

# NATEF TASK SHEET --- SECTION A6 A. 17, 18, 19, 20 (P-1)

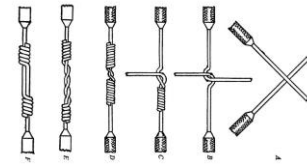
## Soldering Task: Crimping, Soldering, and Heat-Shrinking Wires.

Student: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

Gage of Wire: \_\_\_\_\_ System: \_\_\_\_\_

**Objective:** Student will strip a wire, connect wire using western union splice, solder the connection, and install heat shrink tubing.

- Materials**
1. **EYE PROTECTION**
  2. Wire and Stripper/Crimper Tool
  3. Connectors
  4. Heat shrink tubing and Heat gun
  5. Solder and Soldering gun



Western Union Splice

**Procedure:** **WEAR EYE PROTECTION!** Watch “**Soldering Video**”. Student will measure, cut, and strip both ends of a wire. Student will then slip heat shrink tubing onto the wire(s) loosely. Student will connect wire using western union splice and solder the connections. Student will finally slide the heat shrink tubing into place and heat with heat gun until tubing shrinks snugly onto wiring connections.

Show instructor spliced wires: \_\_\_\_\_

Show instructor soldered wires: \_\_\_\_\_

Show instructor insulated wires: \_\_\_\_\_

What is the benefit of crimping and soldering the connection, instead of just crimping it?

Why do we put heat shrink tubing on the connection?

What does wire gauge refer too?

How do you know that your solder connection is good?

Problems Encountered:

### INSTRUCTORS EVALUATION

LEVEL OF SKILL ATTAINED	Initial	OVERALL SKILL EVALUATION	Points
DEMONSTRATES MASTERY (5)		DOCUMENTATION COMPLETENESS (1)	
PERFORMS SATISFACTORILY (4)		SAFETY COMPLIANCE (1)	
CAPABLE, NEEDS PRACTICE (3)		WORK PROFESSIONALISM (3)	
ASSISTED IN PERFORMING (2)		LEVEL OF SKILL ATTAINED (1-5)	
EXPOSURE, OBSERVATION (1)		TOTAL SCORE	
<b>INSTRUCTOR'S SIGNATURE:</b>			

**Soldering Lab / 01-17-2015 / vdb**