Form No. 3352-805

Wheel Horse® XL 440H Lawn Tractor

Model No. 71286—Serial No. 250000001 and Up

Operator’s Manual

Register your product at www.Toro.com.

Original Instructions (EN)

This spark ignition system complies with Canadian ICES-002.

Ce système d'allumage par étincelle de véhicule est conforme à la norme NMB-002 du Canada.

Contents

Introduction

Read this manual carefully to learn how to operate and maintain your product properly. The information in this manual can help you and others avoid injury and product damage. Although Toro designs and produces safe products, you are responsible for operating the product properly and safely.

Whenever you need service, genuine Toro parts, or additional information, contact an Authorized Service Dealer or Toro Customer Service and have the model and serial numbers of your product ready. Figure 1 illustrates the location of the model and serial numbers on the product.

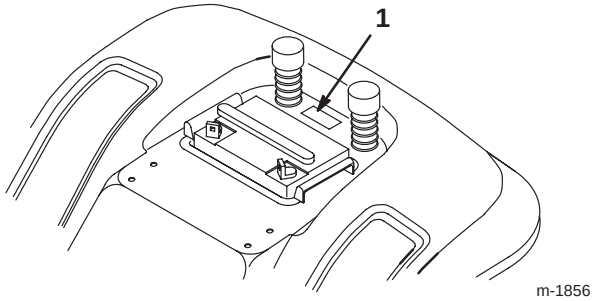


Figure 1

1. Location of the model and serial numbers

Write the product model and serial numbers in the space below:

Model No. _____

Serial No. _____

This manual identifies potential hazards and has special safety messages that help you and others avoid personal injury and even death. ***Danger***, ***Warning***, and ***Caution*** are signal words used to identify the level of hazard. However, regardless of the hazard, be extremely careful.

Danger signals an extreme hazard that **will** cause serious injury or death if you do not follow the recommended precautions.

Warning signals a hazard that **may** cause serious injury or death if you do not follow the recommended precautions.

8111 Lyndale Avenue South
Bloomington, MN 55420-1196

Caution signals a hazard that may cause minor or moderate injury if you do not follow the recommended precautions.

This manual uses 2 other words to highlight information. **Important** calls attention to special mechanical information and **Note:** emphasizes general information worthy of special attention.

Safety

Read and understand the contents of this manual before operating the tractor.

⚠This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid all possible injury or death.

Safe Operating Practices

The following instructions are from the CEN standard EN 836:1997.

This product is capable of amputating hands and feet and throwing objects. Always follow all safety instructions to avoid serious injury or death.

Training

- Read the instructions carefully. Be familiar with the controls and the proper use of the equipment.
- Never allow children or people unfamiliar with these instructions to use the lawnmower. Local regulations can restrict the age of the operator.
- Never mow while people, especially children, or pets are nearby.
- Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.
- Do not carry passengers.
- All drivers should seek and obtain professional and practical instruction. Such instruction should emphasize:
  - the need for care and concentration when working with ride-on machines;
  - control of a ride-on machine sliding on a slope will not be regained by the application of the brake. The main reasons for loss of control are:
    - insufficient wheel grip;
    - being driven too fast;
    - inadequate braking;
    - the type of machine is unsuitable for its task;
    - lack of awareness of the effect of ground conditions, especially slopes;
    - incorrect hitching and load distribution.

Preparation

- While mowing, always wear substantial footwear and long trousers. Do not operate the equipment when barefoot or wearing open sandals.
- Thoroughly inspect the area where the equipment is to be used and remove all objects which may be thrown by the machine.
- **Warning**—Fuel is highly flammable.
  - Store fuel in containers specifically designed for this purpose.
  - Refuel outdoors only and do not smoke while refuelling.
  - Add fuel before starting the engine. Never remove the cap of the fuel tank or add fuel while the engine is running or when the engine is hot.
  - If fuel is spilled, do not attempt to start the engine but move the machine away from the area of spillage and avoid creating any source of ignition until fuel vapors have dissipated.
  - Replace all fuel tanks and container caps securely.
- Replace faulty silencers.
- Before using, always visually inspect to see that the blades, blade bolts and cutter assembly are not worn or damaged. Replace worn or damaged blades and bolts in sets to preserve balance.
- On multi-bladed machines, take care as rotating one blade can cause other blades to rotate.

Operation

- Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect.
- Mow only in daylight or in good artificial light.
- Before attempting to start the engine, disengage all blade attachment clutches and shift into neutral.
- Do not use on slopes of more than
  - 5° when mowing on side hills;
  - 10° when mowing uphill;
  - 15° when mowing downhill.
- Remember there is no such thing as a safe slope. Travel on grass slopes requires particular care. To guard against overturning:

  - do not stop or start suddenly when going up or downhill;
  - engage clutch slowly, always keep machine in gear, especially when travelling downhill;
  - machine speeds should be kept low on slopes and during tight turns;
  - stay alert for humps and hollows and other hidden hazards;
  - never mow across the face of the slope, unless the lawnmower is designed for this purpose.
- Use care when pulling loads or using heavy equipment.
  - Use only approved drawbar hitch points.
  - Limit loads to those you can safely control.
  - Do not turn sharply. Use care when reversing.
  - Use counterweight(s) or wheel weights when suggested in the instruction handbook.
- Watch out for traffic when crossing or near roadways.
- Stop the blades rotating before crossing surfaces other than grass.
- When using any attachments, never direct discharge of material toward bystanders nor allow anyone near the machine while in operation.
- Never operate the machine with damaged guards or without safety protective devices in place.
- Do not change the engine governor settings or overspeed the engine. Operating the engine at excessive speed can increase the hazard of personal injury.
- Before leaving the operator's position:
  - disengage the power take-off and lower the attachments;
  - change into neutral and set the parking brake;
  - stop the engine and remove the key.
- Disengage drive to attachments, stop the engine, and disconnect the spark plug wire(s) or remove the ignition key
  - before clearing blockages or unclogging chute;
  - before checking, cleaning or working on the lawnmower;
  - after striking a foreign object. Inspect the lawnmower for damage and make repairs before restarting and operating the equipment;
  - if the machine starts to vibrate abnormally (check immediately).
- Disengage drive to attachments when transporting or not in use.
- Stop the engine and disengage drive to attachment
  - before refuelling;
  - before removing the grass catcher;
  - before making height adjustment unless adjustment can be made from the operator's position.
- Reduce the throttle setting during engine run-out and, if the engine is provided with a shut-off valve, turn the fuel off at the conclusion of mowing.

Maintenance and Storage

- Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
- Never store the equipment with fuel in the tank inside a building where fumes can reach an open flame or spark.
- Allow the engine to cool before storing in any enclosure.
- To reduce the fire hazard, keep the engine, silencer, battery compartment and fuel storage area free of grass, leaves, or excessive grease.
- Check the grass catcher frequently for wear or deterioration.
- Replace worn or damaged parts for safety.
- If the fuel tank has to be drained, this should be done outdoors.
- On multi-bladed machines, take care as rotating one blade can cause other blades to rotate.
- When machine is to be parked, stored or left unattended, lower the cutting means unless a positive mechanical lock is used.

Toro Riding Mower Safety

The following paragraph contains safety information specific to Toro products or other safety information that you must know that is not included in the CEN standard.

Use only Toro-approved attachments. Warranty may be voided if used with unapproved attachments.

Sound Pressure Level

This unit has an equivalent continuous A-weighted sound pressure at the operator ear of: 87 dB(A), based on measurements of identical machines per EN 11094 an EN 836.

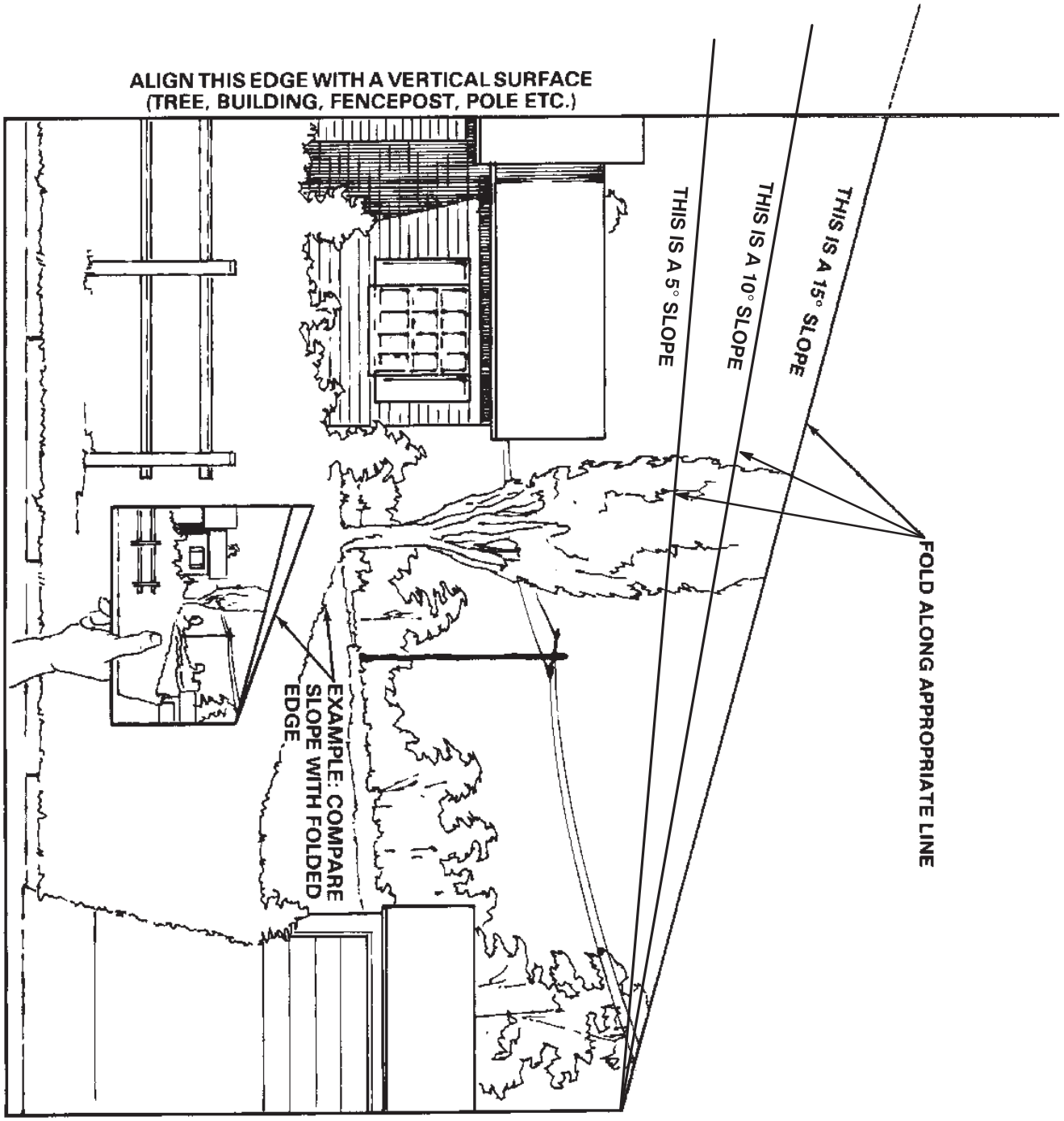
Sound Power Level

This unit has a sound power level of: 100 Lwa, based on measurements of identical machines per EN 11094.

Vibration Level

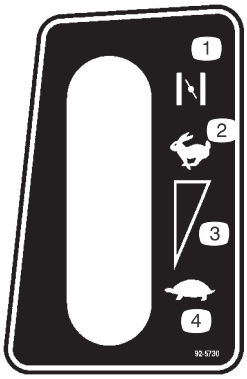
This unit has a maximum hand-arm vibration level of 10.0 m/s^2 and whole body vibration level of 0.4 m/s^2, based on measurements of identical machines per EN 1033 and EN 1032.

Slope Chart


ALIGN THIS EDGE WITH A VERTICAL SURFACE
(TREE, BUILDING, FENCEPOST, POLE ETC.)
THIS IS A 5° SLOPE
THIS IS A 10° SLOPE
THIS IS A 15° SLOPE
FOLD ALONG APPROPRIATE LINE
EXAMPLE: COMPARE SLOPE WITH FOLDED EDGE

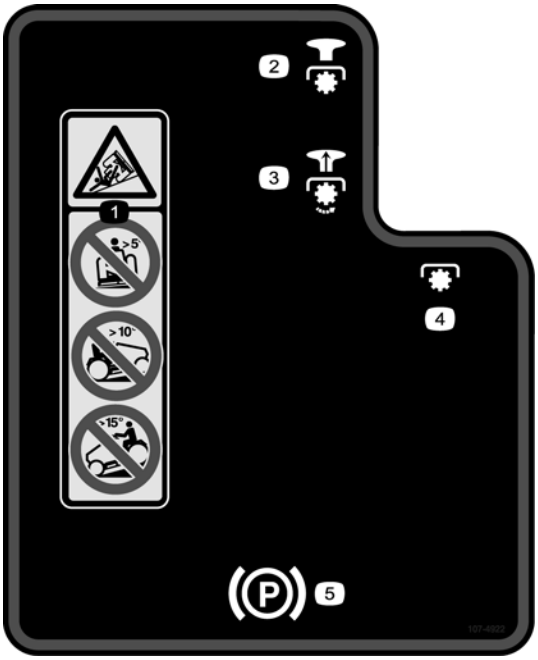
Safety and Instruction Decals

Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or lost.



92-5730

1. Choke
2. Fast
3. Continuous variable setting
4. Slow

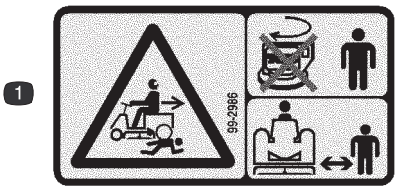


107-4922

1. Warning—to avoid tipping the tractor, do not drive across slopes greater than 5 degrees, up slopes greater than 10 degrees, or down slopes greater than 15 degrees.
2. Disengage
3. Engage
4. Power take-off (PTO)
5. Parking brake

93-6676

1. Parking brake—to engage, press the brake pedal and lift the parking brake lever; to disengage press and release the brake pedal.
2. Brake—to engage, press the brake pedal.
3. Traction drive—to drive forward, press the top of the traction control pedal forward and down; to drive in reverse, press the bottom of the traction control pedal rearward and down.
4. Warning—read the *Operator's Manual.*
5. Warning—to avoid tipping the tractor, do not drive across slopes greater than 5 degrees, up slopes greater than 10 degrees, or down slopes greater than 15 degrees.
6. Thrown object hazard—keep bystanders a safe distance from the machine.
7. Thrown object hazard, mower—keep the deflector in place.
8. Cutting/dismemberment hazard of hand or foot, mower blade—stay away from moving parts.
9. Crushing/dismemberment of a bystander—keep bystanders a safe distance from the machine.

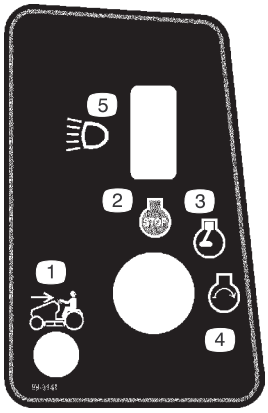


99-2986

1. Crushing/dismemberment hazard of bystanders—do not turn the key while children are present; keep children a safe distance from the machine.

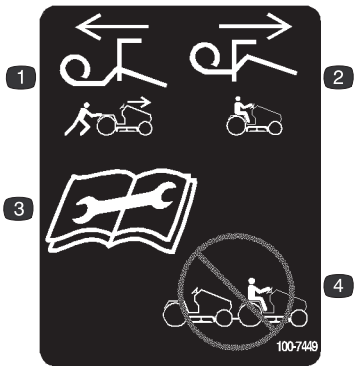
99-5340

1. KeyChoice—turn to enable reverse mowing.



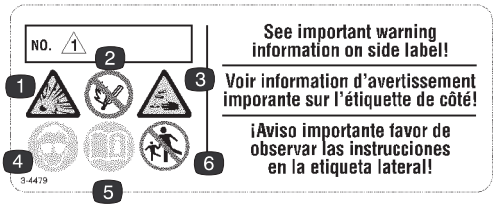
99-8141

1. Mowing in reverse enabled
2. Engine—stop
3. Engine—run
4. Engine—start
5. Headlights



100-7449

1. Pull the lever out to push the machine.
2. Push the lever in to ride on the machine.
3. Read the instructions before servicing or performing maintenance.
4. Do not tow the machine



104-4163

1. Explosion hazard
2. No fire, open flames, or smoking.
3. Caustic liquid/chemical burn hazard
4. Wear eye protection
5. Read the *Operator's Manual.*
6. Keep bystanders a safe distance from the battery.

104-4164

1. Contains lead; do not discard.
2. Recycle
3. Wear eye protection; explosive gases can cause blindness and other injuries
4. No sparks, flame, or smoking
5. Sulfuric acid can cause blindness or severe burns.
6. Flush eyes immediately with water and get medical help fast.
7. Maximum fill line
8. Minimum fill line
9. Instructions for activating the battery

Gasoline and Oil

Recommended Gasoline

Use unleaded regular gasoline suitable for automotive use (85 pump octane minimum). You may use leaded regular gasoline if unleaded regular is not available.

Important Never use methanol, gasoline containing methanol, or gasohol containing more than 10% ethanol because the fuel system could be damaged. Do not mix oil with gasoline.

Danger

In certain conditions, gasoline is extremely flammable and highly explosive. A fire or explosion from gasoline can burn you and others and can damage property.

- **Fill the fuel tank outdoors in an open area when the engine is cold. Wipe up any gasoline that spills.**
- **Do not fill the fuel tank completely full. Add gasoline to the fuel tank until the level is 1/4 to 1/2 in. (6 to 13 mm) below the bottom of the filler neck. This empty space in the tank allows the gasoline to expand.**
- **Never smoke when handling gasoline, and stay away from an open flame or where a spark may ignite the gasoline fumes.**
- **Store gasoline in an approved container and keep it out of the reach of children.**
- **Never buy more than a 30-day supply of gasoline.**
- **Always place gasoline containers on the ground away from your vehicle before filling.**
- **Do not fill gasoline containers inside a vehicle or on a truck or trailer bed because interior carpets or plastic truck bed liners may insulate the container and slow the loss of any static charge.**
- **When practical, remove gas-powered equipment from the truck or trailer and refuel the equipment with its wheels on the ground.**
- **If this is not possible, refuel such equipment on a truck or trailer from a portable container, not from a gasoline dispenser nozzle.**
- **If you must use a gasoline dispenser, keep the nozzle in contact with the rim of the fuel tank or container opening at all times until fueling is complete.**

Using Stabilizer/Conditioner

Use a fuel stabilizer/conditioner in the tractor to provide the following benefits:

- It keeps gasoline fresh during storage for up to 90 days. For longer storage, drain the fuel tank.
- It cleans the engine while it runs.
- It eliminates gum-like varnish buildup in the fuel system, which causes hard starting.

Important Do not use fuel additives containing methanol or ethanol.

Add the correct amount of fuel stabilizer/conditioner to the gasoline.

Note: A fuel stabilizer/conditioner is most effective when it is mixed with fresh gasoline. To minimize the chance of varnish deposits in the fuel system, use a fuel stabilizer/conditioner at all times.

Filling the Fuel Tank

1. Stop the engine and wait for all moving parts to stop.
2. Set the parking brake.
3. Clean around the fuel tank cap and remove the cap.
4. Add unleaded regular gasoline to the fuel tank until the level is 1/4 to 1/2 in. (6 to 13 mm) below the bottom of the filler neck. **Do not fill the fuel tank completely full.**

   Note: This space in the tank allows gasoline to expand.
5. Install the fuel tank cap securely.
6. Wipe up any gasoline that spills.

Checking the Engine Oil Level

Before you start the engine and use the tractor, check the oil level in the engine crankcase; refer to Checking the Oil Level on page 20.

Operation

Controls

Become familiar with all of the controls (Fig. 2) before you start the engine and operate the tractor.

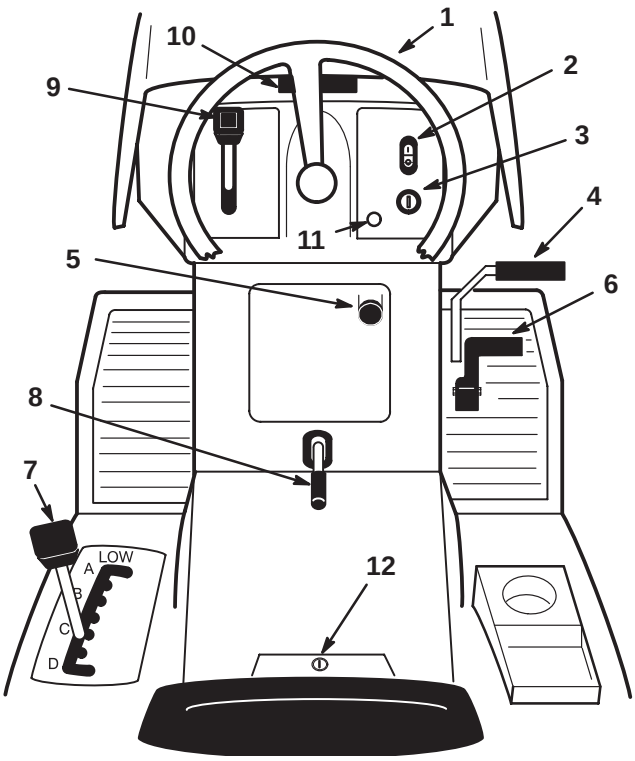


Figure 2

1. Steering wheel
2. Light switch—on/off (selected models)
3. Ignition switch
4. Clutch/brake pedal
5. Blade control (PTO)
6. Ground speed pedal
7. Height-of-cut lever
8. Parking brake lever
9. Throttle lever
10. Hood opening
11. Operating-in-reverse light
12. KeyChoice® switch

Using the Parking Brake

Always set the parking brake when you stop the tractor or leave it unattended.

Setting the Parking Brake

1. Push the clutch/brake pedal (Fig. 3) down and hold it in the depressed position.

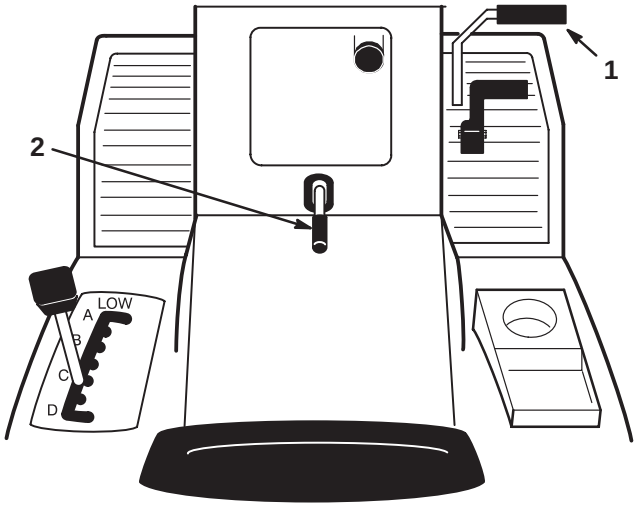


Figure 3

1. Clutch/brake pedal
2. Parking brake lever

2. Lift the parking brake lever (Fig. 3) up and gradually take your foot off of the clutch/brake pedal. The clutch/brake pedal should stay in the depressed (locked) position.

Releasing the Parking Brake

1. Push down on the clutch/brake pedal (Fig. 3). The parking brake lever should release.

2. Gradually release the clutch/brake pedal.

Positioning the Seat

The seat can move forward and backward. Position the seat where you have the best control of the tractor and are most comfortable.

1. Raise the seat and loosen the adjustment knob (Fig. 4).

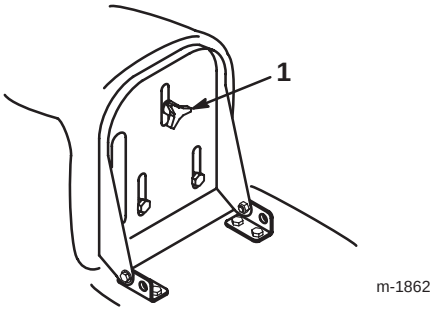


Figure 4

1. Adjustment knob

2. Move the seat to the desired position and tighten the knob.

Operating the Headlights

A dash-mounted On/Off switch (Fig. 2) controls the headlights. The lights only shine while the engine is running and the switch is On.

Using the Blade Control (PTO)

The blade control (PTO) lever engages and disengages power to the blades.

Engaging the Blades

1. Press the clutch/brake pedal to stop the tractor.

2. Pull the blade control (PTO) to Engaged (Fig. 5).

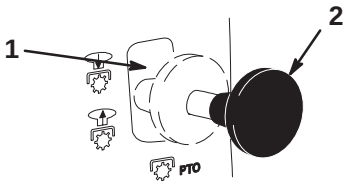


Figure 5

1. Off—disengaged
2. On—engaged

Disengaging the Blades

1. Press the clutch/brake pedal to stop the tractor.

2. Push the blade control (PTO) to Disengaged (Fig. 5).

Setting the Height-of-Cut

The height-of-cut lever is used to raise and lower the mower to the desired cutting height.

1. The cutting height may be set in 1 of 7 positions from approximately 1 to 4 in. (25 to 102 mm).

2. Pull on the height-of-cut lever and move it to the desired position (Fig. 6).

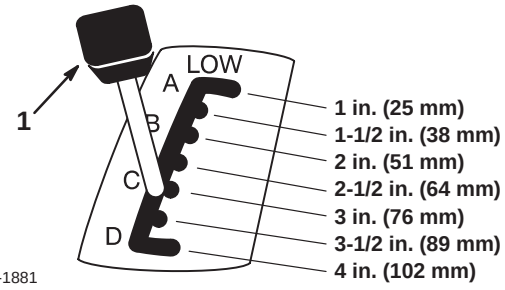


Figure 6

1. Height-of-cut lever

Starting the Engine

1. Sit down on the seat.

2. Set the parking brake; refer to Setting the Parking Brake on page 13.

Note: The engine will not start unless you set the parking brake or fully depress the clutch/brake pedal.

3. Shift the blade control (PTO) lever to Disengaged (Fig. 7).

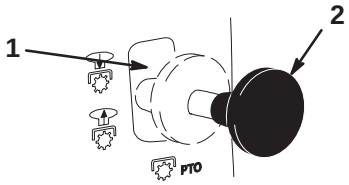


Figure 7

1. Disengaged
2. Engaged

4. Shift the throttle lever to Choke (Fig. 8).

Note: An engine that has been running and is warm may not require step 4.

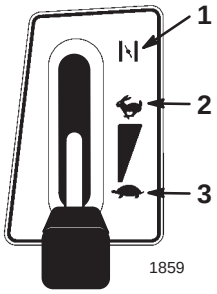


Figure 8

1. Choke
2. Fast
3. Slow

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5. Turn the ignition key clockwise and hold it in the Start position (Fig. 9). When the engine starts, release the key.

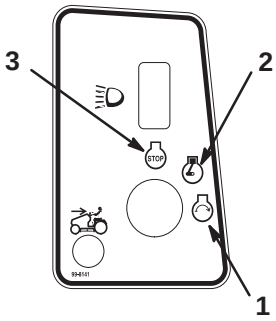


Figure 9

1. Start
2. On
3. Off

Important If the engine does not start after 30 seconds of continuous cranking, turn the ignition key to Off and let the starter motor cool; refer to Troubleshooting on page 30.

6. After the engine starts, slowly shift the throttle lever to Fast (Fig. 8). If the engine stalls or hesitates, shift the throttle lever back to Choke for a few seconds. Then shift the throttle lever to Fast. Repeat this as required.

Stopping the Engine

1. Shift the throttle lever to Fast (Fig. 8).

2. Turn the ignition key to Off and remove the ignition key (Fig. 9).

Using the Safety Interlock System

Understanding the Safety Interlock System

The safety system is designed to prevent the engine from starting unless:

- The clutch/brake pedal is depressed.
- The blade control (PTO) is in the Disengaged position.

The safety system is designed to stop the engine if:

- You rise from the seat when the clutch/brake pedal is released.
- You rise from the seat when the blade control (PTO) is in the Engaged position.
- You shift into reverse with the blade control (PTO) in the Engaged position and the operating-in-reverse interlock not deactivated.

Setting the KeyChoice® Switch to Operate in Reverse

An interlock feature on the tractor prevents the power take off (PTO) from operating when backing up. If you shift into reverse with the blades (PTO) engaged (i.e., with mower blades or other attachment running), the the engine will stop. **Do not mow in reverse unless absolutely necessary.**

If you need to use the blades (PTO) while backing up, you can turn off this interlock feature using the KeyChoice switch located near the seat bracket (Fig. 10).

Danger

You could back over a child or bystander while the mower blades or other attachment is engaged and cause serious injury or death.

- **Do not mow in reverse unless absolutely necessary.**
- **Do not insert the KeyChoice key unless it is absolutely necessary.**
- **Always look backward and down before backing up.**
- **Use the KeyChoice switch only if you are certain no children or other bystanders will enter the mowing area.**
- **Be very observant after deactivating the interlock because the sound of the engine may prevent you from noticing that a child or bystander has entered the work area.**
- **Always remove both the ignition and KeyChoice keys and put them in a safe place out of the reach of children or unauthorized users when leaving the unit unattended.**

1. Engage the blade control (PTO).
2. Insert the KeyChoice key into the switch (Fig. 10).

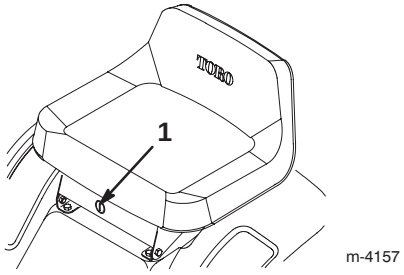


Figure 10

1. KeyChoice switch

3. Turn the KeyChoice key.

   A red light on the front console (Fig. 11) turns on, indicating that the interlock is disabled.

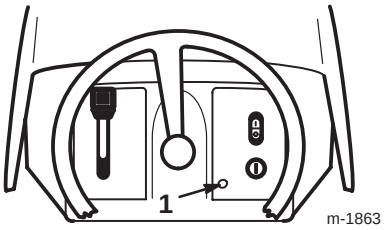


Figure 11

1. Operating-in-reverse light

4. Shift into reverse and complete your task.
5. Disengage the blades (PTO) to activate the interlock.
6. Remove the KeyChoice key and put it in a safe place out of reach of children.

Testing the Safety Interlock System

Caution

If safety interlock switches are disconnected or damaged the tractor could operate unexpectedly causing personal injury.

- **Do not tamper with the interlock switches.**
- **Check the operation of the interlock switches daily and replace any damaged switches before operating the tractor.**
- **Replace switches every 2 years regardless of whether they are operating properly or not.**

Test the safety system before you use the tractor each time. If the safety system does not operate as described below, have an Authorized Service Dealer repair the safety system immediately. While sitting in the seat, perform the following checks:

1. Set the parking brake. Shift the blade control (PTO) to Engaged. Turn the ignition key to Start; the engine should not crank.
2. Shift the blade control (PTO) to Disengaged and release the parking brake. Turn the ignition key to Start; the engine should not crank.
3. With the ground speed lever in Neutral, set the parking brake and shift the blade control (PTO) to Disengaged. Start the engine. While the engine is running, release the parking brake and rise slightly from the seat; the engine should stop.

4. Shift the blade control (PTO) into the Disengaged position, the ground speed pedal in Neutral, and set the parking brake. Start the engine. While the engine is running, shift the blade control (PTO) into the Engaged position, push in the clutch, and put the ground speed lever in Reverse. The engine should stop.

5. Shift the blade control (PTO) into the Disengaged position, the ground speed pedal in Neutral, and set the parking brake. Start the engine. Shift the blade control (PTO) to the Engaged position and turn the KeyChoice key and release it. The operating-in-reverse light should illuminate. Shift the blade control (PTO) to the Disengaged position and the operating-in-reverse light should turn off.

Pushing the Tractor Manually

Important Always push the tractor manually. Never tow the tractor because you may damage the transaxle.

To Push the Machine

1. Disengage the blades (PTO).
2. Stop the engine and wait for all moving parts to stop.
3. Remove the ignition key.
4. Pull the drive control out to the Push position (Fig. 12).

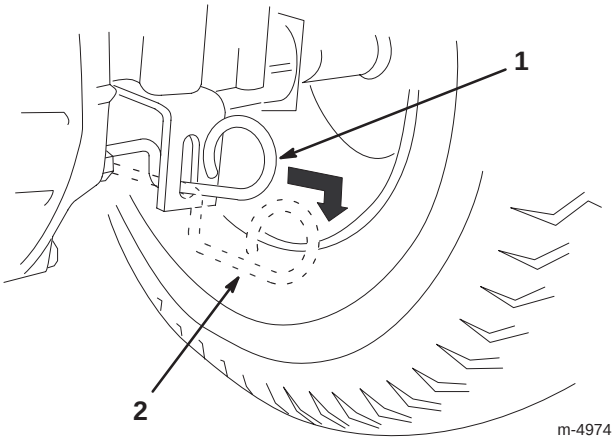


Figure 12

1. Operate position
2. Push position

Note: This disengages the drive system and allows the wheels to turn freely (Fig. 12).

To Operate the Machine

Push the drive control in to the Operate position (Fig. 12).

Note: The machine will not drive unless the drive control is in the Operate position.

Driving the Tractor Forward or Backward

The throttle control regulates the engine speed as measured in RPM (revolutions per minute). Shift the throttle lever into the Fast position for best performance.

1. Release the parking brake; refer to Releasing the Parking Brake on page 13.

Important To avoid transmission damage, always release the parking brake before moving the ground speed pedal.

2. Place your foot on the ground speed pedal (Fig. 13) and slowly press on the top of the pedal to move forward or on the bottom of the pedal to move backward.

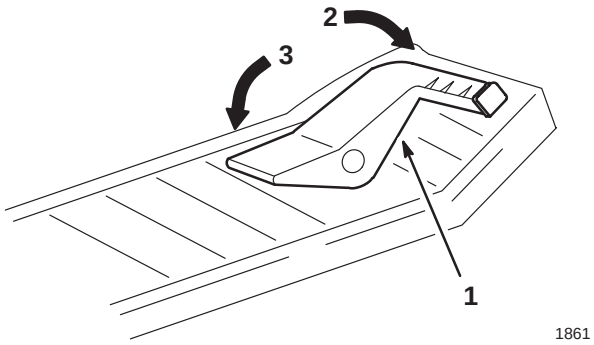


Figure 13

1. Ground speed pedal
2. Forward
3. Backward

Note: The farther you move the ground speed pedal in either direction, the faster the tractor will move in that direction.

Note: To slow down, release the pressure on the ground speed pedal.

Note: For reverse motion, with the blades (PTO) engaged, the operating-in-reverse interlock must be deactivated by the KeyChoice switch located in front of and below the seat.

Stopping the Tractor

To stop the tractor, release the ground speed pedal, disengage the blades (PTO), and turn the ignition key to Off to stop the engine. Also set the parking brake if you leave the tractor unattended; refer to Setting the Parking Brake on page 13. Remember to remove the keys from the ignition and KeyChoice switches.

Caution

Children or bystanders may be injured if they move or attempt to operate the tractor while it is unattended.

Always remove the ignition and KeyChoice keys and set the parking brake when leaving the tractor unattended, even if just for a few minutes.

Operating Tips

- For the best performance, operate the engine at the maximum speed. The mower requires air to thoroughly cut grass clippings, so do not set the height-of-cut too low or completely surround the mower in uncut grass. Always leave one side of the mower free from uncut grass to allow the air to be drawn into the mower.
- Cut the grass slightly longer than normal to ensure that the cutting height of the mower does not scalp any uneven ground. When cutting grass longer than 6 in. (15 cm) tall, cut the lawn twice to ensure an acceptable appearance.
- It is best to cut only about 1/3 of the grass blade. Do not cut more than that unless the grass is sparse or it is late fall when grass grows more slowly.
- Alternate the mowing direction to keep the grass standing straight. This also helps disperse clippings and enhances decomposition and fertilization.
- Grass grows at different rates at different times of the season. To maintain the same cutting height, which is a good practice, mow more often in early spring. As the grass growth rate slows in mid summer, mow less frequently.
- To improve the quality of cut, use a slower ground speed. For best operation on average lawns, operate the engine at full throttle while controlling the ground speed. You should operate the tractor between from 2 to 3.5 mph (3.2 to 5.6 km/h) while mowing. An uneven cut is often a result of operating the tractor at an excessive ground speed.
- If the grass is longer than normal, or if it contains a high degree of moisture, raise the cutting height higher than usual, cut the grass at that setting, and then cut the grass again at the lower, normal setting.
- If you must stop the tractor while mowing, you may leave a clump of grass clippings on your lawn. To avoid this, do the following:
  - Engage the blade and move to a previously cut area.
  - Disperse the clippings evenly by raising the mower 1 or 2 height-of-cut settings while driving forward with the blade engaged.
- Use the washout port to clean clippings and dirt from the underside of the mower after each use. If grass and dirt build up inside the mower, the cutting quality will eventually become unsatisfactory.
- Maintain a sharp blade throughout the season. A sharp blade cuts grass cleanly without tearing or shredding the grass blades. Tearing and shredding the grass turns it brown at the edges, which slows its growth and increases the chance of disease. Every 30 days, check the blade for sharpness and file down any nicks.

Maintenance

Recommended Maintenance Schedule

Maintenance Service Interval	Maintenance Procedure
After first 5 hours of use	• Change the engine oil.
Each use	• Check the engine oil level. • Check the safety system. • Check the battery electrolyte.
Every 5 hours	• Check the brakes.
Every 25 hours	• Grease the chassis.[1] • Service the foam air cleaner.[1] • Check the spark plug. • Check the tire pressure.
Every 50 hours	• Change the engine oil.[2]
Every 100 hours	• Change the oil filter.[2] • Service the paper air cleaner.[1] • Replace the spark plug. • Replace the fuel filter. • Clean the cooling system.[1] • Check the transaxle fluid.
Before storage	• Perform all of the maintenance procedures listed above. • Check the belts for wear/cracks. • Drain the fuel tank. • Paint chipped surfaces. • Charge the battery and disconnect the cables.
After storage	• Check the safety system. • Check the brakes. • Check the spark plug. • Check the battery electrolyte. • Check the tire pressure.

[1]More often in dusty, dirty conditions

[2]More often when operating the engine under heavy load or in high temperatures

Important Refer to your engine operator's manual for additional maintenance procedures.

Caution

If you leave the key in the ignition switch, someone could accidently start the engine and seriously injure you or other bystanders.

Remove the key from the ignition and disconnect the wire from the spark plug before you do any maintenance. Set the wire aside so that it does not accidentally contact the spark plug.

Servicing the Engine Oil

Check the oil level daily or after every 8 hours.

Change the oil after the first 5 operating hours and every 50 operating hours thereafter.

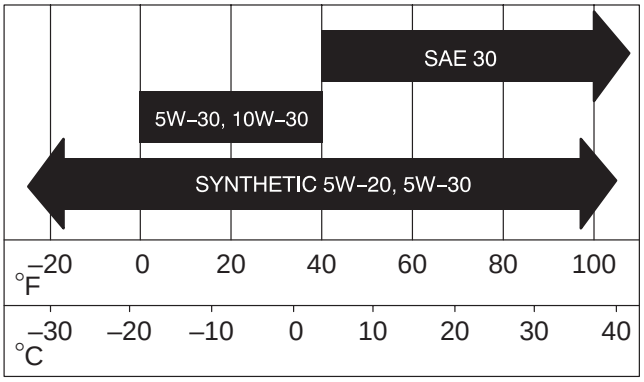
Note: Change the oil more frequently when operating conditions are extremely dusty or sandy.

Oil Type: Detergent oil (API service SF, SG, SH, SJ, or higher)

Crankcase Capacity: 48 oz. or 1-1/2 qt. (1400 cc or 1.4 l) without the oil filter; 56 oz. or 1-3/4 qt. (1700 cc/1.7 l) with the oil filter

Viscosity: See the table below.

USE THESE SAE VISCOSITY OILS



Checking the Oil Level

1. Park the tractor on a level surface.
2. Disengage the blades (PTO).
3. Set the parking brake.
4. Stop the engine and wait for all moving parts to stop.
5. Remove the ignition key.
6. Open the hood.
7. Clean around the oil dipstick (Fig. 14) so that dirt cannot fall into the fill hole and damage the engine.

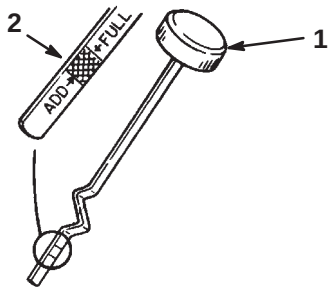


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Figure 14

1. Oil dipstick
2. Metal end

8. Unscrew the oil dipstick and wipe the metal end clean (Fig. 14).
9. Screw the oil dipstick fully onto the fill hole. Unscrew the dipstick again and look at the metal end. If the oil level is low, slowly pour only enough oil into the fill hole to raise the level to the Full mark on the dipstick.

Important Do not overfill the crankcase with oil because the engine may be damaged.

Changing the Oil

1. Start the engine and let it run for 5 minutes. This warms the oil so that it drains better.
2. Park the tractor so that the left side is slightly lower than the right side to ensure that the oil drains completely.
3. Disengage the blades (PTO).
4. Set the parking brake.
5. Stop the engine and wait for all moving parts to stop.
6. Remove the ignition key.
7. Disconnect the spark plug.
8. Open the hood.
9. Place a pan below the oil drain plug and remove it (Fig. 14).
10. When the oil has drained completely, install the drain plug.

Note: Dispose of the used oil at a certified recycling center.

11. Change the oil filter, if necessary (Fig. 15).
12. Slowly pour approximately 80% of the specified amount of oil into the fill hole (Fig. 14). Check the oil level; refer to steps 4 and 5 of Checking the Oil Level on page 20.

Changing the Oil Filter

Replace the oil filter every 100 hours or every other oil change.

Note: Change the oil filter more frequently when operating conditions are extremely dusty or sandy.

1. Drain the oil from the engine; refer to Changing the Oil on page 20.
2. Remove the old filter and wipe the filter adapter (Fig. 15) gasket surface.

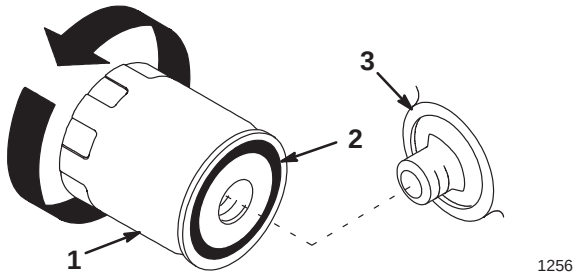


Figure 15

1. Oil filter
2. Gasket
3. Adapter

3. Apply a thin coat of new oil to the rubber gasket on the replacement filter (Fig. 15).
4. Install the replacement oil filter to the filter adapter. Turn the oil filter clockwise until the rubber gasket contacts the filter adapter; then tighten the filter an additional 1/2 to 3/4 turn (Fig. 15).
5. Slowly pour approximately 80% of the specified amount of oil into the fill hole. Check the oil level; refer to steps 8 and 9 of Checking the Oil Level on page 20.
6. Close the hood.

Servicing the Air Cleaner

Foam Element: Clean after every 25 operating hours, or yearly, whichever occurs first.

Paper Element: Replace after every 100 operating hours or yearly, whichever occurs first.

Note: Service the air cleaner more frequently (every few hours) if operating conditions are extremely dusty or sandy.

Removing the Foam and Paper Elements

1. Disengage the blades (PTO).
2. Set the parking brake.
3. Stop the engine and wait for all moving parts to stop.
4. Remove the ignition key.
5. Open the hood.
6. Clean around the air cleaner to prevent dirt from getting into the engine and causing damage. Pull up on the air cleaner cover handle and rotate it toward the engine (Fig. 16). Remove the air cleaner cover.

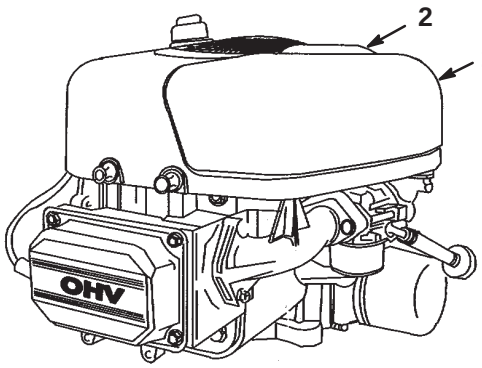


Figure 16

1. Air cleaner cover
2. Air cleaner cover handle

7. Carefully slide the paper element and foam element from the blower housing (Fig. 17).

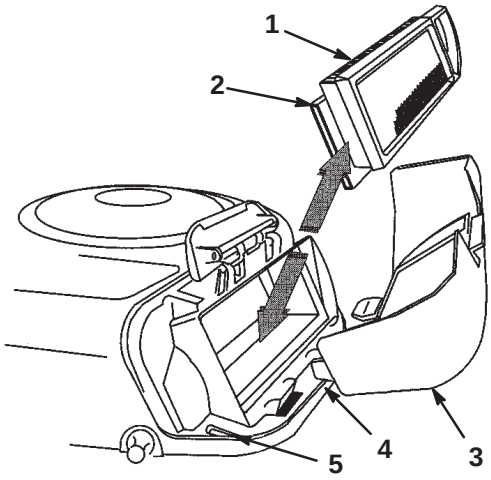


Figure 17

1. Paper element
2. Foam element
3. Air cleaner cover
4. Tab
5. Slot

Cleaning the Foam and Paper Elements

Foam Element:

1. Wash the foam element in liquid soap and warm water. When the element is clean, rinse it thoroughly.
2. Dry the element by squeezing it in a clean cloth. Do **not** oil the element.

Important Replace the foam element if it is torn or worn.

Paper Element:

1. Lightly tap the element on a flat surface to remove dust and dirt.
2. Carefully clean the rubber seal on the paper element to prevent debris from entering the engine.
3. Inspect the element for tears, an oily film, and damage to the rubber seal.

Important Never clean the paper element with pressurized air or liquids, such as solvent, gas, or kerosene. Replace the paper element if it is damaged or cannot be cleaned thoroughly.

Installing the Foam and Paper Elements

Important To prevent engine damage, always operate the engine with the complete foam and paper air cleaner assembly installed.

1. Place the foam element and paper element into the blower housing.

Note: Ensure that the rubber seal is flat against the air cleaner base.

2. Align the tabs on the air cleaner cover with the slots of the blower housing (Fig. 17). Hook the handle onto the cover and press down on the handle to lock the cover in place.
3. Close the hood.

Servicing the Spark Plug

Install a new spark plug after every 100 operating hours. Check the spark plug after every 25 operating hours. Make sure that the air gap between the center and side electrodes is correct before installing the spark plug. Use a spark plug wrench for removing and installing the spark plug and a gapping tool/feeler gauge to check and adjust the air gap.

Type: **Champion QC12YC** (or equivalent)

Air Gap: **0.030 in. (0.76 mm)**

Removing the Spark Plug

1. Disengage the blades (PTO).
2. Set the parking brake.
3. Stop the engine and wait for all moving parts to stop.
4. Remove the ignition key.
5. Open the hood.
6. Disconnect the wire from the spark plug (Fig. 18).

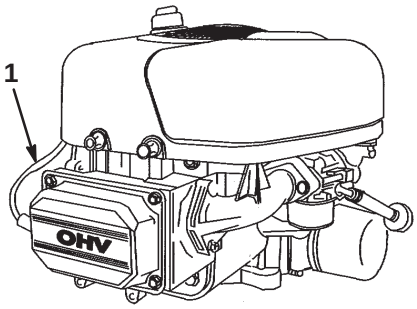


Figure 18

1. Spark-plug wire

7. Clean around the spark plug to prevent dirt from falling into the engine and potentially causing damage.
8. Remove the spark plug and metal washer.

Checking the Spark Plug

1. Look at the center of the spark plug (Fig. 19). If you see light brown or gray on the insulator, the engine is operating properly. A black coating on the insulator usually means the air cleaner is dirty.

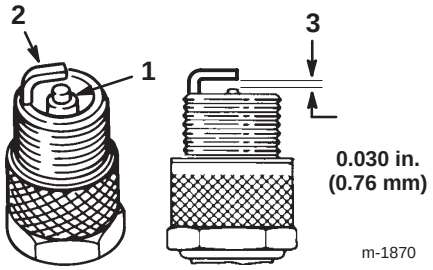


Figure 19

1. Center electrode insulator
2. Side electrode
3. Air gap (not to scale)

Important Never clean the spark plug. Always replace the spark plug when it has a black coating, worn electrodes, an oily film, or cracks.

2. Check the gap between the center and side electrodes (Fig. 19). Bend the side electrode (Fig. 19) if the gap is not correct.

Installing the Spark Plug

1. Install the spark plug and metal washer. Make sure that the air gap is set correctly.
2. Tighten the spark plug to 15 ft.-lb. (20 N·m).
3. Connect the wire to the spark plug (Fig. 18).
4. Close the hood.

Servicing the Brake

The brake is on the right side of the rear axle, inside the rear tire (Fig. 20). If the brake does not hold securely or stopping power is insufficient, an adjustment is required.

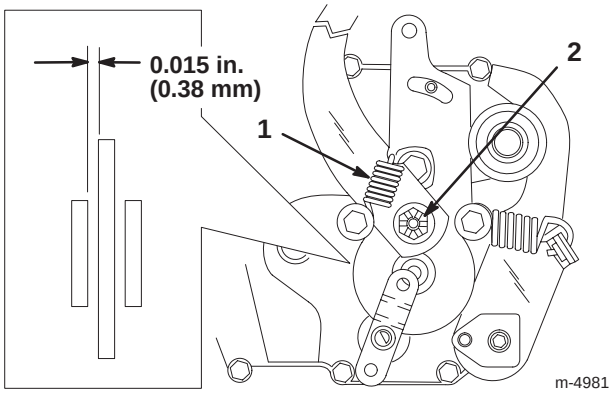


Figure 20

1. Brake arm spring
2. Brake adjusting nut

Checking the Brake

1. Park the tractor on a level surface.
2. Disengage the blades (PTO).
3. Set the parking brake.
4. Stop the engine.
5. Remove the ignition key.
6. Move the drive control wire to the Push position; refer to Pushing the Tractor Manually on page 17.
7. If the rear wheels lock and skid when you push the tractor forward, you do not need to adjust the brake. If the wheels turn and do not lock, adjust the brake; refer to Adjusting the Brake on page 23.

Adjusting the Brake

1. Check the brake before you adjust it; refer to Checking the Brake on page 23.
2. Remove the brake arm spring (Fig. 20).
3. Remove the cotter pin that secures the brake adjusting nut and slightly loosen the nut (Fig. 20).
4. Insert a 0.015 in. (0.38 mm) feeler gauge between the brake disc and the brake puck (Fig. 20).
5. Tighten the nut until you feel a slight resistance on the feeler gauge when you slide it in and out.
6. Install a new cotter pin and attach the brake arm spring.
7. Check the brake operation again; refer to Checking the Brake, page 23.

Important With the parking brake released, the rear wheels should rotate freely when you push the tractor. If you cannot set the 0.015 in. (0.38 mm) clearance and get free wheel rotation, contact an Authorized Service Dealer immediately.

Greasing and Lubricating the Tractor

Grease the tractor after every 25 operating hours or once a year, whichever occurs first. Grease more frequently when operating conditions are extremely dusty or sandy.

Grease Type: General-purpose grease

How to Grease

1. Disengage the blades (PTO).
2. Set the parking brake.
3. Stop the engine and wait for all moving parts to stop.
4. Remove the ignition key.
5. Clean the grease fittings with a rag.
6. Scrape any paint off of the front of the fittings.
7. Connect a grease gun to the fitting and pump grease into the fittings.
8. Wipe up any excess grease.

Where to Add Grease

Lubricate the front wheels and steering spindles until grease begins to ooze out of the bearings (Fig. 21).

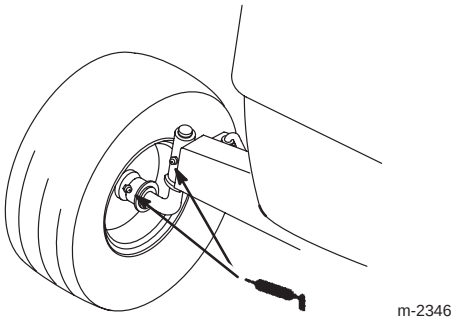


Figure 21

Checking the Tire Pressure

Maintain the air pressure in the front and rear tires at 20 psi (138 kPa). Check the pressure at the valve stem after every 25 operating hours or yearly, whichever occurs first (Fig. 22). Check the tires when they are cold to get the most accurate pressure reading.

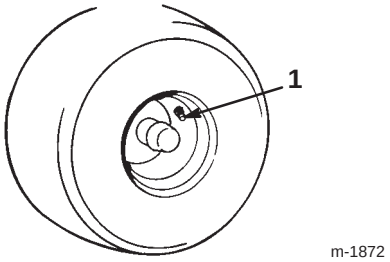


Figure 22

1. Valve stem

Servicing the Battery

Always keep the battery clean and fully charged. Use a paper towel to clean the battery and battery box. If the battery terminals are corroded, clean them with a solution of 4 parts water and 1 part baking soda. Apply a light coating of grease to the battery terminals to prevent corrosion.

Battery voltage and amperage: 12 volts, 155 cold-cranking amps

Removing the Battery

Warning

Battery terminals or metal tools could short against metal tractor components causing sparks. Sparks can cause the battery gasses to explode, resulting in personal injury.

- **When removing or installing the battery, do not allow the battery terminals to touch any metal parts of the tractor.**
- **Do not allow metal tools to short between the battery terminals and metal parts of the tractor.**

1. Disengage the blades (PTO).

2. Set the parking brake.

3. Stop the engine.

4. Remove the ignition key.

5. Tip the seat forward to see the battery.

6. Disconnect the negative (black) ground cable from the battery post (Fig. 23).

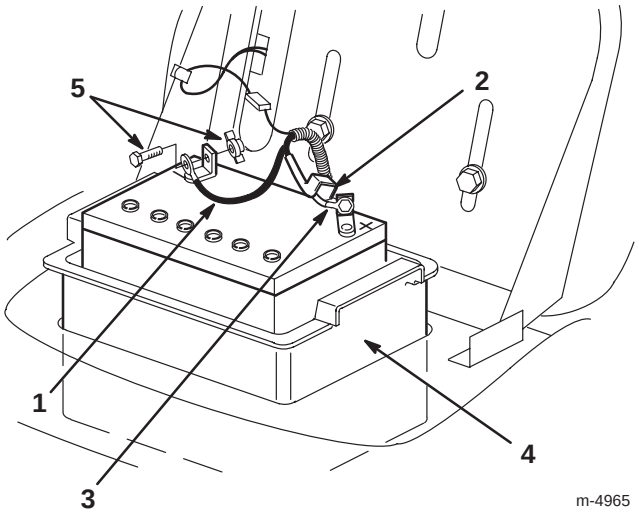


Figure 23

1. Negative cable (black)
2. Rubber cover
3. Positive cable (red)
4. Battery box
5. Bolt and wing nut

Warning

Incorrect battery cable routing could damage the tractor and cables causing sparks. Sparks can cause the battery gasses to explode, resulting in personal injury.

- **Always *disconnect* the negative (black) battery cable before disconnecting the positive (red) cable.**
- **Always *reconnect* the positive (red) battery cable before reconnecting the negative (black) cable.**

7. Slide the rubber cover up the positive (red) cable. Disconnect the positive (red) cable from the battery post (Fig. 23).

8. Remove the battery box and battery from the chassis (Fig. 23).

Installing the Battery

1. Put the battery into the battery box and install it into the chassis (Fig. 23).

2. Using the bolt and wing nut, connect the positive (red) cable to the positive (+) battery post (Fig. 23). Slide the rubber cover over the battery post.

3. Using the bolt and wing nut, connect the negative (black) cable to the negative (–) battery post (Fig. 23).

Checking the Electrolyte Level

1. Tip the seat forward to see the battery.
2. Look at the side of the battery. The electrolyte must be up to the Upper line (Fig. 24).

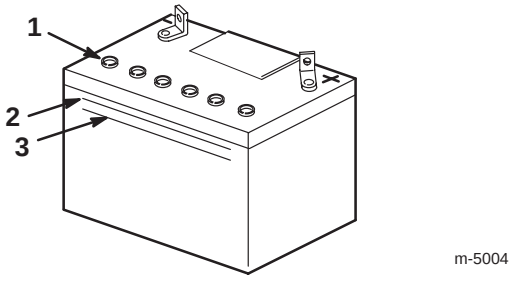


Figure 24

1. Vent caps
2. Upper line
3. Lower line

Important Do not allow the electrolyte to fall below the Lower line (Fig. 24).

3. If the electrolyte is low, add the required amount of distilled water; refer to Adding Water to the Battery on page 25.

Danger

Battery electrolyte contains sulfuric acid which is a deadly poison and causes severe burns.

- **Do not drink electrolyte and avoid contact with skin, eyes or clothing. Wear safety glasses to shield your eyes and rubber gloves to protect your hands.**
- **Fill the battery where clean water is always available for flushing the skin.**
- **Follow all instructions and comply with all safety messages on the electrolyte container.**

Adding Water to the Battery

The best time to add distilled water to the battery is just before you operate the tractor. This lets the water mix thoroughly with the electrolyte solution.

1. Remove the battery from the tractor; refer to Removing the Battery on page 24.
2. Clean the top of the battery with a paper towel.

Important Never fill the battery with distilled water while the battery is installed in the tractor. Electrolyte could be spilled on other parts and cause corrosion.

3. Remove the vent caps from the battery (Fig. 24).
4. Slowly pour distilled water into each battery cell until the electrolyte level is up to the Upper line (Fig. 24) on the battery case.

Important Do not overfill the battery because electrolyte (sulfuric acid) can cause severe corrosion and damage to the chassis.

5. Wait 5 to 10 minutes after filling the battery cells. Add distilled water, if necessary, until the electrolyte level is up to the Upper line (Fig. 24) on the battery case.
6. Install the battery vent caps.

Charging the Battery

Warning

Charging the battery produces gasses that can explode.

Never smoke near the battery and keep sparks and flames away from battery.

Important Always keep the battery fully charged (1.265 specific gravity). This is especially important to prevent battery damage when the temperature is below 32°F (0°C).

1. Remove the battery from the chassis; refer to Removing the Battery on page 24.
2. Check the electrolyte level; refer to Checking the Electrolyte Level on page 25.
3. Make sure that the vent caps are installed in the battery. Charge the battery for 1 hour at 25 to 30 amps or 6 hours at 4 to 6 amps. Do not overcharge the battery.
4. When the battery is fully charged, unplug the charger from the electrical outlet, then disconnect the charger leads from the battery posts (Fig. 25).

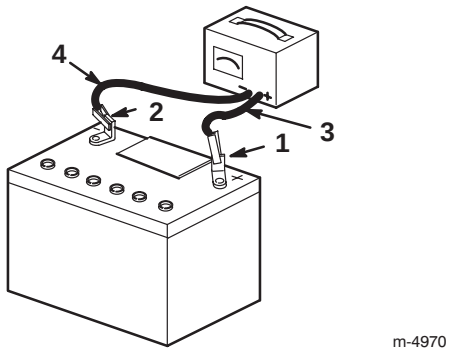


Figure 25

1. Positive Battery Post
2. Negative Battery Post
3. Red (+) Charger Lead
4. Black (–) Charger Lead

5. Install the battery in the tractor and connect the battery cables; refer to Installing the Battery on page 24.

Important Do not run the tractor with the battery disconnected. Electrical damage may occur.

Draining the Fuel Tank

Danger

In certain conditions, gasoline is extremely flammable and highly explosive. A fire or explosion from gasoline can burn you and others and can damage property.

- **Drain gasoline from the fuel tank when the engine is cold. Do this outdoors in an open area. Wipe up any gasoline that spills.**
- **Never smoke when draining gasoline, and stay away from an open flame or where a spark may ignite the gasoline fumes.**

1. Park the tractor so that the left front side is slightly lower than the right side to ensure that the fuel tank drains completely.
2. Disengage the blades (PTO).
3. Set the parking brake.
4. Stop the engine and wait for all moving parts to stop.
5. Remove the ignition key.
6. Open the hood.
7. Squeeze the ends of the hose clamp together and slide it up the fuel line toward the fuel tank (Fig. 26).

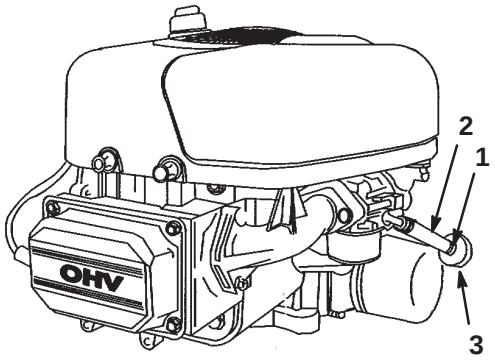


Figure 26

1. Hose clamp
2. Fuel line
3. Filter

8. Pull the fuel line off of the filter (Fig. 26) and allow the gasoline to drain into a gas can or drain pan.

Note: Now is the best time to install a new fuel filter because the fuel tank is empty.

9. Install the fuel line onto the filter. Slide the hose clamp close to the filter to secure the fuel line and filter.

Replacing the Fuel Filter

Replace the fuel filter after every 100 operating hours or yearly, whichever occurs first.

The best time to replace the fuel filter (Fig. 26) is when the fuel tank is empty. Never install a dirty filter if it is removed from the fuel line.

1. Disengage the blades (PTO).
2. Set the parking brake.
3. Stop the engine and wait for all moving parts to stop.
4. Remove the ignition key.
5. Open the hood.
6. Squeeze the ends of the hose clamps together and slide them away from the filter (Fig. 26).
7. Remove the filter from the fuel lines.
8. Install a new filter and move the hose clamps close to the filter.
9. Close the hood.

Servicing the Transaxle Fluid

Check the fluid level after every 100 hours or yearly, whichever occurs first. Always keep the fluid level at the full level when the transaxle is cold.

Note: The transaxle is factory sealed and does not require oil changes.

Fluid Type: SAE 20W-50 engine oil (API service SH/CD recommended)

Checking the Fluid Level

1. Park the tractor on a level surface.
2. Disengage the blades (PTO).
3. Set the parking brake.
4. Stop the engine and wait for all moving parts to stop.
5. Remove the ignition key.
6. Clean around the fill plug (Fig. 27) so that dirt cannot fall into the reservoir if fluid needs to be added.

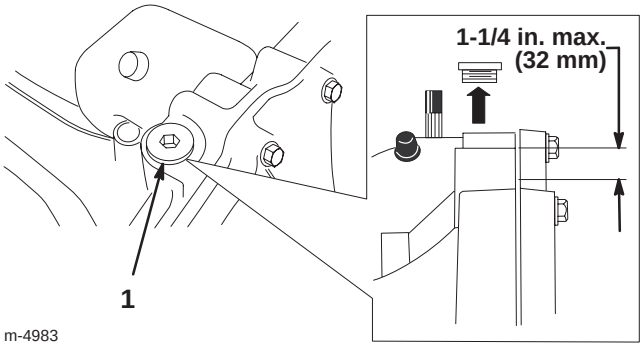


Figure 27

1. Fill plug

7. Remove the fill plug and check the fluid level.

Note: The level should be a maximum of 1-1/4 in. (32 mm) below the top of the fill port (Fig. 27). Add oil if necessary.

8. Install the fill plug.

Servicing the Fuse

The electrical system is protected by fuses. No maintenance is required; however, if a fuse blows, check the circuit wiring for a short. To replace a fuse, pull up (Fig. 28) to remove it from the socket. Push down to insert it.

Fuses: 10 amp, blade-type

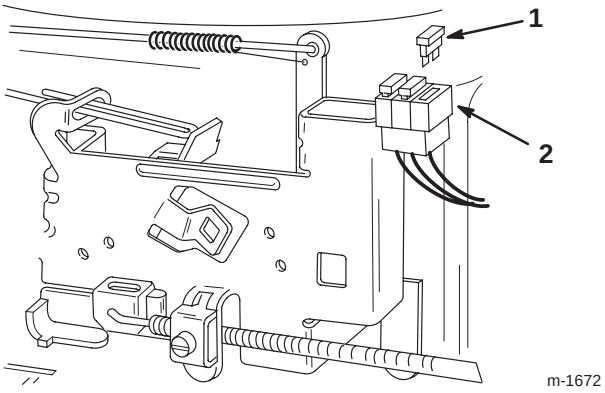


Figure 28

1. Fuse (removed)
2. Socket

Servicing the Headlights

Use a #1156, automotive-type bulb.

Removing the Bulb

1. Disengage the blades (PTO).

2. Set the parking brake.

3. Stop the engine and wait for all moving parts to stop.

4. Remove the ignition key.

5. Open the hood. Pull the wire connectors off of both of the bulb holder terminals.

6. Rotate the bulb holder 1/4 turn counterclockwise and remove it from the reflector (Fig. 29).

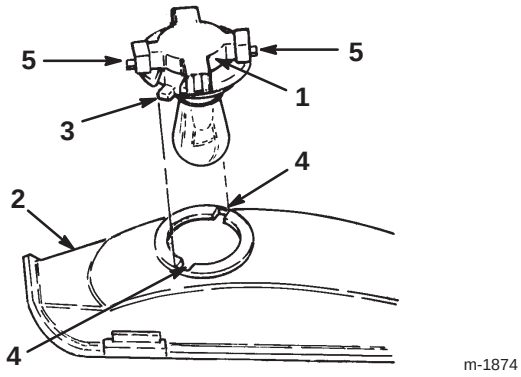


Figure 29

1. Bulb holder
2. Reflector
3. Tabs
4. Slots
5. Terminals

7. Push and rotate the bulb counterclockwise until it stops (approximately 1/4 turn) and remove the bulb from the bulb holder (Fig. 30).

Installing the Bulb

1. The bulb has metal pins on the side of its base. Align the pins with the slots in the bulb holder and insert the base into the holder (Fig. 30). Push and rotate the bulb clockwise until it stops.

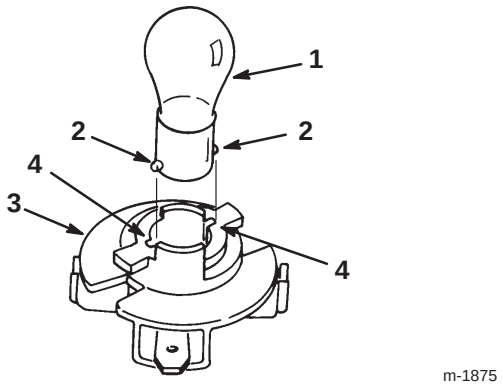


Figure 30

1. Bulb
2. Metal pins
3. Bulb holder
4. Slots

2. The bulb holder has 2 tabs (Fig. 29). Align the tabs with the slots in the reflector, insert the bulb holder into the reflector, and rotate it 1/4 turn clockwise until it stops.

3. Push the wire connectors onto the terminals on the bulb holder.

Cleaning and Storing the Tractor

1. Disengage the blades (PTO).

2. Set the parking brake.

3. Stop the engine and wait for all moving parts to stop.

4. Remove the ignition key.

5. Remove grass clippings, dirt, and grime from the external parts of the entire tractor, especially the engine. Clean dirt and chaff from the outside of the engine cylinder head fins and blower housing.

Important You can wash the tractor with mild detergent and water. **Do not use a pressure washer to wash the tractor.** Pressure washing may damage the electrical system or wash away necessary grease at friction points. Avoid excessive use of water, especially near the control panel, lights, engine, and battery.

6. Check the brake; refer to Servicing the Brake on page 23.

7. Service the air cleaner; refer to Servicing the Air Cleaner on page 21.

8. Grease the chassis; refer to Greasing and Lubricating the Tractor on page 23.

9. Change the crankcase oil and filter; refer to Servicing the Engine Oil on page 20.

10. Check the tire pressure; refer to Checking the Tire Pressure on page 23.

11. Prepare the tractor for storage when non-use occurs over 30 days. Prepare tractor for storage as follows.

A. Add a petroleum based stabilizer/conditioner to fuel in the tank. Follow the mixing instructions from the stabilizer manufacturer. (1 oz. per gallon). **Do not use an alcohol based stabilizer (ethanol or methanol).**

Note: A fuel stabilizer/conditioner is most effective when mixed with fresh gasoline and used at all times.

B. Run the engine to distribute conditioned fuel through the fuel system (5 minutes).

C. Stop the engine, allow it to cool, and drain the fuel tank; refer to Draining the Fuel Tank on page 26.

D. Restart the engine and run it until it stops.

E. Choke or prime the engine.

F. Start and run the engine until it will not start. Use the primer, if equipped on the tractor, several times to ensure that no fuel remains in the primer system.

G. Dispose of fuel properly. Recycle as per local codes.

Important Do not store stabilizer/conditioned gasoline over 90 days.

12. Remove the spark plug and check its condition; refer to Servicing the Spark Plug on page 22. With the spark plug removed from the engine, pour 2 tablespoons of engine oil into the spark plug hole. Use the electric starter to crank the engine and distribute the oil inside the cylinder. Install the spark plug; refer to Servicing the Spark Plug on page 22. Do not install the wire on the spark plug.

13. Disconnect the negative battery cable. Clean the battery and battery terminals. Check the electrolyte level and charge it fully; refer to Servicing the Battery on page 24. Leave the negative battery cable disconnected from the battery during storage.

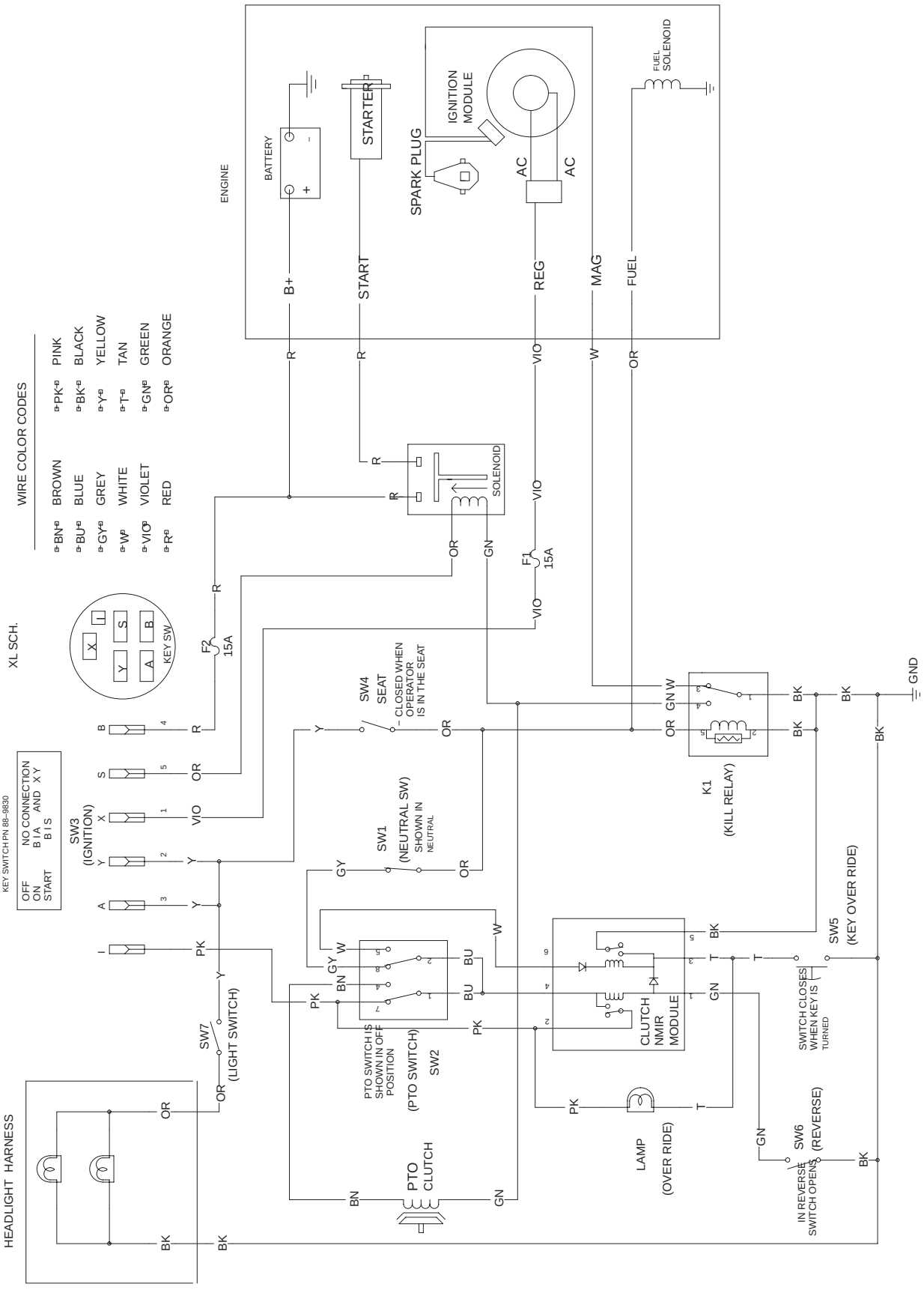
Important The battery must be fully charged to prevent it from freezing and being damaged at temperatures below 32°F (0°C). A fully charged battery can be stored during the winter season without recharging.

14. Check and tighten all bolts, nuts, and screws. Repair or replace any part that is damaged or defective.

15. Paint all scratched or bare metal surfaces. Paint is available from an Authorized Service Dealer.

16. Store the tractor in a clean, dry garage or storage area. Remove the ignition and KeyChoice keys from the mower and keep them in a memorable place. Cover the tractor to protect it and keep it clean.

Wiring Diagram



Troubleshooting

Problem	Possible Causes	Corrective Action
The starter does not crank.	1. The blades (PTO) are engaged. 2. The parking brake is not on. 3. The battery is dead. 4. The electrical connections are corroded or loose. 5. A fuse is blown. 6. A relay or switch is damaged.	1. Shift the blade control (PTO) to Disengaged. 2. Set the parking brake. 3. Charge the battery. 4. Check the electrical connections for good contact. 5. Replace the fuse. 6. Contact an Authorized Service Dealer.
The engine will not start, starts hard, or fails to keep running.	1. The operator is not seated. 2. The fuel tank is empty. 3. The air cleaner is dirty. 4. The spark plug wire is loose or disconnected. 5. The spark plug is pitted, fouled, or the gap is incorrect. 6. The choke is not closing. 7. There is dirt in the fuel filter. 8. The idle speed is too low or the mixture is incorrect. 9. Dirt, water, or stale fuel is in the fuel system.	1. Sit on the seat. 2. Fill the fuel tank with gasoline. 3. Clean or replace the air cleaner element. 4. Install the wire on the spark plug. 5. Install a new, correctly-gapped spark plug. 6. Adjust the throttle cable. 7. Replace the fuel filter. 8. Adjust the carburetor idle speed and idle mixture. 9. Contact an Authorized Service Dealer.
The engine overheats.	1. The engine load is excessive. 2. The oil level in the crankcase is low. 3. The cooling fins and air passages under the engine blower housing are plugged.	1. Shift into lower gear to reduce ground speed. 2. Add oil to the crankcase. 3. Remove the obstruction from the cooling fins and air passages.

Problem	Possible Causes	Corrective Action
The engine loses power.	1. The engine load is excessive.	1. Shift into lower gear to reduce ground speed.
	2. The air cleaner is dirty.	2. Clean the air cleaner element.
	3. The oil level in the crankcase is low.	3. Add oil to the crankcase.
	4. The cooling fins and air passages under the engine blower housing are plugged.	4. Remove the obstruction from the cooling fins and air passages.
	5. The spark plug is pitted, fouled, or the gap is incorrect.	5. Install a new, correctly-gapped spark plug.
	6. The vent hole in the fuel cap is plugged.	6. Clean or replace the fuel cap.
	7. There is dirt in the fuel filter.	7. Replace the fuel filter.
	8. Dirt, water, or stale fuel is in the fuel system.	8. Contact an Authorized Service Dealer.
The tractor does not drive.	1. The drive control is in the Push position.	1. Move the drive control to the Operate position.
	2. The traction belt is worn, loose, or broken.	2. Contact an Authorized Service Dealer.
	3. The traction belt is off of the pulley.	3. Contact an Authorized Service Dealer.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