

## REFRIGERATORS AND TURNTABLES

**Q.** *Whenever my refrigerator turns on, I hear a loud pop through my speakers. But this only happens when I'm using my turntable. The problem isn't due to noise on the ac line, because it still happens with the turntable power cord unplugged.*

—Tom Russell, Providence, RI

**A.** The noise could be due to one of two things. First, a physical vibration could cause a transient movement of the stylus. (You didn't mention whether or not you removed the tone arm from the disc when you removed the cord). Shock-mounting the turntable with foam rubber should take care of that. The more probable cause is the strong magnetic field generated by the compressor motor at the instant it turns on. It could induce a transient signal on the cable to the preamp, and thus be amplified and fed to the speakers. Alternatively, the field could induce a signal on a lead in the phono preamp itself. Such problems have no easy cure. But you'd best start by slipping the phono signal leads into a length of tubular copper braid, which should be grounded to the amplifier chassis. In turn, the chassis should be connected to a good earth ground. If the problem persists, you might have to shield the entire phono preamp circuit with fine screening bolted to the chassis. Finally, rotating the amplifier so that the lead picking up the signal is parallel to the field's line of force will weaken any residual induced signal.