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@genconnesdirect.net

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

Factory and Warranty 35 Pond Park Road, Unit 11, Hingham, MA 02043 Genconnex[™] and Homeconnex[™] are trademarks of New England Gen-Connect LLC, Copyright 2016 All rights reserved.

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Engineered to the next level

70-0016r1.00



Tri-Fuel conversion kit for Honda EG/EB2800i

(Propane, Natural Gas & Gasoline)

by Genconnex™

Supplement to your Honda EG2800i/ EB2800i OEM Owner's Manual



Model number GXK GLPNG-EG2800i-Kit-SA-EC



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Genconnex is a trademark of New England Gen-Connect LLC Honda is a registered trademark of Honda Motor Co., Ltd.

Dear Customer,

Thank you for purchasing a Genconnex[™] conversion kit We sincerely hope you are satisfied with your purchase for many years.

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 operation on alternate fuels. Where different, this manual supersedes the Honda Owner's Manual unless otherwise noted.

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Quick Reference Information

Fuel Usage:	Propane 2.20 lbs/hr 1.57 lbs/hr 1.17 lbs/hr	Natural Gas 44,000 BTU/hr 36,300 BTU/hr 29,600 BTU/hr	Load 2400 Watts 1400 Watts 700 Watts
Engine Oil:	SAE 10W-30 Fully Synthetic (approx. 1/2 qt)		
Spark Plug:	NGK: BPR6ES gapped to .020031 inches (Note: .022 is ideal for propane & NG)		

Technical Information

How long will a tank run my generator?

EG2800i & EB2800i	20lb /4.7gal (400,000Btu)	30lb /7.0gal (600,000Btu)	2-30lb /14gal (1,200,000Btu)	100lb /25gal (2,000,000Btu)
2500W average load		10hrs	21hrs	37hrs
1950W average load	9hrs	14hrs	28hrs	50hrs
1300W average load (eco on)	13hrs	19hrs	38hrs	68hrs
650W average load (eco on)	20hrs	29hrs	59hrs	106hrs

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 C₃H₈ 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		
	Propane Tank:	60psi - 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 Tri-Fuel conversion

Engine Oil	Fully synthetic SAE 10W-30
Fuel Options	Propane, Natural Gas or Gasoline
Propane & Nat. Gas Pressure	7-11" water column (approx. 1/2psi)
Spark Plug	BPR6ES (NGK) *gap to 0.020-0.031"
Max Output on Natural Gas	2.4kW (DO NOT LET LOAD EXCEED THIS)

*spark gap can be set closer to .020 for better operation in cold weather for propane and natural gas, and closer to .031 for best operation in general with gasoline.

Modification for High Altitude Operation

Please contact your authorized GenconnexTM 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.

4: How to start your generator from propane or natural gas

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

2a: If using propane tank, place tank at least one foot away from generator making sure it is secured from tipping over and close enough for the propane hose with pressure reducing 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. Close the valve on the propane tank then attach the propane hose with pressure reducing regulator onto the tank. Connection should be hand tight.

2b: If using natural gas or propane from an outlet, make sure outdoor shutoff valve is in off position at then attach straight hose to outdoor quick disconnect near shutoff valve.

3: Attach the end of hose with the female quick-disconnect onto the generator's male quickdisconnect found near the pull starter side of generator. To do this, fully pull back on the safety shroud of the female quick-disconnect to expose the ring of bearings, insert over male on generator, then release the shroud to seal. See "Safety Information" section of this supplement for more details.

4. Prime the generator by pressing down on the Primer button for <u>3 seconds</u> (see button on top of demand regulator below **Primer** label, then pull starter cord to start. If generator miss-starts, prime again then pull again to start. Priming for too long will flood engine.



Troubleshooting

Generator won't start, wont stay running or runs very poorly

- 1. Make sure to run gasoline out of float bowl BEFORE running propane or natural gas.
- 2. Make sure the generator's run switch is set to on.
- 3. Check that quick 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 internal valve.
- Check that your air cleaner element is not flooded with oil. <u>This can happen if your generator tips over.</u> 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. Listen for slight "hissing" sound before starting when pulling up on round ball on top of inlet (to let you know fuel is flowing through tank and regulator)
- 10. Observe lights on front of generator panel to help diagnose problems.

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 Nat. Gas dealer for repairs.

DO NOT attempt to make repairs yourself

DO NOT connect to non-approved tanks or systems

DO NOT use open flame to check for gas leaks

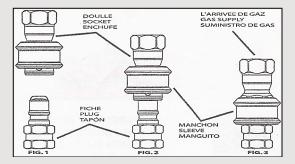
DO NOT perform your own gas pipe installation or repair without a proper license DO NOT let fuel hose/regulator or tank come in direct contact with exhaust pipe

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 & NAT. 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

Push back sleeve of socket (fig. 1), insert plug (fig. 2), and release sleeve.
 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
 Leak test with leak test solution

GENERAL 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

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

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

 7kW 60lb-100lb tank
 7kW 100lb tank
 7kW Dua

 or dual 30lb
 or dual 40lb tanks
 7kW Dua

<u>-10 to -20 Deg F</u> 2kW 40lb tank 3lW 60lb tank 7kW Dual 60 to100lb tanks

Quick Tips

- 1. PRIME FOR ONLY 3 SECONDS (only for propane and natural gas) by gently pressing the button labeled 'Primer' on the demand regulator. Over-priming will flood the engine preventing starting.
- 2. TURN PROPANE TANK ON SLOWLY to prevent EXCESS FLOW VALVE from activating inside propane tank. To reset it, turn tank off, unscrew and re-connect regulator then turn tank on slower.
- 3. The 'Choke' is not needed for propane or natural gas fuels.
- 4. NEVER store propane tanks in your home or garage.
- 5. We recommend that you always put the caps back over the quickdisconnects immediately after use to prevent contamination or water from entering the unit.
- 6. 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 change.
- 7. DO NOT operate any generator inside your home, garage, or place of business to prevent death from Carbon Monoxide inhalation. It must be used outdoors at all times with all nearby doors and windows closed.
- 8. DO NOT operate any generator within 5 feet of any window, door or other opening per The National Fire Code, and it is highly recommend that it be at a minimum distance of 10 feet.
- 9. To shut off your generator when running on propane or natural gas, we recommend that do so by turning off the propane tank or fuel supply valve to prevent accidents.

Use & Operating Instructions NOTE: SEE HONDA MANUAL TO OPERATE FROM GASOLINE

TO OPERATE FROM: Propane or Natural Gas

1: First turn off gasoline 'Tank Valve' below tank then either run generator until it stops or consult Honda manual for how to properly and safely drain float bowl.

Note: valve in picture is in sideways "off" position.



Gasoline tank valve

2: Select and install the correct 'Fuel Orifice'

Your generator has been pre-configured to run from propane but you may instead configure it to operate from low pressure natural gas. To do so, you will need to change the fuel orifice located in the brass fitting attached to the fuel line shown circled below.



To change fuel orifices, first remove the hose clamp then pull the fuel line off of the brass fitting. Using the supplied allen wrench, unscrew the fuel orifice installed in the end of the brass fitting and install the correct fuel orifice. This is also how and where to install the alternate 'High-Altitude Orifice' if needed for over 5000ft.

NOTE: The orifice with the smaller hole is for propane.

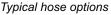
CAUTION: You MUST use a licensed plumber or gas fitter to add a shutoff and quick-disconnect gas outlet to your home's propane or natural gas supply!

3: Connect your generator using the correct hose

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. Your generator comes pre-set from the factory to run from low pressure propane at 7-11" w.c. equivalent to approx. 1/2psi standard household pressure.



Propane & natural gas inlet location. Note protective cap removed for access







Propane hose with pressure reducing regulator for connecting to BBQ style propane tank

Low pressure natural gas & propane straightthrough hose for connecting to regulated supply