

Greenfield

"Excellence through innovation"

Piercemaker[®]



MODEL
Electric
140 V. AC
2.4 kW

**CHIPPER
SHREDDER**



OWNER'S MANUAL
OPERATION, MAINTENANCE, SAFETY, PARTS

Greenfield makes it easy

UNDERSTAND, MAINTAIN AND REPAIR YOUR GREENFIELD CHIPPER SHREDDER
FROM THE PIERCEMANUFACTURING COMPANY

CHIPPER - SHREDDER

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Greenfield Mowers Pty Ltd

All details are correct at time of printing but are subject to change without notice.

Greenfield ***PieremakerTM***

CHIPPER - SHREDDER

Thank you for buying an Australian made Greenfield Chipper Shredder. Follow the manufacturers safety, operating and maintenance instructions and many years of trouble free service can be expected.

SAFETY INSTRUCTIONS

- Study these instructions carefully before using this Greenfield Chipper/Shredder.
 - We remind you that a Chipper/Shredder is a cutting device, used incorrectly or without due respect it could cause serious personal injury.
1. Do not allow any person unfamiliar with the safe operating procedure to operate the Chipper/Shredder.
 2. Do not allow children to operate the Chipper/Shredder.
 3. Know your controls. Learn how to stop the motor quickly in an emergency.
 4. Do not place hands or any other body parts inside feeding chambers or discharge chute.
 5. Do not place your head over either feeding chamber or look in while the Chipper/Shredder is running.
 6. Remove all bystanders and pets from the operating area, particularly children.
 7. Do not wear loose clothing, watches or jewellery.
 8. Use protective eyewear and hearing protection (safety glasses are provided).
 9. Wear heavy gardening gloves and safety footwear.
 10. Stay clear of discharge area when the Chipper/Shredder is operating.
 11. Keep the Chipper/Shredder in good working condition. Before every use check for loose nuts and bolts, missing parts and that guards and deflectors are fitted and functioning properly.

12. Never place any garden tool or any object not required to be shred in either feed chamber. Damage to the Chipper/Shredder will occur and possible personal injury.
13. This chipper shredder is powered by high voltage electricity. An electric shock from 240V of electricity could cause serious personal injury or death. Do not operate this machine if any component appears to be faulty. Simply switching machine off may not be sufficient to eliminate the risk. The power cord must be removed from the power source. Electrical repairs must only be performed by a qualified electrician.
14. The extension lead used with this Chipper/Shredder should be a purchased, 10 amp heavy duty (Tradesman) extension lead suitable for outdoor use preferably no longer than 20 metres.
15. Do not allow anything to rest on the power cord. Do not locate the machine where the cord could be damaged by vehicles or pedestrians passing over it. Never pull on the cord to disconnect it from the power point. The cord must be kept away from excessive heat, oil and sharp edges. Do not move the machine to another position while the electrical power supply is still connected.
16. Switch off the electricity supply and disconnect from the power source whenever the machine is left unattended.
17. This machine is powered by electricity and therefore potentially dangerous if exposed to moisture. Don't expose the chipper shredder to rain, hosing or a sprinkler. Don't use or store the machine in damp or wet locations.
18. Replace any unreadable warning or safety decals.
19. The operator of this Chipper/Shredder should be in good physical and mental health and not under the influence of any drug or alcohol which might impair vision, co-ordination or judgement.
20. Do not sell or lend this machine without the safety and operating instructions.

! WARNING – The blades on your Chipper/Shredder are very sharp and could cause lacerations if not handled with utmost care.

! WARNING – Allow the blades to come to a complete stop, switch off the electricity at the power point and disconnect the extension lead at the Chipper/Shredder, to avoid accidental starting before attempting any inspection or maintenance on the machine.

- Further safety instructions are contained in all sections of this book.

OPERATION

BEFORE STARTING

- Locate the shredder on stable, level ground other than paved or gravel surfaces.
- Disconnect extension lead from the shredder to prevent accidental starting then inspect that all fasteners are secure and safety guards are operating correctly. Also check the cutting blades are secure and in good condition.
- Make sure that both feeding chambers are empty.
- Operate the shredder only in good daylight.

TO START

- To ensure the machine does not start unattended check the switch/brake lever is in the "OFF" position before plugging in the extension lead and switching on at the power point.
- This equipment has been designed to operate on Australian power supply (240V 50Hz).
- Grip the knob on the switch/brake lever and move the lever to the "ON" position while lifting slightly and securing the lever over and into the groove in the locking post.
- If the motor fails to run after following the above "To Start" procedure, check that the motor overload protection device has not activated by pressing the "RESET" button located under the motor terminal box and above the switch/brake lever.

TO STOP

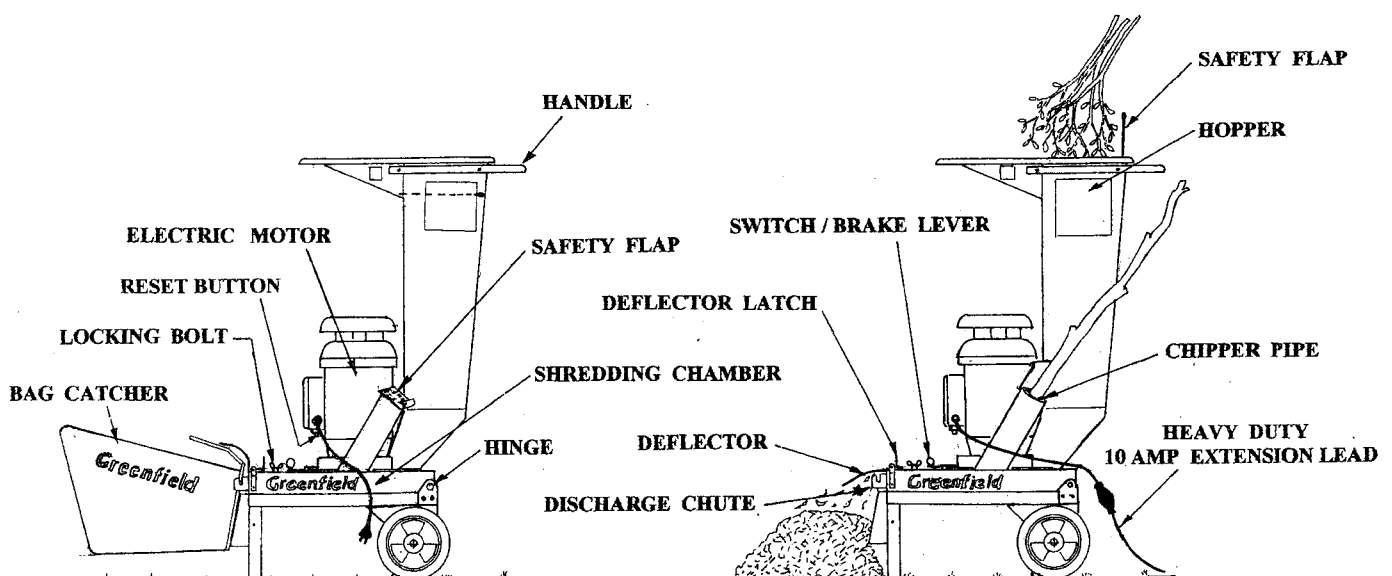
- Before switching off ensure that there is no material left in either the hopper or the chipper pipe and that the shredder chamber sounds completely cleared.
- While holding the knob on the switch/brake lever swing the lever up and out of the locking groove and allow the lever to return to the "OFF" position. Thus switching off the electricity supply and applying the brake to the cutting disc.
- Before leaving the shredder unattended, switch off the power at the outlet and remove the power cord from the outlet.

TO OPERATE

- The operator should be wearing eye and hearing protection and heavy garden gloves.
- Never stand near the discharge chute of the machine when operating and keep your face and body away from the entries to the feeder chambers.
- For maximum cutting efficiency from your Chipper/Shredder feed material in at a steady rate to maintain maximum motor speed. The electric motor driving this machine should not be overloaded to an extent that causes the motor to slow from maximum speed. Overloading will cause regular motor tripping and could cause premature wear and damage to motor and switch gear.
- Ensure there is no foreign matter in the material to be shred. Remove any stones, glass, metal, brick, wire or any other material foreign to garden mulch. Failure to do so could result in damage to the machine and possible personal injury.
- Never place any garden tool or any object not required to be shred in either feed chamber. Damage to the shredder will occur and possible personal injury.
- Do not allow processed material to accumulate at the discharge chute. The shredder will cease to process material and possibly stall the motor because of congestion in the shredding chamber. This situation could occur more often when using the catcher if the catcher is not regularly emptied.
- When the shredder is being used with the catcher removed, the deflector must be hinged fully down into the correct position and retained in that position by means of the deflector latch.
- Stop the motor before removing or attaching the catcher.
- Your shredder will process green branches up to 20mm in the hopper. Larger branches should be fed into the chipper pipe. Refer to section "FOR BEST RESULTS" in this book on page 7.
- If the shredder vibrates or makes uncommon noises, stop the motor immediately. Wait for all the moving parts to come to a complete stop. Switch off electricity supply and disconnect extension cord at the chipper/shredder to avoid accidental starting before inspecting the machine.
- If the shredder becomes clogged, switch off the motor and wait for all moving parts to stop. Switch off electricity supply and disconnect extension cord at the chipper/shredder to prevent accidental starting before attempting to clear a blockage. Use a wooden stick only to clear a blockage, not hands or fingers. The blades on the shredder are very sharp and personal injury could occur if any body parts came in contact with the blades. Before restarting ensure both feeding chambers are empty.
- For an illustration and more information on opening the shredder chamber for inspection or to clear a blockage refer to "INSPECT SHREDDER CHAMBER" or "CLEAR A BLOCKAGE" in this book on page 8.

- The manual reset button for the electric motor overload protection device is located on the grey contactor box. This device will automatically cut off the electricity supply to the motor as a reaction to either stalling the motor with a choked up cutting chamber or by prolonged slowing down of the motor due to excessive heavy working.
- Should this situation arise, wait until the motor cools to normal operating temperature before resetting the device by pushing the reset button. The motor should cool sufficiently to enable a reset after 2 minutes. If the motor will not reset after 5 minutes contact your dealer or the manufacturer direct. Some reset buttons require a very firm press.
- When working to full capacity this electric shredder could use maximum current from your 10 amp power outlet. If this outlet is sharing the same circuit as other heavy demand household appliances such as washing machines, room air conditioners or electric heaters, nuisance tripping in your meter box could occur.

To overcome this, turn off unnecessary appliances or try a different power outlet using another circuit.



FOR BEST RESULTS

- Garden prunings shred better when they are green. Dry material takes longer to process and causes excessive blade wear.
- Combine excessively green material with drier prunings and conversely dried prunings with green ones.
- Feed material in at a steady rate to maintain maximum motor speed. If motor slows, restrict feeding till maximum motor speed returns. If the motor continues to labour, stop the shredder and refer to "TO CLEAR A BLOCKAGE" in this book.
- Your GREENFIELD shredder comes with a fabric catcher which is interchangeable with that of a GREENFIELD domestic mower. Empty the catcher just as you would your mower catcher. Don't allow it to overfill as this hinders the machines performance. Always stop the shredder to empty or replace the catcher.
- An extra large palm frond can produce more shredded mulch than the catcher can hold. Also when a large quantity of material is to be produced it may be more practical to remove the catcher and direct the mulch onto the ground or directly into the garden. Do not allow mulch to build up in the discharge area.
- Your GREENFIELD shredder will process green branches up to 20mm in the hopper and larger branches in the chipper pipe. Use the size of the handle bar on your Piecemaker as a "maximum" gauge.
- Due to time absorbing preparation, slow processing and excessive blade wear, materials such as larger sections of old dried timber and the base section of palm fronds are best disposed of in another manner.
- Keep the blades sharp and the machine in top operating condition.
- Ensure there is no foreign matter in the material to be shred. Remove any stones, glass, metal, brick, wire or any other material foreign to garden mulch. Failure to do so could result in damage to the shredder and possible personal injury.
- If material doesn't feed easily through the hopper we suggest reducing the size of prunings and or the quantity till a sustainable feed rate is developed.
- Never place any garden tool or any object not required to be shred in either feed chamber. Damage to the shredder will occur and possible personal injury.
- Read and understand the safety, operating and maintenance sections in this book.

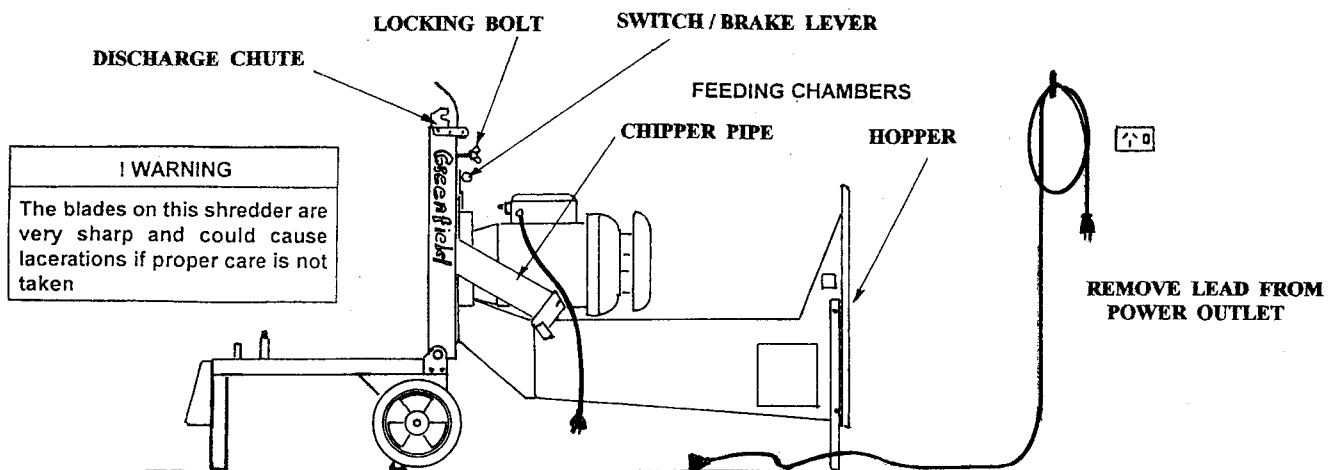
TO INSPECT SHREDDING CHAMBER or TO CLEAR A BLOCKAGE

If material fails to clear the shredding chamber or the machine is under abnormal labour or making uncommon noises or vibrating.

1. Stop the shredder and wait for all moving parts to come to a complete stop.
2. **! WARNING** – Switch off the electricity at the power point and disconnect the extension lead at the chipper shredder to prevent accidental starting.
3. With the switch/brake lever in the “OFF” position, open the shredding chamber by unscrewing both locking bolts. Then, hinge the complete top of the shredder backwards and rest the handle on the ground. Take precautions to protect the chrome surface on the handle.

! WARNING – The blades on the shredder are very sharp and could cause lacerations if proper care is not taken.

4. Check for the build up of foreign material attached to the disc in the shredding chamber. Use only a wooden stick to remove material after a blockage, never hands or fingers.
5. Remove all material out of both feed chambers before closing chamber.
6. Close the shredder chamber and screw in both locking bolts.
7. Restart the motor. If the shredder still vibrates or makes any uncommon sounds, stop the motor immediately and return the complete machine to your local dealer.



MAINTENANCE

BLADES

! WARNING - The blades on your Greenfield Shredder are very sharp and could cause lacerations if not handled with utmost care.

Each blade has two cutting edges for twice the life. When the first edge of both blades becomes dull they can be turned over and used again before needing sharpening or replacement.

When blades do require sharpening return them to your local dealer who will arrange the cutting edges to be reground. Do not attempt to sharpen blades without the proper equipment needed to grind blades in pairs to retain correct balance.

When removing blades to turn over, be careful, as the unused edge is very sharp and could cause personal injury. Remove any build up of mulched material on the blade before turning it over and rebolting it to the disc.

TO REMOVE AND REPLACE BLADES

1. **! WARNING** - Switch off the electricity and disconnect the lead from the power point before attempting any inspection or maintenance on the machine.
2. With the switch/brake lever in the "OFF" position open the shredding chamber by unscrewing both locking bolts, then hinge the complete top section backwards and rest the handle on the ground.
3. Rotate the disc to bring a blade to the top, discharge chute area. The blade securing the bolts are easier to remove if the disc is first restrained from rotating by inserting a piece of timber through the blade hole at the bottom of the disc and into the hopper base hole.

Use a 13mm or 1/2" AF spanner or socket to remove the two (2) blade retaining bolts from the top blade only.

! WARNING - The unused edge of the blade will be very sharp and could cause lacerations if not handled carefully.

If the blade is to be turned over, remove any build up of mulched material on the blade with a wire brush or scraper before bolting that face to the disc. Failure to do so could cause the blade to come loose at a later time. The used spring washers should be discarded and replaced with new spring washers every time the blade is removed. Tighten the M8 x 16 high tensile blade bolts to 22 Nm (16ft lbs).

To change the second blade, repeat step 3 of these instructions.

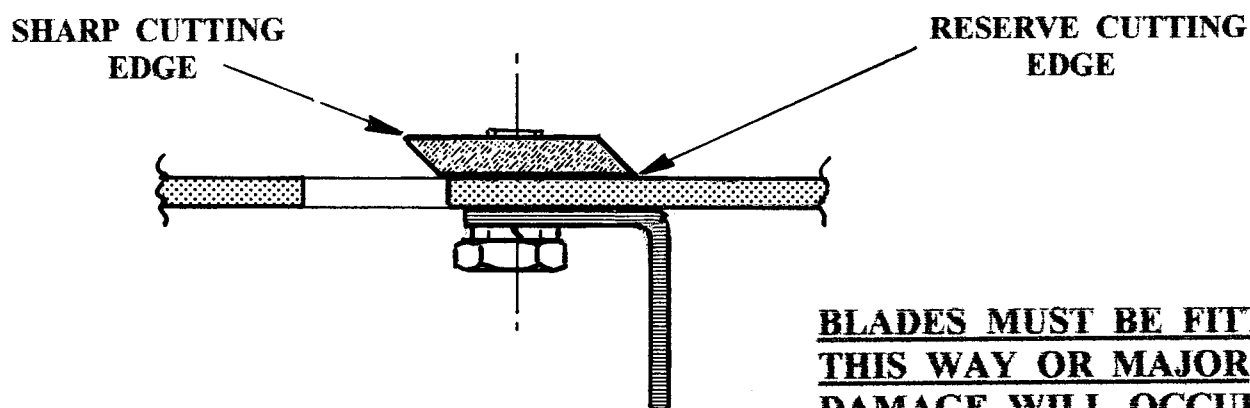
!WARNING - Ensure blades are not fitted upside down. See "Blade Assembly" illustration.

Always replace blades in pairs to preserve balance. When replacing blades always use GENUINE GREENFIELD spare parts.

To remove or replace the blades it is not necessary to touch the bolts in the centre of the disc which secures the disc to the boss or the two bolts securing the labyrinth blades.

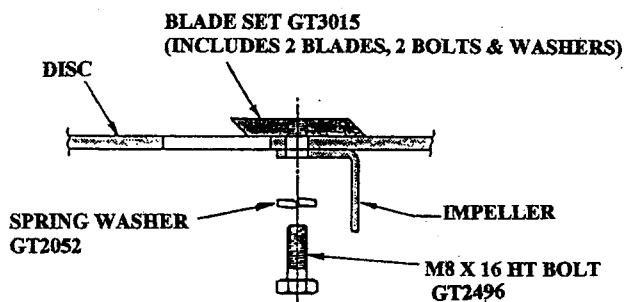
Do not attempt any maintenance or repairs to this shredder unless you have the correct tools and are competent and qualified to work on machinery of this nature.

! WARNING - Use of inferior non-genuine service parts on your Greenfield shredder could result in costly damage and even personal injury. Insist on GENUINE Greenfield spare parts.

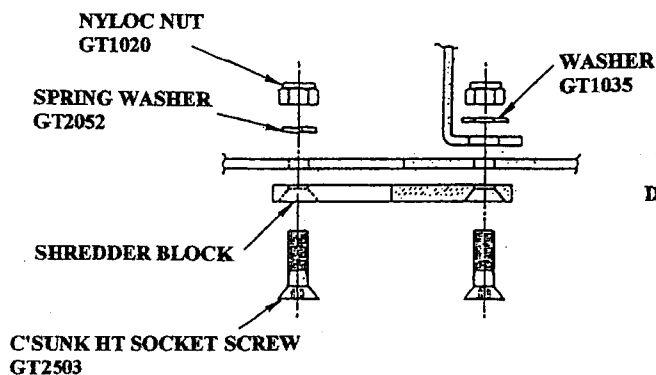


YOUR PART NUMBERS ARE:

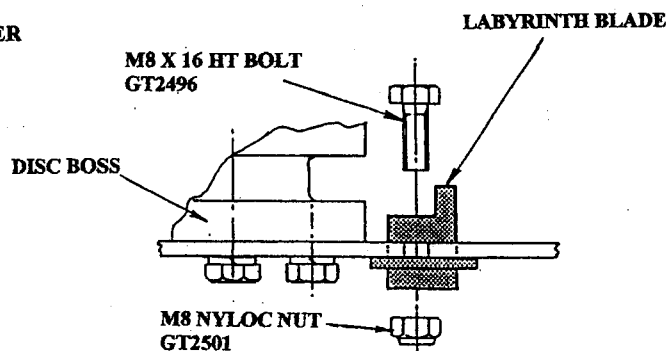
BLADE SET	GT3015
BOLT AND WASHER SET	GT3010
SHREDDER BLOCK	GT3165
LABYRINTH BLADE	GT3145



BLADE ASSEMBLY



**SHREDDER BLOCK
ASSEMBLY**



**LABYRINTH BLADE
ASSEMBLY**

DISC

Should it be necessary to remove the disc, new spring washers should be used when refitting. The M8 x 25 HT centre bolt and the four (4) M8 x 20 HT bolts into the disc boss should be tensioned to 22 Nm (16ft. Lbs) See Illustration "DISC ASSEMBLY".

The disc and disc boss is fitted to the motor shaft then aligned centrally in the cutting chamber to maintain minimum clearance around labyrinth blades. There is a number of operations to be performed in the correct order for both removal and replacement of the motor, motor base and brake unit and should only be done by a person experienced and qualified with the correct tools to do so.

BRAKE

Your Greenfield shredder is fitted with a brake to stop the rotation of the blades. Although self adjusting the brake pad may need periodical replacement. See page 12 for illustration.

Maintenance attempted by an unexperienced and/or unqualified person could cause damage to the machine or even personal injury. The manufacturer recommends all maintenance be performed by an authorised Greenfield dealer or qualified electrician.

NOTE: All electrical components such as motor, switches and power supply cables may only be serviced or replaced by a qualified Electrician.

CLEANING

Never wash your Greenfield Shredder with a high pressure hose. Water and dirt could be forced past the seals in the motor bearings causing premature failure or forced into electrical components resulting in corrosion and a malfunction of the electrical system.

Use a brush to remove any build up of debris then wipe with a cloth.

Clean the catcher bag by hosing away from the machine.

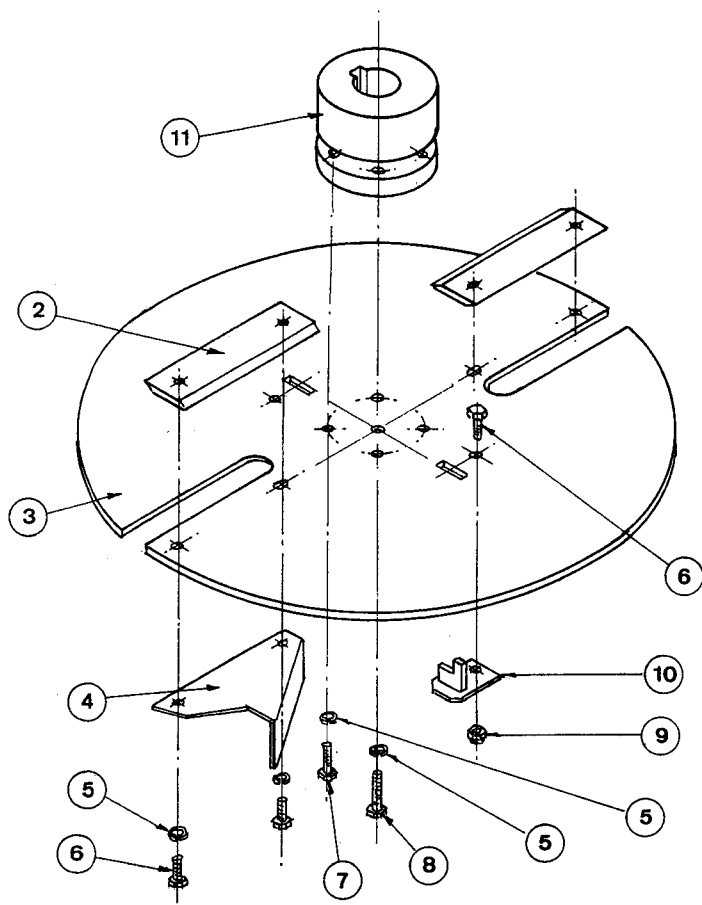
STORING

Make sure all the material fed into the machine has completely passed through before switching it off. After disconnecting from power source inspect feeding chambers and discharge chute, removing any debris.

Before storing, clean the machine and check for any loose or missing parts. Check that the blades are in good condition for the next use.

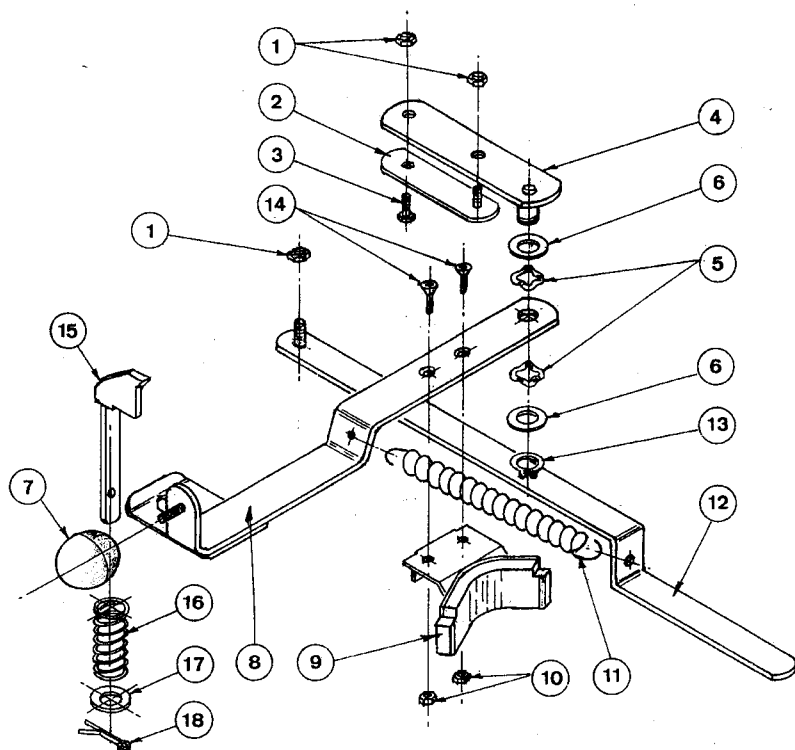
Store in a dry, well ventilated area protected from excessive humidity and dust.

DISC ASSEMBLY

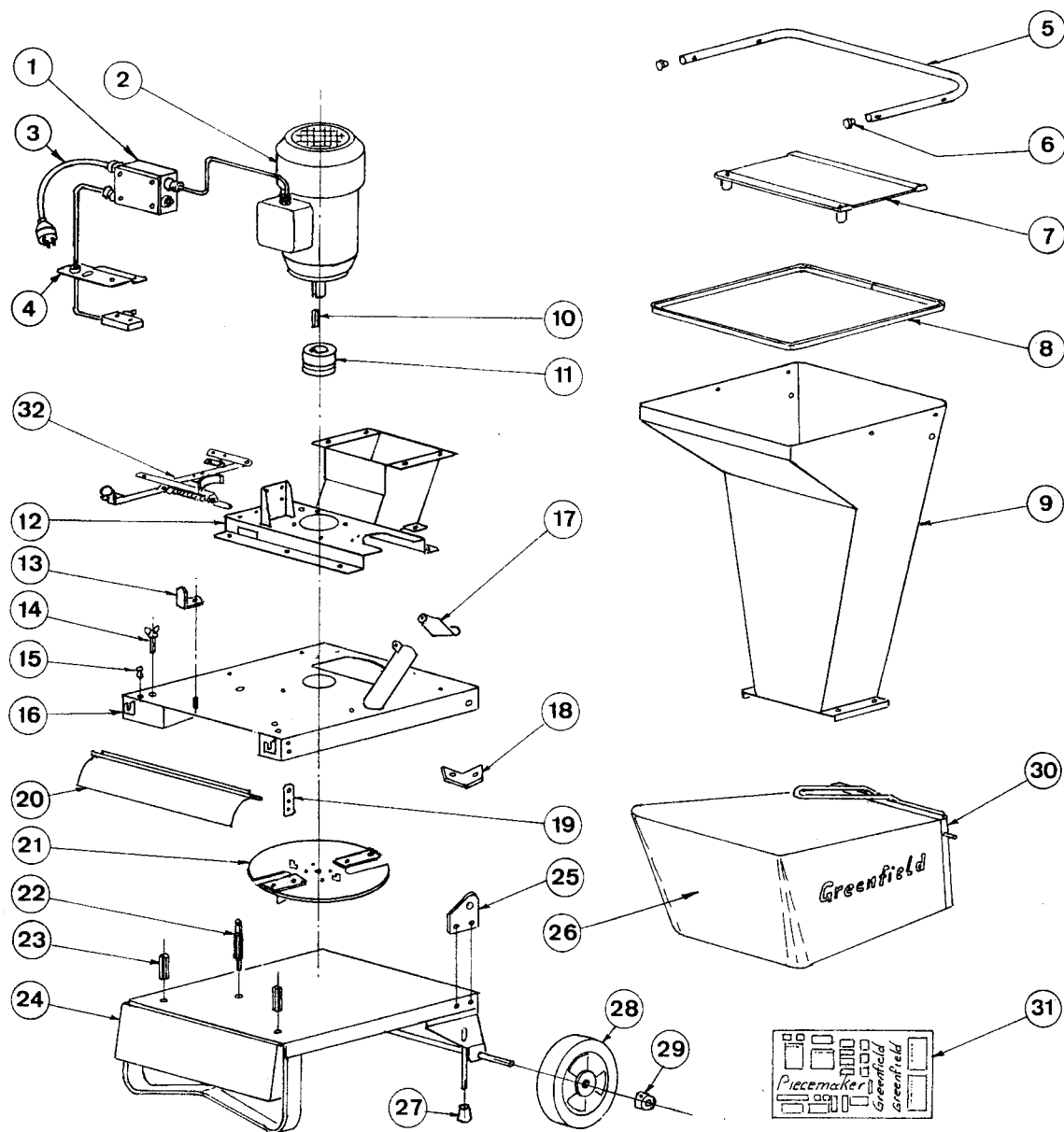


INDEX	PART NO.	DESCRIPTION
2.	GT3015	Blade Set Includes (2 Blades, 4 Bolts & Washers)
3.	GT3162	Disc
4.	GT3164	Impeller
5.	GT2052	Spring Washer
6.	GT2496	M8 HT Bolt 16 Long
7.	GT2497	M8 HT Bolt 20 Long
8.	GT2534	M8 HT Bolt 25 Long (Centre Bolt)
9.	GT2501	M8 Nyloc Nut
10.	GT3145	Labyrinth Blade
11.	GT3161	Disc Boss

BRAKE ASSEMBLY



INDEX	PART NO.	DESCRIPTION
1.	GT1020	5/16" Nyloc Nut
2.	GT3005	Retainer
3.	GT1455	5/16" Set Screw
4.	GT3075	Hinge Arm
5.	GT2046	Tension Washer
6.	GT2541	Washer
7.	GT524	Knob
8.	GT3076	Handle Assembly
9.	GT3082	Brake Unit
10.	GT1734	M5 Nyloc Nut
11.	GT21004	Tension Spring
12.	GT3009	Spring Anchor
13.	GT2010	Circlip
14.	GT2540	C'sunk HT Screw
15.	GT3593	Safety Lock
16.	GT3595	Compression Springs
17.	GT1039	Washer
18.	GT167	Split Pin

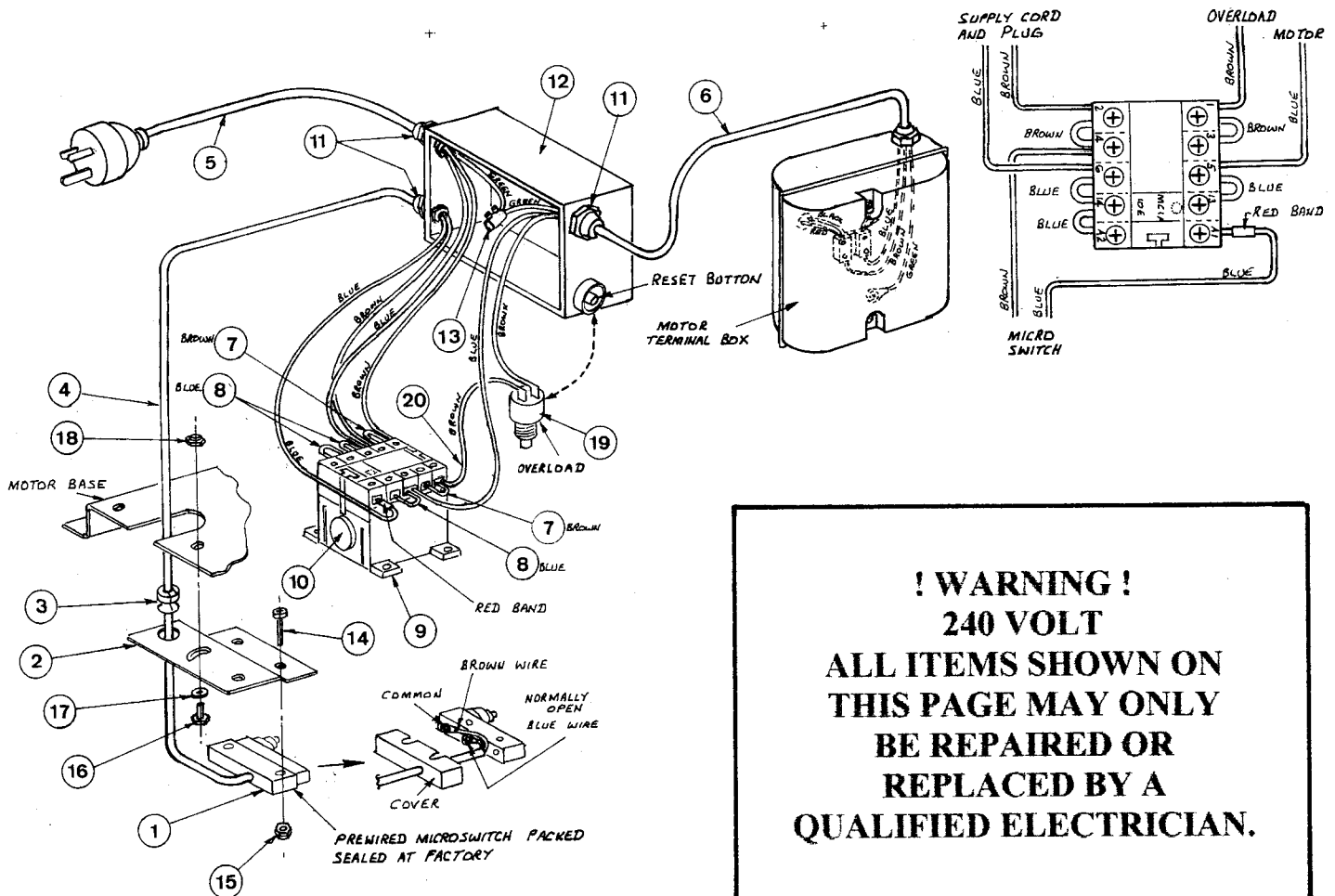


SPARE PARTS

INDEX	PART NO.	DESCRIPTION	INDEX	PART NO.	DESCRIPTION
1.	GT3578	Grey Contactor Box	17.	GT3364	Safety Flap
2.	GT3171	2.4KW Electric Motor	18.	GT3165	Shredder Block
3.	See Page 14	Switchgear and Wiring	19.	GT3168	Bracket
4.	GT3176	Bracket	20.	GT3157	Deflector
5.	GT3059	Handle	21.	See Page 12	Cutting Disc Assy.
6.	GD5583	Plastic End Plug	22.	GT3085	Locking Post
7.	GT3147	Rubber Safety Flap	23.	GT2539	Locking Socket
8.	GT3022	Rubber Edging	24.	GT3044	Base Assembly
9.	GT3066	Hopper	25.	GT3099	Hinge Plate
10.	GT3023	Key	26.	GD5773	Fabric Bag for Catcher
11.	GT3161	Disc Boss	27.	GT3020	Rubber End Cap
12.	GT3098	Motor/Hopper Base	28.	GT2255	Wheel
13.	GT3090	Latch	29.	GT7009	Collar
14.	GT3087	Locking Bolt	30.	GD5811	Bag Catcher
15.	GT1760	Nylon Button	31.	GT3021	Decal Set
16.	GT3054	Cutting Chamber Assy.	32.	See Page 12	Brake Assembly

Parts and specifications subject to change without notice. Standard hardware items are not shown.

SWITCHGEAR AND WIRING



INDEX	PART NO.	DESCRIPTION	INDEX	PART NO.	DESCRIPTION
1.	GT3028	Micro Switch and Cover	11.	GT3026	Cable Entry Clamp
2.	GT3176	Bracket - Micro Switch	12.	GT3578	PVC Box, Seal & Lid
3.	GT3027	Strain Relief Bush	13.	GT3025	Cable Connector
4.	GT3039	Wire Harness "B"	14.	GT2535	Screw M3 x 25
5.	GT3038	Wire Harness "A"	15.	GT2536	Nyloc Nut M3
6.	GT3581	Wire Harness "C"	16.	GT2045	Set Screw 1/4" x 5/8"
7.	GT3012	Brown Wire Loop	17.	GT1022	Washer ø 1/4" x 5/8"
8.	GT3013	Blue Wire Loop	18.	GT79	Nyloc Nut 1/4"
9.	GT3011	Contactor	19.	GT2297	Overload Manual Reset
10.	GT2298	Adhesive Pad	20.	GT3582	Brown Wire Overload

Parts and specifications subject to change without notice.

Guarantee

Greenfield Mowers Pty Ltd, the manufacturer, guarantee their product to be free of faulty workmanship and material only. This period is 12 months for domestic use. The Piecemaker Chipper Shredder is built solely for domestic use. Machines hired out are not covered by the manufacturer's guarantee. The manufacturer cannot accept any claim for damage that may occur due to irresponsible use or abuse by the hirers. Motors and Switch Gear used on Greenfield equipment carry the respective manufacturer's warranty.

This Guarantee will not apply to:

- Fair wear and tear, Blades and Blade Bolts, Blade Holder, and damage caused by misuse, neglect and accidents. We refer you to page 7 of the Owner's Manual, headed 'For Best Results' and the decal headed 'Shredding and Chipping Capacity' located on the machine.
- Repairs rendered necessary or arising from use of other than genuine Greenfield parts, or the relevant genuine electrical parts.
- Any work performed by other than an authorised Greenfield Dealer, Qualified Electrician, or damages arising from parts that have been dismantled, modified or incorrectly fitted.

Products and parts considered faulty should be returned intact to the authorised Greenfield Dealer, or direct to Greenfield with all necessary information, freight paid for inspection. In all warranty claims the manufacturer's decision is final and binding.

The benefits conferred by the above guarantee are in addition to all other rights and remedies in respect of the product which the consumer has under existing laws in Australia and New Zealand.

Greenfield Mowers Pty Ltd, the manufacturer reserves the right to change parts and specifications without notice.

Guarantee Registration Details:

Owner _____

Address _____

_____ Postcode _____

Purchase Date _____ Model _____

Chassis No _____ Motor Serial/ Batch No _____

Dealer Signature _____

Please complete this record which should be held by the purchaser and presented should service under guarantee be required. To register your guarantee, please complete the enclosed guarantee card and return to Greenfield Mowers.

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