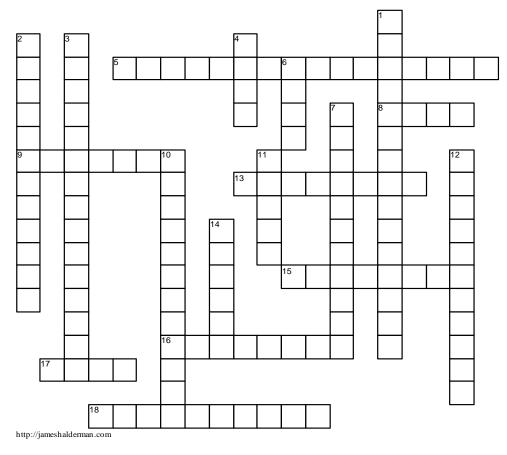
## Parallel Circuits

Chapter 7



## ACROSS

- **5** \_\_\_\_\_ law states: The current flowing into any junction of an electrical circuit is equal to the current flowing out of that junction.
- 8 Another name for branches are \_\_\_\_\_.
- **9** Additional \_\_\_\_\_ can flow when resistances are added in parallel, because each leg of a parallel circuit has its own power and ground and the current flowing through each leg is strictly dependent on the resistance of that leg.
- **13** Electronic fuel injector and diesel engine glow plug circuits are two of the most \_\_\_\_\_\_ tested circuits where parallel circuit knowledge is required.
- **15** The separate paths that split and meet at junction points are called \_\_\_\_\_.
- **16** Which \_\_\_\_\_ is R1, and which is R2 is not important.
- 17 A parallel circuit drops from source voltage to \_\_\_\_\_ (ground) across the resistance in each leg of the circuit.
- **18** When installing extra lighting, the technician must determine the proper gauge wire and \_\_\_\_\_\_ device.

## DOWN

- **1** A \_\_\_\_\_ is a complete circuit that has more than one path for the current to flow.
- 2 If \_\_\_\_\_ resistance is needed, Ohm's law can be used to calculate it because voltage and current are known.
- 3 The only place where electricity takes the path of \_\_\_\_\_ is in a series circuit where there are not other paths for the current to flow.
- 4 Parallel circuits are used in \_\_\_\_\_ automotive applications.
- **6** There are <u>basic</u> basic methods that can be used to calculate the total resistance in a parallel circuit.
- 7 The fractions cannot be added together unless they all have the same \_\_\_\_\_.
- **10** The \_\_\_\_\_ can be calculated first by treating each leg of the parallel circuit as a simple circuit.
- 11 The total resistance of a parallel circuit is always \_\_\_\_\_ than the smallest resistance in the leg of the circuit.
- **12** Most circuits in vehicles are parallel circuits and each branch is connected to the 12 volt \_\_\_\_\_.
- **14** Another name for the separate paths that split and meet at junction points are \_\_\_\_\_.

