

Procedure for conversion of the fan temperature control module on the Stone Mason 50

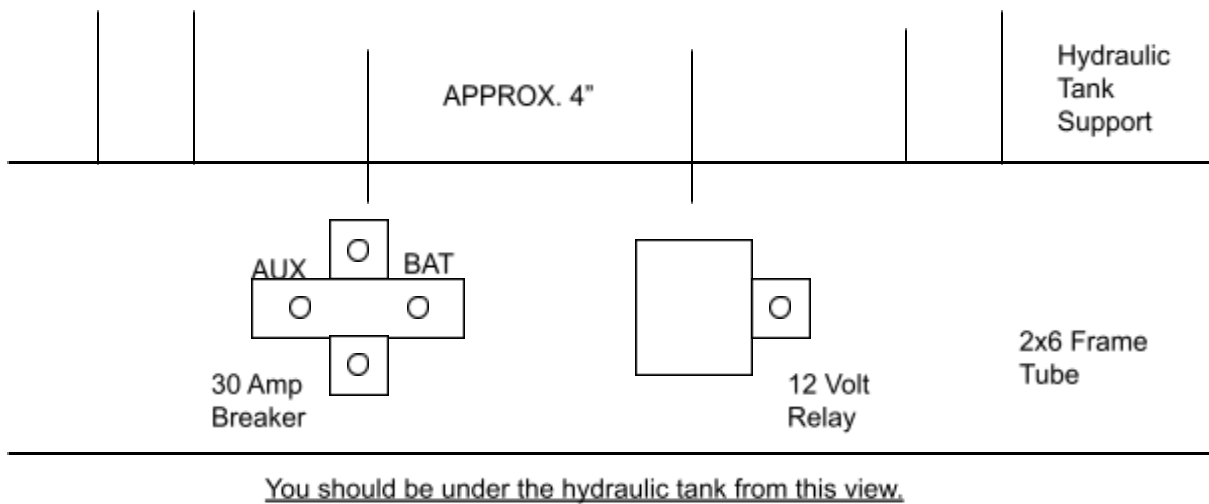
1. Removal of the old components

- 1.1 Disconnect the negative battery cable. Caution! It is only 12 volts but you will shock yourself.
- 1.2 Unplug the wires to the fan motor, which are the blue and black wires coming from the old temperature control unit.
- 1.3 Disconnect the wire from the old temperature sending unit. It is located in the top left corner of the radiator. Remove the old temperature sending unit, discard it and replace it with the new temperature sending unit. Caution! The radiator is filled with hydraulic oil so have the new temperature sending unit handy when you remove the old one.
- 1.4 Disconnect the yellow, red and black wires at the temperature control unit and remove the unit and the bracket. Discard the control unit and replace the bracket with the original bolts. The bolts are metric and longer than the originals so you must replace the bracket.
- 1.5 Remove and discard the yellow, red and black wires from their source. The source should be the battery for the red and black wires and the auxiliary ignition wire at the key switch for the yellow wire.
- 1.6 The removal of the old system is complete.

2. Replacement of the new components

- 2.1 The wiring harness should be assembled when you receive it. This was done for your convenience but you will have to disconnect some of the wires for installation. The wiring diagram will assist you if you forget which wires go to what terminals.
- 2.2 Install the 30 amp circuit breaker and the 12 volt relay on the back side of the 2x6 frame tube, under the hydraulic tank and centered between the radiator support frame. See the Diagram. This will protect it from road debris and the elements. Attach the 2 components with the 14x1 self drilling screws provided. The screws will install easier if you drill a pilot hole because the tube wall is 3/16" thick.

- 2.3 Reconnect the wires to the relay and 30 Amp circuit breaker. Make sure to install the 2 black ground wires under the mounting screw to the 30 Amp Breaker. Run the $\frac{3}{4}$ " black PVC tube with the blue and black fan motor wires up the back of the radiator support on the right side while facing it and secure it with 2 large tie straps. Run the wires over the top of the radiator. Connect the blue and black wires to the fan and tape the connection with electrical tape. Connect the white wire to the sending unit and tape the connection. Remove one of the small screws attaching the fan to the radiator, remove some of the paint to make a good ground and connect the black wire with the eyelet connector.



- 2.4 Run the yellow, black and red wires in-between the hydraulic tank and the radiator support and tie wrap it to the fuel line. Connect the black wire to the negative battery terminal. **Caution! Don't hook up the negative battery terminal yet.** Connect the red wire with the eyelet connector to the positive post of the starter. This is also where the positive battery cable is connected.
- 2.5 This is very important. The yellow wire needs to be connected to the yellow auxiliary wire of the key switch. There are probably 2 yellow wires in the system. One yellow wire will go from the positive post of the starter into the key switch (The same place you hooked the red wire) this wire is always hot. **This is NOT the wire that you want.** The other yellow wire will come out of the key switch, and only has power applied to it when the key switch is on. **This is the wire that you want.** If you find that this is not the case (maybe there are not any yellow wires at all. Stranger things have happened!), please contact the factory and we will be more than happy to help you.

2.6 Reconnect the negative battery cable.

3. Testing the system

2.7 Start the engine.

2.8 Raise the inbound table by pushing the right handle into the detented position. Leave the handle there. This will heat up the oil. Caution: If the handle is left in this position for an extended amount of time it will also over-heat the oil (about 200° F), so you do not want to leave the table raised up while you are cutting stone and walk away from the machine. The fan should turn on when the oil reaches approximately 110° F.

2.9 If the fan starts running, lower the table turn the engine down to idle and it should turn off in a couple of minutes depending on ambient temperature.

2.10 If the fan does not start running check the temperature gauge located in the sight glass of the hydraulic tank to make sure that the oil is hot enough. If it is hot enough, please contact the factory and we will be glad to help you.