

# WATTAGE WORKSHEET

This worksheet will focus on determining your running and starting watt needs.

The size of generator you need depends on your power requirements. Generally, a higher-wattage generator lets you power more items at once.

**1** Select the items you wish to power at the same time. Using the chart on the opposite page, fill in the running watts and additional starting watt requirements on the "Your Power Needs" worksheet.

**2** Add the RUNNING WATTS of the items you wish to power. Enter this number in the TOTAL RUNNING WATTS column.

**3** Select the ONE INDIVIDUAL ITEM with the highest number of additional starting watts. Take this ONE NUMBER, add it to your TOTAL RUNNING WATTS, and enter it in the TOTAL STARTING WATTS box.

## EXAMPLE

TOOL OR APPLIANCE	RUNNING (RATED) WATTS	ADDITIONAL STARTING (SURGE) WATTS
1. Refrigerator/Freezer	700	2200
2. 1/2 HP Furnace Fan	800	2350
3. Television	500	-
4. Lights (8 x 75 watts)	600	-
5. Microwave	600	-
6.		-
7.		

HIGHEST ADDITIONAL STARTING WATTS

TOTAL RUNNING WATTS=

3200      2350

With this example you need a generator that produces at least 3200 total running watts and 5550 total starting watts.

+

3200

=

5550

## YOUR POWER NEEDS

TOOL OR APPLIANCE	RUNNING (RATED) WATTS	ADDITIONAL STARTING (SURGE) WATTS
1.		
2.		
3.		
4.		
5.		
6.		
7.		

TOTAL RUNNING WATTS=

Highest Additional Starting Watts

I need a generator that produces at least \_\_\_\_\_ total running watts and \_\_\_\_\_ total starting watts.

+

=

Total Running Watts

Total Starting Watts

## FREQUENTLY ASKED QUESTIONS

### How many watts does it take to power basic items in an average size house?

In a typical home, essential items will average 5000 – 7500 watts of power to run.

### What is the difference between running watts and starting watts?

Running, or rated watts are the continuous watts needed to keep items running. Starting watts are extra watts needed for two to three seconds to start motor-driven products like a refrigerator or circular saw, this is the maximum wattage the generator can produce.

### Why is only one additional starting watt item used to calculate your total starting watt requirement?

Unlike running watts, starting watts are only needed during the first few seconds of operation. In most cases, only one item will start or cycle at the same time, therefore this is the most accurate estimate.

### What if I can't determine the running or the starting watt requirement for a tool or appliance?

If the running watts are not on the tool or appliance, you may estimate using the following equation: **WATTS = VOLTS X AMPS.**

Only motor-driven items will require additional starting watts. The additional starting watts required may be estimated at 2-3x the running/rated watts.

TOOL OR APPLIANCE	RUNNING (RATED) WATTS	ADDITIONAL STARTING (SURGE) WATTS	TOOL OR APPLIANCE	RUNNING (RATED) WATTS	ADDITIONAL STARTING (SURGE) WATTS
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### HOME



<b>Essentials:</b>		
Light Bulb – 60 Watt	60	0
Light Bulb – 75 Watt	75	0
Refrigerator/ Freezer	700	2200
Sump Pump – 1/3 HP	800	1300
Sump Pump – 1/2 HP	1050	2200
Water Well Pump – 1/3 HP	1000	2000
Electric Water Heater	4500	0
<b>Heating/ Cooling:</b>		
Space Heater	1800	0
Humidifier – 13 Gal	175	0
Furnace Fan Blower – 1/2 HP	800	2350
Furnace Fan Blower – 1/3 HP	700	1400
Window AC – 10,000 BTU	1200	3600
Window AC – 12,000 BTU	3250	9750
Central AC – 10,000 BTU	1500	4500
Central AC – 24,000 BTU	3800	11400
Central AC – 40,000 BTU	6000	18000
Heat Pump	4700	4500
<b>Laundry Room:</b>		
Iron	1200	0
Washing Machine	1150	2250

Clothes Dryer – Electric	5400	1350
Clothes Dryer – Gas	700	1800
<b>Kitchen:</b>		
Microwave Oven – 600 Watts	600	0
Microwave Oven – 1000 Watts	1000	0
Coffee Maker	1000	0
Electric Stove – 8” Element	2100	0
Dishwasher – Hot Dry	1500	1500
Food Processor	400	0
Toaster Oven	1200	0
Toaster	850	0
Electric Can Opener	168	0
<b>Family Room:</b>		
VCR	100	0
Stereo Receiver	450	0
Color TV – 27”	500	0
X-Box, Game Cube, Playstation	40	0
<b>Other:</b>		
Security System	500	0
1/2 HP Garage Door Opener	875	2350
Curling Iron	1500	0
Hair Dryer – 1250 Watt	1250	0

### WORK



<b>DIY/Jobsite:</b>		
Quartz Halogen Work Light, 300	300	0
Quartz Halogen Work Light, 500	500	0
Quartz Halogen Work Light, 1,000	1000	0
Airless Sprayer – 1/3 HP	600	1200
Reciprocating Saw	960	0
Electric Drill – 3/8”, 4 Amps	440	600
Electric Drill – 1/2”, 5.4 Amps	600	900
Hammer Drill	1000	3000
Circular Saw – 7 1/4”	1400	2300
Miter Saw – 10”	1800	1800

Planer/Joiner – 6”	1800	1800
Table Saw/Radial Arm Saw – 10”	2000	2000
Belt Sander	1200	2400
Air Compressor – 1/4 HP	975	1600
Air Compressor – 1 HP	1600	4500
<b>Office Equipment:</b>		
Personal Computer w/17” Monitor	800	0
Fax Machine	65	0
Laser Printer	950	0
Inkjet Printer	80	0
Copy Machine	1600	0

### PLAY



<b>Tailgating/Camping:</b>		
Electric Grill	1650	0
AM/FM Radio	100	0
CD/DVD Player	100	0
Box Fan – 20”	200	0

The above are estimates only. Check your tool or appliance for exact wattage requirements. The wattages listed in our reference guide are based on estimated wattage requirements. For exact wattages, check the data plate or owner's manual on the item you wish to power.