

KASEI

OPERATOR'S MANUAL



Original Instructions

CAUTION:

- Read all precautions and instructions in this manual before using this product. Keep this manual for future reference.
- Product may vary slightly from picture.

KZ-5200BC PRO-2S





SAFETY FIRST

Instructions contained in warnings within this manual marked with a symbol concern critical points which must be taken into consideration to prevent possible serious bodily injury, and for this reason you are requested to read all such instructions carefully and follow them without fail.

WARNINGS IN THE MANUAL



WARNING

This mark indicates instructions, which must be followed in order to prevent accidents, which could lead to serious bodily injury or death.



IMPORTANT

This mark indicates instructions, which must be followed, or it leads to mechanical failure, breakdown, or damage.



NOTE

This mark indicates hints or directions useful in the use of the product.

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WARNING CAUTION

Before using the product, Please Confirm the local laws and regulations no limit to this kind of product Or the product can meet the requirements of local laws and regulations

~~~~~ TECHNICAL DATA ~~~~~

| MODEL                             |                                                                                                                                                     |            | KZ-5200BC-PRO-2S                                             |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------------------------------------------------|
| Main unit                         | Remote type                                                                                                                                         |            | Automatic centrifugal clutch; Spiral bevel gear; Drive shaft |
|                                   | Maximum speed of gear shaft /engine speed (r/min)                                                                                                   |            | 9500/12295                                                   |
|                                   | Idle speed(r/min)                                                                                                                                   |            | 2800±280                                                     |
|                                   | Equivalent vibration level(m/s <sup>2</sup> )<br>(in accordance with EN ISO 22867)<br>Uncertainty of vibration measurement<br>K=1.5m/s <sup>2</sup> | Nylon head | 6.1                                                          |
|                                   |                                                                                                                                                     | Blade      | 5.4                                                          |
|                                   | Sound pressure values[dB(A)]<br>(in accordance with EN ISO 22868)<br>Uncertainty of noise measurement 3dB(A)                                        | Nylon head | 100.2                                                        |
|                                   |                                                                                                                                                     | Blade      | 97.2                                                         |
|                                   | Sound power values[dB(A)]<br>(in accordance with EN ISO 22868)<br>Uncertainty of noise measurement 3dB(A)                                           | Nylon head | 107.6                                                        |
|                                   |                                                                                                                                                     | Blade      | 101.2                                                        |
|                                   | Reduction ratio                                                                                                                                     |            | 15:21                                                        |
|                                   | Blade rotation direction                                                                                                                            |            | Counter-Clockwise(seen from the top)                         |
|                                   | Type of handle                                                                                                                                      |            | Double grip                                                  |
| Weight when dry(kg)               |                                                                                                                                                     | 8.8        |                                                              |
| Engine                            | Name of engine                                                                                                                                      |            | 1E44FG                                                       |
|                                   | Type                                                                                                                                                |            | Air-cooled; 2 cycle; vertical piston valve; gasoline engine  |
|                                   | Displacement(mL)                                                                                                                                    |            | 51.7                                                         |
|                                   | Maximum output(kW/r/min)                                                                                                                            |            | 1.4/7000                                                     |
|                                   | Carburetor                                                                                                                                          |            | Diaphragm-type                                               |
|                                   | Ignition                                                                                                                                            |            | Non-contact electronic ignition                              |
|                                   | Method of starting                                                                                                                                  |            | Recoil type                                                  |
|                                   | Fuel used                                                                                                                                           |            | Gasoline mixed with lubricating oil(ratio of 30:1)           |
|                                   | Fuel tank capacity(L)                                                                                                                               |            | 1.3                                                          |
|                                   | Dry weight(kg)                                                                                                                                      |            | 4.6                                                          |
| Standard blades(mm)               |                                                                                                                                                     |            | CG520-HL-2 255mm 3-blade ( 255×2.8)                          |
| Standard nylon head/nylon rope    |                                                                                                                                                     |            | BG63.10/2.5mm(nylon66)                                       |
| Length of main pipe section(mm)   |                                                                                                                                                     |            | 1500                                                         |
| Length of drive shaft section(mm) |                                                                                                                                                     |            | 1535                                                         |

Technical Data subject to changed without notice.

# SYMBOL

Some of the following symbols may be used on this tool. Please study them and understand their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

| SYMBOL                                                                              | NAME                       | DESIGNATION/EXPLANATION                                                                                        |
|-------------------------------------------------------------------------------------|----------------------------|----------------------------------------------------------------------------------------------------------------|
|    | Safety Alert               | Indicates danger, warning or caution. It means attention! Your safety is involved.                             |
|    | Read The Operator's Manual | Read the operation manual and follow all warnings and safety instructions.                                     |
|    | Ricochet Alert             | Danger of Ricochet.                                                                                            |
|    | Keep Bystanders Away       | Keep all bystanders (especially children and pets) at least 15m away from the work area.                       |
|    | Do not use toothed blade   | This unit is not intended for use with a toothed saw type blade.                                               |
|    | Boots                      | Wear non-slip safety footwear when using this equipment.                                                       |
|   | Gloves                     | Wear non-slip, heavy-duty gloves.                                                                              |
|  | No Smoking                 | Do not smoke when mixing fuel or filling fuel tank.                                                            |
|  | Petrol                     | Use unleaded petrol intended for motor vehicle use with an octane rating of 91([R+M]/2) or higher.             |
|  | Oil                        | Use 2-stroke oil for air cooled engines.                                                                       |
|  | Mix Petrol and Oil         | Mix the fuel mix thoroughly and also each time before refuelling.                                              |
|  |                            | Fully press and release the prime bulb 5 times.                                                                |
|  |                            | All relevant directives, which require the CE-marking and which are applicable for the product, are fulfilled. |
|  |                            | Wear eye, hearing and head protection when operating this equipment.                                           |
|  |                            | To reduce the risk of injury or damage, avoid contact with any hot surface.                                    |
|  |                            | Guaranteed sound power level is 115 dB.                                                                        |
|  | Beware Of Blade Thrust     | Continued movement of saw blade after cutting through log.                                                     |
|  |                            | A hazard from fire/flammable materials.                                                                        |



If warning label peels off or becomes soiled and impossible to read, you should contact the dealer from which you purchased the product to order new labels and affix them in the required location(s).



Never modify your machine. We won't warrant the machine, if you use the remodeled brushcutter or if you don't observe the proper usage written in the manual.



## **FOR SAFE OPERATION**

1. Read this manual carefully until you completely understand and follow all safety and operating instructions.
2. Keep this manual handy so that you may refer to it later whenever any questions arise. Also note, if you have any questions which cannot be answered herein, contact the dealer from whom you purchased the product.
3. Always be sure to include this manual when selling, lending, or otherwise transferring the ownership of this product.
4. Never allow children or anyone unable to fully understand the directions given in the manual to use the machine.

### **WORKING CONDITION**

1. When using the product, you should wear proper clothing and protective equipment.  
(1) Helmet; (2) Ear protectors; (3) Protection goggles or face protector; (4) Thick work gloves; (5) Non-slip-sole work boots.

2. And you should carry with you.

(1) Attached tools; (2) Properly reserved fuel; (3) Spare blade; (4) Things to notify your working area (rope, warning signs); (5) Whistle (for collaboration or emergency); (6) Hatchet or saw (for removal of obstacles).

3. Do not wear loose clothing, jewelry, short trousers, sandals, or go barefoot.

Do not wear anything which might be caught by a moving part of the unit.

Secure hair so it is above shoulder length.

### **WORKING CIRCUMSTANCE**

1. Never start the engine inside a closed room or building. Exhaust gases contain dangerous carbon monoxide.

2. Never use the product,

a. when the ground is slippery or when you can't maintain a steady posture.

b. At night, at times of heavy fog, or at any other times when your field of vision might be limited and it would be difficult to gain a clear view of the working area.

c. During rain storms, during lightning storms, at times of strong or gale-force winds, or at any other times when weather conditions might make it unsafe to use the product.

### **WORKING PLAN**

1. You should never use the product when under the influence of alcohol, when suffering from exhaustion or lack of sleep, when suffering from drowsiness as a result of having taken cold medicine or at any other time when a possibility

exists that your judgment might be impaired or that you might not be able to operate the product properly and in a safe manner.

2. When planning your work schedule, allow plenty of time to rest. Limit the amount of time over which the product is to be used continuously to somewhere around 30 ~ 40 minutes per session, and take 10 ~ 20 minutes of rest between work sessions. Also try to keep the total amount of work performed in a single day under 2 hours or less.

### **WARNING**

1. If you don't observe the working time, or working manner (See "USING THE PRODUCT"), Repetitive Stress Injury (RSI) could occur.

If you feel discomfort, redness and swelling of your fingers or any other part of your body, see a doctor before getting worse.

2. To avoid noise complaints, in general, operate product between 8 a.m. and 5 p.m. on weekdays and 9 a.m. to 5 p.m. on weekends.

### **NOTE**

Check and follow the local regulations as to sound level and hours of operations for the product.

## **BEFORE STARTING THE ENGINE**

1. The area within a perimeter of 15 m (50 ft) of the person using the product should be considered a hazardous area into which no one should enter. If necessary yellow warning rope, warning signs should be placed around the perimeter of the area. When work is to be performed simultaneously by two or



more persons, care should also be taken to constantly look around or otherwise check for the presence and locations of other people working so as to maintain a distance between each person sufficient to ensure safety.

2. Check the condition of working area to avoid any accident by hitting hidden obstacles such as stumps, stones, cans, or broken glass.



**Remove any obstacle before beginning work.**

3. Inspect the entire unit for loose fasteners and fuel leakage. Make sure that the cutting attachment is properly installed and securely fastened.

4. Be sure the debris guard is firmly attached in place.

5. Always use the shoulder strap. Adjust the strap for comfort before starting the engine. The strap should be adjusted so the left hand can comfortably hold the handlebar grip approximately waist high.

## **STARTING THE ENGINE**

1. Keep bystanders and animals at least 15 m (50 ft) away from the operating point. If you are approached, immediately stop the engine.

2. The product is equipped with a centrifugal clutch mechanism, so the cutting attachment begins to rotate as soon as the engine is started by putting the throttle into the start position. When starting the engine, place the product onto the ground in a flat clear area and hold it firmly in place so as to ensure that neither the cutting part nor the throttle come into contact with any obstacle when the engine starts.

## **WARNING**

**Never place the throttle into the high-speed position when starting the engine.**

3. After starting the engine, check to make sure that the cutting attachment stops rotating when the throttle is moved fully back to its original position. If it continues to rotate even after the throttle has been moved fully back, turn off the engine and take the unit to your authorized KOMATSU ZENOAH servicing dealer for repair.

## **USING THE PRODUCT**

### **IMPORTANT**

Cut only materials recommended by the manufacturer. And use only for tasks explained in the manual.

1. Grip the handles firmly with both hands using your whole hand. Place your feet slightly apart (slightly further apart than the width of your shoulders) so that your weight is distributed evenly across both legs, and always be sure to maintain a steady, even posture while working.

2. Keep cutting attachment below waist level.

3. Maintain the speed of the engine at the level required to perform cutting work, and never raise the speed of the engine above the level necessary.

4. If the unit starts to shake or vibrate, turn off the engine and check the whole unit. Do not use it until the trouble has been properly corrected.

5. Keep all parts of your body away from rotating cutting attachment and hot

surfaces.

6. Never touch the muffler, spark plug, or other metallic parts of the engine while the engine is in operation or immediately after shutting down the engine. Doing so could result in serious burns or electrical shock.

• **IF SOMEONE COMES**

1. Guard against hazardous situations at all times. Warn adults to keep pets and children away from the area. Be careful if you are approached. Injury may result from flying debris.

2.If someone calls out or otherwise interrupts you while working, always be sure to turn off the engine before turning around.

**MAINTENANCE**

1.In order to maintain your product in proper working order, perform the maintenance and checking operations described in the manual at regular intervals.

2.Always be sure to turn off the engine before performing any maintenance or checking procedures.



**The metallic parts reach high temperatures immediately after stopping the engine.**

3. When replacing the cutting attachment or any other part, or when replacing the oil or any lubricant, always be sure to use only HUASHENGTAISHAN products or products which have been certified by HUASHENGTAISHAN for

use with the HUASHENGTAISHAN product.

4. In the event that any part must be replaced or any maintenance or repair work not described in this manual must be performed, please contact a representative from the store nearest HUASHENGTAISHAN authorized servicing dealer for assistance.

5. Do not use any accessory or attachment other than those bearing the HUASHENGTAISHAN mark and recommended for the unit.

6. Under no circumstances should you ever take apart the product or alter it in any way. Doing so might result in the product becoming damaged during operation or the product becoming unable to operate properly.

## **HANDLING FUEL**

1. The engine of the HUASHENGTAISHAN product is designed to run on a mixed fuel, which contains highly flammable gasoline. Never store cans of fuel or refill the tank of the unit in any place where there is a boiler, stove, wood fire, electrical sparks, welding sparks, or any other source of heat or fire which might ignite the fuel.

2. Never smoke while operating the unit or refilling its fuel tank.

3. When refilling the tank, always turn off the engine and allow it to cool down. Take a careful look around to make sure that there are no sparks or open flames anywhere nearby before refueling.

4. Wipe spilled fuel completely using a dry rag if any fuel spillage occurs during refueling.

5. After refueling, screw the fuel cap back tightly onto the fuel tank and then carry the unit to a spot 3 m or more away from where it was refueled before turning on the engine.

## **TRANSPORTATION**

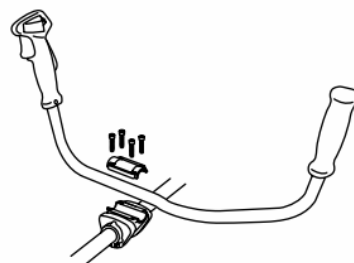
1. When hand-carrying the product, cover over the cutting part if necessary, lift up the product and carry it paying attention to the blade.
2. Never transport the product over rough roads over long distances by vehicle without removing all fuel from the fuel tank. If doing so, fuel might leak from the tank during transport.

## **SET UP**

### **INSTALLING HANDLE**

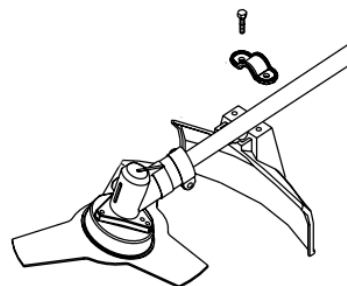
- Loosen the 4 bolts on the upper cap and insert the handle.

Retighten the bolts securely.



### **INSTALLING DEBRIS GUARD**

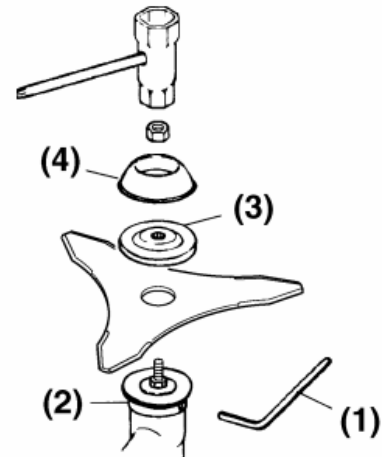
- Attach the debris guard with the bolts provided to the shaft.



### **INSTALLING BLADE**

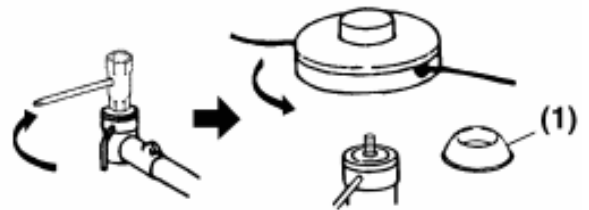
1. Put the angled bar(1) into the side holes of the inner holder and the gearcase.

2. Remove the nut (Lefthanded) and the outer holder(3) from the gearshaft.
3. Put the blade onto the inner holder(2). Make the marked side face the holder.
4. Put the outer holder(3) onto the gearshaft making the recessed side face the blade.
5. Fasten the blade by the nut and the cover(4).



## INSTALLING LINE HEAD

1. While locking the gear shaft by inserting the supplied tool into the upper holder on the gear box, loosen and remove the nut (left-handed).
2. Detach the cover(1), fit the line head assembly to the gear shaft. Hand tighten it securely.



## BALANCE UNIT

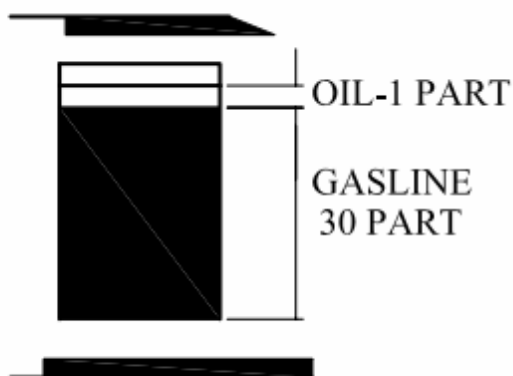
1. Put on strap and attach unit to strap.
2. Slide clamp up or down until unit balances with head aparting from the ground when using it.

# FUEL&OIL MIXTURE



- Never fill the fuel tank to the very top.
- Never add fuel to the tank in a closed non-ventilated area.
- Do not add fuel to this unit close to an open fire or sparks.
- Be sure to wipe off spilled fuel before attempting to start engine.
- Do not attempt to refuel a hot engine.

Fuel used for this model is a mixture of unlead gasoline and approved engine lubricant. When mixing gasoline with two-cycle engine oil, use only gasoline which contains NO ETHANOL or METHANOL (Types of Alcohol) Use Branded 89 octane or higher unlead gasoline known to be of good quality. This will help to avoid possible damage to engine fuel lines and other engine parts.



MIXTURE RATIO IS 30:1

GASLINE-30PART

OIL-1 PART

Fuel mixture at the rate other than 30:1 may cause damage to the engine, Ensure mixture ratio is correct.

## FUEL

The engine uses two-stroke fuel, a mixture of gasoline and 2-stroke lubricant 30:1

## GASOLINE

Use branded 89 octane or higher unlead gasoline known to be of good quality.

## STORING FUEL

Store fuel only in a clean, safe, approved container. Check and follow local ordinances on type and location of storage container.

## IMPORTANT

Two-stroke fuel may separate. Shake fuel container thoroughly before each use. Stored fuel ages. Do not mix more fuel than you expect to use within a month.

## FUEL AND OIL MIXTURE

Inspect fuel tank making sure that it is clean and fill with fresh fuel. Use a mixture of 30:1.



## NOTE

As for details of quality assurance, read the descrip-

tion in the section Limited Warranty carefully. Moreover, normal wear and change in product with no functional influence are not covered by the warranty.

Also, be careful that, if the usage in the instruction manual is not observed as to the mixed gasoline, etc. described therein, it may not be covered by the warranty.

## PREPARING FOR OPERATIONS

WHEN MIXING GASOLINE WITH TWO CYCLE ENGINE OIL, USE ONLY GASOLINE WHICH CONTAINS NO ETHANOL OR METHANOL (TYPES OF ALCOHOL). THIS WILL HELP TO AVOID POSSIBLE DAMAGE TO ENGINE FUEL LINES AND OTHER ENGINE PARTS.

DO NOT MIX GASOLINE AND OIL DIRECTLY IN THE ENGINE FUEL TANK.

**IMPORTANT:** Failure to follow proper fuel mix instructions may cause damage to the engine.

1. When preparing fuel mixture, mix only the amount needed for the job you are to do. Do not use fuel that has been stored longer than two months. Fuel mixture stored longer than this will cause hard starting and poor performance. If fuel mix has been stored longer than this time, it should be removed and filled with fresh mixture.

### WARNING DANGER

2. Never fill the fuel tank to the very top. (under 3/4 of the tank)
3. Never add fuel to the tank in a closed non-ventilated area.
4. Do not add fuel to this unit close to an open fire or sparks.
5. Be sure to wipe off spilled fuel before attempting to start engine
6. Do not attempt to refuel a hot engine.

### CHECK POINTS BEFORE OPERATION

1. Check for loose bolts, nuts and fittings.
2. Check the air cleaner for dirt. Clean the air filter of all dirt, etc. before operation.
3. Check to be sure that protector is securely in place.
4. Check to be sure that fuel is not leaking.
5. Check to be sure that blade is not cracked.

### WARNING DANGER

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

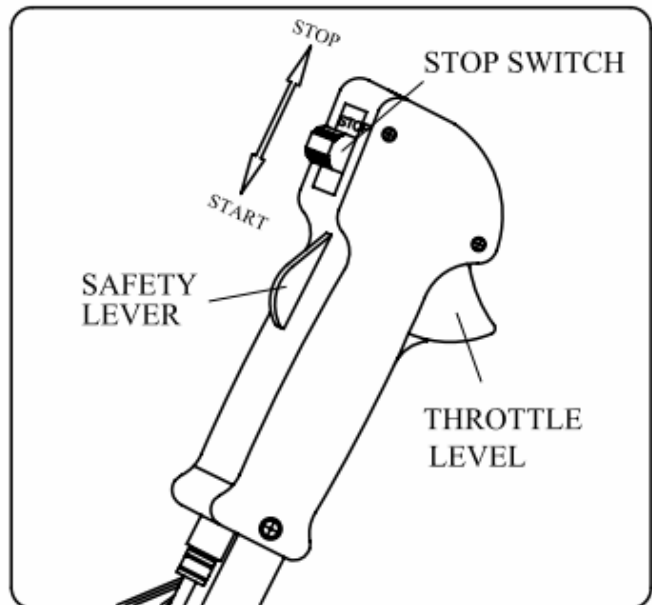


# OPERATION

## ENGINE STARTING AND STOPPING PROCEDURES

### STARTING COLD ENGINE

1. Move the stop switch to "START" position.
2. Give a gentle push on the primer pump repeatedly (7-10 times) until fuel comes into the primer pump.
3. Cold Starts: Pull lever up to close choke.
4. Pull starter handle until engine false fires.
5. Push choke lever inwards( excessive cranking with choke lever will cause flooding of engine making it difficult to start.)
6. Pull starter handle until engine starts.
7. Allow engine to warm up for a few minutes before using.



### STARTING WARM ENGINE

- If fuel tank was not run dry, pull starter one to three times and engine should start.

### DO NOT USE CHOKE

- If fuel tank was run dry, after refilling repeat steps 3 thru 7 in STARTING COLD ENGINE.

### STOPPING THE ENGINE

- Move switch to STOP position.

# MAINTENANCE&CARE

## REFILLING TRIMMING LINE

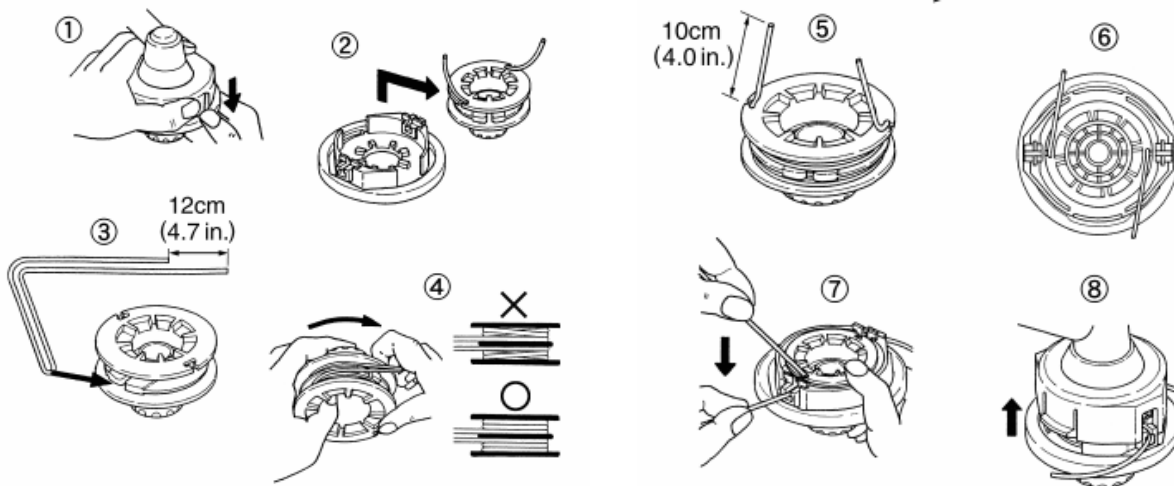
1. For replacement line, use a diameter of 2.4mm(.095in).The spool is capable

for a line upto 6m(20ft) on the 10cm(4”) head. Avoid using a larger line as it may cut down the trimming performance.

## **⚠ WARNING**

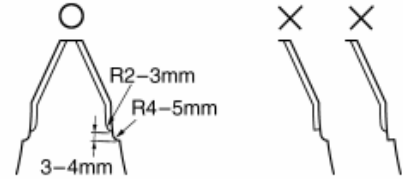
**For safety reasons, do not use metalreinforced line.**

- 2.Pinch the slotted area on the both sides of the spool housing to unhook the bottom cap.
3. Take out the spool and pull off the old line. Put one end of new line through the spool holes and pull it until the length is equal between each part of the line.
- 4.Wind up the line in the correct direction as indicated on the spool.
5. Hook each end of the line in the slot on the edge of the spool, and then put the ends through the eyelets on the housing. Make sure that the spring and the washers are in place.
- 6.While holding the spool against the housing, pull the line ends to release them from the slot.
7. Line up the slot on the bottom cap with the hook on the housing, press the cap against the housing until it clicks.



## BLADE

- Check the blade and the fasteners for looseness, cracking, or bending.
- Check the cutting edges and reform with a flat file.



### Point :

1. Keep the end corner sharp.
  2. Round the root of the edge, using round file.
  3. Do not use water when using a grinder.
- It is recommended that filing should be done by professionals.
  - Especially regarding filing the saw blade, Leave it to the professionals.

## **WARNING**

**Make sure that the engine has stopped and is cool before performing any service to the machine. Contact with moving cutting head or hot muffler may result in a personal injury.**

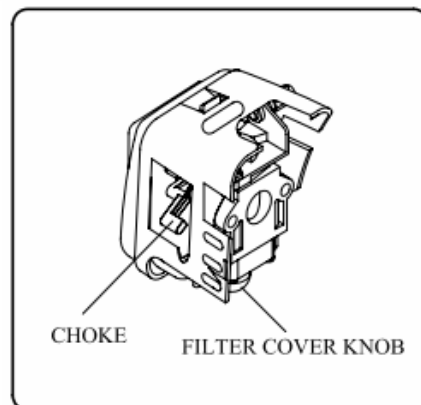
### AIR FILTER

- Accumulated dust in the air filter will reduce engine efficiency. Increase fuel consumption and allow abrasive particles to pass into the engine. Remove the air filter as often as necessary to maintain in a clean condition.
- Light surface dust can readily be removed by tapping the filter. Heavy deposits should be washed out in suitable solvent.
- Remove filter cover by loosening air filter cover knob.

### ADJUSTING CARBURETOR

#### NOTE

Do not adjust carburetor unless necessary. If you have trouble with the carburetor, see your dealer. Improper adjustment may cause engine damage and void warranty.

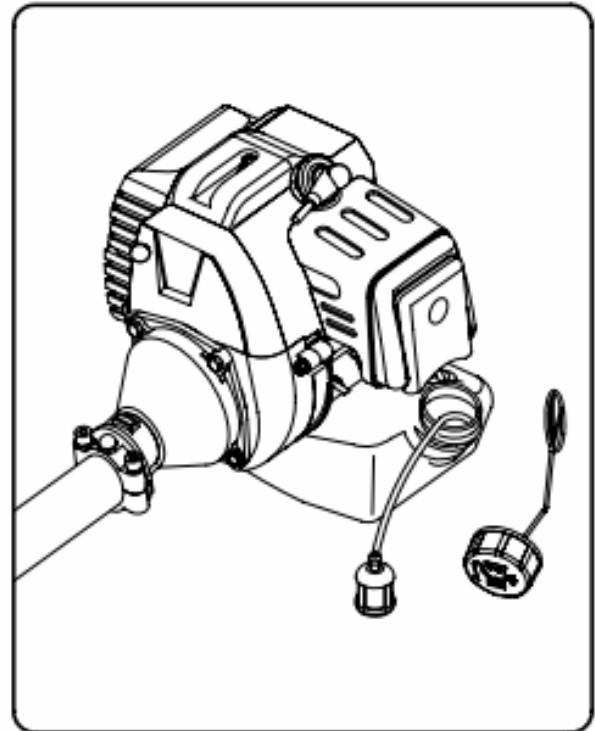




## MAINTENANCE & CARE

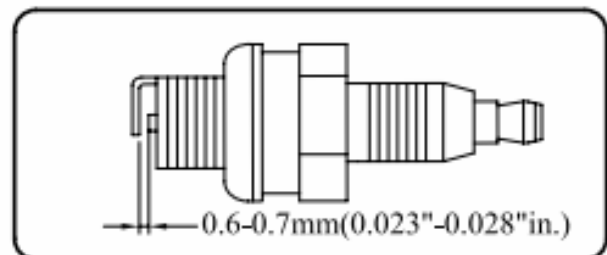
### FUEL FILTER

- Fuel tank is fitted with a filter.  
Filter is situated at the free end of fuel pipe and can be picked out through fuel port with a piece of hooked wire or the like.
- Check the fuel filter periodically. Do not allow dust to enter into fuel tank. Clogged filter will cause difficulty in starting engine or abnormalities in engine performance.
- When filter is dirty, replace the filter.
- When the inside of the fuel tank is dirty, it can be cleaned by rinsing the tank out with gasoline.



### CHECK SPARK PLUG

- Do not attempt to remove the plug from a hot engine in order to avoid possible damage to the threads.



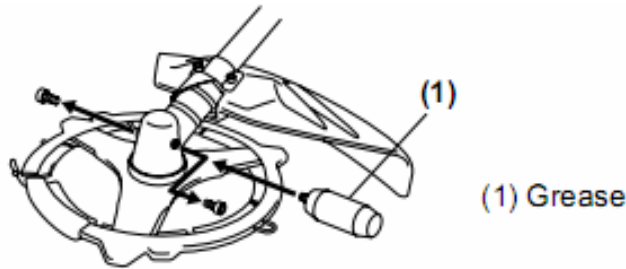
- Clean or replace the plug if fouled with heavy oily deposits.
- Replace the plug if the center electrode is worn rounded at the end.
- Spark gap 0.6-0.7mm (.023".028")
- Fastening torque =145-155kg.cm(125-135in.lb)

### GEAR CASE

- The reduction gears are lubricated by multipurpose, lithium-based grease in

the gear case. Supply new grease every 25 hours of use or more often depending on the job condition.

- Remove the bolt of the grease nipple and the bolt opposite side of the grease nipple. Install new grease into the grease nipple to arrange for old grease to exit from the opposite side.



## MUFFLER



**Inspect periodically, the muffler for loose fasteners, any damage or corrosion. If any sign of exhaust leakage is found, stop using the machine and have it repaired immediately.**

**Note that failing to do so may result in the engine catching on fire.**

## PROCEDURES TO BE PERFORMED AFTER EVERY 100 HOURS OF USE

1. Remove the muffler, insert a screwdriver into the vent, and wipe away any carbon buildup. Wipe away any carbon buildup on the muffler exhaust vent and cylinder exhaust port at the same time.
2. Tighten all screws, bolts, and fittings.
3. Check to see if any oil or grease has worked its way in between the clutch lining and drum, and if it has, wipe it away using oil-free, lead-free gasoline.

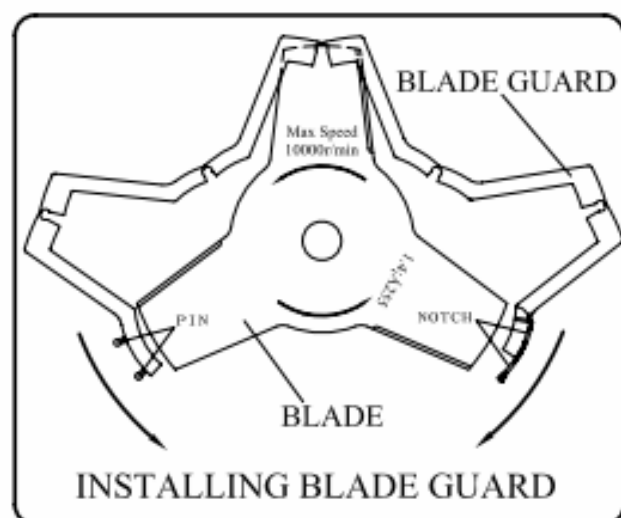


## TRANSPORT & STORAGE

### TRANSPORT, HANDLING

- The engine should be turned off when the unit is moved between work areas.
- After the engine has stopped, the muffler is still hot. never touch hot Parts such as the muffler.
- Confirm that the fuel has not leaked from the tank.
- Allow the engine to cool; empty the fuel tank and secure the unit from moving before transporting in a vehicle, if the blade is fitted, always use the blade guard.
- Installing blade guard.

Open the blade guard and install on the blade, then put the pin into the guard notch.



### WARNING DANGER

Always place the blade guard on the blade when the unit is not in use. Remove the blade guard before using the unit. If not removed, the blade guard could become a thrown object as the blade begins to turn.

### WARNING DANGER

Please empty the fuel tank before transporting, to avoid the engine leaked.

For avoiding the cutting attachment damaged the brush cutter and people, please removed the cutting attachment, and at the same time, resile the brush cutter as factory state, and then casting all parts into the package. Before transporting, all parts should be packed and validated safe.

### EXTENDED STORAGE

- Inspect, clean and repair unit if necessary.
- Remove all fuel from tank.
- Start engine-This will consume all fuel in fuel line and carburetor.
- Remove spark plug and pour one tea spoon of clean motor oil into spark plug hole of cylinder-replace spark plug.
- Store in clean, dry, dust free area.

### WARNING DANGER

Do not store in a closed area where fuel vapors can reach an open flame from hot water heaters, heaters, furnaces, etc. Store in a locked, well ventilated area only.

# TROUBLE SHOOTING GUIDE

## 1.FAILURE TO START

| symptom                                        |                                      |                                                 |               | probable cause                                                                                                                                             | remedy                                                                                  |
|------------------------------------------------|--------------------------------------|-------------------------------------------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| cylinder<br>compress<br>pressure<br><br>normal | spark<br>plug<br><br>spark<br>normal | fuel<br>system<br>abnormality                   |               | these is no fuel in tank<br><br>fuel filter obstructed                                                                                                     | add fuel in tank<br><br>clean fuel filter                                               |
|                                                |                                      | fuel<br>system<br>normal                        | fuel          | fuel is too dirty<br>there is water in fuel<br>there is too much<br>fuel in cylinder<br>mixture ratio is improper                                          | replace fuel<br>replace fuel<br>take down spark plug<br>and dry it<br>mixture proration |
|                                                | fuel<br>system<br><br>normal         | high<br>voltage<br>wire<br>spark<br>normal      | spark<br>plug | spark plug fouled with oily<br>deposits<br>spark plug insulation damage<br>spark gap is too large or small                                                 | clean the oily deposits<br><br>replace spark plug<br>adjust spark gap 0.6-0.7mm         |
|                                                |                                      | high<br>voltage<br>wire<br>spark<br>abnormality |               | high voltage wire breach<br>or break off<br><br>coil looseness                                                                                             | replace or tighten<br><br>tighten                                                       |
| fuel<br>system<br><br>normal                   | ignition<br>system<br><br>normal     | compression<br>pressure<br>is<br>inadequate     |               | piston ring attrite<br>piston ring is broken<br>piston ring cementation<br>spark plug looseness<br>conjoint surface of the<br>cylinder and crank cass leak | replace a new<br>replace<br>eliminate<br>tighten<br>eliminate                           |
|                                                |                                      | compression<br>normal                           |               | high voltage wire and spark<br>plug contact poor<br><br>stop switch failure or short<br>circuit                                                            | tighten the spark plug cap<br><br>repair or replace                                     |

# TROUBLE SHOOTING GUIDE

## 2.LOW OUTPUT

| symptom                                                                      | probable cause                                                                       | remedy                                                                                  |
|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| flameout when speedup<br><br>the smoke is thin,<br>carburetor spout backward | fuel filter obstruct,<br>fall short of fuel<br><br>muffler fouled with oily deposits | clean fuel filter、 clean fuel road、<br>adjust carburetor<br><br>clean the oily deposits |
| compress press is inadequate                                                 | piston、 piston ring、<br>cylinder attrite、                                            | replace piston、 piston ring                                                             |
| engine leak                                                                  | conjoint surface of the<br>cylinder and crank cass leak                              | repair                                                                                  |
| the end of two crank shaft leak                                              | the seal is bad                                                                      | replace seal                                                                            |
|                                                                              | engine overheats<br><br>burning room fouled with<br>oily deposits                    | avoid use it for long time 、<br>high speed and heavy load<br>clean the oily deposits    |

## 3.ENGINE RUNNING UNSTABLE

| symptom                         | probable cause                                                                                            | remedy                                                                                                                           |
|---------------------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| there are knock sound in engine | piston、 piston ring、<br>cylinder attrite、<br>piston pin、 piston attrite<br>bearing of crank shaft attrite | replace piston、 piston ring<br><br>replace piston pin、 piston<br>replace bearing                                                 |
| there are metal knock sound     | engine overheats<br><br>burning room fouled with<br>oily deposits<br>gasoline branded is unfit            | avoid use it for long time 、<br>high speed and heavy load<br>clean the oily deposits<br><br>replace with required branded octane |
| engine ignition break off       | there is water in fuel<br>spark gap is wrong<br>coil gap is wrong                                         | instead fuel<br>adjust spark gap 0.6-0.7mm<br>adjust coil gap 0.3-0.4mm                                                          |

## 4.THE ENGINE SUDDENLY STOPPED

| probable cause                                                                                                | remedy                                         |
|---------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| fuel has been used up<br>spark plug fouled with oily deposits and short circuit<br>high voltage wire fall off | add fuel<br>clean the oily deposits<br>connect |



## INSPECTION & MAINTENANCE

For safety use, make sure the machine is cleaned every three-months. Before working, make sure to inspect the filter and the nozzle, and ensure there is no impurity. After working, make sure there is no water in the pump and the hose.

If the machine needs to be repaired in the guarantee period, please return the machine to the shop. You need to provide the certificate of purchase in order to repair or get the substitute.

Before Packing, the machine should be cleaned, then use closed packaging, packaging should be firm. Store the machine in dry place.

For transportation safety. The machine should comply with ISTA.



Meaning of crossed - out wheeled dustbin:

Do not dispose of electrical machines as unsorted municipal waste, use separate collection facilities.

If electrical machines are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

When replacing old machines with new ones, the retailer is legally obligated to take back your old machine for disposals at least free of charge.

## Warranty Card

### CUSTOMER COPY



Purchaser's Name & Address

\_\_\_\_\_  
\_\_\_\_\_

Product Name

KZ-5200BC-PRO-2S BRUSH CUTTER

Product Serial No.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Invoice / DN No.

\_\_\_\_\_

Date of Delivery

\_\_\_\_\_

Dealer's Office Seal

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Dealer Sign \_\_\_\_\_

Customer Sign. \_\_\_\_\_

I/We accept the terms and conditions of Warranty as in the Warranty Card.

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Customer Sign. \_\_\_\_\_

I/We accept the terms and conditions of Warranty as in the Warranty Card.

1. **LIMITED WARRANTY PERIOD** : For a period of six months from the date of Sale / delivery of the product which ever is earlier. 2. **LIMITED WARRANTY OBLIGATION** : Replacement of defective part(s) by authorized dealer are free of charges. If found defective by reasons of defective material / poor workmanship, parts will be replaced and there will be no value re-imbursement. 3. **TERMS & CONDITIONS** : a. Claims under warranty will be accepted on submission of Warranty Card duly filled and stamped by authorized dealer together with the original purchase document. : b. Shipping / transportation / Incidental charges incurred in replacing defective parts under warranty shall be borne by the purchaser.

**WARRANTY null & void if**

- (i) Lack of maintenance, (ii) Incorrect use of the machine or tampering, (iii) Use of non-genuine spare parts, (iv) Usage of acids, solvents, or any flammable materials, (v) Non-usage of filter water / clear water / soft water & using water above 40°C temperature, (vi) While using the pressure washers to draw water which is contaminated with dust & solvents (eg. paint thinners, gasoline, oil, etc.), (vii) Repair done by unauthorized service people, (viii) Those parts subject to wear & tear due to normal operations and plastic parts, rubber items etc, (ix) Loose connections, faulty electrical fixtures & fluctuations in power supply.
- 4. Should any failure occur during or after the warranty period, customer does not have the right to interrupt payment / price discount.
  - 5. Incidental or consequential damages like inconvenience commercial loss, loss of tie, mental agony etc.
  - 6. Loss of any nature due to operation or non-operation is not covered under warranty.
  - 7. All free service are at Dealer's service point only.
  - 8. Warranty ceases if service is not done periodically.
  - 9. The attached card should be completed and returned to Ratnagiri Impex Pvt. Ltd. for registration immediately after sale / delivery.
  - 10. The warranty is void unless you register the warranty card with Ratnagiri Impex Pvt. Ltd.
  - 11. The decision of Ratnagiri Impex Pvt. Ltd., in settling the warranty is final in all respects.
  - 12. All disputes are subject to Bangalore Courts Jurisdiction

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impex**  
BRINGING YOU THE FUTURE - NOW

## 1st Free Service Coupon

ISO 9001-2008  
CERTIFIED COMPANY

### FREE SERVICE COUPON (30 Days / 20 hrs (Which ever is earlier))

Model

KZ-5200BC-PRO-2S BRUSH CUTTER

Serial Number

PDI Date

Service No.

Purchase bill no.

Date

Dealer's Office Seal & Signature

Operations:

- Check and Test the Fuel Mixture.
- Check and Clean the Air Filter
- Check, Clean and Adjust the Spark plug
- Check and Adjust the Carburetor Tuning
- Check and Sharpen the cutting Tools
- Start and Check the Noise, Vibration, Loosen / Fasteners etc.
- Product familiarization on Usage
- Routine maintenance and Storage

Customer Signature.....

Conditions: Operations listed have been performed to my entire satisfaction without any labour charges. Only consumables were charged.



agriculture | horticulture | sericulture | plantations | forestry | garden | health care

WARRANTY AND FREE SERVICE COUPON



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## 2nd Free Service Coupon

ISO 9001-2008  
CERTIFIED COMPANY

### FREE SERVICE COUPON (30 Days / 20 hrs (Which ever is earlier))

Model

KZ-5200BC-PRO-2S BRUSH CUTTER

Serial Number

PDI Date

Service No.

Purchase bill no.

Date

Dealer's Office Seal & Signature

Operations:

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agriculture | horticulture | sericulture | plantations | forestry | garden | health care

WARRANTY AND FREE SERVICE COUPON



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BRINGING YOU THE FUTURE - NOW

## 3rd Free Service Coupon

ISO 9001-2008  
CERTIFIED COMPANY

### FREE SERVICE COUPON (30 Days / 20 hrs (Which ever is earlier))

Model

KZ-5200BC-PRO-2S BRUSH CUTTER

Serial Number

PDI Date

Service No.

Purchase bill no.

Date

Dealer's Office Seal & Signature

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Customer Signature.....

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agriculture | horticulture | sericulture | plantations | forestry | garden | health care

WARRANTY AND FREE SERVICE COUPON



Small Maintenance. Big Savings.



Small Maintenance. Big Savings.



Small Maintenance. Big Savings.



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**RATNAGIRI IMPEX PVT LTD**

Annapurna House, #1/1G, 7th Cross, New Guddadahalli

Mysore Road, Bangalore-560 026

Customer Care: 1800-425-3036

email: [marketing@ratnagiriimpex.com](mailto:marketing@ratnagiriimpex.com)

[www.ratnagiriimpex.com](http://www.ratnagiriimpex.com)



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