How to Replace a Front Seat, Inner Rear Floor Nut Plate

Studebaker Avanti & Avanti II

What has always been a weak point on all 1963-64 Studebaker Avantis and all 1965-1985 Avantis is the front seat inside, rear seat track mounting nut plate., that is bonded to the bottom side of the fiberglass floor pan.

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.



These nut plates have a 5/16"-18 cage nut that slides about 3/8" of one inch. This is welded to a steel plate that is riveted to a 1/4" x 3" x 4" piece of fiberglass. The cage nut assembly, N.O.S. part number 1350343 is then bonded to the bottom of the fiberglass floor pan. The weak point is the 1" hole in the floor pan is almost

the same size as the rear seat track attachment bracket. As the driver or passenger get bounced up and down in the front seat, it causes the nut plate assembly to break bond, with the floor pan as the seat track want's to go through the 1' hole in the floor pan, which it does.

What I have done over the last 45 years to prevent this is to install a very large washer, about 2 1/2" in diameter on the top side of the floor pan, and then bolt the seat track to the floor. This large washer will spread the load to the fiberglass floor pan and not to the nut plate assembly, which prevents the nut plate from breaking bond, with the floor pan.



If your nut plate has broken this bond, has a broken off bolt, nut cage is rusted out, nut spins in the cage, or just plain missing, this is a very simple fix!



1350343 N.O.S. Nut Plate 1350343WASHER Washer

Avanti Repair

Tools & Parts Needed

- Dust Mask
- N.O.S. Nut Plate P#1350343
- 5/16"-18 Bolts (longer than normal)
- Grease, wood Match Sticks or Similar
- Wrench for the 5/16"-18 bolt
- Some Fiberglass Bond & Hardner
- Large Washer, about 2 1/2"
- Masking Tape
- Grinder or Coarse Sandpaper
- Magic Marker
- Safety Glasses



Remove old nut plate assembly. Clean any tar or grease from the bottom of the floor pan for about a 5"x 5" area. Ground 5"x 5" area, photo 2



Grind the top side of the N.O.S. nut plate assembly #1350343

To determine the location of the new nut plate, temporarily bolt the seat tracks with the seat attached to the two front mounting nut plates and the outer rear floor bolt or measure your seat track mounting points.

Mark the fiberglass floor pan for the center lines of the new nut plate (usually in the center of the 1" bored hole, but not always) Photo 3



Mask off the bottom of the large washer, with masking tape to prevent the bond from sticking. Photo #4 Mark the top side of the large washer from the reference marks you put on the floor pan. Photo AA.



Use a wood matchstick or something to keep the sliding 5/16" x 18 square nut in the center of its cage, Photo #5.

Put some grease in the 1" hole in the top of the nut plate 1350343 (don't get any on the fiberglass bonding area). Put some grease on the threads of the longer than normal 5/16" x 18 bolt. The grease will keep any fiberglass bond from sticking to the nut plate's sliding square nut and the threads of the bolt.





Photo #5 shows the 2 pieces of wood holding the nut in the center, It shows the grease in the hole and it shows the catalyzed bond ready to be installed.

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The longer than normal 5/16" x18 bolt must have threads from top to bottom, this longer than normal bolt allows one person to reach and hold the nut plate with one hand, while starting the bolt with the other. Make sure when you install the N.O.S. nut plate assembly that the sliding cage nut slides from front to back, not side to side.

Line up your reference marks on the washer to the marks on the fiberglass floor and tape the large washer to the floor pan.

Put the longer 5/16" x 18 bolt through the large washer

Mix your fiberglass catalyst (hardener) with the bond. Put the bond on the nut plate (keep the bond away from that greased up hole), Put the nut plate directly below the 5/16" x 18" bolt. Thread the bolt into the nut plate and snug it with your fingers to the floor pan., Don't tighten the bolt too tight, as that will push out too much bond material. As you are lightly snugging up the bolt, keep the cage nut so it slides from the front to rear and keep that nut plate parallel and perpendicular to the side of the car (just because it looks nicer). Photo 5 & 7

Take your finger and wipe off any extra bond on the edges of the nut plate for that professional look. Photo 7

After the bond cures, remove the longer than normal bolt, large washer and etc. Clean out any bond that might be in the 1" hole, remove the 2 pieces of wood.

Leave the large washer on the floor pan to spread the load to the fiberglass floor and not the nut plate. As it will spread out the load to the floor pan and not the 1" hole where it could cause N.O.S. 1350343 N.O.S. nut plate to break loose again.

