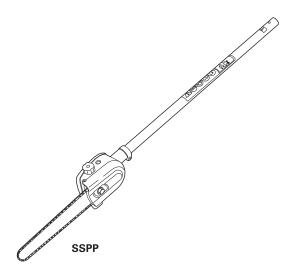
Pole Pruner Attachment SSPP

Instruction Manual

Original Instruction



For Safe Use of Pole Pruner Attachment

- Be sure to read this manual and the powerhead (separately sold) manual to have a good understanding of the contents before handling the pole pruner.
- If there is no powerhead manual, purchase it from sales agency.
- Keep this manual and the powerhead manual carefully in a readily accessible location.

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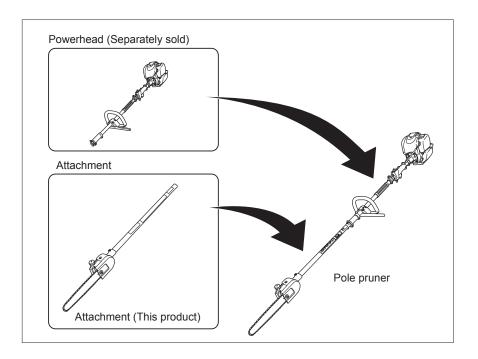
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Important Information

Intended Purpose

This product (hereinafter referred to as a attachment) is designed to be attached to the powerhead (to be sold separately) for cutting or pruning trees or branches. The pole pruner is attached to our approved powerhead.

Do not use the pole pruner for any other purpose or in any other way.



General

- Refer to the powerhead manual for further information on handling the powerhead manual.
- When handling the pole pruner, observe all the applicable safety rules, standards or regulations in the area where the pole pruner is used.
 - This pole pruner is designed and produced according to the standards and regulations applied in the purchase country, assuming that the use is limited to the purchase country only.
 - It will not comply with standards and regulations of other countries.
 - Do not export or resell the pole pruner to any other countries because the languages are different.
- Before use, read this instruction manual and powerhead manual thoroughly, and have a good understanding of the contents.
 - Do not allow any person who does not understand the contents of this manual to handle this pole pruner.
- Do not take any actions other than those described in this manual and powerhead manual.

Important Cautions for Safe Work

- NINGBO LIHAO MACHINERY CO.,LTD. (hereinafter referred to as NINGBO LIHAO MACHINERY)
 cannot foresee all the risks in handling the pole pruner. Therefore, also give consideration to general
 safety measures not stated in this manual and powerhead manual to prevent accidents when handling
 the pole pruner.
- The pole pruner is a very high speed cutting tool. To decrease risk of personal injury, special safety precautions must be observed. If it is used carelessly or inappropriately, hands or body could get contact with the saw chain, resulting in serious injury such as cutoff of finger or hand or even fatal injury.

Important Cautions for Instruction Manual

- This instruction manual is copyrighted and all rights are reserved. This instruction manual, in whole or
 part, may not be copied, translated or reproduced to any electronic medium or machine readable without
 prior written consent from NINGBO LIHAO MACHINERY.
- The contents described in this instruction manual and powerhead manual are subject to change without prior notice.
- Illustrations or figures shown in this instruction manual may partially differ from your pole pruner.
- In case of hand over or rent of the pole pruner, instruct them to have a good understanding of the contents of this instruction manual and powerhead manual before starting any work. Be sure to submit this manual and the powerhead manual to the customer.
- If this instruction manual or powerhead manual is lost or damaged, order from sales agency
- immediately. If you have any questions about descriptions in this manual and powerhead manual, contact the sales agency.

1. Safety

1.1 Warnings

For appropriate use of the pole pruner, follow the instructions in this manual. Warning labels are attached to places where there are potential risks or in the periphery. The warnings in this instruction manual and the warning labels are categorized depending on the degree of risk as shown in the table below.

1.1.1 Warning Description

Signal words in this instruction manual are categorized as shown below. If the warning for each signal word is ignored, serious injury or fatal injury may result.

■ Meanings of signal words

▲ DANGER	Indicates an immediately hazardous situation which, if not avoided, will result in death or serious injury.
⚠ WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠ CAUTION	Indicates a potentially hazardous situation which, if not avoided, could result in mild to moderate injury or property damage.
▶▶Note	Indicates to emphasize important information or provide helpful information.

■ Meanings of symbols

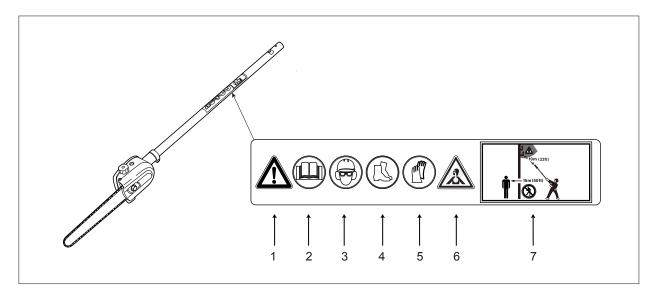
Caution Sign	Indicates that hazardous situation may result due to negligence of instructions. The hazards are designed into pictorial indication inside the symbol.
Prohibition Sign	Indicates prohibition of dangerous action. Prohibited actions are designed into pictorial indication inside or by the symbol.
Enforcement Sign	Indicates enforcement of actions. Actions to be enforced are designed into pictorial indication inside the symbol. This action is required to avoid hazard.

1.1.2 Warning Labels

■ Cautions for Handling

- (a) This pole pruner is provided with warning labels to indicate important cautions. Understand the meanings of the warning labels thoroughly and work in a safe environment without accident or failure.
- (b) Do not operate the pole pruner until you have a good understanding of the meanings of the warning labels. If you do not understand well about the meanings, contact the sales agency.
- (c) Be sure to observe the warning labels and warning messages in the instruction manual at all times to handle the pole pruner.
- (d) Do not remove or damage the warning labels. Also, do not clean the warning labels with solvent.
- (e) Do not paint the warning labels when repainting the pole pruner.
- (f) If the warning labels become illegible, damaged or removed, purchase new ones from the sales agency, and attach them in accordance with the "■ Warning Labels and Attached Locations."

■ Warning Labels and Attached Locations



1	Carefully check the right warning labels and observe them.
2	Be sure to read the instruction manual and completely understand it before use.
3	Wear personal protective equipment for eyes, ears, and head during operation.
4	Wear protective shoes during operation.
5	Wear gloves during operation.
6	Physically-harmful carbon monoxide is contained in exhaust gases. Do not use at the inadequately ventilated place.
7	Keep persons and animals out of the area within a radius of 15 meters from the pole pruner during operation. Do not operate within the area 10m from the electric cable.

1.2 General Precautions

1.2.1 Overall Precautions

When handling the pole pruner, follow the precautions of the powerhead manual in addition to the following precautions.

A DANGER



Do not use the pole pruner for dead branches suspended in tree.

* Otherwise, it will cause unexpected injury.

Do not use the pole pruner when you are tired or under the influence of alcohol or other drugs.

You will be distracted or not be able to use the pole pruner appropriately, causing a serious accident.

Use an approved saw chain.

* If unapproved saw chain is used, it could come off the guide bar, resulting in serious injury due to the damage of the saw chain or guide bar. For any questions, contact the sales agency.



Make sure that the knob bolt at the connection between powerhead and the extension pipe is tightened when installing the attachment.

* The attachment will come off, resulting in a serious accident.

⚠ WARNING



Do not allow minors to operate the pole pruner.

* Otherwise, a serious accident could happen.

Do not modify the pole pruner.

* It could deteriorate the performance, resulting in a serious accident due to deterioration on safety.

Do not install any unapproved powerhead and extension pipe to the attachment.

* The attachment could come off during use, resulting in a serious accident.

Do not remove the safety devices.

* A serious accident could result due to deterioration on safety.

Do not touch the saw chain during operation.

* It could cause injury.

Do not allow the saw chain to get contact with foreign objects such as soil and sand.

* It could cause premature wear.



When renting the pole pruner to any third person, attach the instruction manual and attached material.

* If it is not used appropriately, it could cause serious injury.

WARNING



Wear heavy-duty gloves when handling the saw chain.

Otherwise, hands or fingers could be severed by the saw chain.

1.2.2 Precautions on Clothes

⚠ WARNING



Wear appropriate personal protective equipment when using the pole pruner.

* Otherwise, injury may result.

Wear goggles and face shield (or face screen) when using the pole pruner.

* If they are not used, it could cause eye injury due to scattering of pieces of wood chipped off.

Wear the hearing protective equipment including ear muffs when using the pole pruner.

* Hearing loss could be developed due to the noise of the engine.

Wear a hard hat during the operation or transportation.

* Otherwise, it could cause injury to head.

1.2.3 Precautions before Operation

A DANGER



Do not allow children or animals to enter the working range of the pole pruner (within 15m).

* Otherwise, a serious accident will happen.

Do not operate the pole pruner near the electric cable.

* Otherwise, an electric shock will be caused.

Do not use with the saw chain loosened.

* It could come off the guide bar, resulting in serious injury due to the damage of the saw chain or guide bar.



Make sure that the pole pruner is operated normally or there is not any part missing or cracking before starting the operation.

Especially check looseness of the connections, screws and nuts, and fuel leakage.

* Otherwise, a serious accident could result.

Before starting the operation or when hitting the pole pruner against something hard such as stones, make sure that the knob bolt of powerhead connections is not loosened.

Otherwise, it could cause the attachment to fall off.

Make sure that the knob is returned to the specified position when installing the pole pruner.

The attachment could come off.

MARNING



Check the condition of the saw chain and mounting nuts before/after the cutting.

* If it is used with cracks or looseness, the saw chain could chip off and the pieces of the saw chain could hit a person, or the split attachment could be damaged.

When there is any obstacle (wires, etc.) which cannot be removed near the branches to be cut, cut the branches while taking care so as not to allow the saw chain to get contact with such obstacle during cutting.

* Otherwise, a person could fall down due to the impact and get contact with the saw chain, resulting in serious injury. Or the scattered pieces of obstacles could get in your eyes, resulting in injury such as sight loss.

A CAUTION



If the edge of the saw chain is blunt or damaged, do not operate the pole pruner.

Otherwise, it could cause damage to the pole pruner due to overloading.



When working near the car or building, keep the things around away from the working area.

Cover the immovable thing with the heavy-duty sheets or do not operate at the area.

* If it is operated near the car and the building, scattered gravel stone, etc. could cause damage.

Check if there is any obstacle (empty cans, wires, pebbles, bands, etc.) or not. If there is any obstacle, remove it before operating the pole pruner.

* Scattering of the broken pieces of the damaged saw chain, etc. could result in injury accident.

Foreign substance such as wires and bands could be caught in the saw chain, breaking the saw chain or gears.

1.2.4 Precautions at Start of Operation

A DANGER



The pole pruner must be started in a non-slippery and firm place.

* Otherwise, it will cause falling, resulting in serious injury.

MARNING



The pole pruner must be started or operated by one person.

* If it is operated by more than one person, it could be miss-handled, and it could contact with a person or objects, resulting in accident.

A CAUTION



When starting the pole pruner, make sure that the saw chain is not touching the ground or obstacles.

* Otherwise, you could fall down and get severly injured due to contact with the saw chain.

It could also cause the objects to scatter, resulting in injury such as sight loss.

1.2.5 Precautions for Operation

A DANGER



Do not operate the pole pruner on insecure footings including a ladder, tree, back of the truck.

* Otherwise, you will fall off the footing, drop the pole pruner or get contact with the saw chain by inappropriately handling, resulting in accident.



While cutting, put up a KEEP OUT sign in a prominent place to prevent any third person from entering within 15m of the working area.

* Otherwise, a serious accident may happen.

Use a vehicle designed for high-place work at a high place.

In case of a high-place work, follow the rules and regulations to be observed, and use an appropriate hoisting device.

* Otherwise, you will fall off the footing, drop the pole pruner or get contact with the saw chain by inappropriately handling, resulting in accident.

MARNING



Do not operate the pole pruner in a closed area.

* Exhausted gas affects the health.

Do not operate the pole pruner under poor visibility including after sunset or in the early morning.

* Otherwise, it could cause accidents such as contact with some objects or falling off.

Do not use the pole pruner continuously for a long time.

* If it is operated continuously for a long time, vibration induced white finger could be developed.

Do not operate the pole pruner by one hand.

* Otherwise, you could drop the pole pruner or get contact with the saw chain by inappropriate handling, resulting in accident.

If the saw chain starts moving while idling, do not use the pole pruner.

* Otherwise, it could cause an accident.

Do not use the tip of the guide bar for cutting.

* Otherwise, the pole pruner could be out of control, causing the operator to become bruised, other persons around to get injury due to kickback, or property damage.

MARNING



Concentrate on the work during the cutting without standing talking.

When doing the other work out of necessity, stop the engine before performing.

* Unless concentrating on the cutting work, the operator could be injured unexpectedly because the concentration becomes loose.

When cutting trees over the head level, take a break as necessary.

* If you continue operating without taking a break, your arm gets tired and you cannot hold the pole pruner any more, which could cause you to drop the pole pruner, resulting in accident..

Remove obstacles, and watch your step when operating the pole pruner.

* If the footing is insecure, an accident due to tripping over or falling could happen.

When turning around or changing position, the operator should move slowly so that the moving part does not get contact with people and objects around.

* Otherwise, it could cause a injury to the person or damage to objects by contact with the moving part, or the operator could fall down by the kickback of the equipment.

When pruning or cutting hedges or trees over your eye level, frequently check the hedge or tree for persons, animals or obstacles.

* If the check is neglected, it could cause the pole pruner to get contact with a person, object, etc., resulting in accident.

A CAUTION



Check if there is any empty can, wire, small stone, band, etc.

If any, remove them before starting the operation.

* Otherwise, it could cause injury accident due to scattered pieces of broken saw chain, etc.

During the operation, make sure periodically that the chain oil is being discharged.

* Otherwise, the saw chain or guide bar could be damaged, or burn injury could be caused if you touch the guide bar which has become high in the temperature.

Wear an antidust mask when cutting many branches.

* Otherwise, it could damage your health due to sawdust, etc.

Work at a place where you will not be hit by falling branches. Operate according to the operation method described in the instruction manual.

* You could get injured by the falling branches and bouncing back branches.

1.2.6 Precautions for Maintenance

WARNING



Before performing maintenance, repair or cleaning, stop the engine and remove the attachment from the powerhead.

* If the engine starts during the work, hands or fingers could be severed by the moving parts or saw chain.

Do not perform any maintenance or repair other than those described in the instruction manual. Request the sales agency.

* Otherwise, an accident could happen.

Stop the engine and remove the attachment from the powerhead before adjusting the tension or sharpening the saw chain. Wear gloves while working.

Otherwise, hands or fingers could be cut off.

A CAUTION



Use a designated grease.

* The Split Attachment could be faulty

If the tension on the saw chain is adjusted during the operation, loosen the saw chain after use.

* Otherwise, it could cause failure.

Check if the tip of the saw chain is not worn out.

* If it is worn out, the saw chain is blunt, reducing the working efficiency. Also load applied when cutting becomes large, it could cause the engine or pole pruner to damage.

Clean the gauge (groove) of the guide bar.

* If they are not cleaned, dust, wood sap, or chain oil becomes hardened, which causes the pole pruner to be unmovable for the next operation.

1.2.7 Precautions for Troubleshooting

A DANGER



When troubleshooting, stop the engine and then remove the attachment from the powerhead.

* If the engine starts during the work, hands or fingers could be severed by the moving parts or saw chain.

1.2.8 Precautions for Transporting

⚠ WARNING



Do not transport the pole pruner by a bicycle and a motorbike.

* When the pole pruner is dropped, it could cause injury to the operator unexpectedly and damage to the pole pruner.



When transporting the pole pruner, wear appropriate clothes and personal protective equipment.

* Otherwise, it could cause injury.

Before transporting the pole pruner, stop the engine, and make the saw chain stopped before attaching the transportation guard to the saw chain.

* Body, hands or fingers could be severed or objects could be damaged by contact with the saw chain.

When transporting the pole pruner, install it to a harness or keep the balance with the shaft tube.

* Otherwise, the pole pruner could fall off, resulting in injury or damage of the pole pruner.

Remove obstacles, and watch your step when transporting the pole pruner.

* If the footing is insecure, an accident due to tripping over or falling could happen.

Before transporting the pole pruner put on the back of the truck, etc., remove the attachment from the powerhead, and then fix it so as not to move.

* Otherwise, the attachment could fall off the truck, causing injury or damage to the pole pruner.

1.2.9 Precautions for Storing

MARNING



When storing the attachment with the hook of the pipe cap attached to the pipe, etc., do not pull or swing the attachment.

Or, attach it to the fixed bar having enough strength.

* Otherwise, it will fall off, causing a serious injury.

A CAUTION



When storing the attachment, install the transportation guard to the saw chain.

Otherwise, it could cause injury to an operator due to contact with the saw chain, or even serious injury by getting contact with the saw chain while the operator is falling down or tumbling.

When storing the attachment, store it in the place out of reach of children and animals.

Otherwise, it could cause injury to an operator due to contact with the saw chain, or even serious injury by getting contact with the saw chain while the operator is falling down or tumbling.

1.2.10 Precautions for Grease

A DANGER



Store the grease in a place out of reach of children.

Also, put them in a container so that the grease is not spilled and make them distinguished to understand contents.

* When drinking them by mistake, the person will feel physically sick.

A CAUTION



Do not discard grease into the river, the sea, or the ground.

* Otherwise, it could pollute the environment.

1.2.11 Precautions for Handling Chain Oil

A CAUTION



Supply chain oil before operating.

During the operation, make sure periodically that the chain oil is being discharged.

* Otherwise, the saw chain or guide bar could be damaged. Also, the guide bar could be hot, and if you touched, you could suffer burn injury.

Adjust the oil discharge amount according to the type of trees to be cut or type of the chain oil.

* If the oil discharge amount is not enough, the saw chain or guide bar could be damaged. In addition to the above, the guide bar could be hot, and if you touched, you could suffer burn injury.

Use chainsaw oil.

* If other oil is used, the lubricating performance could deteriorate, which could cause premature wear or damage of the saw chain or guide bar.

1.3 Safety Devices and Protective Guard

1.3.1 Safety Devices (Stop Devices)

To stop the pole pruner in case of an accident or abnormality, use the stop device and stop the operation of the saw chain.

There are the throttle trigger and start/stop switch on the powerhead as stop devices. Refer to the powerhead manual for details.

1.3.2 Safety Devices (Quick Release)

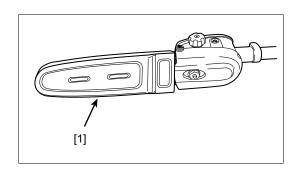
In case of an accident or abnormality, the pole pruner can be released from the harness by using the quick release device.

Refer to the powerhead manual for details.

1.3.3 Protective Guard

(A) Guard for transportation [1]

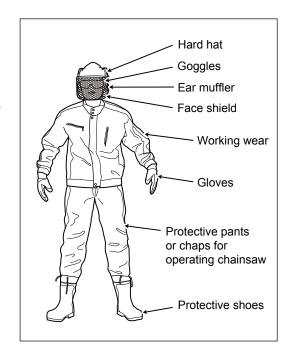
Attach the guard [1] to the saw chain for transporting or storing other than pruning or cutting to prevent an accident due to contact with the saw chain or accumulation of foreign objects on the chain cover. Refer to the figure on the right.



1.4 Protective Equipment

When using the pole pruner for pruning or cutting, always wear the following protective equipment.

- (a) Hard hat
- (b) Working wear (long sleeve jackets and protective pants or chaps for operating chainsaw)
- (c) Protective shoes (or sturdy boots with nonslip sole) (Steel-toed safety boots are recommended.)
- (d) Gloves (heavy-duty, nonslip gloves)
- (e) Goggles
- (f) Face shield (or face screen) (use together with goggles is recommended)
- (g) Ear muffler
- (h) Protective pants or chaps designed for operating chainsaw.



▶ Note

- Use goggles, ear muffs and hard hats, protective pants, etc. conformed to the applicable standard.
- Do not wear any jewelry or ties.
- Loop up long air.
- If the jackets or pants are loose, tighten the cuffs or hems.
- When cutting many branches, put on an antidust mask.

1.5 Noise

There is a danger that a person might suffer permanent hearing loss by the sound from the pole pruner. A person operating the pole pruner must use ear protection equipment including an ear muffler.

A person using the pole pruner frequently must undergo a hearing test.

However, take care when wearing the ear protection equipment. Your ability to hear shouts or alarms is restricted.

1.6 Vibration

Vibration generated by the pole pruner causes vibration induced white finger (Reynaud's phenomenon) or carpal tunnel syndrome. This will cause swelling pain or nerve paralysis of hands, and there is a risk of affecting the hand.

To prevent such problems, do not continuously operate the pole pruner for a long time. Instead, take an appropriate break.

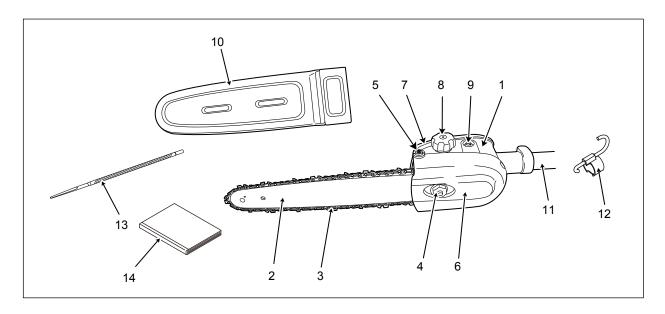
2. Outline

2.1 Name of Parts and Their Functions

The pole pruner is a device with the attachment installed to the powerhead (separately sold). The following is the structure of the split attachment and name and function of each part.

Note

• There are several types of powerheads. For details about the powerhead, refer to the powerhead manual.

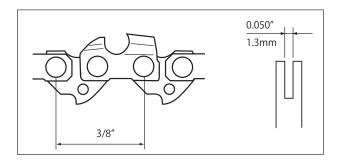


No.	Name	Description
1	Transmission case	Connected with the drive sprocket, it transmits the power from the drive shaft to the saw chain.
2	Guide bar	Transmits the rotational motion of the drive shaft to the transmission case.
3	Saw chain	Rotates at high speed to cut trees or branches.
4	Guide bar nut	A nut to fix the guide bar
5	Tensioning bolt	A bolt to move the guide bar to apply tension to the saw chain.
6	Chain cover	A cover to protect the saw chain and drive sprocket
7	Chain oil tank	A tank for chain oil
8	Chain oil tank cap	Remove it and supply the chain oil.
9	Chain oil adjustment screw	A screw to adjust the discharge amount of the chain oil. When turned counterclockwise, the discharge amount will increase.
10	Transportation guard	A part to protect the saw chain under transportation or storage
11	Shaft tube	This is a main frame with a drive shaft inside.
12	Tube cap	A part to prevent dust, etc. from entering the shaft tube during storage
13	Round file	Used for sharpening the saw chain. φ5/32 inches (4mm)
14	Manual	This manual

2.2 Specification

■ Standard Specification

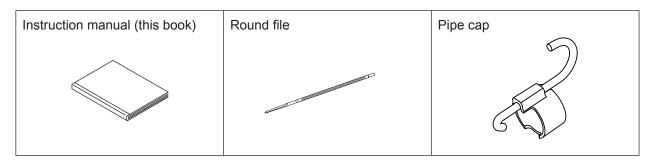
item	Specification
Engine	Refer to your powerhead manual.
Saw chain	JLA1-13-45 (a part packed together) Oregon: 91VX-45E, 91VG-45E (for repair)
Guide bar	12 inches
Weight of Split Attachment	1.5 kg (Europe) 1.6 kg (Australia) (excluding saw chain, guide bar, and transportation guard)



2.3 Attached Material

The following are attached materials. For powerhead, refer to the powerhead manual.

■ Attached Material



2.4 Position of Model and Serial No.

This instruction manual is for attachment of model in same series.

Check the model of your attachment on the nameplate attached to the machine body and read the corresponding sections.

Record serial No. (See "9. Service after Sales"). You will need this serial No. when ordering parts, and when making technical or warranty inquiries.

AAAA ; Model code BBBBBBB; Serial No.

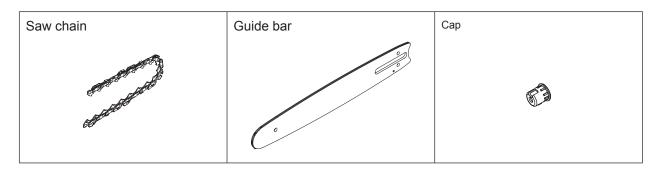
Note

• The model code is 4-digit numeric number for management.

The model code is different from the model name.

2.5 Consumables

The following is the consumables of this attachment. Contact the sales agency for the replacement.



3. Installation and Adjustment

MARNING



Before installing or removing, stop the engine.

* If the engine starts during the work, hands or fingers could be severed by the moving parts or saw chain.

3.1 Installation and Removal of Saw Chain/Guide Bar

This work is required for installation after purchasing or maintenance.

WARNING



Wear heavy-duty gloves when handling the saw chain.

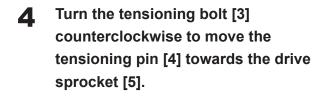
* Otherwise, hands or fingers could be severed by the saw chain.

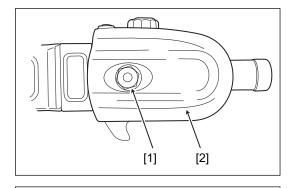
3.1.1 Removal

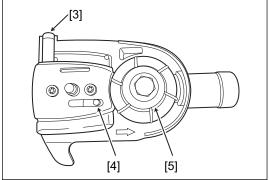
■ Install the transportation guard.

Note

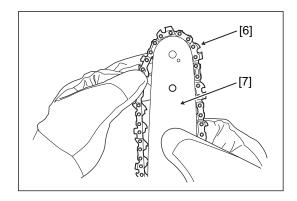
- When you purchase, the saw chain/guide bar is not assembled. Steps 1 and 5 are not necessary.
- 2 Turn the guide bar nut [1] counterclockwise to remove.
- Remove the chain cover [2].





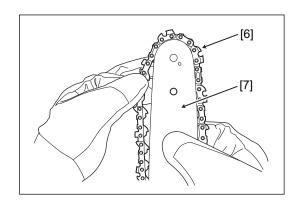


5 Remove the guide bar [7] and saw chain [6] from the transmission case.



3.1.2 Installation

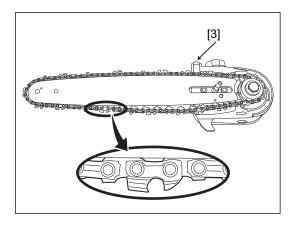
- Install the saw chain [6] to the guide bar [7].
- 2 Set the saw chain in the appropriate position, and install it with the tensioning hole and tensioning pin aligned, and then set the saw chain into the drive sprocket.



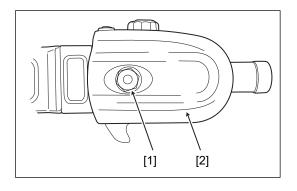
Turn the tensioning bolt [3] clockwise until the slack amount of the saw chain becomes a little.

▶ Note

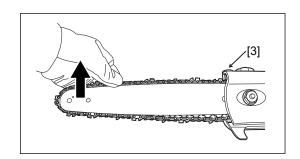
• Check the saw chain is set in the gauge (groove) of the guide bar, when apply tension to the saw chain.



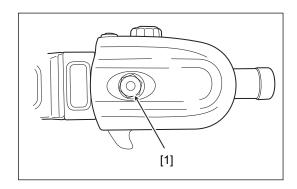
Install the chain cover [2], and lightly tighten the guide bar nut [1].



5 While lifting the guide bar upward, apply tension to the saw chain with the tensioning bolt [3] so that the saw chain is closely fitted with the guide bar.



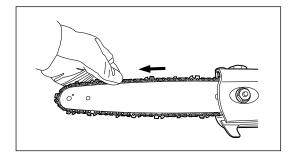
6 While lifting the guide bar, tighten the guide bar nut [1] with a tool.



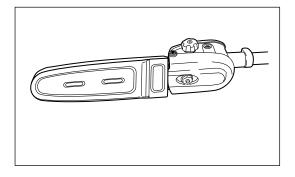
Make sure that the saw chain can be moved by hand easily.

Note

• If it cannot be moved easily, repeat from the step 1.



8 Install the transportation guard.
(Refer to 1.3.3 Protective Guard.)



▶ Note

• Since a new saw chain is easier to be slack than used one, frequently check the tension of the saw chain.

3.2 Installation Method

3.2.1 Combination with Powerhead

WARNING



Do not install any unapproved powerhead to the attachment.

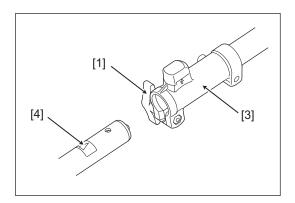
* The attachment could come off during use, resulting in a serious accident.

The attachment can be installed only to our approved equipment (shown below). For detail, refer to the table below.

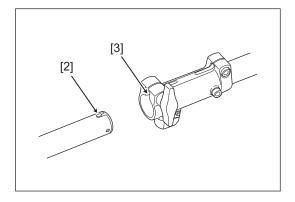
Manufacturer	Our approved powerhead
Thai Honda Manufacturing Co.,Ltd.	UMC425E
Thai Honda Manufacturing Co.,Ltd.	UMC435E
Thai Honda Manufacturing Co.,Ltd.	UMC425U
Thai Honda Manufacturing Co.,Ltd.	UMC435U

3.1.2 Connecting

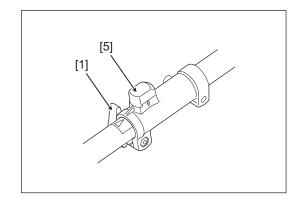
1 Loosen the knob bolt [1] of powerhead connections.



2 Align the boss (protrusion) [2] at the end of the pipe with the slit of the joint case [3], and insert it to the label [4] position.

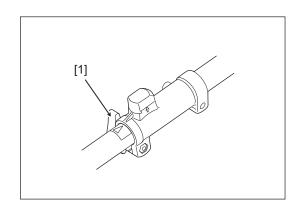


3 Make sure that the positioning knob [5] is lowered to the original position, and then tighten the knob bolt [1] of powerhead connections.



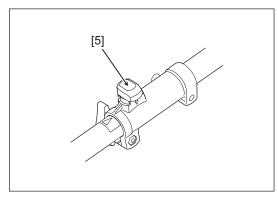
3.2.3 Removing

1 Loosen the knob bolt [1] of powerhead connections.



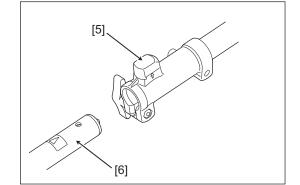
2 Lift the positioning knob [5], and turn it.

When the positioning knob is lifted, it can be rotated both clockwise and counterclockwise by 90°.



Pull out the shaft tube [6].

If the shaft tube is hard to remove, hold it so that the attachment is parallel to the pipe of the powerhead, and then pull out it.



Turn the positioning knob [5] until it comes to the center.

When the positioning knob is returned to the center, it will be released downward.

4. Operation

MARNING



Wear appropriate personal protective equipment when using the pole pruner.

* Otherwise, injury may result.

4.1 Transporting method

WARNING



Do not transport the pole pruner by a bicycle and a motorbike.

* When the pole pruner is dropped, it could cause injury to the operator unexpectedly and damage to the pole pruner.



Before transporting the pole pruner, stop the engine, and make the saw chain stopped before attaching the transportation guard to the saw chain.

* Body, hands or fingers could be severed or objects could be damaged by contact with the saw chain.

When transporting the pole pruner, install it to a harness or keep the balance with the shaft tube.

* Otherwise, the pole pruner could fall off, resulting in injury or damage of the pole pruner.

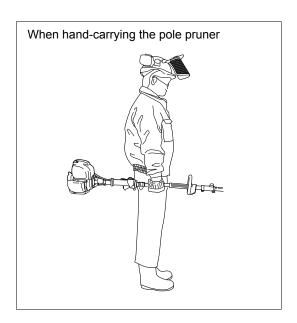
Remove obstacles, and watch your step when transporting the pole pruner.

* If the footing is insecure, an accident due to tripping over or falling could happen.

Before transporting the pole pruner put on the back of the truck, etc., remove the attachment from the powerhead, and then fix it so as not to move.

* Otherwise, the attachment could fall off the truck, causing injury or damage to the pole pruner.

- Wear protective equipment. For detail about the protective equipment, refer to "1.4 Protective Equipment.
- **2** Make sure that the engine is stopped and the saw chain is not moving.
- **3** Install the transportation guard.
- <When hand-carrying the pole pruner> Install it to the harness or use the shaft tube to keep the balance with the shaft tube.



<When transporting by truck, etc.>

- (1) Remove the attachment from the powerhead.
- (2) Put the pole pruner on the back of the truck, and fix it so as not move.

4.2 Pre-operation Check

A DANGER



Make sure that the pole pruner is operated normally or there is not any part missing or cracking before starting the operation.

Especially check looseness of the connections, screws and nuts, and fuel leakage.

* Otherwise, a serious accident could result.

Before operating the pole pruner, check the following:

- (a) Check each part. If there is any faulty part, request a repair.
 - Check the parts (nuts and screws, etc.) for looseness, cracks, bend or deformation.
 - Check the saw chain and guide bar for damage.
 - Check if saw chain is appropriately sharpened.
 - Check the saw chain for tension applied.
 - Check if the chain oil is supplied.
- (b) Check if the pole pruner is appropriately operated. If it is faulty, request a repair.
 - Check if the throttle trigger moves freely (if it bounces back to the idling position.)
 - Check if the start/stop switch is operated appropriately.
- (c) Check the handle and clean if it is dirty.
 - Check if it is kept clean. (if there is any oil or resin attached.)
 - · Check if it is dry.
- (d) Check if the chain oil is not leaking.

If any chain oil leaking is found, request the sales agency for repair.

If the fuel is spilled when supplying the oil, wipe off.

- (e) Check the pole pruner during idling. If there is any problem, contact the sales agency for adjustment or repair.
 - If the saw chain does not move during idling
 - If the idling status is normal

4.3 Start and Stop

The pole pruner is operated by the powerhead. Refer to the powerhead manual.

4.3.1 Start

A DANGER



The pole pruner must be started in a non-slippery and firm place.

* Otherwise, it will cause falling, resulting in serious injury.

WARNING



The pole pruner must be started or operated by one person.

* If it is operated by more than one person, it could be miss-handled, and it could contact with a person or objects, resulting in accident.

For starting the pole pruner, refer to the powerhead manual.

4.3.2 Stop

When the throttle trigger of the handle is released, the engine power will decrease, and the saw chain will stop operating.

However, it will be operating for a while (flywheel effect), and the throttle will not stop immediately after the throttle trigger is released.

Refer to the powerhead manual for details.

4.4 Precautions for Operation

When operating the pole pruner, observe the following as well as "1.2 General Precautions".

- If you feel tired during operation, be sure to take a break. If you continue operating without taking a break, the pole pruner could be out of control. Or if you are aggravated by strenuous work, consult a physician (doctor) before operating the pole pruner.
- Keep the distance at least 15m from persons around when operating.
- Do not cut any object other than hedges or shrubs.
- Do not cut the thick trunk of a tree.
- Always use both hands to hold the pole pruner during operation. Do not use if it is raining.
- Grip the control grip with your right hand. Grip the loop handle with your left hand. (Same applies for left-handers)
- If the saw chain is caught in the thick branches or other obstacles during operation, stop the engine immediately.
- The pole pruner is not insulated against electric shock. Keep a distance at least 10m from the electric
 cable. Have a person qualified for electric work remove wires and cables which can be removed. If there
 are still wires or cables not removable, do not operate the pole pruner.
- Take extreme care when operating in a slippery place. Also watch out for rough ground, stumps, roots, ditches or holes which could cause you to trip or stumble. Do not use the pole pruner when it is raining.
- If there is any problem such as a blunt edge of the saw chain, etc., stop the operation immediately, and make sure that there is no part cracking or lacking or the chain oil is enough. Even if the saw chain has superficial cracks instead of damage or wear, replace the saw chain.
- Set the angle of the cutter bar so that the pole pruner can be held at the position at which an operator does not get tired easily. Use a harness.
- To prevent fire accident, do not use the pole pruner where there are organic sediment, leaves or excessive amount of lubricant.
- · Attach the chain cover when not using.
- Do not allow the saw chain to get contact with foreign objects such as soil and sand. Do not cut a root of a tree which soil or sand is attached.
- Secure a firm footing and escape space. Make sure that there is no obstacle on the escape space before starting operation.
- Check periodically that the chain oil is discharged.
- Check periodically that there is enough saw chain oil remaining.
- Divide working sections and perform cutting for each section.

4.5 Pruning Operation

A DANGER



Do not allow children or animals to enter the working range of the pole pruner (within 15m).

* Otherwise, a serious accident will happen.

⚠ WARNING



The pole pruner must be started or operated by one person.

* If it is operated by more than one person, it could be miss-handled, and it could contact with a person or objects, resulting in accident.

A CAUTION



Supply chain oil before operating.

During the operation, make sure periodically that the chain oil is being discharged.

* Otherwise, the saw chain or guide bar could be damaged. Also, the guide bar could be hot, and if you touched, you could suffer burn injury.

Work at a place where you will not be hit by falling branches.

Operate according to the operation method described in the instruction manual.

* You could get injured by the falling branches and bouncing back branches.

When using multiple pole pruners at the same time, each operator must be at least 15 meters away from the others.

■ Holding Method of Pole Pruner

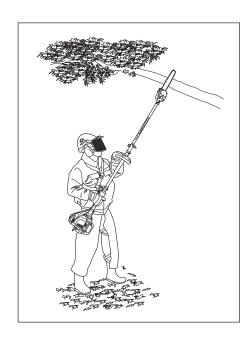
 Always hold the pole pruner with both hands during operation. To prevent accidents due to inappropriate operation, always support the pole pruner stably during the operation by folding as follows.

Right hand: Control grip

Left hand: Loop handle

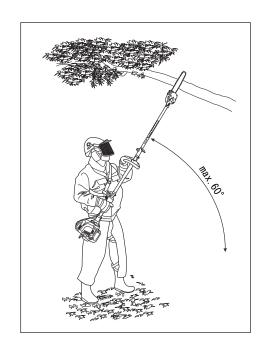
(Same applies to left-handers.)

 Always keep a certain distance between the body and equipment.



■ Operating Method

- When starting the operation or during the operation, check periodically if the chain oil is discharged.
 - * Follow "5.1.4 Discharging Condition Check and Adjustment of Chain Oil".
- Adjust the discharge amount of the chain oil.
 * Follow "5.1.4 Discharging Condition Check and Adjustment of Chain Oil".
- Put the pole pruner at right angle to the branch when cutting.
- Predict the drop position of branches to be cut, and operate where you are not hit by the falling branches.
- Hold the pole pruner so that the shaft tube is at 60° or less to the horizontal line.
- Cut the branch into an appropriate size from the tip towards the root of the branch.
- Pay attention to the branches which are fallen and bounced back from the ground.
- Put the pole pruner at right angle to the branch when cutting.
- Do not use the tip of the guide bar for cutting.



4.6 Actions after Operation

After using the pole pruner, take the following actions.

- Turn the start/stop switch of the engine to OFF (○) to stop the engine.
- 2 Tighten all the screws except for nuts, bolts and screws for adjusting the Carburetor.
- Store the pole pruner according to "6 Storing."

5. Maintenance

MARNING



Before performing maintenance, repair or cleaning, stop the engine and remove the attachment from the powerhead.

* If the engine starts during the work, hands or fingers could be severed by the moving parts or saw chain.

Do not perform any maintenance or repair other than those described in the instruction manual. Request the sales agency.

* Otherwise, an accident could happen.

Wear heavy-duty gloves when handling the saw chain.

* Otherwise, hands or fingers could be severed by the saw chain.

Maintenance items for the attachment are described as follows.

For maintenance of the powerhead, refer to the powerhead manual.

■ List for Maintenance Items

Item	Before operation	After operation	During operation or when refueling	In 10 hours or the 1st one month	Every 20 hours or every 3 months	Remarks
Refueling and check of chain oil	0		0			Refer to 5.1.1.
Check and Sharpening of saw chain	0		0			Refer to 5.1.2.
Check and adjustment of saw chain tension	0		0			Refer to 5.1.3.
Discharging condition check and adjustment of chain oil	0		0			Refer to 5.1.4.
Greasing for guide bar	0					Refer to 5.2.1.
Drive sprocket check	0					Refer to 5.2.2.
Cleaning and check of guide bar		0				Refer to 5.3.1.
Greasing for transmission case					0	Refer to 5.4.1.

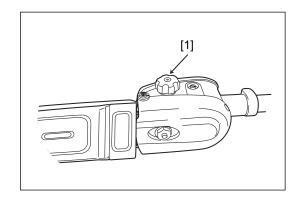
5.1 Before/During Operation or When Refueling

5.1.1 Refueling and Check of Chain Oil

Wear condition or durability of the saw chain and guide bar highly depends on the quality of the chain oil. Be sure to use exclusive chain oil for the chainsaw.

Type of the chain oil might be specified by local rules or regulations in some countries. For any questions, contact the sales agency.

- Wipe off the foreign substances such as dust and chips around the chain oil tank cap [1].
- 2 Remove the chain oil tank cap [1] for chain oil, and refuel the chain oil.
- Close the chain oil tank cap [1] of the chain oil, and wipe off the split chain oil.



5.1.2 Check and Sharpening of Saw Chain

A CAUTION



Check if the tip of the saw chain is not worn out.

* If it is worn out, the saw chain is blunt, reducing the working efficiency. Also load applied when cutting becomes large, it could cause the engine or pole pruner to damage.

Check the following:

- Check if the edges of the upper blade or side blade of the cutter are not blunt.
- Check if the blade of the cutter is sharp.
- Check if the saw chain for cutters, etc. is not lacked, peeled, cracked or bent.

- If you find any cracks, peeling, breaks or bending, replace the saw chain.
 (Refer to "3.1 Installation and Removal of Saw Chain Guide Bar.")
- If the cutter blade is worn and not sharp, sharpen it.
- If the saw chain is blunt, periodically sharpen the saw chain. If there is no tool for sharpening, consult the sales agency.

■ Sharpening the Cutter

Make sure that the saw chain is appropriately installed to the guide bar before sharpening.

(Refer to "3.1 Installation and Removal of Saw Chain Guide Bar.")

▶ Note

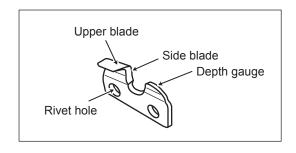
 Use a round file for sharpening (attached) of φ5/32" (4mm.)

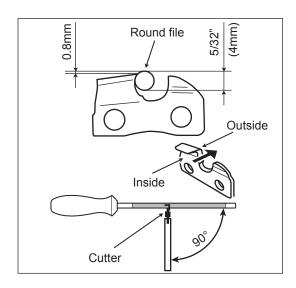
Follow the procedure below for sharpening.

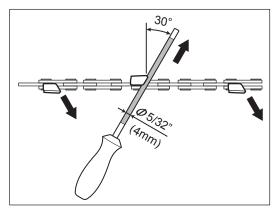
Allow the round file to be protruded from the cutter upper face by 1/5 in diameter (0.8mm), and put a file horizontally (at right angle to the side face of the guide bar), and file the cutter from the inside to outside.

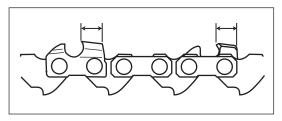
- Cutters are set in the opposite direction (lateral direction) alternately. Pay attention to the set direction.
- When sharpening the upper blade, the angle between the round file and the saw chain must be 30°.

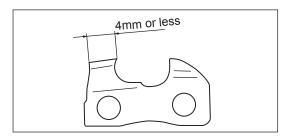
- 3 Lengths of all the cutters must be the same.
- When the length of the cutter becomes 4mm or less, replace it.











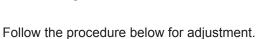
■ Depth Gauge Adjustment

Make sure that the saw chain is appropriately installed to the guide bar before adjustment.

(Refer to "3.1 Installation and Removal of Saw Chain Guide Bar.")

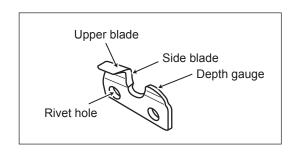
▶ Note

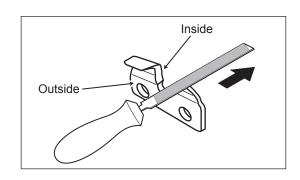
 It is recommended to use Depth Gauge Jointer (separately sold) for easy checking and adjustment of the height.

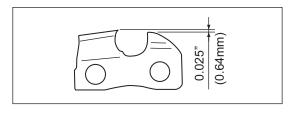


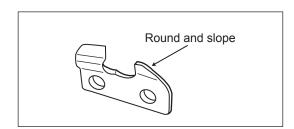
Grind the cutter with a plain file from the inner side of the cutter.

- The cutters are set in the opposite direction (lateral direction) alternately.
- 2 Make sure that the difference of the height between the depth gauge and upper blade is 0.025" (0.64 mm).
- After adjusting the height, file the tip of the depth gauge so that it should be rounded and sloped.









5.1.3 Check and Adjustment of Saw Chain Tension

Make sure that the saw chain is slightly loose and it can be moved by hand easily. (Refer to "3.1 Installation and Removal of Saw Chain Guide Bar.")

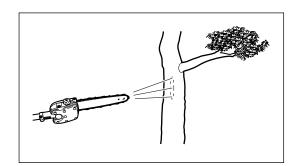
5.1.4 Discharging Condition Check and Adjustment of Chain Oil

When starting the operation, check if the chain oil is discharged.

1 Direct the tip of the guide bar towards a tree or stub of light color while keeping a distance of 20 cm, and operate it with 3/4 throttle opened for approx. 1 min.

Note

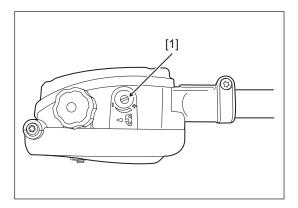
- If the surface of the tree or stub is colored with the oil, the chain oil is discharged.
- When cutting dry or hard trees or branches, the discharge amount of the chain oil must be increased.



2 Adjust the discharge amount of the oil.

▶ Note

- When using biodegradable chain oil, the discharge amount must be a little more than the mineral chain oil. For the adjustment amount, contact the sales agency.
- (a)To increase the discharge amount of the chain oil, turn the chain oil adjustment screw [1] counterclockwise.
- (b)To decrease, turn the chain oil adjustment screw [1] clockwise.



After the adjustment, make sure that the chain oil is discharged before using.

- If the guide bar is adjusted, the consuming amount of the chain oil will increase.
 Then, frequently check the remaining amount of the chain oil in the tank during operation.
- Adjust the adjusting screws depending on the types of trees or branches. If you have any questions, consult the sales agency.

5.2 Before Operation

5.2.1 Greasing for Guide Bar

! CAUTION



Clean the gauge (groove) of the guide bar.

* If they are not cleaned, dust, wood sap, or chain oil becomes hardened, which causes the pole pruner to be unmovable for the next operation.

Sprocket nose type guide bar requires grease for the bearing at the tip of the sprocket.

Greasing the guide bar will reduce the problems of premature wear or excessive damage, maintaining the certain performance, resulting in extension of the service life.

- 1 Remove the guide bar from the pole pruner.

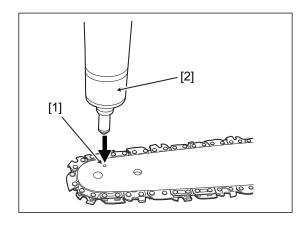
 Refer to "3.1 Installation and Removal of Saw Chain Guide Bar."
- 2 Remove the chips , dust, etc. accumulated in the hole of the chain oil with a thin bar.

▶ Note

- Do not push the chips, dust, etc. in the grease hole.
- 3 Supply lithium heat-resistant grease [2] from the grease fill opening [1].

▶ Note

 If appropriate amount of the grease is applied to the guide bar, the grease comes out a little from the groove of the guide bar. After greasing, wipe off the excessive grease.

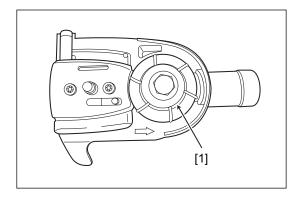


5.2.3 Drive Sprocket Check

- Remove the chain guide bar.
 Refer to "3.1 Installation and Removal of Saw Chain Guide Bar."
- 2 Check the drive sprocket [1] if there is any looseness or abnormal wear.

▶ Note

• If there is a problem, request the sales agency for repair.



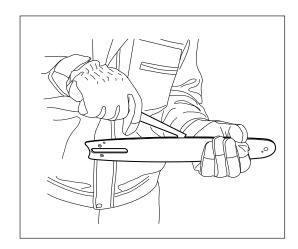
5.3 After Operation

5.3.1 Cleaning and Check of Guide Bar

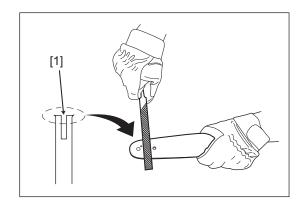
1 Remove the guide bar from the pole pruner.

Refer to "3.1 Installation and Removal of Saw Chain Guide Bar."

2 Remove the chips , dust, etc. accumulated in the hole of the chain oil with a thin bar.



- Remove the chips, dust, etc.
 accumulated in the guide (groove) [1]
 of the guide bar with the bar cleaner
 (separately sold.)
- 4 Check the side face of the guide bar for burrs, etc.



▶ Note

- If any, remove it with a plain file (separately sold.)
- 5 Check the part near the nose or tail for any wear or damage and make sure that the nose sprocket rotates smoothly.

- If it is worn or excessively damaged, replace the guide bar.
- Periodically set the guide bar in the opposite way in the vertical direction to reduce the wear amount of the part near the nose.

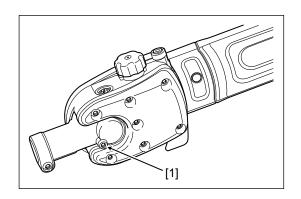
5.4 Every 20 hours or Every 3 months

5.4.1 Greasing for Transmission Case

Greasing must be performed every 20 hours from the grease nipples.

▶ Note

• Use grease of Agip: Lp2 or equivalent.



6. Storing

A DANGER



Store the grease in a place out of reach of children.

Also, put them in a container so that the grease is not spilled and make them distinguished to understand contents.

* When drinking them by mistake, the person will feel physically sick.

MARNING



When storing the attachment with the hook of the pipe cap attached to the pipe, etc., do not pull or swing the attachment.

Or, attach it to the fixed bar having enough strength.

Otherwise, it will fall off, causing a serious injury.



Wear heavy-duty gloves when handling the saw chain.

* Otherwise, hands or fingers could be severed by the saw chain.

A CAUTION



Do not discard grease into the river, the sea, or the ground.

* Otherwise, it could pollute the environment.



When storing the attachment, install the transportation guard to the saw chain.

* Otherwise, it could cause injury to an operator due to contact with the saw chain, or even serious injury by getting contact with the saw chain while the operator is falling down or tumbling.

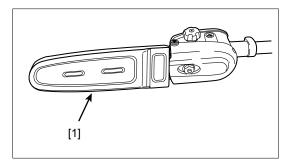
When storing the attachment, store it in the place out of reach of children and animals.

* Otherwise, it could cause injury to an operator due to contact with the saw chain, or even serious injury by getting contact with the saw chain while the operator is falling down or tumbling.

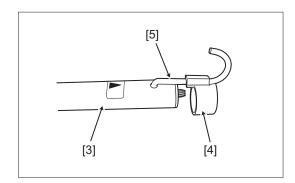
When finishing the operation and storing the pole pruner, follow the procedure below.

For works after the powerhead operation is completed or storing method, refer to the powerhead manual.

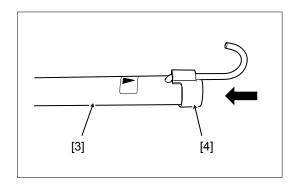
- Remove the attachment from the powerhead.
- Put on gloves.
- 3 Check if the saw chain is not damaged.
- Install the transportation guard [1].



Insert the hook [5] of the pipe cap [4] into the hole of the shaft tube [3].



6 Insert the pipe cap [4] into the shaft tube [3].



7 Remove the saw chain and guide bar, and then clean the guide bar. Wipe off the dirt with a cloth, etc.

Refer to "5.3.1 Cleaning and Check of Guide Bar" for details.

- Be sure to clean the saw chain and gauge of the guide bar.
 If they are not cleaned, dust, wood sap, or chain oil becomes hardened, which causes the pole pruner to be unmovable for the next operation.
- Clean the attachment. Wipe off dust, etc. with a cloth, etc.
- Discharge the chain oil from the chain oil tank.
- **↑** Store the pole pruner in the following place.
 - (a) Locked place
 - (b) High place out of reach of children and other unauthorized person
 - (c) Dried and cool dark plac

7. Waste Disposal

For disposal, observe the standards and regulations of your region. If there is any question, contact the sales agency.

8. Troubleshooting

In case of failure, follow the table below.

A DANGER



When troubleshooting, stop the engine and then remove the attachment from the powerhead.

* If the engine starts during the work, hands or fingers could be severed by the moving parts or saw chain.

Phenomena	Causes	Measures		
The pole pruner does not start.	Fuel runs out or fails.	Refuel or replace the fuel by reference to the powerhead manual		
	Engine fails.	Refer to the powerhead manual.		
	Start/stop switch is off.	Turn on the start/stop switch to start.		
Output is not	Throttle wire adjustment is faulty.	Adjust by referring to the powerhead manual.		
enough.	Engine fails. Refer to the powerhead manual.			
	Saw chain is worn.	Adjust by referring to 5.1.2.		
Vibration is too	Poor balance of attachment	Contact the sales agency.		
large.	Mis-installation of attachment	Check the installed status		
	Connection of Split Attachment is loose.	Contact the sales agency.		
	Saw chain is worn or the tension applied is not appropriate.	Adjust by referring to 3.1.1 and 5.1.2.		
	Shaft tube is bent.	Contact the sales agency.		
Exhaust sound is too large.	Engine fails.	Refer to the powerhead manual.		
Blade is blunt.	Saw chain is worn.	Adjust by referring to 5.1.2.		
Saw chain does not stop even if the engine speed is reduced.	Engine fails.	Refer to the powerhead manual.		
Saw chain does not move even if	Split engine is insufficiently inserted into the joint case.	Connect again by referring to 3.2.2.		
the engine speed	Shaft tube is broken.	Contact the sales agency.		
is increased.	Failure inside the clutch housing of the split engine	Contact the sales agency.		
	Gear is worn.	Contact the sales agency.		
The pole pruner does not stop.	Engine fails.	Refer to the powerhead manual.		

9. Service after Sales

For repair, handling method or cleaning, contact the sales agency.

■ When Requesting for Repair

If there is any problem, try finding the cause and take measures according to "8. Troubleshooting". If it does not solve the trouble, contact the sales agency.

■ Contact for Repair

Contact the sales agency from which you purchased the pole pruner for repair.

Record serial No. (See "2.4 Position of Model Code and Serial No.") in the space below. You will need this serial No. when ordering parts, and when making technical or warranty inquiries.

Required information			
Name of product	Pole pruner attachment		
Model code & Serial No.	SPPE -		
	SPPU -		
Purchased date			
Sales agency which you purchased from			
Faulty condition	(Explain as much detail as possible.)		

10. Technical data

		Model	SSPP (Europe)		SSPP (Australia)	
		Powerhead	UMC425E	UMC435E	UMC425U	UMC435U
		Handle	LOOP	LOOP	LOOP	LOOP
-	Mass (without cutting attachment , guard and powerhead)	kg	kg 1.5		1.6	
a)	Length (without cutting attachment , guard and powerhead)	mm	785		785	
		Front m/s ²	4.4	5.6	-	-
	Measured vibration levels	Uncertainty	2.2	2.3	-	-
	(in accordance with EN ISO 22867) Applies to Europe only	Rear m/s ²	4.4	4.3	-	-
b \		Uncertainty	2.2	2.1	-	-
b)		Front m/s ²	4.1	5.6	-	-
	Measured vibration levels (in accordance with EN ISO 22867)	Uncertainty	2.0	2.3	-	-
	Use with SSES-L(Extension Pipe) Applies to Europe only	Rear m/s ²	6.5	4.3	-	-
		Uncertainty	2.6	2.1	-	-
->	Measured sound pressure level (in accordance with 2006/42/EC)	dB(A)	90	90	-	-
c)	Applies to Europe only	Uncertainty	1	2	-	-
۵/	Measured sound power level	dB(A)	104	105	-	-
d)	(in accordance with 2000/14/EC) Applies to Europe only	Uncertainty	1	2	-	-
e)	Sound power level Australia New South Wales standard Applies to Australia only	dB	-	-	72	75

EC Declaration of Conformity (Applies to Europe only)

Manufacturer NINGBO LIHAO MACHINERY CO.,LTD.

Address NO.408, SONGHUAJIANG ROAD BEILUN, NINGBO 315800

Country CHINA

Type Pole Pruner Attachment

Model SSPP

Serial No. SPPE-1000001 ~

Declare, that the following machinery complies with all the essential health and safety Requirements of the EC Directive.

2006/42/EC 2004/108/EC

2000/14/EC amended 2005/88/EC

The following standards have been applied

EN ISO 12100:2010 EN ISO 11680-1:2011 EN ISO 14982:2009

Approved Powerhead

UMC425E UMC435E

Guaranted sound power level (in accordance with 2000/14/EC)

Use with UMC425E 105 dB(A) Use with UMC435E 107 dB(A)

Issued at: Hiroshi Sugimoto, China

on October 1st 2012

Name and position of the person that signs: Hiroshi Sugimoto

President

Manufacturer's signature

H. Sugimoto

Person authorised to complie the technical file

Honda Motor Europe Ltd. Aalst Office

Wijngaardveld 1 (Noord V), 9300 Aalst

BELGIUM

SPPE-OM-001

October, 2012