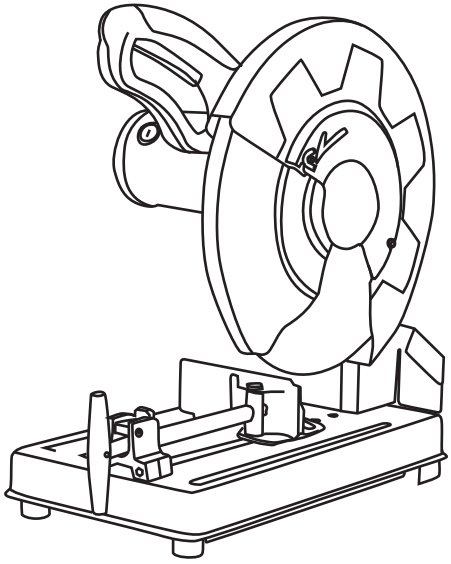
TITAN®

2000W Cut-off Saw



TTB599BNS

Barcode: 5052931310319

WARNING! Read the instructions before using the product!

Original Instructions_MNL_TTB599BNS_GB_V01_130720

TITAN®

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 2 year guarantee, so should it develop a fault within this period contact your retailer.

GUARANTEE

This TITAN product carries a 2 year guarantee. If your product develops a fault within this period, you should, in the first instance contact the retailer where the item was purchased.
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 damage
- 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.

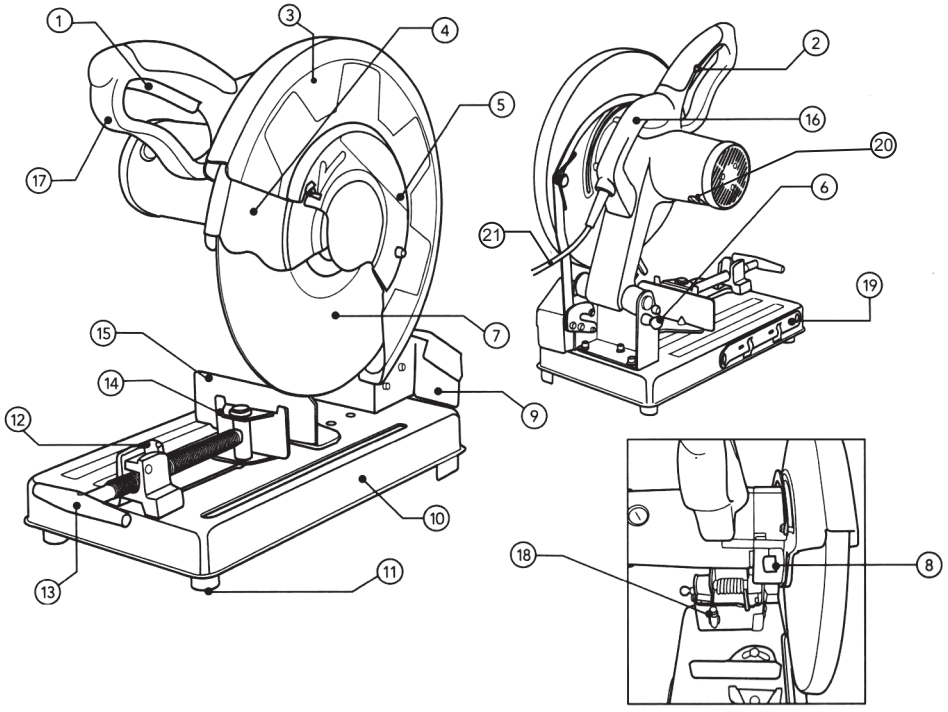
Let's **get started…**

These instructions are for your safety. Please read through them thoroughly before use and retain them for future reference.

Getting **started...** 03

In more **detail...** 16

Your product



1. Trigger switch
2. Lock-off button
3. Upper guard
4. Lower guard
5. Blade access cover
6. Lock down pin
7. Cutting disc
8. Spindle lock button
9. Rear spark deflector
10. Base
11. Rubber feet
12. Quick release vice lock
13. Vice handle
14. Vice
15. Fence
16. Carry handle
17. Main handle
18. Depth stop
19. Double ended spanner (17mmx13mm)
20. Carbon brush
21. Cable&plug

Technical specifications

General

- > **Input Voltage** : 230-240V~50Hz
- > **Power Input** : 2000W
- > **No-load speed:** : 3000min^{-1}
- > **Cutting wheel size** : Φ355mm×3.2mm
- > **Max. Cutting Capacities** : @90°- 100mm, @45°- 70mm
- > **Min. Cutting size of workpiece** : Φ10×100mm
- > **Arbour Size** : Φ25.4mm
- > **Base Size** : 455mm×254mm
- > **Cutting Angle Capacity** : 0-45° Left, 0-30° Right
- > **Net Weight** : 18.5kg

Sound level according to EN 61029-1	Sound pressure level L_{pA} : 94.3dB(A)
	Sound power level L_{WA} : 107.3dB(A)
	Uncertainty K_{pA}, K_{WA} : 3dB(A)

VIBRATION

The European Physical Agents (Vibration) Directive has been brought in to help reduce hand arm vibration syndrome injuries to power tool users. The directive requires power tool manufacturers and suppliers to provide indicative vibration test results to enable users to make informed decisions as to the period of time a power tool can be used safely on a daily basis and the choice of tool.
Further Advice can be found at www.hse.gov.uk

Vibration total values (triax vector sum) determined according to EN 61029:	
Work mode description 1 (if required by the relevant Part 2)	Vibration emission value a_h <2.5m/s^{22}
	Uncertainty K = 1.5m/s^2

The declared vibration emission value should be used as a minimum level and should be used with the current guidance on vibration.
Calculating the actual period of the actual period off use can be difficult and the HSE website has further information.

The declared vibration emission been measured in accordance with a standardised test stated above and may be used to compare one tool with another.
The declared vibration emission value may also be used in a preliminary assessment of exposure.

Warning! The vibration emission value during actual use of the power tool can differ from the declared value depending on the ways in which the tool is used dependant on the following examples and other variations on how the tool is used:
How the tool is used and the materials being cut or drilled.
The tool being in good condition and well maintained.
The use the correct accessory for the tool and ensuring it is sharp and in good condition.
The tightness of the grip on the handles.
And the tool is being used as intended by its design and these instructions.

This tool may cause hand-arm vibration syndrome if its use is not adequately managed

Warning! identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).Note The use of other tools will reduce the users' total working period on this tool.

Helping to minimise your vibration exposure risk.
ALWAYS use sharp chisels, drills and blades.
Maintain this tool in accordance with these instructions and keep well lubricated (where appropriate)
Avoid using tools in temperatures of 10ºC or less.
Plan your work schedule to spread any high vibration tool use across a number of days.
Health Surveillance
All employees should be part of an employer's health surveillance scheme to help identity any vibration related diseases at an early stage, prevent disease progression and help employees stay in work.

Important note

Remove the mains plug from socket before carrying out any adjustment or servicing.
Ensure your mains supply voltage is the same as your tool rating plate voltage.

Symbols

On the product, the rating label and within these instructions you will find among others the following symbols and abbreviations.
Familiarise yourself with them to reduce hazards like personal injuries and damage to property.

V~	Volt	Hz	Hertz
W	Input power	kg	Kilogram
m/min	Metres per minute	dB(A)	Decibel (A-rated)
min^{-1}	Per minute	ø	Diameter

yyWxx Manufacturing date code; year of manufacturing (20yy) and week of manufacturing (Wxx);


Caution / Warning.


Wear hearing protection.


Read the instruction manual.


Wear eye protection.


Wear gloves.


Wear respiratory protection.


Switch the product off and disconnect it from the power supply before assembly, cleaning, adjustments, maintenance, storage and transportation.


The product complies with the applicable European directives and an evaluation method of conformity for these directives was done.


WEEE symbol. Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist.
Check with your Local Authority or local store for recycling advice.

Safety warnings

GENERAL SAFETY INSTRUCTIONS


WARNING! To ensure safe operation when using your cut off saw, make sure you follow basic safety principles to reduce risk of personal injury, electric shock and fire. Please read the following instructions prior to operating this product and keep for future use.

SAVE THESE INSTRUCTIONS

1. **Keep the work area clean.**

> Cluttered and dark areas invite accidents.

2. **Consider work area environment.**

> Do not expose power tools to rain. Do not use power tools in damp or wet locations.

> Keep the work area well lit. Do not use tools in the presence of flammable liquids or gases.

3. **Guard against electric shock.**

> Avoid body contact with earthed or grounded surfaces (e.g. pipes, radiators, ranges, refrigerators).

4. **Keep other persons away.**

> Do not let persons, especially children, not involved in the work touch the tool or the extension cord and keep them away from the work area.

5. **Store idle tools.**

> When not in use, tools should be stored in a dry, high or locked up place, out of reach of children.

6. **Do not force the tool.**

> It will do the job better and safer at the rate for which it was intended.

7. **Use the right tool.**

> Do not force small tools to do the job of a heavy-duty tool.

> Do not use tools for purposes not intended, for example, do not use circular saws to cut tree limbs or logs.

8. **Dress properly.**

> Do not wear loose clothing or jewellery, they can be caught in moving parts. Non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.

9. **Use protective equipment.**

> Use safety glasses.

> Use face or dust mask if working operations create dust.

10. **Connect dust extraction equipment.**

> If the tool is provided for the connection of dust extraction and collecting equipment, ensure these are connected and properly used.

11. **Do not abuse the cord.**

> Never yank the tool to disconnect it from the socket. Keep the cord away from heat, oil and sharp edges.

12. **Secure work.**

> Where possible use clamps or a vice to hold the work. It is safer than using your hand.

13. **Do not overreach.**

> Keep proper footing and balance at all times.

14. **Maintain tool with care.**

> Keep cutting tools sharp and clean for better and safer performance. Follow instructions for lubrication and changing accessories.
> Inspect tool cord periodically and if damaged have them replaced by an authorised service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean and free of oil or grease.

15. Disconnect tools.

> When not in use, before servicing and when changing accessories such as blades, bits and cutters, disconnect tools from the power supply.

16. Remove adjusting keys and wrenches.

> From the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.

17. Avoid unintentional starting.

> Ensure switch is in the “off” when plugging in.

18. Use outdoor extension leads.

> When tool is used outdoors, use only extension cords intended for outdoor use and so marked.

19. Stay alert.

> Watch what you are doing. Use common sense. Do not operate tool when you are tired.

20. Check damaged parts.

> Before further use of the tool, it should be carefully checked to determine that it will operate properly and perform its intended function.
> Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part hat is damaged should be properly repaired or replaced by an authorised service centre unless otherwise indicated in this instruction manual. Have defective switches replaced by an authorised service facility. Do not use the tool if the switch dose not turn it on and off.

21. Warning.

> The using of any accessory or attachment other than those recommended in this instruction manual may present a risk of personal injury.

22. Have your tools repaired by qualified person.

> This electrical tool complies with the relevant safety requirements. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

HEALTH ADVICE

Warning! When drilling, sanding, sawing or grinding, dust particles will be produced. In some instances, depending on the materials you are working with, this dust can be particularly harmful to you (e.g. lead from old gloss paint).

You are advised to consider the risks associated with the materials you are working with and to reduce the risk of exposure. You should:
- Work in a well-ventilated area.
- Work with approved safety equipment, such as those dust masks that are specially designed to filter microscopic particles.

ADDITIONAL SAFETY INSTRUCTIONS FOR YOUR TOOLS

WARNING: Do not touch the cut material until it cools or you will burned. Failure to heed this warning will result in serious personal injury.

- always use eye and ear protection when cutting;
- instruction (describe) to use personal protective equipment such as dust mask, gloves, helmet and apron;
- Warning! Do NOT use cutting wheels that are chipped cracked or otherwise defective;
- Inspect the cutting wheel before every use;
- Warning! Do NOT use saw blade.

Power supply

> Before operating the cut-off saw, check the power supply and make sure it meetsthe requirements listed on the nameplate. A substantial voltage drop will cause loss of power and the saw to overheat.

> Common causes of power loss and saw overheating is insufficicnt extension cord size and multiple tools operating from the same power source.

Switch

> To start the tool, completely depress the trigger switch located in the saw handle.

> To stop the tool, release the trigger switch completely.

When operating the cut-off saw

WARNING:

To prevent serious injury:
do not operate with any guard disabled, damaged, or removed. Moving guards must Move freely and close instantly. Bolt must be loose before operation.

> Using the Vise, secure your workpiece and,if necessary, adjust the angle of the cut.
> Raise the Saw by pushing down on it and pulling out the Lock Ball (6).
> Plug the Power Cord into the nearest 230 V~, grounded, electrical outlet. Squeeze the Trigger and press the Safety Button to start the Saw. Allow the Cut-off Wheel to attain full speed for one minute before working and to stop immediately and replace the cutting-off wheel if there is considerable vibration.
> With one hand on the Handle and the other hand clear, slowly bring the Saw down, letting the Saw do the work. Do not apply excessive force.
> If the Cut-off Wheel does not cut all the way through the workpiece, raise the Saw and release the Trigger. Unplug the unit. Wait until the unit comes to a full stop. Remove the workpiece. Set the Depth Bolt to a deeper setting and bring the Saw all the way down to make sure the Cut-off Wheel doesn't contact the Base. If it does contact any part of the Base, re-adjust the depth so it doesn't.
> Do not remove the workpiece until the Cut-off Wheel has stopped moving.
> After use, to prevent accidents, turn off the tool, disconnect its power supply, and lock it down by pushing it down as far as it will go, and then pushing the Lock Ball (6) in after use. Clean, then store the tool indoors out of children's reach.
> Not to use the machine in explosive atmospheres and environments where sparks could cause fire, explosion etc.
> Ensure that ventilation openings are kept clear when working in dusty conditions, including an instruction to first disconnect the machine from the mains supply and to clean the openings by using a soft brush, if it should become necessary to clear dust.
> Wheel continues to rotate after the machine is switched off

Unpack

> Unpack all parts and lay them on a flat, stable surface.
> Remove all packing materials and shipping devices if applicable.
> Make sure the delivery contents are complete and free of any damage. If you find that parts are missing or show damage do not use the product but contact your dealer. Using an incomplete or damaged product represents a hazard to people and property.
> Ensure that you have all the accessories and tools needed for assembly and operation. This also includes suitable personal protective equipment.

CAUTION! Do not lift the saw by the arm that holds the blade. The saw will be damaged.

You will need

(items not supplied)
> Suitable personal protective equipment
> Phillips screwdriver
> Combination square
> 12mm Spanner
> Small C-clamps (2pcs)
> Ruler or measuring tape

(items supplied)
> Cutting disc (fitted)
> Double ended spanner(17mm&13mm)
> Instruction manual

WARNING! Do not connect to power supply until assembly is complete. Failure to comply could result in accidental starting and possible serious injury.

Getting started...

Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Tool Set Up

WARNING!
TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:
Release the Trigger and unplug the tool from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.

TO PREVENT SERIOUS INJURY:
DO NOT OPERATE WITH ANY GUARD DISABLED, DAMAGED, OR REMOVED.Moving guards must move freely and close instantly.

Cut-off saw mouting

1. Please place the product on a level, horizontal bench or work table.
2. If desired, mount the product to a piece of 3mm or thicker plywood.

WARNING! Make sure that the mounting surface is not warped as an uneven surface can cause binding and inaccurate sawing!

> Raise the Saw if it is locked down by pushing down on it and pulling out the lock ball .
> Open the Movable Guard and tighten the Bolt to secure it while working on the Wheel.

Work Piece and Work Area Set Up

> Designate a work area that is clean and well-lit. The work area must not allow access by children or pets to prevent distraction and injury.
> Route the power cord along a safe route to reach the work area without creating a tripping hazard or exposing the power cord to possible damage. The power cord must reach the work area with enough extra length to allow free movement while working.
> Secure loose work pieces using the vise to prevent movement while working:

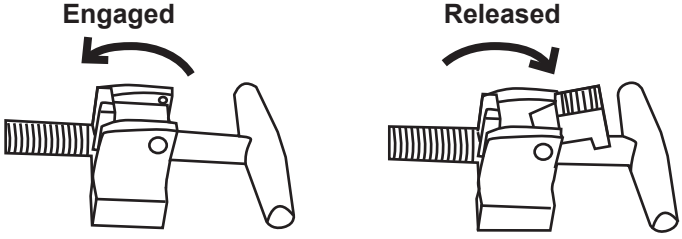


Figure 1: Quick Release Positions

Getting started...

> The cut-off saw is provided with an ON/OFF switch that is located on the handle of the machine.
> To start the saw, push lock-off button (2) first, then push trigger switch (1). To stop it, release Trigger switch (1)

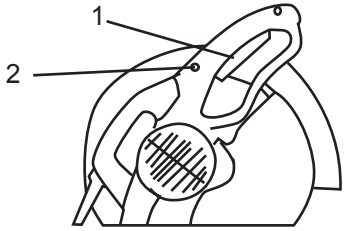


Figure 2: ON/OFF SWITCH

In more detail…

In more detail...

Cutting

WARNING: Do not attempt to cut wood or masonry with this saw. Never cut magnesium or magnesium alloy with this tool. Failure to comply with this waming could result in serious injury

> Secure the tool in place to prevent saw movement or tipping during the cutting procedure.
> Firmly secure the material to be cut using the saws' vise.

WARNING: Large, circular, or irregularly shaped material may require additional means of clamping to be secured in place for cutting. Use C clamps and blocks to hold material securely. Failure to comply could result in serious injury.

> Start the saw by fully depressing the trigger switch and allow the cut-off wheel to come up to full speed before contacting wheel to material.
> Slowly push down the saw arm handle until the cut-off wheel contacts the material being cut. Use a steady and even amount of pressure to obtain a uniform cut. Never force the wheel into the material.
> When the cut is complete, release the trigger switch and allow the wheel to stop before raising it ot the full open position.

DANGER:Do not touch the cut material until it cools or you will be bumed. Failure to heed this waming will result in serious personal injury.

> To use the Quick Release, put the Quick Release tab in the position shown on the in Figure 3 and push the Vise up against the workpiece. Then tighten the Vise Crank. When releasing, loosen the Vise Crank about a turn, lift up the Quick Release, and pull the Vise Crank open.
> To cut at various angles (up to 45°), adjust the Angle Scale by loosening the two Bolts . Adjust the Angle Scale to the desired setting and then tighten the Bolts . To reposition the Angle Scale, remove both of the Bolts , and reattach the
> Angle Scale using the other holes in the Base.

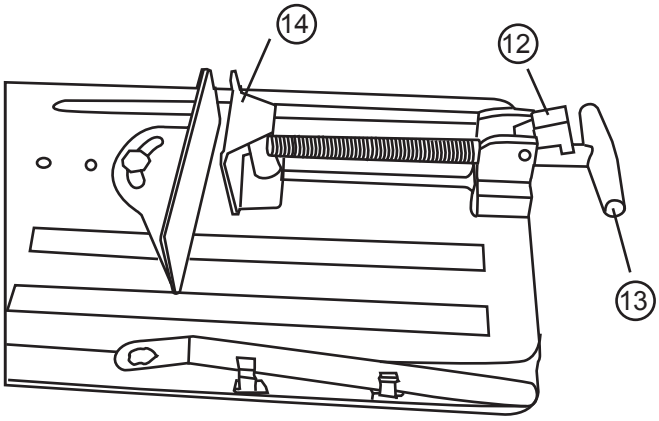


Figure 3: Vise Functions

The golden rules for care

WARNING! Always switch the product off, disconnect it from the power supply and let the product cool down before performing inspection, maintenance and cleaning work!

> Keep the product clean. Remove debris from it after each use and before storage.
> Regular and proper cleaning will help ensure safe use and prolong the life of the product.
> Inspect the product before each use for worn and damaged parts. Do not operate it if you find broken and worn parts.

WARNING! Only perform repairs and maintenance work according to these instructions! All further works must be performed by a qualified specialist!

General operation

> Do not attempt to oil the motor bearings or service the motor's internal parts.
> Switch the product off immediately if you are disturbed while working by other people entering the working area.
> Do not overwork yourself. Take regular breaks to ensure you can concentrate on the work and have full control over the product.

After use

> Switch the product off, disconnect it from the power supply and let it fully cool down before storing.
> Store the product and its accessories in a dry, frost-free place.
> Always store the product in a place that is inaccessible to children.

Lubrication points

> Vise screw shaft
> Front vise clamp rotation clamp

Remove the brush caps at regular intervals to check the carbon brushes. When the brushes are worn to the standard line,as indicated on the brush, go to after-service and replace them.

Plug replacement

If you need to replace the fitted plug then follow the instructions below.
Important
The wires in the mains lead are coloured in accordance with the following code:
Green & yellow - Earth
Blue - Neutral
Brown - Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows.
The wire which is coloured **green & yellow** must be connected to the terminal which is marked with **E** or ⏚.
The wire which is coloured **blue** must be connected to the terminal which is marked with N. The wire, which is coloured brown, must be connected to the terminal, which

is marked with the letter **L**.

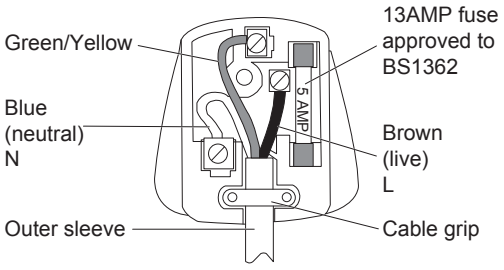


Fig. 4

Warning: Never connect live or netutral wires to the earth terminal of the plug. Only fit an approved 13 Amp BS1363/A plug and the correct rated fuse.

NOTE: If a moulded plug is fitted and has to be removed take great care in disposing of the plug and severed cable, it must be destroyed to prevent engaging into a socket.
If the supply cord is damaged it must be replaced by a service agent or a similarly qualified person in order to avoid hazard.

In more detail...

Replace the cutting wheel

WARNING! Do not connect to power supply until assembly is complete.

> While continuing to hold down the Spindle Lock Pin, use the Wrench to remove the Arbor Bolt .

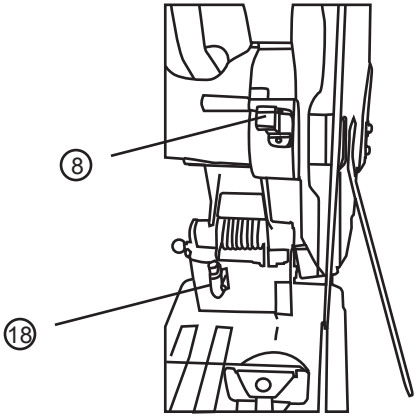


Figure 5: Removing Cut-off Wheel

> Remove the Arbor Bolt , Arbor Washer , Outer Flange , and Cut-off Wheel .

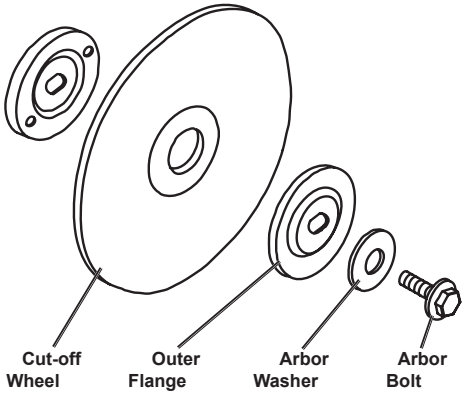


Figure 6: Removing Wheel

> Replace with a new Cut-off Wheel, and reassemble the parts shown in Figure 6. The concave side of the Outer Flange and Arbor Washer must face the wheel, as shown in Figure 7. While holding the Spindle Lock Pin, tighten the Arbor Bolt with the Wrench.

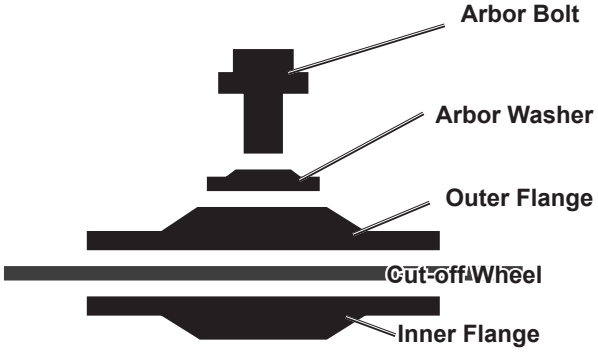


Figure 7: Flange and Washer Cross-section

> Loosen Depth Nut , and adjust Depth Bolt to prevent new Cut-off Wheel from cutting into underlying(18) surface. Tighten Depth Nut afterwards. See Figure 5.

Storage

> Clean the product as described previous.
> Store the product and its accessories in a dry, frost-free place.
> Always store the product in place that is inaccessible to children. The ideal storage temperature is between 10 and 30°C.
> We recommend using the original package for storage or covering the product with a suitable cloth to protect it against dust.

Transportation

> Switch the product off and disconnect it from power supply before transporting it anywhere.
> Protect the product from any heavy impact or strong vibrations which may occur during transportation in vehicles.
> Secure the product to prevent it from slipping or failing over.

In more detail...

Trouble shooting

Suspected malfunctions are often due to causes that the users can fix themselves.
Therefore check the product using this section.
In most cases the problem can be solved quickly.

WARNING! Only perform the steps described within these instructions! All further inspection, maintenance and repair work must be performed by an authorised service centre or a similarly qualified specialist if you cannot solve the problem yourself!

Caution: Troubleshooting could lead to an increased risk to the operator due to the fact that safety guards / covers may have to be removed. It is therefore particularly important that all the measures necessary for safe working are taken.

Problem	Possible cause	Likely Solutions
Tool will not start.	1. Cord not connected. 2. No power at outlet. 3. Tool's thermal reset breaker tripped (if equipped). 4. Internal damage or wear. (Carbon brushes or switch, for example.)	1. Check that cord is plugged in. 2. Check power at outlet. If outlet is unpowered, turn off tool and check circuit breaker. If breaker is tripped, make sure circuit is right capacity for tool and circuit has no other loads. 3. Turn off tool and allow to cool.Press reset button on tool. 4. Have technician service tool.
Tool operates slowly.	Extension cord too long or wire size too small.	Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load.

Problem	Possible cause	Likely Solutions
Performance decreases over time.	1. Cut-off Wheel worn. 2. Carbon brushes worn or damaged.	1. Replace Cut-off Wheels as needed. 2. Have qualified technician replace brushes.
Excessive noise or rattling.	Internal damage or wear. (Carbon brushes or bearings, for example.)	1. Replaced by a service agent
Overheating.	1. Forcing machine to work too fast. 2. Blocked motor housing vents. 3. Motor being strained by long or small diameter extension cord.	1. Replaced by a service agent

Follow all safety precautions whenever diagnosing or servicing the tool. Disconnect power supply before service.

In more detail...

Recycling and disposal

> Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or local store for recycling advice.

Declaration of Conformity

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

Declare that the product:
Designation: 2000W cut-off saw
Model: TTB599BNS

Complies with the following Directives:
2004/108/EC Electromagnetic Compatibility Directive
2006/42/EC Machinery Directive
2006/95/EC Low Voltage Directive
2011/65/EU Restrictions of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment
2002/96/EC and 2003/108/EC Waste Electrical and Electronic Equipment (WEEE)

Standards and technical specifications referred to:

EN 61029-1/A11:2010
EN 61029-2-10:2010
EN 55014-1/A1:2009
EN 55014-2/A2:2008
EN 61000-3-2/A2:2009
EN 61000-3-11:2000

Authorised Signatory and technical file holder
Date : 19/02/2014

Signature: P.C. Harries

Name / title: Peter Harries / Quality Manager
Titan Power Tools (UK) Ltd. Trade House, Mead Avenue, BA22 8RT

GB

Titan Power Tools (UK) Ltd
Trade House, Mead Avenue,
BA22 8RT