



Martin® QC1™ Cleaner HD

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***Operator's Manual
M3618***

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) z244.1-1982, *American National Standard for Personnel Protection - Lockout/Tagout of Energy Sources - Minimum Safety Requirements* and Occupational Safety and Health Administration (OSHA) Federal Register, Part IV, 29 CFR Part 1910, *Control of Hazardous Energy Source (Lockout/Tagout); Final Rule*.

The following symbols may be used in this manual:



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



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



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



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



Note: General statements to assist the reader.

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General

The Martin® QC1™ Cleaner HD combines effective removal of carryback with “quick-change” one-pin 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, at least one 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

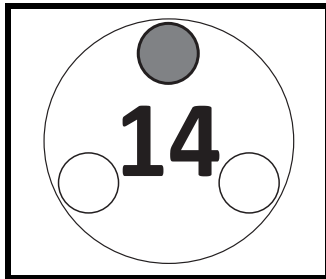
Installation of this equipment requires the use of standard hand tools, grinder, welder, and cutting torch.

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°C)

IMPORTANT*Urethane shelf life*

Urethane put in service after exceeding its 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

Safety

All safety rules defined in the above documents and all owner/employer safety rules must be strictly followed when working on the belt cleaner.



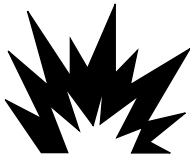
⚠ DANGER

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.



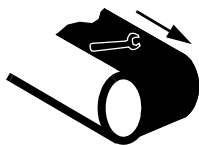
⚠ DANGER

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.



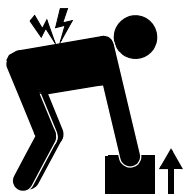
⚠ WARNING

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.

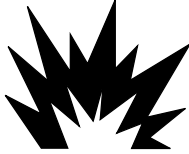


⚠ DANGER

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.

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.")

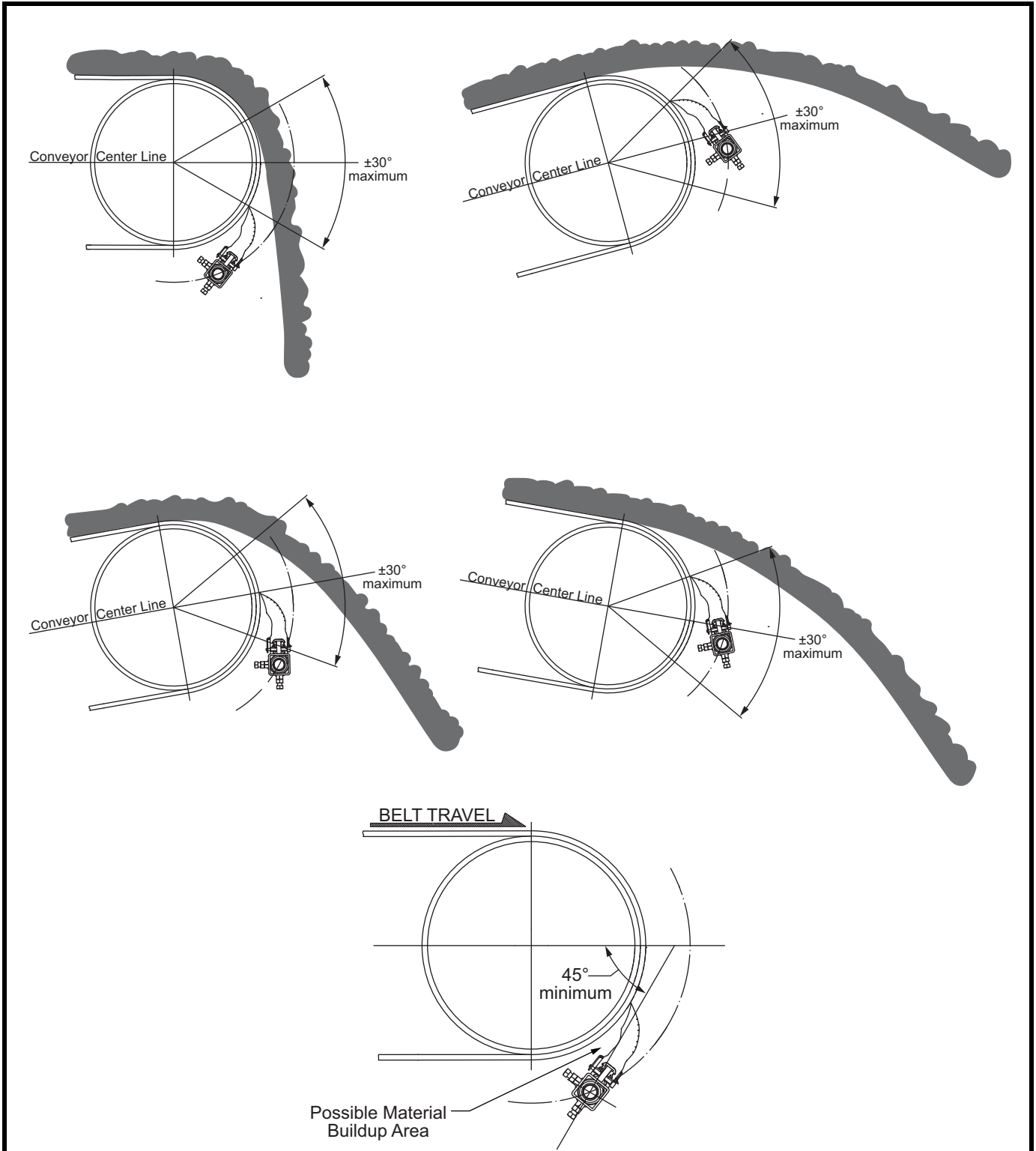


Figure 1. Belt Cleaner Mounting Locations

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

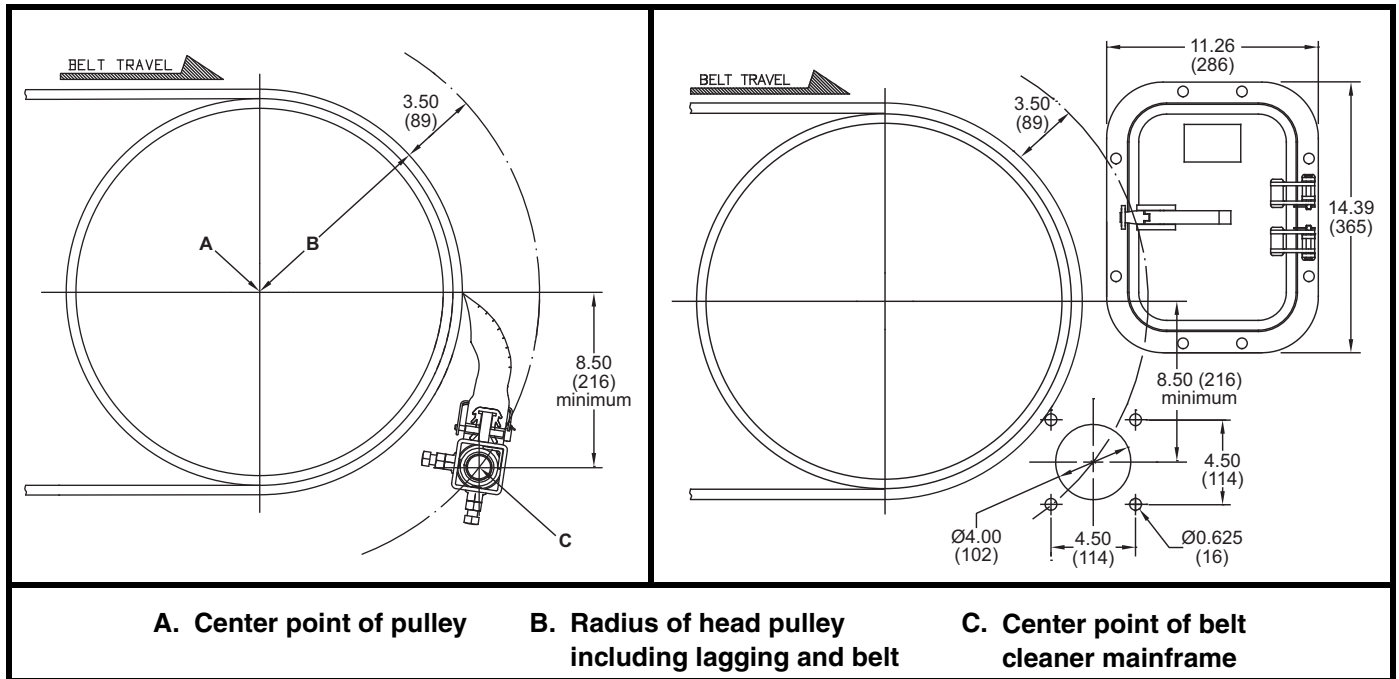


Figure 2. Belt Cleaner Mainframe Location & Chute Wall Cutouts

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 as follows:
 - 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.

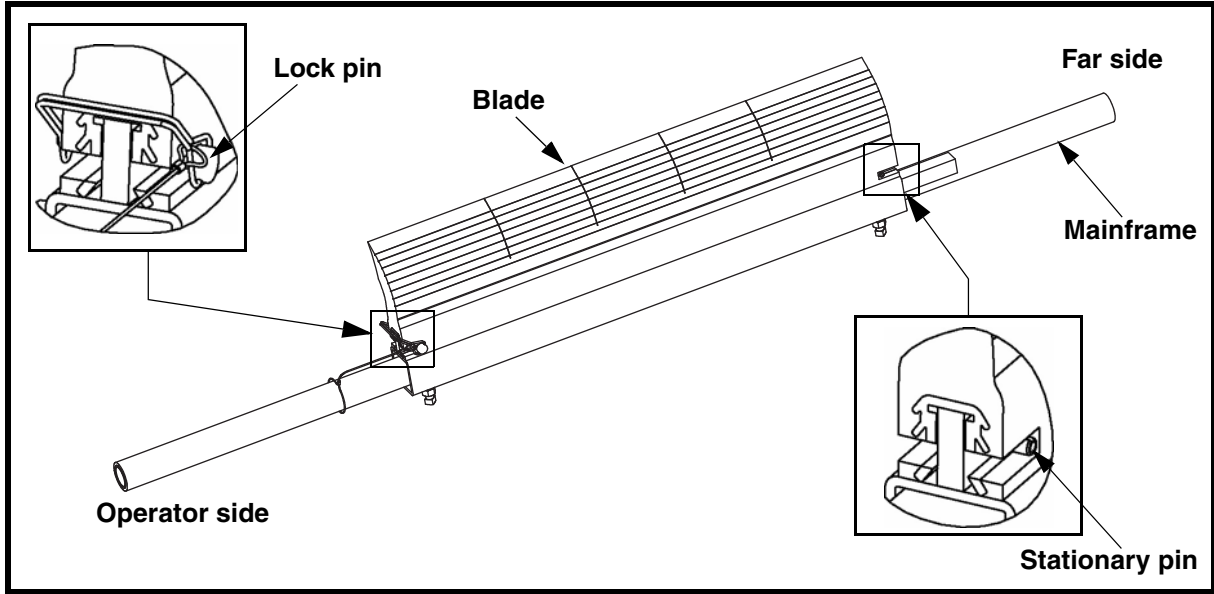


Figure 3. Removing and Installing Blade

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 blade

1. Position blade on mainframe with blade curve facing conveyor belt. Push far side end of blade against stationary pin until it locks.
2. Insert lock pin in mainframe and blade.
3. Make sure blades are centered on belt and mainframe is parallel to belt.
4. Tension belt cleaner according to applicable tensioner's manual.

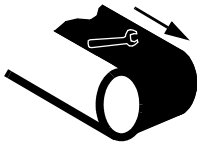
After Installing Belt Cleaner



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, 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. Inspect belt cleaner for the following:
 - (1) Wear. (A small amount of “break-in” wear may be found. This will stop once blades wear to conveyor belt contour.)
 - (2) Material buildup. (No material between blades and return side of conveyor belt should be found.)
- c. 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.



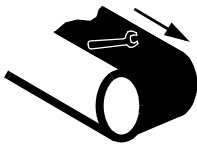
⚠ DANGER

Before installing, servicing, or adjusting the belt cleaner, 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 a 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 does not lie in path of material flow.
✓ Blades are centered on belt.

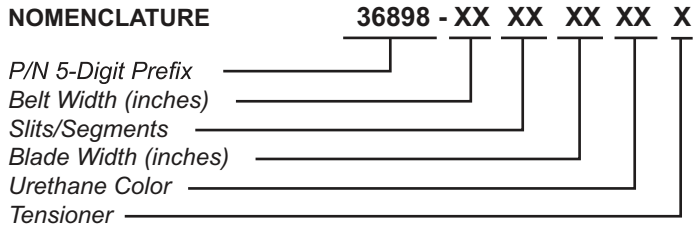
Part Numbers

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:
P/N 36898-XXXXXXXX. See Figure 4.

Martin® QC1™ Cleaner HD Assembly less Pipe End Weldments:
P/N 36899-XXXXXXXX. See Figure 5.



SLITS/SEGMENTS

- 11:** No slits or segments
- 10:** Segments only
- 01:** Slits only
- 00:** Slits & Segments

URETHANE COLOR

- BR:** Brown
- NB:** Navy Blue
- GR:** Green
- CL:** Tan
- Blank:** Orange

TENSIONER

- T:** Martin® Twist Tensioner
- S:** Martin® Spring Tensioner

Recommended Tensioners

Belts 18 to 48 in. wide:

Martin® Twist Tensioner: P/N 38850.

Martin® Twist Tensioner with “L” Bracket: P/N 38850-L.

Martin® Spring Tensioner: P/N 38180

Belts 18 to 54 in. wide:

Martin® Air Bag Tensioner: P/N 32745.

Belts 54 to 96 in. wide:

Dual Martin® Twist Tensioners: P/N 38850-2.

Dual Martin® Twist Tensioners with “L” Bracket: P/N 38850-2L.

Dual Martin® Spring Tensioners: P/N 38180-2

Belts 60 to 96 in. wide:

Dual Martin® Air Bag Tensioners: P/N 32745-2R.

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.

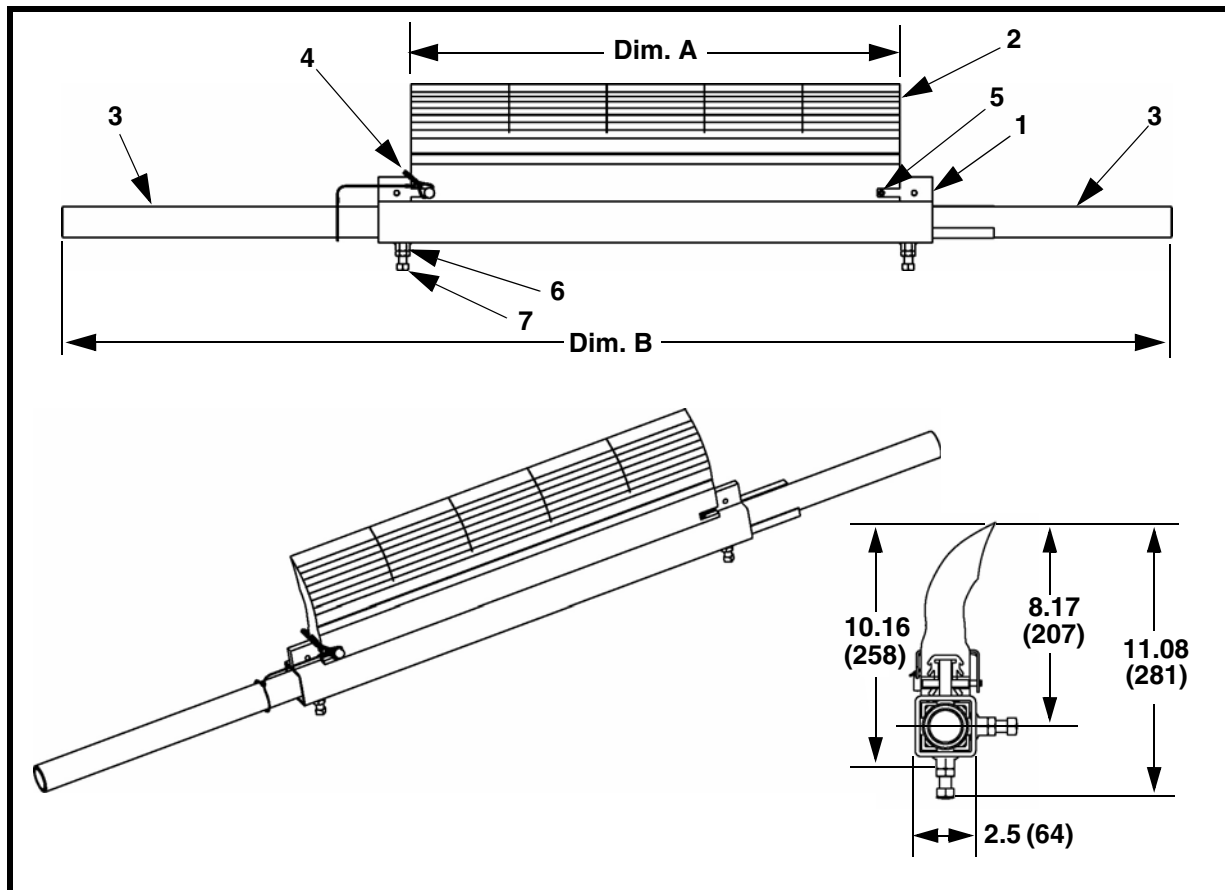


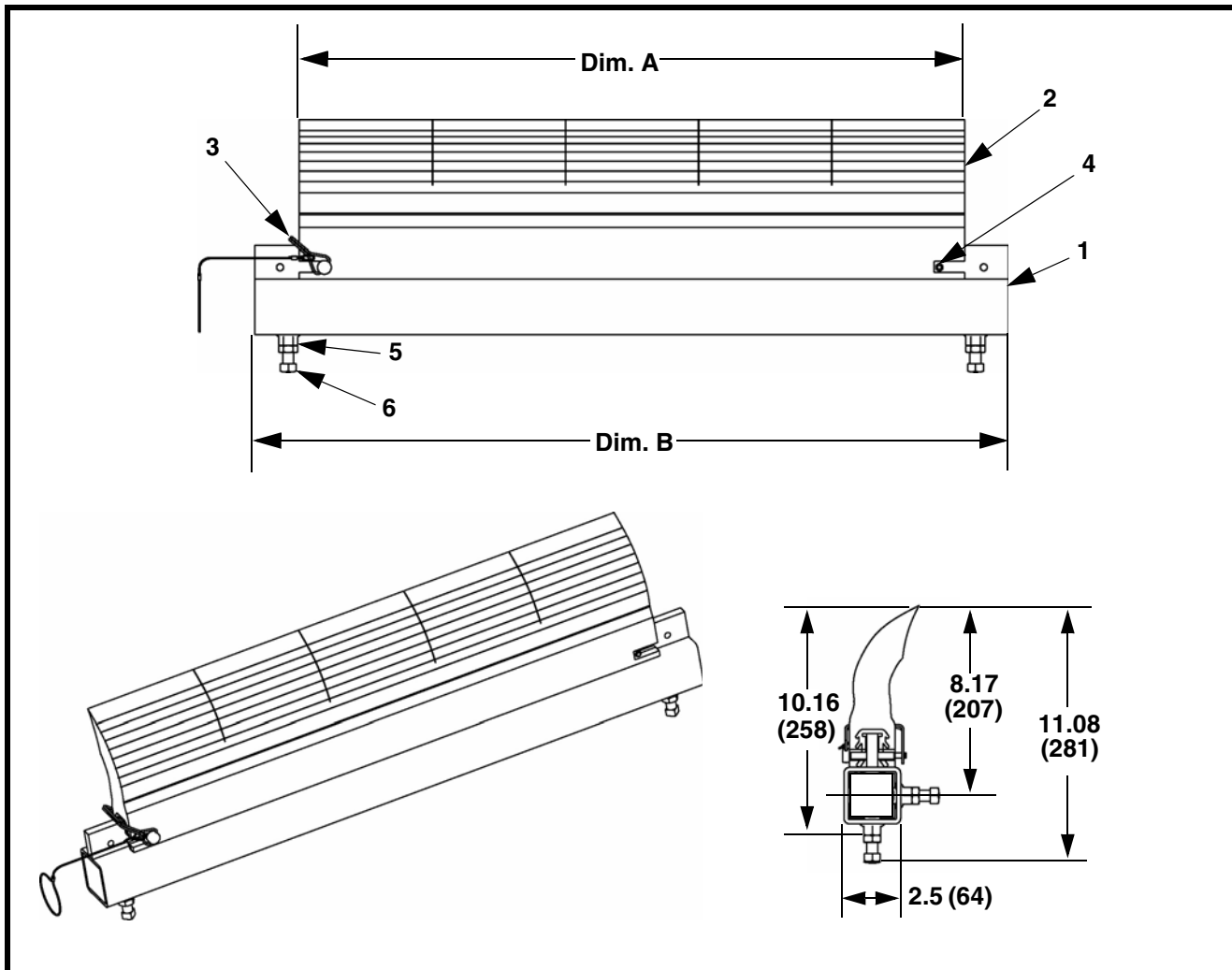
Figure 4. Martin[®] QC1™ Cleaner HD Assembly, P/N 36898-XXXXXXXXXX

Item	Description	Part No.	Qty.
1	Mainframe Weldment	Table III	1
2	Heavy-Duty Blade	Table III	1
3	Pipe End Weldment	Table III	1
4	Lock Pin Lanyard Assembly	38168	1
5	Pin Slotted Spring 5/16 x 2 ZP	32774	1
6	Nut Hex Jam 1/2 - 13 NC ZP	11771	4
7	Screw SHS 1/2 - 13NC x 1-1/2 SS	33190	4
8 (NS)	Label Martin [®] Products	38048	2
9 (NS)	Label Conveyor Products Warning	23395	2
10 (NS)	Manual Operator's	M3618	1
11 (NS)	Martin [®] Twist Tensioner Assembly	38850/38850-2	1
12 (NS)	Martin [®] Spring Tensioner Assembly	38180/38180-2	1

NS = Not Shown

Table III. Part Numbers and Dimensions for Martin® QC1™ Cleaner HD Assembly

Standard Blade Assy. Part No.	Dim. A in. (mm)	Dim. B in. (mm)	Item No. 1	Item No. 2	Item No. 3 One Each		Weight (lbs.) w/o Tensioner
36898-18XX12XXX	12 (305)	44 (1118)	36897-18	35381-18XX12	30354-01	30354-02	33.1
36898-18XX16XXX	16 (406)	44 (1118)	36897-18	35381-18XX16	30354-01	30354-02	35.2
36898-24XX18XXX	18 (457)	50 (1270)	36897-24	35381-24XX18	30354-02	30354-02	42.3
36898-24XX22XXX	22 (559)	50 (1270)	36897-24	35381-24XX22	30354-02	30354-02	44.4
36898-30XX24XXX	24 (610)	62 (1575)	36897-30	35381-30XX24	30354-02	30354-03	53.1
36898-30XX28XXX	28 (711)	62 (1575)	36897-30	35381-30XX28	30354-02	30354-03	55.2
36898-36XX28XXX	28 (711)	68 (1727)	36897-36	35381-30XX28	30354-02	30354-03	59.0
36898-36XX30XXX	30 (762)	68 (1727)	36897-36	35381-36XX30	30354-02	30354-03	60.5
36898-36XX34XXX	34 (864)	68 (1727)	36897-36	35381-36XX34	30354-02	30354-03	62.6
36898-42XX36XXX	36 (914)	74 (1880)	36897-42	35381-42XX36	30354-02	30354-03	67.8
36898-42XX40XXX	40 (1016)	74 (1880)	36897-42	35381-42XX40	30354-02	30354-03	70.0
36898-48XX36XXX	36 (914)	80 (2032)	36897-42	35381-42XX36	30354-03	30354-03	71.3
36898-48XX42XXX	42 (1067)	80 (2032)	36897-48	35381-48XX42	30354-02	30354-03	75.2
36898-48XX46XXX	46 (1168)	80 (2032)	36897-48	35381-48XX46	30354-02	30354-03	77.3
36898-54XX48XXX	48 (1219)	86 (2184)	36897-54	35381-54XX48	30354-02	30354-03	82.5
36898-54XX52XXX	52 (1321)	86 (2184)	36897-54	35381-54XX52	30354-02	30354-03	84.6
36898-60XX54XXX	54 (1372)	98 (2489)	36897-60	35381-60XX54	30354-03	30354-03	93.3
36898-60XX58XXX	58 (1473)	98 (2489)	36897-60	35381-60XX58	30354-03	30354-03	95.5
36898-66XX60XXX	60 (1524)	104 (2642)	36897-66	35381-66XX60	30354-03	30354-03	100.7
36898-66XX64XXX	64 (1626)	104 (2642)	36897-66	35381-66XX64	30354-03	30354-03	102.8
36898-72XX66XXX	66 (1676)	110 (2794)	36897-72	35381-72XX66	30354-03	30354-03	108.1
36898-72XX70XXX	70 (1778)	110 (2794)	36897-72	35381-72XX70	30354-03	30354-03	110.1
36898-78XX72XXX	72 (1829)	117 (2972)	36897-78	35381-78XX72	30354-06	-	135.1
36898-78XX76XXX	76 (1930)	117 (2972)	36897-78	35381-78XX76	30354-06	-	137.2
36898-81XX81XXX	81 (2057)	123 (3124)	36897-81	35381-81XX81	30354-04	-	145.0
36898-84XX78XXX	78 (1981)	123 (3124)	36897-84	35381-84XX78	30354-04	-	144.2
36898-84XX82XXX	82 (2083)	123 (3124)	36897-84	35381-84XX82	30354-04	-	146.3
36898-90XX84XXX	84 (2134)	129 (3277)	36897-90	35381-90XX84	30354-15		166.5
36898-96XX90XXX	90 (2286)	135 (3429)	36897-96	35381-96XX90	30354-05	-	176.3
36898-96XX94XXX	94 (2388)	135 (3429)	36897-96	35381-96XX94	30354-05	-	178.5



**Figure 5. Martin® QC1™ Cleaner HD Assembly
Less Pipe End Weldments, P/N 36899-XXXXXXXX**

Item	Description	Part No.	Qty
1	Mainframe Weldment	Table IV	1
2	Heavy-Duty Blade	Table IV	1
3	Lock Pin Lanyard Assembly	38168	1
4	Pin Slotted Spring 5/16 x 2 ZP	32774	1
5	Nut Hex Jam 1/2 - 13 NC ZP	11771	4
6	Screw SHS 1/2 - 13NC x 1-1/2 SS	33190	4
7 (NS)	Label Martin® Products	38048	2
8 (NS)	Label Conveyor Products Warning	23395	2
9 (NS)	Manual Operator's	M3618	1

NS = Not Shown

**Table IV. Part Numbers and Dimensions for Martin® QC1™ Cleaner HD Assembly
Less Pipe End Weldments**

Part No.	Dim. A in. (mm)	Dim. B in. (mm)	Item No.1	Item No.2	Weight (lbs.)
36899-18XX12 XX	12 (305)	16 (406)	36897-18	35381-18XX12	18.2
36899-18XX16 XX	16 (406)	16 (406)	36897-18	35381-18XX16	20.3
36899-24XX18 XX	18 (457)	22 (559)	36897-24	35381-24XX18	25.6
36899-24XX22 XX	22 (559)	22 (559)	36897-24	35381-24XX22	27.7
36899-30XX24 XX	24 (610)	28 (711)	36897-30	35381-30XX24	32.9
36899-30XX28 XX	28 (711)	28 (711)	36897-30	35381-30XX28	35.0
36899-36XX30 XX	30 (762)	34 (864)	36897-36	35381-36XX30	40.3
36899-36XX34 XX	34 (864)	34 (864)	36897-36	35381-36XX34	42.4
36899-42XX36 XX	36 (914)	40 (1016)	36897-42	35381-42XX36	47.6
36899-42XX40 XX	40 (1016)	40 (1016)	36897-42	35381-42XX40	49.7
36899-48XX42 XX	42 (1067)	46 (1168)	36897-48	35381-48XX42	55.0
36899-48XX46 XX	46 (1168)	46 (1168)	36897-48	35381-48XX46	59.8
36899-54XX48 XX	48 (1219)	52 (1321)	36897-54	35381-54XX48	62.3
36899-54XX52 XX	52 (1321)	52 (1321)	36897-54	35381-54XX52	64.4
36899-60XX54 XX	54 (1372)	58 (1473)	36897-60	35381-60XX54	69.6
36899-60XX58 XX	58 (1473)	58 (1473)	36897-60	35381-60XX58	71.8
36899-66XX60 XX	60 (1524)	64 (1626)	36897-66	35381-66XX60	77.1
36899-66XX64 XX	64 (1626)	64 (1626)	36897-66	35381-66XX64	79.1
36899-72XX66 XX	66 (1677)	70 (1880)	36897-72	35381-72XX66	84.4
36899-72XX70 XX	70 (1880)	70 (1880)	36897-72	35381-72XX70	86.5
36899-78XX72 XX	72 (1829)	76 (1930)	36897-78	35381-78XX72	91.7
36899-78XX76 XX	76 (1930)	76 (1930)	36897-78	35381-78XX76	93.8
36899-84XX78 XX	78 (1981)	82 (2083)	36897-84	35381-84XX78	99.1
36899-84XX82 XX	82 (2083)	82 (2083)	36897-84	35381-84XX82	101.2
36899-96XX90 XX	90 (2286)	94 (2388)	36897-96	35381-96XX90	113.8
36899-96XX94 XX	94 (2388)	94 (2388)	36897-96	35381-96XX94	115.9

Notes: All dimensions are given in inches (mm). All dimensions are for reference only. The first XX indicates belt width. The third X indicates a blade with (0) or without (1) slits. The next X indicates a blade with (0) or without (1) segments. The next XX indicates blade coverage and the last XX indicates blade color.

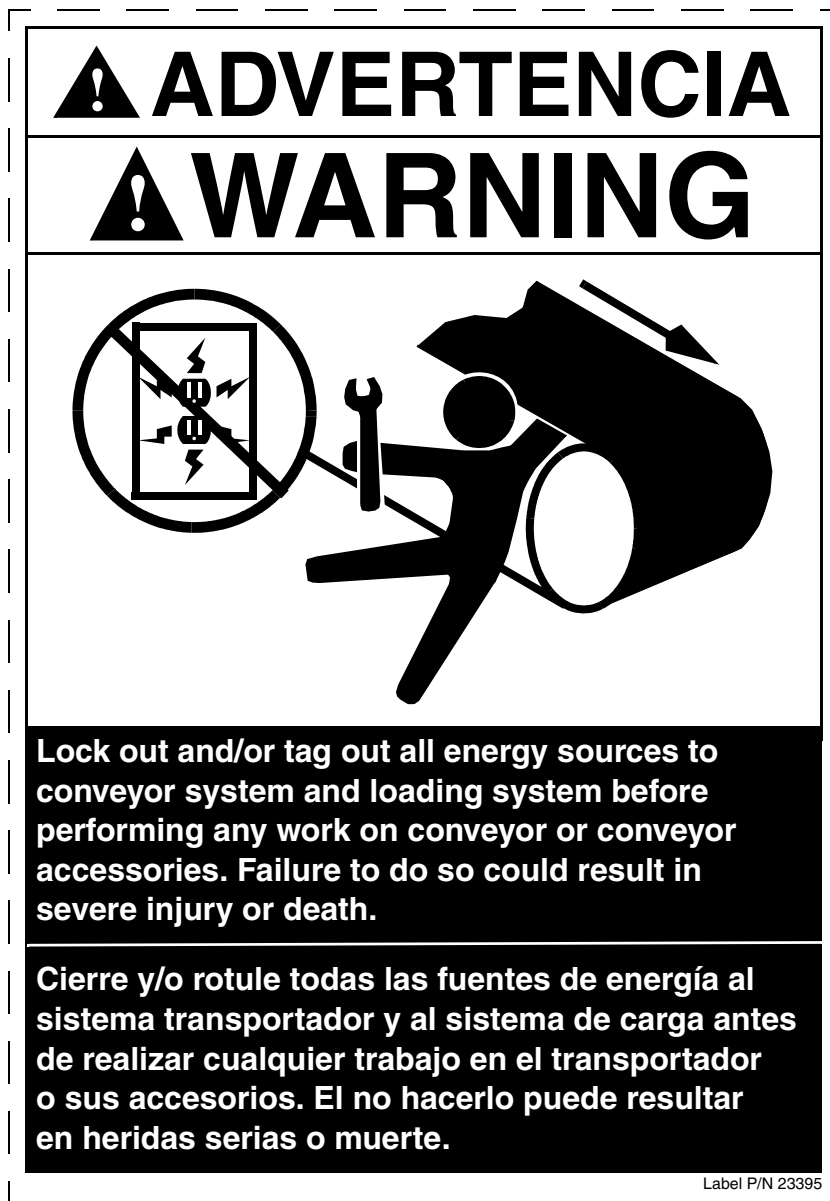
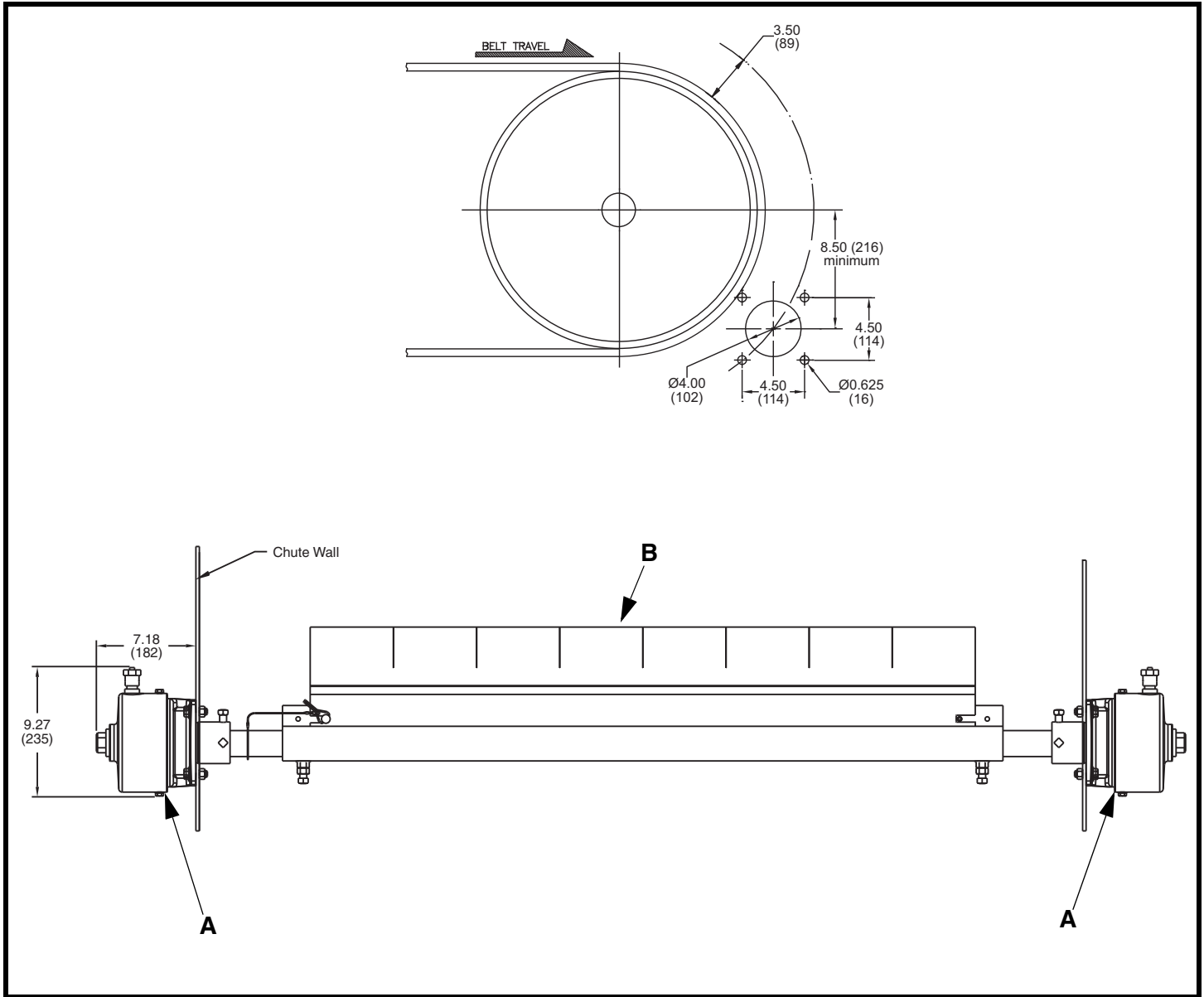


Figure 6. Martin® Conveyor Products Warning Label, P/N 23395

Appendix

Martin® QC1™ Cleaner HD Assembly with Dual Martin® Twist Tensioner Assemblies



A. Dual Martin® Twist Tensioner Assemblies, P/N 38850-2

B. Martin® QC1™ Cleaner HD Assembly, P/N 36898-XXXXXXXX

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One Martin Place
Neponset, IL 61345-9766 USA
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Fax 800 814 1553
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