

**Vehicle Safety Circular** 

# Safety Inspection Station - Required Tools and Equipment

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During recent Vehicle Safety audits, feedback was collected from many shops regarding requirements for tools and equipment.

As per the MPI Accreditation Agreement, it is the inspection station's responsibility to ensure all required tools and equipment are present and in working condition at all times. Missing required tools and equipment is a critical violation, and stations will be placed on hold if any items are missing or nonfunctional.

Below is a list of tools and equipment required for safety inspection stations. All the items on the list must be **shop owned**. A technician may (and often do) own some of the tools; however, a safety inspection station is required to have its own tools and equipment separate from the technicians. Vehicle Safety Officers will check for the listed tools on all Vehicle Safety audits.

# Tool List for Periodic Mandatory Vehicle Inspection Program (PMVI)

- Lifting equipment (hoist) of sufficient capacity to raise the heaviest applicable vehicle for inspection
- Two adjustable safety stands (minimum 3 ton)
- Window tint meter that is self-calibrating and able to test fixed glass
  - Tint meters must be a two-piece design or have an attachment that can test fixed glass
- Brake drum diameter gauge of sufficient size to measure the largest brake drum of applicable vehicles and is accurate to within 0.05 cm (0.002 in and a minimum 16.620 in)
- Micrometers or rotor gauges, capable of measuring the thinnest to the thickest rotor on applicable vehicles and accurate to within 0.002 inches (0-2 in)
  - Must have lower jaws ending in 90 degree angle measuring points and not flat lower jaws
- Headlight aiming equipment capable of aiming all vehicles in the class of vehicle authorized for inspection



- $\circ$   $\:$  Must be approved for regulated inspection programs in the United States and Canada
- Tire tread depth gauge capable of measuring 1/32 of an inch
- Tire pressure gauge (minimum 120 psi)
- Torque wrench capable of measuring torque requirements of applicable vehicles (minimum 600 ft/lbs)
- Dial gauge (accurate to 0.001 in)
- Vernier caliper capable of measuring brake lining and accurate to within 0.002 of an inch

#### Tools required for PMVI trucks over 8900kg and Semi-Trailers

- King pin gauge for 2-inch pin (required for truck tractor and semi-trailer inspections)
- Lower fifth wheel gauge for 2-inch jaws (required for truck tractor and semi-trailer inspections)

### Inspection manual required for PMVI school bus inspections

• Canadian Standards Association - D250 (applicable to the year of the school bus being inspected)

# Tool List for Light Vehicle Inspection Program (LVI)

- Lifting equipment (hoist) of sufficient capacity to raise the heaviest applicable vehicle for inspection
- Two adjustable safety stands
- Brake drum diameter gauge capable of measuring in inches or metric (0-14 in and 0-40 cm) and accurate within 0.002 of an inch
- Micrometers or rotor gauges, capable of measuring from the thinnest to the thickest rotor on applicable vehicles (0-2 in and 0-57 cm) and accurate to within 0.002 of an inch
  - Must have lower jaws ending in 90 degree angle measuring points and not flat lower jaws
- Headlight aiming equipment capable of aiming all vehicles in the class of vehicle authorized for inspection
  - Must be approved for regulated inspection programs in the United States and Canada
- Tire tread depth gauge capable of measuring 1/32 of an inch
- Tire pressure gauge (minimum 60 psi)
- Torque wrench capable of measuring torque requirements of applicable vehicles (minimum 200 ft/lbs)
- Dial gauge (accurate to 0.001 in)
- Vernier caliper capable of measuring brake lining and accurate to within 0.002 of an inch
- Window tint meter that is self-calibrating and able to test fixed glass
  - Tint meters must be a two-piece design or have an attachment that can test fixed glass



# Body Integrity Inspection Station (BII)

- The shop must have access to the necessary tools and equipment to perform four-wheel alignments (3D electronic frame measurements, and a scanner to check Advanced Driver Assistance Systems (ADAS)/SRS airbag systems).
- The business is required to be an MPI accredited autobody and/or frame repair shop.

The image on the left is an example of a micrometer that is not acceptable for rotor thickness measurement. The image on the right is an acceptable example of a micrometer for rotor thickness measurement.



If you have any questions, please contact Vehicle Safety at <u>vsi-stationinfo@mpi.mb.ca</u> or 204-985-0920 (toll-free 1-866-323-0542).