

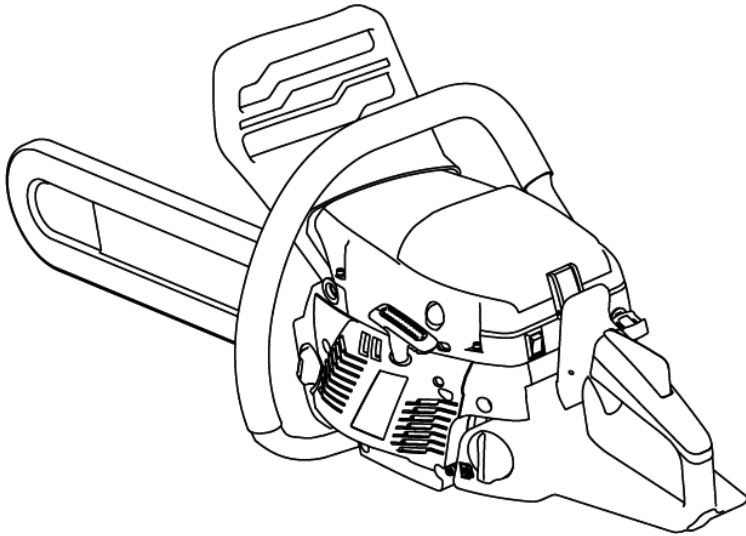
KASEI

Advanced Technology

OPERATOR'S MANUAL

KZ-5121CS

CHAINSAW



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.

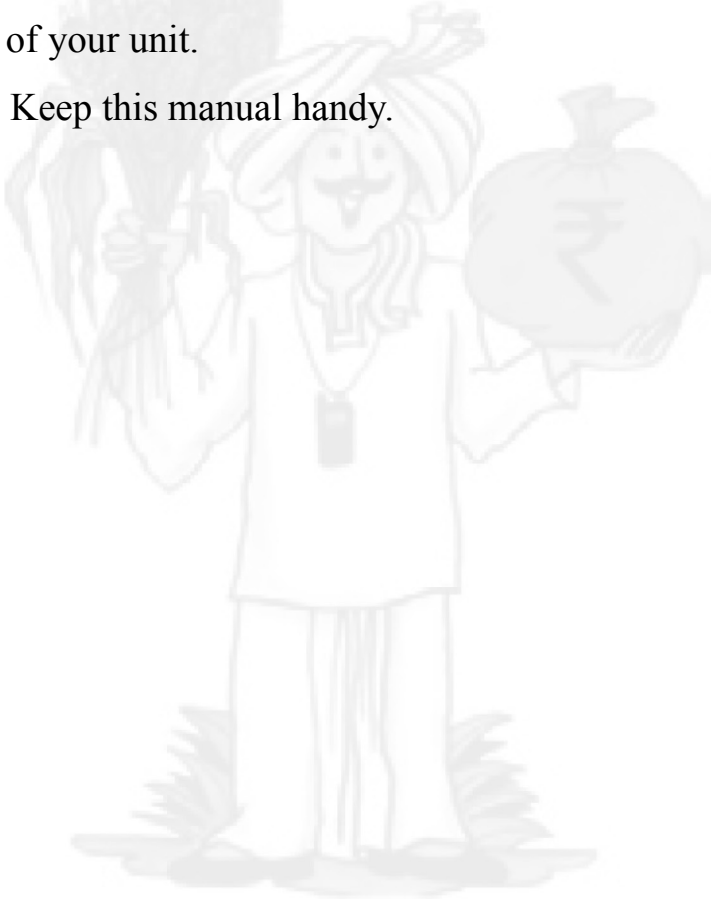




CAUTION

Before using our chain saws, please read this manual carefully to understand the proper use of your unit.

Keep this manual handy.



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.

■ NOTES ON TYPES OF 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.

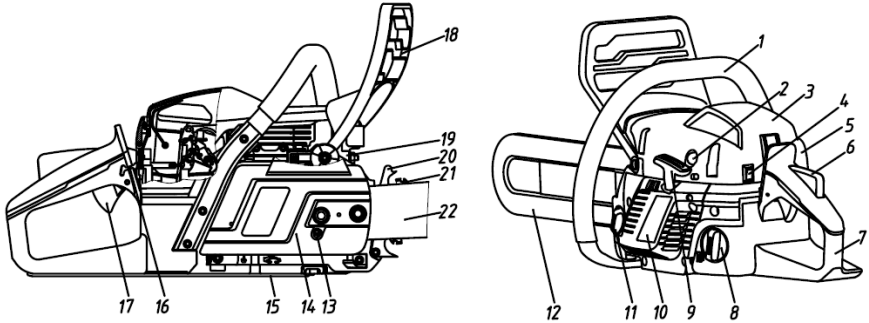
NOTE

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

Contents

1. PARTS LOCATION
2. EXPLANATION OF SYMBOLS AND SAFETY WARNINGS
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6. FUAL AND CHAIN OIL
7. STARTING AND STOPPING
8. SAWING
9. MAINTENANCE
10. TROUBLE SHOOTING
11. TECHNICAL DATA

1. PARTS LOCTATION



- | | |
|---------------------------|-------------------------------|
| 1. Front handle | 13. Chain tensioning screw |
| 2. oil cup | 14. Clutch cover |
| 3. Gland | 15. Oil pump adjustment screw |
| 4. Stop switch | 16. Choke knob |
| 5. Cylinder cover | 17. Throttle control |
| 6. Throttle control latch | 18. Front hand guard |
| 7. Rear handle | 19. Muffler |
| 8. Fuel tank | 20. Bumper spike |
| 9. Starter handle | 21. Chain |
| 10. Starter | 22. Bar |
| 11. Chain oil tank | |
| 12. Bar protector | |

2. EXPLANATION OF SYMBOLS AND SAFETY

WARNINGS

(1) Read owner' s manual before operating this machine.



(2) Wear head, eye and ear protection.



(3) Warning! Kickback is danger.



(4) Warning/Attention .



IMPORTANT

If warning seals peel off or become soiled and impossible to read ,you should contact the dealer from which you purchased the product to order new seals and affix the new seal(s)in the required location(s).

3. SYMBOLS ON THE MACHINE

For safe operation and maintenance, symbols are carved in relief on the machine. According to these indications, please be careful not to make any mistake.

(a) The port to refuel the “MIX GASOLINE”



(b) The port to refuel the “CHAIN OIL”



(c) The indication regarding the chock..

Pulling out the chock knob, the chock closes.



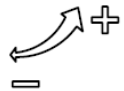
(d) The indication regarding the switch. Flipping the engine switch to the “o”(OFF) direction, the engine stops.



(e) The indication regarding the chain oil adjuster nut.

“-” direction-the oil flow decrease

“+” direction-the oil flow increase.



(f).H: The High-speed adjustment screw.

L: The Slow-speed adjustment screw.



(g) Chain brake, activated (right) Chain brake, not activated (left)



4.SAFETY PRECAUTIONS

■ BEFORE USING THE MACHINE

- a. Read this owners manual carefully to understand how to operate this properly.



- b. 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 be might be impaired or that you might not be able to operate the machine properly and in a safe manner.



- c. Avoid running the engine indoors. The exhaust gases contain harmful carbon monoxide.



- d. Never use the product under circumstances like those described below:

- (1) When the ground is slippery or when other conditions exist which might make it not possible to maintain a steady posture.
- (2) 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 area.
- (3) During rainstorms, during lightning storms, at times of strong or gale-force winds, or at any other times weather conditions might make it unsafe to use this product.

- e. when using this product for the first time, before beginning actual work. learn to handing it from skilled worker.
- f. Lack of sleep, tiredness, or physical exhaustion results in lower attention spans, and this in turn leads to accidents and injury.

Limit the amount of time of using the machine continuously to somewhere around 10 minutes persession, and take 10-20minutes of rest between work sessions. Also try to keep the total amount of work performed in a single day under 2 hours or less.

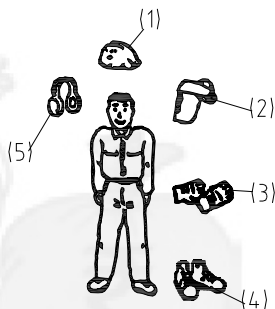
- g. Be sure to keep this manual handy so that you may refer to it later whenever any questions arise.

- h. Always be sure to include this manual when selling, lending, or otherwise transferring the ownership of the product.
- i. Never allow children or anyone unable to fully understand the directions given in this manual to use this product.

■ WORKING GEAR AND CLOTHING

- a. When using the product, you should wear proper clothing and protective equipments as follows.

- (1)Helmet
- (2)Protection goggles or face Protector
- (3)Thick work gloves
- (4)Non-slip-sole work boots
- (5)Ear protectors



- b. And you should carry with you .

- (1)Attached tools and files.
- (2)Properly reserved fuel and chain oil.
- (3)Things to notify your working area (Rope, warning signs)
- (4)Whistle(for collaboration or emergency)
- (5)Hatchet or saw(for removal of obstacles)

- c. Never use the product when wearing pants with loose cuffs, when wearing sandals, or when barefoot.

■ WARNING CONSIDERING HANDLING OF FUEL

- a. The engine of this product is designed to run on a mixed fuel which contains highly flammable gasoline. Never store cans of fuel or refill the fuel tank 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.



- b. Smoking while operating the product or refilling its fuel tank is extremely dangerous. Always be sure to keep lit cigarettes away from the product at all times.
- c. When refilling the tank always turn off the engine first and take a careful look round to make sure that there are no sparks or open flames anywhere nearby before refueling.
- d. If any fuel spillage occurs during refueling, use a dry rag to wipe up spills before turning the engine back on again.
- e. After refueling, screw the fuel cap back tightly onto the fuel tank and then carry the product to a spot 3m or more away form where it was refueled before turning on the engine.

■ BEFORE STARTING ENGINE

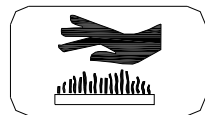
- Check working place, the cutting object and cutting direction. If there is obstacle, remove it.
- Never start cutting until you have a clear work area, secure footing and a planned retreat path from the falling tree.
- Use caution and keep bystanders and animals out of the working area whose diameter is 2.5 times of the cutting object .
- Inspect the machine for worn, loose, or damaged parts .Never operate the machine that is damaged, improperly adjusted, or is not completely and securely assembled, Make sure that the saw chain stops moving when the throttle control trigger is released.

■ WHEN STARTING THE ENGINE

- Always hold the machine firmly with both hands when the engine is running .Use a firm grip with thumb and fingers encircling the handles.
- Keep all parts of your body from the machine when the engine running.
- Before starting the engine, make sure the saw chain is not contacting anything.

■ OPERATION

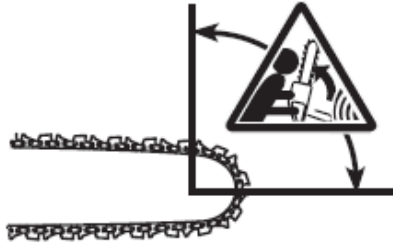
- Keep the handle dry, clean and free of oil or fuel mixture.
- Never touch the muffler, spark plug or other metallic parts of the engine while the engine is in operate or immediately after stopping the engine. Doing so could result in serious burns or electrical shock .
- Use extreme caution when cutting small size brush and saplings because slender material may catch the saw chain and be whipped toward your off balance.
- When cutting a limb that is under tension in the wood fibers is released
- Check the tree for dead branches that could fall during the felling operate.
- Always shut of the engine before setting it down.



■ KICKBACK SAFETY PRECAUTIONS FOR CHAIN SAW USERS

⚠WARNING

Take care when using your saw and make sure the kickback zone of the bar never touches any object.



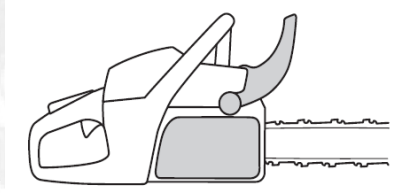
- Kickback may occur when the nose or tip of the guide bar touches an object, or when the wood closes may cause a lightning fast reverse reaction, kicking the guide bar up and back towards the operator. Pinching the saw chain along the top of the guide bar may push the guide bar rapidly back towards the operator. Either of these reactions may cause you to lose control of the saw which could result in serious personal injury.
- Do not rely exclusively on the safety devices built into your saw. As a chain saw user you should take several steps to keep cutting jobs free from accident or injury.
 - (1) With a basic understanding of kickback you can reduce or eliminate the element of surprise. Sudden surprise contributes to accidents.
 - (2) Keep a good grip on the saw with both hands. the right hand on the rear handle, and the left hand on the front handle, when the engines is running. Use a firm grip with thumbs and fingers encircling the chain saw handles. A firm grip will help you reduce kickback and maintain control of the saw.
 - (3) Make certain that the area in which you are cutting is free from obstructions Do not let the nose of the guide bar contact a log, branch, or any other obstruction which could be hit while you are operating the saw.
 - (4) Cut at high engine speeds.
 - (5) Do not overreach or cut above shoulder height.

(6) Follow manufactures sharpening and maintenance instructions for saw chain.

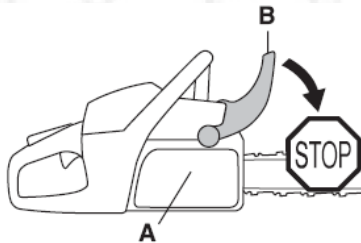
(7) Only use replacement bars and chains specified by the manufacturer or the equivalent.

■ Chain brake and front hand guard

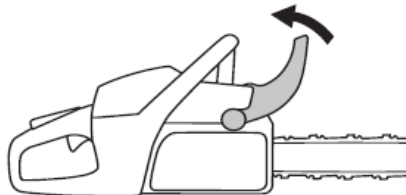
Your chain saw is equipped with a chain brake that is designed to stop the chain if you get a kickback. The chain brake reduces the risk of accidents, but only you can prevent them.



- The chain brake (A) can either be activated manually (by your left hand) or automatically by the inertia release mechanism.
- The brake is applied when the front hand guard (B) is pushed forwards.



- To release the chain brake pull the front hand guard backwards, towards the front handle.



- In the felling position the left hand is in a position that makes manual activation of the chain brake impossible. With this type of grip, that is when the left hand is placed so that it cannot affect the movement of the front hand guard, the chain brake can only be activated by the inertia action.



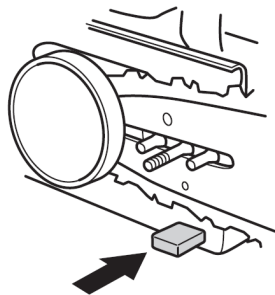
- The way the chain brake is activated, either manually or automatically by the inertia release mechanism, depends on the force of the kickback and the position of the chain saw in relation to the object that the kickback zone of the bar strikes. If you get a violent kickback while the kickback zone of the bar is farthest away from you the chain brake is designed to be activated by the inertia in the kickback direction.



- If the kickback is less violent or the kickback zone of the bar is closer to you the chain brake is designed to be activated manually by the movement of your left hand.

■ Chain catcher

The chain catcher is designed to catch the chain if it snaps or jumps off. This should not happen if the chain is properly tensioned and if the bar and chain are properly serviced and maintained

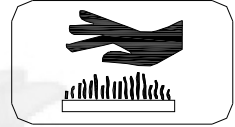


■ MAINTENANCE

- In order to maintain your product in proper working order, perform the maintenance and checking operations described in the manual at regular intervals.
- Always be sure to turn off the engine before performing any maintenance or checking procedures.

⚠WARNING

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



- Leave all maintenance other than the items listed in the Owner's Manual to your competent servicing dealer.

■ TRANSPORT

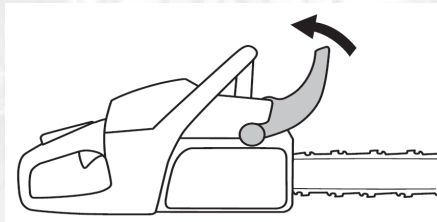
- For longer periods of transport of the chain saw, the fuel and chain oil tanks should be emptied.
- The guide bar cover must always be fitted to the cutting attachment when the machine is being transported or in storage, in order to prevent accident contact with the sharp chain. Even a non-moving chain can cause serious cuts to yourself or persons you bump into with an exposed chain.
- Secure the machine during transport.

5.INSTALLING GUIDE BAR AND SAW CHAIN

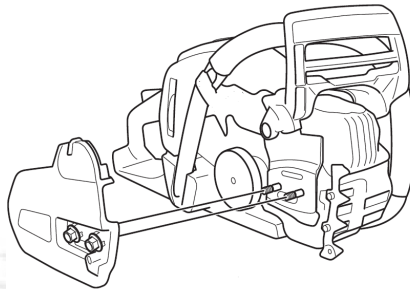
⚠WARNING

The saw chain has very sharp edges ,Use thick protective gloves for safety.

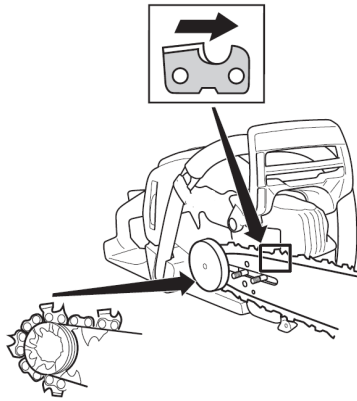
1. Pull the guard towards the front handle to check that the chain brake is not on.



2. loosen the nuts and remove the chain cover.



3. Install the bar over the bar bolts .Place the bar in its rearmost position. Place the chain the drive sprocket locate it in the groove on the bar.Begin on the top edge of the bar .

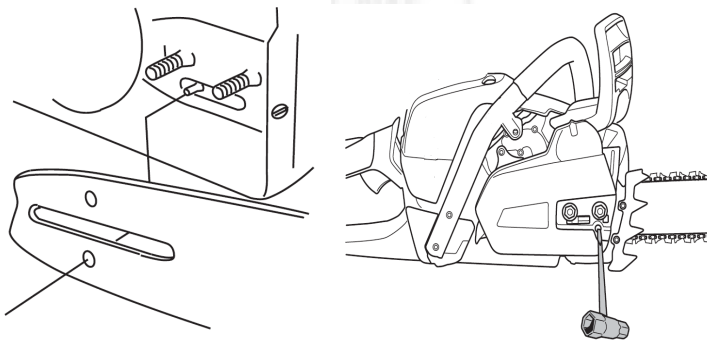


⚠ WARNING

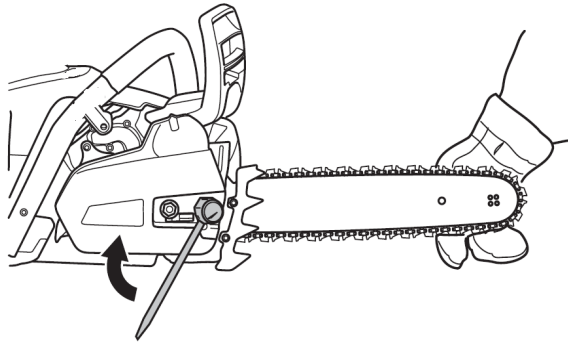
Make sure that the edges of the cutting links are facing forward on the top edge of the bar.

4. Fit the chain cover and locate the chain adjuster pin in the hole in the bar. Check that the drive links of the chain fit correctly over the drive sprocket and that the chain is correctly located in the groove in the bar. Tighten the bar nuts finger tight.

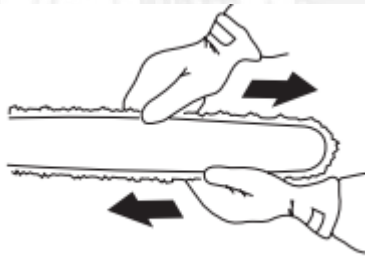
Tension the chain by turning the chain tensioning screw clockwise using the combination spanner.



5. The chain is correctly tensioned when it does not sag from the underside of the bar, but can still be turned easily by hand. Hold up the bar tip and tighten the bar nuts with the plug wrench.



6. When fitting a new chain, the chain tension has to be checked frequently until the chain is run-in. Check the chain tension regularly. A correctly tensioned chain ensures good cutting performance and long life.



NOTE

A new chain will expand its length in the beginning of use. Check and readjust the tension frequently as a loose chain can easily derail or cause rapid wear of itself and the guide bar.

6.FUEL AND CHAIN OIL

■ FUEL

The machine is equipped with a two-stroke engine and must always be run using a mixture of gasoline and two-stroke oil. It is important to accurately measure the amount of oil to be mixed to ensure that the correct mixture is obtained. When mixing small amounts of fuel, even small inaccuracies can drastically affect the ratio of the mixture.

Gasoline

- Use good quality gasoline.
- The lowest recommended octane grade is 90.

Two-stroke oil

- Use two-stroke engine oil, which is specially formulated for our air-cooled two stroke-engines.(JASO FC GRADE OIL OR ISO EGC GRADE)
- Never use oil intended for four-stroke engines.

Recommended mixing ratio:

Condition	Gasoline: oil
Up to 100 hours use	25:1
After 100hours use	30:1

25:1 Mix Chart

Gasoline (L)	1	2	3	4	5
2-cycle oil (ml)	40	80	120	160	200

30:1 Mix Chart

Gasoline (ml)	300	600	900	1200	1500
2-cycle oil(ml)	10	20	30	40	50



⚠WARNING

- keep open flames away from the area where fuel is handle or stored.
- Mix and store fuel only in an approved gasoline

container.

NOTE

Most engine troubles are caused ,directly or indirectly, by the fuel used on the machine .Take special care not to mix a motor oil for 4 cycle engines.

■ **CHAIN OIL**

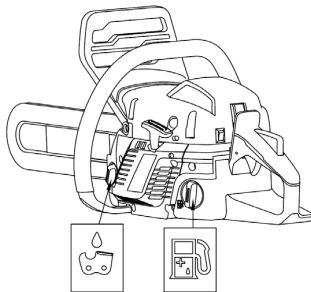
Use motor oil SAE # 30- # 40 in summer and SAE # 20 in winter.

NOTE

Do not use wasted or regenerated oil that can cause damage to the oil pump.

■ **FUELING**

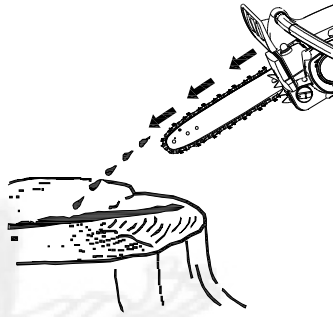
- Never refuel the machine while the engine is running.
- Make sure there is plenty of ventilation when refuelling or mixing fuel (gasoline and 2-stroke oil).
- Move the machine at least 3m from the refuelling point before starting it.
- If you have spilled fuel or chain oil on the machine. Wipe off the spillage and allow remaining fuel to evaporate
- If the machine is leaking fuel. Check regularly for leaks from the fuel cap and fuel lines.



1. Unwist and remove fuel cap. Rest the cap on a dustless palce.
2. Put fuel into the tank to 95% of the full capacity.
3. Fasten the fuel cap securely and wipe up any fuel spillage around the unit.

■ **CHECKING OIL SUPPLY**

Check the chain lubrication each time you refuel.After starting the engine,run the chain at medium speed and see if chain oil is scattered off as shown in the figure.

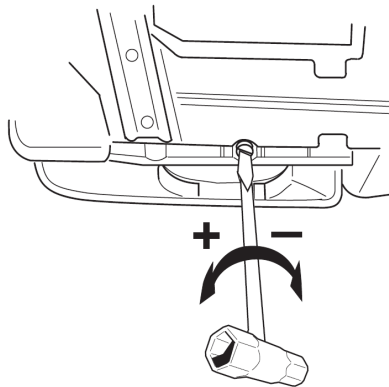


■ ADJUSTMENT OF THE OIL PUMP

NOTE

The saw chain oil tank and the fuel tank are designed so that the fuel runs out before the saw chain oil.

Adjustments are made by turning the oil pump adjustment screw using a screwdriver or combination spanner. The machine is supplied from the factory with the screw set to middle position. Turning the screw clockwise will reduce the oil flow and turning the screw anti-clockwise will increase the oil flow.



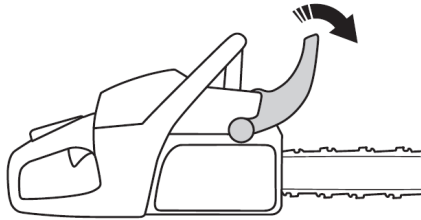
NOTE

Be sure to refill the chain oil tank every time when refueling the unit.

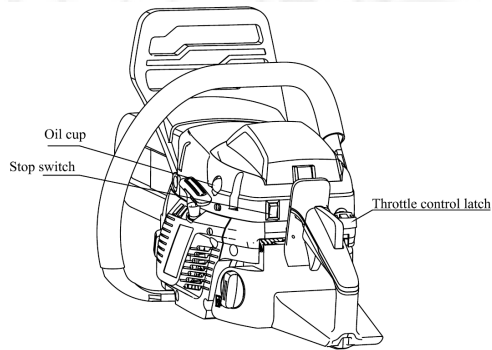
7.STARTING AND STOPPING

■ STARTING ENGINE

1. The chain brake should be activated when starting the chain saw.
Activate the chain brake by pushing the front hand guard forwards.



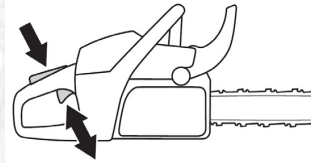
2. Press the oil cup repeatedly until fuel begins to fill the diaphragm (about 3~6 times). The oil cup need not be completely filled.



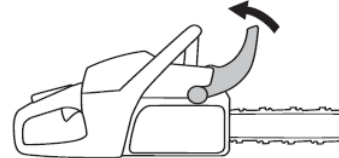
3. Put the switch to “ON” position.
4. Pulling out the chock knob, the chock is closed.
5. Grip the front handle with your left hand. Put your right foot into the boot grip through the lower section of the rear handle pressing the machine against the ground.
6. Pull the starter handle with your right hand and pull out the starter cord slowly (about 3~4 times) until you heard through a "puff" sound.



7. By disengaging the throttle latch in order to the choke is opened. Pull the starter handle with your right hand and pull out the starter cord rapidly until the engine starts.



8. Pulling the front hand guard back towards the front handle. The chain saw is now ready for use.



NOTE

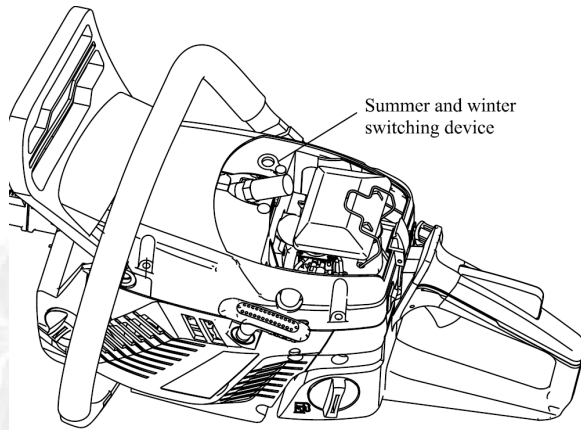
When restarting immediately after stopping the engine, leave the choke knob at the open position.

⚠WARNING

Do not start the engine while holding the chain saw with a hand. The saw chain may touch your body. It is very dangerous.

Winter use

The intermediate wall is designed so it can be adjusted for running in cold weather, so that preheated air from the cylinder can pass into the carburettor space preventing icing of the air filter, etc.



■ **BREAK**

1. Don't accelerate abruptly due to bad lubrication of the engine at the beginning of start-up.
2. Avoid the speedy idle motion and over speed motion. If the engine will run over speed, which not only shortens the service life of the engine but also causes more problems in the engine.

■ **STOPPING ENGINE**

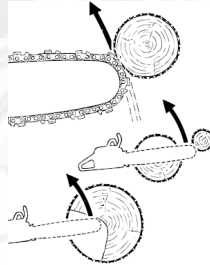
1. Release the throttle lever to allow the engine to idle.
2. Set the switch to the "OFF" position.

8.SAWING

WARNING

- Before proceeding to your job, read “For safe precautions” section. It is recommended to first practice sawing easy logs. This also helps you get accustomed to your unit.
 - Always follow the safety regulations. The chain saw must only be used for cutting wood, It is forbidden to cut other types of material. Vibrations would not be respected. Do not use the chain saw as a lever for lifting moving or splitting objects .Do not lock it over fixed stands ,it is forbidden to hitch tools or applications to the p.t.o that are not specified by the manufacturer.
 - It is not necessary to force the saw into the cut . Apply only light pressure while running the engine at full throttle.
 - When the saw chain is caught in the cut ,do not attempt to pull it out by force, but use a wedge or a lever to open the way.
 - Never use a chain saw by holding it with one hand. A chain saw is not safely controlled with one hand. Always have a secure, firm grip around the handles with both hands.
 - Always use full throttle when cutting!
 - Reduce the speed to idle after every cut (running the engine for too long at full throttle without any load, i.e. without any resistance from the chain during cutting, can lead to serious engine damage)
 - After working a long time, Release the throttle lever to allow the engine to idle and run 3~5 minutes, for preventing the machine parts (ignition、carburetor) from overheating.
 - Always start a cut with the chain rotating at full speed and bumper spike in contact with the wood.
 - Bumper spike as a pivot when chain saw is sawing ,Some of the weight of chain saw and reacting force of sawing have effect on the wood, lighten the intensity of labour.
- **GUARD AGAINST KICKBACK**
- 1.This saw is equipped with a chain brake that will stop the chain in the event of kickback if operating properly. You must check the chain brake operation before each usage by running the front hand guard forward. The chain should stop immediately with the engine at full speed. If the chain is slow to

- stop or does not stop, replace the brake band and clutch drum before use.
- It is extremely important that the chain brake be checked for proper operation before each use and that the chain be sharp in order to maintain the kickback safety level of this saw, removal of the safety devices. Inadequate maintenance, or incorrect replacement of the bar or chain may increase the risk or personal injury due to kickback.



■ BASIC CUTTING TECHNIQUE

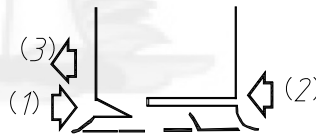
Decide the felling direction considering the wind, lean of the tree, location of heavy branches, ease of job after felling and other factors.

- while cleaning the area around the tree, arrange a good foothold and retreat path.
- Make a notch cut one-third of the way into the tree on the felling side.
- Make a felling cut from the opposite side of the notch and at a level slightly higher than the bottom of the notch.

WARNING

When you fell a tree, be sure to warn person of the danger.

- Notch cut
- Felling cut
- Felling direction



■ Bucking and Limbing

WARNING

- Always ensure your foothold, Do not stand on the log.
- Be alert to the rolling over of a cut log. Especially when working on a slope, stand on the uphill side of the log.
- Follow the instructions in “For safe operation” to avoid kick back of the saw.

Before starting work, check the direction of bending force inside the log to be cut. Always finish cutting from the opposite side of bending direction to prevent the guide bar from being caught in the cut.

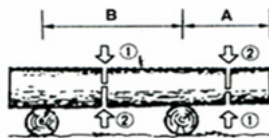
A Log lying on the ground

Saw down halfway, then roll the log over and cut from the opposite side.



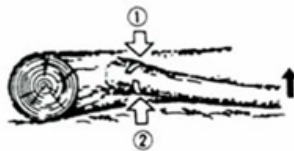
A Log handing off the ground

In area A, saw up from the bottom one-third and finish by sawing down from the top. In area B, saw down from the top one-third and finish by sawing up from the bottom.



Cutting Limbs of Fallen Tree

First check to which side the limb is bent. Then make the initial cut from the bent side and finish by sawing from the opposite side.

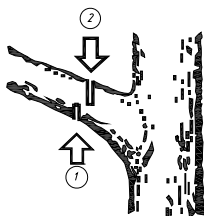


⚠WARNING

Be alert to the springing back of a cut limb.

Pruning of standing tree

Cut up from the bottom, finish down from the top.



9. MAINTENANCE

⚠️WARNING

Before cleaning ,inspecting, or repairing your unit, make sure that engine has stopped and is cool. Disconnect the spark plug to prevent accident starting.

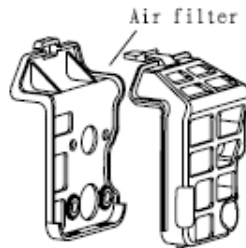
■ MAINTENANCE AFTER EACH USE

1.Air filter and Gland

⚠️WARNING

The air filte rand gland must be regularly cleaned to remove dust and dirt in order to avoid Carburettor malfunctions.

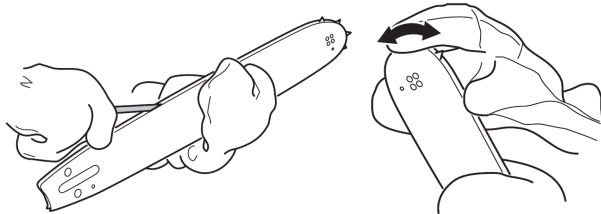
- ò Remove the air filter after taking off the Cylinder cover, Split the air filter into halves. When refitting make sure that the air filter seals tightly against the filter holder. Clean the filter by brushing or shaking it.
- ò The filter can be cleaned more thoroughly by washing it in water and detergent.



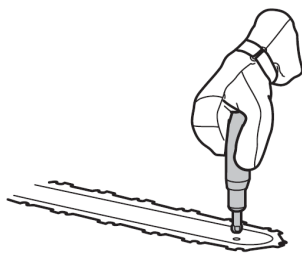
- ò An air filter that has been in use for a long time cannot be cleaned completely. The filter must therefore be replaced with a new one at regular intervals. A damaged air filter must always be replaced.

2.Guide bar

When the guide bar is dismantled, remove Saw dust in the bar groove and the oiling port.



Grease the nose sprocket from the feeding port on the tip of the bar.

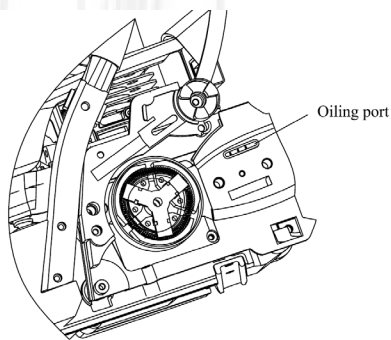


To prolong the life of the bar you should turn it over daily.



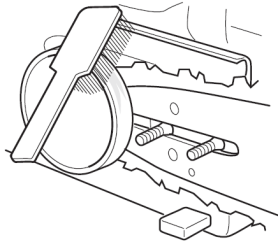
3.Oiling port

Remove the guide bar and check the oiling port for clogging.



4.Chain brake

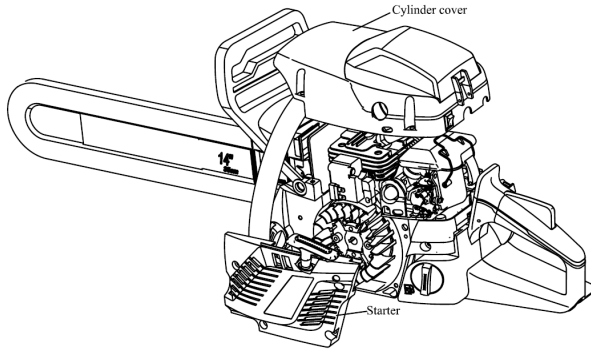
Brush off any wood dust, resin and dirt from the chain brake and clutch drum. Dirt and wear can impair operation of the brake.



■ PERIODICAL SERVICE POINTS

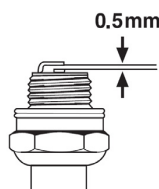
1. Cooling system

Dust clogging between the cylinder fins will cause overheating. Removing the Starter and the cylinder cover. Clean the cooling system with a brush once two week.



2. Spark plug

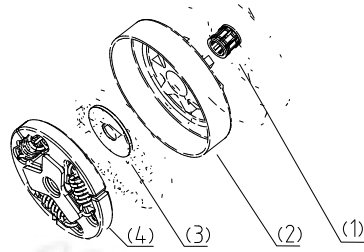
Clean the electrodes with a wire brush and reset the gap to 0.5~0.65mm as necessary.



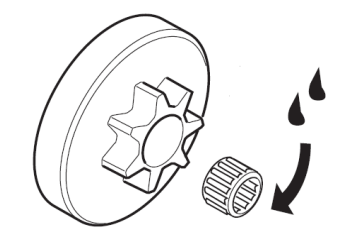
3. Sprocket

Check for cracks and for excessive wear interfering with the chain drive. If the wearing is found obviously, replace it with new one, Never fit a new chain on a worn sprocket, or a worn chain on a new sprocket.

- (1) Needle bearing
- (2) Sprocket
- (3) Spacer
- (4) Clutch

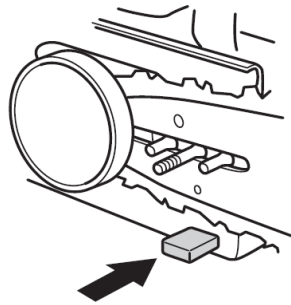


Sprockets have a needle bearing on the drive shaft, which has to be greased regularly (once a week). Use only high quality bearing grease or engine oil



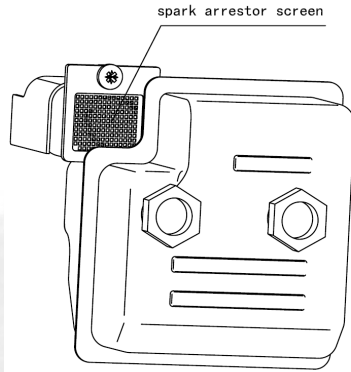
4. Chain catcher

Check that the chain catcher is not damaged and is firmly attached to the body of the chain saw.



5. Muffler

1. Regularly check that the muffler is securely attached to the machine.
2. Some mufflers are equipped with a special spark arrestor screen. If your machine has this type of muffler, you should clean the screen at least once a week. This is best done with a wire brush. A blocked screen will cause the engine to overheat and may lead to serious damage.



6.SAW CHAIN

⚠WARNING

It is very important for smooth and safe operation to keep the cutters always sharp.

The cutters must be regularly to sharp in order to avoid:

- 1).Sawdust becomes powder-like.
- 2).You need extra force to saw in.
- 3).The cut way does not go straight
- 4).Vibration increases
- 5).Fuel consumption increases

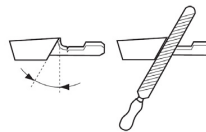
Cutter setting standards:

⚠WARNING

Be sure to wear safety gloves.

When you sharpen a cutting tooth there are four important factors to remember.

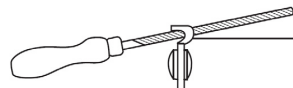
1).Filing angle



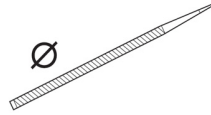
2).Cutting angle



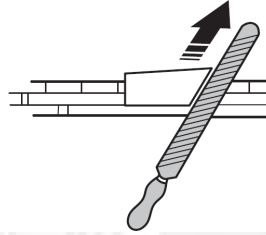
3).File position



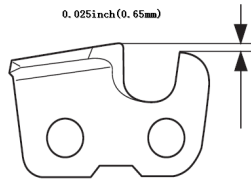
4).Round file diameter



Always file cutting teeth from the inside face. Reduce the pressure on the return stroke. File all the teeth on one side first, then turn the chain saw and file the teeth on the other side.



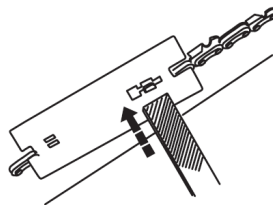
After every cutter has been set, check the depth gauge and file it to the proper level as illustrated.



⚠WARNING

Be sure to round off the front edge to reduce the chance of kickback or tie-strap breakage.

Use the flat file to file off the tip of the depth gauge that protrudes through the depth gauge tool. The depth gauge setting is correct when you no longer feel resistance as you draw the file along the depth gauge tool.



10. TROUBLE SHOOTING

1.Failure to start

Problem			Probable cause	Remedy
cylinder compress pressure normal	spark plug spark normal	fuel system abnormality	these is no fuel in tank fuel filter obstruct	add fuel in tank clean fuel filter
		fuel system normal	fuel is too dirty there is water in fuel there is too much fuel in cylinder mixture ratio is improper	instead fuel instead fuel tear down spark plug and dry it mixture proration
	fuel system normal	high voltage wire spark normal	sparkplugfouledwithoily eposits sparkpluginsulation deposits sparkgapistoolargeor small	clean the oily deposits replace spark plug adjust spark gap (0.5- 0.65)mm
		highvoltage wirespark abnormality	highvoltage wire breachor break off coil looseness	replaceortighten tighten
fule system normal	ignition system normal	compress press is shortage	piston ring attrite piston ring is breaked piston ring cementation spark plug looseness conjointsurfaceofthe cylinderandcrankcass leak	replace a new replace eliminate tighten eliminate
		compress normal	highvoltagewireand sparkplug contact badness stop switchfailure or short circuit	tighten the spark plug cap repair or replace

2.Low output

problem	probable cause	remedy
flameoutwhen speedup the smoke is thin carburetorsput backward	fuel filter obstruct fall short of fuel muffler fouled with oily deposits	clean fuel filter、 clean fuel road、 adjust carburetor clean the oily deposits
Compress press is shortage	piston、 piston ring、 cylinder attrite	replace piston、 piston ring
engine leak	conjoint surface of the cylinder and crank cass leak	repair
	engine overheats burning room fouled with oily deposits	avoid use it for long time 、 high speed and heavy load clean the oily deposits

3.Engine running unstable

Problem	Probable cause	Remedy
there are knock sound in engine	piston,pistonring,cylinder attrite piston pin,piston attrite bearing of crank shaft attrite	replace piston,piston ring replace piston pin, piston replace bearing
there are metal knock sound	engine overheats burning room fouled with oily deposits gasoline branded is unfit	avoiduse it for long time 、 high speed and heavy load clean the oily deposits replacerequirebranded octane
engine ignition break off	there is water in fuel spark gap is wrong coil gap is wrong	instead fuel adjustsparkgap(0.6-0.7)mm adjustcoil gap (0.3-0.4)mm

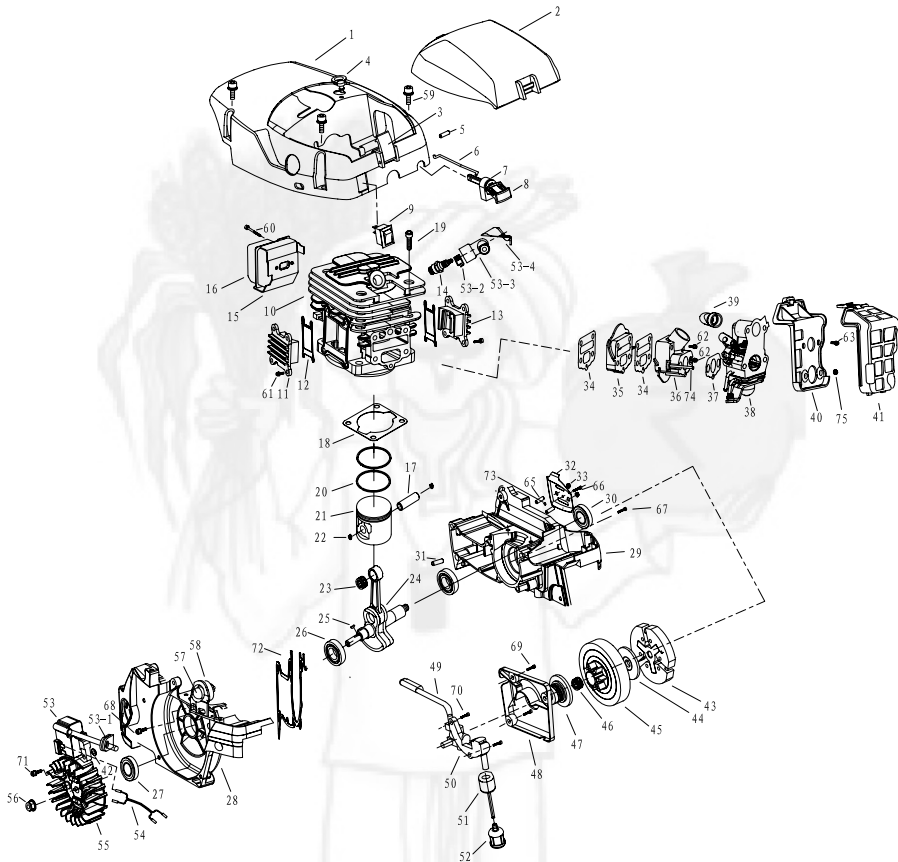
4.The engine suddenly stopped

Probable cause	Remedy
fuel is use up spark plug fouled with oily deposits and short circuit high voltage wire fall off	add fuel clean the oily deposits connect

11. TECHNICAL DATA

Chain saw Model	KZ 5121CS	
Fuel	Mixture (Gasoline25:Two-cycle oil 1)	
Fuel tank capacity(ml)	540	
Chain oil	Motor oil SAE 10W-30	
Oil tank capacity(ml)	280	
Displacement(cc)	50:8	
Rated power kW/r/min	2.2/9000	
Max. TorqueNm/r/min	2.65 /6500	
Carburetor	Diaphragm type	
ignition	C.D.I	
Spark plug	CMR6A	
Oil feeding system	Automatic pump	
Starting system	Recoil Starter	
Guide bar Type	Sprocket nose	
Guide bar Size (in.)	20(standard)	
Saw Chain Pitch(in.)	0.325	
Chain saw without bar or chain, empty tanks, kg	5.8	
Idle speed r/min	3200±280	
Clutch speed r/min	5000±300	
Dimensions(L*W*H)(mm)	430×180×260	
Sound level dB(A)	≤115	
Vibrationlevel (m/s ²)	Front handel	≤5.5
	Rear handle	≤7.5

ENGINE DIAGRAM & PART LIST OF KASEI CHAINSAW KZ 5121CS



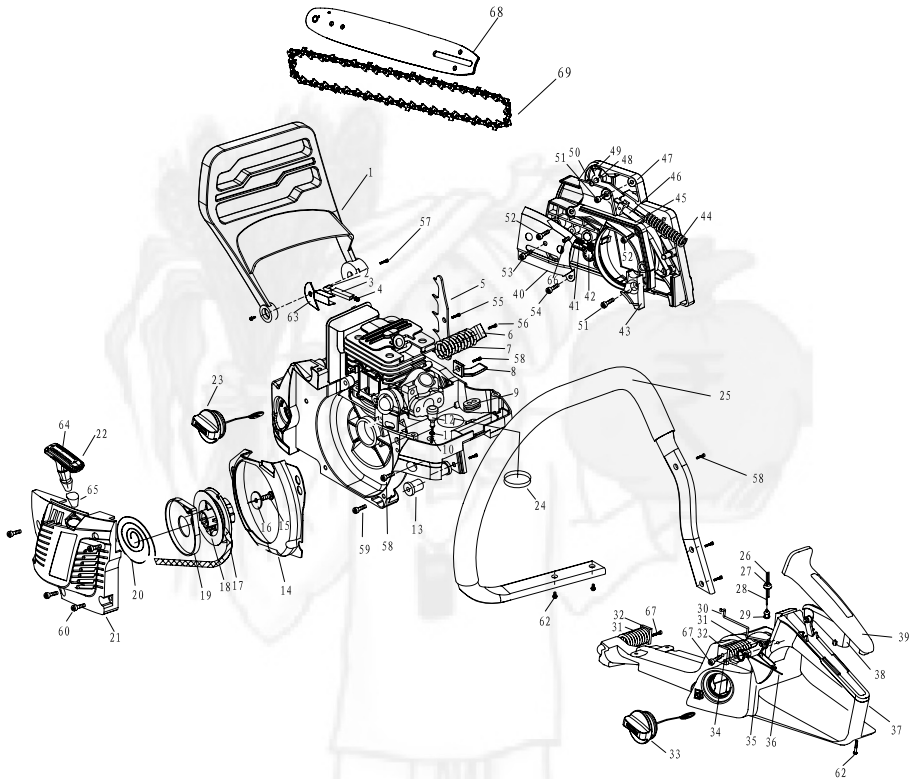
S.N.	PART NO.	DESCRIPTION
1	KZ-5121-CS-E01	Guide Cover
2	KZ-5121-CS-E02	Gland
3	KZ-5121-CS-E03	Start Rope Reel summer and winter switching device
4	KZ-5121-CS-E04	
5	KZ-5121-CS-E05	Pin B3*22
6	KZ-5121-CS-E06	Choker Pull Rod
7	KZ-5121-CS-E07	Choker Plug
8	KZ-5121-CS-E08	Choker Handler

S.N.	PART NO.	DESCRIPTION
9	KZ-5121-CS-E09	Screw M4x20
10	KZ-5121-CS-E10	Cylinder
11	KZ-5121-CS-E11	Lid
12	KZ-5121-CS-E12	Start Spring
13	KZ-5121-CS-E13	Lid
14	KZ-5121-CS-E14	Spark Plug
15	KZ-5121-CS-E15	Gasket
16	KZ-5121-CS-E16	Muffler
17	KZ-5121-CS-E17	Piston Pin

S.N.	PART NO.	DESCRIPTION
18	KZ-5121-CS-E18	Gasket
19	KZ-5121-CS-E19	M5x20
20	KZ-5121-CS-E20	Piston Ring
21	KZ-5121-CS-E21	Piston
22	KZ-5121-CS-E22	Ring
23	KZ-5121-CS-E23	Bearing
24	KZ-5121-CS-E24	Magneto Rotor Comp
25	KZ-5121-CS-E25	Key
26	KZ-5121-CS-E26	Bearing 6202/P5
27	KZ-5121-CS-E27	Oil Seal
28	KZ-5121-CS-E28	Crankcase
29	KZ-5121-CS-E29	Crankcase
30	KZ-5121-CS-E30	Oil Seal
31	KZ-5121-CS-E31	Pin
32	KZ-5121-CS-E32	Guidance Cover Plate
33	KZ-5121-CS-E33	Nut M8
34	KZ-5121-CS-E34	Gasket
35	KZ-5121-CS-E35	Admitting Pipe Spacer
36	KZ-5121-CS-E36	Admitting Pipe
37	KZ-5121-CS-E37	Gasket
38	KZ-5121-CS-E38	Carburetor
39	KZ-5121-CS-E39	Admitting Glue Pipe
40	KZ-5121-CS-E40	Air Filter Inside cover
41	KZ-5121-CS-E41	Air Filter Outside cover
42	KZ-5121-CS-E42	Gasket
43	KZ-5121-CS-E43	Expander
44	KZ-5121-CS-E44	Clutch Washer
45	KZ-5121-CS-E45	Driven Friction disk
46	KZ-5121-CS-E46	Bearing
47	KZ-5121-CS-E47	Oil Pump Worm Gear
48	KZ-5121-CS-E48	Oil Pump cover

S.N.	PART NO.	DESCRIPTION
49	KZ-5121-CS-E49	Oil pump Fuel pipe
50	KZ-5121-CS-E50	Oil Pump
51	KZ-5121-CS-E51	Oil pump Fuel pipe
52	KZ-5121-CS-E52	Cleaner Cover
53	KZ-5121-CS-E53	Ignition Coil Comp
54	KZ-5121-CS-E53-1	Plug
55	KZ-5121-CS-E53-2	Spring
56	KZ-5121-CS-E53-3	Plug Cap
57	KZ-5121-CS-E53-4	Cap
58	KZ-5121-CS-E54	Cord Comp.
59	KZ-5121-CS-E55	Magneto Rotor comp
60	KZ-5121-CS-E56	Nut M8*1
61	KZ-5121-CS-E57	Oil cup
62	KZ-5121-CS-E58	Oil cup stand
63	KZ-5121-CS-E59	Screw M5*16
64	KZ-5121-CS-E60	Screw M5*25-12.9
65	KZ-5121-CS-E61	Screw M4*8
66	KZ-5121-CS-E62	Screw M5*25
67	KZ-5121-CS-E63	Screw M5*8
68	KZ-5121-CS-E64	
69	KZ-5121-CS-E65	Thimble
70	KZ-5121-CS-E66	Screw M4*6
71	KZ-5121-CS-E67	Screw M5*35
72	KZ-5121-CS-E68	Screw M4*12
73	KZ-5121-CS-E69	Screw M4*10
74	KZ-5121-CS-E70	Screw M4*16
75	KZ-5121-CS-E71	Screw M5*18
76	KZ-5121-CS-E72	Gasket
77	KZ-5121-CS-E73	Ventilate Mouth
78	KZ-5121-CS-E74	Bolts for T slot M5x50
79	KZ-5121-CS-E75	Nut M5

HANDLE & ACCESSORIES DIAGRAM & PART LIST OF KASEI CHAINSAW KZ 5121CS



S.N.	PART NO.	DESCRIPTION
1	KZ-5121-CS-H01	Front Hand Guard
2	KZ-5121-CS-H02	Guidance Lump Washer
3	KZ-5121-CS-H03	Guidance Lump
4	KZ-5121-CS-H04	Recall Spring
5	KZ-5121-CS-H05	Bumper spike
6	KZ-5121-CS-H06	Cylinder Spring Seat
7	KZ-5121-CS-H07	Cylinder Spring
8	KZ-5121-CS-H08	Chain Catcher
9	KZ-5121-CS-H09	Plug

S.N.	PART NO.	DESCRIPTION
10	KZ-5121-CS-H10	Fuel Pipe
11	KZ-5121-CS-H11	Ventilate Plug
12	KZ-5121-CS-H12	Admitting Valve
13	KZ-5121-CS-H13	Support Rubber Tube
14	KZ-5121-CS-H14	Air Guidance Board
15	KZ-5121-CS-H15	Screw M5x16
16	KZ-5121-CS-H16	Washer
17	KZ-5121-CS-H17	Rope dia 4
18	KZ-5121-CS-H18	Start Rope Reel

S.N.	PART NO.	DESCRIPTION
19	KZ-5121-CS-H19	Cover
20	KZ-5121-CS-H20	Reoil Spring
21	KZ-5121-CS-H21	Start Cover Assy.
22	KZ-5121-CS-H22	Starter Handle
23	KZ-5121-CS-H23	Oil Tank Lid
24	KZ-5121-CS-H24	Carburettor Bottom Pad
25	KZ-5121-CS-H25	Front Handle
26	KZ-5121-CS-H26	Fuel Pipe
27	KZ-5121-CS-H27	Fuel Pipe Glue Stopper
28	KZ-5121-CS-H28	TPU Fuel pipe
29	KZ-5121-CS-H29	Fuel Cleaner Cover
30	KZ-5121-CS-H30	Throttle Operating lever
31	KZ-5121-CS-H31	Spring
32	KZ-5121-CS-H32	Spring Seat
33	KZ-5121-CS-H33	Fuel Tank Lid
34	KZ-5121-CS-H34	Pin B4x28
35	KZ-5121-CS-H35	Throttle Control Latch
36	KZ-5121-CS-H36	Recall Spring
37	KZ-5121-CS-H37	Rear Handle
38	KZ-5121-CS-H38	Throttle Control
39	KZ-5121-CS-H39	Rear Handle Gland
40	KZ-5121-CS-H40	Tensioning Cover Plate
41	KZ-5121-CS-H41	Initiative Tensioning Gear
42	KZ-5121-CS-H42	Passive Tensioning Gear
43	KZ-5121-CS-H43	Protect Lump

S.N.	PART NO.	DESCRIPTION
44	KZ-5121-CS-H44	Spring
45	KZ-5121-CS-H45	Spring cover plate
46	KZ-5121-CS-H46	Brake Reed
47	KZ-5121-CS-H47	Brake Cover Plate
48	KZ-5121-CS-H48	Bolt
49	KZ-5121-CS-H49	Cam
50	KZ-5121-CS-H50	Stop Ring5
51	KZ-5121-CS-H51	Screw M5x10
52	KZ-5121-CS-H52	Screw M5x8
53	KZ-5121-CS-H53	Screw M4x12
54	KZ-5121-CS-H54	Screw M4x6
55	KZ-5121-CS-H55	Screw M5x20
56	KZ-5121-CS-H56	Screw M5x20
57	KZ-5121-CS-H57	Screw
58	KZ-5121-CS-H58	Tapping Screw
59	KZ-5121-CS-H59	Screw M5x20
60	KZ-5121-CS-H60	Screw M5x20
61	KZ-5121-CS-H61	Tapping Screw
62	KZ-5121-CS-H62	Tapping Screw
63	KZ-5121-CS-H63	Cushion Board
64	KZ-5121-CS-H64	Starter Handle
65	KZ-5121-CS-H65	Guidance Case
66	KZ-5121-CS-H66	Tensioning Pin
67	KZ-5121-CS-H67	Tapping Screw
68	KZ-5121-CS-H68	Bar
69	KZ-5121-CS-H69	Chain

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

Date of Delivery

Product Name

KZ-5121CS CHAINSAW

Dealer's Office Seal

Product Serial No.

Dealer Sign _____

Invoice / DN No.

Customer Sign. _____

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

Warranty Card

DEALER'S COPY



Purchaser's Name & Address

Date of Delivery

Product Name

KZ-5121CS CHAINSAW

Dealer's Office Seal

Product Serial No.

Dealer Sign _____

Invoice / DN No.

Customer Sign. _____

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

Warranty Card

COMPANY COPY



Purchaser's Name & Address

Date of Delivery

Product Name

KZ-5121CS CHAINSAW

Dealer's Office Seal

Product Serial No.

Dealer Sign _____

Invoice / DN No.

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-imbusement. 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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 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

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-imbusement. 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.
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1st Free Service Coupon

ISO 9001-2008
CERTIFIED COMPANY

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

Model

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



2nd Free Service Coupon

ISO 9001-2008
CERTIFIED COMPANY

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

Model

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.



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WARRANTY AND FREE SERVICE COUPON



3rd Free Service Coupon

ISO 9001-2008
CERTIFIED COMPANY

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

Model

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.



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WARRANTY AND FREE SERVICE COUPON



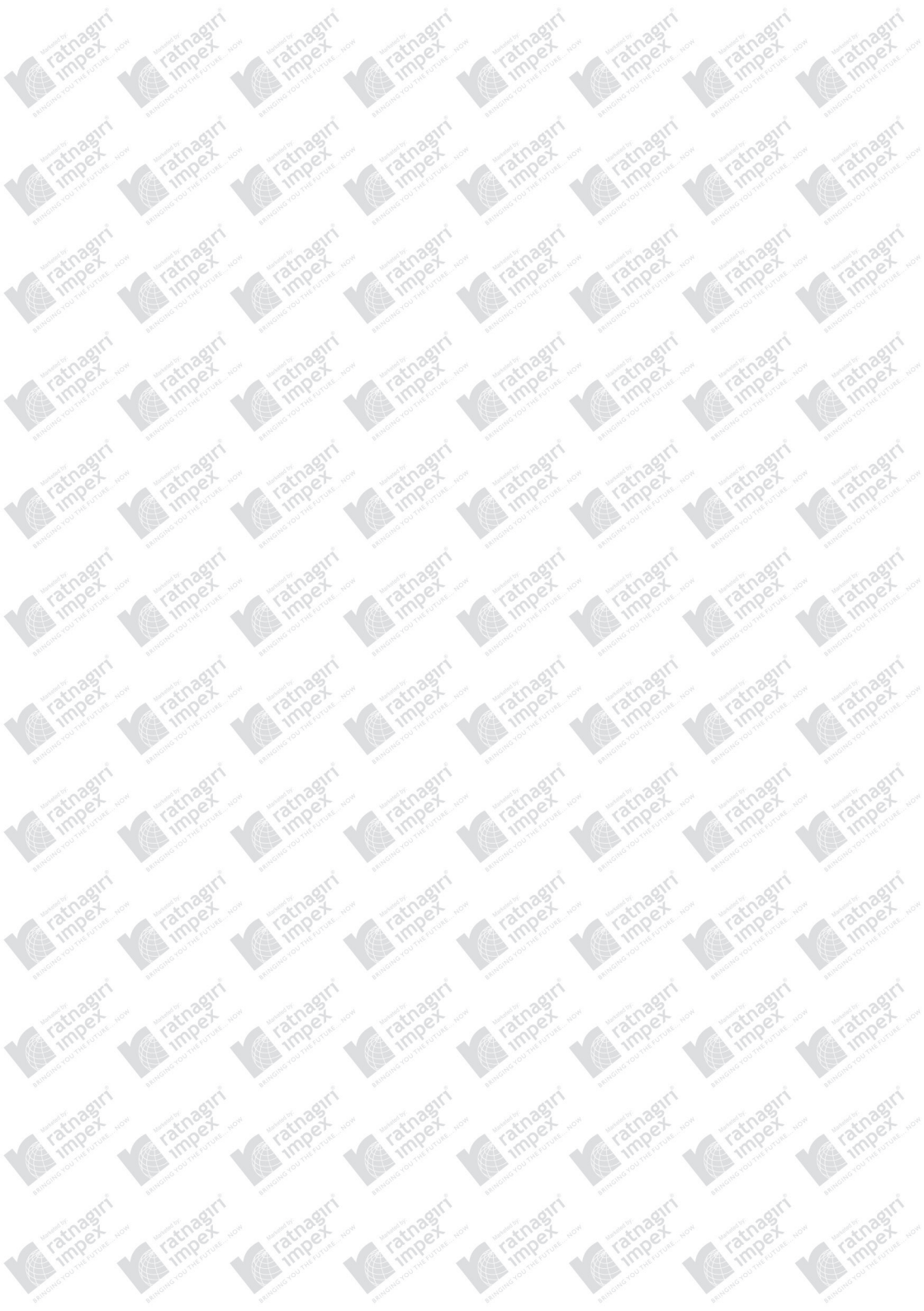
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