



## **OWNER'S INSTRUCTION MANUAL**



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## SECTION 1 SAFETY PRECAUTIONS

(Conforming to BS 5107:C)

**IT IS MOST IMPORTANT THAT BEFORE YOU BEGIN TO WORK WITH YOUR WESTWOOD GARDEN TRACTOR, YOU READ THIS MANUAL CAREFULLY AND THEREAFTER OBSERVE ALL THE SAFETY RECOMMENDATIONS.**

Sticking to a few sensible rules will avoid any risk of injury and also ensure a long and effective working life for your new machine.



Where ever you see this symbol in following pages, it means that special care must be taken to avoid a hazard to the driver of the machine or people standing nearby.



Should you feel that any safety or other aspect is not explained fully in the following pages, call you local Westwood dealer.

### GETTING READY TO MOW



Before you start up your Westwood Garden Tractor for the first time, sit yourself on the seat and get familiar with the layout and operation of the controls. It is most important that you find out how you can stop the engine in an emergency.



Children should on no account be permitted to operate it. The clutch/pedal control is in any event too far away for young legs and requires too much pressure. Similarly, no adult who is unfamiliar with the machine should be allowed to drive it.



When you are mowing, always keep children and animals away from the area that you are cutting.



Check before starting a job that the grass ahead is clear of debris such as stones, sticks, toys, wire or anything else that might be picked up and thrown out by the blades.



Pinpoint hazards like manhole covers, tree stumps, roots or holes and depressions in the ground which could cause you to damage the blades.



Before using your Westwood Garden Tractor it is always a good idea to check the blades for damage or excessive wear. Worn or damaged blade bolts can be extremely dangerous.



When you are working with your Westwood Garden Tractor, always wear substantial footwear and don't put on loose clothing or anything that could become trapped in the blades, or belt drive systems.



Never use this mower unless the guards we provide are in position.



Always make sure that your Westwood Garden Tractor is in a safe condition to operate. If and when you need replacement parts, you would be acting in your own best interests if you use only those components made and guaranteed by Westwood Engineering Ltd.



## SAFETY PRECAUTIONS SECTION 1

### BASIC OPERATING RULES



Depending on the engine fitted, your Westwood Garden Tractor runs on ordinary two star petrol, (higher octane fuel may be used if necessary) or diesel fuel.

Always add fuel BEFORE starting the engine. On no account refill the tank while the engine is running. Fill carefully, and mop up any spillage that cannot be avoided. If you cannot reach some fuel that has slopped over, allow ten minutes for it to evaporate.

Do not fill the tank to the brim. Leave a small space for the liquid to expand when it becomes warm. Use only approved fuel containers like the spare can mounted in front of the driving seat. These should be stored in a well ventilated area away from any naked flame or sparks and safe from children and pets. If you intend to smoke while mowing, you should remove the spare can and put it to the side of the lawn.



Do not run the engine in a confined space like a garage, where dangerous carbon monoxide exhaust fumes will build up.



Before you start the motor, always make sure that the Cutter and Power Take-off drives are disengaged. This is not only a safety measure but guards against unnecessary component wear.



When you are not actually cutting grass, the Cutter should always be disengaged. Be sure to make a habit of doing this. Forgetting to do so is dangerous. On no account should you dismount from the tractor while the Cutter is still engaged.



Never leave the tractor unattended with the motor running. Long idling can harm engine performance. There is also the remote danger that the gears could still be engaged and the machine would run away.



If you are going to check on the mowing blades or other moving parts, stop the engine and also disconnect the spark plug. This guards against accidental ignition which could start the blades.



The engine of your Westwood Garden Tractor is "governed" which means that the maximum power output is carefully controlled for optimum performance. Never attempt to change these governor settings.



When mowing on slopes, use extreme caution. Avoid the need to de-clutch on an incline by selecting a low gear before you start up or down it.



Your Westwood Garden Tractor is designed to have considerable stability. However, even on a slope as gentle as 10 degrees you should be careful to avoid sharp turns, especially at speed. Equally, rough ground can affect the tilt of the machine quite dramatically. Never mow across a slope. Always go up and down. Always take care on steep or wet slopes.



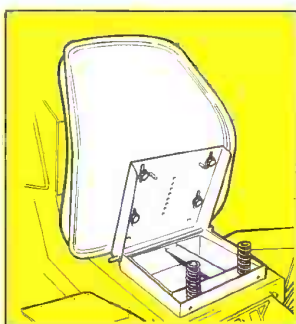
As you get to know your Westwood Garden Tractor, your understanding of its capabilities and your own confidence will increase. But avoid over-confidence and always drive within the machine's capabilities, which already allow you to mow large areas of grass extremely effectively in a surprisingly short period of time.

## SECTION 2 CONTROLS AND SWITCHES

**AFTER ADJUSTING THE SEAT SIT ON YOUR WESTWOOD TRACTOR AND FAMILIARISE YOURSELF WITH THE LAYOUT AND OPERATION OF THE CONTROLS AND SWITCHES**

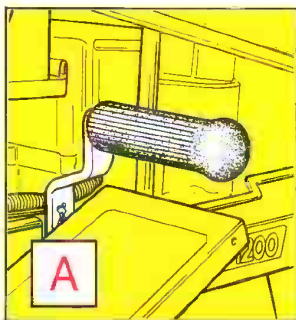


**SIDE VIEW**

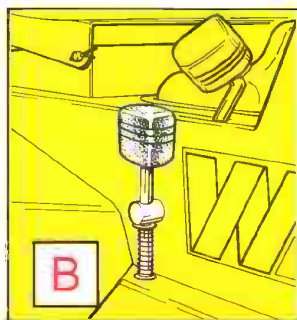


### SEAT ADJUSTMENT

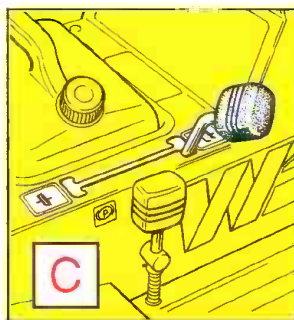
Tip the seat forward and find its four attachment bolts. Slacken them off and adjust the seat to a position you find comfortable. Re-secure firmly.



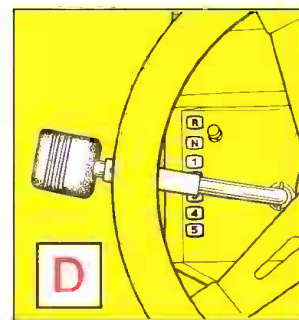
**COMBINED CLUTCH  
BRAKE CONTROL PEDAL**



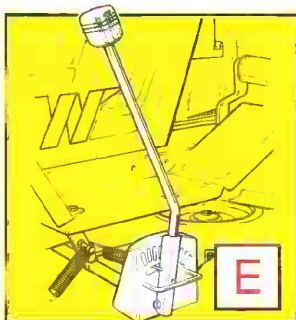
**PARKING BRAKE**



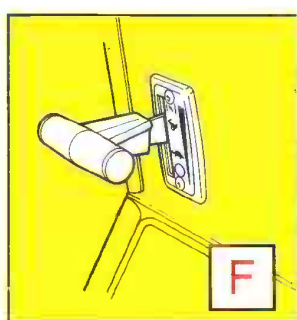
**CUTTER DECK  
ENGAGE CONTROL**



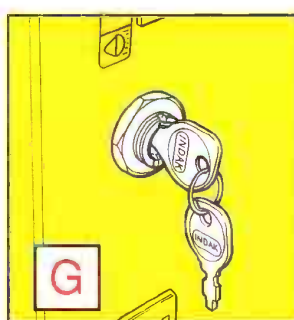
**GEAR SELECTOR  
LEVER**



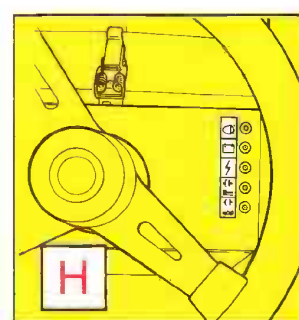
**CUTTER DECK HEIGHT  
CONTROL LEVER**



**COMBINED CHOKE  
THROTTLE CONTROL**

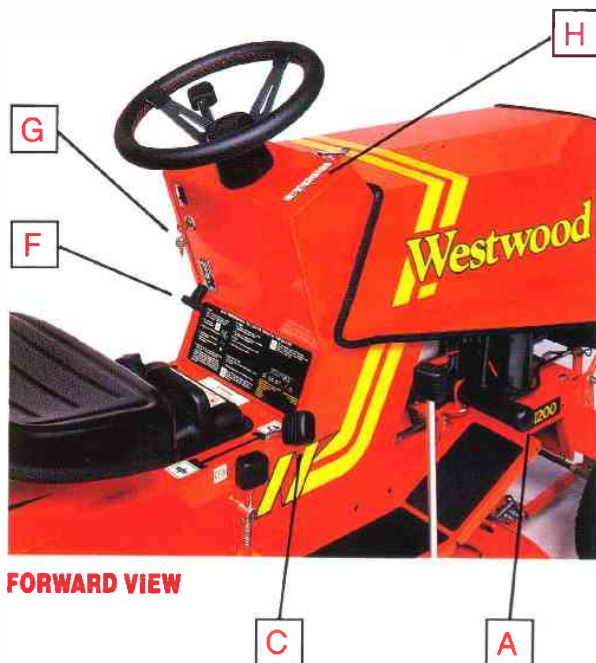


**IGNITION SWITCH**



**INDICATOR LAMPS**

## CONTROLS AND SWITCHES SECTION 2



FORWARD VIEW

in 5th gear. If you let the pedal up too quickly the tractor will start off with surprising speed.

Changing gear on the move is not a good idea, as it will reduce

radically the life of your gearbox gears. Never force the gear lever into another position. Always come to a stop before selecting another gear.

### CLUTCH/BRAKE PEDAL CONTROL

A

The above section has explained how the movement of this pedal operates both the braking and the gear changing by engaging and disengaging the transmission drive.

There are actually two stages to the pedal's operation. The initial downward movement disengages the transmission belt and the final downward movement applies the disc brake, which is located on the Transaxle itself.

To park the tractor, push the pedal down fully and at the same time depress the spring-loaded black knob on the running board to the right and just in front of the seat [B], opposite a symbol "P". While holding this down, let up the foot pedal. This will hold the brake on. To release the parking brake, simply depress the foot pedal and the parking brake will spring off, returning braking control to the foot pedal.

### THE GEARS

D

Your Westwood Garden Tractor has a transaxle unit, which has five forward speeds and a single reverse gear. A transaxle unit combines the functions of a gear box and a differential axle. The differential allows the rear wheels to move at different speeds when cornering.

**THE FORWARD GEARS.** The low gears, 1 & 2, are designed for use when you are cutting long grass or operating on hilly ground or in confined areas. The slower speed offers more effective cutting of long grass. It gives you ample time but steady power to manoeuvre safely in tricky conditions. Gears 3 & 4 are for lighter duties such as cutting well established lawns. The fifth gear, offering a top speed of six mph, is only suitable for very light mowing or driving to and from your worksite.

**THE REVERSE GEAR.** This is a low ratio gear, engaged by mov-

ing the gear stick right to the top, past the safety stop on the gear lever that prevents you slipping into reverse gear by accident. Depressing the catch on the gear lever enables you to pass over the safety stop. **ONLY ENGAGE REVERSE GEAR WHEN YOUR TRACTOR IS STATIONARY.**

**CHANGING GEAR.** The positions of the gears are clearly marked alongside the gear lever, which is to the left of the steering column. The "N" position signifies neutral.

To change gear, press the Clutch/Brake Pedal down fully. This disengages the transmission drive belt and at the same time applies the brake. Choose the gear you want and then SLOWLY release the foot pedal. This both engages the drive belt and lets off the brake. Use low gears until you have got the feel for this foot pedal operation. Particular care should be taken when starting off

### THE THROTTLE

F

The Throttle is a black lever found below the left hand side of the console. When it is pulled up to the top of its travel, you have the maximum setting. When it is depressed you have the minimum. On the D1200 model with the Diesel engine the throttle operates the other way round.

Like the accelerator on a motor car, it is used to control the flow of fuel to the engine and so regulate its speed. The maximum setting is the choke position which should be used when starting the engine from cold.

This position is indicated beside the throttle by the symbol 1/1. The middle setting is used for starting a warm engine. When fully depressed it will permit a warm engine to idle.

It will become a matter of experience, what throttle setting is best in different conditions. The choke position is only used for starting and if used when the engine is warm, will tend to flood the engine with fuel and cause it to stall, just as excessive use of the choke on a motor car.

### CUTTER ENGAGE/DISENGAGE CONTROL

C

The Cutter Deck Drive is engaged and disengaged by the lever on the right hand side of the raised part of the tractor floor in front of the seat. When the blade is disengaged, the lever is locked

in its retaining slot and pointing towards the front of the tractor. When engaged, the lever is pulled back towards the driver and locked into its retaining slot.

When you disengage the cut-



## SECTION 2 CONTROLS AND SWITCHES

ter after use, a brake on the cutter is applied automatically and stops the blade or blades turning. When you move the lever to engaged, this brake is taken off. This facility means that you can disengage the cutter and use your Westwood Garden Tractor for other duties, without having to remove the cutter deck.

It stands to reason that the cutter deck should **NEVER** be engaged until you are sitting at the controls and positioned where you intend to start grass cutting.

To engage the Cutter Deck Drive, run the engine at half throttle and **SLOWLY** move the Cutter engage/disengage lever backwards toward you, until it

can be locked in the engaged position. This both releases the cutter brake mechanism and engages the belt drive that works the cutters.

It is **IMPORTANT** to remember that a **MEDIUM** engine speed and the **SLOW** engagement of the cutter drive will reduce the strain and wear on the drive belt and so extend its life.

To stop the cutter, move the engage/disengage lever forwards to lock back in its original position. This disengages the cutter drive belt and applies the cutter brake. It is however important to remember that the cutter blades **WILL NOT STOP IMMEDIATELY**.

### POWER TAKE-OFF

C

The Power Take-off (PTO) is also controlled by the cutter engage/disengage lever, therefore as the cutter is engaged so the PTO drive belt is engaged. Because of

this it is important to ensure any PTO driven accessory is in a safe condition to operate, e.g. all belt guards provided are correctly fitted.

### CUTTER HEIGHT ADJUSTMENT

E

The height of the cutter blades can be adjusted by the long lever to the right hand side (to the left hand side on the 30" cutter) of the cutter deck. The cutting height ranges from a low  $\frac{1}{2}$ " to  $3\frac{1}{2}$ ". Each slot in the Quadrant at the base of the lever, adjusts the

blade height by increments of approximately  $\frac{1}{2}$ ".

To adjust the cutting height, push the lever outwards and move the lever either backwards or forwards to relocate in the slot on the Quadrant that gives you the desired cutting height.

### WARNING AND SAFETY LAMPS

H

All Westwood Garden Tractors with electric starters have warning and safety lamps fitted. They are easily seen, arranged in a vertical line to the right of the

steering wheel, (with explanatory symbols to their left). Taken in sequence from top to bottom, the functions of the lamps are:



1

**HEADLIGHTS** (if fitted). The actual switch for the headlights is found on the left hand side of the driver's console, just above the ignition key lock. When the headlight switch is in the ON Position, an amber indicator light will shine. This facility proves its usefulness if ever the lights are turned on by mistake in daylight, which could lead to a reduction in battery power. On Westwood Garden Tractors fitted with **TECUMSEH** or **BRIGGS & STRATTON** petrol engines, these headlights will only operate when the engine is running.

2

**BATTERY CHARGING**. On Westwood Garden Tractors fitted with the **TECUMSEH** or **BRIGGS & STRATTON** petrol engines, this amber light will come on when the motor is running, to show that the battery is charging. However if you have a Westwood model powered by a diesel engine, it is important to remember that because the electrics are different from those of a petrol engine, this system works the other way round, i.e. when the amber light goes out, it means the battery is charging.

3

**IGNITION/OIL PRESSURE**. On Westwood Garden Tractors with petrol engines, when the ignition light is showing red, that means the ignition is switched on. However, if you own a diesel engined tractor, this red light has nothing to do with the ignition. It is instead an important warning light which if illuminated indicates that your **OIL PRESSURE** is too low.

4

**CUTTER DECK SAFETY**. This is a green light which when ON means that your Cutter Deck Drive is disengaged.

5

**TRACTOR BRAKE SAFETY**. This is another green light which when ON means that the Clutch/Brake pedal is fully depressed. The tractor will not start unless this pedal is depressed and the cutter disengaged. If you forget either of these safety precautions the starter motor will not operate, and you will have to try again using the correct procedure.



## PREPARATION SECTION 3

**IMPORTANT! BEFORE STARTING YOUR ENGINE FOR THE FIRST TIME-PLEASE CARRY OUT THE FOLLOWING CHECKS**



**1** Release the catch on top of the bonnet. Lift and tip the bonnet forward until it is clear of the engine. Fully opened, it will support itself.

**2** Check the engine oil level with the dipstick attached to the oil filler cap screwed fully down. The operation is exactly the same as with a car engine. If the level is down, top up with clean oil. The recommended oil for PETROL engines is Multigrade Detergent Oil, viscosity grade SAE 10W-30, and for DIESEL engines it is Heavy Duty Detergent Series 3 oil. If you are technically minded and inquisitive, you can refer to the recommendations in the Engine Manufacturers Hand-

book, accompanying this manual. However this manual will tell you everything you will normally need to know to operate your Westwood Garden Tractor.

**3** Check the fuel tank level. The fuel tank is the white plastic container beside the battery. Top up with TWO STAR or equivalent low lead petrol. On the D1200 model with the diesel engine, DIESEL fuel only must be used. In both cases, avoid spillage, mop up or allow to evaporate if you do and leave a small space in the tank for the fuel to expand when the engine warms up.

**4** The Battery is located beside the fuel tank, between the engine and the driver's console. Check the electrolyte level in the battery and ensure that the two terminals are fixed on securely. The correct level should be  $\frac{1}{4}$ " above the separator plates. Topping up should only ever be done with DISTILLED WATER.

**5** Check your tyre pressures. The front tyres should be between 12 and 15 p.s.i. and for the rear, 10 and 12 p.s.i. If you are going to be operating in wet or hilly conditions, the pressures can be reduced by a few pounds to give better grip and traction.

**6** Turn on the ignition and check the operation of the control switches and warning lights. (See page 8).

**7** Check the operation of the foot pedal located on the right of the tractor. This is the combined Clutch/Brake. (See page 7).

**8** Check the working of the Cutter Deck Engage Control Lever. (See pages 7/8).

**9** Check the operation of the Gear Change. (See page 7).

## SECTION 4 STARTING UP YOUR TRACTOR



**IMPORTANT!**  
**BEFORE STARTING THE**  
**ENGINE, CARRY OUT THE**  
**PRE-USE CHECKS SET**  
**OUT IN SECTION 3**  
**SEE PAGE 9**

### THEN

1. Ensure the gear lever **[D]** is in neutral.

2. Check that the parking brake **[E]** is applied. If it isn't, apply it.

3. Ensure the cutter drive **[C]** is disengaged.

4(a). **PETROL ENGINES.** Move the throttle control **[F]** right up to the choke position if starting from cold, or to the midway position when starting a warm engine. NOTE — T1600 models have a separate choke control.

4(b). **DIESEL ENGINE.** On D1200 models with the diesel engine fitted, make sure the STOP control is pushed down fully to the start position.

5. **ELECTRIC START ENGINES.** Turn the ignition key **[G]** clockwise until the red light is illuminated on the console **[H]**. Safety interlocks on the brake and cutter engage mechanism, prevent the engine from being started until the controls are correctly positioned, (as in 2 & 3 above) as indicated by the illumination of the two green lights on the tractor console.

Should either green light fail to illuminate when the ignition is switched on, it means one of the safety interlocks has operated. Re-check the position of each of the controls.

6. Start the engine by continuing to turn the key clockwise

(against slight spring pressure), releasing the key immediately the engine comes to life.

### RECOIL START MOTOR

Most Westwood Garden Tractor models have recoil starts mounted on top of the engine, which in the unlikely event of an electric start motor not working, generally because there is insufficient power in the battery, can be used to get the motor running. There is however one model, the S600R with recoil start only.

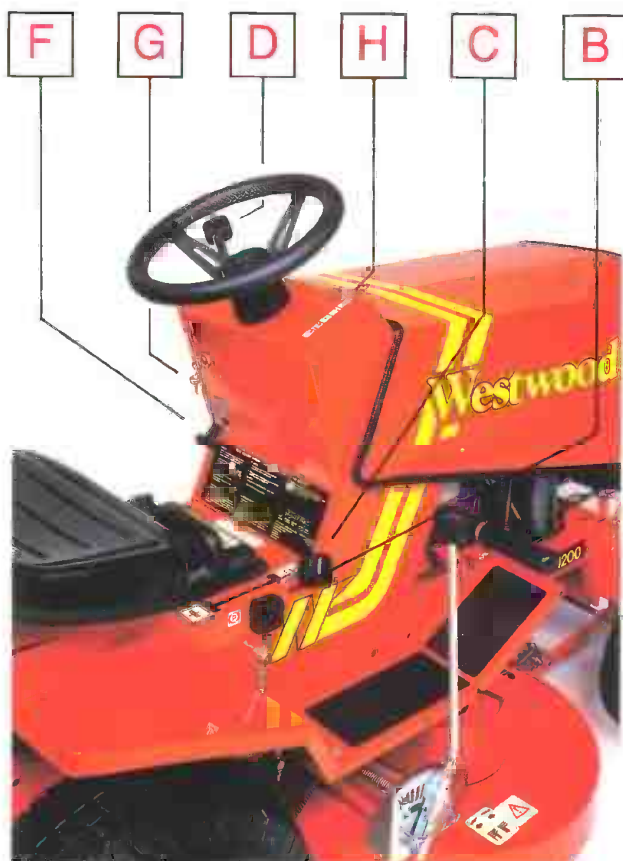
7. With recoil start motors, first turn the ignition key (if any) clockwise, and then set the throttle — fully open for cold start, and midway for warm start.

8. Pull the recoil starter sharply to the full extent and then release slowly.

9. With all engines, as they warm up, the choke should be disengaged by reducing the position of the throttle.

### TO STOP YOUR TRACTOR

1. Disengage cutter drive
2. Apply parking brake
3. Gear change to neutral
4. Move throttle to stop position
5. Switch off ignition





### CUTTER DECKS

**PLEASE NOTE - WHILST ILLUSTRATIONS MAY NOT SHOW THE CUTTER DECK THAT IS FITTED TO YOUR MACHINE, THE METHODS OF ADJUSTMENT AND OPERATION ARE COMMON TO ALL CUTTER DECKS.**

### CUTTER DECK RE-LEVELLING

The Cutter Deck is set level at Westwood Engineering, to a height of  $\frac{3}{4}$ " at its lowest position. After a period of use, particularly if you are often mowing over bumpy ground, the

Cutter may no longer be level.

There are two means of adjustment for levelling Cutter Decks. One for levelling from front to rear and the other for levelling from side to side.

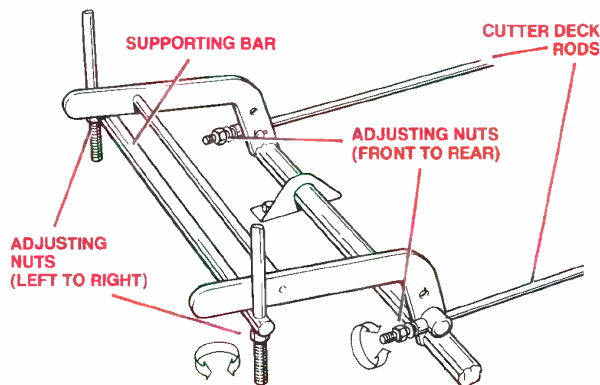


Figure 1. Cutter Deck Levelling Adjustment Points

### ADJUSTING THE LEVEL FROM LEFT TO RIGHT



1. Observe all the safety precautions. In particular make sure the spark plug is disconnected.
2. Set the cutting height to its lowest position and put the Engage/Disengage lever into the engaged position.

3. Find the Hanger Bracket assembly where it is attached to the chassis, near the rear of the tractor. (See figure 1).

4. Find the nuts on the Supporting bar and turn them up or down to reset the bar at the correct level, using a spirit level if necessary.

There are three sizes of Cutter Deck fitted to the Westwood Garden Tractor range:  
30" Single Blade 36" Standard Twin Blade  
42" Twin Contra-Rotating Blades.

### ADJUSTING THE LEVEL FROM FRONT TO REAR



1. Once again observe all safety precautions. In particular make sure the spark plug is disconnected.
2. Set the height of cut to the lowest position and place the Engage/Disengage lever in the engaged position.
3. Find the nuts on the ends of the two cutter deck rods. (See figure 1).
4. With a spanner from the set provided and stowed beneath the seat of your tractor, turn either or both nuts until the deck is level

from front to rear. This can be done by eye or by using a spirit level.

**NOTE:** If you tend to use the Cutter set most of the time to its lowest cutting height, it is an advantage to adjust the front end slightly higher than the rear. This improves the belt alignment between pulleys. However take care not to overdo this adjustment, as too much setting can throw out the belt alignment if you operate the Cutter fully raised.

### CUTTER DRIVE BELT ADJUSTMENT

Properly adjusted, the Cutter Drive Belt should have sufficient tension to make the engine stall in extreme conditions, i.e. cutting long grass on a low cut in high gear. Such a stall will tell you that you need a lower gear and maybe a slightly higher cutting setting.

A slack belt will slip and heat up rapidly and could start to burn. As it heats up, it tends to shrink. A further danger is that the bearings on the Cutter could overheat and fail.

It is therefore obviously most important that the belt tension should be checked regularly and if necessary be adjusted in the following manner:



1. Observe all safety precautions. In particular make sure that the spark plug is disconnected.
2. Release the bonnet catch and tip the bonnet forward, clear of the engine.
3. Find the Cutter engage rod connection to the arm of the Hitch Bracket attached to the front of the tractor. (See figure 2).
4. Remove the "R" clip securing the threaded Pivot and then remove the Pivot from the Hitch Bracket arm.
5. Rotate the Pivot anti-clockwise to "lengthen" the rod, so increasing the travelling distance of the Hitch Bracket and



## SECTION 5 ADJUSTMENTS

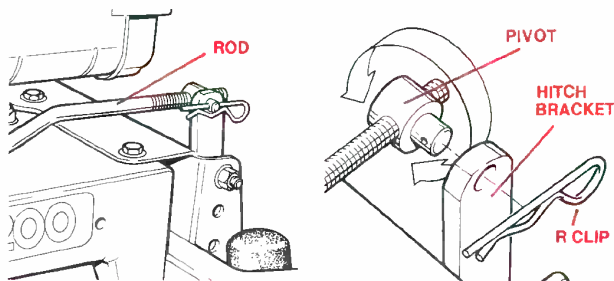


Figure 2. Cutter Drive Belt Adjustment.

thus the tension on the Drive Belt.

6. Reconnect the Pivot to the Hitch Bracket arm and then refit the "R" Clip.

7. Check the belt tension by reconnecting the spark plug, starting the engine and placing the Cutter engage lever to the halfway position along its travel. At this point, the Cutter drive should just begin to engage.



### VERY IMPORTANT

Take care to keep your feet and other objects clear of the rotating blades. Before starting the blades, account for all the tools and any spare nuts and bolts that you have used. A forgotten implement caught up in the blades could not only damage the machinery but could also be thrown out with considerable force and cause serious injury.

## CUTTER BRAKE ADJUSTMENT

As with all braking systems, after a time pads wear and cable tensions slacken. The Cutter Brake Pads and the Brake Cable tension on your Westwood Garden Tractor should be checked from time to time and if necessary adjusted as follows:

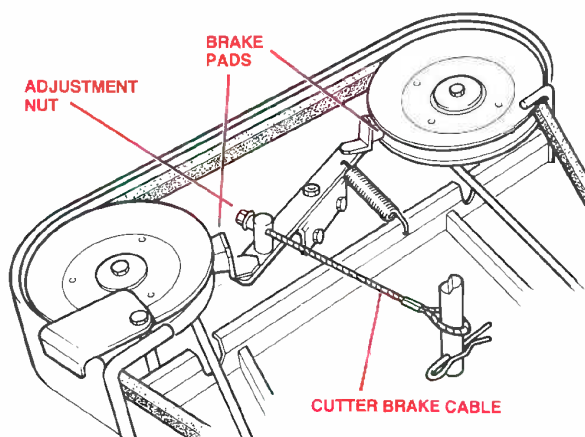


Figure 3. Cutter Brake Adjustment.



1. Observe all safety precautions.
2. Put the Cutter Engage/Disengage lever in the engaged position.
3. Find the brake arm with the brake pad attached along with its operating cable. (see figure 3).
4. The brake pads should be  $\frac{1}{8}$ " to  $\frac{1}{4}$ " clear of the pulleys and the operating cable tight.
5. **WITHOUT STARTING THE ENGINE**, place the cutter engage/disengage lever halfway towards the disengaged position. The pads should be just touching the pulleys. The operating cable

should be slightly slack.

6. Place the cutter disengage/engage lever fully to the disengaged position. Now the pads should be hard against the pulleys and the cable completely slack.

7. There is an adjuster nut on the cable, to increase the cable tension, turn this nut clockwise.

**NOTE:** Cutter Brake Pads on Westwood Garden Tractors are designed to wear into the shape of the pulleys. They should be checked after every 10 hours of use.

## TRACTOR BRAKE ADJUSTMENT

When the Clutch/Brake foot pedal is depressed slowly, the twin Jockey Pulleys begin to release the tension in the transmission belt. If you carry on pressing the pedal down as far as it will go, you disengage the transmission drive and progressively apply the foot brake.

From time to time, it will be necessary to adjust the brake mechanism. This is done as follows:



1. Observe all the safety precautions.
2. Find the adjusting nut at the Transaxle brake lever pivot, and note the two nuts on the brake rod. (See figure 4). The Transaxle's brake lever will apply the brake when moved in either direction. However on the Westwood Garden Tractor the brake is applied only by the forward nut

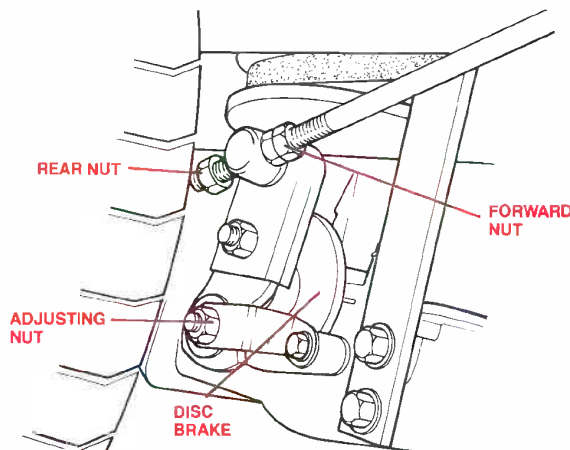


Figure 4. Tractor Brake Adjustment.

on the brake rod. Always ensure the nut on the rear side of the brake lever is positioned at the very end of the brake rod.

**NOTE:** Since the brake lever is double acting any repositioning of the rear nut will mean that the brake will be applied when the foot pedal is released.

3. To compensate for brake wear, adjustment is carried out by turning the locknut at the brake lever pivot in a clockwise direction.

4. As a final check to make sure you have got the brake mechanism adjustments right, test that the brake lever is loose in all positions until the clutch/brake pedal has been pressed three quarters of the way down.

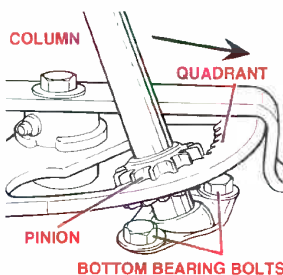
5. Do not let your brake pads wear down too far before you replace them. It is a false economy to tighten up the brakes after the pads have passed their useful life, as damage is likely to be done to the disc itself.

### STEERING GEAR ADJUSTMENT

To remove any excessive play in the steering, you should carry out the following adjustments:



1. Observe all safety precautions.
2. Slacken the two nuts and bolts of the bottom bearing



of the steering column to the chassis. (See figure 5).

3. Pull the steering column forward and hold it there, to take up any play between the Quadrant and the Pinion gear.

4. Still holding the column forward, retighten the nuts and bolts securing the bearing.

5. Check the steering to ensure that you have not over-done it and the gears do not mesh too tightly. The excessive play should have gone but the wheels should be turnable without undue effort.

Figure 5. Steering Gear Adjustment.

### STEERING LOCK ADJUSTMENT

The steering lock, (that means the amount the front wheels turn), is set at Westwood Engineering and no further adjustment is necessary. If, however, a component is replaced, you obtain equal left and right front wheel

lock by adjusting the Drag Links Joint. This is done by slackening off the Ball Joint Lock Nuts, disconnecting the Ball Joint at the Steering Arm and screwing the Ball Joints in or out, as necessary.

### AXLE-BEAM ADJUSTMENT

To eliminate any excessive movement in the Axle-beam, carry out the following adjustments:

1. Slacken off the five nuts and bolts securing the Front Chassis Bracket to the chassis.

2. Tighten the two Axle-beam nuts and bolts until the Axle-beam can only just be pivoted.

3. Re-tighten the five nuts and bolts securing the Front Chassis Bracket to the chassis.

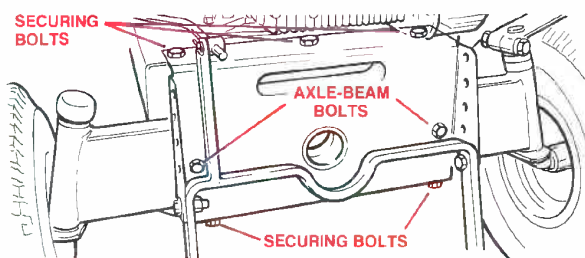


Figure 6. Axle-beam Adjustment.

### WHEEL TRACKING ADJUSTMENT

The front wheel tracking is set at Westwood Engineering and no further adjustment should be necessary. However should a component have to be replaced, wheel tracking is adjusted by the track rod which runs behind and

between the front wheels. The adjustment should be made so that the wheels are pointing straight ahead. It is all right to have up to 1/8" toe-in, but no toe out.

### GEAR CHANGE LEVER ADJUSTMENT

To adjust the gear change lever, the split pin should be removed from the Transaxle gear lever. The swivel is then screwed

in the appropriate direction to give you the correct gear change alignment. (See figure 10, section 6).



**NOTE.** Make sure that after all adjustments involving the loosening of bolts, all are re-tightened firmly. Though the Westwood Garden Tractor engines are all remarkably smooth running, vibration is inevitable and in the end, insecure nuts and bolts could be shaken off. If they end up beneath the cutting blades, they can damage the machine or be tossed out with dangerous force.

## SECTION 6 SERVICE CHECK LIST

### ROUTINE SERVICING

Your Westwood Garden Tractor is designed to give a trouble free life with minimal amount of servicing. However, it is recommended that your machine is serviced at least once a year. This service

should be carried out by your Westwood dealer who has factory trained staff. The following is a recommended service check list that should be carried out at least once a year, or after every 50 hours use.

### RECOMMENDED SERVICE CHECK LIST

#### ENGINE

1. Change oil. (D1200 only — remove and clean the oil filter)
2. Remove and clean air cleaner filter — renew if necessary.
3. Remove and clean spark plug, and check plug gap, replace if damaged or worn.
4. Remove shrouds around the engine and clean the engine cooling fins.
5. Clean and adjust carburettor.
6. Crankcase Breather Cap (D1200 only), clean and check valve operation.
7. Check tappet clearances.
8. Examine engine mountings for security.
9. Check, adjust and lubricate controls.

#### CUTTER DECK

1. Blades — examine for damage and sharpen.
2. Brake — check for wear.
3. Contra cut decks, Toothed Belt drive system — check for wear and correct blade timing.
4. Ensure cutter is fitted level.
5. Ensure Drive Belt tension is correct.
6. Hanger Bar — ensure secure.
7. Lubricate all moving parts.
8. Check pulleys and Blade bolts for security.

#### TRACTOR

1. Brake/clutch Pedal — check for correct operation of Transaxle Brake and Parking Brake, and Pedal for security.
2. Gear Change — ensure correct operation.
3. Steering — check security of (a) Steering Wheel. (b) Steering Arm. (c) Ball Joints.
4. Steering Quadrant and Pinion — clean, lubricate and adjust as required.

#### ELECTRICS

1. Battery — check the electrolyte level, clean the battery terminals and coat with petroleum jelly, and if necessary recharge the battery.
2. Safety Interlocks — check for correct operation.
3. Wiring loom — ensure not fouled by moving parts etc.
4. Check all earth points for continuity.



### WHEELS AND TYRES

1. Examine tyres for damage, and check tyre pressures.
  2. Remove wheels, clean axle shafts. Lubricate shafts with grease and refit wheels.
- NB: Front wheels to be serviced in conjunction with Front Axle.

### FRONT AXLE

1. Dismantle, clean, grease, refit and adjust.

### TRANSMISSION

1. Check Transaxle for security of attachment.
2. Examine PTO assembly for wear and damaged couplings.
3. Examine drive belt and pulleys for wear and damage, and correct operation.

## LUBRICATION

All moving parts on the machine should be lubricated to effect a smooth operation. Particular attention should be given to the exposed areas of the tractor to provide protection and satisfactory performance.

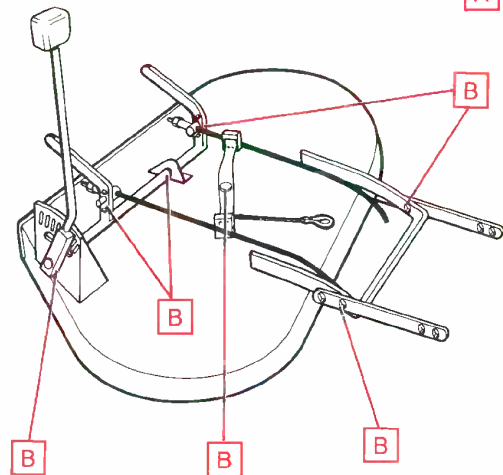
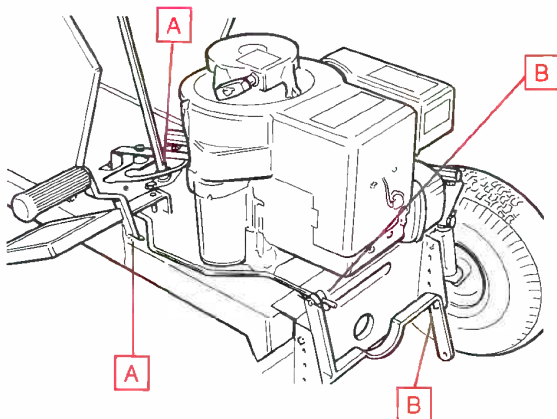
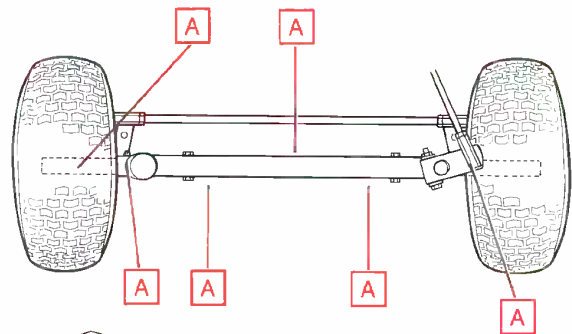
The main routine lubrication points are indicated by either A or B.

**A** Engine Grease

**B** Engine Lubricant Oil

Oil is applied using an oil can. Grease is applied to the stub axle pivots using a grease gun, at the other locations grease is applied after first dismantling and cleaning the parts.

Oil should be applied at 2-3 month intervals, and greasing should take place at least annually.



## SECTION 6 MAINTENANCE



1. Observe all safety precautions.
2. Ensure that the Cutter Engage/Disengage lever is in the disengaged position.
3. Place the Cutter Height Adjustment lever in its lowest position.
4. Remove the "R" clip from the Deck Stop, which is situated above the centre of the Cutter Deck. Allow the brake cable to drop clear of the Deck Stop and then refit the "R" clip. (See fig. 7).
5. Remove the Split Rings and pins from the Hitch Bars at the front of the Cutter Deck.
6. Pull the Cutter Deck forwards to release the Hanger Arms at the rear of the Deck from the tractor Hanger Bracket.
7. Slacken the lower nut on the two belt guides on either side of the Engine Drive Pulley. Then turn the guides rearwards to allow the Drive Belt to be removed from the engine drive pulley. This operation does not apply to Westwood Garden Tractors fitted with the 30" cutting blade, because this model has a different belt guide arrangement

which does not hinder the belt's removal.

8. Return the Cutting Height Adjustment Lever to its highest position (i.e. pull it right back). This will lower the Hanger Arms.
9. The Cutter Deck can now be pulled clear from underneath the tractor. On all models except the 30" Cutter Deck, (with its Height Adjustment Lever on the left),

### CUTTER DECK REMOVAL

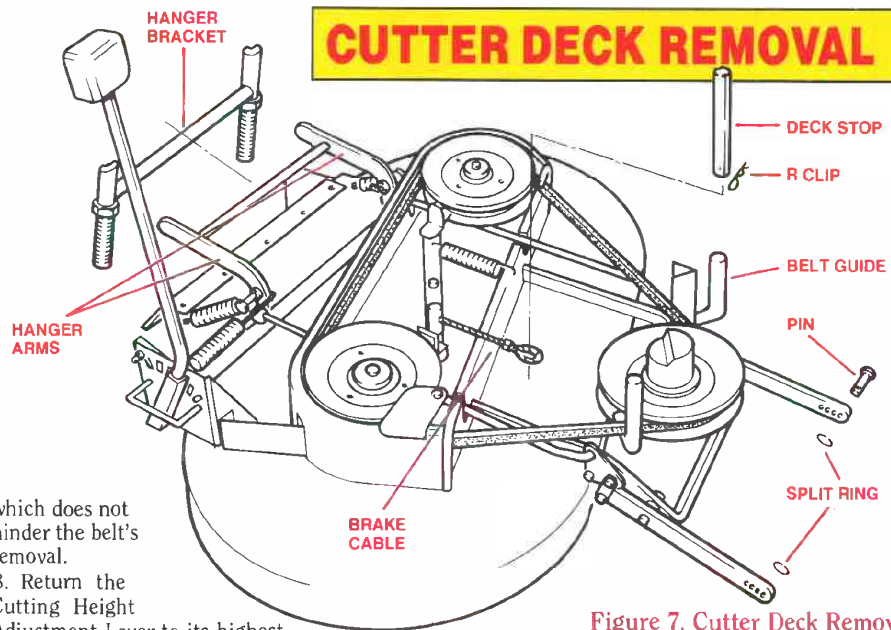


Figure 7. Cutter Deck Removal.

the deck should be removed from the right hand side. If you have a 42" Cutter Deck, its removal is made easier if you turn the front wheels to full lefthand lock.

10. To refit the Cutter Deck, merely reverse this procedure. Be particularly careful to locate the Hanger Arms correctly over the Hanger Bracket. Remember also to fit the belt around the engine pulley BEFORE you connect the Hitch Bars to the front of the deck.

### REPLACING THE CUTTER DRIVE BELT

This work is best done when the Cutter Deck is removed from the tractor.



1. Observe all safety precautions.
2. Remove Cutter Deck from the tractor. (See above).
3. Remove the Finger Guard from the Cutter Drive Pulley. On the 36" standard Cutter Deck, this guard is fitted to the right hand pulley.
4. With 30" and 42" Cutters only, remove the belt guard, which will allow the belt to be removed from the pulley.
5. 36" Std Cutter only; Disconnect the spring to the Cutter

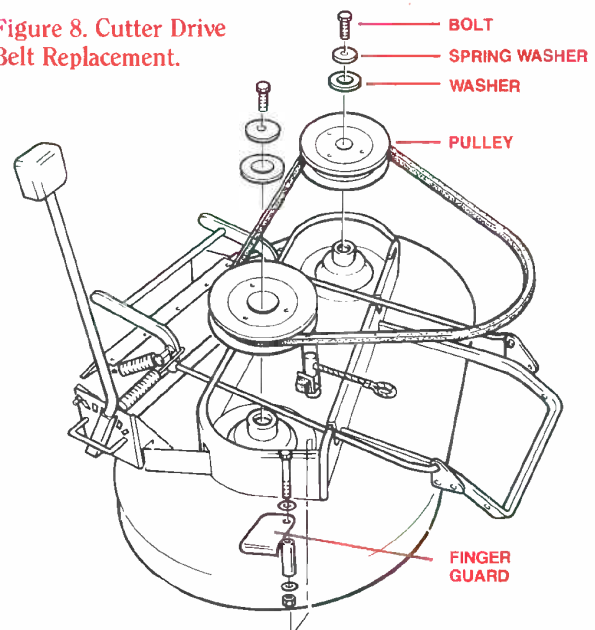
Brake Arm and remove both bolts securing the Pulleys, and remove both pulleys with the belt.

**NOTE:** While undoing these bolts, take particular care to remember the locations of any washers.

6. Refit the Drive Belt in the reverse order. Be careful to make sure that the pulley bolts are firmly tightened.

**NOTE:** To protect your hands and keep the blades from moving about while removing and refitting bolts, we suggest the cutting edges be wrapped in rags.

Figure 8. Cutter Drive Belt Replacement.



### REPLACING THE CONTRA CUTTER TOOTHED BELT



1. Observe all the safety precautions.
2. Remove the Cutter Deck from the tractor (see figure 7).
3. Remove the Cutter Deck Belt Guard, and the Finger Protection Guard (see figure 8).
4. Disconnect the Spring from the Brake Arm.
5. Remove the Drive Belt with the Pulley.
6. Remove the Discs and Blades or Blades and Carriers.
7. Remove the nuts and bolts securing the Belt Drive Case and then remove the belt case from the Deck.
8. Separate the two halves of the Belt case by removing the nuts and bolts.
9. Remove the nut securing the Belt Separator and pull out the bolt far enough to remove one

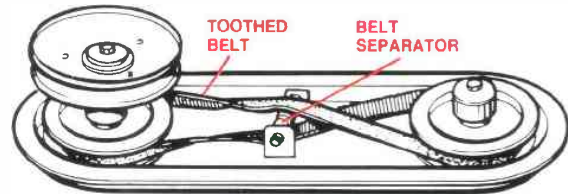


Figure 9. Toothed Belt Replacement.

- roller bearing.
10. Lift off the upper half of the right hand toothed pulley and remove the toothed belt from this pulley.
11. Then remove the toothed belt from the Belt Separator and the left hand toothed pulley.
12. To refit the toothed belt, carry out this procedure in the reverse order.

**NOTE:** Take particular care to get the correct lay of the belt over the Belt Separator (See figure 9). Also ensure the blades are set at 90° to each other.

### REPLACING THE TRANSMISSION DRIVE BELT



1. Observe all the safety precautions.
2. Remove the Cutter Deck (see figure 7).
3. Slacken off the Bolts securing the two Jockey Pulleys. This will allow the belt to slip free from both the pulleys and the guides.
4. Undo and remove the nuts and bolts as well as the belt guides securing the Power Take Off Bearing Housing to the chassis. (See figure 10).
5. Remove the Split Pin from the Gear Change Rod Swivel and then disconnect the Swivel from the Transaxle lever.
6. Slip the belt off the engine drive pulley block and the Jockey Pulleys.
7. Raise the Power Take Off shaft, complete with the bearing housing, so that it disengages from the rubber couplings. Slip the belt off the Transaxle Pulley.
8. The belt is refitted by reversing these procedures. Do make sure that it passes on the correct side of the Belt Guides, especially on the Engine Drive Block. It is also important to ensure that the "V" shape of the belt fits snugly into the pulley grooves. If it does not, belt wear will be rapid.

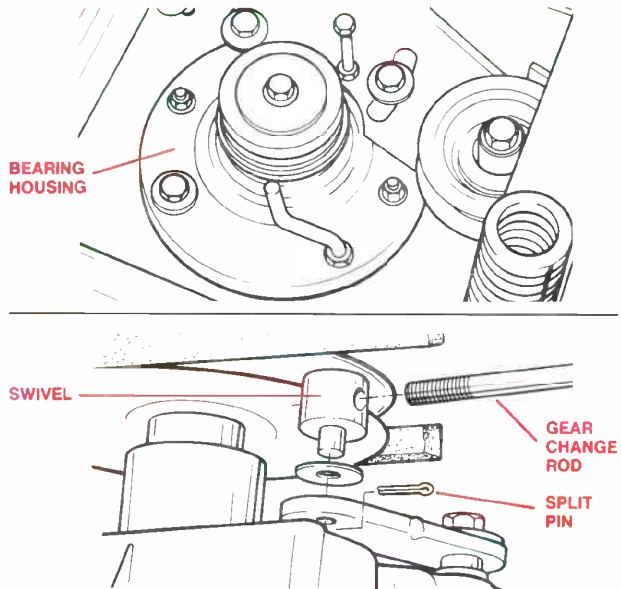


Figure 10. Transmission Belt Replacement.

### REPLACING THE CUTTER BLADES

Your Cutter Blades should always be kept as sharp as possible. If they are maintained in the best condition, they will not only continue to produce an excellent cut but will also pro-

long the working life of the Cutter Belt.

The moment you detect excessive vibration when engaging the Cutter Deck, stop the machine and check the blades for damage

in the following way:



1. Observe all safety precautions.
2. Remove the Cutter Deck from the Tractor (see figure 7).
3. Examine the blades for damage. If they have only suffered superficial damage and are not badly worn, arrange to have them sharpened and balanced by your

local Westwood Garden Tractor dealer. If more serious wear or damage has been caused, they should be replaced.

4. To remove the blades, undo the nuts and bolts securing them to the blade carrier, or blade disc. You can protect your hands by wrapping the blades in rags.



## SECTION 6 MAINTENANCE

### REPLACING POWER TAKE OFF COUPLINGS



1. Observe all safety precautions.
2. Raise and support the tractor so the rear wheels are clear of the ground.
3. Remove the rear wheel hub caps and the "E" clips from the axle shafts. (See figure 11). Then slide off the rear wheels.

4. Disconnect the Gear Change and Brake Rods from their respective levers on the Transaxle by removing the split pins from each of the swivels (See figure 10).
5. Remove the nuts and bolts fixing the Transaxle front support brackets to the chassis floor.

6. While supporting the Transaxle, remove the four sets of nuts and bolts securing the axle housing to the chassis side members. Then carefully lower the Transaxle.
7. Slip the transmission belt off the pulley on the Transaxle.

8. Remove the circlip from above the Transaxle pulley and manoeuvre the pulley off the Transaxle input shaft.

9. Remove the nuts and bolts securing the Rubber Couplings to the pulley, taking care not to lose the two washers which sit between the couplings and the pulley.
10. Attach the new Rubber Couplings to the pulley using the 1/4" UNF (Unified Fine) nuts and bolts. Make sure that the washers are relocated between the couplings and the pulley. Then refit the pulley to the Transaxle and

resecure it with the Circlip. Be certain that the Woodruff key is correctly located in its slot on the shaft. (See figure 12).

11. Refitting the Transaxle is then simply a matter of reversing the rest of the procedures.

**NOTE:** Do ensure that the forks on the Power Take Off shaft engage correctly in the coupling. You may have to slacken the bolts securing the Power Take Off shaft bearing housings, to permit accurate alignment of the forks in the rubber couplings.

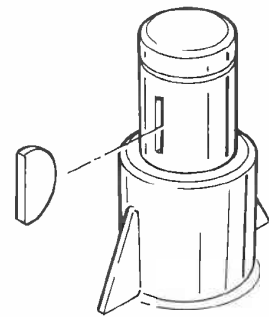


Figure 12. P.T.O. Coupling Replacement - Woodruff key.

### ROAD WHEEL REMOVAL

#### FRONT WHEELS

The front wheels are removed as follows:

1. Pull off the plastic hub caps.
2. Use a pair of pliers to straighten the Split Pin legs and then pull the pins out. (See figure 11).

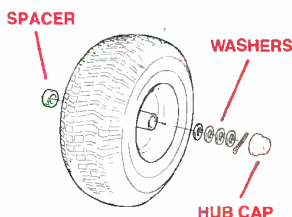


Figure 11. Road Wheel Removal.

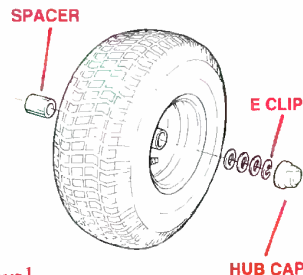
3. After taking a note of the number and position of the washers, slide the wheels off their stub axles.
4. Refitting is simply a matter of reversing the procedure. However, before the wheels are replaced, smear the stub axles with a general purpose grease.

**NOTE:** The hub caps push fit over the large washer. It is also important to ensure that the split pin legs are bent snugly around the axle shafts, to prevent them from pushing off the hub caps when they rotate.

#### REAR WHEELS

To remove the rear wheels:

1. Pull off the the plastic hub caps.
2. Using a strong screw driver, prise off the "E" clip (See figure 11).



3. After making a note of the number and position of the washers, slide the wheel off the axle shaft, taking care not to lose the drive key.
4. Refitting merely reverses this procedure.

**NOTE:** As with the front wheels, take this opportunity to re-grease the axle shaft before refitting the wheel. The hub cap is a push fit over the large washer.

### STEERING WHEEL REMOVAL

The steering wheel is secured to the steering column by a 5/16" UNF NYLOC BOLT and a domed spring washer. (See figure 13).

To remove the steering wheel:

1. Pull off the plastic cover in the centre of the steering wheel.
2. Remove the 5/16" UNF bolt and lift off the steering wheel.

3. The refit is carried out in the reverse order.

**NOTE:** Check that the washer on the steering wheel is not worn at the slot where it fits into the Steering Wheel column, and also at the centre square which fits into the centre of the Steering Wheel itself.



Figure 13. Steering Wheel Removal.

Always use a new NYLOC BOLT when refitting the steering wheel. These are readily available from your Westwood Garden Tractor Dealer.



### WARNINGS

**1.** Before you disturb any part of your Westwood Garden Tractor's electrical system, always disconnect the battery terminals. This operation **MUST BE DONE** if ever you are removing the Printed Circuit Board. If you do not take this precaution you could cause irreparable damage to the Printed Circuit Board.

**2.** Always use fuses that have the correct ampere rating. Check the simple wiring diagram (See pages 20/21) to find out which fuse goes where.

**3.** When fitting the Wiring Loom Connector to the Printed Circuit Board, make sure that the loom is the right way round, i.e. the black wire is always in the Number One position. (See pages 20/21).

**4.** There are two types of Printed Circuit Board. The first is for use with petrol and the second for diesel engines. To avoid damage to both the Wiring Loom and the Printed Circuit Board itself, you must make sure that the correct Printed Circuit Board has been fitted. They are each

marked clearly, "Petrol" or "Diesel". If you do not use the correct Printed Circuit Board you will end up damaging the wiring loom and the Printed Circuit Board itself.

**5.** Correct polarity is **ABSOLUTELY CRITICAL** as the electrical system includes an Alternator for battery charging. Correct polarity means simply that the power take-off cables from the battery must be connected the right way round. **FIRST OF ALL** always connect the **RED** (Positive) connector to the battery's positive terminal (marked with a +) and then **ONLY WHEN THIS IS DONE**, the **BLUE** (Negative) connector to the battery's negative terminal (marked with a -).

**6.** Batteries produce highly inflammable Hydrogen gas. Therefore **NEVER** use a naked light or smoke when working near the battery. Since the engine on your Westwood Garden Tractor is a highly compact unit, this means in effect, never take the risk of fire when working on the motor.

### ALTERNATOR

With the exception of the S600R Model, all other Westwood Garden Tractors are equipped with a powerful 12 Volt car type battery which is charged by an Alternator positioned within

the Engine Flywheel. You will need to undertake no maintenance on the charging system other than regular checks on the electrical connections and the condition of the wiring.

### BATTERY

When you are removing the battery or servicing any other part of the electrical system, always disconnect the **BLUE** (Negative) cable first and reconnect it last.

Check the level of the distilled water on a regular basis. If necessary top up. Use distilled water only. Fill each cell to the "Max" line on the battery case, or  $\frac{1}{4}$ " above the separator plates.

Take particular care when checking the battery level. (The fluid is highly acidic). If any is spilt or splashed onto the skin or clothing, it should be washed off immediately with plenty of fresh water.

Make a point of cleaning the terminals and keeping them free from corrosion. Extra protection can be given by smearing them with Petroleum Jelly.

When your tractor is unused for long periods — this generally means during the winter — or when the battery shows signs of discharge (low power), we recommend that you put it on "trickle charge" using a commercially available re-charger that works off the mains. It is best to trickle charge for 12 hours at 2-3 amps to revive the power level and keep the battery in a healthy condition.

### FUSES

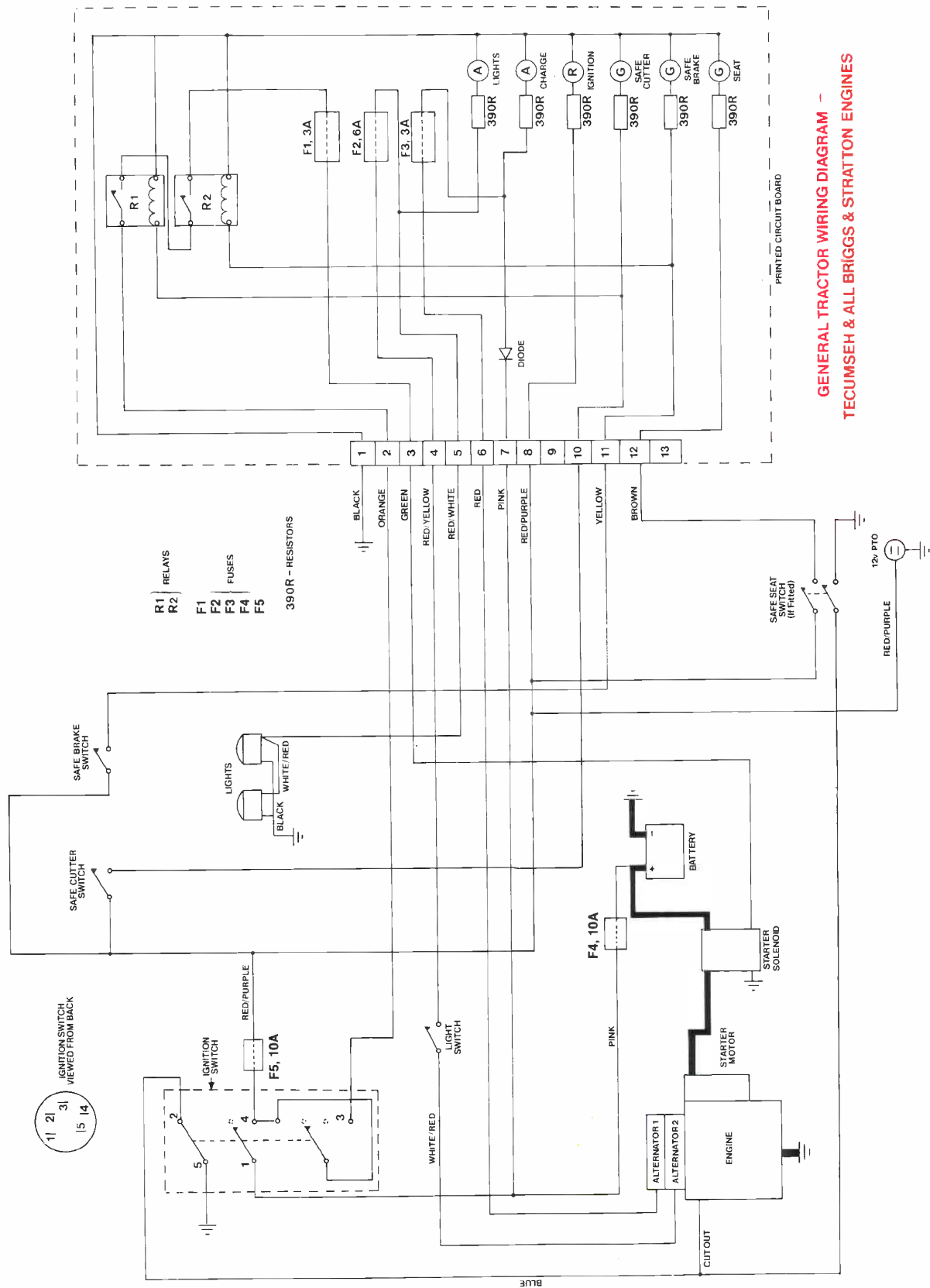
Fuses are fitted that protect the Printed Circuit Board. There are also "in-line" fuses fitted in the Wiring Loom. The different fuse ratings are detailed on the wiring diagram. (See pages 20/21).

The fuses protect the electrical wiring from damage from short circuits and component failure.

If a fuse does blow, check all wiring thoroughly for any damage likely to have caused a short circuit — like two bare wires touching each other or a bare wire coming into contact with other metal. If you replace a fuse before you have found out what caused it to blow, the same thing is very likely to occur again.



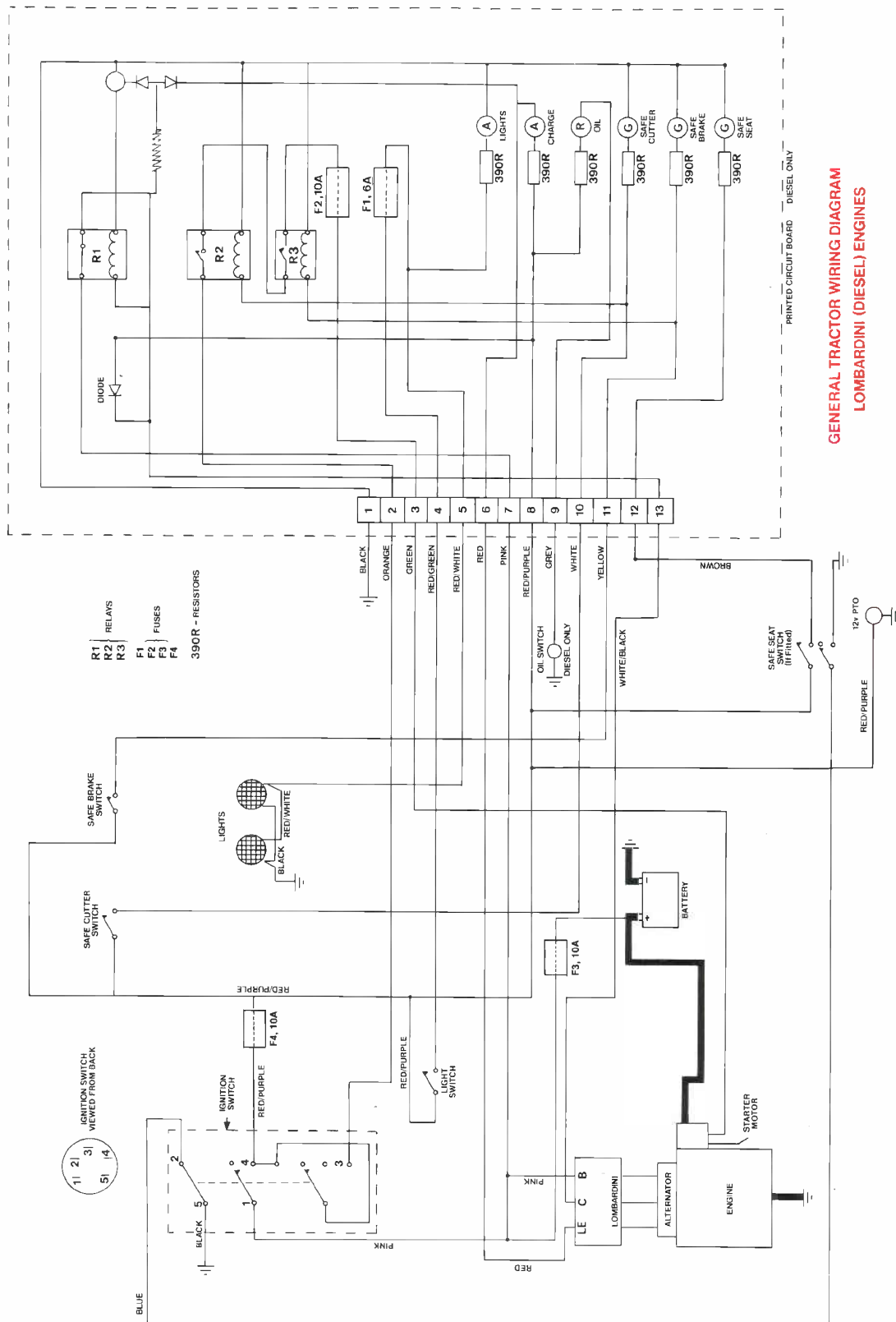
## SECTION 7 WIRING DIAGRAMS



## GENERAL TRACTOR WIRING DIAGRAM - TECUMSEH & ALL BRIGGS & STRATTON ENGINES



## WIRING DIAGRAMS SECTION 7



## SECTION 8 SPECIFICATIONS

### ENGINE

Model	Engine Type	Rated H.P***	Disp cc	Torque N.M.	Spark Plug	Plug Gap*
S600R&E	Tecumseh TVM140	6.0 S.A.E.	221	12	RJ-17LM	0.030
S800	B&S Type 191707	8.0 S.A.E.	319	17.2	CJ-8	0.030
S1100	B&S Type 252707	11.0 S.A.E.	400	23	CJ-8	0.030
T1200	B&S Type 281707	12.0 S.A.E.	465	29	CJ-8	0.030
D1200	Lmbdni 6LD360V**	7.5 D.I.N.	359	17.0	N/A	N/A
T1600	B&S Type 402707	16.0 S.A.E.	656	35.0	RJ-12	0.030

\* Measured in inches.

\*\* Lombardini Diesel Engine.

\*\*\* Engine Manufacturers rating at 3600 rpm

#### Engine Lubricant/Capacity

Tecumseh 6HP (Type No. TVM140) SAE10W30/1½ pints

Briggs and Stratton 8HP (Type No. 191707) SAE10W 30/2 pints.

Briggs and Stratton 11HP (Type No. 252707) SAE10W 30/2½ pints.

Briggs and Stratton 12HP (Type No. 281707) SAE10W 30/2½ pints.

Briggs and Stratton 16HP (Type No. 402707) SAE10W 30/2½ pints.

Lombardini Diesel 7.5HP 6LD360V. HD Series 3 - MIL - L - 2104C.

Shell Rimula, BP Vanellus S3, Essolube D3, Esso Uniform,

Castrol CRDC (Series 3), etc./1¾ pints

### TRANSMISSION

S600R & E	)	
S800	)	— Peerless Type 832 Transaxle. 5 Forward speeds
S1100	)	and reverse.
T1200	)	
D1200	)	Peerless Type 801-030 Heavy Duty Transaxle.
T1600	)	— 5 Forward speeds and reverse.

Lubrication: Lithium based grease/36ozs. Unit filled with grease during manufacture and user lubrication is not necessary.

### GROUND SPEEDS **Approximate**

Using FULL Throttle the following is the approximate speed which can be achieved in each gear:

1st Gear	—	1.1 mph	4th Gear	—	3.6 mph
2nd Gear	—	1.5 mph	5th Gear	—	6.0 mph
3rd Gear	—	2.4 mph	Reverse	—	1.8 mph

### DIMENSIONS

Model	Length	Width	Height	Turning Circle		Weight
				Inner	Outer	
S600R & E	85ins*	38ins*	42ins	72ins	155ins	408lbs*
S800	85ins*	38ins*	42ins	72ins	155ins	420lbs*
S1100/30	85ins*	38ins*	42ins	72ins	155ins	430lbs*
T1200/36	65ins	37¼ins	42ins	72ins	155ins	490lbs
D1200/42	65ins	43ins	42ins	72ins	155ins	585lbs
T1600/42	65ins	43ins	42ins	72ins	155ins	545lbs

\* With Vacuum Collector fitted.

**TYRES**

Model	Front	Pressure	Rear	Pressure
S600R&E	13 x 5.00-6	12 to 15 psi	16 x 6.50-8	10 to 12 psi
S800	13 x 5.00-6	12 to 15 psi	16 x 6.50-8	10 to 12 psi
S1100	13 x 5.00-6	12 to 15 psi	16 x 6.50-8	10 to 12 psi
T1200	15 x 6.00-8	12 to 15 psi	18 x 8.50-8	10 to 12 psi
D1200	15 x 6.00-8	12 to 15 psi	18 x 8.50-8	10 to 12 psi
T1600	15 x 6.00-8	12 to 15 psi	18 x 8.50-8	10 to 12 psi

**ELECTRICS**

Battery: Type 138, 12 volt, 160 amp Cold Start (BS 3911 1982).

Briggs and Stratton / Tecumseh Engines.

Lombardini Diesel Engine.

Battery Charging Alternator: 12 Volt d.c. 3 amp.

Battery Charge Alternator: 12 Volt d.c. 14.5 amp.

Headlight Alternator: 12 Volt a.c. 60 to 100 Watt.

**STORAGE**

When you do not use your Westwood Garden Tractor for more than 28 days, the following measures should be taken:

1. Give the machine a thorough clean, paying particular attention to the underside of the cutter deck. Polish the tractor's paintwork.
2. Arrange with your local Westwood Garden Tractor dealer to carry out an annual service, or yourself carry out the checks detailed in the Service Check List (See pages 14/15).
3. The inevitable nicks and cracks in paintwork should be touched up. Replace any worn or damaged parts.
4. Lubricate all moving parts with the relevant lubricant shown in the Lubrication Chart. (See page 15).
5. Drain the fuel from the Fuel Tank and run the engine until that too runs out of fuel. If you leave fuel in the tank and the engine for

long periods, it will evaporate and form deposits of a harmful gum and varnish in the carburettor and the rest of the fuel system.

6. Remove the battery, taking off the negative cable first. Check the electrolyte level and top up if necessary, but remember to use distilled water only. Store the battery in a cool and dry place. Trickle charge the battery every four to six weeks. (See page 19).
7. Store your Westwood Garden Tractor itself in a cool, dry place that is also well ventilated.

If all these steps are taken, your Westwood Garden Tractor will be ready for renewed use in the Spring. If the machine is left in a poor condition with, for instance grass stuck to its underparts, inevitably rust and corrosion will occur. If you treat it well however, you can be certain that your Westwood Garden Tractor will give you many years of good service.



## SECTION 9 POWERED GRASS COLLECTOR



### SAFETY PRECAUTIONS

1. Ensure you have fitted all the provided belt guards. Switch off the engine **before** you remove any of the belt guards. **DO NOT** carry out any work on the collector drive belt system whilst the engine is running.
2. The Height Adjusting Frame is spring loaded to assist the raising and lowering of the Collector, therefore when releasing the lever on the Height Adjusting Frame restrain the frame with both your hands.
3. The Power Take-off drive is engaged by the same lever as the Cutter Deck drive, please ensure you have **BOTH** items in a safe condition to operate.
4. Ensure you have the net on the front of the Collector Box correctly fastened.

### OPERATING INSTRUCTIONS

There are two controls for operating the Powered Grass Collector, one to set the brush height off the ground, and the other to engage the Power Take-off drive to the Collector.

#### BRUSH HEIGHT

You raise and lower the brush by the Height Adjusting Frame which has the roller at its lower end. At its upper end it has a lever which disengages the Lock Pins from the holes in the collector sides. (See figure 14). You adjust the height of the Brush by squeezing the lever and either push the Adjusting Frame for-

wards to lower the Brush, or rearwards to raise it. Release the lever to lock the mechanism at the desired Brush height. The correct height for the brush is when the bristles are just flicking the cut surface of the lawn. If the brush is set lower than this, it will cause early failure of the brush bristles.

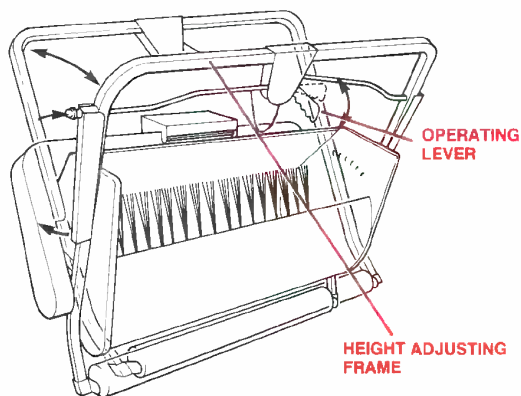


Figure 14. Brush Height Adjustment.



#### BELT DRIVE ENGAGEMENT

The drive to the Collector is engaged by using the same control lever which engages the drive to the cutter unit (Page 6).

Pull the lever back towards the driver to engage the drive, and push it forward to disengage it.

#### TRANSPORT POSITION

Before you remove the Powered Grass Collector, or if you are going from one site to another, always place it in the Transport Position.

This is achieved by using the Height Adjusting Frame (see figure 14) to align and insert the

Latch Pins into the Mounting Frame holes. The Latch Pins are inserted by moving the Latch Pin Levers inwards. (See figure 15).

Locking the Height Adjusting Frame in the foremost position will hold the Roller clear of the ground.

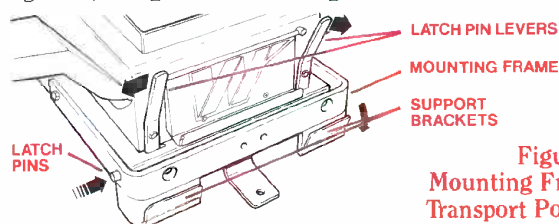


Figure 15. Mounting Frame - Transport Position.

#### REMOVING AND ATTACHING

The removal of the Powered Grass Collector is carried out in the following manner:



1. Observe all the safety precautions.
2. First place your Grass Collector in the transport position.
3. Lift open the Belt Guards situated above the Drive Belt to your collector, and take the drive belt off the Collector's pulley.
4. Lower the Roller to take the weight of your Collector, and lock the Height Adjusting Frame in this position.

5. Unscrew and remove the two Clamp Screws, and lift the Clamps off the Mounting Frame.
6. Move the Height Adjusting Frame forwards (your Collector will now come away from the Mounting Frame), and lock it in the fully forward position.
7. Your Collector can now be lifted off the Mounting Frame and manoeuvred clear of the tractor, on its Roller.

Refitting the Powered Grass Collector is carried out in the reverse order.

## VACUUM COLLECTOR SECTION 9



Powered Grass Collector - continued.

### ADJUSTMENTS



Before you carry out any adjustments please observe all safety precautions.

#### POWER TAKE-OFF DRIVE BELT.

Adjusting the tension of the drive belt to the collector is carried out at the Power Take-off Jockey Pulley, which can be bolted to one of three holes in the Jockey Plate to vary the belt tension. Repositioning the pulley to the outer hole in the Jockey plate will tighten the belt, whilst using the inner hole will slacken the belt.

#### BRUSH DRIVE BELT

Adjustment of the Brush Drive Belt is carried out at the Idler Pulleys on the top left hand side of the collector.

This adjustment is carried out by first slackening the bolts at each end of the Idler Pulleys spindle, and turning the bolt which runs vertically through the centre of spindle, clockwise to tighten the belt, or anticlockwise to slacken it. (See figure 16).

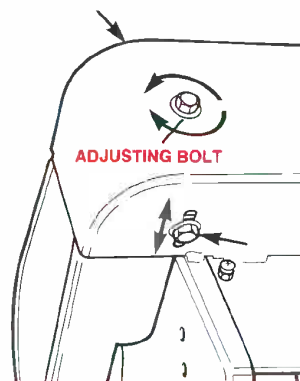


Figure 16. Brush Drive Belt Adjustment.



### SAFETY PRECAUTIONS

1. Before you carry out any work on your machine switch off the engine, and remove the Ignition Key.
2. DO NOT remove Discharge Chute, Deck Moulding or Collector Box whilst the engine is running.
3. Remember the Cutter Blades will continue to rotate after the machine is switched off, before you attempt to clear the discharge chute, or remove any parts from the cutter unit check to make sure the blades are not turning.

### OPERATING INSTRUCTIONS

Your Westwood Vacuum Collector is designed to operate at full engine rpm, therefore in heavy conditions such as wet or long grass it will be necessary to select a lower gear or raise the height of cut, to avoid any drop in engine speed. Under exceptionally heavy conditions you may have to make a second cut to obtain the desired height of cut.

The high lift Blades fitted to the cutter unit create enough suction to lift grass cuttings and leaves from the lawn and direct them up the chute to the collector box. However if you find that

grass collection has stopped during mowing, stop the tractor, disengage the cutter unit drive and switch off the engine. Check to see if the collector box is full or if there is a blockage in the chute.

The transparent access flap on the top of the collector box is a good indicator of a blocked chute or over full collection box. You will find that during collection it will lift and exhaust air. However if a blockage occurs the flap will lay still and flat against the top of the collector box.

### MAINTENANCE

To maintain the efficient performance of your Westwood Vacuum Collector it is essential to keep the Cutter Unit, and Chute free from any build up of grass. After use you should hose the underside of the cutter unit and the

inside of the chute and deck Moulding to prevent any build up of grass.

At regular intervals (10 to 15 hours use) examine the blade assembly for damage or wear.



## SECTION 10 ACCESSORIES

### AN EXCLUSIVE RANGE OF GENUINE WESTWOOD ACCESSORIES DESIGNED TO MAKE GARDENING A WHOLE LOT EASIER

#### LAWNGROOMER

Specifically designed to keep a big garden lawn in tip-top condition, taking all the hard work out of spraying, slitting, raking and spiking.



##### SET TO SPRAY

The big capacity, lightweight 10 gallon tank holds enough liquid fertiliser to make short work of weeds and put life into your lawn. Connects directly to your Westwood Tractor's electrical circuit.



##### SET TO SLIT

Cuts quickly through thatch and moss to prepare the ground for raking.

#### POWERED GRASS COLLECTOR

Acclaimed as by far the most efficient grass collector invented. Collects cuttings whilst you mow and rolls your lawn at the same

time. Also collects up leaves, litter and stones and leaves your lawn with a traditional striped finish.



#### DOZER BLADE

Tough replaceable reinforced rubber edged blade principally designed for clearing snow. It also shifts prunings, leaves, light refuse and debris. It won't damage tarmac and if it hits any immovable objects, the blade safely retracts and lifts automatically.



##### SET TO RAKE

Gives your lawn the chance to "breathe" by loosening and lifting matted thatch and moss. Clears the debris and allows grass to grow evenly.



##### SET TO SPIKE

Improves drainage by opening up hard compacted ground. Helps against moss, algae and unsightly bare patches.



### TOWED SWEEPER

As an alternative to the Powered Grass Collector for tractors without Power Take-Off, it has the weight and strength to give the sweeper the extra traction to

enable the gearing to be pitched high enough to ensure the brushes revolve faster and better whilst you mow.



### DUMP TRUCK

Moves substantial loads of 1,000lbs or more, effortlessly around your garden — earth, logs, rubble and bulky refuse. Tips to unload at the flick of a lever without leaving your seat.



### CHEVRON TYRES

Designed to give extra grip if working on soft wet ground or muddy paddocks.



### TRAILER



Fitted with full road suspension, lights and connections folding sides and tipping mechanism this dual purpose trailer can transport your tractor or double as a dump truck for shifting gravel, earth or refuse.

### SNOW CHAINS

When towing or bulldozing in winter, these chains give your tractor extra grip and safety on snow or ice.

### TRACTOR COVER

For protecting your tractor when it's not in use especially if there is no access to garage or shed.



### ROLLER

Filled with water or sand this steel roller weighs up to 400lbs to smooth out bumpy lawns and the radius edges won't leave any unsightly marks or cuts.



## SECTION 11 GRASS AND GARDENCARE

### GRASS AND GARDENCARE ALL THE YEAR ROUND

#### JANUARY

Little and gently does it in the next three months. Only work on the lawn in mild weather — do not walk unnecessarily on snow. Brush the turf when it is firm to give a well groomed look and remove excess moisture. Spike twice in different directions to assist drainage. If you haven't prepared new lawn areas for overwintering, some rough work can be carried out on light soils.

If snowmould is present on the lawn, spray, and mow very lightly to tidy uneven growth.

#### FEBRUARY

Mow, brush and spike in mild weather when turf is firm. If turf is in good shape, scarify lightly at the end of the month. Select seed mixtures and order lawn maintenance requirements for the year. Carry out mower or tractor maintenance.

#### MARCH

A busy month if weather is fine. Apply wormkiller when ground is moist and worms are active. Spike and scarify and collect debris with lawn sweeper. Spray moss covered areas now, and use scarifier to rake out dead moss, collect rakings. Continue preparation of ground for new lawn when soil is friable. As annual weeds germinate, hoe lightly. Overseed bare patches in lawn, carefully handweed round naturalised bulbs.

#### APRIL

Repeat mosskilling and continue raking and spiking. Mow regularly. Feed lawn when grass is growing well. Do not compost weed treated cuttings, but collect from lawn. Gradually reduce cutting height of mower blades. New lawns should be ready for spring sowing. Choose still, warm weather when soil is moist, but not drenched. Cover with light brushwood if birds are a threat.



#### MAY

Continue weed killing programme with further applications as necessary. Mow at least weekly on summer cut levels, according to type of lawn. Feeding continues — roughly six weekly cycle. Weed seedlings will be at peak germination now, lawn grasses will need the maximum encouragement. Watering may now be necessary if lawn is showing signs of dryness. New grass should be lightly handsheared when seedlings reach two inches. Gently treading will compact surface.

#### JUNE

Water lawn in evenings — drench each section before moving on. Use the lawngroomer to spike if drainage is still poor. Continue to feed. Clean and maintain the mower — hot weather will bring up the dust which will clog filter and machinery. Change oil. Grass should be cut twice a week now. In very dry spells raise the height of the cut. Rake before mowing to bring up straggly trailers of grass or weeds — spot treat where necessary. Trim lawn edges and tie back or control sprawling plants over-hanging lawns.

**GRASS AND GARDENCARE SECTION 11****JULY**

Twice a week mowing, at summer height, unless weather is excessively dry. Rake out thatch and collect. Water copiously and regularly to prevent problems in the future. Six weeks after naturalised bulbs have finished flowering, mow on high cut — do not scalp. Resist any temptation to mow early or you will see dramatically fewer flowers next year. Apply slow release fertiliser or bone meal to encourage growth. Spot weed kill regularly and often.

**AUGUST**

If holidays are planned, discourage grass stimulation by slightly reducing cutting height before departure. This will also help conserve moisture in turf. On return, cut lightly then repeat a few days later. Scarify, treat stray weeds and give last feed of the season. Prepare compost for top dressing later, riddle to produce fine texture and bag up. Given moist weather reseeding and new lawns can be started.

**SEPTEMBER**

Ease up on mowing and heighten cut. Continue to spike and scarify to maintain surface and aeration and drainage. This is the start of the lawn care year. Moist weather will bring problems to the surface. Worm casts will indicate that treatment with wormkiller is necessary. If necessary deal with fungus growths.

**OCTOBER**

End of regular mowing. Brush first, and raise cutter blades. Top dress in fine weather, and brush in. Do not smother the turf, repeat as necessary on uneven areas. Rough dig areas for new lawn, leave in clods to weather overwinter. Lift shrubs as planned.

Brush up falling leaves on continuing basis, as they smother grass and encourage worms which will drag them into the turf and spoil the surface. Scarify tussocky areas, moss kill if necessary. A good month for lawn repairs — broken edges, bumps and hollows and bare patches. Difficult mowing areas can be replanned — where possible avoid corners and introduce curves.

**NOVEMBER**

Not finished yet! One more light mowing will groom the lawn. Lay down a good habit for next year by spiking and scarifying in several directions. Apply top dressings of gritty sand to heavy soils to assist drainage or sand and peat where bulk is helpful; brush into turf and spike holes. Brush as frequently as possible to remove leaves and debris and excess moisture. Arrange professional servicing for tractor or mower, or carry out thorough home service and clean and oil cutting equipment.

**DECEMBER**

Tractor service and adjustment — don't wait till spring. Brush up leaves and mow if really necessary. Keep off a wet or frozen lawn, use boards if you must wheel loads across.

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