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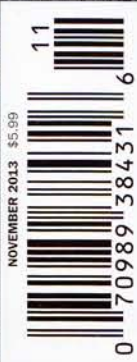


PAVEMENT PUNISHERS

◀ '68 SHOW CAR/RACER
'65 PRO STREET FAIRLANE ▶



A SOURCE INTERLINK MEDIA PUBLICATION





Classic Performance Products introduces an affordable Mustang suspension (and braking!) system you can install in a weekend

TUBULAR TUTORIAL, PART I

Seems most of us would like to get into better handling without having to sell the farm and perform major surgery on our classic Mustangs. Though a good many of the aftermarket suspension systems stand on their own merits, they involve a lot of cutting and welding and they don't come cheap. This is why Classic Performance Parts (CPP) decided to give early '65-'70 Mustangs and '61-'65 Falcons/Comets a closer look, and

develop a cool bolt-on Mini Subframe Kit for these popular Ford compacts.

The Mini Subframe Kit consists of a 1/4-inch steel crossmember that bolts to your Mustang's unit body in place of the stock strut rods. What hinders handling are those antiquated strut rods that tend to bind, limiting suspension travel. The Mini Subframe Kit gives you greater alignment potential, resulting in handling your Mustang or Falcon has never known before. What's more, you

can go with the factory or CPP sway bar. Upper control arms will accommodate stock coil springs and perches, or adjustable coilovers.

Suspension improvements don't carry much weight if you don't support them with a world-class braking system. CPP carries everything from stock disc brake packages to 13-inch, dual-piston units that will enable you to stop without breaking a sweat.

◀ Embarrassing isn't it? The sporty Mustang's underpinnings are anything but sporty. Watch this thing roll in the slalom with absolutely no finesse whatsoever. As we round this segment in a '67 Mustang fastback with bone stock suspension and steering, the body wants to keep going while leaving a lame undercarriage behind. Despite a potentially great contact patch, these skins don't stand a chance at adhesion because this Mustang suffers from a high roll center and virtually no sway control. CPP's Mini Subframe Kit with adjustable coilovers, beefy antisway bar, and better geometry will change all of that.



CPP's bolt-on Mini Subframe front suspension kit can be installed in a weekend and it is easy to install once all of your Mustang's worn out parts are removed. You get the 3/4-inch-thick steel crossmember that bolts on for exceptional strength. Upper control arms will accommodate the stock spring perch and coil spring or these adjustable Viking Performance coilovers. You can use a stock sway bar or this powder-coated bar from CPP with billet aluminum mounts. Adjustable coilovers allow you to tune ride quality, handling, and ride height.

THE MINI SUBFRAME KIT GIVES YOU **GREATER ALIGNMENT POTENTIAL**, RESULTING IN HANDLING YOUR MUSTANG OR FALCON HAS NEVER KNOWN BEFORE



CPP's own 400 Series 16:1-ratio power worm-and-sector steering gear eliminates the leak-prone Bendix power steering employed as original equipment on classic Mustangs and other compacts and intermediates. This is an easy install with everything necessary to get into trouble free, self-contained power steering without special modifications. The CPP power steering gear gets powered by your Ford Thompson pump or just about any domestic pump. Stock tie-rod ends are unified via easy-to-adjust billet aluminum sleeves.

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We're going to install CPP disc brakes fore and aft for an added element of control that completes the handling scenario. These front brakes feature 13-inch rotors and twin-piston powdercoated calipers that combined, offer 60-percent more stopping power. You must have at least a 17-inch wheel to clear these brakes. In back, 9-inch discs with single-piston calipers engineered for Ford 8- and 9-inch axle flanges. Four colors are available—red, black, blue, or silver. Chevy or Ford bolt pattern is available.

4



As you remove old components, think about how to responsibly recycle them; don't just toss them into a dumpster. Power steering control valves are becoming scarce and can be rebuilt. Power rams are a throwaway, but you can always take you old parts to your local metal or auto recycler, and perhaps get some lunch money (or more depending on how much you bring).

5



The steering wheel and column are removed next. You may need a steering wheel puller for this step. For '65-'67, the column tube disconnects at the firewall and dashboard. For '68-'70, a C-clip retains the shaft at the top collar.



Steering box removal can get tricky depending upon your Mustang's exhaust system. Expect to remove the driver-side header to get it out.



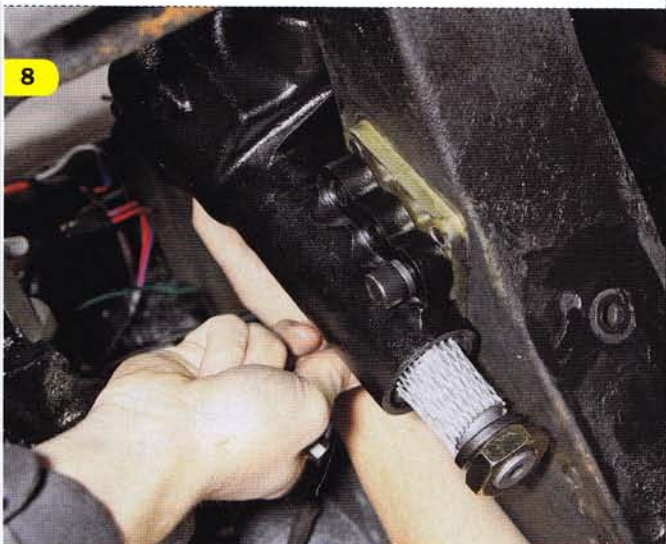
CPP's own steering coupling, commonly known as a rag joint (right), goes your stock joint one better with a more failsafe design.



The power ram bracket is removed at this time. Most are welded and need to be cut free. If yours is bolted, there are two bolts that need to be removed, both with a $\frac{1}{16}$ -inch wrench.



Once your Mustang steering column tube is cut to proper length to clear the rag joint coupler (about 3 inches), slide the interior firewall seal down to meet the floor during installation. Take your stock rubber endcap (not shown) and modify it to fit inside column tube for sealing purposes. The metal endcap shown is not need and not supplied.

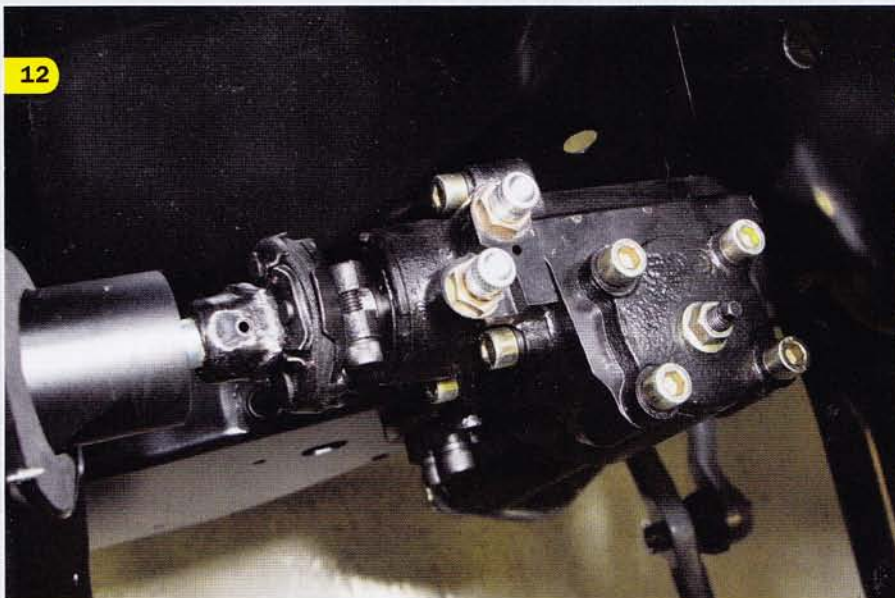


CPP's 400 Series power steering gear is a bolt-on modification you can perform, and a natural for this front suspension build. Expect to shorten your Mustang's steering column tube by approximately 3 inches, which is an easy modification.



CPP steering shaft is installed next and coupled to the steering gear worm shaft.

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Here is the CPP Series 400 steering gear with coupling and shaft assembled.

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Power steering pressure and return hoses are easy to route and install. The key to safety is keeping them at least 2-3 inches away from hot exhaust manifolds and headers with Adel clamps at the shock tower. All fittings are taper fit and easy to secure. This is a Ford/Thompson pump application.



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The strut brace removal begins by drilling out all spot welds as shown, and ends by using an air chisel for complete removal.

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Once the strut braces are removed, surfaces are cleaned up and readied for subframe installation.



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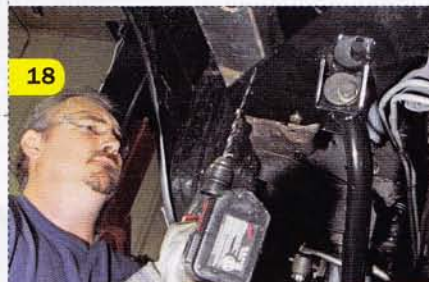
The subframe (available in silver metallic or black) is test fitted and prepared for installation. The subframe should fit flush with the crossmember as shown, and be square with framersails. If it isn't, you likely have body/chassis damage. Measure the front end assembly from corner to corner and compare with factory specifications.

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Hold the subframe firmly in place prior to drilling. We employed a screw jack and Vise-Grips to keep it in place.

18



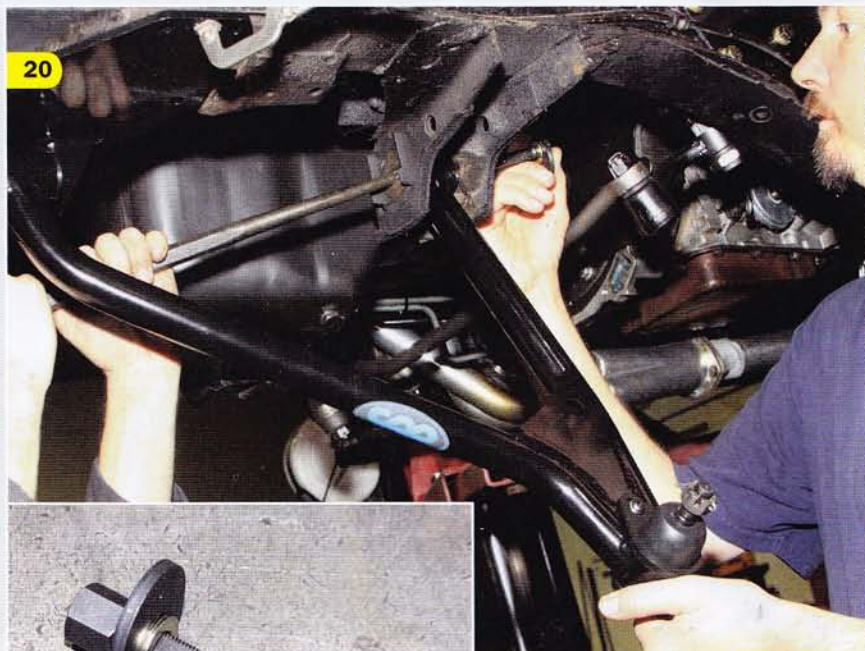
For an installation using the bolt-in method, begin with small 1/8-inch pilot holes dead center in each hole, then a 3/8-inch hole in each. Of course, be sure to use eye and ear protection.

19



The subframe bolts on as shown at each framerail and at the crossmember in front. Not all crossmembers are easy to access for bolt and nut installation, however.

20



CPP's adjustable tubular control arm uses the stock eccentric to adjust camber/caster. No strut rods to sweat out.

21



CPP offers this fixed eccentric kit for added security for '67-'70 Mustang and Cougar. Once it is set, it doesn't move.

UPPER CONTROL ARMS WILL
ACCOMMODATE **STOCK COIL
SPRINGS AND PERCHES, OR
ADJUSTABLE COILOVERS**



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The upper control arms are installed and secured. The CPP tubular upper control arm will work with a stock spring perch or adjustable Viking Performance coilovers.



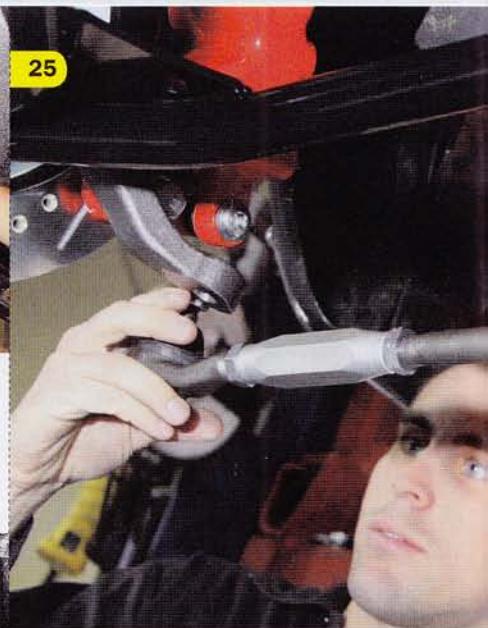
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Viking Performance fully adjustable coilover shocks make a world of difference in handling and ride quality. If you are limited to a tight budget, you can go with factory springs, shocks, and perches.



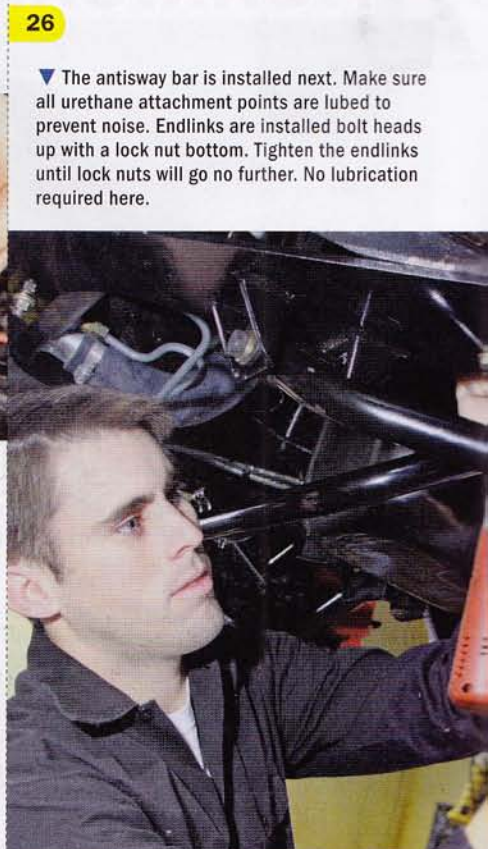
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Top shock mounts are secured with C-clips as shown, and anchored down with bolts accessible with a 1/2-inch socket.



25

▲ Tie-rod ends are installed next. When you join tie-rod ends and billet sleeves, each tie-rod end gets 28 full turns to achieve center. This should get them into the neighborhood of proper adjustment where rod ends are aligned with spindles and center link. Don't forget to lube rod ends with chassis lube.



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▼ The anti-sway bar is installed next. Make sure all urethane attachment points are lubed to prevent noise. Endlinks are installed bolt heads up with a lock nut bottom. Tighten the endlinks until lock nuts will go no further. No lubrication required here.

SOURCE

CLASSIC PERFORMANCE PARTS
(800) 522-5004 Toll Free
(714) 522-2000 Tech Line
www.classicperf.com



We've just shown you how to install CPP's Totally Tubular Mini Subframe Kit for vintage Mustangs and compact Fords. As you can see, it's a straightforward bolt-on suspension package that thrusts a classic Mustang into the late-model arena with vastly improved geometry and function for less money. Next month, we're going to show you how to complete this installation with disc brakes at all four corners, along with a rear antisway bar package for reduced body roll. **MMMP**

