Water Medicator Calibration

Water Line Best Practice Series

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Key Takeaway: Water medicators play a vital role ensuring the correct dosage of medication is being delivered to the animal, making regular calibration essential to maintain accuracy of proper medication delivery.

Why Calibrate a Medicator

Calibrating water medicators helps ensure animals receive the correct dosage of medication in their water. When medicators are not properly calibrated, animals may be under-medicated or over-medicated, which reduces the effectiveness of the treatment. Water medicators should be calibrated at least twice a year. When a new medicator is purchased and installed, it should always be calibrated prior to use.

Calibrating a Water Medicator

A five-gallon bucket, 640 ounces of clean water, a five-ounce measuring cup, a scale, a flat, level surface, and a clean suction hose are needed to calibrate a medicator at a 1:128 injection ratio. Once supplies are gathered, follow these steps:

1. Turn off the incoming water to the medicator.
2. Disconnect the medicator's exit line from the main water line.
3. Set the medicator to a 1:128 injection ratio.
4. Place the exit line into a clean, empty 5-gallon bucket.
5. Using a scale, weigh 640 ounces (5 gallons) of clean water. The weight of the empty bucket should be subtracted to ensure only the water is measured. Pour the water into the bucket and mark the 5-gallon level on the inside.
6. Empty the calibration bucket of water. Place the outflow line into the bucket.
7. Prime the suction line with water from a separate bucket to remove air.
8. Fill a measuring cup with exactly 5 ounces of water.
9. Remove the filter or strainer from the drop hose.
10. Place the drop hose into the measuring cup and hold it in place, ensure the drop hose is straight up and down to avoid the introduction of air.
11. Slowly turn on the incoming water. The medicator will click when it is working.
12. Allow the medicator to draw the 5 ounces from the measuring cup.
13. Turn off the incoming water.
14. When the water in the bucket reaches the 5-gallon mark, the 5-ounce cup should be empty.

Ensure Accurate Calibration

If calibration is not accurate, check for a cracked or leaking suction hose, clogged or dirty filters, incorrect ratio settings, air trapped in the suction line, and mineral biofilm buildup in the seals and internal parts of the medicator.

Watch video here: