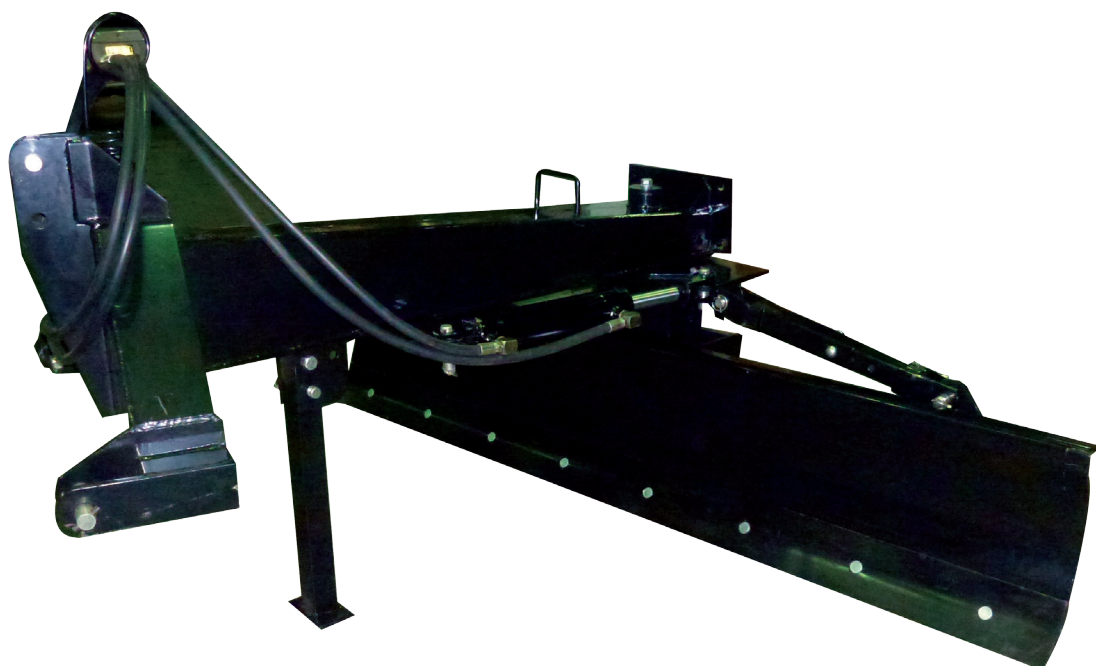




OPERATOR, MAINTENANCE & PARTS MANUAL

8ft Grader Blade

8GBHDST0



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Manufacturers statement: Due to continuing improvements Southern Cross Ag Machinery Pty Ltd reserves the right to modify machinery design and specifications provided herein without any preliminary notice. Information provided herein is of descriptive nature.

**WARNING**

READ THE OPERATOR, MAINTENANCE AND PARTS MANUAL
BEFORE USING THE GRADER BLADE.

INTRODUCTION

Southern Cross Ag Machinery Grader Blades are available in 4ft, 5ft, 6ft plus 6ft Heavy Duty and 8ft Heavy Duty.

This manual contains valuable information about your new Grader Blade. It has been carefully prepared to give you helpful suggestions for operating, adjusting and servicing your Grader Blade. Keep this manual handy for frequent reference. All new operators or owners must review the manual before using the equipment and at least annually thereafter.

It is the owner's and/or operator's responsibility to;

- Read and understand the information contained in this manual.
- Operate, lubricate, assemble and maintain the equipment in accordance with all instructions and safety procedures in this manual.
- Inspect the equipment and replace or repair any parts that are damaged or worn which could cause damage, wear to other parts, or cause a safety hazard.

Please contact your Southern Cross Ag Machinery Dealer if you need any further assistance with your Grader Blade or additional copies of the manual. Visit our website www.sxm.com.au for a complete list of dealers in your area. You can also download additional copies of this manual from our website.

SAFETY

Safety Instructions

Southern Cross Ag Machinery encourages good safety practices. Good safety practices not only protect you but also the people around you. Please ensure that everyone using this equipment is familiar with the recommended operating and maintenance procedures, has read and understood the Operators Manual and follows all the safety precautions. Most accidents can be prevented. Do not risk serious injury or death by ignoring good safety practices.

The alert symbol is used throughout this manual and on the product safety decals. This symbol indicates attention is required and identifies hazards concerning your personal safety and the safety of others. Please follow the recommended precautions.



The safety alert symbol means...
ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



CAUTION

The Caution Symbol indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.



WARNING

The Warning Symbol indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.



DANGER

The Danger Symbol indicates an imminently hazardous situation that, if not avoided will result in death or serious injury. This signal word is to be limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be guarded.

SAFETY continued

General Safety Guidelines

- Have a first-aid kit available for use and know how to use it.
- Have a fire extinguisher available, stored in a highly visible location and know how to use it.
- Wear appropriate protective gear. This list may include but is not limited to:
 - hard hat
 - protective shoes with slip resistant soles and steel caps
 - protective glasses or goggles
 - heavy gloves
 - wet weather gear
 - hearing protection
 - respirator or filter mask
- Read and understand the Operator's Manual and all safety decals before operating, servicing, adjusting, repairing or hitching the equipment.
- Do not attempt any unauthorised modifications to your Southern Cross Ag Machinery product as this could affect function or safety and could affect the life of the equipment.
- Never operate the Grader Blade except from the operator's station on the power unit.
- Inspect and clean the working area before operating. Remove all obstructions such as rocks, stumps and wire.
- Keep hands, feet, clothing, and hair away from moving parts.
- Ensure bystanders are clear of the area before operating. A minimum distance of 100 metres should be kept from all bystanders when Grader Blade is in operation.
- Never operate this equipment while using alcoholic beverages or drugs that can hinder alertness or coordination. Consult your doctor about operating this machine while taking any medication.
- Under no circumstances should children under the age of 18 be allowed to work with or around this equipment. Do not allow anyone to operate or assemble this equipment until they have read and understood this manual.
- This equipment is dangerous to anyone unfamiliar with its operation. The operator should be responsible, properly qualified and physically able person familiar with farm machinery and competent in this equipments operation.
- All new operators or owners must review the manual before using the equipment and at least annually thereafter.
- In order to provide a clear view, certain illustrations in this manual may show an assembly with a safety guard removed equipment should never be operated in this condition. Keep all guards in place. If guard removal becomes necessary for repairs, reinstall the guards prior to use.
- Replace any safety decal that is not legible or is missing. The locations of such safety decals are indicated in this manual.
- Never exceed the limits of a piece of machinery. If its ability to do a job, or to do so safely, is in question – DON'T TRY IT.
- In addition to the design of this implement, safety decals and safety equipment, accident prevention is dependent upon the awareness, common sense, forethoughts, and proper training of everyone involved in the operation, transport, maintenance and storage of the machine. Also refer to safety messages and operating instructions in each of the appropriate sections of the tractor manual. Pay close attention to the safety decals affixed to the tractor and the Grader Blade.

SAFETY continued

Employer/Controller Responsibilities

OH&S legislation places obligations on the employer, or the controller of the Grader Blade, to identify the hazards and control the risks associated with the use of the Grader Blade in their workplace and to do so in accordance with the manufacturer's instructions.

When purchasing a Grader Blade:

- Ensure the manufacturer's instructions are provided at the point of purchase.
- Discuss your needs with the supplier, to ensure the Grader Blade is compatible with the power of your tractor and is appropriate for the intended application.
- Seek practical advice and instruction from the supplier on the use and limitations of the Grader Blade. If you are hiring, leasing or borrowing a Grader Blade on a temporary basis, get safe use instructions from the person supplying it.
- The employer must provide safety instructions to all those involved in using a Grader Blade.
- A copy of safety instructions must be kept in good condition with the Grader Blade.
- Generally, the safety instructions should be the manufacturer's instructions. Any variations from the manufacturer's instructions must be based on a risk assessment and must not remove any of the safety features nor expose anyone to risks.

Supervision, Instruction and Training

The employer must provide safe systems of work, adequate supervision, instruction and training to all those involved in using a Grader Blade. They must be instructed in the safe operation of the Grader Blade, including hazards specific to the workplace, including the terrain, stability of the tractor, working environment and the like. The employer should ensure that everyone achieves a level of understanding that enables them to safely and competently operate the Grader Blade.

Inspection, Maintenance and Repair

- The Grader Blade must be inspected according to the manufacturer's instructions, prior to use.
- All problems identified must be rectified, prior to use.
- The Grader Blade must be maintained according to the manufacturer's instructions.
- Replacement parts must be to the original manufacturer's specifications or their equivalent.
- Safety signs and decals should be legible, maintained and where necessary replaced.
- Repairs should be carried out by a competent person.
- When suspending the Grader Blade for maintenance or repair, whether attached to the tractor or suspended in another way, adequate safety stands must be used to prevent inadvertent lowering of the Grader Blade.

Service and Maintenance Safety

- Stop engine, set brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
- Support the equipment with blocks or safety stands before working beneath it.
- Follow good shop practices including:
 - keep service area clean and dry
 - be sure electrical outlets and tools are properly grounded
 - use adequate light for the job.
- Use only tools, jacks and hoists of sufficient capacity for the job.
- Replace and secure all shields removed during servicing before operating.
- Use heavy leather gloves to handle sharp objects.

SAFETY continued

Start-up Safety

- Do not let inexperienced operators or children use this equipment.
- Place all tractor and machine controls in neutral before starting.
- Operate only with Roll Over Protective System (ROPS) and seat belt equipped tractors.
- Do not operate inside a building unless there is adequate ventilation.
- Ensure all shields are in place and in good condition before operating.

Operation

Prior to use, the Grader Blade should be inspected to ensure it is working correctly. All safety features must be included in this inspection. If any safety feature is not working correctly, the Grader Blade must not be used. The Grader Blade must be operated according to the manufacturer's instructions.

The operator must ensure that no-one is exposed to risks arising from the operation of the Grader Blade.

Additional safety controls may be required when operating in the vicinity of people or traffic – e.g. alongside highways, roads or other public areas.

Where adjustable or removable guarding is provided for specific applications, such as vineyards and horticulture, and the guarding has been removed or is no longer effective, appropriate control measures must be implemented. These controls must ensure that the risk of injury is eliminated or controlled. Before using a Grader Blade in an application other than that outlined above, the guards must be readjusted or replaced so as to be effective.

Operation Safety

- Do not permit riders.
- Do not wear loose fitting clothing during operation.
- Never operate the equipment in the raised position.

Personal Protective Equipment (PPE)

Prior to use, a risk assessment must be undertaken to determine the appropriate PPE required. Any identified PPE must be provided by the employer and must be used by those involved in the operation and maintenance of the Grader Blade. Examples of PPE are appropriate footwear and hearing & eye protection.

Storage and Transport

When not in use, the Grader Blade must be transported and stored according to the manufacturer's instructions. Requirements may differ when transporting a Grader Blade within a property and on a public road – you must comply with all statutory requirements.

Storage Safety

- Store the unit in an area away from human activity.
- Do not permit children to play on or around the stored machine.
- Support the frame on stands and blocks to provide a secure base.

Transport Safety

- Review Transport Safety instructions in tractor manual before moving.
- Check with local authorities regarding transport on public roads. Obey all applicable laws and regulations.
- Make sure the SMV (Slow Moving Vehicle) emblem and all the lights and reflectors that are required by the local highway and transport authorities are in place, are clean, and can be seen clearly by all overtaking and oncoming traffic.
- Never have the equipment in operation during transport.
- Always travel at a safe speed.

SAFETY continued

Modifications

A Grader Blade should not be modified or altered. However, if it is necessary to make modifications, they must be done by a competent person and based on a risk assessment.

Before any modifications are done, contact the manufacturer or supplier.

Anyone who undertakes modifications subsequently assumes the role and responsibilities of the designer and manufacturer.

The instructions relating to the Grader Blade and its use may need to be revised following a modification.

Any modifications made without manufacturers approval will void Warranty.

Safety Signs

- Keep all safety signs clean and legible and replace any that are damaged or missing.
- When original parts are replaced, any safety signs affixed to those parts should be replaced as well. Replacement safety signs are available from your local dealer.

Installation of Safety Signs

- To install safety signs, ensure the installation area is clean and dry. Decide on the exact position before you remove the backing paper. Remove the smallest portion of the split backing paper and align over the specified area. Carefully press in place.
- Slowly peel back the remaining paper and smooth the remaining portion in place. Small air pockets can be pierced with a pin and smoothed out.



ASSEMBLY INSTRUCTIONS

STEP 1

Remove the Blade Pin (#11) and the Clamp Plate (#10) from the blade assembly. Insert the King Pin Weldment (#19) into the blade assembly and assemble the Blade Pin and Clamp Plate using the hardware supplied.

STEP 2

Slide the Arm Weldment (#21) onto the King Pin Assembly. The Arm Weldment is held in place using a 3-1/2" O.D. disk (#22) and a 3/4" x 2" bolt and lock washer (#23 & #25).

STEP 3

Bolt the Stand (#40) to the Arm Weldment.

STEP 4

Remove the Arm Swivel Pin (#27) from the Hitch Weldment (#39). Slide the Hitch Weldment on to the Arm Weldment and connect using the Swivel Pin. The pin is held in place with a hex bolt and lock nut.

STEP 5

Connect the two mechanical links and hydraulic cylinder. Angle Cylinder (#20) is a 3" x 12" cylinder which controls the angle of the arm. Mechanical link (#18 & #9) controls the tilt of the blade. Mechanical link controls the offset of the blade.

STEP 6

Attach hydraulic hoses to the hydraulic cylinder. Bolt the Hydraulic Hose Holder (#32) to the hitch.

STEP 7

Recheck and tighten all bolts. Grease the bushings at both ends of the Arm Weldment.

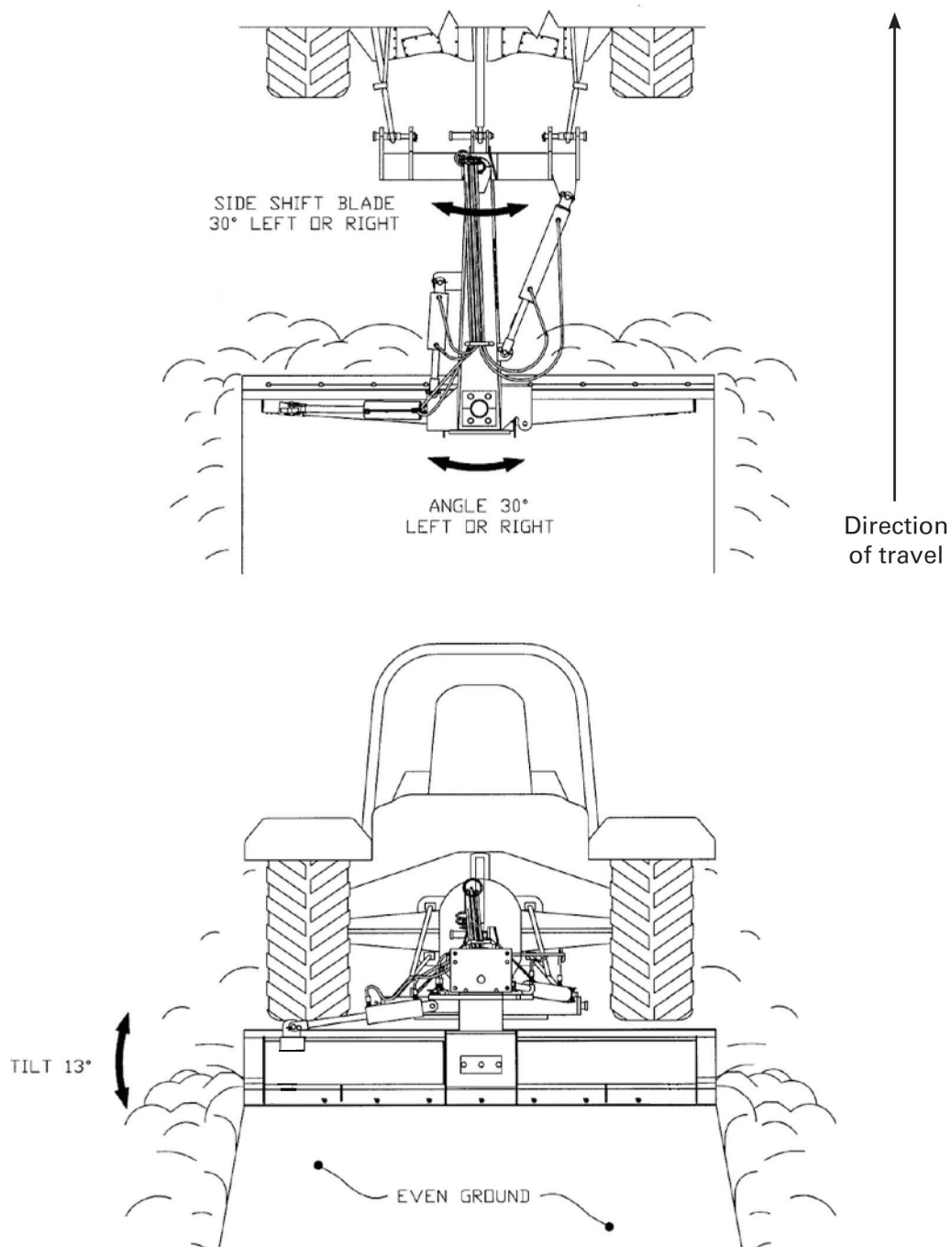
OPERATION INSTRUCTIONS

Theory of Operation

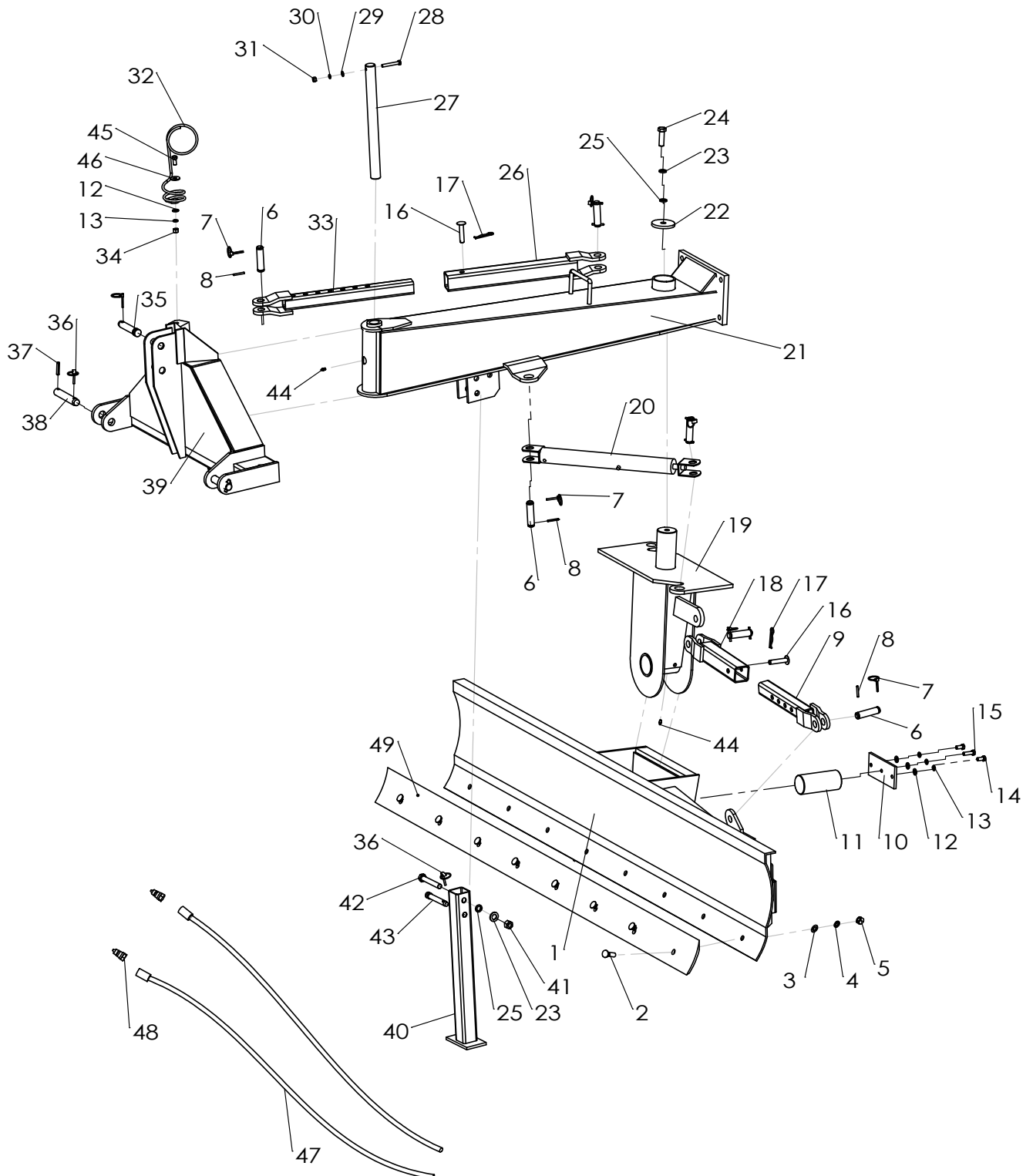


CAUTION

Rear blades are designed for pulling behind a tractor. They are not designed for pushing.



REAR BLADE DRAWING



GRADER BLADE PARTS LIST

PARTS NUMBER	DESCRIPTION	QUANTITY
1	Moldboard	1
2	Carriage Bolt M 16 x 40	8
3	Flat Washer Ø16	8
4	Lock Washer Ø16	8
5	Nut M16	8
6	Pin Ø25 x 102	6
7	Lynch Pin 3/16 x 1 7/16	6
8	Roll Pin 5.8 x 45	6
9	Shorter Inner Tube For Rotating Adjustment	1
10	Shaft Cover (square)	1
11	Main Shaft	1
12	Flat Washer Ø12	4
13	Lock Washer Ø12	4
14	Bolt M 12 x 20	2
15	Bolt M 12 x 40	1
16	Pin Ø16 x 80	2
17	Hair Pin 70	2
18	Shorter Outer Tube for Rotating Adjustment	1
19	Swivel Joint Assembly	1
20	Cylinder	1
21	Tow Frame	1
22	Shaft Cover (round)	1
23	Lock Washer Ø18	2
24	Bolt M18*60	1
25	Flat Washer Ø18	2
26	Longer Outer Tube for Rotating Adjustment	1
27	Shaft	1
28	Bolt M 10x70	1
29	Flat Washer Ø10	1
30	Lock Washer Ø10	1
31	Nut M10	1
32	Spring	1
33	Longer Inner Tube for Rotating Adjustment	1
34	Nut M 12	1
35	Pin Ø29 x 135	1
36	5/16" Lynch Pin	2
37	Roll Pin 10.5 x 50	2

GRADER BLADE PARTS LIST continued

PARTS NUMBER	DESCRIPTION	QUANTITY
38	Hitch Pin Ø28 x 156	2
39	Bracket	1
40	Hitch Stand	1
41	Nut M 18	1
42	Bolt M 18 x 115	1
43	Pin Ø19 x 138	1
44	Grease Nipple	2
45	Bolt M 12 x 35	1
46	Washer Ø12	1
47	Oil Hose	2
48	Oil Hose Coupler	2
49	Blade	1

FOR FURTHER INFORMATION

WorkCover NSW

Visit www.workcover.nsw.gov.au

Call the WorkCover Assistance Service on **13 10 50**

Call the WorkCover Publications Hotline on **1300 799 003**

Visit your nearest WorkCover office.

For technical specifications on Grader Blades, contact your local manufacturer.

SafeWork South Australia

GPO Box 465

Adelaide SA 5001

Help Centre: **1300 365 255**

Website: www.safework.sa.gov.au

Workplace Health and Safety Queensland, Department of Justice and Attorney-General

GPO Box 69

Brisbane QLD 4001

Workplace health and safety infoline: **1300 369 915**

Electrical Safety infoline: **1300 650 622**

Website: www.worksafe.qld.gov.au

WorkSafe Victoria

Advisory Service 222

Exhibition Street

Melbourne VIC 3000

Telephone: **03 9641 1444**

Toll free: **1800 136 089**

Email: info@worksafe.vic.gov.au

Website: www.worksafe.vic.gov.au

WorkSafe Western Australia

1260 Hay Street

West Perth WA 6005

Telephone: **08 9327 8777**

Toll Free: **1300 307 877**

Email: safety@commerce.wa.gov.au

Website: www.worksafe.wa.gov.au

WARRANTY

Southern Cross Ag Machinery warrants all their products against defective workmanship and, or materials for a period of twelve (12) months from the date of purchase. A three-year extended warranty program applies to gearboxes supplied with the following products; Grader Blades, finishing mowers and post-hole diggers sold from June 25th 2009. For attachments used in commercial enterprises the Warranty period is six (6) months on all components with the exception of components that are not included as per the detailed listed in the next paragraph. Proof of purchase plus proof of the defect will be required and must be received by Southern Cross Ag Machinery within seven days of product failure and prior to the end of the twelve (12) month period from date of purchase. A *Warranty Claim Form* MUST be lodged through the Dealer where the item was purchased. A *Warranty Claim Number* will be issued. Work commenced without a Claim Number issued and therefore warranty approval will not be covered by Southern Cross Ag Machinery.

Southern Cross Ag Machinery takes no responsibility for the repair of any products rendered defective or damaged through normal wear and tear or incorrect use of the product. Southern Cross Ag Machinery does not provide warranty on any cutting blades, tilling / hoe blades, rippers, scarifiers, tynes, tyres, clutch plates, friction plates, V-belts and Post Hole Digger cutting bits. Southern Cross Ag Machinery does not provide warranty on any products that have undergone modification. Southern Cross Ag Machinery reserves the right to determine whether the product is defective. Southern Cross Ag Machinery does not accept responsibility for any product which is damaged in transit. Faulty parts may need to be returned to Southern Cross Ag Machinery as part of the Warranty process. Freight costs each way will be paid by the owner / purchaser of the product.

Purchasers, dealers or agents of the Southern Cross Ag Machinery product are not authorised to give warranty on behalf of Southern Cross Ag Machinery. Claims will only be recognised, if lodged as outlined on page 29 in the *Warranty Process*. Any work commenced without Southern Cross Ag Machinery approval will not be honoured.

Product specifications are subject to change due to our company's policy of improvement. Design changes and improvements maybe made by Southern Cross Ag Machinery whenever it believes the effectiveness of its products can be improved. Southern Cross Ag Machinery has no obligation to incorporate any improvements to products, which are currently in service or have been supplied.

REGISTER YOUR WARRANTY

To register your Warranty please ensure the dealer from where the product has been purchased completes the *Southern Cross Ag Machinery Installation / Warranty Registration* Form. This triplet document needs to be signed by the purchaser. One copy remains with the Dealer, one copy needs to be mailed to Southern Cross Ag Machinery (Rear 18 Parramatta Road, Homebush NSW 2140) and one copy will remain with the purchaser for your reference.

If you have any queries regarding the warranty of your Southern Cross Ag Machinery product please call our office Tel. (02) 9746 9060 or email sales@sxm.com.au.

WARRANTY PROCESS

1. Contact your dealer or point of purchase who will contact Southern Cross Ag Machinery.
2. Photos and or video footage may be required to process your claim with a short description of the problem. This will be lodged through your dealer or point of purchase by the completion of the Southern Cross Ag Machinery *Warranty Claim Form*.
3. The claim will be assessed by Southern Cross Ag Machinery to determine whether the warranty claim will be approved. This can take up to five working days from when Southern Cross Ag Machinery is first notified of the problem and proof of product failure along with *Warranty Claim Form* is supplied.
4. If the *Warranty Claim* is approved a *Warranty Claim Number* will be issued to the Dealer.
5. Any work commenced without approval from Southern Cross Ag Machinery and without a *Warranty Claim Number* will not be covered by Warranty. Repairs must be made by Southern Cross Ag Machinery or an authorised dealer. Southern Cross Ag Machinery reserves the exclusive right to determine whether it will pay labour costs for warranty repairs or replacements and the amount of such costs that it will pay and the time in which the repairs will be made. Southern Cross Ag Machinery will not approve invoices sent for repairs that Southern Cross Ag Machinery has not previously approved.
6. Travel and freight charges associated with the processing of the *Warranty Claim* will not be covered by the Southern Cross Ag Machinery Warranty and is the responsibility of the owner / purchaser.

DISCLAIMER

Whilst information is true at time of printing actual product may differ slightly from the product described herein due to our company's policy of improvement. Errors and omissions may happen from time to time, we apologise for any inconvenience should this occur. Products may differ slightly in appearance to illustrations / photographs provided.

SOUTHERN CROSS AG MACHINERY
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