

# SMALL ENGINES

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Home Sown Gardens Training

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# Small Engines - Contents

- Meet our Engines!
  - How To Start Them
  - Maintenance
    - What you can do
    - What you should have maintenance do





# Chainsaw

Only Leads who attended Chainsaw Class in February will be using them.

## PPE

Helmets

Ear & Eye Protection

Chaps

Boots





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# Blower

- When to use
  - Clearing **light** layers of debris in large areas
- Not to use
  - Specific clients
  - Huge amounts of wet leaves





# Blower

- PPE
  - Ear Protection (always)
  - Eye Protection (good idea if you don't wear glasses/sunglasses already)

## General Safety

DO not aim blower directly at someone's face



# Blower

- Keep air intake clear to prevent wear.
- Storage
  - Secured in place with a bungee around the nozzle and handle to prevent it from falling over.



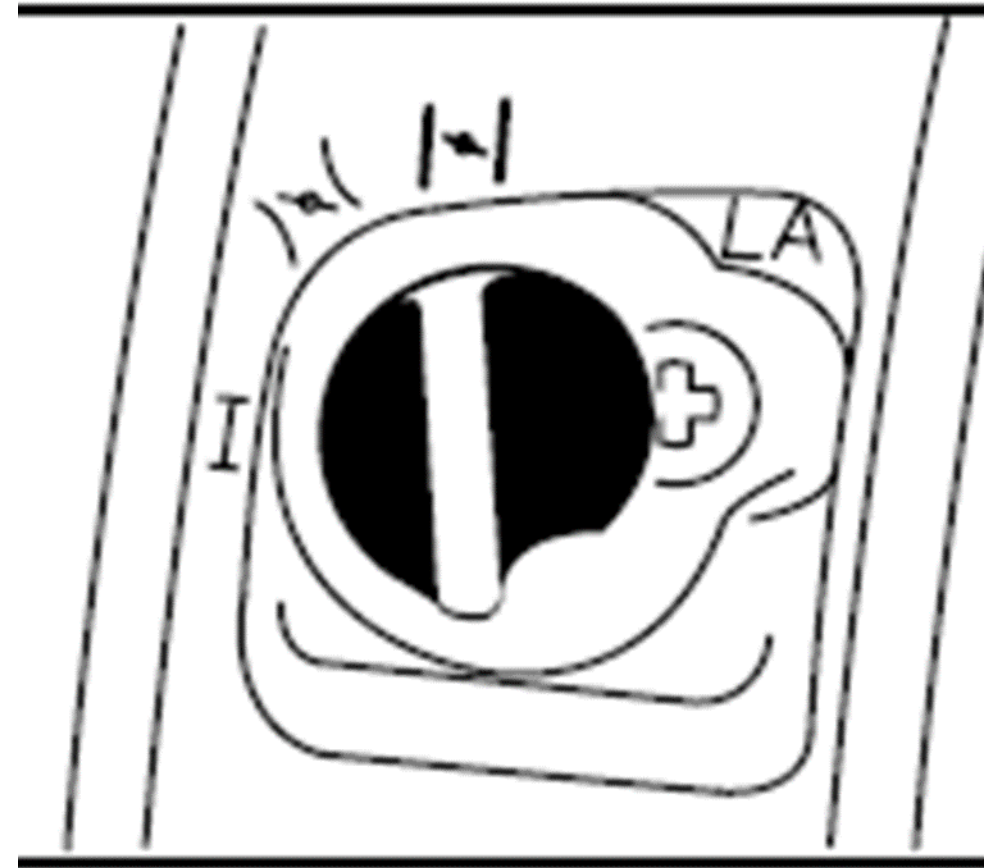
# Blower – How to Start

- Check Gas before starting
- Turn knob to Full Choke
- Prime Carburetor by pressing on the bulb 5-7 times
- Pull cord until "Burps"
- Turn knob to ½ choke and repeat pulling cord
- Might need to rev it once it starts to get it to fully "wake up"



## “Choke?” What does that mean?

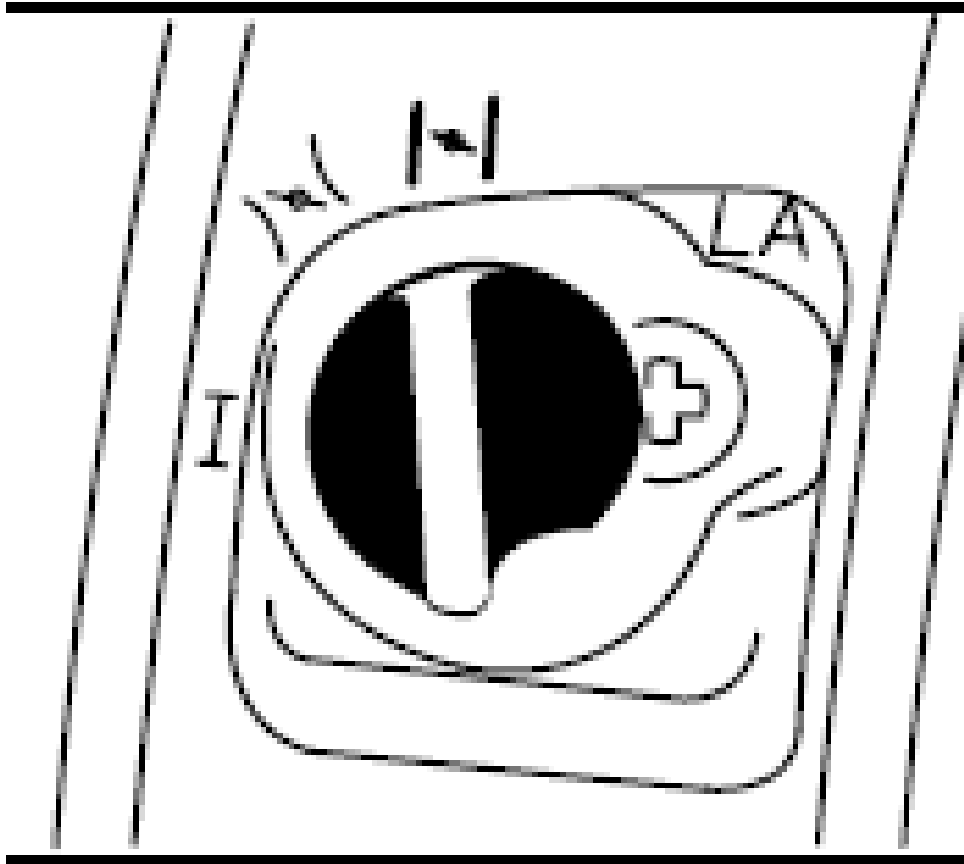
- Engines need gas and air in order to start and run.
- They need more fuel, less air to get started and warmed up initially.
  - This is because the liquid of the gasoline will condense when it enters the combustion chamber (a cold metal space), making it more air-rich than fuel-rich, which in turn makes it harder to ignite and start the engine.
- Once ignited, a more equal measure of fuel and air allows the engine to run smoothly.
- Using a “Choke” restricts (or chokes) the amount of air that can mix with the fuel.





# Full Choke versus Half Choke

- Full choke = cuts off all air intake
- Half choke = Cuts off half of the air intake





# Maintenance - General

- Don't stick stuff/let stuff get in fan
- Don't leave on side- will flood engine
- Keep gas tank full
- Keep clean
- Start once a week if not being used (Very uncommon to not use in week)





# Blower Safety

- Wear your PPE: Ear protection
- Have a plan on where you are blowing
- Do NOT blow directly at someone
- Make sure side fan is clear of debris
- If Left-Handed; The intake is against leg, be mindful of zippers and any other dangly things

# Hedger

- What it is
- Why we use





# Hedger – How to Start

- Check gas tank before starting
- Turn switch on
  - Hint - "I" is for "Ignition", "O" is for "Off"
- Turn knob to Full Choke
- Prime Carburetor 5-7 times



# Hedger – How to Start

- Pull cord until Hedger "Burps"
- Turn knob to  $\frac{1}{2}$  choke
- Pull cord until it starts
- Let sit for about a minute or rev to "wake up"



# Maintenance - General

- Keep clean
- Spray with lubricant after every use
- Keep gas tank full
- Start at least once a week to prevent it from sitting too long
- Talk nice to it when it doesn't start
- Bring in when blades are dull

# Hedger Safety

- Wear your PPE: Ear Protection, Eye Protection
- Have good footing before you start hedging
- Make sure sweatshirt ties and loose pieces of clothing are contained
- Be aware of surroundings before cutting. AKA know where the rest of the crew is







# Choosing the Right Tool: Hedger versus Shears

- What needs cutting?
- What volume of work is there?
- Will clean up be easier/harder?
- What other tasks need to be done?
- Is one tool already being used?

Re-evaluate  
regularly, is this  
still the best  
choice?



# Maintenance

## When should you be concerned?

- When you can't get to start after trying everything and after talking to lead.
- Engine is working abnormally
  - Only runs when it's set on choke or half choke? That's a sign of a problem
- You don't know how to/ unable to fix it quickly in field

## How to turn them in

- Bring item into office and put in/near "In" box in 101
- Send an email to maintenance. Let Lead know.

## How descriptive to be

- What the problem is
- When did you notice it?
- When does it seem to be most noticeable? (When it's just sitting? When using? Etc.)



A close-up photograph of an engine's internal components, including a coil spring and a spark plug, with a semi-transparent blue overlay. The text "LET'S GO START SOME ENGINES!" is centered in white, bold, sans-serif font. A thin white horizontal line is positioned below the text.

**LET'S GO START SOME  
ENGINES!**