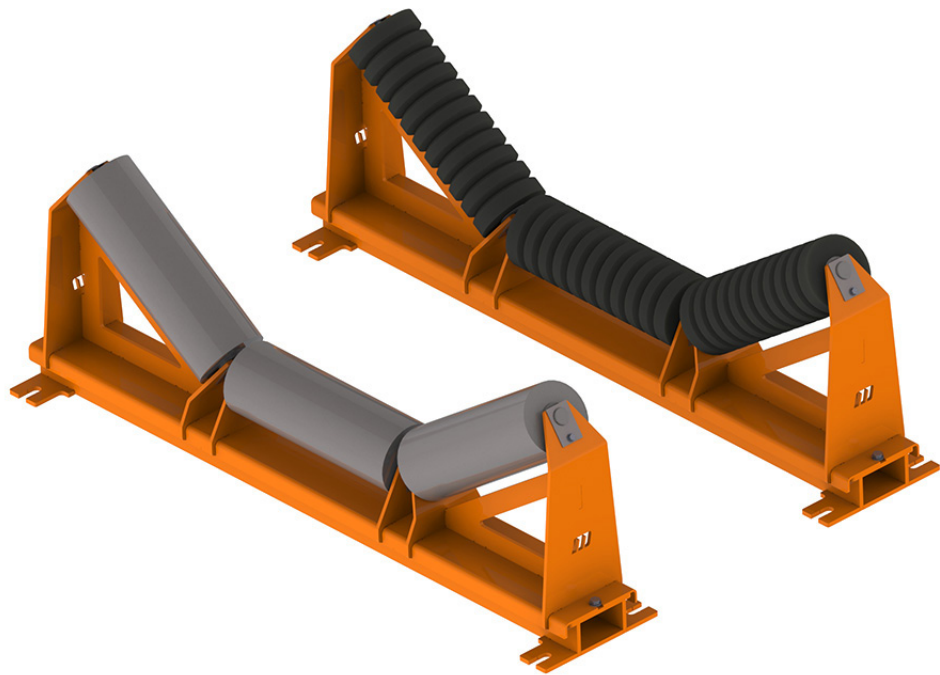


martin®

Martin®
Trac-Mount™ Idler



Operator's Manual
M4055

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® Trac-Mount™ Idlers utilize sliding frames on a stationary base to provide an idler set that will fit in tight spaces between belt support cradles and allows easy installation and service. Trac-Mount™ Idlers are available in 20, 35 and 45-degree angles. Idlers can be steel or impact idlers.

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.

Safety

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

Materials Required

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

Before Installing Idlers

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 idler from shipping container.
3. If anything is missing or damaged, contact Martin Engineering or a representative.
4. Make sure belt is centered on conveyor.

⚠ WARNING

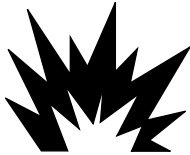
Before installing equipment, turn off and lock out/tag out energy source to conveyor and conveyor accessories.



5. 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.



6. If using a cutting torch or welding, test atmosphere for gas level or dust content. Cover conveyor belt with fire retardant cover.
7. If not already present, install an impact idler 1 in. (25 mm) ahead of and 1 in. (25 mm) behind combination cradle location.
8. Remove any unnecessary idlers.

Installing Idlers

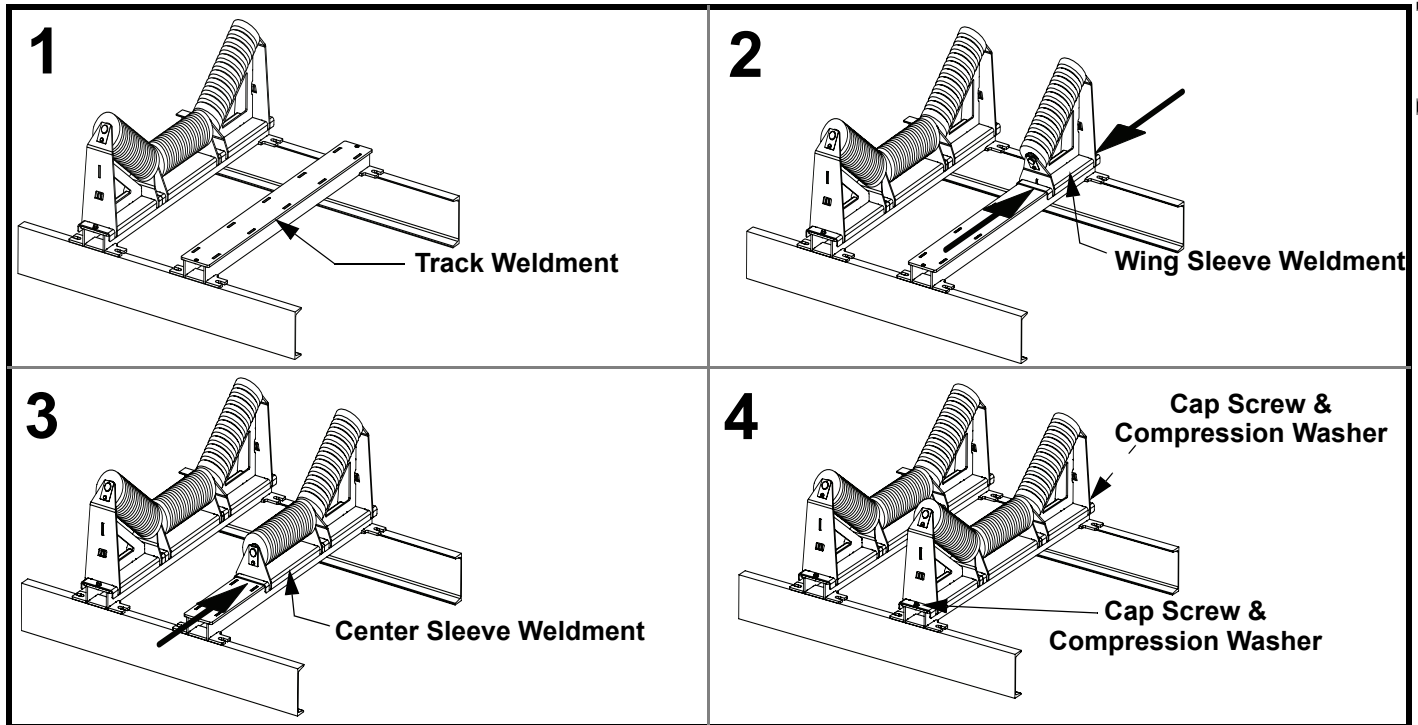


Figure 1. Installing Idlers

IMPORTANT

Installing Trac-Mount™ Idlers

Make sure all idlers in the transfer point are identical (same make and CEMA classification) to ensure proper fit.

1. If necessary, remove any idlers in transfer point where Martin® Trac-Mount™ Idlers are to be located.
2. See Figure 1. Attach track weldment to stringers using supplied hardware. Make sure track weldment is 90° to belt travel.
3. If necessary, attach rollers to sleeve weldments using tie tabs and hardware provided.
4. Slide sleeve weldments onto track weldment one at a time and secure wing sleeve weldments to track weldment with cap screws and compression washers.

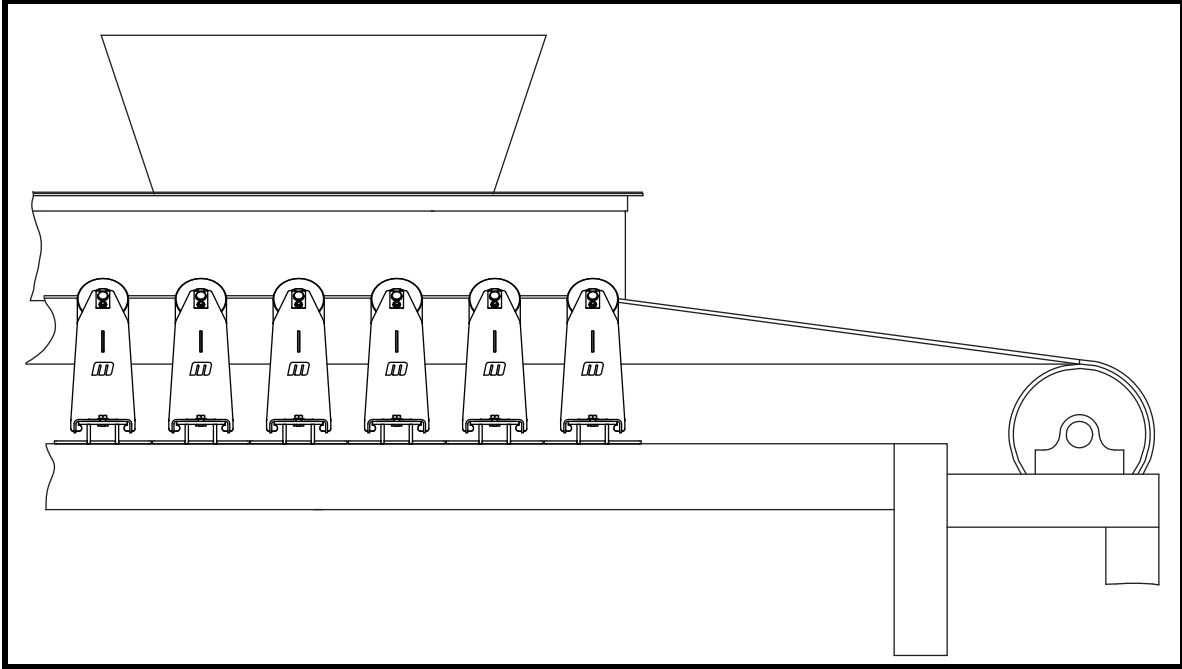


Figure 2. Installing Idlers in Impact Zone

Installing Idlers in Impact Zone

1. Starting from point where material first impacts belt, measure back 12 in. (305 mm) toward tail pulley. Mark position on stringer.
2. From point marked on stringer, install idlers as explained in *Installing Trac-Mount™ Idlers*, making sure track weldments are as close together as possible (see Figure 2).

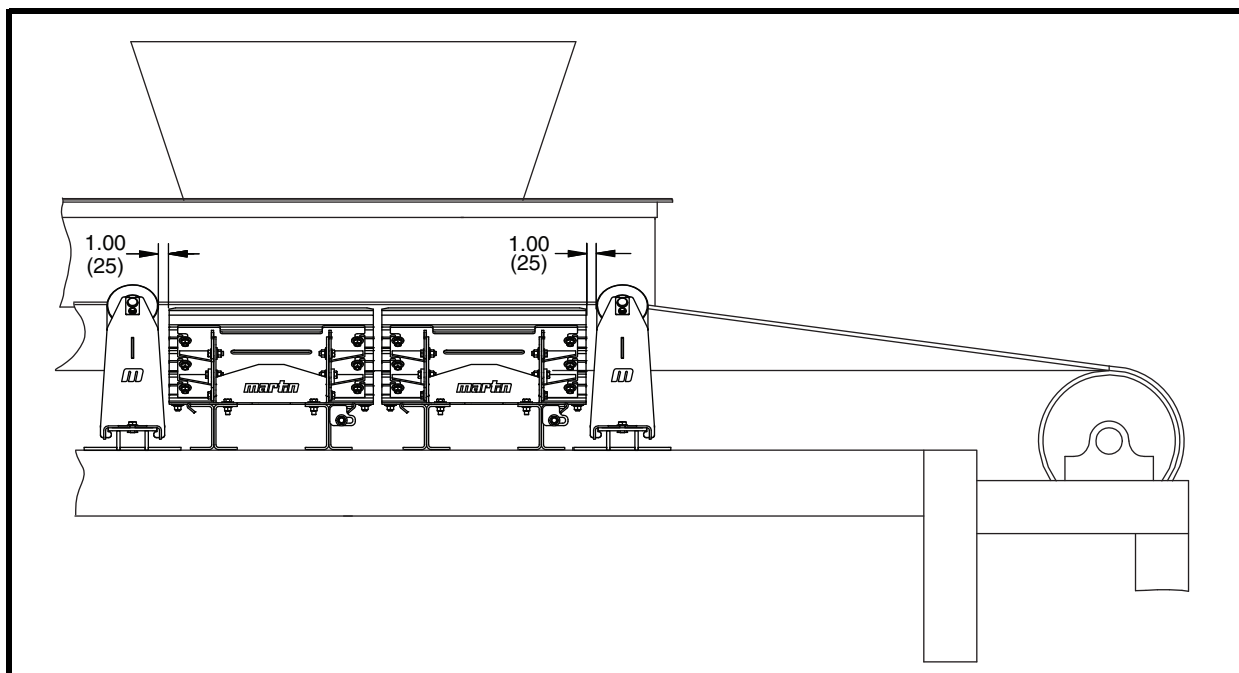


Figure 3. Installing Idlers with a Martin® Impact Cradle or Support Cradle

***Installing Idlers
with a Martin®
Impact Cradle or
Support Cradle***

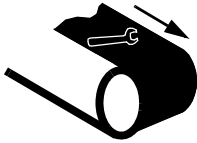
1. Install the Martin® Impact Cradle or Support Cradle according to applicable operator’s manual.
2. Install idlers as explained under *Installing Trac-Mount™ Idlers*, making sure roller is no more than 1 in. (25 mm) from either side of the impact or support cradle (see Figure 3).

After Installing Idlers

IMPORTANT

Read entire section before beginning work.

1. Thoroughly wipe outside chute walls clean above idler on both sides of chute. Place a Conveyor Products Warning Label (P/N 23395) on each chute wall visible to belt operator.



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.

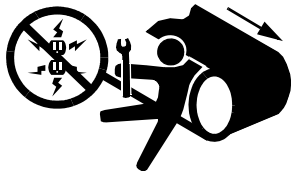
2. Remove all tools and fire retardant cover from installation area and conveyor belt.



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.

3. Turn on conveyor belt.



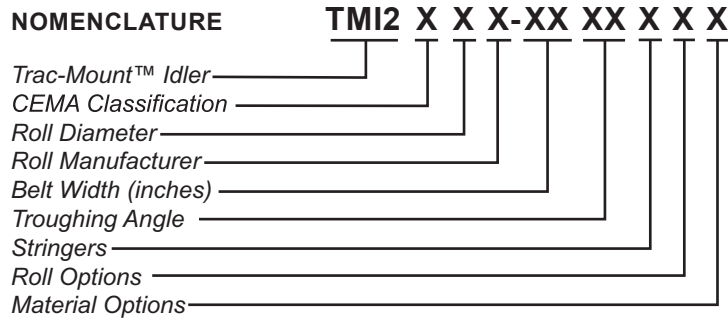
WARNING

Before adjusting combination cradle, turn off and lock out/tag out energy source to conveyor belt and conveyor accessories.

4. After 1 hour of operation, turn off and lock out/tag out energy source according to ANSI standards (see “References”).
5. Inspect idlers and make sure all fasteners are tight. Tighten if necessary.

Part Numbers

This section provides product names and corresponding part numbers for Martin® Trac-Mount™ Idlers. Please reference part numbers when ordering parts.



CEMA CLASSIFICATION:
C, D, or E

ROLL DIAMETER:
5, 6, or 7 in.

ROLL MANUFACTURER:
P: Precision Pulley and Idler
K: PROK

BELT WIDTH:
 CEMA C: 18—60 in.
 CEMA D: 24—72 in.
 CEMA E: 36—96 in.

TROUGHING ANGLE:
20: 20 Degrees
35: 35 Degrees
45: 45 Degrees
PI: Picking Idler (not available with PROK rolls)

STRINGERS:
S: Standard Base (Belt Width + 9 in.)
W: Wide Base (Belt Width + 15 in.)

ROLL OPTIONS:
S: Steel Rolls
I: Impact Rolls
C: Combination Rolls
F: Frame Only

MATERIALS OPTIONS:
Blank: Mild Steel
C: 304 Stainless Steel
S: 316 Stainless Steel

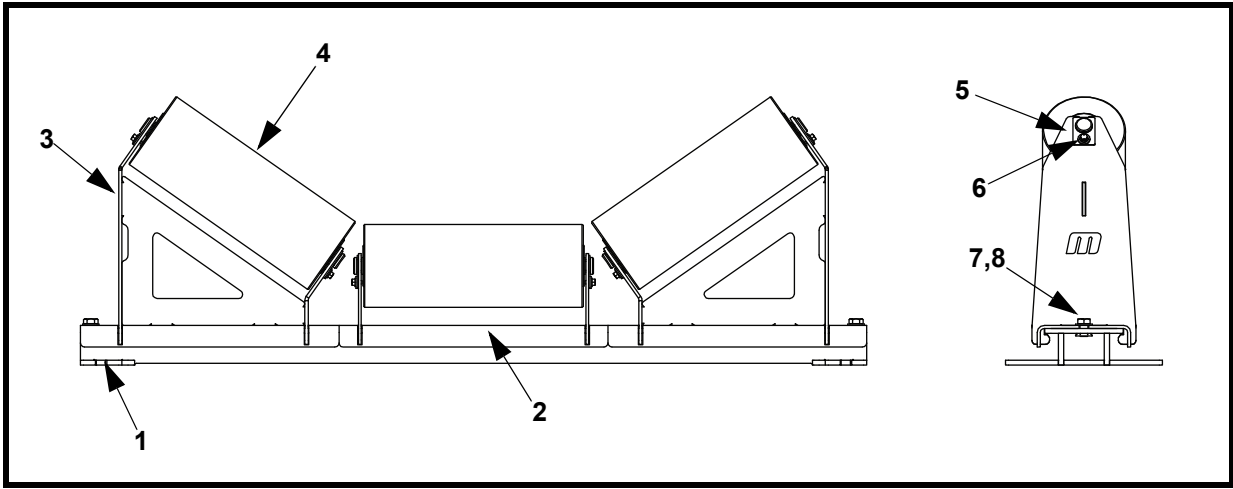


Figure 4. Martin® Trac-Mount™ Idlers, P/N TMI2CXX-XXXXXX

Item	Description	Part No.
1	Track Weldment	TMI2-TW-DXXXX
2	Center Sleeve Weldment	TMI2-CW-DXXXX
3	Wing Sleeve Weldment	TMI2-WW-DXXXXXXXX
4	Roll	TMIRCX-XXXX
5	Tie Tab	Table I
6	Screw Tapping HWH 1/4-20NC x 3/8 Type C ZP	38608
7	Washer Compression 1/2	11750
8	Screw HHC 1/2-13NC x 3/4 ZP	17080
9 (NS)	Mounting Hardware	35283

NS = Not Shown

Table I. Martin® Trac-Mount™ Idlers Part Numbers

Item 5 Part No.
TMI-TT-075P
TMI-TT-098K

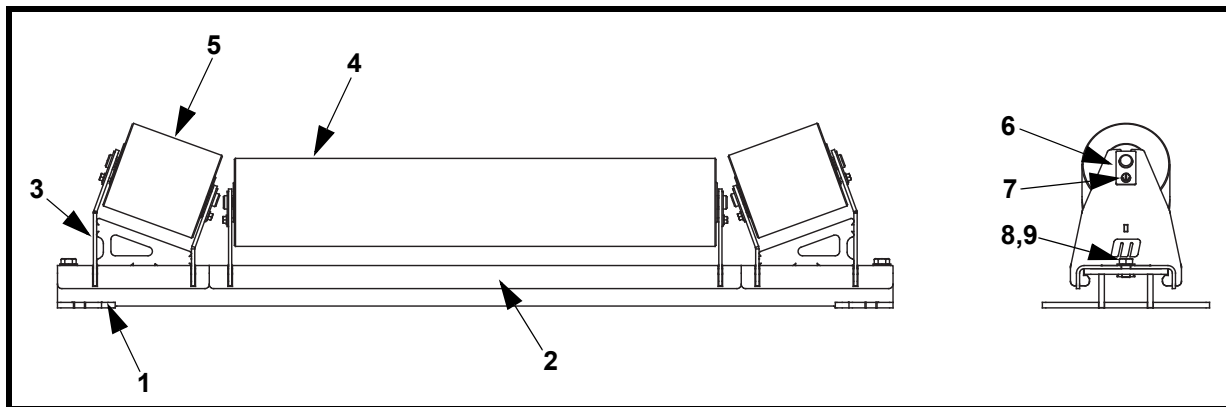


Figure 5. Martin® Trac-Mount™ Idlers, P/N TMI2CXP-XXPIXX (PPI Rolls only)

Item	Description	Part No.
1	Track Weldment	TMI2-TW-DXXX
2	Center Sleeve Weldment	TMI2-CW-DXXXPP
3	Wing Sleeve Weldment	TMI2-WW-DXXXPIXP
4	Roll	TMIRCX-XXXXXX
5	Roll	TMIRCX-XXXXXX
6	Tie Tab	TMI-TT-75P
7	Screw Tapping HWH 1/4-20NC x 3/8 Type C ZP	38608
8	Washer Compression 1/2	11750
9	Screw HHC 1/2-13NC x 3/4 ZP	17080
10 (NS)	Mounting Hardware	35283

NS = Not Shown

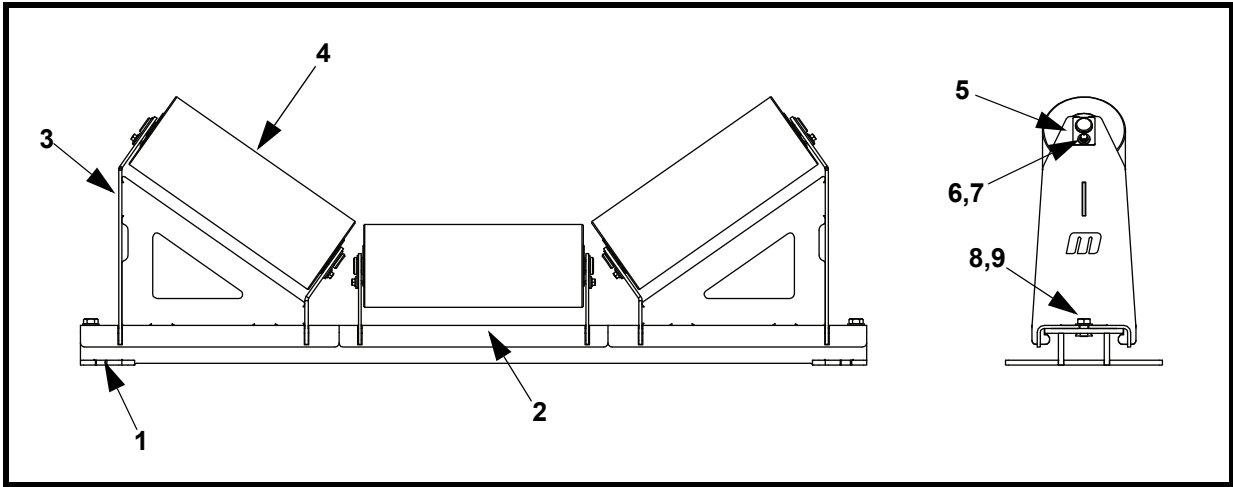


Figure 6. Martin® Trac-Mount™ Idlers, P/N TMI2DXX-XXXXXX

Item	Description	Part No.
1	Track Weldment	TMI2-TW-DXXXX
2	Center Sleeve Weldment	TMI2-CW-DXXXX
3	Wing Sleeve Weldment	TMI2-WW-DXXXXXXXX
4	Roll	TMIRDY-XXXX
5	Tie Tab	Table II
6	Washer Flat 1/4 Wide ZP	15073
7	Screw Tapping HWH 1/4-20NC x 3/8 Type C ZP	38608
8	Washer Compression 1/2	11750
9	Screw HHC 1/2-13NC x 3/4 ZP	17080
10 (NS)	Mounting Hardware	35283

NS = Not Shown

Table II. Martin® Trac-Mount™ Idlers Part Numbers

Item 5 Part No.
TMI-TT-100P
TMI-TT-098K

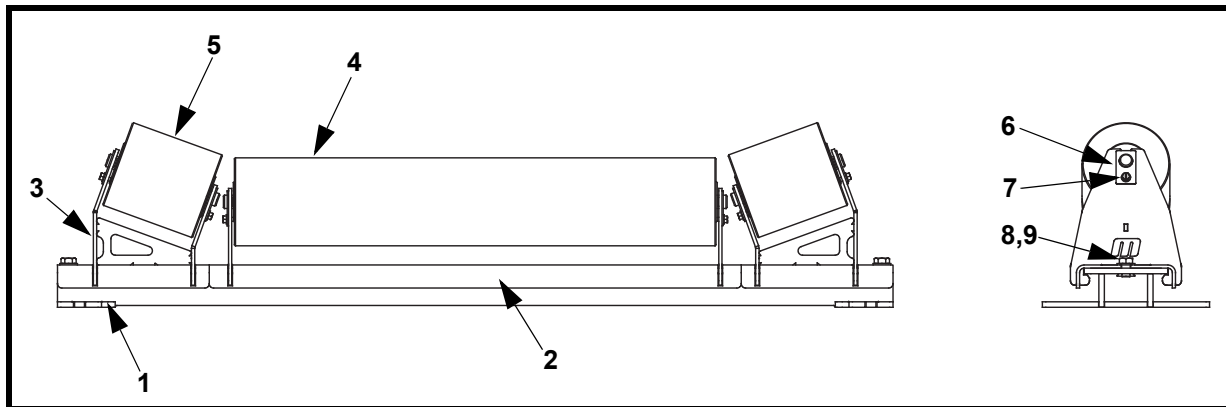


Figure 7. Martin® Trac-Mount™ Idlers, P/N TMI2DXP-XXPIXX (PPI Rolls only)

Item	Description	Part No.
1	Track Weldment	TMI2-TW-DXXX
2	Center Sleeve Weldment	TMI2-CW-DXXPP
3	Wing Sleeve Weldment	TMI2-WW-DXXPIXP
4	Roll	TMIRDX-XXXXXX
5	Roll	TMIRDX-XXXXXX
6	Tie Tab	TMI-TT-100P
7	Screw Tapping HWH 1/4-20NC x 3/8 Type C ZP	38608
8	Washer Compression 1/2	11750
9	Screw HHC 1/2-13NC x 3/4 ZP	17080
10 (NS)	Mounting Hardware	35283

NS = Not Shown

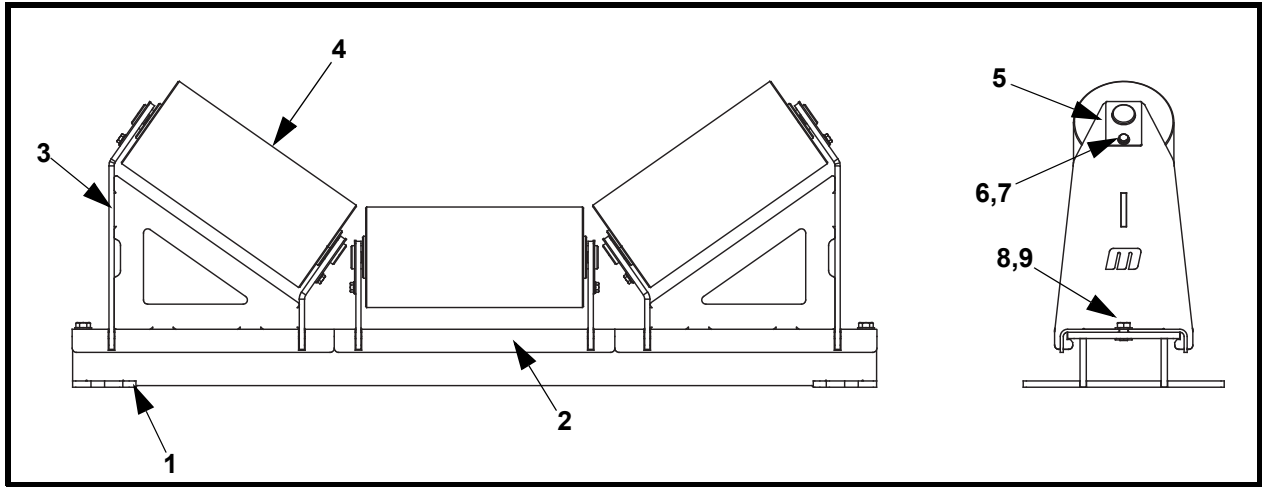


Figure 8. Martin® Trac-Mount™ Idlers, P/N TMI2EXX-XXXXXX

Item	Description	Part No.
1	Track Weldment	TMI2-TW-EXXXX
2	Center Sleeve Weldment	TMI2-CW-EXXXX
3	Wing Sleeve Weldment	TMI2-WW-EXXXXXXX
4	Roll	TMIREX-XXXX
5	Tie Tab	Table III
6	Washer Compression 5/16	11452
7	Screw HHC 5/16-18NC x 1/2 ZP	39450
8	Washer Compression 1/2	11750
9	Screw HHC 1/2-13NC x 3/4 ZP	17080
10 (NS)	Mounting Hardware	35283

NS = Not Shown

Table III. Martin® Trac-Mount™ Idlers Part Numbers

Item 5 Part No.
TMI-TT-138P2
TMI-TT-120K

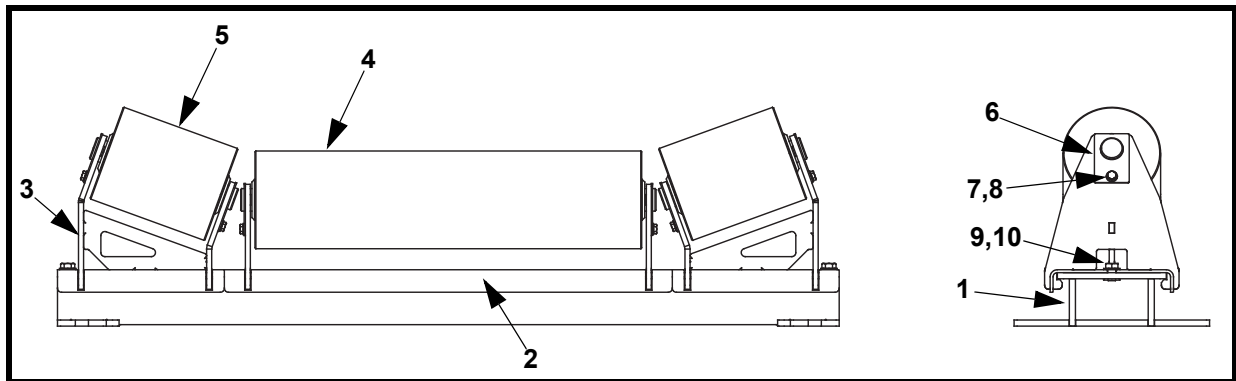


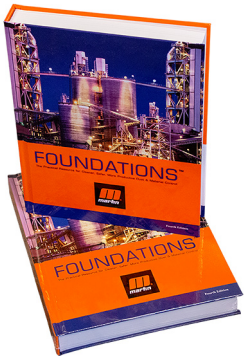
Figure 9. Martin® Trac-Mount™ Idlers, P/N TMI2EXP-XXPIXX (PPI Rolls only)

Item	Description	Part No.
1	Track Weldment	TMI2-TW-EXXX
2	Center Sleeve Weldment	TMI2-CW-EXXPP
3	Wing Sleeve Weldment	TMI2-WW-EXXPIXP
4	Roll	TMIRCX-XXXXXX
5	Roll	TMIRCX-XXXXXX
6	Tie Tab	TMI-TT-138P2
7	Washer Compression 5/16	11452
8	Screw HHC 5/16-18NC x 1/2 ZP	39450
9	Washer Compression 1/2	11750
10	Screw HHC 1/2-13NC x 3/4 ZP	17080
11 (NS)	Mounting Hardware	35283

NS = Not Shown

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