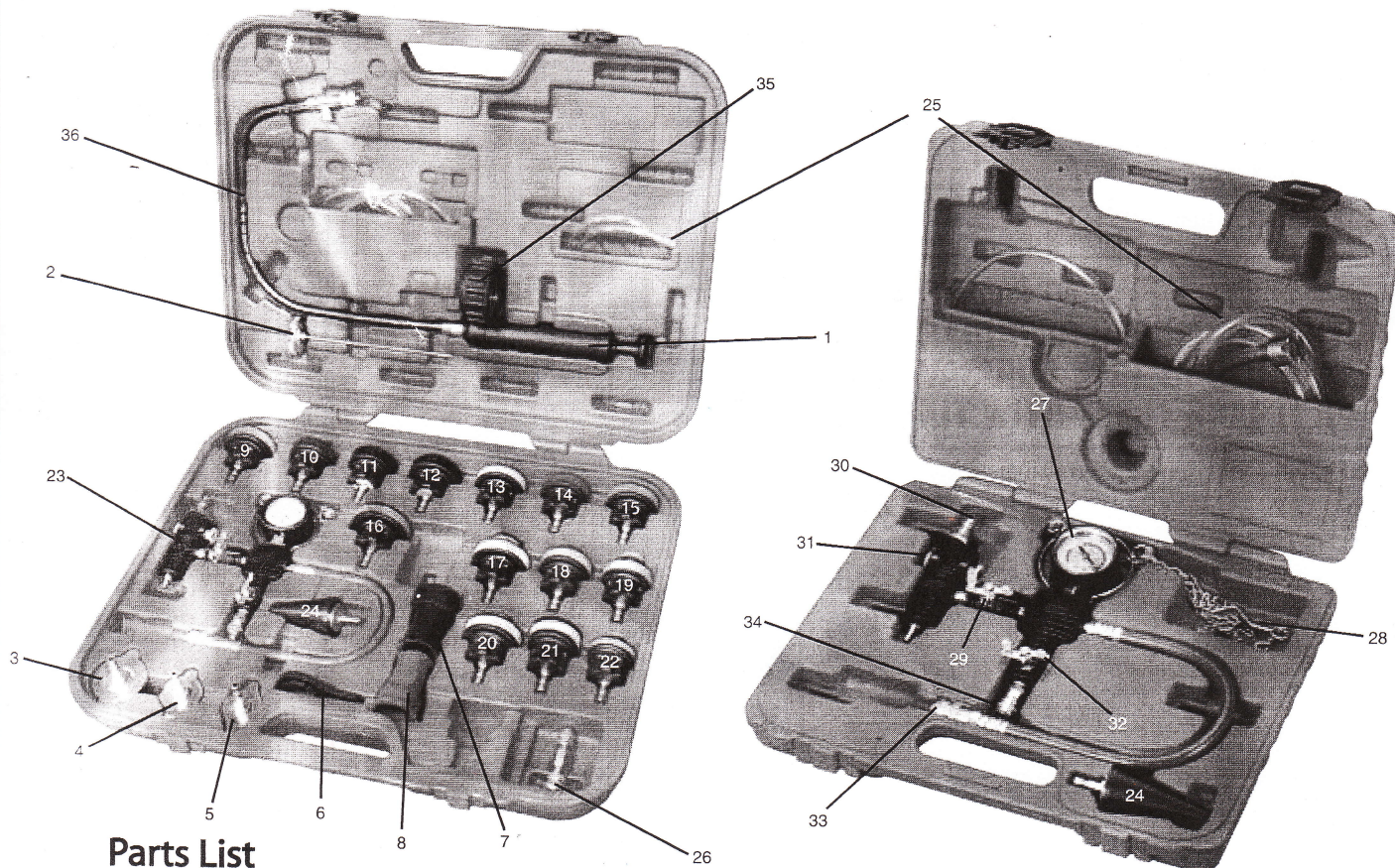


Call 1.800.221.9705 for questions concerning performance of the product or other inquiries.

PARTS BREAKDOWN



Parts List

Index No.	Part No.	Description	Qty
1	7858-01	7858-01 Pump with Gauge and Hose Assembly	1
2	7858-0	Temperature Gauge	1
3	7858-3	No.3 Radiator Cap (Steel)	1
4	7858-4	No.4 Radiator Cap (Steel)	1
5	7858-5	No.5 Radiator Cap (Steel)	1
6	78210-16	Handle	1
7	78210-02A	Black Radiator Cap Test Connector R123/R124	1
8	78210-02B	Blue Radiator Cap Test Connector R123/R125	1
9	78210-6	No.6 Radiator Cap (NYLON 66) - Orange	1
10	78210-7	No.7 Radiator Cap (NYLON 66) - Brown	1
11	78210-8	No.8 Radiator Cap (NYLON 66) - White	1
12	78210-9	No.9 Radiator Cap (NYLON 66) - Violet	1
13	78210-10	No.10 Radiator Cap (NYLON 66) - Grey	1
14	78210-11	No.11 Radiator Cap (NYLON 66) - Red	1
15	78210-12	No.12 Radiator Cap (NYLON 66) - Green	1
16	78210-13	No.13 Radiator Cap (NYLON 66) - Blue	1
17	78210-14	No.14 Radiator Cap (NYLON 66) - Yellow	1
18	78210-15	No.15 Radiator Cap (NYLON 66) - Pink	1

Index No.	Part No.	Description	Qty
19	78585-16	No.16 Radiator Cap (NYLON 66) - Purple	1
20	78585-17	No.17 Radiator Cap (NYLON 66) - Light Blue	1
21	78585-18	No.18 Radiator Cap (NYLON 66) - Turquoise	1
22	78585-19	No.19 Radiator Cap (NYLON 66) - Violet	1
23	78585-20	Vacuum Type Purge and Refill Tool	1
24	78585-21	Universal Rubber Radiator Adaptor	1
25	78585-22	Coolant Hose	1
26	78581	Universal Adapter for Astro Model 78585	1
27	78585-201	Gauge	1
28	78585-202	Hook	1
29	78585-203	Valve	1
30	78585-204	Air Supply	1
31	78585-205	Off/On Button	1
32	78585-206	Valve	1
33	78585-207	Radiator Cap Quick Coupler	1
34	78585-208	Coolant Hose Quick Coupler	1
35	7858-01G	Gauge	1
36	7858-01H	Hose Assembly	1



Model:

78585

Product Type:

**RADIATOR PRESSURE TESTER & VACUUM TYPE
COOLING SYSTEM KIT WITH 78581 ADAPTER**



WARNING



Study, understand and follow all instructions provided with this product. Read these instructions carefully before installing, operating, servicing or repairing this tool. Keep these instructions in a safe accessible place.

INTENDED USE OF THE TOOL

This kit is designed to test for leakage in vehicle cooling systems, including radiator caps, and for quick change of coolant only. Use as intended only.



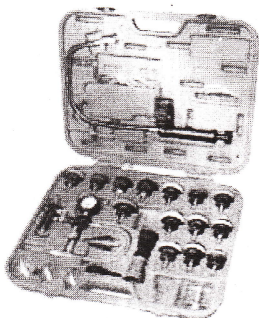
WARNING



Caution: To help prevent personal injury

- Normal use of this product is likely to expose the user to dust and/or microscopic particles containing chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Always wear appropriate safety equipment and clothing when using this product. Study, understand and follow all instructions provided with this product. Failure to read and follow all warnings and operating instructions may result in damages and serious injury or death.
- Always wear ANSI approved goggles when using this product. (Users and Bystanders).
- Never use this tool for any application other than for which it was designed.
- Only use accessories designed for this tool.
- Never alter or modify this tool in any way.
- Improper operation and/or maintenance of the tool, modification of the tool, or use of the tool with accessories not designed for it could result in serious injury or death.
- Always select the correct accessories of the correct size and design for the job that you are attempting to perform.
- Always work in a clean, safe, well-lit, organized and adequately equipped area.
- Do not begin repairs without assurance that vehicle is in secure position, and will not move during repair.

RADIATOR PRESSURE TESTER & VACUUM TYPE COOLING SYSTEM KIT WITH 78581 ADAPTER



MADE IN TAIWAN



**Astro Pneumatic
Tool Company**

www.astrotools.com

1 YEAR LIMITED WARRANTY

- Astro Pneumatic Tool Co. warrants our products to the original user against defective material or workmanship for a period of 1 year (except where noted on our price schedule) from the date of 1st use. Astro reserves the right to determine whether the product failed because of defective material, workmanship or other causes and to charge back for missing parts. Astro Pneumatic Tool Co., at its discretion, will repair products covered under this warranty free of charge. The distributor should direct the original user to return the product (with the exceptions listed below) with the distributor's name, address, adequate proof of date of purchase or a copy of warranty card, and a short note explaining the problem. Failures caused by accident, alteration, or misuse are not covered by this warranty.
- If one part of this product fails, please do not return the entire product. Astro will replace free of charge component parts of this product that fail within 1 year of first use by the original user. Items included in this category include but are not limited to kits, hand tool kits and any other product where there are multiple items or components that make up the unit. Please contact the phone number below in order to obtain the replacement components covered under warranty.
- Astro Pneumatic Tool Co. or its authorized service representatives must perform all warranty repairs. Any repair to the product by unauthorized service representatives voids this warranty. The rights under this warranty are limited to the original user and may not be transferred to subsequent owners.
- This warranty is in lieu of all other warranties, expressed or implied, including warranties of merchantability and fitness for a particular purpose. Some states do not allow the exclusion of limitations of incidental or consequential damages so the above limitations may not apply to you.



**PLEASE DO NOT RETURN ANY PRODUCT WITHOUT CALLING
1-800-221-9705 FOR INSTRUCTIONS**



Unpacking

When unpacking, check the parts diagram and part number listing on page 4 to make sure all parts are included. If any parts are missing or damaged, please call your distributor.

PRODUCT INFORMATION:

- Allows easy testing for leakage in radiator system and quick change of coolant
- Unit is suitable for domestic and import vehicles
- Color coded radiator test caps make it easy to choose the suitable test cap for the job
- Special design of vacuum purge & refill tool connection fits nearly all type of radiator opening
- Set includes:
 - Pressure Testing Pump with Hose, Quick Coupler with Pressure Release, and Gauge: Test Range 0 - 35 psi (0 - 2.5 bar)
 - 1pc. Blue and 1pc. Black Radiator Cap Test Adapters to test for original radiator cap leakage
 - 17pcs. Test Caps for testing cooling systems on most domestic and import vehicles
 - Vacuum Type Cooling System Purge and Refill Tool Kit for quick change of coolant
 - Universal Adapter
 - Temperature Gauge
 - Blow Molded Case
- Applications: Mercedes Benz, GM, Jeep, Peugeot, Subaru, Chrysler, Acura, Mitsubishi, Nissan, Mazda, Toyota, Infiniti, Geo, Suzuki, Isuzu, Honda, Lexus, Volvo, Saab, Citroen, Renault, Fiat, Alfa, Mini Cooper, VW, BMW, Ford, Opel, Porsche, Audi, etc.

DO NOT DISCARD - GIVE TO USER



Model:

78585

Product Type:

RADIATOR PRESSURE TESTER & VACUUM TYPE COOLING SYSTEM KIT WITH 78581 ADAPTER

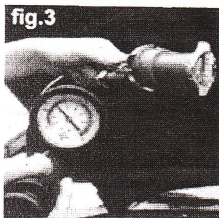
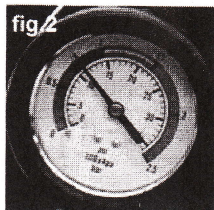
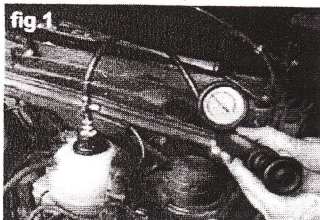
INSTRUCTIONS FOR PRESSURE TESTING COOLING SYSTEM

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 the cooling system opening. Locate the leak and repair as necessary.

Test For Leaks In Original Radiator Cap

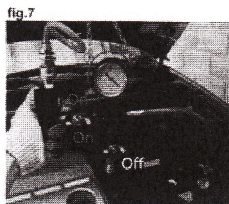
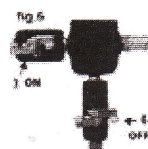
- Step 1: Choose the correct radiator cap connector (02A or 02B) and correct steel radiator cap (03, 04, or 05) for the correct vehicle being tested from the test kit. Fasten the original radiator cap to the radiator cap connector and then fasten the steel radiator cap from the test kit to the other 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

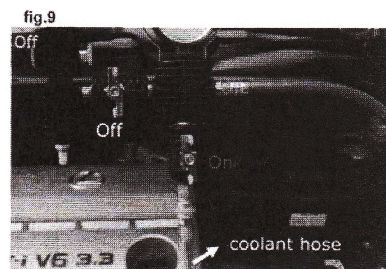
- Step 1: Drain coolant from radiator as well as possible.
- Step 2: Remove the purge and refill tool from the test kit and hang the tool in a convenient location under the hood with the hook provided.
- Step 3: Choose the correct radiator cap for the vehicle being tested, or the universal rubber radiator adapter from the test kit and install the one of 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)

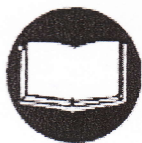


Refill Cooling System

- 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.





Model:

78585

Product Type:

**RADIATOR PRESSURE TESTER & VACUUM TYPE
COOLING SYSTEM KIT WITH 78581 ADAPTER****SPECIFICATION- RADIATOR PRESSURE TESTER**

Part No.	Description
7858-0	Temperature Gauge
7858-3	Mercedes Benz(W123 - W126 - W124 - W201), GM(Buick), Jeep, Oldsmobile (Silhouette 1990-), Pontiac (Bonneville 1990-) (Grand Prix -2003), Buick (LeSabre 1990-) (Park Avenue 1991-) Chevrolet (Venture 1997-), Chrysler (Sebring 1995-), Dodge (Caravan 1989-) (Dakota 1989-) (Stratus 1995-)
7858-4	Peugeot, Subaru, Chrysler, Acura, GM (Nova, Spectrum, Sprint), Mitsubishi, Nissan, Mazda, Toyota, Infiniti, GEO, Suzuki, Isuzu, Mercedes Benz, Lexus (LS 400: 1990-1999) (LX 450 : 1996-1999) (LX 470: 1996-1999) (RX 330: 2004-) (ES:1994-1999), Mazda (All: 1985-1999, not 1995 Protege w/1.5L) (MPV:1990-), Mercury (Courgar: 1989-1992) (Cougar: 1993-1997 w/V6) (Topaz:1992-1994) (Tracer:1991-1999) (Villager: 1993-) (Villager: 1995-1999), Mitsubishi (3000GT:1991-1998) (Diamante:1992-1995) (Galant:1985-1993) (Mirage: 1985-1992) (Montero:1989-1998) (Starion : 1989-1993), Nissan (All: 1987-) Subaru (All:1984-), Suzuki (1983-1995 w/16 mm deep neck), Toyota (4Runner:1986-1995) (Avalon 1995-) (Camry:1983-1989) (Camry:1990-1991) (Camry:1994-1999-4cylinder) (Celica:1982-1989) (Corolla: 1983-1992) (Cressida:1985-1992) (Land Cruiser:1987-) (Pickup:1983-1992) (Previa:1989-1997) (Sienna:1998-1999) (Solara:1998-) (Starlet:1983-1984) (Supra:1986-1992: Not turbo) (T100:1995-1998) (Tacoma:1995-) (Tercel:1983-1990), Acura (Integra: 1990-1993), Chevrolet (Nova:1985-1998) (Spectrum:1985-1988) (Sprint:1985-1988), Chrysler (Laser:1991-1998), Dodge (Colt: 1984-1992) (Stealth: 1991-1996) Eagle (Talon:1991-1998), Ford (Escort:1991-) (Explorer:1995-2001) (Festiva:1988-1993) (Probe:1989-1997) (Ranger:1987-) (Tempo:1992-1994) (Thunderbird:1989-1992; 1993-1997:w/VA) (w/NDSTAR: 1995-) Geo(Metro: 1989-1994) (Prizm:1998-1998) (Tracker:1989-1993), Honda (Accord:1990-1993) (Civic:1988-1991) (Motorcycles:1991-2004) (Passport:1994-) (Prelude:1990-1998), Hyundai (All:1987-), Infiniti (All:1992-) Isuzu (All: 1992-1997), Kia (Sedona:2003-)
7858-5	Honda, Toyota, Suzuki, Mitsubishi, Chrysler, Acura, Lexus, Kia (Sedona:2003-), Mazda (Protege:1995-1.5L) 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), 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-)
78210-16	Handle
78210-02A	Black Radiator Cap Test Connector R123/R124
78210-02B	Blue Radiator Cap Test Connector R123/R125
78210-6	Mercedes Benz (ML-class - W163 - W164)), GM (achiva - skylark - grand am-1992-2002) Mercury (MYSTIQUE:1995-2000), Pontiac(Le Mans:1988-1993), Porsche (911:1999-) (Boxter:1997-) Saab (900: 1994-1998), Saturn(L-Series:2000-), Cadillac (Catera:1997-2001), Daewoo (All:1999-2001) Ford (Contour:1995-2000) (Fiesta: 1995-) (Focus:1998-) (Fusion:2006-), Jaguar (All:1990-1994) (X-Type: 2002-), Land Rover (Discovery:1989-2004) (Range Rover:1988-1994)
78210-7	Volvo, Saab, Sterling, Citroen, Renault, Fiat, Alfa, Jeep, Mini, 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), Volvo (Passenger vehicles w/ threaded neck)
78210-8	VW (Vento - T4 - Passa-1996 - Golf - Beetle - Sharan), VW (1990-1998: w/ female thrd on filler neck of expansion tank- except 1998 Passat & new Beetle) (Eurovan:1990-2003) (Golf: 1993-1998)
78210-9	Audi (A4 - A5 - A6), BMW 345, VW (Passa-1997-2002), Porsche (Cayenne), VW (Beetle:1998-) (Golf:1999-) (Jetta:1999-) (Passat:1998-), Audi (A4:1996-) (A6:1998-) (A8:1997) (TT:2000)
78210-10	BMW (E46 - E36 - E34 - E39 - E38 - E32 - E90), BMW (3 Series: 1998-) (5 Series:1997-2003) (7 Series:1998-)
78210-11	Audi, VW, VW (1975-1993: w/ male thrd on exp.tank) (Golf:1983-1992) Audi (1975-1993: w/ male thread on expansion tank)
78210-12	Ford Mondeo, International, Land Rover, Opel, Ssangyong motor
78210-13	Mercedes Benz (C-class - E-class - S-class - W140 - W220 - W124 - W210 - W211 - W215 - W216 - W221 - R230), Mercedes (w/ thread filler neck on expansion tank, except M-Class) (E-Class: 1996-), Chrysler (Crossfire: 2004-)
78210-14	Ford Mondeo, Focus,C-MAX03
78210-15	Mazda(M3), Mazda (3: 2004-)
78585-16	Mercedes A-class (W168)
78585-17	BMW E60, E63,E64, E65
78585-18	VW SHARAN 1.8T2.8
78585-19	TOYOTA-RAV4, PREVIA, Toyota (Celica: 2000-) (MR2 Spyder: 2000-)
78585-20	Vacuum Type Purge and Refill Tool
78585-201	Gauge
78585-202	Hook
78585-203	Valve
78585-204	Air Supply
78585-205	Off/On Button
78585-206	Valve
78585-207	Radiator Cap Quick Coupler
78585-208	Coolant Hose Quick Coupler
78581	Universal Adapter for Astro Model 78585
7858-01	7858-01 Pump with Gauge and Hose Assembly
7858-01G	Gauge
7858-01H	Hose Assembly

WARNING

ALWAYS assure that the cooling system is depressurized and cool prior to removing the cooling system cap and operating this cooling system pressure test kit. DO NOT operate this cooling system pressure test kit when cooling system is hot or may result in serious burns. DO NOT pressurize the cooling system exceeding the pressure recommended by the vehicle manufacturer.