

shindaiwa

T-25

C-25

C-35 Trimmer+Brush Cutter

INSTRUCTION MANUAL

FOR YOUR OWN SAFETY, CAREFULLY READ
THIS INSTRUCTION MANUAL BEFORE USE.

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A. TECHNICAL SPECIFICATIONS

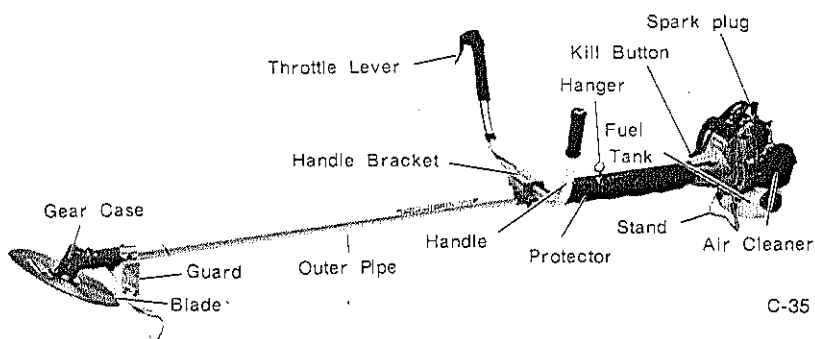
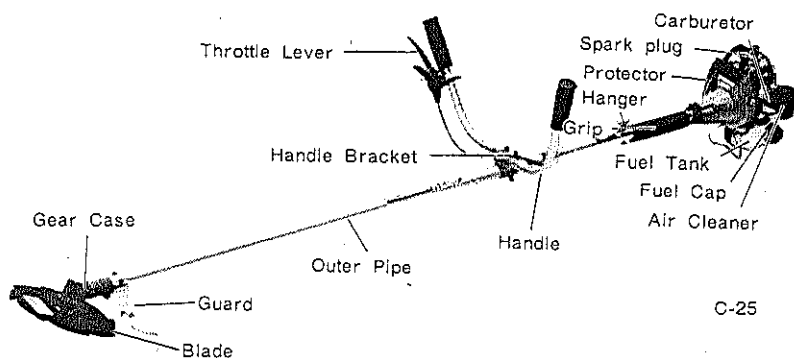
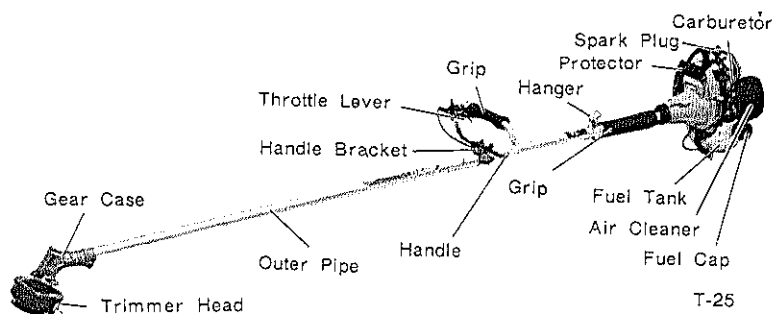
MODEL	T-25	C-25	C-35
Engine			
Type	2 cycle air-cooled industrial	2 cycle air-cooled industrial	2 cycle air-cooled industrial
Displacement (cc/inch ³)	24.1/1.5	24.1/1.5	33.6/2.1
Horse power	1.4/7500 rpm	1.4/7500 rpm	1.8/7500 rpm
Operating range (H p/rpm)	6000 – 9000 rpm	5500 – 8500 rpm	5500 – 8500 rpm
Ignition	Electronic	Electronic	Electronic
Carburetor	All-position diaphragm	All-position diaphragm	All-position diaphragm
Cooling	Forced-air, discharged away from operator	Forced-air, discharged away from operator	Forced-air, discharged away from operator
Muffler	Enclosed, softtone spark arrestor type	Enclosed, softtone spark arrestor type	Enclosed, softtone spark arrestor type
Fuel			
Gas : Oil ratio	25 : 1	25 : 1	25 : 1
Tank capacity	700 cc/24 oz	700 cc/24 oz	1000 cc/34 oz
Tank operating time	1 hour continuous	1 hour continuous	1 hour continuous
Anti-vibration	Full engine, handle and strap/harness standard	Full engine, handle and strap/harness standard	Full engine, handle and strap/harness standard
Safety features emergency release strap/harness	Standard	Standard	Standard
Blade safety guard	Standard	Standard	Standard
Blade safety cover	Not included	Standard	Standard
Spring loaded throttle	Standard	Standard	Standard
Gear case	Heavy duty carbon steel helical gears. Four ball bearings	Heavy duty carbon steel helical gears. Four ball bearings	Heavy duty carbon steel helical gears. Four ball bearings
Handle	Cushioned full-loop type	Cushioned two handle type	Cushioned two handle type
Cutting attachment			
Heavy duty professional manual-feed nylon trimmer head	Standard .095" line	Standard .095" line	Standard .105" line
Cutting swath	16"	16"	18"
Steel brush blade	Optional	Standard 9", 8 tooth	Standard 10", 8 tooth
Steel saw blade	Optional	Standard 9", 80 tooth	Standard 10", 80 tooth
Mower unit	Optional	Optional	Optional
Dry weight	5.2 kg/11.4 lbs	5.8 kg/12.6 lbs	6.4 kg/14.1 lbs

Specifications subject to change without notice.

CAUTION:

Always wear eye protection when operating this machine.

B. DESIGNATION OF VARIOUS PARTS



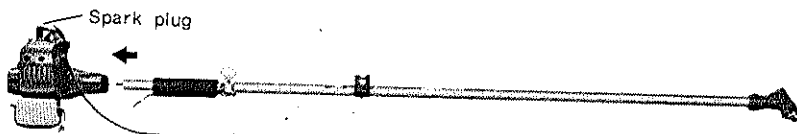
C. Assembly Procedures

Assemble engine, handle, safety guard, and saw blade, each packed in disassembled state, in the following proper order.

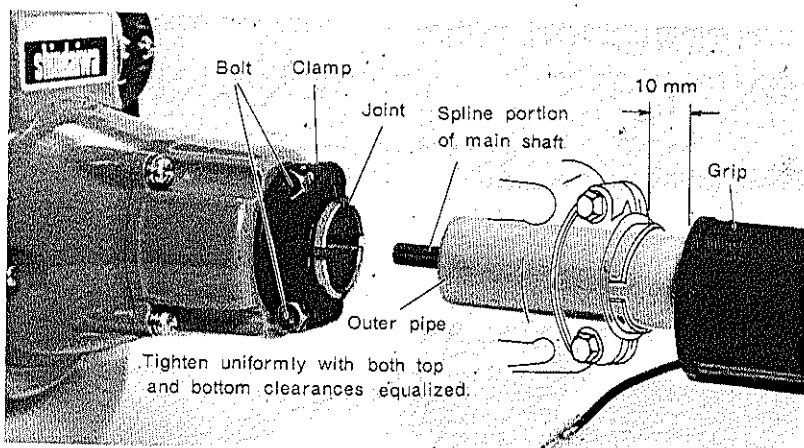
C-1 Installation of engine

T-25, C-25, C-35

Install engine with spark plug mounted on top.



1. Loosen clamp bolts before inserting outer pipe into joint, then check for a firm engagement with spline portion of main shaft.



2. Tighten bottom and top clamp bolts securely and evenly.

C-2 Mounting of handle

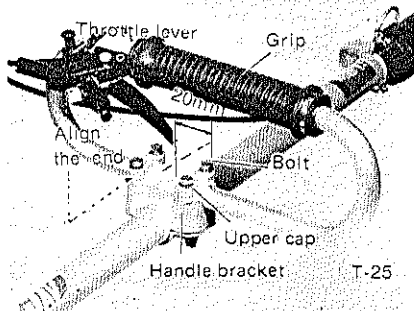
T-25, C-25

1. Remove upper cap by loosening 4 bolts on handle bracket.
2. Mount handle so that throttle lever is on the right-hand side in you operating position.

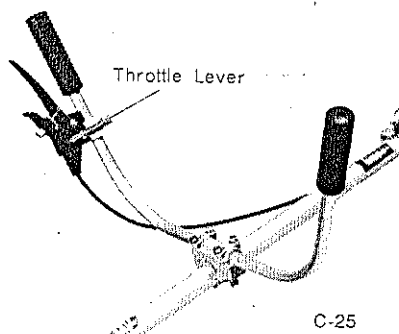
3. Replace upper cap in the original position, then tighten bolts lightly.
4. Tighten bolts securely with handle position and handle angle arrangement properly adjusted.

* Handle position is set to align the right end of grip and bracket by shifting the center of handle about 20 mm (3/4") to the left.

* Adjust throttle lever so that it is located slightly downward and forward of vertical position.



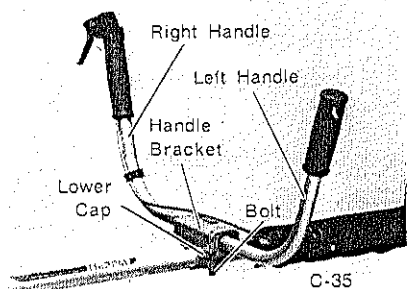
5. When mounting the two-handed handle, mount so that throttle lever is located at the right side.



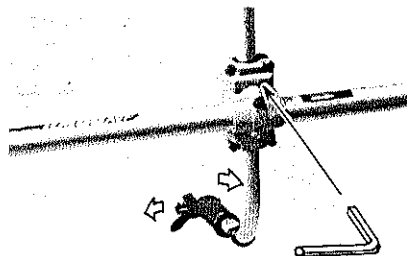
C-35

1. Loosen two bolts from handle bracket and remove lower clamp.

2. Mount handle with throttle lever on right hand side when in operating position.



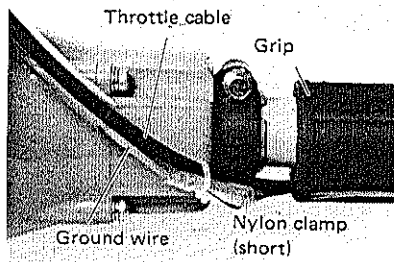
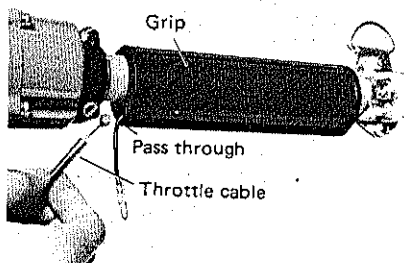
3. Replace lower cap and bolts.
Fasten lightly.
4. Adjust handle position (offset) to stature and comfort of the operator. Align upright and securely tighten lower cap bolts.
5. Loosen four bolts under handle to adjust handle angle.



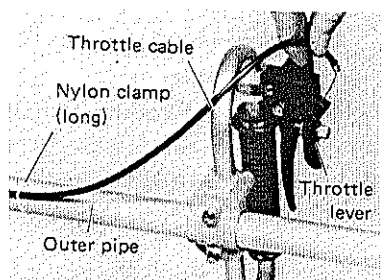
C-3 Mounting throttle cable

T-25, C-25

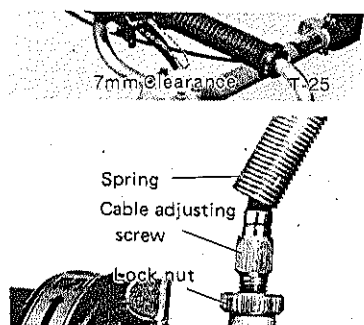
1. Pass throttle cable, attached to engine, through hole on outer pipe grip.
2. Connect ground wire to wire in grip. Secure terminal portion of wire to throttle cable using short nylon clamp.



3. After passing through throttle cable as seen in the photo, secure by fastening end on throttle lever. Fix throttle cable to outer pipe using a nylon clamp (long).

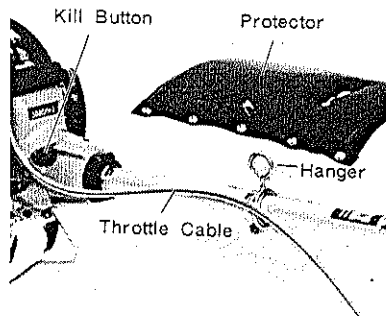


4. Secure in place using lock nut so that the slack of throttle lever is about 7 mm (1/4") with adjusting screw. (After adjustment, replace spring on cable adjusting screw as it was before.)



C-35

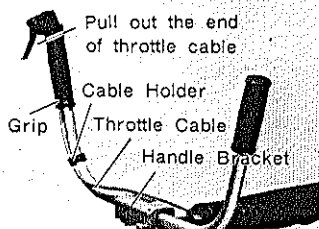
1. Place throttle cable alongside hanger and snap protector over it.
2. Slide vinyl tube on throttle cable so that it protrudes from either end of protector.



C-4 Assembling throttle lever

C-35

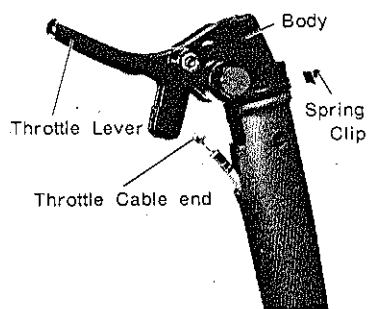
1. Pass cable over handle bracket, through cable holder and through grip hole.



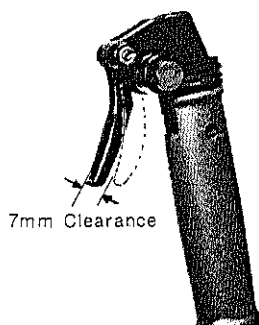
2. Slide spring clip out of handle body and pull throttle cable end out from grip.

3. Secure throttle cable end to trigger and replace cable housing into grip slot.

Slide spring clip back into handle body.

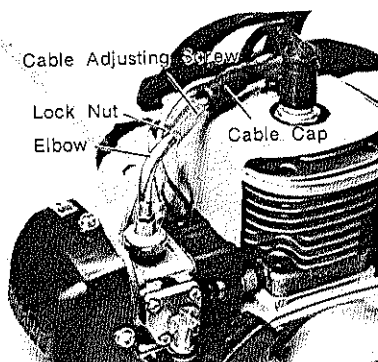


4. Adjust throttle cable by loosening lock nut on adjustment at carburetor. For proper operation, allow 7 mm (1/4") slack on trigger. Retighten lock nut when adjustment is complete.



CAUTION:

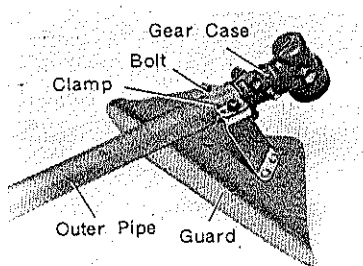
Do not press too hard when sliding spring clip back into handles.



C-5 Mounting of guard

T-25, C-25, C-35

1. Loosen clamp bolts attached to guard.
2. Mount on outer pipe with clamp aligned to the end of gear case as seen in the photo.
3. Tighten clamp bolts securely adjusting so that guard will level horizontally.



C-6 Mounting of cutting blade

For ease of blade installation turn entire unit upside down.

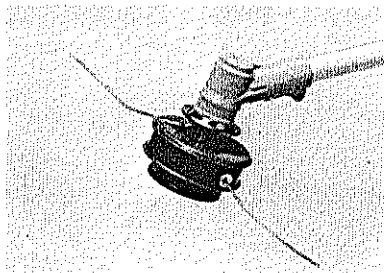
Mounting of trimmer head

T-25, C-25, C-35

1. To index more line.

Simply loosen knob on bottom of head by turning counter clockwise four turns.

Then by gripping lower ring, pull down and turn counter-clockwise at the same time to the next notch, or amount desired. Retighten knob.

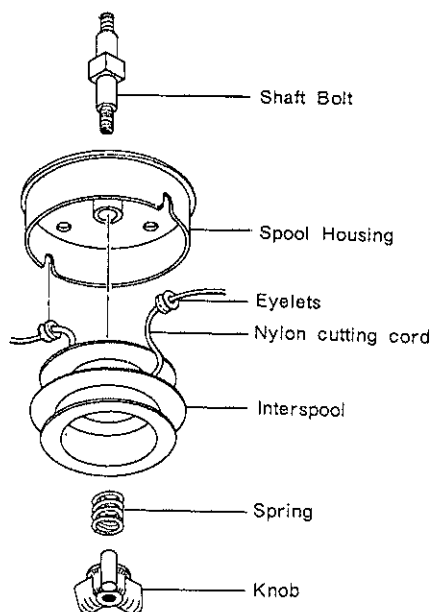


2. To refill head.

Remove knob all the way from bottom of head.

Then grip spool housing with fingers and at the same time place thumb over the end of the shaft bolt adapter. Now by pushing and pulling equally the head will slide off the shaft bolt.

Once removed, separate interspool from housing. NOTE two small holes on interspool. Equal amounts of cord should be indexed at both sides of interspool by inserting nylon cutting cord in one hole and guiding it through the center of spool and out the other side.



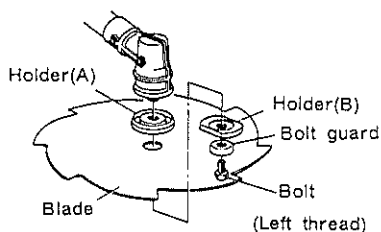
CAUTION:

Nylon cutting cord must be one continuous length, with interspool centered !
If separate pieces are used on each side, serious injury may result as you near the end of use on nylon cord.

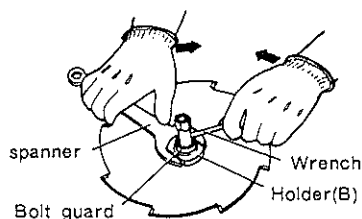
Mounting of saw blade

C-25

1. Set saw blade in place, checking for proper rotation, and secure saw blade with holder B.



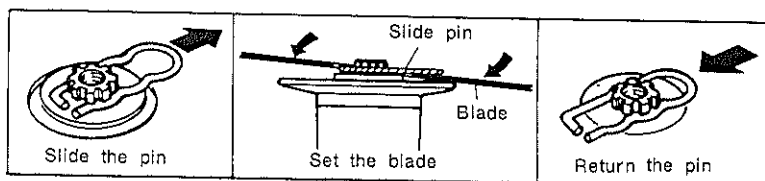
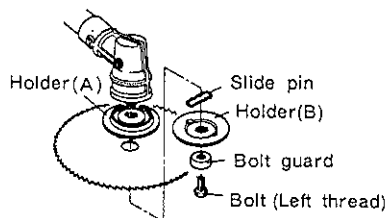
2. Tighten bolt securely with the spanner and the wrench after assembling bolt guard.



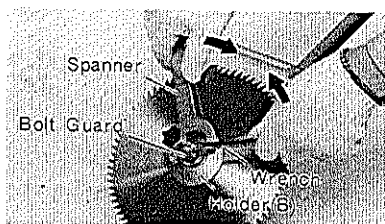
C-35

1. Set the saw blade shown in the sketch.

Slide the slide pin to the arrow direction, then put the saw blade, after that return the slide pin to the original position — see below sketch.



2. Put cutter holder (B), bolt guard, bolt in order. Secure the holder (B) with the spanner and tighten bolt with the wrench. (Be sure that the slide pin is returned to the original position, otherwise, the holder (B) can not be securely fit.)



D. Starting, stopping and adjustment of engine

D-1 Fuel filling

T-25, C-25, C-35

Use fuel with a gas/oil ratio of 25:1.

CAUTION:

1. Always use 2-cycle oil.
2. Add and mix fuel in a safe place.
3. Saw blade will turn when engine starts. Check surrounding area as a precautionary measure.

D-2 Starting procedure

T-25, C-25, C-35

1. When engine is cold.

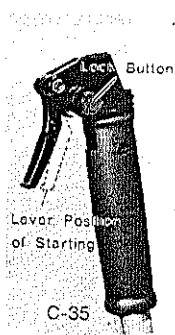
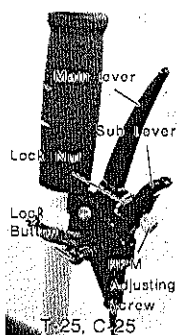
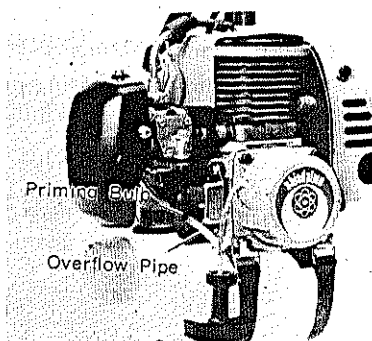
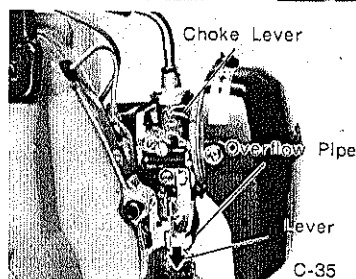
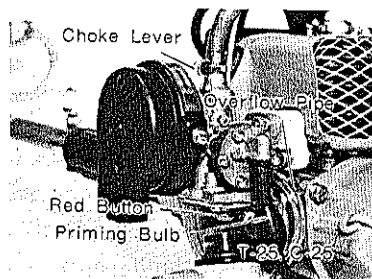
- ① Press red button at base of carburetor. (T-25, C-25)

Press down on lever (located on left hand side of carburetor when facing air cleaner).

(C-35)

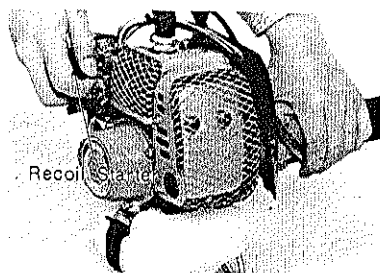
- ② Squeeze priming bulb, until fuel runs out of overflow pipe.

- ③ Close choke lever.
 - ④ Place throttle lever in starting position by opening throttle and depressing throttle lock.
- (Throttle lock will disengage when depressed again.)



- ⑤ Place left hand on engine and pull starter rope with right hand as shown in photo.

Pull slowly until starter pawl engagement (more resistance) is felt, then pull briskly until engine starts.



CAUTION:

Do not pull cord to end as it shortens service life significantly.

- ⑥ When engine first fires or coughs, gradually return choke lever to open position.

* If engine stops before choke is fully open, restart with choke closed.

* If engine stops after initial firing, restart with choke open.

When engine starts return to idle by pulling throttle lever to release lock.

2. When starting a warm engine.

- ① Place throttle in starting position (using throttle lock).
② Pull starter rope.

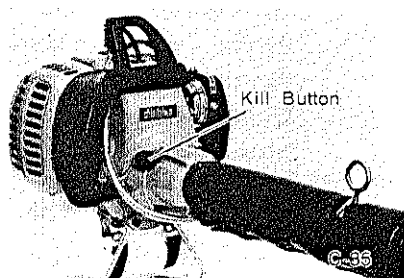
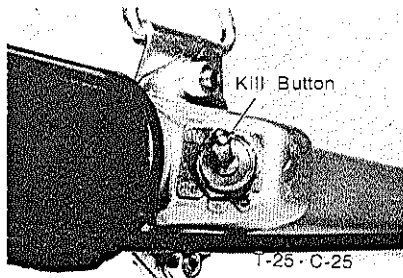
CAUTION:

Repeated prolonged cranking with the choke closed will cause flooding. Restart with choke lever open. After engine starts allow it to warm up at low RPM for 2 — 3 minutes.

D-3 To stop

T-25, C-25, C-35

Before stopping allow engine to idle for a short period; then depress "Kill" button until engine stops.



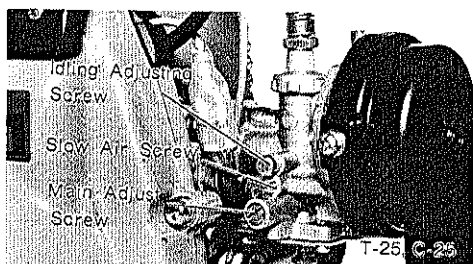
D-4 Adjustment of engine

T-25, C-25, C-35

After starting allow engine to warm up at low speed for 2 – 3 minutes before adjusting.

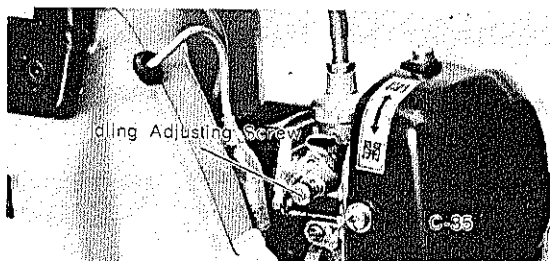
1. Idle Adjustment

Adjust idle speed (Low speed screw on carburetor) so that stable RPM is achieved with throttle closed.



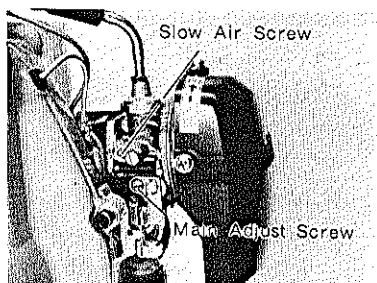
Idle adjustment screw:

Turn to right (clockwise) to increase RPM and turn to left (counter clockwise) to decrease RPM.



CAUTION:

Adjustment should be made so that clutch disengages at low RPM will result in stopping of the saw blade.



2. Adjustment range at low or high speed.

Standard opening	T-25, C-25	C-35
Slow Air Screw	1/2 turn	1/2 turn
Main Adjust Screw	2 1/4 turns	2 turns

CAUTION:

“Standard opening” is the number of turns from the full closed position.

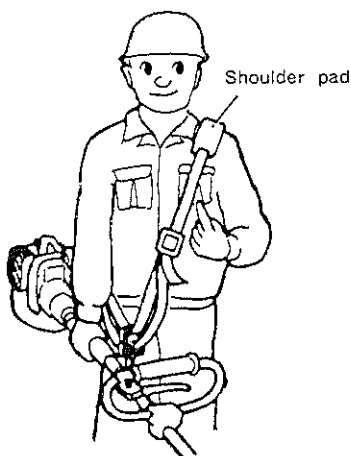
E. Preparation and operation

E-1 Adjustment of strap

T-25, C-25

Use of shoulder strap lessens fatigue when operating this machine for long periods.

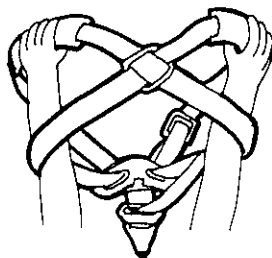
Adjust shoulder strap length so that shoulder pad rests on left shoulder and saw blade Parallels the ground.



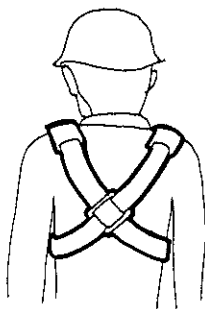
E-2 Hanging of harness

C-35

1. Hold shoulder pads so that adjustment buckle is on right hand side and lower straps rest on forearms. (See illustration)



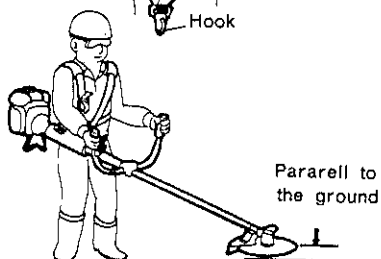
2. Put your head through harness so that belts cross in back.



3. Make sure that hook is at right side.



4. Adjust harness length so that saw blade is Parallel to the ground.



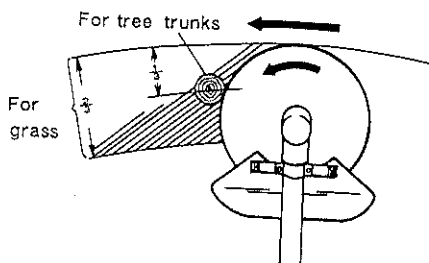
E-3 Cutting procedures

1. Start engine and increase RPM by depressing throttle lever. Saw blade will begin to rotate as RPM increases.
2. When throttle lever is released, centrifugal clutch is disengaged and blade rotation stops (Engine at idle).

3. As the saw blade rotates in counter-clockwise direction, it is more efficient to cut from right to left. (As clippings are deposited at left hand side, it is recommended to advance cutter from left side, so that clippings are clear of the next row).



4. The saw blade cuts most efficiently at about $\frac{1}{3}$ radius from the tip of the saw for cutting trees and $\frac{2}{3}$ radius for cutting grass.



5. For vertical cuts such as in cutting off branches in standing trees, bring blade downward (using left side) and cut from top to bottom.



6. Do not allow the engine to run at high RPM with no load. Damage to the engine or main shaft may occur.
7. Though blade will rotate at relatively low RPM with clutch engaged, it is not recommended to operate in this condition as vibration will occur due to clutch chatter. This can lead to rapid wear of the clutch. Also, grass and leaves tend to coil around the blade.

CAUTION:

1. When cutting tree trunks feed the sawblade into the wood: Do not hit with a shock.
2. Allow no one within 10 m (30 feet) of the operator during operation.
3. Always operate with safety guard.
4. Always attach blade cover when transporting.

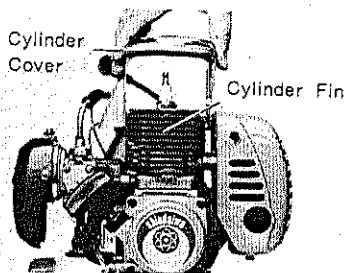
F. Maintenance and adjustment

F-1 Routine maintenance

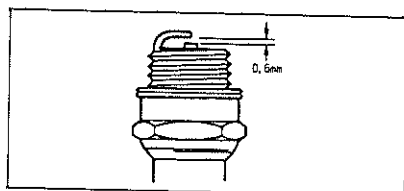
1. Remove all grass clippings and dirt from brush cutter. Check cooling fins and air cleaner for excessive clogging (clean if necessary).
2. Remove fuel tank and muffler and clean out debris. A build up of debris in this area can lead to over-heating, fire, and/or engine trouble. Keep it clean.
3. Check for loose or missing screws and components.
4. Check for leaking fuel or grease.

F-2 50-Hour maintenance

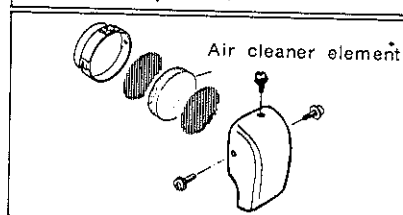
1. Remove cylinder cover and clean grass and debris from cylinder fins and cylinder cover. When reassembling carefully fit cylinder over crankcase.



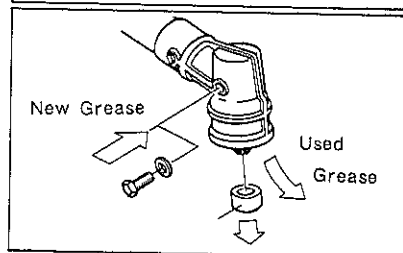
2. Remove and clean spark plug. Adjust gap to 0.6 mm (0.025"). When replacing plug, only use the one recommended by SHINDAIWA.



3. Remove air cleaner element from carburetor and clean with mixed oil. Reassemble after squeezing out excess fuel.



4. Refill gearcase with grease. Pull collar out of gear shaft and refill with new grease to push out old grease. Always use only the type of grease recommended for gearcase (Lithium type).



F-3 100-Hour maintenance

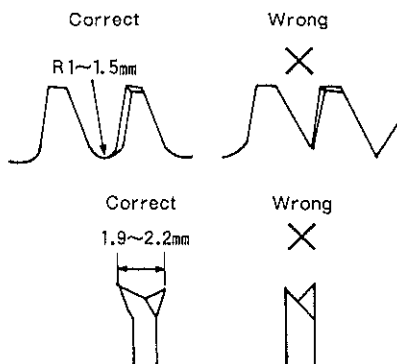
1. Check for missing or loose components.
2. Check for grease between clutch shoe and drum. If present, wipe off with unleaded gasoline.

F-4 Sharpening of blades

1. Circular saw blade
(See illustrations)

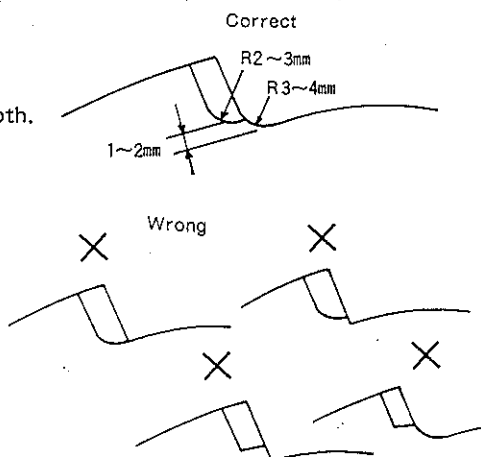
* Leave radius with files.

* Blade must have set.



2. 8-tooth grass cutting blade
(See illustrations)

* Leave radius at base of tooth.



G. Long-term storage

When the unit won't be run for a long period, observe the following storage procedures:

1. For prevention of rust, clean all external parts thoroughly and coat all metallic surfaces with a light coating of oil.
2. Drain all fuel from carburetor and fuel tank.

3. Remove spark plug and pour a small quantity of oil through spark plug hole. Pull recoil starter rope 2 — 3 times to uniformly coat interior of engine. Replace spark plug.
4. If any damage is found, repair it before storage.
5. Store brush cutter in clean dry dust free area.

H. Safety instructions

For safer operation, always observe the following precautions:

H-1 Apparel

1. Wear a long-sleeved jacket and long pants. Wearing unbuttoned or floppy jackets are dangerous.
2. Wear a broad-brimmed hat or helmet when operating on a slope.
3. Wear non-skid (lug soled) boots or shoes.

H-2 Weather

In extremely hot or cold weather, avoid long term operation. Also, use extreme care if work must be done in rainy weather; due to slippery terrain.

H-3 Fire

1. As gasoline is present, do not smoke or light fires near brush cutter.
2. When refueling, always stop engine.

H-4 Preliminary inspection

1. Tighten saw blade fastening bolt firmly before operation.
2. Check saw blade for chipped teeth, cracks, or warpage. If found, DO NOT USE, replace with serviceable blade.
3. Rotate saw blade to check for abnormal vibration. If present, check to be sure saw blade has been properly fitted into cutter holder. If installed properly, replace blade with new one and recheck.
4. When saw blade fastening bolts or flanges have been worn to the point that spanner or wrench slips, replace with new parts.

H-5 During operation

1. Make sure no one is within 10 m (30 feet) during operation.
2. When operating in rocky terrain or near electric wires or fences, use extreme caution to avoid hitting the blade. If accidental contact is made, always stop engine and inspect blade for damage.
3. NEVER operate with guard removed.

Trouble shooting

I-1 Engine will not start

Trouble	Possible cause	Remedy
Spark plug (No Spark)	<ol style="list-style-type: none"> 1. Electrode is wet or fouled . 2. Carbon deposit on electrode . 3. Cracked insulator . 4. Too small or large of electrode gap . 5. Burned electrode . 	<ol style="list-style-type: none"> 1. Dry plug . 2. Clean plug . 3. Replace plug . 4. Adjust gap to 0.6 mm (.024") . 5. Replace plug .
Ignition system (No Spark)	<ol style="list-style-type: none"> 1. Coil is burned out . 2. Coil insulation failure . 3. Break in coil wire . 4. Transistor unit is burned out . 	<ol style="list-style-type: none"> 1. Replace coil . 2. Replace coil . 3. Replace coil wire . 4. Replace unit .
With good compression, sufficient fuel (With Spark)	<ol style="list-style-type: none"> 1. Engine is flooded . 2. Excessive thick fuel . 3. Use of improper fuel . 	<ol style="list-style-type: none"> 1. Discharge fuel by cranking engine—choke off! . 2. Adjust carburetor . 3. Drain and replace with proper fuel .
Sufficient fuel, poor compression. (With Spark)	<ol style="list-style-type: none"> 1. Excessive wear on cylinder, piston, rings . 2. Loose spark plug . 	<ol style="list-style-type: none"> 1. Inspect and replace all worn parts . 2. Tighten spark plug .
No fuel in carburetor (With Spark)	<ol style="list-style-type: none"> 1. No fuel in tank . 2. Loose fuel line fitting . 3. Clogged fuel line . 4. Fuel in tank does not reach carburetor . 5. Plugged air vent in fuel tank . 	<ol style="list-style-type: none"> 1. Refuel . 2. Inspect and tighten . 3. Clean or replace filter . 4. Refer to starting procedure p. 5. Clean vent .

I-2 Insufficient power

Trouble	Possible cause	Remedy
Blockages	<ol style="list-style-type: none"> 1. Clogged air filter . 2. Carbon build-up in muffler . 3. Air leakage in fuel pick-up tube fitting . 4. Fuel line/passage clogged . 5. Piston seizure . 6. Carburetor diaphragm is inoperative . 7. Water in fuel . 	<ol style="list-style-type: none"> 1. Clean . 2. Clean . 3. Tighten fitting . 4. Clean . 5. Examine for scoring, replace worn parts . 6. Replace diaphragm or carburetor . 7. Replace with clean fuel mix .
Overheating	<ol style="list-style-type: none"> 1. Excessively lean mixture . 2. Improper fuel mixing ratio . 3. Carbon deposits on piston . 4. Fan cover, cylinder fins, etc. plugged with dirt and debris . 5. Machine is overworked by operator . 	<ol style="list-style-type: none"> 1. Adjust carburetor . 2. Replace with proper 25:1 fuel mix . 3. Remove carbon . 4. Clean and remove dirt and debris . 5. Operate properly—DO NOT overload .
Engine makes knocking noise	<ol style="list-style-type: none"> 1. Cylinder overheating . 2. Use of improper fuel . 3. Carbon deposits in combustion chamber . 	<ol style="list-style-type: none"> 1. Adjust carburetor, clean cylinder fins . 2. Replace with proper fuel . 3. Clean combustion chamber .

I-3 Poor acceleration

Trouble	Possible cause	Remedy
Fuel system, clogged	1. fuel filter Clogged . 2. Excessively lean carburetor setting . 3. Clogged air cleaner. 4. Excessively low idle .	1. Clean or replace . 2. Adjust carburetor . 3. Clean filter . 4. Speed up idle .
Air leakage	1. Loose carburetor . 2. Loose fuel pick-up tube.	1. Tighten securely . 2. Insert firmly .

I-4 Engine stops during operation

Trouble	Possible cause	Remedy
Engine stops abruptly	1. Switch is bumped . 2. Loose spark plug wire. 3. Piston is scored, indicating seizure . 4. Shorting of spark plug due to carbon build-up. 5. Failure of ignition system .	1. Keep hands clear of switch. 2. Replace. 3. Repair or replace all worn parts . 4. Clean spark plug. 5. Disassemble and inspect .
Miscellaneous	1. Fuel tank empty . 2. Carburetor clogged . 3. Fuel tank clogged. 4. Water in fuel .	1. Refuel . 2. Disassemble and clean . 3. Disassemble and clean vent . 4. Replace with clean fuel mix.

I-5 Engine is difficult to shut off

Trouble	Possible cause	Remedy
Overheating	1. Overheated engine . 2. Overheated spark plug .	1. Run at idle . 2. Clean and adjust gap to 0.6 mm (.024") .
Electrical	1. Poor contact of ground wire . 2. Defective kill switch .	1. Inspect and correct . 2. Replace switch .

I-6 Brush cutter main body

Trouble	Possible cause	Remedy
Sawblade rotates with engine idling	1. Broken clutch spring . 2. Loose cutter holder .	1. Replace . 2. Tighten firmly .
Irregular vibration	1. Sawblade warped or damaged . 2. Bent main shaft . 3. Worn shaft bushings . 4. Loose gearcase .	1. Replace or reinstall . 2. Straighten or replace . 3. Replace . 4. Tighten bolt securely .

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