



KP-SE-TF

SMALL ENGINE KIT (PROPANE, NATURAL GAS OR GASOLINE)

1. FIRST, BEFORE INSTALLATION GIVE THE ENGINE A GOOD LOOK OVER. CHECK ENGINE COMPRESSION AND DO A COMPLETE TUNE UP.
 2. WE WILL ONLY DRY FIT THE UNIT TO GIVE YOU AN IDEA OF WHAT THE SYSTEM WILL LOOK LIKE. YOU WILL HAVE TO TIGHTEN ALL FITTINGS AND ASSEMBLE THE UNIT TOGETHER BECAUSE WE DO NOT KNOW WHAT POSITION YOU NEED TO HOOK UP YOUR HOSES. YOU WILL NEED TO USE SOME SORT OF TEFLON SEALANT.
 3. THERE ARE DIFFERENT STYLE LP ADAPTORS AS SEEN IN THE SCHEMATIC. THERE IS A LITTLE MODIFYING THAT HAS TO BE DONE SOMETIMES BECAUSE THE LP ADAPTOR IS DESIGNED FOR THE ENGINE, NOT FOR WHAT IT IS USED IN.
 4. THE POWER ADJUSTMENT WILL SOMETIMES BE AT THE ADAPTOR INLET OR ON THE REGULATOR OUTLET. WHEN **ADJUSTING THE POWER ELBOW** "IN" WILL DECREASE FUEL (LEAN), "OUT" WILL INCREASE FUEL (RICH—THIS IS FOR SETTING THE UNIT UNDER A LOAD).
 5. WHEN **ADJUSTING IDLE ON THE REGULATOR** "IN" IS RICH , "OUT" IS LEAN.
 6. TRY TO KEEP THE REGULATOR AS CLOSE TO THE ADAPTOR AS POSSIBLE WITH OUT OBSTRUCTION SO THAT YOU GET A GOOD SIGNAL FROM THE LPG REGULATOR TO THE LPG ADAPTOR. WE SUPPLY 36" OF VAPOR HOSE JUST IN CASE BUT SUGGEST YOU SHOULD KEEP IT UNDER 12".
 7. BEFORE TRYING TO START THE ENGINE, MAKE SURE YOU USE A SOAPY SOLUTION TO CHECK FOR LEAKS.
 8. ALSO, OPEN THE POWER ELBOW AND HAND TIGHTEN BECAUSE YOU WILL NEED TO ADJUST. DON'T TRY TO ADJUST THE IDLE MIXER SCREW ON THE REGULATOR FIRST BECAUSE THEY ARE SET UP AT THE FACTORY (IT DOESN'T MEAN THAT IT WILL NOT HAVE TO BE ADJUSTED) THIS JUST GIVES YOU A GOOD START.
HOPEFULLY YOU HAVE ELECTRIC START. IF NOT, GET READY TO PULL A LOT. THERE IS A FINE LINE ON THESE TWO ADJUSTMENTS AND THEY ARE VERY SENSITIVE.
WHEN SWITCHING FROM GAS TO PROPANE, SHUT OFF GASOLINE SUPPLY AND RUN IT OUT OF GAS.
WHEN SWITCHING FROM PROPANE TO GASOLINE, SHUT OFF PROPANE SUPPLY AND RUN IT OUT OF PROPANE.
9. IF YOU HAVE ANY PROBLEM PLEASE CALL. **TOLL FREE: 866-PNG-PARTS (764-7278)**

PNG Technologies, LLC

5711 S. Sheldon Rd. • Canton, MI 48188

Phone: (734) 710-6662 • Fax: (734) 710-6666



- Over 80% of propane is from the USA!
- Propane is 30-35% cheaper than gasoline
- Because propane is a cleaner fuel, at 104 octane, the engine life lasts 3-4 times longer
- Propane does not tarnish nor gum up the
 - carburetor like gasoline does
- Propane doesn't go bad like gasoline.
 - It lasts FOREVER!

**CLEAN AIR
PROPANE
CONVERSIONS**

www.pngtechnologies.com

Toll Free: 866-PNG-PARTS (764-7278)

LAWN MOWER	GENERATOR	FORKLIFT	CONCRETE SAW	FLOOR BUFFER
				

also.. Older Vehicles (No Emission), Golf Carts, Tractors and more!

G-SE-TF CONTENTS:

(Please be sure to check that all items listed below are included in your kit.
If any parts are missing please contact us as soon as possible.)

HOSE, NUTS, BOLTS & ACCESSORIES



HOSE-VAP-1/2

1/2" Vapor Hose
(2 Cut Lengths)
Qty. 42"
Qty. 20"



N-B-1115

1/4-20 x 2"
Qty. 2



N-B-1100

1/4-20 Hex
Finish Nut
Qty. 2



N-B-1101

1/4" Split
Lock Washer
Qty. 2



N-B-1102

1/4" SAE
Flat Washer
Qty. 4



ACC-TS-8

Plastic Tie
Strap 8"
Qty. 4



CLAMP-7

Hose Clamp
5/16" to 7/8"
Qty. 4

PROPANE HIGH PRESSURE REGULATOR ASSEMBLY



INCLUDES THE FOLLOWING:

ACC-3001

(6oz High Pressure Regulator) - Qty. 1

ACC-POL

(POL Valve) - Qty. 1

FITT-3/8-1307

(3/8" NPT x 1/2" Hose, 180°, Brass) - Qty. 1

ADAPTOR



Adaptor—Varies Depending on Engine

Qty. 1

REGULATOR ASSEMBLY



INCLUDES THE FOLLOWING:

G-SE-KN-2

(6oz Low Pressure Regulator) - Qty. 1

G-SE-3/4-BV

(3/4" Ball Valve) - Qty. 1

FITT-3/4-2500

(3/4" x 1-1/2" Black Pipe Nipple) - Qty. 1

G-SE-43EA

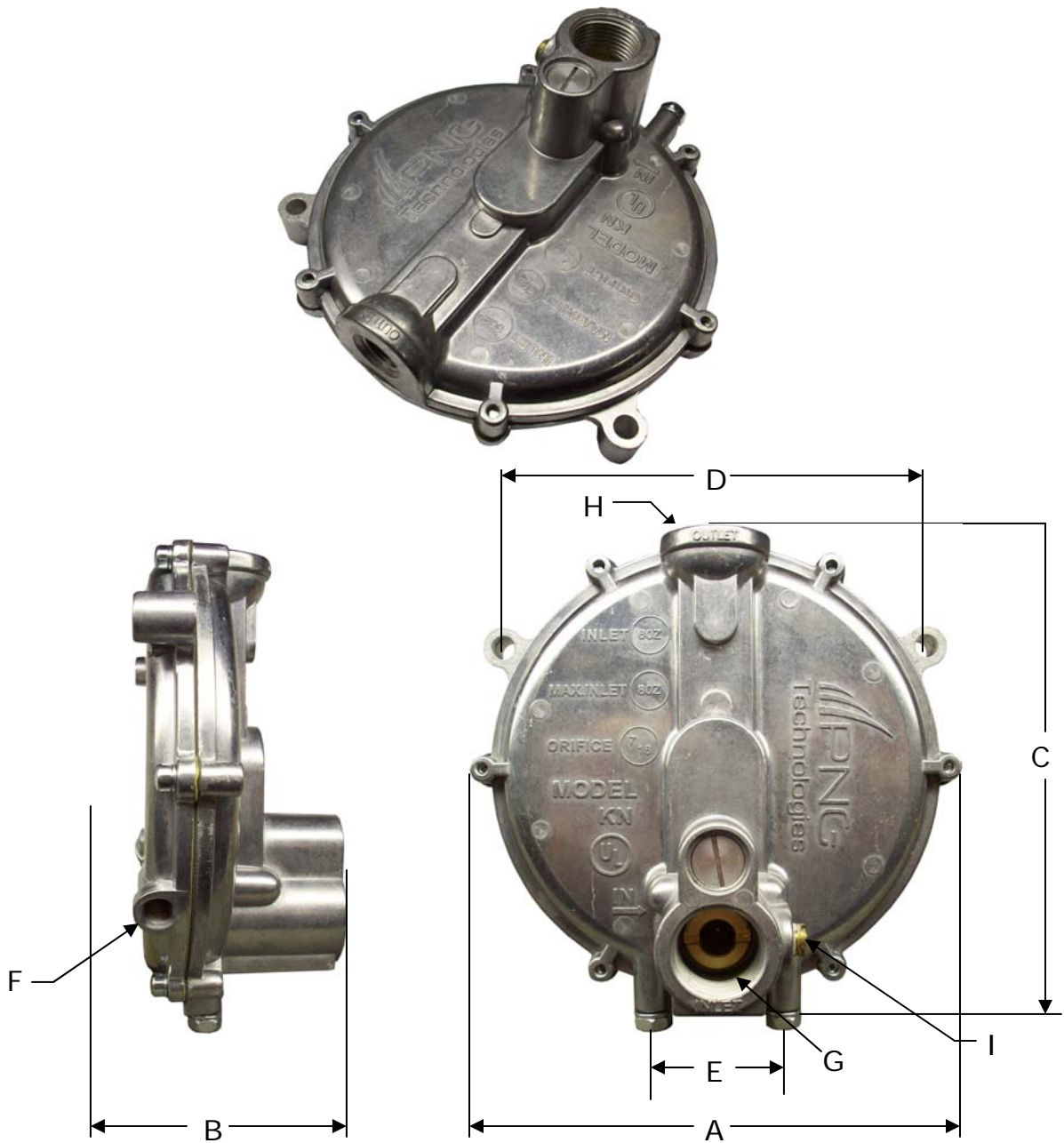
(1/2" Hose x 3/8" NPT Brass Power Elbow) - Qty. 1

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Model G-SE-KN-2 Series Regulator



Regulator Specifications

Overall Width	Overall Depth	Overall Height	Mounting Holes Center to Center	Air Vent	Vapor Fuel Inlet	Vapor Fuel Outlet	Test Port
A	B	C	D, E	F	G	H	I
6-1/4"	3-1/4"	6-1/2"	5-3/4"; 1-3/4"	1/8"	3/4"	3/8"	1/8"

Part Number	Description
G-SE-KN-1A	Regulator, 6 oz., Tamper Resistant, No Primer
G-SE-KN-2A	Regulator, 6 oz., Standard, with Primer
G-SE-KN-3A	Regulator, 6 oz., Tamper Resistant, with Primer
G-SE-KN-4A	Regulator, 6 oz., Standard, No Primer
ELEC-PR4604	Solenoid, Auto Primer

Model G-SE-KN-2 Series Regulator



No.	Part No.	Description	Qty.
1	G-C11-1	Cap, Adj. Screw, TR	1
2	G-S2-18	Screw, Lock, Adj. Spring	1
3	G-S2-11	Screw, Pressure Adj.	1
4	G-J1-3	Jet	1
5	G-W1-6	Seal, Jet	1
6	G-SE-14	Spring	1
7	G-P3-13	Plug, 1/8 NPT, Hex Head	1
8	G-B1-3	Standard Body	1

The following parts are an assembled item in the repair kit:

9*	G-S5-1	Seat	1
10*	G-W1-5	Washer, Seat Backup	1
11*	G-L1-5	Lever	1

12	G-P1-11	Pin, Lever Fulcrum	2
13	G-S10-11	Screw, #4-40 x 1/4" Pan Head	1
14*	G-P1-12	Pin, Connector	1
15*	G-D1-7A	Diaphragm Assy., Silicone	1
16	G-W1-27	Washer, Primer	1
17	G-C1-7	Cover, Back	1
18	G-S2-21	Spring, Primer	1
19	G-P1-1	Pin, Primer	1
20	G-S1-19	Screw, 1-24 x 5/8" Slotted Filister Head w/Split Lockwasher, SEMS	6

Repair Kit: G-SE-RK-KN-2
 * Indicates Repair Kit Components

General

The G-SE-KN-2 is designed for sensitivity and simple operation. It is used with low pressure vaporized gaseous fuels, where dependable starting is required. Because of its extreme sensitivity, the G-SE-KN-2 offers excellent results in most remote starting appli-

Warning!

Special Note: For indoor installations by NFPA definition, an atmospheric zero regulator is not considered a positive shut-off valve, and an approved automatic shut-off device shall be installed to assure that the flow of fuel

Operation

The G-SE-KN-2 is an atmospheric zero regulator which acts like the float. The needle valve in the carburetor creates a vacuum which acts through the outlet of the G-SE-KN-2 on the diaphragm. Atmospheric pressure then forces the diaphragm toward the vacuum, depressing the lever and pulling the valve seat away from the orifice which allows fuel to flow as long as the demand persists. When the vacuum ceases, a spring force pushes on the lever and forces the valve seat against the orifice shutting off the fuel flow. **It is important to remember that fuel should not flow through the G-SE-KN-2 when the engine is not running.** A properly adjusted G-SE-KN-2 requires a vacuum of only 0.25" to 0.35" of water column to start the opening sequence. Due to this sensitivity, most installations do not need priming to start unless low cranking speed or restricted and lengthy piping are required.

If priming is necessary and a manual primer is installed, use only 1 or 2 second bursts of fuel and immediately try to start the engine.

If there is a choke on the carburetor, do not use it as this will probably cause flooding and hard starting.

If you are having trouble operating the engine, in most cases the fuel controller is NOT malfunctioning. There is generally a problem with the engine or fuel supply, so do not make adjustments or attempt to service the G-SE-KN-2.

Installation

The G-SE-KN-2 should be mounted as close to the carburetor as possible with the arrow on the cover pointing up and the diaphragm in a vertical position. This helps to minimize the effects of gravity on diaphragm travel. The unit should also be placed for easy access to the primer if provided.

There are two sets of mounting holes provided. Either set of mounts will adequately support the G-SE-KN-2. The bottom set of holes have a 1-3/4" bolt spacing. The mounting bosses on cover are spaced 5-3/4" apart for use with 5/16" bolts.

Vapor Hose



Hose Clamps / Nuts & Bolts



Tie Straps



20" Vapor Hose



Your Kit Will Include One Of These 2 Styles Of Adaptors

To Tank



Propane High Pressure Regulator Assembly

Mounting Holes



G-SE-KN-2 Regulator Assembly

Mounting Bolts

Mounting Bolts

42" Vapor Hose





EXAMPLE PICTURE

Adaptor

NOTICE HOW THE ORIGINAL
FRAME BAR ON THE FAR RIGHT
HAS THE CURVE ON THE BOTTOM -
WHEN MODIFYING, YOU CUT THIS
PART OF THE BAR AND FLIP TO
HAVE THE CURVE ALONG
THE TOP OF THE UNIT

MODIFIED FRAME

FRAME BAR
-BEFORE MODIFICATION-

EXAMPLE PICTURE

