



1976-1982 Floor Pans: The Achilles Heel of Late C3 Corvettes

Save the C3 Corvette!

Steel Floor Pans were introduced in 1976 Corvette production to counter the excessive heat generated by the new catalytic converter-equipped exhaust systems. As the Corvettes were exposed to the elements and experienced rust issues, it was not uncommon to see them end up at a scrap heap or salvage parts marketplace. The good news is, most of these late C3 Corvettes can return safely and happily to the highway with a reasonable investment of time and labor. Mid America Motorworks tells you how.

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Original or Replacement?

It's possible to exchange the rusted original Floor Pan sections on your rusted C3 in a manner that will make detection nearly impossible from beneath the car. From the inside, especially as part of an interior restoration, no sign of the work is visible. All nut plates for the seat and seat belt anchor points are provided. Mid America Motorworks has even developed and engineered our replacement floor pans to limit the need for specialized skills and tools.

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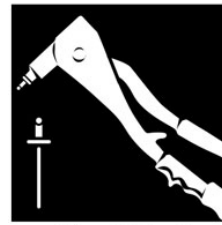
1976-1982 Steel Floor Pan Installation

1. Unbolt and remove seats, sill plates, seat belts, console and park brake trim and carpet and padding/sound deadener.
2. On the Driver's side, there will be a wiring harness running along the floor pan. Move this harness out of the way. Duct tape may be used to secure it, so that it will not interfere with installation.
3. Place the Corvette on a lift or jack stands.
4. Some Corvette models have a heat/splash shield on the lower firewall that

may need to be removed.

5. While the Corvette is raised, examine the underside to locate fuel lines, brake lines, cables, and wiring harnesses. These must be avoided when cutting away the rusted pans.
6. Cut the rusted pans out using the die grinder.
7. Lay the new pans in place and mark where the upper edges meet the stock pans. You will need to leave at least 1.5" of the original pans below the lip of the new pans to serve as an attachment flange.
8. Examine the stock floor pans to see how much metal needs to be replaced. Cut away the rusted area. Leave enough material around the edges and center tunnel to attach the repair panels. The rear of the stock pans must be cut at the point where the floor begins to angle up behind the seat area at the riser. For best overall fit and finish, clean away as much rust build-up, factory tar sealer, and other foreign material as possible from the contact area where the new pans are to be welded or riveted. (See Fig. 1 and Fig. 2)
9. 1977 late to 1982 Corvettes – On the rusted, stock pans - cut out the outer factory seat belt weld nuts and plate located near the door sill plate area. New pans have the necessary nuts in place. (See Fig. 3)

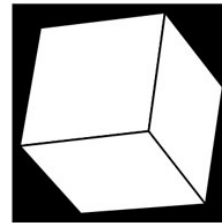
Tools



Rivet Tool



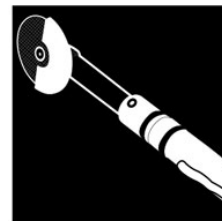
Mallet



Wood Block



Electric Drill



Die Grinder



10. Note: For Corvettes with seat belt retractors located under the seat, remove the outer side weld nuts found on the new pans. Extra seat belt nuts are provided that must be welded in position, after drilling a hole in the bottom of the new pan depression (under the seat area).
11. You may pre-form the forward lip of the new pans, by bending up at a 15-20 degree angle to assist in the initial fit. (See Fig. 4)
12. Fit the new pans in place, mark and trim as needed. You may have to fit and trim multiple times to get the right fit. The inner front corner may need to be bent in slightly on some cars. It is easiest to position the inner front corner first, then the outer front corner. Finally, press the rear of the pan into place.
13. Tip: Use a hammer and block of wood to form pans into position. Outer lip near sill areas may be peened over or flanged by bending over with a block of wood and hammer. (See Fig. 5 and Fig. 6)



14. Secure outer rear corner by drilling a small hole in the new pan and the factory riser panel. Insert and tighten a metal screw there. (See Fig. 7)
15. Temporarily position your seat in place and see if it is level. Adjust the rear of the pan, until the seat is level. Then drill holes at the inner rear corner of the pan and secure with screws. Work your way around the perimeter of the new pans, drilling and securing with 2 or 3 screws on each edge.
16. Mark the location of rear seat bolts. Drill and use supplied nut plates by holding in place over the bolt holes and marking rivet hole locations on the Floor Pan. Remove plate, drill rivet holes and rivet nut plates on bottom of new pans. (See Fig. 8)
17. Now it's time to decide if you wish to weld the pans in place (preferred method) or to seal and use rivets.



Welding in Floor Pans

1. Remove the Floor Pans. Use a wire brush or wheel to clean off the car panels where pan will be welded. Apply weld primer to the outside of pans, where they contact the car. Drill holes in the pan sides and back every 2-3 inches for blind welds for best adhesion. Set the pans in place, resecure with screws and weld. Let cool, then apply caulking or seam sealer around the perimeter to block moisture.

Riveting Floor Pans

1. Remove the Floor Pans. Use a wire brush or wheel to clean off the car panels where the pan will be riveted. Apply a heavy coat of sealer, set the pans in place, re-install screws to hold the Floor Pans in the correct position. Drill rivet holes in the sides and the back and rivet in place with rivets every 2-3 inches around perimeter.
2. The front lip may be riveted at the holes found in fiberglass. Drill up into the new pan from the underside of the Corvette through these existing holes. Then rivet the front lip in place.
3. Smooth out any sealer that extrudes from the overlap area. Apply MWorks Steel Shield or other Rust Preventative Paint to the upper and lower surface of the pans. Let cure for at least 24 hours.
4. Install the new Sound Deadener, Carpet and Seat belts. Reinstall seats and firewall heat/splash shield, if removed.

It's that easy. Now lower your Corvette and take it for a test drive!



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