

14" MODEL NO. 38100 - 0500000 & UP

OPERATOR'S MANUAL

TORO S140 SNOWTHROWER



FOREWORD

The S140 is an outstanding product for throwing snow. It has advanced concepts in engineering, design and safety; and if maintained properly, the S140 will be reliable.

Since the S140 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. Preparation 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 snowthrower. "Note" identifies general information worthy of special attention.

If help — concerning the snowthrower — 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.

TABLE OF CONTENTS

Safety Instructions																				Page 3-4
Safety Decals	3	•	i		•	•	•	•	•	•	•				•	•	•	•	•	4
Loose Parts						i										*	•	•	•	4
Setting Up Instruction					•				•		٠					*			•	-
Install Vane Contro								*	•	•	•	•	•	*	•	•	•	2		5
Install Upper Handl								•	•		•	•	•		•	•	•	•	•	5
Controls											•	•	•	•		•	•	•	•	5
Preparation Before Sta											٠	•		•	•		٠	•	•	100
Mix Gasoline and O	il (11	ııy	*	•	•	•	•	18	•		•	•	•	•	•	•	•	•	•	6-7
Fill Fuel Tank	"	•	•	•	•	•	•	•	•	•		•	•	53	*	*	٠	•	*	6
Fill Fuel Tank .	in	+				•	٠	•	•		•		•	•	•	66		*	٠	
Starting and Stopping	1115	u	CHI	2115)		•	•	•				•							8
Operating Instructions	,				¥		×													8
Adjusting Vanes																				8
Operating Tips .																				8
Maintenance				*												40				9-11
Lubrication																				9
Chain Tension Adju	stn	nen	t																	9
Skid Adjustment																				10
Replacing Spark Plu	p									33	100			120		2056 2025	50	- 01 - 20	100	10
Adjusting Carbureto	or											6					58		78 00	10
Preparing Snowthro	we	r fo	r S	tor	aa	е											-	•	•	11
Identification and Ord					-					100								Rac	·	Page
그래요 그 사람이 있는데 보고 보고 아이들이 되었다면 그 보면 있다면 어떻게 되었다면 하나요?		-					**													Page
			-	•			•	•		•		•			•	•	L.	Jac		age

SAFETY INSTRUCTIONS



This safety alert symbol means CAUTION — PER-SONAL SAFETY IN-STRUCTION. Read the instruction because it has to do with safety. Failure to comply with the instruc-

tion may result in personal injury.

The snowthrower 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.

BEFORE OPERATING

- 1. Never allow children to operate the snowthrower. Adults should operate the snowthrower only after READING THIS MANUAL and receiving proper 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. Wear adequate winter clothing and footwear that will improve footing on slippery surfaces.
- 5. Since fuel is highly flammable, handle it with care. Fill fuel tank with mixture of gasoline and oil before trying to start the engine.
 - A. Use an approved fuel container for storing the gasoline/oil mixture.
 - 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.
- 6. Thoroughly inspect the area where snowthrower will be used. Remove all door mats, sleds, boards, wires, and any other foreign objects.
- 7. Keep all shields and safety devices in place. If a shield or safety device is defective, make all repairs before operating snowthrower. Also tighten loose nuts, bolts, and screws.
- 8. Start engine and let it warm up outdoors for about two minutes to adjust to outdoor temperature before clearing snow.

WHILE OPERATING

- 9. Never operate snowthrower without good visibility or light. Always maintain secure footing and keep a firm grip on the handle when clearing snow: walk never run. DO NOT USE SNOWTHROWER ON A ROOF.
- 10. Do not run engine indoors.
- 11. 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 snowthrower. STAY CLEAR OF DISCHARGE OPENING AT ALL TIMES.
- 12. Do not attempt to make adjustments while engine is running.
- 13. Use extreme caution when clearing snow from a walk, road or a gravel drive. Push down on handle to raise skid and impeller blades so rocks are not picked up and thrown. Stay alert for hidden hazards and traffic on roads.
- 14. Never direct discharge or operate snowthrower near bystanders, glass enclosures, automobiles and trucks, window wells, or a drop-off without proper adjustment of the snow discharge angle. Keep children and pets away.
- 15. Never direct snow discharge at bystanders, and do not allow anyone in front of the snowthrower.
- 16. Never clear snow from steep slopes. Exercise extreme caution when changing direction on slopes.
- 17. Do not overload the snowthrower by clearing snow at too fast a rate.
- 18. If a solid object is hit or if the snowthrower vibrates abnormally, turn key to OFF and wait for engine and all moving parts to stop. Next, check snowthrower for possible damage, an obstruction, or loose parts. Repair damage before starting and operating the snowthrower.
- 19. Before leaving the operator's position behind handle shut engine off and wait for all moving parts to stop. Remove key from switch if snowthrower will be left unattended.
- 20. Before adjusting, cleaning, repairing and inspecting the snowthrower, and before unclogging the discharge guide, shut engine off and wait for all moving parts to stop.
- 21. Let engine run for a few minutes after clearing snow so moving parts do not freeze.

SAFETY INSTRUCTIONS

MAINTENANCE AND STORAGE

23. Never leave fuel in the snowthrower fuel tank when snowthrower is stored in a building where there is flame or spark present. Allow engine to cool before storing. Never store snowthrower in the house or basement, as gasoline and fumes are highly flammable, explosive and dangerous if inhaled.

24. Before performing any maintenance or servicing the snowthrower, turn key to OFF and wait for engine and all moving parts to stop. Remove key from switch.

25. Reinstall fuel cap when top cover is removed for maintenance procedures. Perform maintenance and use storage instructions described in this manual.

26. Keep all nuts, bolts, and screws tight to assure snowthrower is in safe working condition. Be sure to check the impeller and engine mounting bolts.

27. 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 impeller housing and just beneath the control panel. Replace any decal that is damaged.



 KEEP HANDS OUT OF DIS-CHARGE GUIDE AND KEEP CLEAR OF IMPELLER WHILE ENGINE IS RUNNING.

• STOP ENGINE AND WAIT FOR ALL MOVEMENT TO STOP BEFORE SERVICING MACHINE. • READ OPERATOR'S MANUAL FOR COMPLETE SAFETY AND OPERATING INSTRUCTIONS. OPERATOR'S MANUALS ARE AVAILABLE FROM THE TORO COMPANY, MINNEAPOLIS, MINN. 55420. SPECIFY MODEL AND SERIAL NUMBERS.

COLD START TURN KEY TO "ON." PULL CHOKE. PUSH PRIMER 1 TO 4 TIMES, DEPENDING ON TEMPERATURE. PULL STARTER HANDLE. WHEN ENGINE STARTS, PUSH CHOKE IN. HOT START DO NOT PRIME.

FUEL MIX USE CLEAN CONTAINER. MIX ¼ PINT (4 oz.) TWO-CYCLE OIL PER GALLON (32:1 RATIO) OF GASOLINE. DO NOT MIX OIL AND GAS IN GAS TANK.

TO STOP TURN KEY TO "OFF."

LOOSE PARTS

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

Description	Quantity	Where Used
Upper Handle Assembly	1	
Vane Adjusting Rod Assembly	1	
Special Washer - 1/4	2	Vane Control Bracket
Machine Screw 1/4-20 x 1-1/2	4	Mount Upper Handle
Capnut 1/4	1	Vane Control Bracket
Key	2	Ignition Switch
Operator's Manual	1	

SETTING UP INSTRUCTIONS

INSTALL VANE CONTROL

1. Insert flattened end of vane control into slot in vane adjustment bracket (Fig. 1).

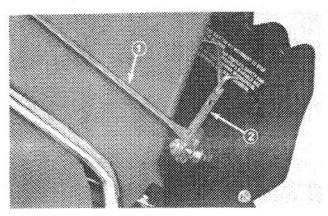


Figure 1

- Vane control
- Vane adjustment bracket
- 2. Mount vane control to lower handle with eyebolt, two curved washers and a capnut (Fig. 2). Note position of washers.

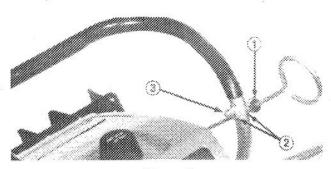


Figure 2

- 1. Eyebolt
- 3. Capnut 2. Curved washer

INSTALL UPPER HANDLE

- 1. Slide upper handle into mounting bracket secured to lower handle. Line up mounting holes in bracket and handle (Fig. 3).
- 2. Secure both sides of handle in place with four machine screws. Tighten screws securely (Fig. 3).

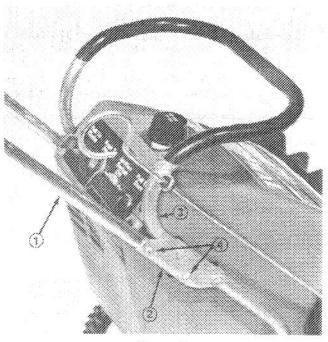


Figure 3

- Upper handle 2. Mounting bracket
- 3. Lower handle
- 4. Machine screw

Note: Manually turn the impeller blades to check for 1/16 inch clearance between the edge of each blade and the leading edge of the skid. Also, check for clearance between blade tips and housing.

CONTROLS

- 1. Primer (Fig. 4) Push primer to pump a small amount of fuel into the carburetor which allows the engine to be started easier in cold temperatures. DO NOT USE PRIMER WHEN ENGINE IS HOT.
- 2. Choke (Fig. 4) Pull choke out to start engine. Because air intake into carburetor is restricted, engine receives a rich fuel mixture for easy starting.
- 3. Ignition Switch (Fig. 4) Switch has ON and OFF position. Rotate key to ON to open the switch; then engine can be started by pulling recoil starter.
- 4. Recoil Starter (Fig. 4) Pull recoil starter to start the engine.

5. Vane Direction Control (Fig. 4) - Rotate vane control to direct discharge of snow to either side or straight forward.

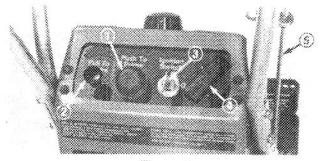


Figure 4

- Primer
- Choke
- 3. Ignition switch
- 4. Recoil starter
- 5. Vane direction control

PREPARATION BEFORE STARTING



CAUTION

Gasoline is flammable and caution must be used when handling or storing it. Do not fill fuel tank while snowthrower is running, hot, or when snowthrower is in an enclosed area. Keep away from open flame, electrical spark, and DO NOT SMOKE while mixing fuel or filling the fuel tank. Fill fuel tank to within 1/4 - 1/2 inch (6.3 - 12.7 mm) from top of tank to provide space for expansion of fuel. Never fill fuel tank to top of filler neck. Always fill fuel tank outdoors and use a funnel or spout to prevent spilling. Make sure to wipe up any spilled fuel before starting the engine.

Store gasoline in a clean, approved container, and keep the cap in place on the container. Keep gasoline in a cool, well ventilated place; never in the house. Never buy more than a 30 day supply of gasoline to assure volatility. Gasoline is intended to be used as a fuel for internal combustion engines; therefore, do not use gasoline for any other purpose. Since many children like the smell of gasoline, keep it out of their reach because the fumes are dangerous to inhale, as well as being explosive.

MIX GASOLINE AND OIL

Tools Required: Gas Can, Funnel, and Clean Rag

The two cycle engine used in the S140 requires a mixture of <u>GASOLINE</u> and <u>OIL</u> for lubrication of bearings and other moving parts. The correct fuel mixture ratio is 32:1.

Note: Gasoline and oil must be premixed in a clean gasoline container. Never mix gasoline and oil indoors or in the snowthrower fuel tank. Always use fresh gasoline.

Store the oil indoors, so it will be at room temperature (above 50° F $[10^{\circ}$ C]) and will more readily mix with the gasoline.

Note: The Toro Company recommends the use of TORO 2 cycle engine oil for optimum performance and engine longevity. This oil has been specially formulated for use in the S-140 snowthrower and may be obtained from your local TORO dealer.



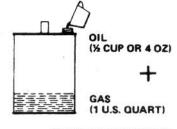
CAUTION

Do not store the oil near open flame or in an extremely warm environment as the oil is flammable. IMPORTANT: When mixing fuel be sure to use the correct amounts of oil and gasoline depending on the units of measurement being used: U.S. Gallons, Imperial Gallons or Liters. Using an incorrect fuel mixture may result in damage to your snowthrower.

U.S. GALLONS

- 1. Add 1 U.S. quart of leaded or unleaded REGULAR gasoline to a gasoline container (Fig. 5).
- 2. Pour 1/2 cup -4 oz. of two cycle engine oil into the gasoline container (Fig. 5). DO NOT use multi-viscosity oils.
- 3. Shake the gasoline container vigorously so oil mixes with gasoline (Fig. 5). Remember to install cap on gasoline container before shaking.
- 4. Add an additional 3 U.S. quarts of gasoline to the premixed gasoline (Fig. 5). Fuel mixture is now ready to use in your \$140 Snowthrower.

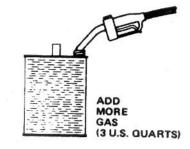
U.S. GALLONS



GASOLINE CONTAINER

32:1 RATIO MIXTURE



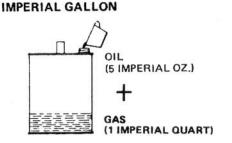


GASOLINE CONTAINER

PREPARATION BEFORE STARTING

IMPERIAL GALLONS

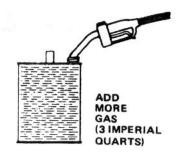
- 1. Add 1 Imperial quart of unleaded or leaded REGULAR gasoline to a gasoline container (Fig. 5B).
- 2. Pour 5 Imperial oz. of two cycle engine oil into the gasoline container (Fig. 5B). DO NOT use multi-viscosity oils.
- 3. Shake the gasoline container vigorously so oil mixes with gasoline (Fig. 5B). Remember to install cap on gasoline container before shaking.
- 4. Add an additional 3 Imperial quarts of gasoline to the gasoline container (Fig. 5B).



GASOLINE CONTAINER



Figure 5B

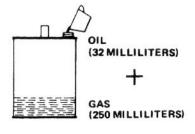


GASOLINE CONTAINER

LITERS

- 1. Add 250 milliliters of unleaded or leaded REGULAR gasoline to a gasoline container (Fig. 5C).
- 2. Pour 32 milliliters of two cycle engine oil into the gasoline container (Fig. 5C). DO NOT use multi-viscosity oils.
- 3. Shake the gasoline container vigorously so oil mixes with gasoline (Fig. 5C). Remember to install cap on gasoline container before shaking.
- 4. Add an additional 750 milliliters of gasoline to the gasoline container (Fig. 5C).

LITERS







GASOLINE CONTAINER

Figure 5C

FILL FUEL TANK

Tools Required: Funnel and Clean Rag

IMPORTANT: Do not fill fuel tank with gasoline that does not have oil mixed in it. Do not use gasoline additives because the engine could be damaged.

 Mix gasoline and oil; refer to Mix Gasoline and Oil.

- 2. Clean area around snowthrower fuel tank cap so foreign matter does not get into fuel tank. Remove cap from fuel tank.
- 3. Shake fuel mixture in gasoline container; then fill snowthrower fuel tank to within 1/4 1/2 inch (6.3 12.7 mm) from the top of the tank, not the filler neck.

Note: When filling fuel tank with gasoline/oil mixture that has been sitting for some time, shake the mixture first because the oil may have settled.

4. Install cap securely on snowthrower fuel tank.

STARTING AND STOPPING INSTRUCTIONS

TO START ENGINE:

- 1. Check the impeller and blades. There must not be an obstruction: impeller must be free to rotate.
- 2. Pull choke out (Fig. 6).

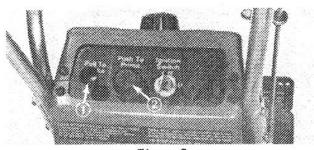


Figure 6
1. Choke 2. Primer

3. Put thumb on center of primer so hole is covered and sealed (Fig. 6). Depending upon temperature at which the machine is stored, push the primer one to four times. For temperatures above $+20^{\circ}$ F (-7° C) use one or two primes; below $+20^{\circ}$ F (-7° C), use three or four primes; for extremely cold temperatures, below -10° F (-23° C) use five to six primes.

Note: If engine is hot, do not use primer. Only use primer when engine is cold. However, pull choke out to start a hot engine.

- 4. Turn ignition key to ON (Fig. 6).
- 5. To start S140 Recoil Start, put one hand on the lower handle to steady the snowthrower. Next, grasp recoil starter handle (Fig. 6) and pull vigorously to start engine. If engine does not start after four pulls, prime engine again as described and pull recoil starter handle four more times. Repeat this procedure until engine starts.
- 6. When engine starts push choke in.

If engine does not start, starts hard or operates erratically a carburetor adjustment may be required: refer to Adjusting Carburetor, page 10. If engine will not start or runs erratically after adjustment, contact your local Authorized Toro Service Dealer.

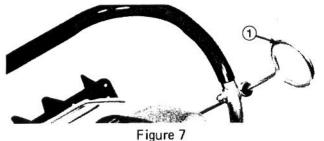
TO STOP ENGINE:

- 1. Turn ignition key to OFF (Fig. 6).
- 2. Wait for all moving parts to stop before leaving the operator's position behind handles.

OPERATING INSTRUCTIONS

ADJUSTING VANES

Rotate vane direction control (Fig. 7) to direct discharge of snow to either side or to the front. After clearing snow, rotate vane control so vanes are in vertical position, not to either side. If vanes are allowed to remain in a side position, the vanes may distort and take a somewhat permanent set. The set affects the normal and efficient discharge of snow.



1. Vane control

OPERATING TIPS

- 1. Use only a 32:1 gasoline/oil mixture ratio for running the engine.
- 2. The snowthrower is designed to operate at temperatures not to exceed +45° F (7° C). When unit is operated in temperatures above +45° F (7° C), engine may overheat.

- 3. Thoroughly inspect area where snowthrower will be used. Remove door mats, sleds, toys, boards, wires, and anything else that may have been covered by the snow. While clearing snow, objects such as the preceding ones could be picked up and thrown by the impeller blades.
- 4. For most efficient snow throwing, keep vanes vertical, discharge snow downwind, and overlap each swath slightly.
- 5. When clearing snow from steps or cutting through deep drifts, hold snowthrower by the upper and lower handles and use a sweeping side to side motion.
- 6. The snowthrower will self propel itself when it is tilted forward so impeller blades contact the ground. However, the depth and weight of the snow govern the forward speed of the snowthrower.
- 7. Before storing the snowthrower, let engine run for a few minutes so ice does not form on moving parts. Wipe ice and snow off control panel and top of upper shroud so control linkages do not freeze.
- 8. Move vanes to vertical position when storing snowthrower. Hang snowthrower by upper handle for convenient storage.
- Keep the skids and drive chain properly adjusted.

MAINTENANCE

LUBRICATION

Your S140 is shipped from the factory properly lubricated for normal plowing conditions. No lubrication should be required during initial use of the machine except for the oil that must be mixed with gasoline.

All the bearings used in the S140 are prelubricated for life at the factory and require no additional lubrication.

A few drops of light machine oil placed on the drive chain once a year will adequately lubricate the chain and sprockets.

CHAIN TENSION ADJUSTMENT

If chain tension is too loose, the chain will drag on the housing, causing excessive noise and wear. If the chain is too tight, the drive assembly may bind, damage or break parts. When properly adjusted, the chain should be snug with no more than 1/8 inch deflection or slack. If an adjustment is necessary, proceed as follows:

1. Remove chain guard from left-hand side of unit by removing three (3) self-tapping screws (Fig. 8).

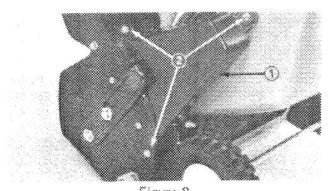


Figure 8

1. Chain guard 2. Remove these screws

2. Remove upper and lower shrouds by removing fuel cap and mounting screws on front panel. Lift covers off and reinstall fuel cap. Disconnect spark plug lead wire.

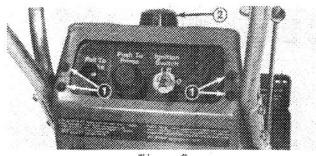


Figure 9
1. Panel screws 2. Fuel cap

3. Loosen four (4) engine mounting nuts on the left-hand side of engine (Fig. 10).

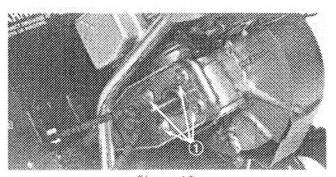


Figure 10
1. Mounting nuts

4. Loosen engine mounting bolt on right-hand side of unit (Fig. 11).

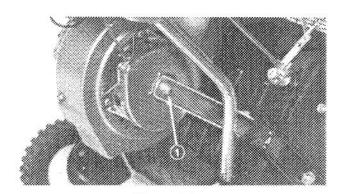


Figure 11
1. Loosen engine mounting bolt

5. Pull engine back until chain is snug. Handtighten four mounting nuts to hold engine in place and to maintain proper chain tension (Fig. 12). Then tighten the nuts to 170-220 in./lbs using tightening sequence shown in illustration below. Tighten bolt on right side of engine.

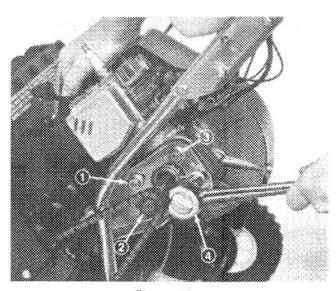


Figure 12

MAINTENANCE

IMPORTANT: It is absolutely necessary that this tightening sequence be used or the crankshaft will break. Do not over tighten the four nuts because the engine casting will break. Never attempt to install the chain on the engine sprocket by rolling chain onto the sprocket when engine is mounted firmly in place.

 Replace lower shroud, chain guard, spark plug lead wire and upper shroud, making sure self tapping screws are secure. Insure front panel is snapped into grooves in upper and lower shrouds before tightenin screws.

SKID ADJUSTMENT

Check for clearance of approximately 1/16" to 1/8" between the edges of both impeller blades and forward edge of skid. To adjust, proceed as follows:

- 1. Loosen front skid adjusting nut on both sides of unit (Fig. 13).
- Adjust skid to proper position and fasten skid adjusting nut securely.
- 3. Repeat adjustment on opposite side of unit.

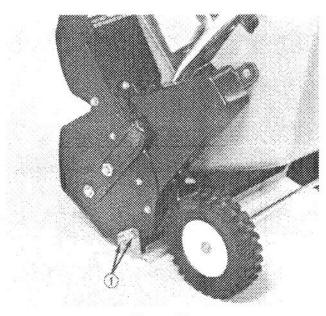


Figure 13
1. Skid adjusting nuts

Note: Adjust both sides equally. A parallel between impeller blade and ground should be maintained.

REPLACING SPARK PLUG

Use a Champion RJ18Y, or equivalent, for replacement. Check and reset the gap at .035 inch every 25 hours of operation. Apply light coating

of graphite grease on threads before replacing plug. If condition of plug is doubtful, install a new plug.

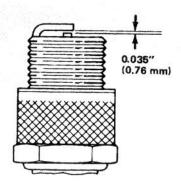


Figure 14

ADJUSTING CARBURETOR

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

IMPORTANT: Do not close power adjusting screw too tight because the screw and seat will likely be damaged.

1. Power Adjusting Screw (Fig. 15) — Close screw by gently rotating it clockwise until a slight seating resistance is felt. Next, rotate power adjusting screw 7/8 of a turn counterclockwise.

IMPORTANT: Do not close idle adjusting screw too tight because the screw and seat will likely be damaged.

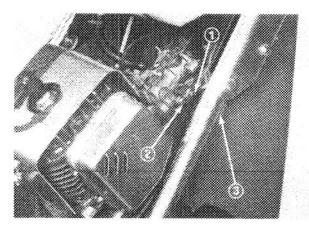


Figure 15

- 1. Power adjusting screw
- 2. Idle adjusting screw
- 3. Access hole

2. Idle Adjusting Screw (Fig. 15) — Close screw by gently rotating it clockwise until a slight seating resistance is felt. Next, rotate idle adjusting screw 1 full turn — 360° — counterclockwise.

MAINTENANCE

Note: The setting for the power adjusting screw is approximate; however, this setting will allow engine to be started so carburetor can be fine tuned — steps 3-4.

3. Start the engine and let it warm up for approximately 3 - 5 minutes. Do not adjust carburetor when engine is cold. Be sure to perform carburetor adjustments while at a temperature that will be the average outdoor temperature at which the machine will be used.



CAUTION

Engine must be running so final adjustment of the carburetor can be performed. Stay away from rotor because it turns while engine is running. To guard against possible personal injury, keep hands, feet, and face away from concealed, moving, or rotating parts.

4. Power adjusting screw can be fine tuned only while engine is under load; that is, actually throwing snow. If engine does not produce enough power while throwing snow, cease snow throwing operation and rotate power adjusting screw counterclockwise — out — 1/8 turn at a time until enough power is produced. Repeat "loading" by throwing snow to confirm the adjustment.

Note: If engine smokes significantly, the carburetor setting is too rich. To correct this condition, rotate power adjusting screw clockwise.

PREPARING SNOWTHROWER FOR STORAGE

- 1. Remove cap from snowthrower fuel tank and tip snowthrower upside down so fuel drains into a container. After fuel is drained, install cap on fuel tank. Wipe up any fuel that may have spilled.
- 2. Start the engine and let engine run until it stops because there is no fuel. When engine sput-



CAUTION

Because gasoline/oil mixture in snowthrower fuel tank is explosive, the fuel mixture must be drained outdoors, away from fire or flame. Do not smoke while draining gasoline. If fuel mixture explodes, personal injury may result.

ters, pull choke out so fuel in carburetor is expended.

Note: After fuel is drained from fuel tank, there may not be enough fuel in the fuel system to start the engine. Nevertheless, fuel must be expended to prevent gum-like varnish deposits from forming in carburetor, fuel line, and fuel tank. Such deposits, if allowed to form, will cause starting problems next snow season. Therefore, if engine will not start, pull recoil starter handle 5 - 10 times to expend all fuel in the system.

- 3. Remove spark plug from cylinder head: refer to Replacing Spark Plug, page 10. Next, pour two teaspoons of engine oil into the spark plug hole in the cylinder head. Pull recoil starter slowly to distribute oil on inside of cylinder. Reinstall spark plug in cylinder head and tighten it to 15 ft-lb.
- 4. Clean impeller, impeller housing, and exterior of snowthrower.
- 5. Remove chain guard and oil chain and sprockets with a few drops of light machine oil. Wipe up excess and replace guard.
- Tighten all screws and nuts. If any part is damaged, repair or replace it.
- 7. Store snowthrower in a clean, dry place, and cover it to give protection. Never store snowthrower in the house or basement.

IDENTIFICATION AND ORDERING

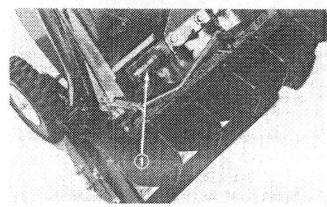
MODEL AND SERIAL NUMBERS

The S140 has two identification numbers: a model number and a serial number. The two numbers are stamped on a decal which is located on the right side of the square tubing of the main frame. In any correspondence concerning the S140 supply model and serial numbers to assure that correct information and replacement parts are obtained.

To order replacement parts from an Authorized TORO Service Dealer, supply the following information.

- 1. Model and serial numbers of the S140.
- 2. Part number, description, and quantity of part(s) desired.

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



1. Model & serial number

The Toro Promise

A One Year Limited Warranty

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

> Residential Products Used Commercially . . . 45 Days

The costs 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 is defective and wish to rely on The Toro Promise, the following procedure is recommended:

- Contact any Authorized TORO Service Dealer, TORO Master Service Dealer, or TORO Distributor (the Yellow Pages of your telephone directory is a good reference
- 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 dealer's analysis of the defect or the service performed, you may contact us.

Write:

TORO Customer Service Department 8111 Lyndale Avenue South Minneapolis, Minnesota 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. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE ARE LIMITED TO THE DURATION OF THE EXPRESS WARRANTY.

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

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 mainte-nance. 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 Account 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

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,

Compliance with Radio Interference Regulations Certified. Certifie Conforme au Reglement sur le Broullage Radioelectrique.