

2016 Safety Compendium Safe Operating Procedures

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QLD WHS Act 2011 legislation obligates PCBU's and business Officers to exercise a Duty of Care and Due Diligence for the safety of their workers and others (maintenance contractors, sub-contractors, visitors & members of the public). This **non-transferable legally enforceable obligation** includes the safe use of plant & equipment and also requires that workers be properly trained and provided with safety information and adequate instruction on safe work practices, safe method of work, operating & maintenance procedures - particularly for potentially dangerous equipment. To be able to prove, if necessary to a safety inspector or in a court of law, your awareness of the need for safety is at a high level requires documentation. Keep your safety related forms up to date and complete.

NOTE: Safe Work Method Statements (SWMS) and Job Risk Assessments / Job Safety Analysis (JRS/JSA) are only legally required for "High Risk Construction Work" in Queensland as set out in WHS Act 2011 and Regulation 291. Safe Operating Procedures (SOP's) & Safety Guides (SG) aren't legally required either but they can both be useful to you for training & inducting an apprentice, a new subbie or an inexperienced casual. A really good commonsense principal is that the more dangerous the machine or activity the more you should record your thoughts about the best & safest way to use it. You have years of valuable experience you can pass on to your workers about how best to keep safe and writing it down & getting your workers to sign it is the simplest way to prove in court you told them how to do it rather than your word against theirs that it was ever discussed. But if it's not at all dangerous or is not a machine you ever use, nor an activity you ever do - you don't need documentation at all even for high risk construction work.

Reviewed July 2016



General Disclaimer:

Note: this and associated documents of the Safety Management Plan that has been prepared for you is a general guideline only and should not be used as a substitute for seeking professional legal advice for your specific circumstances. The contents of this and associated documents are in good faith believed correct and based on available information at the time of writing. However, there may be subsequent decisions of courts, tribunals, State Safety Regulators & other authorities such as Safe Work Australia or Parliaments, either Federal & State, on the matters covered by this guide which mean that the contents are no longer accurate.

This Safety Management Plan and associated documents may contain occupational/work health and safety, environmental and workers compensation information. It may include some of your obligations under the various legislations in Australia. To ensure you comply with your legal obligations you must refer to the appropriate legislation in your State.

Information on the latest safety laws in Queensland can and should regularly be checked by visiting the Department of Justice and Attorney-General, The State of Queensland [website here](http://www.deir.qld.gov.au/workplace/law/whslaws/index.htm?utm_source=website&utm_medium=homead&utm_campaign=newwhslaws), http://www.deir.qld.gov.au/workplace/law/whslaws/index.htm?utm_source=website&utm_medium=homead&utm_campaign=newwhslaws

This Safety Management Plan does not represent a comprehensive statement of the law as it applies to particular problems or to individuals or as a substitute for legal advice.

You should seek independent legal advice if you need assistance on the application of the law to your situation.

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OSH & the new WHS legislation obligates businesses and business officers to exercise a Duty of Care and Due Diligence for the safety of their workers and others (maintenance contractors, sub-contractors, visitors & members of the public). This non-transferable obligation includes the safe use of plant & equipment and also requires that workers to be properly trained and provided with safety information and adequate instruction on safe work practices, operating procedures & maintenance procedures - particularly for potentially dangerous equipment. To be able to prove your awareness of the need for safety is at a high level requires documentation. Keep this form and your other safety related forms up to date and complete.

This Safety Management Plan and its associated documents must be maintained, kept up to date, and modified or corrected by you the client to reflect your knowledge and experience of the activities you and you workers undertake on behalf of your business.

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Health & Safety Fact Sheet

Safe Storage and Handling of Lawn Mower Fuel

Engine fuel is highly flammable and can be dangerous for the users of machinery. The associated risks can be reduced through the safe storage and handling of fuels e.g. lawn mower fuels and containers. The following precautions should be followed to minimise the chance of fuel fires and operator injuries.

Storage of Lawn Mower Fuel

- Flammable liquids must be stored in suitable containers.
 - Metal containers are suitable, providing they are of good quality, well sealed and suitably labelled
 - The only suitable plastic containers are those specifically marketed for the purpose of fuel storage. These will be embossed with a marking indicating that they comply with the requirements of **AS/NZS 2906:2001- Fuel containers, portable, plastic and metal*. Fully compliant containers can be purchased from hardware stores and auto parts and accessory retailers.
- All containers must be clearly labelled as containing flammable liquids.
- Food and drink containers, or glass containers, must *not* be used for the storage of fuels.
- Containers should be stored in a well-ventilated place, well clear of electrical equipment and other potential ignition sources.
- Mower fuels are not compatible with almost all other classes of dangerous goods. It is recommended that fuel is stored at least 5 metres from all other dangerous goods stored at the site.
- The volume of flammable liquids stored on site should not exceed 250 litres. Stored quantities in excess of this amount require placarding under the *Work Health and Safety Regulation 2011* (Schedule 11). All fuels must be stored in accordance with the requirements of **AS/NZS 1940:2004 - The Storage and Handling of Flammable and Combustible Liquids*. Quantities in excess of 2500 litres require notification be made to the regulator.

**Australian Standard/ New Zealand Standard*



- The volume of individual containers storing fuel should not exceed 30 litres. (Controlled volumes reduce the risk of manual handling injuries that may result from lifting and moving heavy objects).
- Fuel storage containers should be contained within a storage area or room with bunding** and should not be stored with incompatible substances (e.g. fertilisers and combustible materials).
- The fuel should be stored away from ignition sources (naked flames, grinder sparks, welding areas, work areas where electrical or mechanical equipment is used).

*** bunding can be a tray or barrier designed to contain liquid spills eg. leaking fuel / chemical containers*

When handling fuel to fill a mower:

- Always refuel outdoors where it is well ventilated.
- Use a funnel when refuelling to minimise spillage.
- Do not smoke while refuelling or whenever handling the fuel.
- Add fuel before starting the engine. Never remove the cap of the fuel tank or add fuel while the engine is running or when the engine is hot.
- If fuel is spilled, do not attempt to start the engine. Be sure to move the machine away from the area of spillage and avoid creating any source of ignition until the fuel is evaporated and the vapour dispersed.
- Replace all fuel tank and fuel container caps securely.
- Consider obtaining a spill kit suitable for fuel spills.

Transport of fuel

It is important that all risks associated with transporting dangerous goods are managed to minimise the potential for injuries or illnesses, including manual handling. Refer to the Chapter 4, in the *Guideline for Managing Risk with Chemicals in DETE Workplaces* at <http://education.qld.gov.au/health/pdfs/healthsafety/guideline-managing-chemicals.pdf> for more specific information.

Organisational Health
Department of Education and Training

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Safe Storage & Handling of Lawn mower Fuel

Portable fuel containers must seal effectively & be of an approved type. Look for markings which indicate the container has been manufactured to Australian Standard AS/NZS 2906 - Fuel containers - Portable - Plastics & metal or an equivalent or AS1940:2004 - Storage & Handling of Flammable & Combustible Liquids

Petrol Operated Blower (SOP)

Safe Operating Procedure



Warning:

This equipment can only be operated by a trained and authorised person.
Equipment must NOT be altered or modified without authorisation.
Only attachments or accessories supplied with equipment can be used.

SAFETY INSTRUCTIONS

1. Check the general condition of the equipment. Inspect fuel line, tank and carburettor for leaks. Check all switches and controls before use.
2. Check that handles are set for comfortable operation.
3. Check area for possible debris that may be thrown.
4. Avoid operation in the direction of people and animals.
5. Avoid open doors and windows.
6. Maintain a proper balance and secure footing when starting unit. Lay unit on firm flat surface with blower pipe clear of the ground and obstacles.
7. Allow unit to warm up at fast idle for a few minutes before use.
8. NEVER use a higher speed setting than necessary to perform the task.
9. Do NOT operate on slippery, uneven or unstable surfaces.
10. Plan direction of travel so that you are walking forward on a firm surface where possible.
11. Hold unit with a firm grip with thumb and fingers encircling the handles.
12. Minimise stooping and bending when using unit.
13. Allow unit to cool down before refuelling. Avoid fuel contact with hot surfaces.
14. Avoid all sources of ignition when refuelling.
15. Wash hands after handling fuel and oil.
16. Wear a broad brim hat and apply sunscreen on high UV days.
17. Turn unit off and remove spark plug lead to perform maintenance and to clean down.
18. Wear strong work boots.
19. Wear ear muffs.
20. Wear safety glasses.
21. Avoid touching hot surfaces.
22. Store implements in a clean and tidy condition.
23. Report all equipment faults and hazards to the supervisor.

CAUTION - Beware of contact with hot surfaces; flying objects and debris; loud noise; UV hazards; fuel leaks; and fire hazards caused by fuel.

Power Leaf Blower – Electric (SOP)

Safe Operating Procedures

DO NOT use this machine unless you have been instructed in its safe use and operation.



PRE-OPERATIONAL SAFETY CHECKS

1. Do not use an electric blower vacuum in wet conditions.
2. Do not wear jewellery or loose clothing that can be drawn into the air inlet.
3. Check machine for loose/missing nuts, bolts and screws. Tighten and/or replace as needed.
4. Inspect the parts of the mulching cutting head (where fitted). Replace cutting line if worn or damaged.
5. Ensure the debris bag is in sound condition and is properly fitted with no gaps.
6. Ensure all guards are fitted, secure and functional.
7. Ensure the machine and extension cord are tagged and are current.
8. Ensure a tagged RCD is used when operating the machine.
9. Trip test RCD before operation.
10. Ensure the extension cord is in good condition.
11. The extension cord must be uncoiled as coiled cables can overheat.
12. Faulty equipment must not be used. Immediately report suspect machinery.

OPERATIONAL SAFETY CHECKS

1. Ensure that no people or animals are endangered when operating this equipment.
2. Adjust the shoulder harness as required to ensure it is in the most comfortable position.
3. Keep a firm grip. Hold handles with fingers together encircling handles.
4. Maintain a straight wrist position. Avoid using your wrist in a bent, extended or twisted position.
5. Maintain footing and balance at all times. Do not stand on slippery, uneven or unstable surfaces. Do not work in odd positions or on ladders.
6. Select the mode indicator to adjust the nozzle position for blow or vacuum.
7. Do not pull cable around sharp objects.
8. Do not direct the blower in the direction of other people.
9. Take wind conditions into account. Avoid open doors and windows.
10. Minimize dust by using blower at lower speeds.
11. If the blower vacuum starts to vibrate abnormally, switch off and check immediately.
12. Switch off and disconnect from the electricity supply before removing or replacing the debris bag.
13. Do not place hands in bag when emptying. Sharp debris can cause injury.

HOUSEKEEPING

1. Remove any foreign material from motor air inlet and nozzle
2. Keep the work area and implement shed in a clean and tidy condition.

POTENTIAL HAZARDS

■ Noise ■ Electrical hazards ■ Flying debris ■ Dust

Date of last review

/ /

Name:

Signature

Power Blower - Petrol Operated (SOP)

Safe Operating Procedures

DO NOT use this machine unless you have been instructed in its safe use and operation.



PRE-OPERATIONAL SAFETY CHECKS

1. Check unit for loose/missing nuts, bolts and screws. Tighten and/or replace as needed.
2. Inspect fuel lines, tank, and area around carburetor for fuel leaks. Do not operate machine if leaks are found.
3. Do not use any attachment or accessory unless it is recommended in the Operator's Manual.
4. Ensure that all guards are fitted, secure and functional.
5. Faulty equipment must not be used. Report suspect machinery immediately.

OPERATIONAL SAFETY CHECKS

14. Ensure that no person or animal is endangered when operating equipment.
15. When starting stand the machine upright on a level surface. Check that blower pipe is not blocked by the ground or by any objects.
16. Allow the machine to warm up at fast idle for a few minutes before using.
17. Keep a firm grip. Hold handle with fingers together encircling handle.
18. Maintain a straight wrist position. Avoid using your wrist in a bent, extended or twisted position.
19. The muffler side of the engine should be away from your body to avoid burns.
20. Maintain footing and balance at all times. Do not work on slippery, uneven or unstable surfaces. Do not work in odd positions or on ladders.
21. Never use a higher speed setting than necessary to perform a task.
22. Do not direct the blower in the direction of other people.
23. Take wind conditions into account. Avoid open doors and windows.
24. Minimize dust by using blower at lower speeds.
25. Always keep exhaust area clear of flammable debris.
26. Disconnect spark plug wire before you work on the unit or leave it unattended.
27. Allow the engine and muffler to completely cool before performing any maintenance activity.
28. Do not refuel a hot engine.

HOUSEKEEPING

3. Remove any foreign material from engine, air intake and guards.
4. Keep the work area and implement shed in a clean and tidy condition.

POTENTIAL HAZARDS

- | | | | |
|----------------------|-----------------|--------|-------------|
| ■ Noise | ■ Flying debris | ■ Dust | ■ Vibration |
| ■ Burns from exhaust | | | |

Date of last review _____

Signature _____

Leaf Blowers, A Guide to Safer & More Courteous Use



Introduction

This article will show you the proper way to use a leaf blower, as well as the different types of leaf blowers and different jobs that leaf blowers perform. After you read this article, and your instruction manuals, you'll have a greater understanding of how to use a leaf blower more safely and courteously to help protect both yourself and the people around you.

Why do we use leaf blowers?

Since their introduction in the 1970's, leaf blowers have rapidly become an essential time and labour-saving cleanup tool for landscape maintenance professionals and homeowners. Leaf blowers are extremely efficient for cleaning leaves, grass clippings, and debris from driveways, sidewalks, parking lots, sports arenas, parks and construction sites. In these situations, a leaf blower is more time and cost efficient than a rake or a broom. Leaf blowers also perform tasks like cleaning areas covered by mulch or bark more effectively than hand tools. When used properly, there is little disturbance to the surface.

What do leaf blowers do?

You can use a leaf blower to:

- Remove and gather leaves
- Vacuum leaves
- Remove grass clippings
- Dislodge or break up matted grass
- Clean parking lots
- Clean farm and construction equipment
- Clean arenas and amusement parks
- Remove light or fluffy snow
- Dry off pavement
- Clean rain gutters

Types of leaf blowers

There are two main types of leaf blowers: handheld and backpack models. Both types are usually powered by either a 2-stroke or 4-stroke engine. Some handheld blowers also provide a blower-vacuum combination. There are many different models, attachments and performance options available for different applications. Compared to leaf blowers manufactured in the early 1990's, today's leaf blowers

are quieter and cleaner. For more technical and performance information, check your operator's manual, ask your outdoor power equipment Dealer or visit a manufacturer's website located at www.opei.org.

How to use a leaf blower

Before you use a leaf blower, read the instruction manual provided by the manufacturer. If you or your employer do not have an instruction manual, you can get one by contacting the manufacturer or your local retailer. Many manufacturers have them available on their websites. You need to know how the leaf blower works and how to use it properly before you start a job. For example, the following are general rules:

- Children should not use a leaf blower.
- Pay attention when using a leaf blower. Don't point an operating blower in the direction of people or pets.
- Make sure bystanders, including other operators, are at least 50 feet away. Stop blowing if you are approached.
- Do not use a leaf blower if you are tired or sick, taking medication, or if you have used drugs or alcohol.
- Do not use a blower indoors or in poorly ventilated areas.
- Inspect the blower before and during use to make sure controls, parts and safety devices are not damaged and are working properly.
- Never modify a blower in a way not authorized by the manufacturer.
- Do not operate while standing on a ladder, rooftop, tree or other unstable surface. Use nozzle attachments to reach high places.
- Work carefully. You need to be safe, courteous and responsible.

Dress Safely!

- Wear hearing protection when using a leaf blower – either ear plugs or earmuffs.
- Wear goggles that meet eye protection standards.
- Wear non-slip, heavy-duty work gloves.
- Wear sturdy protective clothing. Do not wear anything loose. Tie back long hair. Wear long pants to help protect your legs and long sleeves to help protect your arms.
- Wear sturdy shoes with non-slip soles.
- In dusty conditions, wear a respirator or dust mask as appropriate.

Handle Gas Carefully

- Don't spill when you fill! If you do spill, wipe leaf blower dry before using.
- Use the correct fuel/oil mix. Check the instruction manual.
- Refuel before you start the engine. If refuelling during work, turn off the engine and allow it to cool before fuelling. Loosen the cap slowly to relieve pressure in the tank. Always retighten the fuel cap securely.
- Never smoke while handling fuel.
- Start the blower at least 10 feet from the fuelling spot.
- Store fuel in a well-ventilated area in a properly marked safety container.
- Make sure the spark plug boot is secure to avoid sparks and possible ignition of fuel vapours.

Operating courtesy

- Follow local rules and ordinances about when to use leaf blowers. Do not use very early in the morning or very late in the day.
- Check wind direction and intensity. Never point the nozzle or blow debris toward people, pets, cars or houses.
- Do not blow debris toward open windows or doors.
- Always be considerate of people passing by and of property.
- Do not leave the blower running when unattended.
- Do not use a blower to spread or mist fertilizers, chemicals or other toxic substances, unless it is designed for these purposes and in an appropriate area.

Reducing sound

- Use the lowest possible throttle speed to do the job.
- Use nozzle attachments that help reduce sound. See manufacturer's operator's manual.
- Avoid using more than one blower at a time, especially in neighbourhoods or around buildings where sound can be intensified.
- Check the condition of the leaf blower muffler, air intakes and air filter to make sure they're in good operating condition.

Reducing dust

- Start with nozzle close to the ground at first – then raise it to a height where it does not generate dust.
- Use the full lower nozzle extensions to control sound and minimize dust.
- Pay attention to what you are moving.
- Practice moving grass clippings or a paper cup without moving dust.
- Wet dusty areas down first before using a blower.
- Never use a leaf blower to move excessively dusty materials.
- A leaf blower should NOT be used to clean up:
 - Large amounts of gravel or gravel dust
 - Construction dirt
 - Plaster dust
 - Cement and concrete dust
 - Dry garden topsoil
- Use a vacuum or power broom with water.

Being more efficient

- You can improve your efficiency when using a leaf blower by:
- Read your instruction manual completely.
- Learning how to control the air velocity at the end of the nozzle to lift leaves without lifting dust.
- Practicing leaf blower nozzle movement and throttle control combinations.
- Practicing up and down and left and right motions starting close to the ground and the debris, but not close enough to lift excessive amounts of dust.

Quiet blowers

Where blower sound is an issue, purchase sound-reduced blowers from your local lawn care equipment supplier or retailer. Blowers are now available that are as much as 75% quieter than older blowers.

More information

Check the instruction manual for detailed information about your specific kind of blower. For more information about leaf blowers and leaf blower manufacturers, see the "Who Makes That?" section of the

Outdoor Power Equipment Institute's website, www.opei.org. You'll find a listing of all OPEI member companies who manufacture leaf blowers, as well as links to leaf blower manufacturers' websites.

Leaf Blower History

The grandfather of today's leaf blower was designed to spread fertilizers and pesticides on crops and fruit trees. In the late 1960's and early 1970's, landscapers realized that this blower – without the container for chemicals – could be used to move leaves and other yard debris. Manufacturers responded by designing a leaf blower that could be used by homeowners and lawn care and landscape professionals. Today, manufacturers continue to research and develop new improvements for further reducing leaf blower sound and emissions.



A Guide to Safe and Courteous Use of Leaf Blowers

As published by the Outdoor Power Equipment Institute (OPEI)

PETROL POWERED HEDGE TRIMMER – Safety Instructions:



Safety

Because a hedge trimmer is a high-speed, fast-cutting power tool, special safety precautions must be observed to reduce the risk of personal injury.

Warning: The use of any hedge trimmer may be hazardous. If the cutting tool comes in contact with your body, it will cut you.

Striking solid foreign objects such as stones, fence wire or metal could damage the cutting attachment and may cause blades to crack, chip or break.

Warning: The operator is responsible for avoiding injury of third parties and damage to their property.

Never let the hedge trimmer run unattended.

Safe use of a hedge trimmer involves

1. The operator
2. The hedge trimmer
3. The use of the hedge trimmer

Prolonged use of a hedge trimmer exposing the operator to vibrations may produce white finger disease or carpal tunnel syndrome. These conditions reduce the hand's ability to feel and regulate temperature, produce numbness and burning sensations and may cause nerve and circulation damage and tissue necrosis.

All factors which contribute to white finger disease are not known, but cold weather, smoking and diseases or physical conditions that affect blood vessels and blood transport, as well as high vibration levels and long periods of exposure to vibration are mentioned as factors in the development of white finger disease. In order to reduce the risk of white finger disease and carpal tunnel syndrome, please note the following.

- Wear gloves and keep your hands warm.
- Maintain firm grip at all times, but do not squeeze the handles with constant, excessive pressures, take frequent breaks.

All the above mentioned precautions do not guarantee that you will not sustain white finger disease or carpal tunnel syndrome. Therefore continual and regular users should monitor closely the condition of their hands and fingers. If any of the above symptoms appear, seek medical advice immediately.

Warning: The ignition system of your unit produces an electromagnetic field of a very low intensity. This field may interfere with some pacemakers. To reduce the risk of serious or fatal injury, persons with pacemaker should consult their physician.

Proper clothing

Hedge trimmer operation can cause serious injury to eyes, ears and person. Therefore, to reduce the risk of injury to your eyes never operate a hedge trimmer unless wearing goggles or properly fitted safety glasses with adequate top and side protection.

Warning: Hedge trimmer noise may damage your hearing. Wear sound barriers to protect your hearing. Continual and regular users should have their hearing checked regularly.

Wear proper protective clothing. Clothing must be sturdy and snug-fitting, but allow complete freedom

of movement. Avoid loose-fitting jackets, scarfs, neckties, jewellery, flared or cuffed pants, unconfined long hair or anything that could become caught on branches, brush or moving parts of the unit. Wear long pants made of heavy material to protect your legs. Do not wear shorts.

Protect your hands with gloves when handling the hedge trimmer and the cutting too. Heavy-duty, non-slip gloves improve your grip and help to protect your hands.

Good footing is most important in hedge trimmer work. Wear sturdy boots with non-slip soles. Steel toed safety boots are recommended.

Wear an approved safety hard hat to reduce the risk of injury to your head when there is a danger of head injuries.

Warning: Never modify a hedge trimmer in any way. Use on manufacturer's attachments.

Operation

Warning: To reduce the risk of injury from blade contact, do not attempt to "drop start" the trimmer.

Place the hedge trimmer on firm ground or other solid surface in an open area. Maintain a good balance and secure footing. To reduce the risk of injury from blade contact or loss of control always engage the starting lock before starting. When the engine starts at starting-throttle, engine speed will be fast enough for the clutch to engage and move the cutting tool. When you pull the starter grip, don't wrap the starter rope around your hand. Do not allow the grip to snap back, but guide the starter rope to rewind properly. Failure to follow this procedure may result in injury to hand or fingers and may damage the starter mechanism.

To reduce the risk of injury from inhalation of poisonous fumes, operate and start the hedge trimmer only outdoors in ventilated area. Hold the hedge trimmer in such a way that you do not breathe in the exhaust fumes. Operate the hedge trimmer under good visibility and daylight conditions only. Work carefully. Take particular care in slippery conditions and on slopes. Be careful on uneven ground. Watch out for stumps, roots, ditches or holes, which could cause you to trip or stumble. Before you start work, examine the hedge area for stones, fence wire, metal or other solid objects, which could damage the cutter blades.

WIRED or CORDLESS HEDGE/GRASS TRIMMERS

INTRODUCTION

Mains operated (corded) power tool or battery operated (cordless) power tool such as Hedge/Grass Trimmers are tools designed for trimming hedges, shrubs and grass.

ELECTRICAL SAFETY



'Warning' When using mains powered equipment basic safety precautions including the following should always be followed to reduce risk of fire electric shock personal injury and material damage

Read and understand the manual prior to operating this tool.

Save these instructions and other documents supplied with the tool for future reference.

- ✓ Always check that the power supply corresponds to the voltage on the rating plate.
- ✓ Check if the tool is double insulated in accordance with AS/NZS 60335-2-29; therefore no earth wire is required.
- ✓ Check if double insulated or not, also check to which AS/NZS standard it is in accordance with.
- ✓ If the supply cord is damaged, it must be replaced by a qualified electrician or a power tool repairer in order to avoid a hazard.
- ✓ If operating a power tool in a damp location is unavoidable use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

Note: Double insulation does not take the place of normal safety precautions when operating an electric tool. The insulation system is for added protection against injury resulting from a possible electrical insulation failure within the tool.

Using an Extension Lead

- ✓ Always use an approved extension lead suitable for the power input of this tool.
- ✓ Before use, inspect the extension lead for signs of damage, wear and ageing. Replace the extension lead if damaged or defective.
- ✓ When using an extension lead on a reel, always unwind the lead completely.
- ✓ Use of an extension lead not suitable for the power input of the tool or which is damaged or defective may result in a risk of fire and electric shock.



'Warning' A battery operated tool with individual batteries or a separate battery pack must be recharged only with the specific charging unit for the battery. A charging unit that may be suitable for one type of battery may create a risk of fire when used with another battery type

- ✓ • Avoid accidental starting.
- ✓ • When the tool is not in use keep it away from other metal objects.
- ✓ Read the whole safety manual supplied with this tool carefully and make sure you know how to switch the tool OFF, in an emergency, before operating the tool.
- ✓ Save these instructions and other documents supplied with this machine for future reference.

GENERAL POWER TOOL SAFETY WARNINGS – PERSONAL SAFETY



Read all safety, warnings and all instructions Failure to follow the warnings and instructions may result in electric shock fire and/or serious injury. Save all warnings and instructions for future reference

The term power tool in all of the warnings refers to your mains operated (corded) power tool or battery operated (cordless) power tool.

1) Work area safety

- a) Keep work area clean and well lit. Cluttered and dark areas invite accidents.
- b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- c) Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

2) Electrical safety

- a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock
- b) Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- c) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e) When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.

3) Personal safety

- a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b) Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dust-related hazards.

4) Power tool use and care

- a) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- b) Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- f) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) Use the power tool, accessories and tool bits etc. in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from

those intended could result in a hazardous situation.

5) Service

- a) Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.
- b) If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

THIS GUIDANCE SHEET/MANUAL CONTAINS IMPORTANT SAFETY AND OPERATING INSTRUCTIONS FOR YOUR CHARGER & BATTERY.

Before using the charging adaptor, thoroughly Read all instructions and cautionary, markings on charger and hedge/grass trimmer.

Danger! If the hedge/grass trimmer housing is cracked or damaged, do not insert the charge adaptor plug into the charger socket. There is a danger of electric shock or electrocution.

- This charger is not intended for any uses other than charging rechargeable batteries. Any other use may result in risk of fire, electric shock or electrocution.
- Do not place any object on top of the charger or place the charger on a soft surface that may result in excessive internal heat. Place the charger in a position away from any heat source.
- To reduce risk of damage to the electric plug and cord, pull by the plug rather than the cord when disconnecting the charger.
- Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in the risk of fire, electric shock or electrocution.
- Do not operate charger if it has received a sharp blow, been dropped or otherwise damaged in any way. Have it checked by an electrician or power tool repairer.
- Do not disassemble charger. Take it to an electrician or power tool repairer when service or repair is required. Incorrect reassembling may result in a risk of electric shock, electrocution or fire.
- To reduce risk of electric shock, unplug charger from the outlet before attempting any cleaning.
- Never attempt to connect 2 chargers together.

USEFUL TIPS:

Shaping:

The hedge should be trimmed to achieve a trapezoidal form, it should widen toward the bottom at both sides. This improves the penetration of light to the lower extremities. A general guideline is approximately 10cm slant for each 1 metre of hedge height.

Cutting Sequence:

First cut both sides, starting at the bottom and working to the top: this prevents cuttings from falling into the area where you are still to work.

Trimming the Top:

Where the braches have grown extremely long, cut back the hedge in several stages. The shorter cuttings obtained are better suited for composting.

General Information:

When older hedges are to be cut back a substantial amount, use pruning shears or some other device to trim thicker branches (greater than 8mm diameter) to the desired length before starting work with the hedge trimmer.

To shape precisely, run a taught line between the extreme edges of the hedge and then trim along the length of the line.

Ensure that the blade does not come into contact with any object made of hard material that could damage it, such as fencing wire or metallic plant supports.

Our Environment:

Don't throw your clippings into a rubbish bin where it will be disposed of in landfill. You can dispose of the clippings on your compost heap, alternating them with other garden material. Alternatively many communities provide a public collection point where you can dispose of your garden waste in an environmentally friendly manner.

Keep the ventilation vents of the tool clean at all times, if possible, prevent foreign matter from entering the vents.

If the enclosure of the trimmer requires cleaning do not use solvents but a moist soft cloth. Never let any liquid get inside the tool:

Never immerse any part of the tool into a liquid.

The blade rail should be cleaned and treated with light machine oil or spray lubricant (such as WD40, CRC 5.56 or RP7) after each use. When a job lasts for a longer period of time it is recommended that the blade rail also be treated with spray lubricant at regular intervals during operation.

Blade Cleaning:

To ensure many years of efficient and trouble-free operation, blade cleaning should be performed if sap and debris have built-up, or if you live in an area where the soil is sandy. Cleaning unusually heavy deposits may require removal of the blades.

Power tools that are no longer usable should not be disposed of with household waste but in an environmentally friendly way. Please recycle where facilities exist. Check with your local council authority for recycling advice.

Recycling packaging reduces the need for landfill and raw materials. Reuse of recycled material decreases pollution in the environment. Please recycle packaging where facilities exist. Check with your local council authority for recycling advice.

General Safety

Because a hedge trimmer is a high-speed, fast-cutting power tool, special safety precautions must be observed to reduce the risk of personal injury.

Striking solid foreign objects such as stones, fence wire or metal could damage the cutting attachment and may cause blades to crack, chip or break.

Warning: The operator is responsible for avoiding injury of third parties and damage to their property.

Never let the hedge trimmer run unattended.

Safe use of a hedge trimmer involves

4. The operator
5. The hedge trimmer
6. The use of the hedge trimmer



Prolonged use of a hedge trimmer exposing the operator to vibrations may produce white finger disease or carpal tunnel syndrome. These conditions reduce the hand's ability to feel and regulate temperature, produce numbness and burning sensations and may cause nerve and circulation damage and tissue necrosis.

All factors which contribute to white finger disease are not known, but cold weather, smoking and diseases or physical conditions that affect blood vessels and blood transport, as well as high vibration levels and long periods of exposure to vibration are mentioned as factors in the development of white finger disease. In order to reduce the risk of white finger disease and carpal tunnel syndrome, please note the following.

- Wear gloves and keep your hands warm.
- Maintain firm grip at all times, but do not squeeze the handles with constant, excessive pressures, take frequent breaks.

All the above mentioned precautions do not guarantee that you will not sustain white finger disease or carpal tunnel syndrome. Therefore continual and regular users should monitor closely the condition of their hands and fingers. If any of the above symptoms appear, seek medical advice immediately.

Warning: The ignition system of your unit produces an electromagnetic field of a very low intensity. This field may interfere with some pacemakers. To reduce the risk of serious or fatal injury, persons with pacemaker should consult their physician.

Proper clothing

Hedge trimmer operation can cause serious injury to eyes, ears and person. Therefore, to reduce the risk of injury to your eyes never operate a hedge trimmer unless wearing goggles or properly fitted safety glasses with adequate top and side protection.

Warning: Hedge trimmer noise may damage your hearing. Wear sound barriers to protect your hearing. Continual and regular users should have their hearing checked regularly.

Wear proper protective clothing. Clothing must be sturdy and snug-fitting, but allow complete freedom of movement. Avoid loose-fitting jackets, scarfs, neckties, jewellery, flared or cuffed pants, unconfined long hair or anything that could become caught on branches, brush or moving parts of the unit. Wear long pants made of heavy material to protect your legs. Do not wear shorts.

Protect your hands with gloves when handling the hedge trimmer and the cutting too. Heavy-duty, non-slip gloves improve your grip and help to protect your hands.

Good footing is most important in hedge trimmer work. Wear sturdy boots with non-slip soles. Steel toed safety boots are recommended.

Wear an approved safety hard hat to reduce the risk of injury to your head when there is a danger of head injuries.

Warning: Never modify a hedge trimmer in any way. Use on manufacturer's attachments.

Operation

Warning: To reduce the risk of injury from blade contact, do not attempt to "drop start" the trimmer.

Place the hedge trimmer on firm ground or other solid surface in an open area. Maintain a good balance and secure footing. To reduce the risk of injury from blade contact or loss of control always engage the starting lock before starting. When the engine starts at starting-throttle, engine speed will be fast enough for the clutch to engage and move the cutting tool. When you pull the starter grip, don't wrap the starter rope around your hand. Do not allow the grip to snap back, but guide the starter rope to rewind properly. Failure to follow this procedure may result in injury to hand or fingers and may damage the starter mechanism.

To reduce the risk of injury from inhalation of poisonous fumes, operate and start the hedge trimmer only outdoors in ventilated area. Hold the hedge trimmer in such a way that you do not breathe in the exhaust fumes. Operate the hedge trimmer under good visibility and daylight conditions only. Work carefully. Take particular care in slippery conditions and on slopes. Be careful on uneven ground. Watch out for stumps, roots, ditches or holes, which could cause you to trip or stumble. Before you start work, examine the hedge area for stones, fence wire, metal or other solid objects, which could damage the cutter blades.

Line Trimmer – Electric (SOP)

Safe Operating Procedures

DO NOT use this machine unless have been inducted & trained in its safe use and operation.



PRE-OPERATIONAL SAFETY CHECKS

6. Do not use the line trimmer in wet conditions.
7. Ensure that the cutting head guard is fitted, secure and functional.
8. Ensure that the nylon line cutter is functional.
9. Load the nylon line cutting head only with nylon trimmer line of the proper diameter.
10. Ensure that the cutting head is tightened.
11. Ensure that the harness (if fitted) is in sound condition.
12. Ensure that the machine and extension cord are tagged and the tags are current.
13. Ensure the machine is operated from an RCD protected circuit.
14. Trip test external RCD before operation.
15. Ensure that the extension cord is in good condition.
16. Faulty equipment must not be used. Report suspect machinery immediately.

OPERATIONAL SAFETY CHECKS

29. Adjust the handle to a position for comfort and good balance.
30. Maintain a straight wrist position. Avoid using your wrist in a bent, extended or twisted position for extended periods.
31. Take periodic breaks to minimize repetition and rest your hands.
32. Watch especially for ejected material and ensure that no person or animal is endangered when operating equipment.
33. Maintain footing and balance at all times. Do not work on slippery, uneven or unstable surfaces.
34. Ensure extension cable is well clear of cutting head at all times.
35. Always keep both hands on the control handles. Do not operate one-handed.
36. Do not raise the line head above knee height.
37. Keep clear of moving machine parts.
38. Keep clear of fences, wires, posts, rocks, etc. to prevent kick out and cutting head damage.

HOUSEKEEPING

5. Remove any foreign material from motor, cutting head and guards.
6. Keep the work area and implement shed in a clean and tidy condition.

POTENTIAL HAZARDS

- | | | |
|----------------------|----------------|-----------------------|
| ■ Ejected materials | ■ Entanglement | ■ Vibrating machinery |
| ■ Electrical hazards | | |

Date of last review _____

Signature _____

Grass Trimmer Training Checklist

Employee Name: _____ Department: _____

Trainer: _____ Worksite: _____

Tick the boxes as each topic is covered.

Pre-Set Up Checklist

- ☐ Worker has Read and understands safe work procedure.
- ☐ Worker has received a live demonstration of the procedures.
- ☐ Worker can identify appropriate PPE and clothing for this equipment.
- ☐ Worker checks machine condition including guard, fuel level, and string adjustment.
- ☐ Worker can identify appropriate applications for Grass Trimmers vs. Brushcutters.

Procedure Checklist

- ☐ Worker recognizes trimming hazards.
- ☐ Worker puts on appropriate PPE and wears throughout operation.
- ☐ Worker maintains awareness for others around them.
- ☐ Worker has sufficient agility and strength to use trimmer.
- ☐ Worker demonstrates ability to adjust trimmer line length and reload trimmer string on head.
- ☐ Demonstrates overall safe and effective competency in operating Grass Trimmer.
- ☐ Demonstrates overall safe and effective competency in operating Brushcutter.

Post Procedure

- ☐ Checks equipment condition and store safely in truck so it does not roll around.

Trainer Comments:

Training Complete (YES)/(NO) if no explain:

I fully understand what has been presented to me, and give my personal commitment to actively participate and comply with all relevant regulations, policies, procedures, and instructions while I am onsite or representing this Business.

Worker

Signature: _____ Date: _____

Trainer

Signature: _____ Date: _____

Department:	Gardeners & Landscapers	Area	Shop	
Subject:	Power tools – vibration controls SOP			

POWER TOOLS – VIBRATION CONTROL (SOP)

SAFE OPERATING PROCEDURES

Warning:



The use of power tools may be hazardous. High-speed, powerful & heavier tools require special safety precautions which must be observed to reduce the risk of serious personal injury. It is important to fully understand and observe the safety precautions and procedures below. If not familiar with the use of the equipment you intend to use, obtain practical instruction from a competent operator. Do not operate power tools without thorough training or unless under the direct supervision of an instructor. Do not operate if safety devices are not in place.

Exposure to vibration can cause long-term health risks.

Handheld Power Tools commonly used daily by tradies including electricians, plumbers, woodworkers, construction workers, landscape gardeners & lawn maintenance workers may cause vibration that could lead to "white fingers" or Hand-arm vibration syndrome (HAVS). This is especially dangerous when proper damping techniques are not applied, if machines are not maintained, if tools are not alternated, or if a worker uses a vibrating tool for consecutive hours during a workday. Workers need to be trained on the hazards of working with vibrating tools, and should always allow the tool or machine to do the work.

Hazards/Solutions

Potential Hazards:

Both hand-held and stationary tools that transmit vibration through a work piece can cause vibration "white fingers" or Hand-arm Vibration Syndrome (HAVS). White fingers, or Raynaud's Syndrome, is a disease of the hands in which the blood vessels in the fingers collapse due to repeated exposure to vibration. The skin and muscle tissue do not get the oxygen they need and eventually die. HAVS is a more advanced condition, and the entire hand or arm may be affected by exposure to vibration. Early signs of HAVS are infrequent feelings of numbness and/or tingling in the fingers, hands, or arms, or numbness and whiteness in the tip of the finger when exposed to cold. As the disease progresses, a worker experiences more frequent attacks of numbness, tingling, and pain and finds it difficult to use his or her hands. A worker with advanced HAVS may be disabled for a long amount of time.

Possible Solutions:

Engineering Controls:

Vibration isolators or damping techniques on equipment offer the most effective protection. Isolate machine vibrations from the surface if it is mounted or by use of vibration isolation mounts.

Vibrating panels of machine housings and guards may be controlled by use of damping materials applied to the panels. Felts, liquid mastics, and electrometric damping sheets are effective damping materials. Determining the correct type and quantity of damping material to use for a particular machine is a complicated process and should be left to a knowledgeable person. The frequency emitted by the machine, the noise reduction level desired, and the weight and size of the machine are factors to consider. A good rule of thumb, however, is that the damping layer should be the same thickness as the surfaces being treated.

Work Practices:

Maintain machines in proper working order. Unbalanced rotating parts or unsharpened cutting tools can give off excessive vibration.

Arrange work tasks so that vibrating and non-vibrating tools can be used alternately.

Restrict the number of hours a worker uses a vibrating tool during the workday. Allow employees to take 10 to 15 minute breaks from the source of the vibration every hour.

Train workers about the hazards of working with vibrating tools. Instruction should include: the sources of vibration exposure, early signs and symptoms of hand-arm vibration syndrome, and work practices for minimizing vibration exposure.

Instruct workers to keep their hands warm and dry, and to not grip a vibrating tool too tightly. Workers should allow the tool or machine to do the work.

Vibration & the Law:

In Australia harmonisation of the Work Health & Safety laws across the majority of States hazardous manual tasks changed the focus from manual handling to those tasks which present a physical risk to the musculoskeletal system. Vibration is now a factor to be considered with worker and workplace safety.

In the WHS Regulation 2011 vibration is mentioned specifically in several sections as follows:

(page 45) hazardous manual task means a task that requires a person to lift, lower, push, pull, carry or otherwise move, hold or restrain any person, animal or thing that involves 1 or more of the following:

- (a) repetitive or sustained force,
- (b) high or sudden force,
- (c) repetitive movement,
- (d) sustained or awkward posture,
- (e) **exposure to vibration.**

(page 84) Part 4.2 Hazardous manual tasks, Regulation 60 Managing risks to health and safety

(1) A person conducting a business or undertaking must manage risks to health and safety relating to a musculoskeletal disorder associated with a hazardous manual task, in accordance with Part 3.1.

Note. WHS Act—section 19 (see clause 9).

(2) In determining the control measures to implement under sub clause (1), the person conducting the business or undertaking must have regard to all relevant matters that may contribute to a musculoskeletal disorder, including:

- (a) postures, movements, **forces and vibration** relating to the hazardous manual task, and
- (b) the duration and frequency of the hazardous manual task, and
- (c) workplace environmental conditions that may affect the hazardous manual task or the worker performing it, and
- (d) the design of the work area, and
- (e) the layout of the workplace, and
- (f) the systems of work used, and
- (g) the nature, size, weight or number of persons, animals or things involved in carrying out the hazardous manual task.

(Page 128) Division 2 General risk management

Regulation 147 Risk management

A person conducting a business or undertaking at a workplace must manage risks to health and safety associated with electrical risks at the workplace, in accordance with Part 3.1.

Division 3 Electrical equipment and electrical installations

Regulation 148 Electrical equipment and electrical installations to which this Division applies

Regulation 149 Unsafe electrical equipment

(1) A person conducting a business or undertaking at a workplace must ensure that any unsafe electrical equipment at the workplace:

- (a) is disconnected (or isolated) from its electricity supply, and
- (b) once disconnected (or isolated):

- (i) is not reconnected until it is repaired or tested and found to be safe, or
- (ii) is replaced or permanently removed from use.

Maximum penalty:

- (a) in the case of an individual—\$3,600, or
- (b) in the case of a body corporate—\$18,000.

(2) For the purposes of this clause, electrical equipment or a component of electrical equipment is unsafe if there are reasonable grounds for believing it to be unsafe.

(Page 129)

Regulation 150 Inspection and testing of electrical equipment (see page 129)

The National Hazard Exposure Worker Surveillance – Exposure to vibration and the provision of vibration control measures in Australian workplaces, SafeWork Australia, 2009

SUMMARY (in part)

“Occupational exposure to hazardous levels of vibration is associated with a range of adverse health outcomes, including vibration white finger, carpal tunnel syndrome, musculoskeletal disorders and neurological disorders. In 2008, the National Hazard Exposure Worker Surveillance (NHEWS) survey gathered self reported data on the exposure of Australian workers to vibration and, for workers who reported exposure to vibration, data on the provision of control measures for vibration in the workplace. The purpose of this survey was to identify the workers who are at risk from adverse vibration related health effects. This will inform policy and potential regulation development and enable better targeting of work health and safety information, awareness and education campaigns relating to occupational exposure to vibration. It is hoped that these initiatives will lead to a decline and, ultimately, the elimination of occupational vibration related injury or disease. This report describes the demographic and employment characteristics of the workers who reported they were exposed to vibration in the workplace. In addition, the report describes the employment and vibration exposure characteristics that affected the provision of vibration control measures in exposed workers’ workplaces. The analyses in this report focus on the five national priority industries: Manufacturing, Transport and storage, Construction, Agriculture, forestry and fishing, and Health and community services.”

Summary of the main findings of the report

- Approximately 24% of Australian workers were exposed to vibration in their workplace.
- Young workers were more likely to report vibration exposure than older workers.
- The industries where workers had the highest likelihood of reporting exposure to vibration were *Agriculture, forestry and fishing, Transport and storage and Construction*.
- The occupations in which workers had the highest likelihood of reporting exposure to vibration were *Machinery operators and drivers, Technicians and trades workers and Labourers*.
- 43% of vibration-exposed workers were exposed to hand-arm vibration only, 38% were exposed to whole body vibration only and 17% were exposed to both hand-arm and whole body vibration.
- 41% of vibration-exposed workers reported they were exposed for up to a quarter of their time at work, while 21% reported they were exposed for between a quarter and half of their time at work, 15% reported they were exposed for between half and three quarters of their time at work, and 24% reported they were exposed for more than three quarters of their time at work.
- 23% of vibration-exposed workers reported that none of the surveyed control measures were provided in their workplace.
- Only 27% of vibration-exposed workers reported they received training.
- Large percentages of vibration-exposed workers in smaller workplaces reported they were not provided with any vibration control measures.

In Europe: The European Physical Agents (Vibration) Directive 2002/44/EC has been in force in all EU member states since July 6th 2005. This directive introduced 'Control of Vibration at Work' regulations, placing duties on employers to protect workers from vibration and reduce exposure levels.

The European Directive was brought in to protect workers from the health problems caused by Hand Arm Vibration – exposure may result in a range of ill health effects collectively known as Hand-Arm Vibration Syndrome or HAVS. The most well known health effect is vibration white finger, but other effects include damage to sensory nerves, muscles and joints in the hands and arms.

More generally when considering the issues of worker exposure to vibration -

Who is at risk? Those who regularly operate high vibration equipment over long periods of time.

Controlling the risks

The risks can be controlled by good management such as using the correct tool for the job. This requires employers to carry out various duties including:

- ✓ Reducing exposure to a minimum,
- ✓ Providing information and training,
- ✓ Assessing exposure levels,
- ✓ Carrying out measurements and reducing exposure, as well as providing health surveillance when the 'Exposure Action Value' has been reached
- ✓ Keeping exposure below 'Exposure Action Value' limit

What is 'Hand Arm Vibration' (HAV)?

Vibration transmitted to hand and arm causing conditions such as:

- ◆ Vibration White Finger
- ◆ Carpal tunnel syndrome
- ◆ Disorders of bones, muscles, joints and sensory nerves

Effects:

- ◆ Finger blanching
- ◆ Loss of sense of touch
- ◆ Numbness and tingling
- ◆ Ability to grip

When is it hazardous?

Regular and frequent exposure to high levels of vibration can lead to permanent injury.

This is most likely when contact with a vibrating tool or process is a regular part of a person's job.

Occasional exposure is unlikely to cause injury, although it should be avoided by people with medical conditions such as White fingers or Raynaud's Syndrome.

What sort of tools and equipment can cause vibration injury?

There are hundreds of different types of tools and equipment which can expose operators to high levels of hand-arm vibration. Some of the more common ones are:

- ◆ chainsaws;
- ◆ concrete breakers/road drills;
- ◆ hammer drills;
- ◆ hand-held grinders;
- ◆ hand-held sanders;
- ◆ nut runners;
- ◆ pedestal grinders;
- ◆ power hammers and chisels;
- ◆ powered lawnmowers;
- ◆ riveting hammers and bolsters;
- ◆ trimmers & brush cutters;
- ◆ swaging machines.

WHS laws & regulations require People Conducting a Business or Undertaking (PCBU) to do a number of things to protect workers and their workplaces:

- ✓ assess the risk to the health of your workers and plan for its control;
- ✓ manage the risk;
- ✓ provide suitable equipment for your workers' use;
- ✓ maintain equipment correctly;
- ✓ give workers information and training on health risks and safe use of the equipment;
- ✓ provide health surveillance of workers where risks cannot be completely eliminated;
- ✓ provide reports to the relevant regulating authority on cases of HAVS in your workforce;
- ✓ consult your HSR representatives on your proposals to deal with vibration hazards.

How do I know if my workers are at risk?

The documentation supplied by equipment manufacturers should warn you of risks from vibration. You can also check yourself to see if hand-held power tools, hand-guided and hand-fed machines are regularly used, and if so, whether anyone is, in particular using vibrating tools each day. If so, your workers are probably at risk. Even where workers are using vibrating tools or machines for less than these times, there may still be a risk and you should regularly (at least every six months) ask them if they are getting any symptoms of HAVS. Some simple questions you could ask are:

- ✓ Have your fingers gone white on exposure to cold?
- ✓ Have you had any tingling or numbness in your fingers after using vibrating equipment?
- ✓ Are you experiencing any problems with muscles or joints in your hands or arms?
- ✓ Do you have any difficulty picking up small objects such as screws or nails?
- ✓

If the answer to any of these questions is 'yes', assume that there is a risk from HAV to your workers. You should refer the worker to a doctor and take action to reduce exposure.

What information and training do I need to give my workers?

Employees need to know about the hazard and what they should do to reduce the risk, for example:

- ✓ potential sources of hand-arm vibration;
- ✓ the health effects of hand-arm vibration;
- ✓ risk factors (e.g. high levels of vibration, daily length/regularity of exposure);
- ✓ how to recognise and report signs of injury;
- ✓ ways to minimise risk, including:
- ✓ changes to working practices to reduce vibration exposure;
- ✓ correct selection, use and maintenance of equipment;
- ✓ how to use tools to reduce grip force, strain etc.;
- ✓ maintenance of good blood circulation at work, e.g. by keeping warm, exercising fingers and not smoking.

You should consult with your HSR representatives on your proposals for training and information.

What is 'Physical Agents Directive 2002/44/EC'?

Legislation:

Where there is a risk of vibration exposure it requires employers to:

- Assess exposure levels
- Reduce exposure to a minimum
- Provide information and training
- Program of health checks and reduced exposure

Why is 'Physical Agents Directive 2002/44/EC' Being Introduced?

- 25 million people at risk
- Over 5 million exposed to dangerous levels of HAV
- 1 million people suffering from advanced symptoms
- Annual cost to UK economy over €500 million
- Annual cost to European economy €5 Billion?

What Does 'Physical Agents Directive 2002/44/EC' Aim to Achieve?

Aims to reduce the amount of injuries caused by over exposure to high levels of vibration due to excessive use of power tools

Who Does 2002/44/EC Affect?

Metal fabrication workers
 Maintenance fitters
 Carpenters and joiners
 Electricians
 Plumbers
 Builders and construction workers

How Will 'Physical Agents Directive 2002/44/EC' Control Vibration Exposure?

Through establishing allowable usage levels depending on vibration of machine.....

Vibration Measure

Vibration is measured in: m/s^2

Exposure Limits

Exposure Action Value (EAV) $< 2.5m/s^2$ Daily Exposure

SAFE USAGE

Exposure Limit Value (ELV) $\leq 5m/s^2$ Daily Exposure

ASSESSMENT REQUIRED

Exposure Limit Value (ELV) $\geq 5m/s^2$ Daily Exposure (ELV)

The usage time is limited depending on the level of vibration

Vibration Measurement**Tri-Axial Calculation**

$m/s^2 = ?$

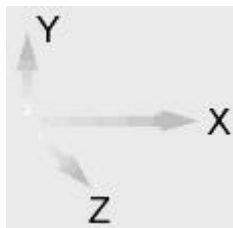
$X^2 + Y^2 + Z^2$

Vector sum of X,Y & Z

2002/44/EC Requires this Standard

Vibration of handheld electric power tools is measured in accordance to EN 60745 series.

EN 60745 which measures vibration in three directions (otherwise known as a tri-axial or vector sum measurement). This has been developed to replace the older version of EN 60745 standard and bring the manufacturers vibration measurement procedures in line with the HAV Directive.



$$m/s^2 = \sqrt{X^2 + Y^2 + Z^2}$$

Vibration Exposure Limits

Exposure limits are calculated as a combination of the vibration level (magnitude) of the tool and the Daily Exposure Time (Trigger Time). E.g. A product with $5m/s^2$ vibration can be used up to 2 hours/day to reach the EAV and up to 8 hours/day to reach the ELV.

Exposure Action Value (EAV) - Daily vibration exposure $A(8) = 2.5m/s^2$

Where daily vibration exposure $A(8)$ is below $2.5m/s^2$ the risk is relatively low and no action need be taken

Exposure Limit Value (ELV) - Daily Vibration Exposure $A(8) = 5.0m/s^2$

If several tools are use the exposure values must be combined. Total exposure is then the combined value of the activities.

Actions you should take:

Actions for Workers:

- ✓ Report any signs of HAV – pins and needles, pain, numbness of the fingertips, pain in the wrists, reduced sensitivity in the touch.
- ✓ Use the correct tools for the job.
- ✓ Consider alternatives for completing the job or rotate with someone else where possible
- ✓ Use gloves.
- ✓

Actions for Employers:

- ✓ Provide training and information
- ✓ Advise employees on safe working practices
- ✓ Eliminate or reduce vibration risks
- ✓ Regularly assess any vibration risks
- ✓ Supply suitable safety equipment
- ✓ Provide the right tools for the job
- ✓ Seek Health & Safety advice

Created: January, 2013
Revised: N/A

Author:
Approved by:

Brush Cutter/Line Trimmer Petrol Operated (SOP)

Safe Operating Procedures

DO NOT use this machine unless you have been instructed in its safe use and operation.



PRE-OPERATIONAL SAFETY CHECKS

17. Check unit for loose/missing nuts, bolts and screws. Tighten and/or replace as needed.
18. Inspect fuel lines, tank, and area around carburetor for fuel leaks. Do not operate unit if leaks are found.
19. Ensure that all guards are fitted, secure and functional.
20. Ensure the blade unit has a debris shield, has either a bar handle or a U-handle, and is suspended from a shoulder harness.
21. Select the correct cutting tool for the task to be undertaken - refer to manufacturer's specification.
22. Load the nylon line cutting head only with nylon trimmer line of the proper diameter.
23. Do not operate if the line cutter is missing.
24. Before operating unit, thoroughly inspect blades for damage and cracks.
25. When operating the unit with a blade, ensure the blade is attached to the unit as designed, such as with a locknut and cotter pin, and with the teeth pointing in the direction the blade head rotates.
26. Faulty equipment must not be used. Report suspect machinery immediately. Arrange repairs ASAP.

OPERATIONAL SAFETY CHECKS

39. Watch especially for ejected material and ensure that no person or animal is endangered when operating.
40. Adjust the handle/s to a position for comfort and good balance.
41. When starting, ensure the machine is in a clear area so the line or blade cannot contact the ground or any other obstruction.
42. The muffler side of the engine should be away from your body to avoid burns.
43. Maintain footing and balance at all times. Do not work on slippery, uneven or unstable surfaces.
44. Maintain a straight wrist position. Avoid using your wrist in a bent, extended or twisted position for extended periods.
45. Always keep both hands on the control handles. Do not operate one-handed.
46. Do not raise the line or blade head above knee height.
47. Keep machine clear of fences, wires, posts, rocks, etc. to prevent kick out and cutter head damage.
48. Shut down immediately if the unit starts to shake or vibrate.
49. After shutting down the engine, keep fingers and feet away from the cutting line or blade until all rotation stops.
50. Disconnect spark plug wire before you work on the unit or leave it unattended.
51. Take extreme caution when refuelling to avoid igniting fuel on hot exhaust or engine.

HOUSEKEEPING

7. Remove any foreign material from engine, cutting tool and guards.
8. Keep the work area and implement shed in a clean and tidy condition.

POTENTIAL HAZARDS

- | | | | |
|---|---------|---------------------|---|
| ■ The blade can push, pull or kick out.
Entanglement | ■ Noise | ■ Ejected materials | ■ |
|---|---------|---------------------|---|

Date of last review _____

Signature _____

Petrol Operated Edger/Trimmers - Safety Instructions:

SAFETY INSTRUCTIONS:

This equipment can only be operated by a trained and authorised person. Equipment must NOT be altered or modified without authorisation.

1. Check the general condition of the equipment. Inspect fuel line, tank and carburettor for leaks.
2. Check all switches and controls before use.
3. Do NOT operate the equipment without all guards in place.
4. Check cutting attachment is firmly fixed and handles set for comfortable operation.
5. Check area to be edged for possible debris that may be thrown.
6. Avoid operation where there is potential for endangering people and animals.
7. Maintain a proper balance and secure footing when starting unit. Lay unit on firm flat surface with moveable parts clear of obstacles.
8. Keep hands/fingers and feet away from blade and moving parts.
9. Confine loose clothing and long hair.
10. Minimise stooping and bending when using unit.
11. Do NOT operate on slippery, uneven or unstable surfaces.
12. Plan direction of travel so that you are walking forward on a hard surface where possible.
13. Hold unit with both hands with thumb and fingers encircling the handles.
14. Do NOT adjust blade height with engine running.
15. When edging, lower the blade gently into the ground and avoid hitting concrete. Do NOT force the blade. Shut down immediately if the unit starts to shake or vibrate.
16. Allow unit to cool down before refuelling. Avoid fuel contact with hot surfaces.
17. Avoid all sources of ignition when refuelling.
18. Wash hands after handling fuel and oil.
19. Wear a broad brim hat and apply sunscreen on high UV days.
20. Turn unit off and remove spark plug lead to perform maintenance and to clean down. Avoid touching hot surfaces.



CAUTION - Beware of contact with blade; flying objects and debris; edging over debris and other objects; loud noise; UV hazards; fuel leaks; and fire hazards caused by fuel.

Product Definition: Walk-behind fixed-blade edger/trimmers are petrol or electric powered units designed to trim, cut and remove grass from edges of sidewalks, driveways, lamp posts, rocks, etc. by employing rigid cutting members, and having at least one ground-support.

Before Using Your Edger/Trimmer

Always remove stones, sticks and other objects from the area before you begin trimming so that objects won't fly up and hit you. Clear the area of people and pets.

Dress properly for the job, wearing substantial shoes, long pants and close-fitting clothes. Wear safety glasses or goggles.

Read the operator's manual to find out where controls are and what they do, and always check for additional safety instructions. Know how to stop the machine quickly. Do not remove or disable guards or other safety devices.

Fill your petrol tank only while the engine is cold. Don't spill when you fill. If you need to refuel the edger/trimmer before completing a task, turn off the machine and allow the engine to cool. Never light a match or smoke around petrol.

Operate Your Edger/Trimmer Carefully

Operate only where firm footing and balance are assured. Do not operate where use of hands would be necessary to prevent falls.

Do not over speed engine.

Do not put hands or feet near or under rotating parts while engine is running. Keep feet away from cutting area.

Stop the engine when crossing gravel drives, walks or roads, and under any conditions where thrown objects might be a hazard.

After striking a foreign object or if a unit vibrates abnormally, stop the engine, disconnect and secure spark plug wire. Inspect the unit for any damage and repair the damage before further operation.

Hold handles firmly with both hands to prevent loss of control due to blade bounce upon contact with hidden solid objects.

When transporting the machine to the work site, make sure the blade is disengaged so that you do not damage blade, lawn, curbs or pavement. After disengaging blade, push the machine to the site where work is to begin.

Before attempting any adjustment of blade and wheels, make certain the engine is off, the blade is disengaged and the spark plug wire removed.

When using an electric-powered edger/trimmer, make sure you never cross over the cord. Use recommended, grounded extension cords and check periodically for worn or damaged cords.

Keep Your Edger/Trimmer In Peak Operating Condition Inspect the edger/trimmer periodically for potential hazards:

1. Loose belts
2. Missing or damaged guards
3. Accumulations of grass, leaves or excessive grease to reduce fire hazard

Seek the professional advice and/or service of a qualified servicing dealer for problems. Take your edger/trimmer to an experienced servicing dealer every year for a safety and maintenance inspection.!

Petrol Driven Edger/Trimmer

Safe Operating Procedures

DO NOT use this machine unless have been inducted & trained in its safe use and operation.



PRE-OPERATIONAL SAFETY CHECKS

27. Check unit for loose/missing nuts, bolts and screws. Tighten and/or replace as needed.
28. Inspect fuel lines, tank, and area around carburetor for fuel leaks. Do not operate unit if leaks are found.
29. Ensure that all guards are fitted, secure and functional.
30. Check that the cutting attachment is firmly attached and in safe operating condition.
31. Check that front handle is adjusted for safe, comfortable operation.
32. Faulty equipment must not be used. Report suspect machinery immediately.

OPERATIONAL SAFETY CHECKS

52. Ensure that no person or animal is endangered when operating the equipment.
53. When starting:
 - Lay the unit on a flat area and keep movable attachment parts clear of all obstacles.
 - Firmly grasp right hand grip with left hand.
3. Before edging, plan your direction of travel so that the unit will always be positioned on your right side and so that you walk on a hard surface whenever possible.
4. Hold the front and center or rear and center handles with both hands, with thumbs and fingers tightly encircling the handles.
5. Maintain footing and balance at all times. Do not work on slippery, uneven or unstable surfaces.
6. Never adjust blade height with engine running otherwise serious personal injury may result.
7. Adjust the blade's depth of cut to produce a fine cut between edging and grass using a minimum blade depth, usually with about 13 mm of the blade into the ground.
8. When starting to edge, run the engine at full throttle, and lower the blade gently into the ground, being careful not to hit the concrete with the blade.
9. Blade depth may have to be adjusted due to differences in height between the hard surface and the top of the grass.
10. Don't force the blade. Move as quickly as the blade will allow.
11. Shut down immediately if the unit starts to shake or vibrate.
12. After shutting down the engine, keep fingers and feet away from the cutting blade until all rotation stops.
13. Disconnect spark plug wire before you work on the unit or leave it unattended.
14. Allow the unit to cool before refuelling. Exercise extreme care to avoid spilling fuel onto hot motor or exhaust.

HOUSEKEEPING

9. Clean away any foreign material, debris from in and around the motor, blades and guards.
10. Keep the work area and implement shed in a clean and tidy condition.

POTENTIAL HAZARDS

- | | | |
|----------------------|-------------------------------|-------------|
| ■ Moving components | ■ Ejected material | ■ Vibration |
| ■ Noise from exhaust | ■ Loose clothing entanglement | ■ Burns |

Date of last review _____

Signature _____

Push Type Mowers (SOP)

Safe Operating Procedure

Warning:

This equipment can only be operated by a trained and authorised person. Equipment must NOT be altered or modified without authorisation.

SAFETY INSTRUCTIONS – NON MOTORISED MOWER:

1. Check the general safe working condition of the equipment.
2. Check that the blades are sharp, secure and not damaged.
3. Do NOT operate the equipment without all guards in place.
4. Check area to be mowed for possible debris that may be thrown or damage blades.
5. Avoid mowing areas where there is potential for endangering people or animals.
6. Always mow in a forward direction.
7. Mow across any slope to avoid contact with a mower that may slip.
8. Operate at a speed that ensures control over unexpected hazards.
9. Wear work boots, leather gloves, spats, safety glasses, broad brim hat and apply sunscreen on high UV days as appropriate.
10. Keep hands/fingers away from mover blades and moving parts.
11. Confine loose clothing and long hair.
12. Minimise stooping and bending when using equipment.
13. Report all equipment faults and hazards to the supervisor.



CAUTION - Beware of contact with blade; flying objects and debris; mowing over debris and other objects; UV hazards; and beware of contact with infectious substances and needle stick injury.

SAFETY INSTRUCTIONS – MOTOR MOWER:

1. Check the general condition of the equipment.
2. Check that the blades are sharp, secure and not damaged.
3. Do NOT operate the equipment without all guards in place.
4. Check all switches, controls and emergency stops before use.
5. Check area to be mowed for possible debris that may be thrown.
6. Avoid mowing areas where there is potential for endangering people or animals.
7. Maintain a proper balance and secure footing when starting the mower.
8. Always mow in a forward direction.
9. Mow across any slope to avoid contact with a mower that may slip.
10. Operate at a speed that ensures control over unexpected hazards.
11. Wear work boots, leather gloves, spats, safety glasses, broad brim hat and apply sunscreen on high UV days as appropriate.
12. Assistants working with you must also wear hearing and eye protection.
13. Keep hands/fingers away from mover blades and moving parts.
14. Confine loose clothing and long hair.
15. Minimise stooping and bending when using equipment.
16. Turn mower off & remove spark plug lead to perform maintenance; clear grass clogs; and to clean down. Avoid touching hot surfaces.
17. NEVER leave a mower running and unattended.
18. NEVER run a mower in confined area. Beware of exhaust fumes.
19. Allow mower to cool before refuelling. Use only approved fuel containers. Do NOT decant fuel to unmarked containers.
20. Avoid all sources of ignition when refuelling.
21. Use only the recommended fuel for your mower.
22. Wash hands after handling fuel and oil.

23. Report all equipment faults and hazards to the supervisor.

Push Mower Safety:

BEFORE MOWING:

1. Review the instruction manual if you haven't used the mower for a while.
2. Be sure that all safety devices are in position and working -- rear shield, grass chute deflector, handle up stops (not on electric models), and "dead man control."
3. Wear close-fitting clothes, sturdy non-slip shoes, eye protection, and hearing protection.
4. Fill the fuel tank out of doors when engine is cold.
5. Wipe up any spills.
6. Do not smoke while fuelling the engine.
7. Adjust cutting height and blade condition—sharpen if necessary (engine must be shut off).
8. If your electric mower isn't labelled "double insulated" never plug into anything but a grounded 3-prong outlet. Use a ground fault interrupter (GFI) for maximum safety.
9. Pick up all debris in the lawn -- anything the mower could pick up and throw.
10. Be sure grass is dry before cutting, to prevent the operator from slipping.
11. Do not allow children or pets near the mowing area.
12. Never allow children to operate power mowers. Wait until they are physically and mentally mature enough to handle the job.

USING THE MOWER:

1. Start the mower outdoors near the area to be mowed.
2. Do not push a running mower over gravel, stones, or hard objects such as pipes, rocks, or pavements.
3. Push the mower forward -- do not pull it.
4. Mow across the slope so if you slip you are less likely to get your feet in the blade.
5. Keep electric cord out of the mowing path.
6. Keep hands and feet clear of the blade housing and the discharge chute.
7. Do not run with push powered mowers.
8. If using a push powered mower be careful to not overdo your work capacity especially on hot days.
9. Take frequent rest breaks especially if the operator is out of condition.
10. Point the discharge chute away from people, pets, buildings, windows, and glass doors.
11. Turn the mower off if you leave it for even a moment.
12. Disconnect the spark plug wire before working on the mower.

ROADSIDE MOWER – Safety Instructions:

Safety Instructions:



Rotary mowers have the inherent ability to throw debris considerable distances, as do flail mowers under certain conditions when knives are allowed to strike foreign objects. Operator caution must be taken or serious injury can result. Be sure bystanders are at a safe distance at all times.

Any ROPS (roll over protection structure) should not be drilled, welded on, or altered in any manner. Any alteration may reduce your protection.

Do not bypass the tractor neutral safety switch. Jumping or bypassing can cause tractor runaway.

Do not allow any persons on the equipment except the operator.

Loose clothing that can catch in moving parts should be avoided.

Use handholds and step-plates provided when mounting and dismounting to prevent injury.

Keep safety decals clean and replace illegible and damaged decals.

The P.T.O. shield should be in place at all times.

Extreme care should be taken when operating near loose objects such as gravel rocks and debris. These objects should be avoided.

Objects such as wire, cable, rope, chains, etc., can become entangled in the rotating parts of the head. These items could then swing outside the cutter head at greater velocities than the blades, creating an extremely dangerous condition. Inspect the cutting area for such objects prior to mowing. Never allow the cutter head to contact such items.

The rotating parts of this machine have been designed and tested for rugged use. However, these could fail upon impact with heavy solid objects such as steel guardrails, concrete abutments, etc., causing them to be thrown at very high velocities. Never allow the cutter head to contact such obstacles.

This machine is not grounded. Injury or death could result from allowing any part of this machine to contact any electrical device such as power lines, transformers, or streetlights. Identify and locate all such items prior to cutting in any area.

Take extreme care to maintain a safe working distance from any such devices. Never attempt to trim tree limbs away from power lines or telephone lines.

When the boom is moved in and out the balance of the tractor changes. Be extremely careful when operating the unit on slopes.

Inspect the unit daily for such things as leaky hoses, loose bolts, kinked hydraulic hoses, worn or broken parts, and pins are locked in. Discovering these problems ahead of time can save down time or operator injury.

The boom is designed only to position the cutter head, which is attached to it. Never attempt to lift, pull, or push other objects with it. Serious injury could result from a structural failure when the boom is used for purposes other than what it was designed.

Mower Operation

Once on location, lower the mower deck slightly above the material to be cut, so the mower does not have to start under a load. With tractor at an idle, engage mower. Bring tractor RPM up to 1800-2200 RPM and slowly lower deck to approximately 2 metres above ground level. This allows enough clearance for bottles, cans, mufflers, etc., to pass under blades. The mower skid shoes should not drag on the ground during cutting operations.

The rotary mower deck should always be carried rather than dragged on the skid shoes when mowing on the ground. Dragging the rotary mower deck increases the side loads on the boom, decreases the horsepower available to the cutter head, and reduces the ability of the accumulator to carry part of the weight of the boom during mowing operations.

The flail mower deck should be carried so that part of the deck weight is carried by the boom and part carried by the ground roller when moving on the ground. When the flail mower is carried this way, the ground roller follows the contour of the ground more easily during mowing operations.

To ensure a clean cut, engine speed should be maintained at approximately 1800-2200 RPM. If the tractor slows to less than 1800 RPM, shift to next lower gear. Do not ride the clutch this will cause premature clutch failure. The engine should not be operated at any time at more than 2,400 RPM on the tractor tachometer.

During mower operation, the hand throttle must be used to maintain engine speed at 1800-2200 RPM. This prevents radical changes in mower spindle speeds, reducing the possibility of cutter assembly damage.

The horizontal positioning action of the boom is designed to position the cutting head and provide a limited pressure relief when excessive pressure is applied to the boom. Do not force cutting head into heavy branches or stumps. Damage to the unit may result.

When the initial pass has been made, disengage mower and return mower back to travel position. Return to start and make the next pass, etc.

The mower will operate more efficiently in tougher conditions and with less power if the knives are kept sharp. If the mower begins to vibrate, stop the tractor, check for wire wrapped in the spindle or knives or damaged knives. When replacing knives, replace all knives with new knives to ensure proper balance so the mower will not vibrate. Severe vibration will result, if knives with unequal wear are used.

Begin a pass at the topside of the trees and work down with each consecutive pass. Use a low speed to allow the cutting blades time to mulch as well as cut the foliage.

Do not remove the trap door from the 50-inch cutter head. The blades rotate at velocities that make them invisible.

Never leave the tractor or allow bystanders to approach the unit until all motion stops completely.

If blades jam or stop, disengage clutch and swing boom back. Normally this will clear the cutter head. If not, shut off mower, turn off tractor, set parking brake, when all motion ceases, rest cutter head on the ground, leave the tractor, and clear cutting blades manually.

After the first day of operation, all bolts should be checked and tightened securely. This should be done periodically to ensure the bolts from becoming loose and causing damage to the tractor mower.

WALK-BEHIND ROTARY LAWN MOWERS – Safety Instructions

SAFETY INSTRUCTIONS:

This equipment can only be operated by a trained and authorised person. Equipment must NOT be altered or modified without authorisation.



CAUTION - Beware of contact with blade; flying objects and debris; mowing over debris and other objects; loud noise; UV hazards; and fire hazards caused by fuel.

Product Definition: Walk-behind rotary mowers are push or self-propelled cutting machines, either petrol or electric powered. Approximately 75 percent of walk-behind mowers are used to mow smaller lawns.

Standard Safety Feature:

Operator Presence Control (OPC) System every walk-behind rotary lawnmower should have an operator presence control system. The OPC insures that the blade comes to a complete stop within three seconds after the blade control is released.

Two types of OPC's may be used:

- Blade Brake Clutch (BBC) -- Blade stops within 3 seconds while engine continues to run.
- Zone System -- Blade and engine stop within 3 seconds.

Before Mowing:

Dress properly for the job, wearing substantial shoes, long pants and close-fitting clothes.

Clean up and clear out the area before you start mowing.

When using a petrol powered mower, fill your petrol tank while the engine is cold. Don't spill when you fill. If you need to refuel before completing a task, turn off the machine and allow the engine to cool. Never light a match or smoke around petrol.

Always start the mower outdoors.

Read the operator's manual to find out where controls are and what they do, and always check for additional safety instructions. Know how to stop the machine quickly. Do not remove or disable guards or other safety devices.

Operate Your Lawnmower Carefully:

Never mow wet grass. You may slip on wet grass, and your mower is more likely to clog.

Always turn off the engine and disconnect the spark plug wire, if accessible, before attempting to unclog or work on the mower. Then use a stick if possible to remove the clog. Avoid having your hands near the blade.

Always shut off the engine when adjusting the mower height.

Mow in sufficient daylight, looking a metre ahead for debris.

Always watch your footing on slopes. Mow across an incline and never mow an incline that is too steep for balance and control.

Never pull the mower towards you. Always push in a forward direction.

Keep the mower flat. Never lift the mower.

Always turn the mower off when crossing a sidewalk or drive.

Stop the mower immediately and turn it off if you hit an object. Inspect the machine and repair any damage before starting the machine.

When using an electric powered mower with a cord, always use recommended, grounded extension cords. Never use a cord that's cut or damaged. Mow away from the cord and always unplug immediately after use.

Keep Your Lawnmower In Peak Operating Condition:

Inspect the mower periodically for potential hazards:

1. Loose belts
2. Missing or damaged guards
3. Accumulations of grass, leaves or excessive grease to reduce fire hazard

Seek the professional advice and/or service of a qualified servicing dealer for problems.

Take your mower to an experienced servicing dealer every year for a safety and maintenance inspection!

Walk-behind Mower

Safe Operating Procedures

DO NOT use this machine unless have been inducted & trained in its safe use and operation.



PRE-OPERATIONAL SAFETY CHECKS

33. Wear proper clothing and Personal Protective Equipment (PPE).
34. Ensure mower is clean. Dirt, oil and debris contribute to fires.
35. Ensure all guards are fitted, secure and functional.
36. Ensure cutting blades are sharp, secure and in good condition. Damaged blades can cause a dangerous imbalance.
37. Repair or replace any loose, broken, missing or damaged parts.
38. Faulty equipment must not be used. Report suspect machinery immediately.

OPERATIONAL SAFETY CHECKS

54. Clear the area to be mowed of debris that may be thrown.
55. Be aware of the potential for ejected material and ensure that no person or animal is endangered when operating the mower.
56. Avoid mowing in wet conditions due to lack of traction.
57. Maintain a proper balance and secure footing when starting the mower.
58. Keep clear of moving machine parts.
59. Operate at a speed slow enough to keep control over unexpected hazards.
60. Mow in a forward direction.
61. When mowing on a slope, mow across the slope – this keeps a better distance between the operator and the mower in case of a slip.
62. Never leave the machine running unattended.
63. Always shut off the mower, remove spark plug lead and allow it to come to a complete standstill before adjusting or clearing grass clogs.
64. Allow the mower to cool before refuelling. Use only approved safety containers to store fuel.
65. Turn off fuel supply when mowing has concluded.

HOUSEKEEPING

1. Clean away any oil and debris from in and around engine and catcher parts.
2. Keep the work area or implement shed in a clean and tidy condition.

POTENTIAL HAZARDS

- Noise
- Rapidly rotating cutting blades
- Ejected material and flying debris

Date of last review _____

Signature _____

RIDING LAWN MOWERS & TRACTORS - Safety Instructions:



SAFETY INSTRUCTIONS:

Product Definition

Select the proper equipment for completing the task -- rear-engine riding mowers, front-engine lawn tractors and garden tractors are all designed to cut grass; however, the engine power, cutting widths, and other capabilities of these products are very different. Don't select a product that may be too small or unsuitable for the job. Ask your retailer/dealer for assistance.

Rear-engine riding mowers and front-engine lawn tractors are self-propelled riding vehicles generally designed for mowing larger lawns or in parks. Nearly 50% of rear-engine riding mowers are used for lawns 1/2 to 1 acre in size (about a quarter to half a hectare), while lawn tractors are generally used for larger areas. Although both may offer options such as sweeper attachments, they are not powerful enough to pull a plough.

Garden Tractors are designed to supply sufficient power for home lawn, garden and yard attachments: mouldboard ploughs, tillers, cultivators, sweepers, leaf mulchers, etc. Fifty percent of garden tractors are used for areas larger than a hectare (two & a half acres).

Look for the following safety features:

An operator presence control (OPC) system that shuts off the blades when the operator dismounts the machine or rises from the seat.

Interlocks to ensure the engine cannot start while the mower is in gear or the blade is engaged.

Before Operating:

Dress properly for the job, wearing substantial shoes, long pants and close-fitting clothes.

Clean up and clear out the area of people, especially children, and pets before you start mowing.

Fill your petrol tank only when the engine is cold. If you need to refuel before completing a job, turn off the machine and allow the engine to cool. Don't spill when you fill. Never light a match or smoke around petrol.

Read the operator's manual to find out where controls are and what they do, and always check for additional safety instructions. Know how to stop the machine quickly. Do not remove or disable guards or other safety devices.

Keep children out of the mowing area.

Operate riding mowers & tractors carefully

Always start the machine from the operator's seat. Never start the machine while standing beside the tractor.

Riding mowers and tractors are one-person machines. Operate from the drivers' seat only and never carry any passengers, especially children. Keep both feet on the machine at all times.

Take care not to throw a unit in gear accidentally and have it jerk ahead unexpectedly.

When operating the machine on unlevelled ground, use extreme care. Always mow up and down slopes -- never across. Avoid sudden starts, stops or turns.

Decrease your speed when going down slopes or around sharp corners to prevent tipping. Maintain minimum ground speed and make turns wide and gradual.

Protect hands when handling the blades and other items which might be sharp, contain nicks or have metal burrs on the edges.

Never jump off the machine or dismount from moving equipment. Observe proper shutdown procedures before dismounting.

Keep your mower/tractor in peak operating condition

Inspect the mower/tractor periodically for potential hazards:

1. Loose belts
2. Missing or damaged guards
3. Accumulations of grass, leaves or excessive grease to reduce fire hazard

Seek the professional advice and/or service of a qualified servicing dealer for problems.

Take your riding mower or tractor to an experienced servicing dealer every year for a safety and maintenance inspection!

All moving machinery parts, capable of causing injury are to be guarded to prevent injury. Any person using equipment fitted with safety guarding is to inspect it before use, before using the equipment and follow safe operating procedures.

Plant and equipment operators

Operators have a responsibility to ensure plant and equipment is operated correctly and in accordance with the specifications and safe operating procedures. Supervisors / managers are also to ensure that the operators have the required safe operating procedure, training, licences, permits and certificates to operate the plant or equipment assigned to them.

Defect procedures

If a defect or problem is encountered with an item of plant or equipment on site, it is to be dealt with in accordance with the following:

- a) If a minor defect is observed which can be rectified by the operator or supervisor, for example blown light globes, this is to be undertaken as soon as possible and noted in the POR.
- b) If a defect does not require urgent attention but needs to be undertaken by the mechanical workshop the details are to be recorded in the POR and communicated to the workshop.
- c) If a major defect is observed, a Danger or Out of Service Tag is to be immediately placed on the plant or equipment by the supervisor. All details relating to the defect and repairs undertaken are to be recorded on the POR and the Danger/Out of Service tags are NOT to be removed until the necessary repair work has been completed and is signed off by the competent mechanic or co-ordinator.
- d) When defects are identified on office based plant or Community Services hire plant through routine inspection or usage, an Out of service Tag is to be immediately placed on the plant or equipment by the supervisor. Arrangements are to be made to have the defect rectified before the tag can be removed by the qualified repairer.
- e) Breakdown situation:
 - Call workshop with problem and plant location
 - Workshop to assess problem and parts needed
 - Workshop to rectify problem
 - Workshop to carry out work order and complete history.
- f) Removal of out of service tags
 - Workshop or qualified repairer to remove tag when repair is completed and item back into service.
 - Only workshop staff or qualified repairer to remove tag- not operator.

The following are examples of major defects in the operation of plant and equipment:

- a) Defective neutral start switch;
- b) Defective service, park or emergency brakes;
- c) Defective seat belt or absence of a seat belt when ROPS is fitted;

- d) Inoperative or inaudible reverse/ travel alarm;
- e) Mechanical lock pin not available or not fitted to the quick hitch;
- f) Machinery guards not fitted;
- g) No manual transmission lock;
- h) Dangerous suspension, steering or tyres;
- i) Any other conditions which could impair the safe operation of the plant.

If a defect or problem is detected on an item of hired plant, the contractor is to be immediately advised and actions taken to have the defect rectified. Where necessary, the item is to be stood down and/or removed from the site until the repairs have been carried out.

See the informative & relevant article [Ride-On Lawnmowers - The hazards of overturning](#)
By Melvin L. Myers,

Download your own copy from this link:

www.asse.org/professionalsafety/pastissues/054/05/F4Myers_0509.pdf

Ride-on Mower (SOP)

Safe Operating Procedures

DO NOT use this machine unless have been inducted & trained in its safe use and operation.



PRE-OPERATIONAL SAFETY CHECKS

39. Ensure all safety devices, guards, switches, and shields are fitted, secure and functional.
40. Ensure that seat belt, if fitted, is in sound condition.
41. Ensure cutting blades are secure and in good condition.
42. Ensure that any pneumatic and hydraulic mechanisms are in sound condition.
43. Ensure that all electrical switches (including dead mans switch if fitted) are functioning.
44. Faulty equipment must not be used. Report suspect machinery immediately.

OPERATIONAL SAFETY CHECKS

66. Never carry passengers.
67. Be sure the transmission is out of gear and the mower blade clutch disengaged before starting.
68. Keep clear of moving machine parts.
69. Drive at speed slow enough to keep control over unexpected hazards.
70. Travel up/down slopes rather than across taking extra care when ascending/descending steep slopes. Use 150 as the maximum to attempt to mow.
71. Take extreme caution when refuelling to prevent spilling fuel onto hot engine or exhaust.
72. Before making adjustments bring the machine to a complete standstill and isolate.
73. Be aware of the potential for ejected material and ensure that no person or animal is endangered when operating the equipment.

STOPPING THE RIDE ON MOWER

1. Park on even ground.
2. Stop the ride on mower and shift the gear selector to park position.
3. Raise and secure the cutting blades.
4. Lock the parking brake.
5. Stop the engine and remove the keys.

HOUSEKEEPING

3. Clean away any foreign material and debris from in and around engine and catcher parts.
4. Keep the work area or implement shed in a clean and tidy condition.

POTENTIAL HAZARDS

- | | | |
|-----------------------------------|---------|--------------------------------------|
| ■ Rapidly rotating cutting blades | ■ Noise | ■ Ejected material and flying debris |
| ■ Eye injuries | | |

Date of last review _____

Signature _____

Loading & Unloading Ride-on Mowers from a Trailer (SOP)



DO NOT OPERATE THIS MACHINERY UNLESS YOU HAVE RECEIVED INSTRUCTION AND SIGNED AN ACKNOWLEDGEMENT FOR ITS SAFE USE & OPERATION

Before Loading:

1. Ensure trailer is connected to vehicle and lock down clip is in place.
2. Conduct and record a pre-start check on ride-on mowers, trailer, vehicle & restraints.
3. Check compatibility of ride-on mower to trailer considering width, length and tie down points.
4. 4 Select a site to load/unload free of hazards such as uneven ground and powerlines.
5. PPE required – Safety Boots, hearing protection, safety glasses, Hi-Visibility clothing.



Loading:

5. Unlock hydraulic locking device on front of trailer if applicable.
6. Placement of ride-on mower on trailer to be predetermined by operator.
7. Three points of contact for operator whilst entering ride-on mower.
8. Operator to wear and fasten seat belt, start engine & commence reversing onto trailer with offside, if present, well clear of trailer & mower.
9. When mower is positioned on trailer, apply parking brake, turn hydraulic handle & secure locking device.
10. Operator to dismount mower and exit trailer safely using 3 points of contact.
11. Secure mower to trailer using designated hold down points on trailer & mower.

Unloading:

1. Remove load restraint gear from mower & trailer and unlock hydraulic locking device.
2. Operator to access mower with three points of contact.
3. Operator to wear and fasten seat belt, start mower, disengage parking brake & drive off trailer.

Operate & Maintain Ride-on Mower or Small Tractor (SWMS)



Site Specific Risk Assessment and Site Induction: At every place of work, the on-site supervisor shall conduct a risk assessment, including traffic hazard assessment, and record, on a Site Specific Checklist, any hazards/risks not listed below. The on-site supervisor shall inform any staff under his control of the hazards at that place of work. If a TCP is required, both standard and modified TCPs used must be documented. Revision Date: 01/01/2013

Description of Activity:	TASK?:	Work site:	WHERE?:
	Operate & Maintain Ride on Mower or Small Tractor		
Critical Steps in this Activity:	Potential Hazards:	Risk Level Assessment	Safety Controls & Mitigation:
Definitions: 1. SWMS: Safe Work Method Statement 2. SWP: Safe Work Procedure 3. TCP: Traffic Control Plan 4. TC: Traffic Control 5. VMP: Vehicle Movement Plan 6. MSDS: Material Safety Data Sheet 7. OHS: Occupational Health and Safety 8. RTA: Roads and Transport Authority 9. AS: Australian Standard E: Extreme; H: High; M: Medium; L: Low			•
1. Conduct risk assessment and induct staff, if necessary	Persons entering/exiting vehicles	Muscle sprain (limbs or torso) Broken ankle MEDIUM	<ul style="list-style-type: none"> • '3 point' technique, back out while exiting, check for uneven ground
2. Establish traffic control using an approved Traffic Control Plan, if necessary	Uneven or slippery/wet grass/Ground	Muscle sprain (limbs or torso) Broken bones Cuts & Abrasion MEDIUM	<ul style="list-style-type: none"> • Inspect work area for appropriate foot placement and vehicle access. Don't walk where you can't see a firm surface e.g. long grass • Don't drive onto soft or slippery ground. • In wet conditions plant should not operate on slopes steeper than 3:1 (horizontal to vertical). • In wet conditions personnel using hand held tools and push mowers should not work on slopes greater than 2:1 (horizontal to vertical) • Personnel should not operate plant or vehicle on wet grass within five meters of obstructions, fixtures or other people in case of uncontrolled slipping and in such conditions vehicles and plant items should be driven at less than 5 KPH. Operators are to make allowances for the increased stopping times and distances that may be involved

3. Perform Plant pre Operation Checklist,(service a appropriate intervals)			•
4. Mow areas specified in schedules and to agreed standards for the particular location			• •
5. Clear equipment of any noxious weed seeds, if necessary			•
6. Unload Mower from Trailer, if necessary		Death or serious injury HIGH	• Follow the procedures set out in 2013 WHS SWMS Loading & Unloading Ride On Mowers from Trailer.doc
	Moving Traffic or Plant	Death or serious injury HIGH	• Record TCPs as per attached SWP • Implement approved or modified TCP • If necessary, implement VMP • Use only trained traffic controllers
	Inappropriate Manual Handling	Muscle sprain (limbs or torso) MEDIUM	• Undertake training in proper manual handling techniques • Task rotation, muscle stretching exercises, use correct equipment
	Equipment Malfunction or misuse	Muscle sprain (limbs or torso) Cuts and abrasions or Entrapment MEDIUM	• Undertake pre-use checks, all operations and maintenance in accordance with manufacturer's recommendations and other safety procedures
	Flying Objects or Materials including dust, sticks, rocks & cut grass	Eye damage, Cuts, Bruising, Respiratory HIGH	• Ensure guards in place • Wear safety glasses or goggles to AS/NZS 1337.1:2010 Personal eye protection - Eye and face protectors for occupational applications standards • Wear safety boots to AS/NZS 2210.1:1994 Occupational protective footwear - Guide to selection, care and use • Check for bystanders • Use dust suppressant
	Hazardous substances	Skin rash, Eye damage Respiratory problems Dust LOW	• Limit skin contact by wearing gloves to AS/NZS 2161.1:2000 – Occupational protective gloves standard • Use in well-ventilated areas i.e. outdoors • Refer to MSDS • Wear goggles or disposable dusk mask •
	Excessive Exposure to UV (sun burn)	Sunburn Skin cancer LOW	• Wear appropriate PPE such as hats and clothing • Regularly apply 30+ sunscreen to all exposed areas of skin
	Proximity to overhead Power lines	Electrocution HIGH	• Must be more than 3M from overhead power lines up to 132kV

			<ul style="list-style-type: none"> • must be more than 6M from high voltage transmission lines from 132-330kV • Must be more than 8M from lines over 330kV • Under special circumstances, distances less than those listed above apply. These distances may be applied ONLY when the special requirements are met • When an operator has the appropriate training, a trained observer is present, and the owner of the power lines has been contacted and permission obtained, the distances can be reduced to as little as one metre • In emergency circumstances, the owner of the power lines can be contacted within 24 hours of the incident
	Excessive exposure to loud noise	Loss of hearing LOW	<ul style="list-style-type: none"> • Wear approved ear muffs or ear plugs to AS/NZS 1269.3:2005 Occupational noise management - Hearing protector program standards
	Build up of grass around pulleys & motor (during work)	Over heating of engine or possibility of fire HIGH	<ul style="list-style-type: none"> • When finished daily use & after the mower has shut down and cooled down cutting deck covers are to be removed from around all belts and pulleys and the mower is to be washed clean (Refer to operators manual for instructions)
	People/Pedestrians'/Park users	Excessive Noise Flying debris from mower MEDIUM	<ul style="list-style-type: none"> • Ensure operator is in safe working distance from all park users, pedestrians' and work colleges Continued observation required until completion of onsite mowing duties
	Potentially Contaminated Sites	Exposure to contaminants HI	<ul style="list-style-type: none"> • Wear disposable overalls • PPE Mask • Attend relevant training
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Work Sequence No:	Plant Items to be used:	Training & Qualifications Needed & by Whom:	Codes of Practice, Procedures, Other References:
1. Conduct risk assessment and induct staff, if necessary.	Tractor Slasher Reach, Ride-on or Push Mower Whipper Snipper	Risk Assessment by on-site supervisor	<ul style="list-style-type: none"> • WHS Manual • Code of Practice • Risk Assessment (2001) • SCC Site Specific • Checklist and TC Record • Mobile plant & Equipment • Safety On Slopes • Class C drivers license or higher depending on the weight of the plant item. •
2. Establish traffic control using an approved Traffic Control Plan, if necessary	Tractor Slasher Reach Mower Ride-on Mower Push Mower Whipper Snipper	Traffic control set up (Level 2 and 3) by a least one qualified crew member	<ul style="list-style-type: none"> • RTA qualification by one crew member • Traffic controller (blue red) to control traffic • Apply traffic control Plans • (yellow card) to set up and break down signage • RTA 'Traffic Control at Work Sites' manual • WHS Manual
3. Perform daily plant pre-operation checklist. (service at appropriate intervals)	Tractor Slasher Reach Mower Ride-on Mower Push Mower Whipper Snipper	Plant operation techniques	<ul style="list-style-type: none"> • WorkCover Construction Induction qualification • Manufacturer's operations manual for plant • Maintenance specifications
4. Slash areas specified in schedules and to agreed standards for the particular location	Tractor Slasher Reach Mower Ride-on Mower Push Mower Whipper Snipper	Plant operation techniques	<ul style="list-style-type: none"> • WorkCover Construction Induction qualification • Class C drivers license or higher depending on the weight of the plant item. • Manufacturer's operations manual for plant
5. Clear equipment of any noxious weed seeds, if necessary		Manual handling techniques for shoveling, etc	<ul style="list-style-type: none"> • WHS Manual • Code Of Practice for Manual Handling
			•
			•

Roles & Responsibilities:			
1. Managers are to ensure there is a robust safety management system of work in place.			
2. Supervisors are to ensure that affected person(s) are instructed in this Safe Work Method Statement, and any other relevant SWMS or SWPs or SOP or Safety Guide (SG) identified for work areas or activities			
3. Person(s) are to comply with this Safe Work Method Statement and notify their supervisor of any deviation from this SWMS, or if they don't understand this or other SWMS/SWP/SOP/SG/JRA or JSA's.			
4. It is the responsibility of the on-site supervisor to ensure that all safety and operational guidelines and SWMS are followed and the relevant forms and permits are completed before any work commences at the worksite.			
5. All workers are to follow the Authority, Responsibility and Accountabilities statement for their nominated level within the organisation.			
SPECIAL NOTES: <ul style="list-style-type: none"> ✓ WHEN MOWING/SLASHING COMPLETED, SWITCH OFF MACHINERY AND REMOVE KEY ✓ CLEAN UP SITE, LEAVE CLEAN AND TIDY ✓ PACK UP AND LOAD TOOLS AND EQUIPMENT ONTO TRUCK ✓ NOTIFY CLIENT JOB HAS BEEN COMPLETED <p style="margin-top: 20px;">✗ Never slash dry grass or vegetation on hot windy days nor on a Total Fire Ban Day as this may cause a wild fire, death, property damage & you possible very heavy fines & imprisonment.</p> <p>Your duties & Responsibilities:</p> <ul style="list-style-type: none"> ✓ To ensure the safety of co-workers and the general public. ✓ To report all incidents and near misses to team leaders. ✓ Ensure equipment is in a safe working order. ✓ Perform regular safety checks of equipment. 			

TASK:

Job Safety Analysis Training & Induction Register

Name of Participant	Provided by	Date	Signature
Add more rows as needed			

Safe Work Procedure: Recording Use of Traffic Control Plans (TCPs)

Safe Work Procedure:

When to use standard, modified or new TCPs?

1. A site specific risk assessment must be undertaken before work starts. This includes checking that an appropriate TCP is available for the existing site conditions.
2. A standard TCP is a numbered TCP from the Traffic Control at Work Sites (TCAWS) manual or a site specific TCP which has been designed and approved by a qualified person.
3. Only minor modifications may be made to standard TCPs of the TCAWS manual; this implies that suitably qualified personnel must hold the red or orange card qualification.
4. Where standard TCPs cannot be modified to suit site conditions, major modifications and/or new TCPs will be required. Only persons who have attained the Design and Inspect Traffic Control Plans Certificate are able to design new TCPs or make major modifications to standard TCPs.

Recording of TCPs

12. A record must be made of all TCPs used at each work site. This record must be available at the work site for verification and/or inspecting and must include a hard copy of any standard TCPs used.
13. If no modifications or changes are made to a standard TCP, then its number only may be recorded on site specific documentation as evidence of the actual arrangement of traffic control devices.
14. Where any standard TCP is modified for a site, the modifications or changes to the TCP must be recorded diagrammatically by the, designated persons holding red or orange traffic control qualifications.
15. Modified TCPs must be recorded diagrammatically on one of the following documents:
 - a. "Site Specific Risk Assessment Checklist and Traffic Control Record" or
 - b. the back of the City Services "Site Specific Risk Assessment (Multiple Work Sites)" form or
 - c. "The Traffic Control Risk Assessment" form
 - d. Any site specific documentation which allows a risk assessment to be recorded e.g. various construction or contractor documentation.
 - e. On photocopies of the standard TCP and then attached to one of the documents above.
16. Standard TCPs do not need to be fully re-drawn but any modifications must be able to be related to the TCP by location, distance or some other reference points.
17. Should power lines / service lines be on site, traffic cones are to be placed 3 metres either side of lines on both sides of the road.
18. If tipping, an observer is to be placed at traffic cones so trucks do not enter the 3 metre zone.
19. A TCP shall be required when cutting/felling trees that are going to fall within a distance of twice the height/length of the tree from the road.

MAINTENANCE RECORD – EQUIPMENT / MACHINERY (FORM)



Date	Regular servicing as per Maintenance Checklist / Major or Minor repairs	Maintenance performed by Company / Business / Individual	Time Taken	Cost	Tag-out (If Required)	Tag Removed & Checked by

QLD WHS legislation 2011 obligates PCBU's and business Officers to exercise a Duty of Care and Due Diligence for the safety of their workers and others (maintenance contractors, sub-contractors, visitors & members of the public). This **non-transferable obligation** includes the safe use of plant & equipment and also requires that workers are to be properly trained and provided with safety information and adequate instruction on safe work practices, operating procedures & maintenance procedures - particularly for potentially dangerous equipment. To be able to prove, if necessary to a safety inspector or in court, your awareness of the need for safety is at a high level requires documentation. Keep this form and your other safety related forms up to date and complete.

The checks below are recommended for equipment prior to or during a unit of work where the equipment will undergo moderate to heavy use.

RANDOM EQUIPMENT CHECKS	Date Signature	/	/	/	/	Follow-up Actions
		Tick or comment ✓	Tick or comment ✓	Tick or comment ✓	Tick or comment ✓	
Visual check of Electrical Switches and dead man switch are functioning etc.						
Visually check All Guards are secure and operate correctly (Check latches/locks and interlocks if fitted).						
Visually check hydraulic or pneumatic systems are functional and that any V belts or gear mechanism are guarded if fitted.						
Verify that the engine , gears, fuel and lubricating systems are as per manufacture's specifications.						
Ensure that the catcher if fitted is secure and functions correctly.						
Check availability and condition of Personal Protective Equipment and that the seat belt is in good condition and functions correctly.						
Conduct visual check for damage to Switch Gear (Cracks, broken Push Buttons etc.) Arrange for immediate repair of any faults						
Lubricate lightly according to manufacturer's specification						
Clear away excessive build up of dirt, grass any oil from in and around the guards, engine components or cutting blades etc.						
Check that the catcher is functional and that latches and securing mechanism are in sound condition.						
Other:						
Other:						
Other:						
Other:						
Other:						

				ANNUAL CHECK	
				Date	/
				Tick or comment	
END OF WEEK or MONTH CHECKS (by amount of use)	Date	/ /	/ /	Follow-up Actions	
	Signature				
	Tick or comment ✓	Tick or comment ✓			
Conduct visual check for damage to Switch Gear (Cracks, broken Push Buttons etc.) Arrange for immediate repair of any faults					Review Safety Operating Procedure and update if necessary
Lubricate lightly according to manufacturer's specification					Check seat belt and dead man seat switch are in good sound condition if fitted.
Clear away excessive build up of dirt, grass any oil from in and around the guards, engine components or cutting blades etc					Check that the muffler is in sound condition if not replace
Check that the catcher is functional and that latches and securing mechanism are in sound condition.					Check that the catcher is in sound condition if damaged repair or replace.
Check lubricate and service the ride on mower to manufacturer's specifications.					Other:
Check, pneumatic and hydraulic systems if fitted - Adjust if necessary or service.					Other:
Check that the seat belts and dead man switch if fitted functions and are in good order.					Other:
Check the condition of muffler , and spark plug and replace if damaged.					Follow-up:
Other:					
Other:					
Other:					
Other:					
Other:					
Other:					

Job Safety Analysis (JSA) Work Sheet

Date:		Division:		Reference No:	
Location:		Procedure/Task/Plant/Event Assessed:			
Functional/Operational Unit:		JSA Team Members			
Task Step	Hazard	Current control	Current control effective? Y/N	Risk Level	Proposed control
JSA Reported to:		Date Reported:			

To be Completed by Manager/Supervisor

Control proposed by JSA Team approved for implementation	Signature	Date / /
JSA registered for a formal risk assessment	Signature	Date / /