

Sales and Service Persons Guide for Scales and Meters

Vermont Agency of Agriculture Food & Markets
Weights & Measures Program

The following explains the legal requirements and policies of the Vermont Weights & Measures Program (W&M) as it relates to the installation, repair, and sales of commercial scales and meters, including Electric Vehicle Supply Equipment (EVSE).

The terms dealer-repairman, service person, registered service agent are all interchangeable terms used in different regions of the United States but mean the same thing for our purposes.

Although the registration of dealers and service persons is voluntary, the sale or repair of a legal for trade device in commercial use by an unregistered agent does not allow the device owner to legally operate their equipment for commerce until it is tested and approved by an authorized party (W&M Inspector or registered service person). Registration allows the service person to put new, used, or re-calibrated devices into commercial use, or place back into service after repair, a scale or meter that has failed an official inspection.

Not all people who work to install or maintain weighting and measuring devices need to be licensed as registered service persons, only the person taking final responsibility to activate the device before it is used in commerce.

Becoming a Registered Service Person

To become a registered service agent or dealer repairman with the W&M Program, you need to fill out our [Application for Dealer or Repairman License](#) and submit payment of the require fee (\$60).

If you are a new service person you will be given a number by our licensing section as your service person's number for the State of Vermont. This number must be on your security seal that most weighing and measuring devices require. If you work in multiple states, you will likely have to apply for this same license in those other states as well. If you already have a service person number for another state, you may request the same number in Vermont if it is available. This license must be renewed annually.

Placed in Service Reports (PIS) are a form submitted to the W&M Program to inform inspectors of new and repaired weights & measures devices in Vermont. Once registered as a dealer repairman, you can contact the W&M Program to get paper or electronic copies of our PIS forms. If you work in other states and already use PIS forms from them, we will accept them in place of our PIS as long as they contain all the necessary information.

SECURITY SEALS

Security seals can be of a lead-and-wire or plastic type. These seals must be placed on the calibrating elements of devices, so that they must be broken to change the calibration of the device.

Some example of acceptable seals can be found at:

- [United Security Seals](#)
- [Brooks Utility](#)
- [Seals.com](#)

Other types of tamper proof seals may be acceptable, but they all must have the service person's number on them.

Requirements of a Registered Service Person

Registered service persons must notify the W&M Program with a PIS within 48 hours after they take the following actions

on commercial scales or meters:

1. Repairing a rejected or condemned device
2. Placing into commercial service, new or used equipment
3. Breaking or replacing a security seal on a calibrator, compensator, audit trail or any other part that limits access to adjustable components that could affect calibration of equipment
4. Breaking or replacing a seal on a rejected device
5. Making any repair or adjustment that affects the measurement accuracy of a device
6. Changing LPG registers, VTM registers, or scale indicators

The W&M Program needs to be notified when a service person installs, repairs, or calibrates a commercial weighing or measuring device. The W&M Program does not need to know when routine maintenance such as light bulbs, screens, or nozzles/plugs are changed on gas pumps or EVSEs, or when performing routine cleaning and maintenance on a vehicle scale. However, service persons must duly notify the W&M Program of situations that require initial or follow-up inspections.

Equipment Needed

Most registered service people are required to have equipment to ensure the devices they repair and place into commercial service are accurate and correct. The minimum equipment is listed in the table below by device type.

Device Type	Field Standards
Small Scale (1 to 30 lb capacity)	31 lb NIST Class F or ASTM Class 6 Weight Kit
Dormant & Portable Platform Scales	500 lb of NIST Class F or ASTM Class 6 Weights
Hopper Scales	3,000 lb of NIST Class F or ASTM Class 6 Weights
Truck Scales	18,000 lb of NIST Class F or ASTM Class 6 Weights
Gas Pumps	5 gallon test measure
Vehicle Mounted Meters	100 gallon prover (or larger)
Bulk Plant Meters	500 gallon prover (or larger)
EVSE	No equipment requirements at this time
Analog Meter Register Replacement	No equipment requirements

All field standards used to place equipment into commercial service must be calibrated annually by a NIST recognized metrology laboratory; with the exception of provers between 25 gallons and 1000 gallons, which must be calibrated once every 5 years by a NIST recognized metrology laboratory. The Vermont W&M Metrology Laboratory can calibrate most of this equipment and can refer companies to other laboratories if the equipment is not within the laboratory's scope.

Applicable Laws and Regulations

Weights and Measures Law is found in Title 9, Chapter 73 of the Vermont Statutes. The registration of dealers and service persons are referenced in sections 2725-2729 and 2766.

The W&M program also adopts, as regulation, the most recent [National Institute of Standards and Technology \(NIST\) Handbook-44 Specifications, Tolerances and other Technical Requirements for Weighing and Measuring Devices](#). We do not supply service agents with copies of this document, but you may obtain a copy for free by downloading it at the link above.

Some parts of the regulation can be somewhat complicated because it deals with manufacturing specifications in addition to field testing. What follows is a summary of some, but not all, of the high points in the regulation and law that could routinely affect a service person.

1. Service persons do not have a tolerance. All adjustments must be made as close to zero error as possible. Tolerances are for W&M inspectors to apply to a device. The service person must adjust the device as close to zero error as practical. Errors should be small and random. For instance:
 - Gas pumps would be expected to be adjusted to within plus or minus 0 to 3 in³ with the errors varying plus and minus, this means that all errors cannot be in favor of the device owner
 - Small and medium capacity scales, the device should have an error of no more than one division at capacity
 - Truck scales should have an error of 40 lb or less at range 40,000 lbs during a section test
 - Devices must not be adjusted predominately in favor of a device owner. Vermont Law, Regulation, and Policy give an inspector the authority to reject devices adjusted predominately in favor of the device owner
2. Direct sale scales or meters must be installed on solid foundations and be within reasonable customer view. Scales and meters that are designed to be used inside a building or under cover must be protected from adverse environmental conditions.
3. Service persons must fill out correctly and send to the W&M Program a Placed in Service Report.
4. Calibrators, compensators, registers, etc., (whatever the terms of your registration allow) must be properly sealed. Meters and scales that are not security sealed by a duly registered service person will be rejected by an inspector.
5. Commercial scales and meters must be installed and tested by a registered service person. If this is not practical, please try to contract out installation with a local service agency.
6. Device owners should be informed of how to operate new devices.
7. All scales and meters installed after July 1st, 2024 must have a valid National Type Evaluation Program (NTEP) Certificate of Conformance Number. This includes gas pump consoles, load cells, shipping scales, electric vehicle supply equipment, on-board weighing devices, vehicle tank meters, among others.

A service person may be fined and lose their registration if they fail to comply with these requirements.

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