FORM NO. 3313-776 Rev. C

TORO®

MODEL NO. 62912 —
0000001 THRU 3900001 & UP
MODEL NO. 62923 —
0000001 THRU 3900001 & UP

OPERATOR'S MANUAL

5 H.P. 30" VACUUM BLOWER

(HAND PROPELLED AND SELF-PROPELLED)



FOREWORD

The Vacuum/Blower is an outstanding product for lawn care. It has advanced concepts in engineering, design and safety; and if maintained properly, the Vacuum/Blower will be reliable.

Since the Vacuum/Blower is a quality product, Toro is concerned about its future use and the safety of the user. Therefore, read this manual to familiarize yourself with correct set-up, operation, and maintenance. The five major sections of the manual are:

1. Safety Instructions
2. Setting Up Instructions
3. Pereparation Before Starting
4. Operating Instructions
5. Maintenance

Some information in this manual needs emphasizing. The words CAUTION, IMPORTANT, and NOTE are used to classify the information. "Caution" identifies personal safety related information. "Important" identifies mechanical information demanding special attention. Be sure to read the directive because it has to do with the possibility of damaging a part or parts of the vacuum/blower. "Note" identifies general information worthy of special attention.

When vacuum/blower is used or operated on any California forest, brush or grass covered land, a working order spark arrester must be attached to muffler. If not, the operator is violating state law, Section 4442 Public Resources Code.

If help — concerning the vacuum/blower — is ever needed, contact the local Authorized TORO Service Dealer or TORO Distributor. Refer to the yellow pages for assistance. In addition to genuine TORO replacement parts, the dealer and distributor have other TORO products and many accessories for these products.

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SAFETY INSTRUCTIONS



This safety alert symbol means CAUTION — PERSONAL SAFETY INSTRUCTION. Read the instruction because it has to do with safety. Failure to comply with the instruction may result in personal injury.

The vacuum/blower is designed and tested to offer reasonably safe service, provided it is operated in strict accordance with the following Safety Instructions. Failure to comply with the following instructions MAY RESULT IN PERSONAL INJURY.

WARNING: Engine exhaust contains carbon monoxide which is an odorless, deadly poison. Carbon monoxide is also known to the State of California to cause birth defects. Do not run engine indoors or in an enclosed area.

BEFORE OPERATING

1. Never allow children to operate the vacuum/blower. Adults should operate the vacuum/blower only after READING THIS MANUAL and receiving proper instructions.

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SAFETY INSTRUCTIONS

2. Familiarize yourself with the controls. Know how to stop the engine and disengage controls quickly.

3. Keep everyone, especially children and pets, away from the area of operation.

4. Since fuel is highly flammable, handle it with care. Fill fuel tank with gasoline before trying to start the engine.

A. Use an approved fuel container for storing the gasoline.

B. Fill fuel tank outdoors, not indoors. Fuel tank must not be filled when engine is running or when engine is hot.

C. Install gasoline container cap and fuel tank cap, and wipe up any spilled gasoline before starting the engine.

5. Thoroughly inspect the area where vacuum/blower will be used. Clear work area of objects which may be picked up and thrown, or which may wrap around the impeller.

6. Keep all shields and safety devices in place. If a shield or safety device is damaged, make all repairs before operating vacuum/blower. Also tighten loose nuts, bolts, and screws.

WHILE OPERATING

7. Never operate vacuum/blower without good visibility or light. Always maintain secure footing and keep a firm grip on the handle. Walk; never run.

8. Do not run engine indoors.

9. Keep face, hands, feet, and any other part of your body or clothing away from concealed, moving, or rotating parts. Stay behind the handle while operating the vacuum/blower. STAY CLEAR OF DISCHARGE OPENING AT ALL TIMES.

10. Do not attempt to make adjustments while engine is running.

11. Rotor continues to turn for a few seconds after the engine is shut off. Do not place any part of the body in the rotor area until you are sure the rotor has stopped turning.

12. Do not put hands into the bag when the rotor is turning.

13. Do not operate the vacuum/blower without the bag in place.

14. Stop engine before emptying bag.

15. Stop engine and disconnect spark plug lead wire before removing bag, cleaning discharge chute, removing obstacles, or when leaving machine. Check the bag frequently for wear or deterioration. If bag is damaged, replace with a new bag for safe operation.

16. When machine is converted to a blower, be sure intake cover is in place and properly mounted. Do not stand in front of discharge area while machine is in operation.

17. Before leaving the operator's position – behind handle – shut engine off and wait for all moving parts to stop.

18. Before adjusting, cleaning, repairing and inspecting the vacuum/blower, and before unclogging the discharge guide, shut engine off and wait for all moving parts to stop.

19. Before performing any maintenance or servicing the vacuum/blower, shut engine off and wait for engine and all moving parts to stop. Disconnect spark plug wire.

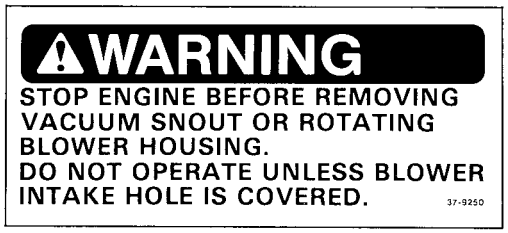
20. Should excessive vibration develop, stop the engine and check the impeller and crankshaft immediately. DO NOT OPERATE THE VACUUM/BLOWER WITH A DAMAGED IMPELLER OR CRANKSHAFT.

21. Keep all nuts, bolts, and screws tight to assure vacuum/blower is in safe working condition. Be sure to check the impeller and engine mounting bolts.

22. ALWAYS USE TORO REPLACEMENT PARTS AND ACCESSORIES TO ASSURE SAFETY AND OPTIMUM PERFORMANCE. NEVER USE "WILL-FIT" REPLACEMENT PARTS AND ACCESSORIES.

SAFETY DECALS

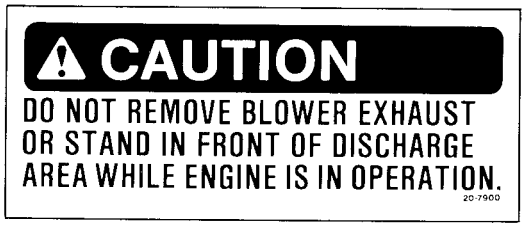
Safety and instruction decals are located on the vacuum/blower. Replace any decal that is damaged or lost.



Top of Blower Housing
(Part No. 37-9250)



Front of Blower Housing
(Part No. 20-7010)



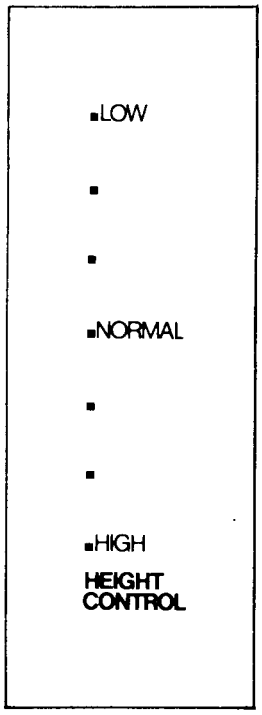
Top of Exhaust Blower
(Part No. 20-7900)



Top of Chute
(Part No. 20-8710)



Upper Handle
(Part No. 20-8700)



Height Adjustment
Bracket
(Part No. 20-6880)

LOOSE PARTS

Note: Using care, remove vacuum/blower and other parts from carton. Use chart below to assure all parts have been shipped.

DESCRIPTION	QTY.	USE
Upper Handle	1	Install upper handle, page 5.
Capscrew - 5/16"	4	Install upper handle, page 5.
Locknut - 5/16"	4	
Screw	1	Secure traction control wire, page 5.
Nut	1	
Height Control Rod	1	Secure height control rod, page 5.
Hair Pin Cotter	2	Secure height control rod, page 5.
Cable Tie	1	
Self-Tapping Screw	2	Attach throttle control, page 5.
Star Washer	2	
Nylon Spacer	2	
Chute Retaining Screw (1/4") & Conical Lockwasher	1 each	Install discharge chute, page 5.
Registration Card	1	
Operator's Manual	1	
Blower Intake	1	Converting to blower, page 9.
Blower Exhaust	1	Converting to blower, page 9.
Bag	1	
Bag Support	1	
Chute	1	

Specifications and design subject to change without notice.

SETTING UP INSTRUCTIONS

Right or left hand is determined from the operator's position behind the handles.

Note: The machine is partially assembled as a lawn vacuum. The blower intake and blower exhaust are not used with the vacuum. To set the machine up as a blower, see Converting From Vacuum to Blower, page 9.

SETTING UP INSTRUCTIONS

INSTALL UPPER HANDLE AND CONTROLS

1. Attach upper handle to lower handle with four capscrews and locknuts (Fig. 1). On self-propelled models, secure bag support to inside of lower handle while mounting handle.

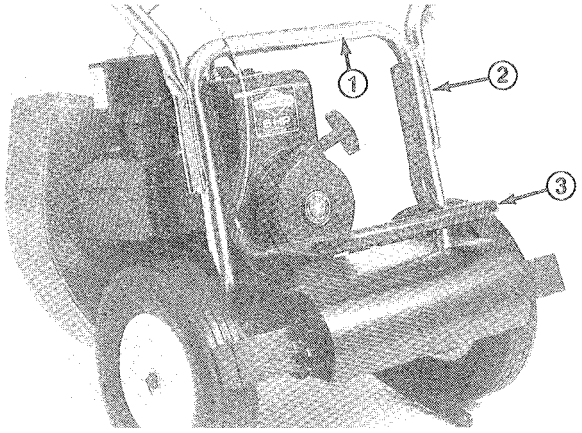


Figure 1

1. Lower handle 2. Upper handle 3. Bag support

2. On self-propelled model, hook lower end (ball end) of the traction control wire in keyhole slot in arm on the traction drive guard (Fig. 2). Secure ball in keyhole slot with screw and nut (Fig. 2).

Note: Make sure ball end of cable is not between screw head and drive guard.

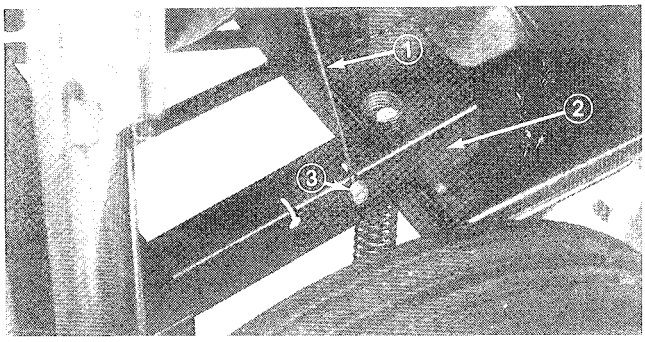


Figure 2

1. Traction control wire 3. Screw and nut
2. Traction drive guard

3. Secure lower end of height control rod to bracket on front wheel support with hair pin cotter (Fig. 3).

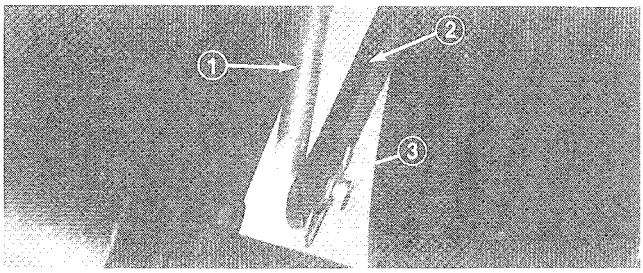


Figure 3

1. Height control rod 3. Washer and hair pin cotter
2. Front wheel support bracket

4. Secure upper end of height control rod to height adjustment handle with hair pin cotter (Fig. 4).

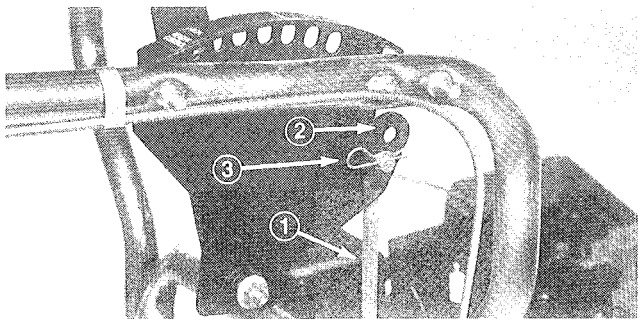


Figure 4

1. Height control rod 3. Hair pin cotter
2. Height adjustment handle

5. Attach the throttle control assembly to the outside of the left side of the upper handle with two self-tapping screws, star washers, and nylon spacers (Fig. 5).

6. Secure the cable to the handle with the cable tie (Fig. 5).

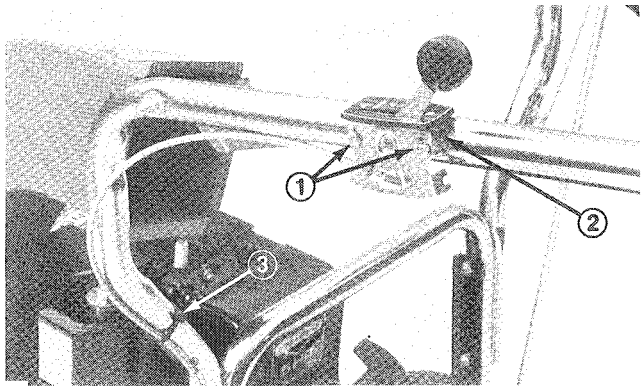


Figure 5

1. Self-tapping screws and star washers 3. Cable tie
2. Nylon spacers

INSTALL DISCHARGE CHUTE AND BAG

1. Install discharge chute and secure with 1/4" chute retaining screw (Fig. 6).

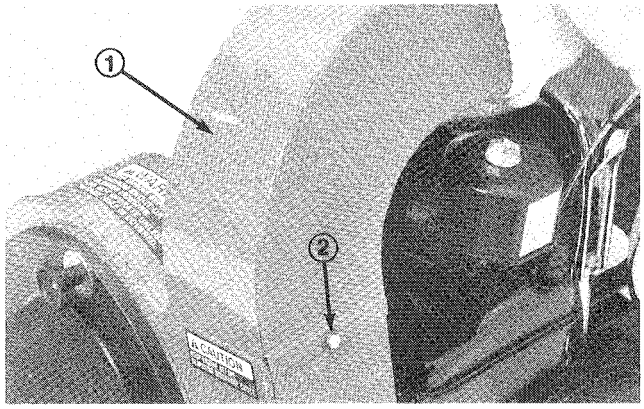


Figure 6

1. Chute 2. Hex screw, conical lockwasher

SETTING UP INSTRUCTIONS

2. Position bag onto handle, hooking grommets over pins, and bag strap over handle (Fig. 7).

3. Slip elasticized neck of bag over the flanges on chute (Fig. 7).

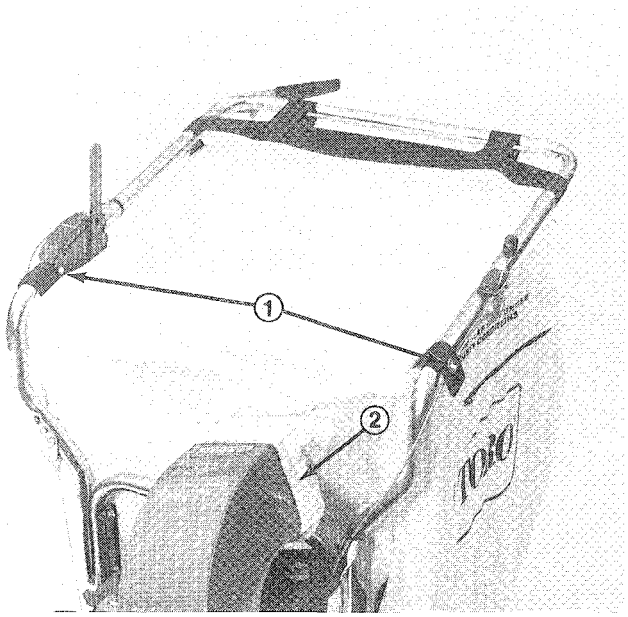


Figure 7

1. Grommets 2. Elasticized neck

INSTALL SNOUT

1. Mount lower edge of flange into mounting brackets.

2. Secure snout to blower with washer and knob (Fig. 8).

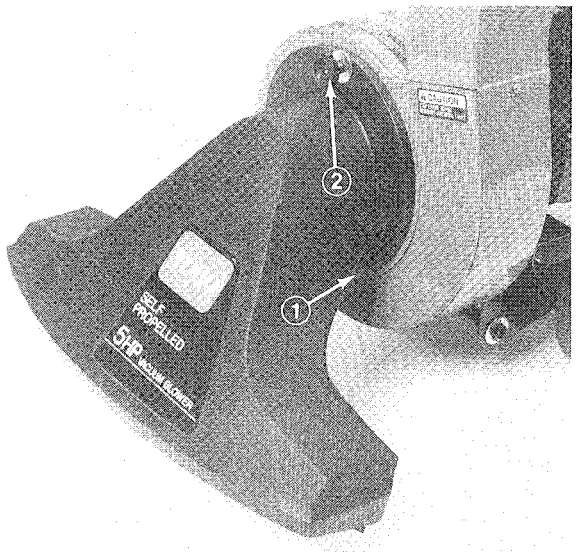


Figure 8

1. Lower edge of flange 2. Washer and knob

PREPARATION BEFORE STARTING

FILL CRANKCASE WITH OIL

The engine is shipped from the factory without oil in the crankcase. Therefore, before trying to start engine, oil must be added to the crankcase.

IMPORTANT: Check level of oil every 5 operating hours or each time unit is used. Initially, change oil after the first 2 hours of operation; thereafter, under normal conditions, change oil after every 25 hours of operation. However, change oil more frequently when engine is operated in extremely dirty conditions.

1. Move unit to a level surface to assure an accurate oil level reading.

2. Clean the area around the oil filter plug so foreign matter cannot enter filler hole when plug is removed.

3. Remove filler plug from crankcase (Fig. 9).

4. Using a clean funnel, slowly pour approximately 20 ounces (.59 l) of SAE 30 weight oil into crankcase filler hole. Use of multi-viscosity oils (10W30, etc.) above 40°F (4°C) will result in high oil consumption and possible engine damage. Use 5W30, 10W30, synthetic 5W30 or synthetic 10W30. The Briggs & Stratton engine uses any high quality detergent oil having the American Petroleum Institute — API — "service classification" SE, SF or SG.

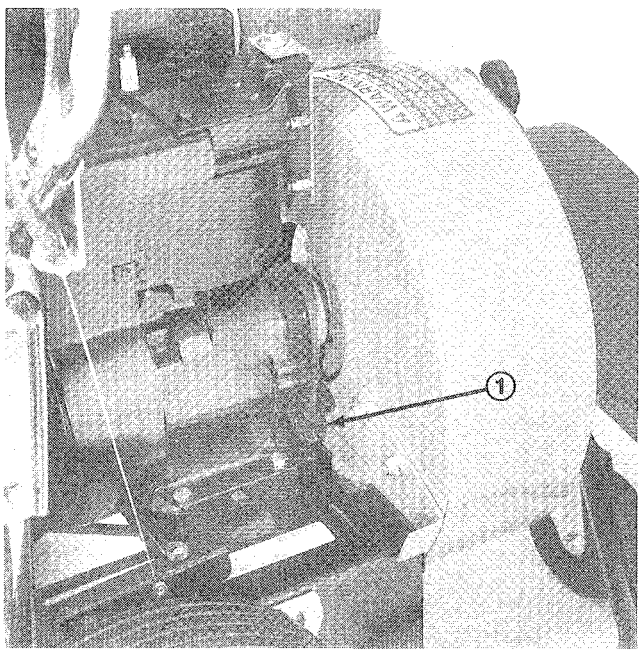


Figure 9

1. Filler plug

PREPARATION BEFORE STARTING

NO SPECIAL ADDITIVES SHOULD BE USED WITH THE RECOMMENDED OILS.

5. After crankcase is filled to point of overflowing, rock the unit gently to release any air that may be trapped in crankcase. If level of oil drops, add enough oil to bring oil back up to the point of overflowing.

6. Install filler plug into opening in crankcase. Wipe up any oil that may have spilled.

FILL FUEL TANK WITH GASOLINE

THE TORO COMPANY STRONGLY RECOMMENDS THE USE OF CLEAN, FRESH **UNLEADED** REGULAR GASOLINE IN TORO GASOLINE POWERED PRODUCTS. UNLEADED GASOLINE BURNS CLEANER, EXTENDS ENGINE LIFE, AND PROMOTES GOOD STARTING BY REDUCING THE BUILD-UP OF COMBUSTION CHAMBER DEPOSITS. LEADED GASOLINE CAN BE USED IF UNLEADED IS NOT AVAILABLE.

Note: Never use methanol, gasoline containing methanol, gasohol containing more than 10% ethanol, premium gasoline, or white gas because engine fuel system damage could result.

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.

DRAIN FUEL FROM ENGINE IF UNIT IS TO BE STORED FOR MORE THAN 30 DAYS. REFER TO DRAINING GASOLINE, page 11.

1. Using a clean rag, clean area around the fuel tank cap. Remove cap from fuel tank and fill tank to within 1/2 inch (13 mm) from the top with gasoline. Reinstall fuel tank cap securely.



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 the possibility of an explosion. Always fill fuel tank outside and wipe up any spilled gasoline before starting engine. Use a funnel or spout to prevent spilling gasoline, and fill tank to about 1/2 inch (12.7 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.

STARTING AND STOPPING

STARTING ENGINE

1. Move throttle control to "choke" position (Fig. 10).

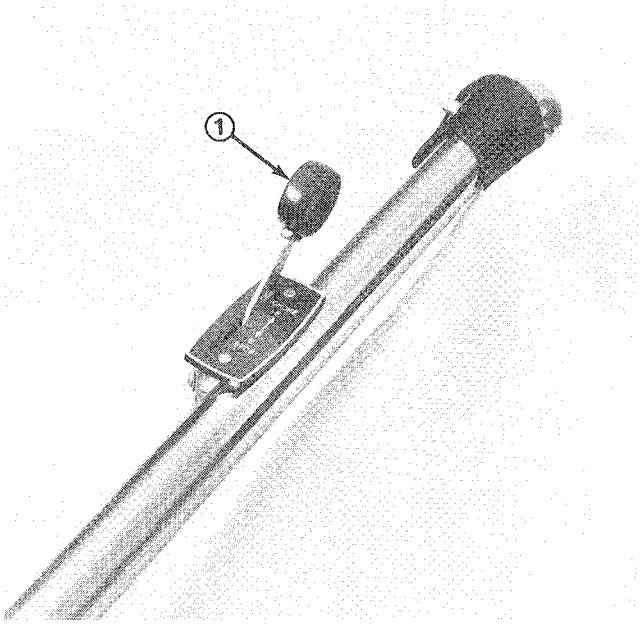


Figure 10

1. Throttle control

2. Pull recoil starter handle out until positive engagement results. Pull handle vigorously to start engine and allow recoil rope to retract slowly.

IMPORTANT: Do not pull recoil rope to its limit or let go of starter handle when rope is pulled out because rope may break or recoil assembly may be damaged.

3. When engine starts, move throttle control to "S" position (slow speed) until engine warms up.

STOPPING ENGINE

1. To stop engine, pull throttle fully to the rear to "STOP" position.

CAUTION

The impeller continues to rotate for a few seconds after the engine is shut off. Do not place any part of the body in the impeller area until you are sure the impeller has stopped.

OPERATING INSTRUCTIONS

CAUTION

Do not operate vacuum without the bag in place. The discharged debris could possibly injure the operator or other persons in the area.

ADJUSTING INTAKE HOUSING

The clearance between the air intake housing and the ground surface may be adjusted to any of 7 positions by moving height adjustment control to desired position. The range of adjustment allows the use of this machine to vary from vacuuming hard surfaces such as sidewalks or driveways, to thick lush turf with a heavy covering of leaves or clippings. The effectiveness of a vacuum depends on creating a "near vacuum" with the ground, so keep the intake as low as is practical.

1. Tip the machine slightly to the rear to take the weight off the castor wheel while adjusting.

2. Move the height adjustment control forward to lower the intake housing; to the rear to raise the housing (Fig. 11).

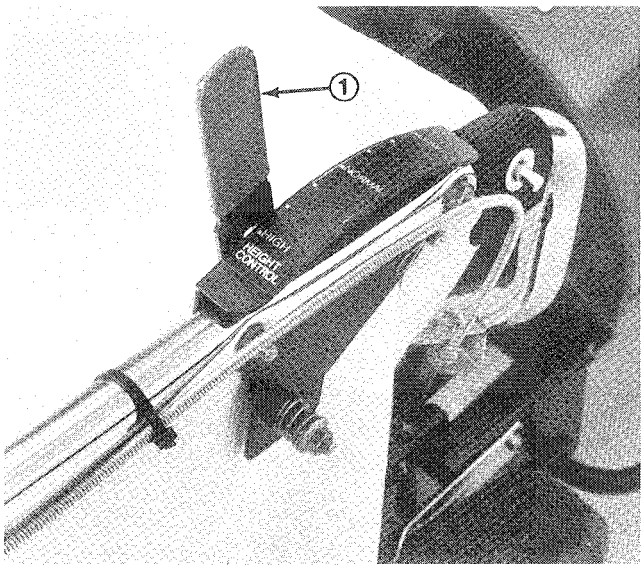


Figure 11

1. Height adjustment control

TRACTION CONTROL (SELF-PROPELLED MODEL ONLY)

The traction control must be held down to engage the traction drive. When the control is released, the traction drive is disengaged (Fig. 12).

OPERATING INSTRUCTIONS

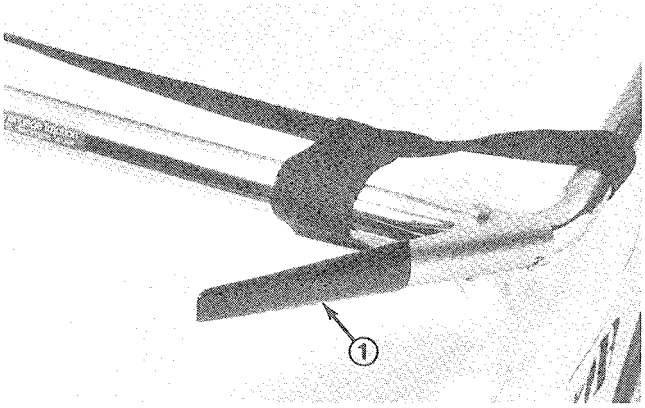


Figure 12

1. Traction control lever (disengaged)

EMPTYING VACUUM BAG

After the bag is filled with grass clippings, leaves, or other debris, it is not necessary to remove the bag to empty it. STOP THE ENGINE, unzip the side of the bag and dump the contents (Fig. 13). Close zipper before starting engine.



Figure 13

1. Zipper for emptying

WARNING

The grass bag material will catch and contain a 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 defective, install a new, genuine TORO replacement bag that has this or similar warning.

BAG VENT

The bag is provided with a zippered vent. When vacuuming an area which is basically free of dust, the side vent should be open to allow free movement of air to enable the vacuum to operate at maximum efficiency. When vacuuming a dusty area the vent should be closed (Fig. 14).

IMPORTANT: Keep the inside of the bag clean to allow the air to circulate properly.



Figure 14

1. Bag vent

CONVERTING FROM VACUUM TO BLOWER

Under some conditions, it will be advantageous to convert the vacuum to a blower. If the surface is uneven, it may be difficult for the vacuum snout to create a "near vacuum" with the ground. If there are many obstacles in the area, or if the area is very large, a blower may be more efficient.

1. Remove knob, washer, and snout (Fig. 15).

2. Remove bag neck from discharge chute. (The entire bag may be removed if desired.)

3. Remove blower discharge chute.

4. Install blower exhaust. Secure with chute retaining screw and lockwasher.

5. Remove flanged locknut securing blower housing.

6. Lift blower housing slightly and rotate it 120° clockwise (as you face the blower). Reinstall flanged locknut.

7. Install blower intake screen. Secure it with knob removed with snout.

OPERATING INSTRUCTIONS

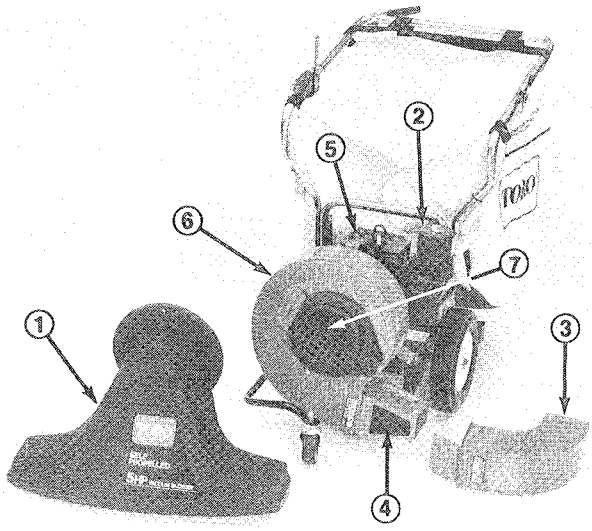


Figure 15

1. *Remove snout*
2. *Remove bag neck from chute*
3. *Remove chute*
4. *Install exhaust*
5. *Flanged locknut*
6. *Rotate housing*
7. *Install blower intake screen*

CAUTION

The air stream comes out of the blower in excess of 100 MPH. Be extremely careful where the air stream is directed to avoid bodily injury or property damage.

TWO WAY BLOWER DISCHARGE

The exhaust blower is equipped with an easily directed deflector for directing the air blast forward or to the side. For front discharge, depress the handle and swing the deflector so the tang is in the rear slot (Fig. 16).

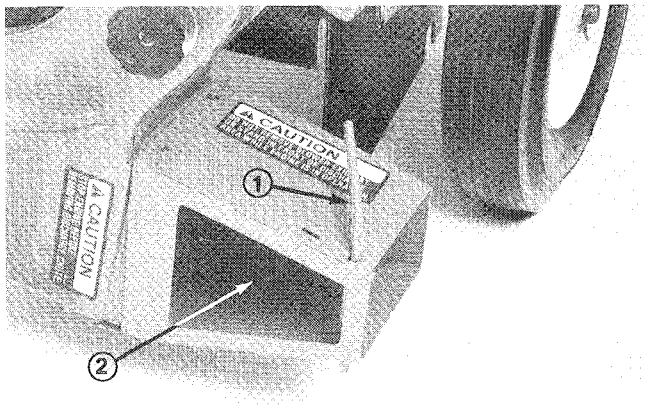


Figure 16

1. *Handle in rear position*
2. *Deflector set for front discharge*

For side discharge, depress the handle and swing the deflector forward so the tang is in the front slot (Fig. 17).

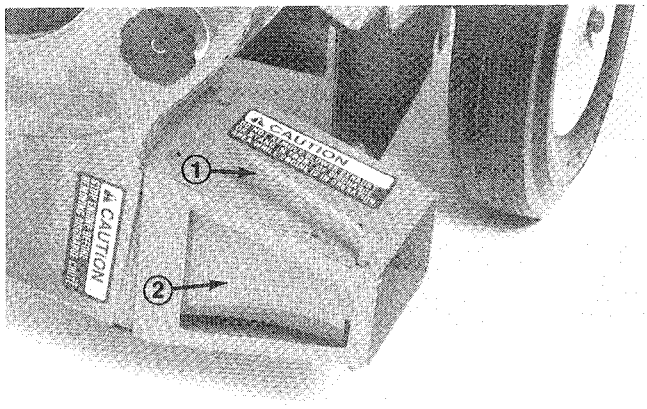


Figure 17

1. *Handle in front position*
2. *Deflector set for side discharge*

MAINTENANCE

CAUTION

Disconnect spark plug lead wire before performing any maintenance on your vacuum/blower. Secure the lead wire in the v-shaped notch to prevent accidental contact with the spark plug.

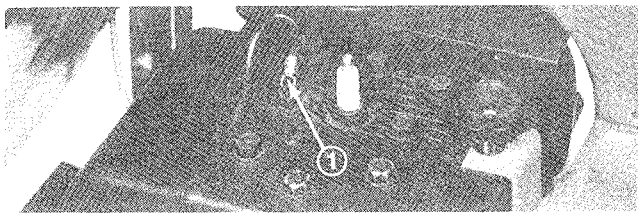


Figure 18

1. *Wire in V-shaped notch*

CHANGING ENGINE OIL

Check oil level after every 5 hours of operation or each time blower is used. Change oil after the first 2

hours of operation; therafter, under normal conditions, change oil after every 25 hours of operation. However, change oil more frequently when engine is operated in dusty or sandy conditions. If possible, run engine just before changing oil because warm oil flows better and carries more contaminants than cold oil.

1. Pull wire off spark plug and install in V-notch (Fig. 18).

2. Clean area around drain plug (Fig. 19).

3. Remove oil drain plug and allow oil to flow into drain pan.

4. After oil is drained, reinstall drain plug and wipe up any oil that spilled.

5. Move the blower to a level surface and fill crankcase with oil; refer to Fill Crankcase with Oil, page 6.

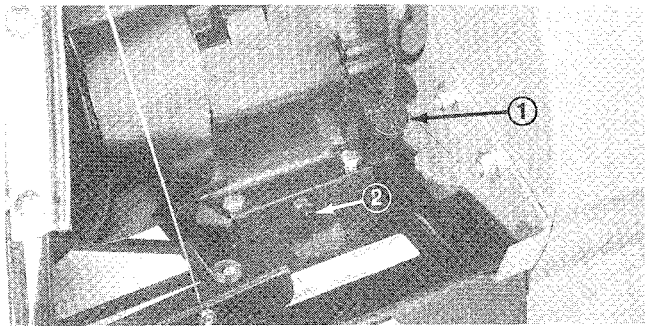


Figure 19

1. Filler plug 2. Drain plug

DRAINING GASOLINE

CAUTION

Since gasoline is highly flammable, drain it outdoors and make sure engine is cool to prevent a potential fire hazard. Wipe up any gasoline that may have spilled. Do not drain gasoline near any open flame or where gasoline fumes may be ignited by a spark. Do not smoke a cigar, cigarette, or a pipe when handling gasoline.

1. ⚠ Assure engine is not running, pull wire off spark plug, and install on V-notch.

2. Remove cap from fuel tank.

3. Using a pump-type syphon, drain gasoline into a clean gas can. This is the only recommended method of draining gasoline.

SERVICING AIR CLEANER

Normally, clean paper cartridge every 3 months or every 25 operating hours. More frequent cleaning is required when machine is operated in dusty or dirty conditions.

1. Stop engine, pull wire off spark plug and install in v-notch.

2. Unscrew knob and lift off air cleaner cover (Fig. 20).

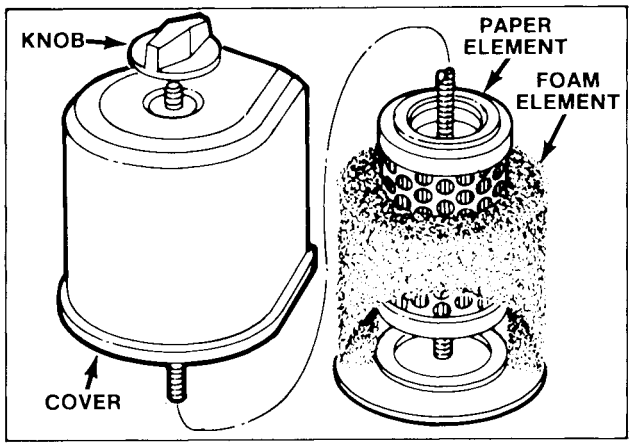


Figure 20

3. Slide foam element off paper cartridge and 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 25 ml (5 teaspoons) of SAE 30 engine oil. Squeeze element to remove excess oil and to distribute oil thoroughly. A damp element is desirable.

4. Reinstall foam element over paper cartridge. Reinstall air cleaner cover and tighten securely in place with knob.

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

Clean the paper filter yearly or after every 25 operating hours. More frequent cleaning of filter is required when machine is operated in dusty or dirty conditions. Clean the paper filter by tapping it **gently** on a flat surface. If very dirty, replace cartridge.

CAUTION

Do not oil paper cartridge. Do not use pressurized air to clean cartridge.

MAINTENANCE

CASTER WHEELS AND PIVOT POINTS

Place a few drops of engine oil in the caster wheel bushing and where front wheel support pivots in engine base. Also, oil where rear traction shafts pivot in engine base (self-propelled model only) (Fig. 21).

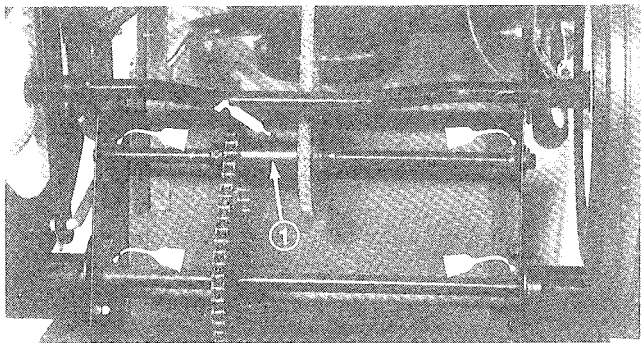


Figure 21

1. Rear idler assembly

GREASE REAR IDLER ASSEMBLY (Self-propelled Model Only)

Lubricate the rear idler assembly with No. 2 general purpose grease after every 25 hours of operation or more frequently when conditions are dusty or sandy (Fig. 21).

COOLING FINS

Clean cooling fins regularly to prevent overheating and possible engine damage.

REPLACING SPARK PLUG

Recommended spark plug to use is a Champion RCJ-8 or equivalent, and correct air gap is 0.030 of an inch (0.76 mm). Since air gap between center and side electrodes of the spark plug increases gradually during normal engine operation, remove plug after every 25 hours of engine operation and check its condition.

1. Assure engine is not running. Then pull wire off spark plug.

2. Clean area around spark plug so foreign matter does not fall into cylinder when plug is removed. Remove plug from cylinder head.

IMPORTANT: A cracked, fouled, or dirty spark plug must be replaced. Do not sand blast, scrape or clean electrodes, because grit may eventually release from the plug and fall into the cylinder. The result will likely be engine damage.

3. Set air gap between electrodes at 0.030 of an inch (0.76 mm) (Fig. 22). Install the correctly gapped spark plug with gasket and tighten plug to 15 ft-lb (20.4 N·m). If torque wrench is not used, tighten plug firmly.

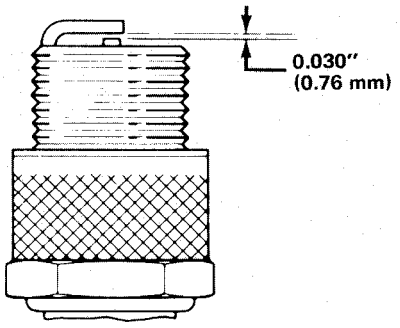


Figure 22

Air gap between electrodes

ADJUSTING CARBURETOR

The carburetor has been set at the factory, but an occasional adjustment may be required. However, do not make unnecessary carburetor adjustments, because factory settings are usually correct. An adjustment may be required to compensate for differences in fuel, temperature, and altitude.

IMPORTANT: Air cleaner must be installed on the engine whenever carburetor is being adjusted. The air cleaner mounting knob must also be installed when engine is run. Fuel tank must be half full of gasoline to get best carburetor adjustment.

1. Needle Valve – Close valve by gently rotating it clockwise (Fig. 23).

IMPORTANT: Do not close needle valve too tight, because valve and seat in carburetor will likely be damaged.

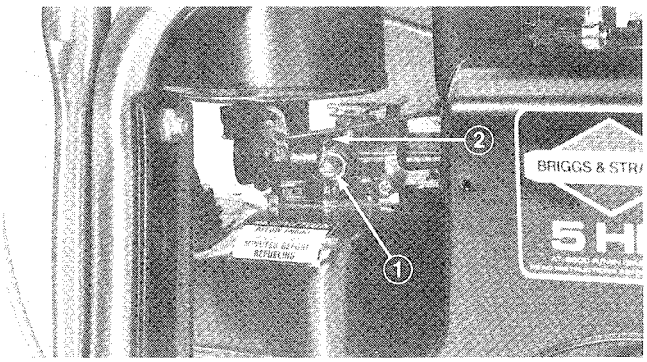


Figure 23

1. Needle valve 2. Idle adjusting screw

2. Open needle valve by rotating 1-1/2 turns counterclockwise.

Note: The needle valve setting is approximate; however, the setting will allow engine to be started so carburetor can be fine tuned.

3. Start engine and let it warm up for approximately two minutes. Next, move throttle control to RUN position.

MAINTENANCE

WARNING

Engine must be running so final adjustment of the carburetor can be performed. To guard against possible personal injury, keep hands, feet, face, and other parts of the body away from any moving parts.

4. Rotate needle valve clockwise 1/8 turn at a time until engine starts to lose speed. Let engine react to each 1/8 turn setting.

5. Rotate needle valve counterclockwise (outward) 1/8 turn at a time until engine first starts to run rough. Let engine react to each 1/8 turn setting.

6. Rotate needle valve clockwise (inward) very slowly until engine starts to run smoothly. This setting, under no load, may be slightly rich; however, the slightly rich setting will assure proper operation when the engine is under load.

7. Move throttle control backward so engine idles. If engine stalls, rotate idle adjusting screw until engine speed increases (1750 rpm).

Note: Rotate idle adjusting screw clockwise to increase idle rpm. By contrast, rotate idle adjusting screw counterclockwise to decrease idle rpm (Fig. 23).

8. Check carburetor adjustment by quickly moving throttle control from idle speed to RUN position. Engine speed should increase without hesitation. If engine tends to stall or die out, rotate needle valve 1/8 turn counterclockwise until engine accelerates smoothly.

ADJUSTING DRIVE BELT (SELF-PROPELLED MODEL ONLY)

An adjustment of the drive belt may be required if the loss of traction occurs, or if belt slips.

1. Assure engine is not running, pull wire off spark plug, and install on V-notch.

2. Loosen nut and slide pulley until belt is at proper tension (Fig. 24).

3. Tighten just enough so the belt does not slip; do not over-tighten.

4. When adjustment is used up on one pulley, use the other pulley. When adjustment is used up on both pulleys, replace the belt.

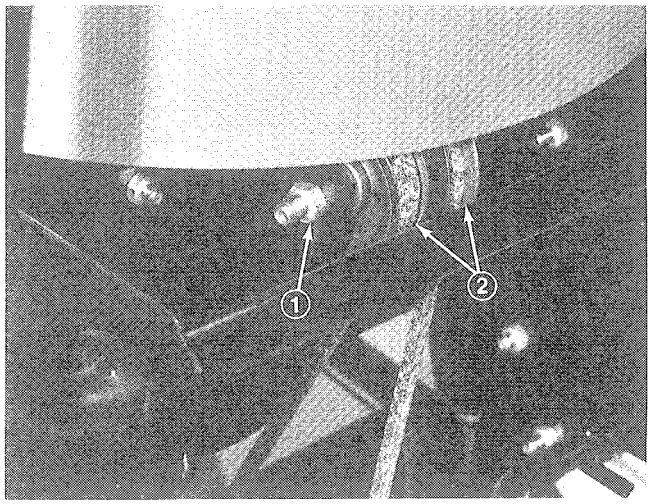


Figure 24

1. Nut 2. Pulleys

REPLACING DRIVE BELT (SELF-PROPELLED MODEL ONLY)

1. Assure engine is not running, pull wire off spark plug, and install on V-notch.

2. Drain gasoline from fuel tank: refer to Draining Gasoline, page 11.

3. Drain oil from crankcase: refer to Changing Engine Oil, page 10.

4. Cut old belt and remove. Loosen belt tightener pulleys.

5. Remove front snout (Fig. 25).

6. Slip the bag off the chute and remove chute (Fig. 25).

7. Remove the flanged locknut securing the blower housing and lift the housing as much as the impeller allows (Fig. 25).

8. Route the new belt around the blower housing (Fig. 25).

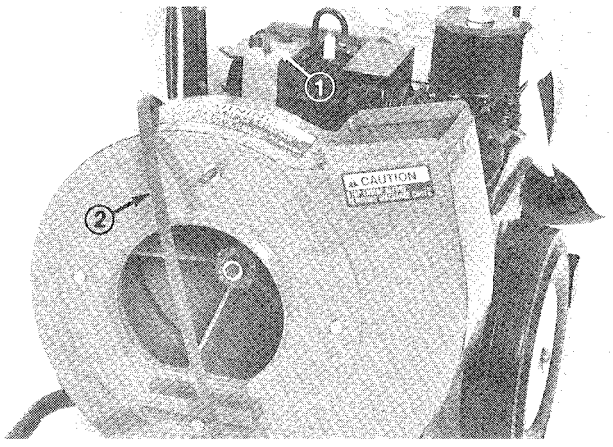


Figure 25

1. Flanged locknut removed 2. Belt around housing

9. Insert the belt over the pulley and down through the opening and reinstall and secure the blower housing (Fig. 26).

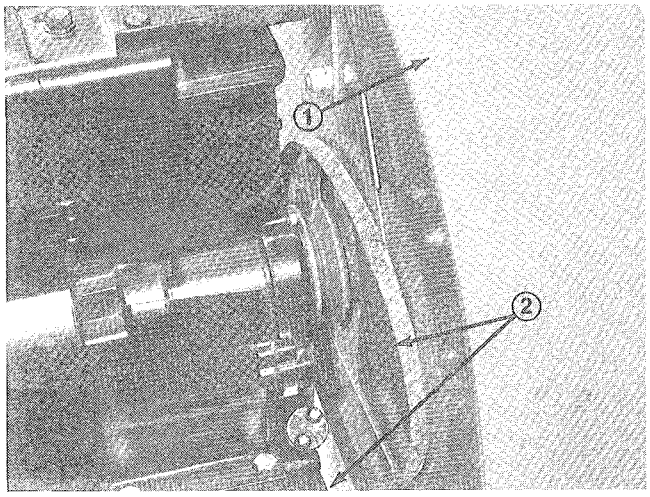


Figure 26

1. Lift housing
2. Feed belt down through opening

10. Refer to Figure 27. Tip the unit back onto the handles. (1) Remove the cotter pin from the end of the shaft, loosen the setscrew in each of the collars, (2) and tap the shaft over far enough (3) so the new belt can be installed. (4)

11. Return shaft to its original position and secure collars with setscrews and shaft with cotter pin. Make sure sprockets are aligned properly.

IMPORTANT: The belt must be installed as shown in Figure 27 or the traction drive will run backward.

12. Tighten belt as described previously.

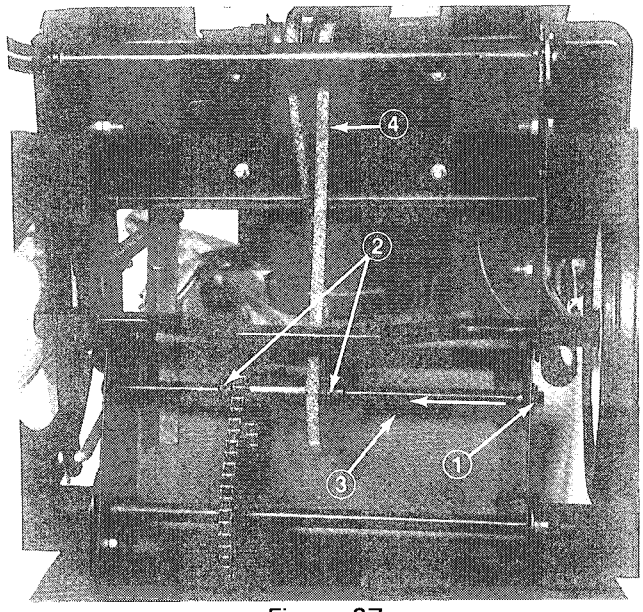


Figure 27

1. Remove cotter pin
2. Loosen setscrews
3. Tap shaft to left
4. Install belt

TRACTION DRIVE ADJUSTMENT (SELF-PROPELLED MODEL ONLY)

As the friction wheels and tires experience normal wear, it will be necessary to adjust the traction drive linkage occasionally.

1. Loosen the lock nut on the bottom side of the bracket (Fig. 28).

2. Tighten the upper nut to move the cable housing upward, which in turn moves the friction wheel closer to the tire. (In effect, this shortens the cable to compensate for the wear.)

3. When the proper adjustment is attained, tighten the bottom nut up against the bracket to secure the adjustment.

4. When all the adjustment is taken up on the cable housing, move the bracket to the upper hole in the handle and start the adjustment procedure over again.

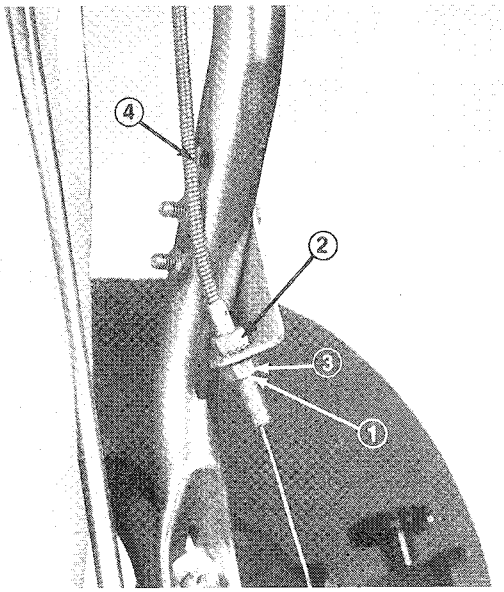


Figure 28

1. Back lower nut down
2. Tighten upper nut as required
3. Tighten lower nut against bracket
4. Move bracket to upper hole for additional adjustment

PREPARING BLOWER FOR STORAGE

1. For long term storage, it is recommended that gasoline be drained from fuel tank or use a fuel additive before storing. To drain gasoline, refer to Draining Gasoline, page 11. After fuel is drained, start engine and let it idle until all fuel is consumed and engine stops. If gasoline is not drained, gum-like varnish deposits will form and cause poor engine operation or 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, fuel additives remain effective in fuel for 6-8 months.

2. Pull wire off spark plug and clean area around the plug so foreign matter cannot fall into cylinder when plug is removed. Remove plug from cylinder head and pour two tablespoons (10 ml) of SAE 30 oil into spark plug hole. Pull recoil starter handle slowly to distribute oil on inside of cylinder. Then install spark plug and tighten it to 15 ft-lb (20.4 N·m). If torque wrench is not used, tighten plug firmly. DO NOT INSTALL WIRE ON SPARK PLUG.

3. Remove drain plug from bottom of engine and allow oil to flow into drain pan. After all oil is drained, install drain plug, but do not fill crankcase with oil at this time.

4. Clean dirt and chaff from outside of cylinder, cylinder head fins, and blower housing. Also, remove debris, dirt and grime from external parts of engine.

5. Check and tighten all capscrews, bolts, screws, nuts and mating parts. If any part is damaged, repair or replace it.

6. Clean or replace cartridge. Refer to Servicing Air Cleaner, page 11.

7. Fill crankcase with oil: refer to Fill Crankcase With Oil, page 6.

8. Touch up all rusted or chipped paint surfaces. Make sure to sand affected area before painting.

Note: TORO Re-Kote "touch-up" paint is available from any Authorized TORO Service Dealer. The spray paint dries in minutes to a glossy, factory-finish.

9. Store the blower in a clean, dry place. Cover the blower to protect it and keep it clean.

TORO Consumer Products

THE TORO TOTAL COVERAGE GUARANTEE

A Full Two–Year Warranty
(Limited Warranty for Commercial Use)

What Is Covered By This Express Warranty?

The Toro Company promises to repair any TORO Product used for residential purposes if defective in materials or workmanship for a period of two years from the date of purchase. The cost of parts and labor are included, but the customer pays the transportation costs.

Transportation within a 15 mile radius of the servicing dealer is covered under this warranty for two–stage snowthrowers, walk behind debris equipment and all TORO Wheel Horse riding products. Walk power mowers, single stage snowthrowers, and other products not specifically covered, are excluded from the transportation coverage provided by this warranty.

What Products Are Covered By This Warranty?

This warranty applies to all gasoline powered Consumer Products (including TORO Wheel Horse riding products). ProLine riding products, wide area walk behind mowers and 21" Commercial mowers without blade stop controls are covered by separate warranty statements.

How About Commercial Use?

TORO Consumer Products used for commercial, institutional or rental use are covered by a limited warranty for the following time periods from the date of purchase:

Products	Warranty Period
• Garden Tractors	
Chassis	1 year limited warranty
Engine	2 year limited warranty
• 21" Commercial Duty Walk Mower with blade stop controls	1 year limited warranty
• Lawn Tractors, Yard Tractors, Rear Engine Riders, 3.0 and 3.5 HP Edgers, Straight Shaft Trimmers, and Backpack Blowers	90 day limited warranty
• All Others	45 day limited warranty

How Do You Get Warranty Service?

Should you feel your TORO product contains a defect in material or workmanship, contact the dealer who sold you the product or any Authorized TORO Service Dealer or TORO Master Service Dealer. The Yellow Pages of your telephone directory is a good reference source. The dealer will either arrange service at his/her dealership or recommend another Authorized Service Dealer who may be more convenient. You may need proof of purchase (copy of registration card, sales receipt, etc.) for warranty validation.

If for any reason you are dissatisfied with the Service Dealer's analysis of the defect in materials or workmanship or if you need a referral to a TORO Service Dealer, please feel free to contact us at the following address:

Toro Customer Service Department
8111 Lyndale Avenue South
Bloomington, MN 55420–1196
612–888–8801

What Must You Do To Keep The Warranty In Effect?

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.

What Does This Warranty Not Cover? and How Does Your State Law Relate To This Warranty?

There is no other express warranty except the TORO Starting Guarantee on GTS Engines. This express warranty does not cover:

- Cost of regular maintenance service or parts, such as filters, fuel, lubricants, tune–up parts, blade sharpening, brake and clutch adjustments.

- Any product or part which has been altered or misused or required replacement or repair due to normal wear, accidents, or lack of proper maintenance.

- Repairs necessary due to improper fuel, contaminants in the fuel system, or failure to properly prepare the fuel system prior to any period of non–use over three months.

- Pickup and delivery charges for distances beyond a 15 mile radius from an Authorized TORO Service Dealer (covered products only).

All repairs covered by this warranty must be performed by an Authorized TORO Service Dealer using Toro approved replacement parts.

Repair by an Authorized TORO Service Dealer is your sole remedy under this warranty.

The Toro Company is not 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. Some states do not allow exclusions 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.