

Accurately Measures All Engine Coolants Including Automotive, Heavy-Duty and Environmentally-Safe Coolants

Quickly and Accurately Determine Freeze Protection of Engine Coolants and Battery Charge Level

The Leica Duo-Chek Engine Coolant/Battery Tester (refractometer) offers an accurate, fast and easy-to-use method for testing engine coolant freeze point, glycol concentration and battery charge condition. Automatic temperature compensation provides immediate, accurate direct readings of ethylene glycol or environmentally-safe propylene glycol coolant with only a few drops of sample.

Standard Features

- Automatic temperature compensation -- accurate at any temperature
- Portable and Rugged -- no batteries or power cord required and will withstand repeated drops from 36" height
- · Waterproof design -- eliminates condensation on the optics
- Bright, direct read scale -- read concentration and freeze point protection
- Easy to read scales, even when wearing eyeglasses

Trust Your Engine to the Accuracy of a Leica Duo-Chek

Accurate coolant concentration means the coolant viscosity and heat transfer properties are correct and will provide adequate freeze-up and boil-over protection. The proper coolant/water mix also helps prevent engine damage from cavitation corrosion, a problem which can occur when the coolant/water ratio is too high. Compare the Leica Duo-Chek with a field test hydrometer which meets ASTM standards:

Precision	LEICA Duo-Chek +/- 1°F (ASTM D 3321)	Hydrometer +/- 8°F (ASTM D 1124)
Measures "Environmentally Safe" Propylene Glycol Coolants	Yes	No
Automatically Correct readings for temperature effects	Yes	No
Measure Coolant and Battery Charge level with one instrument	Yes	No

The Leica Duo-Chek®

Engine Coolant & Battery Tester



Temperature Compensation Makes the Difference

Automatic temperature compensation makes it unnecessary to measure temperature and apply a correction factor when taking readings. Without temperature compensation or correction, readings can be very inaccurate. The chart shows the difference between a temperature compensated instrument and a non-temperature compensated instrument.

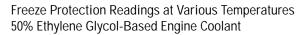
Sample Cover

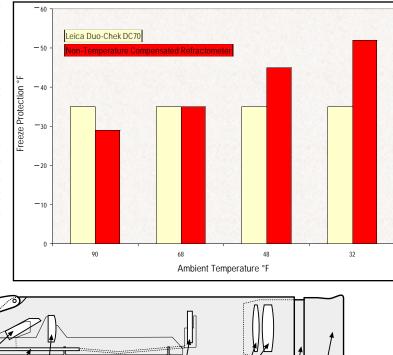
Optical Wedge

Impact Resistant

Prism

Housing





Scale

Lenses

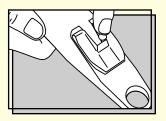
Eyepiece

Eyeguard

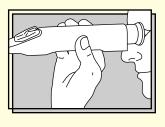
Readings are taken

Results Quickly and Easily! Just three easy steps to read engine coolant or battery charge.

- 1. Take sample using pipette or dipstick.
- 2. Place a few drops of sample on the measuring prism and close the cover.



3. Hold the instrument up to a light source and read the scale.



Cutaway view showing DC70/60 optics and temperature compensation mechanism. As temperature changes, the bi-metal strip moves, changing the position of the optical wedge for accurate readings, regardless of fluid temperature.

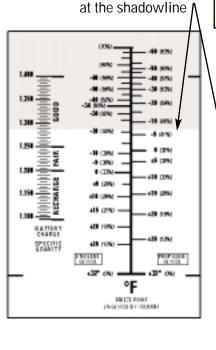
Lens

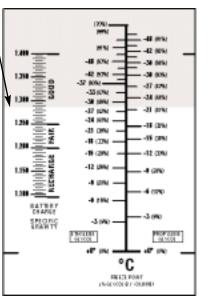
Calibration

Adjustment

Bi-Metal Strip

Model DC70 Model DC60 Catalog No. 137584L0 137564L0 Specific Gravity 1.100-1.400 1.100-1.400 Scale Division 0.01 0.01 Antifreeze Protection 0° to -48°C Ethylene Glycol +32° to -60°F **Propylene Glycol** +32° to -60°F 0° to -48°C Scale Division 5°F 3°C **Coolant Concentration Scale** Ethylene Glycol 0-70% 0-70% **Propylene Glycol** 0-63% 0-61% **Refractive Index Range** 1.3330-1.4048 1.3330-1.4048 -18° to 40°C Temp. Comp. Range 0° to 104°F **Calibration Liquid Distilled Water Distilled Water** Accuracy +1.0°F ±0.55°C





Application

Check engine coolant and battery condition

ISO 9001

Due to a policy of continuous development. we reserve the right to change specifications without notice.

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