# Genconnex® Conversion System Warranty

This conversion system "kit" is designed and manufactured to conform with the applicable requirements of the EPA and California Air Resources Board, is free from defects in materials and workmanship which would cause the this conversion system to fail or to cause damage to any part on the converted generator, is warranted for 2 years from the installation date, is transferable to subsequent purchasers, and covers full repair and replacement costs including the costs of diagnosis, labor and parts (and only in California includes any part on the converted vehicle/engine/equipment that is damaged due to a defect in the alternative fuel conversion system). We reserve the right to deny warranty claims when, in our sole but reasonable determination conclude that the cause of the primary failure was due to misuse and neglect (including but not limited to flood, sand & debris filled, impact with vehicle or heavy object, etc) or failure to perform the basic maintenance called for in this supplement or the original Honda manual.

We disclaim any responsibility for loss of time or use of the product, transportation, commercial loss, or any other incidental or consequential damage. Any implied warranties are limited to the duration of this written warranty. We will either repair or replace with like-kind unit, or issue a refund, within 30 days of receipt of the unit or goods. We will pay shipping costs within the continental 48 states to and back from our repair facility if you call first to get a pre-paid shipping label sent to you by us.

## **Consumer Service Information**

We offer both warranty and out-of-warranty repair service for all kits and generators we modify or manufacture at our main factory and at additional authorized dealers as listed on our website. Please go to www.genconnexdirect.net to find a service center near you.

sales@genconnexdirect.net

1-800-341-0792
Parts, Service and Support

Factory and Warranty
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www.genconnexdirect.net



Engineered to the next level



## Propane & Natural Gas Conversion Kit for Honda EU7000is

by Genconnex®

Supplement to your Honda EU7000is OEM Owner's Manual



Model number
GXK LPNG-EU7000is-Kit-EC

NEW with internal fuel lock-off solenoid!



Engineered to the next level

#### Dear Customer,

Thank you for purchasing a Genconnex® conversion kit. We sincerely hope you are satisfied for many years to come.

Before operating your generator, please take a moment to read this entire manual along with the original Honda Owner's Manual. This manual is intended to be a supplement to the original Honda Owner's Manual with regard to operating from alternate fuels. Where different, this manual supersedes the Honda Owner's Manual unless otherwise noted.

Table of Contents	page
Safety Information >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	1
Tips before starting	2
Use & Maintenance  Emission Control System Information Connecting your generator to a propane tank Starting & Stopping your generator How to change from propane to natural gas orifice Troubleshooting	3-4
Technical Information	5
Consumer Information	6

## **Quick Reference Information**

	Propane	Natural Gas	Load
Fuel Usage:	4.00 lbs/hr	84,000 BTU/hr	5500 Watts
	2.22 lbs/hr	46,000 BTU/hr	2750 Watts
	1 58 lbs/br	32 700 BTH/hr	1375 Watts

Engine Oil: SAE 5W-30 Fully Synthetic (-20deg F and up)

SAE 10W-30 Fully Synthetic ( Odeg F and up)

Spark Plug:Champion: RC12YC 0.020 - 0.022 inches

NOTE: Maximum power output when operation on natural gas is 6,000Watts

## **Technical Information**

#### How long will a tank run my generator?

EU7000is	<b>20lb</b> /4.7gal (400,000Btu)	<b>30lb</b> /7.0gal (600,000Btu)	<b>2-30lb</b> /14gal (1,200,000Btu)	<b>100lb</b> /25gal (2,000,000Btu)
5500W average load			11hrs	20hrs
4125W average load		8hrs	15hrs	27hrs
2750W average load (eco on)	5hrs	10hrs	20hrs	36hrs
1375W average load (eco on)	10hrs	15hrs	30hrs	53hrs

RED means only can use tank/average load combination in weather above 32 deg F or tank won't vaporize propane fast enough to keep up with demand. Propane stops vaporizing at -44Deg F.

Based on lower heating value of Propane C<sub>3</sub>H<sub>8</sub> is approx 85,000 Btu/gal @ 90% full tank

Note that tank refill can varying from 75-100% depending on provider.

#### **Understanding pressure regulators**

	Pressure	
Inside Tank	60psi to 120psi+	(too high!)
Red Regulator reduces to:	10-15 psi / 277-330"w.c. (too high!)	
Silver regulator reduces to:	1/2 psi / 7-11"w.c.	(correct)

(psi = pounds per square inch) (w.c. = inches Water Column)

## Specifications changes for Bi-Fuel conversion

Engine Oil	Fully synthetic SAE 5W-30 or 10W-30
Fuel Options	Propane, Natural Gas
Propane & Nat. Gas Pressure	7-13" water column (approx. 1/2psi)
Spark Plug	RC12YC Champion gap to 0.020-0.022"
Max Output on Natural Gas	6.0 kW (DO NOT LET LOAD EXCEED THIS)

#### **Modification for High Altitude Operation**

Please contact your authorized Genconnex® servicing dealer for the correct high altitude fuel orifice kit for operation of your generator at altitudes above 5,000 feet (1,500 meters). This includes propane or natural gas When installed, this kit will enable your generator to meet emission standards throughout its useful life at the specified altitude. When not operating above 5,000 feet, please make sure to have your generator converted back to prevent overheating and serious engine damage.

## How to start your generator and STOP your generator

**To START your generator** from propane BBQ tanks, connect the supplied regulator hose to both the propane tank and generator. Slowly turn on the propane tank. If you hear a "ting" sound as you turn on the BBQ valve you may have actuated the tank's excess flow valve. If this happens, either wait a moment for it to automatically reset or you will have to turn off tank valve and repeat this step slower. To connect to larger propane tanks with regulators already on them or natural gas connect the straight-through hose to both the generator and supply line quick disconnects.

Note that your generator has a propane & natural gas fuel lock-off solenoid inside that requires a charged battery to open for fuel to flow. **Unlike the gasoline version you will not be able to start the generator with the pull-starter because it will not open the fuel lock-off solenoid.** The only way to start it, is to turn the key to the ON position and then press the START button. See Troubleshooting section below if the generator will not start.

Also, note that it may take several successive attempts to start your generator if your fuel hose is 12 feet or longer. This is because there will be air trapped in the hose when first connected that will have to work through before the generator receives pure fuel.

**To STOP your generator**, we recommend that you turn off what you are powering (generator load), then turn off the gas supply, then turn off the key. This is a best practice to minimize potential accidents and removes the smell of fuel from your hose when disconnecting it.

## How to configure your generator for the proper fuel



Your generator has been configured to run from either propane or natural gas by way of a removable set-screw orifice installed in the end of the carburetor injector module. If you want to change fuel, just replace this orifice with the orifice supplied for that fuel. Remove hose, use supplied 3/8" allen wrench to remove then screw back in the correct orifice, reattach hose and tighten hose clamp.

## **Troubleshooting**

#### Generator won't start

- 1. Make sure the generator's run switch is set to on.
- 2. Check that your battery is charged. If the display turns off or you hear just a "clunk" sound but it does not turn over, check that your battery is charged to at least 12.4Vdc. If not, you can either jump start the battery or use a battery charger to charge it. Position 3 on the display shows battery voltage (See OEM manual).
- 3. Check that guick disconnect from hose to unit is fully seated and locked.
- 4. Check that propane tank hose connection is fully screwed on and tight.
- 5. Turn your propane tank off then back on slowly to check/reset tank excess flow valve.
- 6. Check that your air cleaner element is not flooded with oil. This can happen if your generator tips over. If it is, squeeze filter between paper towels, then properly dispose of oily paper towels. (oily rags can spontaneously combust in garbage or in pile hang until dry, then soak with water and detergent before discarding)
- 7. Check that your tank isn't empty, or near empty.
- 8. If your propane tank tipped over, the tank valve may freeze up. Return tank to upright position and let it sit for a while without use to let valve thaw and/or drain.
- 9. Check oil level. This generator has an automatic low oil shutoff.
- If operating at very high or low temperatures make sure you have the correct fuel orifice installed.

## **Safety Information**

#### NOTICE:

This section is intended to augment safety information in the original Honda OEM manual and not supersede it.

#### You must read the Honda Owner's Manual

#### WARNING:

Failure to follow instructions may result in explosion or fire causing property damage, serious injury or death.

DO NOT attempt to use damaged (including but not limited to kinked, cut, chewed or plugged) equipment and hoses. See your local LP or Natural Gas dealer for repairs.

DO NOT attempt to make repairs yourself

DO NOT connect to non-approved tanks or systems

DO NOT use an open flame to check for gas leaks

DO NOT perform your own gas pipe installation or repair without a proper license

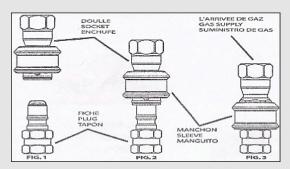
DO NOT let fuel hose/regulator or tank come in direct contact with exhaust pipe

DO NOT make any alterations or modifications to any natural gas or propane supply. You must use a licensed gas fitter/plumber and follow all state and local codes.

#### PROPANE & NATURAL GAS QUICK-DISCONNECT FITTINGS

#### CAUTION

Quick-disconnect devices are to be installed by a gas service technician only. Install according to local codes or NFPA 54 (ANSI Z223.1) National Fuel Gas Code.



ANSI Z21.41 Quick-Disconnect Devices Installation & Operation Instructions

- 1) Push back sleeve of socket (fig. 1), insert plug (fig. 2), and release sleeve.
- 2) Push plug until sleeve snaps forward locking plug in socket (fig. 3) (This turns on the gas automatically if valve is is on and tank is connected)
  - 3) Leak test with leak test solution

#### TANK SIZING GUIDELINES

#### per generator output rating

(assuming 1/2-3/4 average rated load)

 ≥ 10 Deg F
 10 to -10 Deg F
 -10 to -20 Deg F

 2kW 20lb tank,
 2kW 30lb tank
 2kW 40lb tank

 3kW 30lb tank,
 3lW 40lb tank
 3lW 60lb tank

7kW 60lb-100lb tank 7kW 100lb tank 7kW Dual 60 to100lb tanks

or dual 30lb or dual 40lb tanks

## Tips before starting

1. Always check the oil level before each use.

- 2. The "Choke" has been deleted and is not needed for vapor fuels.
- 3. Do not store propane tanks in your home or garage.
- 4. Make sure you generator's battery is charged. This generator requires a charged battery to open the internal fuel lock-off solenoid to start. The pull-starter cannot be used to start this generator. We suggest leaving your generator's battery plugged into a smart-charger/trickle charger when not in use so it remains in a fully charged state, or to start it and run it for a few hours every 2-3 months.
- 5. Turn the generator off by turning off the propane tank or supply valve. This is a best practice for being safe with all propane/natural gas outdoor appliances.
- We recommend that you always put the caps back over the quick-disconnects immediately after use to prevent contamination or water from entering the unit.
- 7. We recommend ECO mode only if your load will not be fluctuating greatly. This prevents a brown-out and possible damage to your equipment as the generator tries to quickly increase RPM's to handle the sudden changes. We do not recommend using ECO mode when running on natural gas.
- 8. Never operate a generator inside your home, garage, or place of business. It must be used outdoors at all times with all nearby doors and windows closed. The National Fire Code requires the generator be a minimum of 5 feet from any structure and highly recommends a minimum distance of 10 feet to any openings including windows and doors.
- 9. To shut off your generator we recommend that you always turn off the fuel at the tank or fuel supply valve to prevent accidents.

## The proper fuel pressure for your generator

Your generator comes pre-set from the factory to run from low pressure propane at 7-11" w.c. equivalent to max 1/2psi, also referred to as standard household pressure. DO NOT connect your generator directly to a propane tank without the proper regulator or to an intermediate 10-15psi regulator often found on large tanks.

#### **Use & Maintenance**

## **Emission Control System information**

Pursuant with the EPA regulation in CFR 40 Part 1054.645 we have re-certified these generators as the manufacturer under this rule to operate on the fuels listed in this supplement.

"A certificate of conformity is no longer valid for an engine if the engine is modified such that it is not in a configuration covered by the certificate. This section applies if such modifications are done to convert the engine to run on a different fuel type. Such engines may need to be recertified as specified in this section if the certificate is no longer valid for that engine.

- (a) Converting a certified new engine to run on a different fuel type violates 40 CFR 1068.101(a)(1) if the modified engine is not covered by a certificate of conformity
- (d) The original engine manufacturer is not responsible for operation of modified engines in configurations resulting from modifications performed by others. In cases where the modification allows an engine to be operated in either its original configuration or a modified configuration, the original engine manufacturer remains responsible for operation of the modified engine in its original configuration.
- (e) Entities producing conversion kits may obtain certificates of conformity for the converted engines. Such entities are engine manufacturers for purposes of this part."

Please refer to your Honda OEM manual for further emissions control system information.

## How to connect your generator to a propane tank



1) Set up your generator outdoors on a hard level surface such as a driveway or concrete patio at least 5' from any opening in a dwelling (window, door vent etc) but preferably 10 feet.



- 2) Take your propane tank and place it next to the generator making sure it is secured from tipping over and close enough for the hose/regulator to reach with a slight slack in the hose (not pulling on fittings). A milk crate is ideal for 20 and 30lb tanks, but taller tanks will need additional securing.
- 3) Close the valve on the propane tank then attach the regulator with integral hose onto the tank. Connection should be snug but do not tighten with a wrench.
- 4) Attach the other end of hose with the female quick-disconnect onto the male quick-disconnect found on top of generator. To do this, fully pull back on the safety shroud of the female quick-disconnect to expose the ring of bearings, insert fully over male fitting on generator, then release the shroud to lock in place. See "Safety Information" section of this supplement for more details.

2