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# INDEX

Slope Gauge	
Rules for Safe Operation	
Assembly	6
Controls	10
Operation	12
Adjustments	13
Lubrication	14
Maintenance	16
Off-Season Storage	19
Trouble Shooting Charts	20-22
Electrical Diagram and Parts List	
Illustrated Parts for Tractor	23-33
Illustrated Parts for Transaxle	

Dear Customer,

So often throughout the year we are all in a rush to meet our daily obligations. However, we at White Outdoor Products are taking a quick moment out to say.

"Thank you for your business."

Sincerely, WHITE OUTDOOR PRODUCTS

INSTRUCTIONS GIVEN WITH THIS SYM-BOL ARE FOR PERSONAL SAFETY. BE SURE TO FOLLOW THEM.

# LIMITED WARRANTY For two years from the date of original retail purchase, WHITE OUTDOOR PRODUCTS will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by WHITE OUTDOOR PRODUCTS. This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or unless the unit has been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, motor, battery, battery charger or component parts thereof. Please refer to the applicable manufacturer's warranty on these items. Warranty on units used commercially is limited to sixty (60) days. Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of WHITE OUTDOOR PRODUCTS. The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by WHITE OUTDOOR PRODUCTS. This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

**WARNING:** This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through your nearest engine authorized service center.

-Cut Along Tms Line

# USE THIS SHEET AS A GUIDE TO DETERMINE SLOPES WHERE YOU MAY NOT OPERATE SAFELY.





Do not mow on inclines with a slope in excess of 15 degrees (a rise of approximately 2½ feet every 10 feet). A riding mower could overturn and cause serious injury. If operating a walk-behind mower on such a slope, it is extremely difficult to maintain your footing and you could slip, resulting in serious injury.

Operate RIDING mowers up and down slopes, never across the face of slopes. Operate WALK-BEHIND mowers across the face of slopes, never up and down slopes.

P G

# CONTENTS OF HARDWARE PACK

Remove this sheet from your owner's manual and lay the hardware on the illustration for identification purposes. Refer to the separate deck manual for any information concerning the deck. After assembly, keep the Slope Gauge which is on the reverse side of this sheet for future use.



# **IMPORTANT** RULES FOR SAFE OPERATION

THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS WHICH, IF NOT FOLLOWED, COULD EN-DANGER THE PERSONAL SAFETY AND/OR PROPERTY OF YOURSELF AND OTHERS. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE YOUR UNIT. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY. WHEN YOU SEE THIS SYMBOL— A HEED ITS WARNING.



Your unit was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. If you violate any of these rules, you may cause serious injury to yourself or others.

- 1. READ THIS OWNER'S MANUAL carefully in its entirety before attempting to assemble or operate this unit. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
- This unit is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.
- 3. Know the controls and how to stop the machine quickly.
- 4. Do not allow children to operate vehicle. Do not allow adults to operate it without proper instruction. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
- Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts to avoid entanglement in the moving parts. Never operate a unit in bare feet, sandals, or sneakers.
- To prevent injury, do not carry passengers or give rides. Keep children, pets and bystanders out of the area while mowing. Only the operator should ride on the unit and only ride in the seat.
- 7. Check overhead clearance carefully before driving under power lines, guy wires, bridges or low hanging tree branches, before entering or leaving buildings, or in any other situation where the operator may be struck or pulled from the unit, which could result in serious injury.
- 8. To maintain control of the unit and reduce the possibility of upset or collision, operate the tractor smoothly. Avoid erratic operation and excessive speed.
- 9. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower. Although the area of operation should be completely cleared of foreign objects, a small object may have been overlooked and could be accidently thrown by the mower in any direction and cause injury to you or a bystander.
- Stop the blade(s) when crossing gravel drives, walks or roads.
- 11. Disengage all attachment clutches and shift into neutral before attempting to start engine.
- 12. Disengage power to attachment(s) and stop engine before leaving operating position.
- Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times as the rotating blade(s) can cause injury.
- 14. Disengage power to attachment(s) and stop engine before making any repairs or adjustments. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.

- 15. Before attempting to unclog the mower or discharge chute, stop the engine. The mower blade(s) may continue to rotate for a few seconds after the engine is shut off. Therefore, be sure the blade(s) have stopped completely. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
- 16. Disengage power to attachment(s) when transporting or not in use.
- 17. Take all possible precautions when leaving vehicle unattended such as disengaging power take-off, lowering attachments, shifting into neutral, setting parking brake, stopping engine and removing key.
- 18. For your safety, use the slope gauge included as part of this manual to measure slopes before operating this unit on a sloped or hilly area. If the slope is greater than 15° as shown on the slope gauge, do not operate this unit on that area or serious injury could result.
- 19. Do not stop or start suddenly when going uphill or downhill. Mow up and down face of steep slopes; never across the face. Use extreme caution if it is necessary to drive the tractor up an incline or back the tractor down an incline because the front of the tractor could lift and rapidly flip over backward which could cause serious injury.
- 20. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Always keep the tractor in gear when going down steep hills to take advantage of engine braking action.
- 21. Stay alert for holes in terrain and other hidden hazards which may cause the unit to tip over.
- 22. 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. Do not turn sharply. Use care when backing,
  - D. Use counterweight(s) or wheel weights when suggested in owner's manual.
- 23. 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.
- 25.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. Open doors if engine is run in garage. Exhaust fumes are dangerous. Do not run engine indoors.

# **Rules for Safe Operation (continued)**

- 26. Keep the vehicle and attachments in good operating condition, and keep safety devices in place. Use guards as instructed in operator's manual.
- 27. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
- 28. Never store the machine with fuel in the fuel tank inside a building where ignition sources are present, such as hot water and space heaters, clothes dryers, and the like. Allow the engine to cool before storing in any enclosure.
- 29. To reduce fire hazard, keep engine free of grass, leaves or excessive grease.
- 30. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object. The damage should be repaired before restarting and operating the equipment.
- 31. Do not change the engine governor settings or overspeed the engine.
- 32. When using the vehicle with mower, proceed as follows:(1) Mow only in daylight or in good artificial light.

- (2) Never make a cutting height adjustment while engine is running if operator must dismount to do so.
- (3) Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher.
- (4) Check blade mounting bolts for proper tightness at frequent intervals.
- 33. Check grass catcher bags frequently for wear or deterioration. For safety protection, replace only with new bag meeting original equipment specifications.
- 34. Look behind to make sure the area is clear before placing the transmission in reverse and continue looking behind while backing up. Disengage blades before shifting into reverse and backing up.
- 35. This unit should not be driven up a ramp onto a trailer or truck under power, because the unit could tip over, causing serious personal injury. The unit must be pushed manually to load properly.

IMPORTANT: This unit is shipped WITHOUT GASOLINE or OIL; however, a small amount of oil may be present from the factory. Do not overfill. After assembly, service engine with gasoline and oil as instructed in the separate engine manual packed with your unit.



NOTE: Reference to right or left hand side of the unit is observed from the driver's seat, facing forward.

# ASSEMBLY

Refer to the separate deck manual for all information concerning the deck.

# UNPACKING

- 1. Remove the carton from the tractor as follows. Cut and remove the bands around the carton. Open the top flaps and remove all carton inserts. Lift the carton off the tractor. Roll the tractor off the skid. Make certain all parts and literature have been removed from the carton before the carton is discarded.
- 2. Remove page four from this manual and lay the contents of the hardware pack on the illustration for identification.

## **BATTERY INFORMATION**



A. Battery acid must be handled with great care as contact with it can burn and blister the skin. It is also advisable to wear protective clothing (goggles, rubber gloves and apron) when working with it.\*

- B. Should battery acid accidentally splatter into the eyes or onto the face, rinse the affected area immediately with clean, cold water. If there is any further discomfort, seek prompt medical attention.
- C. If acid spills on clothing, first dilute it with clean water, then neutralize with a solution of ammonia/ water or baking soda/water.
- D. Since battery acid is corrosive, do not pour it into any sink or drain. Before discarding empty electrolyte containers, rinse them with a neutralizing solution.
- E. NEVER connect or disconnect charger clips to battery while charger is turned on as it can cause sparks.
- F. Keep all lighted materials (cigarettes, matches, lighters) away from the battery as the hydrogen gas generated during charging can be combustible.
- G. As a further precaution, only charge the battery in a well-ventilated area.
  - \*Always shield eyes, protect skin and clothing when working near batteries.







FIGURE 2.



**Battery contains sulfuric acid. Refer to warning on page 6.** Antidote: EXTERNAL—Flush with water. INTERNAL—Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil. Seek prompt medical attention. EYES: Flush with cool water for at least 15 minutes, then seek immediate medical attention.

Since batteries produce explosive gases, keep all lighted materials (cigarettes, lighters, matches, etc.) away. Be sure to charge battery only in well-ventilated areas.

#### KEEP BATTERIES OUT OF THE REACH OF CHILDREN!

# **ACTIVATING THE BATTERY**

Do not activate battery (fill with battery acid) until battery is actually placed in service. Be certain to read previous warnings before activating the battery.

- Open the battery pack. Be careful not to puncture the box. It contains the battery with a long plastic tube attached, battery fluid (acid) in a cardboard container and one cone.
- Place the battery on a table or workbench. Make certain the long plastic drain tube is in place on the vent elbow.
- Remove the six fill caps from the top of the battery with a screwdriver. Be careful not to damage the fill caps. See figure 1.
- 4. Cut off the tip of the cone for use as a funnel.
- Place the battery fluid container upright on the table or workbench. Carefully remove the flap on the box, and pull out the plastic tube. Cut off the tip of the plastic tube. Do not squeeze the container when cutting the tip.
- Fill each battery cell slowly and carefully to the split

   ring at the bottom of the well. See figure 2. Use caution as the acid level will rise rapidly after the bottom of the cell is filled. DO NOT OVERFILL.
- 7. Allow battery to stand for 30 minutes with the fill caps removed, while the plates absorb acid.
- 8. If acid level has fallen after the 30 minute standing period, refill each cell with battery acid to the split ring. Replace the fill caps.
- Before discarding the empty container, neutralize any residue with baking soda and rinse container with water. Puncture container several times before discarding.
- Charge the battery after the 30 minute standing period. SLOW CHARGE THE BATTERY (DO NOT FAST CHARGE) at a maximum bench rate of 5 amperes until the specific gravity reading is 1.265 (approximately 30 minutes).

# 

After battery has been in service, add only distilled water to replace normal loss. Do not add acid.

# 

This engine is equipped with an alternator. The current for the battery charger alternator is unregulated. During normal operation, it is only necessary to charge the battery:

- 1. When it is activated for the first time.
- 2. Before winter storage.
- Before using the tractor after winter storage.



#### SEAT ASSEMBLY (Hardware A)

 Place the seat in position against the seat brackets. Secure each side of seat with hex bolt (3/4" long), two cupped washers (on the inside and outside) and hex lock nut. Crown side of washers should be against the head of the bolt and the nut. See — figure 3.

FIGURE 3.



 Plug the wire lead which is in the wire harness beneath the seat into the plug on the wire lead extending from the right hand side of the seat. Make certain to route the wire in front of the right hand seat bracket so the wire is not pinched when raising and lowering the seat. See figure 4.

FIGURE 4.



## STEERING WHEEL INSTALLATION (Hardware B)

 There are four height positions for the steering wheel. For shipping purposes, the steering shaft is assembled in the lowest position. Lift the hood of the tractor. Remove the hex bolt and hex lock nut on the steering shaft. Raise the shaft to desired position and secure with hex bolt and hex lock nut.
 See figure 5.

FIGURE 5.



FIGURE 6.



FIGURE 7.



- 2. Attach one end of the plastic steering bellow to the steering wheel as shown in figure 6, inset.
- 3. Position the front wheels of the tractor so they are pointing straight forward.
- Place the steering wheel (with steering bellow attached) over the steering shaft extending through the dash, positioning steering wheel as desired.
- 6. Place the steering wheel cap over the center of the steering wheel and seat it with your hand.

## INSTALLING THE BATTERY (Hardware C)

## NOTE

The positive battery terminal is marked Pos. (+). The negative battery terminal is marked Neg. (-).

1. Place the battery on the battery plate with the terminals towards the rear of the tractor.

 Attach the positive cable (heavy red wire) and the small red wire (from the circuit breaker) to the positive battery terminal (+) with hex bolt 5/8"
 long, 1/4" lock washer and hex nut. See figure 7.

 Attach the negative cable (heavy black wire) to the negative battery terminal (-) with the other hex bolt 5/8" long, 1/4" lock washer and hex nut.

4. Hook one hold-down rod into the hole in battery plate beside the battery. See figure 8. Place the black plastic battery cover in position over the holddown rod. Secure with wing nut. Attach other holddown rod to the other side of battery cover in the same manner.

FIGURE 8.

9



FIGURE 9.

5. Route the battery drain tube down beside the oil drain pipe on the left side of the tractor.

Slip the end of the drain tube into the mounting clamp which is attached to the left side of the frame as shown in figure 9.



The vented battery allows any gases or liquid from the battery to be drained onto the ground.

## TIRE PRESSURE

For shipping purposes, the tires on your unit may be over-inflated. Tire pressure should be reduced before unit is put into operation. Recommended operating tire pressure should be 10 p.s.i.

Check sidewall of tire for manufacturer's maximum tire pressure. If this information does not appear on your tire, maximum tire pressure under any circumstances is 30 p.s.i. Equal tire pressure should be maintained on all tires.

# CONTROLS

## **IGNITION SWITCH**

The ignition switch is located on the right side of the dashboard. Turn the key to the START position to start the engine. When the engine is running, leave the key in the ON position. To stop the engine, turn the key to the OFF position. See figure 10.



Remove the key from the tractor when the tractor is not in use to prevent accidental starting.

## THROTTLE CONTROL

The throttle control is located in the center of the dashboard and is used to regulate the engine speed. See figure 10. The engine should be operated from 3/4 to full throttle (FAST) when operating any equipment that uses the tractor engine as a source of power such as the mowing deck, snow thrower or rotary tiller.

## CHOKE CONTROL

The choke control is located in the center of the dashboard and is operated manually. Details for the choke operation are covered in the separate engine manual packed with your unit. See figure 10.



# FIGURE 10.

## LIGHT SWITCH

The head lamps are operated by pushing the light switch located on the dashboard. The head lamps will only operate when the engine is running. See figure 10.



## AMMETER

The ammeter registers the rate of battery charge or discharge. The ammeter will register on the discharging side with starting the engine. It should register on the opposite side (charging) when the engine is running in the fast position until the battery is completely charged. With a fully charged battery or with the engine idling, the ammeter will not show a charge. See figure 10.

#### GASOLINE TANK

The gasoline tank is located under the tractor seat. Tip the seat forward to fill the tank. Refer to figure 3. Be careful not to pinch the wire lead to the seat switch when raising and lowering the seat.

## HYDROSTATIC CONTROL LEVER

A single control lever connected to the hydrostatic transmission controls both the speed and direction of the tractor. Infinite speed control is achieved by moving the control lever forward or backward. The farther forward or backward you move the control lever, the faster you will travel. Pulling the control lever into neutral (N) area will stop the tractor. To increase rear wheel torque (pulling power), move the control lever towards neutral (N) position. The lawn tractor responds similar to shifting to a lower gear with a gear type transmission. See figure 11.



#### FIGURE 11.

# CLUTCH-BRAKE PEDAL

The clutch-brake pedal is located on the right side of the tractor. See figure 12. Depressing the pedal disengages the engine from the hydrostatic transmission and applies the brake. You can release the clutch pedal and resume the same speed without moving the hydrostatic control lever. See figure 12.



The clutch-brake pedal must be depressed to start the engine.

#### **PARKING BRAKE**

To set the parking brake, depress the clutch-brake pedal and pull up the parking brake knob. It will stay in the raised position. To release the parking brake, depress and release the clutch-brake pedal. See figure 12.

#### LIFT LEVER

The five position lift lever is used to change the operating position of the attachments. To operate, pull the lever towards you. To release, move the lever to the right and then forward. See figure 12.

#### **POWER TAKE-OFF (PTO) LEVER**

The PTO lever is located on the left side of the dashboard. To engage the PTO, lift the lever slowly and lock it into the notch. See figure 12.



The PTO lever **must** be in the disengaged position (down) when starting the engine when shifting into reverse and if the operator leaves the seat.



FIGURE 12.

# OPERATION

# CAUTION

- READ OPERATOR S MANUAL(S)
   NEVER CARRY CHILDREN
- KNOW LOCATION AND FUNCTION OF ALL CONTROLS
- KEEP SAFETY DEVICES (GUARDS. SHIELDS AND SWITCHES) IN PLACE AND WORKING
- REMOVE OBJECTS THAT COULD BE THROWN BY BLADE(S)
- DO NOT OPERATE THE UNIT WHEN CHILDREN AND OTHERS ARE AROUND
- ALWAYS LOOK BEHIND THE UNIT BEFORE BACKING UP
- DO NOT OPERATE THE UNIT WHERE IT COULD SLIP OR TIP
- IF THE UNIT STOPS GOING UPHILE STOP BLADE(S) AND BACK SLOWLY DOWNHILL
- BE SURE BLADE(S) AND ENGINE ARE STOPPED BEFORE PLAC-ING HANDS OR FEET NEAR BLADE(S)
- BEFORE LEAVING OPERATOR S POSITION SHUT ENGINE OFF AND REMOVE KEY

## GAS AND OIL FILL-UP

Service the engine with gasoline and oil as instructed in the separate engine manual packed with your tractor. Read instructions carefully.

Your tractor is shipped without oil; however, a small amount of oil may be present from the factory. Do not overfill.



Never fill fuel tank indoors, with engine running or while engine is hot.

## **OPERATING THE TRACTOR**



This unit is equipped with a safety interlock system for your protection. The purpose of the safety interlock system is to prevent the engine from cranking or starting unless the clutch-brake pedal is depressed and the PTO lever is in the disengaged position. In addition, the PTO lever must be in the disengaged position when the unit is put into reverse or the engine will shut off. If the operator leaves the seat with the PTO lever engaged, the engine will shut off.



Do not operate the tractor if the interlock system is malfunctioning because it is a safety device, designed for protection.

- 1. Place the PTO lever in the disengaged (down) position.
- Depress the clutch-brake pedal and set the parking brake.
- Place the hydrostatic control lever in the NEUTRAL (N) position.
- 4. Set the throttle control in the FAST position.
- 5. Pull out the choke control. A warm engine requires less choking.
- 6. Turn the ignition key to the right to the START position. After the engine starts, release the key. It will return to the ON position.
- 7. Slowly push in the choke as the engine warms up.
- 8. Depress the clutch-brake pedal so the parking brake is released and then release the clutch-brake pedal.
- 9. Move the hydrostatic control lever forward. The farther forward you move the hydrostatic control lever, the faster you will travel.
- 10. To stop the tractor, pull the hydrostatic control lever into NEUTRAL (N) or depress the clutch-brake pedal.
- 11. To shut off the engine, turn the ignition key to the left to the OFF position. Remove the key to prevent accidental starting while equipment is unattended.



If you strike a foreign object, stop the engine. Remove wire from spark plug, thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.



If any problems are encountered, refer to the Trouble Shooting Charts on pages 20 and 21.

# **ADJUSTMENTS**



Disconnect the spark plug wire and ground against the engine before performing any adjustments, repairs or maintenance.

# SEAT ADJUSTMENT

To adjust the position of the seat, loosen the four selftapping screws on the bottom of the seat. See figure 3. Slide the seat forward or backward as desired. Retighten the self-tapping screws.

# HYDROSTATIC CONTROL ADJUSTMENT

The hydrostatic transmission control is in correct adjustment when the tractor does not move with the engine running, the clutch engaged and the hydrostatic control lever in the neutral position.

If adjustment is necessary, follow these steps:

- 1. Raise both rear wheels off the ground by placing blocks under the rear frame.
- 2. Loosen both lock nuts on both ends of the connecting rod. See figure 13.





- 3. Place the hydrostatic control lever in the neutral position.
- 4. Start the tractor.

5. Release the clutch-brake pedal.



DO NOT set the parking brake or the relief valve.



Be careful of the cooling fan on the front of the hydrostatic transmission.

- 6. Turn the connecting rod back and forth until the rear wheels do not rotate.
- 7. Shut off the engine.
- 8. Tighten both lock nuts on the connecting rod.
- 9. Remove the blocks under the tractor frame and test the tractor operation.

# REAR WHEEL TRACK ADJUSTMENT

The distance between the rear wheels can be changed from wide to narrow by removing the rear wheels one at a time and reversing them on the hub.

With the rear wheels in the narrow position, the outside of the rear wheels is even with the outside of the front wheels.

With the rear wheels in the wide position, the inside of the rear wheels is even with the outside of the front wheels.

## BRAKE ADJUSTMENT

During normal operation of this machine, the brakes are subject to wear and will require periodic examination and adjustment.



Do not adjust the brake while the engine is running. Be sure to block the wheels of the tractor before making the brake adjustment.

- 1. Loosen the outside lock nut. See figure 14.
- 2. Turn the inside lock nut in until it locks the disc.
- 3. Back off the inside lock nut one complete turn.
- 4. Tighten the outside lock nut.
- 5. Test the brake operation.



#### FIGURE 14.

#### DECK ADJUSTMENT LINKS

If an uneven cut is obtained, the deck may be adjusted. Adjustable lift link assemblies are located on the left side of the unit. Refer to Ref. Nos. 16, 34, and 54 on page 30.

To adjust the deck, remove the hairpin cotter and washer from the clevis pin. Thread eyebolt up or down the adjustable link lift assembly as necessary. Replace clevis pin, washer and hairpin cotter.

## STEERING WHEEL ADJUSTMENT

There are four height positions for the steering wheel. To adjust the height of the steering wheel, remove the hex bolt and hex lock nut on the steering shaft. Place the steering wheel in the position desired and secure with hex bolt and hex lock nut. Refer to figure 5.



When raising the height of the steering wheel, stretch the steering bellow to cover the steering shaft.

## CARBURETOR ADJUSTMENTS



If any adjustments are made to the engine while the engine is running (e.g. carburetor), disengage all clutches and blades. Keep clear of all moving parts. Be careful of heated surfaces and muffler.

Minor carburetor adjustments may be required to compensate for differences in fuel, temperature, altitude and load. Refer to separate engine manual for carburetor adjustment information.



A dirty air cleaner will cause an engine to run rough. Be certain air cleaner is clean and attached to the carburetor before adjusting carburetor. Refer to the separate engine manual.

# LUBRICATION

#### STEERING GEARS

Wipe off the old grease and dirt. After every 25 hours of operation place an automotive multi-purpose grease in the teeth of the segment and pinion gears. See figure 15.



## FIGURE 15. TRANSAXLE

Check the oil level four times a year. Lubricant should be at the point of overflowing. Use SAE E.P. 90 oil. Drain and refill every two years. Capacity 2<sup>3</sup>/<sub>4</sub> pints. See figure 16.



#### FIGURE 16. LINKAGE

Once a season lubricate all the pivot points on the clutch, brake and lift linkage with SAE 30 engine oil.

#### FRONT WHEELS

The front wheels are provided with grease fittings. Lubricate at least once a season with automotive multipurpose grease.

## PIVOT POINTS



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Lubricate all pivot points with light oil at least once a season.

## BALL JOINTS

The ball joints and drag link ends are permanently lubricated.

# HYDROSTATIC OIL LEVEL

The transmission has been filled at the factory and should not require changing for the life of the transmission. The following oils can be used: Texaco 2209, General Motors Dexron B, Ford M2C-33F, Mobile Fluid 300, or a good quality SAE 20 High Detergent oil.

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Never use a multi-viscosity oil.

The transmission fluid level should be checked prior to initial use. The level should not be above the COLD mark which is about ¼" from the bottom of the reservoir/expansion tank. See figure 17.

# 

Overfilling reduces the expansion area in the reservoir/expansion tank and fluid will spill at operating temperatures.



## FIGURE 17.

To check or add fluid to the transmission:

- 1. Unscrew the parking brake and relief valve knobs.
- Unscrew the two screws holding the access cover located in front of the seat.
- 3. Check the oil level in the reservoir/expansion tank. See figure 17.
- If it is necessary to add oil, unscrew the cap on the reservoir/expansion tank and add oil through the hole with a funnel. Do not overfill. See figure 18.
- 5. Reassemble parts.

If frequent additions are required, locate the leak and correct. Inadequate supply of fluid may result in permanent internal damage.



FIGURE 18.

If contaminate is observed on the reservoir/expansion tank screen, poor maintenance is indicated. Remove the reservoir/expansion tank, wash clean, dry and reinstall. If the screen is pierced, the reservoir/expansion tank should be replaced.



The threads on the reservoir/expansion tank are left hand thread.

If the natural color of the transmission fluid has changed, black or milky, overheating and/or water contaminate is indicated. The fluid should be drained and replaced with new transmission fluid.

To drain the hydrostatic transmission, remove the hex plug on the bottom of the hydrostatic transmission.

To fill the hydrostatic transmission, remove the vent plug located next to reservoir/expansion tank to prevent an air lock. Replace vent plug.

#### Hydrostatic Transmission Cooling

The hydrostatic transmission is cooled by the oil, fan and fins. Normal operating temperature is 180° F. If the hydrostatic transmission runs hot, check to see if the fan is in operating condition, the oil level is correct and the fins are clean.



DO NOT use high pressure water spray or steam to clean the hydrostatic transmission.

# MAINTENANCE



Disconnect the spark plug wire and ground against the engine before performing any adjustments, repairs or maintenance.

## TROUBLE SHOOTING

Refer to the chart on page 21 for trouble shooting engine problems.

#### **CRANKCASE OIL**

Check the oil level in the crankcase before each use of the machine and after every two hours of operation. Oil level should be maintained as instructed in the separate engine manual.

After the first two hours of operating a new engine, drain the oil from the crankcase while engine is still hot and refill crankcase with new oil; thereafter change the oil after every 25 hours of operation. Refer to the engine manual.

#### FUEL FILTER

Your unit is equipped with a replaceable in-line fuel filter. Replace filter whenever contamination or discoloration is noticed. Order replacement filter through your authorized engine service dealer.

## WHEEL ALIGNMENT

The front wheels should toe-in approximately 1/8". Measure the distances A and B on the front wheels. See figure 19.



Dimension B should be approximately 1/8 inch less than dimension A.



FIGURE 19.

To adjust the toe-in, loosen the hex jam nut, remove the elastic lock nut, lift the tie rod end out of the hole in the steering arm and screw the tie rod end in or out as necessary. See figure 19.

Reassemble the tie rod end after the correct alignment is made.

## **DRAG LINK**

If the drag link or ball joints are changed, the new assembly must be adjusted to the exact same length as the original. If adjusted incorrectly, it will allow the tractor to turn sharper one direction than the other.

To take off the drag link, remove the nuts and lock washers holding the ball joint to the steering gear and left front axle bracket. See figure 20.





#### ENGINE

Refer to separate engine manual for all engine maintenance procedures.

## MAINTENANCE OF BATTERY

- Check electrolyte level periodically (at least every two weeks). Keep the level to the split rings. Use only distilled water or a good quality drinking water. Never add acid or any other chemicals to the battery after initial activation.
- 2. The battery should be checked with a hydrometer after every 25 hours of operation. If the specific gravity is less than 1.225, the battery should be recharged. Maximum charge rate 5 AMPS.
- Coat the terminals and exposed wire with a thin coat of grease or petroleum jelly for longer service and protection against corrosion.

- The battery should be kept clean. Any deposits of acid should be neutralized with soda and water. Be careful not to get this solution in the cells.
- 5. Avoid tipping the battery. Even a "sealed" battery will leak electrolyte when tipped.

# STORAGE OF THE BATTERY

- Charge battery using normal methods. NEVER store discharged battery as it will not recover.
- When storing battery for extended periods, disconnect battery cables. Removing battery from unit is recommended.
- 3. Store in cold, dry place.
- 4. Recharge battery whenever the specific gravity is less than 1.225, before returning to service, or every two months, whichever occurs first.

## COMMON CAUSES FOR BATTERY FAILURE

- 1. Overcharging
- 2. Undercharging
- 3. Lack of water
- 4. Loose hold downs and/or corroded connections
- 5. Excessive loads
- 6. Battery electrolyte substitutes
- 7. Freezing of electrolyte



These failures do not constitute warranty.

# BATTERY REMOVAL OR INSTALLATION



When removing the battery, follow this order of disassembly to prevent your wrench from shorting against the frame.

- 1. Remove the Negative cable.
- 2. Remove the Positive cable.

### To install a battery:

- 1. Attach the Positive cable.
- 2. Attach the Negative cable.

## JUMP STARTING

- 1. Attach the first jumper cable from the Positive terminal of the good battery to the Positive terminal of the dead battery.
- Attach the second jumper cable from the Negative terminal of the good battery to the FRAME OF THE UNIT WITH THE DEAD BATTERY.



Failure to use this starting procedure could cause sparking, and the gases in either battery could explode.

## INSTALLATION OF TIRE TO RIM



The following procedure must be followed when removing or installing a tire to the rim.

- 1. Be sure rim is clean and rust free.
- 2. Lubricate both the tire and rim generously.
- Never inflate to over 30 p.s.i. to seat beads. Excessive inflation pressure when seating beads may cause tire/rim assembly to burst with force sufficient to cause serious injury.

# CHANGING THE DRIVE BELT

- 1. If a cutting deck is attached to your tractor, remove it. Remove the battery.
- 2. Depress the clutch pedal and set the parking brake.
- 3. Raise and block the front wheels of the tractor so you can work under it.
- 4. Unscrew the belt guard release next to the engine pulley. See figure 21.



FIGURE 21.

5. Swing the belt guard forward towards the front of the tractor.



Observe the way the belt is twisted. If the new belt is installed backwards, the tractor will run backwards.

- 6. Loosen the stop bolt behind the pulley assembly so the pulley assembly will pivot forward enough to remove the V-belt.
- 7. Using a bar or large screwdriver, pry the pulley assembly towards the front of the tractor and unhook the belt from the pulley. See figure 22.
- 8. Install the new belt by hooking it over the engine pulley and twisting the belt to the left as you attach it to the pulley.
- 9. Test the operation of the tractor to assure the belt has been installed correctly.



FIGURE 22.

## Removing the Rear (Clutch) Belt

- 1. Remove the cutting deck (if one is attached) and battery.
- 2. Raise and block the front wheels of the tractor so you can work under it.
- 3. Depress the clutch-brake pedal and set the parking brake.
- 4. Remove the two belt guard pins on the pulley assembly. See figure 23.



#### FIGURE 23.

Take off the idler assembly by removing the center bolt.

NOTE

Be sure the belt clip is reassembled the same way. See figure 24.



## FIGURE 24.

- 6. Take off the round wire belt guard around the hydrostatic pulley by removing the two screws through the frame.
- 7. Loosen the frame bolt holding the rear axle bracket to the frame. See figure 25.
- 8. Pry the frame over about 1/4" and remove the V-belt.
- 9. Reassemble in reverse order with a new V-belt.



FIGURE 25.

# **OFF-SEASON STORAGE**

If the machine is to be inoperative for a period longer than 30 days, prepare for storage as follows.

- 1. Clean the engine and the entire unit thoroughly.
- 2. Lubricate all lubrication points. Wipe the entire machine with an oiled rag to protect the surfaces.
- 3. Refer to the engine manual for correct engine storage instructions. The engine must be completely drained of fuel to prevent gum deposits from forming on essential carburetor parts, fuel lines and fuel tanks.
- 4. Refer to battery storage instructions on page 17.
- 5. Store unit in a clean, dry area.



When storing any type of power equipment in an unventilated or metal storage shed, care should be taken to rustproof the equipment. Using a light oil or silicone, coat the equipment, especially any chains, springs, bearings and cables.

# HYDROSTATIC TRANSMISSION TROUBLE SHOOTING

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No output torque (power) in either direction, cold start.	<ol> <li>Recheck relief valve position, control linkage, input drive.</li> <li>Oil level in reservoir low.</li> <li>Broken control shaft dowel pin. Transmission must be repaired or replaced.</li> </ol>
Loss of output torque, continuous load.	<ol> <li>Operating at conditions approaching hydraulic stall. The transmission fluid has exceeded 180°F.</li> <li>Internal leakage due to wear. Transmission should be repaired or replaced.</li> <li>Water in transmission fluid. Purge system of all fluid and replace with new transmission fluid. Replacement of the transmission is generally not necessary.</li> </ol>
No output torque in one direction.	<ol> <li>One of the directional valves is stuck. Transmission should be repaired or replaced.</li> <li>Low oil level.</li> </ol>
Riding mower cannot be pushed with engine off.	<ol> <li>Relief valve control not set.</li> <li>Relief valve travel not adjusted.</li> <li>Motor piston or rotor seized. Transmission must be repaired or replaced.</li> </ol>
No neutral.	Recheck linkage. Loose linkage creates an adjustment problem. Note: The hydraulic neutral band is very narrow. Deflection in the linkage may make it difficult to obtain neutral from both direc- tions. It is recommended that neutral should be positive from forward drive.
Oil leakage at the control shaft seal.	<ol> <li>Spillage when fluid has been added to the reservoir.</li> <li>Spillage at the vent in the reservoir at operating temperatures due to cold level being too high or water in the fluid. Reduce fluid level or replace fluid in the event there is water in it (milky color).</li> <li>Loose oil reservoir or cover.</li> <li>Loose vent bolt.</li> </ol>
Noisy operation.	<ol> <li>5. Damaged control shaft seal. Transmission should be repaired.</li> <li>1. Operating at part throttle. Hydrostatic transmission is designed to operate with the engine running at full throttle.</li> <li>2. Water in transmission fluid. Replace transmission fluid.</li> <li>3. Air in transmission fluid. Bleed air from vent.</li> </ol>
Output shaft rotates in the opposite direction.	The transmission body is 180° out of position. Transmission has to be removed and reassembled correctly.

# TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

AOUBLE	LOOK FOR	REMEDY
ungine will not crank	Battery installed incor- rectly	The battery must be installed with the negative terminal, identified at the terminal post by (Neg, N or -), grounded. The positive terminal (Pos, P or +) attaches to the large cable from the solenoid The small red wire from the fuse holder or circuit breaker is also attached to the positive terminal
	Blown fuse or circuit breaker	Replace fuse with 7½ amp. fuse ¼ x 1¼" Ig. Circuit breaker will reset itself when it cools off. Fuses or circuit breakers seldom open or fail without a reason. The problem must be corrected. Check for loose connections in the fuse holder. Replace fuse holder if necessary. A dead short may be in the cranking or charging circuit where the insulation may have rubbed through and exposed the bare wire. Replace the wire or repair with electrician's tape if the wire strands have not been damaged Note: Look for a wire pinched between body panels, burned by the exhaust pipe or muffler or rubbed against a moving part.
	Battery is dead or weak	Use a hydrometer to check the condition of the battery. The Specific Gravity (s.g.) should be 1.265 at 80°F. (1.215 s.g. minimum needed for cranking engine). The reason for the battery failing must be determined. (1) Defective battery. Battery will not accept or hold a full charge. (2) Short circuit. Check for grounded wire. (3) Charging system not working.
		The charging system is an alternator located under the flywheel. It is unregulated and rated 3 amp. at 3600 r.p.m. A diode (rectifier) is located in the output lead just before the wire harness plug on the engine side.
		Red Wire Diode Tube Tube 7 AMP AC (Lamps) Black Wire Polarized Plug
		The diode changes A.C. to D.C. to charge the battery. A bad diode can either fail to charge the bat- tery or discharge the battery if the alternator is shorted as well as the diode. To test: (1) Disconnect charger lead from the battery (small red wire). (2) Connect 12 V small test lamp between the 3 amp. D.C. charge lead and the positive terminal of the battery. (3) With the engine off, the lamp should not light. If it does, the diode and possibly the alternator should be replaced. (4) Start the engine. The lamp should light. If it does not, the alternator (stator) or lead wire is bad and should be replaced.
	Mechanical failure (Wires and switches)	The interlock system includes two mechanical activated switches which are wired in series in the circuit used to energize the starter solenoid. While testing the interlock system, you will make the mower temporarily unsale by permitting the engine to be started with the blade and clutch engaged. WARNING: While testing, disengage the clutch, shut off the blade control, set the parking brake and place the gear shift lever in neutral. Attach a wire (minimum 18 gauge) to the positive terminal of the battery and touch the other end to the small terminal on the solenoid. If the engine does not crank: (1) There is a loose connection or poor ground. (2) The solenoid may be bad. The solenoid can be checked by using a heavy wire (#8 gauge minimum) and jumping between the two large terminals. If the engine cranks, the solenoid is bad. (3) If the engine does not crank when you jump the solenoid, have the starter motor tested by an authorized engine dealer. If the engine does crank, the problem is with one of the safety switches, ignition switch or the wire between the fuse holder (or circuit breaker) and the small terminal on the solenoid. Note: Look for a poor connection at the switches or a defective switch. Replace if necessary
Engine cranks but will not start	Throttle or choke not in starting position	Check owner's guide for correct position for throttle control and choke for starting.
	No spark to spark plug	Spark plug lead disconnected. Connect lead. Hold spark plug lead away from engine block about 1/8". Crank engine. There should be a spark. If not, have engine repaired at authorized engine service dealer.
		Faulty spark plug. To test, remove spark plug. Attach spark plug lead to spark plug. Ground the spark plug body against the engine block. Crank the engine. The spark plug should fire at the electrode. Replace if it does not

# TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
-	No fuel to the carburetor	Gasoline tank empty. Fill. Fuel line or in-line fuel fitter plugged. Remove and clean fuel line. Replace filter if necessary.
	Air filter dirty	If the air cleaner is dirty, the engine may not start. Clean or replace as recommended by the engine manufacturer.
Engine smokes	Engine loses crankcase vacuum	Dipstick not seated or broken. Replace defective part. Engine breather defective. Replace.
Excessive vibration	Bent or damaged blade spindle	Stop engine immediately. Check all pulleys, blade adapters, keys and bolts for tightness and damage. Tighten or replace any damaged parts.
ſ	Bent blade	Stop engine immediately. Replace damaged blade. Only use original equipment blades.
Mower will not discharge grass or leaves uncut strips	Engine speed low Transmission selection Blades short or dull	Throttle must be set between 3/4 and full throttle. Use lower transmission speed. The slower your ground speed, the better the quality of cut. Sharpen or replace blades (uncut strip problem only).



# PARTS LIST FOR ELECTRICAL SYSTEM MODEL 786 LAWN TRACTOR

REF.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	'
1	725-0459	Circuit Breaker	9	725-0453	12V Battery	
2	725-0771	Solenoid	10	725-0268	Safety Switch	
3	725-0561	Wire	11	725-0563	Wire	
4	725-0222	Headlight	12	725-0634	Light Switch	
5	725-0916	Ground Wire	13	725-0267	Ignition Switch	
6	725-1134	Wire Harness	14	725-0201	Ignition Key	
7	725-0465	Safety Switch	15	725-0759	Spring Switch	
8	725-0996	6 Ga. Black Wire	16	725-0925	Ammeter	



# PARTS LIST FOR HYDROSTATIC TRANSMISSION M-7 (717-0426) ET-000700-002

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	ET-990067-000	Kit-Input Shaft	16	ET-093895-000	
2	ET-990077-000		17	ET-008761-013	
3	ET-990176-000	Kit Cover	18	ET-093955-000	
4	ET-101597-000		19	ET-091231-000	
5	ET-024234-000	O-Ring Fitting Guide	20	ET-025090-006	O-Ring Plug Subassembly
		Subassembly	21	ET-032278-000	
6	ET-008761-010		22	ET-090797-000	
7		Bracket—Pins Sub-	23	ET-097121-000	Snap Ring
·		assembly	24	ET-095202-000	
8	ET-072149-000	Valve Spring	25	ET-040511-000	Drive Gear (12 Teeth)
9		Square Cut Seal Ring	26	ET-096098-066	
10		Pump Rotor—Ball Sub- assembly	27	ET-095912-125	Socket Hd. Scr. 5/16-18 x 1.25" Lg.
11	ET-102449-000	Cam Ring Subassembly	28	ET-040519-000	
12		Pintle Subassembly	29	ET-009476-000	
13		Motor Rotor-Ball Sub-	30	ET-022892-000	
1		assembly	31	ET-062240-000	Dump Valve Shaft
14	ET-095203-000	Cam Ring Insert	32	ET-024235-000	Nut-Gasket Subassembly
15		Kit—Control Shaft			

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# PARTS LIST FOR MODEL LGT-1655 (786) LAWN TRACTOR

1	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART		PART NO.	COLOR CODE	DESCRIPTION	NEW
	1 2	757-0336 710-0286		Seat Assembly Truss Mach. Scr. 1/4-20 x		44 45	13800 710-0607		Grille Ass'y. Hex Wash. Hd. Self-Tap Scr.	
	3	13808 712-0287	629	.50″ Lg.* Hood Hex Nut ¼-20 Thd.*		46 47	15803		5/16-18 x .50″ Lg. Seat Brkt.—L.H.	
	5	736-0329		L-Wash. 1/4" Scr.*	ļ	48	736-0119		L-Wash. 5/16" Scr.* Hex Nut 5/16-18 Thd.*	
	8 9	15607 710-0623		Vinyl Molding Strip—29" Seat Pivot Bracket Hex Wash. AD AB-Tap Scr.	-	49 50	13820 710-0726		Lower Frame Ass'y. Hex Thd. Rolling AB Scr. 5/16 x .75" Lg.	
	10	723-0296		3/8 x .75" Lg. Hood Latch Ass'y.		51 52	13862 13863		Grille Mount Brkt.—R.H. Grille Mount Brkt.—L.H.	
	11 12	725-0925 736-0242		Ammeter Bell-Wash34" I.D. x .88" O.D.		53	16390 13827		Running Board—R.H. Running Board—L.H. (Not Shown)	
	13 14	725-0459 710-0599		Circuit Breaker 8 Amp. Hex Tap Scr. #10 x .50" Lg.*		54	710-0323		Truss Mach. Scr. 5/16-18 x .75" Lg.*	
ĺ	15 16	727-0199 710-0255		Hood Stop Truss Mach. Scr. ¼-20 x .75" Lg.*		55 56	710-0118 736-0242		Hex Bolt 5/16-18 x .75" Lg.* Bell-Wash34" I.D. x .88" O.D.	
	17 18	749-0651 722-0135		Grille Positioning Rod PVC Foam Strip ½ x 1.00" x 2.00" Lg.		57 58 59	15802 15886 731-0511	483	Seat Brkt.—R.H. Rear Fender	
	19 20	712-0158 731-0555		Hex Cent. L-Nut 5/16-18 Thd. Grommet		60 61	735-0149 751-3054		Trim Strip—81" Lg. Bushing (Gas Tank) 90° Nipple	
	.1	710-0599		Hex Thd. Rolling Scr. ¼" x .50" Lg.		62 63	726-0207 751-0173		Hose Clamp Gas Line 46″ Lg.	
	22 23	712-0344 14748		Speed Nut #10Z Grille Side Panel—R.H.		64 65	738-0435 726-0139		Running Board Rod Speed Nut	
	•	14749		Grille Side Panel—L.H. (Not Shown)		66 67	17151 746-0613	1	Transmission Cover Choke Control Comp.	
1	24 25 26	736-0173		Fl-Wash. 1/4" I.D. Light Switch		70 71	710-0167 15849		Carriage Bolt 1/4-20 x .50" Lg.* Seat Mounting Channel	
	20 27	710-0817		Hex Wash. Hd. Self-Tap Scr. 5/16-18 x 1.25" Lg. Dash Panel Ass'y.		72 73 75	710-0351 738-0482 714-0147		B-Tap Scr. #10 x .50" Lg. Hitch Rod	
	28 29	831-0823 749-0651		Throttle Control Box Comp. Grille Positioning Rod		76 77	751-0367		Internal Cotter Pin Gas Tank Hex Wash. Hd. AB-Tap Scr.	
	30 31	746-0634 732-0431		Throttle Control Wire Seat Spring		78	13813		3/8 x .75" Lg. Hitch Plate	
		09960 725-0201		Head Lamp Retainer Ignition Key		79	15846 15847		Fender Brkt.—R.H. Fender Brkt.—L.H.	
	35	725-0267		Ignition Switch Head Lamp		80 81	731-0755 751-0370		Foot Pad Gas Gauge	
	36 37	710-0255 735-0144		Truss Machine Scr. ¼-20 x .75" Lg. Rubber Wash50" I.D. x		82 82	710-0726	1	Hex Thd. Rolling Scr. 5/16-24 x .75" Lg.	
	38	731-0465		1.00 O.D. x .25 Thk. Headlight Bezel		83 84	736-0222 710-0779		External Wash. 1/4" I.D. Truss. Mach. Scr. #10 x .5"	
	39	710-0148		Hex Wash. Hd. Scr. #8-32 x .38" Lg.			731-0551		Lg. Trim strip—30″ Lg. Truss Mach. Scr. ¼-20 x 1.00	
		731-0881 710-0118		Grille Screen	1		750-0706		Spacer	
				Grille Screen Hex Scr. 5/16-18 x .75" Lg.*		87				



# LGT-1655

Model 786

# PARTS LIST FOR MODEL LGT-1655 (786) LAWN TRACTOR

1	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
	1	13813		Hitch Plate		43	738-0234		Shld. Scr50" Dia. x .395"	
	2	710-0216		Hex Bolt 3/8-16 x .75" Lg.*					Lg. (3/8-16)	
•	3	13835		Rear Axle Support Brkt.		44	13833		Parking Brake Cam Mtg.	
	4	710-0286		Truss Mach. Scr. 1/4-20 x					Brkt.	
			Í	.50" Lg.*		45	712-0267		Hex Nut 5/16-28 Thd.*	
	5	16427		Dash Panel Ass'y.		46	712-0158		Hex L-Nut 5/16-18 Thd.	
	6	720-0165		Knob—Blade Clutch		48	732-0413		Brake Tension Spring	
	8	712-0271		Hex Sems Nut 1/4-20 Thd.	1	49	732-0157		Ext. Spring—Brake Return	
	9	712-0107		Hex Cent. L-Nut 1/4-20 Thd.	ļ	51	712-0798		Hex Nut 3/8-16 Thd.*	1
	10	736-0173	1	FI-Wash28" I.D. x .74"		52	736-0169		L-Wash. 3/8" I.D.*	
			1	O.D. x .063		53	736-0258		Fl-Wash390" I.D. x 1.00"	
	11	735-0126		Rubber Wash33" I.D. x					O.D. x .125" Thk.	
				.87″ O.D. x .30		54	13892		Rear Axle Bracket	
	13	13950		Deck Clutch Cont. Brkt.		55	l		Transaxle (See Breakdown)	
	14	710-0106		Hex Bolt 1/4-20 x 1.25" Lg.*		56	710-0501		Hex Bolt 1/4-20 x 2" Lg.*	
	15	720-0143		Grip		57	712-0287		Hex Nut 1/4-20 Thd.*	
	16	14038		Control Arm Ass'y.		58	736-0329		L-Wash. ¼" I.D.*	
	17	747-0157		Blade Clutch Lever		59	710-0599		Hex Wash. Hd. Self-Tap Scr.	
	18	726-0106		Push Nut ¼″ O.D. Rod					1⁄4-20 x .50″ Lg.	
	19	747-0307		Deck Control Rod		60	710-0442		Hex Bolt 5/16-18 x 1.50" Lg.	
	21	712-0121		Hex Nut #10-24 Thd.*		63	710-0599		Hex Wash. Hd. Self-Tap Scr.	
	22	725-0465		Safety Switch					1⁄4-20 x .50″ Lg.	
	23	736-0119		L-Wash. 5/16" I.D.*		64	738-0155		Shld. Scr437" Dia. x .162"	
	24	710-0473		Truss Mach. Scr. #10-24 x					Lg.	
	15	1 4000		.50″ Lg.*		65	712-0267		Hex Nut 5/16-18 Thd.*	1
	1	14020		Speed Control Bracket		66	710-0773		Hex Wash. Hd. Scr. 3/8-16 x	1
Ŧ	8 27	710-0759 715-0114		Hex Bolt 5/16-18 x .62" Lg."					.50″ Lg.*	
f -	21	715-0114		Spring Pin Spiral 1/4" Dia.		67	710-0726		Hex Wash. Hd. Self-Tap Scr.	
	28	741-0225		x 1.5" Lg. Hex Flange Brg.		76	747 0400		5/16-18 x .75" Lg.	
	29	712-0225		Hex Nut 5/16-18 Thd.*		75	717-0426		Hydrostatic Pump Čomp.	
	30	736-0119		L-Wash, 5/16" I.D.*		76	710-0316		Hex Bolt 3/8-16 x 3.5" Lg.	
	31	14035		Speed Control Shaft Brkt.		77	710-0726		Hex AB-Tap Scr. 5/16 x	
	32	738-0155		Shid. Scr437" Dia. x .162"		78	13849	483	.75" Lg. Side Panel Upper Frame	
		100 0100		Lg.		70	13049	400	R.H.	{
	33	710-0376		Hex Bolt 5/16-18 x 1.00″ Lg.*		79	16445	483	Side Panel Upper Frame	
	34	13826		Idler Support Brkt.		19	10440	400	L.H.	
	35	13893		Idler Brkt. Ass'y.		80	731-0493		Сар	
	36	712-0181		Hex L-Nut 3/8-16 Thd.		81	710-0493		Socket Hd. Bolt 3/8-16 x	
	38	712-0267		Hex Nut 5/16-18 Thd.		01	110-0432		2.75" Lq.	
	39	736-0119	ĺ	L-Wash. 5/16" I.D.*		82	710-0227		Hex Wash. Hd. Scr. #8 x	
	40	731-0483		Convoluted Conduit .50" I.D.			1.10-0227		.50" Lg.	
	41	732-0308		Ext. Spring .50" O.D. x 6.37"		83	726-0222		Insulator Nut Plate	
				Lg.		84	725-0759		Spring Switch	
	42	710-0201		Hex Bolt 3/8-16 x .62" Lg.*		88	736-0141		Wave Washer	
L										

\*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list. (629—Silver Flake) (483—Charcoal Grey)

When ordering parts if color is important, use the appropriate color code listed above. (e.g. 12369-629 Silver Flake)



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# PARTS LIST FOR MODEL LGT-1655 (786) LAWN TRACTOR

•7	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	DESCRIPTION	NEW
	1	756-0293		4" Dia. "V"-Idler Pulley		45	13822	Idler Mtg. Brkt.	1
	2	736-0300		Fl-Wash. 3/8" I.D.	-	46	732-0384	Ext. Spring (Drive Idler)	
•	3	710-0342		Hex Bolt 3/8-16 x 1.25" Lg.*		47	736-0169	L-Wash. 3/8" I.D.*	
	4	714-0104		Intern. Cotter Pin 5/16" Dia.		48	712-0241	Hex Nut 3/8-24 Thd.*	
	5	748-0278		Spacer		49	13815	Clutch Brkt. Ass'y.	
	6	712-0711		Hex Jam L-Nut 3/8-24 Thd.		50	710-0289	Hex Bolt 1/4-20 x .50" Lg.*	
	7	723-0156		Ball Joint Ass'y. 3/8-24 Thd.		51	714-0104	Internal Cotter Pin 5/16"	1
	8	720-0166		Ball Knob	4	• •		Dia. Rod	
	9	747-0300		Parking Brake Link		52	736-0329	L-Wash. 1/4" I.D.*	
	11	14027		Brake Rod Hanger		53	712-0287	Hex Nut 1/4-20 Thd.*	
	12	747-0400		Brake Rod		54	747-0312	Relief Valve Lockout Rod	
	14	13859	Į	Clutch Rod Brg. Brkt.		55	720-0187	Ball Knob	
	15	714-0115		Cotter Pin 1/8" Dia. x 1.00"		56	736-0300	FI-Wash. 3/8" I.D.	
				Lg.*		57	710-0342	Hex Bolt 3/8-16 x 1.25" Lg.*	
	16	714-0145		Hairpin Cotter 1/2" Dia.		58	710-0258	Hex Bolt 1/4-20 x .62" Lg.*	
	17	13832		Parking Brake Cam		59	736-0176	Fl-Washer	
	18	736-0101		Fl-Wash406 I.D. x 1.00"		60	14016		
		750-0101		O.D. x .030	.	62	723-0351	Belt Guard Ass'y.	
	19	714-0145		Hairpin Cotter 1/2" Dia.		02	/23-0351	Ball Joint Ass'y, 3/8-24 L.H. Thd.	
i	20	736-0119		L-Wash. 5/16" I.D.*		61	755 0264		
	21	712-0267				64	756-0364	Transaxle Pulley w/Fan	
	22	747-0306		Hex Nut 5/16-18 Thd.*		65 66	714-0156	Hi-Pro Key 1/8" x ½" Dia.	
	23	711-0198		Brake Cam Rod		67	736-0169	Hex Nut 3/8-16 Thd.*	
_	24	736-0275		Pivot Bushing				L-Wash. 3/8" 1.D.*	
	~ 7	100-0210		FI-Wash401" I.D. x .749"		68	14022	Pintle Arm Ass'y.	
	25	714-0507		O.D. x .057" Thk.		69 70	712-0241	Hex Nut 3/8-24 Thd.	
	20	714-0507		Cotter Pin 3/32" Dia. x .75"		70	736-0169	L-Wash. 3/8" I.D.*	
	26	13856		Lg. Clutch Broke Bodel Acciu		71	756-0293	4" "V"-Idler Pulley	
	27	712-0375		Clutch Brake Pedal Ass'y.		72	13819	Belt Guard (Clutch Idler)	
	29	735-0196		Hex L-Nut 3/8-16 Thd.		73	736-0169	L-Wash. 3/8" I.D.*	
	30			Foot Pad		74	712-0798	Hex Nut 3/8-16 Thd.	
	30	756-0328		Two-Step Engine Pulley		75	747-0321	Speed Control Rod	
	24	754 0045		4.75" and 5.56"		76	747-0307	Deck Control Rod	
	31 32	754-0245 754-0255	1	"V"-Belt		77	738-0155	Shid. Scr437" Dia. x .162"	
				"V"-Belt		-	10007	Lg. (5/16-18)	
	33	710-0198	1	Hex Sems Bolt 5/16-18 x		78	13887	Deck Control Pivot Brkt.	
	24	700 0440		.75" Lg.*		79	13833	Parking Brake Cam Mtg.	
1		736-0119		L-Wash. 5/16" I.D.*				Brkt.	
		756-0324	- 1	Jack Shaft Ass'y.		80	736-0119	L-Wash. 5/16" I.D.*	
ł		711-0696		Stud 3/8-16 x 3.62" Lg.			712-0267	Hex Nut 5/16-18 Thd.*	
	37	736-0169		L-Wash. 3/8" I.D.*		82	714-0104	Internal Cotter Pin 5/16"	
		712-0798		Hex Nut 3/8-16 Thd.*	1			Rod	
		13823	1	Jack Shaft Mtg. Brkt. Ass'y.		83	732-0478	Extension Spring	
		13871		Clutch Idler Horn Ass'y.	ĺ	84		Speed Control Shaft Ass'y.	
		741-0295		Nyliner 5/8" I.D. x .88" Lg.		85	14025	Relief Valve Cam-L.H.	
	42	715-0114	Í	Spring Pin Spiral 1/4" Dia. x		86	14026	Relief Valve Cam—R.H.	
				_ 1.5" Lg.	1	87	712-0312	Hex Jam L-Nut 3/8-24 L.H.	
		732-0153		Ext. Spring (Jack Shaft)				Thd.*	
	44	710-0599		Hex Wash. Hd. Self-Tap Scr.		88	726-0193	Plastic Hose Clamp	
1	ļ			¼-20 x .50″ Lg.				•	



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# PARTS LIST FOR MODEL LGT-1655 (786) LAWN TRACTOR

-4	REF. NO.	PART NO.	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
	1	731-0220	Steering Wheel Cap		32	710-0180		Hex Bolt 3/8-24 x .75" Lg.	
	2	712-0237	Hex Cent. L-Nut 5/16-24 Thd.					Grade 5	
1	3	736-0242	Bell-Wash. 5/16" I.D. x .87"		33	736-0133		FI-Wash. 3/8 I.D. x 1.25 O.D.	1 1
			O.D. x .060	- ·				x .090	
	4	731-0806	Steering Wheel		34	741-0199		Flange Double "D" Brg753	
	- 5	741-0225	Plastic Hex Bearing 5/8" I.D.					I.D.	
	7	710-0258	Hex Bolt 1/4-20 x .62" Lg.		35	12749		Steering Arm Shaft Ass'y.	
	8	712-0113	Wing Nut Plastic 1/4-20 Thd.		36	748-0236		Side Gear-Steering	
	9	731-0707	Battery Cover		37	736-0105		Bell-Wash. 3/8" I.D.	
	10	725-0453	12-V Battery		38	712-0237		Hex Cent. L-Nut 5/16-24 Thd.	
	11	736-0329	L-Wash. ¼″ I.D.*		39	736-0264		FI-Wash. 5/16" I.D. x .62	
	12	712-0287	Hex Nut 14-20 Thd.*					O.D. x .059	
	13	710-0599	Hex Thd. Rolling Scr. 1/4-20		40	748-0237		Pinion Gear-Steering	
			x .50″ Lg.		41	747-0302		Drag Link	
ĺ	14	711-0222	Battery Hold Down Rod		42	710-0342		Hex Bolt 3/8-16 x 1.25" Lg.*	
	15	13379	Battery Plate		43	712-0798		Hex Nut 3/8-16 Thd.*	
	16	710-0533	Hex Bolt 5/8-18 x 2.5" Lg.*		44	12850		Steering Gear Sup. Ass'y.	
	17	736-0282	Flat Wash66" I.D. x 2.25"		46	736-0169		L-Wash. 3/8" I.D.*	1
	40	740 0000	O.D. x .17		47	712-0241		Hex Nut 3/8-24 Thd.*	
	18	712-0923	Hex Cent. L-Nut 5/8-18 Thd.		48	725-0771		Solenoid	
	19	13865	Front Pivot Bar Ass'y.		49	710-0289		Hex Bolt 1/4-20 x .5" Lg.*	1 1
	20	17268	Front Axle Ass'yL.H.	N	50	712-0271		Hex Sems Nut 14-20 Thd.	
1	21 22	736-0169	L-Wash. 3/8" I.D.*		51	736-0222		Ext. L-Wash. 1/4" I.D.	
	22	712-0711	Hex Jam Nut 3/8-24 Thd.		52	731-0559		Steering Bellow	
	23	723-0156 747-0301	Ball Joint Ass'y.	ĺ	53	16512		Upper Steering Shaft	
	24	17267	Tie Rod	<b>N</b> 1	54	710-0837		Oval Hd. CrSunk Scr. #10	1
	25	736-0316	Front Axle Ass'yR.H.	N		744 0050		x 5/8" Lg.	
	27	130-0310	Fl-Wash780 I.D. x 1.59 O.D. Flange Bearing		55	741-0356		FI-Bearing .89" I.D. x 1.36"	
	28		Front Wheel Ass'y. Comp.		56	712-0324		O.D. How I. Nut 14:00 That	
	29	••	Front Wheel Rim Only		50	712-0324		Hex L-Nut 1/4-20 Thd.	
[	30	731-0484	Dust Cover		57	10-0956		Hex Bolt ¼-20 x 1.25" Lg. (Special)	
	31	714-0121	Cotter Pin 5/32" Dia. x 1.00"		58	738-0588		Lower Steering Shaft	
			Lg.*		50	731-0988		Nylon Cap	
l			 -5.			101-0000			

(629-Silver Flake) (483-Charcoal Grey)

\*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

When ordering parts if color is important, use the appropriate color code listed above. (e.g. 12369-629 Silver Flake)

Description	15 x 6.00—Part No. Turf Tread
Wheel Assembly Comp.	734-1135
Tire Only	734-0427
Rim Only	734-0961
Bearing	741-0382
Air Valve	734-0255
Grease Fitting	737-0224

# \*\*FRONT WHEEL CHART







# PARTS LIST FOR MODEL LGT-1655 (786) LAWN TRACTOR

REF. NO.	PART NO.	COLOR	DESCRIPTION	NEW PART	REF. NO.	PART NO.		DESCRIPTION	NEW PART
1	720-0157		Grip	1	29	734-0255		Air Valve	
2	14233		Lift Handle Ass'y.		30	734-1004	1	Rear Wheel Ass'y. Comp.	
3	710-0442		Hex Bolt 5/16-18 x 1.5" Lg.*			734-0322		Tire Only	
4	748-0274	1	Lift Shaft Drive		31	734-1015		Rear Wheel Rim Only	
5	741-0225		Plastic Hex Brg. 5/8" I.D.		32	736-0345		Flat Washer	
6	14231		Index Brkt. Deck Lift		33	714-0142		Cotter Pin 3/16" Dia. x	
7	737-0164		Pipe Nipple 3/8-18 Npt.					1.50″ Lg.	
8	737-0143		Pipe Cap 3/8-18 Npt.	1	34	711-0817		Eye Bolt Adj. Link 1/2-13 Thd.	N
9	714-0118		Sq. Key 1/4" x 1/4" x 1.50"		35	714-0120		Sq. Key 1/4 x 3.0″	
•			Lg.	ļ	36	712-0158		Hex Cent. L-Nut 5/16-18 Thd.	
10	747-0216	ł	Belt Guard Lock Pin	1	37	710-0237		Hex Scr. 5/16-24 x .62" Lg.*	
11	736-0171		L-Wash. 7/16" I.D.		38	736-0119		L-Wash. 5/16" I.D.*	
12	710-0757		Hex Scr. 7/16-20 x 1.50" Lg.		39	712-0181		Hex Top L-Nut 3/8-16 Thd.	
13	747-0299		Belt Guard		40	732-0369		Compression Spring	
14	13889		Lift Shaft Ass'y.	1	41	738-0392		Deck Connecting Rod	
15	13895		Lift Pivot Brkt. Ass'y.		42	712-0123		Hex Nut 5/16-24 Thd.*	
16	17303		Adj. Deck Lift Link	N	43	14170	l.	Index Brkt. Reinforcement	
17	736-0192		FI-Wash. 1/2" I.D. x 1.00"					Plate	
			O.D. x .090		44	751-0275		Exhaust Pipe	
18	714-0101		Hairpin Cotter		45	14282		Heat Shield	
19	741-0295		Nyliner 5/8" I.D. x .88" Lg.		46	726-0185		Mounting Clamp	
20	738-0445		Shid. Bolt 5/8" Dia. x .96"		47	731-0556	i l	Hub Cap	
		1	Lg. 3/8-16		48	710-0224		Hex Wash. Hd. AB-Tap Scr.	
21	13790		Connecting Link					#10 x .50" Lg.	
22	738-0296		Shld. Bolt .437 Dia. x .268		49	736-0242	!	Bell-Wash39" I.D.	
			Lg. 5/16-18		50	714-0111		Cotter Pin .09 Dia. x 1.0" Lg.	
23	736-0322		Flat Wash44" I.D. x 1.25"		51	714-0149		Int. Cotter Pin	
			O.D. x .17		52	736-0231		Flat Wash34" I.D. x 1.12"	
24	756-0328		Two-Step Engine Pulley					O.D. x .125	
		i	4.75" & 5.56		53	710-0726	3	Hex Wash. Hd. AB-Tap Scr.	
25	710-0502		Hex Wash, Hd. Scr. 3/8-16 x					5/16 x .62" Lg.	1
			1.25″ Lg.		54	712-0206	5	Hex Nut 1/2-13 Thd.	
26	710-0600		Hex Thd. Rolling Scr. 5/16-24		55	14399		Deck Link	
			x .50" Lg.						
27	738-0435	:	Running Board Rod		1				
28	750-0490		Spacer 1.0" I.D. x 1.25"			1			
·			O.D. x 2.12" Lg.				-		ļ

The engine is not under warranty by the mower manufacturer. If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines—Gasoline."

Find It Fast In The Yellow Pages \$

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# PARTS LIST FOR TRANSAXLE MODEL 1322

- FAN	IS LIST FUR	
REF. NO.	PART NO.	DESCRIPTION
1	PE-778014	Pinion, Bevel
2	PE-778039	Gear, Bevel
3	PE-786019	Pin, Drive
4	PE-786027	Block, Drive
2	PE-774028A	Carrier, Differential
5 6	PE-774029A	Carrier, Differential
7	PE-778033A	Gear, Ring
		Axle (16-1/64" Long)
8	PE-774434	Washer
10	PE-780107	Washer, Thrust
11	PE-780042	
12	PE-792018	Ring, Snap Screw, Hex Hd. 1/4-20 x 21/4
13	PE-792020	Screw, nex riu. 74-20 x 2.74
14	PE-792006	Lock Washer, 1/4"
15	PE-770052	Case Ass'y. (Incl. Nos.
	1	16 & 17)
16	PE-780013	Bearing, Needle
17	PE-780088	Bearing, Needle
18	PE-772035	Cover Ass'y. (Incl. Nos.
1		16 & 19)
19	PE-780089	Bearing, Needle
20	PE-782041	Housing Ass'y., Axle
20		(Incl. 2 of No. 21)
21	PE-780054	Bushing
23	PE-776207	Shaft, Brake
	PE-788044	Gasket, Case to Cover
24	PE-778036	Gear, Output
25	PE-778037	Gear, Idler
26		Shaft, Output
27	PE-778041	Spacer
28	PE-786017	
29	PE-780001	Washer
30	PE-780090	Washer
31	PE-788008	Seal, Oil
32	PE-786026	Pin, Dowel
33	PE-792046	Screw, Hex Hd., Self-
1	l	Tapping, 1/4-20 x 1
34	PE-792010	Plug, Pipe
35		Gasket
36		Disc, Brake
37	PE-790006	Pad, Brake
38		Plate, Brake Pad
39		Holder, Brake Pad
40		Lever, Brake
40		Washer, Flat
42		Lock Nut 5/16-24
		Screw, Hex Hd., Self-
43	FE-192013	Tapping, 1/4-20 x 11/4
	A DE 700005	Screw, Hex Hd., Self-
43	A PE-792085	Tapping, 14-20 x 21/4
	DE 700000	
44	PE-786066	Spacer



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