



# TIMBERWOLF<sup>®</sup>

Lead the pack

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## TW 13/75G WOOD CHIPPER

# INSTRUCTION MANUAL

(ORIGINAL INSTRUCTIONS)





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Thank you for choosing Timberwolf. Timberwolf chippers are designed to give safe and dependable service if operated according to the instructions.

## IMPORTANT HEALTH AND SAFETY INFORMATION

Before using your new chipper, please take time to read this manual. Failure to do so could result in:

- personal injury
- equipment damage
- damage to property
- 3rd party injuries

This manual covers the operation and maintenance of the Timberwolf TW 13/75G. All information in this manual is based on the latest product information available at the time of purchase.

All the information you need to operate the machine safely and effectively is contained within pages 3 to 11. Ensure that all operators are **properly trained** for operating this machine, especially in **safe working practices**.

Timberwolf's policy of regularly reviewing and improving their products may involve major or minor changes to the chippers or their accessories. Timberwolf reserves the right to make changes at any time without notice and without incurring any obligation.

Due to improvements in design and performance during production there may be, in some cases, minor discrepancies between the actual chipper and the text in this manual.

**The manual should be considered an important part of the machine and should remain with it if the machine is resold.**



### CAUTION or WARNING

**BE AWARE OF THIS SYMBOL AND WHERE SHOWN, CAREFULLY FOLLOW THE INSTRUCTIONS.**

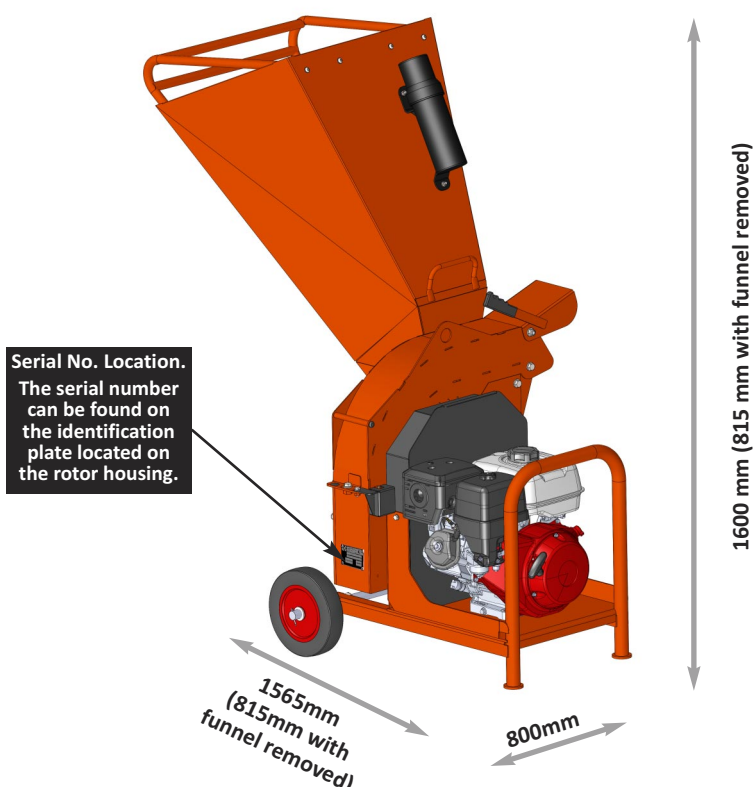
**THIS SYMBOL INDICATES IMPORTANT SAFETY MESSAGES IN THIS MANUAL. WHEN YOU SEE THIS SYMBOL, BE ALERT TO THE POSSIBILITY OF INJURY TO YOURSELF OR OTHERS AND CAREFULLY READ THE MESSAGE THAT FOLLOWS.**

**ALWAYS FOLLOW SAFE OPERATING AND MAINTENANCE PRACTICES**

## PURPOSE

Designed to chip solid wood material up to 75mm in diameter and capable of chipping over 0.75 tonnes of brushwood per hour.

## DIMENSIONS



## TW 13/75G SPECIFICATION

**Engine type:**  
Honda 4 stroke OHV

**Maximum power:**  
9.6kW (13hp)

**Cooling method:**  
Air cooled

**Overall weight:**  
188kg

**Starting method:**  
Recoil

**Type of feed:**  
Gravity

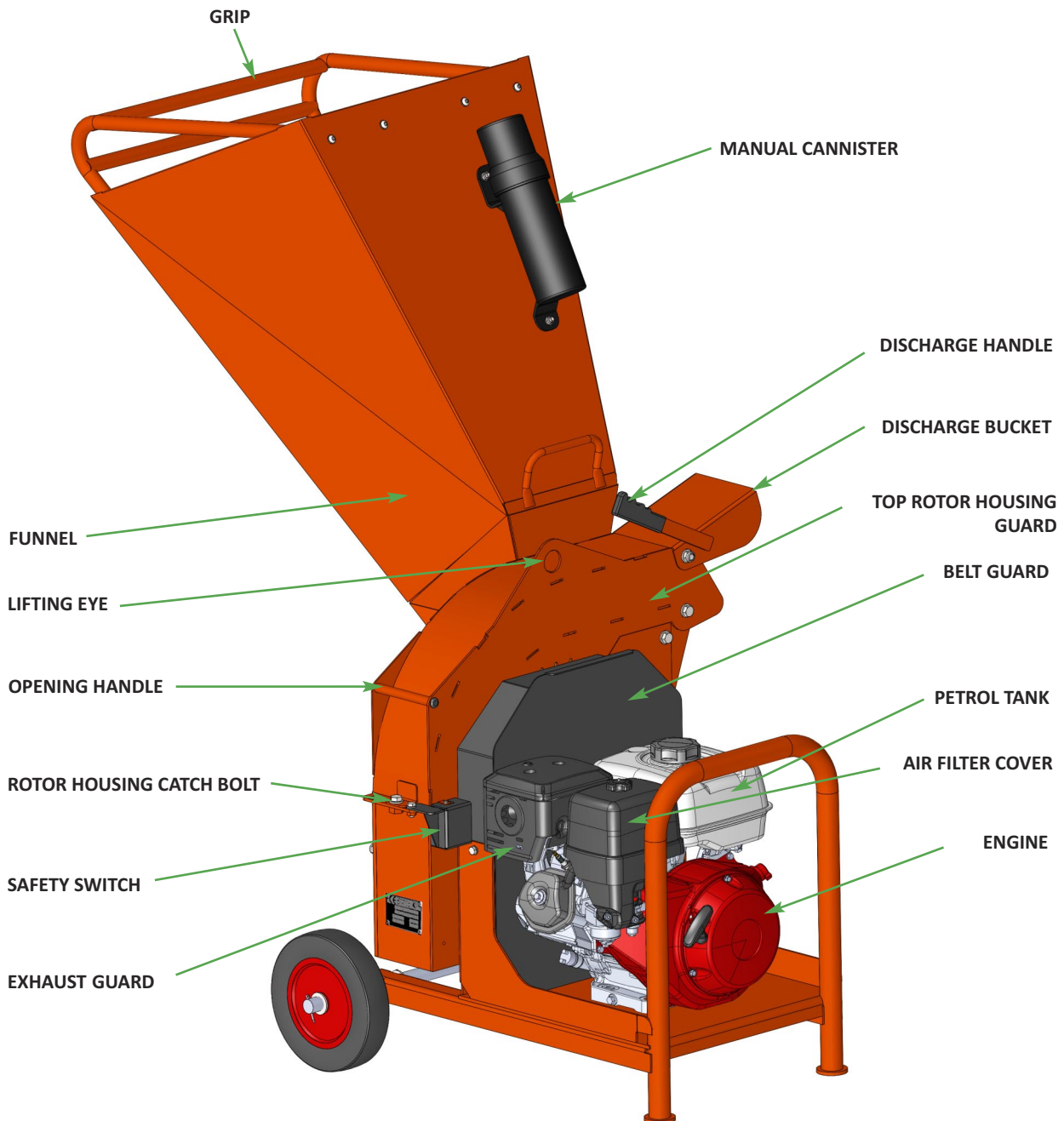
**Maximum diameter material:**  
75 mm (3")

**Fuel capacity:**  
6.5 litres

**Material processing capacity:**  
Up to 0.75 tonnes/hr

**Fuel type:**  
Unleaded petrol

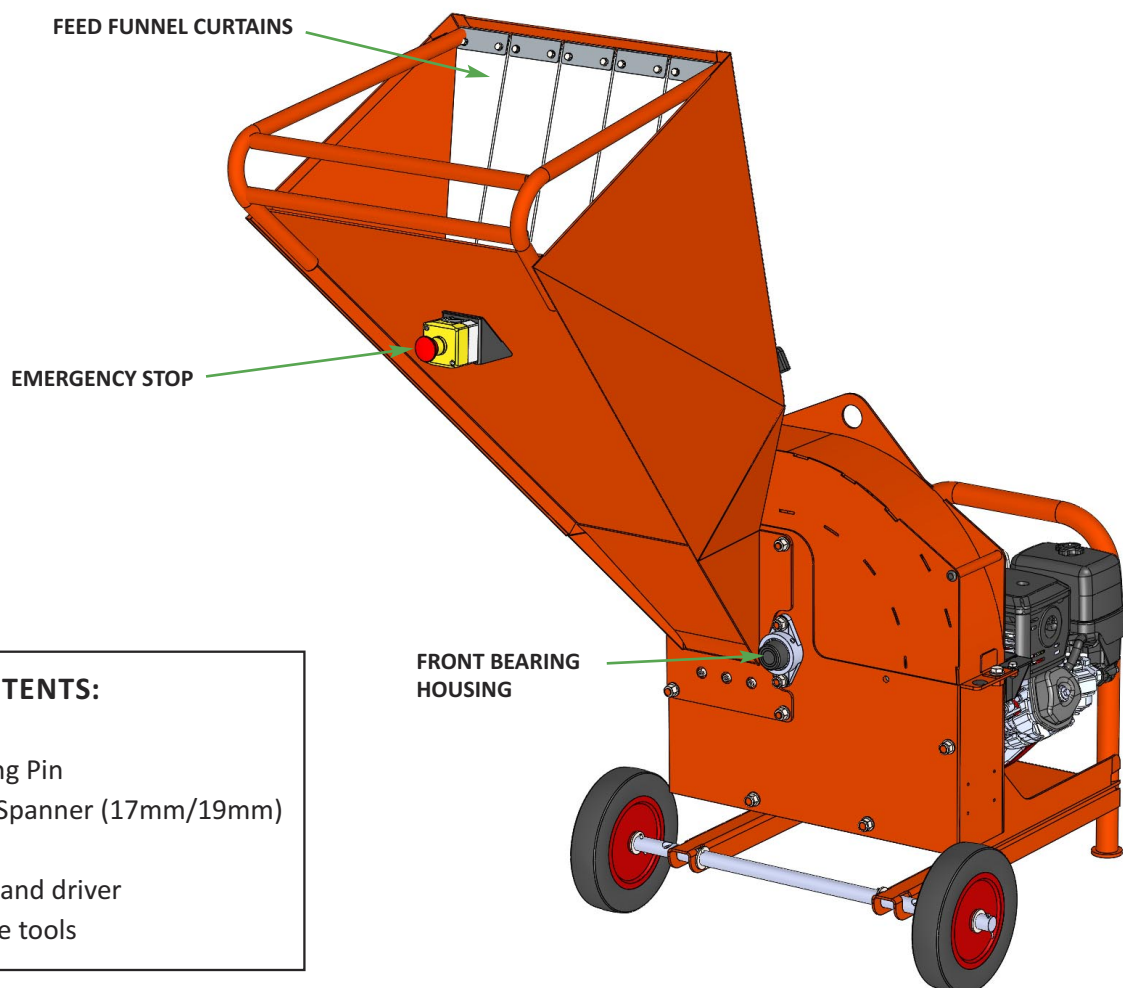
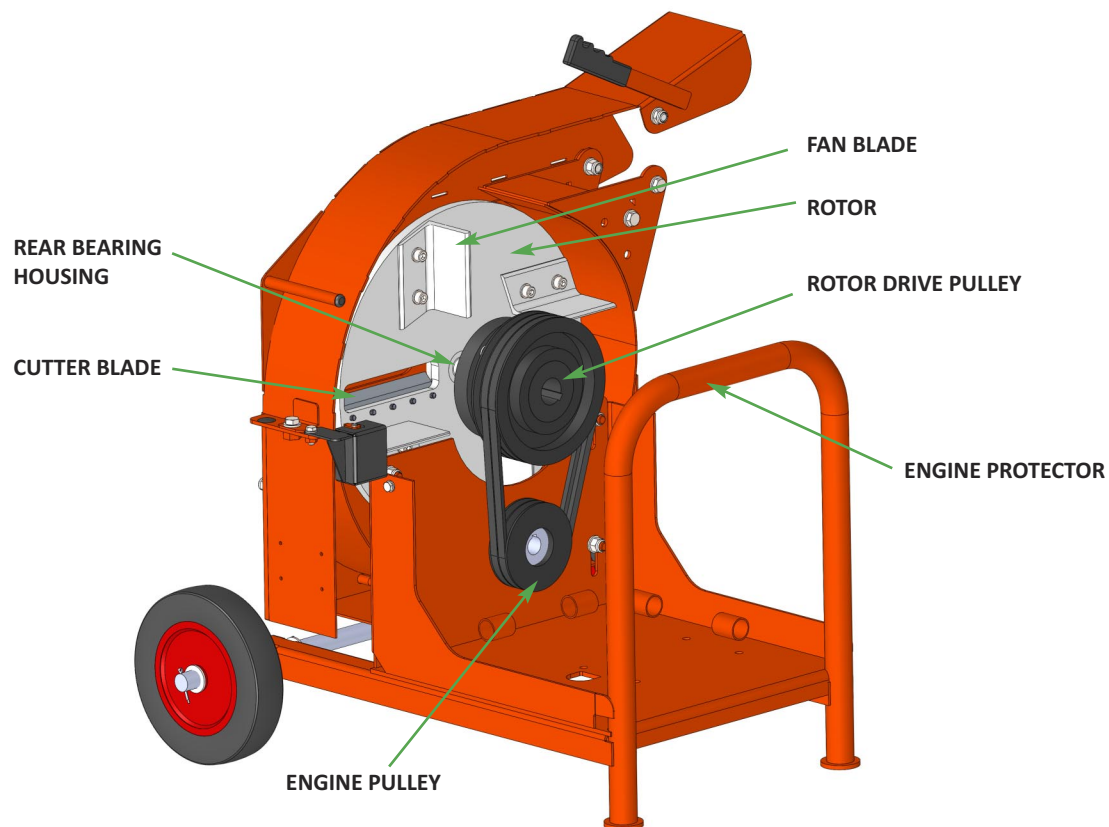




**THE TW13/75G HAS THE FOLLOWING FIXED GUARDS FOR PROTECTION OF THE OPERATOR, CHIPPER AND ENVIRONMENT:**

- **Funnel:** Protects the user from injuries from moving parts and ejected material during operation.
- **Exhaust Guard:** Protects exhaust from damage. Protects the user from heat injuries.
- **Top Rotor Housing Guard:** Protects user from rotational parts e.g. cutting blades. The interlocking switch disengages the engine when the hatch is opened to stop the chipper running.
- **Safety Switch Guard:** Prevents user overriding the interlocking switch.
- **Belt Guard:** Protects the user from rotational parts e.g. belts and pulleys, hot surfaces and engine fluids. Protects machine from ingress of environmental debris.

Guards may be removed for maintenance only, as described in the Service Instruction pages of this manual. **Ensure guards remain in place throughout operation.**

**TOOL BOX CONTENTS:**

- Copper Ease
- Rotor Retaining Pin
- Combination Spanner (17mm/19mm)
- Blade bolts
- Star (torx) tip and driver
- Shaft & handle tools

## OPERATOR'S PERSONAL PROTECTIVE EQUIPMENT (PPE)

- Chainsaw safety helmet (EN 397) fitted with mesh visor (EN 1731) and ear defenders (EN 352).
- Work gloves with elasticated wrist.
- Steel toe cap safety boots (EN 345-1).
- Close fitting heavy-duty non-snag clothing. High-visibility clothing (EN 471) if risk assessment identifies the need.
- Face mask if appropriate.
- DO NOT wear rings, bracelets, watches, jewellery or any other items that could be caught in the material and draw you into the chipper.



### WARNING

**The chipper will feed material through on its own. To do this, it relies on sharp blades on the chipper rotor. To keep the blades sharp, only feed the machine with clean brushwood. DO NOT put muddy/dirty wood, roots, potted plants, bricks, stones or metal into the chipper.**

## BASIC WOODCHIPPING SAFETY

The operator should be aware of the following points:

- Maintain a safety exclusion zone around the chipper of at least 10 metres for the general public or employees without adequate protection. Use hazard tape to identify this working area and keep it clear from debris build up. Chips should be ejected away from any area the general public have access to.
- Hazardous material - Some species of trees and bushes are poisonous. The chipping action can produce vapour, spray and dust that can irritate the skin. This may lead to respiratory problems or even cause serious poisoning. Check the material to be chipped before you start. Avoid confined spaces and use a face mask if necessary.
- Be aware when the chipper is processing material that is an awkward shape. The material can move from side to side in the funnel with great force. If the material extends beyond the funnel, the brush may push you to one side causing danger. Badly twisted brush should be trimmed before being chipped to avoid thrashing in the feed funnel.
- Be aware that the chipper can eject chips out of the feed funnel with considerable force. Always wear full head and face protection.
- Always work on the side of the machine furthest from any local danger, e.g. not road side.
- Never leave the chipper unattended when running. Machines must be supervised at all times when in use.
- In the event of an accident, stop the machine and call the emergency services immediately.

## GENERAL SAFETY MATTERS

- Always stop the chipper engine before making any adjustments, refuelling or cleaning.
- Always check the rotor has stopped rotating before maintenance of any kind, or whenever the machine is to be left unattended. If in doubt, look through the in-feed funnel to see if rotor is still moving.
- Always check the machine is well supported and cannot move. If working on an incline, position on solid ground, across the slope.
- Always operate the chipper with the engine set to maximum speed when chipping.
- Always check (visually) for fluid leaks. If found, resolve the leak before operating the chipper.
- Always take regular breaks. Wearing personal protective equipment for long periods can be tiring and hot.
- Always keep hands, feet and clothing out of feed opening, discharge and moving parts. Under no circumstances should you reach into the funnel.
- Always keep the operating area clear of people, animals and children.
- Always keep the operating area clear from debris build up.
- Always keep clear of the chip discharge tube. Foreign objects may be ejected with great force.
- Always ensure protective guarding is in place before commencing work. Failure to do so may result in personal injury or loss of life.
- Always operate the chipper in a well ventilated area - exhaust fumes are dangerous.
- Ensure a fire extinguisher is available on site.
- Ensure a personal first aid kit and hand cleaning materials are available (e.g. waterless skin cleanser).

## GENERAL SAFETY MATTERS

- Do not operate chipper unless available light is sufficient to see clearly.
- Do not use or attempt to start the chipper without the feed funnel and guards securely in place.
- Do not stand directly in front of the feed funnel when using the chipper. Stand to one side.
- Do not smoke when refuelling.
- Do not let anyone who has not received instruction operate the machine.
- Do not climb on the machine at any time.
- Do not handle material that is partially engaged in the machine.
- Do not touch any exposed wiring while the machine is running.
- Do not use the chipper inside buildings.



CLOTH



PLASTIC



STONES



METAL



GLASS



RUBBER



BRICKS



STRING



ROOTS

BEDDING  
PLANTS

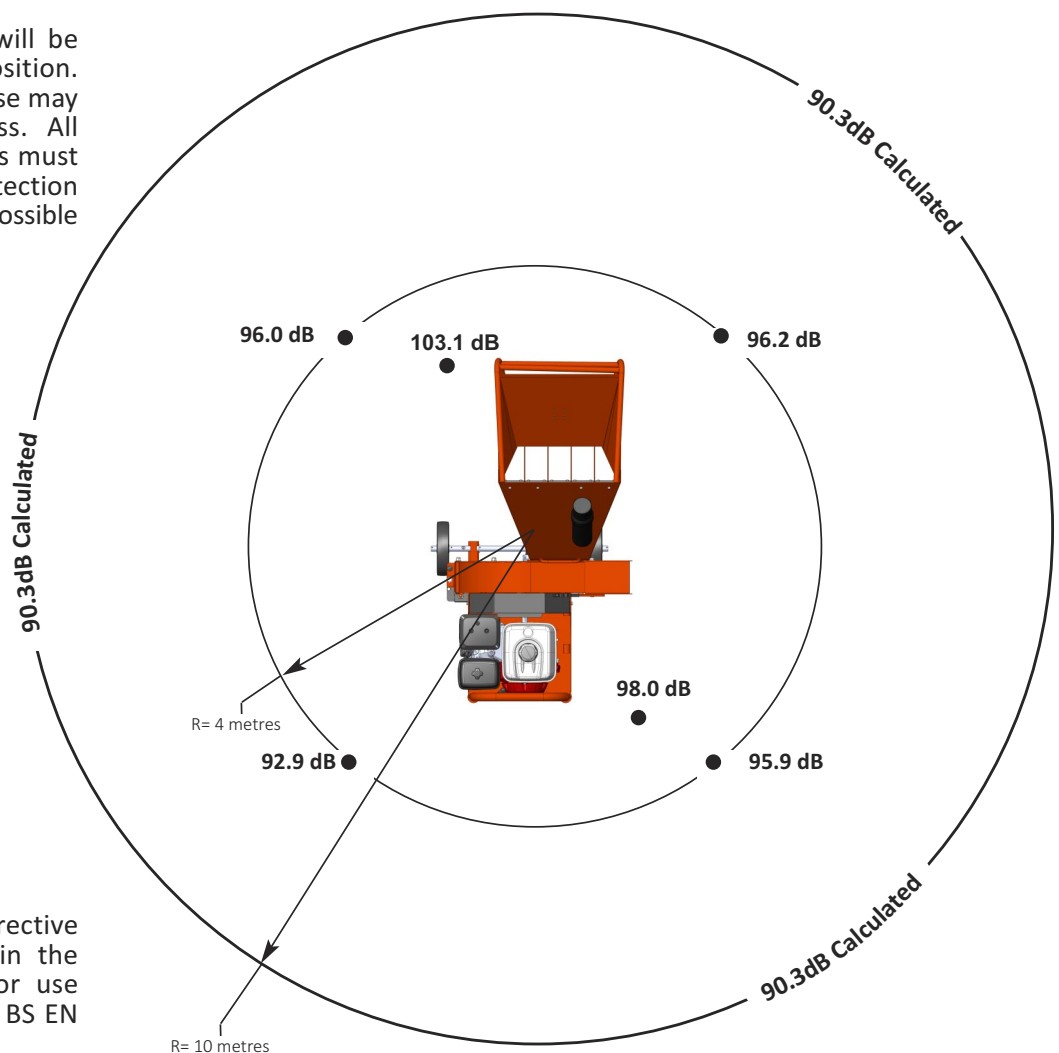
## NOISE TEST

**Machine: TW 13/75G**

**Notes: Tested chipping 40mm x 40mm corsican pine 1.5m in length**

Noise levels above 80dB (A) will be experienced at the working position. Prolonged exposure to loud noise may cause permanent hearing loss. All persons within a 4 metre radius must also wear good quality ear protection (EN 352) at all times to prevent possible damage to hearing.

Guaranteed Sound  
Power: 120dB (A)



As required by Annex III of Directive 2000/14/EC "Noise Emission in the environment by equipment for use outdoors". Tested according to BS EN ISO 3744:2010.

## STORING THE CHIPPER

Perform the following tasks at the storage intervals indicated, following procedures described within this manual.

Maintenance Tasks	Storage time			
	<1 month	1-6 months	6-12 months	>12 months
Allow the engine to cool down.	✓	✓	✓	✓
Clean the chipper, removing all woodchips.	✓	✓	✓	✓
Perform routine maintenance.	✓	✓	✓	✓
Check all fasteners and retighten.	✓	✓	✓	✓
Remove all fuel from the tank. NOTE: Either allow the machine to run until all fuel has been used, or drain from the plug provided. If necessary, siphon the fuel into an approved storage container (refer to re-fuelling section). Drain prior to moving machinery, to prevent spillage.	✓	✓	✓	✓
Disassemble the spark plug (petrol machines).	✓	✓	✓	✓
Where paint is damaged, touch up paint or treat with a lubricant. NOTE: Original paint colours are available from Timberwolf dealers.	✓	✓	✓	✓
Store the chipper in a dry place at +5°C to +40°C. NOTE: Timberwolf strongly recommends the machine is stored in a sheltered location, protected from rain. If the machine is stored outside, it must be well protected with tarpaulin.	X	✓	✓	✓
If relative humidity of the storage environment is > 60%, the shaft of the engine must be rotated by hand 1-2 revolutions bi-weekly. Prior to rotating the shaft, 20 to 30 ml of engine oil should be poured onto the bearing liner.	X	✓	✓	✓
Every 3 months, inspect the machine as per <1 month column.	X	X	✓	✓
Clean out and drain all lubrication lines, including grease pipes, fuel lines and oil reservoirs. Replace with new lubricants. NOTE: This should be performed at 6 month intervals (months 6 & 12) until recommissioned. Drain prior to moving machinery, to prevent spillage.	X	X	✓	✓
Keep machine in original container/packaging or equivalent protection and store in a location free from extremes in temperature, at a min. temp. of +5°C and max. +40°C, humidity and corrosive environments. NOTE: If the storage location is cold, damp or severe humidity changes exist, adequate action should be taken to safeguard machinery.	X	X	X	✓
If machine is exposed to environmental conditions such as humidity during storage, inspect bearing lubrication system for presence of water. If water is detected in the lubricant, flush out the bearing housing and re-lubricate immediately.	X	X	X	✓
All breathers and drains are to be operable while in storage and/or the moisture drain plugs removed. The machinery must be stored so the drain(s) are at the lowest point, while the machine is in its stable position.	X	X	X	✓
Follow the recommissioning process before operation.	X	✓	✓	✓

### NOTE:

Regardless of storage time, all Timberwolf machines must be in a stable, level position to ensure the machine is unable to roll or move unintentionally during storage.



## RECOMMISSIONING AFTER STORAGE

- Ensure machine is stable.
- Remove all guards and check all fasteners. If necessary, retighten as described within this manual.
- Ensure feed funnel is free from foreign objects e.g. tools and clothing.
- Lower and raise feed funnel into its open and closed positions to confirm functionality.
- Check fuel within engine and top up accordingly. \*
- Inspect all internal parts e.g. drive belts, taper locks and shaft keyways.
- Check belt tension as described within this manual.
- Inspect cutting blades to confirm they are sharp and suitable for use.
- Undertake electrical diagnostic continuity check, to confirm circuit is complete.
- Re-lubricate all grease pipes. Remove pipes and bleed the system prior to use, if necessary. \*
- Follow daily checks before starting, as described within this manual.
- Start the machine.
- Run for 15 minutes at half throttle, prior to any cutting activity, to clear the combustion engine. Once complete, bring the machine onto full throttle for a further 5 minutes.

\*Storage fluids should be replaced, DO NOT USE old stagnate fluids.

## SAFE TRANSPORTATION

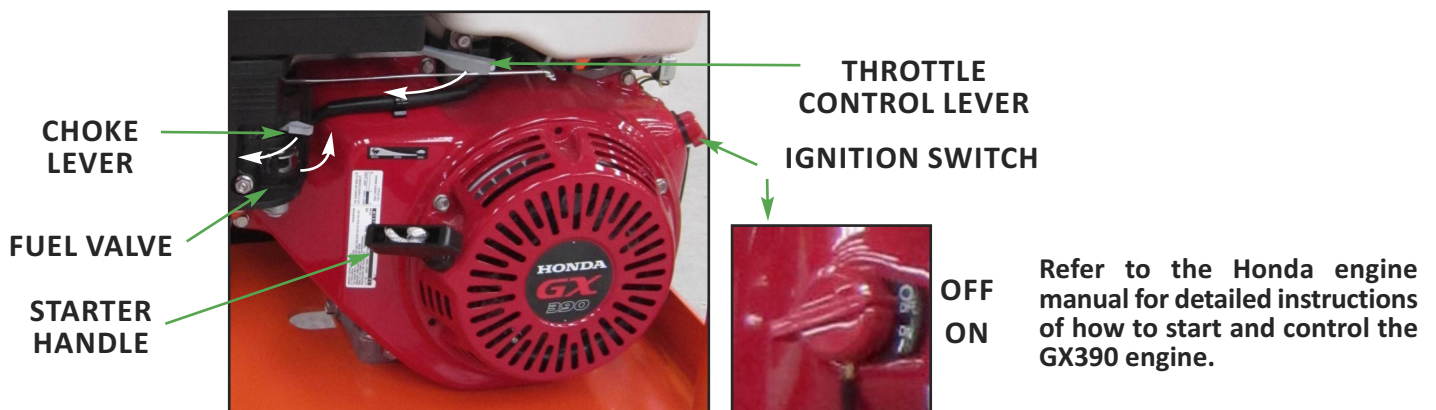
- The TW 13/75G chipper may be transported as a unit or with the feed funnel removed.
- Take care when loading the TW 13/75G as it is 188 kg in weight.
- Strap the chipper down firmly before beginning a journey (do not use feed funnel handles to strap down machine).
- Ensure no debris or water is trapped in the rotor housing that may spill during transit.
- Turn the fuel valve OFF and keep the engine upright.

## DELIVERY

All Timberwolf TW 13/75G machines have a full pre - delivery inspection before leaving the factory and are ready to use. Read and understand this instruction manual before attempting to operate the chipper. In particular, read pages 5-6 which contain important health and safety information and advice.

## MANUAL CONTROLS

There are five controls on the Honda GX 390 K1 that are required for daily usage of the TW 13/75G chipper.





## STARTING THE ENGINE

- Turn the fuel valve to the 'ON' position.
- Move the choke lever to the 'CLOSE' position. NOTE: Do not use the choke if the engine is warm or the air temperature is high.
- Move the throttle control lever slightly to the left.
- Turn the ignition switch to the 'ON' position.
- Pull the starter handle lightly until resistance is felt, then pull briskly.  
CAUTION: Do not allow the starter handle to snap back against the engine. Return it gently to prevent damage to the recoil mechanism.
- As the engine warms up, gradually move the choke lever to the 'OPEN' position.
- Position the throttle control lever for the desired engine speed.

## STOPPING THE ENGINE

- Move the throttle control lever to idle and allow to run for one minute.
- Turn the fuel valve to the 'Off' position.
- Turn the ignition switch to the 'Off' position (as shown in the diagram on page 8).

## EMERGENCY STOPPING

Should the machine need to be stopped in an emergency, push the **red emergency stop** button positioned on the funnel. This stops all power to the engine, bringing the machine to a complete stop. The engine cannot be restarted until the button is restored to its original position. Before disengaging the emergency stop button, ensure the engine has come to a complete standstill then inspect the machinery to determine the reason for activation.

## DAILY CHECKS BEFORE STARTING

- Locate the machine on firm level ground.
- Check engine oil level.
- Check the fuel valve is open.
- Check all guards are in place.
- Check the discharge unit is pointing in a safe direction.
- Check the feed funnel to ensure no objects are inside.

For parts location see diagrams on pages 3 & 4.

## STARTING TO CHIP

- Check that the chipper is running smoothly.
- Stand to one side of the feed funnel.
- Proceed to feed material into the feed funnel.

## CHIPPING

Wood up to 75 mm in diameter can be fed into the feed funnel. Enter it into the funnel butt end first. Release the material before it engages the rotor. Some pieces of wood may move around significantly whilst being chipped. The wood will be drawn into the cutting blade quite quickly, be ready for this to happen. Stand well clear.

A piece of wood which is too tough or too large for the chipper will slow the engine down. When this happens it is possible to hold back the branches that are being chipped and allow the engine to regain its speed again.

If a piece of wood gets stuck in the funnel and it cannot be chipped due to its size or shape, it will need to be removed. **Stop the engine and wait for moving parts to stop before removing the material.** Trim the branch until it is a suitable shape for the chipper to accept.



## BLOCKAGES

Always be aware that what you are putting into the chipper must come out. If the chips stop coming out of the discharge tube but the chipper is taking material in STOP IMMEDIATELY. Continuing to feed material into a blocked machine may cause damage and will make it difficult to clear. If the chipper becomes blocked, proceed as follows:

- Stop the engine, as per instructions on page 9.
- Remove the M12 screw that retains the top rotor housing.
- Open the top rotor housing.
- Wearing gloves, reach into the rotor housing and scoop out the debris causing the blockage.
- It is not necessary to remove all the debris, just the majority.
- Close the rotor housing and clamp down tightly.
- Restart the engine and increase to full speed.
- Allow chipper time to clear the rotor housing.
- Feed a small piece of wood in to ensure complete clearance.
- If this does not clear it, repeat the process and carefully inspect the discharge tube to find any obstruction.

## NOTE

Continuing to feed the chipper with brushwood once it has become blocked will cause the chipper to compact the chips in the rotor housing and it will be difficult and time consuming to clear.

**AVOID THIS SITUATION - WATCH THE DISCHARGE AT ALL TIMES.**

## BLADE WEAR

The most important part of using a wood chipper is keeping the cutter blades sharp. Timberwolf chipper blades are hollow ground to an angle of 40 degrees. When performing daily blade checks ensure blade edge is sharp and free from chips, if there is any evidence of damage, or the edge is "dull" change the blade(s). The TW 13/75G is fitted with one blade 177 mm (7") long. It is 43 mm wide when new. A new blade should chip for up to 25 hours before it requires sharpening. This figure will be drastically reduced by feeding the machine with stony, sandy or muddy material.

As the blade becomes blunt, performance is reduced, with increased stress and load on the machine the chips will become more irregular and stringy. At this point the blade should be sent to a reputable blade sharpening company. The blade can be sharpened several times in its life. A wear mark on the reverse side indicates the safe limit of blade wear. Replace when this line is exceeded.

The machine is also fitted with a static blade (anvil). It is important that the anvil is in good condition to allow the cutting blades to function efficiently. Performance will be poor, even with sharp cutter blades, if the anvil is worn.

## REFUELLING

When refuelling, follow standard Health & Safety practices:

- Stop the engine and allow it to cool before refuelling.
- Never smoke or allow naked flames nearby while refuelling.
- Store fuel away from vapour ignition sources such as fires and people smoking.
- Never refuel at operating location, keep a distance of > 10 m to avoid creating fire hazards.
- Fuel storage containers must be approved for appropriate fuel storage and clearly labelled with securely fitting caps.
- Clean the area around the fuel cap and use a funnel for refuelling. Replace the fuel cap securely. Do not fill the tank beyond the maximum fill indicator.
- Avoid skin contact with fuel. If it gets into eyes wash out with sterile water immediately and seek medical advice as soon as possible.
- Always clean spillages quickly and change clothes before re-entering the work area if fuel is spilled onto garments.















**WARNING**

**DO NOT REACH INTO THE ROTOR HOUSING WITH UNPROTECTED HANDS. THERE ARE SHARP BLADES AND ANY SMALL MOVEMENT OF THE ROTOR MAY CAUSE SERIOUS INJURY.**

## TROUBLESHOOTING

This table is a troubleshooting guide to common problems.

If your problem is not listed below, or is unresolved after following the guide, please contact your Timberwolf service agent, whose Timberwolf trained engineers can perform further fault finding. Before you call, please have this operating manual and the machine serial number ready.

Problem	Cause	Solution	Caution - Always ensure appropriate PPE is worn.	
Wood chip ejection stopped / limited	Obstructed discharge	Clear debris from discharge chute.		Ensure machine is off.
	Loose drive belts	Refer to manual & tension belts guidelines.		Ensure machine is off .
	Broken rotor paddles	Inspect paddles, replace broken / missing paddle.		Ensure machine is off. Call engineer for repair.
Rotor does not turn	Obstructed discharge	Clear debris from discharge chute.		Ensure machine is off
	Rotor jammed	Inspect & clear infeed funnel and rotor housing.		Ensure machine is off
	Drive belt issue	Inspect drive belts, replace if required. Refer to manual & tension belts guidelines.		Ensure machine is off
Slow or not feeding	Low engine speed	Check & inspect throttle and cable. Check throttle is set to specified speed.		Ensure machine is off
	Blades dull	Rotate, sharpen or replace blades.		Ensure machine is off
	Anvils dull	Check anvil has sharp edge, rotate, sharpen or replace if necessary.		Ensure machine is off
	Obstructed discharge	Clear debris from discharge chute.		Ensure machine is off



**THE FOLLOWING PAGES DETAIL ONLY BASIC MAINTENANCE GUIDELINES SPECIFIC TO YOUR CHIPPER.**



**THIS IS NOT A WORKSHOP MANUAL.**

The following guidelines are not exhaustive and do not extend to generally accepted standards of engineering/mechanical maintenance that should be applied to any piece of mechanical equipment and the chassis to which it is mounted.

Authorised Timberwolf service agents are fully trained in all aspects of total service and maintenance of Timberwolf wood chippers. You are strongly advised to take your chipper to an authorised agent for all but the most routine maintenance and checks.

Timberwolf accepts no responsibility for the failure of the owner/user of Timberwolf chippers to recognise generally accepted standards of engineering/mechanical maintenance and apply them throughout the machine.

The failure to apply generally accepted standards of maintenance, or the performance of inappropriate maintenance or modifications, may invalidate warranty and/or regulatory compliance, in whole or in part.

Please refer to your authorised Timberwolf service agent for service and maintenance.

## SERVICE SCHEDULE

**WARNING**

**ALWAYS IMMOBILISE THE MACHINE BY STOPPING THE ENGINE BEFORE UNDERTAKING ANY MAINTENANCE WORK.**

SERVICE SCHEDULE	Daily Check	25 Hours	50 Hours	500 Hours
Check engine oil - top up if necessary (10W-30).	✓			
Check for engine oil leaks.	✓			
Check fuel level.	✓			
Check feed funnel and belt guard are securely fitted.	✓			
Clean engine air intake.	✓			
Check air filter element.	✓			
Check blade condition.	✓			
Check for tightness all nuts, bolts and fastenings making sure nothing has worked loose.		✓		
Check tension of main drive belts (and tension if necessary).		✓		
Check cutting anvil for wear.			✓	
Grease front rotor bearing.			✓	
Check for loose electrical wiring.				✓
Renew oil filter.	REFER TO YOUR ENGINE SUPPLIERS MANUAL			
Replace spark plugs.				
Check valve clearance.				
Clean air filter.				
Clean sediment cup.				
Clean fuel tank and strainer.				
Check fuel line.				
Replace anvil when worn.	RETURN TO DEALER FOR ANVIL CHANGE			

## SAFE MAINTENANCE

- Handle blades with extreme caution to avoid injury. Gloves should always be worn when handling the cutter blades.
- The drive belts should be connected while changing blades, as this will restrict sudden movement of the rotor.
- The major components of this machine are heavy. Lifting equipment must be used for disassembly.
- Clean machines are safer and easier to service.
- Avoid contact with hazardous materials.



### WARNING

**ALWAYS IMMOBILISE THE ENGINE BEFORE UNDERTAKING ANY MAINTENANCE WORK ON THE CHIPPER. ENSURE THE CHIPPER IS STABLE BEFORE PERFORMING ANY MAINTENANCE.**

## SAFE LIFTING OF THE CHIPPER

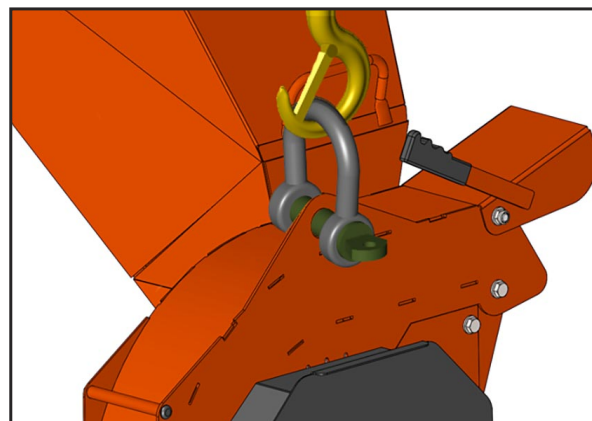
The lifting eye is designed to lift the machine's weight only. Do not use hoist hook directly on the lifting eye, use a correctly rated safety shackle. Inspect the lifting eye prior to each use - **DO NOT USE LIFTING EYE IF DAMAGED**. Maximum lift weight is 200kg, as indicated on the machine.

## SPARES

Only fit genuine Timberwolf replacement blades, screws and chipper spares. Failure to do so will result in the invalidation of the warranty and may result in damage to the chipper, personal injury or even loss of life.

## CHECK FITTINGS

The Timberwolf TW13/75G is subject to large vibrations during the normal course of operation. Consequently there is always a possibility that nuts and bolts will work themselves loose. It is important that periodic checks are made to ensure the security of all fasteners. Fasteners should be tightened using a torque wrench to the required torque (see below). **Uncalibrated torque wrenches can be inaccurate by as much as 25%. It is therefore essential that a calibrated torque wrench is used to achieve the tightening torques listed below.**



	Size	Pitch	Head	Torque lbft	Torque Nm
Blade Bolts	M8	Standard	T40 Torq	22	30
General	M6	Standard	10 mm Hex	10	14
General	M8	Standard	13 mm Hex	20	27
General	M10	Standard	17 mm Hex	45	61
General	M12	Standard	19 mm Hex	65	88

## HAZARDOUS MATERIALS & END OF MACHINE LIFE

### During Machine Life

The following hazardous materials are supplied within Timberwolf machines:

- Engine oil
- Battery acid
- Petrol
- Copper Ease

### MATERIAL SAFETY DATA SHEETS FOR HAZARDOUS MATERIALS SUPPLIED WITHIN TIMBERWOLF MACHINES ARE AVAILABLE ON REQUEST. REFER TO THESE FOR FIRST AID AND FIRE PROTECTION MEASURES.

Always follow recommended procedures for safe handling, removal and disposal of hazardous materials. Safety precautions should be taken when handling hazardous materials (use of oil-resistant gloves and safety glasses are recommended - respiratory protection is not required). Avoid direct contact with the substance and store in a cool, well ventilated area avoiding sources of ignition, strong oxidising agents and strong acids. Ensure hazardous spillages do not flow into the ground or drainage system and ensure potential environmental damage is controlled safely, according to local laws.

### End of Machine Life

Follow these guidelines using approved local waste and disposal agencies for recycled materials, according to applicable Health, Safety and Environmental laws.

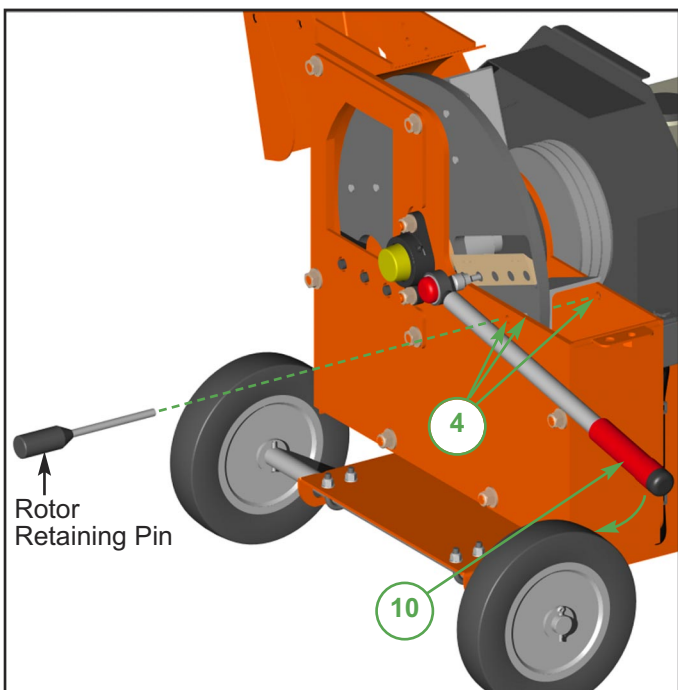
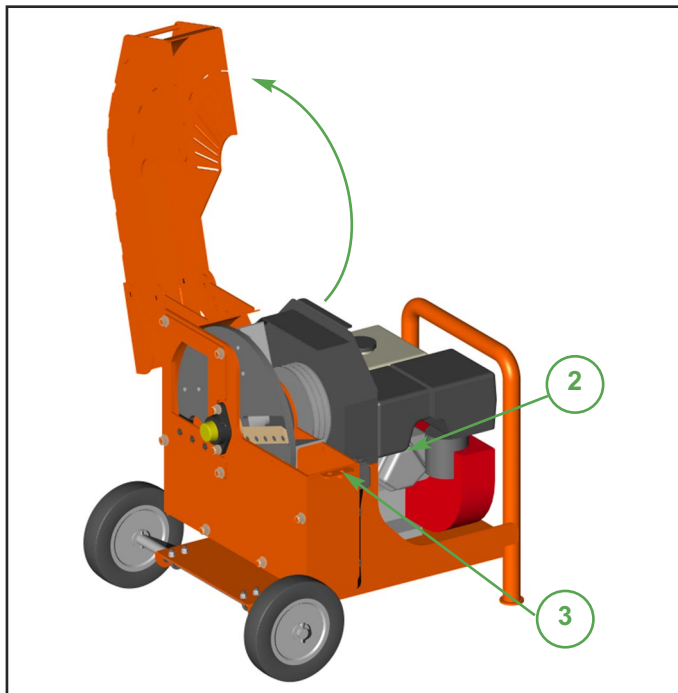
- Position the machine within reach of all necessary lifting equipment.
- Use tools and PPE detailed within maintenance instructions.
- Remove all hazardous materials and store safely before disposal.
- Disassemble the machine structure, referring to the maintenance instructions. Pay attention to parts with mechanical pressure or tension applied, including springs.
- Separate items that continue to have a service life.
- Separate worn items into material groups and where possible, recycle using available agencies for recycled materials. Common types are:

Steel	Plastic materials
Non-ferrous metals	Rubber
Aluminium	Electrical and Electronic Components
Brass	Other materials that can be recycled
Copper	Other materials that cannot be recycled

- If a part is not easily separated into different material groups, it must be added to “general discarded materials”.
- Do not burn discarded materials.
- Change the machinery records to show that the machine is out of service and discarded. Supply this serial number to Timberwolf to close their records.



## CHANGE BLADES



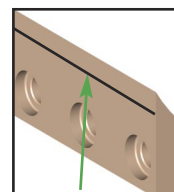
### WARNING

**WEAR RIGGERS GLOVES FOR THE BLADE CHANGING OPERATION.**

- 1 Turn engine off, as per instructions on page 9.
- 2 Pull the plug cap from the spark plug.
- 3 Remove the M12 screw that retains the top rotor housing using a 19 mm spanner.
- 4 Turn the rotor by hand using the fan blades so that holes (4) are aligned and insert the Rotor Retaining Pin (supplied in tool kit).
- 5 Use a small screw driver to clean out the star socket screw heads retaining the blade.
- 6 Undo blade screws using the star socket provided.
- 7 **Before fitting replacement blades ensure the blade seat is clean. No material should be allowed to sit between the blade and the rotor.**
- 8 Check screws being replaced are not damaged. If so, these should be renewed.
- 9 Apply a thin layer of copper grease to the entire screw thread.
- 10 **Retighten the screws to 30Nm (22lb/ft).** This torque setting is vitally important to ensure your bolts come out at a later date. Timberwolf recommend you purchase a torque wrench for this and other jobs on the chipper.
- 11 Remove Rotor Retaining Pin.
- 12 Close rotor housing and replace retaining screw.
- 13 Refit spark plug cap to spark plug.

### WARNING

**ALWAYS SHARPEN BLADES ON A REGULAR BASIS. FAILURE TO DO SO WILL CAUSE THE MACHINE TO UNDER PERFORM AND WILL OVERLOAD ENGINE AND BEARINGS CAUSING MACHINE BREAKDOWN. BLADES MUST NOT BE SHARPENED BEYOND THE WEAR MARK (SEE DIAGRAM). FAILURE TO COMPLY WITH THIS COULD RESULT IN MACHINE DAMAGE, INJURY OR LOSS OF LIFE.**



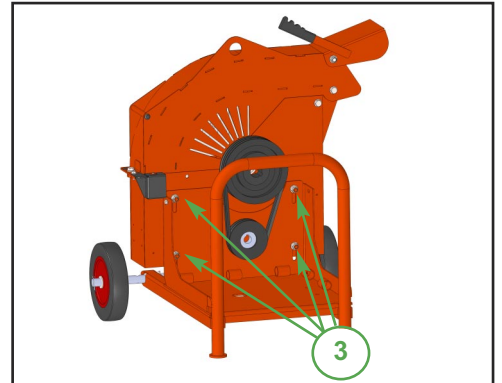
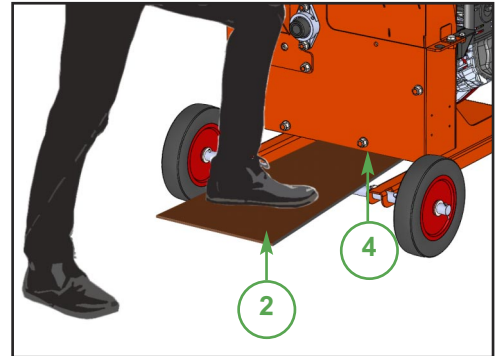
**WEAR MARK**

## TENSION DRIVE BELTS

**NOTE:** There will normally be a rapid drop in tension during run-in period for new belts. When new belts are fitted, check the tension every 2 - 3 hours and adjust until the tension remains constant. Belt failures due to lack of correct tensioning will not be covered under your Timberwolf warranty.

- 1 Remove the belt guard.
- 2 Insert a piece of wood approximately 25mm x 150mm x 1200mm (1"x 6"x 48") in the gap as shown.
- 3 Loosen the four Nyloc nuts located behind the engine.
- 4 With the chipper firmly supported, use the piece of wood to lever the rotor housing upwards.
- 5 For instructions on checking belt tension & correct belt tension values, please refer to the Timberwolf V-Belt Tensioning Data Table (pg 23).
- 6 As the belts become taught, retighten the four Nyloc nuts.
- 7 Replace the belt guard.
- 8 Remove the piece of wood.

**NOTE:** Slack drive belts will cause poor performance and excess belt and pulley wear.



## GREASING ROTOR BEARINGS

- 1 Remove rubber cap from front bearing housing grease nipple.
- 2 Apply 1 pump of grease to bearing.
- 3 Replace cap.

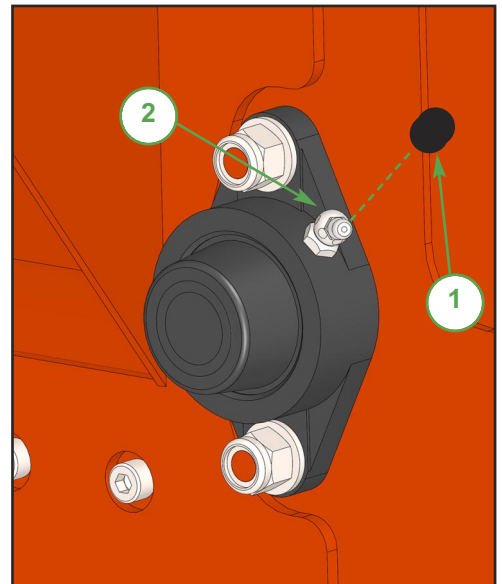
## ANVIL CHANGING

The anvil is an important component in maintaining a consistent machine performance. Inspect it through an open rotor housing. A measure of the wear is how sharp the edge is. If it has become seriously rounded then it is appropriate to change it.

**Turning or replacing the anvil should be carried out by a Timberwolf dealer.**

## ENGINE SERVICING

All engine servicing must be performed in accordance with the Engine Manufacturer's handbook provided with the machine. **Failure to adhere to this may invalidate warranty and/or shorten the life of the engine.**



**TIMBERWOLF NO-NONSENSE WARRANTY**

All new Timberwolf machines come with peace of mind built in. Our no-nonsense warranty is your guarantee of your Timberwolf wood chipper not letting you down.

Your warranty statement is included in your manual pack. Please ensure you register your machine with your dealer to ensure you are eligible for the full Timberwolf warranty period.



# Environmental Manufacturing LLP

Entec House,  
Tomo Industrial Estate,  
Stowmarket,  
Suffolk IP14 5AY

Tel: 01449 765800 Fax: 01449 765801

## E C Declaration of Conformity



Environmental Manufacturing LLP as the designer and manufacturer, certifies that the machine stipulated below complies with all the relevant provisions of the:

### Machinery Directive; 2006/42/EC (& other relevant directives)

and the National Laws and Regulations adopting these directives.

**Designer/Manufacturer** : Environmental Manufacturing LLP


**Description of Machinery** : Self-powered portable machine intended to chip up tree waste prior to disposal.

**Model** : TW 13/75G



**Serial No.** : Serial Manufacture

BSI Transposed Harmonised Standards applied: (including parts/clauses of):


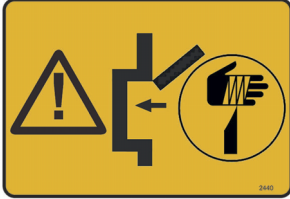





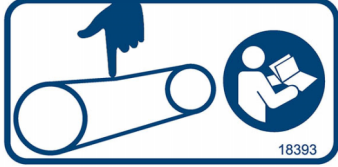

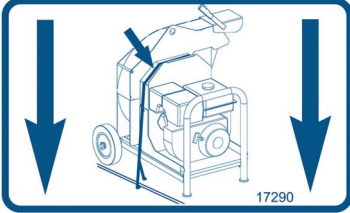


BS EN 12100-1: 2010 Safety of Machinery- Basic concepts, BS EN 13857-1: 2008 Safety of Machinery-Safety distances to danger zones, BS EN 60204-1: 2006 +A1 2009 Safe electrical practices, BS EN 13732-1:2008 Safety of Machinery – Temperatures of touchable surfaces, BS EN 13849-1: 2008 – Safety of Machinery – Safety related parts of control systems, BS13850:2008 safety of Machinery Emergency stop BS EN 982: 1996 + A1 2005 – Safety of Machinery – Hydraulics, BS EN 1088: 1995 + A2 2008 – Safety of Machinery – Interlocking devices, BS EN 13525: 2005 + A2 2009 – Forestry Machinery – Wood chippers – Safety. BS EN 953:1997+A1:2009

“Responsible” Person empowered to sign:  Mr. Chris Perry  
Position in Company: Managing Director


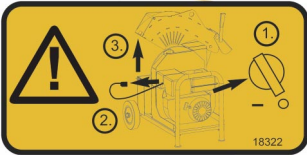



Date: 5<sup>th</sup> July 2018

		<b>ENVIRONMENTAL MANUFACTURING LLP STOWMARKET, SUFFOLK IP14 5AY UK</b>		
MODEL	<input type="text"/>			
SERIAL NO.	<input type="text"/>			
CARR. TYP/SN.	<input type="text"/>	GROSS WEIGHT	<input type="text"/>	
NOM. POWER	<input type="text"/>	DATE	<input type="text"/>	



Decal	Description	Decal	Description
 616	Warning. Hot exhaust.	 2944	Danger Beware of sharp blades when the rotor housing is open.
 617	Warning. High velocity discharge - keep clear.	 2949	<b>Lifting eye is designed to lift the machine's weight only.</b> Do not use hoist hook on lifting eye. Use correctly rated safety shackle only through lifting eye. Lifting eye to be inspected every 6 months or before each use. Always visually inspect lifting eye prior to each use. Do not use lifting eye if damaged.
 670	Personal Protective Equipment required. See Page 5.	 3022	Clean under blades before refitting or turning.  Failure to do so may result in blade(s) coming loose and damage being caused to the rotor housing.
 1662	The instruction manual with this machine contains important operating, maintenance and health and safety information. Failure to follow the information contained in the instruction manual may lead to death or serious injury.	 18393	New drive belts need re-tensioning. When new belts are fitted check tension every 2-3 hours & adjust until tension remains constant.
 4099	Danger. Rotating blades. Keep hands and feet out.	 17290	Place tie-down straps here only.
 17294	75mm Maximum Diameter	 P637 x 3	Danger. Do not operate without this cover in place.



Decal	Description	Decal	Description
P637 	Caution. Do not put road sweepings in machine as grit will damage blades.	18322 	Danger. Rotating blades inside. Stop engine and remove spark plug cap before removing discharge unit.
P652 	Caution. Avoid standing directly in front of feed funnel to reduce exposure to noise, dust and risk from ejected particles.	P1300 	Danger. Do not use this machine without the discharge unit fitted. Failure to comply may result in serious injury or damage.
P651 	Fuel Here. Risk of fire. Allow engine to cool for 1 minute before refuelling. Use unleaded petrol.		


**TIMBERWOLF**  
**TW 13/75G**

1363

1522

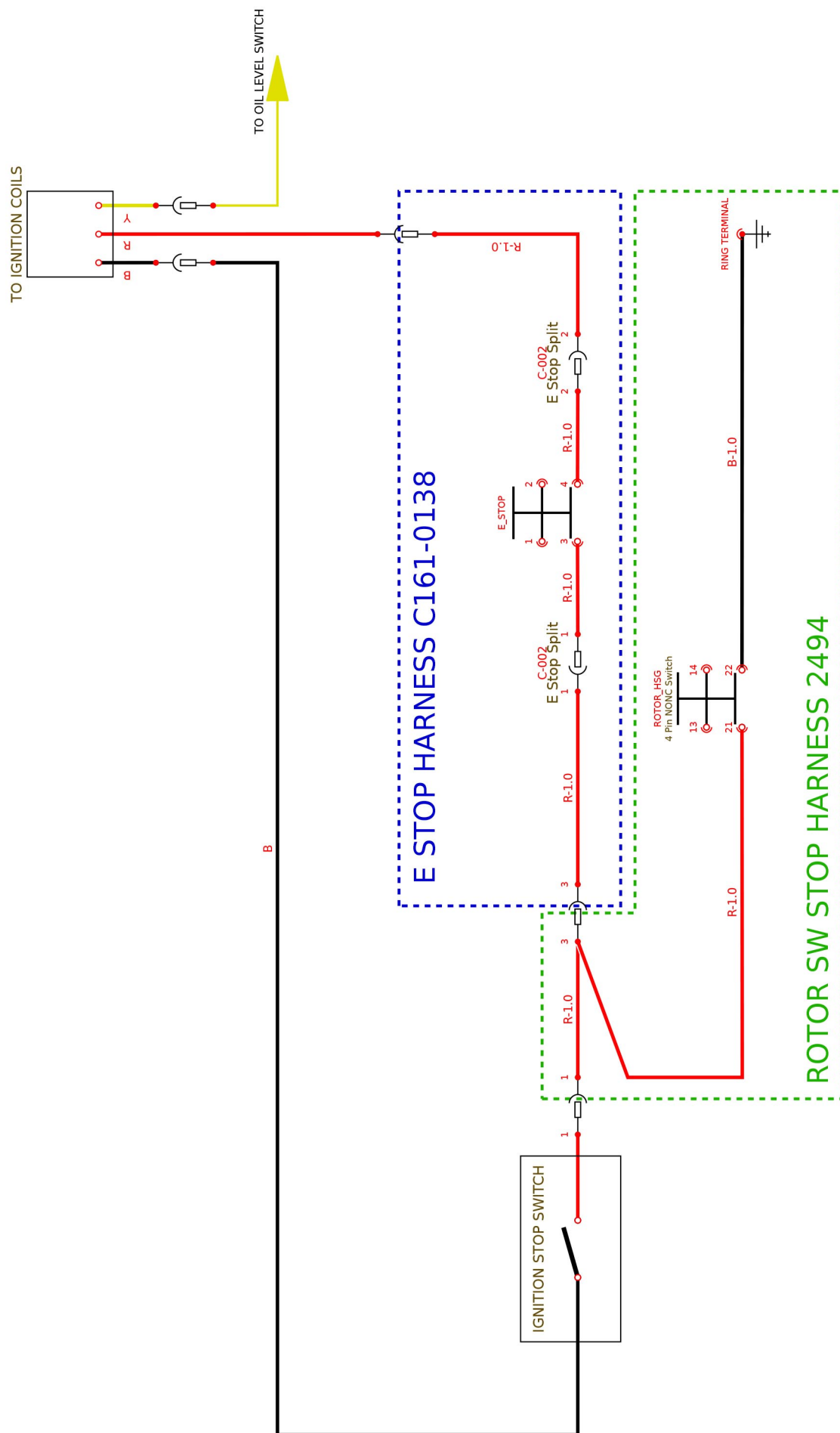
3004

2948

P\*155 x 2



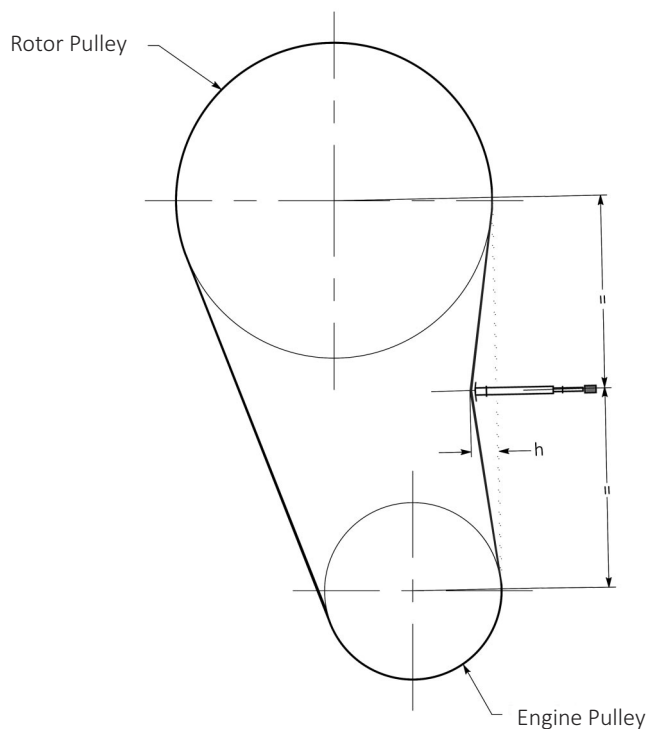
17862 x 2



**METHOD:**

- 1 Set the deflection distance on the lower scale of the tension gauge so that the underside of the 'o'-ring equals the 'h' value given in the table.
- 2 Ensure that the deflection force scale is zero'd by pushing the upper 'o'-ring all the way down.
- 3 Place the tension gauge in the centre of the belt span as shown in the diagram.
- 4 Press downwards on the rubber buffer, deflecting the belt until the underside of the lower 'o'-ring is level with the belt behind (use a straight edge if there is only 1 belt).
- 5 Take the reading from the deflection scale of the tension meter (read at the lower edge of the 'o'-ring) & compare this value with that given in the table.
- 6 Tighten or loosen belts as required following procedure given in this operator's manual.

*Tension gauges are available from Timberwolf spares, quoting part no. 18091*



TW 13/75G		Rotor Belts
Belt Mfr / Type		Gates Super HC-MN
Belt Pitch Designation		SPA
Belt Length in mm		900
Belt Deflection in mm	= h	1.9
Force Reading (Kg)	New belt	1.4 - 1.5
	Used Belt	1.2 - 1.3

**TIPS ON BELT TIGHTENING:**

- There will normally be a rapid drop in tension during the run-in period for new belts. When new belts are fitted, check the tension every 2-3 hours & adjust until the tension remains constant.
- The best tension for V-belt drives is the lowest tension at which the belts do not slip or ratchet under the highest load condition.
- Too much tension shortens belt & bearing life.
- Too little tension will affect the performance of your machine especially in respect of no-stress devices.
- Ensure that belt drives are kept free of any foreign materials.
- If a belt slips - tighten it!

Model number:		Serial number:	
Date of delivery/ handover:		Options/extras:	
Dealer pre delivery check:			
Inspected by:			

**50 HOUR WARRANTY SERVICE CHECK**

Date:

Hours:

Invoice number:

Signature:

Next service due:

Authorised dealer stamp

**11 MONTH WARRANTY SERVICE CHECK**

Date:

Hours:

Invoice number:

Signature:

Next service due:

Authorised dealer stamp

**23 MONTH WARRANTY SERVICE CHECK**

Date:

Hours:

Invoice number:

Signature:

Next service due:

Authorised dealer stamp

Date:	<b>Authorised dealer stamp</b>
Hours:	
Invoice number:	
Signature:	
Next service due:	

Date:	<b>Authorised dealer stamp</b>
Hours:	
Invoice number:	
Signature:	
Next service due:	

Date:	<b>Authorised dealer stamp</b>
Hours:	
Invoice number:	
Signature:	
Next service due:	

Date:	<b>Authorised dealer stamp</b>
Hours:	
Invoice number:	
Signature:	
Next service due:	

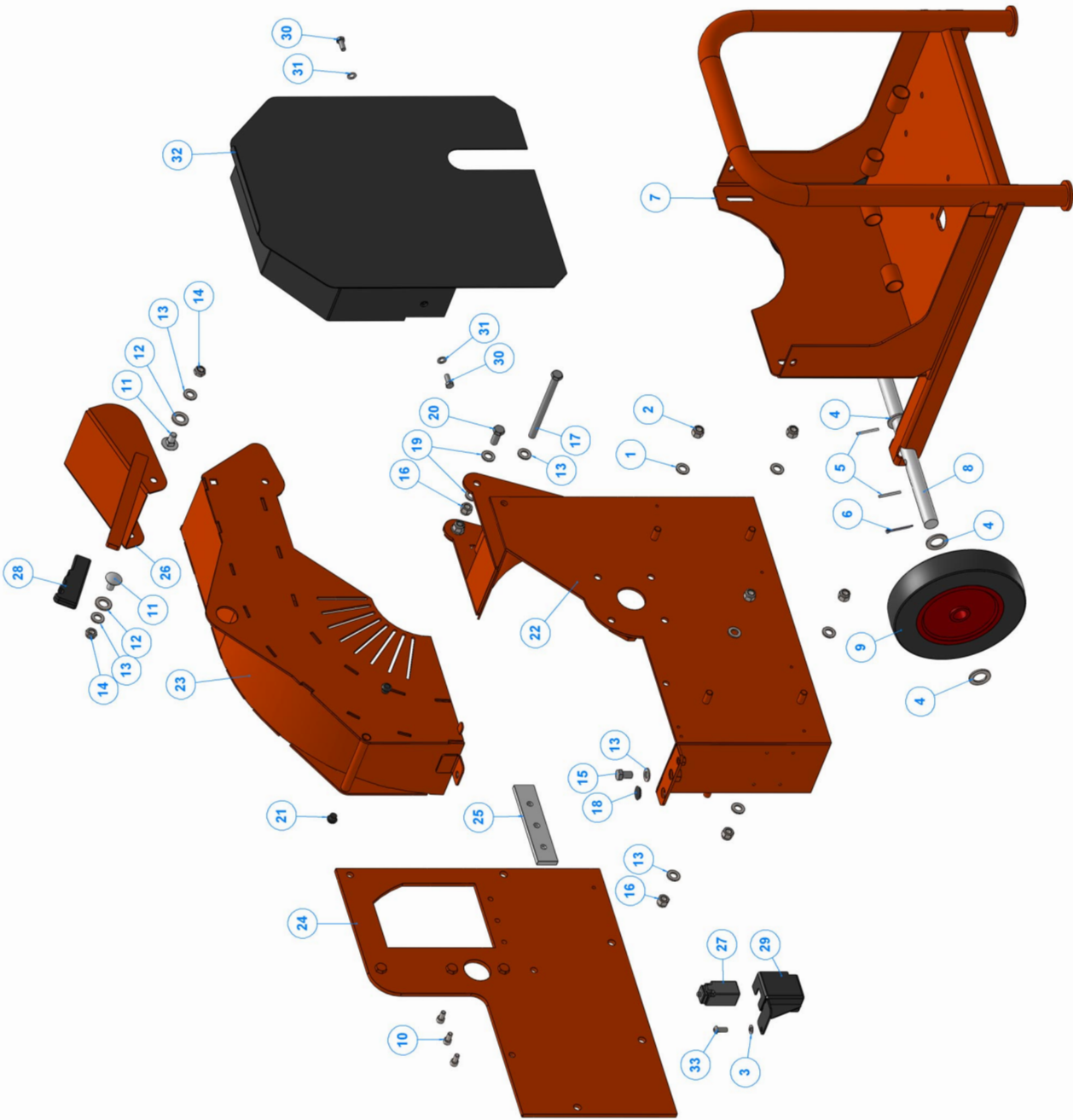
**PARTS LISTS**

**THE FOLLOWING ILLUSTRATIONS ARE FOR PARTS IDENTIFICATION ONLY. THE REMOVAL OR FITTING OF THESE PARTS MAY CAUSE A HAZARD AND SHOULD ONLY BE CARRIED OUT BY TRAINED PERSONNEL.**

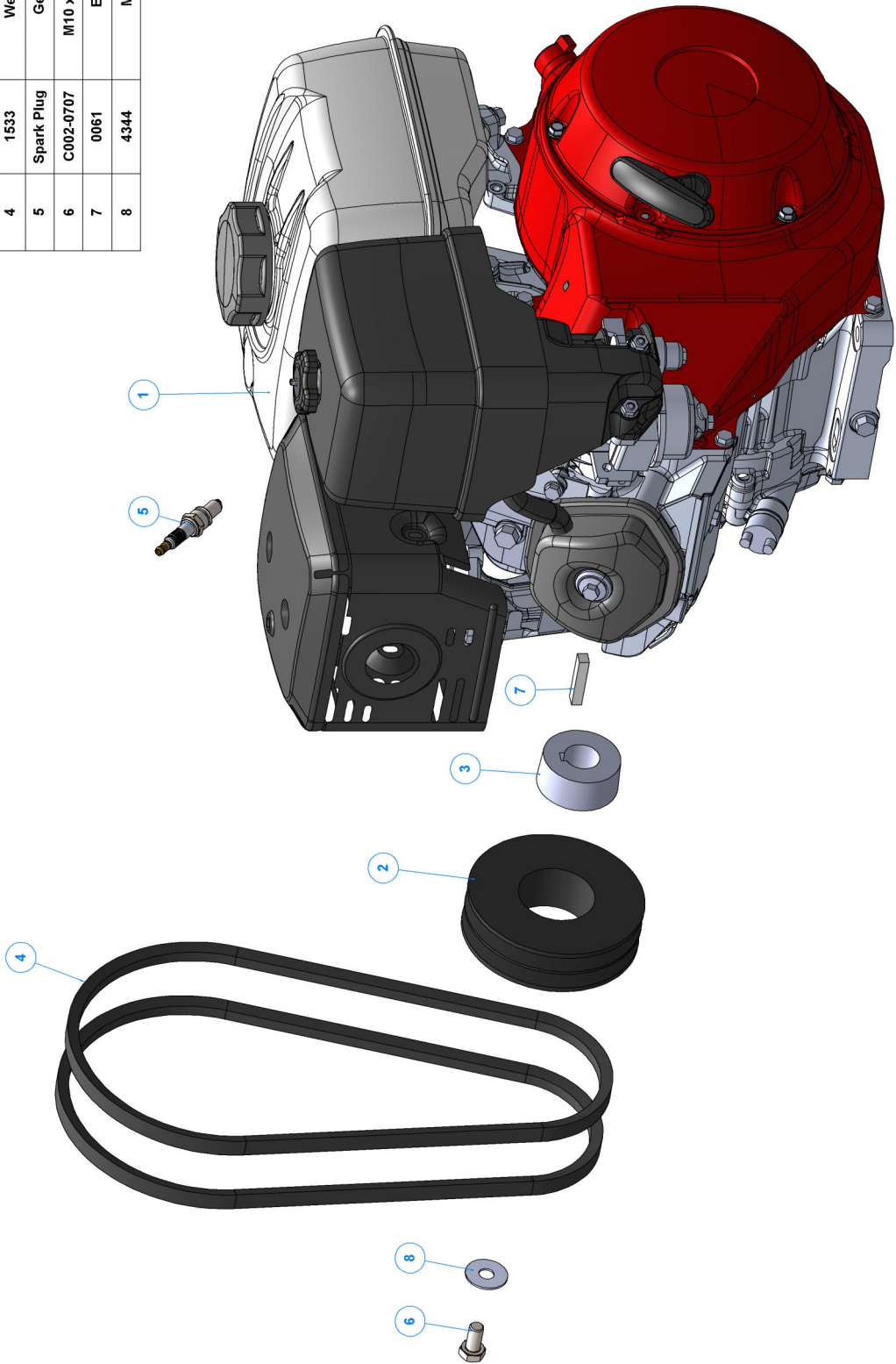
	Page No.
CHASSIS / ROTOR HOUSING	27
ENGINE	28
FUNNEL	29
ROTOR	30
DECALS	31



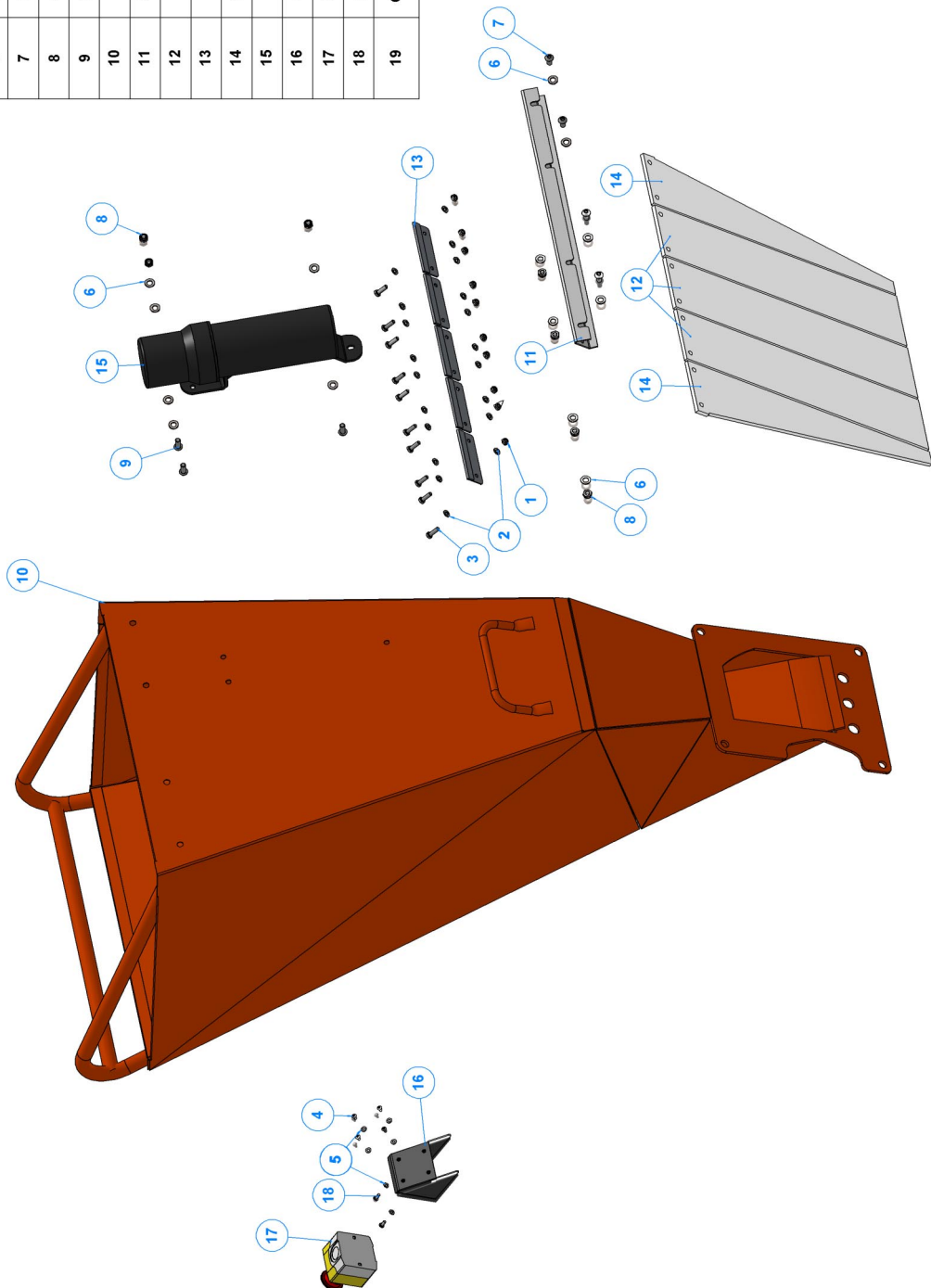
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	C021-0127	M12 FORM C WASHER Z/P	4
2	C031-0165	M12 TYPE P NYLOC NUT Z/P	4
3	C021-0105	M8 FORM A WASHER Z/P	1
4	C021-0132	M22 FORM C WASHER Z/P	6
5	C079-0100	M4 x 40 Roll Pin Steel	4
6	C079-0102	1-8 x 1 1-2 Split Pin	2
7	2475f	Chassis Assy & Details for 13-75G	1
8	1043MS	Axle	1
9	1641	Pneumatic Tyre	2
10	C005-0605	M8 x 16 SKT CAP SET Z/P 12.9	3
11	C046-0809	Bolt M12/25 Cup Square Bzp	2
12	C021-0109	M16 FORM A WASHER Z/P	2
13	C021-0107	M12 FORM A WASHER Z/P	7
14	C031-0125	M12 TYPE T NYLOC NUT Z/P	2
15	C002-0807	M12 x 20 HEX SET Z/P 8.8	1
16	C031-0165	M12 TYPE P NYLOC NUT Z/P	5
17	C002-0830	M12 x 160 HEX SET Z/P 8.8	1
18	C051-0100	BLANKING GROMMET 18MM HOLE	1
19	C021-0127	M12 FORM C WASHER Z/P	4
20	C002-0810	M12 x 30 HEX SET Z/P 8.8	2
21	2493	Rubber Cap	2
22	18452F	Rotor Housing 13-75G	1
23	18453F	Discharge 13-75G	1
24	1567F	Front Plate	1
25	0105MH	Anvil (Gravity Feed)	1
26	1052F	Discharge Bucket	1
27	EL1348	Switch Limit (Metal Plunger)	1
28	0134	Plastic Grip	1
29	C163-0102	Safety Switch Guard Assembly	1
30	C002-0607	M8 x 20 HEX SET Z/P 8.8	2
31	C021-0125	M8 FORM C WASHER Z/P	2
32	2000F	Belt Guard	1
33	C086-0607	M8 x 12 Button Head Pin Hexagon Machine Screw	1



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	EN1172	Engine GX390 13HP Honda 13_75 G	1
2	PU1135	Pulley 118-2 SPA	1
3	C123-0405	T*Lock Bush 1610 - 1"	1
4	1533	Wedge Belt 782 SPA	2
5	Spark Plug	General Spark Plug	1
6	C002-0707	M10 x 20 HEX SET Z/P 8.8	1
7	0061	Engine Shaft Key	1
8	4344	M10 x 30 Washer	1



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	C031-0121	M6 TYPE T NYLOC NUT Z/P	10
2	C021-0123	M6 FORM C WASHER Z/P	20
3	C002-0407	M6 x 20 HEX SET Z/P 8.8	10
4	C086-0201	M4 x 30 Button Head Pin Hexagon Machine Screw	4
5	C021-0101	M4 FORM A WASHER Z/P	6
6	C021-0125	M8 FORM C WASHER Z/P	14
7	C010-0605	M8 x 16 SKT BUTTON SET S/C 10.9	4
8	C031-0123	M8 TYPE T NYLOC NUT Z/P	7
9	C010-0607	M8 x 20 SKT BUTTON SET S/C 10.9	3
10	1642F	Funnel Assembly for 13-75G	1
11	C138-0141	Safety Curtain Rail	1
12	19649	Safety Curtain Strip	3
13	19650F	Safety Curtain Clamp	5
14	C138-0142	Safety Curtain Strip Angled	2
15	P0000144	Operator's Manual Canister	1
16	C131-0234	E - Stop Bracket Assembly	1
17	C162-0100	ESD - Schneider XALK178F 2NC, 1NO	1
18	C013-0202	M4 x 10 PAN POZI Z/P	2
19	C086-0607	M8 x 12 Button Head Pin Hexagon Machine Screw	1



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	0065	M8 x 20 mm Blade Bolt	5
2	C021-0106	M10 FORM A WASHER Z/P	8
3	C005-0709	M10 x 25 SKT CAP SET Z/P 12.9	8
4	BE495	6208 C3	1
5	C015-0810	M12 x 30 SKT CSK SET Z/P 10.9	1
6	0713	Heavy Countersunk Washer	1
7	17342M	Rotor	1
8	0071MH	BLADE 7 INCH (GRAVITY FEED)	1
9	17317F	Fan Blade	4
10	1061M	Nose Shaft	1
11	4063MCB	Bearing Housing Rear	1
12	BE648	Bearing Front SFT25	1
13	C051-0103	Bearing Cap Plastic 35 Evo Front Bearing Housing	1
14	PU1351	Pulley 200 - 3 SPA	1
15	C051-0103	Taper Lock 2517 38mm Ø	1
16	C031-0165	M12 TYPE P NYLOC NUT Z/P	2
17	C021-0127	M12 FORM C WASHER Z/P	6
18	C002-0810	M12 x 30 HEX SET Z/P 8.8	4
19	0796P	20 Thou Shim	1
20	18948M	ROTOR SHAFT 13/75	1
21	C081-0200	45° Grease Nipple 1/8" BSP	1
22	18960	Rotor Shaft Key	1

