



Martin® Tracker™ Reversing Control Panel



**Operator's Manual
M4073**

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 | ii |
| Introduction | 1 |
| General | 1 |
| References | 1 |
| Material required | 1 |
| Safety | 2 |
| Before Installing Control Panel | 3 |
| Installing Control Panel | 4 |
| Installing center roll assembly | 4 |
| Installing wing roll assembly | 5 |
| Installing direction sensor | 6 |
| Mounting power supply cabinet | 7 |
| Wiring power supply cabinet | 8 |
| Operating Control Panel | 11 |
| Indicators | 11 |
| Battery Charger LED Status Lights | 12 |
| General Operation | 12 |
| After Installing Control Panel | 13 |
| Troubleshooting | 15 |
| Parts Numbers | 16 |

List of Figures

| Figure | Title | Page |
|--------|--|------|
| 1 | Installing Center Roll Assembly | 4 |
| 2 | Installing Wing Roll Assembly | 5 |
| 3 | Direction Sensor | 6 |
| 4 | Power Supply Cabinet Layout. | 7 |
| 5 | Jumper Wire | 9 |
| 6 | Installing Fuses | 10 |
| 7 | Control Panel Indicators | 11 |
| 8 | Status Lights | 12 |
| 9 | Martin [®] Roll Generator Assembly, P/N RGTMIXXP-XXCRXX | 18 |
| 10 | Martin [®] Roll Generator Assembly, P/N RGTMIEXP-XXX1XX | 20 |
| 11 | Martin [®] Roll Generator Assembly, P/N RGTMIEXP-XXX1XX. | 22 |
| 12 | Martin [®] Roll Generator Direction Sensor Mount Kit. | 24 |
| 13 | Martin [®] Tracker [™] Reversing Control Panel, P/N 39464-XXX. | 26 |

List of Tables

| Table | Title | Page |
|-------|--|------|
| I | Martin [®] Roll Generator Part Numbers and Quantities for Assembly, P/N RGTMIXXP-XXCRXX. | 19 |
| II | Martin [®] Roll Generator Part Numbers and Quantities for Assembly, P/N RGTMIEXP-XXX1XX. | 21 |
| III | Martin [®] Roll Generator Part Numbers and Quantities for Assembly, P/N RGTMIEXP-XXX1XX. | 23 |
| IV | Martin [®] Roll Generator Direction Sensor Mount Kit Part Numbers | 25 |
| V | Replacement Parts | 26 |

Introduction

General

The Martin[®] Roll Generator is a compact and self-contained power station that uses energy from a moving conveyor belt to provide 24-volt DC electricity that can be used to operate a wide variety of electronic systems, sensors, and safety mechanisms.

The Martin[®] Roll Generator attaches to a standard customer idler to produce electricity. While it is not a net producer of energy, the Martin[®] Roll Generator creates an electric current that can be used at locations that are remote or otherwise challenging to provide power to operate a PLC or other systems.

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.
- *The National Electrical Code (NEC)*, National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.

Materials required

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

Safety

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



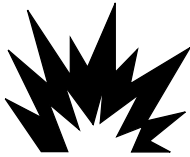
⚠ DANGER

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 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.



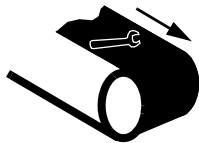
⚠ DANGER

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, 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.

Before Installing Control Panel

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® Tracker™ Reversing Control Panel assembly from shipping container.
3. If anything is missing contact Martin Engineering or a representative.



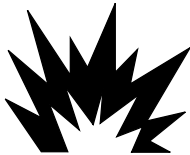
⚠ DANGER

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.

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

Do not install Martin® Roll Generator in load zone.

Installing Control Panel

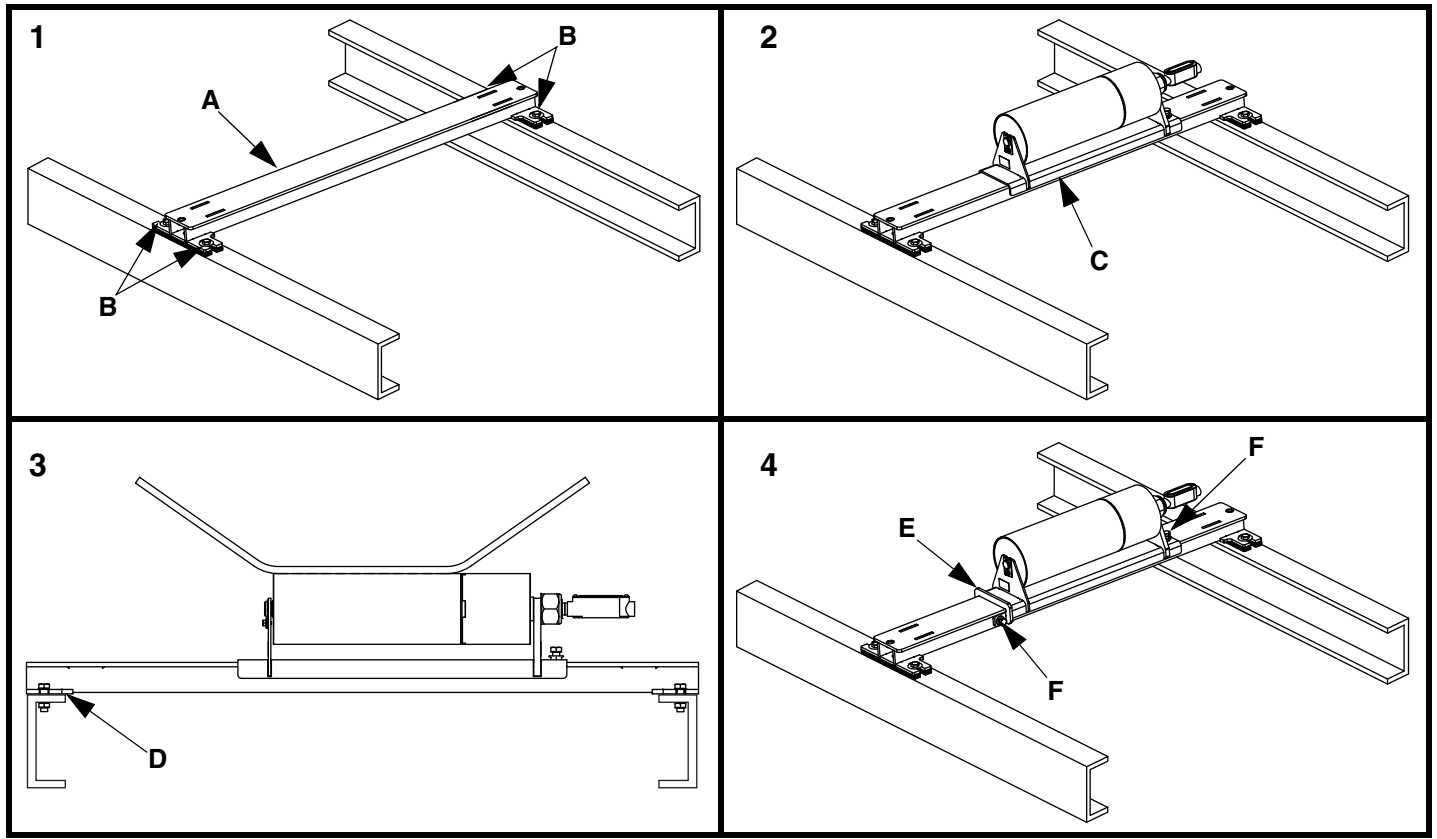


Figure 1. Installing Center Roll Assembly

Installing center roll assembly

1. Mount track weldment (A) on conveyor.
 - a. Determine desired mounting location near reversing tracker.
 - b. Position track weldment on stringer.
 - c. Make sure track weldment is 90° to belt travel.
 - d. Mark location of mounting holes.
 - e. Drill or cut two 5/8-in. holes in each stringer.
 - f. Remove burrs and sharp edges.
 - g. Fasten track weldment to stringer using supplied hardware (B). Hand tighten only.
2. Slide center roll weldment assembly (C) onto track weldment.

IMPORTANT

Roll must contact belt at all times to generate electricity, but generator housing must not come into contact with belt.

3. If necessary add shims (D) between track weldment and stringers. Tighten mounting hardware (B).
4. Slide end stop (E) onto track weldment. Tighten jam nuts (F) on center roll weldment and end stop.

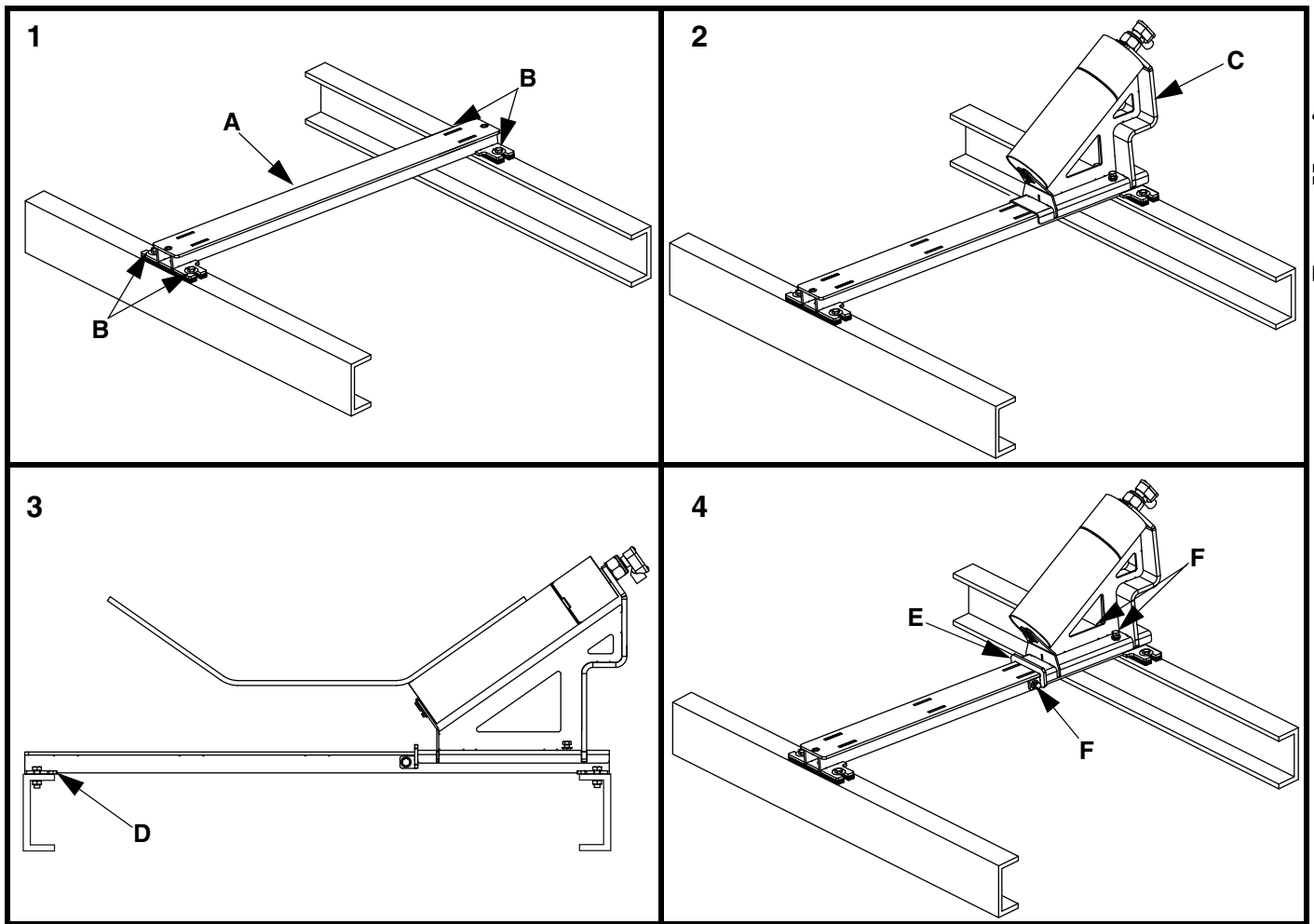


Figure 2. Installing Wing Roll Assembly

Installing wing roll assembly

1. Mount track weldment (A) on conveyor.
 - a. Determine desired mounting location near reversing tracker.
 - b. Position track weldment on stringer.
 - c. Make sure track weldment is 90° to belt travel.
 - d. Mark location of mounting holes.
 - e. Drill or cut two 5/8-in. holes in each stringer.
 - f. Remove burrs and sharp edges.
 - g. Fasten track weldment to stringer using supplied hardware (B). Hand tighten only.
2. Slide wing roll weldment assembly (C) onto track weldment until roll fully contacts belt.

IMPORTANT

Roll must contact belt at all times to generate electricity, but generator housing must not come into contact with belt.

3. If necessary add shims (D) between track weldment and stringers. Tighten mounting hardware (B).
4. Slide end stop (E) onto track weldment. Tighten jam nuts (F) on wing roll weldment and end stop.

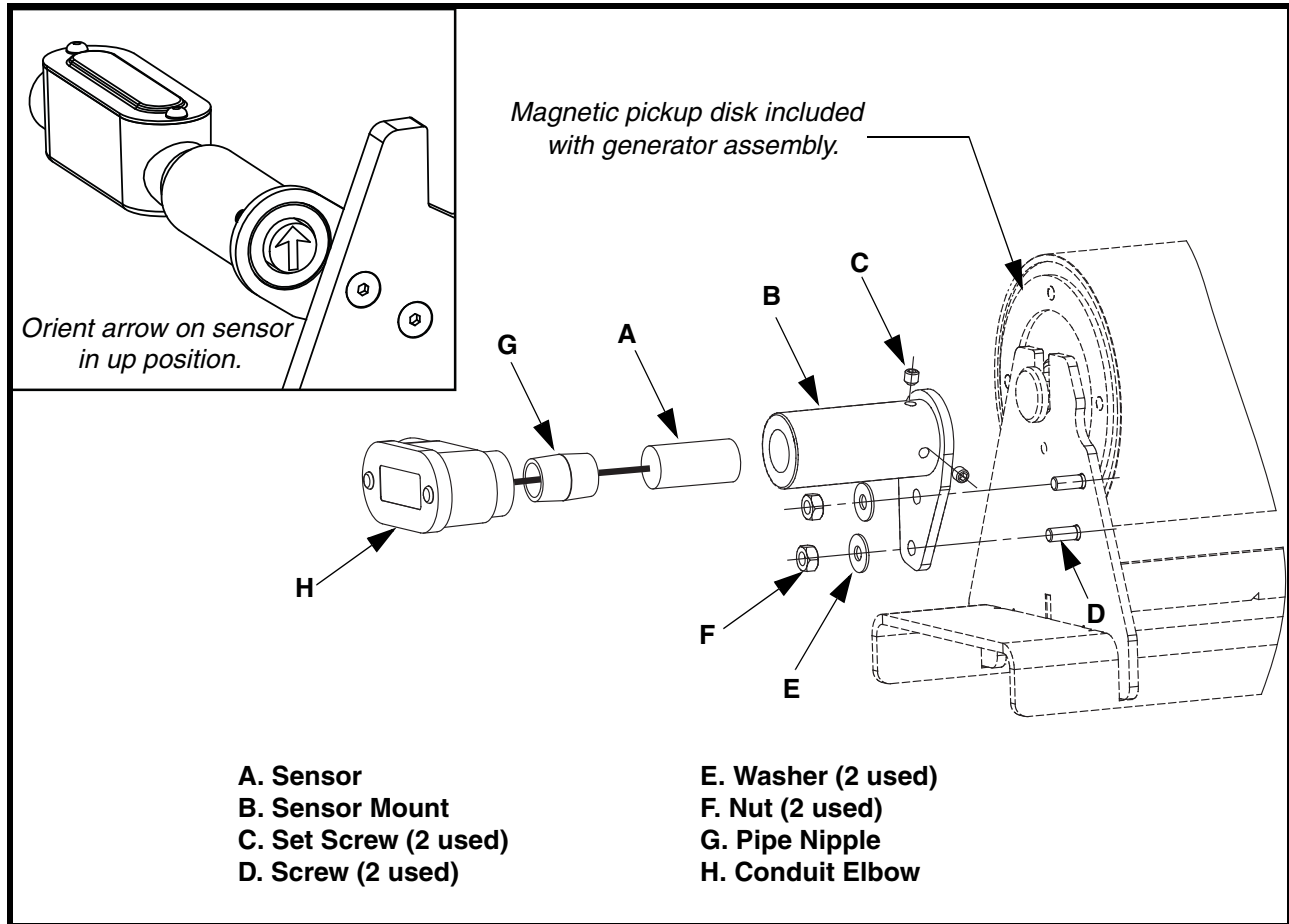


Figure 3. Direction Sensor

Installing direction sensor

1. Install sensor mount (B) on idler frame using screws (D), washers (E), and nuts (F).
2. Insert sensor (A) into sensor mount until sensor is flush with end of mount. Rotate idler roll to ensure clearance between magnetic pickup disk and sensor.
3. Rotate sensor so arrow on sensor is pointing up.
4. Tighten set screws (C).
5. Install pipe nipple (G) into sensor mount.
6. Remove cover from conduit elbow (H) and route sensor wire through elbow.
7. Install conduit elbow onto pipe nipple. Do not twist sensor wire when installing elbow.

Mounting power supply cabinet

⚠ WARNING

Before making any connections, lockout / tagout / blockout / testout electrical supply to controller according to ANSI standards (see “References”).

⚠ WARNING

All electrical work must be done to National Electrical Code (NEC) standards.

1. Determine location for power supply cabinet.

⚠ CAUTION

Do not mount power supply cabinet in area subject to shock, vibration, temperatures exceeding 130°F (55°C), or explosion. Damage to power supply cabinet circuitry could result.

2. Mount cabinet onto wall with fasteners.

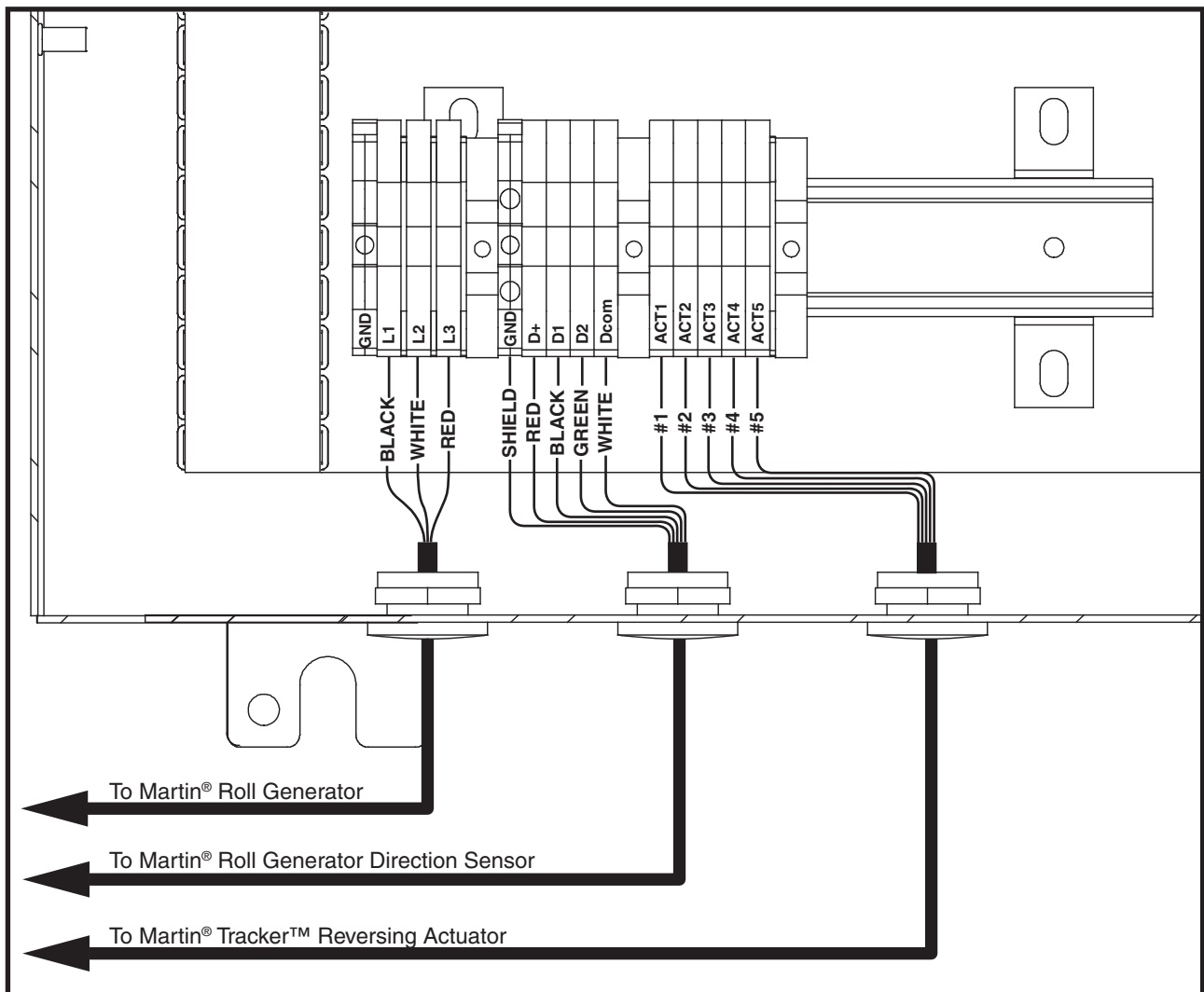


Figure 4. Power Supply Cabinet Layout

***Wiring power
supply cabinet***

1. Using electrical connectors, route wires from power supply to control panel.
 - a. For Martin[®] Roll Generator power supply, connect wires from roll generator to terminal block (see Figure 4):
 - (1) Black wire to L1 terminal.
 - (2) White wire to L2 terminal.
 - (3) Red wire to L3 terminal.
 - b. For 120/240V power supply, connect wires from power supply to terminal block:
 - (1) Line to L1 terminal.
 - (2) Neutral to L2 terminal.
 - (3) Ground to GND terminal.
2. Using electrical connectors, route wires from actuator on Martin[®] Roll Generator to control panel.
 - a. Connect wires from sensor to terminal block (see Figure 4):
 - (1) The number on each wire corresponds with the terminal it connects to (for example, wire #1 to terminal ACT1).
3. Using electrical connectors, route wires from direction sensor on Martin[®] Tracker[™] to control panel.
 - a. Connect wires from actuator to terminal block (see Figure 4):
 - (1) Shield to Ground terminal.
 - (2) Red wire to D+ terminal.
 - (3) Black wire to D1 terminal.
 - (4) Green wire to D2 terminal.
 - (5) White wire to Dcom terminal.

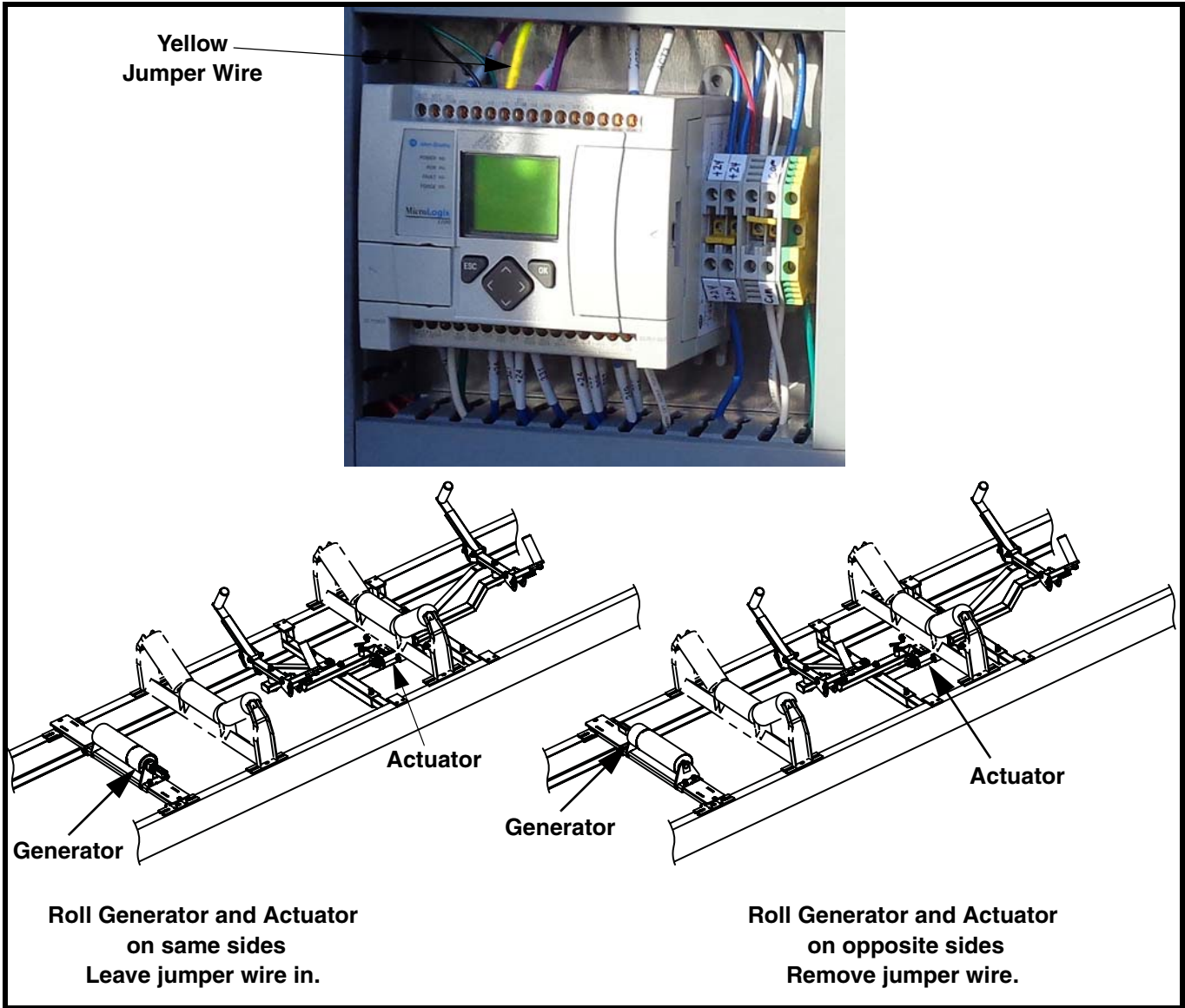


Figure 5. Jumper Wire

4. Remove yellow jumper wire if necessary. Refer to Figure 5.
5. If jumper wire is not in correct position, the “Extend” and “Retract” lights will display the opposite function of the actuator. For example, when the actuator is extended the “Retract” light will be on.

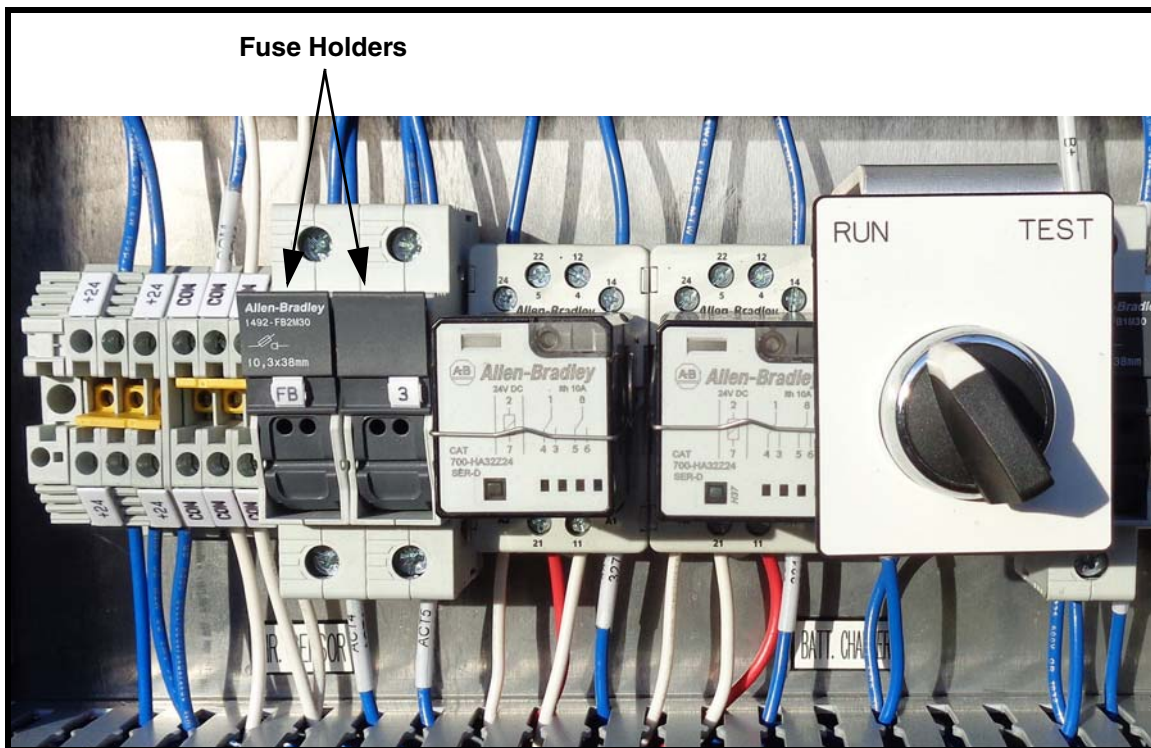


Figure 6. Installing Fuses

NOTE

Fuses are shipped loose with control panel.

6. Insert fuses into fuse holders.

Operating Control Panel

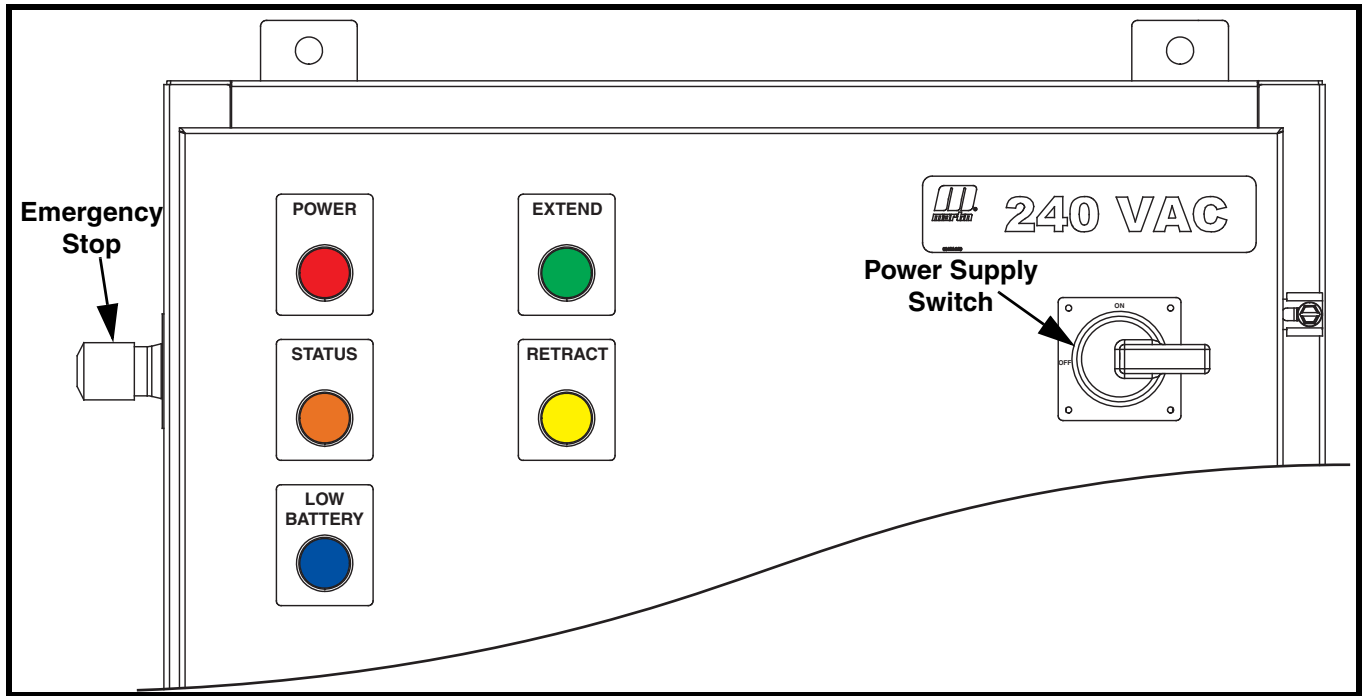


Figure 7. Control Panel Indicators

Indicators

1. Power (red):
 - a. Illuminates when the PLC is receiving power; either the roll generator is making power or the belt has been off for less than 5 minutes.
2. Status (amber):
 - a. Solid: Actuator is moving toward or at the target direction.
 - b. Flashing: Actuator error.
3. Low Battery (blue):
 - a. Solid: System observed low voltage in the last 8 hours and is attempting to recharge batteries (actuator will not move when light is on).
 - b. Flashing: Low battery condition was present in the last 8 hours and batteries have not been able to fully recharge. Batteries need service (resets on power cycle).
4. Extend (green):
 - a. Solid: Actuator at target.
 - b. Flashing: Actuator has faulted, but will try to move again (minor fault).
5. Retract (yellow):
 - a. Solid: Actuator at target.
 - b. Flashing: Actuator has faulted, but will try to move again (minor fault).

IMPORTANT

A solid amber light and either the green or the yellow light flashing indicates actuator has failed to reach target direction after 3 attempts.
 Amber, green, and yellow lights flashing indicates a major fault.

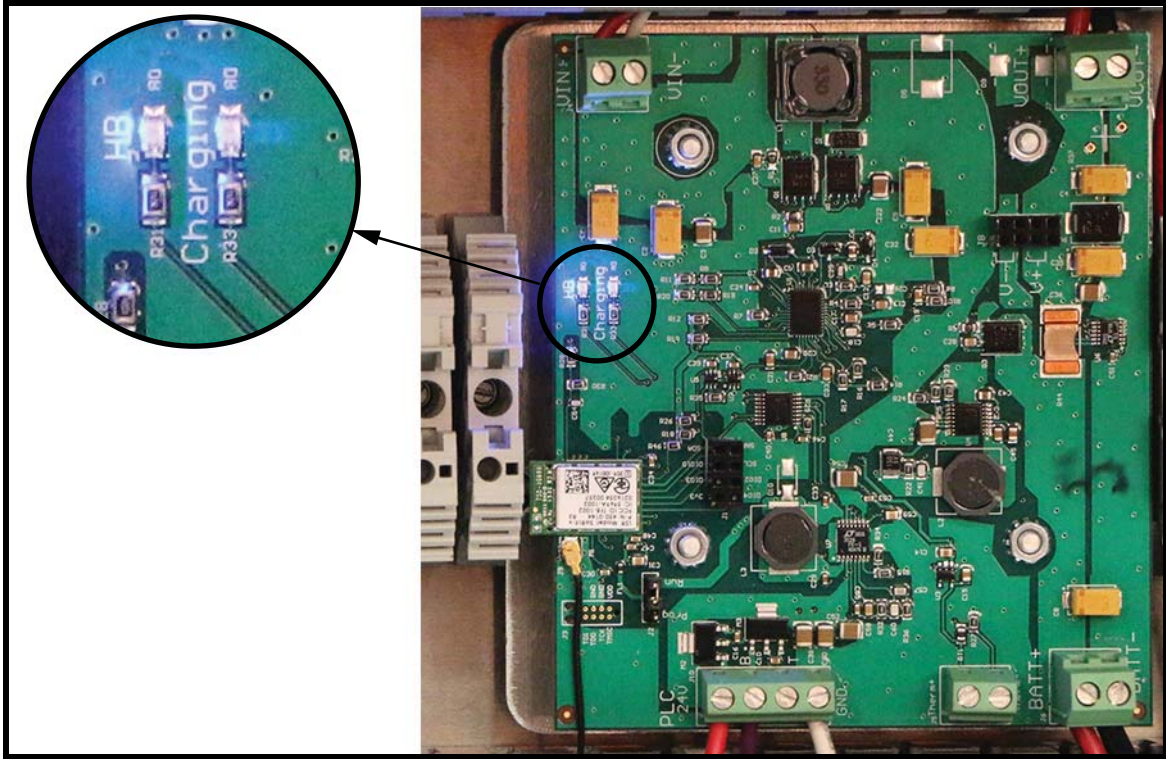


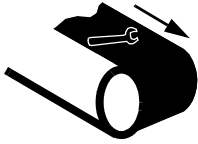
Figure 8. Status Lights

Battery Charger LED Status Lights

1. Heartbeat (HB):
 - a. Indicates batteries are connected to system. Illuminates when there is power supplied from either the battery or the roll generator.
2. Charging:
 - a. Solid: Bulk Charging Mode (maximum voltage and current),
 - b. Fast Flashing: Absorption Mode (maximum voltage and current dropping).
 - c. Slow Flashing: Float Mode (low voltage and low current maintenance).

General Operation

1. The PLC requires approximately 30 seconds to boot up when the unit is turned on.
2. The PLC will stay on for 5 minutes after conveyor stops running and the generator is not making power. The actuator will not run during this time.
3. The actuator will wait for approximately 5 seconds to move after the belt switches direction.
4. Actuator will move for, at most, 4sec. If it has not reached its target in 4sec [minor fault] it will try to move 2 additional times at 5 minute intervals before reaching a major fault.



⚠ 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.

1. Turn on conveyor belt for 1 hour, then turn off.



⚠ 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.

2. Make sure all fasteners are tight. Tighten if necessary.

Troubleshooting

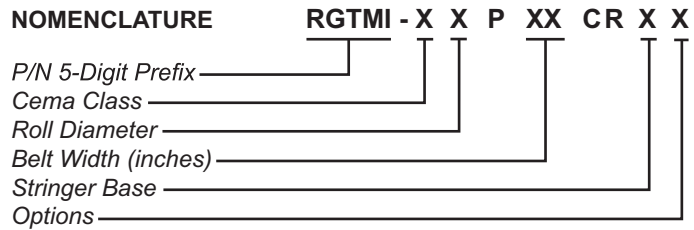
| Symptom | Cause | Corrective Action |
|---|--------------------------------|---|
| Power light is off | Emergency stop tripped | Reset emergency stop |
| | Disconnect OFF | Turn disconnect to ON |
| | No input at power supply | Check voltage at power supply |
| Power light is on, but actuator will not move | Fuse blocks open | Close fuse blocks |
| | Fuses tripped | Check continuity and replace fuses if necessary |
| | Selector switch is set to test | Move selector switch to run |
| | Indicators flashing fault | Inspect actuator for jam or misalignment in tracker |
| | | Check voltage is being supplied to actuator |
| Actuator will not move when belt switches direction (power light is on belt is on) | Low battery light flashing | Service batteries; reset power |
| | Low battery light solid | Wait for dwell charge time or reset power |
| | Fuse blocks open | Close fuse blocks |
| | Fuses tripped | Check continuity and replace fuses if necessary |
| | Selector switch is set to test | Move switch to run |
| | Indicators flashing fault | Inspect actuator for jam or misalignment in tracker |
| | | Check voltage is being supplied to actuator |
| Actuator will not move when belt switches direction (power light is off belt is on) | Roll generator is not turning | Check proper engagement to belt |
| | Emergency stop tripped | Reset emergency stop |
| | Disconnect OFF | Turn disconnect to ON |

Part Numbers

This section provides product names and corresponding part numbers for Martin® Roll Generator and related equipment. Please reference part numbers when ordering parts:

Martin® Power Supply Cabinet: P/N 39413

Martin® Roll Generator Center Roll Assembly



CEMA CLASS

- D:** Class D
- E:** Class E

STRINGER BASE

- S:** Standard Base
- W:** Wide Base

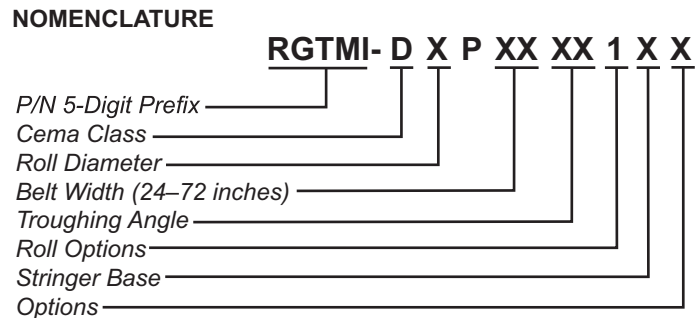
ROLL DIAMETER

- 5:** 5 inch
- 6:** 6 inch
- 7:** 7 inch

OPTIONS

- D:** Rotation Direction Sensor Kit

Martin® Roll Generator Wing Roll Assembly - CEMA D



ROLL DIAMETER

- 5:** 5 inch
- 6:** 6 inch

STRINGER BASE

- S:** Standard Base
- W:** Wide Base

TROUGHING ANGLE

- 20:** 20 Degrees
- 35:** 35 Degrees

OPTIONS

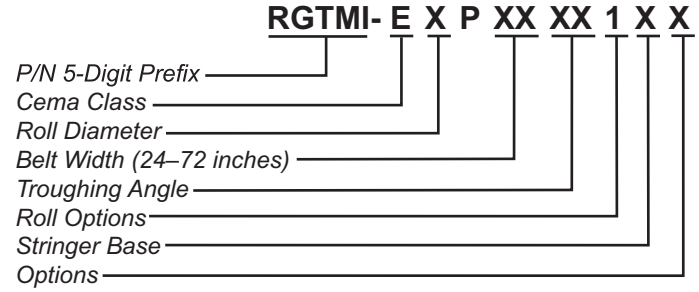
- D:** Rotation Direction Sensor Kit (6 inch rolls only)

ROLL OPTIONS

- 1:** Single Wing Roll

Martin® Roll Generator Wing Roll Assembly - CEMA E

NOMENCLATURE



ROLL DIAMETER

- 6:** 6 inch
- 7:** 7 inch

TROUGHING ANGLE

- 20:** 20 Degrees
- 35:** 35 Degrees

ROLL OPTIONS

- 1:** Single Wing Roll

STRINGER BASE

- S:** Standard Base
- W:** Wide Base

OPTIONS

- D:** Rotation Direction Sensor Kit

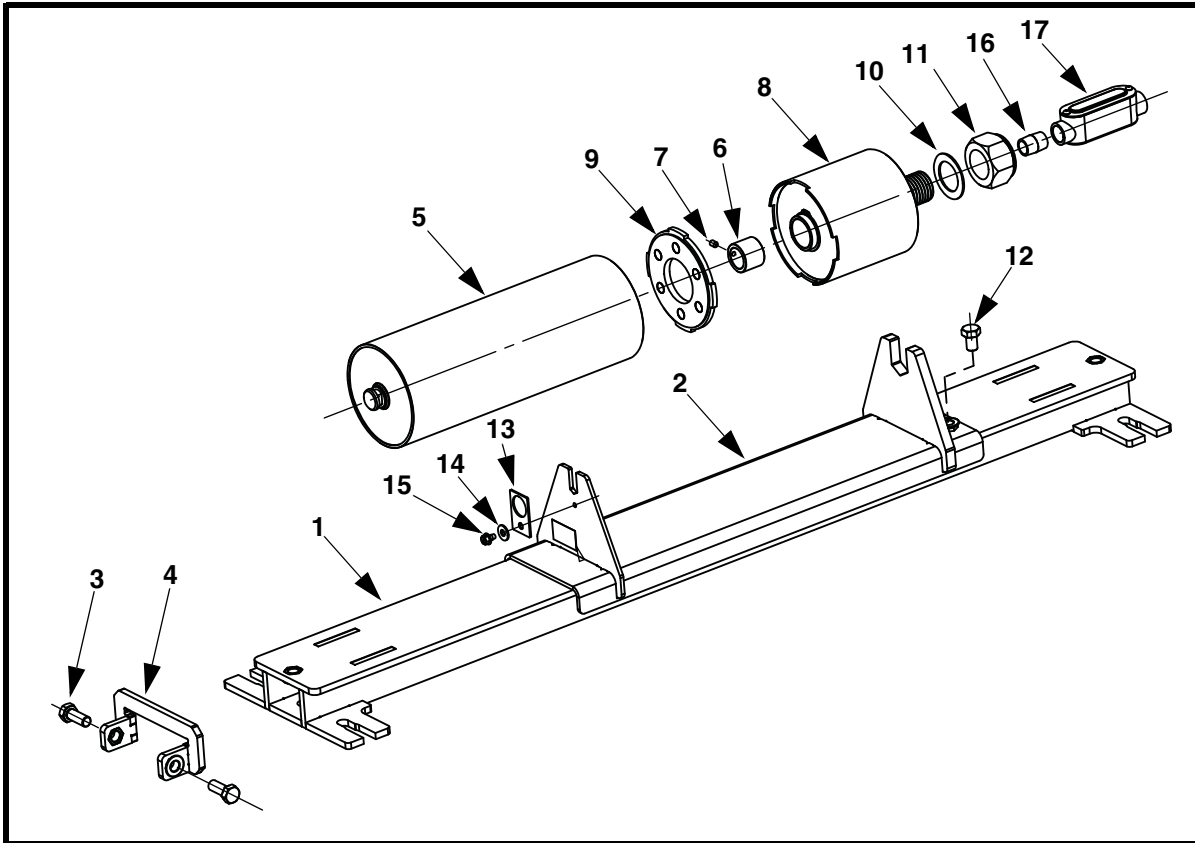


Figure 9. Martin® Roll Generator Assembly, P/N RGTMIXXP-XXCRXX

| Item | Description | Part No. | Qty |
|------|--|------------------|---------|
| 1 | Plate Type Track Weldment | TMI2-TW-XXXX* | 1 |
| 2 | Center Sleeve Weldment | RGTMI-CW-X1PX** | 1 |
| 3 | End Stop Weldment | Table I | 1 |
| 4 | Screw HHC 1/2-13NC x 1-1/4 SS | 25463 | 2 |
| 5 | Steel Roll | Table I | 1 |
| 6 | Shaft Adapter Bushing | RG1-010-0030-100 | Table I |
| 7 | Screw Set Hex SOC Cup 1/4-20 x 3/8 | 11716 | Table I |
| 8 | Roll Generator Sub Assembly for PPI Rolls | RG1-010-5P | 1 |
| 9 | Magnetic Drive Cog/Sleeve | Table I | 1 |
| 10 | Shaft Washer SS | RG-010-0032 | 1 |
| 11 | Nut Elastic Lock M36 x 4.00 ZP | 39400 | 1 |
| 12 | Screw HHC 1/2-13NC x 3/4 SS | 31294 | 1 |
| 13 | Tie Tab | Table II | 1 |
| 14 | Washer Flat 1/4 Wide ZP | 15073 | 1 |
| 15 | Screw Tapping HWH 1/4-20NC x 3/8 Type C ZP | 38608 | 1 |
| 16 | Nipple Pipe 1/2-NPT SCH 40 x 12 Galv. | 37140 | 1 |

| Item | Description | Part No. | Qty |
|---------|---|-----------------|---------|
| 17 | Inline Conduit Connector 1/2 | 39441 | 1 |
| 18 (NS) | TMI Foot Shim Plate .12 Thick | TMI2-FS-XX-12 | 4 |
| 19 (NS) | TMI Foot Shim Plate .18 Thick | TMI2-FS-XX-18 | 4 |
| 20 (NS) | Label Martin® Product Small | 32238 | 2 |
| 21 (NS) | Mounting Hardware Kit | 35283 | 1 |
| 22 (NS) | Operator's Manual | M4062 | 1 |
| 23 (NS) | Rotation Direction Sensor Mount Kit | Table I | Table I |
| 24 (NS) | Rotation Direction Magnetic Disk for 5" Rolls | RGTMI-DS-0014DP | Table I |

* First X indicates CEMA Class (D) or (E). Next XX indicates Belt Width. Last X indicates Standard (S) or Wide (W) Base.
 ** First X indicates CEMA Class (D) or (E). Last X indicates Rotation Direction Sensor Mount Kit (D) or Blank.
 NS = Not Shown

**Table I. Martin® Roll Generator Part Numbers and Quantities for Assembly
 P/N RGTMIXXP-XXCRXX**

| Part No. | Part No. Item 3 | Part No. Item 5 | Part No. Item 9 | Part No. Item 13 | Qty Items 6 & 7 |
|---------------|--------------------|--------------------|--------------------|---------------------|--------------------|
| RGTMID5P-XXCR | RGTMI-ESW-D | TMIRD5-36SP | RG1-010-0050-5P | TMI-TT-100P | 1 |
| RGTMID6P-XXCR | RGTMI-ESW-D | TMIRD6-36SP | RG1-010-0050-6P | TMI-TT-100P | 1 |
| RGTMIE6P-XXCR | RGTMI-ESW-E | TMIRE6-36SP | RG1-010-0050-6P | TMI-TT-138P | 0 |
| RGTMIE7P-XXCR | RGTMI-ESW-E | TMIRE7-36SP | RG1-010-0050-7P | TMI-TT-138P | 0 |

| Part No. | Part No. Item 23 | Qty Item 23 | Qty Item 24 |
|-----------------|---------------------|----------------|----------------|
| RGTMID5P-XXCRXD | RGTMI-DS-MK5 | 1 | 1 |
| RGTMID6P-XXCRXD | RGTMI-DS-MK6 | 1 | 0 |
| RGTMIE6P-XXCRXD | RGTMI-DS-MK6 | 1 | 0 |
| RGTMIE7P-XXCRXD | RGTMI-DS-MK6 | 1 | 0 |

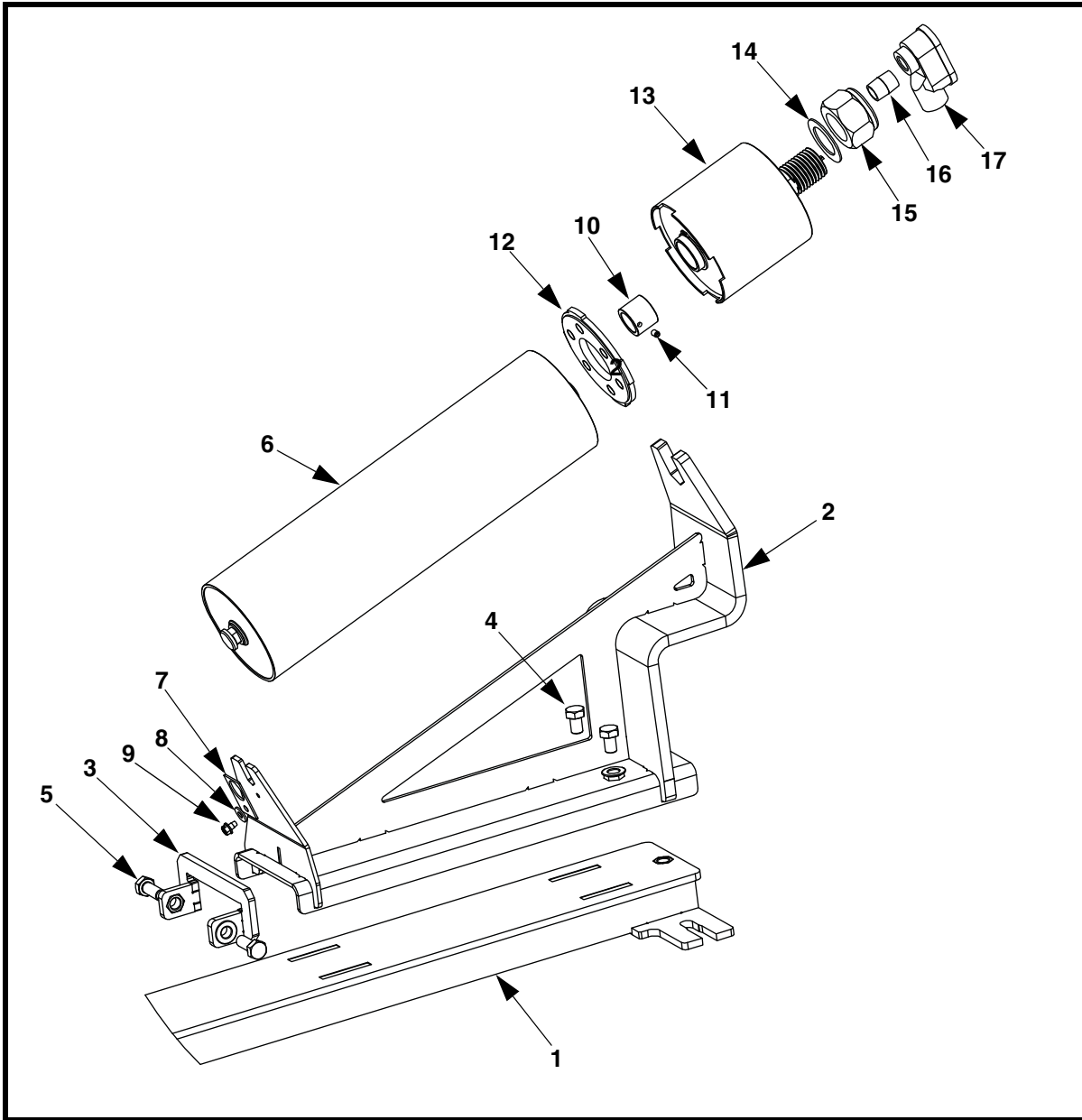


Figure 10. Martin® Roll Generator Assembly, P/N RGTMDXP-XXXX1XX

| Item | Description | Part no. | Qty |
|---------|--|---------------------|----------|
| 1 | Plate Type Track Weldment | TMI2-TW-DXXX* | 1 |
| 2 | Wing Weldment | RGTMI-WW-DXXXXSPX** | 1 |
| 3 | End Stop Weldment | RGTMI-ESW-D | 1 |
| 4 | Screw HHC 1/2-13NC x 3/4 SS | 31294 | 2 |
| 5 | Screw HHC 1/2-13NC x 1-1/4 SS | 25463 | 2 |
| 6 | Steel Roll | Table II | 1 |
| 7 | Tie Tab | TMI-TT-100P | 1 |
| 8 | Washer Flat 1/4 Wide ZP | 15073 | 1 |
| 9 | Screw Tapping HWH 1/4-20NC x 3/8 Type C ZP | 38608 | 1 |
| 10 | Shaft Adapter Bushing | RG1-010-0030-100 | 1 |
| 11 | Screw Set Hex SOC Cup 1/4-20 x 3/8 | 11716 | 1 |
| 12 | Magnetic Drive Cog/Sleeve | Table II | 1 |
| 13 | Roll Generator Sub Assembly for PPI Rolls | RG1-010-5P | 1 |
| 14 | Shaft Washer SS | RG-010-0032 | 1 |
| 15 | Nut Elastic Lock M36 x 4.00 ZP | 39400 | 1 |
| 16 | Nipple Pipe 1/2-NPT SCH 40 x 12 Galv. | 37140 | 1 |
| 17 | Conduit Connector 90° 1/2 | 38256-S | 1 |
| 18 (NS) | TMI Foot Shim Plate .12 Thick | RGTMI-FS-XX-12 | 4 |
| 19 (NS) | TMI Foot Shim Plate .18 Thick | RGTMI-FS-XX-18 | 4 |
| 20 (NS) | Label Martin® Product Small | 32238 | 1 |
| 21 (NS) | Mounting Hardware Kit | 35283 | 1 |
| 22 (NS) | Operator's Manual | M4062 | 1 |
| 23 (NS) | Rotation Direction Sensor Mount Kit | RGTMI-DS-WWMK6 | Table II |

Figure 10. Martin® Roll Generator Assembly, P/N RGT MIDXP-XXXX1XX

* First XX indicates Belt Width. Last X indicates Standard (S) or Wide (W) Base.

** First XX indicates Belt Width. Next XX indicates Troughing Angle (20) or (35). Last X indicates Rotation Direction Sensor Mount Kit (D) or Blank.

NS = Not Shown

Table II. Martin® Roll Generator Part Numbers and Quantities for Assembly P/N RGT MIDXP-XXXX1XX

| Part No. | Part No. Item 6 |
|------------------|-----------------|
| RGTMID5P-XXXX1XX | TMIRD5-XXSP |
| RGTMID6P-XXXX1XX | TMIRD6-XXSP |

| Part No. | Part No. Item 12 | Qty Item 23 |
|-------------------|------------------|-------------|
| RGTMID5P-XXXX1XP | RG1-010-0050-5P | 0 |
| RGTMID6P-XXXX1XP | RG1-010-0050-6P | 0 |
| RGTMID6P-XXXX1XPD | RG1-010-0050-6PD | 1 |

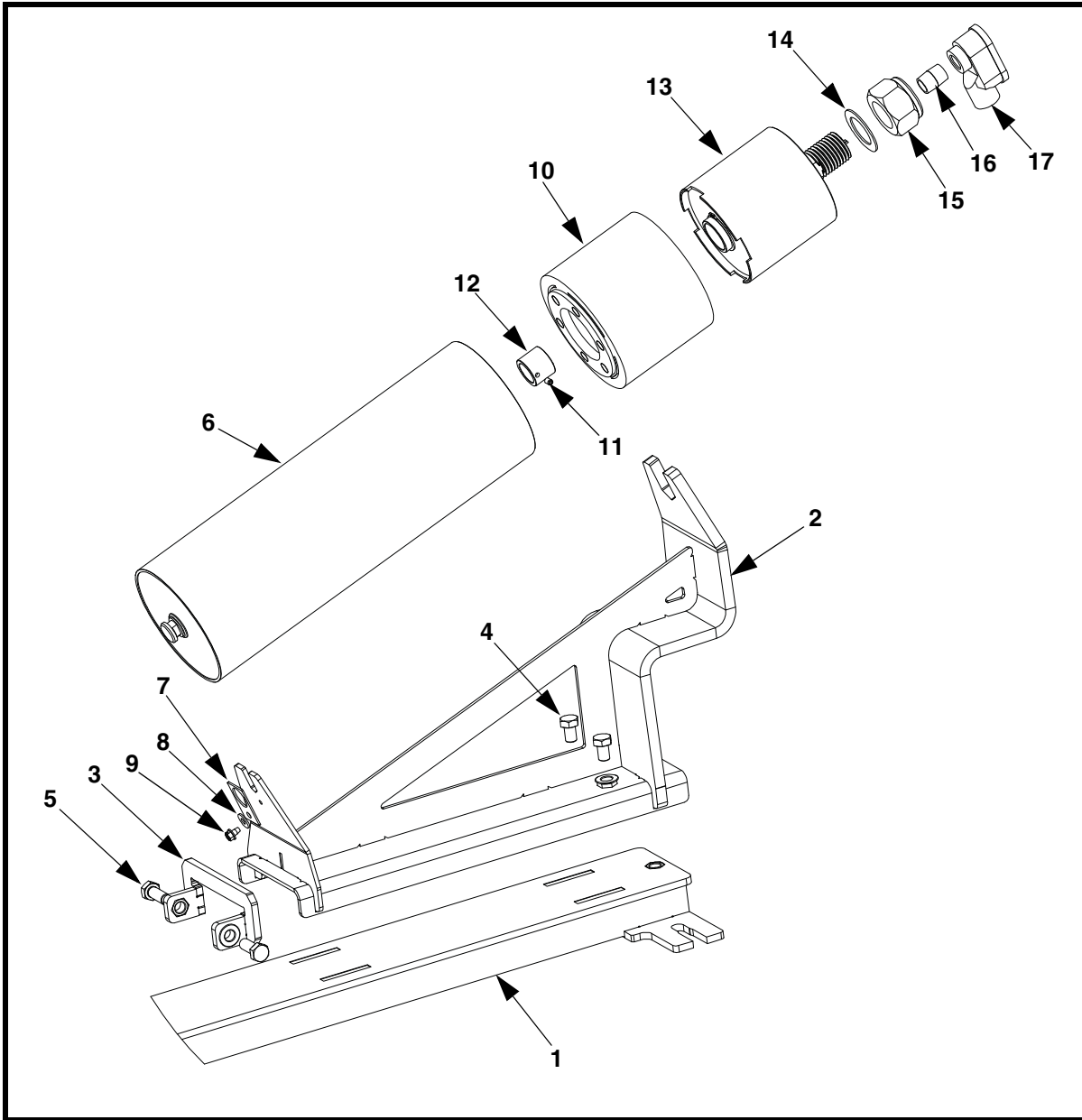


Figure 11. Martin® Roll Generator Assembly, P/N RGTMIEXP-XXXX1XX

| Item | Description | Part no. | Qty |
|---------|---|--------------------|-----------|
| 1 | Plate Type Track Weldment | TMI2-TW-EXXX* | 1 |
| 2 | Wing Weldment | RGTMI-WW-EXXXSPX** | 1 |
| 3 | End Stop Weldment | RGTMI-ESW-E | 1 |
| 4 | Screw HHC 1/2-13NC x 3/4 SS | 31294 | 2 |
| 5 | Screw HHC 1/2-13NC x 1-1/4 SS | 25463 | 2 |
| 6 | Steel Roll | Table III | 1 |
| 7 | Tie Tab | TMI-TT-138P2 | 1 |
| 8 | Washer Compression 5/16 | 11452 | 1 |
| 9 | Screw HHC 5/16-18NC x 1/2 ZP | 39450 | 1 |
| 10 | Magnetic Drive Cog/Sleeve | Table III | 1 |
| 11 | Roll Generator Sub Assembly for PPI Rolls | RG1-010-5P | 1 |
| 12 | Shaft Washer SS | RG1-010-0032 | 1 |
| 13 | Nut Elastic Lock M36 x 4.00 ZP | 39400 | 1 |
| 14 | Nipple Pipe 1/2-NPT SCH 40 x 12 Galv. | 37140 | 1 |
| 15 | Conduit Connector 90° 1/2 | 38256-S | 1 |
| 16 | TMI Foot Shim Plate .12 Thick | RGTMI-FS-XX-12 | 4 |
| 17 | TMI Foot Shim Plate .18 Thick | RGTMI-FS-XX-18 | 4 |
| 18 (NS) | Label Martin® Product Small | 32238 | 1 |
| 19 (NS) | Mounting Hardware Kit | 35283 | 1 |
| 20 (NS) | Operator's Manual | M4062 | 1 |
| 21 (NS) | Rotation Direction Sensor Mount Kit | RGTMI-DS-WWMK6 | Table III |

Figure 11. Martin® Roll Generator Assembly, P/N RGTMIEXP-XXXX1XX

* First XX indicates Belt Width. Last X indicates Standard (S) or Wide (W) Base.

** First XX indicates Belt Width. Next XX indicates Troughing Angle (20) or (35). Last X indicates Rotation Direction Sensor Mount Kit (D) or Blank.

NS = Not Shown

Table III. Martin® Roll Generator Part Numbers and Quantities for Assembly P/N RGTMIEXP-XXXX1XX

| Part No. | Part No. Item 6 |
|------------------|-----------------|
| RGTMIE6P-XXXX1XX | TMIRE6-XXSP |
| RGTMIE7P-XXXX1XX | TMIRE7-XXSP |

| Part No. | Part No. Item 10 | Qty Item 21 |
|-------------------|------------------|-------------|
| RGTMIE6P-XXXX1XP | RG1-010-0050-6P | 0 |
| RGTMIE7P-XXXX1XP | RG1-010-0050-7P | 0 |
| RGTMIE6P-XXXX1XPD | RG1-010-0050-6PD | 1 |
| RGTMIE7P-XXXX1XPD | RG1-010-0050-7PD | 1 |

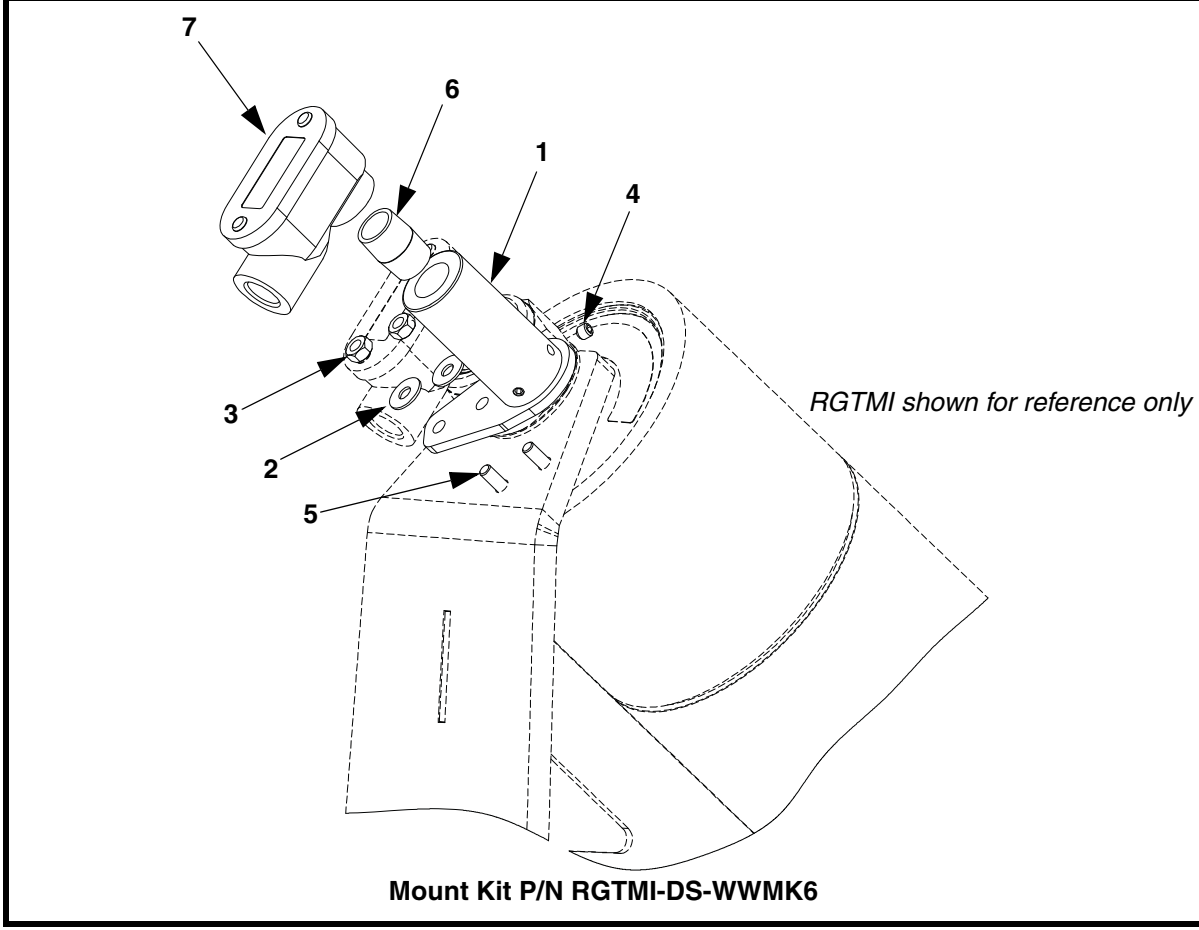
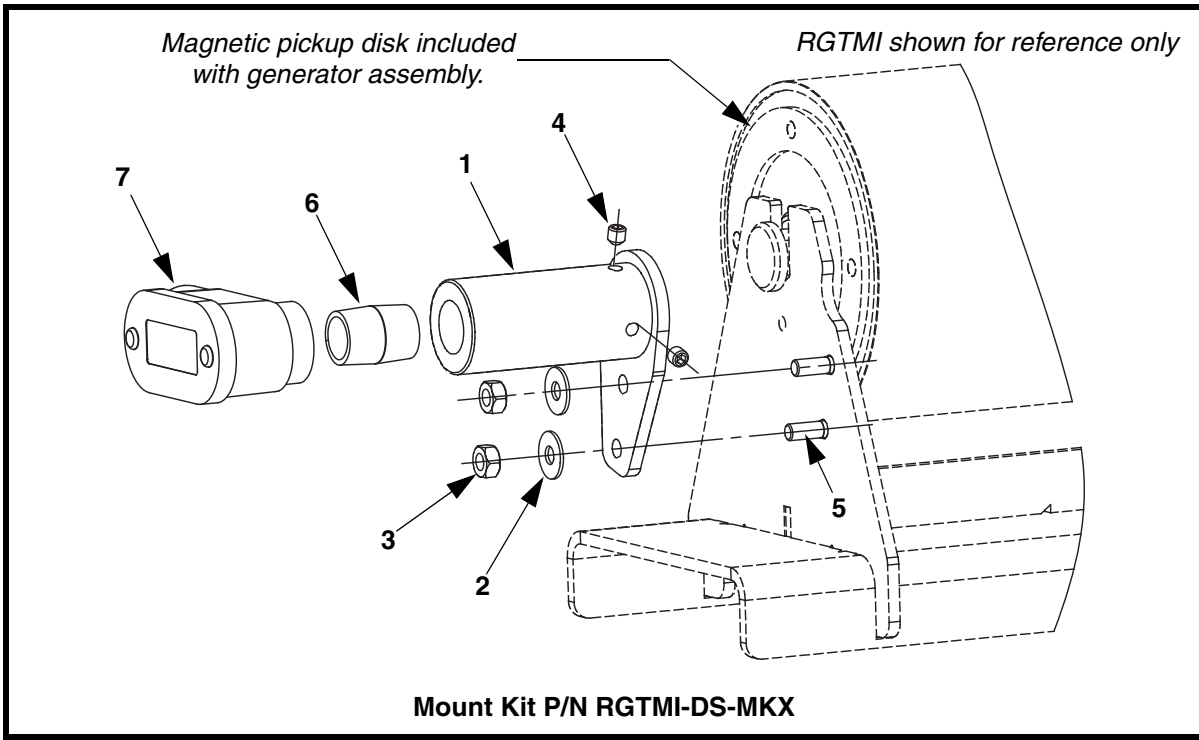


Figure 12. Martin® Roll Generator Direction Sensor Mount Kit

| Item | Description | Part no. | Qty |
|-------------|---------------------------------------|-----------------|------------|
| 1 | Sensor Mount Weldment | RGTMI-DS-0010 | 1 |
| 2 | Washer Compression 1/4 | 11521 | 2 |
| 3 | Nut Hex 1/4-20NC ZP | 11769 | 2 |
| 4 | Screw Set Hex SOC CUP 1/4-20 x 1/4 | 13934 | 2 |
| 5 | Screw SFCHC 1/4-20NC | Table IV | 2 |
| 6 | Nipple Pipe 1/2-NPT SCH 40 x 12 Galv. | 37140 | 1 |
| 7 | Conduit Elbow | Table IV | 1 |

Figure 12. Martin® Roll Generator Direction Sensor Mount Kit

Table IV. Martin® Roll Generator Direction Sensor Mount Kit Part Numbers

| Part No. | Part No. Item 5 | Part No. Item 7 |
|-----------------|----------------------------|----------------------------|
| RGTMI-DS-MK5 | 30453 | 38256-S |
| RGTMI-DS-MK6 | 33552 | 39441 |
| RGTMI-DS-WWMK6 | 33552 | 38256-S |

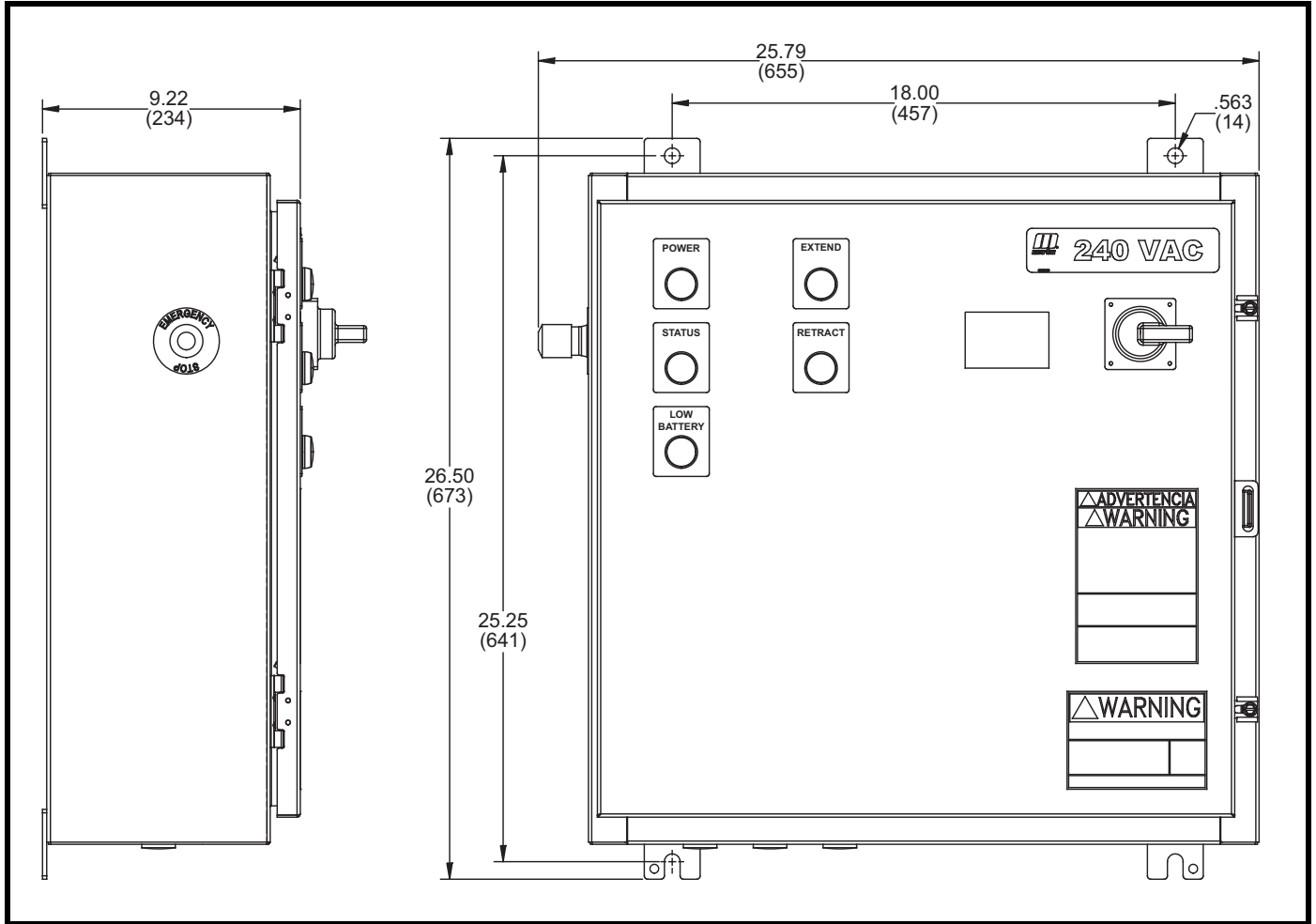


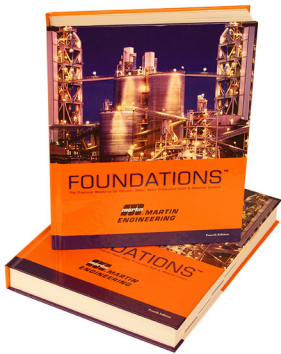
Figure 13. Martin® Tracker™ Reversing Control Panel, P/N 39464-XXX

Table V. Replacement Parts

| Description | | Part no. |
|-------------|---------|----------------|
| Battery | | 39466-13 |
| Fuses | 4.5 Amp | CPBU-FNQ-R-4.5 |
| | 6 Amp | CPBU-FNQ-R-6 |

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