

# INSTRUCTION AND PARTS MANUAL



Strong. Simple. Smart.

## HYDRAULIC TRAILERS

All models from 2018



10 TONNE, TANDEM AXLE



8 TONNE, TANDEM AXLE



6 TONNE, TANDEM AXLE

## THANKS FOR CHOOSING A SAM

This Instruction and Parts Manual covers all SAM Hydraulic Trailers manufactured since 2018.

For all other SAM Machinery Instruction Manuals please visit [www.sammachinery.co.nz](http://www.sammachinery.co.nz)

## SERIAL NUMBER

All SAM Machinery products are identified with a unique serial number located on the front of the machine (e.g. '18 T 1234'). Please include this number with all parts and servicing enquiries so we can provide you with fast and accurate assistance.



## INTRODUCTION

SAM Machinery have created SAM Trailers from over 70 years' experience making agricultural machinery in New Zealand. Strong, simple and smart, each machine is handcrafted from the very best materials and componentry we can find. They are known for their practical design and easy to use operation.

A family-owned and operated company, located in the heart of the Waikato, SAM Machinery control the complete manufacturing process of the iconic SAM range: Fertiliser Spreaders, Combo Spreaders, Orchard Spreaders, Feed Wagons, Hydraulic Trailers and Quick Hitches.

We stand by the quality of all of our products - our team have put the hard work in so you can expect a long working life out of your gear. All the best with your new SAM. We trust you will love it.

For all parts, servicing or support enquiries please contact your local dealership or call SAM +64 7 847 8492.

[www.sammachinery.co.nz](http://www.sammachinery.co.nz)

## MODEL DETAILS

MODEL	
SERIAL NUMBER	

## QUALITY GUARANTEE

SAM Machinery products are guaranteed against any defects in either material or manufacture for a period of 24 months from delivery date, provided that the equipment has not been subject to abuse or misuse, operated incorrectly, over loaded or used for purposes other than for which the equipment is designed or is not maintained correctly or if fitted with other than genuine parts.

Claims are only valid when approved by the manufacturer. No person or agent is authorised to assume any liability.

As the use of the equipment is outside our control we can only guarantee quality. No liability for loss, direct expenses incurred from the use of this equipment or from any other cause of in respect of performance etc. can be accepted.

Defective parts must be returned freight paid to the manufacturer or available to be inspected as directed. Should such parts prove to the manufacturers satisfaction to be faulty - repair of - replacement of defective parts shall constitute fulfillment of guarantee obligations. Parts destroyed, lost or tampered with nullify guarantee.

## WARRANTY

SAM Machinery products as designed and supplied by Coombridge & Alexander Ltd, are warranted against faulty workmanship and defective materials for a period of 24 months from date of purchase. Such warranty is subject to the following conditions:

1. That the basic maintenance (as noted in p4) is followed.
2. This warranty covers the repair or replacement of parts or machinery sold by Coombridge & Alexander Ltd and damaged as a result of faulty workmanship or faulty materials.  
It does not extend to any other loss or damage including consequential loss or damage to other property or persons.
3. No responsibility will be accepted for repairs made other than by Coombridge & Alexander Ltd without prior authorisation by Coombridge & Alexander Ltd.
  - a. Without limiting the generality of paragraph 1. above, this warranty does not cover the following;
  - b. Losses sustained through delay in delivery
  - c. Travel expenses
  - d. Damage caused by accident, misuse or abuse
4. Damage to any goods which have been altered or modified by someone other than Coombridge & Alexander Ltd or its authorised dealers.
5. Procedure for recovery under warranty;
  1. No loss or damage will be covered under warranty unless the following procedure is followed by the purchaser.
    1. If the purchaser is an authorised dealer -
      - a. Coombridge & Alexander Ltd must first be advised of details of the goods concerned, the loss or damage sustained and the circumstances in which the loss or damage arose.
      - b. Coombridge & Alexander Ltd they will then decide if such loss or damage is within the terms of warranty and shall advise the dealer as to how the loss or damage is to be repaired.
    2. If the purchase is not an authorised dealer -
      - a. The loss or damage should be reported directly to Coombridge & Alexander Ltd who will advise whether it is covered by the warranty and direct the purchaser accordingly as to what action is to be taken.

## BASIC SAFETY



Many agricultural machines have potentially dangerous moving parts, which can cause serious or fatal injuries. Remember;

1. Read ALL warning labels on the machine and ensure you understand operating instructions.
2. Turn off the tractor before removing any guards, blockages or servicing the machine.
3. Never use your hands or fingers to check for hydraulic oil leaks.
4. Do not use the machine in steep areas where there is a high-risk of rollover occurring.

## OPERATIONAL CHECK

Before you start work with a machine there are a few basic checks that can be carried out. Ask yourself:

1. Is the machine you intend to use suitable for the job e.g. in good working order and safe to use?
2. Are all safety devices such as guards in place and working correctly?
3. Are there any known mechanical defects – pay particular attention to items such as wheels and tyres, and moving parts?
4. Are you (or the operator) properly trained to do this job/use this machine?
5. Has the instruction manual for the machine been provided, read and understood?
6. Is the right personal protective equipment (PPE) available and worn?
7. Has a risk assessment been carried out?
8. Has the work been properly planned and communicated to those who may be at risk?
9. Is the machine operator competent to do the job safely?
10. Hitching and attachment points for trailed machinery - check that it has been safely attached to the towing vehicle such as a tractor. Pay attention to the condition of drawbar/pick-up hitch, and hitch rings, pins, clips etc.
11. Carry out any pre-use checks as specified.

## BASIC MAINTENANCE



To keep your SAM Trailer in excellent working condition, please follow these basic maintenance procedures as you go.

1. Grease deck pivot and RAM pivot points after every 10 hours of use.
2. Tyre pressure should be 40-45 psi.
3. Regularly grease the screw jack every 2 months or so
4. Check and grease the wheel hubs every 2 months or so

Please keep these checks up for the lifetime of your SAM.



A hazard identification, assessment and control procedure has been conducted on a representative SAM Hydraulic Trailer and where necessary appropriate risk control measures have been outlined below;

HAZARD	HARM	CONTROLS
Contact, impact or entanglement from moving parts/ loose objects inc. rams, drop down sides, wheels, deck etc.	<ol style="list-style-type: none"> <li>1. Deep cuts or amputation</li> <li>2. Bruising</li> <li>3. Fractures</li> </ol>	<p>Avoid wearing loose clothing, jewelery or gloves - they increase the risk of entanglement.</p> <p>Stand a safe distance from the machine when under operation. Do not stand or work under the deck when tilted. Do not stand directly behind the trailer when the deck is being tipped.</p> <p>Do not ride on the trailer or on the drawbar.</p>
Leaking hydraulic hoses and/or couplings.	<ol style="list-style-type: none"> <li>1. Leaking oil may get into skin</li> <li>2. Skin and eye irritation</li> <li>3. Breathing difficulties</li> </ol>	<p>Apply a programme preventive maintenance (hydraulic hoses and hydraulic hose couplings).</p> <p>Ensure adequate pressure ratings for all components.</p> <p>Leaking oil, or bulging or abraded hose walls, MUST have faulty parts replaced.</p> <p>Never use hands or fingers to detect leaks.</p> <p>Wear appropriate PPE (personal protective equipment).</p>
Tractor and/or Hydraulic Trailer roll-over due to instability under varying conditions and terrain.	<ol style="list-style-type: none"> <li>1. Serious injury</li> <li>2. Fatality</li> </ol>	<p>Do not operate trailers in areas that are too steep for; 1. safe operation, 2. adequate weight on hitch, 3. adequate wheel track.</p>

## TROUBLESHOOTING

If you need spare parts or need some help contact SAM Machinery directly or see your local dealership.

## HYDRAULIC TRAILER SIDE-VIEW

REFERENCE	PART NO.	DESCRIPTION	QTY.
1		Keeper locker & pin (20, 30, 40mm options)	1
2*	3103	Wheel & Tyre - 11.5/80 x 15.3 (12ply)	2-4
	3107	Wheel & Tyre - 400/60 X 15.5 (TR Tread)	
	3948	Wheel & Tyre - 550/60 x 22.5 (16ply)	
3	6152	3/4" Spring Bolt - 50 x 17	1
4*	-	Hub & Stub	2-4
5		RAM - Single stage (4 Tonne)	1
		RAM - 4 Stage (6 Tonne)	1
		RAM - 5 Stage (8 & 10 Tonne)	1
6	P1402	Jack Stand (70sq) - DG701	1
7*	P3145D	Fixed Tow Hitch (16mm Mounting Plate) - 50mm Donut Eye	1
	P3145	Fixed Tow Hitch (16mm Mounting Plate) - 37mm Ball Eye	
	P3557B	Swivel Tow Hitch (16mm Mounting Plate) - 37mm Ball Eye	
	P3557	Swivel Tow Hitch (16mm Mounting Plate) - 50mm Ball Eye	
	P2102	Swivel Tow Hitch (20mm Mounting Plate) - Ball/No Ball	

\* Wheel & Tyre, Tow Hitch and Hub & Stub set-up varies depending on machine model, size and year of manufacture. Please include the machine serial number with all parts and servicing enquiries.



## COMMON BEARING SIZES AND DIMENSIONS

### BEARING SIZES BY HUB MAKE / MODEL

HUB MAKE / MODEL	HUB SIZE	BEARINGS	SEAL	HUB CAP
ADR Mk2	60sq	30211 / 30208	57 x 100 x 10 Mk2	80mm
ADR Mk3	60sq	30211 / 30208	56 x 100 x 10 Mk3	80mm
ADR Mk3	70sq	30213 / 32210	67 x 120 x 10 Mk3	90mm
ADR Braked	70sq Braked	30213 / 32210	67 x 120 Mk1	90mm
ADR Mk3	80sq	32215 / 32212	77 x 130 x 10 Mk3	110mm
ADR Mk5	60sq	30211 / 30208	73 x 100 x 13 Mk5	80mm
ADR Mk5	70sq	30213 / 32210	93 x 120 x 13 Mk5	90mm
ADR Mk6	60sq	30211 / 30208	56 x 100 Mk6	82mm - Screw on
ADR Mk6	70sq	30213 / 32210	67 x 120 Mk6	92mm - Screw on
ADR Mk6	80sq	32215 / 32212	77 x 130 Mk6	124mm (+ Cap Screws)
ADR Mk7	60sq	30211 / 30208	80 x 100 x 8	82mm - Screw on
ADR Mk7	70sq	30213 / 32210	100 x 120 x 8	Screw on
ADR Mk7	80sq	32215 / 32212	110 x 130 x 8	124mm (+ Cap Screws)
FAD	60sq	30211 / 30208	70 x 100 x 10	80mm
FAD	70sq	30213 / 30210	80 x 120 x 12	90mm
FAD	80sq	32215 / 32211	90 x 130 x 12	100mm
TVS	60sq	30211 / 30208	80 x 100 x 12	80mm
TVS	70sq	32213 / 32210	90 x 120 x 12	90mm
TVS Braked	70sq & 80sq	Check	Check	90mm & 110mm
TVS	80sq	32215 / 32212	100 x 130 x 14	110mm
Monroc	60sq	30211 / 30207	72 x 105 x 10	73.5mm - Screw on
Monroc	80sq	30215 / 32211	95 x 135 x 14	101.5mm - Screw on

### COMMON BEARING SIZES AND DIMENSIONS

BEARING	INTERNAL DIAMETER (ID)	OUTSIDE DIAMETER (OD)	WIDTH
30208	40mm	80mm	19.75mm
30210	50mm	90mm	21.75mm
32210	50mm	90mm	24.75mm
30211	55mm	100mm	22.75mm
32211	55mm	100mm	26.75mm
32212	60mm	110mm	29.75mm
30213	65mm	120mm	24.75mm
32213	65mm	120mm	32.75mm
32215	75mm	130mm	33.25mm
67048 / 010	1.25"	2.328"	0.625"