



Rederick Metal Industries Corp. | Miami, FL 33142 | Phone : 305-396-3396 |
Fax: 305-735-2662 | customer.service@yardbeast.com



OWNER'S MANUAL

IMPORTANT: READ SAFETY RULES AND INSTRUCTIONS CAREFULLY

Warning: This unit comes equipped with an internal combustion engine and should not be operated near any forest, or field in presence of dry brushes, grass, or any material that may cause fire because of engine's spark, unless the engine comes with a spark arrestor that satisfies local, state and federal laws. As any engine part, it should be properly maintained and in well operating condition. The State of California requires the above stated as mandatory. Any other state may apply similar laws. Please take your time in making sure of this. If you do not intend to use the original engine that comes with this product, and do not have a spark arrestor, please contact original engine's manufacturer's or contact our service department at www.yardbeast.com, or call (305)-396-3396 during business hours Mon-Fri 9am-5pm.

REDERICK METAL INDUSTRIES CO.
1925 NW 21 Terrace. Miami, FL 33142

MANUFACTURER'S LIMITED WARRANTY GIVEN BY:

REDERICK METAL INDUSTRIES CORPORATION

The limited warranty set forth below is given by Rederick Metal Industries Corp. – towards the YARDBEAST Chippers Outdoor Power Equipment line, with respect to new merchandise purchased and used in the continental United States.

Rederick Metal Industries Corp. warrants this product against defects for a period of one (1) year commencing on the date of original purchase and will, at its option, repair or replace, free of charge, any part found to be defective in materials or workmanship. This limited warranty shall only apply if this product has been operated and maintained in accordance with the Operator's Manual furnished with the product, and has not been subject to misuse, abuse, commercial use, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water, or damage because of peril, natural disaster or by acts of God.

Normal wear parts or components thereof are subject to separate terms as follows: All normal wear parts or component failures will be covered on the product for a period of 90 days regardless of cause. After 90 days, but within the two year period, normal wear parts failures will be covered ONLY IF caused by defects in materials or workmanship of OTHER component parts. Normal wear parts and components include, but are not limited to: belts, tires, knives, counter knives, knives adapters, flails, centrifugal clutch and bearings.

How to obtain service: Please contact Rederick MI Corp, Miami FL 33142. For info on how to service your machine contact us at (305)-396-3396 or write to cstsvc@yardbeast.com or log on to our website at www.yardbeast.com.

This limited warranty does not provide coverage in the following cases:

- a. The engine or components parts thereof. These items carry a separate manufacturer's warranty. Refer to applicable manufacturer's warranty for terms and conditions.
- b. Centrifugal damage or components thereof. These items carry a separate manufacturer's warranty. Refer to applicable manufacturer's warranty for terms and conditions.
- c. Routine maintenance items such as lubricants, filters, blade sharpening, tune-ups, clutch adjustments, and normal deterioration of the exterior finish due to use or exposure.
- d. Rederick MI Corp. Does not extend any warranty for products sold or exported outside the continental United States; except those sold through authorized Rederick MI Corp. Dealers and/or channels of export distribution.
- e. Parts that are not genuine to the Yardbeast Chipper line will not be covered by this or any other warranty expressed by Rederick MI Corp.
- f. Transportation charges and service calls are not covered.

No implied warranty, including any implied warranty of merchantability of fitness for a particular purpose, applies after the applicable period of express written warranty above as to the parts as identified. No other express warranty, whether written or oral, except as mentioned above, given by any person or entity, including a dealer or a retailer, with respect to any product manufactured by us shall bind Rederick Metal Industries Corporation. During the period of the warranty, the remedy is repair or replacement of the product as set forth above.

The provisions as set forth in this warranty provide the sole and exclusive remedy arising from the sale. Rederick Metal Industries Corp. shall not be liable for incidental or consequential loss or damage including, without limitation, expenses incurred for substitute or replacement lawn care services or for rental expenses to temporarily replace a warranted product.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

In no event shall recovery of any kind be greater than the amount of the purchase price of the product sold. Alteration of safety features of the product shall void this warranty. You assume the risk and liability for loss, damage or injury to you and your property and/or others and their property arising out of the misuse or inability to use this product.

This limited warranty shall not extend to anyone other than the original purchaser or to the person for whom it was purchased as a gift.

This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Section 7: Troubleshooting

Problem	Cause	Solution
Engine Fails to start	1- Spark plug wire not connected 2- Empty fuel tank 3- Throttle control on incorrect position 4- Choke is not in correct choke position 5- Engine not primed 6- Blocked fuel line 7- Spark plug not functioning well	1- Connect spark plug wire 2- Fill tank with clean, fresh gasoline 3- Move throttle to indicated START position. 4- Move choke to CHOKE position 5- Prime engine, look for 'prime push button' 6- Clean fuel line 7- Clean, adjust or replace
Engine runs erratic	1- Spark plug wire loose 2- Unit running on CHOKE 3- Blocked fuel line 4- Water or dirt in fuel system 5- Dirty air cleaner 6- Carburetor out of adjustment	1- Connect and tighten spark plug wire 2- Move choke lever to OFF position 3- Clean fuel line, fill tank with clean gasoline 4- Drain fuel tank. Refill with fresh fuel. 5- Clean or replace air cleaner 6- See authorized service dealer
Too much vibration	1- Loose parts or damaged rotor 2- Loose transmission belt	1- Tighten loose parts if that is the case; for rotor or other concerns, contact Technical Support. 2- Increase belt tension by adjusting engine base.
Engine Overheats	1- Engine oil level low	1- Fill crankcase with engine's proper oil
Unit does not discharge	1- Discharge chute clogged. 2- Foreign object lodged in between sieve and rotor. 3- Low engine RPM	1- Stop engine immediately. Disconnect spark plug wire. Clean flail sieve and inside of discharge opening. 2- Stop engine and disconnect spark plug wire. 3- Always run engine at full recommended throttle
Rate of discharge slows	1- Low engine RPM 2- Overfeed of material	1- Always run engine at full throttle 2- Let engine attain max. speed with feeding intervals
Composition of material changes	1- Low engine RPM 2- Chipper sharpness dull	1- Always run engine at full throttle 2- Sharpen chipper blade or see auth. dealer

Note: For repairs beyond the minor adjustments listed above, contact us.

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Parts List : Available on website : www.yardbeast.com	

Finding Model Number:

Having the serial number of your machine at hand, is important if you should require to call our Customer Service Department . It is the best choice to copy the Serial No. of the machine into the Operator's Manual for future information.



Model No. _____

Serial No. _____

Contact Information:

If you require assistance from us:

U.S Phone : 305-396-3396

Customer Service e-mail: customer.service@yardbeast.com
www.yardbeast.com

Engine Information

The engine manufacturer is responsible for all engine-related issues. If you have issues related to engine's performance, service, warranty, specifications, etc. please contact the engine's Service Department located in the engine's operator manuals. In case you are unable to locate contact address or it becomes very difficult, we can help getting you in contact with them.

Is this chipper-shredder suitable for commercial use?

Although we sell this unit as homeowner's equipment, we believe our machine is built up to commercial grade standards. Contractors and landscapers may not find any problem associated with the grade of wear resistance this machine has.

SECTION 1: IMPORTANT SAFETY MEASURES



DANGER: Always read the Operator's Manual before attempting to operate this or any outdoor power equipment. This machine is capable of amputating hands or legs. Failure to comply with proper operation procedures may result in serious injury or death.

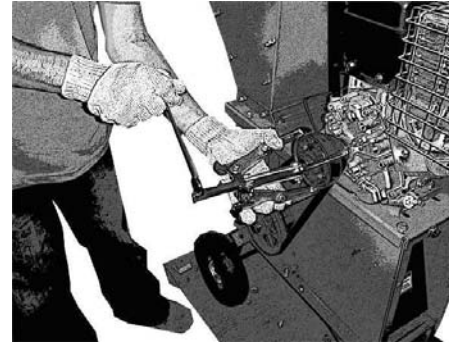
IMPORTANT: Use this equipment OUTDOORS only!. It is known to the State of California that emission gases (Carbon Monoxide gases) from engines may cause cancer and birth defects.

Train yourself:

- Read thoroughly, and make sure you understand all guidelines on this manual. You must do this before you operate this machine. Failure to do so may result in injury to yourself and others.
- Children should **never** be allowed to operate this machine.
- Maintain other people, helpers, pets or bystanders at a considerable distance no less than 70 feet.
- Make sure to keep hands and legs away from rotating parts. Also inserting any limbs into feeding hopper or discharge chute may severely injure, and may amputate fingers, hands and legs.
- Before starting the machine, always check for loose parts and any other strange bodies that may be resting inside the machine and are not supposed to be there. **Never** unclog, repair, move or inspect while the machine is running.
- **never** run an internal combustion engine indoors or with poor ventilation. IC engine's exhaust contains carbon monoxide (CO) and is considered a lethal gas.
- **never** attempt to clean, remove, repair or check any machine component, if the machine is not at a complete stop and the spark plug is not disconnected and properly grounded against the engine.
- At the time of operation, it should be just you and the machine in a 70 feet radius!

Prepare yourself:

- Always make sure to read the instructions. Avoid attempting to operate the machine without reading these operation guidelines.
- Check the area where the chipper is going to be used. Avoid areas that are close to significant amount of people. Check for any foreign objects that could get to the feeding hopper, discharge chute, and/or may affect normal operation of the machine like rocks, bottles, loose clothes, etc.
- You should operate the machine with an appropriate safety gear, that includes fit shirts and pants (loose body wear, may get in contact with rotating parts, and may cause serious injury). Always use hard material working shoes, never attempt to operate the machine in bare feet, sandals, flip-flops or any other type of shoe not appropriate for this application. You should also wear hard-material(preferably leather) gloves when feeding the hopper, this will protect your skin from leaves spikes and machine edges at time of operation.
- **Remember to never attempt to repair, fix, or change any component of the machine while is in operation.** Product leftover could still be inside and may jet out of the machine causing injury.
- **Before starting the machine. You should check every time for loose bolts, screws, and any other adjustable part.** Loose bolts and screws may fall under machine's operating parts and may ricochet inside and outside the machine with potential damage. Also always replace visual labels and indication when they become near unreadable. This will guarantee you and future operators handy information about safety and operation procedures.
- **ALWAYS HANDLE GASOLINE WITH EXTREME CARE.** Gasoline contains volatile and flammable vapors that may be harmful or fatal because these are extremely flammable and toxic if inhaled. If you have spilled gasoline on your skin or clothes, wash immediately or changes clothes. Some tips for handling gasoline safely are:
 - o **Never** smoke in presence of gasoline, neither ignite any object.
 - o Use an approved gasoline container.
 - o Never fuel machine indoors.
 - o Never refill engine's tank while it is running, or is hot.
 - o Allow engine to cool for at least two minutes before refueling.
 - o **Never** overfill engine tank. This will prevent fuel from expanding.
 - o Tighten gasoline cap securely after refilling.
 - o If gasoline is spilled, wipe it off, and allow the remains to evaporate. We suggest to move the machine to another area. You may start the machine at least 7 mins. after the spill.
 - o Always store fuel containers in a fresh dry place, away from ignition sources.



4

After some time, usually clutches and pulleys tend to 'stick' to the shaft in a way that you must use other resources other than simply pulling. Best way is to use a claw pulley extractor. If you do not have this tool, or do not know how to use it, you should take the machine to a shop and let them do it for you.

Checking or Replacing Shred Flails:

- Disconnect the spark plug wire and ground against the engine.
- Repeat steps 1 to step 7 on the section 'Sharpening or replacing chipper blades.'
- Rotate rotor until the flail shaft axial face is facing the side hopper opening.
- Remove cotter pins on the back end of the flail's shaft, and pull out.
- Be careful that as you remove the axle, flails will fall. So be ready.
- Check and replace flails if needed.

Storing your chipper shredder:

- Clean the equipment thoroughly.
- Wipe equipment with an oiled rag to prevent rust.
- Refer to engine manual for correct engine storage instructions.
- Store unit in a clean, dry area. Do not store next to corrosive materials such as fertilizer.

Changing Belt, Clutch or Engine

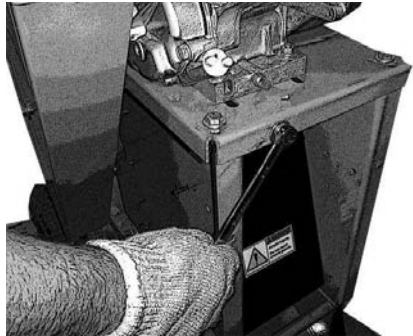


BEFORE STARTING TO SERVICE YOUR EQUIPMENT, YOU MUST DISCONNECT THE ENGINE'S SPARK PLUG. FAILURE TO DO SO MAY RESULT IN INJURY OR DEATH TO YOU OR OTHERS.



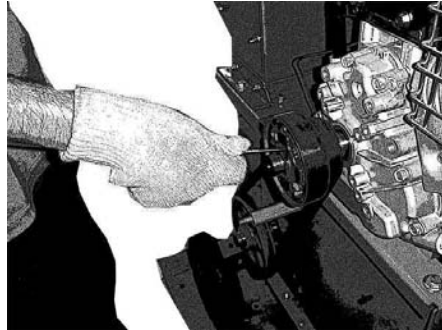
1

Loosen the bolt in the belt guard, and also loosen up a bolt that is located down below. Retire the cover and also make sure to take off the cover's axial support pipe (see Parts List section) and screw bar. You can do that by inserting your hand in the chamber and pulling in the screw bar.



2

Loose belt tension by turning the hex head in the shown direction. Take belt off and check for cracks and wear; replace if needed.



3

If you need to check or replace the centrifugal clutch, first unscrew the two (2) socket set screws that are located in the clutch's outer face. A 1/8" Allen hex wrench required.

Machine Operation Safety Measures:

- **Never** put feet or hands near rotating parts. Chipper Shredders have a natural dangerous operation, and may amputate extremities.
- Before starting the machine, make sure all infeed hoppers and rotating parts are free of any debris and free of contact with any foreign body that can disturb its normal operation.
- Inspect material to be inserted into hoppers, and remove any foreign objects. You must do this every time before inserting material into the machine. High speed impact on foreign objects may result in injury to yourself, or damage to the machine and surroundings.
- If you need to push material into the hopper, do so with a small diameter wooden stick. You can also use a light polymer stick. We strongly suggest using wooden, to guarantee all organic compounds in the discharge chute.
- Contact of an operating rotor with a foreign object may cause undesirable results. If the machine starts producing unusual sounds, or vibrations, stop machine immediately. Allow the rotor to come to a complete stop, disconnect spark plug wire and check internal parts, see if you need to replace for damaged parts, and check for loose parts.
- Systematically free up the discharge chute for material to prevent over accumulation of material, which can kick back and jettison of the machine through other openings.
- **DO NOT ATTEMPT** to chip or shred material larger than specified in this operation manual.
- **Never** attempt to unclog the infeed hoppers or discharge chute while machine is running. To unclog the engine, shut the engine off, and wait until all rotating parts have stopped completely, disconnect spark plug wire.
- **Never** operate machine without the infeed hoppers and discharge chutes properly assembled in the machine.
- **Never** put yourself in the direction of rotation of the rotor. Always face the machine sideways. Never operate the machine without good visibility or light.
- Do not operate this machine in a paved, concrete, gravel or non-leveled surface.
- Do not operate this machine under the influence of alcohol or drugs.
- Engine parts can become very hot while running. Avoid contact since it may cause skin burns.
- **Never** transport the machine or lift it while it is running. Also avoid tipping of the machine while inserting chipping material into the hopper.

Maintenance and Storage Safety Measures:

- **Always** check bolts and screws for proper tightness at frequent intervals to keep the machine in safe operating condition.
- Before any cleaning, inspecting or repairing, make sure the machine and operating parts are at a complete stop and the spark plug wire have been disconnected from the engine.
- The machine has been designed to run at engine's manufacturer specification. Do not alter engine performance or way of operation.
- Maintain and replace safety and operation labels to keep them readable and visually catchy to the operators.
- Never store the machine or fuel container inside or close to open flame, spark or pilot light.
- Always refer to the operator's manual for off-season storage.
- If the fuel tank have to be drained, do it outdoors.
- Check your local and state regulations for proper disposal of gas, oil, and other components, to protect the environment.

- Additional Important Responsibilities -

- *Restrict the use of this equipment to people who can read, understand and follow directions on the labels and signs placed on the equipment.*
- *Know this manual and know how to stop the engine quickly.*
- *If other people than you should use this equipment, give them this manual to read and show them how to operate.*
- *Keep alert while operating the equipment*

SECTION 2: UNPACKING YOUR CHIPPER SHREDDER

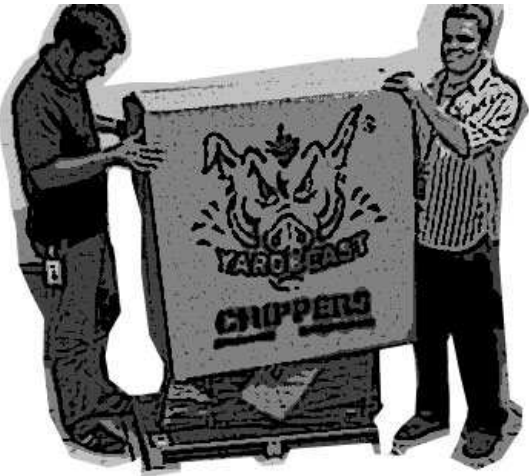
Be prepared for arrival:

- If you want to be running your equipment in an hour or so after receiving it (Make sure you read Operator's Manual first and understand all guidelines) then this is a quick list of things you should buy and have ready before attempting to operate the equipment:
 - o 1 qt. of oil SAE 30
 - o 2 gallons of gasoline in an approved container
 - o A funnel for pouring gas onto engine's tank.
 - o Appropriate clothing for chipping and shredding leaves-branches.
 - o Gloves (Although we provide a pair of them)
 - o Safety Lenses (We also provide these)

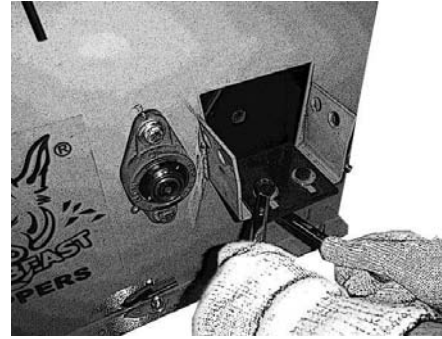
Removing Unit From Wooden Crate:

When removing the chipper from the crate, please do it so in the following way:

- Remove the outer plastic strapping, and lift the carton upwards until you only have the machine standing on the base.
- Remove the plastic strapping that holds the machine and components.
- Read our - *How to assemble note*-. Once read, proceed to assemble.
- Be cautious for plastic strapping leftovers, wood chips or edge metal parts that may puncture.

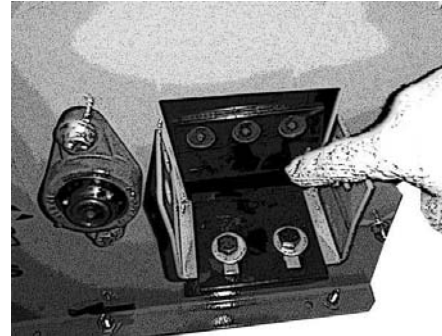


Warning:
*Watch out for
screws, and wood
chips that could
pinch!*



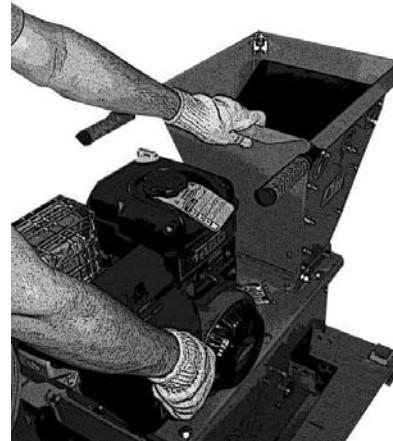
9

Loosen the counter knife and place it in between the knife and the rotor's bore (where products comes out once cut). Tighten again. This will help you to contain the rotor from rotating when you apply torque to knife's bolts when loosening and tightening



10

Check knives. Sharpen or replace if needed. When bolting them on the rotor, make sure the blade is not touching the axle's center dish. If it does and you don't notice it; it will cause a continuous braking on the engine, diminishing chipping power, causing friction and undesired results.



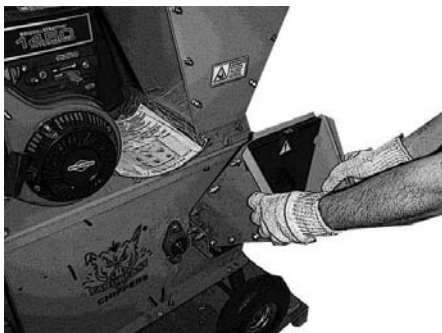
11

Once finished, reposition the counter knife. We suggest that the opening between knives and the counter knife should be at a maximum of 3/32" or 2.4 mm. Place side hopper on the base again and tighten. When placing front cover, you **MUST FIRST** insert the pin across the full sieve and then bolt the front cover, otherwise it will be very difficult to insert the pin. Before starting engine, pull the recoil a few times to see everything rotates freely and it does not make any uncommon sounds. When ready, put the spark plug on and start.



6

Now take apart the side hopper from machine. For this operation you need one (1) 9/16" hex wrench. Loosen bolts that are fastening the base with the hopper. Watch your hands, try to use mechanic's glove if available. Repeat operation at the other side of the hopper.



7

Pull the hopper with two hands as described on the figure. Locate it in a clean, safe place.



8

Loosen the counter knife and place it in between the knife and the rotor's bore (where products comes out once cut). Tighten again. This will help you to contain the rotor from rotating when you apply torque to knife's bolts when loosening up.

SECTION 3: ASSEMBLING YOUR CHIPPER-SHREDDER

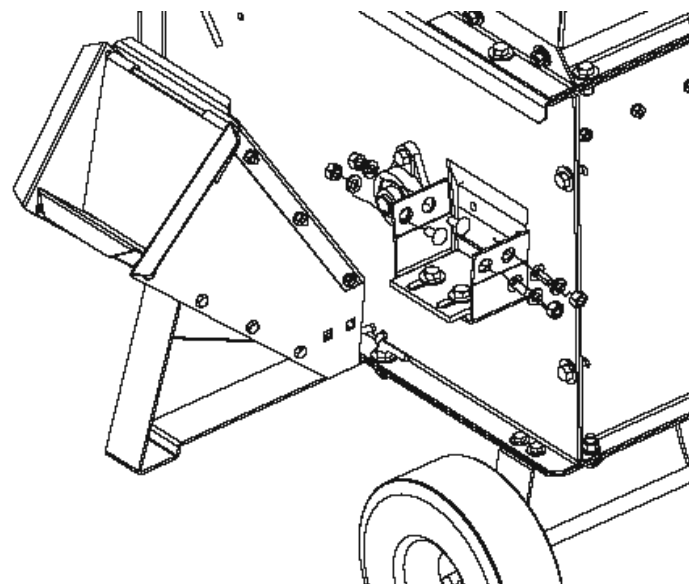
Assembling Lateral Chute into Chipper-Shredder:

Easy, no trouble. Simply just grab de the Side Hopper and insert it just as the figure shows. Reuse the bolts and nuts that grounds the chute against the crate platform. Pick a bolt -3/8" square neck- and insert it through one of the four available holes. While maintaining pressure on it, slip a pressure washer and a nut; repeat three more times with the other holes. Don't worry you can do it all by yourself.

- Once you have inserted all bolts and tightened the nuts gently with the hand; then you can finish tighten with a 7/16" hex wrench.

Tools and pieces used for this assembly:

- 4- 3/8" Square neck carriage bolts – supplied.
- 4- 3/8" Pressure washers - supplied
- 4- 3/8" Nuts – supplied
- 1- 7/16" Hex Tool Wrench, not included.



Assembling handles at top hopper:

- Unbolt handles.
- Revert direction of the handle, so the handle grip is pointing towards the outside of the machine.

These handles comes assembled in this way only for shipping purposes.

Tools used in this operation:

- 1- 3/8" Hex Wrench.



IMPORTANT: Before starting to assemble your chipper shredder, disconnect the spark plug wire from your engine and ground against it.

Regulating Counter knife:

Regulating the counter knife for this equipment is **very important**, because:

- You enhance the machine's performance through better chipping, better chipping capacity, and more fuel efficiency.
- You get more life out of the knives
- You reduce unwanted vibrations on your hands with causes hand-arm stress while chipping.

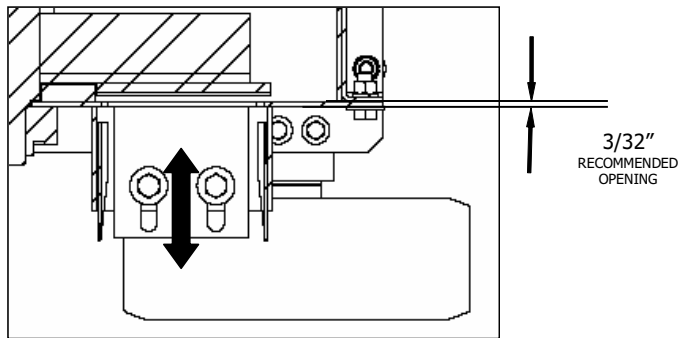
A counter knife that is a bit too far from the knife, will:

- De-fiber the wood rather than chipping it.
- Chipping capacity will be decreased.
- Knives will rather slam than cut through the wood.

A counter knife that is too close to the knife, will:

- CHIRP NOT CHIP
- Produce an unwanted vibration that goes into gloves and hands.
- Decrease chip size.

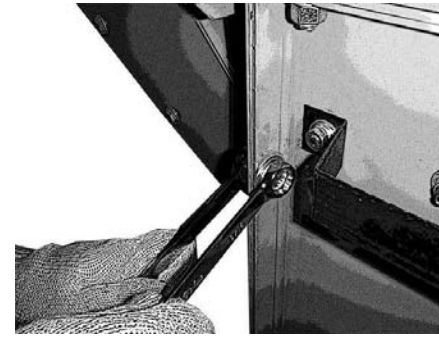
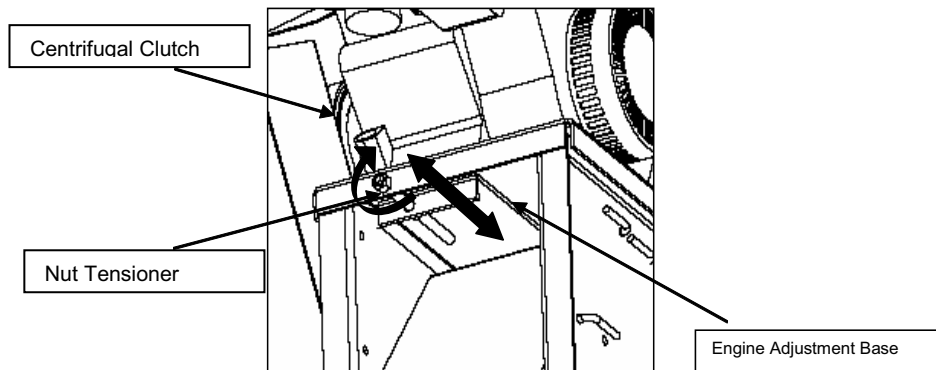
As a matter of advice, generally, we leave spacing between the knife and the counter knife to be 3/32" inch.



Regulating Belt Tension:

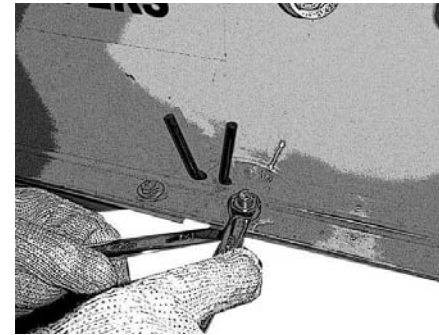
We ship this unit with a regulated transmission. In case you need put a new belt, clutch or put a different engine, you must re-adjust belt tension.

Recommended specification for belt is: Gates® Black Poly-Rubber B45 Belt.



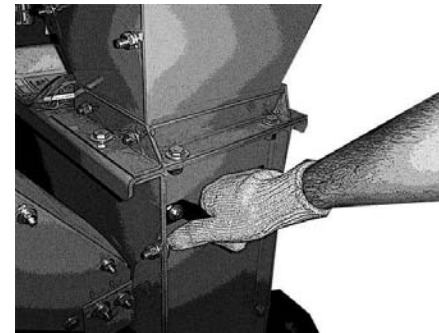
3

You will need to use (2) two 9/16" hex wrench. Loosen side bolts that are fastening the front cover against with the cutting chamber lateral covers. You will need two wrenches because bolts tend to slip when torque is applied to the nut and viceversa.



4

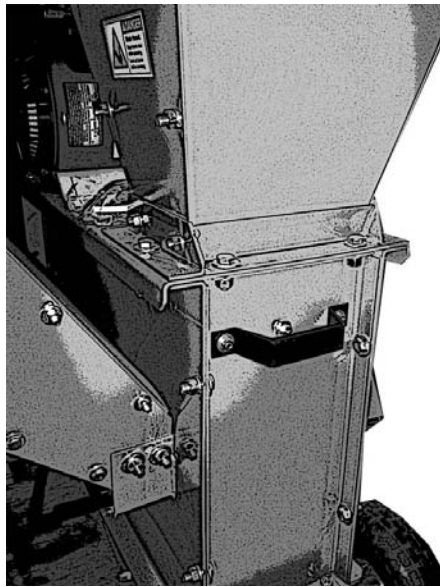
Take the hairpin off from the other side of the machine with pliers and pull the pin that is holding the full sieve in place. You must do this before you attempt to pull out the front cover. Please note that the full sieve is attached by (3) three carriage bolts to the front cover.



5

Make a slight aggressive pulling action to take the front cover with the sieve. Take advantage of the moment to clean inside parts and to check for any potential damage, check flails, for strange debris, etc. Place front cover in safe place to avoid hitting or damaging the part.

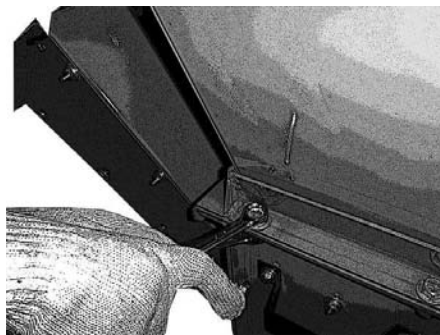
Sharpening or replacing chipping blades:



For sharpening or replacing blades you will need to take off both front-cover and side hopper. Read more below. This 11-step operation can take from 15min to 1 hour (for unexperienced users).



BEFORE STARTING TO SERVICE YOUR EQUIPMENT, YOU MUST DISCONNECT THE ENGINE'S SPARK PLUG. FAILURE TO DO SO MAY RESULT IN INJURY OR DEATH TO YOU OR OTHERS.



1

You will need to use (2) two 9/16" hex wrench. First loosen top bolts that are fastening the front cover against the Top Hopper and cutting chamber. Repeat for bolts below.



2

Repeat as indicated on step 1.

Section 4: Know Your Chipper Shredder:

Your YARDBEAST Chipper Shredder have clearly two different ways of operation, or better said, two different applications, that is shred leaves and chip branches. There are two ways of feeding the machine, through the main hopper and through the side hopper. You need to know a few components and controls before operating this machine.

Main Hopper: This hopper is for inserting leaves of any kind, dry, wet, and small dry branches up to 1/2" in diameter. It is preferably that all wood and leaves are of a dry kind. This guarantees longer life of the machine because of rust, for example.

Side Hopper: This hopper is for chipping branches only. You can chip from 1/2" in diameter up to 3" in diameter. When chipping big diameter branches, it is recommended you chip in a break pattern, that is - you chip you go back, you chip you go back -. Trying to continuously chip big branches may stall the machine and will cause discomfort in your hands even when using leather gloves. Remember to use only leather gloves when chipping branches through the side hopper.

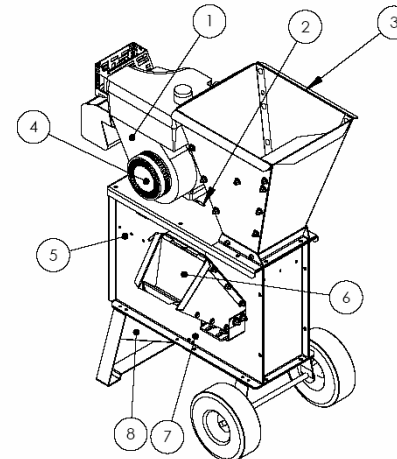
Engine Controls: See the separate engine manual for the location and function of the controls on the engine.

Deflector: You can adjust deflecting angle of the product by placing its location pin on one of the three holes given for it. These three holes are in a horizontal pattern. (see figure). If you need to repair inside, change a sieve, or just clean up, then you can use a fourth hole placed on the upper part of the machine for supporting the deflector. Remember if you are ever to be working on the inner parts of the machine, then you must allow the machine come to a complete stop, disconnect the spark plug wire and ground it against the engine.

Engine Adjustable Mount Base: We have designed the machine with an adjustable mount base to allow the use of different belts in case you can't have the one specified by the manufacturer. Also makes it more comfortable to adjust the tension on the belt since the force will be exerted by a wrench on a nut instead of you on the engine.

Starter Handle: The starter handle is located on the engine. Pull the starter handle to start the engine.

Stopping the engine: The only way to stop the engine is through a STOP button placed in the engine by the engine's manufacturer. Also disconnect the spark plug wire if you will not use the machine for a significant amount of time.



1	Stop Engine Button
2	Engine Adjustment Base
3	Main Hopper
4	Starter Handle
5	Deflector Angle Adj.
6	Side Hopper
7	Sieve Holding Rod
8	Discharge Chute

Section 5: Operating your Chipper Shredder



WARNING: The operation of any chipper shredder can result in foreign objects being thrown into the eyes, which can damage eyes severely. Always wear safety glasses and protective wear while operating or repairing this machine.

Gas and Oil Fill Up:

You must fill with fuel and oil as directed on the engine's manufacturer operator manual provided. Always read instructions carefully.

Starting the Engine:

- First of all, you must connect the spark plug wire into the engine. Make certain the metal cap on the end of the spark plug is fastened securely over the metal tip on the spark plug.
- Engines with choke lever:
 - o Move choke lever on engine to CHOKE position. (A warm engine may not require choking).
- Engines with primer:
 - o Prime engine as instructed in separate engine manual.
 - o The throttle control lever is located on the engine. Move engine throttle control lever to FAST or START position.
 - o Grab recoil handle and pull rope out slowly until engine reaches start of compression cycle. (rope will pull slightly harder at this point).

•NOTE: When starting engine, the machine will make noises that are caused due to lack of centrifugal forces on the flails (hammers). This sound will eventually disappear once the machine have attained sufficient rotational speed.

- o Pull rope with a rapid, continuous, full arm stroke. Keep a firm grip on starter handle. Let rope rewind slowly.
- o Repeat the previous steps until engine fires. When engine starts, move choke control (if equipped) gradually to RUN position.



WARNING: Never fill fuel tank indoors with engine running or until the engine has been allowed to cool for at least two minutes. Remember vapors are extremely flammable and toxic.

Using the Chipper Shredder:

- If you are top use the Main Hopper, then you can rake leaves and branches and pile them up. Check for any foreign objects and discard them. Avoid very green leaves or branches that are fibrous since flails don't do a good performance on this type of organic material. Only use Main Hopper for leaves and small branches up to 1/2" in diameter.
- If you are to chip the real stuff, then you need to pile branches up, and again discard any foreign objects of the pile, and even inspect the branches for nails, or any metal particulate that would interrupt or affect machine performance. Remember you can only chip branches up to 3", after that you will be compromising machine's performance, and your safety. Also remember to use a wooden stick to push your branches and leaves up in the main hopper.
- Never, never insert your hand beyond the safety cover in the side hopper while machine is running. You can only do so if machine is completely stopped and the spark plug from the engine is disconnected.

MAINTENANCE SCHEDULE		Before Each Use	Every 25 hr.	Every 50 hr.	Every 100 hr.	Once a season	Before Storage	SERVICE DATES					
MACHINE	Lubricate Bearings		✓										
	Check Belt	✓											
	Check Flails and Flail Screen		✓										
	Check Chipper Blade		✓										
	Grease bearings		✓										
ENGINE	Check Oil	✓											
	Change Oil			✓									
	Clean Air Filter				✓		✓						
	Clean Engine	✓					✓						
	Check Spark Plug						✓						



WARNING: Always remember to disconnect spark plug wire and ground it against the engine before performing any kind of maintenance on the machine.

Lubrication:

Bearings: Lubricate the two rotor wall mounted bearings every 20 hours of work to attain maximum durability on these parts. Also check for any dirt deposited on the outer shell of the bearings to prevent additional friction on rotating elements.

Maintenance:

Engine:

Refer to the separate engine manual for all engine maintenance instructions.

- Check engine oil level before each use as instructed in the separate engine manual packed with your unit. Read and follow instructions carefully.
- Clean air cleaner every 25 hours under normal conditions or once a season. Clean every few hours under extremely dusty conditions. To service the air cleaner, refer to the separate engine manual packed with your unit.
- The spark plug should be cleaned and the gap reset once a season. Check engine manual for correct plug type and gap specifications.