

E46 Armrest into E36

Initial investigation:

The E46 armrest is actually a bolt-in part into the E36 chassis. The 3 bolt-pattern that hold down the armrest console onto the transmission tunnel is identical. Therefore, there have been a number of conversions that basically use the E46 console, hinge, armrest, etc and bolt it into the E36, with relevant links and information posted on the internet.

The problem:

The E46 armrest won't fit, without some modifications, with the rest of the E36 console trim. Basically, the hinge point of the armrest is roughly ½ inch further forward, and ½ inch higher up, relative to the location of the E36 hinge axis. Additionally, the E46 armrest hinge assembly is wider than the E36, which means cutting the console trim that normally curves above the 'ears' of the E36 console.

The solution:

One solution to the problem is to effectively use the hinge part of the armrest console/carrier from the E46, and the base from the E36. This will position the hinge axis in the correct location in the E36 interior, without leaving unsightly gaps or holes, or expose the hinge mechanisms. In order to do this, one has to cut both armrest carriers at the appropriate locations, and then either glue or bolt the remnants together.

What I did:

Here's some pictures of the final product:



View from behind: You can see the cut out of the E36 console piece. I did not do a very good job, personally, as you can still see the cut on the left side. The right side is better.



From above. You will notice the fore/aft position is nearly perfect.



From the side: You will notice that the height isn't perfect. Although not as bad as the standard E46 console carrier, this can be improved, and there is a simple solution to this when looking at the cut lines illustrated in the procedure later in this document.



From the front: The old E36 intermediate piece doesn't fit as well as before. However, this can be fixed by the changes to the cut lines, as mentioned before. Others simply remove this piece all together.

Procedure (with correction):

1. Cut the E36 console carrier at this position (where you see the white piece of paper at the top of the picture).



2. This leaves a nearly flat plane to which to glue on the E46 hinge. And it retains the strength of the E36 console carrier (X-bracing you see).



This picture shows the remnants of the top hinge of the sacrificial E36 console carrier that I had.



You will notice that there is a lot of area for which the JB weld (epoxy) can cure and adhere to.

One can use a grinder to cut this, as it is very hard plastic. Also, make sure that the surface is flat, although a bit of coarseness on the surface will help the epoxy to adhere better.

3. The next step is to cut the E46 console at a similar location. This is where the improvement can be made. The E46 console has a similar, “twin-floor”, at the base of the hinge.



This picture shows the E36 console carrier, but the E46 is similar. The 'twin floor' at the base of the hinge is highlighted in red.

On my first attempt, I cut the E46 console carrier along the white line, leaving the bottom of the console looking like the following figure. Ideally, one would cut it at the yellow line (same as where the cut is on the E36 console carrier). This will move the hinge lower in the E36 vehicle, and avoid the problems of having the hinge mechanism $\frac{1}{4}$ " too high.



E46 console carrier cut

4. Once the E36 console carrier base is ready and the E46 console carrier hinge is cut and ready, all you have to do is glue them together. Using JB-weld epoxy is ideal, as it will create a strong connection between the two. Make certain to align everything correctly, less your new E46 armrest will be misaligned in the car. JB-weld comes with simple instructions to use.

5. Install your 'adapted' E36-E46 console carrier in the car, reinstall the E46 armrest itself, and all the E36 console parts. One can take more care in cutting the plastic E36 hinge cover, so the cut lines are smooth and not jagged. (I was not so careful, and thus my fit and finish is not 100% perfect, but it's 90% there; also by adjusting the cut line in instruction 3, you will have the hinge axis lower, and thus improve fit and finish by just doing that). And in this method, one resolves the issues of the E36 console trim parts fitting/bolting onto/around the E46 console carrier, and the E46 console carrier hinge location being too far forward and high.

-Chris Graff
February 2007