Seat installation w/ ripped out bolt damage Posted by Jump07 - 30 May 2008 06:19

This morning one of the bolts holding down the front of my seat ripped right through the floorpan. Has this happened to anyone else?

I am hoping that it is repairable with welding another threaded bit on?

I am thinking this would be a good time to install my Kirkey seat. Has anyone welded their brackets directly to the floor?

What are my options here?

Thanks,

Jeremy

Re:Seat installation w/ ripped out bolt damage Posted by joepaluch - 31 May 2008 01:24

cullenwinter wrote:

Having seen some 944 wreck pics, I would like to weld some reinforcement bars from the sill to the tunnel to mount my seat to at some point. The floor pan can fail with some types of impacts, which doesn't look pretty. Hanksville (cage builder, RM sponsor) did this type of reinforcement in Whit's Acura, and it looks like money well spent. That is common practice in rally car preparation too. Just my \$.02

Fine with me and ok in the rules as this is for safety not any competitive advantage.

Re:Seat installation w/ ripped out bolt damage Posted by pixrken - 31 May 2008 02:17

Jeremy,

This can be repaired by welding. The was done on the #95 25 hours car, my #89 car and I believe Steve's #106 car.

TCDesign said this was more common than you might think.

I like to drill through the floor and use big fender washers, larger bolts rated M8 or higher and a nylock nut per bolt.

Joe,

Were the metal pieces just scraps you had laying around or were they specifically shaped?

I just use big fender washers because they were readily available at any hardware store.

Cullen or Chuck,

Can you get some pictures of the reinforcement Hanksville did for the Acura?

I'm interested in this.

Re:Seat installation w/ ripped out bolt damage Posted by joepaluch - 31 May 2008 04:25

pixrken wrote:

Joe,

Were the metal pieces just scraps you had laying around or were they specifically shaped?

I just use big fender washers because they were readily available at any hardware store.

They were some scraps I had laying around that seemed guite large. I figure the larger the better. As you can see the inboard side needed smaller backing plates due to where the lines run under the chassis. If you note the two goldish ones the are the sub belt mounts using hardware from the Schroth harness kit. I don't have a picture of the passenger's seat mounting, but for that I used a large plate about 2" by 12 or 14" long to back up the front and rear holes. Again this was stock I had on had and since my car was underweight (need ballast anyway) saving a few ounces was not an issue.

Re:Seat installation w/ ripped out bolt damage Posted by cullenwinter - 31 May 2008 11:26

pixrken wrote:

Cullen or Chuck,

Can you get some pictures of the reinforcement Hanksville did for the Acura?

I'm interested in this.

I'll check to see if there are build pics, and will post here....

Re:Seat installation w/ ripped out bolt damage Posted by Jump07 - 02 Jun 2008 01:54

Thanks guys. I think I'll get some burly washers and bolts (how long?) and tackle it this weekend.

J

Re:Seat installation w/ ripped out bolt damage Posted by cullenwinter - 05 Jun 2008 10:17

Here's Hanks description, and a photo from Whit

Basically,

the plates were made from 1/8". The rear seat mounts were tied into the roll cage mounting plates, and still complied with the CCR as regards the max allowable size for cage mounts. The factory front seat mount pedestal was removed to enable the seat to sit lower, and 1/8" plate was welded from the rocker to the tunnel, shaped to to match the floor contours, to provide reinforcement for the new front seat mounts.

Remember that the stock floors are pretty thin to begin with, and because of the cars' age, the floors are pretty weak IMO. So, reinforcing the floors

(for the sole purpose of securing the seat, NOT for the purpose of stiffening the chassis to gain an advantage) is a good idea. I think Whit's approach was great, since it more widely distributes the load, but it is time-consuming and costly if you are paying to have it done. So, in the case of stripped holes, rather than trying to helicoil and reinstall dinky little stock-sized bolts, if a customer does not want to cost of larger reinforcements like on Whit's car, I like to drill all the way through the floor and then use 1/8" flat plates, approx. 2"x2" square, to sandwich the floor and create a reinforced seat mount. I don't like fender washers because they are usually too thin and to small in diameter.