

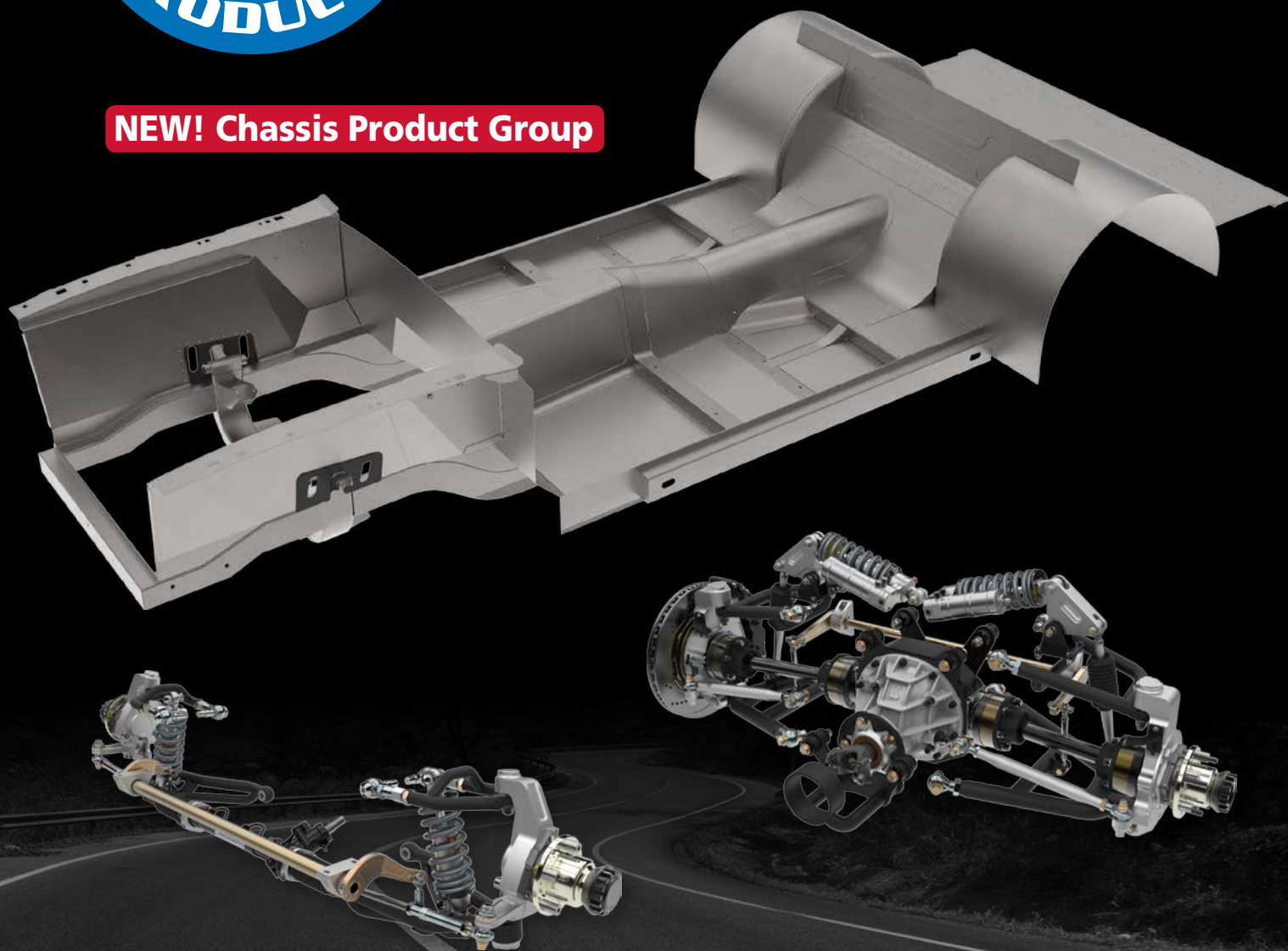


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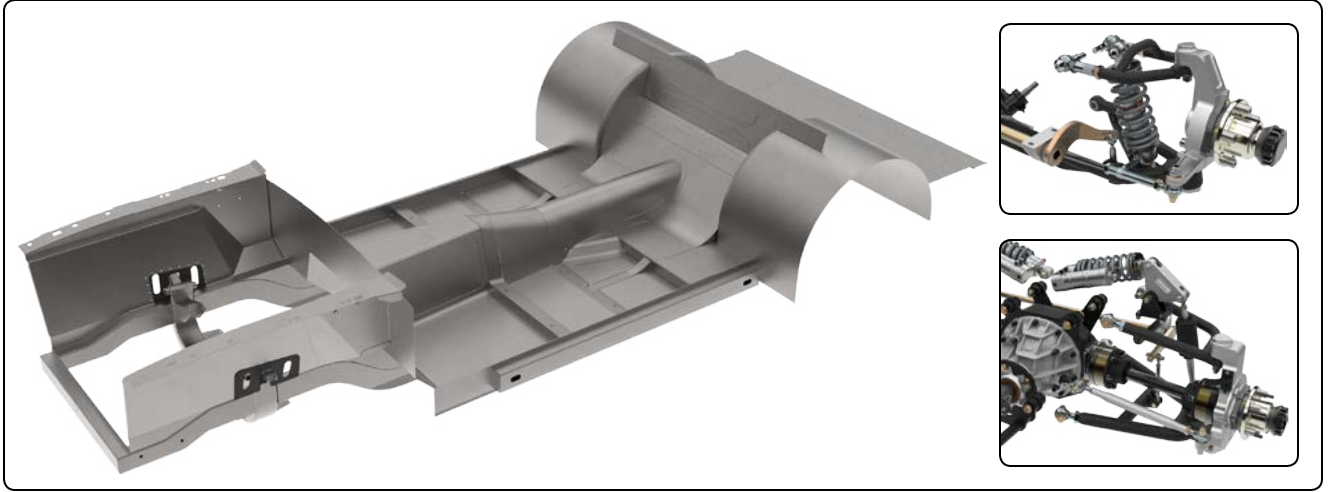
Online Tech Help

Technical-information data sheets and installation instructions for each of our products can be downloaded from our online product document library.

www.totalcontrolproducts.com/docs

NEW PRODUCTS

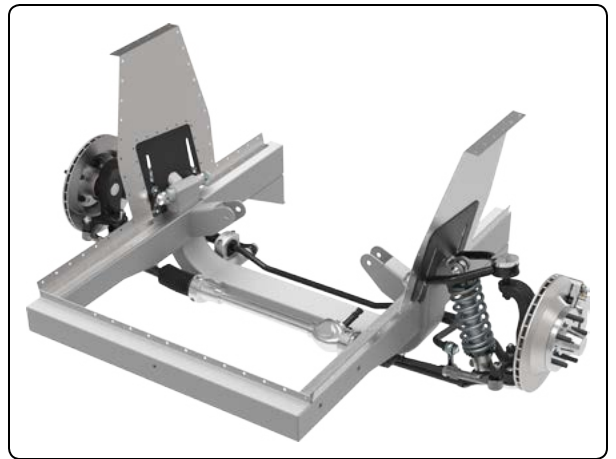
gStreet Pro-Touring Chassis 4



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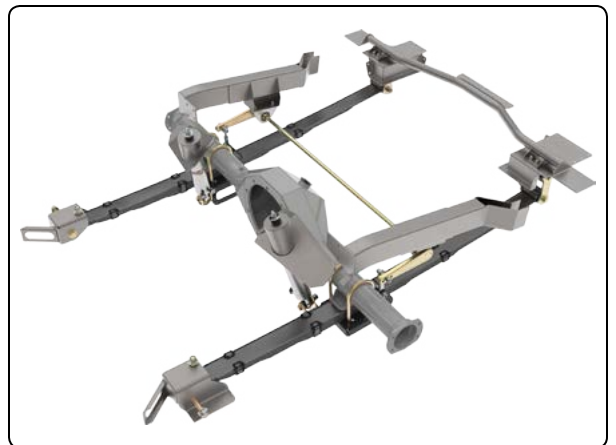
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Mini-Tub g-Link Suspension 60



Mini-Tub Leaf-Spring Suspension 78



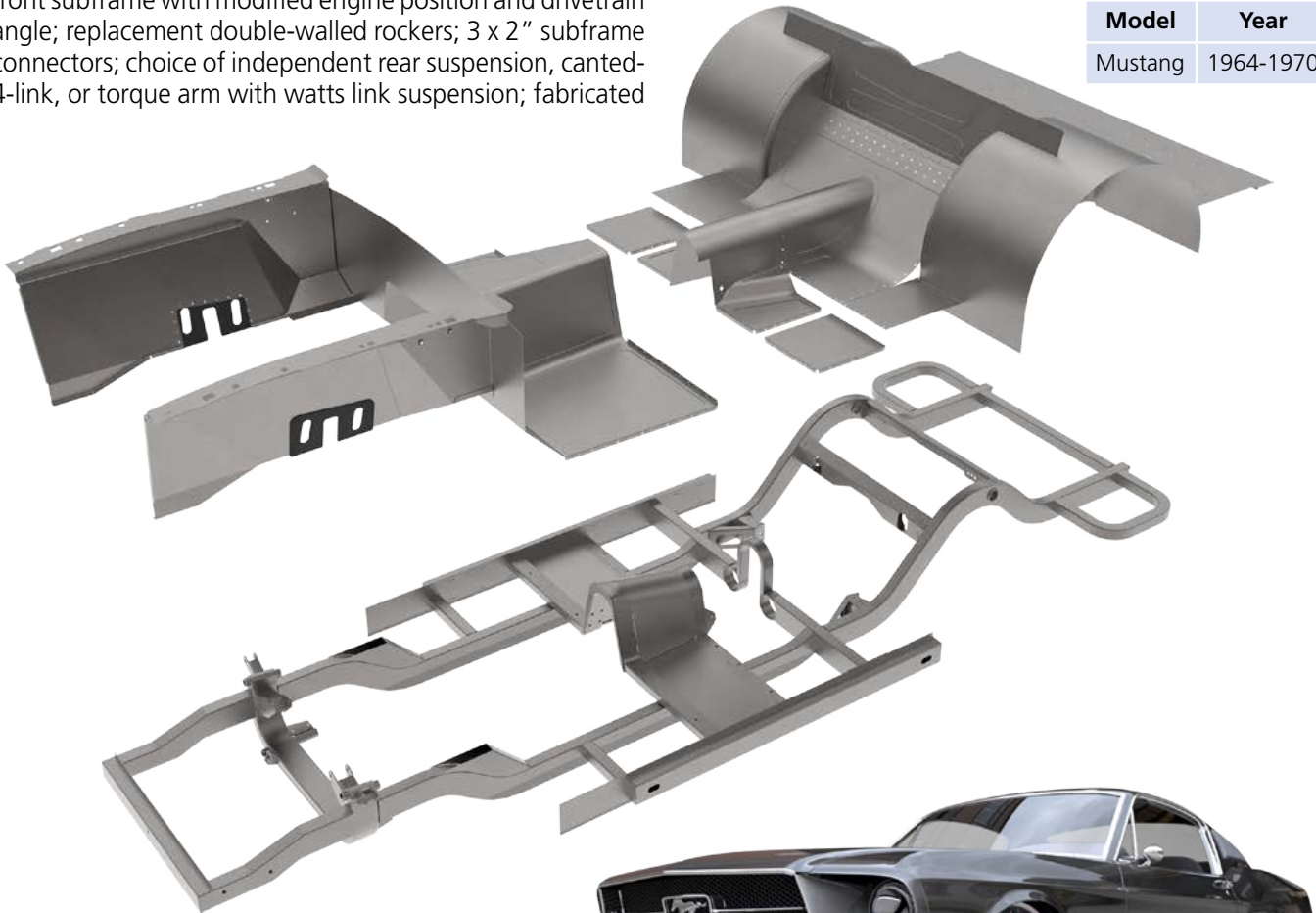
gStreet Pro-Touring Chassis System

The ultimate bumper-to-bumper chassis solution for high horsepower, big tire, pro-touring projects is now available as an off-the-shelf item. Builders can take advantage of Total Control Products robust engineering and manufacturing capabilities, saving hours of fabrication time and effort, while significantly shortening the timeframe to deliver a top-tier performance vehicle.

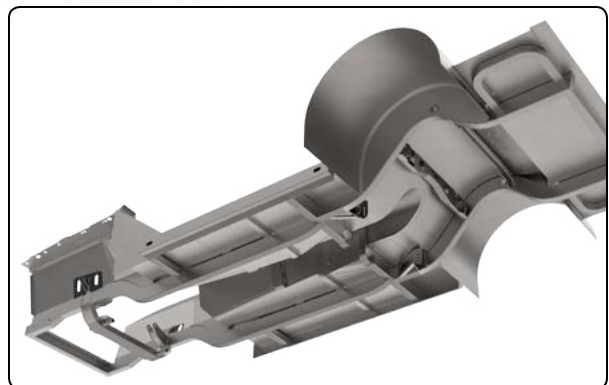
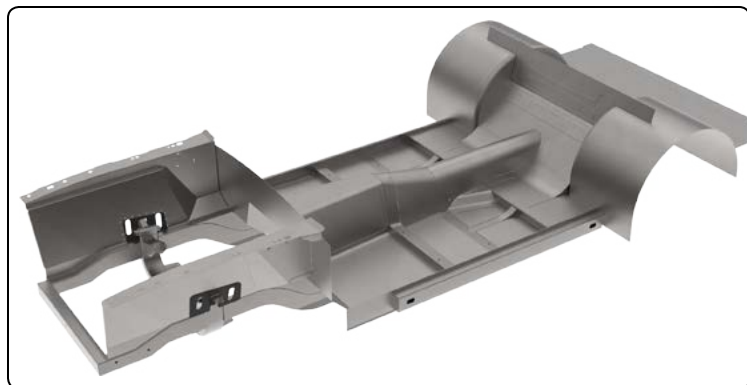
The complete system consists of the following: fabricated front subframe with modified engine position and drivetrain angle; replacement double-walled rockers; 3 x 2" subframe connectors; choice of independent rear suspension, canted-4-link, or torque arm with watts link suspension; fabricated

transmission-tunnel and lowered seat-mount assembly; complete interior tin kit, including inner fenders, front firewall, front and rear floor, wheel tubs, trunk floor, and rear firewall. The exact-fit roll bar or roll cage with forward support struts can be added to create an extremely rigid performance platform suitable for 1,500+ horsepower engine combinations, with room for large enough tires to put that much power to good use.

Model	Year
Mustang	1964-1970



7740-M10	Canted 4-Link gStreet Chassis
7741-M10	Torque Arm gStreet Chassis
7743-M10	Rocker-Arm IRS gStreet Chassis



Exact-Fit Roll Bars and Cages - gStreet Chassis

The gStreet Exact-Fit roll cages and roll bars are intended for pro-touring performance applications to add a level of protection and increase chassis rigidity. To improve interior clearance, fit, and accessibility, cage sides and rear struts feature additional bends not normally found in race-duty roll cages. Both roll bars and cages are constructed of mandrel-bent 1-3/4 x .134"-wall mild-steel tubing. Optionally available is an upgrade to 1-3/4 x .125" DOM tubing for compliance with SCCA rules.



7050-M10-X	Roll Bar (no door bars)
7051-M10-X	Roll Bar and Door Bars
7052-M10-X	Roll Cage 1-5/8" Mild Steel
7053-M10-X	Roll Cage 1-5/8" 4130
7054-M10-X	Roll Cage 1-3/4" .134" Mild Steel
7055-M10-X	Roll Cage 1-3/4" .125" DOM

Front Suspensions - gStreet Chassis

g-Machine Front Suspension



7780	g-Machine Front Suspension
	Tubular steel upper and lower arms (screw-in ball-joints), steel spindles
SHOCKS	Single- or double-adjustable COM-8-eye coil-over shocks 4-way adjustable COM-8-eye coil-over shocks with remote reservoir Single- or double-adjustable poly-eye air-spring shocks
SPRINGS	500, 550, 600, 675, 750
STEERING	Left (USA) or right (Australia) hand drive
BRAKES	13", 14" rotors; black or red calipers
SWAYBAR	g-Machine tubular fixed-rate 1-1/4" bar Splined-end adjustable-rate 1-1/4" bar

gStreet Front Suspension



7781	g-Machine Front Suspension
	Tubular steel upper and lower arms (integrated ball-joints), aluminum uprights, splined-end anti-roll bar
SPINDLE	4-1/2" or 4-3/4" 5-lug, or center-lock hubs
STEERING	Left (USA) or right (Australia) hand drive
SHOCKS	Single- or double-adjustable COM-8-eye coil-over shocks 4-way adjustable coil-over shocks with remote reservoir; COM-8 or pivot-ball eye Single- or double-adjustable poly-eye air-spring shocks
SPRINGS	500, 550, 600, 675, 750
BRAKES	14", 15" rotors; black or red calipers

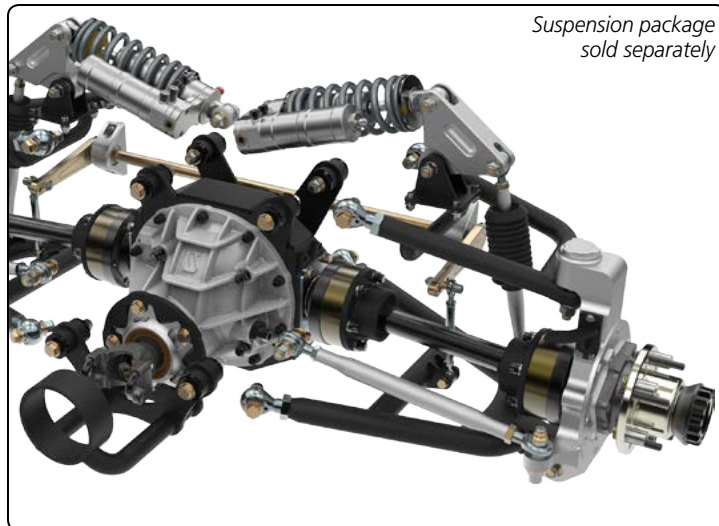
Rear Suspensions

We offer multiple styles of rear suspensions, allowing you to find the right tool for the job. While the IRS system can be somewhat a jack of all trades, the canted 4-link and torque arm suspensions may be a better fit for street-based or track-based performance respectively.



Rocker-Arm IRS System (Coil-Over or Air)

7793	Rocker-Arm-Actuated Coil-Over Suspension	OPTIONS	Coil-over spring rate (450, 500, 550, 600 lb/in)
OPTIONS	Wheel bolt pattern (5 x 4-1/2", 5 x 4-3/4", center-lock single nut connection)		Air-spring valving (single-, double-adjustable)
	Ring and pinion dropout style (Ford 9", Strange ST Iron, HD Pro Aluminum)		14" or 15" rotors, optional parking brake
	Coil-over valving (single-, double-, 4-way adjustable with piggyback reservoir)		Anti-roll bar; splined-end, adjustable rate
			Differential style (Strange S-Trac Helical, TrueTrac 35, Detroit Locker)



Suspension package sold separately



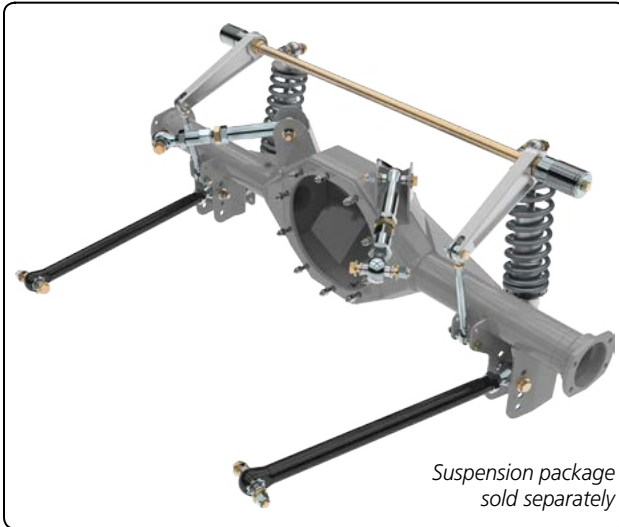
Rocker-arm coil-over shock layout positions the shocks inside the trunk. Corner weighting is then performed via the pushrods.

Control arm lengths were maximized for more consistent track width and consistent handling throughout travel.

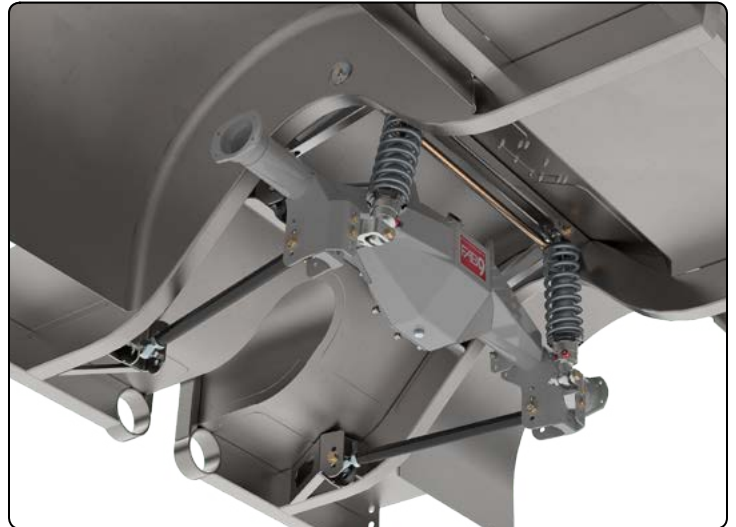
Canted 4-Link Rear Suspension - gStreet Chassis

7790	Canted 4-Link Suspension
SHOCKS	Single- or double-adjustable COM-8 coil-over shocks
	4-way adjustable COM-8 coil-over shocks, remote reservoir
	Single- or double-adjustable COM-8-eye air-spring shocks

SPRINGS	110, 130, 150, 175, 200, 250
HOUSING	FAB9 direct-fit rear end housing
	Weld-on axle brackets for Ford 9"
BRAKES	12", 13", 14", 15"



Canted 4-Link suspension with FAB9 housing shown. Available with weld-on brackets if using OE housing.

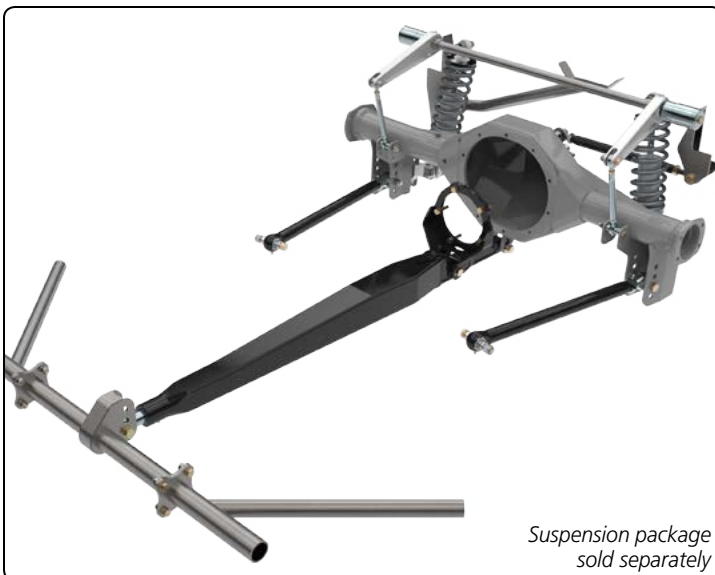


Complete rear clip system with builder wheel tubs. Floor system and tubs are trimmed to fit body during installation.

Torque Arm Rear Suspension - gStreet Chassis

7791	Torque Arm with Watts Link Suspension
SHOCKS	Single- or double-adjustable COM-8 coil-over shocks
	4-way adjustable COM-8 coil-over shocks, remote reservoir
	Single- or double-adjustable COM-8-eye air-spring shocks

SPRINGS	110, 130, 150, 175, 200, 250
HOUSING	FAB9 direct-fit rear end housing
	Weld-on axle brackets for Ford 9"
BRAKES	12", 13", 14", 15"



Torque Arm suspension with FAB9 housing and tubular front crossmember; used for installation without subframe connectors.



A Watts-link with roll-center height adjustment is used for superior lateral location and suspension tuning.

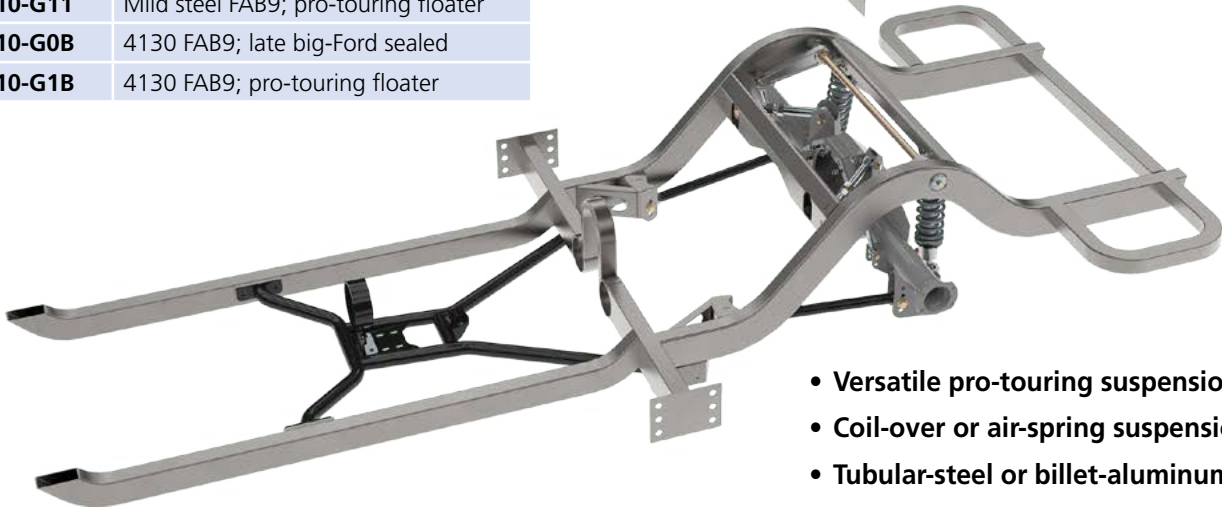
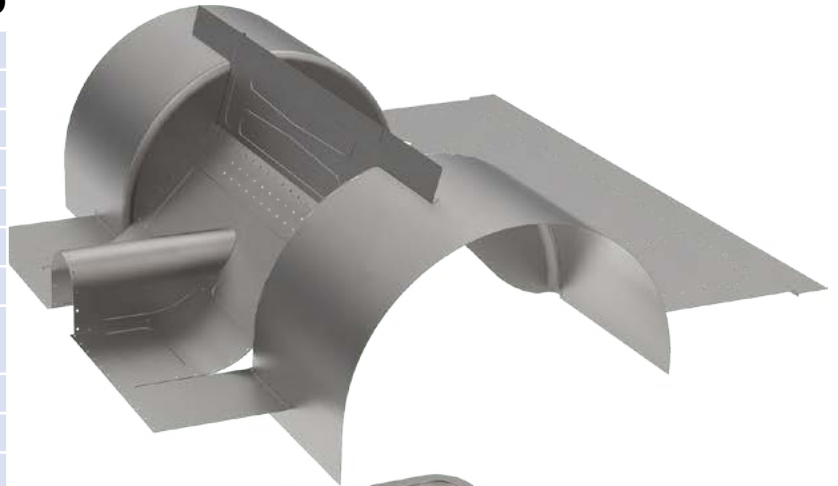
Weld-In Rear Frame Clip Systems

Working with the factory frame rails and sheet metal will always limit your choices of tires and wheels and the amount of power the stock chassis can handle. Our new weld-in frame clip and floor systems allows you to simply cut out the rust damaged and

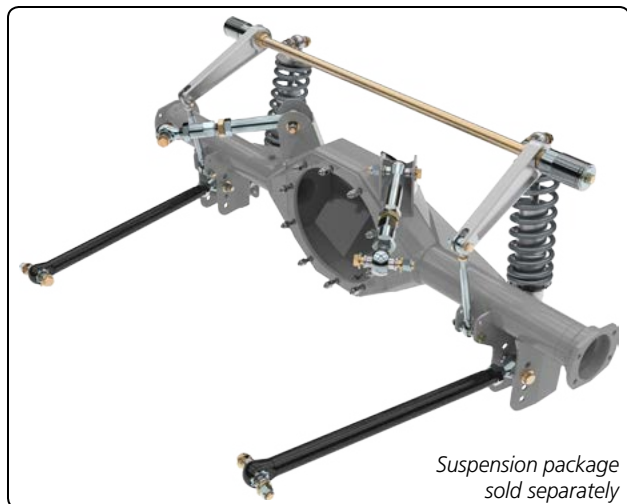
fatigued stock chassis and replace with a completely new system that offers dramatically greater strength and performance. **NOTE:** Rear frame clip, may be paired with direct-fit front suspensions or systems moderately below the stock ride height.

Canted 4-Link Rear Frame Clip

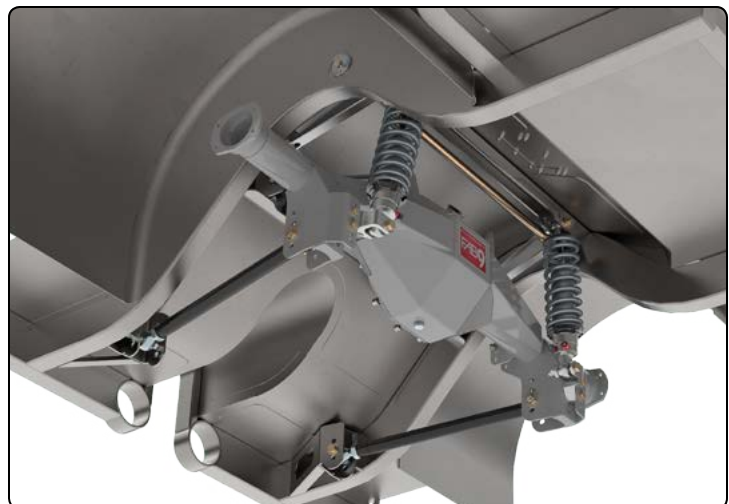
7720-M10	'64-70 Canted 4-Link Frame Clip
	Frame clip (factory-welded)
	Floor kit, pre-fabricated (trim-to-fit)
	Builder wheel tubs
CONNECTOR OPTIONS	Front crossmember doubler plates
	Mid-length 3x2" connectors
	Full-length 3x2" connectors
5852-U01	Removable center support, drive-shaft loop, weld-in mounting brackets
	Suspension package sold separately
84M10-G01	Mild steel FAB9; late big-Ford sealed
84M10-G11	Mild steel FAB9; pro-touring floater
84M10-G0B	4130 FAB9; late big-Ford sealed
84M10-G1B	4130 FAB9; pro-touring floater



- Versatile pro-touring suspension
- Coil-over or air-spring suspension
- Tubular-steel or billet-aluminum arms



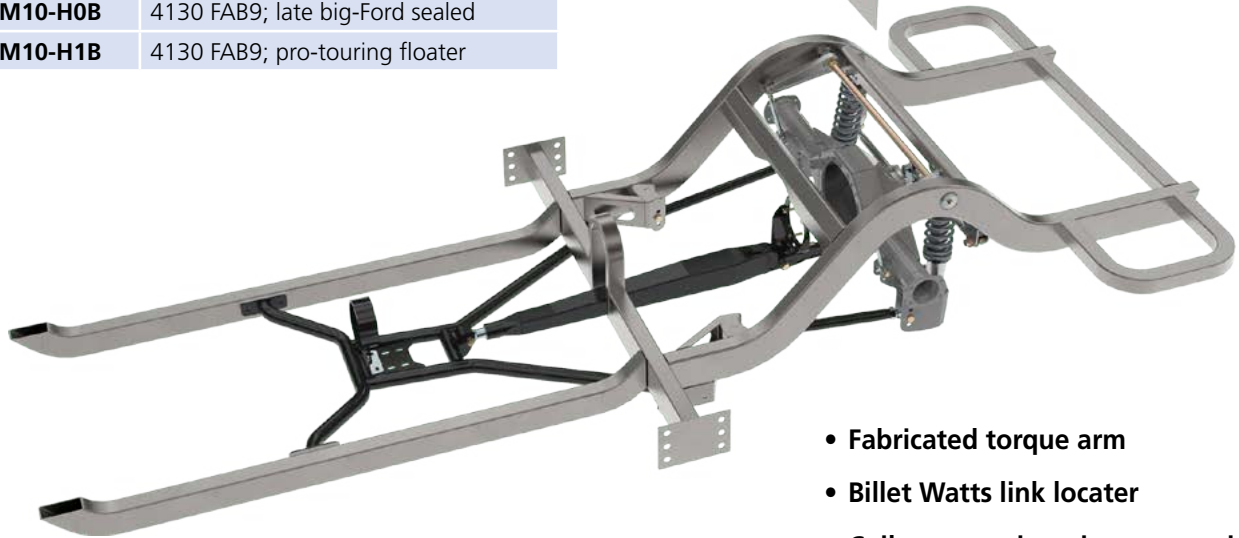
Suspension package sold separately



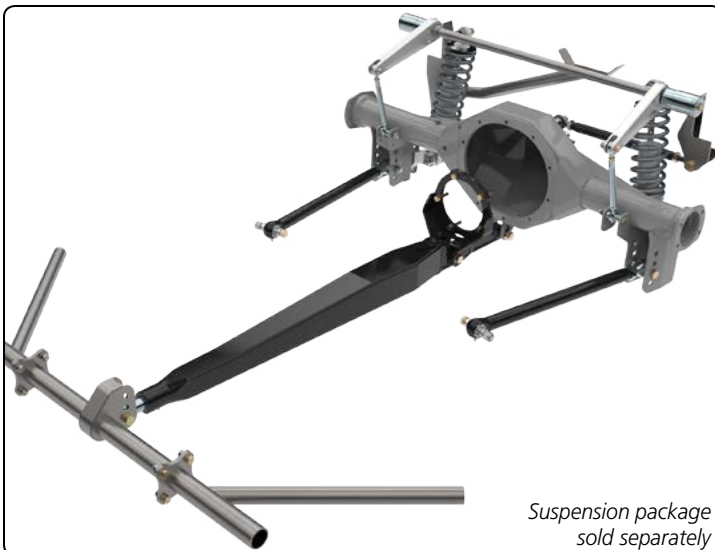
Complete rear clip system with builder wheel tubs. Floor system and tubs are trimmed to fit body during installation.

Torque Arm Rear Frame Clip

7721-M10	'64-70 Torque Arm Frame Clip
	Frame clip (factory-welded)
	Floor kit, pre-fabricated (trim-to-fit)
	Builder wheel tubs
CONNECTOR OPTIONS	Front crossmember doubler plates
	Mid-length 3x2" connectors
	Full-length 3x2" connectors
5857-U05	Removable center support, drive-shaft loop, weld-in mounting brackets
5857-U05	Suspension package sold separately
84M10-H01	Mild steel FAB9; late big-Ford sealed
84M10-H11	Mild steel FAB9; pro-touring floater
84M10-H0B	4130 FAB9; late big-Ford sealed
84M10-H1B	4130 FAB9; pro-touring floater



- Fabricated torque arm
- Billet Watts link locator
- Coil-over or air-spring suspension
- Tubular-steel or billet-aluminum arms



Suspension package sold separately

Torque Arm sususpension with FAB9 housing and tubular front crossmember; used for installation without subframe connectors.



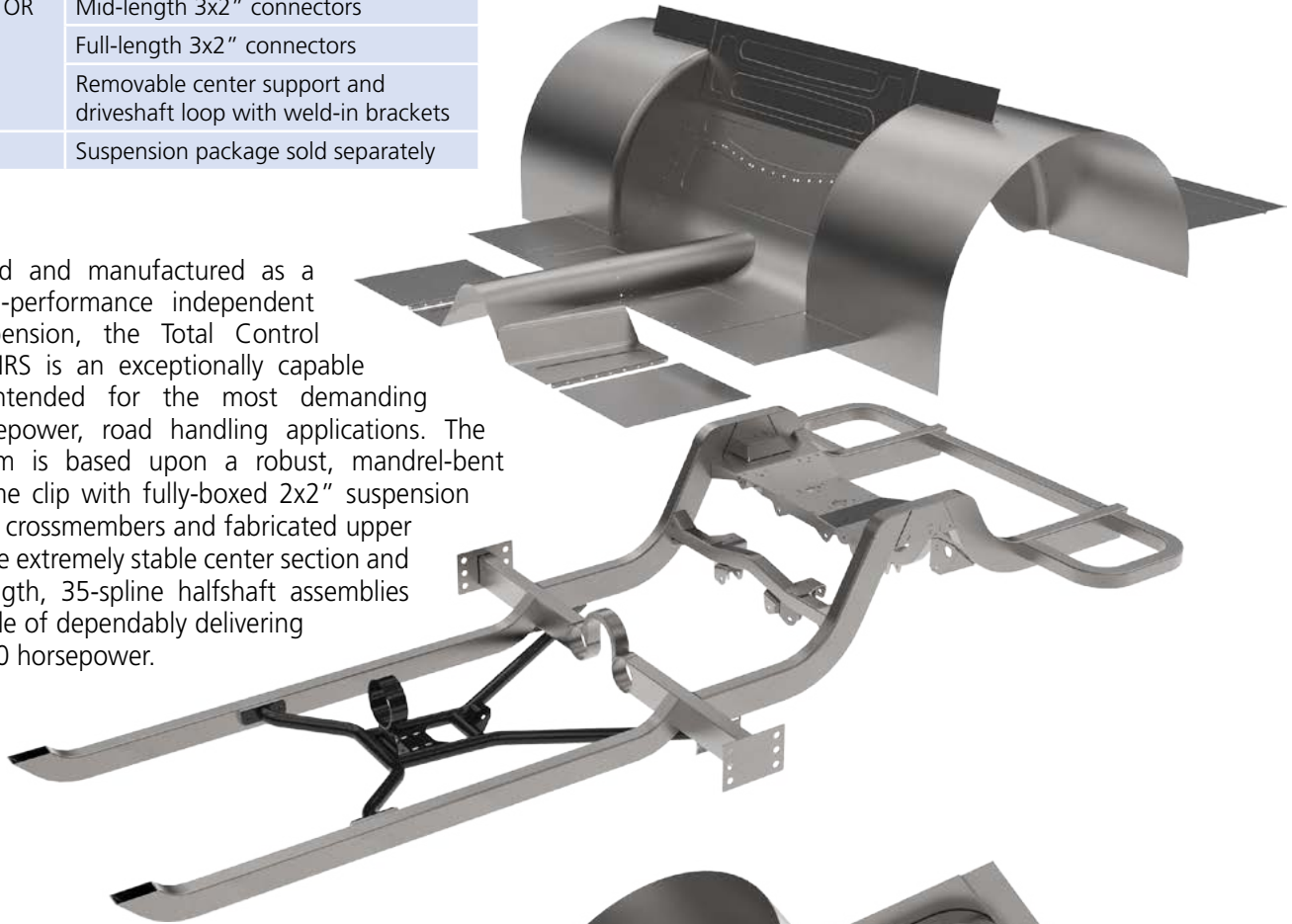
A Watts-link with roll-center height adjustment is used for superior lateral location and suspension tuning.

Independent Rear Suspension (IRS) Frame Clip

7723-M10	'64-70 Rocker-Arm IRS Frame Clip
INCLUDES	Frame clip (factory-welded)
	Floor kit, pre-fabricated (trim-to-fit)
	Builder wheel tubs
	Front crossmember doubler plates
CONNECTOR OPTIONS	Mid-length 3x2" connectors
	Full-length 3x2" connectors
	Removable center support and driveshaft loop with weld-in brackets
NOTES	Suspension package sold separately

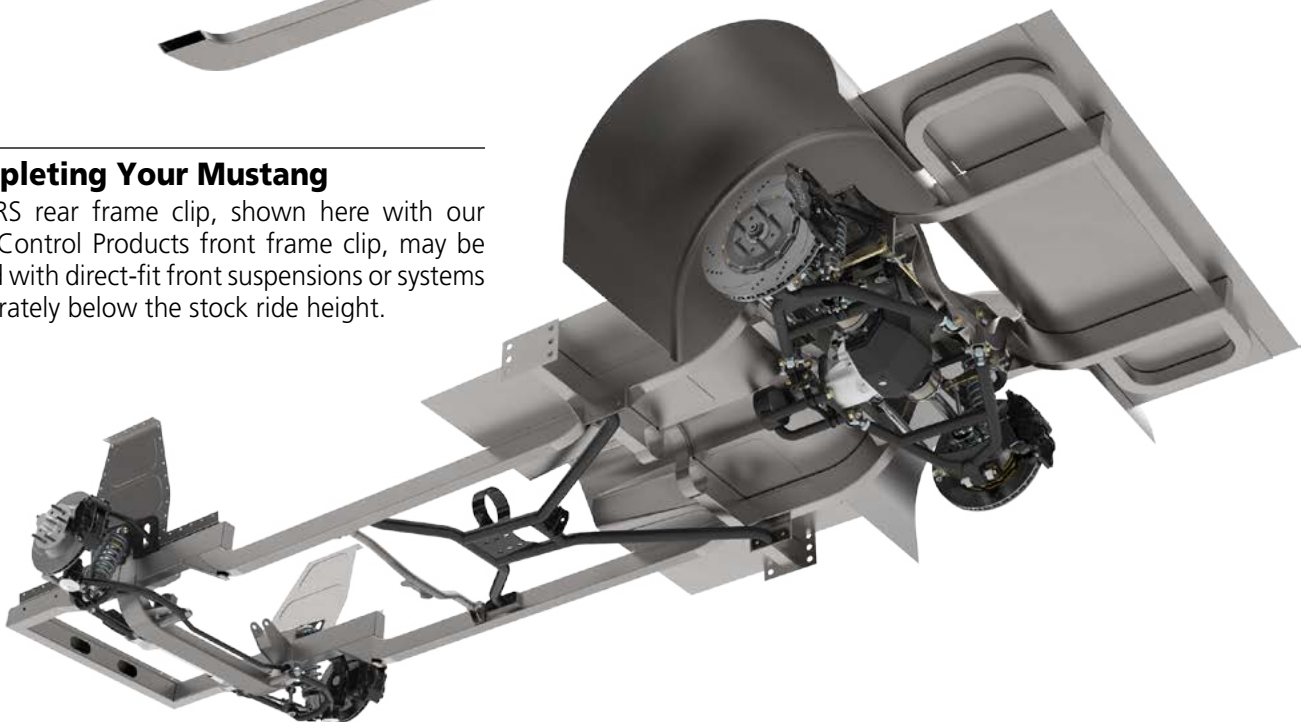
- Complete system; frame, sheet metal, suspension
- Tremendous cornering, acceleration, braking
- True high-performance IRS system

Engineered and manufactured as a true high-performance independent rear suspension, the Total Control Products IRS is an exceptionally capable system intended for the most demanding high-horsepower, road handling applications. The IRS system is based upon a robust, mandrel-bent 4x2" frame clip with fully-boxed 2x2" suspension mounting crossmembers and fabricated upper cradle. The extremely stable center section and high-strength, 35-spline halfshaft assemblies are capable of dependably delivering over 1,500 horsepower.

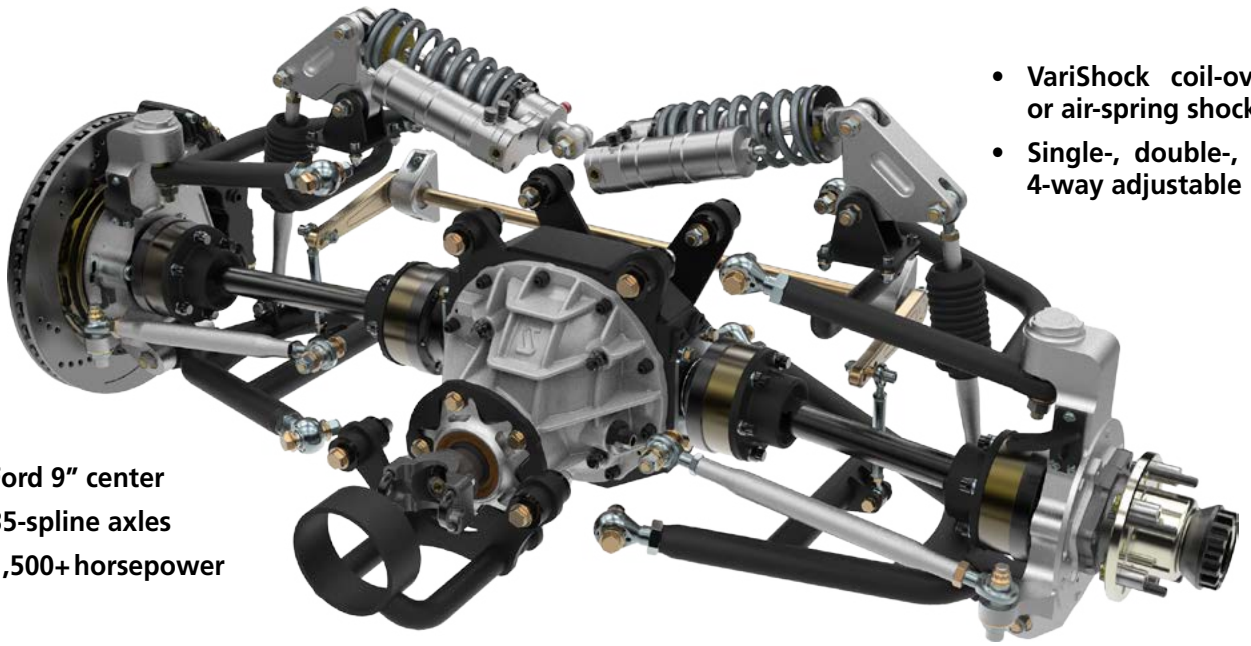


Completing Your Mustang

The IRS rear frame clip, shown here with our Total Control Products front frame clip, may be paired with direct-fit front suspensions or systems moderately below the stock ride height.



- Ford 9" center
- 35-spline axles
- 1,500+ horsepower



- VariShock coil-over or air-spring shocks
- Single-, double-, or 4-way adjustable

Rocker-Arm IRS System (Coil-Over or Air)



5867	Rocker-Arm-Actuated Coil-Over Suspension
	Wheel bolt pattern (5 x 4-1/2", 5 x 4-3/4", center-lock single nut connection)
	Ring and pinion dropout style (Ford 9", Strange ST Iron, HD Pro Aluminum)
	Coil-over valving (single-, double-, 4-way adjustable with piggyback reservoir)
	Coil-over spring rate (450, 500, 550, 600 lb/in)
	Air-spring valving (single-, double-adjustable)
	14" or 15" rotors, optional parking brake
	Anti-roll bar; splined-end, adjustable rate
	Differential style (Strange S-Trac Helical, TrueTrac 35, Detroit Locker)
NOTE	Clip and sheet metal kit not included.



FRONT FRAME CLIP

NEW PRODUCT

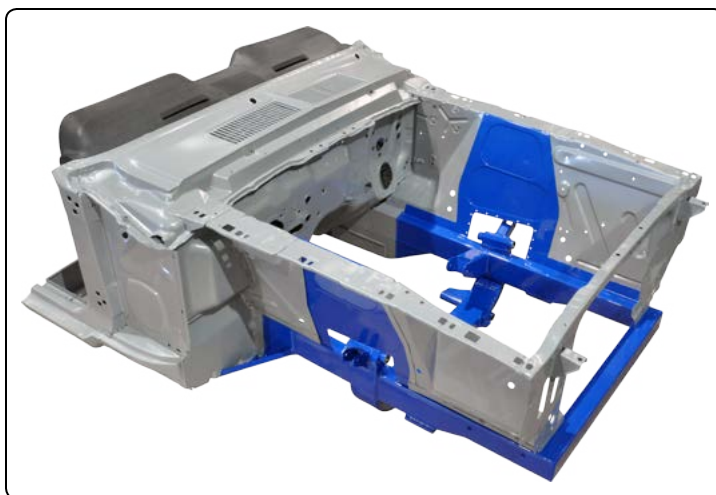
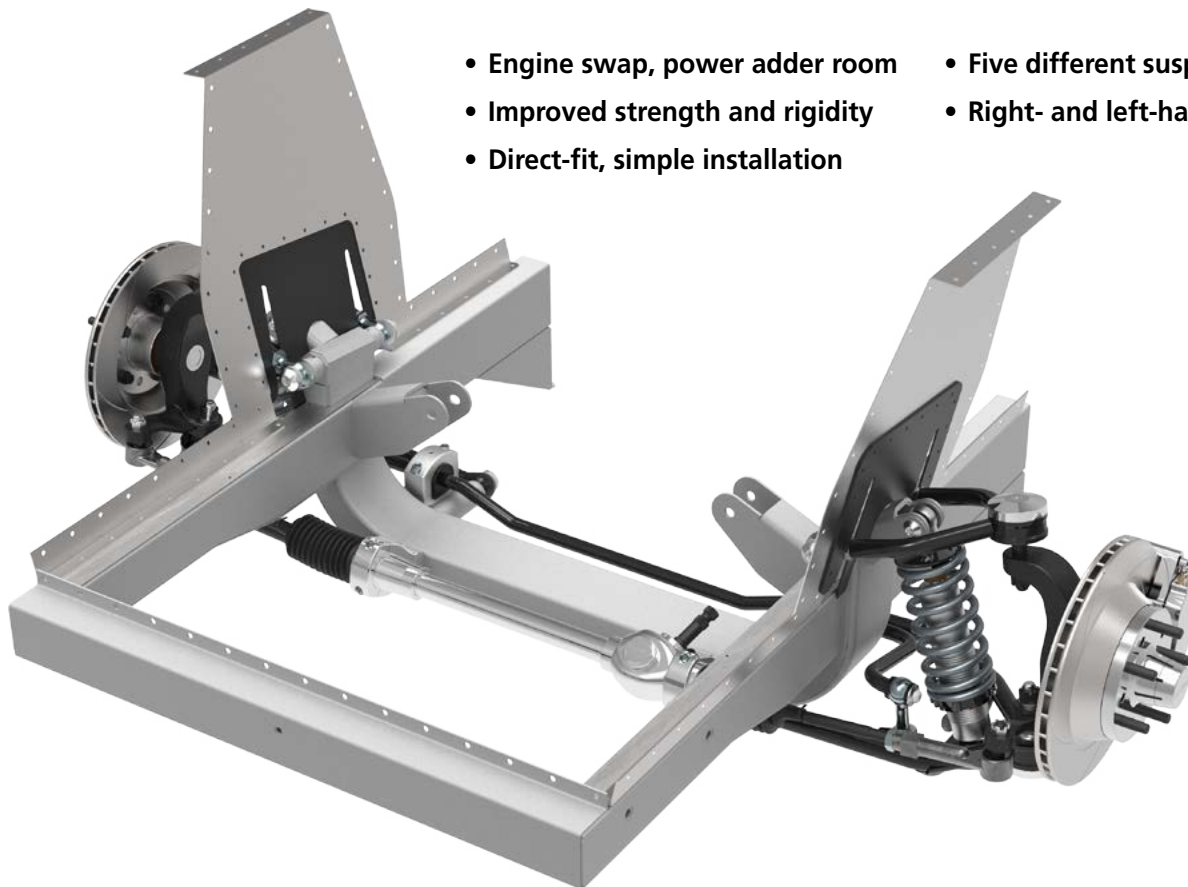
Weld-In Front Frame Clip and Suspension

Total Control Products front subframe clip is a direct-fit, high-performance suspension solution designed for 1964-1970 Mustangs and Cougars, featuring a factory-welded subframe with g-Machine double A-arm, rack-and-pinion crossmember. The system deletes the original shock towers opening up the engine bay to accept bolt-in installation of all popular early- or

late-model engines including Ford Coyote and Chevy LS-Series. With the broadest selection of supporting suspension, steering, and brake components, the TCP frame clip system is the most highly configurable system available. Custom-tailored performance and prices levels that fit the needs of your project. Visit the TCP website and E-store for realtime price quotes.

Model	Year
Cougar	1967-1970
Mustang	1964-1970

- Engine swap, power adder room
- Improved strength and rigidity
- Direct-fit, simple installation
- Five different suspensions
- Right- and left-hand drive



Gray Area: Unmodified stock sheet metal
Blue Area: Subframe assembly and tower delete panels

4 x 2" Crossmember

Bent-tube, billet-component crossmembers are a completely closed, rigid structure with greater strength and resistance to bending and twisting than other designs. Formed from a single piece of 4 x 2 x .120" steel tubing, large-radius mandrel bends are placed at each end to distribute loads throughout the crossmember, eliminating fatigue points at critical areas. Slots for the billet-mount tabs are machined in a horizontal machining center with dedicated fixturing to guarantee correct component geometry that ensures the suspension moves as designed.



Locating features are machined into each crossmember to enable self-positioning of billet components.

Interlocking Slots and Tabs

Self-fixturing female slots used with machined male tabs provide an interlocking assembly method that enables A-arm, rack and pinion, and shock mounts to be accurately positioned in all axes. This guarantees the suspension will perform as designed. Non-interlocking designs are not nearly as accurate after welding. Our superior spray-arc welding process produces the best weld penetration with excellent appearance.

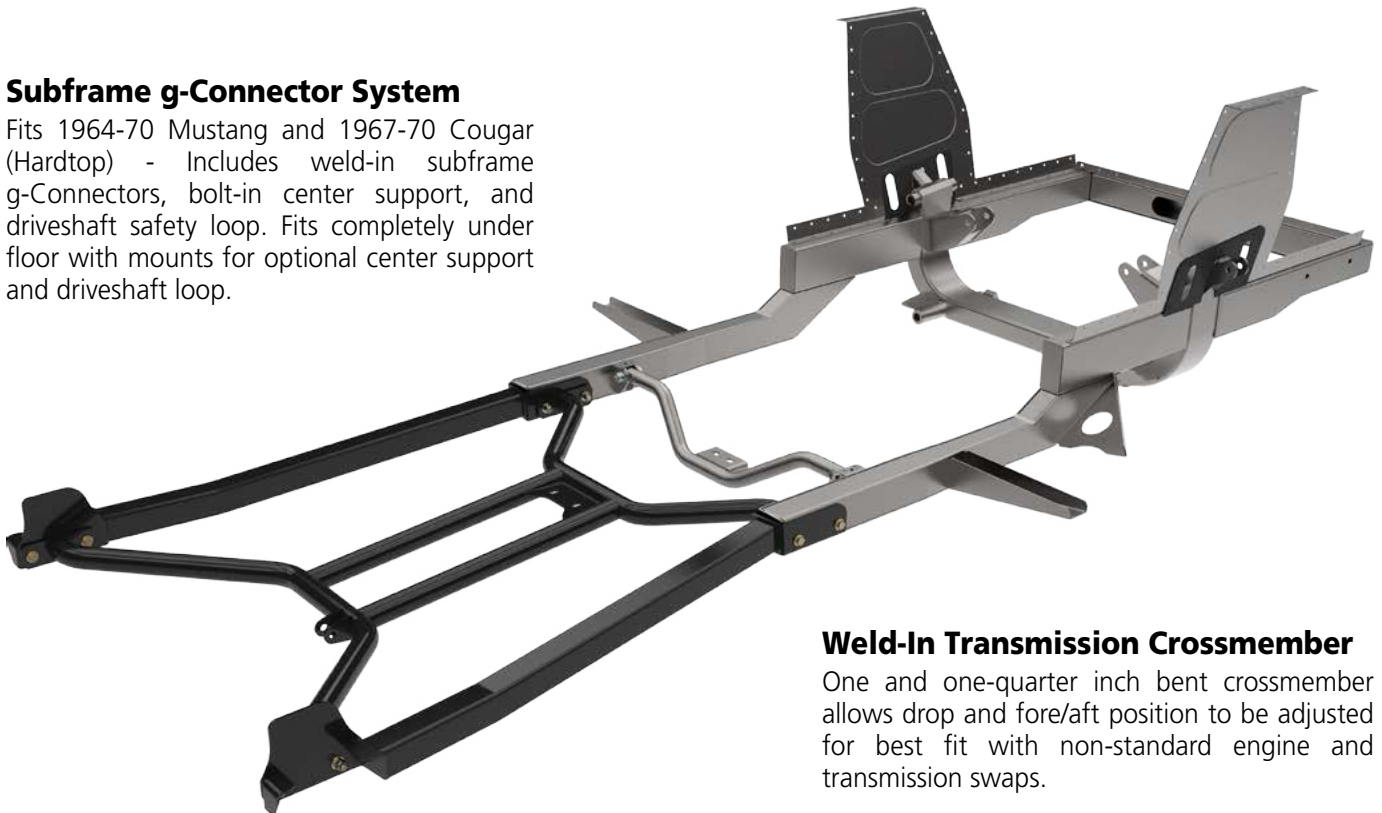


Billet rack-and-pinion mount bases insert into the machined crossmember slot.

Chassis Components

Subframe g-Connector System

Fits 1964-70 Mustang and 1967-70 Cougar (Hardtop) - Includes weld-in subframe g-Connectors, bolt-in center support, and driveshaft safety loop. Fits completely under floor with mounts for optional center support and driveshaft loop.



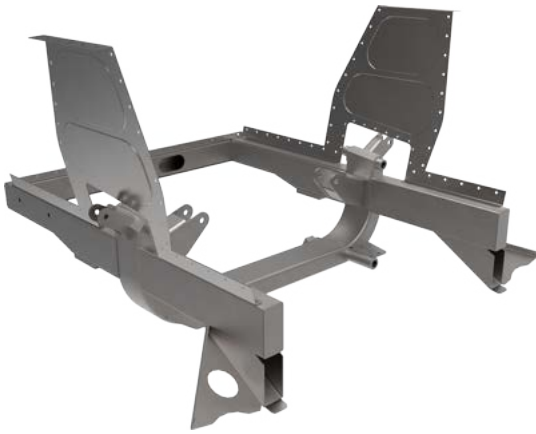
Weld-In Transmission Crossmember

One and one-quarter inch bent crossmember allows drop and fore/aft position to be adjusted for best fit with non-standard engine and transmission swaps.

FRONT FRAME CLIP

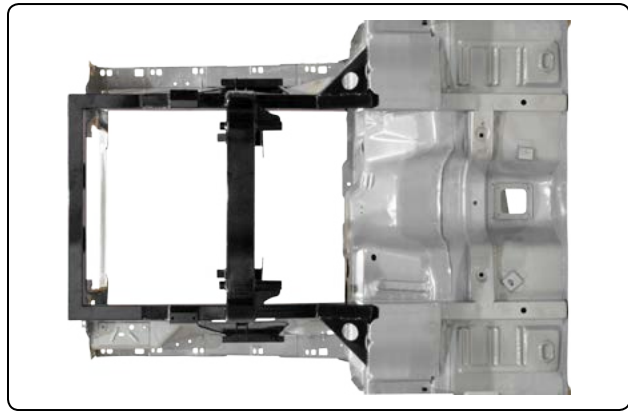
NEW PRODUCT

Firewall-Length Subframe

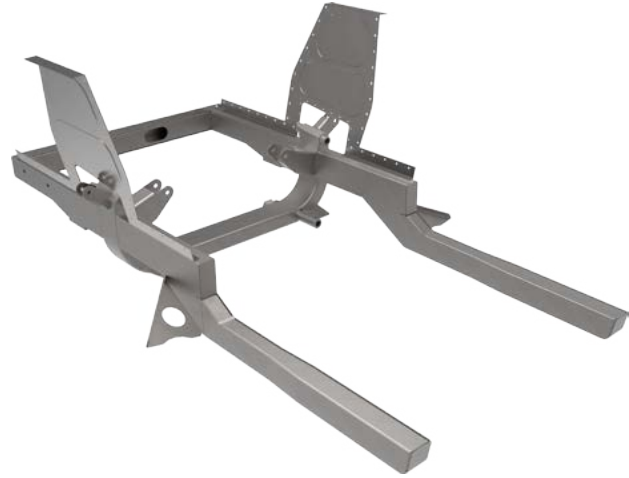


Factory-assembled frame clip inserts and welds into the stock frame-rail bulkhead. Select this option if OEM subframe rails are in good condition and vehicle is primarily used for street and mild performance applications.

TCP KCFT	Firewall-length subframe clip welded assembly for tubular anti-roll bar
TCP KCFA	Firewall-length subframe clip welded assembly for splined-end anti-roll bar

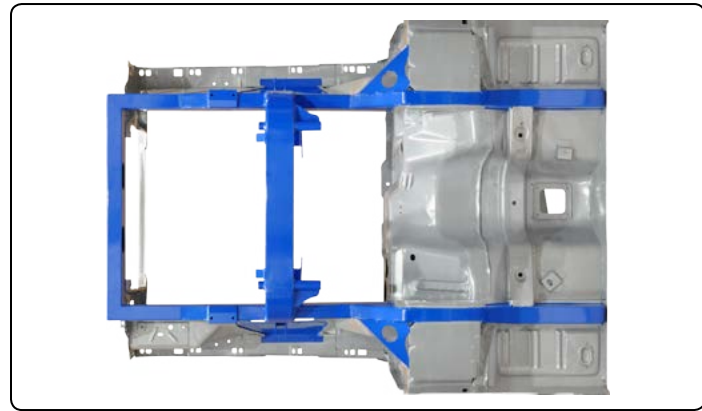


Full-Length Subframe



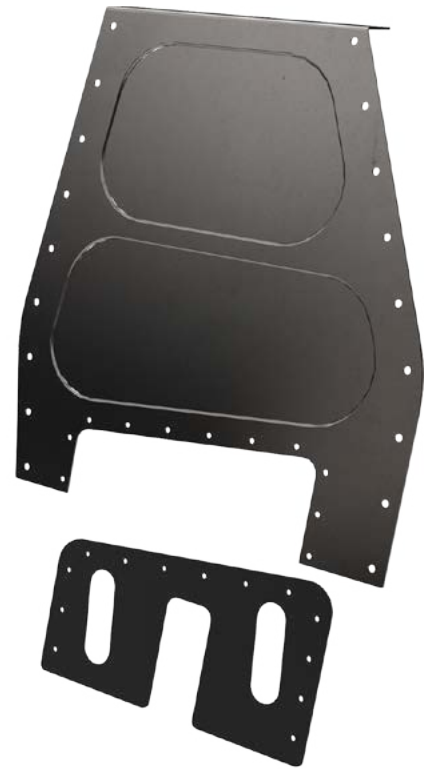
Fully boxed rails with heavier wall thickness provide a more rigid structure. Recommended for high-performance, high-horsepower builds. Combine with TCP g-Connector subframe system to create a tubular structure that extends to the rear suspension.

TCP KCST	Full-length subframe clip welded assembly for tubular anti-roll bar
TCP KCSA	Full-length subframe clip welded assembly for splined-end anti-roll bar



Shock Tower Delete Panels

A common obstacle when working on or swapping to a more desirable powertrain combination are the factory shock towers. Each frame clip includes a pair of recessed-pocket steel delete panels with rubber splash flaps. Panel edges are pre-drilled for rosette welding to factory inner fenders and securing splash flaps with included hardware.



TCP JA1	1964-1966 tower delete panels
TCP JA2	1967-1970 tower delete panels
TCP JC1	1964-1966 inner fender splash flaps

Oil Pan Fitment and Notes

FORD 289/302	Use Ford Performance oil pan kit #M-6675-A50. 5.0L oil pan kit. Includes rear sump oil pan, dipstick, dipstick tube, pickup and main cap stud. Ideal for engine swaps. NOTE: Does not have provision for low oil sender. Fasteners not included. Directly fits 1983-2001 production blocks only. Blocks prior to 1982 require modification to incorporate dipstick receiver (Canton 20-850 or 20-854).
FORD 351W	Use Ford Performance oil pan kit #M-6675-A58. 351W/5.8L oil pan kit. Includes rear sump oil pan, dipstick, dipstick tube, pickup and main cap stud. Ideal for engine swaps. Fits 1969-1997 production blocks. Fasteners not included.
FORD 351C	Requires custom oil pan.
FORD 390/428	Requires use of custom pan with external oil pump or drysump. Visit www.aviaid.com for product options.
FORD MOD/COYOTE	Most Mustang OEM oil pans clear front crossmember. Must use front-mounted (splined) anti-roll bar. Modular Motor & 5.0L & 5.2L Mustang Coyote 2011-2016.
GM LS-SERIES	Requires custom oil pan.

FRONT FRAME CLIP

NEW PRODUCT

Engine Mounts for Weld-In Frame Clip

The significant increase in engine bay space make room for most engine choices. Straight-forward, simple bolt-in installations are accommodated by our poly-bushed steel mounts for popular early- and late-model Ford and GM engines.

FORD	TCP MM-C1S	260, 289, 302	Steel
	TCP MM-C2S	390, 427, 428 - FE	Steel
	TCP MM-C3S	Coyote, V8 Modular	Steel
	TCP MM-C4S	260, 289, 302 - (adjustable)	Steel
	TCP MM-C5S	351W, 351C - (adjustable)	Steel
CHEVY	TCP MM-C6A	LS-series	Aluminum
	TCP MM-C7A	V8 side mount	Aluminum
	TCP MM-C8S	LS-series	Steel
	TCP MM-C9S	V8 side mount	Steel

FORD - Fixed Position, Steel



Small Block Short - TCP MM-C1S

Fits: 260, 289, 302

FE Big Block - TCP MM-C2S

Fits: 390, 427, 428

Modular-Coyote - TCP MM-C3S

Fits: Modular, Coyote 2011-2016

FORD - Adjustable Position, Steel



Small Block Short - TCP MM-C4S

Fits: 260, 289, 302

Small Block Tall - TCP MM-C5S

Fits: 351W, 351C

CHEVY - Fixed Position, Steel



Chevy V8 - TCP MM-C9S

Fits: All big- and small-block engines

LS Series - TCP MM-C8S

Fits: All LS style engines

CHEVY - Fixed Position, Aluminum



Chevy V8 - TCP MM-C7A

Fits: All big- and small-block engines

LS Series - TCP MM-C6A

Fits: All LS style engines

Steering Column and Shaft Components

A selection of hardware component kits are available to complete installation with OEM or aftermarket steering columns. Kits include replacement OEM shaft, floor mount

with rubber gasket, column roller bearing, intermediate steering shaft, and universal joints.

Components for OEM Columns

1960 to Early 1967 - Non-Collapsible Columns

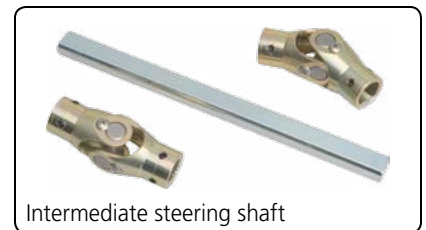
Most vehicle's column tube and steering shaft were supported directly by the steering box. Rack installation requires the column tube be shortened, steering shaft replaced and the addition of a firewall mount. The remaining early 1967 vehicles featured a shortened column tube, factory firewall mount and rag-joint but remained non-collapsible. These applications are supplied a correct length steering shaft with roller bearing assembly and pivoting firewall mount with factory seal. Non-collapsible tilt or swing-away columns must upgrade to factory collapsible or aftermarket columns.

Late 1967 to 1970 - Collapsible Columns

Identifiable by measuring the 1" diameter shaft above the rag-joint. A replacement lower slip shaft, roller bearing assembly and firewall seal is provided.

Intermediate Steering Shaft

All installations also receive an intermediate steering shaft kit with needle bearing universal joints. Various U-joint sets are available to accommodate major aftermarket column manufacturers and high-misalignment applications. See page 47 for part numbers.



Aftermarket Tilt Columns

Aftermarket, five-position, tilt steering columns are optional with the rack and pinion package. Column lengths are specific to our rack and pinion installation and provide improved universal joint alignment compared to competitors aftermarket columns. All columns have the stock Ford steering wheel spline, 11/16-36. The spline at the steering column shaft is 3/4-36. Columns are available in three finishes, paintable, black powder coated or chrome plated. Electrical connectors and floor mounts are also included. Columns can also be purchased separately for use with the rack and pinion.

APPLICATIONS	1964-1966 Mustang 1967 Mustang/Cougar 1968-69 Mustang/Cougar
OPTIONS	Paintable Bare Steel Black Powder Coated Chrome Plated
NOTE	Not compatible with Rally-Pac gauge pod.



See page 48 for part numbers.

FRONT FRAME CLIP

NEW PRODUCT

Wheel and Tire Clearance

The inner fender panel and outside fender are in the exact same position as stock. Any tire and wheel width combination that fits the stock car will fit with our clip. Contact your wheel manufacturer or supplier to verify what wheel and tire sizes fit your car. The TCP front clip hub-to-hub width differs depending upon suspension and brake choice, so wheel offset must be adjusted accordingly.

Benefits of Increasing Hub Width

- Decreased scrub radius; tire pivots about its center
- Reduced steering effort
- Less weight jacking effect
- Improved suspension geometry (Wide Track Arms)

1965-1966 Mustang

Brake Kit	Clip	Hub Width	Change (per side)
Stock Drums	Stock	56-3/4"	0"
TCP DB122-BK, TCP DB122-RD	TCP	57-3/4"	+1/2"
TCP DB111-BK, TCP DB143-BK, TCP DB175-BK	TCP	59"	+1-1/8"
TCP DB275-BK, TCP DB295-BK (wide-track arms)	TCP	60"	+1-5/8"

1967-1970 Mustang

Brake Kit	Clip	Hub Width	Change (per side)
Stock Drums	Stock	58-3/4"	0"
TCP DB122-BK, TCP DB122-RD	TCP	57-3/4"	-1/2"
TCP DB111-BK, TCP DB143-BK, TCP DB175-BK	TCP	59"	+1/8"
TCP DB275-BK, TCP DB295-BK (wide-track arms)	TCP	60"	+5/8"

Control Arm Styles

Street-Machine Arms



- Street and drag race performance applications
- Adjustable upper control arm
- Low-friction, deflection free polymer pivots
- Heavy-duty screw-in ball joints
- Mandrel-bent 7/8" and 1" mild-steel tubing

6171 Upper arms, bare steel

6181 Upper arms, gloss black

6172 Lower arms, bare steel

6182 Lower arms, gloss black

g-Machine Arms



- Street and performance-handling applications
- Rigid triangulated arm brace
- Upper arm adjustment couplers
- Low-friction, deflection free polymer pivots
- Heavy-duty screw-in ball joints
- Mandrel-bent 1" and 1-1/4" mild-steel tubing

6152 Upper arms, matte black

6153 Lower arms, matte black

gStreet Arms



- Ultimate pro-touring and race applications
- Wide track suspension geometry
- Requires gStreet billet upright
- High load capacity pivot ball mechanisms
- Rigid triangulated arm brace
- Mandrel-bent 1" and 1-1/4" mild-steel tubing

6156 Upper arms, matte black

6157 Lower arms, matte black

Spindles and Brake Kits



Street Machine Sculpted Spindle

Our most popular and versatile spindle; suitable for use in all performance applications.



TCP DB122-BK

11-3/4" x .81" vented 1-piece rotor with 4-piston caliper; optional red caliper not shown



TCP DB175-BK

14" x 1.25" vented rotor billet-aluminum hat and hub, with 6-piston radial-mount caliper



TCP DB143-BK

13" x 1" vented rotor billet-aluminum hat and hub, with 4-piston radial-mount caliper



gStreet Pro-Touring Billet-Aluminum Upright

The gStreet unit-bearing upright for the ultimate accuracy and control.



Drag Race Fabricated Spindle

High-strength 4130 upright and spindle for reliability and reduced weight.



TCP DB275-BK

14" x 1.25" vented rotor with billet-aluminum hat and 6-piston radial-mount caliper



TCP DB111-BK

11-3/4" x .35" slotted rotor billet-aluminum hat and hub, with 4-piston (Drag race only)



TCP DB295-BK

15" x 1.25" vented rotor with billet-aluminum hat and 6-piston radial-mount caliper



TCP DB122-BK

11-3/4" x .81" vented 1-piece rotor with 4-piston caliper; optional red caliper not shown

FRONT FRAME CLIP

NEW PRODUCT

Front Clip Suspension Systems

Five-different base suspension and steering systems are offered with a variety of options from which to choose. Detailed option selectors are viewable online by adding to your shopping part.



Ultimate Pro-Touring System

TCP KS4 gStreet wide-track suspension with billet-aluminum large-unit-bearing hub

g-Machine System

TCP KS3 g-Machine suspension arms with sculpted spindle, multiple brake options

Restomod System

TCP KS2 Street Machine bare or black arms with sculpted spindle, multiple brake options

Value System

TCP KS1 Street Machine arms with sculpted spindle, multiple brake options

Drag Race System

TCP KS5 Street Machine arms with fabricated spindle, multiple brake options

Value System (TCP KS1)

Suspension Components



Control Arms	Spindles	Anti-Roll Bars	Tools
Street Machine style	Sculpted style	3/4", poly-poly	Ball-joint wrench
Black powder coat finish	Black powder coat finish	1", bearing-poly	
Bare metal finish	Bare metal finish	1-1/4", bearing-poly	

Shock Absorbers



Coil-Over Shocks	Air-Spring Shocks	Shock Hardware	Tools
Preset or single adjustable	Single adjustable	Grade 8 hex head	Shock simulators
500 to 750 lb/in	Double adjustable	Stainless spud fasteners	

Steering



Manual Rack	Power Rack	Tie Rods
Satin anodized finish	Left-hand drive (USA) Right-hand drive (AUS)	OEM style Bump steer kit

Brakes

	11-3/4 x .81" 1-piece vented rotor and hub 4-piston caliper Black or red		13 x 1.00" Vented iron rotor Billet-aluminum hat and hub 4-piston caliper		14 x 1.25" Vented iron rotor Billet-aluminum hat and hub 6-piston caliper
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FRONT FRAME CLIP

NEW PRODUCT

Restomod System (TCP KS2)

Suspension Components



Control Arms	Spindles	Anti-Roll Bars	Tools
Street Machine style	Sculpted style	3/4", poly-poly	Ball-joint wrench
Black powder coat finish	Black powder coat finish	1", bearing-poly	
Bare metal finish	Bare metal finish	1-1/4", bearing-poly	

Shock Absorbers



Coil-Over Shocks	Air-Spring Shocks	Shock Hardware	Tools
Preset, single, double adjustable	Single adjustable	Grade 8 hex head	Shock simulators
500 to 750 lb/in	Double adjustable	Stainless spud fasteners	

Steering



Manual Rack	Power Rack	Tie Rods
Satin anodized finish	Left-hand drive (USA) Right-hand drive (AUS)	OEM style Bump steer kit

Brakes

	11-3/4 x .81" 1-piece vented rotor and hub 4-piston caliper Black or red		13 x 1.00" Vented iron rotor Billet-aluminum hat and hub 4-piston caliper		14 x 1.25" Vented iron rotor Billet-aluminum hat and hub 6-piston caliper
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g-Machine System (TCP KS3)

Suspension Components



Control Arms	Spindles	Anti-Roll Bars	Tools
g-Machine style	Sculpted style	1" fixed rate	Ball-joint wrench
Black powder coat finish	Black powder coat finish	1-1/4" fixed rate	Shock simulators
	Bare metal finish	1-1/4" splined adjustable	

Shock Absorbers



Coil-Over Shocks	Q4R Coil-Overs	Air-Spring Shocks	Shock Hardware
Preset, single, double adjustable	4-way adjustable	Single adjustable	Grade 8 hex head
Poly or COM-8 eye	Remote reservoir	Double adjustable	Stainless spud fasteners
500 to 750 lb/in	Reservoir mounts		

Steering



Power Rack	Tie Rods
Left-hand drive (USA)	OEM style
Right-hand drive (AUS)	Bump steer kit

Brakes

	11-3/4 x .81" 1-piece vented rotor and hub 4-piston caliper Black or red		13 x 1.00" Vented iron rotor Billet-aluminum hat and hub 4-piston caliper		14 x 1.25" Vented iron rotor Billet-aluminum hat and hub 6-piston caliper
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FRONT FRAME CLIP

NEW PRODUCT

Ultimate Pro-Touring System (TCP KS4)

Suspension Components



Control Arms	Spindles	Anti-Roll Bars	Tools
gStreet style	Billet aluminum	1-1/4" splined bar	Shock simulators
Wide-track geometry	Unit-bearing hub	Adjustable rate	
Black powder coat finish	Center-lock option	Bearing end links	

Shock Absorbers



Coil-Over Shocks	Q4R Coil-Overs	Air-Spring Shocks	Shock Hardware
Single adjustable	4-way adjustable	Single adjustable	Grade 8 hex head
Double adjustable	Remote reservoir	Double adjustable	Stainless spud fasteners
500 to 750 lb/in	Reservoir mounts		

Steering



Power Rack	Tie Rods
Left-hand drive (USA)	Bump steer kit
Right-hand drive (AUS)	

Brakes



14 x 1.25"
Vented iron rotor
Billet-aluminum hat and hub
6-piston caliper
Black, red, or nickel caliper



15 x 1.25"
Vented iron rotor
Billet-aluminum hat and hub
6-piston caliper
Black, red, or nickel caliper

Drag Race System (TCP KS5)

Suspension Components



Control Arms	Race Spindles	Street Spindles	Tools
Street Machine style	Fabricated 4130	Sculpted style	Ball-joint wrench
Black powder coat finish	Black powder coat finish	Black powder coat finish	
Bare metal finish		Bare metal finish	

Shock Absorbers



Coil-Over Shocks	Tools
Single or double adjustable 250 to 500 lb/in	Shock simulators

Steering



Manual Rack	Tie Rods
Satin anodized finish	OEM style
	Bump steer kit

Brakes



11-3/4 x .35"
Slotted rotor
Billet-aluminum hub
4-piston caliper



11-3/4 x .81"
1-piece vented rotor and hub
4-piston caliper
Black or red

FRONT SUSPENSION

Front Suspension Systems

Total Control offers the finest front suspension conversions for vintage Mustangs and classic Fords. We offer three complete systems with the primary difference being type and configuration of the spring. See the following pages for details on each individual component.

Coil-Over Conversion

For precise adjustment of all aspects of the front suspension and ultimate handling, our coil-over conversion is the only choice. This system features a fully adjustable, coil-over shock, custom made by VariShock, exclusively for Total Control. The specifically engineered design allows our coil-over to fit and perform better than kits made with "off-the-shelf" shocks.

TCP FCOC-FD	Front coil-over conversion system
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Coil-Spring Suspension

If your motorsport sanctioning body does not allow coil-over suspension or you prefer OEM similarity of coil springs, but still need excellent handling, then our coil-spring system is the one for you. It's variable rate springs and adjustable-valve VariShock Bolt-Ins represent the state-of-the-art for coil-spring systems. Available in two versions: Core Component System consisting of upper and lower control arms, and strut rods; Front Coil-Spring Suspension includes core system plus springs, bolt-in VariShocks, lower spring perch rocker, and urethane upper spring isolator.

TCP FACS-FD	Control-arm core system
TCP FCSS-FD	Front coil-spring suspension



VariShock Air-Spring Suspension

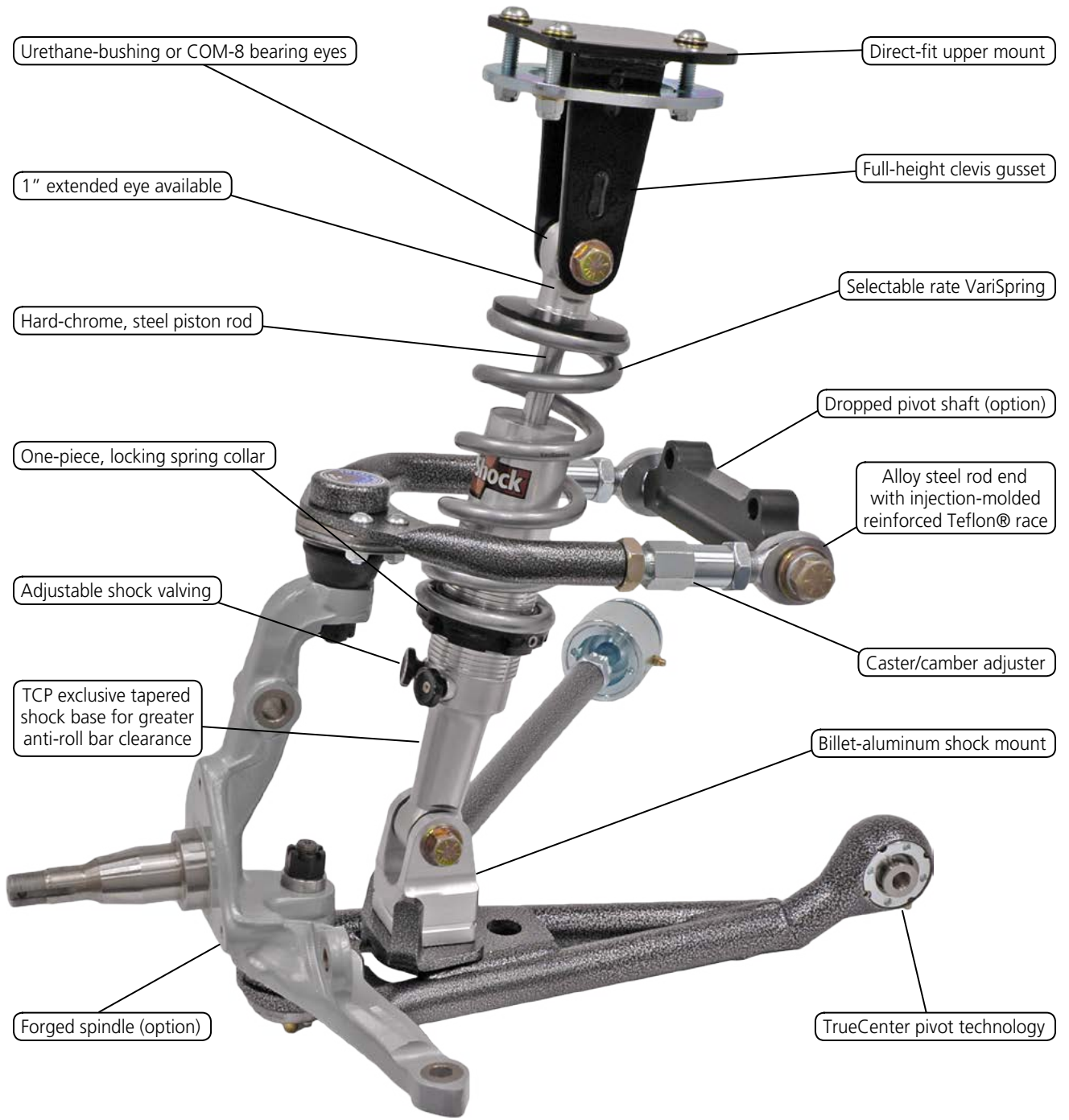
Air-spring equipped vehicles offer some additional benefits. Besides proven excellence in handling performance, you also have the advantage of exceptional ride characteristics, and the ability to set your vehicle on the ground for jaw-dropping static displays.

TCP FASS-FD	Front air-spring suspension system
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Front Coil-Over Conversion System

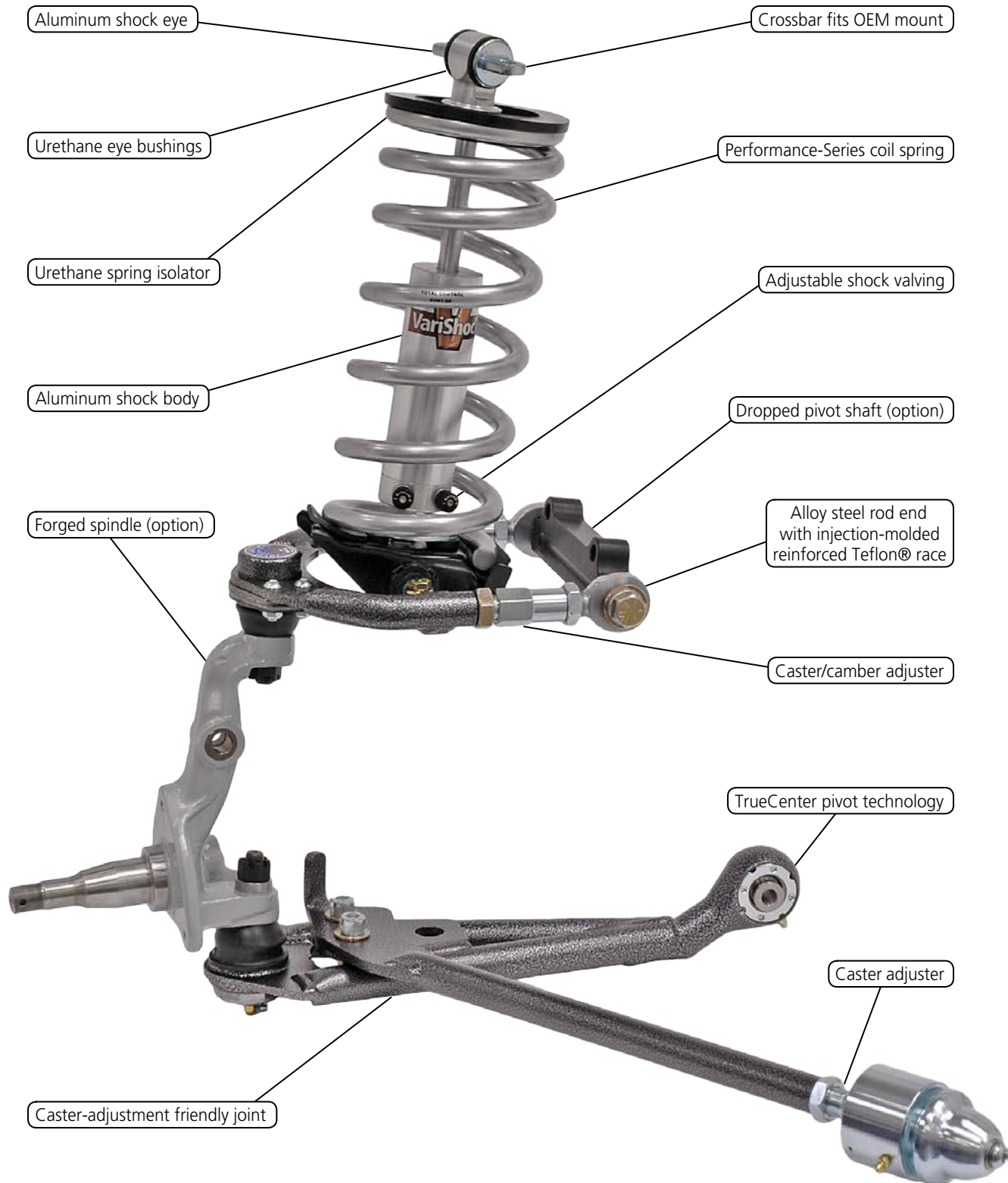
TCP FCOC-FD



FRONT SUSPENSION

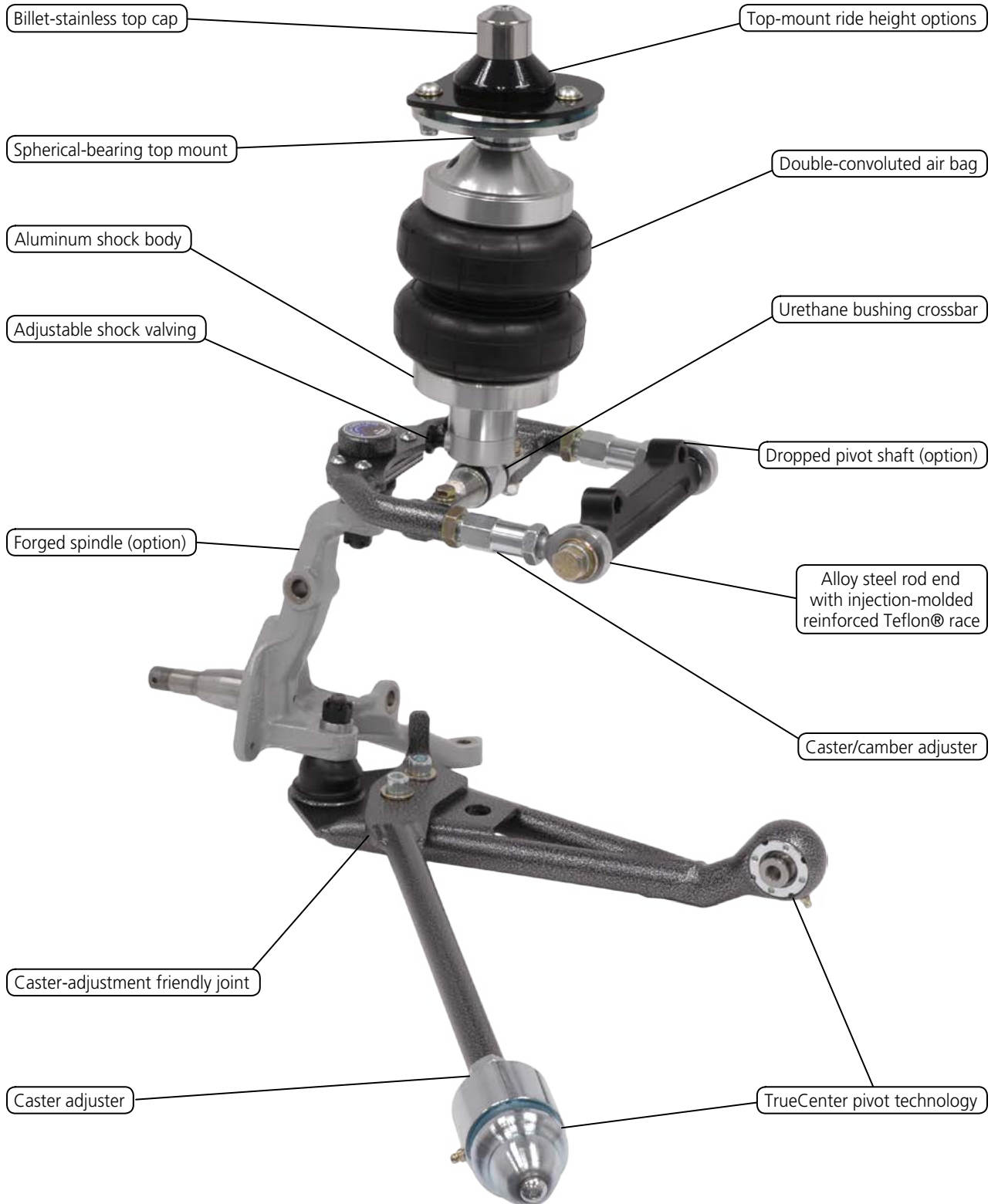
Coil-Spring Front Suspension System

TCP FCSS-FD



Air-Spring Front Suspension System

TCP FASS-FD



Billet-stainless top cap

Top-mount ride height options

Spherical-bearing top mount

Double-convoluted air bag

Aluminum shock body

Urethane bushing crossbar

Adjustable shock valving

Dropped pivot shaft (option)

Forged spindle (option)

Alloy steel rod end with injection-molded reinforced Teflon® race

Caster/camber adjuster

Caster-adjustment friendly joint

Caster adjuster

TrueCenter pivot technology

FRONT SUSPENSION

Front Coil-Over Conversion

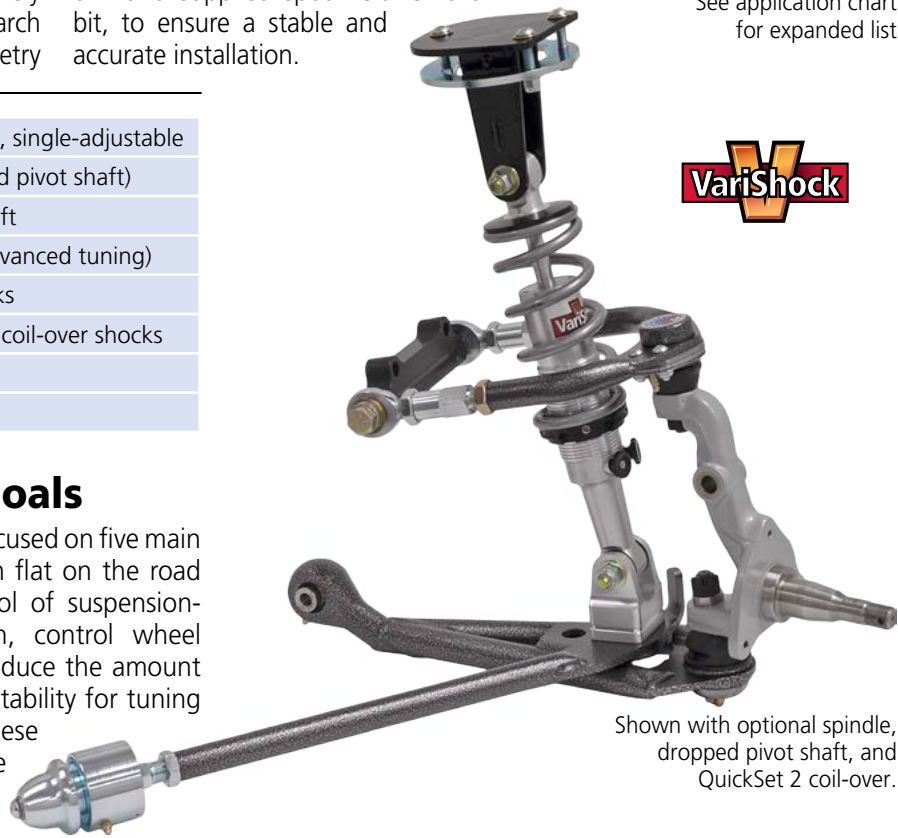
The TCP front coil-over conversion is a fully adjustable suspension system that utilizes the key factory mounting locations to greatly simplify installation. With over 20 years of production, development and testing, the TCP coil-over is the most mature and refined front suspension system available for vintage Mustangs and other classic Fords; moving past our original design that others have copied. You can be assured of exact-fit installation, bind-free operation, effective and predictable suspension-tuning changes, with unmatched strength and performance. Our all-new, exclusive TrueCenter pivot sockets and tubular suspension components provide extremely precise control over the spindle's travel arch with linear resistance. Suspension-geometry

improvements include: lower center of gravity, higher roll center, reduced vehicle roll rate, quicker negative-camber gain, increased compression travel, reduced rebound travel to limit body roll, more-desirable shock-motion ratio, and correct axis and length of lower arm assembly when utilizing factory mounting positions. A brand new, Total Control exclusive, billet-aluminum, offset-pivot-shaft option, enables precise relocation of the upper-control-arm pivot axis, for improved camber-gain geometry without the need to drill holes, or risk of error. Some applications require removal of the upper-coil-spring seat, using a common drill and supplied spot-weld-removal bit, to ensure a stable and accurate installation.

Comet	1960-1967 1971-1977
Cougar	1967-1973
Cyclone	1964-1971
Fairlane	1966-1971
Falcon	1960-1970
Maverick	1970-1977
Montego	1968-1971
Mustang	1964-1973
Ranchero	1960-1971
Torino	1968-1971

See application chart for expanded list

TCP FCOC-FD	Coil-over system, QuickSet 1, single-adjustable
OPTIONS	Drill jig (for use with standard pivot shaft)
	Dropped "no-drill" pivot shaft
	Second set of springs (for advanced tuning)
	QS2 double-adjustable shocks
	Q4R remote-reservoir 4-way coil-over shocks
	Forged spindles
	Anti-roll bar



Shown with optional spindle, dropped pivot shaft, and QuickSet 2 coil-over.

Five Main Suspension Goals

Our front coil-spring suspension design focused on five main goals. First, keep the tires' contact patch flat on the road surface. Second, maintain precise control of suspension-travel arcs and spindle position. Then, control wheel movement without a harsh ride. Also, reduce the amount of body roll and pitch and, provide adjustability for tuning purposes. Our suspension achieves these goals to significantly improve performance without chassis modifications.

Optimize Tire Contact with Road

The most important job of a suspension system is to keep the tire's contact patch flat on the road. Factory suspension geometry allows the tire's inside edge to lift as the suspension compresses and body rolls during cornering. This reduces the size of the tire-contact area and available traction, most commonly realized as front-end "push" or understeer. Our modified suspension geometry uses a relocated upper-control-arm-mounting position that causes the wheel to lean inward as the suspension compresses; known as "negative camber gain." This geometry offsets the effect of body roll, keeping the tire in better contact with the road surface, and provides more available traction and cornering ability.

Precise Control of Suspension-Travel Arcs and Spindle Position

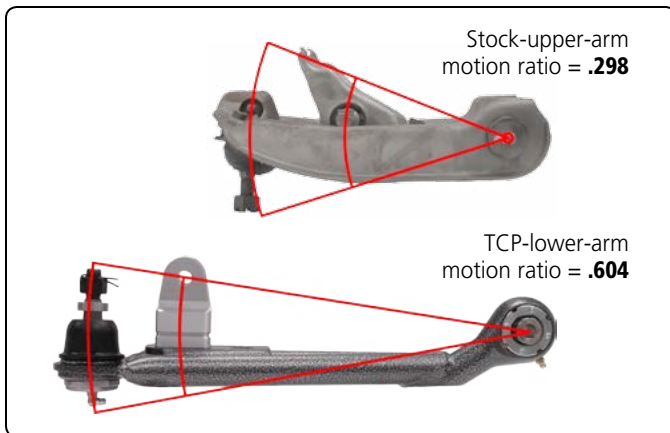
A key to creating a stable and predictably-handling vehicle is precisely controlling the spindle position. Soft, rubber bushings and weak, stamped components of the factory suspension do a poor job of this, allowing erratic handling during braking and cornering. The biggest improvement comes from deflection-free TrueCenter pivot points, a TCP-exclusive design. Incompressible polymer races are used at each chassis pivot to allow precise movement of the spindle along the correct path without the increasing resistance of rubber bushings. Control arms and strut rods are constructed from tubular steel to create deflection-free, rigid suspension components and further enhance accuracy.

Better Control of Wheel Movement Without Degrading Ride Quality

Improving control of wheel movement over bumps without sacrificing ride quality is not possible with the stock suspension. The stock spring perch position is roughly centered along the length of the control arm and transfers much of the road vibration directly into the chassis. By relocating our lower coil-over mount closer to the spindle, the majority of road vibration is transferred directly into the spring and shock. The improved geometry allows use of a lighter, lower rate spring for significantly improved control without degrading ride quality. To take full advantage of the outboard mounting position, a complete custom shock absorber was developed by our sister company, VariShock. Installed height, travel, valving range and mounting configuration are built to our exact specifications, whereas other manufactures are forced to compromise with "off-the-shelf" products. Our system provides a full 5-1/2" of wheel travel.

Better Control of Chassis Movement

A noticeable handling difference between 1960s' and more-modern vehicles is the amount of chassis movement, such as body roll and brake dive. By relocating suspension-mounting points and lowering ride height approximately 2 inches, the front roll-center height is moved closer to the vehicle's center of gravity. A shorter distance between these two points allows the shocks, springs and anti-roll bar to better control chassis movement, resulting in better handling.



Adjustability for Suspension Tuning

Adjustment of caster, camber, toe, ride height, and shock valving, plus a selection of spring rates, enable fine tuning to meet the specific needs of your vehicle. Caster and camber are controlled by adjusting the upper arm, lower arm and strut rod to various lengths. The available adjustment range exceeds the limits of factory suspension, allowing more-aggressive alignment specs for high-performance applications. Toe adjustment is made with our optionally

available, heavy-duty, billet tie-rod-adjuster sleeve. Ride-height adjustment allows the vehicle to be corner-balanced to maximize traction and achieve the desired stance. The VariShock coil-over features 16-position compression- and rebound-valve adjustments, enabling a wide range of combinations. Spring rates range from 310 to 750 lbs/in. to accommodate the complete range of performance and ride-quality applications, and can be changed with minimal effort.

VariShock QuickSet Adjustable Coil-Overs

To take full advantage of the outboard mounting position, a complete custom shock absorber was developed by our sister company, VariShock. Installed height, travel, valving range and mounting configuration are built to our exact specifications, whereas other manufactures are forced to compromise with "off-the-shelf" products. QuickSet 1 single-adjustable coil-over is standard. Optionally available is the QuickSet 2 double-adjustable coil-over with independent bump and rebound adjustment for the ultimate in ride and handling adjustability.



Front Coil-Over Upgrade

For customers who have already purchased our complete standard suspension components and would like to take the next step to a coil-over system, we have upgrade kits available. Kits include VariShock QuickSet 1 adjustable shocks with springs, coil-over upper arm (less hardware), balljoints, and upper and lower shock-mount assemblies.



TCP FCOU-FD	Second Set of Springs (for advanced tuning)
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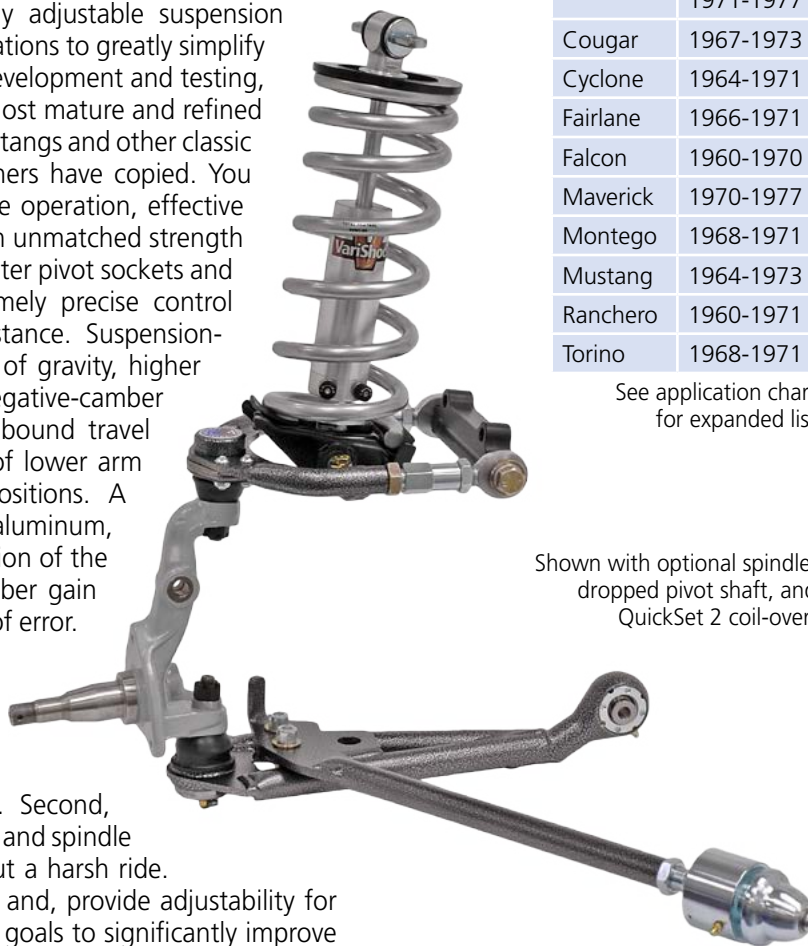
FRONT SUSPENSION

Front Coil-Spring Suspension

The TCP front coil-spring suspension is a fully adjustable suspension system that utilizes the key factory mounting locations to greatly simplify installation. With over 20 years of production, development and testing, the TCP suspension components comprise the most mature and refined front suspension system available for vintage Mustangs and other classic Fords; moving past our original design that others have copied. You can be assured of exact-fit installation, bind-free operation, effective and predictable suspension-tuning changes, with unmatched strength and performance. Our all-new, exclusive TrueCenter pivot sockets and tubular suspension components provide extremely precise control over the spindle's travel arch with linear resistance. Suspension-geometry improvements include: lower center of gravity, higher roll center, reduced vehicle roll rate, quicker negative-camber gain, increased compression travel, reduced rebound travel to limit body roll, and correct axis and length of lower arm assembly when utilizing factory mounting positions. A brand new, Total Control exclusive, billet-aluminum, offset-pivot-shaft option, enables precise relocation of the upper-control-arm pivot axis, for improved camber gain geometry without the need to drill holes, or risk of error.

Comet	1960-1967 1971-1977
Cougar	1967-1973
Cyclone	1964-1971
Fairlane	1966-1971
Falcon	1960-1970
Maverick	1970-1977
Montego	1968-1971
Mustang	1964-1973
Ranchero	1960-1971
Torino	1968-1971

See application chart for expanded list



Shown with optional spindle, dropped pivot shaft, and QuickSet 2 coil-over.

Five Main System Goals

Our front coil-spring suspension design focused on five main goals. First, keep the tires' contact patch flat on the road surface. Second, maintain precise control of suspension-travel arcs and spindle position. Then, control wheel movement without a harsh ride. Also, reduce the amount of body roll and pitch and, provide adjustability for tuning purposes. Our suspension achieves these goals to significantly improve performance without chassis modifications.

Optimize Tire Contact with Road

The most important job of a suspension system is to keep the tire's contact patch flat on the road. Factory suspension geometry allows the tire's inside edge to lift as the suspension compresses and body rolls during cornering. This reduces the size of the tire-contact area and available traction, most commonly realized as front-end "push" or understeer. Our modified suspension geometry uses a relocated upper-control-arm-mounting position that causes the wheel to lean inward as the suspension compresses; known as "negative camber gain." This geometry offsets the effect of body roll, keeping the tire in better contact with the road surface, and provides more available traction and cornering ability.

Precise Control of Suspension-Travel Arcs and Spindle Position

A key to creating a stable and predictable-handling vehicle is precisely controlling the spindle position. Soft, rubber bushings and weak, stamped components of the factory suspension do a poor job of this, allowing erratic handling during braking and cornering. The biggest improvement comes from deflection-free TrueCenter pivot points, a TCP-exclusive design. Incompressible polymer races are used at each chassis pivot to allow precise movement of the spindle along the correct path without the increasing resistance of rubber bushings. Control arms and strut rods are constructed from tubular steel to create deflection-free, rigid suspension components and further enhance accuracy.

TCP FACS-FD	Control-arm core system (upper and lower arms, and strut rods only)
TCP FCSS-FD	Coil-spring system, QuickSet 1, single-adjustable
OPTIONS	Drill jig (for use with standard pivot shaft)
	Dropped "no-drill" pivot shaft
	Anti-roll bar
	QuickSet 2, double-adjustable shocks
	Forged spindles

Better Control of Chassis Movement

A noticeable handling difference between 1960s' and more-modern vehicles is the amount of chassis movement, such as body roll and brake dive. By relocating suspension-mounting points and lowering ride height approximately 2 inches, the front roll-center height is moved closer to the vehicle's center of gravity. A shorter distance between these two points allows the shocks, springs and anti-roll bar to better control chassis movement, resulting in better handling.

Adjustability for Suspension Tuning

Adjustment of caster, camber, toe, and shock valving enable fine tuning to meet the specific needs of your vehicle. Caster and camber are controlled by adjusting the upper arm, lower arm and strut rod to various lengths. The available adjustment range exceeds the limits of factory suspension, allowing more-aggressive alignment specs for high-performance applications. Toe adjustment is made with our optionally available, heavy-duty, billet tie-rod-adjuster sleeve. VariShocks feature single or dual 16-position adjustments, enabling a wide range of settings.

VariShock Bolt-Ins, Adjustable Shocks

To take full advantage of the factory mounting position, a complete custom shock absorber was developed by our sister company, VariShock. Installed height, travel, valving range and mounting configuration are built to our exact specifications, whereas other manufacturers are forced to compromise with "off-the-shelf" products. QuickSet 1 single-adjustable shock is standard, offering 16 settings at which both bump and rebound are adjusted simultaneously. This offers a good compromise between the ultimate tuneability of the QuickSet 2 and affordability of the QuickSet 1. Optionally available is our double-adjustable QuickSet 2, which allows individual control of vehicle separation (rebound) and settling (bump) independent of each other. This gives the ability to tune your suspension for desired ride quality or specific track conditions for ultimate performance.

Performance-Series Coil Springs

Performance-Series springs offer increased performance with linear spring rate and predictable handling characteristics. A linear spring rate is preferred for high performance driving applications, but will have a stiffer, performance feel compared to OEM springs. Ride height is approximately 1" lower than stock height. Total Control's Performance-Series coil springs offers you the best way to get the ride and handling you want for your classic Mustang. Springs are made from high-strength alloy steel and wound on a specialized CNC spring coiler, then powder coated for a lasting, quality appearance. Available for 1964 to 1973 Mustangs and related Ford/Mercury vehicles.



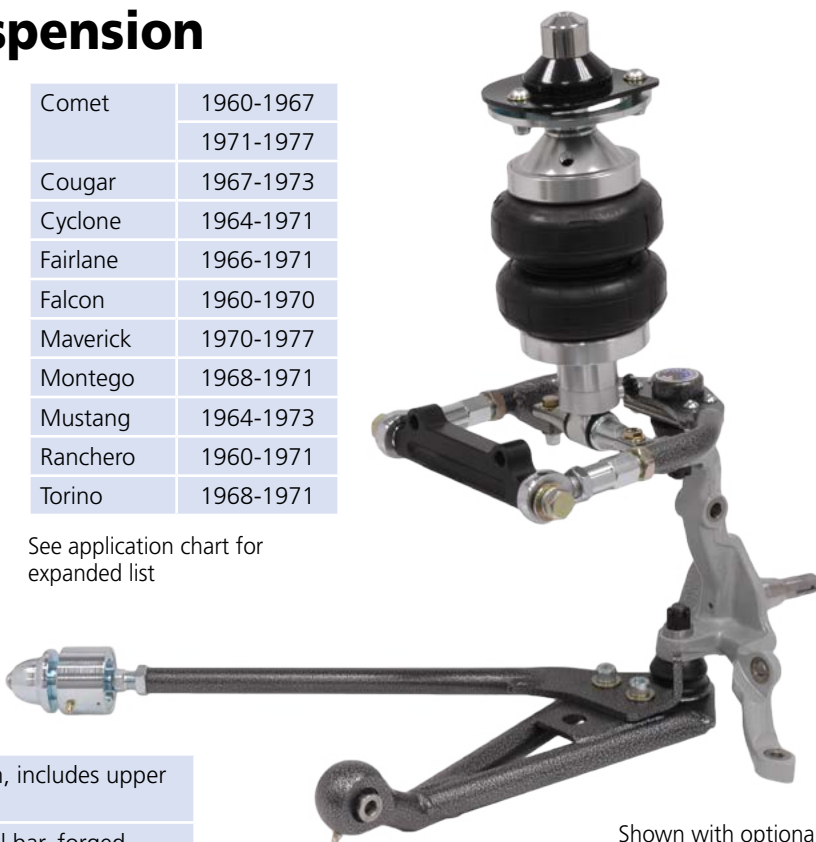
FRONT SUSPENSION

Bolt-On Air-Spring Suspension

Converting the stock front suspension of your 1960 to 1977 Ford/Mercury to air suspension is now a simple bolt-on procedure. Our exclusive modular shock-tower-adapter system and spherical-stem assembly can give you a choice of stock or lowered ride-height range and can be used for a broad variety of vehicles and performance applications. The tower adapter and lower crossbar replaces the factory shock mount and lower spring perch respectively. Lightweight billet-aluminum VariShock air-springs are available in 16-position single-adjustable or 256-combination double-adjustable versions and provide 6" of suspension travel. Kits include VariShock air-spring shocks, 90-degree air fitting, tower adapters with reinforcement plate, mounting hardware, and spot weld removal tool.

Comet	1960-1967
	1971-1977
Cougar	1967-1973
Cyclone	1964-1971
Fairlane	1966-1971
Falcon	1960-1970
Maverick	1970-1977
Montego	1968-1971
Mustang	1964-1973
Ranchero	1960-1971
Torino	1968-1971

See application chart for expanded list



Shown with optional forged spindle

TCP FASS-FD	Front air-spring suspension system, includes upper arms, lower arms, and strut rods
OPTIONS	Double-adjustable shocks, anti-roll bar, forged spindles, billet stem caps, eccentric eliminator kit, dropped pivot shafts

Bolt-On VariShock Air Springs

Installation is very straightforward, utilizing existing mounting locations exclusively. The lower crossbar replaces the factory spring perch and can be mounted directly to a TCP or factory upper control arm. The upper mount utilizes the factory shock-tower mounting holes. Some installations may require modification of the upper coil-spring seat. A sturdy, billet-aluminum mount is positioned underneath the shock-tower and reinforced by a top plate that sandwiches the shock-tower sheet metal, helping to evenly distribute loads.

Cougar	1967-1970	Single	VAS 13M21F1
		Double	VAS 13M21F2
Mustang	1964-1966	Single	VAS 13M11F1
		Double	VAS 13M11F2
	1967-1970	Single	VAS 13M21F1
		Double	VAS 13M21F2



Cap optional

Upper A-Arm Coil-Over Conversion

Converting the stock front suspension of your 1960 to 1977 Ford/Mercury to coil-over shocks is now a simple bolt-on procedure. Our exclusive modular shock-tower-adaptor system and spherical-stem assembly gives you a choice of stock or lowered ride heights and can be used for a broad variety of vehicles and performance applications. The tower adapter and lower crossbar replace the factory shock mount and lower spring perch respectively. Lightweight billet-aluminum VariShock coil-overs are available in 16-position single-adjustable or 256-combination double-adjustable versions and provide 7-1/2" of suspension travel. Choice of spring rates range from 400 to 750 lb/in., suitable for street-friendly ride quality to larger-vehicle handling performance. A second set of different rate springs can also be selected as an option for tuning purposes. Kits include shocks, springs, tower adapters with reinforcement plate, mounting hardware, and spot weld removal tool.



VAS 86MX1FX	Bolt-on coil-over, single adjustable VariShock	Comet	1960-1967 1971-1977
OPTIONS	Lowered ride height	Cougar	1967-1973
	Spanner wrench	Cyclone	1964-1971
	Spring-seat thrust bearings	Fairlane	1966-1971
	2-1/2" spring compressor	Falcon	1960-1970
	Stainless stem caps	Maverick	1970-1977
	2nd set of springs for tuning	Montego	1968-1971
		Mustang	1964-1973
		Ranchero	1960-1971
	Torino	1968-1971	

See application chart for expanded list

Features

- Bolts in with TCP or OEM upper control arms
- Year/model specific shock-tower adapters
- Choice of stock or lowered ride height
- Springs specific to vehicle weight/performance
- Greaseable spherical-stem upper shock mount
- Heavy-duty urethane-bushed lower crossbar
- Available in 16-position single-adjustable or 256-combination double-adjustable versions
- Works with TCP shock tower brace

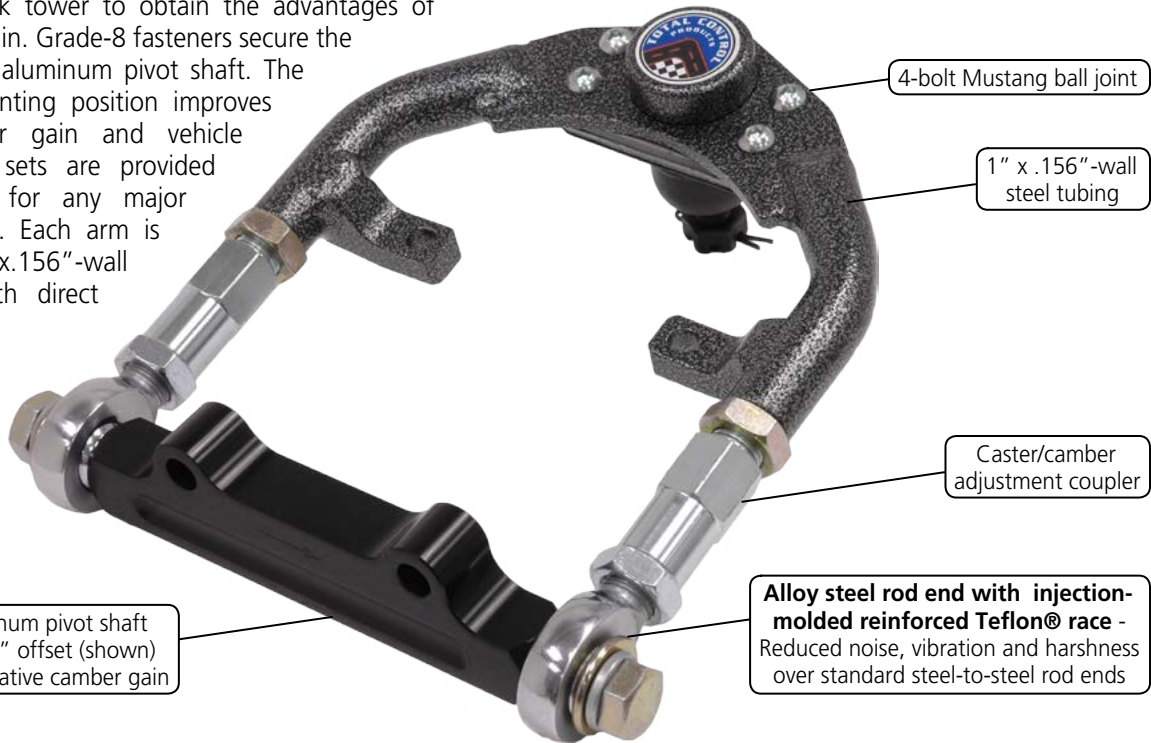


FRONT SUSPENSION

Upper Control Arms ^{Mark II}

The most notable feature of our upper control arms is the double-adjustment couplers. Adjustment range is 1", with travel centered at the stock control-arm length. Caster can be varied within a 6-degree range and camber within 5-1/2 degrees. Alloy-steel rod ends feature low-friction, polymer-bearing races, eliminating deflection and the increasing resistance found with rubber and polyurethane bushings. New dropped pivot shaft, Mark II design eliminates the need to drill the shock tower to obtain the advantages of higher camber gain. Grade-8 fasteners secure the rod ends to the aluminum pivot shaft. The 1"-lowered mounting position improves negative camber gain and vehicle roll rate. Shim sets are provided to compensate for any major chassis variances. Each arm is constructed of 1x.156"-wall steel tubing with direct

threads to the adjustment coupler. The broad, crimped end is robotic-spray-arc-welded to a 1/4" steel bracket. The 4-bolt balljoint relocates the zerk fitting for easier access and allows a lower-profile bump cap to net a 1/4" increase in suspension travel. New dropped style UCA and original straight Crossbar UCA are available. Arms are shipped fully assembled and include all necessary mounting hardware.



Dropped Pivot Shaft - Lowers the control arm pivot axis one-inch to improve camber gain and cornering performance without drilling holes in the shock tower.

Straight Pivot Shaft - Stock arm axis position for towers with drilled holes.

Alignment Shims - Used to compensate for chassis variances.



Front Coil-Over Conversion Upper Arm - Identical construction, geometry and feature set (less spring perch mounting tabs), allowing the coil-over shock to pass through the control arm. This style arm is included with the front coil-over conversion suspension or the tabless weldment sold as part of the coil-over conversion upgrade package.

Upper A-Arm Applications

Model	Year	Straight Pivot Shaft		Dropped Pivot Shaft		Replacement Dropped Pivot Shaft ³	Lowering Drill Jig
		Coil-Spring Arms	Coil-Over Arms	Coil-Spring Arms	Coil-Over Arms		
Comet	1960-1965	TCP UCA-01 ¹	TCP UCA-03 ¹	TCP UCA-06 ¹	TCP UCA-08 ¹	7905-031	TCP TOOL-01
	1966-1977	TCP UCA-02	TCP UCA-04	TCP UCA-07	TCP UCA-09	7905-032	TCP TOOL-02
Cougar	1967-1973	TCP UCA-02	TCP UCA-04	TCP UCA-07	TCP UCA-09	7905-032	TCP TOOL-02
Cyclone	1964-1965	TCP UCA-01	TCP UCA-03	TCP UCA-06	TCP UCA-08	7905-031	TCP TOOL-01
	1966-1971	TCP UCA-02	TCP UCA-04	TCP UCA-07	TCP UCA-09	7905-032	TCP TOOL-02
Fairlane	1966-1971	TCP UCA-02	TCP UCA-04	TCP UCA-07	TCP UCA-09	7905-032	TCP TOOL-02
Falcon	1960-1965	TCP UCA-01 ¹	TCP UCA-03 ¹	TCP UCA-06 ¹	TCP UCA-08 ¹	7905-031	TCP TOOL-01
	1966-1970	TCP UCA-02	TCP UCA-04	TCP UCA-07	TCP UCA-09	7905-032	TCP TOOL-02
Maverick	1970-1977	TCP UCA-02	TCP UCA-04	TCP UCA-07	TCP UCA-09	7905-032	TCP TOOL-02
Montego	1968-1971	TCP UCA-02	TCP UCA-04	TCP UCA-07	TCP UCA-09	7905-032	TCP TOOL-02
Mustang	1964-1966	TCP UCA-01 ¹	TCP UCA-03 ¹	TCP UCA-06 ¹	TCP UCA-08 ¹	7905-031	TCP TOOL-01
	1967-1973	TCP UCA-02 ²	TCP UCA-04 ²	TCP UCA-07 ²	TCP UCA-09 ²	7905-032	TCP TOOL-02
Ranchero	1960-1965	TCP UCA-01 ¹	TCP UCA-03 ¹	TCP UCA-06 ¹	TCP UCA-08 ¹	7905-031	TCP TOOL-01
	1966-1971	TCP UCA-02	TCP UCA-04	TCP UCA-07	TCP UCA-09	7905-032	TCP TOOL-02
Torino	1968-1971	TCP UCA-02	TCP UCA-04	TCP UCA-07	TCP UCA-09	7905-032	TCP TOOL-02

Footnotes

1	Six-cylinder spindles must be upgraded to V8 spindles.
2	Excludes Boss 429.
3	Dropped pivot shaft for use with TCP upper control arm only.

Upper-Arm Drill Jig

Lowering the mounting position of the upper control arm to improve the handling of classic Fords has been a common performance modification done since the 1960s, but never with the accuracy and ease that are now possible with our precision-laser-cut, steel drill jig. Previous methods involved drilling pilot holes using lightweight, flimsy templates or marks derived from a common ruler, leaving a large margin for error.

Our in-house, computer-controlled laser cutter makes perfect parts every time, so measurement errors are a thing of the past. Each drill jig is marked to show correct orientation and simply bolts to the factory mounting location. Heavy-gauge material is used to securely guide the full-size drill bit, so you only drill once for each hole. It's the perfect tool for the do-it-yourselfer and a great timesaver for shops that perform this modification frequently.



Upper-Arm Components

7905-023	Replacement 4-bolt balljoint (each)
3112-075X063-R	Replacement rod end (each)



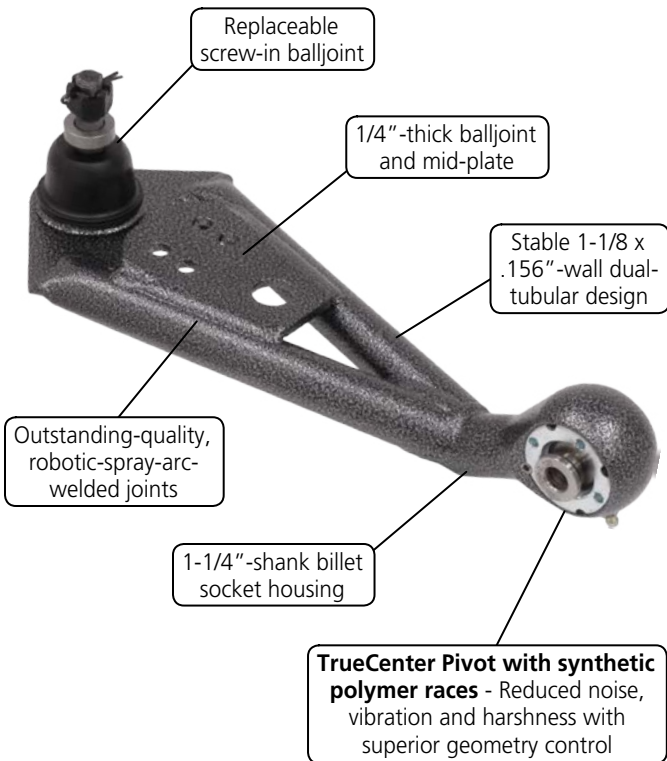
FRONT SUSPENSION

Lower Control Arms ^{Mark II}

Our TrueCenter pivot-socket, direct-replacement lower control arms improve suspension geometry by better controlling the balljoints' travel arch. A 1-piece spherical bearing (80% larger in diameter than our previous rod-end design) and high-strength polymer races create a deflection-free, low-friction pivot point. Bearing preload is maintained with a threaded retaining ring and is secured by a locking set screw. A lubrication zerk fitting is easily accessed at the bottom of the housing. The 1-1/4"-shank socket housing and 1-1/8x.156"-wall steel tubes meet at an overlapping, robotic-spray-arc-welded joint. Balljoint

and mid-plates made from 1/4" steel plate eliminate deflection at the spindle and anti-roll-bar attachment points. Premium-quality, screw-in balljoints are used and can be replaced as necessary. Arms are shipped fully assembled and include Grade-8 mounting hardware.

Kits include: lower control arms, screw-in balljoints, mounting hardware



TrueCenter Pivot Technology

The TrueCenter pivot socket is a deflection free, high load capacity, serviceable component that maintains bearing preload throughout the assembly's service life. Non-compressible, low-friction, synthetic polymer bearing races eliminate deflection, reduce wear and remain linear in resistance, unlike rubber or polyurethane. Each TrueCenter pivot assembly is specially designed for its particular application allowing us to use the largest bearing diameter possible to maximize load bearing capability.



The assembly can also be lubricated with a standard grease gun but differs from a balljoint or rod end in the ability to tighten the polymer races against the bearing if play should ever develop. TrueCenter pivot technology has been applied to our line of TCP lower control arms and strut rods, improving performance and serviceability.

Model	Year	Lower Control Arms	Eccentric Eliminators
Comet	1960-1965	TCP LCA-04 ¹	-
	1966-1967	TCP LCA-05	TCP EE-01
	1968-1977	TCP LCA-06	TCP EE-01
Cougar	1967	TCP LCA-05	TCP EE-01
	1968-1973	TCP LCA-06	TCP EE-01
Cyclone	1964-1965	TCP LCA-04	-
	1966-1967	TCP LCA-05	TCP EE-01
	1968-1971	TCP LCA-06	TCP EE-01
Fairlane	1966-1967	TCP LCA-05	TCP EE-01
	1968-1971	TCP LCA-06	TCP EE-01
Falcon	1960-1965	TCP LCA-04 ¹	-
	1966-1967	TCP LCA-05	TCP EE-01
	1968-1970	TCP LCA-06	TCP EE-01
Maverick	1970-1977	TCP LCA-06	TCP EE-01
Montego	1968-1971	TCP LCA-06	TCP EE-01
Mustang	1964-1966	TCP LCA-04 ¹	-
	1967	TCP LCA-05	TCP EE-01
	1968-1973	TCP LCA-06	TCP EE-01
Ranchero	1960-1965	TCP LCA-04 ¹	-
	1966-1967	TCP LCA-05	TCP EE-01
	1968-1971	TCP LCA-06	TCP EE-01
Torino	1968-1971	TCP LCA-06	TCP EE-01
Footnotes			
1	6-cylinder spindles must upgrade to V8 spindles		

Lower Control Arm Accessories

Heavy-Duty Screw-In Balljoints

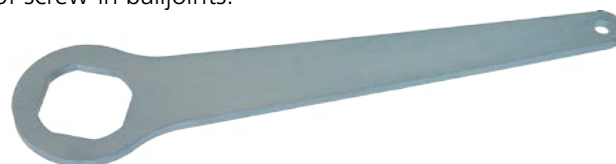
Sold in pairs, these premium screw-in balljoints include rubber dust boots, zerks fittings, and stud hardware.



6104 Replacement screw-in balljoints with boots and hardware (pair)

Balljoint Wrench

Our zinc-plate, laser-cut steel balljoint wrench takes the hassle out of dealing with uncommon OEM drive feature of screw-in balljoints.

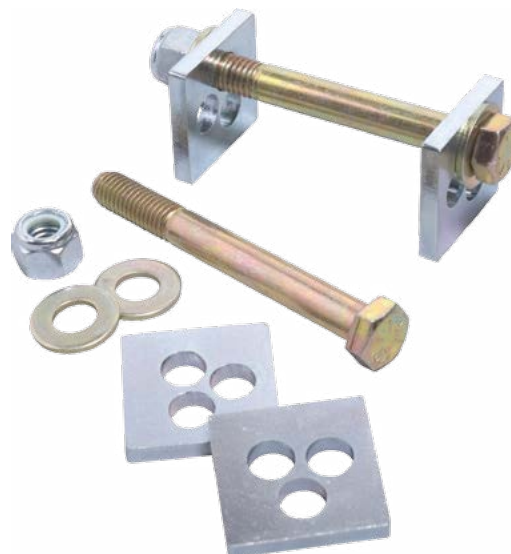


6711 Screw-in balljoint wrench, zinc plated steel

Eccentric Eliminators

Our bolt-on eccentric-eliminator-plate kit directly replaces the factory lower control-arm-mounting hardware on some 1960s and 1970s Ford/Mercury vehicles equipped with cam bolts. The round exterior of the factory hardware does little to prevent rotation of the eccentric plate, and can allow the lower control-arm position to shift when subjected to heavy loads or impacts. Our updated, square shape securely indexes the eliminator plate, preventing any chance of rotation and altered alignments. Eliminator plates are laser-cut from 1/4"-thick steel, feature three 1/2" mounting holes, and are zinc-plated. Various combinations of plate orientation and selected mounting holes enable 11 different mounting positions within a 5-degree camber adjustment range. Grade-8 mounting hardware is included.

TCP EE-01 Eccentric Eliminators and hardware for '67-'73 Mustang and Cougar



FRONT SUSPENSION

Strut Rods ^{Mark II}

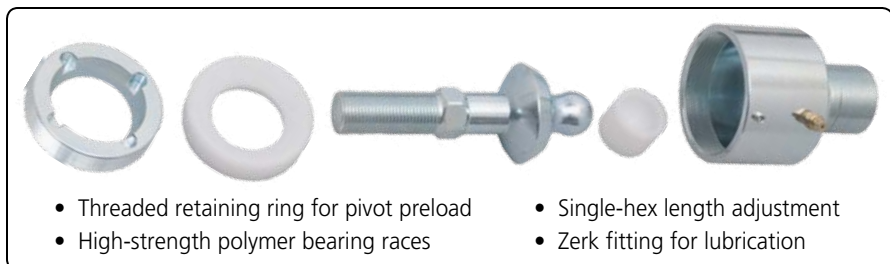
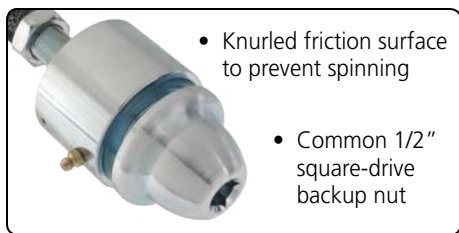
Our adjustable-length strut rods with TrueCenter pivot socket are the only product available that maintains correct suspension geometry without the increasing resistance found with rubber and polyurethane bushings. The pivot stud features concentric bearing-contact surfaces with a 13/16" hex and a caster-adjustment range of 3-4 degrees, depending upon application. This unique concentric arrangement avoids compromising the suspension geometry; unavoidable when using a standard rod end

and clevis mounting method. A maximum of 12 degrees misalignment is possible in any direction and allows the strut rod to rotate beyond the limits of a standard rod end. High-strength, non-compressible, polymer bearing races create a low-friction pivot center with zero deflection and can be lubricated through the easily accessible zerk fitting. The threaded retaining ring maintains preload on the pivot assembly and is secured with a locking set screw. Steel housings have vehicle specific mounting bosses and feature a knurled mounting surface for spin-free installation. A common 1/2"-square-drive backup nut and button-head "jam" fastener secure the assembly to the factory mounting location. Each strut rod is constructed of 1x.156"-wall, steel tubing with direct threads to the pivot stud. The broad, crimped end is robotic-spray-arc-welded to a 5/16" steel control-arm adapter plate with adjustable steering stop. Adapter-plate holes are slotted to achieve the correct mounting angle as caster adjustments are made.



TrueCenter Pivots with concentric polymer races - Reduced noise, vibration and harshness with superior geometry control

Model	Year	Item
Comet	1960-1965	TCP STRD-05
	1966-1967	TCP STRD-06
	1971-1977	TCP STRD-07
Cougar	1967	TCP STRD-06
	1968-1973	TCP STRD-07
Cyclone	1964-1965	TCP STRD-05
	1966-1967	TCP STRD-06
	1968-1971	TCP STRD-07
Fairlane	1966-1967	TCP STRD-06
	1968-1971	TCP STRD-07
Falcon	1960-1965	TCP STRD-05
	1966-1967	TCP STRD-06
	1968-1970	TCP STRD-07
Maverick	1970-1977	TCP STRD-07
Montego	1968-1971	TCP STRD-07
Mustang	1964-1966	TCP STRD-05
	1967	TCP STRD-06
	1968-1973	TCP STRD-07
Ranchero	1960-1965	TCP STRD-05
	1966-1967	TCP STRD-06
	1968-1971	TCP STRD-07
Torino	1968-1971	TCP STRD-07



Total Control Forged Spindles

TCP now offers direct-replacement spindles for early Mustangs and other classic Fords. These spindles are a 1-piece, alloy-steel forging. Our spindles share Ford's identical geometry, and can be used with many 1960s and '70s Ford/Mercury vehicles. Spindles feature a durable, powder-coat finish for long-lasting, quality appearance.

Design and Construction

Spindles are created from alloy-steel forgings, then finish-machined for consistent geometry and mounting positions. The overall design is based on Ford's proven 1970-1973 disc-brake spindle, known for its stouter, flowing design with minimized stress-concentration areas. The later disc-brake-spindle style was chosen for its preferable caliper-mounting arrangement and large bearing size. In addition to the strength of the reinforced areas around the caliper-mounting bosses, the caliper bracket also acts as a diagonal brace, triangulating the spindle assembly. We offer aftermarket disc-brake systems to best utilize this mounting configuration.



TCP SPND-01	Spindle, '70-73 Mustang disc and tie-rod
TCP SPND-02	Spindle shaft hardware kit (pair)

Installation and Compatibility

These spindles can be used with most compact- and intermediate-sized 1960s and '70s Ford/Mercury vehicles, due to common upper and lower balljoint tapers and spindle height. However, the larger spindle pin, redesigned axle flange, and caliper mounts require brake-system upgrades for earlier vehicles. OEM disc brakes from 1968-1973, with upright-to-steering-arm caliper bracket, can be used. OEM hubs from 1968-1969 must change to 1970-

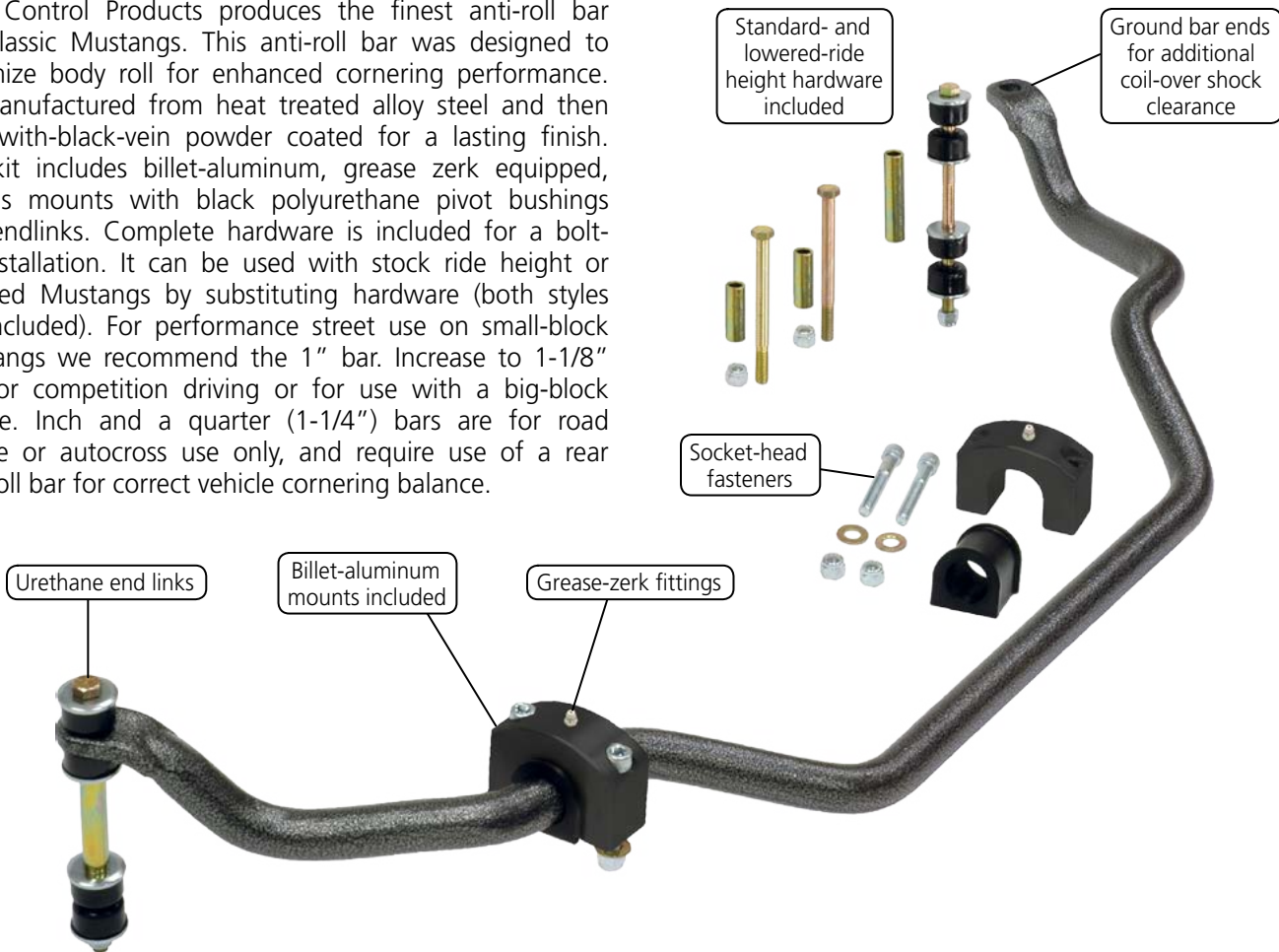
1973 wheel bearings, with larger 1.377" and .865" bore sizes. The use of 1970-1973 Mustang outer tie rods or the TCP bumpsteer kit is required. Six-cylinder tie-rod-adjusting sleeves prior to 1965, measuring .500" OD (1/2-20), must convert to TCP rack and pinion or OEM V8 steering systems with .688" OD (11/16-18) sleeves. (See main applications chart for specific listings.)

Model	Year	Installation Requirement
Comet	1960-1977	Balljoints: Factory or aftermarket interchangeable upper and lower balljoints. Direct bolt-on for all applications listed. Bump-steer tie-rod sets: TCP TIER 07, -16, or -17 Standard tie-rod sets: TCP TIER-13, -14, or -15 Replacement standard outer: MOOG ES387R for 1970-1973 Mustang Brake options: Aftermarket (Wilwood): 13" Performance (WW 140-9189), 11-3/4" Street (WW 140-9054) OEM (disc): 1968-1973 Cougar, 1968-1971 Comet, 1968-1970 Fairlane, 1968-1970 Falcon, 1968-1971 Montego, 1968-1973 Mustang, 1971 Torino (1968-1969 hubs must change to 1970-1973 wheel bearings) Wheel bearings: 1970-1973 Mustang - large inner bearing (1.377" bore); small outer bearing (.865" bore)
Cougar	1967-1973	
Cyclone	1964-1971	
Fairlane	1966-1971	
Falcon	1960-1970	
Maverick	1970-1977	
Montego	1968-1971	
Mustang	1964-1973	
Ranchero	1960-1971	
Torino	1968-1971	
Comet	1960-1965	Six-cylinder vehicles: Must upgrade to TCP rack and pinion or OEM V8 steering system.
Falcon	1960-1965	
Mustang	1964-1966	
Ranchero	1960-1965	

FRONT SUSPENSION

Front Anti-Roll Bars

Total Control Products produces the finest anti-roll bar for Classic Mustangs. This anti-roll bar was designed to minimize body roll for enhanced cornering performance. It's manufactured from heat treated alloy steel and then silver-with-black-vein powder coated for a lasting finish. The kit includes billet-aluminum, grease zerk equipped, chassis mounts with black polyurethane pivot bushings and endlinks. Complete hardware is included for a bolt-on installation. It can be used with stock ride height or lowered Mustangs by substituting hardware (both styles are included). For performance street use on small-block Mustangs we recommend the 1" bar. Increase to 1-1/8" bar for competition driving or for use with a big-block engine. Inch and a quarter (1-1/4") bars are for road course or autocross use only, and require use of a rear anti-roll bar for correct vehicle cornering balance.



Model	Year	1" Street	1-1/8" Street Performance	1-1/4" Competition
Comet	1963-1965	ARFM1-16	ARFM1-18	ARFM1-20
	1966-1970	ARFM2-16	ARFM2-18	ARFM2-20
Cougar	1967-1970	ARFM2-16	ARFM2-18	ARFM2-20
	1971-1973	ARFM3-16	ARFM3-18	-
Fairlane	1966-1969	ARFM2-16	ARFM2-18	ARFM2-20
	1970-1971	ARFM3-16	ARFM3-18	-
Falcon	1963-1965	ARFM1-16	ARFM1-18	ARFM1-20
	1966-1970	ARFM2-16	ARFM2-18	ARFM2-20
Montego	1968-1969	ARFM2-16	ARFM2-18	ARFM2-20
	1970-1971	ARFM3-16	ARFM3-18	-
Mustang	1964-1966	ARFM1-16	ARFM1-18	ARFM1-20
	1967-1970	ARFM2-16	ARFM2-18	ARFM2-20
	1971-1973	ARFM3-16	ARFM3-18	-
Ranchero	1966-1969	ARFM2-16	ARFM2-18	ARFM2-20
	1970-1971	ARFM3-16	ARFM3-18	-
Torino	1966-1969	ARFM2-16	ARFM2-18	ARFM2-20
	1970-1971	ARFM3-16	ARFM3-18	-
NOTES	Part numbers use "TCP" prefix			

Billet Anti-Roll-Bar Mounts

Also available separately, replacement billet-aluminum anti-roll-bar mounts are a quick, simple way to dress up your classic. Mounts feature socket-head hardware, easily accessible grease zerk, and are available with 1", 1-1/8", or 1-1/2" poly bushings. Clear-anodized satin finish; sold in pairs.



TCP ARBM-1.00	1" ID bushing and mount set
TCP ARBM-1.13	1-1/8" ID bushing and mount set
TCP ARBM-1.25	1-1/4" ID bushing and mount set

Front Coil Springs and Components

Performance-Series Coil Springs

Performance-Series springs offer increased performance with linear spring rate and predictable handling characteristics. A linear spring rate is preferred for high performance driving applications, but will have a stiffer, performance feel compared to OEM springs. Ride height is approximately 1" lower than stock height.

Total Control's Performance-Series coil springs offers you the best way to get the ride and handling you want for your classic Mustang. Springs are made from high-strength alloy steel and wound on a specialized CNC spring coiler, then powder coated for a lasting, quality appearance. Available for 1964 to 1966 Mustang with small block, and 1967 to 1973 Mustangs with small- or big-block. Sold in pairs.

Item	Application	Rate	Free Length
TCP SLM1-56	1964-66 Mustang, 1" lowering	560 lb/in	12-1/8"
TCP SLM2-60	1967-73 Mustang, 1" lowering	600 lb/in	13"

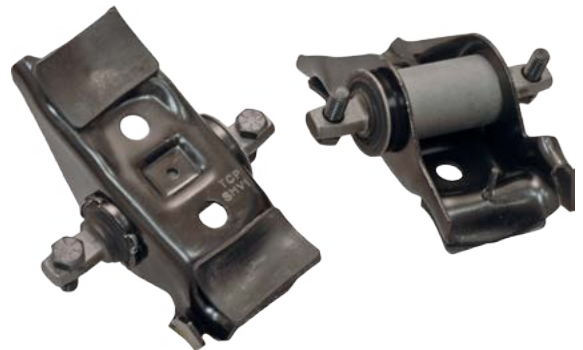


Coil springs are powder-coat finished for a lasting, quality appearance.

Lower Spring Rockers

Replacement lower spring-seat rockers for the upper control arms are available. Made from all new materials they feature rubber pivot bushings and lower spring isolators. Sold in pairs.

TCP SVM1-02	Coil-spring upper arm spring rockers (pair)
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Upper Spring Isolators

Our coil-spring isolator is made from high strength black polyurethane for long life. Sold in pairs.

TCP SVM1-01	1/4" isolator set, lowered ride height (pair)
TCP SVM1-03	1" isolator set, standard ride height (pair)

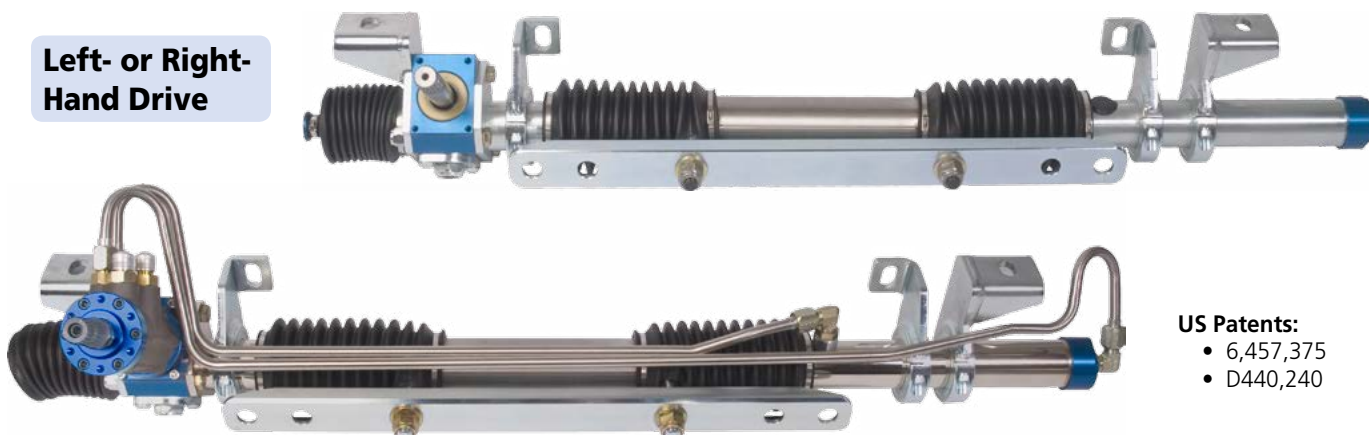


STEERING

Rack-and-Pinion Steering Conversions

Comet '60-65, Cougar '67-73, Falcon '60-65, Mustang '64-73, Ranchero '60-65

Left- or Right-
Hand Drive



US Patents:
• 6,457,375
• D440,240

Model	Year
Comet	1960-1965
Cougar	1967-1973
Falcon	1960-1965
Mustang	1964-1973
Ranchero	1960-1965

Application	Item
Manual rack for stock (OEM) column	TCP RCKMS-FD
Manual rack with aftermarket column	TCP RCKMA-FD
Power rack for stock (OEM) column	TCP RCKPS-FD
Power rack with aftermarket column	TCP RCKPA-FD

Note: 1960-66 model years require V8 spindles and tie rods.

Six Keys to a Successful Rack-and-Pinion Conversion

Six distinct features are mandatory for a successful conversion to rack-and-pinion steering: Tires must turn as far as a factory system. Steering column must provide adequate header clearance. Correct steering geometry must be maintained. Installation must not decrease ground clearance. Frame-stiffening crossmember is required. System must allow comfortable road feel. **Our patented line of superior components are the only systems on the market that provide all of these features.**

1 - Tires must turn as far as factory system

One of the most-important characteristics of a steering system is steering-box travel. The amount of travel directly affects the vehicle's ability to turn sharply enough to maneuver in tight places. The TCP rack and pinion duplicates the factory system's travel of 6-3/8". Major-OEM-manufactured rack and pinions are generally designed for later vehicles with shorter steering arms, which have a shorter travel requirement, typically 5-1/2". Therefore, most late-model racks are not built with adequate travel for classic applications, resulting in a significant increase in turning radius if used in a conversion.



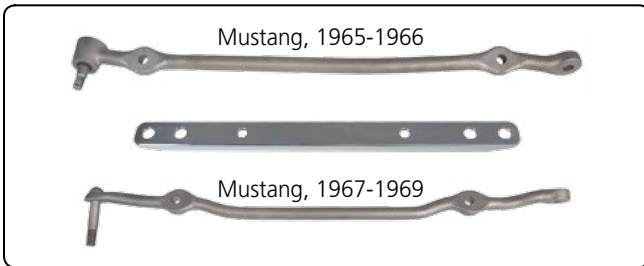
2 - Must provide adequate header clearance

Our unique, patented rack design positions the gearbox against the driver-side frame rail, similar to the original steering box. Steering shaft and universal joints remain close to the frame rail, providing much more header clearance than a conversion kit using an OEM-style rack. OEM-style kits put the steering-box connection beside the oil pan, creating header-installation problems. We offer the most available room for aftermarket headers and exhaust systems of any steering conversion for classic Fords.



3 - Maintain correct steering geometry

Correct center-link position is extremely critical to steering geometry; any deviation from this position will result in "Ackermann" problems and "bump steer." Ackermann is a difference in steering angle between the front wheels, with the inside tire turning at a sharper angle to follow a tighter radius. Incorrect Ackermann geometry leads to excessive tire wear and poor cornering. Bump steer is a change in toe during suspension travel due to incorrectly placed tie-rod pivot points. Avoiding these problems can only be accomplished by using a center-take-off rack, which uses a center link as the inner-tie-rod attachment point. This is the only style of rack that allows the exact duplication of the stock inner-tie-rod positions. The physical limitations of standard OEM end-take-off racks, which position the inner tie rods outboard of the gear box, do not allow duplication of the required dimensions.



4 - Must not decrease ground clearance

In a successful effort to maximize ground clearance, our rack takes the place of the factory tubular crossmember at the rear of the oil pan. Different-length brackets are used, depending upon engine type, to keep the rack above the lowest portion of the oil-pan sump, but allow clearance above for high-capacity, aftermarket pans. Other rack conversions decrease ground clearance and become the lowest point of the car. This would allow the rack to touch the ground when going over speed bumps, or in the event of a flat tire.



5 - Frame-stiffening crossmember is required

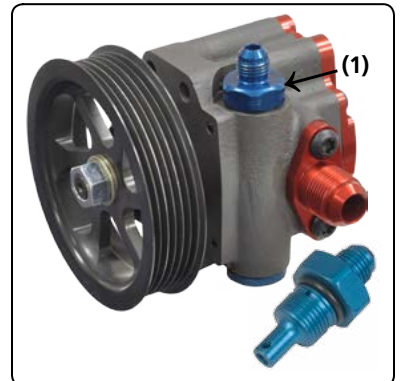
Once installed, the rack replaces the factory structural crossmember and provides an improvement over the original design. Our rack and pinion's main structure is a straight length of steel tubing, 20 percent larger in diameter than the original factory brace, plus stronger in both compression and torsion. The rack tubes in other racks were not designed as structural components and are not strong enough to act as a crossmember. Four mounting brackets

secure to the original frame-rail location and directly to the lower-control-arm mounts. Joining the vertical and horizontal mounting planes through the rack improves consistency of the lower-control-arm suspension and inner-tie-rod steering geometries.

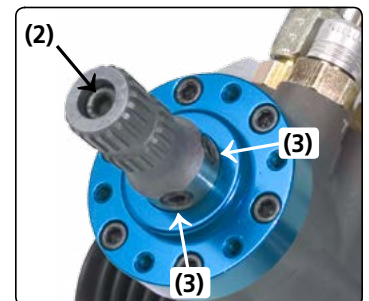


6 - System must allow comfortable road feel

The TCPrack and pinion offers superior road feel over factory and other aftermarket steering systems due to its simple, efficient design. A key difference is the use of straight-cut gears as opposed to helical (angled) gears found in OEM racks. Straight-cut gear teeth have the benefit of directly driving the rack gear in the desired direction. Helical gears use a sliding action across multiple contact surfaces that increases friction and wear. This contact angle also wastes some of your steering effort into forcing the pinion gear in and out of the gearbox, which adds additional friction and wear. Three elements of our power-steering system enable the level of assist to be varied to meet individual driver needs. The system can be adjusted to have low effort at the steering wheel for easy maneuvering in mostly low-speed



conditions. For high-speed driving and racing, the steering effort can be increased to give the driver better road feel through increased feedback. Initially set at the middle of our required range, the power steering pump output flow valve (1) can be easily changed to provide eight additional assist levels. Settings outside the range of the flow valves can be accomplished by changing the internal torsion bar (2), shifting the base point of the tuning range. Many vehicles have a tendency to drift right or left while going straight. The causes for this are numerous and many cannot be resolved. To improve this problem, steering bias can be adjusted to perfectly center itself by a simple adjustment on the servo (3).

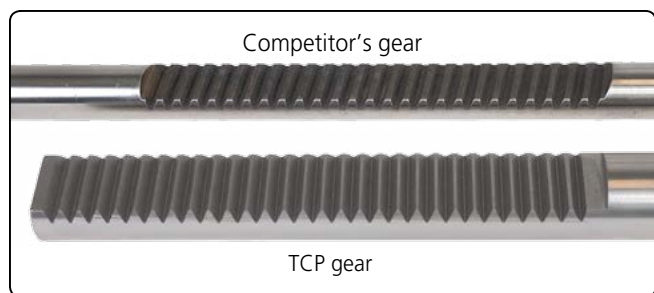


STEERING

Additional Exclusive Features

Unmatched Component Strength

The rack and pinion's internal components were designed to exceed durability levels of competitor and OEM steering systems. The overall strength of the gears is greatly increased by using a 30° pressure angle. This difference creates a 60%-broader gear-tooth base and avoids the undercutting of the pinion-gear teeth common on OEM racks. For ultimate strength and wear resistance, pinion gears are manufactured from 4150 chrome-molybdenum alloy steel. Rack gears are built from high-quality alloy steel and feature a 25%-larger diameter than any OEM or aftermarket rack in our immediate market. As a result, the gear-tooth contact surfaces are also increased in size and load capability.



True Performance Steering

The TCP rack and pinion boasts the quickest steering ratio in our market, with a responsive 2.09" per turn and three turns lock-to-lock. A 25-50% increase in travel per turn is realized over the factory-standard 4-5/8-turn and performance 3-3/4-turn systems. Steering response is more in line with that of a modern sports car, truly bringing enjoyment to the act of driving your classic.

To maintain precise gear lash, a unique, springless system is used. Standard OEM racks use spring pressure against a plastic bushing to remove any slack between gears. This constant pressure adds friction and increases component wear. Our system uses a bronze bearing for reduced wear and minimal friction. The bearing is positioned by an adjustable mechanism to precisely maintain correct gear lash without adding resistance to the steering. This method is superior in efficiency, wear and support against gear separation.



Center-Link Stability

Fastened directly into the rack gear is the billet-steel center link, by means of two specially machined studs. To create a stable attachment area, spacing between the studs is increased to nearly four times the spacing found on competitors' adapted center-take-off racks. Forces from the tie rods produce torque centered on the center-link attachment points. Center links with closely mounted studs provide little support, allowing deflection in the steering system and reduced responsiveness. The distance between the TCP studs is greater than the unsupported length of the center link and reduces the mechanical leverage of the tie rods.



Perfect Power Steering

The complete power-steering system is designed with matched fluid volumes, flow rates and pressure requirements to deliver a tight, responsive feel with adequate feedback. This balance of feedback and assist is not possible with any combination of OEM pumps or steering units. OEM flow rates and pump-output response curves provide over-assisted, nonlinear steering. All hydraulic components with the exception of the pump and reservoir are integral to the rack-and-pinion assembly, completely eliminating externally mounted units and leaky flexible hoses. Fluid is transferred through stainless-steel hardlines to the internal hydraulic cylinder, minimizing any loss of pressure from hose flex. All fittings and lines are routed on top of the rack and pinion to reduce risk of damage from road debris.



Steering Column Components

Vehicle-specific installation kits are included in the rack-and-pinion sales kit. Component sets are available for use of factory or aftermarket steering columns.

Non-collapsible steering columns were in use from 1960 through early 1967. Most vehicles' column tube and steering shaft were supported directly by the steering box. Rack installation requires the column tube to be shortened, the steering shaft replaced, and the addition of a firewall mount. The remaining early 1967 vehicles featured a shortened column tube, factory firewall mount and rag joint, but remained non-collapsible. These applications are supplied a correct-length steering shaft

with roller-bearing assembly and pivoting firewall mount with factory seal. Non-collapsible tilt or swing-away columns must upgrade to factory collapsible or aftermarket columns. Late-1967-through-1970 steering columns feature a slip-fit collapsible steering shaft and can be identified by measuring the 1"-diameter shaft above the rag joint. A replacement lower slip shaft, roller-bearing assembly and firewall seal are provided.

All installations also receive an intermediate-steering-shaft kit with needle-bearing universal joints. Various U-joint sets are available to accommodate major aftermarket column manufacturers and high-misalignment applications.

Non-Collapsible Shaft Kits

TCP's non-collapsible replacement-steering-shaft kit includes model-specific steering shaft with factory steering wheel spline/taper, column roller bearing and retainer. Bearing retainer features a cut-away slot for use with a factory column-shift lever or ignition-lock-out lever.

TCP COLM-01	1964-to-early-1967 Mustang/Cougar
TCP COLM-02	1960-1965 Falcon/Comet



Firewall Mounts

Pivoting column-firewall mount supports the lower end of steering-column tube following removal of factory steering box. Replacement firewall seal also included.



TCP COLM-04	1964-to-early-1967 Mustang/Cougar
TCP COLM-05	1960-1965 Falcon/Comet

Collapsible Shaft Kit

Lower collapsible steering shaft replaces factory slipshaft fitted to rag joint. Features "Double-D" shaft end for universal-joint attachment. Column roller-bearing-retainer assembly and firewall seal included.



TCP COLM-03	Late-1967 to 1970 Mustang/Cougar
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Intermediate Shaft

Intermediate shaft with universal joints. U-joints are specific to steering column and vehicle model.



TCP ISFT-01	Stock Mustang
TCP ISFT-02	Stock Falcon
TCP ISFT-03	Flaming River
TCP ISFT-04	Ididit

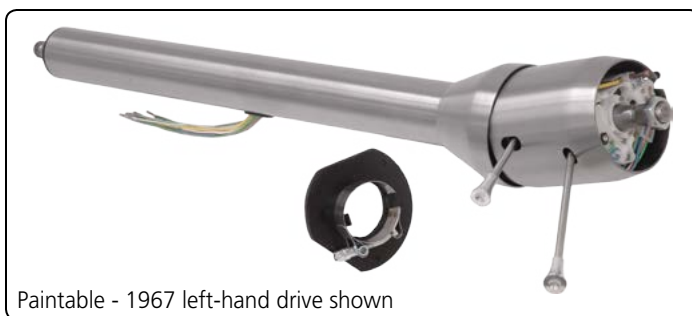
STEERING

Tilt Steering Columns

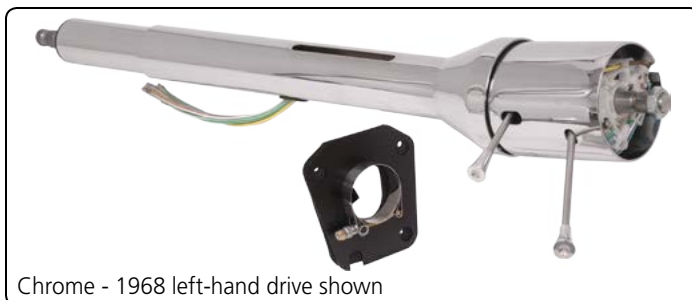
ididit™ tilt steering columns can be purchased for use with stock steering systems, and are also offered as an option with our rack-and-pinion package. Known for manufacturing the best quality and best fitting aftermarket columns, ididit™ has been enhancing the driving experience for over 30 years. Column lengths are specific to our rack-and-pinion installation and provide improved universal-joint alignment compared to competitors' aftermarket columns. Columns feature 8-position tilt mechanism, self-canceling turn signals, Ford turn-signal switch and top shaft, and floor mount with replacement gasket. Column and installation accessories are included in complete rack-and-pinion sales kits and do not require separate purchase. (TCP RCKMA-FD, TCP RCKPA-FD)

Columns can also be purchased separately for use with the rack and pinion at a later date, using part numbers shown.

Note: Aftermarket columns are not compatible with Rally-Pac gauge pod.



Paintable - 1967 left-hand drive shown



Chrome - 1968 left-hand drive shown



Black Painted - 1964-65 right-hand drive shown

Mustang Tilt Steering Column Kits

1964-1966	Left-Hand Drive - USA	Black Painted Finish	IDT 1120644051
		Chrome Finish	IDT 1120644020
		Paintable Steel	IDT 1120644010
	Right-Hand Drive - Australia	Black Painted Finish	IDT 1260642051
		Chrome Finish	IDT 1260642020
		Paintable Steel	IDT 1260642010
1967	Left-Hand Drive - USA	Black Painted Finish	IDT 1120645051
		Chrome Finish	IDT 1120645020
		Paintable Steel	IDT 1120645010
	Right-Hand Drive - Australia	Black Painted Finish	IDT 1260643051
		Chrome Finish	IDT 1260643020
		Paintable Steel	IDT 1260643010
1968	Left-Hand Drive - USA	Black Painted Finish	IDT 1300645051
		Chrome Finish	IDT 1300645020
		Paintable Steel	IDT 1300645010
1968-1969	Right-Hand Drive - Australia	Black Painted Finish	IDT 1250644051
		Chrome Finish	IDT 1250644020
		Paintable Steel	IDT 1250644010
1969	Left-Hand Drive - USA	Black Painted Finish	IDT 1300647051
		Chrome Finish	IDT 1300647020
		Paintable Steel	IDT 1300647010

Bump-Steer Tie-Rod Kits

The TCP bump-steer kit replaces the factory outer tie rod and adjusting sleeve with an extended, billet-steel sleeve and high-strength, 4130-body rod end, unlike competitors' low-grade, mild-steel rod ends. The tapered stud, along with a selection of shims, enable vertical adjustment of the outer pivot point at the steering arm. This added adjustment variable allows the vehicle's suspension-travel toe-in characteristics to be altered for improved steering predictability. Kits are available with or without inner tie rods.



Billet Tie-Rod-Adjuster Sleeves

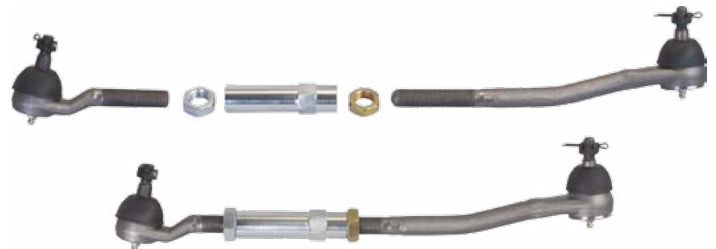
Our heavy-duty, billet tie-rod-adjusting sleeve directly replaces the factory stamped-steel, split-tube design. The seamless sleeve features a 1" hex to facilitate precise toe adjustment and tightening of the zinc-plated jam nuts. Left-handed threads are indicated by offset position of the sleeve hex and yellow zinc coating on jam nuts. A 50%-greater wall thickness and a 40%-larger thread-contact area provide improved strength over the factory design and eliminate any sleeve deflection. Internal threads extend 1-3/4" to a centered stop, enabling a total adjustment range of 2-1/8".



Direct replacement for OEM stamped-steel, clamp design (MOOG-ES2004S)

Complete Tie-Rod Sets

Direct-replacement tie-rod sets can also be purchased with our heavy-duty, billet adjusting sleeves included. High-quality tie rods, come complete with dust boots, zerk fittings and hardware.



Model	Year	Bump Steer Outer	Bump Steer Inner & Outer			Adjuster Sleeve Only*	Billet Sleeve with Inner & Outer		
			For OEM Spindle	For TCP Spindle	Granada Spindle		For OEM Spindle	For TCP Spindle	Granada Spindle
Mustang	1964	TIER-08	TIER-11 ¹	TIER-14 ¹	TIER-22	-	TIER-05 ¹	TIER-16 ¹	TIER-18
	1965-1966	TIER-08	TIER-11 ^{1 or 2}	TIER-14 ^{1 or 2}	TIER-22	TIER-04	TIER-05 ^{1 or 2}	TIER-16 ^{1 or 2}	TIER-18
	1967-1969	TIER-09	TIER-12	TIER-15	TIER-23	TIER-04	TIER-06	TIER-17	TIER-19
	1969 (Boss)	TIER-10	TIER-13	TIER-13	TIER-24	TIER-04	TIER-07	TIER-07	TIER-20
	1970-1973	TIER-10	TIER-13	TIER-13	TIER-24	TIER-04	TIER-07	TIER-07	TIER-20

Footnotes

- * Verify each shaft diameter and sleeve length prior to ordering. (Shaft = .688"; sleeve = 4.7")
 - 1 Installation requires TCP rack and V8 spindles
 - 2 V8 with OEM manual steering
- Also available for select 1960-1973 models of Comet, Cougar, Cyclone, Fairlane, Falcon, Maverick, Mustang, Montego, Ranchero and Torino. See main application chart for expanded list.

STEERING

Power Steering Pump Kits

Sportsman Series Pumps

The base Sportsman power steering pump system is comprised of a OEM-style, aluminum bodied power steering pump, with adequate flow to comfortably meet the requirements of our rack-and-pinion servo. Hydraulic-assisted brake systems can also be supported utilizing our base power steering pumps. Sportsman pumps are available in remote-reservoir or integral-reservoir configurations, with billet V-belt or serpentine pulley.

Features:

- Aluminum body
- Anodized billet pulleys
- 17mm shaft diameter
- Remote reservoir: -6 output, -10 input
- Integral reservoir: -6 output, 3/8" return

Remote Reservoir Sportsman Pump Kit (TCP PSP6XX2)



TCP PSP6XX2	Remote-reservoir pump kit - Includes Sportsman pump, pulley, mounting bracket set, hose kit, hose bracket, and remote-mounted aluminum reservoir
BRACKETS	260, 289, 302,351W, or 351C 390, 427, or 428
PULLEYS	6" V-belt or 4.2" 6-rib serpentine
HOSES	Stainless steel braided
RESERVOIR	Welded aluminum reservoir, optional billet-aluminum reservoir and 14-degree inner fender mount

Integrated Sportsman Reservoir Pump Kit (TCP PSP5XX2)



TCP PSP5XX2	Integral-reservoir pump kit - Includes Sportsman pump with integrated reservoir, pulley, mounting bracket set, hose kit, and hose bracket
BRACKETS	260, 289, 302,351W, or 351C 390, 427, or 428
PULLEYS	6" V-belt or 4.2" 6-rib serpentine
HOSES	Stainless steel braided
RESERVOIR	Integrated aluminum reservoir

Pro Series Pumps

The new Pro Series power steering pump the first pump specifically designed and engineered for racing and high performance use without any production car components, is the result of years of research and development that included input from aftermarket industry leaders in performance steering system development. The pump marries components such as tunable flow valves, spline drive bolt-on pulleys, double bolt patterns, and ball and roller shaft bearings with new and improved pump technologies such as a micro-honed piston bore for quick and smooth response and ported low turbulence internal passages, and a unique pump design to deliver the most versatile, durable, and efficient pump ever manufactured.

Features:

- Calibrated, tunable flow curve
- Runs up to 20 degrees cooler
- 9,000rpm maximum pump speed
- 1600psi maximum pressure relief
- Hard coated and micro-honed piston bore for precise flow control and instantaneous pressure relief
- Large unrestricted intake flow path to prevent fluid cavitation
- All internal openings are CNC ported for lowest possible turbulence

Pro Remote Reservoir Pump Kit (TCP PSP2XXX)



TCP PSP2XXX	Remote-reservoir pump kit - Includes PRO pump, pulley, mounting bracket set, hose kit, hose bracket and remote-mounted billet reservoir
BRACKETS	260, 289, 302,351W, or 351C 390, 427, or 428
PULLEYS	6" V-belt or 4-1/4" 6-rib serpentine
HOSES	Stainless steel braided
RESERVOIR	Billet-aluminum reservoir, optional 14-degree inner fender mount

Pro Remote Reservoir Pump Kit (TCP PSP1XX2)



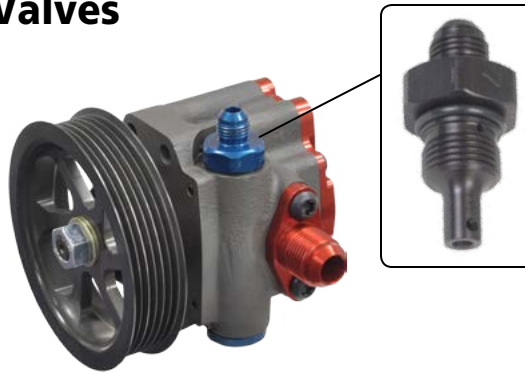
TCP PSP1XX2	Integral-reservoir pump kit - Includes PRO pump with integrated reservoir, pulley, mounting bracket set, hose kit and hose bracket
BRACKETS	260, 289, 302,351W, or 351C 390, 427, or 428
PULLEYS	6" V-belt or 4-1/4" 6-rib serpentine
HOSES	Stainless steel braided
RESERVOIR	Integrated aluminum reservoir

STEERING

Power Steering Pump Accessories

Pro-Pump Flow-Control Valves

Changing the output-flow-control valve alters the steering system's baseline pressure. Baseline pressure provides instantaneous response to steering input and determines the initial feel of the steering. The valve is easily changed and does not require the system to be drained. The standard 8-liters-per-minute (lpm) valve comes already installed on the pump. Additional valves sold separately.



Item	lpm	gpm	%
25304	4	1.05	50
25305	5	1.32	63
25306	6	1.59	75
25307	7	1.85	88
25308	8	2.11	100
25309	9	2.38	112
25310	10	2.64	125
25311	11	2.91	137
25312	12	3.17	150

Bracket Sets

Engine-specific mounting-bracket sets fit common engine combinations. For custom applications, a mounting-bracket blank set is available. All kits include bracket with machined

tensioning slot, aluminum mounting spacer, stainless-steel shim set and applicable mounting hardware. Bracket set included in complete pump-sales kit.

Small-Block Ford (short deck)



TCP PBS-FD-01

260, 289, 302

Small-Block Ford (tall deck)



TCP PBS-FD-02

351W, 351C, 400M

Big-Block Ford (FE)



TCP PBS-FD-03

390, 427, 428

Universal (blank)



TCP PBS-FD-UNIV

6x6" blank bracket

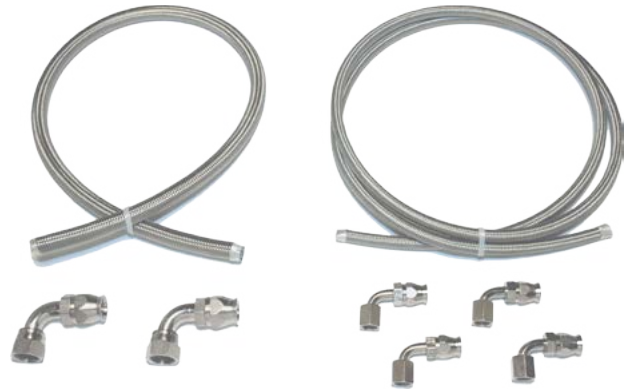
Power Steering Hose Kits

Stainless Teflon Racing Hose

(TCP HOSE-02)

-6 Hose: 72" length, 2500 psi, 28 Hg, 4" bend radius
 -10 Hose: 36" length, 2500 psi, 28 Hg, 6.5" bend radius (TCP HOSE-04 includes -6 components only)
 Hose Ends: steel, field-attachable, clear zinc finish

TCP HOSE-02	For pumps with remote reservoir, -6 and -10 hoses and fittings
TCP HOSE-04	For pumps with integral reservoir, -6 hoses and fittings



Hose Support Bracket

(TCP HOSE-03)

The support bracket attaches to the motor mount bracket. Kit includes two sizes of clamps to fit TCP HOSE-02.

TCP HOSE-03	Hose Support Bracket
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Billet Reservoir

Our polished-billet-aluminum remote reservoir is the finest available anywhere. The internal baffle design with O-ring sealed, vented cap prevents splash over, eliminates system pressure fluctuations. Fluid turbulence and aeration are greatly reduced by an innovative internal return tube design. A sleek, low-profile, mounting bracket with internal key-lock design hides all hardware and securely grips the reservoir. The 100-percent billet-aluminum construction provides an extra fluid capacity of up to 15 oz., in a mirror-polished, compact design. To position the reservoir upright, against the inner-fender panel, a 14-degree adapter block (PSR-01) is available. -6 and -10 male AN fittings are included to complete the installation. Overall dimensions: 2-7/8" OD x 8-3/4" H (Cap: 3" OD)



TCP PSR-02	Billet-aluminum remote reservoir, polished
TCP PSR-01	Reservoir 14-degree adapter

Fabricated Reservoir

The lightweight welded-aluminum, sheet metal reservoir features mounting flanges, vented cap, and internal anti-aeration baffle with -6 and -10 AN male ports.



TCP PSR-03	Fabricated-aluminum power steering reservoir
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VARI SHOCK

VariShock Bolt-Ins

Consistency Through Quality

Our double-adjustable QuickSet 2 allows you to control vehicle separation (rebound) and settling (bump) independent of each other. This allows the ability to tune your suspension to the required track conditions for ultimate performance. In the single-adjustable model, you have 16 settings at which both bump and rebound are adjusted simultaneously. This offers a good compromise between the ultimate tunability of the QuickSet 2 and affordability of the single-adjustable QuickSet 1 or SensiSet factory-valved options.

Repeatability is unprecedented! By controlling the quality of the components, assembling them in-house and dyno-testing every assembly, TCP can deliver a pair of VariShocks that perform virtually identically — throughout the entire range of travel. Whereas other brands in this price range rely on cheaper offshore or OEM parts, American-made VariShocks are engineered systems of premium components, all designed to meet your specific needs. The shocks use “Deflective Disk Valving” in the pistons to eliminate spring fatigue. They have piston rods made from 5/8”, centerless-ground, hard-chrome steel for wear resistance and long service life. VariShock models are even “rebuildable” in the event they become bent or damaged. Custom valving is also available.

Superior Durability

Durability was improved in three key areas. Internal shaft seals were specifically designed and manufactured for these shock absorbers, producing a longer-lasting seal that helps keep dirt out of the shock absorber. Internal connections and return paths use a unique, machined configuration and added seals to prevent bypassing. Racing shocks spend considerable time in low-piston-speed service. In the low-speed mode, the damping action of the shock is dominated by bypassing flows. VariShock eliminates the bypassing of internal leakage to give the shock repeatable control in the area within which it has to operate most frequently.

256 Adjustment Combinations

VariShock’s double-adjustable design is also easier to tune: 256 different settings are attainable simply by rotating two fully accessible, 16-position knobs. All adjustments are made in seconds, without removing or unbolting the VariShock. One knob sets the bump (compression) range; the other sets rebound (extension). Both knobs are laser-etched with directional arrows and “plus/minus” symbols that clearly indicate which direction achieves the desired adjustment. Additional arrows etched into the QuickSet 2 base reveal which knob sets bump, and which sets rebound.



Model	Year	FRONT			REAR		
		SensiSet	QuickSet 1	QuickSet 2	SensiSet	QuickSet 1	QuickSet 2
Fairlane	1966-1971	VAS 14047-515	VAS 14147-515	VAS 14247-515	VAS 14044-715	VAS 14144-715	VAS 14244-715
Falcon	1960-1965	VAS 14047-515	VAS 14147-515	VAS 14247-515	VAS 14044-715	VAS 14144-715	VAS 14244-715
	1966-1970	VAS 14047-515	VAS 14147-515	VAS 14247-515	VAS 14044-715	VAS 14144-715	VAS 14244-715
Mustang	1964-1970	VAS 14067-425	VAS 14167-425	VAS 14267-425	VAS 14044-715	VAS 14144-715	VAS 14244-715
	1971-1973	VAS 14047-425	VAS 14147-425	VAS 14247-425	VAS 14044-715	VAS 14144-715	VAS 14244-715
Notes	Also available for select 1960-1977 models of Comet, Cougar, Cyclone, Fairlane, Falcon, Maverick, Montego, Mustang, Rancho and Torino. See application chart for expanded list.						
	All shocks sold in pairs.						

VariSpring High-Travel Coil-Over Springs

Higher Technology

The new VariSpring line of springs was designed to complement the VariShock family. Once again, we used higher technology to resolve application limitations. These springs are manufactured using a new chrome-silicon, ultra-high-tensile wire. This allows the springs to “set solid.” The springs can compress until the coils touch without damaging the spring or causing it to take a set, which ultimately changes the ride height. Since this wire can flex more than conventional wire, these springs have greater travel than our competitors’ springs of the same rate. These springs will allow your shocks to travel their full range of motion without going solid. This gives you greater traction and control at full bump, plus additional suspension travel for tuning. If you are ready to take advantage of higher technology with greater travel and lighter, stronger springs, step up to VariSprings.

VariSprings have a silver-powder-coat finish. They are individually labeled with our part number and spring rate on the outside of the coils for easy reference. VariSprings are available for front and rear applications in four lengths and a broad range of rates. The steps between rates are sufficiently close to make very fine rate adjustments.

Spring-Selection Guidelines

A good spring-rate baseline for compact cars (i.e., Falcon, Maverick, Mustang with a small-block) seeing regular street use would be 400-450 lbs/in., depending upon desired ride quality.

Differences that alter desired spring rate:

- Weight reduction -50 lbs.
- Big-block +50 lbs.
- Larger car +50 lbs.
- Race use +50 lbs.

The spring rate affects ride quality, ride height and roll rate. Differences in vehicles such as aluminum engine components, fiberglass body parts, chassis stiffening, as well as wheel-size and -offset should be taken into consideration. Additional springs can be purchased to complement your coil-over system.



9" VariSprings (sold in pairs)

Item	Rate lbs/in	Travel
VAS 21-09200	200	5.24"
VAS 21-09240	240	5.57"
VAS 21-09275	275	5.46"
VAS 21-09310	310	5.57"
VAS 21-09350	350	5.17"
VAS 21-09400	400	5.07"
VAS 21-09450	450	4.90"
VAS 21-09500	500	4.47"
VAS 21-09550	550	5.06"
VAS 21-09600	600	4.41"
VAS 21-09675	675	4.80"

VARI SHOCK

VariShock Coil-Overs

During five years of intense research and development, VariShock's engineering team successfully corrected every shortcoming of conventional racing shocks. Designed from a clean sheet of paper, VariShock's QuickSet 2 is the first affordable coil-over to combine sophisticated shock valving with all-new, American-made components. Never before have so much performance, repeatability and adjustability been offered at such an affordable price.

Revolutionary Design

A revolutionary adjustment mechanism, smaller than any previous design, allows our billet-aluminum body to be both shorter and lighter. You get more clearance around the eyes, plus greater travel within any shock length. We built two separate eyes to maximize the benefits of each mounting-eye style. The spherical-bearing eyes use a COM-8 1/2"-bore-x-1"-wide high-misalignment bearing with a Teflon® liner as standard. The eye has more clearance around the mounting brackets than any other design. The urethane end has up to 350% more urethane material than other brands, for superior load distribution, yet no less clearance around the eye. We also chose a premium urethane that has much higher load capacity (for improved life) than the poly bushings from other manufacturers. Urethane ends are 1-1/4" wide and accept 1/2" bolts.



Front Coil-Over Conversion - Shocks



Item	Valves	Ride Height	Compressed Length	Extended Length	Shock Travel	Mounting Eye
VAS 114V1-43	4-Way	14.19"	12.06"	16.31"	4.25"	COM-8
TCP COCQ2-16.30	Double	14.18"	12.05"	16.30"	4.25"	COM-8
TCP COPQ1-16.30	Single	14.18"	12.05"	16.30"	4.25"	Poly

VariShock Accessories

Shock Extended Eye

Increasing vehicle ride height without disrupting the correct balance of shock travel has never been simpler. Our direct-replacement, billet-aluminum shock mounts feature a 1" extended body, and perfect fit for existing VariShock polyurethane bushings or COM-8 bearing. Mounts simply screw onto the top of the shock's piston rod and are secured by a jam nut. Extended eyes can be used with any VariShock coil-over shock to raise ride height approximately 1-1/4". Proper suspension travel and clearance must be verified prior to installation.



Spring-Seat Thrust Bearings

Thrust bearings are used at the lower spring seat to reduce friction when adjusting ride height. New stainless "cap-style" seats, a VariShock exclusive, enclose the thrust bearing to keep dirt out.



Spanner Wrench

Also available is an exclusive four-tang spanner wrench, which will not slip off the lower spring seat because it engages the seat in multiple places (not one, like common spanners).



Coil-Over Spring Compressor

The VariShock coil-over-spring compressor greatly eases lower-spring-collar adjustment on high-preload or high-rate applications. Heavy-duty plates at each end fit 2-1/2" inside-diameter coil springs of 130 lb., rate or greater, with a maximum spring height of 14".



VAS 512-1-2	1"-extended top shock eye, COM-8 bearing (pair)
VAS 512-2-2	1"-extended top shock eye, poly bushing (pair)
VAS 513-100	Spring seat thrust bearing set (pair)
899-012-201	VariShock spanner wrench, zinc plated steel
VAS 200	Coil-over spring compressor for 2-1/2" springs

g-Bar/g-Link Shocks



Item	Type	Valves	Ride Height	Compressed Length	Extended Length	Shock Travel	Mounting Eye
VAS 11022-515	Coil	Fixed	13.53"	10.95"	16.10"	5.15"	Urethane
VAS 11111-515	Coil	Single	13.53"	10.95"	16.10"	5.15"	COM-8
VAS 11122-515	Coil	Single	13.53"	10.95"	16.10"	5.15"	Urethane
VAS 11211-515	Coil	Double	13.53"	10.95"	16.10"	5.15"	COM-8
VAS 11222-515	Coil	Double	13.53"	10.95"	16.10"	5.15"	Urethane
VAS 1A2B838-5	Coil	Double	13.53"	10.95"	16.10"	5.15"	Pivot-ball
VAS 11411-50	Coil	4-Way	13.31"	10.81"	15.81"	5.00"	COM-8
VAS 131K2-515	Air	Single	14.06"	11.56"	16.56"	5.00"	Urethane
VAS 131K2-515	Air	Double	14.06"	11.56"	16.56"	5.00"	Urethane

Pushrod Torque Arm Shocks

Item	Valves	Ride Height	Compressed Length	Extended Length	Shock Travel	Mount Eye
TCP COPQ2-350	Double	13.70"	11.95"	15.45"	3.50"	Urethane
TCP COCQ4-35	4-Way	13.56"	11.81"	15.31"	3.50"	COM-8



REAR SUSPENSION

Rear Suspension Systems

Total Control offers the finest rear suspension conversions for vintage Mustangs and classic Fords. We offer four systems with significant differences in spring type, and suspension link configuration. Additional information on each system can be found on the pages that follow.

g-Bar and g-Link Suspensions

Our most popular system is the g-Bar and g-Link family of rear suspensions. Each features a substantial number of adjustments for tuning flexibility and excellent handling. These systems create a canted, 4-bar linkage system and can be used with VariShock coil-overs or air springs.

Coil-Over Systems

VariShock systems provide ability to corner-balance the vehicle, and predictability of mechanical springs when tuning.



5800-XXX g-Bar coil-over suspension, 1964-73 Mustang, 1967-70 Cougar

Air-Spring Systems

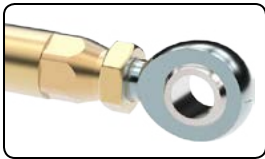
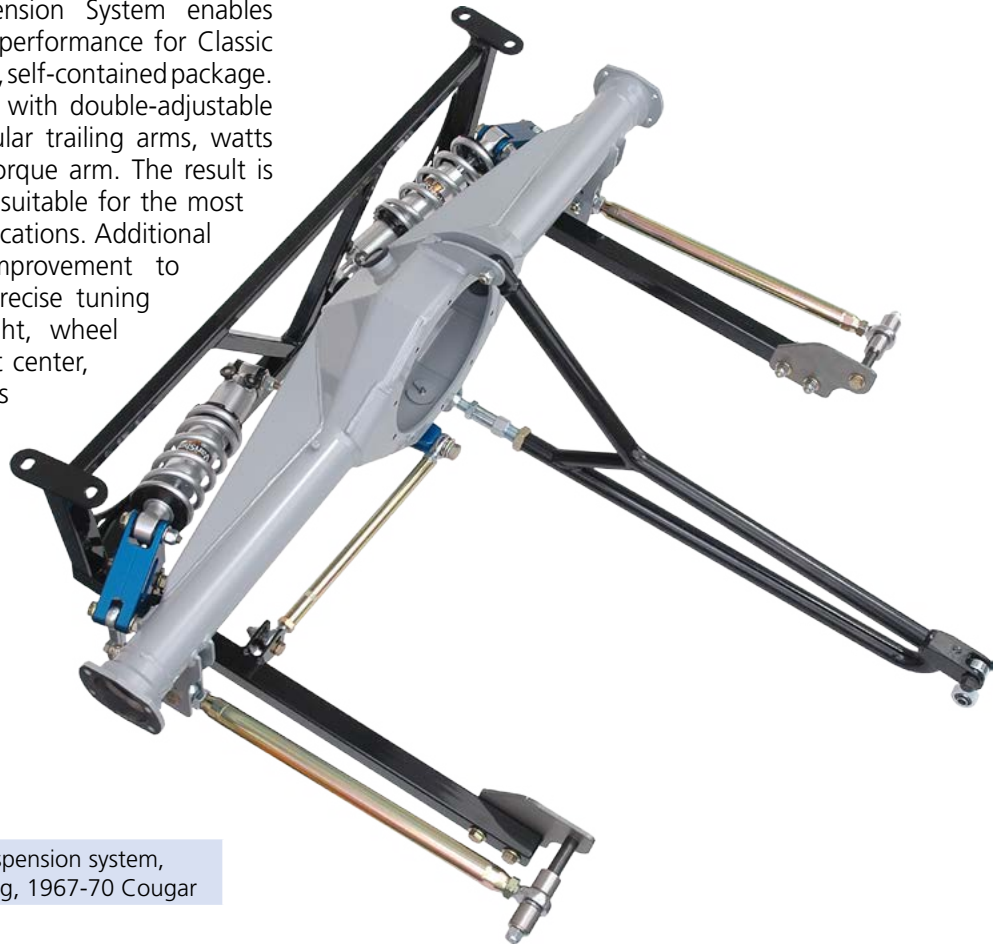
Air-spring equipped vehicles offer some additional benefits. Besides proven excellence in handling performance, you also have the advantage of excellent ride characteristics, and the ability to set your vehicle on the ground for jaw-dropping, static displays.



5801-XXX g-Bar air-spring suspension, 1964-73 Mustang, 1967-70 Cougar

Rear Pushrod Suspension

The TCP Rear Pushrod Suspension System enables dramatically improved handling performance for Classic Mustangs and Fords in a high-tech, self-contained package. We've replaced the leaf springs with double-adjustable VariShock coil-over shocks, tubular trailing arms, watts link assembly, and heavy-duty torque arm. The result is consistent, predictable handling suitable for the most demanding of performance applications. Additional benefits include significant improvement to chassis rigidity and extremely precise tuning adjustments such as ride height, wheel base, housing alignment, instant center, pinion angle, shock valving, as well as a choice of spring rates.



TCP RPSS-FD Rear pushrod suspension system, 1964-70 Mustang, 1967-70 Cougar

Leaf-Spring Suspensions

If you are looking for improved handling on a budget, or your motorsport sanctioning body does not allow coil-overs, choose our leaf-spring, rear-suspension system.



TCP LSS-M1X Leaf spring suspension systems, 1964-73 Mustang

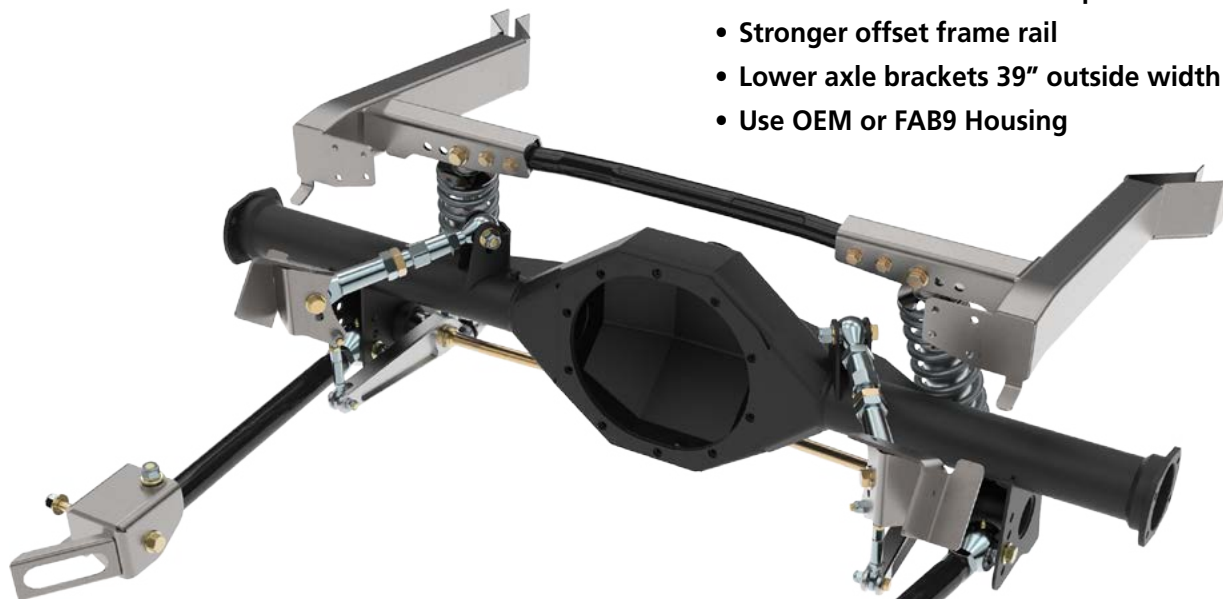
Mini-Tub g-Link Rear Suspension

The Mini-Tub g-Link further broadens the performance application range of our g-Link suspension series to include modern pro-touring builds with substantially larger tire and wheel sizes. The relocated lower control arm position provides approximately 2-3/4" additional clearance on each side of the vehicle when compared to the original leaf spring suspension, with an outside lower axle

bracket with of only 39". Offset frame rails are also offered to improve chassis stiffness and maximize clearance. For use with our vehicle-specific bolt-in FAB9™ housing or the vehicle's existing housing (weld-on bracket installation required).

Model	Year
Mustang	1964-1970

- Moves front mount inside of frame rail
- 2-3/4" additional clearance per side
- Stronger offset frame rail
- Lower axle brackets 39" outside width
- Use OEM or FAB9 Housing



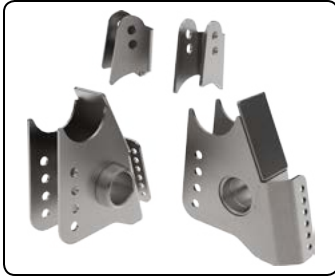
Mini-Tub g-Link Suspension

5854-M10	Includes components from option groups below		
HOUSING	Weld-on axle brackets		
	Upper-arm bracket weld fixture (6732)		
	FAB9 rear end housing		
	Anti-roll bar, axle-bracket mounted		
SHOCKS	Spring	Adjustment	Mount
	12" Coil	Single (overall stiffness)	COM-8
	12" Coil	Double (bump/rebound)	COM-8
	10" Coil	4-way (bump/rebound, high/low speed)	COM-8
	12" Coil	Double (bump/rebound)	Pivot-ball
	Air-spring	Single (overall stiffness)	Poly
	Air-spring	Double (bump/rebound)	Poly
CHASSIS	Offset frame rail kit		
	Mini wheel tubs		
ARMS	Adjustable-length tubular steel		
	Fixed-length billet aluminum		
5821-M10	Splined Billet-Arm Anti-Roll Bar		

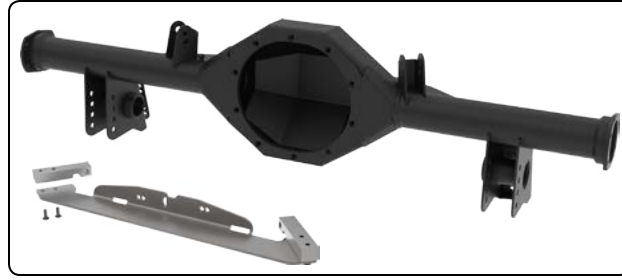
Mini-Tub FAB9 Housings

84M10-801	Mild steel FAB9; Late Big-Ford sealed ends
84M10-80B	Mild steel FAB9; Pro-Touring Floater ends
84M10-811	4130 FAB9; Late Big-Ford sealed ends
84M10-81B	4130 FAB9; Pro-Touring Floater ends
NOTE	Wheel-to-Wheel Width (using 1/4" thick brake hats: Max. 57-1/4", Min. 55-1/4"

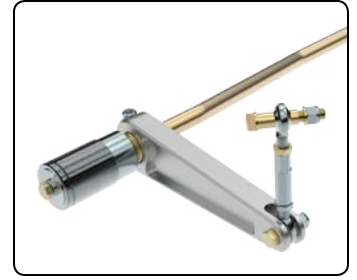
Housing - OPTIONS



Brackets for OE Housing



Upper Arm Mount Weld-Fixture or Direct-Fit FAB9 Housing



Splined-End Anti-Roll Bar

Shock - OPTIONS



Coil-Over Shocks



Coil-Over Shocks



Air-Spring Shocks



VariSprings

Chassis - OPTIONS



Mini Wheel Tub Set

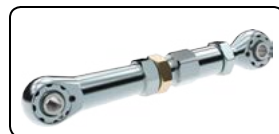


Offset Frame Rail Kit

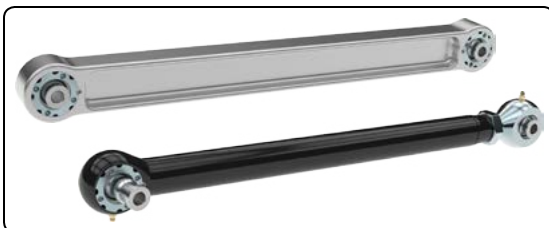


Assembly with Frame Rail Kit (top view)

Arm - OPTIONS



Double-Adjustable Upper



Tubular-Steel or Billet-Aluminum Lower



REAR SUSPENSION

Canted-4-Bar Suspension Conversions

The g-Bar and g-Link are bolt-in, canted 4-bar suspension systems directly replace the OEM leaf springs and shocks for remarkably improved handling and performance. Each can be used with our vehicle-specific bolt-in FAB9™ housing or the vehicle's existing housing. Additional welding is required for installation with all housings other than our bolt-in FAB9™. Total Control's second generation g-Bar and g-Link suspension systems represent the current state-of-the-art in canted 4-bar design.

Available for 1964 to 1973 Mustangs and 1967 to 1970 Cougars. The g-Bar system consists of three different combinations of upper and lower link bars with your choice of coil-over or air-spring shocks. These options create six different variations to better suit your particular performance application. See the following pages for individual photos of each system.



g-Bar & g-Link Street & Performance Systems

g-Bar and its variant, g-Link, dramatically improve ride quality and performance over the stock leaf-spring suspension. The canted 4-bar design is a proven suspension system commonly used in later model American muscle cars of all makes. Four individual arms precisely position the rear axle, better defining the correct suspension travel path. A panhard bar is not required with this style of suspension. This enables spring rates to be easily changed without altering suspension geometry or allowing changes in pinion angle and lateral movement. Lighter spring rates can be used for better ride quality without allowing leaf-spring wrap-up, a common source of wheel hop. Our links are available with premium urethane or, pivot-ball ends to create controlled ride quality that inspires more confident performance driving.

g-Bar and g-Link includes VariShock SensiSet factory-valved coil-over shocks with spring rates (per your vehicle's rear weight) ranging from 110-350 lbs/in. Optional adjustable VariShocks feature 16-position valving adjustment within our specifically designed range in single or double adjustable versions.

58XX-MXX	Canted-4-Bar Suspension Conversions
OPTIONS	FAB9™ direct-fit rearend housing
	Anti-roll bar, sliding link style, chassis mounted
	Anti-roll bar, spline end style, housing mounted
	QuickSet 1, single-adjustable shock upgrade
	QuickSet 2, double-adjustable shock upgrade



Self-Positioning Installation

Installation requires no fabrication, with only minimal welding and trimming required for certain applications. The g-Bar chassis cradle uses a "self-positioning" system utilizing existing pinion snubber and top shock mount factory bolt holes for precise location. Our 3-piece cradle design allows for variations in OEM chassis component locations. It is then welded to structural components of the vehicle, such as frame rails or reinforced sections of sheet metal. Multiple attachment points and tubular construction successfully create an effective chassis-stiffening cradle as well as a stable suspension-mounting crossmember. The cradle has a black-powder-coat finish and the frame adapters are bare steel to facilitate stitch welding into the chassis. Welds and exposed metal must be thoroughly painted after installation.

Chassis-attachment points for upper link bars and shocks are provided on the g-Bar cradle. The front of the lower link bars utilizes the factory front-leaf-spring mounting brackets. When using the stock rearend housing, our lower link bars and shocks fasten to our bracket assembly and are securely u-bolted directly to the existing leaf-spring pads. The rear of the upper-link-bar attachment points require mounting tabs be welded to the housing. An easy-to-use weld fixture (part no. 6716) is available to facilitate this task. Anti-roll bars are also available. A preassembled, fabricated 9" housing (FAB9™) complete with welded bracket assemblies is also available, streamlining installation and saving time. The FAB9™ housing accepts standard 9" Ford components.



"Self-positioning" uses pinion snubber and top shock mount holes.



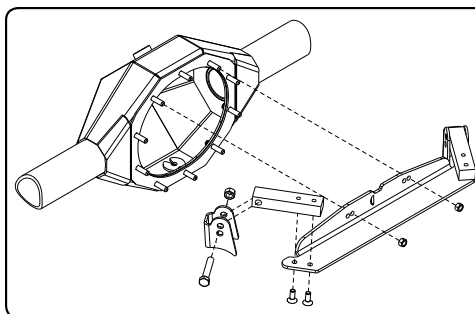
Lower links use leaf-spring brackets.



g-Bar axle bracket assembly.



Steel weld fixture with billet positioning blocks.



Fixture bolts directly to Ford 9" housing face.



Perfect angle and rotation.

REAR SUSPENSION

Adjustable Suspension Geometry

Upper and lower control arm attachment points have multiple mounting holes to adjust chassis anti-squat to optimize your Mustang's handling. Both upper bars are length adjustable to set pinion angle and preload. g-Link lower arms are also adjustable for wheelbase variations. Some vehicles are worn enough that the wheelbase will not be correct without using a wheelbase adjustable lower link.



4-position lower bracket (FAB9)



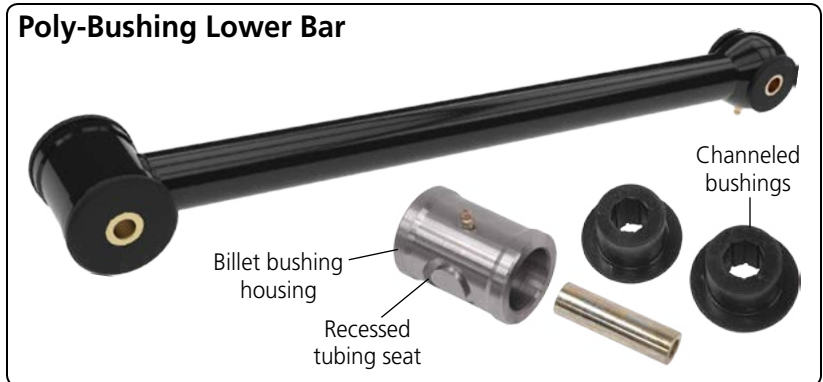
2-position chassis and housing arm brackets

Lower Link Bar Styles

There are three lower link styles and two upper link styles. Their proper selection depends on the intended use of your Mustang.

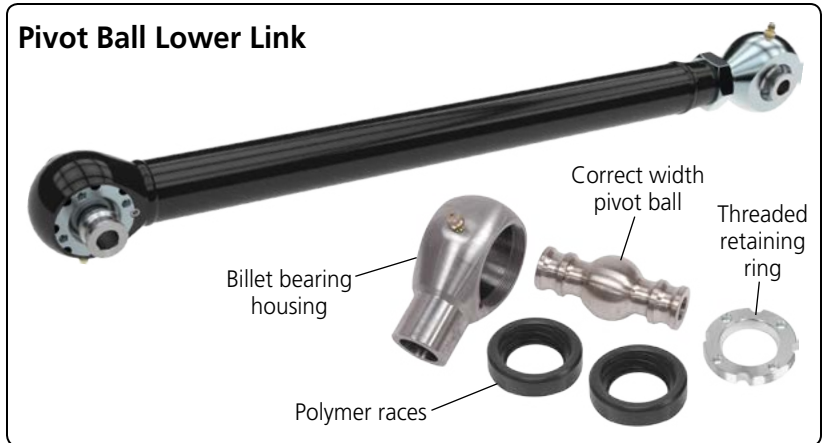
Poly-Bushing Lower Bar

Included in the g-Bar system is the lower fixed-length-tubular link with poly bushings in each end. It is best for vehicles seeing mostly street use because it provides a quiet ride and improved handling.



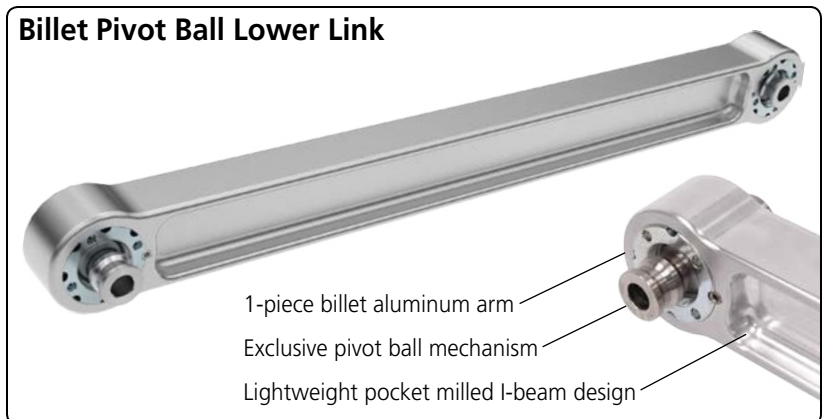
Pivot Ball Lower Link

Included in g-Link system is the lower adjustable-length-tubular link with pivot ball mechanisms in each end. This is our ultimate performance link for use on performance driven street or track applications.



Billet Pivot Ball Lower Link

Included in billet g-Link system is the lower fixed-length billet I-beam link with pivot ball mechanism in each end. The billet link features all radius corners for reduction of stress risers and a pocket area for lower weight. This ultimate link is for those who want to set their g Machine apart from the crowd. It combines the characteristics of our fixed-length link (which is easier install) with the best performance links and, adds a custom built g-Machine look. All link bars are externally greasable at each end. Pivot ball mechanism can be rebuilt and tightened to remove play as they wear. Lower link bar fronts attach to the front leaf-spring eye in the chassis.



Upper Link Bar Styles

Both styles of upper links are constructed of billet alloy steel and clear zinc finished for corrosion resistance. They are length adjustable, and feature a Total Control exclusive - massive 7/8"-shank billet alloy steel rod ends.

Poly-Bushing Upper Bar

Poly links use urethane bushings in both ends for a firm but stiffer-than-stock ride. They are included in g-Bar system.

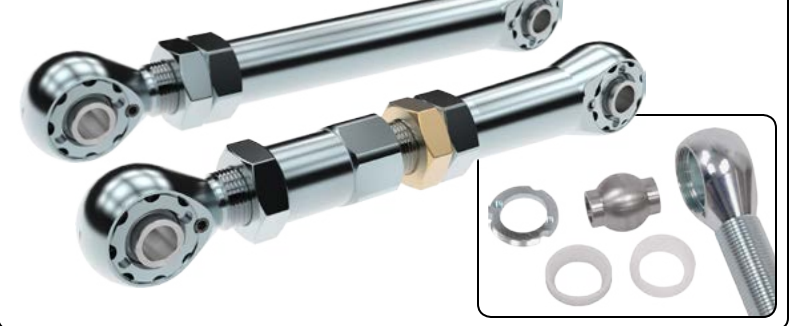
Pivot Ball Upper Link

Pivot ball links are included with g-Link and billet g-Link systems and are used when no-compromise handling is required. The high misalignment and non-compressible nature of these links will guarantee your vehicle goes where you point it. Available in single- and double-adjustable versions.

g-Bar (Poly) Upper Bar



g-Link (Pivot) Upper Links



Adjustable Shock Mounts

Billet aluminum double shear lower shock mounts bolt directly to the back of the lower control arm bracket and provide 4-1/2 inches of ride height adjustments. The upper shock mount has three positions to allow additional ride height and shock angle adjustment. You can adjust the shock angle in at the top to provide increased stability during hard cornering.

Stock Rearend Housing

System is compatible with 8- or 9-inch stock axle housings with at least a 2-13/16" diameter axle tubes. The 1-piece formed UCA axle mount is easier to install than 2-piece styles. Upper control arm brackets weld on and lower control arm brackets attach to the housing on the leaf spring pad using included u-bolts.

Exhaust Clearance

The rear section of the factory exhaust is not compatible with g-Bar. Although space is limited, there is room to run a custom built exhaust system over the housing. Easier solutions include turn-downs before the housing or routing the exhaust underneath the housing.



REAR SUSPENSION

Coil-Over g-Bar and g-Link Suspensions



- Versatile Tuning
- Simple Installation
- Predictable Handling
- Daily Driver to Road Race

g-Bar (poly) Shocks

Recommended for primarily street-driven vehicles with occasional performance event use, polyurethane-bushed g-Bar suspension links are matched with poly-eye VariShock coil-overs for minimized noise and vibration. Factory-valved SensiSet (SS) VariShocks are included, with QuickSet 1 (QS1) single-adjustable and QuickSet 2 (QS2) double-adjustable valve sets offered for a minimal upgrade charge.



SensiSet (SS)
Factory-valved for performance street and autocross use.



QuickSet 1 (QS1)
Single-adjustable, 16-position knob, adjusts bump/rebound simultaneously; moderate tuning.



QuickSet 2 (QS2)
Double-adjustable, dual 16-position knobs, adjusts bump and rebound independently; offers excellent tuning versatility and performance.

g-Link (pivot) Shocks

Intended for vehicles seeing more performance-focused use or just wanting to get the most out of your suspension, g-Link tubular and billet arms are matched with replaceable COM-8 spherical bearings to maximize shock control and increase tuning precision. QuickSet 1 (QS1) single-adjustable VariShocks are included with optional QuickSet 2 (QS2) double-adjustable and Q4R 4-way-adjustable remote-reservoir shocks offered for the ultimate in suspension tuning range and flexibility.



QuickSet 4 Remote Reservoir (Q4R):

Four-way-adjustable, quad 16-position knobs, adjusts bump and rebound at high and low piston speeds independently; the ultimate tuning versatility and performance.

Street Tuning: Ride-quality and ride-harshness (two separate characteristics) can now be isolated and optimized independent of each other.

Performance Tuning: Widely varying suspension events such as road course rumble-strips and vehicle weight transfer can now be isolated and optimized independent of each other.

Coil Springs

Differences in vehicle weight and distribution, such as aluminum or fiberglass components, and the specific performance application, affect what would be the correct spring rate. The majority of street applications begin with 175-200 lbs/in springs as a baseline. Variations for vehicle weight and performance application can be accounted for by purchasing a second set of springs for tuning purposes (discounted at initial purchase).



Weight (lbs)	Part Number	(lbs/in)
925-1000	VAS 21-12110	110
1000-1100	VAS 21-12130	130
1100-1225	VAS 21-12150	150
1225-1350	VAS 21-12175	175
1350-1575	VAS 21-12200	200
1575-1825	VAS 21-12250	250
1825-2075	VAS 21-12300	300
2075-2350	VAS 21-12350	350

Coil-Over g-Bar

5800-C10	1967-70 Cougar
5800-M10	1964-66 Mustang
5800-M20	1967-70 Mustang
5800-M30	1971-73 Mustang

- Poly-bushing suspension
- Tubular steel lower arm
- Fixed-length lower arm
- Adjustable upper arm



Coil-Over g-Link

5804-C10	1967-70 Cougar
5804-M10	1964-66 Mustang
5804-M20	1967-70 Mustang
5804-M30	1971-73 Mustang

- Spherical-bearing suspension
- Tubular steel lower arm
- Adjustable lower arm
- Adjustable upper arm



Coil-Over Billet g-Link

5813-C10	1967-70 Cougar
5813-M10	1964-66 Mustang
5813-M20	1967-70 Mustang
5813-M30	1971-73 Mustang

- Spherical-bearing suspension
- Billet aluminum lower arm
- Fixed-length lower arm
- Adjustable upper arm



REAR SUSPENSION

Air-Spring g-Bar and g-Link Suspensions



- Show Car Stance
- Versatile Tuning
- Simple Installation
- Broad Ride Height Range
- Daily Driver to Mild Performance

g-Bar/g-Link Shock Options

Both g-Bar (poly-bushed) and g-Link (pivot-ball) systems are equipped with poly-eye VariShock air-spring shocks. Due to its variable ride height functionality and softer effective spring rate air-suspensions have traditionally been street and custom show car system. But when combined with our g-Bar and g-Link components, VariShock air-spring shocks become part of an extremely capable performance suspension system. QuickSet 1 (QS1) single-adjustable are included and allow basic control of overall ride quality; perfect for full-time street use. Upgrading to QuickSet 2 (QS2) double-adjustable valve sets allows finer control over chassis movement, making them a must have for vehicles seeing occasional performance use.



QuickSet 1 (QS1)
Single-adjustable, 16-position knob, adjusts bump/rebound simultaneously; moderate tuning.



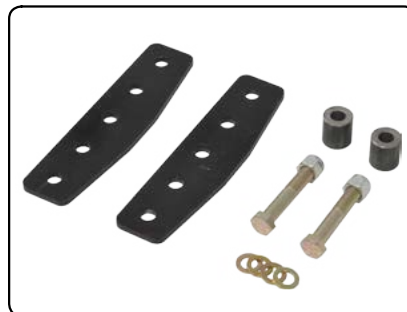
QuickSet 2 (QS2)
Double-adjustable, dual 16-position knobs, adjusts bump and rebound independently; offers excellent tuning versatility and performance.

Lower Shock Mount Extenders

For customers wishing to lower their ride height down even further for that killer car show display we have developed this simple bolt-on extension kit. Installation provides and additional 1-1/4" or 2-1/2" drop in the lower shock mount position and allows the car to be raised to a driveable height for moving on or off the trailer or cruising to and from the show.

This component drastically reduces suspension and ground clearance. Use at your own risk.

300-0162 Lower mount extender (pair)



Air-Spring g-Bar

5801-C10	1967-70 Cougar
5801-M10	1964-66 Mustang
5801-M20	1967-70 Mustang
5801-M30	1971-73 Mustang

- Poly-bushing suspension
- Tubular steel lower arm
- Fixed-length lower arm
- Adjustable upper arm



Air-Spring g-Link

5805-C10	1967-70 Cougar
5805-M10	1964-66 Mustang
5805-M20	1967-70 Mustang
5805-M30	1971-73 Mustang

- Spherical-bearing suspension
- Tubular steel lower arm
- Adjustable lower arm
- Adjustable upper arm



Air-Spring Billet g-Link

5814-C10	1967-70 Cougar
5814-M10	1964-66 Mustang
5814-M20	1967-70 Mustang
5814-M30	1971-73 Mustang

- Spherical-bearing suspension
- Billet aluminum lower arm
- Fixed-length lower arm
- Adjustable upper arm



REAR SUSPENSION

Anti-Roll Bars for g-Bar and g-Link Suspensions

Total Control developed two styles of rear anti-roll bars for use with our g-Bar and g-Link canted-rear-suspension systems. The first, a solid, adjustable rate, bar mounted to the frame rearward of the rearend housing. The second, a splined-end, tubular bar mounted to the rearend housing, below the axle.

Do I really need a rear anti-roll bar?

In an effort to correct excessive body roll on an early Mustang, the common approach is to add a large front anti-roll bar. This may initially appear to correct the issue, but with the unintended result of increased understeer on an already nose-heavy vehicle. To regain vehicle cornering

balance a rear anti-roll bar may be needed. For mild street-performance vehicles a rear anti-roll bar will provide a noticeable improvement to the "tightness" of the handling. However, on high-performance vehicles operating at or near the vehicle's traction limits, careful testing is required. First, to determine need of a rear bar, and then to properly setup the vehicle to optimize cornering balance. Testing your vehicle with different springs, shock settings and anti-roll bars will definitely yield increased handling. If it is a specific look you are after then that's a good enough reason to put one on your car. Nothing is better looking than our billet g-Bar, with splined-end anti-roll bar with billet aluminum arms.

Sliding-Link Adjustable Anti-Roll Bar (g-Bar, g-Link, Panhard)

The sliding-link anti-roll bar system features a 5/8"-diameter, solid bar mounted to the same frame adapter brackets as the g-Bar suspension cradle for a complete bolt-on installation. Billet-aluminum bushing housings securely hold the bar and feature a grease-zerk fitting, and black-polyurethane bushings with internal grease passages. Our unique sliding-link mechanism, utilizes three distinct indents at each end of the anti-roll-bar lever to create six incremental adjustments. The CNC-machined clevis is locked into each detent by a set screw and jam nut, preventing unintended sliding or twisting of the assembly. Links consist of 3/8" rod-ends, allowing the anti-roll bar to be precisely set to a neutral, non-preload condition, by adjusting the assembly length. The sliding-link anti-roll bar system can be used on the entire family of g-Bar suspensions.

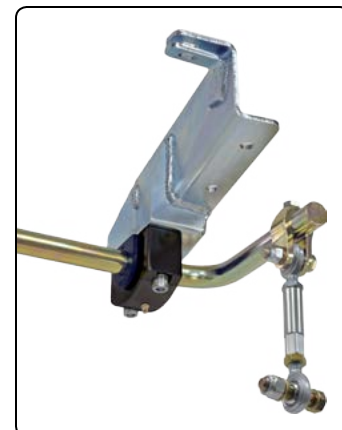
Note: Required g-Bar frame-adapter bracket with integrated anti-roll bar mounting flange is packaged with g-Bar system and must be selected at time of g-Bar purchase.



5812-M10 g-Bar / g-Link anti-roll bar
1964-73 Mustang, 1967-70 Cougar



- 5/8"-diameter bar
- Polyurethane bushings
- Billet-aluminum mounts
- Adjustable-length endlinks for zero preload
- 3-position adjustment mechanism (6 total combinations)



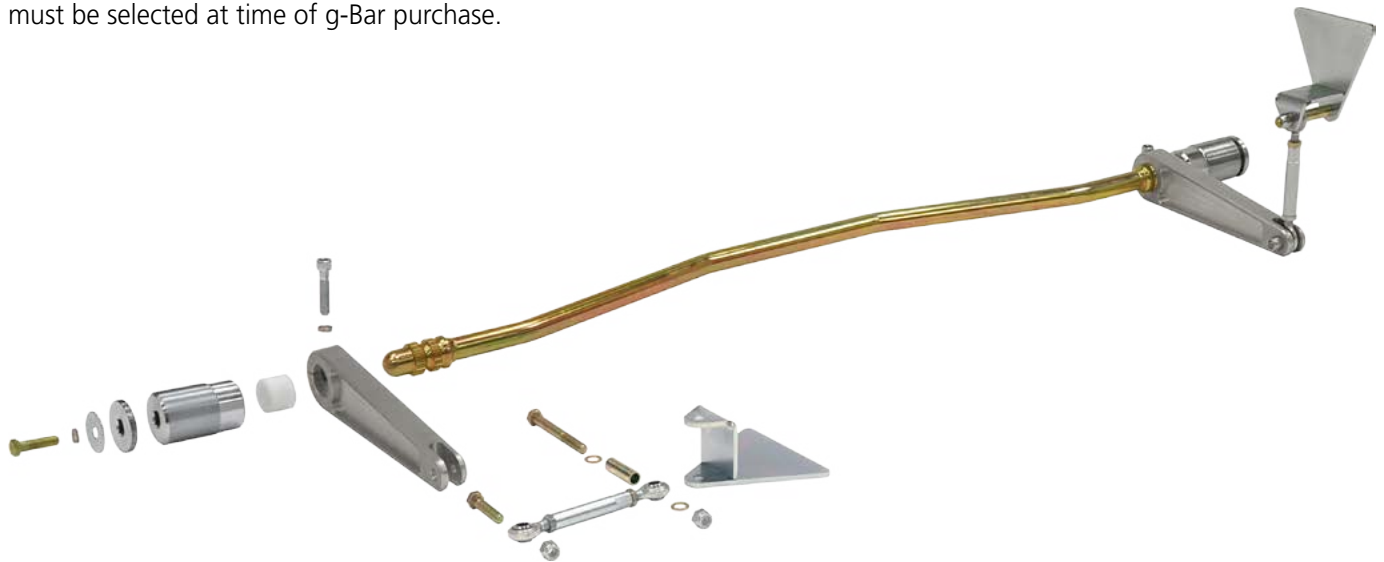
Splined-End Tubular Anti-Roll Bars (g-Bar, g-Link)

Our splined-end anti-roll bar system features a 3/4" -diameter, bent-tube design, that mounts below the rearend-housing. The bar adequately clears FAB9™ and OEM center sections, without decreasing ground clearance. An adjustable, billet-pivot-socket mechanism threads into the g-Bar lower axle-bracket sleeve, and allows the bar to rotate smoothly in a play-free joint. Billet-aluminum arms extend forward, and are connected to the chassis through links consisting of adjustable-length, 3/8" rod-end assemblies. This allows the anti-roll bar to be precisely set in a neutral, non-preloaded state. Double-shear, steel mounts are welded along the stronger, outside corner and across the bottom of the stock frame rail. The combination of Total Control's exclusive pivot mechanism, splined bar ends, spherical-bearing links, and rigid chassis attachment eliminates delayed resistance in the anti-roll bar system, common with rubber-, or urethane-mounted systems. The splined-end anti-roll bar system can be used on the entire family of g-Bar suspensions.

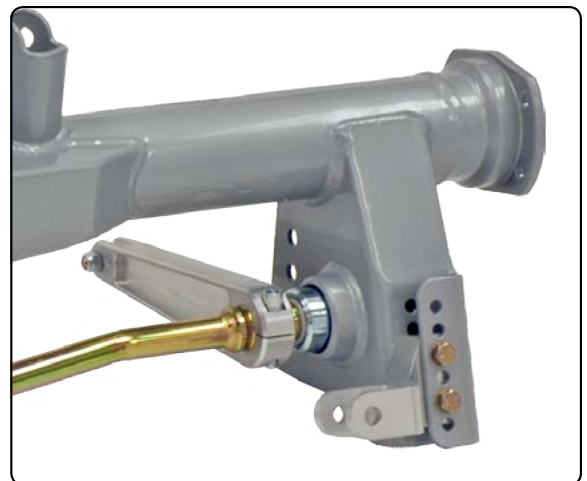
Note: Required g-Bar axle brackets with integrated anti-roll-bar socket boss is packaged with g-Bar system and must be selected at time of g-Bar purchase.



5806-M10	Housing-mounted bar for lower arm brackets at standard width - 1964-73 Mustang, 1967-70 Cougar
5821-M10	Housing-mounted bar for lower arm brackets at mini-tub width - 1964-73 Mustang, 1967-70 Cougar



- Lightweight 3/4" hollow bar
- Billet splined bar ends
- Billet-aluminum arms
- Threaded bracket bosses
- Low-friction polymer bearings



REAR SUSPENSION

Direct-Fit FAB9™ Rearend Housings

Total Control Products is proud to offer Chassiswork's direct-fit, FAB9™ fabricated 9" rearend housings. Engineered to accept all 9", Ford-style differentials, each FAB9™ includes a fully-welded center section with internal gussets, 3" axle tubes, and Ford big-bearing, late-model Torino, housing ends. All housings are manufactured in-house utilizing our state-of-the-art robotic spray-arc welder. Weld penetration, and quality are absolutely outstanding, guaranteeing consistent, reliable performance. Center sections are fully CNC-machined after welding to provide an excellent third-member-seal surface and extremely tight tolerances on the

remaining housing features. Optionally, a folded back brace assembly can be factory welded to your FAB9™ housing, substantially strengthening the housing without adding significant weight. Standard housings are constructed from mild steel, but can be upgraded to 4130 chromemoly; recommended for vehicles weighing over 3500 lbs., and/or developing 650-plus horsepower. Housing hardware includes: billet-aluminum, o-ringed filler/inspection cap; axle-tube vent; magnetic drain plug; and alloy-steel, 12-point, mounting studs with locknuts.

g-Bar Direct-Fit FAB9™ Housings

Total Control's g-Bar FAB9™ offers exceptional performance, reliability, and adjustability in a bolt-on, factory-welded housing, complete with all suspension brackets. Housings are engineered for proper clearance using either VariShock

coil-overs or air-spring suspension; with or without a back brace. Anti-roll-bar bracket options include chassis-mounted (sliding-link bar), axle-housing mounted (splined-end bar), or no anti-roll-bar brackets installed.



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 55-1/4" (2" less than factory for 1965-1966 Mustang, and 4" less for 1967-1970 Mustangs and Cougars. Complete correct length axle packages and third members are also available. Ask our sales representatives for details.

Year	Anti-Roll Bar	Mild Steel	4130
1964-1966	Chassis Mount	84M10-601	84M10-611
	Housing Mount	84M10-701	84M10-711
1967-1970	Chassis Mount	84M20-601	84M20-611
	Housing Mount	84M20-701	84M20-711
1971-1973	Chassis Mount	84M30-601	84M30-611
	Housing Mount	84M30-701	84M30-711
OPTIONS	Folded back brace, factory installed		

Rear Pushrod Suspension System

The TCP rear pushrod suspension system enables dramatically improved handling performance for classic Mustangs and Fords in a high-tech, self-contained package. The original leaf-spring suspension relies heavily on the springs to handle rearend-housing movement in six directions as well as torque reactions during acceleration and braking. Replacing the leaf springs are double-adjustable VariShock coil-overs, tubular trailing arms, a watts-link assembly and heavy-duty torque arm. Separating control jobs to individual components enables a superior level of positioning and geometry accuracy. The result is consistent, predictable handling suitable for the most demanding of performance applications. Additional benefits include significant improvement to chassis rigidity and extremely precise tuning adjustments such as variable ride height, wheelbase, housing alignment, instant center, pinion angle and shock valving, as well as a choice of spring rates. High-quality construction combined with a wide range of adjustments make this system equally at home on the street, strip or road course.

Torque Arm

The TCP Torque Arm is a bolt-on, pinion-angle-adjustable traction device that converts torque to downward force at the tires. The arm is mounted at three points: a swiveling connection at the connector support, and two solid mounts at the rearend housing. Rigid construction and extremely stable mounting points provide instant torque control, resulting in more-immediate throttle response and acceleration.

Model	Year
Mustang	1964-1970
Cougar	1967-1970



Shown with optional driveshaft safety loop

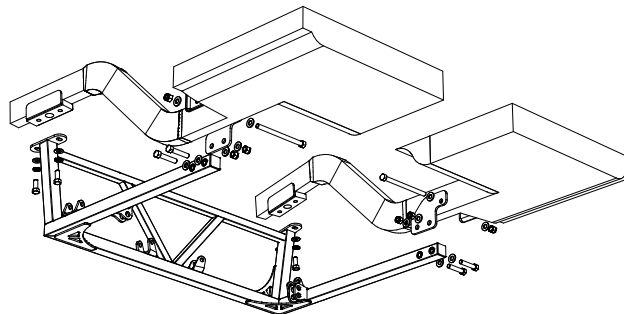
Includes: clip weld assembly, FAB9™ housing, torque arm, VariShock coil-overs, springs, rocker assemblies, trailing arms, watts-link assembly, subframe connectors and connector support. System shipped via truck freight.

REAR SUSPENSION

Installation

Our engineers paid particular attention to simplifying the installation by employing a detachable clip assembly similar to systems used on modern race cars. Our tubular subframe connectors along with four mounting brackets are first welded directly to the chassis. Existing factory mounting locations serve as index features to accurately position the mounting brackets and subframe connectors without risk of incorrect measurements or installer error. The rear-clip assembly and subframe-connector support are then bolted securely to the mounting brackets and weld-in subframe connectors. The remaining suspension components simply bolt to existing mounts on the rear-clip assembly, subframe-connector support, and rearend housing. To guide you

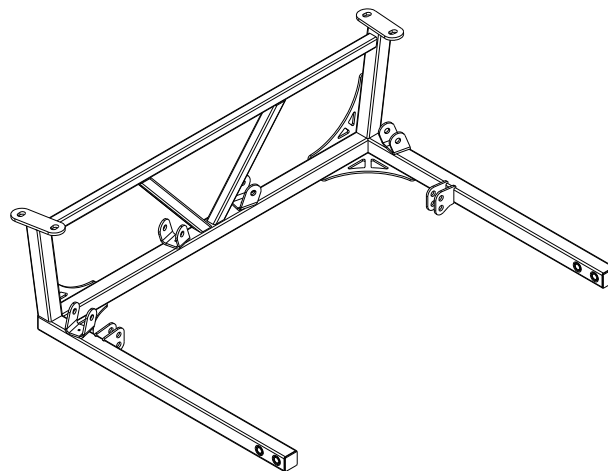
through each step of installation, setup and fine-tuning, a detailed, illustrated instruction manual is provided with each kit.



Rear-Clip Weld Assembly

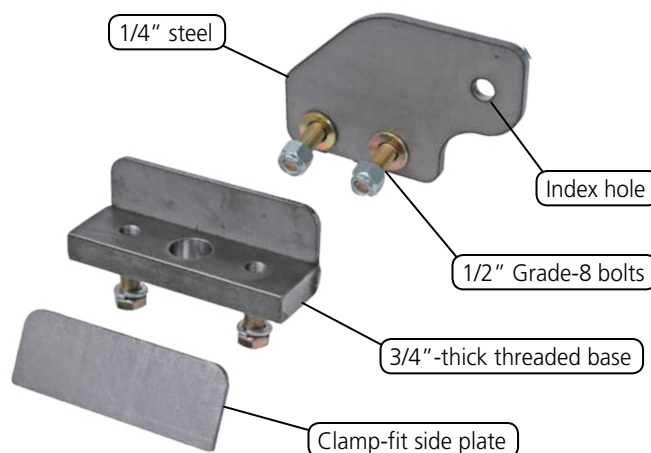
The main structural component of the system is the rear-clip welded assembly. It has been designed to handle vertical and lateral suspension forces, as well as increase torsional rigidity of the chassis. In order to provide a stable platform for the shock, rocker and watts-link mounts, load-bearing lengths of the clip were constructed from 1-1/2x.120"-wall, square-steel tubing. A diagonal truss-bracing structure, made of 1x.120"-wall square tubing, effectively reinforces the shock-mounting area and provides the majority of lateral support for loads transmitted through the watts-link tubes. The lower corners of the clip are further strengthened by 3/16"-thick sheet-metal gussets. Each piece of tubing is capped to improve torsional strength and to prevent moisture from entering the assembly. Vertical uprights are fitted with stout, 1/4"-thick mounting plates with slotted holes to allow for chassis variances during installation. Clip frame rails are capped at their leading edges and fitted with two bolt sleeves to prevent the tube from collapsing when

mounting hardware is tightened. To complete the assembly, a gloss-black-powder-coat finish is applied for corrosion resistance and quality appearance.



Mounting Brackets

The rear-clip assembly is secured to the vehicle by four mounting brackets that must be welded to the chassis. Forward brackets are positioned by the front leaf-spring-mounting bolt, then welded along the inside edge of the factory frame rail. Rear upright brackets are shipped as two separate components: a welded base-to-side-plate assembly and a separate, loose side plate. The mount bases are a stout 3/4" thick to provide sturdy thread engagement for the clip-mounting bolts. During installation, a clamp is used to sandwich the factory frame rail between the base assembly and loose plate. This ensures a perfect bracket fit and eliminates the possibility of filling gaps around the bracket when welding. The clip assembly is secured to the welded chassis brackets by eight 1/2", Grade-8 bolts.



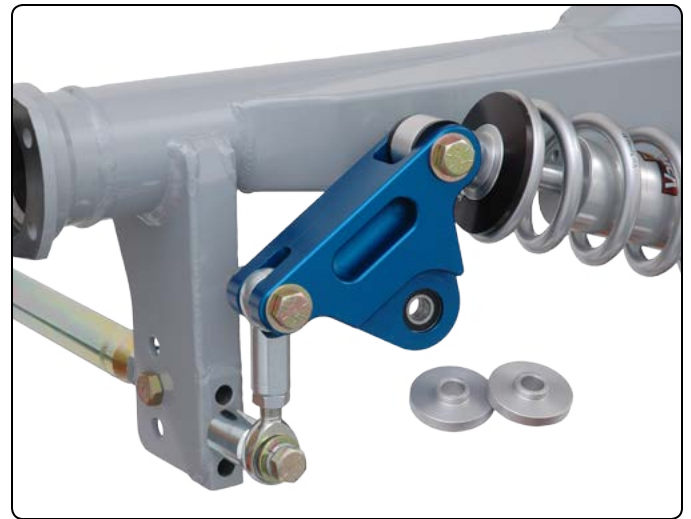


Lay-Down Rocker Shock Configuration

The most-eye-catching feature of the system is the pushrod, rocker and shock arrangement. This configuration enables vehicle corner balancing and over 2" of ride-height adjustment without affecting the designed travel balance of the shocks.

Adjustable-Length Pushrods

Adjustable-length rod-end assemblies make up the pushrods mounted to the rearend housing's axle brackets. Pushrods can be fastened in one of three ride-height positions (1, 2, or 3" below stock) and can also be adjusted for length within a 1/2" range. Rod ends are high-strength, 4130 chromemoly and feature Teflon® bearing races for quiet operation and extended service life.



Roller-Bearing Rockers

As the rearend housing moves, the pushrod rotates the rocker, compressing the coil-over shock. The rocker uses increasing rate geometry to improve ride quality without sacrificing performance potential. Rocker bodies are CNC-machined from 6061-T6 aluminum and feature a full-width outside bridge and closed weight-reduction pockets for

maximized strength with minimal deflection. Dual-sealed roller bearings are contained in each rocker body, held in place by a retaining ring. Specially machined aluminum spacers sit on each side of the bearing stack to further protect the bearings and extend service life.

Double-Adjustable QuickSet 2 VariShocks

The VariShock coil-over features separate, 16-position compression and rebound valve adjustments, enabling a wide range of tuning capabilities. Adjustment knobs are easily accessible at the base of the shock and allow adjustments to be made by hand in just a few seconds,

without removing or unbolting the shock. Shock-mounting eyes are fitted with premium urethane bushings with up to 350% more material and higher load capacity than common poly bushings.

High-Travel VariSprings

VariSprings use a new, high-tensile wire, stronger than chrome-silicon wire used by other manufacturers. This material improvement allows the springs to compress until the coils touch without damaging the spring or causing it to "take a set." The additional usable travel enables a smaller, lighter-weight spring, with greater travel than a comparable spring of the same advertised rate. Available spring rates range from 210-450 lbs/in., with steps between rates sufficiently close to make very fine adjustments in vehicle-

cornering balance and ride quality. Springs are finished in silver powder coating and labeled with part number and spring rate for easy reference.

Choice of spring rate: 210, 240, 275, 310, 350, 400, or 450 lbs/in.

Second spring set (for advanced tuning)



REAR SUSPENSION



Pushrod Torque-Arm FAB9™ Direct-Fit Housing

The FAB9™ housing offers exceptional strength, performance, reliability and adjustability with a simple, direct-fit installation. Finite-element-analysis software was used to create a fabricated 9" (FAB9™) center section stronger yet lighter than its OEM counterpart. Angular panels, internal gussets and a heavy-wall front face are assembled by 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. Tying the center section and axle tubes together are the folded back braces, exact-fit boxed structures spanning from the outer edge of the back panel to the inside edge of the axle mounts. Their tapered design is broad closest to the center section for maximum support and narrows towards the housing ends for lighter weight. It is the enclosed chambers at each end of the of center section and along the backside of the axle tubes that give the entire assembly superior strength over any other housing design.

Housings ship as an uncoated, welded assembly, complete with torque-arm mounts, watts-pivot bung, multiple-position trailing-arm and pushrod mounts, folded back braces, axle-tube vent, and big-bearing, late-Torino housing ends. Housings are available in stock widths of 51.75" (57.25"

wheel-to-wheel) and 53.75" (59.25" wheel-to-wheel with 1/4"-thick hats). Standard-priced FAB9™ housings are constructed from mild steel but can be upgraded to 4130 chromemoly for an additional charge.

FAB9™ Rearend Housing Options

Mild steel, 51.75" housing width, 57.25" wheel-to-wheel (stock width, 1964-1966)

Mild steel, 53.75" housing width, 59.25" wheel-to-wheel (stock width, 1967-1970)

4130 chromemoly, 51.75" housing width, 57.25" wheel-to-wheel (stock width, 1964-1966)

4130 chromemoly, 53.75" housing width, 59.25" wheel-to-wheel (stock width, 1967-1970)

Shorter 51.75" housings can be selected for use on 1967-1970 vehicles. Wheels will require custom width and backsacing.



Subframe Connector System

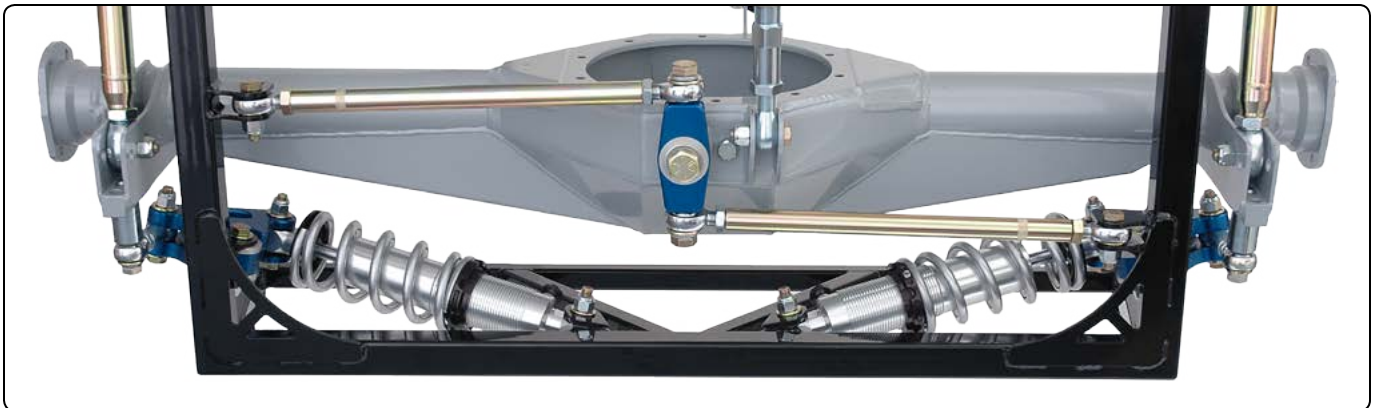
In addition to the subframe-connector system's primary job of stiffening the chassis, it also serves as the torque-arm-attachment point to the vehicle. During heavy acceleration, the torque arm pushes upward upon the chassis with great force. The connector assembly distributes the vertical forces from the torque arm across a broad area of the undercarriage. This reduces localized stresses and also creates a more-stable crossmember for a noticeable improvement in torque control and throttle response.



Watts-Link System

The watts-link assembly is responsible for keeping the rearend housing centered in relation to the chassis and defining the rear suspension's roll center. The assembly is comprised of two staggered links mounted to the rear-clip weld assembly and a central pivot attached to the rearend housing. When cornering, link tubes handle forces in the most-structurally efficient method, compression and tension, rather than as a bending member such as a leaf-spring suspension. This results in immediate, positive

location of the rearend when entering and exiting corners. As the rearend housing moves vertically, the central pivot rotates slightly to follow the two arcs defined by the link assemblies. This pivoting action splits the difference between the two arcs, allowing the housing to travel in a perfectly straight line. Vehicle performance benefits include extremely consistent cornering balance and identical turn-in characteristics for both left- and right-hand turns, neither possible with panhard bars or leaf springs.



Chromemoly Trailing Arms

The primary job of trailing arms is to control fore/aft positioning of the rearend housing in relation to the chassis and to direct forward force into the chassis during acceleration. Trailing-arm assemblies are mounted at the factory front leaf-spring mount and attached to the rearend-housing axle bracket in one of three available positions. Each position alters the specific point at which force, transferred through the suspension links, is directed into the chassis — commonly known as the "instant center." The ability to move the instant center enables a useful tuning aid for acceleration and cornering characteristics.

Due to the high loads transferred through the trailing-arm assemblies, 4130 chromemoly steel tubing is used. Large-diameter, 1-1/4x.083"-wall tubing has the benefit of greater strength without the additional weight of smaller-diameter, thicker-wall material. In order to safely use rod ends with thin-wall tubing, CNC-machined tube adapters must be TIG-welded to the end of each tube. Adapters provide the

necessary thread strength, with the left-threaded adapter also serving as a 1-1/8" adjustment hex. Once welded, tube assemblies are zinc-plated for corrosion resistance.



Mini-Tub Leaf-Spring Suspension

The mini-tub leaf-spring suspension from Total Control Products allows substantially greater clearance for extremely large tire and wheel combinations. Relocated shocks and springs combined with the additional mini-tub clearance allow 2-3/4" more tire clearance on each side of the vehicle. Systems include all mounts, offset frame rail inserts, mini-tubs, leaf springs, spring plates and shock absorbers. A panhard bar version of the suspension is also offered

for sharper and more predictable handling. Optional components include a narrow-width, adjustable-rate anti-roll bar and fabricated Ford 9" housing (FAB9™). Currently available for all styles of 1964-70 Mustangs.

Model	Year
Mustang	1964-1970

NOTE: Not compatible with '65-66 GT rear valance. Requires narrowed gas tank.

- Additional 2-3/4" tire clearance
- Stronger offset rail inserts
- OEM or FAB9 housing



- Adjustable suspension geometry
- Choose spring rate and ride height

Mini-Tub Leaf-Spring Suspension

5868-M10	*Mini wheel tub set (weld-in)
	*Offset frame rail inserts (weld-in)
	Front spring mounts with gusset (weld-in)
	Rear spring mounts, crossmember (weld-in)
	Leaf-spring plates with lower shock clevis
	Upper shock mounts (weld-in)
	Poly spring bushings and shackle set
NOTE	* - Mini tubs and frame rail inserts may be omitted for vehicles with installed tubs

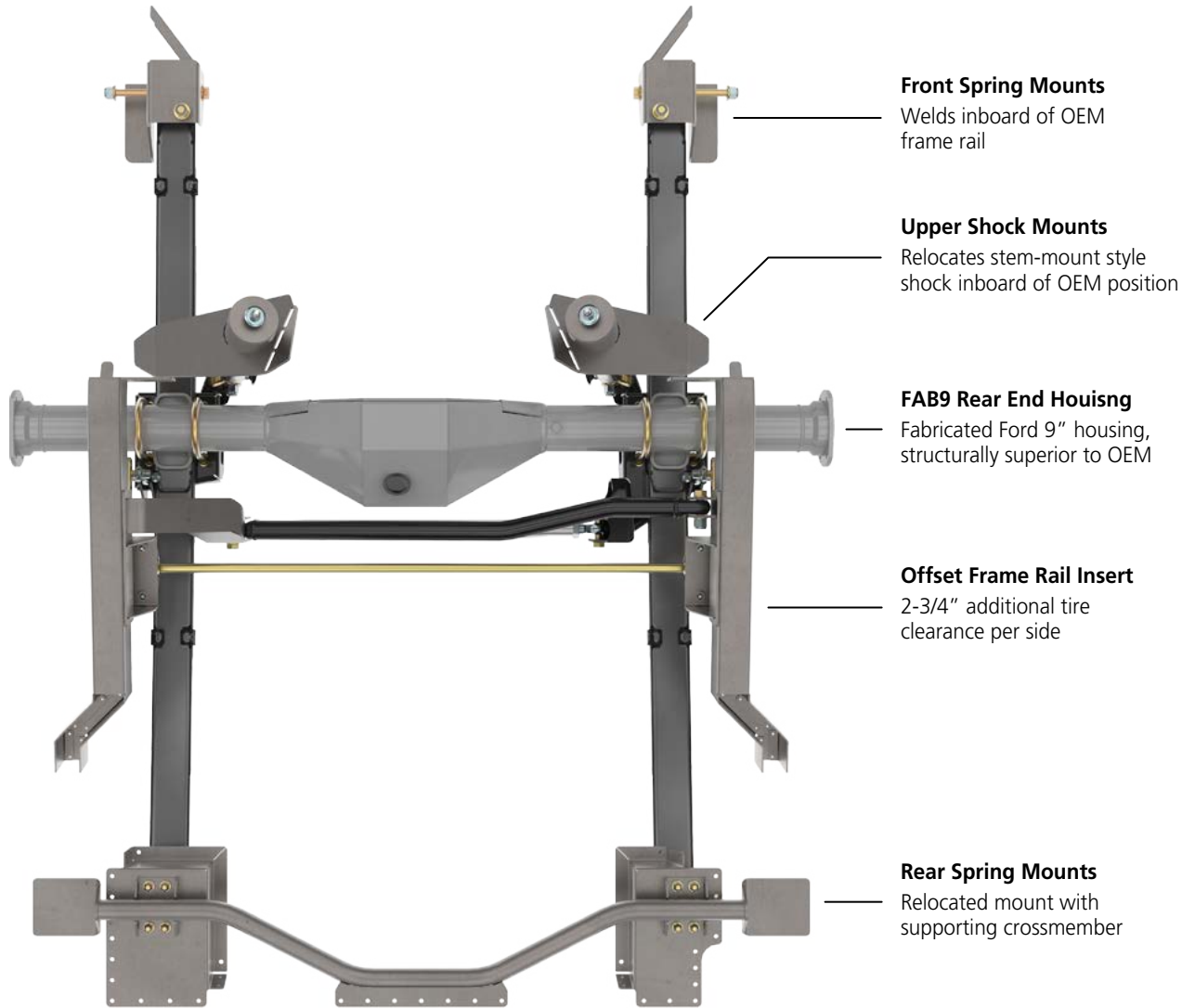


Mini-Tub Panhard Bar Suspension

5868-M10-PB	*Mini wheel tub set (weld-in)
	*Offset frame rail inserts (weld-in)
	Panhard bar mount, mount brace, spring plate, aluminum bar assembly, hardware
	Front spring mounts with gusset (weld-in)
	Rear spring mounts, crossmember (weld-in)
	Leaf-spring plates with lower shock clevis
	Upper shock mounts (weld-in)
	Poly spring bushings and shackle set
NOTE	* - Mini tubs and frame rail inserts may be omitted for vehicles with installed tubs.

OPTIONS

SWAYBAR	Anti-roll bar (5868-M10-ARB)
SPRINGS	Mid-eye (1" lower)
	Reverse-eye (1-1/2" lower)
	4-leaf spring set (street), 4-1/2-leaf spring set (performance), 5-leaf spring set (race)
SHOCKS	Billet-aluminum VariShock Bolt-Ins - factory-valved, single-adjustable, double-adjustable
HARDWARE	U-bolts 3"-ID x 6-1/2"
PERCHES	2-5/8" to 2-3/4" axle tube (TCP LSP-06)
	3" to 3-1/4" axle tube (TCP LSP-07)
HOUSING	84M10-PXX - Mild steel or 4130 FAB9



Front Spring Mounts

Welds inboard of OEM frame rail

Upper Shock Mounts

Relocates stem-mount style shock inboard of OEM position

FAB9 Rear End Housing

Fabricated Ford 9" housing, structurally superior to OEM

Offset Frame Rail Insert

2-3/4" additional tire clearance per side

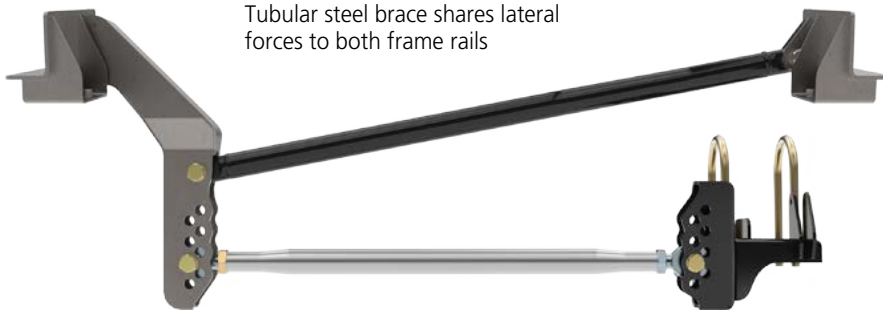
Rear Spring Mounts

Relocated mount with supporting crossmember

Panhard Bar - INCLUDED with 5868-M10-PB

Support Brace

Tubular steel brace shares lateral forces to both frame rails



Panhard Bar Mount

Eight-position mount allows panhard bar to be raised or lowered to alter understeer/oversteer characteristic

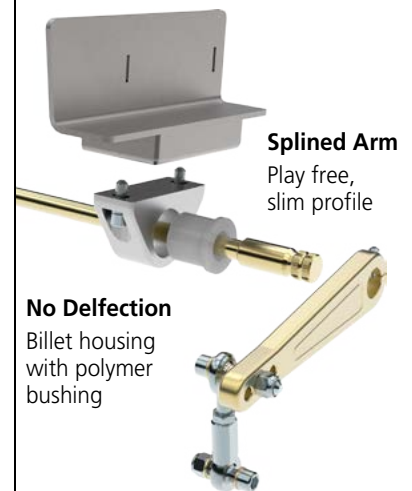
Aluminum Panhard Bar

Aluminum rod with alloy-steel rod ends allow length adjustment of the bar to precisely center the axle between the rear fenders

Leaf Spring Plate

Passenger-side spring plate with integrated panhard bar adjustment holes and anti-roll bar end-link mount

Anti-Roll Bar - OPTION



Splined Arm

Play free, slim profile

No Deflection

Billet housing with polymer bushing

Adjustable Rate

Multiple end-link positions at arm

REAR SUSPENSION

Leaf-Spring Suspension Systems

Total Control Products leaf-spring suspensions for 1964-73 Mustangs provide a marked improvement in vehicle handling over standard OEM components. Systems are offered in a variety of performance stages ranging from upgraded factory-style configuration to autocross or track day suited packages equipped with torque arm and panhard bar. All systems include leaf springs, polyurethane bushing and shackle sets, heavy-duty leaf-spring plates with built-in tie-down loops, and billet-aluminum VariShock direct-replacement shocks. System options include: 1/2" U-bolt set; 4-, 4-1/2-, or 5-leaf springs; mid- or reverse-eyes; factory-valved, single- or double-adjustable VariShocks; and adjustable anti-roll bar.

SPRING-EYE OPTIONS	Mid-eye springs, lowers 1" from stock height
	Reverse-eye springs, lowers 1-1/2" from stock height
SPRING-LEAF OPTIONS	4-leaf spring set, street
	4-1/2-leaf spring set, performance/street
	5-leaf spring set, performance
SHOCK OPTIONS	SensiSet (SS) factory-valved
	QuickSet 1 (QS1) single-adjustable
	QuickSet 2 (QS2) double-adjustable
HARDWARE OPTION	U-bolt hardware set, 1/2"

Mustang 1964-1973

Leaf Spring System

TCP LSS-M11	Leaf springs, poly front eye bushings, poly-bushed spring shackles, shocks and spring plates
SWAYBAR OPTION	Housing-mounted, adjustable rate
SPRING PLATE OPTIONS	For standard position shocks
	For staggered shocks



Panhard Bar System

TCP LSS-M12	Panhard bar with spring plates, leaf springs, poly front eye bushings, poly-bushed spring shackles and shocks
SWAYBAR OPTION	Chassis-mounted, adjustable rate



Torque Arm System

TCP LSS-M15	Torque arm, leaf springs, poly front eye bushings, poly-bushed spring shackles, shocks and spring plates
SWAYBAR OPTION	Housing-mounted, adjustable rate
SPRING PLATE OPTIONS	For standard position shocks
	For staggered shocks
FIXTURE OPTIONS	Ford 8" fixture and tabs
	Ford 9" fixture and tabs
	FAB9 fixture and tabs



Torque Arm with Panhard Bar System

TCP LSS-M16	Torque arm, panhard bar with spring plates, leaf springs, poly front eye bushings, poly-bushed spring shackles and shocks
SWAYBAR OPTION	Housing-mounted, adjustable rate
SPRING PLATE OPTIONS	For standard position shocks
	For staggered shocks
FIXTURE OPTIONS	Ford 8" fixture and tabs
	Ford 9" fixture and tabs
	FAB9 fixture and tabs



REAR SUSPENSION

Leaf Springs and Accessories

Total Control leaf springs are manufactured from the finest alloy steel to provide the best possible performance for your Mustang. Our leaf springs are available in two modified-eye styles and three-separate spring configurations, providing lower-than-stock ride height, with three levels of ride quality and performance.

Leaf-Spring Selection Tips:

Eye style determines car height. Leaf count determines ride quality and performance level. Four-leaf springs provide a ride slightly firmer than stock GT leaf springs, and are the correct choice for mostly street driven vehicles. Four and one-half-leaf springs are recommended for moderate performance and spirited street driving. The extra half leaf provides additional stiffness between the forward eye and axle, better resisting spring wrap-up. Five-leaf springs provide the firmest ride and resistance to wrap up, and are primarily used for performance driving.

TCP LSM-M40	Mid-eye, 4-leaf springs
TCP LSM-M45	Mid-eye, 4-1/2-leaf springs
TCP LSM-M50	Mid-eye, 5-leaf springs
TCP LSM-R40	Reverse-eye, 4-leaf springs
TCP LSM-R45	Reverse-eye, 4-1/2-leaf springs
TCP LSM-R50	Reverse-eye, 5-leaf springs



Mid Eye - Adding a counter bend at the base of each eye repositions the mounting bolts to sit along the centerline of the spring stack. This brings the axle closer to the chassis, lowering the vehicle roughly half the diameter of the spring eyes, or approximately 1".



Reverse Eye - Coiling the spring eyes in the opposite direction from stock, places the mounting bolts below spring-stack centerline, resulting in a ride height roughly 1-1/2" below stock. The ultra-low stance creates a sleek vehicle profile, and lowers the vehicle's center-of-gravity for improved handling.



Standard Eye - OEM leaf springs position the eyes above the centerline of the spring stack. This places the axle at its furthest distance from the chassis, commonly referred to as the stock ride-height position.

Leaf-Spring Bushings

Total Control leaf-spring, polyurethane-bushing sets provide a more stable interface between the leaf springs and the chassis. Poly material has a significantly higher durometer making it more difficult to compress, resulting in reduced deflection and better handling. Front set includes black poly bushings for leaf spring front eyes with sleeves, and hardware. Rear shackle set contains black poly bushings for leaf spring rear eye and chassis mounts, heavy duty shackle set and Grade 8 hardware. Multiple tubes of Teflon®

impregnated assembly lube are also included with each set. Each set will fit 1964-1/2 to 1973 Mustangs and many other '60s and '70s classic Fords.



Model	Year	Front-Eye Bushing Set	Rear-Eye Shackle Set
Comet	1964-1977	TCP LSP-04	-
Cougar	1967-1970	TCP LSP-04	-
	1971-1972	TCP LSP-04	TCP LSP-05
	1973	TCP LSP-04	-
Cyclone	1964-1965	TCP LSP-04	-
Fairlane	1965-1971	TCP LSP-04	-
Falcon	1964-1970	TCP LSP-04	TCP LSP-05
Maverick	1970-1977	TCP LSP-04	-
Montego	1968-1971	TCP LSP-04	-
Mustang	1964-1973	TCP LSP-04	TCP LSP-05
Ranchero	1964-1971	TCP LSP-04	-
Torino	1968-1971	TCP LSP-04	-

U-bolt Set

Total Control's u-bolts are much stronger because they are manufactured from larger, 1/2"-diameter, alloy steel instead of stock 7/16" material. Gold irradiated for durability and formed to fit 3"-diameter axle tubes. These u-bolts will fit with 4- through 5-leaf springs and axle housings, with 2-13/16" through 3"-diameter axle tubes. Included are hardened alloy steel washers and Grade 8 nylon-insert locknuts. Recommended to use LSP-01 or LSP-02 as the stock leaf-spring plates will not accept these larger-diameter u-bolts.



TCP LSP-03 U-bolt set, 1/2 x 6-1/2" for 3" axle tubes

Leaf-Spring Plates

Our direct-replacement leaf-spring plates feature an integrated tie-down loop for added convenience when securing a vehicle to a trailer. The oversized loop measures 1.5x3.7", allowing plenty of clearance for heavy-duty strap hooks. The plate is manufactured from 3/16" plate steel with CNC-press-brake-formed sides, creating the strongest welded joints possible. Radiused gussets extend downward to support the loop at its lower corners and improve structural stability at the shock-mount tab. To give more clearance for brake lines on common 9"-housing conversions, the shock-mount position has been moved slightly forward. The shock tab uses heavier, 1/4"-thick steel and features a 0.85"-diameter mounting hole for use with aftermarket-shock urethane bushings. The plates are designed for 2-1/2"-wide leaf springs and can be installed on various make-and model vehicles. Slotted holes enable the

use of 7/16" or 1/2" u-bolts and 2-1/4" to 3-1/4"-diameter axle tubes. For appearance, all corner welds are ground smooth, adding to the overall curved, flowing design. Zinc plating enhances the quality finish and provides protection against corrosion.

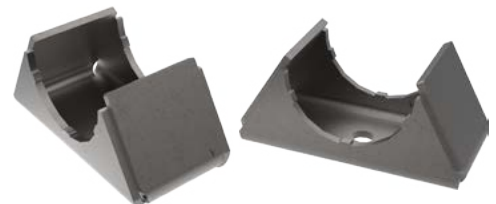


TCP LSP-01 Standard shocks
TCP LSP-02 Staggered shocks

Leaf-Spring Perches

In addition to fully supporting the spring contact area, our folded-steel boxed perches increase the weld area against the axle tube. Notches along the inside radius provide a convenient weld relief and can be ground flush to fit larger axle tubes.

TCP LSP-06 2-5/8" to 2-3/4" axle tube
TCP LSP-07 3" to 3-1/4" axle tube



REAR SUSPENSION

Panhard Bar System

Our panhard bar system for leaf-spring suspensions greatly improves vehicle handling response by providing superior control over side-to-side movement of the rearend housing. Installation and proper setup provides a noticeable change in vehicle handling with a more direct and connected feel during cornering. Minimizing the nervous tendencies of leaf spring suspensions with the TCP panhard bar makes driving near the vehicle's performance limit much easier.

- Controls side-to-side axle movement
- Improves cornering stability
- Predictable handling characteristics
- Adjustable roll center geometry
- Integrated anti-roll bar mounts, shock mounts, and tie-down loops



Shown with optional sliding-link anti-roll bar and driver-side spring plate.

Adjustable Geometry

Multiple mounting holes for each end of the panhard rod allows the system to be used at multiple ride heights and provides adjustment of the vehicle roll center. Altering the roll center affects the understeer and oversteer characteristics of the car and is a quick and easy method to achieve better handling performance.

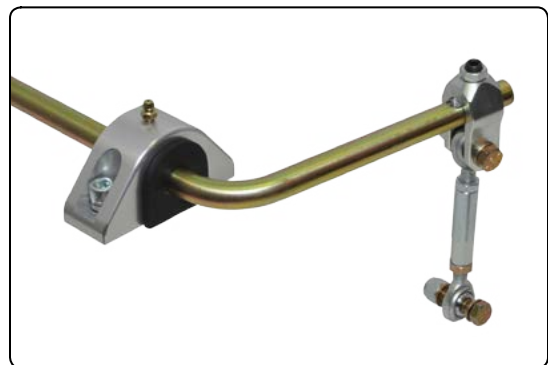
TCP PHL-M10	Panhard Bar - Includes frame brackets, welded steel support tube, aluminum panhard rod and passenger-side spring plate.
TCP PHS-M10	Driver-Side Spring Plate - Required for installation of sliding-link anti-roll bar.

Sliding-Link Anti-Roll Bar - OPTION

With chassis mounts integrated into the panhard bar frame brackets adding an adjustable-rate anti-roll bar couldn't be easier. Our unique sliding-link mechanism, utilizes three distinct indents at each end of the anti-roll-bar lever to create six incremental adjustments. Links consist of 3/8" rod-ends, allowing the anti-roll bar to be precisely set to a neutral, non-preload condition.

Note: Panhard bar and driver-side spring plate are required for installation of this product.

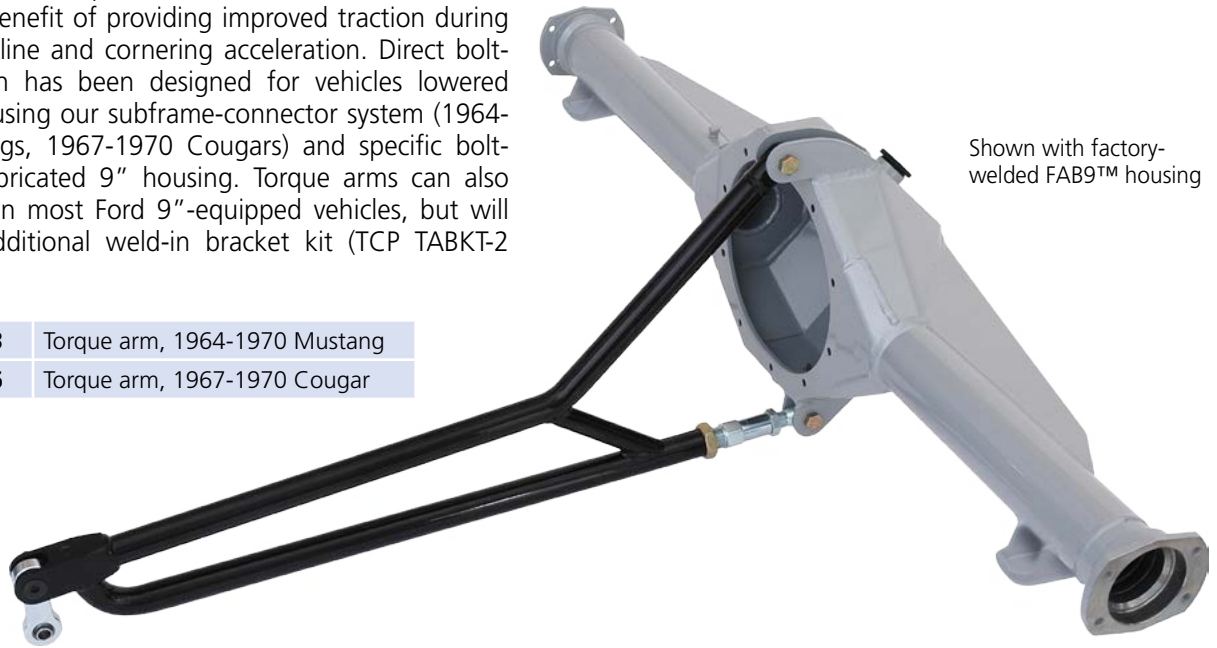
TCP PHA-M10	Sliding-Link Anti-Roll Bar - Includes 5-position adjustment bar, billet-clevis endlink mounts, endlink assemblies, and poly-bushing billet-aluminum mounts
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Torque Arm for Ford 9-Inch

The TCP torque arm is a bolt-on, pinion-angle-adjustable traction device that can be used with our rear pushrod or factory leaf-spring suspensions. Similar to traction bars, the arm converts torque to downward force at the tires, but has the benefit of providing improved traction during both straight-line and cornering acceleration. Direct bolt-on installation has been designed for vehicles lowered 1-1/2" to 2", using our subframe-connector system (1964-1970 Mustangs, 1967-1970 Cougars) and specific bolt-in FAB9™ fabricated 9" housing. Torque arms can also be installed on most Ford 9"-equipped vehicles, but will require an additional weld-in bracket kit (TCP TABKT-2

or TCP TABKT-3) and crossmember fabrication. A bolt-on welding fixture (TCP TABKT-1) is also available to correctly position the mounting tabs.

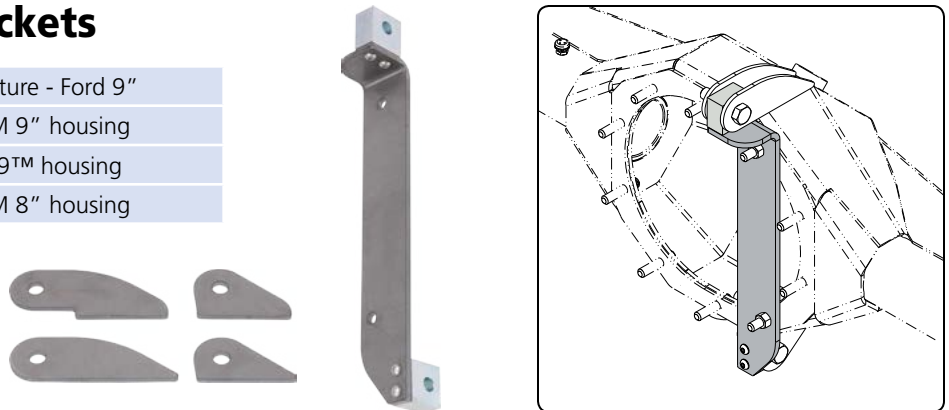


Shown with factory-welded FAB9™ housing

TCP TA2F9-33	Torque arm, 1964-1970 Mustang
TCP TA2F9-36	Torque arm, 1967-1970 Cougar

Weld Fixture and Brackets

TCP TABKT-1	Bracket welding fixture - Ford 9"
TCP TABKT-2	Bracket set for OEM 9" housing
TCP TABKT-3	Bracket set for FAB9™ housing
TCP TABKT-4	Bracket set for OEM 8" housing



Connector-System Packages

Torque arms require a structurally sound chassis mount for the front of the arm. Mustangs and Cougars from 1964 through 1970 will benefit from our subframe connector and center support packages with integrated torque-arm mount. Other vehicle models require fabrication of a suitable mount.

TCP PKG-SFC-01	Hardtop assembly (includes driveshaft loop)
TCP PKG-SFC-02	Convertible assembly



REAR SUSPENSION

Leaf-Spring FAB9™ Housings

Direct-fit FAB9™ fabricated housings are available for most models of leaf-spring equipped Mustangs, Cougars, Falcons, and Comets from 1960 through 1973. Heavy-duty, leaf-spring pads are clocked for correct pinion angle and perfect alignment with factory leaf-spring mounts.

Model	Year	Mild Steel	4130
Comet	1964-1965	84M10-101	84M10-111
Cougar	1967-1970	84M20-101	84M20-111
	1971-1973	84M30-101	84M30-111
Falcon	1964-1965	84M10-101	84M10-111
Mustang	1964-1966	84M10-101	84M10-111
	1967-1970	84M20-101	84M20-111
	1971-1973	84M30-101	84M30-111
Ranchero	1964-1965	84M10-101	84M10-111
OPTIONS	Back brace, torque-arm mounts		

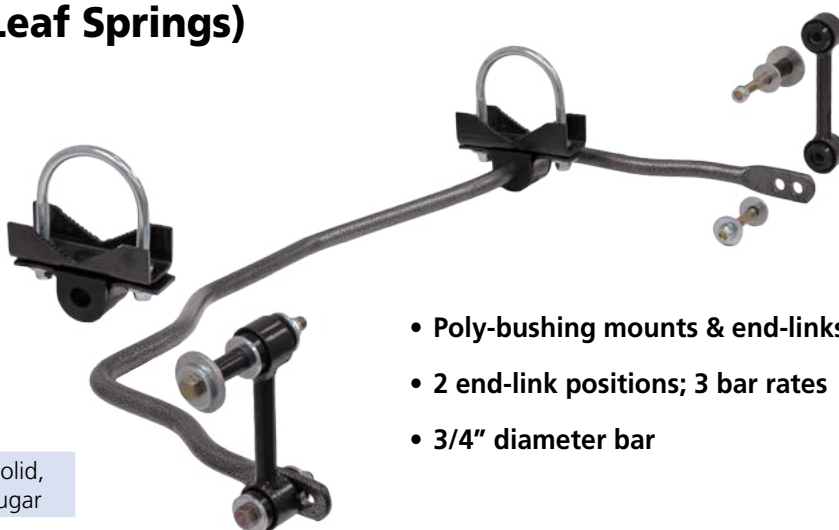


Narrowed Housing Widths - Housings can be built to standard widths for OEM wheel offsets or narrowed to accommodate wider tire and wheel combinations. Widths can be narrowed in 1/4" increments to a wheel-to-wheel minimum of 55-1/4" (2" less than factory for 1965-1966 Mustangs, and 4" less for 1967-1970 Mustangs and Cougars. Complete correct length axle packages and third members are also available. Ask our sales representatives for details.



Adjustable Anti-Roll Bar (Leaf Springs)

Our bolt-on anti-roll bar is designed for leaf-spring rear suspensions on Mustangs and Cougars from 1964 through 1973. The bar is mounted directly underneath the axle tube using bolt-on clamps for more exhaust clearance. The solid anti-roll bar measures 3/4" and features multiple endlink mounting holes for a total of three incremental rate adjustments. Bars are silver-with-black-vein powder coated and ship with all necessary hardware.



- Poly-bushing mounts & end-links
- 2 end-link positions; 3 bar rates
- 3/4" diameter bar

TCP ARR1-12 Leaf-Spring anti-roll bar, 3/4" solid, bolt-on, 1964-73 Mustang/Cougar

Ford 9-Inch Third-Members

ST Iron TruTrac Package (Up to 700 hp, Case - 26.70 lb)

The ST Iron package is a completely assembled Ford 9" third member shipped ready to install. Cases are constructed from high-grade nodular iron and feature a radial ribbed design providing more uniform support for the pinion and carrier bearings. The caps, also nodular iron, are designed with increased thickness for added strength and ring-gear stability. Third members are equipped with Truetrac worm-

gear differentials, with proven acceleration performance in both strip and handling applications. A Daytona-style iron pinion support is included and features a larger than stock rear tapered pinion bearing and improved oil porting. Ring-and-pinion gear selections include: 3.50, 3.70, 3.89, 4.11, 4.30 and 4.57.

8520-112	ST Iron nodular case, 31-spline Truetrac differential, 8620 gear set with choice of ratio (3.50-4.57), chrome-moly 1350 yoke, Daytona iron pinion support
8520-122	ST Iron nodular case, 35-spline S-Trac differential, 8620 gear set with choice of ratio (3.50-4.57), chrome-moly 1350 yoke, Daytona iron pinion support



- **ST Iron Case (Nodular Iron)**
- **Dayton Pinion Support**
- **1350 Chrome-moly Yoke**
- **Truetrac Differential (31- or 35-spline)**

Pro HD Aluminum Truetrac Package (Up to 1000 hp, Case - 31.50 lb)

The Pro HD package is a completely assembled Ford 9" third member shipped ready to install. Cases are constructed from 206-T4 heat treated aluminum and feature a radial ribbed design providing more uniform support for the pinion and carrier bearings. Billet aluminum caps are retained with 9/16" studs and are fully machined. The cap design provides the utmost support for the carrier bearings and significantly reduces ring gear deflection. Third members are equipped with Truetrac worm-gear differentials, with

proven acceleration performance in both strip and handling applications. The billet aluminum pinion support has a unique oil channel that is machined 360 degrees into the support to maximize oil flow to the pinion bearings thru optimized porting holes, as well as a large slot milled into the front of the support to further boost oil circulation. Ring-and-pinion gear selections include: 3.50, 3.60, 3.70, 3.89, 4.11, 4.30, 4.57, 4.71 and 4.86.

8520-319	Pro HD aluminum case, 31-spline Truetrac differential, 8620 gear set with choice of ratio (3.50-4.57), chrome-moly 1350 yoke, billet aluminum pinion support
8520-329	Pro HD aluminum case, 35-spline S-Trac differential, 8620 gear set with choice of ratio (3.50-4.57), chrome-moly 1350 yoke, billet aluminum pinion support



- **Pro HD Aluminum Thru-Bolt Case**
- **Billet Aluminum Pinion Support**
- **1350 Chrome-moly Yoke**
- **Truetrac Differential (31- or 35-spline)**

DRIVETRAIN

Flanged-Axle Packages

We are proud to offer high-quality axle packages from the performance industry leader, Strange Engineering. Kits come with everything needed for a complete axle installation into your new aftermarket or existing factory housing and third member. Two series of axles are available. S-Series, induction-hardened axles are suitable for a wide variety of performance applications including street, strip or track use. For dedicated-drag-racing applications, the Thru-hardened, ProRace series can withstand power levels beyond 1000 horsepower. Allow 1-4 weeks for delivery.

Thru-Hardened Axles (ProRace)

Strange's ProRace series of axles are constructed from Hy-Tuf steel, a high-nickel, ultra-strength steel alloy originally developed for military use. Axle forgings are machined to required specifications, then heat treated in a vertical furnace to achieve a uniform hardness level from surface through to the center of the shaft. Because of their Thru-Hardened quality, these axles, while torsionally superior to withstand the abusive nature of drag racing, are not suited for high bending loads common with everyday street use. ProRace axles feature precisely machined 1.5635" bearing seats and special radius ring seats. The press-fit radius ring minimizes stress concentrations along the bearing shoulder and improves axle-flange stability. Raised brake registers are machined to size, based on your particular brake and wheel requirements.



ProRace 40-Spline Axles (1000 hp and up)

Recommended for drag-race-only use. Requires 3.250"-or-larger-bore case with appropriate gear carrier (spool only).

ProRace 35-Spline Axles (up to 1000 hp)

Recommended for drag-race-only use. Requires 3.250"-bore case with appropriate gear carrier (locker or spool only).

ProRace 31- and 33-Spline Axles (up to 600 hp)

Recommended for drag-race-only use, 31- and 33-spline ProRace axles must be used with a 3.0625"-bore case with appropriate differential (posi, locker or spool; 33-spline axles for spool only).

Induction-Hardened Axles (S/S,ST)

Each axle begins as a SAE 1550 modified steel forging, which then undergoes spline hobbing and CNC machining to meet exact required specifications. To improve resistance against bending loads and wear, a post-machining process of electric-coil-induction hardening is performed. Induction hardening increases the hardness of the outer surface while maintaining a more-ductile axle core, necessary for reliable street use. Both S/S and S/T axles feature precisely machined, 1.5635" bearing and special radius ring seats. The press-fit radius ring minimizes stress concentrations along the bearing shoulder and improves axle-flange stability. Bolt-on, billet-aluminum brake registers are machined to size, based on your particular brake and wheel requirements.



S/T 35-Spline Axles (up to 800 hp)

For street/strip applications, the S/T axles feature a larger, 1.50"-diameter, 35-spline end that is better suited for the extreme levels of torque during launches. Requires 3.250"-bore case with appropriate gear carrier (locker or spool only).

S/S 28- and 31-Spline Axles (28-spline up to 400 hp; 31-spline up to 500 hp)

For street and handling performance applications, 31-spline S/S axles are recommended. S/S axles can be used with factory 2.891"- or aftermarket 3.0625"-bore cases with appropriate differential (posi-traction, torque-sensing, locker or spool).

Note: Horsepower ratings provide a guideline based on drag-race launches and adequate traction. Vehicles equipped with street tires and/or performance applications without drag-style launches (e.g., road racing/track days) can exceed listed power levels by a fair amount.

Axle-Package Options

Specific information regarding the vehicle application is required. Visit our Website or call to obtain technical data sheet with ordering requirements.

S/S	28-, and 31-spline, 1/2" studs
	28-, and 31-spline, 5/8" studs
S/T	35-spline, 1/2" studs
	35-spline, 5/8" studs
ProRace	28-, 31-, 33- or 35-spline, 1/2" studs
	28-, 31-, 33- or 35-spline, 5/8" studs
	40-spline, solid, 5/8" studs
	40-spline, gun-drilled, 5/8" studs
INCLUDES	Axles, radius rings, billet brake registers, wheel bearings, wheel studs

Wheel-Stud Options



Screw-In Studs (1/2")

The standard, 1/2" screw-in stud uses a headed fastener threaded through the axle flange from the back side. The wheel is centered by the raised "brake register" of the axle and driven by the lug-nut-contact surfaces. In the case of a tapered (acorn) lug nut, the driving surface is at the unsupported end of the wheel stud. Lengths: 2", 3".



Drive Studs (5/8" only)

Chromemoly drive studs are threaded through the flange from the outside and secured on the back by a locking nut. The front-side installation allows quick replacement if ever required. The 11/16" diameter shaft of the stud increases the contact surface with the wheel's bolt hole, to more effectively drive the wheel with reduced stud flex and without the need for shoulder-style lug nuts. Aluminum washers and lug nuts are provided. This upgrade is suitable for high-horsepower drag-racing-performance applications. Available lengths (given as 11/16" shaft length and overall length from flange): .875"/ 2.063"; 1.187"/ 2.375"; 1.500"/ 2.688"; 1.875"/ 3.125".

Axle-Housing Ends

Billet axle-housing ends are available in two styles. Drag-style ends are 1" long, and designed for use with sealed bearings only. Seal-style ends are 2" long, and can be used with stock-type axle seal or sealed bearings. They are available for early-small-bearing-Mustang-style (2.835" bore). Big-bearing (3.150" bore) are available in two backing-plate-bolt patterns: early-Ford style and late-Torino style. They can be used for street or track applications.

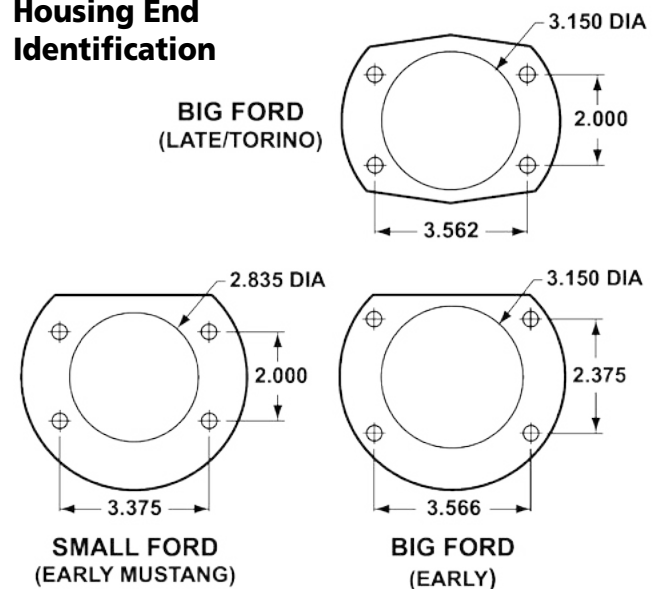


Axle Retainers

Precision-laser-cut axle-bearing retainers are horseshoe shaped to allow axle bearing to be installed before the retainer. Allows for fast and easy axle removal.



Housing End Identification



Application	Ends	Retainers
Big Ford (late/Torino with seal)	8001	8025
Big Ford (early with seal)	8000	8024
Big Ford (late/Torino drag style)	8007	8025
Big Ford (early drag style)	8002	8024
Small Ford (early Mustang)	8005	8022

Note: Part number is for pair of items.

DRIVETRAIN

Floater Axle System



- Heavy-duty billet housing end with integrated caliper bracket bosses
- Heavy-duty wheel hub assembly; larger, stronger, more reliable than Corvette ZR1 hub
- 35-spline differential
- Internal drum-style parking brake; separates from rotor
- 14" or 15" rear disc brakes with Wilwood or Baer radial-mount calipers
- Center Lock single-nut version available

Today's top pro-touring, autocross and road race vehicles often feature some of the largest section-width tires available matched with rapidly increasing levels of horsepower and torque. These drivetrain combos frequently push the reliability and safety limits of the standard flange-style axles that are common place on most muscle cars. Our solution to raising the reliability and safety limit is a complete floater-axle and brake system designed specifically for the leading-edge pro-touring market.

The pro-touring floater axle system features a tapered-roller unit-bearing; larger, stronger, and more reliable

than the Corvette ZR1 bearing, which bolts to a specially designed housing end to remove all weight and bending load from the axles. The axle is left with the sole purpose of transferring torque to the wheels and can then be designed as a simple axle shaft with splines at both ends.

INCREASED SAFETY: Floating axle systems are required by many racing organizations for their greater reliability and safety. An extremely important benefit of a floater axle is the ability to keep the wheel attached to the vehicle and operational in the event of a broken axle, preventing additional damage to the body, suspension, and possibly others.

35-Spline Floater Axles

Item	Description
8557-0135	Pro-touring floater axles (spindle-A) x 35-spline differential, 3.06" brake register - Pair of axles with attaching hardware.
OPTIONS	Axle length: 51 to 61 inches Pinion offset: centered, 1/2" offset, 1" offset
NOTE	SPECIAL ORDER PART NOT RETURNABLE FOR ANY REASON



Wheel Hubs and Housing Ends

Item	Hub Style	Pattern	Contains
8531-1110	2" wheel studs	5 on 4-1/2	Hubs only; requires FAB9
8531-1111	2" wheel studs	5 on 4-1/2	Hubs with housing ends
8531-1210	3" wheel studs	5 on 4-1/2	Hubs only; requires FAB9
8531-2110	2" wheel studs	5 on 4-3/4	Hubs only; requires FAB9
8531-2111	2" wheel studs	5 on 4-3/4	Hubs with housing ends
8531-2210	3" wheel studs	5 on 4-3/4	Hubs only; requires FAB9
8531-4440	Center-Lock, .805" pins	5 on 4-3/4	Hubs only; requires FAB9
8531-4441	Center-Lock, .805" pins	5 on 4-3/4	Hubs with housing ends
NOTE	SPECIAL ORDER PART NOT RETURNABLE FOR ANY REASON		



Floater Axle Brake Kit

Rear brake kits for pro-touring floater housing ends feature radial-mount, four-piston calipers, and 14" or 15" directional-vaned rotors with billet aluminum hats. The complete brake kit features an optional internal, drum-style, parking brake mechanism, which can be omitted from the kit in race or track only applications. The bolt-together hat-rotor-drum assembly allows worn or damaged components to be replaced easily and economically. The kit is designed for use with rearend housings using the floater axle

system and housing end. Fourteen- and fifteen-inch rotors require 18" and 19" wheels respectively. Includes SRP drilled (black e-coated) rotors, Wilwood calipers (black, red or nickel finish with optional Thermlock™ heat-barrier pistons), or Baer one-piece calipers.

Item	Rotor	Hub Style
8380-14	14"	Wheel Studs
8380-15	15"	Wheel Studs
8382-14	14"	Center-Lock
8382-15	15"	Center-Lock



Radial mount caliper



Drum-style parking brake

Caliper Options

Wilwood W4A 4-Piston Calipers	
OPTIONS	Black or red powder-coat finish
	Nickel-coated calipers with Thermlock™ heat-barrier pistons
	Street and Performance Smart Pad (low noise, light dust)
	Autocross or road-race specific pad compounds
Baer 6S 6-Piston Monoblock Calipers	
OPTIONS	Black, red, silver finish



Floater Axle FAB9 Housings

Factory-welded FAB9 housings are available for any of the Total Control Products rear suspensions complete with floater-axle housing ends and all suspension brackets. Option is available through our online product selector or when ordering by phone.



BRAKES

Front Brake Kits (OEM Spindles)

Model	Comet	Cougar	Cyclone	Fairlane	Falcon	Maverick	Montego	Mustang	Ranchero	Torino
Year	1963-1973	1967-1973	1963-1971	1966-1970	1963-1970	1970-1974	1968-1971	1965-1973	1963-1971	1968-1971

13" Brakes

- **12.88" x 1.10" vented rotor**
OPTION - slotted or drilled
- **6-piston Forged Narrow Superlite caliper**
OPTION - black or red
- Requires 17" or larger wheels
- Adds .25" to track width



12" Brakes

- **12.19" x 0.81" vented rotor**
OPTION - slotted or drilled
- **4-piston Forged Dynalite caliper**
OPTION - black or red
- Requires 15" or larger wheels
- Adds .09" to track width



11" Brakes

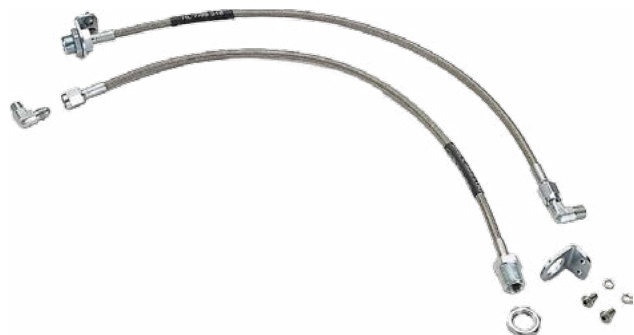
- **11.00" x 0.81" vented rotor**
OPTION - slotted or drilled
- **4-piston Forged Dynalite caliper**
OPTION - black or red
- Requires 14" or larger wheels
- Adds .09" to track width



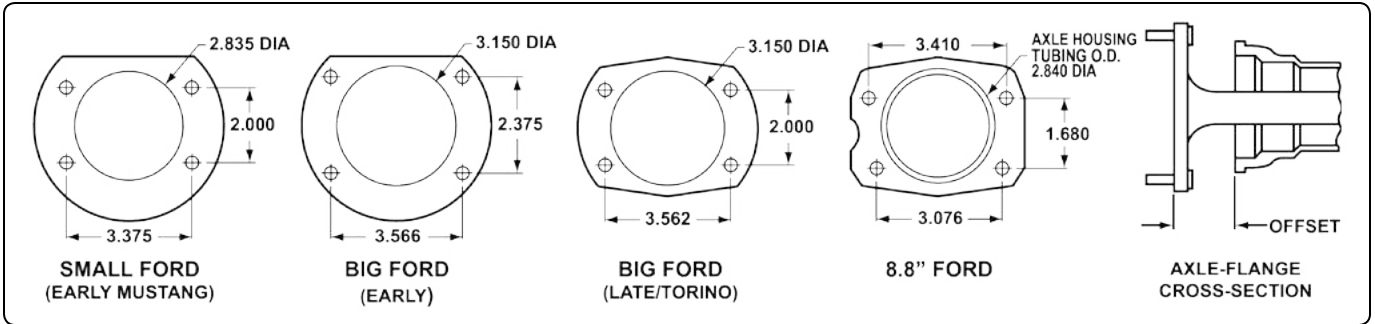
Braided-Stainless Flex-line Kit

TCP's braided-stainless, flex-line kit reduces line flex, common with OEM brake lines, to improve brake system response, and pedal feel. Teflon® hoses, hose ends, and mounting brackets are included.

6329 Braided Teflon® hose set for front or rear brakes



Rear Brake Kits



NOTE: Housing end style, axle offset and wheel diameter required when ordering brakes.

14" and 13" with Parking Brake

- **14.00" x 1.10" vented rotor**
OPTION - slotted or drilled
18" wheels minimum
- **12.88" x 1.10" vented rotor**
OPTION - slotted or drilled
17" wheels minimum
- **4-piston Forged Narrow Superlite caliper**
OPTION - black or red



12" with Drum-Style Parking Brake

- **12.19" x 0.81" vented rotor**
OPTION - slotted or drilled
15" wheels minimum
- **4-piston Forged Dynalite caliper**
OPTION - black or red



11" with Drum-Style Parking Brake

- **11.00" x 0.81" vented rotor**
OPTION - slotted or drilled
14" wheels minimum
- **4-piston Forged Dynapro caliper**
OPTION - black or red



CHASSIS

Shock Tower Braces

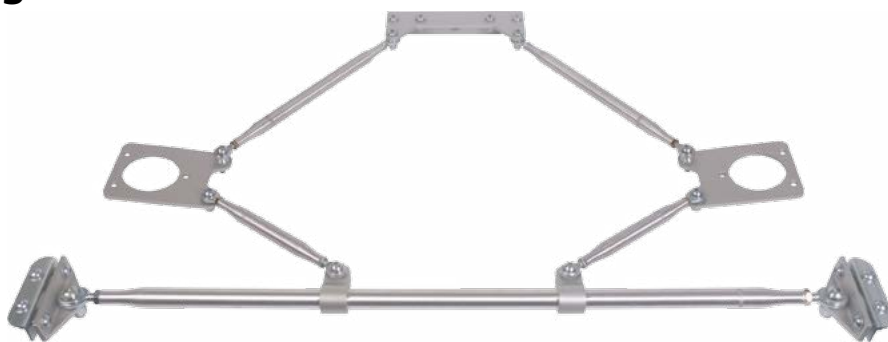
Our multi-stage shock tower bracing system improves overall vehicle handling performance by greatly reducing chassis flex forward of the firewall. The system is made up of three separate component groups; the export brace, fender Monte Carlo brace, and truss braces. Installed individually each makes a marked improvement to the stability of the firewall-inner-fender structure. Used collectively, a triangulated bracing structure is created securing key chassis dimensions. A desirable strength-to-weight ratio is achieved using aluminum wherever possible. Mounting brackets are machined from 1/4" thick 6061-T6 aluminum, then clear

anodized to resist oxidization. All bracing rods are also 6061-T6 tubular aluminum. Tubing ends are swaged to increase wall thickness and strength at the threaded ends. Lightweight mild-steel rod ends provide an adjustable attachment method and ensure a perfect fit for every installation.

A simple analogy of how the complete system works is a common cardboard shoebox to simulate the engine bay. Without the top the box is flimsy and opposite corners can be pushed toward each other. With the top on the box, the diagonals are secured and the entire structure is significantly more stable.

Complete System Packages

Model	Year	System
Comet	1960-1965	PKG-TWRB-54
Cougar	1967-1970	PKG-TWRB-51
	1971-1973	PKG-TWRB-52
Cyclone	1960-1965	PKG-TWRB-54
Falcon	1960-1965	PKG-TWRB-54
Mustang	1965-1970	PKG-TWRB-51
	1971-1973	PKG-TWRB-52
Ranchero	1960-1965	PKG-TWRB-54



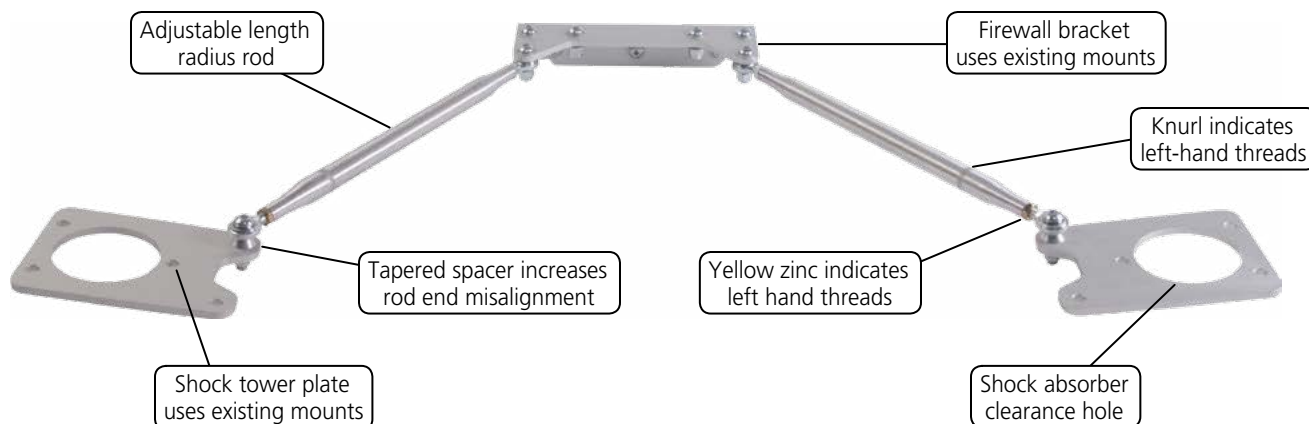
Tower Export Brace

The tower export brace is the main component group of the system and is generally installed first if done in stages. Triangular bracing from the firewall to the top of the shock towers is created and eliminates distortion of the inner-fender-to-firewall attachment points. The adjustable length radius rods greatly simplify installation compared to single piece stamped or welded designs which may require additional work to achieve a proper fit. Access for

engine maintenance simply requires removal of the button head fasteners securing the rod ends at each bracket.

Note: In order to achieve a more effective bracing angle, our export-brace system is not designed to clear OEM plenum-style, fuel-injection intakes. The export brace will clear all common round and oval air-cleaner assemblies, found on carbureted or throttle-body fuel-injection systems.

Model	Year	Export Brace
Comet	1960-1965	TWRB-04
Cougar	1967-1970	TWRB-01
	1971-1973	TWRB-07
Cyclone	1960-1965	TWRB-04
Falcon	1960-1965	TWRB-04
Mustang	1965-1970	TWRB-01
	1971-1973	TWRB-07
Ranchero	1960-1965	TWRB-04



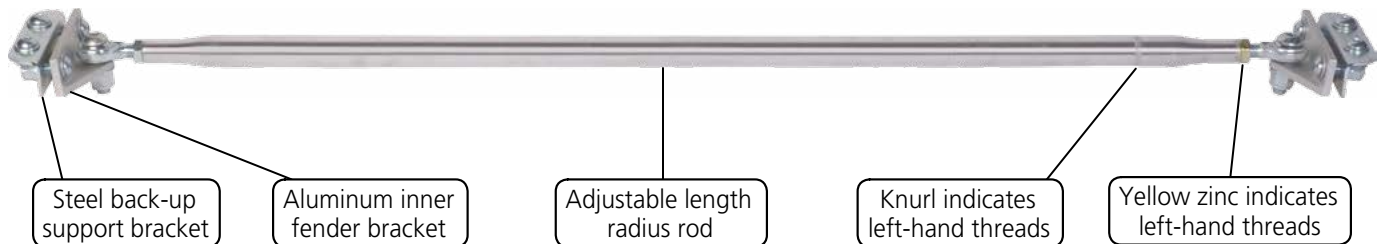
Fender Monte Carlo Brace

The fender Monte Carlo brace is usually installed second, but can be installed independently of the export and truss braces. Its purpose is to fix the distance between the shock towers. The brace resists the tendency of the shock towers to move toward each other during braking and cornering. Overall length is adjustable, as well as bracket placement, providing mounting flexibility during installation. Removal of the two button head fasteners

securing the rod ends enables access to the engine compartment.

Note: Some models of centrifugal superchargers and A/C compressors will interfere with installation of the TCP Monte Carlo brace. With proper equipment, the brace can be modified to work around these accessories. Examples of possible solutions are illustrated in each installation guide (available online).

Model	Year	Monte Carlo Bar
Comet	1960-1965	TWRB-05
Cougar	1967-1970	TWRB-02
	1971-1973	TWRB-08
Cyclone	1960-1965	TWRB-05
Falcon	1960-1965	TWRB-05
Mustang	1965-1970	TWRB-02
	1971-1973	TWRB-08
Ranchero	1960-1965	TWRB-05

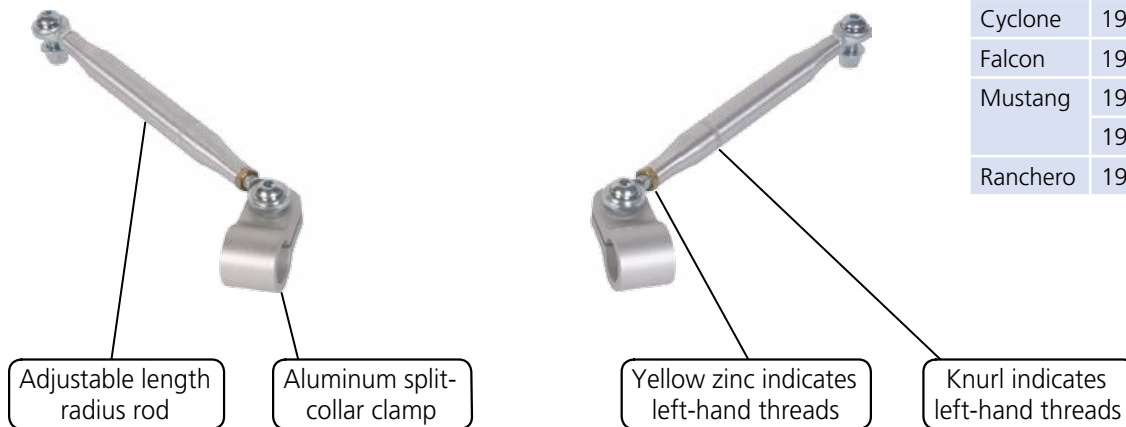


Tower Truss Brace

The truss braces complete the system, extending from the shock tower plates to the central span of the fender Monte Carlo brace. Billet aluminum split-collar clamps secure the braces along the

Monte Carlo brace creating a single structure. This structure, comprised of the firewall, inner fenders, and Monte Carlo brace, is triangulated at each corner by the export and truss braces.

Model	Year	Truss Brace
Comet	1960-1965	TWRB-03
Cougar	1967-1970	TWRB-03
	1971-1973	TWRB-03
Cyclone	1960-1965	TWRB-03
Falcon	1960-1965	TWRB-03
Mustang	1965-1970	TWRB-03
	1971-1973	TWRB-03
Ranchero	1960-1965	TWRB-03



Misalignment Spacer Set

Additional misalignment spacers may be useful in specific cases where the brace rod must be raised to a higher position or ran at a steeper angle.

TCP TWRB-06 Tower brace misalignment spacer set



CHASSIS

Subframe Connectors

The factory unibody frame rails do not span the undercarriage directly below the passenger compartment, leaving independent bracing structures. Our fully enclosed tubular-steel subframe connectors bridge the front and rear frame rails together. Previously separate braces now work as a single structure extending from the radiator support to the rear bumper. Chassis-twisting forces from bumps, cornering and acceleration are now distributed along the entire subframe structure, rather than directly into the sheet-metal floor pan at the end of each subframe.

The improvement to chassis stiffness is beneficial to every level of performance. Drivers of street-driven cars will notice a reduction in vehicle noise and vibration attributed to a flexible chassis. Door latches better maintain their alignment when the chassis is under load. Vehicle handling and responsiveness will also improve. Adjustments such as shock damping or changes of spring rates become more evident and effective, making suspension tuning more precise and predictable. By far one of the best improvements for the money.

Model	Year
Cougar	1967-1970
Mustang	1964-1970

Style	Part Number
Hardtop	TCP SUBFC-01
Convertible	TCP SUBFC-02

Coupes/Fastbacks

This is a 2-piece, weld-in kit that fits over the end cap of the forward frame rail and wraps the corner of the rear frame rail just before the leaf-spring mount. The large-diameter, square tubing visually blends with the factory rails and fits tightly along the bottom of the undercarriage.



TCP SUBFC-01

Convertibles

Our 2-piece, weld-in convertible kit fits over the frame rail forward of the torque box and wraps the corner of the rear frame rail just before the leaf-spring mount. Round tubing is used for maximum ground clearance beneath the torque box.



TCP SUBFC-02

Connector Supports

Triangular bracing is one of the simplest and most effective methods of reinforcement. Our bolt-in connector supports tie the left and right subframe structures together diagonally, fixing the distance between opposite corners. Securing the diagonal length across the undercarriage in multiple directions prevents the sheet metal undercarriage from bowing or twisting. Connector supports include a welded mount for use with the TCP torque arm. Mounts are positioned to provide correct pinion angle adjustment range on vehicles lowered 1-1/2 to 2" below stock ride height.

The bolt-in design allows easy access to the drivetrain and exhaust for maintenance. You can expect a perfect fit every time with our included shim set. Exhaust may require modification for installation.



Model	Year
Cougar	1967-1970
Mustang	1964-1970

Style	Part Number
Hardtop	TCP SUBCS-01
Convertible	TCP SUBCS-03

Coupes/Fastbacks

Our coupe/fastback connector support features four attachment points and a gusset mounting plate for our available driveshaft safety loop.



TCP SUBCS-01

Convertibles

The convertible connector support uses a 3-point mounting system that ties into the factory torque-box-reinforcement plate.



TCP SUBCS-03

Connector-System Packages

Part Number	Application
TCP PKG-SFC-01	Hardtop assembly (includes driveshaft loop)
TCP PKG-SFC-02	Convertible assembly



TCP PKG-SFC-01 (Hardtop)



TCP PKG-SFC-01 (Convertible)

CHASSIS

Driveshaft Safety Loop

The addition of a driveshaft safety loop has never been easier. Our loop assembly conveniently bolts to the mounting plate of your subframe-connector support. You can now have the added safety of a driveshaft loop without drilling holes through your floor pans. The bolt-on driveshaft safety loop features a 5-1/2" ID x 2"-wide x 1/4"-thick tubing loop. Both the mounting tab and bracket are 1/4"-thick mild steel and are secured with Grade-8 fasteners. Slotted holes at each of the attachment points allow the loop position to be adjusted for various transmission lengths and

driveshaft angles (1/2" vertical, 3/8" horizontal, 3-5/16" fore/aft). Components are powder-coated and zinc-plated for corrosion resistance. Installation of our connector center support for hardtops (TCP SUBCS-01) is required.

Model	Year	Part Number
Cougar	1967-1970	TCP DSL-01
Mustang	1964-1970	TCP DSL-01

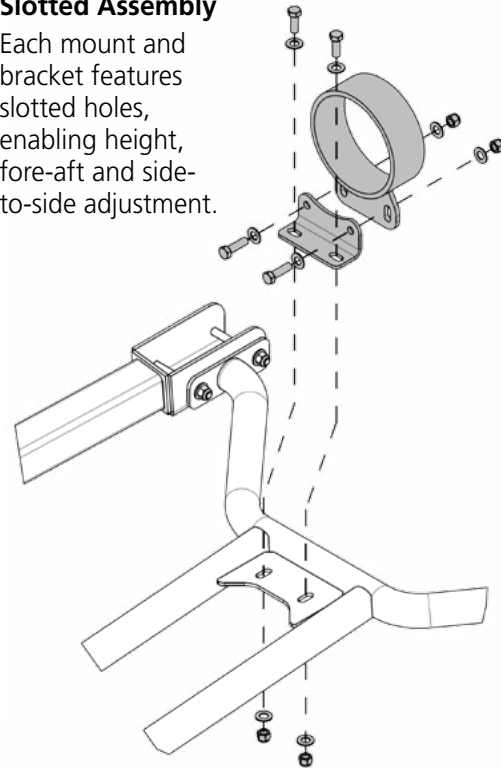


Loop Dimensions:
5-1/2" inside diameter, 2" wide, 1/4" thick

Kit Includes:
Driveshaft loop, mounting bracket and Grade-8 mounting hardware

Slotted Assembly

Each mount and bracket features slotted holes, enabling height, fore-aft and side-to-side adjustment.



Requires installation of Subframe Connector Center Support (TCP SUBCS-01).

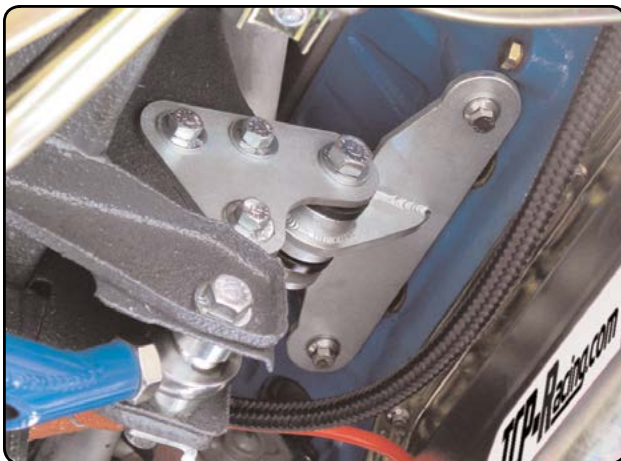
Motor Mounts

Our polyurethane bushed motor mount assemblies provide a high performance, direct replacement alternative to bonded rubber factory mounts for small block and big block applications. A unique, double shear, through bolt design eliminates any chance of motor mount separation during normal use. Shims allow the fore aft position of the motor to be varied within a 1/2" range centered at the stock position. The mount features graphite impregnated polyurethane bushings with seamless internal sleeve and external housing. Transferred vibration is increased over factory levels but without the harshness commonly found using completely solid mounts. The welded assembly features

heavy-duty motor plates (big-block, 1/4"-thick; small-block, 3/8"-thick) with a 3/16"-wall, tubular bushing housing. Frame adapter plates are 1/4" thick with slotted motor-mount holes to make allowance for chassis variances and simplify installation. All mounting hardware is Grade 8 and included.

Model	Year
Comet	1960-1965
Cougar	1967-1970
Cyclone	1964-1965
Falcon	1960-1965
Mustang	1964-1970
Ranchero	1960-1965

TCP MM-FD-01	FE	390, 427, 428	Fixed
TCP MM-FD-02	Windsor	260, 289, 302, 351W	Fixed
TCP MM-FD-02	Cleveland	351C, 400	Fixed
TCP MM-FD-04	Windsor	260, 289, 302, 351W	Adjustable
TCP MM-FD-03	Replacement-bushing-and-sleeve set		

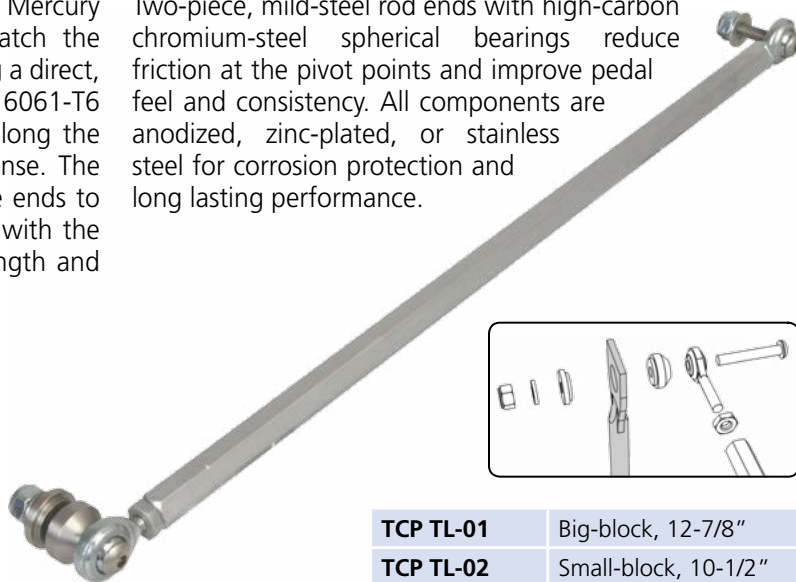


ENGINE/ACCESSORIES

Throttle-Linkage Kits

Our billet-aluminum throttle linkage directly replaces the bent-design factory rod found on early Ford and Mercury vehicles. Stainless-steel adapter components match the inner diameter of the factory pedal rod, facilitating a direct, trouble-free installation. The straight length of 6061-T6 hex rod eliminates the possibility of deflection along the linkage and resulting reduction of throttle response. The rod uses left- and right-hand threads at opposite ends to enable a simple adjustment feature not possible with the factory linkage. Jam nuts secure the adjusted length and

ensure the rod ends remain correctly indexed. Two-piece, mild-steel rod ends with high-carbon chromium-steel spherical bearings reduce friction at the pivot points and improve pedal feel and consistency. All components are anodized, zinc-plated, or stainless steel for corrosion protection and long lasting performance.



TCP TL-01	Big-block, 12-7/8"
TCP TL-02	Small-block, 10-1/2"

TCP Pedal Covers

Our billet-aluminum pedal covers are specifically designed for vintage Ford/Mercury applications and deliver improved performance with a high-quality, modern appearance. Pedal sets are available for automatic- (2-piece) and manual- (3-piece) drivetrain applications. Pedals are machined from aluminum magnesium alloy and are fastened over the factory pedals using allen-head, flush-mount, stainless-steel fasteners and locknuts. Installation requires drilling holes through the factory pedals to ensure mounting stability.

The design requirements of the brake and clutch pedals required increased grip specifically for high-effort clutch and brake systems commonly found in high-performance vehicles. Each pedal benefits from raised edges surrounding the holes and outside edges as well as raised "TCP" letters to improve grip. All front-side edges are left as machined so as not to reduce the level of friction. Both pedals are also curved to maximize contact surface and pressure angle as the pedals are depressed. The outside edges of the pedals are narrowed toward the bottom, which improves the length and angle of the right-foot "grip edge" on heel-toe downshifts and also gives more clearance when transitioning on and off the pedals.

The gas pedal features an exaggerated-angled layout to increase available foot space and clearance from the brake pedal. A flat surface finish allows gradual application of the accelerator and smooth transitions when sliding your foot over to the brake pedal. An additional 1/2" throttle extension with raised bars shortens the reach distance on heel-toe downshifts and gives your heel the extra bit of grip needed to avoid missed throttle blips.

Model	Year	Automatic (2-piece)	Manual (3-piece)
Cougar	1967-1970	TCP PCA-01	TCP PCM-01
Mustang	1964-1970	TCP PCA-01	TCP PCM-01

Clutch and Brake

- High-grip features
- Raised "TCP" letters
- Raised edges at exterior and holes
- Curved face improves contact and comfort
- Brake pedal angled edge for heel-toe pivot
- Flush mounted stainless hardware



Gas Pedal

- Smooth face promotes even throttle application
- Flush mounted stainless hardware
- Raised ridges on lower extension for heel-toe



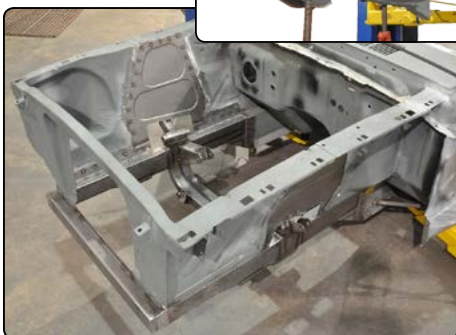
Weld-In Front Clip



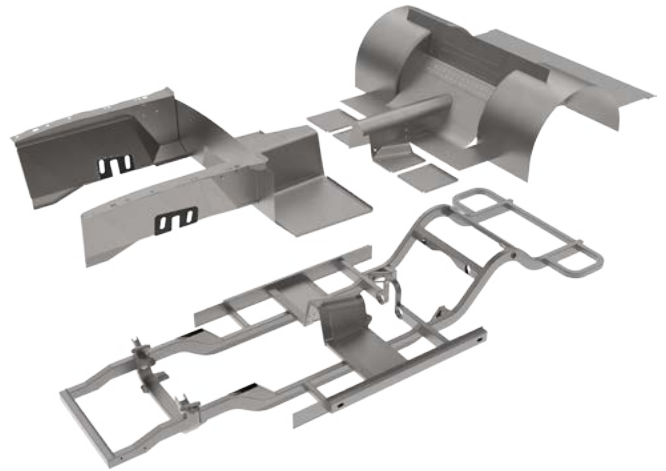
What level of fabrication skill is required to install the front frame clip?

Cutting out the stock frame rails and shock towers, then correctly positioning the frame clip can be done by anyone comfortable working with a cut-off wheel, angle grinder and reciprocating saw. You're basically tack welding a set of positioning tabs to the stock bumper mount holes, then making straight cuts along easy to follow factory sheet metal seams. Once the stock rails are removed the tabs are used to position the new frame clip assembly.

We do recommend having some experience and skill in welding. None of the welds are particularly difficult or hard to reach. However, it will save you some time and effort of extensive cleanup grinding and you'll end up with a much nicer finished product.



gStreet Chassis



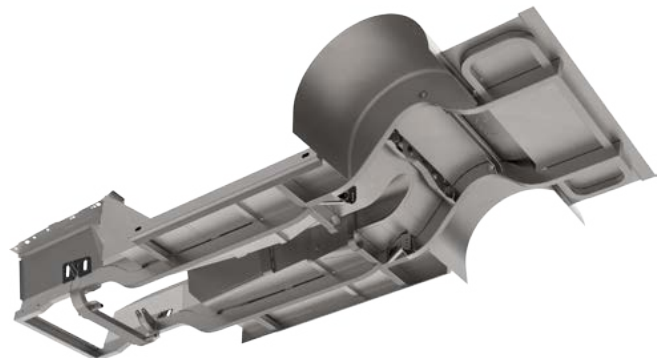
What makes the gStreet Chassis a better option than installing your weld-in front and rear clips?

While you can build an excellent performing vehicle using our weld-in frame clips or even our direct-fit suspensions, the gStreet Chassis removes any limitations to raise the performance bar.

Clean Slate - Since we are cutting out and discarding any of the stock firewall and floor panels a much cheaper and easier to find starter car can be used. You also avoid many costly and time consuming sheet metal repairs, getting your project to the finishline quicker.

Chassis Stiffness - In addition to the main frame rails, boxed tubing and fully enclosed sheet metal structures are used throughout the chassis, including the seat and center tunnel assembly as well as the rocker inserts. With the pre-fabbed tin kit trimmed and welded to the frame and body, an improved unitized-body is created.

Ride Height - The front and rear frame rails are unique to the gStreet chassis, allowing the body to sit several inches lower to the ground and providing four inches of ground clearance. This is the correct solution for achieving an incredible stance and lower center of gravity without destroying drivability.



TECH QUESTIONS

State of the Art

The latest techniques and tools available are used to bring our ideas to life. Each project is first created as a solid in ProEngineer® to greatly speed up the time from initial concept to final production.



Computer-numeric-controlled (CNC) laser cutting and milling machines, along with our exceptional team of welders and machinists, create the highest-quality components available for your vintage Mustang or Ford.

TrueCenter Pivot

The TrueCenter pivot socket is a deflection-free, high-load capacity, serviceable component that maintains bearing preload throughout the assembly's service life. Non-compressible, low-friction, synthetic-polymer bearing races eliminate deflection, reduce wear and remain linear in resistance, unlike rubber or polyurethane.



Each TrueCenter pivot assembly is specially designed for its particular application, allowing us to use the largest bearing diameter

possible to maximize load-bearing capability. The assembly can also be lubricated with a standard grease gun, but differs from a balljoint or rod end in its ability to tighten the polymer races against the bearing if play should ever develop. TrueCenter pivot technology has been applied to our line of lower control arms and strut rods, improving performance and serviceability.



Bolt-On Installation

Straightforward installation with minimal or no chassis modification has been the focus of our design philosophy. Every effort is taken to utilize existing suspension-mounting points.



This allows us to provide you with superior aftermarket components without making complicated modifications to your classic automobile. In most cases, original components can be reinstalled, and the vehicle returned to its stock condition.

Steering



What is the difference in steering effort between the power and manual rack?

As with any manual-steering system, a considerable amount of effort is required to operate at a standstill or very slow speed. Additional variables such as tire size and vehicle weight will also contribute to the amount of effort. The power rack, when used with our power-steering pump, has roughly two-thirds the "assist" when compared to a factory steering system. Imagine the steering feeling slightly stiffer than a stock power system, for improved steering feedback, but tight and responsive.

What type of power steering fluid should I use?

Due to the rack's precision assembly and design, mineral based, NON-SYNTHETIC fluid is required. Any other fluid will cause damage to the internal components.

I have a small amount of "play" in my steering wheel. What should I do?

The bottom of the blue-anodized pinion housing has a large jam nut surrounding an allen setscrew. This setscrew is the adjustment for gear lash between the rack-and-pinion gears. Loosen the jam nut, then tighten the setscrew about 1/16th of a turn. Tighten the jam nut while holding the setscrew in its position. If there is still "play" at the wheel, repeat the above steps. If the steering begins to feel "notchy" or too sensitive while driving, you may need to loosen the setscrew.



Steering



What are the different types of steering shafts and how can I tell which one I have?

Non-collapsible, no-rag-joint steering shafts were used on Cougars, Falcons and Mustangs through the early 1967 production year. These columns can be easily recognized: The steering shaft is not exposed, and the outer column tube meets the steering box.

Non-collapsible, rag-joint steering shafts started appearing during the middle of the 1967 production year. A rag joint is visible just above the steering box. A 3/4"-diameter shaft extends from the rag joint into the column and through the firewall.

Collapsible steering columns marked an increase in the level of safety offered by Ford during the late-1967 production year and thereafter. This assembly uses a larger, hollow, 1" shaft above the rag joint that slips over a smaller shaft inside the column.

Primarily, column identification is only necessary for the 1967 Cougars and Mustangs, unless your column has been changed to a later year or aftermarket column. TCP has rack-and-pinion steering-shaft assemblies for both "collapsible" and "non-collapsible" shaft types. Information regarding tilt and swing-away columns is included in the product-applications table (Page 12).

What headers can I use with the rack-and-pinion steering system?

Our unique rack-and-pinion design gives more available room for aftermarket headers. On small-blocks, the majority of 1-5/8" headers, either long-tube or shorties, will fit. Larger, 2"-primary, long-tube headers may have clearance issues. For FE blocks and big-blocks, header selection is more limited. Stock manifolds and most Tri-Y headers will work. We have not tried every header-block-vehicle combination, so specific results cannot be guaranteed.

Can I use Granada spindles with the TCP rack and pinion, and bump steer kit?

Granada spindles are not recommended for use on 1964-1966 Mustangs or 1960-1965 Falcons due to a significant difference in the spindle steering arm positions. This difference requires the tie-rod assembly to be cut to a shorter length and creates uncorrectable bump steer geometry. In addition, the Granada tie-rod hole is much too large to correctly fit OEM Mustang tie rods or the TCP bump steer stud.

Power-Steering Pump



Can I use my stock power-steering pump?

We do not recommend using the OEM power-steering pump with our power rack-and-pinion. We have experienced many technical issues using factory pumps, including excessive hydraulic noise, over boosted power assist and lack of reliability. Our pump is designed using current technology and manufacturing capabilities, which result in a superior pump in terms of reliability, efficiency and tuning capability. The power-steering pump and rack-and-pinion control servo have matched flow rates to optimize performance and offer an excellent range of adjustment using the optional flow valves.

Can the pump be used with air conditioning?

Yes, the pump mounts below the compressor and shares one of the mounting bolts. The supplied spacer must be trimmed to compensate for the thickness of the compressor mounting bracket. The type of A/C compressor will determine if the pump and compressor will share a belt or run on separate belts.

How does the changeable-flow-rate feature work?

The pump features a changeable-flow-rate fitting to alter the sensitivity of the steering. The standard 8 lpm (2.11 gpm) fitting is the midrange of available steering assist and our preferred flow rate for both street and track use. There are additional fittings ranging from 4 lpm (1.05 gpm) to 12 lpm (3.17 gpm) available for purchase.

Will the pump fit with a 5.0 EFI conversion?

The stamped-steel accessory bracket must be modified using a common angled grinder in order for the pump to be mounted. The pump then bolts up just as it would on an early model Windsor block casting. V-belt and serpentine pulleys are available.

TECH QUESTIONS

VariShocks



Were your double-adjustable VariShocks designed for a specific performance type?

Separate, 16-position compression and rebound settings as well as the various configurations available (coil-over; bolt-on replacement; strut) make the VariShock one of the most-versatile shock absorbers on the market. The standard valving setup has a broad range that can be used for drag racing, street performance and open track or road racing. Any performance requirements beyond our standard setup can be accommodated with a custom-valving range specific to your application.

Does your coil-over kit affect ride height?

Our coil-over kit is designed to lower the front ride height roughly 1-1/2 to 2", depending upon vehicle weight. The lower ride height is part of the suspension design and improves handling. The lower spring collar of the shock is adjustable. This gives minor ride-height adjustment, but is primarily used as a means to corner balance the vehicle. When changing ride height, the shock absorber's installed height must remain within the required range, as stated in the instruction sheet, to avoid damaging your shocks. Refer to this catalog's shock section or contact our sales staff for available options to alter ride height beyond our specified range.

Front Suspension

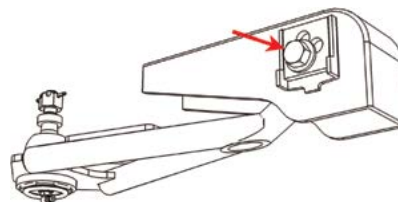


Is a negative-wedge kit needed when lowering the upper-control-arm mount?

A negative-wedge kit is not required to lower the mounting point when using our upper control arms. The increased balljoint angle was taken into consideration when the arm was designed.

How do I adjust camber after eliminating the eccentric washers?

Camber can still be set at one of 11 positions using our 3-hole eccentric-eliminator plates. Each position changes the camber angle by roughly 1/2-degree, with a total adjustment range of over 4-1/2 degrees. Our recommended alignment specs allow a maximum 1/2-degree range of 0- to 1/2-degree negative camber for street use, or a 1-degree range of 1- to 2-degrees negative camber for track use. If a more-precise camber setting is required, the eliminator plate will need to be set at an increased negative angle so that the upper control arm can be shimmed at the pivot shaft. Shimming the upper control arm is the only method for setting camber on vehicles prior to 1967, and your alignment shop should be very familiar with this procedure.



What is the purpose of lowering the upper-control-arm mounting position?

Lowering the mounting position of the upper control arm our recommended 1" has distinct advantages over the stock position: quicker negative camber gain, higher roll center, and reduced roll rate.

Stock Position: Many auto manufacturers design the front suspension of their vehicles to introduce positive camber during hard cornering. As the body rolls, suspension compresses and the outside tire begins to deflect. The top of the wheel is pushed outward, lifting the inside edge and reducing front-end traction. A vehicle tuned to understeer is less likely to spin out, but at the cost of cornering ability and driver satisfaction.

Lowered Position: The lower mounting position at the shock tower places the upper arm at an inclined angle, which draws the top of the wheel inward as the suspension compresses. This is known as negative camber gain, and the improved geometry now keeps the tire in better contact with the road. The inclined angle of the upper control arm also moves the roll center of the front suspension upward, closer to the center of gravity of the vehicle. The closer these two points (roll center and center of gravity) are together, the more effective the stabilizer bar and springs are at controlling the vehicle's tendency to roll when cornering. Reduced body roll also helps keep the tire in better contact with the road, increasing traction and greatly improving cornering ability.



Rear Suspension



How involved is the welding to install your rear pushrod-suspension system?

The rear pushrod suspension requires that four brackets be welded to the frame rails, inside of the leaf-spring mounts and on each side of the gas tank. If our subframe connectors are not already installed, they will also have to be welded to complete the installation. A MIG welder is sufficient to reach all of the areas.

Can I still use your torque arm if I have already installed custom subframe connectors?

Yes. The torque arm can be used, but will require a custom crossmember to be built that provides the correct pinion angle adjustment range with the vehicle at ride height. The crossmember serves as the chassis mount for the torque arm and must be very strong to withstand repeated stress without the chance of failure. We recommend making the crossmember removable so the drive shaft is easily accessed for maintenance.

Can an OEM 9" housing be used with the rear pushrod-suspension system?

We do not recommend or support the use of OEM rearend housings with the rear pushrod-suspension system. OEM housings were not designed to support the additional loads from the watts-link system and axle mounts. All rear pushrod systems are packaged with a completely welded FAB9™ direct-fit housing assembly. FAB9™ housings are specifically designed to handle substantially increased forces through various suspension mounts in high-horsepower applications. The direct-fit housing saves time as well as ensures that all suspension mounts are correctly positioned.

Does the g-Bar rear suspension require a panhard bar or watts link?

The g-Bar uses a canted (triangulated) 4-bar layout and does not require the use of an additional lateral-locating device. The upper control arms angle outward toward the housing ends, creating a series of interconnected triangles. Lateral movement must overcome the collective bushing resistance of both upper control arms.



What can I do to get better performance from a leaf spring suspension?

We offer a broad range of accessories to improve your existing suspension as well as complete performance leaf-spring systems suitable for street, strip, autocross, or road-course use. Simply replacing worn bushings with TCP polyurethane bushing sets and upgrading to VariShock bolt-in replacement shocks makes a noticeable improvement in handling. Continuing with the addition of our torque arm and/or panhard bar system provides a bigger leap in performance capability along with some added features for suspension tuning.



TECH QUESTIONS

Engine Accessories



Do your motor mounts increase vibration?

The use of captive-mounted polyurethane bushings does increase vibration transmitted into the chassis, but much less than a totally solid mount. The tolerable increase in vibration is necessary to improve torque transfer through the drivetrain and create a separation-proof assembly.

Are TCP small-block motor mounts modeled after the early or late OEM mounts?

Our small-block motor mounts use the dimensions and mounting height taken from the OEM mounts used from late 1966 to 1970. Most aftermarket companies design their components, such as headers, with the engine in this position.

Chassis



Will I lose ground clearance with your subframe-connector support?

Our subframe-connector support sits 1-1/2" below the factory frame rails at their lowest point. Generally, the bottom of the rearend housing or a set of long-tube headers sit lower than the connector support. In the event you do bottom out over a speed bump, the connector support will handle the contact much better than your exhaust system!

Can the Monte Carlo brace be used with air conditioning?

The Monte Carlo brace sits roughly 1/2 to 3/4" below the top surface of the inner fender and may require minor modification to clear some A/C compressors. A bend can be placed at each end of the brace to raise the center span for clearance. Example drawings of various solutions are shown in the Monte Carlo brace-installation instructions.



What is the best way to support the car when installing subframe connectors?

Prior to installation of the weld-in subframe connectors, many customers inquire as to whether the vehicle should be supported on a 4-post lift so that the chassis is "loaded" with the regular vehicle weight, or if using a 2-post lift with the chassis "unloaded" is acceptable. A 4-post lift that supports the suspension is preferred, but if you do not have access to one, a 2-post or even jack stands can be used. Pay attention to the body gaps, particularly the door jams, to see if there is a significant difference once the vehicle is fully suspended. A chassis in good condition will show minimal changes along the door jams. To minimize any flexing, position the front arms of the lift as far forward, and the rear arms as far rearward, as possible. If using jack stands, position the jack stands along the frame rails in front of the front wheels and behind the rear wheels or on the axle tubes of the rearend housing.

Do you have technical questions?

To make our product information more accessible, we have added a "Frequently Asked Questions" (FAQ) page to our website.

www.TotalControlProducts.com

Also, our technical support staff can be contacted by e-mail, which enables our techs to send photos and diagrams to better assist you:

tcptech@cachassisworks.com

Suspension, Front

Model	Year	Coil-Over Conversion*	Upper Arm Air-Spring	Upper Arm Coil-Over	Upper Arms		Lower Arms	Strut Rods	Eccentric Eliminators
					Straight	Dropped			
Comet	1960-1963	COLVF-07 ¹	VAS 13M11FX	VAS 86M11FX	UCA-01 ¹	UCA-06 ¹	LCA-04 ¹	STRD-05	-
	1964-1965	COLVF-08 ¹	VAS 13M11FX	VAS 86M11FX	UCA-01 ¹	UCA-06 ¹	LCA-04 ¹	STRD-05	-
	1966-1967	COLVF-09	VAS 13M21FX	VAS 86M21FX	UCA-02	UCA-07	LCA-05	STRD-06	EE-01
	1971-1977	COLVF-11	VAS 13M11FX	VAS 86M11FX	UCA-02	UCA-07	LCA-06	STRD-07	EE-01
Cougar	1967	COLVF-09	VAS 13M21FX	VAS 86M21FX	UCA-02	UCA-07	LCA-05	STRD-06	EE-01
	1968-1970	COLVF-10	VAS 13M21FX	VAS 86M21FX	UCA-02	UCA-07	LCA-06	STRD-07	EE-01
	1971-1973	COLVF-10	VAS 13M21FX	VAS 86M21FX	UCA-02	UCA-07	LCA-06	STRD-07	EE-01
Cyclone	1964-1965	COLVF-08	VAS 13M11FX	VAS 86M11FX	UCA-01	UCA-06	LCA-04	STRD-05	-
	1966-1967	COLVF-09	VAS 13M21FX	VAS 86M21FX	UCA-02	UCA-07	LCA-05	STRD-06	EE-01
	1968-1971	COLVF-10	VAS 13M21FX	VAS 86M21FX	UCA-02	UCA-07	LCA-06	STRD-07	EE-01
Fairlane	1966-1967	COLVF-09	VAS 13M21FX	VAS 86M21FX	UCA-02	UCA-07	LCA-05	STRD-06	EE-01
	1968-1971	COLVF-10	VAS 13M21FX	VAS 86M21FX	UCA-02	UCA-07	LCA-06	STRD-07	EE-01
Falcon	1960-1963	COLVF-07 ¹	VAS 13M11FX	VAS 86M11FX	UCA-01 ¹	UCA-06 ¹	LCA-04 ¹	STRD-05	-
	1964-1965	COLVF-08 ¹	VAS 13M11FX	VAS 86M11FX	UCA-01 ¹	UCA-06 ¹	LCA-04 ¹	STRD-05	-
	1966-1967	COLVF-09	VAS 13M21FX	VAS 86M21FX	UCA-02	UCA-07	LCA-05	STRD-06	EE-01
	1968-1970	COLVF-10	VAS 13M21FX	VAS 86M21FX	UCA-02	UCA-07	LCA-06	STRD-07	EE-01
Maverick	1970-1977	COLVF-11	VAS 13M11FX	VAS 86M11FX	UCA-02	UCA-07	LCA-06	STRD-07	EE-01
Montego	1968-1971	COLVF-10	VAS 13M21FX	VAS 86M21FX	UCA-02	UCA-07	LCA-06	STRD-07	EE-01
Mustang	1964-1966	COLVF-08 ¹	VAS 13M11FX	VAS 86M11FX	UCA-01 ¹	UCA-06 ¹	LCA-04 ¹	STRD-05	-
	1967	COLVF-09	VAS 13M21FX	VAS 86M21FX	UCA-02	UCA-07	LCA-05	STRD-06	EE-01
	1968-1970	COLVF-10 ²	VAS 13M21FX	VAS 86M21FX	UCA-02 ²	UCA-07 ²	LCA-06	STRD-07	EE-01
	1971-1973	COLVF-10	VAS 13M21FX	VAS 86M21FX	UCA-02	UCA-07	LCA-06	STRD-07	EE-01
Ranchero	1960-1963	COLVF-07 ¹	VAS 13M11FX	VAS 86M11FX	UCA-01 ¹	UCA-06 ¹	LCA-04 ¹	STRD-05	-
	1964-1965	COLVF-08 ¹	VAS 13M11FX	VAS 86M11FX	UCA-01 ¹	UCA-06 ¹	LCA-04 ¹	STRD-05	-
	1966-1967	COLVF-09	VAS 13M21FX	VAS 86M21FX	UCA-02	UCA-07	LCA-05	STRD-06	EE-01
	1968-1971	COLVF-10	VAS 13M21FX	VAS 86M21FX	UCA-02	UCA-07	LCA-06	STRD-07	EE-01
Torino	1968-1971	COLVF-10	VAS 13M21FX	VAS 86M21FX	UCA-02	UCA-07	LCA-06	STRD-07	EE-01

Footnotes

- * Sub-kit listed. All coil-over kits are ordered using the main sales-kit part number: FCOC-FD
Use of Granada spindles on '64-66 Mustangs and '60-65 Falcon/Comets is not recommended due to tie rod fitment issues.
- 1 6-cylinder spindles must be upgraded to V8 spindles.
- 2 Excludes Boss 429

Suspension, Rear

Model	Year	Anti-Roll Bar	Panhard Bar	Torque Arm	Spring Plates	LEAF SPRING		G-BAR / G-LINK		Pushrod Coil-Over
						System	FAB9™	Suspension	FAB9™	
Cougar	1967-1970	ARRM1-12	-	TA2F9-36	LSP-01	-	84M20-101	58XX-C10	-	RPSS-FD
	1971-1973	ARRM1-12	-	TA2F9-36	LSP-01	-	84M30-101	-	-	-
Falcon	1964-1965	-	-	-	LSP-01	-	84M10-101	-	-	-
Mustang	1964-1966	ARRM1-12	PHL-M10	TA2F9-33	LSP-01	LSS-MUX	84M10-101	58XX-M10	84M10-601	RPSS-FD
	1967-1970	ARRM1-12	PHL-M10	TA2F9-33	LSP-01	LSS-MUX	84M20-101	58XX-M20	84M20-601	RPSS-FD
	1969-1970 (Boss)	ARRM1-12	PHL-M10	TA2F9-33	LSP-02	LSS-MUX	84M20-101	58XX-M20	84M20-601	RPSS-FD
	1971-1973	ARRM1-12	PHL-M10	TA2F9-33	LSP-01	LSS-MUX	84M30-101	58XX-M30	84M30-601	-

APPLICATIONS

VariShock Bolt-Ins

Model	Year	FRONT			REAR		
		SensiSet	QuickSet 1	QuickSet 2	SensiSet	QuickSet 1	QuickSet 2
Comet	1960-1963	14047-515	14147-515	14247-515	14044-715	14144-715	14244-715
	1964-1965	14047-515	14147-515	14247-515	14044-715	14144-715	14244-715
	1966-1967	14047-515	14147-515	14247-515	14044-715 sedan 14049-715 wagon	14144-715 sedan 14149-715 wagon	14244-715 sedan 14249-715 wagon
	1971-1977	14067-425	14167-425	14267-425	14049-715	14149-715	14249-715
Cougar	1967	14067-425	14167-425	14267-425	14044-715	14144-715	14244-715
	1968-1970	14067-425	14167-425	14267-425	14044-715	14144-715	14244-715
	1971-1973	14047-425	14147-425	14247-425	14044-715	14144-715	14244-715
Cyclone	1964	14047-515	14147-515	14247-515	N/A	N/A	N/A
	1965-1967	14047-515	14147-515	14247-515	14049-825	14149-825	14249-825
	1968-1971	14047-515	14147-515	14247-515	14044-715	14144-715	14244-715
Fairlane	1966-1967	14047-515	14147-515	14247-515	14044-715 sedan 14049-715 wagon	14144-715 sedan 14149-715 wagon	14244-715 sedan 14249-715 wagon
	1968-1971	14047-515	14147-515	14247-515	14044-715 sedan 14049-715 wagon	14144-715 sedan 14149-715 wagon	14244-715 sedan 14249-715 wagon
Falcon	1960-1963	14047-515	14147-515	14247-515	14044-715	14144-715	14244-715
	1964-1965	14047-515	14147-515	14247-515	14044-715	14144-715	14244-715
	1966-1967	14047-515	14147-515	14247-515	14044-715 sedan 14049-715 wagon	14144-715 sedan 14149-715 wagon	14244-715 sedan 14249-715 wagon
	1968-1970	14047-515	14147-515	14247-515	14044-715 sedan 14049-715 wagon	14144-715 sedan 14149-715 wagon	14244-715 sedan 14249-715 wagon
Maverick	1970-1977	14067-425	14167-425	14267-425	14049-715	14149-715	14249-715
Montego	1968-1971	14047-515	14147-515	14247-515	14044-715 sedan 14049-715 wagon	14144-715 sedan 14149-715 wagon	14244-715 sedan 14249-715 wagon
Mustang	1964-1966	14067-425	14167-425	14267-425	14044-715	14144-715	14244-715
	1967	14067-425	14167-425	14267-425	14044-715	14144-715	14244-715
	1968-1970	14067-425	14167-425	14267-425	14044-715	14144-715	14244-715
	1971-1973	14047-425	14147-425	14247-425	14044-715	14144-715	14244-715
Ranchero	1960-1963	14047-515	14147-515	14247-515	14044-715	14144-715	14244-715
	1964-1965	14047-515	14147-515	14247-515	14044-715	14144-715	14244-715
	1966-1967	14047-515	14147-515	14247-515	14049-715	14149-715	14249-715
	1968-1971	14047-515	14147-515	14247-515	14049-715	14149-715	14249-715
Torino	1968-1971	14047-515	14147-515	14247-515	14044-715	14144-715	14244-715
Notes	Bolt-In front shocks are larger in diameter than the hole in the shock tower. The coil spring must be removed to allow installation of the shock. Due to deviations in ride height, you must verify that the application chart's suggested shock will actually fit your vehicle. Consult the dimensional chart below to determine that the selected shock's compressed length, extended length, and upper and lower mounts are correct for your vehicle.						

VariShock Bolt-Ins (Dimensional Chart)

SensiSet	QuickSet 1	QuickSet 2	Ride Height	Compressed Length	Extended Length	Shock Travel	Upper Mount	Lower Mount
VAS 14044-715	VAS 14144-715	VAS 14244-715	14.40"	10.83"	17.98"	7.15"	Stem 3/8"	Stem 3/8"
VAS 14047-515	VAS 14147-515	VAS 14247-515	11.31"	8.74"	13.89"	5.15"	Stem 3/8"	Stud Plate
VAS 14049-715	VAS 14149-715	VAS 14249-715	14.78"	11.20"	18.35"	7.15"	Stem 3/8"	Cantilever Pin 1/2"
VAS 14049-825	VAS 14149-825	VAS 14249-825	16.43"	12.30"	20.55"	8.25"	Stem 3/8"	Cantilever Pin 1/2"
VAS 14067-425	VAS 14167-425	VAS 14267-425	11.70"	9.58"	13.83"	4.25"	Crossbar Closed	Stud Plate

Chassis

Model	Body Style	Year	SUBFRAME CONNECTORS			SHOCK TOWER BRACES			
			System Package	Frame Connector	Connector Support	System Package	Export Brace	Monte Carlo Bar	Truss Brace
Comet	Hardtop	1960-1965		-	-	PKG-TWRB-54	TWRB-04	TWRB-05	TWRB-03
	Convertible	1960-1965		-	-	PKG-TWRB-54	TWRB-04	TWRB-05	TWRB-03
Cougar	Hardtop	1967-1970	PKG-SFC-01	SUBFC-01	SUBCS-01	PKG-TWRB-51	TWRB-01	TWRB-02	TWRB-03
	Convertible	1967-1970	PKG-SFC-02	SUBFC-02	SUBCS-03	PKG-TWRB-51	TWRB-01	TWRB-02	TWRB-03
	All	1971-1973		-	-	PKG-TWRB-52	TWRB-07	TWRB-08	TWRB-03
Cyclone	Hardtop	1960-1965		-	-	PKG-TWRB-54	TWRB-04	TWRB-05	TWRB-03
	Convertible	1960-1965		-	-	PKG-TWRB-54	TWRB-04	TWRB-05	TWRB-03
Falcon	Two-door	1960-1965		-	-	PKG-TWRB-54	TWRB-04	TWRB-05	TWRB-03
	Convertible	1960-1965		-	-	PKG-TWRB-54	TWRB-04	TWRB-05	TWRB-03
Mustang	Hardtop	1965-1970	PKG-SFC-01	SUBFC-01	SUBCS-01	PKG-TWRB-51	TWRB-01	TWRB-02	TWRB-03
	Convertible	1965-1970	PKG-SFC-02	SUBFC-02	SUBCS-03	PKG-TWRB-51	TWRB-01	TWRB-02	TWRB-03
	All	1971-1973		-	-	PKG-TWRB-52	TWRB-07	TWRB-08	TWRB-03
Ranchero	All	1960-1965		-	-	PKG-TWRB-54	TWRB-04	TWRB-05	TWRB-03

Rack and Pinion

Model	Year	Column Set	Manual Rack		Power Rack	
			Small-Block	Big-Block	Small-Block	Big-Block
Comet	1960-1965 ¹	TCP COLM-02	TCP RCKM-03	-	TCP RCKP-03	-
Cougar	1967 early ²	TCP COLM-01	TCP RCKM-02	TCP RCKM-01	TCP RCKP-02	TCP RCKP-01
	1967 late ² -1969	TCP COLM-03	TCP RCKM-02	TCP RCKM-01	TCP RCKP-02	TCP RCKP-01
	1970	TCP COLM-03	TCP RCKM-02	TCP RCKM-01	TCP RCKP-02	TCP RCKP-01
	1971-1973	-	-	-	TCP RCKP397	-
Falcon	1960-1965 ¹	TCP COLM-02	TCP RCKM-03	-	TCP RCKP-03	-
Mustang	1965-1966 ¹	TCP COLM-01	TCP RCKM-02	-	TCP RCKP-02	-
	1967 early ²	TCP COLM-01	TCP RCKM-02	TCP RCKM-01	TCP RCKP-02	TCP RCKP-01
	1967 late ² -1969	TCP COLM-03	TCP RCKM-02	TCP RCKM-01	TCP RCKP-02	TCP RCKP-01
	1969 Boss -1970	TCP COLM-03	TCP RCKM-02	TCP RCKM-01	TCP RCKP-02	TCP RCKP-01
	1971-1973	-	-	-	TCP RCKP397	-
Ranchero	1960-1965 ¹	TCP COLM-02	TCP RCKM-03	-	TCP RCKP-03	-

Footnotes

*	Right-hand drive versions also available for Australia.
1	Not for use with Granada spindles.
2	(1967 only) Early: Column tube covers steering shaft completely or exposed shaft above rag joint is 3/4" diameter. Tilt and swing-away columns must upgrade to 1968-or-later column. Late: Exposed shaft above rag joint is 1" diameter.

APPLICATIONS

Tie Rods and Adjusters

Model	Year	Bump Steer	Bump Steer Inner & Outer			Adjuster Sleeve*	Billet Sleeve with Inner & Outer		
			OEM Spindle	TCP Spindle	Granada		OEM Spindle	TCP Spindle	Granada
Comet	1960-1962	TIER-08	TIER-11 ¹	TIER-14 ¹	TIER-22 ¹	-	TIER-05 ¹	TIER-16 ¹	TIER-18 ¹
	1963-1964	TIER-08	TIER-11 ¹	TIER-14 ¹	TIER-22 ¹	TIER-04	TIER-05 ¹	TIER-16 ¹	TIER-18 ¹
	1965	TIER-08	TIER-11 ^{1 or 2}	TIER-14 ^{1 or 2}	TIER-22 ^{1 or 2}	TIER-04	TIER-05 ^{1 or 2}	TIER-16 ^{1 or 2}	TIER-18 ^{1 or 2}
	1966	-	-	-	-	TIER-04	-	-	-
	1967-1969	TIER-09	TIER-12	TIER-15	TIER-23	TIER-04	-	-	-
	1970	TIER-10	TIER-13	TIER-13	TIER-24	TIER-04	-	-	-
	1971-1972	TIER-10	TIER-13	TIER-13	TIER-24	TIER-04	TIER-07	TIER-07	TIER-20
Cougar	1967-1969	TIER-09	TIER-12	TIER-15	TIER-23	TIER-04	TIER-06	TIER-17	TIER-19
	Eliminator	TIER-10	TIER-13	TIER-13	TIER-24	TIER-04	TIER-07	TIER-07	TIER-20
	1970	TIER-10	TIER-13	TIER-13	TIER-24	TIER-04	TIER-07	TIER-07	TIER-20
	1971-1972	TIER-10	TIER-13	TIER-13	TIER-24	TIER-04	-	-	-
Cyclone	1964	TIER-08	TIER-11 ¹	TIER-14 ¹	TIER-22 ¹	-	TIER-05 ¹	TIER-16 ¹	TIER-18 ¹
	1965	TIER-08	TIER-11 ^{1 or 2}	TIER-14 ^{1 or 2}	TIER-22 ^{1 or 2}	TIER-04	TIER-05 ^{1 or 2}	TIER-16 ^{1 or 2}	TIER-18 ^{1 or 2}
	1966	-	-	-	-	TIER-04	-	-	-
	1967-1969	TIER-09	TIER-12	TIER-15	TIER-23	TIER-04	-	-	-
	1970-1971	TIER-10	TIER-13	TIER-13	TIER-24	TIER-04	-	-	-
Fairlane	1962-1966	-	-	-	-	TIER-04	-	-	-
	1967-1969	TIER-09	TIER-12	TIER-15	TIER-23	TIER-04	-	-	-
	1970	TIER-10	TIER-13	TIER-13	TIER-24	TIER-04	-	-	-
Falcon	1960-1962	TIER-08	TIER-11 ¹	TIER-14 ¹	TIER-22 ¹	-	TIER-05 ¹	TIER-16 ¹	TIER-18 ¹
	1963-1964	TIER-08	TIER-11 ¹	TIER-14 ¹	TIER-22 ¹	TIER-04	TIER-05 ¹	TIER-16 ¹	TIER-18 ¹
	1965	TIER-08	TIER-11 ^{1 or 2}	TIER-14 ^{1 or 2}	TIER-22 ^{1 or 2}	TIER-04	TIER-05 ^{1 or 2}	TIER-16 ^{1 or 2}	TIER-18 ^{1 or 2}
	1966	-	-	-	-	TIER-04	-	-	-
	1967-1970	TIER-09	TIER-12	TIER-15	TIER-23	TIER-04	-	-	-
Maverick	1970-1972	TIER-10	TIER-13	TIER-13	TIER-24	TIER-04	TIER-07	TIER-07	TIER-20
Montego	1968-1969 ³	TIER-09	TIER-12	TIER-15	TIER-23	TIER-04	-	-	-
	1970-1971 ³	TIER-10	TIER-13	TIER-13	TIER-24	TIER-04	-	-	-
Mustang	1964	TIER-08	TIER-11 ¹	TIER-14 ¹	TIER-22 ¹	-	TIER-05 ¹	TIER-16 ¹	TIER-18 ¹
	1965-1966	TIER-08	TIER-11 ^{1 or 2}	TIER-14 ^{1 or 2}	TIER-22 ^{1 or 2}	TIER-04	TIER-05 ^{1 or 2}	TIER-16 ^{1 or 2}	TIER-18 ^{1 or 2}
	1967-1969	TIER-09	TIER-12	TIER-15	TIER-23	TIER-04	TIER-06	TIER-17	TIER-19
	1969 (Boss)	TIER-10	TIER-13	TIER-13	TIER-24	TIER-04	TIER-07	TIER-07	TIER-20
	1970-1973	TIER-10	TIER-13	TIER-13	TIER-24	TIER-04	TIER-07	TIER-07	TIER-20
Ranchero	1960-1961	TIER-08	TIER-11 ¹	TIER-14 ¹	TIER-22 ¹	-	TIER-05 ¹	TIER-16 ¹	TIER-18 ¹
	1962-1964	TIER-08	TIER-11 ¹	TIER-14 ¹	TIER-22 ¹	TIER-04	TIER-05 ¹	TIER-16 ¹	TIER-18 ¹
	1965	TIER-08	TIER-11 ^{1 or 2}	TIER-14 ^{1 or 2}	TIER-22 ^{1 or 2}	TIER-04	TIER-05 ^{1 or 2}	TIER-16 ^{1 or 2}	TIER-18 ^{1 or 2}
	1966	-	-	-	-	TIER-04	-	-	-
	1967-1969 ³	TIER-09	TIER-12	TIER-15	TIER-23	TIER-04	-	-	-
	1970-1971	TIER-10	TIER-13	TIER-13	TIER-24	TIER-04	-	-	-
Torino	1968-1969	TIER-09	TIER-12	TIER-15	TIER-23	TIER-04	-	-	-
	1970-1971	TIER-10	TIER-13	TIER-13	TIER-24	TIER-04	-	-	-

* Verify each shaft diameter and sleeve length prior to ordering. (Shaft = .688"; sleeve = 4.7")

1 Installation requires TCP rack and V8 spindles

2 V8 with OEM manual steering

3 Excludes: Boss Mustang, Police/Taxi Montego

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