For this workshop we recommend the »HOHNER SERVICE SET MZ99331, which includes all the basic tools necessary for harmonica maintenance as shown in these workshops.

A compact and highly recommendable toolkit for the first steps in harmonica maintenance. The set is suitable for both diatonic blues harps and chromatic harmonicas and enables basic maintenance work such as adjusting reed offsets, tuning and centering reeds, exchanging faulty windsavers and maintaining the slide assembly.

For this Workshop C05 - Reed Offsetting you will need the following tools:

**Tool 2:**
**Reed Lifting Blade with Reed Wrench**
An essential tool for many reed adjustment operations.

**Featured in workshops:**
- Workshop C04 - Centering
- Workshop C05 - Regapping
- Workshop C07 - Tuning

**Tool 6:**
**Tube Valve Glue**
Rubber adhesive used to glue windsavers in place.

**Featured in workshop:**
- Workshop C06 - Windsavers
C06 – Windsavers

Tool 7: 1 Set of Windsavers
Featured in workshop:
»Workshop C06 - Windsavers

STEP 01 - Remove old windsaver and remains of old glue

Remove the old windsaver by carefully pulling it off.

Using the reed lifting blade (2), scrape the remains of the old glue from the riveting point, where the windsaver was affixed to the reed plate. If necessary you can use the tip of a screwdriver or even your thumbnail.

It doesn't matter if you should scratch the surface of the reed plate at the point of contact in the process, surface roughness helps the glue to stick better.

Warning:
Don't try to use solvents here, as these can dissolve the old glue and distribute it more widely.

If glue residues get into the gap between reed and slot, you will have great difficulty in getting the reed to function properly again!
STEP 02 - Applying the glue

In order to ensure that the new windsaver functions properly, it's important to dose the quantity of glue correctly. If you apply too much it can run into the gap between reed and plate. If you use too little the valve may fall off.

STEP 03 - Raising Reed Offsets

The photo on the left shows the right quantity. When you press the new windsaver on, it's important that no excess glue gets into the slot.

If you need to renew windsavers frequently it can be a help to use tweezers.

Press the new windsaver gently but firmly onto the reed plate at the point where the tip of the rivet is visible ......

... and align it carefully.

The glue needs 30 minutes to dry. Then you can test the new windsaver.
Windsaver valves are the cause of most of the common problems which occur with chromatic harmonicas.

If you follow the general rules shown here, you should have a lot less trouble.

When Installing Windsavers

- Bend the base of the windsaver slightly down towards the plate beforehand.
- The base should overlap the plate by about the same amount as the rivet pad of the reed.
- Centered
- Flat
- No glue in the slot

- Parallel to the reed slot
- Symmetrical
- Absolutely flat

- Not projecting away from plate
- Minimal overhang at tip

Despite all precautions, valves can sometimes vibrate to produce extraneous noise if the form of the player's vocal tract supports their resonance frequency. Often this can be corrected by changing the throat shape.

Another possibility is to change the natural resonant frequency of the windsaver.

Possible Remedies:

- Use a slightly longer valve (contradicts rule C),
- Shorten the upper layer of the valve
- Shorten the entire valve at point C so that it no longer provides a complete seal.