



Steering, Brake & Suspension Specialists

Engine & Transmission Crossmembers Installation Instructions

Note:

Read these instructions completely before attempting this conversion.

Make sure this kit fits your application before painting or plating. Parts that have been painted, plated or modified may not be returned.

Instructions:

1. The engine and transmission crossmembers are available for a variety of Ford and Chevy V8s and trannys. They come powdercoated and include all necessary hardware.
2. After sliding the end collars over the main tube, position the engine crossmember on the frame. Here nothing needs to be welded or bolted because the crossmember ends will rest on the frame's lower channel as the engine is positioned. Takes an educated guess on how far forward the crossmember will need to be (this will be adjusted as needed).
3. The engine is then lowered into the truck and bolted to the crossmember. Let most of the engine's weight settle down onto the crossmember, but keep the hoist connected for extra support. At this point you can determine whether the engine needs to be slid forward or back, making sure to consider factors such as distributor-to-firewall clearance and engine-to-radiator fit.
4. At this point you'll also want to mock the transmission cross member in place. Welding clamps or C-clamps work well to temporarily hold it in place.
5. While under the truck, center the transmission between the framereails. Sliding the crossmember side to side in the end collars makes it easy to adjust. Mark the frame where it will need to be drilled for mounting bolts.
6. Obviously, the engine also needs to be centered from side to side in the same manner.
7. An important consideration is the angle on which the engine is mounted. CPP recommends a 4-degree downward position (transmission tailshaft lower than the crankshaft snout), paired with a rearend pinion angle that's 2-3 degrees upward when the vehicle is static. This allows for 1-2 degrees of rearend deflection under load, which will properly line up the pinion and tailshaft. Use a magnetic level on the valve cover to check the angle. The crossmember can be rotated slightly inside the end collars for adjustment. Generally, the proper engine angle will put the carburetor mounting pad parallel with the ground.
8. After getting the engine angle set, clamp the end collars to the frame and drills a hole through the collars and crossmember. Bolts secured through these holes will keep the crossmember from rotating or shifting inside the collars. (The collars can also be welded to the crossmember.) The same thing is done on the transmission crossmember.
9. Though it's not really necessary, you may remove the engine and trans at this point to have more room to work while drilling holes and mounting the crossmember to the frame. Four bolts hold each end collar to the framereail.
10. Likewise, the transmission crossmember is secured to the bottom channels of the framereails using two bolts on each side.

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For technical help call Classic Performance Products Monday thru Friday 8:30am to 5:00pm at (714) 522-2000.

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