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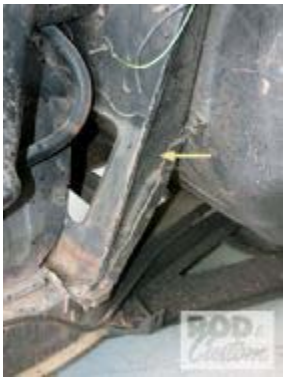
Mounting An Auto Transmission In A 1949-1954 Chevy-Ditch That Six!

Mounting A Small-Block And Auto Trans In A '49-54 Chevy The Easy Way

By Kev Elliott

I've said it before but there probably hasn't been a better time to tackle a project car (the economy notwithstanding) given the extraordinary aftermarket industry we enjoy, and while it's not exactly rocket science to fabricate engine and transmission mounts at home, sometimes it's simply not worth the effort when someone has already done all the hard work for you.

In the case of the above mounts for '49-54 Chevy cars, that someone is Walton Fabrication. There's no mocking up motors and transmissions to get the correct location or angle, and the entire installation is almost a bolt-in job. It's so simple in fact that it's an easy weekend project, though of course you'll still have to hook up an exhaust and cooling system as well as swap out the closed driveline rearend before you'll have a driver, but that's to be expected. The transmission crossmember bolts in where the original's rivets were and accepts all GM transmissions, though in the case of the car shown here, where a 200-4R transmission from Gearstar Inc. was used, a slightly modified version is required to allow clearance for the sump pan and speedometer drive. If you fancy ditching that straight-six and dropping in a small-block Chevy, it couldn't be simpler than this.



With the stock straight-six motor removed, these two ribs (passenger side arrowed) running from the top of the firewall to the chassis mount below have to be removed in order to fit a small-block Chevy.

The majority of the rib was cut away using a cutoff wheel, leaving the lip attached to the firewall. Using a spot weld drill, which removes the weld but doesn't penetrate the layer of metal below it except for a small dimple, the spot welds were drilled out then the lip was pried from the firewall using a chisel.

In order to fit the V-8, the emergency brake rod and clutch linkage assembly will also have to come out. The bracketry for the latter has to be cut away from the chassis mount.

With everything clearanced for the V-8 to fit, engine mounts were in order. Walton Fabrication manufactures these neat mounts that are simple to locate without requiring a dummy motor (or your intended one for that matter) and even come with instructions. The Walton mounts bolt in place using a pair of the front suspension mounting bolts for location. Before they were welded, they were clamped to the frame to close up any small gaps.

The distance between the mounts was double-checked as recommended in Walton Fabrication's instructions.

With the motor mounts completed, the transmission mount was next. Walton Fabrication offers this crossmember that replaces the original, the central saddle is adjustable for a wide range of GM transmissions. This particular car was to be fitted with a 200-4R overdrive trans, which owing to the shape of its sump pan required a different saddle, as well as a notch in the crossmember (arrowed) to allow

clearance for the speedometer drive on the 200-4R. If you're using this trans, make sure you specify this when ordering. The crossmember is supplied with all relevant hardware.

Here's the stock crossmember, looking rearward under the car. This has to be removed carefully. Note the temporary box section crossmember used to support the original torque tube, as the rearend had yet to be changed but the car needed to be mobile.

Removing the rivets that secure the stock crossmember is a dull and tedious job if you drill and punch them out by hand. The rivet heads were removed with an air chisel before a punch was used in the air hammer to drive out the rivets, making for a quick, if noisy job. With all the rivets removed, the crossmember was tapped rearward and removed.

You should end up with the stock crossmember complete with the emergency brake actuating arm on the garage floor, and the underside of your car should look like this with it removed. Time to clean up around all the mounting holes.

Walton Fabrication's instructions let you know exactly what size to drill out the rivet holes to, in order to accept the new hardware.

Fitting the new crossmember is as easy as lifting it into place and inserting the new hardware as directed. Note the crossmember allows you to retain the original fuel line should you so desire.

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Walton Fabrication recommends you bend up the ears on the stock chassis outrigger sections and weld them to the new crossmember, though this was left until the end of the installation in this case.

The Gearstar 200-4R transmission was then dropped into the car. To achieve the desired driveline angle, you may wish to add an aluminum spacer between the trans mount and the transmission, as shown here, though it shouldn't be necessary.

Here's a TH350 installation at Walton Fabrication's shop, showing the routing of the new brake lines and the crossmember welded to the chassis outriggers.