

## Article

### Repairing a Broken Battery Door Hinge Pin

Of all the components that can break on an ITE style hearing aid, nothing looks more ominous as a busted battery door hinge. Your customer may bring the hearing aid to you with the battery door and hinge pin barely attached, or missing these pieces altogether. Either way, before you send it to the repair lab here is a quick fix that you can perform right in the office.

First though, if this unit is still repairable under warranty then by all means send it back to the manufacturer for repair.

Start by cleaning any debris that may still be in the hinge pin area. In other words, you will likely find a small crater where the hinge pin used to be, and there may still be some plastic attached that is loose. You want to pick out any loose or partially attached plastic. Scrape the crater a little if necessary to make a nice spot for the repaired hinge pin to sit. Now, you may have a situation where the hinge pin is still partially attached on one end. If the hinge pin is secure on one end then leave it in place and remove any loose plastic from the damaged end if possible. If the hinge pin is still attached but not very secure, you will be better off to remove it and any plastic that was holding it in place.

If you are lucky and still have the hinge pin, then push the pin firmly in place. If the hinge pin is already partially in place, ensure the damaged end is pushed into place firmly. If you do not have the original hinge pin you can make one. A standard staple is the perfect diameter to fit most battery doors. If you need a little larger pin a 50mm quilting pin will work also. Cut the new hinge pin to length and install as above.

Using a toothpick, apply a drop of UV material on each end of the hinge pin and cure with an UV cure device. The drop should be a similar color to the faceplate if possible, and should be big enough to resemble the original hinge pin ball. Reapply if you need to make the hinge pin ball bigger.

You may find that to make the hinge pin ball big enough you ended up with some material spilling over into the batter door compartment so that the battery door will no longer fit. If this happens simply cut and scrape away any excess material with a razor blade or scalpel until the battery door fits.

#### About the Author

Chris Perkins is the owner of Lightning Enterprises, and facilitates the Lightning Enterprises newsletter. He has worked in the hearing aid industry since 1991 in hearing aid manufacturing and product development, as well as equipment and process consulting.