



# ICON VEHICLE DYNAMICS

PERFORMANCE SUSPENSION SYSTEMS AND SHOCK ABSORBERS

DODGE FORD GM JEEP NISSAN TOYOTA

## COMPANY OVERVIEW

- **ICON Vehicle Dynamics** is a design and manufacturing company specializing in performance suspension systems and shock absorbers for popular trucks and SUVs.
- **ICON Vehicle Dynamics** is part of a family of manufacturing companies specializing in high-end machining, laser cutting, and metal forming. This gives us the versatility to respond quickly to customer needs.
- Being located in Southern California means that **ICON Vehicle Dynamics** is heavily influenced by off-road desert racing. With thousands of miles of race experience (including the famous Baja 1000) and countless hours of race car prep, the ICON team puts this same quality and attention to detail into everything we do.



ICON Vehicle Dynamics Headquarters - Riverside, CA

## TOTAL VEHICLE PERFORMANCE APPROACH

- **HOLISTIC ENGINEERING:** When designing a system for a vehicle, ICON engineers start by looking for performance potential and identifying its strengths and weaknesses.
- **PUSHING THE LIMITS:** ICON aims to maximize wheel travel for improved performance and ride quality. When the limits of factory parts are found in research, we address that component in development. Many ICON systems see wheel travel gains over 50%.
- **SOLVE PROBLEMS, DON'T CREATE THEM:** Many "lift kits" have functional disadvantages. ICON builds performance suspension systems - not "lift kits".
- **FORM & FUNCTION:** A well-built and well-designed part must represent perfection in both function and aesthetics. At every point in the design process ICON engineers aim to provide superior quality and exceptional looks.

## VEHICLE SPECIFIC - WHY IT MATTERS

- **RIDE FREQUENCY:** Humans perceive motion in relation to "frequency". Low frequency motion of a vehicle is often attributed to causing sickness while high frequency motion is jarring and makes it difficult to properly control the vehicle. ICON strives to engineer a balance between comfort and performance.
- **THE PICK-UP PROBLEM:** A truck is designed to carry a significant amount of weight in the bed. When empty, the dynamics and spring rates are far out of balance. ICON systems help equalize the vehicle by correcting these spring rates. Since load capacity can't be compromised by too soft a spring in the rear, ICON also custom tunes each shock to the weight and spring rate of the vehicle.
- **TUNING, TUNING, TUNING:** Utilizing data acquisition and shock dyno testing along with our skill and experience ICON can deliver performance, stability, and comfort. The biggest factor in refining a vehicle specific ride is time, and ICON spends a lot of time tuning.

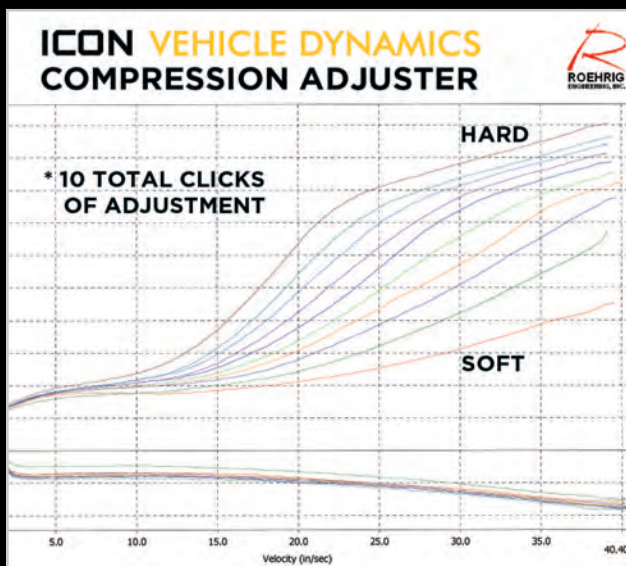


## SYSTEMS & COMPONENTS

- **SYSTEMS:** ICON offers vehicle specific suspension systems in multiple stages starting with entry level systems and finishing with high-end performance systems depending on an individual's needs.
- **COMPONENTS:** Components can also be purchased individually and combined to suit a customer's particular needs. Many of the vehicle platforms are laid out in a modular fashion so that a customer can elect to combine the highest performance shocks with basic suspension options, or utilize high-end billet parts with entry-level performance shocks.
- **SHOCKS:** Shock upgrades are a common area for an exceptional performance improvement. A shock for a given vehicle and lift height can be sold individually to the customer looking to upgrade their current suspension setup. We offer shocks at multiple levels of performance for many applications



ICON PART # K25012



## IVD TECHNOLOGY

- **DIGRESSIVE PISTON SHOCK TECHNOLOGY:** All ICON shocks feature digressive pistons for improved performance. The digressive piston allows us to obtain exceptional low speed control and vehicle stability without adding harshness on larger obstacles or sharp hits.
- **BUMP ZONE:** Featured on many ICON 2.5" piggyback shocks, the bump zone adds 20% more force to the shock in the last couple inches of travel. This helps reduce bottom-out and increases rebound control on larger hits and obstacles.
- **CDC VALVE:** The Compression Damping Control Valve is optional on many remote reservoir shocks and features an external knob with 10 detented settings. This allows the user to change the ride from soft to hard with a simple click of the adjuster knob. CDC valves are also calibrated to be vehicle specific and work with the main shock valving per each application.
- **EXTERNAL BYPASS SHOCKS:** ICON's most advanced shocks use the off-road racing technology of external bypass tubes to give the ultimate in off-road performance, position sensitivity, and adjustability.

## RACING (RESEARCH & DEVELOPMENT)

- **ICON Vehicle Dynamics** sponsors teams in desert racing, King of the Hammers and short course. We don't race for marketing - we race for R & D. The teams we support run the same parts that are in our products. This helps us accelerate testing and continually improve on performance.

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[www.iconvehicledynamics.com](http://www.iconvehicledynamics.com)

