RigMaster Power International Technical Customer Support 1Adding a Temperature Sensor to Older Rigmaster Units (Before 2009)

Condenser + Radiator Fan Activation

On older units, the Condenser (Radiator) Electric Fan Relay and the Compressor clutch are both activated at the same time by the Binary Pressure Switch on the receiver/Dryer. The Fan cycles with the Compressor clutch.

The current RigMasters activate this Fan whenever AC is selected, it runs whether the Compressor is cycling or not. This is achieved by **moving the Fan Relay's activation wire from the Binary Switch on the Receiver/Dryer (Figure 1 Red Circle) to the beginning of the circuit (Figure 2 Red Circle)** where the AC Clutch Control wire leaves the Power Module (J1 Connector, 2nd Wire down on right side of plug - Green Wire).

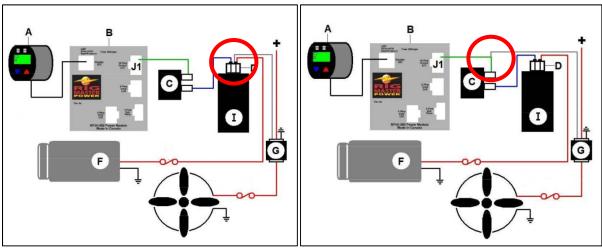


Figure 1.

Figure 2.

AC system componenents:

- A. Cabin Controller
- B. Power Module
- C. Evaporator Thermostatic Switch
- D. Binary Pressure Switch
- E. Fuse
- F. Compressor

- G. Relay
- H. Fuse
- I. Dryer
- J. Temperature Sensor
- K. Relay
- L. Fuse

Activate Condenser + Radiator Fan with Engine Temperature.

To add the function of the condenser fan being activated by the engine coolant temperature, add the following parts:

- 1. RP7-214K Temp Sensor Kit
- 2. RP7-326K Relay Kit

The schematic below (Figure 3) details the wiring to add the temperature sensor to the Rigmaster unit.

Note: Please be advised that the RP7-215 Fan Temp Sensor is polarity sensitive; there is no procedure to determine its polarity other than a run test. If the electric fan doesn't go on when engine temp reaches 82°C (179°F) you must reverse the wires terminals at the temp sensor connection.

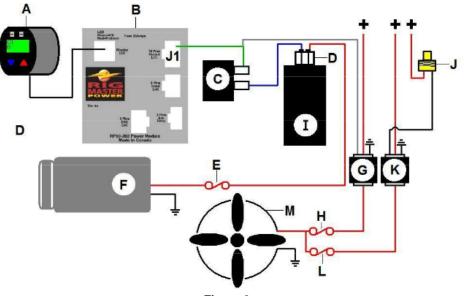


Figure 3.

NOTE:

The RigMaster APU relies on the APU cover being installed to maintain its temperature by moving air through the engine cabinet from one side to the other. Operating the RigMaster with the cover removed will cause overheating.

The "Engine Coolant Overheat Temp sensor" (single pin sensor – "clip on" terminal) is on a separate part of the system, where it protects the engine against overheating. When this sensor activates, the RigMaster engine is turned OFF and "Error Code 5" will be displayed.