



CONCRETE CUTTER SERIES CONCRETE CUTTER OPERATION MANUAL



ERC 12E - 14C

EXEN CORPORATION

☆ SAFETY PRECAUTIONS

- ☆ This product is a machine used for road surface repair, cutting concrete and asphalt in piping work such as gas, water pipe and sewage, and cables, and cutting joints when building concrete paved roads. Do not use for any other purpose.
- ☆ Be sure to read and understand this operation manual carefully before using the product so that it can be operated safely and efficiently. Improper machine use may result in injury or machine failure. Keep this manual for further reference.
- ☆ When you lend this product to another person, be sure to provide them the manuals and to fully explain to them the safe and appropriate use of the product.
- ☆ The following symbols are DANGER, WARNING, and CAUTION instruction for the use of this product so that the product will not cause harm or damage to users or others.

	DANGER	【DANGER】 indicates an imminent dangerous situation which may lead to death or serious injury.
	WARNING	【WARNING】 refers to a hazard that may cause death or serious injury.
	CAUTION	【CAUTION】 refers to a hazard that may cause minor or moderate injury.

- ☆ The engine is equipped with a self-regulatory engine of the Japan Land Engine Manufactures Association.



(To prevent death)

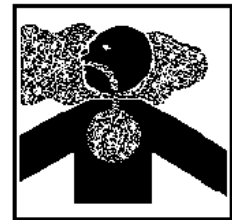
⚠ Always stop the engine when refueling. Be sure to refuel after the engine has cooled down sufficiently. If fuel is spilled, there is a risk of ignition.

⚠ Do not refuel in a place with fire. There is a risk of ignition.



(To prevent death)

⚠ Do not use this product in a place with high airtightness or poor ventilation. There is a risk of exhaust gas poisoning.



⚠ Do not carry the product on the loading platform of cars if fuel is filled in the fuel tank of the engine. There is a risk of spilling fuel and a fire.

⚠ If fuel spills, wipe it completely. Otherwise, there is a risk of fire.

⚠ Do not step on or stand on this product.

⚠ At ambient temperature of 20 °C, an aluminum case reaches 70 °C, and a muffler of 230 °C. Touching the surface causes burn injury. Since this is our measured temperature, it may vary from the surrounding environment. Please be careful to handle the engine.



⚠ Be sure to use unleaded gasoline for automobiles. Using other fuels may cause engine performance degradation, malfunction, and accidents.

⚠ Be sure to handle the engine after carefully reading the attached engine instruction manual.

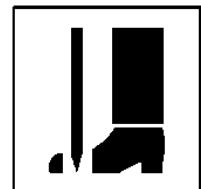
⚠ Do not operate the product without the blade case and belt cover. If your hands or body contact the rotating blade, belt or pulley, you may be injured.



⚠ Check that the blade case and belt cover are securely fixed to the chassis before work. If it is installed incorrectly, you may be injured.

⚠ While the engine is working, the blade shaft at the bottom of this product is rotating. Do not touch the rotating blade shaft. Keep away any tools from it. Otherwise, you may be injured.

⚠ Do not touch the rotating blade with your foot or body. Otherwise, you may be injured.

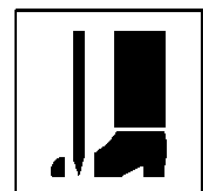


⚠ This product is designed to prevent fingers, hands, feet, and body from entering rotating parts as much as possible. However, there is a gap between the blade case and the blade, and between the belt cover and the belt cover back plate. Do not put hands, fingers, feet or body.

⚠ Trained persons with repair skills should repair this product. Never disassemble this product by an unqualified operator.

⚠ Never modify the characteristics of this product (rotation speed, blade diameter, etc.).

⚠ The blade rotates while the engine is running, so be sure to keep your hands and feet away from the blade.
Contacting the rotating blade may get injured





(To prevent injury or damages)

- ⚠ Never touch the engine, especially the heat generating parts such as mufflers during operation or immediately after stopping. Otherwise, you may get burn.



- ⚠ Do not use this product on slopes. There is a risk of runaway, falling or skidding.
- ⚠ The maximum peripheral velocity of the blade is preset when the maximum blade is attached to this product.
- Do not exceed the set engine speed. The blade tip may break and splatter, causing injury.

■ Maximum peripheral velocity of blade

Model	Maximum peripheral velocity [m/min]
ERC12E	2,720
ERC14C	3,170

■ Engine speed setting

Model	Set rotation speed [min ⁻¹]
ERC12E	3,550~3,600
ERC14C	

- ⚠ Be sure to use diamond blades to attach to the concrete cutter as the tool. Never use a metal saw or circular saw.
- ⚠ Be sure to use 27 mm hole diameter of the diamond blade for concrete cutters. Never use the other hole diameters than ϕ 27mm.
- ⚠ Use only one blade.

⚠ For safety reasons, do not use damaged blades. Please read carefully the manual attached to the blade before use.

⚠ Replace a splash sheet if it is torn and damaged. Using damaged one may result in injury.

⚠ Be sure to return the two attached wrenches to the right of the tank house when you have finished installing or removing a blade. If you start the engine with a wrench attached to the blade shaft, some parts such as the wrench, the main body or the blade shaft might be damaged, and the V-belt might be worn.

⚠ The sound power level and sound pressure of this product are shown in the table below. Since it is a cutting test at our company, the measured value may vary from the surrounding environment. Wear soundproofing protective equipment when working.

[dB]

Measurement condition	Model	Measured value	
		Sound power level	Sound pressure
No load operation	ERC12E	99	86.3
	ERC14C	99	84.7
When cutting (Cutting depth 30mm)	ERC12E	114	93.8
	ERC14C	113	94.9

Note : Sound pressure is measured at the operator's position.

○ INTRODUCTION

Thank you for purchasing the concrete cutter.

Be sure to read this operation manual before use.

Also read the operation manual of the engine.

Be sure to read and understand this operation manual carefully before using the product until it can be operated safely and efficiently. Handle and maintain the product appropriately for safety operation.

Keep this manual for further reference.

The specifications in this document are subject to change without notice due to modification.

CONTENTS

☆	SAFETY PRECAUTIONS	1
○	INTRODUCTION	6
○	SAFETY	8
○	NAMES OF PARTS	12
○	CAUTION LABEL LIST	14
○	OPERATIONS	16
○	BLADE INSTALLATION	22
○	HOW TO USE STOPPER	23
○	HOW TO FIX ELEVATING SHAFT	23
○	HOW TO HANG	24
○	CLEANING AFTER USE	25
○	INSPECTION	26
○	V-BELT ADJUSTMENT	27
○	OIL CHANGE/INSPECTION	28
○	REPLACEMENT PERIOD FOR CONSUMABLES	30
○	TROUBLESHOOTING	31
○	SPECIFICATIONS	32
○	BLADE	34
○	BLADE DIMENSION DRAWING	34

○ SAFETY



(For personal protection during operation)

- Put on a safety helmet, safety gloves, safety boots, face protector (safety glasses and mask) and hearing protection (ear plugs) before using the concrete cutter.



Safety Helmet



Safety Gloves



Safety Boots

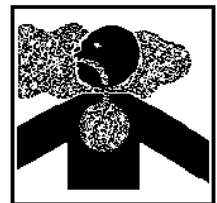


Safety face protector



Hearing protection

- During work, keep away any person except the operator the product (within a radius of 2.5 m). There is a risk of unintentional injury due to flying cut metal.
- During work, keep away from flammable items (sawdust, paper scraps, and wood chips, etc.) and hazardous materials (oils and petroleum, etc.).
- Use lifting tools to lift and suspend the main unit. Also, do not enter under the lifted body.
- Do not use this product in a place with high airtightness or poor ventilation because exhaust gas is highly toxic.

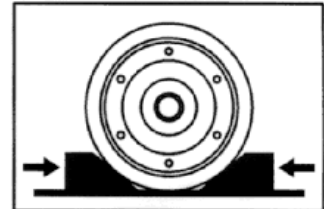


- Before transporting the product outside the work area, be sure to shut off the engine and stop the blade rotation.

- When pulling the recoil to start the engine, make sure that there are no people or obstacles around it.
- Be sure that there are no people or obstacles around it before operating the traveling handle.
- When operating the traveling handle, be careful not to pinch your fingers between the tank house and traveling handle, or between the water tank and traveling handle. Also, be careful not to pinch your fingers between the lever and the throttle lever fixing part when the throttle lever is operating. Otherwise, you may get injured.
- Be sure to work alone when using the concrete cutter.
- The maximum operating mass of the concrete cutter is 124.5 kg for ERC12E, 125 kg for ERC14C. Be sure to wear safety boots when moving. You may get injured if your foot are caught by wheels.
- The product does not tip over at an angle of 10 degree to the horizontal. Be careful not to tip over it depending on the usage environment or external force.
- When operating the product on a slope, be careful not to run out of control.
- Remove the blade when loading, unloading and transporting the main body.
- This product is too heavy, so do not lift it by hand. Otherwise, you may get injury.
- When stopping for storage or leaving it there temporally, do not stop it on the slope.
- Never put any other materials except water into the water tank of the main unit.

- When transporting it by car, tie it with a rope to prevent the body from moving, and fix the wheels with stoppers. If necessary, secure it with a wheel stopper.

* "Stopper" is not a wheel stopper.



- Wear clothes suitable for the work. Since concrete cutters have rotating parts, please do not wear accessories such as clothes with long sleeves and hems and necklaces. Also, be careful not to being caught with long hair by wearing a safety helmet or other means.
- During operation, fix the traveling handle firmly. To fix the traveling handle, tighten the two winging bolts attached to the traveling handle insertion part of the tank house. Check again that the traveling handle is securely fixed before starting work.
- If there is a long string or rope on the road surface on or near operation space, it may get entangled. Before operation, clean the road surface to be cut and remove obstacles.
- Since cuttings may scatter during the cutting process, be sure to use protective equipment such as safety glasses, safety helmet, and safety boots during work.
- The guide arm attached to the front part of the main unit that indicates the cutting part may fall forward if fixing nuts are loose. So, check the operating status of the guide arm before work.



CAUTION

(For longer service life)

- Check the oil level with the oil gauge before starting the engine.

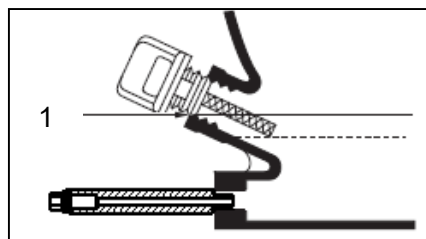
When the oil is insufficient and deteriorated, the service life of the sliding part and the rotating part is remarkably shortened.

If the oil level is below the lower limit, replenish the oil up to the fill line.

Maintain the oil volume when refilling on a regular basis.

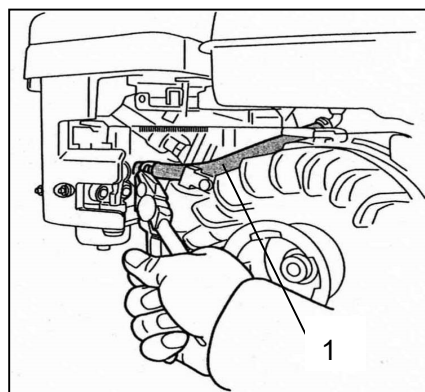
Model	Oil volume
ERC12E	0.6L
ERC14C	

Note : For inspection and maintenance for oil, refer to the Operations Manual of the engine.



▶ 1. Oil level

- Check the oil level by placing the engine horizontally because the oil level cannot be checked properly if the engine is tilted.
- Check the oil level when the oil is cold or about 5 minutes after the engine stops.
- Do not use it outdoors on rainy days.
- If there is a fuel leak from fuel pipes during inspection, replace it immediately.
- Replace the engine fuel pipe every two years regardless of use frequency. If there is a fuel leak from fuel pipes during inspection, replace it immediately.

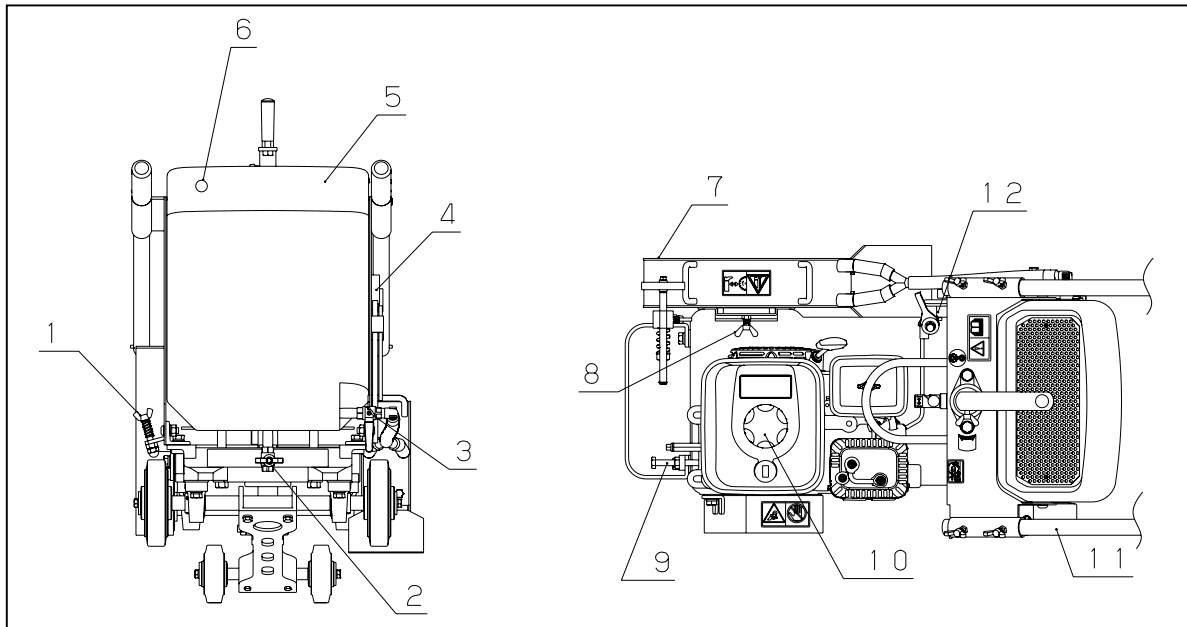


▶ 1. Fuel pipe

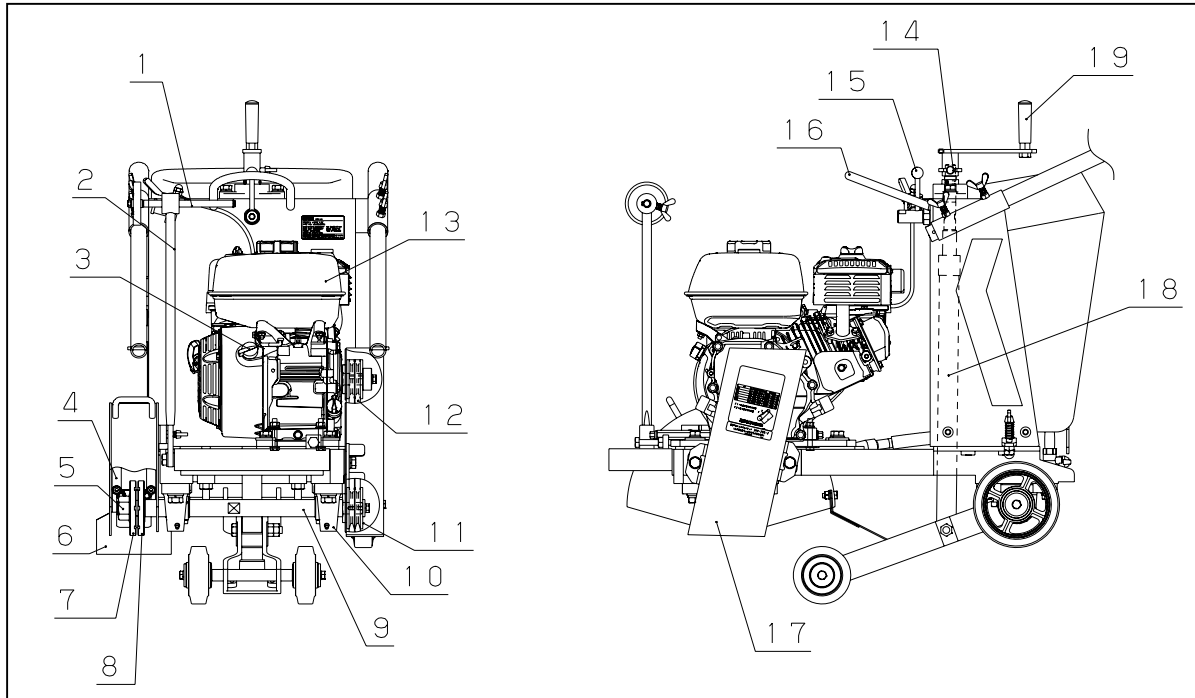
- Check that every bolt or nut is not loose. If it is loose, tighten it again.
- When maintaining or inspecting the engine, refer to the attached engine instruction manual.

○ NAMES OF PARTS

■ ERC12E • 14C

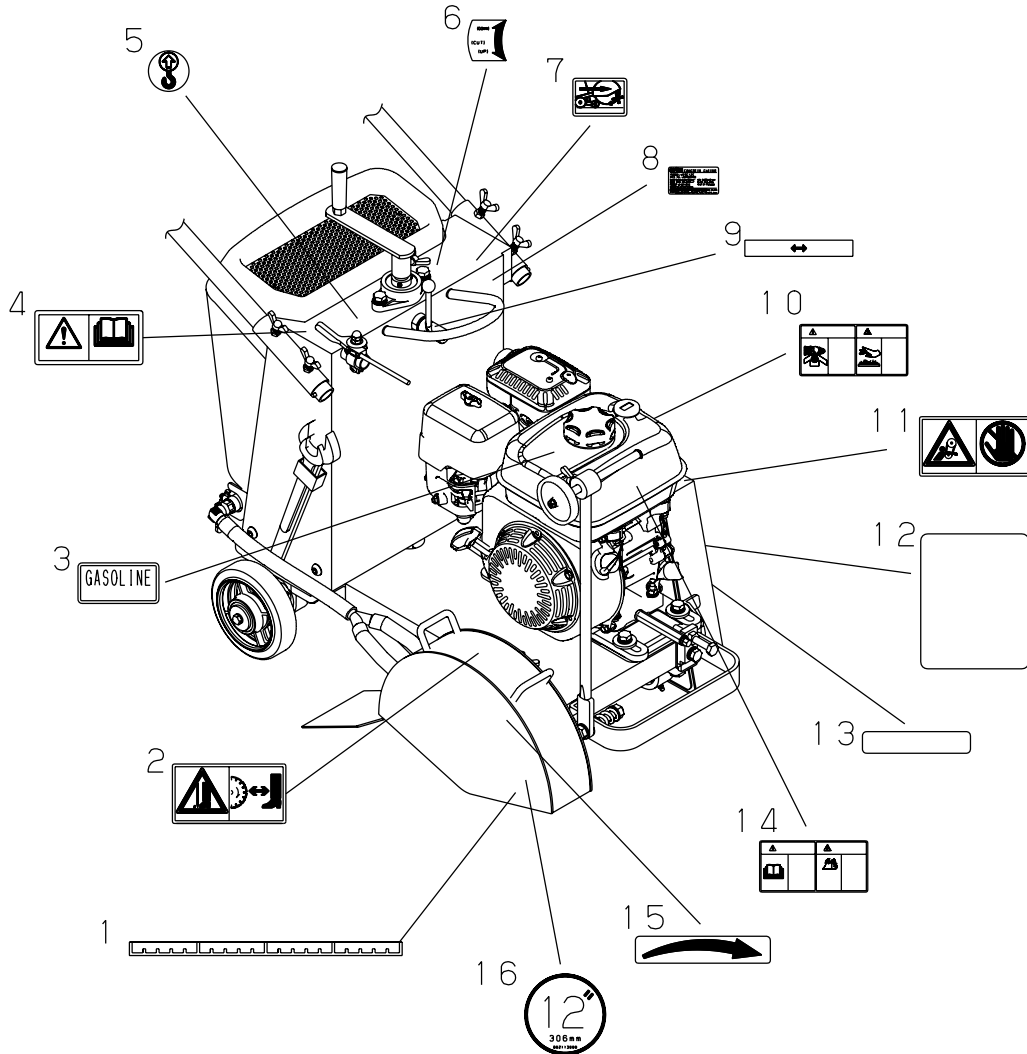


1	Stopper	7	Blade case assembly
2	Drain valve	8	Wing bolt
3	Water supply valve	9	V-belt adjustment bolt
4	Wrench	10	Refueling port
5	Water tank	11	Traveling handle
6	Water hose outlet	12	Throttle lever



1	Guide bar	11	Pulley
2	Guide arm	12	V-belt
3	Engine switch	13	Engine
4	Shower nozzle	14	Wing bolt
5	Nut M24 left	15	Stopper lever
6	Splash sheet	16	Hanging tool
7	Blade holder (Outside)	17	Belt cover
8	Blade holder (Inside)	18	Lifting screw
9	Blade shaft	19	Operation handle
10	Pillow unit (Bearing)	—	—

○ CAUTION LABEL LIST



No.	Label Name	Label description
1	Label Scale	Instruction of cutting depth
2	Label Warning blade	Instruction for cutting Instruction for close attention
3	Label Gasoline	Instruction for using gasoline
4	Label Warning / Operation manual	Operation manual Warning
5	Label Hanging position	Indication of lifting position
6	Label Elevating	Instruction for elevating shaft stopper

No.	Label Name	Label description
7	Label Blade stops during transportation	Instruction to move the product outside the work area after shut off the engine to stop the blade rotation.
8	Label Name plate	Instruction for the specifications of the product
9	Label Elevating shaft stopper	Instruction for fixing and releasing the elevating shaft stopper
10	Label for engine accessory	Warning exhaust gas Caution high temperature muffler
11	Label Warning V-belt	Hazard entanglement Do not touch while driving
12	Label V-belt adjustment	Instruction for tension adjustment when belt is replaced
13	Label V-belt	Instruction for replacement belt
14	Label Engine accessory	Fire prohibition Instruction for carefully reading the engine manual
15	Label Blade rotation direction	Instruction of blade rotation direction
16	Label Blade	Indicating the maximum blade that can be attached to the product

○ OPERATIONS

 **When using this product, do not use it in a place with high airtightness or poor ventilation. Also, be careful to operate it when handling.**

1. BEFORE STARTING THE ENGINE

FROM BLADE REPLACEMENT TO CUTTING PREPARATION

1. Turn the operation handle counterclockwise and raise the chassis from the road surface to a level where the blade can be installed.
2. Loosen the wing bolt and remove the blade case.
3. Remove the blade holder (outside) by using the included wrench. Use a 24mm wrench for the blade shaft (M24 left) and a 36mm wrench for the nut (M24 left).
4. Attach the blade to the blade shaft and fix it with the blade holder (outside) and nuts.

Note : Refer to “BLADE INSTALLATION” (page 22).

5. Attach the blade case and securely fix it to the chassis with wing bolts.
6. Fill the water tank with water.

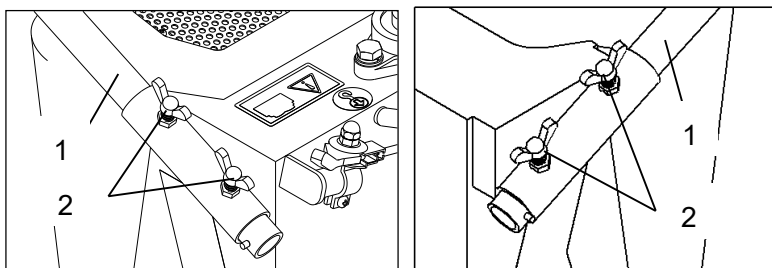
Note : When watering the tank, tighten the cock of the water supply valve / drain valve below the tank.

7. Open the water supply valve before use and check if the shower nozzle is clogged.

Note : When cutting for a long time, the water volume in the water tank is insufficient. In that case, insert a water hose into the outlet and supply water directly from the water supply.

8. Adjust the traveling handle to an appropriate position and fix it firmly with two wing bolts.

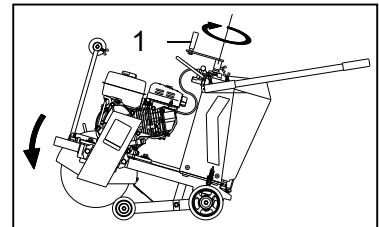
Note : Check it again whether it is securely fixed.



▶ 1. Traveling handle 2. Wing bolts

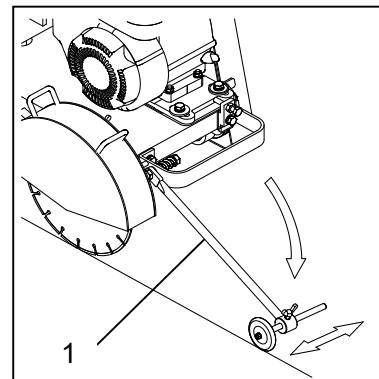
9. Move the product to the position where operators cut something.

10. Turn the operation handle clockwise and adjust the blade to a position 4 to 5 cm away from the road surface.



▶ 1. Operation handle

11. Position the guide bar so that the blade moves along the cutting line.

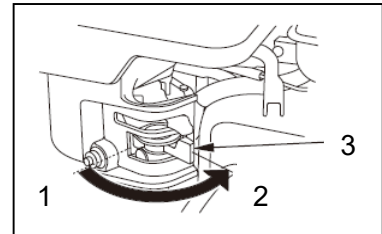


▶ 1. Guide arm

2. STARTING THE ENGINE

FROM ENGINE START TO CUTTING

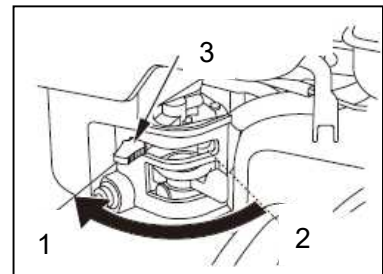
1. Turn the fuel cock lever to the "ON" position.



- ▶ 1. OFF 2. ON
3. Fuel cock lever

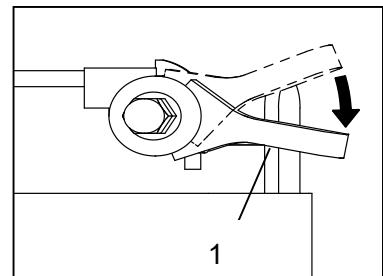
2. Turn the choke lever to the "CLOSED" position when it is cold or it is hard to start the engine.

Note : No operation is required when the engine is warm.



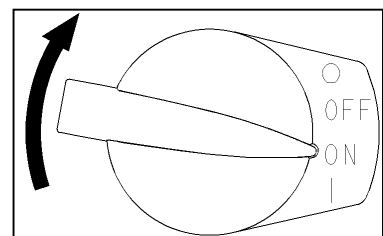
- ▶ 1. CLOSED 2. OPEN
3. Choke lever

3. Open the throttle lever about 1/3 from low speed to high speed.

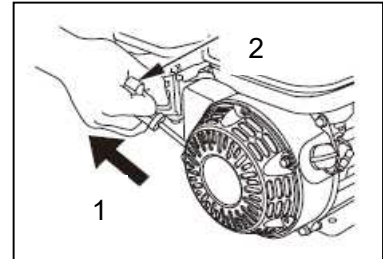


- ▶ 1. Throttle lever

4. Set the engine switch to the "ON" (operation) position.



5. Firmly hold the traveling handles, pull the starting grip gently, and stop it when you feel heavy. Next, pull it strongly in the arrow direction.



- ▶ 1. Pull direction
2. Starting grip

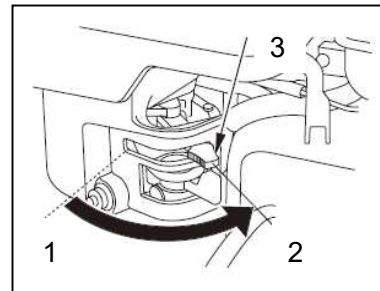
Note : Do not release your hand while pulling the start grip.

The starter and surrounding parts may be damaged.

Note : Do not pull the starting grip while driving. It will adversely affect the engine.

6. Start
Perform warm-up operation for 2 to 3 minutes.

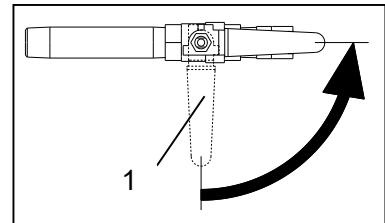
7. When the choke lever is set to “CLOSED,” move it gradually to the “OPEN” direction while confirming that the engine rotation is stable.



- ▶ 1. CLOSED 2. OPEN
3. Choke lever

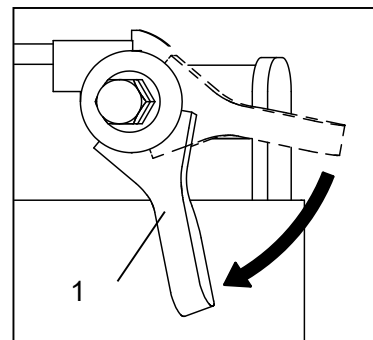
8. After starting the engine, warm up the engine on the low speed for 1-2 minutes without applying a load.
9. Check that there is no noise in the engine or V-belt.

10. Open the water supply valve cock.



▶ 1. Water supply valve

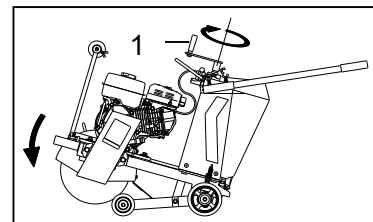
11. Move the throttle lever gradually to the high-speed position in order to open fully.



▶ 1. Throttle lever

12. Slowly turn the operating handle clockwise to cut concrete or asphalt. If the depth of cut is deep, cut in two or three times.

One rotation of the operation handle cuts about 11mm.



▶ 1. Operating handle

13. When the desired depth of cut is reached, fix the lifting shaft.

Note : Refer to “HOW TO FIX ELEVATING SHAFT” (page 23).

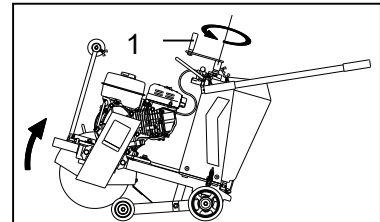
14. Press the travel handle to start cutting.

Note : Note that if the cutting speed is high, it will become overloaded and the engine may stop or the product life of the V-belt might be shortened significantly. Also, do not force the blade by changing the direction of the main body or speeding up during cutting.

3. STOPPING THE ENGINE

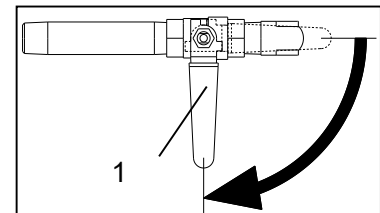
FROM DISCONNECTION TO ENGINE STOP

1. Release the lifting shaft.
2. Turn the operation handle to the counterclockwise and raise the blade to a position 4 to 5 cm from the road surface.



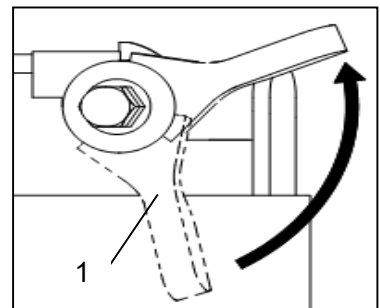
▶ 1. Operating handle

3. Close the water supply valve cock.



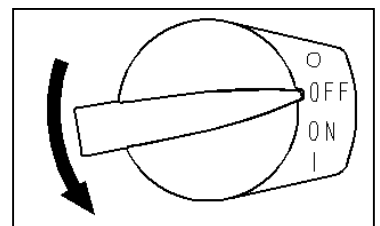
▶ 1. Water supply valve

4. Set the throttle lever to the low-speed position and drive for 2-3 minutes.

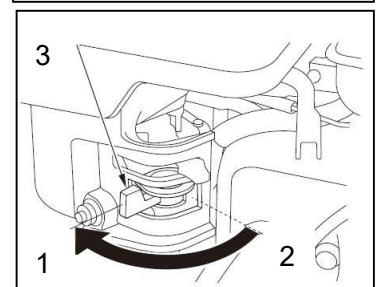


▶ 1. Throttle lever

5. Turn the engine switch to the “OFF” (stop) position.



6. Turn the fuel cock lever to the “OFF” position.



▶ 1. OFF 2. ON
3. Fuel cock lever

○ BLADE INSTALLATION



When replacing the blade, be sure to switch off the engine to stop.

1. Insert the blade into the blade shaft and press it against the blade holder (inside).

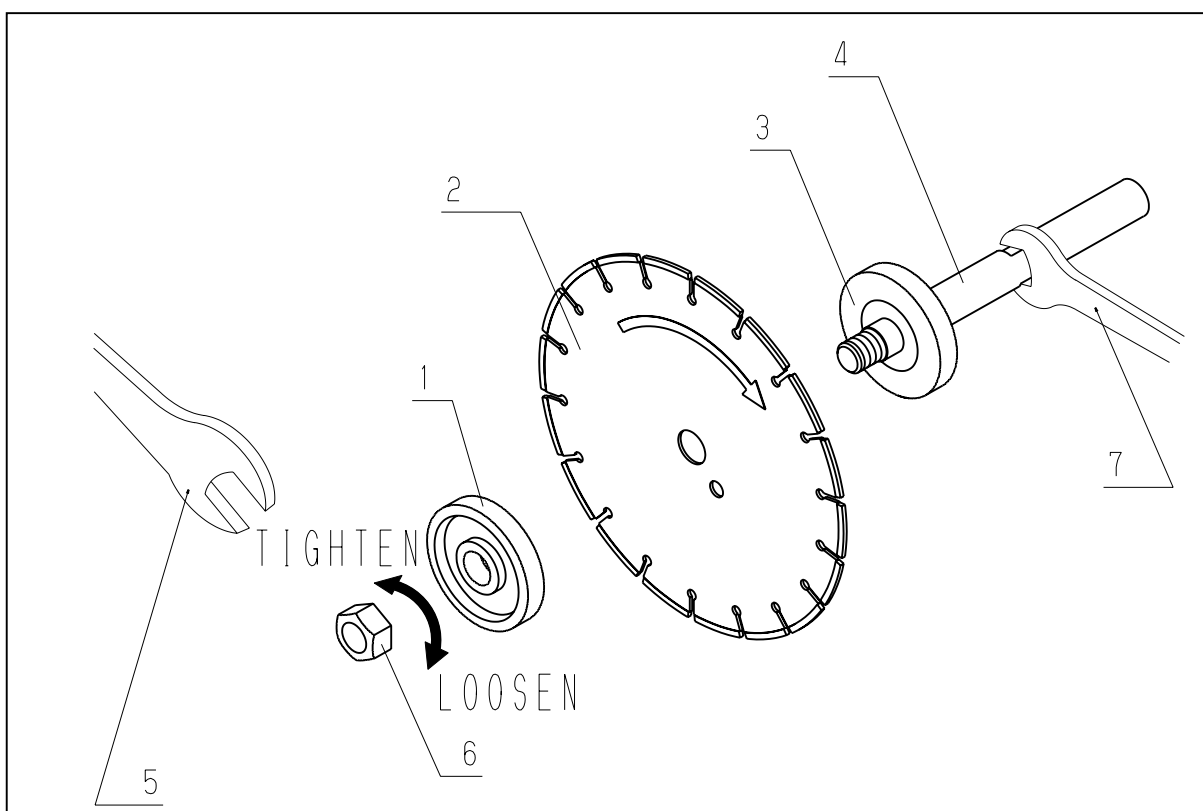
Note : When installing the blade, be sure to set the same rotation direction between the blade and blade shaft.

2. Insert the blade holder (outside) into the blade shaft and align it with the blade face.
3. Screw the M24 nut left, hold the blade shaft with an attached 24mm wrench, and securely fix the nut with a 36mm wrench.

Note : Hit the wrench with a hammer 2-3 times to tighten it.

Note : Make sure that the blade is firmly fixed.

Note : When you have finished installing or removing the blade, return the attached 24 mm wrench and 36 mm wrench to their original locations.



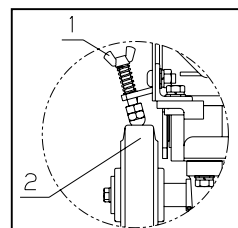
- ▶ 1. Blade holder (outside) 2. Blade 3. Blade holder (inside) 4. Blade shaft
5. Wrench 36mm 6. Nut M24 left 7. Wrench 24mm

○ HOW TO USE STOPPER



The stopper is a simple parking stopper to prevent the body from moving on flat roads. If you want to fix it securely, use a wheel stopper etc.

When turning the wing bolt clockwise, the stopper contacts the wheel and the wheels are fixed. Please turn 1.5 turns (540 degrees) after contacting. When the wing bolt is turned counterclockwise, the wheel is separated from the stopper. The wheel is released, releasing the lock.



- ▶ 1. Stopper
2. Wheel

CAUTION: Do not move the cutter body with the fixed stopper working. It may cause some tire wear.

○ HOW TO FIX ELEVATING SHAFT

■ STOPPER OPEN STATE

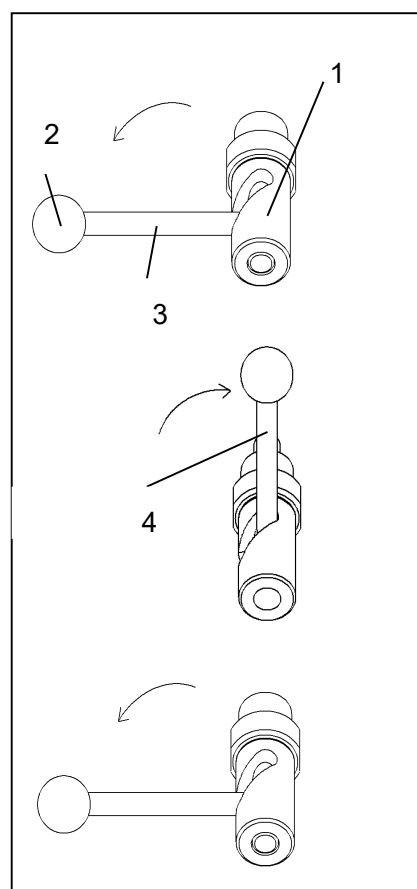
When the lever with ball knob (hereinafter called, ball lever) is all the way counterclockwise, the lifting shaft is released. (The lifting shaft can be turned.)

■ FIX THE STOPPER

1. When the ball lever is turned clockwise, the stopper pin is pulled in by the built-in spring.
2. When the operation handle is put on the lifting shaft and turned slightly, the stopper pin enters the hole of the lifting shaft and then, the lifting shaft is fixed. Make sure that it is fixed.

■ RELEASE THE STOPPER.

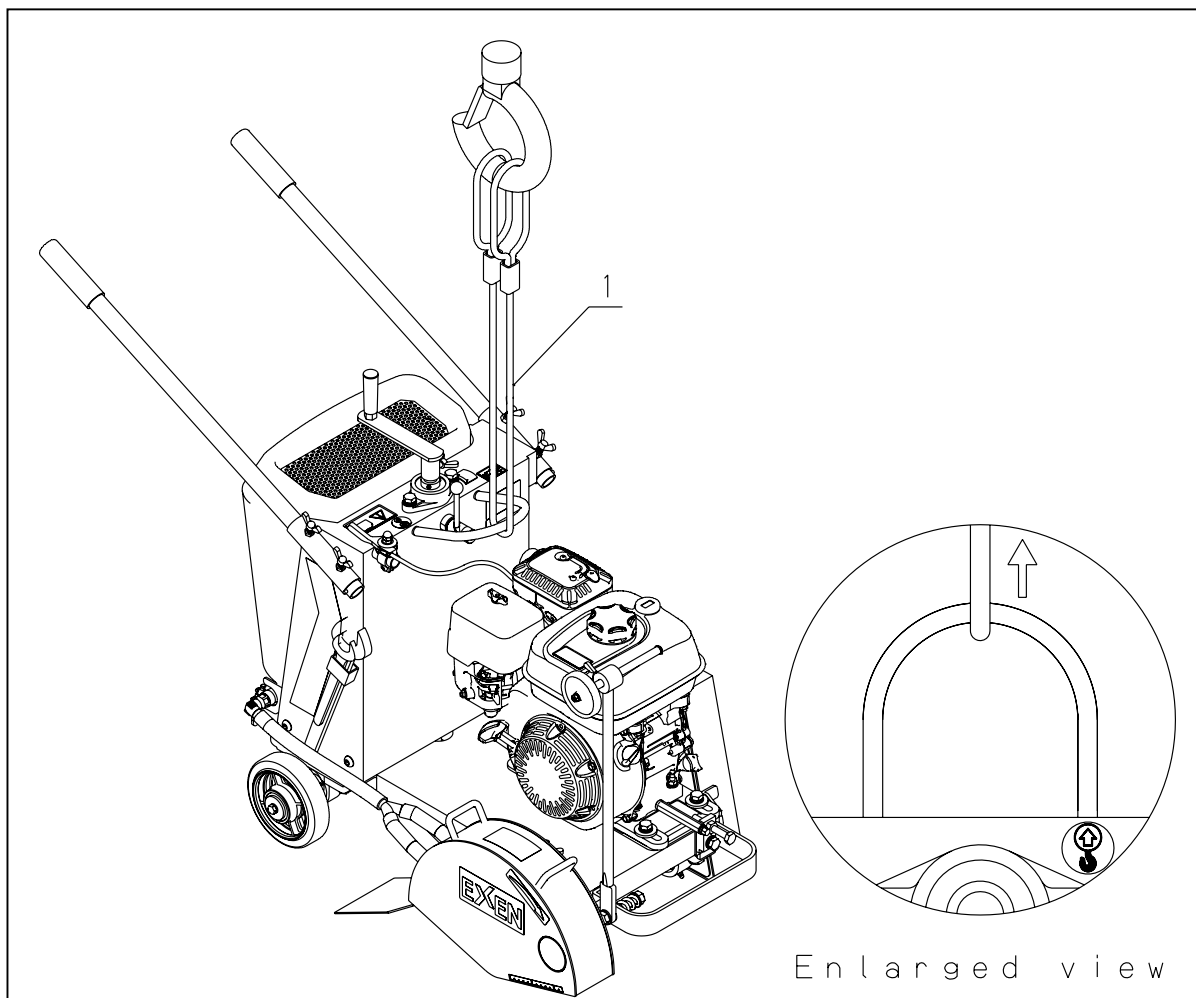
Releases the lifting shaft by turning the ball lever all the way counterclockwise.



- ▶ 1. Spring case 2. Ball knob
3. Ball lever 4. Stopper pin

○ HOW TO HANG

- ⚠ **Be sure to stop the engine and turn off the engine switch when lifting the main body.**
- ⚠ **Qualified persons must lift and suspend the body using a crane.**
- ⚠ **Be sure to use a crane with a rated capacity of 200 kg or more.**



- ▶ 1. Belt sling

<WORKING METHOD>

1. Remove the blade and drain the water so that the main body is level with the ground.
2. Lift the belt sling at the position shown in the figure and hang it.

Note : Do not hang any part other than the position shown in the figure.

Note : Please ensure sufficient working space when working.

3. After mounting it on the vehicle, tie it with a rope to keep the main unit from moving and fix the wheels with the stoppers. If necessary, fix it with the wheel stoppers.

○ CLEANING AFTER USE

- After use, should be cleaned well.
- 1. Be sure to clean the area around the blade shaft because sludge is scattered and dirty.
- 2. Check if the shower nozzle is clogged. Clean it if it is clogged.
- 3. Clean the blade holder (outside) if it is dirty.
- 4. Clean the wheel and pillow.
Grease the blade shaft pillow after cleaning.
- 5. Grease the left screw thread of the blade shaft to prevent rust.
- 6. Please read the attached engine instruction manual for handling the engine.

○ INSPECTION

- Be sure to check the following items before and after use. The inspection is in order to reduce the trouble during use as much as possible.

1. Is the water tank completely drained?
2. Are the pulley fixing bolts loose?
3. Does the lifting mechanism move smoothly to the upper and/or lower limit by using the operation handle?
4. Are there any scratches, cracks or wear on the V-belt?
5. Is the belt tension appropriate?

Note : Refer to "V-BELT ADJUSTMENT" (page 27).
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6. Is the blade holder (outside) attached?
7. Is the blade fixing nut (M24 left) attached?
8. Are there a 24mm single-ended wrench and a 36mm single-ended wrench?
9. Does the nut for fixing blade rotate smoothly?

Note : Grease screws to prevent rust.

10. Is the water tank leaking water?
11. Is the shower nozzle clogged?
12. Is the water supply valve clogged?
13. Is the water supply hose leaking water?
14. Is the engine oil dirty?
15. Is the engine oil the sufficient volume?
16. Is the engine leaking fuel?
17. Can the engine start?
18. Is the operation sound normal? (Engine sound)
19. Does the engine stop when the engine switch is "OFF"?

○ V-BELT ADJUSTMENT

- ⚠ **When adjusting the V-belt tension, be sure to stop the engine and turn the engine switch “OFF.”**
- ⚠ **The V-belt tension greatly affects the product life of V-belts and bearings, so be sure to inspect it before carrying it to the site.**

■ HOW TO ADJUST

1. Loosen the belt cover bolts M10 (2 pieces) and remove the belt cover.
2. Apply the deflection load (F1, F2) to the center of the span length (t) of the V-belt vertically

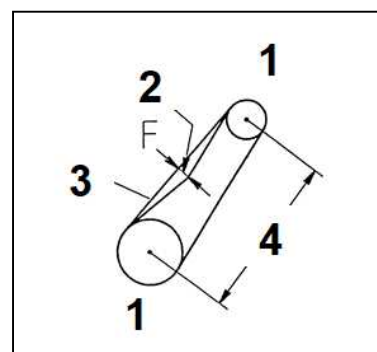
Note : Deflection load

F1=When pulling a new V-belt taut

F2=When pulling the V-belt taut again

3. If the V belt is stretched by applying the F1 or F2 load to the V belt, loosen the engine tightening bolt and adjust the V belt.

Model	F1 (N)	F2 (N)	Deflection (mm)
ERC12E	10.7	9.4	3.6
ERC14C			

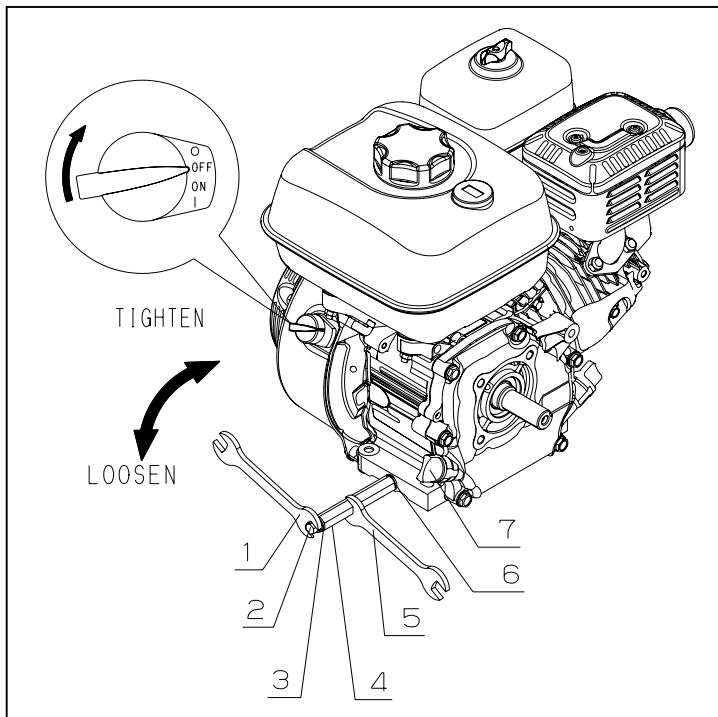


- ▶ 1. Pulley 2. Deflection
3. V-belt
4. Span length (t)

○ OIL CHANGE/INSPECTION

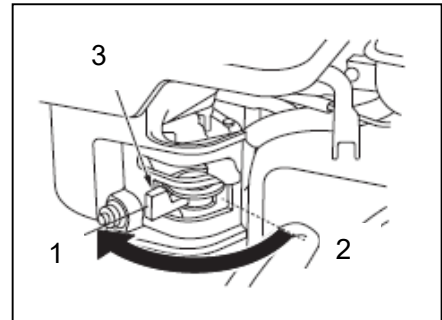
⚠ When changing the oil, be sure to stop the engine and turn “OFF” the engine switch.

■ Engine switch



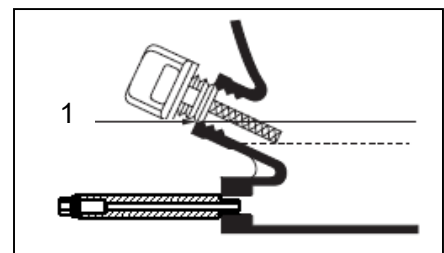
- ▶ 1. Wrench 10mm 2. Drain plug 3. Seal washer
- 4. Oil drain 5. Wrench 14mm 6. Seal washer
- 7. Oil filler cap

■ Fuel cock



- ▶ 1. OFF 2. ON
- 3. Fuel cock lever

■ Oil level check



- ▶ 1. Oil level

<OIL EXCHANGE>

1. Stop the engine and close the fuel cock. Change oil when the engine is warm.

Note : Be careful not to touch hot oil. Otherwise, you may burn your body.

2. Put 14mm wrench on the oil drain and a 10mm wrench on a drain plug, remove the drain plug so that the oil drain does not rotate. Then, drain the oil to the oil case.

Note : Loose oil drainage can cause oil leakage from the engine connection.

3. When fueling crankcase, tighten the drain plug firmly.

Note : If the drain plug is not tightened, oil leakage may occur.

4. Level the engine and fill until the inlet.
5. If oil adheres to the engine or somewhere, wipe it off cleanly.
6. Refer to the following table for the oil to be used and the volume oil.

<OIL LEVEL CHECK>

1. Be sure to check the oil before starting the engine.
2. Level the engine, remove the oil filler cap, and check for oil up to the inlet.
3. If there is a shortage, top up with a new oil.
Replace it if oil is dirty or discolored.

<RECOMMENDED OIL/SPECIFIED VOLUME>

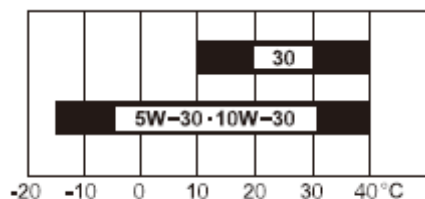
Model	Engine model	Oil volume
ERC12E	GX200T2 SHJE	0.6L
ERC14C		

<OIL REPLACEMENT CYCLE>

First: 1 month or 20 hours.

Second: Every half a year or 100 hours.

<OIL TO BE USED>



Outside temperature

- Please use Honda Genuine Ultra-U General Purpose (SAE 10W-30), or SAE 10W-30 Oil of API category SE class or equivalent/above.
- If the outside air temperature is -20°C or lower and 40°C or higher, use the appropriate oil with viscosity and quality suitable for the place where to use.

☆ Using dirty, insufficient engine oil or poor-quality oil can significantly shorten the life of the sliding and rotating parts of the engine or cause burnt problems. Always be careful to keep the specified amount of fine quality oil.

☆ Do not discard the old engine oil to the garbage, on the ground, or in drains after replacement.

Oil waste disposal is stipulated by law and standards. Please dispose properly according to the law.

If you have any questions, please consult with the shop where you purchased the oil.

○ REPLACEMENT PERIOD FOR CONSUMABLES

○ Consumables should be replaced periodically according to the below table.

Consumables	Replacement period (visual check)	Replacement frequency
V-Belt	As soon as any of scratches, cracks or wear is confirmed	Replacement
Oil	Judgment depending on oil contamination / reduction	First: 1 month or 20 hours Second: Every half a year or 100 hours
Fuel pipe	As soon as fuel leak is confirmed	Replacement Immediately after confirming fuel leakage. Replace it every 2 years regardless of usage frequency.

Note : The above replacement time of consumable parts is a rough guide.

Because it depends on usage, we recommend replacing consumables at earlier than the above.

○ TROUBLESHOOTING

Operation	Phenomenon	Cause	Solution
Blade shaft rotates	Noise	Defective bearing of pillow unit	Replacement
Blade shaft does not rotate	Engine starts	Broken belt	Replacement
	Engine does not Start.	Engine failure (Burnt)	Repair or change
Engine cannot shut down.	The engine does not stop even though the engine switch is turned off.	Engine Switch malfunction	Replace the Engine switch.

■ V-BELT SET MODEL

Model	V-BELT SET MODEL
ERC12E	3VX-280-3
ERC14C	

Note : Be sure to replace all three V-belts at the same time.

Note : For maintenance and inspection of engines, refer to the attached manual.

○ SPECIFICATIONS

■ PRODUCT SPECIFICATION

Model		ERC12E	ERC14C
Mass	[kg]	94.5	95
Blade dimensions	[mm] [inch]	256 – 356 10 – 12	256 – 356 10 – 14
Blade mounting hole	[mm]	27	
Cutting depth	[mm]	70 – 95	70 – 120
Blade peripheral velocity (At rated engine speed)	[m/s]	46	53
Blade shaft rotation speed (At rated engine speed)	[min ⁻¹]	2840	
Cutting depth adjustment		Handle screw type	
Driving method		Handcart	
Blade cooling method		Gravity feed water system	
Water tank capacity	[L]	30	
Engine		GX200T2 SHJE	
Model type		4-stroke, OHV, single cylinder	
Displacement	[cm ³]	196	
Rated speed	[min ⁻¹]	3600	
Continuous rated output	[kW/min ⁻¹] [PS/min ⁻¹]	3.7/3600 5.0/3600	
Lubricant volume	[L]	0.6	
Lubricant		Please use Honda Genuine Ultra-U General Purpose (SAE 10W-30), or SAE 10W-30 Oil of API category SE class or equivalent/above.	
Fuel tank capacity	[L]	3.1	
Fuel		Unleaded gasoline	
Fuel consumption rate	[g/kW·h] [g/PS·h]	367 270	
Ignition plug		BPR6ES(NGK) W20EPR-U(DENSO)	
Starting system		Recoil starter	
Dry mass	[kg]	16.1	

■ VIBRATION TOTAL VALUE

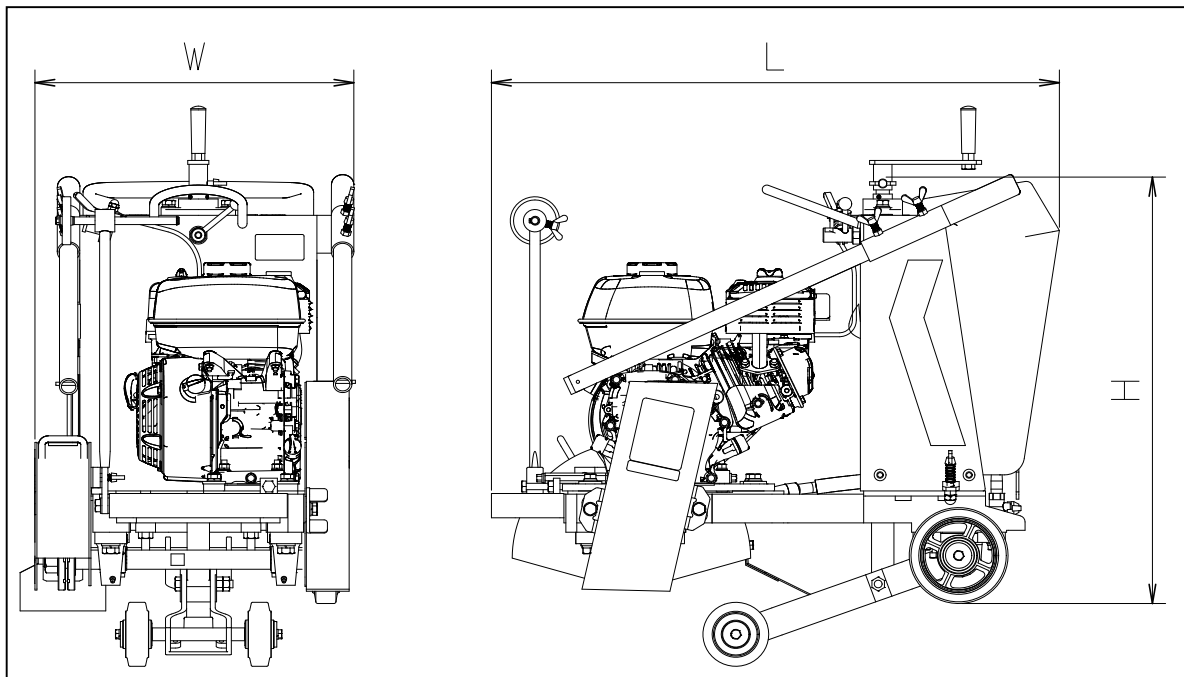
Model	Vibration total value (m/s ²)
ERC12E	4.4
ERC14C	3.9

Note : The 3-axis composite value (hand-arm vibration) is calculated the value at the engine rated speed (3600 min⁻¹) while holding the grip of the traveling handle (on the right of the worker) with no cutting concrete or asphalt.

■ DIMENSIONS (STORAGE)

Model	L (mm)	W (mm)	H (mm)
ERC12E	860	485	670
ERC14C			

■ DIMENSION DRAWING



○ BLADE

○ DIAMOND BLADE (FOR CONCRETE CUTTER)

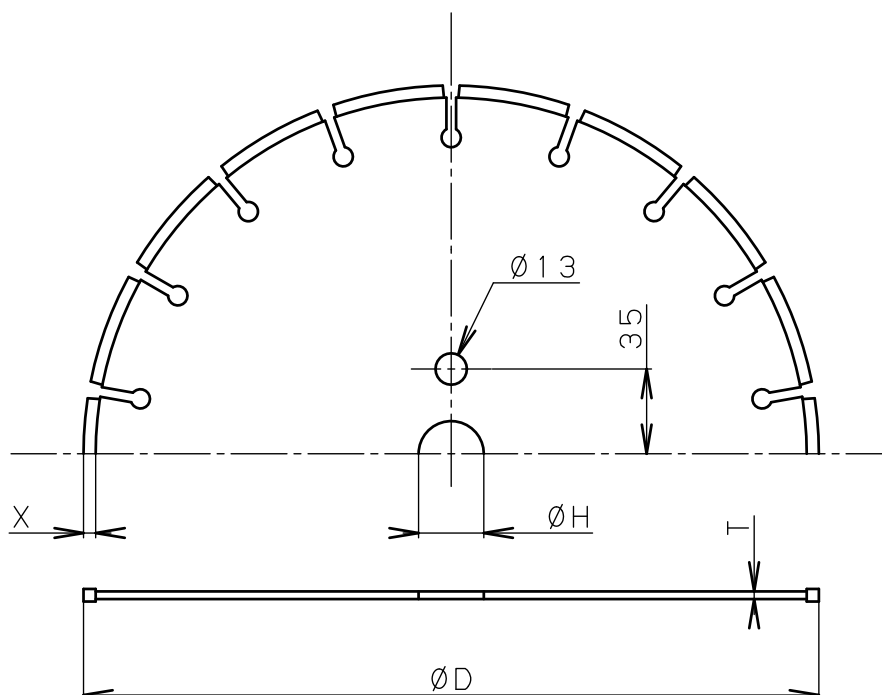
■ P/C SERIES (WET TYPE)

P type: asphalt and soft concrete

C type: for hard and reinforced concrete, brick and soft stones

Model	Size (in)	ϕ D (mm)	T (mm)	X (mm)	ϕ H (mm)
P12S Silent type	(12)	306	3.2	6.0	27
P14S Silent type	(14)	356			
P16	(16)	418			
P18	(18)	469			
C120	(12)	306			
C140	(14)	356			
C16	(16)	418			
C18	(18)	469			

○ BLADE DIMENSION DRAWING



Please read carefully the manual of the diamond blade before use.

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