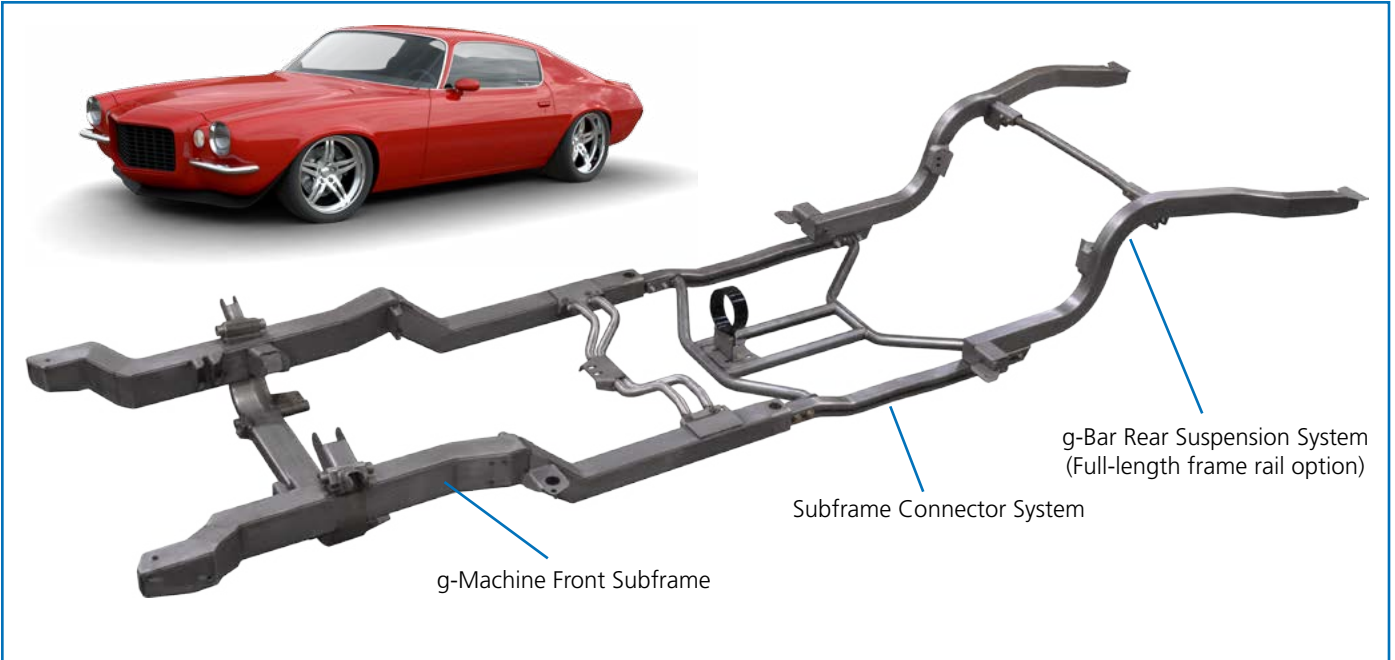


**g-Machine Front Subframe, Frame Connector and g-Bar Rear Suspension System for '70-81 Camaro/Firebird**



## Modular Three-Section Frame System

Chassisworks' '70-81 Camaro frame system is made up of three separate subframe systems that can be used individually with the factory subframe and rear frame rails or used collectively to form a bumper-to-bumper full-frame assembly.

### **g-Machine Front Subframe** [CLICK for More Info Online](#)

The heart of the system is the direct-fit, fabricated, g-Machine Camaro front subframe, a high-performance suspension and steering solution, engineered from the ground up to give classic F-bodies the broadest selection of performance configurations available. Control arm, shock absorber, spindle, brake, and steering options allow custom configurations suitable for show-dropped air suspensions, competitive road handling, lightweight drag racing, and everything in between.

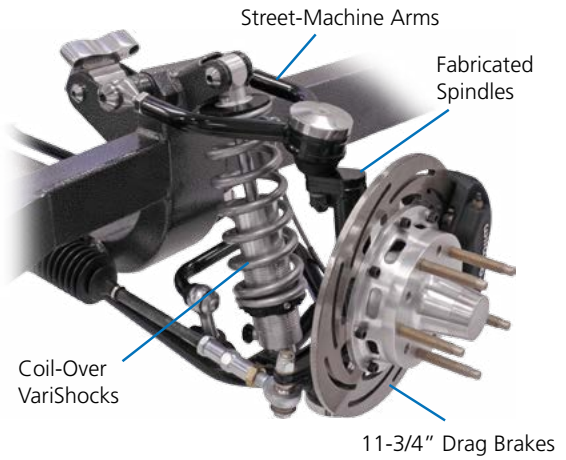
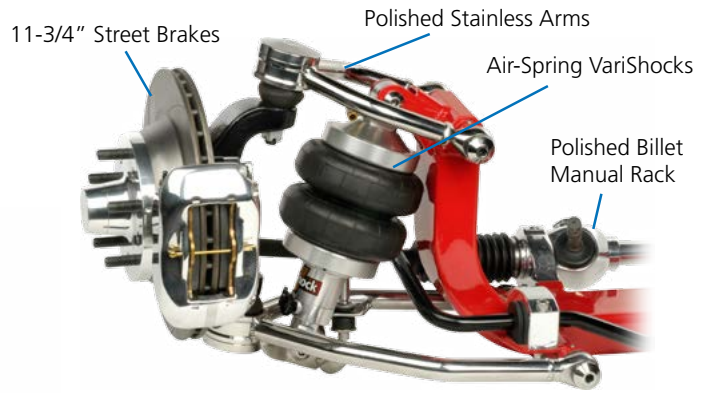
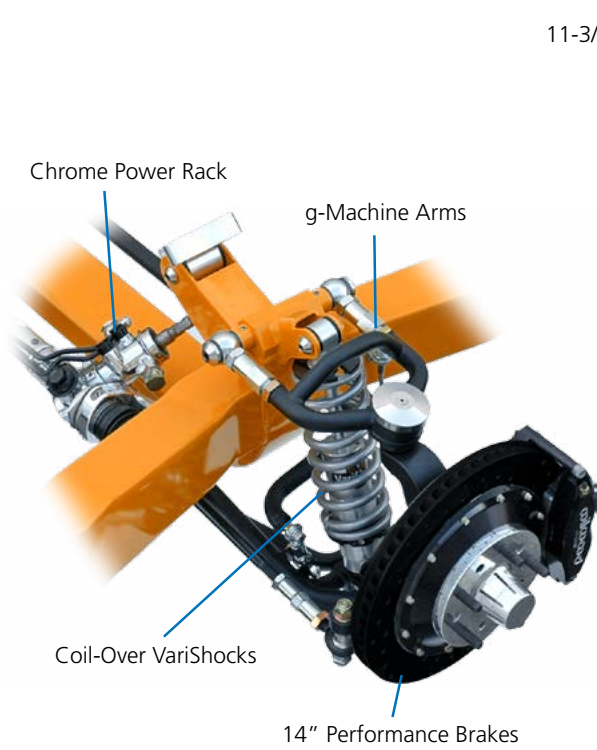
### **Subframe Connector System** [CLICK for More Info Online](#)

To bridge the unsupported distance between the front subframe and the rear suspension, multiple styles of mandrel-bent 2x2" subframe connectors are available for bolt-in installation with factory or Chassisworks' front subframes. A bolt-in, factory-welded, center support with optional driveshaft loop can also be added to further stiffen the chassis and strengthen the lower suspension mounting area.

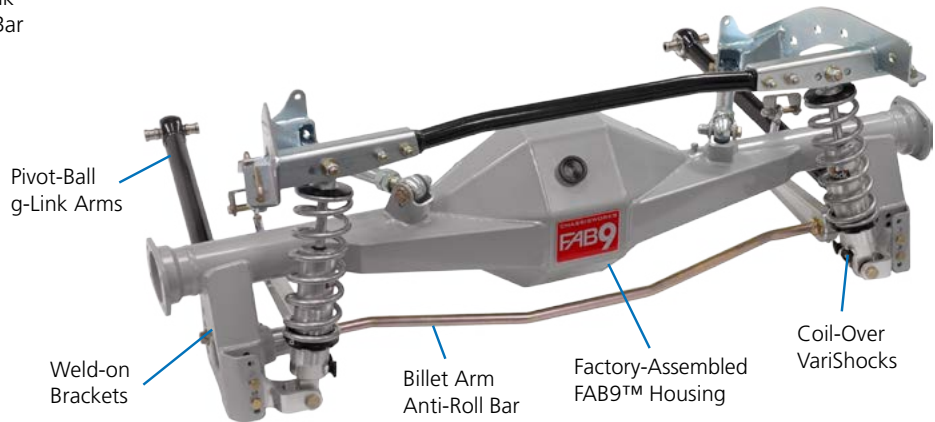
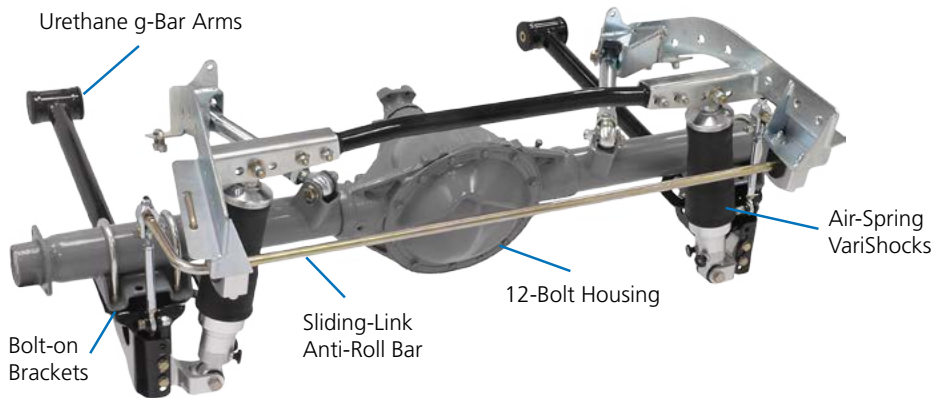
### **g-Bar Rear Suspension System** [CLICK for More Info Online](#)

Chassisworks' g-Bar and g-Link systems represent the current state-of-the-art in retrofit, canted-4-bar suspension design. Following suit with the configuration options of the g-Machine front subframe system, the g-Bar and g-Link air-spring and coil-over systems feature multiple styles of suspension links, shock absorbers, anti-roll bars, and installation brackets. The system can be installed with factory 10- or 12-bolt rearend housings, or Chassisworks's FAB9™, Ford 9" conversion, fabricated housings. To accommodate multiple levels of vehicle customizing and performance goals, rear frame brackets can be ordered as bolt-in, weld-supported brackets or as short 2x3" front rail and full-length 2x3" frame rails to dramatically increase rear-tire clearance.

## Sample Front Suspension Configurations



## Sample Rear Suspension Configurations



## Spindle Selections

### Fabricated Drag-Race Spindle

Chassisworks offers an extremely lightweight (6.56 lb), fabricated, chrome-moly spindle for weight-sensitive, drag race g-Machines with a crossmember and skinny tires (not recommended for street use). The use of finite element analysis (FEA) software enabled selective removal of excess material to reduce weight without decreasing strength or reliability.



### Sculpted g-Machine Spindle

Our sculpted spindle provides reliable and predictable performance for everyday street or road-handling use. Spindles feature a 2"-dropped ride height and are taller than commonly used OEM spindles, providing a lower center of gravity and a correct camber curve for improved cornering traction. Available bare or in black powder-coat finish.



### Billet-Aluminum Upright

Engineered to work with Chassisworks bolt-on clips and 4x2" weld-in suspension crossmembers, the billet-aluminum unit-bearing upright again raises the pro-touring bar. The lightweight upright features a heavy-duty, sealed unit bearing that is both larger in diameter and considerably more reliable than the commonly used and frequently replaced Corvette components.



### Bump-Steer Kit

The latest innovation from the mind of Chris Alston is our infinitely adjustable bump-steer kit with Teflon®-lined 4130 rod end. Utilizing a unique 3/4" threaded stud with locknut, the height of the pivot point can be quickly adjusted without disassembly or hasseling with shim stacks. No other adjustment mechanism is this precise.



### Disc Brake Kit

Continuing down the path of bigger wheels and tires leading to better performance, Chassisworks offers a specially developed brake kit, featuring 14" or massive 15" x 1.25" rotors with radial-mount, Wilwood or Baer, 6-piston calipers in a variety of finishes and optional pad compounds.

## Anti-Roll Bar Selections

### Street-Machine Anti-Roll Bar (3/4" diameter)

Suitable for street/strip performance vehicles, our tubular anti-roll bars for g-Machine crossmember systems equipped with Street-Machine A-arms offer increased stiffness with less body roll than standard OEM suspensions. End links are a unique, billet steel component with an eye-style upper mount

to allow unrestricted bar rotation and a stem-style lower end to better dampen vibration. Graphite-impregnated, black urethane bushings are used throughout to improve lubrication and isolate the anti-roll bar at the frame mounts and end links.



### g-Machine Anti-Roll Bar (1" and 1-1/4" diameters)

Our street/track performance g-Machine anti-roll bar offers substantially increased stiffness and flatter cornering over our standard Street-Machine component. Teflon® race, spherical-bearing, end-link assemblies create deflection-free pivot points

with minimal-resistance and enable the anti-roll bar's effects to be immediate, more linear, and predictable. End-link length is also adjustable to eliminate static preload and ensure balanced handling.



### Billet g-Machine Splined Anti-Roll Bar (1-1/4" diameter, gun-drilled, adjustable)

The top tier item of the anti-roll bar selection is our splined 1-1/4" diameter gun-drilled bar with billet steel arms, manufactured entirely in-house at Chassisworks. Each arm features three mounting holes, which provide six different bar rates. Polymer anti-roll-bar pivot bearings combined with Teflon® race, spherical-bearing, end-link assemblies create

deflection-free pivot points to eliminate any free play and enable the anti-roll bar's effects to be immediate, more linear, and predictable. End-link length is also adjustable to eliminate static preload and ensure balanced handling.



## VariShock Quality

Delivering a finished product that is of excellent quality and value is the primary focus throughout the VariShock product line. Unlike other brands in this price range, VariShocks are engineered, manufactured, and assembled in America using state-of-the-art engineering workstations and computer-numeric-controlled (CNC) manufacturing equipment. Each component, including valves, adjusters, and internal shaft seals is designed and manufactured specifically for use in VariShock products. This level of clean-sheet engineering is the first step to producing longer lasting seals that keep dirt out of the shock absorber and extend service life between rebuilds.

## Select Your Performance Level

We offer the broadest range of shock options of any manufacturer, allowing detailed custom configuration of your complete suspension system.

- **SensiSet (SS)** - Factory set, ride-sensitive valving
- **QuickSet 1 (Q1)** - Single 16-position knob adjusts bump and rebound simultaneously
- **QuickSet 2 (Q2)** - Dual 16-position knobs adjust bump and rebound independently
- **QuickSet 4 (Q4)** - Four 16-position knobs provide high- and low-speed adjustment of bump and rebound independently
- **QuickSet 4 Remote (Q4R)** - Gas-pressurized remote reservoir version of our QuickSet 4 valve system offers higher performance and increased travel range
- **Coil-Over Shocks** - Traditional coil-spring configuration offers selection of spring rates and adjustable spring seats
- **Air-Spring Shocks** - Integrated air-spring configuration allows variable vehicle ride height with benefit of adjustable shock valving

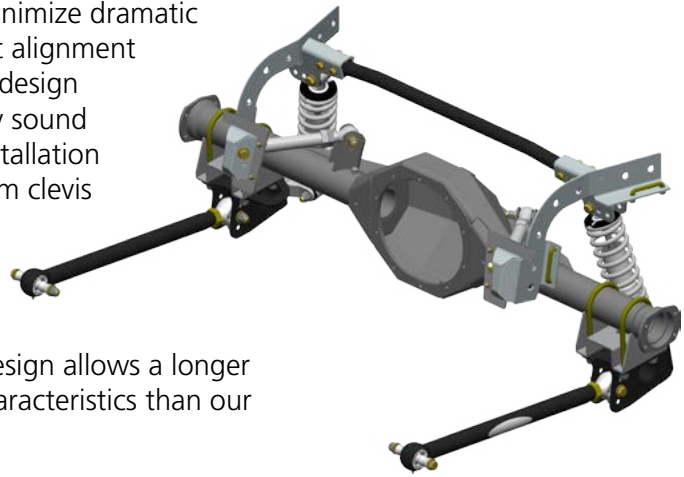


QuickSet 4



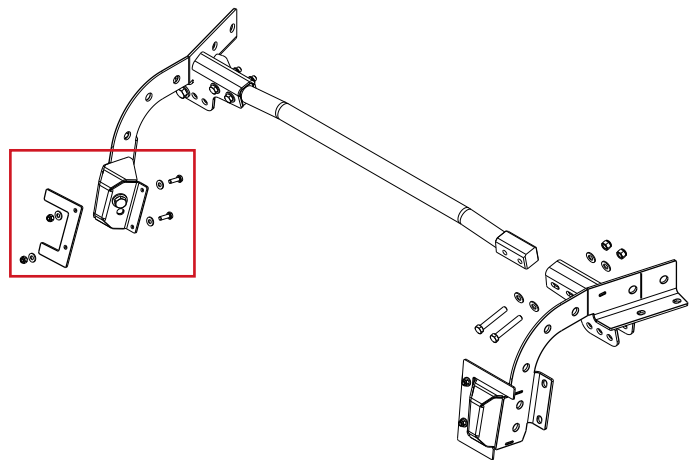
## Upper Control Arm Modification

Maximizing the length of the upper control arm to minimize dramatic and unwanted changes in pinion angle and driveshaft alignment during suspension travel was an extremely important design consideration. Positioning the mounts at a structurally sound chassis point that would not overly complicate the installation was another. To solve these issues, a boxed control arm clevis is integrated into the factory-welded g-Bar frame brackets and optional frame rails. The clevis box extends through an easily accessed portion of the rear floor sheet metal and does not interfere with installation of the stock seat or interior panels. This design allows a longer upper control arm with more predictable handling characteristics than our competitors.



## Frame Bracket - Upper Arm Clevis Box

The standard frame bracket and frame rail versions of the g-Link require a roughly 3x4" hole be cut through the underseat sheet metal. A template to mark the hole location is provided in all versions of the g-Bar and g-Link rear suspensions. The upper arm mount is supported as part of the frame bracket or frame rail and features an inside support flange, which bolts to an interior reinforcement plate for alignment. The three layers are then welded along both seam joints, sealing off the interior.



## Frame Rails - Lower Arm Relocated Mount

Both the short-forward rail and full-length frame rails are cut into the stock floor pan to move the lower control arm mounting point inward enabling use of extremely large rear tires. Templates and fill plates are included to eliminate any guesswork and minimize installation time.



All prices subject to change. Current pricing available at [www.cachassisworks.com](http://www.cachassisworks.com).



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