# 35 Commander Shower drip solution

By Tim Miller and Bruce Harkness

### Introduction:

Some time ago Bruce Harkness posted that he was attacking the dreaded shower drip and replaced original plastic valve seats with new brass seats. I did not realize these were plastic, I had reseated using seat tool to little avail. Basically I forgot one of my mantras, It's amazing what you find if you look. Back to the boat and look at valve level, sure enough they are plastic. All these years I had merely operated on them while standing and unable to see the real problem.

Both Bruce and I have problems with the hot water seat. Brute force and aggravation overcame the obstacle and resulted in a dripless shower. Bruce thanks for leading the way. Now if I could just get the hot water to not stink!

The original shower in our boats drip constantly. Bruce came up with a fix, better yet it worked for Timtation as well. Below are photos of the repair and then the discussion of the repair process.

### Photos of the repair by Tim Miller

1. Handles off



## 2. Valves out





## 4. Valve with seat and screw



### 5. Plastic seat and washer



## 6. Hot water side frozen in place



## 7. Cold water seat in place



### 8. Back together



http://commanderclub.com/photo/albums/bruce-h-and-tim-m-s-magnificent-shower-repair

## Discussion of the repair process

Bruce: Sent May 15

Went to a large plumbing supply store in Knoxville. The new brass seats were 7/16 24 thread fine pitch. The counter guys said the cartridges were Illinois Bronze units. They had some new metal knobs that fit. Fitting it tomorrow if the day goes as planned. They said it was critical to teflon or pipe dope the threads on the new seats. At least I won't crack the plastic parts trying to stop the drip.

#### Tim:

Let me know if this is successful. I am so tired of the drip. Shower head shut off valves are meant to nearly stop flow evidently because all I have tried produced at least a drip per minute.

Bruce: Sent May 16

It worked! The seats have 2-3 times the sealing area of the old plastic seats. They feel much more positive sealing in the hand. The other seat was more difficult to remove. I ended up splitting and peeling it out. They had 1/4 inch drive center holes, but that one was stuck. Your biggest challenge may be removing the old seats.

Tim: Sent May 16

Bruce, is yours the original shepard's crook with the chrome base? Mine seems different internally. It has the seat in the base and the faucets when removed have a stem with a flat neoprene washer held in place with a brass screw. Thanks

Bruce: Sent May 16

Sounds similar Tim. The seats should be replaceable. Mine had 1/4 inch square drive holes in the center and screwed out if the base. I have seen seats with hex drive as well. Those plastic seats may have not been original, but the plumbing fixture sure is.

I use the shutoff so i don't have to adjust the hot/cold mix. Worst case, you could put a regular ball valve in that spot.

Tim: Sent May 16

I'll be at the harbor tomorrow and hope to get time to check it out. I have never looked at the seats other than to see if the reamer had made a difference, fat eyes, narrow hole, big light didn't invite analytical inspection of what I didn't expect to find.

Thanks will update if I get the chance to work on the project. It would be so great to lose the drip.

Bruce: Sent May 16

One of the good things about 50 year old stuff, it is rebuildable. Faucet seats were all replaceable at one time. The slow drip actually erodes a channel in the brass seat. BTDT with old faucets in my parents house. If I read your last reply out of context, it could be a urology or gynecology consult. ©

Tim: Sent on May 17

Bruce, how did you get the square seat out. I'm figuring to use the right size screwdriver blade or a pair of square nuts jammed together. It is a plastic seat but a ridge so it works with a new washer but soon imprints a groove from the ridge and successive tightening works until the washer screw bottoms out.

Bruce: May 19

I assume a plumbing supply or hardware store would have the proper tool. I used a 1/4 inch square drive extension on one and it worked. Any sort of square bar stock should work also. A screwdriver was also tried on the other, but I ended up chipping away at it carefully and removing the pieces. It would be good to get one out whole so you can match it up. If that fails, I can call the plumbing supply store and get the info on the seats they gave me. I know for sure they were 24 thread/inch. I did not get the part info, in retrospect I should have written in down in the boat logbook.

You can see why the old seat is such a poor seal, the new seats have a much broader sealing surface. The sealing surface also protrudes further out towards the cartridge, so you have to back the faucet cartridge out in order to screw it back into the fixture.

It will fix the leak. We should probably post this to the forum as this has got to be a common problem.