

# THE TORPEDO

## PRESENCE SENSOR



### IMPORTANT

READ THIS SECTION BEFORE PROCEEDING WITH INSTALLATION

## INSTALLATION PRECAUTIONS

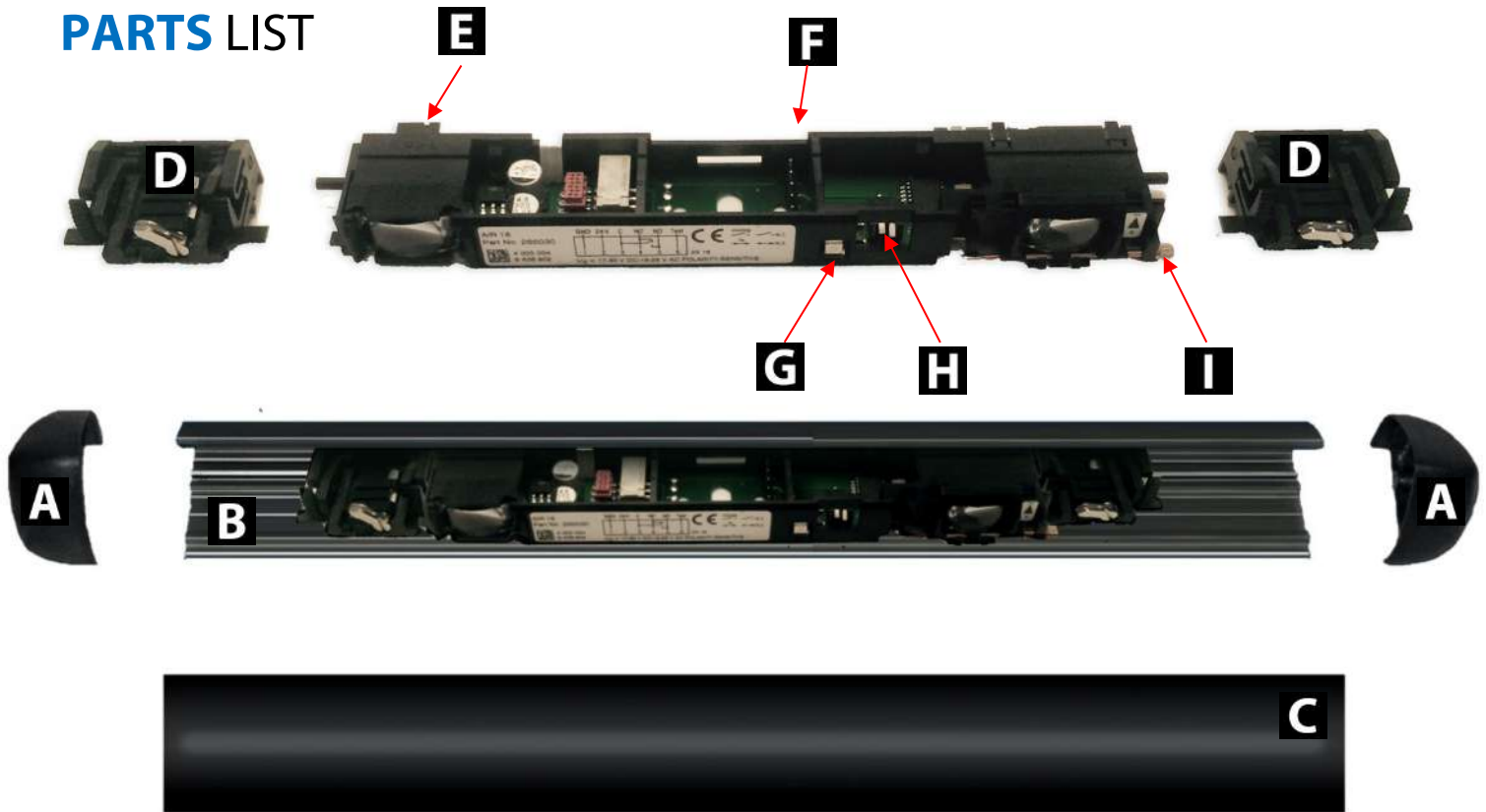
**PORTALP USA, Inc.** recommends that all of its automated pedestrian door products be installed by a trained automatic door technician and that the resulting performance of the product be in full compliance with the most current version of the American National Standards Institute document A156.10 or A156.19 (whichever is applicable) as well as any applicable building codes and/or fire codes. Portalp further recommends that a full inspection of the operating system be performed in accordance with the guidelines of the American Association of Automatic Door manufacturers (AAADM). **This inspection must be performed by a certified AAADM trained inspector.** Portalp recommends this documented inspection be performed upon completion of the installation, as well as, following the completion of every service call thereafter. If service is not performed within one year of the previous service action, a routine AAADM inspection should be performed and documented. Under no circumstance should the product operate for more than one year without an AAADM inspection. Portalp does NOT recommend installation or service, on any of their automated pedestrian door products, by any individual who is not certified as an AAADM inspector. Following the installation or service of any Portalp automated pedestrian door product, if it is deemed unsafe, or is operating in an unsatisfactory manner according to national performance standards or recommended performance guidelines as defined by Portalp, repairs should be made immediately. If an immediate repair cannot be made, the product should be disabled, and appropriate measures should be taken to secure the door in a safe position or to enable the door to safely be used manually. During this situation, every effort should be made to notify the owner (or person responsible) of the condition and to advise on corrective actions that must be taken to return the product to safe operation.

## TECHNICAL SPECIFICATION

**THE TORPEDO** is an active infrared sensor primarily used as a reactivation sensor for low energy automatic swing doors. Mounted on the approach side, The Torpedo will reactivate or hold the door open upon detection. Mounted on the safety side it causes the door to stall. The Torpedo is mounted out of harm's way at the top of the door, eliminating damage caused by shopping carts or hospital gurneys. The Torpedo is the perfect solution for additional safety and energy cost savings for low energy automatic doors.

DESCRIPTION	SPECIFICATION
<b>Product</b>	Torpedo-I 900 mm, (Black) (35" Included End Caps) Torpedo-I 1195mm, (Black) (47" Included End Caps) Torpedo-II Module Kit (Extension Kit for 2nd Module)
<b>Document</b>	TORPEDO Installation Guide
<b>Technology</b>	Active infrared (wavelength 880nm) Triangulation principle
<b>IR Spot Dimension</b>	Approx. 3" (75 mm) in diameter at mounting height of 7" or (2000 mm)
<b>Power Consumption</b>	<110mA
<b>Operating Voltage</b>	17 to 30 VDC / 18 to 28 VAC
<b>Function Indicator</b>	red LED
<b>Operating Elements</b>	Thumb screw for detection range adjustment, DIP-Switches
<b>Black/White Difference (With reference to scanning range set)</b>	Max: 20% White: longer scanning range Black: shorter scanning range
<b>Output</b>	Relay dry contact normally open (N.O.) or normally closed (N.C.)
<b>Relay</b>	Change-over contact: 24 VDC / 48 VAC Current: 1A at 24 VDC - Resistive
<b>Response Time Upon Detection</b>	Approx. 30 ms / after test 2 Seconds
<b>Detection Distance</b>	Background Suppression: min. 19" to 60" (500 to 1500 mm) max. 19" to 96" (500 to 2500 mm) Background Analysis: min. 0" to 60" (0 to 1500 mm) max. 0" to 96" (0 to 2500 mm)
<b>Mounting Height</b>	6ft to 9ft (1700 mm to 2500 mm)
<b>Degree of Protection</b>	IP52 in housing with aluminum rail, cover and end caps
<b>Relative Humidity</b>	Max. 90% not condensing
<b>Temperature Range</b>	4°F to +140°F (-20°C to +60°C)
<b>Dimensions (Sensor only) Dimensions (Housing inc. end cap)</b>	L x W x H (without housing) 7 ¾" x 1 ¼" x ¾" (198.5 x 31 x 20 mm) L x W X H (length variable) L x 1 ½" x 1 ¾" (L x 38 mm x 44 mm)
<b>Material</b>	Rail: Aluminum Lens cover: PC (black) End caps: ABS
<b>Wire / Connection</b>	Cable Length 6ft (2m)

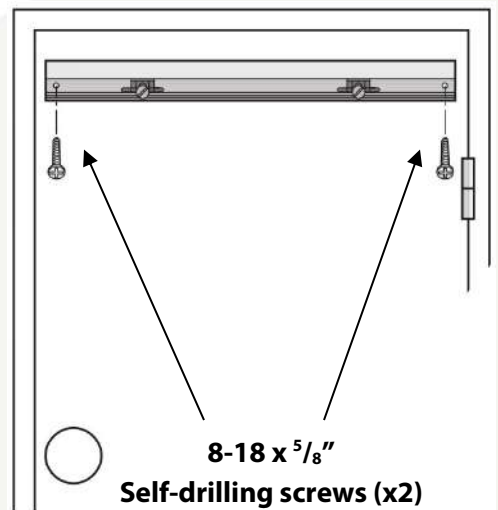
## PARTS LIST



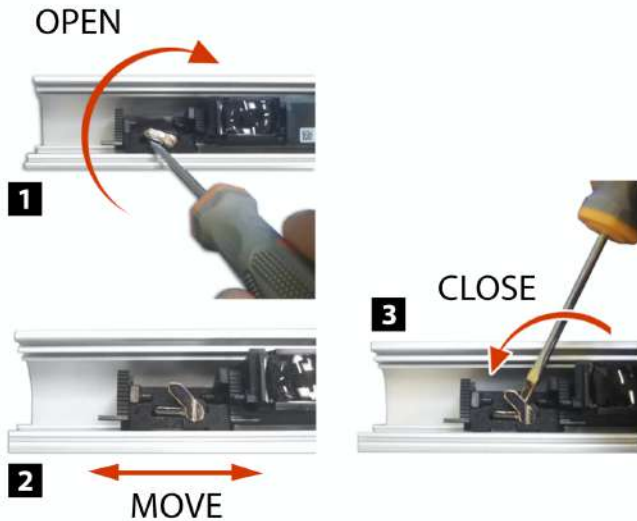
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|-----------------------------------|--|--|
| <b>A.</b> End caps and screw (x2) | <b>D.</b> Pivot block mounting brackets (X2) | <b>G.</b> Detection indication (LED red)       |
| <b>B.</b> Aluminum rail           | <b>E.</b> Left/right pattern selector        | <b>H.</b> Dip switches                         |
| <b>C.</b> Lens Cover              | <b>F.</b> Wiring terminal block              | <b>I.</b> Height/distance adjustment set screw |

## MECHANICAL INSTALLATION

- Center aluminum rail with end caps between door jambs or hinge. Place about 1" (25 mm) from the top of the door or arm fixture/slide rail (if applicable).
- Attach the aluminum rail to door panel with self-drilling screws (included).
- Route cable through cable exit in the end cap and lead to door operator.
- Lead cable to door operator (e.g. through supplied cable loop).



## ASSEMBLY INSTRUCTIONS

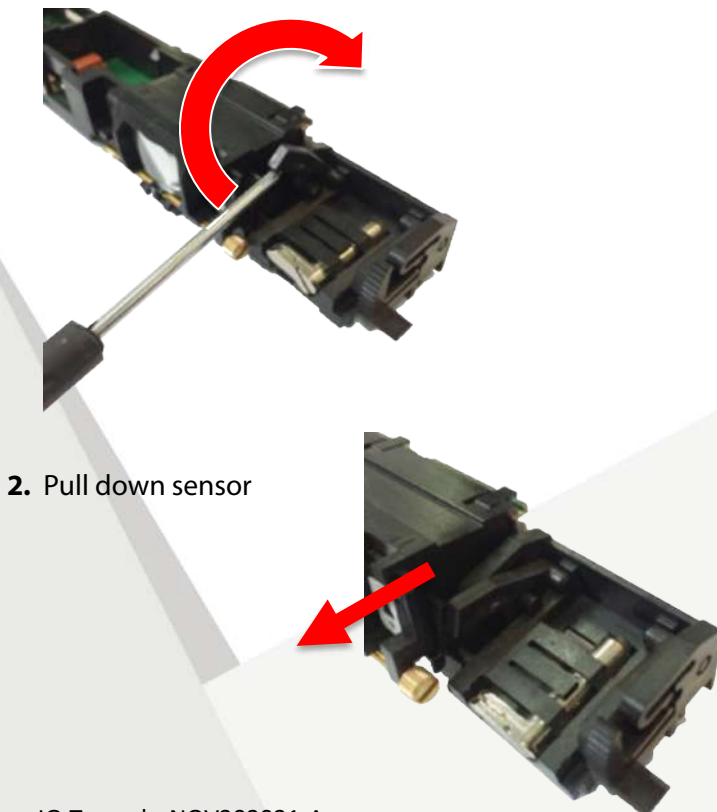


1. Using a screwdriver, turn metal levers on both pivot blocks upward to unlock.
2. Slide pivot to required position and lock with sensor.
3. Turn metal levers down to lock sensor into position.

## INSTALL AND REMOVE SENSOR

1. Lift lever to unlock sensor  
(2 x - left side and right side)

3. Sensor stays in this position to plug-in cables or sensor can be removed from this position without removing the sensor (R + L)



## ROUTING CABLE



1



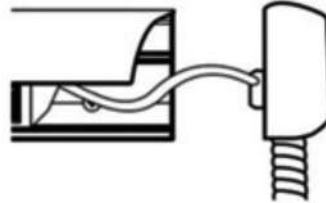
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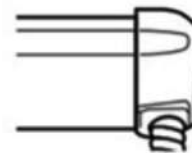
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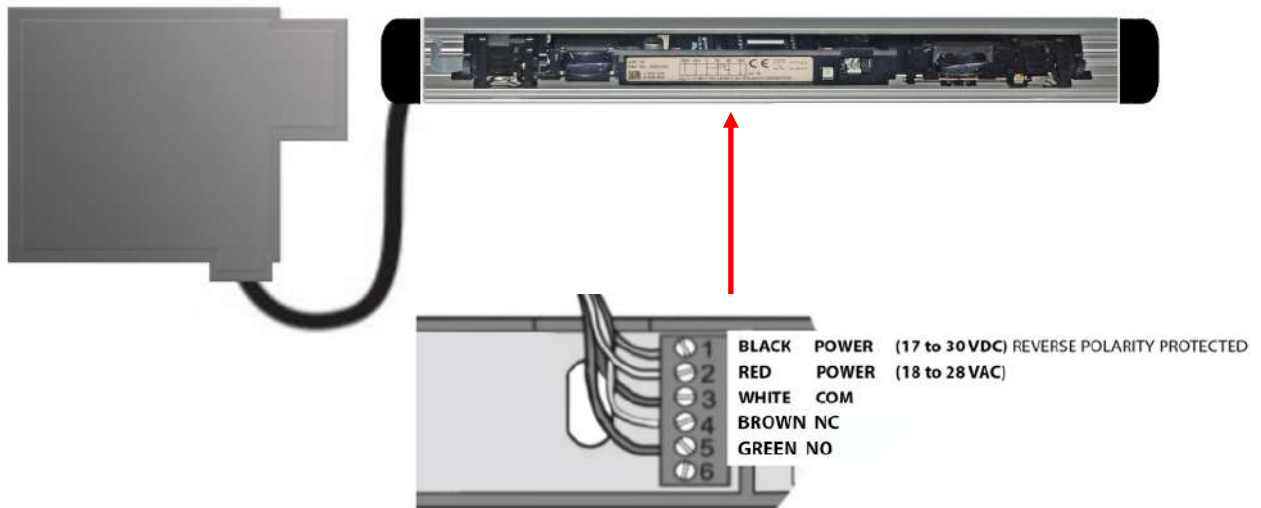
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1. Lead cable from wire terminal behind sensor and pivot blocks.
2. Push a large Phillips screwdriver into tension relief and push cable sheathing onto tension relief.
3. Insert the tubular rivet into tension relief and push cable through tension relief and cable.
4. Use pliers to break out perforated area of the cable exits on end cap.
5. Insert prepared cable and tension relief into end cap cut-out. **NOTE:** *Position of tension relief.*
6. Position end cap and transition cables to sensor bar.
7. Place end cap on sensor bar and screw in place.



## WIRE SENSOR

The Torpedo-One provides a dry relay output and can be connected directly to the activation circuit of the automatic door control. Attach pre-wired terminal block to terminal receptor pins on the sensor unit.







## DIP SWITCH FUNCTIONS

Power-up the sensor after installation is complete. The LED illuminates when the sensor detects a presence.

### OPERATION SELECTION

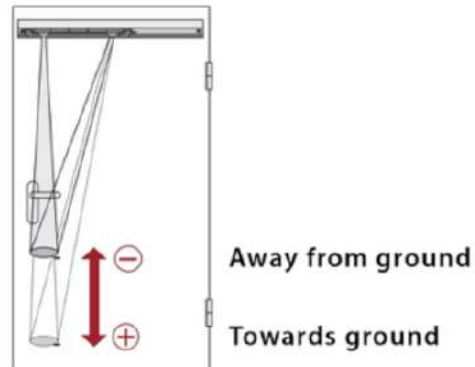
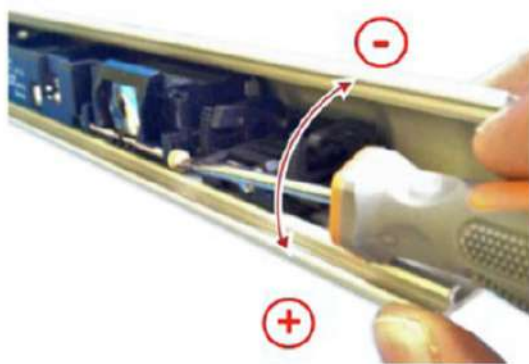
**UP** = OFF | **DOWN** = ON

\*Default

<p><b>Switch 1 - Operating mode selection</b></p> <p><b>*Up</b>  Moving mode (background suppression on) No background necessary, floor is ignored</p> <p><b>Down</b>  Stationary mode (background analysis) A stable background is essential, the floor is analyzed</p>	<p><b>Switch 2 - Switching mode selection</b></p> <p><b>*Up</b>  Passive Switching The relay opens the NO contact on detection.</p> <p><b>Down</b>  Active Switching The relay connects NO to COM on detection</p>
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## DETECTION SETTING

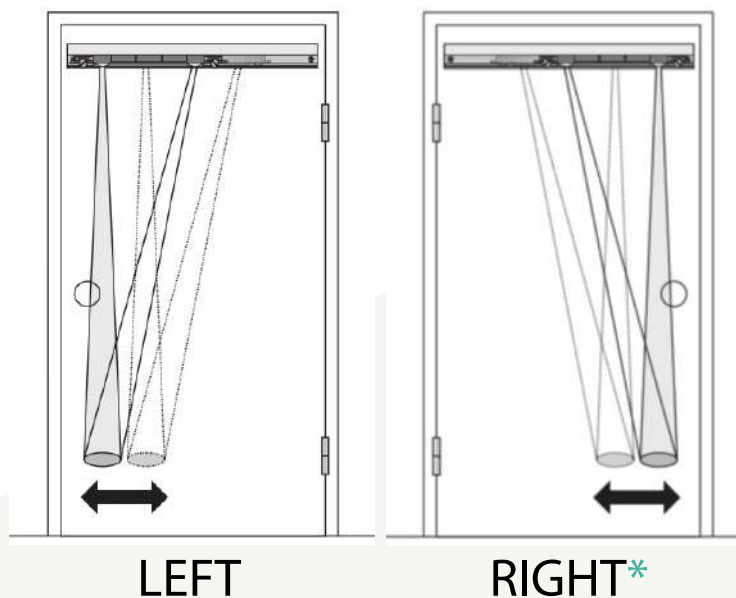
1. First, check trigger point with a white letter size sheet of paper. Then use a screwdriver to adjust scanning range on setscrew.
2. Adjust the detection area by sliding the sensor in the rail. Ensure pivot blocks are sufficiently loosened to move over aluminum.



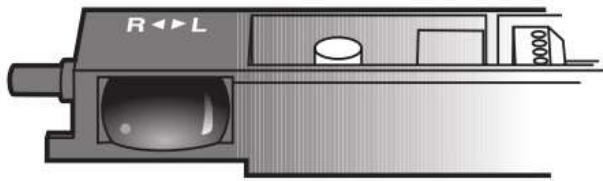
**ATTENTION:** Recommended trigger point should never be greater than 7 ¾" (200mm) above the floor surface.

## SELECTING DETECTION AREA

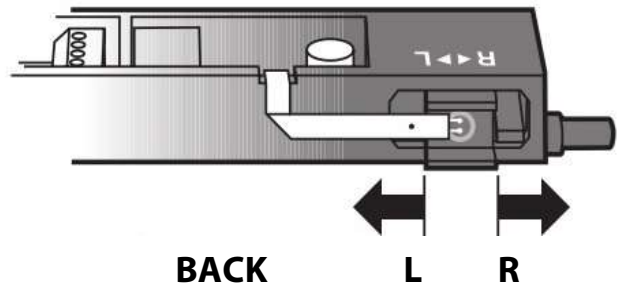
Depending on the door opening, a right or left sensing location must be selected. The selector can be found on the backside of the optics.



*\*Factory Setting*



**FRONT**



**BACK**

**L R**

To change the detection area, slide the plastic selector to position **L** or **R**\*

Position of the detection area: **L = Left / R = Right**

\*Factory Setting

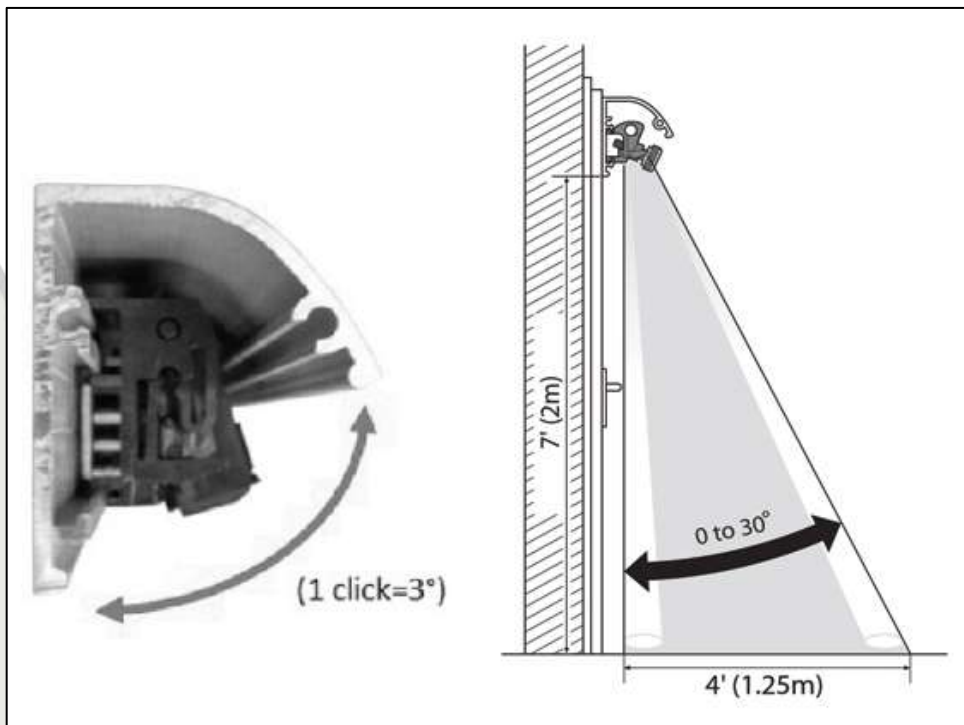
## TILT ANGLE ADJUSTMENT

1. Using both hands, grasp both sides of sensor and carefully tilt up or down to change the inclination angle.

**The angle 0° to 30° can be read on the sides of the mounting brackets.**

2. Ensure sensor is level by setting the same angle on both brackets.

**(1 click = 3°)**



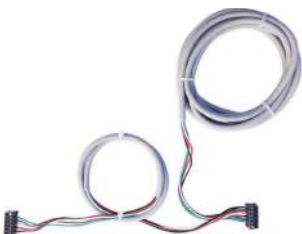


## CLOSING HOUSING

1. Click plastic front cover to aluminum housing.
2. Attach end caps using screws provided.
3. Remove blue plastic protective film from lens.
4. Ensure it is secure along the entire length of rail.



## TORPEDO - TWO - KIT



**C**



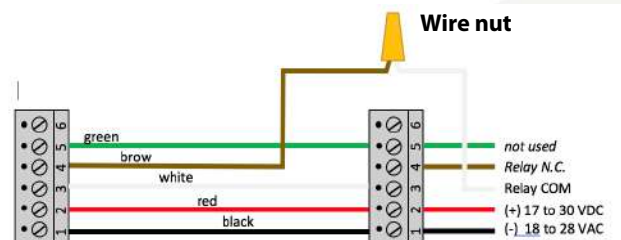
**D**

- A.** Sensor
- B.** Pivot block mounting brackets (X2)
- C.** Harness Kit
- D.** Wire Nuts (X2)

### TROPEO-TWO OUTPUT N.O. Wiring



### TORPEDO-TWO OUTPUT N.C. Wiring



## CONTACT INFORMATION



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