



# Owner's Manual

Model Numbers:

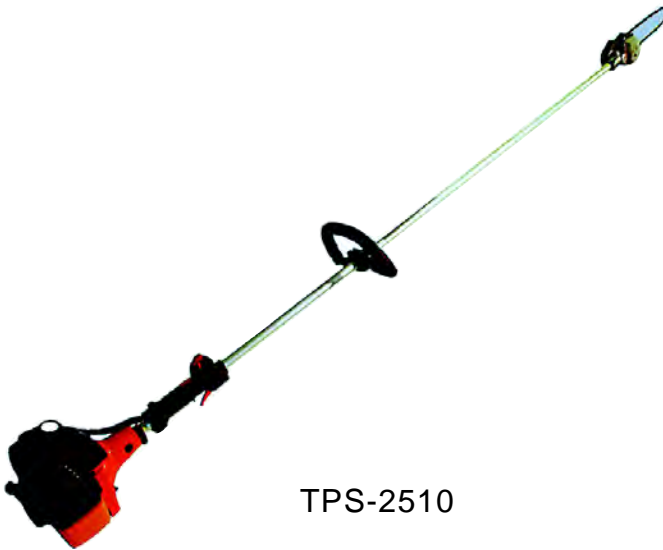
**TPS-2501, TPS-2510**

**TPS-250PF/PN, TPS-270PF/PN**

**POLESAWS**

P/N 28576

Date 03-08-02



TPS-2510



TPS-270PN

*Supplier To The Outdoor Power Equipment Industry*

ISM, Inc. • 1028 4<sup>th</sup> Street SW • Auburn, WA 98001 • Phone: (253) 333-1200 • Fax: (253) 333-1212

**Before using this unit:**

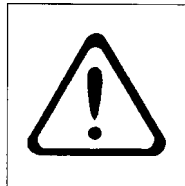
- Read the operator's manual carefully.
- Check that the cutting equipment is correctly assembled and adjusted.
- Start the unit and check the carburetor adjustment. See "Maintenance".

**⚠ WARNING**

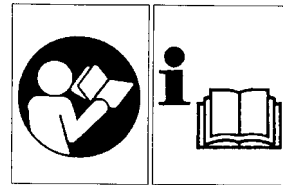
**The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects and other reproductive harm.**



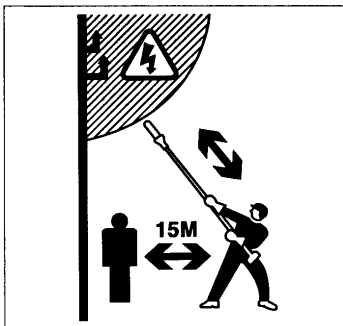
Always wear eye, head and ear protectors when using this unit.



Read, understand and follow all warnings and instructions in this manual and on the unit.



It is important that you read, fully understand and observe the following safety precautions and warnings. Careless or improper use of the unit may cause serious or fatal injury.



Keep all children, bystanders and helpers 15m (50ft.) away from the unit. If anyone approaches you, stop the engine and cutting attachment immediately.

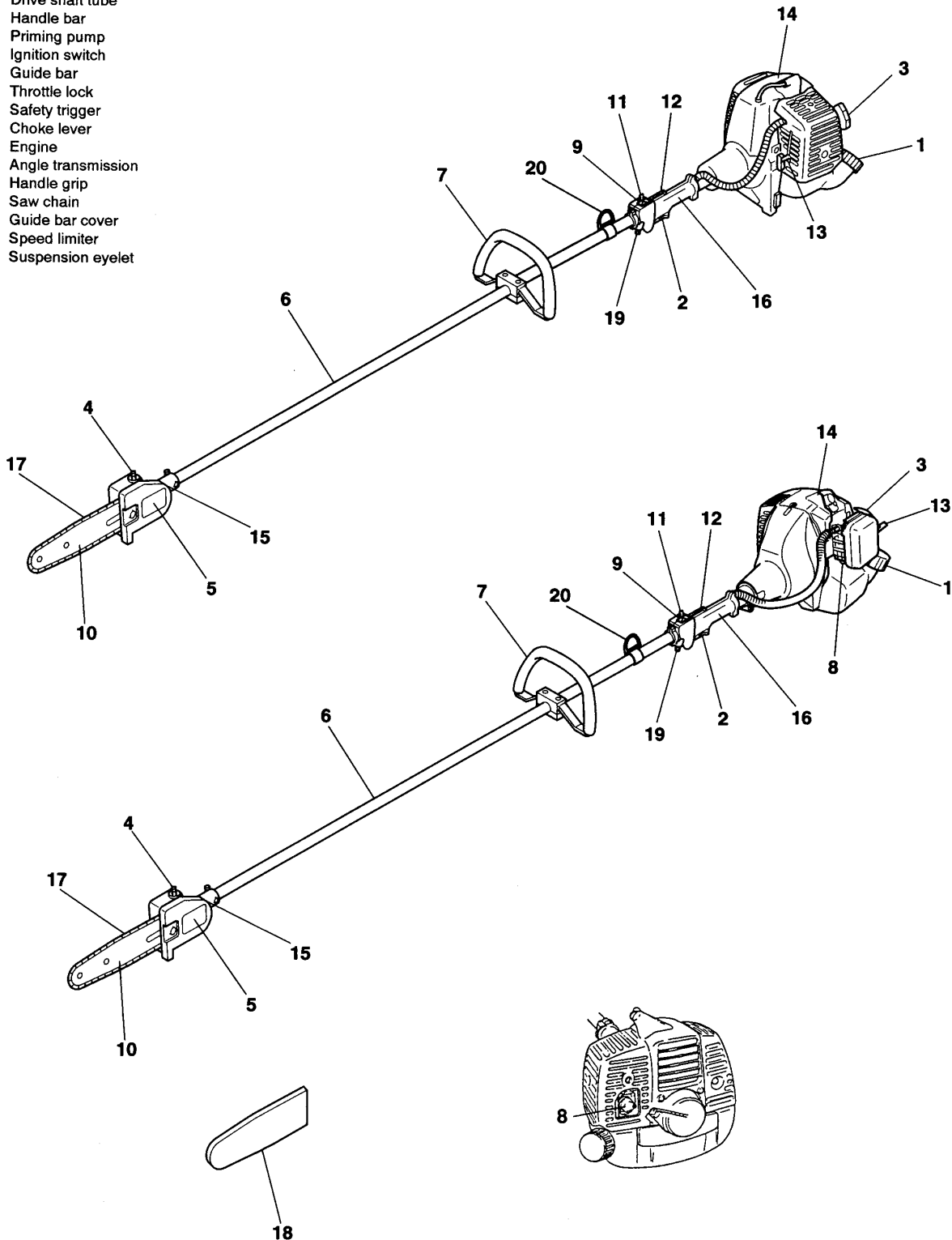
**WARNING ⚠ DANGER**

All overhead electrical conductors and communications wires can have electricity flow with high voltages. Never touch wires directly or indirectly when pruning, otherwise serious injury or death may result.

## 1. What is what?

(En) Since this manual covers several models, there may be some difference between pictures and your unit. Use the instructions that apply to your unit.

1. Fuel cap
2. Throttle trigger
3. Starter handle
4. Oil tank cap
5. Cutting attachment
6. Drive shaft tube
7. Handle bar
8. Priming pump
9. Ignition switch
10. Guide bar
11. Throttle lock
12. Safety trigger
13. Choke lever
14. Engine
15. Angle transmission
16. Handle grip
17. Saw chain
18. Guide bar cover
19. Speed limiter
20. Suspension eyelet



## 2. Warnings and safety instructions

### Operator Safety

- Always wear head protection with full face shield to help protect against falling branches and debris.
- Avoid all power lines. This unit is not insulated against electrical current.
- Gloves should be used when sharpening chain.
- Always wear heavy long pants, boots, and gloves. Do not wear loose clothing, jewelry, short pants, sandals or go barefoot. Secure hair so it is above shoulder length.
- Do not operate tool when you are tired, ill or under the influence of alcohol, drugs or medication.
- Never let a child or inexperienced person operate the machine.
- Wear hearing protection.
- Never start or run the engine inside a closed room or building. Breathing exhaust fumes can kill.
- Keep handles free of oil and fuel.
- Keep hands away from cutting equipment.
- Do not grab or hold the unit by the cutting equipment.
- When the unit is turned off, make sure the cutting attachment has stopped before the unit is set down.
- When operation is prolonged, take a break from time to time so that you may avoid possible white-finger disease which is caused by vibration.
- The operator must obey the local regulations of cutting area.

### Unit/Machine Safety

- Inspect the entire unit/machine before each use. Replace damaged parts. Check for fuel leaks and make sure all fasteners are in place and securely tightened.
- Replace parts that are cracked, chipped or damaged in any way before using the unit/machine.
- Keep others away when making carburetor adjustments.
- Use only accessories as recommended for this unit/machine by the manufacturer.
- Never let the chain strike any obstacle. If the chain makes contact, the machine should be stopped and checked carefully.
- Make sure the automatic oiler is working. Keep the oil tank filled with clean oil. Never let chain run dry on the bar.
- All unit service, other than the items listed in the operator's/owner's manual, should be performed by competent chainsaw service personnel. (For example, if improper tools are used to remove the flywheel or if an improper tool is used to hold the flywheel in order to remove the clutch, structural damage to the flywheel could occur and could subsequently cause the flywheel to burst.)



#### WARNING!

Never modify the unit/machine in any way. Do not use your unit/machine for any job except that for which it is intended.

### Fuel Safety

- Mix and pour fuel outdoors and where there are no sparks or flames.
- Use a container approved for fuel.
- Do not smoke or allow smoking near fuel or the unit/machine or while using the unit/machine.
- Wipe up all fuel spills before starting engine.
- Move at least 3 m (10 ft.) away from fueling site before starting engine.
- Stop engine before removing fuel cap.
- Empty the fuel tank before storing the unit/machine. It is recommended that the fuel be emptied after each use. If fuel is left in the tank, store so fuel will not leak.

- Store unit/machine and fuel in area where fuel vapors cannot reach sparks or open flames from water heaters, electric motors or switches, furnaces, etc.



#### WARNING!

Anti-vibration systems do not guarantee that you will not sustain white-finger disease or carpal tunnel syndrome. Therefore, continual and regular users should monitor closely the condition of their hands and fingers. If any of the above symptoms appear, seek medical advice immediately.

### Cutting Safety

- Do not cut any material other than wood or wooden objects.
- For respiratory protection, wear an aerosol protection mask when cutting the wood after insecticide has been applied.
- Keep others including children, animals, bystanders and helpers outside the hazard zone. Stop the engine immediately if you are approached.
- Hold the unit/machine firmly with both hands.
- Keep firm footing and balance. Do not over-reach.
- Keep all parts of your body away from the muffler and cutting attachment when the engine is running.
- Before pruning branches, the operator must be accustomed to the pruning techniques of the machine.
- Be sure to pre-plan a safe exit from a falling objects.
- While cutting, hold the machine firmly with both hands with thumb firmly locked around front handle, and stand with feet well balanced and your body balanced.
- Be alert against kickback (when saw kicks up and back at operator). Never cut with the nose of the bar.

### Maintenance safety

- Maintain the unit/machine according to recommended procedures.
- Disconnect the spark plug before performing maintenance except for carburetor adjustments.
- Keep others away when making carburetor adjustments.
- Use only genuine Tanaka replacement parts as recommended by the manufacturer.



#### WARNING!

Improper maintenance could result in serious engine damage or in serious personal injury.

### Transport and storage

- Carry the unit/machine by hand with the engine stopped and the muffler away from your body.
- Allow the engine to cool, empty the fuel tank, and secure the unit/machine before storing or transporting in a vehicle.
- Empty the fuel tank before storing the unit/machine. It is recommended that the fuel be emptied after each use. If fuel is left in the tank, store so fuel will not leak.
- Store unit/machine out of the reach of children.
- Clean the unit carefully and store it in a dry place.
- Make sure engine switch is off when transporting or storing.
- When transporting in a vehicle, cover chain with chain cover.

If situations occur which are not covered in this manual, take care and use good judgment.

Contact your dealer if you need assistance.

Pay special attention to statements preceded by the following words:



#### WARNING!

Indicates a strong possibility of severe personal injury or loss of life, if instructions are not followed.

#### CAUTION!

Indicates a possibility of personal injury or equipment damage, if instructions are not followed.

#### NOTE!

Helpful information for correct function and use.

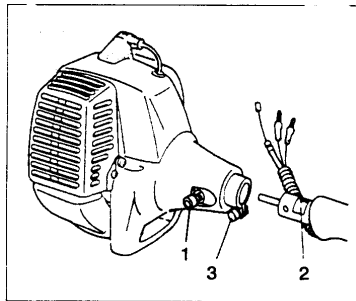


Fig. 1-1

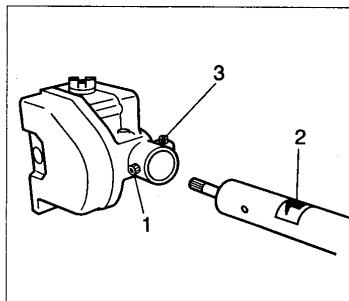


Fig. 1-2

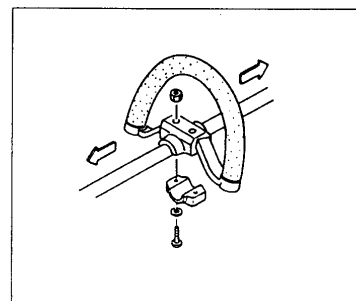


Fig. 1-3

### 3. Assembly procedures

#### Drive shaft to engine (Fig. 1 -1)

Loosen tube locking bolt (1) about ten turns so that the bolt point will not obstruct drive shaft tube to be inserted. When inserting drive shaft tube, hold the tube locking bolt outward preventing inside fitting from obstructing as well. Insert the drive shaft into the clutch case of the engine properly until the marked position (2) on the drive shaft tube meets the clutch case.

#### NOTE!

When it is hard to insert drive shaft up to the marked position on the drive shaft tube, turn drive shaft by the cutter mounting end clockwise or counterclockwise. Tighten tube locking bolt lining up the hole in the shaft tube. Then tighten clamp bolt securely (3).

#### Cutting attachment to drive shaft (Fig. 1-2)

Loosen tube locking bolt (1). Insert the drive shaft into the gear case of the attachment properly until the marked position (2) on the drive shaft tube meets the gear case.

#### NOTE!

When it is hard to insert drive shaft up to the marked position on the drive shaft tube, turn attachment clockwise or counterclockwise.

Tighten tube locking bolt lining up the hole in the shaft tube.

Then tighten clamp bolt securely (3).

#### Installation of handle (Fig. 1-3)

Attach the handle to the drive shaft tube with the angle towards the engine.

Adjust the location to the most comfortable position before operation.

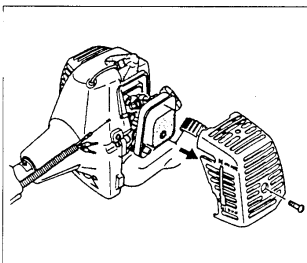


Fig. 1-4

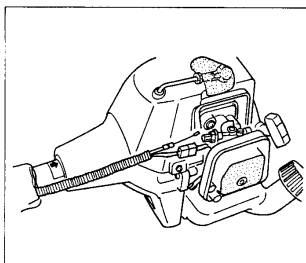


Fig. 1-5

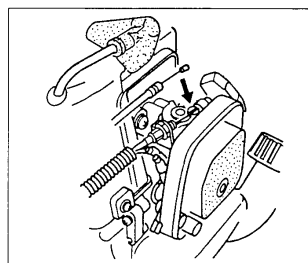


Fig. 1-6

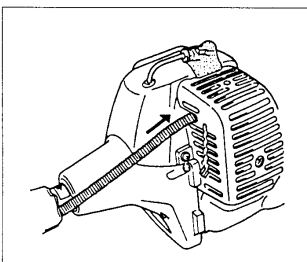


Fig. 1-7

#### Throttle wire/stop cord

Remove air cleaner cover. (Fig. 1-4)

Connect stop cords. (Fig. 1 -5)

Connect throttle wire end to carburetor. (Fig. 1 -6)

Cover throttle wire and stop cords together with protective tube provided up to air cleaner cover. (Fig. 1 -7)

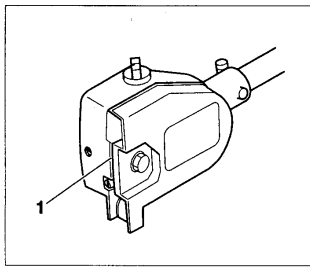


Fig. 1-8A

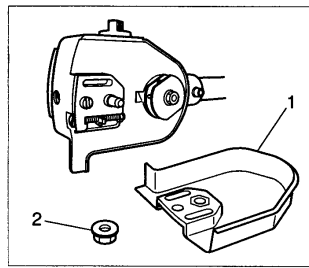


Fig. 1-8

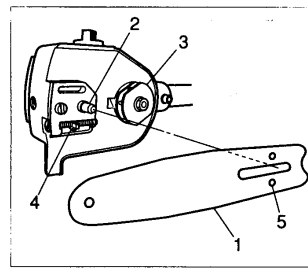


Fig. 1-9

**⚠ WARNING!**

Never try to start engine without side case securely fastened.

**NOTE!**

When assembling brand new unit, take off and discard the cardboard (1) between gear case and side case. (Fig. 1 -8A)

**Installation of bar and chain**

1. Remove chain bar clamp nut (2).
2. Remove the side case (1). (Fig. 1 -8)
3. Install, the chain bar (1) onto the bolt (2), then push it toward the sprocket (3) as far as it will go. Make sure that the boss of chain tension adjusting bolt (4) fits into the hole of the bar (5). (Fig. 1-9)

**NOTE!**

Slightly move the bar back and forth and make sure the chain tension boss (4) fits into the hole (5) in the bar properly.

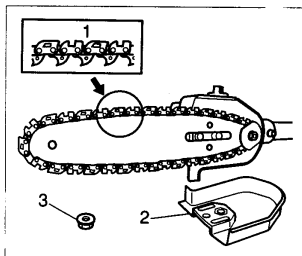


Fig. 1-10

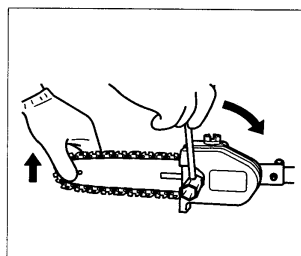


Fig. 1-11

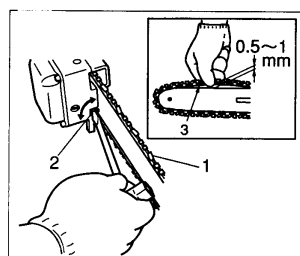


Fig. 1-12

4. Confirm the direction of saw chain (1) is correct as in the figure, and align the chain on the sprocket. (Fig. 1 -10)
5. Guide the chain drive links into the bar groove all around the bar.
6. Install the side case (2) onto the guide bar clamp bolt. Then fix the clamp nut (3) temporarily. (Fig. 1 -10)
7. Raise the bar end, and tighten the chain (1) by turning the tension adjustment bolt (2) clockwise. To check proper tension, lightly lift up the center of chain and there should be about 0.5-1.0mm clearance between bar and edge of drive link (3). (Fig. 1-11, 12)

**CAUTION!**

**PROPER TENSION IS EXTREMELY IMPORTANT! (Fig. 1-11, 12)**

8. Raise the bar end and securely tighten the chain bar clamp nut with the box wrench. (Fig. 1 -11)
9. A new chain will stretch so adjust the chain after a few cuts and watch chain tension carefully for the first half hour of cutting.

**NOTE!**

Check the chain tension frequently for optimum performance and durability.

**CAUTION!**

When the chain is excessively tightened the bar and chain will be damaged rapidly. Conversely, when the chain is excessively loosened, it may get out of the groove in the bar.

Always wear gloves when touching the chain.

**⚠ WARNING!**

During operation, hold the unit firmly with both hands. A single hand operation may cause serious injury.

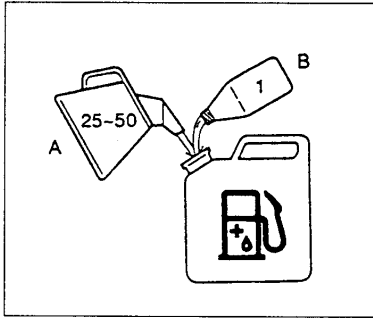


Fig. 2-1

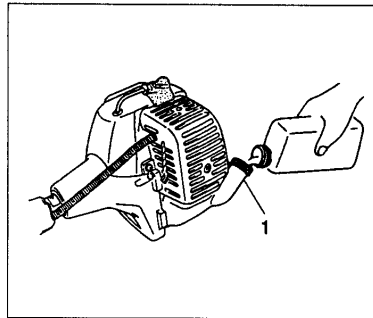


Fig. 2-1B

## 4. Operating procedures

### Fuel (Fig. 2-1)

#### ⚠ WARNING!

The chainsaw is equipped with a two-stroke engine. Always run the engine on fuel, which is mixed with oil. Provide good ventilation, when fueling or handling fuel.

### Fuel

- Always use branded 89 octane unleaded gasoline.
- Use Tanaka two-cycle oil or a quality two-cycle oil at mixing ratio of 25-50:1 (Gasoline (A) : Oil (B)), only for the state of California at 50:1.
- Never use multi-grade oil (10 W/30) or waste oil.
- Always mix fuel and oil in a separate clean container.
- Always start by filling half the amount of fuel, which is to be used. Then add the whole amount of oil. Mix (shake) the fuel mixture.
- Add the remaining amount of fuel.
- Mix (shake) the fuel-mix thoroughly before filling the fuel tank.

### Fueling

#### ⚠ WARNING!

- Always shut off the engine before refueling.
- Slowly open the fuel tank, when filling up with fuel, so that possible over-pressure disappears.
- Tighten the fuel cap carefully, after fueling.
- Always move the unit at least 3 m (10 ft.) from the fueling area before starting.

Before fueling, clean the tank cap area carefully, to ensure that no dirt falls into the tank. Make sure that the fuel is well mixed by shaking the container, before fueling.

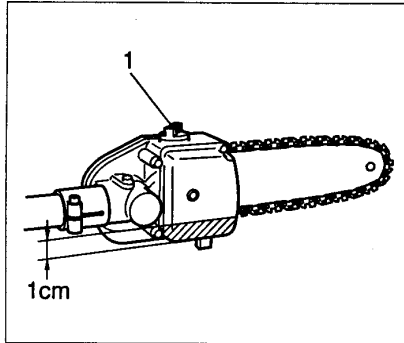


Fig. 2-2

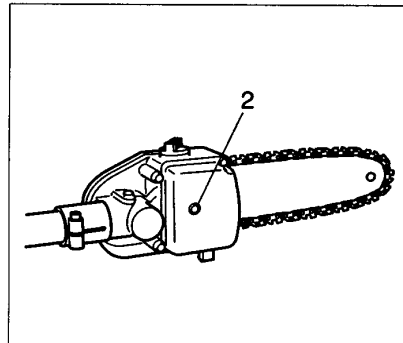


Fig. 2-3

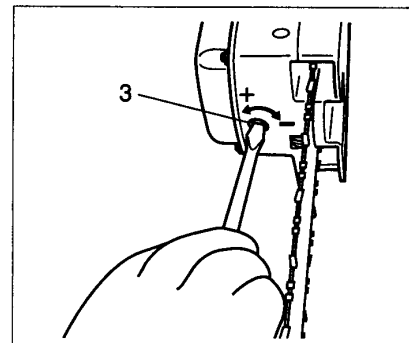


Fig. 2-4

### CHAIN OIL (Fig. 2-2)

Fill the chain oil reservoir (2). Always use good quality chain oil. When the engine is running, the chain oil is automatically discharged.

### NOTE!

Add chain oil when its level lowers to one centimeter from bottom. (Fig. 2-2)

### ADJUSTMENT OF CHAIN OIL SUPPLY

The chain oil quantity discharged through the lubrication system is factory-adjusted to the maximum. Adjust the quantity in accordance with the operating condition.

- Loosen the fixing screw (2) one turn. (Fig. 2-3)
- Turn the adjusting screw (3) clockwise to decrease the quantity and turn it counterclockwise to increase the quantity. (Fig. 2-4)
- Do not try to turn the screw (3) clockwise beyond 1 turn from its most counterclockwise position or the maximum quantity discharged position.
- After adjustments have been made, tighten fixing screw (2). (Fig. 2-3)

### NOTE!

When you have lost the proper position of the screw (3), start with the most counterclockwise position.



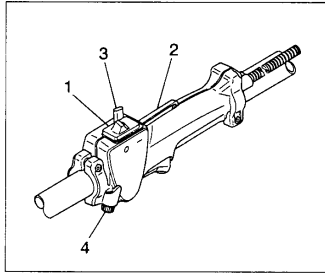


Fig. 2-5

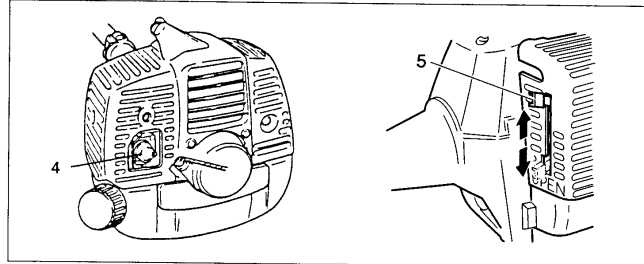


Fig. 2-6

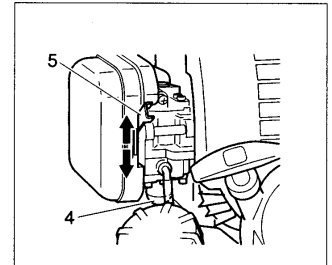


Fig. 2-7

## Starting (Fig. 2-5)

### CAUTION!

Before starting, make sure the cutting attachment does not touch anything.

1. Set ignition switch (1) to ON position. (Fig. 2-5)

\*Push priming bulb (4) several times so that fuel flows through the bulb or return pipe. (if so equipped) (Fig. 2-6,7)

2. With the safety trigger (2) pressed (if so equipped), pull throttle trigger and push throttle lock (3), then slowly release the throttle trigger first, then the safety trigger. This will lock the throttle in starting position.

3. Set choke lever to CLOSED position (5). (Fig. 2-6,7)

4. Pull recoil starter briskly, taking care to keep the handle in your grasp and not allowing it to snap back.

5. When you hear the engine want to start, return choke lever to RUN position (open). Then pull recoil starter briskly again.

### NOTE!

If engine does not start, repeat procedures from 2 to 5.

6. After starting engine, pull throttle trigger to release throttle lock. Then allow the engine about 2-3 minutes to warm up before subjecting it to any load.

### NOTE!

Throttle limiter (4) is to adjust maximum opening of throttle. At the factory it is adjusted at its full opening. (Fig. 2-5)

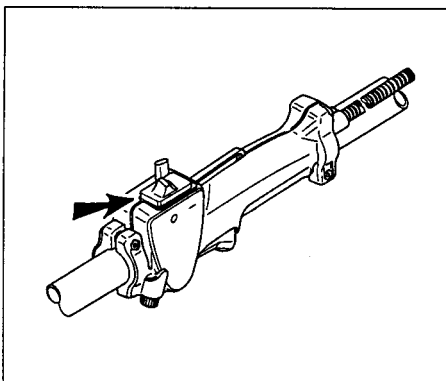


Fig. 2-8

## Stopping (Fig. 2-8)

Decrease engine speed and run at an idle for a few minutes, then turn off ignition switch.

### ⚠ WARNING!

A cutting attachment can injure while it continues to spin after the engine is stopped or power control is released. When the unit is turned off, make sure the cutting attachment has stopped before the unit is set down.

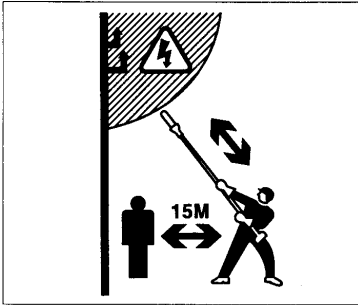


Fig. 2-9

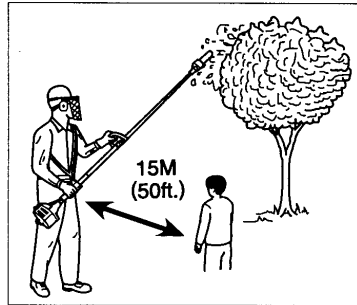


Fig. 2-10

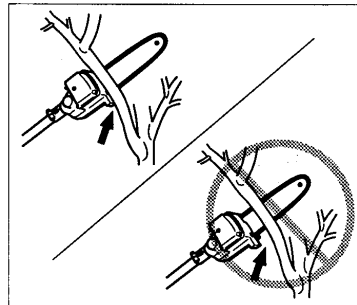


Fig. 2-11

## SAFE OPERATION

- Review the area to be trimmed. Look for hazards that could contribute to unsafe conditions. DO NOT operate unit if any wires (power, telephone, cable, etc.) are closer than 15M (50ft.) to any part of the operator or unit. (Fig. 2-9)
- Spectator and fellow workers must be warned, and children and animals prevented from coming nearer than 15M (50ft.) while the pole saw is in use. (Fig. 2-10)
- Avoid all power lines. This unit is not insulated against electrical current.
- Always wear head protection with full face shield to help protect against falling branches and debris. (Fig. 2-10)

## Pruning techniques

This unit is designed for trimming small limbs and branches up to 8 'in diameter. Follow these tips for successful operation.

- Plan cut carefully. Check direction branch will fall.
- Long branches should be removed in several pieces.
- Do not stand directly beneath branch being cut.
- When ready to cut:  
Hold "front cutting guide" against branch. This will prevent whipping of the branch. DO NOT use back and forth sawing action. (Fig. 2-11)

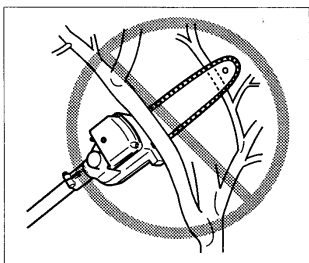


Fig. 2-12

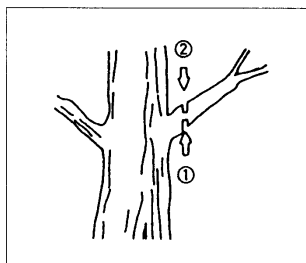


Fig. 2-13

- Look out for branch immediately behind the branch being cut. If blade hits rear branch damage to blade may occur. (Fig. 2-12)
- Accelerate to full throttle.
- Apply a light cutting pressure.
- Ease cutting pressure when nearing end of cut to maintain control.
- When pruning a limb 4 inch diameter or larger, cut as follows: (Fig. 2-13)
  1. Undercut 1/4 limb diameter near tree trunk.
  2. Finish top cut slightly farther out on limb.
  3. Flush cut stub at trunk.
- DO NOT use for felling or bucking.

## 5. Maintenance

**MAINTENANCE, REPLACEMENT, OR REPAIR OF THE EMISSION CONTROL DEVICES AND SYSTEMS MAY BE PERFORMED BY ANY NONROAD ENGINE REPAIR ESTABLISHMENT OR INDIVIDUAL.**

### Carburetor adjustment (Fig. 3-1)

**⚠ WARNING!**

The cutting attachment may be spinning during carburetor adjustments.

**⚠ WARNING!**

Never start the engine without the complete clutch cover and tube assembled! Otherwise the clutch can come loose and cause personal injuries.

In the carburetor, fuel is mixed with air. When the engine is test run at the factory, the carburetor is basically adjusted. A further adjustment may be required, according to climate and altitude. The carburetor has one adjustment possibility:

T = Idle speed adjustment screw.

### Idle speed adjustment (T)

Check that the air filter is clean. When the idle speed is correct, the cutting attachment will not rotate. If adjustment is required, close (clockwise) the T-screw, with the engine running, until the cutting attachment starts to rotate.

Open (counter-clockwise) the screw until the cutting attachment stops. You have reached the correct idle speed when the engine runs smoothly in all positions well below the rpm when the cutting attachment starts to rotate.

If the cutting attachment still rotates after idle speed adjustment, contact your service workshop.

**NOTE!**

Standard Idle rpm is 2500-3000 rpm.

**⚠ WARNING!**

When the engine is idling the cutting attachment must under no circumstances rotate.

### Air filter (Fig. 3-2)

The air filter must be cleaned from dust and dirt in order to avoid:

- Carburetor malfunctions.
- Starting problems.
- Engine power reduction.
- Unnecessary wear on the engine parts.
- Abnormal fuel consumption.

Clean the air filter daily or more often if working in exceptionally dusty areas.

### Cleaning the air filter

Remove the air filter cover and the filter (1).

Rinse it in warm soap suds. Check that the filter is dry before reassembly. An air filter that has been used for some time cannot be cleaned completely. Therefore, it must regularly be replaced with a new one. A damaged filter must always be replaced.

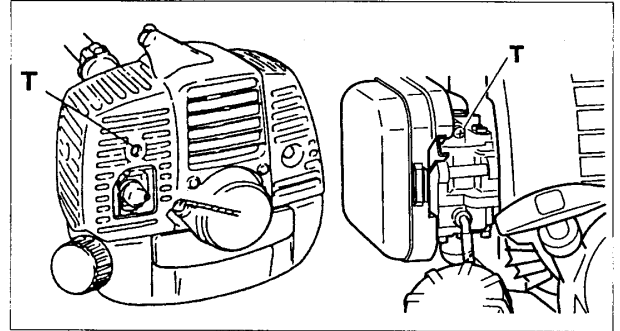


Fig. 3-1

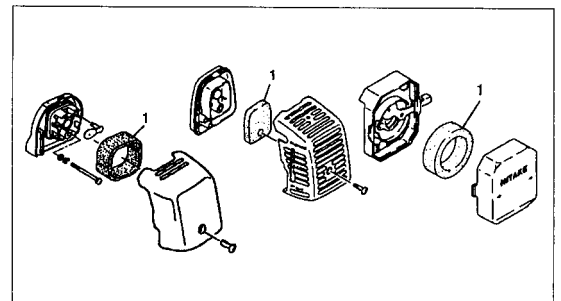


Fig. 3-2

### Fuel Filter (Fig. 3-2B)

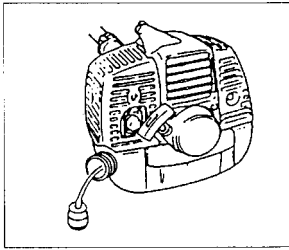


Fig. 3-2B

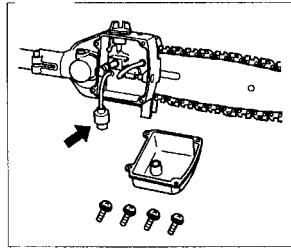


Fig. 3-2C

Drain all fuel from fuel tank and pull fuel filter line from tank. Pull filter element out of holder assembly. Replace filter if it appears to be discolored or hardened from use. The filter has a white, felt-like appearance when new.

### Chain oil filter (Fig. 3-2C)

Remove the oil filter and thoroughly wash it in solvent.

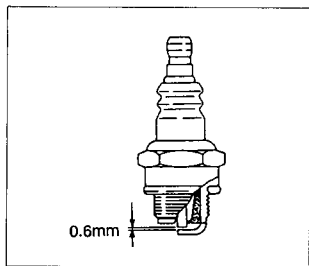


Fig. 3-3

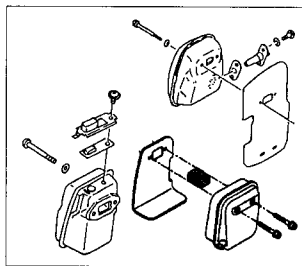


Fig. 3-4

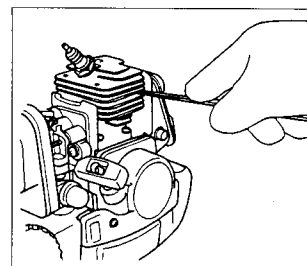


Fig. 3-5

### Spark plug (Fig. 3-3)

The spark plug condition is influenced by:

- An incorrect carburetor setting.
- Wrong fuel mixture (too much oil in the gasoline)
- A dirty air filter.
- Hard running conditions (such as cold weather).

These factors cause deposits on the spark plug electrodes, which may result in malfunction and starting difficulties. If the engine is low on power, difficult to start or runs poorly at idling speed, always check the spark plug first. If the spark plug is dirty, clean it and check the electrode gap. Readjust if necessary. The correct gap is 0.6 mm (.024"). The spark plug should be replaced after about 100 operation hours or earlier if the electrodes are badly eroded.

#### NOTE!

In some areas, local law requires using a resistor spark plug to suppress ignition signals. If this machine was originally equipped with resistor spark plug, use same type of spark plug for replacement.

### Muffler (Fig. 3-4)

Remove the muffler and remove excess carbon from the exhaust port or muffler inlet every 100 hours of operation.

### Cylinder (Engine cooling) (Fig. 3-5)

The engine is air cooled, and air must circulate freely around engine and over cooling fins on cylinder head to prevent overheating.

Every 100 Operating hours, or once a year (more often if conditions require), clean fins and external surfaces of engine of dust, dirt and oil deposits which can contribute to improper cooling.

#### NOTE!

Do not operate engine with engine shroud or muffler guard removed as this will cause overheating and engine damage.

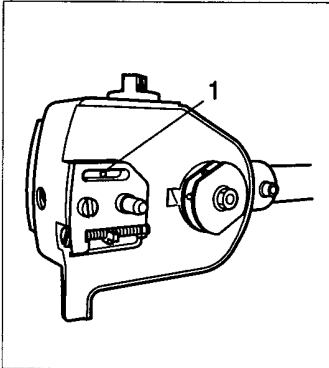


Fig. 5.1

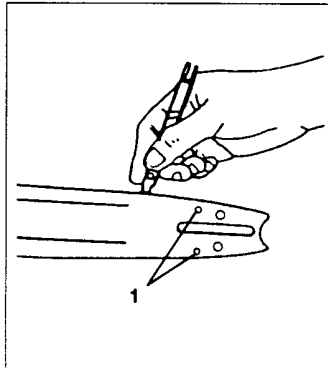


Fig. 5.2

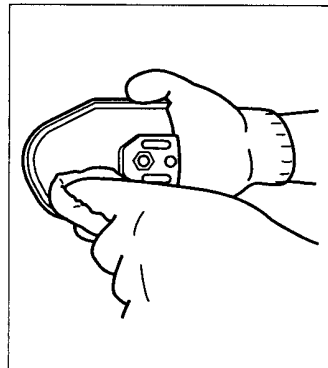


Fig. 5.3

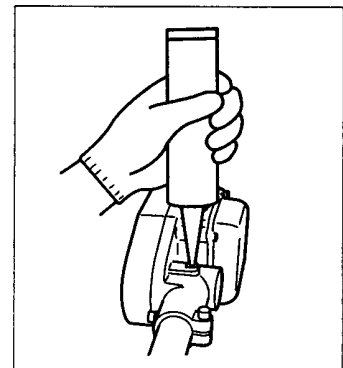


Fig. 5.4

**Oiler port (Fig. 5-1)**

Clean the chain oiler port (1) whenever possible.

**Guide bar (Fig. 5-2)**

Before using the machine, clean the groove and oiler port (1) in the bar with the special gauge offered as an optional accessory.

**Side case (Fig. 5-3)**

Always keep the side case and drive area clean of saw dust and debris.

Periodically apply oil or grease to this area to protect from corrosion as some trees contain high levels of acid.

**Angle transmission (Fig.5-4)**

Check angle transmission or angle gear for grease level about every 50 hours of operation by removing the grease filler plug on the side of angle transmission.

If no grease can be seen on the flanks of the gears, fill the transmission with a quality lithium based multipurpose grease up to 3/4.

Do not completely fill the transmission.

**Spark Arrestor**

If your unit comes with spark arrestor screen and yet your local regulation requires use of spark arrestor for prevention against a possible fire, please attach it to the muffler by removing muffler protector and other related parts. [The spark arrestor meet the regulation of SAE J335-SEP90 and CSA CAN3-Z62.1-M77.]

## CHAIN SHARPENING

Parts of a cutter. (Fig. 4-1, 2)

### ⚠ WARNING!

Gloves should be used when sharpening chain.

1. Top plate
2. Working corner
3. Side plate
4. Gullet
5. Heel
6. Chassis
7. Rivet hole
8. Toe
9. Depth gauge
10. Correct angle on top plate (degree of angle depends on chain type)
11. Slightly protruding "hook" or point (curve on non-chisel chain)
12. Top of depth gauge at correct height below top plate
13. Front of depth gauge rounded off

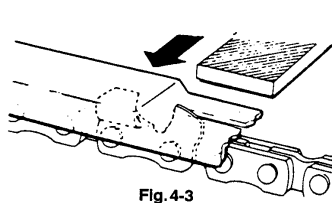
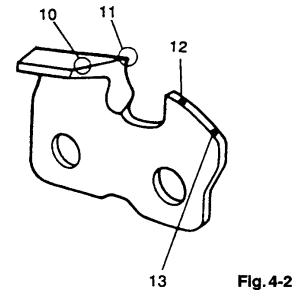
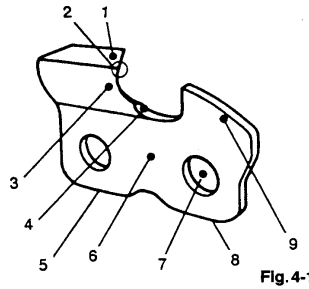


Fig. 4-3

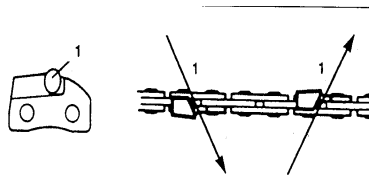


Fig. 4-5

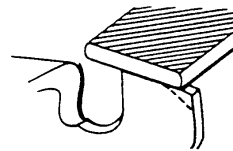


Fig. 4-4

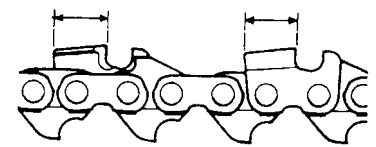


Fig. 4-6

### LOWERING DEPTH GAUGES WITH A FILE

- 1) If you sharpen your cutters with a file holder, check and lower the depth.
- 2) Check depth gauges every third sharpening.
- 3) Place depth gauge tool on cutter. If depth gauge projects, file it level with the top of the tool. Always file from the inside of the chain toward an outside cutter. (Fig. 4-3)
- 4) Round off front corner to maintain original shape of depth gauge after using depth gauge tool. Always follow the recommended depth gauge setting found in the maintenance or operator manual for your saw. (Fig. 4-4)

### GENERAL INSTRUCTIONS FOR FILING CUTTERS

File (1) cutter on one side of the chain from the inside out.

File on forward stroke only. (Fig. 4-5)

5) Keep all cutters the same length. (Fig. 4-6)

6) File enough to remove any damage to (~) 6 cutting edges (side plate (1) and top plate (2)) of cutter. (Fig. 4-7)

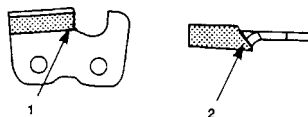


Fig. 4-7

### SHARPENING ANGLES FOR SHARPENING SAW CHAIN (Fig. 4-7B)





|  |        |
|--|--------|
| 1. Part Number   | 91VG   |
| 2. Pitch   | 3/8"   |
|  3. Depth Gauge Setting     | 0.025" |
|  4. Side Plate Filing Angle | 85°    |
|  5. Top Plate Angle         | 30°    |
|  6. File Guide Angle        | 90°    |

Fig. 4-7B

**Maintenance schedule**

Below you will find some general maintenance instructions.  
For further information please contact your service dealer.

**Daily maintenance**

- Clean the exterior of the unit.
- Clean the chain oil filter port.
- Clean the groove and oil filter port in the guide bar
- Clean the side case of saw dust.
- Check that the saw chain is sharp.
- Check that the bar nuts are sufficiently tightened.
- Make sure that the chain transport guard is undamaged and that it can be securely fitted.
- Check that nuts and screws are sufficiently tightened.







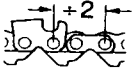



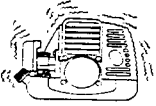
**Weekly maintenance**

- Check the starter, especially cord and return spring.
- Clean the exterior of the spark plug,
- Remove the spark plug and check the electrode gap. Adjust it to 0.6 mm (.024'), or change the spark plug.
- Clean the cooling fins on the cylinder and check that the air intake at the starter is not clogged.
- Clean the air filter.

**Monthly maintenance**

- Rinse the fuel tank with gasoline, and clean fuel filter.
- Clean chain oil filter.
- Clean the exterior of the carburetor and the space around it.
- Clean the muffler of carbon.

## 6. Specifications

| MODEL   | TPS-2501          | TPS-2510                      | TPS-270PN                      | TPS-250PN         |
|---|-------------------|-------------------------------|--------------------------------|-------------------|
|  Engine Size (ml) ..... 24 (1.46 cu. in.)                              | ←                 | ←                             | 26 (1.58 cu. in.)              | 24 (1.46 cu. in.) |
|  Spark Plug ..... CHAMPION CJ6<br>RCJ6<br>or equivalent                | ←                 | NGK BPM-6A or<br>BPMR-6A<br>← | CHAMPION CJ6Y or<br>RCJ6Y<br>← | ←                 |
|  Fuel Tank Capacity (l) ..... 0.50 (16.9 fl.oz)                        | 0.50 (16.9 fl.oz) | 0.76 (25.7 fl.oz)             | 0.65 (22.0 fl.oz)              | 0.50 (16.9 fl.oz) |
|  Chain Oil Tank Capacity (l) ..... 0.16                                | ←                 | ←                             | ←                              | ←                 |
|  Dry Weight (kg) ..... 4.8 (10.7 lbs)<br>(Without guide bar and chain) | 4.8 (10.7 lbs)    | 5.0 (11.0 lbs)                | 5.4 (11.9 lbs)                 | 5.1 (11.22 lbs)   |
|  Guide bar length (cm) ..... 25 (10")                                 | ←                 | ←                             | ←                              | ←                 |
|  Chain pitch (mm) ..... 9.52 (3/8 inch)                              | ←                 | ←                             | ←                              | ←                 |
|  Chain gauge (mm) ..... 1.09 (0.043 inch)                            | ←                 | ←                             | ←                              | ←                 |
|  Sound pressure level (dB(A)) ..... Lpmeasured                       |                   | 91.8                          | 98.8                           | 91.0              |
|  Sound power level (dB(A)) ..... Lwguaranteed                        |                   |                               | 106.8                          |                   |
|  Vibration level (m/s <sup>2</sup> )                                 |                   | 112                           |                                | 112               |
| Idling (Front handle) .....   | 3.8               | 3.1                           |                                | 3.1               |
| Idling (Rear handle) .....  | 1.6               | 1.4                           |                                | 3.1               |
| Racing (Front handle) .....   | 2.6               | 5.9                           |                                | 2.6               |
| Racing (Rear handle) .....  | 2.9               | 7.9                           |                                | 8.8               |

**Note:** Sound level are calculated as the time-weighted energy total under various working conditions with the following time distribution: 1/2 idling, 1/2 racing.

**\*\*All data subject to change without notice.**



**Declaration of conformity**

We, Tanaka Kogyo Co., Ltd., 3-4-29 Tsudanuma, Narashino, Chiba, Japan

Declare under our sole responsibility that the product, pole saw model

TPS-2501/2510  
TPS-250PN,TPS-270PN

to which this declaration relates is in conformity with the essential safety requirements of directives.

89/392/EEC,91/368/EEC,93/44/EEC,93/68/EEC, EMC89/336/EEC

The following standards have been taken into consideration

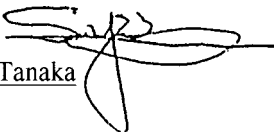
ISO 3767/6531/11806/DIS 11680-1,2  
(EN292-1/2)

Manufactured at: Chiba, Japan

Serial No. up from

U001001

Signature:

  
Seiji Tanaka

Position:

Vice president