MOTORVAC TECHNOLOGIES, INC. / MODEL MCF5000 CoolantClean[™] QUICK REFERENCE GUIDE

- > Read the Operator's Manual & Safety Precautions before performing these procedures.
- Check engine & coolant temperatures before removing or repairing system components.
- > Verify all pressure has been alleviated before opening hot cooling system.
- *>* Hot coolant under pressure can cause severe burns.
- 1. Attach the unit to the vehicle's battery by connecting the unit's red battery clip to the positive (+) battery terminal and the black battery clip to a solid ground point as far away from the battery as possible.
- 2. Insert the unit's clear braided disposal hose into the shop's coolant recycling receptacle or a container suitable for hot coolant collection.
- Carefully remove cap from the vehicle's coolant overflow tank (if applicable). Attach an open-ended adaptor onto the unit's RED hose & insert into vehicle's overflow tank, move power switch to VACUUM. Evacuate half of the coolant in the overflow tank then move power switch to OFF.
- 4. Locate and disconnect the vehicle's recovery tank overflow hose. Connect an open-ended adaptor to the unit's RED hose & attach adaptor to radiator overflow nipple.
- Move unit's power switch to VACUUM & carefully loosen radiator cap or pull the pressure release lever on radiator cap (according to the manufacturer's or radiator cap instructions).
 Remove radiator cap.
- 6. Disconnect adaptor from radiator overflow tube, insert into radiator fill neck & evacuate radiator until coolant level is below the upper radiator hose connection point.
- Remove adaptor from radiator & place into overflow reservoir, evacuate reservoir completely.
 When finished, move unit's power switch to OFF.
- Disconnect vehicle's upper radiator hose. Install proper adapters to radiator and to open upper hose, tighten all hose clamps securely. Connect the unit's GREEN hose to radiator's inlet adapter and the RED hose to upper hose outlet adaptor (SEE FIGURE 1).
 <u>NOTE:</u> Vehicles with reverse flow may require that the unit's service hoses be reversed.

*Verify flow before connection of unit and hoses.

- Verify that the CoolantClean[™] unit contains the correct amount of Antifreeze (Coolant) and water mixture. Move the unit's power switch to SERVICE position & continue until the vehicle's coolant level has reached the middle of radiator filler neck. When level is reached move unit's power switch to OFF.
 **Re-install vehicle's radiator cap securely.*
- 10. Start vehicle's engine & move unit's power switch to SERVICE. Continue service with vehicle's engine running until coolant in the unit's tank has been depleted or until flow from clear braided drain hose is clean. When either condition is met, move unit's power switch to OFF.
 *Turn off vehicle's engine at this time.

- 11. Remove the clear braided drain hose from waste receptacle and insert into the vehicle's coolant recovery tank. Move unit's power switch to VACUUM to fill recovery tank. When recovery tank is at an acceptable level, move unit's power switch to OFF.
- 12. Verify unit's pressure gauge reads "zero" & carefully remove the radiator cap. Vehicle coolant level should be lower that the upper radiator hose connection point, if not insert clear drain hose into a suitable collection container. Move power switch to VACUUM until level is acceptable.

<u>NOTE</u>: During this procedure, the clear braided hose will be draining clean coolant from the vehicle. Place the clear drain hose into an acceptable storage container to save this "clean" coolant or direct flow into the shop's waste receptacle to dispose of coolant properly.

- 14. Disconnect unit's lines & adaptors from vehicle. Re-connect vehicle's upper radiator hose and overflow tank hoses, tighten hose clamps securely. Inspect all connections at end of service with cooling system pressurized to manufacturer's specifications.
- 15. Connect open-ended adapter to the unit's GREEN hose & insert into the vehicle's radiator filler neck. Move the unit's TOP OFF switch to ON to fill or top-off the coolant in the radiator. Repeat procedure to fill or top-off the overflow tank. Adjust radiator / overflow tank levels per manufacturer's specifications.
- 16. Start engine with radiator cap removed. Re-check and adjust radiator & overflow tank levels as needed. Replace radiator cap securely and re-check all connections when procedure is complete.

<u>FIGURE 1</u>

