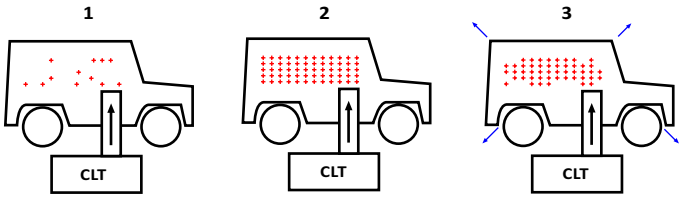
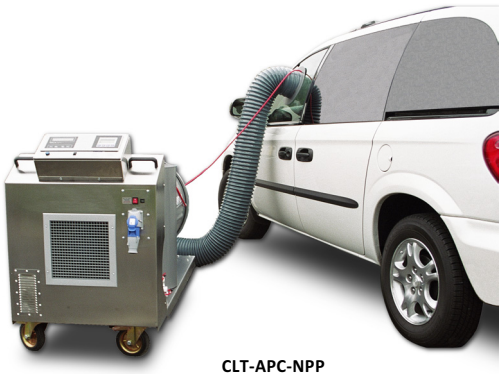
Vehicle Cabin Leakage Testers

Cabin Comfort Test Rig

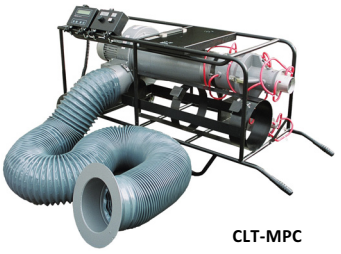
Leakage testing is performed by pressurizing or depressurizing the vehicle cabin. The tester measures the changes in cabin pressure. The control unit consists of a manometer and pressure transducers. The manometer detects the leakage flow, which is calculated by measuring the nozzle pressure relative to static pressure. The tester controls an adjustable fan to maintain static test pressure. Five selectable inlet nozzles provide reasonable leakage flow rate measurements of 2.5 to 800 cfm.



1. The cab is pressurized (either positively or negatively)
2. Pressure will be stable, normally stable conditions are achieved quickly
3. The leakage rate is measured



CLT-APC-NPP



CLT-MPC

Features:

- Automatic Pressure Control
- Negative Pressure Testing
- Features High Accuracy Manometer
- System includes inlet nozzles, certificate of conformance to ISO 5801: 1997, and pressure measurement calibration certificate

Specifications

Model	CLT-MPC	CLT-MPC-NPP	CLT-APC	CLT-APC-NPP
Fan Speed	847 cfm (400 L/sec)			
Pressure Measurement Accuracy	+/- 2 % of reading +/- 1 digit			
Leakage Flow Measurement Accuracy	+/- 3 % of reading +/- 1 digit Providing flow rate is varied by the nozzle * See nozzle specs			
Cabin Pressure Preset Ranges	–		0.2 to 2 in. H_2O (5 to 499 Pa)	
Automatic Pressure Control	–		○	
Negative Pressure Plenum	–	○	–	○
Small Transport Cart	○	–		
Power Supply	120/240 V, 1 phase			
Duct Size	16.4 ft x ø8 inches (5 m x ø203 mm)			
Dimensions	Small Transport Cart: W 22.5" x H 23.5" x D 54" Large Transport Cart: W 27.5" x H 42" x D 58.5"			

Nozzle Specifications

Nozzle	Inlet Diameter	Flow Ranges
F	0.590" (15 mm)	2.5 to 10 cfm (1.2 to 4.8 l/s)
G	1.122" (28.5 mm)	8.5 to 36 cfm (4 to 17 l/s)
H	2.204" (56 mm)	32 to 142 cfm (15 to 67 l/s)
D	3.543" (90 mm)	53 to 296 cfm (25 to 140 l/s)
E	6.023" (153 mm)	190 to 847 cfm (90 to 400 l/s)