

ELECTRICAL REQUIREMENTS AND INSTALLATION

The following information is provided for hooking up electrical supply to your new pool. A qualified, licensed, electrician must perform this work. Failure to follow these instructions will terminate all warranty coverage and can cause serious injury or death.

Your 60 Hz pool is preset at the factory to run on 240 V with a 48 A input. This feature gives you the most performance out of your pool. This will require a 240 V, 60-amp GFCI

Your export 50 Hz pool is preset out of factory to run 230 V-240 V 3 wires 30 A max input. This product must always be connected to residual current device (RCD) having a trip current of not more than 30 mA.

ELECTRICAL WIRING

WARNING: Your pool must be wired by a certified electrician and according to these instructions. Failure to do so will terminate all warranties and all listings from the independent listing facility.

1) The TidalFit requires a 240 VAC dedicated system. The pool must be hard wired to the power supply, with no plug-in connections, extension cords, or sharing of service.

2) The pool requires that you run 6 (10 mm²) or 8 (8.4 mm²) AWG copper wire, depending on the GFCI size. Do Not Use Aluminum Wire.

3) The power supply must have a suitable Ground Fault Circuit Interrupter (GFCI), according to Section 422-20 of the National Electrical Code, ANSI/NFPA 70-7987 or other national installation requirement with a residual current device (RCD) having a trip current of not more than 30 mA. This could be used as the shut-off switch, which must be installed in plain view of the pool. This electrical service must be readily accessible to the pool occupants, but must not be within 5 feet of the pool.

4) Use only non-metallic conduit and fittings when installing power to the spa.

5) After your pool has been positioned, route lines through the knockout on the left or right front corner of the pool.

6) Connect the power to the pool.

ELECTRICAL REQUIREMENTS AND INSTALLATION

GFCI PROTECTION

NOTE: The GFCI section does not apply on EL systems used outside the United States. This GFCI section does not apply to GL Systems.




Your pool may be equipped with a GFCI Protection feature. If your pool does not have this feature enabled, the GFCI Trip Test must occur to allow proper pool function.

Within 1 to 7 days after startup, the pool will trip the GFCI to test it. (The number of days is factory programmed.) The GFCI must be reset once it has been tripped. After passing the GFCI Trip Test, subsequent GFCI trips will indicate a ground default or other unsafe condition requiring the power to the pool to be shut off.




Warning: The owner should test and reset the GFCI on a regular basis to verify it's function


GFCI TRIP TEST PROCEDURE

The installer can cause the GFCI Trip Test to occur sooner by initiating it with the following button sequence.

Press "Warm",  then "Jets 1",  then "Light." 



(Each press must be within 3 seconds of the previous press.) Press the "Warm" button repeatedly until "**9FC**" is displayed.

Press "Jets 1"  to select it. Press the "Warm"  button until "**9t.n**" is displayed. 

Press "Jets 1"  to initiate the GFCI Trip Test.

The GFCI should trip within several seconds and the pool should shut down. If it does not, shut down the power and manually verify that a GFCI breaker is installed and that the circuit and pool are wired correctly. Verify the function of the GFCI with it's own test button. Restore power to the pool and repeat the GFCI Trip Test.

Once the GFCI is tripped by the test, reset the GFCI and the pool will operate normally from that point. You can verify a successful test by navigating to the "**9FC**" item as described above, pressing

"Jets 1"  and then pressing the "Warm"  button until you see "**9SP**". The code signifies GFCI Status - Passed.

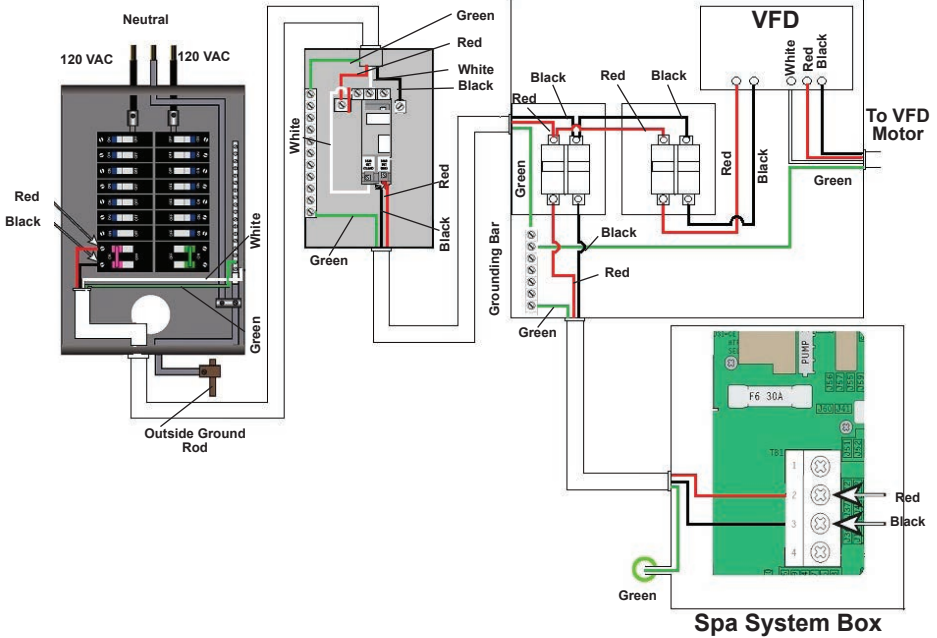
The system will exit this menu in 30 seconds if no buttons are pressed.

60 Hz GFCI WIRING SCHEMATIC (EP-16)

240 Volt Residential Wiring Schematic with G.F.C.I.

House Breaker Box G.F.C.I. Breaker Box

VFD Control Box



NOTE: THE POWER IN TO THIS CONTROL DOES NOT HAVE A COMMON LINE IN, ONLY A GROUND. DO NOT HOOK A COMMON TO A POWER IN TERMINAL! THIS WILL DAMAGE THE UNIT

IMPORTANT: REQUIRED SIEMENS 60A GFCI CIRCUIT BREAKER TO OPERATE THE TIDALFIT EP-16

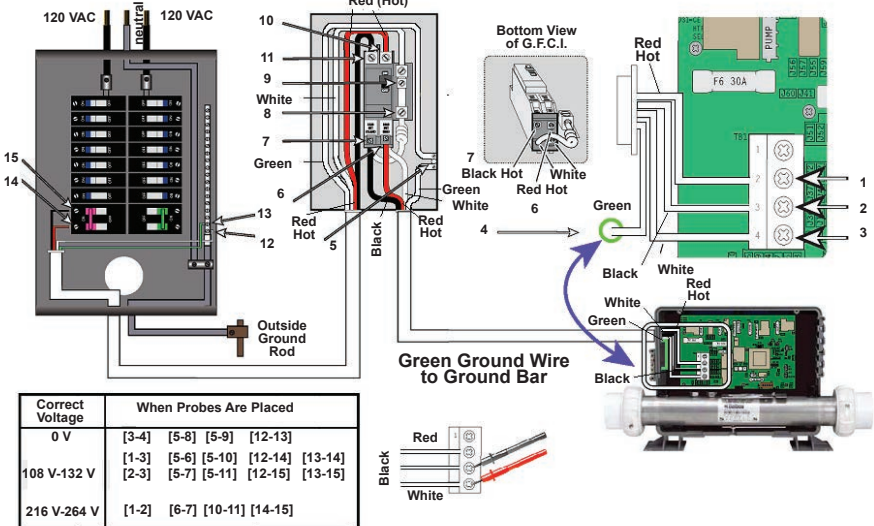
60 Hz GFCI WIRING SCHEMATIC (EP-12/14/15)

240 Volt Residential Wiring Schematic with G.F.C.I.

House Breaker Box

G.F.C.I. Breaker Box

Spa System Box



Test for Voltages by placing probes on locations

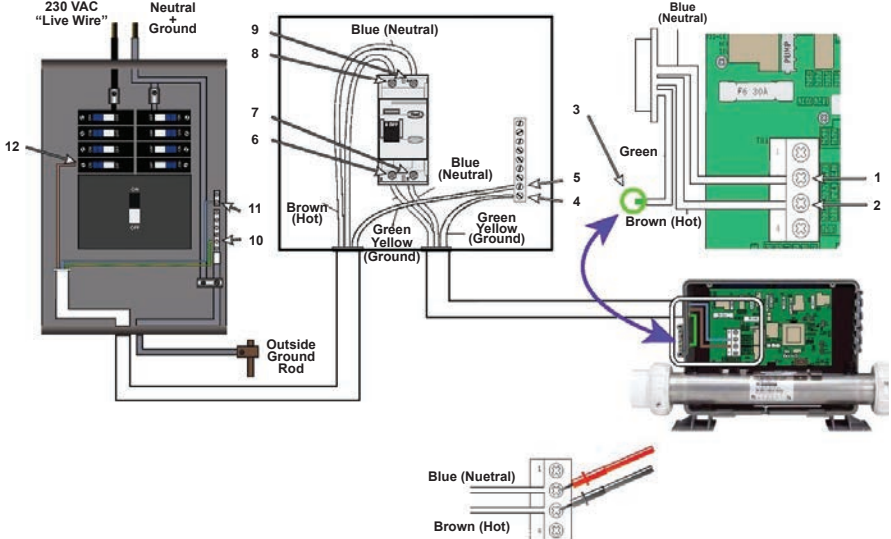
50 Hz RESIDENTIAL WIRING SCHEMATIC

230 Volt/50 Hz Residential Wiring Schematic with 2 Pole RCD Breaker Box

230 VAC House Breaker Box

RCD Breaker Box

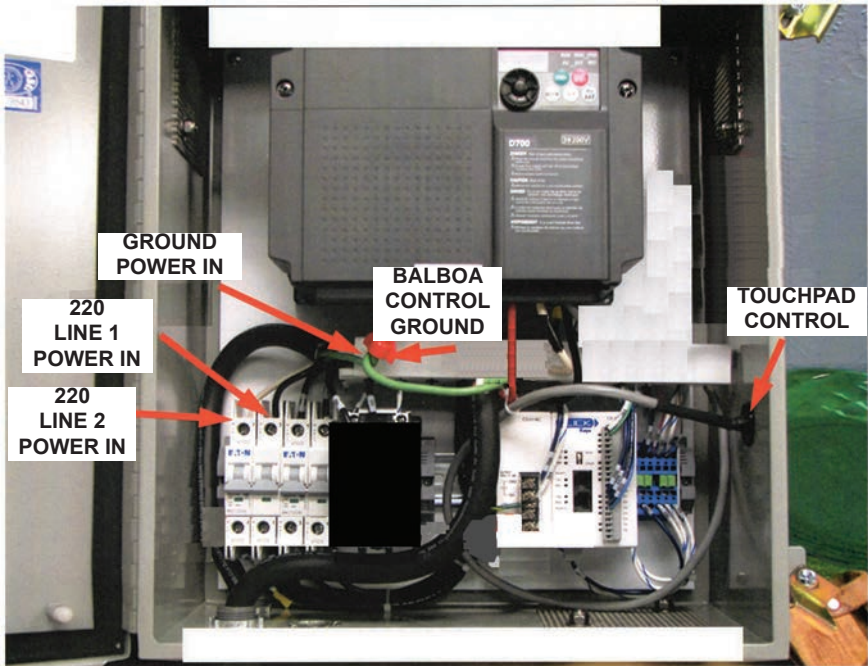
Spa System Box



Test for Voltages by placing probes on these locations

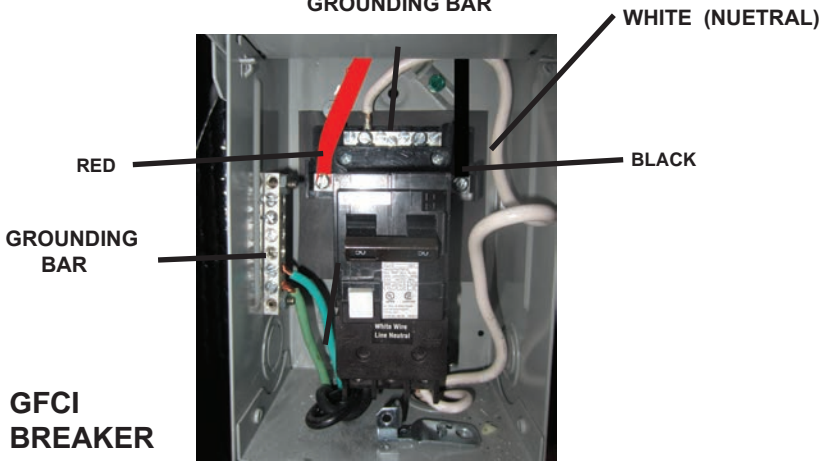
FREQUENCY DRIVE WIRING DIAGRAM (EP-16)

FREQUENCY DRIVE WIRING DIAGRAM



NOTE: THE POWER IN TO THIS CONTROL DOES NOT HAVE A COMMON LINE IN, ONLY A GROUND. DO NOT HOOK A COMMON TO A POWER IN TERMINAL! THIS WILL DAMAGE THE UNIT

GREEN GROUND) CONNECT TO GROUNDING BAR



IMPORTANT: REQUIRED SIEMENS 60A GFCI CIRCUIT BREAKER TO OPERATE THE TIDALFIT EP-16