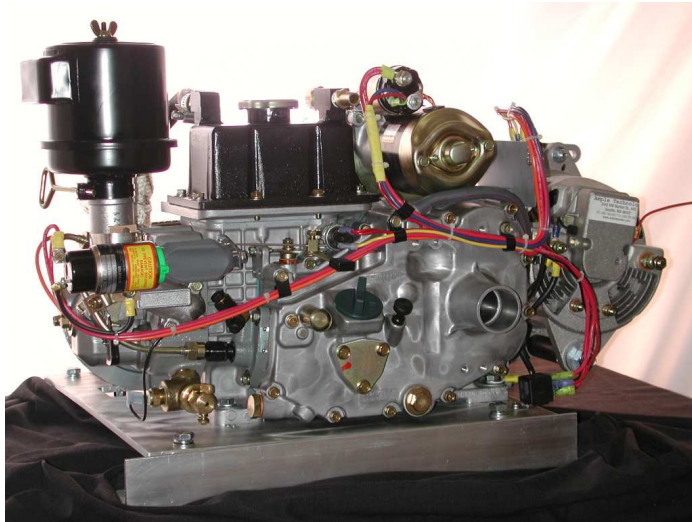
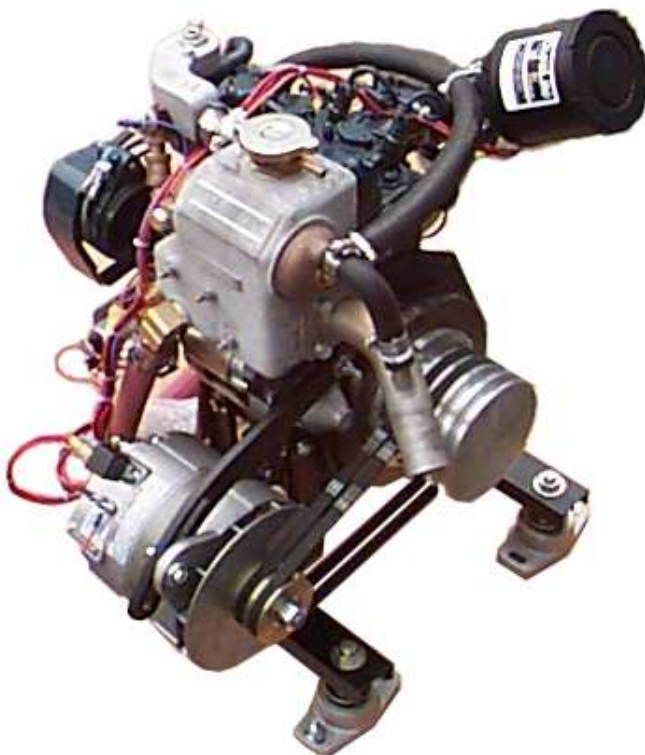


**Ample Power Company**

## Manual Start/Stop Ample Power Genie . . . DC Amps Generators



**Genie 150, and Genie 75**



**Genie 24/175, and Genie 12/280**

### **A Fast, Full Charge**

Charging batteries from an alternator is much more efficient than going through an AC generator and a battery charger. That's why we use Kubota diesels to drive large frame DC alternators . . . to charge batteries fast and full.

Chances are you'll already have an inverter onboard, so when you want AC, it's there whether you run the engine or not. If you want AC for a long time, then you'll have to run the engine to keep up with demand.

A Genie is perfect for multihulls using outboards which have limited charge capability, especially at anchor. It is also ideal for small sailboats owners who don't want to run their main engine just to charge batteries or make hot water.

### **Better By Design**

What makes the Genie the best diesel charger available? Compare the features and benefits against other similar units.

- Smart Alternator Regulation with temperature compensation . . .
  - Battery service life is much greater when they are charged at correct voltages for their temperature.
- Large frame alternator . . .
  - A large frame alternator is more efficient than a small frame unit which means that more current can be delivered for less horsepower and fuel consumption.
- Electronic alternator current limiting . . .
  - Rather than attempt to match alternator output and engine horsepower with pulley ratios, electronic current limiting allows for precise setting at higher amperage output than provided by mechanical means.
- Dual electronic alternator current limiting . . .
  - When the engine also drives another apparatus, such as a refrigeration compressor, alternator output is reduced automatically to free up some power for the other load. The alternative, used by others, is to shut the alternator completely off. Typically, the Genie can produce 50–70 Amps while powering a second load.
- Cast silicon bronze heat exchanger . . .
  - Welded heat exchangers corrode around the welds, and eventually leak.
- Full electric start/stop from control switch . . .

- Unlike other units that offer electric starting, the Genie doesn't require manual throttle control before starting, and to stop the engine.
- Automatic shutdown for low oil pressure or high temperature . . .
  - Warning buzzers offered by others are fine as long as you're there to hear them, and you can get to the engine to turn it off before permanent damage occurs.
- Advanced regulator can drive two alternators . . .
  - The Smart Alternator Regulator can be shared with the alternator on the main engine, and both the main and Genie can be running at the same time if desired.

## Five standard Models

There are five standard models to choose from, covering a range of voltages and power.

The standard models are shown in the table below. The kilo-Watt rating is calculated using rated Amps and the absorption setpoint voltage.

Voltage	Rated Amps	kW	Part #
12	150	2.2	G12-150
12	280	4.0	G12-280
24	75	2.2	G24-75
24	175	5.0	G24-175
24	300	8.5	G24-300

Model #	Length	Width	Height	lbs/(kgs)
G12-150	30(76)	16(40)	16(40)	158(72)
G12-280	20(51)	18(46)	24(61)	185(84)
G24-75	30(76)	16(40)	16(40)	158(72)
G24-175	20(51)	18(46)	24(61)	190(86)
G24-300	29(64)	30(76)	26(66)	270(123)

## Gauge Panel Option

An optional instrument panel is available with any of the Genies. This panel has gauges for water temperature, oil pressure, and an hour meter. The control switch is incorporated into the panel. Dimensions are 6 inches square.

## Intake Silencer Option

There's a lot more to noise reduction than just enclosing an engine. An enclosure that allows the engine to pull hot intake air will lead to premature engine failure. The engine must get ambient intake from outside the enclosure(s).

Without an intake silencer, noise levels will be dramatically higher. In many remote applications, that may not be a problem.

We have tested many solutions before settling on the intake silencer offered as an option.

## Hot Water Option

While the DBCs are efficient, there is waste heat which can be used to make hot water, or heat living spaces. Distributing this heat is done with a circulating pump which is turned on and off by the EnerMatic Controller. The controller senses engine coolant temperature and turns on the pump when the engine is warm enough.

The DBC hot water system can be connected to the same coolant circuits as the passive solar panels, however great care must be taken to keep the liquid circuits full at all time.

Heating a water tank can be quickly accomplished by using an inverter to drive the AC heating element, and the DBC to circulate coolant through the coils in the tank. The inverter represents a significant load for the DBC, so not only does it provide heat via the AC element, but it also causes the engine to heat and thus provide more energy for the hot water tank.

The Hot Water Option requires the EnerMatic Controller and includes the DC circulating pump;

## Remote Cooling Options

Standard units are built using the factory radiator mounted to the engine. To be effective, the radiator needs to be mounted against an exterior wall such that ambient air is pulled through the radiator. The air pulled must also be exited from the compartment to avoid overheating. Adequate ventilation for the engine generally means that noise levels are noticeable.

A remote radiator or marine heat exchanger can be used to reduce air circulation requirements, and subsequently reduce noise levels. The air intake to the engine should always be drawn from ambient temperature . . . never from inside a hot enclosure.

A custom aluminum remote radiator is available. An electric fan is included. Fans are more efficient pulling air than pushing air. Either fan can be ordered. The EnerMatic Controller can be programmed to run prior to starting the engine and for a specified time after the engine is stopped.

A marine heat exchanger can be used, where engine coolant is circulated on one side and raw water is circulated on the other side. A marinized unit requires the heat exchanger, a raw water pump, and a custom header to cool the exhaust.

## Marine Installation Kit Option

The Marine Installation Kit includes parts necessary to plumb raw water to the heat exchanger.

- Water Lift Muffler
- Water Strainer
- Intake Through-Hull Fitting
- Intake Ball Valve
- Exhaust Through-Hull Fitting
- Exhaust Ball Valve

## Fuel System Kit

All engines need well filtered fuel.

Most engines have a mechanical diaphragm pump, which has a limited lift range. Even so, an electric fuel pump is useful to pre-charge/bleed the fuel system.

The EnerMatic Controller can operate the fuel pump continuously, or in a pre-charge mode where it operates before cranking the engine and for a programmed time after the engine starts.

The fuel system kit includes a Racor housing and cartridge and a fuel pump.

## BioDiesel Battery Chargers with Manual Start/Stop . . . Ordering Information

Model # (Volts-Amps)	List Price (\$)
G12-150	5,395
G12-280	8,395
G24-75	5,799
G24-175	8,395
G24-300	11,950

Item	List Price (\$)
HOT-WATER	439
REMOTE-RADIATOR-PULL	1,350
REMOTE-RADIATOR-PUSH	1,350
MARINE-COOLING (see note below)	2,100
INTAKE-SILENCER	190
FUEL-KIT	295
MARINE-INSTALL-KIT	389
SHIPPING-CRATE	198
GAUGE-PANEL	579

**Optional BioDiesel Battery Charger Items  
... Ordering Information**

Notes: The Gauge Panel is only available for manually controlled Genies . . . not applicable to units with the EnerMatic Controller.

The Marine Cooling option is not required for G12-150 and G24-75. This option includes a fresh water cooled exhaust manifold, raw water pump, and a marine heat exchanger.