

# 01 Contributing to Motor Sports

NGK spark plugs, the core products of NGK SPARK PLUG, are important functional engine components which determine a large share of engine performance. For years, we have supplied high-quality spark plugs to the field of motor sports. In fulfilling our responsibilities as a leading spark plug brand, NGK SPARK PLUG will continue to contribute to the reliability and the development of motor sports and automobile society.

## Technology Development of Spark Plugs for F1

The aim of Formula One (F1), the highest class of single-seater auto racing in the world, is not simply to compete in engine performance or machine design. The race is a fair competition involving the overall ability of the machine, driver, and team under strict technical regulations with safety and environmental issues kept in mind. Various devices and technological innovations developed from F1 have later made great contributions to the development of automotive technologies and use of the automobile in society.



Spark plug Racing spark plug

Leading-edge technologies and ideas are used in spark plugs for F1 engine to boost engine performance. For example, to make the engine head design more flexible, it has been necessary to reduce the thread size on the one hand, and to offer resistance to heat and vibration to ensure durability in the demanding racing environment, which is characterized by continuous application of a high load. NGK SPARK PLUG is constantly exploring the best way to meet that challenge and setting new targets for itself. This can clearly be seen in the fact that since the company first supplied spark plugs for F1 engines in 1964, many teams have continued using NGK spark plugs.

Development of F1 machines and engine technologies continues throughout the season. At NGK SPARK PLUG, engineers at our Technical Center in Europe and engineers in Japan collaborate on a daily basis to provide technical support aimed at meeting



the precise requirements for our spark plugs. As a result of our efforts, the F1 machine that won the F1 Malaysian Grand Prix held in March this year marked the 300th win for a F1 machine equipped with NGK racing spark plugs. NGK spark plugs provide outstanding performance in various categories that include WRC, Super GT and other automobile races, as well as MotoGP, the Superbike World Championship and other motorcycle races, and snowmobiles.



### voice

**Tomoaki Ueda**  
Spark Plug  
Engineering Dept.,  
Spark Plug Div.

I am a racing spark plug planner, developer, and designer who responds to requests from engine manufacturers. Recent racing engines need to meet the challenge of how to ignite limited fuel effectively and improve both power and fuel efficiency. The challenge is no longer simply to deliver power. Techniques that I have acquired through leading-edge development in the area of motor sports will be incorporated into our products.



### voice

**Satoru Nakajima**  
General Director,  
NAKAJIMA RACING

I am currently involved in racing as the General Director of Nakajima Racing. Since I was a racing driver, NGK spark plugs have been a must for my teams. I feel very confident whenever I see NGK's red logo at race venues. I hope that you will continue to supply excellent products.



### Isle of Man TT (Tourist Trophy) Race

The NGK Spark Plug brand became known worldwide since teams used our spark plugs in the Isle of Man TT, a prestigious motorcycle race in the UK.

## Events

NGK SPARK PLUG supports motor sport venues and exhibitions and always has a booth at these events. At our booth, our products are on show, and visitors can experience replacing spark plugs and enjoy games by our mascot, the Spark Girls. These are only a fraction of the amusements that we present for spark plug users and visitors so that they may become acquainted with motor sports and expand their interest in and knowledge of replacement parts for automobiles.

The company sponsors the NGK Cup (Suzuka Sunday Road Race Grand Championship), in which a wealth of talent from beginners to experienced riders hone their skills to qualify for Japan's most prestigious race, the All Japan Road Race Championship. As such, the NGK Cup serves as a steppingstone for riders who are aiming to compete in the All Japan Road Race Championship and go on to international races.

These events and support activities allow NGK SPARK PLUG to contribute to the development and promotion of motor sports.



### voice

**Hiroshi Nakao**  
Aftermarket Sales  
& Marketing Dept.,  
Sales & Marketing Div.

I visit many auto race venues including Japanese national racing championships and provide services to our spark plug users. To improve the brand image of NGK spark plugs in the field, I work almost every weekend at race sites, including the Suzuka 8 Hours Endurance Road Race in summer, the Formula One (F1) Japan Grand Prix and MotoGP in autumn, and snowmobile races in winter.



Hands-on experience of spark plug replacement

### voice

Visitors to the our event booth at the Suzuka 8 Hours Endurance Road Race

- It was a good that I took a close look at electric sparks being produced by a spark plug. (Male)
- It turned out that replacing a spark plug required more force than I expected. (Male)
- I was happy that my kids enjoyed the event a lot. (Female)