



MODEL NO. 22685 - 0000001  
THRU 1000001 & UP

## OPERATOR'S MANUAL

**21" (0.53 M) SP LANDSCAPER REAR BAGGER**  
FINGERTIP START

# SAFETY INSTRUCTIONS

## BEFORE OPERATING

1. Read this manual carefully before operating the mower. Become familiar with the controls and proper use of the mower. Never allow children or adults to operate it without proper instructions.
2. Keep everyone, especially children and pets, away from area of operation. Thoroughly inspect area where mower will be used. Remove sticks, stones, wire, and debris.
3. Wear long pants and substantial shoes. Do not operate mower while wearing open sandals or barefoot.
4. Always wear safety glasses or eye shields during operation to protect eyes from foreign objects that may be thrown from the machine.
5. Check fuel level before starting engine. Do not fill fuel tank indoors, when the engine is running or until engine cools for several minutes after running. Wipe up spilled gasoline before starting engine.
6. Keep all guards, shields, and safety devices in place. Repair or replace defective or damaged parts.
7. Traction drive, engine, and blade are designed to stop when control bar is released. Assure control and brake function properly before each use of mower.

## WHILE OPERATING

8. Keep face, hands, and feet away from the mower housing and cutter blade when the engine is running. Stay behind the handle until the engine stops and keep clear of discharge opening at all times.
9. Shut engine off and wait for all moving parts to stop before unclogging chute.
10. Since the blade rotates for a few seconds after the blade control is released, stay behind the handle until all moving parts stop.
11. Shut off engine and wait for all moving parts to stop before adjusting the height-of-cut.
12. Do not run engine indoors.
13. Always maintain secure footing. Keep a firm grip on the handle and walk; never run. Never op-

erate mower in wet grass. Mow only in daylight or in good artificial light.

14. Mow across the face of slopes; never up and down. Use extreme caution when changing direction on slopes. Do not mow excessively steep slopes.

15. When mulching, assure discharge door is closed. When bagging grass, stop engine before the bag is removed and emptied.

16. After striking a foreign object or if mower vibrates abnormally, stop engine and remove wire from spark plug. Check mower for damage and make all repairs before using mower again.

17. Stop the blade when crossing a gravel driveway, road, or sidewalk.

18. Stop engine before leaving the operator's position—behind the handle. Disconnect wire from spark plug if mower will be unattended.

19. Do not touch engine while it is running or shortly after it is stopped. Engine will be hot enough to cause a burn.

## MAINTENANCE

20. Perform only those maintenance instructions described in this manual. If major repairs are ever needed or if assistance is desired, contact your local Authorized TORO Service Dealer.
21. Before mower is cleaned, inspected, serviced, or adjusted, stop engine and disconnect wire from spark plug. Keep wire away from plug to prevent accidental starting.
22. To assure the mower is in safe operating condition, frequently check and keep all nuts, bolts, and screws tight. Assure blade nuts are tightened to 50 ft-lb.
23. To reduce fire hazard, keep engine free of excessive grease, grass, leaves, and accumulations of dirt.
24. Check grass catcher bag frequently for wear or deterioration. Replace with a new bag for your protection.
- 25.. Allow engine to cool before storing mower in any enclosure. Do not store mower near any open flame or where gasoline fumes may be ignited by a spark.
26. Do not overspeed the engine by changing governor settings.

# SAFETY INSTRUCTIONS

27. At the time of manufacture, the mower conformed to the safety standards in effect for rotary mowers. To ensure best performance and continued safety certification of the mower, use genuine TORO replacement parts and accessories. Re-

placement parts and accessories made by other manufacturers may result in non-conformance with the safety standards, and that could be dangerous.

## SAFETY SYMBOL GLOSSARY

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.



Safety alert



Choke  
on



Slow



Fast



Read and understand  
operator's manual



Engine speed  
(Throttle)



50:1

50:1 ratio unleaded gasoline  
to 2-cycle oil



Neutral



Traction drive - ENGAGED

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# SET-UP INSTRUCTIONS

## INSTALL HANDLE AND GRASS BAG

1. Spread handle ends and slide onto mower housing mounting studs (Fig. 1). Secure each side of handle to mounting stud with a washer and locknut.

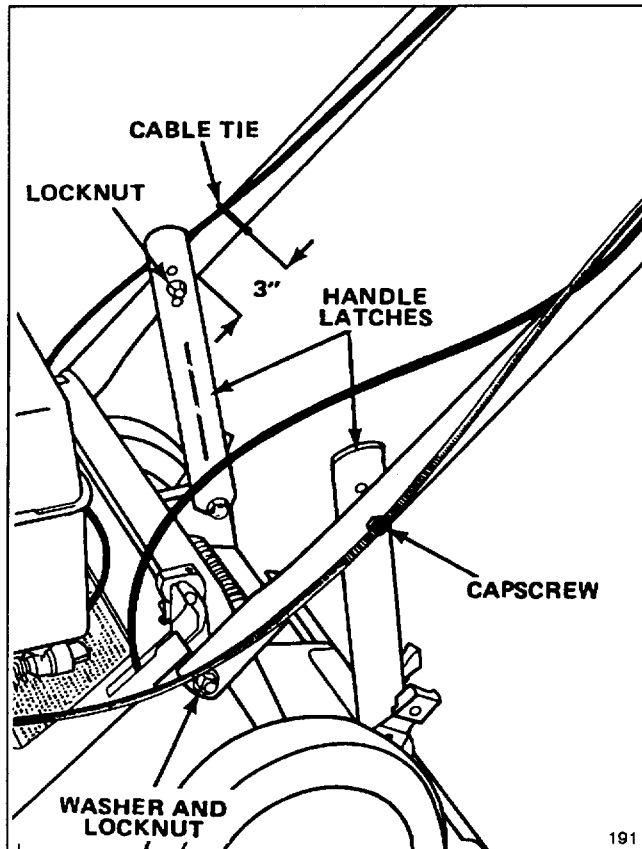


Figure 1

2. Pivot handle latches backward and secure to insides of handle with (2) capscrews and (2) locknuts (Fig. 1).

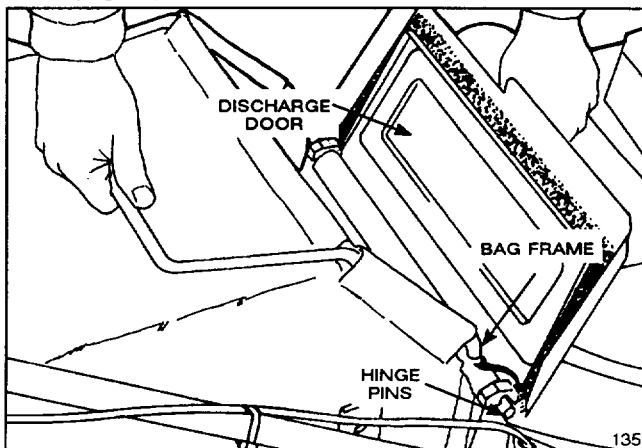


Figure 2

**Note:** Handle height is adjustable for operator comfort. Stand behind mower handle to gauge height. If a lower or higher handle height is desired, reposition capscrews and locknuts securing

handle latches to handle into other mounting holes in latches.

3. Secure control cable to right side of handle approximately 3" above handle latch with cable tie (Fig. 1).

4. To install grass bag, raise discharge door and hook bag frame onto hinge pins (Fig. 2). Allow bag to rest on mower housing over discharge opening. Close door and make sure it seals around top of bag opening (Fig. 3).

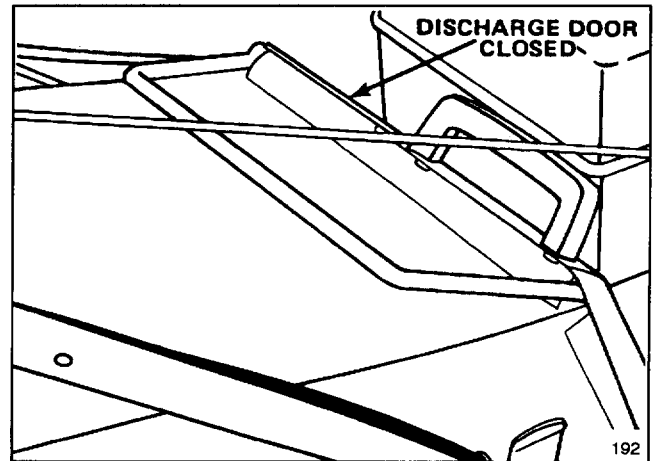


Figure 3

## INSTALL ROPE GUIDE AND STARTER ROPE

1. Secure rope guide to upper handle with bolt and locknut (Fig. 4).

2. Pull starter rope through opening in rope guide (Fig. 4). By squeezing control bar (Fig. 11) against handle, blade brake will release and allow rope to be pulled easily up through rope guide.

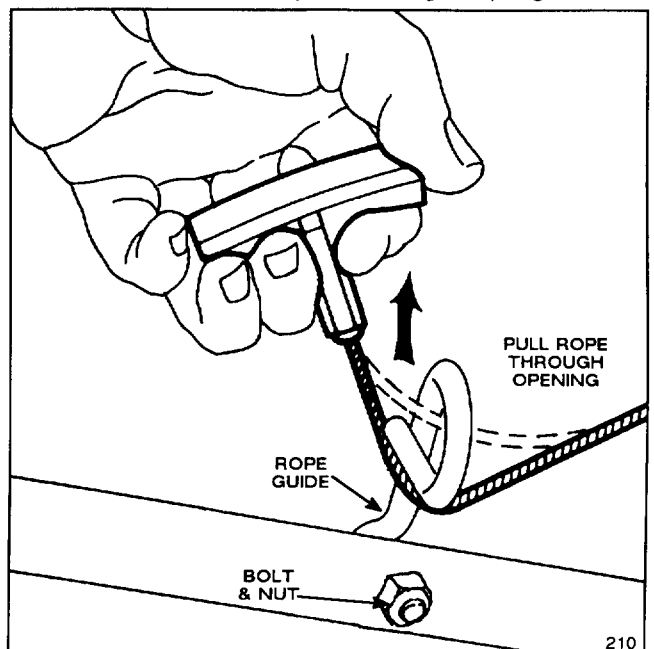


Figure 4

# SET-UP INSTRUCTIONS

## INSTALL GAS TANK

1. Remove back capscrew from recoil cover (Fig. 5). Slide tank bracket under edge of recoil cover, aligning holes in tank bracket and recoil cover (Fig. 5). Reinstall capscrew.

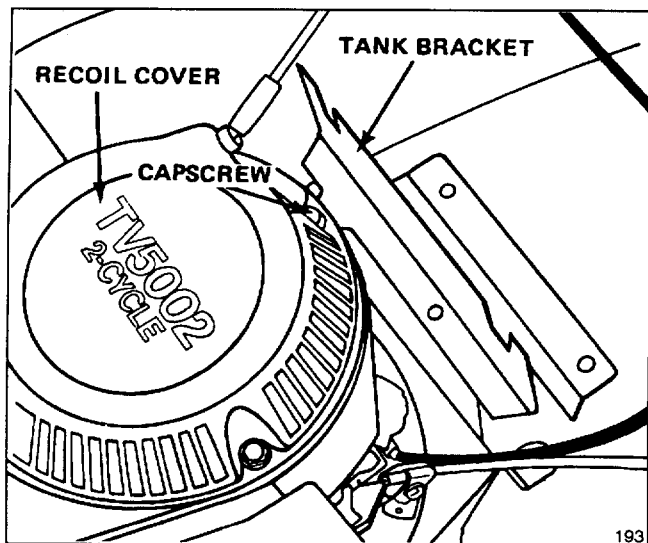


Figure 5

2. Hook plastic clips on rear of gas tank onto tank bracket (Fig. 6).
3. Secure gas tank to tank base with (2) self-tapping screws (Fig. 6). Do not overtighten.

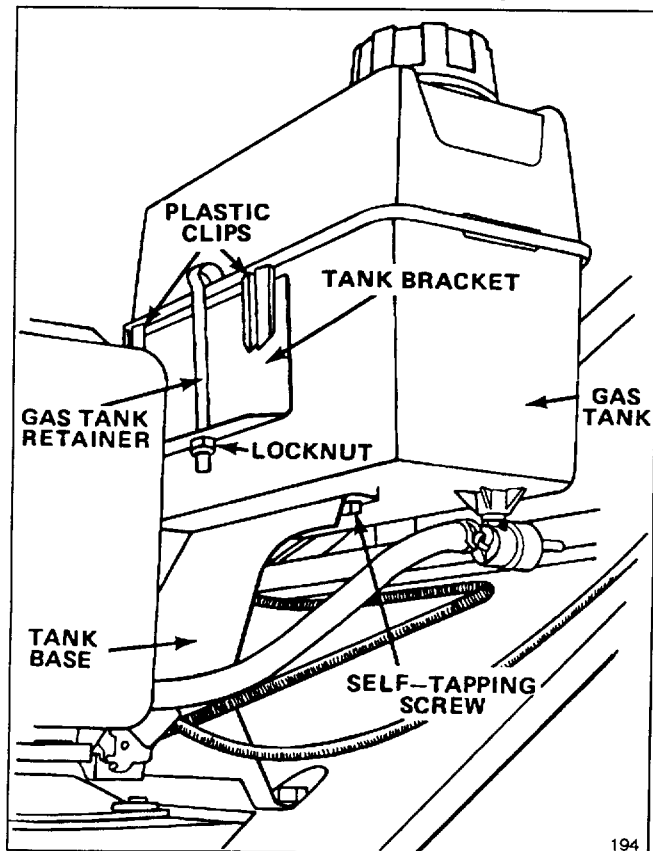


Figure 6

4. Hook gas tank retainer onto gas tank and slide end of retainer into hole in tank bracket. Secure retainer to tank bracket with locknut (Fig. 6). Do not overtighten.

5. Connect fuel line by sliding fuel line clamp onto end of fuel line. Slide end of fuel line onto fuel shut-off valve end (Fig. 7).

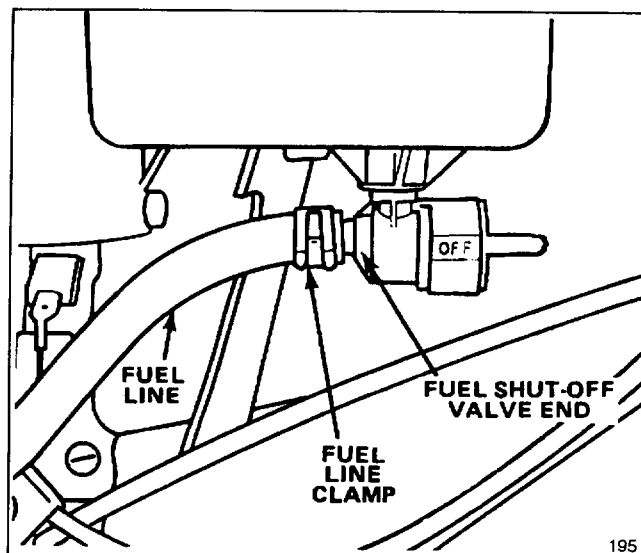


Figure 7

## INSTALL AIR CLEANER COVER (Fig. 8)

1. Insert bottom tabs of air cleaner cover into slots. Rotate cover upwards and snap into place.

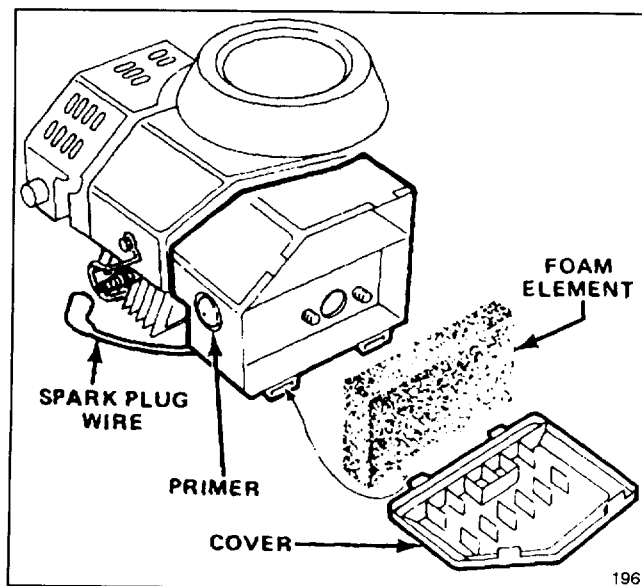


Figure 8

# BEFORE OPERATING



## WARNING

**DANGER:** Gasoline is extremely flammable and explosive under certain conditions. Do not smoke when handling fuel and keep fuel far away from open flames and sparks. Never buy more than a 30 day supply of gasoline. Store it in an approved container. Keep gasoline out of reach of children.

Refuel outdoors and only when engine is cold. Do not fill tank full. Fill tank to within 1/4" to 1/2" (6 to 13 mm) from top of tank, not into filler neck. This space is for expansion of fuel. Use funnel or spout to prevent spilling. Wipe up any spilled gas.

## MIX GASOLINE AND OIL (Fig. 9)

1. **APPROVED OIL**—For simplicity and best engine performance, mix the contents of one bottle of Toro 50:1 Two-Cycle Oil with two gallons of fresh, unleaded regular gasoline. Leaded regular gasoline may be used if unleaded regular is not available.

Toro Two-Cycle Oil is specially formulated to provide superior lubrication, make starting easy, and prolong engine life. If Toro Two-Cycle Oil is not available, mix two gallons of gasoline and 5.2 ounces of another high grade two-cycle oil that has the NMMA or BIA-TCW certification printed on the label.

**IMPORTANT:** YOU CAN ALSO USE TORO "EASY MIX" TWO-CYCLE OIL (3.2 OUNCE BOTTLE MIXED ONE PER GALLON OF GASOLINE) IN THIS TORO TWO-CYCLE ENGINE.

NEVER USE AUTOMOTIVE OIL (i.e. SAE 30, 10W30 etc.), TWO-CYCLE OIL THAT IS NOT CERTIFIED NMMA/BIA-TCW, OR THE WRONG MIX RATIO BECAUSE THE ENGINE CAN BE DAMAGED, AND IT WOULD NOT BE COVERED BY THE TORO WARRANTY.

2. **Mixing Gasoline and Oil**—Pour correct amount of two cycle oil into an approved gasoline container and add a half gallon of gasoline. Install cap on gasoline container and shake the container to

mix oil and gas thoroughly. Remove cap and add remaining amount of gasoline.

**IMPORTANT:** NEVER USE METHANOL, GASOLINE CONTAINING METHANOL, GASOLINE CONTAINING MORE THAN 10% ETHANOL, PREMIUM GASOLINE, OR WHITE GAS BECAUSE ENGINE FUEL SYSTEM DAMAGE COULD RESULT.

Toro also recommends that Toro Stabilizer/Conditioner be used regularly in all Toro gasoline powered products during operation and storage seasons. Toro Stabilizer/Conditioner cleans the engine during operation and prevents gum-like varnish deposits from forming in the engine during periods of storage.

**DO NOT USE FUEL ADDITIVES OTHER THAN THOSE MANUFACTURED FOR FUEL STABILIZATION DURING STORAGE SUCH AS TORO'S STABILIZER/CONDITIONER OR A SIMILAR PRODUCT. TORO'S STABILIZER/CONDITIONER IS A PETROLEUM DISTILLATE BASED CONDITIONER/STABILIZER. TORO DOES NOT RECOMMEND STABILIZERS WITH AN ALCOHOL BASE SUCH AS ETHANOL, METHANOL OR ISOPROPYL. ADDITIVES SHOULD NOT BE USED TO TRY TO ENHANCE THE POWER OR PERFORMANCE OF MACHINE.**

**NOTE:** Do not mix gasoline and oil in the product fuel tank. Oil that is at room temperature mixes easier and more thoroughly than cold oil.

## 50:1 GAS/OIL Mixing Chart

U.S. GALLON	
Gasoline	Oil
1 gallon	2.6 oz.
2 gallon	5.2 oz.

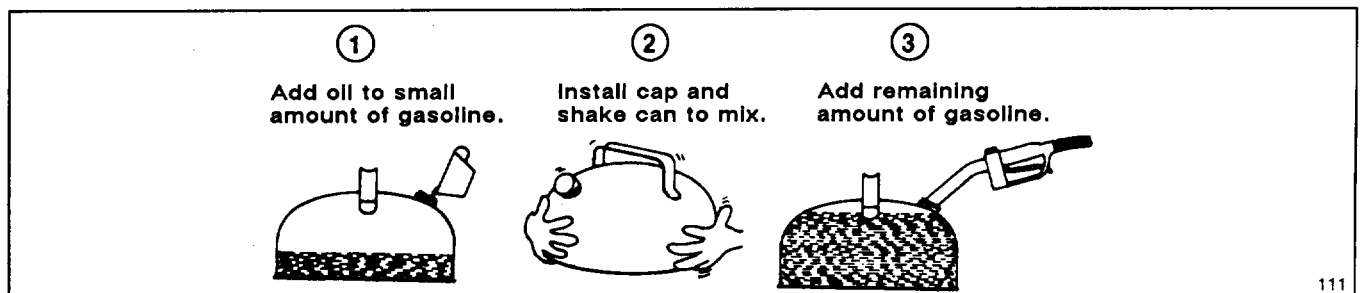


Figure 9

## BEFORE OPERATING

3. Turn fuel shut-off valve to ON position (Fig. 10).

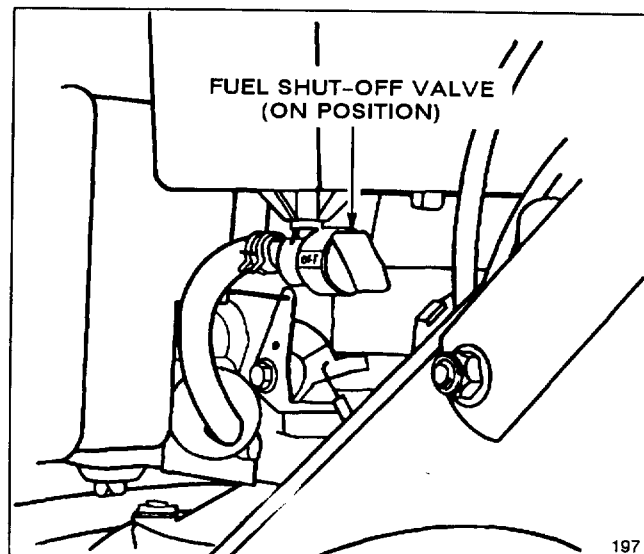


Figure 10

## OPERATING INSTRUCTIONS

### OPERATING TIPS

1. **BEFORE OPERATING**—Assure engine, brake, self-propel drive, and control bar function properly. When control bar is released, engine, self-propel drive, and blade are designed to stop.
2. **CUTTING AND BAGGING**—To improve quality of cut, discharge clipping toward previously cut area. Best results are normally achieved when engine is running at maximum speed and only about 1/3 of the grass blade is cut. If long grass must be cut, use highest height-of-cut setting for first mowing. Then recut the grass at a more normal setting. If too long of grass is cut, mower may plug and cause engine to stall.

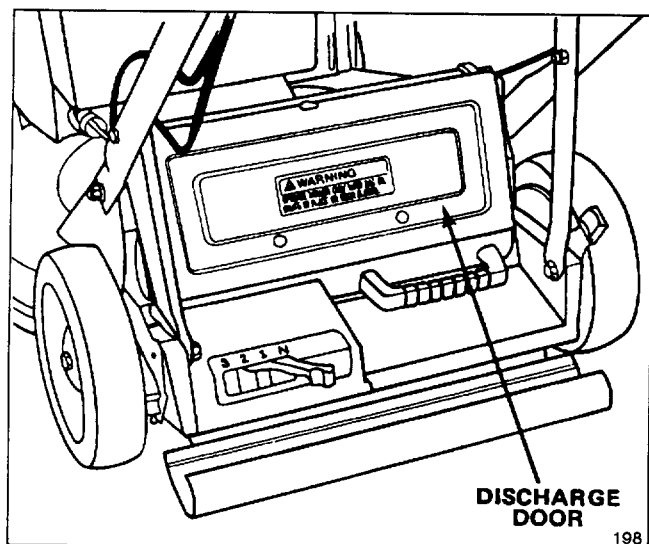


Figure 11

When cutting in dry, dusty conditions, move the throttle to a slower speed to reduce the amount of dust generated by mower.

3. **MULCHING**—In summer when grass grows slower and is drier, mulch by removing the grass bag and closing the discharge door (Fig. 11).
4. **SHARP BLADE**—Begin each cutting season with a sharp blade. Periodically file down nicks.

### STARTING, STOPPING, AND SELF-PROPELLING

1. **CONTROLS**—Throttle, blade/self-propelled control bar, and fingertip starter are on upper handle (Fig. 12). Ground speed selector is on rear of mower housing (Fig. 13).

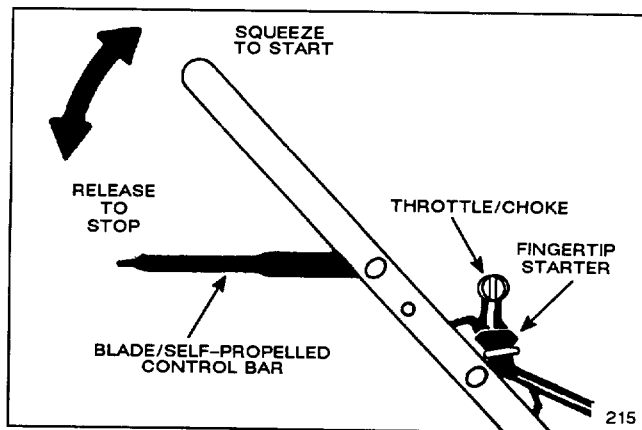


Figure 12

# OPERATING INSTRUCTIONS

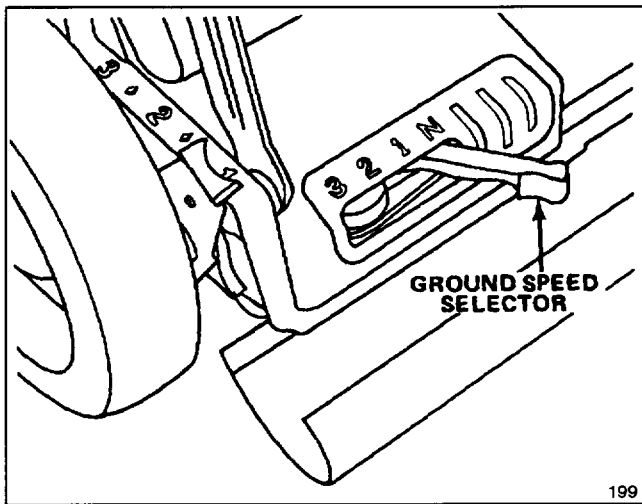


Figure 13

2. Push spark plug wire onto spark plug (Fig. 16).

3. **STARTING**—Move ground speed selector to “N” and throttle to **CHOKE**. Cover hole in center of primer with thumb and push once (Fig. 16). Hold control bar against handle. Pull fingertip starter (Fig. 12) out until positive engagement results; then pull vigorously to start the engine. Regulate throttle as desired when engine starts.

**NOTE:** When starting a warm engine, **CHOKE** and **PRIMER** may not be necessary.

4. **TRACTION OPERATION**—Move ground speed selector to desired setting and squeeze control bar against handle to drive. Ground speed varies, depending on space between control bar and handle.

**NOTE:** The drive wheels are equipped with free-wheeling clutches which enable the mower to be pulled rearward easier when the wheel drive is disengaged. To disengage the clutches, mower must be pushed forward at least 1” after wheel drive operation has stopped.

5. **STOPPING** (Fig. 12)—Move ground speed selector to “N”. Release control bar to stop traction drive, engine, and blade. Pull wire off spark plug if mower will be unattended or not used.

## USING GRASS BAG

Keep bag installed when bagging or mulching.

1. Stop engine and wait for all parts to stop.

2. **INSTALLING BAG**—Raise discharge door and hook bag frame onto hinge pins (Fig. 14). Allow bag to rest on mower housing over discharge opening. Close door and make sure it seals around top of bag opening.

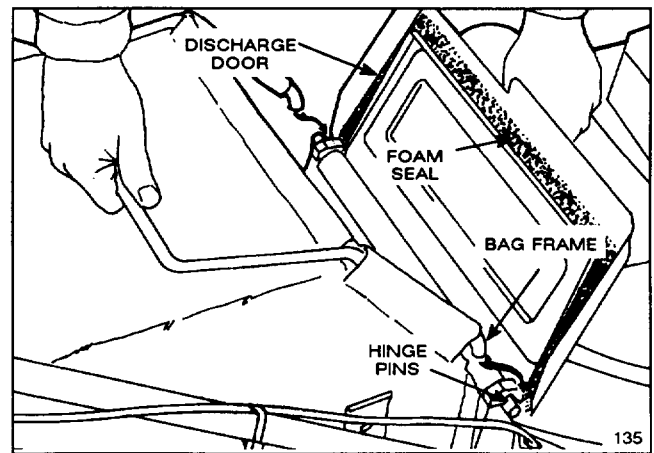


Figure 14

3. **CHECKING BAG**—To see if grass bag is full, release control bar and wait for blade to stop. Feel the bag to determine whether bag needs to be emptied.

### CAUTION

Never open discharge door on mower when grass bag is not installed and engine is running because grass clippings and other debris discharge with enough force to cause injury.

The grass bag material will catch and contain the majority of foreign objects such as small stones and other similar debris. The bag material, however, is subject to normal wear and deterioration. So check the bag frequently, and if it is worn, install a new genuine **TORO** replacement bag that has this or similar warning.

4. **REMOVING BAG**—Stop engine and wait for all moving parts to stop. For protection, always keep hands and feet away from mower housing when engine is running. Open discharge door. While holding discharge door, grasp handle on grass bag and lift bag off mower. Allow discharge door to close.

5. **EMPTYING BAG**—Grasp bag frame handle and rear of bag. Gradually raise rear of bag while shaking bag to empty.

**Note:** If grass bag is overfilled, some clippings may remain in discharge opening when bag is removed. Normally, these clippings will be blown into grass bag when the bag is reinstalled and the blade is engaged.

### DANGER

If the discharge opening remains plugged, be sure to stop engine and wait for all moving parts to stop before attempting to clear any clippings from the mower. Use a stick, not your hand, to unclog discharge opening.

# OPERATING INSTRUCTIONS

## ADJUSTING HEIGHT-OF-CUT

Three numbers cast into the housing represent the height-of-cut settings. The diamond between each number represent 1/2" increments.



**DANGER**

**Do not adjust the height-of-cut settings when engine is running.**

1. Stop the engine.
2. For easier adjustment, lift housing up so wheel is off ground. Do not place hands under the deck to lift housing. Squeeze adjusting lever toward wheel and move to desired setting (Fig. 15). Assure pin on adjusting lever engages notch in housing. Adjust all wheels to the same setting.

**Note:** Front wheels can be adjusted to 1/2". Move adjusting lever past "1" and release pin into notch in housing.

3. In conditions when maximum power is required or when cutting in spongy thatch that causes rear wheels to sink in turf, raise rear wheel setting one

increment higher. Make sure wheel settings are returned to equal settings, when cutting in normal conditions, to achieve the best quality of cut.

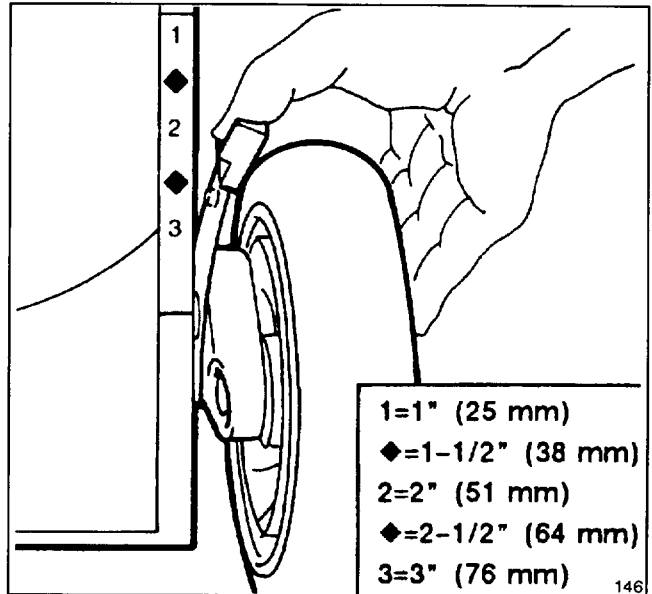


Figure 15

## MAINTENANCE



**CAUTION**

**Pull wire off spark plug before performing adjustments or maintenance.**

## SERVICING AIR CLEANER

Normally, clean air cleaner after every 25 operating hours. More frequent cleaning is required when mower is operated in dusty or dirty conditions.

1. Stop engine and pull wire off spark plug (Fig. 16).
2. Lift tabs at top of air cleaner cover and pivot cover down (Fig. 16). Clean cover thoroughly.
3. If outside of foam element is dirty, remove it from air cleaner body (Fig. 16). Clean thoroughly.

A. WASH foam element in a solution of liquid soap and warm water. Squeeze to remove dirt, but do not twist because foam may tear. Rinse thoroughly in clear water.

B. DRY by wrapping in a clean rag. Squeeze rag and foam element to dry.

C. SATURATE element with 5 teaspoons (25 ml) of SAE 10W30 engine oil. Squeeze element to remove excess oil and to distribute oil thoroughly. A damp element is desirable.

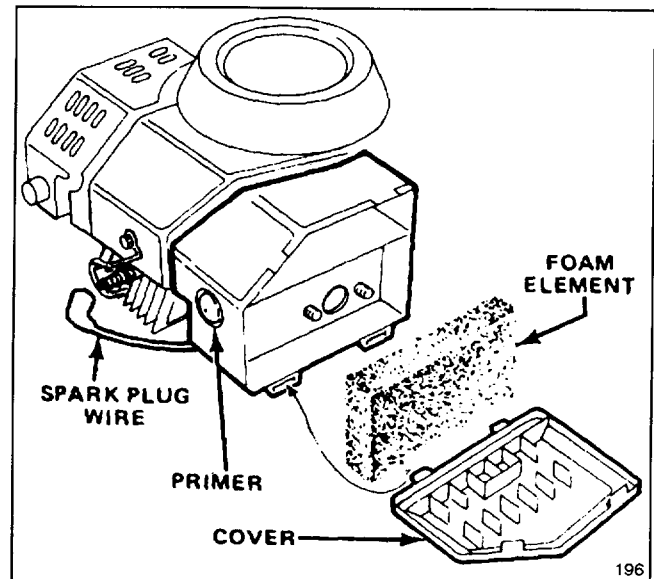


Figure 16

4. Reinstall foam element and air cleaner cover.

**IMPORTANT:** Do not operate engine without air cleaner element because extreme engine wear and damage will likely result.

## REPLACING SPARK PLUG

Use an NGK BPR4A spark plug or equivalent. Correct air gap is 0.032" (0.81 mm). Remove plug after every 25 operating hours and check its condition.



# MAINTENANCE

1. Stop engine and pull wire off spark plug (Fig. 16).
2. Clean around spark plug and remove plug from cylinder head.

**IMPORTANT:** Replace a cracked, fouled, or dirty spark plug. Do not sand blast, scrape, or clean electrodes because engine damage could result from grit entering cylinder.

3. Set air gap at 0.032" (0.81 mm) (Fig. 17). Install correctly gapped spark plug and gasket seal. Tighten plug firmly to 10 ft-lb (13.6 N·m).

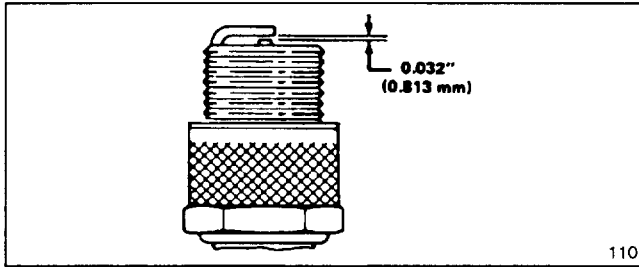


Figure 17

## DRAINING GASOLINE

1. Stop engine and pull wire off spark plug (Fig. 16).
2. Turn fuel shut-off valve to OFF position (Fig. 18).
3. Remove cap from fuel tank and use pump-type siphon to drain fuel into clean gas can.

**NOTE:** This is the only procedure recommended for draining fuel.

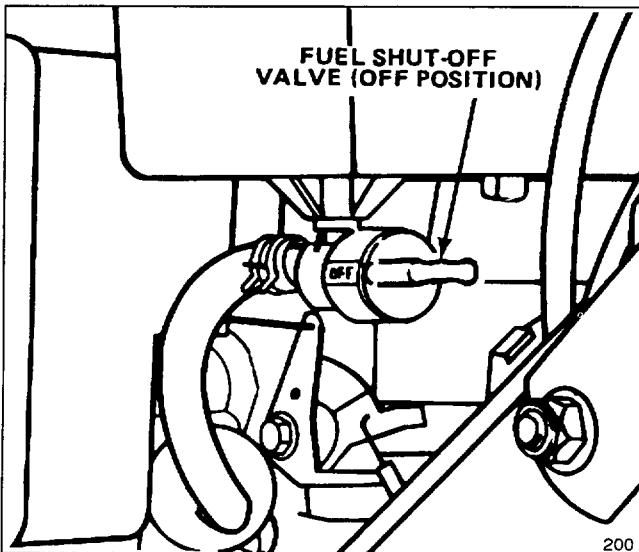


Figure 18

## ADJUSTING WHEEL TRACTION DRIVE

If mower does not self-propel or has a tendency to creep forward when drive is not engaged, an adjustment to the wheel traction control cable is necessary.

1. Stop engine and pull wire off spark plug (Fig. 16).
2. Lift control bar until some resistance is felt. Control bar should be 1-1/2" from handle when properly adjusted (Fig. 19).

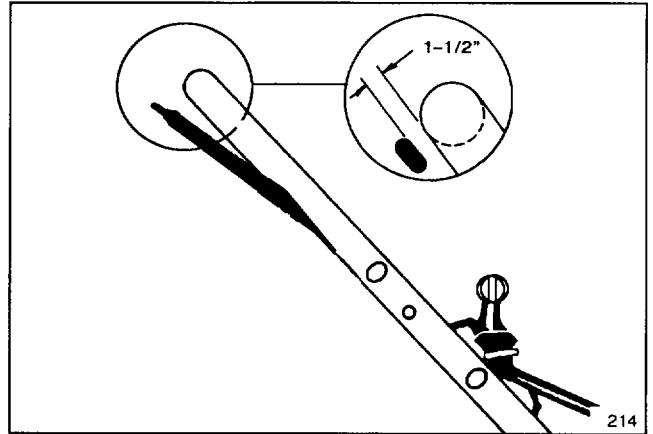


Figure 19

3. Loosen jam nut on cable adjuster and rotate fitting up or down to achieve correct distance between control bar and handle (Fig. 20).
4. Repeat steps 2 and 3 until properly adjusted.
5. Tighten jam nut to lock the adjustment.

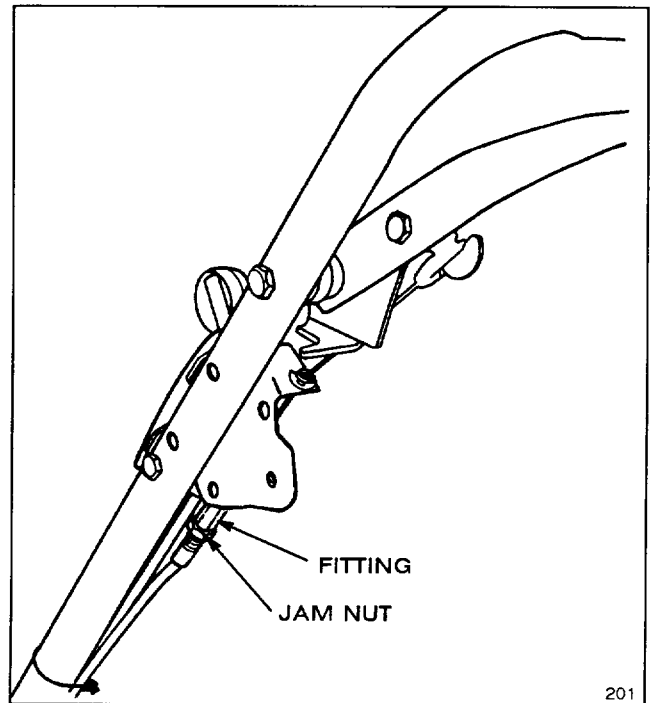


Figure 20

## CLEANING COOLING SYSTEM

After every 75 operating hours, clean dirt and chaff from cylinder, cylinder head fins and from around carburetor and linkage. Also remove debris from air intake slots on recoil housing. This will ensure proper cooling and best engine performance.

# MAINTENANCE

## CLEANING MUFFLER AND EXHAUST PORT

Check and, if necessary, clean end of muffler pipe and exhaust port after every 75 hours of operation.



### CAUTION

Clean muffler and exhaust port only after engine and muffler are cool. A hot engine and muffler can cause burns.

1. Use hard wood scraper and remove carbon from end of muffler pipe (Fig. 21).
2. Remove screw, two nuts, and lockwashers (Fig. 21). Slide muffler off mounting pins.

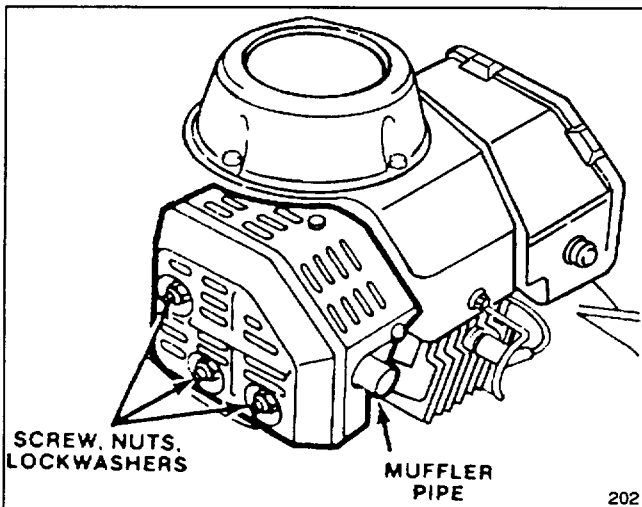


Figure 21

3. Pull wire off spark plug. Slowly pull recoil starter so piston covers exhaust port (Fig. 22).

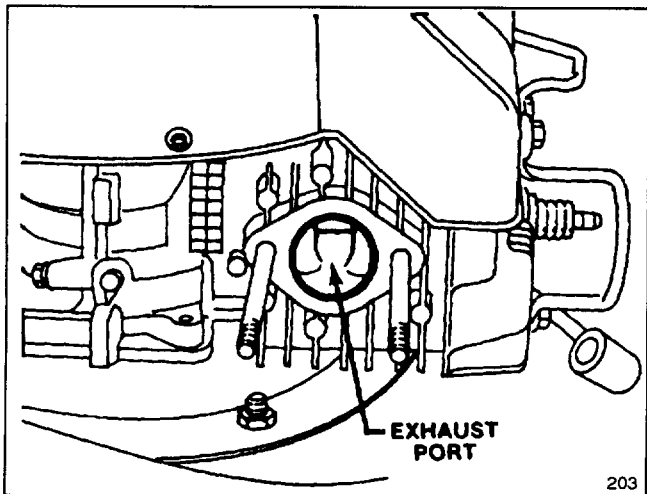


Figure 22

4. Clean carbon from exhaust port (Fig. 22) with flat, hard wood scraper.

## ADJUSTING THROTTLE (Fig. 23)

Throttle control adjustment may be required if engine does not start or stop. Whenever a new throttle control cable is installed, throttle must be adjusted.

1. Stop engine and pull wire off spark plug (Fig. 16).
2. Move throttle control to STOP.
3. Loosen cable clamp screw until throttle cable slides. Hold carburetor control arm down against throttle control bracket. Pull throttle cable slightly to remove any slack and tighten cable clamp screw to lock adjustment in place.

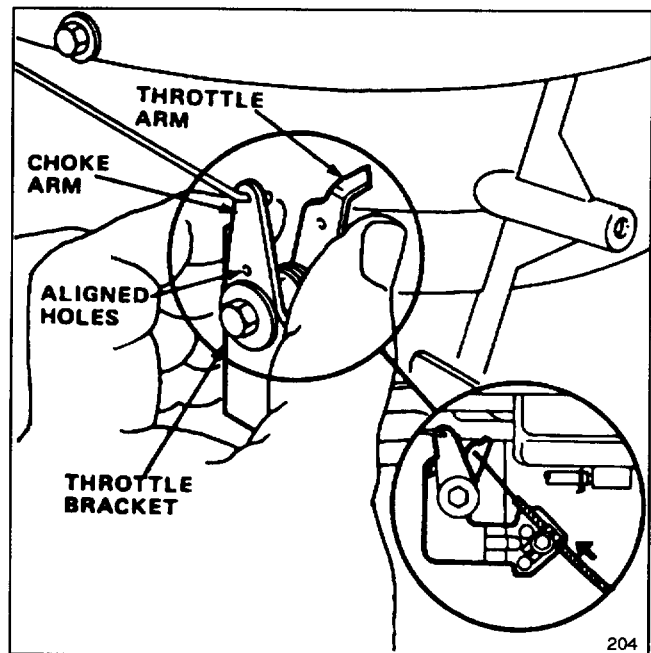


Figure 23

## INSPECTING/REMOVING/SHARPENING BLADE

1. Stop engine and pull wire off spark plug (Fig. 16).



### WARNING

Do not attempt to inspect, remove or replace blade without first removing the spark plug wire from spark plug and fastening it away from accidental contact with the spark plug.

2. Drain gasoline from fuel tank; refer to Draining Gasoline, page 9.
3. Tip mower on its right side (Fig. 24).

# MAINTENANCE

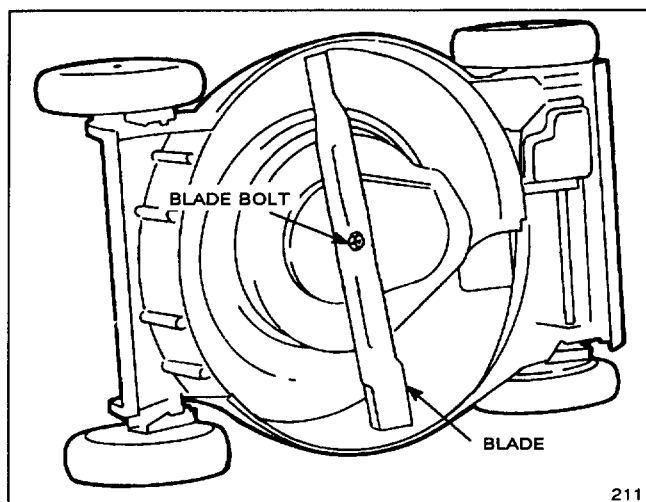


Figure 24

4. **INSPECTING BLADE**—Carefully examine blade for sharpness and wear, especially where flat and curved parts meet (Fig. 25A). Since sand and abrasive material can wear away the metal that connects the flat and curved parts of the blade, check blade before using the mower. If a slot or wear is noticed, (Fig. 25B & C), replace blade. Refer to step 5.

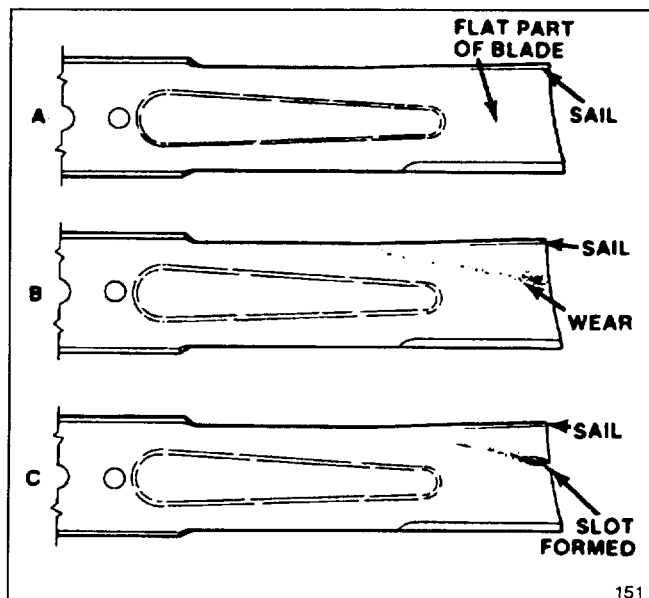


Figure 25

5. **REMOVING BLADE**—Grasp end of blade using a rag or thickly padded glove. Remove blade bolt, washer, blade, and blade retainer (Figs. 24 & 26).

**Note:** For optimum performance, install new blade before cutting season begins. During the year, file down small nicks to maintain the cutting edge.

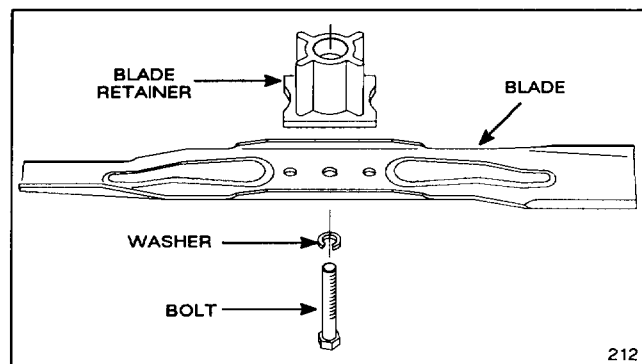


Figure 26



## WARNING

If blade is allowed to wear, a slot may form near the sail. Eventually a piece of blade may break off resulting in serious injury to yourself or a bystander.

6. **SHARPENING BLADE**—Using a file, sharpen top side of blade (side facing mower housing) and maintain original cutting angle (Fig. 27). The blade will remain balanced if the same amount of material is removed from both cutting edges.

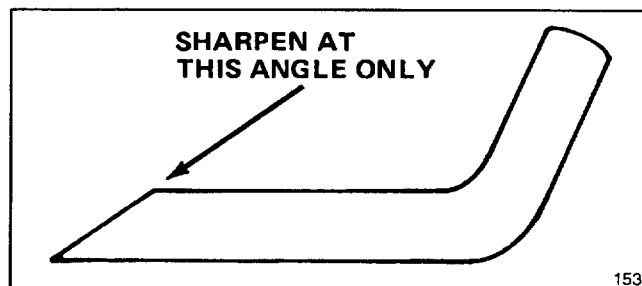


Figure 27

**IMPORTANT:** Check balance of blade by putting it on a blade balancer. An inexpensive balancer can be purchased at a hardware store. A balanced blade will stay in a horizontal position and an unbalanced blade will settle to the heavy side. If the blade is not balanced, file more metal off cutting edge on heavy end of blade.

7. Install blade spacer, sharp, balanced blade, and washer with blade bolt. Sail part of blade must point toward top of mower housing to assure correct installation. Tighten the blade nuts to 50 ft-lb.

## LUBRICATION

1. Mower rear wheel height-of-cut levers to "2" setting. Wipe grease fittings with clean rag (Fig. 28). Install grease gun onto fitting and gently apply 2 or 3 pumps of #2 Multi-Purpose Lithium Base Grease.

# MAINTENANCE

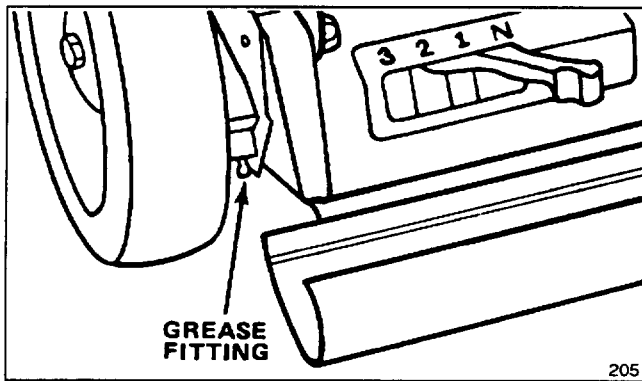


Figure 28

## ADJUSTING BLADE BRAKE

Whenever a new blade brake cable assembly is installed, an adjustment is required.

1. Stop engine and pull wire off spark plug (Fig. 16).
2. CHECK ADJUSTMENT (Fig. 29)—Move control bar toward handle until slack in wire is removed. Gap between brake lever and handle must be  $1/8''$ – $3/16''$ . See step 3 for adjustment.

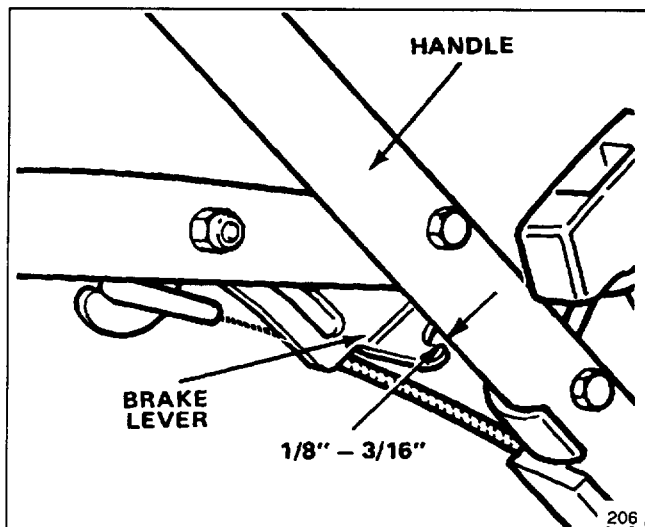


Figure 29

3. ADJUST CABLE CONDUIT—Loosen locknut on cable support (Fig. 30). Insert  $1/8''$ – $3/16''$  object between brake lever and handle. Adjust cable conduit until slack is removed. Then tighten locknut.

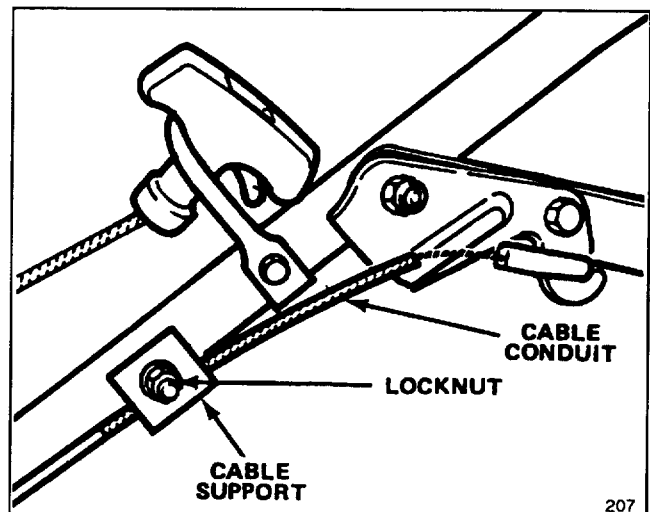


Figure 30

## SERVICING WHEELS

### Removal

1. Stop engine and remove capscrew, wheel spacer, and locknut mounting wheel to pivot arm (Fig. 31).
2. Separate wheel halves from tire by removing (4) flange capscrews and locknuts (Fig. 31).

**Note:** If bearings are to be removed from bearing support hub, remove by pressing on bearing spacer.

### Assembly

1. Position tire onto (1) wheel half aligning lugs on each (Fig. 31).

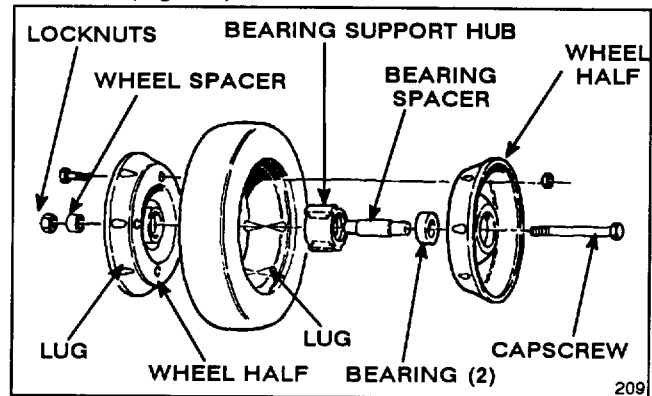


Figure 31

2. Place bearing support hub into center hole of wheel half. Make sure legs of hub are positioned over flange of hole.
3. Place other wheel half onto bearing support hub aligning wheel and tire lugs and mounting holes.
4. Using (2)  $1/4$ – $20 \times 1.50''$  lg. fully threaded screws or bolts and non-locking nuts, loosely secure wheel halves together. Mount screws or bolts in opposing holes.

# MAINTENANCE

5. Check alignment of all parts and tighten screws alternating from side to side for a uniform fit, until wheel halves are drawn together.
6. Install (2) flange capscrews and locknuts, previously removed, in remaining holes in wheel halves and tighten. Remove (2) long screws or bolts and replace with (2) flange capscrews and locknuts.
7. Reinstall wheel to pivot arm with capscrew, spacer, and locknut. Make sure spacer is positioned between wheel hub and pivot arm.

## CLEANING MOWER HOUSING

To ensure best performance, keep underside of mower housing and inside of discharge area clean.

1. Stop engine and pull wire off spark plug (Fig. 16).
2. Drain gasoline from fuel tank: refer to Draining Gasoline, page 9.
3. Tip mower on its right side (Fig. 32).
4. Remove dirt and grass clippings that stick to housing by spraying it with a garden hose. Scrape out remaining debris with hardwood scraper. Avoid burrs and sharp edges.
5. Clean discharge door and hinges of grass or debris that may impair operation of door. Use caution when cleaning door so you do not damage foam seal.

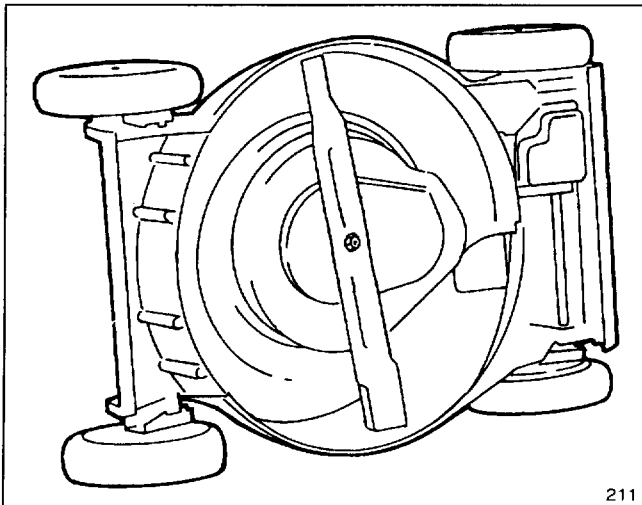


Figure 32

## PREPARING MOWER FOR STORAGE

1. For long term storage, either drain gasoline from fuel tank or use a fuel additive before storing. To drain gasoline, refer to Draining Gasoline, page 9. After fuel is drained, start engine and let it idle until all fuel is consumed and engine stops. Repeat the starting procedure two more times to assure all gas is removed from the engine. If gasoline is not drained, gum-like varnish deposits will form and cause poor engine operation, even starting problems.

Fuel can be left in gas tank only if a fuel additive, such as Toro's Stabilizer/Conditioner, is added to gasoline and run through engine before storing. Toro's Stabilizer/Conditioner is a petroleum distillate based conditioner/stabilizer. Toro does not recommend stabilizers with an alcohol base, such as ethanol, methanol or isopropyl. Use fuel additive in recommended quantities as specified on container.

Under normal conditions, all fuel additives remain effective in fuel for 6–8 months.

2. Remove spark plug and pour 2 teaspoons of SAE 10W30 oil into hole in cylinder. Pull starter rope slowly to coat inside of cylinder. Install spark plug and tighten to 10 ft-lb (13.6 N·m). **DO NOT INSTALL WIRE ON SPARK PLUG.**
3. Clean mower housing: refer to Cleaning Mower Housing, page 13.
4. Check condition of blade: refer to Inspecting/Removing/Sharpening Blade, page 10.
5. Tighten all nuts, bolts, and screws.
6. Clean dirt and chaff from cylinder, cylinder head fins, and blower housing. Also remove grass clippings, dirt, and grime from external parts of the engine, shrouding, and top of mower housing.
7. Clean air cleaner: refer to Servicing Air Cleaner, page 8.
8. Lubricate the wheels: refer to Lubrication, page 11.
9. Touch up all rusted or chipped paint surfaces. Toro Re-Kote paint is available from an Authorized TORO Service Dealer.
10. Store mower in a clean, dry place. Cover mower to keep it clean and protected.

## MAINTENANCE INTERVAL CHART

	Every 5 Hours	Every 25 Hours	Every 50 Hours	Every 75 Hours
Check Blade	X			
Check and Gap Spark Plug		X		
Service Air Cleaner*			X	
Clean Cooling System				X
Clean Muffler & Exhaust Port				X

*\*Service more frequently when conditions are dusty or sandy.*

## PRODUCT IDENTIFICATION

The model and serial number decal is located at rear of mower housing, near the discharge door. Always refer to specific numbers on this decal in correspondence or when replacement parts are needed.

## TORO SERVICE SUPPORT

If help – concerning safety, set-up, operation, maintenance, or troubleshooting – is ever needed, contact the local Authorized TORO Service Dealer or Distributor. Refer to the “Yellow Pages” for assistance. In addition to skilled service technicians, the dealer and distributor have factory approved accessories and replacement parts. Keep your Toro all TORO. Buy genuine TORO replacement parts and accessories.

## OPTIONAL EQUIPMENT

For special conditions the following accessories may be purchased at your local authorized TORO Service Dealer.

**1. Side Discharge Kit, Model No. 59112**—Installs in seconds. Rear mounted in place of the grass bag. Disperses clippings while trimming on both sides (Fig. 33).

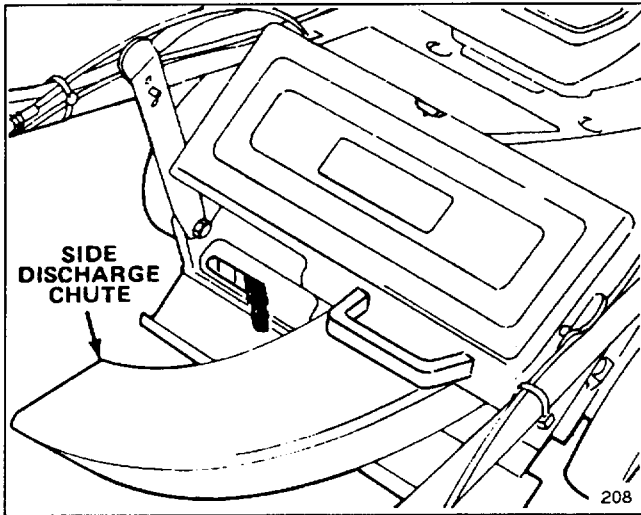


Figure 33

**2. Dethatcher Kit, Model No. 59131**—Installs in minutes. Front mounted for easy maneuverability. Spring tines loosen thatch for clean vacuuming into grass bag (Fig. 34) and convenient disposal.

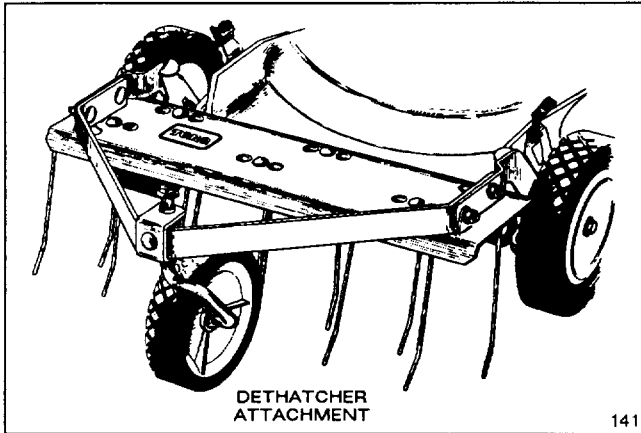


Figure 34

**3. Leaf Shredder Kit, Model No. 59180**—Installs on underside of mower in minutes without requiring removal of blade. Shreds leaves into small pieces for clean vacuuming into grass bag and convenient disposal (Fig. 35).

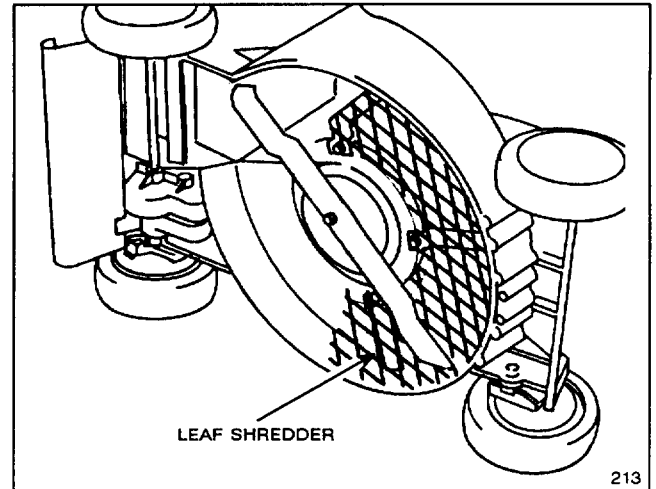


Figure 35

**4. Mulching Plug Kit, Model No. 59172**—Includes mulching plug, mulching blade, blade stiffener and anti-scalp cup. Converts rear bagging mower into a mulching mower.

**5. Optional Spark Arrestor (Part No. 81-0200)**—If a spark arrestor is required because of local, state, or federal regulations, it may be purchased at your local Authorized TORO Service Dealer. Clean screen after every 75 hours of operation. If mower is operated on any California forest, brush, or grass covered land without a properly operating spark arrestor, the operator is violating state law, Section 4442 Public Resources Code.

# The Toro Promise

## A Limited Warranty

*The Toro Company promises to repair your TORO Product if defective in materials or workmanship. The following time periods from the date of purchase apply:*

Models 22040, 22580, 22581 and 22685 .....	Consumer Use	2 Years
.....	Commercial Use	1 Year

*The cost of parts and labor are included, but the customer pays the transportation costs.*

If you feel your TORO Product is defective and wish to rely on The Toro Promise, the following procedure is recommended:

1. Contact your Authorized TORO Distributor or Authorized Dealer (the Yellow Pages of your telephone directory is a good reference source).
2. The TORO Distributor or Authorized Dealer will advise you on the arrangements that can be made to inspect and repair your product.
3. The TORO Distributor or Authorized Dealer will inspect the product and advise you whether the product is defective, and if so, make all repairs necessary to correct the defect without an extra charge to you.

If for any reason you are dissatisfied with the distributor's analysis of the defect or the service performed, you may contact us.

Write: Consumer Products Service Dept.  
8111 Lyndale Avenue South  
Minneapolis, MN 55420

The above remedy of product defects through repair by an Authorized TORO Distributor or Authorized Dealer is the purchaser's sole remedy for any defect.

THERE IS NO OTHER EXPRESS WARRANTY. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE ARE LIMITED TO THE DURATION OF THE EXPRESS WARRANTY.

Some states do not allow limitations on how long implied warranty lasts, so the above limitation may not apply to you.

This Warranty applies only to parts or components which are defective and does not cover repairs necessary due to normal wear, misuse, accidents, or lack of proper maintenance. Regular, routine maintenance of the unit to keep it in proper operating condition is the responsibility of the owner.

All warranty repairs reimbursable under The Toro Promise must be performed by an Authorized Toro Dealer or Distributor using Toro approved replacement parts.

Repairs or attempted repairs by anyone other than an Authorized TORO Distributor or Authorized Dealer are not reimbursable under the TORO Promise. In addition, these unauthorized repair attempts may result in additional malfunctions, the correction of which is not covered by warranty.

THE TORO COMPANY IS NOT LIABLE FOR INDIRECT OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THE USE OF THE PRODUCT INCLUDING ANY COST OR EXPENSE OF PROVIDING SUBSTITUTE EQUIPMENT OR SERVICE DURING PERIODS OF MALFUNCTION OR NON-USE.

Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion 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 The Toro Company.