



# WATTAGE WORKSHEET

WHEN SELECTING A GENERATOR, THERE ARE SEVERAL IMPORTANT FEATURES TO CONSIDER

Wattage · Engine · Run Time · Starting · Mobility

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 WATTS
1. Refrigerator/Freezer	800	1600
2. 1/2 HP Furnace Fan	800	1300
3. Deep Freezer	500	500
4. Television	500	-
5. Lights (6 x 75 watts)	450	-
6.		
7.		

HIGHEST ADDITIONAL STARTING WATTS

TOTAL RUNNING WATTS = 3050

1600

+ 3050 TOTAL RUNNING WATTS  
= 4650 TOTAL STARTING WATTS

With this example you need a generator that produces at least 3050 total running watts and 4650 total starting watts.

## YOUR POWER NEEDS

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

TOTAL RUNNING WATTS =

HIGHEST ADDITIONAL STARTING WATTS

+ TOTAL RUNNING WATTS  
= TOTAL STARTING WATTS

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

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 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 voltage the generator can produce.

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 1 - 2x the running/rated watts.



TOOL OR APPLIANCE	RUNNING (RATED) WATTS	ADDITIONAL STARTING WATTS
<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	4000	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	1800
Window AC - 12,000 BTU	3250	3950
Central AC - 10,000 BTU	1500	3000
Central AC - 24,000 BTU	3800	4950
Central AC - 40,000 BTU	6000	6700
Heat Pump	4700	4500
<b>Laundry Room:</b>		
Iron	1200	0
Washing Machine	1150	2250

TOOL OR APPLIANCE	RUNNING (RATED) WATTS	ADDITIONAL STARTING WATTS
Clothes Dryer - Electric	5400	1350
Clothes Dryer - Gas	700	1800
<b>Kitchen:</b>		
Microwave Oven - 625 Watts	625	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