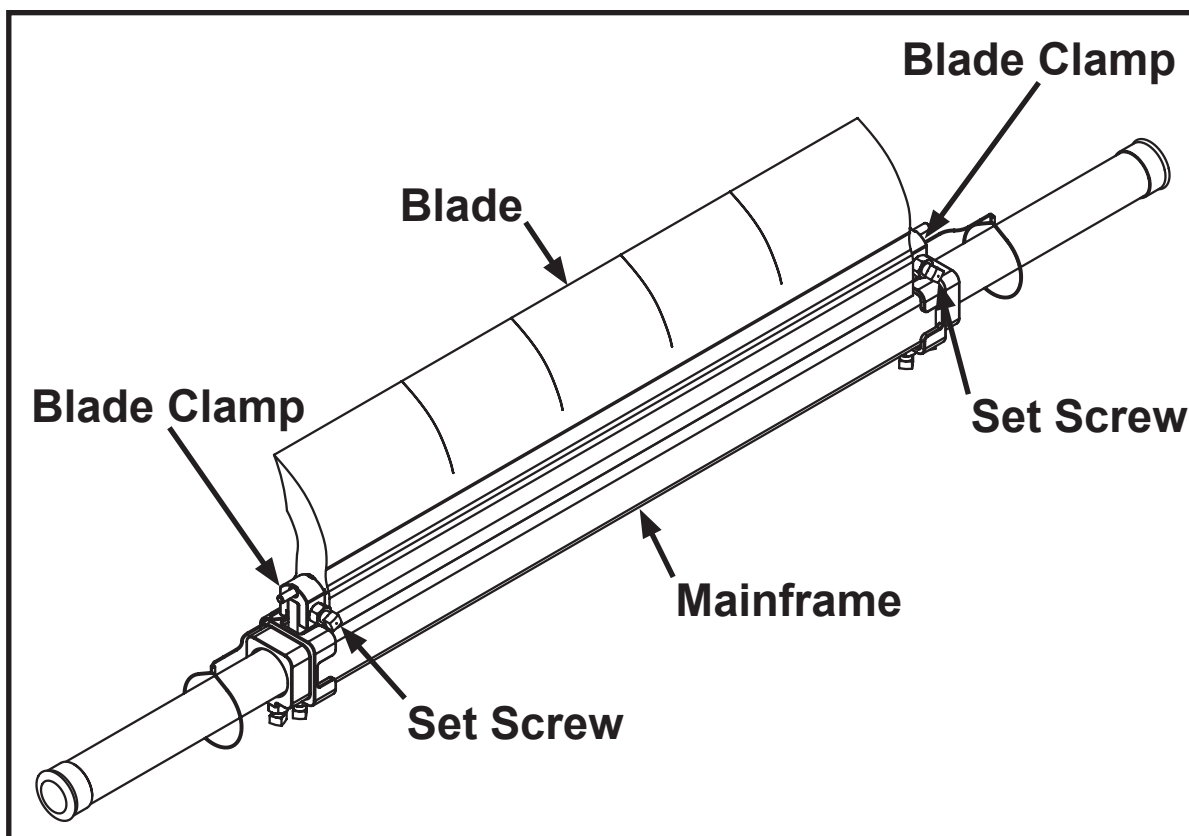


Figure 3. Removing and Installing Blade (Three-Piece Mainframe)

Removing blade

1. Loosen set screw on each blade clamp. Remove blade clamp from blade and mainframe. Make sure blade clamp lanyards remain attached to mainframe.
2. Remove blade from mainframe.

Installing tensioner

1. Install tensioner according to applicable tensioner's manual.
2. If using Martin® Inspection Door, install according to *Martin® Inspection Door Operator's Manual*, P/N M3891.

Installing blades

1. Install tensioner according to applicable tensioner's manual.
2. Install blade clamps onto mainframe and insert into blade.
3. Center blade on mainframe and tighten blade clamp set screws.
4. Make sure blades are centered on belt and mainframe is parallel to belt.
5. Tension belt cleaner according to applicable tensioner's manual.

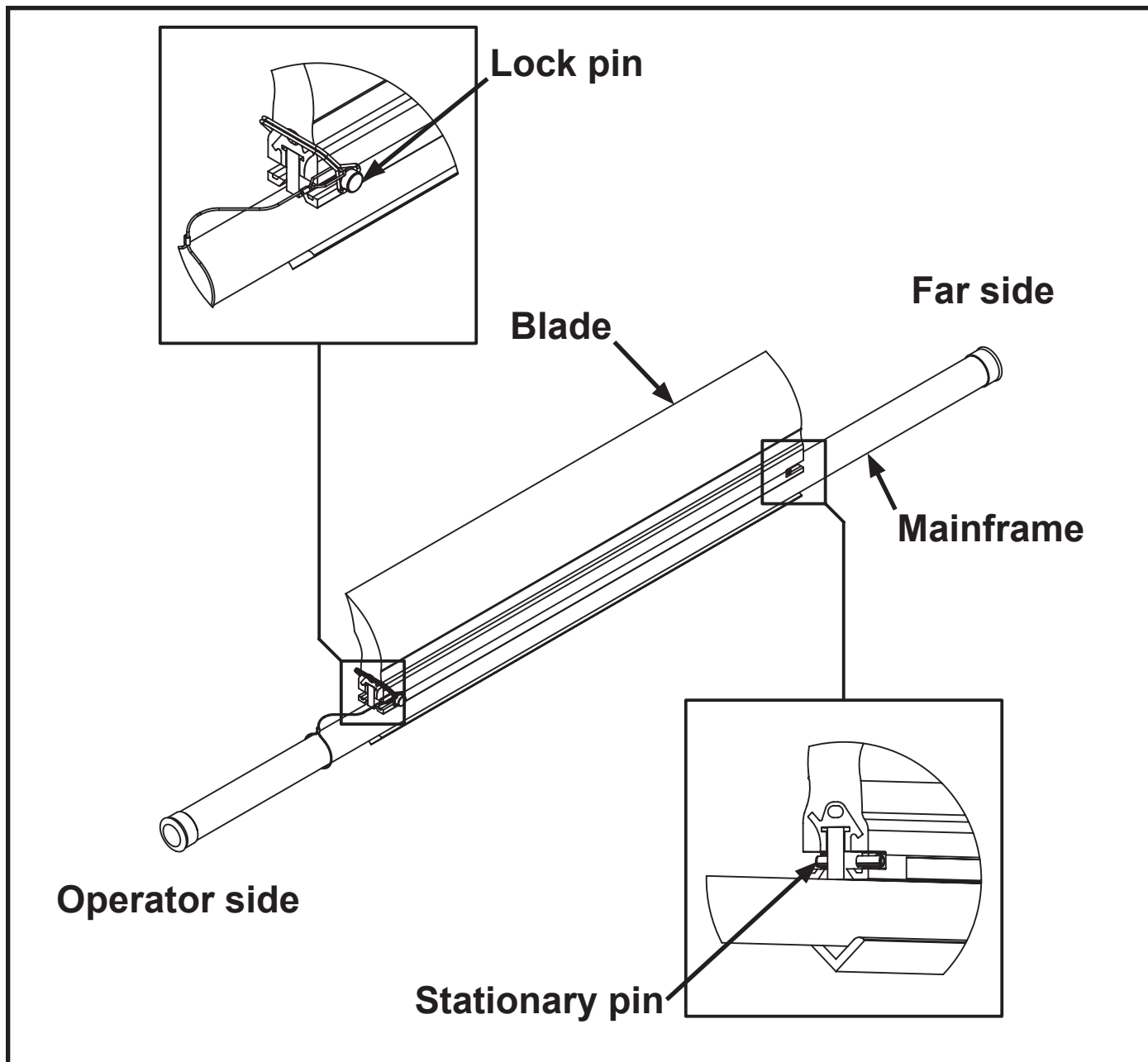


Figure 4. Removing and Installing Blade (One-Piece Mainframe)

Removing blade

1. Disengage lock pin from operator side of mainframe and blade.
2. Pull blade away from stationary pin on far side of mainframe, and remove from mainframe. Make sure lock pin lanyard remains attached to mainframe.

Installing tensioner

1. Install tensioner according to applicable tensioner's manual.
2. If using Martin® Inspection Door, install according to Martin® Inspection Door Operator's Manual, P/N M3891.

Installing blades

1. Position blade on mainframe with blade curve facing conveyor belt. Push far side end of blade against stationary pin until it locks.
2. If using Martin® Inspection Door, install according to Martin® Inspection Door Operator's Manual, P/N M3891.
3. Make sure blades are centered on belt and mainframe is parallel to belt.
4. Tension belt cleaner according to applicable tensioner's manual.

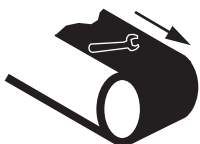
After Installing Belt Cleaner



1. Thoroughly wipe chute wall clean above tensioner.
2. Place Conveyor Products Warning Label (P/N 23395) on outside chute wall visible to belt cleaner operator.
3. Additional safety labels are available from CEMA. For more information regarding CEMA safety labels visit www.cemanet.org.

WARNING

Failure to remove tools from installation area and conveyor belt before turning on energy source can cause serious injury to personnel and damage to belt.



DANGER

Do not touch or go near conveyor belt or conveyor accessories when conveyor belt is running. Body or clothing can get caught and pull body into conveyor belt, causing severe injury or death.



4. Turn on conveyor belt for 1 hour, then turn off.

DANGER

Before installing, servicing, or adjusting the belt cleaner/tensioner, turn off and lockout / tagout / blockout / testout all energy sources to the conveyor and conveyor accessories according to ANSI standards. Failure to do so could result in serious injury or death.



- a. Make sure all fasteners are tight. Tighten if necessary.
- b. Make sure cleaner is not changing belt line. If it is, install belt support ahead of blade-to-belt contact point (Secondary Cleaner).
- c. Inspect belt cleaner for the following:
 - Wear. (A small amount of “break-in” wear may be found. This will stop once blades wear to conveyor belt contour.)
 - Material buildup. (No material between blades and return side of conveyor belt should be found.)
- d. If wear, material buildup, or some other problem exists, see “Troubleshooting.”

Weekly Maintenance

IMPORTANT

Read entire section before beginning work.

NOTE

Maintenance inspection should be performed no less than weekly. Some applications may require more frequent maintenance inspections.

⚠ DANGER

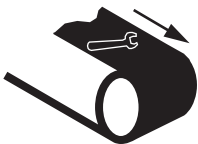
Before installing, servicing, or adjusting the belt cleaner/tensioner, turn off and lockout / tagout / blockout / testout all energy sources to the conveyor and conveyor accessories according to ANSI standards. Failure to do so could result in serious injury or death.



1. Remove any material from belt cleaner.
2. Make sure all fasteners are tight. Tighten if necessary.
3. Check tension on cleaner. Re-tension if necessary.
4. Wipe all labels clean. If labels are not readable, contact Martin Engineering or a representative for replacements.
5. Check blades for excessive wear. Replace if necessary.
6. Remove equipment from service if there is any indication it is not functioning properly. Call Martin Engineering or a representative for assistance. Do NOT return equipment to operation until the cause of the problem has been identified and corrected.

⚠ WARNING

Failure to remove tools from maintenance area and conveyor belt before turning on energy source can cause serious injury to personnel and damage to belt.



7. Remove all tools from maintenance area.

⚠ DANGER

Do not touch or go near conveyor belt or conveyor accessories when conveyor belt is running. Body or clothing can get caught and pull body into conveyor belt, causing severe injury or death.



8. Start conveyor belt. Observe belt cleaner operation for several revolutions of the belt. Service or adjust belt cleaner as necessary to ensure proper belt cleaner operation.

Troubleshooting

Symptom	Corrective Action
Insufficient cleaning and carryback.	<ul style="list-style-type: none"> • Tension of cleaner on belt is set too low or too high. Increase or decrease tensioner setting. • Blades are worn. Check blades and replace if necessary.
Blade wears only in the center.	<ul style="list-style-type: none"> • Use a segmented style blade for crown pulleys. • Consider narrowing the blade width to clean the middle of the belt.
Noise or vibration.	Tension is not sufficient or is set too high. Correct tension as necessary. If this does not correct problem, blade urethane may not match application. Contact Martin Engineering or representative.
High blade wear rate.	Tension of cleaner on belt is set too high. Reduce tensioner setting.
Unusual wear or damage to blades.	Check belt splice(s) and repair as necessary.
Bent or broken mainframe or support frame due to blade slipping through.	If blades are worn to or past the wear line, replace blades. If blades are not worn, check mainframe location.
Corrosion or chemical degradation.	Blade urethane may not match application. Contact Martin Engineering or representative.

NOTE

Conveyor equipment such as conveyor belt cleaners are subject to a wide variety of bulk materials characteristics and often have to perform under extreme operating or environmental conditions. It is not possible to predict all circumstances that may require troubleshooting. Contact Martin Engineering or a representative if you are experiencing problems other than those listed in the “Troubleshooting” chart above. Do not return the equipment to operation until the problem has been identified and corrected.

Installation checklist

If after taking the corrective actions suggested under “Troubleshooting” you are still experiencing problems, check for the following:

Installation Checklist
✓ Pre-Cleaner mainframe is proper distance from belt surface on both ends of mainframe and parallel to the pulley shaft.
✓ Pre-Cleaner blade tip is at or below horizontal center line of pulley and does not lie in path of material flow.
✓ Blades are centered on belt.

Part Numbers

This section provides product names and corresponding part numbers for Martin® QC1+™ Cleaner HD and related equipment. Please reference part numbers when ordering parts:

Martin® QC1+™ Cleaner HD

Martin® QC1+™ Cleaner HD Mainframe Assembly with Three Piece Mainframe: P/N C1QCH3SXXSXXXSX. See Figure 5.

NOMENCLATURE	C1QCH3	SXX	SX	X	X	X	X
P/N Prefix							
Belt Width (inches)							
Blade Width (inches)							
Urethane Color							
Solid/Segmented							
Mainframe							
Tensioner							

BELT WIDTH

00: No Blade

SXX: XX indicates belt width in inches (18 thru 96)

SA2: 102 Inches

SA8: 108 Inches

BLADE WIDTH

00: No Blade

S4: 4 Inches less Belt Width

S6: 6 Inches less Belt Width

S8: 8 Inches less Belt Width

SOLID/SEGMENTED

0: Segmented Blade/No Blade

1: Solid Blade

URETHANE COLOR

0: No Blade

B: Brown

T: Tan

G: Green

N: Navy Blue

O: Orange

C: Yellow with Ceramic Beads

TENSIONER

O: Martin® Twist Tensioner (P/N 31443)

T: Martin® Twist Tensioner (P/N 38850)

S: Martin® Spring Tensioner (P/N 38180)

MAINFRAME

E: Painted Steel with Extended Torque Tubes and Aluminum Blade Insert

F: Stainless Steel with Steel Blade Insert

P: Painted Steel with Aluminum Blade Insert

T: Painted Steel with Steel Blade Insert

Martin® QC1+™ Cleaner HD Mainframe Assembly with Three Piece Mainframe: P/N C1QCH3SXXSXXXXX. See Figure 5.

NOMENCLATURE	C1QCH1	SXX	SX	X	X	X	X
P/N Prefix							
Belt Width (inches)							
Blade Width (inches)							
Urethane Color							
Solid/Segmented							
Mainframe							
Tensioner							

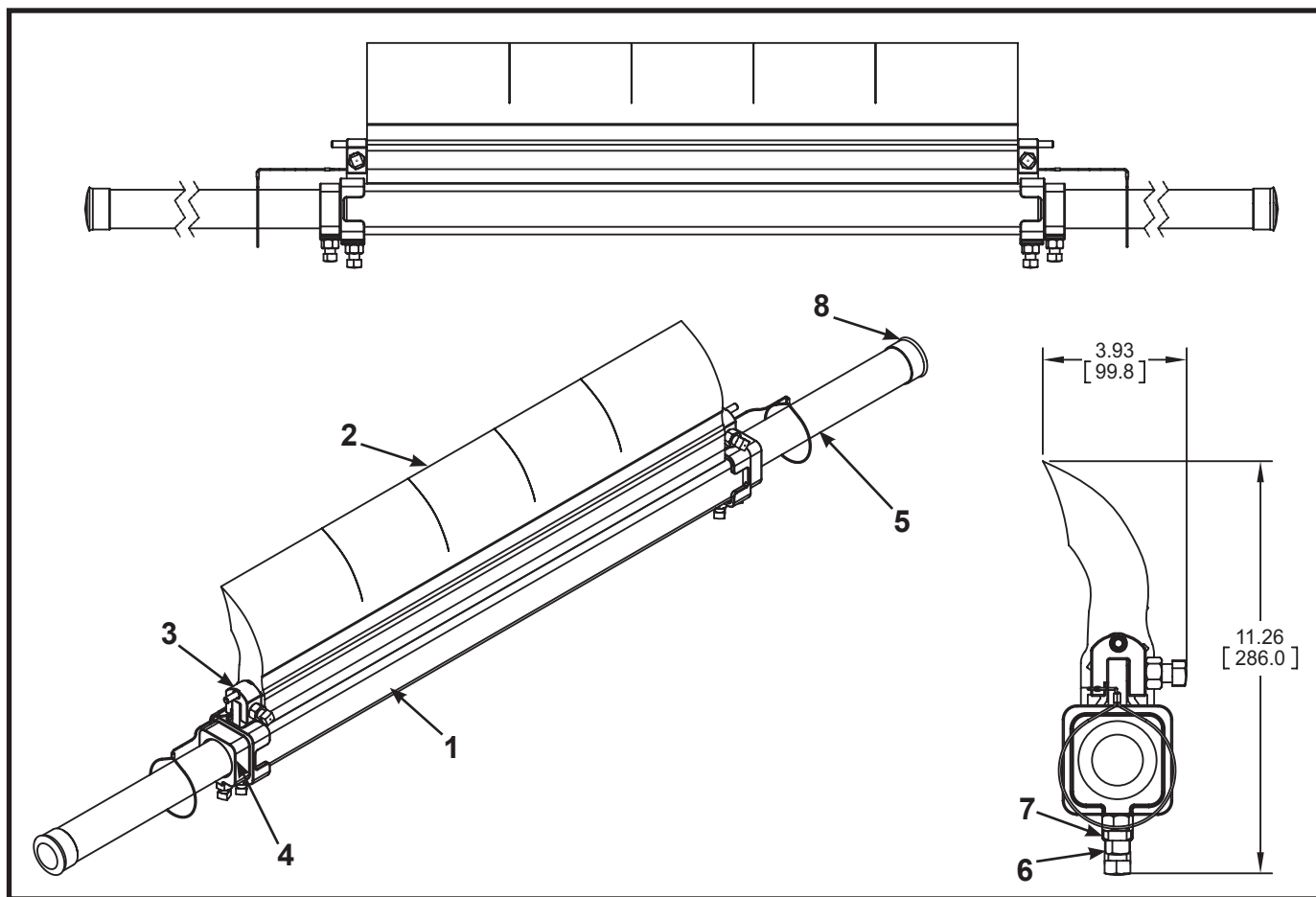
BELT WIDTH 000: No Blade SXX: XX indicates belt width in inches (18 thru 96)	URETHANE COLOR 0: No Blade B: Brown T: Tan G: Green N: Navy Blue O: Orange C: Yellow with Ceramic Beads	MAINFRAME P: Painted Steel with Aluminum Blade Insert T: Painted Steel with Steel Blade Insert
BLADE WIDTH 00: No Blade S2: 2 Inches less Belt Width S6: 6 Inches less Belt Width		TENSIONER O: Martin® Twist Tensioner (P/N 31443) T: Martin® Twist Tensioner (P/N 38850) S: Martin® Spring Tensioner (P/N 38180)
SOLID/SEGMENTED 0: No Blade 2: Segmented with slots 3: Solid with slots		

Operator's manuals

Martin® Spring and Air Tensioners Operator's Manual: P/N M3263.

Martin® Twist Tensioner Operator's Manual: P/N M3837.

Martin® Inspection Door Operator's Manual: P/N M3891.



**Figure 5. Martin® QC1+™ Cleaner HD with Three-Piece Mainframe Assembly,
P/N C1QCH3SXXSXXXXX**

Item	Description	Part Number	Qty
1	Mainframe Weldment	Table III	1
2	Blade	Table III	1
3	Mainframe Clamp	C1QCA1002ST	2
4	Collar	C1QCA1004ST	2
5	Torque Tube	Table III	2
6	Screw SHS 1/2-13NC x 1-1/4 SS	30488	2
7	Nut Hex 1/2-13NC ZP	11771	6
8	Vinyl Cap W/Flange	SUS10141	2
(NS) 9	Label Martin® Products	38048	6
(NS) 10	Label Conveyor Products Warning	23395	2
(NS) 11	Manual Operator's	M4124	2
(NS) 12	Tensioner Assembly	Table V	1

NS = Not Shown

**Table III. Martin® QC1+™ Cleaner HD with Three-Piece Mainframe Assembly
Hardware Part Numbers (Sheet 1 of 2)**

Part Number	P/N Item 1	P/N Item 2	P/N Item 5
C1QCH3S18S4XXPX	C1QCH3MS18P	C1QCHBS18S4XX	C1QATTS16
C1QCH3S18S6XXPX	C1QCH3MS18P	C1QCHBS18S6XX	C1QATTS16
C1QCH3S18S8XXPX	C1QCH3MS18P	C1QCHBS18S8XX	C1QATTS16
C1QCH3S24S4XXPX	C1QCH3MS24P	C1QCHBS24S4XX	C1QATTS19
C1QCH3S24S6XXPX	C1QCH3MS24P	C1QCHBS24S6XX	C1QATTS19
C1QCH3S24S8XXPX	C1QCH3MS24P	C1QCHBS24S8XX	C1QATTS19
C1QCH3S30S4XXPX	C1QCH3MS30P	C1QCHBS30S4XX	C1QATTS19
C1QCH3S30S6XXPX	C1QCH3MS30P	C1QCHBS30S6XX	C1QATTS19
C1QCH3S30S8XXPX	C1QCH3MS30P	C1QCHBS30S8XX	C1QATTS19
C1QCH3S36S4XXPX	C1QCH3MS36P	C1QCHBS36S4XX	C1QATTS24
C1QCH3S36S6XXPX	C1QCH3MS36P	C1QCHBS36S6XX	C1QATTS24
C1QCH3S36S8XXPX	C1QCH3MS36P	C1QCHBS36S8XX	C1QATTS24
C1QCH3S42S4XXPX	C1QCH3MS42P	C1QCHBS42S4XX	C1QATTS24
C1QCH3S42S6XXPX	C1QCH3MS42P	C1QCHBS42S6XX	C1QATTS24
C1QCH3S42S8XXPX	C1QCH3MS42P	C1QCHBS42S8XX	C1QATTS24
C1QCH3S48S4XXPX	C1QCH3MS48P	C1QCHBS48S4XX	C1QATTS24
C1QCH3S48S6XXPX	C1QCH3MS48P	C1QCHBS48S6XX	C1QATTS24
C1QCH3S48S8XXPX	C1QCH3MS48P	C1QCHBS48S8XX	C1QATTS24
C1QCH3S54S4XXPX	C1QCH3MS54P	C1QCHBS54S4XX	C1QATTS24
C1QCH3S54S6XXPX	C1QCH3MS54P	C1QCHBS54S6XX	C1QATTS24
C1QCH3S54S8XXPX	C1QCH3MS54P	C1QCHBS54S8XX	C1QATTS24
C1QCH3S60S4XXPX	C1QCH3MS60P	C1QCHBS60S4XX	C1QATTS30
C1QCH3S60S6XXPX	C1QCH3MS60P	C1QCHBS60S6XX	C1QATTS30
C1QCH3S60S8XXPX	C1QCH3MS60P	C1QCHBS60S8XX	C1QATTS30
C1QCH3S66S4XXPX	C1QCH3MS66P	C1QCHBS66S4XX	C1QATTS30
C1QCH3S66S6XXPX	C1QCH3MS66P	C1QCHBS66S6XX	C1QATTS30
C1QCH3S66S8XXPX	C1QCH3MS66P	C1QCHBS66S8XX	C1QATTS30
C1QCH3S72S4XXPX	C1QCH3MS72P	C1QCHBS72S4XX	C1QATTS30
C1QCH3S72S6XXPX	C1QCH3MS72P	C1QCHBS72S6XX	C1QATTS30
C1QCH3S72S8XXPX	C1QCH3MS72P	C1QCHBS72S8XX	C1QATTS30
C1QCH3S78S4XXPX	C1QCH3MS78P	C1QCHBS78S4XX	C1QATTS42
C1QCH3S78S6XXPX	C1QCH3MS78P	C1QCHBS78S6XX	C1QATTS42
C1QCH3S78S8XXPX	C1QCH3MS78P	C1QCHBS78S8XX	C1QATTS42
C1QCH3S84S4XXPX	C1QCH3MS84P	C1QCHBS84S4XX	C1QATTS42
C1QCH3S84S6XXPX	C1QCH3MS84P	C1QCHBS84S6XX	C1QATTS42
C1QCH3S84S8XXPX	C1QCH3MS84P	C1QCHBS84S8XX	C1QATTS42
C1QCH3S90S4XXPX	C1QCH3MS90P	C1QCHBS90S4XX	C1QATTS42
C1QCH3S90S6XXPX	C1QCH3MS90P	C1QCHBS90S6XX	C1QATTS42
C1QCH3S90S8XXPX	C1QCH3MS90P	C1QCHBS90S8XX	C1QATTS42
C1QCH3S96S4XXPX	C1QCH3MS96P	C1QCHBS96S4XX	C1QATTS42
C1QCH3S96S6XXPX	C1QCH3MS96P	C1QCHBS96S6XX	C1QATTS42
C1QCH3S96S8XXPX	C1QCH3MS96P	C1QCHBS96S8XX	C1QATTS42

**Table III. Martin® QC1+™ Cleaner HD with Three-Piece Mainframe Assembly
Hardware Part Numbers (Sheet 2 of 2)**

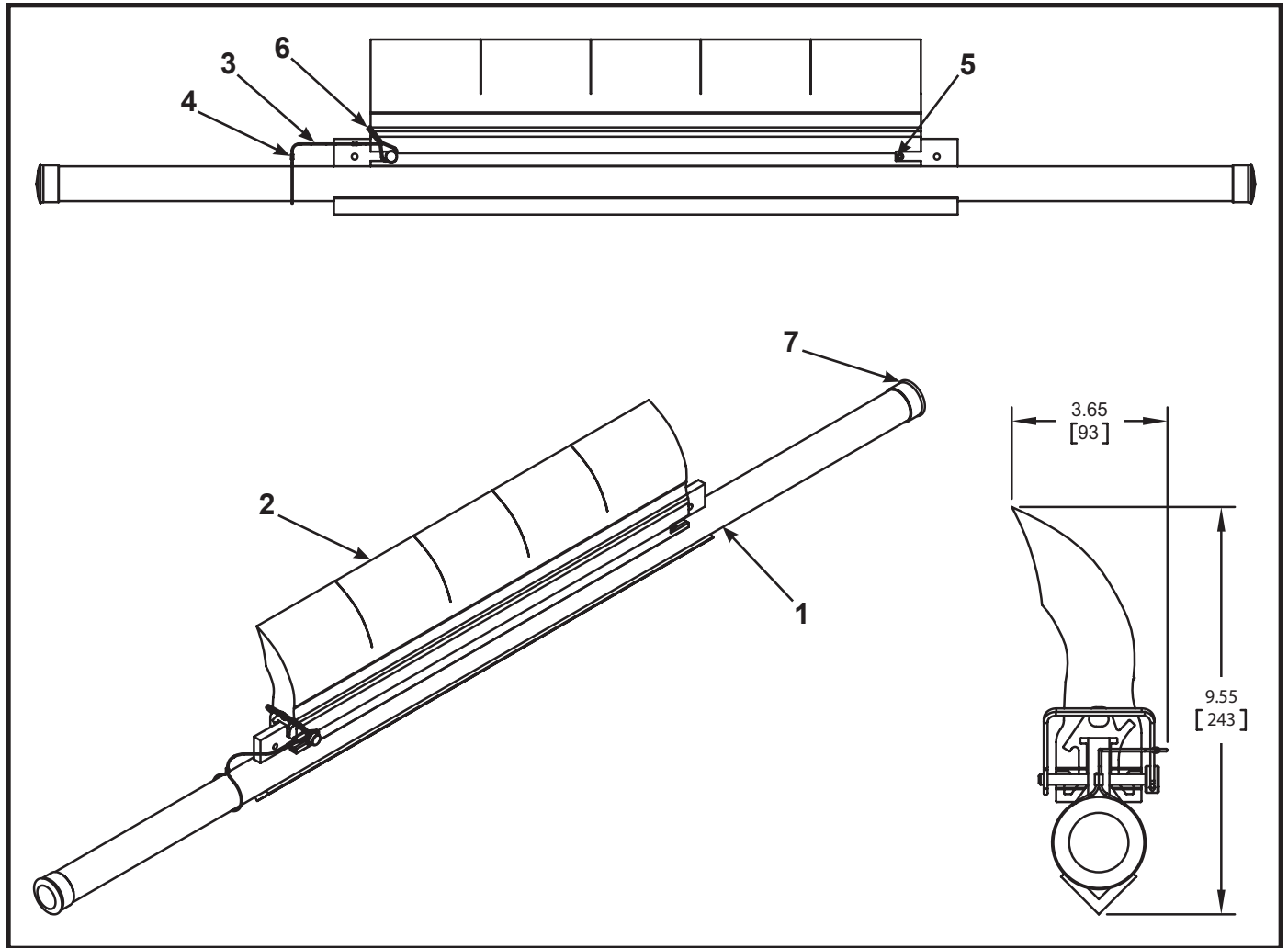
Part Number	P/N Item 1	P/N Item 2	P/N Item 5
C1QCH3SA2S4XXPX	C1QCH3MSA2P	C1QCHBSA2S4XX	C1QATTS42
C1QCH3SA2S6XXPX	C1QCH3MSA2P	C1QCHBSA2S6XX	C1QATTS42
C1QCH3SA2S8XXPX	C1QCH3MSA2P	C1QCHBSA2S8XX	C1QATTS42
C1QCH3SA8S4XXPX	C1QCH3MSA8P	C1QCHBSA4SXXX	C1QATTS42
C1QCH3SA8S6XXPX	C1QCH3MSA8P	C1QCHBSA2SXXX	C1QATTS42
C1QCH3SA8S8XXPX	C1QCH3MSA8P	C1QCHBSA0SXXX	C1QATTS42

**Table IV. Martin® QC1+™ Cleaner HD with Three-Piece Mainframe Assembly
Blade Color Part Number Chart**

Part Number	Blade Color & Segmented or Solid	P/N Item 2
C1QCH3SXXSXB0PX	Seg Brown	C1QCHBSXXSXB0
C1QCH3SXXSXB1PX	Sol Brown	C1QCHBSXXSXB1
C1QCH3SXXSXT0PX	Seg Tan	C1QCHBSXXSXT0
C1QCH3SXXSXT1PX	Sol Tan	C1QCHBSXXSXT1
C1QCH3SXXSXG0PX	Seg Green	C1QCHBSXXSXG0
C1QCH3SXXSXG1PX	Sol Green	C1QCHBSXXSXG1
C1QCH3SXXSXN0PX	Seg Navy Blue	C1QCHBSXXSXN0
C1QCH3SXXSXN1PX	Sol Navy Blue	C1QCHBSXXSXN1
C1QCH3SXXSXO0PX	Seg Orange	C1QCHBSXXSXO0
C1QCH3SXXSXO1PX	Sol Orange	C1QCHBSXXSXO1
C1QCH3SXXSXC1PX	Sol Yellow W/ Ceramic Beads	C1QCHBSXXSXC1

**Table V. Martin® QC1+™ Cleaner HD with Three-Piece Mainframe Assembly
Tensioner Chart**

Belt Width	P/N Item 11 Twist Tensioner	P/N Item 11 Spring Arm Tensioner	P/N Item 11 SS Spring Tensioner	P/N Item 11 Steel Twist Tensioner	P/N Item 11 SS Twist Tensioner
18 THRU 48	38850	38180	38180-SS	31443	31443-SS
54 AND ABOVE	38850-2	38180-2	38180-2SS	31443-2R	31443-DSS



**Figure 6. Martin® QC1+™ Cleaner HD with One-Piece Mainframe Assembly,
P/N C1QCH1SXXSXXXXX**

Item	Description	Part Number	Qty
1	Mainframe Weldment	Table VI	1
2	Blade	Table VI	1
3	Lanyard Cable	102249	2 ft
4	Clip Cable	28112	2
5	Pin Slotted Spring 5/16 x 2 ZP	32774	1
6	Pin Wire Lock 1/4 x 2-1/2 SS	32772	1
7	Vinyl Cap W/Flange	SUS10141	2
(NS) 8	Label Martin® Products	38048	2
(NS) 9	Label Conveyor Products Warning	23395	2
(NS) 10	Manual Operator's	M4124	1
(NS) 11	Martin® Tensioner Assembly	Table VIII	1

NS = Not Shown

**Table VI. Martin® QC1+™ Cleaner HD with One-Piece Mainframe Assembly
Hardware Part Numbers**

Part Number	P/N Item 1	P/N Item 2
C1QCH1S18S2XXPX	C1QCH1MS18S2P	C1QCHBS18S2XX
C1QCH1S18S6XXPX	C1QCH1MS18S2P	C1QCHBS18S6XX
C1QCH1S24S2XXPX	C1QCH1MS24S2P	C1QCHBS24S2XX
C1QCH1S24S6XXPX	C1QCH1MS24S2P	C1QCHBS24S6XX
C1QCH1S30S2XXPX	C1QCH1MS30S2P	C1QCHBS30S2XX
C1QCH1S30S6XXPX	C1QCH1MS30S2P	C1QCHBS30S6XX
C1QCH1S36S2XXPX	C1QCH1MS36S2P	C1QCHBS36S2XX
C1QCH1S36S6XXPX	C1QCH1MS36S2P	C1QCHBS36S6XX
C1QCH1S42S2XXPX	C1QCH1MS42S2P	C1QCHBS42S2XX
C1QCH1S42S6XXPX	C1QCH1MS42S2P	C1QCHBS42S6XX
C1QCH1S48S2XXPX	C1QCH1MS48S2P	C1QCHBS48S2XX
C1QCH1S48S6XXPX	C1QCH1MS48S2P	C1QCHBS48S6XX
C1QCH1S54S2XXPX	C1QCH1MS54S2P	C1QCHBS54S2XX
C1QCH1S54S6XXPX	C1QCH1MS54S2P	C1QCHBS54S6XX
C1QCH1S60S2XXPX	C1QCH1MS60S2P	C1QCHBS60S2XX
C1QCH1S60S6XXPX	C1QCH1MS60S2P	C1QCHBS60S6XX
C1QCH1S66S2XXPX	C1QCH1MS66S2P	C1QCHBS66S2XX
C1QCH1S66S6XXPX	C1QCH1MS66S2P	C1QCHBS66S6XX
C1QCH1S72S2XXPX	C1QCH1MS72S2P	C1QCHBS72S2XX
C1QCH1S72S6XXPX	C1QCH1MS72S2P	C1QCHBS72S6XX
C1QCH1S78S2XXPX	C1QCH1MS78S2P	C1QCHBS78S2XX
C1QCH1S78S6XXPX	C1QCH1MS78S2P	C1QCHBS78S6XX
C1QCH1S84S2XXPX	C1QCH1MS84S2P	C1QCHBS84S2XX
C1QCH1S84S6XXPX	C1QCH1MS84S2P	C1QCHBS84S6XX
C1QCH1S90S2XXPX	C1QCH1MS90S2P	C1QCHBS90S2XX
C1QCH1S90S6XXPX	C1QCH1MS90S2P	C1QCHBS90S6XX
C1QCH1S96S2XXPX	C1QCH1MS96S2P	C1QCHBS96S2XX
C1QCH1S96S6XXPX	C1QCH1MS96S2P	C1QCHBS96S6XX

**Table VII. Martin® QC1+™ Cleaner HD with One-Piece Mainframe Assembly
Blade Color Part Number Chart**

Part Number	Blade Color & Segmented or Solid	P/N Item 2
C1QCH1SXXSXB2PX	Seg Brown	C1QCHBSXXSXB2
C1QCH1SXXSXB3PX	Sol Brown	C1QCHBSXXSXB3
C1QCH1SXXSXT2PX	Seg Tan	C1QCHBSXXSXT2
C1QCH1SXXSXT3PX	Sol Tan	C1QCHBSXXSXT3
C1QCH1SXXSXG2PX	Seg Green	C1QCHBSXXSXG2
C1QCH1SXXSXG3PX	Sol Green	C1QCHBSXXSXG3
C1QCH1SXXSXN2PX	Seg Navy Blue	C1QCHBSXXSXN2
C1QCH1SXXSXN3PX	Sol Navy Blue	C1QCHBSXXSXN3
C1QCH1SXXSXO2PX	Seg Orange	C1QCHBSXXSXO2
C1QCH1SXXSXO3PX	Sol Orange	C1QCHBSXXSXO3
C1QCH1SXXSXC3PX	Sol Yellow W/ Ceramic Beads	C1QCHBSXXSXC3

**Table VIII. Martin® QC1+™ Cleaner HD with One-Piece Mainframe Assembly
Tensioner Chart**

Belt Width	P/N Item 11 Twist Tensioner	P/N Item 11 Spring Arm Tensioner	P/N Item 11 Steel Twist Tensioner
18 THRU 48	38850	38180	31443
54 AND ABOVE	38850-2	38180-2	31443-2R

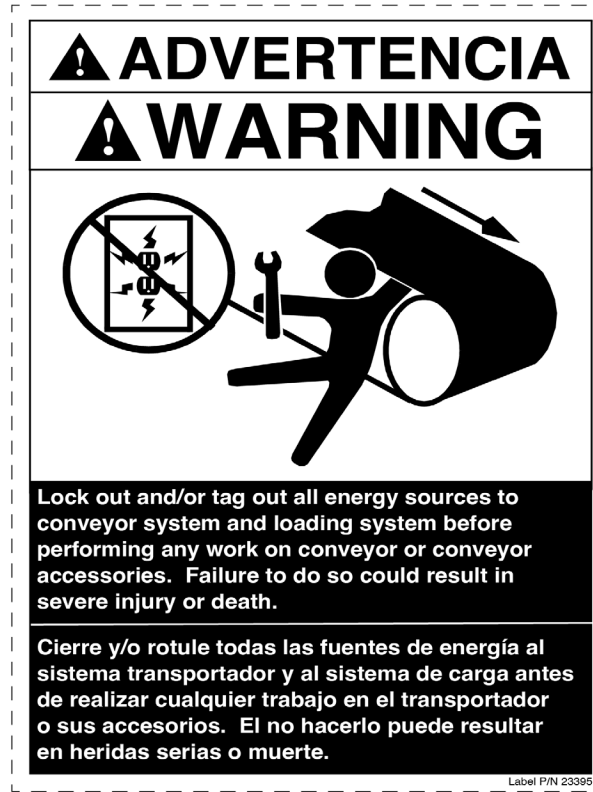
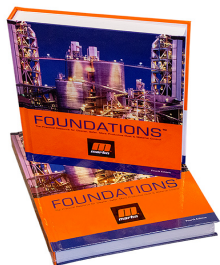


Figure 7. Conveyor Products Warning Label, P/N 23395

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