

Evolution® Engines 80GX

USER GUIDE



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12961.1 revised 12/09



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Before using this engine, please read these instructions carefully.

Introduction

Congratulations on your purchase of the newest and one of the most technically advanced 2-stroke gas model airplane engines in the world. Whether you are new to the sport of model aviation or an experienced flyer, you will enjoy the features of the new Evolution® GX engine. Evolution engines are designed to be the most powerful in their class, extremely easy to start and operate, and provide years of enjoyable service. These engines incorporate many unique features designed to ensure success with your new engine. This user's guide is intended to provide the basic information required to operate and maintain your Evolution GX engine.

Important: While the Evolution engine is extremely easy to operate, if this is your first experience flying a model airplane, it is highly recommended that you have the help of an experienced modeler during the first few flights. Your local hobby shop or flying club can put you in touch with an experienced pilot in your area.

Contents Included

Engine

Spark Plug (EVO30013309)
 Electronic Ignition (EVO3314LB)
 Exhaust Gasket (EVO30070407)
 Spark Plug Wrench
 Spark Plug Cable Spiral Wrap
 Break-in Oil
 Instruction Manual
 Decal Sheet (2 pcs)

Optional Items

Muffler Inverted Wraparound (EVO30073400)
 Silencer System (EVO30074206E)
 Gas Start Kit (EVO1002)
 Evolution 2-Cycle Synthetic Oil (EVOX1001Q)
 Tachometer (HAN156)
 Kill Switch (JRPA004)
 Ignition Battery, 2-Cell Li-Po 2100mAh (THP21002SPL)

Mounting the Engine

Most model airplane designs make provision for an engine mount. It is extremely important that the engine mount be securely attached to the airplane's firewall and that the engine is securely attached to the engine mount. Follow the instructions included with the airplane for mounting the engine. The engine should be fastened in place with 4 bolts, blind nuts and lock washers. Use 1/4 inch or 6mm bolts. If you decide to fasten the engine using a flexible motor mount, always choose parts with enough solidity and strength. Make sure all bolts are tightened and regularly check that they remain tight and in good condition.

Note: The use of threadlock on all engine mounting fasteners is highly recommended.

Important: Air is necessary to cool the engine during operation. Make sure sufficient air circulation through the cowling is provided. As a basic reference, the outlet area should be **3–5 times** the area of the inlet area to provide adequate cooling.

Throttle Linkage

Carefully attach the throttle linkage to the engine. We recommend the use of a ball link on the carburetor. Make sure the linkage is free to operate from low throttle to high-throttle and confirm that the low throttle setting on the transmitter closes the carburetor butterfly to the low-idle position. Adjust the length of the pushrod until full throttle opens the carburetor butterfly fully, while low throttle, low trim completely closes the butterfly.

Attaching the Fuel Lines

Use large gasoline-compatible fuel line in the fuel tank as well as the supply line to the engine. The fuel stopper and the fuel lines used in the fuel tank must be compatible with gasoline.

Fuel for the Evolution Gas Engine

The Evolution gas engine has been designed to run on a mixture of high-quality 91-octane unleaded gasoline and synthetic oil intended for racing 2-stroke gasoline engines. For the break-in period of the new engine, mix the fuel in a ratio of 30 parts gasoline to 1 part lubricant. After break-in, use a ratio of 40 parts gasoline to 1 part lubricant.




Spark Plug

The Evolution 80GX engine uses a CM-6 type of spark plug. Before installing the spark plug you will need to set the spark plug gap to the following dimension: .024 in to .028 in (.6mm to .7mm).

Selecting a Suitable Propeller

The Evolution 80GX has been designed to generate maximum power at 6200–6600 rpm, according to the type of exhaust used. If you wish to utilize the maximum power output, choose a propeller which will allow the engine to reach these revolutions, or slightly lower revolutions. (The engine will unload in the air, depending on the aircraft speed and propeller selected.)

Choose your propeller according to the chart and to achieve approximately 6400 rpm on the ground for best performance and the lowest noise signature.

80GX	Two-blade		26x10	26x12	27x10
	Three-blade	25x12		26x12	

We do not recommend using propellers that allow the engine to reach more than 7500 rpm on the ground.

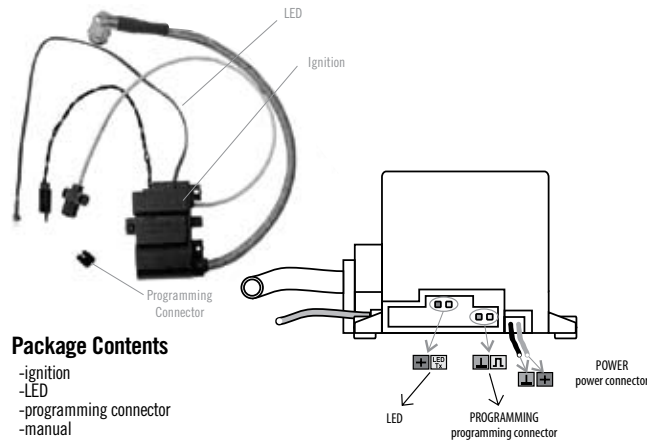
Evolution GX Engine Simple Start Ignition System

The spark ignition included with your Evolution gas engine is a modern generation electronic ignition. There are many useful functions built into the microprocessor of this unit.

In addition to the basic ignition functions, the unit has a BATTERY-SAVER feature. After 90 seconds of inactivity it automatically switches to an inactive state. In order to restart normal operation, it is necessary to turn the battery switch off and then back on. This function will preserve battery life should the switch be left in the ON position during inactivity.

Installation of the GX Simple Start Ignition Unit

While installing the ignition unit in your model, be careful to have all parts that are connected to the unit and the engine situated as far as practical from the radio receiver and radio antenna. Secure the ignition unit to the airframe using the provided hardware. Install the bolts through the three rubber grommets and tighten securely. The grommets help to dampen the ignition unit from vibration. **DO NOT HARD MOUNT.** The throttle servo should be mounted a distance of 8–12 inches from the engine. The spark plug cable must not touch any part of the model structure as vibration may damage the cable. If this is not practical, it will be necessary to provide an insulation material for the cable. All components must be protected from contact with engine fuel.



Package Contents

- ignition
- LED
- programming connector
- manual

DESCRIPTION

The ICU-L ignition makes the selection of a pre-ignition curve ("short" or "long" exhaust stroke) possible. You can change the setting using the supplied programming connector.

The setting is permanently stored in the memory of the ignition even if the supply voltage is turned off. You do not need to turn the ignition on again.

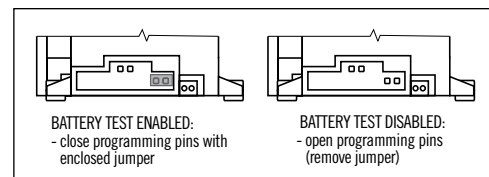
BASIC FEATURES

- Two preprogrammed pre-ignition curves ("short," which is the default setting, and "long," for tuned silencer)
- Sleep mode after 90 seconds of engine inactivity to save battery power
- Ignition shuts off if the engine runs counterclockwise

Enabling or Disabling Battery Test

This ignition makes it possible to enable or disable the battery test. The battery test is very useful when Li-Po or Li-Ion batteries are used. During the test, a series of flashes are generated and voltage is measured. When the battery passes the test, that means it will run for a minimum of 10 minutes in flight.

- Battery test is disabled when jumper is removed and programming pins are open (this is the default condition of the engine as shipped from Evolution)
- Battery test is enabled when jumper is plugged and programming pins are closed
- Enable or disable battery test when the ignition is off



Enabling or Disabling Battery Test, Continued

Ignition System Warning

When using the GX electronic ignition, it is designed to fire the spark plug for 1 second to check the condition of the battery prior to starting the engine. If the engine is in the compression position (i.e., the piston is above the exhaust port in either the up OR down part of the stroke), any compressed fumes may ignite, causing the propeller to turn and possibly the engine to start unintentionally.

To prevent injury with the Evolution Gasoline GX Ignition System, the Ignition Power Switch must be turned off first; then check to see that the piston is in the Bottom Dead Center (BDC) position. (Bottom Dead Center can be found by rotating the propeller through the compression

stroke. As you rotate the propeller you will feel it tighten, then suddenly loosen. Once the turn becomes very easy, you have completed the compression stroke and are at BDC.) Once you are sure the piston is in this position, you may turn on the ignition power switch and operate the system safely.

As always, it is important to use extreme care when near or with engines, fuel and propellers. Please use caution when working with these components. If you have any questions or concerns, please contact the Horizon Support Team at 1-877-504-0233 or productsupport@horizonhobby.com.

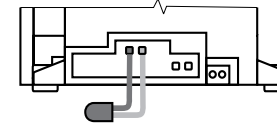
If you want to change the type of silencer, do the first two steps and then continue to PROGRAMMING SEQUENCE. Otherwise, follow these steps:

FIRST STEP

- Screw on pickup on engine
- Attach the plastic protection to the high-voltage cable
- Connect boot to plug
- Mount ground terminal on the high-voltage cable bolt holding the engine to the motor mount
- Mount the ignition to the airplane

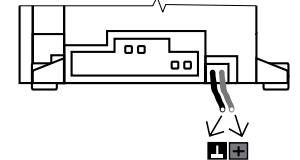
SECOND STEP

- Connect enclosed LED to the ignition (red or red/black wire to left)



START

- Keep clear of the propeller
- Connect battery with the ignition box



Starting Sequence

- Move propeller to put the piston at bottom dead center of its travel
- Keep your hands outside of the propeller radius to avoid serious injury
- Hold the airplane and switch on ignition

- If battery test is enabled, the ignition starts battery test; during this test, a series of sparks are generated for about 2 seconds and LED is blinking
- If battery test is disabled, then LED blinks for about 2 seconds
- If LED turns off, you can fly; otherwise battery is low

WARNING

Use the ignition only in dry conditions
Use recommended number and type of cells for every ignition type
The product is specified for RC engines only (other use must be approved by the manufacturer)
Do not take off the plug cap if the ignition is on
Danger of electric injury (voltage over 20,000V)
Recharge ignition battery only outside the model
Because of possible interferences, ignition and battery should be placed at least 25 cm from the receiver

The manufacturer is not responsible for damages caused by not following the manual or by using the ignition for anything other than RC engines. Guarantee is void if the high-voltage (HV) cable or HV isolation is damaged, the pickup or batteries are reversed, or the ignition box is opened.

Ignition Programming Sequence

Changing the Ignition Timing

If using the battery test function

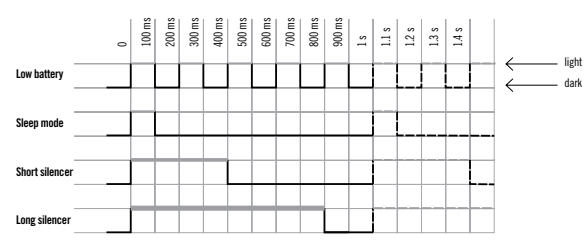
- Make sure plug cap is attached to the plug
- Turn on ignition and power up
- Wait about 90 seconds until sleep mode is active; LED will begin flashing once per second
- If battery test is enabled (jumper is plugged) remove the jumper from programming pins
- Wait about 3 seconds; a flashing sequence changes itself
- Unplug battery
- Plug jumper back (to enable battery test)

If not using the battery test function

- If battery test is disabled (jumper is removed), plug the jumper to programming pins
- Wait about 3 seconds until flashing sequence changes
- Unplug battery
- Unplug jumper back (to disable battery test)

To change silencer type, repeat the procedure again:
short muffler ⇨ tuned pipe ⇨ short muffler, etc.

LED Blinking Types



LED Blinking Indication

Type	Problem	Solution
Fast blinking (after power up)	Battery test is running	Wait a while
Fast blinking (5 sec after power up)	Battery voltage is low	Charge battery/Voltage is lower than 6.5V
One short flash per second	Sleep mode spark is blocked	Unplug battery and reconnect it again

Starting the Engine

The new Evolution Engine carburetor comes adjusted to a basic setting. This setting should be maintained during the initial break-in runs.

Before you first start the engine, make sure that the spark plug is screwed in and tightened and the plug socket is fitted in place and fastened down properly. Fix the ignition sensor in the proper position above the magnet with the screws enclosed. Follow the directions in the Ignition System addendum to program the ignition module in your model.

Important: Never turn the engine over with the ignition turned on unless the spark plug is inserted in the plug socket. This could lead to ignition damage.

Technical Data

Version	
Weight	190 g
Power supply	2x Li-Ion/LiPo* 6.0V 6x NiCd / NiMH* 8.4V
Minimal battery voltage*	6.0V*
Maximum battery voltage*	8.4V*
Sleep mode after 90 seconds of engine inactivity	
Battery level signalization *	
Ignition goes off if engine runs counterclockwise	
Choice of preignition curve	
Preignition point	5°
Location of the magnet	240° / 120°
Min. battery capacity	1Ah

* if battery test is enabled

Never use ignition with plug cap removed from plug! Before first flight, do a range check with running engine.

Starting the Engine, Continued

Starting and Choke Valve Operation

- 1) When you are ready to start your engine, make sure the ignition is switched off, the choke valve is closed and the throttle valve is partly open. Confirm that fuel is filling the fuel line to the carburetor then switch the ignition to the on position. Flip the propeller smartly until the engine fires. With the choke in the closed position, the engine will fire then quit.
- 2) Open the choke valve and set the throttle at a slightly high-idle position. Be sure to have a helper hold the model securely. Give the propeller a few quick flips. When the engine starts, allow it to idle for 30–45 seconds in order for it to warm up to operating temperature. At this point you can proceed to test the carburetor settings before flying your model. See the following section regarding carburetor adjustment.
- 3) If the engine does not start, leave the throttle at the high-idle position, turn the ignition off, then on and close the choke valve. Start the engine with throttle at the fast-idle position and the choke valve closed. The engine should fire and quit. If it does, repeat step 2 above.
- 4) At this point, if the engine still will not start, unscrew the spark plugs and check the contacts. Clean any possible excess fuel (an indication of engine flooding) and screw them in again. Further starting should only be done with the throttle at idle position and the choke in the open position. If the plug is dry, then probably not enough fuel has been drawn into the carburetor. If that is the case, check for proper fuel feed and then return to the instructions given in paragraph 1.

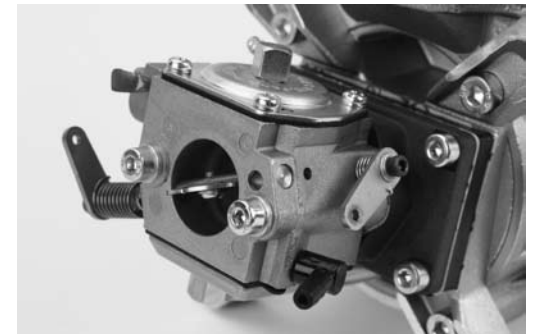
Having started the engine, leave it running for about 5 minutes at a higher idle speed. Then run it for about 20 minutes, while changing revolutions from idle to 1/2–3/4 of the range and shortly holding each position—gradually prolong the holding periods. After 10 minutes of operation, open the throttle to maximum for a period of about one minute. At this point, stop the engine and let it cool down. Then restart it and check the adjustment. If everything is all right, you can make your first flight. During the first few flights, do not overload the engine and do not let it run at high revolutions for long periods of time (very important during hot weather). Use up all the fuel that was mixed with the oil that is included with your engine. From then on, fuel and oil should be mixed in the proportion 40:1.

Carburetor Adjustment

First, start and warm the engine for 30–45 seconds before attempting to adjust the carburetor. In order to confirm your engine is properly adjusted, you should follow the procedure below.

- 1) Move the throttle from idle to 2/3 of the full throttle position quickly (fast acceleration). Then repeat three times – if the engine accelerates smoothly, go to step 3 below. If acceleration is not smooth, go on to step 2.
- 2) Faulty acceleration and a tendency to quit is usually attributable to a poor fuel mixture in the medium rpm range. Stop the engine and recheck the fuel feed (the fuel line must not be pinched or broken). Restart the engine and test acceleration again. If the problem persists, adjust the carburetor. Open the low-speed needle by 1/8 turn and retest. If acceleration is smooth, open the needle by another 1/8 turn—this should be done because the needle was previously set too lean; if atmospheric conditions have changed recently you may have to readjust the needle. If the engine continues to not accelerate properly, open the low-speed needle by 10 minutes. If the engine's operation does not improve, shut it off and check the basic setting, restart the engine and test the acceleration. If the engine runs correctly, go to step 3. If it continues to not accelerate properly, open the low-speed needle by another 10 minutes. If acceleration is faulty, the defect is likely to lie somewhere other than an incorrect adjustment.
- 3) If the engine accelerates correctly, according to the above test, set it at idle speed and accelerate to full speed. Repeat twice more. If the engine functions correctly, go to step 4. If it cuts out, open the low-speed needle by another 1/8 turn more.
- 4) If the engine reacts correctly set it at full speed. If revolutions do not drop, the engine has been adjusted successfully. If revolutions seem to drop, open the high-speed needle by approx. 5–10 minutes.

CAUTION The engine must be stopped while you adjust the carburetor in order to prevent injury by the propeller.



Carburetor Adjustments 806X

Basic setting:
Adjust needle (L) for low rpm range 1 turn and 55 minutes.
Adjust needle (H) for high rpm 1 turn and 15 minutes.

Troubleshooting Guide

If the engine does not start

- check and use a new spark plug if needed.
(Check the spark: Put the plug into the cable end and by turning the engine you'll see the necessary spark. Note: The plug must touch a metal part of the engine.)
- check fuel lines.
- check for proper mechanical function by turning the engine over.
- check that the carburetor is correctly installed.
- remove the carburetor cover from the feed side; check the filter and blow off carburetor with compressed air (⚠CAUTION: When using compressed air, use eye protection.); when reassembling be careful to maintain the proper order of the components.
- check the vacuum feed line.

Mechanical Faults

If the engine can not be turned over easily

- a likely cause is the piston in the cylinder is seized: loosen and unscrew the cylinder bolts.
- carefully remove the cylinder.
- visually examine the piston and crankcase to find the likely cause of the engine's mechanical problem.

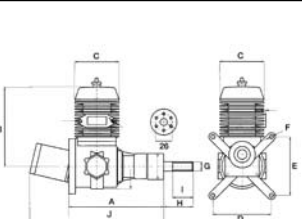
Note: Mechanical repairs must always be completed by a professional service department.

Engine Specifications

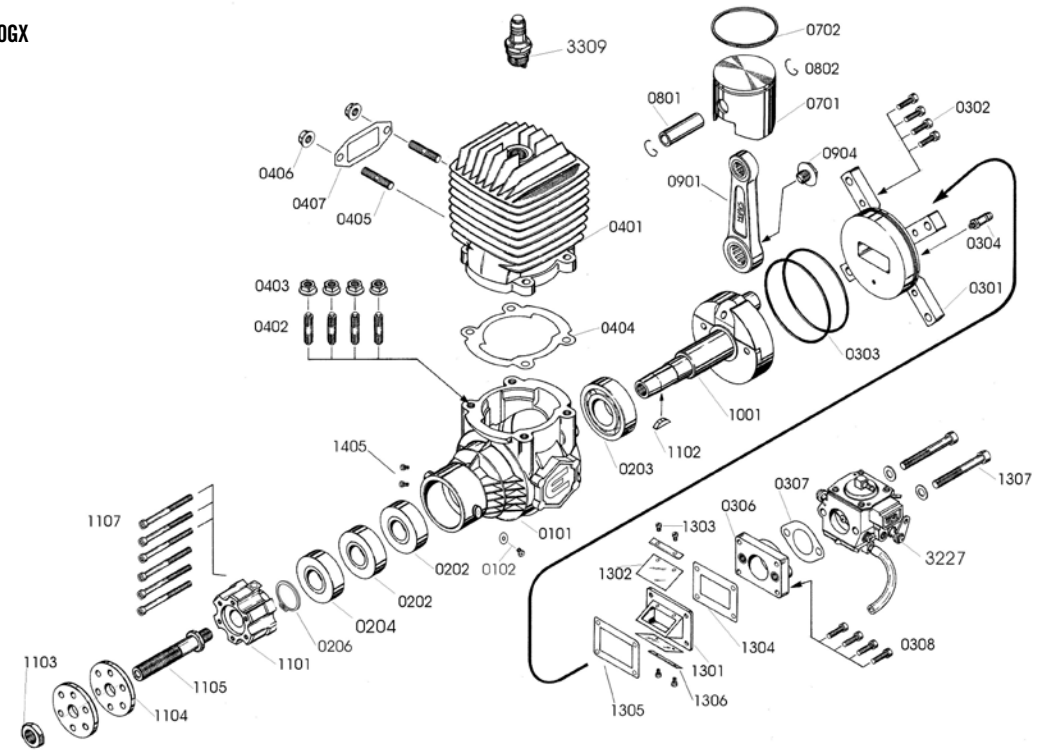
Bore	48mm	RPM range	1000–7500 rpm
Stroke	44mm	Fuel	Unleaded 91-octane
Displacement	80cc / 4.9 cu in	Lubrication Break-in	Oil with gasoline in mixture 1:30
Weight without ignition*	2220 g / 78.3 oz	Lubrication/Standard	Oil with gasoline in mixture 1:40
Weight of ignition unit	190 g / 6.7 oz		

* The value in the table above stands for the weight of a completely assembled engine, including the spark plug, carburetor, drive washer and prop screws.

80GX Evolution Engine Dimensions

	A mm	B mm	C mm	D mm	E mm
	157	148	83	90	90
F mm	G mm	H mm	I mm	J mm	
6.6	M10x1	55	26	204	

80GX



Part #	Description	Part #	Description	Part #	Description
EVO30070101	Crankcase	EVO30010406	Exhaust Nut	EVO30101107	Propeller Screw Set
EVO30070202	Front Bearing	EVO30070407	Exhaust Flange Gasket	EVO30070306	Carburetor Flange
EVO30070203	Rear Bearing	EVO30070701	Piston	EVO30010307	Carburetor Flange Gasket
EVO30070204	Packing	EVO30070702	Piston Ring	EVO30070308	Carburetor Flange Screw Set
EVO30070206	Crankshaft Retaining Ring	EVO30070801	Piston Pin	EVO30101301	Reed Valve Case
EVO30070301	Rear Cover	EVO30070802	Piston Pin Retainer	EVO30101302	Reed Valve
EVO30010302	Rear Cover Screw Set	EVO30070951	Connecting Rod	EVO30011303	Reed Valve Screws
EVO30070303	Rear Cover O-Ring	EVO30010904	Connecting Rod Washer	EVO30101304	Reed Valve Gasket (Upper)
EVO30940304	Pressure Nozzle	EVO30071001	Crankshaft	EVO30101305	Reed Valve Gasket (Bottom)
EVO30940305	Pressure Nozzle Gasket	EVO30050102	Crankcase Screw Set	EVO30101306	Reed Valve Strap
EVO30070401	Cylinder	EVO3007i1101	Prop Drive Washer 80GX	EVO30071307	Carburetor Bolt/Screws (2pcs)
EVO30010402	Cylinder Screw Set	EVO30041102	Drive Washer Key	EVO3314LB	Electronic Ignition Unit Type 2
EVO30010403	Cylinder Nut	EVO30011103	Propeller Nut	EVO30013309	Spark Plug (Sm Cap)
EVO30070404	Cylinder Gasket	EVO30071104	Propeller Washer	EVO30941405	Ignition Sensing Fixing Screws
EVO30010405	Exhaust Screw Set	EVO30011105	Propeller Screw	EVO3227	Carburetor

Warranty Period

Exclusive Warranty- Horizon Hobby, Inc., (Horizon) warranties that the Products purchased (the "Product") will be free from defects in materials and workmanship for a period of 2 years from the date of purchase by the Purchaser.

2 Year Limited Warranty

Horizon reserves the right to change or modify this warranty without notice and disclaims all other warranties, express or implied.

(a) This warranty is limited to the original Purchaser ("Purchaser") and is not transferable. REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. This warranty covers only those Products purchased from an authorized Horizon dealer. Third party transactions are not covered by this warranty. Proof of purchase is required for warranty claims. Further, Horizon reserves the right to change or modify this warranty without notice and disclaims all other warranties, express or implied.

(b) Limitations- HORIZON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCT. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.

(c) Purchaser Remedy- Horizon's sole obligation hereunder shall be that Horizon will, at its option, (i) repair or (ii) replace, any Product determined by Horizon to be defective. In the event of a defect, these are the Purchaser's exclusive remedies. Horizon reserves the right to inspect any and all equipment involved in a warranty claim. Repair or replacement decisions are at the sole discretion of Horizon.

This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of or to any part of the Product. This warranty does not cover damage due to improper installation, operation, maintenance, or attempted repair by anyone other than Horizon. Return of any goods by Purchaser must be approved in writing by Horizon before shipment.

Damage Limits

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCT, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY. Further, in no event shall the liability of Horizon exceed the individual price of the Product on which liability is asserted. As Horizon has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability. If you as the Purchaser or user are not prepared to accept the liability associated with the use of this Product, you are advised to return this Product immediately in new and unused condition to the place of purchase.

LAW: These Terms are governed by Illinois law (without regard to conflict of law principals).

Safety Precautions

This is a sophisticated hobby Product and not a toy. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the Product or other property. This Product is not intended for use by children without direct adult supervision. The Product manual contains instructions for safety, operation and maintenance. It is essential to

read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or injury.

Questions, Assistance, and Repairs

Your local hobby store and/or place of purchase cannot provide warranty support or repair. Once assembly, setup or use of the Product has been started, you must contact Horizon directly. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance.

For questions or assistance, please direct your email to productsupport@horizonhobby.com, or call 877.504.0233 toll free to speak to a service technician.

Inspection or Repairs

If this Product needs to be inspected or repaired, please call for a Return Merchandise Authorization (RMA). Pack the Product securely using a shipping carton. Please note that original boxes may be included, but are not designed to withstand the rigors of shipping without additional protection. Ship via a carrier that provides tracking and insurance for lost or damaged parcels, as Horizon is not responsible for merchandise until it arrives and is accepted at our facility. A Service Repair Request is available at www.horizonhobby.com on the "Support" tab. If you do not have internet access, please include a letter with your complete name, street address, email address and phone number where you can be reached during business days, your RMA number, a list of the included items, method of payment for any non-warranty expenses and a brief summary of the problem. Your original sales receipt must also be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

Warranty Inspection and Repairs TO RECEIVE WARRANTY SERVICE, YOU MUST INCLUDE YOUR ORIGINAL SALES RECEIPT

verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be repaired or replaced free of charge. Repair or replacement decisions are at the sole discretion of Horizon Hobby.

Non-Warranty Repairs

Should your repair not be covered by warranty, the repair will be completed and payment will be required without notification or estimate of the expense unless the expense exceeds 50% of the retail purchase cost. By submitting the item for repair you are agreeing to payment of the repair without notification. Repair estimates are available upon request. You must include this request with your repair. Non-warranty repair estimates will be billed a minimum of ½ hour of labor. In addition you will be billed for return freight. Please advise us of your preferred method of payment. Horizon accepts money orders and cashiers checks, as well as Visa, MasterCard, American Express, and Discover cards. If you choose to pay by credit card, please include your credit card number and expiration date. Any repair left unpaid or unclaimed after 90 days will be considered abandoned and will be disposed of accordingly. **Please note: non-warranty repair is only available on electronics and model engines.**

United States:

Electronics and engines requiring inspection or repair should be shipped to the following address:

**Horizon Service Center
4105 Fieldstone Road
Champaign, Illinois 61822 USA**

All other Products requiring warranty inspection or repair should be shipped to the following address:

**Horizon Product Support
4105 Fieldstone Road
Champaign, Illinois 61822 USA**

Please call 877-504-0233 or e-mail us at productsupport@horizonhobby.com with any questions or concerns regarding this product or warranty.

United Kingdom:

Electronics and engines requiring inspection or repair should be shipped to the following address:

**Horizon Hobby UK
Units 1-4 Ployters Rd
Staple Tye
Harlow, Essex
CM18 7NS
United Kingdom**

Please call +44 (0) 1279 641 097 or e-mail us at sales@horizonhobby.co.uk with any questions or concerns regarding this product or warranty.

Germany:

Electronics and engines requiring inspection or repair should be shipped to the following address:

**Horizon Technischer Service
Hamburger Strasse 10
25335 Elmshorn Germany**

Please call +49 4121 46199 66 or e-mail us at service@horizonhobby.de with any questions or concerns regarding this product or warranty.

Compliance Information for the European Union



Instructions for Disposal of WEEE by Users in the European Union

This product must not be disposed of with other waste. Instead, it is the user's responsibility to dispose of their waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or where you purchased the product.

Declaration of Conformity

(in accordance with ISO/IEC 17050-1)

No. HH20091204U1

Product(s): Evolution Gas Engine
Item Number(s): EVOE80GX

The object of declaration described above is in conformity with the requirements of the specifications listed below, following the provisions of the European EMC Directive 2004/108/EC:

EN55022 Radio disturbance characteristics
EN55024 Immunity characteristics

Signed for and on behalf of:
Horizon Hobby, Inc.
Champaign, IL USA
Dec 04, 2009

Steven A. Hall
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