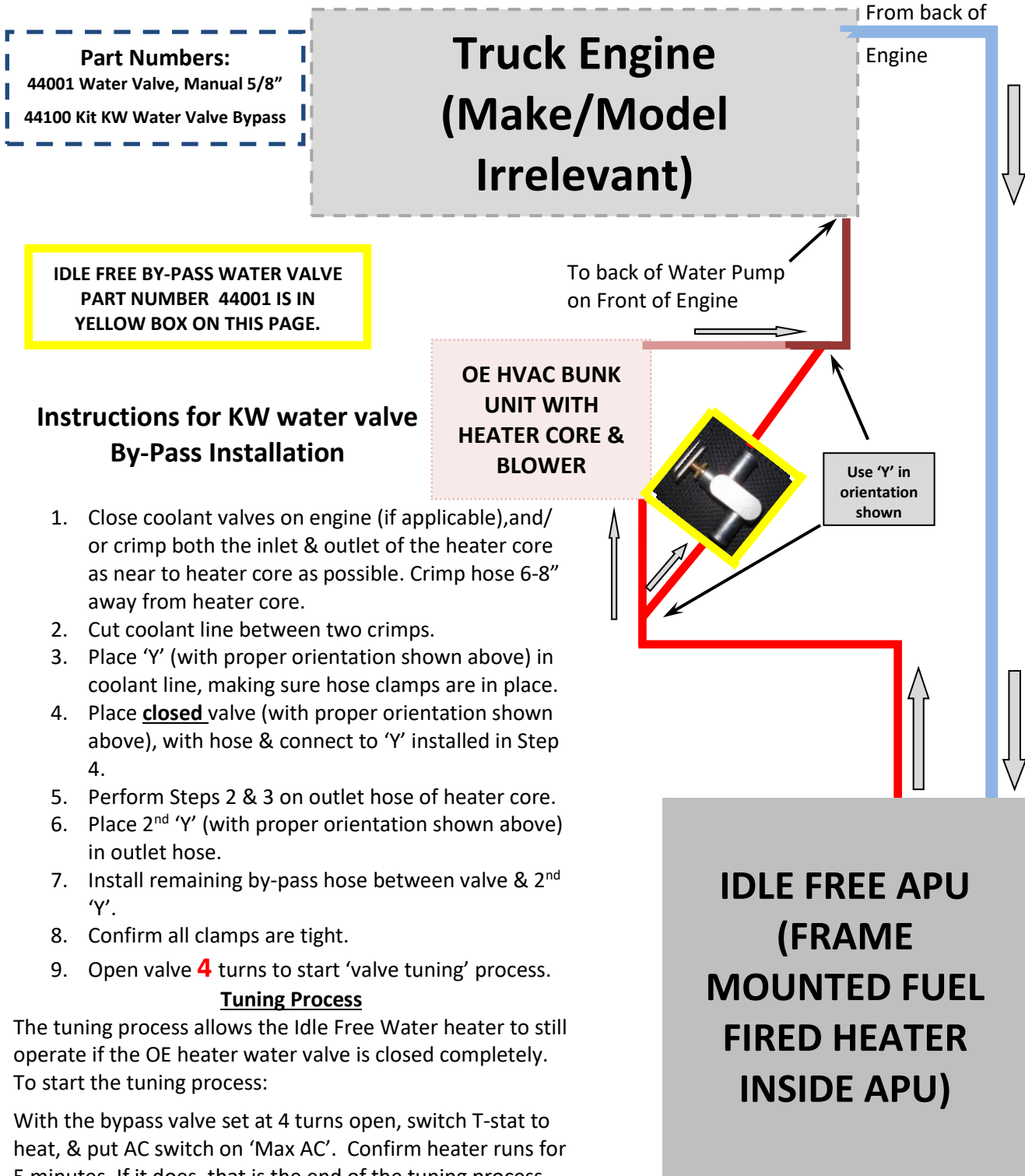


Idle Free Systems Optional Kenworth By-Pass Flow Diagram

The diagram on this page displays the flow of coolant in the Kenworth Coolant system when an Idle Free Systems APU is installed, **and IF** the truck has a bunk heater equipped with a water valve (stacked system HVAC). Blend systems DO NOT require the use of this valve.



Instructions for KW water valve By-Pass Installation

1. Close coolant valves on engine (if applicable), and/ or crimp both the inlet & outlet of the heater core as near to heater core as possible. Crimp hose 6-8" away from heater core.
2. Cut coolant line between two crimps.
3. Place 'Y' (with proper orientation shown above) in coolant line, making sure hose clamps are in place.
4. Place **closed** valve (with proper orientation shown above), with hose & connect to 'Y' installed in Step 4.
5. Perform Steps 2 & 3 on outlet hose of heater core.
6. Place 2nd 'Y' (with proper orientation shown above) in outlet hose.
7. Install remaining by-pass hose between valve & 2nd 'Y'.
8. Confirm all clamps are tight.
9. Open valve **4** turns to start 'valve tuning' process.

Tuning Process

The tuning process allows the Idle Free Water heater to still operate if the OE heater water valve is closed completely. To start the tuning process:

With the bypass valve set at 4 turns open, switch T-stat to heat, & put AC switch on 'Max AC'. Confirm heater runs for 5 minutes. If it does, that is the end of the tuning process. Due to truck cooling system condition, & as ambient temperature gets colder, VALVE MAY NEED TO BE ADJUSTED to make sure driver has adequate heat in bunk, & adequate coolant flow to heat engine.

Call Idle Free Systems Technical Support with any questions at 920.206.9333