## Radiator Coolant Service—Electronic

# **OPERATION MANUAL**

The RCS Coolant Machine completely removes contaminated engine coolant while simultaneously refilling the cooling system with new coolant. Keeping the cooling system full at all times eliminates air locks from occurring. RCS gives you the ability to hook up to the cooling system while it is cool and not under pressure – alleviating working with hot pressurized coolant. Flushing chemicals can be used to maximize the cleaning of cooling system. This proven thermal barrier process makes a cooling system flush & exchange, the most effective, time-saving response to cooling system service requirements.

- Open the radiator/expansion tank cap
   (CAUTION: Fluid may be hot and cap under pressure)
- Connect shop air to RCS and check for pressure by pressing the EXCHANGE switch to ON (15-17 psi)
   If adjustment is needed, a regulator is located in the side pocket of the machine. Pull out on knob and turn it either clock wise to increase or counter clockwise to decrease the pressure, then push in the knob.
- Make sure proper amount of premixed coolant is in the new coolant tank plus 2 Lit (or 2 quarts) extra (be sure the cap is tight on the new coolant tank)
- Check so that the used tank has enough room for the used coolant
- IMPORTANT! Empty the used fluid tank after every service
- Use the evacuator hose (attach it to the Black drain hose, press the EVACUATE Switch to On) to clean out the overflow tank & evacuate out approx. 2 liters (2 quarts) of coolant from the system

# STEP 1 - CONNECTION OF ADAPTERS

**CAUTION:** 

CONNECTORS
WILL BE
HOT!

- Remove the top radiator hose at either the engine block or at the radiator whichever is the most accessible. If desired pour a radiator flush chemical into the radiator hose or the radiator.
- Connect the step adapters to the radiator hose, top up with fluid.
- Attach the red hose toward thermostat black toward radiator. Make sure to open both ball valves.
- NOTE: On reverse flow systems connect the opposite direction (long red hose toward radiator)



**Technical Support Line Toll Free 1-888-467-4142** 

#### **EXCHANGE THE COOLANT**

- Start vehicle check fluid level in radiator after a few minutes of run time. Top up if required.
- If using a cleaner, run vehicle for suggested length of time for cleaning
- Turn off vehicle
- Press LEFT SWITCH (upper radiator) to ON. The other to OFF
- Make sure ball valves are open on the red and black hoses
- When desired amount has been exchanged close ball valve on red hose first then on the black hose. For a spill free disconnection evacuate out approximately 2L (2Qt) of coolant from radiator so that the level is below top radiator hose.

After service you MUST test drive vehicle and THEN check fluid levels once again.

## **TO DISCONNECT**

- Disconnect the red fill hose & black drain hoses
- Disconnect the adapters
- If desired, pour a conditioner into the radiator or top radiator hose
- Reconnect top radiator hose to radiator make sure clamps are tight
- Top up radiator and overflow tank using evacuator hose attached to red fill hose and press left switch to on.
- Start vehicle, check coolant level and check for possible leaks

#### **USE OF CONE ADAPTER:** CAUTION: FLUID MAY BE HOT AND UNDER PRESSURE

- 1) On the machine press the EVACUATE USING CONE ADAPTER switch to on, the other switch to off
- 2) Attach the cone adapter to red and black hose remove the radiator or overflow cap and place the cone adapter in the hole.
- 3) Start vehicle. Run until it has reached operating temperature.
- 3) Open the ball valve on the BLACK hose, when no more fluid is coming out close ball valve
- 4) Open the ball valve on the RED hose until the cooling system is full. Disconnect the cone adapter.
- 5) If required to top off, attach a clear adapter hose to the end of the red hose, press exchange switch to on, then open the ball valve

#### TROUBLESHOOTING

**No pressure**—Set regulator 15-17psi, tighten filler cap on the machine

**No vacuum**—Clean external filter or debris in the air line