

# CONVERSION KIT INSTRUCTION MANUAL

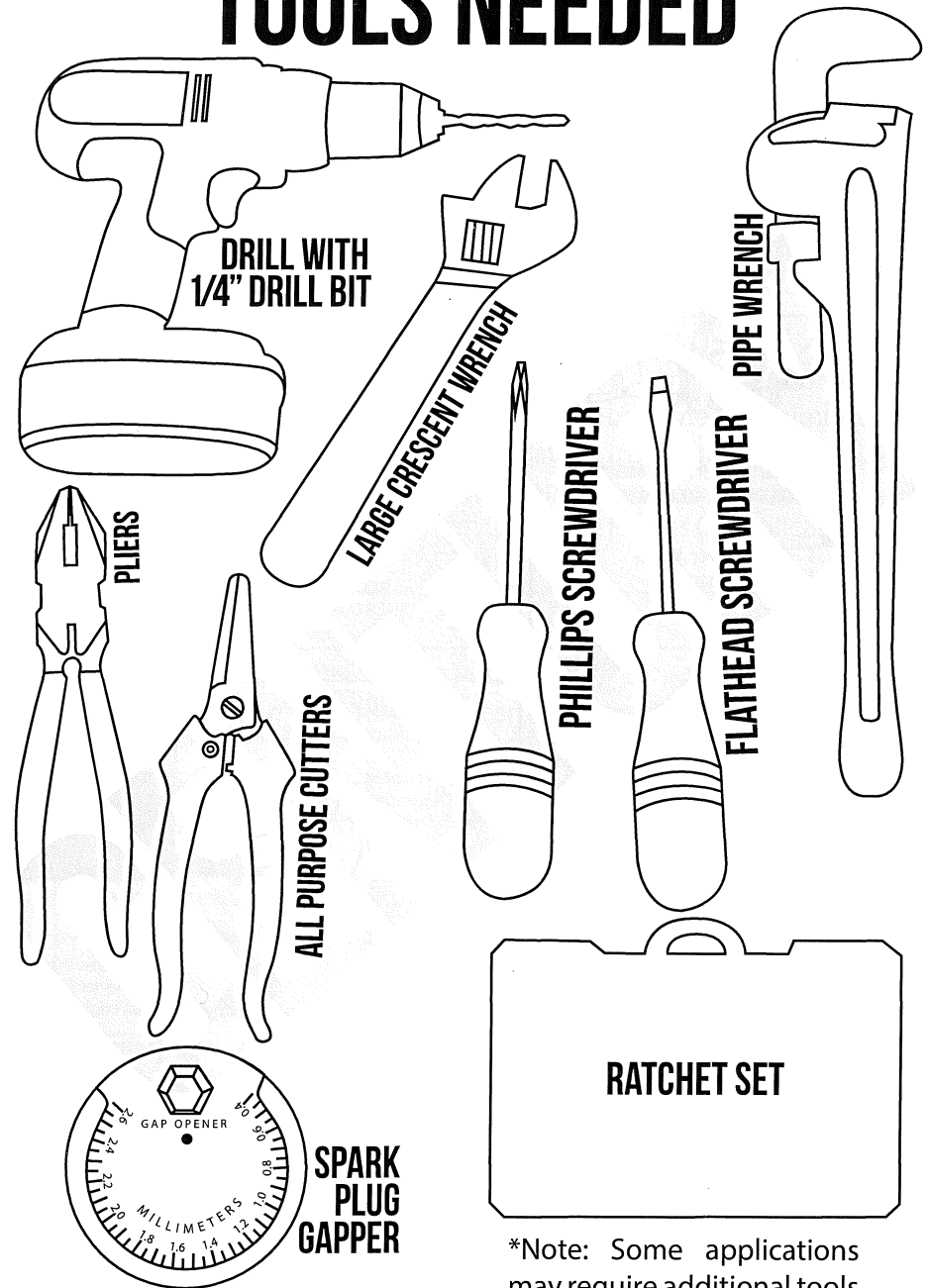
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## TOOLS NEEDED

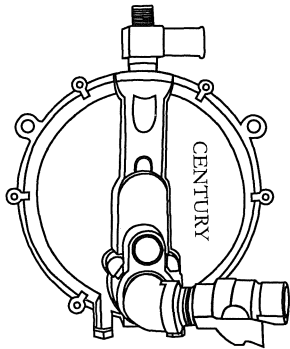


\*Note: Some applications may require additional tools

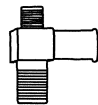
## CONVERSION KIT CONTENTS

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

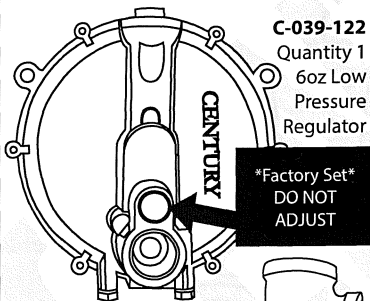
### REGULATOR ASSEMBLY



THE REGULATOR ASSEMBLY INCLUDES THE FOLLOWING:



**Power Valve**  
Quantity 1

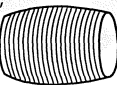


**C-039-122**  
Quantity 1  
6oz Low Pressure Regulator

**\*Factory Set\*  
DO NOT  
ADJUST**

#### FIT3/4-01

Quantity 2  
3/4"x1-1/2"  
Black Pipe  
Nipple



#### FIT3/4-02

Quantity 1  
3/4" Elbow, 90°

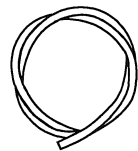


**NOTE: Kit Shown  
is Dual Fuel Only.  
If you have the  
Tri-Fuel Kit the  
High Pressure Hose  
Assembly is not  
shown here.**



**3/4" Ball Valve**  
Quantity 1

### HOSE, NUTS & BOLTS



**Vapor Hose**  
Qty. 24 Inches



**NB-1100**  
1/4-20 Hex  
Finish Nut  
Qty. 2



**NB-1102**  
1/4" SAE  
Flat Washer  
Qty. 4



**NB-1101**  
1/4" Split  
Lock Washer  
Qty. 2

**NB-1120**  
1/4-20 x 2-1/2"  
Qty. 2

**NB-1115**  
1/4-20 x 2"  
Qty. 2

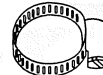
### ACCESSORIES



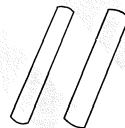
**ACC3-51**  
Plastic Tie  
Strap 8"  
Qty. 2



**ACC4-03**  
PTFE Thread  
Sealing Tape  
Qty. 1



**Hose Clamps**  
Qty. 2



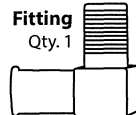
**ACC2-13A**  
Breather Tube Pipe  
1/4" x 2-1/2"  
Qty. 1

**ACC2-14A**  
Breather Tube Pipe  
3/8" x 2-1/2"  
Qty. 1

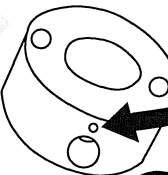
### ADAPTER

Includes fitting, gasket & studs

**Adapter**  
Varies Depending  
on Engine Type  
Qty. 1



**Fitting**  
Qty. 1



**\*Small hole next  
to inlet is for set  
screw - DO NOT  
TOUCH\***



**Gasket**  
Qty. 1  
\*Size/shape  
varies based  
on engine type

#### SE-08

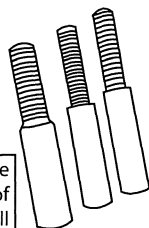
8mm Qty. 2

#### SE-06

6mm Qty. 2

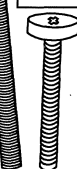
#### SE 1/4-20

1/4"-20 Qty. 2



**NOTE: Studs are  
sent per spec of  
your kit. Not all  
sizes are included  
in most cases.**

**NOTE: In rare  
cases you may  
use rods or  
screws instead  
of 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

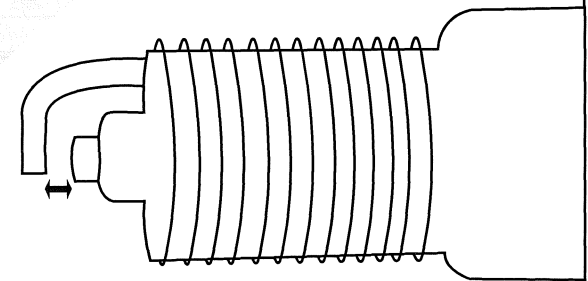
Before beginning the conversion process, run generator to break in motor (if new generator). Duration varies (minimum 2-4 hours) - please review the generator's instructions. To start the conversion process move choke/any other levers away from the air cleaner assembly. Shut off fuel valve for gas (if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

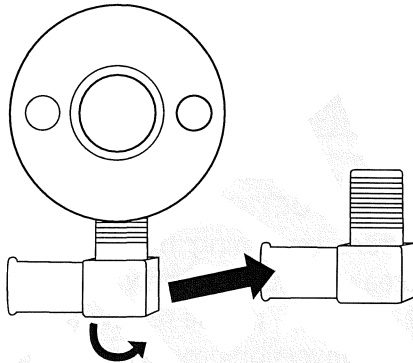
**\*TIP:** An average spark plug gapping is .035 of an inch. You need to make it .025 of an inch.

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

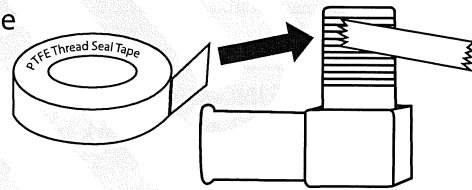


## STEP 1 PREPARING THE FUEL ADAPTER

1.1 Take elbow fitting off of adapter by unscrewing it.

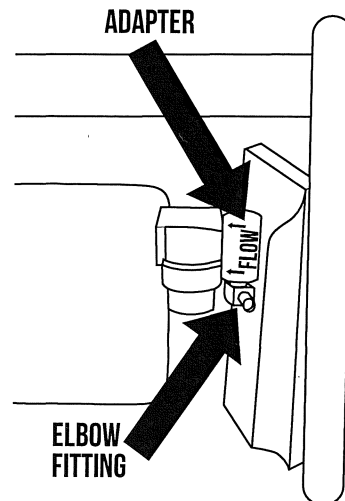


1.2 Put pipe sealant thread (ACC4-03) on the edge of the fitting's threads.

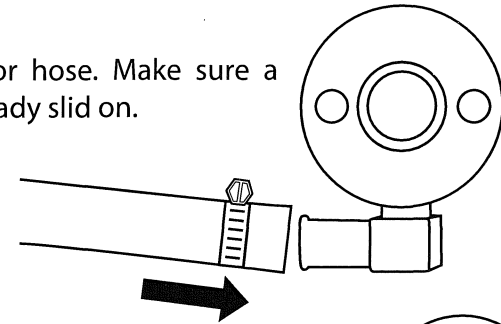


1.3 Screw elbow fitting back in with a wrench to be angled, so that it is pointing away from the generator.

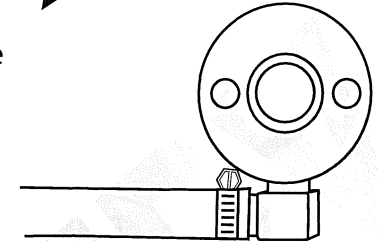
\*TIP: Usually you can angle it so it is parallel with air cleaner and is pointing left.



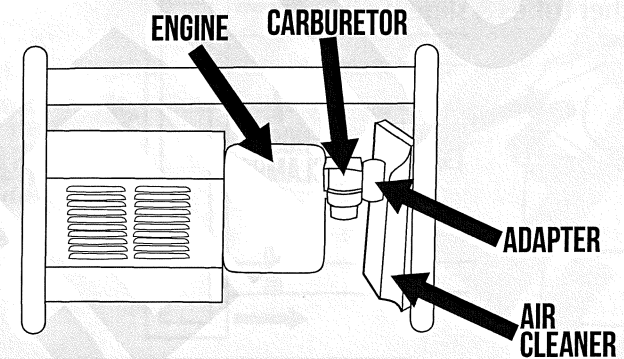
1.4 Slide on vapor hose. Make sure a hose clamp is already slid on.



1.5 Attach and tighten hose clamp on to fitting.



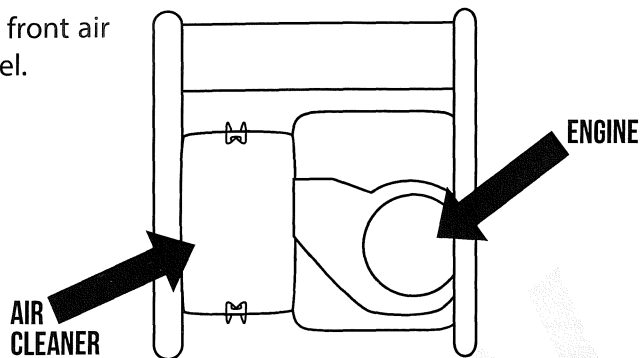
## STEP 2 MOUNTING THE FUEL ADAPTER



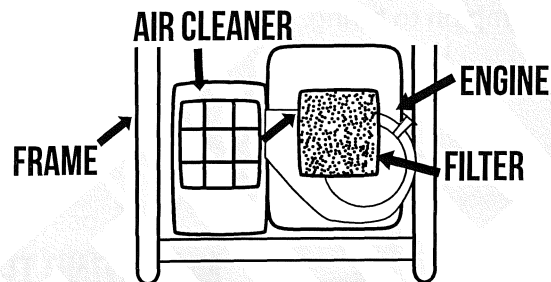
\*TIP: Keep in mind, your conversion should be arranged like this diagram when completed.

The following steps will show you how to do this.  
(Engine > Carburetor > Adapter > Air Cleaner)

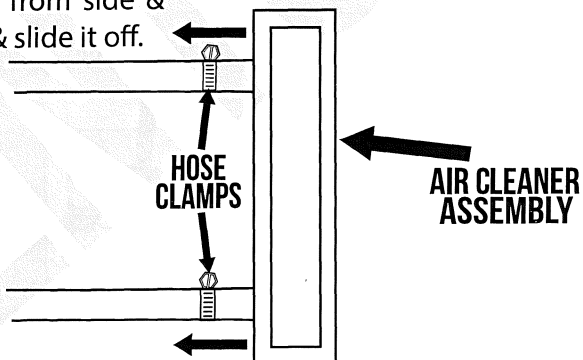
2.1 Remove front air cleaner panel.



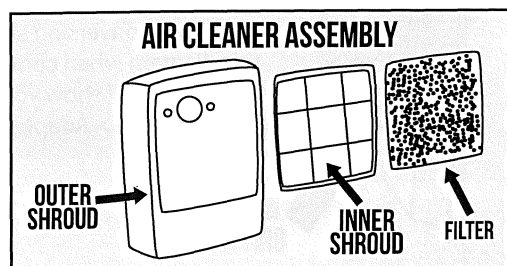
2.2 Remove air filters



2.3 Remove clamps from side & top breather tubes & slide it off.

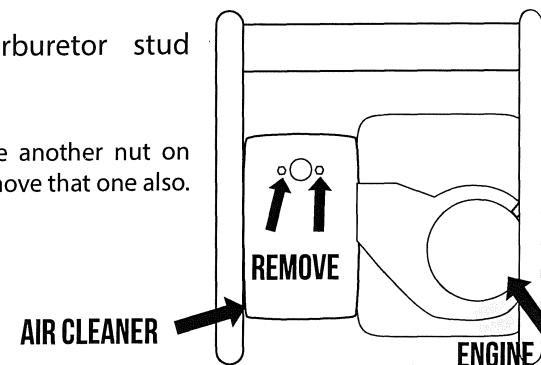


2.4 Remove inner shroud of air cleaner assembly (if applicable).

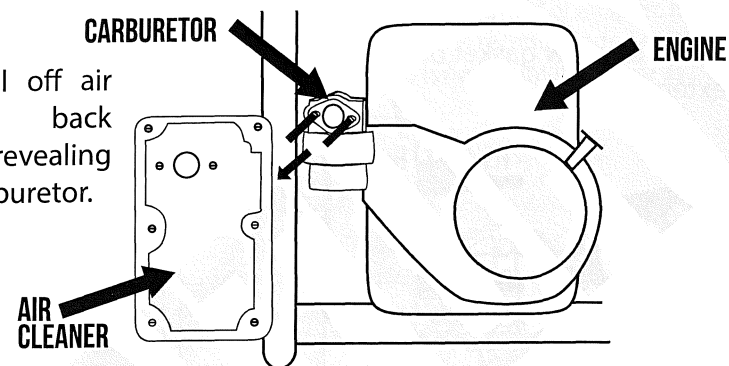


2.5 Remove carburetor stud nuts.

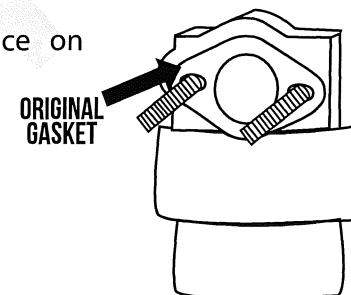
\*TIP: there might be another nut on back side. Please remove that one also.



2.6 Pull off air cleaner back panel, revealing the carburetor.

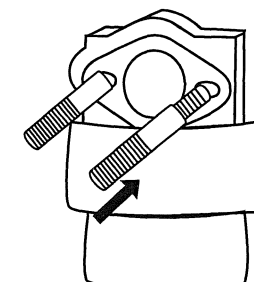


2.7 Leave original gasket in place on carburetor studs

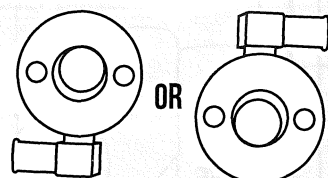


2.8 Find the right size of studs/screws that are included in kit (SE-8, SE-6, SE1/4-20, rods or screws).

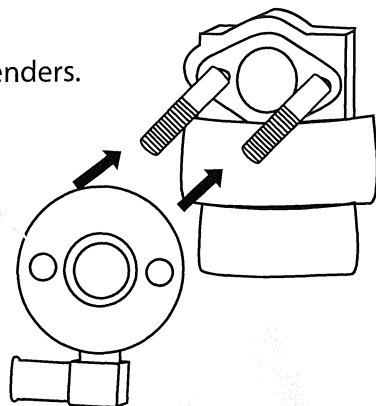
\*TIP: Try screwing one stud on, if it doesn't easily screw on you have the wrong stud.



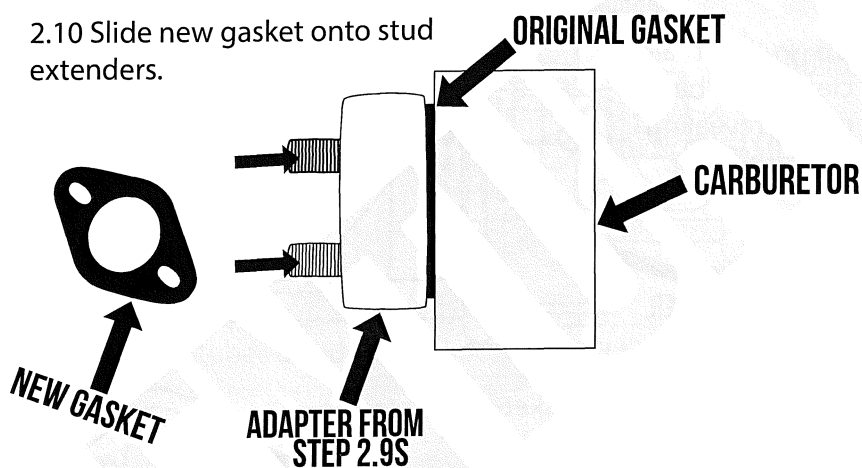
2.9 Slide adapter onto the stud extenders.



\*TIP: The fitting can be placed in any direction - be sure to have flow sticker in line with air flow.



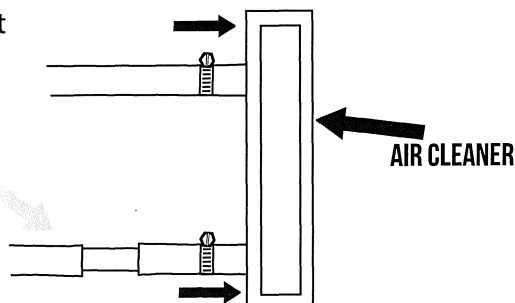
2.10 Slide new gasket onto stud extenders.



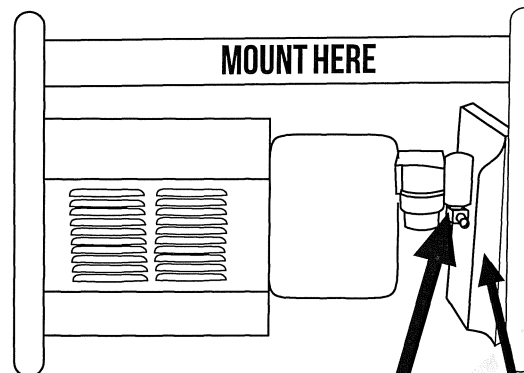
2.11 Reassemble air cleaner assembly in reverse order that is described in steps 2.1s thru 2.6s

2.12 Be sure to reconnect breather tubes.

\*\*TIP: If they are not long enough, cut tube and replace gap with plastic tubes (ACC2-13A & ACC2-14A) provided in kit.



## STEP 3 PREPARING/MOUNTING THE FUEL REGULATOR

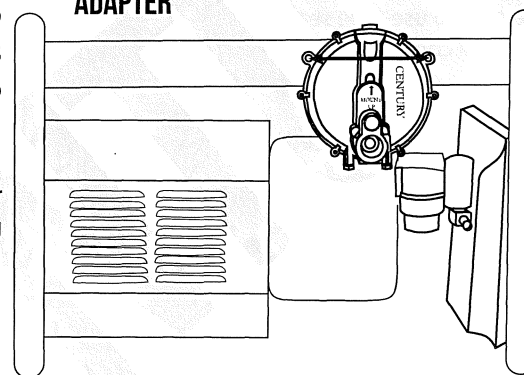


3.1 Place regulator (C-039-122) onto frame on the same side as adapter.

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

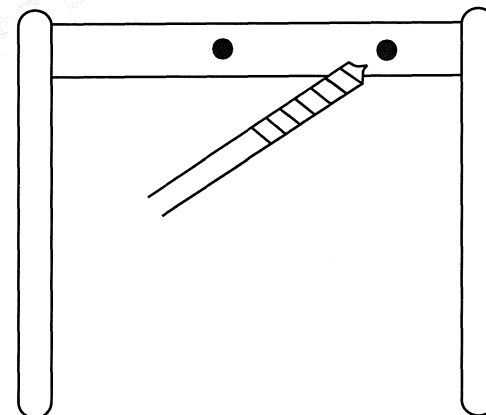
3.2 Use a marker to mark placements for top two mounting ears.

\*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 5 3/4" Center to Center Distance to mount the regulator



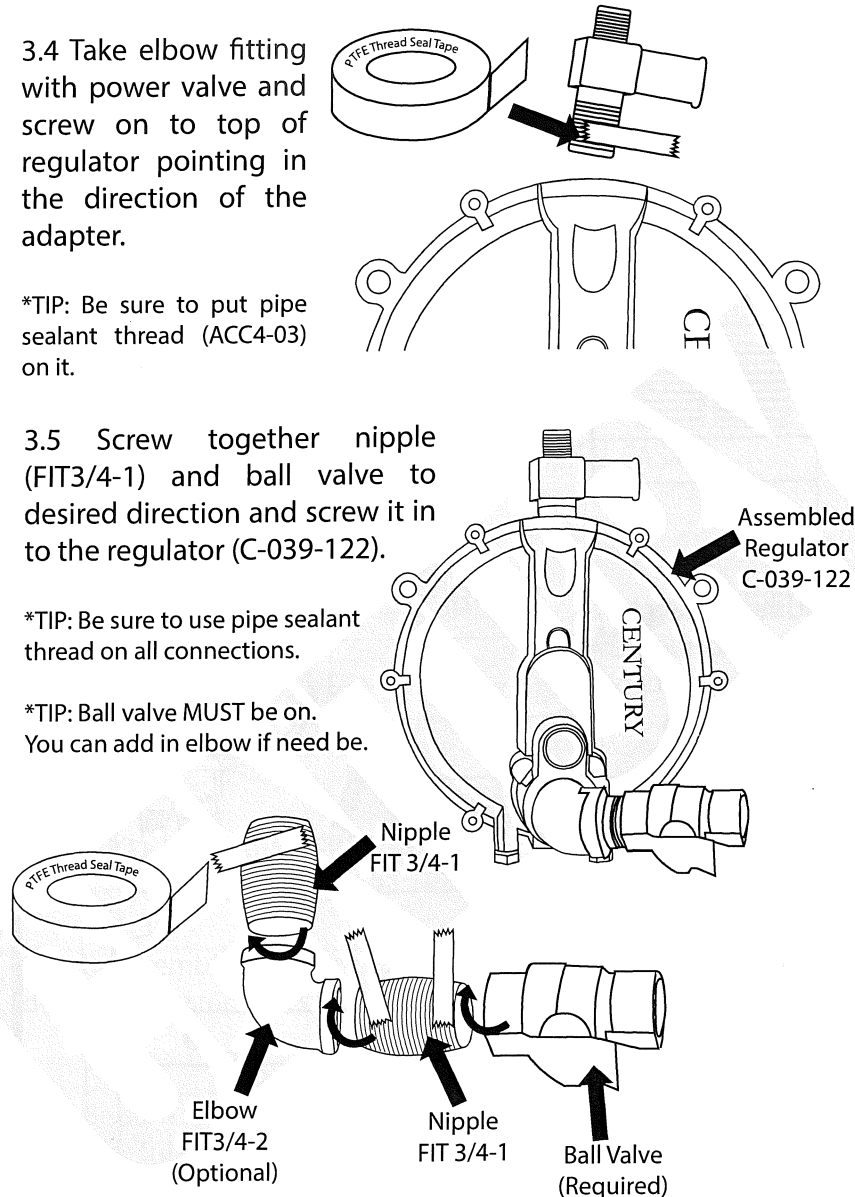
3.4 Take elbow fitting with power valve and screw on to top of regulator pointing in the direction of the adapter.

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

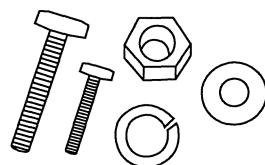
3.5 Screw together nipple (FIT3/4-1) and ball valve to desired direction and screw it in to the regulator (C-039-122).

\*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.



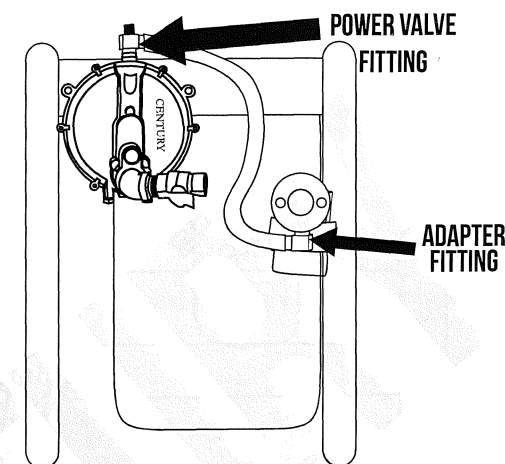
3.6 Use bolts, nuts and washers that were included in kit to mount regulator to the frame. (NB-1120, NB-1115, NB-1100, NB-1102, NB-1101).



## STEP 4 CONNECT THE FUEL REGULATOR TO ADAPTER

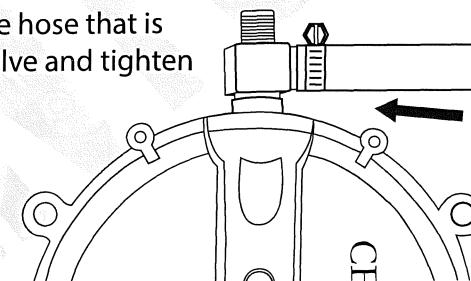
4.1 Take vapor hose and cut to length that matches the distance between the adapter fitting and power valve fitting on the regulator.

\*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 1.5)

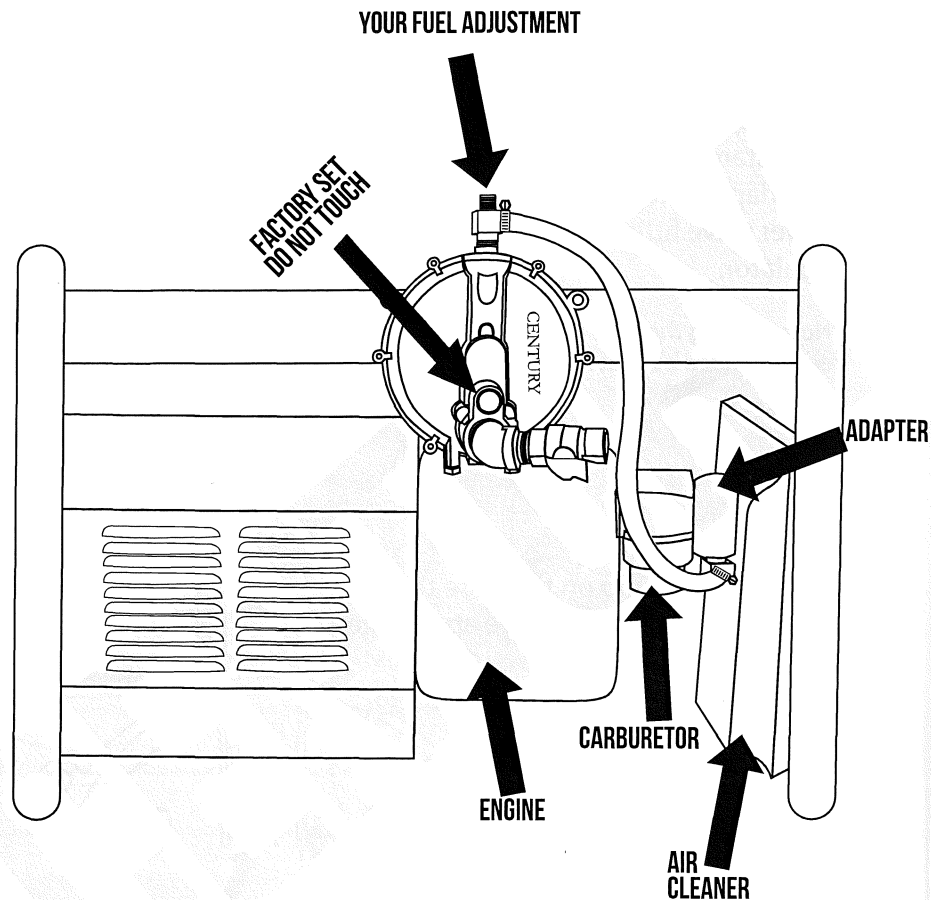


4.3 Use zip ties (ACC3-51) to tighten down any loose breather tube or vapor hose to ensure it is tight against the frame.

\*Note: This is recommended but not required



## COMPLETED GENERATOR CONVERSION

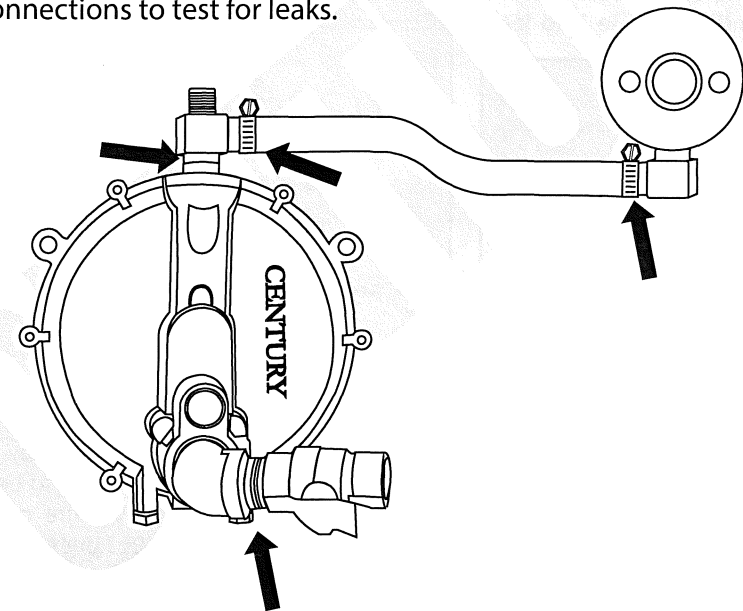


## STEP 5 LEAK TESTING

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.



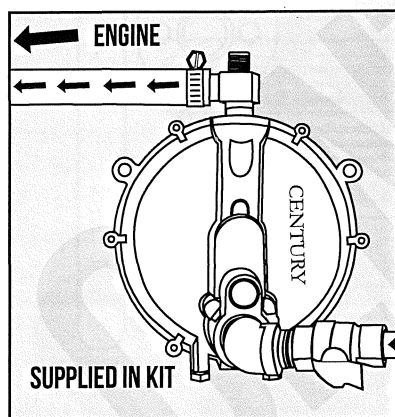
5.4 If no bubbles appear, all fittings are sealed and safe.

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

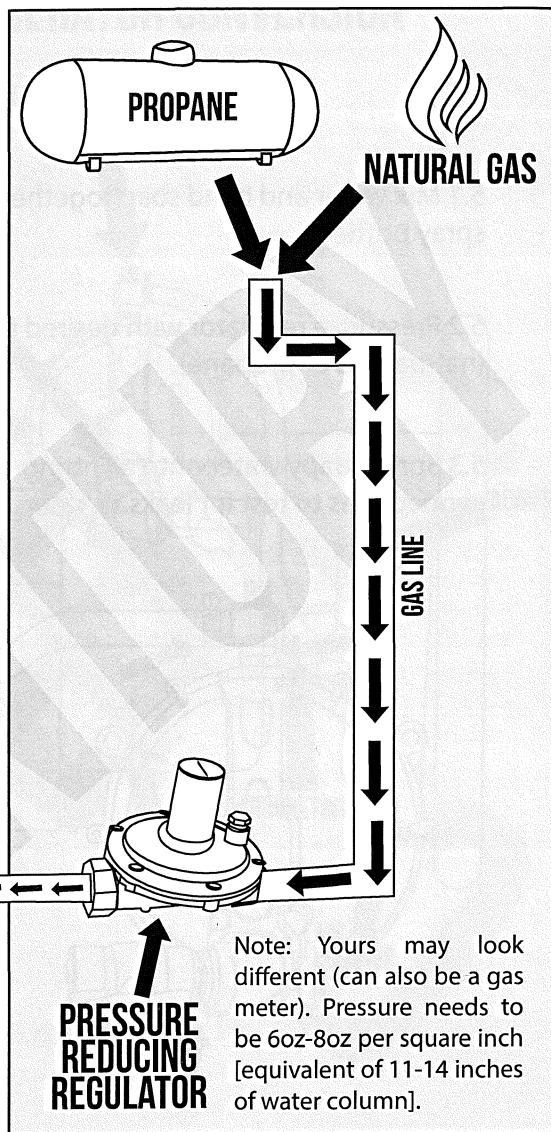


## HOW TO CONNECT FUEL SUPPLY FOR SEK-04 DUAL FUEL KITS

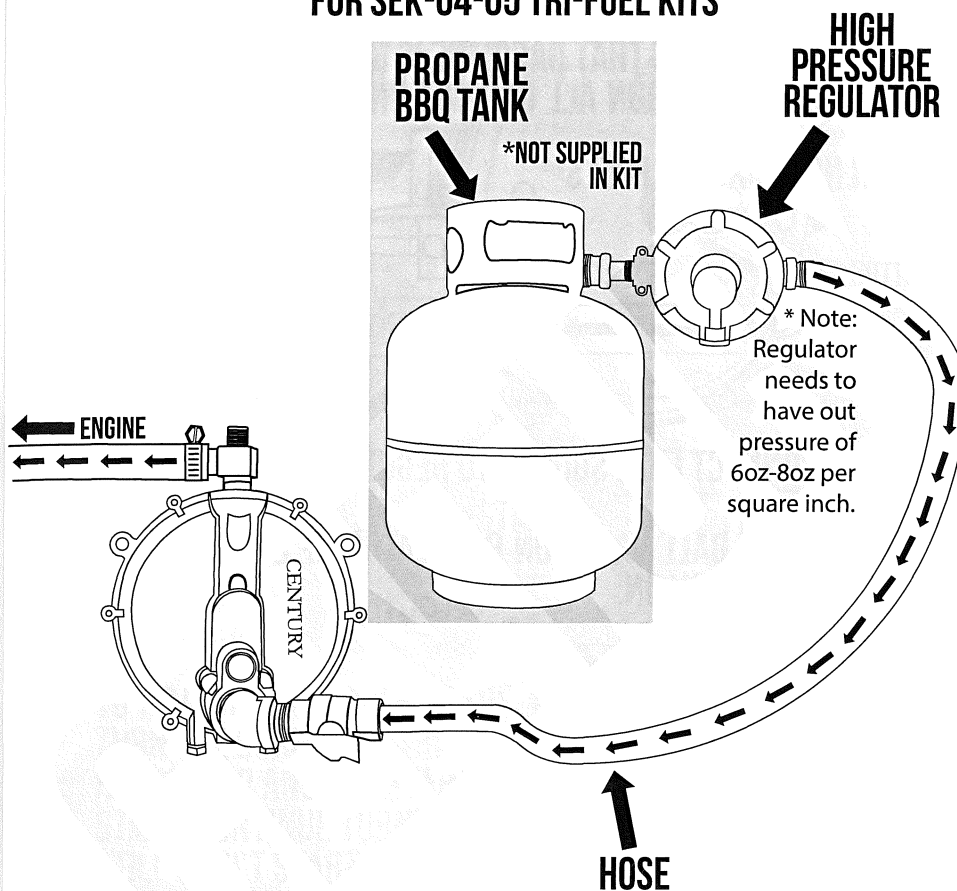
Pressure going to the regulator provided in your kit cannot exceed 8oz per square inch (or 14 inches water column) or it will damage the regulator and can cause it to leak.



## HOUSE PROPANE OR NATURAL GAS



## BARBECUE TANK INSTALLATION INSTRUCTIONS FOR SEK-04-05 TRI-FUEL KITS



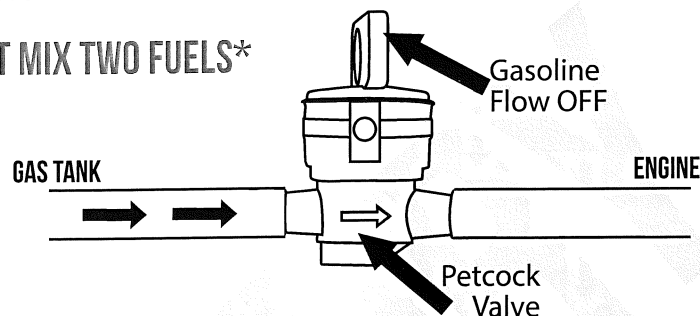
AVAILABLE AT [WWW.CENTURYFUELPRODUCTS.COM](http://WWW.CENTURYFUELPRODUCTS.COM)

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

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

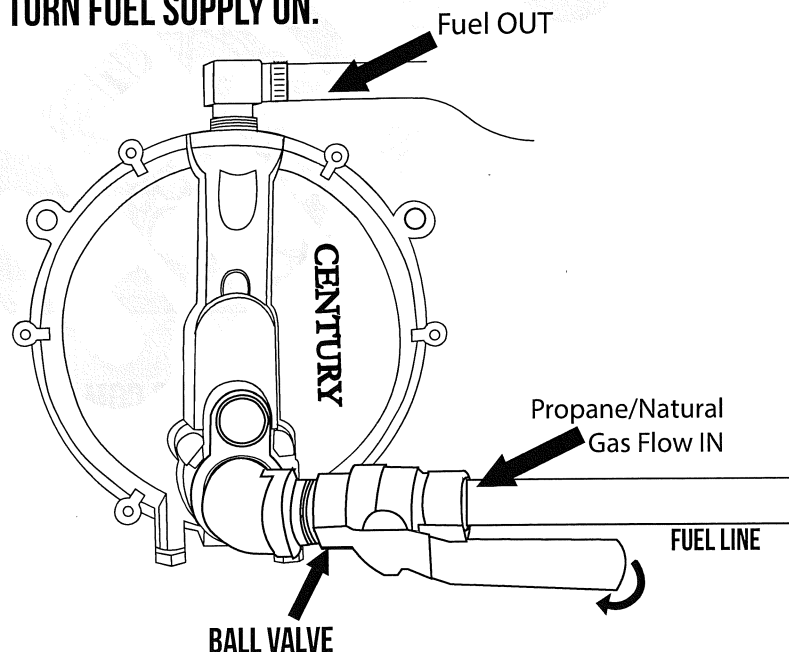
**STEP 1. MAKE SURE THAT GASOLINE IS NOT FLOWING TO THE CARBURETOR AND RUN ALL GAS OUT UNTIL ENGINE STALLS.**

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



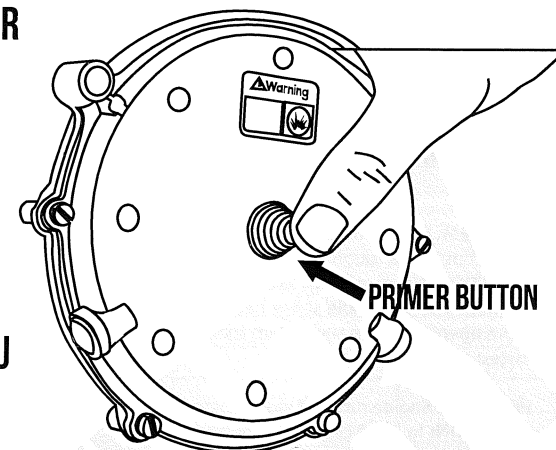
**STEP 2. CONNECT FUEL SOURCE TO REGULATOR.**

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

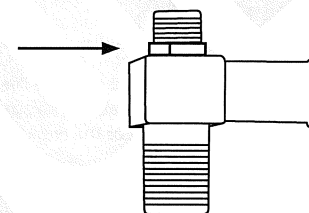


**NOTE: MAKE SURE GASOLINE CHOKE IS OPEN/OFF.**

**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.**

# COMMON TROUBLESHOOTING

## IT WON'T START?!

**FIRST MAKE SURE YOU SMELL GAS COMING FROM THE ADAPTOR WHEN PRESSING THE PRIMER BUTTON.**

**\*TIP: IF YOU CANNOT SMELL GAS, MAKE SURE THE FUEL SOURCE IS ON OR A HOSE MAY BE KINKED.**

**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.

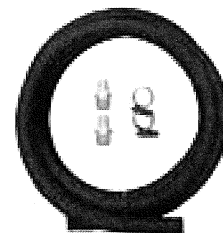
**INCORRECT SPARK PLUG GAP:** Spark plugs should be in good condition and gapped to factory specs. A protruded nose plug is helpful if it will clear the piston at the top of its stroke. On smaller engines a .025 gap is usually helpful.

**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)

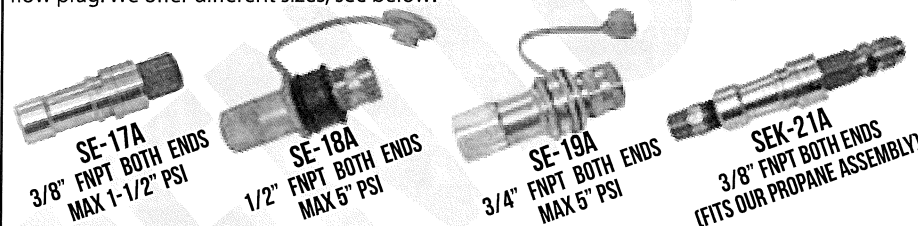
SEK-8 (1" diameter)

\*Recommended length is 10 Feet\*

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

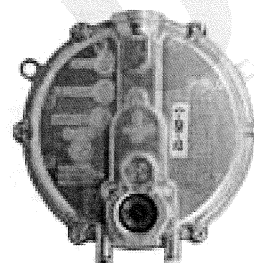
## QUICK DISCONNECT FITTINGS

Quick Disconnect Fittings are for use with low pressure Propane/ Natural Gas systems which includes a Female NPT x Female Quick Connect valve and a male NPT x Male Quick Connect full flow plug. We offer different sizes, see below:



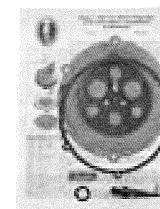
## BROKEN REGULATOR? WE OFFER NEW UNITS OR REPAIR KITS!

### C-039-122



Complete Unit

### C-039-99



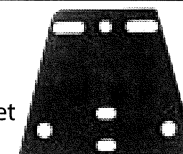
Repair Kit

## \*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 the regulator. For other pressures, consult the factory.

## BRKT-02 BRACKET

Flat universal mounting bracket for regulator.



## 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:



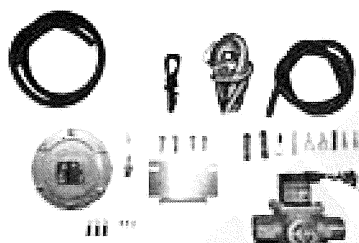
**BRKT-12** 1-1/2" Flat Support Bracket

**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.



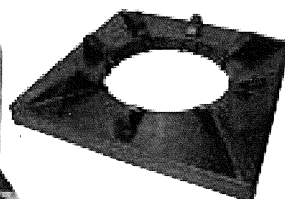
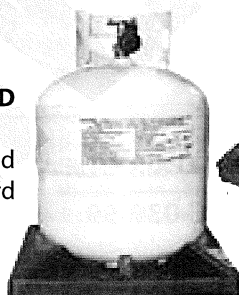
**SEK-10A** \*Use if you DO NOT have an Oil Filter\*

**SEK-12A**  
\*Use if you 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:

**SE-25** Medium W 28" X L 22" X H 21"

**SE-26** Extra Large W 30" X L 30" X H 22"



## ACCESSORIES (CONT.)

### LAZY MAN'S OIL DRAIN - 10MM OR 12MM

Oil changes made easy. No more tools, no more struggling.

Check your oil in a glance.

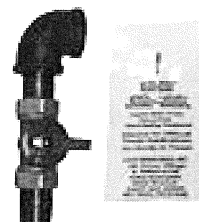
Available in two sizes.



Size	Part Number
10mm	SE-23
12mm	SE-24

### SEK-20 SAFETY BALL VALVE ASSEMBLY

Our inverter generators do not have a Safety Ball Valve in our kit because most run off of barbecue bottles. If you want to run off natural gas on your inverter generator, you need this assembly.



### INDOOR SURFACE MOUNT TRANSFER SWITCH KIT

If you experience power outages on a regular basis or need to wire up a cabin where power is difficult to obtain then you should consider a transfer switch.

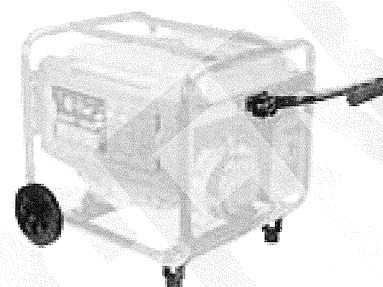
**SE-31** (6 Circuit Switch)

**SE-32** (10 Circuit Switch)



### 8 INCH PREDATOR GENERATOR WHEEL KIT

Make your generator portable. Smooth-rolling never-flat tires make it easy to transport your generator to the jobsite. The wheel kit fits all Predator generators and comes with a tubular steel handle as well as rubber feet for stationary positioning. Add functionality and portability to your generator with this easy to install generator wheel kit.



### ACC13-10 HOUR METER

ACC13-10 Hour Meter records the overall running time of an engine. Think of the hour meter like the odometer in a car. Instead of recording distance, the hour meter records time. By tracking time intervals, the hour meter also acts as a service reminder, so you know when to give your generator, motorcycle, snowmobile, boat, ATV and lawn mower, a quick tune-up.



### FOR QUESTIONS, ORDERING & PRICING

CALL US AT (734) 728-0300 OR ORDER ONLINE  
AT [WWW.CENTURYFUELPRODUCTS.COM](http://WWW.CENTURYFUELPRODUCTS.COM)



## **CENTURY FUEL PRODUCTS**

**51225 MARTZ ROAD, BELLEVILLE, MI 48111**

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

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