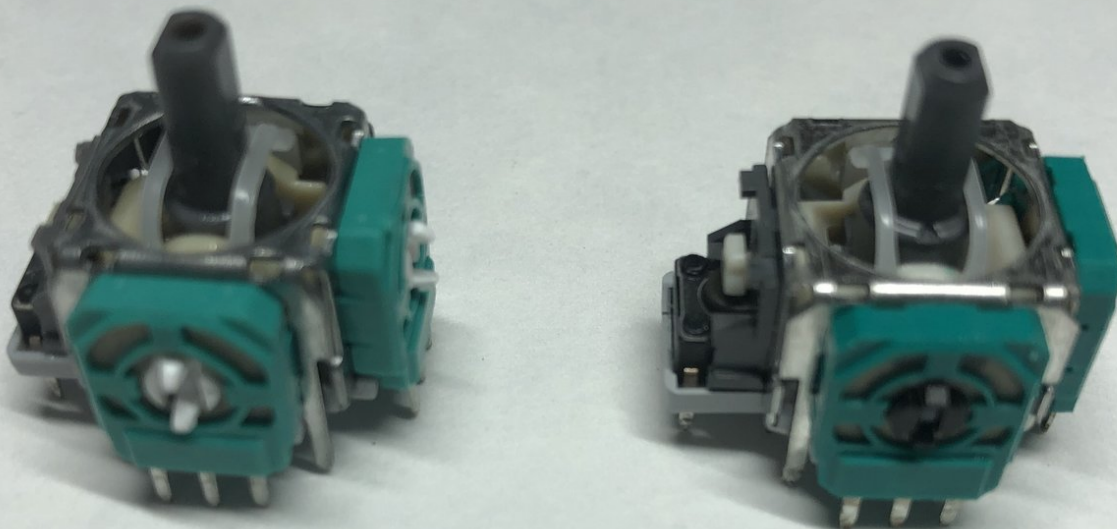




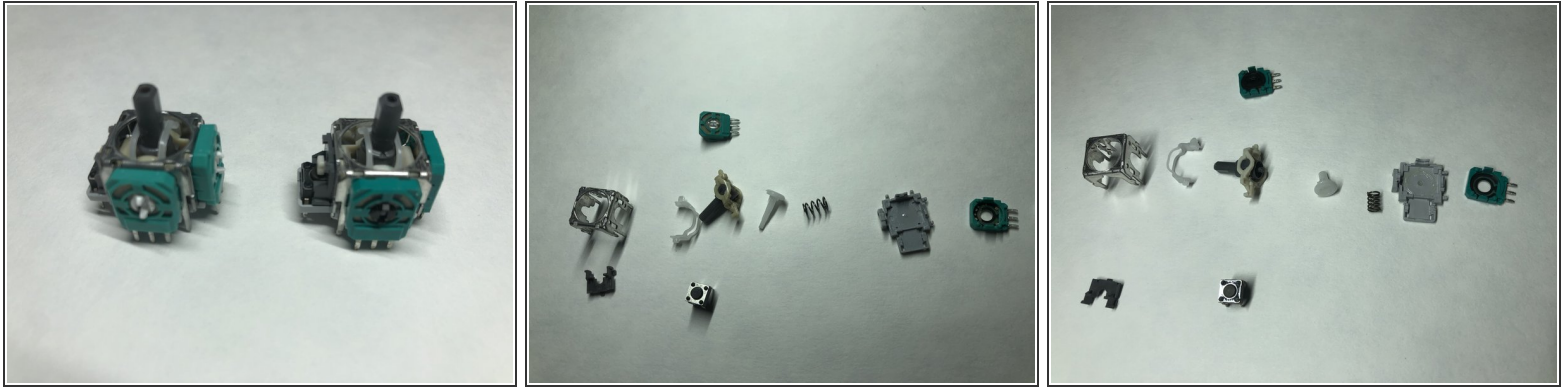
ALPS RKJXV1224 Variants Teardown

Show the differences between Alps joysticks that may be the cause of more prevalent joystick drift.

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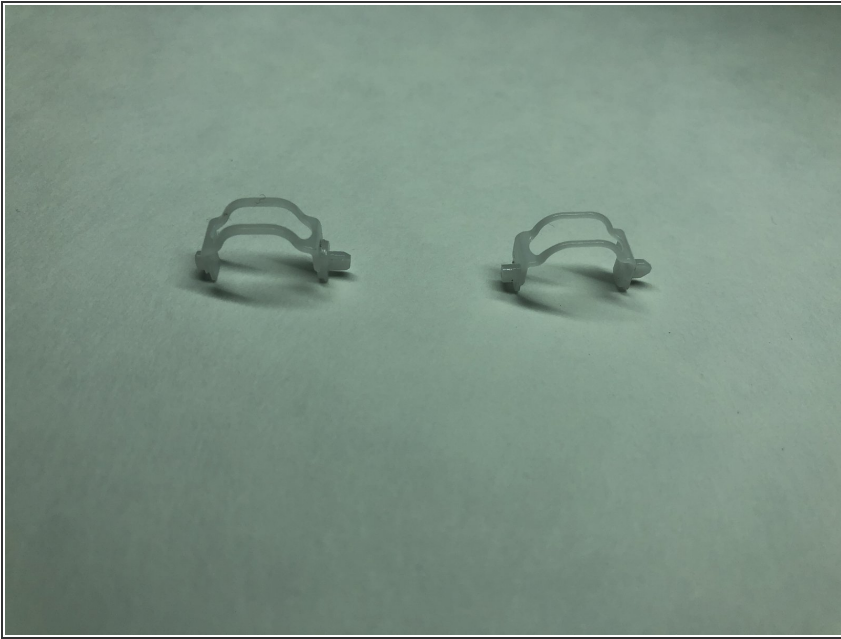


Step 1 — Same part number, but different?



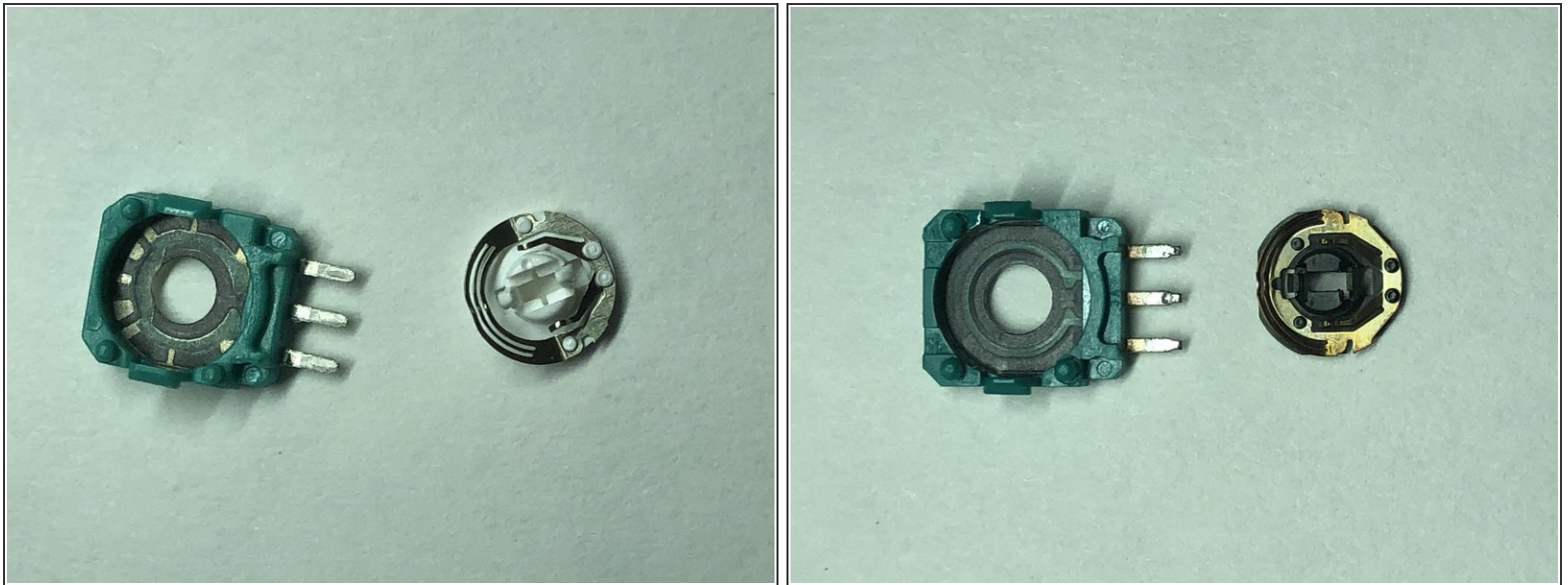
- Both of these switches are ALPS RKJXV1224 and are common in most gaming controllers from PlayStation 3 through 5, Xbox One through Series X|S, Switch pro controllers, and most third party joysticks.
- However, it appears that over the years Alps has made some changes. On the left, with white Pots is an earlier revision 002 pulled from an earlier Xbox One controller without bluetooth.
- This third photo shows revision 005 with the black Pots (potentiometers) pulled from an Xbox One wireless controller.
- It is also apparent that Alps has changed the spring setup for this variant, but I have found either.

Step 2 — Left/Right cage on a diet



- The Left/right cages of the joystick have been revised. Likely to reduce cost.
- On the left is the cage from the older revision 002 that averages .7mm in thickness and has .8mm thick arms. These were changed from copper in the Xbox 360 to plastic for newer controllers.
- On the right is the cage from the new revision 005 that averages only .5mm in thickness and has .6mm thick arms. It is very easy to bend, and could allow the pot to be twisted without moving the stick.

Step 3 — Potentiometer woes



- First we have the older style potentiometer that appears to be more robust than the new revision. It has three wipers and a back plate that appears to seal up better. The wipers also look to be plated which may reduce wear.
- The newer style pots only have two wipers that are bare copper. The back plate is smaller and has a couple gaps which may let in more dust.

Step 4 — loosen up your belt



- Last we have the bodies. These are both stamped out of the same thickness material, but the older revisions appear to have slightly more metal near all corners allowing tighter gaps. This may allow more dust and debris to get into the newer revision switches.

Step 5 — Conclusion



- While still available in the aftermarket, older revisions of these joysticks may not be available for long. It appears that cost saving measures have introduced problems for gamers.