

**DENNIS**  
**CYLINDER MOWERS**  
**PREMIER - STANDARD**  
**INSTRUCTION MANUAL**



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## INTRODUCTION

This manual has been prepared to enable the user to carry out all necessary maintenance and adjustment operations on the **PREMIER MOTOR MOWER**.

Care in following out these instructions, as well as regularity in their application, will ensure that the best results are obtained together with long life and economical operation.

In case of any difficulty or if any information and advice is required our Service Department will only be too pleased to answer any of your queries.

Whenever contacting our Service Department for spares, information or advice please state the machine number, which is to be found on the name plate affixed to the side plate of the machine. References to the left and right hand sides of the machine are looking towards the grass box from the operators position.

### **DESCRIPTION.**

The DENNIS Premier motor mower is powered by a single cylinder four stroke petrol or diesel engine. The rear roller and cutting cylinder are powered through two single plate clutches, thus giving independent control of forward motion and cutter. The drive of the rear roller and cutter are engaged by levers situated on the handle bar. A tow bar is fitted to the rear of the machine for the optional trailer seat.

### **GENERAL DATA.**

**Normal mowing speed**      7.25 KMPH

**Cutting performance**  
Premier 36"                      1.25 Acre/hour                      (0.506 Hectare /hour)

**Weights**  
Premier 36"                      756 LBS                      (343 KG)

**Dimensions**

	<b>Length</b>	<b>Breadth</b>	<b>Height</b>
Premier 36"	7'0" (2.13M)	3'9" (1.14M)	3'3" (0.99M)

## **IMPORTANT SAFETY INSTRUCTIONS**

In order to operate the machine safely please follow these Health and Safety guidelines.

### **TRAINING**

Read the instructions contained in this manual with care. If you are in any doubt please ask your employer or contact us direct at **DENNIS**. Be familiar with the controls and the proper use of the equipment.

Never allow children or people unfamiliar with these instructions to use the mower. Local regulations or insurance may restrict the age of the operator.

Never mow while people, especially children, or pets are nearby.

Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.

### **PREPARATION**

While mowing always wear substantial footwear and long trousers. Do not operate the mower in barefoot or in open sandals.

Thoroughly inspect where the equipment is to be used and remove all stones, sticks, wire, bones and other foreign objects.

**WARNING** Petrol and diesel are highly flammable and will damage grass if spilt.

- A) Store fuel in containers specifically designed for this purpose.
- B) Refuel out doors and do not refuel whilst smoking.
- C) Add fuel before starting the engine. Never remove the cap of the fuel tank or add petrol while the engine is running or when the engine is hot.
- D) If petrol is spilled do not attempt to start the engine but move the machine away from the area of spill and avoid creating any sources of ignition until the vapours have dissipated.

Replace damaged or faulty silencers.

Before using the machine always inspect the safety devices including the cut off switch and the blades for excessive wear or damage. Replace if necessary.

## **OPERATION**

Do not operate the engine in a confined space where dangerous CARBON MONOXIDE fumes can collect.

Mow only in daylight or good artificial light.

Avoid operating the machine in wet grass where feasible.

Always be sure of your footing on slopes.

Walk. Never run.

Walk across the face of slopes, never up and down.

Exercise extreme care on slopes when changing direction.

Do not mow excessively steep slopes.

Use extreme caution when reversing or pulling the machine towards you.

Stop the blades if the mower has to be tilted for transportation when crossing surfaces other than grass and when transporting the mower to and from the area to be mown.

Never operate the mower with defective guards or shields or without the safety devices, for example without the deflector plate or grassbox in place.

Do not change the engine governor settings or overspeed the engine.

Disengage all blade and drive clutches before starting.

Start the engine carefully following the instructions with feet well away from the blades.

Do not tilt the mower when starting the engine.

Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.

Never pick up or carry the mower while the engine is running.

## OPERATING INSTRUCTIONS.

### OPERATOR PRESENCE CONTROL

- In order to satisfy the CE regulations all machines must now be fitted with an operator presence control.



- To satisfy this regulation the Premier has been fitted with a “bale bar” connected electrically to the engine. This is only active when the gear levers (red and black knobs) are engaged. This means that to engage red (cutter) or black (roller drive) the bale bar must be depressed to the handle bar. If you let go of the bale bar during operation the machine will cut out. Once the two levers have been disengaged the bale bar can be released without the engine cutting out (e.g. at grassbox emptying).



- These controls have been put there for your safety. Please ensure they are not tampered with and are operating effectively.

### PREPARATION FOR USE.

Before commencing to cut the grass ensure that it is free from stones or other obstructions which might cause damage to the blades. Fill the fuel tank with unleaded petrol. Check that the clutches controlling the roller and cutter are disengaged, that is to say with the levers in the upright position.

## STARTING FROM COLD.

Always check the oil levels of the machine before commencing mowing. Full details are given in the Engine Manual at the back of this book. Check with engine manufactures instructions before starting the engine.



## CUTTING THE GRASS.

The length of the grass after cutting depends on the adjustment of the front roller in relation to the main frame of the machine.



To carry out adjustment, slacken the clamping bolts on the quadrant brackets at either end of the roller (use 3/4 A/F (19mm) spanner). Rotate the quadrants by equal amounts to bring the roller to the correct height and re - tighten the bolts. The roller must remain parallel to the cutting cylinder at all times. To commence mowing, once the engine is running, set the throttle lever to increase power and engage the cutting cylinder clutch by easing forward the inner lever on the left hand side of the handle bar. Ease forward the outer lever and the machine will move off.

Speed of travel is controlled by means of the throttle. To stop the engine push the throttle lever fully forward to the off position.



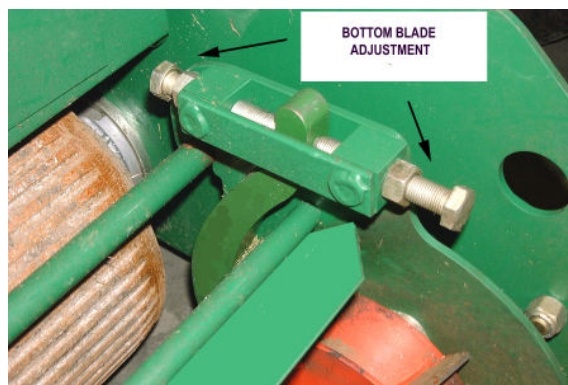
It is recommended that the cutter is disengaged for transporting purposes.

### **GRASS BOX.**

When emptying the grass box, always disengage the cutter and roller drive clutches. To empty simply lift the rear edge of the grass box which will pivot forwards depositing the contents in front of the machine. It must be stressed that if cutting without the grass box the special SCATTER PLATE must be fitted in place of the deflector plate to avoid the danger of fire and prevent cuttings being re - mown. The special BALANCE BAR must also be fitted to compensate for the removal of the grass box.

### **SHEAR BLADE ADJUSTMENT.**

Never attempt any adjustment or maintenance whilst the engine is running. It is recommended that the spark plug lead is removed for added safety.

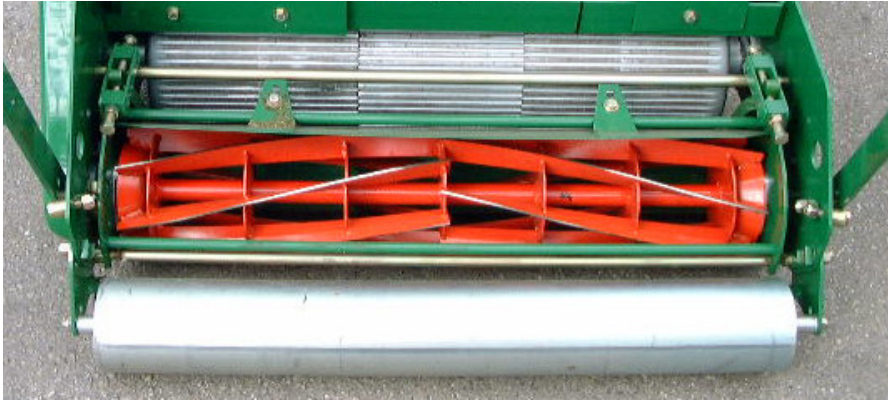


To adjust the shear blade, firstly slacken the four adjusting screws and locknuts positioned in opposed pairs at each end of the cutter cassette frame. Then move the shear blade to the cutting cylinder all along it's length and bring the screws up to the levers so that the position of the blade is maintained. Tighten the screws and locknuts.



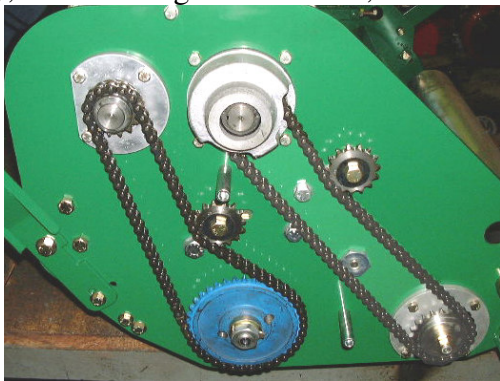
The cutting cylinder should just brush against the shear blade. A good test is to cut paper at different points along the blade. Heavy contact of the blade and cylinder will result in rapid wear.

## REMOVING THE CUTTING UNIT.



To remove the cutting unit for servicing purposes the following procedure should be followed:-

Firstly, remove the grass box arms, then remove the chain case from the side of the machine.



Take off the cutting cylinder drive chain and withdraw the cylinder sprocket (use 3 leg puller). Unscrew the four bolts securing the bearing housing on the main side plate (use 1/2" A/F spanner) and withdraw the housing (use 3 leg puller). Then unscrew the set screw on the left hand side of the cassette assembly (use 15/16 A/F spanner). The cutter cassette unit can now be moved fully to the left hand side of the machine and lifted out.

For re - assembly simply carry out the above procedure in reverse.

## HANDLE BAR ADJUSTMENT.



For operator comfort the handle bar must be adjusted using the various hole positions provided on the side plates of the machine (use 9/16" A/F/ spanner).

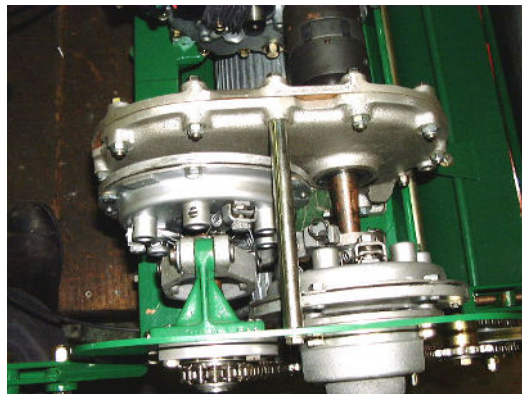
## ROUTINE MAINTENANCE.

### ENGINE.

Comprehensive details of the engine maintenance are given the Engine Manual which can be found at the back of this book.

### GEARBOX.

The aluminium gear box is situated under the steel drive cover. The oil level should be checked regularly. It should just touch the pip on the end of the dipstick plug marked 'oil'.



## DRIVING CHAINS.

Running the machine with improperly adjusted driving chains will cause rapid wear of both chains and sprockets.

To adjust the chain tension, slacken the nut on the nylon tensioner assembly and rotate the disc until there is only 3/8" slack on the lower side of the chain. Once correct tension is achieved re - tighten the assembly nut.

Chains should be kept greased at all times.

### CLUTCHES.

Identical clutches are fitted for engagement of the driving roller and cutting cylinder. It is essential that in the engaged position, a clearance of 1/10" is maintained between the graphite release bearing and the toggle lever plate. If the clearance becomes abnormally large the clutches will drag, but if too small slip will result.

For adjustment purposes on each clutch there is provided a spherical nut at the end of the transverse operating rods. This nut should be turned (use 1/2" A/F spanner) to give the correct clearance whilst the clutch is in position. Re - tighten the locknut after adjustment.

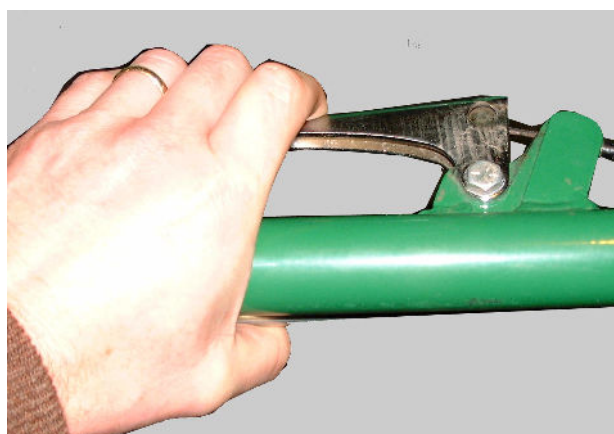
### REAR ROLLER.



The main drive roller is split into three sections incorporating a differential gear system running in an oil bath. Every six months the old oil should be drained off and the bath replenished with clean oil (560cc) (1 pint).

### BRAKE STEER

The brake steer system is as follows :-



The hand grips on the handle bars operate heavy duty boden cables. These in turn operate a drum brake system, the rear outer roller castings working as the drum.

Two adjusters are provided on the cable to facilitate adjustment.

Allow plenty of free play on the cables as only a small amount of pull travel is required. Having the cables adjusted too tightly will cause the machine to turn very quickly making operations difficult.

Do not under any circumstances wash the machine down with high pressure washers as water may penetrate the brake drum and cause damage.

To minimise cable friction, we have used nylon lined cable. to keep these lubricated apply light oil to cable inners using an oil can. To ease this operation remove cables from handle bar controls and hold vertically when applying oil to inner cable. We suggest during heavy usage this is carried out weekly.

**GENERAL LUBRICATION.**

All bearings used in this machine are pre - packed with grease and rubber shielded, thus no greasing of these parts is required.

Occasional greasing of the clutch lever mechanisms on the handle bar is required.

**STORAGE.**

The machine should always be kept in a clean dry place, free from condensation. After use ensure that the machine is thoroughly clean, dry and free from grass and mud. Before off season storage smear a thin layer of grease on to the cutter blades and the shear blade.

Under no circumstances must the machine be steam cleaned as this may remove grease from the pre - packed bearings.

For engine storage see details in the engine manual supplied in the back of this book.

**TABLE OF LUBRICANTS.**

ENGINE	Grade SAE 30 engine oil
REDUCTION BOX	Grade SAE 30 engine oil
GEARBOX	Grade SAE 30 engine oil
REAR ROLLER	Grade SAE 30 engine oil

**NOTE:**

**ELECTRIC START MACHINES.**

Please ensure to turn key to off position when leaving machine to avoid damage to the charging circuit.