**WIRING DIAGRAMS**
32W, 40W, 60W, 110W Rapid Start

**EVFDR SERIES FLUORESCENT LIGHTING FIXTURES**
Installation & Maintenance Information

**APPLICATION**
The EVFDR Series lighting fixtures are suitable for Class I, Division 1 & 2, Groups C, D, Class II, Division 1 & 2, Groups E, F, G, wet, hazardous and marine (non-submersible) locations.

These fixtures are completely assembled and wired for rigid surface mounting. Adjustable brackets are furnished. (See Figure 1)

**MOUNTING OPTIONS**
Kit 41 - Beam Clamps
Shipping carton contains all parts required for installation. Attach beam clamps to fixture mounting brackets as shown in Figure 2.

**FIGURE 1**

Kit 40 - Shock Mount and Beam Clamps
Shipping carton contains all parts required for installation. (See Figure 4)

**FIGURE 2**

Catalog Suffix S715 - Safety Cable
This is to be attached to adjacent superstructure to provide additional safety for the fixture. (See Figure 3)

**FIGURE 3**

Catalog Suffix S714
When specified, lamps are furnished with fixture.

**FIGURE 4**

**INSTALLATION**

**WARNING**
Make sure power is OFF before starting installation.

**WIRING PROCEDURE**

1. Securely mount fixture
2. All lighting fixtures are furnished with three (3) 3/4-14 pipe thread openings, all of which have pipe plugs in them.

3. To install field wiring remove front cover. G in Figure 3, and make wire connections to fixture wires in a manner that complies with NEC and local codes.

4. Should only one conduit entrance be used, make certain unused openings remain securely plugged.

CAUTION
To avoid electrical shock, fixture must be installed on grounded wiring system.
LAMP INSTALLATION OR REPLACEMENT

NOTE: Make sure lamp is COOL.

1. Unlock quarter-turn fastener on end of fixture opposite the ballast end of fixture and located between the lamp tubes, as shown in Figure 5. Be sure to hang on to lamp tubes.
2. Lower lamp tubes slowly to clear any adjacent fixture, or obstruction.
3. Unscrew lamp tube cover(s). (See Figure 5) Use wrench if necessary.
4. Loosen lampholder mounting screws. Grasp lampholder between thumb and index finger, turn clockwise and remove lamp holder slowly, being careful not to break the lamp(s). Allow the strap to hang. (See Figure 5)
5. Remove old lamp and install new lamp.

FIGURE 5 (RELAMP END)

6. Slide new lamp most of the way into the lamp tube and place lampholder over lamp end contacts.
7. Holding lampholder between thumb and index finger, slide lamp forward into tube until opposite end of lamp properly engages the spring loaded lampholder. Turn lamp if necessary. This is assisted by the built-in lamp guide.
8. Depress lampholder and engage the lampholder mounting bracket over mounting screw, then turn counterclockwise to lock.
9. Re-tighten lampholder mounting screws.
10. Be sure the O-ring on the lamp tube cover is seated properly and in usable condition.
11. Replace lamp tube cover(s) tightly.
12. Raise lamp tube assembly to original position. Make sure quarter turn fastener is completely engaged.

BALLAST REPLACEMENT

All fixtures are furnished complete, with ballast to match lamp wattage specified.

WARNING

Make sure power is OFF before proceeding farther.

1. Remove cover, J in Figure 3, and disconnect power supply wires from fixture wires.
2. Move entire fixture to a suitable work area and proceed as follows:
   A) Straighten wires out.
   B) Disconnect all ballast leads from lampholder leads.
   C) Remove four (4) U bolt nuts, D in Figure 1, remove support G from pipe (H).
   D) Loosen support pipe set screws, C in Figure 1.
   E) Unscrew and separate support pipe, H in Figure 1, from ballast housing cover, E in Figure 1. Remove and set support pipe down and carefully lower lamp tube assemblies to neutral position.
   F) Loosen set screws locking ballast housing (See A and B in Figure 1)
   G) Unscrew and remove ballast housing cover, E in Figure 1.
   H) Unscrew and remove ballast housing, F in Figure 1, from main housing.
3. For removal of ballast from housing proceed as follows:
   A) Loosen two (2) ballast jack screws, see Figure 6, and disengage from the holes in the ballast housing.
   B) Slide entire ballast assembly out of the housing.
   C) Remove ballast from hanger brackets. (See Figure 7)
   D) Put new ballast in place, positioning all wires facing in the same direction, See Figure 7, running wires thru wire strap.
   E) Be sure to re-connect ground wire on ballast.
   F) Slide ballast assembly back into the ballast housing, making certain that no wires are pinched under the ballast.
4. To replace ballast housing in fixture proceed as follows:
   A) With ballast wires in forward position and thru wire straps, insert ballast housing assembly into main housing and tighten it until it bottoms on the inside of the main housing.
   B) Replace ballast housing cover, E in Figure 1, tightening it until it bottoms and then back off, if necessary, to position the hub on top.
   C) Lock ballast housing assembly at both ends with set screws at points A and B in Figure 1.
   D) Lift up on ballast housing and lamp tube assemblies, reposition ballast housing support pipe thru bracket and into ballast housing cover. Securely tighten the support pipe.
   E) Lock the two (2) support pipe set screws, C in Figure 6.
   F) Reassemble mounting bracket assembly to desired position on the support pipe and securely tighten the four (4) "U" bolt nuts.
5. Re-install fixture.
6. To complete the process see the applicable wiring diagram, as shown below and make connections in accordance with all applicable codes. (NEC)
7. Be sure O-ring on cover J is seated properly in Figure 3.
8. Replace and securely tighten front cover, J in Figure 3, of main ballast housing.
9. Reapply power.

MAINTENANCE

WARNING

To avoid electrical shock, make certain that power is OFF before servicing or replacing parts.

NOTE: Do not overtighten jack screws

1. To maintain peak efficiency, establish periodic inspection and maintenance procedures.

NOTE:
Lamp tubes are tempered glass and to avoid breakage at washdown allow sufficient time for tubes to cool.

WIRING DIAGRAMS
See page 4 for Wiring Diagrams.