Avanti Repair

How to Replace a Broken

Front Floor Nut Plate on Your Front Seat

1963-64 Studebaker Avantis and all 1965-85 Avantis have nut plates, part # 1351038 riveted to the floor pan in the raised area below the front seat. These nut plates are located on the bottom side of the floor pan. This raised area of the floor pan has a flat piece of fiberglass bonded and riveted to the bottom side for added strength, which hides these nut plates. Being exposed to mother nature for 35 to 57 years, has caused the 5/16"-18 threads to rust and the bolts normally break off. This is actually a very common problem, but easily repaired to factory specs.

Tools Needed::

- Grinder with a rotary file bit
- Dust mask
- Drill bits
- · Drill motor
- Pop rivet gun
- Fiberglass mat (not cloth)
- Fiberglass Resin
- Small 1" paint brush
- · Sandpaper, 80 grit
- · Masking tape 2"
- 5/16-18 bolts
- · Small round magnet
- 2 scratch awls
- Needle nose pliers
- Safety Glasses





By Dan Booth **Nostalgic Motor Cars**

Dan Booth has over 45 years of exclusive, hands on Avanti sales, service, collision and parts, not Studebaker cars or trucks, just 1963-1985 Avantis.

How to Repair a broken front seat track nut plate

Remove the vinyl or carpet from this area

Drill out the old small pop rivets, that were countersunk



Grind a slot in the back side of the raised area, about the same size as the new nut plate. You will also have to grind a perpendicular slot so the old nut plate will come out, with the broken off bolt (see photo 2)



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Take your magnet to retrieve the old nut plate, and pull it out with our needle nose pliers.



Load the new nut plate on the magnet, stick it through the hole, use your scratch awls to line up the bolt holes. Start a 5/16" bolt in one of the holes, then start the 2nd bolt. Use your scratch awls to line up the rivet holes, then tighten down the bolts.

Drill the new holes through the fiberglass for the new larger pop rivets. You may have to remove the lower bolt for clearance for the pop rivet gun.







Grind the fiberglass floor area to be reglassed.



Cut some fiberglass mat large enough to cover the repair, each layer a little larger than the previous, about 2-3 layers of 1½ oz. mat. Cut your 1" paint brush bristles to about 1/2" long If you can't find the fiberglass mat, I have it in stock and can cut what you need.

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Mix your resin with your catalyst. I pour some mixed resin on a piece of cardboard, place a piece of mat in that poured resin, and then turn it over to get the mat completely wet with resin. I place the piece of wet fiberglass mat on the surface to be repaired, stretching it out. Using the shortened brush, I lightly jab (stipple) the fiberglass working towards the edges to get any air bubbles out. I repeat this process again for the 2nd layer. Each layer of mat should be just a little bigger than the previous layer, so the thickness tapers. Repeat for the 3rd layer, don't apply too much resin, just enough to saturate the layers of mat, stippling each layer of mat to get any air bubbles out.

Take 2' wide masking tape and carefully place it on the repaired area. I keep overlapping the masking tape (see picture #10, until I have covered the hole area. I then take my fingers, a spatula, a small roller, a cut off new paint brush and etc, working from the center to the edges leveling and working the air out. I keep watch on my repairs, I remove the masking tape from the center out, when the resin has almost fully kicked. Make sure when you are removing the masking tape, that it is not pulling the new fiberglass mat away from the original fiberglass.



This is what your repair will look like, when your are finished. A little scuffing with some 80 grit paper to knock down any pointed or sharp fiberglass threads, and you are finished with this repair.



As I mentioned before, the original nut plate pop rivets were smaller and flat headed. They were also counter sunk to be flush with the surface. It would be very difficult to counter bore these holes to allow for a flush surface with the fiberglass and not necessary.

Take 1/4" foam rubber about 2" x 4", or the size of your choice, cut a hole for the 2 5/16"-18 bolts and glue it to the floor. I take a grinder or a new single edge razor blade and taper the edges of the foam. This glued on foam will keep the pop rivet heads from showing through the glued on vinyl, which was installed on 1963 Studebaker Avantis. If you have an Avanti where the entire floor was covered with carpet, including this raised area, you will not need to install this foam.



CAUTION:

If you mix too much Methyl Ethyl Ketone Peroxide (MEKP), in the resin, it can set itself on fire. If your fiberglass repair start to kick, before you are finished smoothing out any bubbles, simple remove that repair, before it totally bonds to the original fiberglass and discard. Regrind the original fiberglass repair, and use less MEKP in the resin.