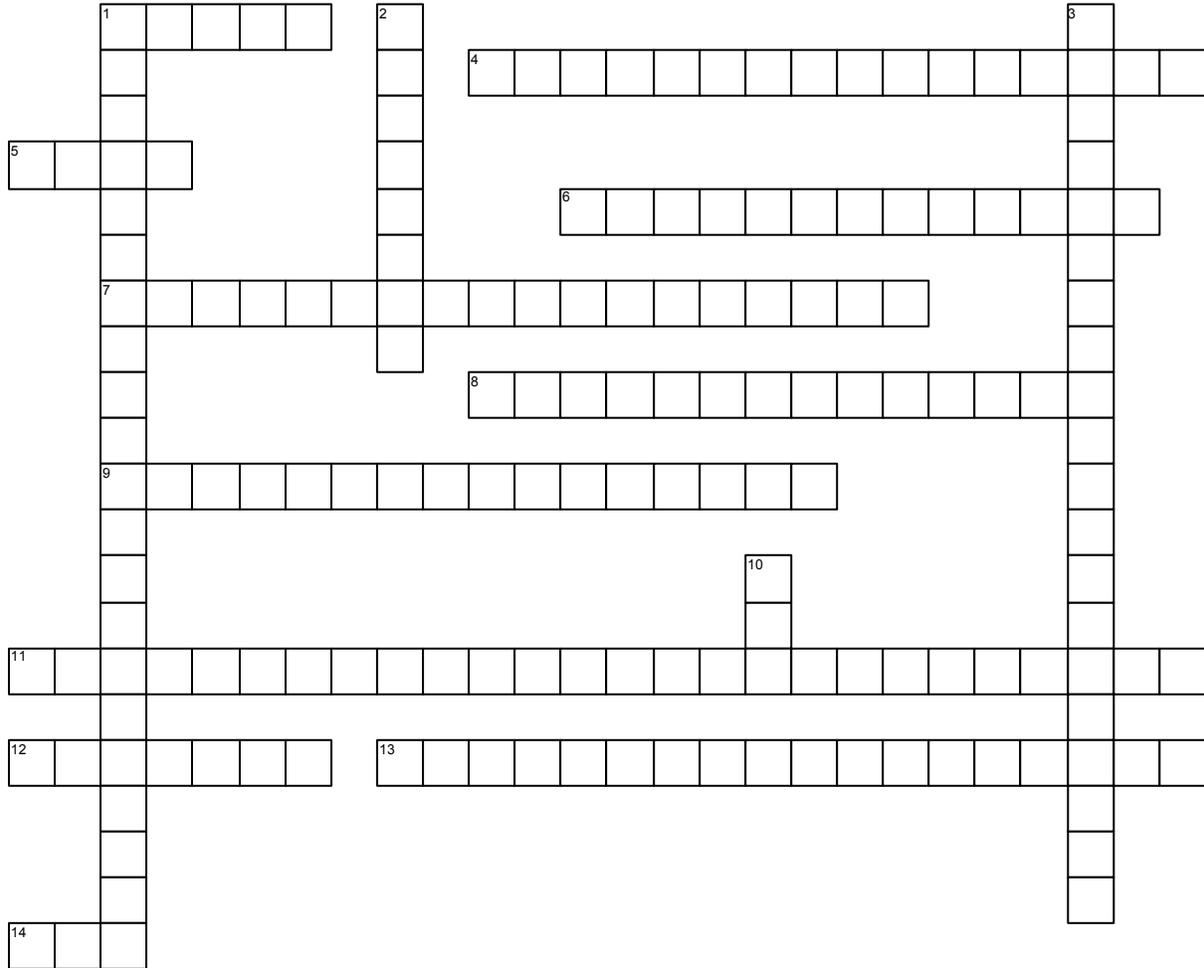


# Honda Hybrid Vehicles

## Chapter 13



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### ACROSS

- 1 Another significant change for the 2006 model year included a VTEC system called \_\_\_\_.
- 4 The \_\_\_\_\_ works with the ECU to control the idle stop feature and to regulate the flow of energy between the battery pack and the electric motor.
- 5 A number of different \_\_\_\_ designs are used in Honda vehicles, but the version found in the 2003-2005 Civic hybrid allows three of four cylinders to be deactivated during vehicle deceleration by keeping the valves closed.
- 6 During fuel-cut mode, the IMA motor is driven by the wheels, generating electricity to be stored in the \_\_\_\_\_, and slowing the vehicle in the process.
- 7 To reduce vibration and noise, the V-6 Accord Hybrid uses \_\_\_\_\_.
- 8 When a Honda hybrid is cruising at a constant speed and the battery module state of charge is relatively low, some engine output is used by the IMA motor-generator being operated in \_\_\_\_\_ to charge the battery module.
- 9 During acceleration and other high-load conditions, current from the battery module is converted to alternating current by the \_\_\_\_\_ and supplied to the IMA motor.
- 11 To achieve improved fuel economy, three cylinders (the rear bank of the V-6) are deactivated by closing both valves, this is accomplished using the \_\_\_\_\_ system.
- 12 The \_\_\_\_\_ prototype, by another name, was first shown to the public at the Tokyo Auto Show in 1997.
- 13 After about 7 seconds, the \_\_\_\_\_ will reduce the available current to 50 amperes to reduce heat build-up of the motor.
- 14 For 2006, the Civic Hybrid could only be ordered with a \_\_\_\_\_.

### DOWN

- 1 Torque assist and electric power generation are both accomplished with the \_\_\_\_\_ motor.
- 2 The \_\_\_\_\_ is a square metal box, made of magnesium to save weight, located next to the MDM, that absorbs and dissipates heat produced by the MDM and DC-DC converter.
- 3 All of the electronics for the IMA system are located at the rear of the vehicle, with three power cables running between the IMA motor and the \_\_\_\_\_.
- 10 The battery state-of-charge indicator is operated by the \_\_\_\_\_, which is responsible for calculating the battery state of charge.