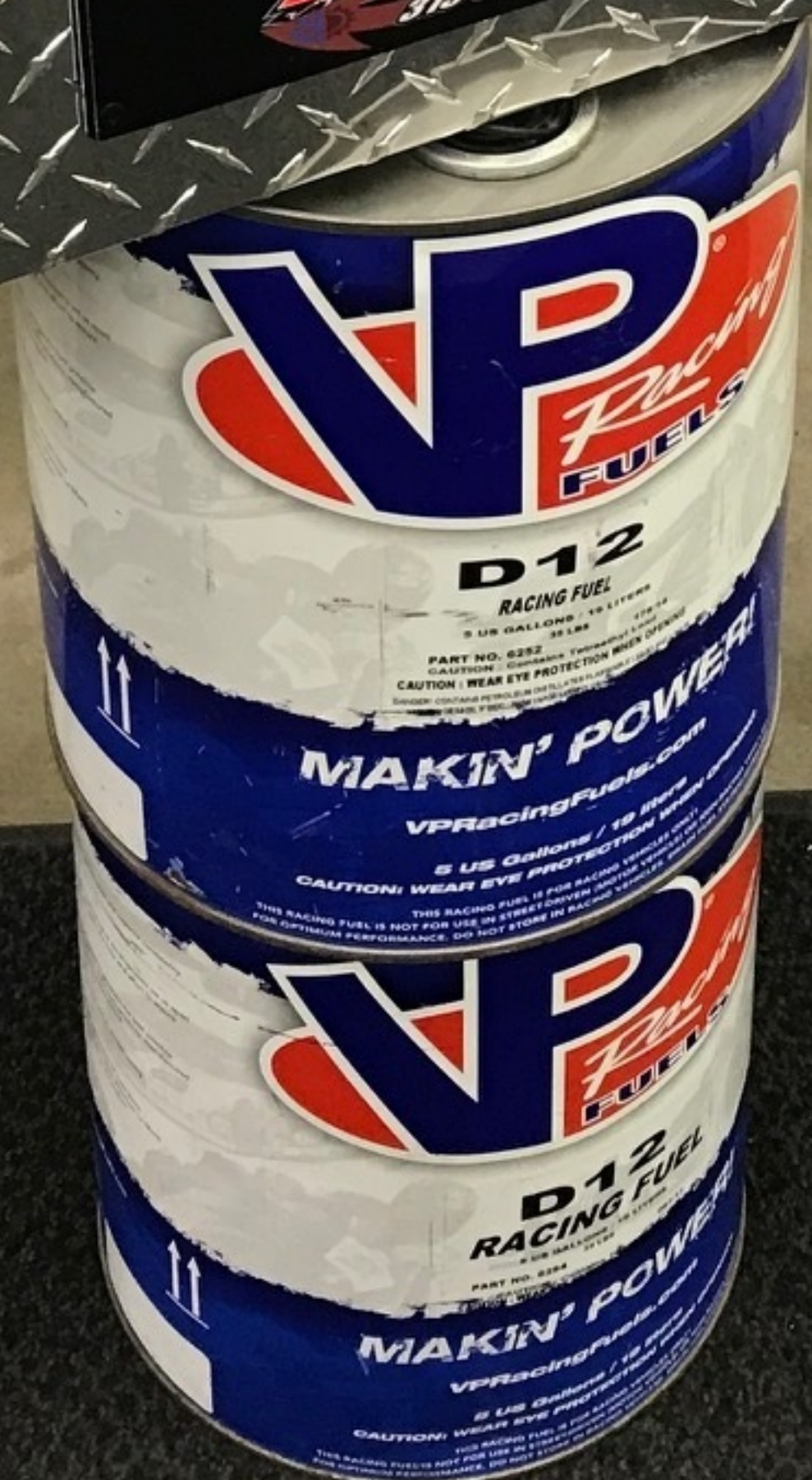




- 1.** Install Lower radiator check valve into Lower radiator hose. You will have to mark and cut a section of the radiator hose out and it will be replaced by the Check Valve. It is VERY important that the lower check Valve is installed the correct way, Otherwise serious engine damage can occur. The coolant flows from the radiator into the water pump, To check move the flapper inside the valve if you push on it with your finger from the right side the flapper should open, When pushed from the left side the flapper should be in the "closed" position. The red end of the check valve will go towards the engine and the blue end will go towards the radiator (see attached picture). We recommend using a double hose clamp method on the connections at the check valve to ensure a tight on leak seal
- 2.** Install Upper inlet fitting mount on the downtube towards the front of the engine (see attached picture) We found this is the easiest access point to be able to hook the Engine Heater Hoses to the Quick release fittings included in the kit. Secure the mount to the chassis using the (2) supplied hose clamps
- 3.** With the check valve and the frame mount installed you can now connect the 2 together using -8 push lock hose and fittings. Commonly (2) -9 straight and (2) 90 degree fittings seem to be best. Ensure that the push lock hose is completely pressed against the rubber seal on the fitting. When assembling the hoses some WD40 or similar lubricant on the fitting and a small amount in the hose end will make assembly easier. Remember the "red" hose will connect to the side of the check valve closest to the engine and the "blue" will connect to the side closest top the radiator. The orientation of the fittings on the frame mount do not matter as long as red is to red and blue is to blue
- 4.** Connect the fittings from the Engine Heater to the fittings on the frame mount. Plug a 110v extension cord into the "Low" plug, Low will power the pump and the low heating element. At this time you can turn the "pump" switch to the ON position, Verify the pump is running and then turn the LOW switch to the ON position. At this time you can plug a 110v cord into the HIGH plug and also turn that to the ON position. The unit can be utilized in 3 ways, You can heat with the low element on 110v, Heat with LOW and HIGH, with 220v or in the case the engine is overheating or warm you can hook the box up and simply turn the pump to the ON position and place a fan in front of the radiator to quickly and effectively cool the engine.
- 5.** After a few minutes of run time touch both hoses to verify that the engine is gaining temperature, Normally with a full 220v after about a hour the engine will have very good temperature to it (Caution the hoses and fittings will be very hot)
- 6.** Before disconnecting turn both the LOW and HIGH switches to the OFF position (down) and let the pump circulate water for a few seconds before turning the pump switch to the OFF position. Re install your Hood Side panel and you are ready to go, Your entire engine now has a nice heat soak, The Block, Heads, Pistons are all up to temp. If you do not have a oil heating pad or element it will still be beneficial to fire your engine for a few minutes to gain some oil temp. Remember a warm engine and warm oil is a happy engine

Thanks you for your purchase, Any questions we can be reached at (315) 378-7829 Chris Hile or (315) 378-7825 Rob Hile

# MOUNTING POSITION FOR INLET FITTINGS



**ENGINE**

**COOLANT FLOW**

**RADIATOR**

Connect to  
"Red" Side  
of Frame  
mount

Connect to  
"Blue" Side  
of Frame  
mount

