

How to maintain and repair the Suzuki Chromatic Harmonica

① Care after every use



If there is no abnormality in the movement or sound of the slide, it is enough to wipe the dirty part with a soft cloth (depending on the fabric, as the fine scratches may be left on the metal surface, it is recommended to use the attached cloth or eyeglass cloth to you).

By using Suzuki harmonica sanitizing cleaner (HAC-01), it is easy to wipe off the oil etc. and keep the harmonica clean. If you do not wipe off saliva or dirt, it hardens and becomes hard to remove, or hardened material will clog a REED. If saliva is accumulated inside, do not immediately put it in the case and it is better to let it dry in the open air for a while.

----- Recommended products for cleaning chromatic harmonica -----

- Harmonica sanitizer cleaner

HAC-01

The alcohol type is effective for sterile filtration and deodorization. As it is excellent in quick drying, it can be easily cleaned, It is Harmonica sanitizer cleaner which is safe with only ingredients that can be used in food. It cleans the finger marks and the stickiness.

- Harmonica slide oil

SHO-01

It is a special oil to keep the chromatic harmonica slide movement in good condition. By applying thinly on both sides and spring holes of the slide, Smooth movement is obtained. Of course it can be used for the human body because it is made of harmless raw materials.



② If the slide moves badly due to dirt

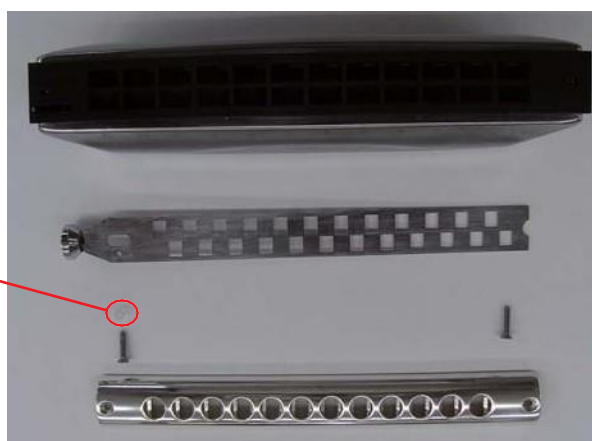


Place a towel on the mouthpiece so that the harmonica is not damaged, and remove the left and right screws of the mouthpiece. Be careful not to lose the screws because they are very small.



After loosening the screw, pull up the mouthpiece. As a rubber tube fits behind the screw on the button side, be careful not to lose it.

Rubber tube



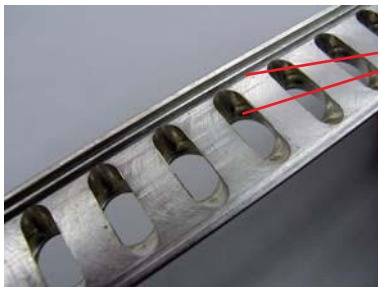
Wipe off the saliva and oil on the slide with a cloth soaked in rubbing alcohol or Suzuki harmonica sanitizer cleaner (HAC-01). At this time, be careful not to bend the slide with great force.

You can wash it with a neutral detergent and rinse with water, but considering cleaning at the performance places, it is convenient to use a portable cleaner.

You may not be able to remove the darkening of the slides, etc. However, if there is no swelling, the movement will not be affected, so there is no problem. Conversely, do not rub too much and bend the slide.



Once the slide is clean, check for sharp distortions (A big curve on the whole slide is fine). If the slide is bent due to dropping or heavy use, the movement of the slide will not be improved by assembling as it is. In this case, ask the manufacturer for repair and parts replacement.



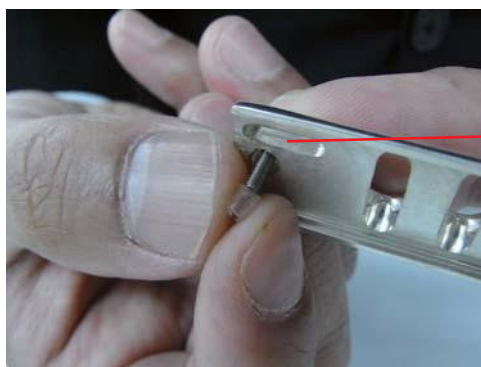
Dirt sticks to the inside of the mouthpiece and the groove like a thin skin.




If the inside of the mouthpiece and the groove are not too dirty, wiping it with a cloth as well as a slide. However, if there is accumulated dirt or saliva, use a toothbrush to remove dirt.



Wipe off the surface of the main body where the slide was put with a cloth soaked with the rubbing alcohol or Suzuki harmonica sanitizer cleaner (HAC-01) in the same way as the slide. Dry wiping may not remove oil.



Insert the left and right screws into the screw holes on the mouthpiece . Insert the rubber tube into the screw on the slide button side.  side with the groove is the slide button side. Be careful the direction.



Insert the rubber tube all the way into the hole.



Find the slide spring protruding from the main body, insert it into the small hole in the slide, and place it on the main body.

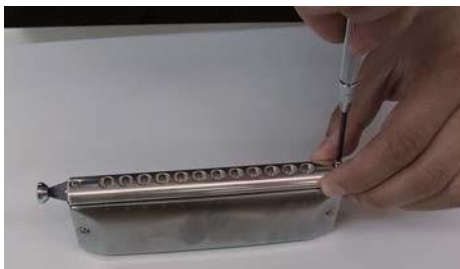




Check the direction of the mouthpiece, first insert the screw on the slide button side lightly into the screw hole on the main body and temporarily fix it with a screwdriver. Next, temporarily fix the opposite screw.



After temporary fixing, check that the slide is properly fitted. If you tighten the screw strongly without fitting in the correct position, the parts may be damaged. If you do not press down the mouthpiece to some extent during the work, be careful as the spring will easily come off the slide.



When the slide moves properly, first tighten the screw on the side opposite to the slide button. At this time, first press the mouthpiece firmly against the body with your hand, and then turn the screw with natural force until the screw stops.

If you turn the screw too much, it may cause the damage of the body. You do not need to tighten the screw so strongly. It is enough to tighten the screw with the strength which the mouthpiece will not float off.



Tighten the screw on the slide button side while checking the movement of the slide. Again, there is no need to tighten tightly. Tighten the screw so that the slide moves smoothly and the mouthpiece does not float off the body.

Finally, blow the harmonica and check the slide movement and breathlessness.

For smoother sliding action, we recommend using SUZUKI Harmonica Slide Oil SHO-01.

About valves

If you look inside the chromatic harmonica from back side, you 'll see a thin and white plastic material attached to the reed plate . This is the valve. The chromatic harmonica has two reeds for blow and draw into one room. By attaching a valve, the breath is prevented from leaking from the reed on the drawing side when blowing, and from the reed on the side blowing when drawing.

Sticking of valve due to water droplets.

When playing chromatic harmonica, the sound that was sounding at first may become increasingly difficult to produce the sound when blowing with a weak breath. This is caused by the valve sticking to the reed plate.

If the plate is cold and warm air is blown, water droplets may form between the valve and the plate, causing the valve to stick to the plate. If this happens, you will not be able to make the sound unless you breathe strong.

By the way, this phenomenon only occurs on the outer valve.

Why only the outer valve?

When air is blown, the inner valve closes and is in close contact with the plate, so there is no water droplet between the plate and the valve. Since the outer valve is open, water droplets and saliva get on between the plate.

Countermeasure

If as much as there is the difference between the temperature of the breath and the temperature of the harmonica makes, it is easier for water droplets to stick, so try to keep the harmonica not become cool before performing. Many of the chromatic players keep in their pocket or always hold it by hand before playing to warm the harmonica.

When the valve gets dirty ~ How to replace the valve

If the valve gets dirty, the valve may stick to the plate easier.

In such a case, the valve need to be replaced.

Let us explain the procedure.

① Remove the cover

Remove the screws and nuts on both sides holding the cover. It's very small, so be careful not to lose it



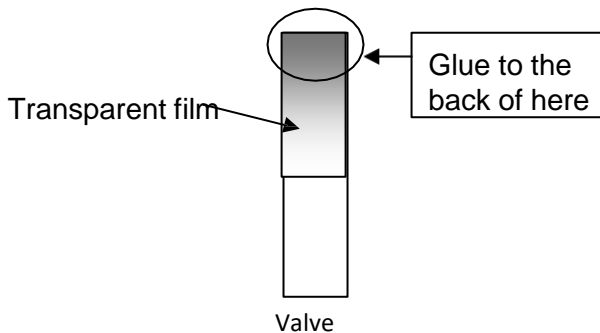
② Remove the valve

First, remove the valve. Since a vestige of adhesive remains, use a knife to clean off the vestige of the adhesive. If any adhesive remains, gaps will appear when a new valve is attached. Please remove it completely.



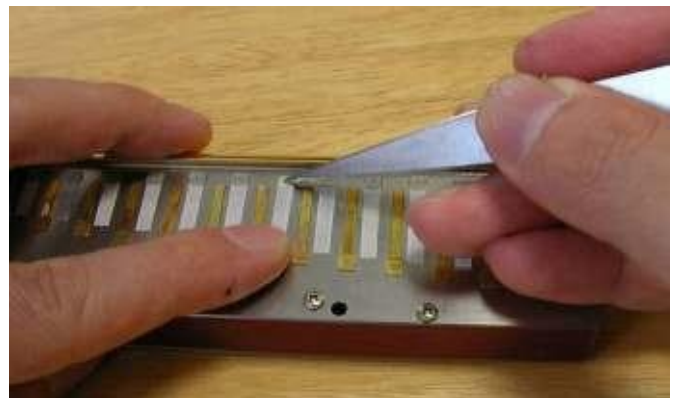
③ Glue the valve

Glue the adhesive bond (Cemedine Super X) to the point of attachment of the valve side. Be careful not to apply too much glue as it may get into the window.



Attach the valve so that it completely covers the window. The bonding point is on the back side of the reed attachment position. Paste it in the correct position so that it does not come close to either side.

Finally, hold down the adhesive surface firmly. After bonding, do not touch it until it is completely dry.



④ Attach the cover

When the adhesive dries, attach the cover and this work has done !

Chromatic harmonica tuning

Chromatic harmonica has a valve, so it may take some time to get used to tuning compared to other harmonica, but please try to challenge it.

Use the following tools for tuning.



The sound of the reed is raised by shaving the tip, and the sound is lowered by shaving the root.

Adjust the sound by repeating the process of shaving, blowing the reed you anxious and checking with an instrument or tuner (*). The way of working is slightly different between the reed on the drawing side (outside) and the reed on the blowing side (inside). Please let us explain each of them.

(*) About tuner

It is convenient to have a tuner to check the sound, but the pitch of harmonica is very easy to change depending on how you blow it, please check with some tolerances in mind. If it is within ± 5 cents, the tuning is fairly accurate.

How to shave the reed on the drawing side (outside)

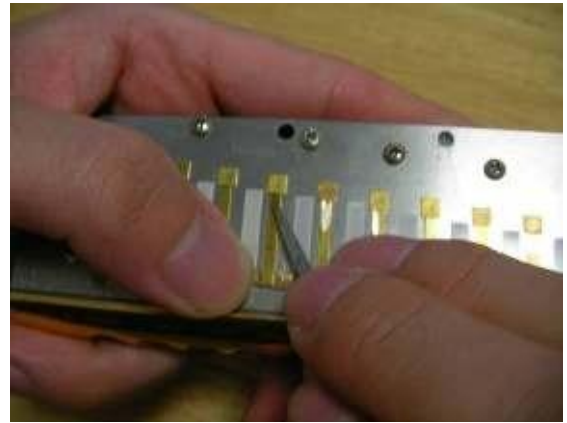
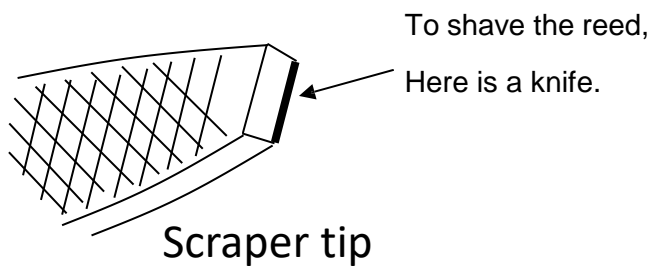
Raise the sound.

Insert a spatula under the tip of the REED. This will be the sill for shaving the REEDS. On this, from the part about 3 to 5 mm ahead of the REEDS, apply a file over the tip. Until you know the modification, check the sound after shaving a little.



Lower the sound

Insert a spatula to about 2/3 of the REED (the reed does not go through under), shave the point from the root about 3-5mm with scraper.



How to shave the reed on the blowing side (inside)

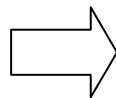
Raise the sound

Need caution when tuning the reed of inside of chromatics. Be careful as there is a possibility to damage the valves and REEDS.

First, prepare a spatula beside the window of the tuning reed. Insert another spatula from the blowing hole and lift the reed from the inside. Be careful not to damage the valve in inside. Also, lift the reed more than necessary, let's not change the raising condition. Put the prepared spatula under the raised reed. On this spatula, shave the tip of the REED. Be careful not to bend the valve.



Lift the REED and insert the spatula



Shave the tip of REED with a file

Lower the sound

Lift the valve on the back of the reed which is tuned, shave the root with scrape. Be careful not to bend the valve.

