

INSTALLATION INSTRUCTIONS FOR FV SERIES FLUORESCENT FIXTURES

IMPORTANT: this fixture is designed for permanent installation in Class I, Div. 2, Groups A, B, C & D, Class I, Zone 2, Group IIC, Class II, Group F & G, Marine Outside Type (Salt Water), Type 4X and Wet locations in accordance with the National Electric Code and all applicable local codes. Marine Outside (Salt Water) Rating is not applicable for fixtures that include fusing.

DO NOT OPEN OR REMOVE FIXTURE WHILE IT IS ENERGIZED.

DO NOT USE FIXTURE ON UNGROUNDED CIRCUITS. Failure to ground this fixture can result in electrical shock which may be fatal.

DO NOT use in areas of limited ventilation or in high ambient areas (above 55°C for FVR 240 models or 40°C for all other models).

- Lens should be cleaned periodically for maximum light output.

SURFACE MOUNT - FVSM.

1. Attach the mounting brackets to the back of the housing using the hardware supplied with fixture.
2. Mount the fixture, with mounting brackets installed, directly to the ceiling or to any structural support member that can handle the weight of the fixture in accordance with local building code and all applicable local codes.
3. Once the fixture is securely mounted in place, open the fixture lens by rotating actuator counter-clockwise to release the fixture lens from the locking mechanism. Refer to wiring page 2.
4. Hinge the reflector to one side by pulling down on the reflector on the side where the two red tabs can be seen that hold the reflector in position. Refer to wiring page 2.

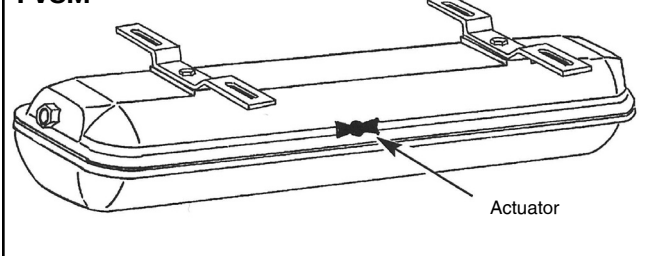
CHAIN MOUNT - FVCM

1. Attach the chain mounting brackets by threading them into the holes on the back of the fixture. Tighten against the back of the fixture housing but, make sure not to over-tighten as damage to the fixture housing may occur.
2. Attach chain (not supplied) to chain mounting brackets.
3. Attach chain to structural support member in area to be installed.
4. Once the fixture is securely mounted in place, open the fixture lens by rotating the actuator counter-clockwise to release the fixture lens from the locking mechanism.
5. Hinge the reflector to one side by pulling down on the reflector on the side where the two red tabs can be seen that hold the reflector in position. Refer to wiring page 2.

45 ° FIXED WALL MOUNT FVWFM

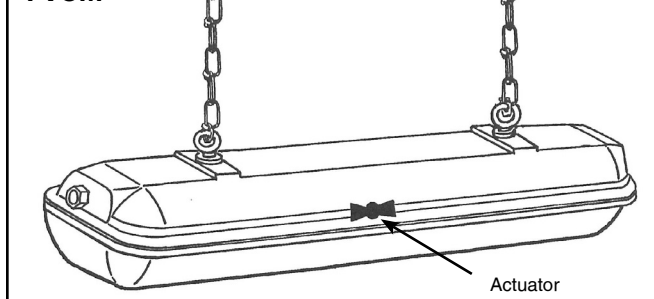
1. Attach the 45° wall mounting brackets to the back of the housing using hardware supplied as shown in Figure 1, NOTE: Use screws supplied with fixture.
2. Mount the fixture with mounting brackets installed directly to the wall or to any structural support member that can handle the weight of the fixture in accordance with all applicable local codes.
3. Once the fixture is securely mounted in place, open the fixture lens by rotating the actuator counter-clockwise to release the fixture lens from the locking mechanism.
4. Hinge the reflector to one side by pulling down on the reflector on the side where the two red tabs can be seen that hold the reflector in position. Refer to wiring page 2.

FVSM



SEE BRACKET DIMENSIONS ON PAGE 2

FVCM



FVWFM

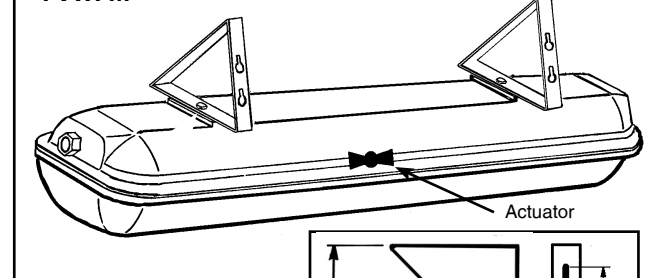
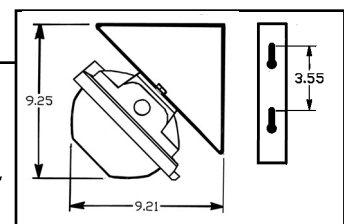
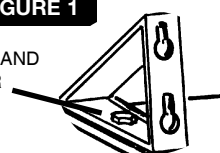


FIGURE 1

SCREW AND WASHER



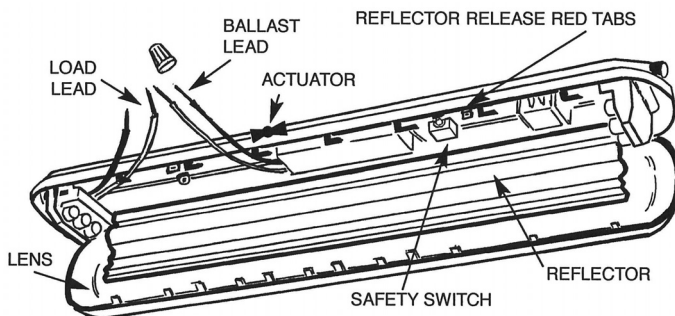
ADJUSTABLE WALL MOUNT - FVWAM

1. Attach the adjustable wall mounting brackets to the back of the housing. Using hardware supplied, as shown in Figure 2.
2. Mount the fixture, with mounting brackets installed, directly to the wall or to any structural support member that can handle the weight of the fixture in accordance with local building code and all applicable local codes.
3. Once the fixture is securely mounted in place, open the fixture lens by rotating the actuator counter-clockwise to release the fixture lens from the locking mechanism.
4. Hinge the reflector to one side by pulling down on the reflector on the side where the two red tabs can be seen that hold the reflector in position. Refer to wiring.

WIRING AND RELAMPING

TO OPEN FIXTURE

1. Once the fixture is securely mounted in place, open the fixture lens by rotating the actuator counter-clockwise to release the fixture lens from the locking mechanism.
2. Hinge the reflector to one side by pulling down on the reflector on the side where the two red tabs can be seen that hold the reflector in position. (See illustration below and at right).



WIRING OF FIXTURE

1. Pull supply wires through conduit system and into the lighting fixture. Use supply wire rated at least 75° C.
2. Ground wire, if present should be secured inside the cup washer with the ground screw located on the hub plate. Refer to Figure 4.
3. Connect the black and white leads from the conduit to proper ballast leads.
4. If fixture contains an optional terminal block, connect the black, white and ground leads from the conduit to the proper terminals on the terminal block. Likewise, similar connections are to be made for fixtures that contain optional fusing.
5. Close the reflector by pushing it back up into place until it snaps over the posts on the lampholder bracket locking it in place.
6. Install lamps, checking both lamp type and wattage for proper lamp. Make sure to secure the opposite ends of the lamps in place in the lamp clips (FVP only) attached to the fixture reflector, as shown in figure 6.
7. Secure the lens by swinging it back up into place until the lens gasket touches the fixture housing. Then rotate the actuator clockwise to secure lens in the closed position.
8. Power can now be applied to the fixture. Note that the fixture lamps will only light when the fixture lens is secured in the "closed" position.

FVWAM

FIGURE 2

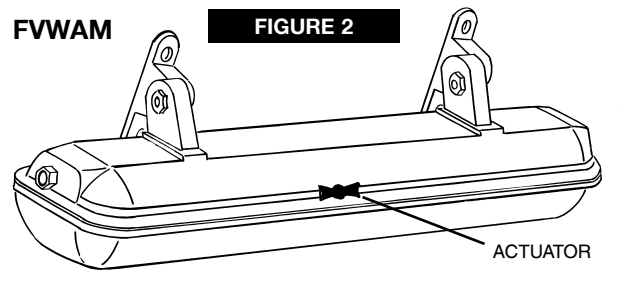
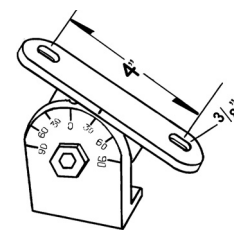
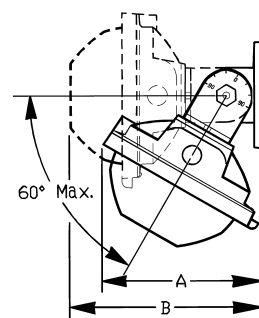
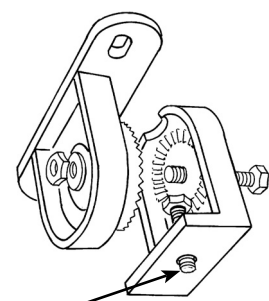


FIGURE 3

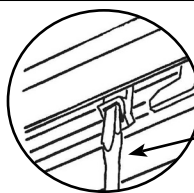
	A	B
MIN	7.5"	
MAX		9.50"



Disassemble bracket assembly to attach hinge bracket to fixture then reassemble and hang fixture.



M8 Screw supplied with Fixture



2. Hinge reflector to one side by pressing reflector release tabs with a small screw driver to release reflector.

FIGURE 4

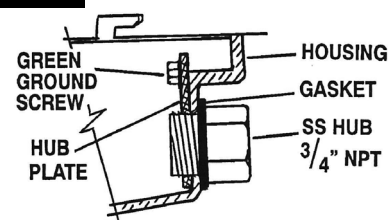
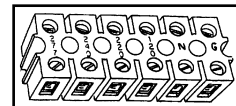


FIGURE 5

NOTE: Terminal block positions are labeled.



RELAMPING

RELAMPING INSTRUCTIONS FOR 40 WATT PL-L LAMPS: FIGURE 6

1. Rotate the actuator counter-clockwise to release the fixture lens from the locking Mechanism.

NOTE: The power will be disconnected from The lampholders once the fixture lens is open.

2. Remove lamps from the fixture by carefully pulling down on lamps from the end to free from lamp clips; lamps can now be removed by pulling outward away from lampholder.

3. Install new lamps by inserting lamp pins into lampholder first then carefully pushing lamp end into lamp clip.

4. Secure the lens by swinging it back up into place until the lens gasket touches the fixture housing then, rotate the actuator clockwise to secure lens in the closed position.

5. Power can now be applied to the fixture.

NOTE: The fixture lamps will only light when the fixture lens is secured in the "closed" position.

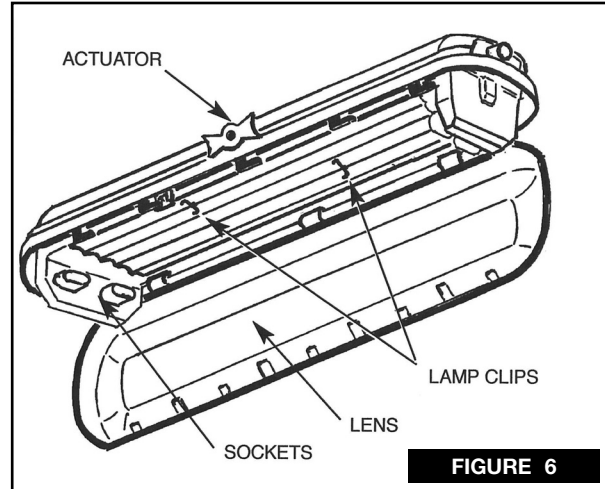


FIGURE 6

RELAMPING INSTRUCTIONS FOR FOUR FOOT (HO) T8 & T12 LAMPS:

1. Rotate the actuator counter-clockwise to release the fixture lens from the locking mechanism. **NOTE:** The power will be disconnected from the lampholders once the fixture lens is open.

2. Remove lamps from the fixture by pushing inward (toward) spring-loaded lampholder and then remove lamp end from rigid socket at opposite end of fixture.

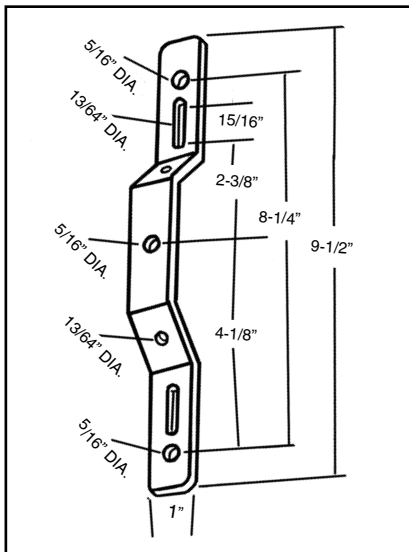
3. Replace lamp with lamp of proper wattage and size.

4. Reassemble lamps by following steps 1 through 3 in reverse order.

5. To secure lens and apply power follow steps 4 & 5 from PL-L relamping instructions.

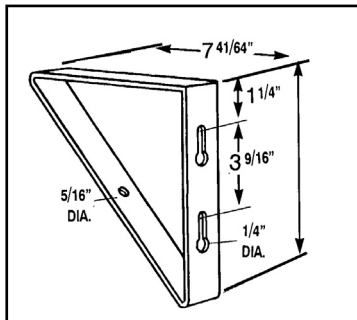
BRACKET MOUNTING DIMENSIONS

FIGURE 7



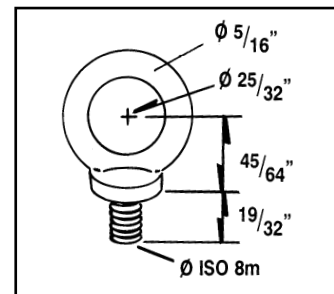
Fixed Surface Mount FVSM
14 GA. Stainless Steel

FIGURE 8



**45° Fixed Wall Mount Bracket
for Fixture FVWFM**
11 GA. (1/8") Stainless Steel

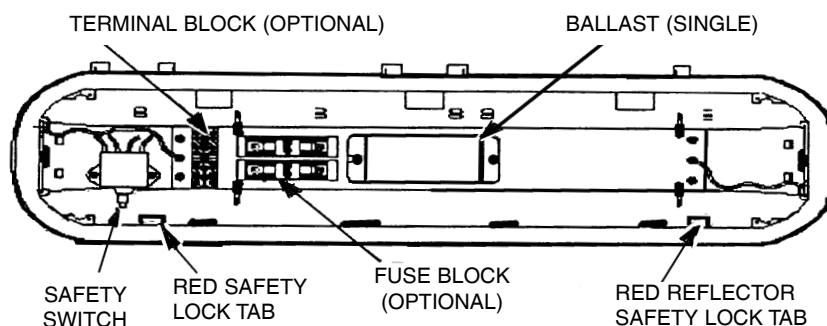
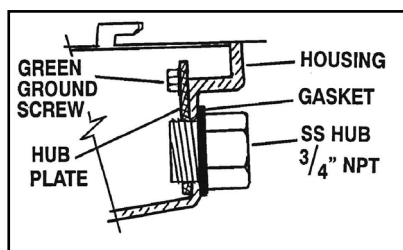
FIGURE 9



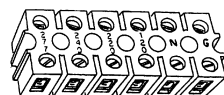
**Chain Ring Bolts for Fixture
FVCM**

Set of 2 Zinc Plated M8 Steel
Ring Bolts for suspended Units
Internal Dia. 20mm

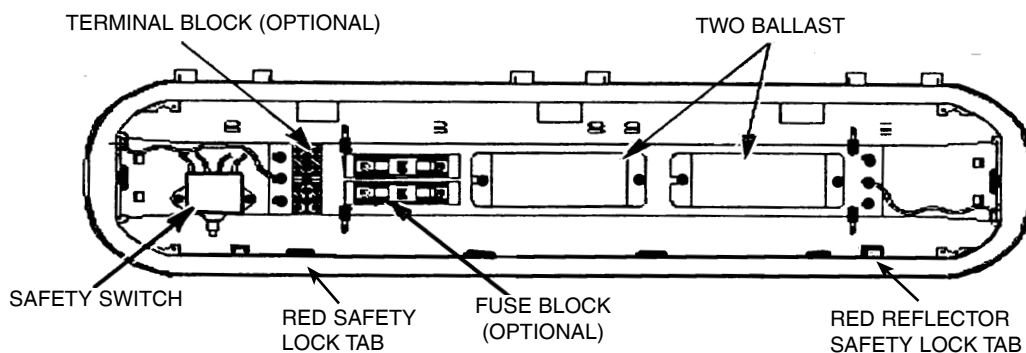
SINGLE BALLAST LAYOUT (2 FT., 2 LAMP PL-L LAMPS)



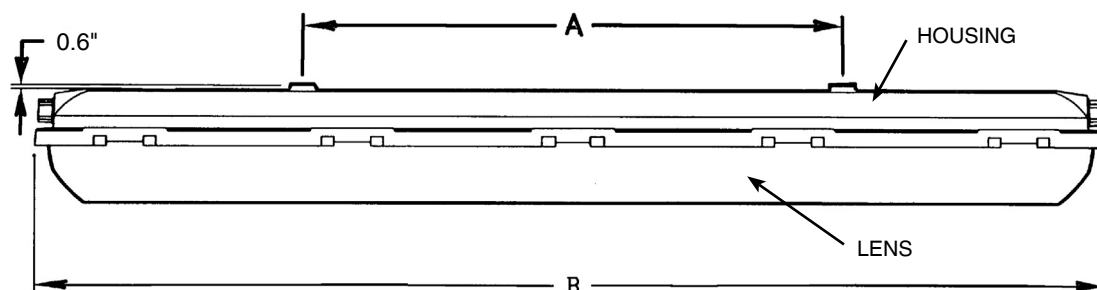
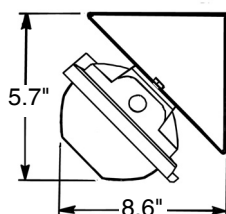
DOUBLE BALLAST LAYOUT (4 LAMP PL-L LAMPS)



NOTE: Terminal block positions are labeled. (SEE PAGE 2)



DIMENSIONS



	A	B
TWO FOOT FIXTURE	15.8"	30.7"
FOUR FOOT FIXTURE	27.6"	54.7"

Standard Materials

- Housing: Fiberglass reinforced polyester.
- Lens: Polycarbonate.
- Gasket: Elastomer.
- Hubs: Stainless Steel (3/4" NPT). One on each side of fixture.
- Lampholders: Polycarbonate.
- Internal Reflectors Highly Reflective White Polycarbonate.

Standard Finishes

- Housing: White color finish.

Compliances:

- FV Series: Class I, Div. 2, Groups A, B, C, D.
- Class II, Div. 2, Groups F & G.
- Class 1 Zone 2, Group IIC.
- Wet Locations.
- Type 4X.
- UL844
- UL1598 and 1598A
- Marine Outdoor Type (Salt Water). Except fixtures containing fusing.