

MSD
IGNITION



**IMPROVE YOUR
RACING VEHICLE**

Presented by:

NBM
INC.

Custom Communications



IMPROVE YOUR RACING VEHICLE

IGNITION OFFERS SUPERIOR ENGINEERING AND INNOVATIONS

In 1970, three engineers from White Sands Missile Range, a U.S. military research, development and training branch, established MSD Ignition's lean-burn fuel system for carbureted engines, says Todd Ryden, director of marketing for MSD Ignition. As the team of engineers perfected the new fuel system, the air and fuel mixture became so lean that it was difficult to ignite by conventional breaker points and early electronic ignitions.

To counter this, the engineer team then started investigating a new system by using capacitive discharge, which opened another door for the ignition, the capability to spark multiple times at a much higher heat degree, Ryden explains. Since this innovation, MSD Ignition has continued to develop new and exciting performance ignition components that range from street cars to professional race engines.

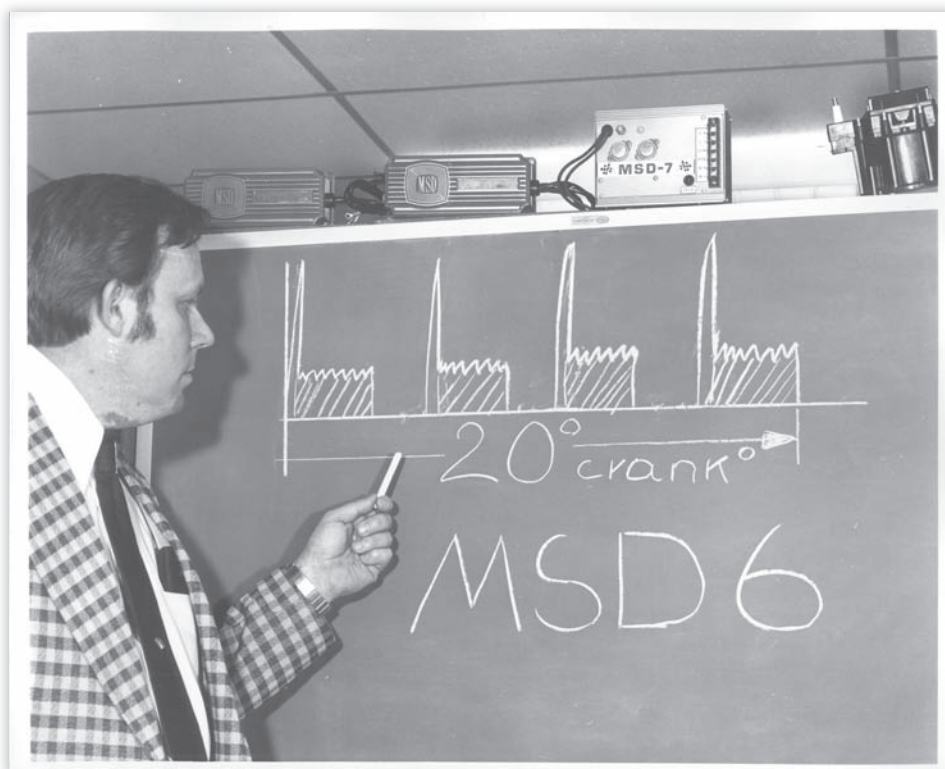
AROUND THE PRO RACE TRACK

Within a few years, MSD Ignition began serving the professional racing market, when many of the top racers started to use its products. In fact, Bob Glidden, who recorded the most wins in National Hot Rod Association's history, was one of the first racers to use MSD Ignition.

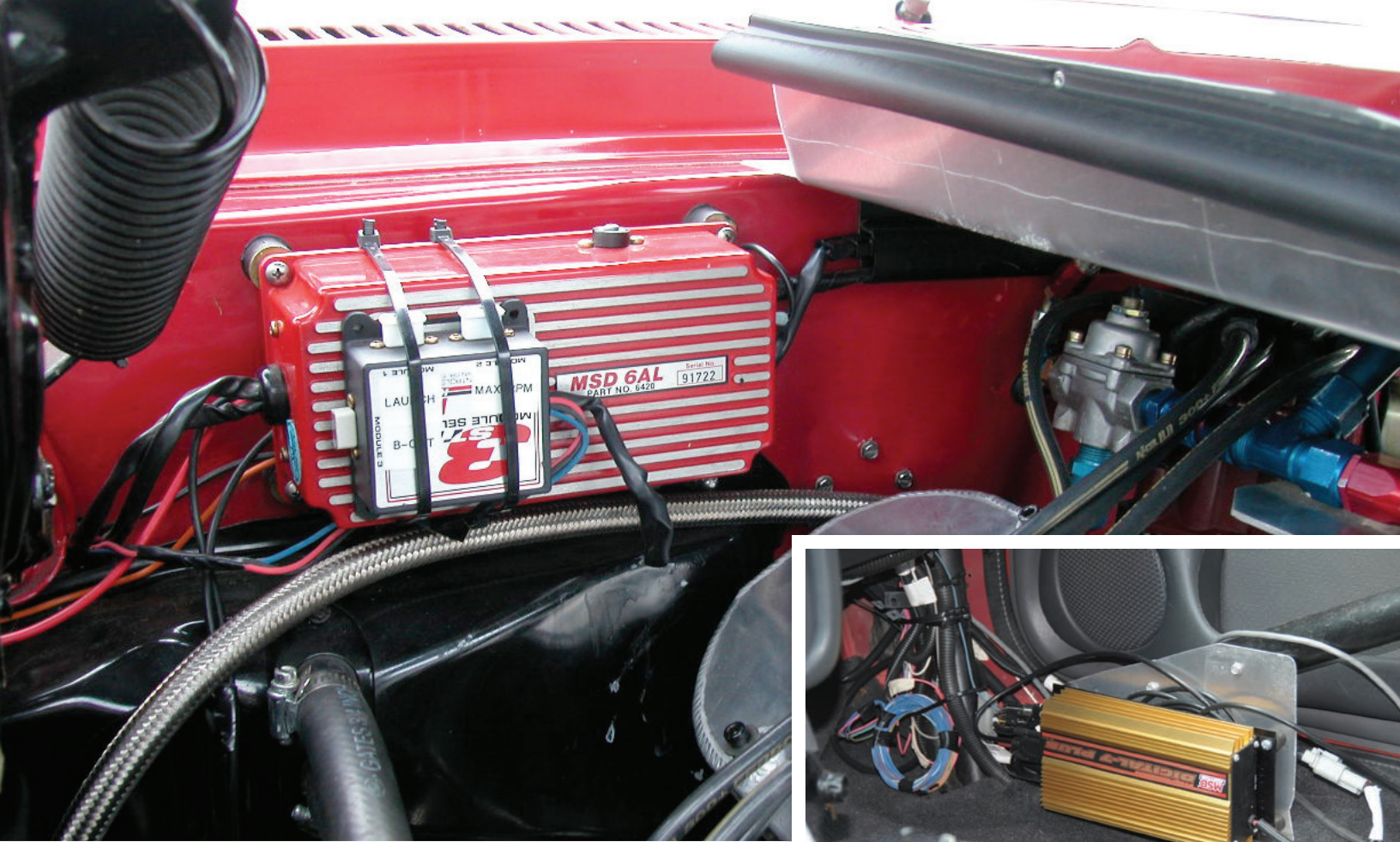
Besides NHRA, MSD Ignition supplies critical racing components to many professional racing organizations, including NASCAR, World of Outlaws, DIRT, SCORE, IHRA and IDBA. No other ignition company offers the breadth of racing ignition products for the professional racer, and MSD Ignition's knowledgeable staff has direct experience with the market.

"It comes from working in the race pits with top race teams and finding out exactly what they need," Ryden says. "It's really helped us develop these products."

MSD Ignition's programmable ignition series, for example, has revamped the way crew chiefs tune an ignition system by allowing them to program a precise timing curve through a laptop.



Walt Merrick, one of the original engineers behind the multiple spark discharge CD ignition system, explained the benefits of powerful multiple sparks coupled with high voltage and spark energy.



Another innovation from MSD Ignition was the 2-Step rev limiter. This simple device allows a racer to activate a lower rpm limit on the starting line to help improve consistency from the holeshot resulting in improved ets. MSD now offers a 3-Step as well.

“Before you were limited in the changes you could make mechanically,” Ryden says. “With the programmable ignition series, you can program the timing curve down to tenths of a degree for every 100 RPM, instead of a big sweeping ignition curve.”

This technology has also extended to cylinder-to-cylinder timing, Ryden adds. Most engines have variables when delivering the air fuel mixture to the combustion chamber. When one cylinder runs lean, the timing must be pulled out of all eight cylinders, which reduces the power output. However, with the programming capabilities, the timing is pulled from the one inefficient cylinder, which means no more compromising performance – a fact that racers like.

Another MSD Ignition innovation was the first two-step rev control, Ryden says. When race vehicles are on the starting line, racers can activate a lower RPM limit to hold the engine at a steady RPM. This gives more consistent launches from the starting line and has become an industry standard.



Laptop programming provided racers with an all new way to tune their timing and control the rpm of their engines. The MSD Programmable 7-Series Ignitions are on everything from Pro Stock to 10.5 Outlaw racers.



MSD is also known in the circle track sanctions from NASCAR to Saturday night dirt track fun. MSD offers ignition controls designed for high rpm for long endurance racing as well as advanced HEI modules with high output.



MSD was developed, and is still proudly based in El Paso, Texas!



The MSD Pro Mag 44 is the only choice when it comes to blown, nitro slurping 8,000 horsepower top fuel engines. The Pro Mag is fully electronic with advanced timing controls giving crew chiefs control over ignition timing that was never available before.

FOR THE RACING HOBBYIST

Besides professional race teams, MSD Ignition serves the hobbyist racing industry, which is its key target market. From hot rods to muscle cars, MSD Ignition offers a wide range of solutions for the weekend racer or cruiser, especially given its history in the professional racing market, Ryden says.

"We have most of the solutions hot rod enthusiasts need to fire up their car," Ryden says. "When you look back on our 40 years of experience, we are the choice of top race teams, and that same quality, engineering and innovation goes into the products offered for the hot rodders."

For the racing hobbyist, MSD Ignition provides a hands-on approach to customer service. Of course, MSD Ignition offers the traditional customer service support line, but it is also actively involved with racers on the grass-root level. In fact, MSD Ignition often travels to regional races and events throughout the country to help service and support its products in the field, Ryden says. Whether hobbyist racers need help on the track or just product advice and recommendations, MSD Ignition is there to provide its expertise.

"We just finished participating in our fifteenth Hot Rod Magazine Power Tour," Ryden says. "We were out there for seven days, talking to customers

and helping where we could. We want to be out there to help as many people as we can."

With MSD Ignition's top products, knowledgeable staff and supportive customer service, the hobbyist racing market has a partner for powerful racing performance. MSD Ignition's products help racing vehicle operate more efficiently—and it has the history to prove it.

"The results speak for themselves," Ryden says. "The number of products we offer and our innovations really set us apart. We have a great team from techs to engineers to assembly specialists, who have been with the company for a long time, and they know ignitions."