Operation Manual FOR RCS 542

Always wear protective devises for eyes and hands when operating the RCS Machine. Always set PARKING BRAKE and install fender covers when working on vehicle.

CAUTION FLUID MAY BE HOT AND CAP UNDER PRESSURE

Connect the shop airline to the RCS 542 machine. Open the radiator/expansion tank cap. Turn the middle and far right diverter valve on top of the machine inward to 'Evacuate / Exchange Fluid', then Check both 'New tank' and 'Used tank' gauges (New Tank gauge 18-20 psi and the USED tank gauge vac -20 hg)

If adjustment is needed 'Set Exchange Pressure' by pulling out on the knob (turn clockwise to increase pressure, counter clockwise to decrease pressure) push the knob back in to lock and maintain pressure.

Be sure proper amount of coolant is in the new coolant tank plus 2Lt or 2 Qt extra. Tighten the cap back on the New coolant tank. If coolant is used with water, Turn the far-left diverter valve to 'Mix' for 2-5 min, then turn the diverter valve back to the 'Off' position.

Remove the top radiator hose at either the engine bock or at the radiator, whichever is the most accessible. If desired, pour a radiator flush chemical into the radiator hose or into the radiator.

Connect one end of the adapter loop hose (#7013) to the radiator, the other toward the thermostat. Attach the long red hose (New fluid hose) to the loop hose toward the thermostat and the long clear coiled hose (Used fluid hose) towards the radiator. (Making sure the ball valves on both hoses are in the off position before attaching them to the loop hose)

DO NOT USE the OE spring style hose clamps. Use only gear hose clamps.

IMPORTANT- Top up with appropriate fluid and attach radiator cap.

NOTE: On reverse flow systems connect the opposite direction (Long red hose towards the radiator and the long clear coiled hose towards the thermostat)

CHEMICAL FLUSH PROCEDURE & EXCHANGE COOLANT

- Make sure the ball valve on the long red hose (New Fluid hose) and clear coiled hose (Used fluid hose) Is in the off position, then open the ball valve on the loop hose (#7013). This allows fluid to flow through the loop hose, making sure the vehicle wont over heat.
- Start the vehicle – check fluid level in radiator after a few minutes of run time. Top up if required.
- If using a cleaner, run the vehicle for suggested length of time for cleaning.
- Turn off vehicle – Close the loop hose valve
- Turn the middle and far right diverter valve inward to 'Exchange Fluid position'
- At desired pressure (18-20psi) open the ball valve on the clear coiled hose (used fluid hose) then open the ball valve on the red hose (New fluid hose)
- When the desired amount has been exchanged, close the ball valve on the clear coiled hose FIRST, then close the ball valve on the red hose.

Caution- If the radiator hoses on the vehicle start collapsing, turn the ball valve on the clear coiled hose to half position (Allowing the suction to slow down)

DISCONNECT LOOP HOSE

- To release the pressure, open the ball valve on the loop hose. Evacuate out approximately 1-2 Lt or Qt of coolant from the radiator so that the level is below the top radiator hose.
- Disconnect the red hose (new fluid hose) and the clear coiled hose (used fluid hose)

- Disconnect the loop hose adapter
- If desired, pour a conditioner into the radiator or top radiator hose.
- Reconnect the radiator hose to the radiator and make sure the clamps are tight
- To top up the radiator and the overflow tank, attached the clear fitting (# 7012) to the red hose, opening the ball valve on the red hose to fill to desired amount
- Start vehicle, check coolant level and check for any possible leaks

DRAIN USED COOLANT TANK

- Connect the clear fitting (#7012) to the clear coiled hose.
- Connect the shop airline to the machine
- Turn the middle and far right diverter valve outward to 'Drain Used Fluid Tank' (Set used tank regulator to 15psi)
- Place the clear hose into a waste pail/ bucket, open the ball valve on the clear coiled hose (The air pressure will force the used coolant out of the used coolant tank.)

USE OF CONE ADAPTER

CAUTION; FLUID MAY BE HOT AND UNDER PRESSURE

The engine is turned on and running at normal operation temperature when using this system.

IMPORTANT!

Turn the exchange regulator counter clockwise all the way until there is no pressure in the tank, make sure all the diverter vales are in the off position when starting. Remove the filer cap on the RCS 542 machine

1. Connect the red and clear coiled hose to the cone adapter, (with ball valves in the closed position)
2. If required attach the clear hose provided into the end of the rubber cone (#7015).

3. Turn the middle and far right diverter valve inward to ‘Evacuate Fluid’ position. Remove the radiator or overflow tank cap and place the rubber cone tightly in the hole, then open the valve on the clear coiled hose.
4. When a sufficient amount of fluid has come out, close the ball valve on the clear coiled hose and open the valve on the red hose
5. If required, top off fluid by closing the filler cap on the RCS 542 machine, turn both the middle and far right diverter vale to ‘Evacuate Fluid’ and ‘Set Exchange pressure to 5-10 psi.