

Cooling System Service Equipment

Cooling System Test & Evacuation Equipment

Mityvac offers the most advanced cooling system test and refill equipment available. In addition to offering a professional pressure tester and AirEvac kit, Mityvac is the first to combine pressure, temperature, and vacuum testing and automatic refill into one kit. Only MV4525 is capable of performing all these tests and functions, replacing up to three different competitive kits. But even more important, it is the first tester designed for testing a vehicle with the engine on or off. Testing with the engine on provides real-time feedback of pressure, vacuum and temperature while the engine warms up through its normal operating cycle, providing the most accurate assessment on how the cooling system is functioning. Using this system, a technician can quickly and easily diagnose cooling system leaks, a blown head gasket, a cracked or damaged head or block, or a faulty thermostat, fan switch/relay, or coolant sensor.

To compliment our testers, Mityvac offers 29 custom designed adapters to fit the radiators, coolant bottles, and caps of virtually every make and model of US, Asian, and European manufactured car and light truck. All adapters are sold separately, and are also available in five cost saving kits.

MV4525 Cooling System Test & Refill Kit

The MV4525 is the most innovative, advanced automotive cooling system test kit ever designed. It is the first and only tester developed specifically to run complete cooling system diagnostics with the engine running and at normal operating temperature and pressure. New patent pending technology combines testing and monitoring of pressure, vacuum and temperature simultaneously, to provide real-time data far beyond the capabilities of a simple pressure tester. This combination of features ensures the most extensive, accurate cooling system diagnosis possible. See pages 34 and 35 for a complete list of available adapters and their applications as well as convenient, cost saving adapter kits. Visit mityvac.com to view a complete updated make/model/year application guide.

Applications:

- Pressure and/or vacuum test for leaks in automotive cooling systems
- Rapidly refill cooling systems without trapping air
- Check proper function of thermostat, cooling sensor, and cooling fan(s)
- Diagnose blown head gasket(s), cracked block, and cylinder head damage
- Cooling system cap pressure testing (additional adapters required)

Features:

- Patent pending coupler saves the expense of up to three separate kits by combining pressure, vacuum and temperature testing capabilities
- Tests cooling system with engine on or off to pinpoint leaks or diagnose blown head gaskets, cracked block, or damaged head(s).
- Refills cooling system in minutes without trapping air that can cause overheating
- Components connect using self-locking quick-disconnects for easy and time saving assembly and breakdown.
- Safety valves prevent discharge of pressure and/or hot fluid in case of accidental disconnect
- Built-in valve allows the rapid, safe release of pressure and fluid without waiting for the system to cool
- Includes four adapters for connecting to the most common radiator and coolant bottle necks found on Domestic, Asian, and European automobiles.
- Additional adapters available for all makes and models of cars and light trucks
- Packaged in custom-molded case with space for additional adapters
- Molded adapter design provides a secure grip during installation or removal

Includes:

- Pressure Pump
- 2.5" (64 mm) diameter diaphragm style compound gauge w/ hanging hook
- Venturi Vacuum
- Valve Coupler
- Temperature Probe
- (2x) 30" (760 mm) Extension Hose
- 5' (1.5 m) Refill Hose
- 5' (1.5 m) Drain Hose
- Cap Wrench
- Hose Clip
- MVA100 Cooling System Adapter (US and foreign cars)
- MVA101 Cooling System Adapter (Asian cars)
- MVA102 Cooling System Adapter (Asian cars)
- MVA103 Cooling System Adapter (US and foreign cars)
- Custom Molded Case
- User's Manual (English, French, Spanish)
- Adapter Selection Guide (English, French, Spanish)

Specifications:

Packaged Weight:	10.3 lbs (4.7 kg)
Packaged Size:	20.6" x 18.3" x 4.3" (525 mm x 465 mm x 110 mm)
Maximum Pressure:	30 psi (200kPa)
Maximum Temperature:	400°F (200°C)
Vacuum:	15 in. Hg (51 kPa) @ 60 psi (4.1 bar) inlet pressure 24 in. Hg (81 kPa) @ 90 psi (6.2 bar) inlet pressure 25 in. Hg (85 kPa) @ 120 psi (8.3 bar) inlet pressure
Air Inlet Size:	¼" NPT



MV4525

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MV4530 Cooling System Pressure Test Kit

The Mityvac MV4530 Cooling System Pressure Test Kit quickly reveals external cooling system leaks, and detects internal leaks caused by a blown head gasket, or cracked block or head. The kit comes complete with a high-quality pressure pump and four (4) adapters for connecting to the cooling systems of most US and Asian manufactured cars and light trucks. See pages 34 and 35 for a complete list of available adapters and their applications as well as convenient, cost saving adapter kits. Visit mityvac.com to view a complete updated make/model/year application guide.

Applications:

- Pressure testing for leaks in automotive cooling systems
- Cooling system cap pressure testing (additional adapters required)

Features:

- Hand operated pump builds pressure quickly to locate leaks in automotive cooling systems
- Includes four (4) adapters for connecting to the most common radiator and coolant bottle necks found on US Domestic, Asian automobiles
- Components connect using self-locking quickdisconnects for easy and time saving assembly and breakdown
- Convenient push-button valve safely relieves pressure when testing is complete
- Additional adapters available for most all makes and models of cars and light trucks
- Adapters also available for testing cooling system caps
- Packaged in custom-molded case with space for two (2) additional adapters

Includes:

- Hand Pressure Pump w/ 2' (610 mm) long hose and push-button pressure relief valve
- MVA100 Cooling System Adapter (US and foreign cars)
- MVA101 Cooling System Adapter (Asian cars)
- MVA102 Cooling System Adapter (Asian cars)
- MVA103 Cooling System Adapter (US and foreign cars)
- Cap Wrench
- Custom Molded Case
- User's Manual (English, French, Spanish)
- Adapter Selection Guide (English, French, Spanish)

Specifications:

Packaged Weight:	6.0 lbs (2.7 kg)
Packaged Size:	17.9" x 13.2" x 4.8" (455 mm x 335 mm x 122 mm)
Maximum Pressure:	30 psi (200kPa)



MV4530

MV4529 Cooling System Pressure Tester

The Mityvac MV4529 Cooling System Pressure Tester quickly reveals external cooling system leaks, and detects internal leaks caused by a blown head gasket, or cracked block or head. The kit comes complete with a high-quality pressure pump and one (1) adapter for connecting to bayonet style radiator and coolant bottle necks found on many US and foreign manufactured automobiles. See pages 34 and 35 for a complete list of available adapters and their applications as well as convenient, cost saving adapter kits. Visit mityvac.com to view a complete updated make/model/year application guide.

Applications:

- Pressure testing for leaks in automotive cooling systems
- Cooling system cap pressure testing (additional adapters required)

Features:

- Hand operated pump builds pressure quickly to locate leaks in automotive cooling systems
- Includes adapter for connecting to bayonet style radiator and coolant bottle necks found on many US and foreign manufactured automobiles
- Connects directly to Stant style adapters. No conversion adapter is required.
- Convenient push-button valve safely relieves pressure when testing is complete
- Additional adapters available for most all makes and models of cars and light trucks
- Adapters also available for testing cooling system caps
- Packaged in custom-molded case

Includes:

- Hand Pressure Pump w/ 2' (610 mm) long hose and push-button pressure relief valve
- MVA100 Cooling System Adapter (US and foreign cars)
- Custom Molded Case
- User's Manual (English, Spanish, French)

Specifications:

Packaged Weight:	3.0 lbs (1.4 kg)
Packaged Size:	17.7" x 14.6" x 20.1" (450 mm x 370 mm x 510 mm)



MV4529

Cooling System Service Equipment










Cooling System Adapter Selection Guide

To complement our testers, Mityvac offers a large selection of adapters to fit the radiators and coolant bottles of most makes and models of US, Asian, and European manufactured cars and light trucks. In addition, for each cooling system adapter, we offer an equivalent cap adapter for testing the function of the cooling system cap. The chart below provides a list of available adapters and a brief description of their applications. Visit mityvac.com to view a complete updated make/model/year application guide. The most popular adapters are available in our test kits MV4525, MV4530 and MV4529, but each is available for separate purchase or in special adapter kits shown on page 35.

Radiators and Coolant Bottles with bayonet style neck

Pressure Cap	System Adapter #	Cap Adapter #	Application(s)
	MVA100 	MVA200 	Original large bayonet style used on most early model autos. Still used on many applications through current year.
	MVA101 	MVA201 	Small bayonet applications with 16mm deep neck. Numerous applications including many Asian autos.
	MVA102 	MVA202 	Small bayonet applications with 9mm deep neck. Numerous applications including many Asian autos.

Radiators and Coolant Bottles with internal threads on the neck

	MVA106 	MVA206 	Volkswagen models 1990-1998 w/ internal thread on coolant bottle
	MVA108 	MVA208 	Volkswagen and Audi models 1998 and later w/internal thread on coolant bottle
	MVA111 	MVA211 	Toyota MR2 Spyder and Celica 2000 and later

Radiators and Coolant Bottles with external threads on the neck

	MVA103 	MVA203 	Numerous domestic applications especially GM beginning in early 1990s through current year. Also some Mercedes, Jaguar, and Ford.
	MVA104 	MVA204 	Volkswagen and Audi models 1975 through 1993 w/ external thread on coolant bottle
	MVA105 	MVA205 	Peugeot 206/406, Volvo, Land Rover Freelander, Alfa Romeo 164, Renault, Mini, Jeep, Sterling, Saab w/ external thread on coolant bottle
	MVA107 	MVA207 	Porsche, Mercury, Saturn, Saab, Jaguar, Range Rover, Pontiac, Daewoo, Ford
	MVA109 	MVA209 	Mercedes E-Class 1996 and later, Mercedes w/external thread on coolant bottle (except MClass), Chrysler Crossfire 2004 and later
	MVA110 	MVA210 	Ford Focus and Escape, Jaguar XK8 and XJ8, Mazda Tribute
	MVA112 	MVA207 	BMW through 1987, Merkur Scorpio 1987 through 1989
	MVA113 	MVA213 	BMW 1998 through 2002 with external thread on coolant bottle, Land Rover Range Rover 1995 through 1997
	MVA114 	MVA214 	Mazda 3

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Cooling System Service Equipment

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All of our MVA100 series cooling system adapters and MVA200 series cooling system cap adapters listed on page 34 are available for separate purchase or in conveniently packaged kits. Kits MVA4610 thru MVA4650 listed below include a custom-molded case with space for up to eight adapters.

Cooling System Test Adapter Kits

The most popular of our MVA100 series cooling system test adapters are included with test kits MV4525, MV4530 and MV4529. Adapter kits MVA4620 and MVA4640 contain most of the others.

	MV4525	MV4529	MV4530	MVA4620	MVA4640
MVA100	X	X	X		
MVA101	X		X		
MVA102	X		X		
MVA103	X		X		
MVA104				X	
MVA105				X	
MVA106				X	
MVA107					X
MVA108				X	
MVA109				X	
MVA110					X
MVA111					X
MVA112					
MVA113				X	
MVA114					X

Cooling System Cap Test Adapter Kits

All of our MVA200 series cooling system cap test adapters are available for separate purchase or in the convenient kits listed below.

	MVA4610	MVA4630	MVA4650
MVA200	X		
MVA201	X		
MVA202	X		
MVA203	X		
MVA204		X	
MVA205		X	
MVA206		X	
MVA207			X
MVA208		X	
MVA209		X	
MVA210			X
MVA211			X
MVA213		X	
MVA214			X

MVA360 Cooling System Test Hose

Allows Mityvac hand pressure pumps to be used with any of the MVA100 and MVA200 series cooling system test adapters to test automotive cooling systems and cooling system caps for leaks that can lead to overheating and severe engine damage.

Specifications:

Weight: 5.2 oz (215 g)



MVA4620
European CS Test Adapter Kit



MVA4640
Extended CS Test Adapter Kit



MVA4610
US/Asian CS Cap Adapter Kit



MVA4630
European CS Cap Adapter Kit



MVA4650
Extended CS Cap Adapter Kit



MVA360

Cooling System Service Equipment



MV4535

MV4535 Cooling System AirEvac Kit

The Mityvac MV4535 Cooling System AirEvac Kit refills automotive cooling systems in minutes without trapping air that can cause overheating. The kit combines a universal adapter with a compressed-air operated venturi vacuum to quickly eliminate trapped air by purging and refilling the cooling system under vacuum. Its new innovative design allows improved access into tight areas, and the patent pending valve coupler allows the operator to test the cooling system for leaks prior to refilling.

Features:

- Uses shop-air to quickly evacuate an automobile's cooling system for vacuum leak testing
- Refills cooling system in minutes without trapping air that can cause overheating
- Universal adapter forms an airtight seal with all radiator and coolant bottle necks. No custom adapters are required.
- Components connect using self-locking quickdisconnects for easy and time saving assembly and breakdown.
- Packaged in custom-molded case

Includes:

- 2.5" (64 mm) diameter diaphragm style vacuum gauge w/ hanging hook
- Venturi Vacuum
- Valve Coupler
- Universal Cooling System Adapter
- (2x) 30" (760 mm) Extension Hose
- 5' (1.5 m) Refill Hose
- Custom Molded Case
- User's Manual (English, French, Spanish)

Specifications:

Packaged Weight:	5.0 lbs (2.3 kg)
Packaged Size:	17.7" x 12.8" x 4.2" (450 mm x 325 mm x 107 mm)
Vacuum:	15 in. Hg (51 kPa) @ 60 psi (4.1 bar) inlet pressure
	24 in. Hg (81 kPa) @ 90 psi (6.2 bar) inlet pressure
	25 in. Hg (81 kPa) @ 120 psi (8.3 bar) inlet pressure
Air Inlet Size:	1/4" NPT



MV4506

MV4506 Universal Cooling System Adapter

Expand the versatility of standard cooling system pressure testers by adding the Mityvac MV4506 Universal Adapter to your toolbox. This adapter replaces dozens of special, custom-manufactured radiator and expansion tank adapters required by other brands of pressure testers, saving you time, money and space. Simply attach the radiator adapter from your standard kit to the inlet side of our universal adapter to create a pressure tester compatible with the majority of cars, trucks and SUVs. The MV4506 is easy to service and requires no inflation or conditioning.

Features:

- Universal design fits most automotive radiators and expansion tanks
- Inlet fits standard adapter available on all brands of pressure testers
- Simple, easy-to-service design requires no complicated setup

Includes:

- Universal cooling system adapter
- User manual (English/French/Spanish)

Specifications:

Weight:	11 oz (310 g)
Size:	5 1/4" tall x 2 1/2" diameter (135 mm tall x 65 mm diameter)

Fig. 1

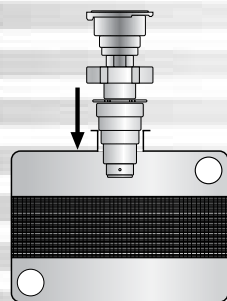
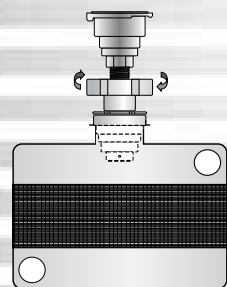


Fig. 2



Application of the Universal Cooling System Adapter

The Mityvac Universal Cooling System Adapter utilizes a multi-step, expandable rubber bushing design to adapt to the radiator and expansion tank filler necks on most domestic and import automobiles. Each of the five steps on the bushing has a unique diameter ranging from 3/4" (20 mm) up to 1 1/2" (40 mm). The diameters are designed slightly smaller than the most common filler neck sizes so that the adapter easily installs into the filler neck until the largest possible diameter fits with only slight interference (Fig. 1). The tension knob is then rotated causing the bushing to expand and securing the adapter in the neck (Fig. 2). Once properly installed, the adapter forms an airtight seal with the radiator or expansion tank, and can be utilized for vacuum, pressure or temperature related diagnostics as well as evacuating and refilling coolants while eliminating airlocks.

The Mityvac Universal Cooling System Adapter will not fit every automotive radiator and expansion tank available. However, it can be used in conjunction with many specialized adapters. If the sole intended use of the universal adapter is for a specific or unique application, please verify the size and depth of the application to ensure proper fit.

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MV4560 Cooling System Pressure Test Kit

The Mityvac MV4560 Cooling System Pressure Test Kit makes automotive cooling system testing simple, efficient, and economical. It combines our unique hand pressure pump with four cooling system test adapters and two dual-function cap test adapters to quickly reveal external cooling system leaks and detect internal leaks and defective caps.

Features:

- Economical, accurate and simple method to find common causes of overheating
- Pinpoints external leaks caused by loose clamps or leaky hoses, connectors, water pumps or radiators
- Diagnoses internal leaks caused by a blown head gasket or damaged block or head
- Test radiator and coolant bottle caps to ensure they are maintaining the correct pressure
- Contains adapters to test the cooling system and caps of most US and Asian manufactured cars and light trucks, as well as many European vehicles

Includes:

- Mityvac Selectline hand pressure pump w/ 2" (50 mm) diameter gauge
- Small Bayonet Test Adapter, Deep
- Small Bayonet Test Adapter, Shallow
- Large Bayonet Test Adapter
- GM/Ford Test Adapter
- Small Bayonet Cap Test Adapter
- Large Bayonet/GM/Ford Cap Test Adapter
- Connection Hose
- Compression Nut
- User Manual



MV4560

Specifications:

Packaged Weight:	2.5 lbs (1.1 kg)
Packaged Size:	13.3" wide x 12" deep x 2.8" tall (335 mm wide x 305 mm deep x 70 mm tall)

Vehicle Applications

Make	Model	Make	Model
Acura	All	Jeep	All with bayonet cap
Buick	All	Kia	All
Cadillac	All except Catera	Land Rover	2003-2006 Freelander, 2005-2009 LR3
Chevrolet	All except Aveo	Lexus	All except GS 460, IS F, LS 460, LS 600H
Chrysler	All	Mazda	All except Mazda 3
Dodge	All	Mercury	All except 1995-1997 Mystique
Eagle	All	Mitsubishi	All
Ford	All except Contour, Focus, Mondeo	Nissan	All
Geo	All	Oldsmobile	All
GMC	All	Plymouth	All
Honda	All	Pontiac	All except Le Mans
Hummer	All	Saturn	All except LS, LW, Vue
Hyundai	All	Scion	All except 2008-2009 xB
Infiniti	All	Subaru	All
Isuzu	All	Suzuki	All through 2009 except Verona
Jaguar	2000-2008 S-Type	Toyota	All except 2000-2005 Celica, 200-2005 MR2 Spyder, 2006-2009 RAV 4

Applications verified through 2009 model year. For the latest updates, visit Mityvac.com.

MV4510 Motorcycle Cooling System Test Kit

The Mityvac MV4510 Motorcycle Cooling System Pressure Test Kit is specially designed for testing motorcycles and other recreational, sports, and utility vehicles with liquid cooled engines. It makes cooling system testing simple, efficient, and economical, and can quickly pinpoint the cause of cooling system related problems including external and internal leaks or defective caps.

Features:

- Economical, accurate and simple method to find common causes of overheating
- Pinpoints external leaks caused by loose clamps or leaky hoses, connectors, water pumps or radiators
- Diagnoses internal leaks caused by a blown head gasket or damaged block or head
- Test radiator and coolant bottle caps to ensure they are maintaining the correct pressure
- Specially designed low-profile test adapter fits into areas with tight or limited access, requiring less component disassembly

Includes:

- Mityvac Selectline hand pressure pump w/ 2" (50 mm) diameter gauge
- Low-profile Bayonet Test Adapter
- Bayonet Cap Test Adapter
- Connection Hose
- Compression Nut
- User's Manual

Specifications:

Packaged Weight:	1.6 lbs (.7 kgs)
Packaged Size:	9.6" wide x 12.5" deep x 2.4" tall (245 mm wide x 320 mm deep x 60 mm tall)



MV4510