Title: **Extension Cord** Job: 3

Course: Electrical Applications Unit: Electrical Shop CLO: 7

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Grade \_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Objectives**

1. Student shall construct a six-foot extension cord
2. Student shall apply the National Electrical Code requirements during construction

**Assessment**

Students shall demonstrate a comprehension of the objectives listed above by scoring a minimum of 75% on this Job. Grading shall be based on instructor evaluation.

**Materials**

|  |  |
| --- | --- |
| Student Provided Materials | **Department Provided** |
| Wire Strippers | 6’ of type 14/3 SJO cord |
| Linesman Pliers | 15A Male Plug End |
| Hawk Bill Knife | 15A Female Plug End |

**Instructions**

|  |  |
| --- | --- |
| 1. Loosen the three face screws by using the Phillips head screwdriver and remove the front section of the connector. 2. Loosen the clamp screws on the bottom section of the female connector. Feed the cord through this section of the connector. 3. Remove approximately 1” of the outer cord insulation by using the Hawk Bill knife, exposing the three internal conductors. There should be a black (hot) conductor, a white (grounded or neutral) conductor and a green (grounding) conductor. Trim the white nylon strings. |  |

Check each conductor carefully to ensure that the conductors are not cut, nicked or sliced. If they are damaged, cut off the conductors and repeat step #3.

1. Remove no more than ¼” of insulation from each conductor (or amount shown on the device)
2. Insert the stripped wires into the proper terminal clamps on the front section of the connector and tighten the screws.
   1. Narrow blade/slot is the black (hot) conductor.
   2. Wider blade/slot is the white (grounded or neutral) conductor.
   3. Semi-round blade/slot is the green (grounding) conductor.

Ensure that there are no loose strands around the terminals.

Do not assemble the bottom section of the connector.

1. Repeat steps one (1) through five (5) for the male plug.
2. Have the Instructor check both the male plug and female connector for proper connections.

Instructor verification \_\_\_\_\_\_

1. Assemble the bottom section of the plug and connector.
2. Using a permanent marker, write your name on the yellow section on one of the ends.
3. Have the completed extension cord checked for operation.

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