

# Plastic Bassoons

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The use of plastic for making bassoon bodies presents both advantages and problems.

There have been essentially three types of plastic bassoons made on a production basis: Fox, Linton and Selmer. The Linton bassoon, originally developed by Jack Linton, became the property of Armstrong, which in turn became part of UMI. The Artley bassoon is a directly descendent of the Linton bassoon. The Selmer plastic bassoon has been sold under various Selmer names. The Fox plastic bassoon is also made under the Renard trademark. My knowledge of the Linton and Selmer plastic instruments is limited and most of the following applies to the Fox plastic bassoons.

Plastic can be an excellent material for musical instruments. Its biggest liability is the difficulty of combining the economics of manufacturing plastic goods with the very different economics of the limited production of bassoons. Despite that, good instruments can be made from plastic if sufficient attention is paid to the differences between wood and plastic.

The greatest advantage to using plastic bodied bassoons is in institutional situations. Schools often don't take good care of bassoons. Plastic will tolerate abuse and neglect better than wood.

Technically the biggest problem with plastic is that it is heavier than maple. Fox chose to use polypropylene as the lightest plastic that would do the job. Linton scavenged the body to remove any excess material that could possibly be eliminated. Selmer apparently ignored the problem and produced a bassoon that is ponderously overweight.

The penalty for using polypropylene for Fox and Renard bassoons is that this type of plastic cannot be solvent bonded. There is no adhesive that will bond to polypropylene. Whatever adhesive you can think of, it won't work. Any problems that require one piece of material to be attached to the body must involve a mechanical attachment. Conventional procedures that work with wood or other plastics need to be modified to accommodate this problem.

Stripped threads are an occasional problem that need a different technique. When posts are broken out the repair is best done by installing a Heli-Coil. This is a steel thread insert that is easily installed with some special tools. A new post must be installed—there is no give to the Heli-Coil and the old post is not going to end up in the correct position.

Another aspect of plastic is the thermal expansion factor. Plastic expands with heat and shrinks with

cold. Don't tighten hinges between posts too much. On a cold day the instrument will shrink down and the keywork will bind.

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