GRIZZLY

OPERATOR'S INSTRUCTION MANUAL

MODEL: **303 500 / 303 600 /303 800** ENGINE MODEL: _____
SERIAL: _____ ENGINE SERIAL: _____

DATE OF PURCHASE: _____
PURCHASED FROM: _____

WARNING: THIS PRODUCT IS DESIGNED AND MANUFACTURED TO PROVIDE SAFE AND DEPENDABLE SERVICE IF OPERATED ACCORDING TO INSTRUCTIONS. THE MANUFACTURER PROVIDES THE FOLLOWING INSTRUCTIONS FOR USE AND CARE OF THIS EQUIPMENT AND RELIES UPON THE PURCHASER TO SEE TO IT THAT THESE INSTRUCTIONS ARE MADE CLEAR TO THE PERSONS WHO WILL ACTUALLY BE USING THE EQUIPMENT. FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY OR EQUIPMENT DAMAGE.

GRIZZLY EQUIPMENT
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INTRODUCTION

303 500, 303 600, 303 800 PIRANHA ROOF CUTTERS

Thank you for purchasing this quality **GRIZZLY** product. With proper use and care, the roof cutter will provide many years of reliable service. For the safety of all job-site personnel it is mandatory that the instructions provided for the use and handling of the equipment be read and thoroughly understood by the operators.

303 500/ 303 600

303 800

CAUTION

INTENDED USE; THIS MACHINE IS INTENDED TO BE USED ON FLAT, LEVEL ROOFS ONLY. IT'S SOLE PURPOSE IS TO CUT FLAT LEVEL BUILT-UP ROOFS FOR THE RE-ROOFING PROCESS
ANY OTHER USE OF THIS EQUIPMENT VOIDS THE MANUFACTURER'S WARRANTY AND IS THE SOLE RESPONSIBILITY OF THE OWNER/USER, SHOULD ANY DAMAGE OR INJURY OCCUR.

PREPARATION

OPERATOR;

START BY READING AND FULLY UNDERSTANDING OPERATING INSTRUCTIONS. IF SOMETHING IS NOT UNDERSTOOD, HAVE SOMEONE ELSE READ AND EXPLAIN THE INSTRUCTIONS TO THE OPERATOR OR CALL THE MANUFACTURER FOR INFORMATION. AN UNINFORMED OPERATOR CAN SUBJECT HIMSELF AND OTHERS TO DEATH OR SERIOUS INJURY.

WEAR PROPER ATTIRE

Safety glasses are recommended and must be worn if any roof cutting or scraping is being done in the vicinity. Safety glasses and or face shield are also necessary when working with hot stuff.

Wear properly fitting clothes. Tight clothing can restrict movement and slow down reaction time in a dangerous situation. Loose fitting clothing can be dangerous and cause serious injury if it gets caught in moving mechanical parts. Wear a long-sleeved shirt, buttoned at the cuffs, safety shoes, and pants without cuffs, and knit wrist type gloves.

A hard hat must be worn by operator when working on a job site.

ROOF PREPARATION

INSPECT ROOF DECK

Before allowing equipment and personnel access to roof, make certain roof is strong enough to support the weight. Check load limits of deck with owner, builder or architect. Clear the work area of all potentially dangerous obstacles that could cause personal injury to the operator or others. Keep unauthorized people away from construction area. Check to see that all roof openings are guarded to protect against falls.

WARNING LINE SYSTEM

When operating parallel to roof edge warning line system must be at least six feet from edge. When operating perpendicular to edge warning line must be ten feet from roof edge.

HOISTING TO ROOF

WARNING; **ALWAYS CHECK DECK LOAD LIMITS WITH BUILDER, OWNER, OR ARCHITECT BEFORE DECIDING TO USE ON THE ROOF.**

INSPECT THE HOIST

Make certain hoist is in safe operating condition, to be operated by trained personnel. The hoist should be clear of ground objects and overhead obstacles, such as power lines; it should be secure and properly counterbalanced. Hoist should be inspected for frayed cables, bent frame members of faulty mechanical parts. Make sure everyone on the ground is completely clear of the hoisting area. Do not exceed the weight and size capacity of your hoist. Do not use if you are in doubt.

CONNECTING TO LIFT RINGS

There is one centred lift ring on the machine (see Fig. 2). Always lift machine by this ring using the proper hook and cable. Do not attempt to lift the machine by any other part. Always inspect ring for wear or damage and make sure the hoist, cable, hook, etc. are in good running order or damage or injury may result.

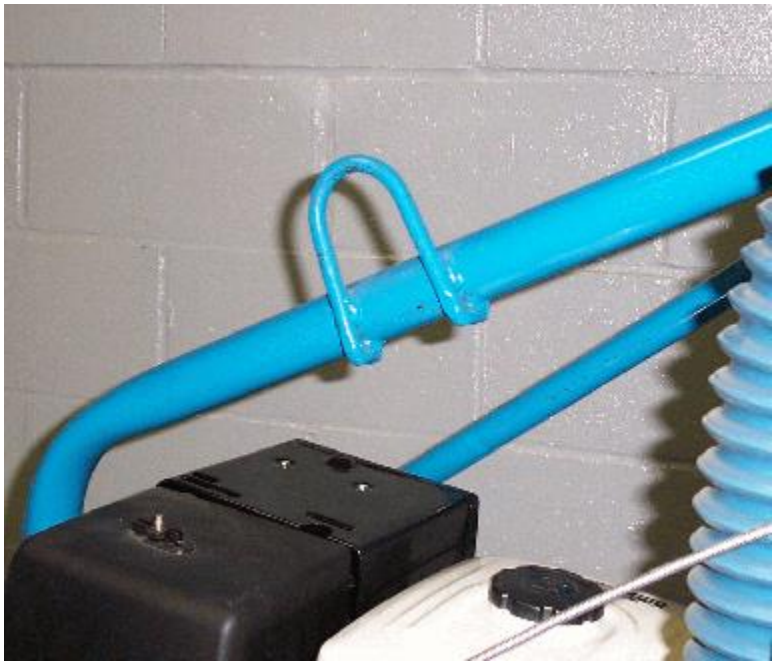

Fig. 2

WEIGHT:	303 500 GX340	**245 LBS**
	303 600 GX390	**245 LBS**
	303 800 KOHLER CH20S	**340 LBS**

SAFETY PRECAUTIONS

- Do not allow other people to be near the machine during operation (except operator)
- Other workers on the job site must wear eye protection when in the vicinity of the cutter.
- Be certain all guards, shields and covers are secure and tight before starting.
- Never operate a cutter that is damaged in any way. Repairs or replacement of damaged components must be made by a qualified mechanic
- Do not modify the equipment. Do not operate a modified piece of equipment.
- Never reach into the blade area when the engine is operating, keep hands and feet away from the blades and belts.
- Wear safety footwear and snug fit clothing.
- Operate the Cutter only from the "Walk Behind" position.
- Operate on flat, level roofs only.
- Use only **GRIZZLY** cutting blades.
- Keep away from electrical lines and extension cords.
- Use caution when handling fuel. Gasoline is very flammable. Shut off engine, and allow cooling before refuelling. Clean up gasoline before restarting.
- Guard all openings on the roof.
- Do not allow anyone to walk in front of cutter.
- Do not operate within 10 feet of roof edge (or within 6 feet, if operating parallel to the edge).
- Never tilt the machine during cutting.
- Do not operate this machine if you are under the influence of alcohol, marijuana, or drugs that could impair judgment and ability.
- Keep the equipment in good condition.
- Do not walk backward while operating.
- Remove loose debris before cutting.
- The owner or operator must see that all warning decals are in place and legible. Write to **GRIZZLY** Equipment for replacement decals and instructions.
- Cut in straight line only.
- Make certain the operator and others in the vicinity wear a respirator and other protective gear as conditions warrant.
- Do not attempt to cut metal decks.
- Inspect blade and blade tightness before starting engine. Do not operate with damaged or worn out blade.
- Keep away from blade and blade guard when starting the engine and when the engine is running.
- Keep guard chains and rubber guards in good working order to prevent material from flying out from underneath.

OPERATION

Before Operation

Check to see that engine is serviced properly. Read Honda operation and safety instructions. Handle gasoline with extreme caution. Make certain belt guards and blade guards are in place and secure and that there are no signs of damage or wear of these parts. Never operate machine with damaged or missing guards. Serious injury may otherwise result.

Engine Start-Up and Operation

After checking the blade installation (refer to the blade installation section), put the depth control in the idle position and make certain the control is set so that blade does not come in contact with the roof deck (Fig. 3) Pushing down on the handles will allow the depth control to slide to the idle position.

Fig. 3 Roof Cutter in idle position

At this point, after you have read through all of the instructions, the roof cutter should be ready for operation.

Position saw where work is to be done, start the engine and allow to warm up. (Please refer to the engine manufacturer's owner's manual). Turn handle on depth control bar slowly clockwise to lower cutting blade into roof. Adjust depth of cut just deep enough to penetrate the top layers of the roofing felts, and not more than about half the thickness of the insulation. Push the cutter forward only as fast as the blade will readily cut into roof. If you want to stop cutting, push down on the handles to lock depth control in idle position, letting the blade rotate freely without cutting the roof. Take every precaution not to cut through metal deck or any other deck under roof. This cutter is designed to cut only tar, asphalt, imbedded gravel, felts, and insulation. To avoid flying stones and excessive wear to blade, always sweep loose gravel and clear roof before cutting. Cut in a straight line only. Stop forward motion of cutter whenever people are in front of you. Always set the machine in its idle position turning or changing direction.

The Controls

The depth control (see Fig. 4 and Fig. 5) is located on the right side of the handle assembly. Figure 4 shows the control in the idle position and figure 5 shows the cutting position. Turning the crank clockwise adjusts the cutting depth lower; counter-clockwise rotation of crank raises the cutting blade. Operator must be familiar with operation of this control before using roof cutter on the job.

The throttle is located on the left hand side (see Fig. 6). Lowering lever handle decreases the engine speed. Raising the lever increases the engine speed.

Fig. 4 Depth control in idle position

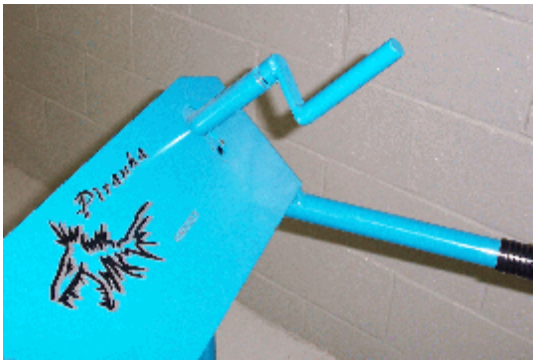

Fig. 5 Depth control in operating position

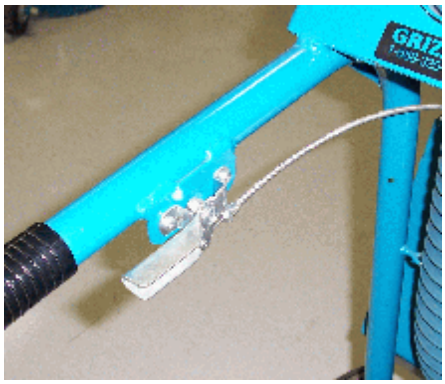

Fig. 6 Throttle control

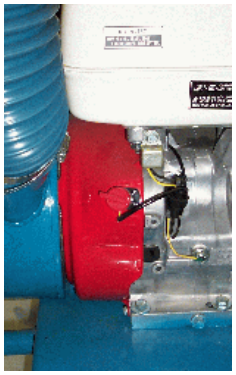

Fig. 7 shut-off switch

The throttle is located on the left hand side (see Fig. 6). Lowering lever handle decreases the engine speed. Raising the lever increases the engine speed.

Be sure to test the shut-off switch before depending on it (see Fig. 7), the shut-off switch is located on the back-side of Honda engine.

MAINTENANCE

- Grease pillow block bearings regularly as needed.
- Check bolts and nuts for tightness every day.
- Belt tension should be adjusted so that there is approximately ¾" deflection of belt when pushed down firmly between the two pulleys.
- Threaded rod on depth control should be maintained with spray lubricant periodically to keep it turning freely.
- Check breather hose assembly for cracks or wear.
- Keep breather hose assembly in perfect working order to minimize dust and dirt accumulation on engine.
- Clean and/or wash engine frequently to keep engine "breathing" and cooling properly.
- Change the oil weekly or according to engine manufacturer's recommendations.
- Check blade for wear, cracks, warpage etc., replace if in doubt.
- If service or repair of engine is needed, contact an authorized Honda service center.

Blade Installation

GRIZZLY roof cutters are equipped with a premium carbide roof cutting blade. Always disconnect spark plug before changing blade. The blade requires a disc and a 1" nut to hold it in place (refer to picture below)

Make certain 1" hex nut is tightened securely so that blade won't come loose. Never operate machine with bent, broken or damaged blade as it could cause vibration and fly apart and cause damage or injury.

SAFETY HAZARDS

Safety hazards are not always obvious to workers. Unlike exposure to health hazards, where illness or injury develop slowly, safety hazards usually result in immediate injury or death.
Broken bones, cuts bruises, sprains, burns and loss of limbs, eyesight and hearing are the kinds of injuries caused by safety hazards.
The rate of occupational injuries in roofing, in fact, ranks in the top ten of all major occupational groups.

Falls

Falls are the number one cause of serious injury and death to roofers. An estimated 10 percent of all roofing accidents result from falls off roof edges, through roofing openings or off ladders, more than half of the non-fatal accidents result in serious injury.
Unprotected and unguarded roof edges and roof openings create extremely hazardous conditions.
Ladders with cracked, loose or missing steps: with side rails broken or cracked and not attached firmly to the steps; with broken, loose or missing locks, or coated with grease, oils or hardened bitumen can lead to serious injury. Ladders should always be inspected to make sure they're properly maintained and constructed and that they're long enough to extend three feet above the roof's surface.
Improperly balanced or unstable hoists overturn and will often carry the worker along. Rolls of roofing felt should never be used as counterweight. Workers should know the load capacity; it should be posted.

Burns

Skin contact with hot asphalt and hot coal tar pitch usually results in second and third degree burns. They usually involve deeper portions of the skin and are easily infected.
An estimated 16 percent of all injuries are burns from hot stuff. The major causes of burns have been from:

Kettle flashes

< Kettle splashes from dropping pieces of coal pitch or asphalt into the kettle
< Slips and trips while carrying hot bitumen in open containers
< Splashes involving transfer operations like from the hot pipe outlet to a hot lugger, from a hot lugger to a mop cart or a pail, or from the kettle to a pail.

Heavy Lifting

Sprains and strains, a majority of which involve the back, are the most common roofing injury and one of the most severe. Almost 30 percent of these injuries result in 10 or more days away from work.

Fire/Explosion

Two conditions must be met in order for fires and explosions to occur. First, there must be an ignition source, a welding arc, spark, cigarette, flame or simply a hot spot as in a kettle or tanker. Secondly, there must be the right mixture of vapours (from asphalt, pitch, solvents) and oxygen.

For kettles and tankers, fire/explosion conditions arise when:

< oversized burners are used to fire the kettle, causing localized overheating of the heating tubes creating a hot spot
< the temperature of the bitumen is brought up to the desired operation temperature too quickly allowing the level of bitumen to drop to the level of the firing tubes, allowing excessively high surface temperatures
< heating the bitumen to its flash point (for asphalt, about 525°-540°; for pitch, about 450°-475°)
< the temperature of the bitumen is hot enough to reach the auto-ignition level
< in tankers, the vent pipe is clogged or plugged so that flammable vapours can build up to explosive levels

Many solvents evaporate quickly at roof temperatures. Explosive mixtures of vapours can be readily formed within confined spaces like high parapet walls, in atriums or in any space where little or no ventilation exists. And any kind of spark or flame can ignite the vapours.

Electrocution

Low voltage electricity can cause shock, muscle contractions, breathing difficulty, irregular heartbeat, severe burns and death. The route that the current takes through the body affects the degree of injury. Current flowing from one finger to another would not pass vital organ, while from one hand to another would pass through the heart and lungs.
Electrical tools should be properly grounded. The electrical cord should end in a three-prong grounding contact, or the wires should be enclosed in a metal case with a special grounding attachment.
Employers are required to provide ground fault circuit interrupters for all outlets on construction sites that are not part of the permanent wiring of the building. This is actually a fast-acting circuit breaker, which can shut off electricity in a fraction of a second.
Aluminum or other metal ladders pose a serious electrical hazard around electrical equipment and energized lines.

Falling Objects

Tools, bricks, materials, buckets, boxes, pallets or almost anything dropped from a sufficient height can cause severe damage. Head injuries, one of the highest compensated injuries to workers, often include brain damage.
Workers need protective head gear when working beneath people, tools and equipment.

Flying Objects

Objects can be projected by machines, from welding or grinding operations and can be windblown. Tear-off operations, where power cutters, power brooms and power spudders are generally used, are the major source of flying substances.
The part of the body most often injured is the eyes.

Unguarded Machinery

Exposed blades and chains on powered machinery like hoists and roof cutters can severely lacerate and crush parts of the body. Guards should always be fitted over moving parts to protect workers.