

Volumetrics™ Instrument

Series DM

- Measures engine compression volume
- Measures TOTAL volume
- Use to locate top dead center
- Temperature compensated
- Not affected by noise
- Built-in reference volume
- Operates on clean shop air and 110 VAC
- Portable



MODELS AVAILABLE	
<u>Model</u>	<u>Volume Range</u>
DM 60-1200 CT	60-1200 CC

Description

The *Volumetrics™ Instrument* measures engine cylinder volume acoustically. Simply remove a spark plug and insert the whistle. The volume is displayed digitally in cubic centimeters.

The *Volumetrics™ Instrument* is powered by 110 Volts AC. It uses shop air for the whistle. It is temperature compensated and can be used to measure cylinder volume of hot or cold engines. Accuracy is not affected by typical shop noise or noise from air operated tools.

A standard 100 cc volume is built in and is used to fine tune the calibration before making critical measurements. Air flow is adjustable to assure accurate measurements even with excessive valve or ring leakage. Normal operation requires 30 SCFH air flow.

Accuracy is within 2% of reading plus or minus 1 digit.

CompRatio™ Signal Processing System

For the Volumetrics™ Instrument



- Includes modified Volumetrics™ Instrument
- Measures combustion volume
- Calculates compression ratio
- Displays averaged volume reading with reduced measurement fluctuation
- Displays fast bar graph of un-averaged volume measurement
- Compensates for spark plug volume

Description

The *CompRatio™ Signal Processing System* combines a modified *Volumetrics™ Instrument* with a laptop computer based signal processing system. Just connect the laptop to the *Volumetrics™ Instrument* with the provided cable and run the easy-to-use *CompRatio™ System*. The *CompRatio™ Application* software uses the raw *Volumetrics™ Instrument* signals to display the averaged volume measurements in cubic centimeters, as well as the calculated compression ratio. The averaging reduces measurement fluctuation. Non-averaged measurements are displayed using a bar graph that can be used to locate top dead center.

System includes a *Volumetrics™ Instrument* (which can be used as a stand-alone), modified with a signal output connector, a laptop computer based signal processing system, the *CompRatio™ System* software, and a connecting cable.

Accuracy of the *CompRatio™ Signal Processing System* is within ± 0.1 compression ratio. Volume range is 30-300 cubic centimeters. (See reverse for details about the stand-alone *Volumetrics™ Instrument*).

“CompRatio™ Application (for Volumetrics™)” software Copyright © 2001-2003 Michigan Scientific Corporation.

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