

SAFETY AND OPERATING MANUAL

Should you experience any issues with this Titan product, please do not return it to Store. Please contact the Titan 2 Stroke Helpline on: 0333 2000 339

Original instructions (Version 1.0_201508)

Congratulations on your purchase of a **TITAN** power tool from Titan Power Tools (UK) Ltd. We want you to continue getting the best performance from it so this handbook includes information on safety, handling and care. Please retain this handbook in case you need to refer to any of the information in the future

Your **TITAN** power tool comes with a 1-year guarantee. Should it develop a fault within this period please do not return it to Store. Please contact the Titan 2 Stroke Helpline on: 0333 2000 339 in the first instance.

GUARANTEE

This **TITAN** product carries a guarantee of 1 year. If your product develops a fault within this period, you should, in the first instance contact: 0333 2000 339 (Mon – Fri : 09.00 – 17.00)

This guarantee specifically excludes losses caused due to:

- Fair wear and tear
- Misuse or abuse
- Lack of routine maintenance
- Failure of consumable items (such as batteries)
- Accidental dammage
- Cosmetic damage
- Failure to follow manufacturer's guidelines
- Loss of use of the goods

This guarantee does not affect your statutory rights. This guarantee is only valid in the UK.

For any enquiries relating to the guarantee please refer to your retailer.

Should you experience any issues with this Titan product, please do not return it to Store. Please contact the Titan 2 Stroke Helpline on: 0333 2000 339

SAFETY INSTRUCTIONS



Warnings! Read this instruction carefully before operating this tool. Make sure that you are familiar with the controls and properly operate the machine. Following this instructions, you can reduce the risk of fire, electric shock and personal injury.

GENERAL SAFETY INSTRUCTIONS

- 1. This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the product by a person responsible for their safety.
- 2. Children should be supervised to ensure that they do not play with the product.

IMPORTANT Read carefully before use Keep for future reference

- 1. Read the instructions carefully. Become familiar with the instruction manual before attempting to operate the product.
- 2. Never allow children or people unfamiliar with these instructions to use the product. Local regulations can restrict the age of the operator.
- 3. Never operate the product while people, especially children, or pets are nearby.
- 4. Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.

Preparation

- 1. This product can cause serious injuries. Read the instructions carefully for the correct handling, preparation, maintenance, starting and stopping of the product. Become familiar with all controls and the proper use of the product.
- 2. Never allow children to use this product.
- 3. Avoid operating while people, especially children, are nearby.
- 4. Dress properly! Do not wear loose clothing or jewellery, which can be caught in moving parts. Use of sturdy gloves, non-skid footwear and safety glasses is recommended.
- 5. Use extra care when handling fuels. They are flammable and the vapours are explosive. The following points should be observed.

- Use only an approved container.
- Never remove the fuel tank cap or add fuel with the power source running. Allow engine and exhaust components to cool down before refuelling.
- Do not smoke, when operating fueling or starting this machine.
- Never refuel indoors or in confirmed spaces.
- Never store the product or fuel container inside where there is an open flame, such as near a water heater.
- If fuel is spilled, do not attempt to start the product, but move it away from the area of spillage before starting.
- Always replace and securely tighten the fuel tank cap after refuelling.
- Drain fuel outdoors only.

PRUNER SAFETY INSTRUCTIONS

- 1.Do not overwork yourself. Take regular breaks to ensure concentrated work and full control over the product. A moment of inattention while operating the product may result in serious personal injury.
- 2. Keep all parts of the body away from the saw chain. Do not remove cut material or hold material to be cut when saw chain is moving. Make sure the product is switched off when clearing jammed material. A moment of inattention while operating the product may result in serious personal injury.
- 3. Hold the product by insulated gripping surfaces only, because the saw chain may contact hidden wiring. Saw chains contacting a "live" wire may make exposed metal parts of the product "live" and could give the operator an electric shock.
- 4. Keep all parts of the body away from the saw chain when the product is operating. Before you start the product, make sure the saw chain is not contacting anything. A moment of inattention while operating this product may cause entanglement of your clothing or body with the saw chain.
- 5. Always hold the product with your right hand on the rear handle and your left hand on the front handle. Holding the product with a reversed hand configuration increases the risk of personal injury and should never be done.
- 6. Wear safety glasses and hearing protection. Further protective equipment for head, hands, legs and feet is recommended. Adequate protective clothing will reduce personal injury by flying debris or accidental contact with the saw chain.
- 7. Do not operate the product in a tree. Operation of a product while up in a tree may result in personal injury.
- 8. Always keep proper footing and operate the product only when standing on fixed, secure and level surface. Slippery or unstable surfaces such as ladders may cause a loss of balance or control of the product.
- 9. When cutting a limb that is under tension be alert for spring back. When the tension in the wood fibres is released the spring loaded limb may strike the operator and/or throw the product out of control.
- 10. Use extreme caution when cutting brush and saplings. The slender material may catch the saw chain and be whipped toward you or pull you off balance.

- 11. Carry the product by the front handle with the product switched off and away from your body. When transporting or storing the product always fit the guide bar cover. Proper handling of the product will reduce the likelihood of accidental contact with the moving saw chain.
- 12. Follow instructions for lubricating, chain tensioning and changing accessories. Improperly tensioned or lubricated chain may either break or increase the chance for kickback.
- 13. Keep handles dry, clean, and free from oil and grease. Greasy, oily handles are slippery causing loss of control.
- 14. Cut wood only. Do not use the product for purposes not intended. For example: do not use the product for cutting plastic, masonry or non-wood building materials. Use of the product for operations different than intended could result in a hazardous situation.
- 15. Pay attention to national and local regulations. National and local regulations may restrict the use of this product.
- 16. Remove branches in sections.
- 17. Beware of dangerous operating positions as well as of the risk of being struck by falling branches or by those that rebound after hitting the ground.
- 18. Beware of overhead power lines. Do not use the product in any position that causes any part to come within 10m of overhead electrical lines.
- 19. Never cut in areas where the cutting attachment is out of sight.

SYMBOLS



Warning



Read the instruction manual



Wear ear protection



Wear eye protection



Wear respiratory protection



Wear safety helmet!



Wear face protection!



Gloves with saw protection



Wear safety footwear



Wear protective clothing



Risk of long hair being drawn into air inlet.



Risk of loose clothing being drawn into air intake.



Always beware of the danger from overhead electric-power line, keep a safe distance at least 15M from the power line.



Warning! Switch the product off and disconnect the spark plug connector before assembly, cleaning, adjustments, maintenance, storage and transportation.



Risk of fire / flammable materials



Naked flames in the work area, around the product and in the vicinity of flammable materials are prohibited!



Do not smoke in the work area, around the product and in the vicinity of flammable materials!



Contact of the guide bar tip with any object should be avoided.



Correct direction of cutting-teeth.

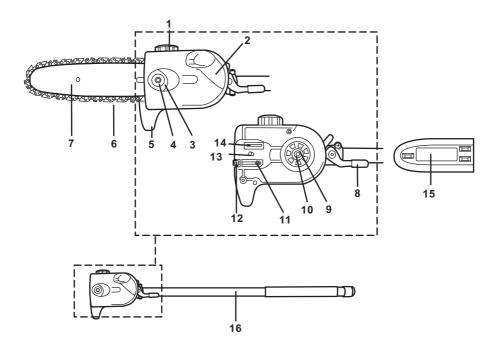


Refill chain oil

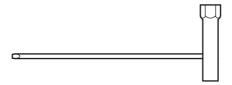


Do not touch the cutting device until it stops completely.

Pruner



Tool



Pruner

1.	Chain oil tank cap
2.	Cover
3.	Locking nut
4.	Spring washer
5.	Pivot
6.	Saw Chain
7.	Guide bar
8.	Locking lever
9.	Clutch
10.	Drive sprocket
11.	Tension pin
12.	Tension screw
13.	Bolt
14.	Oiling port
15.	Guide bar cover
16.	Pruner shaft

Tool

Multi tool: Socket wrench / slotted screw driver

TECHNICAL DATA

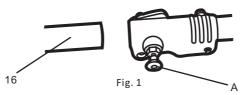
PRUNER

Chain oil tank	150 ml
Saw chain speed	21 m/s
Max. cutting length	180 mm
Guide bar length	203 mm
Guide bar type	552912
Saw chain type	91PJ033X
Chain pitch	9.525 mm (3/8")
Chain gauge (thickness of drive links)	1.27 mm (0.050")
Drive sprocket (teeth and pitch)	7 teeth x 9.525 mm(3/8")

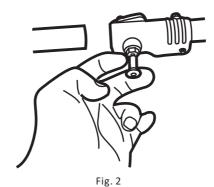
ASSEMBLY INSTRUCTIONS

Pole Pruner attachment assembly

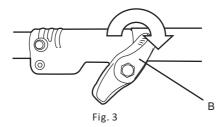
- a). Remove the protection cap from the pruner shaft.
- b). Align the extension with the clamp so that the hole in the extension is orientated to the locking pin(A). (See Fig. 1)



c). Pull out the locking pin and insert the extension into the clamp. Release the locking pin and ensure it engages in the hole. (See Fig. 2)



d). Secure the connection by tightening the locking knob(B) clockwise. (See Fig. 3)



NOTE: Fit the pruner shaft (16) directly to the upper shaft if no pole extension is required. Fit the pole extension to the upper shaft if required, and then fit the pruner shaft to the pole extension.

Saw chain tensioning

Always check the saw chain tension before use, after first cuts and regularly during use, approx. every five cuts. After initial operation, new chains can lengthen considerably. This is normal during the break-in period and the interval between future adjustments will lengthen quickly.



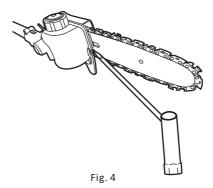
WARNING! Always switch the product off and disconnect the spark plug connector before adjusting the saw chain tension!

The cutting edges of the saw chain are sharp. Always wear protective gloves when handling the chain!

Always maintain proper chain tension! A loose chain increases the risk of kickback! A loose chain may jump out of the guide bar groove! This may injure the operator and damage the chain! A loose chain will cause rapid wear to the chain, guide bar and sprocket!

Tensioning the chain too tightly will overload the engine and cause damage, and insufficient tension can cause chain derailing, whereas a correctly tightened chain provides the best cutting characteristics and prolonged working life! The chain life

- a). Lift up the tip of the guide bar (7) and keep it there as you adjust the tension.
- b). Turn the tension screw (12) clockwise until the chain "tie straps" are just touching the bottom edge of the guide bar (7). (See Fig. 4)



c). Check the chain tension using one hand to lift the saw chain (6) against the weight of the product. The correct chain tension is achieved when the saw chain can be lifted by approx. 2-4mm from the guide bar (7) in the centre. (See Fig. 5, 6)

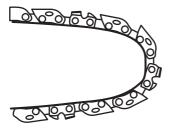


Fig. 5

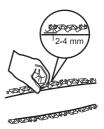


Fig. 6

d). Turn the locking nut (3) to tighten the cover (2) completely.

Filling Chain Oil Tank

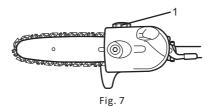


WARNING! The product is not filled with chain oil. It is essential to fill the product with chain oil before using it! Never operate the product without chain oil as this will result in extensive damage to the product!

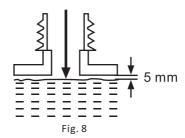


Operating the saw chain dry or with too little chain oil will decrease cutting efficiency, shorten the product life span and cause rapid wear to the saw chain and guide bar from overheating! Insufficient chain oil is evident by smoke or bar discoloration! Adequate lubrication of the saw chain during cutting operations is essential to minimise friction with the guide bar!

a). Set the product on any suitable surface with the chain oil tank cap (1) facing upwards. (See Fig. 7)



- b). Unscrew and remove the tank cap (1), then add the lubricant into the tank. We recommend using environmentally-friendly chain oil specifically intended to be used with this product.
- c). Use a proper funnel with a filter to prevent debris entering the tank and to avoid spilling and overfilling the tank. Do not overfill and leave approximately 5 mm of space to the lower edge to allow the lubricant to expand. (See Fig. 8)



d). Wipe up spilled fuel with a soft cloth and refit the chain oil tank cap (1).

NOTE: Always dispose of lubricant, used oil and objects contaminated with them in accordance with local regulations.

Checking Chain Lubrication



WARNING! Check the chain lubrication before each use.

NOTE: This product is equipped with an automatic oiling system! The oiling system automatically delivers the proper amount of oil to the bar and chain! Checking the lubrication requires starting the engine. Before checking the product must be fully assembled and all instructions must have been read.

- a). Make sure the guide bar (7) and the saw chain (6) are in place when you check the oil delivery.
- b). Start the engine; keep it running at medium power and check if the chain oil is delivered as shown in the figure. (See Fig. 9)

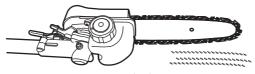


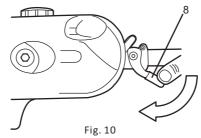
Fig. 9

OPERATION INSTRUCTIONS

1. Angle adjustment

Adjust the attachment angle continuously to fit the growth of the plant.

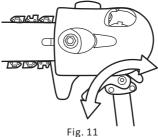
a). Press the locking lever (8) downward and hold it in position. (See Fig. 10)



b). Adjust the pruner head to required position and then release the locking lever (8). (See Fig. 11)



WARNING! Ensure the locking lever returns to its initial position! To test if the unlock lever is properly engaged try to move the pruner head! It may not be possible to adjust the angle!



2.Kickback



WARNING! Beware of kickback! Kickback can lead to dangerous loss of control of the product and result in serious or fatal injury to the operator or anyone standing close by! Always be alert because rotational kickback and pinch kickback are major product operational dangers and the leading cause of most accidents!

- a). Kickback is the sudden backward/upward motion of the product, occurring when the chain (at the tip of the chain bar) comes in contact with a log or wood, or when the chain becomes jammed.
- b). When kickback occurs the product reacts unpredictably and can cause severe injuries to the operator or bystanders.
- c). With a basic understanding of 'kickback', the element of surprise can be reduced or eliminated. Sudden surprise contributes to the majority of accidents.

d). You should read all the safety warnings and user instructions carefully before attempting to operate this product.

To avoid kickback:

- Never work with a loose, overstretched or worn out chain
- Ensure chain is sharpened correctly
- Never work with the tip of the guide bar
- Always hold the tool firmly with both hands
- Always use a low kickback chain
- Ensure correct chain tension

3.Pruning

a). Always hold the product firmly with both hands on gripping surface and handle grip Never operate this product using only one hand. (See Fig. 12)



Fig. 12

- b). Maintain a firm grip with your thumbs and fingers encircling the handles. A firm grip will help you reduce 'kickback' and maintain control of the product.
- c). Always hold the product at an angle of not more than 60° from the horizontal level. Otherwise safe operation is not possible. (See Fig. 13)

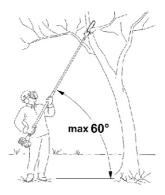


Fig. 13

- d). Never stand directly under the limb you are sawing. Objects may fall different than expected. Always position yourself out of the path of falling limps. (See Fig. 14a)
- e). Keep other persons away from cutting end of product and at a safe distance from the work area. Maintain a minimum distance of 15 m to bystanders. (See Fig. 14b)

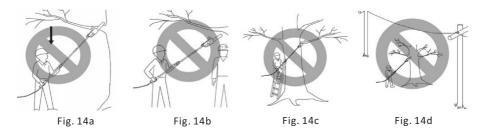


WARNING! Never climb into a tree to prune! Do not stand on ladders, platforms, logs, or in any position which may cause you to lose your balance or control of the product! When pruning trees, it is important not to make the flush cut next to main limb or trunk until you have cut off the limb further out to reduce the weight! This prevents stripping the bark from the main member!

f). Never stand on a ladder or other type of unstable support while using the product. Insecure stand invites hazards. (See Fig. 14c)



WARNING! This product has not been designed to provide protection from electric shock in the event of contact with overhead electric lines! Therefore do not use product near cable, electric power or telephone lines. Keep a minimum distance of 15 m to all electric lines. (See Fig. 14d)



- g). Use the product only with secure footing. Hold the product at the right-hand side of your body.
- h). Do not operate the product with arms fully extended or attempt to cut areas which are difficult to reach.
- i). Keep a firm, steady pressure on the product while working with it. Do not try to force the product through the wood, let the cutting device do the work, using the gripping teeth to apply minimal leverage pressure.
- j). Beware when reaching the end of the cut. The weight of the product may change unexpectedly as it cuts free from the wood. Accidents can occur to the legs and feet. Always remove the product from a wood cut while it is running.

NOTE: The chain must be running at full speed before it comes into contact with the wood.

4. Cut thin branches

Thin branches can be cut off with one single cut. To prevent the branch from slivering and buckling the branch should be cut off in several pieces. (See Fig. 15)



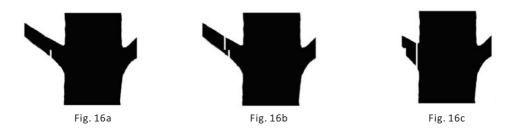
Fig. 15

5. Cut thick branches

When cutting larger branches, three cuts are necessary as shown below:

NOTE: Remove the branches lying on the floor regularly to avoid stumbling hazards. Check the oil level regularly and fill up if necessary. Switch the power off and disconnect from power source when leaving the product.

- a). First cut into the branch from below, outside of the location where you intend to cut off the branch. The cut should go one third to halfway through the branch. (See Fig. 16a)
- b). Cut into the branch from the top, outside from where the branch is to be sawn. (See Fig. 16b)
- c). Last, cut off the stump with one clean cut from top to bottom. You might want to seal the cut with a suitable compound. (See Fig. 16c)



d). You might want to seal the cut with a suitable compound.

NOTE: Remove the branches lying on the floor regularly to avoid stumbling hazards. Check the oil level regularly and fill up if necessary. Switch the power off and disconnect from power source when leaving the product.

MAINTENANCE

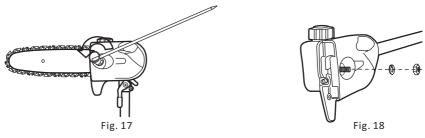
1. Replace chain and guide bar

1). Use only the guide bar (7) and saw chain (6) according to the technical data of the product.

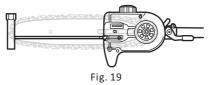


WARNING! Always use a saw chain designed as "low-kickback" or a saw chain which meets the low-kickback requirements! A standard saw chain (a chain which does not have the kickback reducing guard links) should only be used by an experienced professional operator! Nevertheless, a low-kickback saw chain does not completely eliminated kickback! A low-kickback or "safety" chain should never be regarded as complete protection against injury!

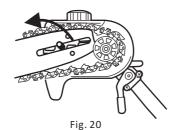
- 2). Place the product on a suitable flat surface with the cover (2) facing upwards.
- 3). Loosen locking nut (3) with the socket wrench anticlockwise and remove it together with the spring washer (4) and cover (2). (See Fig. 17, 18)



4). Turn the tension screw (12) clockwise with the slotted screwdriver and make sure the tension pin(11) is adjusted to its closer position. (See Fig. 19)



5). Take off the guide bar and chain. (Fig. 20)



6). Ensure that the tension pin (11) is adjusted to its far right position before assembly the checked or the new chain and guide bar. If not, turn the tension screw (12) anticlockwise with the slotted screwdriver. (See Fig. 21)



Fig. 21

- 7). Spread the saw chain (6) around the guide bar (7). Slide the chain into the groove around the guide bar. Pay attention to the cutting direction.
- 8). Align the saw chain around the drive sprocket (10) and place one corner of the guide bar into a gap of the sprocket. (See Fig. 22)



WARNING! The direction of the saw chain 'cutters' must be as indicated by the arrow on the pruner head!



Fig. 22

9). Make sure the tension pin (11) is inserted into the lower hole on the guide bar. (See Fig. 23)

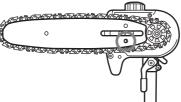


Fig. 23

10). Put it together with the spring washer (4) and cover (2), and tighten locking nut (3) with the socket wrench clockwise . (See Fig. 24a, 24b)

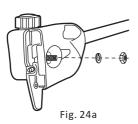


Fig. 24b

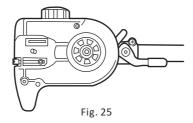


NOTE: The saw chain (6) has not yet been tensioned. Tension the chain as described under "*Saw chain tensioning*". After operating the product for approx. 30min, adjust the chain

2. GUIDE BAR

Most guide bar problems can be prevented merely by keeping the product well maintained. Incorrect filling and non-standard cutter and depth gauge settings are the causes of most guide bar problems, primarily resulting in uneven bar wear. As the bar wears unevenly, the rails widen, which may cause the chain to clatter and make it difficult to complete straight cuts. If the guide bar is insufficiently lubricated and the product is operated with a saw chain which is too tight, this will contribute to rapid bar wear. To help minimise bar wear, maintenance of the guide bar as well as the saw chain is recommended.

- 1). Disassemble the guide bar and saw chain in reversed order from assembly.
- 2). Check the oiling port (14) for clogging and clean if necessary to ensure proper lubrication of the guide bar and saw chain during operation. Use a soft wire small enough to insert into the oil discharge hole. (See Fig. 25)



NOTE: The condition of the oil passages can be easily checked. If the passages are clear, the chain will automatically give off a spray of oil within seconds of the product starting. Your product is equipped with an automatic oiling system.

- 3). Check the drive sprocket (10). If it is worn or damaged due to strain, have it replaced by an authorised service agent.
- 4). Clear residue from the rails on the guide bar (7) using a screwdriver, putty knife, wire brush or other similar tool. This will keep the oil passages open to provide proper lubrication to the guide bar (7) and saw chain (6). (See Fig. 26)



5). Check the guide bar 'rail' for wear: Hold a ruler (straight edge) against the side of the guide bar and 'cutter side plates'. If there is a gap between the ruler and guide bar the guide bar 'rail' is normal. If there is no gap (ruler flush against the side of the guide bar) the guide bar 'rail' is worn and needs to be replaced with a new one of the same type. (See Fig. 27)

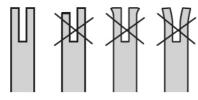


Fig. 27

- 6). Turn the guide bar 180° to allow even wear, thereby extending the life span of the guide bar (7).
- 7). Check the saw chain for possible wear and damages. Replace it with a new one if required. Experienced user can sharpen a dull saw chain (see section "Saw chain sharpening" below).
- 8). Refit the saw chain (6) and the guide bar (7) as described under "Assembly".

3.SAW CHAIN SHARPENING



WARNING! Only sharpen the saw chain yourself if you are trained and have experience! Use proper tools to sharpen the saw chain!

NOTE: Never saw with a blunt chain. The saw chain is blunt if you have to push the product into the tree and the chips are very small.

- 1). Have the saw chain (6) sharpened professionally at an authorised service centre or sharpen the chain yourself by using a suitable sharpening kit. Also observe the sharpening instructions supplied with the sharpening kit.
- 2). The height difference between the tooth and the ridge is the cutting depth. When sharpening the saw chain (6) you have to consider the following points. (See Fig. 28)
- File angle
- Cutting angle
- File position
- Diameter of round file
- File depth

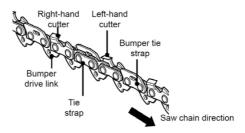
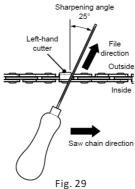


Fig. 28

- 3). To sharpen the chain proceed as follows:
- Use protective gloves.
- Ensure the chain is correctly tensioned.
- Engage the chain brake to lock the chain on the bar.
- 4). Use a suitable file, whose diameter is 1.1 times the cutting tooth depth. Make sure 20% of the file diameter is above the cutter's top plate.
- 5). A file guide is available from most reputable tool merchants and is the easiest way to hold the file at the correct position.
- 6). File at an angle perpendicular to the bar, and at an angle of 25° to the direction of travel. (See Fig. 29)



- 7). File each tooth from the inside towards outside only. File one side of the chain first than turn the saw around and repeat the process.
- 8). Sharpen each tooth equally by using the same number of strokes.
- 9). Keep all cutter lengths equal. Check the safety depth gauge height every 5 sharpenings. If the depth gauges are also trimmed it is essential that the original profile be restored.
- 10). Use a depth gauge measuring instrument to check the height of the depth gauge. Depth gauge measuring jigs are available from most reputable tool merchants. (See Fig. 30)

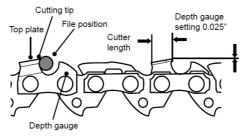


Fig. 30

Store the Tools

- 1). Remove and clean the saw chain and guide bar, spray with corrosion inhibiting oil.
- 2). If you use biological chain and bar lubricant completely fill the chain oil tank.
- 3). If the Tool is stored separately, fit the protective cap on the drive tube to avoid dirt getting into the coupling.
- 4). Store the machine in a dry, high or locked location out of the reach of children and other unauthorised persons.



Declaration of Conformity

We, Importer
Titan Power Tools (UK) Ltd
Trade house, Mead Avenue, BA22 8RT

Declare that the product:

Designation: Pole Pruner Attachment

Model: TTL650GDO

Standards and technical specifications referred to:

EN ISO 11680-1:2011

Authorised signatory and technical file holder

Date: 20/08/2015

Signature:

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