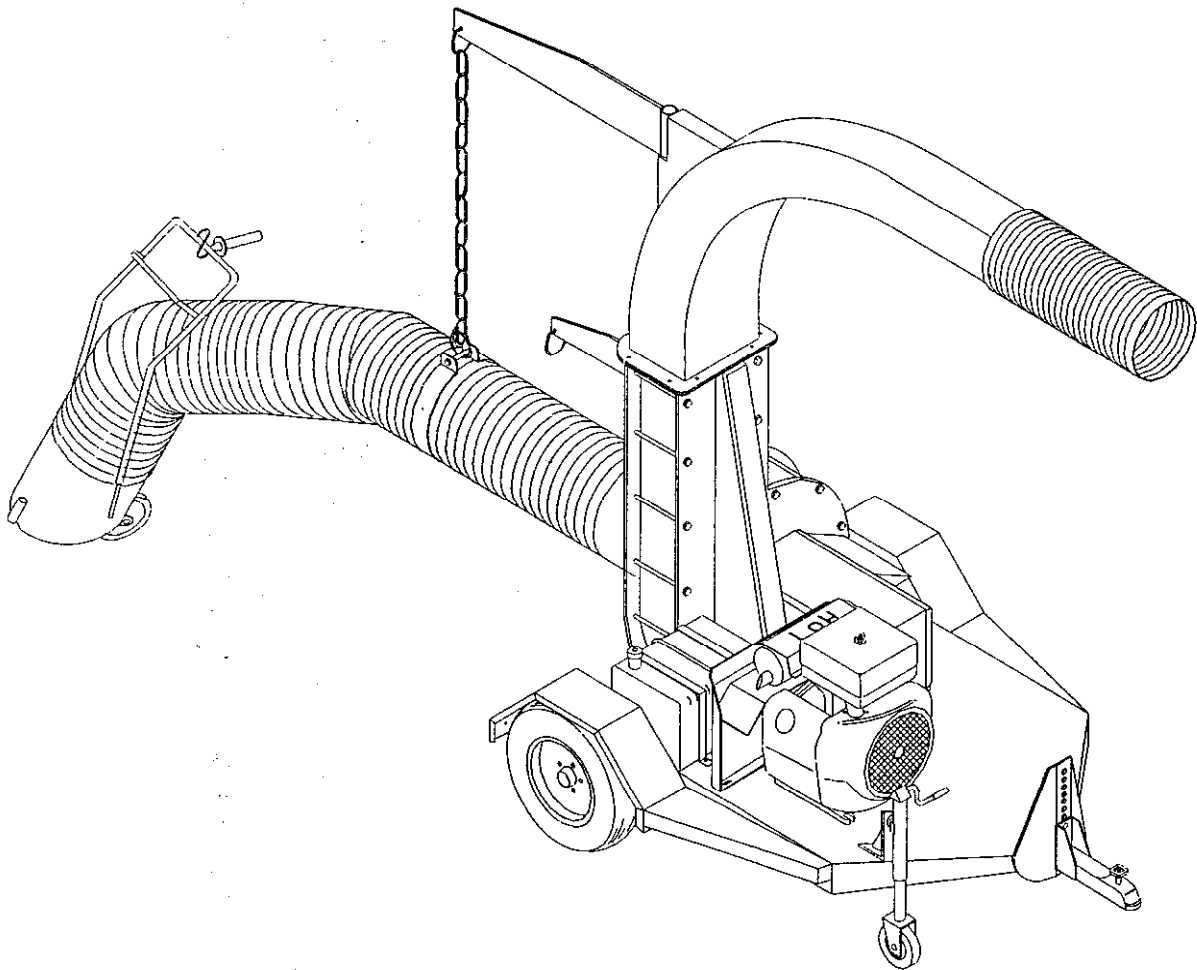




MODEL NO. 44510 - 20101 & UP  
MODEL NO. 44515 - 20101 & UP

**OPERATOR'S  
MANUAL**

**DEBRIS LOADER 3100**



## FOREWORD

Thank you for buying a high quality Toro turf care product. To get the best performance from this machine, operate and maintain it according to the instructions in this manual.

Toro also wants to stress the importance of safety. You and anyone else using or maintaining this machine are strongly urged to read this manual, especially all the safety instructions.

DANGER, WARNING and CAUTION, used with the triangular safety alert symbol, highlight safety messages. Always read and understand these messages because they relate to personal injury and your safety.

If you ever need help or have questions about your new Toro turf care product, contact your local Authorized Toro Distributor. The Toro Distributor has a complete supply of replacement parts, a full line of accessories and a professional service staff to support you. Keep your Toro all Toro. Buy genuine Toro parts and accessories.

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## SAFETY INSTRUCTIONS



The safety alert symbol means CAUTION, WARNING or DANGER - "personal safety instruction". Read and understand the instruction because it has to do with safety. Failure to comply with the instruction may result in personal injury.

### BEFORE OPERATING

1. 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. A free replacement manual is available by sending complete Model and Serial Number to:

**The Toro Company**  
**100 New Century Parkway**  
**New Century, KS 66031**

2. Do not allow children to operate the machine. Do not allow adults to operate the machine without proper instruction.

3. **Never** operate the machine while under the influence of drugs or alcohol.

4. Keep all shields and safety devices in place. If a shield, safety device or decal becomes damaged, malfunctioning or illegible, repair or replace it before operation is commenced. Also tighten loose nuts, bolts to ensure machine is in safe operating condition.

5. Before each use, tighten all bolts and nuts.

6. Do not alter this equipment in any manner which may cause hazardous conditions.

7. Fill gas tank before starting the engine. Avoid spilling any gas. Since gas is flammable, handle it carefully.

A. Use a approved fuel container.

B. Do not fill tank when engine is hot or running.

C. Do not smoke while handling fuel.

D. Fill tank outdoors and up to about one inch (25 mm) from the top of the tank.

E. Wipe up any spilled fuel.

# SAFETY INSTRUCTIONS (Continued)

## WHILE OPERATING



### DANGER

#### ROTATING MEMBERS CAN CAUSE SERIOUS PERSONAL INJURY

- Keep hands and feet away from reel area.

8. Do not run the engine in a confined area without adequate ventilation. Exhaust fumes are hazardous and could possibly be deadly.

9. Maximum seating is one person; therefore never carry passengers.

10. Do not touch engine, muffler or radiator while engine is running or soon after it is stopped. These areas could be hot enough to cause a burn.

11. Using the machine demands attention, and to prevent loss of control:

- A. Operate only in daylight or when there is good artificial light.
- B. Drive slowly.
- C. Watch for holes or other hazards.
- D. Look behind machine before backing up.
- E. Do not drive close to a sand trap, ditch, creek or other hazard.
- F. Reduce speed when making sharp turns and when turning on a hillside.
- G. Avoid sudden stops and starts.

12. 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 possibly resulting in personal injury or death.

13. If towing vehicle 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.

## MAINTENANCE

14. Remove the key from the ignition switch to prevent accidental starting of the engine when servicing, adjusting or storing the machine.

15. If major repairs are ever needed or assistance desired, contact an Authorized TORO Distributor.

16. Make sure machine is in safe operating condition by keeping nuts, bolts and screws tight.

17. To reduce potential fire hazard, keep the engine free of excessive grease, grass, leaves and accumulations of dirt.

18. Do not over speed the engine by changing the governor settings. Maximum engine speed with no load is 3200 RPM. To ensure safety and accuracy, have an Authorized TORO Distributor check maximum engine speed with a tachometer.

19. Engine must be shut off before checking oil or adding oil to the crankcase.

## SAFETY AND INSTRUCTION DECALS

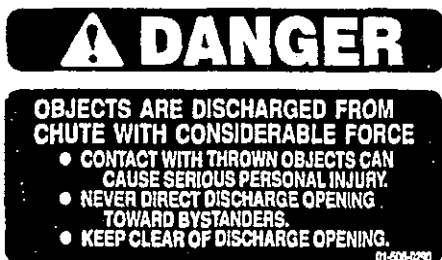
The following safety and instruction decals are installed on the unit. Replace any decals that becomes damaged or illegible. Part numbers for decals are listed below and in your Parts Catalog. Order replacements from your Authorized Toro Distributor.



**ON MAIN FRAME**  
(Part No. 01-506-0430)



**ON GAS TANK**  
(Part No. 01-506-0460)



**ON FAN HOUSING**  
(Part No. 01-506-0290)



**ON MAIN FRAME**  
(Part No. 01-506-0540)



**ON BOTH SIDES OF CHUTE**  
(Part No. 01-506-0300)



**ON ENGINE**  
(Part No. 01-506-0030)



**NEAR BEARINGS &  
GREASE POINTS**  
(Part No. 01-506-0550)

## SPECIFICATIONS

**FAN:** 6 blades, single outlet, 20" diameter, 3/8" steel, 4000 CFM.

**ENGINE:** 20 HP Onan Performer, 2 cylinder

**FRAME:** All welded steel construction

**FAN DRIVE:** 2" jackshaft, 2" welded hub with taperlock.

**COUPLER:** Power band belt

**FUEL TANK:** 5.3 gallon

**CHUTE :** 12 ga. top for extended wear, 14 ga. sides. 91" from ground to lower edge of chute opening.

**BEARINGS:** Self sealed throughout (1) 2" pillow block, (1) 1 1/4" pillow block

**INTAKE HOSE:** 9', 12" diameter, flexible.

**FENDERS:** 10 ga. welded

**TIRES:** 5.30 x 12 load range B

**DIMENSIONS:** Width - 56 1/2"  
Length - 66" w/o hose  
and chute  
Height - 56" w/o chute,  
102" with chute

**SHIPPING WEIGHT :** 960 lbs.

**OPTIONS:** Light Kit  
Donaldson Air Cleaner  
24 HP Onan Engine

## BEFORE OPERATING

### CHECK TIRE PRESSURE

Check tire pressure before each use. Inflate to 22 PSI.

### CHECK CRANKCASE OIL

Oil recommendations are: SAE 10W30 SF-CC

The engine is shipped with 2-1/2 quarts of oil in the crankcase, however, level of oil must be checked before and after the engine is first started.

1. Position the loader on a level surface and make sure engine is off.
2. Remove the dipstick and wipe it with a clean rag. Push dipstick down into the tube and ensure it is fully seated. Pull dipstick out of the tube and check level of oil. If oil level is low add enough oil to raise level on top notch on dipstick.

**IMPORTANT:** Check level of oil after every 5 hours of operation or daily. Change oil after every 50 hours of operation and change the oil filter after the first 50 hours and every 100 hours thereafter. Change oil and filter more frequently when engine is operated in extremely dusty conditions.

### FILL FUEL TANK WITH GASOLINE

THE TORO COMPANY STRONGLY RECOMMENDS THE USE OF FRESH CLEAN, UNLEADED REGULAR GRADE GASOLINE IN TORO GASOLINE POWERED PRODUCTS. UNLEADED GASOLINE BURNS CLEANER, EXTENDS LIFE, AND PROMOTES GOOD STARTING BY REDUCING THE BUILD-UP OF COMBUSTION CHAMBER DEPOSITS.

**Note:** Do not mix oil with gasoline. Never use methanol, gasoline containing methanol, gasohol, gasoline additives, premium gasoline, or white gas because engine/fuel system damage could result.



### DANGER

Because gasoline is flammable, caution must be used when storing or handling it. Do not fill fuel tank while engine is running, hot or when machine is in an enclosed area. Vapors may build up and be ignited by a spark or flame source many feet away. **DO NOT SMOKE** while filling the fuel tank to prevent possibility of explosion. Always fill fuel tank outside and wipe up any spilled gasoline before starting engine. Use a funnel or spout to prevent spilling gasoline before starting engine and fill tank to about 1 inch (25 mm) below the filler neck. Store gasoline in a clean safety approved container and keep the cap in place on the container. Keep gasoline in a cool, well ventilated place; never in an enclosed area such as a hot storage shed. To assure volatility, do not buy more than a 30 day supply of gasoline.

Gasoline is a fuel for internal combustion engines; therefore, do not use it for any other purpose. Since many children like the smell of gas, keep it out of their reach because the fumes are explosive and dangerous to inhale.

1. Remove the cap from the fuel tank and fill the 5 gallon tank to within 1 inch (25 mm) from the top with unleaded gasoline. Install fuel cap tightly.
2. Wipe up any gasoline that may have spilled to prevent a fire hazard.

# CONTROLS

## THROTTLE CONTROL (Fig. 1)

The throttle operates the engine at various speeds. Moving throttle forward increases engine speed; backwards decreases engine speed.

## INTAKE HOSE (Fig. 1)

The intake hose is manually controlled to allow the operator to reach the hard to sweep areas.

## KEY SWITCH (Fig. 1)

The key switch starts and stops the engine and has two positions: "OFF" and "ON". Rotate key clockwise to engage starter motor. When engine starts, release key and it will move automatically to the "ON" position. To shut engine off, rotate key counterclockwise to the "OFF" position.

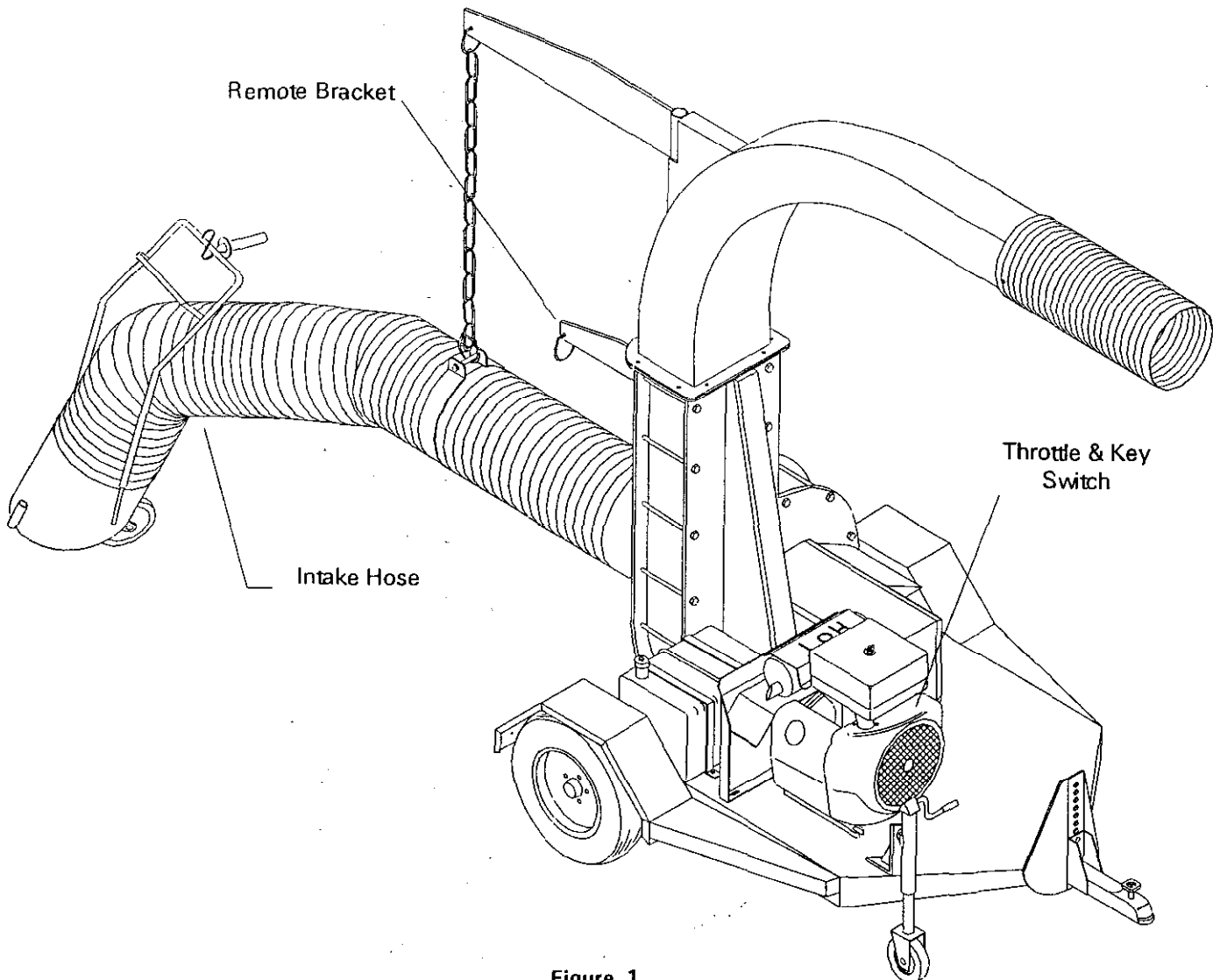


Figure 1



# OPERATING INSTRUCTIONS



## CAUTION

### THROWN OBJECTS FROM THE DISCHARGE CHUTE CAN CAUSE PERSONAL INJURY.

- Before starting, position the discharge chute away from any bystanders.

1. Park the unit on a level surface .
2. Move the jack to the down position. Turn the jack handle until the unit is level with the surface.
3. Start engine with the throttle barely open and choke pulled out. When engine starts, push choke in gradually.
4. Run engine to full throttle.

5. Remove the hose assembly from the remote bracket (See Fig. 1) and pin and begin picking up debris.

6. When finished, replace the hose assembly on the pin and remote bracket before transporting.

## WHILE TRANSPORTING



## DANGER

- Stay alert for holes in the terrain or other hidden hazards. To avoid tipping or loss of control, do not drive close to a ditch, creek or drop off.
- If machine stops going uphill, back slowly downhill. Do not attempt to turn around.

# LUBRICATION

## BEARINGS (Fig. 2)

The loader has two self sealing bearings that must be lubricated with a No. 2 Lithium based grease.

**IMPORTANT:** Lubricate the bearings to maintain a slight leakage on the seals. Too much grease can cause overheating.

## WHEELS AND WHEEL BEARINGS (Fig. 2)

Grease the fittings and wheel bearings every 100 operating hours. Use a No. 2 Lithium based grease.

## GREASE FITTINGS (Fig. 2)

There is one grease fitting that must be lubricated with a No. 2 Lithium based grease. Grease fittings every 100 hours of operation or as needed to maintain a slight leakage at the point.

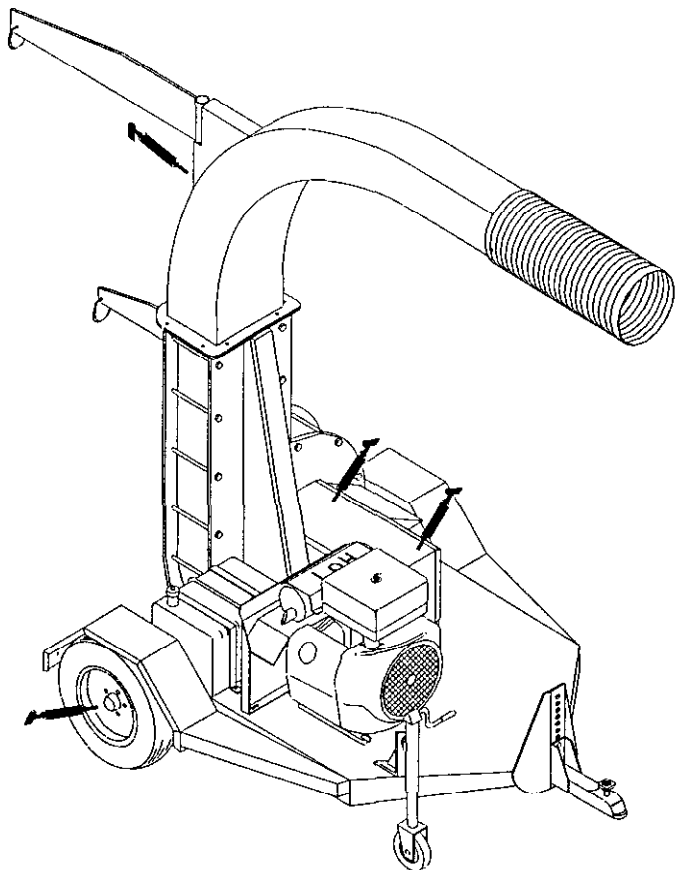


Figure 2

# MAINTENANCE

## BELT TENSION (Fig. 3)

The belt is properly adjusted when it has 1/4 deflection with 5 lbs. of force. To decrease tension, move the

adjusting nuts on the spring rod downward; upward to increase tension.

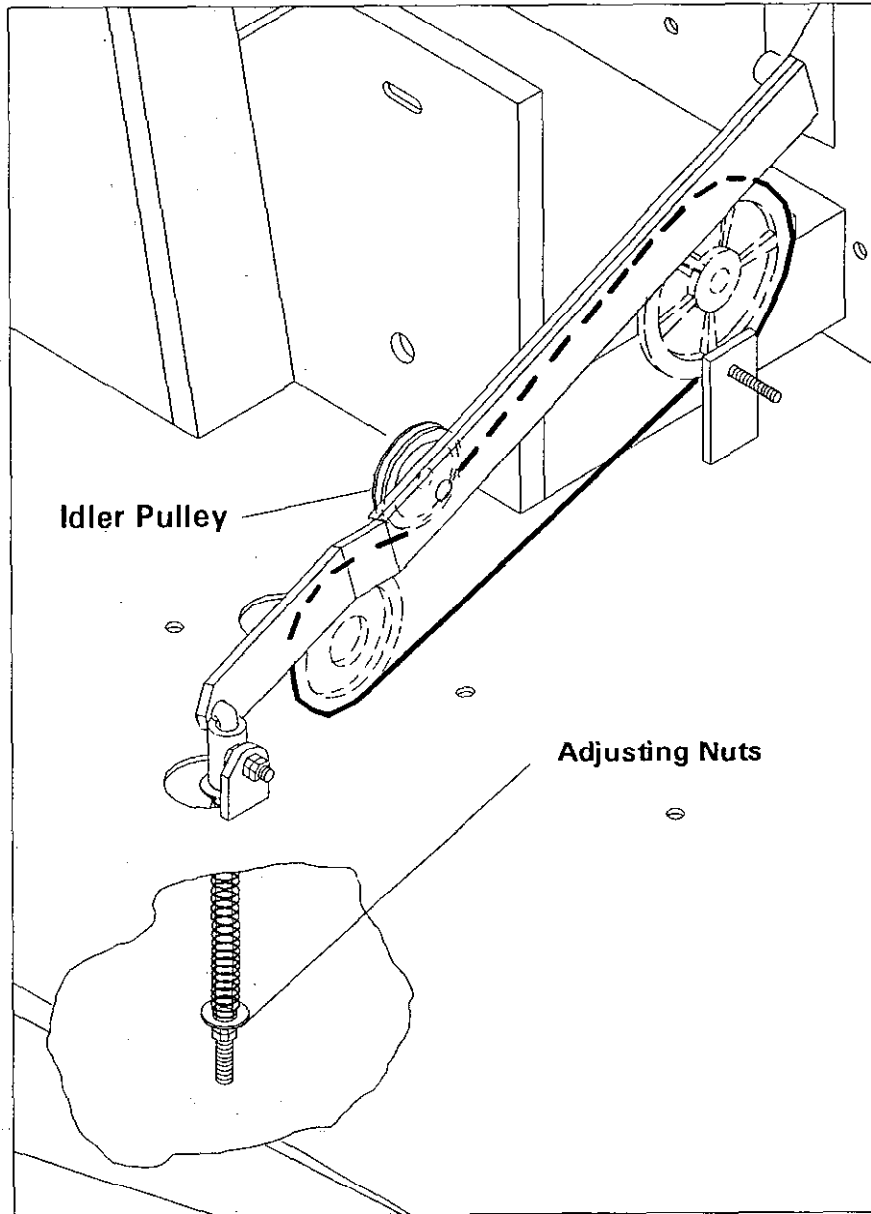


Figure 3

## TROUBLE SHOOTING

CONDITION	CAUSE	CORRECTION
TOO MUCH VIBRATION	<ul style="list-style-type: none"> <li>• Remove hose from fan housing. Debris in the impeller.</li> </ul>	<ul style="list-style-type: none"> <li>• Clean out any objects in the impeller.</li> </ul>
LOSING SUCTION	<ul style="list-style-type: none"> <li>• Long chute blocked.</li> <li>• Hose blocked.</li> <li>• Loose belt.</li> <li>• Incorrect engine speed.</li> </ul>	<ul style="list-style-type: none"> <li>• Clean out any blockage.</li> <li>• Clean out the hose.</li> <li>• Adjust the tension. See belt adjustments in manual.</li> <li>• Set the R.P.M. to 3600.</li> </ul>

## STORAGE

1. Thoroughly clean the loader so it is free of dirt, leaves and debris.

2. Inflate tires to 22 PSI.

3. Check all fasteners for looseness: tighten as necessary.

4. Grease or oil all grease fittings and bearings. Wipe off excess lubricant.

5. Check the tension and condition of the drive belt.

6. Service the battery and cables as follows:

A. Remove the battery terminals from the battery posts.

B. Clean the battery, terminals and posts with a wire brush and baking soda solution.

C. Coat the cable terminals and battery posts with Grafo 112X skin over grease (Toro Part Number 505-46), or petroleum jelly to prevent corrosion.

D. Slowly recharge the battery every 60 days for 24 hours to prevent lead sulfating of the battery.

## ENGINE

1. Drain the engine oil from the oil pan and replace drain plug.

2. Remove and discard the oil filter. Install a new oil filter.

3. Refill oil pan with 2-1/2 quarts of SF-CC, 10W30 motor oil.

4. Start the engine and run at idle speed for approximately two minutes.

5. Stop the engine.

6. Thoroughly drain all fuel from the fuel tank, lines and the fuel pump filter.

7. Flush the fuel tank with fresh clean gasoline.

8. Tighten all fuel system fittings.

## IDENTIFICATION AND ORDERING

### MODEL AND SERIAL NUMBER

The DEBRIS LOADER 3100 has two identification numbers: a model and serial number. The two numbers are stamped on a plate which is riveted to the main frame. In any correspondence concerning the DEBRIS LOADER 3100, supply model and serial numbers to be sure that the correct information and replacement parts are obtained.

To order replacement parts from an authorized TORO Distributor, supply the following information.

1. Model and serial numbers of the machine.

2. Part number, description and quantity of parts desired.

**Note:** Do not order by reference number if a parts catalog is being used; use the part number.

## NOTES

## NOTES

[illegible]

# The Toro Promise

## A ONE YEAR 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:*

### **Commercial Products ..... 1 Year**

*The costs of parts and labor are included, but the customer pays the transportation costs on walk rotary mowers with cutting widths of less than 25".*

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 Commercial Dealer (the Yellow Pages of your telephone directory is a good reference source).
2. The TORO Distributor or Commercial Dealer will advise you on the arrangements that can be made to inspect and repair your product.
3. The TORO Distributor or Commercial 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:

**TORO Commercial Products Service Department  
8111 Lyndale Avenue South  
Minneapolis, Minnesota 55420**

The above remedy of the product defects through repair by an Authorized TORO Distributor or Commercial 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 an 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 condition is the responsibility of the owner.

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

Repairs or attempted repairs by anyone other than an Authorized TORO Distributor or Commercial 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, INCIDENTAL 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 or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

### **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.