

**Multi Functional Tool**

**FDBTR55**

ORIGINAL INSTRUCTIONS



. this model is only brushcutting

**WARNINGDANGER**

**WARNING**

**The exhaust muffler and the muffler cover may before extremely hot.Always keep clear of exhaust and muffler area.Otherwise,serious personal injury may occur.**

**The engine exhaust from this product contains chemicals known to cause cancer,birth defects and /or other reproductive harm.**

Warning : Please read this manual carefully before using the equipment!

**FEIDER 32, rue Aristide Bergès - ZI 31270 Cugnaux – France Made in PRC 2019**



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**SAFETY INFORMATION**

**1.Safety signs**

The following safety labels are used on the machine.This will remind you of the care and attention during operation.The meaning is explained below.

**1.1 The muffler can get very hot during operation.Do not touch it,if the machine is in use or immediately after use.**

 Risk of high temperatures

**1.2 If the machine is operating, keep away from moving parts to avoid injury**

Keep spectators away from the machine!

1.3 please read the instructions carefully before using the device!

 1.4 Place the machine in a stable position before you leave

**( 3 )**

Wear eye,ear head protector

Not use metal blades

 111 dB(A) for brush cutter

 93 dB(A) for tiller

 Warning – Rotating working tool

**2.Safety**

-The machine must always be used according to the manufacturer’s instructions in the instruction manual.

-The engine must be turned off during maintenance and cleaning work performed and tools are changed and when transporting the machine without its own drive.

-The machine must be used by adequately trained personnel.

-While working with the machine safety shoes must be worn.

-It is forbidden to use this hard on machine(stony,disk,etc.) of the soil.

-In an emergency,move the lever to position.

**( 4 )**

**Intended use**

**• These products are multi-purpose tools. They employ one power head, but can fitted with different function-head. When tiller head is fitted, it is a tiller, when sweeper is fitted, it is a sweep machine, when grass head are fitted, it is a wheeled grass trimmer.**

**• This product is intended for private domestic use only. It must be used outdoors.**

**• This product is not intended to be used in a closed room and places where exhausted**

**gas and flames can be present.**

**• The use of this product in case of rain or humid environments is prohibited.**

**• Any other use might lead to damage of the appliance, property or personal injury.**

**Instruction hand book**

Comprehensive instructions and information on all aspects of maintenance and safe use of the machine.

**In particular,the following points shall be emphasised.**

1. The machine shall always be used in accordance with the manufacturer’s instructions laid down in the instruction handbook;
2. The engine shall be stopped when carrying out maintenance cleaning operations,when changing tools and when being transported by means other than under its own power.
3. The adjustable part of the protective device shall be adjusted to the working depth of the tool so that only that part of the working tool that cuts into the soil remains uncovered.This does not apply to motor hoes;
4. Recommendations for starting up under normal conditions and,if necessary,for the auxiliary or secondary starting device;
5. The machine should only be operated by suitably trained persons;
6. During the operation of the machine safety shoes should be worn;

**The following good practices should be sated as appropriate;**

1. Training
2. Read the instructions carefully.Be familiar with the controls and the proper use of the equipment;
3. Never allow children or people unfamiliar with these instructions to use the machine.Local regulations can restrict the age of the operator;
4. Never work while people,especially children,or pets are nearby;
5. Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.

**( 5)**

1. Preparation

While working,always wear substantial footwear and long trousers.Do not operate the equipment when barefoot or wearing open sandals;

Wear safety glasses or goggles at all times when operating the trimmer;

Wear ear protection

1. Thoroughly inspect the area where the equipment is to be used and remove all objects which can be thrown up by the machine;
2. WARNING – Petrol is highly flammable；

-Store fuel in containers specifically designed for this purpose;

-Refuel outdoors only and do not smoke while refueling;

-Add fuel before starting the engine.Never remove the cap of the fuel tank or add petrol while the engine running or when the engine is hot;

-If petrol is spilled,do not attempt to start the engine but move the machine away from the area of spillage and avoid creating any source of ignition until petrol vapours have dissipated;

-Replace all fuel tank and container caps securely;

1. Replace faulty silencers;
2. Before using,always visually inspect to see that the tools are not worn out or damaged.

Replace worn out or damaged elements and bolts in sets to preserve balance.

3)Operation

1. Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect;
2. Work only in daylight or in good artificial light;
3. Always be sure of your footing on slopes;
4. Walk,never run with the machine;
5. For wheeled rotary machines,work across the slopes,never up and down;
6. Exercise extreme caution when changing direction on slopes;
7. Do not work on excessively steep slopes;
8. Use extreme caution when reversing or pulling the machine towards you;

**( 6 )**

1. Do not change the engine governor setting or over-speed the engine;
2. Start the engine carefully according to manufacturer instructions and with feet well away from the tool（s）;
3. Do not put your hands or feet near or under rotating parts;
4. Never pick up or carry a machine while the engine is running;
5. Stop the engine:

-Whenever you leave the machine;

-Before refueling;

-Before clearing blockages;

-Before checking,cleaning or working on the trimmer;

-After striking a foreign object and inspect the trimmer.Do not restart or operate the trimmer until any necessary repairs have been done;

-If the trimmer starts to vibrate abnormally or the operating noise increases and check immediately.Do not restart or operate the trimmer until any necessary repairs have been done;

1. Reduce the throttle setting during engine shut down and,if the engine is provided with a shut-off valve,turn the fuel off at the conclusion or working;
2. Stop the cutting means if the trimmer has to be tilted for transportation when crossing surfaces other than grass,and when transporting the trimmer to and from the working area;
3. Never operate the trimmer with defective guards,or without safety devices,in place;
4. Disengage all cutting means and drive clutches before starting the engine
5. Do not tilt the trimmer when starting the engine,except if the trimmer has to be tilted for starting.In this case,do not tilt it more than absolutely necessary and lift only the part which is away from the operator.
6. Maintenance and storage
7. Keep all nuts,bolts and screws tight to ensure the equipment is in safe working condition;
8. Never store the equipment with petrol in the tank inside a building where fumes can reach and open flame or spark;
9. Allow the engine to cool before storing in any enclosure;
10. To reduce the fire hazard,keep the engine,silencer,battery compartment and petrol storage area free of vegetative material and excessive grease;

**( 7 )**

1. Replace worn or damaged parts for safety;never replace the cutting means with metal parts and only use cutting means(cutting heads and cutting elements) which are suitable for use at the operating speed of the trimmer;
2. If the fuel tank has to be drained,this shall be done outdoors.
   * + This tool is not intended to be use by persons (including children) whose physical, sensory or mental capabilities are reduced, or persons without experience or knowledge, unless they have been able to benefit from through a person responsible for their safety, surveillance or prior instructions regarding the use of the device.
     + Children should be supervised to make sure they do not play with the device.
     + Children and young persons as well as persons who have not read the instruction manual are not allowed to operate this appliance.
     + Local regulation may restrict the age of the operator.
     + Never use the appliance when people, especially children, or pets are nearby.
     + Remember that the operator or user is responsible for accidents or dangers to people or their personal belongings.
     + Do not use accessories other than those recommended by the manufacturer; these may damage the unit and / or cause injury.
     + Do not disassemble the device yourself. Any dismantling, repair or verification must be done exclusively by a qualified person.
     + Use the device fully assembled and secured. Check before use if the guards and safety devices are in place.
     + When operating the machine, always wear protective equipment including a face shield, visors or goggles, hearing protection, helmet, gloves, non-slip shoes and protective clothing.
     + Always transport the machine by its handle, never by another part of the machine.
     + Avoid using the device in bad weather conditions, especially when there is a risk of thunderstorms and lightning.
     + In the event of an accident, stop using the machine immediately. Turn off and check the problem. Do not use the machine while the machine is damaged.
     + Use unleaded gasoline for the engine. Gasoline is flammable and explosive. During use, take special precautions;
       - Do not smoke.
       - Avoid the presence of flames or sparks in the surrounding area.
       - Engines warm up during use. Make sure the engine is cool before refueling.
       - If there is leaking fuel, clean carefully and wait until it is dry before starting the engine.
     + Never allow people to approach the tool, especially during its operation.
     + Do not use the tiller when you are tired, sick, or under the influence of alcohol, drugs or drugs.
     + Always wear appropriate clothing (do not wear short or loose clothing). Wear safety shoes (do not wear sandals or work barefoot). Avoid putting jewellery and anything that gets stuck in the machine.
     + Keep people or animals away from the work area (with a minimum distance of 10 m).
     + Remove all materials that could create accidents before the machine is used (pieces of wood, stones, wire ropes, ropes, glasses, etc.).
     + Check that all components are correctly attached.
     + Do not use the cultivator on a ground incline more than 10 °.
     + In an emergency situation, stop the machine.
     + Never refuel or start the engine in a closed enclosure. The tiller must always be used outdoors.
     + The machine must be stopped when carrying out maintenance and cleaning operations, when changing tools or when transported by means other than under its own power.
     + Be aware that the application may unexpectedly bounce upward or jump forward if the tines should strike extremely hard, packed soil, frozen ground, or buried obstacles such as large stones, roots or stumps.
     + The adjustable part of the protective device shall be adjusted to the working depth of the tool so that only that part of the working tool that cuts into the soil remains uncovered.

**Residual risks**

* Even if you use this product in compliance with all safety requirements, the potential risks of injury and damage remain. Always be vigilant when using this product, so that you can recognize and manage the risks rather. The following hazards may arise in the structure and design of this product:
* There are adverse health consequences resulting from the emission of vibration if the product is used for long periods of time or not managed properly and properly maintained.
* There is a risk of injury and property damage due to attachments or broken the sudden impact of hidden objects when using cutting.

**( 8 )**

* Risk of injury to persons and property caused by flying objects.
* Risk of hearing loss due to a long exposition to noise emitted by the machine.

Prolonged use of this product exposes the operator to vibration and can produce so-called "white finger" disease. To reduce the risk, wear gloves and keep your hands warm.

If any of the symptoms of "white finger syndrome" occur, seek immediate medical attention. Symptoms of the "white finger" include numbness, loss of sensitivity, tingling, tingling, and pain, loss of strength, color changes or skin condition. These symptoms usually appear on the fingers, hands or wrists. Risk increases at low temperatures.

.

**(for trimmer)**

**IMPORTANT**

**READ CAREFULLY BEFORE USE**

**KEEP FOR FUTURE REFERENCE**

**Safe operating practices**

**Training**

Read the instructions carefully. Be familiar with the controls and the proper use of the trimmer.

**Preparation**

a) Warning:

never allow people unfamiliar with these instructions to use the trimmer;

never allow children to use the trimmer;

b) local regulations may restrict the age of the operator;

c) never trim while people, especially children, or pets are nearby;

d) wear safety glasses or goggles at all times when operating the trimmer;

e) wear ear protection;

f) while operating the trimmer, always wear substantial footwear and long trousers. Do not operate the trimmer when barefoot or wearing open sandals;

g) thoroughly inspect the area where the trimmer is to be used and remove all objects which may be thrown by the trimmer;

h) **WARNING — Fuel is highly flammable**:

store fuel in containers specifically designed for this purpose;

refuel outdoors only and do not smoke while refuelling;

add fuel before starting the engine. Never remove the cap of the fuel tank or add fuel while the engine is running or when the engine is hot;

if fuel is spilled, do not attempt to start the engine but move the trimmer away from the area of spillage and avoid creating any source of ignition until fuel vapours have dissipated;

replace all fuel tanks and container caps securely.

i) replace faulty silencers;

j) before using, always visually inspect to see that the cutting elements and cutting means are not worn or damaged. Replace worn or damaged cutting elements in sets to preserve balance.

**( 9 )**

**Operation**

a) Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect;

b) trim only in daylight or in good artificial light;

c) avoid operating the trimmer in wet grass, or take additional precautions to avoid slipping;

d) always be sure of your footing on slopes;

e) walk, never run;

f) trim across the face of slopes, never up and down;

g) exercise extreme caution when changing direction on slopes;

h) do not trim on steep slopes;

i) use extreme caution when reversing or pulling the trimmer towards you;

j) stop the cutting means if the trimmer has to be tilted for transportation when crossing surfaces other than grass, and when transporting the trimmer to and from the working area;

k) never operate the trimmer with defective guards, or without safety devices, in place;

l) do not change the engine governor settings or over-speed the engine;

m) disengage all cutting means and drive clutches before starting the engine;

n) start the engine carefully according to instructions and with feet well away from the cutting elements;

o) do not tilt the trimmer when starting the engine, except if the trimmer has to be tilted for starting. In this case, do not tilt it more than absolutely necessary and lift only the part which is away from the operator;

p) do not put hands or feet near or under rotating parts;

q) never pick up or carry the trimmer while the engine is running;

**WARNING — Stop the engine and disconnect the spark plug wire and for battery start trimmers remove the ignition key:**

**-** before clearing blockages;

**-** before checking, cleaning or working on the trimmer;

**-** after striking a foreign object and inspect the trimmer. Do not restart or operate the

trimmer until any necessary repairs have been done;

**-** if the trimmer starts to vibrate abnormally or the operating noise increases and

check immediately. Do not restart or operate the trimmer until any necessary repairs

have been done;

**-** whenever you leave the trimmer;

**-** before refuelling;

r) reduce the throttle setting during engine shut down and, if the engine is provided with a shut-off valve, turn the fuel off at the conclusion of trimming.

**F.3.4 Maintenance and storage**

a) Keep all nuts, bolts and screws tight to be sure the trimmer is in safe working condition;

b) never store the trimmer with petrol in the tank inside a building where fumes may reach an open flame or spark;

c) allow the engine to cool before storing in an enclosed space;

d) to reduce the fire hazard, keep the engine, silencer, battery compartment and petrol storage area free of grass, leaves, or excessive grease;

e) examine the trimmer regularly and replace worn or damaged parts for safety. Never replace the cutting means with metal parts and only use cutting means (cutting heads and cutting elements) which are suitable for use at the operating speed of the trimmer;

f) if the fuel tank has to be drained, this should be done outdoors. The drained fuel should be stored in a container specifically designed for fuel storage or it should be disposed of carefully.

**( 10 )**

The trimmer is not suitable for use by children or people unfamiliar with the instructions;

The fuel can be dangerous and information on how to deal with fuel;

The trimmer shall be switched off and the spark plug lead disconnected before clearing blockages, cleaning, inspecting, working on the trimmer, refuelling or leaving the trimmer unattended;

If the noise or vibration of the trimmer increases the trimmer shall be stopped immediately and checked.

**DESCRIPTION**

* + **Physical Condition**

Your judgement and physical dexterity may not be good if:

* You are tired or sick
* You are taking medication
* You have taken alcohol or drugs

Operate this unit only if you are physically and mentally well.

* + **Eye Protection**

Always wear eye protection that meets ANSI Z87.1 or CE requirements whenever you operate this unit.

* + **Hand Protection**

Wear non-slip,heavy duty work gloves to improve your grip on the handles.Gloves also reduce transmission of machine vibration to your hands.

* + **Hearing Protection**

We strongly recommend wearing hearing protection whenever this unit is used.

* + **Proper Clothing**

Wear snug fitting,durable clothing

Parts should have long legs,shirts with long sleeves;

* DO NOT WEAR SHORTS
* DO NOT WEAR TIES,SCARFS,JEWELRY

Wear protective hair covering to contain long hair.Wear sturdy work shoes with non-skid soles.

* DO NOT WEAR OPEN TOED SHOES
* DO NOT OPERATE UNIT BAREFOOTED

Keep long hair away from engine and air intake.Retain hair with cap or net.

* + **Hot Humid Weather**

Heavy protective clothing can increase operator fatigue which may lead to heat stroke.

Schedule heavy work for early morning or late afternoon hours when temperatures are cooler.

** WARNING**

The ignition components of this machine generate an electromagnetic field during operation which may interfere with some pacemakers.To reduce the risk of serious or fatal injury,persons with pacemakers should consult with their physician and the pacemaker manufacturer before operating this machine.In the absence of such information,we do not recommend the use of this product by anyone who has a pace maker.

**( 11 )**

** WARNING**

Do not operate this product indoors or in inadequately ventilated areas.Engine exhaust contains poisonous emissions and can cause serious injury or death.

**EQUIPMENT CHECK**

* + Check your trimmer for loose,missing nuts,bolts and screws.Tighten and/or replace as needed.
  + Check that the cutting attachment is firmly attached and in safe operating condition.
  + Read this manual.Provide all users of this equipment with the Owner’s Manual for instructions on Safe Operation.
  + Clear the Work Area.Spectators and fellow workers must be warned,and children and animals prevented from coming nearer than 15m(50ft) while the machine is in use.
  + Keep a Firm Grip.Hold the handles with both hands,with thumbs and fingers encircling the handles.
  + Keep a Solid Stance.Maintain footing and balance at all times.DO NOT stand on slippery,uneven or unstable surfaces.DO NOT work on odd positions or on ladders.DO NOT over reach.
  + Avoid Hot Surfaces.Keep exhaust area clear of flammable debris.Avoid contact during and immediately after operation

** WARNING**

Use only approved attachments.Serious injury may result from the use of non-approved attachments.We will not be responsible for the failure of cutting devices,attachments or accessories which have not been tested and approved.Read and comply with all safety instructions listed in this manual.

** WARNING**

Moving parts can and will amputate fingers or cause severe injuries.Keep hands,clothing and loose objects away from all opening and moving parts.

# ALWAYS stop engine,disconnect spark plug and make sure all moving parts have come to a complete stop before removing obstructions,clearing debris or sevicing the unit.

* DO NOT start or operate the unit unless all guards and protective covers are properly assembled in the unit.
* NEVER reach into any opening while the engine is running.Moving parts may not be visible through openings.

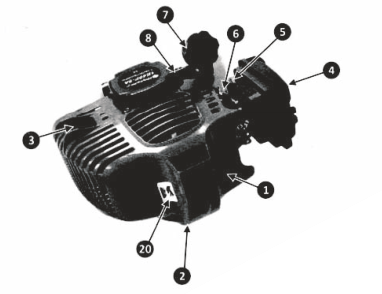
** WARNING**

Check fuel system for leaks due to fuel tank damage,especially if the unit is dropped.If damage or leaks are found.DO NOT use the unit,otherwise serious injury or property damage may occur.Have the unit repaired by an authorized service center/dealer before use.

**( 12 )**

**DESCRIPTION**

Locate the safety decals on your unit.Make sure the decals are legible and that you understand and follow the instructions.If a decal has worn off,is torn,or destroyed,a new one can be ordered from your dealer.

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**DESCRIPTION**

1. **Spark Plug:** Provides the spark necessary to ignite the air and fuel mixture in the combustion chamber.
2. **Engine Cover:** Protects arm and hands during operation and protects hands against heat from engine.
3. **Muffler:** The muffler controls exhaust noise and emissions coming from engine.
4. **Air Cleaner:** Contains replaceable filter element.
5. **Choke Lever:** The choke lever is located on the side of the air filter casing.Move choke lever to cold start position()to close the choke for cold starts.Move choke lever to open “Run position()to open the choke.
6. **Purge,Bulb Priming:** Pumping the purge priming bulb before starting the engine will draw fresh fuel from the fuel tank to the carburetor,purging air out.Pump the purge priming bulb until you see fuel and the free flow in the clear fuel tank return line.Pump the bulb an additional,4 or 5 times.
7. **Fuel Tank &Tank Cap:** Contains fuel and fuel filter.The cap seals the fuel tank opening.
8. **Recoil Starter Handle:** Pull handle slowly until recoil starter engages,then quickly and firmly.DO NOT pull rope all the way out or allow the handle to snap back,damage to the starter will occur.

**( 13 )**

**CONTENTS**

The product you purchased has been partially assembled for your convenience.Due to packaging restrictions,installation of the plastic debris shield,wheels and positioning of the handle bar assembly are necessary.

After opening the carton,check for damage.Immediately notify your retailer of damaged or missing parts.Use the contents list to check for missing parts.

\*Some parts may be factory pre-assembled.The power head to body,blade cutting head(nylon trimmer head) are pre-assembled to the unit.Assembly tools are supplied with this unit.The handle bar cushions,throttle and stop switch are pre-assembled on the unit.

**─── Power Head**

**─── Drive Shaft Assembly**

**───Owner’s Manual**

**─── Assembly Tools**

**───Wheels**

**─── Wheel shaft**

**─── Plastic Shield**

**─── Cut-off Knife**

**─── Nuts&Bolts**

**─── Cutting Blade(If applicable)**

**───Cutting Blade Shield(If applicable)**

**─── Nylon Trimmer Head(If applicable)**

**( 14 )**

**STEP 1, Put gear box on the Engine body.**

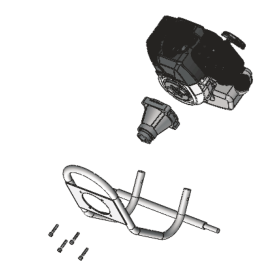
**STEP 2,Connect the Engine body with mower rack.**

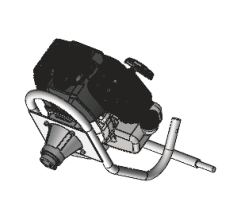
**STEP 3/4, Fix the switch handle to Engine tightly.**

**STEP 5/6,Assembly the wheels tightly.**

**STEP 1 STEP 2**

**STEP 2**

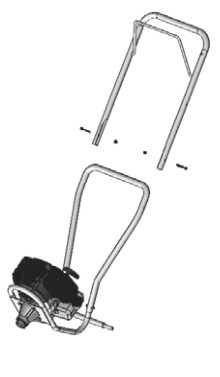
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**STEP 3**

**STEP 4**

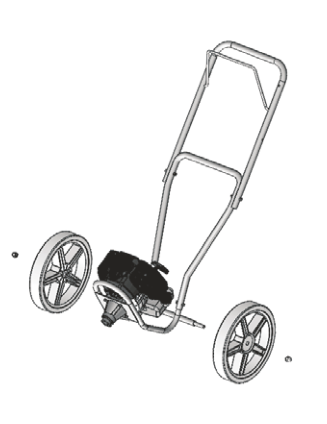
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**STEP 5 STEP 6**

**STEP 5**

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**( 15 )**

**STEP 7, Put on nylon cutter.**

**STEP 8, Assembly the working head to gear box.**

**STEP 9, Put on Grass guard with screw .**

**STEP 7 STEP 8**

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**STEP 9**

** **

**(16)**

**OPERATION**

**FUEL**

**NOTICE** use of unmixed,improperly mixed,or fuel older than 90 days,(stale fuel),may cause hard starts,poor performance,or severe engine damage and void the product warranty.Read and follow all instructions in this manual.

**FUEL REQUIREMENTS**

Gasoline-Use 89 Octane or higher gasoline known to be good quality.Gasoline may contain up to 10% Ethano or 15% MTBE.Gasoline containing methanol is NOT approved.

**2-Stroke Oil**

A 2-stroke engine oil meeting ISO-L-EGD and J.A.S.O. standards must be used.Universal 2-stroke oil meets these standards.Engine problems due to inadequate lubrication caused by failure to use an ISO-L-EGD and J.A.S.O certified oil,will void the 2-Stoke engine warranty.

** WARNING**

Alternative fuels,such E-15(15% Ethanol),E-85(85% Ethanol) or any fuel not meeting the requirements are NOT approved for use in 2-stroke gasoline engines.The use of alternative fuels may cause performance problems,loss of power,overheating,fuel vapor lock and unintended machine operation,including but not limited to,improper clutch engagement.Alternative fuels may also cause premature deterioration of fuel lines,gaskets,carburetors and other engine components.

**MAINTENANCE**

** DANGER**

Fuel is VERY flammable.Use extreme care when handling,storing or mixing or serious personal injury may result.

* Use an approved fuel container ONLY.
* DO NOT smoke near fuel.
* DO NOT allow flames or spark near fuel.
* NEVER refuel a unit when the engine is HOT or RUNNING.
* DO NOT fill fuel tanks indoors.ALWAYS fill fuel tanks outdoors over bare ground.
* Fuel tanks/cans may be under pressure.Always loosen fuel caps slowly allowing pressure to equalize.
* DO NOT overfill fuel tank.Wipe up spills immediately.
* Securely tighten fuel tank cap and close fuel container after refueling.
* Inspect for fuel leakage.If fuel leakage is found,DO NOT start until or operate until leakage is repaired.
* Move at least 10 ft.(3m) from refueling location before starting the engine.

**(17)**

**OPERATION**

**FUEL**

**Mixing Instructions(2-STROKE ENGINE ONLY)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Fuel &Oil Mix Ratio-25:1** | | | |
| **U.S** | | **METRIC** | |
| Gasoline | Oil | Gasoline | Oil |
| Gallons | fl.oz. | Liter | ml |
| 1 | 5.12 | 1 | 40 |
| 2 | 10.24 | 2 | 80 |
| 5 | 25.6 | 4 | 160 |

1. Fill an approved fuel container with half of the required amount of gasoline.
2. Add the proper amount of 2-stroke oil to the gasoline.
3. Close container and shake to mix oil with gasoline.
4. Add remaining gasoline,close fuel container and remix.
5. **NEVER MIX OIL IF YOU HAVE A 4-STROKE ENGINE.NO MIXING IS NECESSARY.**

** NOTICE**

Spilled fuel is a leading cause of hydrocarbon emissions.Some states may require the use of automatic fuel shut-off containers to reduce fuel spillage.

**After use**

DO NOT store a unit with fuel in the tank.Leaks can occur.Return unused fuel to an approved fuel storage container.

**Storage**

Fuel storage laws vary by locality.Contact your local government for the laws affecting your areas.As a precaution,store fuel in an approved,airtight container.Store in a well-ventilated,unoccupied building,away from sparks and flames.

** NOTICE**

Stored fuel ages.DO NOT mix more fuel than you expect to use in 30(thirty) days,90(ninety) days when a fuel stabilizer is added.

** NOTICE**

Stored 2-stroke mixed fuel may separate.ALWAYS shake fuel container thoroughly before each use.

**(18)**

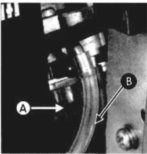
**OPERATION**

**COLD ENGINE STARTING**

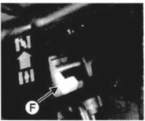
** WARNING**

Grass trimmer/brush cutter blades are very sharp.Touching them may/will lead to severe personal injury.Avoid touching blades whenever possible,and always wear gloves to protect hands.

1. Pump the primer purge bulb  until fuel is visible and flows freely in the clear fuel tank return hose 
2. Move the choke lever  to the CLOSED  position
3. Depress the throttle trigger  3 to 5 times.
4. With one hand on the power head and the other gripping the pull start lever .Firmly grasp the start lever and rapidly pull the lever until the engine starts.
5. After the engine starts,or 4 to 6 pulls,move the choke lever  to the OPEN  position.Restart the engine if necessary and allow unit to warm up at idle for several minutes
6. After the engine has warmed up,grip the throttle handle.Depress the throttle trigger gradually to increase engine RPM to operating speed.

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** WARNING**

The blade or nylon line head must not move at idle speed,otherwise serious personal injury may/will occur.Periodic carburetor adjustments may be necessary to assure blade or nylon line head do not move at idle. If the blade or nylon line head move,adjust the carburetor according to “Carburetor Adjustment”instructions in the manual or see your nearest dealer or service center.

** NOTICE**

If engine does not start with choke in the OPEN position after 4 to 6 pulls,repeat steps 2 – 5.

**(19)**

**OPERATION**

**WARM ENGINE STARTING**

The starting procedure is the same as COLD ENGINE STARTING except DO NOT close the choke lever.

** WARNING**

The blade(s) or nylon line head must not move at idle speed,otherwise serious personal injury may/will occur.Periodic carburetor adjustments may be necessary to assure blade(s) or nylon line head do not move at idle.If the blade(s) or nylon line head move,adjust the carburetor according to “Carburetor Adjustment” instructions in the manual or see your nearest dealer or service center.

1. Depress throttle trigger 3 to 6 times.
2. Pump the primer purge bulb until fuel is visible and flows freely in the clear fuel tank return hose.
3. Lay the unit on a flat clean surface.Grip the support handle firmly with your right hand.Pull the recoil starter handle with your left hand until the engine starts,(or 4 to 6 pulls)

** NOTICE**

If the engine does not start after 6 pulls,please refer back to “Cold Engine Starting”procedure.

**STOPPING ENGINE**

1. Release the throttle trigger  and allow engine to return to idle before shutting off the engine.
2. Press and hold the stop switch  until engine has completely stopped.

****

** WARNING**

If engine does not stop when stop switch is depressed,close the choke to stall the engine.Take your unit to your nearest dealer to service center to have the stop switch repaired before using the trimmer/cutter again.

**(20)**

**OPERATION**

** WARNING**

The trimmer/cutter blade(s) is very sharp.Touching them may/will lead to severe personal injury.Avoid touching blade(s) whenever possible,and always wear gloves to protect hands.

1. Always grip the support handle firmly with both right and left hands.
2. Hold the trimmer/cutter handle firmly and depress the throttle trigger slowly to accelerate the engine.

** WARNING**

NEVER remove your hands from the trimmer/cutter handle bar when unit is working.

** WARNING**

The engine continues running even when the blade(s) or nylon line head have stopped due to an obstruction.If this occurs,stop the engine and remove the obstruction before you continue.

**(21)**

**MAINTENANCE**

** WARNING**

Moving parts can amputate fingers or cause severe injuries.Keep hands,clothing and loose objects away from all openings. Always stop engine,disconnect spark plug,and make sure all moving parts have come to a complete stop before removing obstructions,clearing debris,or servicing unit.Allow unit to cool before performing service.Wear gloves to protect your hands from sharp edges and hot surfaces.

Your trimmer/cutter is designed to provide many hours of trouble free service.Regular scheduled maintenance will help your unit achieve that goal.If you are unsure or are not equipped with the necessary tools,you may want to take your unit an authorized service center for maintenance.To help you decide whether you want to do it yourself or have an authorized service center do it,each maintenance task has been graded.If a certain task is not listed,please see your authorized service center for repairs.

**SKILL LEVELS**

Level 1-Easy to do,common tools may be required.

Level 2-Moderate difficulty,some specialized tools may be required.

**MAINTENANCE INTERVALS**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **SYSTEM** | **SKILL LEVEL** | **DAILY or BEFORE USE** | **EVERY REFUEL** | **3 MONTHS or 90 HOURS** | **YEARLY or 600 HOURS** |
| Air Filter | 1 | 1/C\* |  |  |  |
| Fuel Filter | 1 |  |  | 1 \* | 1/R \* |
| Fuel Cap Gasket | 1 |  |  | 1 \* | R \* |
| Fuel System | 1 | 1(2) \* | 1(2) \* |  |  |
| Choke Shutter | 1 | 1/C \* |  |  |  |
| Spark Plug | 1 |  |  | 1/C/R \* |  |
| Cooling System | 2 | 1/C |  |  |  |
| Muffler | 2 |  |  | 1C/R \* |  |
| Cylinder Exhause Port | 2 |  |  | 1C/D |  |
| Gear Housing | 2 |  |  | 1/G(1) |  |
| Cutting Blades | 1 | 1/C(3) |  |  |  |
| Recoil Starter Rope | 1 | 1/C \* |  |  |  |
| Screws,Nuts,Bolts | 1 | 1/T/R \* |  |  |  |

Letter Codes:1-Inspect / R-Replace / C-Clean / D-De-carbon / T-Tighten

**Note:**Time intervals shown above are maximum.Actual use and your experience will determine the frequency of required maintenance.

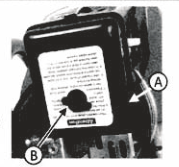
**MAINTENANCE NOTES:**

1. Apply good quality lithium base grease every 25 hours of use.
2. Low evaporative fuel tanks DO NOT require regular maintenance to maintain emission integrity.
3. Inspect blades,clean and sharpen as needed,Lubricate blades periodically during use.

\*All recommendations to replace are based on finding of damage(d) or wear during inspection.

**(22)**

**MAINTENANCE**

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**Level 1**

**Tools Required:25 or 50mm Brush.**

**Parts Required:Air Filter Element**

1. Push the choke lever to the closed position  to prevent any dirt or dust from entering the carburetor when air filter is removed.
2. Remove the air filter cover by turning the wing bolt  counter-clockwise and brush away any dirt from inside over.
3. Remove the filter and lightly brush away debris from filter .Replace the filter if it is damaged,fuel soaked or very dirty.
4. If the filter can be reused,be certain it:

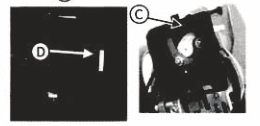
Fits tightly in the air filter cavity.It’s not torn.

1. Install the air filter cover,making sure it’s in the correct position .
2. 4-Stroke engine has only 1 round filter

2-Stroke engine has 2 square filters.

**4-Stroke Filter**

**AIR FILTER**

****

**2Stroke Filter**

****

** NOTICE**

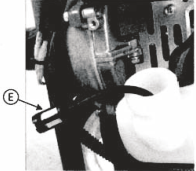
If the engine does not start after 6 pulls,please refer back to “Cold Engine Starting”procedure.

**FUEL FILTER**

**Tools Required:200 or 250mm length of wire with one end bent into a hook,clean rag,funnel,and an approved fuel container.**

**Parts Required:Fuel Filter**

1. Use a clean rag to remove loose dirt from around fuel cap and empty fuel tank.
2. Use the bent with wire to pull the fuel line(black) and filter from the tank.
3. Remove the filter from the line and install the new filter

****

** DANGER**

Fuel is VERY flammable.Use extreme care when mixing,storing or handling.NO SMOKING

**(23)**

**MAINTENANCE**

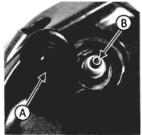
**SPARK PLUG**

**Level 2**

**Tools Required: T-Wrench or Spark Plug Socket,Feeler Gauge,Soft Metal Brush.**

**Parts Required:Spark Plug**

1. Remove the spark plug boot  and spark plug  and check for fouling,worn,rounded center electrode.
2. Clean the plug or replace with a new one.DO NOT sand blast to clean,remaining sand will damage engine.
3. Adjust spark plug gap by bending outer electrode.
4. Tighten spark plug to 150-170 kgf.cm\*(130-150 in \*lbs)

****

** NOTICE**

If the engine does not start after 6 pulls,please refer back to “Cold Engine Starting”procedure.

**Level 2**

**COOLING SYSTEM**

**Tools Required: #3 and #4 Hex wrench,25 or 50 mm Cleaning Brush**

**Parts Required:None,if you are careful.**

Overheating and engine seizure can occur when :

Air intake in the crankcase is blocked,preventing cooling air from reaching the cylinder.

Dust and grass build up in the outside of the cylinder.This build up insulates the engine and prevents the heat from leaving.

Removal of crankcase cooling passage blockages or cleaning of cooling fins is considered “Normal Maintenance”.Any failure attributed to lack of maintenance is not warranted.

** NOTICE**

To maintain proper engine operating temperatures,cooling air must pass freely through the cylinder fin area.This flow of air carries combustion heat away from the engine.

**(24)**

**MAINTENANCE**

**COOLING SYSTEM**

1. **Remove spark plug boot.**
2. **Remove air cleaner cover.**
3. **Remove engine cover screws and engine cover.**
4. **Remove ignition wires from clip for cleaning.**
5. **Assemble components in reverse order.**

** NOTICE**

**DO NOT USE A METAL SCRAPER TO REMOVE DIRT FROM THE CYLINDER FINS.**

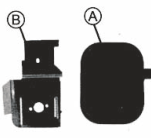
**Level 2**

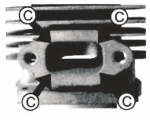
**EXHAUST SYSTEM**

**Tools Required: #4 mm Hex wrench,Cross Head Screwdriver,Soft Metal Brush,Wood or Plastic Scraper.**

**Parts Required:Gaskets,Heat Shield.**

1. Disconnect spark plug wire.
2. Remove muffler cover.
3. Place piston at TOP DEAD CENTER(TDC) to prevent carbon/dirt from entering cylinder.
4. Remove the 2 muffler screws,gasket from muffler body 
5. Use a wood or plastic scraping tool to clean deposits from cylinder exhaust port 
6. Install muffler with new gasket if old gasket is damaged.
7. Tighten muffler mounting bolts(or nuts) to 80-95 in \* lbs (90-110 kgf \*cm)
8. Install cover and attach spark plug lead.
9. Start engine and warm to operating temperature.
10. Stop engine,and re-tighten mounting bolts(or nuts) to specifications.

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** NOTICE**

**Never use a metal tool to scrape carbon deposits from exhaust post.DO NOT scratch the cylinder or piston when cleaning the exhaust port.DO NOT allow carbon particles to enter the cylinder.**

**(25)**

**MAINTENANCE**

**Level 2**

**CARBURETOR ADJUSTMENT**

** WARNING**

The blades must not move at idle,otherwise serious personal injury may result.Periodic carburetor adjustment may be necessary to assure blades do not move at idle.If blades move,readjust carburetor according to these instructions or see your authorized dealer or service center.

**Engine Break-in Period**

New engines must be operated a minimum duration of two(2) full tanks of fuel break-in before carburetor adjustments can be made.During the break-in period,your engine performance will increase and exhaust emissions will stabilize.Idle speed can be adjusted as required.

**High Altitude Operation**

This engine has been adjusted from factory to maintain satisfactory starting,emission,and durability performance up to 1,100 feet above sea level.To maintain proper engine operation and emission compliance above 1,000 feet,the carburetor may/will need to be adjusted by an authorized dealer or service center.

** NOTICE**

If the carburetor is adjusted for operating above 1,100 feet,the carburetor must be re-adjusted when operating below 1,100 feet,otherwise severe engine damage may/will result.

**Tools Required:Screwdriver,Tachometer**

**Parts Required:None**

** NOTICE**

Every unit is started and run at the factory and carburetor adjusted and set in compliance with emission regulations.Carburetor adjustments,other than the idle speed,must be done by an authorized dealer or service center.

**(26)**

**MAINTENANCE**

**CARBURETOR ADJUSTMENT**

1. Before adjusting the carburetor,clean or replace the air filter.
2. Star engine and run for several minutes to reach operating temperature.
3. Check idle speed and adjust if necessary.If a tachometer is available,idle speed screw  should be set to the specification found on page 26

“Specifications”of this manual.Turn idle screw clockwise to increase idle speed,counter-clockwiseto decrease idle speed.

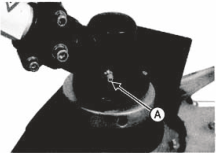
1. The air/fuel mixture screw  should ONLY be adjusted by your dealer or service center

** WARNING**

When carburetor adjustment is completed,the cutting attachment should not move at idle,otherwise serious personal injury may/will result.

**(27)**

**MAINTENANCE**

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**GEAR BOX LUBRICATION**

**Tools Required:Clean Rag,Grease Gun**

**Parts Required:Lithium Based Grease**

1. Clean dirt from grease fitting .
2. Apply 1-2 pumps of grease into the fitting.DO NOT over fill.Leave room for the grease to expand during operation.

**Level 1**

**BLADES HARPENING**

**Level 3**

**Tools Required:Flat Fine File,Plier,Flat Screwdriver**

**Parts Required:None**

1. Disconnect spark plug wire.
2. Slide blades together with pliers to allow file clearance for sharpening.
3. File the original shape,and file each cutting edge carefully.
4. Maintain 6mm(25 in) radius at the base of each blade.
5. Connect spark plug wire

** WARNING**

The trimmer/cutter blades are very sharp.Touching them may lead to severe personal injury.Avoid touching blades whenever possible,and always wear gloves to protect hands.

** NOTICE**

If a power grinder is used,DO NOT allow blades to overheat.

**(28)**

**MAINTENANCE**

**Level 2**

**BLADES REPLACEMENT**

**Tools Required:4# mm Hex Wrench,8 mm wrench or socket with extension.**

**Parts Required:New blade**

1. Remove blade guard and replace blade and install blade guard.See page 14.

** WARNING**

The trimmer/cutter blades are very sharp,Touching them may lead to severe personal injury.Use a socket and extension when blade locknut in order to keep hands at a safe distance from sharp blades.

** NOTICE**

Blades should only be removed and re-installed by authorized service center,otherwise premature wear or internal damage may occur

**(29)**

**TROUBLESHOOTING**

|  |  |  |
| --- | --- | --- |
| **PROBLEM** | **CAUSE** | **CORRECTION** |
| Will not Starter | 1.Out of Fuel | 1.Fill Fuel Tank |
| 2.Engine not CHOKED properly | 2.See TO START ENGINE in Operation Section |
| 3.Engine flooded | 3.Wait Several minutes before starting again |
| 4.Dirty air filter | 4.Clean or replace air filter |
| 5.Water in fuel | 5.Drain fuel tank and carburetor,fill with fresh cuel |
| 6.Clogged fuel tank,line | 6.Remove fuel tank or filter and clean |
| 7.Loose spark plug wire | 7.Make sure plug wire is seated properly on plug |
| 8.Bad spark plug or improper gap | 8.Replace spark plug or adjust gap |
| 9.Carburetor out of adjustment | 9.Make necessary adjustments |
| Hard To Starter | 1.Throttle control not set properly | 1.Place throttle control in “FAST”position |
| 2.Dirty air filter | 2.Clean or replace air filter |
| 3.Bad spark plug or improper gap | 3.Replace spark plug or adjust gap |
| 4.Stale or dirty fuel | 4.Drain fuel tank and carburetor,fill with fresh fuel |
| 5.Loose spark plug wire | 5.Make sure plug wire is seated properly on plug |
| 6.Carburetor out of adjustment | 6.Make necessary adjustments |
| Loss of Power | 1.Engine is overloaded | 1.Set depth stake or wheels for shallow tilling |
| 2.Dirty air filter | 2.Clean or replace air filter |
| 3.Bad spark plug or improper gap | 3.Replace spark plug or adjust gap |
| 4.Stale or dirty fuel | 4.Drain fuel tank and carburetor,fill with fresh fuel |
| 5.Water in fuel | 5.Drain fuel tank and carburetor,fill with fresh fuel |
| 6.Clogged fuel tank,line | 6.Remove fuel tank or filter and clean |
| 7.Loose spark plug wire | 7.Make sure plug wire is seated properly on plug |
| 8.Dirty or clogged muffler | 8.Clean or replace muffler |
| 9.Carburetor out of adjustment | 9.Make necessary adjustments |
| 10.Poor compression | 10.Contact an authorized service center |
| Engine Overheats | 1.Dirty air filter | 1.Clean or replace air filter |
| 2.Dirty engine | 2.Clean cylinder fins,air filter,muffler |
| 3.Partially plugged muffler | 3.Remove and clean muffler |
| 4.Improper carburetor adjustment | 4.Adjust carburetor |

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**TROUBLESHOOTING**

|  |  |  |
| --- | --- | --- |
| **PROBLEM** | **CAUSE** | **CORRECTION** |
| Excessive Bounce/Difficult Handling | 1.Ground too dry and hard | 1.Moisten ground or wait for more favorable soil conditions |
| 2.Wheels and depth stake incorrectly adjusted | 2.Adjust wheels and depth stake |
| Soil Balls up or Clumps | 1.Ground too wet | 1.Wait for more favorable soil conditions |
| Engine Runs But Labors When Tilling | 1.Tilling too deep | 1.Set depth stake for shallower tilling |
| 2.Throttle control not properly adjusted | 2.Check throttle control setting |
| 3.Carburetor out of adjustment | 3.Make necessary adjustments |

**Technical data:**

|  |  |
| --- | --- |
| Engine Type: | 2-Stroke |
| Engine displacement: | 52cm³ |
| Max engine power: | 1.45 kW – 7500/min |
| Max engine speed: | 8500/min |
| Weight of tool: | 15,5 kg |
| Fuel tank capacity: | 1250ml |
| Gasoline,engine oil mixture ratio: | 25:1 |
| Noise for tiller function: | LpA=71.6dB(a);K=2.07dB(a)  LwA=93.0dB(a);K=2.07dB(a) |
| Noise for other function: | LpA=89.5dB(a);K=3,26dB(a)  LwA=111dB(a),K=3,26dB(a) |
| Vibration: | 7.102m/s²；K=1.5m/s² |
| Sweeper brush diameter: | 255mm |
| Sweeper working width: | 550mm |
| Spool line length: | 3m |
| Pool cluttering width: | 450mm |

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**(31)**

**CE DECLARATION**

FEIDER

32, rue Aristide Bergès - ZI 31270 Cugnaux – France

Tel: +33 (0)5.34.502.502 Fax: +33 (0)5.34.502.503

Declares that the machines:

Multi Functional Tool

Model:FDBTR55

Serial No.: 20190706832 to 20190706921

The people name holding the technical file：M. Olivier Patriarca

Have been designed in compliance with the following standards:

EN 709:1997/A4:2009

EN 14910:2007/A1:2009

EN ISO 12100:2010

EN ISO 14982:2009

And in accordance with the following directives:

Directive Machine 2006/42/EC

EMC directive 2014/30/EU

Noise directive 2000/14/CE

Cugnaux, 12/07/2019



Philippe MARIE / PDG

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