

A Light flicker Elimination Guide

by Spyder Controls

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This guide is intended to aid in the suppression of flickering lights.

Please note that not every motorhome experiencing flickering lights will need all these suppression solutions. For example, if the gas portion of the water heater is the only cause, only address the items related to the gas side of the water heater (only add the diode on the solenoid and the spark plug type wire). If the customer is only using the electric portion of the water heater, only address the electric side. (Add diode to the power and ground as shown in the guide below.) If both the water heater gas and electric are the only cause, there is no need to address the furnace.

NOTES:

GAS HEATER NOTE: First remove the original orange wire, then when installing the new spark plug type wire, feed it through from the outside of the unit. The wire will be fed into the lower left side of the water heater (when looking from the rear of the unit now).

FURNACE NOTE: Disconnect the ground wire from the furnace that connects to the ground bus bar. The furnace is already grounded to the coach chassis.

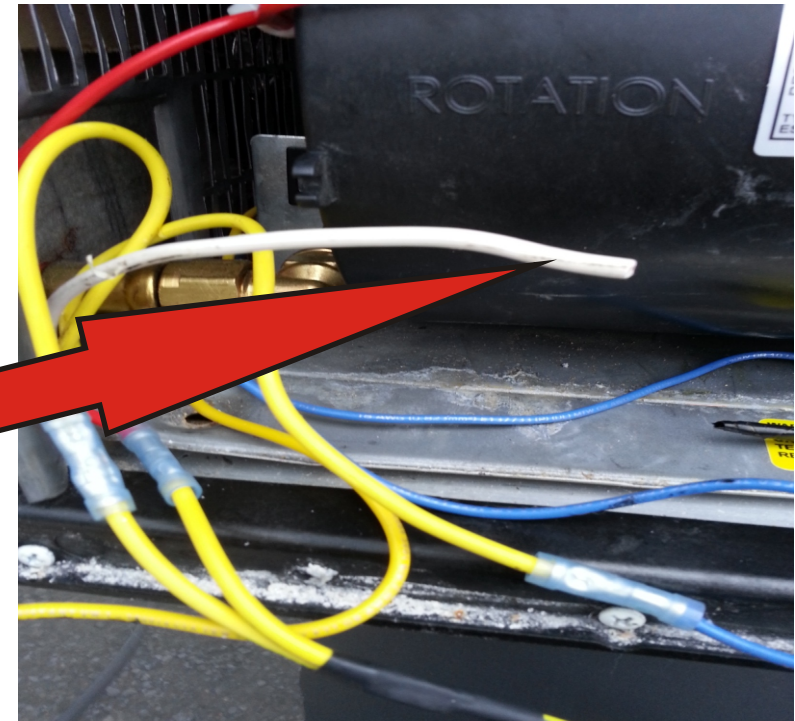
FURNACE SOLUTION



Step 1. Unplug orange wire from igniter.

Step 2. Wrap Orange wire through the blue ferrite once

Step 3. Plug orange wire back in

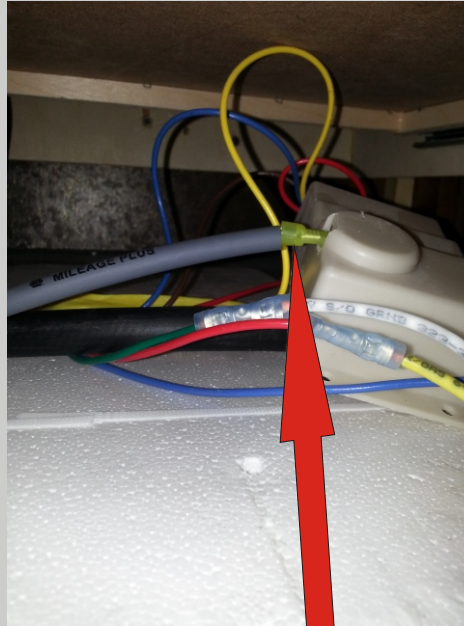


Step 4. Disconnect/cut ground wire from furnace.

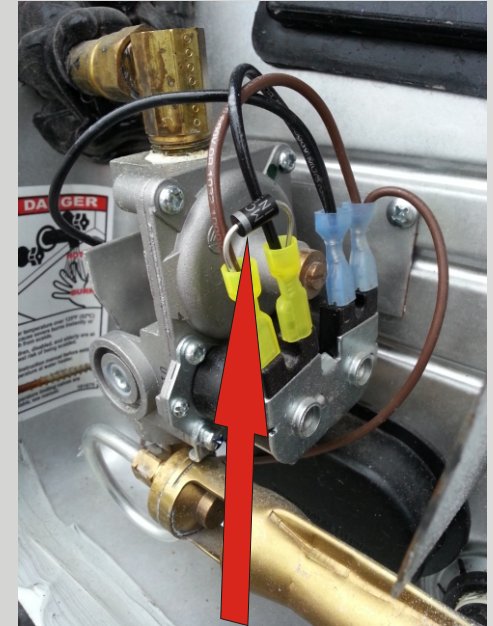
ISSUE #1: GAS WATER HEATER



STEP 1. Replace Orange wire with suppression spark plug wire.

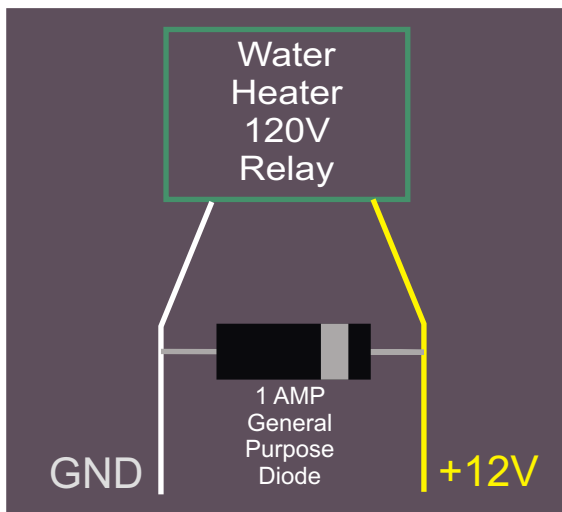


Step 2. Plug suppression wire into igniter module



Step 3. Add diode to the power and ground wires

ISSUE #2: ELECTRIC WATER HEATER



NOTE: If both electric and gas are causing flickering, perform both solutions for electric and gas.

STEP 1. Insert diode into the ground side and connect power wire to the power end of the diode.