Important! It is essential you read the instructions in this manual before starting and operating this machine. Subject to technical modifications.
Dangerous Environments. To avoid falling, do not use the product in damp or wet locations.

Controlling the Product. During carburetor adjustments, the cutting attachment may spin. Therefore, you should wear protective equipment and observe all safety instructions when adjusting the carburetor. For products equipped with a clutch, be sure the cutting attachment stops turning when the engine idles. When the product is turned off, make sure the cutting attachment has stopped before setting down the product.

Use the Right Product. Use the product for the intended purpose only.

Save these instructions. Refer to them frequently and use them to instruct others who may use this power tool. If you loan someone this power tool, loan them these instructions also.

Physical Condition of the Operator. Do not operate this product when tired, ill or under the influence of alcohol, drugs or medication.

Clothing Requirements. Always wear long heavy pants, boots and gloves. Do not wear loose clothing, jewelry, short pants, sandals or go barefoot. Secure hair so that it is above shoulder level to avoid entanglement in moving parts.

Protective Accessories Requirements. Wear eye and hearing protection when operating this product. Before use, inspect the condition of the trimmer. Replace damaged parts. Check for fuel leaks. Make sure all fasteners are in place and secure. Replace cutting attachment parts that are cracked, chipped or damaged in any way. Make sure the cutting attachment is properly installed and securely fastened. Be sure the cutting attachment shield is properly attached and in the position recommended by the manufacturer. Use only flexible, non-metallic line recommended by the manufacturer. For example, never use wire or wire rope, which can break off and become a dangerous projectile.

Proper Stance. Keep firm footing and balance. Do not overreach. Keep the cutting attachment below waist level. Keep all parts of your body away from the rotating cuttingattachment and hot surfaces.

Exhaust Gases. Never start or run the product inside a closed room or building; breathing exhaust fumes can cause illness or death.

Fueling. Mix and pour fuel outdoors where there are no sparks and flames. Slowly remove the fuel cap only after stopping the engine. Do not smoke while fueling or mixing fuel. Wipe spilled fuel from the product. Move at least 30ft. (9m) away from the fueling source and site before starting the engine.

Work Area. Clear the area to be cut before each use. Remove all objects, such as rocks, broken glass, nails, wire or string, that can be thrown or become entangled in the cutting attachment. Clear the area of children, bystanders and pets. At a minimum, keep all children, bystanders and pets outside a 50ft. (15m) radius. Because there still may be a risk of injury to bystanders from thrown objects, bystanders should be encouraged to wear eye protection. If you are approached while operating the product, stop the engine and the cutting attachment.
## Important:

Some of the following symbols may be used on your tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>NAME</th>
<th>EXPLANATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Safety Alert]</td>
<td>Safety alert</td>
<td>Indicates danger, warning or caution. It means attention!!! Your safety is involved.</td>
</tr>
<tr>
<td>![Read Your Operator's Manual]</td>
<td>Read your operator’s manual</td>
<td>Your manual contains special messages to bring attention to potential safety concerns as well as operating and servicing information. Please read all the information carefully to ensure satisfaction and safe use.</td>
</tr>
<tr>
<td>![Wear Eye, Hearing and Head Protection]</td>
<td>Wear eye, hearing and head protection</td>
<td>Wear eye, hearing and head protection when operating the equipment.</td>
</tr>
<tr>
<td>![Keep Bystanders Away]</td>
<td>Keep bystanders away</td>
<td>Keep all bystanders, especially children and pets, at least 15m from the operating area.</td>
</tr>
<tr>
<td>![Ricochet]</td>
<td>Ricochet</td>
<td>Danger of ricochet.</td>
</tr>
<tr>
<td>![Boots]</td>
<td>Boots</td>
<td>Wear non-slip safety footwear when using the product.</td>
</tr>
<tr>
<td>![Gloves]</td>
<td>Gloves</td>
<td>Wear non-slip, heavy-duty gloves.</td>
</tr>
<tr>
<td>![No Smoking]</td>
<td>No smoking</td>
<td>Do not smoke when mixing fuel or filling the fuel tank.</td>
</tr>
<tr>
<td>![Petrol]</td>
<td>Petrol</td>
<td>Use regular unleaded petrol intended for motor vehicle use with an octane rating of 91 ([R+M]/2) or higher. E10 is not recommended.</td>
</tr>
<tr>
<td>![Oil]</td>
<td>Oil</td>
<td>Use 2-stroke oil for air cooled engines.</td>
</tr>
<tr>
<td>![Mix Petrol and Oil]</td>
<td>Mix petrol and oil</td>
<td>Mix the fuel mix thoroughly and also each time before refuelling.</td>
</tr>
<tr>
<td>![No Blade]</td>
<td>No blade</td>
<td>Do not install any type of blade on this unit.</td>
</tr>
<tr>
<td>![Do Not Use Toothed Blade]</td>
<td>Do not use toothed blade</td>
<td>This unit is not intended for use with a toothed saw type blade.</td>
</tr>
</tbody>
</table>
### RPM Decal
Rotational direction and maximum speed of the shaft for the cutting attachment.

### Run position.

### Set the choke lever to "Full" position.

### Place the engine switch to the "I" position.

### PRIME - press the primer bulb 10 times slowly.

### Pull the starter rope to start.

### Squeeze throttle trigger to start / run.

### To stop the unit, place the engine switch to the "O" position.

### Blade hazard
Warning! Risk of getting cut; operate carefully.

### Guaranteed sound pressure level and sound power level.

### Regulatory Compliance Mark (RCM). This product meets applicable regulatory requirements.

---

The following signal words and meanings are intended to explain the levels of risk associated with this product.

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>SIGNAL</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>!</td>
<td>DANGER:</td>
<td>Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.</td>
</tr>
<tr>
<td>!</td>
<td>WARNING:</td>
<td>Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.</td>
</tr>
<tr>
<td>!</td>
<td>CAUTION:</td>
<td>Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.</td>
</tr>
<tr>
<td>!</td>
<td>CAUTION:</td>
<td>(Without Safety Alert Symbol) Indicates a situation that may result in property damage.</td>
</tr>
</tbody>
</table>
### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight without fuel and trimmer head</td>
<td>4.38 Kg</td>
</tr>
<tr>
<td>Weight without fuel with trimmer head</td>
<td>4.60 Kg</td>
</tr>
<tr>
<td>Fuel tank volume</td>
<td>250 ml</td>
</tr>
<tr>
<td>Cutting swath</td>
<td>432 mm</td>
</tr>
<tr>
<td>Diameter of cutting line</td>
<td>2.4 mm</td>
</tr>
<tr>
<td>Engine displacement</td>
<td>26 cc</td>
</tr>
<tr>
<td>Maximum engine performance (in accordance with ISO 8893)</td>
<td>0.65 kW</td>
</tr>
<tr>
<td>Maximum rotational frequency of the spindle</td>
<td>12,000 min⁻¹</td>
</tr>
<tr>
<td>Engine speed (rotational frequency) at recommended max. spindle rotational frequency</td>
<td>12,000 min⁻¹</td>
</tr>
<tr>
<td>Engine speed (rotational frequency) at idle</td>
<td>2,800-3,800 min⁻¹</td>
</tr>
<tr>
<td>Fuel consumption (in accordance with ISO 8893) at max. engine performance</td>
<td>0.37 kg/h</td>
</tr>
<tr>
<td>Specific fuel consumption (in accordance with ISO 8893) at max. engine performance</td>
<td>0.57 kg/kw.h</td>
</tr>
<tr>
<td>Vibration level idling</td>
<td></td>
</tr>
<tr>
<td>Front handle</td>
<td>7.5 m/s²</td>
</tr>
<tr>
<td>Rear handle</td>
<td>3.3 m/s²</td>
</tr>
<tr>
<td>Vibration level racing</td>
<td></td>
</tr>
<tr>
<td>Front handle</td>
<td>11.5 m/s²</td>
</tr>
<tr>
<td>Rear handle</td>
<td>16.5 m/s²</td>
</tr>
<tr>
<td>Measured sound pressure level (in accordance with EN ISO 22868)</td>
<td></td>
</tr>
<tr>
<td>Idle</td>
<td>79.1 dB(A) KpA=3 dB(A)</td>
</tr>
<tr>
<td>Racing</td>
<td>98.5 dB(A) KpA=3 dB(A)</td>
</tr>
<tr>
<td>Measured sound power level (in accordance with EN ISO 22868)</td>
<td></td>
</tr>
<tr>
<td>Idle</td>
<td>91.6 dB(A) KpA=3 dB(A)</td>
</tr>
<tr>
<td>Racing</td>
<td>109.3 dB(A) KpA=3 dB(A)</td>
</tr>
</tbody>
</table>

### DESCRIPTION

#### FIGURE 1
1. Upper shaft  
2. Knob  
3. Button  
4. Guide recess  
5. Front handle  
6. Safety guard  
7. Trimmer line  
8. Trimmer head

#### FIGURE 2
5. Front handle  
9. Securing bolts  
10. Bracket

#### FIGURE 3
11. Securing bolt  
12. Flat washer  
13. Lock washer  
14. Wing nut

#### FIGURE 4
15. On/Off switch  
16. Throttle lock out lever  
17. Throttle trigger  
18. Primer bulb  
19. Starter grip

#### FIGURE 5
20. Full choke position  
21. Run position

#### FIGURE 8
32. Bump head cover  
27. Bump knob  
28. Line spool  
29. Bump head spring  
30. Bump head securing bolt  
31. Cutting head housing

#### FIGURE 9
22. Foam air filter  
23. Air filter cover  
24. Latch

#### FIGURE 10
25. Spark plug boot  
26. Spark plug

### ASSEMBLY

### UNPACKING

This product requires assembly.  
- Carefully remove the tool and any accessories from the box. Make sure that all items listed in the packing
ATTACHING THE FRONT HANDLE (FIG. 2)

Loosen and remove the bolt (item 9), wing nut (item 10) and flat washer (item 12) from the front handle (item 5).

Install the front handle onto the upper shaft at the position between foam and warning label.

Replace the bolt, washer and wing nut; tighten wing nut securely.

SAFETY GUARD (FIG. 3)

Remove wing nut (item 14), flat washer (item 12), lock washer (item 13) and bolt (item 11) from the Owner's Kit.

Place safety guard (item 6) over shaft and bracket.

Install bolt through the slots in the tabs on safety guard and bracket on driveshaft housing.

Install flat washer, lock washer and wing nut.

Tighten securely.

INSTALLING THE REEL EASY LINE TRIMMER HEAD

See Figures 8

Stop the engine and disconnect the spark plug wire.

Remove currently installed line trimmer head.

Open the Reel Easy Line Trimmer Head by depressing the latches on each side. The contents of the line trimmer head are spring loaded, so keep your other hand over the line trimmer head cover while depressing the latches. (image 3)

Remove the line trimmer head cover, bump knob, and line spool and set aside.

Place the cutting head housing on the drive shaft. Make sure the housing is fully seated.

Install the hex bolt to secure the line trimmer head to the drive shaft. Tighten by using the hex-shaped opening on the inside of the bump knob. 

Note: Only use the bump knob to tighten the bolt. The use of other tools may allow over tightening of the bolt, which could damage the line trimmer head. (image 4)

Reinstall the bump head spring into the line trimmer head and push down to seat. (image 5)

Reinstall the line spool. For the curved shaft attachment with the Reel Easy cutting head the spool should be placed so "This side out for curved shaft" is visible on the line spool.

Replace the bump knob by inserting it into the centre of the line spool.

Replace the line trimmer head cover, aligning latches with openings in the line trimmer head. Press cover and line trimmer head together until both latches snap into openings securely.

Install line as described in the next section of this manual.
INSTALLING LINE IN REEL EASY LINE TRIMMER HEAD
See Figures 8
Use 2.4mm diameter monofilament line.

- Stop the engine and disconnect the spark plug wire.
- Cut one piece of line approximately 6.0 meters in length.
- Rotate the bump knob on line trimmer head until line on the centre of the bump knob aligns with arrows on top of line trimmer head. (Image 6)
- Insert one end of line into eyelet located on the side of the line trimmer head and push until line comes out through the eyelet on the other side. Continue to push line through the line trimmer head until the middle section of the line is inside the line trimmer head and line outside the line trimmer head is evenly divided on each side. (Image 7-8)
- Rotate the knob on the line trimmer head counterclockwise to wind the on the line.

NOTE: If using the Reel Easy Head on a straight shaft attachment, the knob should be rotated clockwise.

- Wind the line until approximately 20cm remains protruding from the line trimmer head.
- Replace the spark plug boot.

NOTE: For video instruction see the following website:
http://www.youtube.com/user/RYOBIAustralia
And watch the video;
RYOBI: How to install trimming line on a Reel Easy™ head

OPERATION

FUEL AND REFUELING

Handling the fuel safely
Always handle fuel with care, it is highly flammable.
- Always refuel outdoors where there are no sparks and flames. Do not inhale fuel vapors.
- Do not let petrol or oil come in contact with your skin.
- Keep petrol and oil away from the eyes. If petrol or oil comes in contact with the eyes, wash them immediately with clean water. If irritation is still present, see a doctor immediately.
- Clean up spilled petrol immediately.

Mixing the fuel
- This product is powered by a 2-stroke engine and requires pre-mixing petrol and 2-stroke oil. Pre-mix unleaded petrol and 2-stroke engine oil in a clean container approved for petrol.
- This engine is certified to operate on unleaded petrol intended for automotive use with an octane rating of 87 ([R + M] / 2) or higher. E 10 is not recommended.
- Do not use any type of pre-mixed petrol / oil from fuel service stations, this includes the pre-mixed petrol / oil intended for use in mopeds, motorcycles, etc.
- Use synthetic 2-stroke oil only. Do not use automotive oil or 2-stroke outboard oil.
- Mix 2% synthetic 2-stroke oil into the petrol. This is a 50:1 ratio.
- Mix the fuel thoroughly and also each time before fueling.
- Mix in small quantities. Do not mix quantities larger than usable in a 30 day period. Synthetic 2-stroke oil containing a fuel stabilizer is recommended.

FILLING THE TANK
- Clean surface around fuel cap to prevent contamination.
- Loosen fuel cap slowly to release pressure and to keep fuel from escaping around the cap.
- Carefully pour fuel mixture into the tank. Avoid spillage.
- Prior to replacing the fuel cap, clean and inspect the gasket.
- Immediately replace fuel cap and hand tighten. Wipe up any fuel spillage. Move 9 m away from refueling site before starting engine.

Note: It is normal for smoke to be emitted from a new engine during and after first use.

WARNING
Always shut off engine before fueling. Never add fuel to a machine with a running or hot engine. Move at least 9m from refueling site before starting engine. Do not smoke!

50:1 Petrol to Oil Mixing Chart

<table>
<thead>
<tr>
<th>Petrol (litres)</th>
<th>Oil (ml)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20 ml</td>
</tr>
<tr>
<td>2</td>
<td>40 ml</td>
</tr>
<tr>
<td>3</td>
<td>60 ml</td>
</tr>
<tr>
<td>4</td>
<td>80 ml</td>
</tr>
<tr>
<td>5</td>
<td>100 ml</td>
</tr>
</tbody>
</table>

50:1 (2%)
STARTING THE PRODUCT (FIG. 4-5)
Starting the product differs depending on whether the engine is cold or warm. Refer to the label on the air filter cover.

TO START A COLD ENGINE
Follow these steps to start a cold engine.
1. Lay the product on a flat, bare surface.
2. Ensure the engine switch is in the I (ON) position (item 15).
3. Push the primer bulb (item 18) approximately 10 times.
4. Set the choke lever to Full choke position (item 20).
5. Hold down the throttle lock out button (item 16) and squeeze the throttle trigger (item 17).
6. Pull the starter grip (item 19) with a quick firm and consistent upward motion (No more than 4x).
7. Set the choke lever to Run position (item 21).
8. Hold down the throttle the lock-off button and squeeze the throttle trigger.
9. Pull the starter grip with a quick firm and consistent upward motion until the engine starts (No more than 6x).

Note: If engine does not start, return to step 4 and repeat the steps.

Note: When the engine starts, let it run for 30 seconds prior to operation.

TO START A WARM ENGINE
Follow these steps to start a warm engine.
1. Lay the product on a flat, bare surface.
2. Ensure the engine switch is in the I (ON) position (item 15).
3. Ensure the choke lever is set to position B (Choke Open).
4. Hold down the throttle lock out button (item 16) and squeeze the throttle trigger (item 17).
5. Pull the starter grip with a quick firm and consistent upward motion until the engine starts (No more than 6x).

Note: If engine does not start, return to step 4 on the “TO START A COLD ENGINE” and repeat the steps.

STOPPING THE PRODUCT
- Release the throttle trigger.
- Hold down the engine switch to the O (OFF) position until the engine comes to a complete stop.

OPERATING THE TRIMMER (FIG. 6)

WARNING
Injuries may be caused, or aggravated, by prolonged use of a tool. When using any tool for prolonged periods, ensure you take regular breaks.

Follow these steps to operate the curved shaft trimmer.
- Start the trimmer.
- Hold the trimmer at waist level with your right hand on the trigger handle and your left hand on the front handle.
- Place the product on the right side of your body with the engine behind and away from your body.
- Trim grass and weeds with the line parallel to the ground.

TO ADVANCE THE CUTTING LINE
Follow these steps to advance the cutting line.
- Start the trimmer.
- Tap the bump knob lightly on the ground while the motor is running. The line will only advance with the engine at full throttle. Do not hold the bump knob on the ground.

Note: The blade on the safety guard will cut the line to the proper length.

Note: To help prevent line tangle, tap only once to lengthen the line. If additional line is required, wait a few seconds before retapping the bump knob. Do not allow the line to wear too short. Keep the cutting line at full length.

MAINTENANCE

WARNING
When servicing, use only identical replacement parts. Use of any other parts may create a hazard or cause product damage.

Always wear safety goggles or safety glasses with side shields during tool operation. If operation is dusty, also wear a dust mask.
English (Original Instructions)

**WARNING**

Before inspecting, cleaning, or servicing the machine, shut off engine, wait for all moving parts to stop, and disconnect spark plug lead and move it away from spark plug. Failure to follow these instructions can result in serious personal injury or property damage.

**WARNING**

Neglected or poorly conducted maintenance may create additional hazards. Do not attempt to repair or maintain this product if you are not qualified to do so. If in doubt, return to a service centre for professional assistance.

**GENERAL MAINTENANCE**

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, dust, lubricant, grease.

**WARNING**

Do not at any time let brake fluids, petrol, petroleum-based products, penetrating lubricants, etc., come in contact with plastic parts. Chemicals can damage, weaken or destroy plastic which may result in serious personal injury.

You can often make adjustments and repairs described in this manual. For other repairs, have the trimmer serviced by a service dealer.

**CLEANING THE AIR FILTER (FIG. 9)**

A dirty air filter will cause starting difficulty, loss of performance, and shorten the life span of the engine. Check the air filter monthly. For best performance, replace the air filter at least once a year.

- Remove the air filter cover (item 23) by pushing down on the latch (item 24) with your thumb while gently pulling on the cover.
- Remove the air filter (item 22).
- Clean the foam filter element with warm soapy water. Rinse and let dry.

**NOTE:** If the foam filter element is damaged, it should be replaced.

- Apply a light coat of engine oil to the foam filter element, then squeeze it out.
- Reinstall the air filter.

**NOTE:** Make sure the filter is seated properly inside the cover. Installing the filter incorrectly will allow dirt to enter the engine, causing rapid engine wear.

- Replace the air filter cover by inserting the slot at the bottom of the air box cover into the latch at the bottom of the air box base; push the air box cover up until it latches securely in place.

**WARNING**

Make sure the trimmer head stops rotating when you release the trigger. Contact with a rotating trimmer head could cause personal injury.

**CHECKING THE FUEL CAP**

**WARNING**

A leaking fuel cap is a fire hazard and must be replaced immediately.

The fuel cap contains a non-serviceable filter and check valve. A clogged fuel filter causes poor engine performance. If performance improves when the fuel cap is loosened, the check valve may be faulty or the filter may be clogged. Replace the fuel cap if necessary.

**REPLACING THE SPARK PLUG (FIG. 10)**

This engine uses a Champion RCJ6Y or NGK BPMR7A spark plug. Use an exact replacement and replace annually.

Follow these steps to replace the spark plug.

- Remove the spark plug boot (item 25).
- Loosen the spark plug (item 26) by turning it counterclockwise with a 16mm socket.
- Remove the spark plug.
- Hand thread the new spark plug, turning it clockwise.
- Tighten with a socket. Do not overtighten.

**CAUTION**

Be careful not to cross-thread the spark plug. Cross-threading will seriously damage the engine.

**STORING THE PRODUCT**

Storing the product differs depending on the amount of time it will be in storage.

Follow these steps for short term product storage.

- Clean all foreign material from the product.
- Store the product in a well-ventilated place that is inaccessible to children.

If you do not intend to use the product for more than one month, follow the storage procedures below.

- Drain all fuel from the tank into a container approved for petrol.
- Run the engine until it stops.
Clean all foreign material from the product.
Store the product in a well-ventilated place that is inaccessible to children.

**Note:** Keep the product away from corrosive agents such as garden chemicals.

**Important:** Abide by all local and government regulations for the safe storage and handling of petrol.
## TROUBLE SHOOTING

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE CAUSE</th>
<th>SOLUTION</th>
</tr>
</thead>
</table>
| Engine will not start. | 1. Switch set to the O (OFF) position.  
2. No spark.  
3. No fuel.  
4. Flooded engine.  
5. Starter cord is hard to pull. | 1. Set switch to the I (ON) position.  
2. Remove the spark plug. Reattach the spark plug cap and lay the spark plug on the metal cylinder. Pull the starter cord and watch for a spark at the spark plug tip. If there is no spark, repeat the test with a new spark plug.  
3. Push primer bulb until the bulb is full of fuel. If the bulb does not fill, the primary fuel delivery system is blocked. If the primer bulb fills, the engine may be flooded. (See next item.)  
4. Remove the spark plug. Turn the product so that the spark plug hole is aimed at the ground. Make sure the choke lever is set to Run position (item 21) and pull the starter cord 10 to 14 times. This clears excess fuel from the engine. Clean and reinstall the spark plug. With the throttle trigger fully depressed, pull the starter cord 3 times. If the engine does not start, set the choke lever to Full choke position (item 20) and follow normal starting instructions. If the engine still fails to start, repeat the procedure with a new spark plug.  
5. Contact an authorized service dealer. |}

| Engine does not reach full speed and emits excessive smoke. | 1. Check oil fuel mixture.  
2. Air filter is dirty.  
3. Spark arrestor screen is dirty. | 1. Use fresh fuel and the correct 2-stroke oil mix.  
2. Clean the air filter according to the instructions in the Maintenance section.  
3. Contact an authorized service dealer. |}

| Cutting line will not advance when using bump feed action. | 1. Line welded to itself.  
2. Not enough line on the spool.  
3. Line worn too short.  
4. Line tangled on spool.  
5. Engine speed too slow.  
2. Install more line.  
3. Pull line while alternately pressing down on and releasing the retaining cap.  
4. Remove line from spool and rewind.  
5. Advance line at full throttle.  
6. Ensure the writing on the line spool is facing the correct way; THIS SIDE OUT FOR CURVED SHAFT. |}

| Grass wraps around the trimmer head assembly and the attachment shaft. | 1. Cutting tall grass at ground level.  
2. Operating the product at part throttle. | 1. Cut tall grass from the top down.  
2. Operate the product at full throttle. |}

| Oil drips from muffler. | 1. Operating the product at part throttle.  
2. Check oil/fuel mixture.  
3. Air filter is dirty. | 1. Operate the product at full throttle.  
2. Use fresh fuel and the correct 2-stroke oil mix.  
3. Clean the air filter according to the instructions in the Maintenance section. |}