



22in Recycler® Lawn Mower

Model No. 20068—Serial No. 28000001 and Up

Operator's Manual

Introduction

Read this information carefully to learn how to operate and maintain your product properly and to avoid injury and product damage. You are responsible for operating the product properly and safely.

You may contact Toro directly at www.Toro.com for product and accessory information, help finding a dealer, or to register your product.

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 identifies the location of the model and serial numbers on the product.

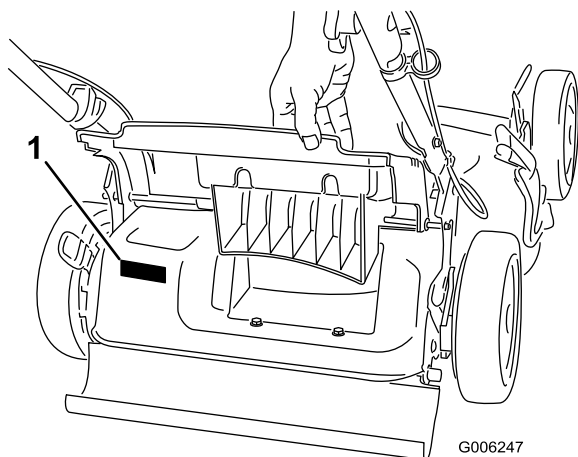


Figure 1

1. Model and serial number plate

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

Model No. _____
Serial No. _____

This manual identifies potential hazards and has safety messages identified by the safety alert symbol (Figure 2), which signals a hazard that may cause serious injury or death if you do not follow the recommended precautions.



Figure 2

1. Safety alert symbol

This manual uses 2 words to highlight information.

Important calls attention to special mechanical information and **Note** emphasizes general information worthy of special attention.

Warning

CALIFORNIA

Proposition 65 Warning

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

Important: This engine is not equipped with a spark arrester muffler. It is a violation of California Public Resource Code Section 4442 to use or operate the engine on any forest-covered, brush-covered, or grass-covered land. Other states or federal areas may have similar laws.

This spark ignition system complies with Canadian ICES-002.

The enclosed *Engine Owner's Manual* is supplied for information regarding the US Environmental Protection Agency (EPA) and the California Emission Control Regulation of emission systems, maintenance, and warranty. Replacements may be ordered through the engine manufacturer.

For models with stated engine horsepower, the gross horsepower of the engine was laboratory rated by the engine manufacturer in accordance with SAE J1940. As configured to meet safety, emission, and operating requirements, the actual engine horsepower on this class of lawn mower will be significantly lower.

Safety

This lawn mower meets or exceeds the CPSC blade safety requirements for walk-behind rotary lawn mowers and the B71.1 specifications of the American National Standards Institute in effect at the time of production.

Read and understand the contents of this manual before you start the engine.

The safety alert symbol (Figure 2) is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death. Improperly using or maintaining this mower could result in injury or death. To reduce this potential, comply with the following safety instructions.

The following instructions have been adapted from the ANSI/OPEI standard B71.1-2003.

This cutting machine can amputate hands and feet and throw objects. Failure to observe the following safety instructions could result in serious injury or death.

General Operation

- Read, understand, and follow all instructions on the machine and in the manual(s) before starting.
- Do not put hands or feet near or under the machine. Keep clear of the discharge opening at all times.
- Only allow responsible adults, who are familiar with the instructions, to operate this machine.
- Clear the area of objects such as rocks, wire, toys, etc., which could be thrown by the blade. Stay behind the handle when the engine is running.
- Be sure the area is clear of bystanders before operating. Stop machine if anyone enters the area.
- Do not operate machine barefooted or while wearing sandals. Always wear substantial footwear.
- Do not pull machine backward unless absolutely necessary. Always look down and behind before and while moving backward.
- Never direct discharged material toward anyone. Avoid discharging material against a wall or obstruction. Material may ricochet back toward the operator. Stop the blade when crossing gravel surfaces.
- Do not operate machine without the entire grass catcher, discharge guard, rear guard, or other safety protective devices in place and working.
- Never leave a running machine unattended.
- Stop the engine and wait until the blade comes to a complete stop before cleaning the machine,

removing grass catcher, or unclogging the discharge guard.

- Operate machine only in daylight or good artificial light.
- Do not operate machine while under the influence of alcohol or drugs.
- Never operate mower in wet grass. Always be sure of your footing; walk; never run.
- Disengage the drive system, if so equipped, before starting the engine.
- If the machine should start to vibrate abnormally, stop the engine and check for the cause immediately. Vibration is generally a warning of trouble.
- Always wear eye protection when operating machine.
- See manufacturer's instructions for proper operation and installation of accessories. Only use accessories approved by the manufacturer.

Slope Operation

Slopes are a major factor related to slip and fall accidents, which can result in severe injury. Operation on all slopes require extra caution. If you feel uneasy on a slope, do not mow it.

- Mow across the face of slopes; never up and down. Exercise extreme caution when changing direction on slopes.
- Watch for holes, ruts, bumps, rocks, or other hidden objects. Uneven terrain could cause a slip and fall accident. Tall grass can hide obstacles.
- Do not mow on wet grass or excessively steep slopes. Poor footing could cause a slip and fall accident.
- Do not mow near drop-offs, ditches, or embankments. You could lose your footing or balance.

Children

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the mowing activity. **Never** assume that children will remain where you last saw them.

- Keep children out of the mowing area and under the watchful care of a responsible adult other than the operator.
- Be alert and turn mower off if a child enters the area.
- Never allow children to operate the machine.
- Use extra care when approaching blind corners, shrubs, trees, or other objects that may block your view of a child.

Service

Safe Handling of Gasoline

To avoid personal injury or property damage, use extreme care in handling gasoline. Gasoline is extremely flammable and the vapors are explosive.

- Extinguish all cigarettes, cigars, pipes, and other sources of ignition.
- Use only an approved gasoline container.
- Never remove gas cap or add fuel with the engine running. Allow engine to cool before refueling.
- Never refuel the machine indoors.
- Never store the machine or fuel container where there is an open flame, spark, or pilot light such as on a water heater or on other appliances.
- Never fill containers inside a vehicle or on a truck or trailer bed with a plastic liner. Always place containers on the ground away from your vehicle before filling.
- Remove gas-powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment with a portable container, rather than from a gasoline dispenser nozzle.
- Keep the nozzle in contact with the rim of the fuel tank or container opening at all times until fueling is complete. Do not use a nozzle lock-open device.
- If fuel is spilled on clothing, change clothing immediately.
- Never overfill fuel tank. Replace gas cap and tighten securely.

Safety and Instructional Decals

Important: Safety and instruction decals are located near areas of potential danger. Replace damaged decals.



Manufacturer's Mark

1. Indicates the blade is identified as a part from the original machine manufacturer.



Exhaust contains carbon monoxide, an odorless, deadly poison that can kill you.

Do not run the engine indoors or in an enclosed area.


General Service

- Never operate machine in a closed area.
- Keep all nuts and bolts tight to be sure the equipment is in safe working condition.
- Never tamper with safety devices. Check their proper operation regularly.
- Keep machine free of grass, leaves, or other debris build-up. Clean up oil or fuel spillage and remove any fuel-soaked debris. Allow machine to cool before storing.
- If you strike a foreign object, stop and inspect the machine. Repair, if necessary, before starting.
- Never make any adjustments or repairs with the engine running. Disconnect the spark plug wire and ground against engine to prevent unintended starting.
- Check grass catcher components and the discharge guard frequently and replace with manufacturer's recommended parts, when necessary.
- Mower blades are sharp. Wrap the blade or wear gloves, and use extra caution when servicing them.
- Do not change the engine governor setting or overspeed the engine.
- Maintain or replace safety and instruction labels, as necessary.




94-8072

Battery Charger

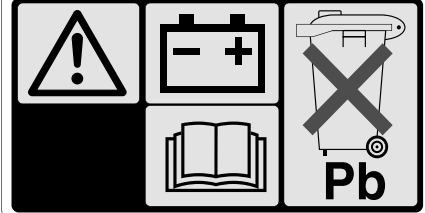
Part No. 104-7401
 Input: 120VAC 60HZ XW
 Output: 13.2VDC XXXmA
 REGULATED XXXXXX
 Model: XXXXXX EIA: XXX  US LISTED
 F4 CLASS 2 POWER SUPPLY MADE IN XXXXX

CAUTION
 DRY LOCATION USE ONLY



104-7402

1




2

WARNING

BATTERY CHARGING INSTRUCTIONS

CHARGE BATTERY FOR A MINIMUM OF 24 HOURS:

- WHEN FIRST PURCHASED
- AFTER EACH MOWING OR EACH MONTH
- BEFORE WINTER STORAGE
- AFTER WINTER STORAGE



104-7953

104-7953

1. Warning—read the *Operator's Manual* for information on charging the battery; contains lead; do not discard.
2. Read the *Operator's Manual*.

CAUTION:
 DRY LOCATION USE ONLY

WARNING:
 TO REDUCE RISK OF ELECTRIC SHOCK, DO NOT EXPOSE UNIT TO WATER OR OPERATE UNIT ON WET GROUND. MADE IN XXXXX
 BATTERY CHARGER PART NO.: 104-7401
 USE ONLY TO CHARGE
 12 V ELECTRIC START
 LAWN MOWER BATTERY
 INPUT: 120 VAC 60 Hz XW XXXXXX CLASS 2 F4
 OUTPUT: 13.2 V XXXmA

CUIDADO:
 NO SE EXPONGA A LA LLUVIA. SOLO PARA SER USADO EN AREAS INTERIORES.

ADVERTENCIA:
 PARA REDUCIR EL RIESGO DE ELECTROCUCION, NO SE EXPONGA ESTA UNIDAD AL AGUA NI SE OPERE SOBRE TERRENOS HUMEDOS.
 HECHO EN XXXXX XXXXXX
 CARGADOR DE LA BATERIA PARTE No.: 104-7401
 USESE UNICAMENTE PARA CARGAR LA BATERIA DE 12 VOLTIOS DEL CORTADORA DE CESPED DE ARRANQUE ELECTRICO
 ENTRADA: 120 V CA 60 Hz XW
 SALIDA: 13.2 V XXX MA

ATTENTION:
 NE PAS EXPOSER A LA PLUIE. POUR USAGE A L'INTERIEUR SEULEMENT.

AVERTISSEMENT:
 AFIN DE RÉDUIRE LE RISQUE DE CHOC ÉLECTRIQUE, NE PAS EXPOSER L'APPAREIL A L'EAU OU FAIRE FONCTIONNER L'APPAREIL SUR UN SOL MOUILLE.
 FAIT EN XXXXX XXXXXX
 CHARGEUR DE BATTERIE PIÉCE NO. : 104-7401
 UTILISER SEULEMENT POUR CHARGER LES BATTERIES ÉLECTRIQUES DE 12 VOLTS POUR DÉMARRER LA TONDEUSE
 PUISSANCE : 120 VAC 60 Hz XW
 SORTIE: 13.2 V XXX mA



104-7403

104-7403

REMOVE LABEL BEFORE USE.
 ETIRER L'ÉTIQUETTE AVANT UTILISATION.
 RETIRE LA ÉTIQUETA ANTES DE UTILIZAR.



READ OPERATORS MANUAL FOR PROPER INSTRUCTIONS. FUSE MUST BE INSERTED INTO BATTERY FOR PROPER OPERATION.

LIRE LES INSTRUCTIONS APPROPRIÉES FIGURANT DANS LE MANUEL DE L'OPÉRATEUR. INSÉRER LE FUSIBLE DANS LA BATTERIE POUR UN FONCTIONNEMENT APPROPRIÉ.

LEA LAS INSTRUCCIONES CORRESPONDIENTES EN EL MANUAL DEL OPERADOR. EL FUSIBLE ESTAR INSERTADO EN LA BATERIA A FIN PERMITIR UN FUNCIONAMIENTO ADECUADO.

1. 
2. 

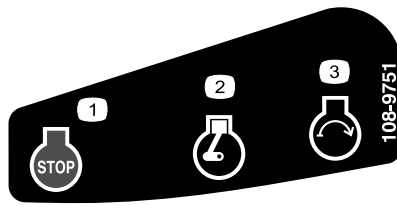
109-4791

108-4791

STEP HERE WHEN STARTING AT ENGINE

108-8117

108-8117



108-9751

1. Engine—stop
2. Engine—run
3. Engine—start



112-8759

1. Warning—read the *Operator's Manual*.
2. Thrown object hazard—keep bystanders a safe distance from the machine.
3. Cutting/dismemberment hazard of hand or foot, mower blade—remove the wire from the spark plug, and read the instructions before servicing or performing maintenance.
4. Cutting/dismemberment hazard of hand or foot, mower blade—stay away from moving parts.
5. Cutting/dismemberment hazard of hand or foot, mower blade—do not operate up and down slopes; operate side to side on slopes; stop the engine before leaving the operating position; and look behind you when backing.



112-8867

1. Lock
2. Unlock

Setup

Important: Remove and discard the protective plastic sheet that covers the engine.

1. Installing the Blade Control Bar

Procedure

Install the blade control bar into the upper handle (Figure 3).

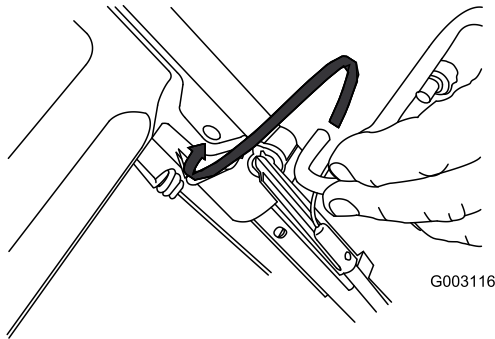


Figure 3

2. Unfolding the Handle

Procedure



Folding or unfolding the handle improperly can damage the cables, causing an unsafe operating condition.

- Do not damage the cables when folding or unfolding the handle.
- If a cable is damaged, contact an Authorized Service Dealer.

1. Carefully move the upper handle forward until the handle halves are in line and nest together as shown (Figure 4).

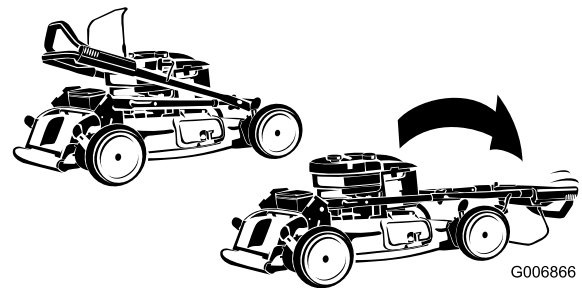


Figure 4

2. Tighten the handle knobs (Figure 5).

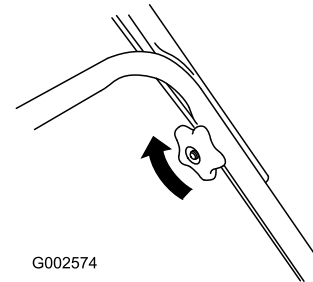


Figure 5

3. Rotate the handle rearward (as shown) until it clicks into place (Figure 6).

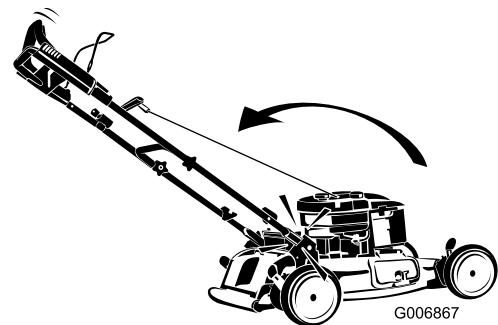
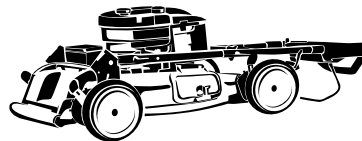


Figure 6

3. Filling the Engine with Oil

Procedure

Your mower does not come with oil in the engine, but it does come with a bottle of oil.

1. Remove the dipstick (Figure 7).

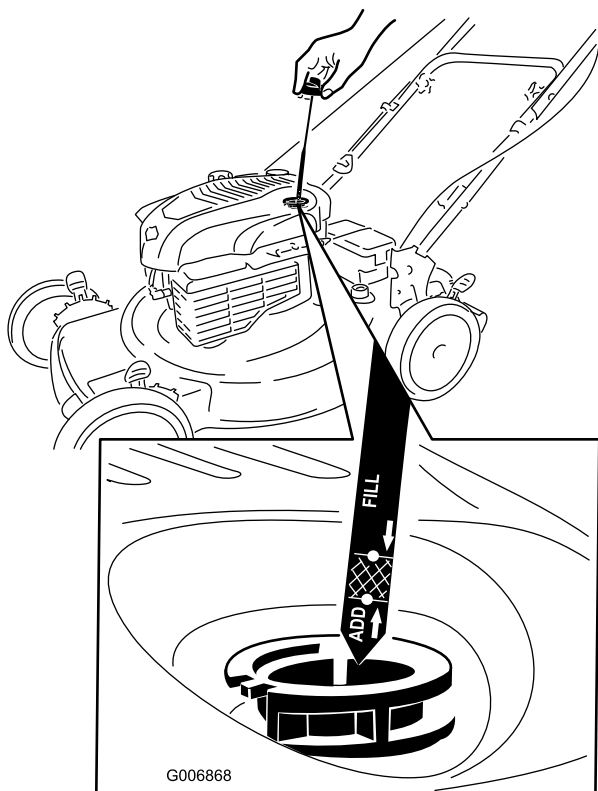


Figure 7

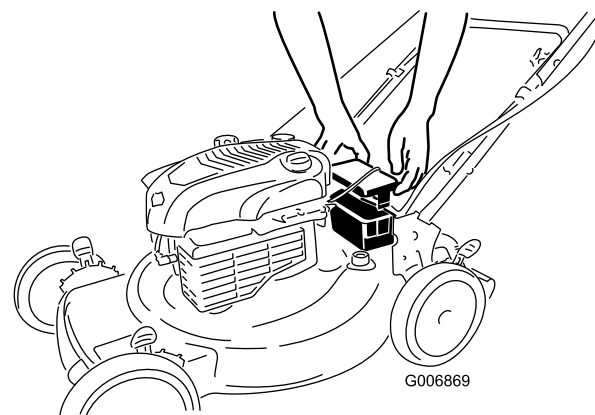


Figure 8

2. Insert the fuse into the fuse holder (Figure 9).

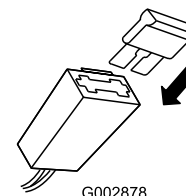


Figure 9

2. **Slowly** pour oil into the oil fill tube until the oil level reaches the **Full** line on the dipstick (Figure 7). **Do not overfill.** (Max. fill: 20 oz. (0.59 l), type: SAE 30W detergent oil with an API service classification of SF, SG, SH, SJ, SL, or higher.)
3. Install the dipstick securely.

Important: *Change the engine oil after the first 5 operating hours; change it yearly thereafter. Refer to Changing the Engine Oil.*

4. Installing the Fuse

Procedure

Your mower comes with a 40-amp fuse that protects the electric starter.

Important: You cannot start the mower with the electric starter or charge the battery unless you install the fuse.

1. Unclip both ends of the battery cover and remove it (Figure 8).

Note: Your mower comes with a fuse in the owner's packet and another fuse in the battery box.

3. Install the battery cover.

5. Charging the Battery

Procedure

Refer to Charging the Battery in the Maintenance section.

Product Overview

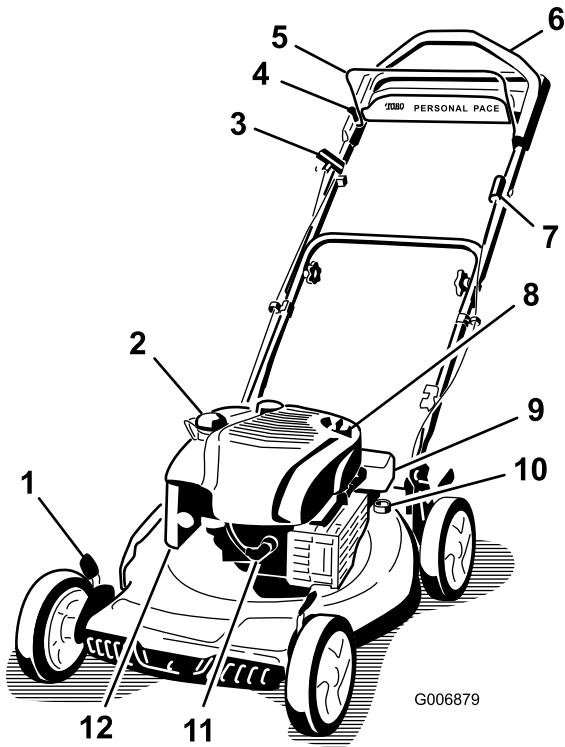


Figure 10

- | | |
|-------------------------|----------------------|
| 1. Cutting height lever | 7. Ignition key |
| 2. Fuel tank cap | 8. Oil fill/Dipstick |
| 3. Recoil start handle | 9. Battery |
| 4. Control bar lock | 10. Washout port |
| 5. Blade control bar | 11. Spark plug |
| 6. Handle | 12. Air filter |

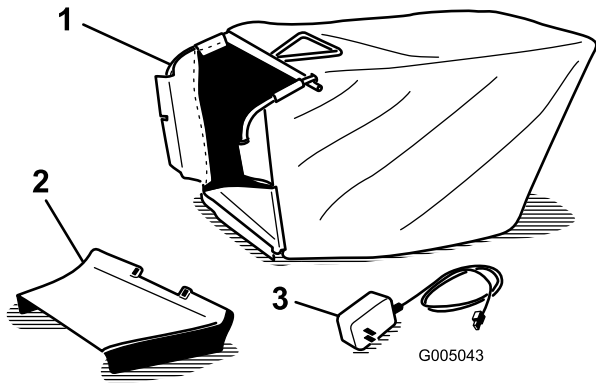


Figure 11

- | | |
|-------------------------|--------------------|
| 1. Grass bag | 3. Battery charger |
| 2. Side discharge chute | |

Operation

Filling the Fuel Tank



Gasoline is extremely flammable and explosive. A fire or explosion from gasoline can burn you and others.

- To prevent a static charge from igniting the gasoline, place the container and/or mower directly on the ground before filling, not in a vehicle or on an object.
- Fill the tank outdoors when the engine is cold. Wipe up spills.
- Do not handle gasoline when smoking or around an open flame or sparks.
- Store gasoline in an approved fuel container, out of the reach of children.

Fill the fuel tank with fresh unleaded regular gasoline from a major name-brand service station (Figure 12).

Note: 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.

Important: To reduce starting problems, add fuel stabilizer to the fuel all season, mixing it with gasoline less than 30 days old.

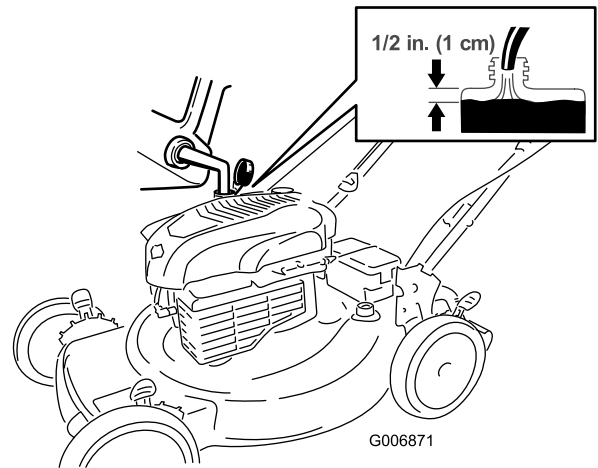


Figure 12

Checking the Engine Oil Level

Service Interval: Before each use or daily

1. Remove the dipstick, wipe it clean, and fully install the dipstick (Figure 13).

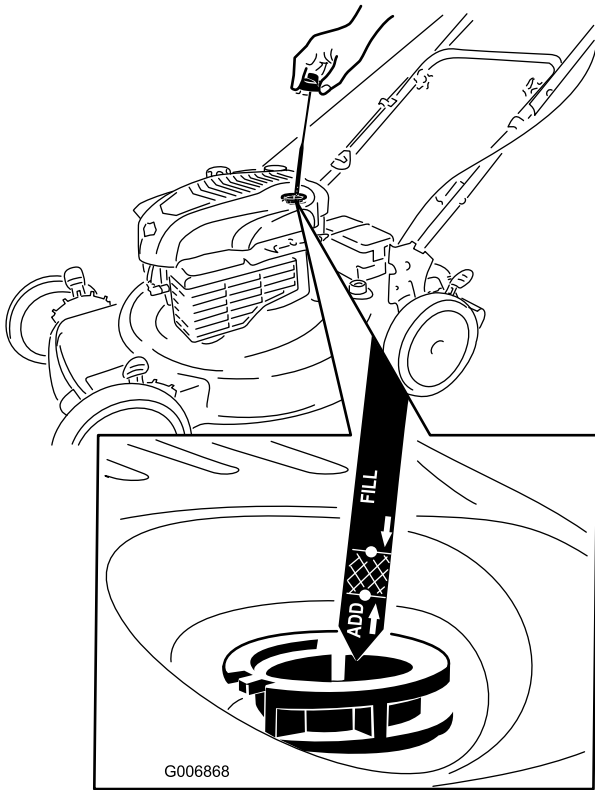


Figure 13

-
2. Remove the dipstick and check the oil level (Figure 13). If the oil level is below the **Add** mark on the dipstick, **slowly** pour oil into the oil fill tube to raise the oil level to the **Full** mark on the dipstick.
Do not overfill. (Max. fill: 20 oz. (0.59 l), type: SAE 30W detergent oil with an API service classification of SF, SG, SH, SJ, SL, or higher.)
 3. Install the dipstick securely.

Adjusting the Cutting Height



Adjusting the cutting height may bring you into contact with the moving blade, causing serious injury.

- Stop the engine and wait for all moving parts to stop.
- Do not put your fingers under the housing when adjusting the cutting height.



If the engine has been running, the muffler will be hot and can severely burn you. Keep away from the hot muffler.

Adjust the cutting height as desired. Set the front wheels to the same height as the rear wheels (Figure 14).

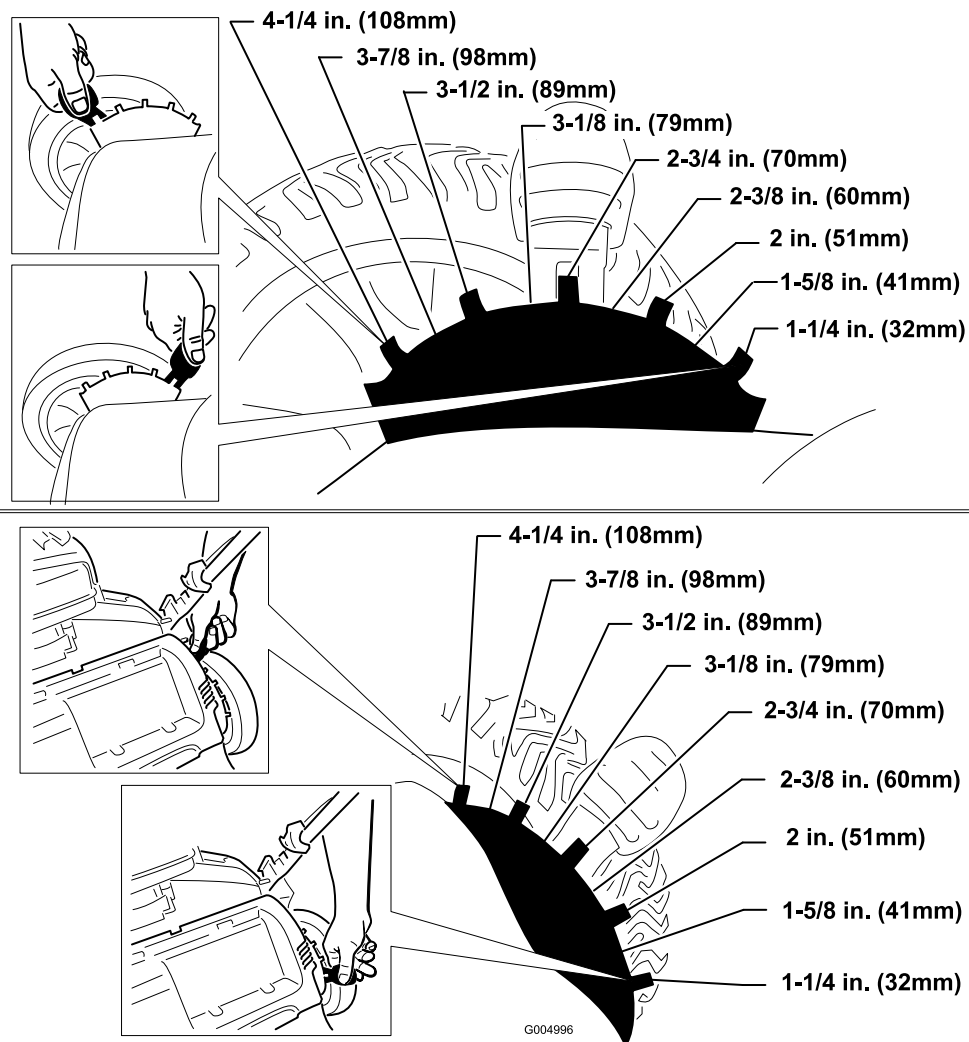


Figure 14

Starting the Engine

1. Turn the ignition key (Figure 15) or pull the recoil start handle (Figure 16).

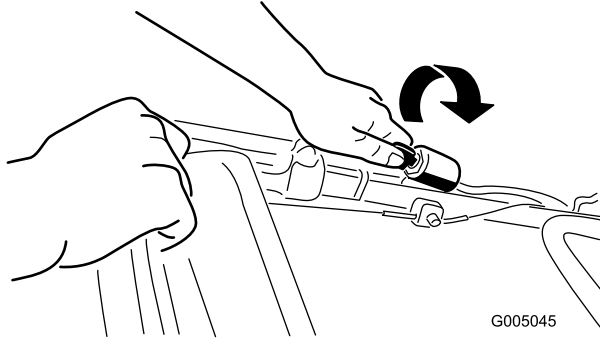


Figure 15

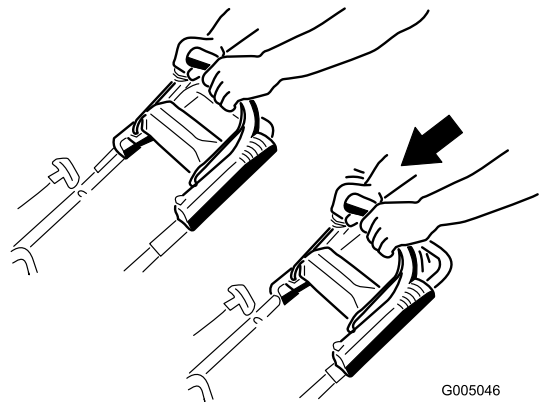


Figure 17

Note: You can self-propel the mower with the blade engaged or disengaged.

Stopping the Engine

1. Turn the ignition key to the Off position.
2. Remove the ignition key when you leave the mower.

Engaging the Blade

When you start your engine, the blade does not turn. You must engage the blade to mow.

1. Pull the control bar lock back (Figure 18).

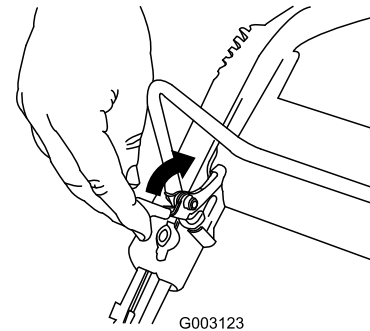


Figure 18

2. If the mower does not start in 1 or 2 pulls (or within 5 seconds using the electric starter), press the primer button 1 or 2 times and try starting it again.

Note: If the mower still does not start, contact an Authorized Service Dealer.

Using the Self-propel Drive

To operate the self-propel drive, simply walk with your hands on the upper handle and your elbows at your sides, and the mower will automatically keep pace with you (Figure 17).

2. Pull the blade control bar to the handle (Figure 19).

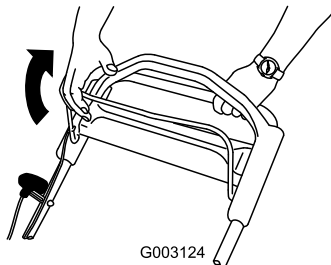


Figure 19

1. Blade control bar

3. Hold the blade control bar against the handle (Figure 20).

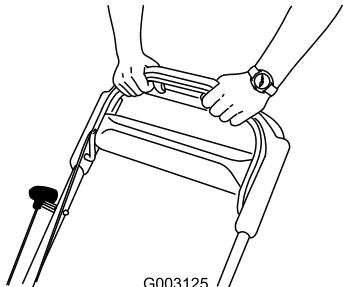


Figure 20

Disengaging the Blade

Release the blade control bar (Figure 21).

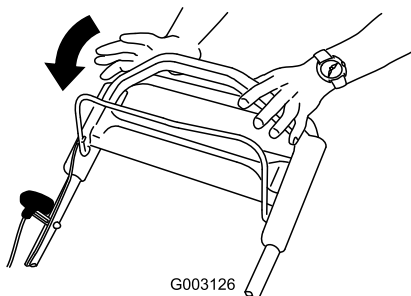


Figure 21

Important: When you release the blade control bar, the blade should stop within 3 seconds. If it does not stop properly, stop using your mower immediately and contact an Authorized Service Dealer.

Checking the Blade Brake Clutch Operation

Check the control bar before each use to ensure that the blade brake clutch system is operating properly.

Using the Grass Bag

Service Interval: Before each use or daily

You can use the grass bag to perform an additional test to check the blade brake clutch.

1. Install the empty grass bag on the mower.
2. Start the engine.
3. Engage the blade.

Note: The bag should begin to inflate, indicating that the blade is engaged and rotating.

4. Release the blade control bar.

Note: If the bag does not immediately deflate, the blade is still rotating. The blade brake clutch may be deteriorating and, if ignored, could result in an unsafe operating condition. Have the mower inspected and serviced by an Authorized Service Dealer.

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

Not Using the Grass Bag

1. Move the mower onto a paved surface in a non-windy area.
2. Set all 4 wheels to the 2-3/4 inch (7 cm) cut setting.
3. Take a half sheet of newspaper and crumple it into a ball small enough to go under the mower housing (about 3 inches or 7.6 cm in diameter).
4. Place the newspaper ball about 5 inches (13 cm) in front of the mower.
5. Start the engine.
6. Engage the blade.
7. Release the blade control bar.
8. Immediately push the mower over the newspaper ball.
9. Stop the engine and wait for all moving parts to stop.
10. Go to the front of the mower and check the newspaper ball.

Note: If the newspaper ball did not go under the mower, repeat steps 4 through 10.

11. If the newspaper is unraveled or shredded, the blade did not stop properly, which could result in an unsafe operating condition. Contact an Authorized Service Dealer.

Recycling the Clippings

Your mower comes from the factory ready to recycle the grass and leaf clippings back into the lawn.

If the grass bag is on the mower, remove it (refer to Removing the Grass Bag) before recycling the clippings.

If the side discharge chute is on the mower, remove it and lock the side discharge door (refer to Removing the Side Discharge Chute) before recycling the clippings.

Bagging the Clippings

Use the grass bag when you want to collect grass and leaf clippings from the lawn.



A worn grass bag could allow small stones and other similar debris to be thrown in the operator's or bystander's direction and result in serious personal injury or death to the operator or bystanders.

Check the grass bag frequently. If it is damaged, install a new Toro replacement bag.

If the side discharge chute is on the mower, remove it and lock the side discharge door (refer to Removing the Side Discharge Chute) before bagging the clippings.



The blade is sharp; contacting the blade can result in serious personal injury.

Stop the engine and wait for all moving parts to stop before leaving the operating position.

Installing the Grass Bag

1. Raise and hold up the rear door (Figure 22).

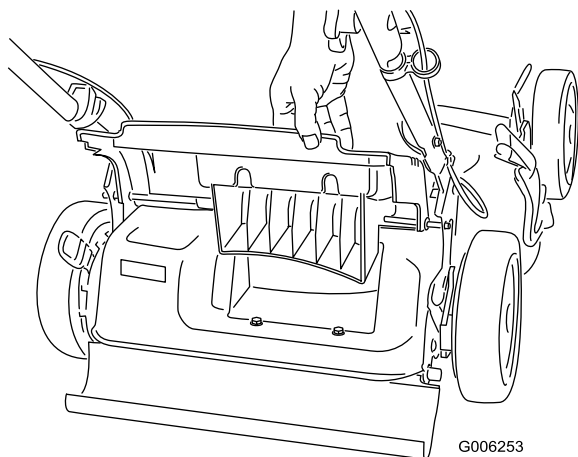


Figure 22

2. Install the grass bag (Figure 23).

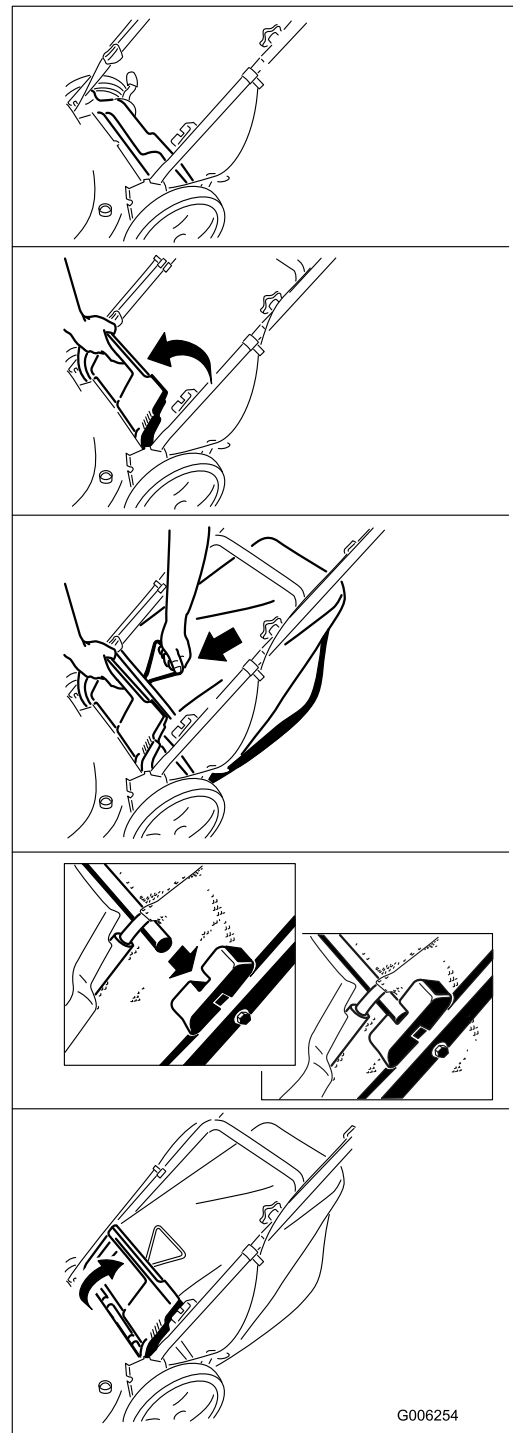


Figure 23

3. Lower the rear door.

Removing the Grass Bag

To remove the bag, reverse the steps above.

Side-discharging the Clippings

Use the side discharge for cutting very tall grass.

If the bag is on the mower, remove it before side-discharging the clippings.



The blade is sharp; contacting the blade can result in serious personal injury.

Stop the engine and wait for all moving parts to stop before leaving the operating position.

Installing the Side Discharge Chute

1. Unlock the side discharge door (Figure 24).

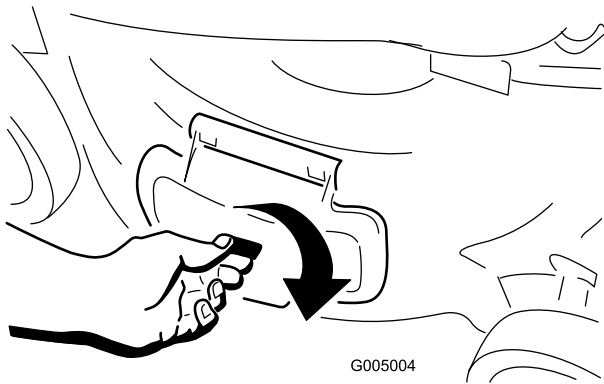


Figure 24

2. Install the side discharge chute (Figure 25).



Figure 25

Removing the Side Discharge Chute

To remove the side discharge chute, reverse the steps above.

Important: Lock the side discharge door after you close it (Figure 26).

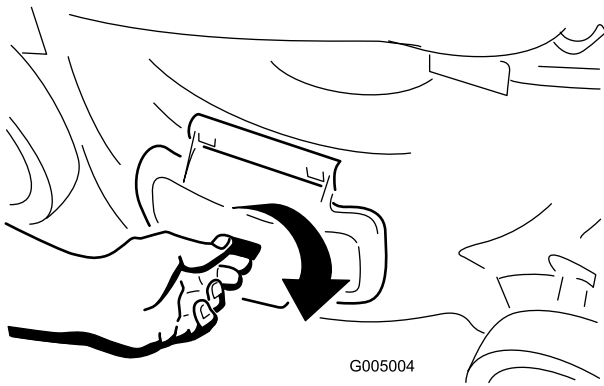


Figure 26

- Be aware of a potential fire hazard in very dry conditions, follow all local fire warnings, and keep the mower free of dry grass and leaf debris.
- Alternate the mowing direction. This helps disperse the clippings over the lawn for even fertilization.
- If the finished lawn appearance is unsatisfactory, try one or more of the following:
 - Replace the blade or have it sharpened.
 - Walk at a slower pace while mowing.
 - Raise the cutting height on your mower.
 - Cut the grass more frequently.
 - Overlap cutting swaths instead of cutting a full swath with each pass.
 - Set the cutting height on the front wheels one notch lower than the rear wheels. For example, set the front wheels at 2 inches (51 mm) and the rear wheels at 2-3/8 inches (60 mm).

Operating Tips

General Mowing Tips

- Clear the area of sticks, stones, wire, branches, and other debris that the blade could hit.
- Avoid striking solid objects with the blade. Never deliberately mow over any object.
- If the mower strikes an object or starts to vibrate, immediately stop the engine, disconnect the wire from the spark plug, and examine the mower for damage.
- For best performance, install a new blade before the cutting season begins.
- Replace the blade when necessary with a Toro replacement blade.

Cutting Grass

- Cut only about a third of the grass blade at a time. Do not cut below the 2-inch (51 mm) setting unless the grass is sparse or it is late fall when grass growth begins to slow down. Refer to Adjusting the Cutting Height.
- When cutting grass over 6 inches (15 cm) tall, mow at the highest cutting height setting and walk slower; then mow again at a lower setting for the best lawn appearance. If the grass is too long, the mower may plug and cause the engine to stall.
- Mow only dry grass or leaves. Wet grass and leaves tend to clump on the yard and can cause the mower to plug or the engine to stall.

Cutting Leaves

- After cutting the lawn, ensure that half of the lawn shows through the cut leaf cover. You may need to make more than one pass over the leaves.
- If there are more than 5 inches (13 cm) of leaves on the lawn, set the front cutting height one or two notches higher than the rear cutting height.
- Slow down your mowing speed if the mower does not cut the leaves finely enough.



Wet grass or leaves can cause serious injury if you slip and contact the blade. Mow only in dry conditions.

Maintenance

Note: Determine the left and right sides of the machine from the normal operating position.

Recommended Maintenance Schedule(s)

Maintenance Service Interval	Maintenance Procedure
After the first 5 hours	<ul style="list-style-type: none">• Change the engine oil.
Before each use or daily	<ul style="list-style-type: none">• Check the engine oil level.• Check the blade brake clutch operation.• Clean grass clippings and dirt from under the mower.
Every 25 hours	<ul style="list-style-type: none">• Replace the air filter; replace it more frequently in dusty operating conditions.• Charge the battery for 24 hours.
Before storage	<ul style="list-style-type: none">• Empty the fuel tank before repairs as directed and before annual storage.
Yearly	<ul style="list-style-type: none">• Change the engine oil.• Lubricate the wheel gears.• Replace the blade or have it sharpened (more frequently if the edge dulls quickly).• Refer to your Engine Operator's Manual for any additional yearly maintenance procedures.

Important: Refer to your *Engine Operator's Manual* for additional maintenance procedures.

Preparing for Maintenance

1. Stop the engine and wait for all moving parts to stop.
2. Disconnect the spark plug wire from the spark plug and hook it onto the retaining post (Figure 27) before performing any maintenance procedure.

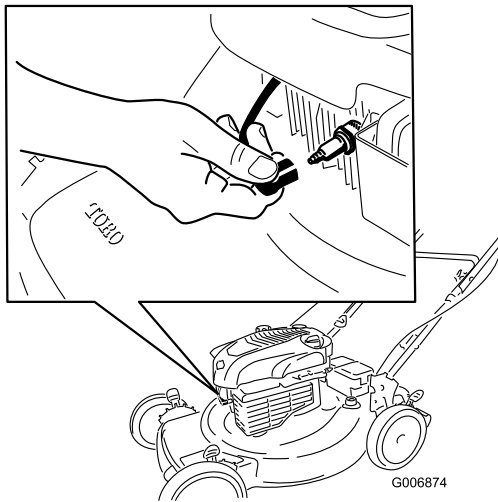


Figure 27

hand fuel pump to remove the fuel. Always tip the mower onto its side, with the air filter up.



Tipping the mower may cause the fuel to leak. Gasoline is flammable, explosive and can cause personal injury.

Run the engine dry or remove the gasoline with a hand pump; never siphon.

Replacing the Air Filter

Service Interval: Every 25 hours

Replace the air filter yearly; replace it more frequently in dusty operating conditions. Refer to Preparing for Maintenance.

1. Use a screw driver to open the air filter cover (Figure 28).

3. After performing the maintenance procedure(s), connect the spark plug wire to the spark plug.

Important: Before tipping the mower to change the oil or replace the blade, allow the fuel tank to run dry through normal usage. If you must tip the mower prior to running out of fuel, use a

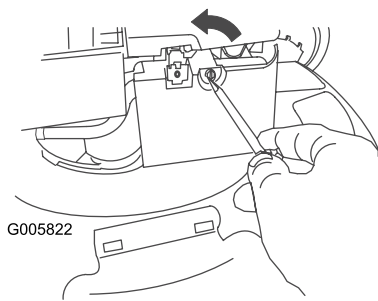


Figure 28

2. Replace the air filter (Figure 29).

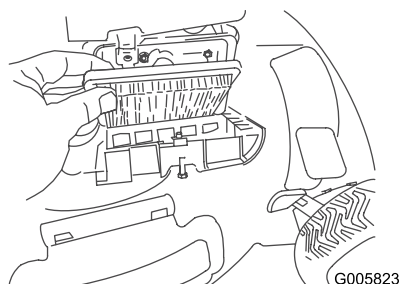


Figure 29

3. Install the cover.

Changing the Engine Oil

Service Interval: After the first 5 hours

Yearly

Change the engine oil after the first 5 operating hours; change it yearly thereafter.

Run the engine a few minutes before changing the oil to warm it. Warm oil flows better and carries more contaminants.

1. Refer to Preparing for Maintenance.
2. Remove the dipstick (Figure 30).

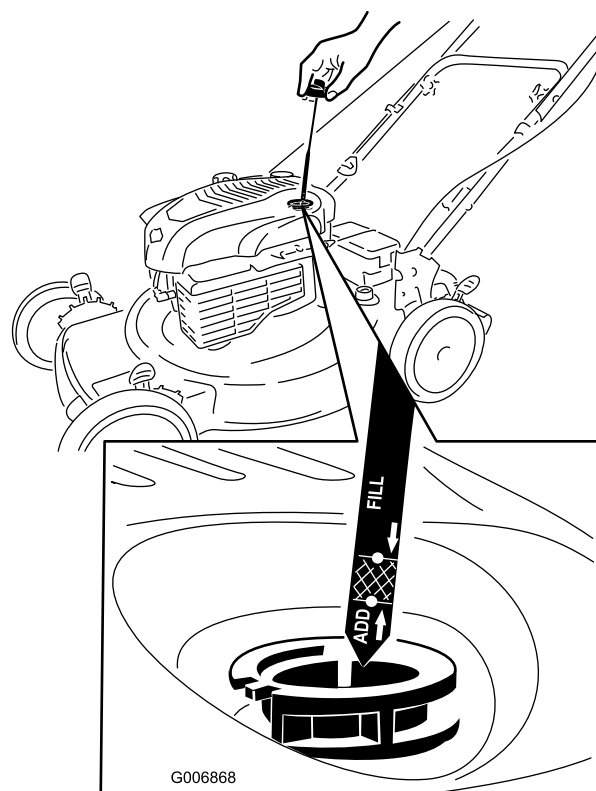


Figure 30

3. Tip the mower onto its side with the air filter up to drain the used oil out through the oil fill tube (Figure 31).

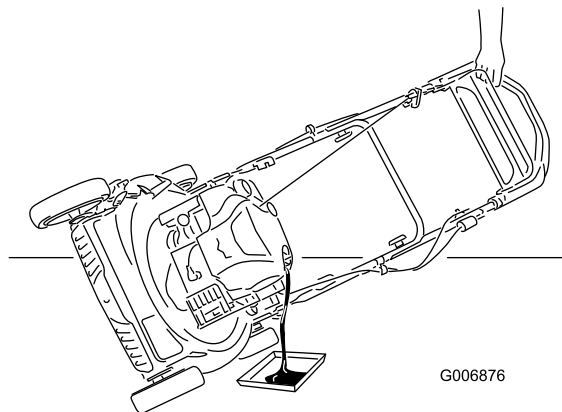


Figure 31

4. **Slowly** pour oil into the oil fill tube until the oil level reaches the **Full** line on the dipstick (Figure 30). **Do not overfill.** (Max. fill: 20 oz. (0.59 l), type: SAE 30W detergent oil with an API service classification of SF, SG, SH, SJ, SL, or higher.)
5. Install the dipstick securely.
6. Dispose of the used oil properly at a local recycling center.

Charging the Battery

Service Interval: Every 25 hours

Warning

CALIFORNIA Proposition 65 Warning

Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm.
Wash hands after handling.

Charge the battery for 24 hours initially, then monthly (every 25 starts) or as needed. Always use the charger in a sheltered area and charge the battery at room temperature (70° or 22° C) whenever possible.

1. Connect the charger to the mower wire harness located below the ignition key (Figure 32).

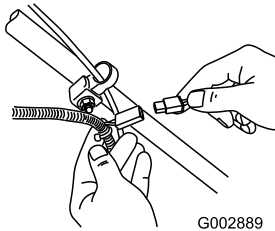


Figure 32

2. Plug the charger into a wall outlet.

Note: When the battery no longer holds a charge, recycle or dispose of the lead-acid battery according to local codes.

Replacing the Fuse

If the battery does not charge or the engine does not run with the electric starter, the fuse may be blown. Replace it with a 40-amp plug-in type fuse. Refer to Installing the Fuse.

Lubricating the Wheel Gears

Service Interval: Yearly

1. Remove the wheel bolts on the **rear** wheels and remove the rear wheels.
2. Apply a lubricating oil to the inner and outer sides of the gear as shown in Figure 33.

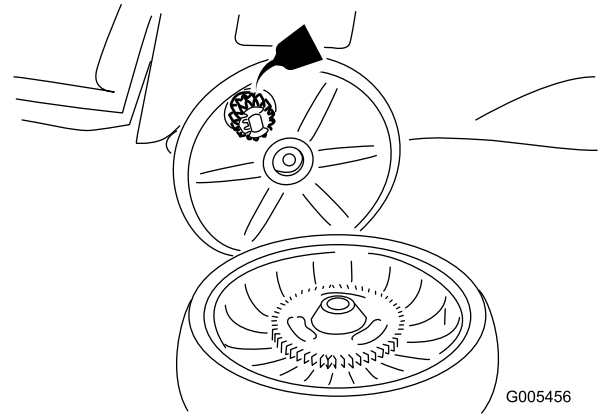


Figure 33

3. Install the rear wheels.

Replacing the Blade

Service Interval: Yearly

Important: *You will need a torque wrench to install the blade properly. If you do not have a torque wrench or are uncomfortable performing this procedure, contact an Authorized Service Dealer.*

Examine the blade whenever you run out of gasoline. If the blade is damaged or cracked, replace it immediately. If the blade edge is dull or nicked, have it sharpened or replace it.



The blade is sharp; contacting the blade can result in serious personal injury.

Wear gloves when servicing the blade.

1. Disconnect the spark plug wire from the spark plug. Refer to Preparing for Maintenance.
2. Tip the mower onto its side with the air filter up.
3. Remove the 2 blade nuts and the stiffener (Figure 34).

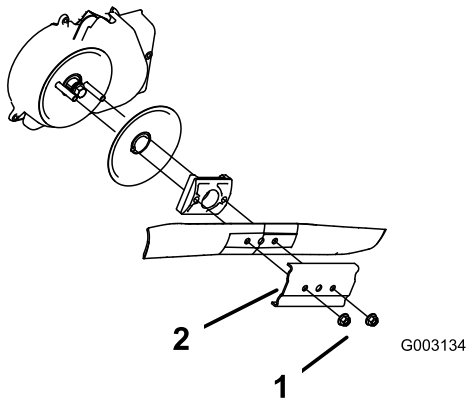


Figure 34

- 1. Blade nuts
- 2. Stiffener

4. Remove the blade (Figure 34).
5. Install the new blade (Figure 34).
6. Install the stiffener you previously removed.
7. **Install the blade nuts and torque them to 15 to 27 ft-lb (20 to 37 N·m).**

Cleaning the Blade Brake Clutch Shield

Clean the blade brake clutch shield yearly to prevent the blade from stalling while you mow.

1. Disconnect the spark plug wire from the spark plug. Refer to Preparing for Maintenance on page 18.
2. Tip the mower onto its side with the air filter up.
3. Remove the 2 blade nuts and the stiffener (Figure 35).

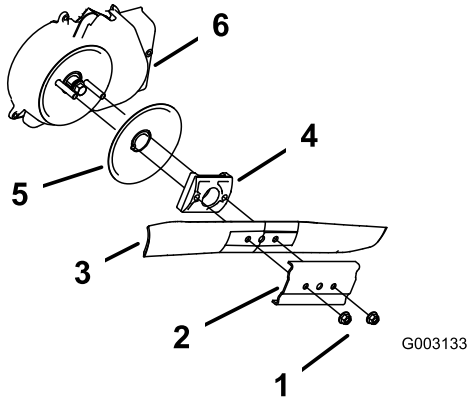


Figure 35

- 1. Blade nuts
- 2. Stiffener
- 3. Blade
- 4. Blade driver
- 5. Disk
- 6. Blade brake clutch shield

4. Remove the blade (Figure 35).
5. Remove the blade driver and disk (Figure 35).
6. Remove the blade brake clutch shield (Figure 35).

7. Brush or blow out debris from the inside of the shield and around all the parts.
8. Install the blade brake clutch shield that you previously removed.
9. Install the blade driver that you previously removed.
10. Install the blade and the stiffener that you previously removed (Figure 35).
11. **Install the blade nuts and torque them to 15 to 27 ft-lb (20 to 37 N·m).**

Adjusting the Self-propel Drive Cable

Whenever you install a new self-propel cable or if the self-propel drive is out of adjustment, adjust the self-propel drive cable.

1. Loosen the cable support nut (Figure 36).

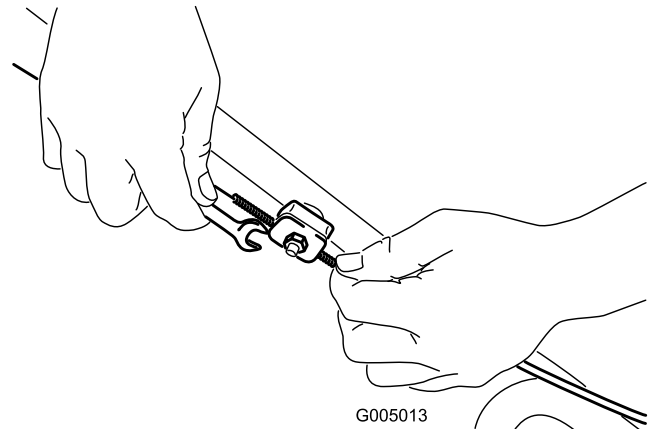


Figure 36

2. Pull down the cable jacket (toward the mower) until there is no slack in the cable (Figure 37).

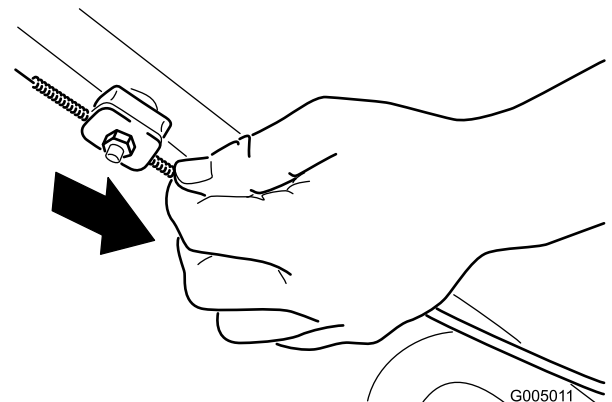


Figure 37

3. Tighten the nut on the cable support.

Cleaning the Mower

Service Interval: Before each use or daily

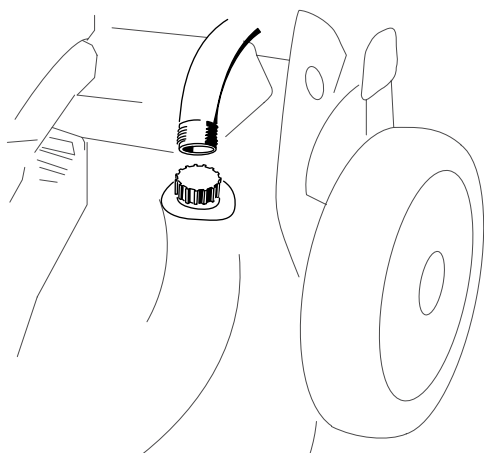


The mower may dislodge material from under the mower housing.

- Wear eye protection.
- Stay in the operating position (behind the handle) when the engine is running.
- Do not allow bystanders in the area.

For best results, clean the mower soon after you have completed mowing.

1. Lower the mower to its lowest cutting height setting. Refer to Adjusting the Cutting Height.
2. Move the mower onto a flat paved surface.
3. Attach a garden hose that is connected to a water supply to the washout port on the mower housing (Figure 38).



G006256

Figure 38

4. Turn the water on.
5. Start the engine and run it until there are no more clippings that come out from under the mower housing.
6. Stop the engine.
7. Shut off the water and disconnect the garden hose from the mower.
8. Start the engine and run it for a few minutes to dry the housing to prevent it from rusting.

Storage

Store the mower in a cool, clean, dry place.

Preparing the Mower for Storage



Gasoline vapors can explode.

- Do not store gasoline more than 30 days.
- Do not store the mower in an enclosure near an open flame.
- Allow the engine to cool before storing it.

1. On the last refueling of the year, add fuel stabilizer to the fuel as directed by the engine manufacturer.
2. Dispose of any unused fuel properly. Recycle it according to local codes, or use it in your automobile.

Note: Old fuel in the fuel tank is the leading cause of hard starting. Do not store fuel without stabilizer more than 30 days, and do not store stabilized fuel more than 90 days.

3. Run the mower until the engine stops from running out of fuel.
4. Prime the engine and start it again.
5. Allow the engine to run until it stops. When you can no longer start the engine, it is sufficiently dry.
6. Disconnect the wire from the spark plug and connect the wire onto the retaining post.
7. Remove the spark plug, add 1 oz. (30 ml) of oil through the spark plug hole, and pull the starter rope slowly several times to distribute oil throughout the cylinder to prevent cylinder corrosion during the off-season.
8. Loosely install the spark plug.
9. Tighten all nuts, bolts, and screws.
10. Charge the battery for 24 hours, then unplug the battery charger and store the mower in an unheated area. If you must store the mower in a heated area, you must charge the battery every 90 days.

Folding the Handle



Folding or unfolding the handle improperly can damage the cables, causing an unsafe operating condition.

- Do not damage the cables when folding or unfolding the handle.
- If a cable is damaged, contact an Authorized Service Dealer.

1. Remove the ignition key.
2. Loosen the handle knobs until you can move the upper handle freely.
3. Fold the upper handle forward as shown in Figure 39.

Important: Route the cables to the outside of the handle knobs as you fold the upper handle.

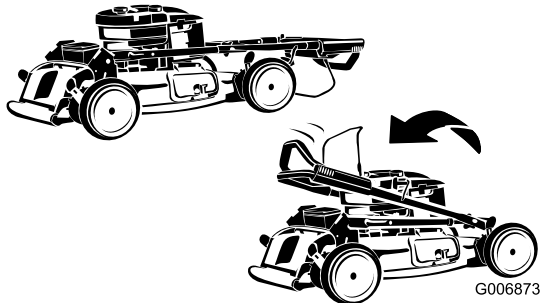


Figure 39

4. To unfold the handle, reverse the steps above.

Removing the Mower from Storage

1. Remove the spark plug and spin the engine rapidly using the starter to blow the excess oil from the cylinder.
2. Install the spark plug and tighten it with a torque wrench to 15 ft-lb (20 N·m).
3. Charge the battery for 24 hours.
4. Connect the wire to the spark plug.

Notes:

Notes:



The Toro Total Coverage Guarantee
A Two -Year Full Warranty (Limited for Commercial Use)
and

The Toro Starting Guarantee on GTS-2 (Guaranteed to Start) Engines
A Two -Year Full Warranty (Not applicable for Commercial Use)

Conditions and Products Covered under The Toro Total Coverage Guarantee

The Toro Company and its affiliate, Toro Warranty Company, pursuant to an agreement between them, jointly promise to repair any Toro Product, when used for residential purposes*, if defective in materials or workmanship or if it stops functioning due to the failure of a component. The following time periods apply from the date of original purchase:

<u>Products</u>	<u>Warranty Period</u>
<ul style="list-style-type: none">• All Products and attachments• Batteries	<ul style="list-style-type: none">• 2 year full warranty• 1 year full warranty

Limited Warranty for Commercial Use

Toro Products used for commercial, institutional, or rental use are warranted against defects in materials or workmanship for the following time periods from the original date of purchase:

<u>Products</u>	<u>Warranty Period</u>
All Products and attachments	45 day limited warranty

This warranty covers the cost of parts and labor, but you must pay transportation costs. This warranty applies to all Toro Recycler walk power mowers and their attachments.

Conditions and Products Covered Under the Toro Starting Guarantee

The Toro Company and its affiliate, Toro Warranty Company, pursuant to an agreement between them, jointly guarantee that your Toro GTS-2 Engine, when used for residential purposes*, will start on the first or second pull for two years from the date of original purchase, if you provide the routine maintenance it requires, or we will fix it free of charge.

This warranty covers the cost of parts and labor, but you must pay transportation costs. This warranty applies to all Toro Recycler walk power mowers.

The Toro Starting Guarantee does not apply when the product is used commercially. Use at more than one location is considered commercial use.

The following applies to both the Toro Total Coverage Guarantee & the Toro Starting Guarantee:

Items and Conditions Not Covered

There is no other express warranty except for special emission system coverage on some products. This express warranty does not cover the following:

- Cost of regular maintenance service or parts, such as filters, fuel, lubricants, oil changes, air filter, blade sharpening/worn blade on mowers, cable/linkage adjustments, or brake and clutch adjustments
- Any product or part which has been altered or misused and requires replacement or repair due to accidents or lack of proper maintenance
- Repairs necessary due to improper battery care, electrical supply irregularities, failure to use fresh fuel (less than one month old), or failure to properly prepare the unit prior to any period of non-use over one month
- Pickup and delivery charges
- Operational misuse, neglect, or accidents
- Repairs or attempted repairs by anyone other than an Authorized Toro Service Dealer
- Repairs or adjustments to correct starting difficulties due to the following:
 - Failure to follow proper maintenance procedures
 - Rotary mower blade striking an object
 - Contaminants in the fuel system
 - Improper fuel (consult your *Operator's Manual* if in doubt)
 - Failure to drain the fuel system prior to any period of non-use over one month
- Special operational conditions where starting may require more than two pulls:
 - First time starts after extended period of non-use over one month or seasonal storage
 - Cool temperature starts such as those found in early spring and late autumn (applies to rotary mowers only)
 - Improper starting procedures

If you are having difficulty starting your unit, please check the *Operator's Manual* to ensure that you are using the correct starting procedures. This can save an unnecessary visit to a Service Dealer.

Owner Responsibilities

You must maintain your Toro Product by following the maintenance procedures described in the *Operator's Manual*. Such routine maintenance, whether performed by a dealer or by you, is at your expense.

Instructions for Obtaining Warranty Service

If you think that your Toro Product contains a defect in materials or workmanship, or if a normal, able-bodied adult can no longer start your product's engine in one or two pulls, follow this procedure:

1. Contact any Authorized Toro Service Dealer to arrange service at their dealership. To locate a dealer convenient to you, refer to the *Yellow Pages* of your telephone directory (look under "Lawn Mowers") or access our website at www.Toro.com. U.S. Customers may also call the number listed in item #3 to use our 24-hour Toro dealer locator system.
2. Bring the product and your proof of purchase (sales receipt) to the Service Dealer. The dealer will diagnose the problem and determine if it is to be covered under warranty.
3. If for any reason you are dissatisfied with the Service Dealer's analysis or with the assistance provided, contact us at: Customer Care Department -Consumer, Toro Warranty Company, 8111 Lyndale Avenue South, Bloomington, MN 55420-1196; or call us toll free at 1-866-214-9807 (U.S. customers) or 1-866-214-9808 (Canada customers).

General Conditions

All repairs covered by these warranties must be performed by an Authorized Toro Service Dealer using Toro approved replacement parts.

Neither The Toro Company nor Toro Warranty Company is liable for indirect, incidental, or consequential damages in connection with the use of the Toro Products covered by these warranties, including any cost or expense of providing substitute equipment or service during reasonable periods of malfunction or non-use pending completion of repairs under these warranties.

Some states do not allow exclusions of incidental or consequential damages, so the above exclusions and limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Countries Other than the United States or Canada

Customers who have purchased Toro products exported from the United States or Canada should contact their Toro Distributor (Dealer) to obtain guarantee policies for your country, province, or state. If for any reason you are dissatisfied with your Distributor's service or have difficulty obtaining guarantee information, contact the Toro importer. If all other remedies fail, you may contact us at Toro Warranty Company.