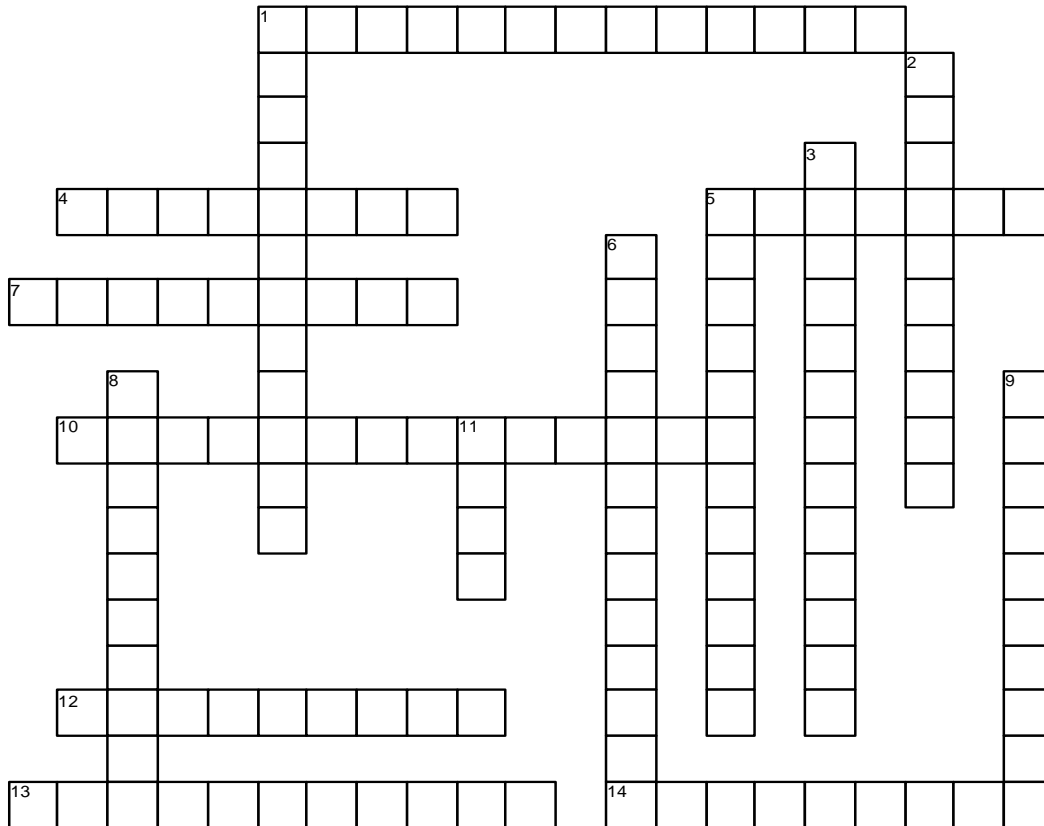


# Engine Removal And Disassembly

## Chapter 23



<http://jameshalderman.com>

### ACROSS

- 1 Before the pistons can be removed from the clock, the \_\_\_\_\_ must be removed.
- 4 Valve leakage is corrected by doing a \_\_\_\_\_.
- 5 The engine can be lifted out of the \_\_\_\_\_ with the transmission/transaxle attached.
- 7 \_\_\_\_\_ replacement is a good example of an engine repair option when a timing chain is worn.
- 10 By using a \_\_\_\_\_ engine, one can be replaced in a day or two, greatly reducing the amount of time the customer is without a vehicle.
- 12 The next step after the water pump has been removed is to remove the crankshaft \_\_\_\_\_ damper.
- 13 Always use at least four grade 8 bolts when mounting an engine to an \_\_\_\_\_.
- 14 The replacement assembly is called a \_\_\_\_\_ when the reconditioned assembly includes the heads and valve train.

### DOWN

- 1 \_\_\_\_\_ are new engines built by the engine manufacturer and sold through vehicle dealers.
- 2 Additional engine problems that need attention may be noticed after the oil pan is removed and the piston and rod assemblies are taken out, this procedure is called \_\_\_\_\_ the engine.
- 3 An example of a \_\_\_\_\_ is a complete engine reconditioning job.
- 5 Draining the coolant from the radiator and the engine block help reduce the chance of coolant getting into the cylinders when the \_\_\_\_\_ is removed.
- 6 A \_\_\_\_\_ can usually be done without removing the engine from the chassis.
- 8 A complete engine reconditioning job is called \_\_\_\_\_.
- 9 In some cases, when replacing the engine, only a reconditioned block, including the crankshaft, rods, and pistons is used, this replacement assembly is called a \_\_\_\_\_.
- 11 Engines should be \_\_\_\_\_ before disassembly to minimize the chance of warpage of the components that are being removed.