## INSTRUCTION

## 916-6072 C-10 Truck Rear Suspension: 60-72 Chevy C-10

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## **Kit Contents:**

• 9166072.1

• 9166072.2

• 9166072.3

• 9166072.4-LH

• 9166072.4-RH

9166072.5

• 91616769.9

• 9166072.10

• 350004

• 350018

Mount, Panhard Bar, Frame

Mount, Truck Arm

Crossmember, Shock Mount

Brace, Crossmember, Left

Brace, Crossmember, Right

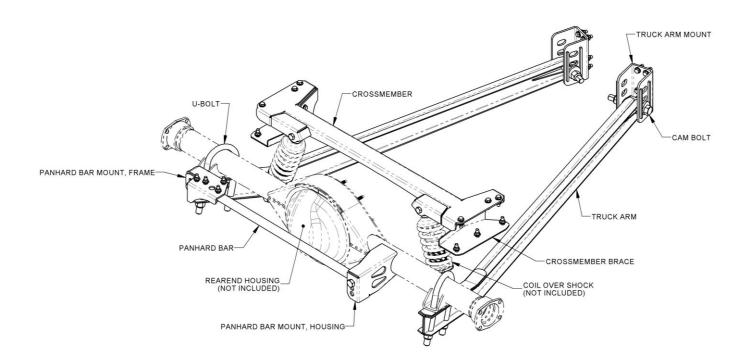
Panhard Bar

Mount, Panhard Bar, Housing

Hardware Kit

Truck Arms

U-Bolts, Truck Arms



- Remove Rear Suspension: Remove truck box. Raise the truck and support it with jack stands or a lift. Remove the exhaust, drive shaft, rear end, and all rear suspension components. Disconnect and remove brake lines, and E-brake cables from bottom of truck.
- Remove OE Brackets/Crossmember: Remove the front truck arm mounts, panhard bar mount, and the rear crossmember by removing the factory-installed rivets.
- 3. Install New Brackets/Crossmember:
  - Front Truck Arm Mounts
    - i. Truck arm mounts will bolt in the same position as the OE mounts through the rivet holes.
    - ii. Secure to the frame using the supplied 3/8"-24 x 1 1/4" grade 5 bolts, washers and lock nuts.

CROSSMEMBER

CROSSMEMBER BRACE

OEM CHASSIS

- iii. Repeat on opposite side
- Crossmember & Crossmember Braces
  - Crossmember & braces will bolt in the same position as the OE crossmember through the rivet holes.
  - ii. Loosely bolt crossmember to the frame using the supplied 3/8"-24 x 1 1/4" grade 5 bolts, washers and lock nuts.
  - iii. Loosely bolt braces to the frame and crossmember using the supplied 3/8"-24 x 11/4" grade 5 bolts, washers and lock nuts.
  - iv. Now fully tighten all crossmember hardware.
- Panhard Bar Mount
  - i. Panhard bar mount will bolt in the same position as the OE mount through the rivet holes.
  - ii. Secure to the frame using the supplied 3/8"-24 x 1 1/4" grade 5 bolts, washers and lock nuts.
- 4. Install Truck Arms and Rearend Housing: Install truck arms onto the front truck arm mounts using the supplied 3/4"-16 X 5-1/2" grade 8 cam bolts and spacers. NOTE: Install the cam bolts in the center of adjustment as shown. The flat side of the bolt should be facing upwards. Install rear end housing using the supplied U-bolts and nuts as shown above. Do not fully tighten U-bolts at this time. Raise the rear end to the desired ride height. (Without frame modification suggested ride height is 13-1/2" center to center for the shock bolt holes). (If using a C-notch frame modification suggested ride height is

12-3/8" center to center for the shock bolt holes). Support the rear end at this height and center it in the truck. Once the rear end is centered, and at ride height, add shims between the arms and rear end housing to achieve the desired pinion angle. Now, double check that the rear end is in the proper location and tighten down the U-bolt nuts.

- Install Panhard Bar and Panhard Bar Bracket: Secure the panhard bar to the rear crossmember using the supplied 5/8"-18 x 3-1/4" grade 5 bolt and lock nut. Adjust the panhard bar so that there is about 1/2" of thread showing and tighten the jam nut. This will allow for a small amount of adjustment in both directions. Now, raise the panhard bar bracket into place on the rear end and bolt the panhard bar to it using the 5/8"-18 x 3-1/4" grade 5 bolt and lock nut. Rotate, or "clock" the bracket on the rear end so that the bolt is horizontal. Double check that the bracket is in the proper position and tack weld CENTERLINEthe bracket to the rear end housing. As shown, the panhard bar bracket should be about 12-1/16" from the center of the housing. The 12 1/16" center of the housing can be found by measuring the flange to flange distance and dividing by two. DO NOT assume that the drain plug or third member are centered, this is often not the case. You must measure to find the center! If using a Ford Grand National rearend housing you may have to clearance the panhard bar mount to fit. **NOTE:** There are three possible locations for each end of the panhard bar. Use the mounting holes that make the panhard bar closest to level with the ground at ride **BOTTOM VIEW** height. This will vary depending on ride height.
- 6. Check Alignment and Clearances: It is recommended at this point to cycle the suspension though its travel and check for any clearance issues. This is also a good time to double check that the rear end is aligned properly with the car and the pinion angle is correct. (Use the cam bolts on the truck arms to adjust the alignment)
- 7. **Finish Weld**: Remove the rear end, panhard bar, and truck arms from the car. Fully weld the panhard bar bracket to the rear end. **NOTE**: It is a very good idea to only weld a small bead at a time, then move to a new area and allow the first area to cool completely before welding further in that area. This will greatly reduce the risk of warping the rear end housing.
- 8. **Re-Assemble**: Once all of the welding is complete, everything can now be re-assembled.

- Secure the truck arms to the chassis brace using the cam bolts and cam spacers as shown in step 6. Torque the nuts to 120 ft-lbs.
- Now is a good time to fully assemble the rear end by installing gears, axles, and brakes. (This can also be done after installing the housing into the truck)
- Raise the complete rear end into position. Attach the rear end to the truck arms using the supplied u-bolts, washers, and nuts. Torque nuts to 220 ft-lbs.
- Install the pan hard bar using the 5/8"-18 x 3-1/4" grade 5 bolt and lock nut on the crossmember end and the 5/8"-18 x 3-1/4" grade 5 bolt and nut on the housing end. Torque both bolts to 120 ft-lbs.
- Install your coil over shocks using the supplied 1/2"-13 grade 5 bolts. The 2-1/2" bolts and 3/16" wide spacers are for the bottom while the longer 2-3/4" bolts and 5/16" spacers are for the top. Torque the coil-over bolts to 65 ft-lbs **Note:** This kit is design to use a 5" stroke shock without modifying the frame and a 4" stroke shock if using a C-notch frame modification. Shock ends should be ½" bearings with a mounting width of 1". For recommended part numbers please visit our website or contact one of our tech experts.
- Re-install; drive shaft, brake lines, and E-brake cable etc...
- Bleed the brakes.
- Fill the rear end with fluid.
- Install wheels and tires

## 9. Alignment:

- Lower the truck onto the ground and check for desired ride height. Adjust ride height if necessary by raising the truck and spinning the adjusting collar on the coil-over.
- Once the ride height has been set, lower the truck onto the ground and make sure the rear end is in the center in the truck body. Adjust the panhard bar if necessary. Lengthening the panhard bar will move the rear end toward the passenger side, while shortening it will move the rear end toward the driver side.
- Now that the ride height is set and the rear end is centered perfectly in the truck, the rear end can be aligned by adjusting the cam bolts on the front of the truck arms. NOTE: This is difficult to do accurately and a professional alignment is recommended. This method will get you close enough to drive the truck to an alignment shop.

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Speedway Motors, Inc. P.O Box 81906 • Lincoln, NE 68501 800.979.0122 • Speedway Motors.com

