

## Martin® Brush Cleaner

Go to Martin® Brush Cleaner web page





Operator's Manual M3289

#### **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.

## **Table of Contents**

Section	Page
List of Figures and Tables	ii
Introduction	1
General	1
Installations without chutework	1
Brush cleaner inspection access	1
References	1
Safety	1
Materials required	1
Before Installing Brush Cleaner	2
Installing Brush Cleaner	3
Locating Brush Cleaners	3
Cutting Holes in Chute Walls	4
Installing Standard Brush Cleaner	5
Installing Rotary Strip Brush Cleaner	6
Tensioning Brush Cleaner	7
Wiring Brush Cleaner Motor	8
After Installing Brush Cleaner	9
Weekly Maintenance	10
Troubleshooting	12
Part Numbers	
Appendix. Typical Martin® Brush Cleaner Installation	

## **List of Figures**

Figure	Title	Page
1	Dimensions for Martin® Standard or Rotary Strip Brush Cleaner	. 3
2	Cutouts for Martin® Standard or Rotary Strip Brush Cleaner	. 4
3	Installing Martin® Standard Brush Cleaner	. 5
4	Installing Martin® Rotary Strip Brush Cleaner	. 6
5	Tensioning Martin® Standard or Rotary Strip Brush Cleaner	. 7
6	Martin® Brush Cleaner Changing Belt Line	. 7
7	Martin® Brush Motor Wiring Diagram	. 8
8	Martin® Standard Brush Cleaner Assembly with Ø10.00 Brush and Telescoping Mount, P/N 32875-XXXX	. 14
9	Martin® Rotary Strip Brush Cleaner Assembly with Ø10.00 Brush and Telescoping Mount, P/N 35331-XXXX	. 17
10	Conveyor Products Warning Label, P/N 23395	. 20

## **List of Tables**

Table	Title	Page
I	Martin <sup>®</sup> Standard Brush Cleaner Assembly Quantities and Part Numbers	16
II	Martin® Standard Brush Cleaner Assembly Part Numbers and Materials	16
III	Martin® Rotary Strip Brush Cleaner Assembly Quantities and Part Numbers	19
IV	Martin® Rotary Strip Brush Cleaner Assembly Quantities and Part Numbers	19
V	Martin® Rotary Strip Brush Cleaner Assembly Part Numbers and Materials	20

#### Introduction

#### General

The Martin® Brush Cleaner is designed as a secondary cleaner for removing fines in dual cleaner systems. Each cleaner consists of a nylon or polypropylene 10-in. (254-mm) round brush mounted on a steel shaft that rotates in the opposite direction of the conveyor belt. The Martin® Rotary Strip Brush Cleaner with bristle strips is also available for applications where small amounts of moisture in the material may be present.

Martin<sup>®</sup> Brush Cleaners are powered by electric motors that operate at 350 to 420 rpm. For belts up to 42 in. (1200 mm) wide a 1-horsepower motor is standard; for belts wider than 42 in., a 2-horsepower motor is standard. Explosion-proof motors are available upon request.

Operating temperatures for Martin® Brush Cleaners are -20°F to 200°F (-29°C to 93°C).

# 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.

#### Brush Cleaner Inspection Access

If the Martin<sup>®</sup> Brush Cleaner is installed on enclosed pulley chutework, a Martin<sup>®</sup> Inspection Door should be installed. Martin<sup>®</sup> Inspection Doors are available from Martin Engineering or a representative.

#### 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 Health Administration (OSHA), 32nd Floor, Room 3244, 230 South Dearborn Street, Chicago, IL 60604.
- *The National Electrical Code (NEC)*, National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.
- Martin® Inspection Door Operator's Manual, P/N M3891.

#### Safety

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

#### Materials Required

Only standard hand tools are required to install and service this equipment.

#### **Before Installing Brush 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 Martin® Brush Cleaner from shipping container. Equipment in container should include the following:
  - Martin® Standard or Rotary Strip Brush Cleaner.
  - Two Conveyor Products Warning Labels, P/N 23395.
- 3. If anything is missing, contact Martin Engineering or representative.

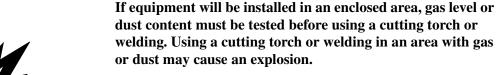


## **▲**WARNING

Before installing equipment, turn off and lock out/tag out energy source to conveyor and conveyor accessories.

4. Turn off and lock out/tag out energy source according to ANSI standards (see "References").





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

## **IMPORTANT**

The Martin® Brush Cleaner should not be used on belts that reverse or roll backward unless brush cleaner motor is wired directly to conveyor motor, so it will change direction when conveyor changes direction.



The chute wall that the mount will be located on is referred to as the "operator side." The other side of the chute is referred to as the "far side."

6. Determine which side of chute is easiest to access. Locate Martin<sup>®</sup> Brush Cleaner mount on most accessible chute wall.



## **IMPORTANT**

Read entire section before beginning work.

To install the Martin® Brush Cleaner, follow the procedures corresponding to the following steps:

- 1. Locate Martin® Brush Cleaner mounts on chute walls.
- 2. Cut holes in chute walls.
- 3. Install Martin® Brush Cleaner.
- 4. Wire Martin® Brush Cleaner motor.

## **IMPORTANT**

## Locating Brush Cleaners

A minimum clearance of 6 in. (152 mm) outside operator side chute wall and 16 in. (407 mm) outside far side chute wall is required for Martin® Brush Cleaner installation.

- 1. Ensure Martin® Brush Cleaner location allows proper clearance for Martin® Brush Cleaner. Locate Martin® Brush Cleaner on conveyor belt return side close to the head pulley or where belt is supported.
- 2. Locate Martin® Brush Cleaner mounts on chute walls according to Figure 1.

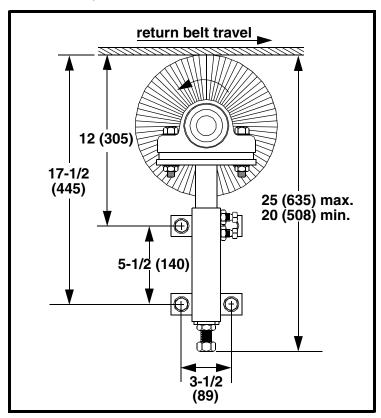


Figure 1. Dimensions for Martin® Standard or Rotary Strip Brush Cleaner

## Cutting Holes in Chute Walls

## **IMPORTANT**

Martin Engineering recommends using a Martin® Inspection Door on the operator side chute wall. If not, cutout holes must be large enough to accommodate Martin® Brush Cleaner assembly.

If no Martin<sup>®</sup> Inspection Door is used, seal access holes to prevent fines from escaping.

- 1. See Figure 2. Using mounts as templates, mark bolt holes and cutouts on chute walls.
- 2. If bolting mounts to chute walls, drill or cut bolt and access holes. If welding mounts to chute walls, drill or cut access holes only. Grind surface of chute wall smooth for flush mount bracket fit.

## **IMPORTANT**

If a Martin<sup>®</sup> Inspection Door is installed, a Martin<sup>®</sup> Brush Cleaner mount bracket must be used.

3. If using a Martin<sup>®</sup> Inspection Door, install according to *Martin*<sup>®</sup> *Inspection Door Operator's Manual*, P/N M3891.

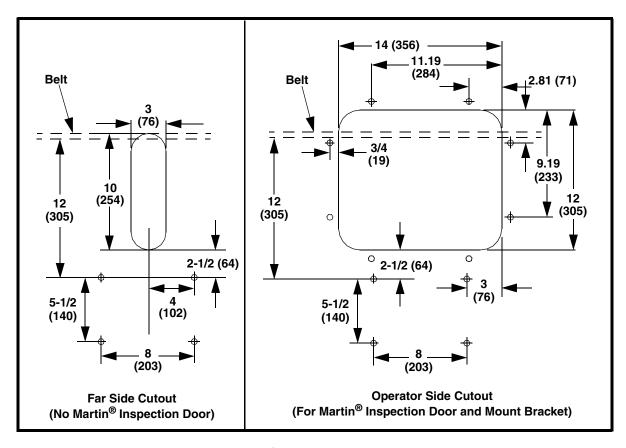


Figure 2. Cutouts for Martin® Standard or Rotary Strip Brush Cleaner

#### Installing Standard Brush Cleaner

- 1. Align Martin® Brush Cleaner mount over bolt holes on far side chute wall. Bolt or skip weld mount to chute wall.
- 2. Install motor (A, Figure 3) onto motor mount on far side chute wall.
- 3. Slide brush shaft (B) through mount on operator side chute wall and roller bearing (C) on far side chute wall.
- 4. Install clutch (D) onto motor shaft and brush shaft.
- 5. Center brush (E) under conveyor belt and secure with locking hubs (F) and brush clamps (G).
- 6. Slide operator side mount over brush shaft and install to chute wall or mount bracket if using a Martin® Inspection Door.
- 7. If necessary, cut off excess shaft on operator side. Remove burrs and sharp edges.

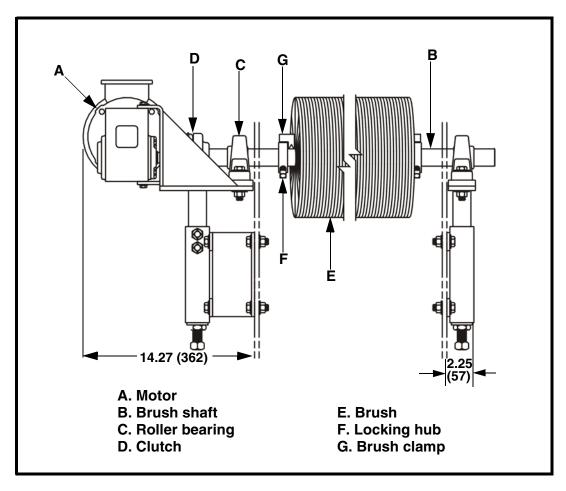


Figure 3. Installing Martin® Standard Brush Cleaner

#### Installing Rotary Strip Brush Cleaner

- 1. Align Martin® Brush Cleaner mount over bolt holes on far side chute wall. Bolt or skip weld mount to chute wall.
- 2. Install motor (A, Figure 4) onto motor mount on far side chute wall.
- 3. Slide shaft and brush (B) through mount on operator side chute wall and roller bearing (C) on far side chute wall.
- 4. Install clutch (D) onto motor shaft and brush shaft.
- 5. Center brush under conveyor belt as follows:
  - a. Loosen two set screws (E) at each end of brush assembly.
  - b. Center brush under belt.
  - c. Tighten screws, securing brush assembly to shaft.
- 6. Slide operator side mount over brush shaft and install to chute wall, or install to mount bracket if using a Martin® Inspection Door.
- 7. If necessary, cut off excess shaft on operator side. Remove burrs and sharp edges.

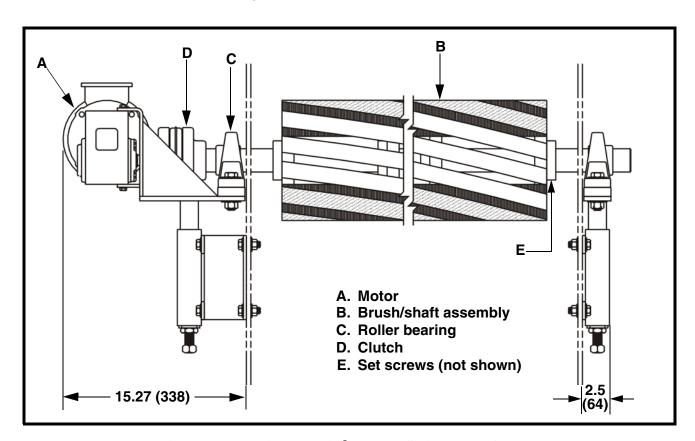


Figure 4. Installing Martin® Rotary Strip Brush Cleaner



#### Tensioning Brush Cleaner

Tension belt cleaner so 1/4-in. (6 mm) of brush is deflected against conveyor belt. Over-adjustment will cause bristles to be pulled off brush shaft.

- 1. Tension Martin® Standard or Rotary Strip Brush Cleaner as follows:
  - a. Turn take-up rod weldment on bottom of mount bracket until 1/4-in.
     (6 mm) of brush is deflected against belt (see Figure 5). Count number of turns.

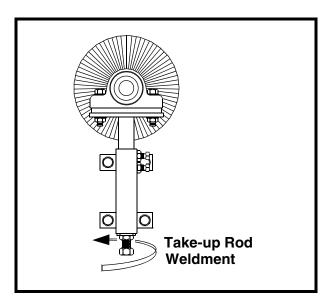


Figure 5. Tensioning Martin® Standard or Rotary Strip Brush Cleaner

- b. Repeat on other side with same number of turns so brush contacts belt evenly across width of belt.
- c. Make sure Martin® Brush Cleaner is not changing belt line (see Figure 6). If it is, install belt support directly above brush.

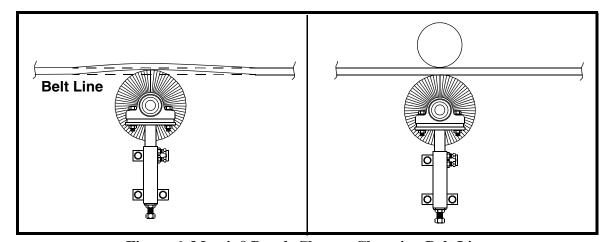


Figure 6. Martin® Brush Cleaner Changing Belt Line

#### Wiring Brush Cleaner Motor

## **A** CAUTION

All electrical work must be done by a qualified electrician and according to NEC Article 430.

## **IMPORTANT**

Wire motor so brush rotates in opposite direction of conveyor belt. On reversing belts, wire Martin® Brush Cleaner motor directly to conveyor motor so it will change direction when conveyor changes direction.

1. Wire Martin® Brush Cleaner motor according to Figure 7.

## NOTE

Martin Engineering recommends using a 3-way selector switch that can be used for manual or automatic control of the Martin<sup>®</sup> Brush Cleaner.

- 2. Wire Martin<sup>®</sup> Brush Cleaner to a switch allowing the following positions:
  - AUTO to operate cleaner and conveyor together.
  - ON to operate only the Martin® Brush Cleaner.
  - OFF to operate only the conveyor belt.

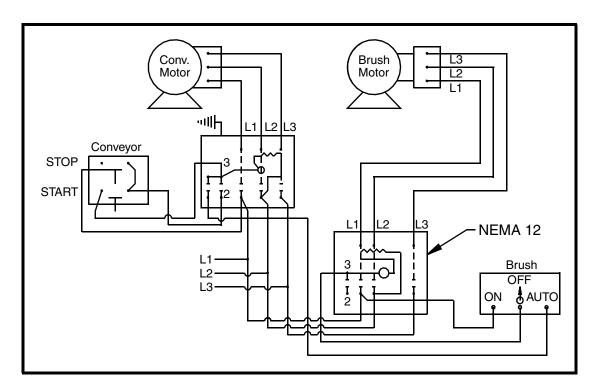


Figure 7. Martin® Brush Motor Wiring Diagram

### **After Installing Brush Cleaner**

- 1. Measure from edge of conveyor belt to outside edge of brush on both sides to make sure brush is centered on belt.
- 2. Thoroughly wipe outside chute walls clean above Martin® Brush Cleaner mounts. Place a Conveyor Products Warning Label (P/N 23395) on both chute walls visible to belt cleaner operator.





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.

3. Remove all tools and fire retardant cover from installation area and conveyor belt.





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.

4. Turn on conveyor belt for 1 hour.

## **A** DANGER



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

- 5. After 1 hour of operation, turn off and lock out/tag out energy source according to ANSI standards (see "References").
- 6. Make sure all fasteners are tight. Tighten if necessary.
- 7. Inspect Martin® Brush Cleaner for the following:
  - Wear. (A small amount of "break-in" wear may be found. This will stop once brush wears to conveyor belt contour.)
  - Material buildup. (No material between brush and return side of conveyor belt should be found.)
- 8. If wear or material buildup exists, see "Troubleshooting."

## **IMPORTANT**

Read entire section before beginning work.

## **IMPORTANT**

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



## **▲** DANGER

Before installing, servicing, or adjusting the belt cleaner, turn off and lock out/tag out 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. Turn off and lock out/tag out energy source according to ANSI standards (see "References").
- 2. Make sure all fasteners are tight. Tighten if necessary.
- 3. Check brush for excessive wear. If worn, replace as follows:
  - a. To replace brush on Martin® Brush Cleaner:
    - (1) Turn take-up rod weldment to lower brush assembly away from belt.
    - (2) Remove operator side bearing.
    - (3) Loosen clutch (D, Figure 3). Slide shaft and brush (E) out of far side roller bearing (C) and remove from chute.
    - (4) Remove brush clamps (G) and one locking hub (F).
    - (5) Slide used brush off shaft and install new brush. Replace brush clamps and locking hub.
    - (6) Insert shaft back into far side bearing and ensure shaft engages with clutch (D).
    - (7) Make sure brush is centered under belt. Replace operator side roller bearing.
    - (8) Tension brush against belt.
  - b. To replace bristle sets on Martin® Rotary Strip Brush Cleaner:
    - (1) Turn take-up rod weldment to lower brush assembly away from belt.
    - (2) Remove operator side bearing.
    - (3) Loosen clutch (D, Figure 4). Slide shaft and brush (B) out of far side roller bearing (C) and remove from chute.
    - (4) Loosen clamp screws on hubs between bristle sets just enough to pull bristle sets off shaft.

- (5) Install new bristle sets one at a time, tightening clamp screws just enough to hold bristle sets in place. After all bristle sets are in place, tighten clamp screws securely so wedges on clamps match height of strip backing on bristles.
- (6) Insert shaft and brush back into far side bearing and ensure shaft engages with clutch.
- (7) Make sure brush is centered under belt. Replace operator side roller bearing.
- (8) Tension brush against belt.
- 4. 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.
- 5. Wipe warning labels clean. If labels are not readable, contact Martin Engineering or representative for replacements.



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.

6. Remove all tools from maintenance area.



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.

7. Start conveyor belt.





## **Troubleshooting**

Symptom	Corrective Action
High brush wear.	Bristle diameter is too small or bristle deflection is greater than 1/4 in. (6 mm). Increase bristle diameter or decrease bristle deflection to 1/4 in. (6 mm).
Material buildup.	Increase brush pressure or change to larger bristle diameter.
Uneven brush wear.	<ul> <li>Take-up rod weldments on standard brush cleaner are set at different levels. Reset both with same number of turns.</li> <li>Brush assembly is not hung level under belt. Adjust brush cleaner.</li> </ul>

## 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.

#### **Part Numbers**

This section provides product names and corresponding part numbers for Martin® Brush Cleaners and related equipment. Please reference part numbers

when ordering parts:

Brush Cleaner Martin® Standard Brush Cleaner Assembly with Ø10.00 Brush and

**Telescoping Mount:** P/N 32875-XXXX. See Figure 8.

Martin® Rotary Strip Brush Cleaner Assembly with Ø10.00 Brush and

**Telescoping Mount:** P/N 35331-XXXX. See Figure 9.

**Brushes** Nylon Brush: P/N 28560-XXX. See Table II.

Polypropylene Brush: P/N 28898-XXX. See Table II.

Martin® Rotary Strip Brush Cleaner Replacement Bristle Sets:

Polypropylene Bristle Set: P/N 35329-XX.

Nylon Bristle Set: P/N 35329-XXN

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

Miscellaneous

Motors for Martin<sup>®</sup> Standard or Rotary Strip Brush Cleaners:

 $Motor\ 1\ hp\ Right\ Angle\ Flange\ Mount\ for\ 18\mbox{-}\ through\ 42\mbox{-}\ in.\ (400\mbox{-}\$ 

through 1200-mm) belts: P/N 31925-01.

Motor 2 hp Right Angle Flange Mount for 48- through 72-in. (1200-

through 2000-mm) belts: P/N 31925-02.

## **IMPORTANT**

If a Martin® Inspection Door is installed, a Martin® Brush Cleaner mount bracket must be used.

Martin® Brush Cleaner Mount Bracket: P/N 32880.

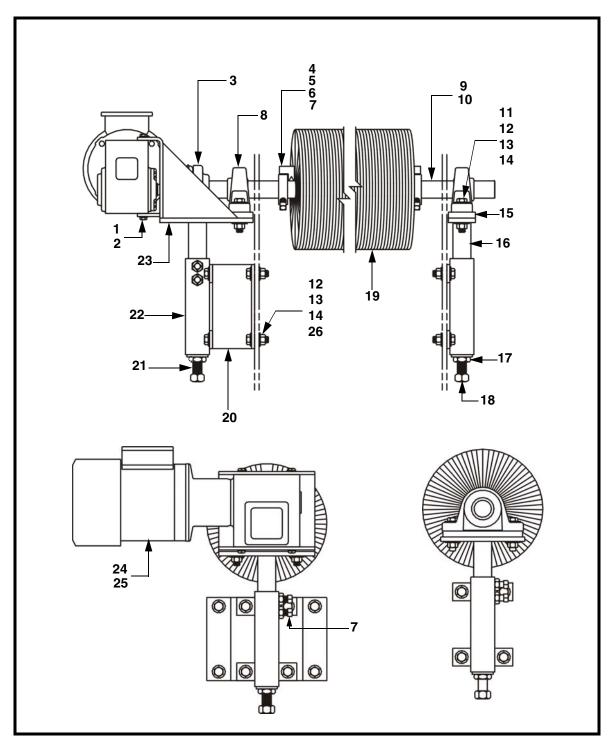


Figure 8. Martin® Standard Brush Cleaner Assembly with Ø10.00 Brush and Telescoping Mount, P/N 32875-XXXX\* (Sheet 1 of 2)

Item	Description	Part No.	Qty.
1	Screw HHC 5/16 - 18NC x 1	32583	4
2	Washer compression 5/16	31401	4
3	Sure-flex coupling	27368-03	1
4	Clamp brush	32844	2
5	Screw SHC 5/16 - 18NC x 3/4	32845	2
6	Hub locking	32842	2
7	Screw SHS 1/2 - 13NC x 1	22763-03	8
8	Bearing pillow block	35328-01	2
9	Keyshaft 1.44 (36)	Table I	1
10	Key square 3/8 x 3/8 x 2 - 1/2	28483	1
11	Screw HHC 1/2 - 13NC x 2 - 1/2	14205	4
12	Nut hex 1/2 - 13NC	11771	16
13	Washer compression 1/2	11750	16
14	Washer flat 1/2	19126	16
15	Spacer plate bearing	32828-S	2
16	Inner slide weldment	32834	1
17	Nut hex jam 3/4 - 16NF	32242	2
18	Nut hex 3/4 - 16NF	34688	2
19	Brush spiral 10.00	Table II	1
20	Mount bracket	32880	1
21	Take-up rod weldment	32835	2
22	Outer guide mount weldment	32836	2
23	Motor mount inner slide weldment	32834-M	1
24	Motor/reducer assembly 1 hp, right angle	31925-01	Table I
25	Motor/reducer assembly 2 hp, right angle	31925-02	Table I
26	Screw HHC 1/2-13NC x 1-1/2	11763	12
Fig. 10	Label Conveyor Products Warning	23395	2

Figure 8. Martin® Standard Brush Cleaner Assembly with Ø10.00 Brush and Telescoping Mount, P/N 32875-XXXX\* (Sheet 2 of 2)

<sup>\*</sup>The first XX indicates belt width. The third X indicates bristle material and the last X indicates the bristle diameter.

Table I. Martin® Standard Brush Cleaner Assembly Quantities and Part Numbers

Assembly Part No.*	Item 24 Quantity	Item 25 Quantity	Item 9 Part No.
32875-12XX	1	0	32841-12
32875-18XX	1	0	32841-18
32875-24XX	1	0	32841-24
32875-30XX	1	0	32841-30
32875-36XX	1	0	32841-36
32875-42XX	1	0	32841-42
32875-48XX	0	1	32841-48
32875-54XX	0	1	32841-54
32875-60XX	0	1	32841-60
32875-72XX	0	1	32841-72
32875-112XX	0	1	32841-112

<sup>\*</sup>The first X indicates bristle material and the last X indicates bristle diameter.

Table II. Martin® Standard Brush Cleaner Assembly Part Numbers and Materials

Assembly Part No.*	Item 19 Part No.*	Bristle Diameter in. (mm)	Bristle Material**
32875-XXN1	28560-XX1	.014 (0.35)	Nylon
32875-XXN2	28560-XX2	.020 (0.51)	Nylon
32875-XXN3	28560-XX3	.028 (0.71)	Nylon
32875-XXP1	28898-XX1	.014 (0.35)	Polypropylene
32875-XXP2	28898-XX2	.020 (0.51)	Polypropylene
32875-XXP3	28898-XX3	.028 (0.71)	Polypropylene
32875-XXP4	28898-XX4	.038 (0.96)	Polypropylene

<sup>\*</sup>XX indicates belt width in inches. N or P indicates bristle material (nylon or polypropylene). 1, 2, 3, or 4 indicates bristle diameter. Example: 32875-24P3 indicates a 24-in. belt and brush with Ø.028 polypropylene bristles.

<sup>\*\*</sup>Stainless or tempered steel brushes also available. Contact Martin Engineering or representative for part numbers.

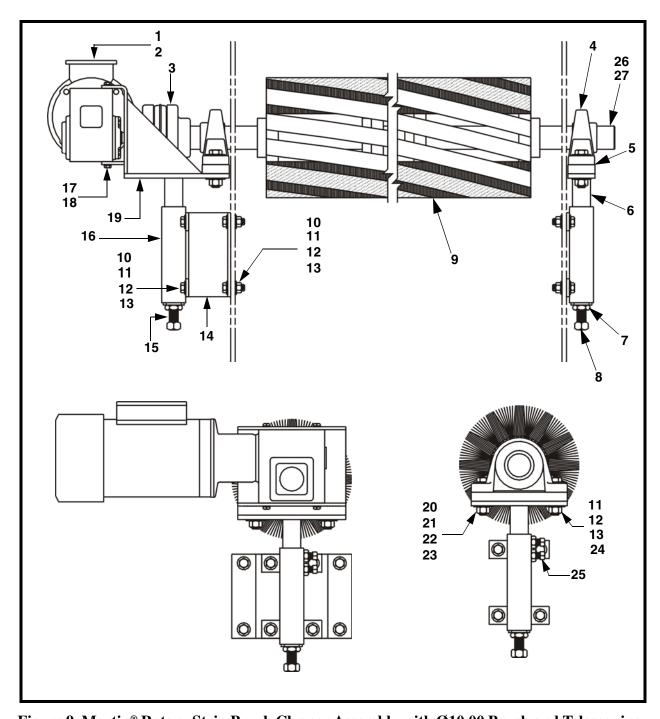


Figure 9. Martin® Rotary Strip Brush Cleaner Assembly with Ø10.00 Brush and Telescoping Mount, P/N 35331-XXXX\* (Sheet 1 of 2)

Item	Description	Part No.	Qty.
1	Motor/reducer assembly 1 hp, right angle	31925-01	Table III
2	Motor/reducer assembly 2 hp, right angle	31925-02	Table III
3	Sure-flex coupling	Table IV	1
4	Bearing pillow block	Table IV	2
5	Spacer plate bearing	Table IV	2
6	Inner slide weldment	Table IV	1
7	Nut hex jam 3/4 - 16NF	32242	2
8	Nut hex 3/4 - 16NF	34688	2
9	Brush 10.00	Table V	1
10	Screw HHC 1/2 - 13NC x 1 - 1/2	11763	12
11	Nut hex 1/2 - 13NC	11771	Table III
12	Washer compression 1/2	11750	Table III
13	Washer flat 1/2	19126	Table III
14	Mount bracket	32880	1
15	Take-up rod weldment	32835	2
16	Outer guide mount weldment	32836	2
17	Screw HHC 5/16 - 18NC x 1	32583	4
18	Washer compression 5/16	31401	4
19	Motor mount inner slide weldment	Table IV	1
20	Washer flat 5/8	16614	Table III
21	Washer compression 5/8	11752	Table III
22	Nut hex 5/8 - 1HC	11772	Table III
23	Screw HHC 5/8 - 1NC x 2 3/4	23532	Table III
24	Screw HHC 1/2 - 13NC x 3	19136	Table III
25	Screw SHS 1/2 - 13NC x 1	22763-03	4
26	Keyshaft	Table IV	1
27	Key square	Table IV	1
Fig. 10	Label Conveyor Products Warning	23395	2

Figure 9. Martin® Rotary Strip Brush Cleaner Assembly with Ø10.00 Brush and Telescoping Mount, P/N 35331-XXXX\* (Sheet 2 of 2)

\*The first XX indicates belt width. The second XX indicates with motor (blank); less motor and motor mounting hardware (LM); nylon brush (N); oil-tempered wire brush (W); poly brush (no suffix).

**Table III. Martin® Rotary Strip Brush Cleaner Assembly Quantities** 

Assembly Part No.	Item 1 Quantity	Item 2 Quantity	Item 24 Quantity	Items 11,12,13 Quantity	Items 20, 21, 22, 23 Quantity
35331-18XX	1	0	4	16	0
35331-24XX	1	0	4	16	0
35331-30XX	1	0	4	16	0
35331-36XX	1	0	4	16	0
35331-42XX	1	0	4	16	0
35331-48XX	0	1	0	12	4
35331-54XX	0	1	0	12	4
35331-60XX	0	1	0	12	4
35331-72XX	0	1	0	12	4
35331-84XX	0	1	0	12	4
35331-96XX	0	1	0	12	4

**Table IV. Martin® Rotary Strip Brush Cleaner Assembly Part Numbers** 

Assembly Part No.	Item 3 Part No.	Item 4 Part No.	Item 5 Part No.	Item 6 Part No.	Item 19 Part No.	Item 26 Part No.	Item 27 Part No.
35331-18XX	27368-03	35328-01	32828-S	32834	32834-M	38279-18	28483
35331-24XX	27368-03	35328-01	32828-S	32834	32834-M	38279-24	28483
35331-30XX	27368-03	35328-01	32828-S	32834	32834-M	38279-30	28483
35331-36XX	27368-03	35328-01	32828-S	32834	32834-M	38279-36	28483
35331-42XX	27368-03	35328-01	32828-S	32834	32834-M	38279-42	28483
35331-48XX	27368-04	35328-02	35334	35335	35330	38279-48	28483-02
35331-54XX	27368-04	35328-02	35334	35335	35330	38279-54	28483-02
35331-60XX	27368-04	35328-02	35334	35335	35330	38279-60	28483-02
35331-72XX	27368-04	35328-02	35334	35335	35330	38279-72	28483-02
35331-84XX	27368-04	35328-02	35334	35335	35330	38279-84	28483-02
35331-96XX	37368-04	35328-02	35334	35335	35330	38279-96	28483-02

Table V. Martin® Rotary Strip Brush Cleaner Assembly Part Numbers and Materials

Poly Brush				
Assembly Part No.	Item 9 Part No.			
35331-18	35327-18			
35331-24	35327-24			
35331-30	35327-30			
35331-36	35327-36			
35331-42	35327-42			
35331-48	35327-48			
35331-54	35327-54			
35331-60	35327-60			
35331-72	35327-72			
35331-84	35327-84			
35331-96	35327-96			

Nylon Brush						
Assembly Part No.	Item 9 Part No.					
35331-18N	35327-18N					
35331-24N	35327-24N					
35331-30N	35327-30N					
35331-36N	35327-36N					
35331-42N	35327-42N					
35331-48N	35327-48N					
35331-54N	35327-54N					
35331-60N	35327-60N					
35331-72N	35327-72N					
35331-84N	35327-84N					
35331-96N	35327-96N					

Oil-Tempered Wire Brush	
Assembly Part No.	Item 9 Part No.
35331-18W	35327-18W
35331-24W	35327-24W
35331-30W	35327-30W
35331-36W	35327-36W
35331-42W	35327-42W
35331-48W	35327-48W
35331-54W	35327-54W
35331-60W	35327-60W
35331-72W	35327-72W
35331-84W	35327-84W
35331-96W	35327-96W

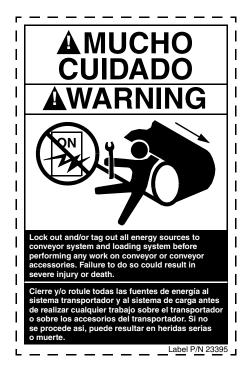
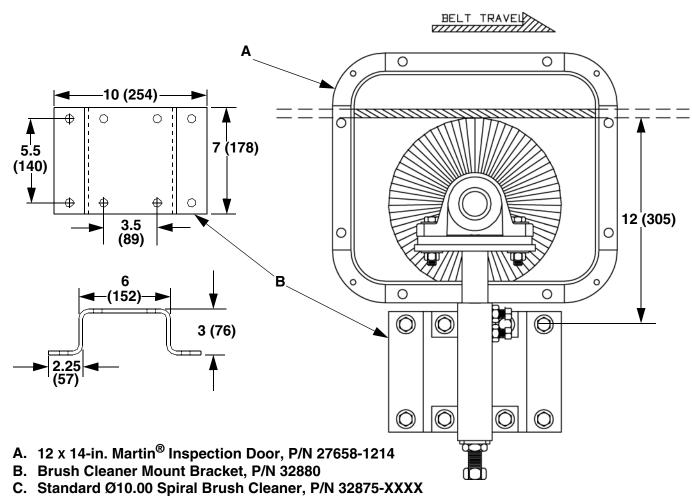
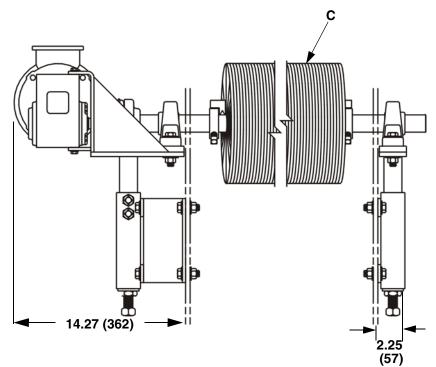


Figure 10. Conveyor Products Warning Label, P/N 23395

## **Appendix**

# Typical Martin® Brush Cleaner Installation with Brush Cleaner Mount Bracket and Martin® Inspection Door

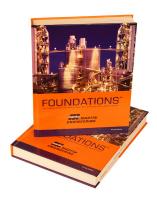




## Notes



# Problem Solved™ GUARANTEED!



For nearly 20 years, Martin Engineering's Foundations™ Books have taught industry personnel to operate and maintain clean and safe belt conveyors. The Foundations™ Book, fourth edition, focuses on improving belt conveyors by controlling fugitive material. "The Practical Resource for Total Dust and Material Control," is a 576-page hard cover volume that provides information of value to industries where the efficient handling of bulk materials is a key to productivity and profitability.

Expanding upon the book, our Foundations™ Training Program addresses the design and development of more productive belt conveyors, and is offered in three customizable seminars. Attendees gain a better understanding of conveyor safety and performance, helping to justify upgrade investments and increase profitability.



#### **Martin Engineering USA**

One Martin Place Neponset, IL 61345-9766 USA 800 544 2947 or 309 852 2384 Fax 800 814 1553 www.martin-eng.com

COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV = ISO 9001:2008 =