# ARKTITE® PLUGS, RECEPTACLES AND CORD CONNECTORS 20 AMP, 2 POLE

Installation & Maintenance Information

**IF 1338** 

### SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

### **APPLICATION**

ARKTITE plugs, receptacles and cord connectors are designed for the distribution of secondary electrical power and to provide for quick disconnect from the power source.

#### **WARNING**

Electrical power supply must be OFF before and during installation and maintenance. Installation and maintenance procedure must be performed by a trained and competent electrician.

### CABLE PREPARATION FOR PLUG, CORD CONNECTORS AND RECEPTACLES

The plug and cord connector should be used with the following types of cord or cable, per the National Electrical Code®, Article 400:

Portable Power Cable

Thermoset Jacketed Heater Cord

Hard Service Cord

Flexible Stage and Lighting Power Cable

Junior Hard Service Cord

These plugs and cord connectors may also be used with the following cord and cable identified in the Canadian Electrical Code, Section 4-010:

Flexible Cord (for hard or extra hard usage)

Outdoor Flexible Cord

Portable Power Cord

• Refer to Table 1 for proper wire size.

### Table 1

Amperage	Wire Size	Cable Diameter
20	#14 - #12	.250 to .875

• Remove outer cable jacket on cable.

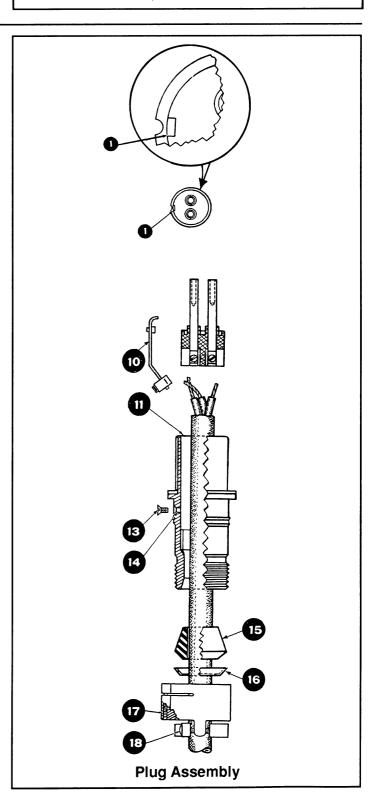
#### **CAUTION**

When removing the outer cable jacket, DO NOT cut into or damage the insulation on the individual conductors.

- Strip each individual wire to the proper length to expose the conductors.
- Tin the ends of the conductors.
- Set prepared cable aside until ready for use.

## DISASSEMBLY OF PLUG AND CORD CONNECTOR

- 1. Remove ground lug screw. (13)
- Remove plug interior parts as a complete unit. On cord connectors, with sleeve locking screw loose, unscrew the front sleeve and remove the retaining spring in the back of red insulator. Remove the interior.



3. Loosen screws (17 and 18), then remove gland nut, cupped metal gland washer (16) and rubber cable grip bushing (15).

### CONNECT CABLE TO PLUG AND CORD CONNECTOR

- Select the rubber cable grip bushing (15) that most closely fits the cord or cable prepared earlier. The remaining rubber bushings furnished with the plug may be discarded.
- 2. Slide the gland nut, the cupped washer, the rubber bushing and the handle over the stripped cable in order indicated (gland nut first, handle last).
- Connect the individual conductors to the contact binding screws.

#### **WARNING**

A wire pattern MUST be used so that the same color wire is put into the same 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.

4. The green grounding conductor must be connected to the green grounding lug (10).

### RE-ASSEMBLY OF PLUG AND CORD CONNECTOR

- Slide the handle up over the plug interior parts with ground lug assembly in insulator notch. On the cord connector, slide the protective sleeve over interior parts with the ground lug assembly in insulator notch. Replace the retaining spring to secure the interior in place. Finally screw the sleeve onto the handle body.
- 2. Rotate the handle until the tapped hole in the grounding lug assembly aligns with the hole (14) for the grounding lug screw (13) in the handle. Insert the screw and tighten.
- 3. Push the rubber cable grip bushing (15) into place in the handle. Follow it with the cupped metal gland washer (16).
- 4. Screw the gland nut onto the end of handle tight enough to squeeze the bushing firmly against the cable. While doing this, push in on the cable so as to relieve the strain on the wire terminals.
- 5. Tighten gland nut clamping screw (17) to prevent the twisting of cable from loosening the gland nut and from twisting the wires at the contact terminals.

6. Tighten the mechanical cable grip by means of screws (18).

### INSTALLING THE RECEPTACLE

- 1. Install back box on conduit and securely fasten in desired position, using lag bolts or machine screws.
- Prepare cable, refer to CABLE PREPARATION SECTION above.
- Remove spring that retains the red insulator assembly to access the contacts
- 4. Connect the conductors to the wire binding screws.
- 5. Replace contacts in insulator and replace spring to hold insulator in place.
- 6. Fasten receptacle to back box with gasket properly positioned using four (4) screws provided. If dust cover is used, put end of chain under one screw to hold in place.

#### **MAINTENANCE**

Electrical and mechanical inspection of all components must be performed on a regular basis, determined by the environment and frequency of use. It is recommended that inspection be performed a minimum of once a year.

### **WARNING**

If any parts of the plug, receptacle or cord connector appear to be missing, broken or show signs of damage, **DISCONTINUE USE IMMEDIATELY**. Replace with the proper replacement parts before continuing use.

- Inspect all contact wire terminal for tightness. Discoloration due to excessive heat is an indicator of a possible problem and should be thoroughly investigated and repaired as necessary.
- Clean exterior surfaces making sure nameplates remain legible.
- Check tightness of all screws before using.
- Inspect housing and replace those which are broken.
- Check contacts for signs of excessive burning or arcing and replace if necessary.

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

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