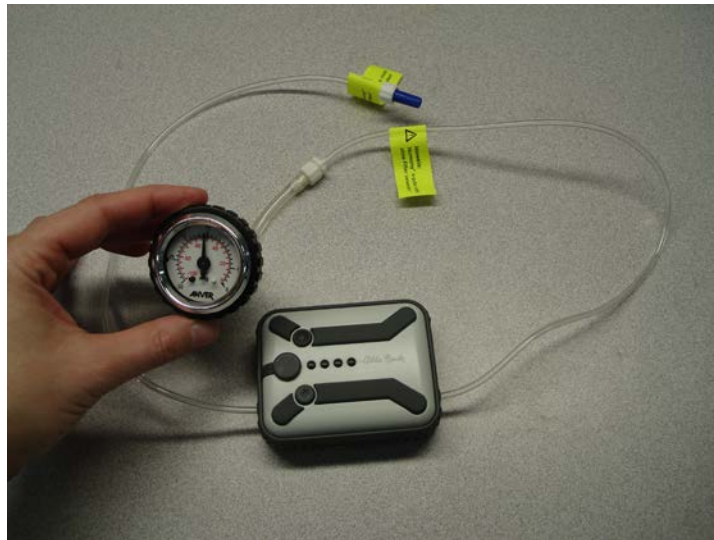


# Academy Tech Tips

## Testing Vacuum in a Harmony® e-pulse System / Updated Filter

### **Losing vacuum in a Harmony e-pulse system? It could be the e-pulse itself, or in the tubing.**

Start your troubleshooting by testing the e-pulse for vacuum. To do this, isolate the e-pulse from the rest of the system and connect it directly to a 4R131 vacuum gauge. This way you can see if the e-pulse is generating the desired amount of vacuum and whether it is then holding vacuum, or losing it.

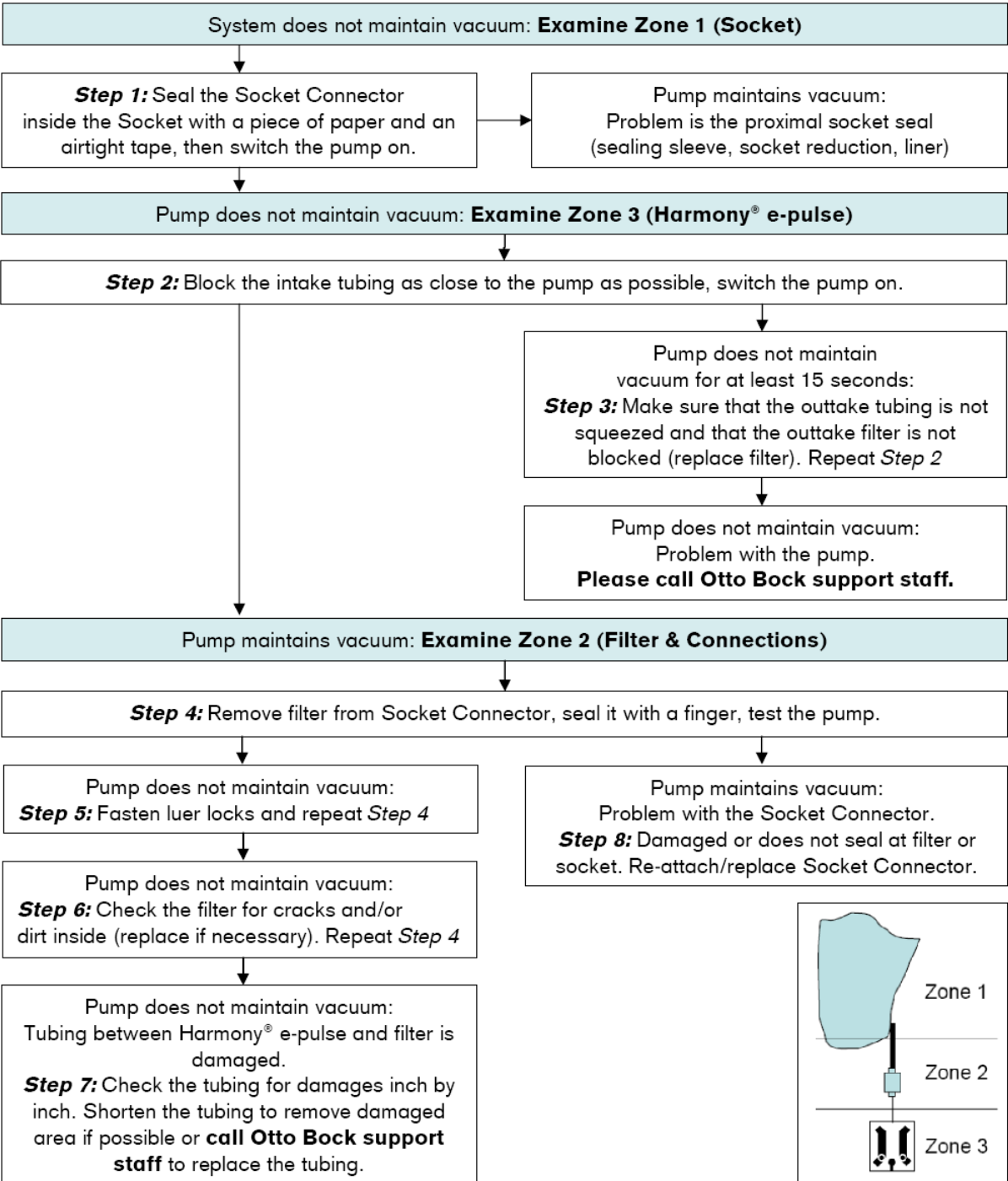


If the vacuum is holding when the e-pulse is isolated, the leak is not coming from the e-pulse. Once you've confirmed this, check the rest of the tubing in the system for holes or other damage that may have been caused by pinching or excessive wear. Even a small pin hole could cause a slow leak in the system.



**Flow Chart**  
**for *Trouble Shooting Harmony® e-pulse***

Follow the steps in the flow chart until you eliminate the leak.



**Product notification: Updated filter**

If your Harmony e-pulse still uses the disposable Epidural filter, it can be replaced with this updated version (4X255). Make sure you attach the appropriate connector to the correct diameter tube.



If you have any further questions, please contact Ottobock at 800 328 4058 and ask to speak with a member of our Professional and Clinical Services department.