



Air Conditioning Products  
Tools, Equipment & Refrigerant

**Part # 43664**

**Deluxe Radiator & Radiator Cap  
Pressure Test Kit  
with Air Lift**

**28 Piece Kit**

**IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NO LIABILITY IS  
ACCEPTED FOR INCORRECT USE OF THIS PRODUCT.**

# SAFETY WARNING AND PRECAUTIONS

## General Safety Warnings

- ⚠ **WARNING:** Please thoroughly read the instructions and warnings contained in this manual prior to using or operating this tool. Failure to follow these instructions may result in severe personal injury to the user and bystanders or inflict damage to this tool or surrounding property.
- ⚠ **WARNING:** Use proper safety equipment and clothing to protect eyes and skin. User and bystanders should wear protective eyewear which complies with current safety standards. Use an ANSI-approved dust mask or respirator when working around metal, wood, and chemical dusts and mists. Protective clothing includes non-skid safety shoes, gloves, hard hat, dust collection systems, and hearing protection when appropriate.
- ⚠ **WARNING:** Keep bystanders and children out of the area while operating this tool.
- ⚠ **WARNING:** Always keep work area clean, uncluttered, and well-lit to limit the potential for accidents and injuries. **DO NOT** work on wet or slippery floor surfaces.
- ⚠ **WARNING:** Do not operate this tool if you are tired or under the influence of alcohol, drugs, or medications which could impair your ability to properly operate this tool.
- ⚠ **WARNING:** Do not wear loose clothing or jewelry as they can be caught in moving parts. Wear restrictive hair covering to contain long hair.
- ⚠ **WARNING:** Do not reach across running machines. Keep proper footing and balance at all times.

**NOTE:** The warnings discussed in this manual cannot cover all possible conditions and situations which may occur. Please use discretion and common sense.

**KEEP THIS MANUAL FOR FUTURE REFERENCE.**

# INSTRUCTIONS FOR PRESSURE TESTING COOLING SYSTEM

## Test for Leaks in Cooling System

- **Step 1:** Remove the original radiator cap after assuring that the cooling system is depressurized and cool.
- **Step 2:** Choose the correct radiator cap for the vehicle being tested from the test kit and install on cooling system opening.
- **Step 3:** Remove the hand pump assembly from the test kit and fasten the quick coupler at the end of the hose to the radiator cap securely. Operate the hand pump until reaching the pressure recommended by the vehicle manufacturer. (See fig. 1 & 2) **DO NOT** exceed vehicle manufacturer's recommended pressure or maximum gauge range pressure of 35psi (2.5bar).
- **Step 4:** Check the pressure reading on the gauge immediately after reaching the vehicle manufacturer's recommended pressure. If the pressure reading drops, there is a leak in the cooling system. After pressure testing is completed, press the release button on the quick coupler until the reading on the gauge reads 0. Remove quick coupler from radiator cap and then remove radiator cap from



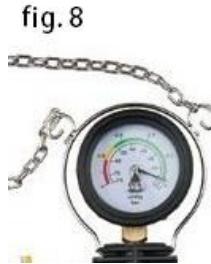
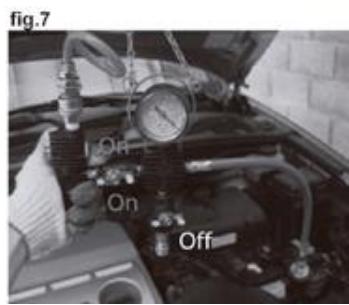
## Test for Leaks in Original Radiator Cap

- **Step 1:** Choose from the test kit the correct radiator cap connector (02A or 02B) and correct steel radiator cap (03, 04, or 05) for the vehicle being tested. Fasten the original radiator cap to the radiator cap connector and then fasten the steel radiator cap from the test kit to the other end of the radiator cap connector.
- **Step 2:** Remove the hand pump assembly from the test kit and fasten the quick coupler at the end of the hose to the radiator cap securely. Operate the hand pump until reaching the pressure recommended by the vehicle manufacturer. (See fig. 3) Do not exceed vehicle manufacturer's recommended pressure or maximum gauge range pressure of 35psi (2.5bar).
- **Step 3:** Check the pressure reading on the gauge immediately after reaching the vehicle manufacturer's recommended pressure. If the pressure drops, there is a leak in the radiator cap. After pressure testing is completed, press the release button on the quick coupler until the reading on the gauge reads 0. Remove quick coupler from radiator cap and then remove the original radiator cap from the radiator cap connector. Discard original radiator cap and replace with new cap if leaking or if it does not meet vehicle manufacturer's recommendations.

# INSTRUCTIONS FOR PURGING AND REFILLING COOLING SYSTEM

## Purge Cooling System

- **Step 1:** Drain coolant from radiator as completely as possible.
- **Step 2:** Remove the purge and refill tool from the test kit and hang the tool in a convenient location under the hood with the hook provided.
- **Step 3:** Choose the correct radiator cap for the vehicle being tested, or the universal rubber radiator adapter from the test kit and install your choice on the cooling system opening. Fasten the quick coupler at the end of the hose on the purge and refill tool to the radiator cap securely. (See fig. 4 & 5)
- **Step 4:** Turn valve No. 3 to the open position and valve No. 6 to the closed position. (See fig. 6)
- **Step 5:** Connect air supply to the purge and refill tool and press operating button until the pressure reaches 20-25 Hg (50-60cmHg). Turn valve No. 3 to the closed position and release the operating button. (See fig. 7 & 8)



## Refill Cooling System

- **Step 1:** Connect the coolant hose to the purge and refill tool and submerge in coolant.
- **Step 2:** Assure that valve No. 3 is in the closed position and that there is coolant in the coolant hose.
- **Step 3:** Turn valve No. 6 to the open position to allow the coolant to refill the cooling system.
- **Step 4:** The refill is complete when the gauge reads 0.

**Note:** Please check the coolant level and add coolant as necessary to the proper level.

# APPLICATION OF RADIATOR PRESSURE TESTER

0	Thermometer	
1	Pressure Testing Pump With Gauge	
2A	Connector R123/R124	
2B	Connector R123/R124	
3	Buick Chrysler Chevrolet Dodge Jeep Mercedes Benz Oldsmobile Pontiac	LeSabre 1990-, Park Avenue 1991- Sebring 1995- Venture 1997- Caravan 1989-, Dakota 1989-, Startus 1995-  W123, W126, W124, W201 Silhouette 1990- Bonneville 1990-, Grand Prix - 2003
4	Acura Chevrolet Chrysler Dodge Eagle Ford Geo GM Honda Hyundai Infiniti Isuzu Kia Lexus Mazda Mercury Mitsubishi Mercedes Benz Nissan Subaru Suzuki Peugeot Toyota	Integra: 1990-1993 Nova: 1985-1998, Spectrum: 1985-1988, Sprint: 1985-1988 Laser: 1991-1998 Colt: 1984-1992, Stealth: 1991-1996 Talon: 1991 -1998 Escort: 1991-, Explorer: 1995-2001, Festiva: 1988-1993, Probe: 1989-1997 Ranger: 1987-, Tempo: 1992-1994, Windstar: 1995- Thunderbird: 1989-1992, 1993-1997: W/VA Metro: 1989-1994, Prizm: 1998-1998, Tracker: 1989-1993 Nova, Spectrum, Sprint Accord: 1990-1993, Civic: 1988-1991, Motorcycles: 1991-2004, Passport: 1994- Prelude: 1990-1998 All: 1987- All: 1992- All: 1992-1997 Sedona: 2003- LS 400: 1990-1999, LX 450: 1996-1999, LX 470: 1996-1999, ES: 1994-1999 All: 1985-1999, not 1995 Protege W/1.5L, MPV: 1990- Cougar: 1989-1992, Cougar: 1993-1997 W/V6, Topaz: 1992-1994, Tracer: 1991-1999 Villager: 1993-, Villager: 1995-1999 3000GT; 1991-1998, Diamante: 1992-1995, Galant: 1985-1993, Mirage: 1985-1992 Montero: 1989-1998, Starion: 1989-1993  AIL: 1987- AIL: 1984- 1983-1995 W/16 mm deep neck  Corolla: 1983-1992, Starlet: 1983-1984, Tacoma: 1995-, Tercel: 1983-1990 4Runner: 1986-1995, Avalon 1995-, Camry: 1983-1989, Cressida: 1985-1992 Camry: 1983-1989, Land Cruiser: 1987-, Pickup: 1983-1992, Solara 1998- Sienna: 1998-1999, Supra L 1986-1992: Not turbo, T100, 1995-1998, Camry: 1990-1991 Previa: 1989-1997, Avalon 1995-, Camry: 1994-1999: 4 cylinder, Celica: 1982-1989

5	Acura	CL: 1997-, Integra: 1994-1999, Legend: 1991 -1996, MDX:2001-, TL:1995-
	Chevrolet	Metro: 1998-1998, Prizm: 1998, Tracker: 1998-1998
	Dodge	Colt: 1993-1994
	Eagle	Summit: 1993-1995
	Geo	Metro: 1995-1998, Prizm:1998-, Prizm:1993-1997, Tracker:1994-1998
	Honda	Accord: 1994-, Civic:1991-, Odyssey:1995-, Pilot:2003-
	Isuzu	All: 1998-
	Lexus	GS400: 1998-1999, ES250: 1990-1991, ES300: 1992-1993, GS300: 1993-1999
	Mercedes Benz	ML-class , W163 , W164
	Mitsubishi	Diamante:1996-, Galant: 1994-, Mirage :1993-, Montero Sport: 1997-
	Suzuki	1989-1999: W/9mm deep neck, XL-7:2001-
	Toyota	4Runner:1969-, Camry:1990-1991:V6 w/auto,trans., Camry:1992- Celica: 1990-1998, Corolla: 1993-, Echo: 2000-, Paseo: 1992-1997, RAV4: 1996- Supra: 1990-1992 turbo, Tercel: 1991-1999
6	Cadillac	Catera: 1997-2001
	Daewoo	All: 1999-2001
	Ford	Contour: 1995-2000, Fiesta:1995-, Focus:1998-, Fuscion:2006-
	GM	Achiva, Skylark, Gramd Am-1992-2002
	Jaguar	All:1990-1994, X-Type: 2002 -
	Jeep	
	Land Rover	Discovery: 1989-2004, Range Rover: 1988-1994
	Mercedes Benz	ML-class, W163, W164
	Mercury	MYSTIQUE: 1995-2000
	Pontiac	Le Mans: 1988-1993
	Porsche	911: 1999-, Boxter: 1997-
	SAAB	900: 1994-1998
	Saturn	L-Servies: 2000-
7	Alfa Romeo	
	Citroen	
	Fiat	
	Mini Cooper	S: 2002-
	Peugeot	206: 1999-, 307: 2004-, 406: 1999-, 407: 2004-, 807:2004-
	Renault	All: 1985-1987, Avantime: 2002 -, Espace: 2002-
	SAAB	900: 1978-1993, 9000:1986-1998
	Sterling	All: 1987-1991
	Jeep	
	Volvo	Passenger vehicles W/threaded neck
8	VW	Vento, T4, Passa-1996, Golf, Beetle, Sharan, 1990-1998: W/ female third on filler neck of expansion tank- except 1998 Passat & new Beetle, Eurovan:1990-2003, Golf:1993-1998
9	Audi	A4: 1996-, A5, A6:1998-, A8:1997, TT:2000
	BMW	345
	Porsche	Cayenne
	VW	Beetle: 1998-, Golf: 1999-, Jetta: 1999-, Passat: 1998-
10	BMW	3 Series:1998-, 5 Series: 1997-2003, 7 Series:1998- E46, E36, E34, E39, E38, E32, E90
11	Audi	1975-1993: w/male thread on expansion tank

	VW	1975-1993: w/male thrd on exp.tank, Golf: 1983-1992
12	Ford International Land Rover Opel Sangyong Motor	Mondeo
13	Chrysler Mercedes Benz	Crossfire: 2004- w /thread filler neck on expansion tank, except M-Class, E-Class: 1996- C-Class, E-Class, S-Class, W140, W220, W124. W210. W211. W215, W216, W221 , R230
14	Ford	Mondeo 2000-2007, Focus 2000-2007, C-MAX 03
15	Ford Mazda	Focus 2008-2011, Mondeo 2008, 2009 M3 2004-2011
16	Mercedes Benz	A-class W168, Vito
17	BMW	E60, E63, E64, E65
18	VW	SHARAN 1.8T 2.8
19	Toyota	Celica: 2000-VW, RAV4, PREVIA, MR2 Spyder:2010-
20	Alfa Citroen Fiat Mini Peugeot Renault SAAB Sterling Jeep Volvo	Cooper S: 2002- 206:1999-, 307:2004-, 406:1999-, 407:2004-, 807:2004- All:1985-1987, Avantime:2002-, Espace:2002- 900: 1978-1993, 9000: 1986-1998 All:1987-1991 Passenger Vehicles W/Threaded Neck
21	Cadillac Chevrolet Ford Freightliner GM GMC Jaguar Land Rover Oldsmobile Pontiac SAAB Saturn	Seville:1998-2003, Fleetwood:1994-1996, Escalade:1999 & newer, Cts:2003 Tahoe:1999-2009, Silverado2500:1999-2009, Suburban: 2000-2009 Silverado 1500:1999-2009, Metro:1999, Prizm:1999, Malibu: 1997-1999, Corvette: 1999 Impala SS: 1994-1996, Corsica: 1992-1996, Cobalt:2005-2009, Cavalier:1995-1999, Caprice: 1995-1996, Camaro: 1999, Beretta: 1992-1996, Tracker: 1999, Trailblazer:2001-2002 Five Hundred:2005, F-150:2004-2005, Excursion:2002-2004, Explorer:2002-2005 Taurus: 1996-2006 Diesel Truck:2004 All Models With Plastic Threaded Neck:1992-2009 Envoy:2002, Sierra 1500:1999-2003, Sierra 2500:1999-2003, Yukon:1999 S Type:2000-2003 Freelander:2005, Lr3:2005-2007 Achieva: 1992-1998, Alero: 1999, Aurora: 1995-1999, Cutlass; 1997-1998 Intrigue: 1999-2000 Grand Am:1992-1999, Sunfire:1995-1999, G6:2005 9,3:2003-2004 All Models:1990-1999, Vue:2003, Ion:2005
N/A	Other Part	Universal Adapter for FJC # 43664 Kit

## ❖ DELUXE RADIATOR PRESSURE TESTER



#### ❖ VACUUM-TYPE COOLING SYSTEM KIT



VA.10 VA.11

VA.12

The diagram shows a pressure gauge assembly with the following labeled components:

- VA.1: The main pressure gauge.
- VA.2: A flexible hose or tube.
- VA.3: A valve or fitting.
- VA.4: A chain or cable.
- VA.5: A valve or fitting.
- VA.6: A valve or fitting.
- VA.7: A valve or fitting.
- VA.8: A valve or fitting.
- VA.9: A valve or fitting.

Description	
VA. 1	Gauge
VA. 2	Hook
VA. 3	Air Switch
VA. 4	Air Supply
VA. 5	On/Off Button
VA. 6	Thin Hose Connection
VA. 7	Coolant Switch
VA. 8	Coolant Hose Connection
VA. 9	Radiator Test Cap Connection
VA. 10	Universal Rubber Radiator Adaptor
VA. 11	Thin Hose
VA. 12	Coolant Hose

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