index (VI) improver, a goo that looks like rubber cement that is not a lubricant. Amazing, isn t it?

My fears were put to rest when the speaker said that comparing a Model T or any other old engine to the modern engines is like comparing apples and oranges. He further went on to say that considering the Model T engine s construction, the cooling and lubricating systems, my choice of viscosity/weight was in line.

When I mentioned that many T owners use single viscosity oil and some even use non-detergent oil, he gave an O.K. to the single viscosity but nixed the use of non-detergent oils, citing their lack of anti-oxidants, rust inhibitors and other useful additives.

So what do we have here. More modern engines are engineered to use thinner oils (5W-30 and OW-30), but spell doom to the older engines, especially the Model T They can handle high concentrations of VI modifiers. For just occasional trips around town, SAE 30 detergent oil will afford ample protection. For those with modified engines, and what T engine is not modified, use a 10W-30 and if you tend to be a Hot-Dogger and have a high compression head, domed pistons, a reground camshaft or an OHV head, go to possibly a 20W-50.

SPARK PLUGS
An Alternate For The OHV Head Equipped Model T

The spark plug is the *business end* of the ignition system of all Model T engines. Voltage is built up in the coils and at the proper moment surges across the spark plug gap to ignite the air-fuel mixture.

With the standard Model T, the plug of choice for years has been the Champion A-25 (Autolite 3095, Motorcraft F-11 or AC G58 will also work and have the same heat range).

About 15 years ago, somebody came up with the idea of using modern 14mm plugs in their Model T. However, their use required the use of a 1/2 inch by 14mm bushing. Not a shelf item at the local hardware store, these bushing had to be made. Not many were set up to drill the proper size hole or had a 14mm tap, but of late, the parts vendors are now offering them at a reasonable price. The manufacturers of alloy heads having a modern combustion chamber can be ordered already set up for 14mm plugs and require no modification.

Back around 1969 or 1970 Ford, who at that time had a relationship with Autolite, startled the motoring world with the "Power Tip spark plug. The business end of the spark plug extended well into the combustion chamber and resisted fouling during low speed, light load conditions as well as during high speed, full load conditions. This type of plug is now common place and is available from most all sources.

The regular old-style plug does yeoman duty for the average Model T owner, but the owners and drivers of Fronty and Rajo equipped Ts found the Champion s and the like marginal in service as they tended to foul. This fouling can be attributed to excess oil running down the valve stems into the combustion chamber. The rocker arms and shafts, oiled by just a felt pad saturated with engine oil and the absence of valve stem seals, seemed to be the cause.

It took a grass roots Model T hacker from up around Fredonia, Arizona to come up with a solution to the problem. He did it the hard way by modifying the old take-apart Champion spark plugs. He would take the plug apart and chucking the thread end in a lathe would remove the area below the threads. He would then weld on a side electrode to the modified base. He frowned on the available adapters for the 14mm plugs, as the tips were not exposed to the combustion chamber. This can be easily corrected by turning down the thread end of the adapters to suit the plugs being used.

The regular Model T spark plug can be considered a hot plug. Normally in an engine of good repair, it burns clean, but will under certain condition foul with carbon, as the electrode tips are not fully exposed to the fire. Using the so-called *Power-Tip,* the electrodes are situated in the center of the combustion chamber.

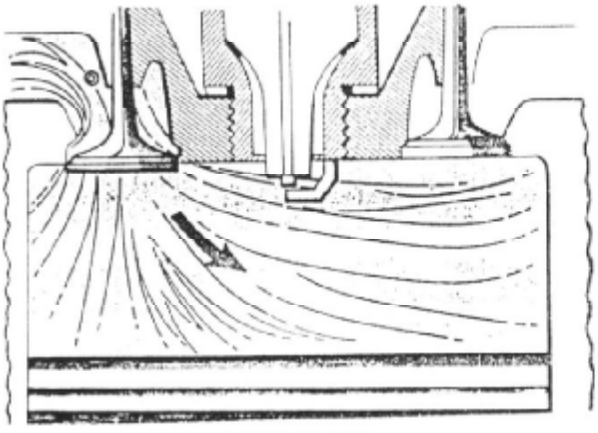
With these modern spark plugs, one should not exceed by much the heat range of the regular Model T plugs. Too hot can cause pre-detonation of the air/fuel mixture, leading

to a bad scene.

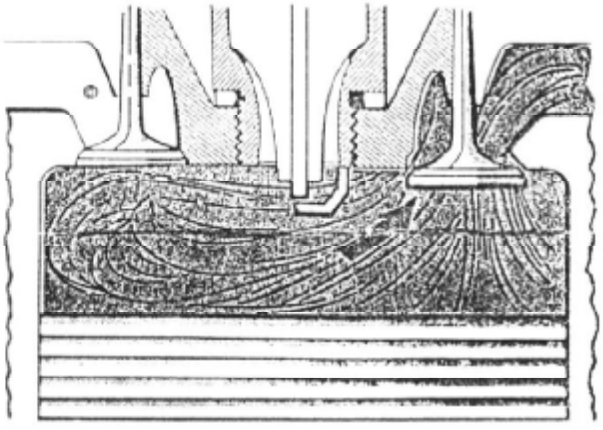
Under a full-load condition, the tip temperature of these modern plugs are lower than those of the conventional design due to the lower temperatures caused by the incoming air-fuel mixture passing over the insulator tip. This is more noticeable in the OHV engines (see drawings). Above all, do choose the spark plug with the proper heat range for your application (note drawing showing heat ranges of various spark plugs).

AUTOLITE SPARK PLUG HEAT RANGE CHART

Heat Range	Heat Range Number	Code Number
HOT PLUGS	11	A 11
	10	AR 10
	9	A 9
MEDIUM PLUGS	8	AT 8
	7	A 7
	6	AT 6
COLD PLUGS	5	A 5
	4	A 42
	3	AR 32
	2	A 21



INTAKE STROKE



EXHAUST STROKE