

#### **Room Temperature Calibration**

#### Notice where the Delay Tip ends on the screen



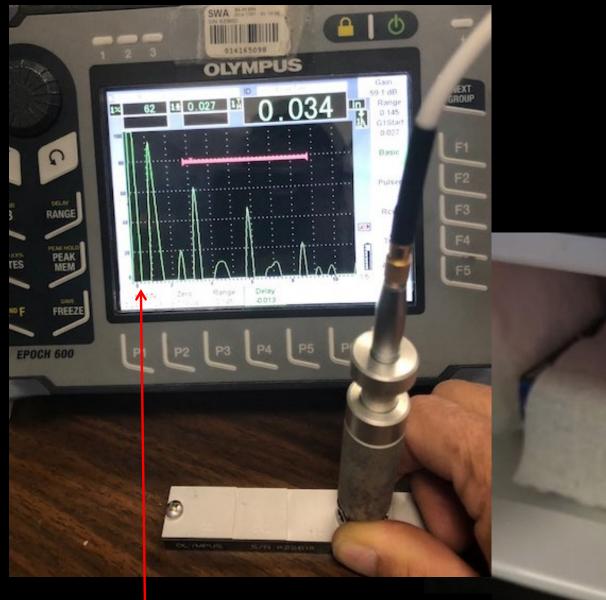
#### **Calibration Block Cool**

Notice where the Delay Tip ends on the screen when COOL. It has moved slightly left of calibrated.



## Calibration Block Warm

Notice where the Delay Tip ends on the screen when WARM. It has moved slightly right of calibrated.



Notice where the Delay Tip ends on the screen when COLD. It has moved a lot to the left of calibrated.

## Tip Cold

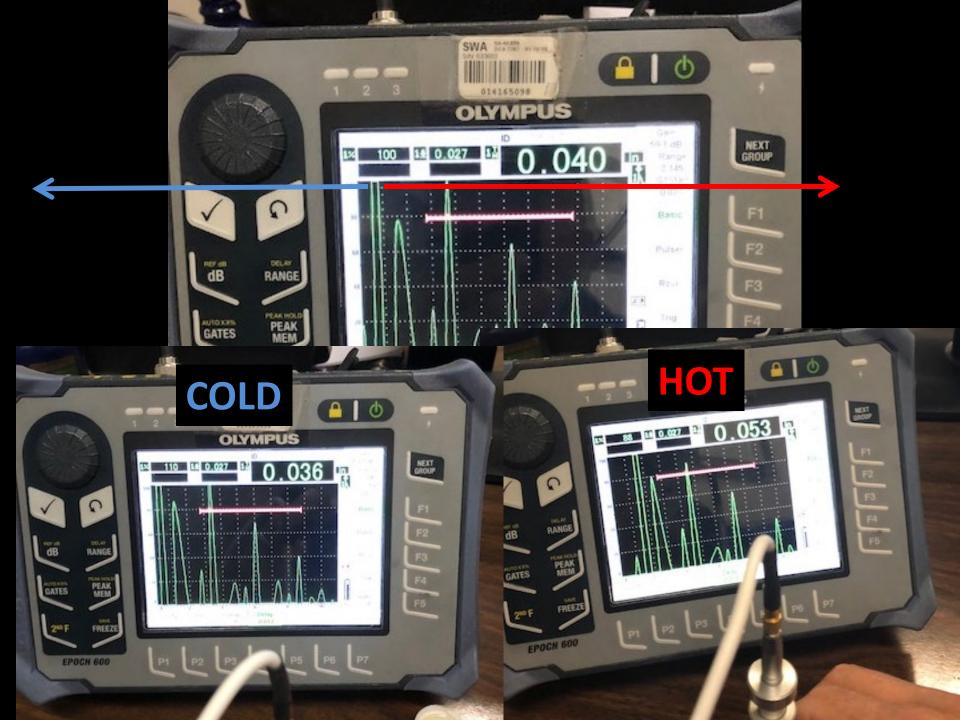
5.



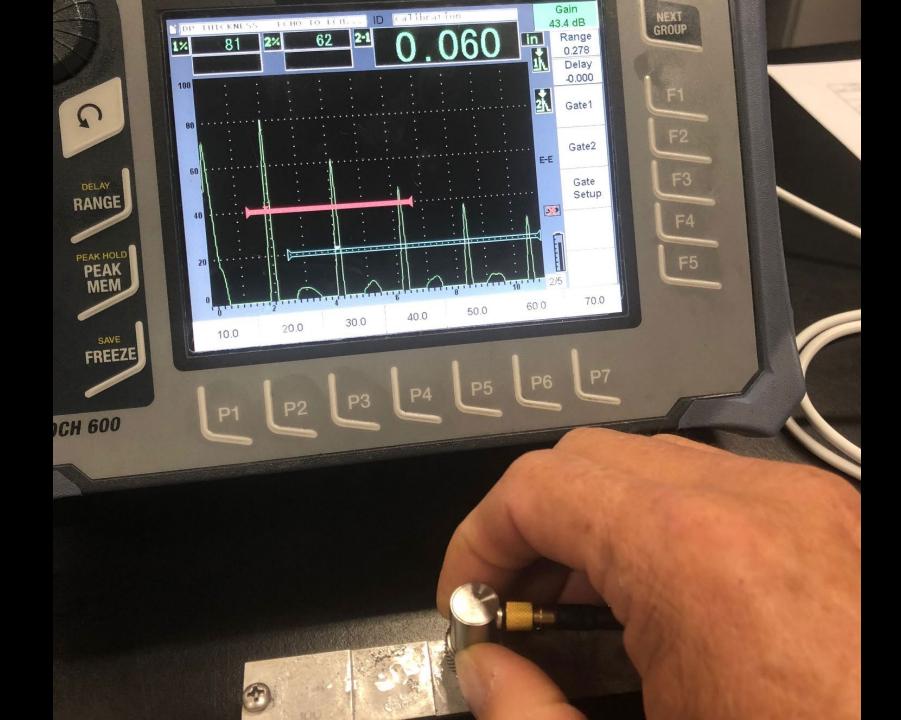
**Tip Hotter** 



Notice where the Delay Tip ends on the screen when COLD. It has moved a lot to the right of calibrated.







# Key Takeaways

- As the delay tip gets hotter or colder from the temperature during calibration the sound velocity within the tip changes.
- To prevent this issue causing measurement inaccuracy, allow the tip time to match the temperature of the part you plan to inspect before you calibrate.
- Another option is to use "Echo to Echo" measurements. This eliminates the tip in the distance equation.

**Question or additional input:**