



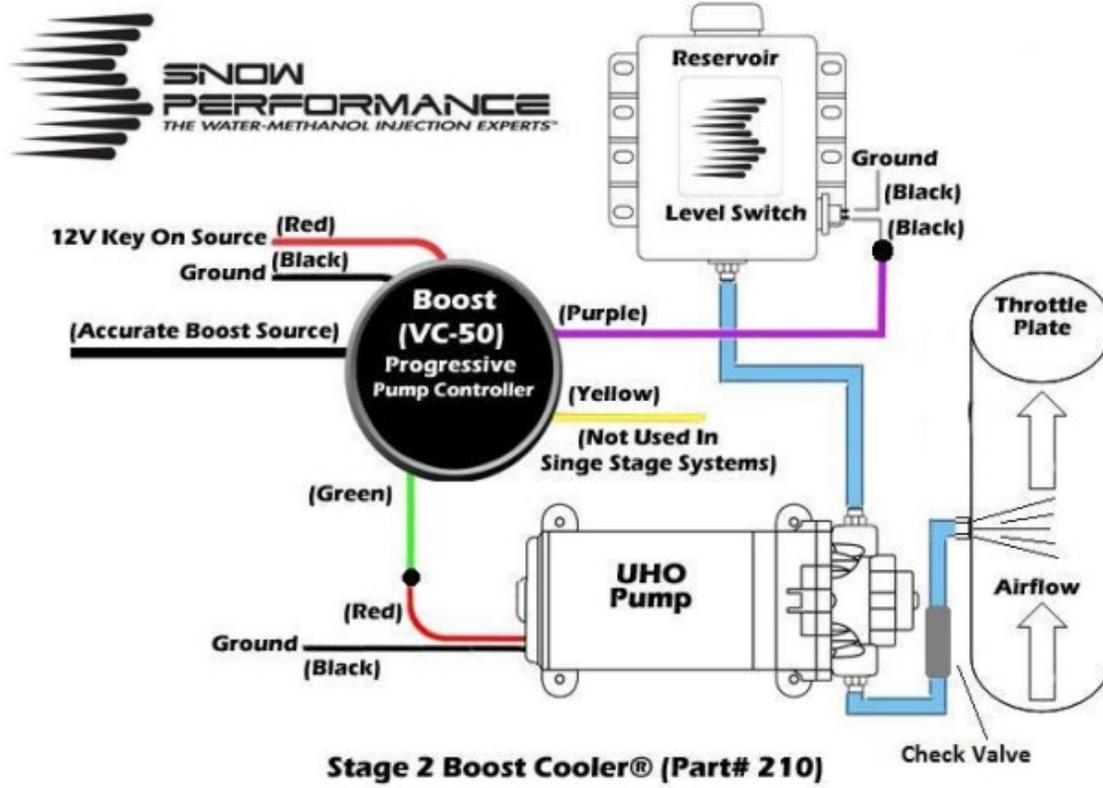
VC-50 Instructions part # SNO-60500



Caution: Disconnect the negative battery terminal while connecting the wires to prevent electrical fire or damage to the controller.

To complete your water-methanol install locate the part# for your injection kit and follow the subsequent electrical diagram/instructions. The wires on the level sensor / LEDs are interchangeable and it does not matter which wire connects to ground 12V source.

Wiring Diagram



VC-50 Wiring/Boost Source

Step 1: Mount controller in desired location using a 52 mm Gauge pod.

Step 2: Slide the black silicon hose supplied in kit over the black boost line coming from the controller and secure with a wire tie. Connect other end of black silicon hose to accurate boost source using included boost "T" fitting.

Step 3: Connect the BLACK wire to good ground location.

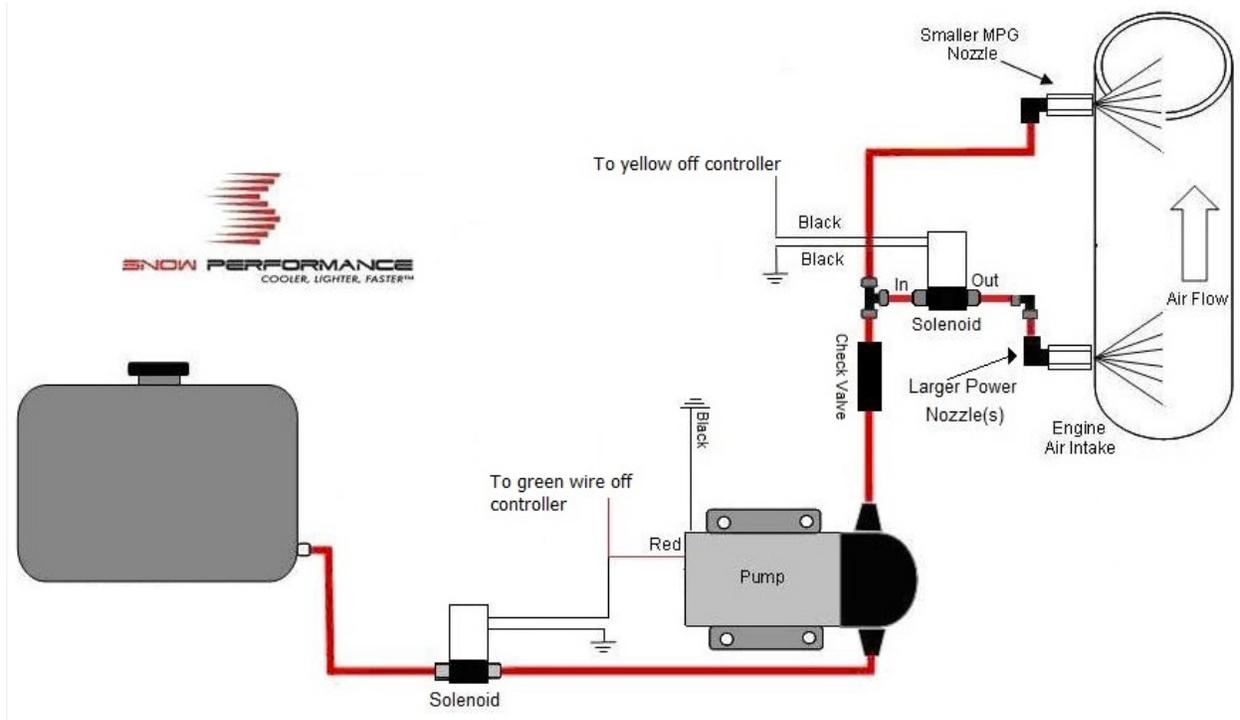
Step 4: Connect the VC-50 GREEN wire to the pumps RED power wire.

Step 5 Connect the VC-50 PURPLE wire to one of the black wires on the reservoir level switch. Connect the other reservoir level switch black wire to good ground location. These wires are interchangeable and either one can connect to controller/ground.

Step 6: Connect the VC-50 RED wire to a 12Volt key on power source that is powered when the engine is running.

Step 7: YELLOW wire is not used in in a single stage system.

Dual Nozzle System Only



Wiring for (Dual Nozzle ONLY)

Step 1: Mount controller in desired location using a 52 mm Gauge pod.

Step 2: Slide the black silicon hose supplied in kit over the black boost line coming from the controller and secure with a wire tie. Connect other end of black silicon hose to accurate boost source using included boost "T" fitting.

Step 3: Connect the BLACK wire to good ground location.

Step 4: Connect the VC-50 GREEN wire to the pumps RED power wire.

Step 5 Connect the VC-50 PURPLE wire to one of the black wires on the reservoir level switch. Connect the other reservoir level switch black wire to good ground location. These wires are interchangeable and either one can connect to controller/ground.

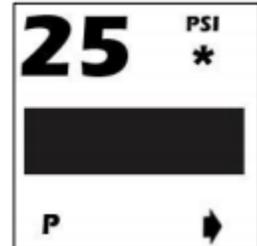
Step 6: Connect the VC-50 RED wire to a 12Volt key on power source that is powered when the engine is running.

Step 7: Connect the VC-50 YELLOW wire to one of the wires from the second stage solenoid. **(This wire is only used in this type of dual stage set up)**. The other solenoid wire will be connected to ground.

VC-50 Injection Settings / Screens

Main Screen

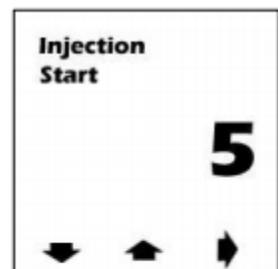
- Main Screen (see right) is used to monitor boost pressure, injection, low level, second stage activation, and to prime the system.
- To prime the system press the red button underneath “P”. This will Command 100% injection briefly to fully prime the system. ONLY ENGAGE PRIME WHEN ENGINE IS RUNNING!
- Boost pressure is displayed in PSI on the upper left of the screen
- Percent of Injection is displayed using the graph in the middle of the screen. When injection is turned “Off” the graph will display the text “Off”.
- When a low level situation occurs the outside of the screen will blink yellow alerting the user to fill the water-methanol reservoir.
- (Dual Stage Systems Only) When a second stage of water-methanol is activated an asterisk will appear where “PSI” is located alerting the user of both stages injecting.
- To enter the setting screens press the red button directly under the arrow on the bottom right.



 **CAUTION: Do not operate the prime button when the engine is not running. Only engage priming of the system when the engine is on.**

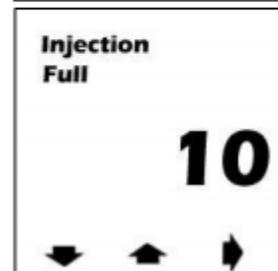
Injection Start

- Setting screen 1 (see right) is used to select what boost pressure will start injection. This should be set to 1/3rd to 1/2 the engines max boost output using the red buttons below the up and down arrows to adjust the PSI to desired setting. Press the red button underneath the arrow pointing right to move to setting screen 2 once desired setting is reached.



Max Injection

- Setting screen 2 (see right) is used to select what boost pressure will correlate to max injection. This should be set to the vehicles maximum boost level using the red buttons below the up and down arrows to adjust the psi to desired setting. Press the red button underneath the arrow pointing right to move to setting screen 3 once desired setting is reached.

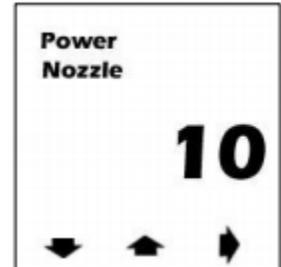


How to put controller into BAR:

When powering up hold #2 button to put into BAR; to change back to PSI, when powering up hold #1 button to put into PSI.

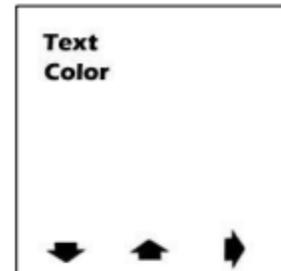
Second Stage Nozzle “Power Nozzle” (Only Used In Dual Nozzle)

- Setting screen 3 (see right) is used to select what boost pressure a second stage of injection will be triggered. If a second stage of injection is not being used this must be set above 50 PSI to the “OFF” setting to avoid a fault code. If a second stage is being used, the boost pressure must be set to a higher value than the “Injection Full” value.



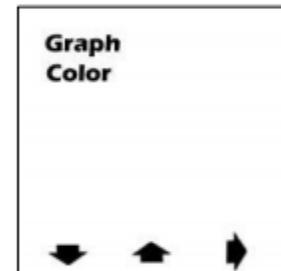
Text color

- Setting screen 4 (see right) is used to select what text color will be displayed on screen. Using the red buttons below the up and down arrows adjust the color to the desired setting (Red, Blue, Green, Yellow, Orange, Purple, White) are available. Press the red button underneath the arrow pointing right to move to setting screen 5.



Graph Color

- Setting screen 5 (see right) is used to select what graph color will be displayed on screen. Using the red buttons below the up and down arrows adjust the color to the desired setting (Red, Blue, Green, Yellow, Orange, Purple, White) are available. Press the red button underneath the arrow pointing right to move to setting screen 6.



Injection On/Off

- Setting screen 6 (see right) is used to toggle between on/off mode. In “ON” mode injection will take place based off the boost settings in the unit. In “OFF” mode no injection will take place and the “OFF” icon will be shown on the main screen. In this mode the controller will only function as a boost gauge.



 **TECH TIP** In most applications, the start setting should initially be set at ½ of full boost pressure so that boost levels in normal driving do not trigger injection needlessly. The full setting should be near the vehicle's max boost pressure. Start tuning by carefully trying lower start point settings. If bogging is experienced at the onset of injection, move the start point back up a small amount. Then try lower and lower points for the full setting. If bogging is experienced as injection ramps up, turn the full point back up to a safe level. The engine should run with no bogging or miss-fires. Be sure to make small changes and then test them each time to avoid any drastic differences in injection.

VC-50 Fault Alerts

Low Level Alert

- When the fluid in the reservoir is running low the border of the graph for injection will blink yellow alerting the user to fill the water-methanol reservoir.

Clogged Line

- In the event of a clogged line the psi reading on the main screen will turn to stars and begin flashing. If this occurs, fix the problem and press the middle red button to clear the code.

Broken Line

- In the event of a broken line the psi reading on the main screen will turn to stars and begin flashing. If this occurs, fix the problem and press the middle red button to clear the code.

Solenoid Not Engaging (Dual Stage System Only)

- In the event of a solenoid not opening to engage a second stage of water-methanol the psi reading on the main screen will turn to stars and begin flashing. If this occurs, fix the problem and press the middle red button to clear the code.