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Topic

Recommended spark plugs for the vehicles equipped with aftermarket Edelbrock cylinder heads.

Background

Edelbrock cylinder heads are specifically designed for high performance use and are often interchangeable with original equipment cylinder heads. According to the manufacturer, Champion RC12YC spark plugs can be used with their cylinder heads on most street applications. But what happens is that when the customers use this plug they have to advance the timing and adjust the air fuel mixture (i.e., rich) to get proper combustion. The Champion equivalent NGK spark plugs for these aftermarket cylinder heads are NGK FR4 or BKR5E spark plugs.

Issue

When using the NGK FR4 or BKR5E spark plugs, because the NGK plugs have more copper in the core of the spark plugs than the Champion spark plugs, they pull out more heat during the start-up and can cause gas fouling issues and intermittent misses. This problem is worse in cold weather climates. In fact, when the cylinder head manufacturer suggests using Champion RC12YC spark plugs, they are only specifying the basic spark plug design specifications (i.e., 14mm threads, 5/8" or 16mm hex, and 3/4" or 19mm reach) not an actual heat range for the plugs.

Solution

For these applications, we suggest using NGK R5672A-(X) series spark plug, where "X" stands for the heat range for the spark plug. Depending upon the compression ratio and horsepower of the engine, start with an "8" heat range and move up to 9&10. There is no need to advance the timing or use a rich air fuel mixture with these plugs and customers can simply use 94 octane fuels and make slight adjustments for the humidity level in the environment.

Additional information

The above information only applies to specific Edelbrock cylinder heads that recommends using the Champion RC12YC spark plugs. Please refer to the manufacturer's product manual for the correct spark plug specifications when selecting the spark plugs for your aftermarket cylinder heads.