

TECHNICAL BULLETIN

October 2025

i30 Gear Motor Protection Update: Firmware & PCB Upgrade

Cause:

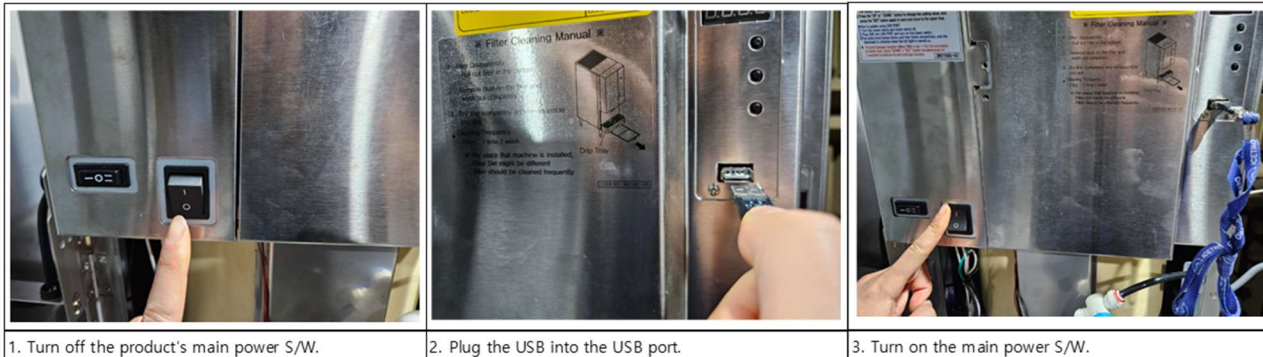
Small and brief power dips cause the unit to shut down the gear motor, but the compressor continues to rapidly cool the ice-making auger. The water in the auger quickly freezes and moments later, when the power level normalizes, the gear motor attempts to engage, but the auger is 80-90% frozen. The torque output against the auger **causes damage to the plastic gear in the motor.**

Solution:

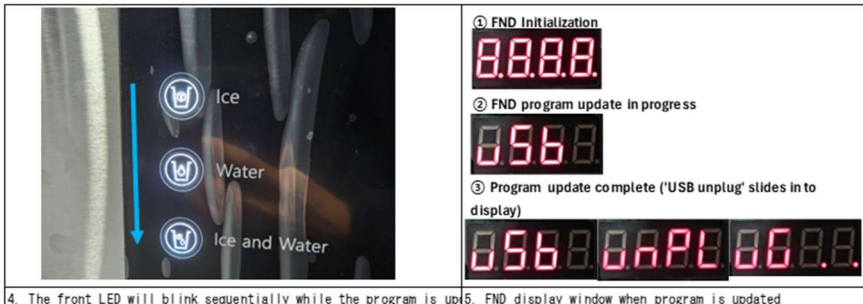
In addition to replacing a damaged gear motor, an updated PCB and FND update must be installed that prevents this situation entirely. The update ensures both the auger and gear motor shut down simultaneously during power dips, avoiding freeze-up and gear damage. Updated main PCBs are supplied with a memory stick to update the FND PCB. **Updated PCBs must have the FND PCB updated as well; mismatched firmware versions are not compatible.** If a replacement gear motor is installed, the PCB/firmware update must also be installed to prevent repeat failures.

Solution Checklist

1. Replace damaged gear motor *and* install new updated PCB (includes new firmware).
2. Use the provided memory stick and supplied instructions to update the FND PCB firmware.
3. Verify that both updates are complete to prevent repeat failures.



1. Turn off the product's main power S/W. 2. Plug the USB into the USB port. 3. Turn on the main power S/W.



4. The front LED will blink sequentially while the program is updated. 5. FND display window when program is updated.



6. Once the program update is complete, remove the USB. 7. Press the settings button to check the FND and MAIN versions.