

# Radiator Pressure Tester Kit

- Tests automotive pressurized cooling systems up to 30 PSI
- Kit includes pump with gauge, 12" hose and cap adapter to check 3/4" deep filler necks, 1/4" Spacer Washer for testing 1" deep filler necks, plus 3 Radiator Adapters (#7090, #7091 & #7092).
- Applications:
  - 7090 - Cadillac, Chevrolet, GEO, GMC, Hummer, Oldsmobile, Pontiac, Saturn
  - 7091 - Acura, Chevrolet, Chrysler, GEO, Honda, Isuzu, Lexus, Mazda, Mitsubishi, Suzuki, Toyota
  - 7092 - Acura, Chevrolet, Chrysler, Ford, GEO, Honda, Hyundai, Infiniti, Isuzu, Lexus, Mazda, Mitsubishi, Nissan, Subaru, Suzuki, Toyota



**CAUTION:** To prevent injury, always wear gloves and eye protection that meets ANSI Z87.1 and OSHA standards.  
**CAUTION:** To prevent equipment damage, clean and lubricate threaded screws and holes before and after use.

## INSTRUCTIONS:

### Preparation

1. Carefully remove the radiator pressure cap from the vehicle, making sure it is cool to touch.
1. Check that coolant is at the recommended level in the radiator and overflow reservoir.
2. Clean inside of filler neck and make sure overflow tube and reservoir are clear to prevent pressure build-up.
3. Check if cams on outside of filler neck are bent. Reform or replace if necessary.
4. Determine which adapter is required - see application chart.
5. Before attaching the tester head to the radiator or adapter, rotate clockwise the pressure valve release handle on top of tester head until it is parallel to raised section of tester head handle. Now attach the tester head to the radiator or adapter and rotate clockwise until the locking ears contact the stops on the cams. Then rotate clockwise the pressure valve release handle until the pressure valve in the tester head is released. You will feel the valve snap into place.
6. Check vehicle specs to determine proper pressure of system being tested.

### Testing System

1. Pump the tester until the gauge needle reaches the arrow on the gauge just beyond the end of the color band for the recommended pressure for the vehicle.
2. Watch the needle on the gauge to check system:
  - a. NEEDLE HOLDS STEADY – if steady for two minutes, indicates that there are no serious leaks in the system.
  - b. NEEDLE DROPS SLOWLY – indicates that there are small leaks or seepage in the system. Check radiator, hose gaskets and heater core. Also check radiator hoses for swelling, as they may need to be replaced.
  - c. NEEDLE DROPS QUICKLY – indicates serious leaks in the system. If visible leakage, repair as needed.
  - d. NEEDLE DROPS, BUT NO VISIBLE LEAKAGE - remove tester and replace pressure cap. Run engine for a few minutes, then turn off. Check oil dipstick for water globules or light colored foam.
3. CHECKING FOR COMBUSTION OR COMPRESSION LEAKAGE – with tester in place and engine idling, carefully watch gauge:
  - a. If pressure builds fast, turn off engine and rotate clockwise pressure valve release handle until parallel to raised part of tester head. DO NOT ALLOW PRESSURE TO EXCEED PRESSURE FOR THE SYSTEM. Fast pressure build-up indicates blown head gasket.
  - b. If pressure build-up is not immediate, then pump tester until specified range. If needle vibrates, compression or combustion leak is in the cooling system.
4. Remove tester from radiator – rotate clockwise pressure valve release handle until parallel with raised section of tester head. Wait until system pressure is released before removing tester head.

## INSTRUCTIONS FOR TESTING THE PRESSURE CAP:

### Preparation

1. Carefully remove the pressure cap from vehicle, making sure it is cool to touch.
2. On lever design pressure caps, lift lever to release cap pressure.
3. Check cap pressure as marked on the cap and compare to recommended pressure rating of the OE cap for the vehicle.
4. Determine which cap adapter is required – see application chart.
5. Clean all seating surfaces of cap and adapter. On lever design pressure release caps, make sure lever is in open position. On new caps, wet the rubber gasket in water. Remove pressure cap several times to get a proper sealing seat on the gasket.
6. Before attaching the tester head to the cap, rotate clockwise the pressure valve release handle on top of tester head until it is parallel to raised section of tester head handle. Now attach the tester head to the cap and rotate clockwise until the locking ears contact the stops on the cams. Then rotate clockwise the pressure valve release handle until the pressure valve in the tester head is released. You will feel the valve snap into place.

### Testing Cap

1. Pump the tester until the needle reaches the highest point. Note: if an old cap leaks, remove and apply several times to the adapter. After cap is reinstalled on the car, the continuous spring pressure will re-seat the gasket properly.
2. Stop pumping when the valve opens and check the gauge. Needle should be in the vehicle's specified range.
3. NEEDLE IS STEADY OR FALLS SLOWLY (STAYS WITHIN BAND FOR ONE MINUTE) – cap is OK.
4. NEEDLE FALLS FAST – cap is leaking and should be replaced.

