



Martin® Washbox™ Cleaning System

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Operator's Manual
M3768

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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Introduction

General

Martin® Washbox™ Cleaning Systems are designed for use in applications where the conveyor belt must be very clean. As the belt enters the Martin® Washbox™ Cleaning System, a set of return idlers stabilizes the belt. The spray bar uniformly sprays the belt with water before the first belt cleaner removes most of the material from the belt. A second belt cleaner then removes the remaining material and dries the belt. The material cleaned from the belt can be pumped back onto the belt or drained into the plant sump.

The water in the system can be substituted with anti-freeze or dust-suppressant chemicals. Martin Engineering recommends using a pre-cleaner with the Martin® Washbox™ Cleaning System for maximum efficiency.

Appendix B provides Martin® Washbox™ Cleaning System dimensions and water consumption.

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® SAF2™ & Martin® SQC2S™ Cleaners Operator's Manual*, P/N M3820.
- *Martin® QC2™ Cleaner Operator's Manual*, P/N M3429.
- *Martin® H2O Cleaner Operator's Manual*, P/N M3825.

Safety

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

Materials required

In addition to standard hand tools, the following special tools are required to install and service this equipment:

- Pipe wrench to fit 4-in. NPT pipe.

Before Installing Belt Cleaning System

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® Washbox™ Cleaning System from shipping container. Equipment in container should include the following:
 - Martin® Washbox™ Cleaning System.
 - Two Conveyor Products Warning Labels, P/N 23395.
3. If anything is missing or damaged, contact Martin Engineering or a representative.



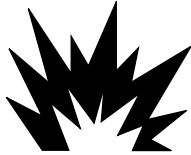
WARNING

Before installing or servicing 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").

WARNING

If equipment will be installed in an enclosed area, gas level or dust content must be tested before using a cutting torch or welding. Using a cutting torch or welding in an area with gas or dust may cause an explosion.



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

Installing Belt Cleaning System

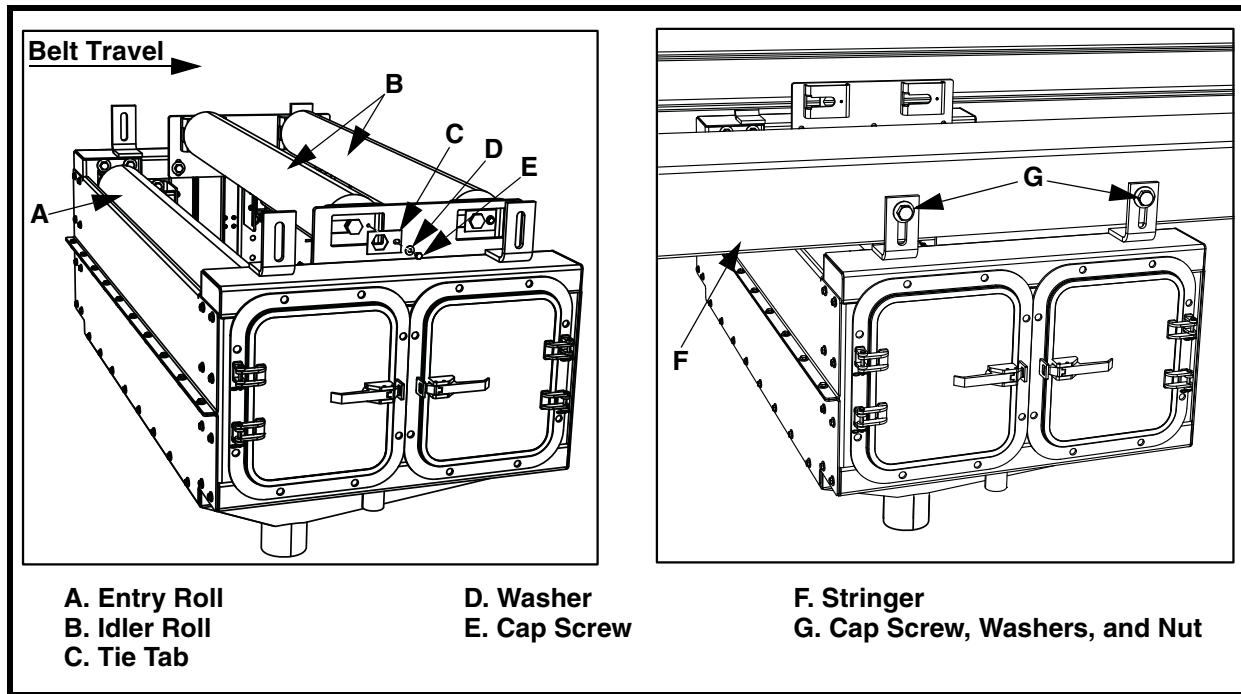
IMPORTANT

Customer must supply and install a return idler directly before Martin® Washbox™ Cleaning System to ensure correct belt alignment for proper operation of washbox.

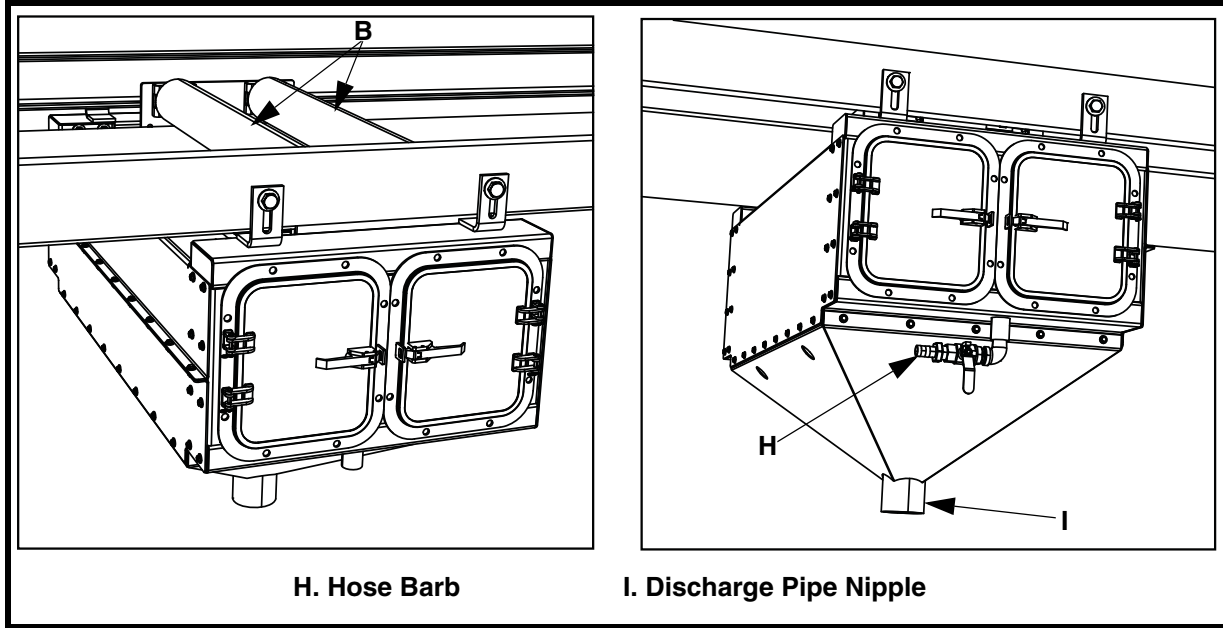
NOTE

The side of the Martin® Washbox™ Cleaning System that the spray bar connection is located on is referred to as the “operator side.” The other side is referred to as the “far side.”

1. Determine location of Martin® Washbox™ Cleaning System. Make sure system is located on return side of belt where belt runs flat.



2. Remove two idler rolls (B) as follows:
 - a. Remove cap screws (E), washers (D) and tie tabs (C) from roll bracket on operator side and farside.
 - b. Remove rolls (B) from washbox.
3. Install washbox on conveyor structure in pre-determined location.
 - a. Using a hoist or crane, lift washbox into position.
 - b. Position washbox so belt cleaner mainframe centers are 7-1/2 in. below belt line.
 - c. Cut or drill four 3/4-in. mounting holes in stringers.
 - d. Mount washbox to stringers (F) through four hanger bracket weldments using cap screws, washers, and nuts (G).



4. Reinstall two idler rolls (B) above cleaner mainframes as follows:
 - a. Slide idler rolls in above belt, making sure belt is between rolls and cleaner blades. Position rolls so they do not change belt line.
 - b. Install tie tabs (C), washers (D), and cap screws (E).
5. Make sure idler rolls above and below belt are snug against belt.
6. Install belt cleaners and tensioners according to applicable operator's manuals.

IMPORTANT

Martin Engineering recommends installing water regulator and ball valves on water line to isolate spray bars and regulate water pressure to Martin® Washbox™ Cleaning System. If your water supply contains particles larger than 300 microns, install filter on water line.

7. Connect water supply to 1-in. hose barb (H).
8. Connect plant discharge pipe to 4-in. NPT discharge pipe nipple (I).

After Installing Belt Cleaning System

1. Thoroughly wipe outside chute walls clean above Martin® Washbox™ Cleaning System on both sides of chute. Place Conveyor Products Warning Label (P/N 23395) on chute walls visible to belt cleaner operator.
2. Make sure all connections and bolts are tight.
3. Start conveyor belt. Follow procedures in applicable belt cleaner operator's manual.

IMPORTANT

Top spray bar is to wet belt only; it should not be used to wash or blast material from belt.

4. Start water flow. Adjust water flow and top spray bar to wet entire belt width. (See Appendix B for required water consumption.)
5. Direct lower spray bar toward bottom of washbox to flush material cleaned off belt toward discharge.
6. When spray bars are positioned properly, tighten spray bar clamps on each spray bar.
7. Operate conveyor belt and Martin® Washbox™ Cleaning System for one hour.
8. Inspect and adjust belt cleaner and tensioner according to applicable belt cleaner operator's manual.

Maintenance

1. Maintain belt cleaners and tensioners according to applicable belt cleaner operator's manual.
2. Wash out Martin® Washbox™ Cleaning System weekly until amount of buildup is determined, then wash as needed.
3. Every 6 months, check spray nozzles for clogs. If nozzles are clogged, remove and clean.
4. Wipe Conveyor Products Warning Labels clean. If label(s) is not readable, contact Martin Engineering or representative for replacement.

Part Numbers

Martin[®]
Washbox[™]
Cleaning System

This section provides product names and corresponding part numbers for the Martin[®] Washbox[™] Cleaning System. Please reference part numbers when ordering parts.

P/N WBP XX X XX X X X XX X X See Figure 1.
 1 2 3 4 5 6 7 8 9

P/N WBSCP XX X XX X X See Figure 2.
 1 2 3 4 5

1. The first XX indicates belt width.
2. The next X indicates first belt cleaner type:
 A = WSQC2-XXXXXXXXXX cleaner
 B = WSQC2-XXXXXXX3XX cleaner
 C = WH2O-XXXXXXXXXX cleaner
 D = WQC2-XXXXXXXXXX cleaner
 0 = No cleaner
3. The next XX indicates first cleaner blade width.
4. The next X indicates first cleaner blade type:
 C = WSQC2 with SC-XXC White Blade
 D = WSQC2 with SC-XXD White Blade
 G = WSQC2 with SC-XXG Orange Blade
 H = WSQC2 with SC-XXH Orange Blade
 R = WSQC2 with SC-XXR Orange Blade
 T = WSQC2-XXXXXXX3XX & WQC2 with Tungsten Carbide Blade
 A = WQC2 with Ceramic Blade
 S = WQC2 with Stainless Steel Blade
 U = WSQC2-XXXXXXX3XX & WH2O with Urethane Blade
 0 = No Blade
5. The next X indicates the first cleaner blade color:
 B = Brown Blade (SQC2-XXXXXXX3XX & WQC2)
 G = Green Blade (SQC2-XXXXXXX3XX & WQC2)
 O = Orange Blade (SQC2-XXXXXXX3XX & WQC2)
 T = Teal Blade (WH2O)
 0 = No Blade
6. The next X indicates second belt cleaner type:
 A = WSQC2-XXXXXXXXXX cleaner
 B = WSQC2-XXXXXXX3XX cleaner
 C = WH2O-XXXXXXXXXX cleaner
 D = WQC2-XXXXXXXXXX cleaner
 0 = No cleaner
7. The next XX indicates second cleaner blade width.

8. The next X indicates second cleaner blade type:
- C = WSQC2 with SC-XXC White Blade
 - D = WSQC2 with SC-XXD White Blade
 - G = WSQC2 with SC-XXG Orange Blade
 - H = WSQC2 with SC-XXH Orange Blade
 - R = WSQC2 with SC-XXR Orange Blade
 - T = WSQC2-XXXXXXX3XX & WQC2 with Tungsten Carbide Blade
 - A = WQC2 with Ceramic Blade
 - S = WQC2 with Stainless Steel Blade
 - U = WSQC2-XXXXXXX3XX & WH2O with Urethane Blade
 - 0 = No Blade
9. The next X indicates the second cleaner blade color:
- B = Brown Blade (SQC2-XXXXXXX3XX & WQC2)
 - G = Green Blade (SQC2-XXXXXXX3XX & WQC2)
 - O = Orange Blade (SQC2-XXXXXXX3XX & WQC2)
 - T = Teal Blade (WH2O)
 - 0 = No Blade

Operator's manuals

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

***Martin® SAF2™ & Martin® SQC2S™ Cleaners Operator's Manual,
P/N M3820.***

Martin® QC2™ Cleaner Operator's Manual, P/N M3429.

Martin® H2O Cleaner Operator's Manual, P/N M3825.

Part Numbers

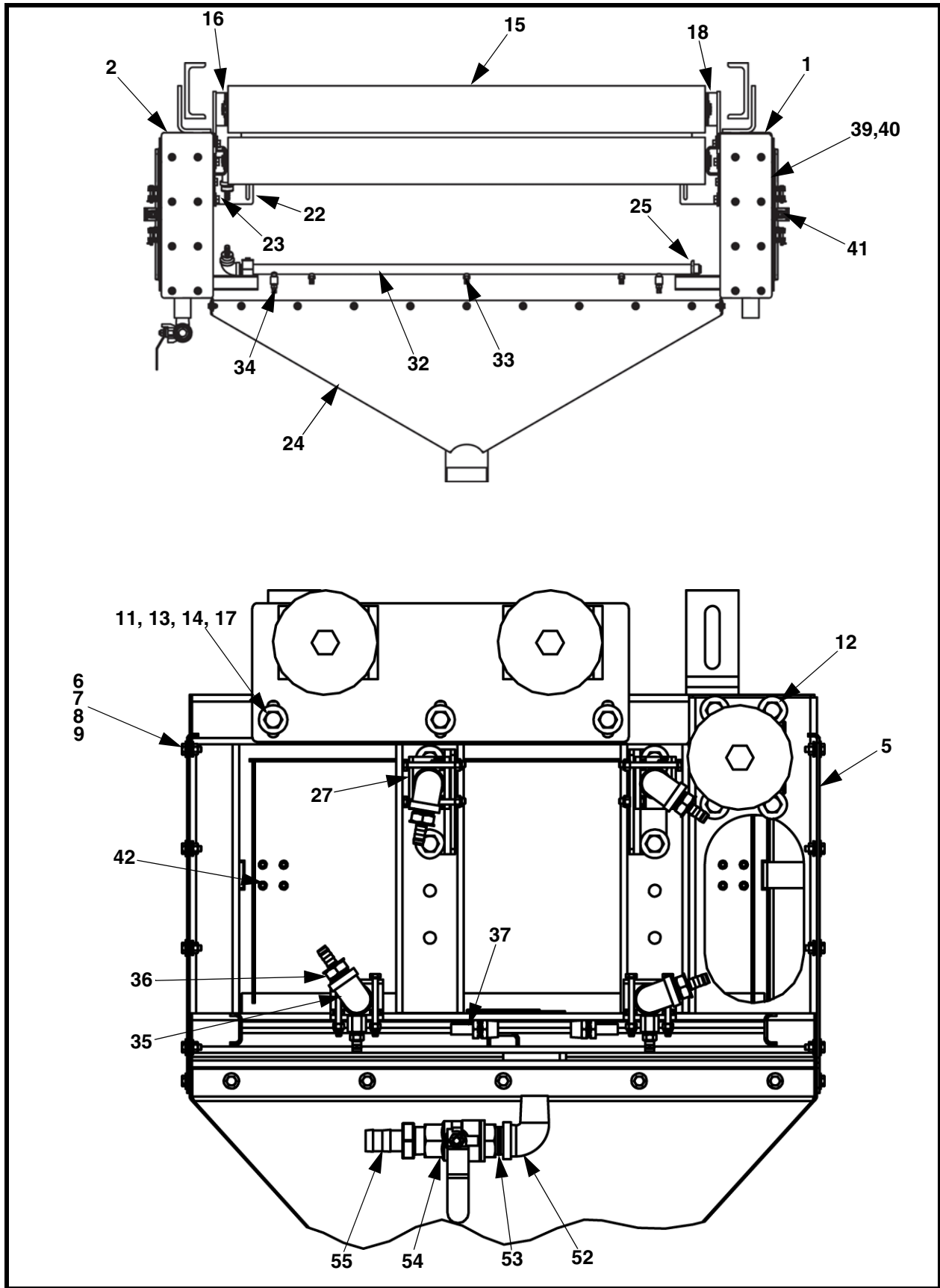


Figure 1. Martin® Washbox™ Cleaning System Assembly, P/N WBPXXXXXXXXXXXXXX

Item	Description	Part Number	Qty
1	Right-Side Panel Weldment	38262-R	1
2	Left-Side Panel Weldment	38262-L	1
3	Bottom End Panel	Table I	1
4	Top End Panel	Table I	1
5	End Panel	Table I	1
6	Flat Washer 1/4 Wide ZP	15073	Table I
7	Screw HHC 1/4-20NC x 3/4 ZP	11852	Table I
8	Compression Washer 1/4	11521	Table I
9	Hex Nut 1/4-20NC ZP	11769	Table I
10 (NS)	Roller Holder Bracket	38264	2
11	Flat Washer 1/2 Wide ZP	17328	22
12	Screw HHC 1/2-13NC x 1 ZP	13842	8
13	Compression Washer 1/2	11750	22
14	Hex Nut 1/2-13NC ZP	11771	22
15	Idler Roll 5.00 Dia	Table I	3
16	Roller Bracket Weldment	38273-L	1
17	Screw HHC 1/2-13NC x 1-1/4 ZP	13835	6
18	Roller Bracket Weldment	38273-R	1
19 (NS)	Tie Tab	29852	6
20 (NS)	Screw HHC 1/4-20NC x 3/8 ZP	32185	6
21 (NS)	Pipe Plug 1/2 NPT Plastic	12519	4
22	Spray Bar Hanger Bracket	38267	4
23	Screw HHC 1/2-13NC x 1-1/2 ZP	11763	8
24	Modular Funnel	Table I	1
25	Angle Spray Bar Retainer	38269	4
26 (NS)	Screw HHC 1/4-20NC x 1 ZP	12699	8
27	Vibration Pipe Clamp for 3/4 Pipe	38239	4
28 (NS)	Top Spray Bar Weldment	Table I	2
29 (NS)	Spray Nozzle 1/4 NPT	38305	Table I
30 (NS)	Screw HHC 1/4-20NC x 2-1/2 ZP	33668	8
31 (NS)	Hex Nut Elastic Lock 1/4-20NC ZP	30227	8
32	Bottom Spray Bar	Table I	2
33	Spray Nozzle 1/4 NPT	28276-06	Table I
34	Adapter Brass 1/4-NPTF x 1/4 NPTM	38304	4
35	Elbow 90 Deg 3/4 NPT Galvanized	33246	4
36	Hose Barb 3/4 NPT x 1/2 Hose Brass	17309	4
37	Hose Barb Swivel 1/2 NPT x 1/2 Hose	36320	4

Item	Description	Part Number	Qty
38 (NS)	Hose Gray 1/2 ID x 24.00	17239-24	4
39	Low Profile Door Weldment	38932-1214	4
40	Gasket Rubber Door Seal	38400-1214	4
41	Over Center Lever Latch	37051	4
42	Screw PHPM #10-32NF x 1/2 Washer	38182	16
43 (NS)	Pin Clevis 1/4 x 1-5/8 SS	34952	8
44 (NS)	Hairpin Cotter .06 Dia. x 1.13 SS	34951	8
45 (NS)	Martin [®] Nameplate 2.50 x 5.30 SS	33970	1
46 (NS)	Label Martin Engineering Logo	22193-01	2
47 (NS)	Silicone Sealant	28576	1
48 (NS)	Flat Washer 5/8 Narrow ZP	16814	4
49 (NS)	Screw HHC 5/8-11NC x 2 ZP	18831	4
50 (NS)	Compression Washer 5/8	11752	4
51 (NS)	Hex Nut 5/8-11NC ZP	11772	4
52	Elbow Street 1-NPT	36006	1
53	Nipple Pipe 1-NPT x Close Galvanized	30746	1
54	Ball Valve Safety Lockout 1-NPT	28281	1
55	Hose Barb 1-NPT x 1.00 Hose	36127	1
56 (NS)	Regulator 1-NPT	38078	1
57 (NS)	Gauge Liquid Filled 1/4 NPT	37021	1
58 (NS)	Kit Drain for Washbox with Dual Outlet Funnel	Table I	1
59 (NS)	Operator's Manual	M3768	1

NS = Not Shown

Figure 1. Martin[®] Washbox[™] Cleaning System Assembly, P/N WBPXXXXXXXXXXXXX

**Table I. Martin® Washbox™ Cleaning System (Dual Belt Cleaners)
Part Numbers and Quantities**

Part Numbers

Part Number	P/N Item 3	P/N Item 4	P/N Item 5	Qty Items 6 & 7	Qty Item 8	Qty Item 9
WBP18XXXXXXXXXX	38263-18B	38263-18T	38263-18	56	70	64
WBP24XXXXXXXXXX	38263-24B	38263-24T	38263-24	59	73	67
WBP30XXXXXXXXXX	38263-30B	38263-30T	38263-30	62	76	70
WBP36XXXXXXXXXX	38263-36B	38263-36T	38263-36	65	79	73
WBP42XXXXXXXXXX	38263-42B	38263-42T	38263-42	68	82	76
WBP48XXXXXXXXXX	38263-48B	38263-48T	38263-48	71	85	79
WBP54XXXXXXXXXX	38263H-54BP	38263H-54TP	38263H-54P	74	88	82
WBP60XXXXXXXXXX	38263H-60BP	38263H-60TP	38263H-60P	78	92	86
WBP72XXXXXXXXXX	38263H-72BP	38263H-72TP	38263H-72P	82	96	90
WBP84XXXXXXXXXX	38263H-84BP	38263H-84TP	38263H-84P	86	100	94

Part Number	P/N Item 15	P/N Item 24	P/N Item 28	Qty Item 29	P/N Item 32	Qty Item 33	P/N Item 58
WBP18XXXXXXXXXX	34595-18	38268-18C	38296-18	4	38297-18	6	—
WBP24XXXXXXXXXX	34595-24	38268-24C	38296-24	4	38297-24	6	—
WBP30XXXXXXXXXX	34595-30	38268-30C	38296-30	6	38297-30	8	—
WBP36XXXXXXXXXX	34595-36	38268-36C	38296-36	6	38297-36	8	—
WBP42XXXXXXXXXX	34595-42	38268-42C	38296-42	8	38297-42	8	—
WBP48XXXXXXXXXX	34595-48	38268-48C	38296-48	10	38297-48	10	—
WBP54XXXXXXXXXX	34595-54	38268HD-54C	38296-54	12	38297-54	10	38588-54
WBP60XXXXXXXXXX	34595-60	38268HD-60C	38296-60	12	38297-60	10	38588-60
WBP72XXXXXXXXXX	34595-72	38268HD-72C	38296-72	14	38297-72	12	38588-72
WBP84XXXXXXXXXX	34595-84	38268HD-84C	38296-84	16	38297-84	12	38588-84

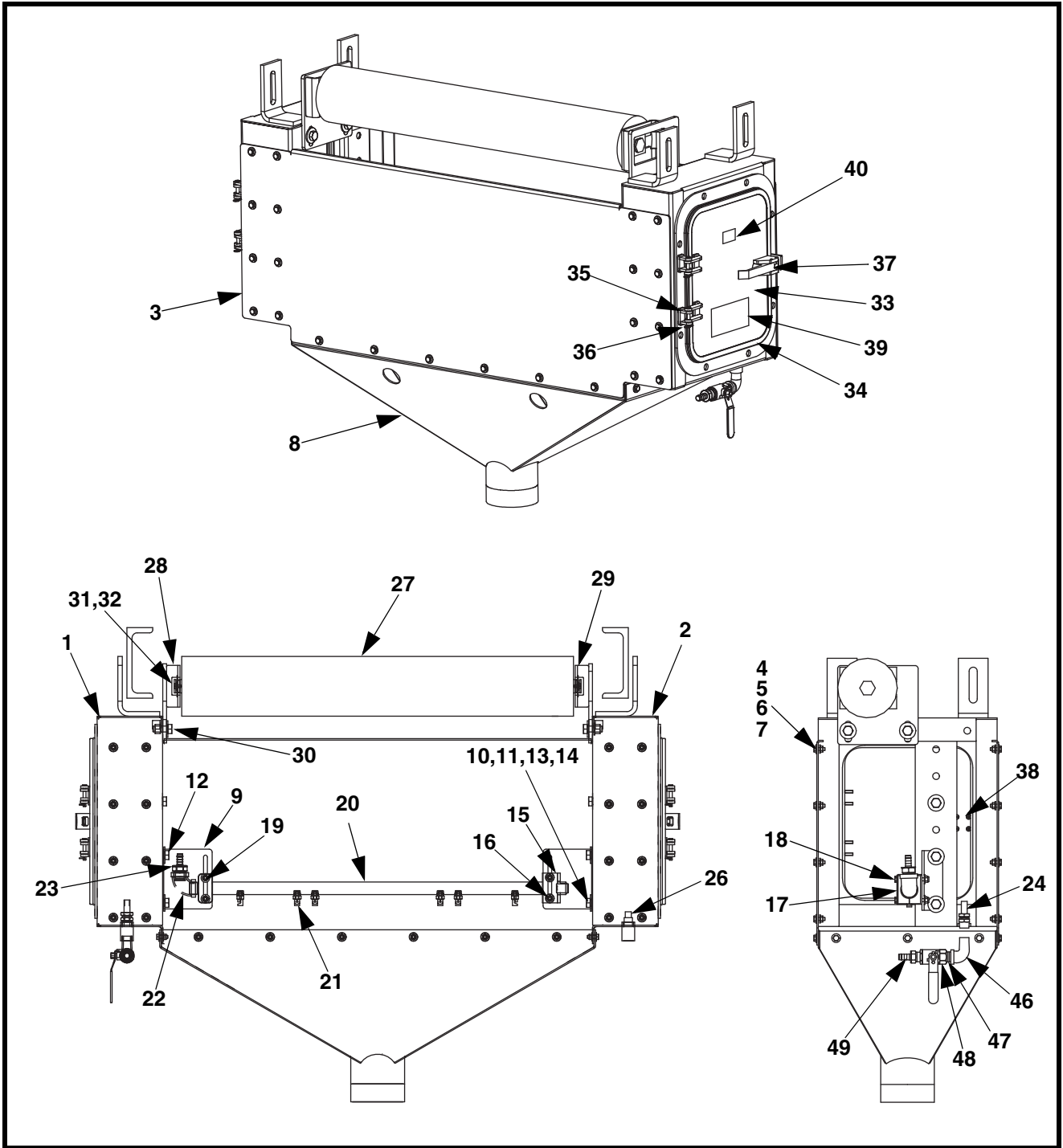


Figure 2. Martin® Washbox™ Cleaning System Assembly, P/N WBSCPXXXXXXXX

Item	Description	Part Number	Qty
1	Side Weldment	38594-R	1
2	Side Weldment	38594-L	1
3	End Panel	Table II	2
4	Flat Washer 1/4 Wide ZP	15073	Table II
5	Screw HHC 1/4-20NC x 3/4 ZP	11852	Table II
6	Compression Washer 1/4	11521	Table II
7	Hex Nut 1/4-20NC ZP	11769	Table II
8	Funnel Weldment	Table II	1
9	Hanger Bracket	38267	2
10	Flat Washer 1/2 Wide ZP	17328	10
11	Screw HHC 1/2-13NC x 1 ZP	13842	2
12	Screw HHC 1/2-13NC x 1-1/2 ZP	11763	4
13	Compression Washer 1/2	11750	10
14	Hex Nut 1/2-13NC ZP	11771	10
15	Angle Spray Bar Retainer	38269	1
16	Screw HHC 1/4-20NC x 1 ZP	12699	2
17	Vibration Pipe Clamp for 3/4 Pipe	38239	1
18	Screw HHC 1/4-20NC x 2-1/2 ZP	33668	2
19	Nut Hex Elastic Lock 1/4-20NC ZP	30227	2
20	Spray Bar Weldment	Table II	1
21	Nozzle Spray 1/4-NPT Brass	28276-06	Table II
22	Elbow 90 Degree 3/4-NPT Galvanized	33246	1
23	Hose Barb 3/4-NPT x 1/2 Hose Brass	17309	1
24	Hose Barb Swivel 1/2-NPT x 1/2 Hose	36320	1
25 (NS)	Hose Gray 1/2 ID x 24	17239-24	1
26	Plug Pipe 1/2 NPT Plastic	12519	1
27	Idler Roll 5.00 Dia.	Table II	1
28	Roller Bracket Weldment	38601-L	1
29	Roller Bracket Weldment	38601-R	1
30	Screw HHC 1/2-13NC x 1-1/4 ZP	13835	4
31	Tie Tab	29852	2
32	Screw HHC 1/4-20NC x 3/8 ZP	32185	2
33	Low Profile Door Weldment	38932-1214	2
34	Gasket Rubber Door Seal	38400-1214	2
35	Pin Clevis 1/4 x 1-5/8 SS	34952	4
36	Hairpin Cotter .06 Dia. x 1.13 SS	34951	4
37	Over Center Lever Latch	37051	2

Item	Description	Part Number	Qty
38	Screw PHPM #10-32NF x 1/2 with Washer	38182	8
39	Martin® Nameplate 2.50 x 5.30 SS	33970	1
40	Label Martin Engineering Logo	22193-01	2
41 (NS)	Silicone Sealant	28576	2
42 (NS)	Flat Washer 5/8 Narrow ZP	16814	4
43 (NS)	Screw HHC 5/8-11NC x 2 ZP	18831	4
44 (NS)	Compression Washer 5/8	11752	4
45 (NS)	Hex Nut 5/8-11NC ZP	11772	4
46	Elbow Street 1/2-NPT Galvanized	38235	1
47	Nipple Pipe 1/2-NPT x 1.13 Galvanized	37140	1
48	Valve Ball 1/2 NPT	14824	1
49	Hose Barb 1/2-NPT x 1/2 Hose Brass	17235	1
50 (NS)	Operator's Manual	M3768	1

NS = Not Shown

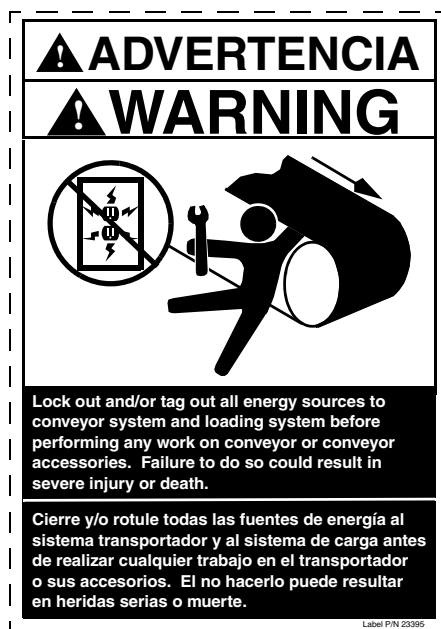
Figure 2. Martin® Washbox™ Cleaning System Assembly, P/N WBSCPXXXXXXXX

**Table II. Martin® Washbox™ Cleaning System (Single Belt Cleaner)
Part Numbers and Quantities**

Part Number	P/N Item 3	P/N Item 8	P/N Item 20	P/N Item 27	Qty Item 4	Qty Item 5	Qty Item 6	Qty Item 7	Qty Item 21
WBSCP18XXXXX	38263-18	38595-18C	38596-18	34595-18	50	46	50	48	4
WBSCP24XXXXX	38263-24	38595-24C	38596-24	34595-24	52	48	52	50	4
WBSCP30XXXXX	38263-30	38595-30C	38596-30	34595-30	54	50	54	52	6
WBSCP36XXXXX	38263-36	38595-36C	38596-36	34595-36	56	52	56	54	6
WBSCP42XXXXX	38263-42	38595-42C	38596-42	34595-42	58	54	58	56	6
WBSCP48XXXXX	38263-48	38595-48C	38596-48	34595-48	60	56	60	58	8

Appendix A

Martin® Washbox™ Cleaning System Labels



Conveyor Products Warning Label, P/N 23395

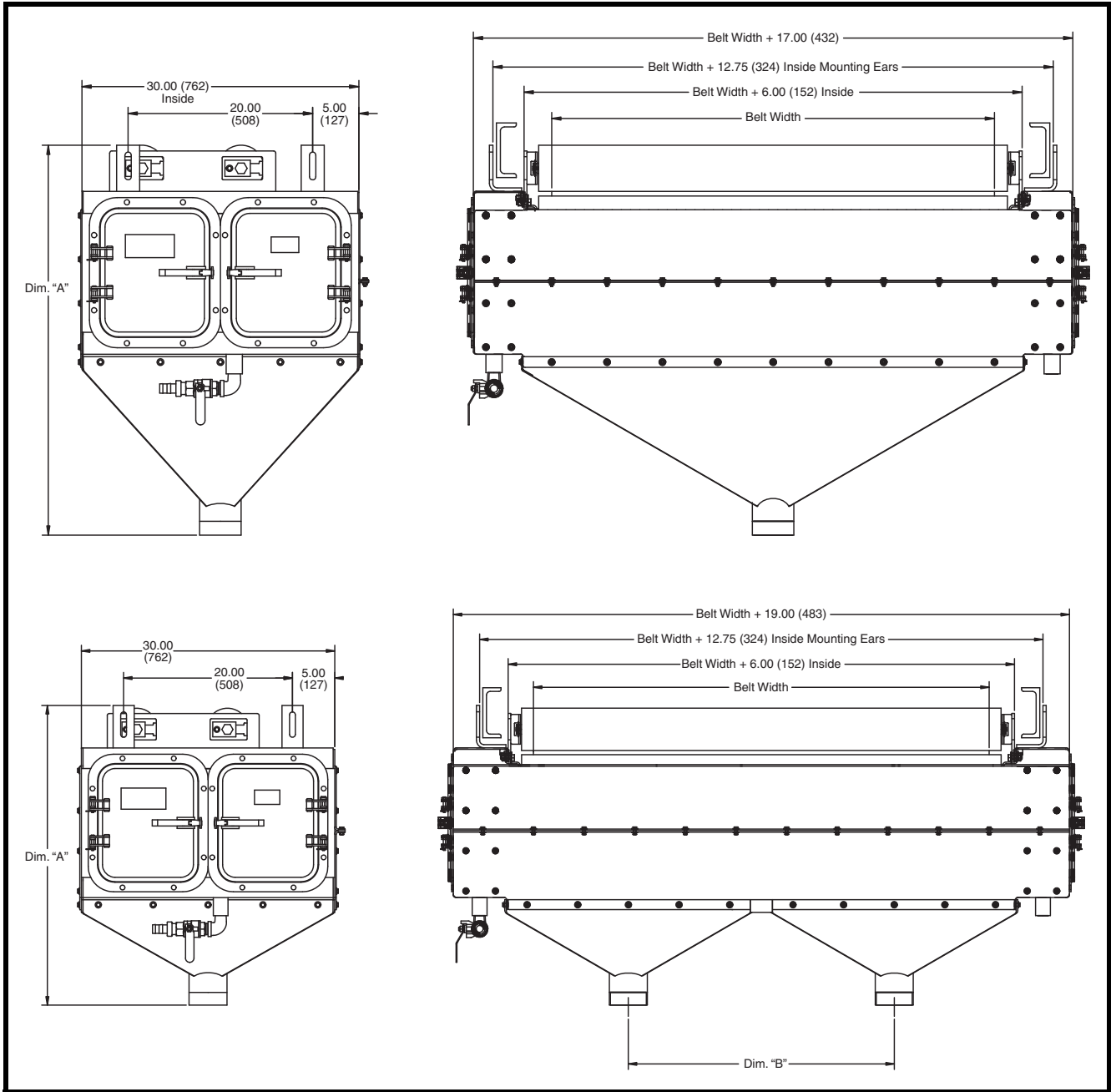


Pinch Point Warning Label, P/N 30528



Martin® Inspection Door Warning Label, P/N 30382

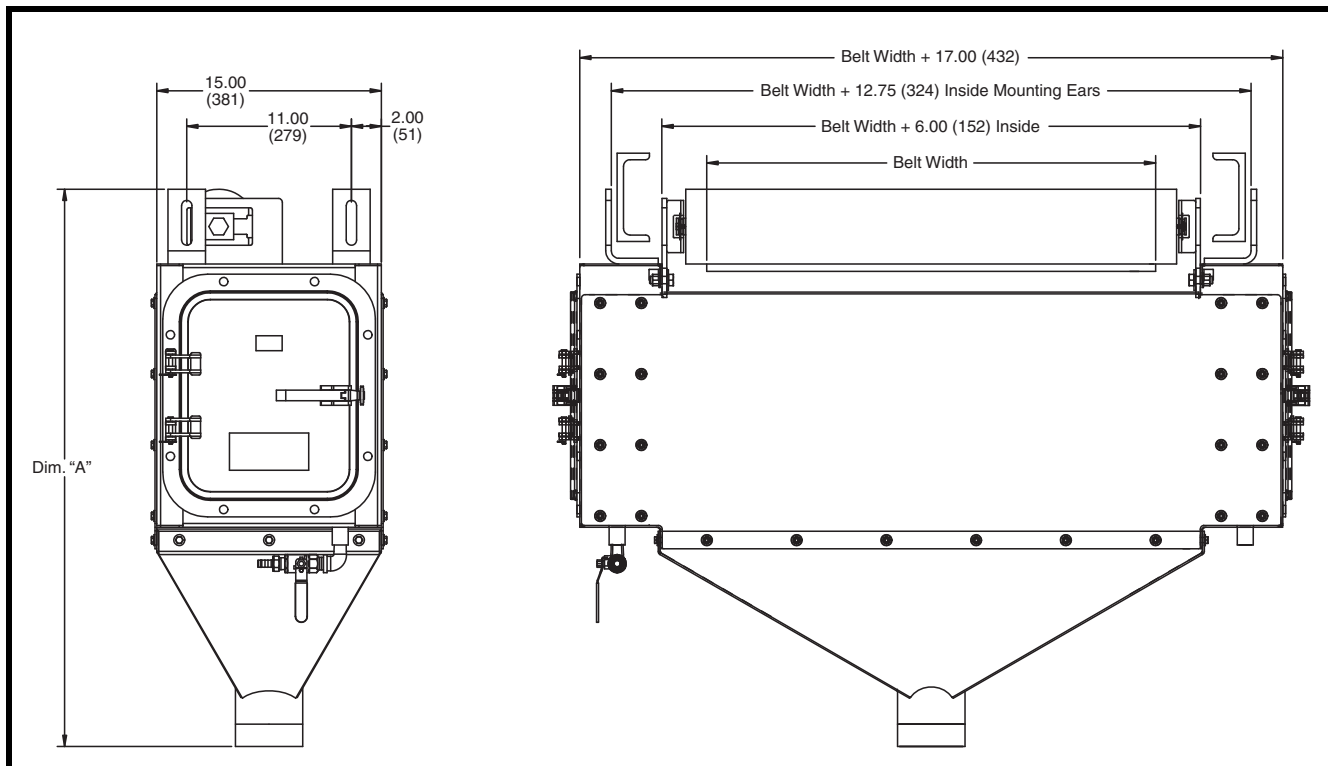
Appendix B
Martin® Washbox™ Cleaning System Dimensions



Martin® Washbox™ Cleaning System Dimensions, P/N WBPXXXXXXXXXXXX

Part Number	Dim. A
WBP18XXXXXXXXXXXX	34.01 (864)
WBP24XXXXXXXXXXXX	35.69 (907)
WBP30XXXXXXXXXXXX	37.29 (947)
WBP36XXXXXXXXXXXX	38.94 (989)
WBP42XXXXXXXXXXXX	40.57 (1030)
WBP48XXXXXXXXXXXX	42.19 (1072)

Part Number	Dim. A	Dim. B
WBP54XXXXXXXXXXXX	44.45 (1129)	31.52 (801)
WBP60XXXXXXXXXXXX	46.16 (1172)	34.52 (877)
WBP72XXXXXXXXXXXX	49.64 (1261)	40.51 (1029)
WBP84XXXXXXXXXXXX	53.14 (1350)	46.51 (1181)



Martin® Washbox™ Cleaning System Dimensions, P/N WBSCPXXXXXXXX

Part Number	Dim. A
WBSCP18XXXXX	34.02 (864)
WBSCP24XXXXX	35.70 (907)
WBSCP30XXXXX	37.30 (947)
WBSCP36XXXXX	38.95 (989)
WBSCP42XXXXX	40.58 (1031)
WBSCP48XXXXX	42.20 (1072)

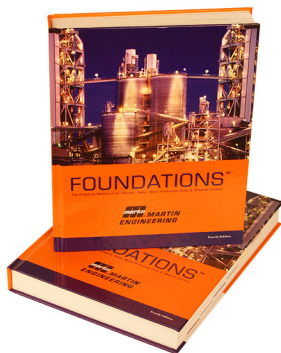
Martin® Washbox™ Cleaning System Water Consumption

Belt Width	Total Nozzles	Pressure PSI (bar)						
		5 (0.34)	10 (0.69)	15 (1.03)	20 (1.38)	30 (2.07)	40 (2.76)	60 (4.14)
18 (400-500)	10	5 (20)	8 (28)	9 (35)	11 (42)	13 (49)	15 (57)	18 (68)
24 (500-650)	10	5 (20)	8 (28)	9 (35)	11 (42)	13 (49)	15 (57)	18 (68)
30 (650-800)	14	7 (28)	11 (40)	13 (49)	15 (57)	18 (69)	21 (79)	25 (95)
36 (800-1000)	14	7 (28)	11 (40)	13 (49)	15 (57)	18 (69)	21 (79)	25 (95)
42 (1000-1200)	16	8 (32)	12 (45)	15 (57)	18 (67)	21 (79)	24 (91)	29 (109)
48 (1200-1400)	20	11 (40)	15 (57)	18 (70)	22 (83)	26 (98)	30 (114)	36 (136)
54 (1400-1600)	22	12 (44)	17 (62)	20 (77)	24 (92)	29 (108)	33 (125)	40 (150)
60 (1600-1800)	22	12 (44)	17 (62)	20 (77)	24 (92)	29 (108)	33 (125)	40 (150)
72 (1800-2000)	26	14 (52)	20 (74)	24 (91)	29 (108)	34 (128)	39 (148)	47 (177)
84 (2000-2200)	30	16 (60)	23 (85)	28 (104)	33 (125)	39 (148)	45 (170)	54 (204)

Consumption is measured in approximate gallons per minute (L/min) and is intended for reference only.

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