TITAN pro
Gives You The Edge

TPSW820
Petrol Power Brush/Yard Sweeper
User Manual

FOREWORD

Thank you for purchasing the Titan Pro Petrol Power Brush / Sweeper (Model TPSW820).

This manual contains important information regarding the safe operation, maintenance, and adjustment of your machine. The information provided is based on the most recent product data available at the time of printing.

Important Notes

- **Continuous Improvement:** Titan Pro reserves the right to make amendments to the product specifications, design, or this manual at any time without notice and without incurring any obligation.
- **Copyright:** No part of this publication may be reproduced without written permission.
- **Permanent Part:** This manual should be considered a permanent part of the machine and should remain with the sweeper if it is resold.
- **Product Variation:** Illustrations in this manual are for reference purposes only. The actual product may differ slightly from the images or descriptions shown due to ongoing improvements.

Compliance Standards

- **Engine Production Permission:** XK06-002-00252

IMPORTANT: CONDITIONS OF USE

! WARNING Warranty & Liability: Failure to follow the instructions in this manual may result in serious injury and will **void the manufacturer's warranty**.

1. Intended Use This machine is designed solely for sweeping dust, mud, leaves, debris, and light snow from hard surfaces. Any other use is strictly forbidden and is considered misuse. Titan Pro accepts no liability for damage or injury resulting from misuse.

2. Unauthorized Modifications Any changes or modifications made to this machine by the operator or dealer without prior written approval are strictly forbidden. Modifying the machine invalidates the CE/UKCA compliance and terminates the warranty immediately.

3. Operator Responsibility Please read this Owner's Manual carefully. Ensure you fully understand the instructions before using the machine. Titan Pro is free from any responsibility for damages or injuries caused by disobeying the safety and operation terms found in this manual.

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SAFETY INFORMATION & INSTRUCTIONS

Your safety and the safety of others are of paramount importance.

Important safety information is provided in this manual and on the machine itself. Please read this information carefully. This information alerts you to potential hazards that could hurt you or others. Each safety message is preceded by a safety alert symbol and one of three signal words: **DANGER**, **WARNING**, or **CAUTION**.

Safety Signal Words

DANGER Indicates an immediate hazard which, if not avoided, **will** result in **death or serious injury**.

WARNING Indicates a potential hazard which, if not avoided, **could** result in **death or serious injury**.

CAUTION Indicates a potential hazard which, if not avoided, **may** result in **minor or moderate injury**.

NOTICE Indicates a situation which, if not avoided, could result in **damage to the machine** or other property, but not personal injury.

General Safety Precautions

WARNING Read the Manual: If the TPSW820 Sweeper is operated according to these instructions, it will work safely and reliably. Before operating the machine, please read and understand this manual carefully. Failure to do so could result in serious personal injury and equipment damage.

Safety Labels: Keep all safety labels and decals on the machine clean and legible. Replace any labels that become damaged, unreadable, or missing. Contact Titan Pro for replacement decals.

1. TRAINING & LIABILITY

- **Training:** Never allow children (under 16 years old) to operate the equipment. Never allow adults to operate the equipment without proper instruction.
- **Liability:** The operator is responsible for accidents or hazards occurring to other people or their property.

- **Operator Condition:** Do not operate the sweeper while under the influence of alcohol, drugs, or medication, or when you are tired or ill. You must be alert and in control at all times.
- **Medical Implants:** The engine produces an electromagnetic field during operation. Persons with medical implants (e.g., pacemakers) should consult their physician and the implant manufacturer before operating this machine.

2. WORK AREA SAFETY

- **Clear the Area:** Thoroughly inspect the area where the equipment is to be used. Remove all doormats, wires, boards, bones, and other foreign objects that could be thrown by the brush or damage the machine.
- **Bystanders:** Keep the area of operation clear of all persons, particularly small children and pets. Stop the machine immediately if anyone enters the area. Maintain a minimum distance of **15m (50ft)** from others.
- **Indoor Use: DANGER!** Exhaust fumes contain carbon monoxide, an odorless and deadly gas. Never run the engine indoors or in an enclosed space.
- **Visibility:** Never operate the machine without good visibility or light.

3. PERSONAL PROTECTIVE EQUIPMENT (PPE)

- **Eye & Ear Protection:** Always wear safety goggles or eye shields during operation to protect against thrown debris. Wear approved ear defenders to prevent hearing loss.
- **Footwear:** Wear heavy-duty, slip-resistant boots with good ankle support. **Never** operate the machine in bare feet, sandals, or trainers.
- **Clothing:** Wear appropriate close-fitting clothing. Avoid loose jackets, scarves, or jewelry that could get caught in moving parts.

4. SAFE OPERATION

- **Guards and Shields:** Before using this machine, ensure all safety components are installed and secure, specifically the **brush guard/hood**. Never operate the machine without these protective covers in place.
- **Rotating Brush Hazard: DANGER!** Stay clear of the rotating brush. The bristles rotate at high speed and can pick up and throw debris with significant force.
    - Never step on the brush housing.
    - Never stand in front of the brush while the machine is starting or running.
    - Keep hands and feet away from rotating parts.
- **Starting Procedure:** Disengage all clutches (release drive handles) and shift into **NEUTRAL** before starting the engine.
- **Gear Shifting: Stop before shifting.** You must disengage the clutch (release the drive handle) before moving the gear shift lever. Attempting to force the gear lever while the machine is moving will cause severe damage to the transmission.

- **Reverse Operation:** Use extreme caution when reversing. Look behind and down for hazards before and during reverse motion to prevent tripping.
- **Slopes:** Exercise extreme caution when operating on slopes. Walk, never run.
- **Vibration & Fatigue:** If the machine starts to vibrate abnormally, stop the engine immediately and check for the cause. Vibration is generally a warning of trouble (e.g., loose bolts). Prolonged operation of vibrating machinery can cause numbness; take regular breaks.
- **Stopping:** Stop the engine whenever you leave the operating position, before unclogging the brush housing, and when making any repairs, adjustments, or inspections.

5. FUEL SAFETY

- **Flammable:** Petrol is highly flammable and explosive. Handle with extreme care.
- **Refuelling:**
    - Store fuel in approved containers.
    - **Never** refuel while the engine is running or hot. Allow the engine to cool for at least 2 minutes before refuelling.
    - Fill the tank outdoors with extreme care. Never fill indoors.
    - Do not overfill. Leave room for fuel expansion.
    - Replace the fuel cap securely and wipe up any spills immediately. Move the machine at least **3m (10ft)** away from the refuelling spot before starting the engine.

6. MAINTENANCE SAFETY

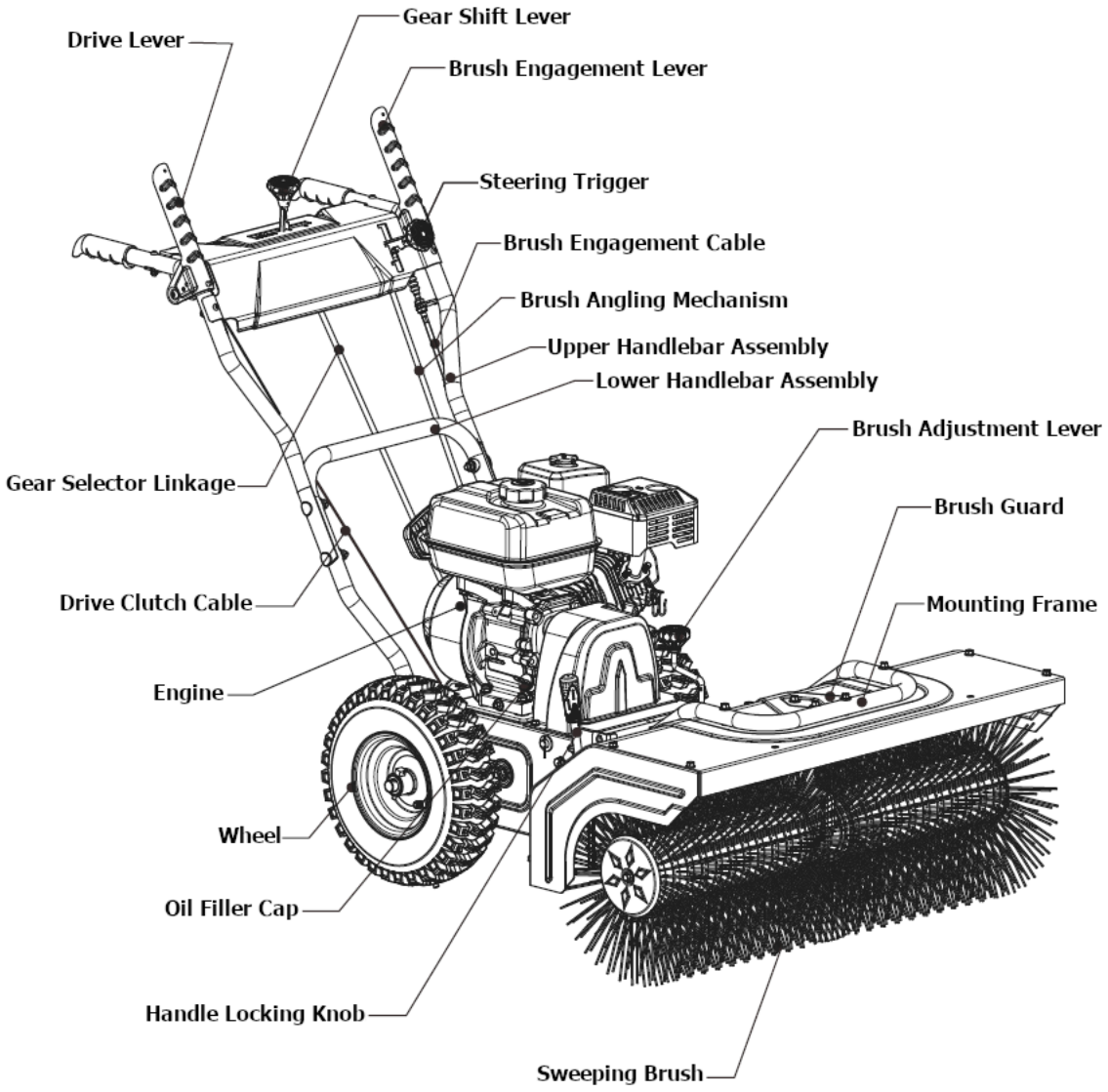
- **Disconnect Spark Plug:** Before performing any maintenance, adjustments, or cleaning, stop the engine and disconnect the spark plug wire to prevent accidental starting.
- **Modifications:** Do not change the engine governor settings or over-speed the engine. Do not modify safety guards.
- **Genuine Parts:** Use only original equipment replacement parts. Non-standard parts may damage the machine and compromise safety.
- **Hot Components:** The muffler and engine become very hot during use. Allow them to cool before touching or storing the machine.
- **Fluids:** Strictly use the regulated fuel (Unleaded) and lubricant (SAE 10W-30) ratings specified in this manual.

COMPONENT IDENTIFICATION

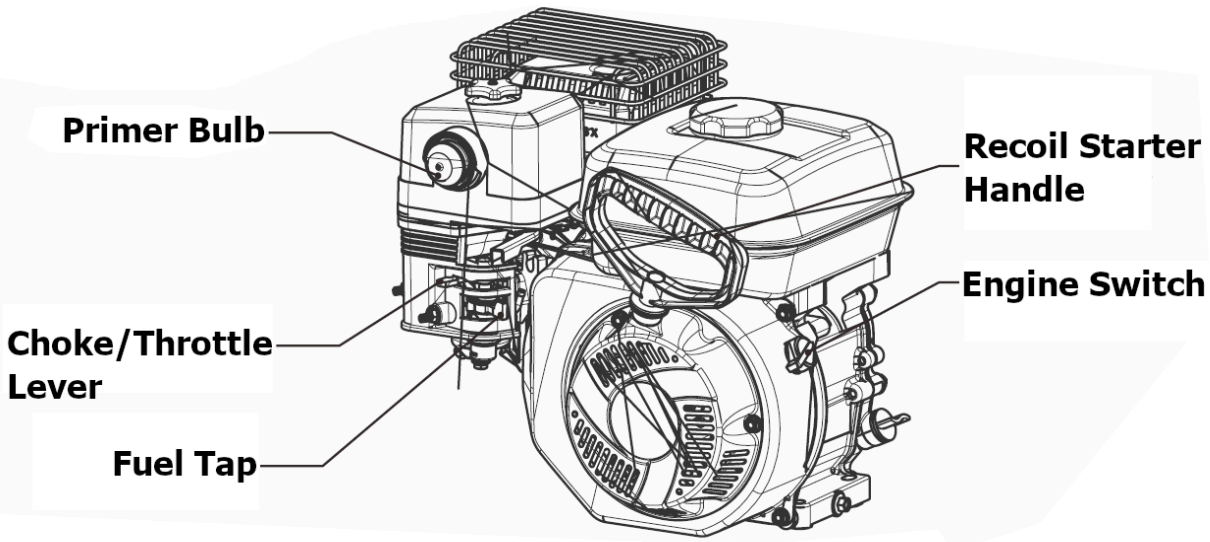
The Titan Pro TPSW820 Petrol Power Brush is designed to clear moss, leaves, mud, debris, and light snow quickly and efficiently.

Please use the following diagrams to familiarise yourself with all the parts and controls of your machine. These components will be referred to later in this manual for assembly and operation instructions.

1. MACHINE DIAGRAM



2. ENGINE DIAGRAM



MACHINE SPECIFICATIONS

Technical Specifications: TPSW820 Petrol Power Sweeper

Feature	Specification
Model	TPSW820
Engine Model	170FS/P
Engine Type	4-Stroke Petrol
Displacement	212cc
Net Power Output	4.3 kW @ 3600 rpm
Max. Torque	12 Nm @ 2800 rpm
Starting System	Recoil Starter
Fuel Tank Capacity	3.0 Litres
Oil Capacity	0.6 Litres
Recommended Oil Type	SAE 30 (Above 0°C) or 10W-30 (Below 0°C)
Drive Type	Friction Disc Drive
Propulsion	Self-Propelled
Gears	6 Forward / 2 Reverse
Tyre Size	13 x 4.10-6
Control Panel Material	Metal

Brush & Sweeping Specifications

Feature	Specification
Clearing Width	800 mm
Clearing Depth (Snow)	100 – 250 mm
Brush Diameter	350 mm
Brush Material	Polypropylene (PP) Wafer Sections
Number of Brush Sections	24
Brush Angle Adjustment	18° (Left / Right)
Transmission Case Material	Aluminium

Gear Speed Ratings

Gear	Speed (Approx.)
Forward 1	1.8 km/h (± 0.4)
Forward 2	2.1 km/h (± 0.4)
Forward 3	2.4 km/h (± 0.4)
Forward 4	2.7 km/h (± 0.4)
Forward 5	3.0 km/h (± 0.4)
Forward 6	3.2 km/h (± 0.4)
Reverse 1	1.8 km/h (± 0.4)
Reverse 2	2.0 km/h (± 0.4)

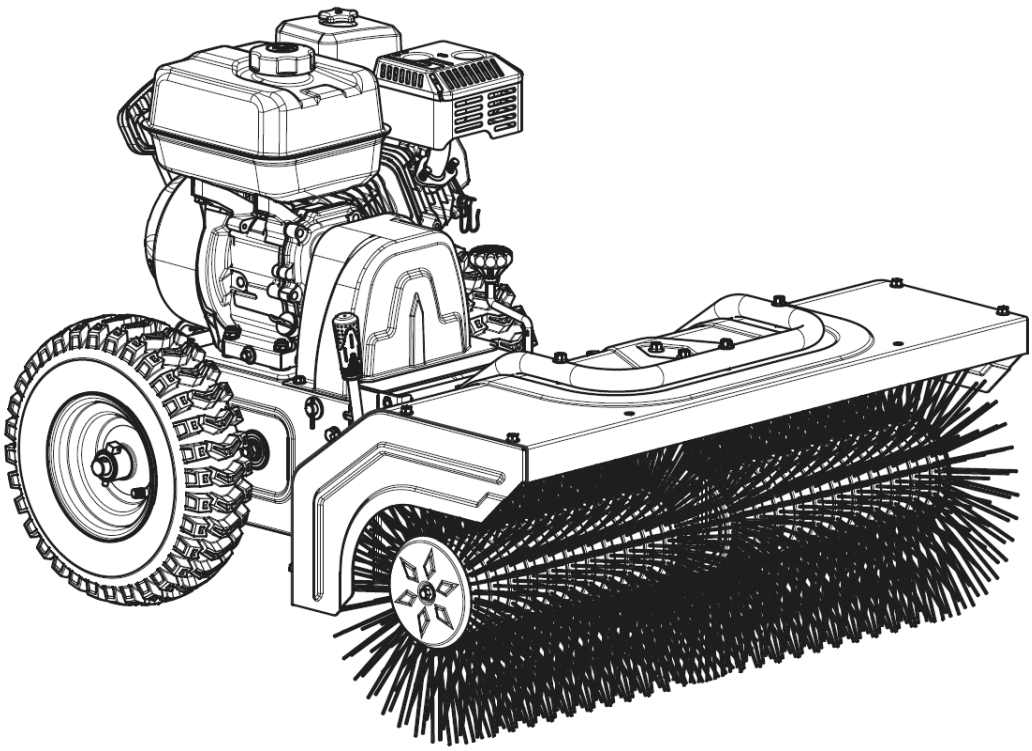
Dimensions & Weight

Feature	Specification
Overall Dimensions (LxWxH)	1540 x 810 x 1070 mm
Packaging Dimensions (LxWxH)	1000 x 830 x 640 mm
Net Weight	68 kg
Gross Weight	76 kg

ATTENTION - NOTE: Due to continuous product improvement, specifications are subject to change without prior notice. All figures are approximate and for reference purposes only.

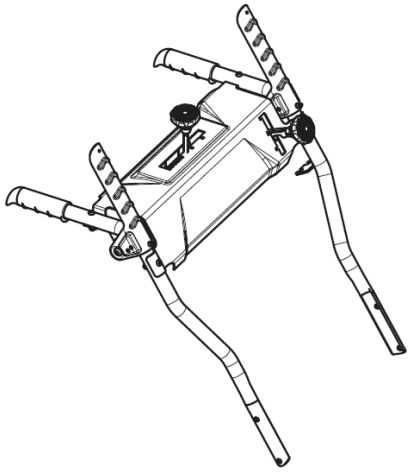
PACKING LIST

Main Unit

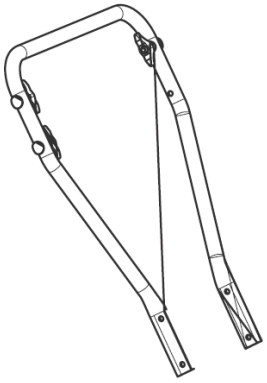


Power Sweeper Main Unit

Handlebar Assembly

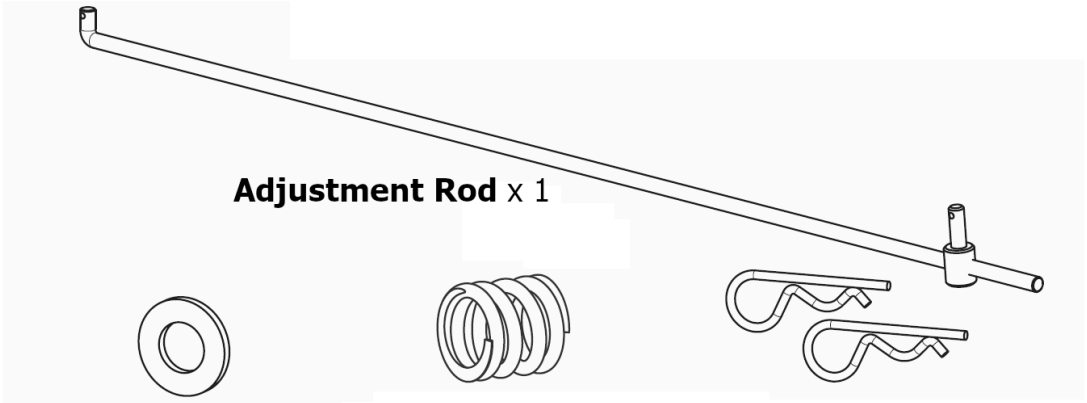


Upper Handlebar Assembly x 1



Lower Handlebar Assembly x 1

Brush Angle Adjustment Linkage



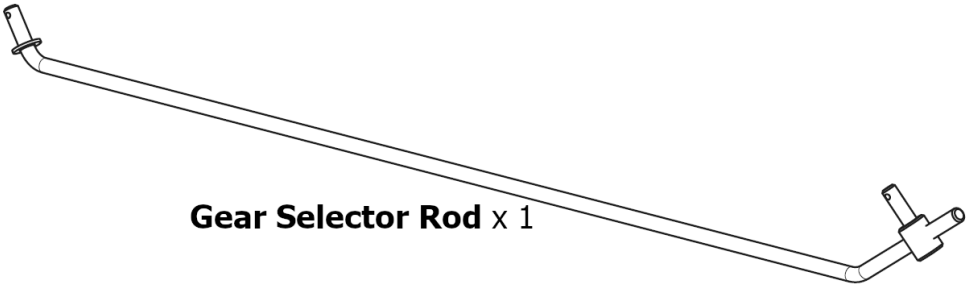
Adjustment Rod x 1

M8 Flat Washer x 2

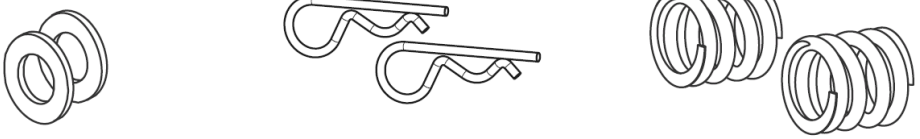
Spring x 1

R-Clip x 2

Gear Shift Linkage



Gear Selector Rod x 1

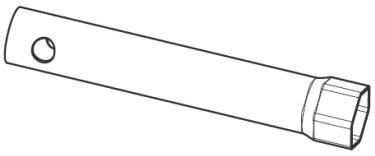


M8 Flat Washer x 2

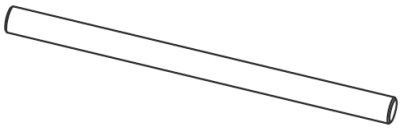
R-Clip x 2

Spring x 2

Tool Kit



Spark Plug Box Spanner x 1



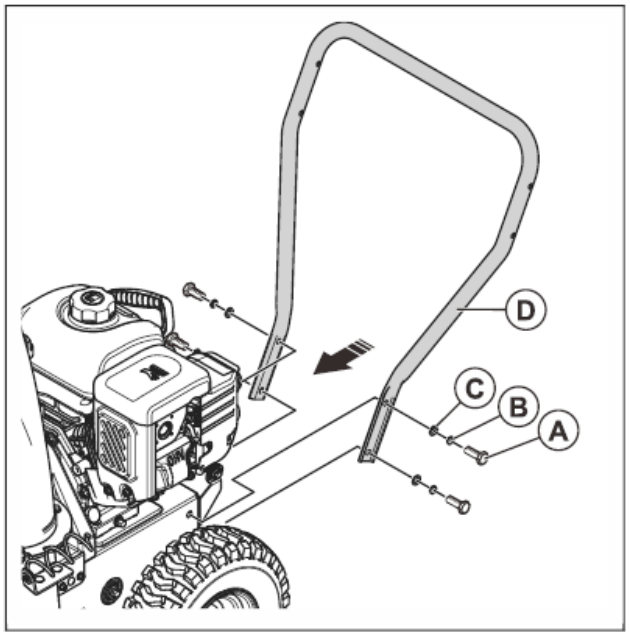
Tommy Bar x 1

Cable Management

Cable Clip x 1

ASSEMBLY

WARNING - PREVENT SERIOUS INJURY: Do not operate this machine until assembly is complete. Ensure you have read and understood all handling and adjustment procedures before starting the engine. Failure to comply with these safety warnings may result in severe personal injury.

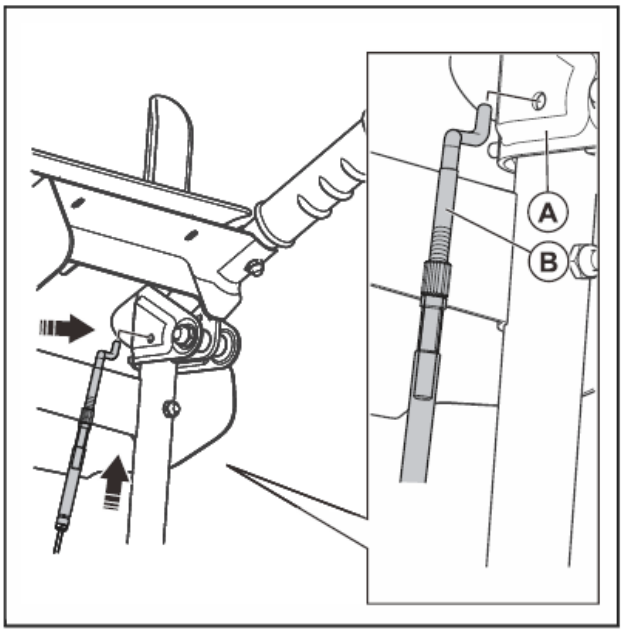


INSTALLING THE HANDLEBAR ASSEMBLY

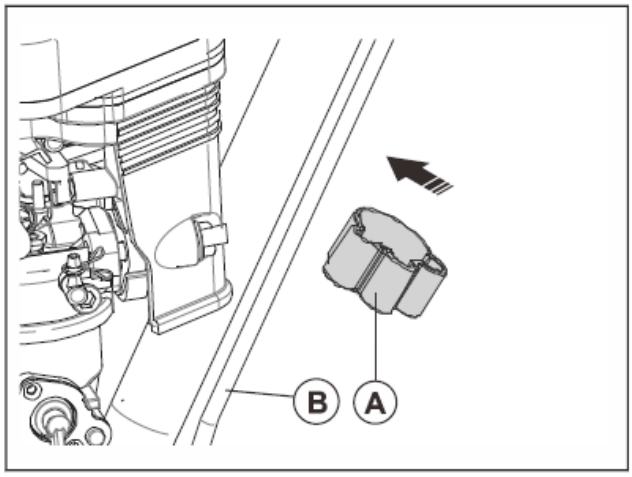
1. Remove the four **M8 x 25 Flange Bolts (A)** from the **Chassis**.

2. Prepare the four **M8 x 25 Flange Bolts (A)**, the four **Spring Washers (B)**, and the four **Flat Washers (C)**.

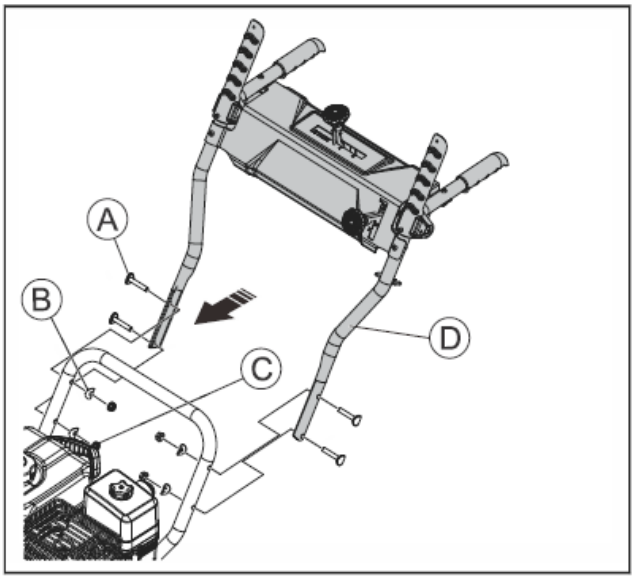
3. Align the **Lower Handlebar Assembly (D)** with the mounting holes on each side of the **Chassis** and secure it using the bolts and washers.



4. Connecting the Control Cables
Insert the **Cable Adjustment Bolts (B)** located at the top of the **Brush Engagement Cable** and the **Drive Clutch Cable** into the corresponding mounting holes on the left and right **Upper Handlebars (A)**.



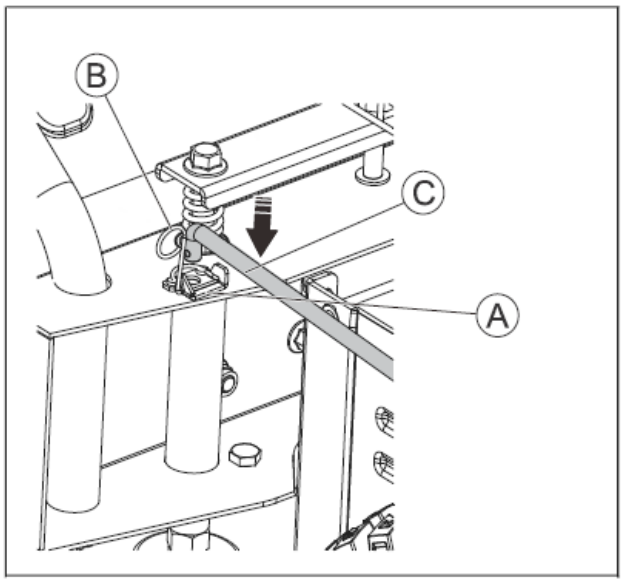
5. Securing the Brush Engagement Cable Secure the **Brush Engagement Cable (B)** to the **Lower Handlebar** using the **Cable Clip (A)**.



ATTENTION - NOTE: To install the Upper Handlebar Assembly, you may need to locate or remove the pre-installed hardware on the Lower Handlebar Assembly.

6. Prepare the four **M8 x 50 Handle Bolts (A)**, the three **Curved Washers (B)**, and the three **Locking Knobs (C)**.

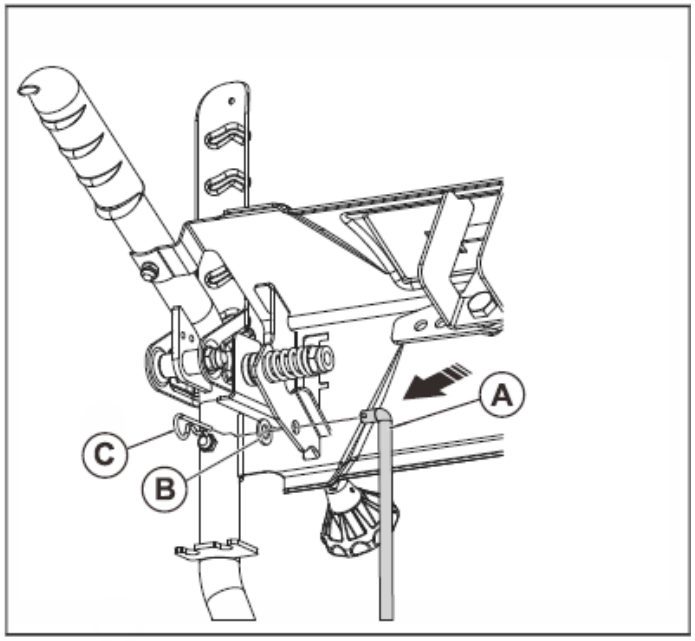
7. Position the **Upper Handlebar Assembly (D)** (with the attached **Control Panel**) onto the **Lower Handlebar Assembly** and secure it using the bolts, washers, and knobs.



ASSEMBLING THE CONTROL LINKAGES

1. Insert the **Lower Linkage Rod (C)** into the mounting hole on the **Brush Head Bracket (A)**. Secure it in place using the **R-Clip (B)**.

2. Align the connection points on the **Mounting Frame** to ensure that the **Brush Head** is positioned perpendicular (square) to the main unit.

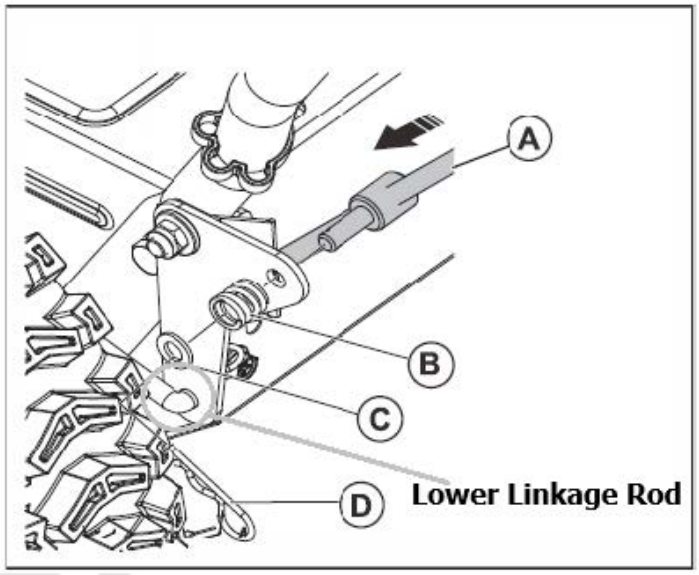


3. Move the **Brush Adjustment Lever** on the control panel to the **Lowest Position** (bottom notch).

4. Locate the **Adjustment Rod (A)**. Remove the pre-installed **R-Clip (C)** and **M8 Flat Washer (B)** from the end of the rod.

- Insert the **Elbow (bend)** of the rod into the corresponding hole on the **Brush Adjustment Lever** assembly.
- Secure it in place by re-installing the **M8 Flat Washer (B)** and locking it with the **R-Clip (C)**.

5. Move the **Brush Adjustment Lever** to the **Centre Position** to check the alignment.



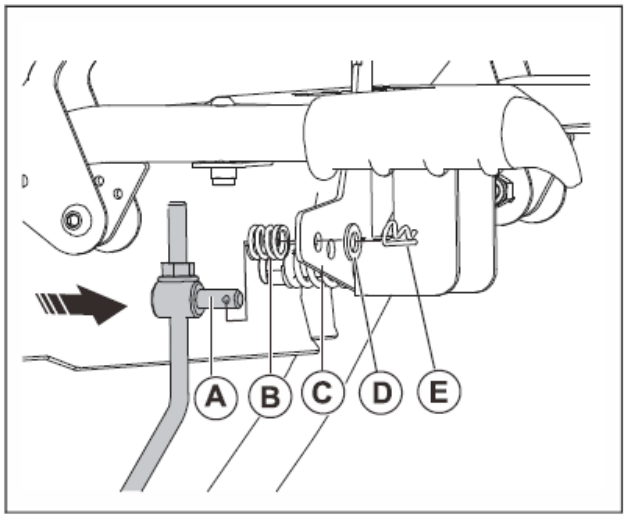
6. Locate the lower end of the **Gear Selector Rod (A)**. Remove the pre-installed **R-Clip (D)**, **M8 Flat Washer (C)**, and **Compression Spring (B)**.

7. Insert the end of the **Gear Selector Rod** into the corresponding mounting hole on the **Triangular Pivot Plate** (located near the transmission).

Note: Ensure any adjustment nuts on the rod are positioned correctly to allow the rod to fit.

8. Secure the connection by reinstalling the components in the following order:

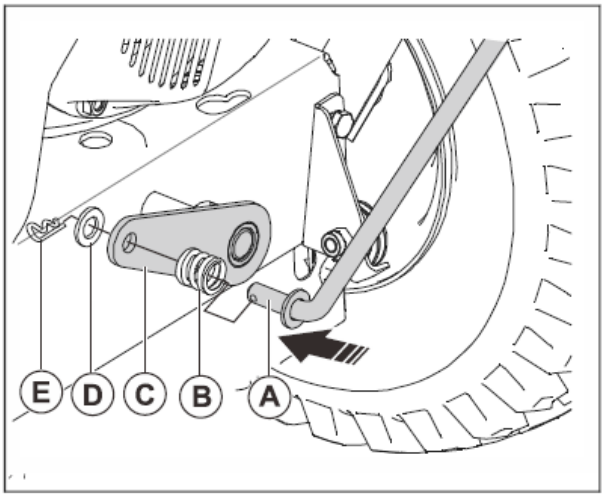
1. Slide the **Compression Spring (B)** onto the rod end.
2. Fit the **M8 Flat Washer (C)**.
3. Lock everything in place with the **R-Clip (D)**.



INSTALLING THE GEAR SELECTOR ROD

1. Insert the **Long Bent End** of the **Gear Selector Rod (A)** into the corresponding hole on the **Control Panel** lever.

1. Secure the connection using one **Spring (B)**, one **Flat Washer (D)**, and one **R-Clip (E)**.



2. Lift the **Shift Plate (C)** slightly to align the mounting hole.

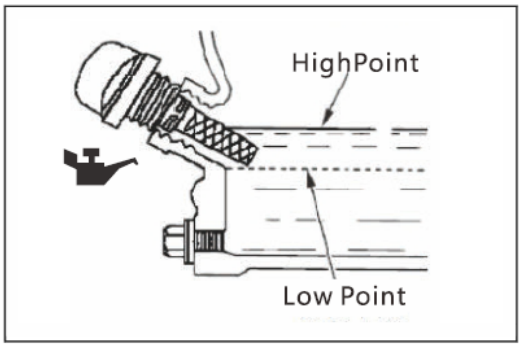
- Insert the **Short Bent End** of the **Gear Selector Rod (A)** into the plate.
- Secure it in place using the remaining **Spring (B)**, **Flat Washer (D)**, and **R-Clip (E)**.

OPERATION

BEFORE STARTING THE MACHINE

- Ensure that the work area is clear of people and animals.
- Perform daily maintenance checks. Refer to the **Maintenance Schedule** section
- Check that the **Spark Plug Lead** is securely fitted to the spark plug
- Check fuel and oil levels and top up if necessary. Refer to the **Technical Specifications** section.

FILLING THE ENGINE OIL



ATTENTION Do not screw the dipstick in when checking the oil level. Ensure the oil level does not exceed the upper limit mark.

1. Remove the **Oil Filler Cap** and wipe the dipstick clean.
2. Add oil gradually until it reaches the upper mark on the dipstick.
   - Use **SAE 30** for general use (above 0°C).
   - Use **10W-30** for cold weather/winter use (below 0°C).
3. Check the oil level at regular intervals during filling to ensure accuracy.
4. Replace the **Oil Filler Cap** and tighten securely.

You can find a video on checking the oil level on our YouTube channel by scanning the QR code to the left.

FILLING THE FUEL TANK

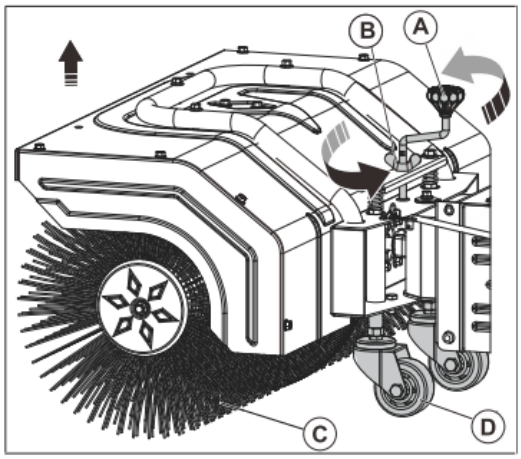
For best performance, use **alkylate petrol** (low-emission) where available. If alkylate petrol is not available, use high-quality **unleaded petrol**.

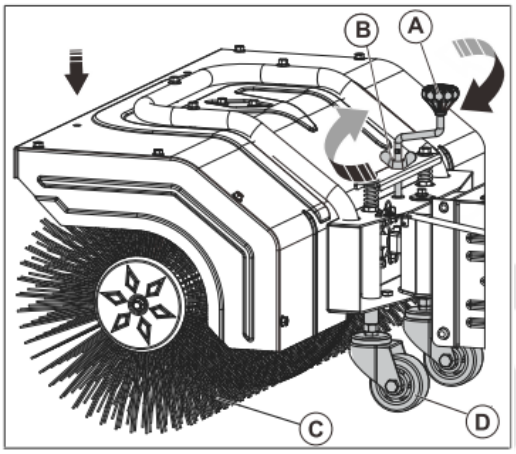
ATTENTION: Use petrol with an **octane rating of 90 RON or higher**. Ensure the fuel contains a **maximum of 10% ethanol (E10)**. Do not use fuel with an octane rating lower than 90 RON, as this can cause internal engine damage.

1. **Clean the area** around the fuel tank cap to prevent debris from entering the tank.
2. **Open the fuel tank cap slowly** to safely release any built-up pressure.
3. **Fill the tank slowly** using a suitable fuel canister. Do not overfill; leave space for fuel expansion.
4. **Tighten the fuel tank cap fully. WARNING:** A loose or improperly fitted fuel cap presents a significant fire risk.
5. **Clean up any spills.** If fuel is spilled, wipe it away immediately with a cloth and allow the area to dry completely.
6. **Move the machine** at least **3 metres (10 feet)** away from the refuelling area before attempting to start the engine.

ADJUSTING THE SWEEPING BRUSH HEIGHT

The height of the sweeping brush is controlled by the **Jockey Wheel** height adjustment mechanism.





For Transport or Storage:

1. Loosen the **Wing Nut (B)**.
2. Turn the **Adjustment Knob (A)** anti-clockwise to raise the **Jockey Wheel (D)**. This will lower the rear of the head and lift the **Sweeping Brush (C)** off the ground.
3. Once the brush is clear of the ground, tighten the **Wing Nut (B)** to lock it in position.

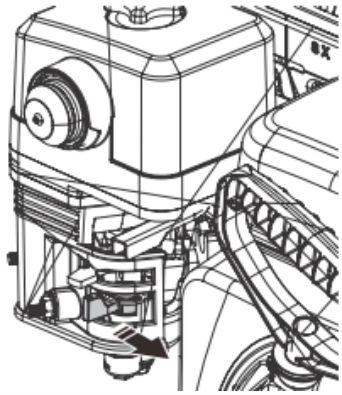
For Operation: 3. Loosen the **Wing Nut (B)** and rotate the **Adjustment Knob (A)** clockwise until the brush reaches the desired working height. 4. Tighten the **Wing Nut (B)**.

NOTE: Avoid applying excessive downward pressure. The bristles should just touch the surface; too much pressure will cause premature wear to the brush sections.

Adjusting for Wear: 5. As the brush bristles wear down over time, you will need to lower the brush to maintain contact with the ground. Loosen the **Wing Nut (B)**, turn the **Adjustment Knob (A)** clockwise to lower the brush, and re-tighten the **Wing Nut (B)**.

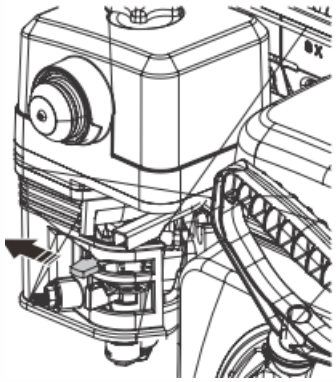
ATTENTION: When replacing the brush sections, rotate the **Adjustment Knob** clockwise to set the brush to its lowest position. This makes the components easier to access and reconnect.

STARTING THE ENGINE



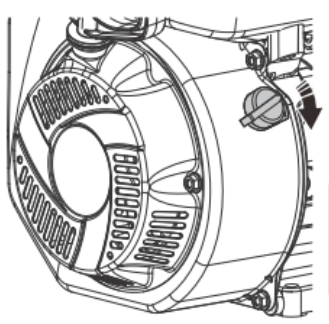
1. Ensure the **Drive Clutch Lever** and **Brush Engagement Lever** are released. Place the **Gear Shift Lever** into the first (slowest) gear.

2. Turn the **Fuel Tap** to the **ON** position.

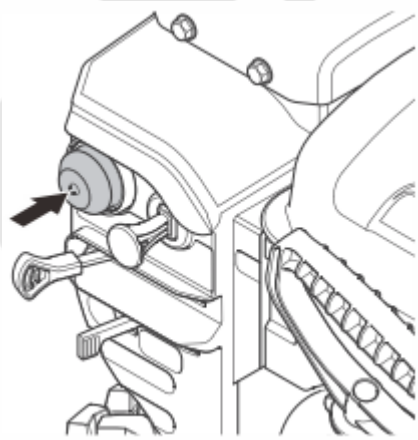


3. Move the **Choke Lever** to the **CLOSE** (Cold Start) position.

- *Note: If the engine is already warm, you may not need to use the choke.*

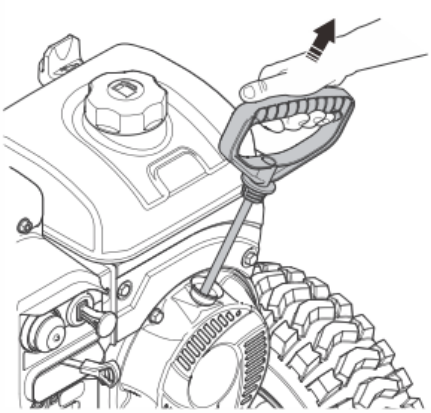


4. Turn the **Engine Switch** to the **ON** position.



5. Use the **Primer Bulb** to prime the fuel system:

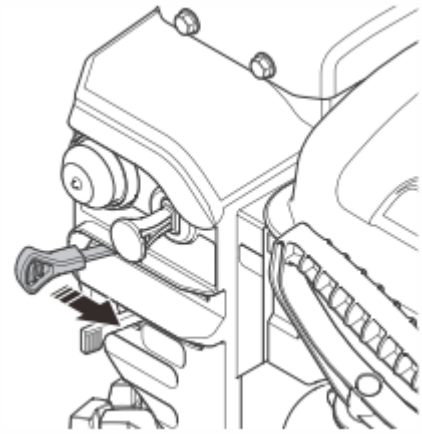
- **First-ever initial use:** Firmly press the primer bulb **in excess of 10 times** to ensure the carburettor bowl is fully filled with fuel.
- **Standard cold start:** Press the primer bulb **3–4 times**.
- *Note: Do not prime a warm engine.*



ATTENTION: Do not allow the starter handle to snap back. Guide the rope back into the housing slowly to prevent damage to the recoil mechanism.

6. Pull the **Recoil Starter Handle** firmly until the engine starts.

- *If the recoil rope feels frozen or stuck:* Slowly pull as much rope out as possible and allow it to retract gently before trying again.
- *If the engine has an electric start option:* You may use the electric start button if the recoil method fails.

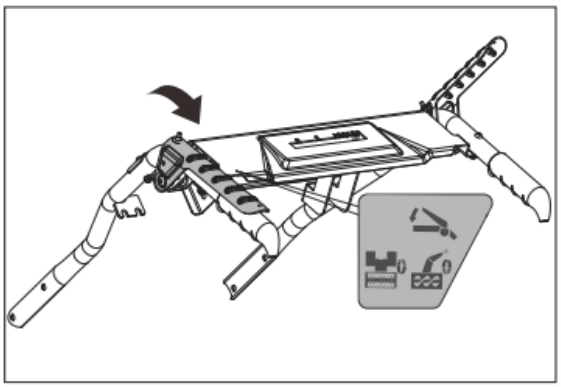


7. Allow the engine to idle for 30–40 seconds before engaging the brush.

8. Once the engine has warmed up, slowly move the **Choke Lever** back to the **OPEN** (Run) position.

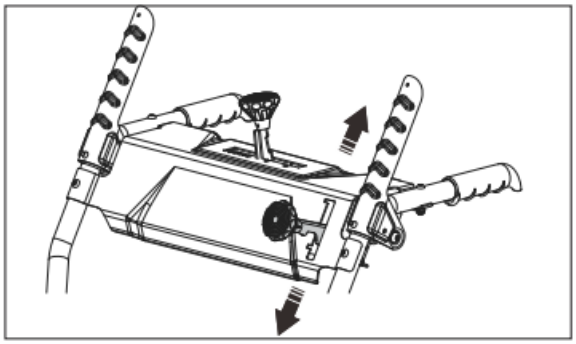
ATTENTION: Do not attempt to start the engine more than 10 times in quick succession. If the engine fails to start after 10 attempts, allow the starter motor and engine to cool for **40 minutes** before trying again.

OPERATING THE MACHINE



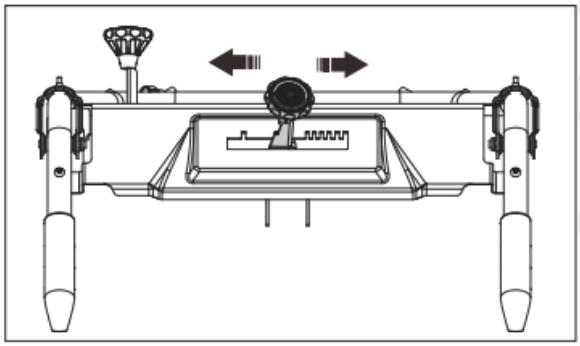
1. Engaging the Sweeping Brush

- Squeeze the **Brush Engagement Lever** against the handlebar to start the brush rotating and begin sweeping.



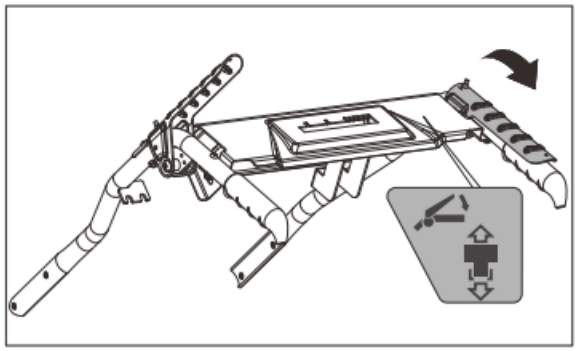
2. Adjusting the Brush Angle

- Move the **Brush Adjustment Lever** forward to pivot the brush **18° to the right**.
- Pull the **Brush Adjustment Lever** backward to pivot the brush **18° to the left**.
- Place the **Brush Adjustment Lever** in the **centre notch** to sweep straight ahead.



3. Selecting Speed and Direction

- Move the **Gear Shift Lever** to the right-hand side of the panel to select a **Forward** speed.
- Move the **Gear Shift Lever** to the left-hand side of the panel to select a **Reverse** speed.
- This machine is equipped with **8 speeds**: 6 Forward and 2 Reverse.

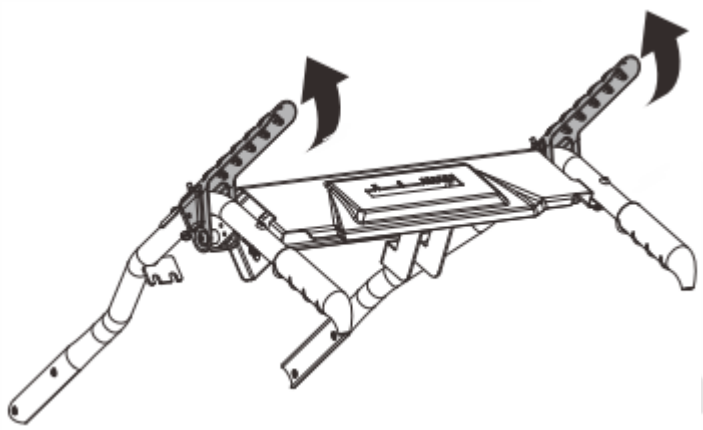


4. Engaging the Drive (Self-Propulsion)

- The **Drive Clutch Lever** is located on the right-hand handlebar.
- Squeeze the **Drive Clutch Lever** against the handle to engage the wheels.
- The machine will move forward or backward depending on the position selected on the **Gear Shift Lever**.

STOPPING THE MACHINE

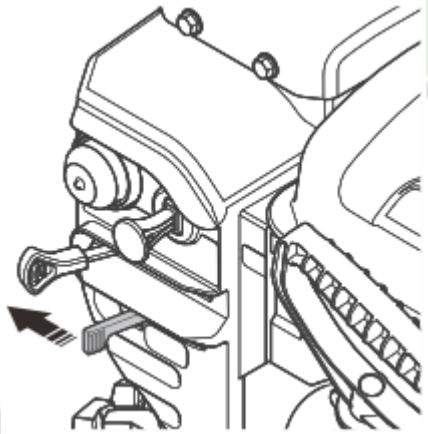
ATTENTION: To turn the engine off in an emergency, immediately turn the **Engine Switch** to the **OFF** position.



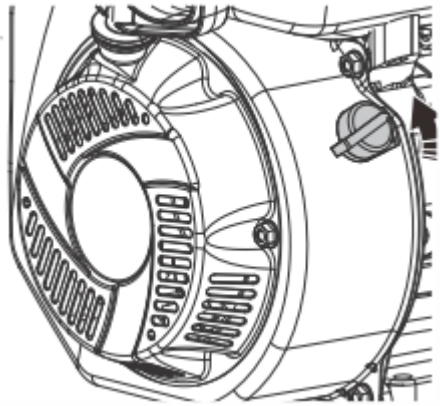
1. Release the **Drive Clutch Lever** (right handle) to disengage the drive wheels and stop the machine from moving.

2. Release the **Brush Engagement Lever** (left handle) to stop the sweeping brush from rotating.

3. Turn the **Fuel Tap** to the **OFF** position.



4. Turn the **Engine Switch** to the **OFF** position.



OPERATING TIPS FOR BEST RESULTS

1. Always operate the engine at or near full throttle for optimal sweeping performance.

2. Adapt the forward speed of the machine to the depth and weight of the snow or debris. Use the **Gear Shift Lever** to select a suitable gear, ensuring the machine clears the surface effectively without straining the engine.

3. It is much easier and more efficient to clear snow immediately after it falls before it has a chance to compact or freeze.

4. Always angle the brush to sweep snow and debris downwind whenever possible.

5. Reduce your ground speed on uneven terrain to maintain control and avoid damaging the machine.

6. On loose or uneven surfaces, such as gravel driveways, raise the **Sweeping Brush** slightly above the surface using the height adjustment mechanism (Jockey Wheel).

WARNING: Ensure the brush does not make heavy contact with gravel or loose stones. These can be ejected at high speed, causing severe personal injury or property damage.

7. If the machine stops moving forward unexpectedly or becomes jammed, release the **Drive Clutch Lever** immediately or turn the **Engine Switch** to the **OFF** position.

MAINTENANCE SCHEDULE

Maintenance Task	Daily	20 Hours	50 Hours	100 Hours	150 Hours
Check all nuts and screws are securely tightened	X				
Check the engine oil level	X				
Check for fuel or engine oil leaks	X				
Remove blockages or foreign objects from the brush	X				
Replace the engine oil *(Note 1)*		X	X	X	
Check the tyre pressure *(Note 2)*			X		
Inspect and replace the spark plug *(Note 3)*				X	
Check and adjust engine valve clearances *(Note 4)*					X

Maintenance Notes:

1. Replace the engine oil after the first 20 hours of use, then at 50 hours, 100 hours, and every 100 hours thereafter.
2. Refer to the **Technical Specifications** section for the correct tyre pressure.
3. Inspect the spark plug condition and gap every 50 hours of operation. Replace the spark plug every 100 hours or once a year (whichever comes first). Refer to the **Technical Specifications** section for the correct plug type and gap settings.
4. Checking and adjusting valve clearances requires specialist tools and mechanical knowledge. It is highly recommended that this task is carried out by a qualified mechanic or an authorised service dealer.

GENERAL INSPECTION

Regularly check that all nuts, bolts, and screws on the machine are securely tightened to ensure safe and reliable operation.

CHECKING THE ENGINE OIL LEVEL

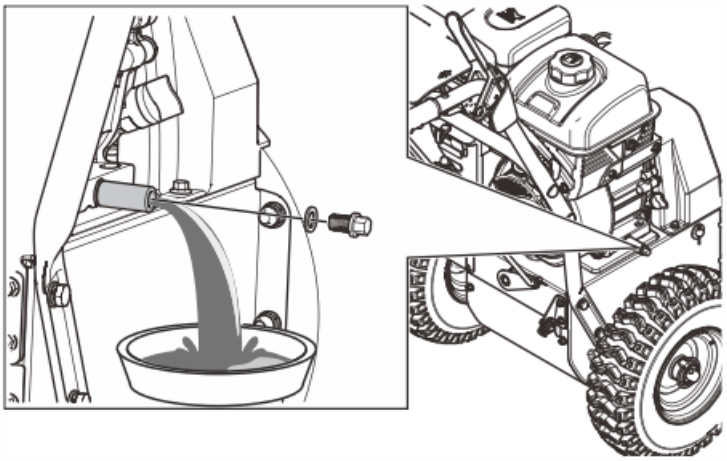
ATTENTION: Running the engine with a low oil level can cause severe engine damage. Always check the oil level before starting the machine.

1. Ensure the machine is parked on level ground.
2. Remove the **Oil Filler Cap** and wipe the attached dipstick clean with a cloth.
3. Insert the dipstick back into the filler neck. *(Note: Remember our previous rule - rest the cap on the threads, do not screw it in to get an accurate reading).*
4. Remove the dipstick and inspect the oil level.
5. If the oil level is low, gradually add **SAE 30** engine oil until it reaches the upper limit mark on the dipstick.

SCAN FOR VIDEO TUTORIAL: Scan this QR code with your smartphone camera to watch a quick video guide on how to correctly check and top up your engine oil!

REPLACING THE ENGINE OIL

WARNING: BURN HAZARD The engine oil becomes very hot during operation. Allow the engine to cool slightly, but remain warm, before draining. Avoid skin contact with used engine oil.



1. Run the engine for a few minutes to warm the oil. Warm oil flows more easily and carries away more suspended contaminants.
2. Park the machine on level ground.
3. Turn the **Fuel Tap** to the **OFF** position. If you intend to tip the machine back at a steep angle, run the engine until the remaining fuel in the carburettor has been depleted to prevent spills.
4. Turn the **Engine Switch** to the **OFF** position and disconnect the spark plug lead for safety.
5. Place a suitable drain pan or container underneath the **Oil Drain Plug**.
6. Remove the **Oil Drain Plug** using a suitable spanner. Tip the machine slightly backwards to allow all the used oil to drain completely into the container.
7. Once drained, return the machine to its normal resting position on level ground.
8. Refit the **Oil Drain Plug** and tighten it securely with a spanner. *(Do not hand-*

tighten only, as it may vibrate loose).
9. Refill the engine with fresh oil. Refer to the **Filling the Engine Oil** instructions in the Operation section of this manual.

CHECKING THE SPARK PLUG

ATTENTION: Always use the recommended spark plug type. Using an incorrect spark plug can cause severe damage to the engine.

1. Inspect the spark plug if the engine lacks power, is difficult to start, or runs poorly at idle.
2. To prevent carbon build-up on the spark plug electrodes, ensure the following:

- The idle speed is correctly adjusted.
- You are using fresh, clean, and correct fuel.
- The air filter is clean and unblocked.

3. If the spark plug is dirty, clean it with a wire brush.
4. Check the electrode gap using feeler gauges and adjust if necessary. Refer to the **Technical Specifications** section for the correct gap measurement.
5. Replace the spark plug if the electrodes are worn, burned, or if the porcelain insulator is cracked.
6. As a general rule, check and clean the spark plug at the start of every season.

INSPECTING THE SWEEPING BRUSH

1. Before each use, inspect the brush bristles and the surrounding guards for excessive wear or damage.
2. With the engine running and the **Brush Engagement Lever** squeezed, visually check that the brush rotates smoothly and evenly. *(Note: The brush should stop rotating completely when the lever is released).*
3. If the brush sections are heavily worn or damaged, they will need replacing. Contact an authorised service centre for replacement parts, or refer to the brush height adjustment steps to lower the brush and compensate for minor wear.

WARNING: ENTANGLEMENT HAZARD Never place your hands, feet, or loose clothing near the sweeping brush while the engine is running.

CHECKING THE TYRES

1. Keep the tyres free of spilled fuel, oil, and harsh chemicals, as these will degrade and damage the rubber.
2. Avoid driving over tree stumps, large stones, deep ruts, or sharp objects that could puncture or damage the tyres.

3. Regularly check the tyre pressure. Refer to the **Technical Specifications** section for the correct inflation pressure.

OPERATIONAL SAFETY WARNINGS

WARNING:

- **Uneven Ground:** Reduce your speed when operating on uneven or sloping ground. Moving too fast can cause the machine to bounce, resulting in a loss of control.
- **Flying Debris:** Never sweep towards people, pets, buildings, vehicles, or windows. The brush can throw stones and debris at high speeds, causing severe injury or property damage.
- **Controls:** Only operate the engagement levers when the engine is running and you are firmly holding the handlebars.

CLEANING THE MACHINE

Proper cleaning extends the lifespan of your machine and prevents build-up of corrosive materials like winter road salt.

1. Clean all plastic parts and panels with a clean, dry (or slightly damp) cloth.
2. Do not use a high-pressure power washer to clean the machine. High-pressure water can force its way into the engine intake, carburettor, and sealed bearings, causing catastrophic damage.
3. Do not flush water directly onto the engine.
4. Use a stiff hand brush to remove compacted leaves, grass, mud, and dirt from the brush head and chassis.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Engine will not start	Engine Switch is in the OFF position	Turn the Engine Switch to the ON position
	Fuel Tap is in the OFF position	Turn the Fuel Tap to the ON position
	Out of fuel	Fill the fuel tank with fresh, clean petrol
	Choke is OPEN on a cold engine	Move the choke to the CLOSE (Cold Start) position
	Engine is not primed	Press the primer bulb 3-4 times
	Engine is flooded	Wait 10-15 minutes before restarting. Start with throttle FAST
	Spark plug lead is disconnected	Connect the lead firmly to the spark plug
	Spark plug is faulty or fouled	Remove, clean, check the gap, or replace the spark plug
	Stale fuel or water in fuel system	Drain the fuel tank and carburettor completely. Refill
Engine lacks power	Spark plug lead is loose	Ensure the lead is firmly attached to the spark plug
	Sweeping too deeply or too fast	Reduce forward speed and raise the brush height slightly
	Fuel tank cap breather is blocked	Clean the area around and on the fuel tank cap
	Exhaust is blocked or dirty	Wait for the exhaust to cool completely, then clear blockage
	Air filter is blocked	Wait for the engine to cool, then clean or replace the filter
Engine idles roughly	Choke is still in the CLOSE position	Slowly move the choke to the OPEN (Run) position
	Fuel line is blocked	Inspect and clean or replace the fuel line
	Stale fuel or water in fuel system	Drain the fuel tank and carburettor completely. Refill

Excessive vibration	Loose nuts, bolts, or fasteners	Stop the engine immediately. Inspect and tighten fasteners
	Brush sections or shaft are damaged	Inspect the brush assembly. Replace damaged parts
	Handlebars are loose	Ensure all handlebar locking knobs/bolts are securely tightened
Starter rope is hard to pull	Recoil mechanism is frozen or jammed	Slowly pull out as much rope as possible to free the mechanism
	Rope is entangled	Ensure the pull cord is not caught on cables or engine parts
Loss of drive/sweeping power	Control cables are loose	Adjust the tension on the Drive or Brush Engagement cables
	Drive or Brush belts are slipping	Adjust the belt tension or cable length
	Belts are worn, damaged, or off pulleys	Inspect and reinstall or replace the belts
	Debris is jammed in the brush assembly	Stop the engine. Remove the jammed debris from the brush head
Brush will not stop rotating	Brush engagement cable is too tight	Adjust the cable tension to allow sufficient slack when released
Adjustment lever is stiff	Dirt/debris in the pivot mechanism	Clean and lightly lubricate pivot points on the mounting frame
Machine pulls to one side	Tyre pressures are unequal	Check and inflate both tyres to the correct, equal pressure

TRANSPORTATION, STORAGE & DISPOSAL

Transportation and Storage

1. When storing or transporting the machine and its fuel, ensure there are no leaks or fumes. Fuel vapours can be ignited by sparks or naked flames from electrical devices, boilers, or other sources of ignition, causing a fire.
2. Always use approved, purpose-built containers for storing and transporting petrol.
3. Empty the fuel tank and carburettor before storing the machine for an extended period (such as at the end of the season). Dispose of stale fuel safely at a designated local recycling facility.
4. Securely strap or tie down the machine during transportation to prevent movement, damage, or accidents.
5. Store the machine in a secure, locked area out of the reach of children and unauthorised persons.
6. Keep the machine in a dry, frost-free environment, away from heat sources or naked flames.
7. Do not place heavy objects on top of the Sweeping Brush. Resting weight on the bristles will permanently deform them and severely reduce the sweeping performance of the machine.

- *Tip: Always use the Jockey Wheel mechanism to raise the brush off the ground when the machine is in storage.*

Disposal

1. Adhere to all local authority recycling guidelines and environmental regulations.
2. Safely dispose of all chemicals, such as used engine oil and petrol, at an authorised service centre or a designated hazardous waste facility. **Do not pour oil or fuel down drains or into the ground.**
3. When the machine reaches the end of its usable life, do not dispose of it in general household waste. Take it to a local civic amenity site (recycling centre) for proper metal and plastic recycling.

TECHNICAL SPECIFICATIONS

Feature	Specification
Petrol Capacity & Type	3.0 Litres (Unleaded, max 10% ethanol / E10)
Oil Type (API SJ-SN)	SAE 30 (Above 0°C) / 10W-30 (General) / 5W-30 (Below 0°C)
Oil Capacity	0.6 Litres
Spark Plug Type	F7RTC (or equivalent)
Spark Plug Electrode Gap	0.7 mm - 0.8 mm
Tyre Pressure	20 psi (1.38 bar)

CUSTOMER SUPPORT & RESOURCES

Need help with your TPSW820? 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/

UKCA DECLARATION OF CONFORMITY

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

Designation: Petrol Sweeper Self-Propelled 80cm Power Brush Yard Scraper
Model(s): TPSW820
Type/Serial No.: As per rating label on machine
Nominal Power: 4.3kW/3600/min
Clearing Width: 800mm
Engine Displacement: 212cm³

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

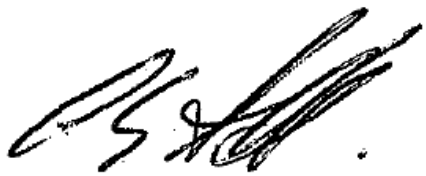
The conformity assessment procedure followed was in accordance with:
EN ISO 14982:2009, EN ISO 12100:2010

Notified Bodies
TÜV SÜD Product Service GmbH

Address(es)
Ridlerstraße 65, 80339 Munich, Germany

Authorised Signatory & Technical File Holder Date: 13/02/2026

Signature:



Name: Mr. Charles Abbott
Position: Director
Company: Titan Pro Ltd

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