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| Station | | Task | |
| 26 | | 3 | |
| ELECTRIC TESTS | | | |
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# Parallel circuit vs Series circuit

## TASK OBJECTIVE

At the completion of this task the technician will be able to demonstrate the knowledge acquired on the previous task by resolving a simple but common problem.

**PROCEDURES**

Follow the steps and answer the questions below:

|  |
| --- |
| 1. Place AMP meter on L |
| 1. Switch ON #11 and note the amps:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Switch ON #12 and note the amps:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Is it a circuit in series or in parallel? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Switch OFF #11 and #12 |
| 1. Switch #13 to the right to create a failure on this circuit |
| 1. Switch ON #11 and note the amps:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Is it a circuit in series or in parallel? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Check voltage drop between   R-O:  S-P:  T-Q: |
| 1. Switch ON #12 and note the amps:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. **Remember the current always flows through the easiest path** |
| 1. Is the switch #12 good? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Repeat voltage drop between   R-O:  S-P:  T-Q: |
| 1. **Note: When two points are at the same voltage potential there is no difference between them so the voltmeter shows 0 or close to 0** |
| 1. Use the voltage drop test to determine what’s wrong on the circuit:   11 S Q M O L N 12 T |
| 1. Return switches to the original position |

**Instructor sign off-- Go \_\_\_\_\_\_\_\_\_\_**