CHRIS ALSTON'S Chassisworks
THE HOME OF HIGHER TECHNOLOGY

Direct-Fit FAB9™ 9" Rearend Housings for 1979-2004 Mustangs and Fox Chassis Vehicles

Housing shown with spherical-bearing eyes and optional anti-roll bar

Shown with urethane-bushing eyes and optional back brace

Direct-Fit FAB9™ 9" Housing for Fox Chassis

Chassisworks' direct-fit FAB9™ fabricated 9" housing offers exceptional performance, reliability, and adjustability to 1979-2004 Mustangs and other Fox chassis vehicles. Housing mounts have been engineered to accept OEM or aftermarket control arms and feature multiple mounting positions for instant-center adjustment. Shock mounts also have the benefit of multiple mounting positions, which enable a ride-height adjustment range of 1-3/4" when used with coil-over shocks. FAB9™ offers superior strength from fabricated center-section panels, internal tube gussets, folded back braces, and consistent robotic spray-arc welded seams. Various options are also available, including mild-steel or 4130 chrome-moly construction, urethane-bushing or spherical-bearing upper arm mounts, and the drag-race-ready anti-roll bar and wheelie-bar mounting assembly. (Anti-roll bar and wheelie-bar kits sold separately.) Housings are available in stock and narrowed widths to a minumum of 54-1/2" wheel to wheel.

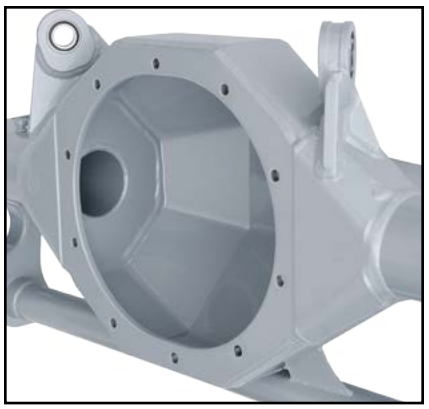
Direct-Fit Installation

Chassisworks' direct-fit FAB9™ housings are engineered to work correctly with OEM or aftermarket control arms in the factory mounting locations. Both upper and lower control arm mounts are precisely angled to maximize available bushing compliance, bearing-misalignment range, and structural strength. Shock mounts can be used with OEM or aftermarket replacement shocks as well as our high-quality double-adjustable VariShock Bolt-Ins. A coil-over conversion kit is available.

Narrowed Housing Widths

Housings can be built to standard widths for OEM wheel offsets or narrowed to accommodate wider tire and wheel combinations. Widths can be narrowed in 1/4" increments to a wheel-to-wheel minimum of 54-1/2" (4-1/2" less than factory for 1979-1993, 6" less for 1994-1998, and 7-1/2" less for 1999-2004 Mustangs). Complete correct-length axle packages and third members are also available. Ask our sales representatives for details.

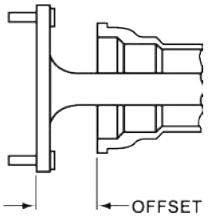
FAB9™ Construction

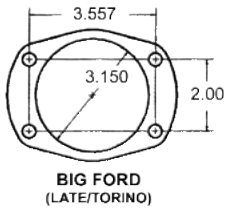


Finite element analysis software was used to create a fabricated 9" (FAB9™) center section that is stronger yet lighter than its OEM counterpart. Angular panels, internal gussets, and a heavy-wall front face are assembled by a robotic spray-arc welder to ensure every housing is built to exacting standards. Axle tubes are 3" in diameter and welded along the internal tube gusset as well as the tapered edge of the center section. It is this enclosed internal chamber at each end of the center section that gives the entire assembly superior strength over OEM and competitors' designs. The housing can be further strengthened by adding an optional folded back brace. FAB9™ back braces are exact-fit boxed structures spanning from the outer edge of the back panel to the inside edge of the axle mounts. The tapered design is broad closest to the center section for maximum support and narrows toward the housing ends for lighter weight.

Housing Ends & Brake Options

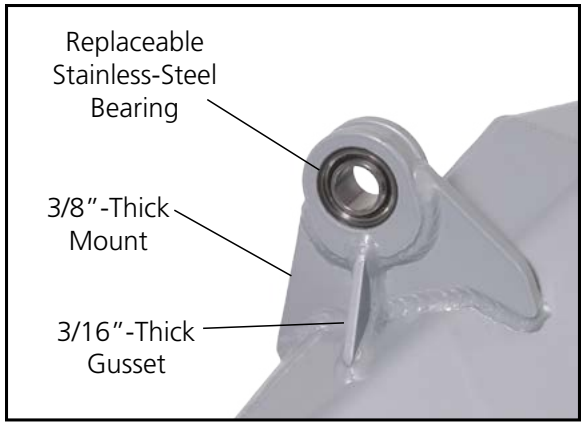
Each housing receives billet, late big Ford (Torino) housing ends. This drag-style housing end eliminates excess material normally present for the seal seat, reducing weight and allowing the use of stronger, large-diameter axle shafts. To properly seal the axle tube, a 3.150"-diameter internally-sealed wheel bearing must be used. The billet housing ends also feature direct threads that eliminate additional mounting hardware for a cleaner installation. Aftermarket rear brake systems designed for the "late Ford" bolt pattern with 2.50" offset can be used. We also offer a selection of direct-fit Wilwood brake kits for street or drag-race use.

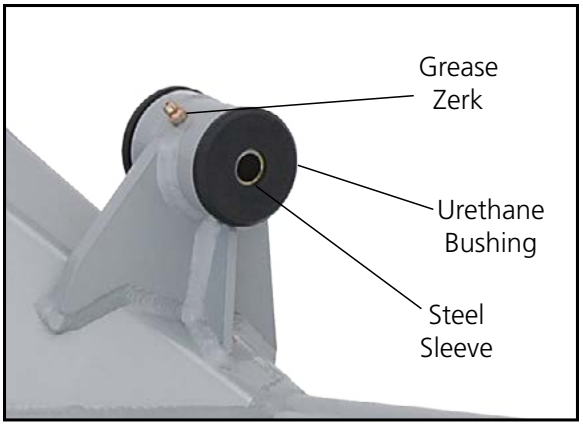




Upper Control Arm Mounts

Two types of upper control arm mounts are available: urethane bushing and spherical bearing. Bushing and bearing housings are securely mounted to the center section by heavy, 3/8"-thick, plate-steel mounting tabs with 3/16" side gussets. The upper control-arm's pivot position has been relocated upward approximately 1-3/4". This modification is necessary to allow the upper control arms to clear the larger FAB9™-housing center section. Additionally, this upper mount relocation—combined with the adjustable lower control arm mount—provides suspension geometry better suited to drag racing. Urethane bushings are made from a quality high-durometer material for greatly extended service life and are best suited for street/strip or street/track applications where ride quality is still important. Spherical bearing mounts are recommended for high-performance applications needing absolute control of rearend-housing movement. Bearing assemblies are secured by spiral-wound retaining rings and can be easily replaced when necessary.





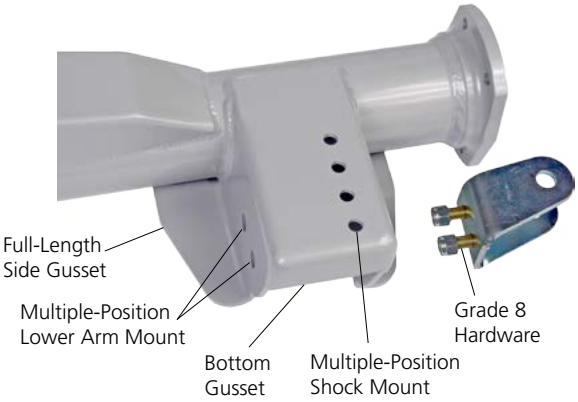
Replacement bearing and bushing kits are available.

Lower Control Arm Mounts

The lower axle brackets feature two control-arm mounting positions: one at the stock position, and the second 1-1/8" below the stock position. This enables you to improve your 60-ft times by adjusting the suspension geometry to better suit your tires' level of traction. The lower control arm axle brackets are formed from a single piece of 3/16" sheet metal, eliminating long seams. The design incorporates broad, full-length gussets along each sidewall and a bottom gusset to effectively box the structure. This design is unique to Chassisworks and is the strongest, most efficiently designed bracket in use for Fox chassis applications.

Standard Shock Mount

The standard lower shock mount is a one-piece sheet metal clevis that mounts directly to the axle bracket and is included with each Fox chassis FAB9™ housing. The clevis can be used with OEM or VariShock Bolt-In replacement shocks. Multiple mounting holes at the axle bracket enable a selected ride-height range of 1-3/4" without sacrificing available shock travel.



Optional Inboard Shock Mounts

You can gain a substantial amount of tire clearance by choosing the optional anti-roll-bar-bracket mounted, shock-mount system. The 6-degree-offset, billet aluminum mount can be placed at one of four positions, enabling a ride-height adjustment range of 1-7/8". (Upper coil-over-shock crossmember kits are required and are available in 36" and 48" widths.

Part Number	Description
OPTION	Inboard billet shock mounts

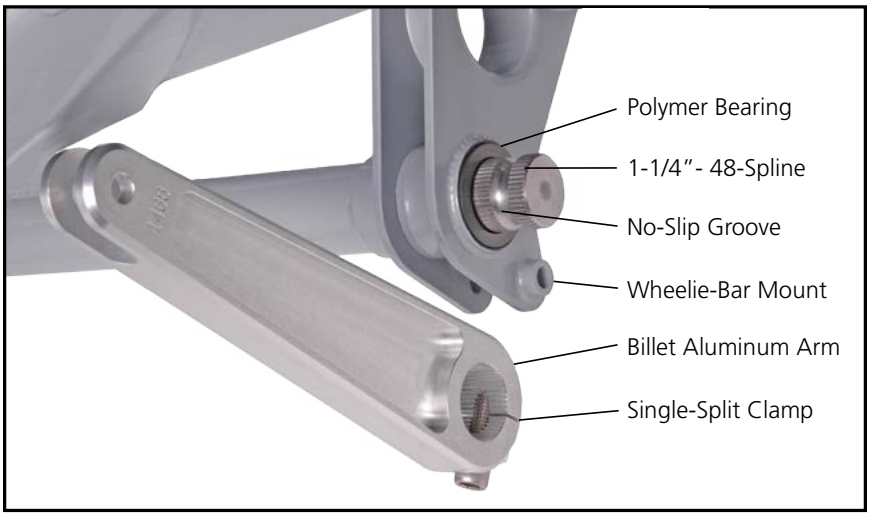
Complete Hardware Kit

Each FAB9™ housing comes equipped with an easily accessible fill hole, drain, and all necessary hardware. The fill hole is purposely oversized and strategically placed to allow visual inspection of the ring gear without draining fluid or disrupting gaskets or seals. A black anodized, billet aluminum cap with an O-ring seal prevents any unwanted fluid seepage. A specially slotted drain insert, welded to the floor of the center section, allows complete drainage of fluid and increases drain-plug thread engagement. The magnetic drain plug with a reusable copper gasket captures metal particles suspended in the fluid, reducing the rate of wear on gears and seals. To relieve internal pressure, housings are fitted with an axle vent located along the top of the axle tube. Equalized pressure improves the effectiveness of all seals and gaskets for trouble-free extended use. If an external fluid catch can is required, axle vents can be easily removed using the 7/16" hex and replaced with an appropriate 1/8" NPT fitting. Third-member mounting hardware consists of high-strength 12-point studs, hardened SAE flat washers, and nylon-insert locknuts.

Anti-Roll Bar (Drag Race)

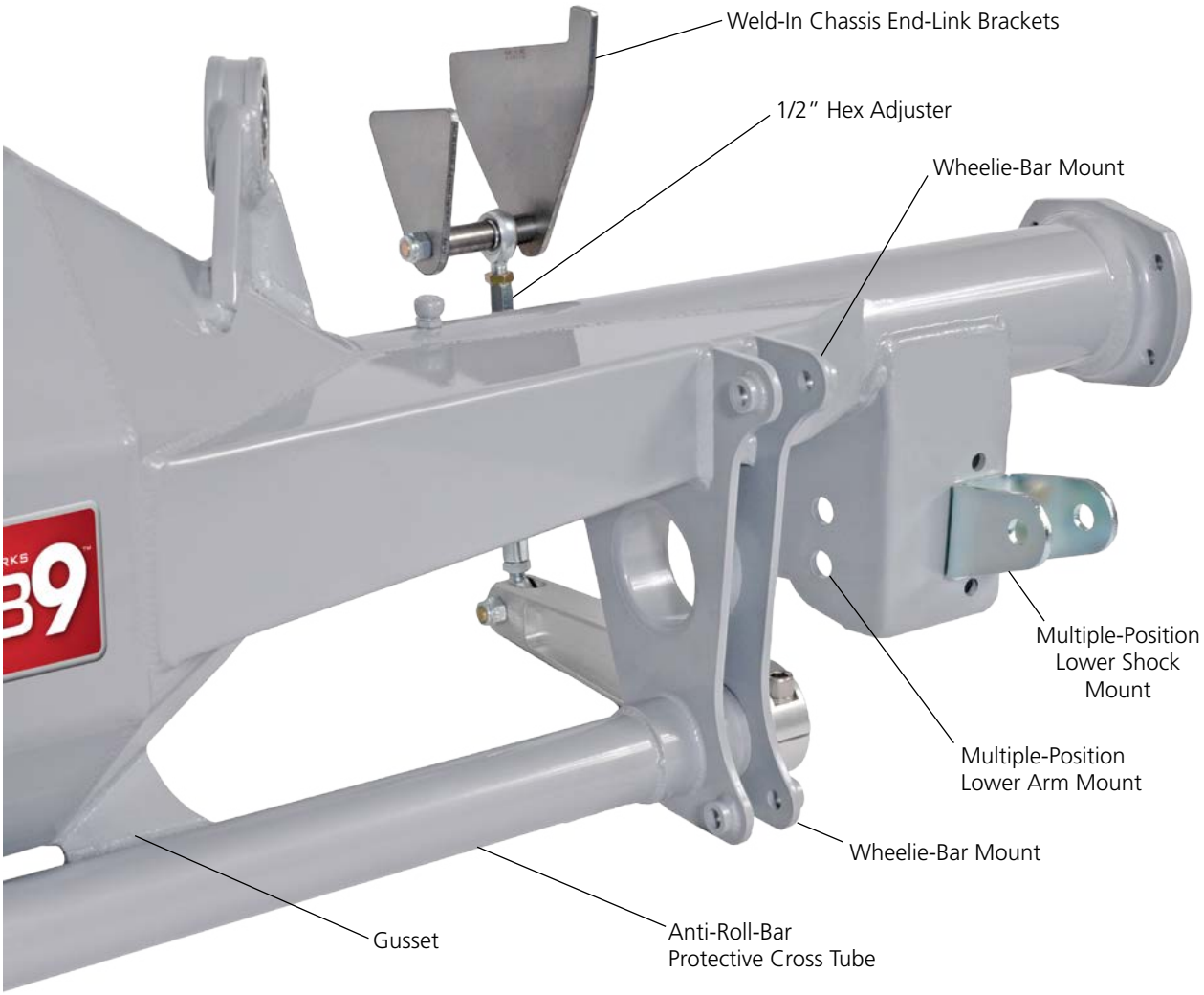
The newest innovation in Fox chassis rear-suspension control is our anti-roll bar and integrated housing mount. It has been designed specifically for high-horsepower drag-racing applications to dramatically reduce body roll during launches. This improvement has consistently been shown to produce quicker 60-foot times and ETs. The weld-in end-link brackets feature self-locating tabs, making installation much easier by correctly positioning the brackets against the frame. The anti-roll bar assembly pivots on high-strength, low-friction polymer bearings seated directly in the axle mounts.

The anti-roll bar assembly includes a large, 1-1/4"-diameter, heat-treated torsion bar with splined ends and billet aluminum arms. Each arm is machined with a single split to ease installation fit and clamp down upon the spline when tightened. A socket-head fastener applies pressure to the spline, creating a play-free joint while also fitting into a groove machined at the end of the bar. This locking joint prevents the arms from sliding even under the most extreme force. Billet arms are connected to the chassis mounts by adjustable-length end-link assemblies. Steel end-link tubes feature left- and right-hand threads and a 1/2" hex for quick adjustment during installation. Adjuster links feature a 3/8"-shank, 4130-body rod end for the ultimate in strength.



Anti-Roll-Bar Kit (5806-M40)
Sold Separately

Our anti-roll-bar mounting assembly is built to withstand the abusive environment of professional drag racing and further stabilizes and strengthens the housing. Axle brackets use a dual-plane design and feature two stabilizing gusset tubes, with one acting as the polymer-bearing housing. A protective anti-roll-bar tube connects the two axle brackets and is tied to the center section by two gussets. Extended tabs at the top and bottom of each bracket are fitted with thick 3/8" wheelie-bar mounting holes. The additional material prevents elongating the bolt hole, a common problem with designs made of thinner sheet metal.



Part Number	Description
5806-M40	Anti-Roll-Bar Kit (bar, arms, links, brackets, hardware)

Housing Applications

OEM Year	Dimensions[1]		Upper Arm Mounts	Housing Material	Anti-Roll Bar Mount	Part Number
	Wheel to Wheel[1]	Housing Only[2]				
1979-1993	59″	53-1/2″	Urethane	Mild Steel	-	84M40-207
			Urethane	Chrome-moly	-	84M40-217
			Spherical	Mild Steel	-	84M40-307
			Spherical	Chrome-moly	-	84M40-317
			Urethane	Mild Steel	Yes	84M40-407
			Urethane	Chrome-moly	Yes	84M40-417
			Spherical	Mild Steel	Yes	84M40-507
			Spherical	Chrome-moly	Yes	84M40-517
1994-1998	60-1/2″	55″	Urethane	Mild Steel	-	84M50-207
			Urethane	Chrome-moly	-	84M50-217
			Spherical	Mild Steel	-	84M50-307
			Spherical	Chrome-moly	-	84M50-317
			Urethane	Mild Steel	Yes	84M50-407
			Urethane	Chrome-moly	Yes	84M50-417
			Spherical	Mild Steel	Yes	84M50-507
			Spherical	Chrome-moly	Yes	84M50-517
1999-2004	62″	56-1/2″	Urethane	Mild Steel	-	84M60-207
			Urethane	Chrome-moly	-	84M60-217
			Spherical	Mild Steel	-	84M60-307
			Spherical	Chrome-moly	-	84M60-317
			Urethane	Mild Steel	Yes	84M60-407
			Urethane	Chrome-moly	Yes	84M60-417
			Spherical	Mild Steel	Yes	84M60-507
			Spherical	Chrome-moly	Yes	84M60-517

Footnotes:

All	Uses late big Ford drag-style housing ends. (Requires SET-20 or aftermarket externally sealed bearings.) 3.150″ bearing bore, 2.50″ brake offset.
1	Dimensions given are for standard stock widths. Housing widths are available in 1/4″ increments from 62″ to a minimum of 54-1/2″.
2	Wheel-to-wheel dimension calculated using 1/4″-thick hats.
3	Housing-only dimension is measured to outside surfaces of housing ends.
4	Prices listed are for bare metal, assembled housings. Additional charge for installed back brace ($150 mild steel, $200 chrome-moly).

Related Products

Rear Control Arms for Fox Chassis Vehicles

Chassisworks offers two levels of race-ready, adjustable-length, upper and lower control arms for Fox chassis vehicles from 1979 to 2004. Both sets feature quality, 4130 spherical-bearing rod ends and 4130 chrome-moly lower arms for absolute control of rearend-housing movement in high-horsepower, high-traction performance applications.

Rear Coil-Over Conversion Kit

The Chassisworks rear coil-over conversion uses a true coil-over shock designed specifically for the damping and travel requirements of the Fox chassis. The system utilizes OEM mounting locations and can be used with direct-fit FAB9™ or factory rearend housings. An adjustable lower shock mount is available and required for both FAB9™ or factory housings. Each end of the shock features spherical bearings that enable the shock to misalign as needed and avoid unpredictable, untunable, bushing deflection. The upper spherical mount is a unique, VariShock exclusive, extended-stem-style configuration that lowers the upper spring seat for additional tire clearance. The stem features an easily accessible zerk fitting to inject grease directly onto the bearing contact surfaces. Shocks are available with 16-position, single- or double-adjustable damping. Kits include coil-over shock, choice of spring rate, and VariShock spanner wrench.

Adjustable Billet Lower Shock Mount

Separately available is our highly adjustable billet lower shock mount kit. The bolt-together assembly enables a greater range of ride height with finer adjustment increments. Adjustments are made in 7/16" increments to a maximum of 2-5/8". Kits consist of billet steel mounting blocks, precision laser-cut mounting tabs, and 3/8" Grade 8 mounting hardware. This mount system is highly recommended for our coil-over shock conversion and is available for OEM or FAB9™ rearend housings.

Upper Coil-Over Shock Crossmember

These 1-5/8 x 36"- or 48"-wide crossmembers are required if you select the optional inboard shock mounts with your FAB9™ housing. Crossmember kits come complete with a trim-to-fit length of tubing, four shock-mount tabs, and 1/2" Grade 8 mounting hardware.

All prices subject to change. Current pricing available at www.cachassisworks.com.

CHRIS ALSTON'S Chassisworks THE HOME OF HIGHER TECHNOLOGY

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