

Unplug It, Dummy!

— safety for the traveling ham

For those recreational vehicles which have provisions for connecting to 110-volt outside power, there is always the risk of the owner forgetting to unplug the power cord before driving off. Human frailty and Murphy's Law being what they are, this is bound to happen sooner or later.

For us, the reckoning came one time when we had our camper van parked in our driveway while we were packing for a trip. We had the cord plugged into our house power for pre-cooling the refrigerator. Getting off later than we had hoped, we took off in a hurry. When we got to our first stop, we were horrified to find the socket from our extension cord sitting in the van power receptacle. The cord had pulled right out of

its socket when we drove off, meaning it was lying in our driveway with the live ends exposed. Mindful of the neighborhood children who frequently play in our driveway, we put in a frantic long-distance call to our local police, informing them of the situation and asking them to do something about the hazard. Fortunately, no further harm came of it.

To preclude any repetition of this fiasco, I installed a cord alarm in our van. It is arranged so that a door bell rings if the ignition is turned on while the cord is plugged in. You can install such an alarm in your RV for an expenditure of about \$15 for parts—less than the cost of a power cord that might be ruined by a drive-off. It does the

same job as a commercial alarm that sells for \$50.

You will need the following three items: (1) An ordinary door bell, installed near the driver's seat. I chose a door bell rather than a buzzer in order to have a distinctive alarm sound that would not be confused with the seat-belt warning buzzer. (2) A bell transformer of the type designed to mount in a knock-out hole in a junction box. Be sure to get a 10-volt transformer rather than a 16-volt type, which is for chimes. (3) A 12-volt dc relay (Radio Shack #275-208 or equivalent).

Attach the bell transformer to an unused knock-out hole in the power control center or the junction box for the outside power receptacle. (Confinement of the 110-volt wiring to the inside of such a box makes for a very safe installation.) Connect the primary wires to the 110-volt power at the point where it enters the vehicle, with no circuit breakers or other switching devices intervening so that the alarm will not fail to operate because of a breaker or switch being turned off. (Protection against short circuits in the transformer is given by the circuit breaker feeding the

outlet into which the cord is plugged.)

Make a bracket for the relay socket out of sheet metal or aluminum angle and mount the relay in a convenient location. Wire up the system as shown in Fig. 1, soldering all connections to the relay socket. The transformer is connected to the bell in series with a pair of normally-open contacts on the relay. One end of the relay coil is connected to chassis ground, and the other end is connected to a circuit that is energized when the ignition is turned on. Pick a circuit that is energized only in the "ignition" position of the switch, and not the "accessory" position. For our Econoline van, a convenient connection point was the wire feeding power to the seat-belt warning system.

With these connections, turning on the ignition operates the relay and completes the circuit from the transformer to the bell so that it will ring if the transformer is powered by the cord being plugged in.

What if you remember to unplug the cord but forget to stow it? This alarm is foolproof but it is not claimed to be *damn-foolproof!* ■

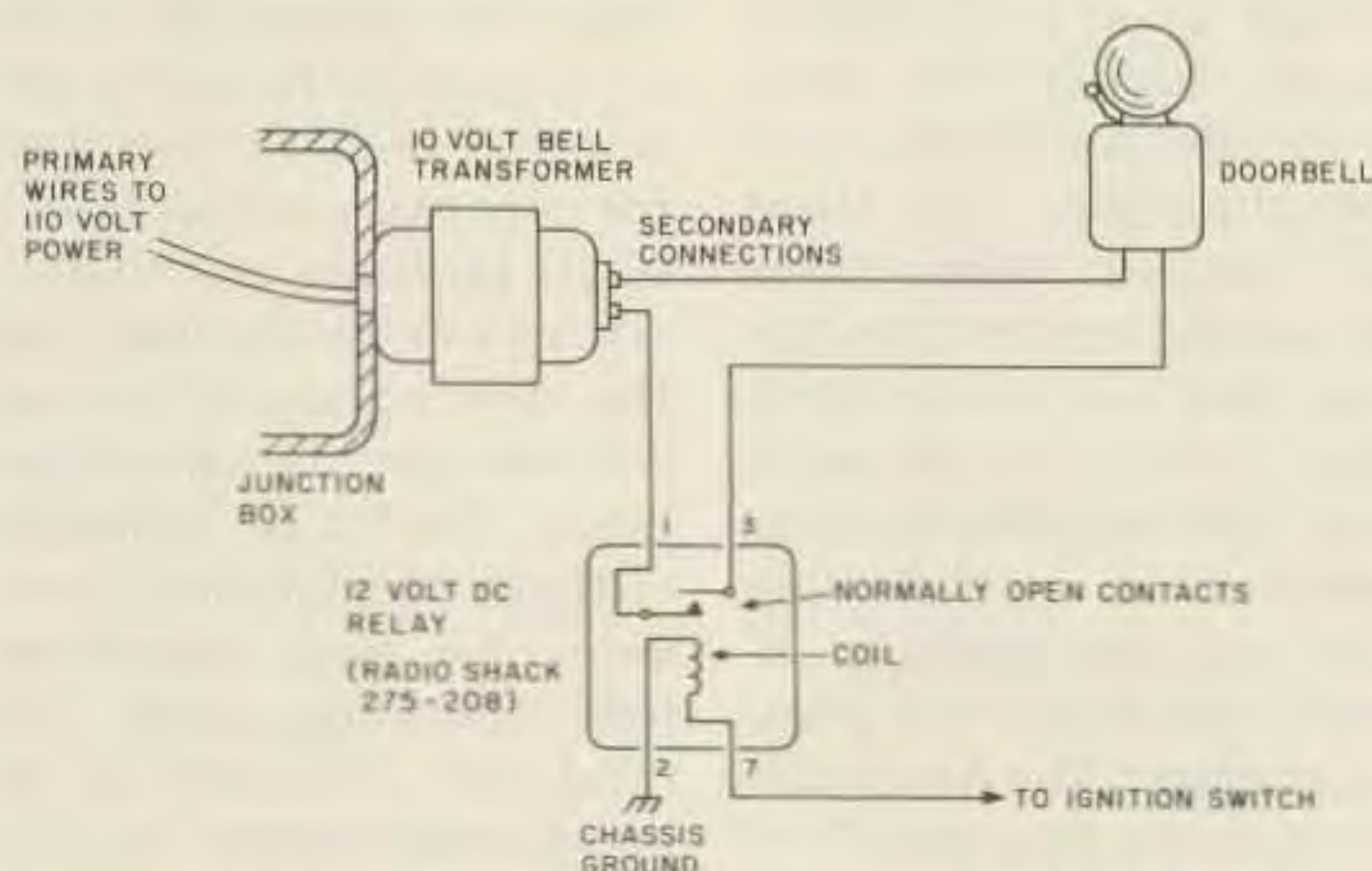


Fig. 1. Wiring diagram of the cord alarm.