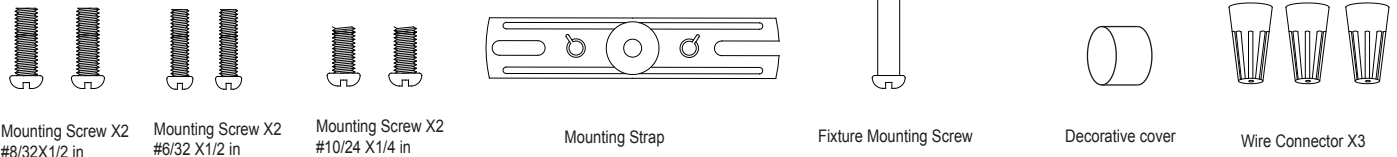# ASSEMBLY AND INSTALLATION INSTRUCTIONS

T0170 / T0171 / T0297 / T0298 / T0299

WARNING: TO AVOID RISK OF ELECTRICAL SHOCK, BE SURE TO SHUT OFF POWER BEFORE INSTALLING OR SERVICING THIS FIXTURE.

NOTES: 1. Before installing, consult local electrical codes for wiring and grounding requirements.
2. READ AND SAVE THESE INSTRUCTIONS.

Hardware Package (included):

Mounting Screw X2 #8/32X1/2 in	Mounting Screw X2 #6/32 X1/2 in	Mounting Screw X2 #10/24 X1/4 in	Mounting Strap	Fixture Mounting Screw	Decorative cover	Wire Connector X3

Important to Know:

1. If you are not familiar with state and local electrical codes, it is recommended that you consult with a qualified electrician.
2. This fixture requires a 120 VAC, 60 Hz power source.
3. For general safety and to avoid any possible damage to the sensor, be sure the power is switched "off" before adjustment.

Maximum Wattage: 36 W
Working Temperature Range: - 4°F ~ 113°F

Features:

1. Energy saving LED fixture.
2. Motion sensor: turns light ON automatically when motion is detected and turns light OFF automatically when motion stops.
3. Photocell keeps the light OFF during daylight hours.
4. When in manual override mode, use wall switch to keep the light ON during the night.

Note: Fixture can be wall mounted or eave mounted.

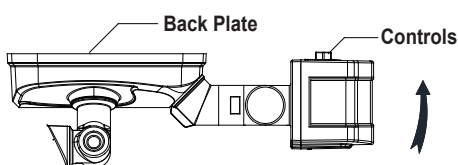**Wall Mounted**

Eave Mounted

Read notes section on page 4 for additional information about mounting location of fixture.
Light fixture and sensor should be mounted as shown above when installed (depending upon type of installation)
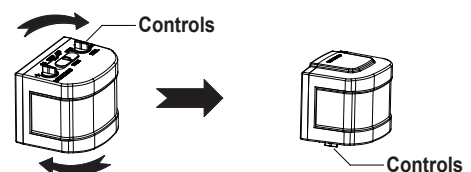
Before installing the light fixture under an eave, the sensor head must be rotated as shown in the next two steps for proper operation and to avoid the risk of electrical shock.
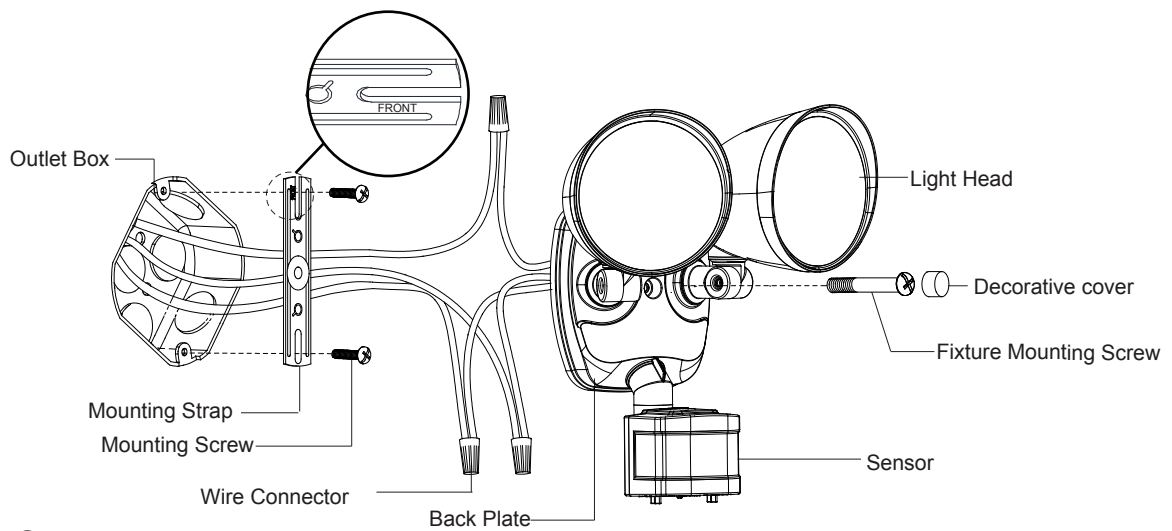
For eave mounted only:

◉ Swing the sensor head towards the back plate.

◉ Rotate the sensor head clockwise 180˚ so the controls face down

Back Plate

Controls

Controls

Controls

VAXCEL

180704

Outlet Box

Mounting Strap

Mounting Screw

Wire Connector

Back Plate

Light Head

Decorative cover

Fixture Mounting Screw

Sensor

Installation Steps

Turn off the power at fuse or circuit box.

1. Install the mounting strap to the outlet box with the stamped word "FRONT" facing away from the outlet box, using two mounting screws that best fit the outlet box. Back plate should sit flush against wall surface when secured. (Choose one matching pair of suitable mounting screws from the 3 pairs provided)

2. Pull out the source wires from the outlet box. Make wire connections using wire connectors as follows:
   ---Connect the black wire from the fixture to the "hot" wire from the power source. (usually black)
   ---Connect the white wire from the fixture to the neutral wire from the power source. (usually white)
   ---Connect the grounding wire from the fixture to the grounding wire from the power source. (usually green / yellow insulation)
   Carefully tuck the wires back into the outlet box.

3. Attach the back plate of the light to the mounting strap, secure it with the fixture mounting screw.

4. Push the decorative cover firmly into the fixture mounting screw hole on the light.

5. With silicone caulking compound, caulk completely around where the back plate meets the wall surface.
   CAUTION: Be sure to caulk completely where the back plate meets the wall surface to prevent water from seeping into the outlet box.
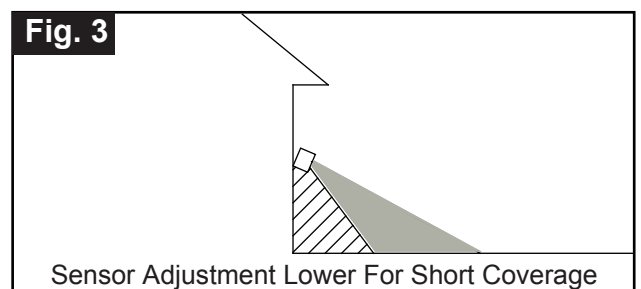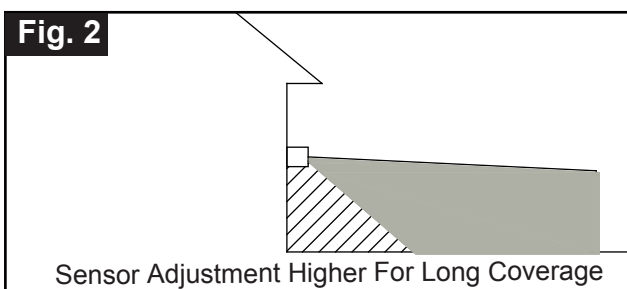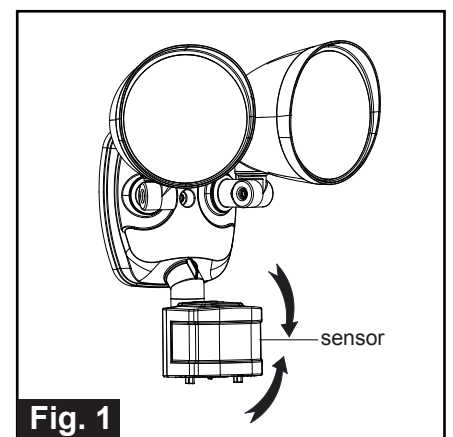
Turn on the power at fuse or circuit box.

Adjusting the Sensor Head:

1. Aim sensor head toward desired detection area, maintaining a 5° - 40° downward angle to allow moisture to drain.
   Note: Make sure sensor head is positioned with controls facing toward the ground.

2. You can move the sensor head up and down to change the coverage area. (See Fig. 1)
   Note: Range set too high may increase false triggering.
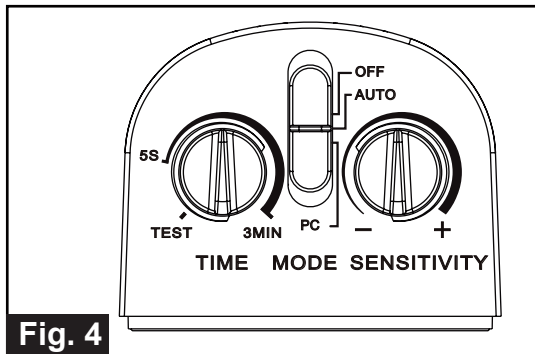   (See Fig. 2 and Fig. 3)

sensor

Fig. 1

Fig. 2

Sensor Adjustment Higher For Long Coverage

Fig. 3

Sensor Adjustment Lower For Short Coverage

♡ VAXCEL
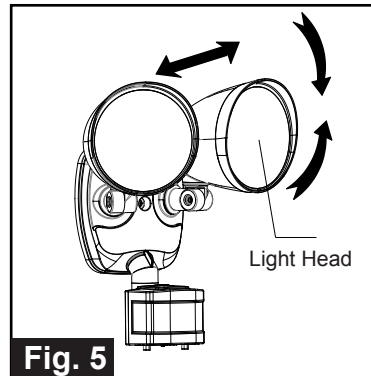
180704

<u>Sensitivity of Motion Sensor</u>
- You can adjust the sensitivity of the motion sensor by using the "SENSITIVITY" selector located on the right side of the bottom surface of the sensor. (See Fig. 4)
- Adjust motion sensor sensitivity to achieve desired performance.
- Approximate range for each setting from 10ft to 70ft.

Adjusting the Light Head:
1. Gently grasp the light heads and move them up or down, left or right to adjust the light coverage area. Keep the light heads at least 1" (25mm) away from the sensor.(See Fig. 5)

2. Keep the light heads 30˚ below horizontal to avoid water damage and electrical shock.

Fig. 4

Fig. 5

Function and Operation

Choose a mode by sliding the switch on the bottom of the sensor. (See Fig.4)
Note: When power is first applied, the light will turn on . The sensor will take 30 seconds to warm up.

1. Test mode(daytime or nighttime operation）
   - Rotate knob on the bottom of the sensor to the "TEST" position. (See Fig.4)
     - When slide the mode selector to "OFF", the light turns off automatically. It turns to high-level brightness when motion is detected, and stays on as long as the motion continues. It turns off about 5 seconds after motion is no longer detected.
     - When slide the mode selector to "AUTO", the light turns to low-level brightness automatically. It turns to high-level brightness when motion is detected, and stays on as long as the motion continues. Then reverts back to low-level brightness about 5 seconds after motion is no longer detected.
     - When slide the mode selector to "PC", the light will turn off when it is daytime, if it is nighttime, the light will turn to high-level brightness.

2. OFF MODE (nighttime operation only)
   - To shift to "OFF" mode, rotate Time knob arrow to point to the desired time setting (between 5 seconds and 3 minutes). At dusk, the light turns to high-level brightness automatically when motion is detected, and stays on as long as the motion continues. When the motion is no longer detected, the light at full brightness remains on for the predetermined time you set (5s ~ 3min), after then the light turns off automatically.
   - The light turns off automatically at dawn.

3. AUTO MODE (nighttime operation only)
   - To shift to "AUTO" mode, rotate Time knob arrow to point to the desired time setting (between 5 seconds and 3 minutes). At dusk, the light turns on to low level brightness. When motion is detected, the light turns to full brightness and stays on as long as motion continues. When the motion is no longer detected, the light at full brightness remains on for the predetermined time you set (5s ~ 3min), and then switches back to low level automatically.
   - The light turns off automatically at dawn.

4. PC MODE (nighttime operation only)
   - The light turns on to full brightness at dusk and remains on until dawn.

VAXCEL
180704

5. Manual Override mode (nighttime operation only)
   ● To temporarily override the settings in "OFF" or "AUTO" modes for continuous full-brightness at night, turn the wall switch "OFF" then turn it "ON" within 3 seconds. The light remains on all night long. To shift back to "OFF" or "AUTO" mode, turn the wall switch "OFF" then turn it "ON" within 3 seconds again.
   ● The light turns off automatically at dawn.

Note: To make sure the above functions operate properly, always keep the wall switch in the "ON" position (including the daytime).

Fig. 6

Manual Override Operation Diagram

Turn wall switch OFF-ON in 0.5~3 Seconds

"OFF" or "AUTO" Mode ⟶ ⟵ Manual Override
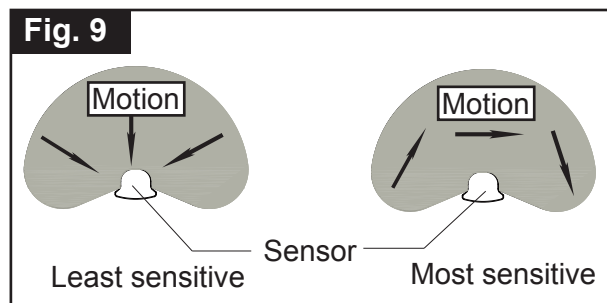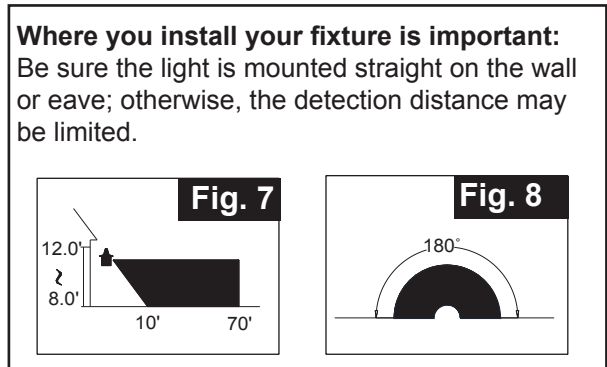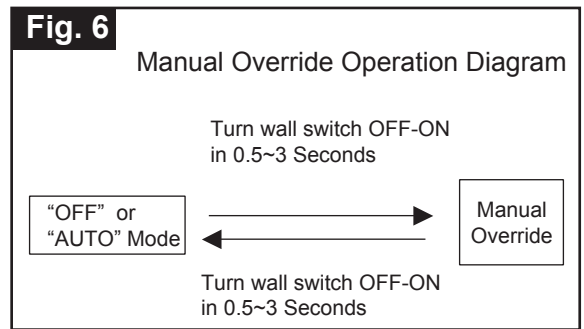
Turn wall switch OFF-ON in 0.5~3 Seconds

Customization Options:

Shut-off Delay
   ●The shut-off delay is the length of time the light will stay at full brightness after motion is detected.
   ●You can set the shut-off delay by rotating the Time knob arrow so it points to the desired time setting (from 5 seconds to 3 minutes). To increase the shut-off delay, turn the knob clockwise. To decrease the shut-off delay, turn the knob counterclockwise.

Notes:

1. The sensitivity of the motion sensor will increase as the environmental temperature gets cooler. For best performance, gently clean the lens with a soft cloth every 1 or 2 months to ensure maximum sensitivity.

2. For best performance, install fixture at least 8 feet above the ground. At such a height, the fixture will provide a detection distance of up to 70 feet at 77 degrees Fahrenheit. (See Fig.7)

3. The sensor detects movement across a detection range of 180 degrees. (See Fig.8)

4. The sensor will be more sensitive to motion across its detection path than motion directly towards it. (See Fig.9)

5. To reduce possible nuisances, do not mount the fixture near a heat source like an air conditioner, vent or furnace exhaust, or in a direction facing any reflective object or other nearby light source.

Where you install your fixture is important:
Be sure the light is mounted straight on the wall or eave; otherwise, the detection distance may be limited.

Fig. 7

12.0'
8.0'
10'   70'

Fig. 8

180°

Fig. 9

Motion   Motion

Sensor

Least sensitive   Most sensitive

VAXCEL

180704

Troubleshooting

---The light does not come on at all:
1. Make sure the wall switch and circuit breaker are on.
2. Make sure the wiring is correct.
3. Cover the sensor with dark color cloth to verify that the ambient light level is not too high.

---The light comes on for no apparent reason:
1. Re-aim the motion sensor.
2. Decrease the sensitivity setting.
3. Do not use a dimmer or timer to control the light fixture. Replace the dimmer or timer with a standard on/off wall switch.
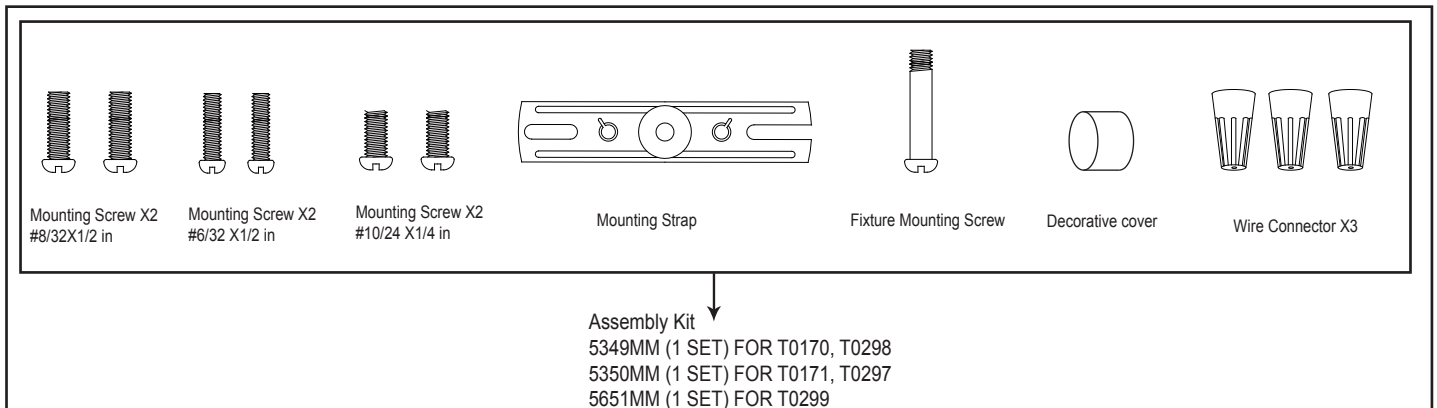
---The light flashes on and off:
1. Reposition the light head away from the motion sensor.
2. Reposition the motion sensor.
3. The motion sensor is in "TEST" mode and warm up.

---In Manual override, the light stays on after dawn:
1. The ambient light level may be too low due to overcast skies.

The following parts are available for re-order if damaged or missing.

| Mounting Screw X2 #8/32X1/2 in | Mounting Screw X2 #6/32 X1/2 in | Mounting Screw X2 #10/24 X1/4 in | Mounting Strap | Fixture Mounting Screw | Decorative cover | Wire Connector X3 |

Assembly Kit
5349MM (1 SET) FOR T0170, T0298
5350MM (1 SET) FOR T0171, T0297
5651MM (1 SET) FOR T0299

5-YEAR LIMITED WARRANTY:
All products are warranted to be free of defects in material and workmanship for five (5) years from date of purchase. This warranty is limited to the correction of any such defect, or the replacement of any such defective item(s), provided that: (a) we are properly notified and consent to return of the item(s) in question:(b) the item (s) is / are returned with proof of purchase date; and (c) it is found upon inspection by us that the item (s) is / are defective as noted above. This warranty dose not cover labor costs, consequential damages, nor dose it apply to any item(s) that have been improperly installed, overloaded, altered, or otherwise abused by the customer, its agent(s) or emplyee(s). Finishes are specially excluded from the terms of this warranty since they are subject to environmental maintenance deemed beyond our control. Other than the described obligation, we assume no further liability with respect to the sale or use of our products.We make no warranty, express or implied, and disclaim any warranty of merchantability or fitness for a particular purpose.

A: 9-1/4"

B: 9"

C: 5-3/4"

VAXCEL

180704