Classic Performance Products 378 E Orangethorpe Ave., Placentia CA 92870

Have a V-8

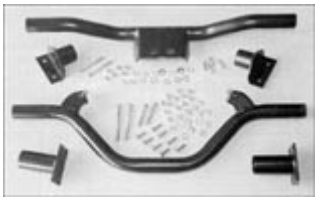
Swapping Engines Is Easy With Crossmembers From Classic Performance Products

By Damon Lee

A Chevy engine in a Ford truck!? Hey, don't act so surprised and disgusted. The small-block Chevy has become a ubiquitous street rod engine, and there are some good reasons for that. Besides being light and compact, the small-block Chevy makes good power and is simple and convenient. You can find parts for one anywhere, and a monkey can rebuild one with a crescent wrench. Simply put, it's an easy affordable choice.

In all honesty, however,. this story really isn't about putting a Chevy engine in a Ford truck. It's about putting any number otV-8 engines in any number of vintage straight-axle trucks. You see, Cassic Performance Products builds these nifty engine and transmission crossmembers for Ford and Chevy trucks from the late-'40s through the '50s (up through '64 for most Fords).

The transmission crossmembers are basically universal, while the engine crossmembers are available for a variety of power plants including small and big-block Chevys and many different Ford mills (289/351W, 351C/400M, 352/428, and 429/460). And since the tubular crossmembers use slip-fit collars to mount to the framerails, they can be adjusted and tailored to fit a wide range of trucks, pretty much anything using a beam-axle and ladder-type frame with rails no farther than 38 inches apart is a likely candidate. You'd be surprised at how many '40s, '50s, and '60s trucks fall into these parameters. We recently had the chance to witness Alan Crouse putting these crossmembers to use on CPP's '56 F-l00 project truck. Ford fanatics may wince at the sight of him lowering a small-block Chevy between those Blue-Oval rails, but take heart-you could use similar crossmembers to put a 460 in a '55 Chevy (in fact, we dare you to do that). Check it out and see what you think.

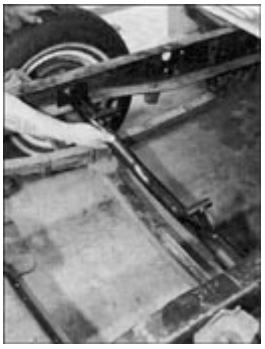


1. The CPP engine (bottom) and transmission (top) crossmembers are available for a variety of Ford and Chevy V-8s and trannys. They come powdercoated and include all necessary hardware.

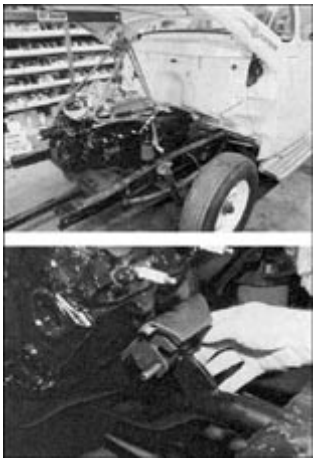
7. Obviously, the engine also needs to be centered from side to side in the same manner.

11. Likewise, the transmission crossmember is secured to the bottom channels of the framerails

2. For better access, Alan has Ryan Smith help him lift the front sheetmetal off the F-100.



3. After sliding the end collars over the main tube, Alan positions 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. Alan takes an educated guess on how far forward the crossmember will need to be (this will be adjusted as needed).



4. The engine is then lowered into the truck and bolted to the crossmember. Alan lets most of the engine's weight settle down onto the crossmember, but keeps 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 using two bolts on each side.

8. 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. Alan uses 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.

12. Here's what the installed crossmembers lool like, clean, simple and effective

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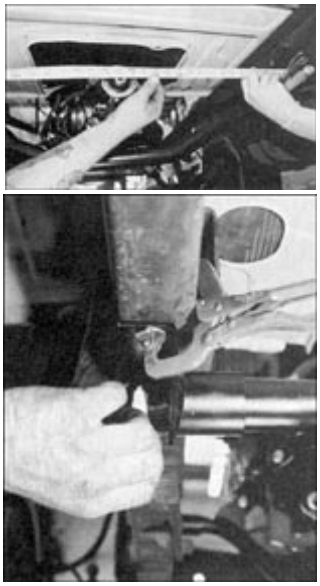
13. With a little help from CPP owner Jim Ries, Alan maneuvers the engine and transmission back in one final time.

14. Anticipating clearance problems, Jim ordered a set of Sanderson's compact headers (PN CC134) for the project. As it turns out, there's more space than he initially thought, although the coated headers still provide a clean, compact exhaust option. You'll also note that the F-100 has been upgraded with one of CPP's power steering kits utilizing a Toyota 4x4 power-steering box.

15. Hey, it's in! After just a few hours' work, the small-block fits snug and sound between the F-100's

factors such as distributor-to-firewall clearance and engine-to-radiator fit.

5. 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.

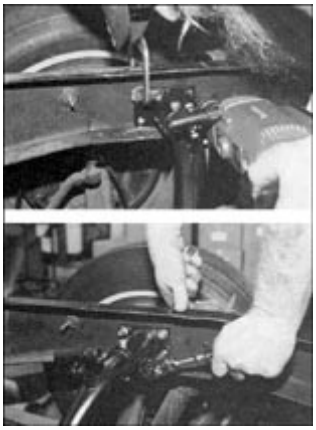


6. While they're under the truck, Alan and Ryan center the transmission between the framerails. Sliding the crossmember side to side in the end collars makes it easy to adjust. They also mark the frame where it will need to be drilled for mounting bolts.

9. After getting the engine angle set, Alan clamps 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.

framerails. Who said V-8 conversions had to be difficult?

It's always best to have shop and assembly manuals on hand to make sure your installation is correct and to make the project as easy as possible. We recommend factory manuals, available at Greg's Automotive



10. Though it's not really necessary, Alan removes the engine and trans at this point so he has more room to work while drilling holes and mounting the crossmember to the frame. Four bolts hold each end collar to the framerail.