

vDrive[®] Insecticide

Performing a Catch Test using the Manual Test Health Check

This guide will describe the process of fine tuning the vDrive Insecticide meters by using the Manual Test found in Health Checks on the vDrive Insecticide Diagnose page. This test will turn the meters and expel product. Catching and weighing the expelled product can indicate if an Adjustment Percent is necessary for any rows. This guide is intended for use with Gen 3 systems using the Manual Test Health Check.

Note: A Calibration Mass for the current product must be determined before running this test. See the *vDrive Insecticide Operators Guide* for more information on determining Calibration Mass.

Step 1:

Determine the Rate for each row in lbs./acre. In most cases, if one product is being used then the rate will be the same for each row.

Step 2:

Convert lbs./acre to oz./1000 square feet.

- a: Multiply lbs./acre by 16 to calculate oz./acre
- b: Divide 43560 by the Row Spacing **in feet**, then divide the result by 1000 to calculate the length of 1/1000 of an acre for the specific row spacing.
- c: Divide the result of step a by the result of step b to arrive at oz./1000 sq.ft.

Example: 4 lbs./acre on 30 in. (2.5 ft.) row spacing.

4 lbs./acre x 16	64 oz./acre
$(43560 / 2.5) / 1000$	17.42
$64 / 17.42$	3.67 oz./1000 sq. ft.

Step 3:

Convert miles per hour to feet per second by dividing mph by 0.681818.

Example: Planting speed is 4 mph.

$4 / 0.681818$	5.87 feet/second.
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Step 4:

Determine test duration by dividing 1000 by feet per second to calculate time needed to equal 1000 feet of application.

Example: Planting speed is 5.87 feet/second

$1000 / 5.87$	170 seconds (2 minutes 50 seconds)
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Step 5:

Run the test for the calculated duration. Weigh the amount caught per row against the amount that was calculated in step 2. Determine the percentage difference for any rows with high variance between the value caught and the value calculated. Make adjustments as necessary by navigating to Setup > Systems > Insecticide and press on vDrive Insecticide.

Press Continue and enter the values calculated in the Adjustment Percent box *for each row*.

