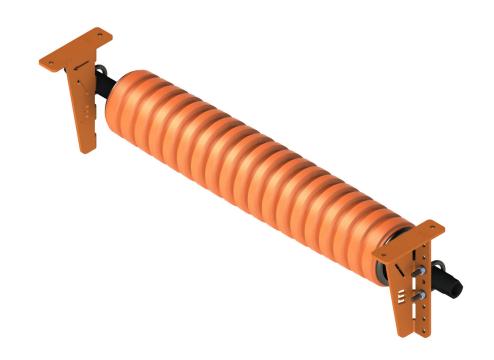


## Martin<sup>®</sup> Roller Tracker<sup>™</sup>





Operator's Manual M4108

#### **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.



#### **▲** DANGER

Before installing, servicing, or adjusting the conveyor 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.

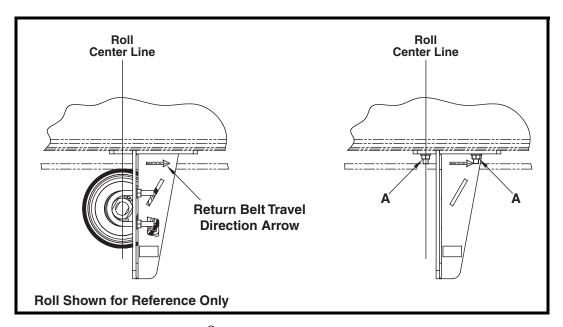


Figure 1. Martin<sup>®</sup> Roller Tracker<sup>TM</sup> Mounting Location

- 1. Turn off and lockout / tagout / blockout / testout energy source according to ANSI standards.
- 2. Remove existing return belt idler and brackets.

### NOTE

Arrow on bracket indicates belt direction. Make sure bracket is installed with arrow pointing the direction the return side of the belt will be traveling.

- 3. Mark center line of Martin<sup>®</sup> Roller Tracker<sup>TM</sup> roll on stringer. Make sure center line is perpendicular to belt line.
- 4. Using the bracket as a template, align small slot on mount bracket with roll center line and mark location of mounting holes.
- 5. Drill or cut holes in stringer. Remove burrs and sharp edges.
- 6. Install bracket onto stringer using cap screws, washers, and nuts (A).
- 7. Repeat steps 3–6 on opposite side of conveyor.



Set height of Martin<sup>®</sup> Roller Tracker<sup>TM</sup> approximately 1 in. (25 mm) higher than removed return idler.

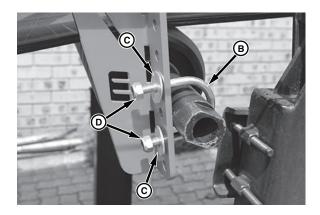


Figure 2. Installing Roll onto Brackets

- 8. Determine proper mounting holes on brackets. Install roll onto brackets using U-bolts (B). Fasten U-bolts with washers (C) and nuts (D), but do not fully tighten.
- 9. Center roll on stringer.

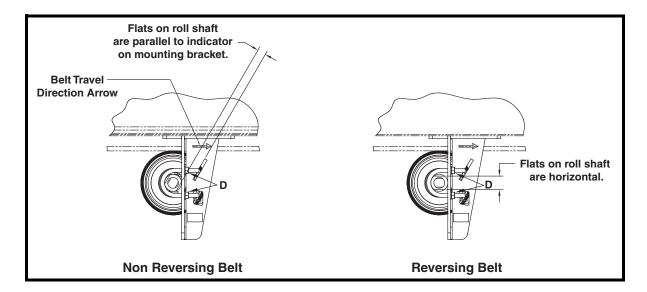


Figure 3. Roll Shaft Orientation

- 10. For non reversing belts, rotate center shaft of roll so machined flats on shaft are parallel with indicator on bracket. Approximate angle is 30 degrees towards the direction of the return belt.
- 11. For reversing belts, rotate center shaft of roll so machined flats on shaft are horizontal.
- 12. Tighten nuts (D) on U-bolts.
- 13. Make sure all fasteners are tight and remove all tools from installation area.





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.

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





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.

2. Turn on conveyor belt and observe belt tracking.



#### **▲WARNING**

Before adjusting  $\overline{Martin}^{\otimes}$  Roller Tracker<sup>TM</sup>, turn off and lock out/tag out energy source to conveyor and conveyor accessories.

- 3. Allow belt to run through at least ten revolutions. Then turn off and lock out/tag out energy source according to ANSI standards (see "References").
- 4. Make sure all fasteners are tight. Tighten if necessary.
- 5. If necessary, raise Martin<sup>®</sup> Roller Tracker<sup>TM</sup> so belt contacts roller across entire width.
  - a. Loosen and remove u-bolts.
  - b. Raise shaft up and attach with u-bolts.
  - c. Check alignment of shaft with notch in hanger bracket.
  - d. Tighten nuts on u-bolts.

NOMENCLATURE	CTRS	XX
P/N Prefix ————		Т
Belt Width (inches)		

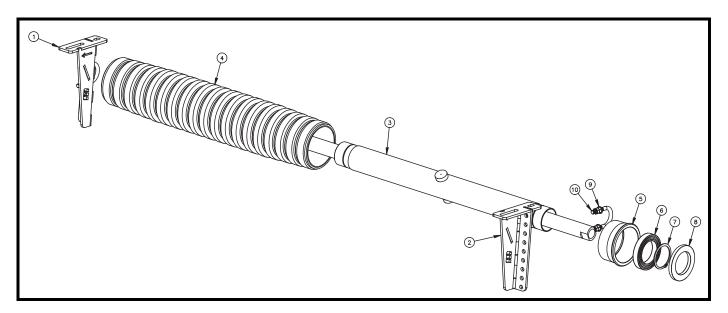


Figure 4. Martin $^{\otimes}$  Roller Tracker $^{\text{TM}}$  Assembly, P/N CTRSXX

Item	Description	Part No.	Qty
1	Hanger Bracket Right	CTRA904R	1
2	Hanger Bracket Left	CTRA904L	1
3	Pivot Tube Weldment	CTRSXXA900*	1
4	Disc Tube Assembly	CTRSXXA902*	1
5	Bearing Sleeve	CTRP007	2
6	Ball Bearing	CTRP008	2
7	Retaining Ring Ext A85 Std	39570	2
8	Rubber Oil Seal	CTRP009	2
9	Washer Compression 1/2	11750	4
10	U-Bolt Extended Lg F/2" Pipe 1/2-13NC	39071	2
11	Label Martin Product 32238		2
12	Mounting Hardware	35283	1
13	Operator's Manual	M4108	1

<sup>\*</sup>XX indicates belt width in inches.

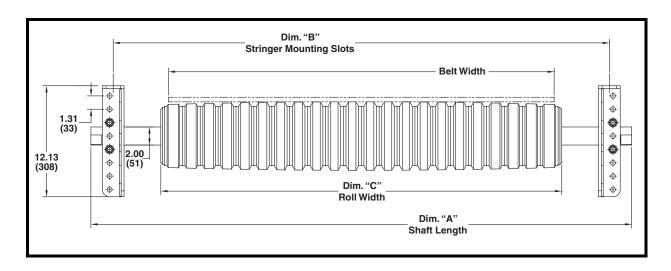
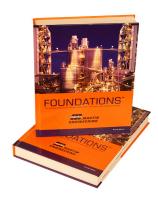


Table I.  $Martin^{\text{(B)}}$  Roller  $Tracker^{TM}$  Dimensions

Assembly P/N	Belt Width in. (mm)	Dim. "A"	Dim. "B"	Dim. "C"
CTRS20	20 (500)	36.97 (939)	29 (736)	21.46 (545)
CTRS24	24 (600)	40.87 (1038)	33 (838)	25.35 (644)
CTRS30	30 (750)	46.85 (1190)	39 (990)	31.18 (792)
CTRS36	36 (900)	52.91 (1344)	45 (1144)	37.05 (941)
CTRS42	42 (1050)	58.90 (1496)	51 (1296)	42.87 (1089)
CTRS48	48 (1200)	64.88 (1648)	57 (1448)	48.74 (1238)
CTRS54	54 (1350)	70.87 (1800)	63 (1600)	56.54 (1436)
CTRS60	60 (1500)	76.85 (1952)	69 (1752)	62.36 (1584)
CTRS72	72 (1650)	88.86 (2257)	81 (2057)	74.06 (1881)



# 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.

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