

HJ60 Rear Hatch Lock fix.

Sadly, my old girl has been off the road these last few years, but now ok after lots of work, ready to give me another 10 years of "good enough" service.

One thing that has really bugged me for ages has been the back hatch lock not working properly, and having the "push it a few times and it will open" issue.

Well...here's my writeup of the fix. If you aren't patient and don't have a reasonable array of tools available, the fix is not for you. But any competent home mechanic can do it. And what's more it now works ok.

Important things to remember. Take numerous photos along the way, before undoing anything. The mechanism is a fiddly thing that looks like it was designed by someone from mercedes! Some of the special tools needed: twisted nose long nose pliers, dremel with carbide, welding, head torch, various grinders, fingers with 5 joints instead of 2.

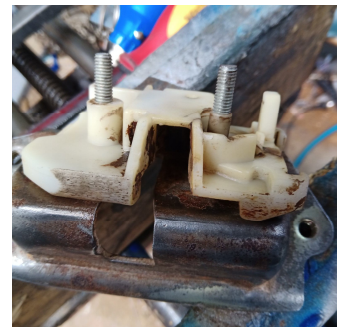
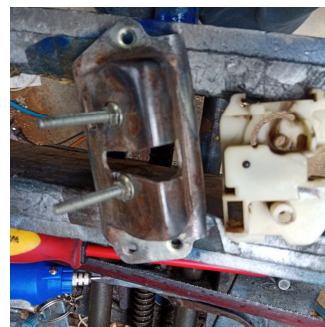
1). Removal can be really annoying. The main access is through the right hand cover plate, but having both off is a must. Undo all the click-in linkages first. Mine were a bit perished but careful wedging with a suitable small flat bar did the trick. I also had the electric lock mech. The 3 x 10mm head bolts undo and leave the external plate free, with the mechanism floating around inside. The worst part is that the latch mech needs the key barrel as far out of it's hole as possible. After undoing the cylinder slide clip, there was muck that limited how far I could do this, but once I'd cleaned this up best as possible, there still seemed to be NO way of getting the key mech fully out of it's hole without bugging up the levers on the cylinder end. It must be possible, as they put the mech in from the outside, presumably fully fitted, so I tried...tried..tried #\$\$%B but in the end was able to swing a little arm just enough to then let the latch mech glide enough to then come out. Key mechs thus remained in place. The end levers looked like they were compression riveted on, that's why I gave up and got it done without removal. (No more pondering how they did that at the factory...OK?) The pic at the end of these pages was taken after refit, to better show where everything goes.

2). The latch is now out and inspection shows the issue. The thing is held together with pissy little rivets that have completely worn holes and their tension. Careful grinding of the easiest to get at heads and the main plate on that side can now be carefully removed. You can then see the guts, and carefully remove each piece. Work your way towards the other side, carefully noting positions of things. There are 3 springs in use, don't let them fly fly fly away. Once you have it all separated, it all needs a good solvent wash. The main body is 2 plastic parts, I think done this way due to moulding constraints back then. Clean it all up best as possible and then lay it all out on the workbench.

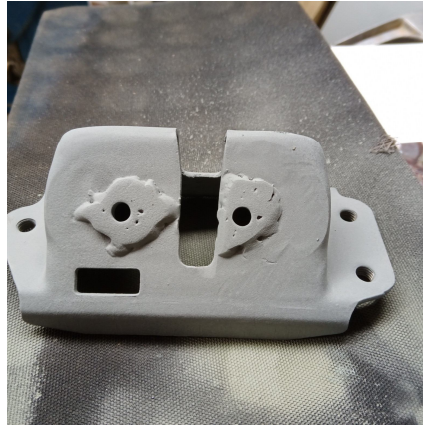


3). My fix for the shit rivets was replacing them with 5mm bolts of sufficient length. The ideal would have been a socket cap screw cut down enough so that the pivoting bits of the lock were running on solid shoulder, but I had to settle for using fully threaded ones as no suitable ones were available/suitable.

4). The main issue is that the old holes were completely flogged out on the main plate. Given that the holes need to perfectly match the hole centres in the plastic, and also that there are small inlays in the plate itself, I ended up using the flanged nuts from a 5mm dynabolt as a "starter". The screws were run through from the inside, nuts tightened down, the plastic put on them, and then with patience and gentle final tightening, perfect placement of the nuts is possible, ready for welding.



5) Welding was a bit of a PITA, as there was so much rust that I couldn't remove, even with fine wire dremel work. So I had to work inwards with the mig, and of course had bubbles here and there. After tacking, the screws were again checked that the plastic fitted ok, then full welding and cleanup done. The nuts are small and easily burnt through, which then obviously locks the threads. If you aren't a good welder practice first on something else!

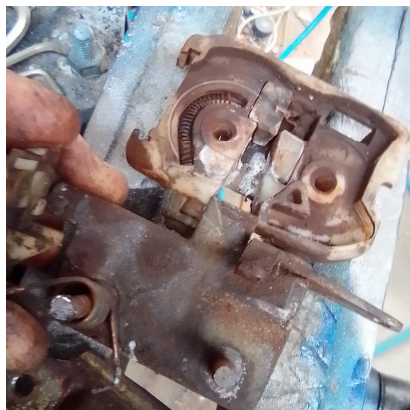


6). Once this was done then got onto the other bits. The spring that works the locking plate was ok but a bit rusted. Re-use ok with lube. There is an arc of "indent" in the main plastic body that relates to the latch plate centre, and this was a bit of a puzzle. This indent mounts a small compression spring that is quite long, on mine it was broken. The latch plate has a small pin on the back of it, which on correct assembly engages into the end of the spring via going into a small hole at the end of the indent. Thus when it turns it compresses the spring. The issue for mine was that due to age/broken spring ends/whatever, the other side of the "slot" was a bit worn and the spring could pop out where it wasn't meant to. I ended up replacing this with a suitable one marginally bigger diameter. Not perfect, but ok. On the other side of the same pivot point is a much larger torsion spring, which I couldn't really figure out what it does. Mine was quite worn and had a right angle dogleg on one arm. I think that it is a bit of an after-thought at trying to make the latch rotate better to the open position. If you put it in place, I suspect that when everything was new, the leg of the torsion spring would engage onto the pin on the latch plate, and thus assist the compression spring a huge amount, but on mine there was a fair bit of pin wear and no engagement. So that's why I reckon it was added in later production due to the pissy little compression spring not having enough grunt to push the latch open correctly. I can imagine the discussion...."Shit, the bloody latch doesn't rotate properly due to that undersized spring. Hey, if we lengthen the little pin a bit we could put a torsion spring on the other side and that will do the job, without needing to re-engineer the entire bloody thing". "And also use the millions of plastic bits we've already made....."

Initial Look.

Backplate fully off and plates out

After cleanup and the torsion spring



This showed the torsion spring orientation, but it was still a puzzle requiring pondering....

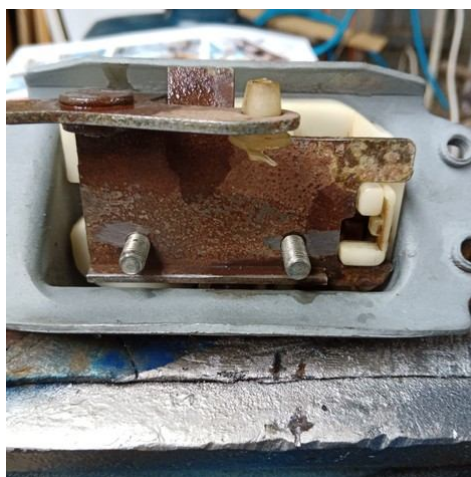
Anyway, got underway with repairing it all as best as possible. Both the strike plate and the locking plate are hardened. Very.... Ended up running a carbide bit in the dremel and simply enlarging the hole as best as possible to 5mm by parallel round and round action. Easy and effective if you're careful..tiny bite at a time till just right. The plate on the other side was tapped 5mm to suit the screws. The beauty of this method is that tension can be applied just so.... then locked up with nylocks. The plastic body needed a tiny "ream" to ensure 5mm would go through both legs ok.

Reassembled very carefully with lots of quality long term lube in place on everything. I also pondered this given it is likely a hard wearing type of plastic, perhaps made as "not needing lube due to ingress of crap upsetting things" type of thinking. But where it is located is the worst place possible to get dust ingress so I put some lube in place. Easily squirted if needed in the future. Once all screwed back together, checked operation by using a pretend latch, and tweaked the screws tension till just right. Did the nylocks up enough and checked again. The lock plate throw lever (below right pic) was quite tight due to crap and rust, but didn't undo it. Plenty of crc and firm wiggling to grind it all out and it was fine.

The torsion spring, and you can see the pin that's on the latch plate poking through the end of the little spring.

Screwing up the back plate.

Nylocks in place. Note the prints in the background for reference. Screws were shortened just enough.



Fitted in place and tests perfectly. And yes....I know that's some body rust, and the bolts are rusty. Didn't have any good bolts left in my 10mm shorty car body bolt stash, and there is only so much I'm prepared to do on the old girl re rust. I've already treated and fixed sooo much. Little bits don't matter... ☺

I don't know what the tang is for on the external plate, but it just fits neatly in next to the screw heads so I didn't remove it.

To do all this took the better part of a day, as some of it was really fiddly and needed careful thinking. With this as a guide it shouldn't take anywhere near as long.

Lastly, re the little compression and larger torsion spring, I think that their main purpose is to swing the strike plate definitely open. Given that the

very act of opening the hatch does this action, I decided that I can live with perhaps having to occasionally swing it manually if it somehow "closes" itself when open. So far it hasn't.....

Pic of internals once all back together . The blue link on the key mech can be twisted just enough with the mech pushed out enough to juusssstt let the latch assembly slide past. Head torch and no kids nearby to hear naughty words being spoken is a must!

