

Fixing the phantom auto misadjusting side mirror position - TSB 513608

Summary of My Problem (and others):

When I use the mirror-fold button I hear a loud crank and pop sound coming from drivers side mirror and same going back down.

As soon as this happens, it is misaligned with the main arm and have to manually pop it back into alignment. This happens every time I use the mirror fold.

I'm having a similar problem on my 2006 330xi. Both mirrors are F\$%##\$ up and it's driving me nuts. The strange thing is..is that the mirrors tend to fold out and all the way to the 12 "o" clock position (so pointing towards the front of the car) when i press my unlock button on my car. Sometimes when i start my car they do it.....and once in a while, though rare, when i'm driving - all the sudden the mirror will just simply fold out all the way. It has a mind of its own.

Some important notes taken from the youtube videos, comments, and forum posts:

- TSB number is 51 36 08
- What size torx head is on the screw that holds in the motor → screw is T-10
- Rolled the windows down to make popping the mirror off on the car side a little easier
- Use a plastic interior trim tool.
- I ended up not sanding anything, instead I used the CRC QD Electronic Cleaner on both contacts and blew them out with compressed air, followed by Permatex Dielectric Grease

There are 4 potential fixes for this problem.

As stated above, one involves disabling (cutting the wire) the auto fold-in mirror capability but I'd like to avoid doing that as it appears this malfunctioning mirror problem is a common problem on BMWs of my age (there is an official BMW TSB on it) and there a couple of other fixes for it as found on youtube and the forums. Although one poster discusses just using WD-40 and lithium grease (or similar like PB Blaster) and not even disassembling (taking the back cover off) the mirror as a solution that worked, I'd like to do Fix #1 (which temporarily unplugs the mirror motor forcing a reset?) and maybe then also Fix #2 (just cleaning and lubing the pin area) but I'll leave it up to you guys to decide.

Fix #1 (official BMW TSB solution)

<https://www.tsbsearch.com/BMW/SI-B51-36-08>



BMW TSB SI B51 36 08

Make:

BMW

Number:

SI B51 36 08

Date:

11/1/2013

Title:

Outside Door Mirror Moves When Locking Or Unlocking The Vehicle

Summary:

The door mirror tilts immediately after unlocking or locking. The mirror position does not correspond to the memory position preset by the customer. Pressing the seat memory button typically will return the mirror to the stored position. **It is caused by Poor electrical contacts of the mirror drive in the mirror housing.** The problem has been integrated into ISTA diagnostics. Complete the diagnosis test plan using the latest ISTA version. The test plan can be accessed via the following path: "Information Search / Function Structure / Body / Mirror / Exterior mirrors / Driver's or passenger side / Exterior Mirror Malfunction," and then press "Start Search." Select the test plan "AM5102_00010."

I have a similar issue- most likely from the previous owner's use of a car wash. When I use the mirror-fold button I hear a loud crank and pop sound coming from drivers side mirror and same going back down. As soon as this happens, it is misaligned with the main arm and have to manually pop it back into alignment. This happens every time I use the mirror fold or if I go a bit too fast the wind pushes it out of alignment as well.

I'm having a similar problem on my 2006 330xi. Both mirrors are F\$%##\$ up and it's driving me nuts. The strange thing is..is that the mirrors tend to fold out and all the way to the 12 "o" clock position (so pointing towards the front of the car) when i press my unlock button on my car. Sometimes when i start my car they do it....and once in a while, though rare, when i'm driving - all the sudden the mirror will just simply fold out all the way. It has a mind of its own.

See this forum post <https://www.e90post.com/forums/showthread.php?t=683764> where there is a PDF document that shows step by step with pictures how to do this fix. I've also attached this document.

Attached Images

 [DIY - Fix BMW e90 phantom side mirror misadjustment - TSB 513608.pdf](#) (488.5 KB, 32877 views)

TSB number is 51 36 08

I'm convinced that disconnecting the motor forces a reset of some kind. The whole assembly went back exactly as it had come off with no work or cleaning needed on the contacts.

Those look like aluminum pins on that plug, could be oxidation and just re-seating it clears it up. I had this same issue years ago on the main wiring harness on a dodge truck. Whatever pin it was it was always the same one (happened more than once) b/c it took out the dash cluster (lights and gauges) every time. The solution was unplug harness from the fuse block, blow it out and plug it back in.

Just did the DIY in about 10 minutes. One thing I haven't seen mentioned yet (probably obvious) is that I **rolled the windows down to make popping the mirror off on the car side a little easier.**



It took me about 10 minutes start to finish. Popped off the mirror with a plastic trim tool, cleaned the pins with a pencil eraser (trick I learned working on radios in the military; those things are all put together with these aluminum pin connectors), blew out the other side with canned air, and put it back together.

There was no visible corrosion on the plugs on mine, but i sprayed down with some electrical contact cleaner and used some wire wool to rough up the surface abit and finished off with some dielectric grease - can say my phantom mirror issues haven't reared their head again this week; previously i'd have to readjust every other time the car was unlocked so thumbs up from me!

Wilsjay, you very kindly took the time to post instructions and photographs to solve a common, but evasive problem. The very least I could do was take the time to register for this forum and offer my thanks.

THANK YOU, THANK YOU, THANK YOU!

It took me half an hour from start to finish and worked like magic.

This very problem (on my '08 E92 335d) has been driving me mad for over a year, and common internet wisdom suggested the only solution was a new mirror motor. I wonder how many people went down that expensive route unnecessarily?

I must admit I was surprised it worked, as my car is always garaged and the contacts all looked brand new. So maybe simply unplugging the motor forces a reset?

Regardless: it works!

Update: Done, I hope this fixes the mirror problem. It took ten minutes. I used a plastic car molding pry tool I have to pop the mirror off after pointing the mirror low and inside. I used the dielectric goop for light bulbs and electrical contacts, as I had that laying around. I will post again if problem comes back soon. 71k miles on my 335i and going strong.

I just did this today. Took about 10-15 min. Mirror is easy to pop off, just tilt down and in towards the window like others have said. Hopefully this will fix my phantom mirror. This thing has been moving all over the place lately... I know it does it with the central locking button, but it also moved if I used my spare metal key to lock or unlock my door.

simply used alcohol wipes to clean the connectors and been good since

To anyone that tried this and didn't work, I'm part of that group... 😞. My issues is just the passenger mirror folding down and not returning to correct location when going from reverse to park and also moves when locking car. I cleaned all the terminals, greased them up and it worked fine for the initial test and then started not working and doing the same crap. My diagnostic tool is giving me an error for this module. Mine looks to be truly bad and needs replaced 😞

Fix #2 (lubricating the spot that has the pin & spin – involves drilling a hole)

<https://www.youtube.com/watch?v=4Ev9bxBcWLk>

There is a pin that gets stuck in the up position and does not go back down and the lubrication wears out or gets crusty due to weather and dirt. The pin does not go back down so the mirror can't hone in on where it is suppose to lock in to place. This solution involves drilling a hole in the spot that has the pin & spring mechanism and lubricating the area thru that hole.

→ the video uses 1/16" drill bit but it seems a 1/8" drill bit will be easier to get the WD40 in.

→ I would not just put hot glue over the top of the hole in case some of the glue leaks into the hole. **Use a small computer screw to plug the hole** or put a small (actually tiny) piece of cardboard or metal over the small hole, then use the hot glue gun (as the cardboard or metal will prevent the glue from dripping into the hole).

Some comments other people made:

- showed the video to mechanic. **He followed the steps, but didn't drill a hole. He just pried at the bottom of the gear (where the pilot hole was pointing), and with that little tiny gap, sprayed lubricants.** The mirror's correct movement was then restored. He said that it was the same idea of lubrication, and added that if the mirror was moved every day, it would not have a problem; the trouble was due to inactivity. Anyway, all little problems were all little different. Might or might not be relevant to others. thanks.
- This is all good. My experience was a little different. 1) The pin must be lubricated and free to move. Notice the mechanism is spring loaded. You can tilt the mirror while it's in the folded back position with the cover off and open up the gaps between the moving parts. Try the WD40 and tapping and poking and prodding from below through the opened gap. Maybe you won't even have to drill, although drilling and packing grease in there is the baller move. 2) WD40 is a penetrant, not a lubricant. If you're lucky enough to get the pin moving, wipe away the excess WD40 and devise a way to get lithium grease on that pin and work it in and out. Now tip and tilt the mirror every possible way and get lithium grease into the gap. Rotate the mirror manually and you'll notice it starts moving a lot easier. 3) There could still be a synchronization issue. There is an intermediate disc. It can rotate WRT to the car and WRT to the mirror. I think it's meant to stay put unless you drive the mirror into a tree, then it's a safety valve. You have to get the system back in synch. There's a step by step TSB method but trial and error works, especially with the cover off so you can see the moving parts.
- I used the 1/16 drill bit like some mentioned but its a too small in my opinion. I could not use any pointed tool to push pin with. I used the same drill bit to push pin back and forth along with lubricant till i could hear the click. For reference use a bigger drill bit like 1/8".
- I used a 1/16 drill bit and only needed to drill about 1/8 inch, but the fix worked perfectly.
- I drilled a hole with 1/8th inch bit and only went down about an 1/8th and used my WD40 with long straw and bam!!! 20 second fix.. worked immediately
- **I used a computer case screw (instead of hot glue gun) to plug the hole** when I was done as a mechanical mod going forward in case I need to prod the pin with a push again in the future.
- **sprayed brake cleaner in until it leaked out the bottom and then refilled with wd40. Mirror works perfectly now. Thank you! Brake cleaner eats up gunk and grime well.**
- **Cleaned with carb cleaner** and some swings, a good knock with a screw driver, and **some 75w-140 gear oil** got it all back and working again.
- Awesome fix! Best out there! It keeps the factory function with minimal work/disassembly. I did a fair number of rounds of lubricant, tapping with a brass hammer, rotating the mirror and poking at the pin with the awl like you said, but it worked like a charm.
- I never could feel a pin moving up and down, but after three squirts of **PB BLASTER** <https://www.canadiantire.ca/en/pdp/pb-b-laster-rust-penetrant-311-g-0381510p.html> and five or six manual rotations it started working! I used an 1/8" drill bit
- I watched your video and followed the method with drilling a hole and luckily and found the punch out hole about .020" from my pilot hole center. I then went up a drill size to 7/64" and could see the spring in the cavity. I put some PB blaster and tapped from the top with an awl and it still wouldn't go, though I did not give up. I continued to work the power mirror via control and tapped the housing and pin adding more penetrating oil and then all of a sudden the mirror moved on it's own to the correct resting point. I did a few more flushes with the pb plaster and worked the power mirror function as I applied moderate pressure to the pin to make sure it was good and free. you can feel a slight feedback in the awl when the mirror gets to the rest position. I then filled a syringe with a thin synthetic teflon grease and pumped it into the hole while working the power mirror function a few times. Lastly, capped off the hole with hot glue just like you said. This fix works great and is efficient, great job on figuring this out. The only thing that would improve this would be to make a template with dimensions to locate the punch and drill holes.
- **After drilling the hole and unblocking/lubing it became clear my problem was that whatever the pin was supposed to stop in was worn out. I drove a screw through the same hole to push the pin down even more.** the mirror retracts a bit slower but it does stop where it should. Thought to post in case it helps somebody.

- Tackled that repair first thing this morning (5:00 AM). Grabbing my drill and attaching a 1/16" bit took longer than any other part of the process. The hole that I drilled was almost exactly over the pin which was very clearly visible. **I pulled the bit out of the drill and used the reverse end in a way similar to you and your pick(s). It took almost no effort in pressing the pin until it noticeably retreated a bit deeper into the "hole."**

Fix #3 (remove back mirror cover, lubricating under rotating part of mirror – no drilling involved)

→ Might want to tape off area on car (metal and glass) with a garbage bag so lubricant spray does not get on car or windows)

JUST FIXED THIS DIFFERENT WAY!!!! JUST SPRAYED A LOT OF WD40 UNDER THE ROTATING PART OF THE MIRROR. Remove plastic cover, then just pull whole mirror up (or bend it to the side) so there's a thin space under the rotating mechanism between the mirror and car holder. (Buy small 100ml WD40 with thin pipe/straw, so you can squeeze it deeper into that 1mm space what you will have when pulling mirror up or bending it to the side. Note! You can pull or bend it just slightly, just few millimeters). Spray WD40 into that space aiming to the area, where this stuck thing is located (that thing with spring, what this guy in video oiling in the end), keep removing excessive WD40 with paper towel. Rotate left right, shake a bit the whole mirror, not too much, don't damage anything, then repeat. After a while (in 5 minutes or may be 1 hour) oxidation on the lock will be gone, the mechanism will get unlocked and working again. No need to damage the mirror. Then just put plastic cover back.

I avoided the drilling, and simply clean where the two folding parts meet w WD40, and then sprayed lithium grease into those gaps. Rotate the mechanism by hand several times so the grease is in place, and voila, my problem is fixed.

Q/ Did you even remove the cover? Or just spray into the cracks and move around? I know the cover is pretty old and may break tabs now. So I'm trying to avoid that.

A/ Yup I did remove the cover, clean the mechanisms, and either spray WD5 or Lithium grease into the crevices. After several times moving them, hopefully the pin will stick

This worked for me this morning. It was quite messy though. So I think the cleanup of all the spray from wd40 took longer than the fix lol. Took cap off. Gently lifted on assembly. Sprayed generously...moved back and forth, sprayed again. Did this a couple times and probably the 3rd move it clicked hard and was working. I did it a couple more times for good measure then closed everything up and cleaned.

Showed the video in fix #1 to mechanic. **He followed the steps, but didn't drill a hole. He just pried at the bottom of the gear (where the pilot hole was pointing), and with that little tiny gap, sprayed lubricants.** The mirror's correct movement was then restored. He said that it was the same idea of lubrication, and added that if the mirror was moved every day, it would not have a problem; the trouble was due to inactivity. Anyway, all little problems were all little different. Might or might not be relevant to others. thanks.

Fix #4 involves just rotating the mirrors to a specified starting position and then using mirror button on inside of door.

<https://www.youtube.com/watch?v=DxtZqaHRicM>

I tried the solution in the video and it did not work.

But someone mentioned a slight variation of it which I did not try. I still don't think this solution (if it works) is as good as the other three.

What I did was the opposite of what was suggested here. I took both mirrors on my e92 and pushed them all the way forward, hit the button and they came back all the way and touched the side window and stopped, I hit the button about 6 or 7 times with one more time pushing both mirrors forward after the 4th try and they finally lined up perfect and haven't had a problem since. My problem started when someone came by and ripped my mirror glass out of the actual mirror and left it hanging and I just popped it back in place. Don't give up on the reset if it doesn't work the first time. It might take multiple tries.

Some other comments from posts explaining the problem:

Driver mirror keeps moving after adjusting

My left driver side mirror keeps moving every time I drive the car after I adjust it. I have tried pressing the memory with a number to program the seat with the side mirror, but it is not working. I played around with the toggle since i do not have i drive and it is not working. However, my other key fob works perfectly just not this one. How can I get my side mirror to not move and have to adjust it every time I drive my car with this key fob?

Not sure how the 3 does it but are you using the correct key fob for the correct memory settings?

i.e. saving memory settings to #1 but using key fob #2 to open the car.. ?

I have this problem and the dealer told me it's a mirror motor problem. What's funny is that the position also changes when you lock and unlock doors

EXACTLY. I had this problem on the right side, and the dealership replaced the mirror motor, been ok since.

My mirror was possessed  and needed a Catholic Priest to cast the demons out. Every time I would lock and unlock the car the Driver side mirror would start to move, Then the metal stops snapped and the mirror keeps going until the mirror faces forward (almost) I would have to manually push it back then I lost patience  and disconnected the power to the mirror.

When I took it to the dealer they said I needed a new mirror housing. So naturally I bought one and now the mirror works fine, BUT it is not aligned. it is pointing too far out in its standard position. I am not sure what to do with it at this point.

My passenger side mirror seemed to mysteriously move pointing to the ground whenever I unlocked the doors. It took me forever to figure this out. I noticed it one day while the car was running and I unlocked the doors via the dash button to let in a passenger. Took it to the dealer and they told me the "connection needed cleaning". Worked fine ever since!

I figured I'd bump this thread rather than post a new given it's the identical problem I am having. Has there been any closure on this? **I am having this issue in my 2007 E90 335.** I was always under the impression that it had something to do with the **memory seat settings?** It sounds here like a **bad motor** causes this? It confuses me that a bad motor would randomly adjust the mirror when I lock/unlock the car. Can anyone shed some light?

I took it to the dealer and they replace the mirror motor and it now works like a charm. i haven't had any problem with it. I thought it was the **memory seating but it isn't.** You just have to find a nice SA that is willing to replace it for you.