

START RIGHT WITH AUTOLITE SPARK PLUGS.

Multi-Rib Insulator Design reduces danger of current leakage ("flash-over") over outside of insulator. Leakage can occur if there is an improperly fitting boot, and/or moisture or dirt on the insulator.

Steel Shell/Insulator Seal produced by hot pressed assembly to assure a perfectly centered, unitized and leakproof unit.

Copper Center Electrode sheathed in nickel chromium alloy for superior heat dissipation and durability. Designed for vehicles equipped with copper core plugs as original equipment.

Precision Rolled Shell Threads conform completely to Society of Automotive Engineers (SAE) and International Standards Organization (ISO) standards, to assure proper installation and easy removal.

Longer Insulator pioneered by FRAM Group Autolite to resist carbon fouling. Operates efficiently over wide heat range, allows combustion deposits to burn away.

Ground Electrode nickel chromium alloy resists gap growth and maintains precise spark gap longer.

One-Piece Terminal Post is firmly sealed within ceramic insulator.

Near Diamond Hard Insulator will actually cut glass. Provides maximum insulation, delivers precise heat ranges.

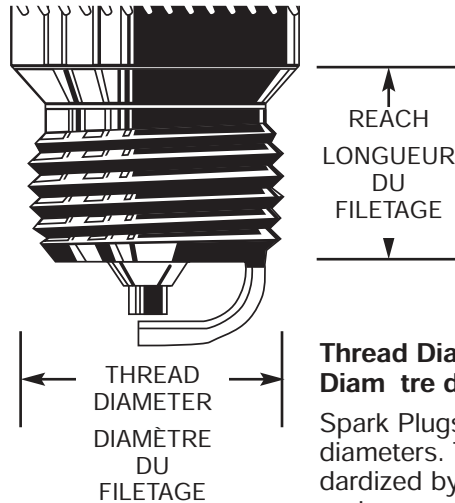
Double Terminated Suppressor/Resistor Seal for best EMI suppression; proven to be the best in the industry.



Understanding Spark Plug Sizes Tailles Des Bougies D'allumage

To form a perfect seal in the combustion chamber, each spark plug must exactly match the dimensional characteristics of the cylinder head it is designed to fit in two important ways: (1) Thread Diameter, and (2) Reach.

Pour que la chambre de combustion soit parfaitement hermétique, les dimensions de chacune des bougies doivent correspondre exactement aux dimensions de la culasse correspondante, surtout en ce qui concerne: (1) le diamètre et (2) la longueur du filetage.



Reach Longueur

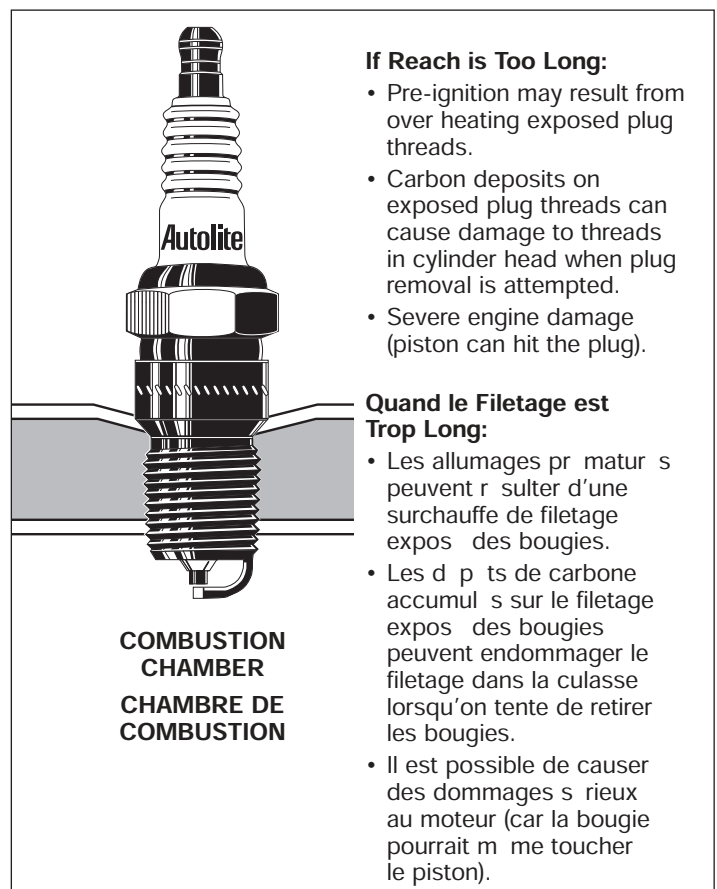
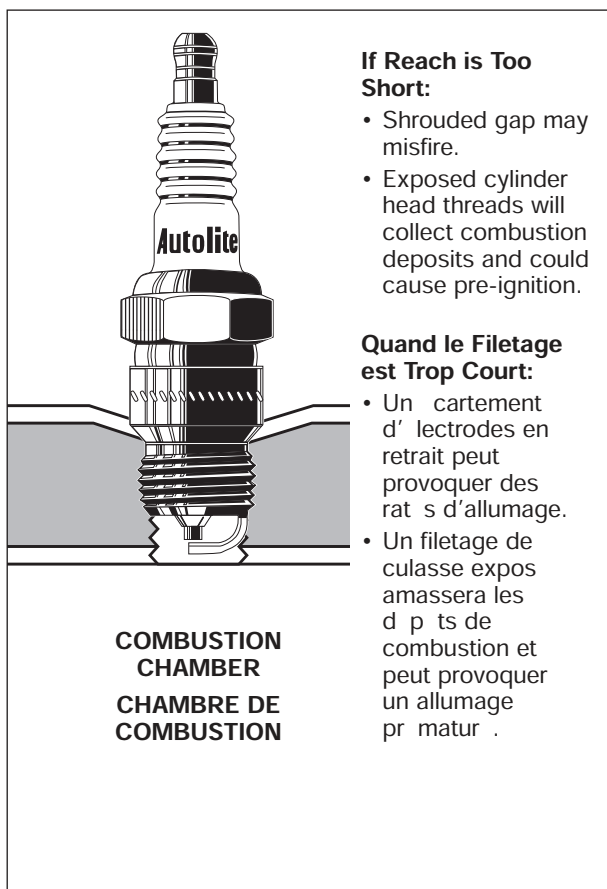
Dimensional match is critical since it determines the position of the spark gap inside the combustion chamber.

Il est absolument essentiel que les dimensions soient assorties puisqu'elles déterminent la position de l'écartement des électrodes dans la chambre de combustion.

Thread Diameter Diamètre du Filetage

Spark Plugs are made in 10, 12, 14, and 18 mm thread diameters. These thread dimensions have been standardized by the Society of Automotive Engineers (SAE) and are used by all spark plug manufacturers.

Les bougies peuvent avoir un filetage d'un diamètre de 10, 12, 14 ou 18 mm. Les dimensions des filetages ont été normalisées par la Society of Automotive Engineers (SAE) et sont adoptées par tous les fabricants de bougies.



Follow Autolite Catalog recommendations to assure perfect thread and reach for each engine application.

Suivre les recommandations qui figurent dans le catalogue des bougies Autolite pour que le diamètre et la longueur du filetage correspondent bien à chaque application du moteur.

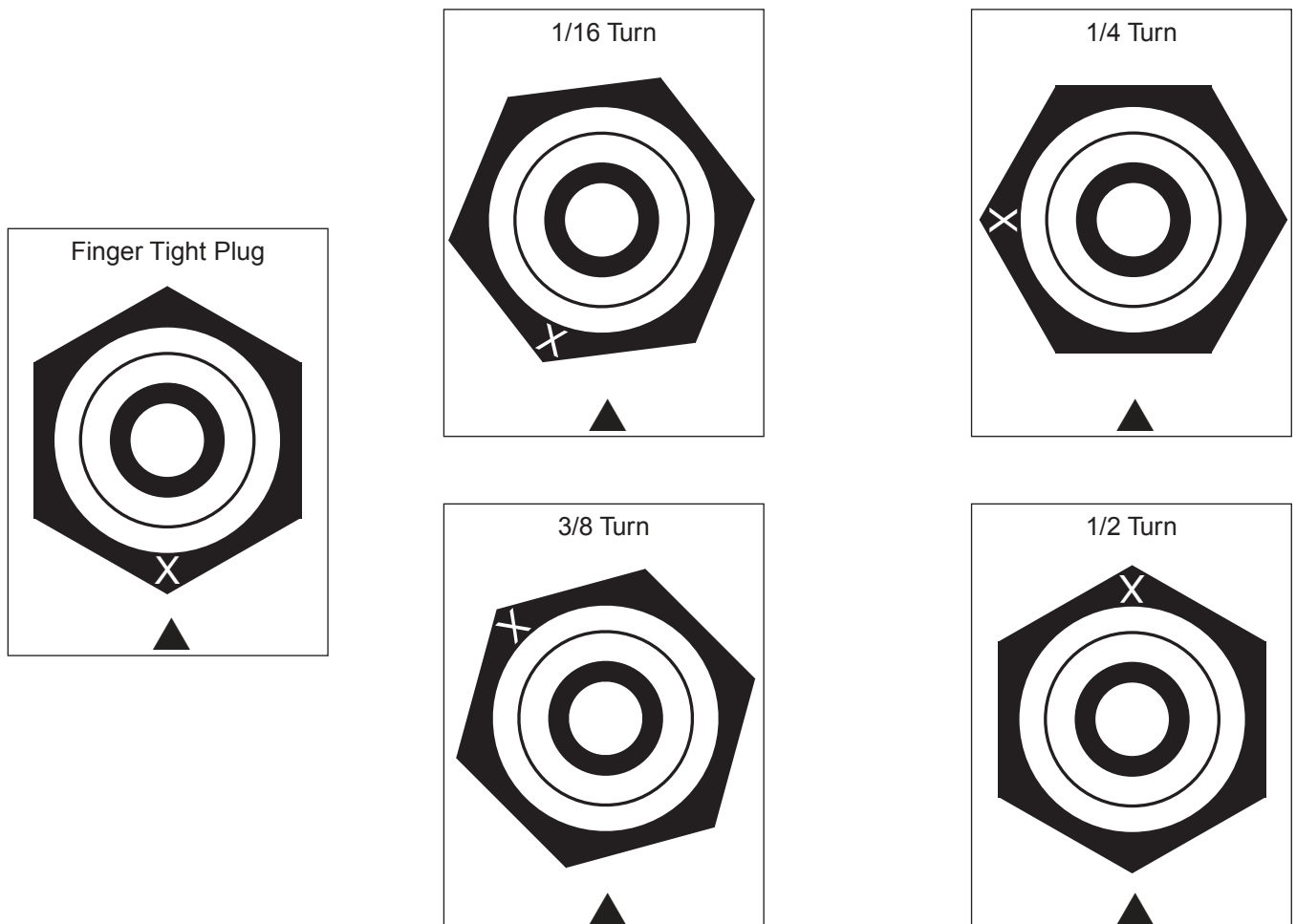
Torque Specifications For Proper Spark Plug Installation

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

Installing Spark Plugs Without a Torque Wrench

14 and 18mm tapered seat plug – tighten 1/16 turn after finger tight; 14 and 18mm gasket seat plug – tighten 1/2 turn past finger tight; 12mm gasket seat plug – tighten 3/8 turn past finger tight; 10mm gasket seat plug – tighten 1/4 turn past finger tight.

NOTE: Spark plugs should be installed with clean and dry threads to avoid overtorquing or stretching the spark plug which can, and often does, result in engine damage.



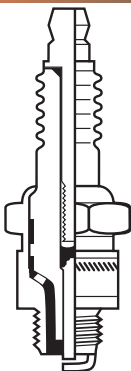
Autolite®

Spark Plug Types

Engineered for a wide array of spark-ignited combustion engines.

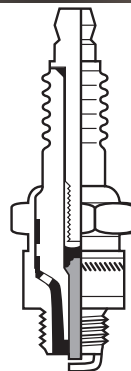
1. RESISTOR

Another Fram Group Autolite "first" incorporates an internal resistor which minimizes radio and TV interference, reduces electrode erosion for longer plug life. Used mainly for automotive and marine applications.



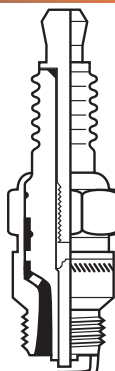
2. COPPER CORE

The copper core increases the rate of heat conduction in the spark plug tip and improves resistance to all types of fouling.



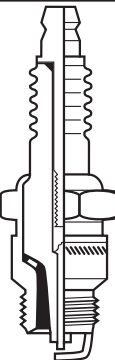
3. TRANSPORT

A large center electrode and center insulator provide increased durability over the life of the spark plug in engines operating under full load (heavy-duty over-the-road truck and tractor engines).



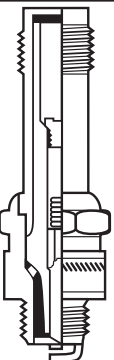
4. POWER TIP

Pioneered by Fram Group Autolite, insulator extends beyond the shell into the combustion chamber. Designed to provide "self-cleaning" action to virtually eliminate fouling at low speeds; "charge cooling" action to reduce the possibility of pre-ignition at high speeds.



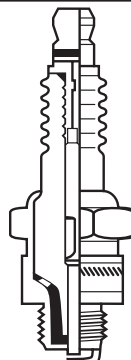
5. SHIELDED

Spark plug insulator is enclosed in a metal case. Wires are attached by means of water-proof connectors. Complete sealing makes plugs waterproof, explosion-proof, also provides improved suppression of radio interference. Used in military, marine, automotive and industrial applications.



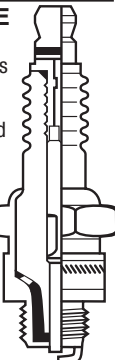
6. SERIES GAP

Designed to fire under heavy fouling conditions (long idle, low speed running). Used mainly in truck and stationary engine applications.



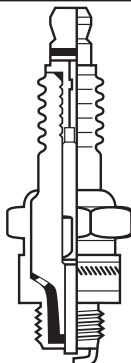
7. SMALL ENGINE

Shortened side electrode extends just halfway across tip of center electrode (compared to all the way across the tip of a standard plug). Designed to resist "bridging". Used on a variety of 2- and 4-cycle engines such as power lawn mowers, snowmobiles, outboard motors, chain saws, motorcycles, etc.



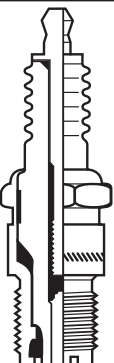
8. RACING

Precise heat ranges to power anything from street rods to top fuel cars. Cut back ground electrode exposes spark for quicker acceleration.



9. SPECIAL MAZDA PLUG

Specially designed and developed for use in Mazda rotary engines. Features a special surface gap quadruple electrode design for self-cleaning and apex seal clearance.



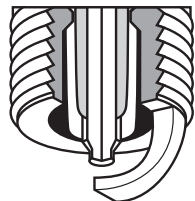
10. SURFACE GAP TIP

Used with capacitor-discharge ignition systems only (principally marine, snowmobile and motorcycle engines). Provides total protection from spark plug induced pre-ignition due to the extremely cold heat range inherent in the design.



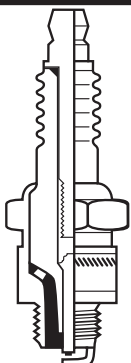
11. NECKED DOWN CENTER ELECTRODE

Tapered high nickel-chrome alloy tip combined with copper center electrode produces hotter, sharper spark for easier starting and on-road performance.



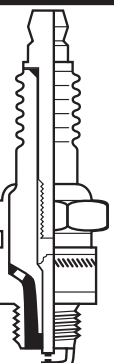
12. PLATINUM

Our basic spark plug design with the addition of a platinum center electrode tip that delivers precision firing, reduced gap erosion, more durability, and improved fuel efficiency over the life of the plug.



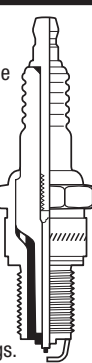
13. DOUBLE PLATINUM

Features our basic spark plug design with the addition of a platinum on the center tip and side electrodes. This plug's design delivers platinum durability with virtually no gap erosion over the life of the plug. Double Platinum spark plugs are the approved spark plugs for DIS engines.



14. XTREME SPORT®

These premium small engine spark plugs are engineered with an Iridium Enhanced .6mm Finewire Design for better overall ignitability, more focused ignition for faster fuel combustion and reduced fouling.



15. XTREME START™

These premium small engine spark plugs are engineered with an Iridium Enhanced .6mm Finewire Design for quicker first-pull starts, fewer misfires and improved emissions and power.

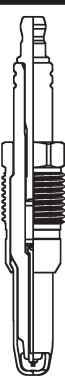


*Compared to standard plugs.

*Compared to standard plugs.

16. REVOLUTION HT®

This unique, patented 10-mm diameter high-thread spark plug design offers a more compressive seal and provides more space to optimize engine design, a one-piece ground shield strap for improved heat transfer, and a patented finewire design for more focused ignition power compared to standard plugs. This spark plug requires no gapping and requires a 9/16-inch socket wrench for installation.



17. XP XTREME PERFORMANCE®

With an iridium-enhanced .6 mm finewire design and patented platinum sidewire technology, this plug provides the durability advantages of a double platinum spark plug with virtually no gap erosion, longer life, and top fuel efficiency over the life of the plug compared to standard plugs. The XP Xtreme Performance® spark plug also provides more focused ignition for better ignitability performance.



XP XTREME PERFORMANCE®

