SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

IF1311

EBBR Replacement Interlock Receptacle Kit

Installation & Maintenance Information

APPLICATION

EBBR interlock receptacles with circuit breakers are used as a service outlet for portable equipment. The interlocked receptacles with circuit breakers are mechanically interlocked to provide line disconnect means and short circuit protection. The receptacle contacts cannot be made or broken under load. The circuit breaker cannot be closed until the plug is fully inserted and the plug cannot be withdrawn until the breaker is open.

EBBR receptacles are suitable for use in Class I, Groups C, D; Class II, Groups F, G and Class III hazardous locations as defined by the National Electrical Code®.

CAUTION

To reduce the risk of ignition of hazardous atmospheres, do not use in Class II, Group F locations that contain electrically conductive dust.

EBBR receptacles are available in 30, 60 and 100 ampere, 3 wire, 4 pole (style 2) configurations.

This instruction sheet is for the replacement of the receptacle on the EBBR.

EBBR receptacles should be installed, inspected and serviced only by qualified, competent personnel.

AMPS	CATALOG #
30	EBBR342-KIT
60	EBBR642-KIT
100	EBBR1042-KIT

WARNING

The electrical power to the enclosure must be **OFF** before and during replacement of receptacle or any maintenance.

OPENING COVER

EBBR interlock receptacle enclosures are furnished with captivating triple lead bolts that utilize a spring to aid and indicate full retraction of the bolts into the cover when opening and closing. Make sure all cover bolts are fully retracted into the cover before attempting to open or close the cover.

When bolts are disengaged from the body flange, the bolts will withdraw and be held in this position by the spring and washer under the bolt heads. (See Figure 1)

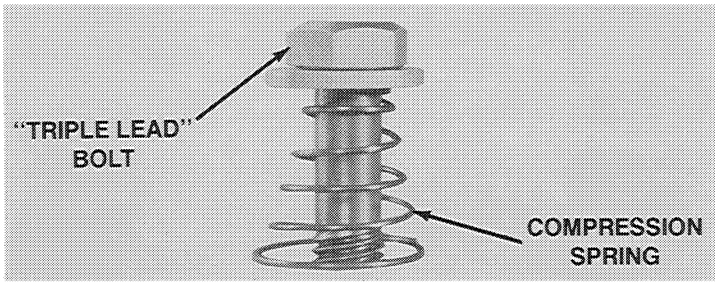

Figure 1

After all bolts are fully disengaged, firmly grasp the bottom and right side of the cover and swing cover open. Use care to prevent damage to the ground joint surface. Avoid striking cover or devices in cover on neighboring enclosures or structures.

WARNING

Hammers or prying tools must not be allowed to damage the flat ground joint surfaces. Do not handle cover roughly, or if removed, place on surfaces that might damage or scratch the flat ground joint surfaces.

RECEPTACLE REMOVAL

1. Record numbered receptacle lead positions at circuit breaker load connections.
2. Disconnect receptacle leads to circuit breaker.
3. Disconnect receptacle ground strap at enclosure.
4. **IMPORTANT:** Insert plug and move breaker handle to "ON" position. Padlock in "ON" position. **DO NOT** turn breaker handle to "OFF" until receptacle replacement is complete.

   If breaker handle is moved to "OFF" position with no receptacle in place, the interlock mechanism will unwind and will have to be disassembled, reassembled and reset with special tools and instructions. Consult factory if this happens.
5. Loosen, but do not remove, #8-32 round head screw. (See Figure 2)
6. Rotate thread ring, counter-clockwise, sufficient to remove receptacle. Complete removal of thread ring is not required. (See Figure 2)

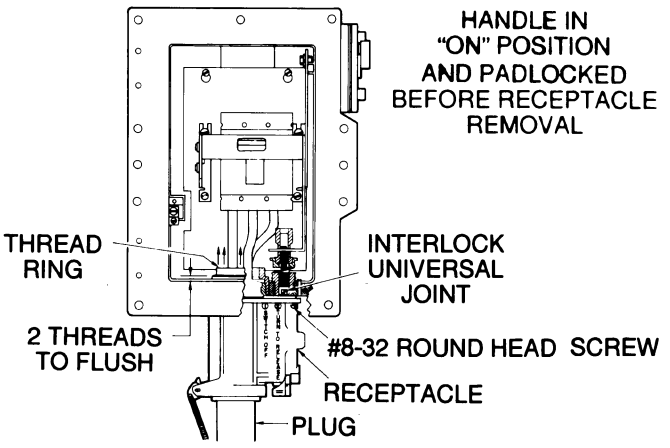

Figure 2

RECEPTACLE REPLACEMENT

1. Insert plug into replacement receptacle. This will locate receptacle handle in position 2.
2. Adjust thread ring so that 3 to 4 enclosure threads are exposed. (See Figure 3)

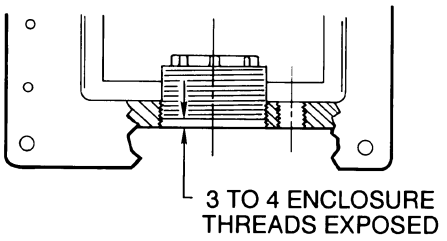

Figure 3

3. Position replacement receptacle (with plug inserted) into thread ring and engage interlock universal joint.
4. Rotate thread ring clockwise, engaging replacement receptacle's threads. Continue threading until the thread ring "bottoms out." At this point two threads on the thread ring will be above bottom of the interior enclosure wall. (See Figure 2)

NOTE: The thread ring that the receptacle is installed in has internal and external threads. The threads are designed to provide proper clearance which results in thread shake. The #8-32 screw in the base of the receptacle is tightened to eliminate the designed shake in the threads. When properly installed, movement of the receptacle should be minimal.

5. Tighten #8-32 screw.
6. Connect numbered receptacle leads to load side of breaker in position recorded per receptacle removal part 1.
7. Connect receptacle ground strap to ground post on enclosure wall.
8. All electrical connections should be tightened to torque values specified in manufacturer's literature and comply with the National Electrical Code® and any local codes.
9. Test wiring for correct phase relationship with continuity checks and also for unwanted grounds with an insulation resistance check.
10. Remove padlock.

CLOSING COVER

CAUTION

Clean both ground joint surfaces of body and cover before closing. Dirt or foreign material must not accumulate on flat joint surfaces. Surfaces **MUST** seat fully against each other to provide a proper explosionproof joint.

CAUTION

Before closing cover, be certain all bolts are retracted fully into the cover flange and do not project beyond the ground surface. This is important to prevent damage to the ground joint surface by the bolts as the cover is being closed (See Figure 4). When closing cover be sure wiring is not pinched between body and cover flanges.

When cover is closed push cover bolts into body and start thread engagement. Start all threads by hand before wrenching any bolts tight. Torque to 40-45 ft. lbs. Use only bolts supplied with the enclosure. These are special threaded bolts (marked EBM-1) and substitutes for them will impair the explosionproof safety of the enclosure.

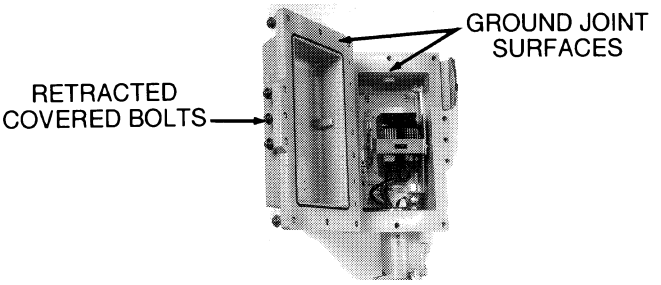

Figure 4

MAINTENANCE

WARNING

Always disconnect primary power source before opening enclosure for inspection or service.

1. Frequent inspections should be made. A schedule for maintenance checks should be determined by the environment and frequency of use. It is recommended that it should be at least once a year.
2. Perform visual, electrical and mechanical checks on all components on a regular basis.
   - Visually check for undue heating evidenced by discoloration of wires or other components, damaged or worn parts, or leakage evidenced by water or corrosion in the interior.
   - Electrically check to make sure that all connections are clean and tight and that contacts in the components make or break as required.
   - Mechanically check that all parts are properly assembled and operating mechanisms move freely.

WARNING

If any parts of the plug or receptacle appear to be missing, broken or show signs of damage **DISCONTINUE USE IMMEDIATELY.** Replace with the proper replacement part(s) before continuing service.

3. Make sure all cover bolts are fully retracted into cover before closing cover on body. Close cover and start cover bolt threads by hand. Torque all cover bolts securely to 40-45 ft. lbs.

CAUTION

Carefully clean both ground joint surfaces of body and cover before closing. Dirt or foreign material must not accumulate on first ground joint surfaces. Surfaces must seat fully against each other to provide explosion proof seal.

In addition to these required maintenance procedures, we recommend an Electrical Preventative Maintenance program as described in the National Fire Protection Association Bulletin NFPA No. 70B.

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