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Topic

The use of anti-seize compounds on spark plug with “special shell plating” (i.e. Trivalent coating).

Issue

Applying anti-seize to the threads of spark plugs with a special metal plating will allow the installer to over-torque the spark plug in the cylinder head. Over-torqueing will stretch the metal between the last thread and the seal between the cylinder head and spark plug, causing a much higher probability the spark plug will break during installation or removal.

Solution

DO NOT use anti-seize for spark plugs with special metal plating

Additional Information

It is recommended to use spark plugs with the special plating on all aluminum cylinder head applications to prevent damage to the head. All NGK Spark Plugs are manufactured with special shell plating on the metal body (Trivalent Chromate).

The use of anti-seize on spark plugs is only recommended on those brands that do not offer a special metal shell plating. Spark plugs that have a shiny silver appearance on the metal body usually indicate the spark plug is manufactured with special metal shell plating. When installing spark plugs without special metal plating (using anti-seize), install based on vehicle manufacturer’s torque specification.

These images show spark plugs that do not have special metal shell plating where they have bonded with the aluminum in the cylinder head



When using anti-seize:

- Only on spark plugs without special metal plating
- Use manufacturer’s torque angle/specification to avoid over-tightening