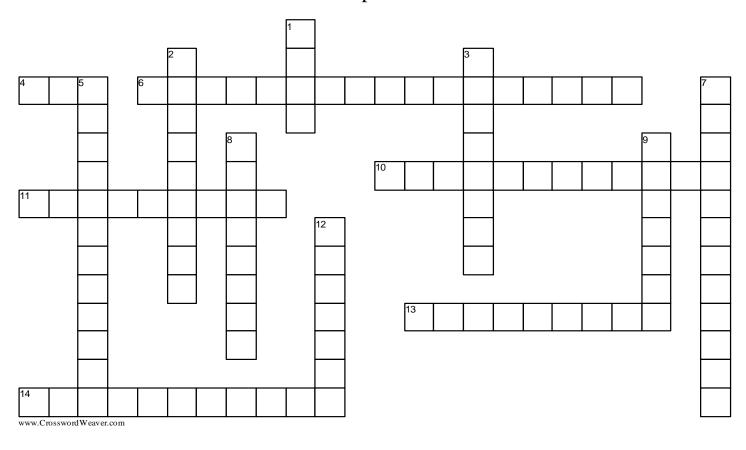
Duramax Diesel Engines

Chapter 23



ACROSS

- 4 Part of the SCR system, the ___ injector sprays a fine mist of urea fluid from the DEF tank into the SCR cataly st.
 6 the Duramax diesel engine started life using a
- highpressure common rail fuel injection system. the 2001–2004 model years version was labeled LB7 because this was the ______ option code used for this engine model.
- **10** The head gaskets used in the Duramax diesel engines are _____ steel gaskets.
- **11** The Diesel _____ Cataly st is used to oxidize HC and CO into CO2 and H2O.
- **13** the _____ thermostat is used to restrict the flow of coolant through the radiator when it is closed.
- **14** The Diesel _____ Filter is used to trap particulate matter, commonly called soot.

DOWN

| 1 | The engines are built by a GM and Isuzu partnership |
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| | company called, a joint venture in Moraine near |
| | Dayton in southwest Ohio. |
| 2 | The catalyst reduction is used to reduce |
| | NOx exhaust emissions into N2 and O2, and to oxidize |
| | the remaining elements into N2, CO2 and H2O. |
| 3 | Each fuel injector has an injector adjustment |
| | code. the code is marked on each injector, which |
| | indicates the flow rate of the injector to the PCM. |
| 5 | The drivers for the injectors are located in the |
| | control module (FICM). the FICM is located |
| | on the side of the engine and cooled with fuel that flows |
| | through it. |
| 7 | From the fuel tank, fuel is drawn through the lines to the |
| | fuel module. |
| 8 | The control module controls the operation of |
| | the glow plugs and its location varies by application. |
| 9 | The (forward) thermostat is used to control |
| | both the bypass coolant flow when the engine is cold |
| | and the flow though the radiator when the engine is hot. |
| | In operation, the primary thermostat starts to open at |
| | 180°F (82°c) and allows coolant to flow to the radiator. |
| 12 | The oil change interval is determined by using the |
| | monitor. |

