

Idle Free System Bunk Harness Wiring

KENWORTH T680

Wire Connection Location:

There are two wires that need to be connected to the Idle Free HVAC Harness. One of these wires needs to be spliced, and the other needs to be tapped. They are located on the top of the HVAC unit, under the bunk.

Wire Access & Location:

Two pairs of wires are routed from the IFS Under Bunk Box to the KW Bunk HVAC unit. The first wire is Kenworth Wire #7310-381 is located near the bunk blower motor. The second Kenworth Wire is wire # 7300-383. It can be found leading to the HVAC blend door actuator.

Wire Numbers & Connections:

1st Pair of Wires (The wire is located on top of the HVAC unit, near the blower motor. It is a 12 gauge wire)

Turn ignition key to "On" position. Ensure bunk HVAC is activated. Confirm bunk blower engages. Turn ignition key to "Off" position. Locate and isolate wire number **Yellow 7310-381**. Cut wire, allowing adequate length of wire on both sides to perform a butt splice. Turn ignition key to "On" position. The side of the cut wire with 12 VDC power will be butt spliced to the **Brown** Idle free Systems harness wire.

BEFORE PERFORMING ANY CRIMP, TURN IGNITION KEY BACK TO "OFF" POSITION

The opposite end of the cut wire will have the **Pink** wire butt-spliced to it. See diagram on following page.

2nd Pair of Wires (This wire is leading to the blend door actuator, it is an 18 gauge, YELLOW wire)

With the ignition key OFF, locate and isolate wire number **7300-383, YELLOW**. Cut wire, allowing adequate length of wire on both sides, to perform a butt splice. Take the **Yellow** Idle Free wire, and join it with one end of wire number **Yellow 7300-383**. Select a butt spliced that will allow all three wires (two ends of cut yellow wire number 7300-383 and the yellow Idle Free Wire) to be crimped together in one end. Using heat shrink provided, heat tubing to create a closed seal. Take Orange Idle Free wire, and place heat shrink over end, and seal it shut. This wire will have un-used 12 volts at it when ignition key is on.

3rd Pair of Wires (NOT USED IN THIS APPLICATION)

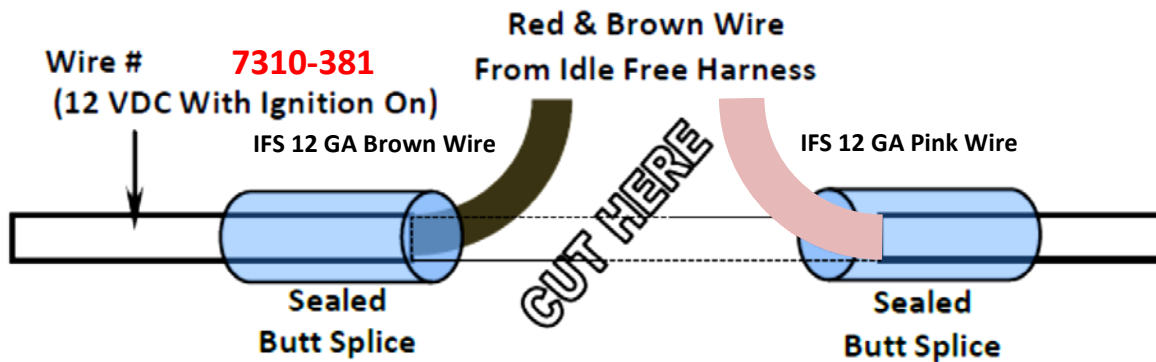
Use butt splice on end of blue wire, and cover other end of splice. This wire will have 12 Volts DC when thermostat switch is in heat position. (Blue & green are paired)

Installation Confirmation:

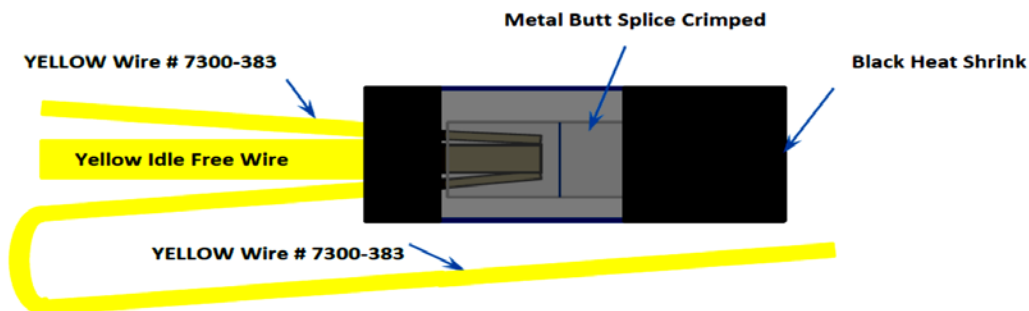
Proper wiring by can be confirmed **AFTER** the exterior heater (Webasto coolant heater) has been connected electrically and plumbing is completed. The IFS UBB must have all necessary wiring in place as well as well as fuses as noted on bottom of second page. When this is complete, turn the ignition key to the "On" position and confirm bunk blower operates as normal. Turn ignition key to "Off" position, and turn Idle Free thermostat to *Heat* position. The bunk blower should operate as if the ignition key was in the "On" position, allowing blower speed control and blend door operation.

The following page shows the connections between the Idle Free wire harness and the truck wire harness.

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Wire Tapping Diagram



Place piece of shrink tube around end of Orange wire, as it will have 12 VDC with Ignition on.



Each Heater Control Harness bag contains a bag with the necessary fuses for the truck the system is being installed in.

Remember, EVERY truck will have a 5 amp fuse in position #1 (top) for thermostat.

Fuse Number	Kenworth-All
1	5 amp
2	30 amp
3	5 amp
4	NONE

The Fan harness connects into the back side of the under bunk (bed) box. A 6 pin connector body contains 6 wires; Brown and Pink, both 12 gauge, Yellow and Orange, both 14 gauge, and Blue and Green, both 18 gauge wires.