

# WEED EATER PARTS, REPAIRS AND OPERATIONS MANUAL

*A Guide to Common Weed Eater  
Problems and Repair Methods*

JACK FERGUSON

# **Weed Eater Parts, Repairs and Operations Manual**

**A Guide to Common Weed Eater Problems and Repair Methods**

**By: Jack Ferguson**

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## **SUMMARY**

**Congratulations for purchasing this book! By downloading this book, as well as using the online resources at [www.weedeaterfeatherlite.com](http://www.weedeaterfeatherlite.com), I have helped so many people around the world.**

**Lets start with a small introduction about myself and a description of the trials, challenges, joys, sweat and tears when operating and repairing string trimmers over the years. I have been a hobbyist gardener for 32 years and enjoy the outdoor lifestyle of caring for and producing an organic garden. I have a particular interest in maintaining a finely manicured, neat and beautifully green lawn.**

**Over the years I have operated a number of different string trimmers with varying success and have been often frustrated with the lack of information and support in maintaining and repairing such garden appliances. I wrote this book to help people particularly with limited mechanical skills and experience conduct simple troubleshooting, maintenance and repairs to their trimmer so they do not need to throw their often recently purchased machine out and buy a new one!**

**Chapter 2 will set the scene and provide you with the main parts and description of a weed eater to ensure that you maximize your benefit from this book. In a nutshell it gives you the 'building block' information so please don't skip it.**

**Chapters 3 is the key basics providing you with the essential core knowledge of how to operate a string trimmer, how to string a**

**weed eater, correct fuel mixtures, how to start, choke and prime a weed eater and how to adjust the carburetor. Think of this as your foundation where you will build your skills up. Typically most books do not usually teach this part because it is often overlooked.**

**Chapters 4 takes you through some common faults and repair methods including non-start, broken fuel lines in tank, non-rotating trimmer head, snapped pull cord, pull cord will not pull out and engine wont stay running after start-up.**

**Chapters 5 will provide you with simple maintenance routines including carburetor stripdown and overhaul, carburetor replacement parts and rebuilds, pull chord replacement and how to compression test a trimmer engine.**

**Chapters 6 provides you with links to string trimmer schematics and parts lists where you can find affordable high quality parts.**

**Thank You!**

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# Chapter 1: Introduction

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Weed eaters are a great convenience for a small investment to keep your lawn and landscape looking good. Generally, they will run very well and last a long time if you keep them maintained and treat them properly. As with any tool or equipment there are maintenance and upkeep that need to be completed regularly. The proper fuel mixture used, etc. When something does need repaired or replaced, more often than not, you should be able to do it yourself.

There are a number of different weed whackers available in the market. Each model has its own size and capacity depending upon the requirement of the consumer. The most common types of wackers used by customers are weed eater, Stihl, Poulan, Ryobi and Echo.

We will discuss how to use your weed wacker properly. How to maintain it so that it will last many years. And we will cover typical repairs that are easily done by the owner.



## Weed Eaters

Weed eaters also known as weed wackers are the most commonly used device for trimming. Weed wackers are devices that are used to cut the grass or weeds near objects easily. If we go into the details of a weed eater you will come to know that weed eaters are made up of handheld elongated pipe that is powered by either electricity or gas depending upon the requirement of the customer. Normally blades are used in cutting but in case of a weed eater, the machine does not use blades rather it uses a monofilament line. A monofilament line is basically used for fishing purposes but in case of weed eaters the same line is used for cutting grass instead of using blades for the purpose.

Monofilament is used in weed eaters as they are quite cheaper to produce compared to blades and this cost cut also makes a lot of difference in the product price as well. The technique that is used in weed eaters is different from other weed cutting devices and it is more convenient to use than other devices as well. If you look at the weed eater physically, weed eater consists of many parts. There is a cutting head placed at the end of the shaft. The cutting head is the basic part that is responsible for the cutting methods used. The shaft enables the cutter to get adjusted so that it can be used for cutting the grass.

The long elongated shaft enables the user to use it more frequently as the design is the one factor that makes it more popular among the users. There is a shoulder strap placed on the handle that is used to lever the weed eater. The grip of the weed eater makes it quite unique in the functionality as the shoulder strap can be strapped onto the shoulder making it easier to have grip on the weed. The grip on a weed wacker makes it easier to use, the better the grip the easier a weed wacker is to use and vice versa. The purpose of having a weed eater is to use in places that are not easily accessible, for example if you wish to cut the grass around any landscape area or objects you can easily use a weed eater as it allows you to reach those hard to access areas where other cutting devices fail to reach.

## Chapter 2: Weed Eater Anatomy

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There are many parts of the weed eaters and every part has its own functionality with the specified utility achieved. Every part is interrelated to the other parts because each part is performing the task with respect to the other components of the weed wackers. The most common functions that we would see in a weed wacker before purchasing is the engine functions that it performs. There should be a few questions in mind before selecting any particular weed wacker.



***Trimmer Head   Trimmer String   Shaft***

The next component on which most people focus on is the ignition system offered by the company. The exhaust system of the engine also does have an effect on the performance of the engine. These are the few common components of the weed wacker but we will also discuss the larger parts of the weed wackers as well but before going into the depth we will have a brief overview of each of the components of the weed wacker to better understand all the parts of the equipment. As we all know that every part of the weed wacker is interconnected and that does mean that whenever there is a malfunctioning issue in any part it will translate into the whole of the wacker will be affected.



## Trimmer Head

As the name suggests trimmer is that part in the wacker that is responsible for cutting the weed from those places where an ordinary machine cannot reach. The concept behind the trimmer is very simple and unique. Normally in the



machines that are used in trimming you must have seen that there are blades used of different metals but in case of the wacker there is not a single blade used in the weed wacker. Instead of

the blade there are strings used in the trimmer as it is more smoothly used than that of any metal blades. Due to use of the string in the trimmer these weed wackers are lighter in weight and are made more compatible. The trimmer head is very simple and it can be disassembled very quickly. All you have to do is look in the manual and you can easily get the idea about the trimmer head of the weed wacker.

The basic trimmer head is only reloaded when you feel that there is a need of the string to be replaced. But most of the companies have very simple opening and assembling methods defined for their products. The two common techniques that are used in disassembly of the trimmer is that either there are nuts and bolts provided with which the head is made intact and in some cases these trimmers are made in such a way that they can be opened using the bare hands. The technology has made it quite easy to have the string replaced from the speed feed. The process of changing the string only takes five minutes if you are trained enough to have that string replaced.

The line is loaded in to the trimmer when it is replaced. To replace the string in the trimmer head there are only few steps that have to follow in order to complete the task. First of all you have to remove the old string that has to be replaced. For that you have to move the head clockwise so that it can be opened. As the header is opened you can have the string of the specified

length and then load the line with the holes of the head passing from one end to the other end. After that you need to cut the string from the both ends. As soon as you have cut down the string you need to load the line by simply turning up the large knob on the trimmer head. This knob can be managed with the bare hands. When you turn the knob the string comes to the right place you can stop the knob where you want it to. As soon as the string is adjusted you can move the knob on the head to tight the string. The string works on clockwise direction to cut down the weed on the ground.

## Trimmer string

The trimmer string is that component of the trimmer on which the whole concept of the weed wacker lies within. In earlier times the trimmers that were used to trim the grass or the weed were made of metals and the blades were used for cutting the weed. But as the time passed the concept changed and the technology moved towards the light weight products. These weed wackers has versatility in their design that makes them different from other weed wackers. The string is made up of plastic that is used in the weed wacker trimmer. The concept of the string is that it can be used for a longer period of time and secondly it can used in places where no other machines is able to move or reach. The lighter weight of these weed wackers has made it easier for the user to carry them anywhere you want to. The string that is used in the trimmers has ignorable weight and that can easily be replaced as well. The replacement of the string is not an Issue in weed wackers but it may vary from company to company as most of the companies have made it quite easier for the user to get the replacement done.

There is an eyelet present on every trimmer. The purpose of this eyelet is to have the line string inserted into the trimmer. If you wish to have the replacement of the old strings that you have to use you just have to remove that older string by pulling out the string and then you can take the measured segment of the string line inserted into the eye-let of the trimmer.



Make it sure that you have inserted the string in the eyelet properly because if the string is lose it will hinder your trimmer's working properly. The spool of the trimmer is very convenient to use you just need to pull out the string very gently from the spool of the trimmers. There is no need to enforce the string to move into the eyelet as it is not manufactured to bear that kind of stress of the human arm. These kind of weed wackers are lighting quick to get the replacement and that is why they have higher efficiency than that of other weed wacker available in the market. The other positive point of these weed wackers is that every component of these weed wacker scan get replaced. Whether it is a string or trimmer head all of the components are easily

available on the market and that could be one the reason of the popularity of the weed wackers.

There are different standards of the strings used in the weed wackers. The string should be used onto the recommendation of the company product that you are using. Never try to save the money by using substandard string as it may damage the trimmer as well costing you more in the long run. The catalog is always provided with the product and its maintenance procedures are always mentioned in the manuals as well. As a wise person you just have to follow those steps and you can do all the maintenance yourself.

The next part is the rapid roller placed on the trimmer head, as it is clear from the name that the rapid roller is the one on which the string is tightened and there is always a margin of having the string tightened on the roller. Normally clockwise direction is followed to tighten the roller but the design of the roller is made as such because the company has to facilitate the consumer in terms of maintenance. It is obvious that the strings would be getting replaced quite earlier if there is the burden of the work on the machine. The string will definitely get replaced after some specific duration of the time as the string may break up into pieces keeping the length of the desired length shorter. The shorter length will not allow weed to be cut from the ground. You can physically examine the length of the string and if you feel it should be replaced you can do it within no time.

### **Line Profile**

Weed eater string trimmer works much better with a good trimmer line. Every replacement line has label including diameter size, length, shape and purpose. The size determines the diameter of the nylon cord while the shape, round or square, characterizes the type of use. Round trimmer line is suitable for tidy lawn edges and Weed eater grass trimmer models. It tends to brake less often when hitting a stone or tree. Square cutting line offers more efficiency, especially when working on overgrown gardens with large bushes. Power and clean cut made by the sharp edges make a great difference and provides a better experience, but the square line has its own deficiencies. This product cuts faster and unfortunately makes more noise, breaks frequently and tangles easily while working or trying to rewind a spool.

## **Spool Length**

The length of the nylon string can range up to few hundred feet. In order to save money, professionals buy 1000 to 2000 foot bulk because they spend hundreds of feet per day. For an average customer, that is not a good idea. If you see 3-pack spools in the shops or large bulks, the first thing on your mind would be: "Is this really an economical purchase, I'll buy 1000 foot long trimmer line for the next six years!". Four years later the string line becomes too old and fragile so you end up throwing away 600 foot to the garbage, since you use it just few times a year. Be careful when buy trimmer line- consider your requirements first! As an additional feature for Weed eater line trimmer, quiet and extra durable spools are available in specialized shops or webshops.

## **Diameter Size**

The diameter size varies from 0.040 inch or 1 mm (0.1cm) for light-duty performance, to up to 0.170 inch or 4.3 mm for demanding gardening jobs. Electric string trimmers are limited to 0.100 inch or 2.5 millimeters thick replacement line. The thicker cords are made for trimmer with a powerful gas fueled engine. Weed eater lawn trimmer with a 20cc engine should be rewind with .040 to .080 inch replacement line and used in the back yard or a small garden. Shrubs, stones or metal pieces could break the thin line more likely so it's appropriate for clean lawns. The grass that grows around our houses is the same like the one on the golf course or football field and that's a fine place to use Weed eater on. Heavy-duty 30cc weed wacker should load a spool with .090,.110 trimmer line or even .150 inch trimming cord made for gas-powered trimmers only. Swinging the string is not possible with a weak line trimmer but mighty ones cut through tough weeds like a knife through butter. Spooled line



can be even .170 inch thick, which is actually 4.3 millimeter. The trimmer slices through high grass, bushes, ivy and it's possible to use it on any type of lawn surface, no matter how thick the weeds are. Refilling the spool with proper trimming line means a lot when spending a whole day trimming with Weed eater. Professional gardeners note that it is more important to have quality equipment than to save few bucks and bump the trimmer or replace the line every 10 minutes.

## Shaft

The shaft is said to be one of those components on which the performance of the weed wacker lies upon. The shaft is kind of mount of which the trimmer head is fixed upon. Many different models of the weed wackers have the ability to have different kinds of attachments. These attachments can be used depending upon the use of the weed wackers. On some of the places there is a requirement to have the high ability attachments onto the weed wacker and in such a case these attachments are in place on the shaft of the weed wacker. Whenever you are making the attachments to the weed trimmer header or even if you are having the maintenance of the header make sure that the head does not move. It should be completely fixed or should be adjusted in such a way that it does not move. If the head starts to move it means that your weed wacker would start malfunctioning a lot because the head is one of those parts on which the trimmer rely upon.

There are some maintenance tools provided with the kit as soon as you buy the best quality weed wacker from the market. There are tools provided that



enable you to lock the shaft in the rod. These tools are used in maintenance as they have to be used quite frequently during the operation of the weed wacker. Proper use of the tools is extremely necessary for the life of the shaft. The tool that is specifically designed to lock the shaft should be used whenever there is need to lock the shaft up. But the question is that how does this lock tool work on the shaft? As if you have physically

monitored the weed wacker you must have seen the holes that are laid between the guard and the head of the trimmer head. The tool that we are talking about is inserted into these holes quite gently enabling that shaft to lock firmly. The important point to note here is before doing any installations or even if you are doing any kind of maintenance make it sure that the power of the weed wacker is turned off. You must take all the necessary precautionary measures before doing anything.

The other maintenance that is done with the shaft is the lubrication of the shaft. As the shaft is that part of the weed wacker that is constantly moving round. The shaft is made up of metal and that is why it needs to have constant

monitoring. The shaft sometimes may heat due to the excess use or the overload of the weed wacker but you don't have to worry about the heat. Normally the parts like the shaft have heat emission during use. The shaft can be lubricated using the grease but people often don't use the phrase instead the lubrication oil is suggested by most of the companies. These lubricants are also available in different forms. Especially the spray oil is widely used by a number of users. After some usage of the weed wacker it should be given a rest and then you can check the level of mobility of the shaft. The shaft can be replaced but it takes some time to replace it but commonly shaft does not require being replaced often.

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# Chapter 3: How To Use A Weed Wacker

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There are a number of steps followed in using a weed wacker. Obviously there are many different kinds of weed wackers available in the market depending upon the situation of the garden or the area you need to cover. There are some other factors that also influence the choice of the weed wackers as well. We will be discussing all of the factors in this topic as well.



The utmost requirement of the weed wackers is that they should be handled with extreme care as they are kind of sensitive devices. Let us start with the gas weed wacker and will be looking into the details of using the gas weed wackers first. As the name clearly suggests that these weed wackers are operated on gas utility and obviously there are some standards to be followed by the use of the gas weed wacker. It will depend a lot upon the type of gas weed wacker you are using. There are two types of gas weed wackers. Two strokes and four stroke. Both have different ways of handling the engine.

Two stroke gas engines are formulated using both gas and the oil systems used to start up the engine. If you are using two stroke gas engines then you must verify the amount of the gas the oil needed to have the startup. There are gauges given on to the wacker from which you can have an idea about the limit that you have to maintain. Having anything less than that of prescribed limits, may result in malfunctioning of the device. After you are sure that you have both the levels maintained you can check the trimmer line.

There are choke options provided on the engine too. These chokes can manually be changed. Before starting the gas engine make sure that the engine is set to be on full choke. Primer bulbs are placed on to the engine. You need to set those bulbs as well as their key role in depressing the engine. You need to depress the primer bulbs more than twice to make sure that the engine is depressed. Smooth start is one of the major concerns in these kinds of devices. To have the smooth start make sure that you have your left hand placed on the start line on start. As the engine starts moving the choke of the

engine should be brought to half position. You have to maintain the throttle as well.

As the engine starts running smoothly place the weed wacker on to the direction where you wish to have the weed eaten. There are few other things that need to be adjusted as well. You have to make it sure that the angle of the trimmer is so adjusted that it gives the maximum output. In general practice the trimmer is adjusted thirty degrees. The placements of right and the left hands are to be adjusted according to the momentum of the engine and the speed.

For smooth cutting of the grass the throttle needs to be in the constant position. Never throttle the engine unless until it is in use which means that



while cutting the grass the throttle should be used. It is highly un-recommended that you should be using the throttle if the weed wacker is not in use. Use the wacker with a gentle speed.

Lower the trimmer near the ground from where you need to cut down the grass. The strings used in the wacker are the ones that are responsible for cutting.

The use of the electric weed wacker is different from that of gas weed wackers. There are also some measures to be taken before starting the electric weed wacker. You need to collect all of the materials needed to start the electric weed wacker. Before starting to take a look on to the cartridge of the engine and make it sure it do have the cord placed and if you find that there is no cord present then you must have to remove the cartridge from the engine and then put the cartridge into the hole placed at the bottom of the engine.

There is a weed eater twine that you can see. You just need to place that twine into the hole of the cartridge. You need to set the wind direction as well. As soon as you do with the wind direction, make it sure that all of the parameters are set accordingly. You need to place back the cartridge back to the original position in order to make it sure that it will work smoothly.

You need to look at the number of filaments that your cartridges have and then you must also consider the length of your twine as well. If you find it



extra-large then you may cut that into equal parts. Make the loop of the ends that you have already cut. You must know the direction into which you need the twine to be winded. Make it sure that you wind the twine in the right direction. Put the power cord into the power socket and then pull the twine over the cartridge and then you have your engine started.

There is a trigger placed on to the weed eater from where you can have the adjustments very easily. There is a complete maintenance manual present in the packing of the weed wacker. Sometimes it does happen that your twine may break but you need to make it sure that it will be reconstructed and then you can have your engine operational again. The maintenance does have impact on to the life of the weed wacker. If the wacker is maintained on the regular intervals of time then there are higher numbers of chances that the wacker would remain in a position that it does not have to be repaired again and again. The cartridge needs to be refilled all the time. As it does exhaust after the use and it needs to be refilled time again and again.

The third kind of weed wacker is battery operated weed wacker. Battery operated weed wackers are bit expensive than that of other kinds of the weed wackers. These weed wackers are suitable for those kinds of gardens that have a larger area to cover. Because we all know that it's not easy to have the long power cord to provide the power for the engine. They're battery operated engines are those kinds of engines that are provided with the batteries with the engines. These batteries are charged first before the use and then these batteries are sufficient to move the engine for the longest time. The power supplied by these batteries does have the time limit and after that duration of the time limit the batteries exhaust causing the engine to stop.

So before starting using the battery operated weed wackers make it sure that it is fully charged and there are also indications present that will guide you about the charging of the battery. There are some maintenance techniques followed for the batteries as well. There are different kinds of batteries installed in the weed wackers. The one that is maintenance free are preferably used in the weed wackers. There are some other protections as well before using the weed wackers. Your eyes and the hands should be covered with the gloves and the eyeglasses. It is highly recommended that you must charge the battery at-least for overnight so as to make sure the charging is full. Full

charging is required by the engine to be in full operated form. There are a number of other methods as well. The grip of the handle must be very tight so as to use the weed wacker. There are adjustments present on the handle of the weed wacker so that the person using the weed wacker can have the adjustments accordingly. Many weed wackers have an automatic system of bumping the ground on which they are to be used but some of them have to manage manually by the person handling it. If you are using an automatic machine then it would not be an issue but if it's not automatically adjustable then you have to adjust it by yourself and after that you are ready to trim.

## How To Create The Correct Fuel Mixture For A Weed Wacker

We all are familiar with the fact that there has to be some kind of ratio with which the gas and the oil should be mixed in the weed wacker but we need to know that why it is necessary to have the mixing done before the use. In this topic we will cover all the details regarding the mixing technique used in the weed wackers. The weed wackers are those kinds of machines that works on specified momentum and as the use of the mixture is highly recommended by the weed wacker companies it is highly recommended that one must know that what kind of weed wacker engine you have in your weed wacker machine

The weed wackers are normally divided into two stroke engines and the four stroke engines. In general practice two stroke engines are normally used in the weed whackers. When you are sure what kind of weed wacker engine you have you can carry on to the next step. The two cycled engine required proper mixing of the oil along with the gasoline for the proper working of the engine. The question that arises in the mind is that what is necessary to have the mixture of the gas with the oil. The answer to this question is very simple.

The internal moving parts of the engine as designed in such a way that they require having the lubrication in between them. It is obvious that there is a phenomenon of the heat generation between the moving parts of the engine and for the same reason they should be mobilized between the parts so as to ovoid the parts of the engine to get heated. Now the question is how we can keep the heat between the engine component low and the only way through which one can get that resistance to the lower level is by lubricating the engine parts.

There are various reasons that can help you understand the use of the oil in the engine but the most common method is the mixing of the oil and the gasoline. The crankcase of the engine should have to be mobilized all the time and the crank is that part of the engine that has to be constantly in the moving position. When the gas reaches the crank space with the oil in it, the crankcase easily gets mobilized and keeps on working with the same momentum. There are lots of disadvantages of not having the mobilization with the gas.

Let me explain this fact with the example that if there is no lubrication of the crank space then the heat generated in the crankcase will lower the mobilization of the engine and from that the heat generations will ultimately increase. As the crank is made up of the certain metal and the property of the metal is that it gets an expansion ion heating. When the heat rises in the crank it causes the crank to get expanded and as the result there is need of oil in between the parts of the crank keeping it mobilized.

The engine may get seized causing the engine to stop working completely and that ultimately means that the oil is to be mixed with the gas all the time. One thing that is too kept in mind is the quantity in which these two liquids have to be added. If you add too much oil into the mixture than there are lots of chances that your engine may start malfunctioning because the excess oil will gum the muffler up causing the muffler to choke. To create a full complete mixture of the oil requires a little bit of wise directions and the decisions. One mistake can get you to the loss of the engine of the weed wacker.

Some people always seek to have the mixture of the gas and the oil from the market but this kind of mixture is not available on the market as the user of the weed wacker has to make this mixture by themselves. For mixing these two liquids one must prefer to use high quality lubricating oil and the high quality of the gasoline. There are degree of the oils available in the market by one must prefer to use the highest quality of the oil for preparing the mixture for the engine.

The fuel-oil mixture ratio varied with the design and the model of the weed wacker you are using. Different design shave different specifications and there are different ratios for each of the models of the weed wacker. There is catalog provided with each of the weed wacker purchased. If you see that catalog you will come to know that there are lots of ways given to prepare the mixture of the oil and the gas. After verifying the catalog you can start preparing the mixture by yourself. If you don't find the answer of these types of questions on the catalog then you can get these kinds of information's from the internet as well. You just have to write the name of the model and all information will be provided onto the internet.

User manuals should not be ignored at all because these manuals are designed according to the needs of the engine. Consultation with the manual

is extremely necessary because it's all about the life of your engine. After you are sure that you have noted down the fuel to oil mixture ratio for your engine then the next step would be the amount of the gas and the oil to be mixed. For example if you are asked to have 30:1 mixture then it means you have to take 30 parts of the gasoline to mix with the only 1 part of the oil. From this one can have an idea about the mixture quantity. Don't even increase the amount slightly because even a small amount in excess can cause the damage to the engine parts.

The most common problems that the weed engine company faces is the use of non-recommended fuels and the oils in the engine. As we all know that there are lots of other fuel available in the market. These alternative fuels are good but they are not recommended by the manufacturer companies as the engines are not designed to manufacture to be run on alternative fuels. For example if you have bought the weed wacker that works on unleaded gasoline, then it means that you only have to use gasoline in the engine. Ethanol is other alternatively used fuel but it is also not recommended by most of the gas run engines.

Always prefer to use the only recommended fuels in the engine. Now here is some instruction that you would have to follow to prepare the mixture of the gas and the oil. As soon as you have purchased the gallon of the recommended oil you need to have another container in which you have to prepare the mixture for your weed wacker engine. As soon as to have the container with you make it sure that the container is completely washed from inside. Even a small particle of the dust can cause your engine carburetor to choke. Fill up the required amount of the gasoline into the container and mix the oil into the container. Shake the container till you feel that the oil is completely mixed with the gasoline. Now the mixture has been prepared.

Now get the weed wacker that you are using and try to find the cap opening of the fuel tank of the weed whacker. Make it sure that the weed wacker is turned off and there is no power supply connected to the weed wacker. There are some precautionary measure that should be taken so that to avoid any kind of loss. There is a kit available in the market that is recommended to be used before the use of the weed wacker. These include the costumes' and the tool kit. The tool kit also involves the use of the goggles as they can protect the eyes from getting damaged. The power source should be out and take the



weed wacker to places where you can have the balanced area of the floor or the table.

The purpose of choosing the balanced surface is to avoid the fuel not to get wasted, you must have the Kef with you in order to pour the oil into the tank of the weed wacker. Remove the cap of the weed wacker trimmer and use the funnel to pour the gasoline mixture into the trimmer. There is a limitation of the gasoline that can pour into the container. This can be noted from the catalog or it is also mentioned on the tank of the weed trimmer also. Never pour too much gasoline as if you fill up the tank more than the required level than it may cause it to leak. As we all know that the gasoline can be very lethal with the power that is provided to the weed wacker. Tight the cap to the maximum level after filling up the tank and your weed wacker is ready to be used for the trimming purposes.

The mixing of the oil and the gas is not a difficult job to perform at all but as a matter of fact all of these functions have to be understood by the user. If you wish to have a longer lasting life of your machine you need to use it according to the instructions given by the company. Most of the time the machines gets malfunctioned because of the fact that people don't bother to use these machines according to the instructions from the company. There are a number of companies that do have a warranty and the claim policy but these policies are only implemented to those conditions in which the user use the machines in accordance with the company instructed.

Whenever you have to buy the weed wacker makes it sure that you must have purchased the product of that company that have some reputation in the market. People often go for brands yet with the fact that the brands are expensive to buy but still there are higher numbers of people that prefer to buy brands because in brands there is surety that the quality of the product will not be a question. There are a number of outlets of the brands from where you can buy the weed whacker easily. There is a warranty card given along with the invoice of every product and if you don't give the warranty card do ask the shop keeper to provide you the warranty card so in case if you need to claim then you can have that claim back.

Mixing up the oil and the gas will make your engine work smoother. All the parts through which that gasoline will move, it will lubricate and when these

parts get lubricated it means that there are less chances that the particular part gets over heated. As most of the engine parts are made up of different metals and when the engine is in running form these part do have to move upon each other. According to the laws of friction when the metals move upon each other it not only causing the heat to rise up but there are lots of chances that these metals do get over heated. Now you must know that what a lubricant can do for these kinds of parts?

The lubricant will ensure that these parts will work smoothly having less heat generated between them. There is no concept of the working of the machine without the use of the lubricant .Every little engine uses the lubrication to perform the task or work correctly. As a user, one must have make sure that the lubrication must be done timely.

## How To String A Weed Wacker

The string is mounted in the eyelet of the trimmer head. The trimmer head is connected to the shaft of the weed wacker that is responsible for the movement of the weed wacker. Between the guard and the hole of the trimmer you can see the hole openings through which the string has to be passed. First of all never pulls the older string with the force as it's delicately made. The stings can be easily pulled out of the holes and then you just need to replace that string with the new one.

Rewinding the trimmer head usually means that you must disassemble the spool on your trimmer product. Only the new string trimmers have a spool that manually loaded once lasts, until the cord is worn. Those lawn trimmers are double lined but the nylon string is one piece. The replacement line has not have the ends protruding out: it is arched and feeds automatically, unlike the one on bump trimmers. To bump the trimmer head means to press it on the ground while operating, to “bump” head feeder that extends the trimmer line.

Please check out the step-by-step instructions and video tutorial link below on how to replace trimmer line:

1. Restring Weed eater trimmer by removing the cap on the trimmer headfirst. Unscrew it and put close to hand. You will see later why is important to keep the cap in a know place.
2. As you have removed the cover, the spool comes off. See what trimmer style you own- single or double line. Dual lined trimmers have two channels to re-line. Cut a 10 to 25 feet long replacement line and find the small hole on the spool. Tip: cut the end of the trimmer line angled to make handling easier.
3. Pass the end of the cutting line through the starting hole. Now look at the arrow for direction when wrapping- it shows the way you should wind the spool. Wrap the spool in rows precisely so it could feed the line from the trimmer head properly. An untidy wrapped string could snag when trimming. Some line trimmers have a quick feeder for fast replacing. When restringing,

just squeeze the string through the tiny hole and bump several times to re-line. Quick feeder is available in shops specialized for gardeners as an additional feature for Weed eater. Force keeps the string taut and it feeds automatically when it becomes worn.

4. Once the spool is wrapped, put it back on the trimmer head. Line the spool with a slot on the head so it could fit in and pull the trimmer line through the socket. Rotate the spool by about 45 degrees, or as much as it can be tightened. In case you have dual line Weed eater trimmer, use the retainer on the side to hold the nylon line while replacing the other. Reattach the retaining cap to assemble the string trimmer again. It makes much easier if you do not need to look for a cap while holding the string to prevent unwrapping. Your Weed eater is now ready to go!

**Note: For a Video tutorial on how to replace trimmer line please follow this [link](#).**

Take your new roll of the string and measure the length of the string that is needed to be replaced. You need to have the string cutter as well so that it would be easier for you to cut the strings. Take one side of the string from the roll and string inserting into the eyelet of the trimmer and make it sure that the length of the string does not get exceeded and then cut the string into the second half. As soon as you are done with that you need to put the second string into the second eyelet of the eyelet. Cut that string to after the sufficient length. The reamer head had two portions. The lower portion is made to tighten up the string to the required level.

After you tight the string form both ends make it sure that the directions of the strings are set. These strings are manufactured in such a way that there is a curve in the string that helps the trimmer to trim the grass. To ensure the maximum output you must check that there should be no losing in the string because the loosing may cause the malfunctioning of the trimmer as every component is connected to each other and this may result in the effective efficiency of the trimmer.

Low quality strings should not be used in the trimmer and only recommended brands should be used in the trimmer. The qualities of the string do have an impact on the working of the trimmer. Lighter weighted good quality string is long lasting and it gives your lawn smoother look that any other string cannot give. The smooth look of the lawn is also dependent upon the person moving the weed wacker. Normally there are adjustments given on the weed wacker with whom one can adjust many things including the speed and the throttle of the weed wacker. All of the parameters should be maintained for the smooth working of the weed wacker. The lubrication is also required for the parts of the weed wacker but it may require some training.

## How To Adjust The Carburetor Of Weed Wacker

Carburetors are those kinds of components that should be constantly maintained after some time. There are instructions given in the manuals in which it is clearly written that after how long the carburetor need to be adjusted again. But the question that comes on to mind here is what does the adjustment mean and how it could be done?

All Weed eaters require a carburetor adjustment from time to time. Weed wacker carbs will loose their tune because the adjustment screws may work



themselves loose from vibration, fuel mixtures may slightly change or you may change the trimmer head causing a different load on the engine. The carburetor settings drastically affect the performance of your trimmer. All the weed eater trimmers use a two-

stroke engine where oil is added to the fuel manually at a preset fuel to oil mixture. To adjust your carburetor you will need to find the two fuel adjustment screws on the carburetor body. The screws are highlighted as HI and LO. Simply speaking the HI screw allows the fuel adjustment of the weed eater at full throttle. Whereas the LO screw allows the fuel adjustment when the engine is idling.

Follow the listed steps and video tutorial link below to tune your Weed eater carburetor:

1. Adjust both screws clockwise until just tight using the correct tool. This will be the reference position for adjusting the carburetor.
2. Rotate the HI screw one and a half full turns counter-clockwise.
3. Rotate the LO screw one full turn counter-clockwise.
4. Open the choke by pulling the choke level all the way out or turning it to full.

5. Start the weed eater by pulling the starter cord. The engine will sound out of tune and will fail to idle by itself. therefore apply just enough throttle to keep the engine running.

6. Rotate the LO screw clockwise in one-quarter turn increments checking each time if the engine is idling smoothly. When you have found the sweet position do no further adjustments.

**Note: For a Video tutorial on how to adjust your Weed Eater Carburetor please follow this [link](#)**

Apply full throttle watching the engine. If the engine is sputtering then the engine is receiving too much fuel from the carburetor. Therefore rotate the HI screw clockwise in one-quarter turn increments checking each time if the engine runs smoothly. Again when you find the sweet position do no further adjustments.

The carburetor is always adjusted near the fuel tank. Before reaching for the carburetor always ensure that you have enough tools with you so that you can open up the carburetor. The carburetor is that kind of device that is needed to take off from the weed wacker because you cannot adjust carburetor by taking it off from the engine. There are normally two screws used on each side of the engine. Before reaching for these screws always count the number of screws so that it would be easier for you to know that how many screws are there on each side.

One of the most important factors that most of the people don't bother while opening or dis-assembling of the devices is that they should handle the screws with care because once these screws gets lost then there is no chance you can get your weed wacker engine or the carburetor to be working position again. Place a screw box near your side and put the entire screws one by one into that box. Now as the lightweight weed wackers are now manufactured by most of the companies so as to make them portable there are some plastic screws used in the weed wacker covers also.

The screws that are made up of plastic should be opened with the prescribed tools and the screws that are made up of metals should be open with the normal screw drivers. As soon as you have removed the covering of the weed



wacker and you have reached the carburetor follow the instruction as given in the manual. The carburetor is always located at the lower end of the engine. The carburetor is attached to the number of other things with the engine.

Obviously there are fuel pipes attached to the carburetor so as to supply the fuel to the carburetor. There is a term used to call the petcocks with the fuel lines are attached .Before will any further steps remove all the pipes and make sure that the supply of the fuel is already turned off because with the fuel there are a higher number of chances that any mishap could take place. You can use the pliers to remove all the fuel pipes from the carburetor. The carburetor is divided into two parts. The part that is on the lower end is said to be floating bowl and float on the bowl there is a covering of the carburetor. The float bowl can be removed by unsnap the mounted wire. As the wire unsnap the floating bowl can be removed easily. You must have to clean the floating bowl and there are a number of ways through which one can clean the floating bowl. The floating bowl may have the dust particles in it that must have carried along with the fuel that has been used by the carburetor. The recommended way of cleaning the carburetor is that you must use the spray cleaner to do that task. There are number of spray cleaners available in the market with the different names.

As soon as you are done with the cleaning of the float bowl make it sure that you must clean it the way it was before. Re-mount the wire so that the float bowl can be re-attached to the upper part of the carburetor and then tight the screws on the sides of the carburetor. The next step is to give the supply of the fuel pipes to the carburetor. The fuel pipes are to be attached to the carburetor by using the pliers so that it can be done easily. After you are done with the fitting on the pipe to make it sure that there should be no leakage from the pipes. These leakages can be very devastating as far as the chance of the fire burn is concerned. The leakages can be checked by shaking the carburetors.

When you are done with that place the carburetor to the place from where you have removed and then try to find the three adjustment screws on the lower side of the carburetor. These adjustment screws have three settings. One is high and the other one is low and in between there are idle settings. After you set these adjustments remount the carburetor and then you can start the engine.

# How To Start A Weed Wacker – Prime Choke And Startup

**WARNING:** Read and follow all **Safety Rules and Operating Instructions** before using this product. Failure to do so can result in serious injury.

## SAFETY RULES

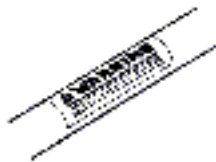
### WARNING:

When using gardening appliances, basic safety precautions should always be followed to reduce the risk of fire and serious injury. Read and follow all instructions.

This power unit can be dangerous! Operator is responsible for following unit and manual instructions and warnings. Read entire **Operator's Manual** before using unit! Be thoroughly familiar with the controls and the proper use of the unit. Restrict the use of this unit to persons who read, understand, and follow unit and manual instructions and warnings. Never allow children to operate this unit.



OPERATORS  
MANUAL



SAFETY INFORMATION  
ON THE UNIT

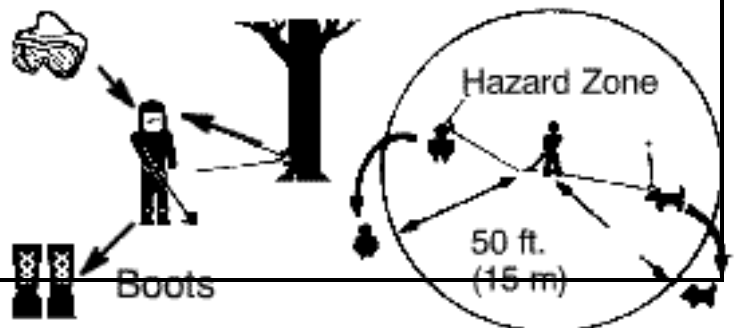
### DANGER:

Never use blade, wire or flailing devices. This unit is designed for line trimmer use only. Use of any other accessories or attachments will increase the risk of injury.



**WARNING:** Trimmer line throws objects violently. You and others can be blinded/injured. Wear safety glasses and leg protection. Keep body parts clear of rotating line. Safety glasses or similar eye protection risk of injury.

Keep children, bystanders, and animals 50 feet (15 meters) away. If



approached, stop unit immediately. If situations occur which are not covered in this manual, use care and good judgment. If you need assistance, contact your Authorized Service Dealer or call 1-800-554-6723.

#### *OPERATOR SAFETY*

- Always wear safety eye protection.
  
- Always wear long pants, long sleeves, boots, and gloves. Wearing safety leg guards is recommended. Do not go barefoot or wear sandals. Stay clear of spinning line.
  
- Secure hair above shoulder length. Secure or remove loose clothing or clothing with loosely hanging ties, straps, tassels, etc. They can be caught in moving parts.
  
- Do not operate this unit when you are tired, ill, or under the influence of alcohol, drugs, or medication.
  
- Wear hearing protection if you use this unit for more than 1 1/2 hours per day.
  
- Never start or run inside a closed room or building. Breathing exhaust fumes can kill.
  
- Keep handles free of oil and fuel.

#### **UNIT/MAINTENANCE SAFETY**

- Disconnect the spark plug before performing maintenance except carburetor adjustments.
- Look for and replace damaged or loose parts before each use.
- Look for and repair fuel leaks before use. Keep in good working condition.
- Replace trimmer head parts that are chipped, cracked, broken, or damaged in any other way before using the unit.
- Make sure unit is assembled correctly as shown in this manual.
- Make carburetor adjustments with lower end supported to prevent line from contacting any object.
- Keep others away when making carburetor adjustments.
- Use only recommended **WEED EATER** accessories and replacement parts.

#### **FUEL SAFETY**

- Mix and pour fuel outdoors. - Keep away from sparks or flames. - Use a container approved for fuel. - Do not smoke or allow smoking near fuel or the unit. - Wipe up all fuel spills. - Move at least 10 feet (3 meters) away from fueling site before starting engine. - Stop engine and allow to cool before removing fuel cap.

### **CUTTING SAFETY**

- Use only for trimming, mowing, and sweeping. Do not use for edging, pruning, or hedge trimming. - Inspect the area before each use. Remove objects (rocks, broken glass, nails, wire, etc.) which can be thrown by or become entangled in line. Hard objects can damage trimmer head and be thrown causing serious injury. - Keep firm footing and balance. Do not overreach. - Keep all parts of your body away from spinning line and muffler. Keep engine below waist level. A hot muffler can cause serious burns. - Cutting with the line on left side of the shield will throw debris away from the operator.

### **TRANSPORTING AND STORAGE**

- Allow the engine to cool; secure unit before storing or transporting in vehicle. - Empty the fuel tank before storing or transporting the unit. Use up fuel left in the carburetor by starting the engine and letting it run until it stops. - Store unit and fuel in an area where fuel vapors cannot reach sparks or open flames from water heaters, electric motors or switches, furnaces, etc. - Store unit so line limiter cannot accidentally cause injury. Unit can be hung by the tube. - Store the unit out of the reach of children. If situations occur which are not covered in this manual, use care and good judgment. If you need assistance, call 1-800-554-6723.

### **SPECIAL NOTICE:**

This unit is not equipped with a temperature limiting muffler and spark arresting screen which meets the requirements of California Codes 4442 and 4443. All U.S. forest land and the states of California, Idaho, Maine, Minnesota, New Jersey, Oregon, and Washington require by law that many internal combustion engines to be equipped with a spark arrestor screen. If you operate in a locale where such regulations exist, you are legally responsible for installing and maintaining the operating condition these parts. Failure to do so is a violation of the law. If a spark arrestor is required in your area, contact your Authorized Service Dealer for the proper kit.

### **SPECIAL NOTICE:**

Exposure to vibrations through prolonged use of gasoline powered hand tools could cause blood vessel or nerve damage in the fingers, hands, and joints of people prone to circulation disorders or abnormal swellings. Prolonged use in cold weather has been linked to blood vessel damage in otherwise healthy people. If symptoms occur such as numbness, pain, loss of strength, change in skin color or texture, or loss of feeling in the fingers, hands, or joints, discontinue the use of this tool and seek medical attention. An anti-vibration system does not guarantee the avoidance of these problems. Users who operate power tools on a continual and regular basis must monitor closely their physical condition and the condition of this tool.

### **ASSEMBLY**

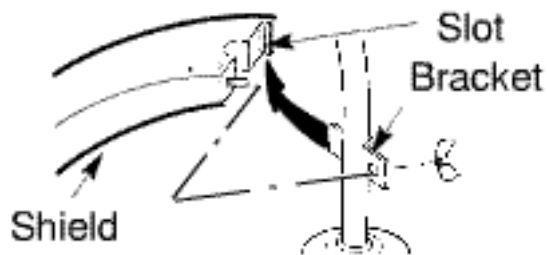
**WARNING:** Make sure your unit is properly assembled and all fasteners are secure.

### **ADJUST THE HANDLE**

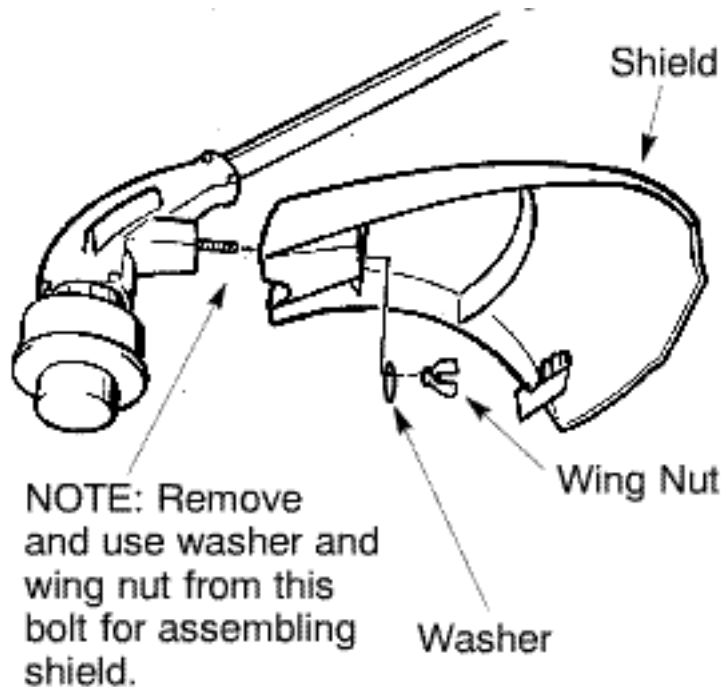
- Loosen wing nut on handle. - Rotate handle to upright position and tighten in a comfortable position between the trigger and the safety label on the tube. Tighten handle securely.

### **ATTACH THE SHIELD**

**WARNING:** The shield must be properly installed. The shield provides partial protection from the risk of thrown objects to the operator and others and is equipped with a line limiter which cuts excess line. The line limiter (on underside of shield) is sharp and can cut you. Assemble your shield (Style A or Style B) as shown. **STYLE A** - Insert bracket into slot in shield. Tighten securely.



**STYLE B** - Assemble parts as shown; Tighten securely.



NOTE: Remove and use washer and wing nut from this bolt for assembling shield.

### **FUEL YOUR UNIT**

This engine is certified to operate on unleaded gasoline. Gasoline must be mixed with a quality 2-cycle air-cooled engine oil designed to be mixed at a ratio of 40:1. **Poulan/Weed eater** brand oil is recommended. (A 40:1 ratio is obtained by mixing 3.2 ounces of oil with 1 gallon of unleaded gasoline). When mixing fuel follow the instructions printed on the container. Always read and follow the safety rules under FUEL SAFETY.

### **STARTING**

#### **HOW TO STOP YOUR UNIT**

Push and hold engine stop switch in the STOP or OFF position until the Weed eater unit has fully stopped.

There are a number of ways one must have to follow in order start the weed wacker. In this topic we will try to cover up all the details regarding the startup of the weed wacker and the problems that could be the reason for the startup of the weed wacker. Weed Wacker are the kinds of devices that are handled with care and professionalism. There are number of weed wacker of different types that are available in the market. These weed wacker has some techniques used in order to start them Sometimes these techniques may be

wrongly implemented causing the weed whackers to get malfunctioned. As there are lots of components that are attached with the weed wacker including the fuel pump and the engine? The engine consists of many other parts as well. All of these parts are to handle with the specified ways so as to get the weed wacker into the smooth running condition.

There are some steps that are necessary to look at before you start the weed wacker. Like the car engines the weed whacker also has a choke in the engine. Most of us are familiar with the work chokes but before going into the details about the choke let have some inner look into the carburetor working first so as to understand the concept of the choke more correctly. Carburetor is that kind of device that is used to run the engine but there is some technical information included in the working of the carburetor as well. The carburetor is that kind of device that combines the air and the fuel. The combination of the fuel and the air is used in the internal combustion engine. Now what is an internal combustion engine? The internal combustion engine is that part of the carburetor that generates the power to run the engine. Now we can understand the purpose of the choke more easily.

When the engine is in idle state or not in running state the air content in the carburetor becomes more and as a result the ratio between the air and the fuel becomes uneven. The fuel starts vaporizing more slowly when the engine is not in running state. The walls of the carburetors need to have the air content and when there is no air content available in the carburetor then it makes the engine more difficult to start. Here comes the role of the choke. The choke enables the carburetor to receive an extra amount of the fuel in it causing it start more smoothly. The role of the choke is that it reduces the flow of air content in the carburetor and on the other end keeps flowing in the new mixture of the air and the fuel into the carburetor making it easier for the engine to start.

The purpose of letting you know all the details about the choke is that the choke has an important role in starting up of the engine so one must know that how to start the engine and how should the choke should be used. There is another problem that most of the people faces. There is a level of the choke provide in every weed wacker.



The level of the choke means that how much choke is required by the engines. In normal practice the use of the choke is very common in winter season and in the summer season there is no need of the choke to be used, but there is an issue using the choke excessively as well. When the user uses the chokes without the requirement of the choke to be used then there are chances that the engine might not start or may cause some problems. The reason behind that is when the choke is used it cause the gas to reach in excess amount ion to the carburetor casing the carburetor to move in an over state.

Now people who use the car must be familiar with these terms as well but most of the people don't know about the terms as well. The engine is said to be over when the fuel that enters into the carburetor in excess than the required amount of the fuel. This may cause engine to knock a lot or May it does not start. All of these issues have to be kept in mind before you start preparing to turn on the weed whacker engine. The first step that you have to do is to look at the gas level ion the engine. The gas level should be maintained at a certain level in order to start the engine of the weed wacker.

The engine requires a certain level of the fuel in order to start the start. The lower level of the fuel may be one of the treason that won't allow the engine to start. Once you have maintained the level of the fuel in the tank you now to have to look some other details as well.

You must know the fact that the fuel that you are pouring into the fuel tank must be mixed with the oil. If not then you must know that the mixture of the gas and the oil is used as the fuel in the engine. You must be thinking that why would we need to have the oil mixed in the fuel? If you are using two cycled weed wacker than it is mandatory to do that mixing otherwise your weed wacker engine may seize. Before startup makes it sure that you have mixed the oil and the fuel together in the fuel tank. If you are not sure about the ration with which you have to mix the fuel and the oil then must consult with the manual that you have been provided with. The manual will guide you about the ratio and the technique used to mix up the fuel and the oil.

When you are done with the fuel portion then the next step is the use of the primer bulbs. The use of the premier bulb is simple but there is logic behind the use of the primer bulbs. The weed wacker machine look simple apparently but these kinds of machines are complex and they do have complex structure

of working as well. The basic phenomenon that one must know is that it's all about the fuel reaching to the carburetor without any delay and then the engine will work smoothly.

Coming back to the use of the primer bulbs, one must know the fact the primer bulbs have to be pushed before the start of the engine. Now there would be question arising in the mind and that would be why it is always necessary to use the primer bulbs before the starting of the engine? The fuel reservoir will refer to the fuel tank. Every time the fuel is pumped in at the carburetor there is vacuum developed in the carburetor upper part. The upper part of the carburetor is the one that is receiving the fuel but the point is that the when the fuel moves from the upper chamber to the carburetor to the lower chamber it creates the vacuum between the two chambers. As a result of the vacuum between the two chambers the fuel fails to reach the lower chamber less than the required amount. Thus the engine will unable to start for the first time.

What these bulbs do is that they fetch the fuel in the required amount from the fuel reservoir and then this fuel is transferred to the throttle of the engine. The throttle is that part of the engine that controls the intake of the fuel. There is a spray machine installed in the throttle that makes sure that the fuel mixture reaches the combustion engine in the required form. Whenever the user throttles more the amount of the spray also increases in the combustion engine. In combustion engine the fuel is burned with the air thus generating the power for the engine. The uses of the bulbs thus provide help to the carburetor to start early having enough fuel supplied. These bulbs are pressed 3-4 times so as to make sure that enough fuel has reached its destination.

The next step will be monitoring of the chokes. There are three levels of the chokes that provide one is the initial level and then there are medium level and the last one is the full level. When you have to start the engine you have to set the level of the choke to the last level that is the highest or the full choke position. Through this it would be sure that the required amount to fuel for the time to start the engine will be supplied to the engine quickly. That will not only save your time but it will also save some fuel along with eh energy of the engine to start and run smoothly. The level of the choke can be adjusted with the hands as well. These levers are present just near the carburetors and

if you find it difficult to have those levers seen you can consult the manual as well.

The throttle does have a larger role to play. Whenever you start your car you have to give some throttle to start the car similarly while starting the weed wacker engine you also have to make some throttle in order to start the engine. The throttle should be moderate because even if it is low the engine will not start if it is too high it also means that you are having an extra pressure on the engine that might be not good for the engine.

Your one hand should be on the throttle always and makes the throttle to increase slowly so that your engine could reach a smooth level. Here smooth level means that the engine is in a position to be loaded with the work. Most of the people don't bother to keep the engine heated to the required level. It is suggested that the engine should be heated first before the use and what people mostly do is they are just starting the engine and then after starting the engine they immediately put the load on the engine thus lowering the efficiency of the engine as well. It takes 2-3 minutes to get into the smooth position and then the load has to apply to the engine fan.

The next step is to pull the starter rope of the engine. The starter ropes of the engine have to be pulled so that the engine could have the momentum to start. There is need of physical strength in order to start the engine through the rope. The rope is to be pulled in such a way that there should be a margin of round. The rope has to be pulled 5-6 times in order to start the ignition and once the ignition is started you have to use the throttle. Either you use the right hand on throttle and left hand on the rope it is purely the choice of the user using the weed wacker. Once the engine has started then try to have the throttle at the constant position. Never throttle too much as the more throttle means that more fuel is injected into the carburetor increasing the consumption of the fuel.

Now coming back to the choke, as soon as the engine attains the speed and the momentum there is needed to turn off the choke immediately because the purpose of the choke is now achieved as the engine has come to a level where it can be used for the load. The weed wackers are complex machines but these machines have to be used in accordance with the way they are told to be

used. They are effective and cost saving as well if these machines are started the way they are manufactured to be started.

# Chapter 4: Common Weed Wacker Faults And Repairs

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## Weed Wacker will not start

There could many reasons for having issues in the weed wacker that it could be not starting properly. We will be having discussions in this regard and will try to focus on the issues that may be causing the problems for the weed wacker. To avoid having these kinds of issues there are some steps that are needed to be followed by the user. There are some standard techniques used in starting the weed wacker and if the user is not following the ways that are defined by the manufacturer of the company then it may lead to the problems regarding the starting.

## Fuel Lines Broken inside tank

The fuel lines on a Weed eater are notorious for degrading over time and eventually breaking. The fuel filter located on the small fuel line usually needs replacement by this stage. However this does not mean the end of your weed



eater! The small and large fuel lines can be replaced and refitted simply with minor skill involved. The small fuel line is the suction line providing gas to your carburetor from the gas tank. The filter ensures that no materials other

than the gas is supplied to the carburetor. The large fuel line is the gas return line from the carburetor. Any excess unused gas is sent straight back to the gas tank.

Follow the listed steps and video tutorial link below to replace the large and small fuel lines on your Weed eater carburetor:

### **Safety: Do not forget to use safety glasses and gloves**

1. Open the gas tank cap and pull out the gas filter. Remove any debris or broken fuel lines in the tank.
2. Remove the small and large fuel lines from the tank. The small line is the fuel suction line supplying gas to the carburetor. The large line is the fuel return line sending excess gas back to the tank.
3. The fuel filter is attached to the small fuel line only.
4. Purchase the small and large fuel lines and filter.
5. Push the large fuel line back through the hole in the gas tank about an inch.

6. Push the small fuel line into the other hole in the gas tank. Pull this fuel line through the gas tank opening.
7. Put the fuel filter onto the end of the small gas line you just pulled out of the gas tank opening.
8. Pull the small fuel line with attached filter back into the gas tank.
9. Push the other end of the small gas line onto the small carburetor connection.
10. Push the other end of the large gas line onto the large carburetor connection.

**Note: For a Video tutorial on how to replace broken fuel lines in the tank please follow this [link](#)**

Fuel lines are responsible for the supply of the fuel to the carburetor of the weed wacker as the carburetor is that part of the weed wacker that is responsible for the operation. As every part of the weed wacker is connected to each other in such a way that every component is dependent on another component. Fuel lines are those lines that have to take the fuel from the fuel tank and that fuel have to reach the carburetor of the engine.

There are a number of chances that these fuel lines may leak. The leakage can be stopped by checking the carburetor of the engine as it can remove from the engine easily. The weed wacker is made is such a way that its cover can be removed enabling the user to open the weed wacker any time required. To have a look on the inside of the weed wacker these covers are made portable.

The portability of the weed wacker is one of the main reasons that makes is unique from other weed cutting devices. The line may get stiff after sometimes use as these lines are made up of different materials. It may vary from company to company as most of the companies use the metal to be used in the pipelines. Some companies also use the rubber pipes as they are cheap but there can be various reasons for these pipes to get damaged.



The temperature is always high inside the weed wacker engine and the fuel line shave is made of a material that can withstand the temperature inside the engine. The heat inside the engine affects these fuel lines a lot. There is another factor that affects the working of the fuel lines. These fuel lines can be blocked by the fuel that is coming from the fuel tank. There may be involvement of the dust particles in the fuel tank that may cause the fuel line to get blocked. The pressure in the fuel line may cause them to break and thus unable the carburetor to have the enough fuel. To avoid this, one must consider all of the factors before the use of the weed wacker.

## Non-rotating Trimmer Head

The trimmer head on a weed eater will sometimes stop rotating because the rotating mechanism has seized. When this occurs the starter cord will resist and prevent you from starting the engine. If this occurs when the engine is already running the trimmer head will start to smoke when you apply throttle.

However this does not mean the end for your weed eater! The rotating mechanism can easily be repaired to allow you to wack those weeds for many more years to come.

Follow the listed steps and video tutorial link below to fix a weed eater that has a non-rotating trimmer head:

### **Safety: Do not forget to use safety glasses and gloves**

1. This step by step guide is only suitable for curved shaft weed eaters. However the same principle applies for straight shaft weed eaters.
2. Using your hand check the rotation of the trimmer head. If it does not rotate without excessive force then you have a problem. Also when you try to pull the starter cable it will simple resist and not spool out.
3. Remove the trimmer / cutting head.
4. Remove the bushing assembly on the end of the curved shaft with the careful aid of a hammer or block of wood.
5. Pull apart the bushing assembly to access the bush. You should find that the deterioration of the washer inside the bushing assembly is seizing the bush preventing rotation.
6. Clean up all the bushing assembly parts and apply multi-purpose grease.
7. Put all the bushing assembly parts back together in reverse order.

8. Refit the bushing assembly to the end of the curved shaft ensuring that you align the assembly correctly with the shaft. Do not use excessive force.
9. Refit the trimmer head

**Note: For a Video tutorial on how to fix a non-rotating trimmer head please follow this [link](#).**

There are a number of reasons that can affect the rotating effect of the trimmer head. The trimmer head is responsible for the rotary movement of the head the thus using that rotary movement of the head weed wacker helps in cutting the weed. The trimmer head can be malfunctioned due to various reasons. In this topic we will cover up all the reason that may have an effect on the trimmer head directly or indirectly.

One of the biggest advantages that trimmer has to offer is the replacement at any time. After some time the trimmer head has to be replaced. The replacement can be one of the options but this should not be the priority. There are certain other reasons as well. The weed wacker manual suggests the replacement time of every component after the use of that specified time the head of the weed wacker should be replaced. But the thing to be noted here is that if the trimmer head wears out before the time specified then there must be something that is being done wrong with it.

Try to find out the reason that may have affected the working of the weed wacker. These reasons have to be found out as early as possible because this may affect or reduce the life of the weed wacker. To change a weed wacker, the head should be the last reason and should not be removed until completely worn out. The first thing can be monitored is the trimmer of the weed wacker. The trimmer cannot get replaced once it stops working but the head can be replaced as it is not that expensive however the changing time of both parts is the same.

The weed wacker must be monitored all the time. These weed wackers are vibration free or in other words it can be said that the weed wacker are not that kind of devices that normally vibrate a lot and if you feel any such thing during normal routine use or anything unusual than it means there is some

problem going on in the weed wacker. There could be numerous reasons that can be the cause of excess vibration. A look at the trimmer head can help you solving this kind of problem.

## Snapped Pull Cord on start Assembly

Pull cord is the part of the weed wacker that is responsible for starting the weed wacker. The weed wackers that use a pull cord to start the weed wacker are normally available at cheaper rates in the market.

There could be various problems that could be faced related to the use of the cord. There are some technicalities in this as well. There is a specific technique that has to be used in order to start the weed wacker using the pull cord. In normal routine this pull cord is said to be the rope that has to be used in the weed wacker. This cord is made up of tough material so that it can withstand the pressure and the force exerted on it. The pull cord is normally mounted on the pulley that is directly connected to the engine. That pulley moves round in order to get started. The rope is mounted on the pulley in such a way that when the rope is pulled the pulley rotates making the engine start.

If we look into the details of the starting mechanism you will come to know that when the pulley rotates the engine it starts using the fuel in the combustion engine and then the power is generated in the engine to perform the operations. The state assembly of the weed wacker is that part that initiates the start of the engine. There could be problems in the start assembly as well but the parts like the starter assembly normally don't get malfunctioned too often. The basic problems that people face regarding the start is the breakage of the rope or the cord.

The cord should be pulled with the specified angle as well. If the angle of pulling the rope is not as the same given in the instruction manual than there could be two possibilities of having the malfunctioning or the engine won't start. The rope may get break if excess force is applied to the cord. The cord is that kind of material that can bear the force exerted by the person trying to start the engine but these cords are not manufactured for extensive force that the cord cannot withstand.

## Weed Wacker will not stay running

The weed wackers are those kinds of machines that can bear a lot of pressure of work. It is suggested that the weed wacker should be maintained properly in order to use for the long time. If the weed wacker is used on a constant basis then it means that it had been maintained as well. Now what does that maintenance means? It suggests that every part of the weed wacker should be checked after the use. There could be many factors that won't allow your weed wacker to be used on the regular basis. The running of the weed wacker depends upon many other factors.

There is heat generated in the weed wackers where the engine runs on a regular basis. The heat that is produced in the engine may cause the engine to heat to a certain limit that is why it is suggested that after some use of the weed wacker it should be rested for a couple of minutes, causing the temperature of the engine of the weed wacker to move down a bit.

The temperature gauge that is normally placed on the engine helps the user to have a look at the temperature. The temperature should not exceed beyond a certain limit as the limit of the gauge is given in the manual of the weed wacker.

The overheating of the engine may cause the engine to seize and that means your weed wacker engine has to be overhauled. The overhauling of the engine is not that cheap either so you must avoid these kinds of conditions to come in your way. The next thing that comes in to play is the level of the fuel in the weed wacker. The fuel has to be mixed in the tank before it is ready to be used in the engine of the weed wacker. The engine uses both oil and gas to run properly. The reason for this is that the moving parts of the engine have to be lubricated all the time and for the purpose oil is necessary for the engine. The oil included in the fuel keeps the moving parts lubricated and thus mobilized lowering the level of friction between the moving parts of the engine. These are some reasons which require regular looking into to have your weed wacker working properly.

# Chapter 5: Repair and Maintenance of Weed Wackers

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You can do many repairs of your weed eater yourself. Sometimes you may need specialized tools, but usually you will only need common tools.



## Carburetor Removal and Stripdown

A carburetor overhaul and rebuild may be required when you have owned and used your favourite weed eater for some time. Weed wacker carbs contain a number of replacement parts including fuel diaphragms, gaskets, metering needle, primer bulb, fuel lines and filter. The carburetor is a critical part of the weed eater engine and is necessary for providing the correct fuel and air mixture to the engine based on your throttle movements.

Unfortunately it is cheaper to buy a new weed eater than sending your existing trimmer to an engine repair shop to complete this overhaul. However it is far cheaper if you can follow the two part instructions below and conduct the carburetor rebuild and overhaul yourself.

Follow the listed steps and video tutorial link below to remove and stripdown your Weed eater carburetor:

**Safety: Do not forget to use safety glasses and gloves**

1. Remove the two allen screws on the filter cover.
2. Remove filter and filter holding plate.
3. Remove air filter housing from carburetor by unscrewing the bolts.
4. Remove the carburetor from the engine.
5. Remove the carburetor cover by removing the screw.
6. Pull off the fuel diaphragm gasket.
7. Turn the carburetor over and remove the primer bulb by unscrewing the 4 screws.
8. Remove the other carburetor cover and pull off the metering diaphragm gasket.

9. Check the condition of all the diaphragm gaskets. If a diaphragm gasket is stiff, holed or cracked it will need replacing. It is good practice to replace the diaphragm gaskets every time you overhaul and rebuild your carburetor.
10. Remove the fuel metering needle, metering lever and spring by unscrewing the backing plate bolts.
11. Check the condition of the fuel metering needle. If the tip shows signs of wear or discolouration then it will need to be replaced.
12. Remove the backing plate gasket.
13. Remove both **HI** and **LO** fuel adjustment screws.
14. Using carb cleaner spray the solvent on the carburetor parts including all holes and surfaces.
15. Using a cloth or rag wipe down all carburetor parts
16. Using a wire brush softly clean all the gasket surfaces on the carburetor ensuring to stroke the brush in the direction away from the carburtor. This ensures no material enters the carburetor.
17. Leave the carburetor parts to soak in the carb cleaner for a few hours.
18. After leaving for a few hours give the carb parts another final spray of the carb cleaner.

**Note:** For a Video tutorial on how to remove and overhaul a carburetor please follow this [link](#).

## Carburetor Part Replacement and Rebuild

Follow the listed steps and video tutorial link below to replace parts and rebuild your Weed eater carburetor:

**Safety: Do not forget to use safety glasses and gloves**

1. Purchase a carburetor kit suitable for your model. Normally two types of kits exist where one kit contains the diaphragm gaskets only and the second kit contains all replacement parts for the carb including the diaphragm gaskets.
2. Refit the metering lever, metering needle and spring. Refit the screw to ensure that the metering assembly is in place.
3. Refit the backing plate and gasket by inserting the screws.
4. The metering lever should be fitted such that it is flush with the backing plate. Use the metering level tool if required to set the height.
5. Refit the metering diaphragm and gasket
6. Refit the primer bulb end plate. The end cap fits only one way so do not be concerned about fitting it incorrectly.
7. Refit the primer bulb by inserting the 4 screws. Check the primer bulb is not holed.
8. Turn the carburetor over and refit the gasket and diaphragm.
9. Refit the end plate. Hold back the throttle mechanism to allow this plate to be refitted.
10. Refit the **HI** and **LO** fuel adjusting screws.
11. Refit the carburetor to the engine by inserting the filter housing bolts through the carburetor.

12. Refit the filter and filter holding plate.
13. Refit the filter cover.
14. Follow the instruction to prime, startup and adjust the carburetor.

**Note: For a Video tutorial on how to remove and overhaul a carburetor please follow this [link](#).**

## Compression Test a Weed Eater Engine

If a Weed eater has trouble starting and all the usual troubleshooting routes have been explored then the issue may be poor engine compression pressure. The usual non-start routes include gas, fuel lines, carburetor, air filter and spark plug. The piston in the weed eater engine has piston rings that prevent the combustion chamber pressure from escaping past the piston and into the crankcase. Furthermore if the engine cylinder's valve is not seating correctly then air may be passing by the valve and into the carburetor. A simple check with the aid of a compression tester can determine if the weed eater is not starting due to poor pressure. For weed eaters the compression pressure must be greater than 60 lb. per square inch or PSI. If the pressure is less than 60 psi then the cylinder is losing pressure and the engine will not start. If this is the case then the engine will only ever work again if it is reconditioned replacing piston rings, valves and valve seats.

Unfortunately it is cheaper to buy a new weed eater then reconditioning your existing trimmer engine. However a compression test conducted by yourself is a very cheap and effective way to troubleshoot the problem and save you time and money replacing other parts thinking you have a traditional non-start problem. At the very least you can eliminate the possibility that you have poor compression pressure.

Follow the listed steps below to conduct a compression test on a Weed eater Engine:

**Safety: Do not forget to use safety glasses and gloves**

- 1.Ensure that the weed eater is off and not running.
- 2.Remove the spark plug cap located on the engine.
- 3.Remove the spark plug with the aid of a spark plug socket wrench.
- 4.Purchase a compression tester or borrow one from someone else.
- 5.Push the free end of the compression tester hose into the recess that the

spark plug was screwed into.

6. Watching the compression tester gauge pull the starter cord a number of times until the needle reaches a peak pressure.

**Note: For a Video tutorial on how to compression test a Weed Eater engine please follow this [link](#).**

Remember! A weed eater must generate more than 60 PSI or lb. per square inch to be able to start the engine. If your weed eater is less than 60 psi then your engine cylinder has a leak or the piston cannot compress enough air.

## Pull cord replacement

1. Buy string/cord in same or slightly larger diameter.
2. Take off plastic cover. You need a hex and a torx driver. Take off green housing. Also take off black handle.
3. The spool is held by clips on a wheel at the bottom. Screws hold the clips tight, just loosen do not remove, turn clips and take out spool.
4. Check path that the string follows, thread string and wrap the same way. Wind string until spool is full. Usually it is about a foot of string.
5. Put string through housing and replace spool. Ensure it is seated properly.
6. Ensure it is seated properly and replace screws.
7. Ensure the trigger is in place to pull the throttle cable. Reattach handle with screws.
8. Ensure the cord is turning the motor. Thread through pull cord handle and tie off, cut excess.
9. Test start.



# Chapter 6: Weed Eater Schematics and Parts Lists

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On this page you will find every Weedeater model and a link to the exploded parts diagram and catalogue. We have attempted to provide every product including the older Weed eater models. All models including gas and electric trimmers are provided below. Just have a browse and find your particular trimmer model and click on the link to find that specific model's parts diagram and catalogue. Please note to will be sent to a website and will need an internet connection.

## Accessories

- [Trimmer Line](#)



# Gas Trimmers

## ***Weed Eater Original Series***

- [31WG](#)
- [650](#)
- [657](#)
- [670](#)
- [1400](#)
- [1400T](#)
- [1500](#)
- [1600](#)
- [1600T](#)
- [1700](#)
- [1740](#)
- [1900](#)
- [2215](#)
- [2610](#)
- [2615](#)
- [2620](#)
- [4500](#)
- [5000](#)
- [5500](#)
- [6000](#)
- [6010](#)
- [6510](#)

### ***FL Series***

- [FL20](#)
- [FL20C](#)
- [FL21](#)
- [FL21LE](#)
- [FL23](#)
- [FL25](#)
- [FL25C](#)
- [FL25LE](#)
- [FL26](#)

### ***FX Series***

- [FX25](#)

### ***BC Series***

- [BC24W](#)
- [BC2400 Type 1](#)
- [BC2400 Type 2](#)
- [BC2400 Type 3](#)
- [BC2400 Type 4](#)
- [BC2400 Type 5](#)
- [BC2400 Type 6](#)

## ***SST Series***

- [SST25](#)
- [SST25C](#)
- [SST25CE](#)
- [SST25HO](#)
- [SST45](#)

# Electric Trimmers

## ***Weed Eater Original Series***

- [100](#)
- [108](#)
- [118](#)
- [300](#)
- [400](#)
- [407](#)
- [409](#)
- [409.9](#)
- [417](#)
- [500-E](#)
- [509](#)
- [559](#)
- [587](#)
- [589](#)
- [807-4](#)
- [807-8](#)
- [829](#)
- [1000](#)
- [1200](#)
- [1200C](#)
- [1208](#)
- [1209](#)

- [1210](#)
- [1212](#)
- [1214](#)
- [1215](#)
- [1216](#)
- [1400](#)

### ***RT Series***

- [RT10](#)
- [RT110](#)
- [RT112](#)
- [RT112C](#)

### ***RTE Series***

- [RTE112C](#)
- [RTE113](#)
- [RTE113C](#)
- [RTE114](#)
- [RTE115](#)
- [RTE115C](#)

### ***WE EL Series***

- [WE EL-11](#)
- [WE EL-13TNE](#)
- [WE EL-15TNE](#)