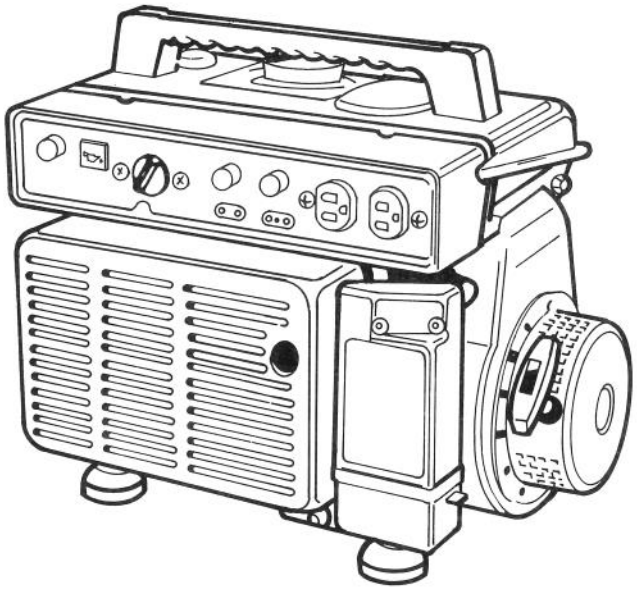
FROM NO. 3312-459 Rev. A

TORO®

MODEL NO. 62008-5000001 : UP

OPERATOR'S MANUAL

T800 GENERATOR



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The Toro Company — 1984
MINNEAPOLIS, MN 55420 – U.S.A.

IMPORTANT NOTICE

Please read this manual and follow its instructions carefully.
To emphasize special information the words WARNING, IMPORTANT and NOTE carry special meanings and should be carefully reviewed.

WARNING:
The personal safety of the operator may be involved. Disregarding this information could result in injury to the operator.
IMPORTANT:
These instructions point out special service procedures or precautions that must be followed to avoid damaging the machine.
NOTE:
Special information to make maintenance easier or important instructions clearer.

All information, illustrations and specifications contained in this manual are based on the latest product information available at the time of publication. Due to improvements or other changes, there may be some discrepancies in this manual. TORO reserves the right to make changes at any time.

WARNING:
- **Read owner's manual before operating this generator.**
- **This generator is intended to be assembled, serviced, and inspected by your authorized TORO Generator Dealer prior to sale. You should depend on him to perform these very important operations, as failure to do so could result, in damage to the generator and injury to the operator.**

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FOREWORD

The TORO ® generator T800 uses a forced air-cooled, 4-cycle engine with side valves. This features quiet operation, excellent durability and stable performance. The revolving field type self-exciting generator produces a AC voltage which is controlled at a constant level by an A.V.R. (automatic voltage regulator).

This manual provides the technical information required for the operating, handling and the routine care of the TORO Generator T800.

We hope that you will use the generator in the correct manner, according to the instructions given in this manual and you will keep the machine at top performance for many years.

The Toro Company
Publications Department

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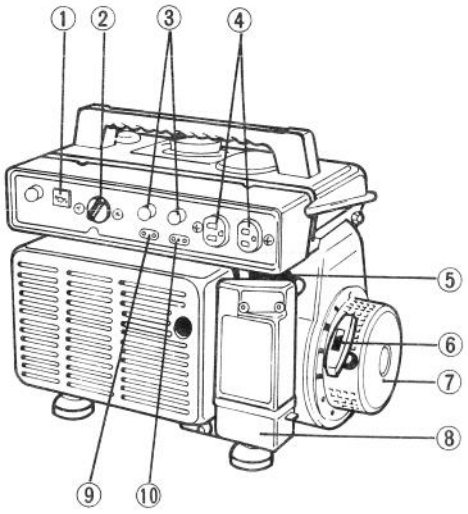
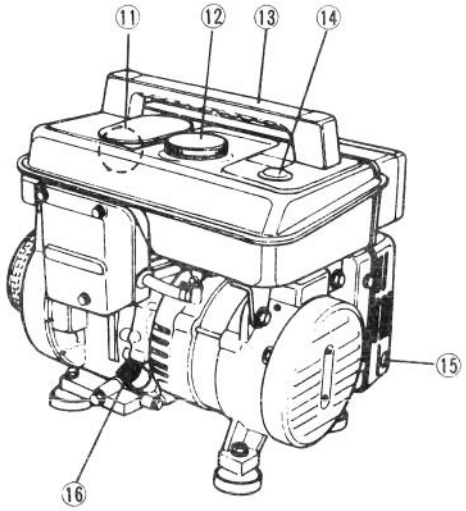
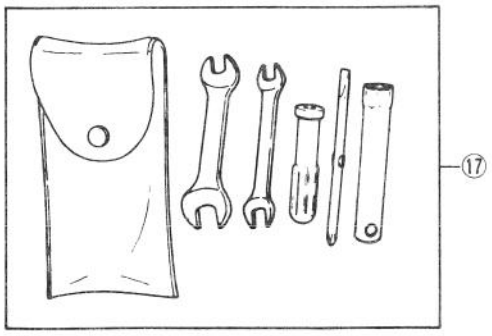
LOCATION OF PARTS



① Oil level alarm lamp
② Engine switch and fuelcock knob
③ DC receptacle
④ AC receptacle
⑤ Choke lever
⑥ Starter grip
⑦ Recoil starter
⑧ Air cleaner
⑨ Circuit breaker (DC)
⑩ Circuit breaker (AC)



⑪ Spark plug
⑫ Tank cap
⑬ Carrying handle
⑭ Fuel gauge
⑮ Exhaust hole
⑯ Oil cap

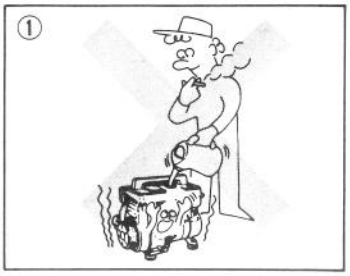


⑰ Tool kit

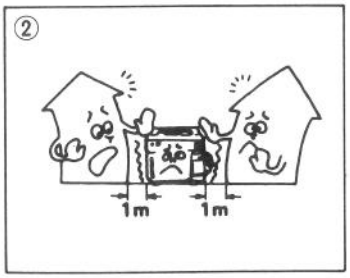
PRECAUTIONS

WARNINGS:

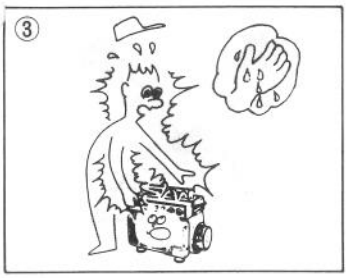
① To avoid fire, never use the generator near spark, flame or other heat source.



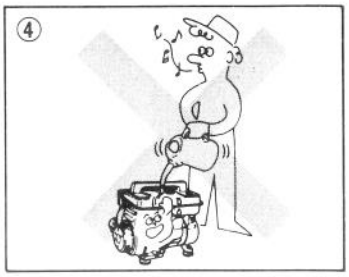
② To prevent fire, keep the generator at least 3 ft (1 m) from any combustible materials.



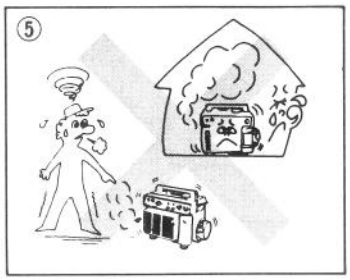
③ To prevent electrical shock, do not touch with wet hands.



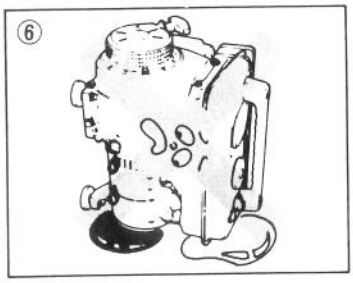
④ When filling with gasoline, always stop the engine to avoid fire. Do not overfill. If gasoline overflows, wipe off before operation.



⑤ Exhaust gas contains components harmful to people and animals. Avoid breathing exhaust gases and never use the generator indoors or in tunnels.

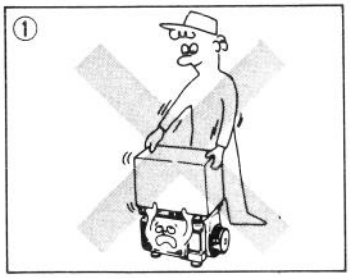


⑥ Keep the generator upright at all times to prevent spillage of gasoline and oil which may result in fire.

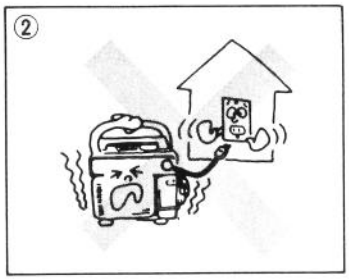


IMPORTANT:

① To avoid overheating, do not cover during operation.

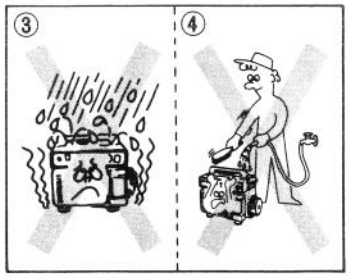


② Never connect the generator to a wall socket. Doing so may damage the generator and connected electric appliance, injure the operator or result in fire.

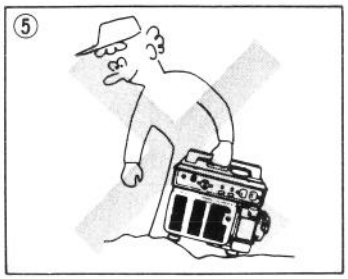


③ Never use the generator in rain, snow near water. Doing so will damage the generator or connected electric appliance and could cause electrical shock.

④ Do not wash the generator with water. Doing so will damage the generator.

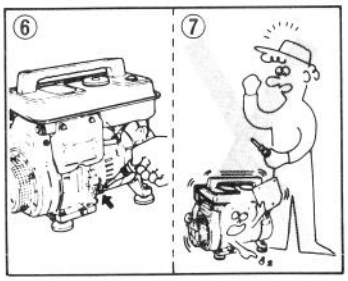


⑤ Never operate the generator on unstable or uneven ground. Doing so may cause fuel spillage and cause the generator to fall down or shift.

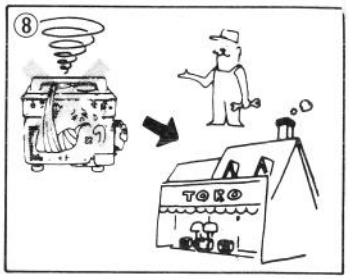


⑥ To prevent engine damage, make sure to check the engine oil level prior to operation.

⑦ To prevent injury, do not operate the generator with covers, etc. detached.



⑧ If the generator should encounter troubles, immediately stop the generator. You should consult your TORO dealer immediately.



PRE-OPERATION CHECK

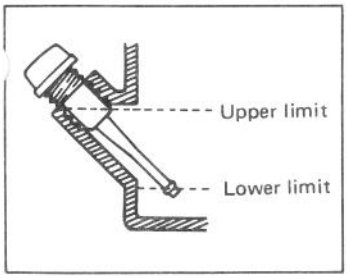
IMPORTANT:
- *** This GENERATOR has been shipped from factory without oil. Therefore, be certain to fill the GENERATOR with oil according to the following instructions before use.**
- *** Make sure to check oil level and add oil as necessary before use everyday.**
- *** When the engine oil level comes down to below the lower level line, the alarm lamp turns on and the engine stops automatically. Add the engine oil up to the specified line and start the engine again.**

1. Filling engine oil

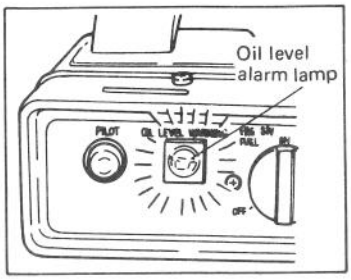
	Oil capacity
T800	0.5L (1.06 US.pt.)

IMPORTANT:
Oil replacement; First 20 hours
Every 100 hours

2. Check the engine oil level
   Remove the dipstick, wipe clean, insert but do NOT screw in. Pull dipstick out and read the level.



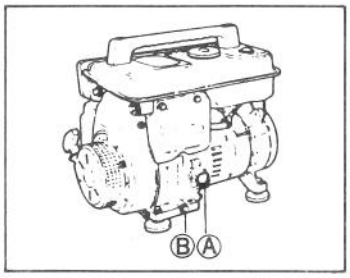
IMPORTANT:
When the engine oil level comes down to below the lower level line, the alarm lamp turns on and the engine stops automatically. Add the engine oil up to the specified line and start the engine again.



3. Engine oil replacement
   Draining the engine oil
   While the engine is still warm, remove the oil filler cap Ⓐ and remove the drain plug Ⓑ.

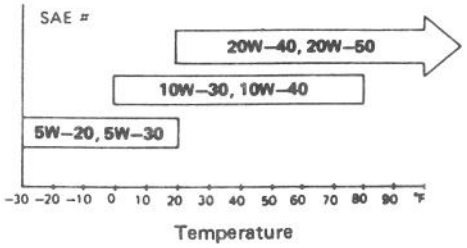
   Refilling with engine oil
   Firmly tighten the drain plug Ⓑ and add the engine oil through the tank filler up to the upper limit line.
   Replace the oil filler cap Ⓐ.

IMPORTANT:
Check the oil level with the generator on level ground.

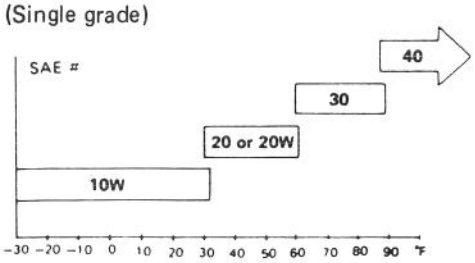


Oil viscosity:

(Multi-grade)



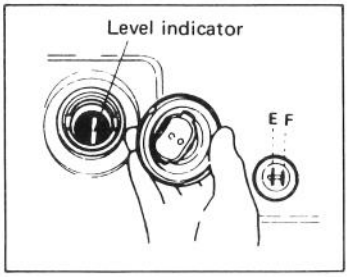
(Single grade)



4. Filling gasoline

	Tank capacity
T800	3.4 L (0.90 US. gal.)

5. Check the fuel level



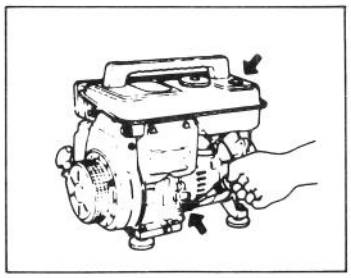
IMPORTANT:
Check the fuel level with the generator on level ground. Be sure to check the fuel level before refueling. If the level is low, add gasoline.

WARNING:
- **Gasoline is very dangerous!**
- **Use unleaded or regular gasoline.**
- **Minors should not refill the fuel tank.**
- **Refuel in a well-ventilated area with the engine stopped.**
- **When filling gasoline, take care so that no dust or water enters the tank.**
- **Do not fill fuel tank near spark, flame or other heat source.**
- **Do not fill the fuel tank above the red line in the fuel inlet. Overfilling will cause spillage and potential fire hazard.**

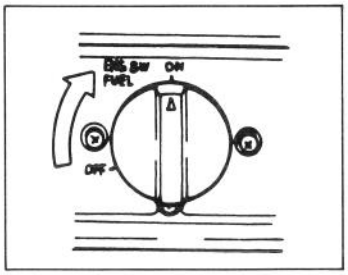
OPERATION

Starting the Engine

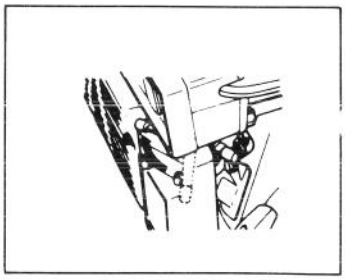
1. Check the oil and fuel levels.



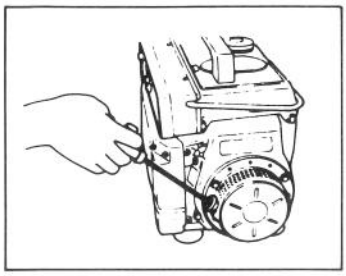
2. Turn the engine switch and fuel cock "ON."



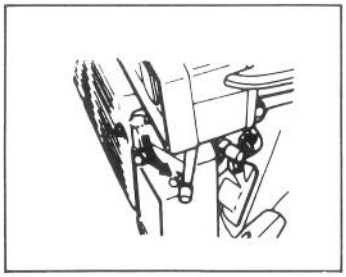
3. Move the choke lever to the left.



4. Pull the starter rope.



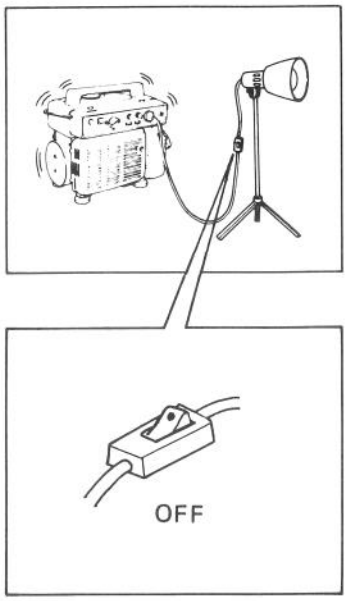
5. Return the choke lever.



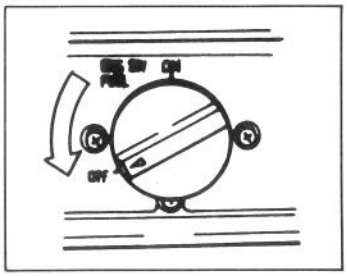
IMPORTANT:
Do not operate the generator more than 30 minutes at maximum output.

Stopping the Engine

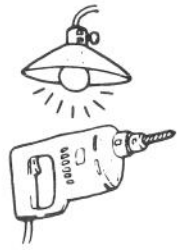
1. Turn off any connected electric appliance.



2. Turn the engine switch and fuel cock "OFF."



RANGE OF APPLICATION

	Appliance	Scope of Application	When malfunctions or more current is required than the capacity of the generator.
AC	 120V 60Hz	0.66KVA	AC circuit breaker will automatically be turned off.
	Single phase motor  120V 60Hz	Up to 180W	Those electric appliance incorporating a motor require usually a power three times the minimum rated input. Hence, those appliance whose wattage is within the ranges listed on the left can be connected to the generator. However, there are instances where some product can not be operated, depending upon the type of motor windings.
DC		Up to 8.3A (12V)	DC circuit breaker will burn out when more current is required than the capacity of the generator. **IMPORTANT: Never use this generator for charging batteries with a capacity of less than 12V-26AH.**

APPLICATIONS

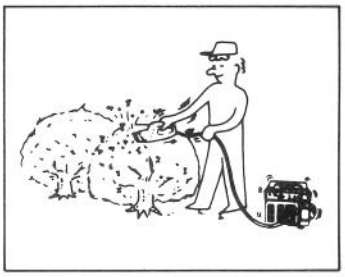
The TORO generator has a wide range of applications. The following examples are but a few of them.

IMPORTANT:
The power requirement of various electrical equipment varies. Check the rating before use.

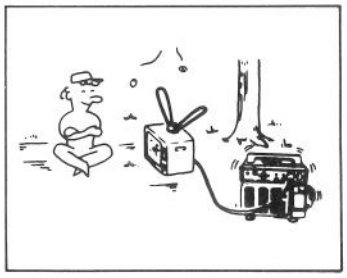
① Power source for safety signs



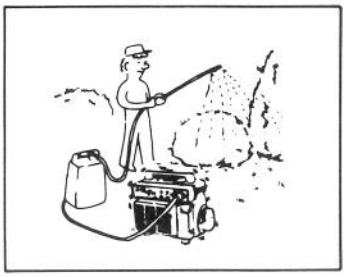
② Power source for electric scissors



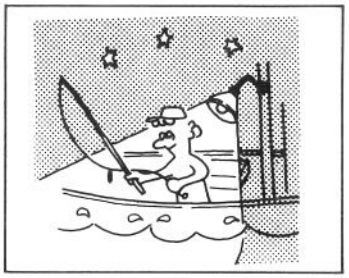
③ Power source for television reception unit



④ Power source for spray machine



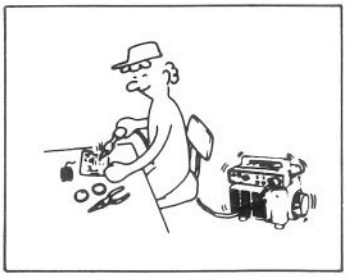
⑤ Illumination for night fishing



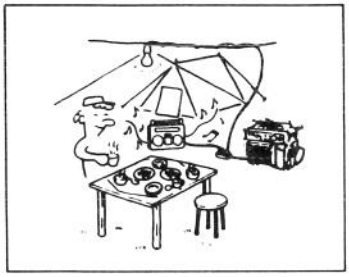
⑥ Illumination for mobile sales



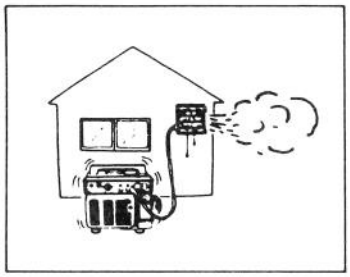
⑦ Power supply for light soldering



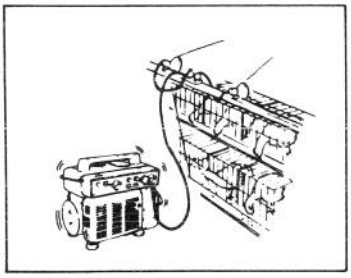
⑧ For use in recreational activities



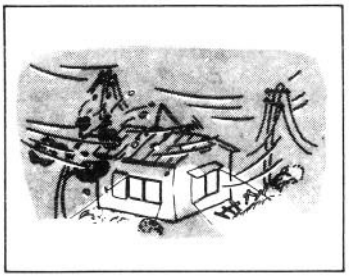
⑨ Power supply for small ventilator



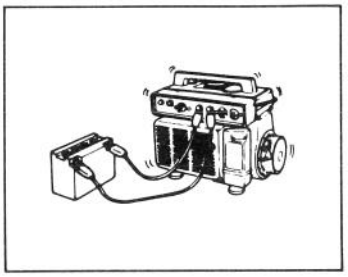
⑩ Power source for heater for live-stock



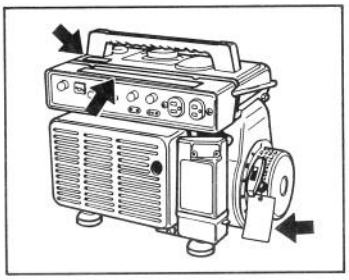
⑪ Power source at time of disasters

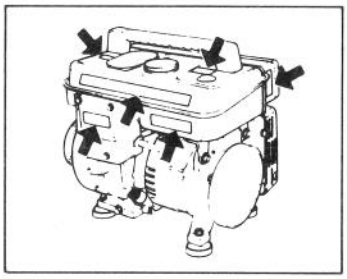


⑫ For charging battery



IMPORTANT:
Before starting operation, read the labels and tags attached to the generator carefully and thoroughly.



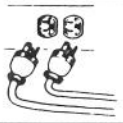


IMPORTANT:
Before you start operating electrical appliance, be sure to check specifications as posted in the label affixed on the equipment. Make sure that specifications of the electrical appliance match with those of the generator.

Models		T800
AC	Rated voltage (V)	120
	Rated frequency (Hz)	60
	Rated current (A)	5.5
	Rated output (KVA)	0.66
DC	Rated output	12V, 8.3A

HOW TO CONNECT POWER CORDS

A.C. Applications

Model	VOLTAGE & HZ	TOTAL WATTAGE
	120V 60Hz	0.66KVA

IMPORTANT:
- **Never connect the generator to a wall socket. This could cause an overload and seriously damage the generator.**

NOTE:
- **Make sure the pilot light is on.**
- **Be sure to plug the cord in completely.**

D.C. Applications



Exclusively for battery charge	12V, 8.3A

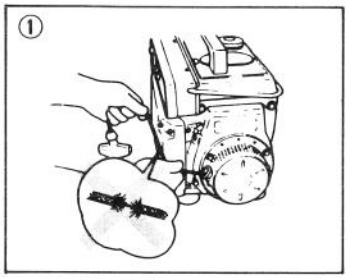
CAUTION:
- **Use the D.C. terminals for charging 12V automotive type batteries only.**
- **Never use this generator for charging batteries with capacity of less than 12V-26AH.**
- **Before connecting the generator to the battery, make sure all wires are disconnected from the battery.**
- **Don't insert the plug of any other electric appliance to this D.C. plug socket.**
- **Observe the correct polarity when connecting the battery to the generator otherwise the generator may be damaged.**

DAILY INSPECTION

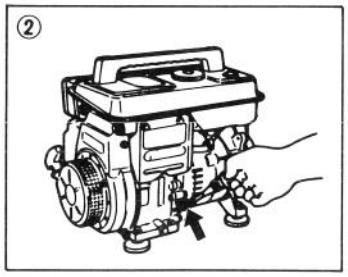
Prior to starting daily operations, be sure to check the generator for proper functions and evidence of damage etc., as follows.

WARNING:
NEVER start the engine without performing these checks.

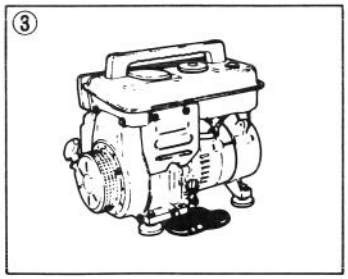
① Starter rope



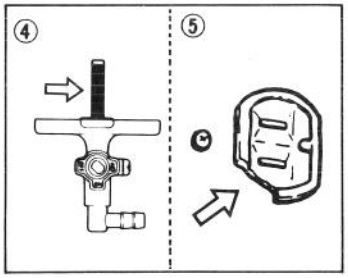
② Engine oil capacity



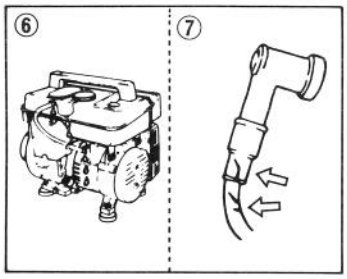
③ Leakage of engine oil



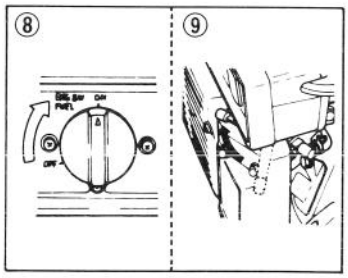
④ Fuel strainer
⑤ Receptacle



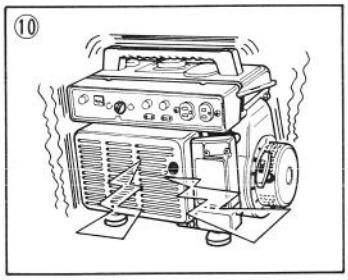
⑥ Fuel leakage
⑦ High tension cord damage



⑧ Engine switch and fuel cock knob
⑨ Choke lever



⑩ Abnormal noises and vibrations



PERIODIC INSPECTION

No.	Item \ Interval	Initial 20 Hrs.	Every 50 Hrs.	Every 100 Hrs.	Every 300 Hrs. or One year
1	Engine oil replacement	*○		*○	
2	Clean the spark plug			○	
3	Clean the spark arrester screen			○	
4	Clean the air cleaner element		**○		
5	Clean the fuel strainer		○		
6	Check tightness of bolts and nuts		○		
7	Combustion chamber cleaning				***○
8	Tappet clearance adjustment				***○
9	Valve maintenance				***○

IMPORTANT:

* **Check oil level and add oil as necessary everyday.**

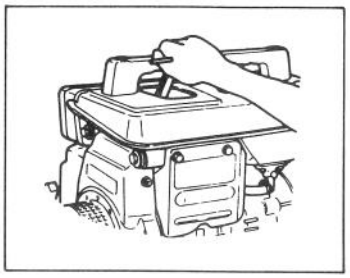
** **When used in dusty areas, the air cleaner should be serviced more frequently.**

*** **For these check-ups, ask your TORO dealer. Don't make these check-ups by yourself.**

1. Engine oil replacement
See page 5.

2. Clean the spark plug
A dirty, oily or sooty spark plug will adversely affect engine performance. Clean it periodically.

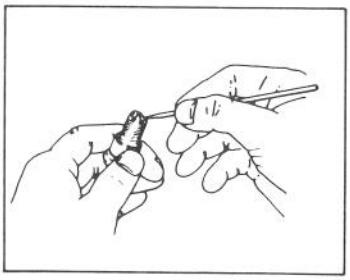
① Remove the spark plug.



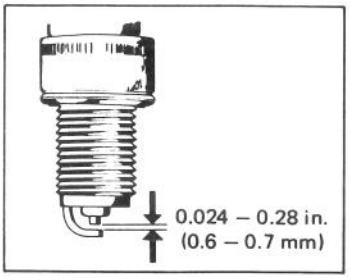
② Check for carbon deposits or discoloration (burning).



③ Remove the carbon.

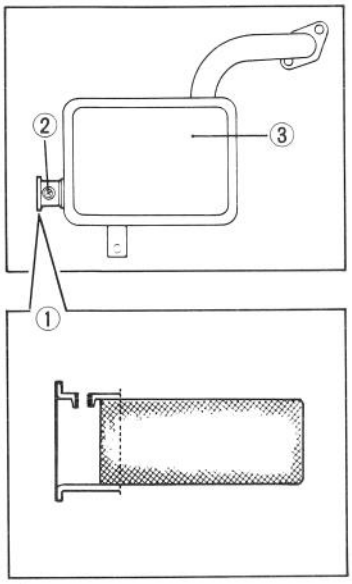


④ Adjust the spark plug gap.



3. Clean the spark arrester screen

The exhaust system muffler assembly contains a spark arrester screen that must be cleaned periodically to remove accumulated carbon particles.



① Screen comp.
② Screw
③ Muffler

Clean out procedure

① Remove the screw ② and pull the screen comp. ① out.
② Start the engine and dislodage the accumulated carbon particles inside the muffler ③.
③ If the screen is clogged with soot or carbon, use a screwdriver or the like to scrape it away. At this time, care should be exercised that the screen be neither indented nor reformed.
④ After cleaning, install the screen comp. ① with the screw ②.

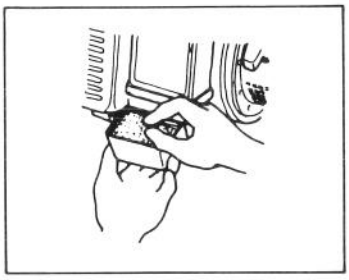
WARNING:
Be sure that the muffler cover and the muffler assembly are not hot when you begin to perform the clean out operation.

4. Clean the air cleaner element

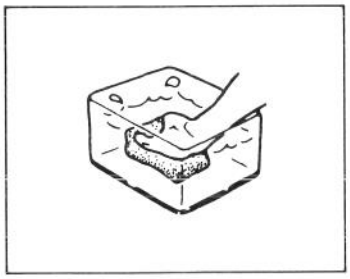
A dirty or clogged air cleaner will result in engine power loss. Clean it periodically.

IMPORTANT:
- **When used in dusty area, the air cleaner should be serviced more frequently.**
- **When installing the element, make sure that the element seals all of the way around its edge.**

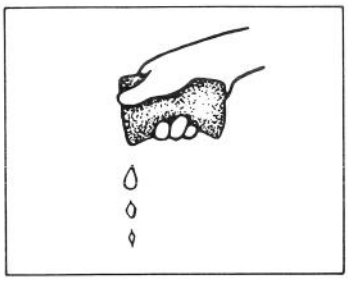
① Remove the air cleaner element.



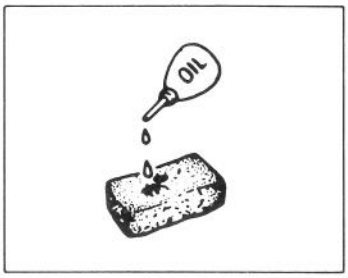
② Wash the element in nonflammable cleaning solvent.



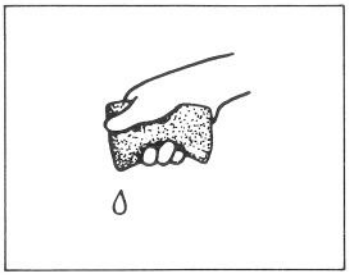
③ Squeeze the element dry.



④ Oil the element with engine oil.



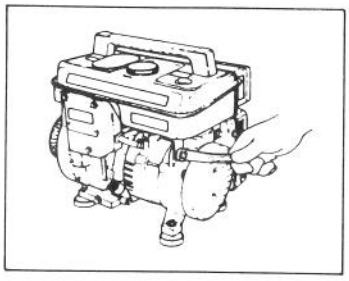
⑤ Squeeze excess oil from the element. Install the element carefully.



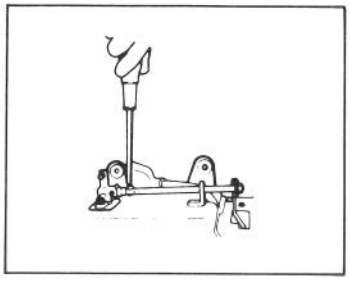
5. Clean the fuel strainer

① Remove the fuel tank.

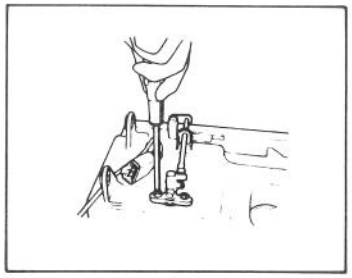
WARNING:
Before removing the fuel strainer cup, make certain that the fuelcock lever is in the "OFF" position and the engine is not hot.



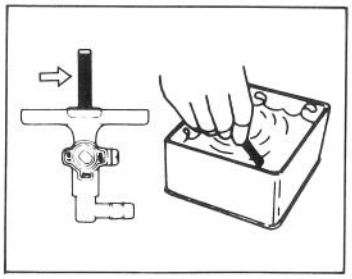
② Remove the bracket set nut.



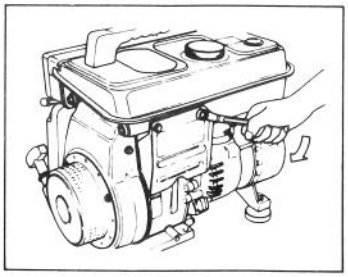
③ Remove the fuel strainer.



④ Wash the fuel strainer parts in non-flammable cleaning solvent.
⑤ Reinstall the fuel strainer, the bracket set nut and the cover.



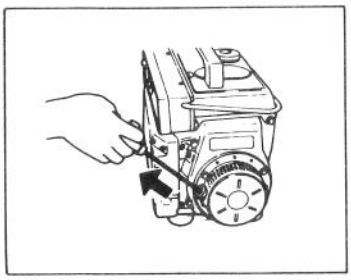
6. Check tightness of bolts and nuts



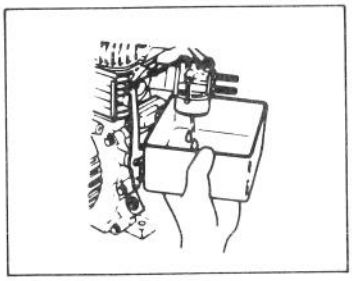
LONG-TERM STORAGE

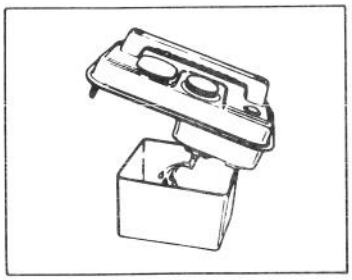
① Gently pull the recoil starter, until you start feeling a drag. Then, stop pulling of the recoil starter.

This is done so that the valve comes to a closed position.

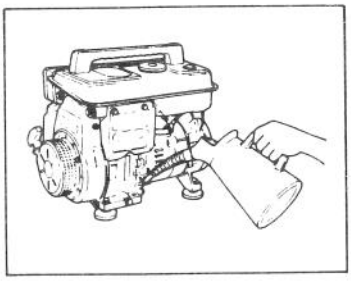


② Drain all gasoline from the fuel tank and carburetor.
Follow all gasoline handling warnings.

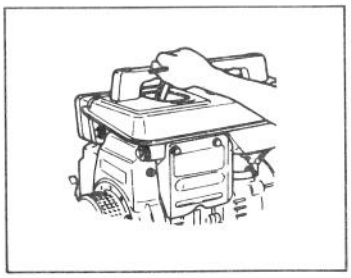




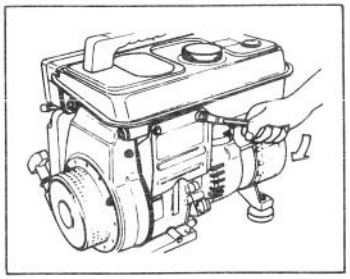
③ Drain the existing engine oil and refill with new oil.



④ Remove the spark plug and pour 1 or 2 tablespoons of engine oil into spark plug hole. Reinstall the spark plug.

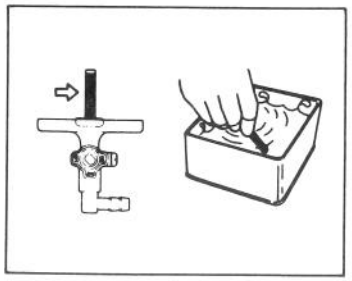


⑤ Retighten the bolts and nuts.

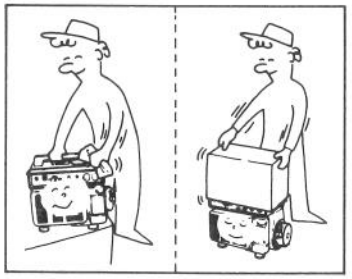


⑥ Clean the air cleaner element.
See page 14.

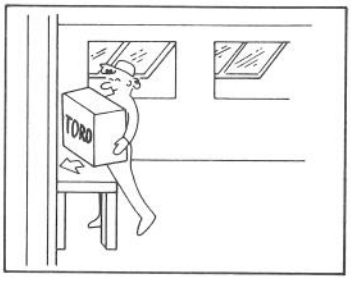
⑦ Clean the fuel strainer.
Wash the fuel strainer parts in non-flammable cleaning solvent.



⑧ Thoroughly wipe off dust or dirt from the top of the generator body.
⑨ Cover the generator body with a cardboard box or a vinyl cover, etc.



⑩ As a storage site, select a place free from dust, with low humidity.



SPECIFICATIONS T800

Generator

AC

Rated voltage (V)	120
Frequency (Hz)	60
Rated current (A)	5.5
Rated output (KVA)	0.66
Max. output (KVA)	0.76
Rated revolution (r/min)	3600

DC

Rated output	12V, 8.3A

Engine

Type	Forced air-cooled, 4-cycle, gasoline
Piston displacement [cu. in. (cm^3)]	5.19 (85)
Bore x Stroke [in. (mm)]	1.89 x 1.85 (48 x 47)
Continuous output [hp (kw) @ rpm]	1.6 (1.20)/3600
Fuel used	Unleaded gasoline or regular gasoline
Fuel tank capacity [gal. (L)]	0.90 (3.4)
Oil capacity [pt. (L)]	1.06 (0.5)
Ignition system	Transistorized ignition
Starting system	Recoil starter
Standard spark plug	NGK BPM6A

Dimension and dry weight

Dimensions, Length x Width x Height [in. (mm)]	16.1 x 10.6 x 14.5 (410 x 269 x 368)
Dry weight [lb (kg)]	51.4 (23.3)

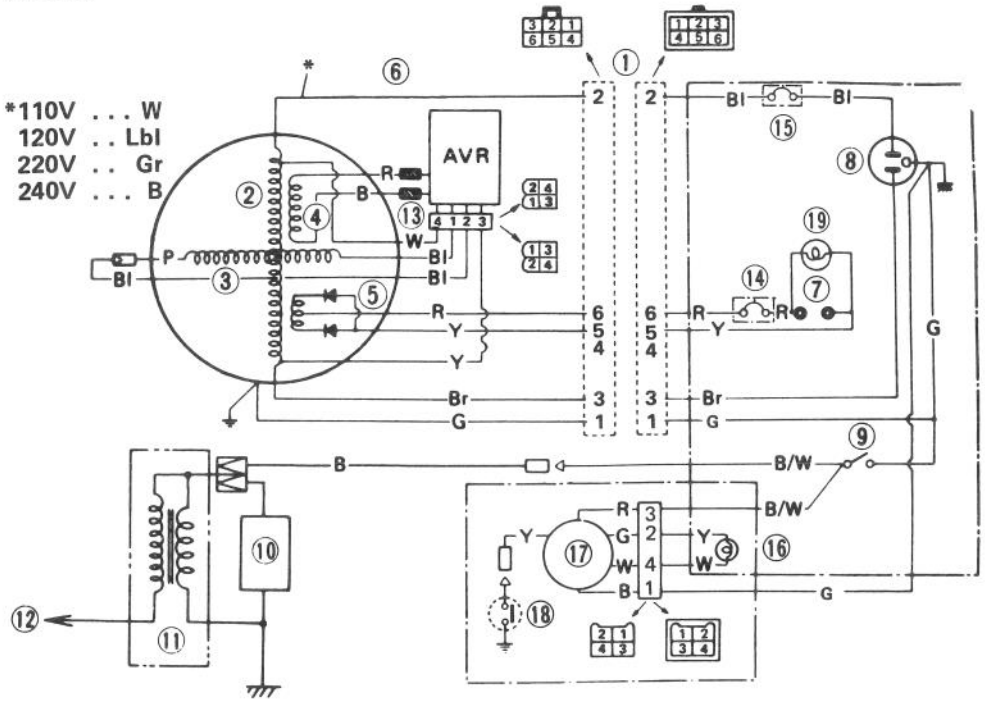
Breaker

AC circuit breaker (A)	6.3A
DC circuit breaker (A)	10A

NOTE:
Specifications are subject to change without notice.

WIRING DIAGRAM

(T800)



Part Name:

1. 6P connecting plug
2. Main coil
3. Exciting coil
4. Rotor coil
5. Diode
6. Capacitor
7. DC output
8. AC output
9. Engine switch
10. Unit
11. Ignition coil
12. Plug
13. Brushes
14. Circuit breaker (DC)
15. Circuit breaker (AC)
16. Oil level alarm lamp
17. Oil level unit
18. Oil sensor
19. Pilot lamp

Wire color:

B : Black
Br : Brown
R : Red
Y : Yellow
O : Orange
G : Green
P : Pink
Bl : Blue
Lbl : Light blue
B/W : Black/White

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

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:

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 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 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 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 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.