

Arktite CPH Series Plug

CPH7713, CPH7714, Cord Range .375 - .875

30A 240VAC, 7A 480VAC. Model M11

Installation & Maintenance Information

IF 1473

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

APPLICATION

Arktite CPH Series Plugs are used with Cooper Crouse-Hinds CES & CESD Series Delayed Action Circuit Breaking Receptacles. CPH plugs are rated for use in Class I, Div.1, Group D & Class I, Div. 1 & 2, Groups C & D. CPH plugs are used where power is to be supplied to portable electrical equipment such as compressors, tools and lighting systems in hazardous or corrosive environments. CPH plugs can also be used with Cooper Crouse-Hinds Arktite AR series receptacles.

INSTALLATION

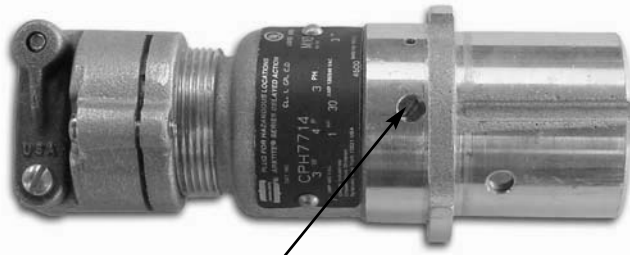
⚠ WARNING

Be certain that electrical power is OFF before starting installation or maintenance.

Installation and maintenance to be performed by qualified electrician only.

Disassemble Plug

1. Remove brass flathead assembly / polarizing screw from side of plug shell as shown in Figure 1.



Assembly / Polarizing Screw

Figure 1

⚠ WARNING

The assembly / polarizing screw threads into the ground shunt located on the interior. This screw acts as a mechanical bond between the ground shunt and the plug shell. This screw must be re-inserted when the plug is re-assembled.

2. Remove the internal copper spring retaining ring from the groove as shown in Figure 2.

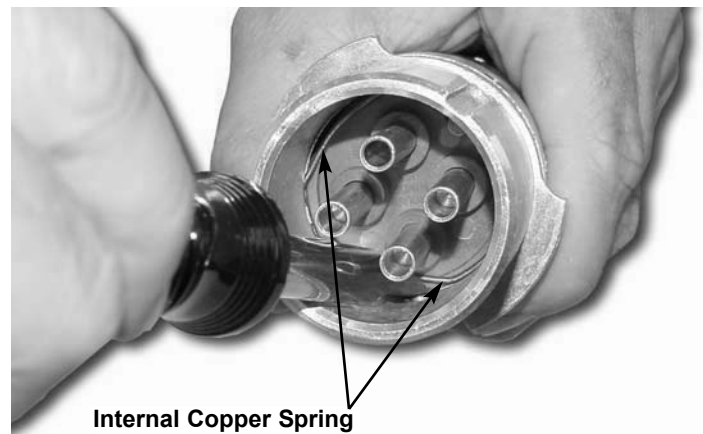


Figure 2

3. Remove the contact carrier as shown in Figure 3.



Figure 3

4. Remove the back cord grip assembly. The clamp nut unthreads in the counter-clockwise direction.
5. Remove the rubber grommet and metal compression washer.

The plug is now disassembled and ready for wiring.

Wiring

- Slide cord grip assembly, compression washer, rubber grommet and plug shell onto the power cord as shown in Figure 4.

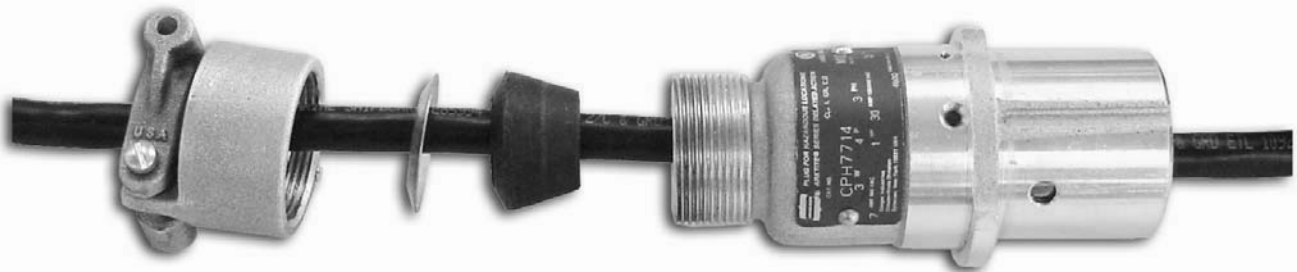


Figure 4

Note: Use #6 thru #10 AWG type S, SO, ST or STO cord with range of .375 to .875 inches diameter only. For larger wire diameter range use CPH7913 or CPH7914 series

- Strip cord jacket and wire insulation according to dimensions shown in Figure 5. Be careful not to damage individual conductors or their insulation.

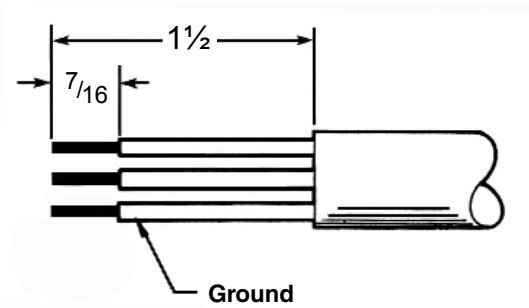


Figure 5

- Loosen terminal screws enough so conductors can be inserted into the wire pockets of each contact.

⚠ WARNING

A wire pattern **MUST** be used so that the same color wire is put into the same numbered contact opening in all plugs and receptacles in the system. This requirement provides correct polarity for the system and eliminates possibilities for equipment damage and / or personal injuries.

- Attach conductors to terminal pockets as shown in Figure 6. Torque terminal screws to 20 in/lb.

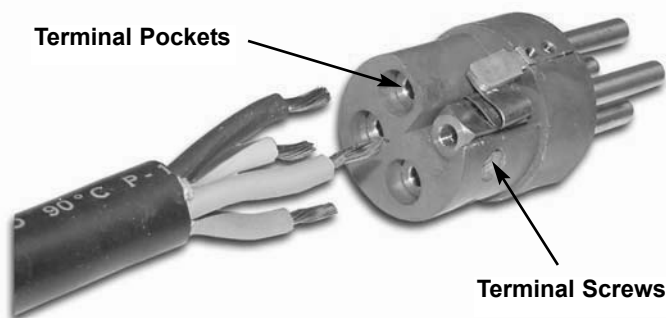


Figure 6

⚠ WARNING

Check to make sure that the white mylar arc barrier is still in place inside the plug shell. Failure to have this arc barrier in place can result in a potential short from a stray wire conductor strand to the plug shell. If the plug shell were to become energized, and a person were to touch the shell under the right conditions, injury or death could result.

- Slide plug shell down the cord and over the contact interior. Align the interior so that the tapped hole in the ground shunt lines up with the screw hole in the plug shell where the assembly / polarizing screw goes.
- Insert the assembly / polarizing screw
- Install the copper spring retaining ring, making certain that it seats in the groove.
- Cord Grip Assembly** - Refer to Figure 4.
 - Slide rubber grommet down the cord and make sure it is seated into the tapered back end of the plug body.
 - Slide the metal compression washer down the cord and make sure it is seated on top of the rubber grommet.
 - Slide the cord grip nut down the cord and thread it onto the back end of the plug shell. Hand tighten the cord grip nut as tightly as possible to ensure a good environmental seal.
 - Tighten the cord grip nut 'locking screw'. This screw compresses the slot in the cord grip nut and binds the threads under pressure, creating a locked condition. This helps prevent the cord grip nut from vibrating loose and maintains the sealing and gripping power of the rubber grommet.
 - Tighten the 2 cord grip screws to 20 in/lb.

⚠ WARNING

Make sure the cord clamps are compressing on the cord jacket. The strip dimensions in Figure 5, have been developed to make sure there is sufficient cord jacket remaining to allow the cord clamps to work properly. If the cord clamps are not clamping fully on the cord jacket, do not use. The cord should be re-stripped to the proper dimensions and re-assembled.

MAINTENANCE

- Perform visual, electrical and mechanical checks of all components on a regular schedule. This should be determined by the environment and frequency of use, but it is recommended that it should be at least once a year.



WARNING

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

- Cooper Crouse-Hinds recommends an Electrical Preventive Maintenance program as described in the National Fire Prevention Protection Association Bulletin NFPA No. 70B.

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