

TORQUE SPECIFICATIONS FOR PROPER SPARK PLUG INSTALLATION

AUTOLITE

Plug Thread	Cast Iron Heads		Aluminum Heads	
	Pound Feet	Newton Meters	Pound Feet	Newton Meters
10mm Gasket Seat	7 - 11 lb. ft.	10 - 15 nm	7 - 11 lb. ft.	10 - 15 nm
12mm Gasket Seat	11 - 19 lb. ft.	15 - 25 nm	11 - 19 lb. ft.	15 - 25 nm
14mm Gasket Seat	26 - 29 lb. ft.	35 - 40 nm	15 - 22 lb. ft.	20 - 30 nm
14mm Tapered Seat	7 - 15 lb. ft.	9 - 20 nm	7 - 15 lb. ft.	9 - 20 nm
18mm Gasket Seat	32 - 38 lb. ft.	43 - 52 nm	28 - 34 lb. ft.	38 - 46 nm
18mm Tapered Seat	15 - 20 lb. ft.	20 - 27 nm	15 - 20 lb. ft.	20 - 27 nm
7/8" - 18	35 - 43 lb. ft.	47 - 58 nm	31 - 39 lb. ft.	42 - 53 nm

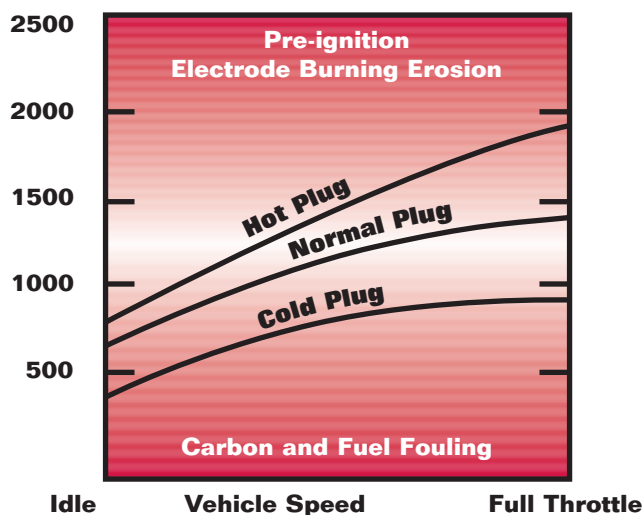
UNDERSTANDING HEAT RANGE

Why is Heat Range Critical?

It is the measure of how fast the spark plug tip dissipates combustion heat. It must do this in a controlled manner that will:

1. Stay cool enough to avoid pre-ignition and/or electrode destruction.
2. Run hot enough to burn off combustion deposits that would otherwise collect at the firing tip.
3. Adapt to specific engine characteristics and widely varying driving road conditions.

TIP TEMPERATURE



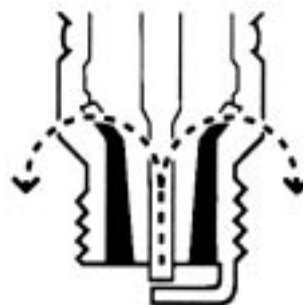
Each engine has different temperature characteristics; typical plug temperature ranges are illustrated above.

How is Heat Range Engineered?

Heat is conducted away from the firing tip through the (1) insulator to (2) the spark plug shell to (3) the cylinder head.

Thus, heat ranges are primarily controlled by the length of the insulator through which the heat must travel before escaping to the cylinder head.

Other factors effecting Heat Range are the thermal characteristics of the insulator and the bond of the insulator to the shell. In both regards, Autolite plugs are superior.



The shorter the path, the faster the heat is dissipated and the cooler the plug.

**Heavy Loads
High Speeds**
SHORT Insulator Tip
Fast Heat Transfer
LOWER Heat Range
COLD PLUG

