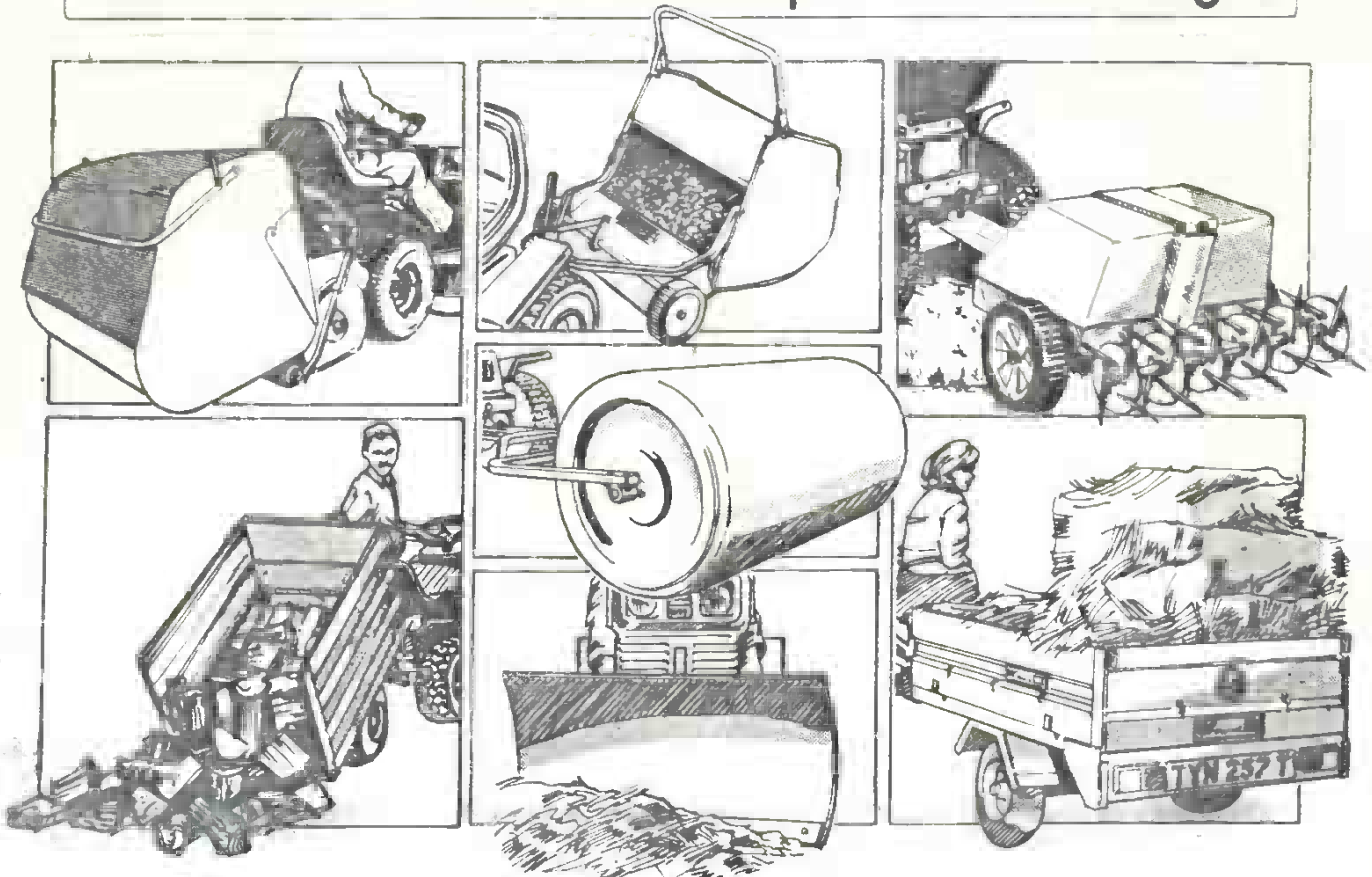


1987 WITHOUT  
1988 ACCESSORIES



# GARDEN TRACTORS and ACCESSORIES

## INSTRUCTION MANUAL and Spare Parts Catalogue



# Westwood GARDEN TRACTORS and ACCESSORIES

## INSTRUCTION MANUAL and Spare Parts Catalogue

### CONTENTS

### PAGE

#### OPERATING INSTRUCTIONS

Battery.....	10
Brakes, Adjustment.....	7
Brake Controls.....	3
Cutter Belt-adjustment.....	6
Cutter Deck — Replacement.....	6
— Brake adjustment.....	5
— Blade replacement.....	6
— engage control.....	4
— levelling.....	5
— Removal.....	5
— Toothed belt replacement.....	6
Electrical Wiring Diagram — Tecumseh, Briggs & Stratton	8
— Lombardini and Kawasaki.....	9
Gear change.....	3
Indicator Lamps and Switches.....	4
Lubrication.....	10
Safety — Code of Practice.....	3
— Precautions.....	6
Servicing your Westwood.....	6/10
Starting your tractor for the first time.....	2
Steering — Adjustment.....	7
To operate your tractor.....	3/10
Transmission — Method of operation.....	7
— Belt replacement.....	7



**Westwood**

# STARTING YOUR TRACTOR FOR THE FIRST TIME

Before starting your Westwood tractor read Pages two to four. Sit on the seat and become familiar with the layout and operation of all controls. These are illustrated below. Complete details are given in the following pages.

Tip the seat forward to locate the 4 Bolts securing the seat to the housing platform. Slacken the Bolts and adjust to desired position and re-tighten the Bolts.

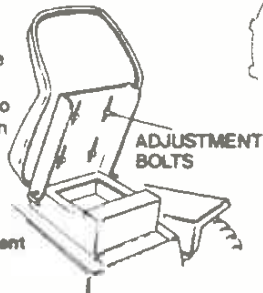


Figure 1. Seat Adjustment

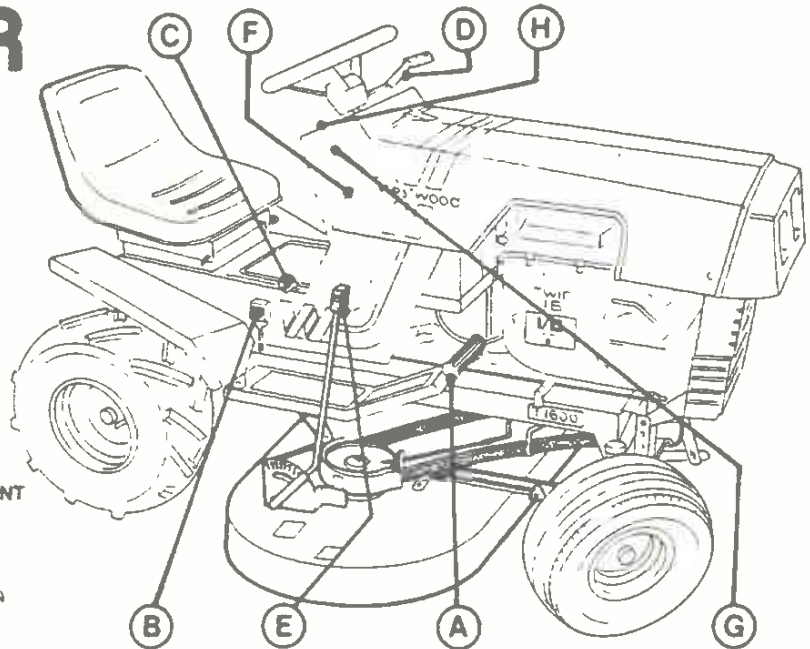
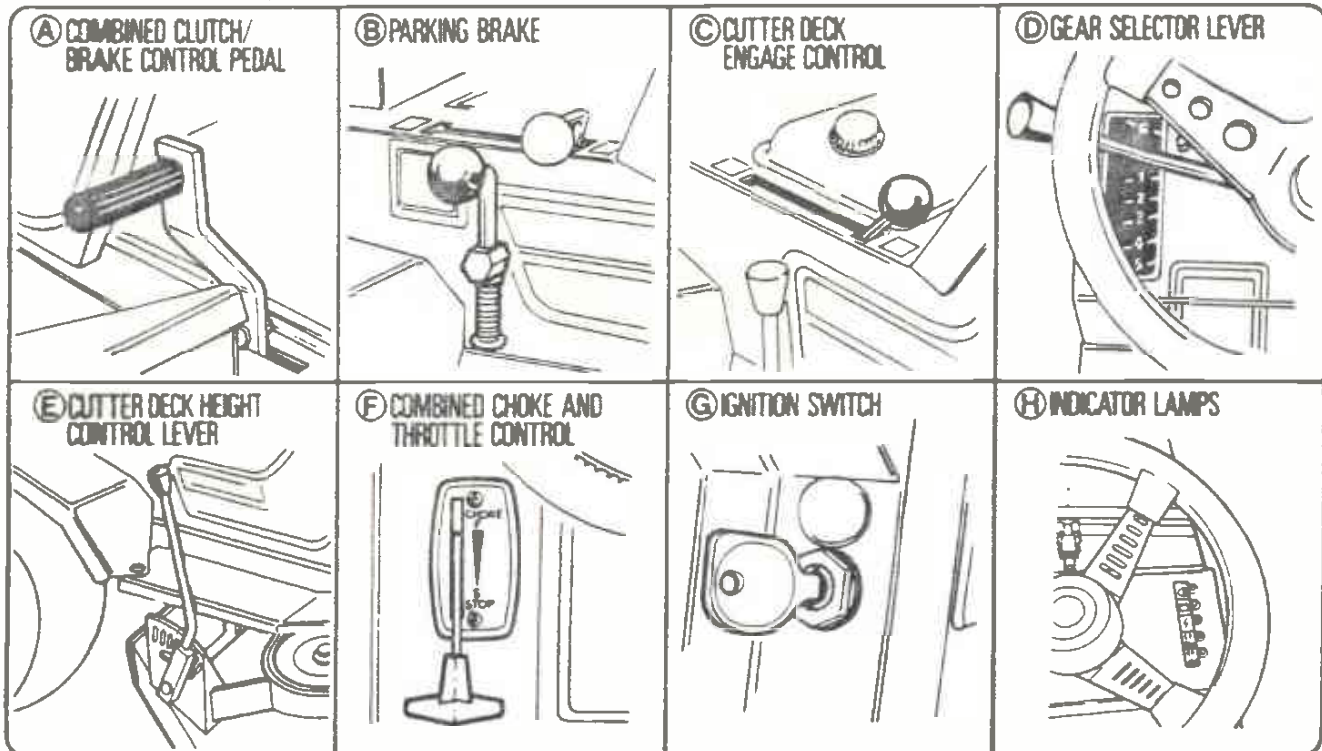


Figure 2. Location of Main Operation Controls



Having familiarised yourself with the above please read all instructions thoroughly.

## IMPORTANT! Before starting the engine

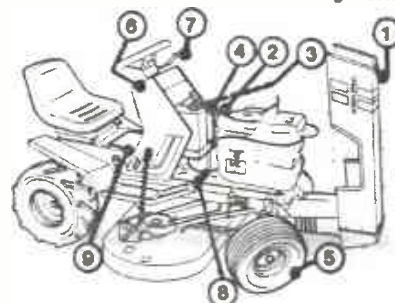
Before starting the engine for the first time please carry out the following procedures. Identification points are shown in Figure 3, Page 2.

- 1) Release the Catch on top of the bonnet, located under the steering wheel. Lift the bonnet forward until it is clear of the engine.
- 2) Check the engine oil level with the dipstick, attached to the oil cap; top up if necessary with clean oil. (Refer to the separate Engine Manufacturer's Handbook for oil specification and recommendations).
- 3) Fill fuel tank, located under the bonnet next to the engine, with 2 star or equivalent low lead petrol. (D1200 models only use Diesel fuel). Avoid spillage and always leave a small space in the tank for the expansion of the fuel when the engine warms up.
- 4) Check the battery connections for security. Tighten, if necessary. The battery will have been filled with electrolyte and given its first conditioning charge by your dealer. (If there should be any doubt, refer to 'The Battery', Page 10). Top up the electrolyte level, if necessary, to 1/4" above separator plates using **DISTILLED WATER ONLY**.
- 5) Check tyre pressures. These should be 12-15 lbs p.s.i. front

and 10-12 lbs p.s.i. rear. These pressures can be safely reduced by a few pounds for operating in wet or hilly conditions.

- 6) Check the operation of the control switches and warning lights – see 'Indicator Lamps and Switches', Page 4.
- 7) Check the operation of gears – see 'The Gears', Page 3.
- 8) Check the operation of the combined Clutch/Brake Control Pedal – see 'Brake Control/Parking Brake', Page 3.
- 9) Check the operation of the Cutter Deck Engage Control Lever – see 'Cutter Deck Engage Control', Page 4.

Figure 3. Location of Areas to Check before Starting Tractor





# TO OPERATE YOUR TRACTOR

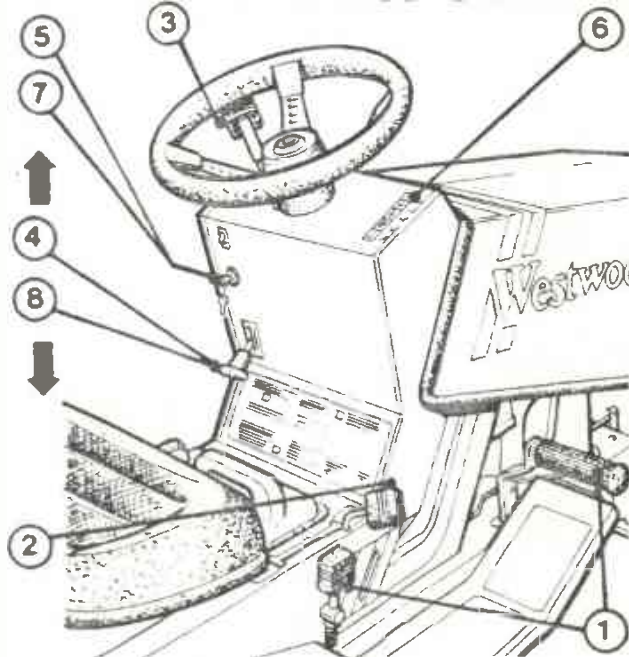


Figure 4. Location of Controls to Start your Tractor

## The Gears

**NOTE:** Forward Gears: Use low gears for cutting long grass or operating in hilly situations or confined areas. A higher gear can be safely selected for lighter duties. The fifth gear is best suited for light work or light transit hauls over long distances.

**Reverse Gear:** Only engage reverse gear when the machine is stationary. The Safety 'Stop Bar' on the console automatically prevents accidental selection of Reverse Gear. To engage reverse gear depress safety catch on gear lever and move lever to reverse position.

When the engine is running and with the combined Clutch/Brake Control Pedal fully depressed in conjunction with the Parking Brake) select a gear suitable for the work to be carried out, by placing the Gear Control Lever in the Forward 1-5 or Reverse positions marked on the console.

Having selected the appropriate gear, fully depress the Clutch/Brake Control Pedal (which automatically releases the Parking Brake). Slowly let up the Clutch/Brake Control Pedal to obtain a smooth engagement of the transmission drive.

To stop, fully depress the Clutch/Brake Control Pedal, place the Gear Control Lever into the neutral position and apply the Parking Brake.

Changing gear on the move is not recommended and must only be carried out in safe situations. This can be achieved only in light load conditions by slightly depressing the Clutch/Brake Control

1) Always adopt the double brake procedure by fully depressing the Clutch/Brake Control Pedal and firmly pushing down to engage the hand Parking Brake Handle. Full details are given under the heading 'Brake Control/Parking Brake'. Both the Clutch/Brake and Parking Brake Handle now remain in the engaged position during the 'start up' procedure.

2) Place the Cutter Deck Engage Control lever into the disengaged position.

3) Position the Gear Lever in neutral, by pushing the Gear Lever forward, up to the 'Stop Bar' in the 'N' position.

4a) Move the Throttle Lever up to the choke position if starting the engine from cold. The 16 hp has separate Choke Control and Throttle Control. Pull the Choke Control Lever in an upward position with the Throttle Control Lever midway between 'fast' and 'slow'.

4b) D1200 Models only — Ensure Engine Stop Control is in the start position (pushed fully down).

5) On electric start models, switch on the Ignition by turning the key clockwise. Safety interlocks on the Brake and Cutter Engage mechanism will prevent the engine being started until the controls are correctly positioned and indicated by the two green lamps being illuminated on the Tractor Console. *Should either green lamp fail to light when the ignition is switched on one of the safety interlocks has operated. If this happens, switch off ignition, check the position of the controls and if necessary investigate further.* **NOTE:** Some models have an additional back up Recoil 'Starter' located under the bonnet.

6) When the ignition key is turned a red lamp will light to indicate that ignition is switched on.

7) Start the engine by turning the key further clockwise (against slight spring resistance), releasing the key when engine starts. On non-electric models pull Recoil Starter sharply, to full extent of 'rope' travel and release slowly.

8) Disengage choke and reduce throttle speed as engine warms up.

Pedal and selecting another gear. Remember, if in doubt, or if the gear change becomes stiff, do not strain or force the Gear Selector Lever — simply fully depress the Clutch/Brake Control Pedal to bring the machine to a halt and then select an appropriate gear.

## Brake Control/Parking Brake

The previous section dealing with the operation of the gears tells how the movement of a single pedal control operates both braking and clutch engage/disengage movements. The brake is applied by depressing the foot pedal. This disengages the engine drive from the Transmission Axle, further movement of the pedal then applies the Disc Brake located on the Transaxle. To engage the parking brake, depress the foot pedal to its full extent and push down on the small hand lever at the right hand side of the chassis above the footboard and release the pressure on the Foot Pedal. (See Item 1 in Figure 4, Location of Controls to Start your Tractor). The brake linkage will be held in the 'brake applied' position. To release the Parking Brake apply pressure to the foot pedal and the spring loaded hand lever will automatically release, returning the brake to its normal foot-operated control.

*When starting engine by recoil start PLEASE NOTE that safety interlocks are non-effective. It is essential to ensure that the Gear Lever is in the neutral position; the Cutter Deck Control is disengaged and the Brakes are fully applied before starting the engine.*

## SAFETY FIRST

Westwood are proud of the many safety features incorporated in the design of their machines. Now that you are the proud owner please observe the Westwood Code of Practice detailed throughout this manual and especially the following safety rules.

1) Always keep children and animals well clear of the mowing area.

2) Keep the Cutter Deck disengaged at all times when not actually cutting grass, and particularly when starting the engine.

3) Never dismount from the tractor with Cutter Deck Blades engaged.

4) Check the operation of Clutch/Brake and Cutter Deck controls before each day's use. (Adjust, if necessary).

5) Never leave the tractor unattended with the engine running.

6) Avoid the need to declutch on steep slopes by selecting a low gear early.

7) Always switch off the engine before filling with fuel. Wipe or allow to evaporate any spillage before starting the engine.

8) Do not overfill the Fuel Tank. Always leave a small space for warmth expansion.

9) Keep the cap on both the Fuel Tank and Spare Can tightly

secured at all times.

10) Keep the tractor free from accumulations of spilled oil, grass cuttings, etc.

11) Always disconnect and remove the Battery before tipping the tractor for inspection or maintenance.

12) Check security of nuts and bolts regularly. Pay particular attention to the Cutter Deck.

13) Always remove Ignition Key and disconnect Sparking Plug before making adjustments to moving parts on the tractor.

14) Remember at all times that the exhaust system becomes very hot during engine running — allow to cool before making adjustments in the exhaust area.

15) When you have stopped the engine we suggest you leave the tractor in gear as an additional 'fail safe' back up to the braking system. Be aware at all times of the need to observe precautions to ensure your safety and the safety of others present when operating or servicing your machine. Always plan your actions. Tractors are often used in confined areas with hilly or uneven terrain. Always consider the hazards and avoid hurried or risky movements that may place you or others in danger.

# Indicator Lamps and Switches

Indicator Lamps and Switches are fitted to all electric models. They are conveniently placed on the Steering Console where they can be easily observed and operated.

The function of the indicator lamps and their sequence is as follows:-

**IND 1.** Headlights (if fitted). With the switch in the ON position the Amber lamp will illuminate to indicate the lights are on. Machines fitted with Tecumseh or Briggs and Stratton engines, the headlights will only operate when the engine is running. This saves accidentally draining the battery.

**IND 2.** Battery Charging. Machines fitted with Tecumseh or Briggs and Stratton engines, the Amber lamp is ON to indicate the battery is charging. With the diesel engine tractor the Amber lamp should go OUT on engine start up to indicate battery is charging.

**IND 3.** When the ignition key is turned to the right this Red lamp will illuminate to indicate the ignition is ON, and will remain on until the key is returned to the OFF position. D1200 Diesel models only — this Red lamp is the OIL PRESSURE Warning and will only illuminate when there is insufficient oil pressure.

**IND 4.** When illuminated this Green lamp indicates the cutter deck drive is disengaged.

**IND 5.** When illuminated this Green lamp indicates the Clutch/Brake Pedal is fully depressed.

Should you attempt to start the engine by turning the ignition key without first adopting all the safety procedures (Brakes on and Cutter Deck disengaged) both Green lamps and the Red ignition lamp will go out.

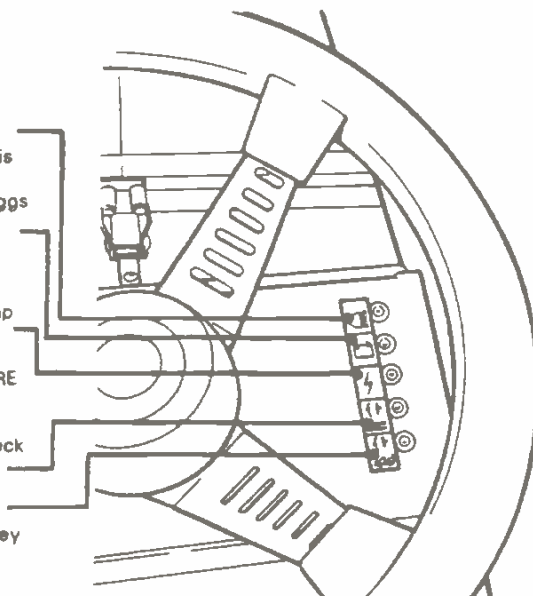
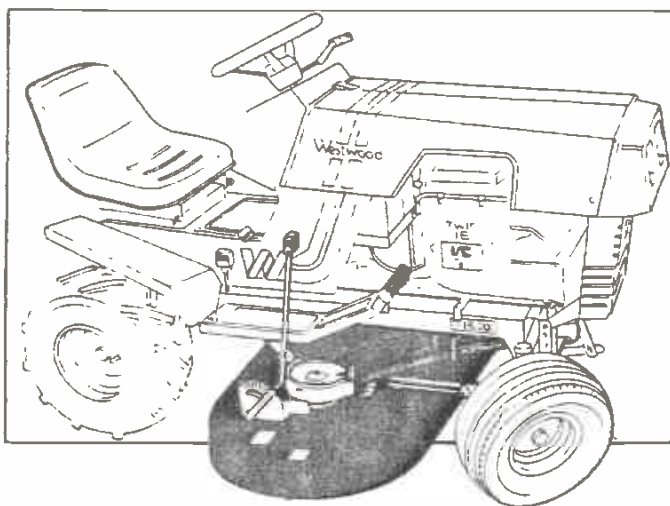


Figure 5. Location of Indicator Lamps and Switches

## THE CUTTER DECK



There are three sizes of Cutter Deck for the Westwood Range of Tractors. They are fitted to the Model as shown in Table 1. Tractor Model and Cutter Deck Blade/s Size.

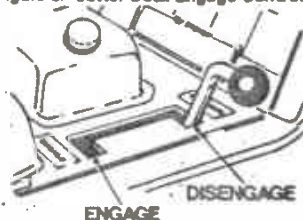
Tractor Model	Cutter Deck Blade/s	Size
S600(IR)	Small wheels, single blade	- 30"
S600(E)	" " " "	- 30"
S1100/30	" " " "	- 30"
S1100/36	" " Standard Twin Blades	- 36"
T1200	Large wheels " " "	- 36"
D1200 Diesel	large wheels, twin contra blades	- 42"
T1600	Large wheels, twin contra blades	- 42"

NB. Whilst illustrations may not show the cutter deck that is fitted to your machine, the methods of operation and adjustment are common to all cutter decks.

## Cutter Deck Engage Control

The versatility of the Westwood Tractor is enhanced by the Cutter Deck Engage Control Lever which disconnects the Cutter Deck drive from the engine, at the same time engaging a separate brake to prevent the blade/s rotating. This enables the tractor to be safely used for other duties without the need to remove the Cutter Deck Unit.

Figure 6. Cutter Deck Engage Control



The Cutter Deck Blade/s should only be engaged when the operator is seated at the controls ready to commence grass cutting. To reduce loading on the Cutter Belt Drive when operating in long grass it is good practice to set the height of the

Height Adjustment Lever to the higher position before engaging the Cutter Belt Drive mechanism.

To engage the Cutter Blade/s, run the engine at half throttle and move the Cutter Deck Control Lever SLOWLY to the Engaged position. See Figure 6. Cutter Deck Engage Control. This releases the blade/s brake and engages the Cutter Belt Drive. It is important to remember that a MEDIUM engine speed and a SLOW engagement of the Cutter Deck Engage Lever will reduce the strain on your Drive Belts, extending their life.

To stop the Cutter Blade/s, move the Cutter Deck Control Lever forward into the disengaged position. The Blade Brake is then applied automatically.

**PLEASE NOTE** The Blade/s will NOT stop immediately.

**ON ELECTRICAL START TRACTORS** the Cutter Deck is fitted with an electrical interlock, which prevents the engine being started unless the Cutter Deck Control Lever is in the forward 'disengage' position. In Recoil Start machines, it is essential to ensure that the engine is never started with the Cutter 'engaged' and only operate the Cutter Control lever under safe conditions.

# Cutter Deck Removal

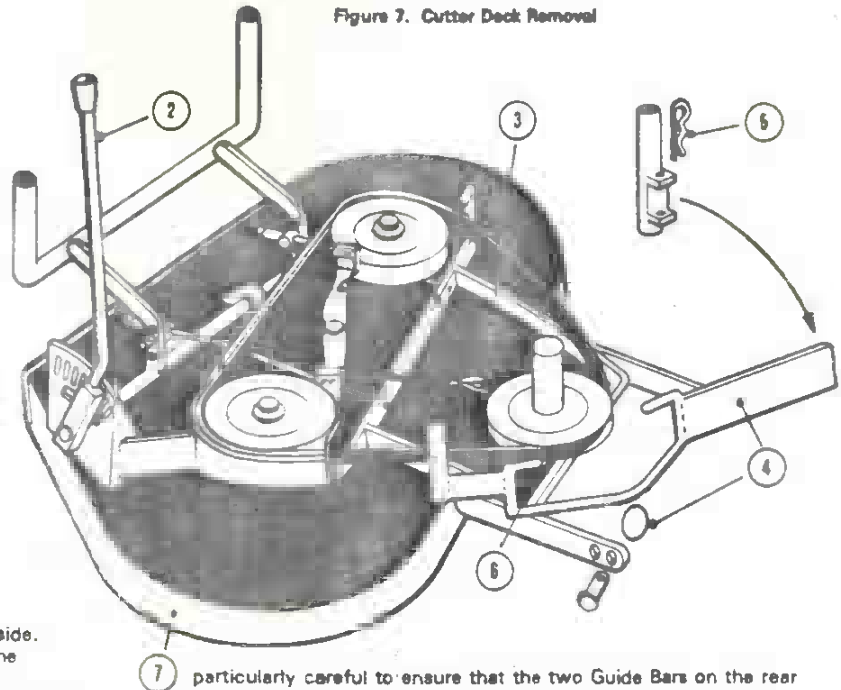
## OBSERVE ALL SAFETY PRECAUTIONS

- 1) Place the Cutter Blade Engage Control Lever forward to the disengage position.
- 2) Place the Cutter Deck in its lowest position, i.e. lower to the ground.
- 3) Remove the 'R' clip from Deck Stop Arm (above the centre of the Cutter Deck). Allow brake cable to fall clear of its location slot and replace the 'R' clip.
- 4) Remove spring rings and pins from the Hanger Arms on the front of the Cutter Deck — pull the Cutter Deck forward to release rear Guides Bar from the Hanger Bracket attached to the tractor.
- 5) Remove the 'R' clip from the Engine Belt Guide Retaining Pin (left hand side as viewed from driver's seat). Swing the Guide as far forward as it will go.
- 6) Remove Cutter Deck Drive Belt from the groove in the Engine Pulley.
- 7) The Cutter Deck can now be pulled clear from beneath the tractor from the right hand side. To ease the removal of the 42" cutter deck, turn the front wheels to full right hand lock.

**NOTE:** (Before lifting the Cutter Deck, return the Cutter Deck Height Adjustment Lever to the highest position (backwards), to lower the rear Guide Bars, in order not to trap fingers).

- 8) To replace Cutter Deck reverse the above procedure. Be

Figure 7. Cutter Deck Removal



particularly careful to ensure that the two Guide Bars on the rear of the Cutter Deck are properly located on the Hanger Bracket just in front of the trans-axle. **REMEMBER** to fit Belt around the Engine Pulley before hitching the front of the Cutter Deck Arm up into position.

# Cutter Deck Levelling

Leveling adjustments are carried out in two ways.

- A. Adjustment to remedy an uneven cut: left or right

- 1) Observe all safety precautions.
- 2) Identify and locate the Hanger Bracket where it bolts into chassis near rear end of tractor. (See Figure 8. Cutter Deck Levelling Adjustment Points, Section A).
- 3) Loosen the Hanger Bracket securing nuts sufficiently to adjust the Bracket and achieve the correct Cutter Deck level. Make tight the securing nuts.

- B. Adjustment to Cutter Deck Rod

The Cutter Deck is set level at the factory. After a period of use, particularly over bumpy ground, the Cutter Deck may no longer be level. Adjustment should be made as follows:-

- 1) Observe safety precautions.
- 2) Locate end of rods that run from front to back of Cutter Deck (See Figure 8. Cutter Deck Levelling Adjustment Points, Section B).
- 3) With a spanner turn the adjusting nut clockwise until Cutter Deck is level. (See Figure 8. Cutter Deck Levelling Adjustment Points, Section B).

**NOTE:** If you tend to use the tractor predominantly on a low cut, it may be an advantage to have the front of Cutter Deck slightly raised to keep the Drive Belt more in line. Take care not to overdo this adjustment, as a reverse effect can take place when the Cutter Deck is fully raised.

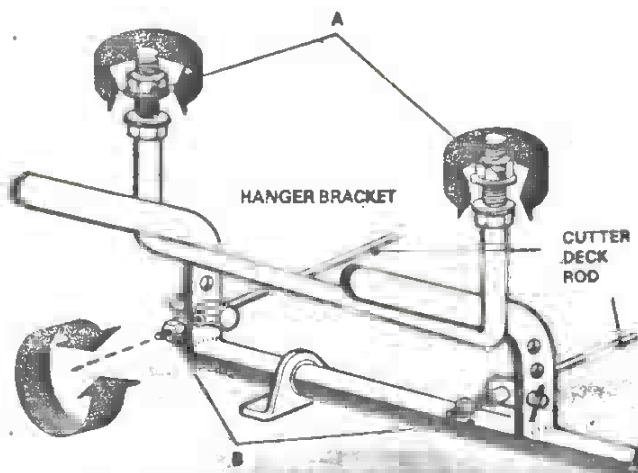


Figure 8. Cutter Deck Levelling Adjustment Points

# Cutter Brake Adjustment

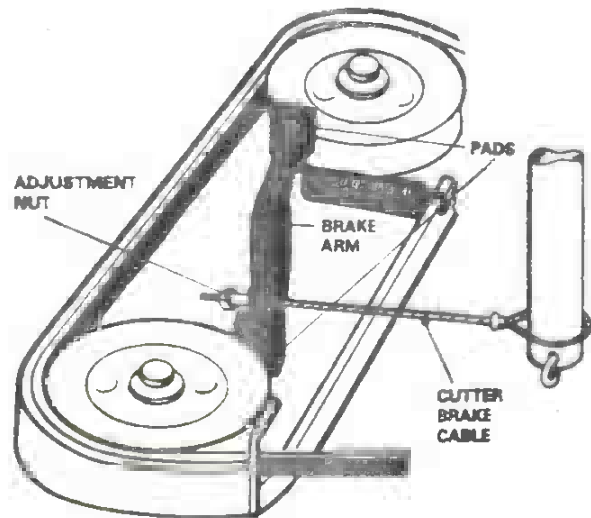


Figure 9. Cutter Deck Brake Adjustment

After a period of use the Cutter Deck Brake Pads wear and the Brake Cable tension should be checked and, if necessary, adjusted.

- 1) Observe all safety precautions.
- 2) Place Cutter Engage Control Lever to the **ENGAGE** position.
- 3) Identify and locate Brake Arm with Brake Pad at the end. (See Figure 9. Cutter Deck Brake Adjustment).
- 4) Examine Cutter Deck Brake Pads. They should be 1/8" to 1/4" clear of pulleys. The tension wire should be tight.
- 5) Move Cutter Deck Engage Control Lever towards **DISENGAGED** position (to the halfway mark) until the pads are just touching the pulleys. There should be some slight slack in the cable. When the Cutter Deck Engage Control Lever is fully **DISENGAGED** the cable is totally slack.
- 6) To tension the cable, rotate the nut at the end of the cable in a clockwise direction.

**NOTE:** The Cutter Deck Brake Pads are designed to wear into the shape of the Pulley and should be checked and adjusted after about 10 hours use. As the Pads bed in they require less adjustment.



## Cutter Belt Adjustment

If the Cutter Drive Belt is correctly adjusted it should have sufficient tension to automatically stall the engine in extreme conditions, i.e. cutting long grass on a low cut in a high gear. If it becomes too slack it will slip and the Belt will rapidly heat up and start to burn; at this temperature the Belt will tend to shrink. The Cutter Bearings could also overheat and be seriously damaged.

The belt should be regularly checked for tension and, if necessary, adjustment made as follows: -

- 1) Observe all safety precautions.
  - 2) Lift the bonnet and locate the front end of the Cutter Deck Engage Clutch Rod connected to the Clutch Lever Arm at the front of the tractor. (See Figure 10. Cutter Belt Adjustment, Section A).
  - 3) Remove the 'R' clip securing the threaded pivot. Gently clear the pivot from the upright Clutch Lever Arm.
  - 4) Rotate the pivot in an anticlockwise direction to 'lengthen' the rod, increasing the travelling distance of the Clutch Lever Arm to achieve sufficient tension on the Cutter Drive Belt. (See Figure 10. Cutter Belt Adjustment, Section B).
  - 5) Reconnect the pivot on to the Clutch Lever Arm and replace the 'R' Clip.
  - 6) Check the operation by placing the Cutter Deck Engage Control Lever to the halfway position in its slot. At this point the Cutter Drive mechanism should begin to engage.
- VERY IMPORTANT:** Take care to keep feet and other objects clear of the rotating blades.

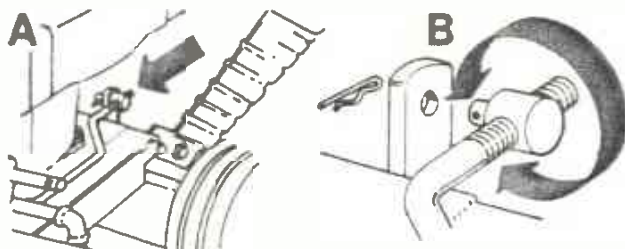


Figure 10. Cutter Deck Belt Adjustment

## Replacing Cutter Belt

It is recommended that this work be done with Cutter Deck removed from the tractor, as follows:-

- 1) Observe all safety precautions.
- 2) Remove the Cutter Deck from the Tractor in accordance with separate instructions. (See 'Cutter Deck Removal': Page 5).
- 3) Remove the bolt and washers from drive pulley (36 inch standard deck remove from both pulleys).

**NOTE:** Washer locations.

- 4) Remove pulley(s) with belt.
- 5) Refit pulley(s) with new belt.
- 6) Refit washers and securely tighten bolts.

**NOTE:** To restrain cutter blades whilst removing/refitting bolts, wrap blade with rag, to protect hands.

## Replacing Contra Cut Toothed Belt

- 1) Observe safety precautions. (Page 6).
- 2) Remove Cutter Deck (Page 5).
- 3) Remove Cutter belt guard from Cutter Deck.
- 4) Remove Drive belt and pulley.
- 5) Remove disc and blades (or carrier and blades).
- 6) Remove the nuts and bolts securing the toothed Belt Drive case and remove drive case from Cutter Deck.

## SERVICING YOUR WESTWOOD

**INTRODUCTION** Before servicing or making adjustments to your Westwood tractor please familiarise yourself with the drive mechanism under the tractor chassis. The purpose of the notes that immediately follow this introduction is to help you achieve a better understanding of the tractor operation when carrying out adjustments or repairs.

In addition it is most important that before making any adjustments to moving parts you adhere to the listed **SAFETY PRECAUTIONS**.

**GENERAL DESCRIPTION** Under the chassis, immediately below the engine, is a grooved block which drives the vee belt, via a twin jockey pulley to the transaxle and road wheels. From a pulley attached to this Drive Block a second vee belt drives the Cutter Blade or Blades on the detachable Cutter Deck. The grooved Drive Block and pulley are connected to the engine shaft. The drive to the road wheels and the Cutter Deck is engaged by applying tension to each vee belt.

To transmit power to the road wheels the combined Clutch/ Brake Pedal is released, allowing the twin jockey pulleys to move

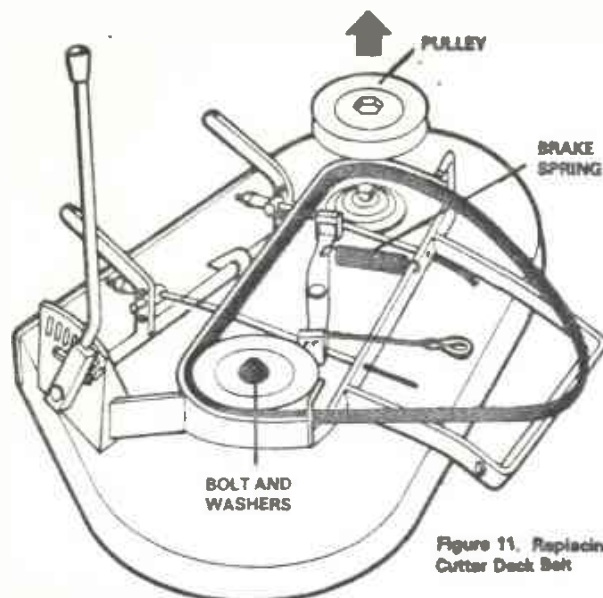


Figure 11. Replacing Cutter Deck Belt

- 7) Remove the 2BA nuts and bolts and lift off the upper half of the drive case.
- 8) Remove the nut securing the belt separator roller bearings, and remove one bearing.
- 9) Lift off the upper half of the right hand toothed pulley, and remove the toothed belt from this pulley.
- 10) Remove the toothed belt from the belt separator and the left hand toothed pulley.
- 11) Refitting the toothed belt is carried out in the reverse order. Please note the lay of the belt over the belt separator bearings (See Fig 12).

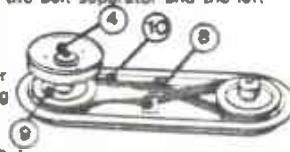


Figure 12. Replacing Toothed Belt

## Replacing Cutter Blades

It is very important to keep cutter blades as sharp as possible and well balanced. Blades kept in best condition will maintain quality of cut and extend working life of the cutter belt.

At the first sign of excessive vibration when engaging Cutter Deck, stop machine and check blades for damage as follows:-

- 1) Observe all safety precautions.
- 2) Remove Cutter Deck from tractor in accordance with separate instructions. (See Cutter Deck Removal: Page 5).
- 3) Examine the blade/s and if not severely damaged and/or worn, arrange to have sharpened and balanced.
- 4) To change blade/s, undo the retaining bolts. Protect hands by covering the blade with a rag. Grip each end of the blade and pull off evenly.
- 5) Fit the replacement blade/s and secure the retaining bolts tightly.
- 6) Replace Cutter Deck on to the tractor and test.

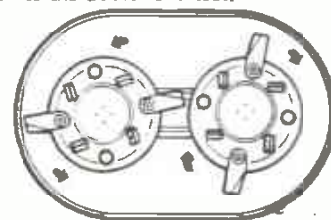


Figure 13. Contra Cutter Blades

**N.B.** Contra Cut Decks require LH and RH Blades

into engagement with the Transmission Drive Belt. A tension spring automatically ensures that the belt drive is correctly tensioned. The vee belt which transmits power to the Cutter Deck is driven from the lower engine pulley and is brought into tension by the Cutter Deck Engage Control Lever moving the Cutter Deck, on its Hanger Bracket, towards the rear of the tractor, thus tensioning the Cutter Drive Belt.

**SAFETY PRECAUTIONS** Before making any adjustment or repair to the tractor moving parts please satisfy yourself that the following safety precautions have been fully carried out.

- 1) Park tractor on level site.
- 2) Stop engine and grass cutter.
- 3) Disengage Cutter Deck, remove Ignition Key and disconnect Spark Plug lead.
- 4) Allow engine and exhaust system to cool completely.
- 5) Before tipping the tractor, disconnect and remove the Battery.
- 6) Isolate working area from children and pets.

### SERVICING AND ADJUSTMENT TO THE ENGINE

Please refer to the Engine Manufacturer's Handbook supplied separately with your Westwood Tractor.

# Transmission Drive Belt

The Transmission Drive Belt System incorporates a spring controlled arm on which is mounted an idler pulley and a clutch pulley. This configuration is a design feature. The cantilever effect of the twin jockey pulley system automatically takes up any stretch, due to wear, during the normal life of the Transmission Drive Belt. (See Figure 14. Transmission Drive Belt).

If too much slack was inadvertently taken up by manual adjustment the clutch would not fully disengage. This would make gear changing difficult and in extreme cases cause rapid belt wear.

As long as resistance is felt before the arm reaches the end of the slot the drive will still function. If, however, the pedal continually hits the end of its slot with no resistance it may be necessary to replace the Transmission Drive Belt.

Also see 'Replacing Transmission Drive Belt' and 'Tractor/Brake Adjustment' on this page.

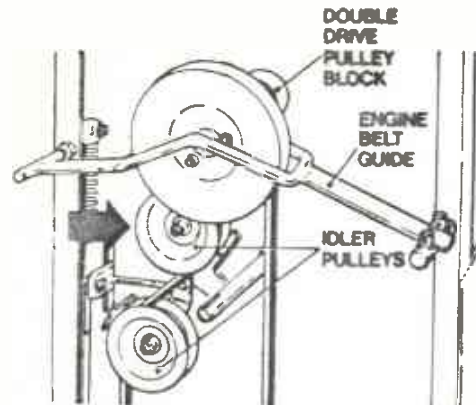


Figure 14. Transmission Drive Belt

## Adjustment to Steering

To remove any excessive 'play' in the steering, carry out the following adjustments.

- 1) Adjustment to Axle Beam: (See Figure 15. Adjustment to Axle Beam).
  - a) Slacken 5 bolts attaching chassis front.
  - b) Tighten 2 bolts securing the axle beam.
  - c) Re-tighten the 5 bolts attaching chassis front.
- 2) Adjustment to Steering Gear: Slacken the two Bolts on the Bush Bearing plate either side of the Steering Column. Pull the Steering Column forward to lessen the play between the two gears. Do not mesh the gears too tightly. Re-tighten the Bearing Plate Bolts as required.

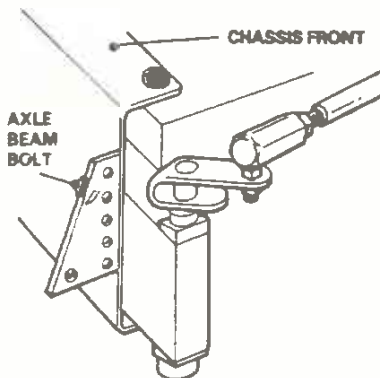


Figure 15. Adjustment to Axle Beam



Figure 16. Adjustment to Steering Bush

## Tractor Brake Adjustment

The twin jockey pulley system automatically compensates for both stretch and wear of the Transmission Drive Belt. When the Clutch/Brake Pedal is slowly disengaged the twin pulleys begin to release the tension in the Transmission Belt. A continued downward movement of the pedal disengages the Clutch and progressively applies the Foot Brake. It may be necessary from time to time to adjust the brake operating mechanism.

- 1) Observe all safety precautions.
- 2) Locate the two nuts positioned on the Brake Rod either side of the pivot on the Brake Operating Cam at the side of the Transaxle. (See Figure 17. Tractor Brake Adjustment). The Brake mechanism is purposely designed to be loose for forward or backward pivoting. The Brake is adjusted by tightening the Inner Nut next to the Pivot. Always ensure that the END Nut is positioned at the very end of the Rod.
 

N.B. As the Brake Lever is double actioned any re-positioning of the END Nut could result in the Brake mechanism re-engaging when the Clutch/Brake Control Pedal is in the Clutch Engage position. As a final check to the re-adjustment of the Braking system, the Brake Operating Arm should be loose in all positions except when the Clutch/Brake Control Pedal has travelled three-quarters of the way through its downward path.

- 3) An additional adjustment to the Brake System is available, via two locknuts on the outside of the disc brake. This last adjustment is subject to there being sufficient brake life in the pads. (See Figure 17. Tractor Brake Adjustment).

**NOTE:** The hand brake is correctly adjusted during assembly and should require no further adjustment.

**IMPORTANT:** When using the tractor to pull a load on a steep slope, operate the brake in conjunction with engine. Selection of low gear in conjunction with the throttle control saves a great deal of wear and tear to Brake Pads.

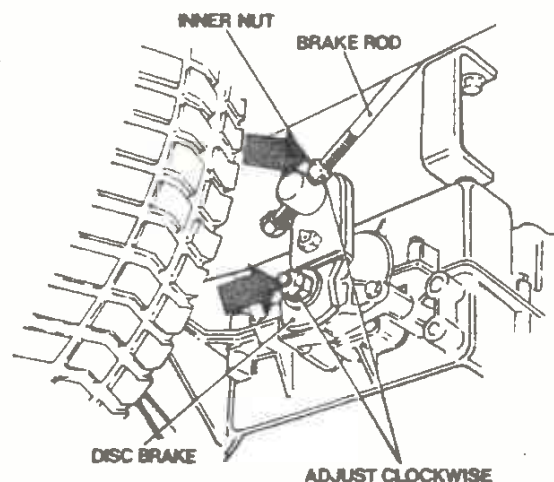


Figure 17. Tractor Brake Adjustment

## Replacing Transmission Drive Belt

- 1) Observe the safety precautions (Page 6).
- 2) Remove the Cutter Deck (Instructions Page 5).
- 3) Partially unscrew the Jockey Pulleys attachment bolts to allow the belt to slip between the pulleys and the guides.
- 4) Remove the nuts and bolts and belt guides securing the PTO shaft bearing housing to the tractor chassis.
- 5) Remove the split pin securing the gear lever rod swivel to the lever on the transaxle. (See Fig 18)
- 6) Slip the belt off the Engine Pulley Block and Jockey pulleys.
- 7) Lift the PTO shaft to disengage it from the Transaxle pulley rubber couplings and slip the belt off the Transaxle pulley.
- 8) Refit the new belt following the above instructions in the reverse order. Make sure the new belt passes on the correct side of the Belt Guides, especially on the engine Drive Pulley Block, and that the 'V' of the belt is facing inwards. Failure to observe this precaution will result in immediate rapid wear of the belt.

Use this opportunity to check the tightness of the nuts and bolts on all pulleys including the Drive and Transaxle pulleys.

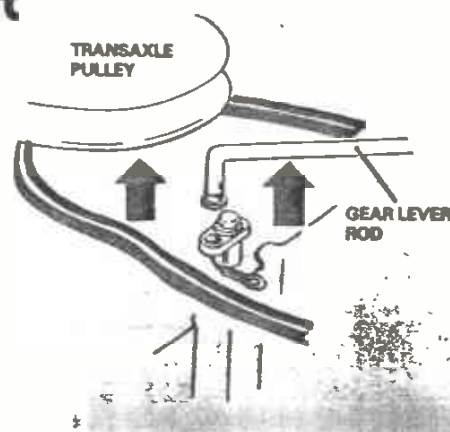
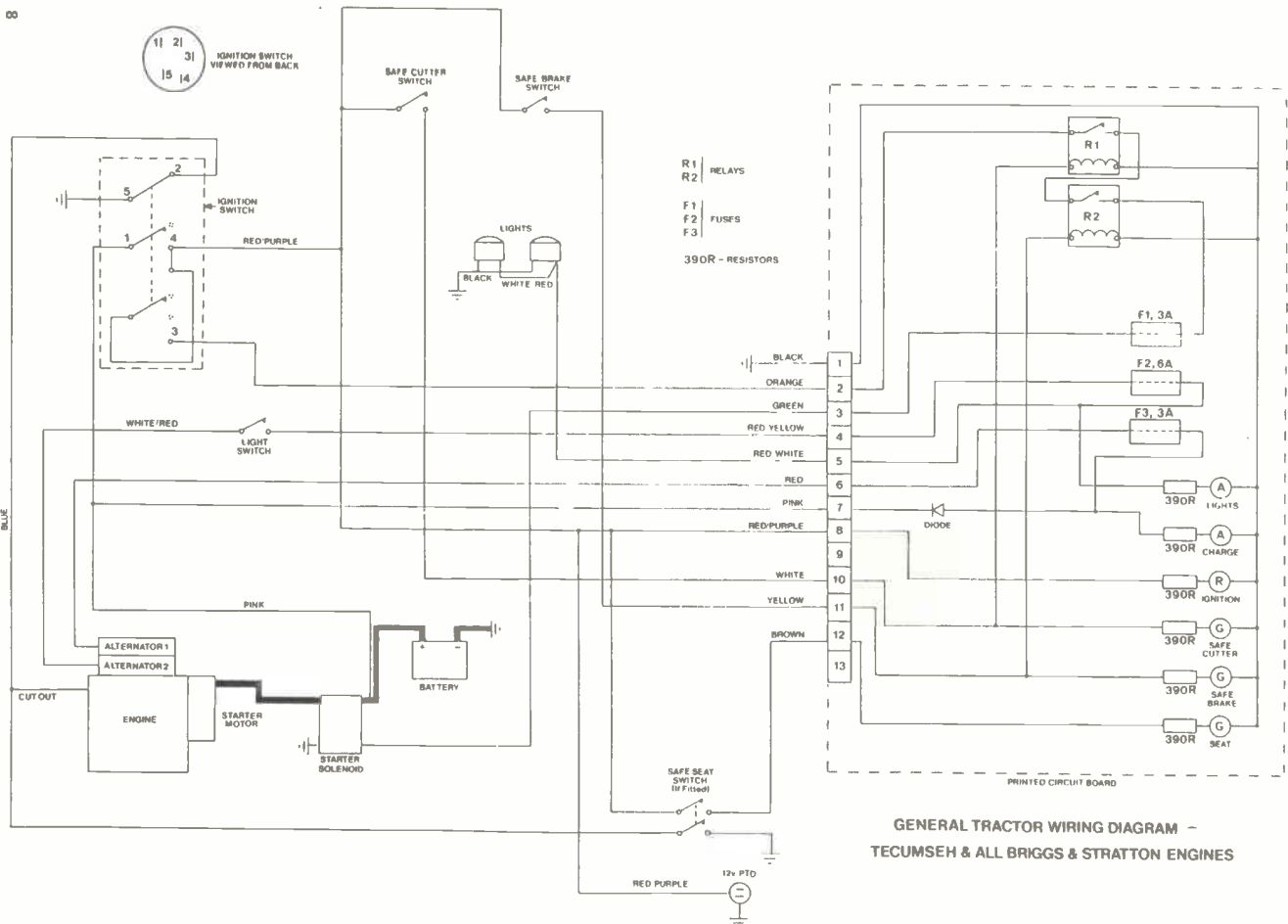
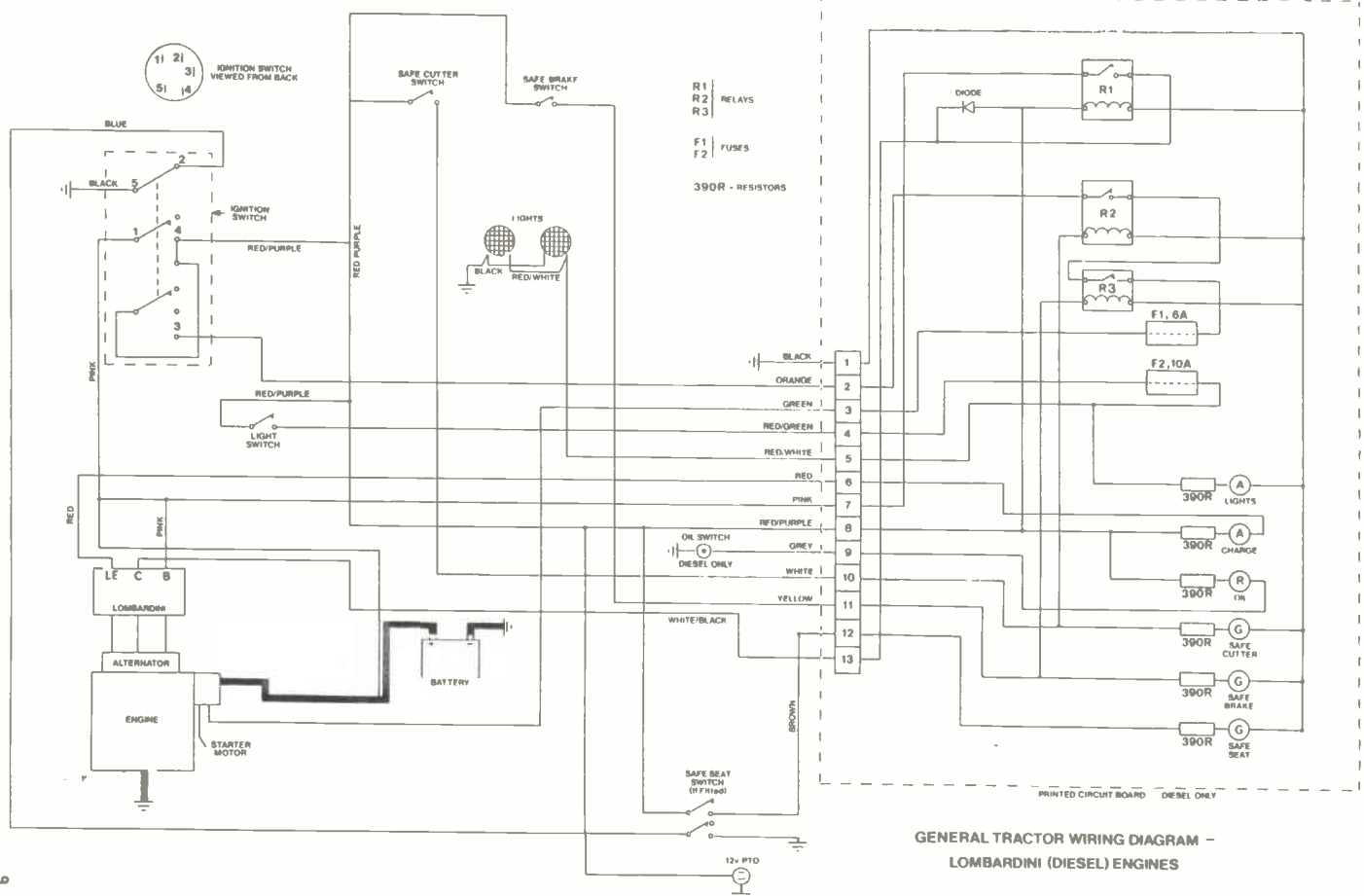


Figure 18. Replacing Transmission Drive Belt





10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100



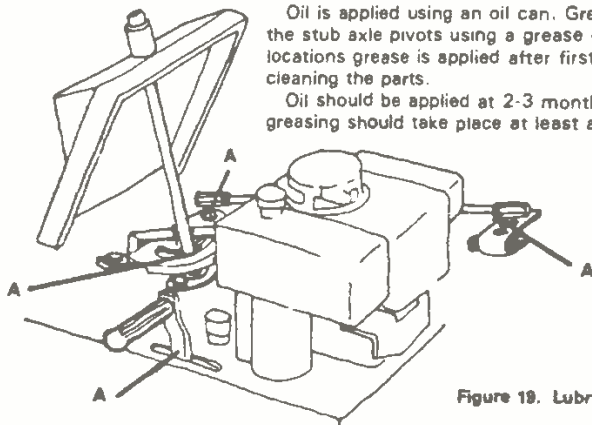
# Lubrication

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. (See Figure 19. Lubrication Points).

Points A Engine Grease

Points 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.

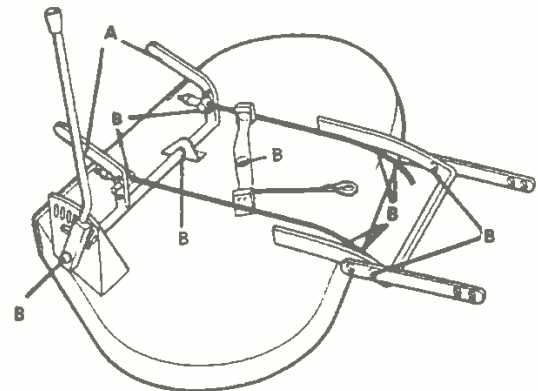
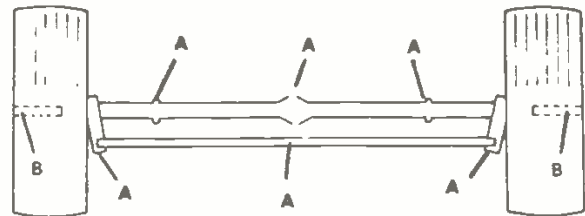


Figure 19. Lubrication Points

## The Battery

The battery on the Electric Start tractors has been fully serviced, charged and checked by your Westwood dealer.

### Maintenance

- 1) Check that the terminals are tight – but do not over-tighten.
- 2) Regularly check the acid levels.
- 3) If necessary, top up with Electrolyte (Distilled Water) only. Fill each cell to  $\frac{1}{4}$ " above the separators.

### Battery Charge

The battery is charged by the engine when the Amber Indicator light on the Driver Console is ON. (See Figure 5. 'Indicator Lamps and Switches', Page 4).

When the engine is running the Amber Light will become brighter as the battery charge increases.

Never allow the battery to become fully discharged.

When the tractor is not used for long periods, i.e. during Winter months or perhaps the Battery shows signs of discharge, we recommend a conditioning battery charge of 12 hours at 2–3 amps to revive and keep the battery in a healthy and operative condition. Should the Battery fail to start the engine at any time. Some models have a back-up Recoil Starter positioned on top of the engine under the body. With the ignition key engaged and the choke in the appropriate position, a sharp pull to the Recoil Starter will start the engine. Once started it is possible to temporarily re-charge the battery.

HOWEVER, observe the 'Maintenance' and 'Battery Charge' procedure.

## After the first 10hrs running

As with all new machinery, nuts and bolts and moving parts tend to settle in once they have been used. This particularly

### Check:

- 1) Brake and Clutch
- 2) Gear Lever positioning
- 3) Cutter Deck Belt tension
- 4) Cutter Deck Brake
- 5) Cutter Deck for levelness
- 6) Blade/s for sharpness
- 7) Blade Bolts and Pulley Bolts for tightness
- 8) Steering for excess play
- 9) Seat bolts for tightness
- 10) Transaxle Securing Bolts for tightness
- 11) Battery (where fitted) for correct electrolyte level
- 12) Tyres for correct pressure
- 13) Lubricate all moving parts. (See Lubrication, above).

## Useful Hints and Tips

Your Westwood tractor is designed and manufactured to superior specification. Take pride in driving and operating your tractor and its equipment carefully. This not only results in a well finished appearance to your lawn and garden, it extends the working life of the moving parts and avoids the premature replacement of belts, pulleys, blades, etc.

Carry out routine inspections. (See 'After the First 10 Hours of Running').

Careful driving is also safe driving; always plan your move well in advance.

Before engaging the Cutter Deck, make sure the Cutter Blade/s is clear of the grass and move the Engage Control Lever slowly into the Engage position. This procedure gives the Blade/s time to pick up speed. If the Blade/s have to cut the grass from a standing position, undue pressure is put on the Cutter Belt, causing slippage and overheating. When fully engaged, the Cutter

Deck Level is lowered to the required height before moving off.

Always avoid overloading your machine, do not try to operate when adjustments or repair is required. It will usually be obvious from noise or sometimes smoke from the belts when something is wrong with your machine. Always be aware of a change in operating noise and, if noticed, – investigate. Maladjusted, slipping or misaligned belts generate heat which weakens the fabric of the belt causing premature failure. Always ensure that belts are in proper adjustment.

Always engage the transmission belt drive slowly but positively, snatching will result in belt wear and the possibility of lifting the front of the machine off the ground.

On all Cutter Decks, keep blades in balance to reduce vibration and premature failure.

If you should strike a hard object with the blades, always stop the engine and examine the blades before continuing moving. A blunt blade not only results in a poor finish to your grass cutting, but greatly increases the load on the belts and engine. Remember, you use twice as much power and consequently more fuel when running your tractor with blunt blades.