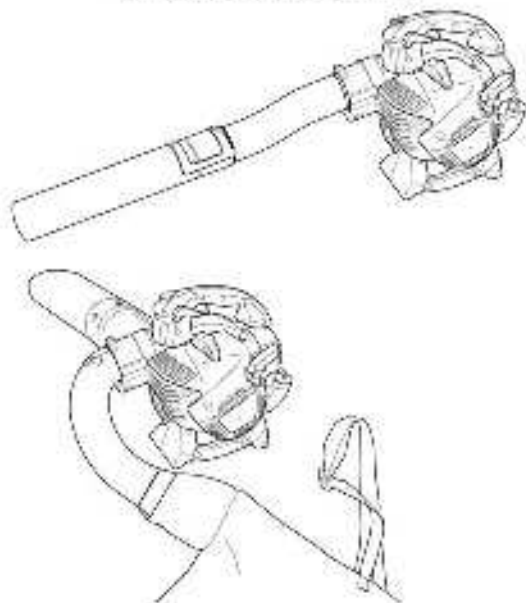


TITAN

27.6cc Petrol Blower Vacuum



TTL684BVC

Ref. No.: 3044P

Original Instructions_TTL684BVC_GB_V5_160526



WARNING: Read the instructions before using the product!

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

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 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 collection bag, nozzles and tubes)
- 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.

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

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**...

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Care and **maintenance** 40

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Recycling and **disposal** 47

EC declaration **of** conformity 48

Safety warnings

Blower / vacuum safety warnings

IMPORTANT

**READ CAREFULLY BEFORE USE.
KEEP FOR FUTURE REFERENCE.**

Training

- > Read the instructions carefully. Be familiar with the controls and the proper use of the product.
- > Never allow children to use the product.
- > Never allow persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge or people unfamiliar with these instructions to use the product. Local regulations can restrict the age of the operator.
- > Never operate the product while people, especially children, or pets are nearby.
- > The operator or user is responsible for accidents or hazards occurring to other people or their property.

Preparation

- > While operating the product, always wear substantial footwear and long trousers. Do not operate the equipment when barefoot or wearing open sandals.
- > Do not wear loose clothing or jewellery that can be drawn into the air inlet. Keep long hair away from the air inlets.
- > Wear protective goggles while operating.
- > To prevent dust irritation the wearing of a face mask is recommended.
- > Never operate the product with defective guards or shields, or without safety devices, for example debris collector in place.

>If the product sucks or strikes any foreign object or the product starts making any unusual noise or vibration, switch the product off and allow it to stop. Disconnect the spark plug connector from the spark plug and take the following steps:

- inspect for damage,
- check for, and tighten, any loose parts,
- have any damaged parts replaced or repaired with parts having equivalent specifications.

>Wear hearing protection!

>Wear eye protection!

>In an emergency switch the product off by immediately releasing the throttle trigger and setting the ignition switch to its off position **O**.

Getting started

>Do not operate the product indoors, it produces poisonous exhaust fumes whilst the engine is running and may be colourless and odourless.

>Do not wrap the recoil starter rope around your hand whilst starting the product. This may result in injuries to your hand or fingers.

>Do keep handles dry, clean, and free from oil and grease. Greasy, oily handles are slippery causing loss of control.

>Do shut off the engine before setting the product down.

>Before using the product and after any impact or dropping, check for signs of wear or damage and repair as necessary.

Operation

>Stop the engine before

- cleaning or when clearing a blockage,
- checking, carrying out maintenance or working on the product,
- leaving the product unattended.

>Ensure that the product is correctly located in a designated working position before starting the engine.

>While operating the product, always ensure that the operating position is safe and secure.

>Do not operate the product with a damaged or excessively worn suction / blowing device.

>To reduce fire hazards, keep the engine and silencer free of debris, leaves and excessive lubricant.

>Always use two hands to operate a product designed with two handles.

>Always be aware of your surroundings and stay alert for possible hazards of which you may not be aware due to the noise of the product.

>Operate the product only in daylight or in good artificial light.

>Do not overreach and keep your balance at all times.

>Always be sure of your footing on slopes.

>Walk, never run.

>Keep all ventilation openings clear of debris.

>Never blow debris in the direction of bystanders.

Recommendations for operation

>Operate the product only at reasonable hours - not early in the morning or late at night when people might be disturbed.

>Use rakes and brooms to loosen debris before blowing / vacuuming.

- >Slightly dampen surfaces in dust conditions or use mister attachment.
- >Use the full blower nozzle extension so the air stream can work close to the ground.
- >Avoid using the machine in bad weather conditions especially when there is a risk of lightning.

Maintenance and storage

- >Keep all nuts, bolts and screws tight to be sure the product is in safe working condition.
- >Check the collection bag frequently for wear or deterioration.
- >Replace worn or damaged parts for safety. Use only genuine replacement parts and accessories.
- >When the product is stopped for servicing, inspection, or storage, or to change an accessory, switch the product off, disconnect the spark plug connector and make sure that all moving parts have come to a complete stop. Allow the product to cool before making any inspections, adjustments, etc. Maintain the product with care and keep it clean.
- >Always allow the product to cool before storing.
- >Store the product only in a dry place out of the reach of children.
- >When servicing the shredding means be aware that, even though the power source is switched off due to the interlock feature of the guard, the shredding means can still be moved.

Additional safety warnings

- >Warning! Do not operate the product near open windows, etc.
- >Do not blow hard objects such as nails, bolts, or rocks.
- >Apply extra care when cleaning debris from stairs or other tight areas.

- >Keep all parts of your body away from the suction/blowing device. Do not remove blockages or jams when the product is switched on. Make sure the switch is off when clearing jammed material. One moment of inattentiveness while operating the product may result in serious personal injury.
- >Carry the product by the handle with the engine off. Handling the product properly reduces the possibility of personal injury.
- >Never use the product standing on steps or a ladder. Do not work above shoulder height.
- >If the product starts to vibrate abnormally, check it immediately. Excessive vibration can cause injury.
- >Always ensure the product is fully assembled before using it. Never attempt to use an incomplete product or one fitted with an unauthorised modification.
- >Check the suction/blowing device regularly for damage, and if damaged repair immediately.
- >Do not overload the product.
- >Follow the maintenance and repair instructions for this product. Never carry out any modifications to the product. Information about maintenance and repair is provided in this user manual.

Fuel handling

- >Always switch the product off, disconnect the spark plug connector and let the product cool down before refuelling it. Fuel and fuel vapour are highly flammable. Take care when handling fuel. Never smoke when you are refuelling the product. Do not refuel the product, if there is an open fire in the vicinity!

- >Always use suitable aids such as funnels and filler necks. Do not spill any fuel on the product or its exhaust system. There is a risk of ignition. Remove spilled fuel carefully from all parts of the product. Any residue which may be present must have completely evaporated, before the product is put into operation!
- >Never refuel indoors.
- >Never use the product in environments where there is a risk of explosion. Exhaust gases and fuel fumes are noxious. Fuel fumes can ignite.
- >Never breathe in any fuel fumes, when you are refuelling the product. Never fill the tank in enclosed spaces, such as basements or sheds. There is a risk of poisoning and explosion!
- >Avoid skin contact with petrol.
- >Do not eat or drink, while you are refuelling the product. If you have swallowed petrol or oil, or if petrol or oil has got into your eyes, then seek the advice of a doctor immediately.
- >Close the tank lid immediately after filling the tank. Make sure that it is properly closed.
- >Never use the product without an air filter.
- >Fuel vapour pressure may build up inside the fuel tank depending on the fuel used, weather conditions and the tank venting system. To reduce the risk of burns and other personal injuries, remove the fuel cap carefully to allow any pressure build up to release slowly.
- >Be aware of fire risks, explosion and inhalation risks.
- >Do not smoke while operating the product, handling fuel or near fuel.
- >Ensure the spark plug lead is secured; a loose lead may cause electrical arcing that could ignite combustible fumes and cause a fire or explosion.
- >Check regularly for leaks from the fuel cap and fuel lines.

- > Use caution when handling fuel. To avoid any accidental fires, move the product at least 3 metres (10') from the fuelling point before starting the engine.
- > Tighten the fuel cap thoroughly after refilling the fuel tank.
- > Do not operate the product if it is leaking fuel. Do not remove the fuel tank cap while the engine is running.
- > Use only an approved container.
- > Do not store cans of fuel or refill the fuel tank in any place where there is a boiler, stove, wood fire, electrical sparks, welding sparks, or other sources of heat or fire which might ignite the fuel.
- > If any fuel spillage occurs during refuelling, use a dry rag to wipe up spills and allow remaining fuel to evaporate before turning the engine on again.
- > If you have spilt fuel on yourself or on your clothes, change your clothes and wash any part of your body that has come in contact with fuel before turning the engine on again.
- > If fuel is ignited, put out the fire with a dry powder fire extinguisher.
- > If the fuel tank is drained, this should be done outdoors.

Vibration and noise reduction

To reduce the impact of noise and vibration emission, limit the time of operation, use low-vibration and low-noise operating modes as well as wear personal protective equipment.

Take the following points into account to minimise the vibration and noise exposure risks:

- > Only use the product as intended by its design and these instructions.
- > Ensure that the product is in good condition and well maintained.

- > Use correct attachments for the product and ensure they are in good condition.
- > Keep tight grip on the handles / gripping surface.
- > Maintain this product in accordance with these instructions and keep it well lubricated (where appropriate).
- > Plan your work schedule to spread any high vibration tool use across a longer period of time.

Emergency

Familiarise yourself with the use of this product by means of this instruction manual. Memorise the safety directions and follow them to the letter. This will help to prevent risks and hazards.

- > **Always be alert when using this product, so that you can recognise and handle risks early.** Fast intervention can prevent serious injury and damage to property.
- > **Stop the engine and disconnect the spark plug connector if there are malfunctions.** Have the product checked by a qualified professional and repaired, if necessary, before you operate it again.
- > **In case of fire stop the engine and disconnect the spark plug connector.** Take fire-extinguishing measures immediately if the product switch is no longer accessible.



WARNING! Never use water to extinguish a product on fire. Burning fuel must be extinguished with special extinguishing agents! We recommend that you keep a suitable fire extinguisher within reach in your work area!

Residual risks

Even if you are operating this product in accordance with all the safety requirements, potential risks of injury and damage remain. The following dangers can arise in connection with the structure and design of this product:

- >Health defects resulting from vibration emission if the product is being used over long periods of time or not adequately managed and properly maintained.
- >Injuries and damage to property due to broken cutting attachments or the sudden impact of hidden objects during use.
- >Danger of injury and property damage caused by flying and thrown objects.
- >Burns, if touching hot surfaces.
- >Injuries and damage to property to due to thrown and fallen objects.
- >Prolonged use of this product expose the operator to vibrations and may produce 'whitefinger' disease. In order to reduce the risk, please wear gloves and keep your hands warm. If any of the 'whitefinger' symptoms appear, seek medical advice immediately. 'Whitefinger' symptoms include: numbness, loss of feeling, tingling, pricking, pain, loss of strength, changes in skin colour or condition. These symptoms normally appear in the fingers, hands or wrists. The risk increases at low temperatures.



WARNING! This product produces an electromagnetic field during operation! This field may under some circumstances interfere with active or passive medical implants! To reduce the risk of serious or fatal injury, we recommend persons with medical implants to consult their doctor and the medical implant manufacturer before operating this product!

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.

kW	Kilowatt	cm ³	Cubic centimetre
m ³	Cubic metre	/min or min ⁻¹	Per minute
km/h	Kilometres per hour	mm	Millimetre
cm	Centimetre	kg	Kilogram
dB(A)	Decibel (A-rated)	l	Litre
m/s ²	Metres per second squared		Lock / to tighten or secure.
	Unlock / to loosen.		Note / Remark.
	Caution / Warning.		Read the instruction manual.
	Wear hearing protection.		Wear eye protection.
	Wear a dust mask.		Wear protective gloves.
	Wear protective, slip-resistant footwear.		Wear tight-fitted protective clothes.
	Wear respiratory protection.		

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



Do not expose the product to rain or wet conditions (moisture).



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!



Risk of fire / flammable materials



Hot surface, do not touch! High temperatures on the product's surfaces and structural parts that could cause burns, if they are touched. The product can also stay hot for a longer period of time after operation!



This product produces noxious exhaust fumes. If the product is used improperly, these fumes can lead to poisoning, a loss of consciousness or death!



Noxious exhaust fumes; do not operate or start the product in confined space!



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



Objects thrown by the product could hit the user or other bystanders. Always ensure that other people and pets remain at a safe distance from the product when it is in operation. In general, children must not come near the area where the product is.



Keep hands away for impeller! Danger of injuries.



Only use petrol-oil mixture with a ratio of 40 : 1. Do not use any other mixture ratio. Always switch the product off and let it cool down, before refuelling it.



Switch the engine off while you are refilling the tanks!

**CHOKE**

Choke - CLOSE position

**RUN**

Choke - OPEN position



Engine manual start; recoil starter



Primer



Ignition switch - ON position



Ignition switch - OFF position



H - Set the maximum engine speed



L - Set the minimum engine speed



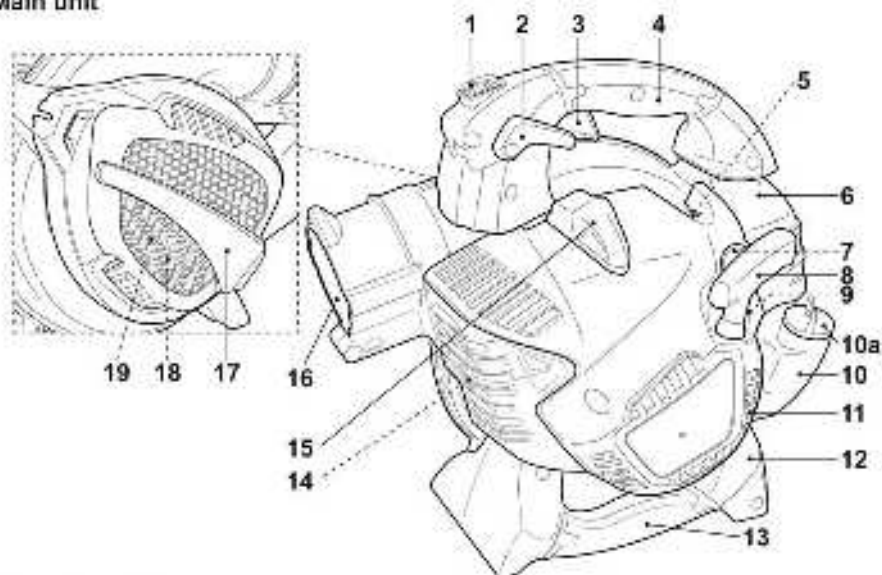
Guaranteed sound power level value in dB



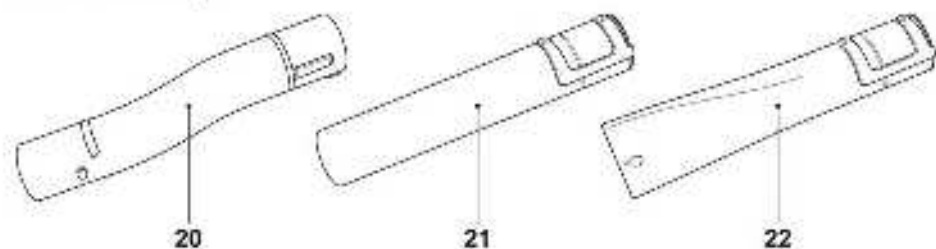
The product complies with the applicable European directives and an evaluation method of conformity for these directives was done.

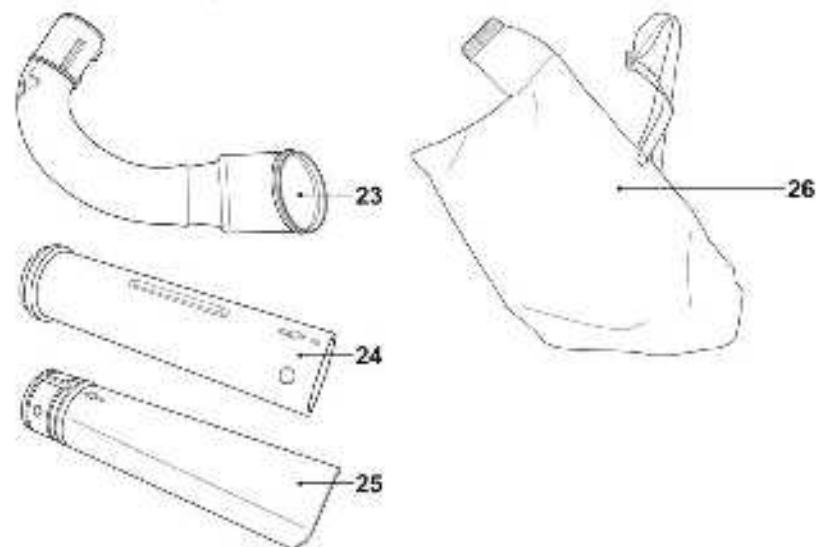
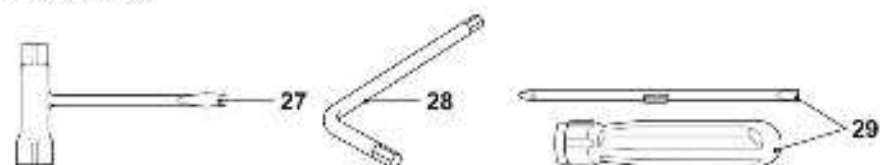
Your product

Main unit



Blower assembly



Vacuum assembly**Accessories**

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Ignition switch I / O 2. Lock-on lever 3. Throttle trigger 4. Main handle 5. Primer 6. Air filter case <ol style="list-style-type: none"> a. Fixation screw* b. Cover* c. Filter* 7. Choke 8. Recoil starter handle 9. Adjustment screw L / H (engine speed) 10. Fuel tank <ol style="list-style-type: none"> a. Cap 11. Air vents 12. Foot 13. Auxiliary handle 14. Exhaust 15. Spark plug connector <ol style="list-style-type: none"> a. Spark plug* 16. Outlet nozzle <ol style="list-style-type: none"> a. Interlock device* | <ol style="list-style-type: none"> 17. Vacuum inlet cover <ol style="list-style-type: none"> a. Locking hole* 18. Fan 19. Blades 20. S-shape connector 21. Concentrator nozzle (blower) 22. Flat nozzle (blower) 23. L-shape connector 24. Upper tube (vacuum) 25. Lower tube (vacuum) <ol style="list-style-type: none"> b. Inlet nozzle* 26. Collection bag <ol style="list-style-type: none"> a. Inlet* b. Hook and Loop fastener* c. Zipper* d. Harness* 27. Multi tool 28. Star-head key 29. Crosshead / slot-head screwdriver |
|---|---|



NOTE: Parts marked with * are not shown in this overview. Please refer to the respective section in the instruction manual.

Technical specifications

General

- | | |
|---|---|
| <ul style="list-style-type: none"> > Fuel > Petrol type > Engine oil type > Fuel tank volume > Air volume > Air velocity > Mulching ratio > Collection bag capacity > Dimensions (L x W x H) (Main unit) > Net weight (Blower assembly) | <ul style="list-style-type: none"> : Petrol oil mixture 40:1 : 95RON Fuel : air cooled 2-stroke engine oil; oil quality grade: JASO FC or above. : 400 cm³ (ml) : 10.2 m³/min : 260 km/h : 4:1 : 55 l : approx. 350 x 250 x 350 mm : approx. 4.7 kg |
|---|---|

> Net weight (Vacuum assembly)	: approx. 5.9 kg
Engine	
> Engine model	: 1E35F
> Engine type	: air cooled 2-stroke
> Engine displacement	: 27.6 cm ³
> Maximum engine power	: 0.8 kW
> Engine idling speed range	: 2900 - 3300 min ⁻¹
> Engine rated speed	: 7500 min ⁻¹
> Fuel consumption at maximum engine performance	: 0.38 kg/h
> Specific fuel consumption at maximum engine performance	: 480 g/kWh
> Spark plug	: CHAMPION RCJ7Y
> Spark plug gap	: 0.6 - 0.7 mm
Sound values	
> Sound pressure level at operator's position L_{pA}	: 93.9 dB(A)
> Uncertainty K_{pA}	: 3 dB(A)
> Measured sound power level L_{WA}	: 106.6 dB(A)
> Uncertainty K_{WA}	: 3 dB(A)
> Guaranteed sound power level L_{WA} (according to 2000/14/EC amended by 2005/88/EC)	: 109 dB(A)
Hand arm vibration values	
> Blower mode	
> Main handle	: 2.06 m/s ²
> Vacuum mode	
> Main handle	: 2.02 m/s ²
> Auxiliary handle	: 1.33 m/s ²
> Uncertainty K	: 1.5 m/s ²

The sound values have been determined according to noise test code given in EN 15503, using the basic standards EN ISO 3744 and EN ISO 11201.

The sound intensity level for the operator may exceed 80 dB(A) and ear protection measures are necessary.

The declared vibration value has been measured in accordance with a standard test method (according to EN 15503) and may be used for comparing one product with another. The declared vibration value may also be used in a preliminary assessment of exposure.



WARNING! Depending on the actual use of the product the vibration values can differ from the declared total. Adopt proper measures to protect yourself against vibration exposures. Take the whole work process including times the product is running under no load or switched off into consideration.

Proper measures include among others regular maintenance and care of the product and accessories, keeping hands warm, periodical breaks and proper planning of work processes.

Unpacking

- > 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.



WARNING! The product and the packaging are not children's toys! Children must not play with plastic bags, sheets and small parts! There is a danger of choking and suffocation!

You will need

(items not supplied)

Suitable personal protective equipment
Suitable petrol
Suitable 2-stroke engine oil
Fuel funnel with filter
Fuel mixing container

(items supplied)

Collection bag (26) with harness (26d)
Multi tool (27)
Star-head key (28)
Crosshead / slot-head screwdriver (29)

Assembly



WARNING! The product must be fully assembled before operation! Do not use a product that is only partly assembled or assembled with damaged parts!



Follow the assembly instructions step-by-step and use the pictures provided as a visual guide to easily assemble the product!



Disconnect the spark plug connector (15) from the spark plug (15a)!
Reconnect it after assembly.

Always wear protective gloves during assembly!



NOTE: Take care of small parts that are removed during assembly or when making adjustments. Keep them secure to avoid loss.

Blower assembly

The product is supplied with two nozzles (21, 22). Use the most appropriate nozzle according to the desired application.

- > Align the S-shape connector (20) with the outlet nozzle (16) and insert it all the way to the stop (Fig. 1, step 1). Ensure the S-shape connector snaps in position.
- > Align the pins with the slots and fit the nozzle (21, 22) onto the S-shape connector (20) (Fig. 1, step 2).
- > Turn the nozzle (21, 22) clockwise to secure the connection (Fig. 1, step 3).
- > Before changing configuration, cleaning, maintenance, transportation or storage, use a proper tool (e. g. the multi tool (27)) to tilt up the interlock device (16a) as far as possible; at the same time pull the S-shape connector (20) out from the outlet nozzle (16).
- > Remove the nozzles (21, 22) in reverse order to change configuration, before cleaning, maintenance, transportation or storage.

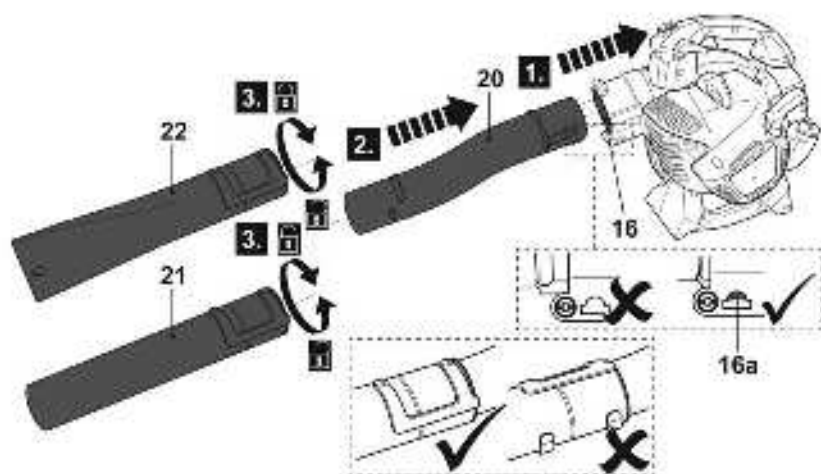


Fig. 1

Vacuum assembly

- > Align the L-shape connector (23) with the outlet nozzle (16) and insert it all the way to the stop (Fig. 2, step 1). Ensure the L-shape connector snaps in position.
- > Fit the inlet (26a) of the collection bag (26) onto the L-shape connector (23) (Fig. 2, step 2).
- > Fasten the Hook and Loop fastener (26b) so that the inlet (26a) sits properly around the notch of the L-shape connector (23). Ensure the connection is secured.

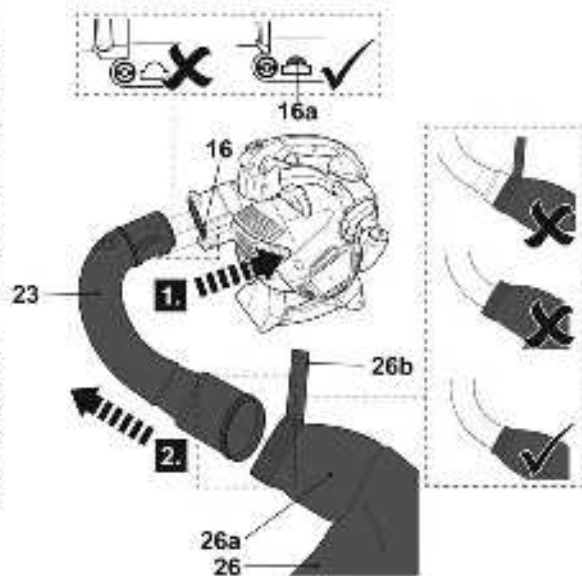


Fig. 2



WARNING! In vacuum mode, always operate the product with the collection bag attached to protect yourself against flying debris and to avoid injuries! Do not use this product with a damaged collection bag or without one at all!



NOTE: Before changing configuration, cleaning, maintenance, transportation or storage, use a proper tool (e. g. the multi tool (27)) to tilt up the interlock device (16a) as far as possible; at the same time pull the L-shape connector (23) out from the outlet nozzle (16).

- > Insert a proper tool (e. g. the multi tool (27)) into the locking hole (17a) and pry the lock block, then open the vacuum inlet cover (17) and hold it in position (Fig. 3, step 1).



WARNING! The blades (19) are very sharp and become hot during use! Handle them carefully! Wear protective gloves when handling blades in order to avoid injuries like burns and cuts!



WARNING! Do not damage other parts (e. g. plastic housing), when using an additional tool to open the vacuum inlet cover (17)!

- > Align the arrow-markings and insert the lower vacuum tube (25) into the upper vacuum tube (24) (Fig. 3, step 2). Ensure the pins properly engage in the holes.
- > Align the pins with the slots and insert the upper vacuum tube (24) into the vacuum inlet all the way to the stop (Fig. 3, step 3). Ensure the arrow-marking facing upward.
- > Turn the upper vacuum tube (24) anticlockwise to secure the connection (Fig. 3, step 4).

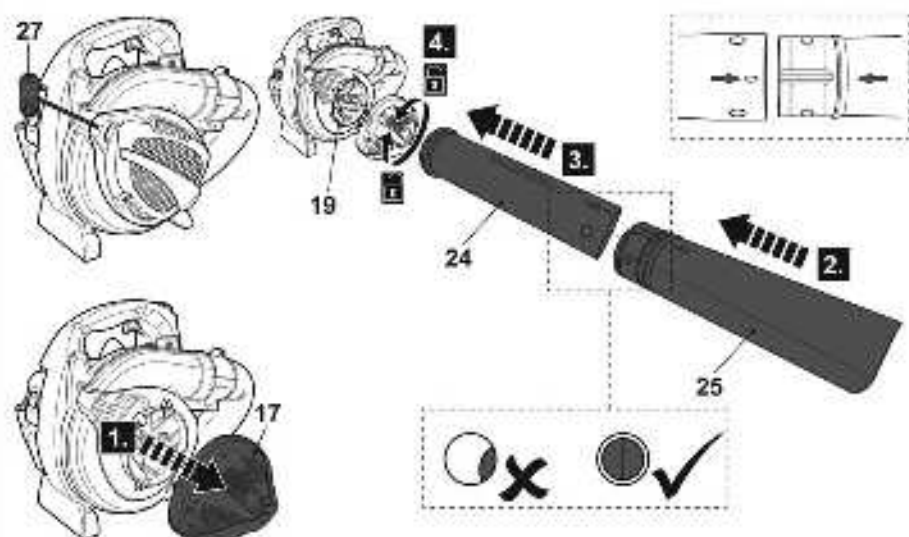


Fig. 3

- > Remove the tubes (24, 25) in reverse order and allow the vacuum inlet cover return to close position to change configuration, before cleaning, maintenance, transportation or storage.

Harness



WARNING! In vacuum mode, always use the product with the harness!
Do not carry it only with your hands!
Always adjust the harness before operation!

The harness (26d) on the collection bag (26) helps the operator to carry the product / collection bag in vacuum mode.

- > Assemble the collection bag (26) onto the L-shape connector (23) (see section "Vacuum assembly").
- > Wear the harness (26d) over your left shoulder so that you can quickly throw off the machine and collection bag in an emergency (Fig. 4).



Fig. 4

Fuel and engine oil



WARNING! This product is not supplied with fuel mixture in the engine! Before operating this product it is essential to fill it with fuel mixture!

This product is equipped with a 2-stroke engine, the fuel and oil tanks are combined and it is essential to fill a fuel-oil mixture before operating this product. Observe the technical specifications for suitable petrol and engine oil.

- > Place the product on a stable, level surface. We recommend laying a non-flammable sheet under the product.
- > Avoid spilling and overfilling the tank.



WARNING! Fuel is highly inflammable! Fumes will explode if lit! Ensure that there are no naked flames around the product! Do not smoke while filling fuel mixture!

- > Always dispose of fuel, used oil and soiled objects according to local regulations (see section "Recycling and disposal").
- > Mix a regular-grade unleaded petrol and a quality engine oil for air cooled 2-stroke engines in a suitable fuel mixing container (Fig. 5).
- > Fill half the quantity of the petrol to be used into the container. Then add the entire quantity of oil and shake the prepared fuel mixture. Add the remaining quantity of petrol. Shake the fuel mixture thoroughly before filling the fuel tank.
- > Use an anti-oxidant added quality oil expressly labelled for air-cooled 2 stroke engine use (JASO FC GRADE OIL or ISO EGC GRADE). Do not use BIA or TWC (2 stroke water-cooling type) mixed oil.
- > The mixing ratio for petrol: oil shall be 40 : 1.






				
100 ml	+	2.5 ml	=	40 : 1
200 ml	+	5 ml	=	
300 ml	+	7.5 ml	=	
400 ml	+	10 ml	=	
500 ml	+	12.5 ml	=	

Fig. 5



NOTE: Never mix fuel and oil directly in the tank of the product. Use a suitable fuel mixing container that helps to ensure the correct mixing ratio. Shake gently to ensure a thorough mix of fuel and oil.

- > Always use clean, fresh unleaded petrol. Purchase fuel in quantities that can be used within 30 days.
- > Avoid getting dirt, dust or water in the fuel tank (10).
- > Unscrew and remove the fuel tank cap (10a). Use a proper tool (e. g. the multi tool (27)) if necessary (Fig. 6).
- > Fill correctly mixed fuel-oil into the tank using a fuel funnel fitted with a filter to avoid debris entering the tank. Do not overfill. Leave a minimum 5 mm of space between the top of the fuel-oil mixture and the inside edge of the tank to allow for expansion (Fig. 7).
- > Wipe any spilled fuel with a soft cloth and reattach the fuel tank cap. Do not over tight the fuel tank cap (10a).

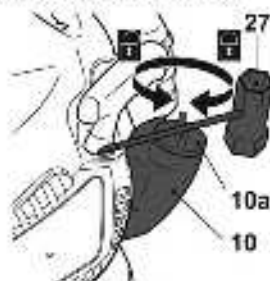


Fig. 6

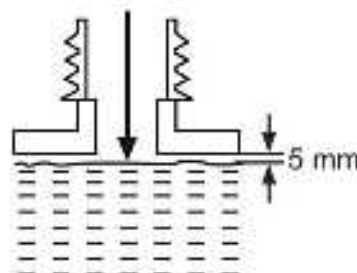
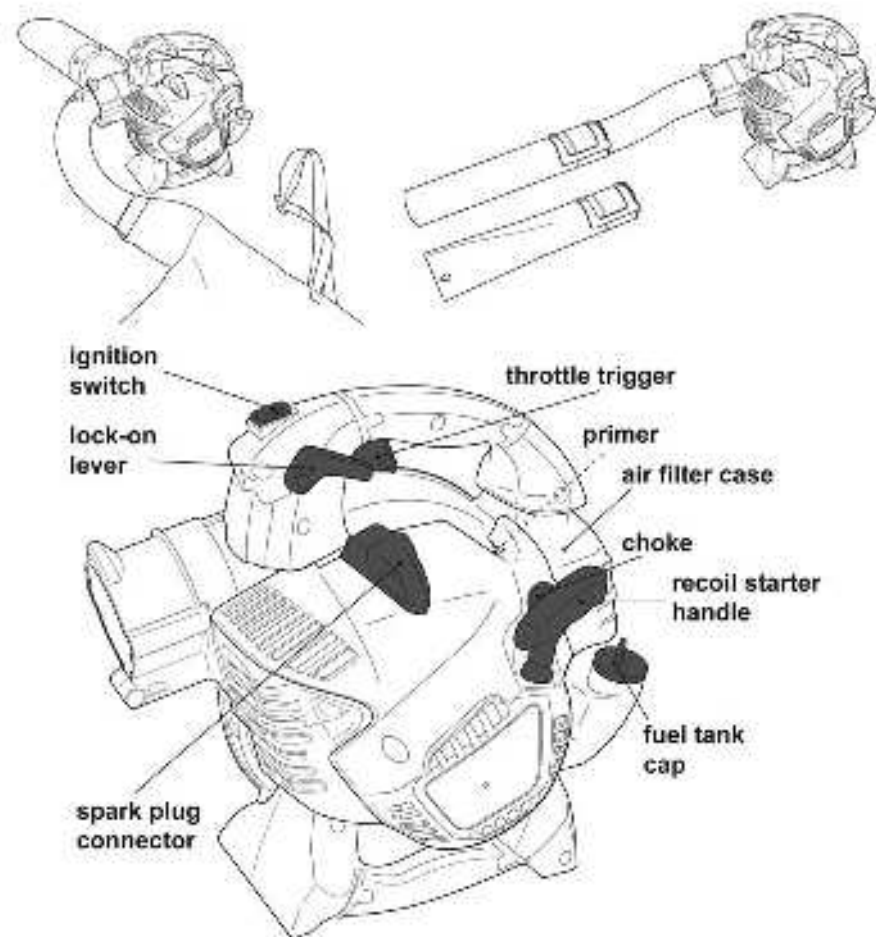


Fig. 7

- > Your product is now ready to be used.

Operating controls



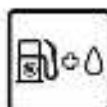
Set up



Assemble



Adjust



Add fuel
mixture

Cold start



Set ignition
switch to I



Set choke to
CHOKE



Press the
primer
7 - 10 times



Pull recoil
starter handle
until the first
firing occurs



Set choke to
RUN



Pull recoil
starter handle
until engine
starts



Run idle for
5 - 10 seconds



Squeeze the
throttle trigger



Operate

Warm start



Set ignition switch to **I**



Press the primer 2 - 3 times



Pull recoil starter handle until the first firing occur



Squeeze the throttle trigger



Operate

Stopping



Release the throttle trigger



Allow the product to return to idle



Set the ignition switch to **O**



Wait until the product comes to a complete stop

Storage



Empty fuel tank



Clean and maintain



Store

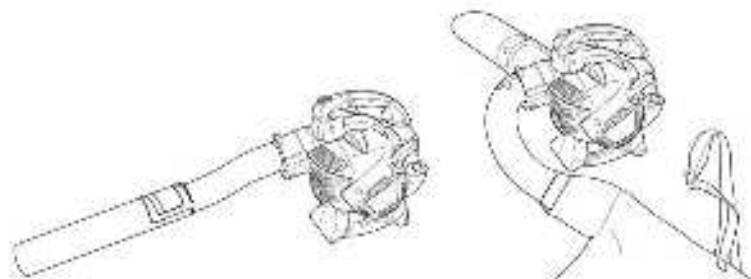


WARNING! This quick start provides only a short overview of how to start and stop the product! For safe use it is essential to read the entire instruction manual before first use!

In more detail...



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Intended use

This petrol blower vacuum TTL684BVC is designated with an engine displacement of 27.6 cm³. The product is intended for:

- blowing debris to pile it up ready for collection or to blow similar material out of areas which are hard to reach;
- vacuuming and collecting debris. The product also functions as a shredder; debris is shredded and their volume is reduced, preparing the material for later composting.

The product must not be used to create a dust hazard or as a wet suction / blowing device.

The product may only be used with the suction / blowing tube fully installed. Avoid wet materials such as leaves and dirt, twigs, branches, pine needles, grass, earth, sand, mulch, cuttings etc.

For safety reasons it is essential to read the entire instruction manual before first operation and to observe all the instructions therein.

This product is intended for private domestic use only, not for any commercial trade use. It must not be used for any purposes other than those described.

Primer

The primer (5) is positioned underneath the main handle (4) and close to the air filter case (6) / choke (7). Use the primer for both cold start and warm start (Fig. 8).

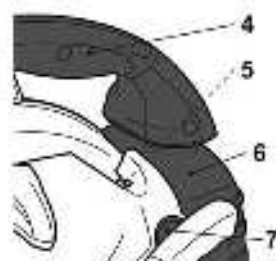


Fig. 8

Recoil starter handle

- > The recoil starter handle (8) is positioned close to the air filter case (6) / choke (7) / fuel tank (10).
- > Hold the product stable and pull the recoil starter handle (8) lightly until you feel resistance then pull it rapidly. Do it again until the engine starts (Fig. 9).



Fig. 9



WARNING! Never twist the starter rope around your hand! Only pull on the handle!



WARNING! Do not suddenly release the recoil starter handle! Allow the rope to return slowly and in a controlled manner each time it is pulled! Do not pull out the recoil starter beyond the red colour band at the end of the recoil starter! Pulling excessively will cause damage on the recoil starter cord!

Choke

The choke (7) is positioned close to the air filter case (6) / recoil starter handle (8).

- > Turn the choke clockwise to the position **CHOKE** to close the choke (Fig. 10). Move the choke to the position **CHOKE** for cold start.
- > Turn the choke anticlockwise to the position **RUN** to open the choke (Fig. 11). Move the choke to the position **RUN** for warm start and normal use.

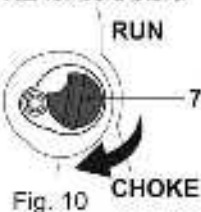


Fig. 10

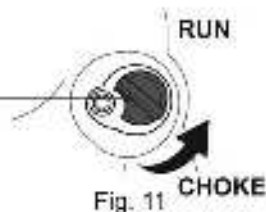


Fig. 11



NOTE: The choke resets automatically to the **RUN** position once the throttle trigger (3) is activated.

Ignition switch

- > Set the ignition switch (1) to the ON position I to start the product (Fig. 12).
- > Set the ignition switch (1) to the OFF position O to shut the product off (Fig. 13).

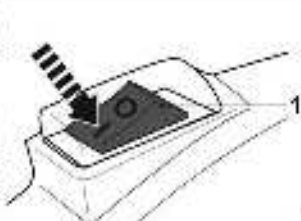


Fig. 12

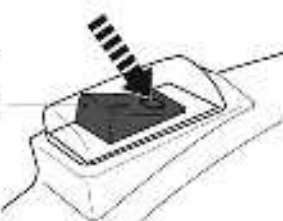


Fig. 13



WARNING! The engine / fan will continue to run for some time even after the engine has been switched off.

Wait until it comes to a complete stop before putting the product down!

Throttle trigger

The product can be operated either in instant or continuous mode.

Instant mode

- > Squeeze the throttle trigger (3). The speed is controlled by how far the throttle trigger is depressed.
- > Release the throttle trigger (3) to idle the engine (Fig. 14).

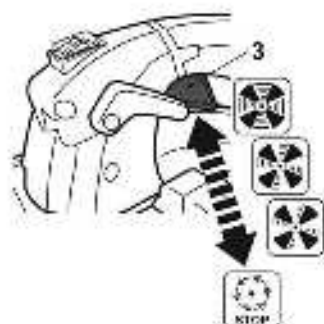


Fig. 14

Continuous mode

- > Squeeze the throttle trigger (3) completely and hold it in position (Fig. 15, step 1).
- > Move the lock-on lever (2) upwards to lock the throttle trigger in position (Fig. 15, step 2).
- > Release the throttle trigger (3) afterwards. The throttle trigger is now locked on for continuous use.
- > Move the lock-on lever (2) downwards to release the throttle trigger and idle the engine.

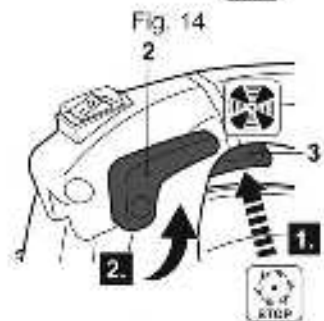


Fig. 15

General operation

- > Check the product as well as accessories for damage before each use. Do not use the product if it is damaged or shows wear.
- > Double check that accessories or attachments are properly fixed.
- > Check the fuel level, refill if necessary.
- > Always hold the product on its handles. Keep the handles dry and clean to ensure safe support.
- > Ensure that the air vents are always unobstructed and clear. Clean them if necessary with a soft brush. Blocked air vents may lead to overheating and damage the product.
- > Switch the product off immediately if you are disturbed while working by other people entering the working area. Always let the product come to complete stop before putting it down.
- > Do not overwork yourself. Take regular breaks to ensure you can concentrate on the work and have full control over the product.
- > Before operation, loosen leaves that are stuck to the ground using a broom or rake.
- > Before switching the product on, check whether it has been assembled correctly and all the moving parts are running smoothly!
- > While working, ensure that the product does not strike hard objects, as this can cause damage.
- > Do not blow / vacuum any solid bodies such as stones, branches or pieces of branch, fir cones or similar.
- > We recommend slightly dampening surfaces in dusty conditions or using a mister attachment.

Operating hours

Only operate the product at reasonable hours - not early in the morning, late at night or on weekends / public holidays when people might be disturbed. Inform yourself about local restrictions.

Collection bag

- > In vacuum mode, always operate the product with the collection bag (26) attached.
- > Inspect the collection bag each time before use. Do not use it if you detect any damage.
- > Empty frequently during use. Do not wait until the collection bag is completely full. We recommend emptying it when it is half full.



NOTE: A full collection bag reduces the performance of this product.

- > Switch the product off.
- > Remove the collection bag in reverse order of assembly.
- > Open the collection bag by its zipper (26c) and empty the clippings onto a compost heap.
- > Close the zipper and re-fit the collection bag before continuing operation.

Starting / stopping



NOTE: Follow the cold start procedure if the product has been switched off for more than 10 minutes or after refuelling.

Cold start

- > Set the ignition switch (1) to the ON position I (Fig. 16, step 1).
- > Turn the choke (7) clockwise to the position **CHOKE** (Fig. 16, step 2).
- > Press the primer (5) 7 to 10 times (Fig. 16, step 3).
- > Hold the product securely to the ground and then pull the recoil starter handle (8) lightly until you feel resistance then pull it rapidly until you hear the first firing occur (Fig. 16, step 4).
- > Turn the choke (7) anticlockwise to the position **RUN** (Fig. 16, step 5).



WARNING! Allow the rope to return slowly and in a controlled manner after each pull!

- > Hold the product securely to the ground and then pull the recoil starter handle (8) lightly until you feel resistance then pull it rapidly until the engine starts (Fig. 16, step 6).
- > Squeeze and release the throttle trigger (3) to warm up the engine (Fig. 16, step 7).



WARNING! Do not use the lock-on lever (2) to lock the throttle trigger (3) and set the product on continuous mode during the warm-up period!

- > Let the product run in idle for 5 to 10 seconds.

- > Have firm grip on the handles. For vacuuming operation, grip the product with both hands, the left hand on the auxiliary handle (13) and the right hand on the main handle (4); for blowing operation, grip the product with the right hand on the main handle (4).
- > Squeeze the throttle trigger (3) to start the operation (Fig. 16, step 8). The speed is controlled by how far the throttle trigger is depressed.
- > Use the lock-on lever (2) to lock the throttle trigger (3) in position for continuous operation if required.

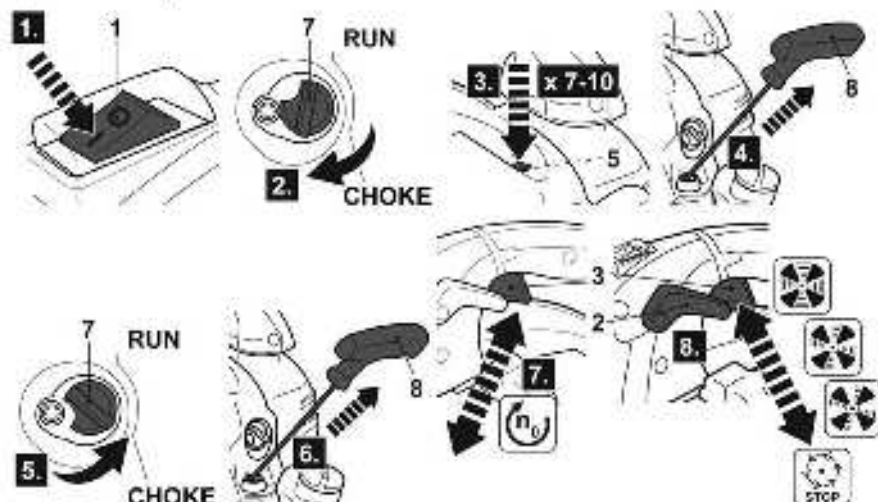


Fig. 16

Warm start

- > Set the ignition switch (1) to the ON position I (Fig. 17, step 1).
- > Press the primer (5) 2 to 3 times (Fig. 17, step 2).
- > Ensure the choke (7) is on the position RUN.



WARNING! Allow the rope to return slowly and in a controlled manner after each pull!

- > Pull the recoil starter handle (8) lightly until you feel resistance then pull it rapidly until the engine starts (Fig. 17, step 3).
- > Have firm grip on the handles. For vacuuming operation, grip the product with both hands, the left hand on the auxiliary handle (13) and the right hand on the main handle (4); for blowing operation, grip the product with the right hand on the main handle (4).

- > Squeeze the throttle trigger (3) to start the operation (Fig. 17, step 4). The speed is controlled by how far the throttle trigger is depressed.
- > Use the lock-on lever (2) to lock the throttle trigger (3) in position for continuous operation if required.

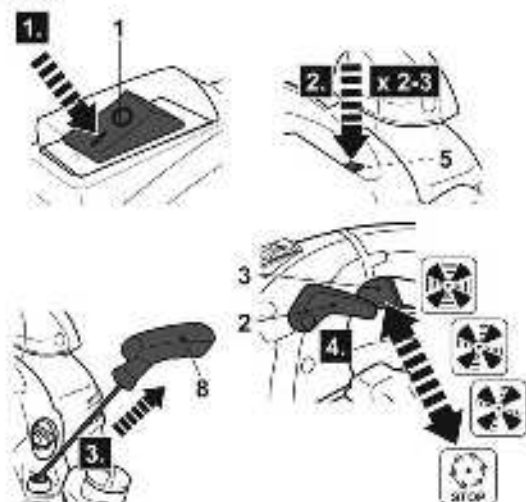


Fig. 17



NOTE: If the engine does not start, the engine may be flooded. Flooding is caused by too much fuel mixture applied at the wrong time and can prevent a product from starting. Follow below procedure:

Set the ignition switch (1) to the **OFF** position **O**. Move the choke (7) to the position **RUN**. Remove the spark plug (15a) and dry it. Pull the recoil starter handle (8) slowly for several times to drain the fuel from the combustion chamber.

Wait until the fuel vapors dissipate and then refit the spark plug. Clean up any spilled fuel and move the product at least 3 metres (10') away before starting the engine to avoid any accidental fire. Wait until the engine has cooled down and then start the product as described in section "Cold start".

Stopping

- > Release the throttle trigger (3) (Fig. 18, step 1).
- > Move the lock-on lever (2) downwards to release the throttle trigger (3) if the product is operated under continuous use.
- > Let the product run idle for a few seconds.
- > Set the ignition switch (1) to the **OFF** position **O** (Fig. 18, step 2).



Fig. 18



NOTE: The product will become very warm after a long time using; allow it to cool down completely before refuelling, and then refer to the cold start procedure.

Blowing

The product with blowing assembly is designed for single-handed application. Grip the product with the right hand on the main handle (4) during operation.

- > Before blowing, loosen the leaves that are stuck to the ground using a broom or rake.
- > Hold the nozzle (21, 22) approximately 10 cm above the ground / leaves and walk slowly forward using a sweeping motion from side to side (Fig. 19).

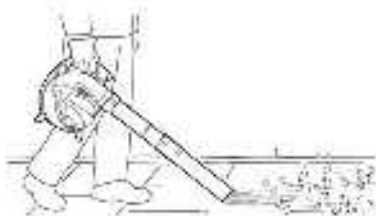


Fig. 19

- > Direct the air stream away from yourself. Avoid blowing debris towards bystanders, pets or cars. Do not operate the product near open windows.
- > Ensure that you do not stir up any heavy objects and hurt somebody or damage something.
- > Start the work with the flat nozzle (22) to rapidly pile up the leaves lying around. Choose the concentrator nozzle (21) to compact the already piled up leaves.

Vacuuming

The product with vacuuming assembly is designed for two-handed application. Grip the product with both hands, the left hand on the auxiliary handle (13) and the right hand on the main handle (4) during operation.

- > Push the product in front of you (Fig. 20).

- > The leaves will be sucked up into the tube and thrown into the collection bag.
- > Make sure the volume of leaves sucked in at one time is not too large. This will avoid clogging the tube and blocking the impeller wheel.



Fig. 20



WARNING! Switch the product off and disconnect the spark plug connector (15) if the product stops suddenly during operation and does not produce any suction. Refer to the instructions below about removing blockages and the section "Troubleshooting".

After use

- > Switch the product off, disconnect the spark plug connector (15) and let it cool down.
- > Check, clean and store the product as described below.

The golden rules for care



WARNING! Always switch the product off, disconnect the spark plug connector (15) 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 cleaning

- > Clean the product with a dry cloth. Use a brush for areas that are hard to reach.
- > In particular clean the air vents (11) after every use with a cloth and brush.
- > Remove stubborn dirt with high pressure air (max. 3 bar).



NOTE: Do not use chemical, alkaline, abrasive or other aggressive detergents or disinfectants to clean this product as they might be harmful to its surfaces.

- > Check for worn or damaged parts. Replace worn parts as necessary or contact an authorised service centre for repair before using the product again.

Maintenance

Before and after each use, check the product and accessories or attachments for wear and damage. If required, exchange them for new ones as described in this instruction manual. Observe the technical requirements.

Removing blockages



WARNING! Wear protective gloves when removing blockages! Use proper tools to remove debris, e. g. a wooden stick! Never use your bare hands!



- > Place the product on an even surface and remove the L-shape outlet connector (23), upper / lower tubes (24, 25) and collection bag (26).
- > Check the vacuum assembly for blockages. Carefully tap the L-shape outlet connector (23) and upper / lower tubes (24, 25) to loosen the blockage.



WARNING! Never attempt to open the product housing in case of blockage. Contact an authorised service centre or a similarly qualified person to have it checked and repaired!

Collection bag

- > Place the product on an even surface and remove the collection bag (26) in reverse order of assembly.
- > Clean the collection bag after operation by turning it inside out and brushing it.
- > Wash the collection bag every year or more often if necessary. Let it dry completely before use.
- > Turn the collection bag right side out once clean and dry.
- > Replace the collection bag with one of the same type if it is damaged.
- > Refit the collection bag as above described.

Maintenance table

Part	To do	Before / after each use	First month or 10 hours	Every 3 months or 25 hours	Every 6 months or 50 hours	Every year or 100 hours	Every 2 years or 250 hours
Air filter	check	x					
Air filter	clean			x			
Air filter	replace			When necessary			
Spark plug	Check / adjust			x			
Spark plug	clean			x			
Spark plug	replace			When necessary			
Spark plug connector	clean					x	
Fuel tank and filter	clean			x			

Air filter

Wash the air filter every 25 hours (in dusty conditions or when airborne debris is present, clean more often) with clear water and dry it. Dip the air filter into clean machine

oil if necessary. It can be used after superfluous oil is eliminated.

- > Inspect the air filter regularly. Replace it with a new one if necessary.
- > Loosen the fixation screw (6a) and remove it together with the cover (6b) (Fig. 21).
- > Remove the air filter (6c) from the air filter case (6) and tap it on a solid surface to remove dust.
- > Apply a small amount of air filter oil on the filter to increase the performance of the filter. Wring out surplus oil and put the filter (6c) back into the case (6).
- > Re-fit the cover (6b), ensure it sits properly in position.
- > Tighten the fixation screw (6a) to secure the cover (6b).

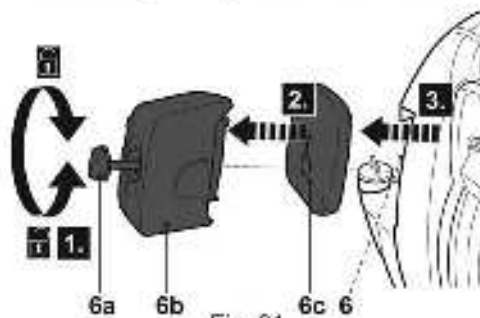


Fig. 21

Spark plug

Inspect the spark plug every 25 hours or prior to long-term storage over 180 days if the use has not been this high. Clean or replace with a new one if necessary.

- > Disconnect the spark plug connector (15) (Fig. 22).
- > Loosen the spark plug (15a) anticlockwise with the multi tool (27) (Fig. 23) and remove it carefully.

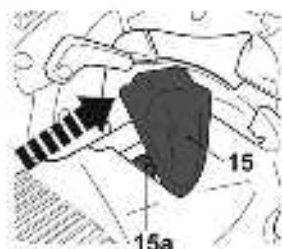


Fig. 22



Fig. 23

- > Check the spark plug (15a) for damage and wear. The colour of the electrode should be light-brown coloured.

- > Remove carbon deposition from the electrode with a soft wired brush; avoid heavy cleaning of the electrode.
- > Dry the spark plug (15a) with a soft cloth, if it is wet from fuel.
- > Check the spark plug gap. It should be 0.6 - 0.7 mm (Fig. 24).
- > Replace with a new spark plug if either the electrode or the insulation is damaged.
- > When replacing the spark plug, first screw it in hand tight and then lightly tighten it with the multi tool (27). Tighten the spark plug clockwise for approximate 90 degrees.

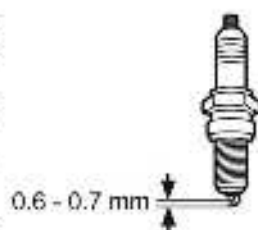


Fig. 24



WARNING! Do not over tighten the spark plug to avoid any damage!

- > Reconnect the spark plug connector (15).

Fuel and engine oil



NOTE: Petrol deteriorates over time. Engine starting may be difficult if you use petrol kept for more than 30 days. Do not reuse any fuel that has been removed. Always empty the fuel tank when storing over 30 days.

- > Empty the fuel tank (10) when storing the product over 30 days to prevent the fuel deteriorating.
- > Wipe spilled fuel up.
- > Before re-use, refill the fuel tank as described in the section "Fuel and engine oil - Fuel".



NOTE: Towards the cold season, it is advisable to put only as much fuel in the tank as you need for each use, since it should be completely used up before storing the product.

Carburettor

The carburettor is pre-set by the manufacturer. Should it be necessary to modify or replace the carburettor, please contact an authorised service centre or a similarly qualified person. Do not attempt to make any adjustments by yourself.

Muffler

Should it be necessary to modify or replace the muffler, please contact an authorised service centre or a similarly qualified person.

Spare parts / Replacement parts

The following parts of this product may be replaced by the consumer. Spare parts are available at an authorised dealer or through our customer service.

Description	Model no. or Specification
Collection bag	F28.0115.0100
Spark plug	CHAMPION RCJ7Y, BOSCH (L8RTF)

Repair

This product does not contain any parts that can be repaired by the consumer. Contact an authorised service centre or a similarly qualified person to have it checked and repaired.

Storage

- > Switch the product off and disconnect the spark plug connector.
- > Clean the product as described above.
- > Store the product and its accessories in a dark, dry, frost-free, well-ventilated place.
- > Always store the product in a place that is inaccessible to children. The ideal storage temperature is between 10 °C and 30 °C.
- > We recommend covering the product with a suitable cloth or enclosure to protect it against dust.
- > Empty the tank if you are not going to use the product for an extended period of time (more than 30 days) and before storing it for the winter.

Transportation

- > Switch the product off and disconnect the spark plug connector.
- > Attach transportation guards, if applicable.
- > Always carry the product by its handles (4, 13).
- > 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 falling over, loss of fuel, damage and injury.

Troubleshooting

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!

Problem	Possible cause	Solution
1. Engine does not start	1.1. Not enough fuel mixture in tank 1.2. Wet spark plug 1.3. Damaged spark plug 1.4. Loose spark plug connector 1.5. Choke not in the correct position for the prevailing conditions 1.6. Dirty air filter 1.7. Loose spark plug 1.8. Incorrect spark plug gap 1.9. Carburettor flooded with fuel 1.10. Opened vacuum inlet cover in blower mode 1.11. Missing L-shape connector / upper tube / lower tube in vacuum mode 1.12. Missing S-shape connector in blower mode	1.1. Add suitable fuel mixture 1.2. Dry the spark plug 1.3. Replace with a suitable spark plug 1.4. Attach the spark plug connector properly 1.5. Move choke to correct position 1.6. Clean air filter (see section Care and maintenance - Air filter) 1.7. Tighten spark plug 20 - 30 Nm 1.8. Set gap between electrodes at 0.6 - 0.7 mm 1.9. Remove air filter and pull recoil starter handle continuously until carburettor clears itself and install air filter back in the case 1.10. Close the cover before blowing operation 1.11. Assemble the tubes and connector before vacuuming operation 1.12. Assemble the connector before blowing operation

Problem	Possible cause	Solution
2. Engine stops	2.1. Not enough fuel mixture in tank 2.2. Blocked fan	2.1. Add suitable fuel mixture 2.2. Remove blockage
3. Engine difficult to start or loses power	3.1. Dirt, water or stale fuel mixture in the tank 3.2. Dirty fuel filter 3.3. Dirty air filter	3.1. Drain and clean tank. Fill tank with clean, fresh and suitable fuel mixture 3.2. Clean fuel filter 3.3. Clean air filter
4. Engine operates erratically	4.1. Defective spark plug 4.2. Incorrect spark plug gap 4.3. Dirty air filter 4.4. Dirty fuel filter	4.1. Install new, correctly gapped spark plug 4.2. Set gap between electrodes at 0.6 - 0.7 mm 4.3. Clean air filter 4.4. Clean fuel filter
5. Engine idles poorly	5.1. Dirty air filter 5.2. Clogged air vents 5.3. Dirty fuel filter	5.1. Clean air filter 5.2. Remove debris from air vents 5.3. Clean fuel filter
6. Engine skips at high speed	6.1. Too close gap between electrodes of spark plug 6.2. Too close between blowing / vacuum tube(s) and ground.	6.1. Set gap between electrodes at 0.6 - 0.7 mm 6.2. Keep a proper distance of 25 - 75 mm
7. Engine overheats	7.1. Clogged air vents 7.2. Incorrect spark plug	7.1. Remove debris from vents 7.2. Install correct spark plug
8. Unsatisfactory result	8.1. Clogged tube assembly 8.2. Full collection bag 8.3. Blocked fan	8.1. Remove blockage from the tube assembly 8.2. Empty the collection bag 8.3. Remove blockage
9. Excessive vibration/ noise or exhaust	9.1. Dull / damaged shredding means 9.2. Loose tube / connector assembly 9.3. Loose bolts / nuts / screws 9.4. Incorrect fuel mixture	9.1. Have it replaced by an authorised service centre or a similarly qualified person 9.2. Ensure all tubes / connectors are properly assembled 9.3. Tighten bolts / nuts / screws 9.4. Drain and clean tank. Fill tank with clean, fresh and suitable fuel mixture

Recycling and disposal

- > Old products are potentially recyclable and do not, therefore, belong in your household rubbish. You are requested to assist us and our contribution to saving resources and protecting the environment by handing in this product at an equipped collection centre (if there is one available).
- > Petrol, oil, used oil, a mixture of oil and petrol and objects soiled with oil e. g. cleaning cloths do not belong in the household rubbish. Dispose of oil-contaminated items in accordance with the local guidelines and hand them in at recycling centres.
- > The product comes in a package that protects it against damage during shipping. Keep the package until you are sure that all parts have been delivered and the product is function properly. Recycle the package afterwards.

EC declaration of conformity

TITAN

Declaration of Conformity

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

Declare that the product
Designation: 27.6cc Vacuum Blower
Model: TTL684BVC

Complies with the following Directives:
2014/30/EU Electromagnetic Compatibility Directive
2006/42/EC Machinery Directive
2000/14/EC amended by 2005/88/EC on noise emission
Conformity assessment procedure: 2000/14/EC-Annex V
Measured sound power level: 107.5 dB(A)
Guaranteed sound power level: 105 dB(A)
Standards and technical specifications referred to:

EN 15503:2009+A1:2013
EN ISO 14982:2009

Authorised Signatory and technical file holder
Date: 05/12/2018

Signature P. CHANDLER

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





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