

# Cooling System 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.

#### 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)
- User's Manual (English, French, Spanish)
- Adapter Selection Guide (English, French, Spanish)



MV4525

#### 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:	1/4" NPT

# Cooling System Equipment

## MV4530 Cooling System Pressure Test Kit



MV4530

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. For more adapter features, selection details, and vehicle make/model application guide, click on the link above. Cost saving adapter kits are featured below.

### 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 quick-disconnects 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)

## MV4529 Cooling System Pressure Tester



MV4529

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.

### 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)

# Cooling System Equipment

## MVA4535 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.

### Applications:

- Vacuum refilling cooling systems without trapping air
- Vacuum testing for leaks in automotive cooling systems

### 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 quick-disconnects 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)



MVA4535

### 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

## MVA4610 US/Asian Cap Adapter Kit

The Mityvac MVA4610 US/Asian Cap Adapter Kit contains four adapters for testing the proper function of the radiator and coolant bottle caps on the vast majority of US and Asian manufactured cars and light trucks. These cap adapters compliment the system adapters included with kits MV4525 and MV4530. The pump included with MV4525 or MV4530 is required for pressure testing with these adapters, or crossover adapter MVA400 may be purchased to use these adapters with competitive bayonet style pressure pumps.

### Applications:

- Tests the capability of the cooling system cap to hold pressure
- Tests the capability of the cooling system cap to vent pressure at the proper level

### Features:

- Custom design ensures an airtight seal with the cooling system cap for reliable results.
- Comfortable molded design makes the adapters lightweight and easy to grip
- Conveniently connects to pump using low-profile quick-connects
- Custom molded case contains space for four additional adapters

### Includes:

- MVA200 Bayonet Cap Adapter (US and foreign cars)
- MVA201 Bayonet Cap Adapter (Asian cars)
- MVA202 Bayonet Cap Adapter (Asian cars)
- MVA203 Threaded Cap Adapter (US and foreign cars)
- Custom Molded Case
- User's Manual (English, French, Spanish)
- Adapter Selection Guide (English, French, Spanish)



MVA4610

### Specifications:

Packaged Weight:	4.1 lbs (1.9 kg)
Packaged Size:	17.7" x 12.8" x 4.2" (450 mm x 325 mm x 107 mm)



# Cooling System Equipment

## MVA4620 European System Adapter Kit

MVA4620 contains six cooling system adapters that expand the applications of test kits MV4525 and MV4530 to include a large number of European makes and models of cars and light trucks. This kit contains adapters only, and requires additional equipment included with MV4525 and MV4530 to perform cooling system tests or refill functions. Crossover adapter MVA400 may be purchased to use these adapters with competitive bayonet style testers.

### Applications:

- Expands the testing applications of MV4525 and MV4530 to include many European vehicles.
- Adapts test equipment to a vehicle's radiator or coolant bottle for performing cooling system diagnostics, refilling, and airlock elimination.

### Features:

- Each adapter is custom designed to accurately duplicate the coolant bottle cap to ensure an airtight seal with the cooling system.
- Comfortable molded design makes the adapters lightweight and easy to grip
- Adapters use low-profile quick-connects to conveniently connect to test equipment
- Custom molded case contains space for two additional adapters

### Includes:

- MVA104 Cooling System Adapter
- MVA105 Cooling System Adapter
- MVA106 Cooling System Adapter
- MVA108 Cooling System Adapter
- MVA109 Cooling System Adapter
- MVA113 Cooling System Adapter
- Custom Molded Case
- User's Manual (English, French, Spanish)
- Adapter Selection Guide (English, French, Spanish)

### Specifications:

Packaged Weight:	5.3 lbs (2.4 kg)
Packaged Size:	17.7" x 12.8" x 4.2" (450 mm x 325 mm x 107 mm)



MVA4620

## MVA4630 European Cap Adapter Kit

The Mityvac MVA4630 European Cap Adapter Kit contains six adapters for testing the proper function of the coolant bottle caps used on many European manufactured cars and light trucks. The pump included with MV4525 or MV4530 is required for pressure testing with these adapters, or crossover adapter MVA400 may be purchased to use these adapters with competitive bayonet style pressure pumps.

### Applications:

- Tests the capability of the cooling system cap to hold pressure
- Tests the capability of the cooling system cap to vent pressure at the proper level

### Features:

- For reliable results, each adapter is custom designed to ensure an airtight seal with the cooling system cap
- Comfortable molded design makes the adapters lightweight and easy to grip
- Conveniently connects to pump using low-profile quick-connects
- Custom molded case contains space for two additional adapters

### Includes:

- MVA204 Cooling System Cap Adapter
- MVA205 Cooling System Cap Adapter
- MVA206 Cooling System Cap Adapter
- MVA208 Cooling System Cap Adapter
- MVA209 Cooling System Cap Adapter
- MVA213 Cooling System Cap Adapter
- Custom Molded Case
- User's Manual (English, French, Spanish)
- Adapter Selection Guide (English, French, Spanish)

### Specifications:

Packaged Weight:	5.2 lbs (2.4 kg)
Packaged Size:	17.7" x 12.8" x 4.2" (450 mm x 325 mm x 107 mm)



MVA4630

# Cooling System Equipment

## MVA4640 Extended System Adapter Kit

Extended System Adapter Kit MVA4640 contains four cooling system adapters that extend the applications of test kits MV4525 and MV4530 to include additional makes and models of U.S., European, and Asian cars and light trucks. This kit contains adapters only, and requires additional equipment included with MV4525 and MV4530 to perform cooling system tests or refill functions. Crossover adapter MVA400 may be purchased to use these adapters with competitive bayonet style testers.

### Applications:

- Expands the testing applications of MV4525 and MV4530 to include many European vehicles.
- Adapts test equipment to a vehicle's radiator or coolant bottle for performing cooling system diagnostics, refilling, and airlock elimination.

### Features:

- Each adapter is custom designed to accurately duplicate the coolant bottle cap to ensure an airtight seal with the cooling system.
- Comfortable molded design makes the adapters lightweight and easy to grip
- Adapters use low-profile quick-connects to conveniently connect to test equipment
- Custom molded case contains space for two additional adapters

### Includes:

- MVA107 Cooling System Adapter
- MVA110 Cooling System Adapter
- MVA111 Cooling System Adapter
- MVA114 Cooling System Adapter
- Custom Molded Case
- User's Manual (English, French, Spanish)
- Adapter Selection Guide (English, French, Spanish)



MVA4640

### Specifications:

Packaged Weight:	4.6 lbs (2.1 kg)
Packaged Size:	17.7" x 12.8" x 4.2" (450 mm x 325 mm x 107 mm)

## MVA4650 Extended Cap Adapter Kit

The Mityvac MVA4650 Extended Cap Adapter Kit contains four adapters for testing the proper function of the coolant bottle caps used on additional makes and models of U.S. Asian, and European manufactured cars and light trucks. The pump included with MV4525 or MV4530 is required for pressure testing with these adapters, or crossover adapter MVA400 may be purchased to use these adapters with competitive bayonet style pressure pumps.

### Applications:

- Tests the capability of the cooling system cap to hold pressure
- Tests the capability of the cooling system cap to vent pressure at the proper level

### Features:

- For reliable results, each adapter is custom designed to ensure an airtight seal with the cooling system cap
- Comfortable molded design makes the adapters lightweight and easy to grip
- Conveniently connects to pump using low-profile quick-connects
- Custom molded case contains space for two additional adapters

### Includes:

- MVA207 Cooling System Cap Adapter
- MVA210 Cooling System Cap Adapter
- MVA211 Cooling System Cap Adapter
- MVA214 Cooling System Cap Adapter
- Custom Molded Case
- User's Manual (English, French, Spanish)
- Adapter Selection Guide (English, French, Spanish)







MVA4650

### Specifications:

Packaged Weight:	4.5 lbs (2.0 kg)
Packaged Size:	17.7" x 12.8" x 4.2" (450 mm x 325 mm x 107 mm)

# Cooling System Equipment

## Cooling System Adapter Selection Guide

<b>Radiators and Coolant Bottles with bayonet style neck</b>					
<i>Pressure Cap</i>	<i>System Adapter #</i>	<i>Cap Adapter #</i>	<i>Application(s)</i>		
	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.
<b>Radiators and Coolant Bottles with internal threads on the neck</b>					
	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
<b>Radiators and Coolant Bottles with external threads on the neck</b>					
	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 M-Class), 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

# Cooling System Equipment

## MV4506 Universal Cooling System Adapter

Expand the versatility of standard cooling system pressure testers by adding the Mityvac 4506 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 4506 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)



MV4506

## 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.

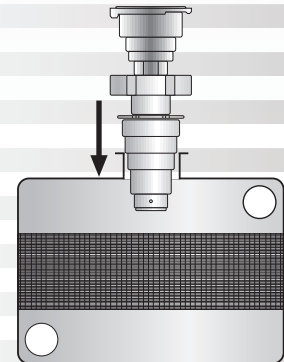


Fig. 1

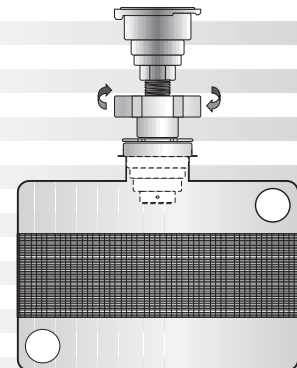


Fig. 2