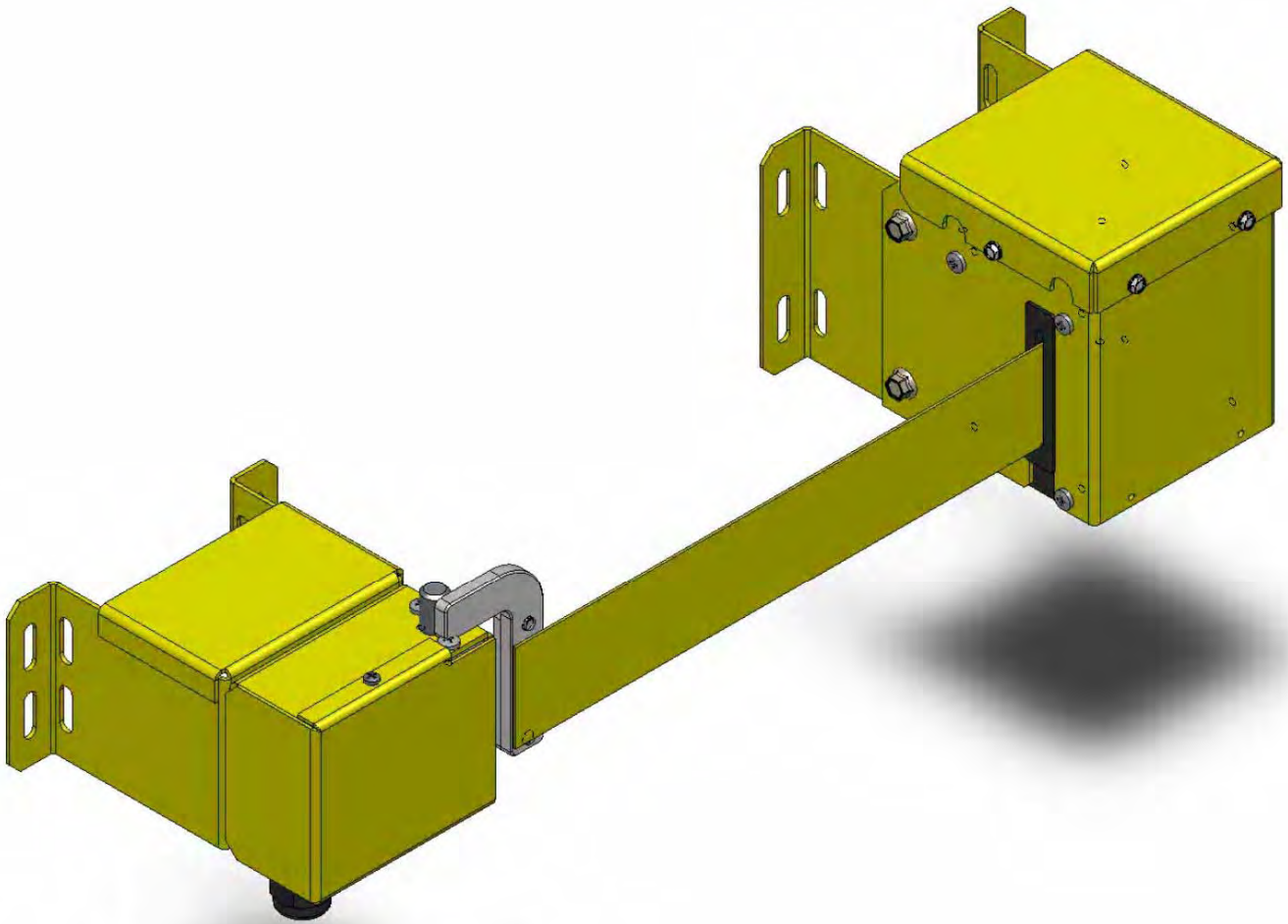


Safety Strap™ Installation Guide

Safety Strap™ Models ST0200 & ST0201



A Product of



340 Gateway Park Drive
North Syracuse, NY 13212
Phone: 315-463-7348
Toll Free: 866-235-7468
Fax: 315-463-8559
Email: sales@dlmanufacturing.com
www.dlmanufacturing.com

WARNING!!!!

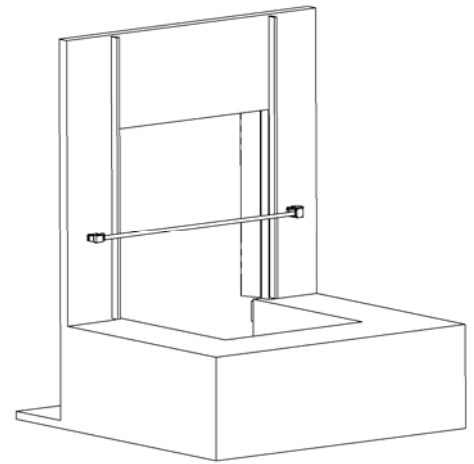
Do not use in hazardous or corrosive environments!

REQUIRED TOOLS

- Pliers
- Drivers and wrenches appropriate to installer-supplied fasteners
- 3/16" hex driver
- Phillips head screwdriver

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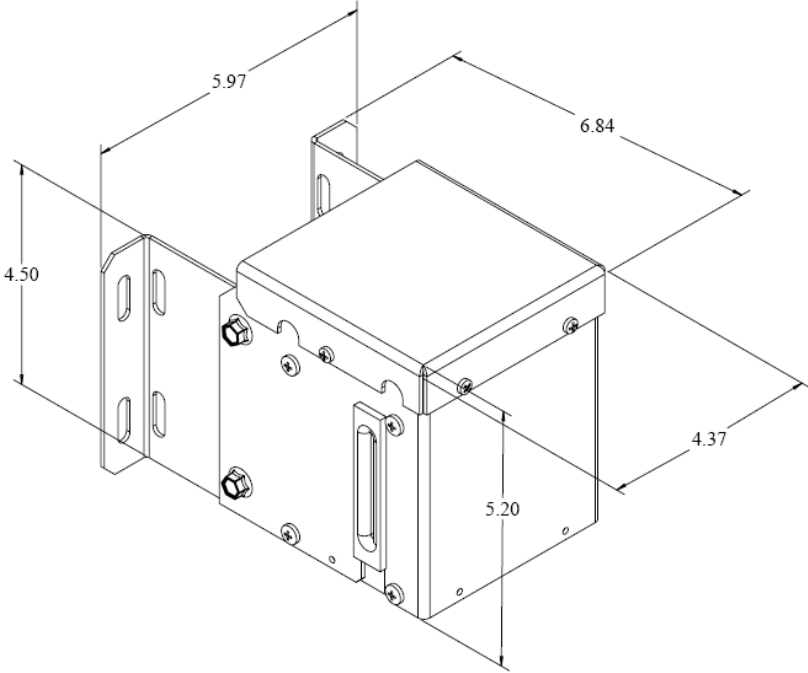
YEARLY MAINTENANCE

- 1 – Inspect connections for any damage
- 2 – Inspect mounting bolts for tightness
- 3 – Inspect strap material for any cuts or fraying
- 4 – Clean unit with compressed air

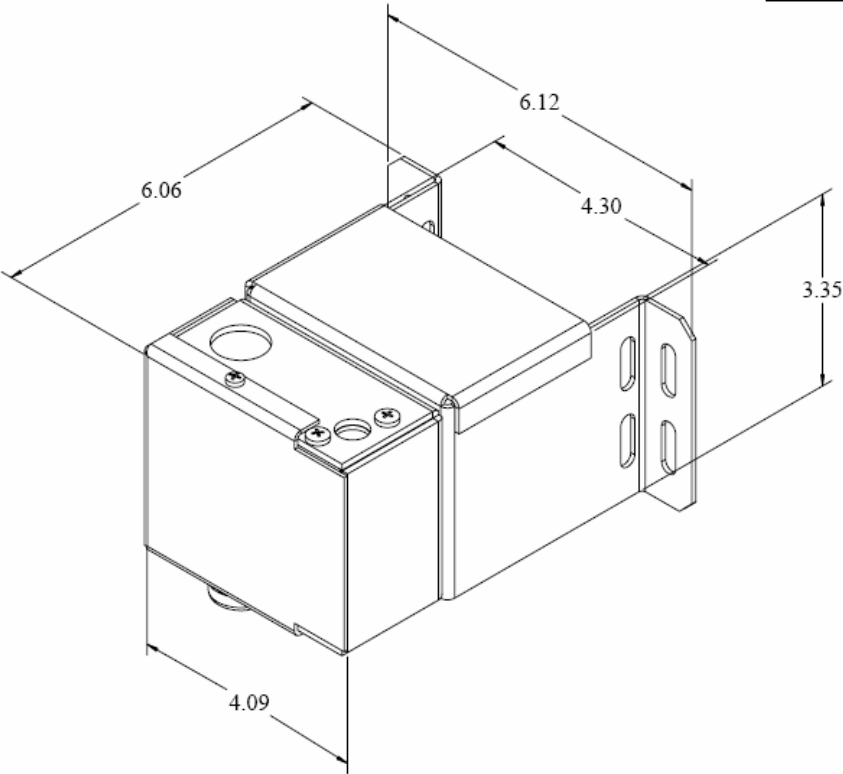
STRAP REPLACEMENT POLICY

SAFETY STRAP is designed with a unique recoil system. This recoil is set at the factory and can't be reset in the field. Therefore, if the strap is damaged in the field (cut, frayed, etc.) the complete Recoil Housing w/strap (Part # ST5017) must be returned to DL Manufacturing for strap replacement. DL Manufacturing will replace all damaged straps shipped to us with the Recoil Housing within 4 business days from receipt (this does not include outbound transit time). The nominal strap replacement cost is \$26.00 US Funds per unit, plus all shipping costs. We recommend that customers keep several spares in stock.

DIMENSIONAL DRAWINGS



Recoil Assembly



Receiver Assembly

CHANGING FROM RIGHT MOUNT TO LEFT MOUNT

CAUTION!!

Care must be taken to prevent the strap from retracting into the housing while the handle cap screws are loose. Failure to do so will result in loosening the pretension on the spring and **require immediate factory repair**. Pull the strap out of the recoil assembly and clamp the strap using vise grips or similar tool next to the recoil assembly to prevent the strap from retracting back into the assembly.

The SAFETY STRAP™ is supplied as right hand mount. Instructions to change from right to left hand mount are as follows:

1. Remove the top cover of the ST5017 Recoil Housing (See Figure 1), rotate the ST5017 Recoil Housing 180° and re-attach the cover on the other side of the assembly (See Figure 2.)
2. Remove the ST5011 Strap Handle, rotate it 180° and re-attach (See Figure 3.)
3. Remove the front cover of the ST5015 Receiver Housing
4. Move the sensor bracket to the bottom of the ST5015 Receiver Housing using the existing holes and rotate the housing 180° (See Figure 4.)
5. Attach the ST5015 Receiver Housing to the ST5005 Receiver Mounting Bracket (See Figure 5.)
6. Re-attach the cover on the ST5015 Receiver Housing.

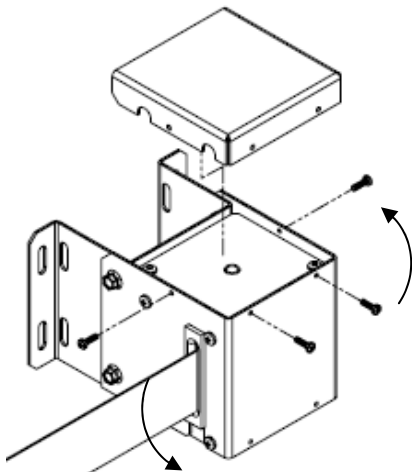


Figure 1. Remove Recoil Housing cover and rotate 180°.

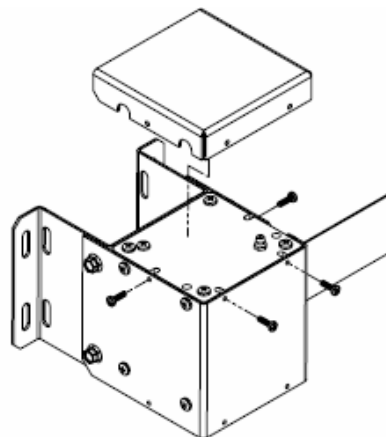


Figure 2. Re-attach cover on what was the bottom of the Recoil Housing.

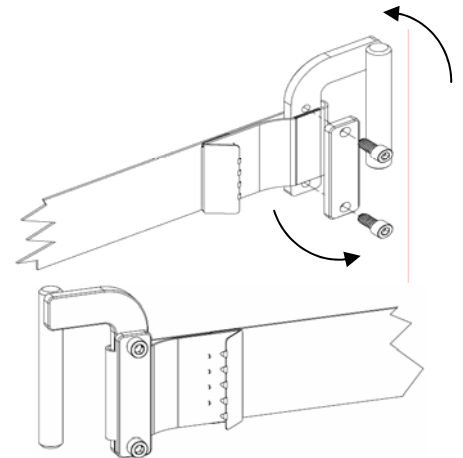


Figure 3. Remove strap handle, rotate it 180° and re-attach.

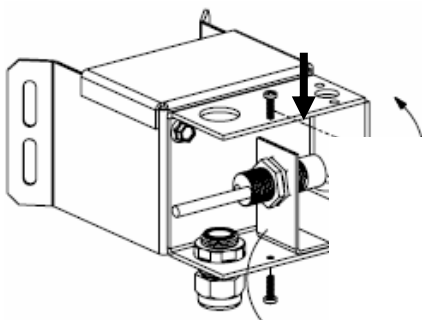


Figure 4. Move the sensor bracket to the bottom of the Receiver Housing on the same side.

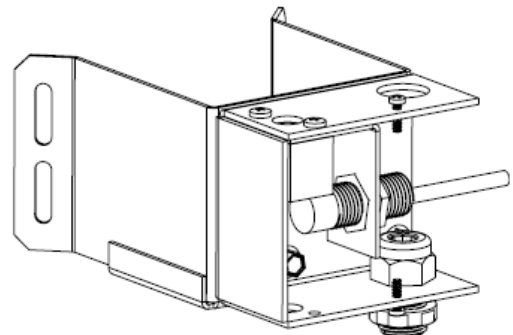


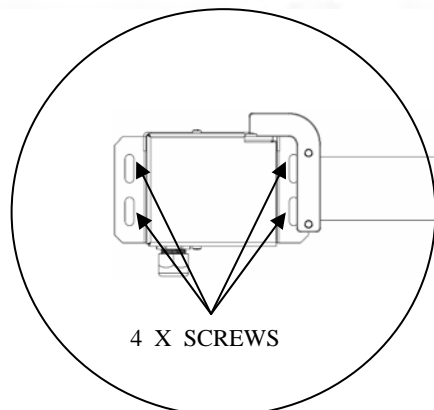
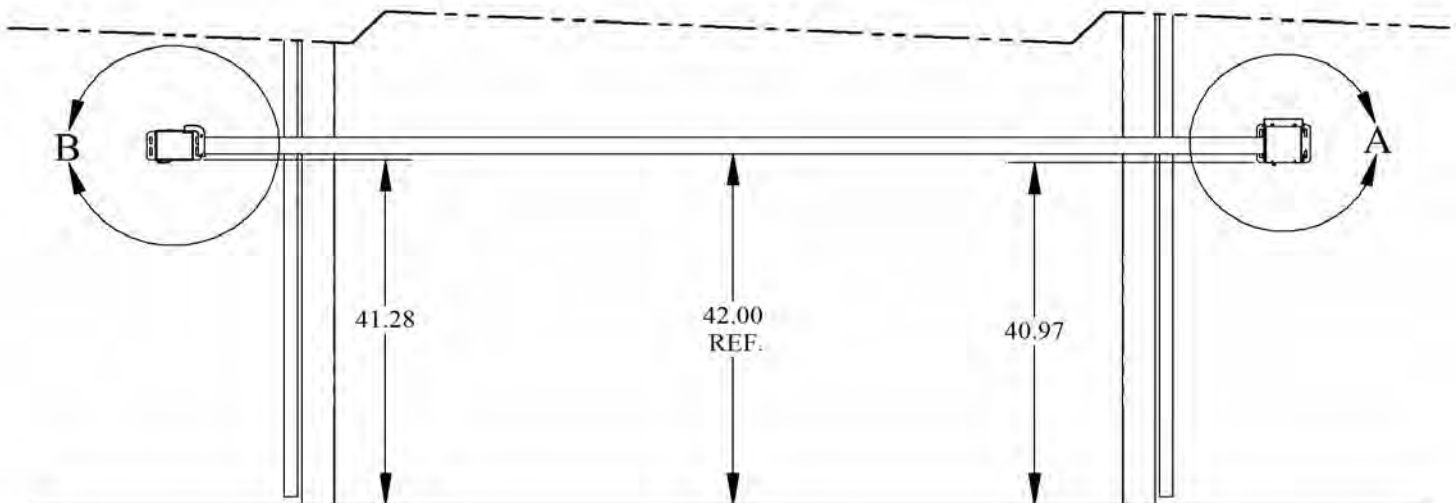
Figure 5. Attach Receiver Housing to Receiver Mounting Bracket. Re-attach cover.

WALL MOUNT INSTALLATION

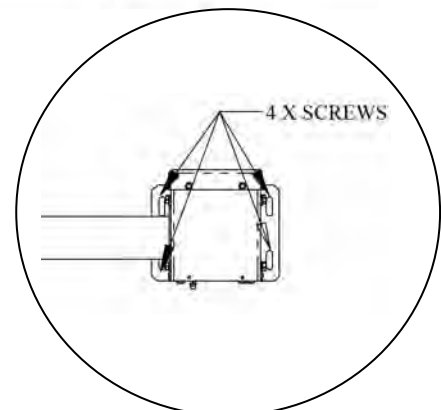
1. Determine the type of fastener required for the application. For concrete walls, use ¼" x 1-1/4" Tapcon concrete screws. For metal beams, use ¼" x 1-1/4" self tapping screws. A total of eight installer-supplied screws will be needed, four on each side.
2. Mount the ST5001 Recoil Mounting Bracket 41" off the floor using 4 installer-supplied fasteners. **(See Detail A)**
3. Attach the ST5017 Recoil Housing to the ST5001 Recoil Mounting Bracket using supplied AT2018 ¼-20 x ¾" flange bolts.
4. Mount the ST5005 Receiver Mounting Bracket 41 ¼" off the floor. **(See Detail B)**
5. Attach the ST5015 (w/prox switch) or ST5016 (w/o prox switch) Receiver Housing to the Receiver Mounting Bracket using supplied AT2018 ¼-20 x ¾" flange bolts.

WARNING!!!!

Be sure to mount the unit securely to the wall. Improper installation could result in serious injury.



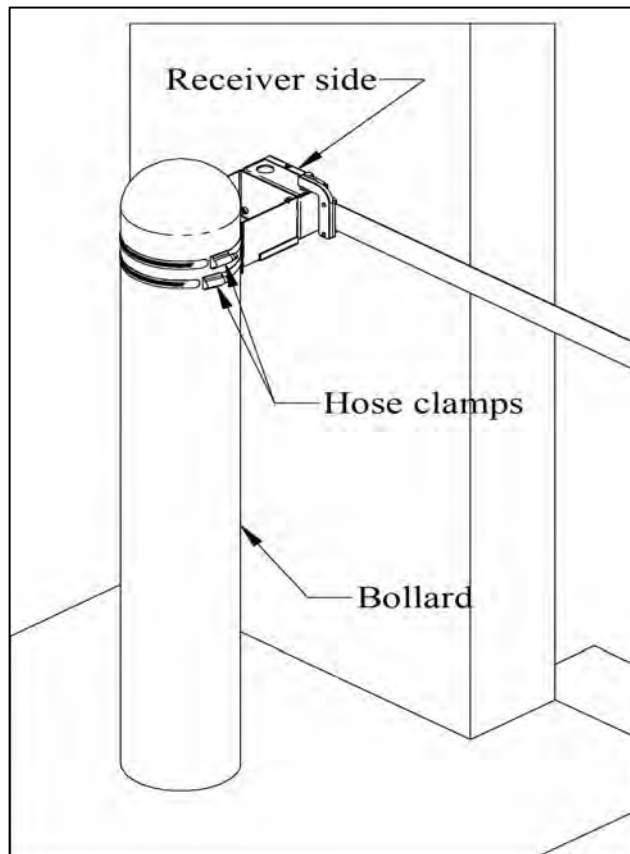
Detail B
Scale 1:8



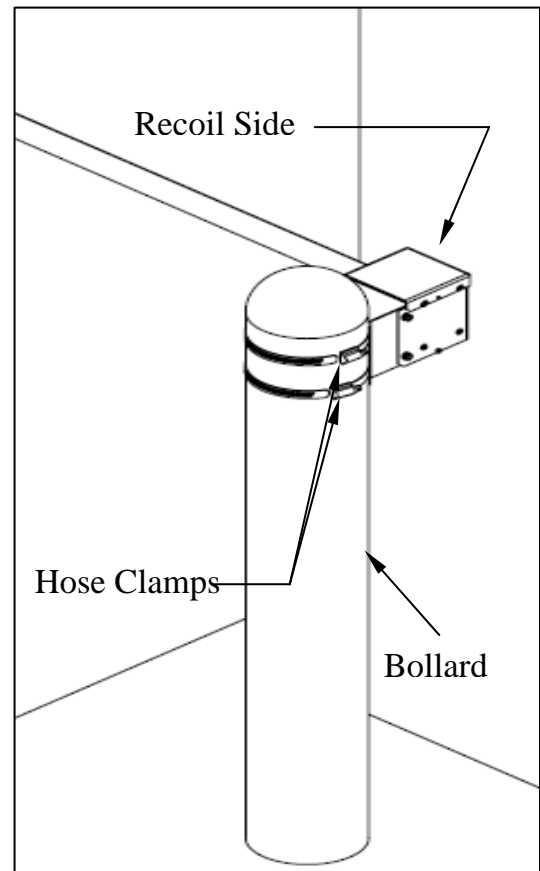
Detail A
Scale 1:8

BOLLARD MOUNT INSTALLATION (Optional Mounting Kit)

1. Slightly bend the flanges of the mounting brackets to fit the rounded surface of the bollard.
2. Mount the ST5006 Recoil Assembly 41" off the floor using two MK2001 hose clamps. Slide the hose clamps through the holes on the ST5001 Mounting Bracket and tighten the clamps. Cut off excess material on the hose clamps and make sure no sharp edges are exposed. Ensure the strap components are facing the exterior of the building to reduce exposure. See diagrams below.
3. Mount the Receiver Assembly 41 ¼" off the floor using two MK2001 hose clamps. Cut off excess material on the hose clamps and make sure no sharp edges are exposed. Ensure the strap components are facing the exterior of the building to reduce exposure. See diagrams below.



RECEIVER SIDE



RECOIL SIDE

STRAP LENGTH ADJUSTMENT

CAUTION!!

- Care must be taken to prevent the strap from retracting into the housing while the handle cap screws are loose. Failure to do so will result in loosening the pretension on the spring and **require immediate factory repair**.
- The strap must be adjusted to the correct length or serious injury could result.

STEP 1

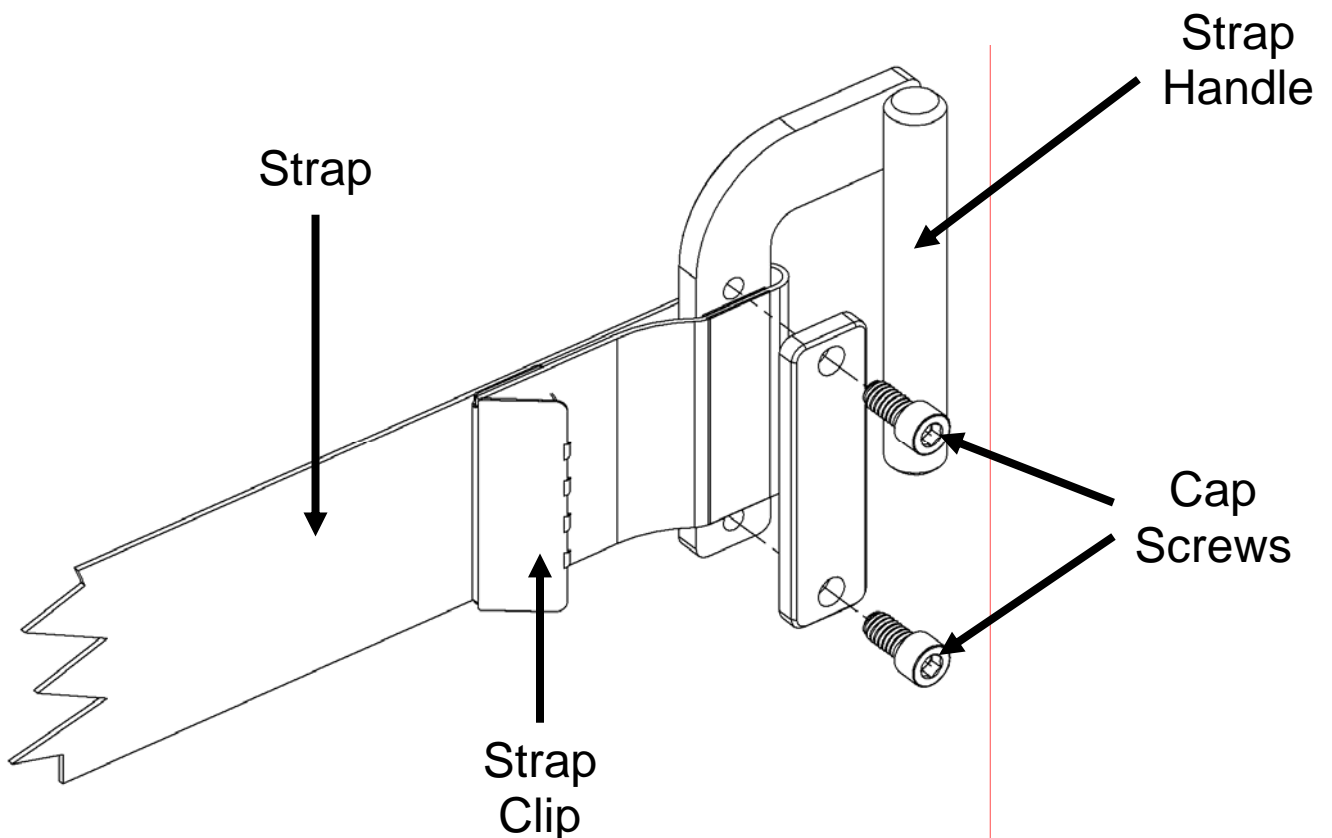
Pull the strap out of the recoil assembly until the end is reached. Clamp the strap using vise grips or similar tool next to the recoil assembly to prevent the strap from retracting back into the assembly.

STEP 2

Place the strap handle into the receiver box. Loosen the two cap screws and pull the excess strap through the handle so that the strap is tight. Tighten the cap screws back down to 35 in-lbs.

STEP 3

Cut off the excess strap leaving approximately 1" remaining. Place the end clip over the remaining 1" of strap. Use a pair of pliers to clamp the end clip over the end of the strap. This will prevent the strap from unraveling.



WIRING DIAGRAM / INSTRUCTIONS (Model ST0200 only)

If wiring the SAFETY STRAP™ proximity sensor to a newly installed SMART CHOCK™ or SAFETY SIGNAL™ **NOT** using a door sensor, reference **Section 1**.

If wiring the SAFETY STRAP™ proximity sensor to a newly installed SMART CHOCK™ or SAFETY SIGNAL™ **using** a door sensor, reference **Section 2**.

For wiring to **all other** SMART CHOCK™ or SAFETY SIGNAL™ control boards **with** a door sensor, refer to **Addendum A on pg.10 & 11 and contact factory for assistance**.

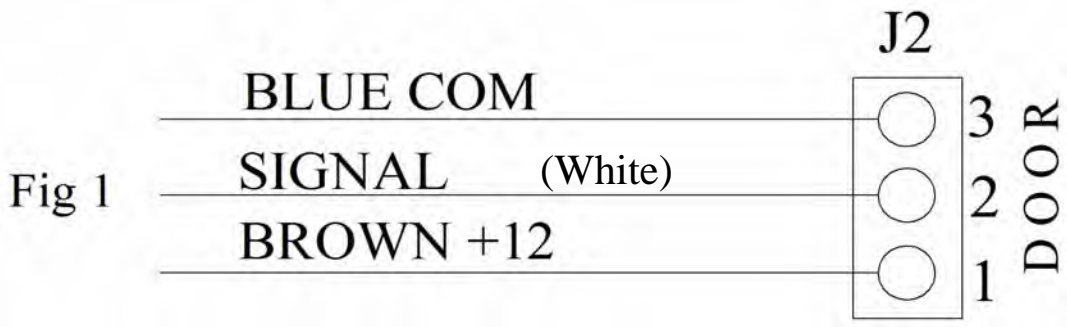
SECTION 1

STEP 1

Insert sensor wire into pluggable terminal block as shown below in **Figure 1**. Plug into DOOR header (J2) on control board.

STEP 2

Fold over the remaining wire and tape it to the cord with electrical tape to prevent any short from occurring.



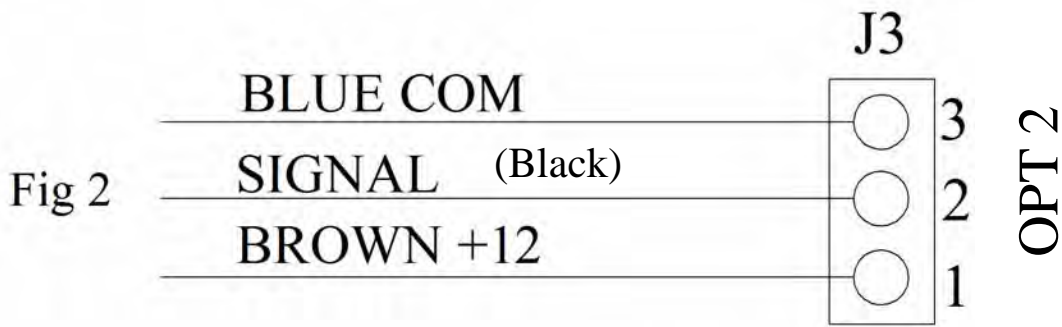
SECTION 2

STEP 1

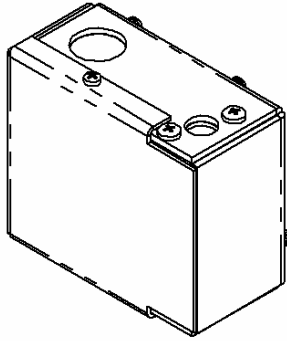
Insert sensor wire into pluggable terminal block as shown below in Figure 2. Plug into OPT 2 header (J3) on control board.

STEP 2

Fold over the remaining wire and tape it to the cord with electrical tape to prevent any short from occurring.



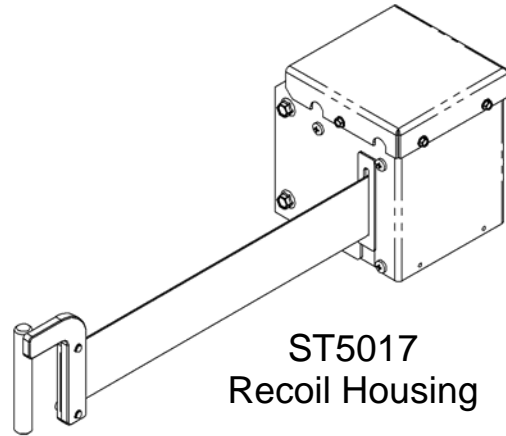
SAFETY STRAP™ Replacement Parts List



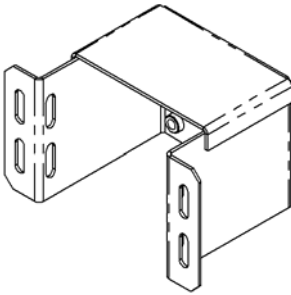
ST5015
Receiver Housing (w/prox switch)
ST5016
Receiver Housing (w/out prox switch)



AT2018 –
1/4-20x3/4
Flange Bolt



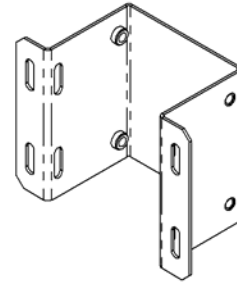
ST5017
Recoil Housing



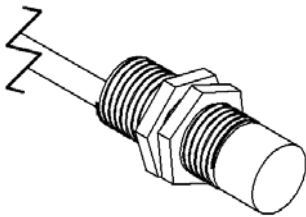
ST5005
Receiver Mounting
Bracket



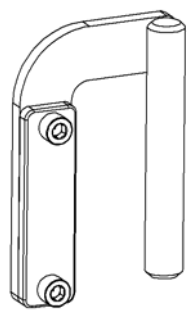
MK2001
10" Hose Clamp
(Bollard Mount
Only-optional)



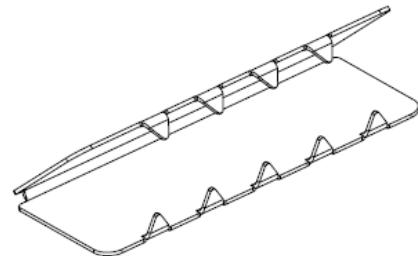
ST5001
Recoil
Mounting
Bracket



ST3001
Proximity Sensor
Model ST0200 only



ST5011
Strap Handle



ST2009
Strap Clip

DL Manufacturing Terms / Conditions/ Warranty

Shipping Times

~ Orders for stock items received by 3:00pm EST will be processed for shipment the next day. Orders requesting 2nd Day Air or Overnight Air received by 1:00pm will be processed for same day shipment.

Shipments / Freight

~ All DL Manufacturing orders will ship directly from our facility in North Syracuse, NY.

~ All parts will be shipped via UPS Ground unless you authorize a different service. UPS shipments are prepaid and the charges are added to your invoices.

~ For orders shipping by common carrier, the freight will be FOB, North Syracuse, NY. When "best way" is the preferred shipping method on your order, DL Manufacturing will choose the carrier, unless otherwise stated, for the orders shipping from this facility. No adjustments will be made after the order has shipped.

Returns

~ DL Manufacturing will issue a Returned Material Authorization (RMA) number for any product, parts and accessories. Products should not be returned without an RMA number.

~ Replacement parts will be invoiced at the time of shipping. Invoices will be credited upon receipt and inspection of Returned Material Authorization (RMA).

~ Freight for returns is paid for by the shipper unless otherwise specified by DL Manufacturing.

~ A restocking fee of 25% of net price or a minimum \$20.00 is charged for returns.

~ All replacement parts are warranted for a period of 90 days from shipment.

Cancellation Fees

~ Cancellation charges may be incurred on orders cancelled with DL Manufacturing. Please contact DL Manufacturing to discuss each situation.

Warranty Policy

~ All Products (excluding bulbs) manufactured by DL Manufacturing are warranted to be free from defects for a period of 12 months from the date of shipment, excluding doors, which have a warranty period of 12 months from date of installation or 18 months from shipment, whichever occurs first.

This warranty is subject to unreasonable/improper use or use beyond rated conditions, improper storage, negligence or accident; damage because of incorporated use of equipment with Goods, after Customer has or reasonably should have, knowledge of any defect; or improperly installed by any other Person that is unauthorized by DL Manufacturing.

This warranty is subject to customer covenants to inform all subsequent buyers of the Goods of the limitation on and exclusive of warranties provided for herein. Customer hereby indemnifies and agrees to hold DL Manufacturing harmless from and against all losses, costs and expenses, including reasonable attorney's fees incurred by DL Manufacturing as a result of any third party claim relating to the purchase, sale or use of, or otherwise relating to, the Goods covered by this Agreement.

In no event shall DL Manufacturing be required to repair, replace or reimburse Customer for more than the part or material that is found to be defective and DL Manufacturing's liability shall in such event be no greater than the invoiced price of the item and shall not include labor, shipping or other costs incurred in connection with the reshipment of defective Goods to DL Manufacturing or the reinstallation of such Goods after any repair or replacement. The remedy set forth in this paragraph is expressly agreed to be the sole and exclusive remedy for any breach of warranty. This warranty is exclusive and in lieu of all other warranties expressed or implied, including but not limited to any warranty of merchantability or of fitness for a particular purpose.

Limitation of Liability - In no event as a result of breach of contract, warranty or negligence shall DL Manufacturing be liable for special, or consequential damages including but not limited to loss of profits or revenues, loss of any equipment, cost of capital, cost of substitute equipment, facilities or services, downtime costs or claims of purchasers of the Customer for such damages. Additionally, DL Manufacturing will not be liable for any delay in the performance of contracts and orders, or in the shipment and delivery of goods, or for any damage suffered by the Customer by reason of delay, when such delay is, directly or indirectly, caused by force majeure, including war, Government interference, strikes, embargoes, shortage of labor, fuel, fires, floods, or any other cause or cause whether or not similar in nature to any of those herein before specified beyond DL Manufacturing's control.

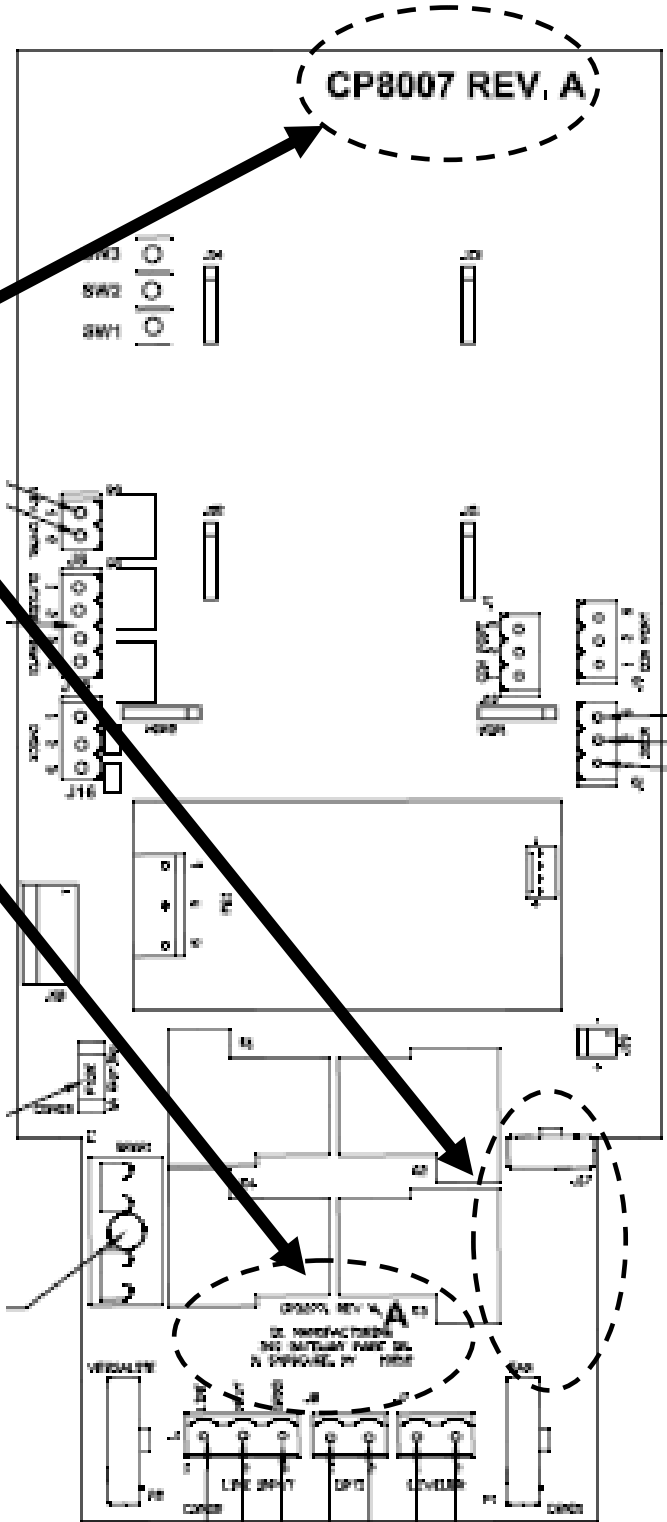
ADDENDUM A

Before wiring the SAFETY STRAP™, you must determine

- The part # and revision of the control board. Part # _____ Revision _____
- If control board is REV D, call factory for assistance.

NOTE:

Check one of the circled areas for the control board part # and revision level.



WIRING DIAGRAM / INSTRUCTIONS FOR EXISTING SMART CHOCK™ / SAFETY SIGNAL™

NOTE: Older SMART CHOCK™ or SAFETY SIGNAL™ control boards do not have an input for a second sensor. The door sensor and the SAFETY STRAP™ need to be wired in series in order to operate correctly.

NOTE: The signal wire can be white or black. Use the white for the signal first. The red light should be illuminated on the inside when the strap handle is in the receiver. If the light is green then switch the wire to black.

STEP 1 Insert sensor wire into pluggable terminal block as shown below in Figure 3. Plug into DOOR header (J2) on control board.

STEP 2 Fold over the remaining wire and tape it to the cord with electrical tape to prevent any short from occurring.

