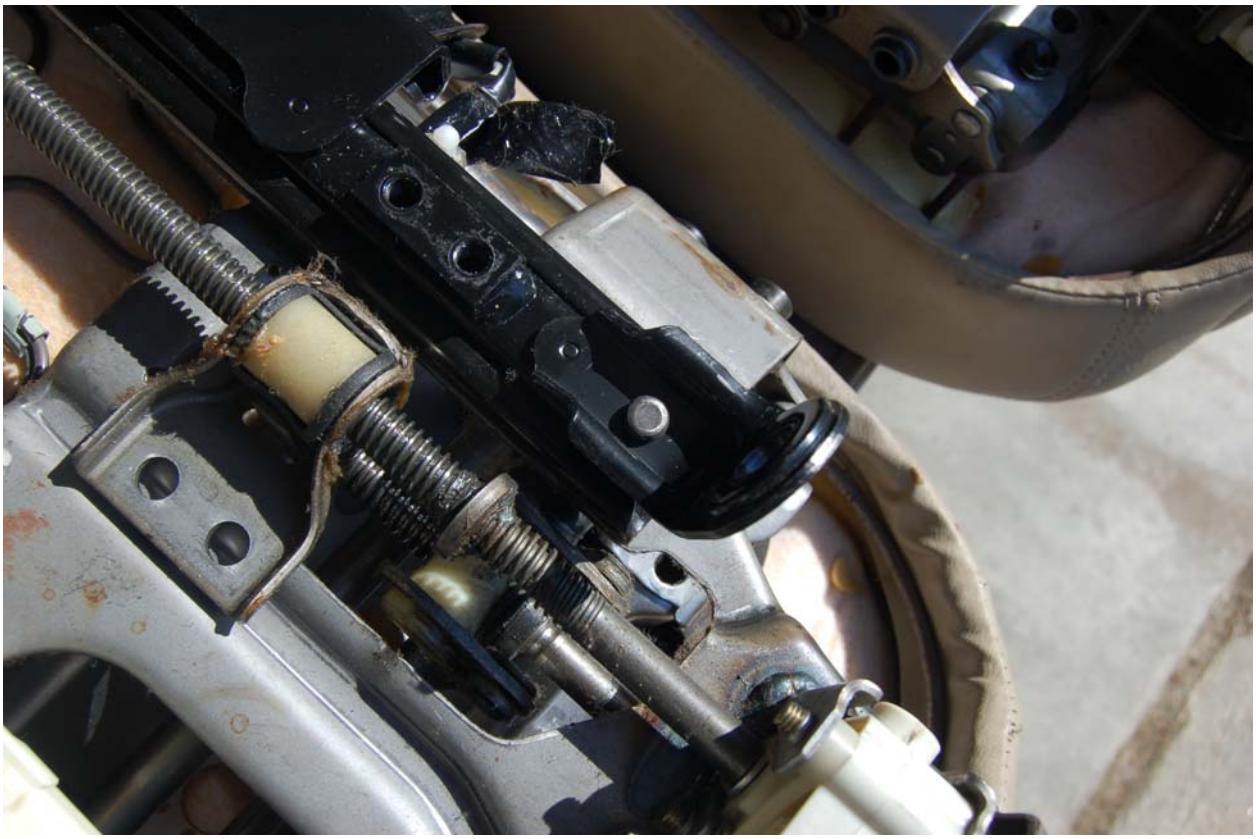
Electric Seat Mod Installation Procedure

Removing seat:

1. Remove head rest
2. Move seat forward and remove rear seat foot covers and bolts
3. Move seat backwards and remove front seat foot screws.
4. Raise front of seat completely.
5. Move seat completely backwards and then forward ½”
   NOTE: this is to allow for reassembly of rail unit after it has been modified
6. Fully recline seat, unplug the wiring harness and remove from vehicle. NOTE: be careful of the reclining knob on the side controls breaking off as you guide chair out and into vehicle.
7. Place chair face down on a protective surface such as a blanket.

Removing Rails:

1. Using a ¼” drill bit, drill the underside of the rivet and the weld on the front feet. Be careful to only drill deep enough to release the feet. You don’t want to drill into the foot itself.

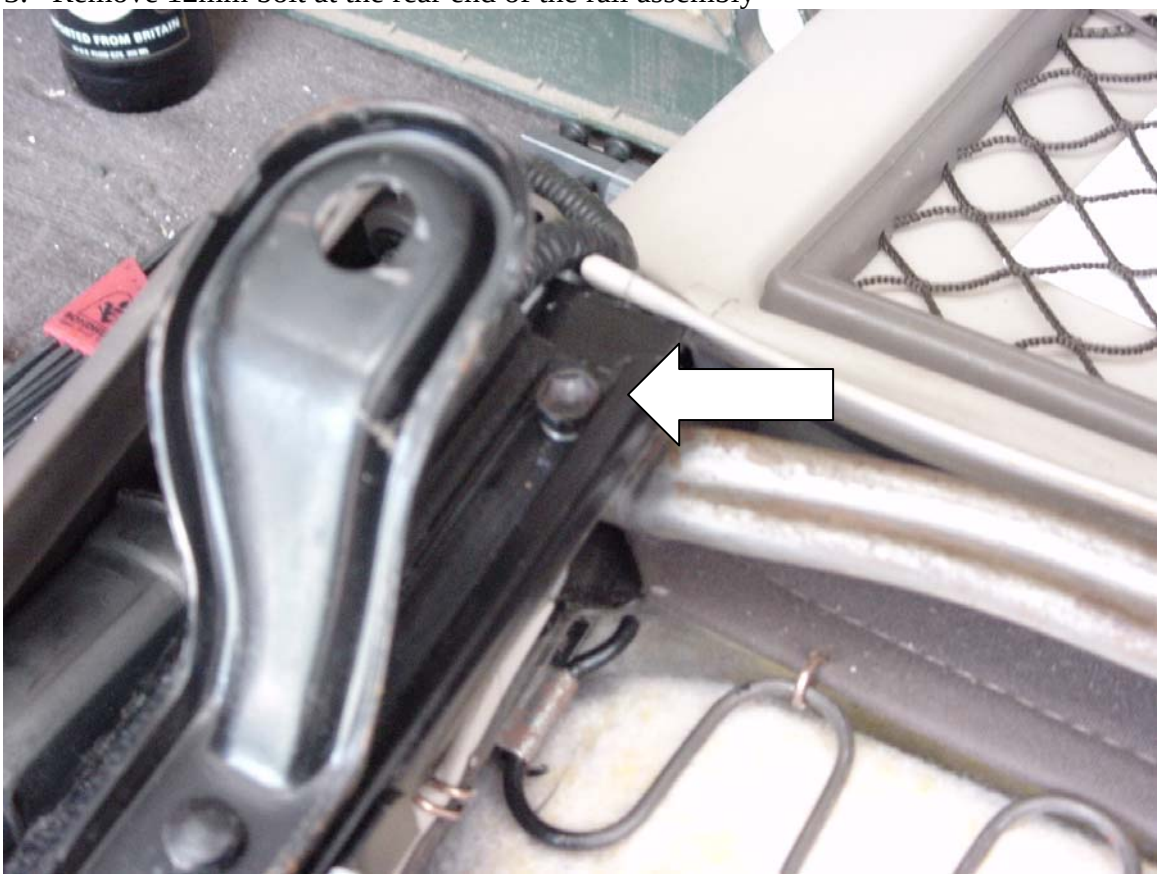


This picture shows the foot prior to drilling.

This shows the two 1/8” pilot holes that gets drilled into the rivet and spot weld.

Here you can see that the pilot holes have been drilled out with a ¼” drill bit. On the rivet you only drill down to the surface of the foot and then knock off the head with a hammer to preserve the original hole.

2. Remove feet, drive rivets out of the rail using a punch and then remove the foot. Sometimes it is necessary to hit the foot on it's side to break it free from the rails
3. Remove 12mm bolt at the rear end of the rail assembly



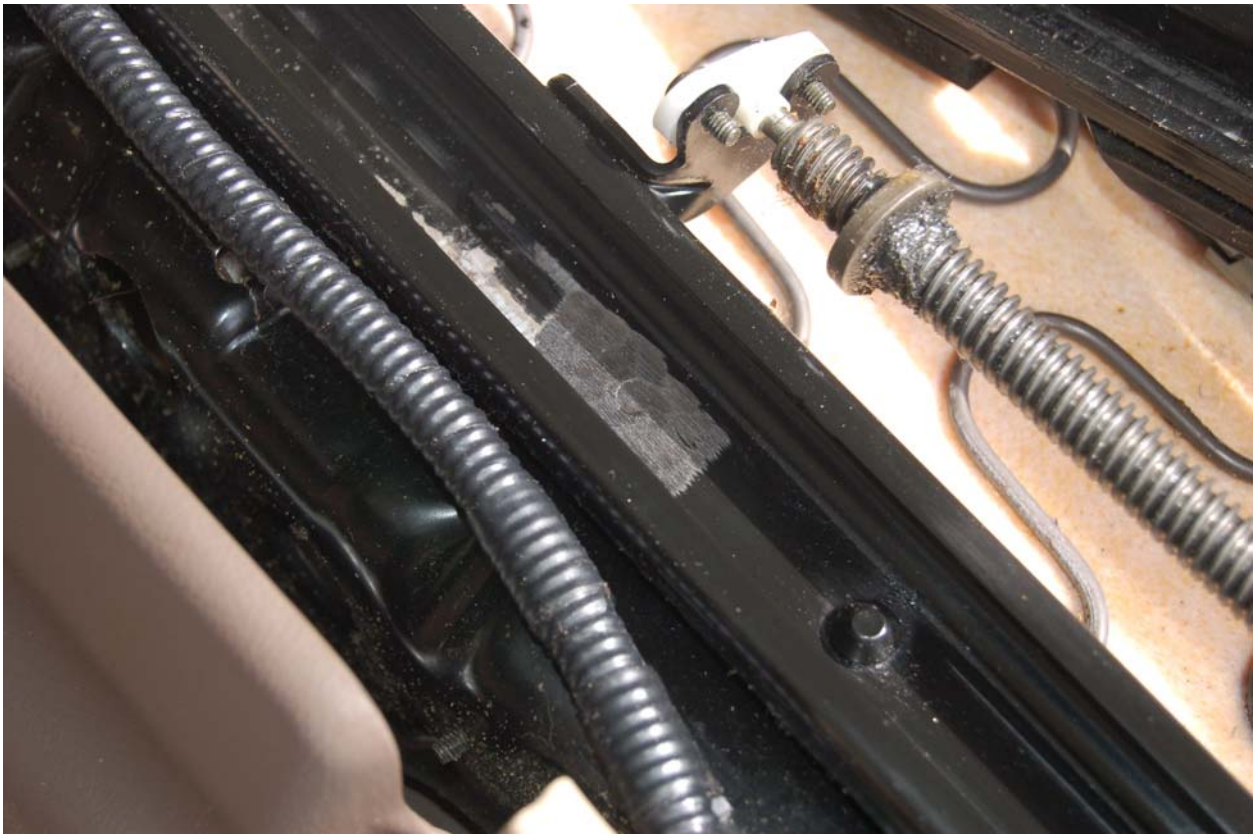
4. Remove the lower rail by sliding it backwards. Be careful of the roller bearings held within the rails.

Modifying Rails:

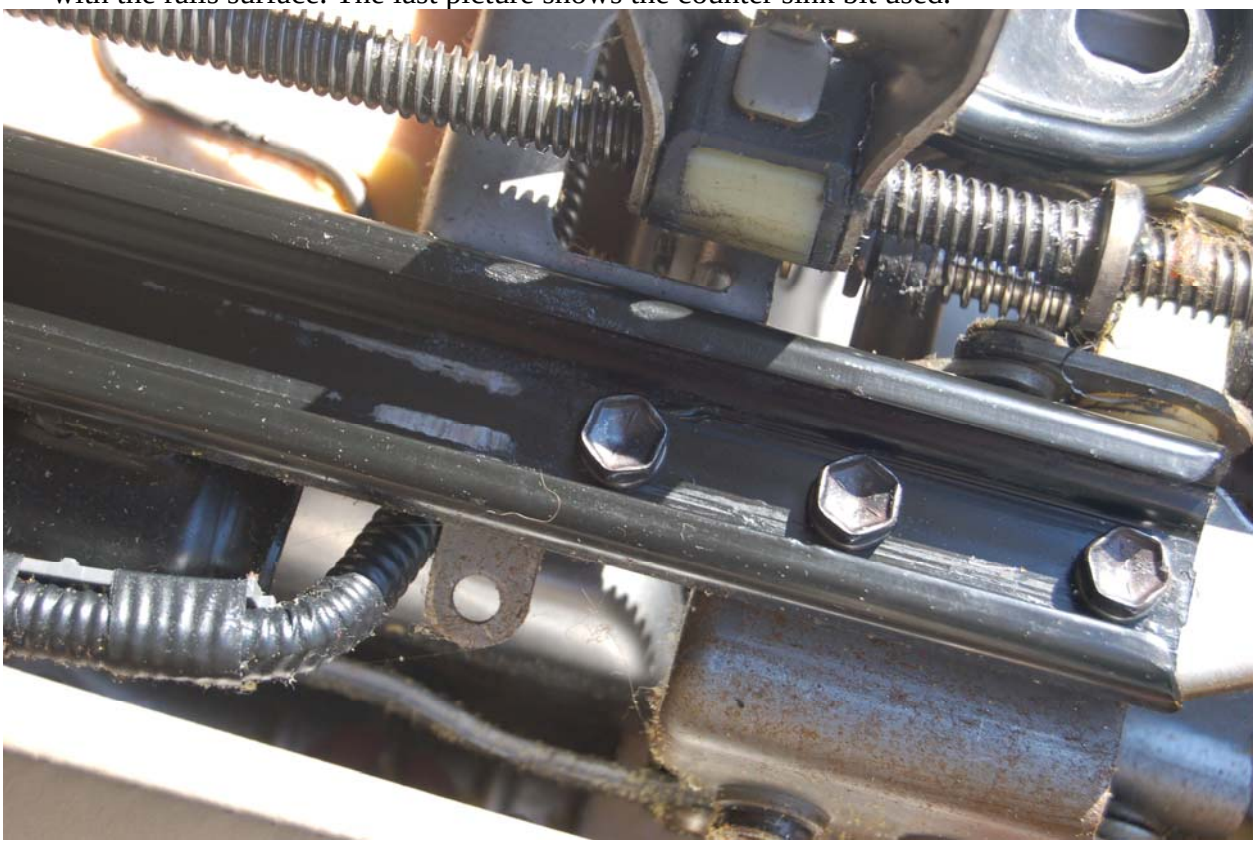
1. Locate the limiting dimple on each rail and grind them flush with the bottom of the channel. The next series of pictures will help you identify which dimples need to be ground off. There is one dimple on each rail piece. So there are 4 dimples in all that need to be ground off. One 0n each rail that is attached to the chair and one on each rail that was removed.

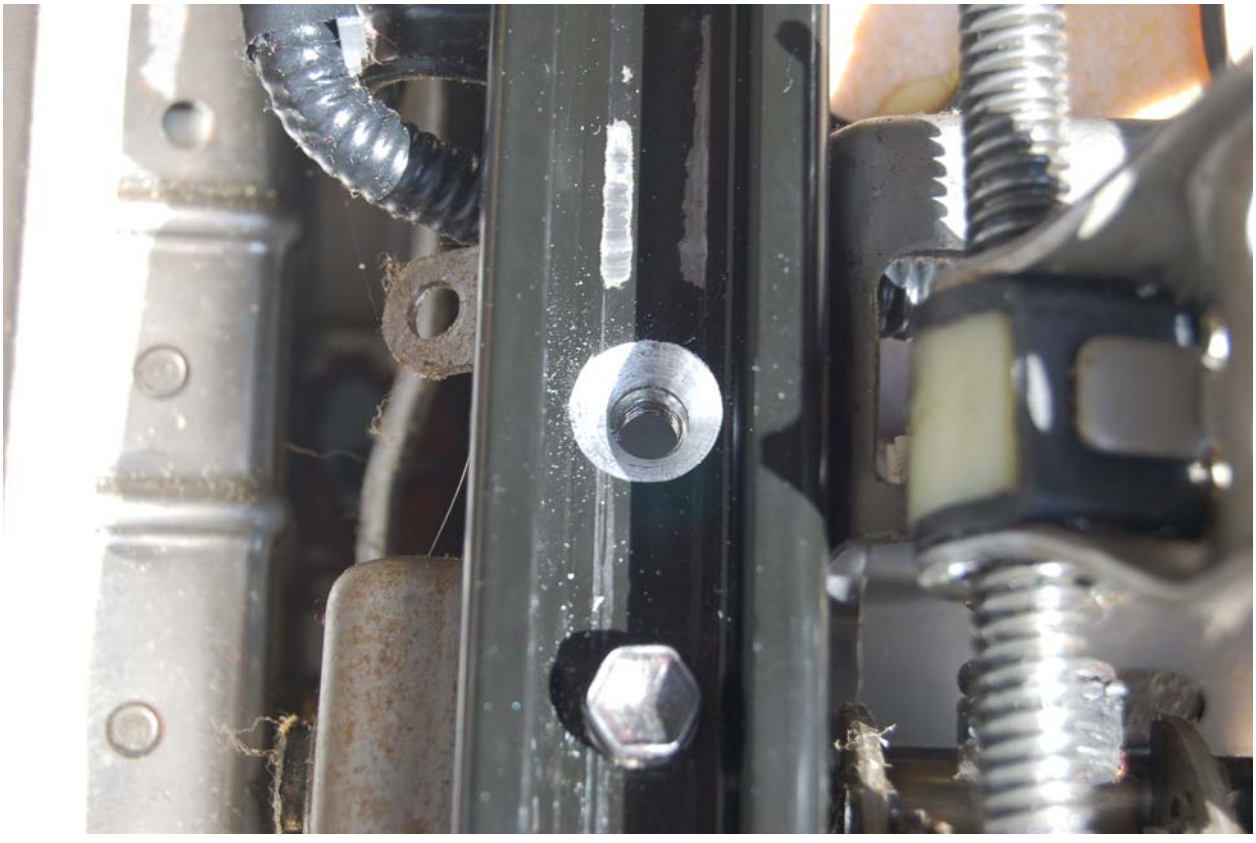
The first two pictures are of the rails that are still attached to the seat and the second two are of the rails that were removed.

NOTE: Not enough grinding and the bearings won't roll past.



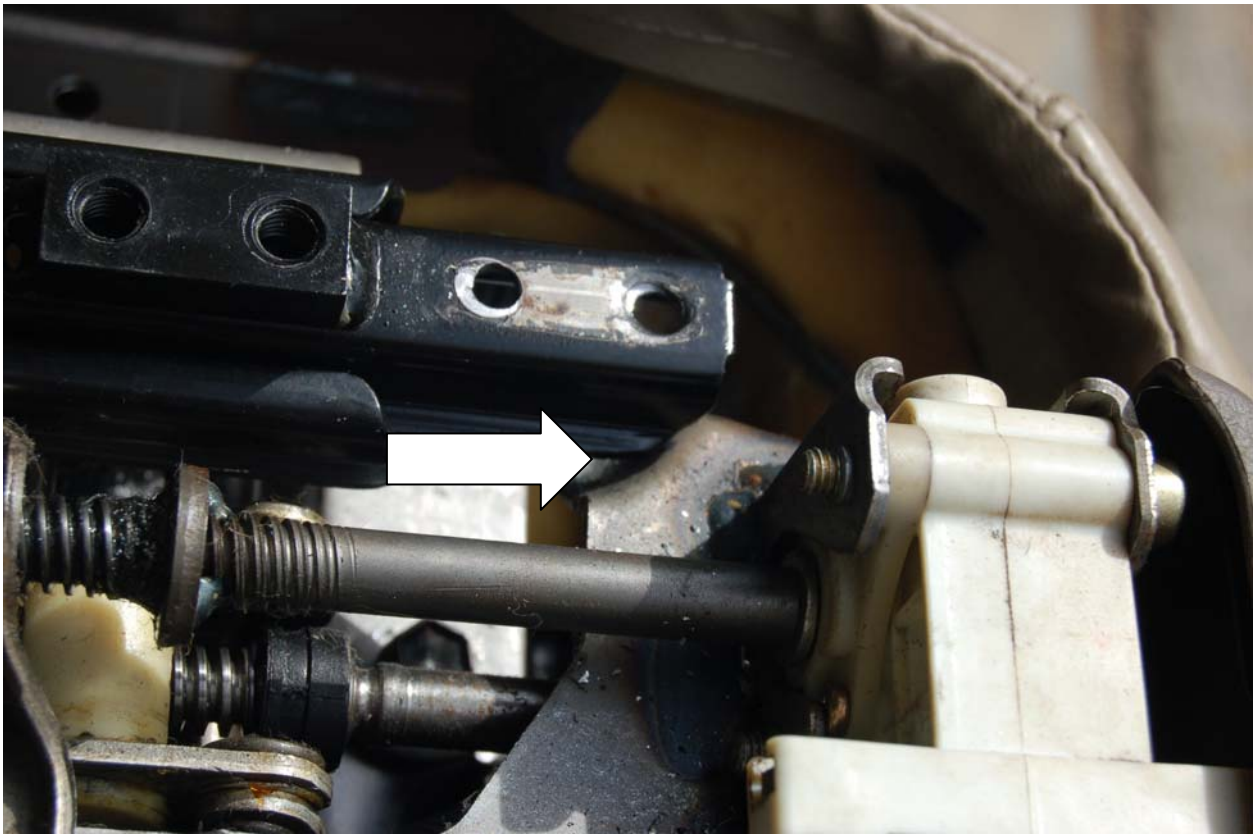
2. On the upper rail at the front there are 3 12mm bolts. The rear one needs to be removed and replaced with the 8MX16 flat head bolt. You will need to countersink the hole for this bolt as the rollers will now travel over the top of it. The next series of pictures shows the bolt that gets removed, countersinking the hole and the flat head screw in place flush with the rails surface. The last picture shows the counter sink bit used.





3. Cut or grind a relief on the lower rail to avoid an interference problem with the frame. The relief needs to be about 2” long from the front of the rail.

This picture shows the contact issue with the rail that can now move further forward because of the nubs being removed. When done removing the side of the rail make sure it doesn't contact this area by inserting the rail and pushing it as far forward as possible. When the rail is inserted completely you should feel and here the bearings hitting the new limits of the rail.



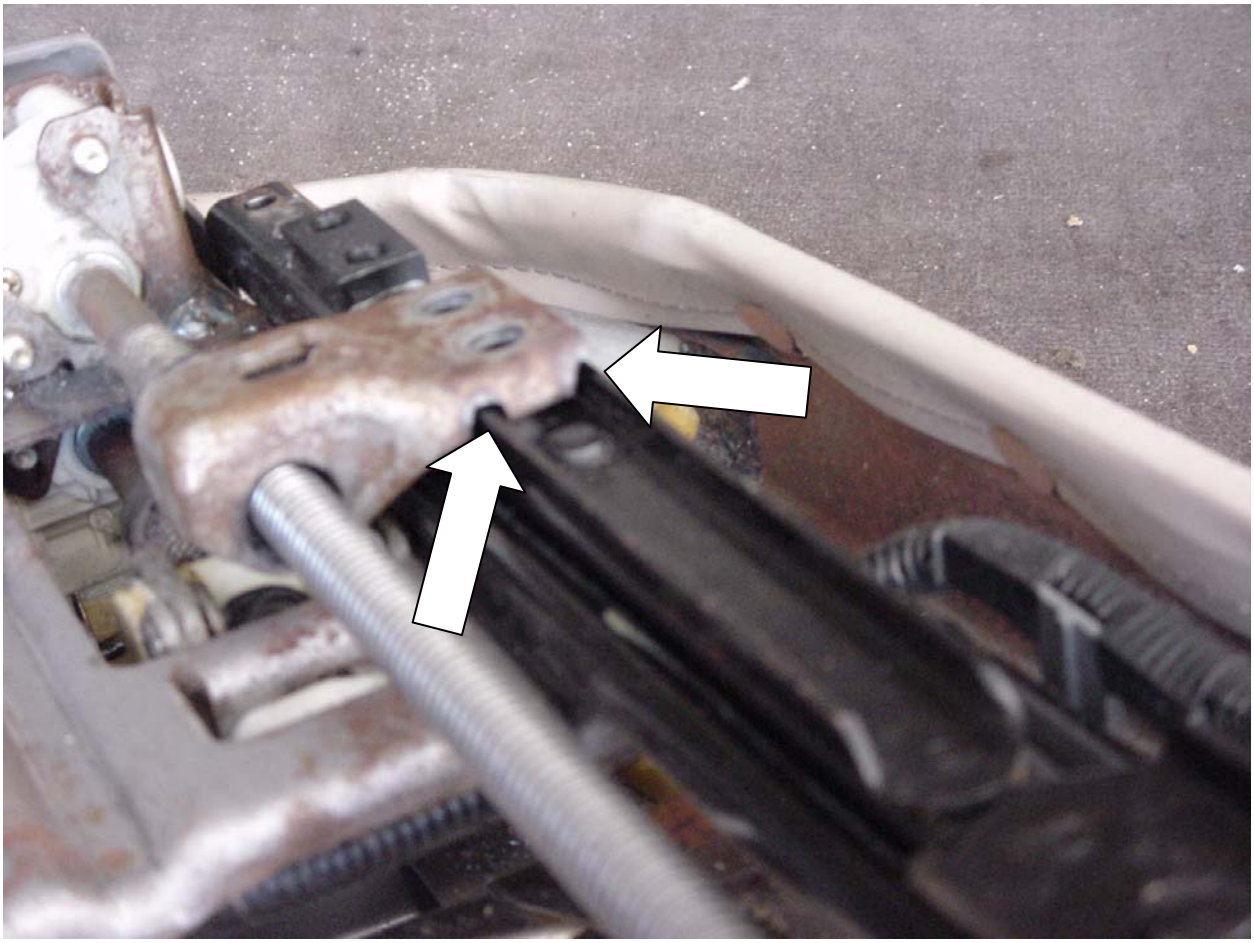
The next series of pictures shows a stock rail and then the material removed to allow it to not contact that area

Remember, the rails get ground on the inside of their perspective sides. So if holding the rails side by side the ground edges should face each other.

4. Clean rail assemblies and lubricate with bearing grease and slide together.
5. Assemble and check that the rails now move smoothly and clear the seat frame when pushed further forward.

Installing Bracket:

1. On the outboard rail grind a relief in the following nut assembly as shown to eliminate its interference with the rails construction.

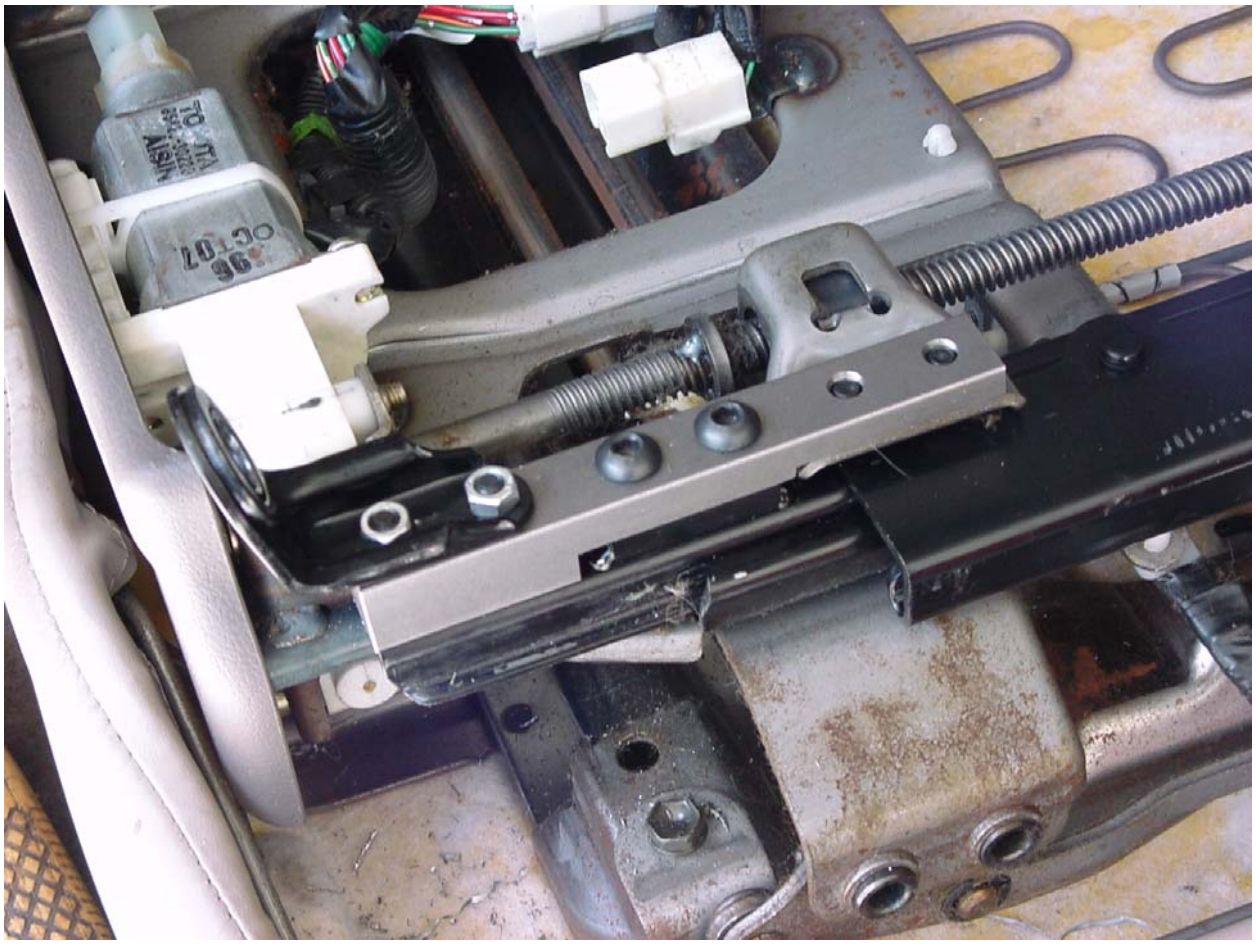


2. Using 2 8Mx10 bolts, bolt the bracket to the following nut assembly tight enough to hold its position but still allow for movement.

   NOTE: if you can't rotate the nut assembly because it is hitting the limit washer on the lead screw DO NOT rotate the lead screw by hand, this will strip out the gear box!

3. Rotate the bracket into position and align it to the 2 holes of the front feet and the 2 holes of the following nut's original position.
4. Bolt the bracket into place using the 6Mx30 bolts and nuts attach the front foot and using the 8Mx16 bolts in the old following nut position.
5. Once the bracket is in place adjust the following nut's position so that it is aligned straight with the lead screw.
6. Now remove the 8Mx16 and 6Mx30 bolts, rotate the bracket and completely tighten the 8Mx10 bolts to secure the following nit's position.
7. Now rotate the bracket back intro place and replace the 8MX16 and 6MX30 bolts. However this time use some high strength thread locktite 271 on the nuts for the front feet. Adjust the position of the bracket so it is flush with the end of the rail.

NOTE: be sure to follow the suggested procedure to ensure a good bond between those surfaces. Also at a later date if disassembly is required a butane torch found at Radio shack can be used to heat the nuts enough to crystallize the lock tight and allow easy removal



8. Replace the seat and enjoy added leg room.

Disclaimer: This modification is intended for offroad use only and the user accepts all responsibility and risks from performing this change.