Application Note



Test Valve Springs and Other Performance Springs for Pressure and Strength

To achieve maximum on-track performance without valve spring failures, proper selection and testing of those components is critical. Intercomp offers two benchtop units, a crank-style Valve Spring Tester and a lever-operated Arbor Valve Spring Tester, to help maintain high-performance engines. Both US-designed and built tools utilize electronic load cell technology with a digital display to provide consistent pressure ratings for valve, clutch and other small springs used in motorsports applications.

Calibrated using a certified process to ensure ultimate accuracy, Intercomp's Valve Spring Tester and Arbor Valve Spring Tester allow racers to test and rate the strength of valve, clutch and other small springs. Using these tools at pre-determined intervals, a racer can ensure maximum performance while reducing the chance of system failures.

The crank-style Valve Spring Tester is constructed of powder-coated aluminum and has a maximum capacity of 1,000 lb (500 kg). This heavy-duty, lowmaintenance piece of equipment accommodates any spring up to two inches in diameter and four inches tall. The hand-crank and screw design allows a user to compress a spring to a specific height, and record the data while the spring remains under pressure. The backlit LCD display also offers a peak hold option to display the maximum spring force exerted at a given height.

The lever-style Arbor Valve Spring Tester is an alternative to the traditional crank-style tool and has a maximum capacity of 1,500 lb (750 kg). The arbor design, made of 6061-T6 billet aluminum, accommodates taller springs, up to five inches tall and two inches in diameter, and comes with two adjustable test stops. Using high-torque, lever-actuated compression, this tool allows a racer to quickly rate multiple springs. Maximum spring pressure values can be captured using the Peak Hold function of the backlit LCD display. With Intercomp's optional Bump Stop Adapters, the Arbor Valve Spring Tester doubles as the ideal solution to rate a variety of bump stops.

With any high-quality motorsports program, the proper selection of engine components, and following a preventative maintenance plan that inspects high-wear or high-stress parts, is essential. Regardless of the type of racing, Intercomp's Valve Spring Testers improve maintenance programs and can provide the information needed to keep valve trains, clutches and other critical systems in optimal working order while reducing the chance for costly repairs.





The chance of valve spring failure in high-performance engines can be reduced through a proper maintenance and testing program.



The crank-style Valve Spring Tester allows the user to compress a spring to a particular height, then record the force value without losing pressure on the spring.



Intercomp's billet aluminum Arbor Valve Spring Tester quickly converts to a Bump Stop Tester using the optional adapters.

Additional Data or Customer Testimonials Available Upon Request