

## 43305

### 10 PIECE COOLING SYSTEM PRESSURE TEST ADAPTER KIT

ITEM#	PART#	DESCRIPTION
1	43302-14	Aluminum #14 Adapter (purple)
2	43302-15	Aluminum #15 Adapter (black)
3	43302-16	Aluminum #16 Adapter (dark gold)
4	43302-17	Aluminum #17 Adapter (royal blue)
5	43302-18	Aluminum #18 Adapter (champagne)
6	43302-19	Aluminum #19 Adapter (red)
7	43302-20	Aluminum #20 Adapter (light silver)
8	43302-21	Aluminum #21 Adapter (light green)
9	43302-5A	Radiator Cap Test Connector #2 & #3 (Black)
10	43302-5B	Radiator Cap Test Connector #2 & #4 (Blue)
11	43305-PB	Blow Molded Case



#### REPLACEMENT PARTS:

43302-14G	Gasket for #14 Aluminum Adapter
43302-15G	Gasket for #15 Aluminum Adapter
43302-16G	Gasket for #16 Aluminum Adapter
43302-17G	Gasket for #17 Aluminum Adapter
43302-18G	Gasket for #18 Aluminum Adapter
43302-20G	Gasket for #20 Aluminum Adapter
43302-22G	Gasket for #22 Aluminum Adapter

43302-19G	Gasket for #19 Aluminum Adapter
43302-21G	Gasket for #21 Aluminum Adapter
43302-23G	Gasket for #23 Aluminum Adapter

#### FEATURES:

- Detects and exposes external system leaks
- Detects internal engine leaks due to blown gaskets or cracked block
- Includes blue and black radiator cap test connectors
- Includes 8 adapters (No's 14, 15, 16, 17, 18, 19, 20, 21 ) to fit most popular domestic and import cars and trucks

#### SAFETY WARNING AND PRECAUTIONS:



**WARNING:** The instructions and warnings contained in this manual should be read and understood before using or operating this tool. Do not allow anyone to use or operate this tool until they have read this manual and have developed a thorough understanding of how this tool works. Failure to observe any of the following instructions could result in severe personal injury to tool user and bystanders, or cause damage to the tool and property. Keep this manual for future reference.

**NOTE:** The warnings and cautions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

**WARNING:** Use safety equipment. User and bystanders should use safety goggles or safety glasses with side shields which comply with current national standards, or when needed, a face shield. Use an ANSI approved dust mask or respirator when working around metal, wood, and chemical dusts and mists. This applies to all persons in the work area. Also use non-skid safety shoes, hardhat, gloves, dust collection systems, and hearing protection when appropriate.

**WARNING:** Keep bystanders and children out of the work area while operating this tool.

**WARNING:** Always keep your work area clean, uncluttered, and well lit. Cluttered or dark areas invite accidents and injuries. DO NOT work on poor surfaces that are slippery.

**WARNING:** Do not operate this tool if you are tired or under the influence of alcohol, drugs, or medications that could affect your ability to use the tool properly.

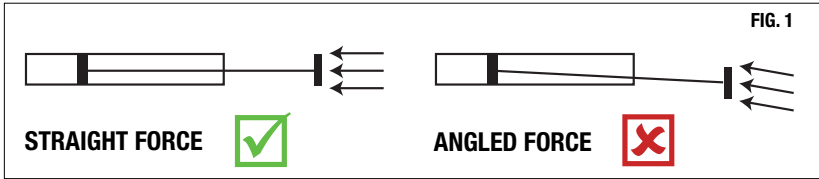
**WARNING:** Dress properly. Do not wear loose clothing or jewelry as they can be caught in moving parts. Wear restrictive hair covering to contain long hair.

**WARNING:** Do not reach over or across running machines. Keep proper footing and balance at all times. Non-skid foot-

wear is recommended when working.

## OPERATING INSTRUCTIONS:

- Before performing the test on your cooling system, test the pump first (supplied separately) by pumping few times to ensure the pump is working correctly. When testing, **DO NOT PUMP OVER 20 PSI**.
- During your inspection and during the test of your cooling system, when pumping the pump handle, always make sure that the force is applied straight into the pump rather than at an angle, or else it may cause the pump to leak. (See Figure 1)



## TO TEST FOR LEAKS IN COOLING SYSTEM:

1. Refer to the vehicle's service manual for any specific radiator pressure testing instructions.
2. Loosen the vehicle's radiator cap slowly to relieve any excess pressure before removing the cap completely. **NEVER OPEN THE SYSTEM WHILE HOT**, as this may cause personal injury.
3. Select the proper adapter and configuration of the stationary seat accessories. Securely attach the adapter to the filler neck of the radiator or expansion tank.
4. Attach the quick connector of the hand pump onto the adapter. (supplied separately 43300-1)
5. Rapidly pump the hand pump handle using straight force as shown in figure 1 while watching the pressure gauge. Pressurize the radiator up to the optimal pressure only - **DO NOT OVER PRESSURIZE THE RADIATOR**. Ideal readings should range between 15-20 PSI (1.03-1.37 BAR).
  - Needle holds steady – If gauge hand holds at the same pressure number for 2 minutes, there are no serious leaks in the system.
  - Needle drops slowly – Indicates the presence of the small leaks or seepage.
  - Needle drops quickly – Indicates serious leakage is present.
6. Once the test is complete, release the air pressure by depressing the pressure release valve on the hand pump hose, then disconnect the quick coupler and adapter assembly.
7. Maintenance – After testing process in Radiator Test:
  - Keep the adaptor connected to the pump as you had set up while performing the actual test. Operate the pump several times to dissipate moisture and/or coolant that may have remained in the adaptor and pump.
  - Oil the hand pump in order to lubricate the piston and prevent corrosion and internal damage.
8. Store the radiator pressure tester kit in its carrying case and keep the kit in a clean, dry, safe location out of reach of children and other unauthorized persons.

## TO TEST FOR LEAKS IN ORIGINAL RADIATOR CAP:

1. Choose the correct radiator cap connector (43302-5A or 43302-5B) and correct steel radiator cap (supplied separately 43300-2, 43300-3, or 43300-4) for the correct vehicle being tested from the test kit. Fasten the original radiator cap to the radiator cap connector (43302-5A or 43302-5B) and then fasten the steel radiator cap (supplied separately 43300-2, 43300-3, or 43300-4) from the test kit to the other end of the radiator cap connector (43302-5A or 43302-5B).
2. Remove the hand pump assembly (supplied separately 43300-1) from the test kit and fasten the quick coupler at the end of the hose to the radiator cap (supplied separately 43300-2, 43300-3, or 43300-4) securely. Operate the hand pump until reaching the pressure recommended by the vehicle manufacturer. - **DO NOT OVER PRESSURIZE**. Ideal readings should range between 15-20 PSI (1.03-1.37 BAR).
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 original radiator cap connector.




## Vehicle Compatibility Chart

ADAPTER #	MAKE & MODEL
14	<b>Ford</b> (Mondeo: 2000-2007, Focus: 2000-2005, C-MAX03, Contour: 1995-2000), <b>Mercury</b> (Cougar: 1999, Mystique: 1995-1999)
15	<b>Ford International</b> (C-Max: 2007-2012, C-Max 11: 2010, Fiesta V JH, JO: 2001, Fiesta Van: 2009, Fiesta V1: 2009, Fiesta V1: 2008, Focus C-Max: 2003-2007, Focus 11 0A: 2004, Focus 11 Convertible: 2006, Focus 11 Estate 0AW: 2004, Focus Saloon 0A: 2005, Focus 11 Station Wagon 0AW: 2004, Focus 111: 2011, Focus 11V Saloon: 2011, Focus 111 Turnier: 2011, Galaxy: 2006, Grand C-Max: 2010, Kuga: 2008, Mondeo 1V: 2007, Mondeo 1V Saloon: 2007, Mondeo 1V Turnier: 2007, Rager: 2011, S-Max: 2006, Transit Bus: 2006, Transit Flatbed Chassis: 2006, Transit Tourneo: 2006), <b>Ford Asia &amp; Oceania</b> (Fiesta: 2002-2013, Focus: 2004-2011, Focus Estate Wagon: 2011, Mondeo: 2007, Ranger: 2011), <b>Ford Europe</b> (B-Max: 2012, C-Max: 2007-2012, Fiesta: 2001-2013, Fiesta Van: 2008-2010, Focus: 2004-2013, Focus CC: 2006-2011, Focus C-Max: 2003-2007, Focus Estate Wagon: 2004-2013, Focus Van: 2005-2013, Galaxy: 2006-2011, Galaxy Van: 2006-2010, Grand C-Max: 2010-2012, Kuga: 2008-2012, Mondeo: 2007-2012, Mondeo Estate Wagon: 2007-2011, S-Max: 2006-2011, Transit 250: 2011, Transit 260: 2006, Transit 280: 2006, Transit 300: 2006, Transit 330: 2006-2013, Transit 350: 2006-2013, Transit 370: 2006, Transit 410: 2006, Transit 430: 2006-2013, Transit 460: 2006, Transit Custom 250: 2012, Transit Custom 270: 2012, Transit Custom 290: 2012, Transit Custom 300: 2012, Transit Custom 310: 2012, Transit Custom 330: 2012, Transit Tourneo: 2012, Transit Tourneo Custom: 2012), <b>Ford USA</b> (Ranger: 2011), <b>Ford Australia</b> (Fiesta WS: 2008, Fiesta Hatchback WT: 2010, Fiesta Saloon WT: 2010, Focus Hatchback LT: 2005, Focus Hatchback LV: 2009-2011, Focus Hatchback LT: 2005, Focus Saloon LS, LT: 2005, Focus Saloon LV: 2009-2011, Mondeo Hatchback MA, MB: 2007), <b>Land Rover</b> (Freelander 2 FA: 2006, Range Rover Evoque: 2011, Freelander: 2006-2013, LR2: 2006), <b>Mazda</b> (2: 2007, 3: 2003-2013, 5: 2010, 2 OE: 2007, 3 BK: 2003, 3 BL: 2009, 3 Saloon BK: 2000-2009, 3 Saloon BL: 2009, 5 CW: 2010, Axela: 2003, BT50: 2011), <b>Volvo</b> (C30: 2006-2012, C70: 2005-2011, C70 11 Convertible: 2006, S40: 2004-2010, S40 11 MS 2004, S60: 2010-2013, S60 11: 2010, S80: 2006-2011, S80 11 AS: 2006, V40: 2012, V40 Cross Country: 2012, V40 Hatchback: 2012, V50: 2003-2012, V50 NW: 2004, V60: 2010-2013, V70: 2007-2012, V70 III Estate: 2007, XC60: 2008, XC70: 20 7-2012, XC70 Cross Country: 2007-2011, XC70 11: 2007)
16	<b>Mercedes</b> (A140: 19 7-2004, A150: 2004-2012, A160: 1997-2012, A170: 1998-2012, A180: 220004-2012, A190: 1999-2004, A200: 2004-2012, A21 AMG: 2002-2004, A210: 2002-2004, B150: 2009-2011, B160: 2009-2011, B170: 2005-2011, B180: 200 -2011, B200: 2005-2011, Vaneo: 2001-2005, Vaneo 1.6: 2002, Vaneo 1.7: 2002, Vaneo 1.9: 2002, W168: 1997-2004)
17	<b>BMW</b> (X5: 2000-2011, X5 M: 2009-2012, X5 xDrive 30i: 2008-2010, X5 xDrive 48i, X5 xDrive 50i: 2010-2012, X6: 2008-2012, ActiveHybrid X6: 2010, X6 M: 2009, X6 xDrive 35i: 2008-2013, X6 xDrive 50i: 2008, Z3: 1996-2002, Z4: 2003-2008, Z8: 2000-2003)
18	<b>Ford</b> (Galaxy Van : 1995-2006), <b>SEAT</b> (Alhambra Van: 1996-2010), <b>VW</b> (Sharan Van: 1996-2010)
19	<b>Lexus</b> (GS460: 2008-2011, HS 250h: 2010, IS F: 2008-2013, LS460: 2007-2013, LS 600h: 2008-2012), <b>Scion</b> (tC: 2011-2012, xB: 2008-2012), <b>Toyota</b> (Celica: 2000-2005, MR2 Spyder: 2000-2005, Prius: 2010-2011, RAV4: 2006-2012)
20	<b>Saab</b> (EcoPower 9-3, 9-5)
21	<b>Buick</b> (LaCrosse: 2005, Rainier: 2005-2007), <b>Cadillac</b> (CTS: 2006, Escalade: 2004-2007, SRX: 2004-2007, STS: 2005-2006, BL: 2007), <b>Chevrolet</b> (Avalanche 1500: 2002-2006, Avalanche: 2007, Cavalier: 1999-2005, Classic: 2004, Cobalt: 2007, Colorado: 2004-2007, Equinox: 2005-2007, Express 1500: 2004-2007, Express 2500: 2003-2007, Express 3500: 2003-2007, HHR: 2007, Malibu: 2001-2007, Silverado 1500: 1999-2007, Silverado 1500 HO: 2002-2007, Silverado 2500: 1999-2004, Silverado 2500 HO: 2001-2007, Silverado 3500: 2001-2007, Silverado 3500 HO: 2007, SSR: 2006, Suburban 1500: 2001-2007, Suburban 2500: 2001-2007, Tahoe: 2000-2007, Trailblazer: 2002-2007, Viva: 2003-2008), <b>Fiat</b> (Croma: 2005-2013), <b>Ford</b> (Crown Victoria: 1993-2011, E-150: 2003-2012, E-150 Club Wagon: 2003-2005, E-150 Econoline: 1992-2002, E-150 Econoline Club Wagon: 1992-2012, E-250 Econoline: 1992-2002, E-250 Super Duty: 2004-2005, E-350: 2003, E-350 Club Wagon: 2003-2005, E-350 Econoline: 1992-2002, E-350 Econoline Club Wagon: 1992-2002, E-350 Super Duty: 2004-2012, Edge: 2007-2012, Excursion: 2000-2005, Expedition: 1997-2008, Explorer: 2002-2012, F-150: 1997-2012, F-250 Super Duty: 1999-2012, F-350 Super Duty: 2005-2012, F-450 Super Duty: 2005-2012, F-550 Super Duty: 2005-2012, Five Hundred: 2005-2007, Flex: 2009-2012, Freestar: 2004-2007, Fusion: 2006-2012, Mustang: 1996-2012, Ranger: 1998-2011, Taurus: 1996-2012, Thunderbird: 2002-2005, Windstar: 1999-2003), <b>GMC</b> (Canyon: 2004-2007, Envoy: 2003-2007, K2500 Suburban: 1999, Savana 1500: 2003-2007, Savana 2500: 2003-2007, Savana 3500: 2004-2007, Sierra 1500: 1999-2007, Sierra 1500 HO: 2001-2007, Sierra 2500: 1999-2004, Sierra 2500 HO: 2001-2007, Sierra 3500: 2001-2007, Sierra 3500 HO: 2007, Sierra C3: 2001, Yukon: 2000-2006, Yukon XL 1500: 2000-2007, Yukon XL 2500: 2001-2007), <b>Hummer</b> (H2: 2004-2006, H3: 2006), <b>Isuzu</b> (Ascender: 2003-2006, i-280: 2006, i-290: 2007), <b>Lincoln</b> (Continental: 1995-2002, Mark V111: 1993-1998, MKS: 2009-2012, MKT: 2010-2012, MKX: 2007-2012, MKZ: 2007-2012, Town Car: 1993-2011, Zephyr: 2006), <b>Mazda</b> (Mazda 6: 2006), <b>Mercury</b> (Cougar: 1993-1997, Grand Marquis: 1993-2011, Milan: 2006-2011, Monterey: 2004-2007, Sable: 1996-2009), <b>Oldsmobile</b> (Alero: 1999-2004, Cutlass: 1999, Intrigue: 2002), <b>Opel</b> (Astra: 2004-2013, Astra Cabrio: 2003-2006, Astra Classic: 2006-2009, Astra Coupe: 2003-2005, Astra GTC: 2005-2011, Astra H: 2004-2010, Astra Van: 2004-2010, Corsa: 2006-2013, Corsa O: 2007-2011, Corsa Van: 2006-2010, Meriva: 2006-2010, Signum: 2003-2008, Vectra: 2002-2008, Zafira: 2005, Zafira B: 2005-2011, Zafira Van: 2005), <b>Pontiac</b> (G5: 2007, G6: 2006, Grand Am: 199-2005, Grand Prix: 2005-2006, Pursuit: 2005-2006, Solstice: 2006-2007, Sunfire: 2005), <b>Saab</b> (9-3: 2003-2012, 9-3 Sport: 2002-2012, 9-3 X: 2009-2012, 9-7 X: 2007), <b>Saturn</b> (Aura: 2007, Ion 1: 2003-2005, Ion 2: 2003-2007, Ion 3: 2003-2007, Outlook: 2007, Sky: 2007, Vue: 2005-2007), <b>Suzuki</b> (XL-7: 2007), <b>Vauxhall</b> (Astra: 2002-2011, Astra Cabrio: 2006-2011, Astra Coupe: 2005-2008, Astra GTC: 2004-2011, Combo: 2005-2011, Corsa: 2006-2012, Meriva: 2006-2010, Signum: 2003-2008, Vectra: 2002-2008, Zafira: 2005-2013)

22	<p><b>BMW</b> (550i 2010-2012, 550i Gran Turismo: 2012, 550i GT: 2010-2012, 550i GT xDrive: 2011-2012, 550i xDrive Gran Turismo: 2012, 550i X: 2011-2012, 550i XGT: 2010-2012, 650i: 2012, 650i Cabrio: 2012, 650i Convertible: 2011-2012, 650i Coupe: 2011-2012, 650i: Gran Coupe: 2012, 650i xDrive Gran Coupe: 2012, 650iX Convertible: 2012, 650i X Coupe: 2012, 750i: 2009-2012, 750i Active Hybrid: 2011, 750i xDrive: 2010-2011, 750i X: 2010, 750Li: 2009-2012, 750 Li Active Hybrid: 2011, 750 LiX: 2010, 760i: 2010-2012, 760Li: 2010-2012, Alpi a B7: 2010-2012, Alpina B7 xDrive: 2011-2012, Alpina B7L: 2010-2012, Alpina B7L xDrive: 2011-2012, Alpina B7LX: 2011-2012, Alpina B7X: 2011-2012, Hybrid 5: 2012, M5: 2012, M6 Convertible: 2012, X5: 2004-2012, X5 50iX: 2011, X5 M: 2009-2010, X5 xDrive 48i: 2008-2010, X5 xDrive 50i: 2010, X6: 2008-2012, X6 50iX: 2008-2010, X6 Active Hybrid: 2010, X6 Hybrid: 2010-2011, X6 M: 2009-2010, X6 xDrive 50i: 2008), <b>Land Rover</b> (Range Rover: 2003-2005), <b>Mini</b> (Cooper:2008-2012, Cooper Clubman: 2008-2012, Cooper Countryman: 2011-2012, Cooper Convertible: 2009-2012, Cooper S Clubman: 2008-2012, Cooper S Convertible: 2009-2012, Cooper SX: 2011-2012, Cooper Works: 2007-2012, Cooper Works Clubman: 2008-2012, Cooper Works Convertible: 2009-2012, Cooper S:2007-2012, Mini Clubman: 2007-2013, Mini Clubvan: 2010-2012, Mini Cooper: 2006-2013, Mini Countryman: 2010-2013, Mini Coupe: 2011, Mini One: 2009-2010, Mini Roadster: 2012)</p>
23	<p><b>Ford</b> (Late Model), <b>GM</b> (Late Model)</p>

**For parts or service contact the service department: 1-888-825-6989**

 **WARNING:** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)