



ATD-3307 Heavy-Duty Cooling System Pressure Test and Refill Kit Owner's Manual



Features:

- Remove the complications that often result from unreliable rubber plugs or bladders with our heavy-duty cooling system pressure test and refill kit. This kit will save set-up time and provide precise test results.
- Uses shop air to hold continuous vacuum in the cooling system during testing and refill
- 4 quick disconnect vacuum attachments provide quick refilling of the cooling system and eliminates air pockets
- For use with Freightliner, International, Kenworth, Peterbilt, Mack, Volvo, GMC and Sterling cooling systems

Kit Includes:

- Heavy-duty vehicle adapters
- Pressure test regulator
- Vacuum refill attachment with tubing

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, hard-hat, 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 footwear is recommended when working.

WARNING: Never remove the vehicle's radiator cap or adapter cap when the system is hot and/or under pressure.

WARNING: Never work on a cooling system when the system is hot or under pressure

NOTE: Pressure check cooling system, when using shop air, 90 to 125 PSI is recommended

<u>ITEM#</u>	<u>PART#</u>	<u>DESCRIPTION</u>
1	43306-1	Pressure Regulator
2	43306-2	White Adapter #2
3	43306-3	Black Adapter #12
4	43306-4	Red Adapter #13
5	43306-5	Yellow Adapter #15
6	43306-6	Green Adapter #14
7	43306-7	Spindle A
8	43306-8	Vacuum Refill Adapter
9	43306-9	Refill Hose
10	43306-10	Plastic Case



CONFIGURATIONS

White Adapter #2:

Cars and Light Trucks: Typically used with 1990 to current domestic vehicles

Large over-the-road Trucks: Typically used with Freightliner, GM, International, Kenworth and Peterbilt

White Adapter #2 with Spindle A:

Cars and Light Trucks: Typically used with 1990 to current domestic vehicles

Large over-the-road Trucks: Typically used with Ford, Freightliner, GM and Navistar

Black Adapter #12:

Large over-the-road Trucks: Typically used with Volvo large trucks

Red Adapter #13:

Large over-the-road Trucks: Typically used with Freightliner

Green Adapter #14:

Large over-the-road Trucks: Typically used with Volvo trucks

Yellow Adapter #15:

Large over-the-road Trucks: Typically used with B size truck adapters

OPERATING INSTRUCTIONS

To pressure check and/or fill a cooling system, first pick the correct cooling system adapter.

NOTE: Spindle A screws into adapter 2 (white) for coolant reservoirs that have a reduced diameter neck inside.

PRESSURE / LEAK CHECK:

1. If system is empty or underfilled, add coolant and fluorescent dye (if desired), this will aid in the leak check process.
2. Connect the appropriate adapter to the cooling system.
3. Turn pressure regulator, round black knob (#1), completely out (counterclockwise).
4. Connect pressure regulator hose to adapter.
5. Close ball valve on pressure regulator then connect shop air to pressure regulator.
6. Slowly open ball valve on pressure regulator.
7. Turn round black knob (#1) on pressure regulator clockwise until desired pressure is reached.
8. When desired pressure is reached, turn black collar clockwise to lock.
9. Close the ball valve on the pressure regulator.
10. Inspect the cooling system for any external leaks in the hoses, radiator, water control valve, water pump, heater core, cylinder head/intake manifold, coolant recovery/reserve tank.

NOTE: If pressure reading decreases there could be an internal leak, check for coolant in the oil

TO REMOVE PRESSURE REGULATOR FROM SYSTEM:

1. Ensure that the ball valve is closed and disconnect shop air.
2. Connect one end of the pressure relief/fill tube (#9) to the regulator shop air connection and the other end into container to capture any residual coolant from the system.
3. To relieve the pressure, slowly open the ball valve, turn black locking collar counter clockwise then black knob (#1) counterclockwise and remove adapters.

REFILL SYSTEM USING VACUUM REFILL ADAPTER:

1. Connect the appropriate adapter to the system.
2. Connect the vacuum refill adapter to the to the adapter on the system.
3. Connect the fill tube (#9) to the vacuum refill adapter and place the other end into fresh coolant supply. Make sure that the fresh coolant supply is at the same level or higher than the vacuum refill adapter.
4. Connect the shop air and slide, slide the vacuum/fill handle to "vacuum" position.
5. Monitor the gauge reading on the vacuum fill adapter, when the vacuum stabilizes, slide the handle to the "fill" position to draw in the fresh coolant. The cooling system is filled when the pressure gauge reads "0" PSI.
6. Remove the adapters, check to ensure proper coolant level.