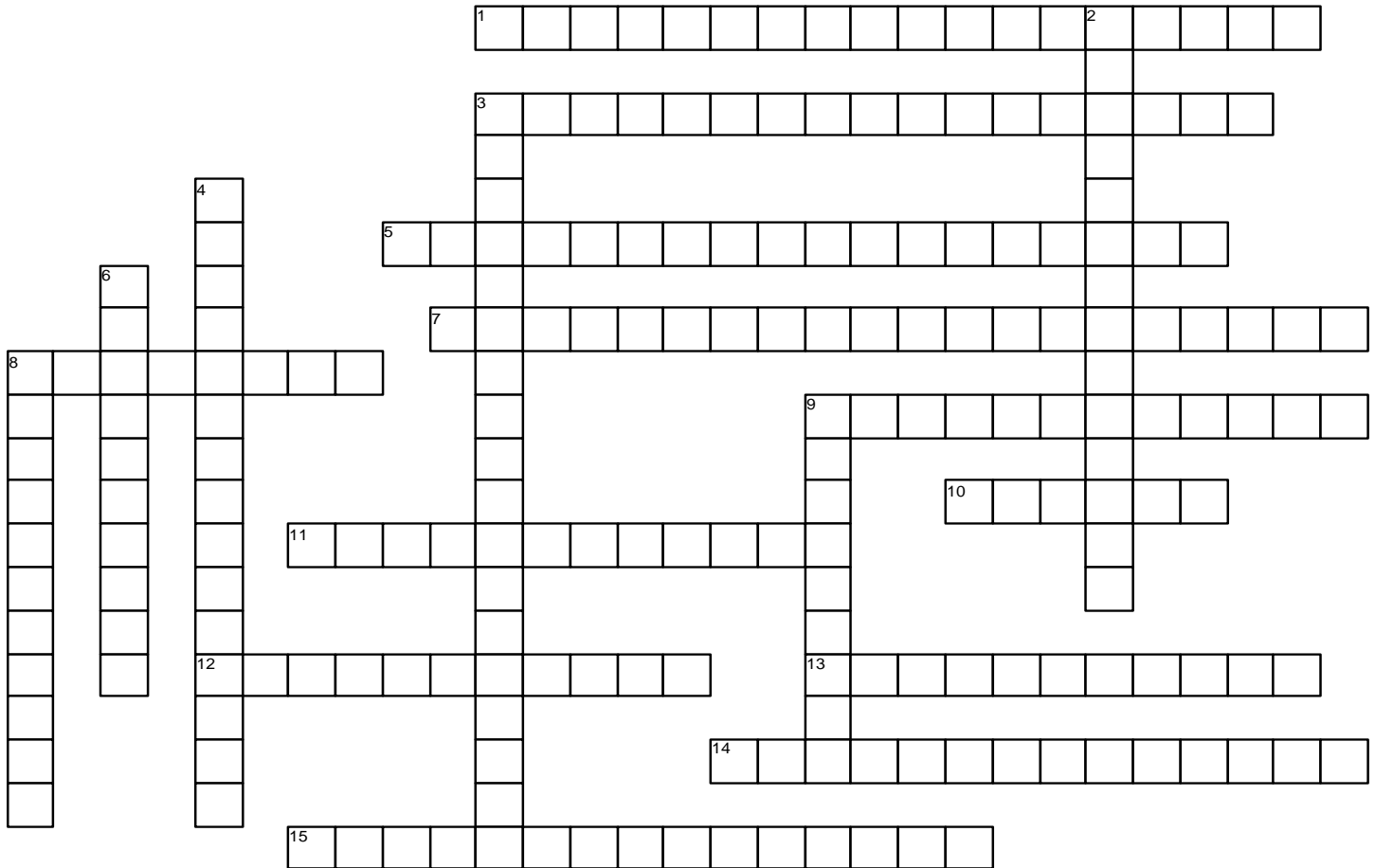


# Engine Condition Diagnosis

## Chapter 21



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### ACROSS

- 1 During an \_\_\_\_\_ test, a clogged catalytic converter could be found to be present.
- 3 If you have a \_\_\_\_\_, the engine will be low on power, yet smooth.
- 5 Another name for a running compression test is a \_\_\_\_\_ test.
- 7 During an \_\_\_\_\_, an engine knocking noise is often difficult to diagnose.
- 8 \_\_\_\_\_ can lead to severe engine damage if the resulting low oil level is not corrected.
- 9 The purpose of a cylinder \_\_\_\_\_ test is to determine if all cylinders are contributing power equally.
- 10 During a \_\_\_\_\_ test, the results can be measured in millimeters of mercury.
- 11 If the exhaust system is restricted, pressure increases in the exhaust system, this pressure is called \_\_\_\_\_.
- 12 An engine \_\_\_\_\_ test is one of the fundamental engine diagnostic tests that can be performed.
- 13 Performing \_\_\_\_\_ diagnosis by the color of the engine exhaust smoke can indicate what engine problem might exist.
- 14 If the compression test reading indicates low compression

on one or more cylinders, add three squirts of oil to the cylinder and retest, this is called a \_\_\_\_\_ test.

- 15 One of the best tests that can be used to determine engine condition is the \_\_\_\_\_ test.

### DOWN

- 2 A \_\_\_\_\_ test is a quick and easy test to determine if the piston rings and valves are properly sealing.
- 3 A \_\_\_\_\_ test is done with the engine running rather than during engine cranking as is done in a regular compression test.
- 4 Vacuum is pressure below atmospheric pressure and is measured in \_\_\_\_\_.
- 6 During an \_\_\_\_\_ test, an engine in proper condition should idle with a steady vacuum between 17 and 21 in. Hg.
- 8 \_\_\_\_\_ testing can indicate if main thrust or rod bearings are worn.
- 9 A soundly running engine should produce even and steady exhaust at the tailpipe, you can test this with the \_\_\_\_\_.