

The Shure Pneumatic Shock Mount



Internal Shock Mount

- Reduces handling and stand noise
- Protects cartridge
- Critical for vocal microphones designed for handheld use
- Often overlooked by counterfeits

Pneumatic Shock mount

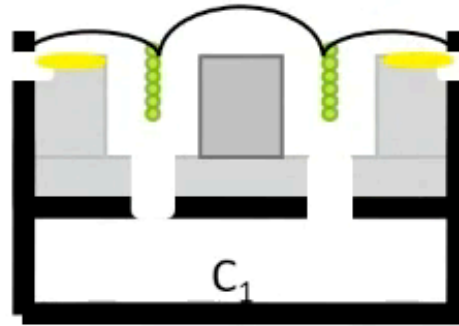
- A well-designed shock mount is essential for professional microphone performance in handheld applications.
- 1964 Shure created the pneumatic shock mount.
- Extremely complex design that's integrated into the acoustics of the cartridge.
- Only found in authentic Shure products.



Mounting the Cartridge

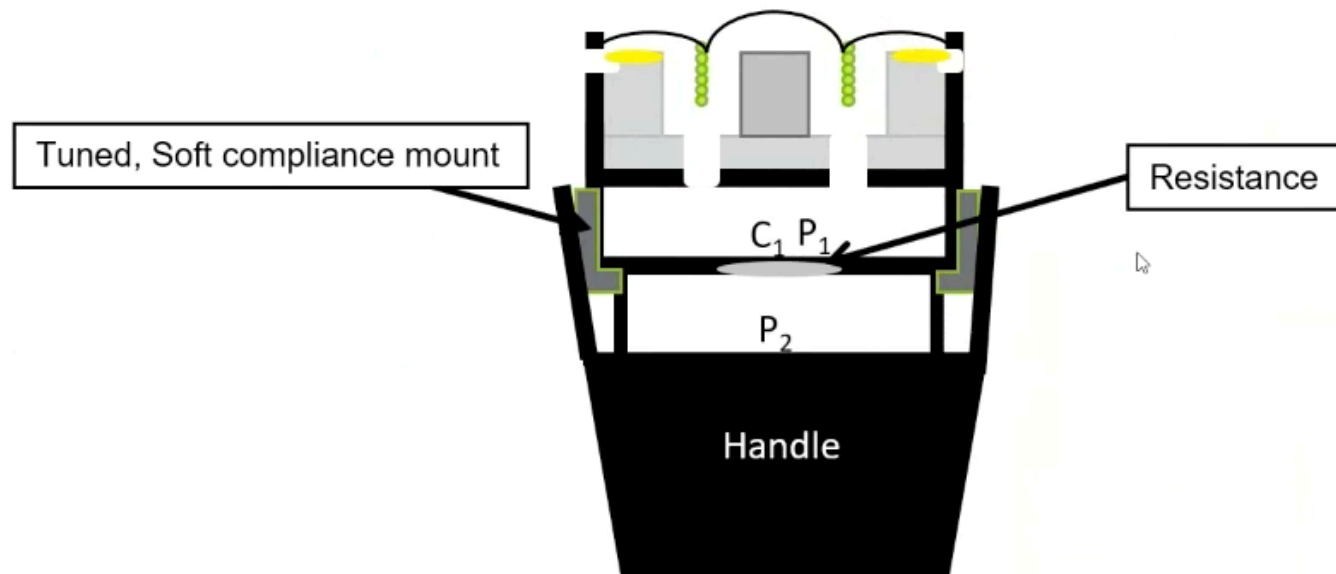
The complexity of the pneumatic shock mount is due to the bond and integration it has on the acoustic network.

You must design the cartridge acoustics and shock mount together, constantly tuning both aspects of acoustics and shock performance.



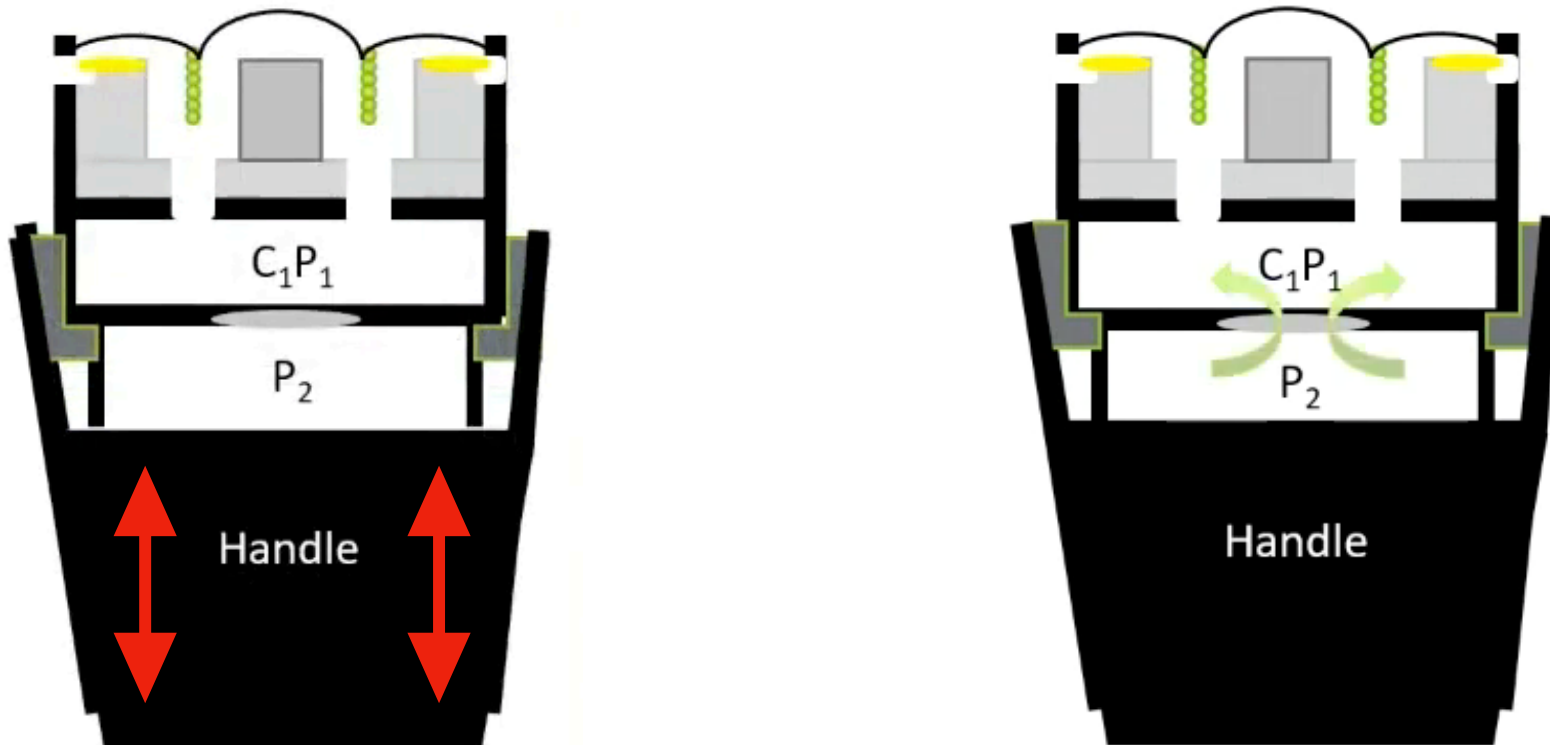
Mounting the Cartridge

- The Cartridge is suspended and not fully mounted on the Chamber (C1)
- As the Chamber is also part of the Piston can also be called (P1), which is then mounted inside another Piston (P2)
- On the edge of the Piston there is a Tune, Soft compliance mount
- Between P1 and P2 there is an Air Resistance
- The air inside chamber is constant - does not change



Counteract the Vibrations

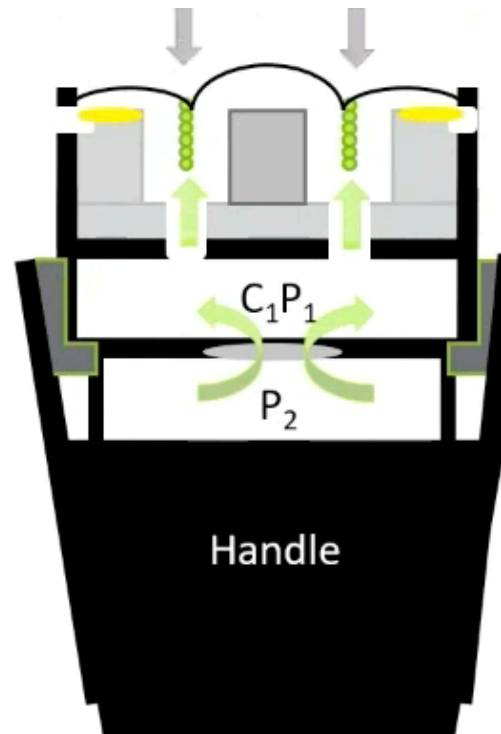
- Where there is a movement on the Microphone, the Cartridge jumps In and Out
- Forces the Air from P2 to flow through the resistance into P1 during vibration



Counteract the Vibrations

- The air then flows into the back of the Diaphragm
- Creating additional pressure under the diaphragm (inflating) equally to the motion of the Microphone
- Counteracts mechanical pressure on the opposite side of the diaphragm
- This mechanical motion works also in reverse when the diaphragm is compressed

Counteracts
negative pressure
(-) being induced
on diaphragm
due to
mechanical
vibration



Increased
positive pressure
(+) under
diaphragm...