# **INSTRUCTION MANUAL**



# **ROTO-TILLER SF600 / SF600D**





Read this instruction manual carefully before any use of the machine, keep it as a reference. For any question about this manual, please report to your OREC dealer or to the distributor of your country or to:

<a href="http://www.orec-ip.com">http://www.orec-ip.com</a>.

Update: August 2018

"Only the English version of this manual can be used as a reference."

## INTRODUCTION

#### Forward to the user

Read this manual before any use of your rotor tiller only the herein instructions shall help you to achieve an efficient and safe work.

A safe use will only result from the manner you will use the machine in accordance with the restrictions described in this manual. Thus, you must know and follow all the safety measures in this manual and those relating to the use of your tiller.

The tiller that you have just bought has been designed and manufactured for your entire satisfaction. As any other mechanical machine, it requires a proper maintenance and must be kept clean. Grease the machine like indicated. Follow the rules and safety indications as described in this manual and as showed on the preventive instruction stickers.

About maintenance, always mind that your OREC dealer has the skills, the genuine parts and the necessary tools to solve the possible problems.

Use only the OREC original parts: "non genuine" parts will not assure you of a correct and safe working and are likely to make the guarantee null and void. Write the name and the serial number of your machine hereunder:

MODEL :		
SERIAL NUMBER	(refer to the pictures herein)	:

Always mention these information to your dealer in order to obtain the right parts.

Concerned about constant progress, OREC keeps the right to modify the machines without being compelled to modify those already sold.

The illustrations and characteristics in this manual might lightly differ from your machine because of the constant improvements made by our production department.

In this manual, the left and the right hand or the rear and the front position are determined according to the user at the handlebar.

All along this manual the word **IMPORTANT** is used to indicate that a fault might cause damage to the machine. The words **WARNING**, **CAUTION** and **DANGER** are used with the "safety/warning" pictogram (triangle with an exclamation mark) in order to indicate a hazard for your safety.



This symbol indicates that you must be very attentive because your safety is at stake. It reminds that you must follow the safety instructions and pay attention to hazardous operations that might cause injuries.



Reminds the safety rules that might cause injury if they are not respected



Remembers to pay attention to a real danger that is likely to cause injury or even death if no proper precaution is taken.



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Indicates a major hazard that is most likely to cause irremediable injury or death if the right precautions are not taken.

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## **SPECIFICATIONS**

Model	SF600	SF600D
Weight	81kg	83kg
L x W x H (mm)	1690 x 590 x 970	1690 x 590 x 970
Forward speed (km/h)	(1): 1.16	(1): 1.16
1 orward speed (Killin)	(2): 4.48	(2): 4.48
Reverse speed (km/h)	(R): 1.16	(R): 1.16
Tool speed (rpm)	Forward : 228	Forward : 203
	Reverse : 228	Reverse : 209
Working width(cm)	52	52
Engine	Honda GX160	Honda GX160
Engine power(kw)	4.1	4.1
Engine speed (tr/min)	3100	3100
Fuel Tank (L)	3.10	3.10

## **CHECK LIST**

#### **INSTRUCTIONS TO THE DEALER**

- The assembling, the installation and the first application of the machine is under the OREC dealer's responsibility.
- Read the instruction manual as well as the safety measures. Check that all the before delivery and at delivery check points specified in the following lists have been verified and possibly modified before delivering the machine to its owner.

#### **CHECKS BEFORE DELIVERY**

- Check that all the shields, grids and safety guards are in place and in a good state.
- Check that the hoses are in place and in a good state. Replace them if necessary.
- Check that there is no oil leak, repair if necessary.

- Check that the safety instruction stickers are in place and in a good state. Replace them if necessary.
- Check that all the bolts and screws are properly tightened with the right torque (refer to page 16).
- Protect the grease nipples by coating them with grease and lubricate the machine.
- · Check that the machine can work properly.

#### CHECKS ON DELIVERY

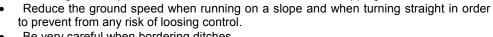
- Show the user how to perform the adjustments.
- Explain to the user the importance of the lubrication and show him the different greasing points on the machine.
- Show him the safety devices, grids, guards and the optional equipments.
- · Give the instruction manual to the customer, ask him to read it carefully.

## SAFETY RULES

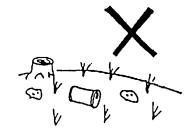


## Some of the illustrations show the machine with no guard, no shield. Never use the machine without these devices.

- Learn to stop the machine in case emergency.
- Read this manual.
- Do not let anybody use the machine before having read and understood this manual.
- Do not let children use the machine.
- Do not wear loose clothes. They might be grasped by moving parts.
- Always wear protection equipments for when using the machine.
- Only work during daylight or with a good artificial light.
- Check that the safety instruction stickers are in place and in a good condition.
- Keep the machine free from debris, dust or mud.
- Check that the machine can work properly before any use.
- Check that all the shields, grids and safety guards are in place and in a good state.
- It is strictly forbidden to carry persons or animals onto the machine during the work or during the transportation.
- Never stop or start roughly when working on a slope. Never use the machine to work on a stepping terrain.



- Be very careful when bordering ditches.
- Stop the engine, and remove the sparking plug ignition cover before any intervention on the machine.
- Never work under the machine or its parts when lifted, unless they are blocked and maintained into position with sufficient security.
- When running on a slope, always work going up or down but never across the slope.
- Steer clear of unsteady embankments, holes or rocks. They might be dangerous during maneuvers or transport.
- Keep away from electric wires and obstacles. A contact with electric wires cause electrocution and death.
- Stop the machine progressively when lifting or lowering the machine.
- When stopping the work, stop the engine and remove the sparking plug ignition cover before leaving the tiller.
- Engage all the safety equipments.
- Move the controls only when correctly sat down in the tiller
- Visually check hydraulic leaks and if some parts are faulty or missing. Repair before
- Never change the adjustment of the regulator, it is set in the factory. Unsetting this valve would cause failures.
- Ensure that the user of the machine has already read and understood this manual and that he is aware of all the safety instructions before any use.
- Always use a chuck and bronze hammer when replacing or intervening on the pins and bolts at the end of rams, rod ... etc in order to avoid the projection of metal fragments.





# **DIFFERENT PARTS OF THE MACHINE**

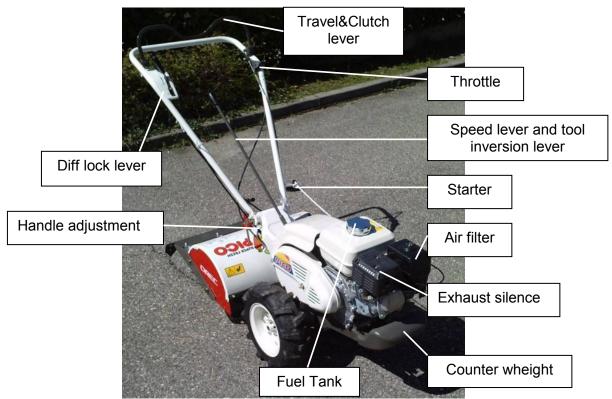
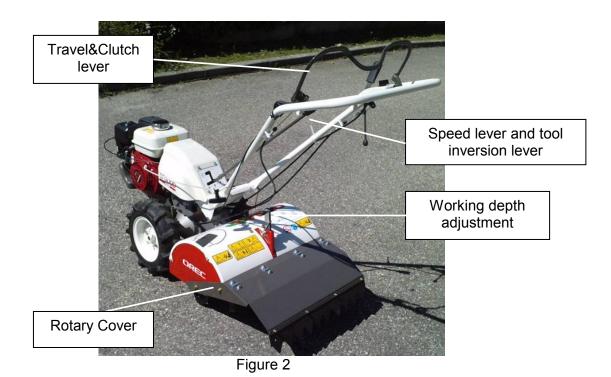


Figure 1



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# **SAFETY INSTRUCTION STICKERS**

Note their location and replace them immediately in case of damage or when missing



-Read owner's manual
-Beware of Flammable
gasoline
-Beware of exhaust gases
-Beware of hot surfaces near
the engine



Beware of rotating belt under the shield





Do not exceed 15° slope



Always wear prrotective equipment for dust, noise and wear glasses





Beware of rotating blades under the shield



Before doing maintenance remove the spark plug



Beware of thrown objects



Place foot here when starting engine



Keep away from the machine



Read owner's manual

## **CONTROLS**

#### **CLUTCH LEVER**

When the lever (1, Figure 3) is pushed down, the machine is going to go forward or reverse. When the lever is released, the machine stops.

Following the position of the gear lever, (2, Figure 3), the rotative tools is clutched in the same time as the wheels. When the lever is released, the machine and the tool stops.

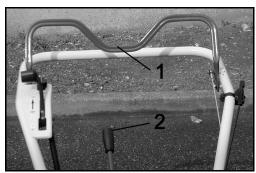


Figure 3

## GEAR BOX LEVER(SF600)(FIGURE 4-1)

This lever allowed to select 2 forward travel speed, the reverse speed and two rotations of the tool.

- A : Forward speed. The machine is going forward and the tools is rotating at the same rotation that the wheels.
- B : Forward speed. The machine is going forward and the tools is rotating at the opposite rotation that the wheels.
- C : Reverse speed. The machine is going on reverse and the tools is not rotating.
- D : Neutral. Nothing is engaged the wheels and the rotating tools are stopped.
- E: 1st Forward speed. The machine is going forward and the tools is not rotating.
- F : Neutral. Nothing is engaged the wheels and the rotating tools are stopped.
- $\ensuremath{\mathsf{G}}$  : 2nd Forward speed. The machine is going forward fast and the tools is not rotating.

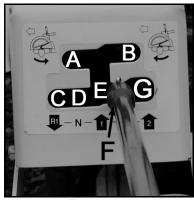


Figure 4-1

#### GEAR BOX LEVER(SF600D)(FIGURE 4-2)

This lever allows to select 2 forward travel speed, the reverse speed

A: Working. The machine is going forward and the tools is rotating.

B: Reverse speed. The machine is going on reverse.

C: 1st Forward speed. The machine is going forward.

D: 2st Forward speed. The machine is going forward.

\*Neutral. Nothing is engaged on the wheels and the rotating tools are stopped.

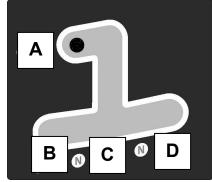


Figure 4-2



Release the travel lever to change of speed. When the speed is engaged, open the throttle slowly.



Take many care when travelling on reverse to not stumble on bumps, holes or debris on the ground.

#### THROTTLE LEVER

Push the lever (Figure 5) completely backward to operate the engine, when engine at maximum speed. Push the throttle lever forward to decrease engine speed, to idle speed.

#### **LOCK DIFF LEVER**

Push the lever forward (Figure 6) when a wheel is slipping in deep or wet ground, it makes the two wheels driven together. It is better to engage the diff lock when the wheels are turning slowly to avoid damage to the transmission. When a wheel is slipping, reduce the throttle to engage the diff lock at low speed. Do not engage the diff lock on hard surface like concrete or macadam or when turning.

#### **H**EIGHT CONTROL

Depth of work is adjustable with the tooth (1, Figure 7). When the stand is low, the depth of work is low. When the stand is high, the depth of work is high.



When the depth of work is important, the power needed is important and you can hit stones and cause damage to the machine.

#### Resistance rod

For the hard soil. Pull up the resistance rod(2, Figure7) and use the up-cut rotary position. (Figure 4 position B).

For the soft soil. Stick the rod (2, Figure 7) in the soil deeply and use the down-cut rotary(Figure 4 position A).

#### **Engine controls**

The machine is delivered with a specific manual. Read and understand this manual before use or maintain the engine.

#### FUEL COCK AND CHOKE LEVER

#### Choke lever (A, Figure 8)

Push the lever completely forward to close the choke to start engine cold, when engine has start release it.

## Fuel cock (B, Figure 8)

The fuel cock have to close when machine not use. Fuel cock is closed pushed forward, and open rearward.

#### **ENGINE SWITCH**

- This switch allowed to start or stop the engine (Figure 9).
- When the switch is on "stop" the engine is stopped and cannot be started.
   Put the switch on "stop" position to stop the engine or to avoid starting.
- Place the switch to the "on" position to allowed the engine to start.

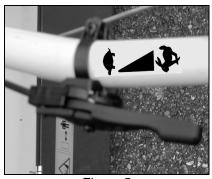


Figure 5



Figure 6



Figure 7

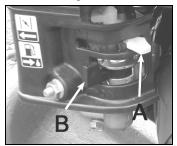


Figure 8



Figure 9



Always disconnect the spark plug when the machine is stored or if you want to perform maintenance.

## RECOIL POSITION AND E/G STARTING MOTION

The recoil is located in the left side of the handle(Figure 10) To start the machine, pull the recoil according to Figure 10 shown.



Figure 10

#### **ADJUSTING THE HANDLEBAR**

The handlebar is adjustable in free position to allow all operators to use the machine.

To adjust the handlebar:

- Unscrew the knob at the low side of the handlebar.
- Pull of the axle with Jack bolt(A, Figure 11).
- Adjust the handlebar as required
- Put the axle, and screw the knob.



Figure 11

## **OPERATION**



Check the tightening of bolts, referring to the tightening torque chart

The safety was one of our main worry when designing and manufacturing this machine. Therefore, negligence in the use of the machine should reduce our efforts to nothing. The prevention strictly depends on the care and on the skill of the user when applying and maintaining the machine. The best safety method remains a careful and skilled user; we wish you to be this kind of user.

The user of this machine is responsible for its safe use. He must be a skilled user specially trained for the use of this machine. Read the safety instructions. This machine has been designed to mow grass. It is not designed for any other operation. It is no designed to transport other tools or materials that might damage it and cause injuries to the user. It must not be used to carry persons.



Never use the machine without having priorly carried out all the maintenance operations as described in the daily maintenance chapter.



Never let children or unskilled persons use the machine. Check that nobody or no object stands near the machine when at work. They could be hit by the moving parts. Nobody must stand on the machine except the driver. Never put your hands under moving parts.

#### **STARTING OF THE ENGINE**

- Turn the fuel cock "ON".
- Check that the tool and the transmission is disengaged.
- Push choke lever if engine is cold or push throttle lever half if engine is hot. Pull the starter rope. When the engine has started, pull back the choke lever.



#### **Working**



Stop the engine and disconnect the spark plug before clean or perform any maintenance on the machine. Do not push the rot tiller when the toll is rotating, it may damage the transmission

#### Working on a soft ground(SF600)(Figure 12-1)

- Start the rototiller.
- Stick the resistance rod in the soil deeply.
- Adjust deep of work as required.
- Select the transmission lever on "A"
- Push and maintain the travel lever.
- To stop working, release the travel lever.

The better speed depends on the hardness of the ground and the depth of work. A soft ground will be worked at high speed and a hard ground will be worked at low speed.

#### Working on a hard ground(SF600)(figure 12-1)

- Start the rototiller.
- Pull up the resistance rod .
- Adjust deep of work as required.
- Select the transmission lever on "B" (figure 11).

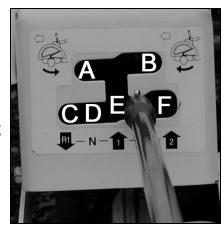


Figure 12-1

#### .Working on a soft ground(SF600D)(Figure 12-2)

- Start the rototiller.
- Stick the resistance rod in the soil deeply.
- · Adjust deep of work as required.
- Push and maintain the travel lever.
- To stop working, release the travel lever.

The better speed depends on the hardness of the ground and the depth of work.

Soft ground will be worked at high speed and a hard ground will be worked at low speed.

#### Working on a hard ground(SF600D)(Figure 12-2)

- Start the rototiller.
- Pull up the resistance rod and work twice or three times.
- Adjust deep of work as required.
- · Push and maintain the travel lever.
- To stop working, release the travel lever.

If it is difficult to work on all the depth selected, select a less deep height and start again. When you have finish the job with this depth, select a depth more deeper and perform the job again .



Check that nobody is around the machine especially around the area where objects can be thrown by the rototiller.

Never start the machine if a lever is not in neutral position.

Stop working if the machine hit something, allow the machine to cool and clean from dust and debris. Check or ask to your dealer to check if the machine is damage.

Do not work on slope more than 15°.

Clean the mud inside the shield around the tool. Mud and debris makes the transmission override and can damage the engine and the transmission.

#### **HOW TO STOP THE MACHINE**

- Release the travel lever, place the transmission lever in neutral position, return to the throttle lever idle engine speed position.
- Turn the engine switch to stop.
- Close the fuel cock.
- · Remove the spark plug.



Always store the machine on a flat, hard and level surface.

#### STORING THE MACHINE



Gasoline is highly flammable:

- Store the fuel on tanks designed for this use.
- Drain the gasoline in a fully ventilated workshop or outside
  - Do not smoke or make sparks during this operation.
- Drain the carburettor by closing the fuel cock when the engine is running.
- When the engine is getting cold, drain the fuel tank by unplug the full tube from the carburettor. Open the fuel cock to allowed the fuel to be drained in an appropriate tank.
- Clean the machine from dust, mud and debris. Check or ask to your dealer to check if the machine is damaged. Clean the machine with water and dry it with air under pressure.
- Perform the normal maintenance of the machine according to maintenance chart. Store the machine in a dry protected area. Remove sparking ignition wire from the sparking plug.

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- Remove rust and paint the metal.
- Store the machine in a dry protected area.

#### \*TRANSPORTATION

disconnect the spark plug . close the fuel cock. Fix the machine with rope securely.

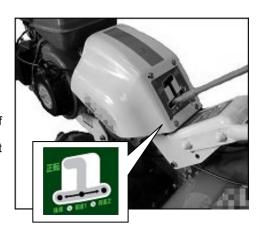


Figure 12-2

## MAINTENANCE OPERATIONS TO BE CARRIED OUT BY THE USER



BEFORE perform any maintenance operation on the machine, cut off the engine, and remove the spark wire from the sparking plug

If maintenance operation is not realized, damages can occur to the machine and personal injuries to the user and/or spectators. These damages and injuries will not be covered by the warranty.

- Daily maintenance will be performed by the user.
- Maintenance operations for first 20 hours, 100 and 300 should be realized by the dealer.
- Ask your dealer to check the machine if you meet some problems.

#### DAILY MAINTENANCE, BEFORE START WORK

Transmission oil level: check by the plug (1 Figure 13). Oil level should appear in the hole. Check only engine stopped since ten minutes on a flat level surface.

- Use only good quality gear oil "SAE 90" or "API GL-5". Oil quantity: 3.00L
- Check that there is no leaks

## Transmission oil replacement frequency

First replacement : After 20 hours of operation

Later replacement:
Each 100 hours or Every year whichever comes first.



Figure 13

#### Fuel

Check tank level is full before start to work. Check that tank plug is fully closed, and check for leaks. Use only a good quality unleaded gasoline.



Check fuel tank is closed, wipe spillages fuel before start the machine. Check there is no fire, electric sparks, and cigarettes near the machine when refueling.

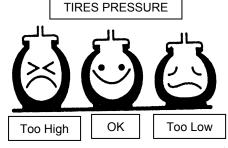


Figure 14

Clean the machine from flammable materials, grass, woods which can be burnt on hot surfaces of the machine, especially around the engine and the exhaust silencer.

#### Tires (Figure 14)

Check tires are not cut, cracked or worn.

Check tires pressure: 1,2 bar.

Clean for flammable materials

#### Safety stickers

Check safety stickers are sticked at their place. Replace them if they are worn and damage.

State of the working tool blade(SF600)(figure 15-1)



Blades can cut hands or fingers; always wear protective gloves when holding blades.

- Check that rotary blades are in good condition, change worn or damage blade if the blade is worn more than (20 mm) the point B figure 15-1, comparing to a new blade (A, figure 15-1).
- Changing the blade: Unscrew the to bolts and nuts of the blade on the shaft.

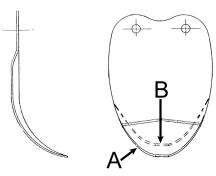


figure 15-1

Screw a new blade and check the screwing torque with the chart at the end
of this manual.

#### State of the working tool blade (SF600D)(Figure 15-2)

Center section : Up cut Side section : Down cut

\*Dual-Action cutting system makes for finer tilling



# Blades can cut hands or fingers; always wear protective gloves when holding blades.

- Check that rotary blades are in good condition, change worn or damage blade if the blade is worn
- Changing the blade: Unscrew the to bolts and nuts of the blade on the shaft.
- Screw a new blade and check the screwing torque with the chart at the end
  of this manual.



Only use original genuine OREC parts. Other parts may be dangerous for your health and for the bystanders and the machine. If some vibration occur. If you feel vibrations in the handlebar, check the blade. Vibrations may cause loosening of the bolt and nuts and may crack the steel of the machine.

#### **Engine**

Refer to engine manual delivered with the machine. Engine Oil Type: SAE10W30 or API SL class

Engine Oil Quantity: 0.58L

## Engine oil replacement frequency

First replacement:
After 20 hours of operation

Later replacement:

Each 100 hours or Every year

whichever comes first.

#### Tightening of bolts and nuts

Check the screwing torque with the chart at the end of this manual.

Vibration may loose bolts, nuts and screws.

#### Air filter

Check the air filter from dust and debris. Clean the foam with water and soap. Dry it without squeezing it. Apply air filter oil before mounting.

#### **MAINTENANCE EVERY MONTH**

#### Transmission belt tension



A loosen belt may slips and worn quicly, a too tighten belt may worn bearings.

Check for belt condition, cracks and wear. Replace if necesary.

Stop engine, with the engine switch on "stop" position, disconnect the spark plug. Pull out the belt case by unscrewing the

When the travel lever is pushed down, the lower side of the belt may be pushed from 10 mm (Figure 16).

If this value is not right, adjust it by the tension bolt on the wire (Figure 17).

To increase tension, unscrew the nut A to the top of the machine and screw the nut B to the top. When the adjustment has been performed, screw again the nut A (Figure 17).

To decrease tension, unscrew the nut B to the low of the machine and screw the nut A to the low. When the adjustment has been performed, screw again the nut B (Figure 17).

When the adjustment has been performed, replace the belt case and screw the knob again...



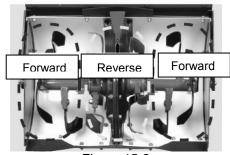
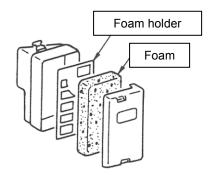
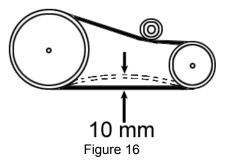


Figure 15-2





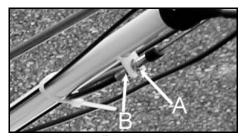


Figure 17

#### Diff lock wire tension

If the diff lock does not engage when you operate the control:

- Increase the wire tension. (Figure 18) Unscrew the nut A and screw the nut B to the top of the machine. When the adjustment has been performed, screw again the nut A.

If the diff lock does not disengage when you operate the control:

- Decrease the wire tension. Unscrew the nut B and screw the nut B to the low of the machine. When the adjustment has been performed, screw again the nut A.

# A/\sqrt{B}

Figure 18

#### Lubrication

Lubricate with light oil (engine oil) following points :

- Wires and control lever axles (A & B, Figure 19).
- Stand (A, Figure 20-1(SF600), 20-2(SF600D)).
- On the gear box, the diff lock lever and the speed lever.
- Tension belt lever under the belt case.

## **EVERY YEAR**

#### **Draining the transmission**

On a level surface, put a tank under the transmission case and unscrew the plug (A, Figure 21) and let the oil drop. Screw the plug again and add oil by the plug (1, Figure 13) until the level is up to the plug hole.

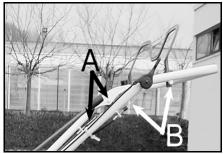


Figure 19

#### Blade position(Figure 22)

Blade rotates forward and reverses at same time. Make sure if the blades are installed correctly.

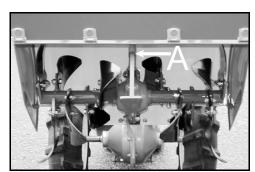


Figure 20-1



Figure 20-2

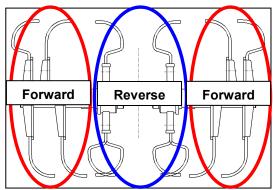
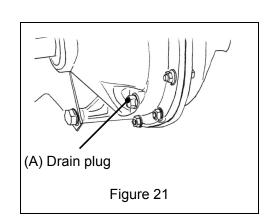


Figure 22



- Maintenance chart

  ☐ Ask your dealer to realize this operation needing special tools and knowledge.

  ⊕ Inspection to realize by the owners before starting the engine

  ⊗ Inspection to realize by the owners after starting the engine

Part to inspect	Inspection	Every use	first 20 hours	Every les 100 hours	Every 300 hours every year
Blade belt	Check belt tension				
	Check wear				
Fuel	refueling	$\oplus$			
	Fuel cock	$\oplus$			
Flammable materials	Clean the machine from flammables materials	$\oplus$			
Travel lever	check machine do not move when lever is on "N"	8			
	Check travel lever goes on "N" when applying brake	8			
Tires	Check tires pressure	$\oplus$			
	Check tires wear	$\oplus$			
Brake	Check efficiency of the brake	8			
	Check travel lever goes on "N" when applying brake	8			
Chassis	Check for rust, and cracks				
Safety stickers	Check they are in place and in good condition	$\oplus$			
Safety switches	Check for efficiency	8			
Guards & shields	Check they are bolted in their place and in good	$\oplus$			
	condition				
Tank and fuel hoses	Check for leaks and good condition	$\oplus$			
	Replace if needed				
Throttle lever	Check for efficiency	8			
tines	Check they are bolted in their place and in good	$\oplus$			
	condition				
Main clutch control lever	Check the adjustment of the wire	$\oplus$			
Blade belt	Check they tensioned and in good condition				
Engine	Refer to engine manual				

## **BREAKDOWNS AND SOLUTIONS**

PROBLEME	CAUSE	SOLUTIONS
	No fuel	Refuel the tank
	Battery is empty	Load or replace the battery
Engine does not start	Safety switches are working	Check brakes, blade clutch and seat and travel lever
	V Belt damaged	Change the Belt
The machine does not travel	V Belt slips	Adjust Belt tension
The machine does not stop	Travel lever is not on « N »	Move the travel lever to « N »
	main clutch lever is not engage	engage main clutch lever
	Engine rotation is not good	Adjust carburetor
The rotor does not rotate	Chain,Sprocket, Gear is damaged	Change damaged part
	Machine hops	Cannot use because of clay or ground is too hard. Turn the
		soil by other machine in advance.
Cannot cultivate	Dashing of the machine	Easy Anchor is worn or dropped. Cultivate too deep
	Cannot cultivate completely	Change all tine for new one. Easy Anchor is worn .

# **TIGHTENING TORQUES (Kgf.cm)(SF600)**

	Marks on the headscrew				
DIAMETER OF THE SCREW (mm)	4 or without mark	7	8	9	11
3	0,3 to 0,5				
4	0,8 to 1,0				
5	2,5 to 3,4	5,4 to 6,4	6,4 to 7,4	6,4 to 7,4	8,8 to 9,8
6	4,9 to 6,9	9,8 to 11,8	11,8 to 13,7	11,8 to 13,7	14,7 to 16,7
8	11,8 to 16,7	24,5 to 29,4	29,4 to 34,3	34,3 to 36,2	36,3 to 41,2
10	20,6 to 29,4	39,2 to 44,1	49 to 53,9	49 to 53,9	72,6 to 82,4
12	44,1 to 53,9	83,4 to 93,2	93,2 to 107,9	93,2 to 107,9	122,6 to 137,3
14	63,7 to 78,5	117,7 to 132,4	132,4 to 147,1	147,1 to 166,7	205,9 to 225,6
16	88,3 to 107,9	152 to 171,6	176,5 to 196,1	215,8 to 245,2	313,8 to 343,2
18	117,7 to 137,3	205,9 to 235,4	245,2 to 274,6	313,8 to 343,2	441,3 to 470,7
20	147,1 to 166,71	235,4 to 274,6	313,8 to 353	441,3 to 480,5	617,8 to 657,1
22	176,5 to 205,9	421,7 to 451,1	539,4 to 578,6	608 to 647,2	843,4 to 882,6
24	235,4 to 264,8	539,4 to 568,8	706,1 to 745,3	784,5 to 823,8	1098,4 to 1137,6

# **TIGHTENING TORQUES (Kgf.cm)(SF600D)**

	Marks on the headscrew				
DIAMETER OF THE SCREW (mm)	<b>4</b> or without mark	7	8	9	11
3	0,3 to 0,5				
4	0,8 to 1,0				
5	2,5 to 3,4	5,4 to 6,4	6,4 to 7,4	6,4 to 7,4	8,8 to 9,8
6	4,9 to 6,9	9,8 to 11,8	11,8 to 13,7	11,8 to 13,7	14,7 to 16,7
8	11,8 to 16,7	24,5 to 29,4	29,4 to 34,3	34,3 to 36,2	36,3 to 41,2
10	20,6 to 29,4	39,2 to 44,1	49 to 53,9	49 to 53,9	72,6 to 82,4
12	44,1 to 53,9	83,4 to 93,2	93,2 to 107,9	93,2 to 107,9	122,6 to 137,3
14	63,7 to 78,5	117,7 to 132,4	132,4 to 147,1	147,1 to 166,7	205,9 to 225,6
16	88,3 to 107,9	152 to 171,6	176,5 to 196,1	215,8 to 245,2	313,8 to 343,2
18	117,7 to 137,3	205,9 to 235,4	245,2 to 274,6	313,8 to 343,2	441,3 to 470,7
20	147,1 to 166,71	235,4 to 274,6	313,8 to 353	441,3 to 480,5	617,8 to 657,1
22	176,5 to 205,9	421,7 to 451,1	539,4 to 578,6	608 to 647,2	843,4 to 882,6
24	235,4 to 264,8	539,4 to 568,8	706,1 to 745,3	784,5 to 823,8	1098,4 to 1137,6

## **EC CONFORMITY DECLARATION**

Business name and full address of the manufacturer:

OREC CO LTD 548-22

HIYOSHI HIROKAWA-MACHI YAME-GUN FUKUOKA JAPAN S.A.T. sarl - Force 7 – ZA – 38110 ROCHETOIRIN France owner of the technical documents

Designation : rototiller Mark : OREC Type : SF600

Serial Identification:

Engine:

Manufacturer: Honda
type: GX160
Power: 4 kW
Width of work: 500 mm

Conforms to directives: 2000/14/EC, 2006/42/EC, 2004/108/EC

Conformity assesment: 2006/42/EC Annex VIII

Measured acoustic power level : 93,18 dB(A)
Granted acoustic power level : 94 dB(A)

Conformity assesment : 2000/14/EC Annex V

Acoustic pressure level at operator's ears: 79,4dB(A)

Harmonized standards used: EN 709, EN ISO 14982-2009,

EN ISO 3744-2010, EN ISO 3746-2010, EN1032-2003+A1-2008, EN ISO 20643-2008

made at: Fukuoka, 24 August 2016

Signed: Haruhiko Imamura Function: Managing director

## **MEASUREMENT OF VIBRATIONS**

Mark : OREC Type : SF600

Engine: Honda GX160

g	
Pick up location	Awp
100 mm of the end of handlebar (right side)	3,12 m/s <sup>2</sup>
100 mm of the end of handlebar (left side)	3,16 m/s <sup>2</sup>

## **EC CONFORMITY DECLARATION**

Business name and full address of the manufacturer:

OREC CO LTD 548-22

HIYOSHI HIROKAWA-MACHI YAME-GUN FUKUOKA JAPAN S.A.T. sarl - Force 7 – ZA – 38110 ROCHETOIRIN France owner of the technical documents

Designation : rototiller Mark : OREC Type : SF600D

Serial Identification:

Engine:

Manufacturer: Honda
type: GX160
Power: 4 kW
Width of work: 500 mm

Conforms to directives: 2000/14/EC, 2006/42/EC, 2004/108/EC

Conformity assesment: 2006/42/EC Annex VIII

Measured acoustic power level : 93,18 dB(A)
Granted acoustic power level : 94 dB(A)

Conformity assesment : 2000/14/EC Annex V

Acoustic pressure level at operator's ears: 79,4dB(A)

Harmonized standards used: EN 709, EN ISO 14982-2009,

EN ISO 3744-2010, EN ISO 3746-2010, EN1032-2003+A1-2008, EN ISO 20643-2008

made at: Fukuoka, 24 August 2016

Signed : Haruhiko Imamura Function : Managing director

## **MEASUREMENT OF VIBRATIONS**

Mark: OREC Type: SF600D

Engine: Honda GX160

Pick up location	Awp
100 mm of the end of handlebar (right side)	3,12 m/s <sup>2</sup>
100 mm of the end of handlebar (left side)	3,16 m/s <sup>2</sup>

## LIMITED WARRANTY

Each new product manufactured by OREC is guaranteed under the cope of the following terms. The warranty applies to defective parts due to defect in assembling and construction or/and in material imputable to us. It is valid for a period of one year and for normal use of the machine. It does not apply to engines manufactured by other companies that also guarantee their materials and whose guarantee is supplied with the machine.

- 1° This guarantee is limited to the sole replacement of the defective parts during one year commencing with the purchasing date of the machine. The guarantee is limited to the parts that are previously shown to and acknowledged by OREC.
- 2° Each part concerned by a guarantee claim must be returned to OREC's in order to be inspected, repaired or replaced. The part(s) must be returned with freight prepaid and must be accompanied with a proof of the purchase. The part(s) must be packed with the greatest of care to ensure their protection.
- 3° The machine must not have been worn out, repaired or maintained by anyone without OREC's previous authorization. The machine must not have been damaged in a road accident, roughly handled or improperly used.

This guarantee does not compel OREC or its dealer to reimburse the labor costs or the carriage costs to the repairer.

NO OTHER GUARANTEE SHALL BE APPLIED TO THIS MACHINE EXCEPT THE LEGAL GUARANTEE. OREC SHALL NOT BE LIABLE FOR ANY DAMAGE OR COST INVOLVED BY THE MACHINE, FOR EXAMPLE :

- 1. HIRING COSTS
- TURNOVER LOSSES
- WORK DONE BY A REPLACING MACHINE

OREC DOES NOT TAKE ON ANY OTHER OBLIGATION AND DOES NOT AUTHORIZE ANYBODY TO TAKE ON ANY OTHER OBLIGATION THAN THOSE MENTIONED IN THE 3 PARAGRAPHS ABOVE.

To know the name of your dealer, report to: OREC

www.orec-jp.com

<u>NOTES</u>