

Simplicity®

**OPERATOR'S
M A N U A L**

**LANDLORD
& SOVEREIGN**

MFG. NO. 655

MFG. NO. 654

MFG. NO. 657

MFG. NO. 653

Safety Rules

This notation preceding Cautions and Warnings in the text signifies important precautionary steps which, if not properly followed, could result in personal injury or damage to your equipment.

General

- Read the Operating and Service Instructions carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
- Never allow children to operate the machine. Do not allow adults to operate it without proper instruction.
- Do not carry passengers.
- Keep the area of operation clear of all persons, particularly small children, and pets.
- When using any attachments, never direct discharge of material toward bystanders nor allow anyone near the vehicle while in operation.
- Make sure
 - a. tractor and attachments are in good operating condition,
 - b. all safety devices and shields are in place and in good working condition, and
 - c. all adjustments (cutting height, etc.), have been made.

Preparation

- Handle gasoline with care — it is highly flammable.
 - a. Use approved gasoline container.
 - b. Never remove the cap of the fuel tank or add gasoline to a running or hot engine, or fill the fuel tank indoors. Wipe up spilled gasoline.
- Do not run the engine indoors. Exhaust fumes are dangerous.
- Clear the work area of objects which might be picked up and thrown.
- Disengage all attachment clutches and shift into neutral before attempting to start the engine.
- Wear heavy footwear. Do not operate tractor when barefoot or when wearing open sandals or canvas shoes.

Operation

- Disengage power to attachments and stop engine before unclogging attachment chutes.
- Disengage power to attachment(s) and stop the engine before leaving the operator's position.
- Disengage power to attachment(s) and stop the engine before making any repairs or adjustments.
- When using the vehicle with mower, proceed as follows:
 - a. Mow only in daylight or in good artificial light.
 - b. Never make a cutting height adjustment while the engine is running.
 - c. Check the blade mounting bolts for proper tightness at frequent intervals.
- Do not stop or start suddenly when going uphill or downhill. Mow up and down the face of steep slopes; never across the face.
- Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Use extreme caution when changing direction on slopes.
- Stay alert for holes in the terrain and other hidden hazards. Be extra careful when operating on wet or slippery surfaces.
- The vehicle and attachments should be stopped and inspected for damage after striking a foreign object, and the damage should be repaired before restarting and operating the equipment.
- Watch out for traffic when crossing or near roadways.
- If equipment begins to vibrate abnormally — disengage power to attachments and stop engine at once. Inspect for damage and correct before starting up tractor.
- Use care when pulling loads or using heavy equipment.
 - a. Use only drawbar hitch point.
 - b. Limit loads to those you can safely control.
 - c. Do not turn sharply. Use care when backing.
 - d. Use weights when suggested in the owner's manual.
- Disengage power to attachment(s) when transporting or not in use.
- Take all possible precautions when leaving the vehicle unattended, such as disengaging the power take-off, lowering the attachment(s), shifting into neutral, setting the parking brake, stopping the engine, and removing the key.
- Keep the vehicle and attachments in good operating condition, and keep safety devices in place.

Maintenance and Storage

- Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
- Do not change the engine governor settings or overspeed the engine.
- To reduce fire hazard, keep the engine free of grass, leaves, or excessive grease.
- Never store the equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.

Congratulations on your **purchase** of the Simplicity **tractor**. We know you bought this machine to make your lawn and garden work easier. You bought the right machine to do it. So that **you** can get the very most from your **purchase**, we would consider it a personal favor if you would take time to study this manual before using your tractor and its attachments. It will increase the chance of adding

you to our **long** list of satisfied customers. Also, before allowing others to operate your tractor, be **sure** they read and understand the safety precautions and operation **section** of this manual. For your own safety and that of your family and friends, periodically review the safety tips found on the inside front cover and page two of this manual.

SIMPLICITY'S NEW EQUIPMENT WARRANTY

The Company warrants Simplicity products to be free from **defects** in material and workmanship, except the Company makes no warranty, express **or** implied, with respect to tires, engines, generators and voltage regulators, which **are** warranted by their **respective** manufacturers. Any part **covered** by this warranty which is **proven** defective within one year (**45** days for equipment used for rental, municipal **or** commercial purposes) under normal **use**, from date of purchase, will **be** replaced without charge, provided such **part** is returned to the factory, (if requested), and is **found** to be defective upon examination at the factory. This **warranty** does not apply to any Simplicity products altered outside of the Simplicity factory. THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS **OR** IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, PERFORMANCE, OR OTHERWISE. The Company's obligation under its warranty is **strictly** and exclusively limited to the replacement of **such** parts, **and** in no **event** shall the Company **be** liable for any other damages, whether direct, immediate, incidental, special, **or** consequential. Simplicity Manufacturing Company, Inc., **reserves** the right to modify **or** change specifications without prior notification. There are no warranties which extend beyond the description of any Simplicity product.

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PROTECT YOURSELF AND OTHERS

- Know the controls and how to stop quickly -- READ THE OWNER'S MANUAL.
 - Do not allow children or young teenagers to operate vehicle or adults to operate it without proper instruction.
 - Do not carry passengers. Keep children and pets a safe distance away.
 - Clear work area of objects which might be picked up and thrown.
 - Disengage all clutches and shift into neutral before Starting engine.
 - Disengage power to implement (s) and stop engine before leaving operator position.
 - Disengage power to implement (s) and stop engine before making any repairs or adjustments.
 - Disengage power to implement (s) when transporting or not in use.
 - Take precautions, such as disengaging power take-off, lowering implements, shifting into neutral, setting parking brake, stopping engine and removing key when leaving vehicle unattended.
 - Don't stop or start suddenly when going uphill or downhill.
 - Reduce speed on slopes and in sharp turns to prevent tipping or loss of control.
 - Stay alert for holes in terrain and other hidden hazards.
 - Use care when pulling loads or using heavy equipment.
 - A. Use only approved drawbar hitch points.
 - B. Limit loads to those you can safely control.
 - C. Don't turn too sharp, and use care when backing.
 - D. Use counterweight (s) or wheel weights when suggested in owner's manual.
- Watch out for traffic when crossing or near roadways.
- When using any attachments, never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.
 - Handle gasoline with care -- it is highly flammable.
 - A. Use approved gasoline container.
 - B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline.
 - C. Replace gasoline cap securely.
 - D. Open doors if engine is run in garage exhaust gasses are dangerous.
 - Keep vehicle and attachments in good operating condition and keep safety devices in place. Use guards as instructed in owner's manual.
 - Do not operate equipment when barefoot or wearing open sandals. Always wear substantial footwear.
 - Do not put hands or feet near or under rotating parts. Keep clear of discharge opening at all times.
 - Before cleaning, inspecting, adjusting, or repairing the tractor or any attachments stop the engine, remove the ignition key (electric start models) and be sure all blades and other moving parts have stopped.
 - Stop blade (s) when crossing gravel drive, walks or roads.
 - After striking a foreign object stop the mower and remove the ignition key. Thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.
 - If your equipment should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
 - Do not run the engine indoors.
 - Look to be sure that children are not behind the tractor, before backing up.
 - When mowing with a tractor mounted mower, mow up-and-down on slopes, never across or horizontally. To prevent the danger of overturning, exercise extreme caution when stopping, starting or changing direction.
 - Check blade and engine mounting bolts for proper tightness at frequent intervals.
 - Keep all nuts, bolts, and screws tight to be sure equipment is in safe working condition.
 - Never store equipment with gasoline in the tank inside of a building where fumes may reach an open flame or spark. Allow engine to cool before storing in any enclosure.
 - To reduce fire hazard keep engine free of grass, leaves or excessive grease.
 - Never operate any attachment without all guards, defectors, and other protective covering in place.
 - Keep the area of operation clear of all persons, particularly small children, and pets.
 - Thoroughly inspect the area where the equipment is to be used and remove all stones, sticks, wire, bones and other foreign objects.
 - Check fuel before starting engine. Do not fill gasoline tank when engine is running or while engine is still hot. Wipe off any spilled gasoline before starting engine. Do not smoke when fueling engine or around open gasoline containers.
 - Mow only in daylight or in good artificial light.
 - Do not change engine governor, settings or overspeed engine.

SIMPLICITY OFFERS YOU -

OPERATION

Easy to get on and off. Full length foot rest is convenient step. Controls are out of the way.

Quick, simple starting. High capacity battery. Key-controlled electric starter/generator.

Easy steering. Large steering wheel and gear reduction provide low steering effort.

Simple control of engine speed. Single lever has adjustable friction lock.

Choice of ground speed control. Pick from two transmissions. Hydrostatic Drive for full range of ground speeds in forward or reverse without clutching. Variable Speed Drive provides seven speeds in each gear plus flip shift second-to-reverse shifting using clutch.

Foot controlled "inching". Foot controlled Touch-O-Matic clutch/brake slows tractor, leaves both hands free for steering.

Good traction on sidehills and slippery surfaces. Automatic limited slip differential provides traction on sidehills and ice, yet doesn't scuff lawns on turns.

Precise attachment positioning. Standard manual lift has notched sector for fixed positioning and a float cam so attachments can follow ground contour.

SAFETY

Single action stopping. Large clutch/brake pedal has outer lip, retains foot even when icy; declutches in first half of travel and applies brake when depressed further.

Protection from hazardous parts. Belts and drives are shielded. Muffler and exhaust pipe are enclosed by hood and grill.

Unobstructed view. Low profile hood. Headlights illuminate wide area, do not reflect from snow thrower.

Easily identified control action. Controls are logically grouped and clearly marked as to function and direction.

COMFORT

Soft, comfortable ride. Double bead rim wheels retain tires at low air pressure.

Comfortable Seat. Position is adjustable to match operator's size.

Comfortable foot support. Large area foot rests permit changing foot position without resting feet on mower.

Reduced noise and vibration. Enclosed, large volume muffler lowers engine noise. Synchro-balanced engine (Sovereign) and massive frame (Sovereign and Landlord) minimize vibration.

RELIABILITY

Increased engine life. Briggs & Stratton engine has stellite valves with rotators.

Durable power train. Transmission differential and bevel gear housing are all of hardened gear construction. Rolling contact bearings support all moving parts. Cast iron housings and superior gear lubricant protect parts. Both pulleys change pitch simultaneously on Variable Speed Drive to eliminate belt pinching.

Hydrostatic transmission handler high loads. Oil cooler maintains proper operating temperature at all loads.

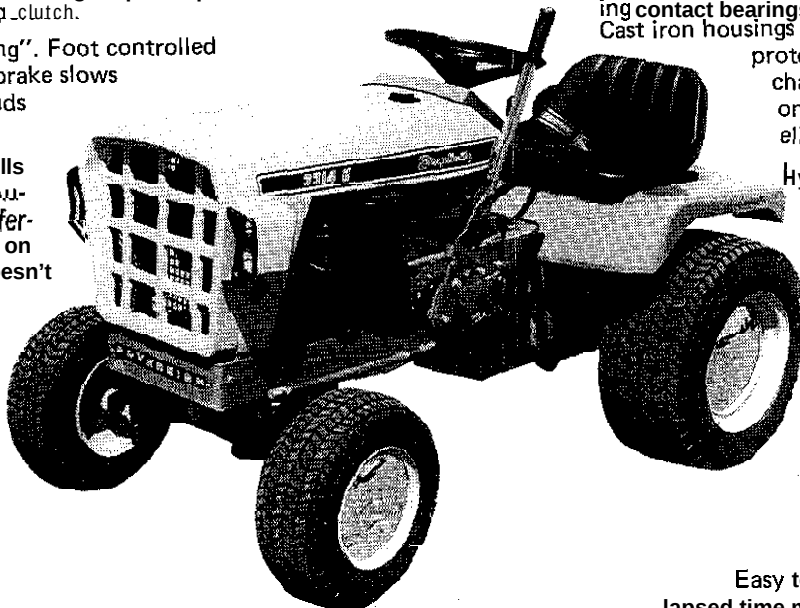
SERVICEABILITY

Simple access to engine and power train. Hood unlatches and pivots forward. Seat deck flips back. Engine is open at bottom.

Easy to change oil. Optional elapsed time meter indicates when oil change is required. Oil fill and drain pipes are readily accessible.

No fuse replacement. Automatic reset circuit breaker eliminates fuses.

Differential needs no adjustment. Eight springs and hardened wear plates automatically adjust limited slip action.



Simplicity
POWER-EQUIPMENT

OPERATION

CONTROLS AND HOW TO USE THEM

Picture yourself seated on your Landlord or Sovereign tractor. Before starting the engine, let's learn how to use each of the safe, easy to reach controls. (The numbers on figures 1 thru 7 correspond to the paragraph numbers below.)

1. Ignition Switch: When turned clockwise to the first position, the ignition is turned "ON". Turn past the "ON" position to **actuate** the starter. (If the starter does not actuate, be sure the transmission shift lever on variable speed models or the hydrostatic control lever on hydrostatic models is in the neutral position). Release the key as **soon** as the engine starts. Return the key to the vertical position to stop the engine. **ALWAYS REMOVE THE IGNITION KEY WHEN CLEANING, ADJUSTING OR REPAIRING THE TRACTOR OR ANY ATTACHMENT OR WHEN LEAVING THE VEHICLE UNATTENDED.**

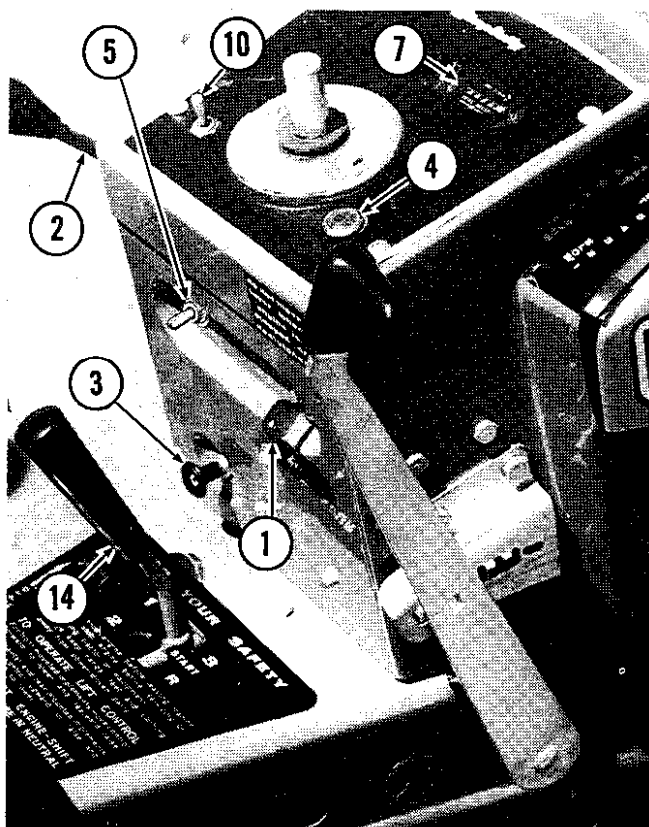


FIGURE 1

2. Engine Speed Control Lever. The engine speed control lever should be moved forward toward the FAST position to increase engine speed and back toward the SLOW position to decrease engine speed.

3. Choke Control Knob: Pull the choke control knob all the way out when starting the engine. As **soon** as the engine starts, push the control knob all the way in. The

choke control should be pushed all the way in whenever the engine is running.

4. Generator Warning Light: The generator light will **warn** you if the generator or voltage regulator on your tractor is not functioning properly. It is normal for the generator light to come on when the ignition switch is in the ON position and the engine is stopped or running at low speed. The light should go out when the engine is running at higher speeds. If it does not, the generator or voltage regulator, is not functioning properly. Check the generator belt adjustment (see **adj.** page 11). See your Simplicity dealer if the light will not go out after the belt is adjusted.

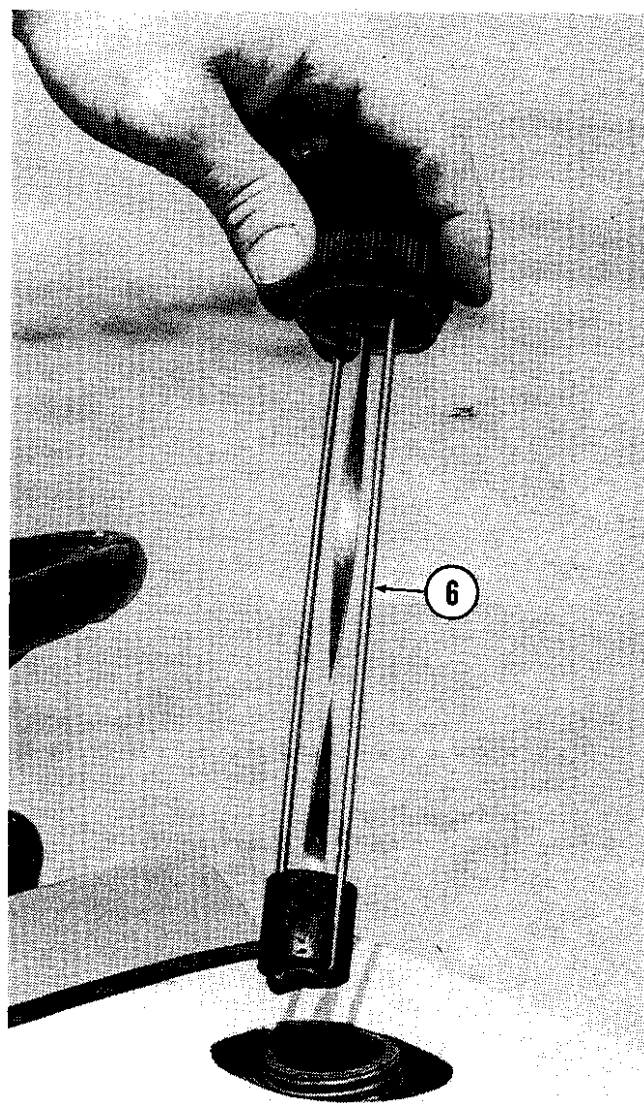


FIGURE 2

5. Light Switch: (Standard equipment on Sovereign • Optional on Landlord). Place the toggle switch in the "UP" position to turn on lights. To avoid the battery being **ac-**cidentally run down, the ignition switch must also be in the "ON" position for the lights to work. **DO NOT OPER-**

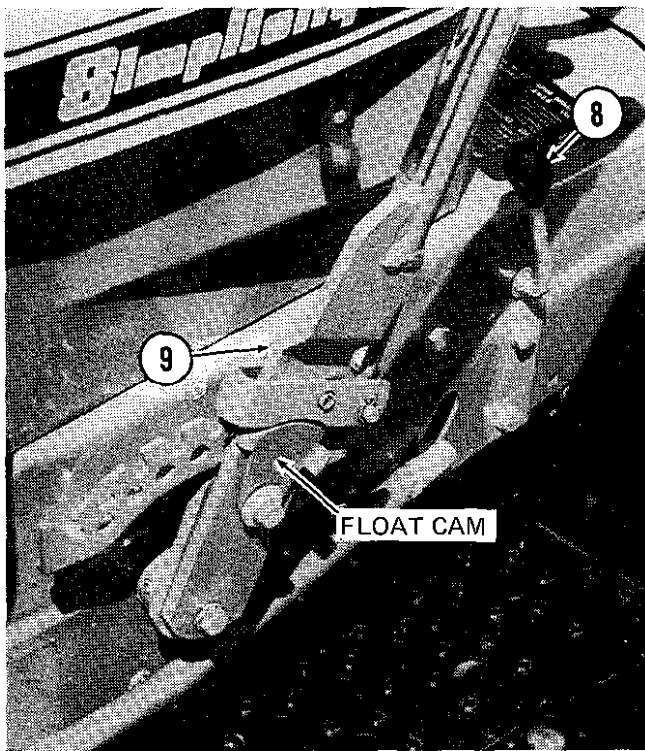


FIGURE 3

ATE THE LIGHTS FOR OVER 10 MINUTES WHEN THE GENERATOR LIGHT IS ON OR THE BATTERY MAY DISCHARGE ENOUGH SO IT WILL NOT START THE ENGINE.

6. Fuel Gauge and Filler Cap: The gauge measures the level of fuel in the tank. Turn the cap counterclockwise to remove for adding gasoline.

7. Hourmeter (Optional): The hourmeter is used to record the number of hours the engine runs, though it will operate any time the ignition switch is ON even if the engine isn't running.

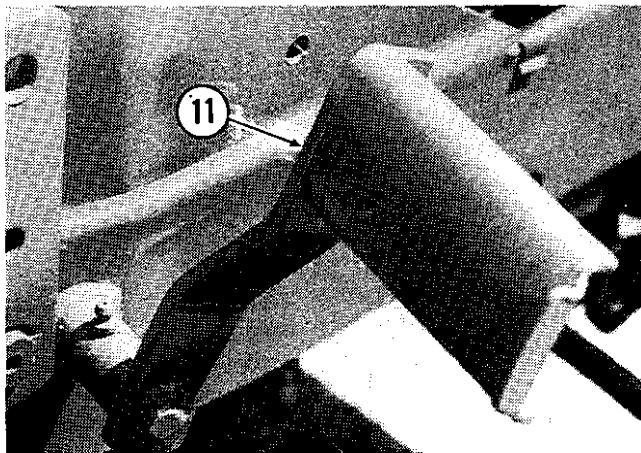


FIGURE 4

8. Power Take-Off Control Lever: The power takeoff lever controls power to attachments such as a mower or sickle bar which are driven by the center power take-off unit. Pull the lever up and forward until it snaps over center to engage the P.T.O. Pull it back and down to disengage. The tractor engine should be running at 112 to full engine

speed when the power take-off is engaged to absorb the initial effort of the added load. ALWAYS DISENGAGE THE P.T.O. AND WAIT UNTIL ALL ATTACHMENTS HAVE STOPPED MOVING BEFORE LEAVING THE TRACTOR SEAT.

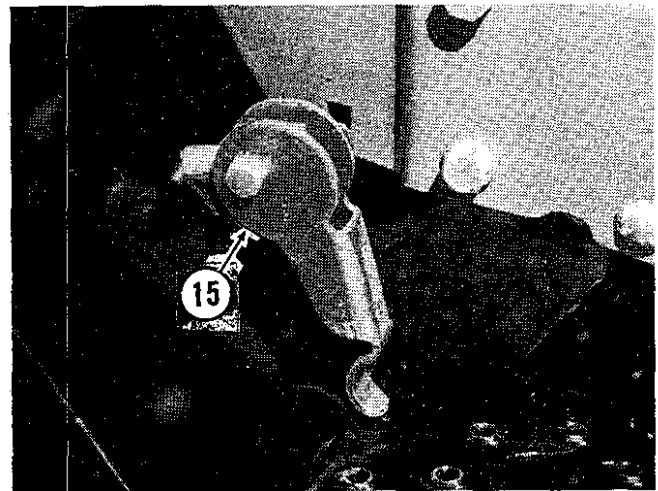


FIGURE 5

9. Lift Lever: The lift lever is used for lifting the rotary mower or other attachments out of the operating position so they can be transported. By using the notches and pin holes provided in the quadrant, you can regulate the operating height of attachments such as the grader blades and snow throwers. The thumb button on top of the handle is pressed to disengage the latch from the quadrant so the lever can be moved forward or back as required and locked in position. Placing the float cam in the "UP" position will allow the lift lever to "float" through any position as an attachment moves over rough surfaces. SEE THE ATTACHMENT BOOK FOR SPECIFIC INFORMATION ON HOW THE LIFT LEVER SHOULD BE USED WITH YOUR ATTACHMENTS.

10. Power Lift Switch (Optional): The Power Lift Switch controls the electrically operated power lift unit. Push the toggle switch forward when you wish to raise a center or rear mounted attachment or lower a front mounted attachment. Pull it back toward you to raise a front mounted attachment or lower a center or rear mounted attachment to the operating position. The power lift will immediately stop and hold in any position when you release the toggle switch. The height indicator on the left side of the tractor can be used to determine what position the lift is in. The lift motor will ratchet when it has reached the end of its travel. It is not harmful to the unit, but you should release the toggle switch as soon as the motor begins to ratchet to prevent unnecessary wear. If the motor is allowed to ratchet for an extended period of time, a circuit breaker will open disconnecting power to the lift motor. It will automatically reset itself after a few minutes.

11. Clutch and Brake Pedal: Depressing the pedal will first disengage the tractor drive clutch. As you continue to depress the pedal the brakes will be applied to stop the tractor. CAUTION: ON HYDROSTATIC TRACTORS THE

BRAKES WILL NOT FUNCTION IF THE GEAR SHIFT LEVER AT THE REAR OF THE TRACTOR IS IN THE NEUTRAL POSITION. (See Figure 7).

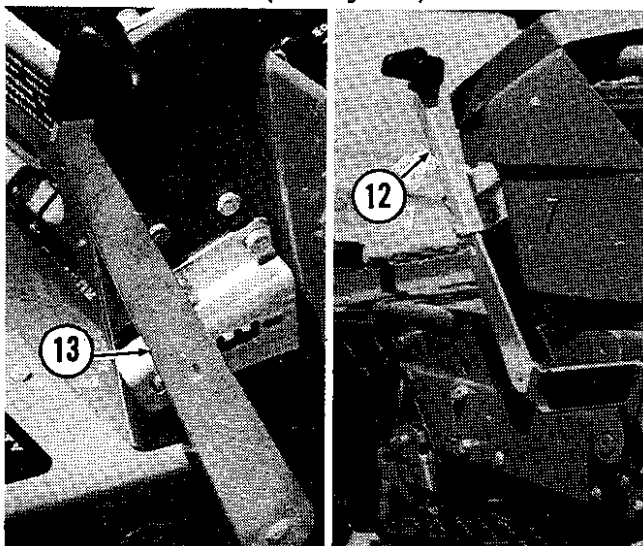


FIGURE 6

12. Hydrostatic Speed Control: (Tractors With Hydrostatic Transmission): Travel speed of the hydrostatic equipped tractors is controlled by the control lever at the right of the instrument panel. Place your hand on top of the control and squeeze the lever so the control can be moved. It must be in the notched "NEUTRAL" position to start the engine. The further it is moved forward from this position, the greater the tractor ground speed forward will be in relation to the engine speed. Moving the lever back from the "NEUTRAL" position will allow the tractor to move in reverse. THE GEAR SHIFT LEVER AT THE REAR OF THE TRACTOR MUST BE IN THE DRIVE POSITION.

13. Variable Speed Control (Tractors With Variable Speed Transmission): Tractor ground speed can be changed while the tractor is in motion by moving the Variable Speed Control Lever. Place your hand on top of the control and move it to the desired position. Pushing it all the way forward to position 7 will give the greatest speed in any particular transmission gear (see item 14). Pulling it all the way back to position "1" the lowest speed. NEVER ATTEMPT TO MOVE THE VARIABLE SPEED LEVER UNLESS THE ENGINE IS RUNNING AND THE FOOT PEDAL IS RELEASED.

14. Transmission Shift Lever (Tractors with Variable Speed Transmission): The transmission shift lever is used to select the desired transmission gear speed and direction. There are three forward and one reverse position. The ground speed for each depends on the position of the variable speed lever discussed in paragraph 13.

Gear	Variable Control at "7"	Variable Control at "1"
First	1.56 MPH	.815 MPH
Second	3.65 MPH	2.04 MPH
Third	6.1 MPH	3.36 MPH
Reverse	3.14 MPH	1.73 MPH

The diagram printed on the panel shows the location of each position. To shift the transmission into reverse or second, pull the shift lever back toward you, then push it all the way to the right or left into the desired position. To shift into first or third, push the shift lever forward and move it left or right all the way to the desired position. Do not attempt to move the shift lever unless the foot pedal (item 11) is depressed and tractor motion is stopped. The shift lever must be in the neutral "Start," position for the engine to start.

15. Parking Brake Lock: To lock the parking brake, grasp the lock and pull it upward and back until the handle rests against the footrest. To release, pull the top portion away from the footrest and down. The parking brake is located on the right side of tractors equipped with Hydrostatic Transmission and on the left side of those with Variable Speed Transmission.

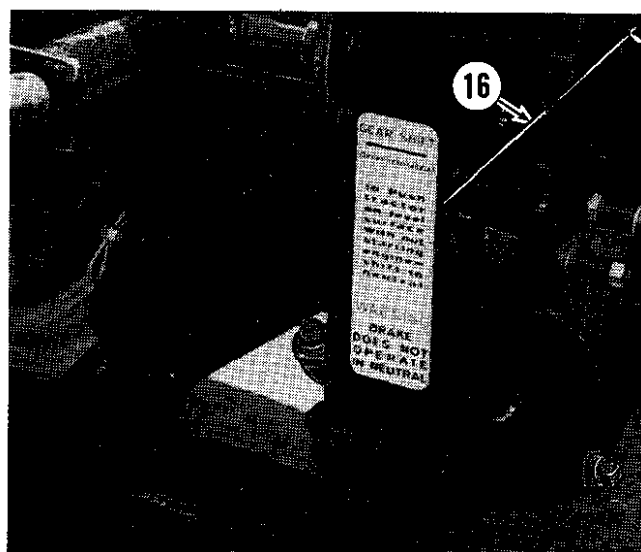


FIGURE 7

16. Gear Disconnect Lever (Hydrostatic Models Only): The gear disconnect lever located at the right rear of tractors equipped with the hydrostatic transmission is used to disengage the transmission from the rear axle. With the lever in the NEUTRAL position the tractor may be moved without engine power. WHEN THE GEAR DISCONNECT LEVER IS MOVED TO THE NEUTRAL POSITION, THE BRAKES WILL NOT FUNCTION. NEVER DISENGAGE DISCONNECT LEVER WHEN TRACTOR IS ON AN INCLINE UNLESS TIRES ARE PROPERLY BLOCKED. Be sure the hydrostatic control lever is in the NEUTRAL position before attempting to engage or disengage the Gear Disconnect Lever. To engage, move the lever to the vertical position until it snaps into the spring clip. Disengage by pulling the spring lock up and moving the disconnect as far as possible to the right.

BEFORE STARTING

Though your Simplicity dealer may have performed the before starting checks listed below, we suggest you per-

sonally check each one so that you will become familiar with them and also to insure that your tractor is ready to go the first time you use it.

1. Tire Inflation: The tractor is shipped with all tires inflated to 25 PSI. Before operating, reduce pressure in all tires. The front tires 12 to 15 PSI and rear to 6 to 8 PSI.

2. Engine Oil: Be **sure** the oil in the crankcase is at the proper level. Remove the dipstick, wipe it clean, and **turn** it back in. When removed again, oil should show up to the full mark. See figure 8. **See** your **Briggs** and Stratton manual and page 15 of **this manual** for grade and weight of oil to use.

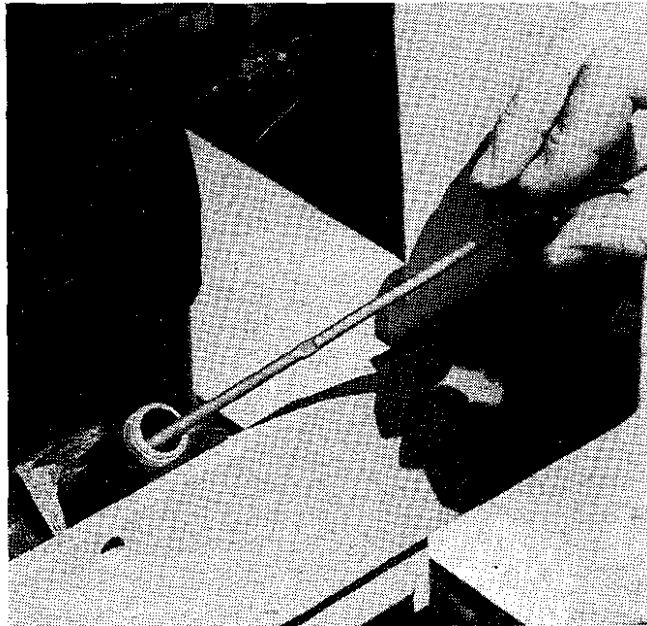


FIGURE 8

3. Transfer Gear Case Oil: Remove the pipe plug from the elbow at the rear of the gear case. Oil should be present at the top of the filler elbow. If it is not, fill with 90 weight transmission oil.

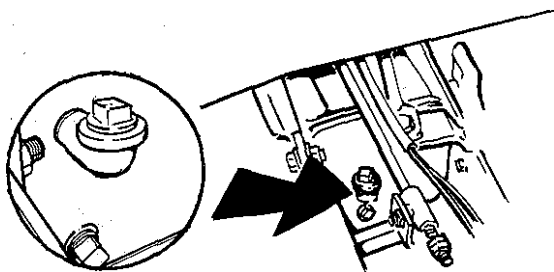


FIGURE 9

4. Transmission Oil (Hydrostatic Models): Remove the inspection plug at the side of the reservoir to check the oil in

the hydrostatic pump. Oil should be level with the bottom edge of this hole. If it is not see page 17 under Maintenance. Remove the pipe plug from the elbow on the axle housing. Oil should be level with the top of the elbow. If it is not see page 17 under Maintenance.

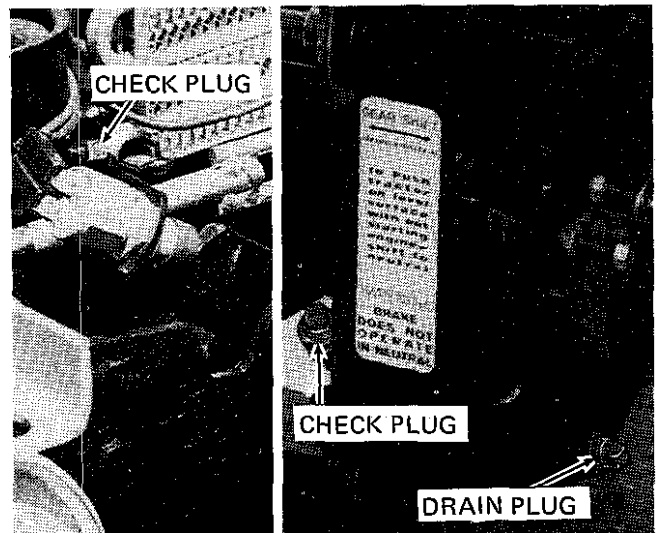


FIGURE 10

(Variable Speed): Remove the fill plug on the right side of the transmission. Oil should be level with the bottom edge of this hole. See page 17 of Maintenance.

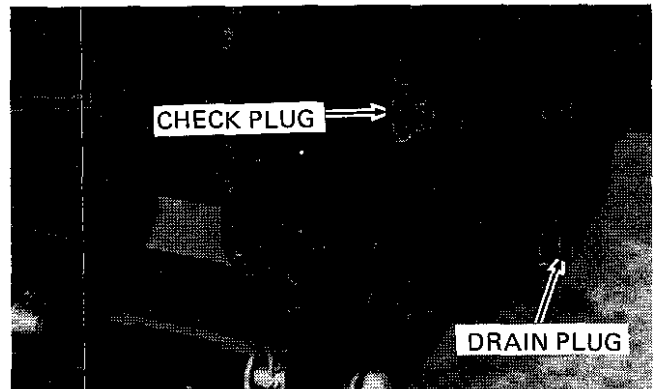


FIGURE 11

5. Fuel Supply: Fill fuel tank completely with clean, fresh, leaded or non-leaded "Regular" grade automotive gasoline. (DO NOT MIX OIL WITH GASOLINE) Store gasoline in small quantities as prolonged storage produces gum. See page 9 item 6 of this manual. (Figure 12).

6. Battery: Be sure the battery is filled to the proper level with electrolyte and the vent holes on each cap are open. See page 18.

7. Lubrication: Lubricate all grease fittings and oil lubrication points shown in figures 32 through 34 of the Maintenance section of this manual.

8. Attachments: Read and become **familiar** with the ATTACHMENTS MANUAL which refers to attachments you will be using with your tractor. IMPORTANT: If you are

using a rotary **mower** with your tractor, the front to rear height adjustment must be checked.

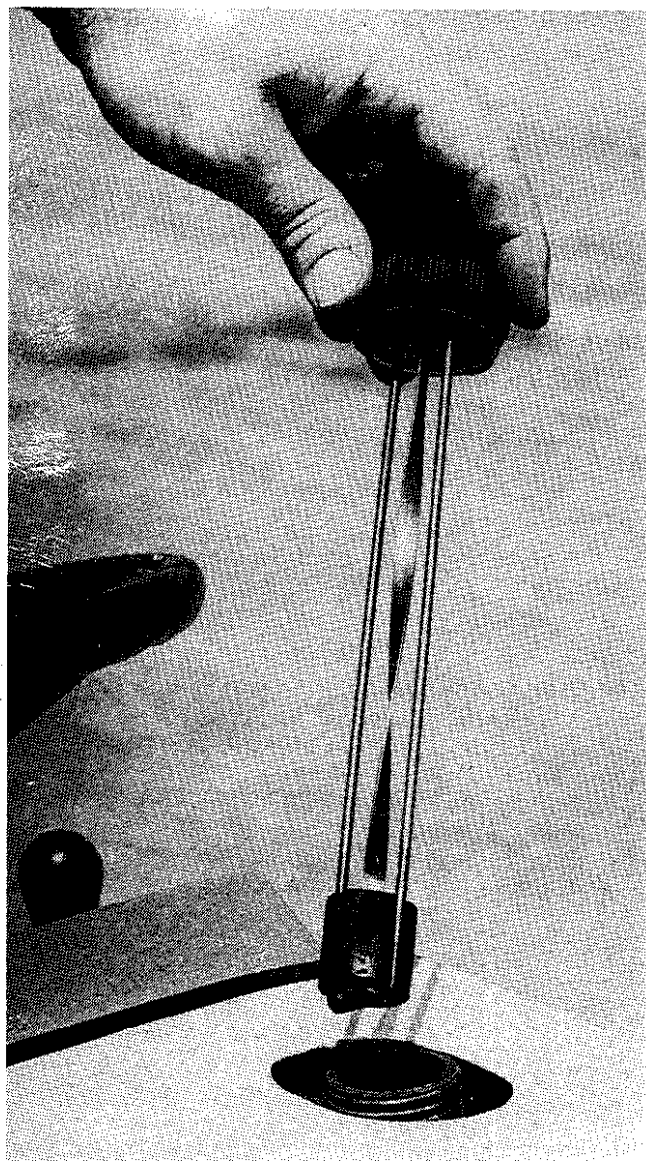


FIGURE 12

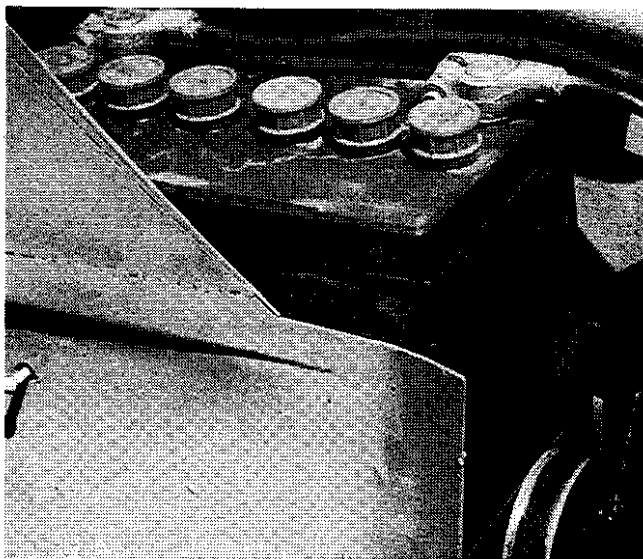


FIGURE 13

STARTING THE ENGINE

1. Insure that the power take-off is **disengaged** by moving the lever to the rear and down. If your tractor has attachments mounted, be sure the power drives to them are disengaged. (See figure 14).

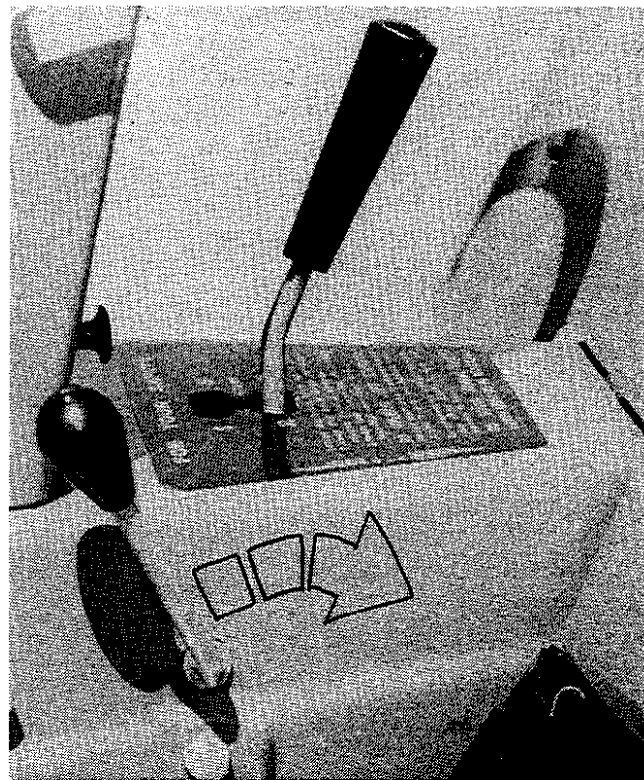


FIGURE 14

2. Place the transmission shift lever **or** hydrostatic control in neutral. **THE ENGINE WILL NOT START UNLESS THE TRANSMISSION LEVERS ARE IN NEUTRAL.** (See figure 15).

3. Depress the clutch **brake** pedal all the way and hold it down. (See figure 16).

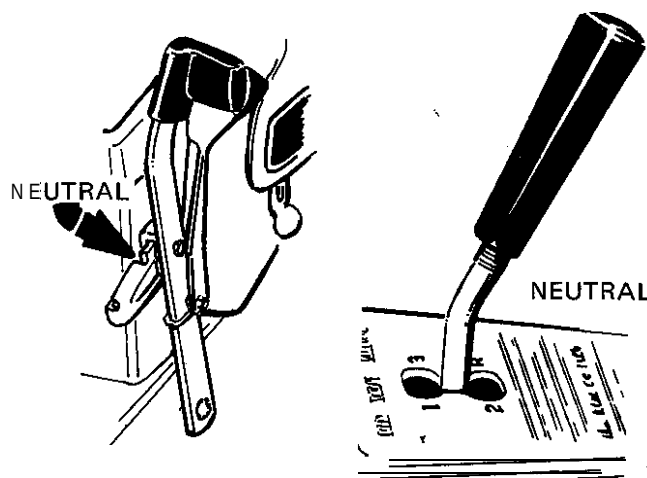


FIGURE 15

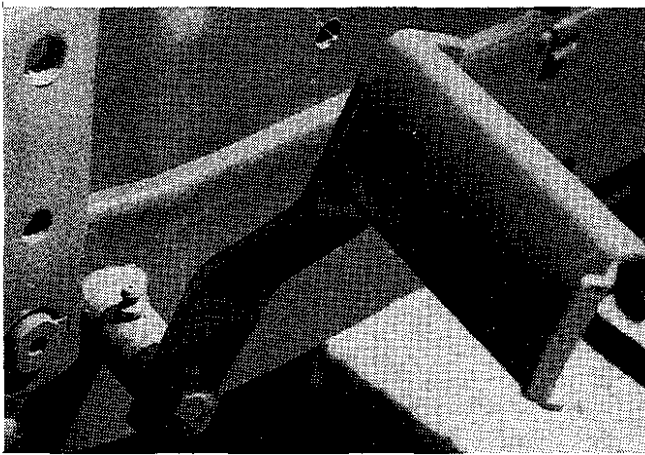


FIGURE 16

4. Move the engine speed control lever forward about $\frac{1}{3}$ of the way. (See figure 17).

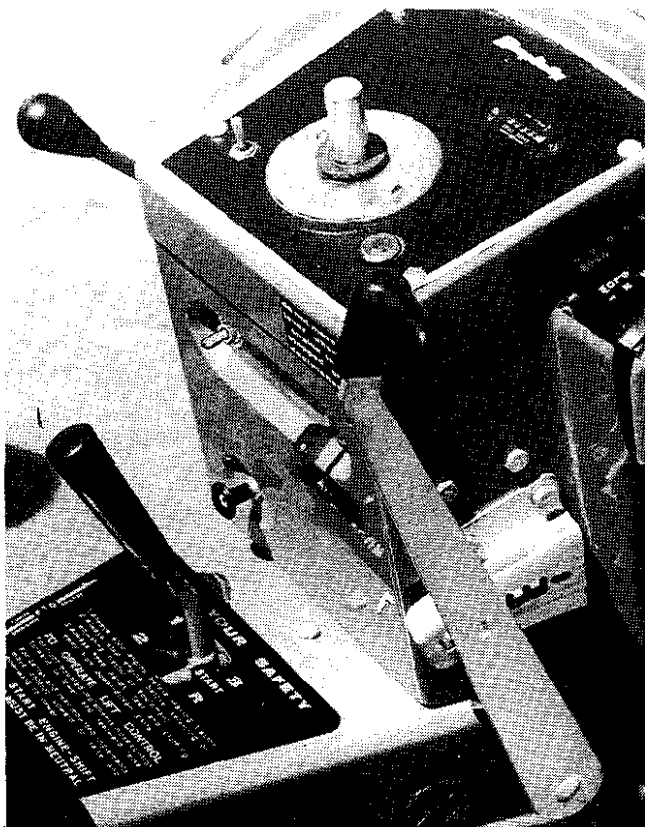


FIGURE 17

5. Pull the choke lever out all the way. (See figure 17).

6. Turn the ignition key clockwise (See figure 17) and hold until the engine starts, then release. If the engine does not crank, move the shift lever or hydrostatic control lever forward and back to insure the **safety** switch is making contact. When the engine starts, push the choke in all the way. If the engine does not start after about half a minute, it may be flooded. Push the choke in and crank to clear the engine of excess **gasoline**.

7. Before applying load to the tractor, allow it to warm up for about a minute, then move the engine speed control

lever to fast or slow as needed for the operation. **DO NOT ALLOW THE ENGINE TO RUN IN AN ENCLOSED BUILDING WHERE CARBON MONOXIDE MAY ACCUMULATE.**

STOPPING THE ENGINE

1. Move the speed control lever to the slow position. To **gradually** reduce engine temperature allow the engine to idle for about a minute if the tractor has been **operated** under full load. Stopping a hot engine too **suddenly** can **cause** damage to engine parts.

2. Turn the ignition key counter clockwise to the vertical position and remove the key to prevent unauthorized "se of the tractor.

CONTROLLING TRACTOR GROUND SPEED

Tractor ground speed can be controlled by the **position** of the transmission controls, by adjusting the engine speed control or by inching (slipping) the clutch. When moving the tractor from one area to another, be sure all attachments are in the raised "transport" position. When beginning travel set the engine speed at about $\frac{1}{3}$ to $\frac{1}{2}$ of full speed.

(Hydrostatic Drive): The hydrostatic equipped tractor is designed so forward and reverse movement can be completely controlled without the "se of the clutch. Simply squeeze the control handle and move it forward to start the tractor moving ahead. To slow the tractor, move the control to the rear. As the control is moved further away from the neutral the tractor ground speed will increase. The brake pedal may be depressed to stop the tractor at any time. It is also very handy to use the clutch to slow down for turns or when moving in tight areas when both, hands are needed for steering.

(Variable Speed): The variable speed drive has two controls. The three speed gear transmission is used to determine the direction of travel and the forward speed range. Always depress the clutch-brake pedal and bring the tractor to a complete stop before attempting to shift **gears**. See item 11 on page 5.. If the **gears** do not engage easily, it may be helpful to let the clutch out for an instant and then depress it again to rotate the gears slightly. The variable speed control can be moved **from position I** to 7 to vary the tractor ground speed in any of the transmission gears. (See item 13 on page 6). **NEVER ATTEMPT TO MOVE THE VARIABLE SPEED CONTROL UNLESS THE CLUTCH IS RELEASED AND THE ENGINE RUNNING.**

STOPPING

1. Slowly depress the clutch-brake pedal until the tractor stops. (Tractors equipped with hydrostatic transmission can be stopped without depressing the pedal by moving the hydrostatic control to the "Neutral" position.)

2. Place the tractor in neutral and set the parking brake.

3. Disengage the power-take-off clutch and lower any attachments to the ground.

4. If the engine **has** been working under full load, allow the engine to idle about a minute before turning the ignition key counterclockwise to the off position.

5. Remove the key to prevent unauthorized use of the tractor.

TROUBLE SHOOTING

IF THE ENGINE FAILS TO TURN OVER — ELECTRIC START MODELS, ONLY, check the following:

1. The shift lever must be in Neutral. Move the lever around to be **sure** the safety switch is contacted.
2. The battery cable clamps must be clean and tight.
3. The starter-generator belt must be tight enough to rotate the engine.
4. The power take-off must be disengaged.
5. The battery may not be charged.

IF THE ENGINE TURNS, BUT WILL NOT START, check the following:

1. Wiring connection at the switch, regulator, and **generator** must be clean and tight.
2. The engine speed control lever must be about $\frac{1}{3}$ open and the choke lever pulled out.
3. The spark plug cable must be tightly connected.
4. The fuel tank must have a good **regular** gasoline in it.
5. The power take-off must be in "Neutral".

IF BELT SLIPPAGE OCCURS, check the following:

1. Belts may be stretched or excessively worn.
2. Pulleys may be greasy or oily.
3. Insufficient belt tension due to a broken or **worn** tension spring.

IF A BELT BREAKS, check the following:

1. Look for sharp edges or rough spots on the pulleys.
2. Pulleys may be misaligned.
3. Belt tension may be too tight.

IF HANDLING IS DIFFICULT, check the following:

1. Controls or drive systems may be out of adjustment.
2. Tires may be under-inflated, or not of equal **pressure**. Inflate tires to **REAR 6-8 PSI FRONT 12-15 PSI**.
3. Wheels spinning on slopes. Wet **grass** is very slippery try to work in the late afternoon after it has dried. Wheel weights may be added to provide additional traction. See Accessories section of this manual.

IF THE POWER LIFT WILL NOT WORK:

1. Check the ignition switch to be sure it is "ON".
2. The circuit breaker may have cut out. Wait a few minutes for it to reset.

ADJUSTMENTS

The Landlord and Sovereign tractors have been designed for easy accessibility to areas which need to be reached in making adjustments and performing maintenance. The underside of the frame has been left open to provide easy access to areas requiring lubrication, adjustment or repairs.

The tractor hood is hinged at the front by two spring loaded bolts. It may be easily opened by releasing the two rubber straps which are located one on each side at the rear of the hood. Pull down and out on the straps to release them. See figure 18. The tractor seat deck is hinged at the back by two bolts. To raise the seat deck, reach under the front of the deck from each side and pull the two locking levers to the outside. As you hold the locks out, raise the seat deck. See figure 18.

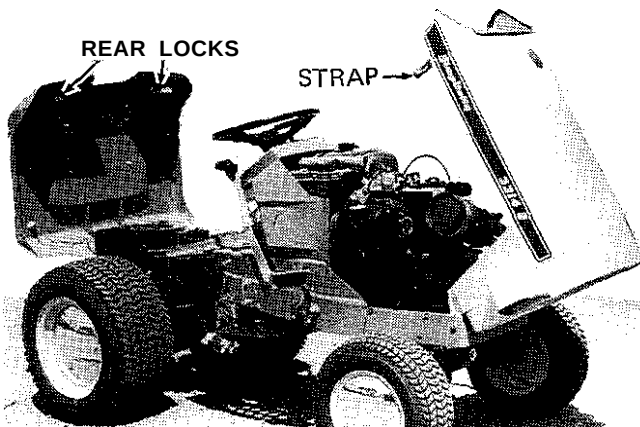


FIGURE 18

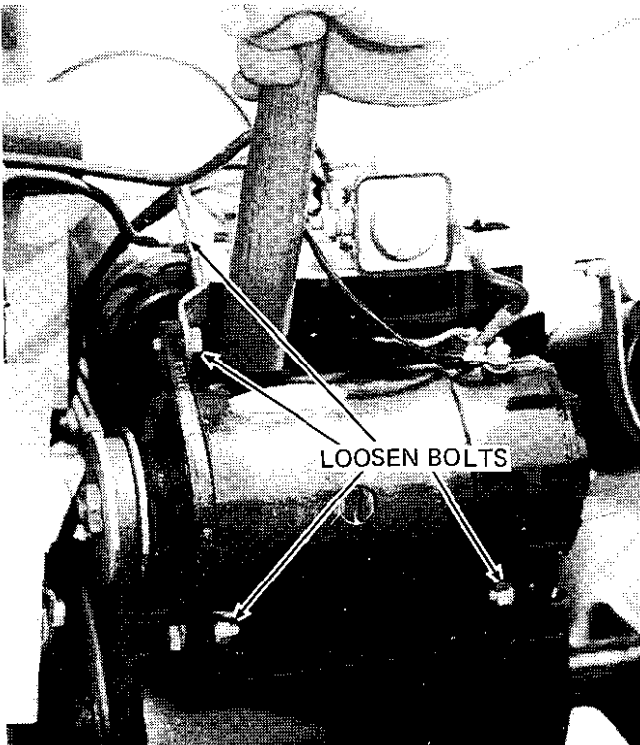


FIGURE 19

Starter-Generator Belt: If the starter turns but the engine does not rotate, the starter-generator belt may need tightening. The belt tension may be adjusted by slightly loosening the two generator mounting bolts and the two adjustment arm bolts. A wooden handle or bar approximately one foot long and 1-1/4 inches in diameter may be placed between the generator and engine block to tighten the belt. See figure 19. While holding the starter-generator in position where the belt is snug, tighten the belt at the slotted end of the adjustment arm. Actuate the starter to **make** sure the engine will rotate. If it does not loosen the bolt and apply more tension to the **belt**. Tighten all four bolts securely when the adjustment has been completed.

SEAT: The tractor seat may be adjusted from front to rear in any of four positions. To change position, remove the two capscrews and two nuts from the underside of the seat deck and line the seat up with the deck holes in the desired position. When the seat is in the two forward positions, two rubber spacers are used between the seat and seat deck at the front of the seat. They are not required when the seat is in the rear position. When the seat is positioned as desired, replace the lockwashers, **capscrews** and nuts and tighten securely.

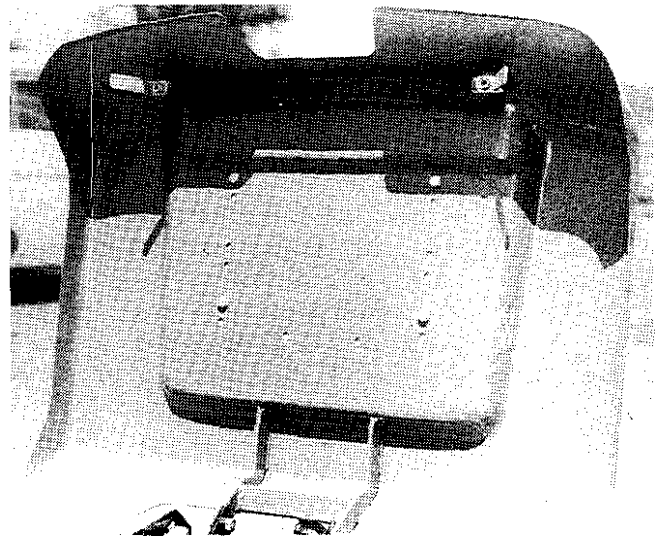


FIGURE 20

Safety Interlock: The safety interlock switch prevents the starter from actuating if the transmission lever is not in neutral. It may need adjustment if the starter fails to **ac-**
tuate when the key is turned to the start position. Also, check the safety interlock adjustment if movement of the transmission shift lever or hydrostatic control becomes difficult. To adjust the safety switch, place the transmission shift lever in the neutral "START" position. On hydrostatic drive models move the control to the neutral **posi-**
tion where the back of it just rests against the neutral "Z" stop on the quadrant. Move the safety switch up or down as required by rotating the two hexagon nuts on either side of the bracket. See figure 21 and 22. Position it so the

starter will actuate. If difficulty is experienced in moving the shift lever through the neutral position, raise the switch until the shift lever **moves** easily. Place a film of grease on the end of the safety interlock to reduce friction and wear.

VARIABLE SAFETY INTERLOCK

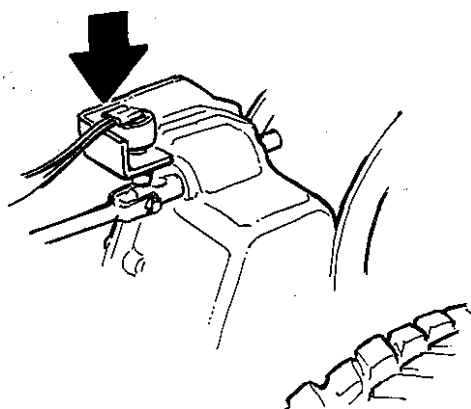


FIGURE 21

Power Take-Off Clutch and Belt Stops: The power take-off clutch can be correctly adjusted only when the attachment such as a mower or sickle bar is mounted and the drive belt connected. The clutch adjustment is made by moving the set collar located **behind** the left **footrest**. Loosen the set-screw on the collar and adjust it so there is about $\frac{1}{4}$ " clearance between the **collar** and the end of the rod guide when the clutch is engaged. **BE SURE, THE SPRING TENSION LEVER AT THE LEFT REAR OF THE TRACTOR IS PULLED BACK IN THE TIGHTENED POSITION.** Set the clutch only tight enough to drive the attachment without belt slippage. Unnecessary belt tension will cause rapid wear of the belt and pulleys. See figure 22.

The power take-off belt stop should be adjusted after the clutch has been adjusted and with the attachment. Loosen the mounting bolt and adjust the belt stop so it is $\frac{1}{8}$ " from the belt when the clutch is engaged. See figure 22. Tighten the mounting bolt securely and check the $\frac{1}{8}$ " dimension again.

The belt guard located at the top of the power take-off unit should be adjusted so there is $\frac{1}{8}$ " clearance between the guard and the belt when the power take-off clutch is engaged. Loosen the mounting bolt and **move** the belt guard as required. See figure 22. Tighten the mounting bolt securely.

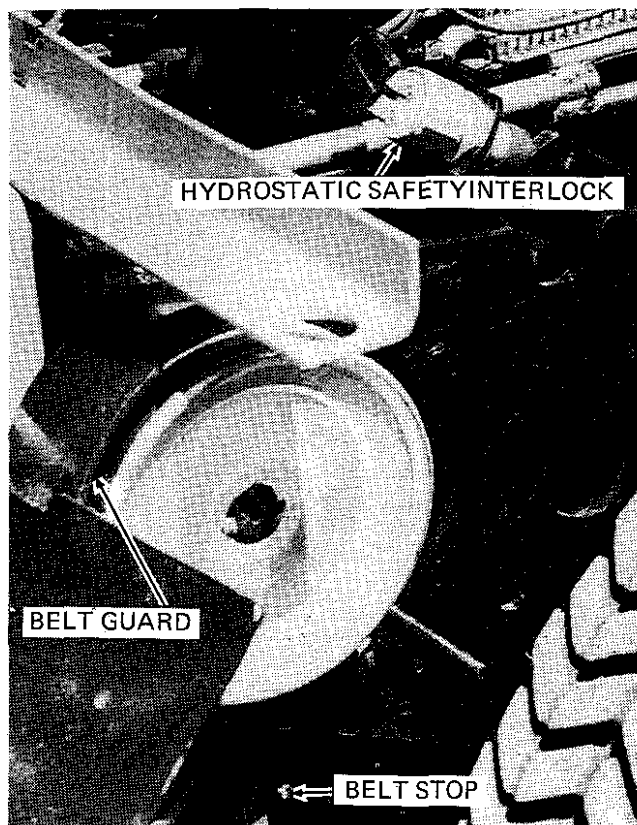


FIGURE 22

Variable Speed Drive: ALWAYS HAVE THE ENGINE RUNNING AND THE CLUTCH ENGAGED (RELEASED) WHEN ATTEMPTING TO MOVE THE VARIABLE SPEED CONTROL LEVER. Adjust the variable speed drive as follows. The reference numbers correspond to the numbers on figure 23:

1. With the engine running and the **transmission** in neutral place the variable control in the fast (7) position.
2. Remove the spark plug wire and place it at least $\frac{1}{2}$ inch away from the spark plug.
3. Loosen slightly, the bolt which holds the control arm to the variable lever.
4. Rotate the engine with the starter and **move** the variable arm until the belt **runs** flush with the top of the small pulleys. This may be **most** easily done by using a bar about 2 to 3 feet long and about $\frac{3}{4}$ inch in diameter to **move** the flat variable **arm**. See figure 23.
5. Tighten the bolt loosened in step 3, being careful not to **move** either the control lever or the variable arm.
6. While rotating the engine with the **starter**, **move** the control lever to the slow (1) position. Loosen the lock nut at the turnbuckle and alternately adjust the turnbuckle and rotate the engine. Adjust the turnbuckle so the belt will ride $\frac{1}{8}$ " below the top of the large pulley when the engine is rotated.

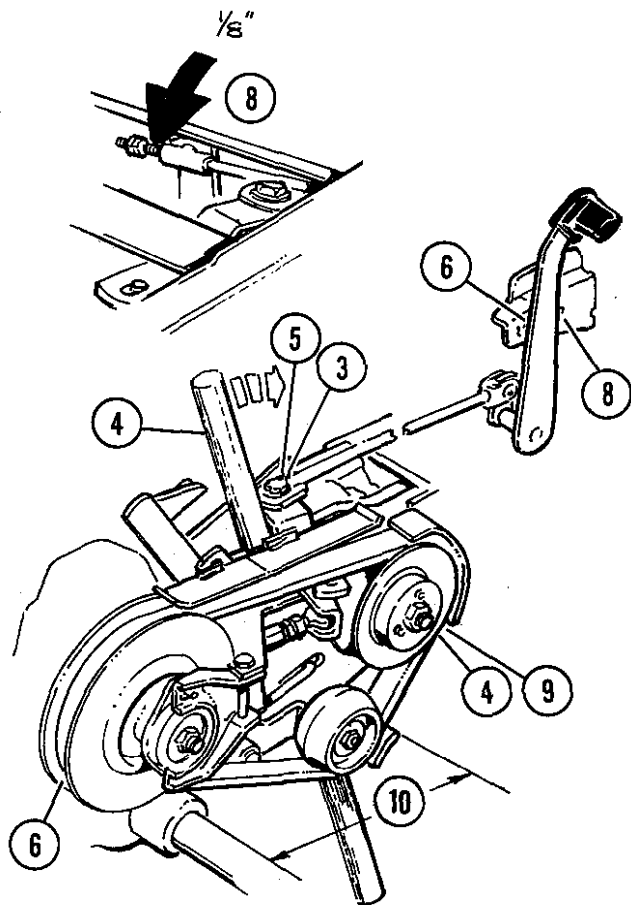


FIGURE 23

7. Replace the spark plug wire and start the engine. Move the control lever **from slow** to fast and check your adjustments. Repeat steps 1 through 6 if not correct.

8. Place the variable speed lever in the high (7) position and adjust the **two** locknuts so there is $1/8$ " clearance between the **nuts** and the rod guide. To loosen the two nuts, hold the forward one while turning the rear one counterclockwise. Tighten the nuts securely against each other after completing the adjustment. See figure 23.

9. With the variable control in the high (7) position adjust the belt guard to obtain a $3/16$ " clearance between the belt and the guard. See figure 23.

10. Loosen the nut at inside of the clutch idler and adjust belt stop so the distance between its front edge and the forward side of the **axle** is $8-7/8$ " See figure 23. Retighten the nut and check the adjustments.

Hydrostatic Transmission: If the tractor tends to creep (move slightly forward or backward) when the hydrostatic

speed control lever is in the Neutral position, the **turnbuckle** may need adjusting. See figure 24. To adjust, place the control lever in the neutral position. **THE HYDROSTATIC LOCKOUT AT THE REAR OF THE TRACTOR MUST BE IN THE "DRIVE" POSITION.** Loosen the nuts at each end of the turnbuckle. Start the engine. If the tractor creeps forward turn the top of the turnbuckle toward the tractor. If the tractor creeps backward, **rotate** the top of the **turnbuckle** away from the tractor. When the **turnbuckle** is adjusted so the tractor will not creep, tighten the nuts at each end.

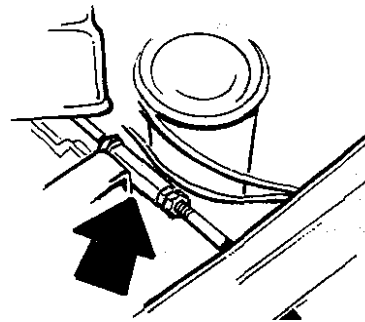


FIGURE 24

The tractor clutch should be adjusted so there is $1/8$ inch clearance between the nuts and the rod guide when the clutch is completely released. See figure 25. Loosen the nuts by holding the forward one while turning the rear one counterclockwise. Retighten the nuts against each other when the adjustment has been completed.

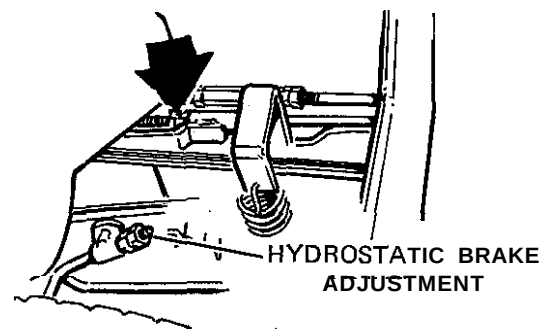
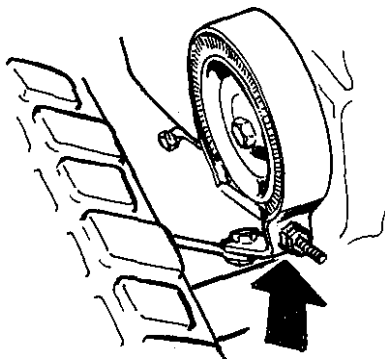


FIGURE 25

Brake Adjustment, Foot Pedal: The foot pedal brake adjustment is at the right rear of tractors equipped with hydrostatic transmissions and at the left rear of those with the variable speed. See figure 26. To adjust, it is necessary to loosen the two nuts. Hold the front one and turn the rear nut counterclockwise to loosen. Turn the forward nut clockwise to **tighten** the **brake** and counterclockwise, to loosen. Tighten only enough so the brake will stop the tractor. Further tightening of the brake may cause the brake to drag when moving the tractor. When the brake is adjusted so it works properly, tighten the rear nut up against the forward one to lock them in place. Hold the forward one with a wrench so you do not **change** the adjustment when tightening the nuts together.



VARIABLE SPEED BRAKE ADJUSTMENT

FIGURE 26

Brake Adjustment, Parking: The parking brake is actuated and adjusted **independently** of the foot brake. It is found at the **rear** of the left footrest on tractors with variable speed transmissions and the right footrest on tractors equipped with hydrostatic transmission. To adjust the parking brake, loosen the nut located behind the footrest. See figure 27. **Rotate** the brake lever clockwise to tighten and

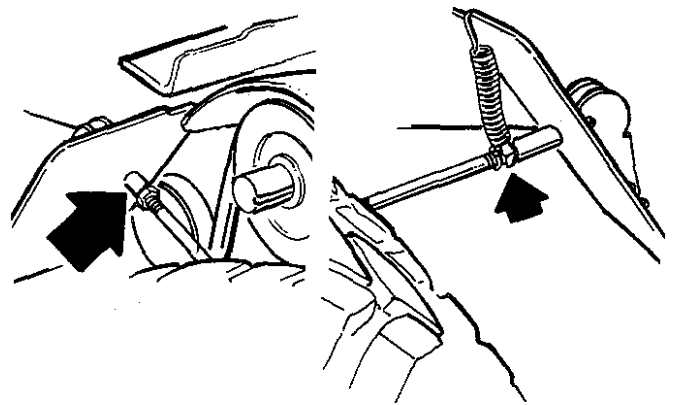


FIGURE 27

counterclockwise to loosen the brake. The brake should be tight enough so it **will** hold, yet be easily placed in the "locked" position. Before retightening the locking nut, be sure the brake lever is positioned so it is in the 1 o'clock position as viewed from the front on tractors equipped with variable speed transmission and in the 11 o'clock position on tractors equipped with hydrostatic transmission.

MAINTENANCE

Regular maintenance of your Simplicity tractor will greatly increase its useful life and reduce repair costs. A wide variety of attachments and accessories permit use of your tractor throughout the year. **BECAUSE YOUR TRACTOR IS A MULTI-SEASON TOOL, IT IS VERY IMPORTANT TO SERVICE THE ENGINE FOR THE SEASON IN WHICH IT WILL BE OPERATED.** Be **sure** to change to winter grade oil before making cold temperature starts. Fuel refiners change the volatility of gasoline for each season of the year. Using the proper fuel for the season of operation will improve starting. Refer to your Briggs and Stratton manual for engine maintenance in addition to the steps listed here.

EVERY 5 HOURS

Before starting the engine and at least once every five hours check the oil level in the engine crankcase. Turn the inspection-fill plug counterclockwise to remove. Maintain the oil at the **FULL** line on the engine dipstick. See figure 28.

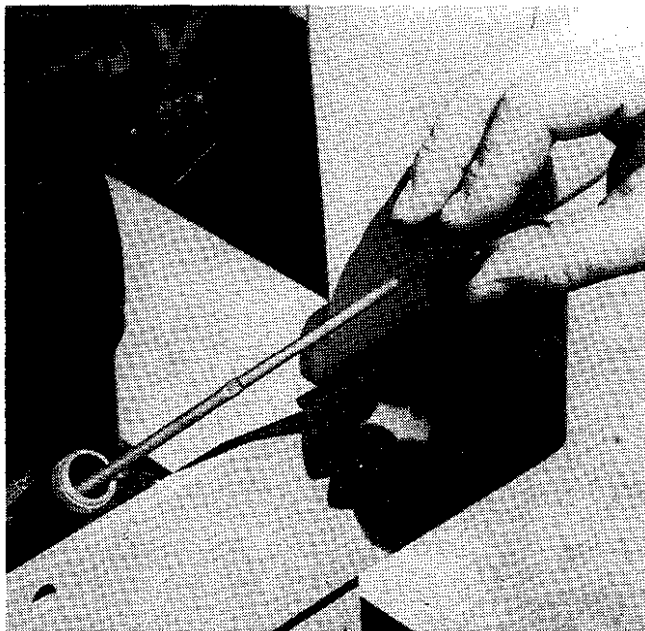


FIGURE 28

EVERY 25 HOURS

Every 25 hours or **oftener** under extremely dusty conditions, **all** attachments should be removed from the tractor and the following maintenance procedures performed:

1. Clean the Cooling System: Continued operation with a clogged cooling system causes **severe** overheating and possible engine damage. Remove all grass and chaff from the engine shrouds and fins, and the flywheel screen at the lower rear of the tractor.

2. Change Engine Oil: Drain the crankcase when the engine is warm. Remove the oil drain plug found on the left. See figure 29. After the oil has completely drained replace the plug and tighten securely. Refill the crankcase with four pints of a high quality detergent oil classified MS. It is essential to long engine life that the crankcase oil remain free of contaminants. Use a clean funnel and clean the top of the oil can before opening to insure foreign material does not get in the crankcase when you are adding oil.

Winter (Below 40°F)

Use SAE 5W-20

If not Available
use SAE 10W

Summer (Above 40°F)

Use SAE 30

If not Available
use SAE 10W 30

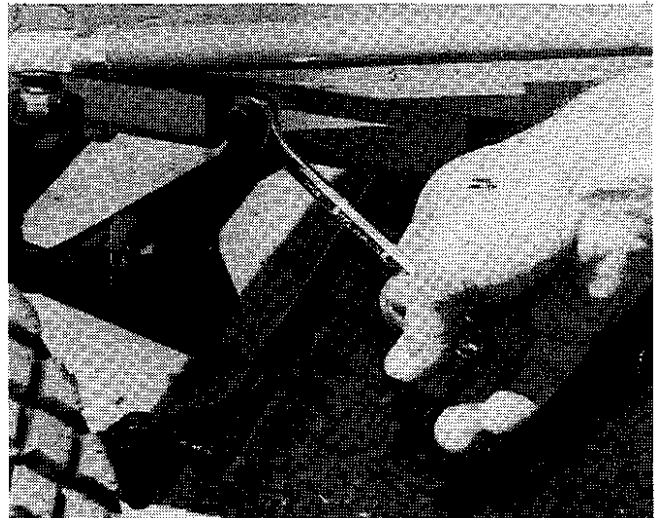


FIGURE 29

IT IS VERY IMPORTANT TO SERVICE THE ENGINE ACCORDING TO THE SEASON AND TEMPERATURE IT WILL BE USED IN.

3. Service the Air Cleaner: Turn the **capscrew** at the top center of the air cleaner counterclockwise and remove. Remove the **cover** and foam element. Remove the screen from inside the foam element. Wash the element in kerosene or liquid detergent and water to remove dirt. Wrap foam in cloth and squeeze dry. Saturate the foam in engine oil and squeeze to remove excess. Put the screen inside the foam element, being sure the sealing lip is **over** the end of the screen at both the top and bottom. Replace the element, cover and **capscrew** and tighten securely.

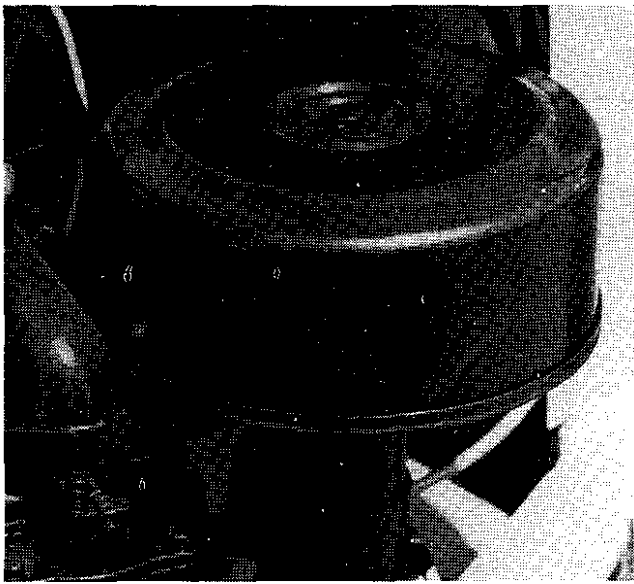


FIGURE 31

4. Lubricate Grease Fittings: There are six grease **zerks** on the tractor located as follows: two on the front spindles and one on the steering bearing housing, power take-off, right **rear axel** and clutch. Give each **zerk** about 3 shots of automotive type grease every 25 hours. See figures 32 through 36.

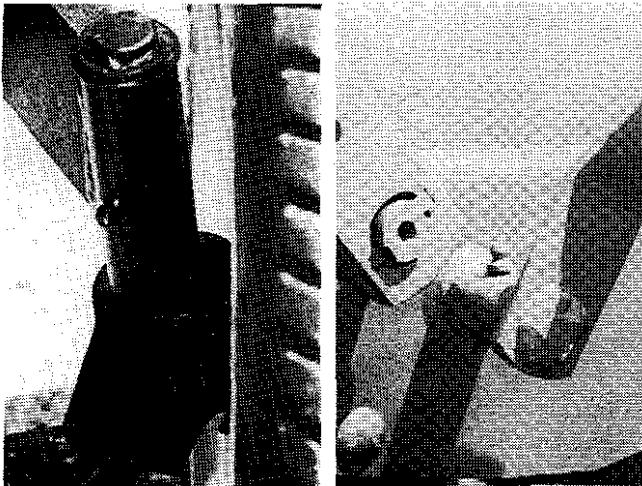


FIGURE 32

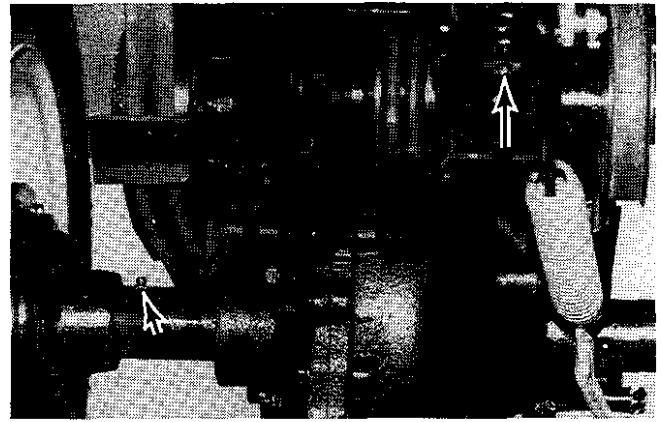


FIGURE 34

5. Check the Oil Level in the **gear** box located above the power take-off. Turn the pipe plug counterclockwise to **re-move**. The oil should be level with the top of the elbow at the rear of the gear box. If necessary, add SAE 90 wt. transmission oil. Reinstall the plug securely. See figure 35.

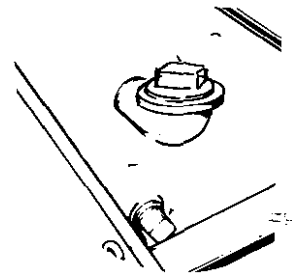
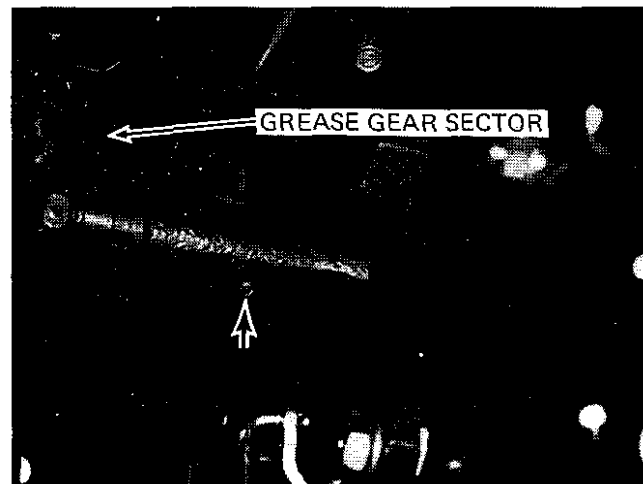


FIGURE 35

6. Lubricate Pivot Points: Place a few drops of engine oil on all pivot points to reduce wear and provide for easier operation. See figures 36 through 38. Be careful not to get oil on belts or pulleys as it may cause slippage. Place a film of grease on the steering gear sector. See figure 36.



FIGURES 33 & 36

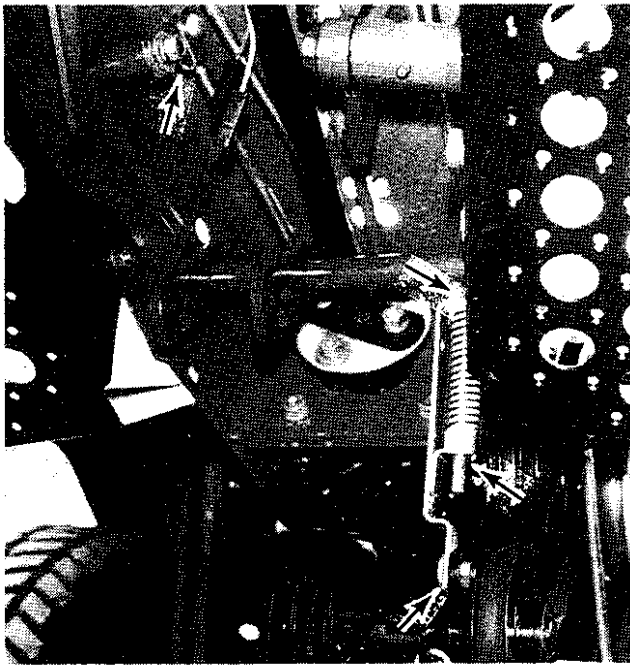


FIGURE 37

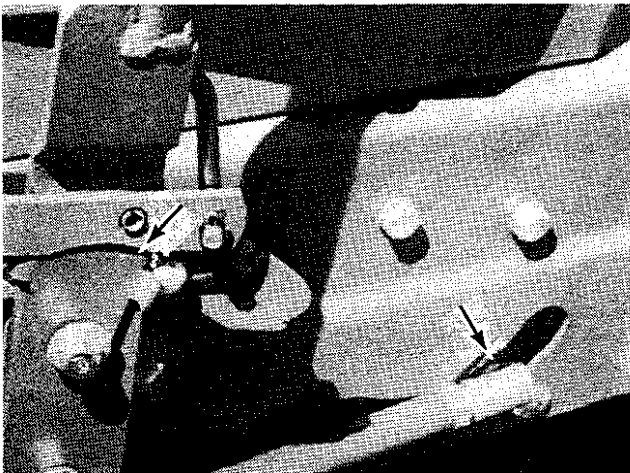


FIGURE 38

7. Check the Transmission Oil Level (Variable Speed Transmission): Remove the plug at the right rear of the transmission. See figure 39. The oil should be level with the bottom of this hole. If necessary add SAE 90 transmission oil. Replace the plug and tighten securely. It is not



FIGURE 39

normally necessary, but if you wish to drain oil from the transmission; the drain plug is located at the lower right side of the transmission.

(Hydrostatic Transmission): Check the oil level of the hydrostatic unit with the engine stopped at the plug in the reservoir. (See figure 10.) Turn the plug counterclockwise to remove. The oil should be level with the bottom of the threads. If it is not, remove the capscrew and cover from the top of the reservoir and add Dexron automotive transmission fluid which is available locally from several major oil companies. Replace the cover, capscrew and inspection plug and tighten securely. The hydraulic oil filter in the bottom of the reservoir has to be changed only when dirt gets into the hydraulic oil in the reservoir or the hydrostatic transmission is removed for repair. If it should be necessary to change the filter, remove the nut and cover from the top of the reservoir. Disconnect one of the hoses at the bottom of the reservoir to drain the oil. Raise the end of the hose and tie it up so oil will not run out of the transmission. Remove the filter and replace with a new one. Replace the hose and add Dexron Automatic Transmission Fluid to the reservoir up to the level of the inspection plug. Replace the cover and nut on the reservoir.

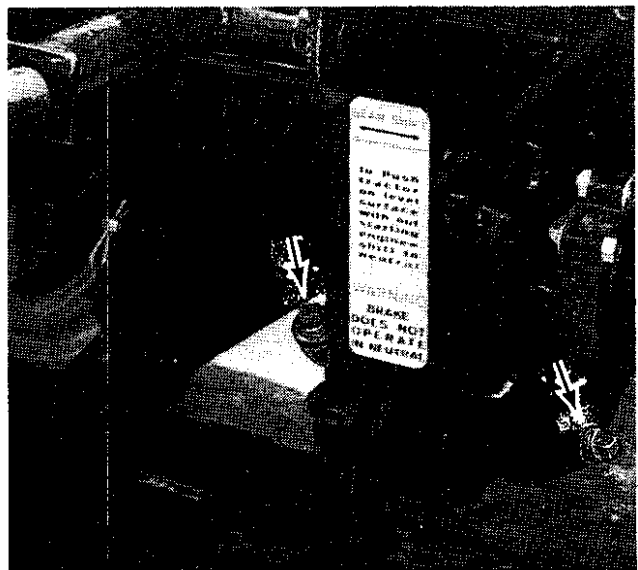


FIGURE 40

Remove the snap out rubber plug from the fan and oil cooler housing and clean fan and housing with air or water under pressure. Replace the plug by pressing it into the hole.

Check the oil level in the axle housing at the elbow located at the rear of the housing. Remove the pipe plug from the elbow. Oil should be level with the top of the elbow. If necessary, add SAE 90 wt. transmission oil. Replace the plug and tighten securely (See figure 40).

8. Check the Battery Water Level to insure it is maintained at the battery ring or approximately 1/2 inch above the plates. See figure 41. If water is needed, add distilled water

just before charging to mix the solution. DO NOT OVER FILL THE BATTERY.

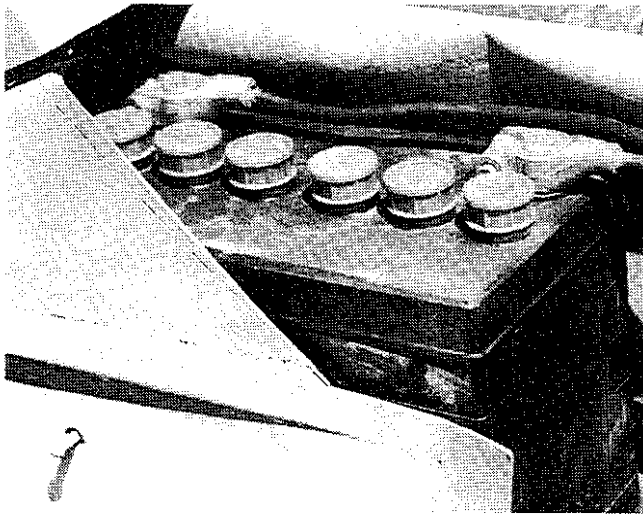


FIGURE 41

9. Check the Air Pressure on Tires: Front 12-15 PSI and Rear 6-8 PSI.

EVERY 100 HOURS OR ONCE A YEAR

1. **Remove the Spark Plug.** clean or replace and set the gap at .030. DO NOT SAND BLAST PLUGS, AS THE ABRASIVE PARTICLES LEFT ON THE PLUG MAY DAMAGE THE ENGINE. Plugs may be cleaned by scraping or wire brushing and washing in a solvent.

2. Remove the **Battery Cables.** ALWAYS REMOVE THE NEGATIVE "GROUND" CABLE FIRST AND REPLACE it last. Clean the battery with soap and water to remove all dirt, oil and corrosion from battery surface. DO NOT ALLOW FOREIGN MATERIAL OR CLEANING SOLUTION TO GET INSIDE BATTERY. Clean the terminals and cable clamps with a wire brush. Replace and tighten snugly. After tightening, coat the terminals and clamps liberally with grease or **vaseline** to inhibit corrosion.

3. **Clean and Repack the Front Wheel Bearings.** Before attempting to remove the wheel, block or jack the front of the tractor so the wheel you are to work on is not supporting the tractor. Remove the grease cup by prying off with a screw driver. Use an **allen** wrench to loosen the set collar. Remove the set collar, outer bearing, wheel, and inner bearing. It is best to keep the two bearings separate, so you can put them back in their original place. Wash the bearings, shaft and wheel bearing housing with a suitable solvent and wipe dry. Inspect the seal at the inner wheel. Replace it if damaged. Using the palm of your hand force a good quality wheel bearing grease into the bearings. Place a **coating** of grease on the **axel** where the seal will turn. Replace the inner bearing and the seal and slide the wheel on the **axel**. Replace the outer bearing and the set collar. Spin the wheel slowly and press in on the set collar to set the bearings. Be sure the seal on the inside of the wheel is properly seated. Hold in on the set collar and tighten the **allen** screw securely. Replace the grease cup.

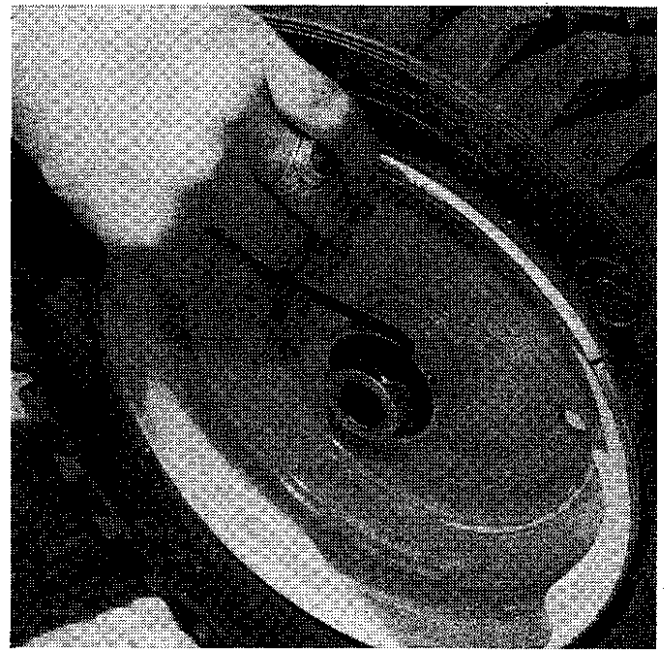


FIGURE 42

SERVICE

Battery Replacement: A dead battery or one too weak to start the engine may not necessarily mean the battery needs to be replaced. The voltage regulator or generator may not be charging it properly. If there is any doubt what is causing the problem, see your **Simplicity** dealer. If you need to replace the battery, proceed as follows:

1. Disconnect the battery cables, (REMEMBER TO REMOVE THE NEGATIVE "GROUND" CABLE FIRST), and remove the old battery from the tractor.

2. Wash the battery mounting area and clamps with soap and water. Remove corrosion from cable ends with a wire brush. Check the new battery to be sure it is filled with the special electrolyte to the rings or marks and the vent holes in the filler caps are open.

3. Carefully place the new battery in the tractor. Fasten the battery hold down clamp and connect the cables. CONNECT THE (+) POSITIVE CABLE FIRST.

4. After tightening the cable clamps, put a liberal coat of grease or **vaseline** on them to inhibit corrosion.

GENERAL REPAIR

To prevent rusting, sand off and paint any parts which become chipped or damaged. Apply a good rust preventative to all bare metal parts. Keep all **fastners** and guards tightened securely.

OFF SEASON STORAGE

When the tractor is to be stored without use for a period of one month or longer, the following precautions should

be taken to insure your tractor will be, ready to go when you need it.

1. Drain the **fuel** tank completely by cunning the tractor until it stops. This may be easily done by removing the gas line at the carburetor, and draining the tank through this hose. If you desire, fuel may be stored in the tank or a **small** container if a good brand of gasoline stabilizer is used. This **additive, available** from your Simplicity dealer, prevents formation **of** gum and varnish for up to one year, providing easier starting and a clean fuel system.

2. Drain and refill the crankcase when the engine is warm. See "Maintenance".

3. Remove spark plug, **pour** one ounce of **10W-30** oil into cylinder through plug hole. Crank engine a few times to distribute oil and reinstall the plug.

4. Clean dirt and chaff from cylinder head fins and engine housing.

5. Grease all **zerks** and apply oil to all points shown in "Maintenance".

6.. Block the machine up off the wheels to relieve weight and keep tires off a damp floor. Protect the tires from prolonged exposure to direct sunlight.

7. Store the machine in a dry place indoors.

STARTING AFTER STORAGE

1. Remove the spark plug and wipe dry. Crank the engine a few times to blow the excess oil out of the plug hole. **Re-**install the plug.

2. Fill the fuel tank with fresh "**regular**" gasoline. (Unless a fuel stabilizer has been used.)

3. Service the air cleaner. See "Maintenance".

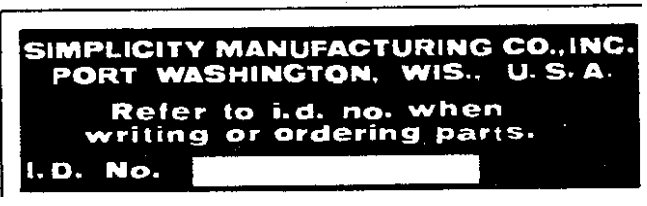
4. Check the crankcase oil level and replenish if necessary. See "Maintenance".

5. Start the engine outdoors or in a well ventilated area. **DO NOT** run the engine at high speed immediately after starting.

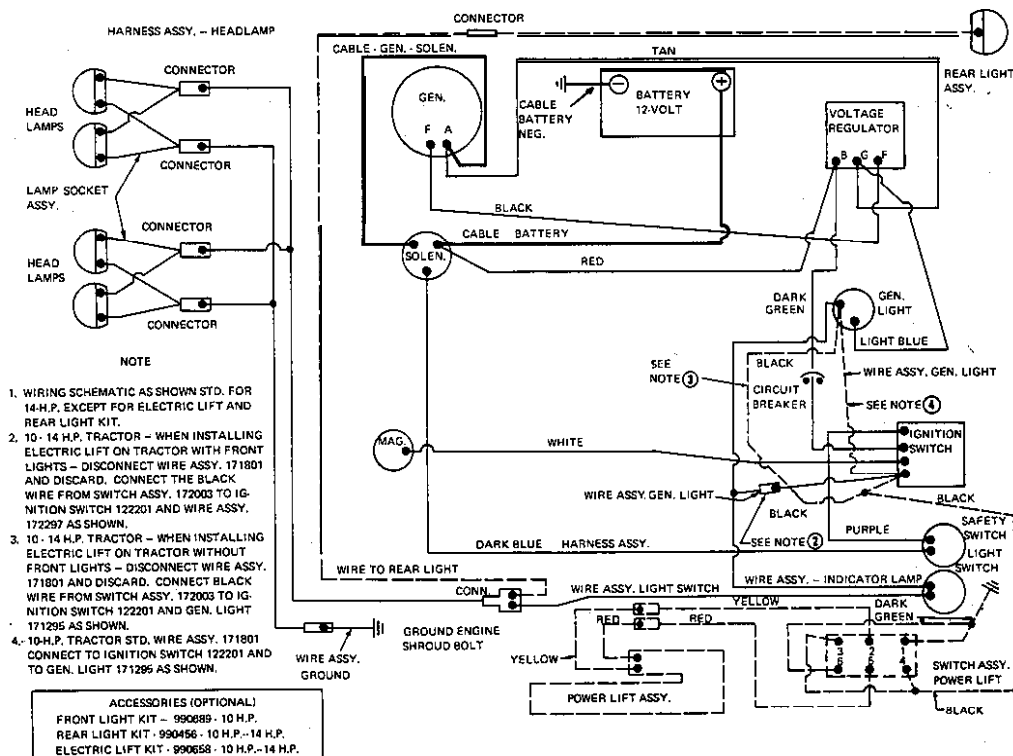
6. Inflate the front **tires** to 12.15 PSI and rear to **6-8** PSI.

REPLACEMENT PARTS

Replacement parts for your Simplicity equipment should be purchased from your Simplicity dealer. Be prepared to give him the tractor name, model and the ID number found on the plate pictured below.



USE ONLY SIMPLICITY BELTS AND BLADES.



SPECIFICATIONS

ENGINE SPECIFICATIONS

SOVEREIGN

LANDLORD

MAKE	Briggs & Stratton	
MODEL NO.	320421	243431
NUMBER OF CYLINDERS	One (Cast Iron)	
CRANK SHAFT PLANE	Horizontal	
HORSEPOWER (AT 3600 RPM)	14	10
PISTON DISPLACEMENT	32.4 Cu. In.	23.94 Cu. In.
BORE	3-9/16"	3-1/4"
STROKE	3-1/4"	3-1/4"
CYLINDER MATERIAL	Cast Iron	
EXHAUST VALVE AND SEAT	Stellite	
VALVE ROTATORS	Yes	Yes
SYNCHRO BALANCED (85% Horizontally, 60% Vertically)	Yes	
IGNITION	Patented High Voltage Magneto	
GOVERNOR TYPE	Adjustable Mechanical Fully Enclosed and Lubricated	
RANGE	1000-3600	1000.3600
LUBRICATION	Splash, Capacity 4 Pints	
STARTING (Key Controlled with Solenoid)	Electric Starter Generator	
VOLTAGE REGULATOR	3 Unit Type	
BATTERY	40 Ampere Hour, 12 Volt	
PROTECTION (Electrical)	20 Ampere Circuit Breaker and Warning Light	
AIR CLEANER	Reusable Oil Foam Type	
MUFFLER	Large, Quieter Enclosed	
FUEL CAPACITY (Gage is Standard Equipment)	3 Gallons (Regular Grade Gasoline)	

HYDROSTATIC TRANSMISSION

MAKE	Vickers
TYPE	Piston to Piston
LUBRICATION AND WORKING FLUID	Type A Automatic Transmission
CAPACITY (INDEPENDENT SYSTEM)	1-3/4 Quarts
TEMPERATURE PROTECTION	Oil Cooler with Fan and Cold Weather By-Pass Valve
NEUTRAL IDENTIFICATION	Z Pattern Control
DISCONNECT (PUSHING)	Sliding Gear
CLUTCH (STARTING and OPERATING)	V-Belt Idler Drive
SPEEDS (STEPLESS HOLDS POSITION)	0-7 MPH Forward, 0-4 MPH Reverse
SOFT RIDE VALVE	Fast Acting (No Spring Change Required for Tilling)
PROTECTION	High Pressure Relief Valve: Filter
GEAR REDUCTION UNIT (HOUSING)	Cast Iron Housing
GEARS and BEARINGS	Hardened Spur Gears, Rolling Contact Bearings
LUBRICATION	SAE 90 Gear Oil • 1-1/2 Quarts
VARIABLE SPEED TRANSMISSION	
MAKE	Simplicity
TYPE	Synchronized Variable Speed Sheaves and 3 Speed Spur Gear Transmission
SPEED RANGE (7 STEPS EACH GEAR)	
1st GEAR	.815 to 1.56 MPH
2nd GEAR	2.04 to 3.65 MPH
3rd GEAR	3.36 to 6.1 MPH
REVERSE	1.73 to 3.14 MPH
CONSTRUCTION -HOUSING	Cast Iron
GEARS	Hardened Spur Gears
BEARINGS	Rolling Contact
LUBRICATION	SAE 90, Capacity 1-3/4 Quarts

**BEVEL GEAR HOUSING
(Hydrostatic and Variable)**

MAKE	Simplicity	
HOUSING MATERIAL	Cast Iron	
GEARS	Bevel Type, Hardened Steel	
BEARINGS	Rolling Contact	
LUBRICATION	SAE 90, Capacity 1 Quart	
DIFFERENTIAL (Hydrostatic and Variable)		
MAKE	Simplicity	
HOUSING MATERIAL	Drawn Steel	
GEARS	Spur Type. Hardened Steel	
LIMITED SLIP	8 Springs and Hardened Washers Automatically Transfer Maximum Driving Force From Slipping Wheel Which is Possible Without Scuffing Lawns On Turns.	
CLUTCH/BRAKE (Single Pedal) PARKING BRAKE	Clutch Is V-Belt Idler. Brake Is Band Type. Cam Controlled For Controlled Uphill Starts- Operates Independently Of Foot Brake.	
FRAME	Welded Deep Drawn Steel, Open Construction	
FRONT AXLE PIVOT	Large Area Belt With "Wishbone" Support For Added Stability	
STEERING	Bevel Gear Type, Ratio 4.66 to 1 .O	
SEAT	Large High Back With Drain Slot. Black Naugahide Over Thick Moulded Foam Rubber Cushion.	
DIMENSIONS:'	SOVEREIGN	LANDLORD
OVERALL LENGTH (Less Attachments)	67"	67"
OVERALL WIDTH (Less Attachments)	36-3/4"	34-1/2"
OVERALL HEIGHT TO TOP OF STEERING WHEEL	39-1/4"	39-1/4"
OVERALL HEIGHT TO TOP OF HOOD WHEEL	35"	35"
OVERALL HEIGHT TO TOP OF HOOD CLOSED	35"	35"
WHEEL BASE	48"	

SOVEREIGN
LANDLORD

READ FRONT (Inside Tires)	30"	
TREAD REAR (Inside Tires)	26"	
TURNING RADIUS	30-1/2"	
TIRES, FRONT, Size	16 x 6.50 x 8	4.8/4.0 x 8
TYPE AND INFLATION PRESSURE	Pneumatic, 6-8 psi Rear, 12-15 psi Front	
TREAD	Turf	
TIRES, REAR, Size	23 x 10.50 x 12	23 x 8.50 x 12
NET WEIGHT	Hydro-922, Vari-883	Hydro-825, Vari-785
SIDE HILL AND UPHILL OPERATION	20% Slope without Wheel Weights 40% Slope with Wheel Weights	
GROUND CLEARANCE, FRONT AXLE	9"	
AT DIFFERENTIAL	6"	
RAWBAR	7"	
CENTER OF FRAME	15-1/4"	
ATTACHMENT MOUNTING (Front and Center)	Attachments Mount To And Tilt With Front Axle. Connect with 2 Pins And Spring Clips (No Tools Required)	
REAR	Draw Bar And Lower And Upper Pivoting Horizontal Mounting Is Standard. Movable Mast To Complete 3 Point Hitch Is Optional Extra (Rear Lift Kit)	
ATTACHMENT LIFT MANUAL (Standard)	Lift Lever With Notched Sector Includes Float Position Cam	
POWER (Optional)	Electric Powered, Highly Efficient Recirculating Ball Screw, Easily Installed. Stops Precisely (Includes Brake) And Holds Position.	

ACCESSORIES

MFG.	NO.	574	SNOW TIRE AND WHEEL SET
MFG.	NO.	673	SNOW CAB
MFG.	NO.	504	540 RPM REAR PTO (1-3/8 SPLINE)
MFG.	NO.	686	BALL HITCH FRONT
MFG.	NO.	685	BALL HITCH REAR
MFG.	NO.	689	FRONT LIGHT KIT (STANDARD EQUIPMENT ON SOVEREIGN)
MFG.	NO.	466	REAR LIGHT KIT (REQUIRES 689 FOR LANDLORD)
MFG.	NO.	280	HUB CAPS, SET OF 4
MFG.	NO.	617	HUB CAPS, FRONT PAIR ONLY
MFG.	NO.	536	WEIGHT, WHEEL, REAR
MFG.	NO.	449	WEIGHT, WHEEL, FRONT
MFG.	NO.	668	WEIGHT, FRONT
MFG.	NO.	182	WEIGHT, REAR
MFG.	NO.	045	WEIGHT, AUXILIARY (FITS ON 182)
MFG.	NO.	658	POWER LIFT KIT
MFG.	NO.	584	DUAL WHEEL SPACER (REQUIRES NO. 574)
MFG.	NO.	690	REAR LIFT KIT
MFG.	NO.	523	CHAINS, PAIR FOR THE SIZE (23 x 10.50 x 12)(SOVEREIGN)
MFG.	NO.	315	CHAINS, PAIR FOR TIRE SIZE (23 x 8.50 x 12)(LANDLORD)
MFG.	NO.	181	CHAINS, PAIR FOR TIRE SIZE (6 x 12)(SNOW TIRES)
MFG.	NO.	635	STORAGE COVER (TRACTOR AND MOWER OR GRADER BLADE)
MFG.	NO.	636	STORAGE COVER (TRACTOR, MOWER & TILLER OR SNOW THROWER OR DOZER BLADE.
MFG.	NO.	632	CUSTOMER TOOL KIT (WRENCHES, PLIERS AND SCREWDRIVERS)

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