

## 63-72 C-10 "WIDE RIDE" BOLT IN

## FRONT SUSPENSION SYSTEM

Improve your '63-'72 GM trucks handling steering, and overall ride quality with No Limit Engineering's "Wide Ride" raised cross member system. Featuring a power "rack and pinion" steering unit, along with No Limit's correct steer "ZG spindles" This replacement cross member 'Bolts in" place of the factory cross member to your existing OEM frame without cutting, or welding. Paired with tubular upper and lower control arms, along with a custom Anti- Sway Bar and improved camber/ caster refinements the Wide Ride system also allows for more cross member clearance than the factory cross member. Rounding out this complete front suspension includes new brake calipers and a pair of drilled and slotted 12" diameter rotors that feature a "double drilled" pattern to accept numerous bolt circle patterns.





This '71 Chevy C-10 (the cab and engine were removed for photo purposes) was really chosen to lose its factory front end and all the headaches that go along with it. We wasted no time tearing into the truck at No Limit. We removed the entire front suspension, steering, and brakes using nothing more than some hand tools and rust penetrate in just under an hour.



Shown here in the photo is the complete Wide Ride front suspension system for the '63-'72 GM C-10 truck line. As mentioned before, this unique set up is a true "bolt on" system that does not require any cutting or welding. The system can also be purchased at different levels while remaining operational.



Here's a peak on how each cross member is assembled in No Limit's "frame jig" purposely built for the C-10 Models. This is a good look at the raw cross member straight out of the jig fully welded and ready for shipment.



Place the frame on a set of jack stands and check to see if the frame is level. Position the jack stands where they won't interfere with the cross member location. Next, grab a buddy to help slide the cross member under the frame rails and up into the stock frame rail mounting holes. The best way to accomplish this is to move the cross member forward first towards the steering box mounting holes, then swing it back while lifting up towards the rear.





Align the holes from the stock cross member with the holes on the bottom of the Wide Ride cross member and run in the supplied fasteners. Do the same on the side plates located on the outside of the frame rails, which might need to be opened up with the assistance of a ½ drill bit and a drill motor depending on the model year of your trucks frame. Finally, snug the bolts down tight using a cross pattern to keep things square.





The engine mounts are next on the list which pull double duty as a mount and a brace for the frame. This triangulates the load forces of the engines weight, and lateral forces created while driving. The cool thing is that one mount allows you to run any of the GM family engine packages including the new LS series, along with the good ol' small block or big block package. Bolting them in place is easy by aligning the bottom tabs with the mount so the top holes align with the existing factory drilled holes in the frame.



The front mount of the bottom "A"-arm lines up with a pocket in the cross member while the rear tucks behind the stub of the cross member. Once in place, slide the long bolt through the cross member and the "A"-arm using a rubber mallet for persuasion.



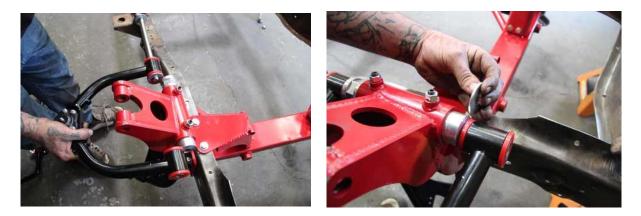
The upper cross shafts that hold the upper "A"-arm are made from solid billet aluminum and need to be greased before installing it into the cross member.



Slide the cross shaft in place from the rear while allowing 5/8 of an inch to protrude out of the cross member. Also note that the cross shaft mounting hole is drilled off center, creating an eccentric bushing to allow for camber adjustments. The best place to start is to line it up in the six o'clock position during the install.



The cross shafts are held in adjustment by two set screws. Before you install them in the cross member place a dab of "anti-seize paste" on the threads and sung them down. To ensure that the set screws stay tight, a lock nut snugs them down tight.





To install the upper arm, align it with the cross shaft hole and slide the long fastener through the arm and the shaft. Be sure to use the supplied washer in between the "A"-arm bushing and the cross shaft to maintain the bushings integrity. Finish it off by installing the nuts on the shafts fasteners and tighten them down tight while allowing the arm to travel up and down with some resistance.



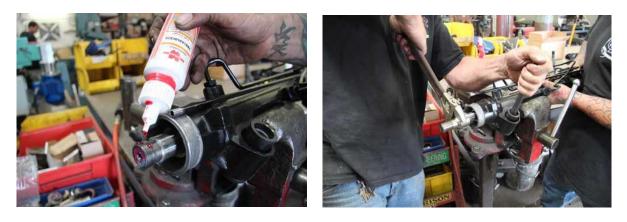


Supplied in the kit is an inner tie rod extension for the passenger side of the rack and pinion.





To install the extension you'll need to remove the clamps that hold the tie rod dust boot in place. Next, using an adjustable wrench, break loose the inner tie rod at the knuckle joint and spin it free.







Use thread locker before installing the extension. After you install the extension repeat the process of using thread locker on the extension before re –installing the inner tie rod knuckle. Now re-install the dust boot and clamp the band back down to the rack body so that the boot stays in place.





NOTE: PUMP PRESSURE IS APPROXIMATELY 1100 PSI @ 2.2 GPM.

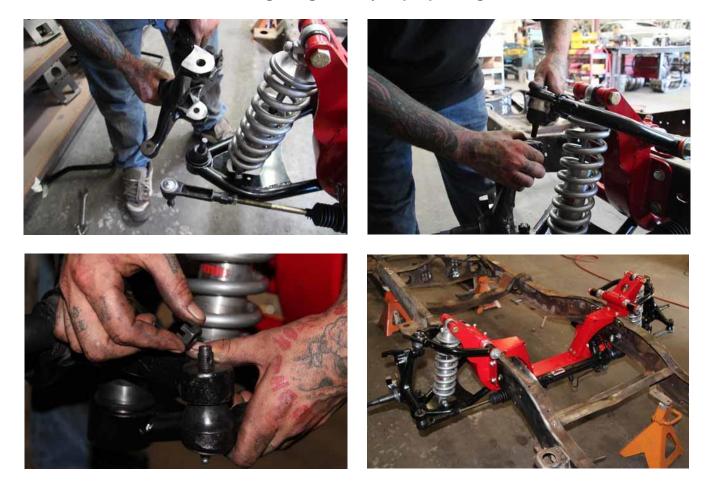
Slide the rack under the frame and snake the column body through the cross member at the driver's side engine mount. Don't forget to place a dab of anti-seize paste on the bolt that holds the rack to the cross-member. Line up the mounting holes on the rack to the mounting bosses on the cross member and run in the fasteners.







Install the coil over shocks from top to bottom but be sure to face the adjustment knob towards the outside on the top to allow for easy adjustment. Run the nut and bolt through the top mount and then move on to the bottom. The bottom arm mounting plates offers you a choice of two different mounting locations, one pair sets the shock closer to the cross member, while the other set places it towards the outside. C-10's prefer the outside mounting holes setting the geometry in proper alignment.



Rounding out the suspension components is the "ZG" spindles that install over the preinstalled ball joints. Place the spindles over the bottom ball joint first, followed by the top then attach the outer tie rod end and tighten and three up. Don't forget to run cotter pins through the castle nuts and through the ball joint studs. With that said, this is how things should look.



Normally we would be packing the wheel bearings with quality grease before the installation of the rotors however, for mock up purposes we are installing them dry as we plan to pull them back off to powder coat these. If you don't plan on power-coating them, install the seal and large bearing into the rotor and slide it over the spindle's "spud" repeat the process with the smaller bearing and tighten down the castle nut. Remember to pack the bearings with grease and put a cotter pin through the spindle as a safety for the castle nut before installing the dust cover.



The method to installing the calipers is just like factory GM specs, as the pads stay in place between the rotor as the caliper surrounds it. To fasten them slide the pins through the caliper and spindle and snug them down.





Due to the fact that we moved the cross member up three inches, as well as No Limit's corrected geometry of the front suspension has changed, the factory anti sway bar mounts will have to be removed. Drill out the factory rivets and chase them through with a drill bit that will allow 3/8" hardware to pass through smoothly. Next locate the rear factory of the old sway bar mount hole with the new sway bar mount and mark the front hole, drill on the mark which will now allow you to attach the new sway bar to the frame.



Run the fasteners through the frame and the "frame to bar" mounts. Next run the bar's "links" from the eyelet on the bar to the upper control arm. Leave these fasteners loose until the truck is back on the ground under weight, and then snug everything down.



Here's a close look at the front end fully assembled before the wheels and tire were put back on. One great feature about this kit is that it allows brake clearance for wheels beginning at 15." Once we put the truck back on its wheels and had the power train in place we took a measurement of ride height clearance. We came up just 5" of frame to ground clearance!



Take a look at the finished product with everything installed and ready for the road. Here you can see that it sits nice on a set of 18 rims that has an over all tire diameter measurement of 26-1/2." Now hard corners, highway speeds and great comfort is what this old truck is known for.

Questions: Call (865) 940-1503



# WIDE RIDE IFS PARTS LIST

#### \*\*STANDARD BRAKES

#### **\*VARIOUS SUB MODELS**

PART TYPE	PART #	APPLICATION
BRAKE PADS	D52	70-81 CAMARO*
POWER RACK	101-0107	88-96 THUNDERBIRD*
LOWER BALL JOINT	K6145T	70-02 CAMARO
UPPER BALL JOINT	K5208	70-81 CAMARO
OUTER TIE ROD END	ES2150RL	82-88 THUNDERBIRD*
INNER TIE ROD END	EV117	80-88 THUNDERBIRD*
INNER SEALS	S-8871	
INNER BEARINGS	A-6	
OUTER BEARINGS	S-A-3	
SPINDLES	NO LIMIT	WIDE RIDE
ROTORS	5040RGS	70-81 CAMARO*
CALIPER (PASSENGER)**	18-4020	70-81 CAMARO*
CALIPER (DRIVER)**	18-4021	70-81 CAMARO*

### **ALIGNMENT SPECS**

**CASTER = +4 - +5** 

**CAMBER = - 1/2 DEGREES** 

<u>POWER RACK</u> SMALL PORT – PRESSURE LARGE PORT-RETURN