

## Operator's Manual

MANSLASH - REV J 26/10/07

# Rotary Slasher Range | 3PL Slashers | Vineyard Slashers | Pasture Toppers



**SAFETY WARNING:** 

PLEASE READ THIS MANUAL THOROUGHLY BEFORE ATTACHING OR OPERATING THE SLASHER.

#### SILVAN AUSTRALIA PTY. LTD.

ABN 48 099 851 144

## **VICTORIA (HEAD OFFICE)**

#### **NEW ZEALAND**

Telephone: +61 (03) 9887 2788 FREECALL 0508 SILVAN (0508 745 826)

Facsimile: +61 (03) 9887 1035

www.silvanaust.com www.silvannz.co.nz

No liability can be accepted for any inaccuracies or omissions in this publication, although due care has been taken to make it as complete and accurate as possible.

The information, illustrations and technical data were considered to be correct at the time of preparation.

In accordance with our policy of continuous development Silvan Australia Pty. Ltd. reserves the right to make changes at any time without notice.

	YOUR ROTARY SLASHER DETAILS					
Record the details of your Rotary Slasher here for future reference when discussing service with your Silvan dealer, ordering service parts or making a warranty claim.						
MODEL						
SERIAL NO.	·					
ATTACHMENTS						
DATE OF DELIVERY						
SELLING DEALER						
ADDRESS						
TELEPHONE NO.						
INSTALLED BY						



## Introduction

Silvan Australia Pty. Ltd. is an Australian owned company specialising in the supply of equipment to primary producers. A leader in the design of agricultural sprayers and associated equipment, the company was established in 1962 and has grown to become the largest manufacturer and supplier of crop protection equipment in Australia.

At Silvan we are extremely proud of our reputation for quality products backed by quality service. Your investment in a Silvan product is an investment in quality.

This manual covers all models of Silvan rotary slashers, vineyard slashers and pasture toppers including those listed below.

9			<b>Cutting Widths (Metres)</b>
3 Point Linkage	General Purpose and Medium Duty	40HP	0.85 to 1.47
	Heavy Duty Heavy Duty	75HP 100HP	1.47 to 2.01 1.47 to 2.01
	Field Boss	75HP	1.47 to 1.75
	Contracting Contracting Contracting & Shireboss	75HP 100HP 130HP	1.82 to 2.12 1.82 to 2.12 1.82 to 2.12
	Side and rear discharge	75HP	1.75
	Vineyard	75HP	1.82 to 2.30
	Pasture Topper - Twin 60HP Pasture Topper - Twin 75HP		2.40 to 3.00 2.40 to 3.60

Silvan rotary slashers are designed and manufactured to provide a high standard of performance and safety. To ensure continued safe and efficient operation of your slasher, you need to read this manual thoroughly and fully familiarise yourself with all aspects of the machine's operation, maintenance and safety procedures.

Now that you are a proud Silvan owner, all our services and dealer support is available to you should you need them. We assure you of our best attention at all times.

PLEASE NOTE: Because of the machine's configuration and method of operation, particularly the rotating blades, rotating driveline and resultant debris ejection, all slashers are inherently dangerous. For this reason, pay particular attention to the safety instructions contained within this manual.



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## **About Your Warranty**

Silvan Australia Pty. Ltd. builds equipment to a high level of specification using components from quality suppliers. The following information is provided to assist you with any repairs required within the warranty period.

- All warranty repairs on Silvan products are carried out by Silvan dealers. If any warranty repairs are required on Silvan products, it is recommended that the product be returned to the place of purchase.
- It is good practice to keep a record of equipment maintenance both during and after the warranty period.

The following information on warranty coverage explains the extent and limitations of your Warranty coverage on Silvan Products.

# Warranty

This warranty is the only warranty applicable to Silvan new products ('Products') and, to the maximum extent permitted by law, is expressly in lieu of any other conditions or warranties expressed or implied in relation to the Products.

Subject only to legislative obligations to the contrary, Silvan shall not be liable for incidental or consequential damage resulting from ownership or use of a Product.

Silvan does not authorize any person to create for it any other obligation or liability in connection with these products.

Silvan warrants its authorised Dealer, who in turn warrants the original purchaser (owner) of each new Silvan product that it will repair or replace the product, or, pay the cost of repair or replacement, as determined by Silvan without charge for labour or any defective or malfunctioning parts in accordance with the warranty limitations and adjustment schedule below.

The warranty period begins on the date the product is delivered to the first retail purchaser for a period of 12 months

## This Warranty Covers

Only conditions resulting directly from defects in workmanship or material under normal use and service.

## Warranty Exclusions

The Warranty does not cover:

- Conditions resulting from misuse, use of incompatible chemicals, exceeding machine specifications including overloading, impact damage, negligence, accidental damage or failure to perform recommended maintenance services.
- Any product which has been repaired by other than an authorised Silvan service outlet in a
  way which, in the sole and absolute judgement of Silvan, adversely affect its performance or
  reliability.
- The replacement of maintenance items such as diaphragms, batteries, V belts and ground engaging components, etc.
- Loss of time, inconvenience, loss of use of the product liability to third parties or any other consequential damages.
- Incidental costs associated with a warranty repair including any travel costs, out of hour's labour charges, cleaning costs, transportation costs, freight costs or any communication costs

The repair of a defective product qualifying under this warranty will be performed by any authorised Silvan service outlet within a reasonable time following the delivery of the product, at the cost of the owner, to the service outlet's place of business. The product will be repaired or replaced, using new parts supplied by Silvan. Silvan, in its absolute discretion, may choose to pay the cost of replacement or repair of the product.

The owner is responsible for the performance of regular maintenance services as specified in the Owner/Operator Manual applicable to the product. Failure to carry out regular maintenance may invalidate warranty



## Safety Information



## Before operating the slasher read the following safety instructions. Failure to comply with these warnings may result in serious injury or death.

Whilst your Silvan slasher has been designed and manufactured to incorporate all necessary safety features it is <u>absolutely essential</u> that any person who operates or works on the machine is aware of the safety precautions that should be exercised.

- ▲ Silvan rotary slashers are designed and manufactured solely for the purpose of grass or brush cutting. <u>Under no circumstances</u> <u>should they be used for any other purpose</u>.
- ▲ Do not operate the slasher with people or animals in the vicinity where they could be caught in the driveline mechanism or struck by objects flying from the slasher blades. Keep onlookers at least 10 metres from the slasher whilst in operation. Keep hands and feet completely clear of the slasher deck and rotating blades at all times. NOTE: The blades may continue to rotate after PTO driveshaft has stopped. Ensure that you wear appropriate clothing including steel cap boots.
- ▲ Before using the slasher carefully read and ensure you understand the contents of this manual and the contents of the operators manual for the associated tractor, including all relevant safety instructions.
- ▲ Before operating the slasher read all the safety warnings which are carried on the machine. Refer to the next page for the location and the wording of these warnings.
- ▲ Never allow an inadequately trained person to attach or operate the slasher.
- ▲ Front and rear projectile guards should be used particularly when operating in any public area such as roadsides or parkland or in the vicinity of buildings. Projectile guards substantially limit material being thrown from the blades and if not already fitted to the slasher, are readily available as after market equipment for all Silvan slashers.
- ▲ Do not operate the slasher whilst wearing loose clothing, unrestrained long hair, jewellery or anything which could become entangled in rotating components or limit your vision.
- ▲ Only operate the slasher on a tractor fitted with a roll-over protective structure (ROPS), or a cab incorporating a ROPS, complying with AS1636 or equivalent.

- ▲ Wear ear protection complying to AS1270 when operating the slasher on a tractor that is not fitted with a sound proofed cabin.
- ▲ Ensure the PTO power and 3 point linkage lifting capacity or drawbar rating of the tractor matches the requirements of the slasher see Specifications section. Refer to the tractor operator's manual for safe working loads, including any counter-weighting that may be required to balance the weight of the slasher.
- ▲ <u>Do not operate the slasher without all the</u> tractor and slasher safety shields in place.
- ▲ Before operating the slasher inspect the area to be cut to ensure that you are familiar with the ground conditions and in particular any obstacles that may be partially hidden.
- ▲ Exercise extreme care when operating in hilly or uneven terrain. Allow for the effect that the slasher weight has on the tractor's stability. Refer also to the tractor operating and safety instructions.
- ▲ If working under rough conditions with a linkage slasher fitted with a rigid headstock, particularly where rocks or stumps may be present, the top link of the tractor linkage may be replaced with a chain to allow the slasher to lift at the rear without lifting the front.
- ▲ Before dismounting from the tractor, or allowing any person to approach the slasher, disengage the PTO, switch off the engine, apply the parking brake and ensure the slasher blades have stopped rotating.
- ▲ Ensure the tractor engine is switched off and the parking brake is applied before performing any inspection or maintenance on the slasher. If it is necessary to raise the slasher for such work ensure it is properly supported with stands. Do not rely on the tractor hydraulics for support.
- ▲ Never allow any person to ride on the slasher or the tractor when the slasher is attached.
- Relieve all hydraulic pressure before disconnecting hoses. Oil escaping under pressure can penetrate the skin, causing serious injury. Seek medical advice immediately if injured by escaping oil.

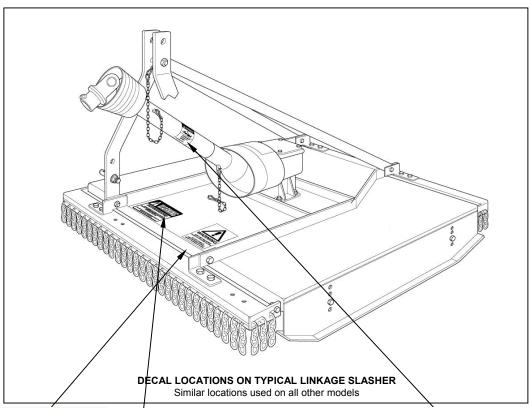


## Safety Information

## **Locations of Safety Warnings**

The following safety warning decals are fitted to all Silvan slashers. The diagram below shows the typical locations and the wording of these decals.

It is important that all operators read and follow the information given on all safety decals. They should be kept clean and legible at all times. If any are missing or unreadable they should be replaced by ordering new decals from your Silvan dealer.





**DEC 94** 





**CODE:** 399 14100

- Check Gear Box Oil (Recommended Gear Oil SAE 85/140)
   Lubricate Driveshaft
- Tighten Nuts And Bolts

**DEC 128A** 



## **Specifications**

#### **Cutting Width and Weight**

HP figures below apply to gearbox ratings, the tractor power required varies with cutting conditions.

#### 3 Point Linkage Models

			3'	3'6"	4'	4'6"	5'	6'	6'6"	7'	7'6"
General Purpose 40HP Cut (m)			1.01	1.16	1.35						
		Weight (kg)		162	180	203					
Medium Duty		Cut (m)	0.98	1.01	1.16	1.35	1.47				
5 .	==	Weight (kg)	144	164	196	228	258	. =0			
Heavy Duty	75HP	Cut (m)					1.47	1.72		2.01	
5 /	400115	Weight (kg)					372	467		572	
Heavy Duty	100HP	Cut (m)					1.47	1.72		2.01	
		Weight (kg)					376	471		576	
Field Boss	75HP	Cut (m)					1.47	1.72			
		Weight (kg)					315	418			
Shire Boss	130HP	Cut (m)						1.82		2.12	
		Weight (kg)						648		790	
Contracting	75HP	Cut (m)						1.82		2.12	
		Weight (kg)						575		641	
Contracting	100HP	Cut (m)						1.82		2.12	
		Weight (kg)						600		671	
Contracting	130HP	Cut (m)						1.82		2.12	
		Weight (kg)									
Side and rear	75HP	Cut (m)						1.72			
Discharge		Weight (kg)						482			
Vineyard		Cut (m)						1.75	1.94	2.1	2.3
- 7		Weight (kg)						480	518	556	561
		3 ( 0)									

**General Specifications -** Variations may apply depending upon model.

## **Cutting Platform, Skids and Sideplates**

Welded steel top plate

Welded steel sideplates with integral skids Height adjustable skids

## **Three Point Linkage – Mounted Models**

Category 1 - all general purpose and medium duty slashers.

Category 2 - all other.

Central and / or Offset, Rigid or Collapsible headstock depending upon model.

#### **Driveline and Gearbox**

Fully shielded 540 rpm PTO Driveshaft with multi-plate spring loaded friction clutch Nodular cast iron gearbox Heat treated steel bevel gears Tapered roller bearings, alloy steel shafts Oil bath lubrication SAE 80-140 gear oil

#### Rotor

Twin bar rotor with taper splined hub All models except Contractor, Shireboss, Vineyard and Field Boss - Welded mild steel Contractor, Shireboss, Vineyard and Fieldboss - Bolted spring steel

#### **Blades**

Heat-treated Boron steel

Stepped profile – all models except Contractor & Shireboss

Contractor & Shireboss -Twisted edge for uplifting grass

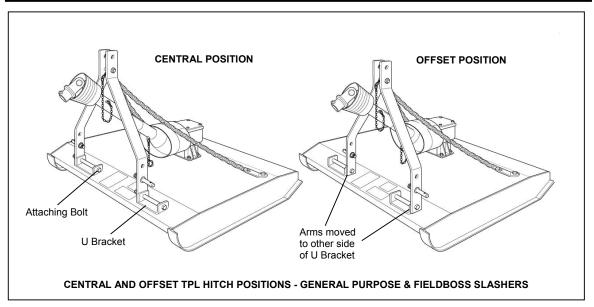
Hardened steel blade bush

Blade Attachment - Hexagon head bolt, nut and spring washer

#### **Contractor & Shireboss Models**

Rear corners removed for extra manoeuvrability Collapsible (chain) linkage 'A' frame Fully replaceable front and rear chain guards High clearance Spring steel rotor





## TPL Hitch Position General Purpose, Medium Duty and Fieldboss Slashers

These slashers can be operated in a central or offset position by attaching the three point linkage (TPL) hitch in the appropriate position.

### 1. General Purpose & Fieldboss Slashers

On General Purpose models, the TPL hitch frame is connected by one bolt on each arm, which passes through a 'U' shaped bracket on the slasher deck.

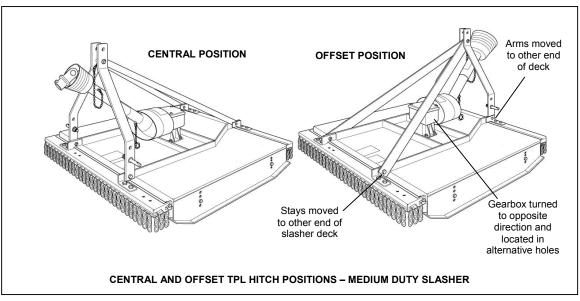
To change between the central and offset position undo and remove the bolt and nut connecting each arm to the 'U' brackets. Reposition the arms at either the right or left outer end of the 'U' bracket and re-install the bolt and tighten securely.

## 2. Medium Duty Slasher

On the Medium Duty slasher changing between the central and offset positions is achieved by reversing the slasher deck and attaching the TPL hitch arms and support stays to the opposite end of the deck.

The gearbox also has to be removed and reinstalled facing in the opposite direction so that the output shaft faces the tractor PTO stub shaft. The deck has two sets of gearbox mounting holes to suit either the central or offset position.

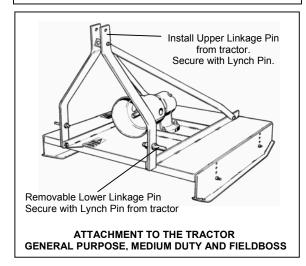
After re-installing the components ensure that all hardware is securely tightened.







IMPORTANT - Check the oil level in the gearbox before operation. Slashers are shipped to the dealer without oil in the gearbox.



## Attaching to the Tractor - Linkage Models 1. General Purpose and Medium Duty Slashers

General purpose and medium duty slashers use Category 1 lower linkage pins that are fastened by a hexagon nut. The upper linkage pin of the tractor and three Lynch pins are required to complete the installation.

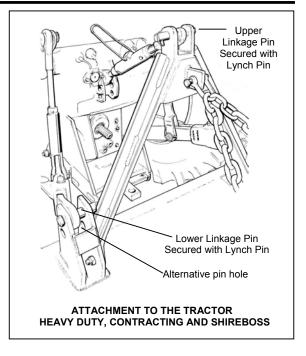
Align the tractor with the slasher and lower the linkage so the ends of the arms can be fitted over the lower linkage pins. Install a Lynch pin in each linkage pin to secure the arms. Adjust the length of the tractor upper linkage arm so it fits between the top hitch plates of the slasher and aligns with the pinhole. Install the upper linkage pin and secure with a Lynch pin.

Raise the tractor linkage so the front of the slasher is just off the ground and level the machine by adjusting the length of the top linkage arm. Check that the sway chains on the tractor linkage are tight to avoid unwanted side movement of the slasher.

To disconnect the slasher, lower it to the ground and reverse the above procedure.

## 2. Heavy Duty, Contractor, Shireboss, Vineyard and Pasture Topping Slashers

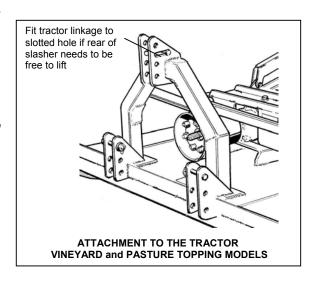
Heavy Duty slashers, Contracting models and special purpose Vineyard and Pasture Topping models have double hitch plates and are supplied with removable Category 2 linkage pins and Lynch pins. Multiple pinholes in the hitch plates facilitate fitment to tractor linkages of various heights. Whichever pinholes are most convenient can be used.



Remove the Lynch pins and extract the upper and lower linkage pins. Align the tractor with the slasher and lower the linkage so the ends of the arms are between the slasher lower hitch plates and aligned with one set of pinholes. Install both lower linkage pins and secure with Lynch pins.

Adjust the tractor upper linkage arm so it fits between the top hitch plates of the slasher and aligns with one of the holes. Install the upper linkage pin and secure with a Lynch pin.

Raise the tractor linkage so that the front of the slasher is just off the ground and level it by adjusting the length of the top linkage arm.





Check that the sway chains on the tractor linkage are tight to avoid unwanted side movement of the slasher.

To disconnect the slasher, lower it to the ground and reverse the above procedure. Vineyard and Pasture Topping models include a slotted hole in the upper hitch plates, which can be used to allow the rear of the slasher to lift if it contacts the ground. This feature is not required on Heavy Duty and Contracting models, which have collapsible headstocks to achieve the same purpose.

#### Connecting the PTO Shaft - Linkage Models

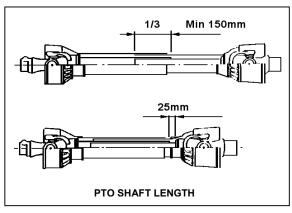
Clean and grease the splines on the tractor and slasher PTO stub shafts and install the PTO shaft making sure that the spring loaded locking pins engage in the interference grooves of both stub shafts. Ensure that the PTO shaft guards are attached to the slasher and tractor.

<u>Caution</u>: Depending upon the model it may be possible to raise the slasher too high which will cause the PTO shaft to contact the slasher body. Raise the slasher very slowly to check whether this happens and if so set the upper lift limit of the tractor hydraulics to avoid contact. <u>Do not rely upon your memory to avoid PTO contact</u>.

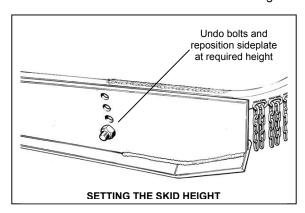
<u>PTO Shaft Length</u>: Upon delivery of a new slasher it is the selling dealer's responsibility to install and set the PTO shaft to the correct length. The following information is provided for reference.

The telescoping tubes must overlap by at least 1/3 their length, but not less than 150mm in all possible operating positions, and there must be at least 25mm telescopic movement remaining at the minimum operating length. Refer diagram below.

To check the length, set the linkage height so the ends of the two shafts are at the closest distance. Install the PTO shaft and check that there is at least 25mm of telescopic travel remaining. Raise and lower the slasher to check the telescopic tubes overlap by approximately 1/3rd their length, and not less than 150mm, in all operating positions.



If the PTO shaft has to be shortened cut equal amounts from both male and female shafts and safety covers. Carefully remove all burrs and swarf then clean and relubricate before reassembling.



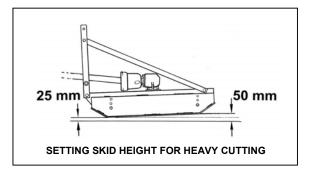
#### Setting the Cutting Height - Linkage Models



Disengage the PTO, stop the tractor engine and support the slasher on stands before adjusting skid height.

On slashers with adjustable skids the cutting height can be set by lifting the slasher, undoing the bolts and nuts attaching the sideplates and repositioning the sideplates to the required height. When adjusting the skids ensure the whole surface touches the ground to avoid uneven wear. Achieve this by adjusting the slasher altitude with the top link of the tractor. After adjusting the skids retighten the attaching bolts and nuts securely.

On slashers with fixed skids the linkage must be raised to achieve a higher cut. Optional rear depth wheel kits are also available for linkage slashers; see Optional Equipment on page 14.



Under heavy cutting conditions it is advantageous to set the rear of the slasher about 25mm higher than the front to ensure the material will only be cut once. If the slasher is lower at the rear the material will be cut a second time by the rear arc of the blades and will require considerably more power.



If working under rough conditions with a rigid tower slasher, particularly where rocks or stumps may be present, the top link of the tractor linkage may be replaced with a chain to allow the slasher to lift at the rear without lifting the front.

#### **Connecting Hydraulic Hoses**



Relieve all hydraulic pressure before connecting or disconnecting hoses. Oil escaping under pressure can penetrate skin, causing serious injury. Seek immediate medical treatment if injured by escaping oil.

Before attaching or removing the hydraulic hoses ensure that the quick release connections are clean to avoid contaminating the system.

Plug the slasher hoses into the tractor remote outlets with the pressure and return hoses in the corresponding tractor sockets.

For safety reasons it is desirable to always attach the hoses in the same pattern to ensure the action of the tractor controls is consistent, ie. the controls for operating the front and rear lift will always be the same and the direction of the controls to raise or lower the slasher will always be the same. This can be achieved by marking the hoses with tags or by some other convenient means.

Ensure that the hoses are well supported and clear of the tractor wheels.

#### Operating the Slasher - All Models

Before starting slashing inspect the area to be cleared to ensure that you are familiar with the ground conditions and that there are no dangerous hazards. This is especially important on land that has not been cut by you before, vacant blocks, sides of roads or channels that can hold hazardous surprises.

After having made certain that there are no people or animals in the vicinity of the slasher, sound the horn and start the tractor.

Raise the slasher approximately 10 to 20cm above the ground and engage the PTO at low engine speed. Slowly increase engine speed to 540 PTO rpm and allow the slasher to run for a short while to check that there are no vibrations, which could indicate a damaged blade.

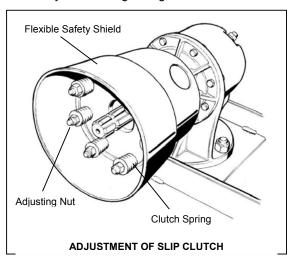
Move slowly forward in a low gear and lower the slasher to the operating height. Once the operation of the slasher has been satisfactorily established, select a higher gear to provide a safe working rate for the particular ground conditions. The PTO speed should be maintained at 540rpm to minimise wear and tear on the tractor and slasher. Lower speeds cause excessive wear, especially to blades and bolts, as the lower centrifugal force allows the blades to move on the bolts continuously.

If the cutting is very heavy and the tractor has difficulty handling it, take a narrower cut, which requires less power and provides space for the cut material to form a windrow.

#### Adjusting the Slip Clutch - All Models

All slashers are fitted with an adjustable friction clutch in the PTO driveline, which allows the rotor to slip under heavy load and on striking any obstructions.

A slip clutch that also incorporates an overrunning clutch is available for smaller tractors that only have a single stage PTO clutch.



The slip clutch is factory set and should not need adjustment under normal use. If it is necessary to adjust the clutch, remove the PTO shaft and turn each of the adjusting nuts on the clutch springs by one half turn. It is not necessary to remove the flexible safety shield to adjust the clutch.

Turning the nuts clockwise increases the spring pressure on the clutch plates and reduces the tendency to slip under load. Turning the nuts anti-clockwise loosens the clutch. Re-install the PTO shaft and check whether slipping continues. It is important that adjustment is made evenly and in small increments. Overtightening may result in damage to the PTO shaft or gearbox components, so care needs to be taken. <u>Under no circumstances should the slasher be operated with the clutch tightened to an extent where it is locked</u>.



If the slasher has not been used for some time and the clutch cannot be made to slip, it may be seized due to sticking plates. In this case, fully slacken each of the clutch bolts and run the slasher for about 30 seconds to free the clutch plates and clean the surfaces. Then re-tighten the spring bolts evenly to achieve the required slip setting.

This can be done by compressing the springs fully and then backing off two turns....

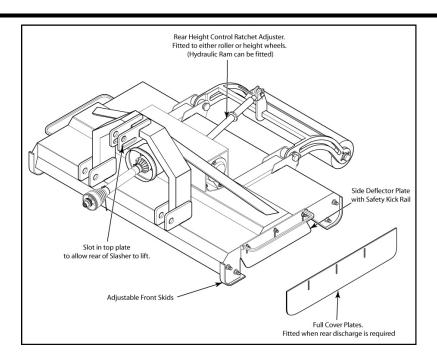
## **PTO Safety Guards**

All slashers have factory fitted safety guards over the input shaft of the gearbox and a telescopic cover fully enclosing the PTO drive shaft.

Never operate the machine without these covers being correctly fitted and in good condition. Worn or damaged covers do not provide adequate protection and must be replaced before operating the machine.

Replacement covers can be obtained through your Silvan dealer.

## Operation - Vineyard Models



The Vineyard slasher is a twin rotor design is capable of side or rear discharge. The blades rotate in opposite directions towards the centre of the slasher and the cutting arcs overlap. The rotors are timed so that the blades do not clash. To control rear height the slasher can be fitted with twin trailing caster wheels or a heavy steel roller. Either height control system can be actuated by a ratchet jack or optional hydraulic cylinder.

The twin caster wheels are fitted with solid rubber tyres to avoid punctures and are mounted on trailing arms which are attached to clevis plates welded to the rear of the machine.

The steel roller is mounted on two arms and in addition to controlling rear height it also compresses the cut material, such as cover crop and prunings, into the surface to promote decomposition. The roller also limits cut material from being thrown from the rear of the slasher and damaging adjacent vines.

For information about attaching a Vineyard slasher to a tractor refer to part 2. of the previous section "Attaching to the Tractor - Linkage Models". Vineyard models have a rigid linkage tower so it may be appropriate to fit the top link of the tractor to the slotted hole in the top hitch plate to allow the rear of the slasher to lift if ground conditions are uneven. If an optional



## Operation - Vineyard Models

hydraulic cylinder is used to control the wheel or roller height refer to the information in the section "Connecting Hydraulic Hoses – Trailed Models".

To achieve right and left discharge, the slasher is fitted with a bolt on deflector side plate to both of the discharge outlets. These plates may be adjusted to vary the angle and amount of discharge. They also incorporate a safety kick rail to help prevent inadvertent foot contact with the slasher blades.

For rear discharge, the slasher can be supplied with two full cover plates which must be fitted in place of the side discharge plates.

The caster wheels or steel roller can remain installed when discharging to either the side or

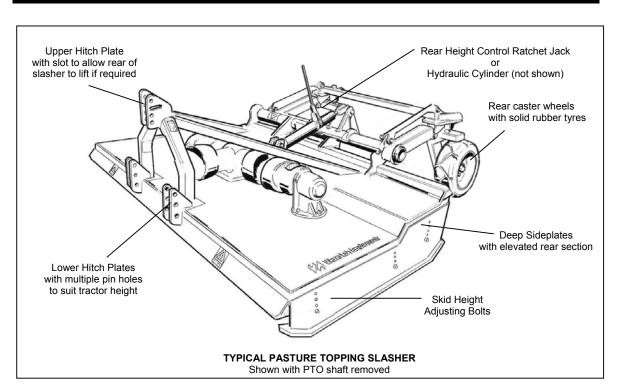
the rear. The roller mounting incorporates a full width steel scraper to remove mud build up.

Cutting height is set by raising the slasher and positioning the front skids at the appropriate height as for other slashers, refer previous sections. Once the skid height is set the rear wheels or roller can be set using the ratchet jack or optional hydraulic cylinder so that they just take the weight of the slasher at the rear.

For other operating requirements refer to the previous sections "Operating the Slasher - All Models" and "Adjusting the Slip Clutch".

**IMPORTANT-** check the oil levels in the three gearboxes before operating the slasher, by removing and then refitting the steel safety cover. **NEVER** operate the slasher without the cover securely in place.

## Operation - Pasture Topping Models



#### **Pasture Topping Models**

The Pasture Topping slasher is of a twin rotor design with deeper than normal sideplates to enable a higher cut for crop topping operations. The rear of the top plate is elevated to allow the cut material to be discharged above the standing crop. The blades rotate in opposite directions

towards the centre of the slasher and the cutting arcs overlap. The rotors are timed so that the blades do not clash.

To control the rear height the slasher is fitted with twin trailing caster wheels actuated by a ratchet jack or an optional hydraulic cylinder.



## Operation – Pasture Topping Models

The wheels are fitted with solid rubber tyres to avoid punctures.

For information about attaching a Pasture Topping slasher to a tractor refer to part 2. of the previous section "Attaching to the Tractor - Linkage Models". Pasture Topping models have a rigid linkage tower so it may be appropriate to fit the top link of the tractor to the slotted hole in the top hitch plate to allow the rear of the slasher to lift if ground conditions are uneven. If an optional hydraulic cylinder is used to control the wheel height refer to the information in the section "Connecting Hydraulic Hoses".

Cutting heights is set by raising the slasher and positioning the skids at the appropriate height so that the blades will top the crop to the desired

height. Refer to previous sections covering setting of skid height.

When the skid height is set the rear wheels can be positioned with the ratchet jack or optional hydraulic cylinder so that they just take the weight of the slasher at the rear.

Pasture Topping slashers are designed to operate at a PTO speed of 540rpm but can be run at higher speed, up to a maximum of 750rpm, to promote better topping and achieve a higher ground speed.

For other operating requirements refer to the previous sections "Operating the Slasher - All Models" and "Adjusting the Slip Clutch".

## Operation - General



## **Front and Rear Protective Guards**

Objects thrown from the unguarded blades of a slasher can travel at very high speed over considerable distance and could cause serious injury or death to any person or animal they may strike.

Protective projectile safety guards of the chain or flap type fitted to the front and rear of the slasher deck help to safeguard against the ejection of hard objects, e.g. stones and rocks, which may be thrown out by the rotating slasher blades.

For safety reasons front and rear guards should always be fitted when operating in any public area such as roadsides or parkland and in the vicinity of buildings or any area likely to be inhabited or frequented by people or animals.

Protective guards are fitted to some models as standard equipment, such as the Shireboss Slasher, and are available as factory fitted optional equipment for all other models.

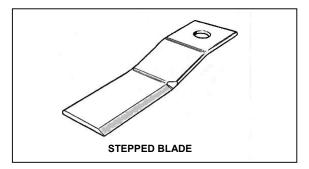
Retrofit guards are also available and can be bolted to the front and rear of the slasher deck.



Replace all worn or damaged guard components before operating the slasher.

#### Stepped Blades

Stepped blades are standard on all slashers, except Contractor & Shireboss models, so that a lower cut can be achieved whilst also providing added rotor protection. The blade is similar to a standard twisted blade but the step in the blade profile is 30mm larger, which lowers the cutting height by a similar amount.

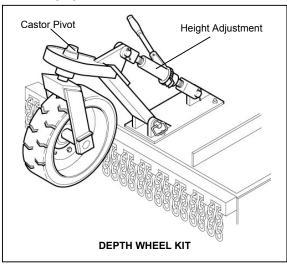




## Operation - General

The stepped blades must always be used and replaced in pairs and are fitted using standard bushes and bolts.

Refer to the Maintenance section for information on changing blades.



## **Optional Depth Wheels.**

A trailing caster wheel can be fitted to linkage slashers (except General Purpose models) to assist the control of cutting height on uneven terrain and to prevent the rear of the slasher digging in under adverse conditions.

The depth wheel is mounted on a trailing arm, which can be set to several heights by use of an adjustable ratchet.

To install the depth wheel, simply bolt the mounting plate onto the slasher deck through the four holes provided.

In operation, once the skid height has been set the depth wheel can be adjusted so that it just takes the weight of the slasher at the rear.

#### **Road Travel**

When travelling on a public road always ensure the slasher is equipped with all necessary lights and signs to comply with local regulations.

Travel at a slow speed with the slasher raised to a suitable position and optional height control wheel fully raised.

The tractor PTO should be in the neutral position.



## Lubrication and Maintenance

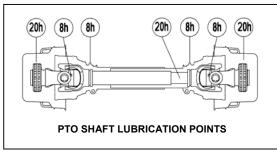
#### **General Inspection**

After the first two hours of operation and then before starting each day, check that all hardware is tight, in particular the blade bolts. Inspect for any damaged components and run the slasher to check for any vibration.

#### **PTO Shaft**

Grease the PTO shaft with multi-purpose grease at the locations shown before starting for the first time and then at the intervals shown. This is the amount of lubrication recommended for normal operation.

More frequent inspection and lubrication may be needed under very dusty conditions.



#### Gearbox Oil Level

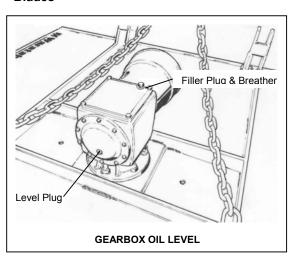
The slasher is shipped from the factory without oil in the gearbox and it is the dealer's responsibility to add it before delivering the unit. However, before starting the slasher for the first time the oil level should be checked and if necessary fill to the level plug with good quality SAE 85-140 gear oil.

Check the oil level each day before starting and top up if necessary. Periodically check for oil leaks by raising the slasher, switching off the engine and inspecting underneath. Use a support under the slasher and do not rely upon the tractor hydraulics.

**Warning!** Gearbox becomes hot during operation. A burn may result if touched by exposed skin.

It is not necessary to change the gearbox oil periodically.

#### Blades



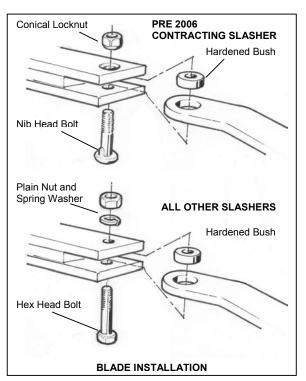
Inspect the blades and bolts daily before slashing. Carry out the check from the rear of the slasher with the tractor engine turned off, the parking brake applied and the slasher lowered to the ground so that it rests on its skids.

If excessive wear or damage is apparent, the worn components must be replaced. New blades must always be fitted in pairs to maintain correct balance. The cutting edges of lightly worn blades can be reground but equal amounts should be removed from each blade to maintain balance.

The slasher may be fitted with either straight or twisted blades depending upon the model. Both types are interchangeable and can be installed on any model slasher. Straight blades provide a finer cut whilst twisted blades produce an updraught that assists cutting flattened material. A pair of the same type must always be fitted.

All slashers other than Contracting models pre 2006 use a plain hexagon bolt and nut with a spring washer to attach the blade. Pre 2006 Contracting models use a nib headed bolt and conical locknut. The nib locates in the rotor to prevent the bolt rotating so that only one spanner is required to change the blade. All slashers use hardened blade bushes.

Ensure the blade bolts are securely tightened after refitting the blades and test run the slasher to check for any vibration. Re-check the tightness after operating for a short while.



## SILVAN AUSTRALIA PTY. LTD.

ABN 48 099 851 144

Victoria (Head Office)

Telephone: +61 (03) 9887 2788 Facsimile: +61 (03) 9887 1035

www.silvanaust.com

## NewZealand

FREECALL 0508 SILVAN (0508 745 826)

www.silvannz.co.nz