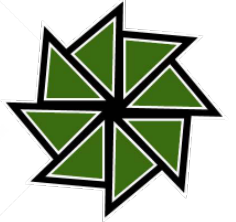


**TITAN** *pro*  
Gives You The Edge

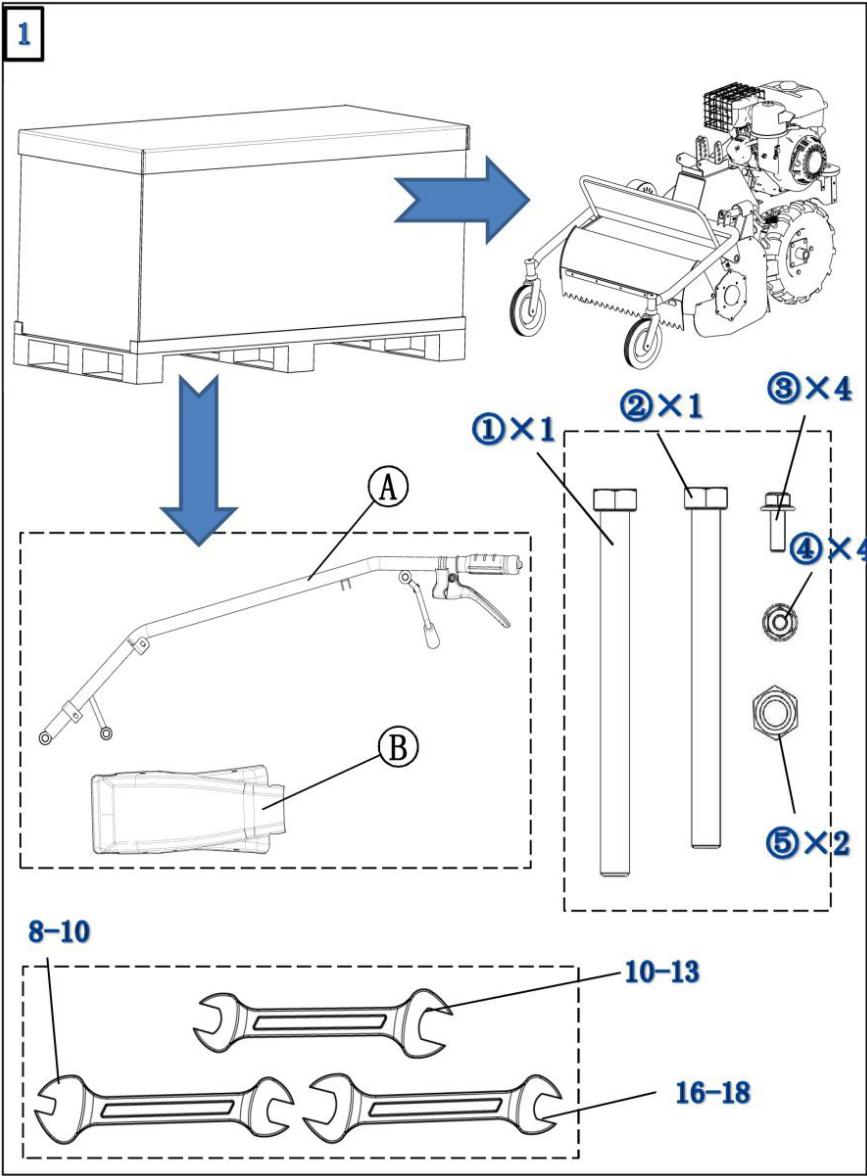


**TP690**

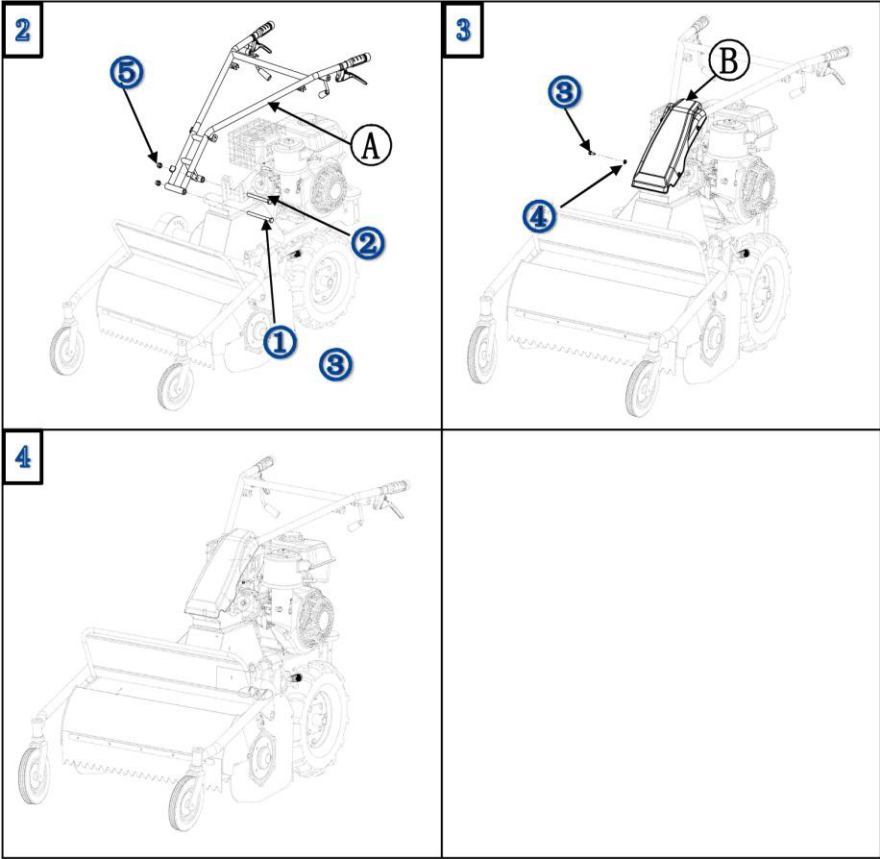
**Walk-Behind Field  
Topper Mower**

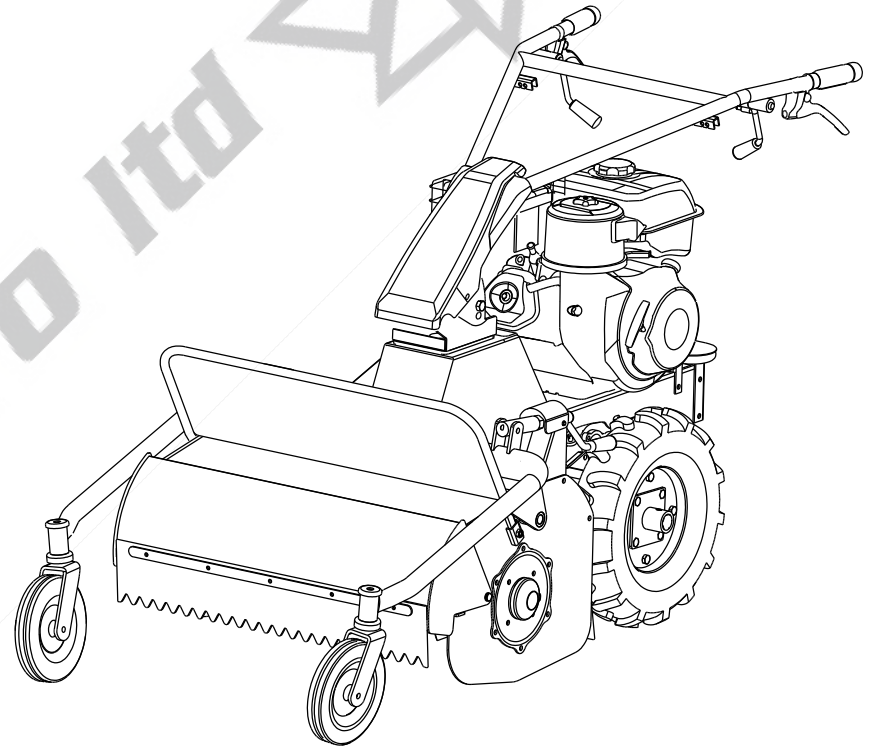
**Owner's Manual**

TP690 Machine Assembly Instructions



TP690 Machine Assembly Instructions





**Thank you for purchasing the Titan Pro TP690 Walk-Behind Field Topper Mower**




This manual covers operation and maintenance. All contents of this manual is based on the most recent information at the time of printing, and may be changed in newer revisions.

## Safety Information

This manual provides important safety information for users, so please ensure that you read it carefully before using the mower.

This safety information warns you of potential dangers and hazards that can pose harm to the user and others nearby.


Each piece of information is indicated by safety signs designated as "danger", "warning" or "attention".

	<b>Hazards:</b>	Failure to follow these instructions can cause serious injury or death.
	<b>Warning:</b>	Failure to follow these instructions may result in equipment damage or injury.
	<b>Note:</b>	Failure to follow these instructions may result in equipment damage or injury to personnel.

## Damage Prevention Information

Other important information is indicated by "attention".	
<b>Note</b>	Failure to follow these instructions may result in equipment damage.

## Safety Precautions

	If this mower is operated according to the instructions, it will run safely and reliably as it is designed to do. Please ensure you read and understand this manual carefully before operating the mower, to avoid causing personal injury or equipment damage.
--	---

## Safety Matters

- When the engine starts, the clutch handle is released and the flameout switch is set to ON.
- Please pay attention to the information provided on the safety signs to ensure you are prepared to operate the machine.
- Be careful with the rotary tilling knives and weeding wheels as these can cause injury to people nearby.
- Always use good quality, clean fuel.
- When you are done using the mower, set the flameout switch to OFF to keep the machine in a static state.
- Remember: petrol is flammable.

Due to continuous improvement of our models, the photos and illustrations in this manual may differ from the machine you have received.

## Table of Contents

<b>Chapter I: Safety Precautions and Warnings</b>	7
1) Training	7
2) Preparation	7
3) Machine Usage	7
4) Maintenance and Storage	8
<b>Chapter II: Safety Warning Signs on the Machine</b>	9
<b>Chapter III: Specifications and Structural Schematics</b>	10
1) Specifications	10
2) Structural Schematics	10
	11
<b>Chapter IV: Operating Instructions</b>	12
1) Daily Checks	12
2) Start-up Instructions	14
3) Cutter Height Adjustment	15
4) Preparations for Long-Term Storage	15
<b>Chapter V: Scope of Application</b>	16
<b>Chapter VI: Troubleshooting Common Issues</b>	16
<b>Chapter VII: List of Wearing Parts</b>	17

## Chapter I: Safety Precautions and Warnings

### 1) Training

- a) Read the operation and maintenance instructions carefully. Fully familiarise yourself with all operating mechanisms and the correct use of your Titan Pro mower. Ensure you know how to stop the mower in an emergency.
- b) Children are never allowed to use this mower. Never allow adults who have not read the instructions to use this machine.
- c) Ensure the work area is always kept clear. Never allow children or animals into the work area.

### 2) Preparation

- a) Thoroughly inspect the area where the mower will be used, and remove all small objects/obstacles that may intrude on using the mower.
- b) Before starting the engine, disengage the clutch and put the mower in neutral.
- c) Do not operate the machine without the appropriate safety equipment and clothing. Always wear non-slip footwear to improve your stability on slippery surfaces.
- d) Handle petrol carefully, as this is flammable.
  - Use appropriate containers to store your fuel and oil.
  - Never add fuel to the fuel tank/oil to the engine when the engine is running or warm.
  - Refuelling should never be done indoors; this should always take place outside, in a well-ventilated area.
  - Firmly secure the fuel tank cap and wipe off any excess/spilled fuel from the fuel tank before starting the engine.
- e) No adjustments should be made to the engine while it is running (unless explicitly stated by the manufacturer)
- f) Safety glasses should be worn during any part of the operation, including preparation, operation and maintenance.

### 3) Machine Usage

- a) Never put your hands or feet near, inside or under any moving or rotating parts.
- b) Be especially careful when operating near gravel roads, walkways or public roads. Always be alert to potential dangers. Pay attention to traffic conditions. Never carry passengers.
- c) If you hit any objects, stop the engine and run a comprehensive check of the mower to see if there is any damage. Do not operate the mower again until it has been repaired.
- d) Pay attention to your footing to avoid slipping/falling. Always wear non-slip footwear.
- e) If you experience any unusual/abnormal vibration from the mower, stop the engine immediately to find the cause. If unchecked, abnormal vibration can lead on to permanent machine damage.

- f) Stop the engine whenever you step away from the operating position, before clearing any blockages of the blade, or during any maintenance, adjustment or inspection.
- g) When the mower is unmanned, all preventive measures should be taken: put the machine in neutral; stop the engine; separate the power take-off (PTO) shaft and lower any additional devices.
- h) Before cleaning, repairing or inspecting the mower, the engine should be turned off and all moving parts must come to a full and complete stop.
- i) Exhaust fumes are harmful and can kill, so never run the mower indoors or in an enclosed space - ensure it is only run in properly ventilated areas.
- j) Never operate the mower without proper protection, for yourself and for the mower.
- k) Keep the mower away from children and animals at all times.
- l) Never overload the mower.
- m) Never run the mower at high speeds on slippery surfaces. Always check what is behind you when moving backwards.
- n) Never allow bystanders to approach the mower.
- o) Only additional accessories, ancillary items or equipment provided by the manufacturer should be used with this mower.
- p) This mower should not be operated in situations with low light or visibility.
- q) Be careful when using this machine on hard ground. The blade may hook into the ground and pull the machine forward. If this happens, let go of the handrail.
- r) Never operate the machine on steep slopes.
- s) When the mower goes downhill, you should hold it so as to prevent it tipping.

### 4) Maintenance and Storage

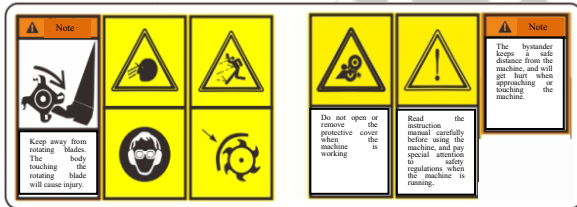
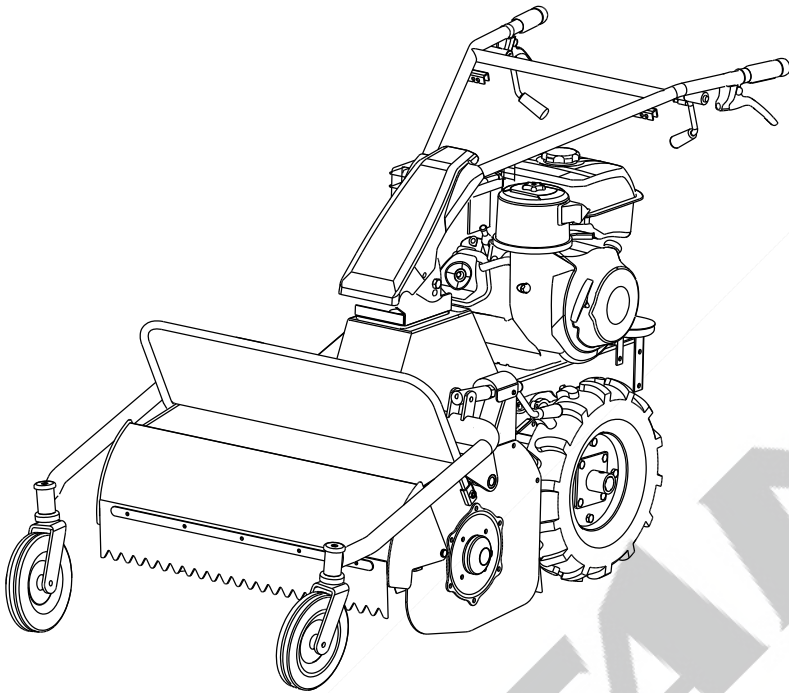
- a) Keep the mower, any additional items and equipment in safe working condition.
- b) Check that the shear bolts, engine fixing bolts and all other bolts are properly tightened at regular intervals to ensure that the mower is in safe working condition.
- c) The mower should be stored indoors and away from any potential fire sources. The engine should always be left to cool before storing the mower indoors.
- d) If the mower needs to be stored for a long period of time, the user manual should always be kept with it, as it contains important information.
- e) Do not attempt to repair the mower unless you have suitable tools, as well as instructions for disassembling, repairing and reassembling the machine.



## Chapter II: Safety Warning Signs on the Machine

Safety warning signs should be kept clear and visible at all times to avoid damage to the machine and personal injury.

The stickers should be attached to the machine fenders.

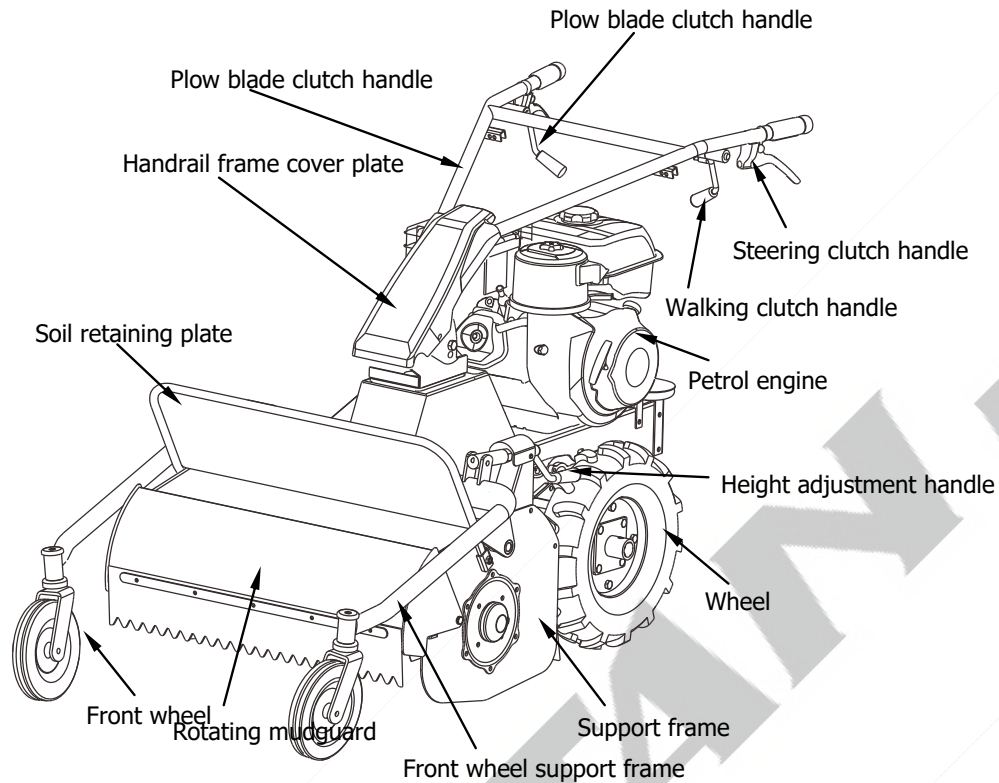


## Chapter III: Specifications and Structural Schematics

### 1) Specifications

Model Number:	Titan Pro TP690 Walk-Behind Field Topper Mower
Engine Rated Power:	6.3kW
Engine Rated Speed:	3600r/min
External Dimensions:	1800mm x 800mm x 800mm
Weight:	180kg
Transmission:	Gear and Belt Drive
Gears:	3 Forward/1 Reverse
Clutch:	Belt Tension Clutch
Cutting Height:	$\geq 5\text{mm}$
Width:	690mm
Operating Speed:	$0.1\text{m/s} \sim 0.3\text{m/s}$
Hourly Productivity:	$\geq 4\text{mu/hour}$
Oil Consumption:	$\leq 35\text{kg/hm}^2$
Number of Standard Flail Knives (Pieces):	36

## 2) Structural Schematics



## Chapter IV: Operating Instructions

The user should check all adjustment points to ensure that it is in correct working order prior to starting the engine and using the mower.

### 1) Daily Checks

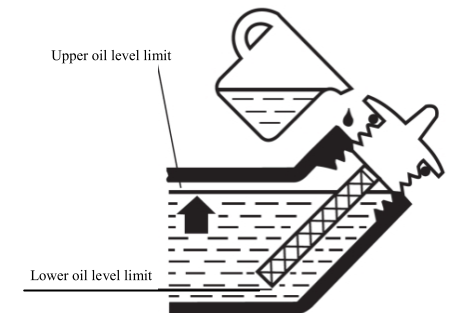
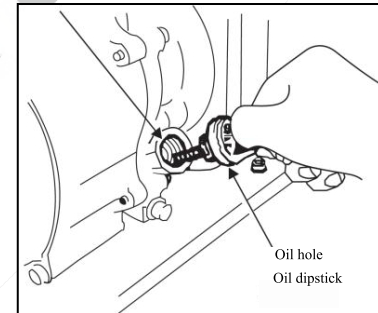
#### • Check the engine oil



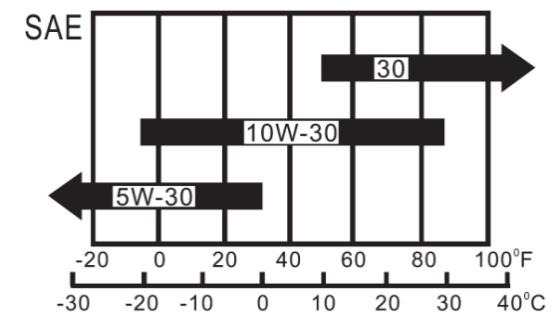
**Note**

The required engine oil on this mower is 1.1 litres. Never run the engine when the oil level is lower than required as this can cause irreparable damage to the engine.

- Only check the oil levels on level, horizontal ground.
- Unscrew the engine oil dipstick and wipe it clean with a rag.
- Insert the oil dipstick into the oil filling hole (do not turn it).
- Take out the oil dipstick and check the oil level. The oil should be within the range indicated by the oil dipstick.



SAE10W-30 is a recommended engine oil at a number of common temperatures. The chart below advises which oils are recommended at various different temperatures.

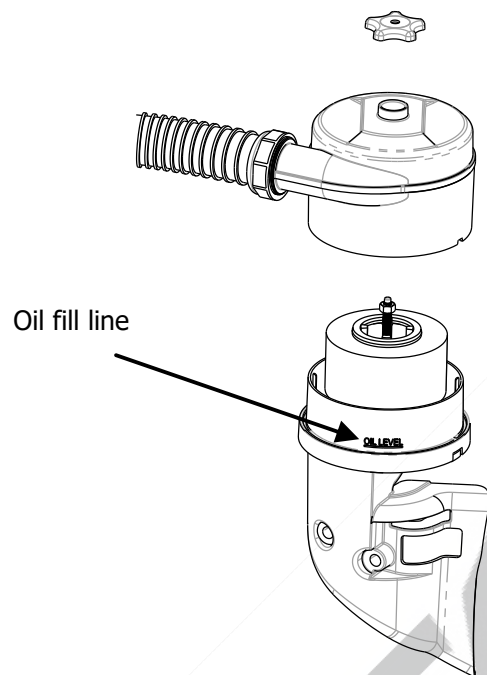


- **Check the transmission case oil**

- Only check the oil level on level, horizontal ground.
- Unscrew the oil injection bolt with a wrench.
- The normal oil level is 1.6 litre. This level is at the lower edge of the oil filling hole. Add oil if the oil level is low.
- The recommended oil grade is SAE10W-30.

- **Check the air filter**

- When using the mower for the first time, take off the air filter cover and fill the oil to the correct level.

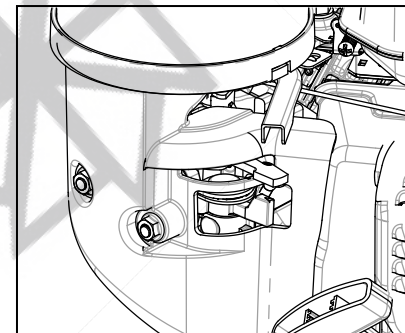


**Note**

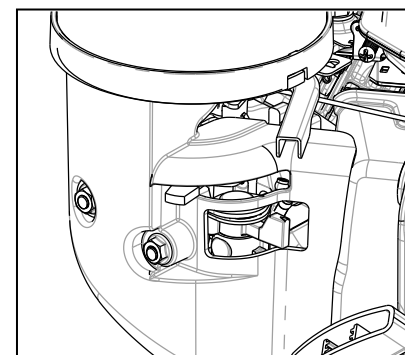
A dirty air filter will restrict air from flowing into the carburettor, which will reduce engine performance. Never run the engine without an air filter, as this will increase wear on the engine. Check the air filter element to ensure it is intact and clean. Replace this as necessary.

## 2) Start-up Instructions

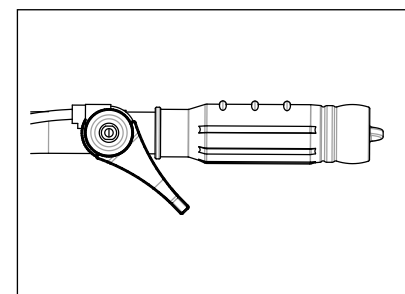
a) Turn the fuel valve to the "ON" position



b) Turn the choke lever to the "CLOSE" position

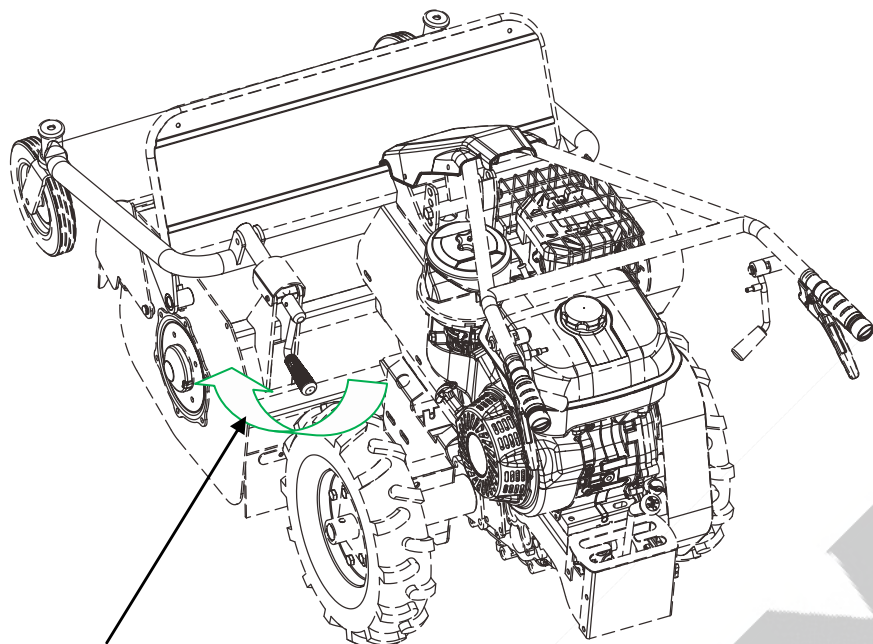


c) Turn the throttle





### 3) Cutter Height Adjustment



Rotate the height adjustment handle to adjust the clearance between the blade and the ground

When using the machine, the clearance between the blade and the ground should be properly adjusted to suit the thickness and the compactness of the crops. The forward speed should also be appropriate for the crops.

### 4) Preparations for Long-Term Storage

You should follow the below measures when preparing the mower for long-term storage:

- Clean the exterior of the machine of dust and dirt.
- Drain the lubricating oil from the transmission case and replace this with new lubricating oil.
- Apply anti-rust oil on unpainted surfaces.
- Store the machine in a ventilated and dry indoor location.

## Chapter V: Scope of Application

This mower is suitable for weeding in vegetable fields, flowers, orchards and overgrown land. It is great for safe and reliable use on terrain with overgrown weeds and thorns. It is also suitable for use with cultivated land on slopes less than 5°. If the slope is greater than this, it may cause the machine to overturn, which may cause machine damage and/or personal injury.

## Chapter VI: Troubleshooting Common Issues

Issue	Reason	Resolution
Clutch is not engaging	Clutch handle	Repair/replace
	Clutch cable damage	Replace
	The belt is damaged	Replace
	Improper clutch cable adjustment	Adjust clutch cable
Excessive gear noise	The shaft is damaged/bent	Replace the shaft
	Gears are worn	Replace gears
	Movement in shaft/worn bearings	Replace the shaft or bearing
Oil leaking from the output shaft	Worn bearing	Replace the output shaft or bearing
	Oil seal failure	Replace the oil seal
Oil leaking at the oil drain hole	Damaged gasket	Replace the gasket
	Loose bolts	Tighten bolts

## Chapter VII: List of Wearing Parts

Part Number	Part Name
1	Flashing blade
2	Belt
3	Clutch cable
4	Steering cable
5	Throttle cable
6	Clutch tensioning handle
7	Steering clutch handle
8	Damping grip
9	Bearing
10	Oil seal
11	Gasket
12	Mud retaining rubber
13	Oil plug