

# CONVERSION KIT INSTRUCTION MANUAL

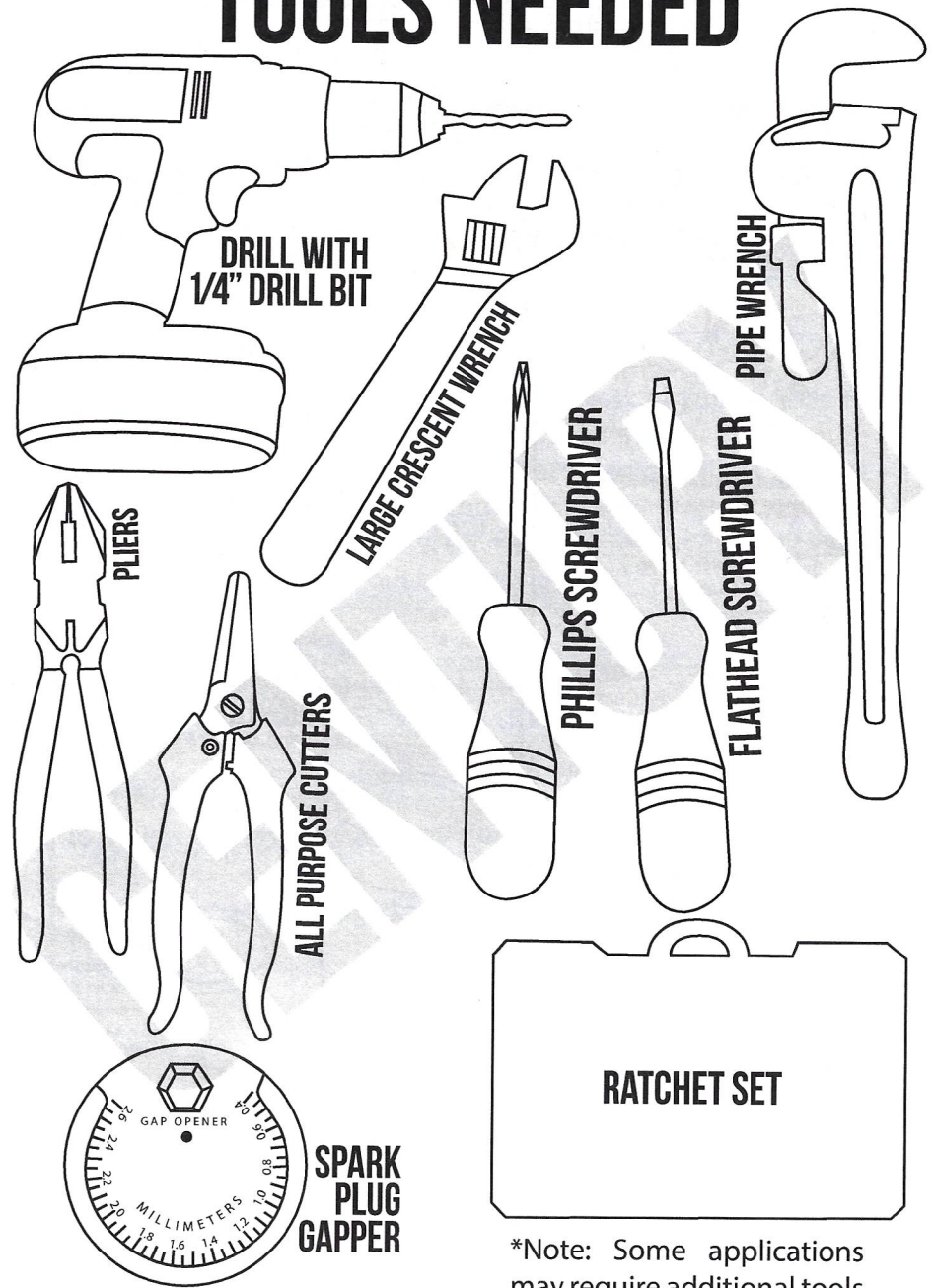
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# TOOLS NEEDED

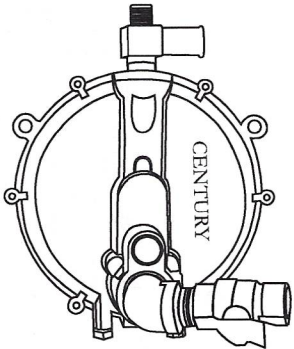


\*Note: Some applications may require additional tools

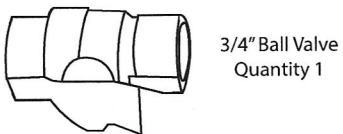
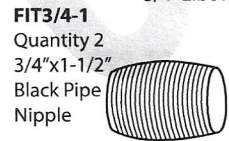
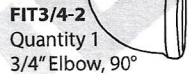
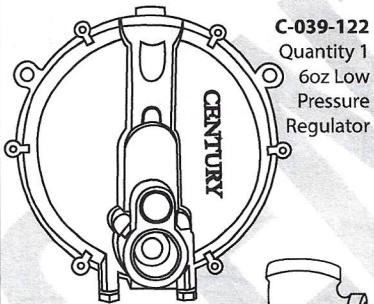
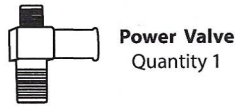
# SEK-4A CONTENTS

Please be sure to check that all items listed below are included in your kit.

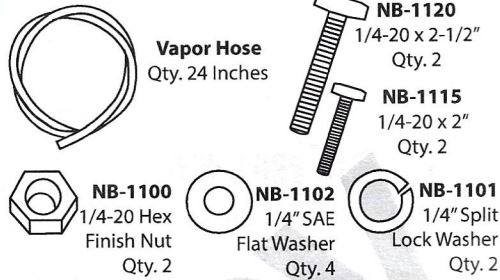
## REGULATOR ASSEMBLY



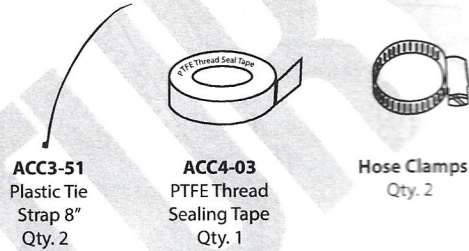
**THE REGULATOR ASSEMBLY INCLUDES THE FOLLOWING:**



## HOSE, NUTS & BOLTS

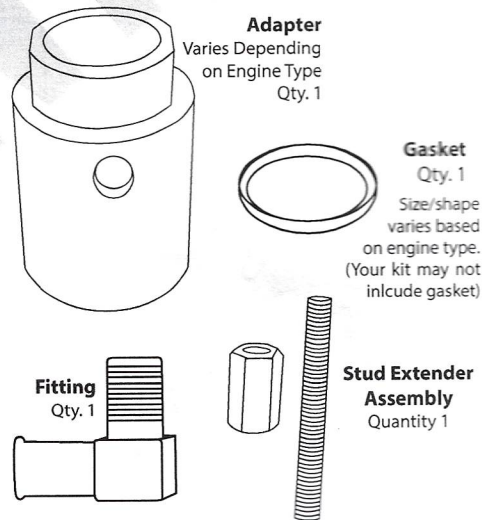


## ACCESSORIES



## ADAPTOR

Includes fitting, gasket & studs



# PREPARING GENERATOR/ENGINE

## \*IMPORTANT NOTE\*

The C-039-122 Regulator's Fuel Inlet ONLY accepts fuel pressure of 6-8 ounces per square inch [equivalent to 11-12 inches of water column]. Higher pressures WILL cause damage to regulator. For other pressures consult factory.

## INTRODUCTION

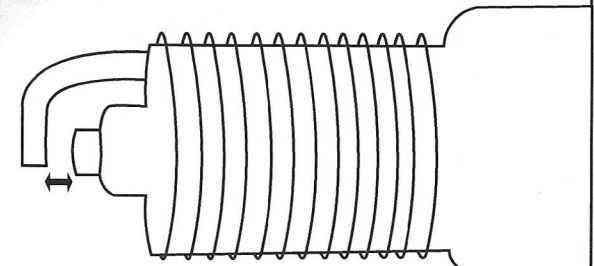
Before beginning the conversion process, run generator to break in motor (if new generator). Duration varies (minimum 2-4 hours) - please review the generator's instructions. To start the conversion process move choke/any other levers away from the air cleaner assembly. Shut off fuel valve for gas (if applicable) and run the carburetor out of gas.

## CHANGE GAPING ON SPARK PLUG

You need to take down spark by ten thousandths of an inch.

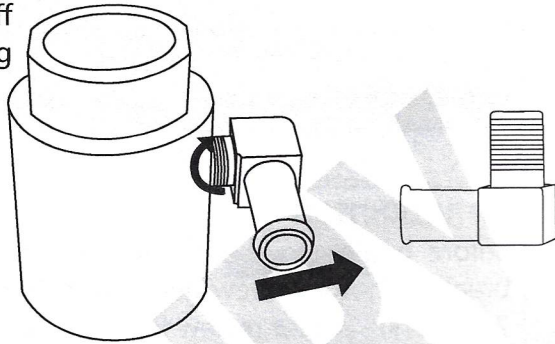
\*TIP: An average spark plug gapping is .035 of an inch. You need to make it .025 of an inch.

\*Note: If generator is used, replace the spark plug.

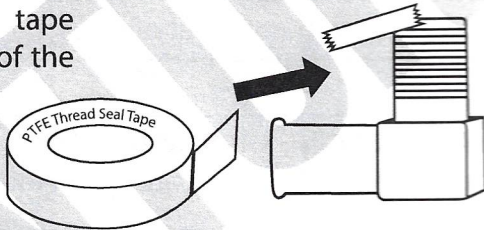


## STEP 1 PREPARING THE FUEL ADAPTER

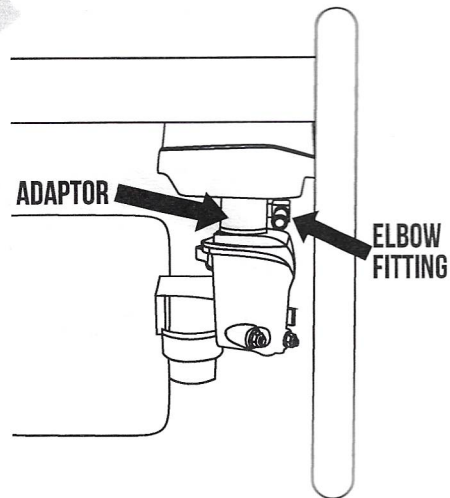
1.1 Take elbow fitting off of adapter by unscrewing it.



1.2 Put pipe sealant tape (ACC4-03) on the edge of the fitting's threads.



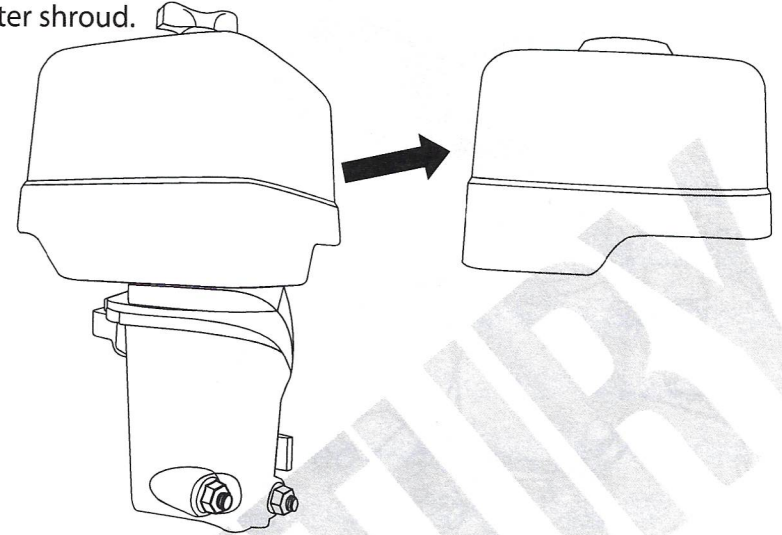
1.3 Screw elbow fitting back in with a wrench to be angled, so that it is pointing away from the generator.



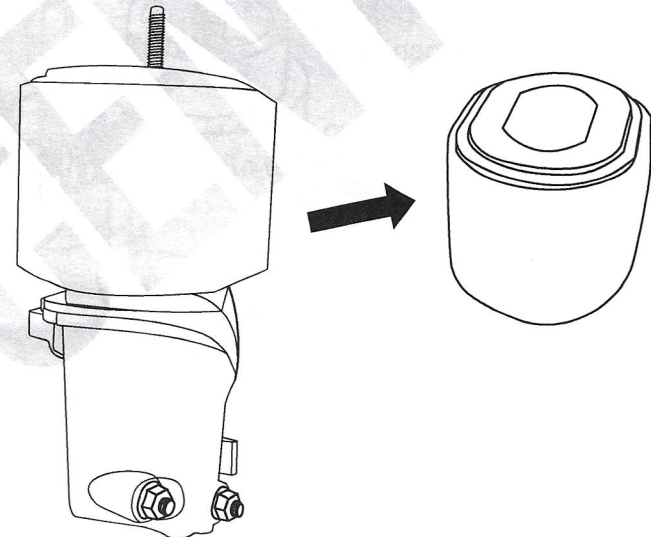
\*TIP: Usually you can angle it so it is parallel with air cleaner and is pointing left.

## STEP 2 MOUNTING THE FUEL ADAPTER

2.1s Unscrew and remove air cleaner outer shroud.



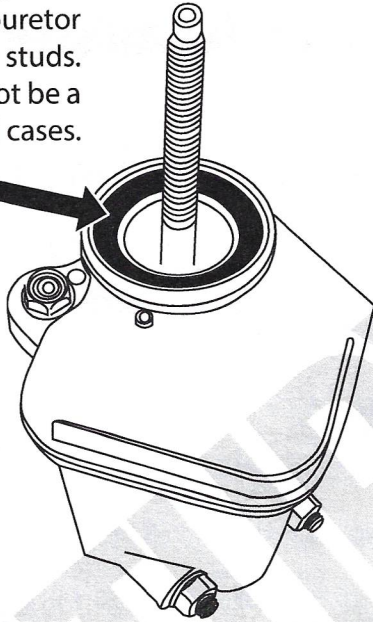
2.2s Remove air filter



2.3s Leave original gasket in place on carburetor studs.

\*Note: There may not be a gasket in all cases.

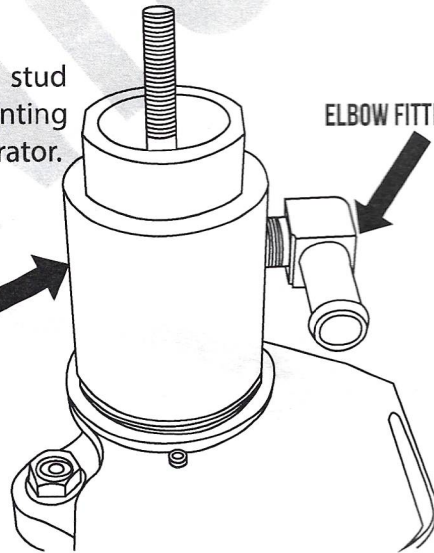
ORIGINAL GASKET



2.4s Slide adapter onto the stud with the elbow fitting pointing outwards away from the generator.

ELBOW FITTING

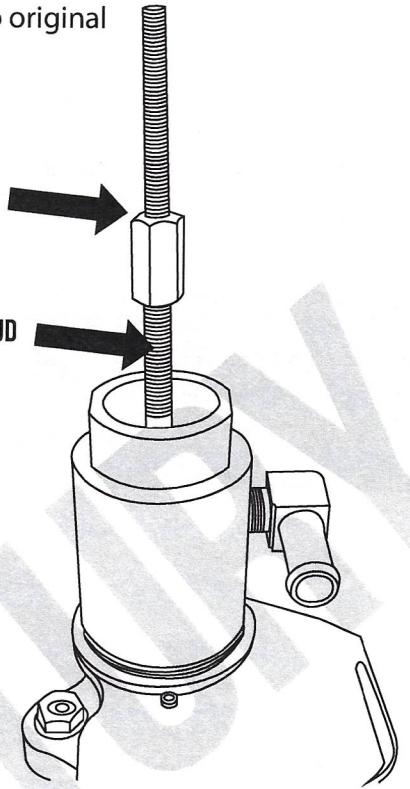
ADAPTER



2.5s Screw stud extender on to original stud.

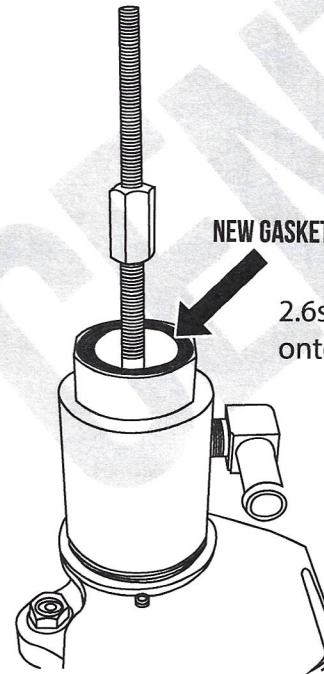
STUD EXTENDER

ORIGINAL STUD



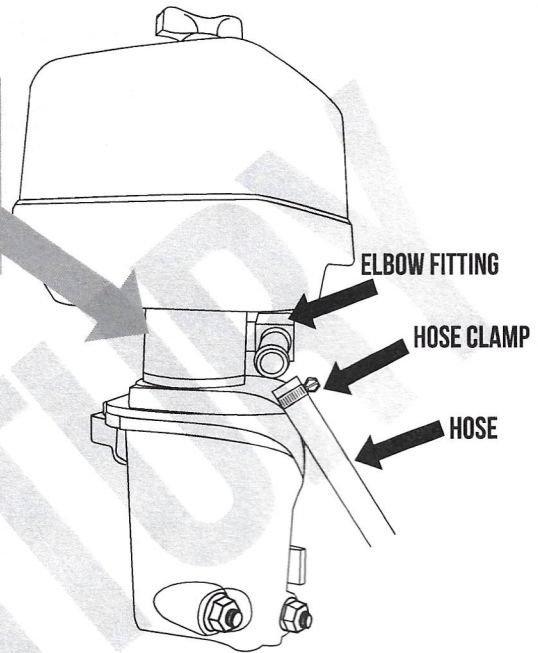
NEW GASKET

2.6s Slide new gasket that came in the kit onto the stud extenders. (If applicable)



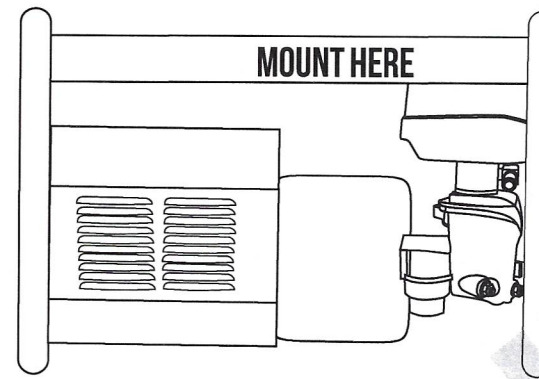
2.7s Reassemble air cleaner assembly in reverse order that is described in steps 2.1s and 2.2s.

**\*Note:** Air cleaner will have a gap causing it to stick up higher than original position due to adapter being in place.



2.8s Attach and tighten hose clamp on to fitting.

## STEP 3 PREPARING/MOUNTING THE FUEL REGULATOR

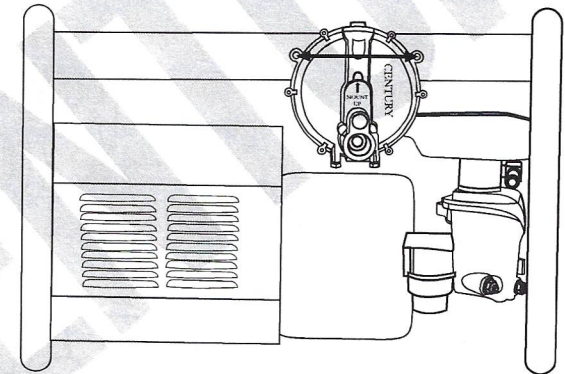


3.1 Place regulator (C-039-122) onto frame on the same side as adapter.

**\*TIP:** You may mount regulator anywhere within 19" of adapter. It is recommended that you mount it as close as possible.

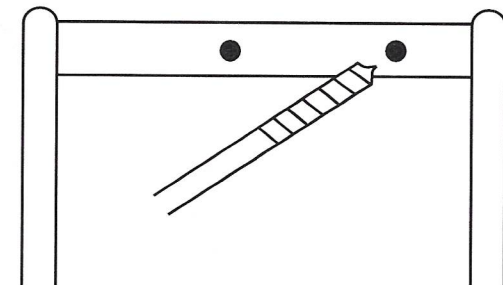
3.2 Use a marker to mark placements for top two mounting ears.

**\*TIP:** The regulator has to be pointing vertical (up).



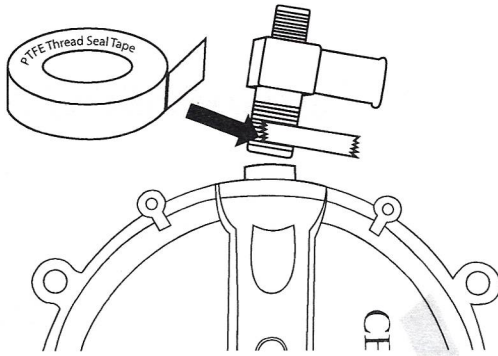
3.3 Drill holes on markings using a 1/4" metal drill bit.

**\*TIP:** DO NOT drill into the gas tank (Remove gas tank before drilling if necessary)



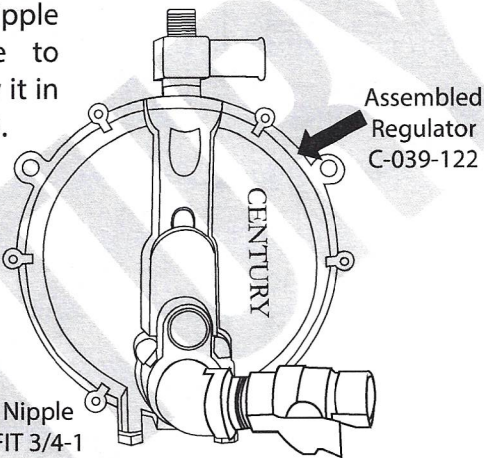
Use as a guide to mark 6" Center to Center Distance to mount the regulator

3.4 Take elbow fitting with power valve and screw on to top of regulator pointing in the direction of the adapter.



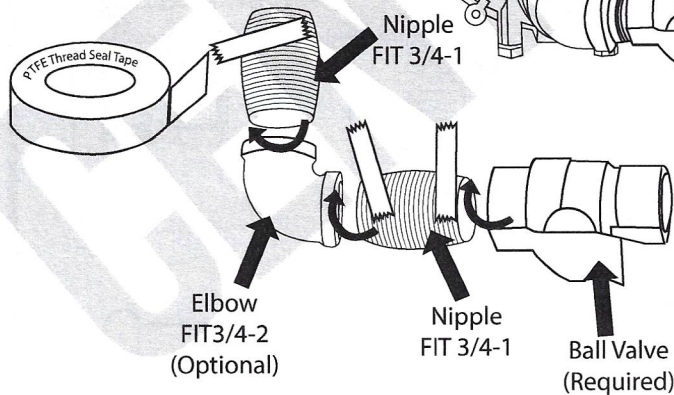
\*TIP: Be sure to put pipe sealant thread (ACC4-03) on it.

3.5 Screw together nipple (FIT3/4-1) and ball valve to desired direction and screw it in to the regulator (C-039-122).

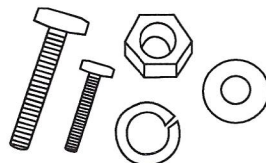


\*TIP: Be sure to use pipe sealant thread on all connections.

\*TIP: Ball valve MUST be on. You can add in elbow if need be.

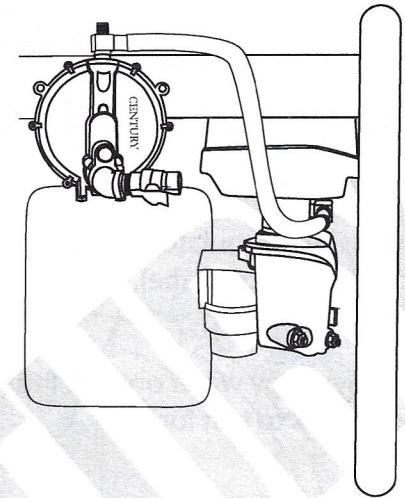


3.6 Use bolts, nuts and washers that were included in kit to mount regulator to the frame. (NB-1120, NB-1115, NB-1100, NB-1102, NB-1101).



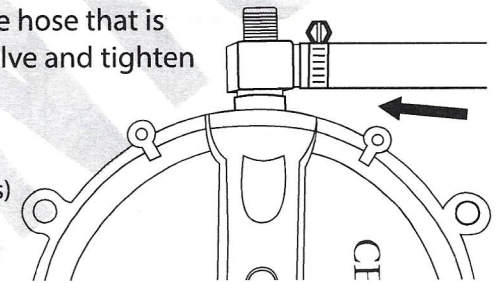
## STEP 4 CONNECT THE FUEL REGULATOR TO ADAPTER

4.1 Take vapor hose and cut to length that matches the distance between the adapter fitting and power valve fitting on the regulator.



\*Note: Cutting the hose is recommended but not required.

4.2 Put hose clamp on the hose that is attached to the power valve and tighten it down.



\*TIP: The other end of hose is already clamped (see step 2.9s)

4.3 Use zip ties (ACC3-51) to tighten down any loose breather tube or vapor hose to ensure it is tight against the frame.



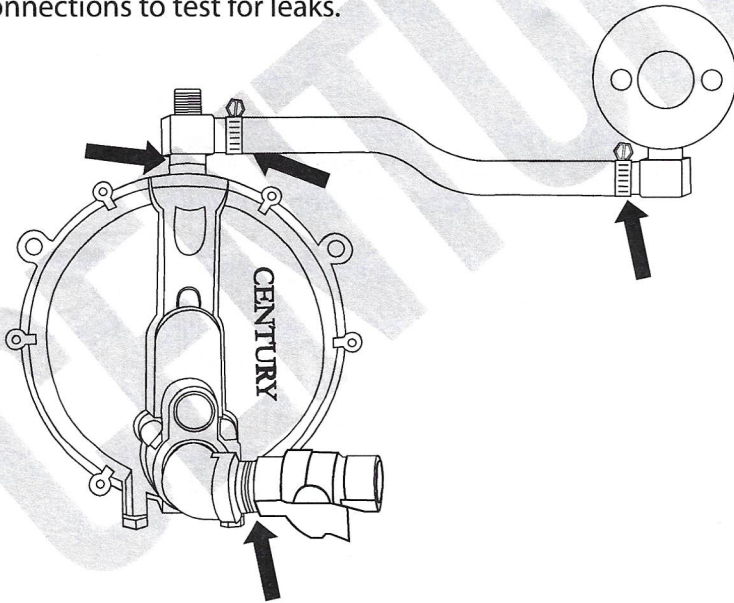
\*Note: This is recommended but not required

## STEP 5 LEAK TESTING

5.1 Mix water and hand soap together in a spray bottle

5.2 Pressurize regulator with desired fuel (natural gas or propane).

5.3 Spray soapy water onto all fitting connections to test for leaks.



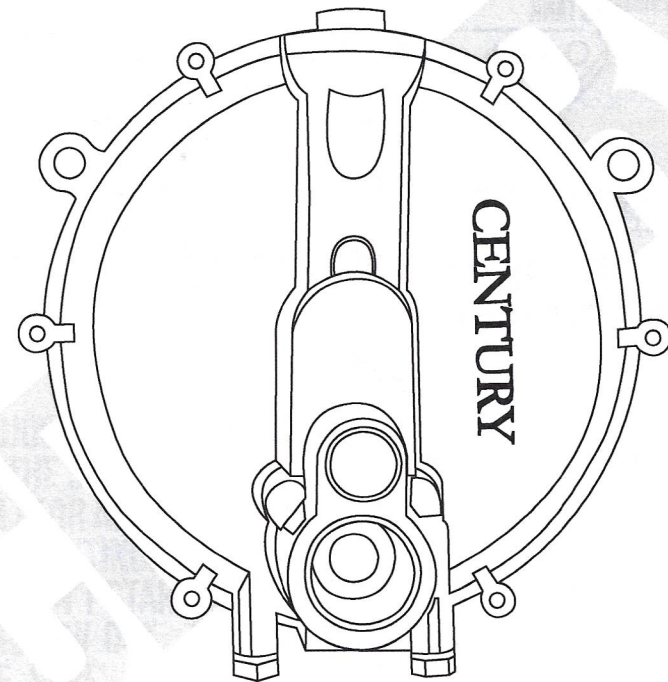
5.4 If no bubbles appear, all fittings are sealed and safe.

\*Note: If there are leaks you must re-tighten the connection to ensure proper seal.

## BROKEN REGULATOR? WE OFFER REPAIR KITS TO FIX IT!

### **\*IMPORTANT NOTE\***

The C-039-122 Regulator's Fuel Inlet **ONLY** accepts fuel pressure of 6-8 ounces per square inch [equivalent to 11-12 inches of water column]. Higher pressures **WILL** cause damage to regulator. For other pressures consult factory.



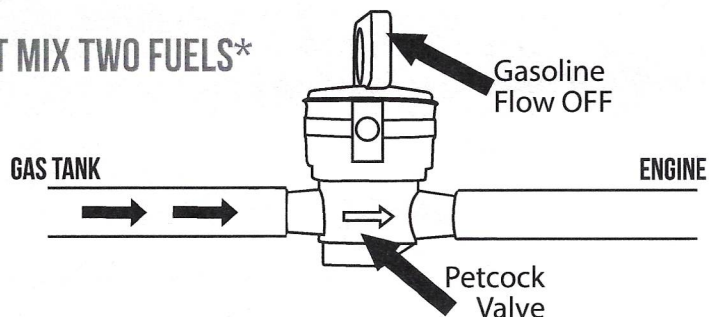
**THE C-039-99 REPAIR KIT IS AVAILABLE  
AT [WWW.CENTURYFUELPRODUCTS.COM](http://WWW.CENTURYFUELPRODUCTS.COM)**



## START-UP PROCEDURE TO RUN ON PROPANE OR NATURAL GAS

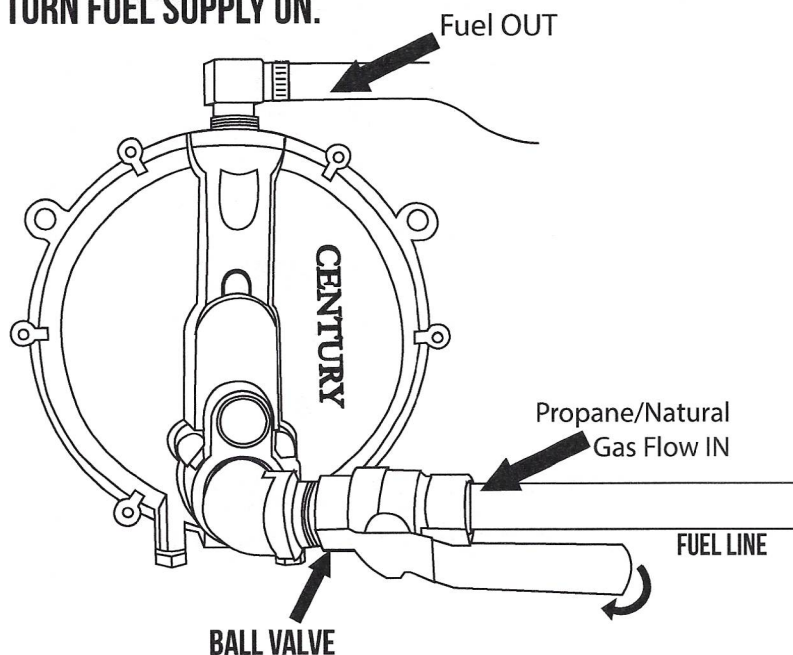
**STEP 1. MAKE SURE THAT GASOLINE IS NOT FLOWING TO THE CARBURETOR AND RUN ALL GAS OUT UNTIL ENGINE STALLS.**

**\*CAN NOT MIX TWO FUELS\***



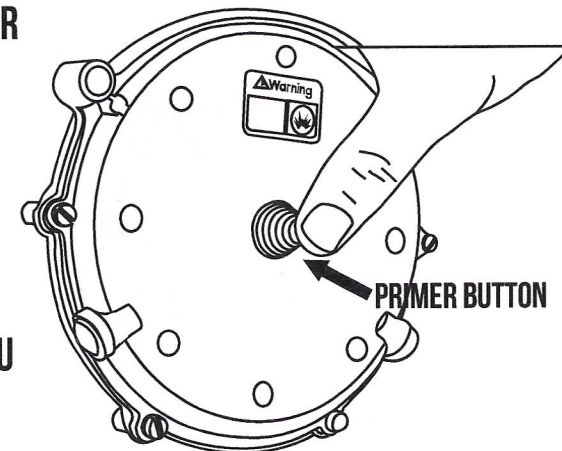
**STEP 2. CONNECT FUEL SOURCE TO REGULATOR.**

**STEP 3. OPEN BALL VALVE ON REGULATOR, IF EQUIPPED, OR TURN FUEL SUPPLY ON.**

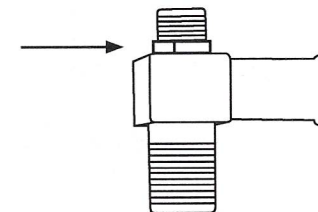


**NOTE: MAKE SURE GASOLINE CHOKE IS OPEN/OFF.**

**STEP 4. PRESS PRIMER BUTTON, LOCATED ON BACK OF REGULATOR, FOR A SECOND SO A LITTLE BIT OF FUEL IS FLOWING IN TO THE CARBURETOR. DO NOT HOLD PRIMER BUTTON DOWN OR YOU WILL OVER FUEL THE ENGINE.**



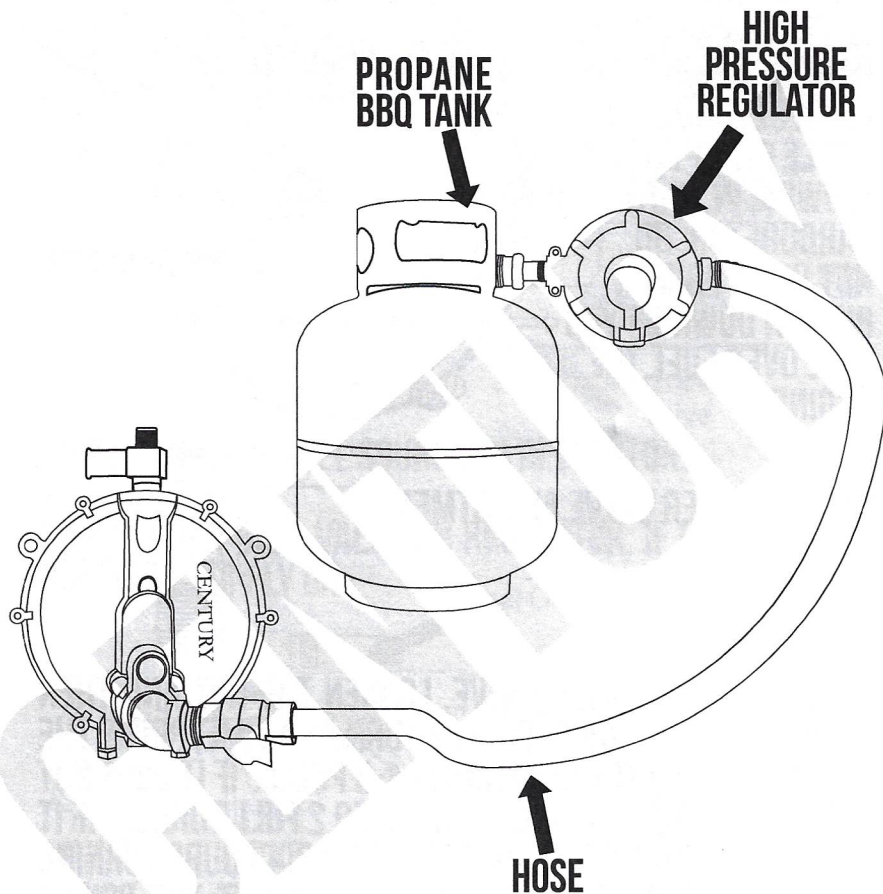
**STEP 5. POWER VALVE ADJUSTMENT**



**TO ADJUST THE POWER VALVE, LOOSEN THE NUT AND THEN TURN THE SCREW INWARD A 1/2 TURN AT A TIME, PRIME THE REGULATOR AND TRY STARTING IT 4-5 PULLS. IF IT DOES NOT START, CONTINUE TURNING IT IN (UP TO 2 FULL TURNS). IF IT STILL WON'T START FOLLOW THE SAME PROCEDURE TURNING THE SCREW OUT. ONCE IT STARTS, BACK OUT THE POWER VALVE SCREW UNTIL THE ENGINE STARTS TO DIE. THEN SCREW IT INWARD UNTIL IT SMOOTHS OUT AND TIGHTEN THE NUT TO LOCK IT IN PLACE.**

**YOU WILL NEED TO ADJUST IT ONE FINAL TIME WHEN YOU PUT THE MOST COMMON SIZED LOAD ON THE GENERATOR - THE AMOUNT OF POWER YOU WILL NEED IF YOUR POWER GOES OUT.**

# BARBECUE TANK INSTALLATION INSTRUCTIONS



AVAILABLE AT [WWW.CENTURYFUELPRODUCTS.COM](http://WWW.CENTURYFUELPRODUCTS.COM)

Name	Part Number
12 Feet Propane Hose Assembly	SEK-05-12A
6 Feet Propane Hose Assembly	SEK-05A

# COMMON TROUBLESHOOTING

## IT WON'T START?!

**PROBLEM:** My engine was idling too fast so I closed down on the idle mixture screw to reduce the speed but it runs rough.

**SOLUTION:** Never attempt to control idle speed with the idle mixture screw. Idle speed should be controlled with the idle screw near the governor. This adjustment controls the throttle butterfly valve opening at idle and in turn the air flow. At the air flow, always set the idle mixture screw for fastest speed.

**PROBLEM:** Engine runs but won't come up to full speed or power.

**SOLUTION:** In most cases poor power is caused by a mixture that is too lean. This lean mixture is often caused by too many pressure regulators in the system or some small or restrictive fitting causing poor fuel flow.

**PROBLEM:** I have a vapor withdrawal kit and the engine runs fine for a while and then frost starts to form on the regulator. Is it possible the vapor pressure reduction flow is causing this?

**SOLUTION:** No. Frost is always caused by drawing liquid from the tank. Your tank may be over filled, orientated wrong or the engine is using fuel faster than what the tank can vaporize.

**PROBLEM:** Engine won't start or is hard to start.

**SOLUTION:** Starting problems are caused by over priming and/or dirt on one of the regulator seats, which will cause gas to leak through. If propane or natural gas makes up more than 10% of the fuel/air mixture, the spark plug will not ignite. It is too rich. You might want to try changing the spark plug gap to around .025".

**STARTING PROBLEMS:** Starting has never been a serious problem when dealing with single fuel alternative engines. However, with dual fuel applications, especially those under 250 cid, there are many factors that can contribute to hard starting.

**INCORRECT SPARK PLUG GAP:** Spark plugs should be in good condition and gapped to factory specs. A protruded nose plug is helpful if it will clear the piston at the top of its stroke. On smaller engines a .025 gap is usually helpful.

**AMBIENT TEMPERATURES:** At very cold temperatures -30°F/-34°C or below, there may be insufficient vapor pressure in the fuel tank to supply fuel to the converter/regulator, resulting in no start or hard starting. Another condition, which may prevent starting in cold weather, involves over priming. If this condition is suspected, attempt to start the engine with the primer disconnected. The primer can be disconnected by removing the electrical connector or by pinching the fuel hose.

**INCORRECT STARTING TECHNIQUE:** Over cranking the engine, especially in cold weather, causes over priming and flooding, a common starting problem.

# ACCESSORIES

ADDITIONAL (OPTIONAL) ITEMS WE OFFER  
CALL OUR PROFESSIONAL TEAM IF YOU HAVE ANY QUESTIONS  
OR TO PLACE YOUR ORDER TODAY! (734) 728-0300



## NATURAL GAS SERVICE LINE

Available in 5' increments  
SEK-6 (1/2" diameter)  
SEK-7 (3/4" diameter)  
SEK-8 (1" diameter)

Generator Wattage	Engine HP	10 Feet of Hose	20 Feet of Hose
1,850	3.5	SEK-6	SEK-6
2,500	5	SEK-6	SEK-6
4,000	8	SEK-6	SEK-6
5,000	10	SEK-6	SEK-7
7,500	15.5	SEK-7	SEK-7
8,000	16	SEK-7	SEK-7
10,000	20	SEK-7	SEK-7
12,000	24	SEK-7	SEK-8
13,000+	25+	SEK-8	SEK-8

\*Call for lengths greater than 20 feet\*

## SEK-21 3/8" QUICK-CONNECT KIT

The Quick-Connect Kit is for use with low pressure Propane/Natural Gas systems. Quickly and easily add a convenient connect/disconnect method with an additional safety shut off. Kit includes a 3/8" Female NPT x Female Quick Connect valve and a 3/8" male NPT x Male Quick Connect full flow plug.



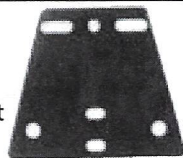
## SE-17 3/8" QUICK-CONNECT FITTINGS

3/8" Quick-Connect Fittings are for use with low pressure Propane/Natural Gas systems which includes a 3/8" Female NPT x Female Quick Connect valve and a 3/8" male NPT x Male Quick Connect full flow plug.



## BRKT-02 BRACKET

Flat universal mounting bracket for generator.



# ACCESSORIES (CONT.)

## SUPPORT BRACKET

Sometimes when converting your generator squared or rounded framed caged units, you may find yourself having to modify your existing frame.

We supply the frame support legs that make this task easy!

Available in 3 sizes:



**BRKT-12** 1-1/2" Flat Support Bracket

**BRKT-4** 1-1/4" Frame Support Leg

**BRKT-3** 1" Frame Support Leg

## ELECTRIC KIT FOR \*EXISTING\* REMOTE OR AUTOMATIC START-UP

If your generator has an existing remote control or automatic start-up this kit will provide the safety feature of shutting off the fuel supply of the natural gas or propane that is free flowing through the line should the unit stop functioning at any point in time. NOTE: This kit does not make your pull start remote or automatic.



**SEK-12A**  
\*Use if you have an Oil Filter\*



**SEK-10A** \*Use if you DO NOT have an Oil Filter\*

## TANK-HOLDER-1 PROPANE TANK HOLDER AND STABILIZER

EZGO is a state of the art designed stabilization device for a standard 20, 30, or 40 LB propane tank.



## GENERATOR TENT

Our tents significantly reduce sound and protect the generator from rain, wind and other elements. Tent Material: Flame Retardant Nylon. Frame: 3/4 in. CPVC & Schedule 80 Gray. Sound Insulation: Azdel SuperLite®.

Available in two sizes:

**SGP004** Medium W 28" X L 22" X H 21"

**SGP003** Extra Large W 30" X L 30" X H 22"







## **CENTURY FUEL PRODUCTS**

**5 1225 MARTZ RD, BELLEVILLE MI 48111**

**PHONE: (734) 728-0300 FAX: (734) 728-0303**

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