1. Use a clean container and drain approximately 2 gallons of coolant from the radiator and save coolant to be re-installed later.

2. Remove air cleaner hose from the turbo inlet to air cleaner housing, by loosening the 2 hose clamps which are attached to the hose and the air cleaner filter from the inner fender well, using a 5/16” nut driver. Then drill a ¾” dia. hole in the center of the bottom side of the air cleaner hose using a ¾” uni-bit and install the venturi bulk head fitting using a 11/8” wrench. Don’t over tighten.

3. Mount regulator bracket to the passenger fender well, locating the bracket against the 90 degree raised rib on the fender. Mark and drill the top hole about 1 1/2” down from the top of the rib and about ¾” in front of the rib using a 3/16” drill. Then drill the second hole 11/2” below the top hole. Using (2) 5/16” X ¾” long washer head lag bolts and a ½” socket. Install and tighten the regulator-mounting bracket.

4. Install all the fittings into the regulator;  
   A. The lock off valve into the top of regulator (1/4” pipe).  
   B. The two 90 degree water fittings in the right left sides of regulator (3/8” pipe).  
   C. The 5/8” orifice fitting in the bottom side of regulator (1/2” pipe).  
   Tighten all fittings and install the 5/16” hose fitting in the side of the lock off valve.

5. Loosen and rotate the turbo discharge T bolt clamp from the vertical position to a horizon position to give us more clearance for the regulator water hoses.

6. Cut the heater hoses about 8” from the firewall and then cut out about 1” of each hose. Then install the Y fittings into each hose. Pointing the Y’s toward the passenger door. Secure the Y fittings into the heater hoses with clamps provided in system.

7. Attach the water lines to the regulator; first install the 50” hose to the right side of the regulator and then the 34” hose to the left side and secure with clamps provided in system.
8. Bolt the regulator to the mounting bracket on the fender using (2) ¼” X 5/8” long cap screws, (2) washers and (2) lock washers using a 7/16” wrench. Route the water lines under the filter box, under the air conditioning lines and over the air conditioner condenser. Install and clamp the lines to the Y’s using clamps provided in it. (Wire tie hoses so they won’t move around).

9. Remove the Intake manifold adapter. Using a 7/16” socket loosen the lower clamps on the intake hose on the pressure chamber and slide clamp down the steel tubing. Next remove the five cap screws holding the intake pressure chamber and dipstick tube using a 10mm socket. When removing the cap screws from the air intake pressure chamber notice that there are two long length cap screws, two medium length cap screws and one short length cap screws. **IMPORTANT: NOTE where each cap screw goes for re-installation.** When removing the air intake pressure chamber take special care not to damage the intake gasket and also make sure to hold the electrical grid heater down in place while lifting air intake pressure chamber. This is so that the gasket under the electrical grid heater is not damaged. If the gasket gets damaged the Cummings part number for a new gasket is PN-39l3352. Using a shop towel cover the manifold and intercooler pipe openings to keep foreign objects out.

10. Drill and tap 1/8” pipe into the intake manifold. Use an “R” drill; locate hole as per drawing in the front side of manifold. Install and tighten the hob switch. The hob switch comes pre-set to 5 lbs. Adjustable between 3.1 psi to 7.4 psi.

11. Re-install intake manifold adapter, remove the shop towels covering the manifold and intercooler pipe. Install the factory intake gasket onto the electrical grid heater. Now install the air intake pressure chamber onto the manifold and the intercooler pipe. Re-install the five cap screws and dipstick tube, refer to the note made in instruction #9. Tighten the five cap screws to 18 FT.-LB using a 10mm socket. Slide the clamp back over the hose on the pressure chamber and tighten using a 7/16” deep socket.

12. These instructions assume that the tank is already mounted. If the tank is not mounted, this is a good time to mount the tank whether under the
truck or in the bed. **NOTE:** **If you are going to mount the tank in the bed, a bulkhead fitting should be used.**

13. Assemble the L.P.G. feed hose. Use the 15’ hose supplied in the system. Route the L.P.G. hose on the outside of the frame rail and away from exhaust and up to the regulator to find the correct length. Secure hose to frame using tie wraps.

14. Install 5/16” L.P.G. hose to tank or bulkhead fitting. Use a ¾” wrench. Cut the L.P.G. hose to desired length and assemble hose fitting to hose by disassembling hose fitting, and screwing the large female end in a counterclockwise rotation onto the hose. With female end install into the hose, holding the fitting in a vise or using a wrench, place a small amount of oil to the other female fitting and install this fitting into the large fitting screwing this fitting in a clockwise rotation until fittings are tight together. Route the L.P.G. hose assembly on outside of rail and away from exhaust. Use tie wraps to secure hose to prevent any chafing. Connect the L.P.G. hose assembly to either bulkhead fitting or tank at the liquid valve.

15. Connect 5/16” L.P.G. hose assembly to the fuel lock off valve, Use a ¾” wrench.

16. **NOTE:** **IMPORTANT** Slowly open the liquid valve at the tank and using a solution of soap and water in a spray bottle, check all connections for leaks! (It will bubble or have an odor.) If any leaks exist, repair and recheck for leaks.

17. Re-attach the air cleaner box to the fender well. Install the filter and clamp on the top cover and re-install the stock intake hose and venturi fitting.

18. Install the vapor injection hose. Attach the hose to the bottom of the regulator and to the intake hose venturi.

19. Connect one side of the lock off valve to the ground of the battery. Wire tie to ground cable.

20. Connect the other side of the lock off valve to the Hobb switch. Wire tie to the alternator wire loom going across the front of the motor.

21. Mount the on/off switch in a convenient place in the cab.
22. Run a wire from the other side of the Hobb switch to inside the cab to the on/off switch.

23. Run a wire from the switch to a keyed power source. (Make sure it is fused).

**Special Tools Needed**

1/8” NPT tap

“R” Jobber drill

3/4” UNI-bit