MB Dynamics Innovating and Delivering Solutions ...Vibration and Shock

# *S&R Energizers*
*the **QUIET!** Shaker*

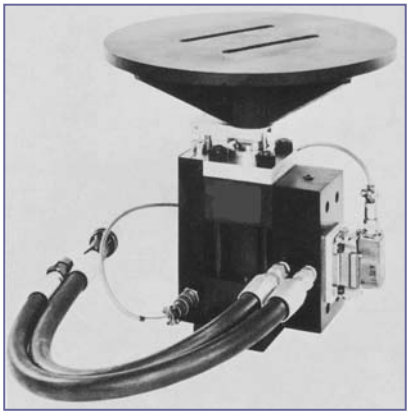
## **Squeak & Rattle Experts Agree**:
***"Quiet Shakers are a MUST for Effective Squeak & Rattle Tests." Hear and See the Difference Below!***


*MB S&R Energizer Black*

| TEST CONDITIONS in QUIET ROOM[1] | N(10) Loudness, SONES | Sound Pressure, dB(A) |
|---|---|---|
| Shaker @ Rest, Ready<br>• Bare table<br>• Amp ON and ready to shake<br>• Microphone 10" above mounting table | Test Lab A: 1.0 | Test Lab A: 29 |
| Random Vibration<br>• Typical S&R Profile<br>• 0.36 gRMS 8-100 Hz<br>• Microphone 10" above mounting table | Test Lab A: 1.1 | Test Lab A: 30 |
| **Shaker Features: permanent magnet; no cooling needed; quiet flexures** | | |

*Typical electrodynamic shaker[2]*

| TEST CONDITIONS in QUIET ROOM[1] | N(10) Loudness, SONES | Sound Pressure, dB(A) |
|---|---|---|
| Shaker @ Rest, Ready<br>• Bare table<br>• Amp ON and ready to shake<br>• Microphone 10" above mounting table | Test Lab B: 5.9 | Test Lab B: 49 |
| Random Vibration<br>• Typical S&R Profile<br>• 0.36 gRMS 8-100 Hz<br>• Microphone 10" above mounting table | Test Lab B: 8.1 | Test Lab B: 51 |
| **Shaker Features: ≈ 1000 lbf (4.5 kN); field coils; blower OFF; S&R-rated** | | |



*Typical hydraulic shaker[2]*

| TEST CONDITIONS in QUIET ROOM[1] | N(10) Loudness, SONES | Sound Pressure, dB(A) |
|---|---|---|
| Shaker @ Rest, Ready<br>• Bare table<br>• Power supply ON (in separate room) and ready to shake<br>• Microphone 10" above mounting table | Test Lab C: 1.0 | Test Lab C: 33 |
| Random Vibration<br>• Typical S&R Profile<br>• 0.36 gRMS 8-100 Hz<br>• Microphone 10" above mounting table | Test Lab C: 17 | Test Lab C: 64 |
| **Shaker Features: ≈ 1000 lbf (4.5 kN); 3000 psi pressure** | | |

[1] *All Quiet Rooms are state-of-the-art. Ambient noise levels fluctuate from ≤ 1.0 - 1.5 sones and ≤ 29 - 33 dBA*

[2] *Shaker make & model in photo was not source of actual data*

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