**Unity** Lab Services

A Thermo Fisher Scientific Brand

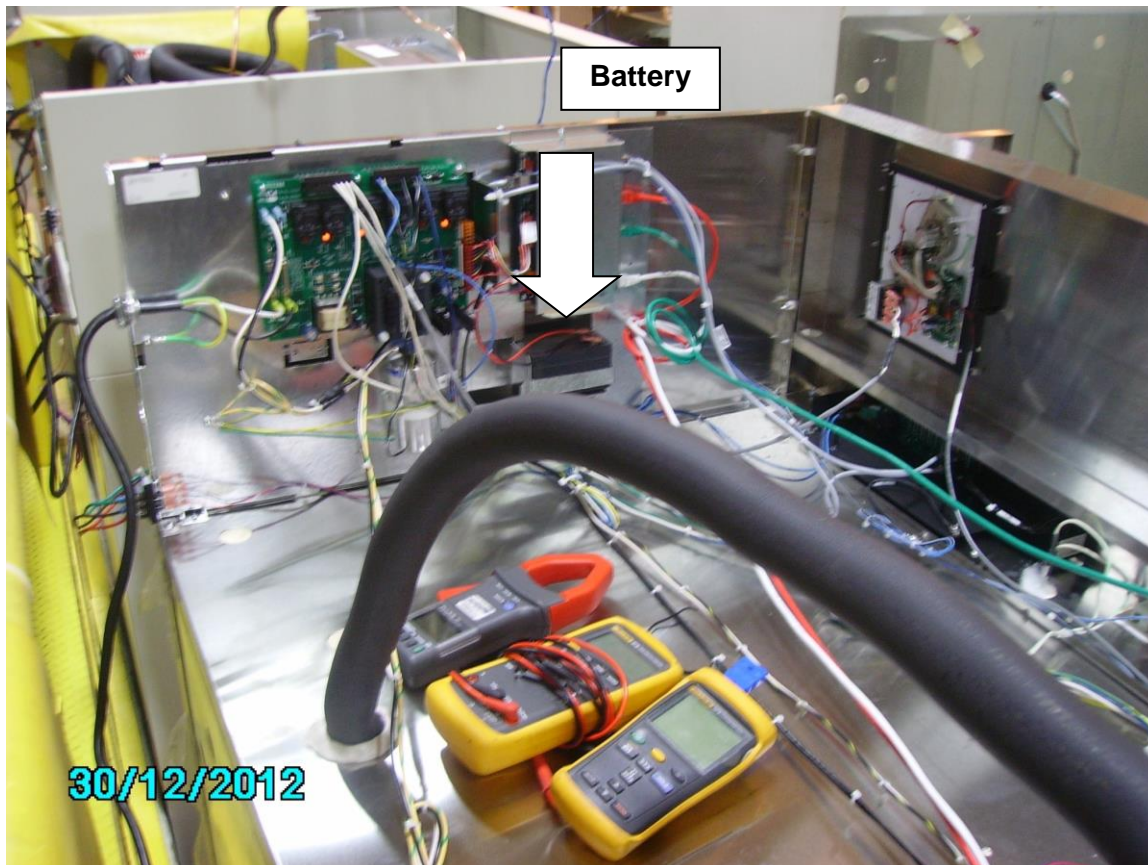# Battery Replacement on Thermo + 4 Refrigerators & -20 -30 Freezers

| Thermo +4 Refrigerators & -20&-30 Freezers – (see page 3 for applicable models) |
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| **Revision Date: October 23,2014** |
| Charles Woody |

Turn power off at the key switch and disconnect power plug from wall outlet.  Remove the protective grill from the top of the unit. The battery is located in a mounting bracket just under the micro board (see photo below).  Remove the red and black wires which are clipped onto the battery terminals. Remove the screw from battery strap bracket and remove battery strap. If only replacing battery # 60678H02, the battery is silicone (glued)  in place from the factory and requires the silicone to be cut with a sharp knife or object between the battery base and plate (which can be difficult).  After removing battery, install new battery and re-silicone to the battery bracket or place thin foam on base. Install battery strap bracket and retighten screw. Place red wire on "+" battery terminal and black wire on "-" battery terminal. Replace the protective grill and retighten screws. Reconnect power plug to the wall outlet. Turn the key switch back on to the "power on" position. When unit powers up and the display temp is below warm alarm set point, turn the key to 3:00 position to activate alarms. Press the up and down arrows on the front of the display to reset the low battery light.

 Note: If you choose to leave the old battery in place, a new battery and bracket assembly can be installed below the old battery and requires two short sheet metal screws to mount on top of the unit.  Battery assembly # 28109G03 S.



Battery

30/12/2012

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|---|---|---|---|---|---|---|
| BB124 | FRBB2304 | IUF3023 | LF2330 | PPL5030 | RPR3004 | |
| BB234 | FRBB3004 | IUF3030 | LF3030 | PR234 | RPR5004 | |
| BB304 | FRBB5004 | IUF3050 | LF5030 | PR504 | RX423 | |
| BB504 | FRCR2304 | JBB2304 | LR124 | REB1204 | RX430 | |
| CC234 | FRCR3004 | JBB3004 | LR234 | REB2304 | RX450 | |
| CC304 | FRCR4504 | JBB3004 | LR304 | REB3004 | TSFMS2305 | |
| CC454 | FRCR5004 | JBB5004 | LR412 | REB5004 | TSFMS2320 | |
| CC504 | FRCR7504 | JLF1230 | LR423 | REC2304 | UEN2320 | |
| CC754 | FRGG1204 | JLF2330 | LR430 | REC3004 | UEN3020 | |
| FC423 | FRGG2304 | JLF3030 | LR445 | REC4504 | UFP1230 | |
| FC430 | FRGG3004 | JLF5030 | LR450 | REC5004 | UFP2330 | |
| FC445 | FRGG5004 | JLR2304 | LR454 | REC7504 | UFP3030 | |
| FC450 | FRGG7504 | JLR3004 | LR475 | REL1204 | UFP5030 | |
| FC475 | FRGL1204 | JLR3004 | LR504 | REL2304 | UGL2320 | |

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|---|---|---|---|---|---|
| FFEN2320 | FRGL2304 | JLR5004 | LR754 | REL3004 | UGL3020 |
| FFEN3020 | FRGL3004 | JPL1230 | LRG124 | REL4504 | ULT1230 |
| FFGL1230 | FRGL4504 | JPL2330 | LRG234 | REL5004 | ULT2330 |
| FFGL2320 | FRGL5004 | JPL3030 | LRG304 | REL7504 | ULT3030 |
| FFGL2330 | FRGL7504 | JPL5030 | LRG504 | RFMS2305 | ULT5030 |
| FFGL3020 | FRPH1204 | JPR2304 | LRG754 | RFMS2320 | UPF1230 |
| FFGL3030 | FRPH2304 | JPR3004 | PBB1204 | RGL1204 | UPF2330 |
| FFGL5030 | FRPH3004 | JPR5004 | PBB2304 | RGL2304 | UPF3030 |
| FFMS2305 | FRPH5004 | JRG1204 | PBB3004 | RGL3004 | UPF5030 |
| FFMS2320 | IEN2023 | JRG2304 | PBB5004 | RGL5004 | VCR2304 |
| FFPF1230 | IEN2030 | JRG3004 | PPL1230 | RGL7504 | VCR3004 |
| FFPF2330 | IGL2023 | JRG5004 | PPL2330 | RPR1204 | VCR4504 |
| FFPF3030 | IGL2030 | LF1230 | PPL3030 | RPR2304 | VCR5004 |
| FFPF5030 | | | IUF3004 | | |
| FRBB1204 | | | IUF3012 | | |