# BCITS 🔂 te«hnology for liviag

# ((((()))) Back-up Power for Bilevels

Bilevels are powered primarily by plugging the power cord into a wall outlet, otherwise known as AC power. When there is a power outage, bilevels will not receive power from the wall outlets.

This document provides information about available back-up power systems for PROP bilevels.

# **Clients Responsibility**

PROP does not supply back-up power systems. It is the clients' responsibility to create their own Emergency Preparedness Plan, including a back-up power system. PROP will be happy to assist you with any questions you may have after reading through this document.

## **Emergency Preparedness Plan**

All PROP clients MUST have an "Emergency Preparedness Plan" in-case of a power outage. This is very important for PROP clients who depend on their bilevel. You can estimate how long the power outage may last by contacting BC Hydro at 1-888-769-3766. If BC Hydro expects the power to be out longer than you can be without your bilevel, you may need to go somewhere not affected by the power outage.

Your emergency preparedness plan should include a facility with a back-up power source (ie: emergency power generator). You need to discuss their availability during your planning, but some possible solutions may include; police station, fire station, hotel, and/or hospital.

# **Options for Back-up Power**

### 1) Manufacturer External Battery Packs

An External Battery Pack, designed and manufactured by the same company that makes your bilevel device, is a device that contains a battery to power your bilevel in instances when AC power is unavailable (power outage, travel, etc).

Most manufacturers produce an external battery pack to work with their bilevel devices, but the accessories you need to order with the pack depends on which bilevel device you use.

As these external battery packs are constantly changing, if you'd like further information about which pack to purchase and where to get it, contact PROP and our staff will assist you in finding the external battery pack for your bilevel.





#### 2) AC Backup Power Packs

**AC Backup Power Pack**: An AC Backup Power Pack should be kept charged to maximum capacity, so it is ready to power your bilevel in the event of a power outage. It can also be used for an extended period of time away from home where AC power is not available.

An AC Backup Power Pack is a portable device that contains a battery and electronics that produce AC and/or DC power. There are different sizes and capacities of AC Backup Power Packs available, so you need to pick the right one for your needs. It is recommended you purchase one that you think will work, take it home and test it using your bilevel, and if it doesn't last long enough, exchange it for a more suitable AC Backup Power Pack.

Your AC Backup Power Pack must be rated more than 300 watts to power your bilevel. How long an AC Backup Power Pack will last depends on several factors:

- battery type/size
- age of the battery
- bilevel settings.

\*If you need assistance, please consult the PROP Biomed Dept. for selecting an appropriate size AC Backup Power Pack for you.

Some AC Backup Power Packs require monthly discharging to keep it in good condition. Please follow manufacturer instructions.

#### Table 1. AC Backup Power Packs

Examples of AC Backup Power Packs		Where to Purchase	Approx. Cost	Can Humidifier Be Used?
	MotoMaster Eliminator PowerBox	Canadian Tire	\$120 – 300	Yes: System One, AirCurve, A40, DreamStation <u>No</u> : Stellar, VPAP III, Synchrony
	CyberPower Pure SineWave UPS System	Amazon.ca	\$160 — 250	Yes: All Bilevels

The length of time the AC Backup Power Pack lasts depends on the battery capacity and individual respiratory settings. To determine how long the AC Backup Power Pack will last:

- Charge up AC Backup Power Pack to maximum capacity. Then, unplug it from wall outlet so it is an independent power source.
- Plug your bilevel into one of power outlets of the AC Backup Power Pack, start using your bilevel, and note the start time.
- Continue using the bilevel until it stops running. Note the end time.
- The length of time your AC Backup Power Pack battery is expected to last is the time elapsed between the Start Time and the End Time.

CAUTION: As the AC Backup Power Pack's battery ages and/or your respiratory needs change, you will receive varying back-up power time from the pack. Please repeat this test monthly.

#### 3) Gas-Powered Generators

A portable generator is a gasoline operated device which produces electricity. You can plug your bilevel into its built-in AC power outlets. This is an effective back-up power source if there is outdoor space to operate a gas generator. You will need a heavy duty extension cord to plug your bilevel into the generator located outside.

#### WARNING: Gas-powered generators must be outdoors. Carbon monoxide poisoning is fatal.

#### Table 2. Gas Generators

Examples of Gas Generators		Where to Purchase	Approx. Cost	Can Humidifier Be Used?
	Champion Portable Gas Generator	Canadian Tire	\$400	<u>Yes</u> : All Bilevels
	Firman Gas- Powered Portable Generator	Costco Canada	\$300	<u>Yes</u> : All Bilevels

#### 4) Vehicle Battery via 12V DC Power Source (aka Vehicle Accessory Port)

It is possible to power your bilevel with your vehicle's battery, via the vehicle's 12V DC power source. Your car battery can power your bilevel while you travel to a location unaffected by the power outage. PROP has 12V car adaptors for <u>some</u> bilevel units, please check with us to see if we have one for your bilevel unit.

If a 12V car adaptor is unavailable for your bilevel, you will need a DC to AC inverter, which you connect to your vehicle's 12V DC power source. As long as you have gasoline in your tank, and you keep your vehicle's battery charged, your car battery can provide power for your bilevel. (be sure to run your vehicle occasionally to charge the vehicle's battery)

WARNING: DO NOT leave your car running in a garage. Carbon monoxide poisoning is fatal.

WARNING! DO NOT USE HUMIDIFIER IN A VEHICLE. There is a higher chance of water spilling into the bilevel unit when used in a vehicle. If water gets inside the bilevel, it could damage the bilevel.

Examples of Gas Generators		Where to Purchase	Approx. Cost	Can Humidifier Be Used?
	MotoMaster Eliminator Power Inverter	Canadian Tire	\$150	Yes: System One, AirCurve, A40, DreamStation <u>No</u> : Stellar, VPAP III, Synchrony
	Go Power! Pure Sine Wave Inverter	Amazon.ca	\$270	<u>Yes</u> : All Bilevels

#### Table 3. Power Inverters

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