

## L3P Sonic Sifter

### Frequently Asked Questions

**1. Can I use one sieve and fill the rest of the spots with spacers?**

Yes. If you do this, you may be able to use a larger test sample since there won't be sample going back through the sieve.

**2. Why use a horizontal pulse accessory (part number L3-N8)?**

You should use a horizontal pulse accessory when sifting material smaller than 45 microns. This accessory adds a tap horizontally to help eliminate particles sticking together.

**3. How much of a sample do I start with?**

On this unit, start out with 1 gram, depending on the density of the material.

**4. What amplitude should I run the unit at?**

Start at 0 and raise amplitude until material in sieves lifts off the mesh to approximately ½ of sieve height.

**5. How long should the sample run?**

Start with one minute; increase the time if the sample has not separated.

**6. Material appears to be coming out of the sides of the sieves, what is wrong?**

Column lock may not be completely unlatched.

**7. How do I keep the sieves in place?**

Make sure the column lock is in place. To do this, insert the column lock all the way to the backstop on the driver plate. Make sure to unlatch the locking arms by pushing outward on the sides.

**8. What is the lever on the side for?**

This is the table switch, it activates the sift pulse circuit.

**9. Can you operate the unit with the door open?**

Yes, but this is a tuned chamber and by leaving it open you may change your results.

**10. What does the cam assembly do?**

It activates the sift pulse circuit through the table switch.

**11. I need a new power cord, which one should I order?**

The power cord you need depends on when the unit was manufactured. For us to get you the correct cord, you will need to tell us the serial number and when the unit was purchased.

**12. Why does the unit have a light in it?**

The light aids in setting the proper amplitude by letting you view sample movement.

**13. Does the unit have to be calibrated?**

The unit does have certain components that need to be set.

**14. Is there any regular maintenance that has to be done to the unit?**

No, just keep the unit clean.

**15. What is the warranty on the unit?**

One year

**16. Can I use brass 3" sieves in the unit?**

It is not recommended as it would be very difficult to accurately set the amplitude of the machine, but brass sieves can be used. We recommend using clear acrylic sieves.

**17. Does the horizontal pulse accessory come in 220 volts?**

No. You need a 100-watt step-down transformer. We stock these transformers and the part number is P6385.

## Terms

**Driver (X465030):** The driver looks like a speaker and produces the column of air at 60 times per second.

**Cam Assembly (X465035):** The cam assembly is the spring loaded pivot block.

**Stack Assembly (L3-N7):** Consists of column lock, diaphragm, fines collector, fines collector holder, top cone and selected sieves or spacers. This device is where the sample is placed for the particle separation.

**Diaphragm (L3-N2):** Blocks the particles from entering the driver and sits on the top cone. It is made out of latex.

**Top Cone (L3-N3):** The top cone acts as a funnel and holds the diaphragm on. This is where the sample is introduced into the stack assembly.

**Fines Collector (L3-N5):** Made of latex, it collects the minus material that has passed through the stack assembly.

**Spacers (L3-N4):** Spacers are used in place of sieves to maintain the stack assembly height.

**Fines Collector Holder (L3-N6):** The fines collector holder is used to hold the fines collector and is the base of the stack assembly.

**Tapper Coil Assembly (X351404A):** Located on lower portion of the unit, the purpose of the tapper coil assembly is to convert pulsating electrical energy to mechanical energy. It does this at a rate of 1 vertical tap every 4 seconds.

**Fuse Holder (X327558):** There is one 1.5 amp AGC fuse in the unit. There are two types of this fuse; the older type has a red top and slot, the newer version can just be pushed in and turned.

**Note:** The L3P operates on a moving air column. The amplitude increases the intensity of airflow in the sieve column.

## Troubleshooting

<b>Problem</b>	<b>Possible Cause</b>
Unit won't work and is plugged in.	Check plug input to unit, then check fuse.
Unit will sift but not pulse.	Pulse timer inoperative. Call for technical support.
Unit comes on but will not sift or pulse.	Make sure stack assembly is inserted correctly. If the stack assembly is not the problem, the cam assembly may be out of alignment or the trigger spring may be broken.
Unit works but shuts off before timer hits 0.	Stack assembly has not been unlatched.
Unit works but no light comes on.	Replace the starter, which is located in the upper left hand corner of the chamber. Also check the light bulb.
Unit runs but lacks power.	Possible defective driver or defective power transformer.