# COOLING SYSTEM
# PRESSURE TESTER

## AND VACUUM PURGE KIT

INSTRUCTION
MANUAL

PUSH THE LIMITS MISHIMOTO

THE WORLD LEADER IN PERFORMANCE COOLING PRODUCTS™

# COOLING SYSTEM PRESSURE TESTER PARTS LIST

| PART NUMBER | DESCRIPTION |
|---|---|
| 1 | Hand pump with gauge |
| 1 | Filling unit |
| 2 | Thermometer |
| 2 | Universal adapter |
| 3 | Mercedes-Benz W123, W126, W124, W201, Buick Chrysler, Chevrolet, Dodge, Jeep, Oldsmobile, Pontiac |
| 3 | Filling hose |
| 4 | Acura, Chevrolet, Chrysler, Dodge, Ford, GM, Honda, Hyundai, Infiniti, Isuzu, Kia, Lexus, Mazda, Mercury, Mitsubishi, Mercedes-Benz, Nissan, Subaru, Suzuki, Peugeot, Toyota |
| 5 | Acura, Chevrolet, Dodge, Eagle, Honda, Lexus, Mercedes-Benz M-Klasse, Mitsubishi, Suzuki, Toyota |
| 6 | Cadillac, Daewoo, Ford, GM, Jaguar, Jeep, Land Rover, Mercedes-Benz, Mercury, Pontiac, Porsche, Saab, Saturn |
| 7 | Alfa Romeo, Citroen, Fiat, Mini Cooper, Peugeot, Renault, Saab, Sterling, Jeep, Volvo |
| 8 | VW Vento, T4, Passat 1996, Golf Beatle, Sharan |
| 9 | Audi A4, A5, A6, BMW345, VW Passat 1997–2002, Porsche Cayenne |
| 10 | BMW E32, E34, E36, E38, E39, E46, E90 |
| 11 | Audi 1975–1993 and VW 1975-1993 mit Aussengewinde |
| 12 | Ford Mondeo, International, Land Rover, Opel, Ssangyong |
| 13 | Mercedes-Benz (C-, E-, and S-Klasse) W140, W124, W210, W211, W215, W216, W220, R230 |
| 14 | Ford Mondeo, Focus, C-Max |
| 15 | Mazda (M3) |
| 16 | Mercedes-Benz A-Klasse W168, Vito |
| 17 | BMW E60, E63, E64, E65 |
| 18 | VW Sharan 1, 8T u, 2, 8 |
| 19 | Toyota Celica, RAV4, Previa, MR2 |
| 20 | Saab |
| 21 | Open, Fiat, Chevrolet, Buick, Cadillac, Ford (USA), Saab, GMC, Suzuki, Vauxhall, Mazda, Lincoln, Oldsmobile, Isuzu, Hummer |
| 22 | BMW, Land Rover, Mini |
| 30 | Connecting Piece R123/R124 (Black) |
| 31 | Connecting Piece R123/R125 (Blue) |
| 32 | Tool for test adapter |
| 33 | Hose |

# IMPORTANT SAFETY INFORMATION

- Take care when opening the cooling system. The cooling system may be under pressure and hot coolant can spray out.
- Before dismantling the pump or the adapter release the pressure.
- Check the cooling fluid after the pressure test or repair of the correct level and frost protection.
- Take care when working on running engines. Loose or baggy clothing can be caught in rotating engine parts.

# INSTRUCTIONS

**1. COOLING SYSTEM LEAKAGE TEST**

**1.1.** Remove the original radiator cap from the radiator or expansion tank.

**1.2.** Choose the appropriate adapter from the test set and connect it to the radiator or expansion tank.

**1.3.** Connect the hand pump to the adapter.

**1.4.** Press the test pump until a pressure of 10–15 psi is reached.

**CAUTION: AVOID A PRESSURE OF 35 PSI OR MORE.**

Check the pressure gauge. If the displayed value decreases, the leakage is in the cooling system. If the pressure drops or there is water loss the cooling system has a leak.

**2. RADIATOR CAP LEAKAGE TEST**

**2.1.** Remove the original radiator cap.

**2.2.** Choose the appropriate joint 2a or 2ba and connect it to the radiator cap.

**2.3.** Press the test pump a few times and watch the pressure gauge. The cap is defective if the pressure falls.

**2.4**. Compare the measured pressure values with the standard pressure of the radiator cap.

**MAINTENANCE AND STORAGE**

• Attach the test adapter to the quick coupler on the hand pressure pump. Then, press the hand pressure pump several times to push remnant water out the test adapter.

• Drop pneumatic oil into the air hold of the hand pump end to lubricate the hand pump piston.

# INSTRUCTIONS CONTINUED

### 3. FILL COOLING SYSTEM

**3.1.** Open the hood and attach the vacuum pump with the hooks on the hood.

**3.2.** Remove radiator or reservoir cap. Drain coolant completely into a suitable container. The procedure can be found in the vehicle's service literature.

**3.3.** Connect a suitable vehicle specific adapter or the universal adapter to the radiator/ reservoir tank.

**3.4.** Be sure that the top valve is set to "ON" and the bottom valve is set to "OFF."

**3.5.** Switch top valve to "OFF" if a pressure of 20–25 inHg (60–50smHg) is reached.

**3.6.** Connect the coolant hose to the vacuum pump and put the hose into a container filled with coolant.

**3.7.** Make sure that the top valve is in the "OFF" position before the coolant is topped up.

**3.8.** Make sure the hose is filled with coolant.

**3.9.** Switch the bottom valve to "ON" for the coolant to drain from the container.

**3.10.** If the pressure indicator has dropped to "0," the cooler should be sufficiently filled, otherwise, repeat the procedure.

### IMPORTANT NOTE

The instructions do not replace the vehicle's service literature. You may find additional information in the vehicle's service literature. For all tests, vehicle-specific data should be present. Without this data, adequate results cannot be ensured.