

GENERATOR/INVERTER/CHARGER KITS

Generator/Inverter/Charge System

For those of you who don't want to get into solar yet, we can create a Generator/ Inverter/ Charger system that allows the use of a generator for large AC loads while charging a battery bank (at the same time) in order to use the inverter for power smaller, longer running loads. The Inverter/charger part of the system extends generator life and eliminates continuous noise. Later, solar can easily be added in order to run the generator even less.

Conventional Home Backup

The Generator/Inverter/Charger Kit also makes an excellent backup power source for homes powered by the power company. The same benefits apply as use in a remote home: much more efficient use of the backup generator. Our web site, newenglandsolar.com, has an extended article explaining how to incorporate this type of system into a conventional home.

For those places where there is no solar exposure, or for those people who wish to first efficiently utilize their generator before they take the chance on PV, we can provide you with a generator/inverter/charger kit.

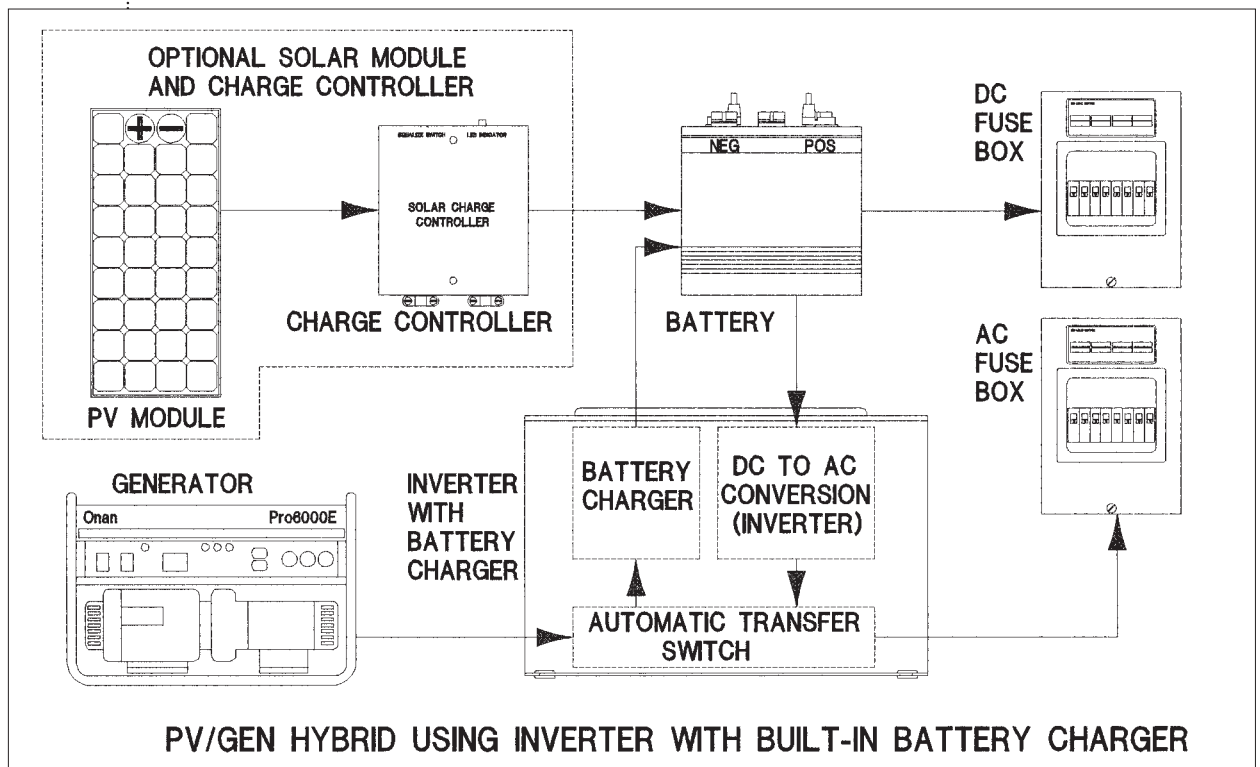
A generator/inverter/charger kit consists of a battery bank, and an inverter with an integral battery charger and automatic transfer switch. When the generator is on, the inverter senses it and connects all loads directly to the generator. The inverter also changes functions and operates backwards as a battery charger. When the generator is turned off, all loads are powered by the inverter using the stored electricity in the batteries. When the batteries are low the generator must be used to recharge the batteries. The obvious advantage to this system is that the generator runs less, making less noise, lasting longer, and using less fuel.

The following is an example of how one might use a Generator/Inverter/Charger. A large load such as a washing machine is used. Instead of powering this load by the inverter and using stored energy out of the batteries, the generator is turned on. When the generator is on, the inverter senses it, and after about 60 seconds, throws a transfer switch in the inverter. All loads from the inverter are now put straight through to the generator. Now the large load of the washing machine is powered by the generator. (The batteries are not being discharged.) The inverter

changes its job and becomes a battery charger. Thus the generator is charging the batteries while it is running the washing machine.

At the end of the washing cycle, the generator is turned off. The inverter reverts back to normal and powers the loads of the house. For the rest of the day, small loads are powered from the inverter and the batteries. The next day the generator recharges the batteries while it runs a large load. Most people gradually add PV modules to further decrease the generator running time.

Another common use of the Inverter/Generator/Charger is to decrease the running time of a generator during construction of a remote home. The generator is run to power extended large tool loads, while it charges the batteries at the same time. For the rest of the time the small tools and intermittent use tools, such as a screw gun and a skill saw, are powered by the inverter. The generator is off. After the home is built, you move in and add additional batteries and PV modules.



GENERATOR/INVERTER/CHARGER KITS

Basic Generator Charger Kit #1

1	Magnum MM1512AE Inverter	\$899.00
1	Magnum ME-ARC50 Control	299.00
4	Trojan T-105 batteries	636.00
2	2 ga. Battery Cables	18.00
2	2/0 ga. Battery Cables	24.00
8	Anticorrosion rings	3.20
1	Set 10' 2/0 ga. Inverter cables	139.00
1	Class "T" Fuse Block w/Fuse 200A	69.00
1	MidNite Lightning Arrestor	119.00
1	PV/Generator Hybrid Book	8.00
	Total (priced separately)	\$2214.20

782-013 Special Kit Price \$1909

Basic Generator Charger Kit #2

1	Magnum RD2212 Inverter	\$1459.00
1	Magnum ME-ARC50 Control	299.00
4	T-105 batteries	636.00
2	2 ga. battery cables	18.00
2	2/0 ga. battery cables	24.00
8	Anticorrosion rings	3.20
1	Set 10' 2/0 ga. inverter cables	139.00
1	Class "T" Fuse Block w/Fuse 200A	69.00
1	MidNite Lightning Arrestor	119.00
1	PV/Generator Hybrid Book	8.00
	Total (priced separately)	\$2774.20

782-022 Special Kit Price \$2359

Advanced Generator Charger Kit #2

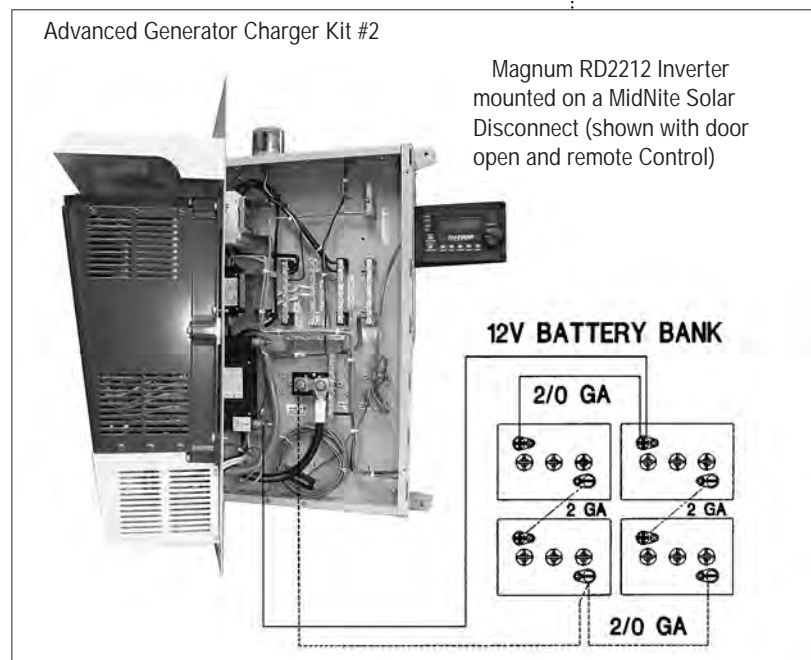
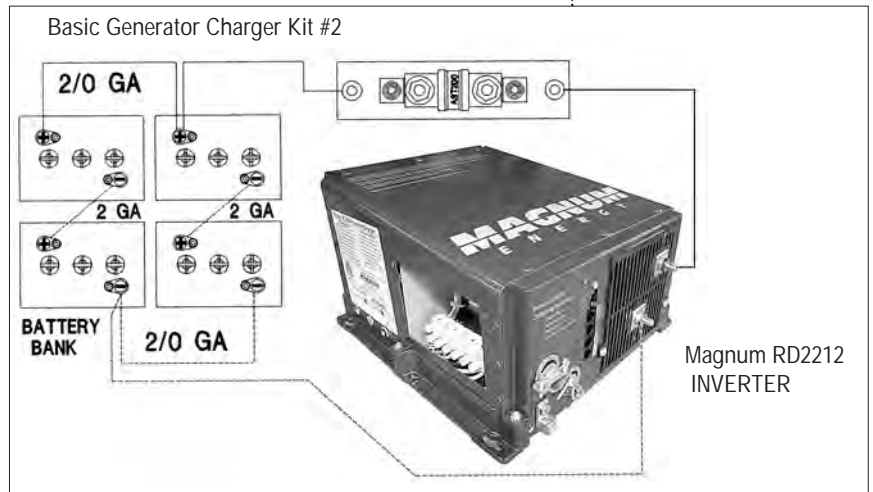
1	Magnum RD2212 Inverter	\$1459.00
1	Magnum ME-ARC50 Control	299.00
1	MidNite AC/DC Disconnect	619.00
4	T-105 batteries	636.00
2	2 ga. battery cables	18.00
2	2/0 ga. battery cables	24.00
8	Anticorrosion rings	3.20
1	Set 10' 2/0 ga. inverter cables	139.00
1	MidNite Lightning Arrestor	119.00
1	PV/Generator Hybrid Book	8.00
	Total (priced separately)	\$3324.20

782-023 Special Kit Price \$2879

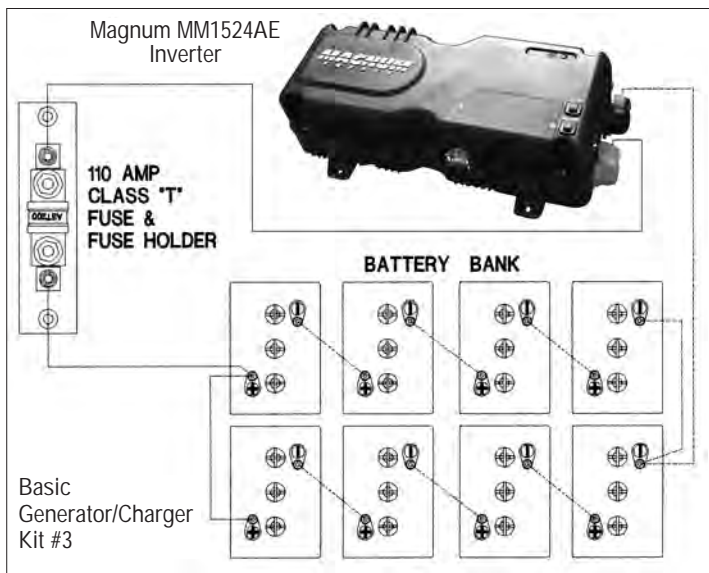
Kit Options

2	Additional T-105 batteries	298.00
1	Hydrometer	12.95
1	Solar Electric Independent Home Book	10.95
1	Battery Book for Your PV Home	8.00
1	Digital Multimeter	25.00

Batteries are shipped to you via common carrier (tractor/trailer). They can only be shipped to a business or commercial address. Please call for a freight quote.



GENERATOR/INVERTER/CHARGER KITS



Basic Generator Charger Kit #3

1	Magnum MM1524 Inverter	\$939.00
1	Magnum ME-ARC50 Control	299.00
8	T-105 batteries	1272.00
6	2 ga. battery cables	54.00
2	2/0 ga. battery cables	24.00
16	Anticorrosion rings	6.40
1	Set 10' 2/0 ga. inverter cables	139.00
1	Class "T" Fuse Block w/Fuse 110A	69.00
1	MidNite Lightning Arrestor	119.00
1	PV/Generator Hybrid Book	8.00
	Total (priced separately)	\$2929.40

782-031 Special Kit Price \$2609

Intermediate Generator Charger Kit #3

1	Magnum RD2824 Inverter	\$1679.00
1	Magnum ME-ARC50 Control	299.00
8	T-105 batteries	1272.00
6	2 ga. battery cables	54.00
2	2/0 ga. battery cables	24.00
16	Anticorrosion rings	6.40
1	Set 10' 2/0 ga. inverter cables	139.00
1	Class "T" Fuse Block w/Fuse 200A	69.00
1	MidNite Lightning Arrestor	119.00
1	PV/Generator Hybrid Book	8.00
	Total (priced separately)	\$3669.40

782-032 Special Kit Price \$3199

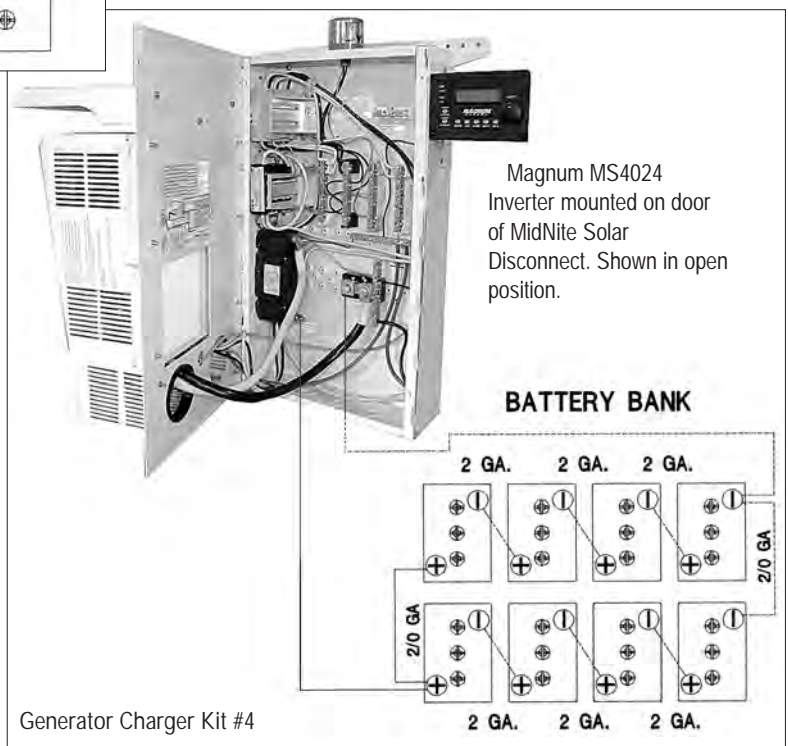
Kit Options

4	Additional T-105 batteries	596.00
1	Hydrometer	12.95
1	Solar Electric Independent Home Book	10.95
1	Battery Book for Your PV Home	8.00
1	Digital Multimeter	25.00

Advanced Generator Charger Kit #3

1	OutBack VFX3524 Inverter	\$2569.00
1	OutBack MATE	295.00
1	MidNite AC/DC Disconnect	619.00
8	T-105 batteries	1272.00
6	2 ga. battery cables	54.00
2	2/0 ga. battery cables	24.00
16	Anticorrosion rings	6.40
1	Set 10' 4/0 ga. inverter cables	219.00
1	MidNite Lightning Arrestor	119.00
1	PV/Generator Hybrid Book	8.00
	Total (priced separately)	\$5185.40

782-033 Special Kit Price \$4479



Generator Charger Kit #4

1	Magnum MS4024 Inverter	\$2699.00
1	Magnum ME-ARC50 Control	299.00
1	MidNite AC/DC Disconnect	799.00
8	T-105 batteries	1272.00
6	2 ga. battery cables	54.00
2	2/0 ga. battery cables	24.00
16	Anticorrosion rings	6.40
1	Set 10' 4/0 ga. inverter cables	219.00
1	MidNite Lightning Arrestor	119.00
1	PV/Generator Hybrid Book	8.00
	Total (priced separately)	\$5499.40

782-043 Special Kit Price \$4749

GENERATOR/INVERTER/CHARGER KITS

Generator Charger Kit #5

1	Xantrex XW4024 Inverter	\$3950.00
1	Xantrex XW DC Disconnect	1800.00
1	Xantrex XW Control panel	300.00
12	Trojan T-105 batteries	1908.00
9	2 ga. battery cables	81.00
4	2/0 ga. battery cables	48.00
24	Battery anticorrosion rings	9.60
1	Set 10' 4/0 Inverter cables	219.00
1	MidNite Lightning Arrestor	119.00
1	PV/Generator Hybrid Book	8.00
	Total (priced separately)	8442.60

Kit #5 Options

1	Xantrex Auto Generator Start	\$200.00
4	Additional T-105 batteries	\$596.00
1	Hydrometer	\$12.95
1	Solar Electric Independent Home Book	\$10.95
1	Battery Book for Your PV Home	\$8.00
1	Digital Multimeter	\$25.00

782-053 Special Kit Price \$7299

Generator Charger Kit #5 features the Xantrex XW4024 4000 watt 24 volt sine wave inverter. With a large enough battery bank, the XW 4024 could supply backup power to a full size home for a few days. This inverter can control just about any aspect of an integrated power system including full grid tie capability as well as automated generator control. See page 44 of this catalog for more details on the XW4024.

Gen Charger Kit #5 can become a 48 volt kit by adding four more batteries, and switching the inverter to an XW4548.

Kit #5 can also feature a Xantrex XW6048 inverter. Call for prices.

