Form No. 3350–834

9 CU. FT. HOPPER Kit

Groundsmaster® 200 Series 52” & 62” Decks

Model No. 30504–240000001 and Up

Installation Instructions

Safety

Before Operating

- Read and understand the contents of this manual before starting and operating the machine. Become familiar with all controls and know how to stop quickly.
- Never allow children to operate the machine. Do not allow adults to operate the machine without proper instruction. Only trained operators, skilled in slope operation and who have read this manual should operate this machine.
- Never operate machine when under the influence of drugs or alcohol.
- Remove all debris or other objects that might be picked up and thrown by cutter blades. Keep all bystanders away from the operating area.
- Keep all shields and safety devices in place. If a shield, safety device, or decal is defective or damaged, repair or replace it before operation is commenced. Also, tighten any loose nuts, bolts, and screws to insure machine is in safe operating condition.
- Do not wear loose–fitting clothing because it could get caught in moving parts. Always wear long pants and substantial shoes. Wearing safety glasses, safety shoes, and a helmet is advisable and required by some local ordinances and insurance regulations.
- Be sure interlock switches are adjusted correctly so engine cannot be started unless traction pedal is released–neutral position–and PTO switch is in DISENGAGED position.
- Fill fuel tank before starting the engine. Avoid spilling any fuel. Since fuel is flammable, handle it carefully.
  - Use an approved fuel container.
  - Do not fill fuel tank when engine is hot or running.
  - Do not smoke while handling fuel.
  - Fill fuel tank outdoors and up to about one inch (25 mm) from the top of the tank, not the filler neck.
  - Wipe up any spilled fuel.

While Operating

- Sit on the seat when starting the engine and operating the machine.
- Always make sure seat pivot retaining pin is installed.
- Before starting the engine:
  - Engage parking brake.
  - Make sure traction pedal is in neutral and PTO is in DISENGAGE position.
  - After engine is started, release parking brake and keep foot off traction pedal. Machine must not move. If movement is evident, the neutral return mechanism is adjusted incorrectly. Shut engine off and adjust until machine does not move when traction pedal is released.
- Do not run the engine in a confined area without adequate ventilation. Exhaust fumes are hazardous and could possibly be deadly.
- Maximum seating capacity is one person. Therefore, never carry passengers.
- Check carefully for overhead clearances before driving under any objects.
- The grass deflector or complete blower assembly must always be installed on cutting unit.
- Operator must be skilled and trained in how to drive on hillsides. Failure to use caution on slopes or hills may cause loss of control and vehicle to tip or roll possibly resulting in personal injury or death.
- Traverse slopes carefully. Do not start or stop suddenly when traversing slopes or when traveling uphill or downhill.
- If engine stalls or machine loses headway and cannot make it to the top of a slope, do not turn machine around. Always back slowly straight down the slope.
- Using the machine demands the operator’s complete attention. To prevent loss of control:
  - Operate only in daylight or when there is good artificial light.
  - Drive slowly.
  - Avoid sudden stops and starts.
  - Look behind machine before backing up.

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  - Watch for holes or other hidden hazards.
  - Do not drive close to a sand trap, ditch, creek, or hazard.
  - Reduce speed when making sharp turns and when turning on a hillside.
  - The cutting deck must be lowered when going down slopes for steering control.
- The grass deflector must always be installed and in lowest position on the cutting unit when blower assembly is removed. This product is designed to drive objects into the ground where they lose energy quickly in grassy areas. However. don't take an injury risk!! When a person or pet appears unexpectedly in or near the mowing area, STOP MOWING. Careless operation, combined with terrain angles, ricochets, or improperly positioned guards, can lead to thrown object injuries. Do not resume mowing until area is cleared.
- Never raise the cutting unit while the blades or other parts are rotating.
- If cutting blades strike a solid object or the machine vibrates abnormally, disengage PTO, move throttle to SLOW, set parking brake, and shut engine off. Remove key from switch to prevent possibility of accidental starting. Check cutting unit, blower assembly and traction unit for damage and defective parts. Repair any damage before restarting the engine and operating the cutting unit. Assure cutting unit blades are in good condition and blade bolts are torqued to proper specifications (See Cutting Deck Operator's Manual).
- If the cutting unit discharge area or blower assembly ever plugs, disengage PTO and shut engine off before removing the obstruction.
- To stop machine, remove foot from traction pedal and use brakes. Gradually reversing the traction pedal can provide additional braking.
- Do not touch engine, muffler, or radiator while engine is running or soon after it has stopped. These areas could be hot enough to cause a burn.
- Never operate collection system with hopper covers open.

Maintenance

- Remove key from ignition switch to prevent accidental starting of the engine when servicing, adjusting, or storing the machine.
- Stay away from hopper and hopper linkage during operation.
- Do not walk under hopper or service machine unless hopper is fully raised and empty, with hydraulic lines disconnected at quick couplers or fully lowered.
- Do not remove any hydraulic line unless hopper is fully lowered or fully raised and empty.
- If major repairs are ever needed or assistance is desired, contact an Authorized TORO Distributor.
- To reduce potential fire hazard, keep the engine free of excessive grease, grass, leaves, and accumulations of dirt.
- Make sure machine is in safe operating condition by keeping nuts, bolts, and screws tight. Check all cutting unit blade mounting bolts frequently to assure they are torqued to proper specifications (See Cutting Deck Operator's Manual).
- Make sure all hydraulic line connectors are tight, and all hydraulic hoses and lines are in good condition before applying pressure to the system.
- Keep body and hands away from pin hole leaks or nozzles that eject hydraulic fluid under high pressure. Use paper or cardboard, not hands, to search for leaks. Hydraulic fluid escaping under pressure can have sufficient force to penetrate skin and do serious damage. If fluid is ejected into the skin, it must be surgically removed within a few hours by a doctor familiar with this form of injury or gangrene may result.
- Before disconnecting or performing any work on the hydraulic system, all pressure in system must be relieved by stopping engine and lowering implement to the ground.
- If the engine must be running to perform maintenance or an adjustment, keep clear of PTO shaft, cutting unit blades, and other moving parts.
- At the time of manufacture, the machine conformed to safety standards in effect for riding mowers. To ensure optimum performance and continued safety certification of the machine, use genuine TORO replacement parts and accessories. Replacement parts and accessories made by other manufacturers may result in non–conformance with the safety standards, and the warranty may be voided.

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.



43-1100

Set Up

Loose Parts Chart

Note: Use this chart as a checklist to assure all parts necessary for assembly have been received. Without these parts, total set-up cannot be completed. Some parts may have already been assembled at factory.

Description	Qty.	Use
Template (GM 220 only)	1	Install Mounting Brackets
Capscrew 3/8–16 x 2” lg.	1	
Capscrew 3/8–16 x 1–1/4” lg.	7	
Washer 3/8	8	
Locknut 3/8–16	8	
Lockwasher 3/8	2	
Mounting Bracket (52” deck)	4	
Mounting Bracket (62” deck)	4	
Lower Support Tube Assembly	1	Mount Lower Support Tube Assembly
Capscrew 3/8–16 x 2–1/4” lg.	4	
Locknut 3/8–16	4	
Upper Support Tube Assembly	1	Mount Upper Support Tube Assembly
Capscrew 5/16–18 x 2–1/4” lg.	2	
Locknut 5/16–18	2	
Hood Assembly	1	Mount Hood
Capscrew 5/16–18 x 3/4” lg.	2	
Locknut 5/16–18	2	
Hinge Pin	1	
Hood Stop	2	
Spacer	2	
Washer 5/16” I.D. x 1–1/4” O.D.	4	
Capscrew 5/16–18 x 7/8” lg.	2	
Locknut 5/16–18	2	
Washer 5/16	2	
Chute Extension	1	Install Chute Extension Between Chute and Hood
Nut Plate	2	
Button Head Screw	4	
Cloth Bag	1	Install Cloth Bag
Installation Instructions	1	Read before operating the machine.
Parts Catalog	1	Use for ordering replacement parts.

Optional Equipment

Cloth Bag (38”–13 cu. ft.)	Part No. 43–0980
Retainer Cord (38” Bag)	Part No. 36–7770

Install Grass Catcher Brackets

1. Position brackets over existing mounting holes as shown in figure 1. Mount brackets using (1) 3/8–16 x 2” lg. capscrew, (7) 3/8–16 x 1–1/4” lg. capscrews, (8) 3/8 washers, (6) locknuts and (2) lockwashers.

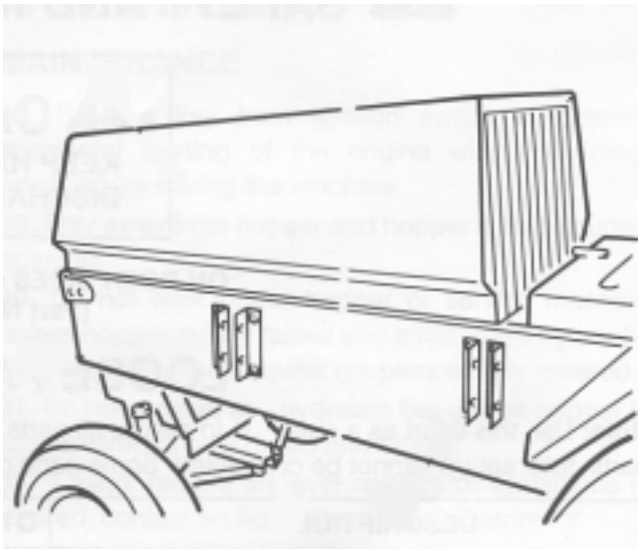


Figure 1

Note: Wide brackets are used for 62” decks and narrow brackets are for 52” decks.

Install Grass Catcher

1. Mount lower support tube assembly to brackets with (4) 3/8–16 x 2–1/4” lg. capscrews and locknuts (Fig. 2).

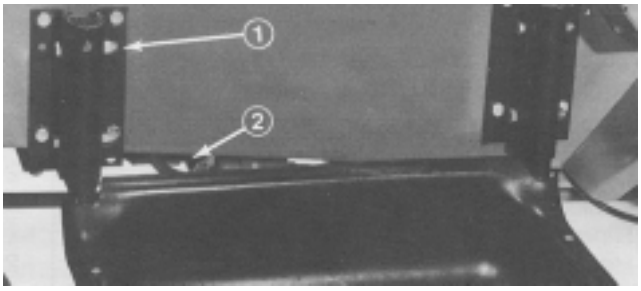


Figure 2

1. Capscrew and locknut
2. Lower support tube assembly

2. Insert legs of upper support tube assembly into lower support tubes and secure with (2) 5/16–18 x 2–1/4” lg. capscrews and locknuts (Fig. 3).

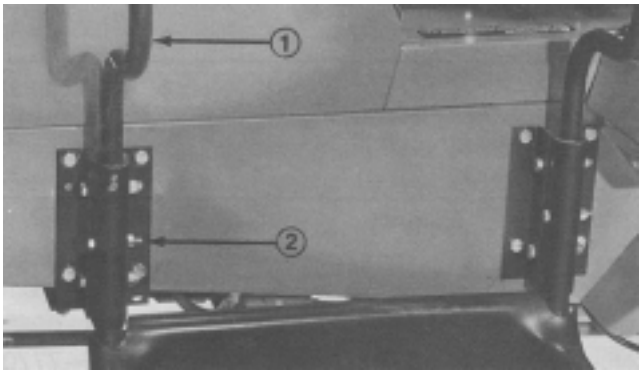


Figure 3

1. Upper support tube assembly legs
2. 5/16–18 x 2–1/4” lg. capscrew and locknut

3. Connect hood assembly to upper support tube assembly with hinge pin (Fig. 4).

4. Connect hood stops to upper support tube assembly with capscrews and locknuts.

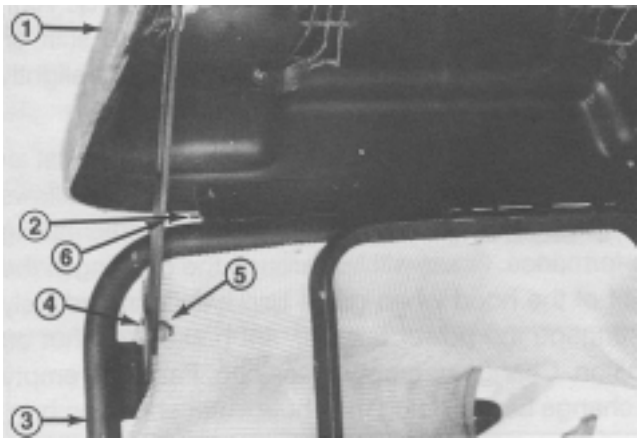


Figure 4

1. Hood assembly
2. Hinge pin
3. Upper support tube assembly legs
4. Capscrew
5. Locknut
6. Hood stop

5. Mount hood stop, spacer and (2) washers to each side of hood with a 5/16–18 x 7/8” lg. capscrew and locknut (Fig. 5).

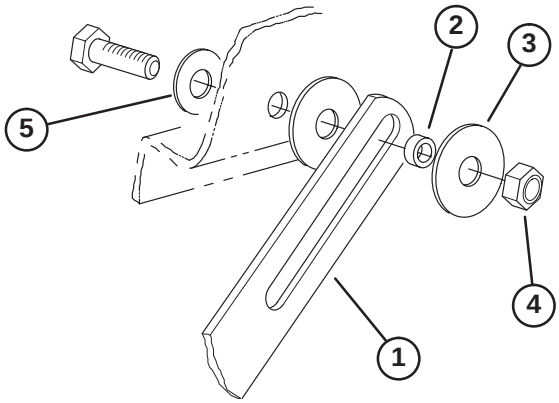


Figure 5

1. Hood stop
2. Spacer
3. Washer
4. Locknut
5. Washer

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6. Open hood and position bag around inner frame of upper support tube assembly (Fig. 6).

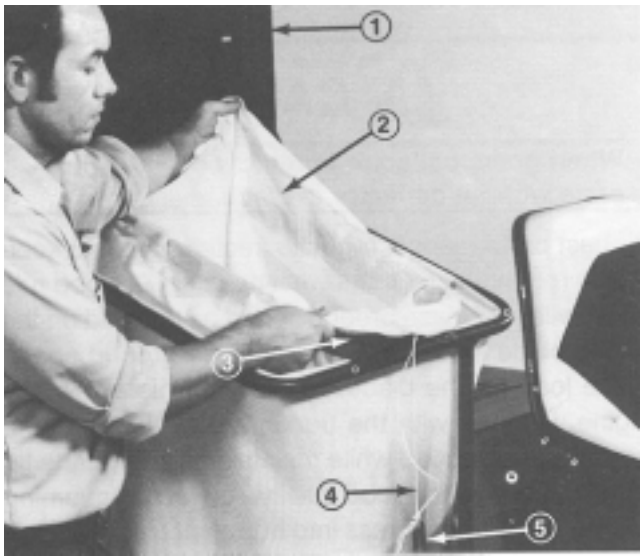


Figure 6

1. Hood
2. Bag
3. Inner frame of upper support tube assembly
4. Bag drawstring
5. Metal clip

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7. Pull bag drawstring cord tightly around frame to hold bag and secure with metal slip (Fig. 6).

8. Install chute extension provided with kit. Attach chute extension to grass catcher hood with (2) nut plates, (4) button head screws, using existing mounting holes (Fig. 7)

Mount Blower Housing Chute

1. Set deck to desired height–of–cut setting.

2. Slide chute over blower opening and onto mounting studs (Fig. 7).

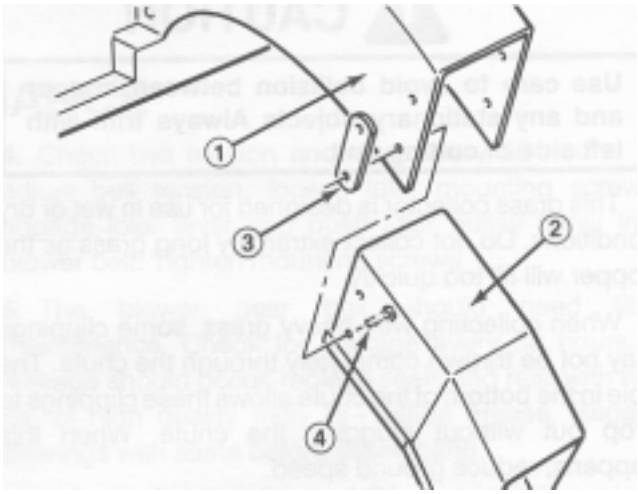


Figure 7

1. Grass catcher hood
2. Chute extension
3. Nut plate
4. Button head screw

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3. Lower hopper hood and align chute with snout. Secure chute in position with locknuts and brackets. Wide end of brackets to be positioned toward rear (Fig. 8).

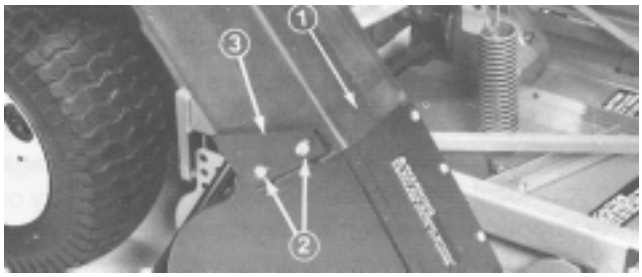


Figure 8

1. Chute
2. Mounting studs
3. Mounting bracket

Operation

Operating Characteristics

(When used with a 52” or 62” Blower Kit)

Caution

When blower is removed, NEVER operate without deflector in place.

For best performance, regulate traction pedal to keep engine rpm high and somewhat constant. A good rule to follow is: decrease ground speed as the load on the cutting blade increases; and increase ground speed as the load on the blade decreases. This allows the engine, working with the transmission, to sense the proper ground speed while maintaining high blade tip speed necessary for good quality–of–cut, vacuuming action, and to throw grass into hopper If blower speed drops too low, plugging may result. Refer to Cutting Unit and Traction Unit Operator’s Manual for operation of each.

Caution

Use care to avoid collision between hopper and any stationary objects Always trim with left side of cutting unit.

- This grass collector is designed for use in wet or dry conditions. Do not collect extremely long grass as the hopper will fill too quickly.
- When collecting wet, heavy grass, some clippings may not be thrown completely through the chute. The hole in the bottom of the chute allows these clippings to drop out without plugging the chute. When this happens, reduce ground speed.

Caution

Never place hands or feet in chute, blower, or cutting unit.

- The bumper which protects the blower housing doesn’t extend far enough to eliminate the chance of lower tray or hood striking a stationary object. Stay far enough away from obstructions to avoid collisions. Trim with left side of cutting unit only.
- To improve productivity, Toro recommends purchasing additional seven or ten bushel grass bags from your local Toro dealer. Store empty bags in tray of lower support tube assembly and drop off filled bags and sealed bags to be collected later.
- The optional ten bushel grass bags should not be used under extremely wet grass conditions as they may be too heavy to remove easily.
- Heavy duty lawn trash bags may be used with an optional retainer cord (Toro part no. 36–7770). High winds may cause bottom of empty bags to shift off lower tray. If this happens, mow until bag is slightly filled and re–center on tray.
- The grass collector hood is designed to exhaust air beside the grass bag rather than through it. This allows the grass bag to fill completely without decreasing performance. Grass will fall through the opening in the front of the hood when grass bag is full. Immediately disengage the power take off, set brake and shut off ignition. Change or empty grass bag. Failure to empty or change bag will plug the chute. After changing bag, check that grass clippings have not fallen into chute.
- Optional Hi–sail blades (Toro part no. 44–5480) will give improved performance in wet cutting conditions.
- While operating, check frequently for excessive clippings left on turf or uncut grass. If those conditions occur, the blower or cutting unit may be plugged. Stop unit, disengage PTO, set brake and shut off ignition. Check for obstructions in the chute, blower or cutting unit. Clear any obstruction using a stick or similar tool. Check blower belt tension. If slipping, readjust.
- Cut grass often, especially when turf growth is rapid. If shorter turf is desired, cut the grass again. Overlap the swaths to produce an even cutting pattern.

Important **When transporting unit, tie down grass collector hood or back unit onto truck or trailer to avoid wind throwing hood open and damaging it.**

- To remove blower assembly, shut engine off, disengage idler assembly, unlatch and open belt cover and lift belt off spindle pulley. Close cover. Remove (2) knobs securing blower to mounting brackets and remove blower, belt and chute
- Reverse procedure to reinstall blower assembly.

Caution

When blower is removed, NEVER operate without deflector in place.

Mount Grass Deflector

1. Remove bumper from carrier frame. Reinstall two lift arm/carrier frame connection capscrews. Torque to 70–80 ft–lb.
2. Position grass deflector mounts on outside of pivot brackets (included in kit) and secure parts together with capscrews, locknuts and washers previously removed (Fig. 9). Both locknuts must face each other. Tighten locknuts until they are flush against deflector pivots.
3. Slide grass deflector and pivot brackets onto alignment bolts and secure to mounting brackets with knobs and washers. Lift deflector and allow it to drop to check spring tension.

Note: If blower assembly or grass deflector do not easily slide on or off mounting brackets, loosen alignment bolts slightly.

Caution

When grass collector is removed, NEVER operate without deflector in place.

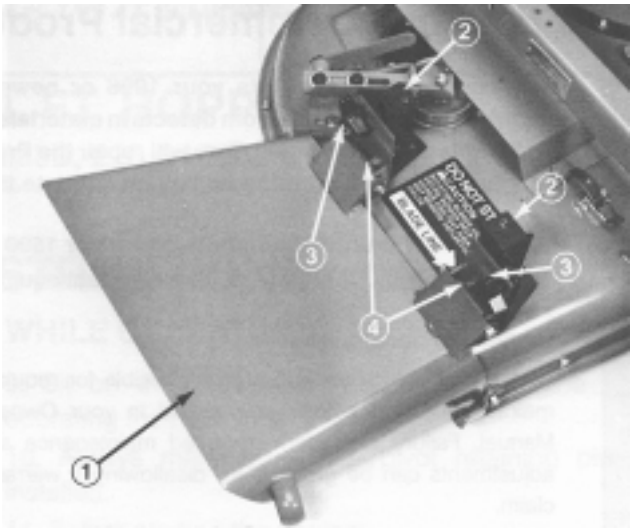


Figure 9

1. Grass deflector
2. Mounting brackets
3. Knob and washer
4. Alignment bolts

Maintenance

- Keep unit clean, checking that engine is free of dirt and chaff. Make sure all fasteners are tight. Check deflectors, baffles and shields for wear and replace as needed.
- Check gearbox impeller for tightness every 50 hours. Torque impeller shaft bolt to 220–230 in–lbs.
- Clean grass clippings from hood, chute, blower and cutting unit after each use. Wash underside of cutting unit daily with hose. An excessive buildup of clippings will impair bagging performance.
- Check belt tension and wear every 50 hours. To adjust belt tension, loosen idler mounting screws, engage idler lever and push idler pulley firmly into blower belt. Tighten mounting screws
- The blower gear box should need little maintenance. Check for leakage every 50 hours. If leakage should occur, replace seals and refill with two oz. of high quality moly di–sulfide grease. Repack bearings with same before assembling.
- Refer to Cutting Unit and Traction Unit Operator's Manuals for service requirements of each.

The Toro General Commercial Products Warranty

A Two-Year Limited Warranty

Conditions and Products Covered

The Toro Company and its affiliate, Toro Warranty Company, pursuant to an agreement between them, jointly warrant your Toro Commercial Product ("Product") to be free from defects in materials or workmanship for two years or 1500 operational hours*, whichever occurs first. Where a warrantable condition exists, we will repair the Product at no cost to you including diagnosis, labor, parts, and transportation. This warranty begins on the date the Product is delivered to the original retail purchaser.

* Product equipped with hour meter

Instructions for Obtaining Warranty Service

You are responsible for notifying the Commercial Products Distributor or Authorized Commercial Products Dealer from whom you purchased the Product as soon as you believe a warrantable condition exists.

If you need help locating a Commercial Products Distributor or Authorized Dealer, or if you have questions regarding your warranty rights or responsibilities, you may contact us at:

Toro Commercial Products Service Department
Toro Warranty Company
8111 Lyndale Avenue South
Bloomington, MN 55420-1196
952-888-8801 or 800-982-2740
E-mail: commercial.service@toro.com

Owner Responsibilities

As the Product owner, you are responsible for required maintenance and adjustments stated in your operator's manual. Failure to perform required maintenance and adjustments can be grounds for disallowing a warranty claim.

Items and Conditions Not Covered

Not all product failures or malfunctions that occur during the warranty period are defects in materials or workmanship. This express warranty does not cover the following:

- Product failures which result from the use of non-Toro replacement parts, or from installation and use of add-on, modified, or unapproved accessories
- Product failures which result from failure to perform required maintenance and/or adjustments
- Product failures which result from operating the Product in an abusive, negligent or reckless manner
- Parts subject to consumption through use unless found to be defective. Examples of parts which are consumed, or used up, during normal Product operation include, but are not limited to, blades, reels, bedknives, tines, spark plugs, castor wheels, tires, filters, belts, etc.
- Failures caused by outside influence. Items considered to be outside influence include, but are not limited to, weather, storage practices, contamination, use of unapproved coolants, lubricants, additives, or chemicals, etc.
- Normal "wear and tear" items. Normal "wear and tear" includes, but is not limited to, damage to seats due to wear or abrasion, worn painted surfaces, scratched decals or windows, etc.

Parts

Parts scheduled for replacement as required maintenance are warranted for the period of time up to the scheduled replacement time for that part.

Parts replaced under this warranty become the property of Toro. Toro will make the final decision whether to repair any existing part or assembly or replace it. Toro may use factory remanufactured parts rather than new parts for some warranty repairs.

General Conditions

Repair by an Authorized Toro Distributor or Dealer is your sole remedy under this warranty.

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 this warranty, including any cost or expense of providing substitute equipment or service during reasonable periods of malfunction or non-use pending completion of repairs under this warranty. Except for the Emissions warranty referenced below, if applicable, there is no other express warranty. All implied warranties of merchantability and fitness for use are limited to the duration of this express warranty.

Some states do not allow exclusions of incidental or consequential damages, or limitations on how long an implied warranty lasts, 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.

Note regarding engine warranty: The Emissions Control System on your Product may be covered by a separate warranty meeting requirements established by the U.S. Environmental Protection Agency (EPA) and/or the California Air Resources Board (CARB). The hour limitations set forth above do not apply to the Emissions Control System Warranty. Refer to the Engine Emission Control Warranty Statement printed in your operator's manual or contained in the engine manufacturer's documentation for details.

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.

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