Dometic Refrigerator Repair

This month's column begins with an experience from Al Izzi, WBCCI # 1827, in repairing a Dometic refrigerator on his 34 foot trailer: While performing an overall check and maintenance program on my 34 Excella trailer, I discovered my refrigerator worked very well on A/C but would not fire on propane. The good news was that since electrically the unit worked well and there was no ammonia odor, the problem was in the gas (propane) system. I checked the tanks first, then gas flow to the gas solenoid valve before the ignitor & thermocouple. Both were okay. The Airstream manual did not provide further help. Four areas seemed important: 1. ignitor, 2. thermocouple, 3. reignitor board, and 4. micro-control board. I felt the ignitor and thermocouple were probably OK because 75/80% of refrigerator use was on electricity.

After 2-3 phone calls and checking the electrical schematic on the back of the refrigerator, I decided to replace either the micro-board or the reignitor board, or possibly both. I thought the micro-board was the culprit, but after talking with R & G Electronics (phone 800-390-3908 or www.rg-electrospec.com) they steered me to the reignitor board. I called an Airstream dealer for any additional assistance and they concurred. I ordered the reignitor providing my refrigerator model number for the correct part number. The part was received promptly.

As a precaution I turned off the electrical supply both AC and DC. Turned off the propane gas supply at the tanks and vented the gas line at the solenoid valve before doing any work. I marked the old unit where the three wire connectors went and reconnected the wires the same way on the new board.

I subsequently turned on the propane at the tanks and activated the refrigerator controls. Within 2 or 3 minutes the gas phase was operational. Note that molded type micro boards and reignitor boards are not repairable according to R & G Electronics. You can call for individual information. They were helpful to me and offer retail sales of micro-boards for furnaces and water heaters as well as refrigerators. This information may be useful to other tinkerers!

Editor's note: Please be reminded if neither gas nor electric will run the refrigerator and you normally have automatic switching from one to the other, the first thing to check is 12 volt power to the unit, since 12 volts does the actual switching. Your house battery may not have enough voltage to cause the control switch to function.