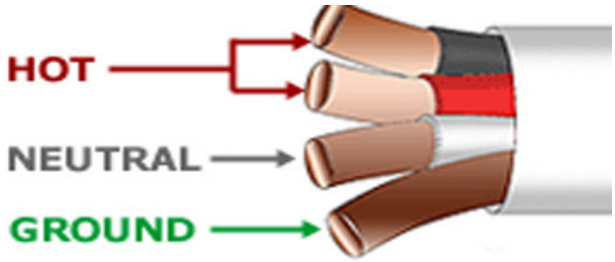
Installing the 50-amp 120/240-volt 3 pole 4 wire grounding Service

DO NOT CONFUSE the 50-amp 4 wire 120/240-volt (14-50R) Service with the OLD APPLIANCE 50-amp (10-50R) 3 wire 120/240-volt service.

The 50-amp service has 4 wires with two 120-volt HOT feeds. It is a misconception that the 50-amp RV service is something special. This service is a STANDARD 120/240 50-amp 3 pole with 4 prongs used for numerous applications.

Parts needed to install.
1 DOUBLE POLE 50-amp 120/240-volt Breaker
1 14-50 Receptacle and
2 (HOT), 1 White (Neutral) and 1 Ground Correctly sized wire



Plugs and Receptacles are available at Lowe's, Home Depot, Camping World and Electric Supply houses.





14-50R 3 pole 4 wire grounding receptacle

The half round or U is the ground the one directly below it is the WHITE or neutral and the other two black wires are 180 degrees out of phase with each other are the HOT 120-volt. In reality you have TWO 120 volt split service going into your RV

X & Y are interchangeable, red and black (or 2 black) wires are hot (live) wires, one wire on the X, and the other on the Y. The neutral (white) and the bare ground wire MUST be on their designated connection.



14-50R

It is crucial that ALL NEW installations be checked with a volt meter. The voltage between X and Y should be 240-Volt, X and W 120-Volt, Y and W 120-Volt, X and G 120-volt, Y and G 120-volt, W and G 0-Volt. Always check ALL outlets before plugging in the first time. From this common service we can draw 12,000 watts.

RECOMMENDED **wire sizes for 50-amp: 25 feet - #8, 50 feet - # 6 and 100 feet - #4. You may get along fine with longer runs.**

ALWAYS check out new Installation before you plug in the RV.