



#### **Channel – Front illumination**

A letter shape or artform fabricated from plastic, metal, or other material recognized as suitable as an enclosure; depending on the face, to be used exposed, as a sign body or as an enclosure.



The installations in this section are mounted on a raceway (transformer located within raceway).



# CHANNEL LETTERS

## Raceway Mounted

# CHANNEL LETTER

Raceway Mounted

## General Requirements



Drain holes in letter and raceway



Porcelain bushing



Waterproof cut-off switch



Tube support required within 6" of termination

Close nipple with bushing



1/2" lip on top of raceway



Porcelain wire support required within 6" of termination



Building entrances (mounting and electrical conduit)  
Must be sealed



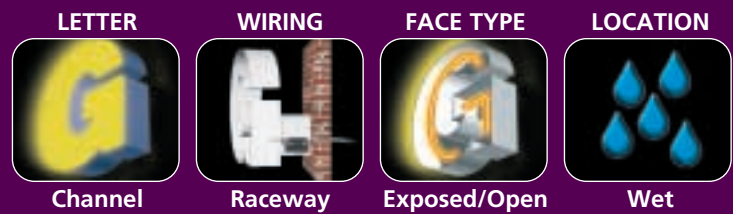
Casino bushing






# CHANNEL LETTER

## RACEWAY MOUNTED (Option 1)

### No Face, Exposed Neon



### Special Installation Instructions

- Sign Location Is Wet 
- Connections Inside Channel Letter (Exposed) Must Be Listed As A "System" For Wet Locations 
- Protected Connections On The Opposite Side Of The Wall Are Damp/Dry Rated 
- Protected Connections Inside Raceway Can Be Enclosure Rated, This Allows:
  - Twisted Connections With Appropriate Spacing
  - GTO Without Integral Or External Sleeving



Example of Finished Installation



### Wet Connections

**Wet Location** — Installations subject to saturation with water or other liquids (such as vehicle washing areas), and unprotected locations exposed to weather.



Listed housing cap



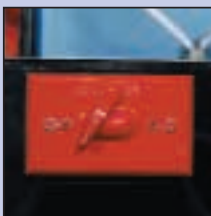
Boot & Sleeve  
(Masters-Watertite system shown)



G cup with CPA  
(Absko shown)



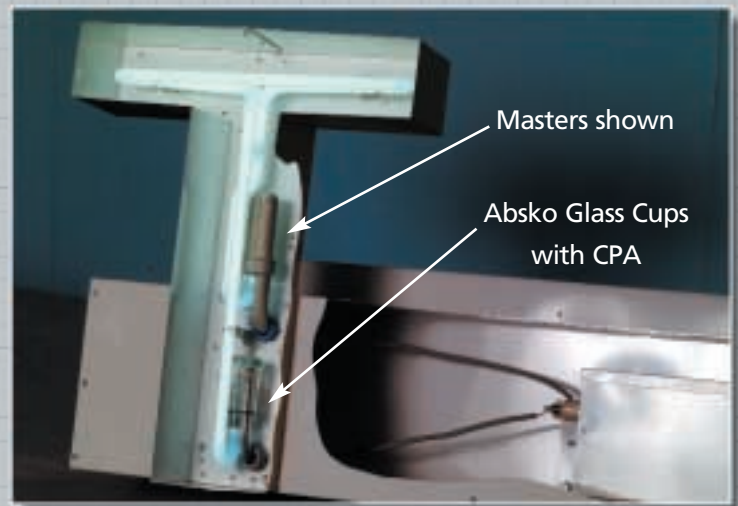
Drain holes  
Letters and  
raceway



Waterproof  
cutoff switch



1/2" Lip on  
raceway

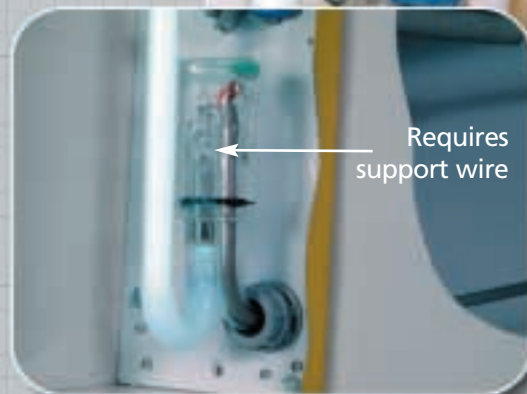


Glass cup and boots & sleeving



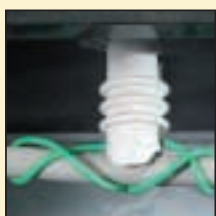
Boot and  
sleeve listed for  
wet locations  
(Masters-  
Watertite system  
shown)

Caulking  
required



Requires  
support wire

Glass cup &  
CPA Assembly  
(Absko shown)



Porcelain wire  
support



100 Glass  
housing

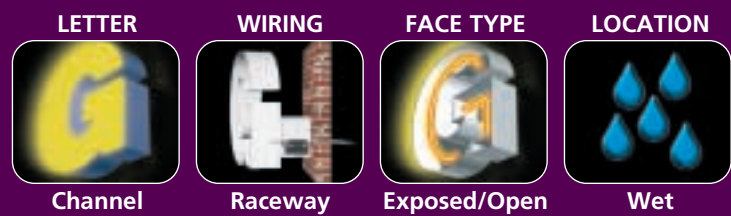


300 Open  
glass housing




# CHANNEL LETTER

## RACEWAY MOUNTED (Option 2)

### No Face, Exposed Neon



### Special Installation Instructions

- Sign Location Is Wet 
- Connections Inside Channel Letter (Exposed) Must Be Listed As A "System" For Wet Locations 
- Protected Connections On The Opposite Side Of The Wall Are Damp/Dry Rated 
- Protected Connections Inside Raceway Can Be Enclosure Rated, This Allows:
  - Twisted Connections With Appropriate Spacing
  - GTO Without Integral Or External Sleeving



Example of Finished Installation

### Wet Connections

**Wet Location** — Installations subject to saturation with water or other liquids (such as vehicle washing areas), and unprotected locations exposed to weather.



Listed housing cap



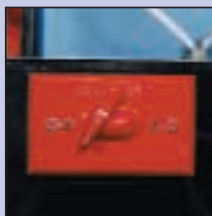
Boot & Sleeve  
(Masters-Watertite system shown)



G cup with CPA  
(Absko shown)



Drain holes  
Letters and  
raceway



Waterproof  
cutoff switch



1/2" Lip on  
raceway

### Inside Raceway



Porcelain wire  
support



100 Glass  
housing



300 Open  
glass housing



Glass housings



Glass and porcelain housings



# CHANNEL LETTER

RACEWAY MOUNTED (Option 1)

No Face, Exposed Neon

LETTER



Channel

WIRING



Raceway

FACE TYPE



Exposed/Open

LOCATION



Dry/Damp

## Special Installation Instructions

- Sign Location Is Damp/Dry
- Connections Inside Channel Letter (Exposed) Must Be Listed For Damp/Dry Locations
- Protected Connections On The Opposite Side Of The Wall Are Damp/Dry Rated
- Connections Shown Here Cannot Be Used For Wet Locations



Example of Finished Installation



## Damp or Dry Connections

**Damp Location** – Partially protected locations under canopies, marquees, roofed open porches, and similar locations; as well as interior locations subject to moderate degrees of moisture, such as basements, barns, and cold storage warehouses.

All listed wet connections are acceptable for use in damp or dry locations.



Drain holes  
Letters and raceway



Waterproof  
cutoff switch

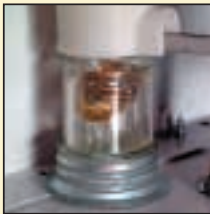


1/2" Lip on  
raceway

## Inside Raceway



Porcelain wire  
support



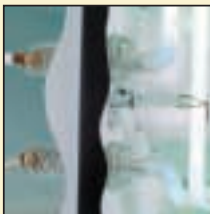
100 Glass  
housing



300 Open  
glass housing



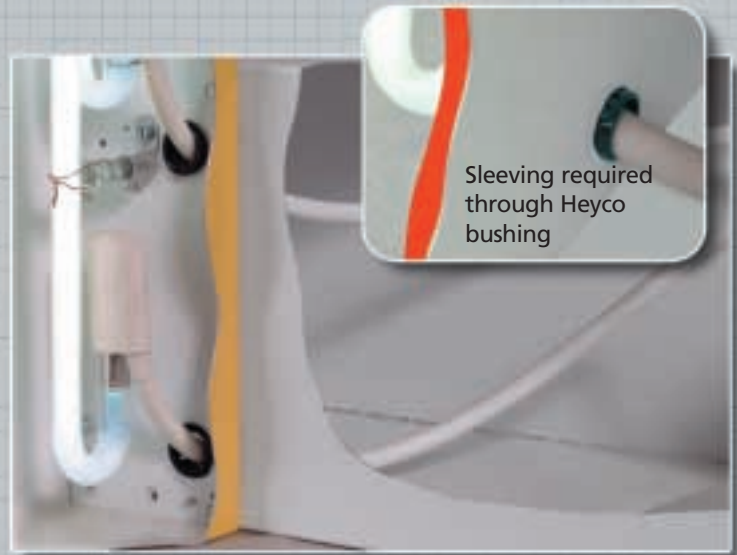
Casino bushing



Glass / spring  
housings



Plastic / porcelain  
bushings



Boots and sleeving (Westrim shown)

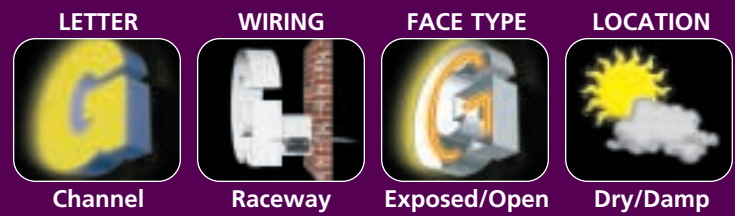


Casino bushing





# CHANNEL LETTER

## RACEWAY MOUNTED (Option 2)

### No Face, Exposed Neon



### Special Installation Instructions

- Sign Location Is Damp/Dry 
- Connections Inside Channel Letter (Exposed) Must Be Listed For Damp/Dry Locations 
- Protected Connections On The Opposite Side Of The Wall Are Damp/Dry Rated 
- Connections Shown Here Cannot Be Used For Wet Locations 



Example of Finished Installation



### Damp or Dry Connections

**Damp Location** – Partially protected locations under canopies, marquees, roofed open porches, and similar locations; as well as interior locations subject to moderate degrees of moisture, such as basements, barns, and cold storage warehouses.

All listed wet connections are acceptable for use in damp or dry locations.



Drain holes  
Letters and raceway

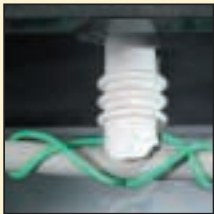


Waterproof  
cutoff switch



1/2" Lip on  
raceway

### Inside Raceway



Porcelain wire  
support



100 Glass  
housing



300 Open  
glass housing



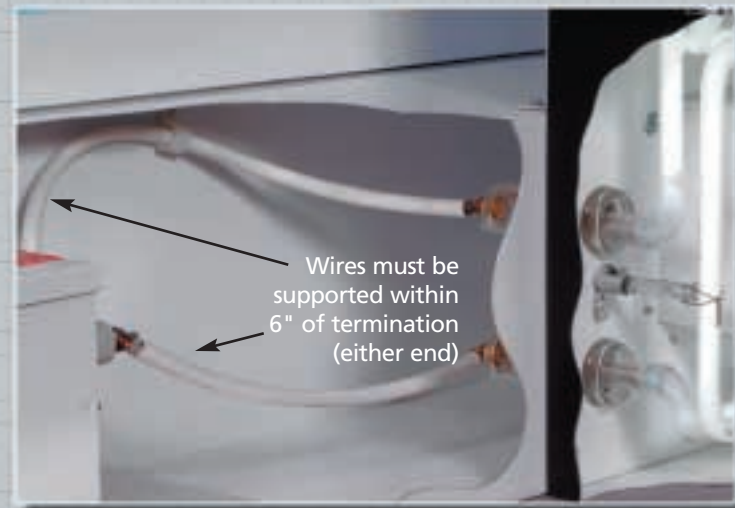
Casino bushing



Glass / spring  
housings



Plastic / porcelain  
bushings



Glass housings





# CHANNEL LETTER

## RACEWAY MOUNTED (Option 1)

### With Plastic Face

LETTER



Channel

WIRING



Raceway

FACE TYPE



Plastic

LOCATION



Wet

### Special Installation Instructions

- Sign Location is Wet
- Channel Letter with Plastic Face Creates a Sign Body
- Connections Inside Channel Letters (Sign Body) Need Only Be Damp/Dry Rated
- Protected Connections Inside Raceway Need Only Be Enclosure Rated
  - Allowable Connections In Raceway Include Twisted Connections With Appropriate Spacing
  - GTO Does Not Require Integral Or External Sleeving In Raceway

### Wet, Damp or Dry Connections

**Wet Location** — Installations subject to saturation with water or other liquids (such as vehicle washing areas), and unprotected locations exposed to weather.

**Damp Location** — Partially protected locations under canopies, marquees, roofed open porches, and similar locations; as well as interior locations subject to moderate degrees of moisture, such as basements, barns, and cold storage warehouses.



Listed housing cap



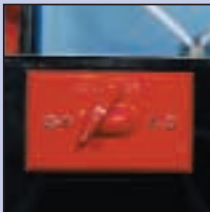
Boot & Sleeve (Masters-Watertite system shown)



G cup with CPA (Absko shown)



Drain holes Letters and raceway



Waterproof cutoff switch

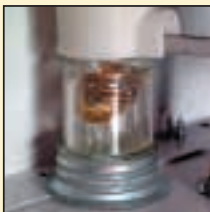


1/2" Lip on raceway

### Inside Raceway



Porcelain wire support



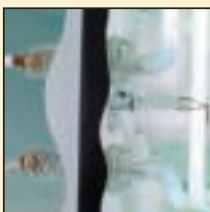
100 Glass housing



300 Open glass housing



Casino bushing



Glass / spring housings



Plastic / porcelain bushings



Example of Finished Installation

Boots and sleeving (Masters-Watertite system shown)



Sleeving required through Heyco bushing

Boots and sleeving (Electrobits shown)

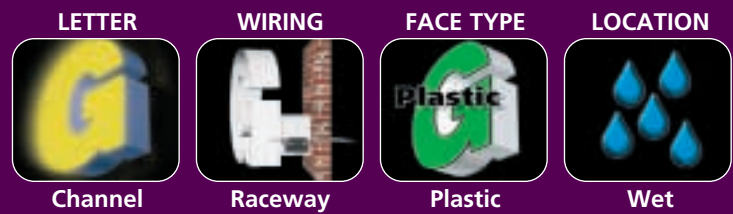


Wires must be supported within 6" of termination (either end)



# CHANNEL LETTER

## RACEWAY MOUNTED (Option 2)

### With Plastic Face



### Special Installation Instructions

- Sign Location is Wet 
- Channel Letter with Plastic Face Creates a Sign Body
- Connections Inside Channel Letters (Sign Body) Need Only Be Damp/Dry Rated 
- Protected Connections Inside Raceway Need Only Be Enclosure Rated
  - Allowable Connections In Raceway Include Twisted Connections With Appropriate Spacing
  - GTO Does Not Require Integral Or External Sleeving In Raceway

### Wet, Damp or Dry Connections

**Wet Location** — Installations subject to saturation with water or other liquids (such as vehicle washing areas), and unprotected locations exposed to weather.

**Damp Location** — Partially protected locations under canopies, marquees, roofed open porches, and similar locations; as well as interior locations subject to moderate degrees of moisture, such as basements, barns, and cold storage warehouses.



Listed housing cap



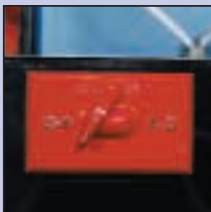
Boot & Sleeve (Masters-Watertite system shown)



G cup with CPA (Absko shown)



Drain holes Letters and raceway



Waterproof cutoff switch

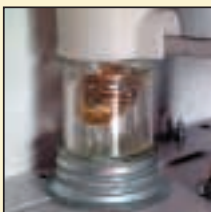


1/2" Lip on raceway

### Inside Raceway



Porcelain wire support



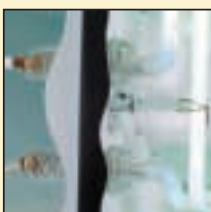
100 Glass housing



300 Open glass housing



Casino bushing



Glass / spring housings



Plastic / porcelain bushings

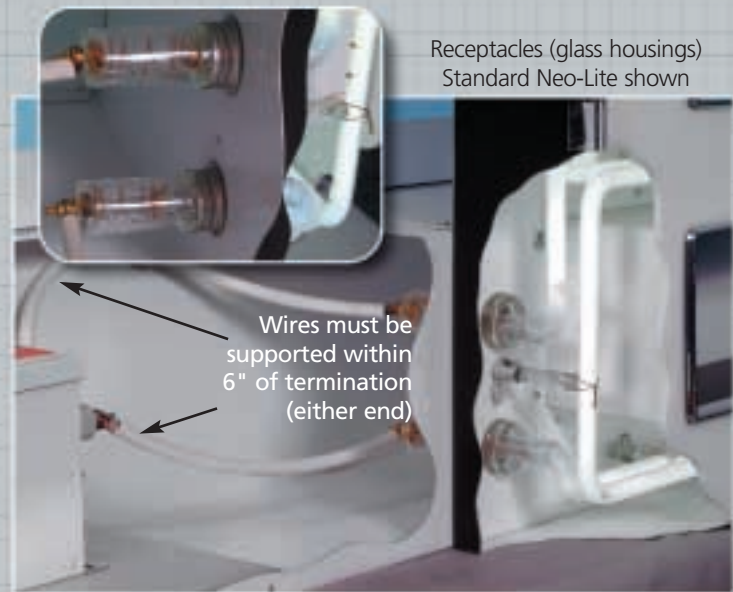


Example of Finished Installation

Proper 1-1/2" clearance front, back and sides



Casino bushing (no cap required) face removed for demo purposes



Receptacles (glass housings) Standard Neo-Lite shown

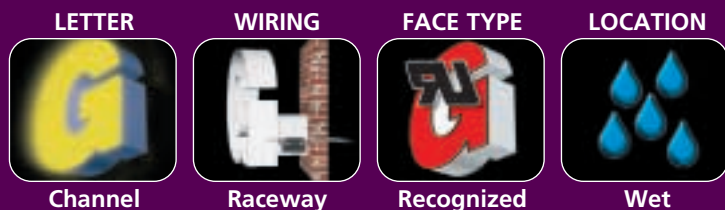
Wires must be supported within 6" of termination (either end)




# CHANNEL LETTER

## RACEWAY MOUNTED (Option 1)

### With Recognized Component Face



### Special Installation Instructions

- Sign Location Is Wet 
- Channel Letter With Enclosure Rated Face Creates An Enclosure
- Connections Inside Channel Letters Can Be Enclosure Rated, This Allows:
  - Twisted Connections With Appropriate Spacing
  - GTO Does Not Require Integral Or External Sleeving

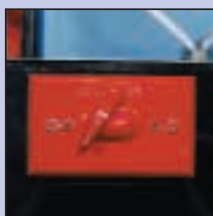


### Wet Connections

**Wet Location** — Installations subject to saturation with water or other liquids (such as vehicle washing areas), and unprotected locations exposed to weather.



Drain holes  
Letters and raceway



Waterproof  
cutoff switch

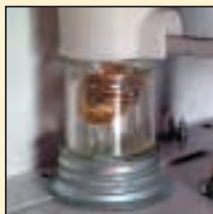


1/2" Lip on  
raceway

### Inside Raceway



Porcelain wire  
support



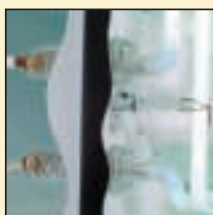
100 Glass  
housing



300 Open  
glass housing



Casino bushing



Glass / spring  
housings



Plastic / porcelain  
bushings



Example of Finished Installation



Listed boots and sleeving (Masters-Watertite system shown)




# CHANNEL LETTER

## RACEWAY MOUNTED (Option 2)

### With Recognized Component Face



### Special Installation Instructions

- Sign Location Is Wet 
- Channel Letter With Enclosure Rated Face Creates An Enclosure
- Connections Inside Channel Letters Can Be Enclosure Rated, This Allows:
  - Twisted Connections With Appropriate Spacing
  - GTO Does Not Require Integral Or External Sleeving

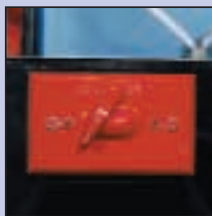


### Wet Connections

**Wet Location** — Installations subject to saturation with water or other liquids (such as vehicle washing areas), and unprotected locations exposed to weather.



Drain holes  
Letters and raceway

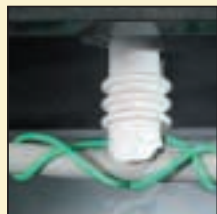


Waterproof  
cutoff switch

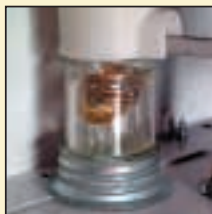


1/2" Lip on  
raceway

### Inside Raceway



Porcelain wire  
support



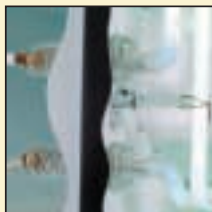
100 Glass  
housing



300 Open  
glass housing



Casino bushing



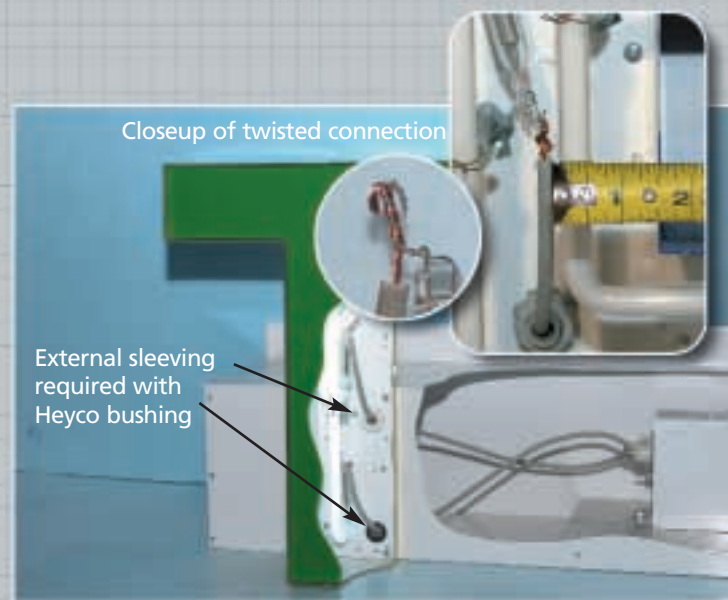
Glass / spring  
housings



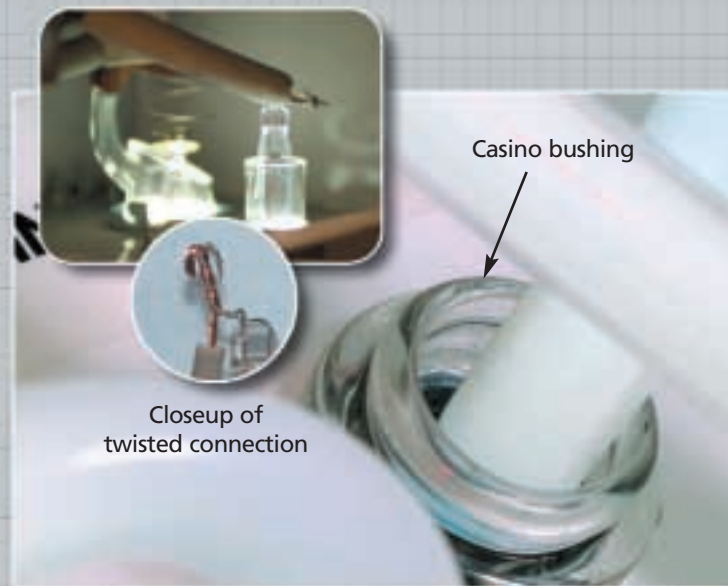
Plastic / porcelain  
bushings



Example of Finished Installation



Twisted connection with proper 1-1/2" clearance






# CHANNEL LETTER

## RACEWAY MOUNTED (Option 3)

### With Recognized Component Face



### Special Installation Instructions

- Sign Location Is Wet 
- Channel Letter With Enclosure Rated Face Creates An Enclosure
- Connections Inside Channel Letters Can Be Enclosure Rated, This Allows:
  - Twisted Connections With Appropriate Spacing
  - GTO Does Not Require Integral Or External Sleeving

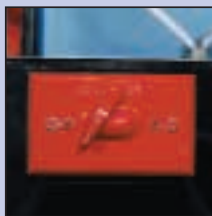


### Wet Connections

**Wet Location** — Installations subject to saturation with water or other liquids (such as vehicle washing areas), and unprotected locations exposed to weather.



Drain holes  
Letters and raceway



Waterproof  
cutoff switch

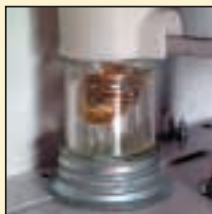


1/2" Lip on  
raceway

### Inside Raceway



Porcelain wire  
support



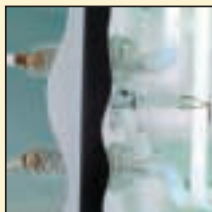
100 Glass  
housing



300 Open  
glass housing



Casino bushing



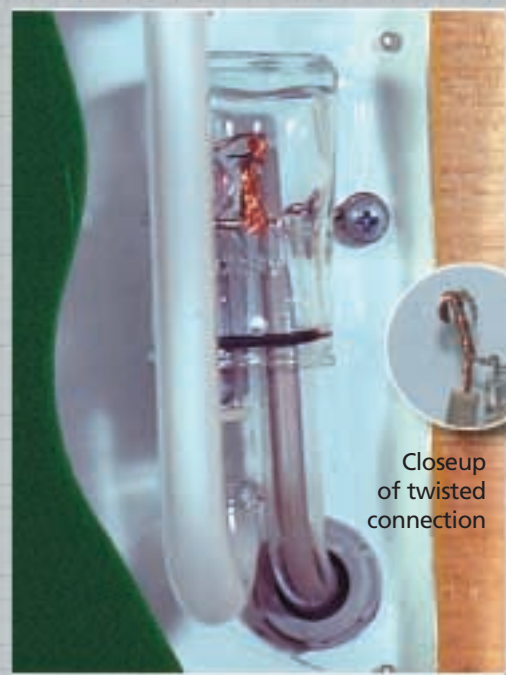
Glass / spring  
housings



Plastic / porcelain  
bushings



Example of Finished Installation



Closeup  
of twisted  
connection

Glass cup (Absko shown) Vertical orientation not required



Bushings for use with  
GTO wire