TITAN pro

Gives You The Edge

TP450 Petrol Tiller Rotavator
User Manual

Introduction

Thank you for purchasing our petrol tiller/cultivator.

- This handbook explains how to safely operate and maintain your **TP450 Tiller**.
- All information is up-to-date as of the time of printing.
- We reserve the right to make changes to the product and/or this manual at any time without notice.
- Reproduction of this manual without written permission is prohibited.
- **Important:** Please keep this manual with the machine at all times. If you sell or lend the tiller, ensure this manual is handed over to the new user.
- Note: Due to continuous product improvement, the illustrations and specifications in this manual may differ slightly from your actual machine.

Safety Information

Your safety and the safety of others is extremely important.

Important safety information is provided in this manual and on the machine labels. Please read this information carefully. This machine is designed to give safe and dependable service if operated according to instructions. Read and understand this owner's manual before operating the tiller. Failure to do so could result in personal injury or equipment damage.

Signal Words
This manual uses the following signal words to alert you to potential hazards:

- **DANGER:** Indicates a hazardous situation which, if not avoided, **will** result in death or serious injury.
- **WARNING:** Indicates a hazardous situation which, if not avoided, **could** result in death or serious injury.
- **NOTICE:** Indicates specific information to prevent damage to the machine or property.

Important Safety Precautions

- **Starting Procedure:** When starting the engine, ensure the clutch lever is disengaged (released) and the Engine Switch is in the **ON** position.
- **Stay Alert:** Always operate the machine with care. Do not operate the tiller if you are tired, distracted, or under the influence of alcohol or medication.
- **Rotating Tines:** Keep hands and feet away from the rotating tines (blades). Contact with the blades can cause severe injury.
- **Fuel Quality:** Use fresh, clean unleaded petrol. Ensure the fuel is free from dirt and water.
- **Fire Hazard:** Petrol is highly flammable. Handle with care and never refuel while the engine is hot or running.
- **Stopping:** When you have finished using the tiller, always turn the Engine Switch to the **OFF** position.

Contents

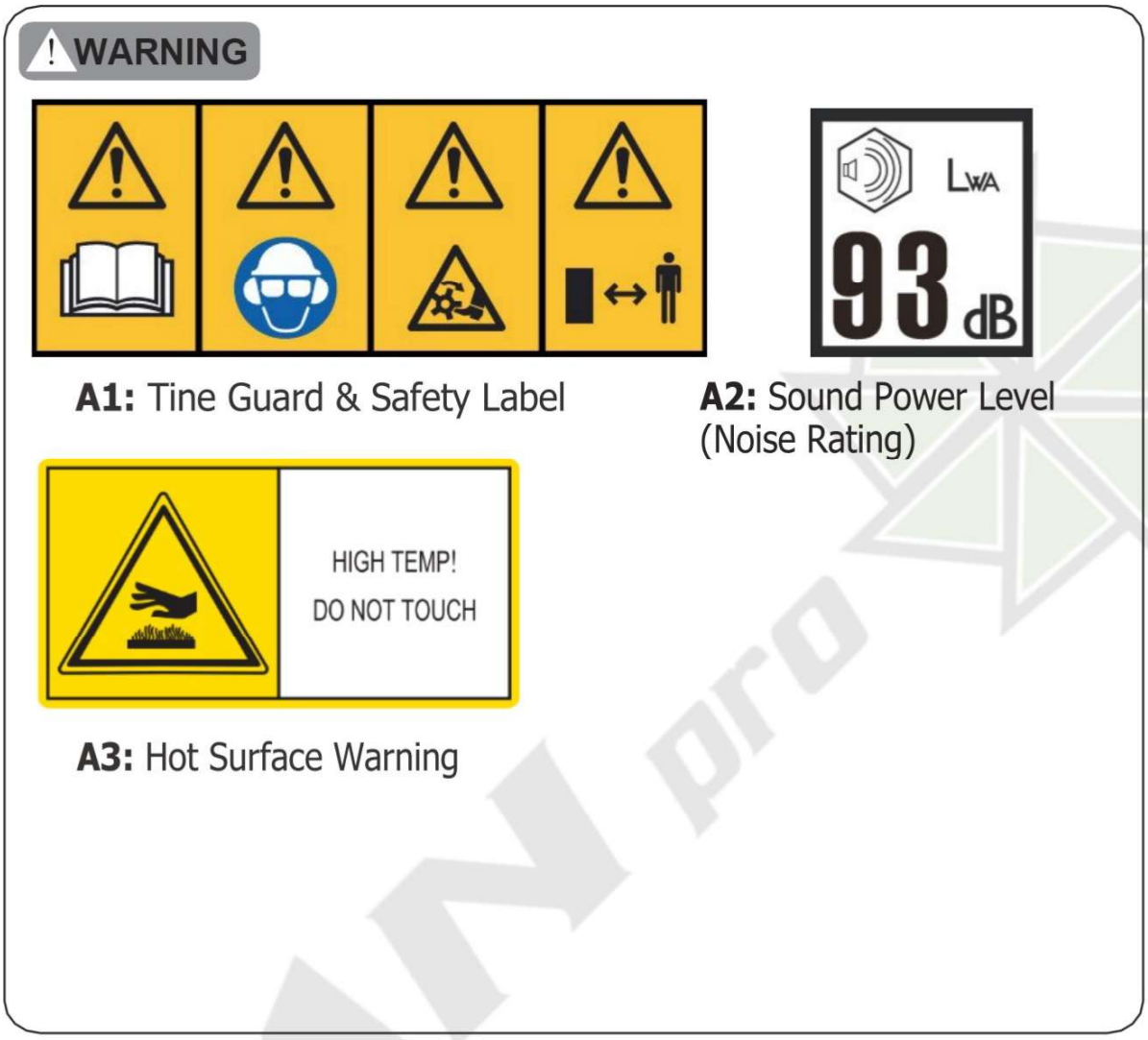
Safety Instructions and Warnings

1. **Training**
    a. **Read the Manual:** Read this manual carefully. Be familiar with the controls and the proper use of the machine. Learn how to stop the machine and disengage the clutch quickly in an emergency.
    b. **Users:** Never allow children to operate this machine. Never allow adults to operate the machine without proper instruction.
    c. Safety Zone: Keep the area of operation clear of all persons, particularly small children, and pets.
2. **Preparation**
    a. **Clear the Area:** Thoroughly inspect the area where the machine is to be used. Remove all stones, sticks, wire, bones, and other foreign objects (debris) that could be thrown by the tines.
    b. **Protective Clothing:** Wear proper working clothes and sturdy, non-slip safety footwear. Do not operate the machine when barefoot or wearing open sandals.
    c. **Eye Protection:** Always wear safety glasses or goggles during operation, adjustment, or repair to protect your eyes from thrown objects.
    d. **Fuel Safety:** Petrol is highly flammable.
        i. Store fuel in containers specifically designed for this purpose.
        ii. Never refuel while the engine is running or hot.
        iii. Refuel outdoors only - **never indoors**.
        iv. Replace the fuel tank cap securely and wipe up any spilled fuel before starting.
    e. Adjustments: Never attempt to make any adjustments while the engine is running (except where specifically recommended by the manufacturer.)
3. **Operation**
    a. **Rotating Parts:** Do not put hands or feet near or under rotating parts. Keep clear of the tines at all times.
    b. **Roads & Passengers:** Exercise extreme caution when operating on or crossing gravel drives, walks, or roads. Never carry passengers.
    c. **Impact:** If the machine strikes a foreign object, stop the engine immediately, inspect for damage, and repair before restarting.
    d. **Footing:** Always keep a firm hold on the handlebars and ensure good footing. Do not run; walk.

e. **Vibration:** If the machine starts to vibrate or make abnormal noise, stop the engine immediately and check for the cause. Vibration is generally a warning of trouble.
f. **Maintenance Stops:** Stop the engine whenever you leave the operating position, before unclogging the tines, and when making any repairs, adjustments, or inspections.
g. **Unattended Machine:** When leaving the machine unattended, disengage the clutch, shift to neutral, and stop the engine.
h. **Servicing:** Before cleaning, repairing, or inspecting, shut off the engine and make sure all moving parts have come to a complete stop.
i. **Exhaust Fumes:** Engine exhaust contains Carbon Monoxide, a poisonous, odourless gas. **Never operate the machine indoors.**
j. **Guards:** Do not operate the machine without proper guards, plates, or other safety protective devices in place.
k. **Overloading:** Do not overload the machine capacity by attempting to till too deep at too fast a rate.
l. **Slippery Surfaces:** Do not operate on wet or slippery surfaces. Use extra care when operating in reverse.
m. **Bystanders:** Keep bystanders, children, and pets a safe distance away.
n. **Accessories:** Use only attachments and accessories approved by the manufacturer.
o. **Lighting:** Operate only in daylight or good artificial light.
p. **Control Loss (Kickback):** If the tines catch on the ground and propel the tiller forward, **let go of the handles**. Do not try to hold the machine back.
q. Slopes: Do not operate on excessively steep slopes. Exercise extreme caution when changing direction on slopes.

4. **Maintenance and Storage**
   a. **Safe Condition:** Keep the machine, attachments, and accessories in safe working condition.
   b. **Fasteners:** Check engine mounting bolts and other fasteners at frequent intervals for proper tightness.
   c. **Storage:** Allow the engine to cool before storing in any enclosure. Store the machine indoors, away from open flames or sparks.
   d. **Long-term Storage:** If the machine is to be stored for an extended period, always refer to the instructions for important details. Keep the manual with the machine.
   e. **Competence:** Do not attempt to repair the machine unless you have the proper tools and mechanical proficiency.

5. Safety Labelling



A1: Tine Guard & Safety Label

A2: Sound Power Level (Noise Rating)

A3: Hot Surface Warning

6. Safety Labelling Locations

Main Specifications and Structure

Specifications Table

Item	Specification
Engine Specifications	
Engine Model	156F/P-M (Petrol)
Max Power	1.4 kW
Rated Power	1.1 kW
Rated Speed	2900rpm
Tiller Unit Specifications	
Dimensions (L x W x H)	1100 x 450 x 900 mm
Weight	29kg
Transmission Type	Chain
Drive System	V-Belt / Tension Pulley
Tiller Performance Specifications	
Tine Speed	134rpm (Forward)
Tine Radius	120mm
Number of Tines	24
Tilling Width	42cm
Tilling Depth	10-20cm
Operating Speed	0.21 m/s
Work Rate (Productivity)	≥ 400 m²/h
Fuel Consumption	≤ 1.4 kg/h

Note: Specifications are subject to change without notice due to continuous product improvement. The data above is for reference only.

Structure Diagram Key

1. Handlebars
2. Clutch Lever
3. Handlebar Column
4. Engine
5. Chassis/Engine Mount
6. Engine On/Off Switch
7. Belt Guard
8. Mudguard
9. Rotary Tines
10. Transport Wheel
11. Depth Gauge

Intended Use

Application: This machine is designed for cultivating light to medium soil (such as sandy or loamy earth) in private domestic gardens and allotments. It is intended for intermittent use and is not suitable for heavy clay, rocky ground, or continuous commercial operation.

Tine Configuration (Standard): 3 groups per side (4 tines per group); 24 total tine count; 420mm Tilling Width

Assembly Instructions

WARNING: The tiller is heavy. We recommend having two people to lift the machine out of the box safely.

Step 1: Unpacking Remove the tiller body and all loose accessories from the carton. Place parts on a flat, clean surface.

Step 2: Install Drag Bar (Depth Gauge)

- Locate the **Drag Bar** (Resistance Rod) and insert it into the bracket on the rear of the **Engine Frame**.
- Secure it in place using the **8x40 Pin** and lock it with a split pin/clip.

Step 3: Install Transport Wheel

- Attach the **Transport Wheel** to the Drag Bar assembly.
- Secure it using the **Clip Pin** provided.

Step 4: Install Lower Handlebar

- Position the **Lower Handlebar** (Handlebar Column/Bending Pipe) onto the mounting point on the **Engine Frame**.
- Align the holes and secure firmly using the **M8x70 Bolt** and nut.

Step 5: Install Upper Handlebar

- Attach the **Upper Handlebar** to the Lower Handlebar (Column).
- Secure using the **M8x45 Bolt** and knob/nut. Ensure the cables are not trapped or twisted during this step.

Step 6: Final Check

- Check the toolbox and carton to ensure no parts or loose bolts remain.
- Double-check that all bolts installed in steps 2–5 are tightened securely.

Operation

Pre-Operation Note: Although this machine was adjusted at the factory, vibration during shipping may have affected the settings. Before using the tiller, you must check and adjust the machine to ensure it is in safe working condition.

You can see this model in operation in our product video – scan the QR code below to find this.

Daily Checks (Pre-Start)

Engine Oil Check

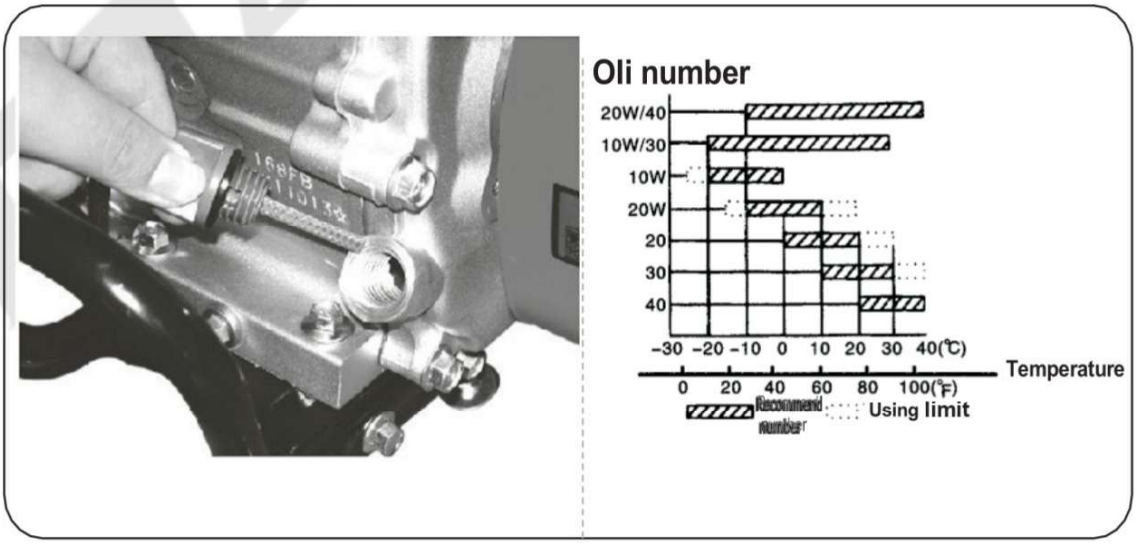
NOTICE: Engine Oil Capacity: 0.35 Litres. Running the engine with insufficient oil **will** cause severe engine damage and void the warranty.

Procedure:

1. **Level Surface:** Place the tiller on a flat, horizontal surface.
2. **Remove Dipstick:** Unscrew the oil filler cap/dipstick ("oil ruler") and wipe it clean.
3. **Check Level:** Insert the dipstick back into the hole without screwing it in, then remove it to check the oil level. The oil should be between the upper and lower limit marks.
4. **Oil Type:** Use high-quality 4-stroke engine oil. **SAE30** is recommended for general use.

NOTICE:

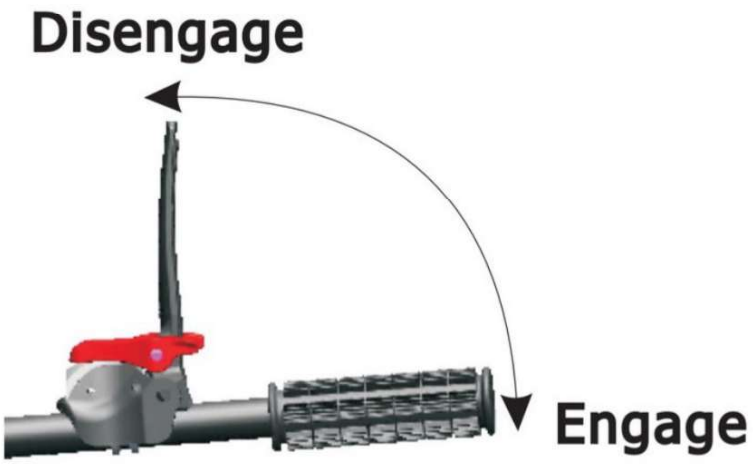
- **Oil Quality:** Use only clean, high-quality 4-stroke oil. Using old or dirty oil will shorten the engine's life.
- **Air Filter: Never** run the engine without the air filter installed. Dust and dirt entering the engine will cause rapid wear.



Clutch Operation & Adjustment

How the Clutch Works The clutch lever controls the engagement of the tines (blades).

- **Engaging (Squeezing the Lever):** When you squeeze the clutch lever against the handlebar, the tension pulley tightens the drive belt. Engine power is transferred to the gearbox, and the **tines will begin to rotate**. *(See the below diagram)*.
- **Disengaging (Releasing the Lever):** When you release the clutch lever, the tension pulley loosens the belt. Power transfer stops, and the **tines will stop rotating**. *(See the below diagram)*.



Checking Clutch Adjustment

NOTICE: Incorrect clutch cable tension will affect performance. If the cable is too loose, the tines will not have power. If too tight, the tines may not stop when you release the lever.

- **Test:** Start the engine (ensure tines are clear of the ground).
- **Check:** Squeeze the lever; the tines should rotate smoothly. Release the lever; the tines must stop immediately.
- If the tines do not stop or do not turn, refer to the **Troubleshooting** section to adjust the cable.

Operating Precautions

NOTICE: The following precautions are critical to prevent damage to the machine and ensure operator safety.

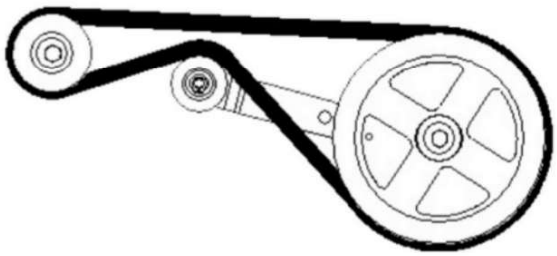
1. **Monitor the Machine**
    - **Listen & Feel:** While working, pay attention to the machine's sound and vibration. If you notice any loose parts, abnormal noise, or excessive vibration, **stop the engine immediately** and inspect the tiller.
    - **Fasteners:** Regularly check that all nuts, bolts, and connecting pins are tight.
2. **Engine Care**
    - **Warm-Up:** Do not operate the engine under heavy load immediately after starting, especially if the engine is cold. Allow it to warm up for a few minutes. This is vital for new machines or after a major repair.
    - **Oil Level:** Check the engine oil level frequently. If the oil is low, top it up immediately.
    - **Cooling: Never** pour water over the engine to cool it down. This will cause thermal shock and crack the engine block. Allow the engine to air-cool naturally.
    - **Air Filter:** Clean the air filter element regularly, especially when working in dusty soil. A clogged filter reduces power and causes rapid engine wear.
3. **Handling & Transport**
    - **Stability:** Maintain a firm grip on the handlebars and ensure good footing to prevent the machine from tipping over.
    - **Hard Surfaces: Do not** drive the tiller over concrete, tarmac, or rocky ground with the tines installed. This will damage the blades and the transmission. Use the transport wheel or carry the machine.
    - **Cleaning:** After every use, remove grass, roots, soil, and oil residue from the machine. Keep the engine cooling fins clear of debris.

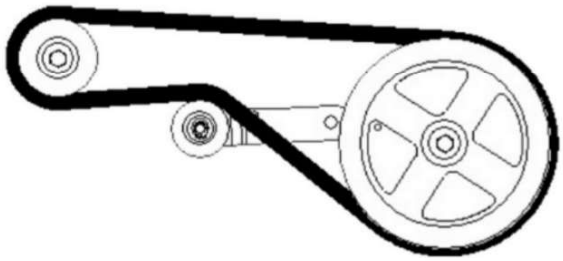
Adjustment & Assembly

Belt Tension Adjustment

Checking the Tension The proper operation of the tiller depends on correct belt tension.

- **Engaged:** When you squeeze the clutch lever, the tension pulley moves **up** to press against the belt. This tightens the belt and transfers power to the transmission (please see left-hand image below).
- **Disengaged:** When you release the clutch lever, the tension pulley moves **down**, releasing pressure on the belt. The belt becomes loose, and the tines stop rotating (please see right-hand image below).
- **Correct Value:** The reference value for belt tension (spring extension/deflection) is approximately **65mm** when the clutch is engaged.





Adjusting the Engine Position If the belt is slipping (too loose) or the tines won't stop (too tight), you must adjust the engine position:

- **Loosen Bolts:** Loosen the four (4) Engine Mounting Bolts that secure the engine to the chassis.
- **Adjust:**
    - **If Belt is Too Loose:** Slide the engine **forward** (away from the handlebars) to tighten the belt.
    - **If Belt is Too Tight:** Slide the engine **backward** (towards the handlebars) to loosen the belt.
- **Tighten:** Once the correct tension is achieved, securely tighten all four engine mounting bolts.
- **Check:** Verify the pulleys are aligned straight. Misaligned pulleys will cause the belt to jump off or wear rapidly.

Cable Assembly & Adjustment

Clutch Cable Installation – See Below Image

- **Attach:** Connect the clutch cable end to the Clutch Lever on the handlebar.
- **Adjust:** Locate the Cable Adjuster (threaded barrel) on the cable. Turn the adjuster to remove excess slack.
- **Fine Tuning:** The cable should be adjusted so there is no slack when the lever is open, but not so tight that it pulls on the tension pulley. The adjuster nut should be roughly in the middle position to allow for future adjustment.

Engine Stop Switch (Flameout Switch)

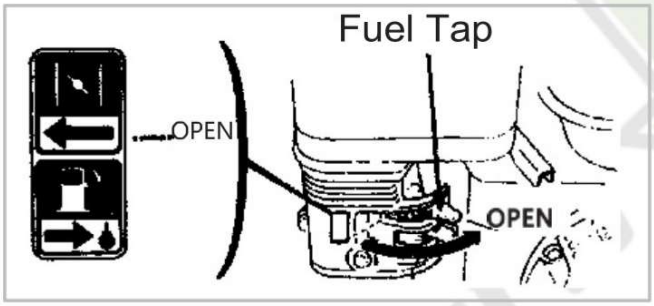
- **Connect:** Locate the wire coming from the engine's ignition coil and connect it to the corresponding wire from the ON/OFF Switch on the handlebar.
- **Test:** Start the engine. Turn the switch to the OFF position. The engine must stop immediately. If it does not, check the wire connection.

Starting the Engine

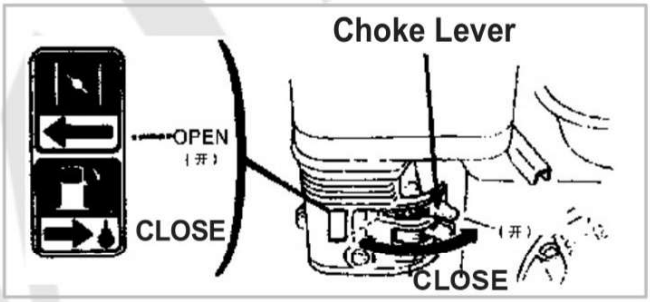
WARNING - Safety Check: Before starting the engine, ensure the **Clutch Lever** is fully released (disengaged). If the clutch is engaged, the tines will rotate immediately upon starting, which could cause injury.

Starting Procedure

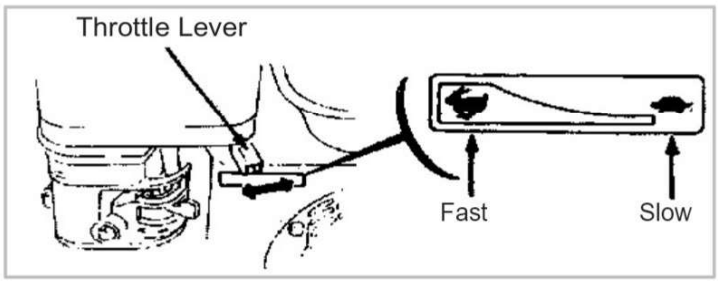
- **Step 1: Open Fuel Tap** Turn the Fuel Tap to the **ON** position.



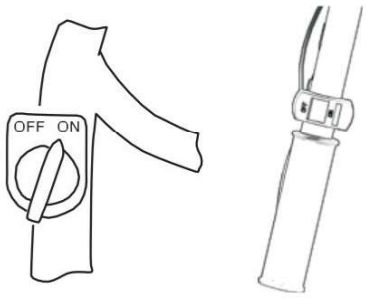
- **Step 2: Close the Choke (Cold Start)** Move the Choke Lever to the **CLOSE** position. *Note: If the engine is already warm, you can leave the Choke in the OPEN position.*



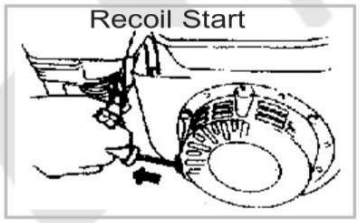
- **Step 3: Set Throttle Speed** Move the Throttle Lever slightly to the left (towards the "Fast" or "Hare" symbol).



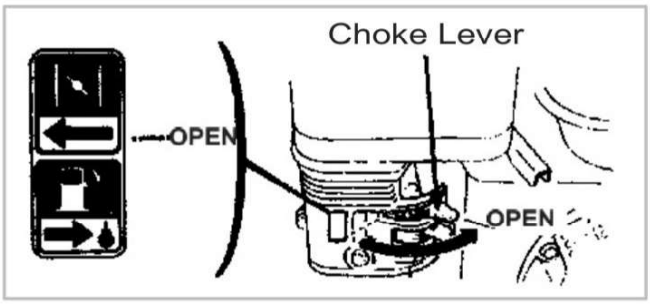
- **Step 4: Turn on Ignition** Turn the Engine ON/OFF Switch ("Flameout Switch") to the **ON** position. There are two different designs of the handle, with different styles of Engine ON/OFF Switches – you can see these designs below.



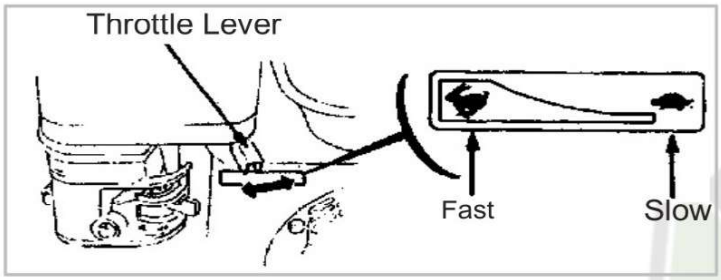
- **Step 5: Pull Starter** Grip the starter handle firmly. Pull the cord slowly until you feel resistance (compression), then pull briskly and forcefully to start the engine.
- **NOTICE:** Do not let the starter handle snap back against the engine. Return it gently to prevent damage to the starter mechanism.



- **Step 6: Open the Choke (Warm Up)** Once the engine is running and begins to warm up (usually after a few seconds), slowly move the Choke Lever to the **OPEN** position.



- **Step 7: Adjust Speed** Use the Throttle Lever to set the desired engine speed for tilling.

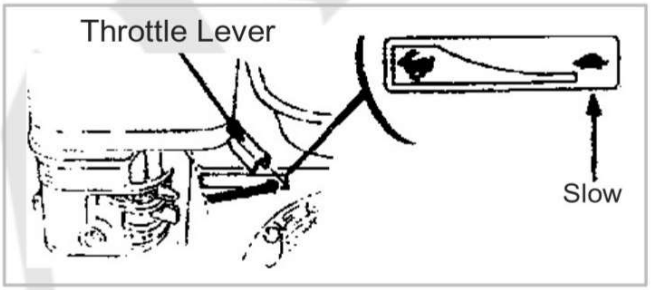


Stopping the Engine

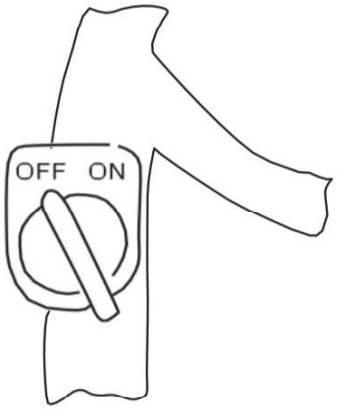
Emergency Stop: In an emergency, simply turn the Engine ON/OFF Switch directly to the **OFF** position.

Normal Stopping Procedure

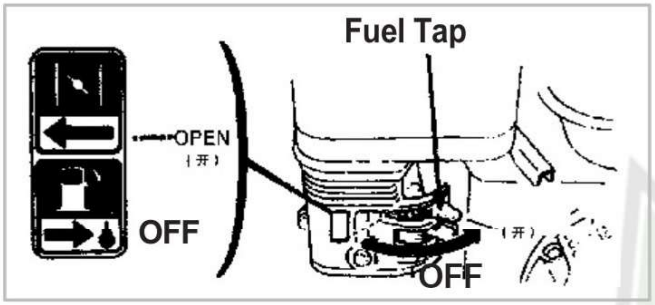
- **Reduce Speed:** Move the Throttle Lever to the minimum speed ("Slow" or "Tortoise") position.



- **Ignition Off:** Turn the Engine ON/OFF Switch to the **OFF** position.



- **Fuel Off:** Turn the Fuel Tap/Fuel Valve to the **OFF** position.



Maintenance

Regular maintenance is essential to ensure your tiller operates safely and effectively. Normal use causes vibration, friction, and wear, which can loosen nuts or reduce engine power over time. Following a strict maintenance schedule will extend the service life of your machine.

Running-In Period (Break-In)

- **New or Rebuilt Machines** For a new machine (or after a major engine repair), correct "running-in" is vital for the engine's long-term health.
    - **Step 1:** Run the engine without load (idling) for **1 hour**.
    - **Step 2:** Operate the tiller under a light load for **5 hours**.
    - **Step 3:** While the engine is still warm, drain the oil from the engine crankcase and transmission gearbox.
    - **Step 4:** Refill with fresh, clean oil to the specified level. The machine is now ready for normal use.

Routine Maintenance

- **Daily Checks (Before and After Use)** Perform the following checks every time you use the machine:
    - **Listen:** Check for abnormal noises or excessive vibration.
    - **Fasteners:** Check all nuts and bolts are tight. Vibration can loosen these over time.
    - **Leaks:** Inspect the engine and gearbox for any oil leaks.
    - **Oil Levels:** Ensure engine oil is at the correct level.
    - **Cleanliness:** Remove dirt, grass, and oil residue from the machine, particularly around the engine cooling fins and exhaust.
    - **Damage Check:** Inspect tines (blades) for damage or cracks. Replace any broken parts immediately.
    - **Log:** It is good practice to keep a record of your maintenance hours

Tiller Maintenance Timetable

Time Intervals → Maintenance Task ↓	Daily (8hrs)	1st Month (20hrs)	Every 3 Months (150hrs)	Every Year (1000hrs)
Check & Tighten Fasteners	✓			
Check Engine Oil Level	✓			
Change Engine Oil	✓ First change	✓ Second change	✓ Third change, then every 3 months (150 hrs)	
Check for Leaks	✓			
Clean Machine	✓			
General Inspection	✓			
Adjust Control Cables	✓			
Check Belt Tension	✓			
Inspect Gears & Bearings				✓

Engine Long-Term Storage

Warning: Risk of Burns or Fire - The engine and exhaust become extremely hot during operation. Allow the engine to cool completely before performing any storage maintenance.

Storage Preparation

Proper storage is essential to prevent engine problems. Protecting the engine from rust and corrosion will ensure it starts easily next season.

Cleaning

- **Cool Down:** If the engine has been running, allow it to cool for at least 30 minutes.
- **Clean Exterior:** Clean all outer surfaces. Touch up any damaged paintwork to prevent rust. Apply a light coat of anti-rust oil to areas susceptible to corrosion.

NOTICE: Do not wash the engine with water (especially high-pressure washers). Water can enter the air filter or muffler and cause severe internal damage.

Fuel System (Important)

Petrol degrades over time. Stale fuel can "gum up" and block the carburettor and fuel lines. If storing the machine for longer than 30 days, you must drain the fuel system.

- **Drain the Fuel Tank:** Turn the fuel valve to **OFF**, remove the sediment cup (deposit cup) at the bottom of the fuel valve, and drain any fuel into a suitable container. Reassemble the cup securely.
- **Drain the Carburetor:** Turn the fuel valve **ON**. Place a container under the carburetor. Loosen the drain screw/bolt (or press the drain valve, depending on model) at the bottom of the carburetor to drain the remaining fuel. Once drained, tighten the screw/valve and return the fuel valve to **OFF**.

Lubrication

- **Change Oil:** While the engine is warm (but not hot), change the engine oil to remove sludge and contaminants. Refill with fresh oil.
- **Protect the Cylinder:**
    - Remove the spark plug using a spark plug spanner.
    - Pour one teaspoon (5ml) of clean engine oil into the cylinder.
    - Pull the starter recoil cord slowly a few times to distribute the oil inside the cylinder.
    - Reinstall the spark plug.

Valve Protection

- **Close the Valves:** Slowly pull the starter recoil handle until you feel resistance. At this point, the piston is coming up on its compression stroke and both intake and exhaust valves are closed. This seals the cylinder and prevents moisture from entering and causing rust.

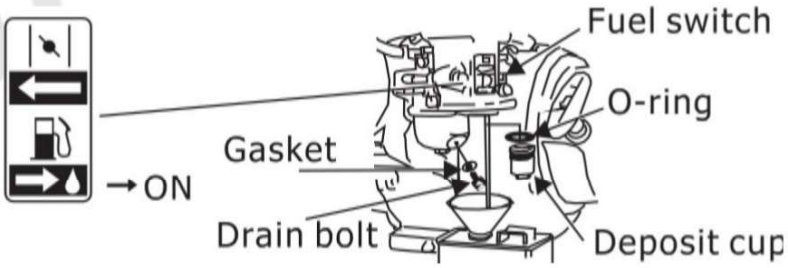
Storage Environment

- **Ventilation:** If the engine contains any residual fuel, store in a well-ventilated area away from naked flames, sparks, or pilot lights.
- **Humidity:** Store in a cool, dry place. damp environments promote rust.
- **Position:** Keep the engine horizontal (upright) to prevent oil or fuel leaks.
- **Cover:** Once the engine is cool, cover it with a breathable dust cover. **Do not** use a plastic sheet, as this traps moisture and promotes condensation/rust.

Returning to Service

- **Check:** Perform the standard pre-start checks (oil level, bolts tight).
- **Refuel:** Fill with fresh, clean petrol. (Note: Petrol left over from the previous season may make the engine hard to start).
- **Smoke:** Upon the first start, the engine may emit some smoke. This is normal; it is simply the protective oil burning off the cylinder wall.

DANGER: Petrol is highly flammable and explosive. Do not smoke in the storage area. Keep away from naked flames, sparks, and heat source.



Long-Term Storage (Tiller Unit)

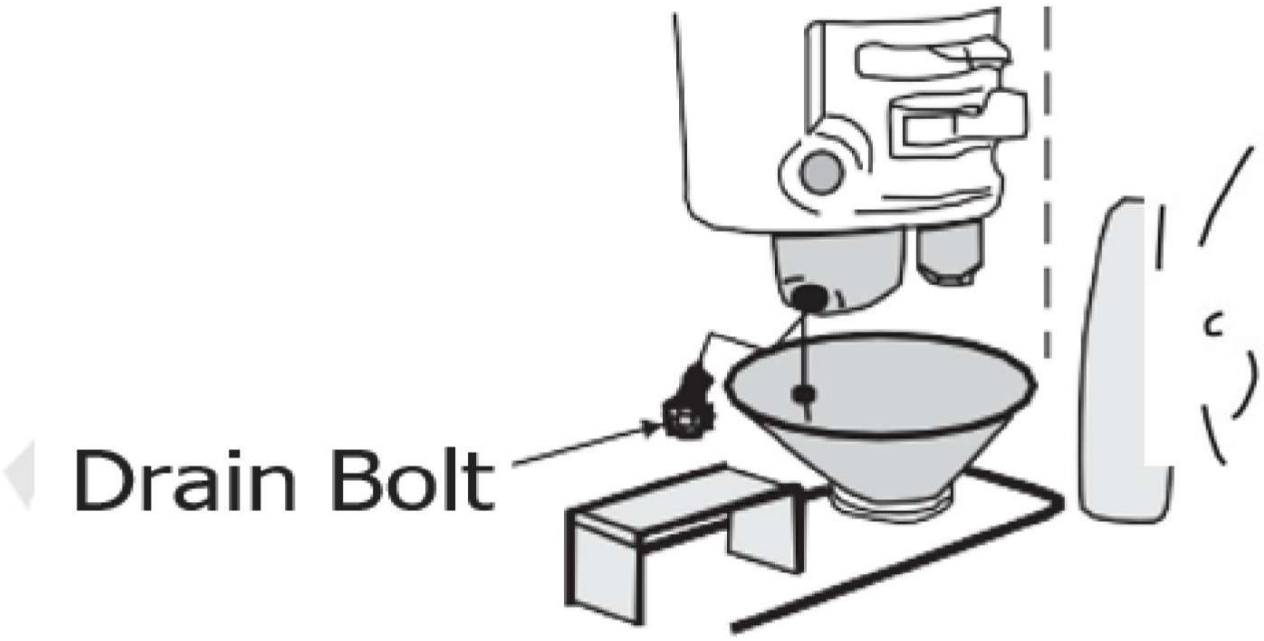
If the tiller is to be stored for an extended period, you must protect the chassis and transmission from rust and corrosion.

- **Cleaning:** Remove all dirt, mud, and vegetation from the tiller, particularly around the tines and the axle seals. (Soil holds moisture which causes rust).
- **Transmission Oil:** Drain the old oil from the transmission gearbox and refill with fresh oil (refer to the specifications for the correct oil type and quantity).
- **Rust Prevention:** Apply a light coating of oil or grease to all exposed non-painted metal parts (such as the tines, axles, and hitch) to prevent rusting. Aluminium parts do not require oiling but should be wiped clean.
- **Storage Location:** Store the machine in a dry, well-ventilated area, protected from rain and direct sunlight.
- **Tools & Manual:** Store the toolkit and this Owner's Manual with the machine so they are ready for use next season.

Engine Troubleshooting

Problem: The engine will not start. Follow these steps in order to diagnose the issue.

1. **Check Engine Switch:** Ensure the Engine ON/OFF switch is in the **ON** position.
2. **Check Oil Level:** Check the engine oil level. (Note: Many engines are fitted with a low-oil sensor that prevents the engine from starting if the oil level is too low). Top up if necessary.
3. **Check Fuel Valve:** Ensure the fuel valve (fuel tap) is in the ON (Open) position.
4. **Check Fuel Tank:** Ensure there is fresh petrol in the tank.
5. **Check Fuel Flow to Carburetor:** Verify that fuel is actually reaching the carburetor.
    - Place a suitable container under the carburetor.
    - Loosen the drain bolt at the bottom of the carburetor. Fuel should flow out freely.
    - Retighten the drain bolt securely.



WARNING - Fire Hazard: Spilled petrol is highly flammable and explosive. If fuel spills during this check, wipe it up immediately and ensure the area is completely dry before attempting to start the engine or test the spark.

6. **Check Spark:** If fuel is reaching the engine but it won't start, check the ignition system:
    - **Remove:** Remove the spark plug cap and clean any dirt from around the spark plug base. Remove the spark plug using a plug spanner.
    - **Inspect:** Check the condition of the spark plug. If the electrode is worn or the insulator is cracked, replace it.
    - **Test:**
        1. Reconnect the spark plug cap to the spark plug.
        2. Hold the metal body of the spark plug against a metal part of the engine cylinder head (to create an earth).
        3. Pull the recoil starter cord firmly. You should see a blue spark jump across the gap.
    - **Result:** If there is no spark, replace the spark plug. If there is a good spark, reinstall the plug carefully.
7. **Professional Service** If the engine still fails to start after performing these checks, contact your authorised dealer or service centre for repair.

Tiller Troubleshooting Table

Problem	Symptom	Cause	Solution
Clutch	Tines do not stop when lever is released.	Belt is too tight.	Adjust engine position to loosen the belt.
Clutch	Tines do not stop when lever is released.	Pulley still drags on belt when disengaged.	Adjust clutch cable so the pulley moves down and clears the belt.
Power	Tines stop turning under load (Engine runs).	Belt is too loose (Slipping).	Adjust engine position to tighten the belt.
Power	Tines stop turning under load (Engine runs).	Tension pulley is too loose.	Adjust clutch cable so the pulley applies firm pressure to belt.
Frame	Visible crack or break in chassis.	Material failure or impact damage.	Contact your dealer for a replacement part.
Noise	Grinding noise; Tines hitting gearbox.	Retaining pin/clip missing (Tines sliding).	Install the correct fixed pin and R-clip to secure tines.
Noise	Grinding noise; Tines hitting gearbox.	Tines are bent or damaged.	Replace the damaged tines.
Tilling	Tines not digging into the ground.	Tines installed backwards.	Reassemble so blade edges face forward direction.
Tilling	Uneven tilling or heavy vibration.	Incorrect assembly (e.g. two Left sets).	Check orientation. Ensure one Left and one Right set are used.
Smoke	Black/Blue smoke from exhaust.	Oil has entered cylinder (Machine tipped).	Run engine to burn off oil. Do not tilt machine >20°.

Wear Parts List

Part Name	Assembly/Location
Clutch Cable	Handlebar Assembly
Engine Stop Switch	Handlebar Assembly
Rubber Grip	Handlebar Assembly

SPARE PARTS & SUPPORT We stock a comprehensive range of spare parts and consumables for this machine to keep it running at peak performance. From air filters and spark plugs to replacement tines and cables, you can find everything you need on our website.

CUSTOMER SUPPORT & RESOURCES
Need help with your TP450 tiller? We offer a comprehensive online support center to ensure you get the most out of your machine. Please visit our website for the following resources:

- **Instructional Videos:** Step-by-step guides on assembly, operation, and maintenance.
- **Spare Parts:** Order official replacement parts directly from our store.
- **Technical Information:** Download digital copies of manuals and technical diagrams.
- **FAQs:** Answers to common questions and troubleshooting tips.
- **Aftersales Care:** Contact our support team for warranty and service enquiries.

VISIT OUR ONLINE SUPPORT CENTER
CLICK HERE TO VISIT WEBSITE
https://www.titan-pro.co.uk/

Note: This model was previously coded TP400B/450 and these model codes may be used interchangeably in some instances on the Titan Pro website.

UKCA DECLARATION OF CONFORMITY

We Titan Pro Ltd - DT11 7FP (Importer) declare that the product:

Designation: Petrol Tiller Cultivator 3.5HP (420mm Tilling Scope)
Model(s): TP450/TP400B

Complies with the following machinery directives:
2006/42/EC – Machinery Directive

The conformity assessment procedure followed was in accordance with: EN 709:1997/A4:2009

Notified Bodies
TÜV SÜD Product Service GmbH

Address(es)
Ridlerstraße 65, 80339 München, Germany

Authorised Signatory & Technical File Holder
Date:
05/06/2020

Signature:

Name: Mr. Charles Abbott

Position: Director

Company: Titan Pro Ltd

Address
Unit 11 Glenmore Business Park, Wend-Al Road, Blandford Forum, Dorset, DT11 7FP