Rail Draggin’ the Square Body

HAMMERING A ’79 C-10 WITH PORTERBUILT AND KP COMPONENTS

CERTAIN TRUCKS REQUIRE A CERTAIN LOOK TO MAXIMIZE THEIR NATURAL LINES AND ACCENT THEIR FACTORY SHAPE. The ’73-87 GM pickups are undoubtedly boxy and are referred to many in the scene as “square bodies.” These trucks survived the production line at GM for 14 years, and as a result, many are still doing duty on the road today, making them perfect candidates for full-throttle customizing. Investigating the chiseled lines and squared off corners these trucks feature makes us want to plant one on the ground and go cruising. Like all pickup trucks there are definite hurdles to cross when it comes to seriously modifying the chassis and suspension. For the square body GMs it is the pesky factory cross member that puts the lower control arms in the dirt even with a moderate static lowering job. When you ‘bag one you better plan on buying the city a few reflectors because you will definitely be clipping some off the highway.

The folks at Porterbuilt Street Rods have designed a cross member system called the “Dropmember,” which is a bolt-in cross member section specifically designed to substantially lower the truck, while eliminating cross-member-to-ground-clearance issues. The frame rails become the lowest point on the chassis — the part you want to drag! The steering system is converted to rack-and-pinion for a more controlled feel and the system can be used with either factory control arms or Air Ride Technologies Strong Arms. This cross member unit from Porterbuilt also narrows the track width by just over an inch per side and locates the wheel center forward from its factory position, which centers the wheel and tire in the fender well upon full deflate of the air suspension and allows for more firewall clearance when running big wheels and tires.

To lay out the rear of this truck, we partnered up with KP Components and installed one of their 6-link rear systems paired with Slam Specialties airbags. The KP 6-link is a bolt-on 4-link and cantilever system producing 12 inches of travel. The system accommodates up to a 22-inch wheel, features a bolt-on Watts link to eliminate axle shift, and is designed for ’63-87 GM trucks.

With a truck waiting to hit the tarmac and endless miles of Arizona highway ahead of this low-down cruiser, we rolled the truck into the bay at Porterbuilt and got to work. Follow along and watch this C-10 transform.

1. Our victim is a ’79 Chevy C-10 short bed that is currently in nosebleed country with an old school static lowering job. The Porterbuilt Dropmember, KP Components 6-link and Slam Specialties airbags will take care of that.

2. In the rear we chose the KP Components 6-link system, which is a bolt-on, cantilever system producing 12 inches of travel. The system accommodates up to a 22-inch wheel, features a bolt-on Watts link to eliminate axle shift, and is designed for ’63-87 GM trucks. The Porterbuilt Dropmember comes with the main X-member section, inner frame support plates, upper control arm/bag mount plate, transmission cross member, shock mounts, billet tie-rod ends and heavy duty Heim joints with hardware, aluminum shock mount bushings, C-notch for rack-and-pinion tie rod clearance, motor mounts, and all of the hardware and instructions.
Up front, the factory inner fenders and A/C box will need to be removed for clearance.

Here is a glimpse of the factory front suspension and cross member. Note how low the control arms hang down. This is a common problem on these trucks.

After the truck was secured on the lift, or jack stands for those of you working in the home garage, the factory cross member and front suspension were removed to make way for the Porterbuilt cross member, tubular Air Ride Technologies arms and Slam Specialties ‘bags. Porterbuilt recommends pulling the drive train out of the truck before removing the factory cross member and installing the Porterbuilt unit. Fuel lines need to be properly capped to avoid sparks from the welder or cutting tools.
The necessary tie rod notch was located on the frame rails. The center of the rack notch is 4.25 inches forward of the Dropmember’s most forward mounting hole. The top of the rack notch will be located at 2.25 inches below the top of the frame rail. Nathan marked the notch, cut out the marked frame section and trimmed to fit. It was then welded in place.

Nathan installs the supplied motor mounts.

An inner frame support plate is included in the Porterbuilt kit and is installed for strength.

The Dropmember main piece is installed and will soon be ready to hammer this C-10 on the asphalt!

In this picture you can see how much the engine will be raised up. The drive train will head north approximately 1.5 inches.

The supplied transmission cross member is installed. After it was slid into place and the motor mounts were installed, Nathan set the pinion angle on the transmission output shaft, bolted up the transmission cross member to the transmission mount, squared up the transmission, marked the holes, drilled the holes, and bolted the cross member down.

The holes used to mount the upper control arm and ‘bag mount plate were drilled out to 1/2-inch.

Nathan installed the upper control arm/‘bag mount plate keeping in mind there will be one hole on the ’73-87 chassis that will need to be drilled into the top of the frame rail.

Next, the rack-and-pinion, which is a ’79-93 Mustang rack with 15.5 inches center on mounting points, is mounted up with the supplied aluminum bushings. Porterbuilt notes to install the rack before the lower control arms.
Prior to installing the lower control arm, the arm’s locating pin is installed to ensure everything is squared up properly.

The lower control arm is bolted up utilizing the billet mounting caps and supplied hardware.

The upper control arm was installed into the upper control arm/bag mount plate. We used a set of Air Ride Technologies Strong Arms here. The factory upper arms may be employed if need be.

If you choose to utilize the factory upper control arms it is necessary to trim the rear portion of the control arm at the bushing for frame clearance.

The spindle’s steering arm hole must be drilled out to 5/8-inch to be compatible with the new rack-and-pinion components.

Next, Nathan reinstalls the spindle and we are one step closer to putting this baby on the ground — literally!

Supplied in the Porterbuilt Dropmember kit are heavy-duty Heim joints, spacers and billet tie rod adapters, which are installed on the topside of the spindle’s steering arm.

For correct geometry it was imperative that we trim 1.25 inches from the rack-and-pinion tie rod ends. Using a cut-off wheel, Nate went to work.

The airbag mounting location on the lower control arm will need to be moved out 1.25 inches on the lower A-arm. We scope things out with the tape.

With the truck still on the rack, we used the floor jack and jacked the front wheel up in the fender to get the viewpoint once the truck was aired out and laying frame. Muy bueno!
To get started on the rear KP components suspension the bed had to be removed from the truck. We employed a dolly for the bed to rest on while we got busy on the chassis tail section.

Here are the rear frame rails in their stock and untouched state. The fabrication pros at Porterbuilt were about to change all that!

Nate starts by cutting off the factory exhaust. A custom system will be built later to route around all the wild chassis and suspension work.

The factory leaf springs and assorted brackets and hardware are removed from the frame.

Nathan ditched the factory spring hangers. With the KP 6-link these will no longer be needed.

The factory spring hanger holes were drilled out to 1/2-inch to accommodate the new KP Components forward 4-link mount.

Next, the front 4-link mount was installed onto the frame so we could mount the rest of the bracketry and set up the link bars.

The factory shock mount tabs were removed from the axle housing using a cut-off wheel.

Porterbuilt installed the urethane bushings and inserts into the 4-link ends to prep them for installation.

A view of the 4-link and axle brackets installed according to the KP Components instructions.
Here is the rear cantilever bracket/airbag mount being installed.

A custom step notch was built by Porterbuilt to allow full travel of the rearend when the truck is laid out. It was boxed and welded solid for strength.

The supplied Watts link bracket from KP Components is installed onto the rearend.

Here is a view of the KP Components Watts link installed and fit with adjustable brackets fabricated by Porterbuilt Street Rods.

The Slam Specialties RE7 ‘bags were fit with the supplied hardware and fittings and installed in position.

Next, the supplied steering linkage from the steering column to the rack was installed by losing the steering box and dropping the steering down to the rack-and-pinion, this is a necessary step.
The center of the bed and factory inner fender housings were cut out to provide room for the frame notch and wheel and tire combo. Eventually, Porterbuilt will fabricate some custom tubs and build a notch cover for the bed.

A peek inside the engine bay reveals the missing inner fenders and A/C system. A Vintage Air or Hot Rod Air system would most likely be the best option in this truck with all the new modifications.

With the truck aired all the way out the tire to battery tray clearance is a little tight. We might move the battery into the bed later. We got the clearance where we really needed it between the tire and the firewall.

A rear view of the KP 6-link system and step notched and air-bagged chassis; all we had to do now was reinstall the bed and go cruising.

After a few days at Porterbuilt this former nosebleeder ‘79 C-10 was successfully in the weeds and looking 10 times better than it did when it rolled in. The best part is the smooth ride and ground clearance gained by the Dropmember.

Now that's low.

An undercarriage shot shows the frame firmly planted on the asphalt, proving this setup has street credit.