

# KENWORTH / PETERBILT SURGE TANK 237048

#### Kit Includes:

- (1) Heavy Duty Steel Surge Tank
- (1) Immersion-Style Sensor
- (1) 3-Wire Male Pigtail

## **Additional Items May Be Needed:**

- (1) 18 AWG Wire Connectors
- (1) 18 AWG Wire



Northern Radiator now offers a redesigned replacement Heavy Duty Steel Surge Tank to eliminate the common failures of the OEM's plastic surge tank. Northern Radiator's replacement tank will now use an immersion-style low coolant level sensor instead of the float-style sensor the OEM used.

When converting from an OEM plastic surge tank with a float-style sensor to Northern Radiator's Heavy Duty Steel Surge Tank with the immersion-style sensor, some applications may require the addition of an 18 gauge, 5 volt power wire to make the new sensor function properly. To confirm if a power wire is needed, check the male pigtail for the low coolant level sensor currently installed. If there are 3 wires, no additional wire is needed. If there are only 2 wires running to the male pigtail, the 2-wire pigtail needs to be replaced with the provided 3-wire male pigtail. Please follow the instructions below to complete the install of the new surge tank and coolant level sensor.



**Step 1:** Identify the port on the lower side of the tank for installation of new coolant level sensor.



The sensor should come with pipe tape already applied to the fitting threads. If pipe tape is not already applied, pipe tape will need to be added prior to installation.



**Step 3:** This is an NPT fitting. Install the coolant level sensor finger tight into the port located in Step 1. Then, tighten 1.5 - 2.5 more turns with a wrench.

#### Step 4:

Remove and replace defective surge tank with Northern Radiator Heavy Duty Steel Surge Tank.

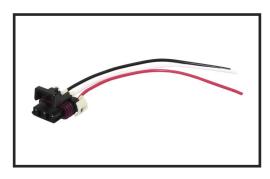
#### Step 5:

With the new surge tank and coolant level sensor installed, refill the system.



### Step 6:

Locate the male pigtail that was connected to the old float-style coolant level sensor. If only 2 wires are running to the male pigtail move to Step 7. If 3 wires are already running to this pigtail, plug it into the new sensor. Confirm it is functioning by checking that the low coolant dash light is not illuminated. (this may take up to 90 seconds to register.) Install is now complete for 3-wire male pigtails.



#### **Step 7:**

Using the provided 3-wire replacement male pigtail, replace the factory 2-wire male pigtail. First snip the outside wire and connect it to the black wire on the provided 3-wire pigtail. Next, snip the remaining (middle) wire on the 2-wire pigtail and connect it to the white (middle) wire on the 3-wire pigtail.

#### Step 8:

Locate a 5 V power source using the truck's engine wiring diagram. Note: Each engine manufacturer uses a different wiring diagram.

#### Step 9:

Connect the remaining red wire on the 3-wire pigtail to the 5 V power source using an 18 gauge wire. Secure the new wire to avoid any moving or hot parts. Confirm the new sensor is functioning by checking that the low coolant dash light is not illuminated. (This may take up to 90 seconds to register.)