FORM NO. 3314-357

TORO

MODEL NO. 30935-1000001 & UP

OPERATOR'S MANUAL

TORO GAS HAND HELD BLOWER

⚠ SAFETY INSTRUCTIONS

To assure maximum safety, best performance, and to gain knowledge of the blower, it is essential that you or any other operator of the blower read and understand the contents of this manual before the motor is ever started. Pay particular attention to the safety alert symbol ⚠ which means CAUTION, WARNING OR DANGER — "personal safety instruction." Read and understand the instruction because it has to do with safety. Failure to comply with instruction may result in personal injury.

BEFORE OPERATING

1. Operate this machine only after reading and understanding the contents of this manual. A replacement manual is available by sending complete model and serial number to: The Toro Company, 8111 Lyndale Avenue South, Minneapolis, Minnesota 55420.

2. Keep everyone, especially children and pets, away from area of operation. Never allow children to operate the blower. It is not a toy. Never allow adults to operate unit without first reading the Operator's Manual.

3. Become familiar with the controls and know how to stop the engine quickly.

4. The following articles of apparel are strongly recommended and are required by some local safety and insurance regulations:

A. Safety glasses/goggles - REQUIRED
B. Safety shoes
C. Long pants
D. A long-sleeved shirt
E. A helmet
F. Ear plugs
G. Face mask (filter)

Dress properly—Do not wear loose clothing, scarves, jewelry, or uncontained hair. They can be caught in moving parts.

5. Keep the area of operation clear of all persons, particularly small children and pets.

6. Never operate blower when you are fatigued.

7. Keep all shields, safety devices, and decals in place. If a shield, safety device or decal is defective, damaged or lost, repair or replace it before operating the blower.

8. Gasoline is highly flammable; handle it carefully. Fill fuel tank with a mixture of gasoline and oil before trying to start the engine. Observe all of the following precautions:

A. Use an approved fuel container for storing the gasoline/oil mixture.
B. Do not fill tank when engine is hot or running.
C. Do not smoke while handling gasoline.
D. Fill fuel tank outdoors and up to about 1/4" to 1/2" (6 to 13 mm) from the top of the tank, not the filler neck. Use funnel or spout to prevent spilling.
E. Wipe up any spilled gasoline before starting the engine.
F. Move at least 10 feet (3 m) away from fueling point before attempting to start the engine.
G. Make sure the unit is properly assembled and in good operating condition.

WHILE OPERATING

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

10. Always be sure of your footing. Keep a firm hold of the handle and walk, never run, during operation. Shut the engine off before proceeding to the next area of operation.

11. Do not put hands or feet in front of discharge opening. Keep clear at all time. Never operate blower without blower pipes installed. Stay clear of muffler discharge.

12. If the blower should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.

13. Be careful where you point the discharge tube to avoid possible injury and property damage. Note how far debris can be blown and work within these limitations. Do not direct discharge at bystanders or pets.

14. Use blower only in daylight or good artificial light.

15. Shut off engine and be certain all moving parts have completely stopped rotating before performing any adjustment or maintenance procedures.

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⚠ SAFETY INSTRUCTIONS

16. Before servicing or making adjustments to the machine, stop the engine and pull wire off spark plug to prevent accidental starting of the engine.

MAINTENANCE

17. Ensure entire machine is in good condition. Keep all nuts, bolts and screws properly tightened.

18. Replace cracked or damaged parts before operating. If major repairs are ever needed or if assistance is desired, contact an Authorized Toro Service Dealer.

19. To reduce potential fire hazard, keep the engine area free of excessive oil, grass, leaves and accumulation of dirt.

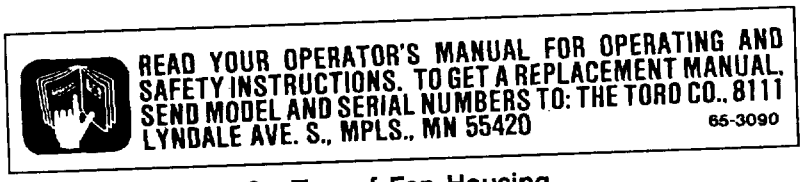
20. If the engine must be running to perform a maintenance adjustment, keep hands, feet, clothing and any part of the body away from unit and any moving parts. Keep everyone away.

⚠ SAFETY DECALS AND INSTRUCTIONS

Safety decals and instructions are easily visible to the operator and are located at any indicated area of potential danger. Replace any decal that is damaged.



On Top of Fan Housing
(Part No. 82-5920)



On Top of Fan Housing
(Part No. 65-3080)



On Air Cleaner Cover
(Part No. 65-3030)



On Fan Housing Below
Screen
(Part No. 82-5720)



On Recoil Housing
(Part No. 65-3040)



On Fan Housing Above
Muffler Cover
(Part No. 65-3070)

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LOOSE PARTS CHART

Loose Parts	Qty.	Where Used
Straight Pipes with Molded-in Clamp	2	Mount to blower and to each other.
Screws Nuts	4 4	Assemble to straight pipe clamps.
End Pipe	1	Mount to straight pipe(s).
End Pipe Clamp	1	Assemble to end pipe.
Operator's Manual	1	Read before operating blower.
Registration Card	1	Fill out and return to TORO.

SET-UP INSTRUCTIONS

INSTALL BLOWER PIPES TO BLOWER HOUSING (Fig. 1 & 2)

1. Assemble two mounting screws and nuts through end of each straight tube.

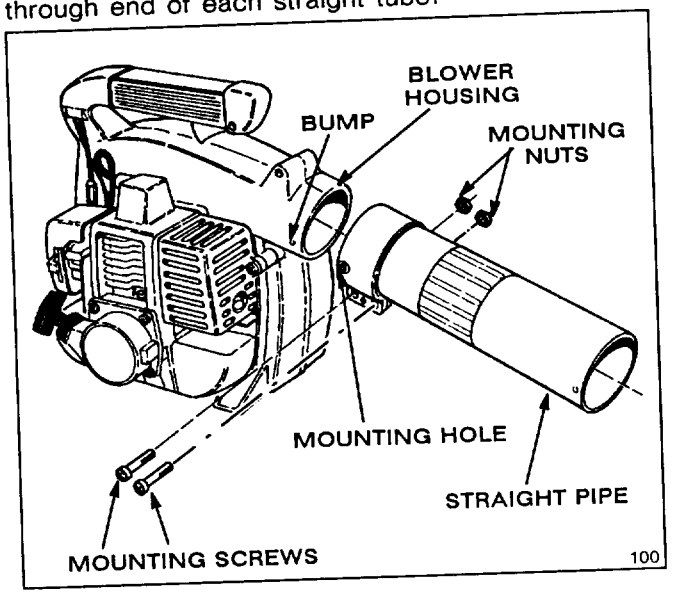


Figure 1

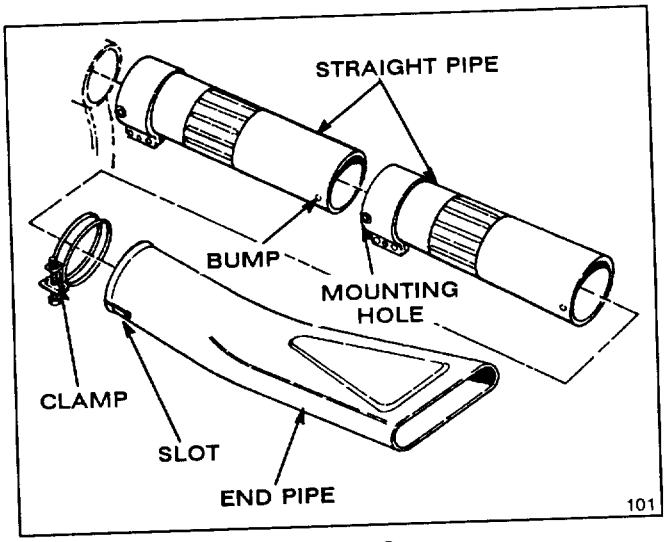


Figure 2

2. Slide a straight tube onto blower housing as shown in Fig. 1. Bumps on blower housing must engage holes in pipe.

3. Tighten mounting screws.

4. Slide second pipe onto first until bump engages mounting hole in pipe. Tighten screws.

5. Slide clamp onto end tube.

6. Slide end tube onto straight tube, aligning end tube as shown in Fig. 2. Tighten clamp.

ASSEMBLE OPTIONAL SHOULDER STRAP (Part No. 65-4290)

1. Insert the strap through openings in blower housing. Thread strap through buckle (Fig. 3).

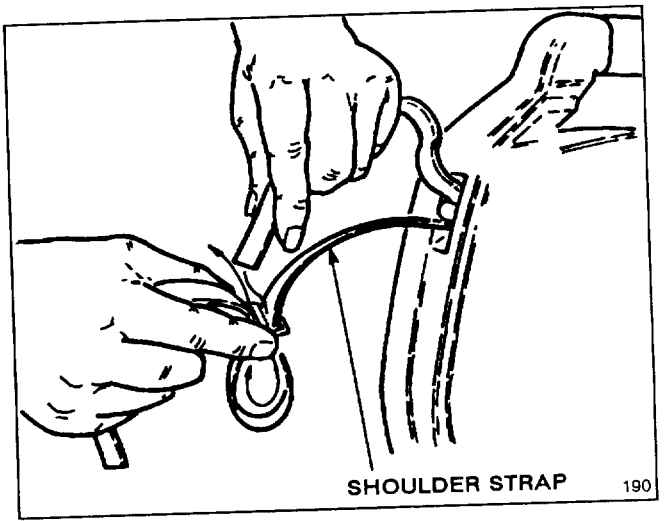


Figure 3

2. Adjust the strap so that the blower fits comfortably against your body.

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 to 1/4" to 1/2" (6 to 13 mm) from top of the tank, not into the filler neck. This space is for expansion of fuel. Use funnel or spout to prevent spilling. Wipe up any spilled gas before starting engine.

MIX GASOLINE AND OIL (Fig. 4)

1. Approved Mixture—For simplicity and best engine performance, mix the contents of one 8-ounce bottle of Toro 32:1 Two-Cycle Oil with two gallons of fresh unleaded regular gasoline. You can also use Toro "Easy Mix" Two-Cycle Oil (3.2 ounce bottle mixed one per gallons of gasoline 40:1 ratio) in this Toro two-cycle engine. 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 8 ounces of another high grade two-cycle oil that has the NMMA or BIA-TCW certification printed on the label.

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 ad a half gallon of gasoline. Install cap on gasoline container and shake the container to mix oil thoroughly. Remove cap and add remaining amount of gasoline.

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.

IMPORTANT: 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.

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.

32:1 GAS/OIL MIXING CHART

U.S. GALLON	
Gasoline	**Oil**
1 gallon	4 oz.
1.5 gallons	6 oz.
2 gallons	8 oz.

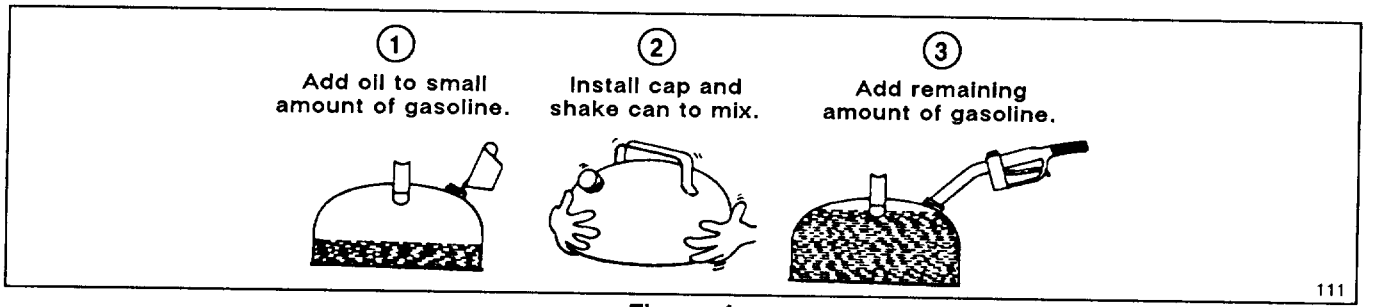


Figure 4

OPERATING INSTRUCTIONS

STARTING AND STOPPING INSTRUCTIONS (Fig. 5)

1. Place blower on a level surface.
2. Move ignition switch to "ON" position.
3. Raise choke lever to close completely.

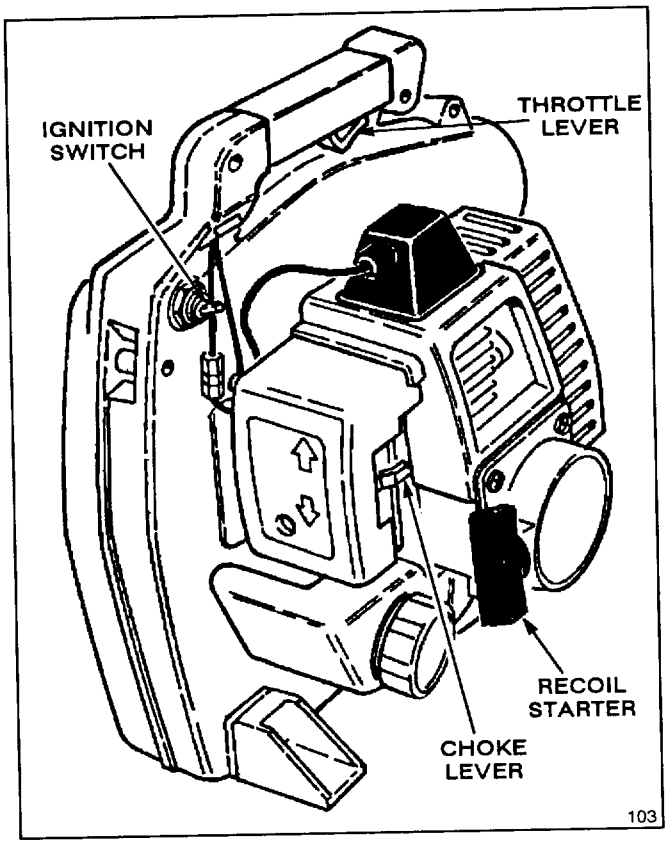


Figure 5

4. Squeeze throttle lever to half position and hold.
5. Pull recoil starter handle out slowly until starter ratchets are engaged, then pull handle with short, sharp strokes until engine starts.

Note: When initially starting blower or after an extended storage period, several pulls may be required to draw fuel from the tank to carburetor.

6. After engine starts, gradually lower choke lever and return throttle lever to idle position.

WARM ENGINE

1. Move ignition switch to "ON" position.
2. Raise choke lever to close completely.
3. Leave throttle lever in idle position.
4. Pull recoil starter handle out slowly until starter ratchets are engaged, then pull handle with short, sharp strokes until engine starts.
5. After engine starts, gradually lower choke lever.

To Stop Engine

1. Release throttle lever and move ignition switch to "STOP".

OPERATING TIPS

DANGER

Always wear safety glasses to protect your eyes. Because rotating fan blades inside of blower housing can sever fingers, always keep at least one straight tube attached to prevent potential contact with blades.

CAUTION

The air stream comes out of the fan head nozzle at extremely high speeds when at high engine speed. Be extremely careful where the air stream is directed to avoid personal injury or property damage.

CAUTION

Always wear safety goggles or other suitable eye protection and long pants and shoes while operating blower. Wear a long sleeve shirt or other similar arm protection to avoid possible contact with hot muffler surface. Ear protection must be worn when operating blower for prolonged periods of time (over 2-1/2 hours).

1. Allow the engine to warm up for a few minutes after initial start to make sure engine is up to proper operating temperature.
2. The engine may be operated at any speed between an idle of 3000-3200 RPM and full throttle speed. The speed of the engine, therefore, dictates the velocity of the air out the nozzle, making the blower a versatile cleaning unit capable of moving debris where only a gentle breeze is needed to move larger objects that can only be moved by a high speed blast.
3. Vary engine RPM by operating the throttle lever (Fig. 5). Idle speed, if desired for blowing leaves from a lawn or flower bed, is achieved by leaving the throttle elver in the idle position.

Medium to high speed, used to clean grass, wet leaves, etc. from walks, patios and drives, is achieved by squeezing the lever midway between the closed and full throttle positions.

High speed, used to move gravel, dirt, snow, bottles or cans from driveways, streets, parking lots or stadiums, is achieved by squeezing the throttle lever to a fully open position.

OPERATING INSTRUCTIONS

4. Get in a normal, comfortable position with both feet firmly positioned before beginning operation. Survey the area before beginning to enable you to plan your procedures. If the area is fairly well enclosed where large amounts of dust may be thrown into the air, it is advisable to wear a face filter mask.

5. Avoid directing the nozzle at walls or other vertical surfaces where debris could ricochet off and be directed at you or could possibly cause damage.

⚠ CAUTION

Never operate blower if air inlet cover or blower housing is cracked or broken. Replace damaged parts before operating blower.

MAINTENANCE

⚠ CAUTION

To prevent personal injury, use extreme caution when an adjustment or maintenance procedure must be performed while the engine is running. Pull wire off spark plug if engine does not have to be running while performing adjustment or maintenance procedures.

SERVICING AIR CLEANER (Fig. 6)

Check and clean the air filter after each use of the blower to make sure that performance and durability of the engine will not be affected.

1. Remove screw securing air cleaner cover to air cleaner body. Remove cover.

2. Carefully remove foam filter from air cleaner cover.

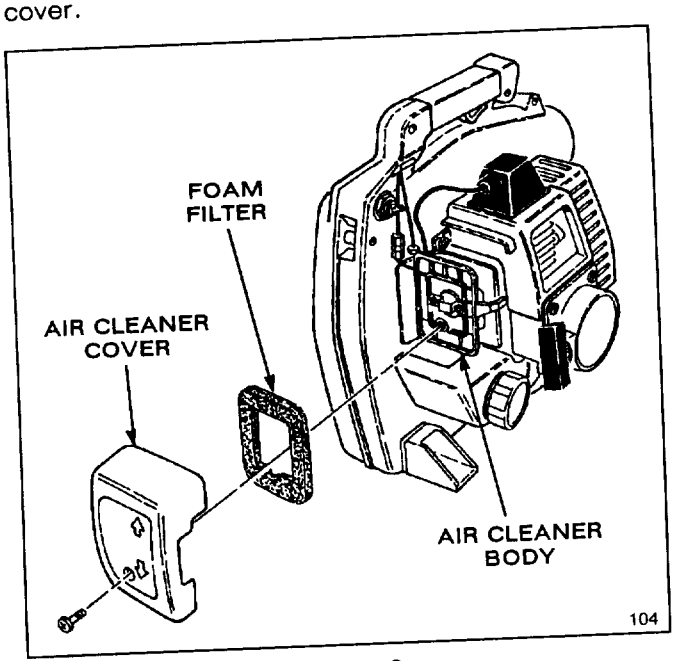


Figure 6

3. Wash foam filter in a soap and water solution and thoroughly dry. If filter shown any sign of damage, replace it.

4. Saturate the filter with SAE 30 oil: then squeeze it to distribute the oil evenly and to remove excess oil. A damp filter is desirable.

5. Reinstall filter and cover and secure with mounting screw.

ADJUSTING CARBURETOR (Fig. 7)

The carburetor has been adjusted at the factory, but an adjustment may be required to compensate for difference in fuel, temperature, and altitude.

1. Fuel Adjusting Screw—Screw is set in the middle of five notches. If adjustment is too rich, turn screw to the right. If adjustment is too lean, turn screw to the left (Fig. 7). Adjust while engine is at low speed.

2. Idle Speed Adjusting Screw—Adjust screw to attain idle speed of 3000–3200 RPM (Fig. 7).

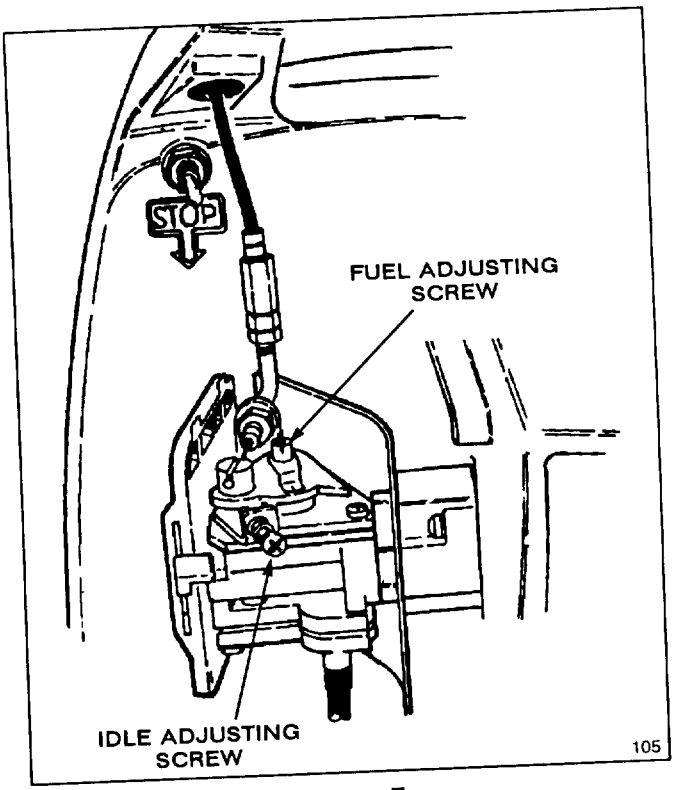


Figure 7

MAINTENANCE

SERVICING MUFFLER (Fig. 8, 9, 10)

If engine speed or power decreases drastically, inspect and clean muffler and exhaust port of carbon deposits to relieve back pressure.

1. Remove two (2) screws securing muffler cover to blower.

2. Remove two (2) bolts securing muffler and gasket to blower.

3. Clean any carbon buildup from inside of muffler.

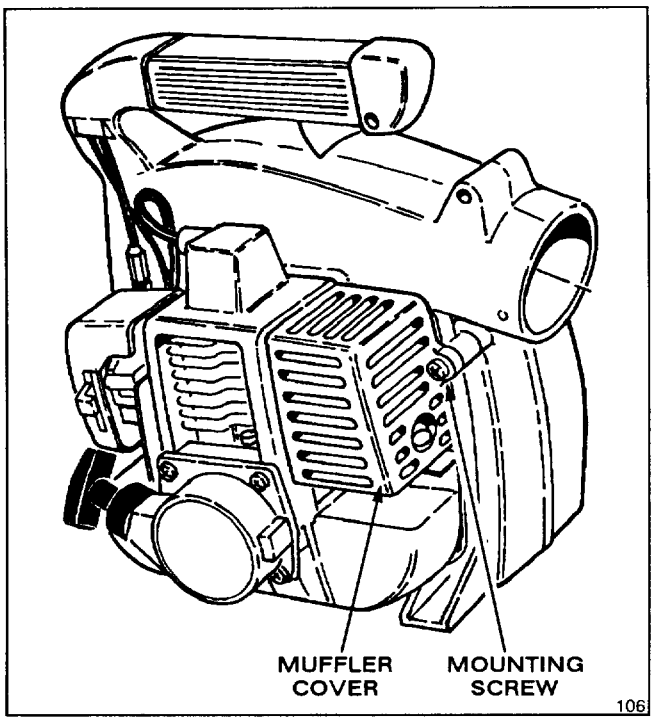


Figure 8

4. Rotate the engine crankshaft until the piston totally covers the exhaust port (Fig. 9).

IMPORTANT: Use extreme care when cleaning exhaust port. Stay clear of the piston so it will not be damaged. Piston damage can cause early engine failure.

5. Make sure the muffler gasket is still useable (replace, if necessary) and install muffler and muffler cover to blower. Tighten all fasteners securely.

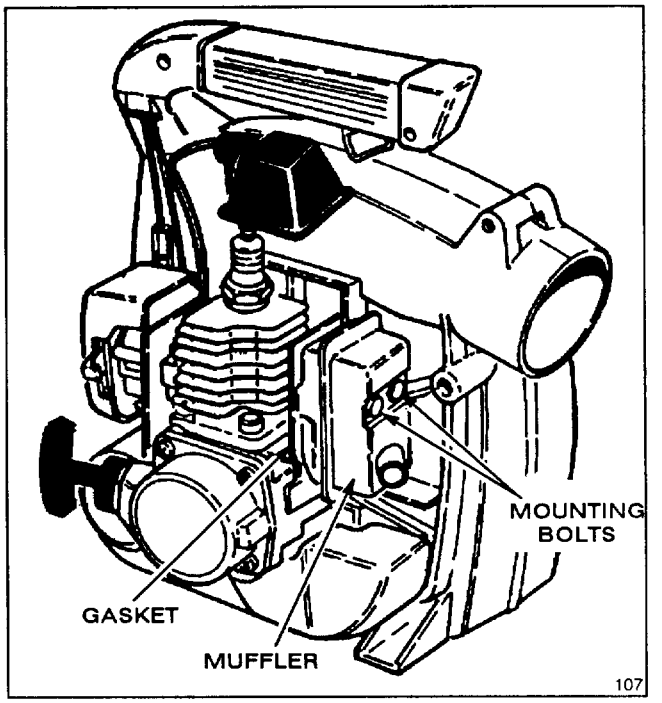


Figure 9

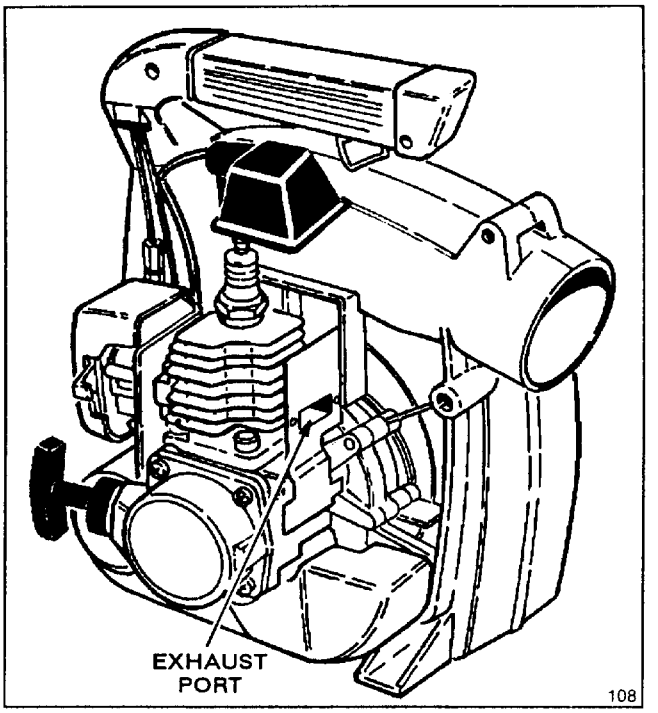


Figure 10

REPLACING SPARK PLUG (Fig. 11)

Use an NGK BM-7A spark plug or equivalent. Correct air gap is .024-.028" (0.6 - 0.7 mm). Remove plug after every 25 operating hours and check its condition.

1. Stop engine and pull wire off spark plug.

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 .024" - .028" (0.6 - 0.7 mm). Install correctly gapped spark plug and gasket seal. Tighten plug firmly to 9 ft-lb (1.2 Kg-m).

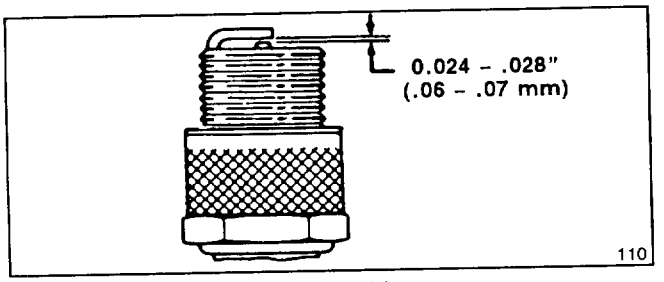


Figure 11

COOLING SYSTEM SERVICE

To avoid overheating and possible engine damage, visually inspect the cooling air inlet for debris obstructing the air passages, muffler, and also the cooling fins around the cylinder after each use. Remove any contamination by using a flat piece of wood shaped so it will pass between the fins.

REPLACING FUEL FILTER (Fig. 12)

After every 25 hours of operation, remove and replace fuel filter.

1. Drain gasoline from fuel tank. Start engine and let it run at idle speed until it stops and all fuel is expended.

2. Remove fuel tank cap. Invert blower and shake until end of suction hose is accessible or passes through fuel tank opening.

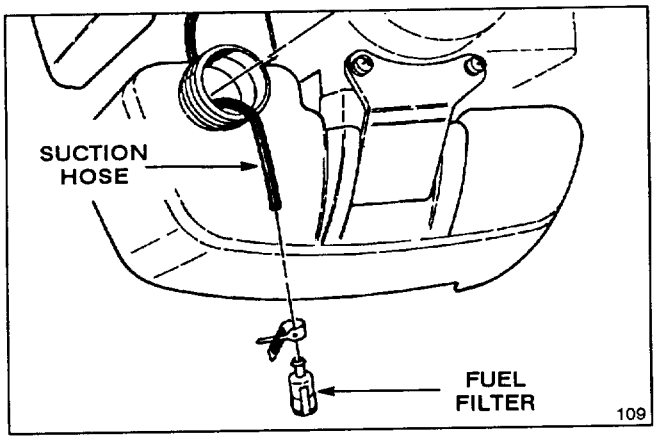


Figure 12

Alternate Method: Insert a clean wire with a hooked end into tank, hook suction hose above weight, and carefully pull hose out fuel tank opening.

3. Replace fuel filter and reinstall suction hose into tank.

4. Reinstall fuel tank cap.

ADJUSTING THROTTLE CONTROL (Fig. 13)

1. Remove screw securing air cleaner cover to air cleaner body. Remove cover and filter.

2. Push choke lever down to open carburetor, exposing throttle valve.

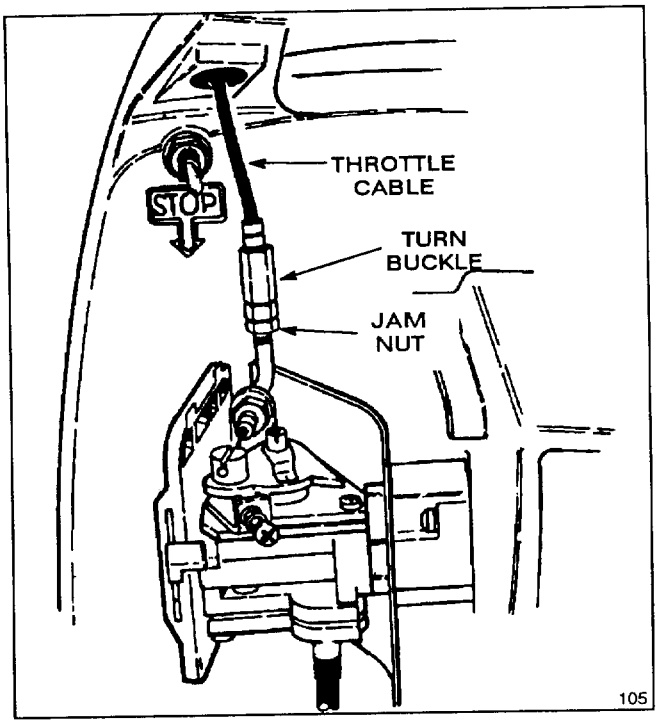


Figure 13

3. Squeeze throttle lever and note travel of throttle valve in carburetor opening. Throttle valve should travel to top of carburetor opening when lever is in full throttle position.

4. To adjust, loosen jam nut on throttle cable and rotate turnbuckle to increase or decrease travel of throttle valve.

5. Tighten jam nut and check adjustment.

6. Reinstall air cleaner components to blower.

7. Recheck idle speed and adjust if necessary. Refer to Adjusting Carburetor.

MAINTENANCE

PREPARING BLOWER FOR STORAGE

1. Drain gasoline from fuel tank. Pull recoil starter handle a number of times to purge fuel remaining from carburetor.

2. Remove dirt and grime from external parts of blower housing and engine. Also clean the cooling system: refer to Cooling System Service.

3. Clean carbon from internal parts of engine: refer to Servicing Muffler.

4. Pull wire off spark plug, clean area around plug so foreign matter cannot fall into cylinder when plug is removed. Remove plug from cylinder head and pour one teaspoon (5 ml) of 2 cycle oil into spark plug hole. Pull recoil starter handle slowly to distribute oil on inside of cylinder. Reinstall spark plug and tighten it to 9 ft-lbs (1.2 Kg-m). If torque wrench is not used, tighten plug firmly. DO NOT REINSTALL WIRE ON SPARK PLUG.

5. Check fuel filter; refer to Fuel Filter Service.

6. Clean the air cleaner; refer to Air Cleaner Service.

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

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 an Authorized Toro Service Dealer. The spray paint dries in minutes to a glossy, factory finish.

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

TROUBLESHOOTING CHART

Trouble	Possible Cause	Remedy
Engine Won't Start or Hard Starting	A. No Fuel	A. Fill fuel tank with gasoline, oil mix: refer to Preparation Before Starting.
	B. Stale Fuel	B. Drain fuel tank. Fill with proper fuel.
	C. Carburetor Maladjusted	C. Adjust: refer to Adjusting Carburetor.
	D. Faulty Spark Plug	D. Replace spark plug.
	E. Improper Starting	E. Refer to Starting and Stopping Procedures.
	F. Clogged Air Cleaner	F. Refer to Air Cleaner Service.
	G. Fuel Filter Plugged	G. Replace fuel filter.
	H. Carbon Buildup in Exhaust System	H. Clean exhaust system; refer to Servicing Muffler.
Engine RPM Too Slow (Below 3000 RPM)	A. Wrong Fuel Mix	A. Drain fuel tank. Fill with proper gasoline, oil mix. Refer to Before Operation.
	B. Clogged Air Cleaner	B. Refer to Air Cleaner Service.
	C. Engine Overheating	C. Refer to Cooling System Service.
	D. Carbon Buildup in Exhaust System	D. Clean exhaust system; refer to Servicing Muffler.
	E. Throttle Cable Maladjusted	E. Refer to Adjusting Throttle Control.
Engine Runs Erratically	A. Carburetor Maladjusted	A. Adjust; refer to Adjusting Carburetor.
	B. Fuel Filter Plugged	B. Replace fuel filter.
Engine Stops Running	A. Out of Fuel	A. Fill fuel tank.
	B. Fuel Filter Plugged	B. Replace fuel filter.
Reduction of Air Flow Output at Full Throttle	A. Air Inlet Cover Clogged with Debris	A. Clean cover.
	B. Engine RPM Too Slow	B. See above.

PRODUCT IDENTIFICATION

A model number and a serial number decal is located on blower housing. 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.

The Toro Promise

A Two Year Limited Warranty
On All
Gasoline Powered Consumer Products

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

Residential Product	2 Years
Residential Products Used Commercially	45 Days
Straight Shaft Trimmers, 3 H.P. Edger, Back Pack Blowers, 5 H.P. Lawn Vac, 5 H.P. Blower Used Commercially	90 Days

The cost of parts and labor are included, but the customer pays the transportation costs. Just return any residential product to an Authorized TORO Service Dealer or TORO Distributor.

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

1. Contact any Authorized TORO Service Dealer, TORO Master Service Dealer, or TORO Distributor (the Yellow Pages of your telephone directory is a good reference source).

2. He will either instruct you to return the product to him or recommend another Authorized TORO Service outlet which might be more convenient.

3. Bring the product along with your original sales slip, or other evidence of purchase date, to the service dealer.

4. The servicing dealer will inspect the unit, advise you whether the product is defective and, if so, make all repairs necessary to correct the defect without extra charge to you.

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

Write: TORO Customer Service Dept.
8111 Lyndale Avenue South
Minneapolis, MN 55420

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

THERE IS NO OTHER EXPRESS WARRANTY EXCEPT FOR THE TORO STARTING GUARANTEE ON GTS ENGINES. ALL IMPLIED WARRANTIES OF MERCHANTIBILITY 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 Service Dealer using Toro approved replacement parts.

Repairs or attempted repairs by anyone other than an Authorized TORO Service 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.


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